ANALYTICAL REPORT

Job Number: 680-85980-1

SDG Number: 68085980-1

Job Description: 35th Avenue Superfund Site

For:
Oneida Total Integrated Enterprises LLC
1220 Kennestone Circle
Suite 106
Marietta, GA 30060

Attention: Ms. Limari F Krebs

Approved for release.
Bernard Kirkland
Project Manager I
1/3/2013 12:59 PM

Designee for
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Project Manager II
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01/03/2013

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CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-85980-1

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 12/20/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.2 C.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) LOW LEVEL PAH

Samples CV0228B-CS-SP (680-85980-9), CV0230A-CS-SP (680-85980-10), CV0424A-CS-SP (680-85980-26), CV0424B-CS-SP (680-85980-27), CV0235A-CS (680-85980-28), CV0235B-CS (680-85980-29), CV0294B-CS (680-85980-32), CV0294C-CS (680-85980-33), FM0016A-CS (680-85980-37), FM0016B-GS (680-85980-38), CV0627A-CS (680-85980-39), HP0190A-CS-SP (680-85980-41), HP0190B-CS-SP (680-85980-42), HP0190C-CS-SP (680-85980-43), CV0451A-CS-SP (680-85980-44) and CV0451B-CS-SP (680-85980-45) were analyzed for Semivolatile Organic Compounds (GC/MS) Low level PAH in accordance with EPA SW846 Method 8270C. The samples were prepared on 12/31/2012 and analyzed on 01/02/2013.

Samples CV0228B-CS-SP (680-85980-9)[10X], CV0230A-CS-SP (680-85980-10)[10X], CV0424A-CS-SP (680-85980-26)[10X], CV0424B-CS-SP (680-85980-27)[10X], CV0235A-CS (680-85980-28)[10X], CV0235B-CS (680-85980-29)[10X], FM0016A-CS (680-85980-37)[10X], FM0016B-GS (680-85980-38)[10X], CV0627A-CS (680-85980-39)[10X], HP0190A-CS-SP (680-85980-41)[10X], HP0190B-CS-SP (680-85980-42)[10X], HP0190C-CS-SP (680-85980-43)[10X], CV0451A-CS-SP (680-85980-44)[10X] and CV0451B-CS-SP (680-85980-45)[10X] required dilution prior to analysis. As such, surrogate recoveries are not reported, and elevated reporting limits (RLs) are provided.The reporting limits have been adjusted accordingly.

Several analytes recovered outside the recovery criteria for the MS/MSD of sample CV0627A-CS (680-85980-39) in batch 680-261629.

Refer to the QC report for details.

No other difficulties were encountered during the Low-Level PAH analyses.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) LOW LEVEL PAH

Sample 121912-RB-SIEVE (680-85980-46) was analyzed for Semivolatile Organic Compounds (GC/MS) Low level PAH in accordance with EPA SW846 Method 8270C. The samples were prepared on 12/26/2012 and analyzed on 12/28/2012.

No difficulties were encountered during the Low-Level PAH analysis.

All quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-85980-1
Sdg Number: 68085980-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-85980-9	CV0228B-CS-SP	Solid	12/18/2012 1450	12/20/2012 1027
680-85980-10	CV0230A-CS-SP	Solid	12/18/2012 1515	12/20/2012 1027
680-85980-26	CV0424A-CS-SP	Solid	12/18/2012 1245	12/20/2012 1027
680-85980-27	CV0424B-CS-SP	Solid	12/18/2012 1300	12/20/2012 1027
680-85980-28	CV0235A-CS	Solid	12/18/2012 1515	12/20/2012 1027
680-85980-29	CV0235B-CS	Solid	12/18/2012 1535	12/20/2012 1027
680-85980-32	CV0294B-CS	Solid	12/18/2012 1419	12/20/2012 1027
680-85980-33	CV0294C-CS	Solid	12/18/2012 1430	12/20/2012 1027
680-85980-37	FM0016A-CS	Solid	12/19/2012 0840	12/20/2012 1027
680-85980-38	FM0016B-GS	Solid	12/19/2012 0850	12/20/2012 1027
680-85980-39	CV0627A-CS	Solid	12/19/2012 0915	12/20/2012 1027
680-85980-39MS	CV0627A-CS	Solid	12/19/2012 0915	12/20/2012 1027
680-85980-39MSD	CV0627A-CS	Solid	12/19/2012 0915	12/20/2012 1027
680-85980-41	HP0190A-CS-SP	Solid	12/19/2012 0950	12/20/2012 1027
680-85980-42	HP0190B-CS-SP	Solid	12/19/2012 1000	12/20/2012 1027
680-85980-43	HP0190C-CS-SP	Solid	12/19/2012 1015	12/20/2012 1027
680-85980-44	CV0451A-CS-SP	Solid	12/19/2012 0900	12/20/2012 1027
680-85980-45	CV0451B-CS-SP	Solid	12/19/2012 0915	12/20/2012 1027
680-85980-46	121912-RB-SIEVE	Water	12/19/2012 1200	12/20/2012 1027

METHOD SUMMARY

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-85980-1
Sdg Number: 68085980-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Semivolatile Organic Compounds (GC/MS) Low level PAH	TAL SAV	SW846 8270C_LL_PAH	
Microwave Extraction	TAL SAV		SW846 3546
Percent Moisture	TAL SAV	EPA Moisture	
Matrix: Water			
Semivolatile Organic Compounds (GC/MS) Low level PAH	TAL SAV	SW846 8270C_LL_PAH	
Liquid-Liquid Extraction (Continuous)	TAL SAV		SW846 3520C

Lab References:

TAL SAV = TestAmerica Savannah

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: Oneida Total Integrated Enterprises LLC

Job Number: 680-85980-1
Sdg Number: 68085980-1

Method	Analyst	Analyst ID
SW846 8270C_LL_PAH	Beaty, Van	VHB
EPA Moisture	Swafford, Frances	FS

DATA REPORTING QUALIFIERS

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-85980-1
Sdg Number: 68085980-1

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	X	Surrogate is outside control limits
	D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-85980-1
Sdg Number: 68085980-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 680-261057					
LCS 680-261057/11-A	Lab Control Sample	T	Water	3520C	
LCSD 680-261057/12-A	Lab Control Sample Duplicate	T	Water	3520C	
MB 680-261057/10-A	Method Blank	T	Water	3520C	
680-85980-46	121912-RB-SIEVE	T	Water	3520C	
Analysis Batch:680-261362					
LCS 680-261057/11-A	Lab Control Sample	T	Water	8270C_LL_PAH	680-261057
LCSD 680-261057/12-A	Lab Control Sample Duplicate	T	Water	8270C_LL_PAH	680-261057
MB 680-261057/10-A	Method Blank	T	Water	8270C_LL_PAH	680-261057
680-85980-46	121912-RB-SIEVE	T	Water	8270C_LL_PAH	680-261057
Prep Batch: 680-261484					
LCS 680-261484/18-A	Lab Control Sample	T	Solid	3546	
MB 680-261484/17-A	Method Blank	T	Solid	3546	
680-85980-9	CV0228B-CS-SP	T	Solid	3546	
680-85980-10	CV0230A-CS-SP	T	Solid	3546	
680-85980-26	CV0424A-CS-SP	T	Solid	3546	
680-85980-27	CV0424B-CS-SP	T	Solid	3546	
680-85980-28	CV0235A-CS	T	Solid	3546	
680-85980-29	CV0235B-CS	T	Solid	3546	
680-85980-32	CV0294B-CS	T	Solid	3546	
680-85980-33	CV0294C-CS	T	Solid	3546	
680-85980-37	FM0016A-CS	T	Solid	3546	
680-85980-38	FM0016B-GS	T	Solid	3546	
680-85980-39	CV0627A-CS	T	Solid	3546	
680-85980-39MS	Matrix Spike	T	Solid	3546	
680-85980-39MSD	Matrix Spike Duplicate	T	Solid	3546	
680-85980-41	HP0190A-CS-SP	T	Solid	3546	
680-85980-42	HP0190B-CS-SP	T	Solid	3546	
680-85980-43	HP0190C-CS-SP	T	Solid	3546	
680-85980-44	CV0451A-CS-SP	T	Solid	3546	
680-85980-45	CV0451B-CS-SP	T	Solid	3546	

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-85980-1
Sdg Number: 68085980-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Analysis Batch:680-261629					
LCS 680-261484/18-A	Lab Control Sample	T	Solid	8270C_LL_PAH	680-261484
MB 680-261484/17-A	Method Blank	T	Solid	8270C_LL_PAH	680-261484
680-85980-9	CV0228B-CS-SP	T	Solid	8270C_LL_PAH	680-261484
680-85980-26	CV0424A-CS-SP	T	Solid	8270C_LL_PAH	680-261484
680-85980-27	CV0424B-CS-SP	T	Solid	8270C_LL_PAH	680-261484
680-85980-28	CV0235A-CS	T	Solid	8270C_LL_PAH	680-261484
680-85980-29	CV0235B-CS	T	Solid	8270C_LL_PAH	680-261484
680-85980-37	FM0016A-CS	T	Solid	8270C_LL_PAH	680-261484
680-85980-39	CV0627A-CS	T	Solid	8270C_LL_PAH	680-261484
680-85980-39MS	Matrix Spike	T	Solid	8270C_LL_PAH	680-261484
680-85980-39MSD	Matrix Spike Duplicate	T	Solid	8270C_LL_PAH	680-261484
680-85980-42	HP0190B-CS-SP	T	Solid	8270C_LL_PAH	680-261484
680-85980-43	HP0190C-CS-SP	T	Solid	8270C_LL_PAH	680-261484
680-85980-44	CV0451A-CS-SP	T	Solid	8270C_LL_PAH	680-261484
680-85980-45	CV0451B-CS-SP	T	Solid	8270C_LL_PAH	680-261484
Analysis Batch:680-261663					
680-85980-10	CV0230A-CS-SP	T	Solid	8270C_LL_PAH	680-261484
680-85980-32	CV0294B-CS	T	Solid	8270C_LL_PAH	680-261484
680-85980-33	CV0294C-CS	T	Solid	8270C_LL_PAH	680-261484
680-85980-38	FM0016B-GS	T	Solid	8270C_LL_PAH	680-261484
680-85980-41	HP0190A-CS-SP	T	Solid	8270C_LL_PAH	680-261484

Report Basis
T = Total

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-85980-1
Sdg Number: 68085980-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:680-261140					
680-85980-9	CV0228B-CS-SP	T	Solid	Moisture	
680-85980-10	CV0230A-CS-SP	T	Solid	Moisture	
680-85980-26	CV0424A-CS-SP	T	Solid	Moisture	
680-85980-27	CV0424B-CS-SP	T	Solid	Moisture	
680-85980-28	CV0235A-CS	T	Solid	Moisture	
680-85980-29	CV0235B-CS	T	Solid	Moisture	
680-85980-32	CV0294B-CS	T	Solid	Moisture	
680-85980-33	CV0294C-CS	T	Solid	Moisture	
680-85980-37	FM0016A-CS	T	Solid	Moisture	
680-85980-38	FM0016B-GS	T	Solid	Moisture	
680-85980-39	CV0627A-CS	T	Solid	Moisture	
680-85980-39MS	Matrix Spike	T	Solid	Moisture	
680-85980-39MSD	Matrix Spike Duplicate	T	Solid	Moisture	
680-85980-41	HP0190A-CS-SP	T	Solid	Moisture	
680-85980-42	HP0190B-CS-SP	T	Solid	Moisture	
680-85980-43	HP0190C-CS-SP	T	Solid	Moisture	
680-85980-44	CV0451A-CS-SP	T	Solid	Moisture	
680-85980-45	CV0451B-CS-SP	T	Solid	Moisture	

Report Basis
T = Total

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Instrument ID: MSK Analysis Batch Number: 261629

Lab Sample ID: 680-85980-42 Client Sample ID: HP0190B-CS-SP

Date Analyzed: 01/02/13 15:20 Lab File ID: ka0217.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[a]anthracene	10.72	Unspecified		
Benzo[b]fluoranthene	11.88	Unspecified		
Benzo[k]fluoranthene	11.89	Unspecified		

Lab Sample ID: 680-85980-43 Client Sample ID: HP0190C-CS-SP

Date Analyzed: 01/02/13 15:44 Lab File ID: ka0218.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	11.90	Unspecified		
Benzo[k]fluoranthene	11.92	Unspecified		

Lab Sample ID: 680-85980-44 Client Sample ID: CV0451A-CS-SP

Date Analyzed: 01/02/13 16:07 Lab File ID: ka0219.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	11.88	Unspecified		
Benzo[k]fluoranthene	11.91	Unspecified		

Lab Sample ID: 680-85980-26 Client Sample ID: CV0424A-CS-SP

Date Analyzed: 01/02/13 16:31 Lab File ID: ka0220.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	11.87	Unspecified		
Benzo[k]fluoranthene	11.89	Unspecified		

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Instrument ID: MSK Analysis Batch Number: 261629

Lab Sample ID: 680-85980-27 Client Sample ID: CV0424B-CS-SP

Date Analyzed: 01/02/13 16:54 Lab File ID: ka0221.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	11.87	Unspecified		

Lab Sample ID: 680-85980-28 Client Sample ID: CV0235A-CS

Date Analyzed: 01/02/13 17:18 Lab File ID: ka0222.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[k]fluoranthene	11.89	Unspecified		

Lab Sample ID: 680-85980-29 Client Sample ID: CV0235B-CS

Date Analyzed: 01/02/13 17:41 Lab File ID: ka0223.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	11.87	Unspecified		
Benzo[k]fluoranthene	11.88	Unspecified		

Lab Sample ID: 680-85980-39 MSD Client Sample ID: CV0627A-CS MSD

Date Analyzed: 01/02/13 18:28 Lab File ID: ka0225.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	11.86	Unspecified		

Lab Sample ID: 680-85980-39 Client Sample ID: CV0627A-CS

Date Analyzed: 01/02/13 18:52 Lab File ID: ka0226.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	11.85	Unspecified		
Benzo[k]fluoranthene	11.87	Unspecified		

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Instrument ID: MSK Analysis Batch Number: 261629

Lab Sample ID: 680-85980-37 Client Sample ID: FM0016A-CS

Date Analyzed: 01/02/13 19:16 Lab File ID: ka0227.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	11.87	Unspecified		
Benzo[k]fluoranthene	11.89	Unspecified		

Lab Sample ID: 680-85980-45 Client Sample ID: CV0451B-CS-SP

Date Analyzed: 01/02/13 19:40 Lab File ID: ka0228.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	11.89	Unspecified		
Benzo[k]fluoranthene	11.91	Unspecified		

Lab Sample ID: 680-85980-9 Client Sample ID: CV0228B-CS-SP

Date Analyzed: 01/02/13 20:04 Lab File ID: ka0229.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	11.89	Unspecified		
Benzo[k]fluoranthene	11.91	Unspecified		

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Instrument ID: MSY Analysis Batch Number: 261362

Lab Sample ID: LCSD 680-261057/12-A Client Sample ID:

Date Analyzed: 12/28/12 15:34 Lab File ID: yl2813.d GC Column: HP-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[k]fluoranthene	9.36	Unspecified		

Lab Sample ID: 680-85980-46 Client Sample ID: 121912-RB-SIEVE

Date Analyzed: 12/28/12 17:05 Lab File ID: yl2817.d GC Column: HP-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	9.33	Unspecified		
Benzo[k]fluoranthene	9.36	Unspecified		

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Instrument ID: MSY Analysis Batch Number: 261663

Lab Sample ID: 680-85980-10 Client Sample ID: CV0230A-CS-SP

Date Analyzed: 01/02/13 20:34 Lab File ID: ya0211.d GC Column: HP-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	11.46	Unspecified		
Benzo[k]fluoranthene	11.48	Unspecified		

Lab Sample ID: 680-85980-38 Client Sample ID: FM0016B-GS

Date Analyzed: 01/02/13 20:57 Lab File ID: ya0212.d GC Column: HP-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	11.45	Unspecified		
Benzo[k]fluoranthene	11.47	Unspecified		

Lab Sample ID: 680-85980-41 Client Sample ID: HP0190A-CS-SP

Date Analyzed: 01/02/13 21:20 Lab File ID: ya0213.d GC Column: HP-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1-Methylnaphthalene	5.42	Unspecified		
Benzo[k]fluoranthene	11.48	Unspecified		

Lab Sample ID: 680-85980-32 Client Sample ID: CV0294B-CS

Date Analyzed: 01/02/13 21:43 Lab File ID: ya0214.d GC Column: HP-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	11.46	Unspecified		
Benzo[k]fluoranthene	11.48	Unspecified		

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Instrument ID: MSY Analysis Batch Number: 261663

Lab Sample ID: 680-85980-33 Client Sample ID: CV0294C-CS

Date Analyzed: 01/02/13 22:06 Lab File ID: ya0215.d GC Column: HP-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	11.45	Unspecified		
Benzo[k]fluoranthene	11.48	Unspecified		

Method 8270C Low Level

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

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Matrix: Solid Level: Low

GC Column (1): RXi- 5Sil ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	OTPH	#
CV0228B-CS-SP	680-85980-9	0	D
CV0230A-CS-SP	680-85980-10	0	D
CV0424A-CS-SP	680-85980-26	0	D
CV0424B-CS-SP	680-85980-27	0	D
CV0235A-CS	680-85980-28	0	D
CV0235B-CS	680-85980-29	0	D
CV0294B-CS	680-85980-32	28	X
CV0294C-CS	680-85980-33	38	
FM0016A-CS	680-85980-37	0	D
FM0016B-GS	680-85980-38	0	D
CV0627A-CS	680-85980-39	0	D
HP0190A-CS-SP	680-85980-41	0	D
HP0190B-CS-SP	680-85980-42	0	D
HP0190C-CS-SP	680-85980-43	0	D
CV0451A-CS-SP	680-85980-44	0	D
CV0451B-CS-SP	680-85980-45	0	D
	MB 680-261484/17-A	50	
	LCS 680-261484/18-A	42	
CV0627A-CS MS	680-85980-39 MS	0	D
CV0627A-CS MSD	680-85980-39 MSD	0	D

	QC LIMITS
OTPH = o-Terphenyl	36-131

Column to be used to flag recovery values

FORM II 8270C_LL_PAH

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Matrix: Water Level: Low

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

Client Sample ID	Lab Sample ID	OTPH #
121912-RB-SIEVE	680-85980-46	56
	MB 680-261057/10-A	71
	LCS 680-261057/11-A	58
	LCSD 680-261057/12-A	61

	QC LIMITS
OTPH = o-Terphenyl	41-130

Column to be used to flag recovery values

FORM II 8270C_LL_PAH

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Matrix: Water Level: Low Lab File ID: yl2812.d

Lab ID: LCS 680-261057/11-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acenaphthene	10.0	6.11	61	54-130	
Acenaphthylene	10.0	6.21	62	50-130	
Anthracene	10.0	6.27	63	54-130	
Benzo[a]anthracene	10.0	5.76	58	54-130	
Benzo[a]pyrene	10.0	6.06	61	43-130	
Benzo[b]fluoranthene	10.0	6.37	64	46-130	
Benzo[g,h,i]perylene	10.0	5.80	58	46-130	
Benzo[k]fluoranthene	10.0	5.82	58	53-130	
Chrysene	10.0	6.09	61	56-130	
Dibenz(a,h)anthracene	10.0	5.92	59	42-130	
Fluoranthene	10.0	5.66	57	52-130	
1-Methylnaphthalene	10.0	5.46	55	51-130	
Fluorene	10.0	7.07	71	57-130	
2-Methylnaphthalene	10.0	6.01	60	49-130	
Indeno[1,2,3-cd]pyrene	10.0	5.24	52	39-130	
Naphthalene	10.0	5.91	59	50-130	
Phenanthrene	10.0	6.24	62	58-130	
Pyrene	10.0	6.01	60	54-130	

Column to be used to flag recovery and RPD values

FORM III 8270C_LL_PAH

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Matrix: Solid Level: Low Lab File ID: ka02116.d

Lab ID: LCS 680-261484/18-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Acenaphthene	332	166	50	33-130	
Acenaphthylene	332	167	50	37-131	
Anthracene	332	164	49	42-146	
Benzo[a]anthracene	332	168	51	39-157	
Benzo[a]pyrene	332	176	53	41-158	
Benzo[b]fluoranthene	332	152	46	35-152	
Benzo[g,h,i]perylene	332	171	52	32-150	
Benzo[k]fluoranthene	332	175	53	38-148	
Chrysene	332	163	49	38-147	
Dibenz(a,h)anthracene	332	178	54	32-155	
Fluoranthene	332	167	50	36-147	
1-Methylnaphthalene	332	171	51	36-130	
Fluorene	332	172	52	36-138	
2-Methylnaphthalene	332	183	55	42-130	
Indeno[1,2,3-cd]pyrene	332	182	55	35-148	
Naphthalene	332	168	51	33-130	
Phenanthrene	332	158	48	40-135	
Pyrene	332	148	45	38-145	

Column to be used to flag recovery and RPD values

FORM III 8270C_LL_PAH

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

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Matrix: Water Level: Low Lab File ID: yl2813.d

Lab ID: LCSD 680-261057/12-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acenaphthene	10.0	6.86	69	12	50	54-130	
Acenaphthylene	10.0	6.99	70	12	50	50-130	
Anthracene	10.0	6.88	69	9	50	54-130	
Benzo[a]anthracene	10.0	6.90	69	18	50	54-130	
Benzo[a]pyrene	10.0	6.68	67	10	50	43-130	
Benzo[b]fluoranthene	10.0	7.13	71	11	50	46-130	
Benzo[g,h,i]perylene	10.0	6.39	64	10	50	46-130	
Benzo[k]fluoranthene	10.0	7.06	71	19	50	53-130	
Chrysene	10.0	6.87	69	12	50	56-130	
Dibenz(a,h)anthracene	10.0	6.67	67	12	50	42-130	
Fluoranthene	10.0	6.48	65	14	50	52-130	
1-Methylnaphthalene	10.0	6.21	62	13	50	51-130	
Fluorene	10.0	8.02	80	13	50	57-130	
2-Methylnaphthalene	10.0	6.87	69	13	50	49-130	
Indeno[1,2,3-cd]pyrene	10.0	5.78	58	10	50	39-130	
Naphthalene	10.0	6.71	67	13	50	50-130	
Phenanthrene	10.0	7.04	70	12	50	58-130	
Pyrene	10.0	6.85	68	13	50	54-130	

Column to be used to flag recovery and RPD values

FORM III 8270C_LL_PAH

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Matrix: Solid Level: Low Lab File ID: ka0224.d

Lab ID: 680-85980-39 MS Client ID: CV0627A-CS MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1-Methylnaphthalene	456	140	315	37	36-130	
2-Methylnaphthalene	456	220	378	34	42-130	F
Acenaphthene	456	93 U	223	49	33-130	
Acenaphthylene	456	93 U	217	48	37-131	
Anthracene	456	93 U	230	50	42-146	
Benzo[a]anthracene	456	200	337	31	39-157	F
Benzo[a]pyrene	456	190	331	31	41-158	F
Benzo[b]fluoranthene	456	370	425	12	35-152	F
Benzo[g,h,i]perylene	456	110	197	19	32-150	F
Benzo[k]fluoranthene	456	180	335	33	38-148	F
Chrysene	456	340	425	19	38-147	F
Dibenz(a,h)anthracene	456	93 U	174	38	32-155	
Fluoranthene	456	330	426	21	36-147	F
Fluorene	456	93 U	233	51	36-138	
Indeno[1,2,3-cd]pyrene	456	92 J	183	20	35-148	F
Naphthalene	456	280	373	19	33-130	F
Pyrene	456	310	428	25	38-145	F
Phenanthrene	456	310	415	24	40-135	F

Column to be used to flag recovery and RPD values

FORM III 8270C_LL_PAH

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Matrix: Solid Level: Low Lab File ID: ka0225.d

Lab ID: 680-85980-39 MSD Client ID: CV0627A-CS MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1-Methylnaphthalene	455	272	28	15	50	36-130	F
2-Methylnaphthalene	455	317	20	17	50	42-130	F
Acenaphthene	455	192	42	15	50	33-130	
Acenaphthylene	455	189	42	14	50	37-131	
Anthracene	455	214	47	7	50	42-146	
Benzo[a]anthracene	455	333	30	1	50	39-157	F
Benzo[a]pyrene	455	300	24	10	50	41-158	F
Benzo[b]fluoranthene	455	415	9	3	50	35-152	F
Benzo[g,h,i]perylene	455	179	15	10	50	32-150	F
Benzo[k]fluoranthene	455	294	24	13	50	38-148	F
Chrysene	455	397	13	7	50	38-147	F
Dibenz(a,h)anthracene	455	155	34	11	50	32-155	
Fluoranthene	455	391	13	9	50	36-147	F
Fluorene	455	215	47	8	50	36-138	
Indeno[1,2,3-cd]pyrene	455	168	17	9	50	35-148	F
Naphthalene	455	302	4	21	50	33-130	F
Pyrene	455	407	20	5	50	38-145	F
Phenanthrene	455	370	14	11	50	40-135	F

Column to be used to flag recovery and RPD values

FORM III 8270C_LL_PAH

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Lab File ID: yl2811z.d Lab Sample ID: MB 680-261057/10-A

Matrix: Water Date Extracted: 12/26/2012 18:09

Instrument ID: MSY Date Analyzed: 12/28/2012 14:50

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-261057/11-A	yl2812.d	12/28/2012 15:12
	LCSD 680-261057/12-A	yl2813.d	12/28/2012 15:34
121912-RB-SIEVE	680-85980-46	yl2817.d	12/28/2012 17:05

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Lab File ID: ka02115.d Lab Sample ID: MB 680-261484/17-A

Matrix: Solid Date Extracted: 12/31/2012 13:00

Instrument ID: MSK Date Analyzed: 01/02/2013 14:34

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-261484/18-A	ka02116.d	01/02/2013 14:57
HP0190B-CS-SP	680-85980-42	ka0217.d	01/02/2013 15:20
HP0190C-CS-SP	680-85980-43	ka0218.d	01/02/2013 15:44
CV0451A-CS-SP	680-85980-44	ka0219.d	01/02/2013 16:07
CV0424A-CS-SP	680-85980-26	ka0220.d	01/02/2013 16:31
CV0424B-CS-SP	680-85980-27	ka0221.d	01/02/2013 16:54
CV0235A-CS	680-85980-28	ka0222.d	01/02/2013 17:18
CV0235B-CS	680-85980-29	ka0223.d	01/02/2013 17:41
CV0627A-CS MS	680-85980-39 MS	ka0224.d	01/02/2013 18:05
CV0627A-CS MSD	680-85980-39 MSD	ka0225.d	01/02/2013 18:28
CV0627A-CS	680-85980-39	ka0226.d	01/02/2013 18:52
FM0016A-CS	680-85980-37	ka0227.d	01/02/2013 19:16
CV0451B-CS-SP	680-85980-45	ka0228.d	01/02/2013 19:40
CV0228B-CS-SP	680-85980-9	ka0229.d	01/02/2013 20:04
CV0230A-CS-SP	680-85980-10	ya0211.d	01/02/2013 20:34
FM0016B-GS	680-85980-38	ya0212.d	01/02/2013 20:57
HP0190A-CS-SP	680-85980-41	ya0213.d	01/02/2013 21:20
CV0294B-CS	680-85980-32	ya0214.d	01/02/2013 21:43
CV0294C-CS	680-85980-33	ya0215.d	01/02/2013 22:06

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

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Lab File ID: ka0205t.d DFTPP Injection Date: 01/02/2013

Instrument ID: MSK DFTPP Injection Time: 10:48

Analysis Batch No.: 261629

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0 % of mass 442	15.8	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	15.2	
70	Less than 2.0 % of mass 69	0.0	(0.3)1
127	10.0 - 80.0 % of mass 442	29.1	
197	Less than 2.0 % of mass 198	0.0	(0.0)1
198	Greater than 50.0 % of mass 442	61.5	
199	5.0 - 9.0 % of mass 198	4.0	(6.5)1
275	10.0 - 60.0 % of mass 442	16.8	
365	Greater than 1.0 % of mass 442	2.4	
441	Present but less than mass 443	16.4	
442	Base Peak, 100% relative abundance	100.0	
443	15.0 - 24.0 % of mass 442	19.9	

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

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
	IC 680-261629/2	ka0206q.d	01/02/2013	11:04
	IC 680-261629/3	ka0207q.d	01/02/2013	11:28
	IC 680-261629/4	ka0208q.d	01/02/2013	11:51
	IC 680-261629/5	ka0209q.d	01/02/2013	12:15
	IC 680-261629/6	ka0210q.d	01/02/2013	12:38
	IC 680-261629/7	ka0211q.d	01/02/2013	13:01
	ICIS 680-261629/8	ka0212q.d	01/02/2013	13:24
	MB 680-261484/17-A	ka02115.d	01/02/2013	14:34
	LCS 680-261484/18-A	ka02116.d	01/02/2013	14:57
HP0190B-CS-SP	680-85980-42	ka0217.d	01/02/2013	15:20
HP0190C-CS-SP	680-85980-43	ka0218.d	01/02/2013	15:44
CV0451A-CS-SP	680-85980-44	ka0219.d	01/02/2013	16:07
CV0424A-CS-SP	680-85980-26	ka0220.d	01/02/2013	16:31
CV0424B-CS-SP	680-85980-27	ka0221.d	01/02/2013	16:54
CV0235A-CS	680-85980-28	ka0222.d	01/02/2013	17:18
CV0235B-CS	680-85980-29	ka0223.d	01/02/2013	17:41
CV0627A-CS MS	680-85980-39 MS	ka0224.d	01/02/2013	18:05
CV0627A-CS MSD	680-85980-39 MSD	ka0225.d	01/02/2013	18:28
CV0627A-CS	680-85980-39	ka0226.d	01/02/2013	18:52
FM0016A-CS	680-85980-37	ka0227.d	01/02/2013	19:16
CV0451B-CS-SP	680-85980-45	ka0228.d	01/02/2013	19:40
CV0228B-CS-SP	680-85980-9	ka0229.d	01/02/2013	20:04

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

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Lab File ID: yl2105t.d DFTPP Injection Date: 12/21/2012

Instrument ID: MSY DFTPP Injection Time: 10:58

Analysis Batch No.: 261214

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0 % of mass 442	19.5	
68	Less than 2.0 % of mass 69	0.4	(2.0)1
69	Mass 69 relative abundance	20.6	
70	Less than 2.0 % of mass 69	0.3	(1.3)1
127	10.0 - 80.0 % of mass 442	31.6	
197	Less than 2.0 % of mass 198	0.8	(1.0)1
198	Greater than 50.0 % of mass 442	83.9	
199	5.0 - 9.0 % of mass 198	5.3	(6.3)1
275	10.0 - 60.0 % of mass 442	22.2	
365	Greater than 1.0 % of mass 442	3.0	
441	Present but less than mass 443	14.4	
442	Base Peak, 100% relative abundance	100.0	
443	15.0 - 24.0 % of mass 442	19.6	

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

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
	IC 680-261214/2	yl2106q.d	12/21/2012	11:14
	IC 680-261214/3	yl2107q.d	12/21/2012	11:37
	IC 680-261214/4	yl2108q.d	12/21/2012	11:59
	IC 680-261214/5	yl2109q.d	12/21/2012	12:22
	IC 680-261214/6	yl2110q.d	12/21/2012	12:44
	IC 680-261214/7	yl2111q.d	12/21/2012	13:07
	ICIS 680-261214/8	yl2112q.d	12/21/2012	13:30

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

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Lab File ID: yl2801t.d DFTPP Injection Date: 12/28/2012

Instrument ID: MSY DFTPP Injection Time: 10:20

Analysis Batch No.: 261362

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0 % of mass 442	28.7	
68	Less than 2.0 % of mass 69	0.3	(0.9)1
69	Mass 69 relative abundance	32.2	
70	Less than 2.0 % of mass 69	0.0	(0.0)1
127	10.0 - 80.0 % of mass 442	49.2	
197	Less than 2.0 % of mass 198	1.0	(0.9)1
198	Greater than 50.0 % of mass 442	111.3	
199	5.0 - 9.0 % of mass 198	7.2	(6.5)1
275	10.0 - 60.0 % of mass 442	26.7	
365	Greater than 1.0 % of mass 442	3.3	
441	Present but less than mass 443	14.4	
442	Base Peak, 100% relative abundance	100.0	
443	15.0 - 24.0 % of mass 442	19.2	

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

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
	CCVIS 680-261362/2	yl2802q.d	12/28/2012	10:37
	MB 680-261057/10-A	yl2811z.d	12/28/2012	14:50
	LCS 680-261057/11-A	yl2812.d	12/28/2012	15:12
	LCSD 680-261057/12-A	yl2813.d	12/28/2012	15:34
121912-RB-SIEVE	680-85980-46	yl2817.d	12/28/2012	17:05

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

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Lab File ID: ya0201tzz.d DFTPP Injection Date: 01/02/2013

Instrument ID: MSY DFTPP Injection Time: 16:44

Analysis Batch No.: 261663

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0 % of mass 442	26.0	
68	Less than 2.0 % of mass 69	0.3	(1.2)1
69	Mass 69 relative abundance	20.5	
70	Less than 2.0 % of mass 69	0.1	(0.4)1
127	10.0 - 80.0 % of mass 442	36.8	
197	Less than 2.0 % of mass 198	0.7	(0.9)1
198	Greater than 50.0 % of mass 442	74.7	
199	5.0 - 9.0 % of mass 198	5.0	(6.7)1
275	10.0 - 60.0 % of mass 442	17.5	
365	Greater than 1.0 % of mass 442	2.4	
441	Present but less than mass 443	14.5	
442	Base Peak, 100% relative abundance	100.0	
443	15.0 - 24.0 % of mass 442	19.6	

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

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
	IC 680-261663/2	ya0202q.d	01/02/2013	17:06
	IC 680-261663/3	ya0203q.d	01/02/2013	17:29
	IC 680-261663/4	ya0204q.d	01/02/2013	17:53
	IC 680-261663/5	ya0205q.d	01/02/2013	18:16
	IC 680-261663/6	ya0206q.d	01/02/2013	18:39
	IC 680-261663/7	ya0207q.d	01/02/2013	19:02
	ICIS 680-261663/8	ya0208q.d	01/02/2013	19:25
CV0230A-CS-SP	680-85980-10	ya0211.d	01/02/2013	20:34
FM0016B-GS	680-85980-38	ya0212.d	01/02/2013	20:57
HP0190A-CS-SP	680-85980-41	ya0213.d	01/02/2013	21:20
CV0294B-CS	680-85980-32	ya0214.d	01/02/2013	21:43
CV0294C-CS	680-85980-33	ya0215.d	01/02/2013	22:06

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

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Sample No.: ICIS 680-261629/8 Date Analyzed: 01/02/2013 13:24

Instrument ID: MSK GC Column: RXi- 5Sil MS ID: 0.25(mm)

Lab File ID (Standard): ka0212q.d Heated Purge: (Y/N) N

Calibration ID: 15399

		NPT		ANT		PHN	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		329115	4.50	177918	6.29	254927	7.90
UPPER LIMIT		658230	5.00	355836	6.79	509854	8.40
LOWER LIMIT		164558	4.00	88959	5.79	127464	7.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 680-261484/17-A		429122	4.50	240000	6.29	353245	7.90
LCS 680-261484/18-A		437752	4.49	255266	6.29	406857	7.91
680-85980-42	HP0190B-CS-SP	487969	4.50	286429	6.29	439329	7.90
680-85980-43	HP0190C-CS-SP	502262	4.50	291167	6.29	449585	7.90
680-85980-44	CV0451A-CS-SP	529713	4.50	310450	6.29	486027	7.91
680-85980-26	CV0424A-CS-SP	443920	4.50	255304	6.29	391193	7.91
680-85980-27	CV0424B-CS-SP	514489	4.50	300951	6.29	465961	7.90
680-85980-28	CV0235A-CS	457113	4.50	260596	6.29	390981	7.90
680-85980-29	CV0235B-CS	476331	4.50	278479	6.29	441029	7.91
680-85980-39 MS	CV0627A-CS MS	441674	4.50	258979	6.29	410561	7.91
680-85980-39 MSD	CV0627A-CS MSD	446881	4.50	258188	6.29	414360	7.91
680-85980-39	CV0627A-CS	427059	4.50	247368	6.29	388365	7.91
680-85980-37	FM0016A-CS	501600	4.50	289014	6.29	455702	7.91
680-85980-45	CV0451B-CS-SP	488723	4.50	285196	6.29	452301	7.91
680-85980-9	CV0228B-CS-SP	507481	4.50	297483	6.29	469774	7.91

NPT = Naphthalene-d8
ANT = Acenaphthene-d10
PHN = Phenanthrene-d10

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_LL_PAH

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

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Sample No.: ICIS 680-261629/8 Date Analyzed: 01/02/2013 13:24

Instrument ID: MSK GC Column: RXi- 5Sil MS ID: 0.25(mm)

Lab File ID (Standard): ka0212q.d Heated Purge: (Y/N) N

Calibration ID: 15399

		CRY		PRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		186355	10.73	160778	12.36		
UPPER LIMIT		372710	11.23	321556	12.86		
LOWER LIMIT		93178	10.23	80389	11.86		
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 680-261484/17-A		280642	10.73	258707	12.36		
LCS 680-261484/18-A		347155	10.73	311887	12.35		
680-85980-42	HP0190B-CS-SP	318259	10.73	249643	12.36		
680-85980-43	HP0190C-CS-SP	300042	10.74	217080	12.38		
680-85980-44	CV0451A-CS-SP	351099	10.73	259443	12.36		
680-85980-26	CV0424A-CS-SP	254336	10.72	172815	12.35		
680-85980-27	CV0424B-CS-SP	336564	10.72	260079	12.35		
680-85980-28	CV0235A-CS	249421	10.72	171655	12.34		
680-85980-29	CV0235B-CS	310881	10.72	208946	12.34		
680-85980-39 MS	CV0627A-CS MS	290043	10.73	208185	12.35		
680-85980-39 MSD	CV0627A-CS MSD	287501	10.72	219925	12.34		
680-85980-39	CV0627A-CS	268935	10.72	197454	12.33		
680-85980-37	FM0016A-CS	300515	10.73	205249	12.36		
680-85980-45	CV0451B-CS-SP	296573	10.74	197432	12.37		
680-85980-9	CV0228B-CS-SP	332505	10.74	223344	12.37		

CRY = Chrysene-d12
PRY = Perylene-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_LL_PAH

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

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Sample No.: CCVIS 680-261362/2 Date Analyzed: 12/28/2012 10:37

Instrument ID: MSY GC Column: HP-5MS ID: 0.25(mm)

Lab File ID (Standard): yl2802q.d Heated Purge: (Y/N) N

Calibration ID: 15368

		NPT		ANT		PHN	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		66613	3.32	38066	4.84	60271	6.09
UPPER LIMIT		133226	3.82	76132	5.34	120542	6.59
LOWER LIMIT		33307	2.82	19033	4.34	30136	5.59
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 680-261057/10-A		87635	3.32	52277	4.84	82972	6.09
LCS 680-261057/11-A		84497	3.32	51639	4.84	87718	6.09
LCSD 680-261057/12-A		85649	3.32	53650	4.84	93412	6.09
680-85980-46	121912-RB-SIEVE	79299	3.32	49362	4.84	76696	6.09

NPT = Naphthalene-d8
ANT = Acenaphthene-d10
PHN = Phenanthrene-d10

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_LL_PAH

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

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Sample No.: CCVIS 680-261362/2 Date Analyzed: 12/28/2012 10:37

Instrument ID: MSY GC Column: HP-5MS ID: 0.25(mm)

Lab File ID (Standard): yl2802q.d Heated Purge: (Y/N) N

Calibration ID: 15368

		CRY		PRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		41627	8.39	33634	9.66		
UPPER LIMIT		83254	8.89	67268	10.16		
LOWER LIMIT		20814	7.89	16817	9.16		
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 680-261057/10-A		62412	8.40	48777	9.67		
LCS 680-261057/11-A		65054	8.39	52383	9.67		
LCSD 680-261057/12-A		71412	8.40	56645	9.67		
680-85980-46	121912-RB-SIEVE	58732	8.40	46119	9.67		

CRY = Chrysene-d12
PRY = Perylene-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_LL_PAH

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

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Sample No.: ICIS 680-261663/8 Date Analyzed: 01/02/2013 19:25

Instrument ID: MSY GC Column: HP-5MS ID: 0.25(mm)

Lab File ID (Standard): ya0208q.d Heated Purge: (Y/N) N

Calibration ID: 15404

		NPT		ANT		PHN	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		338403	4.71	178192	6.25	237891	7.56
UPPER LIMIT		676806	5.21	356384	6.75	475782	8.06
LOWER LIMIT		169202	4.21	89096	5.75	118946	7.06
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-85980-10	CV0230A-CS-SP	441408	4.71	259672	6.25	400512	7.56
680-85980-38	FM0016B-GS	473791	4.71	269911	6.25	399571	7.56
680-85980-41	HP0190A-CS-SP	386315	4.71	219639	6.25	326594	7.56
680-85980-32	CV0294B-CS	451629	4.70	269495	6.25	434657	7.56
680-85980-33	CV0294C-CS	457782	4.70	264113	6.25	419751	7.56

NPT = Naphthalene-d8
ANT = Acenaphthene-d10
PHN = Phenanthrene-d10

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_LL_PAH

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

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Sample No.: ICIS 680-261663/8 Date Analyzed: 01/02/2013 19:25

Instrument ID: MSY GC Column: HP-5MS ID: 0.25(mm)

Lab File ID (Standard): ya0208q.d Heated Purge: (Y/N) N

Calibration ID: 15404

		CRY		PRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		186907	10.08	188661	12.07		
UPPER LIMIT		373814	10.58	377322	12.57		
LOWER LIMIT		93454	9.58	94331	11.57		
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-85980-10	CV0230A-CS-SP	327735	10.08	265089	12.08		
680-85980-38	FM0016B-GS	306911	10.08	275194	12.07		
680-85980-41	HP0190A-CS-SP	249461	10.08	223909	12.07		
680-85980-32	CV0294B-CS	348349	10.08	262164	12.08		
680-85980-33	CV0294C-CS	334764	10.08	272073	12.08		

CRY = Chrysene-d12
PRY = Perylene-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_LL_PAH

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: CV0228B-CS-SP | Lab Sample ID: 680-85980-9

Matrix: Solid | Lab File ID: ka0229.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/18/2012 14:50

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.35(g) | Date Analyzed: 01/02/2013 20:04

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

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

% Moisture: 28.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	190		92	43
91-57-6	2-Methylnaphthalene	220		92	45
83-32-9	Acenaphthene	92	U	92	45
208-96-8	Acenaphthylene	92	U	92	45
120-12-7	Anthracene	92	U	92	45
56-55-3	Benzo[a]anthracene	420		92	45
50-32-8	Benzo[a]pyrene	530		92	16
205-99-2	Benzo[b]fluoranthene	950		92	45
191-24-2	Benzo[g,h,i]perylene	290		92	45
207-08-9	Benzo[k]fluoranthene	410		92	27
218-01-9	Chrysene	570		92	45
53-70-3	Dibenz(a,h)anthracene	110		92	45
206-44-0	Fluoranthene	410		92	45
86-73-7	Fluorene	92	U	92	45
193-39-5	Indeno[1,2,3-cd]pyrene	230		92	45
91-20-3	Naphthalene	140		92	45
129-00-0	Pyrene	410		92	45
85-01-8	Phenanthrene	260		92	33

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0229.d
Lab Smp Id: 680-85980-A-9-A DL
Inj Date : 02-JAN-2013 20:04
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85980-A-9-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:58 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:24 Cal File: ka0212q.d
Als bottle: 25
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.501	4.501	(1.000)	507481	2.00000	
2 Naphthalene	128	4.524	4.524	(1.005)	94108	0.31472	104.90
3 2-Methylnaphthalene	142	5.194	5.194	(1.154)	87472	0.47064	156.88
4 1-Methylnaphthalene	142	5.300	5.300	(1.178)	79385	0.42134	140.44
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	297483	2.00000	
* 9 Phenanthrene-d10	188	7.909	7.903	(1.000)	469774	2.00000	
10 Phenanthrene	178	7.932	7.932	(1.003)	169202	0.57069	190.23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
12 Fluoranthene	202	9.225	9.219	(1.166)	268493	0.89889	299.63
14 Pyrene	202	9.466	9.460	(0.881)	256291	0.90430	301.43
16 Benzo(a)Anthracene	228	10.729	10.717	(0.999)	198587	0.91227	304.08
* 13 Chrysene-d12	240	10.741	10.729	(1.000)	332505	2.00000	
17 Chrysene	228	10.764	10.758	(1.002)	265402	1.23919	413.06
19 Benzo(b)fluoranthene	252	11.892	11.875	(0.961)	343882	2.07180	690.60(M)
20 Benzo(k)fluoranthene	252	11.910	11.904	(0.962)	142490	0.88694	295.64(M)
21 Benzo(a)pyrene	252	12.298	12.280	(0.994)	147218	1.16012	386.70
* 18 Perylene-d12	264	12.374	12.356	(1.000)	223344	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	13.984	13.966	(1.302)	84936	0.49473	164.91
23 Dibenzo(a,h)anthracene	278	14.002	13.984	(1.132)	28085	0.24610	82.03
24 Benzo(g,h,i)perylene	276	14.477	14.460	(1.170)	71290	0.62961	209.87

QC Flag Legend

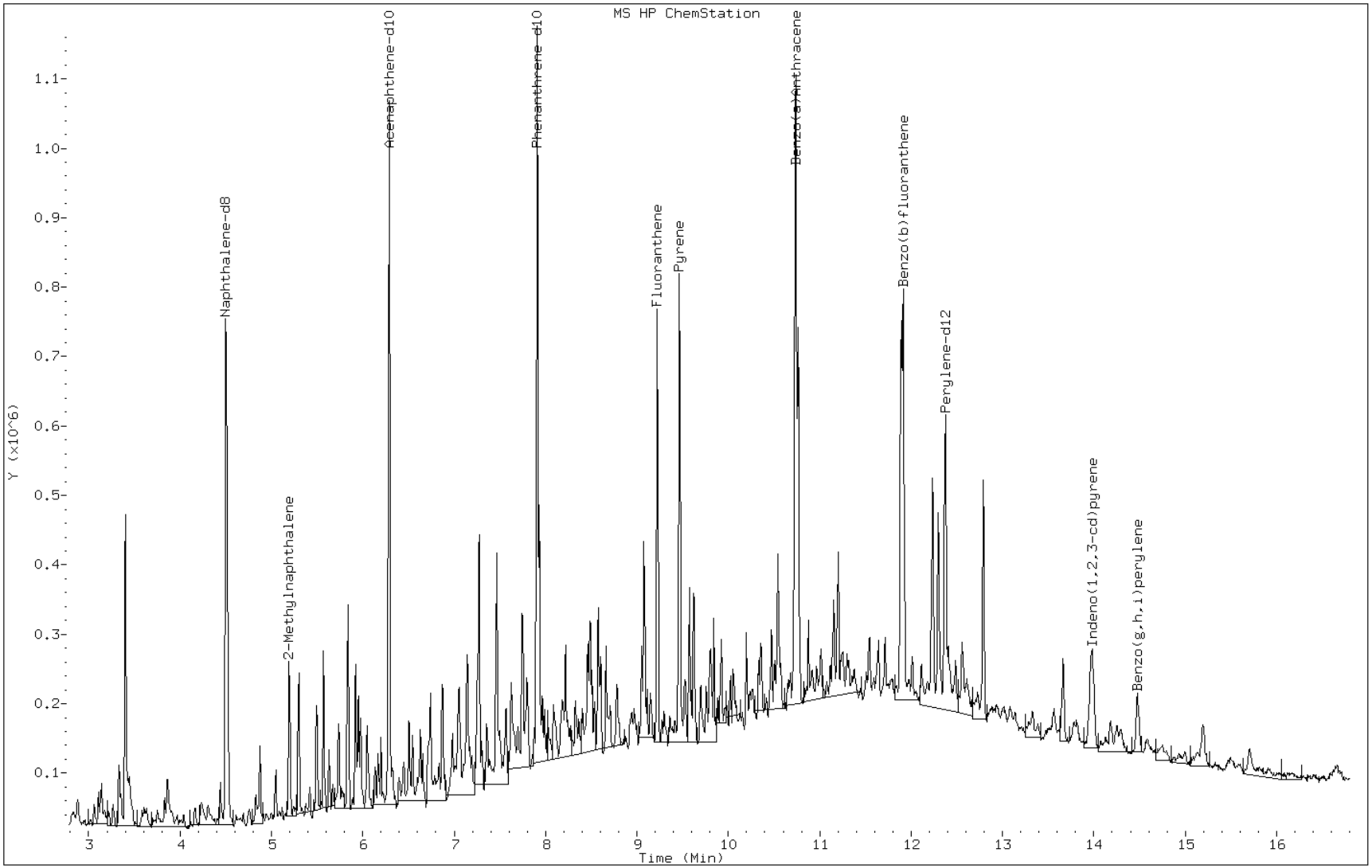
M - Compound response manually integrated.

Data File: ka0229.d

Date: 02-JAN-2013 20:04

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-9-A DL=10 Operator: LEG



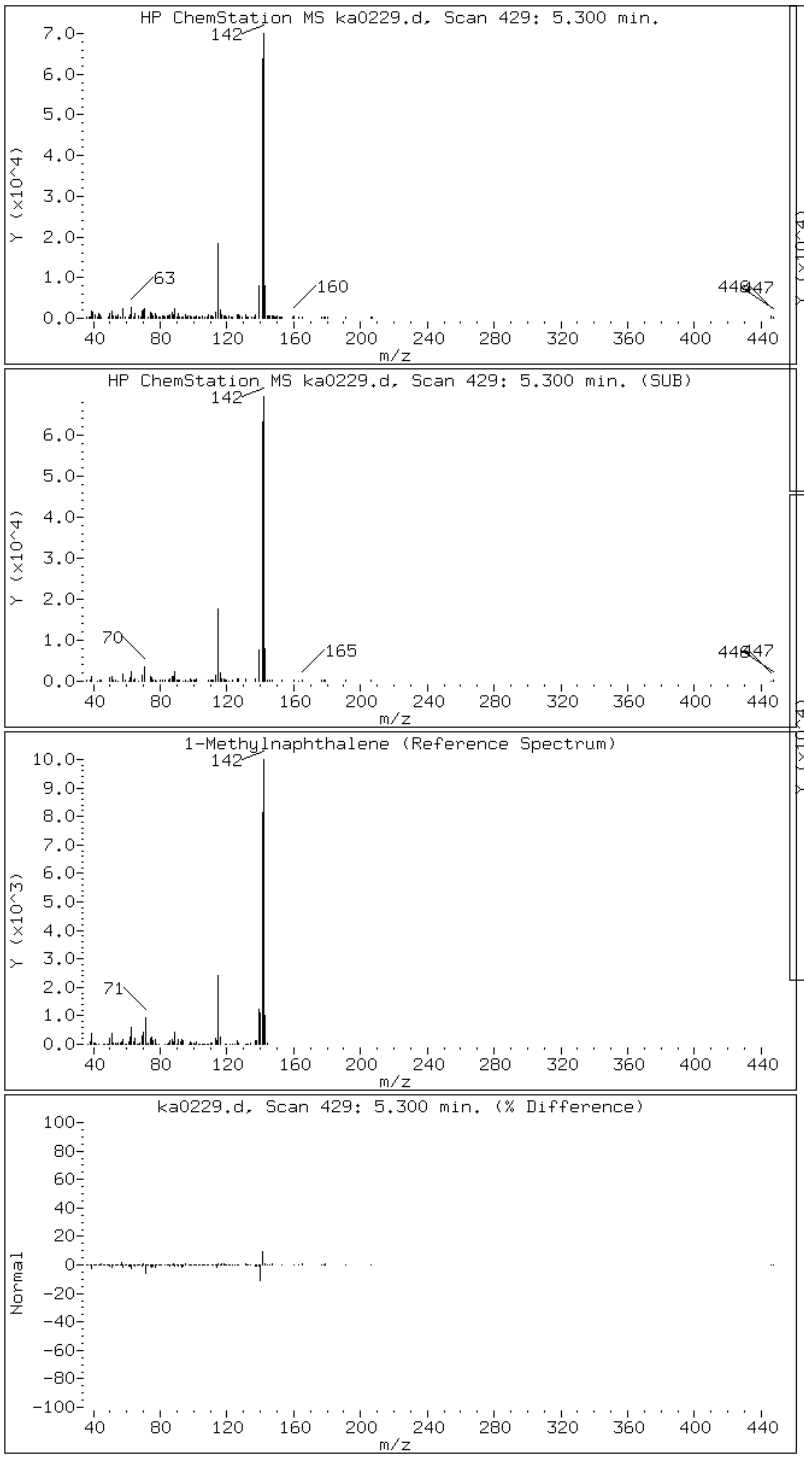
Data File: ka0229.d

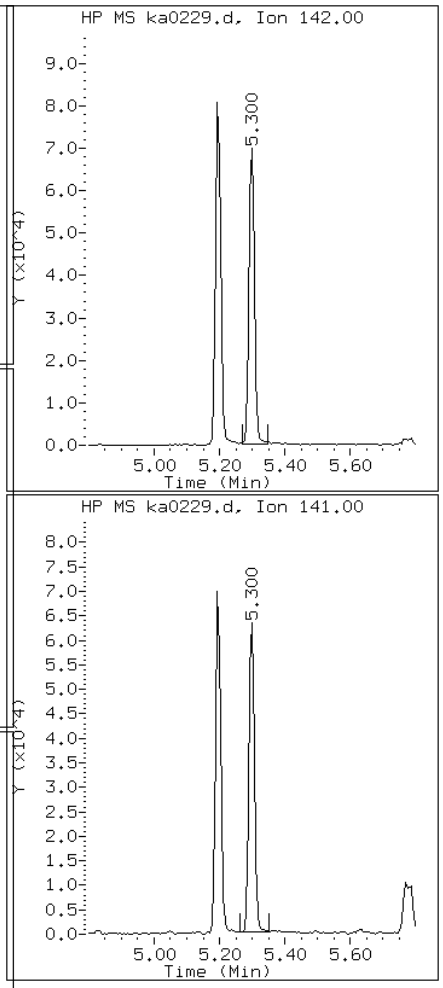
Date: 02-JAN-2013 20:04

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-9-A DL=10 Operator: LEG

4 1-Methylnaphthalene





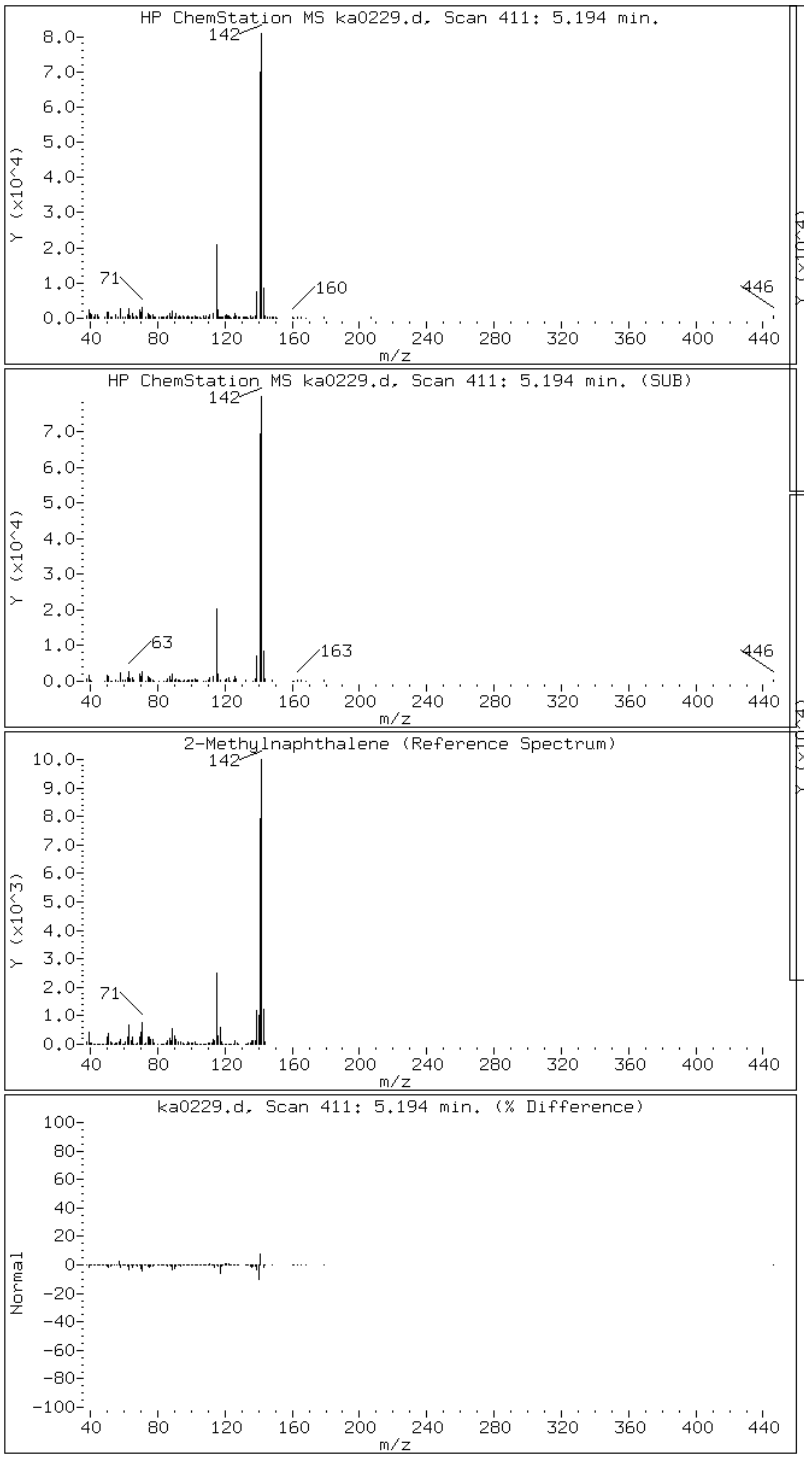
Data File: ka0229.d

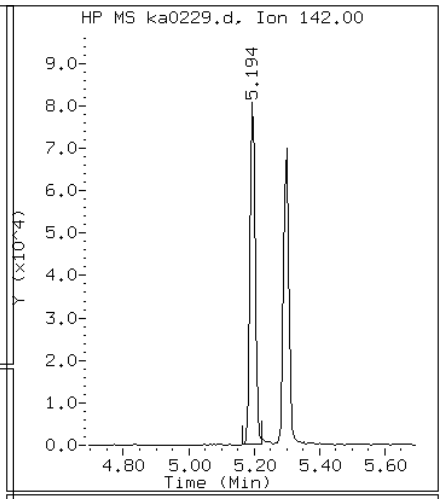
Date: 02-JAN-2013 20:04

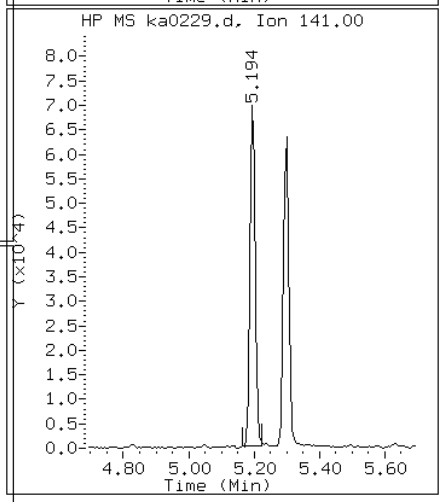
Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-9-A DL=10 Operator: LEG

3 2-Methylnaphthalene







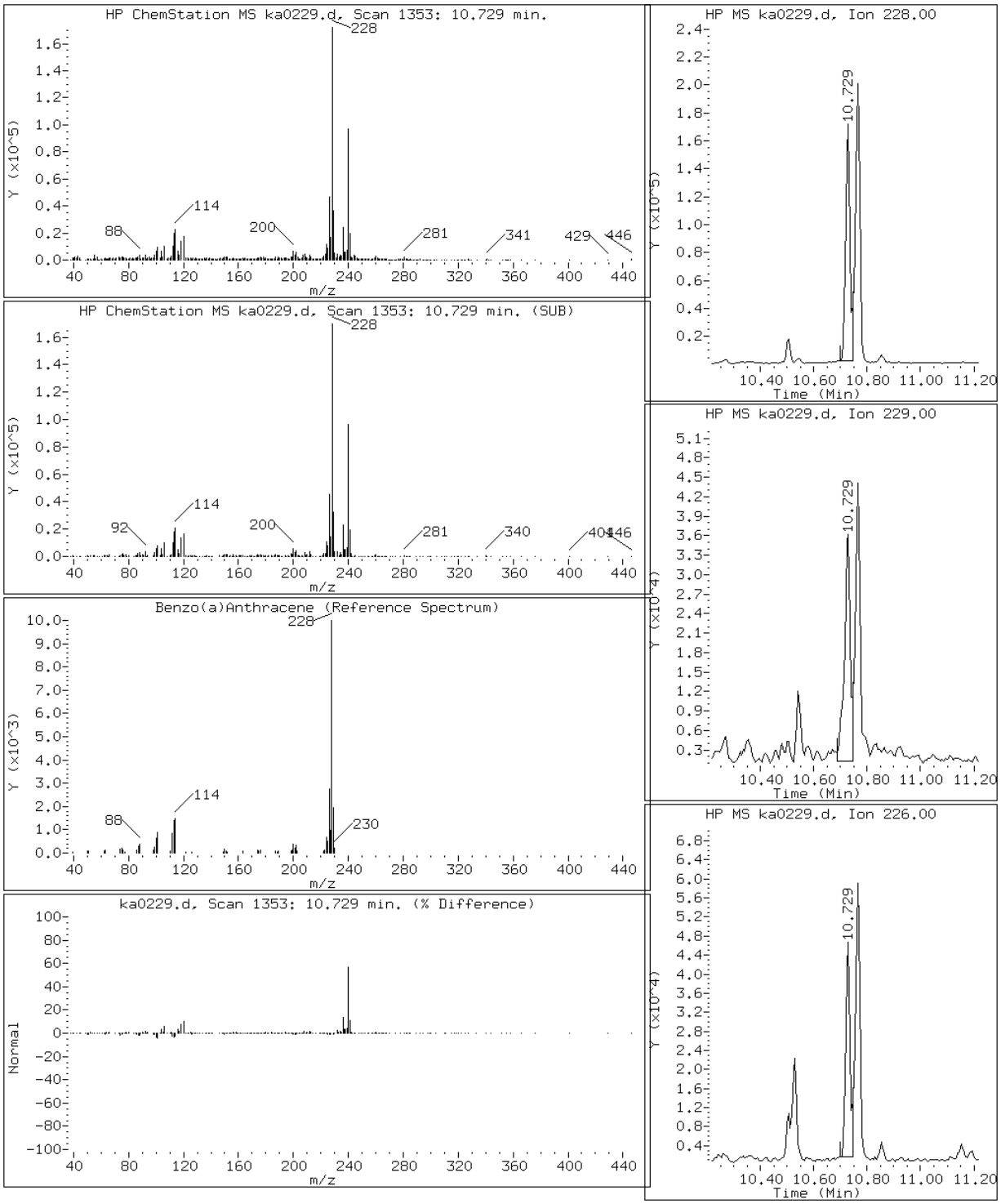
Data File: ka0229.d

Date: 02-JAN-2013 20:04

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-9-A DL=10 Operator: LEG

16 Benzo(a)Anthracene



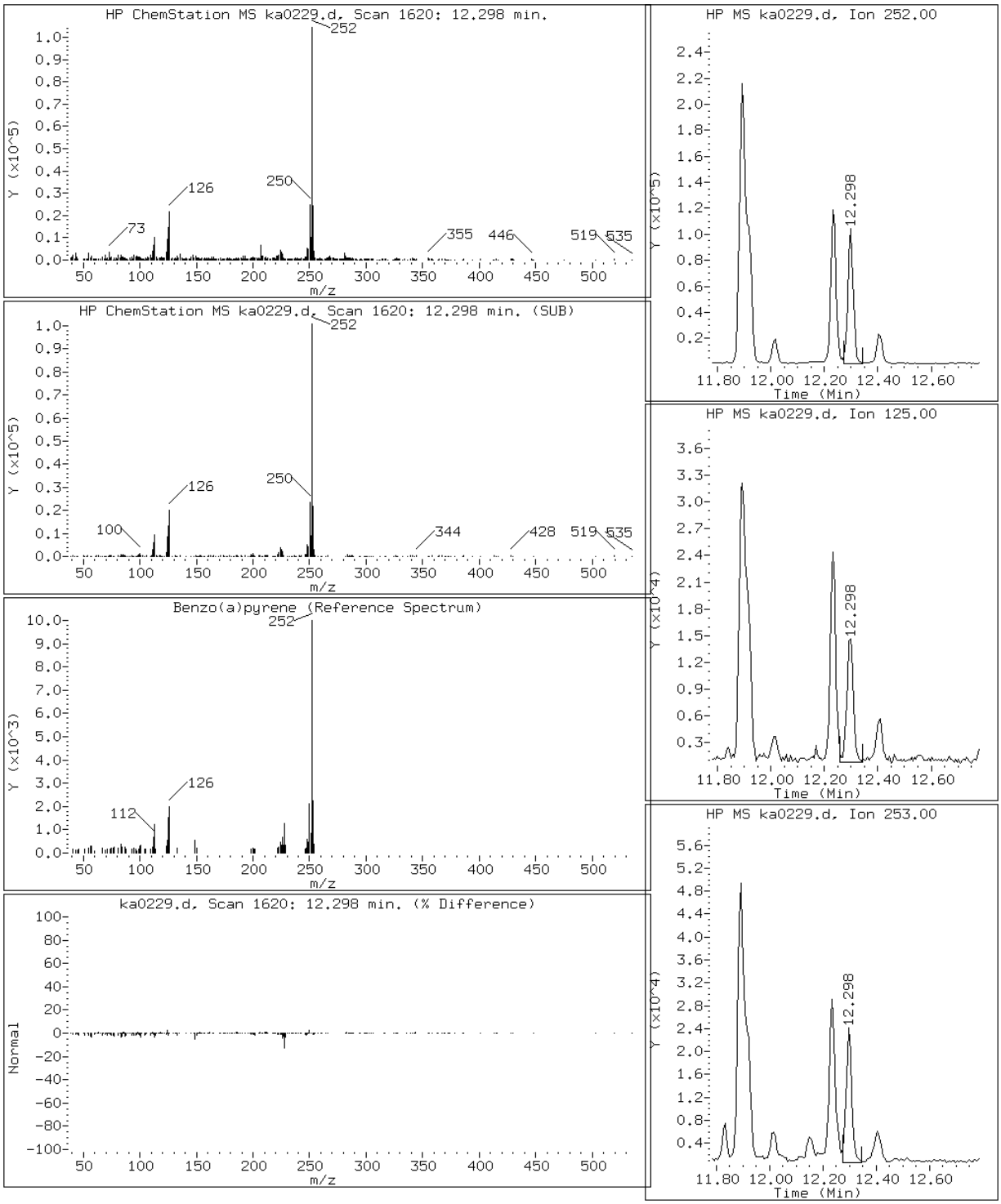
Data File: ka0229.d

Date: 02-JAN-2013 20:04

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-9-A DL=10 Operator: LEG

21 Benzo(a)pyrene



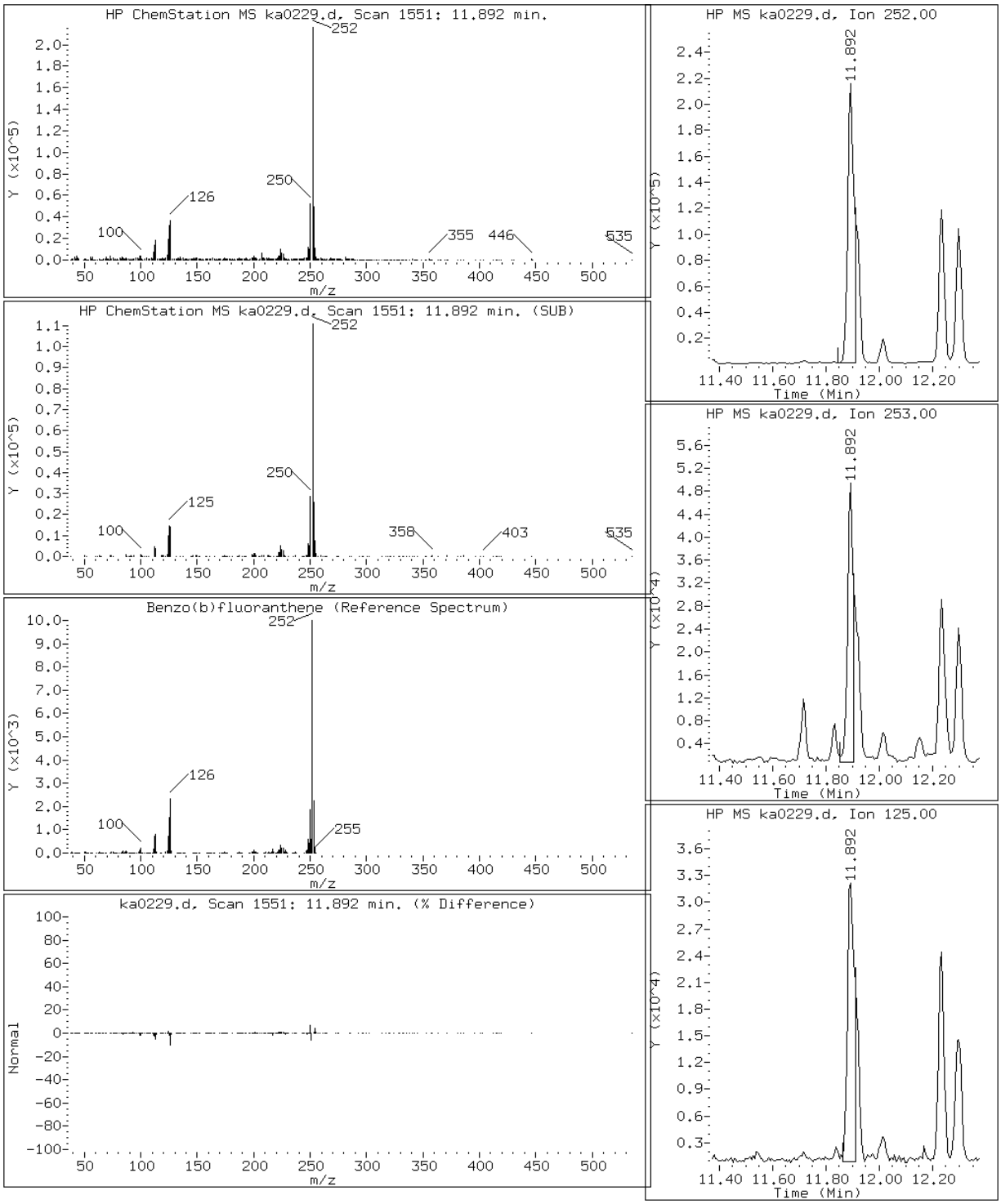
Data File: ka0229.d

Date: 02-JAN-2013 20:04

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-9-A DL=10 Operator: LEG

19 Benzo(b)fluoranthene



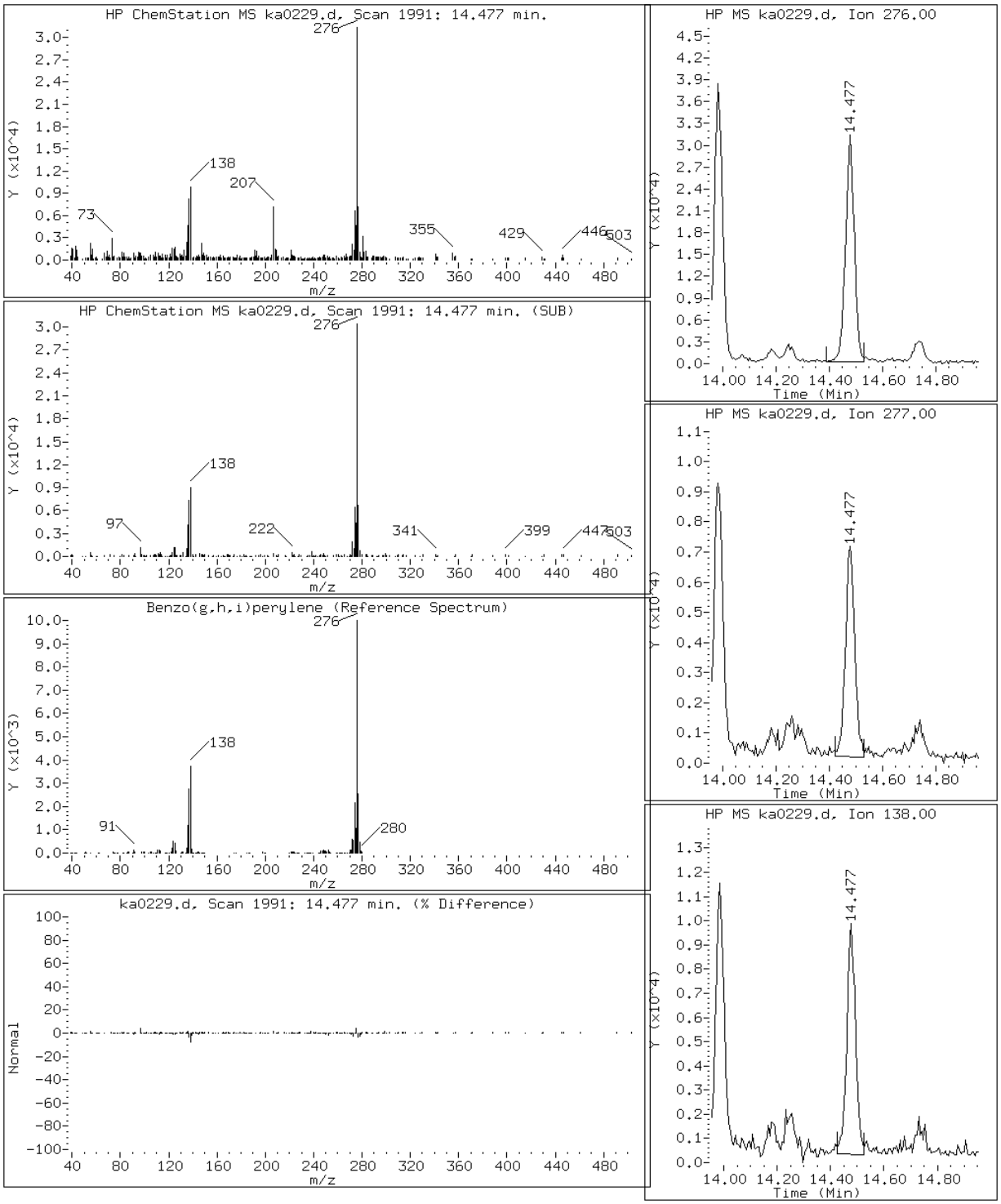
Data File: ka0229.d

Date: 02-JAN-2013 20:04

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-9-A DL=10 Operator: LEG

24 Benzo(g,h,i)perylene



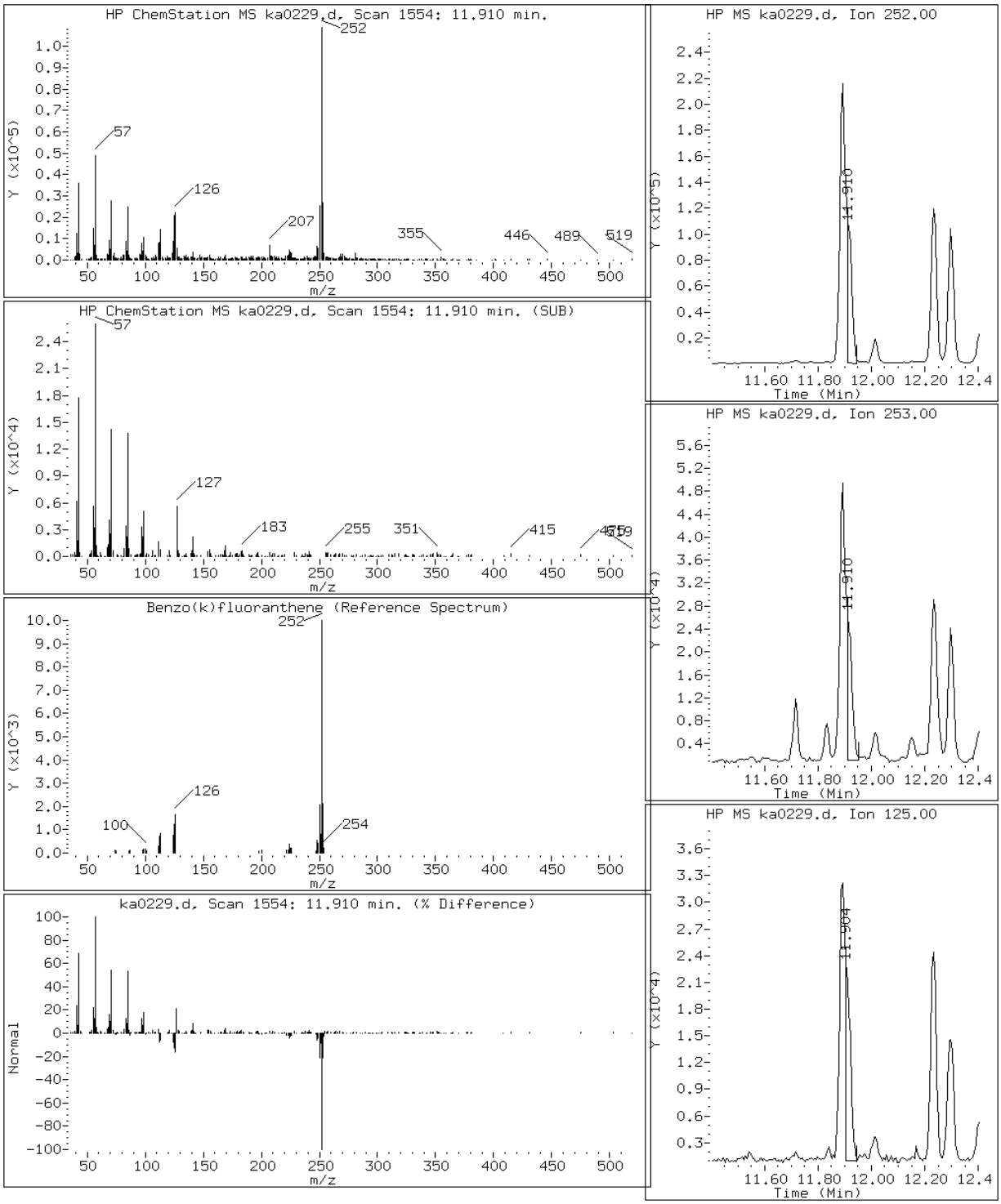
Data File: ka0229.d

Date: 02-JAN-2013 20:04

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-9-A DL=10 Operator: LEG

20 Benzo(k)fluoranthene



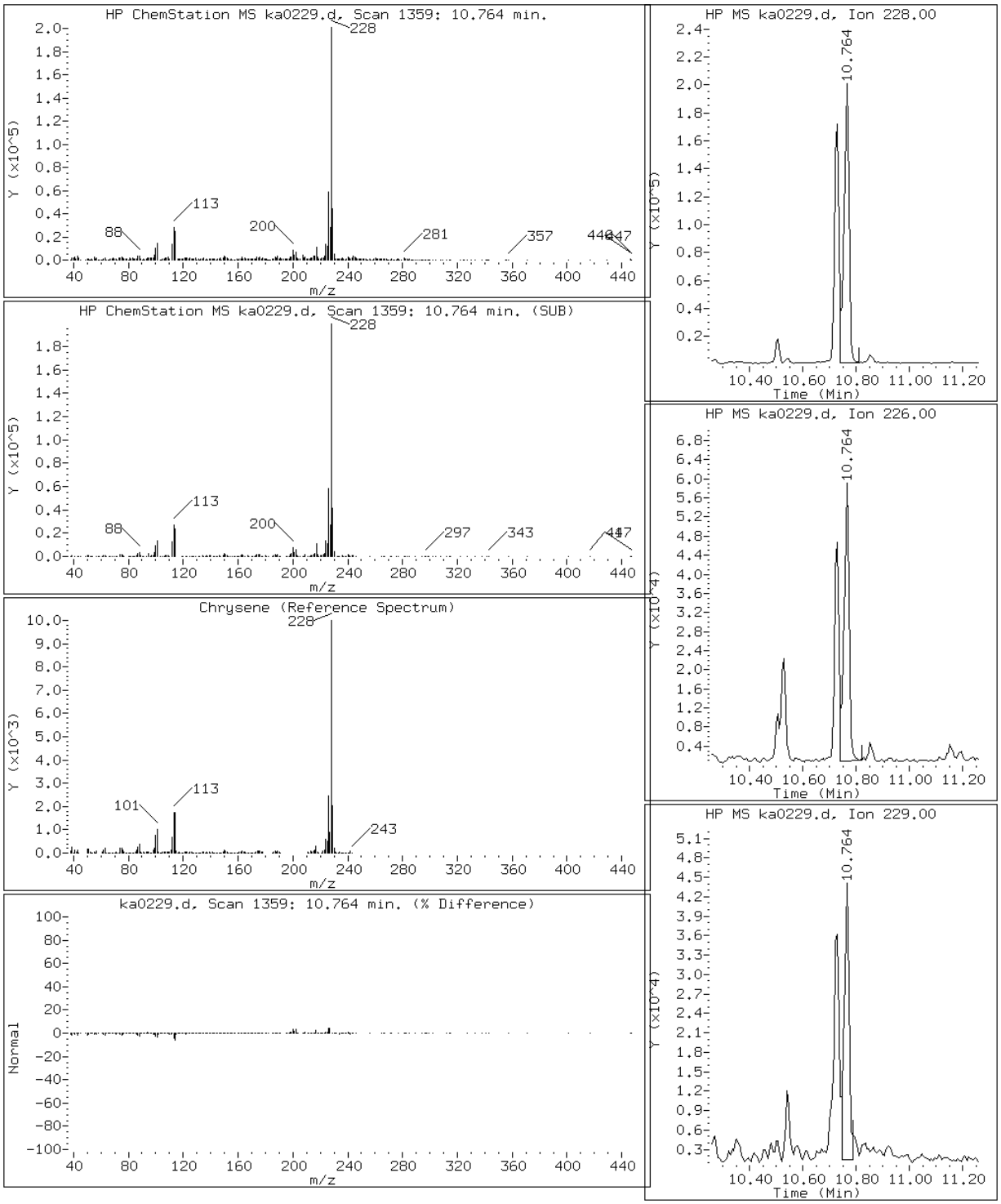
Data File: ka0229.d

Date: 02-JAN-2013 20:04

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-9-A DL=10 Operator: LEG

17 Chrysene



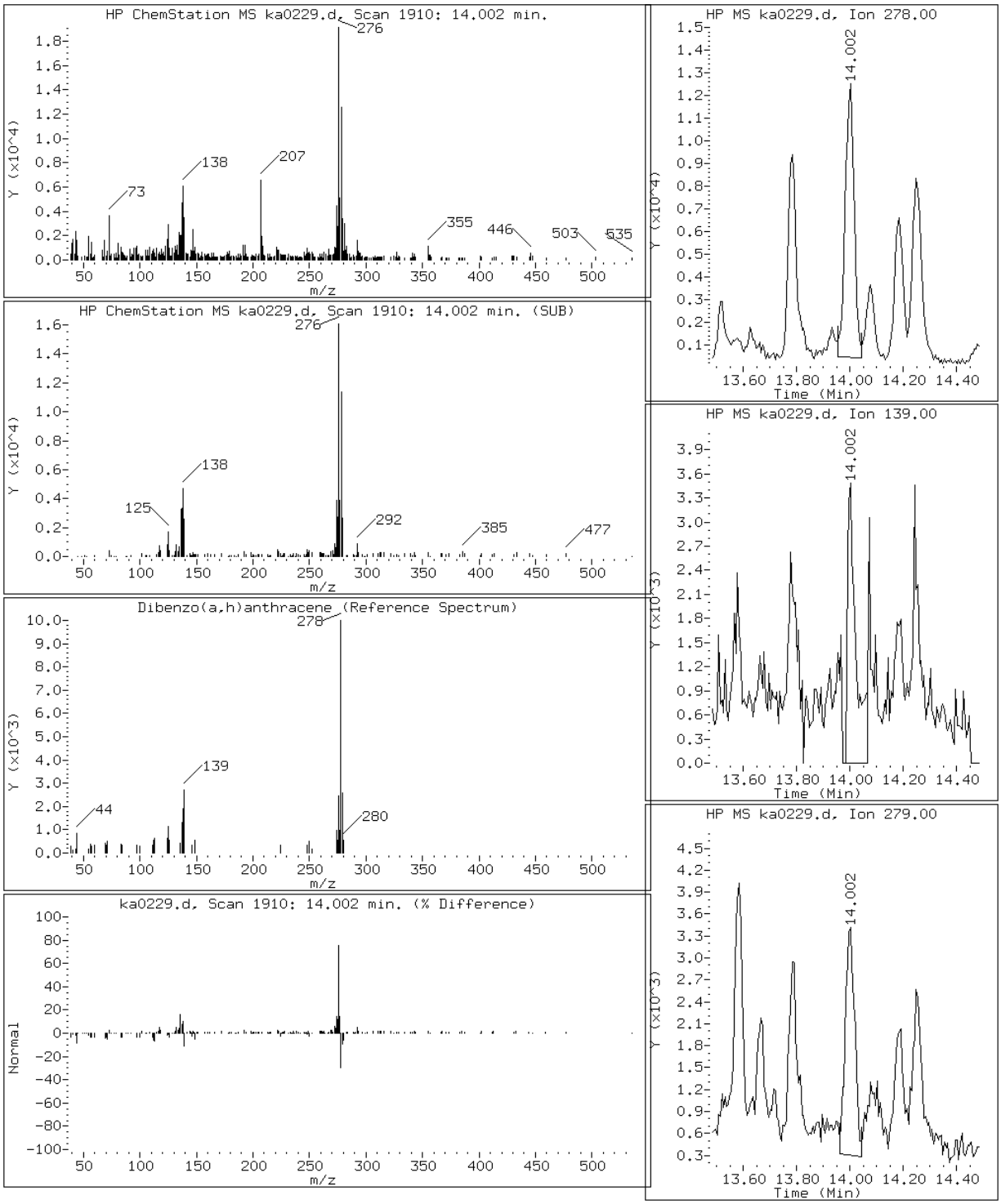
Data File: ka0229.d

Date: 02-JAN-2013 20:04

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-9-A DL=10 Operator: LEG

23 Dibenzo(a,h)anthracene



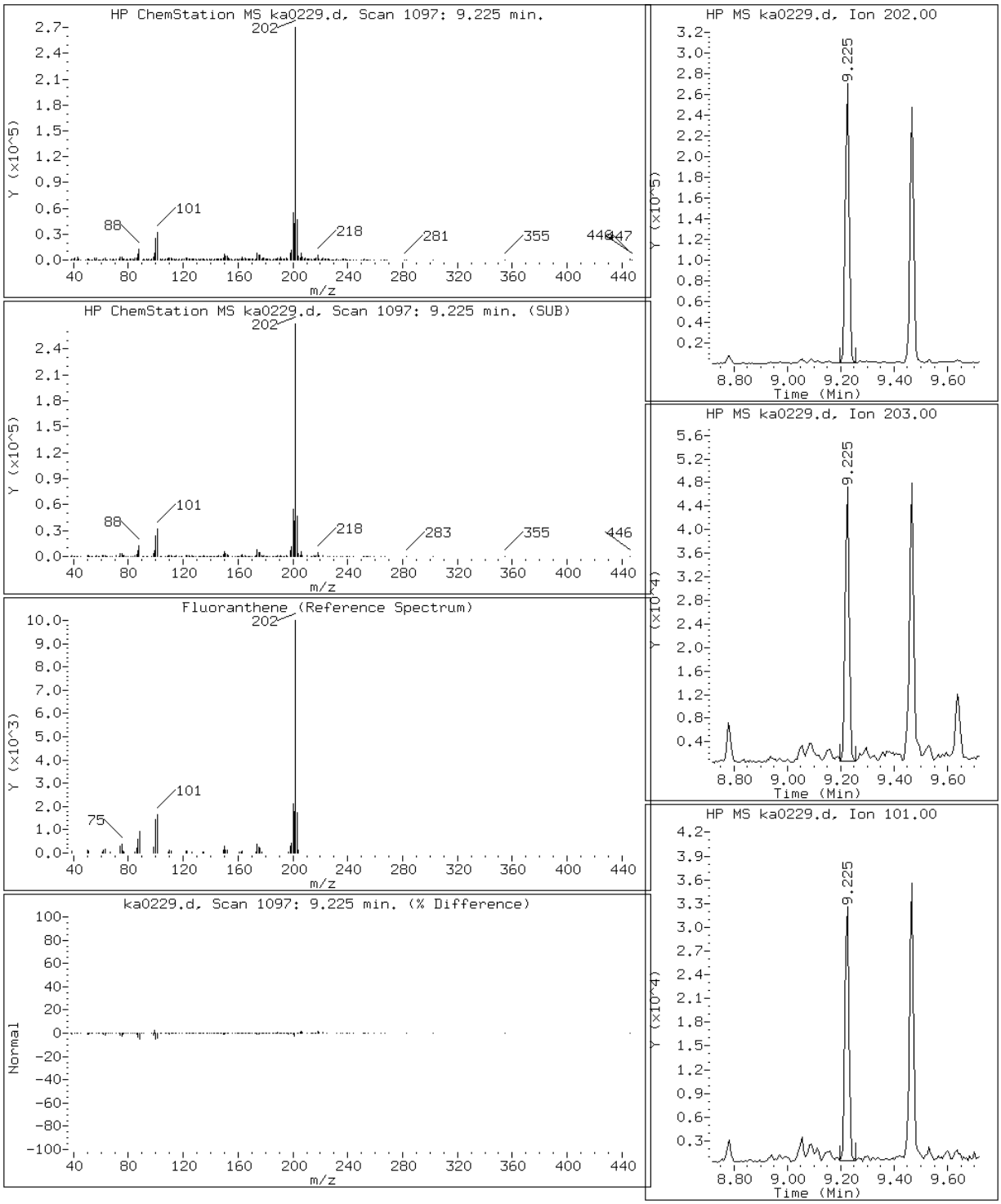
Data File: ka0229.d

Date: 02-JAN-2013 20:04

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-9-A DL=10 Operator: LEG

12 Fluoranthene



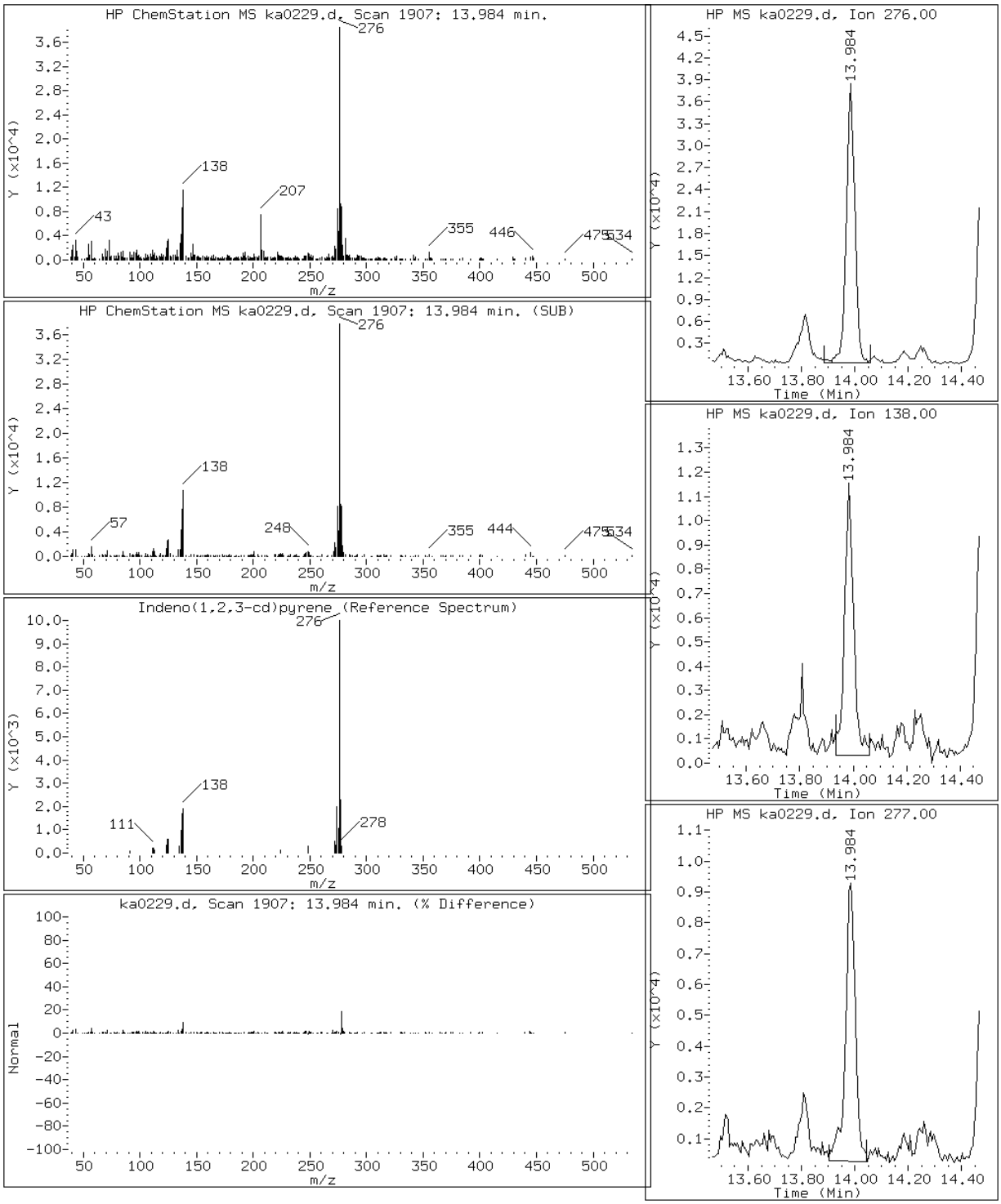
Data File: ka0229.d

Date: 02-JAN-2013 20:04

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-9-A DL=10 Operator: LEG

22 Indeno(1,2,3-cd)pyrene



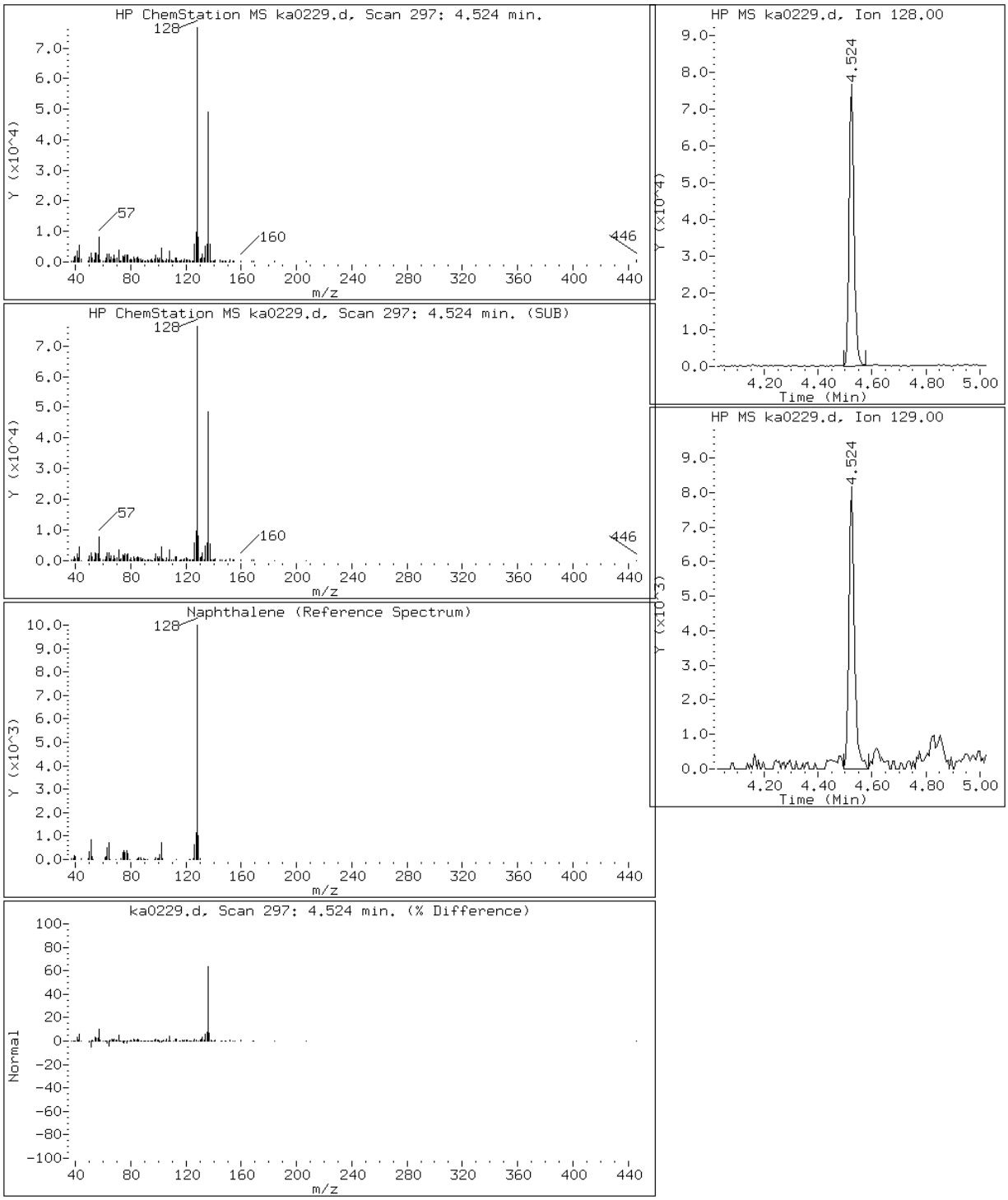
Data File: ka0229.d

Date: 02-JAN-2013 20:04

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-9-A DL=10 Operator: LEG

2 Naphthalene



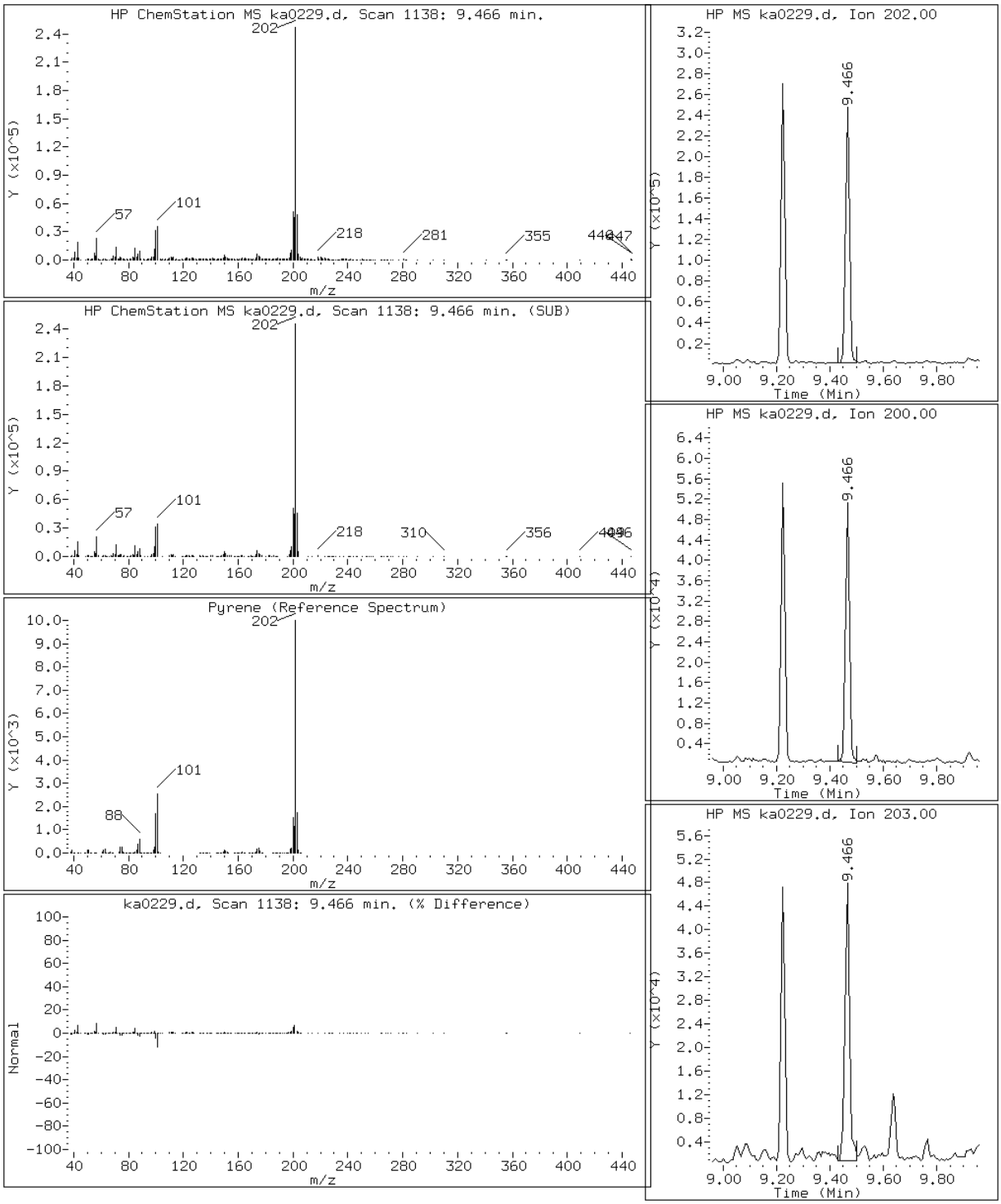
Data File: ka0229.d

Date: 02-JAN-2013 20:04

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-9-A DL=10 Operator: LEG

14 Pyrene



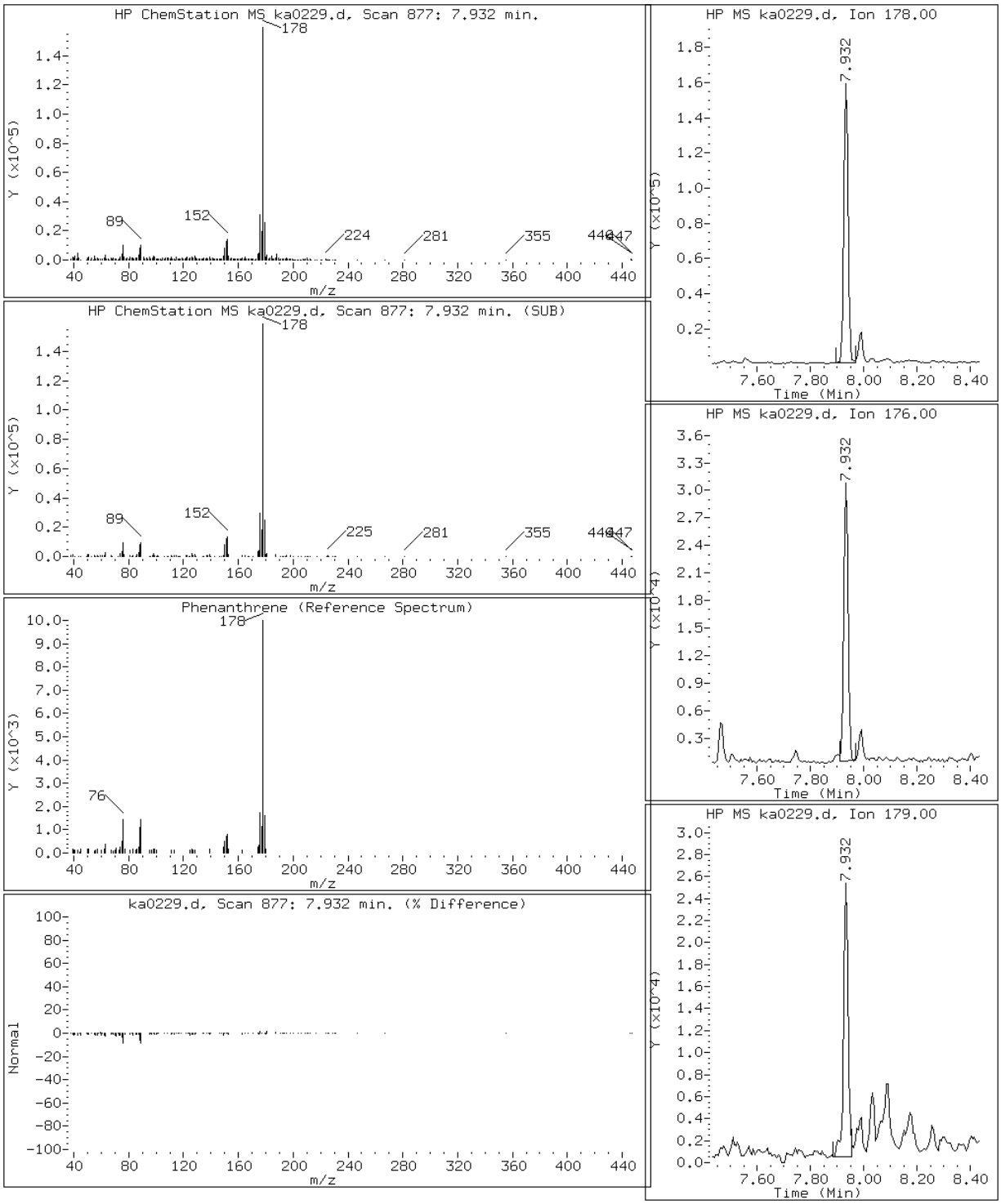
Data File: ka0229.d

Date: 02-JAN-2013 20:04

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-9-A DL=10 Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: ka0229.d
Inj. Date and Time: 02-JAN-2013 20:04
Instrument ID: MSK5973.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 01/03/2013

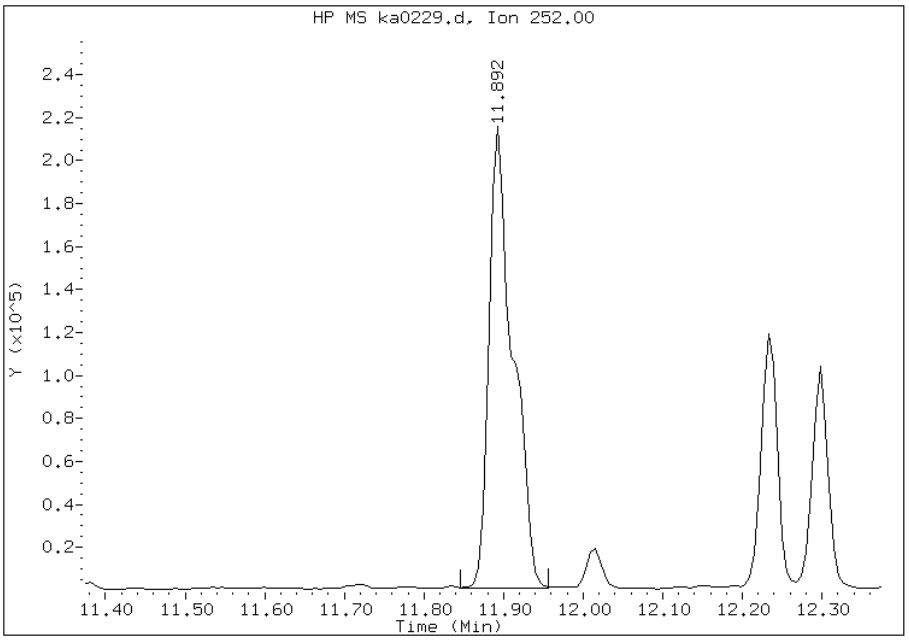
Processing Integration Results

RT: 11.89

Response: 447726

Amount: 3

Conc: 899



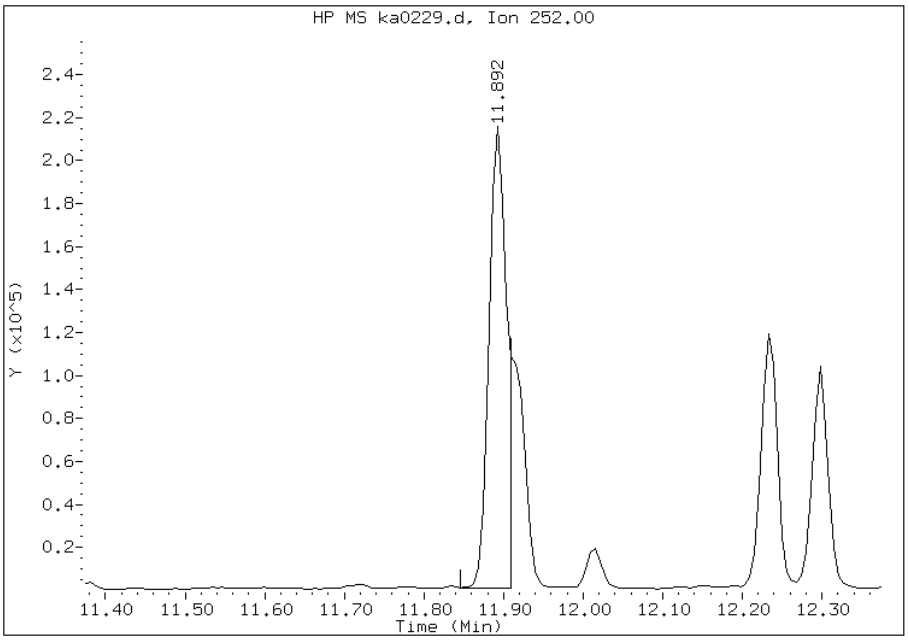
Manual Integration Results

RT: 11.89

Response: 343882

Amount: 2

Conc: 691



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: ka0229.d
Inj. Date and Time: 02-JAN-2013 20:04
Instrument ID: MSK5973.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 01/03/2013

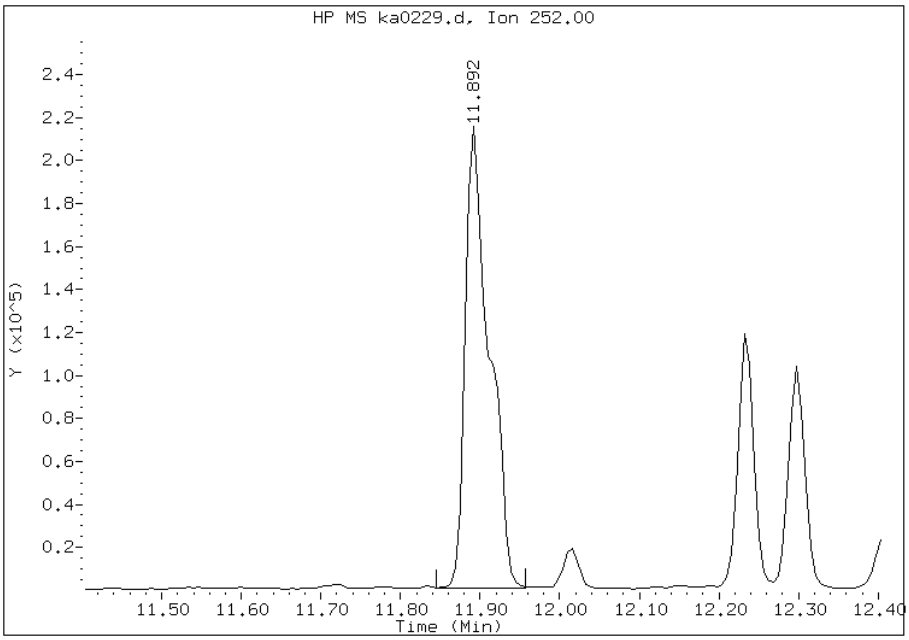
Processing Integration Results

RT: 11.89

Response: 447867

Amount: 3

Conc: 929



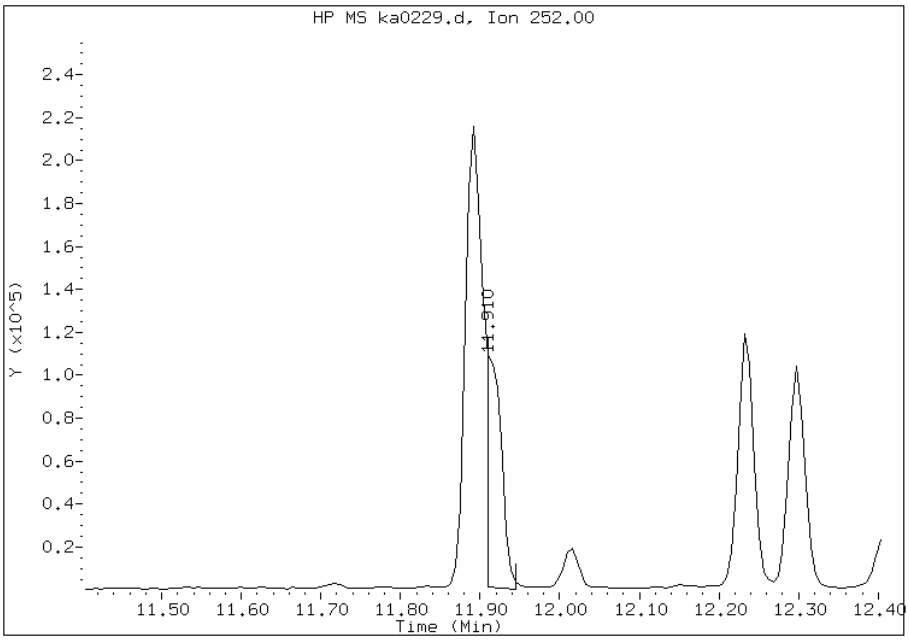
Manual Integration Results

RT: 11.91

Response: 142490

Amount: 1

Conc: 296



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: CV0230A-CS-SP | Lab Sample ID: 680-85980-10

Matrix: Solid | Lab File ID: ya0211.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/18/2012 15:15

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.04(g) | Date Analyzed: 01/02/2013 20:34

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

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

% Moisture: 32.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261663 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	75	J	99	46
91-57-6	2-Methylnaphthalene	96	J	99	49
83-32-9	Acenaphthene	99	U	99	49
208-96-8	Acenaphthylene	99	U	99	49
120-12-7	Anthracene	70	J	99	49
56-55-3	Benzo[a]anthracene	830		99	49
50-32-8	Benzo[a]pyrene	1100		99	18
205-99-2	Benzo[b]fluoranthene	1800		99	49
191-24-2	Benzo[g,h,i]perylene	850		99	49
207-08-9	Benzo[k]fluoranthene	700		99	30
218-01-9	Chrysene	1100		99	49
53-70-3	Dibenz(a,h)anthracene	340		99	49
206-44-0	Fluoranthene	1000		99	49
86-73-7	Fluorene	99	U	99	49
193-39-5	Indeno[1,2,3-cd]pyrene	670		99	49
91-20-3	Naphthalene	93	J	99	49
129-00-0	Pyrene	770		99	49
85-01-8	Phenanthrene	440		99	36

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y010213.b/ya0211.d
Lab Smp Id: 680-85980-A-10-A DL
Inj Date : 02-JAN-2013 20:34
Operator : VHB Inst ID: MSY5975.i
Smp Info : 680-85980-A-10-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y010213.b/Y-b8270CLLPAH-m.m
Meth Date : 03-Jan-2013 07:09 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 19:25 Cal File: ya0208q.d
Als bottle: 11
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.713	4.708	(1.000)	441408	2.00000	
2 Naphthalene	128	4.729	4.729	(1.003)	48699	0.18777	62.58(a)
3 2-Methylnaphthalene	142	5.328	5.328	(1.131)	31150	0.19385	64.61(a)
4 1-Methylnaphthalene	142	5.419	5.419	(1.150)	24750	0.15116	50.38(a)
* 5 Acenaphthene-d10	164	6.253	6.253	(1.000)	259672	2.00000	
* 9 Phenanthrene-d10	188	7.564	7.558	(1.000)	400512	2.00000	
10 Phenanthrene	178	7.585	7.580	(1.003)	232818	0.88446	294.82

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
11 Anthracene	178	7.628	7.628	(1.008)	35612	0.14247	47.48(a)
12 Fluoranthene	202	8.671	8.666	(1.146)	503507	2.07113	690.37
14 Pyrene	202	8.890	8.890	(0.882)	442339	1.55161	517.20
16 Benzo(a)Anthracene	228	10.067	10.067	(0.998)	359995	1.68405	561.35
* 13 Chrysene-d12	240	10.083	10.078	(1.000)	327735	2.00000	
17 Chrysene	228	10.110	10.110	(1.003)	458633	2.16059	720.19
19 Benzo(b)fluoranthene	252	11.457	11.452	(0.949)	736680	3.67387	1224.62(M)
20 Benzo(k)fluoranthene	252	11.484	11.490	(0.951)	279205	1.42698	475.66(M)
21 Benzo(a)pyrene	252	11.987	11.982	(0.992)	351609	2.24649	748.82
* 18 Perylene-d12	264	12.078	12.073	(1.000)	265089	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	14.217	14.217	(1.410)	266998	1.35210	450.70
23 Dibenzo(a,h)anthracene	278	14.228	14.228	(1.178)	96274	0.68969	229.89
24 Benzo(g,h,i)perylene	276	14.891	14.886	(1.233)	256310	1.72151	573.83

QC Flag Legend

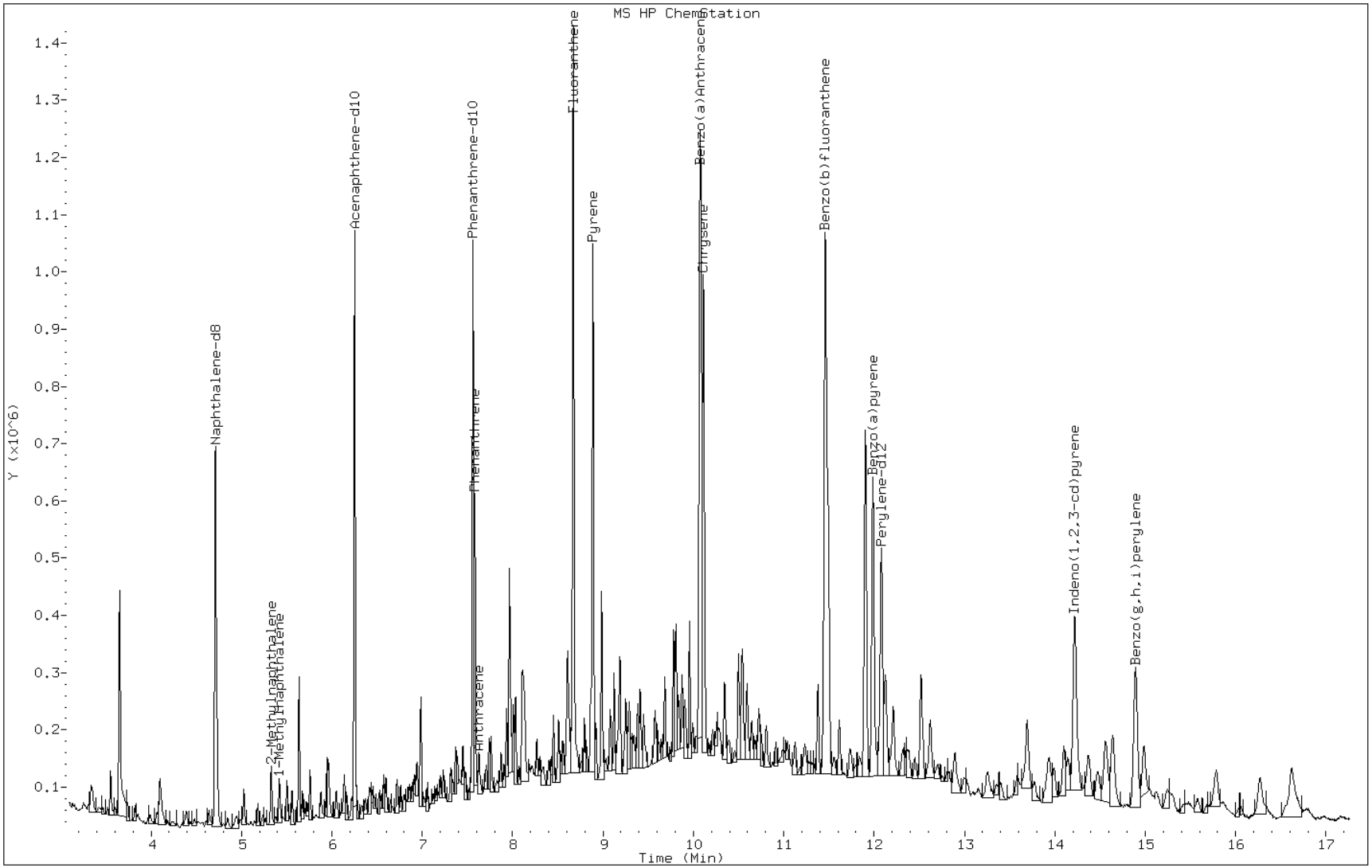
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: ya0211.d

Date: 02-JAN-2013 20:34

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-10-A DL=10 Operator: VHB



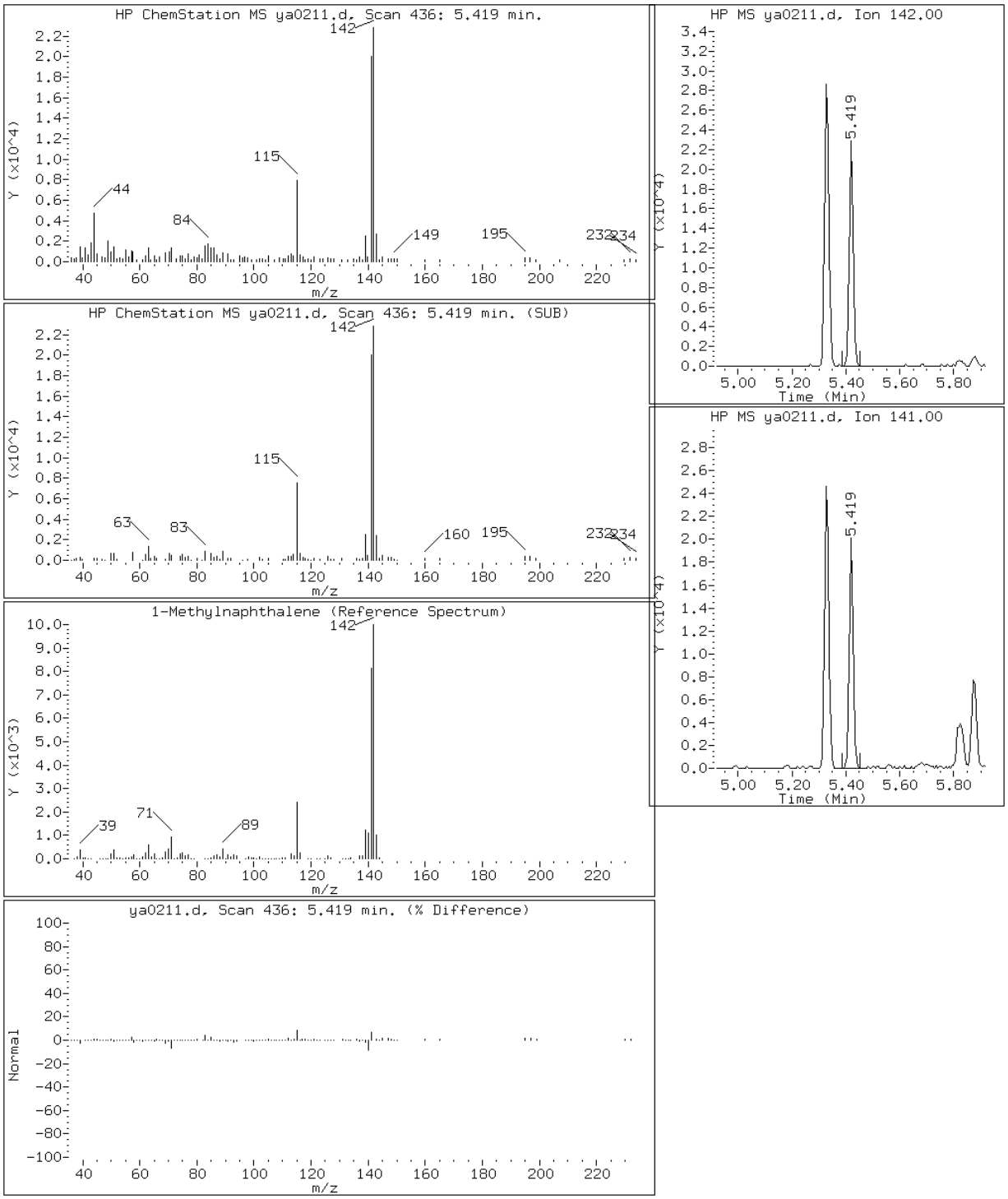
Data File: ya0211.d

Date: 02-JAN-2013 20:34

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-10-A DL=10 Operator: VHB

4 1-Methylnaphthalene



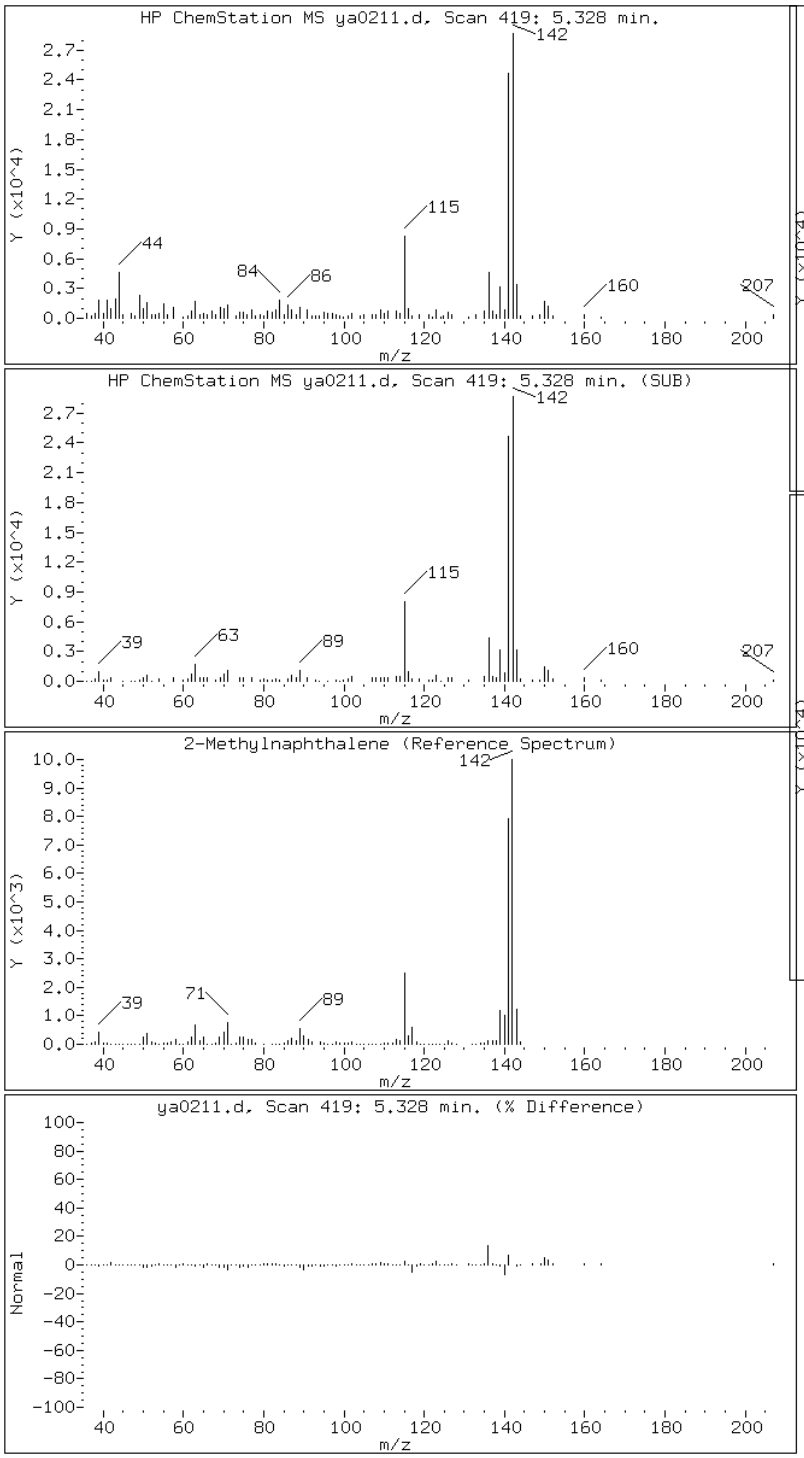
Data File: ya0211.d

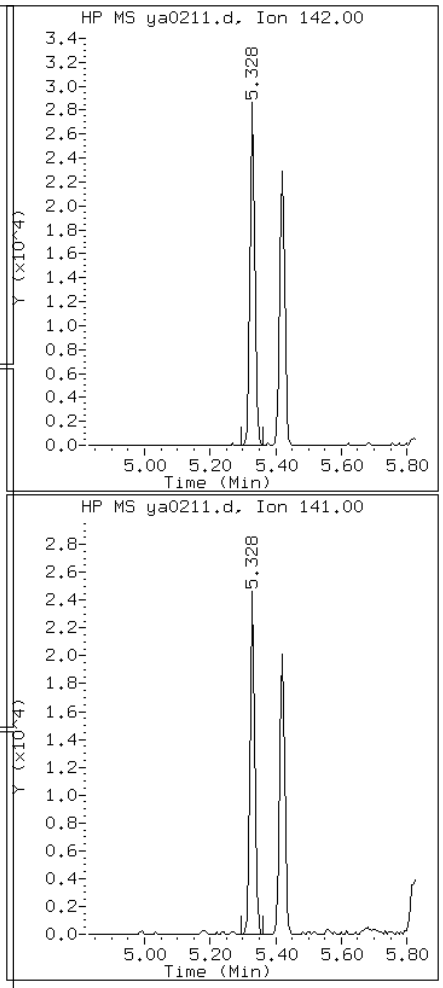
Date: 02-JAN-2013 20:34

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-10-A DL=10 Operator: VHB

3 2-Methylnaphthalene





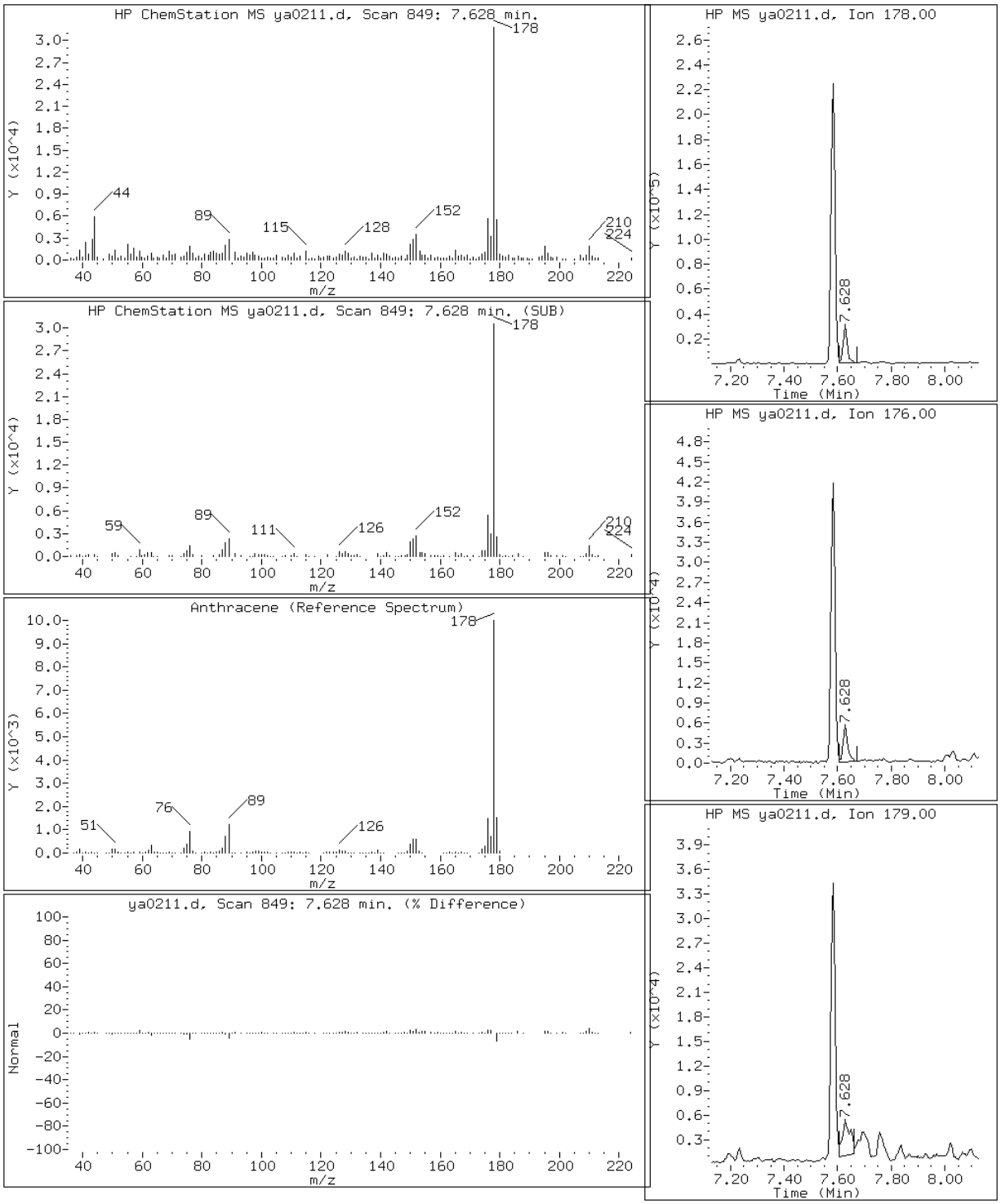
Data File: ya0211.d

Date: 02-JAN-2013 20:34

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-10-A DL=10 Operator: VHB

11 Anthracene



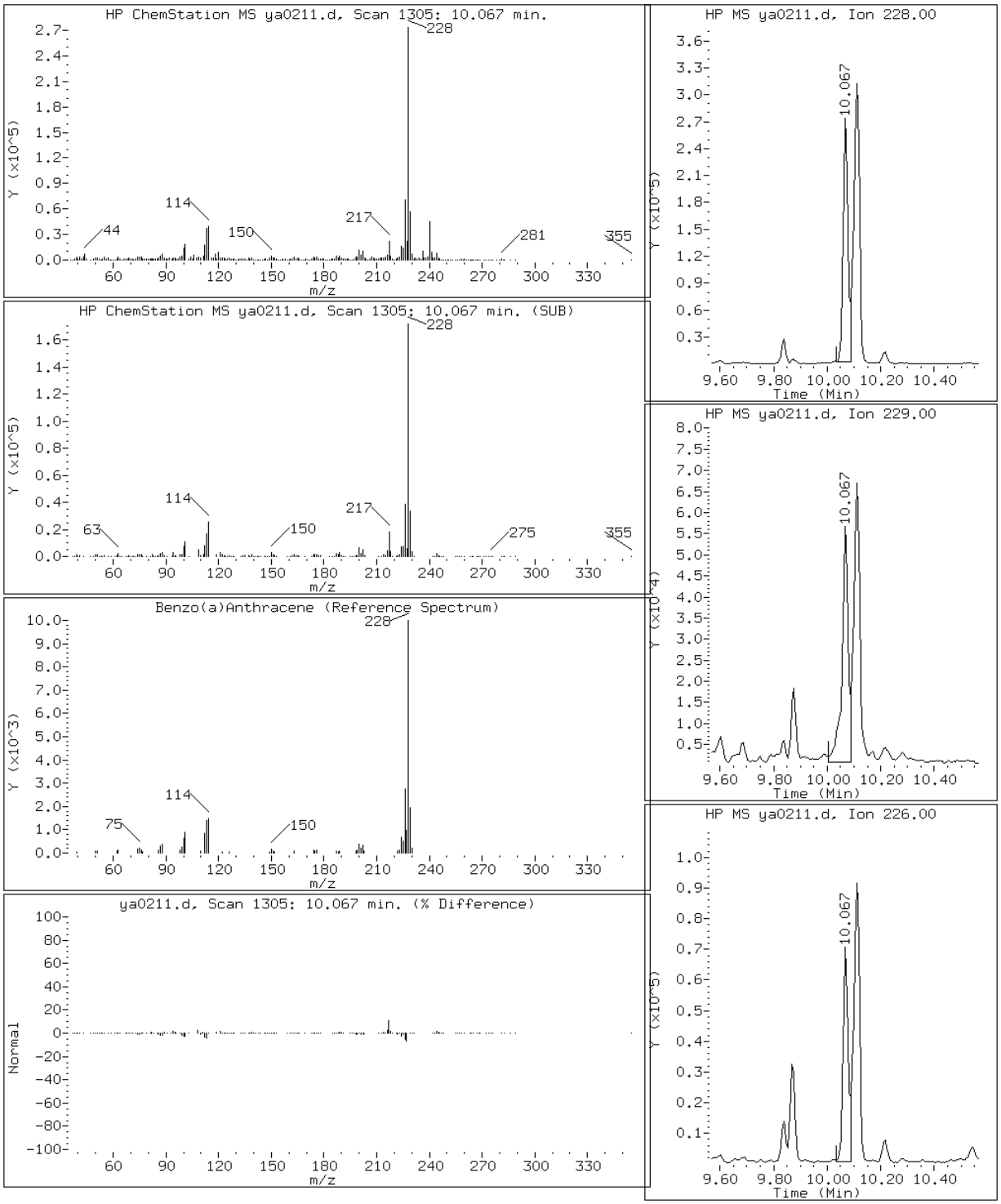
Data File: ya0211.d

Date: 02-JAN-2013 20:34

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-10-A DL=10 Operator: VHB

16 Benzo(a)Anthracene



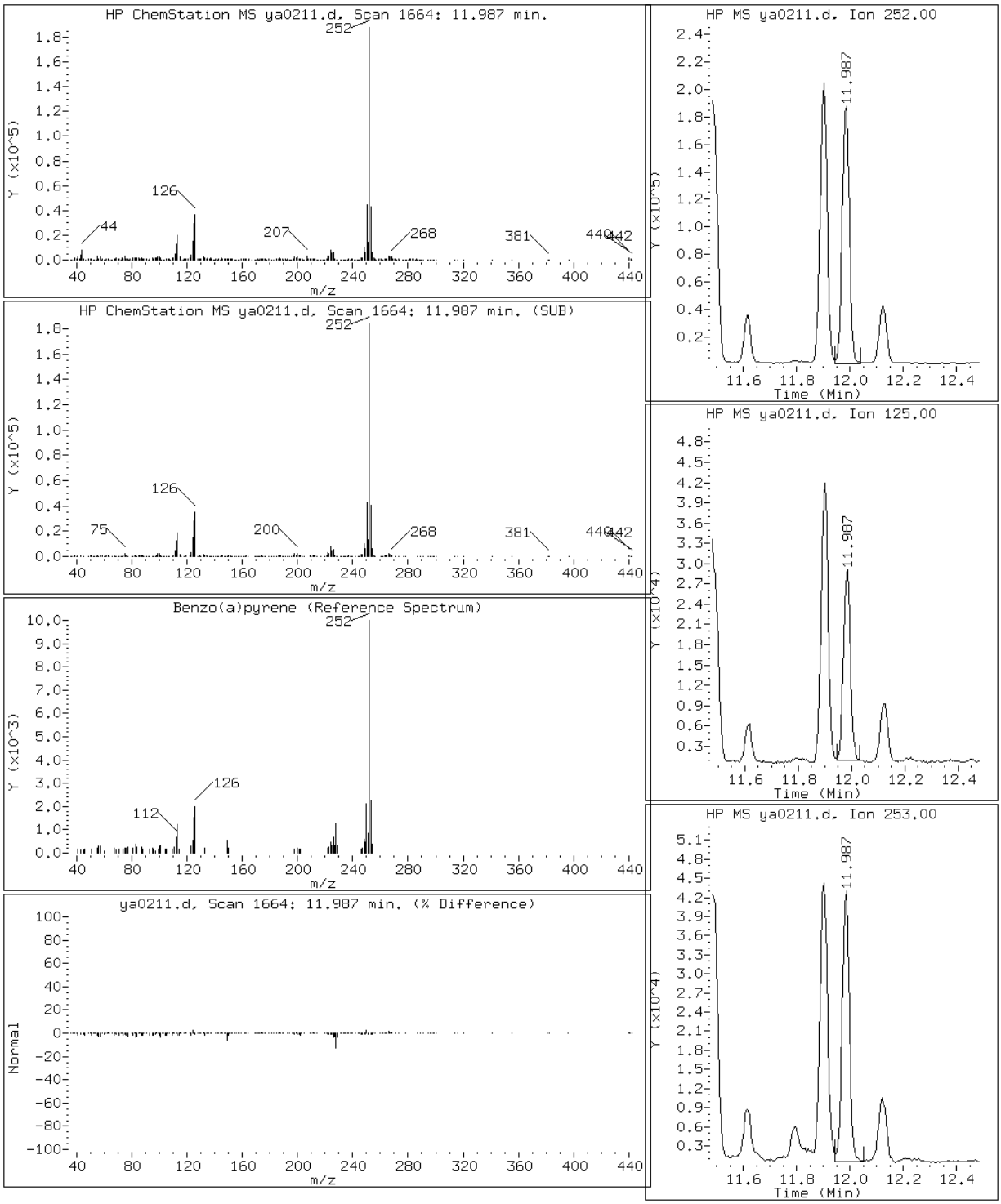
Data File: ya0211.d

Date: 02-JAN-2013 20:34

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-10-A DL=10 Operator: VHB

21 Benzo(a)pyrene



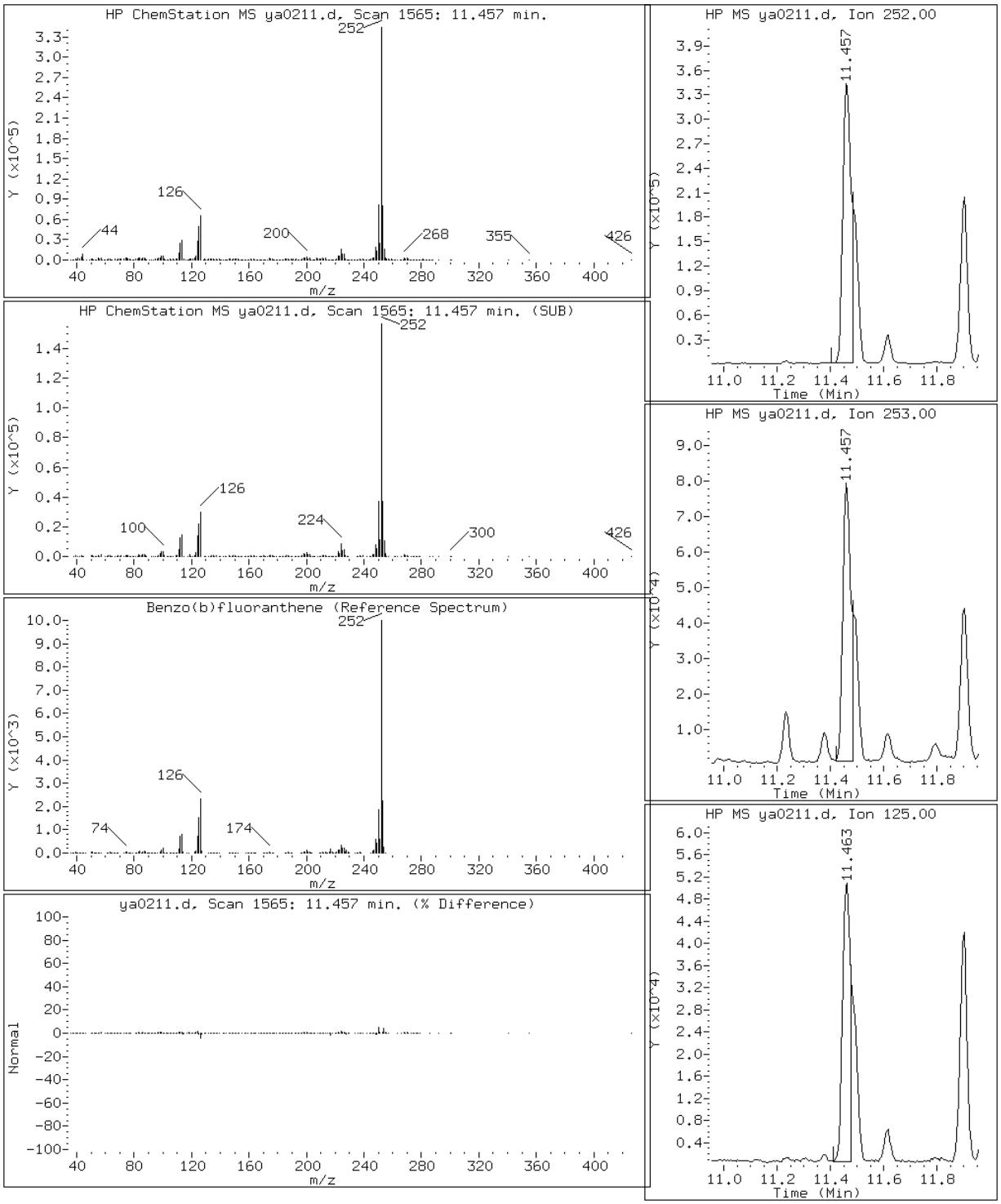
Data File: ya0211.d

Date: 02-JAN-2013 20:34

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-10-A DL=10 Operator: VHB

19 Benzo(b)fluoranthene



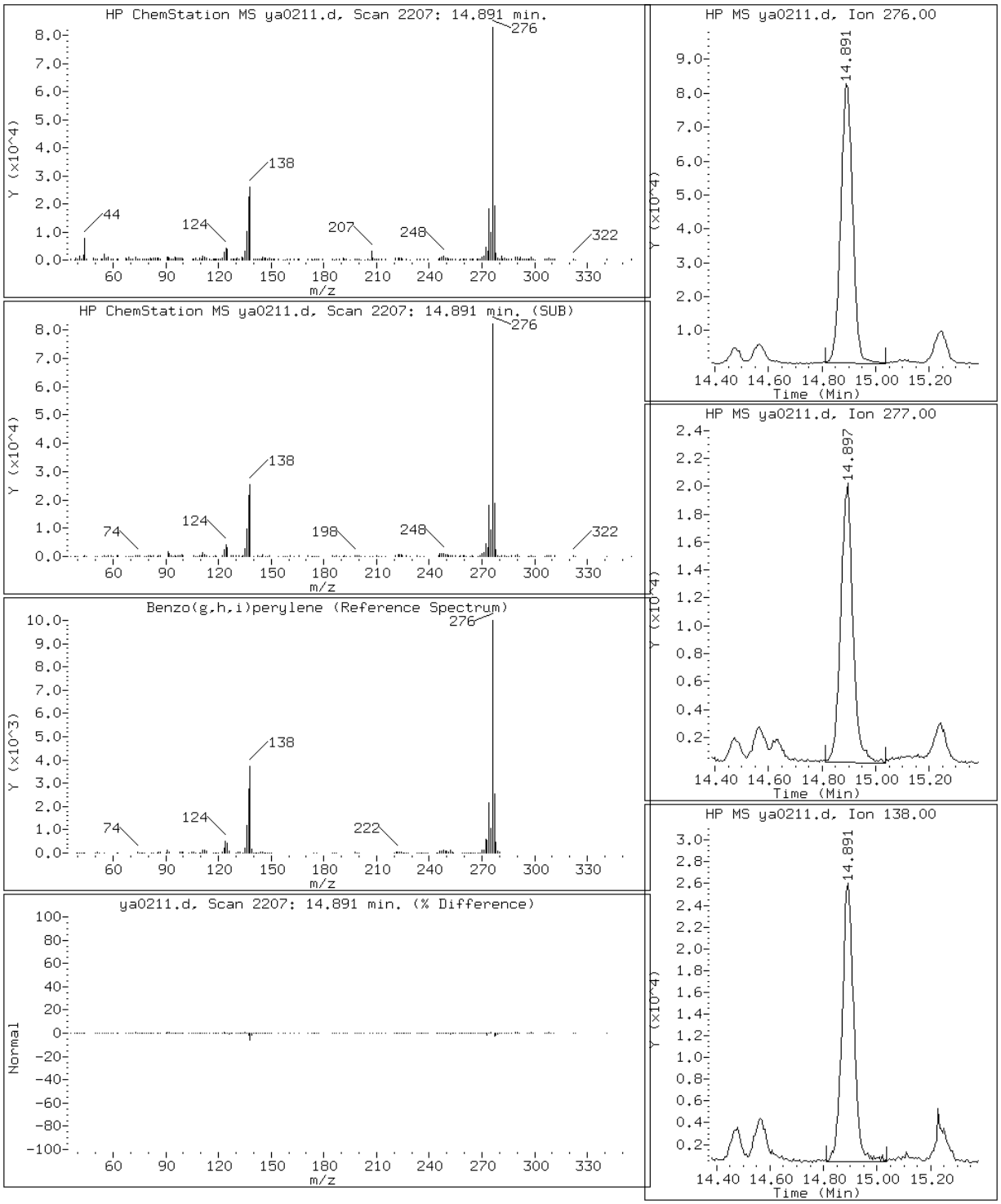
Data File: ya0211.d

Date: 02-JAN-2013 20:34

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-10-A DL=10 Operator: VHB

24 Benzo(g,h,i)perylene



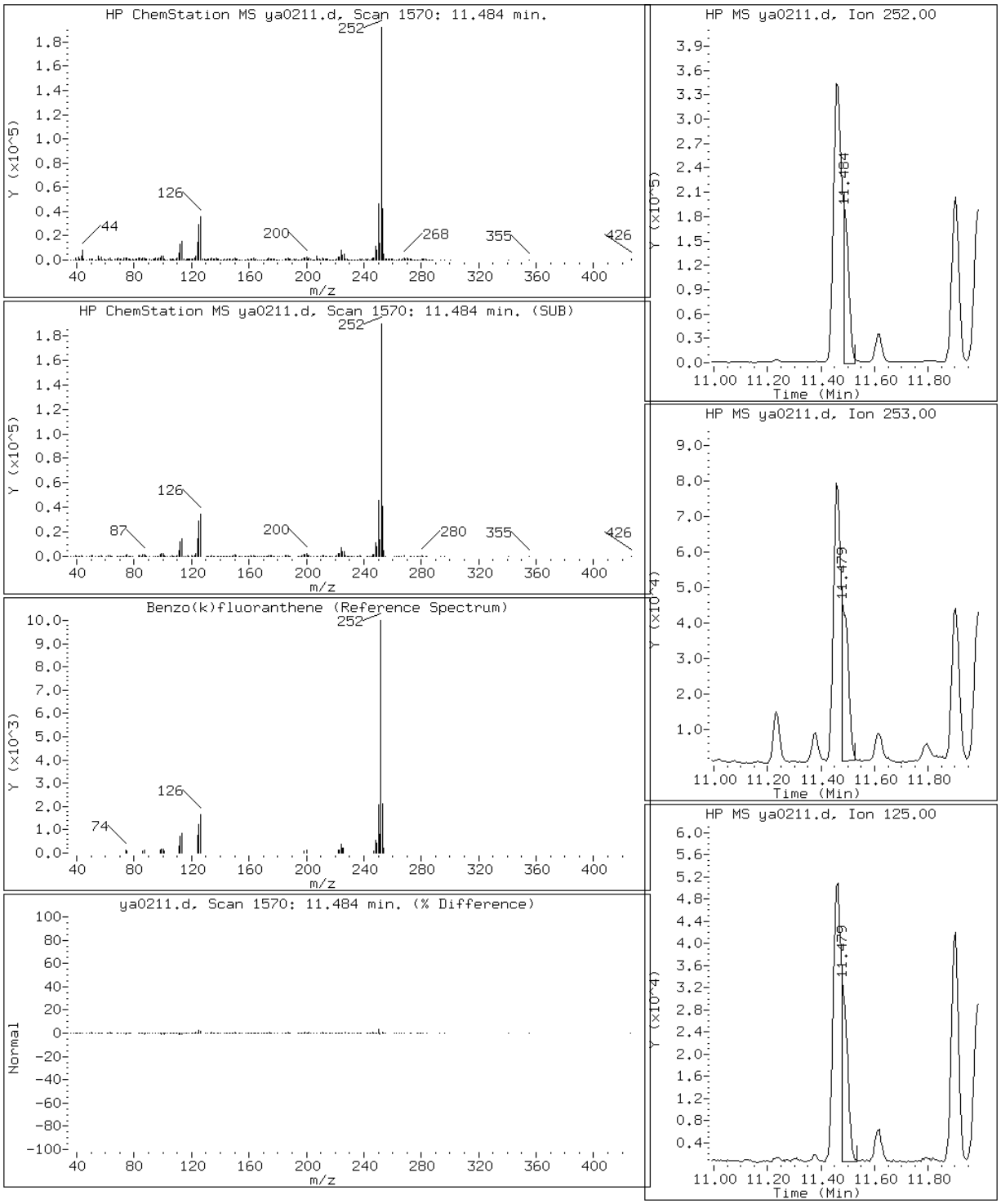
Data File: ya0211.d

Date: 02-JAN-2013 20:34

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-10-A DL=10 Operator: VHB

20 Benzo(k)fluoranthene



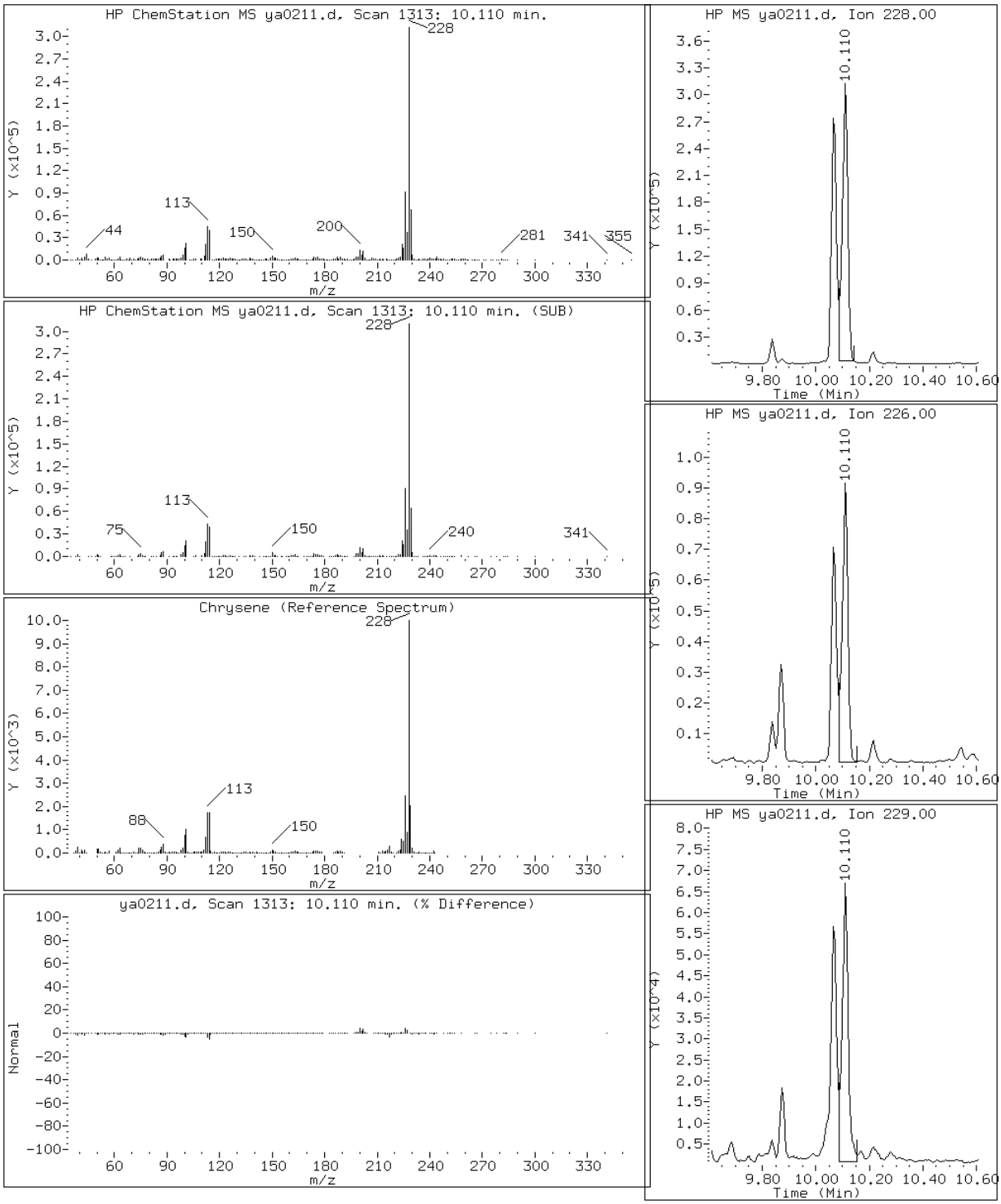
Data File: ya0211.d

Date: 02-JAN-2013 20:34

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-10-A DL=10 Operator: VHB

17 Chrysene



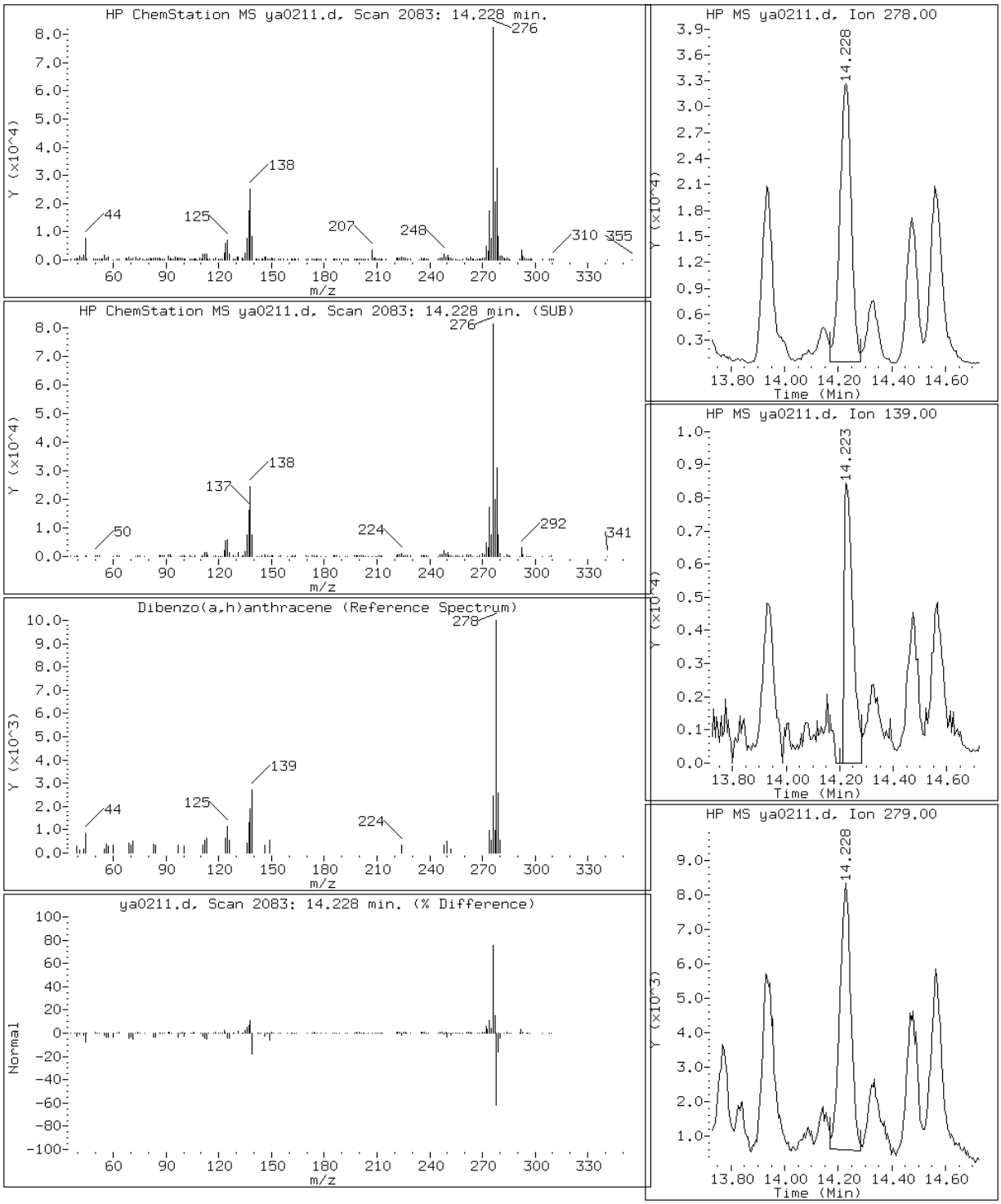
Data File: ya0211.d

Date: 02-JAN-2013 20:34

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-10-A DL=10 Operator: VHB

23 Dibenzo(a,h)anthracene



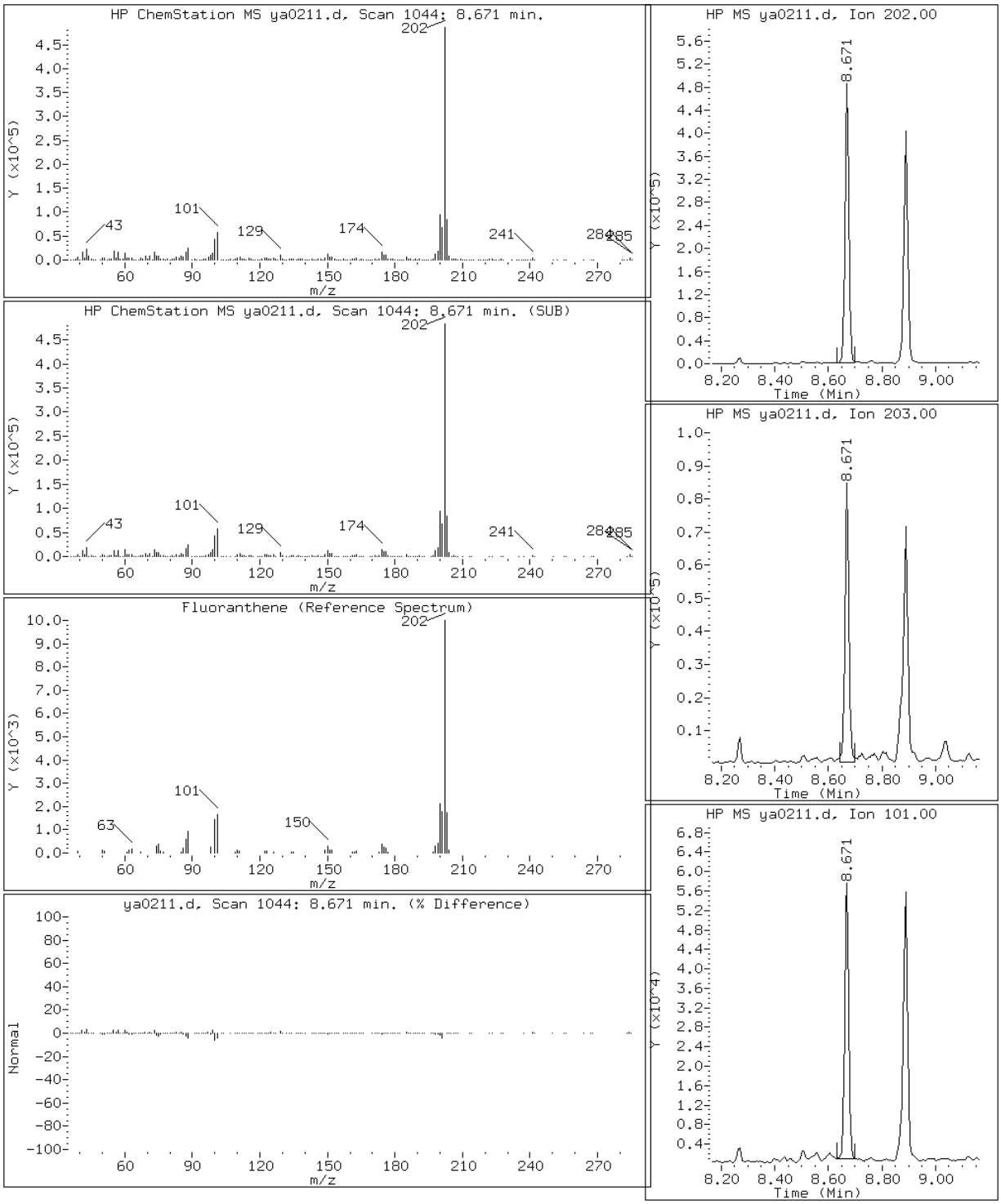
Data File: ya0211.d

Date: 02-JAN-2013 20:34

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-10-A DL=10 Operator: VHB

12 Fluoranthene



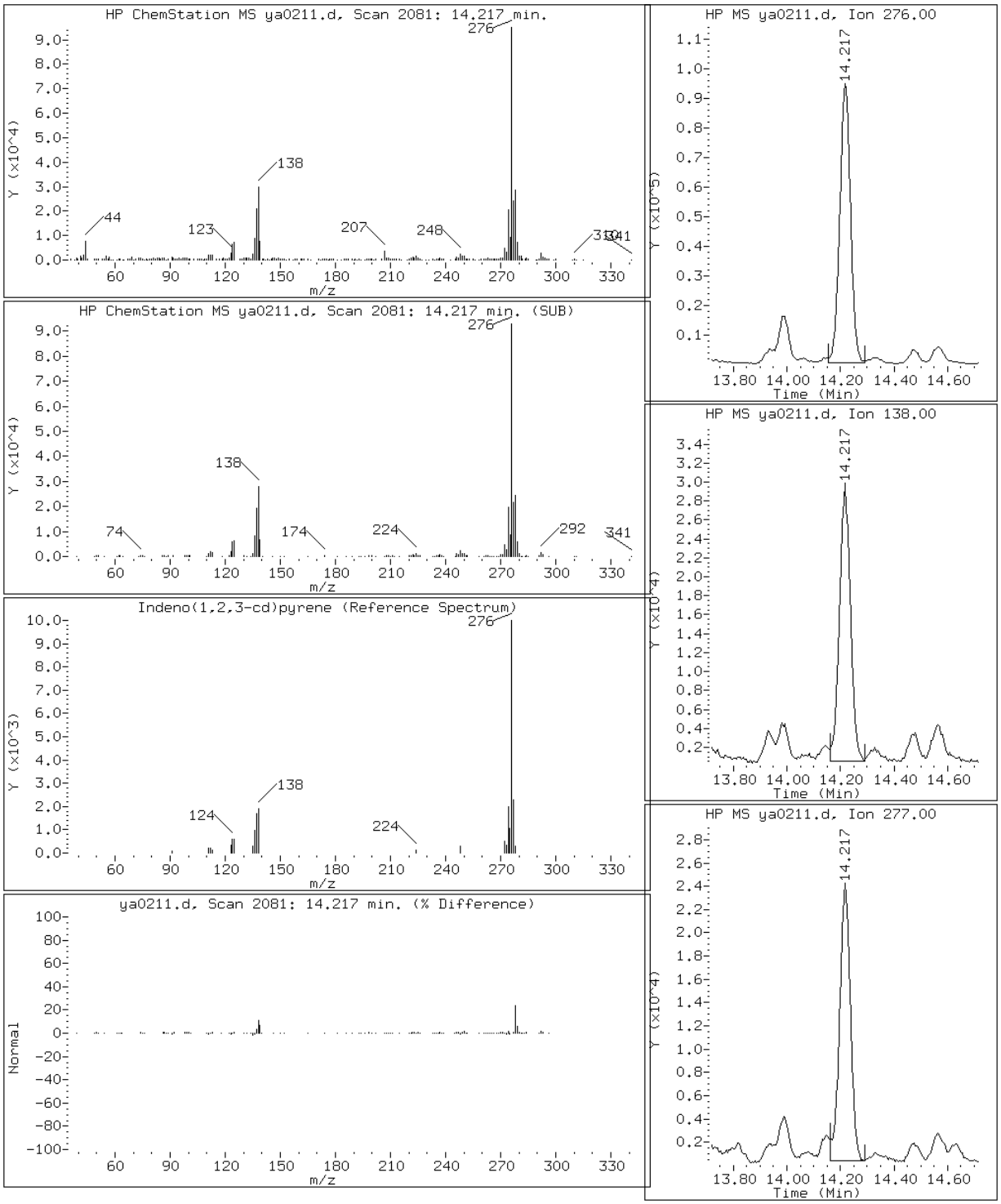
Data File: ya0211.d

Date: 02-JAN-2013 20:34

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-10-A DL=10 Operator: VHB

22 Indeno(1,2,3-cd)pyrene



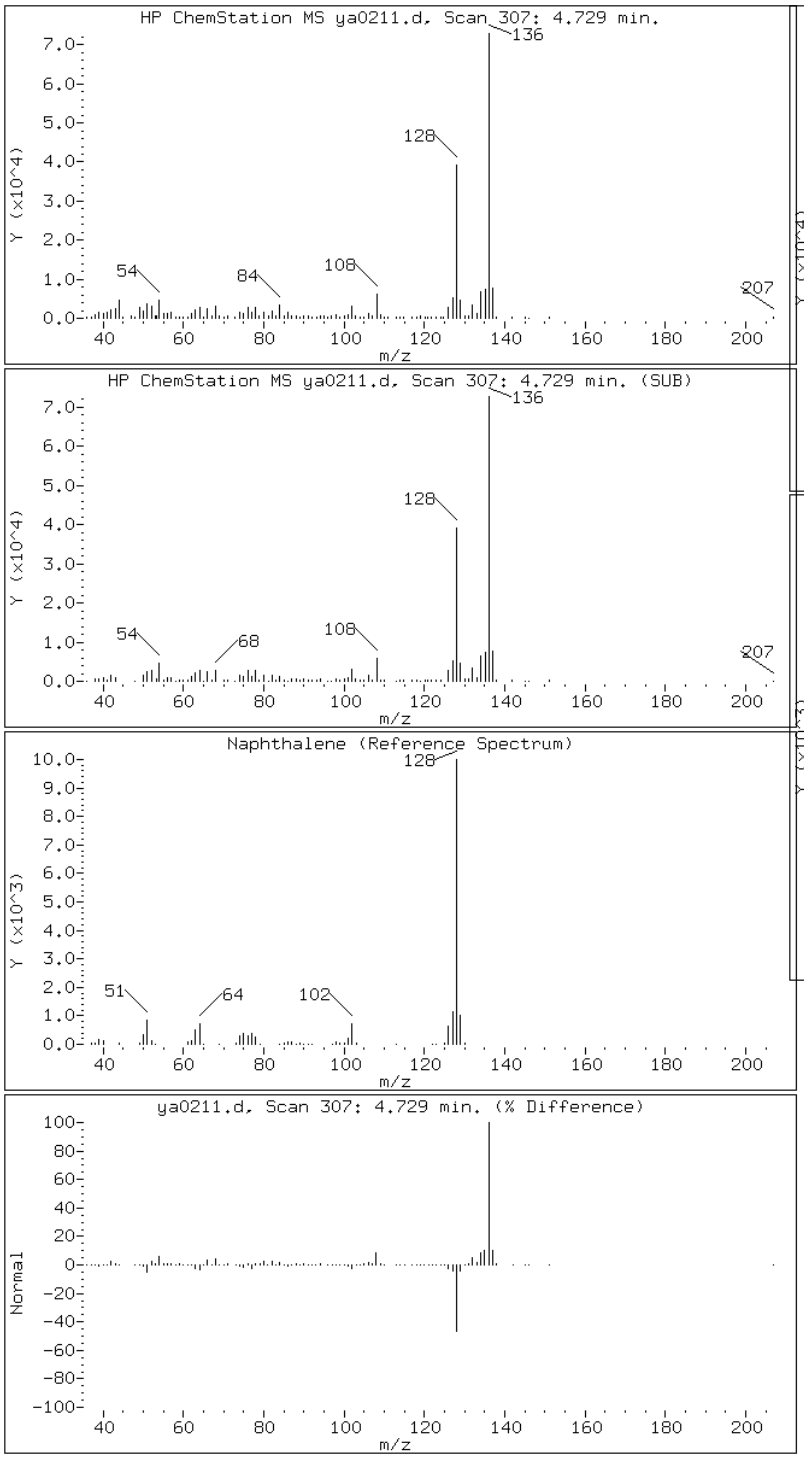
Data File: ya0211.d

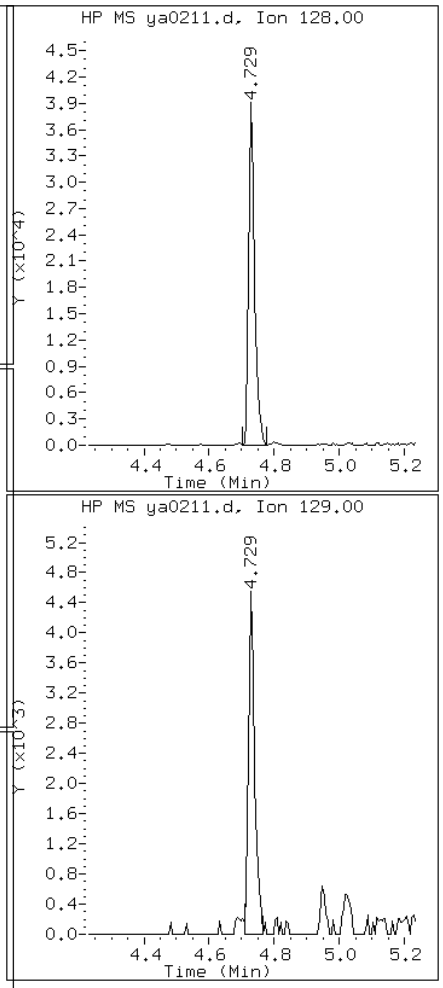
Date: 02-JAN-2013 20:34

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-10-A DL=10 Operator: VHB

2 Naphthalene





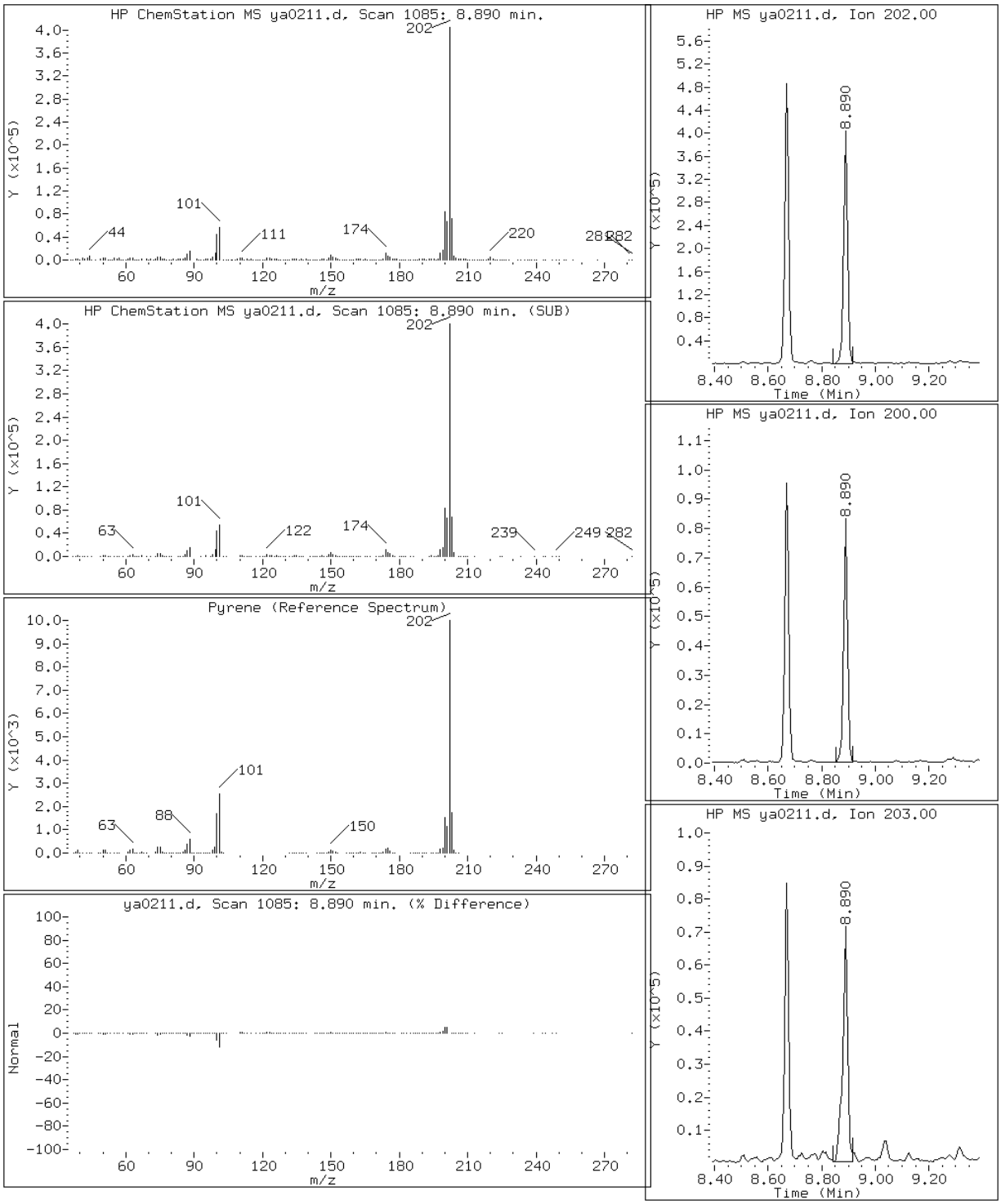
Data File: ya0211.d

Date: 02-JAN-2013 20:34

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-10-A DL=10 Operator: VHB

14 Pyrene



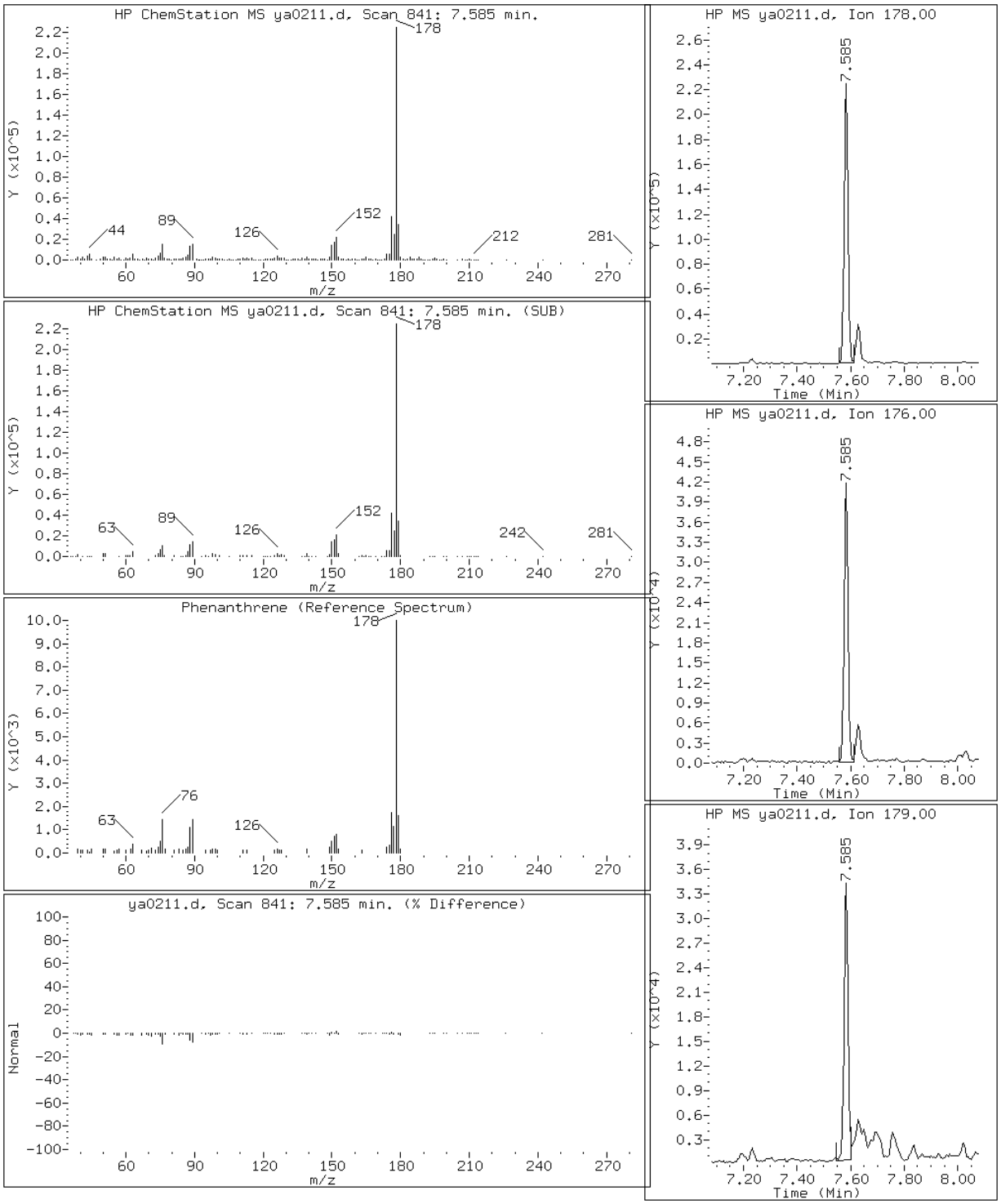
Data File: ya0211.d

Date: 02-JAN-2013 20:34

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-10-A DL=10 Operator: VHB

10 Phenanthrene



Manual Integration Report

Data File: ya0211.d
Inj. Date and Time: 02-JAN-2013 20:34
Instrument ID: MSY5975.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 01/03/2013

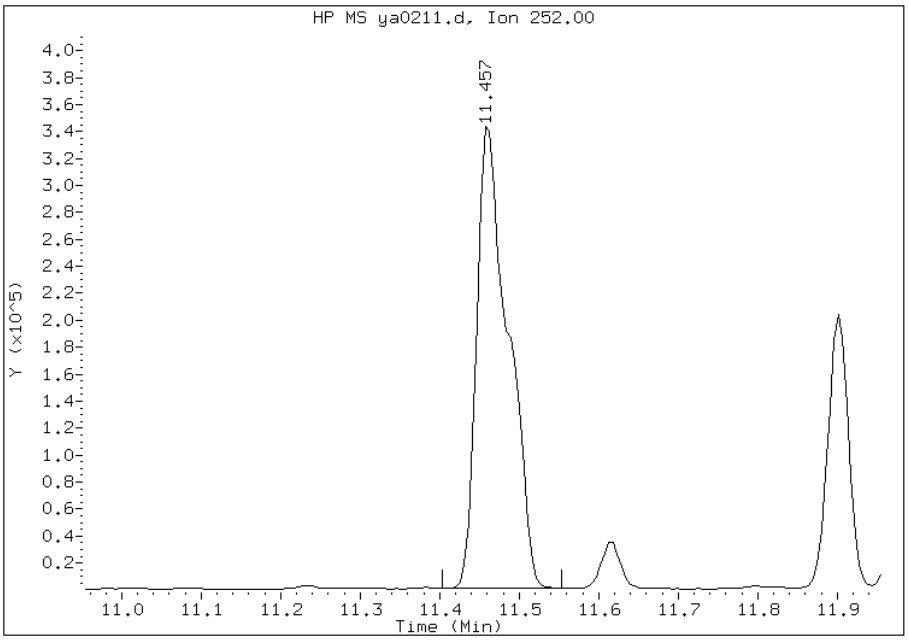
Processing Integration Results

RT: 11.46

Response: 948325

Amount: 5

Conc: 1576



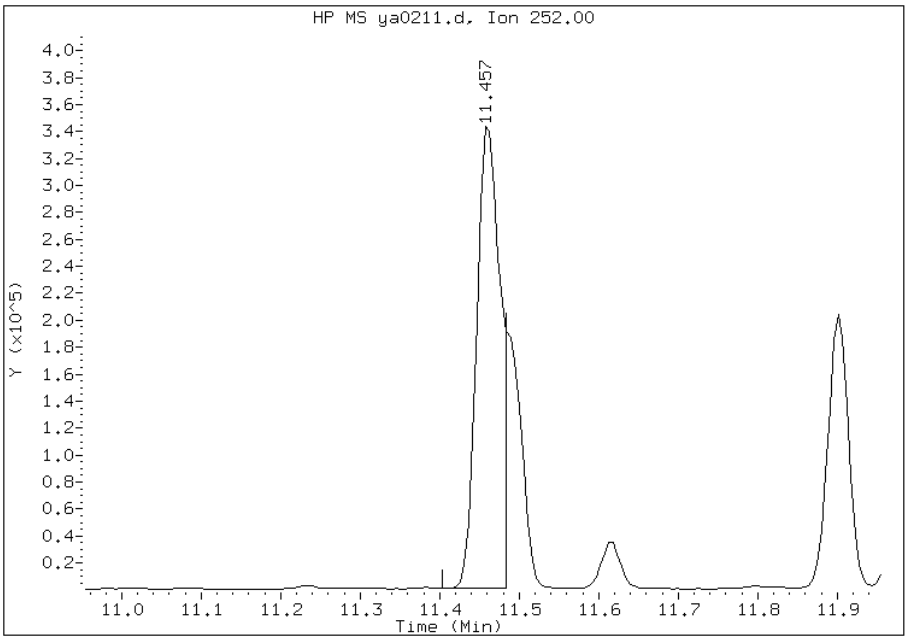
Manual Integration Results

RT: 11.46

Response: 736680

Amount: 4

Conc: 1225



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: ya0211.d
Inj. Date and Time: 02-JAN-2013 20:34
Instrument ID: MSY5975.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 01/03/2013

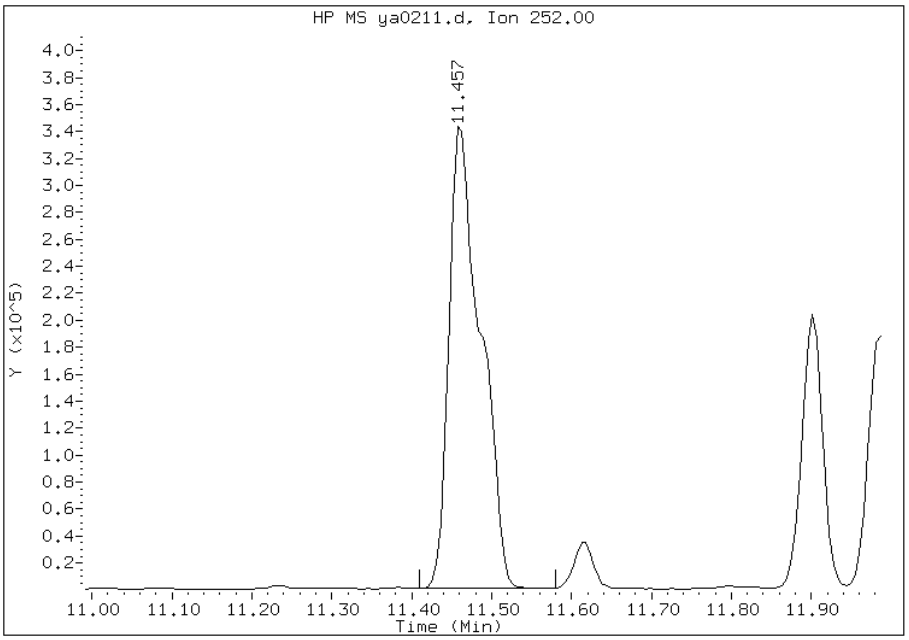
Processing Integration Results

RT: 11.46

Response: 948560

Amount: 5

Conc: 1616



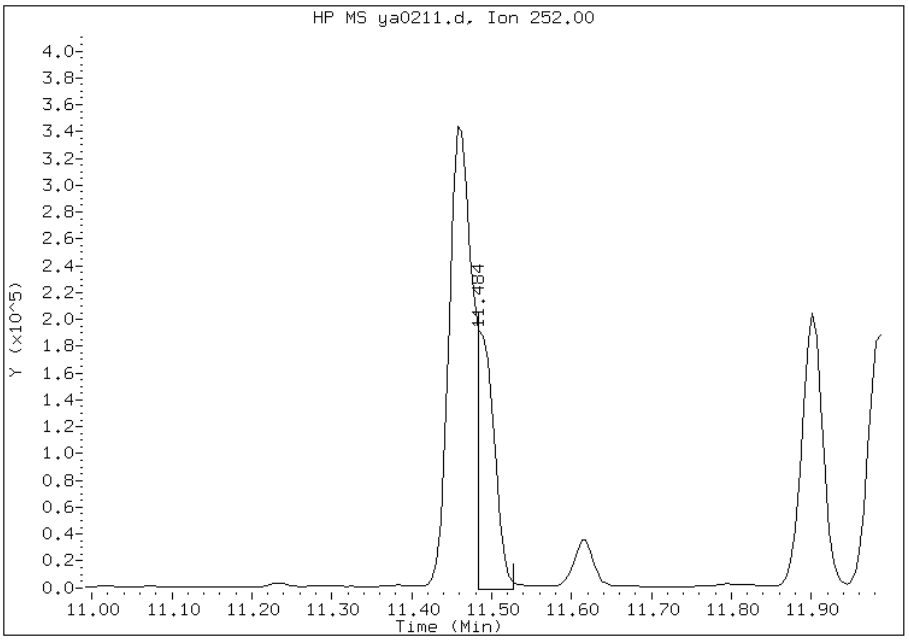
Manual Integration Results

RT: 11.48

Response: 279205

Amount: 1

Conc: 476



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: CV0424A-CS-SP | Lab Sample ID: 680-85980-26

Matrix: Solid | Lab File ID: ka0220.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/18/2012 12:45

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.02(g) | Date Analyzed: 01/02/2013 16:31

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

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

% Moisture: 24.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	56	J	88	41
91-57-6	2-Methylnaphthalene	76	J	88	44
83-32-9	Acenaphthene	88	U	88	44
208-96-8	Acenaphthylene	88	U	88	44
120-12-7	Anthracene	88	U	88	44
56-55-3	Benzo[a]anthracene	240		88	44
50-32-8	Benzo[a]pyrene	240		88	16
205-99-2	Benzo[b]fluoranthene	370		88	44
191-24-2	Benzo[g,h,i]perylene	130		88	44
207-08-9	Benzo[k]fluoranthene	170		88	26
218-01-9	Chrysene	300		88	44
53-70-3	Dibenz(a,h)anthracene	45	J	88	44
206-44-0	Fluoranthene	460		88	44
86-73-7	Fluorene	88	U	88	44
193-39-5	Indeno[1,2,3-cd]pyrene	96		88	44
91-20-3	Naphthalene	87	J	88	44
129-00-0	Pyrene	420		88	44
85-01-8	Phenanthrene	270		88	32

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0220.d
Lab Smp Id: 680-85980-A-26-A DL
Inj Date : 02-JAN-2013 16:31
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85980-A-26-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:58 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:24 Cal File: ka0212q.d
Als bottle: 16
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.501	4.501	(1.000)	443920	2.00000	
2 Naphthalene	128	4.524	4.524	(1.005)	51922	0.19850	66.16(a)
3 2-Methylnaphthalene	142	5.194	5.194	(1.154)	28011	0.17229	57.43(a)
4 1-Methylnaphthalene	142	5.300	5.300	(1.178)	20966	0.12721	42.40(a)
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	255304	2.00000	
* 9 Phenanthrene-d10	188	7.909	7.903	(1.000)	391193	2.00000	
10 Phenanthrene	178	7.932	7.932	(1.003)	150591	0.60995	203.31

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
12 Fluoranthene	202	9.225	9.219	(1.166)	258640	1.03984	346.61
14 Pyrene	202	9.466	9.460	(0.883)	208348	0.96108	320.35
16 Benzo(a)Anthracene	228	10.711	10.717	(0.999)	90306	0.54235	180.78
* 13 Chrysene-d12	240	10.723	10.729	(1.000)	254336	2.00000	
17 Chrysene	228	10.752	10.758	(1.003)	112839	0.68879	229.59
19 Benzo(b)fluoranthene	252	11.869	11.875	(0.961)	108409	0.84411	281.37(M)
20 Benzo(k)fluoranthene	252	11.886	11.904	(0.962)	47061	0.37859	126.19(M)
21 Benzo(a)pyrene	252	12.274	12.280	(0.994)	54638	0.55645	185.48
* 18 Perylene-d12	264	12.350	12.356	(1.000)	172815	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	13.949	13.966	(1.301)	28711	0.21863	72.87
23 Dibenzo(a,h)anthracene	278	13.972	13.984	(1.131)	8993	0.10184	33.94(a)
24 Benzo(g,h,i)perylene	276	14.448	14.460	(1.170)	25689	0.29321	97.73

QC Flag Legend

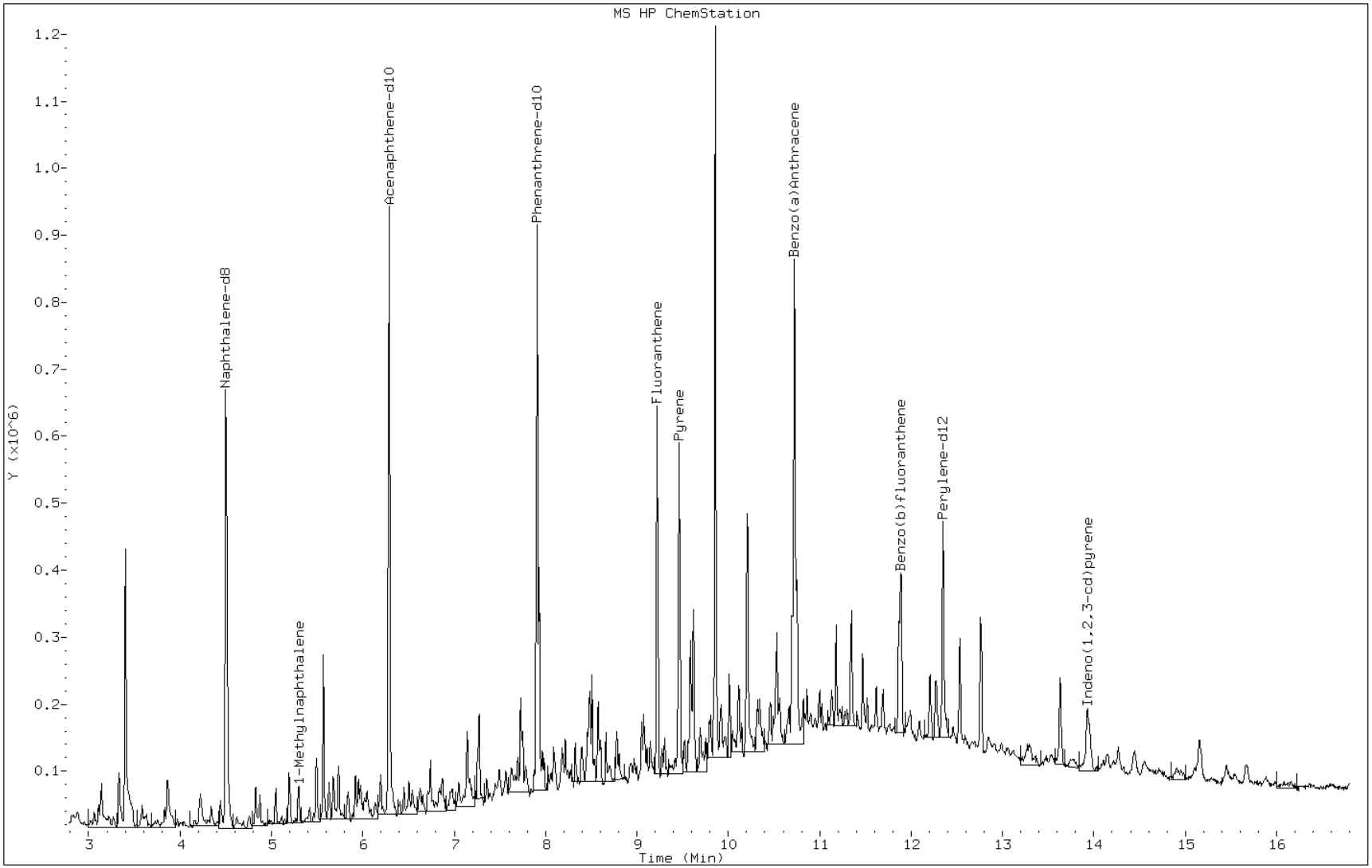
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: ka0220.d

Date: 02-JAN-2013 16:31

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-26-A DL=10 Operator: LEG



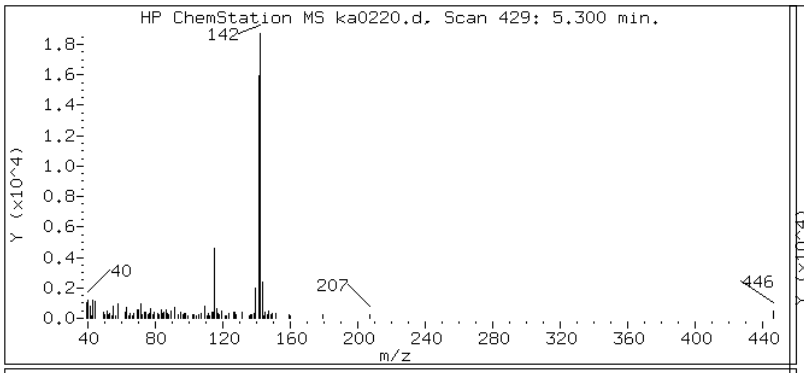
Data File: ka0220.d

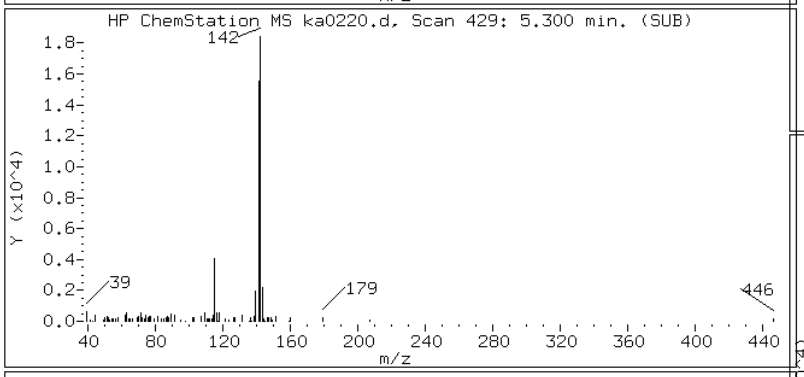
Date: 02-JAN-2013 16:31

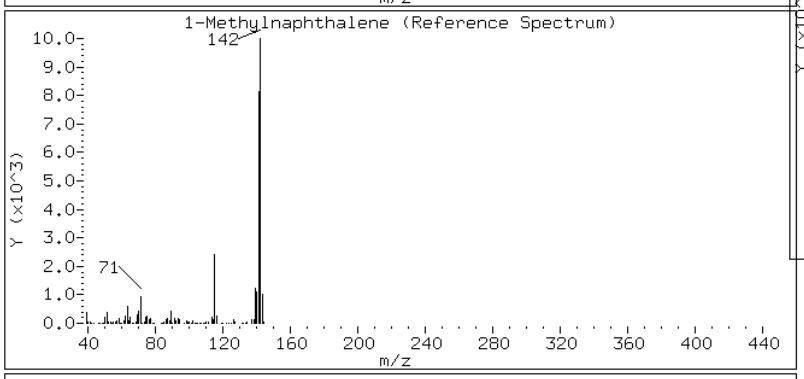
Client ID: Instrument: MSK5973.i

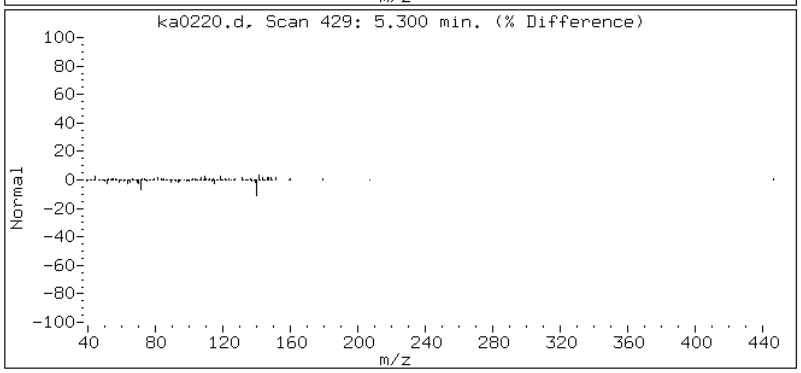
Sample Info: 680-85980-A-26-A DL=10 Operator: LEG

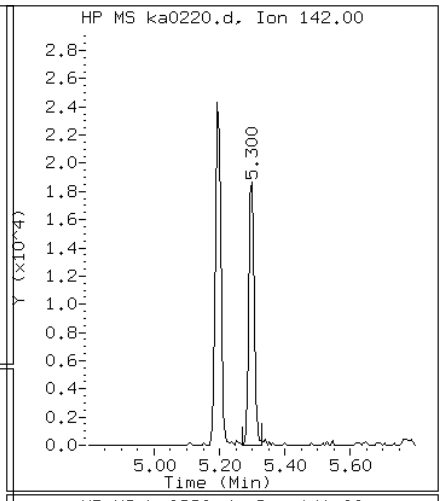
4 1-Methylnaphthalene

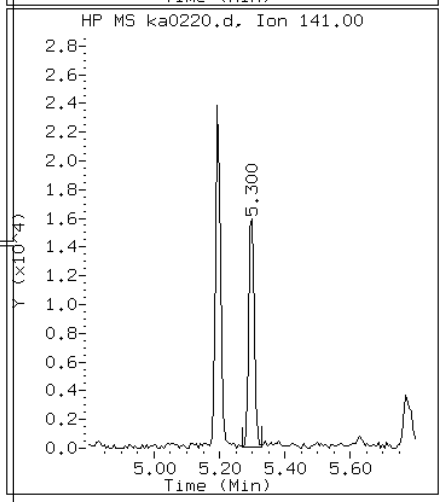












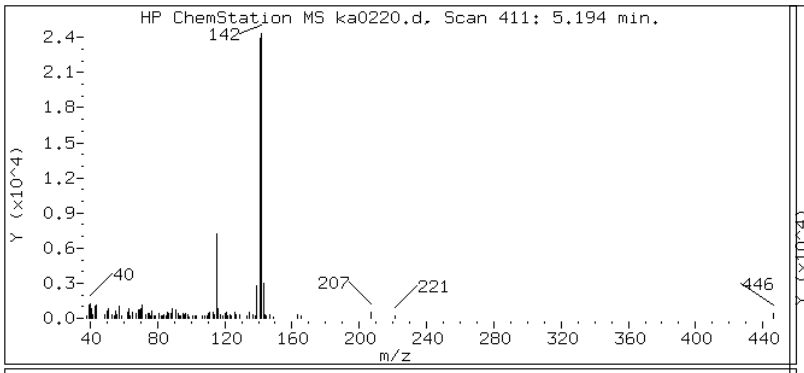
Data File: ka0220.d

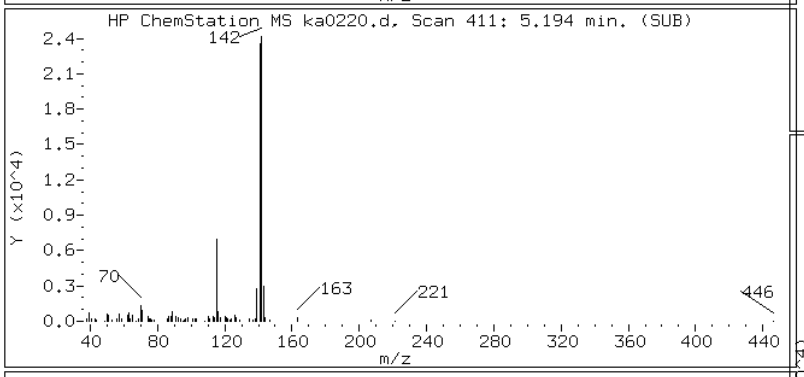
Date: 02-JAN-2013 16:31

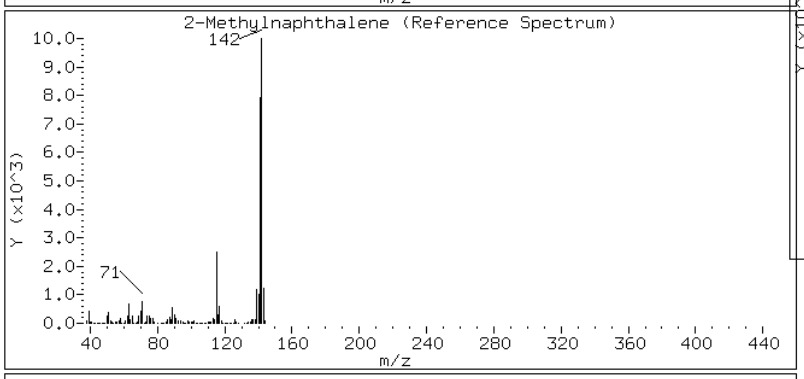
Client ID: Instrument: MSK5973.i

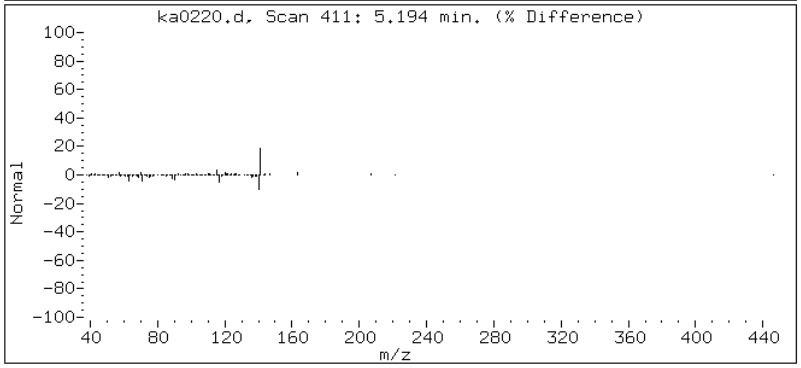
Sample Info: 680-85980-A-26-A DL=10 Operator: LEG

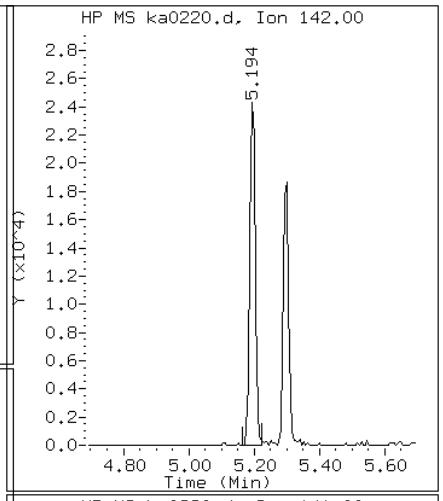
3 2-Methylnaphthalene

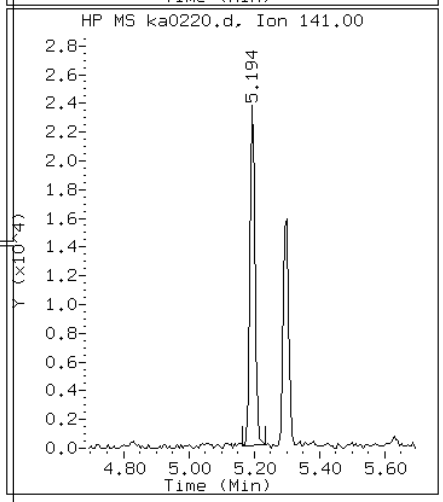












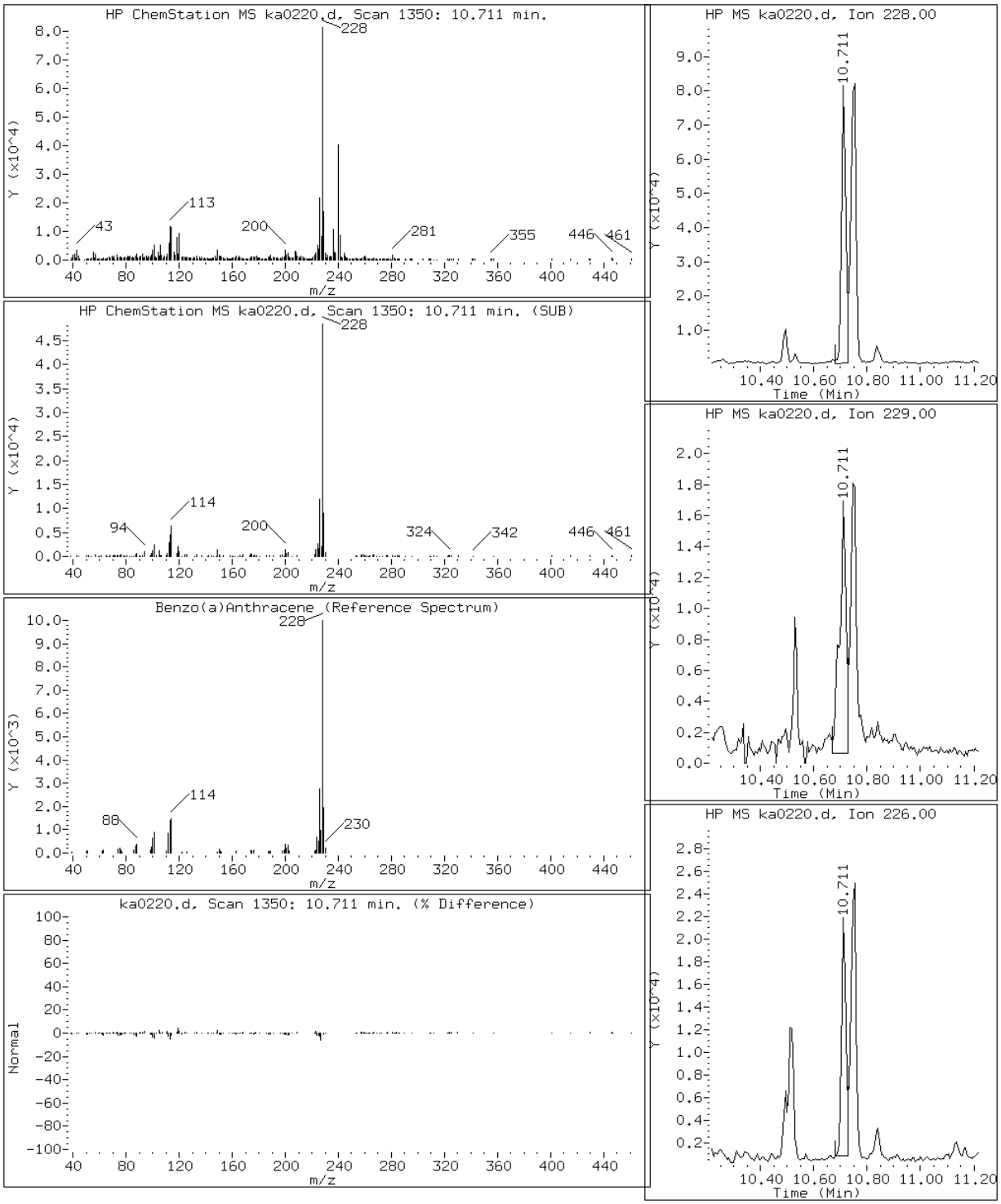
Data File: ka0220.d

Date: 02-JAN-2013 16:31

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-26-A DL=10 Operator: LEG

16 Benzo(a)Anthracene



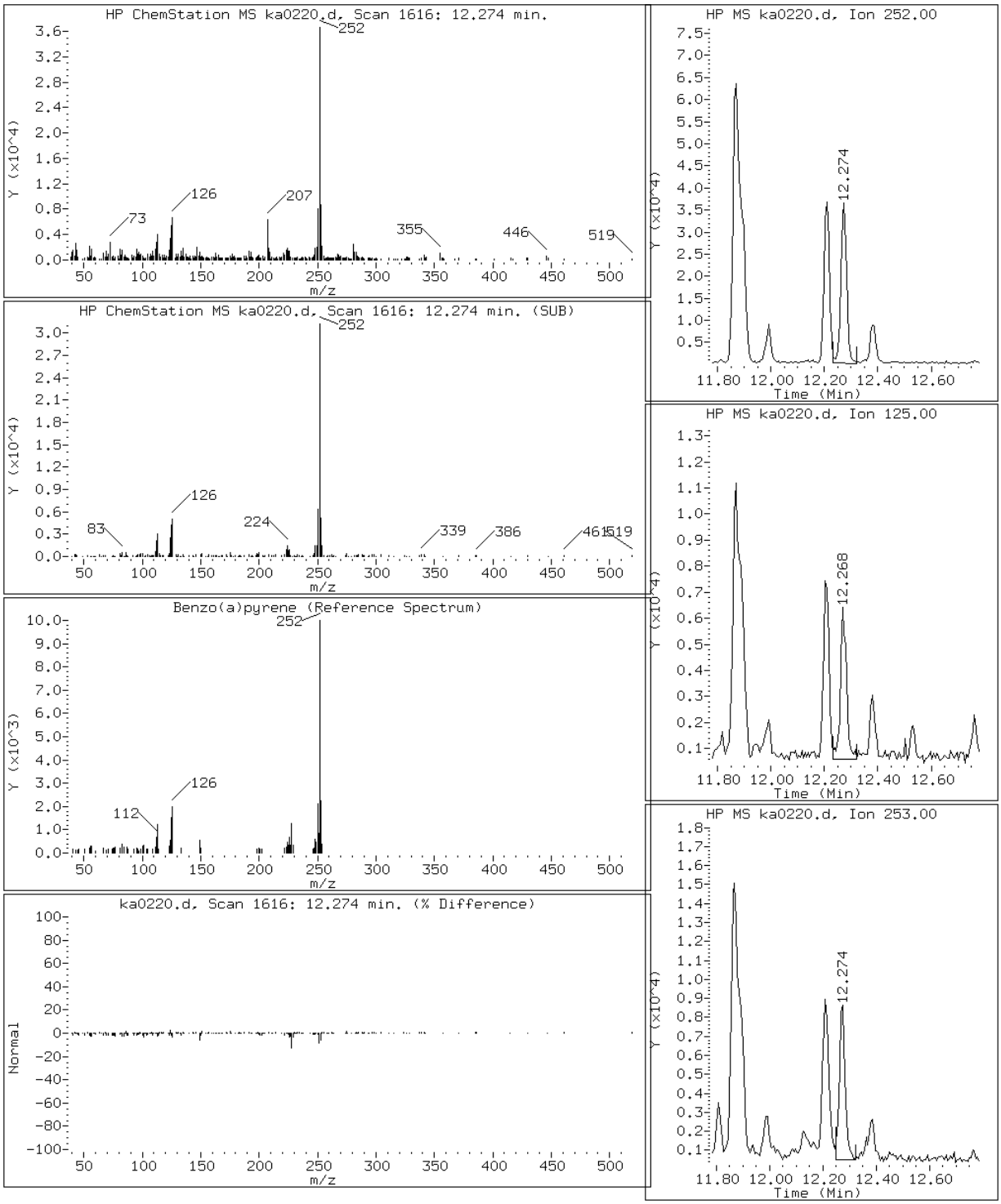
Data File: ka0220.d

Date: 02-JAN-2013 16:31

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-26-A DL=10 Operator: LEG

21 Benzo(a)pyrene



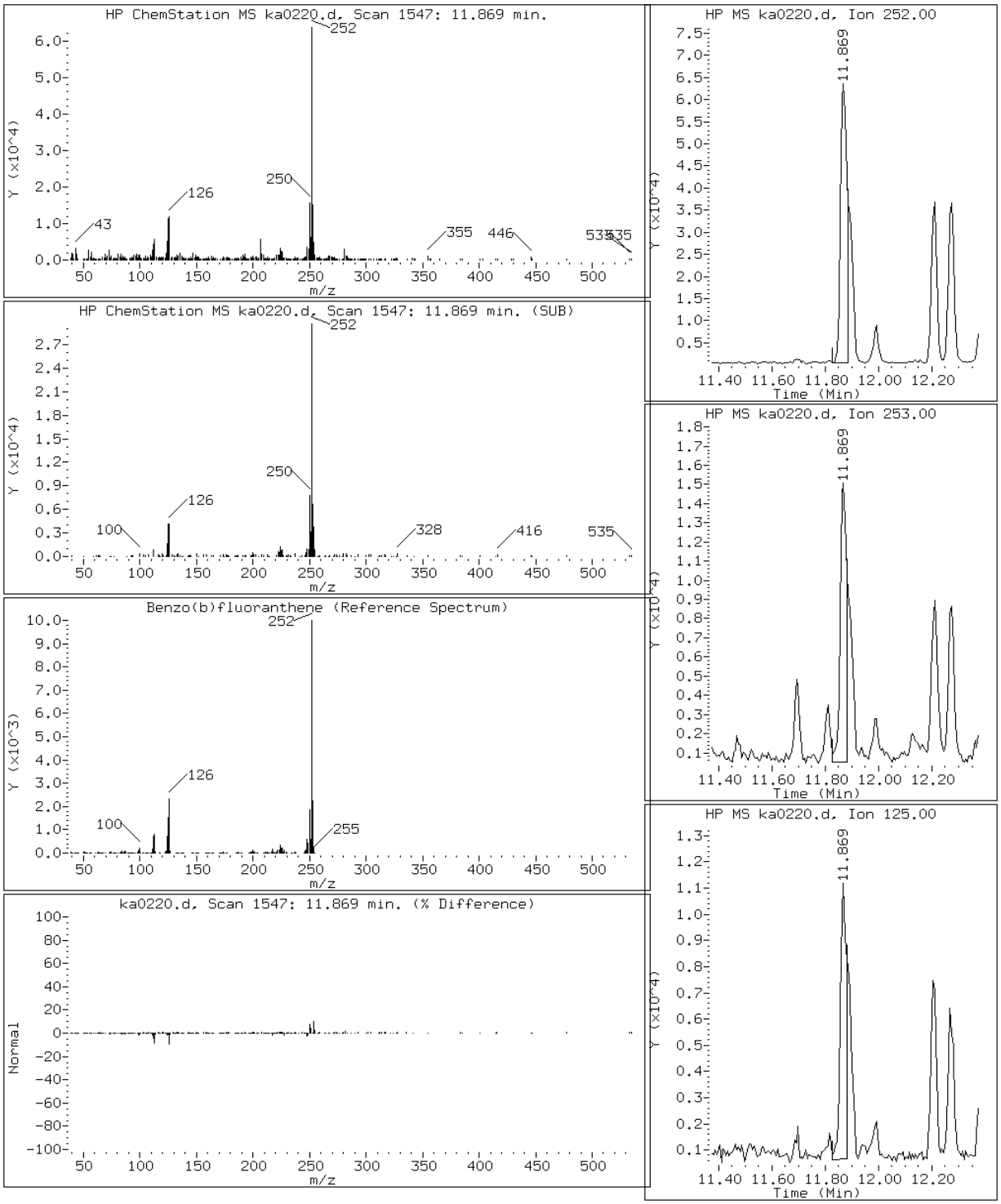
Data File: ka0220.d

Date: 02-JAN-2013 16:31

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-26-A DL=10 Operator: LEG

19 Benzo(b)fluoranthene



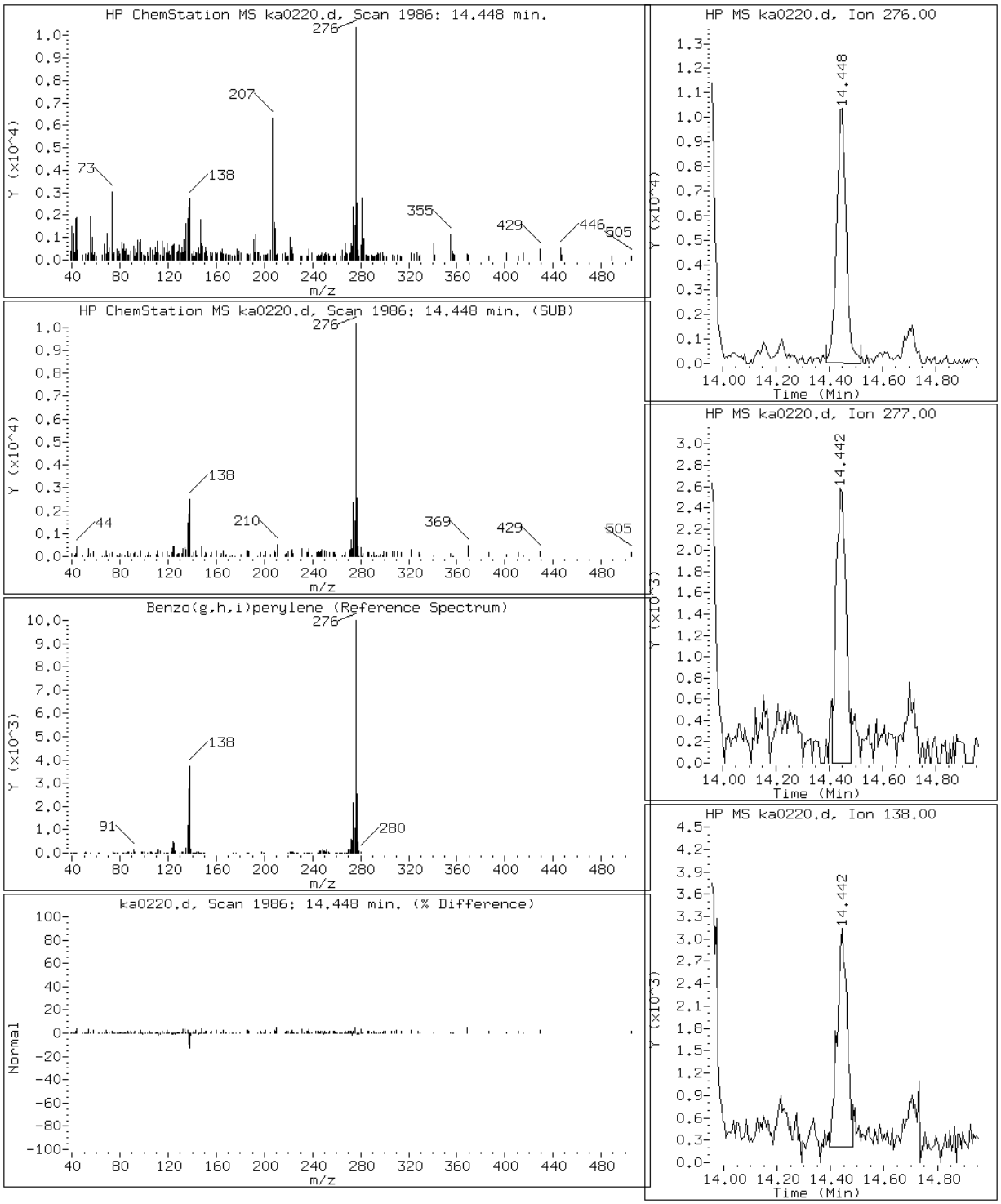
Data File: ka0220.d

Date: 02-JAN-2013 16:31

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-26-A DL=10 Operator: LEG

24 Benzo(g,h,i)perylene



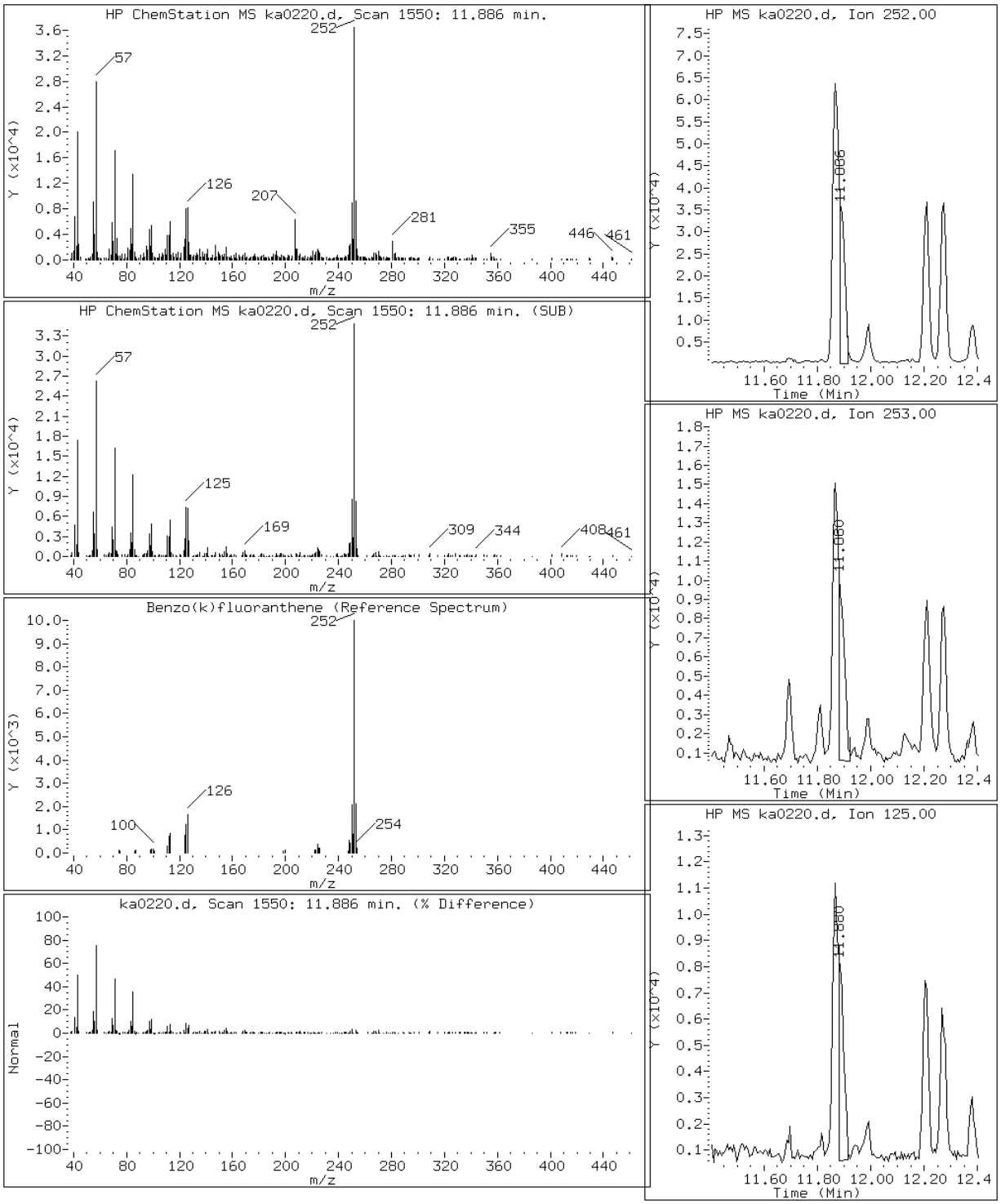
Data File: ka0220.d

Date: 02-JAN-2013 16:31

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-26-A DL=10 Operator: LEG

20 Benzo(k)fluoranthene



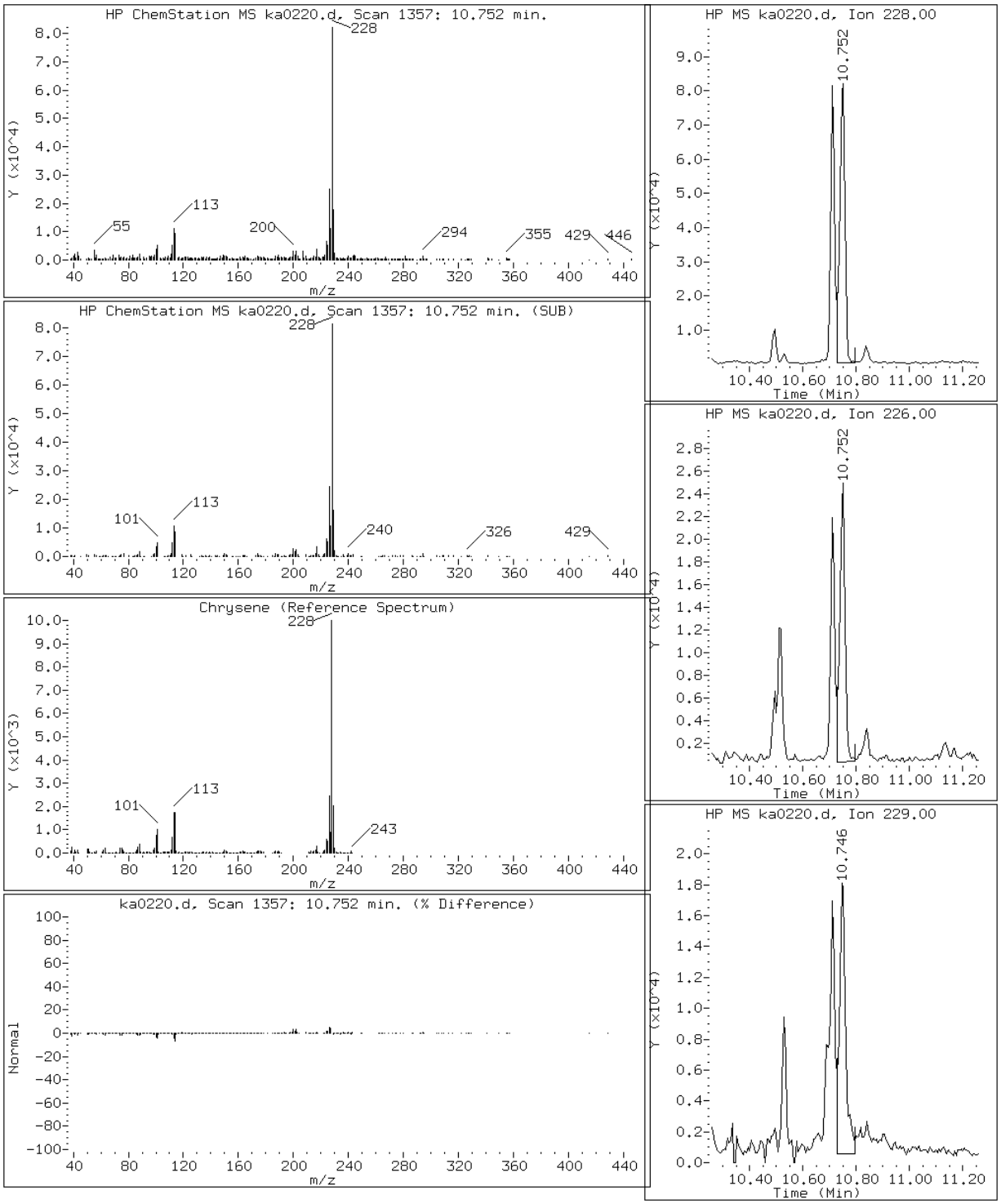
Data File: ka0220.d

Date: 02-JAN-2013 16:31

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-26-A DL=10 Operator: LEG

17 Chrysene



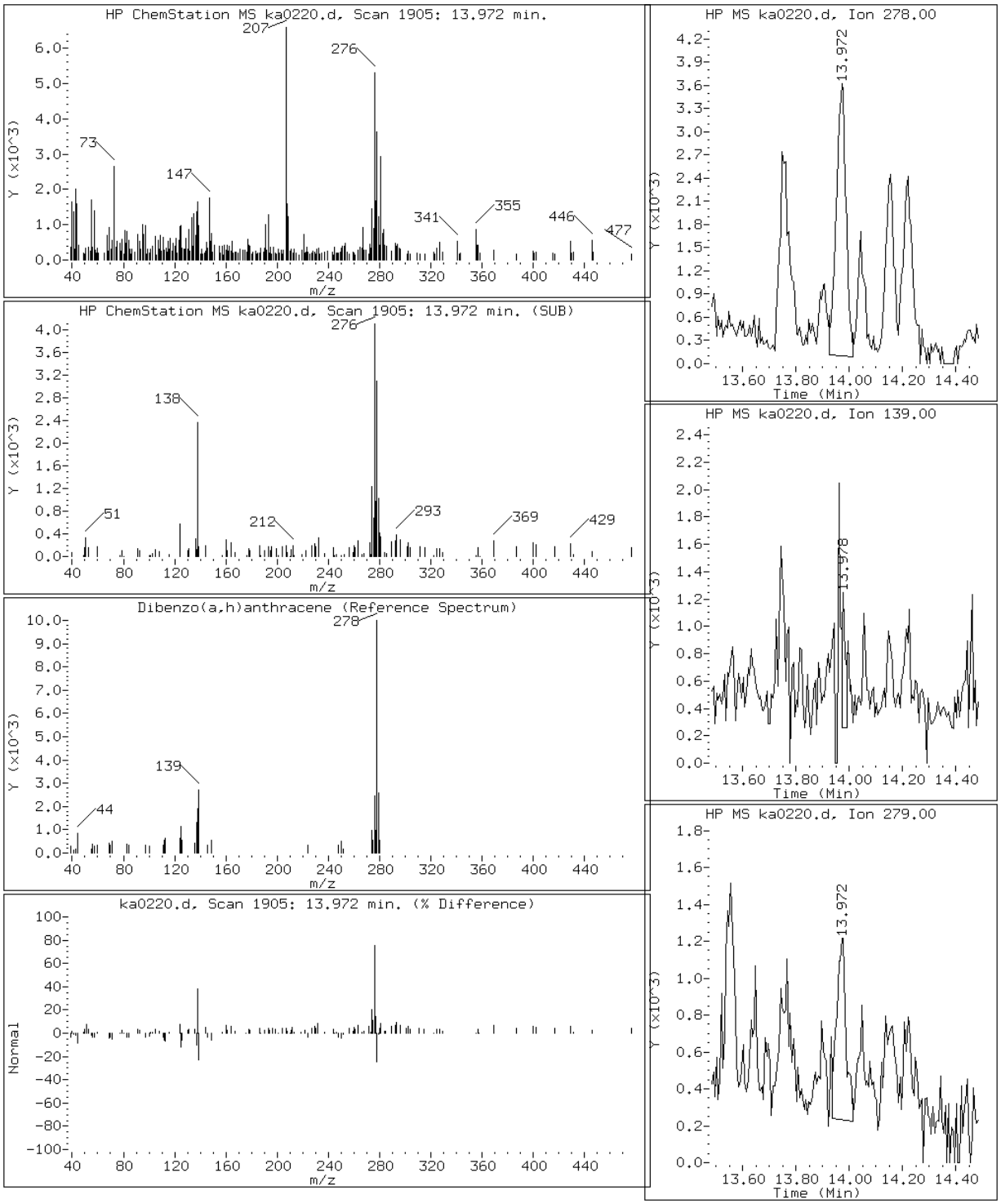
Data File: ka0220.d

Date: 02-JAN-2013 16:31

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-26-A DL=10 Operator: LEG

23 Dibenzo(a,h)anthracene



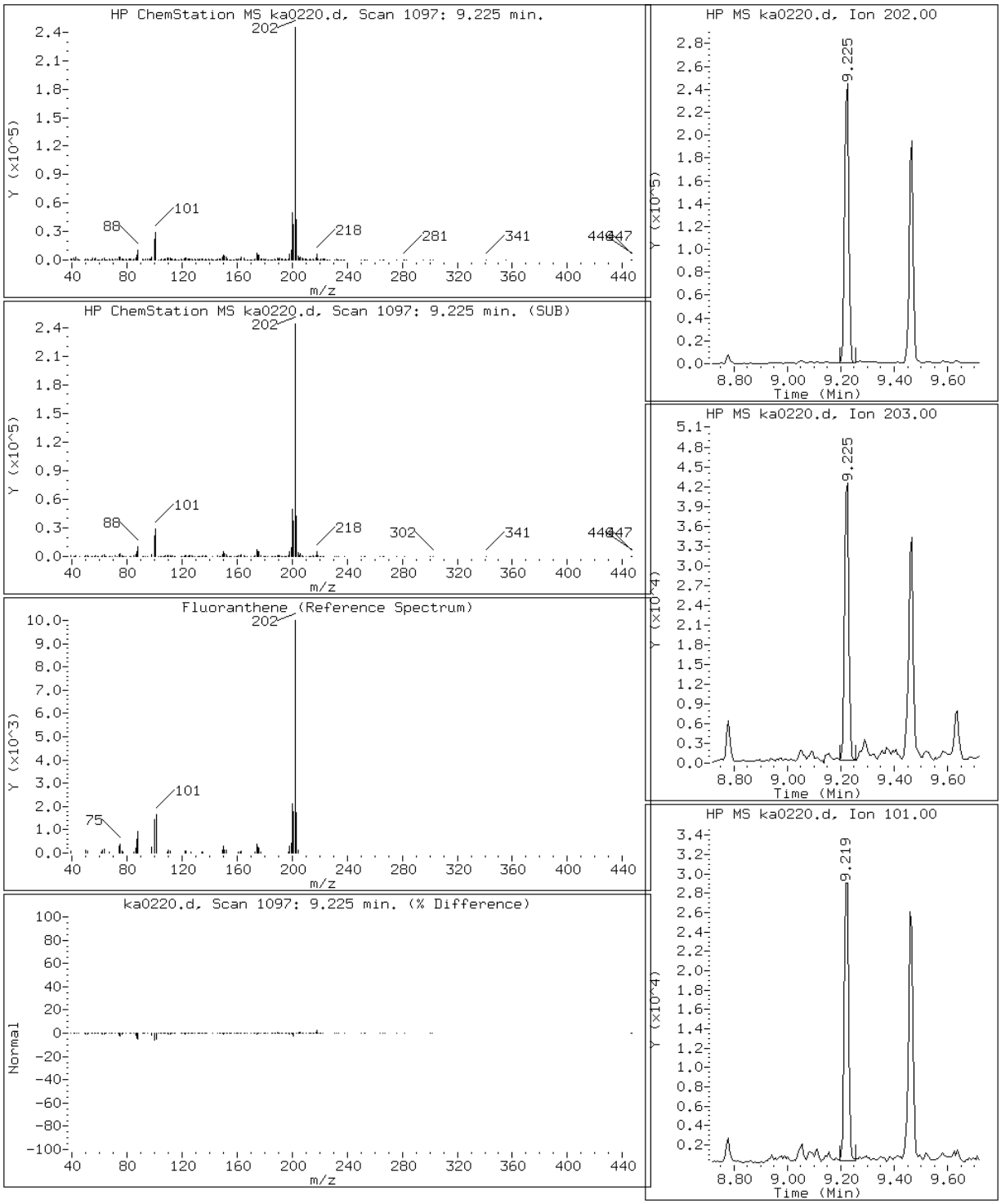
Data File: ka0220.d

Date: 02-JAN-2013 16:31

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-26-A DL=10 Operator: LEG

12 Fluoranthene



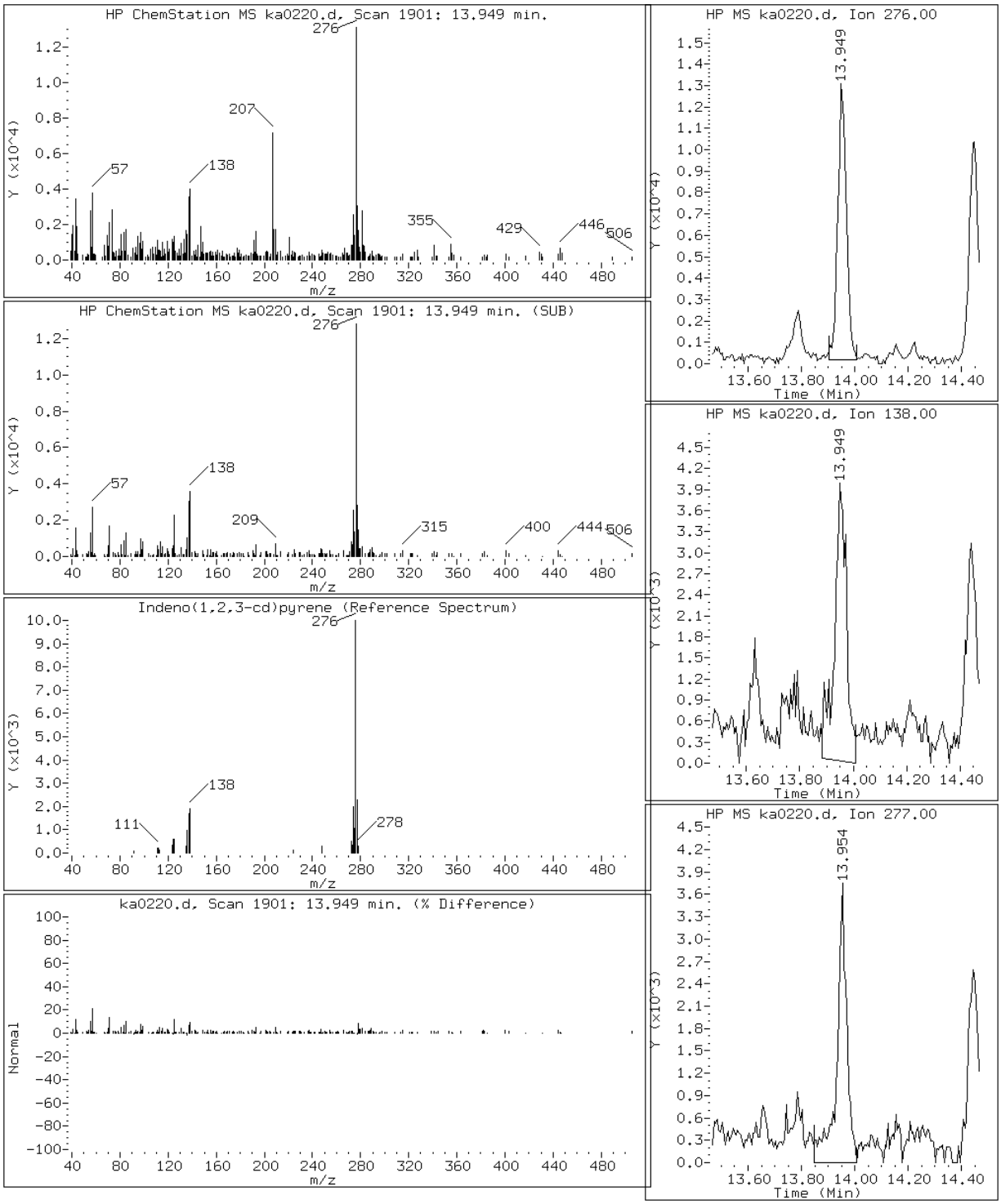
Data File: ka0220.d

Date: 02-JAN-2013 16:31

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-26-A DL=10 Operator: LEG

22 Indeno(1,2,3-cd)pyrene



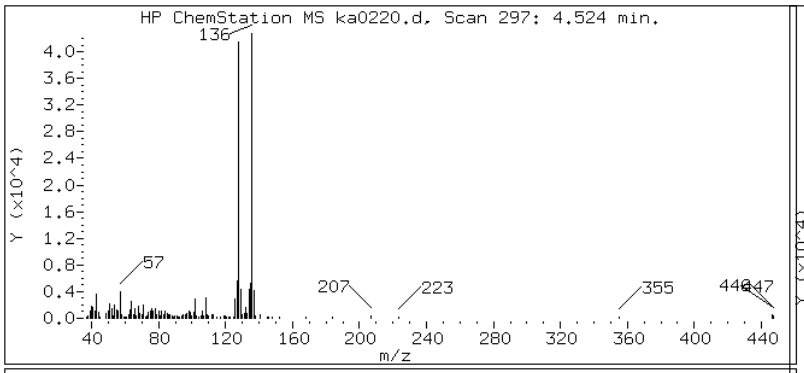
Data File: ka0220.d

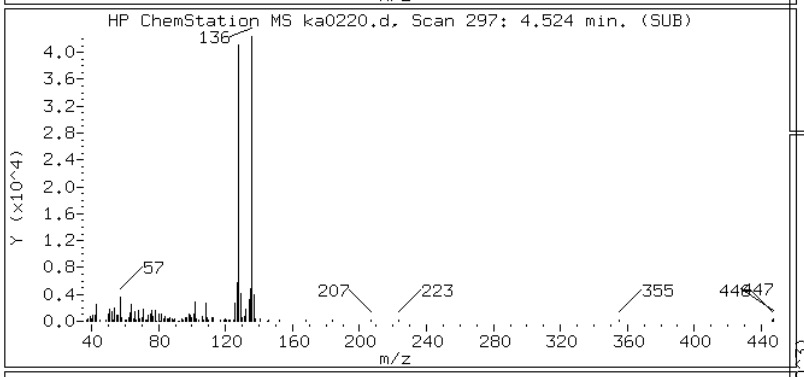
Date: 02-JAN-2013 16:31

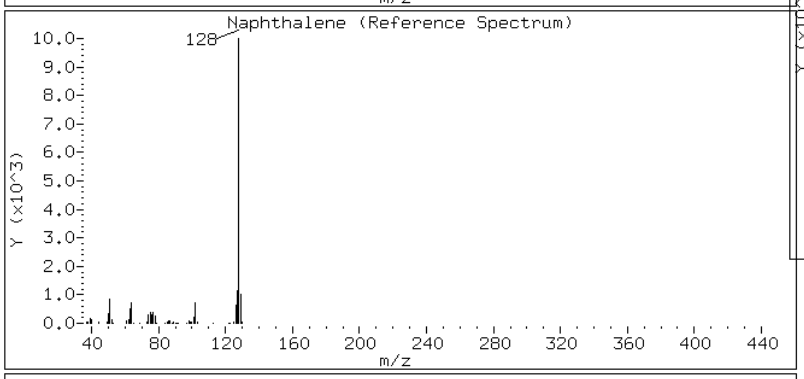
Client ID: Instrument: MSK5973.i

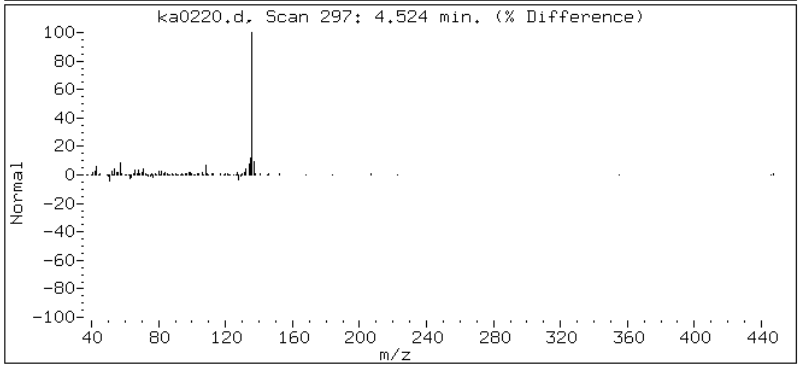
Sample Info: 680-85980-A-26-A DL=10 Operator: LEG

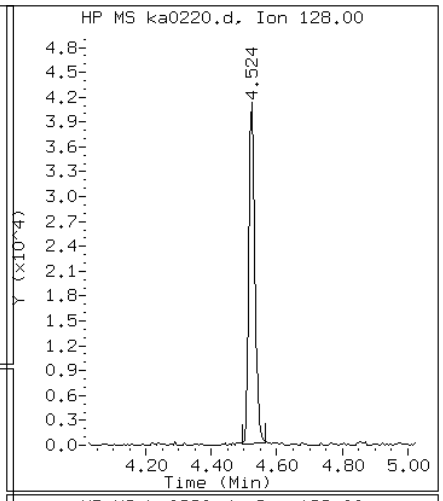
2 Naphthalene

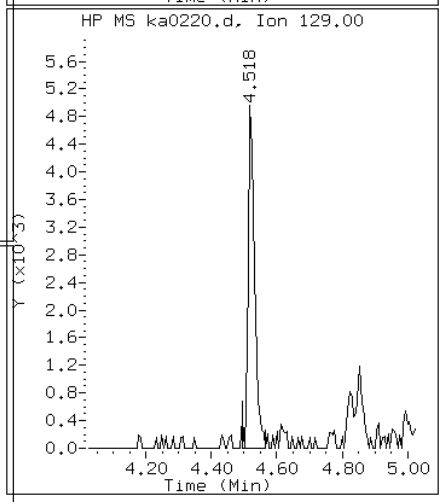












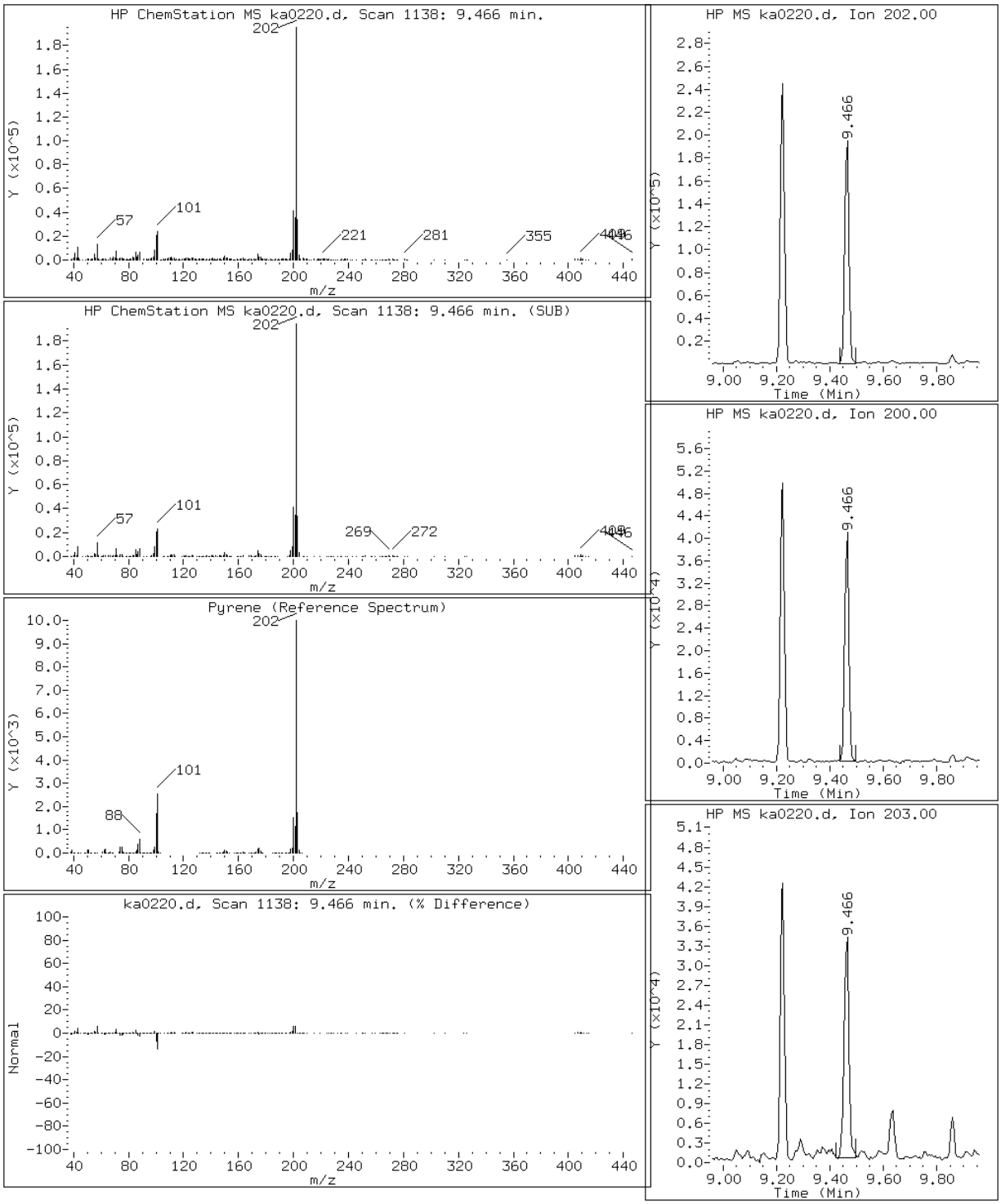
Data File: ka0220.d

Date: 02-JAN-2013 16:31

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-26-A DL=10 Operator: LEG

14 Pyrene



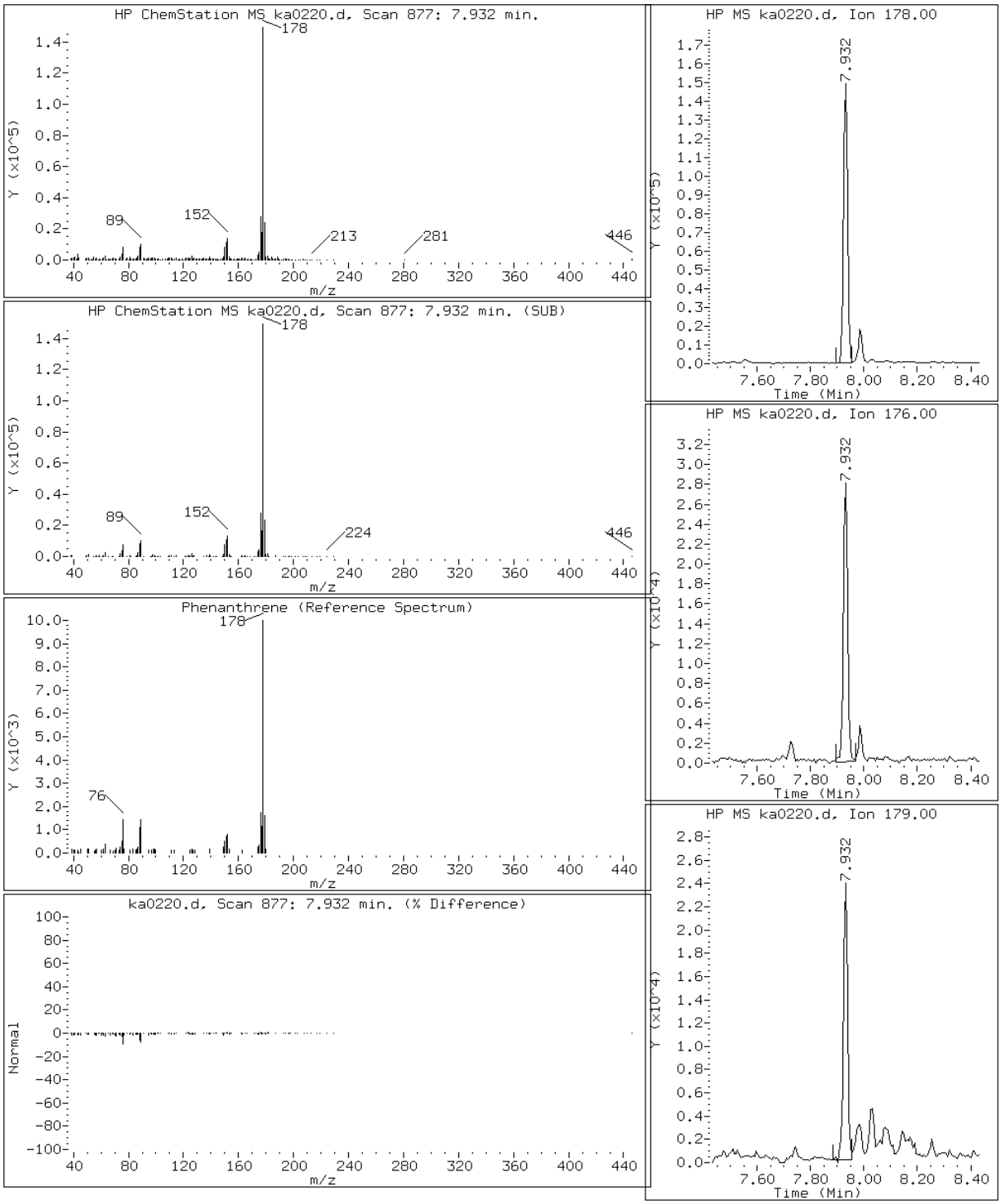
Data File: ka0220.d

Date: 02-JAN-2013 16:31

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-26-A DL=10 Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: ka0220.d
Inj. Date and Time: 02-JAN-2013 16:31
Instrument ID: MSK5973.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 01/03/2013

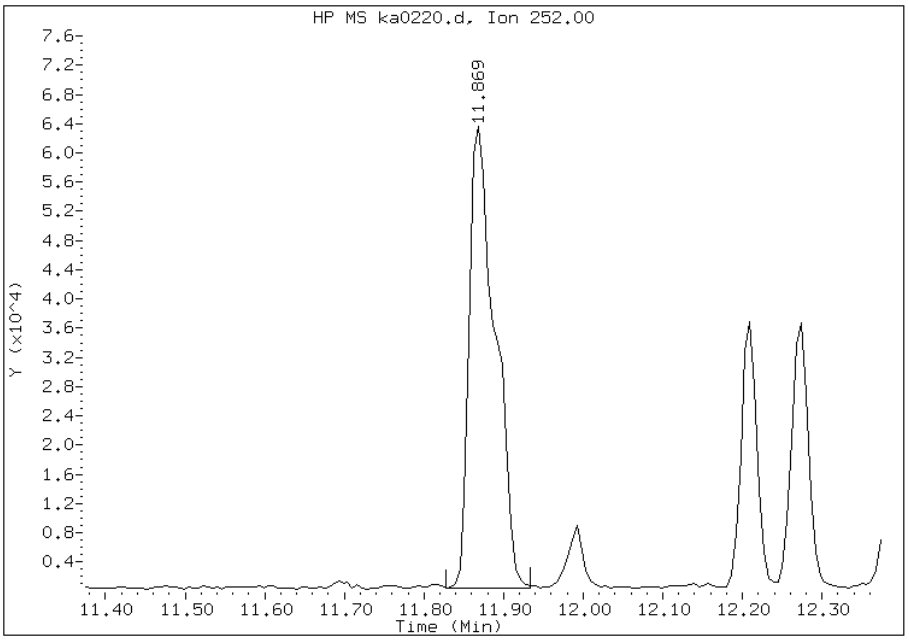
Processing Integration Results

RT: 11.87

Response: 142749

Amount: 1

Conc: 370



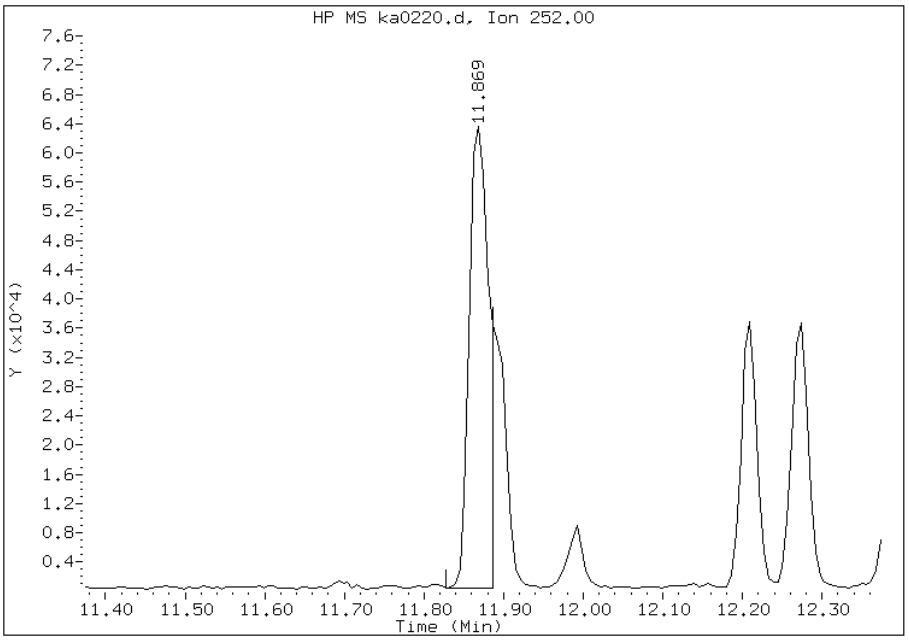
Manual Integration Results

RT: 11.87

Response: 108409

Amount: 1

Conc: 281



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: ka0220.d
Inj. Date and Time: 02-JAN-2013 16:31
Instrument ID: MSK5973.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 01/03/2013

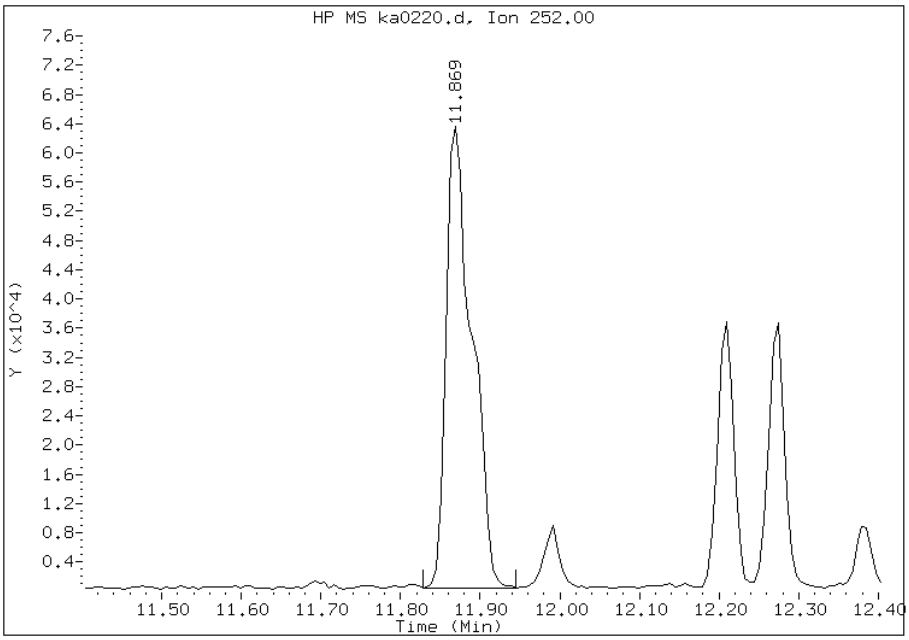
Processing Integration Results

RT: 11.87

Response: 142846

Amount: 1

Conc: 383



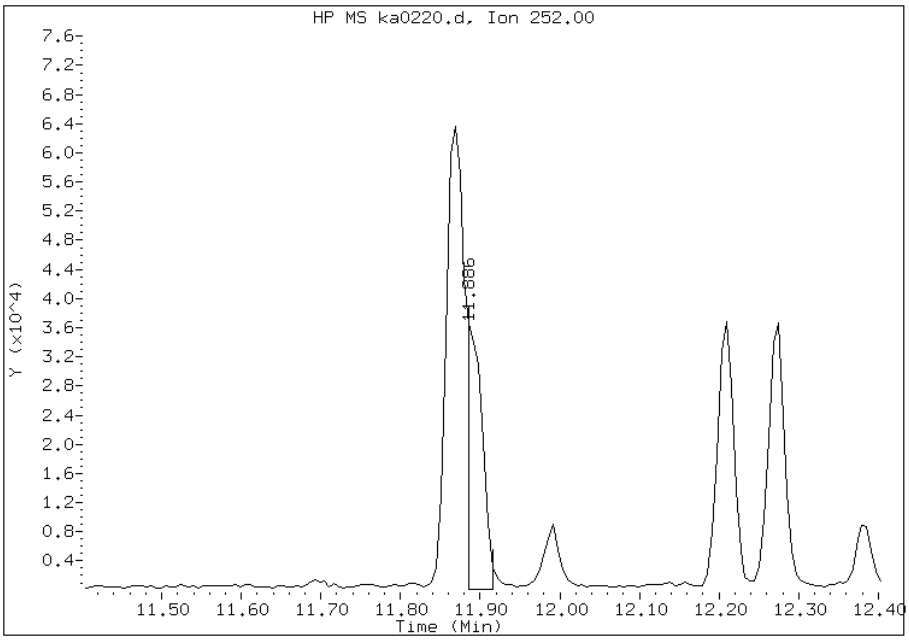
Manual Integration Results

RT: 11.89

Response: 47061

Amount: 0

Conc: 126



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: CV0424B-CS-SP | Lab Sample ID: 680-85980-27

Matrix: Solid | Lab File ID: ka0221.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/18/2012 13:00

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.07(g) | Date Analyzed: 01/02/2013 16:54

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

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

% Moisture: 19.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	83	U	83	38
91-57-6	2-Methylnaphthalene	83	U	83	41
83-32-9	Acenaphthene	83	U	83	41
208-96-8	Acenaphthylene	83	U	83	41
120-12-7	Anthracene	83	U	83	41
56-55-3	Benzo[a]anthracene	83	U	83	41
50-32-8	Benzo[a]pyrene	24	J	83	15
205-99-2	Benzo[b]fluoranthene	83	U	83	41
191-24-2	Benzo[g,h,i]perylene	83	U	83	41
207-08-9	Benzo[k]fluoranthene	83	U	83	25
218-01-9	Chrysene	83	U	83	41
53-70-3	Dibenz(a,h)anthracene	83	U	83	41
206-44-0	Fluoranthene	83	U	83	41
86-73-7	Fluorene	83	U	83	41
193-39-5	Indeno[1,2,3-cd]pyrene	83	U	83	41
91-20-3	Naphthalene	83	U	83	41
129-00-0	Pyrene	83	U	83	41
85-01-8	Phenanthrene	83	U	83	30

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0221.d
Lab Smp Id: 680-85980-A-27-A DL
Inj Date : 02-JAN-2013 16:54
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85980-A-27-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:58 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:24 Cal File: ka0212q.d
Als bottle: 17
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.501	4.501	(1.000)	514489	2.00000	
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	300951	2.00000	
* 9 Phenanthrene-d10	188	7.903	7.903	(1.000)	465961	2.00000	
* 13 Chrysene-d12	240	10.723	10.729	(1.000)	336564	2.00000	
21 Benzo(a)pyrene	252	12.274	12.280	(0.994)	8479	0.05738	19.12(a)
* 18 Perylene-d12	264	12.351	12.356	(1.000)	260079	2.00000	

QC Flag Legend

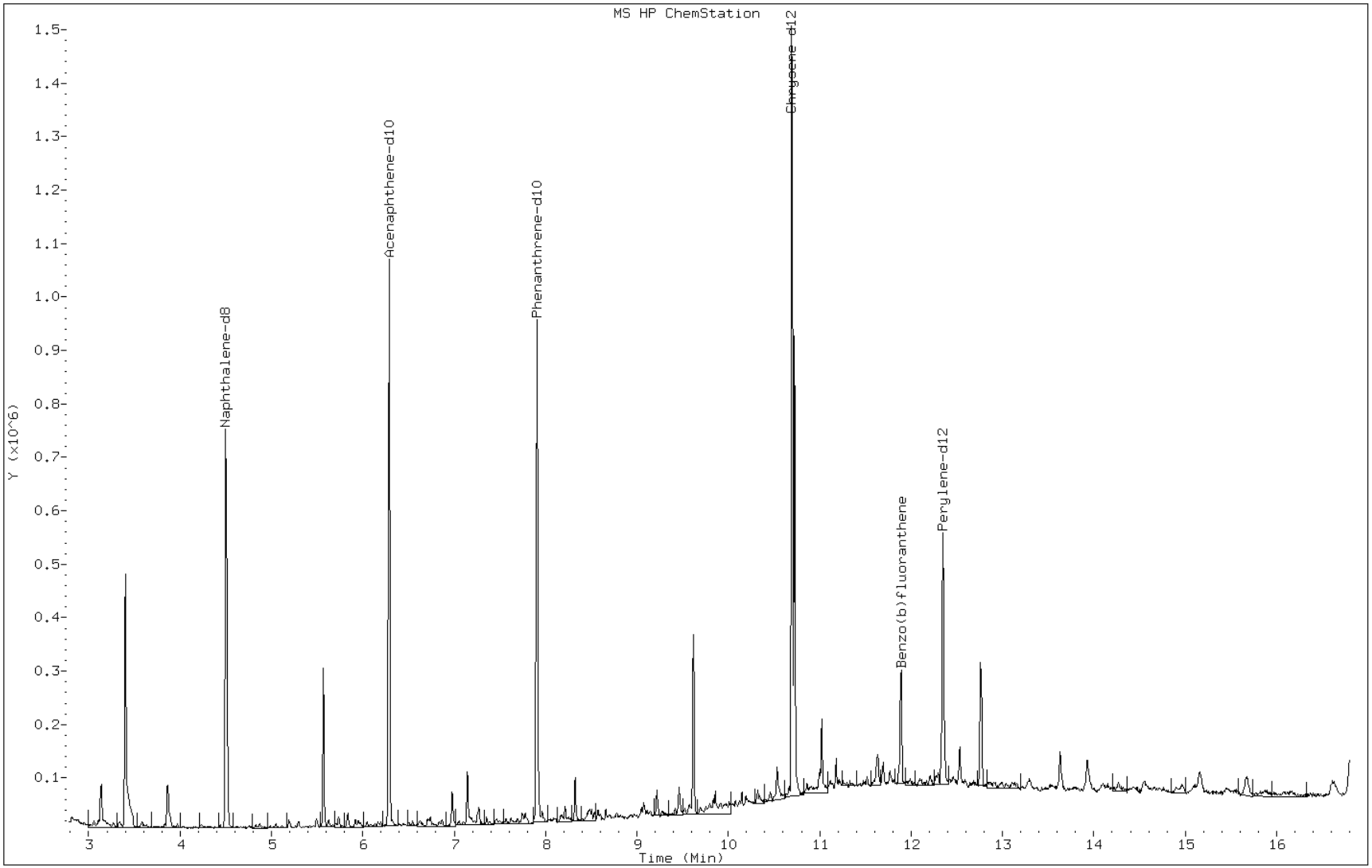
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: ka0221.d

Date: 02-JAN-2013 16:54

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-27-A DL=10 Operator: LEG



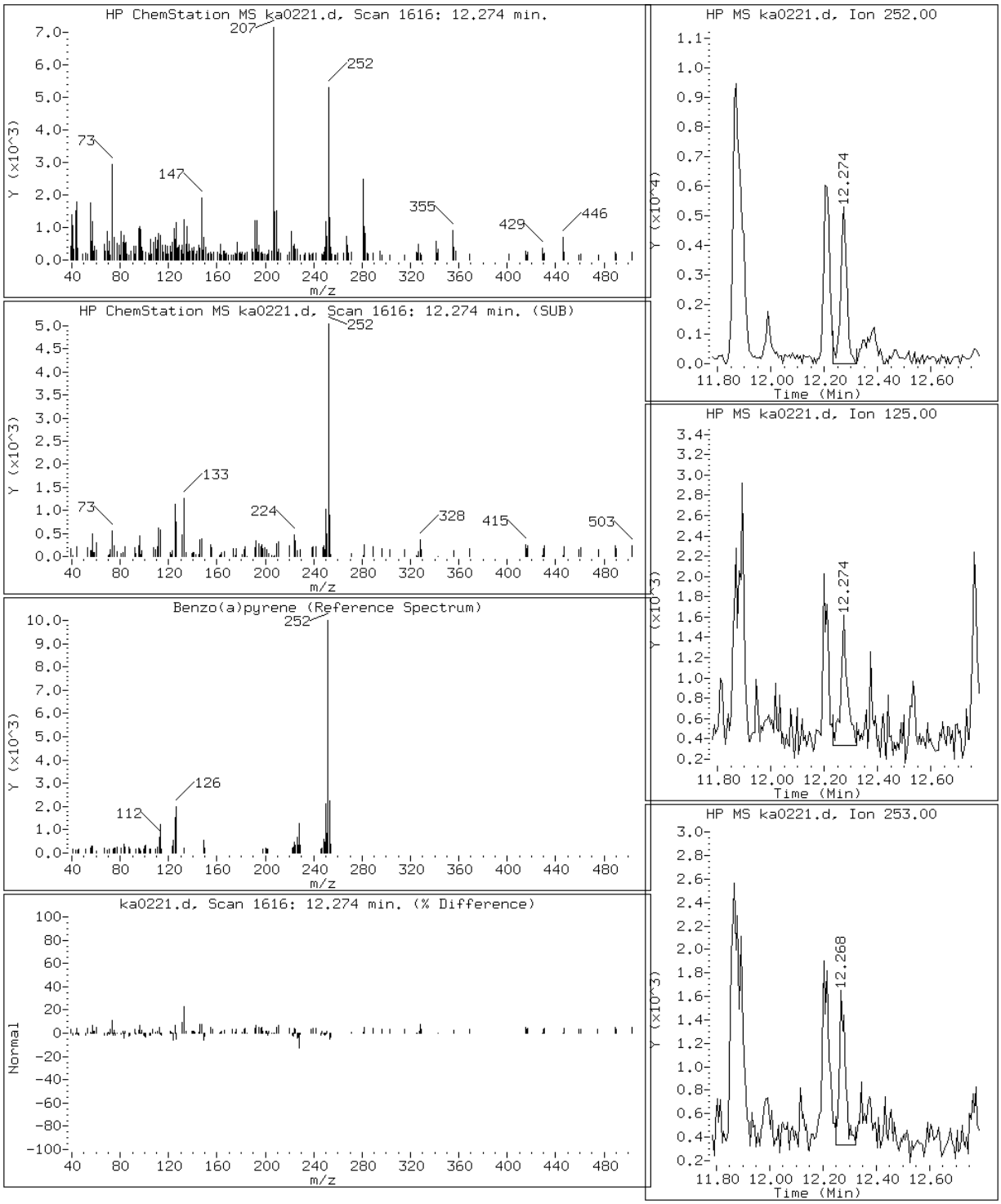
Data File: ka0221.d

Date: 02-JAN-2013 16:54

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-27-A DL=10 Operator: LEG

21 Benzo(a)pyrene



Manual Integration Report

Data File: ka0221.d
Inj. Date and Time: 02-JAN-2013 16:54
Instrument ID: MSK5973.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 01/03/2013

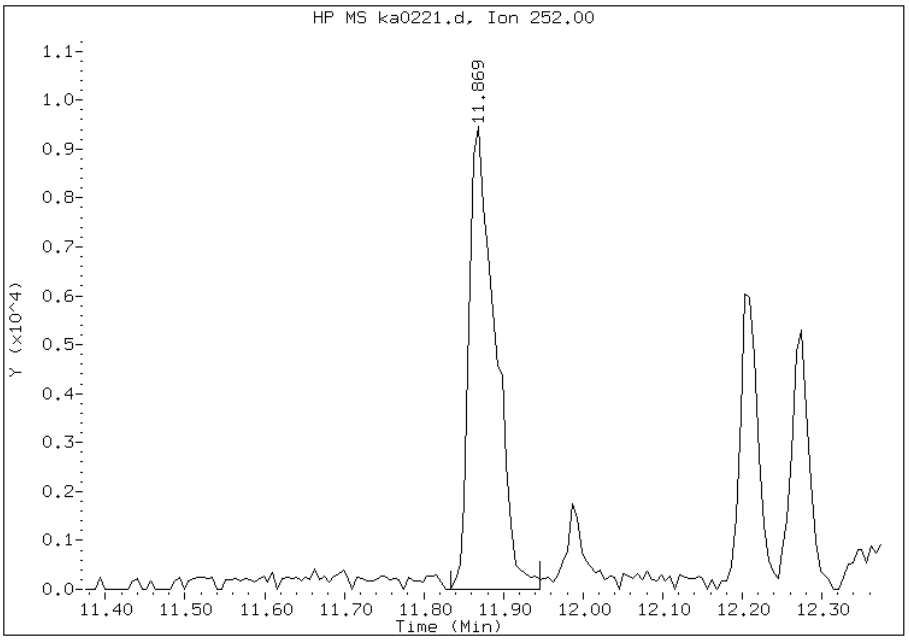
Processing Integration Results

RT: 11.87

Response: 21657

Amount: 0

Conc: 37



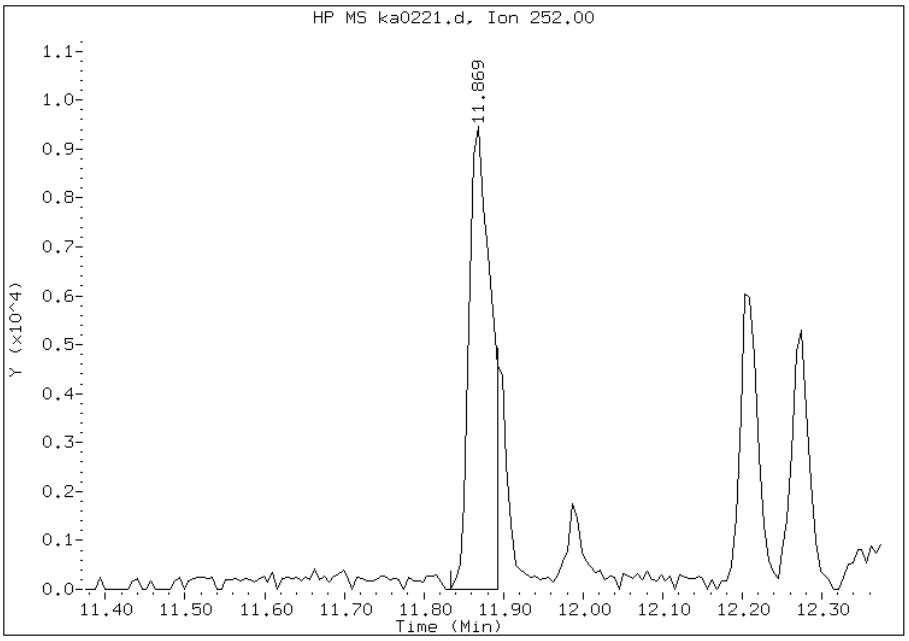
Manual Integration Results

RT: 11.87

Response: 18064

Amount: 0

Conc: 31



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: CV0235A-CS | Lab Sample ID: 680-85980-28

Matrix: Solid | Lab File ID: ka0222.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/18/2012 15:15

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.01(g) | Date Analyzed: 01/02/2013 17:18

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

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

% Moisture: 26.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	60	J	91	42
91-57-6	2-Methylnaphthalene	61	J	91	45
83-32-9	Acenaphthene	91	U	91	45
208-96-8	Acenaphthylene	91	U	91	45
120-12-7	Anthracene	91	U	91	45
56-55-3	Benzo[a]anthracene	93		91	45
50-32-8	Benzo[a]pyrene	99		91	16
205-99-2	Benzo[b]fluoranthene	160		91	45
191-24-2	Benzo[g,h,i]perylene	61	J	91	45
207-08-9	Benzo[k]fluoranthene	66	J	91	27
218-01-9	Chrysene	130		91	45
53-70-3	Dibenz(a,h)anthracene	91	U	91	45
206-44-0	Fluoranthene	180		91	45
86-73-7	Fluorene	91	U	91	45
193-39-5	Indeno[1,2,3-cd]pyrene	91	U	91	45
91-20-3	Naphthalene	91		91	45
129-00-0	Pyrene	160		91	45
85-01-8	Phenanthrene	160		91	33

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0222.d
Lab Smp Id: 680-85980-A-28-A DL
Inj Date : 02-JAN-2013 17:18
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85980-A-28-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:58 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:24 Cal File: ka0212q.d
Als bottle: 18
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.501	4.501	(1.000)	457113	2.00000	
2 Naphthalene	128	4.524	4.524	(1.005)	54138	0.20100	67.00
3 2-Methylnaphthalene	142	5.194	5.194	(1.154)	22432	0.13399	44.66(a)
4 1-Methylnaphthalene	142	5.194	5.300	(1.154)	22500	0.13258	44.19(a)
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	260596	2.00000	
* 9 Phenanthrene-d10	188	7.903	7.903	(1.000)	390981	2.00000	
10 Phenanthrene	178	7.932	7.932	(1.004)	85320	0.34576	115.25

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
12 Fluoranthene	202	9.219	9.219	(1.167)	96152	0.38678	128.92
14 Pyrene	202	9.466	9.460	(0.883)	73937	0.34778	115.92
16 Benzo(a)Anthracene	228	10.711	10.717	(0.999)	33474	0.20500	68.33
* 13 Chrysene-d12	240	10.723	10.729	(1.000)	249421	2.00000	
17 Chrysene	228	10.746	10.758	(1.002)	46827	0.29147	97.15
19 Benzo(b)fluoranthene	252	11.863	11.875	(0.961)	45723	0.35842	119.47
20 Benzo(k)fluoranthene	252	11.892	11.904	(0.963)	17843	0.14451	48.16(aM)
21 Benzo(a)pyrene	252	12.268	12.280	(0.994)	21189	0.21725	72.41
* 18 Perylene-d12	264	12.345	12.356	(1.000)	171655	2.00000	
24 Benzo(g,h,i)perylene	276	14.442	14.460	(1.170)	11726	0.13474	44.91(a)

QC Flag Legend

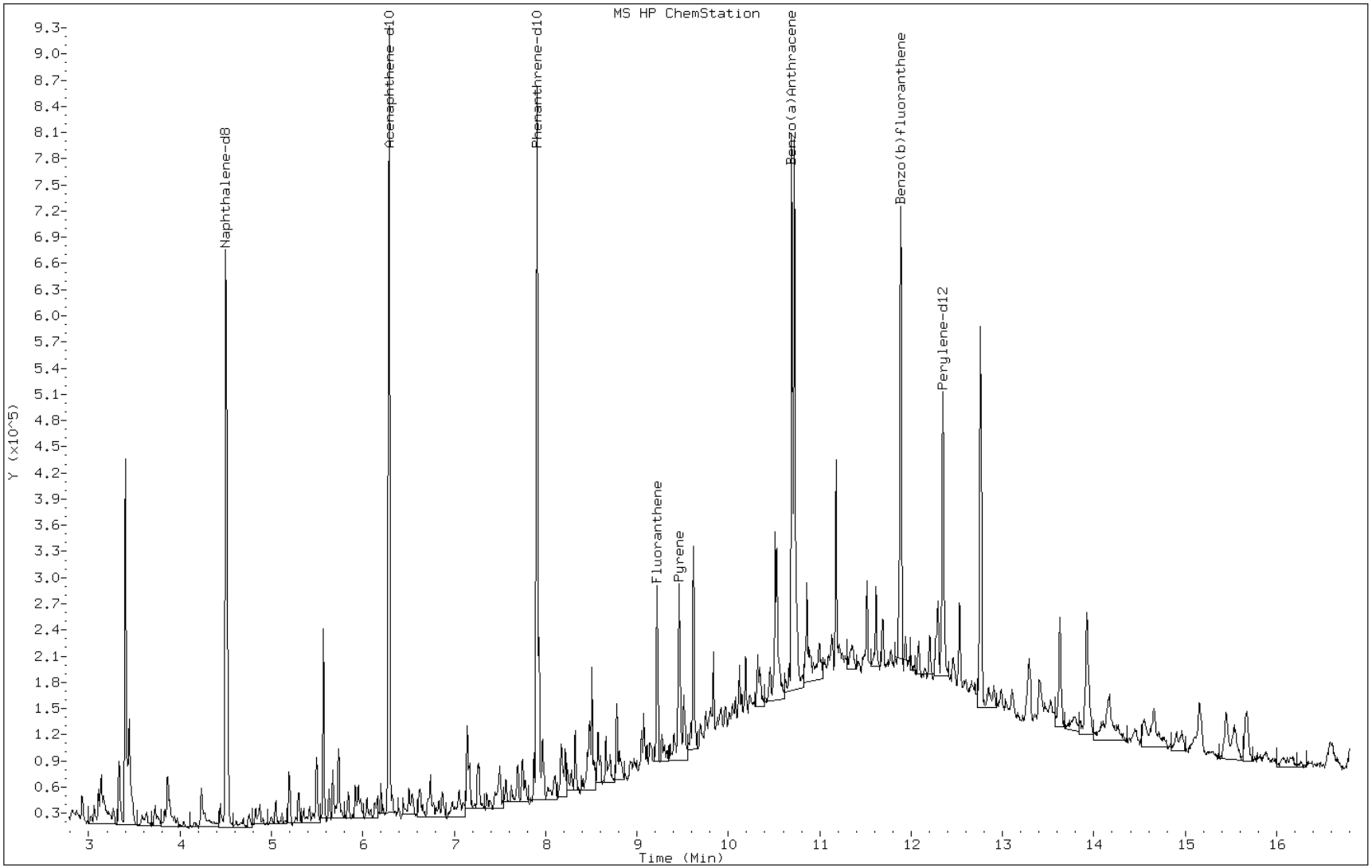
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: ka0222.d

Date: 02-JAN-2013 17:18

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-28-A DL=10 Operator: LEG



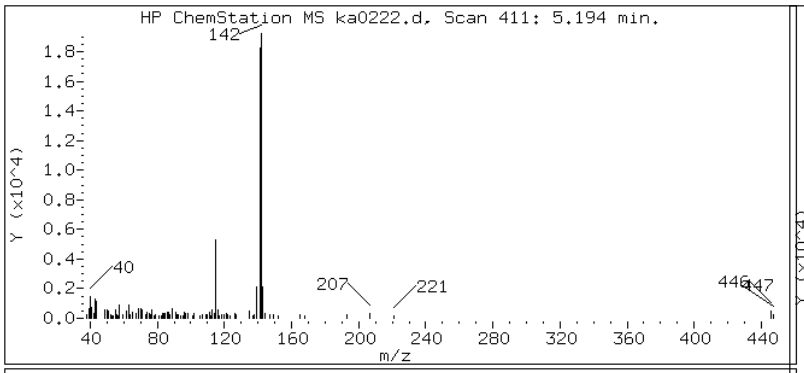
Data File: ka0222.d

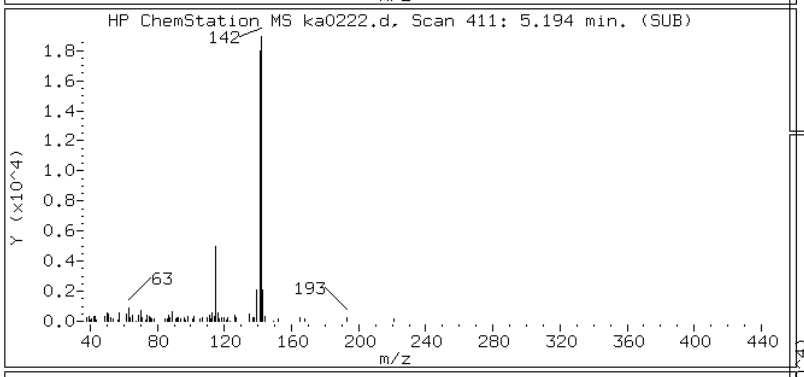
Date: 02-JAN-2013 17:18

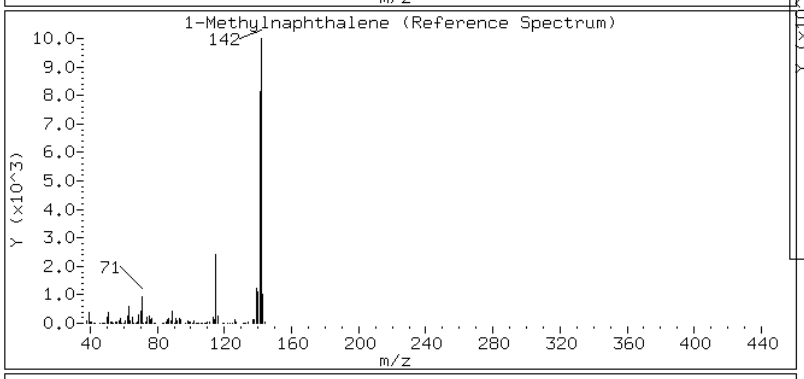
Client ID: Instrument: MSK5973.i

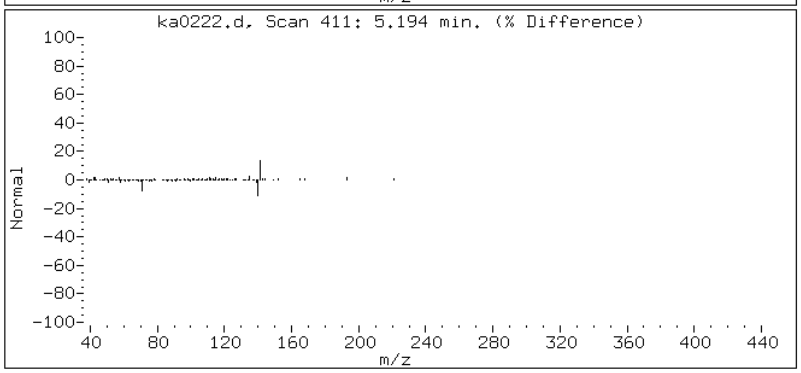
Sample Info: 680-85980-A-28-A DL=10 Operator: LEG

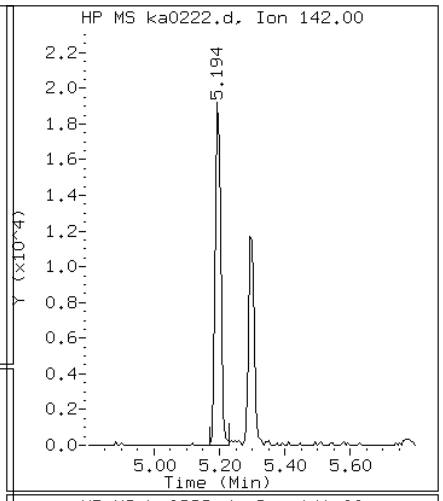
4 1-Methylnaphthalene

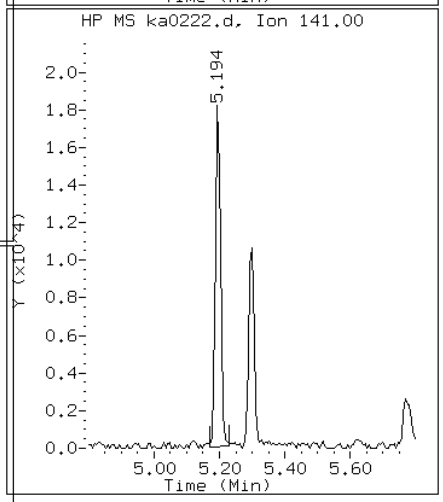












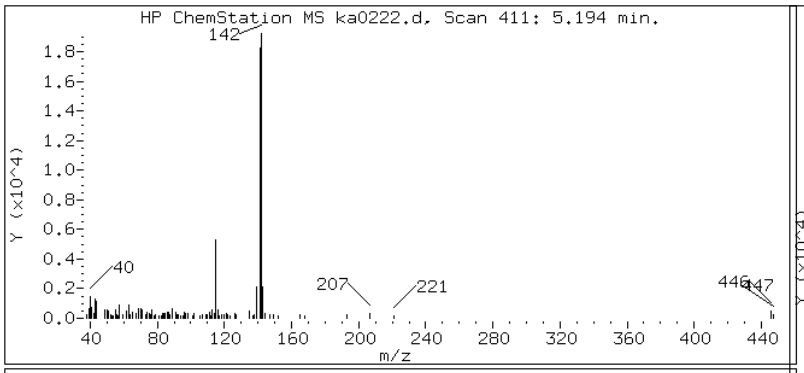
Data File: ka0222.d

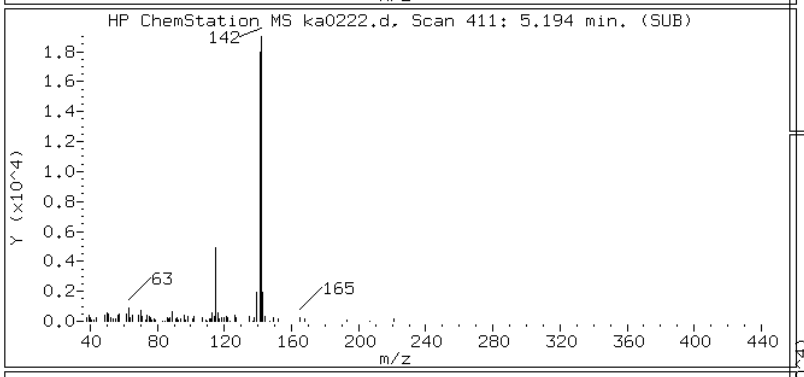
Date: 02-JAN-2013 17:18

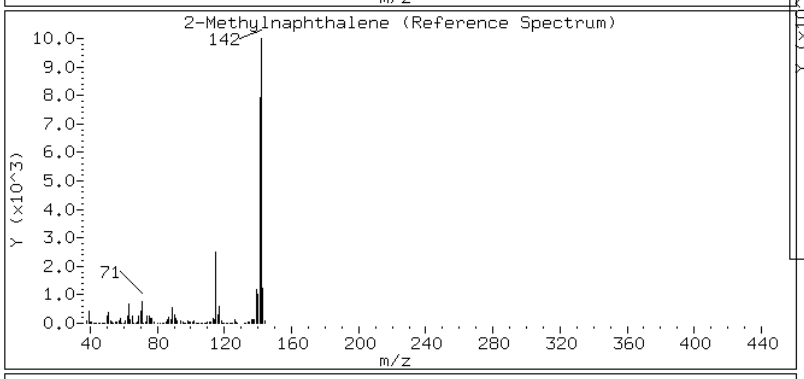
Client ID: Instrument: MSK5973.i

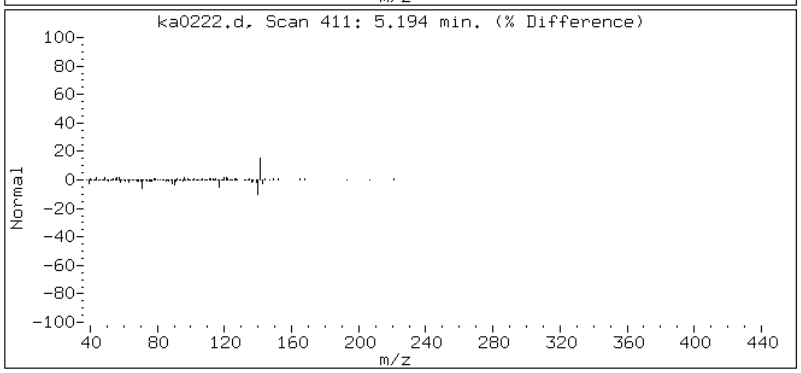
Sample Info: 680-85980-A-28-A DL=10 Operator: LEG

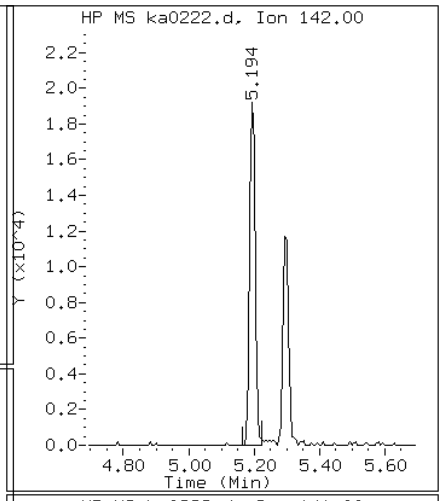
3 2-Methylnaphthalene

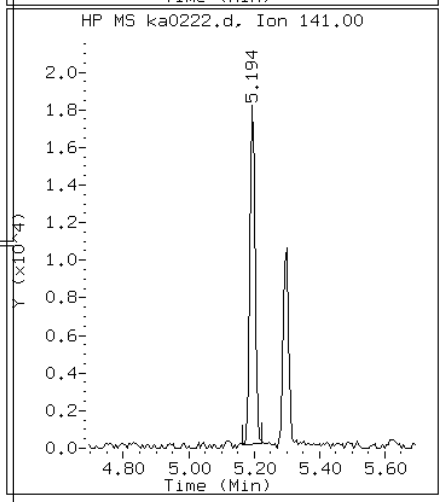












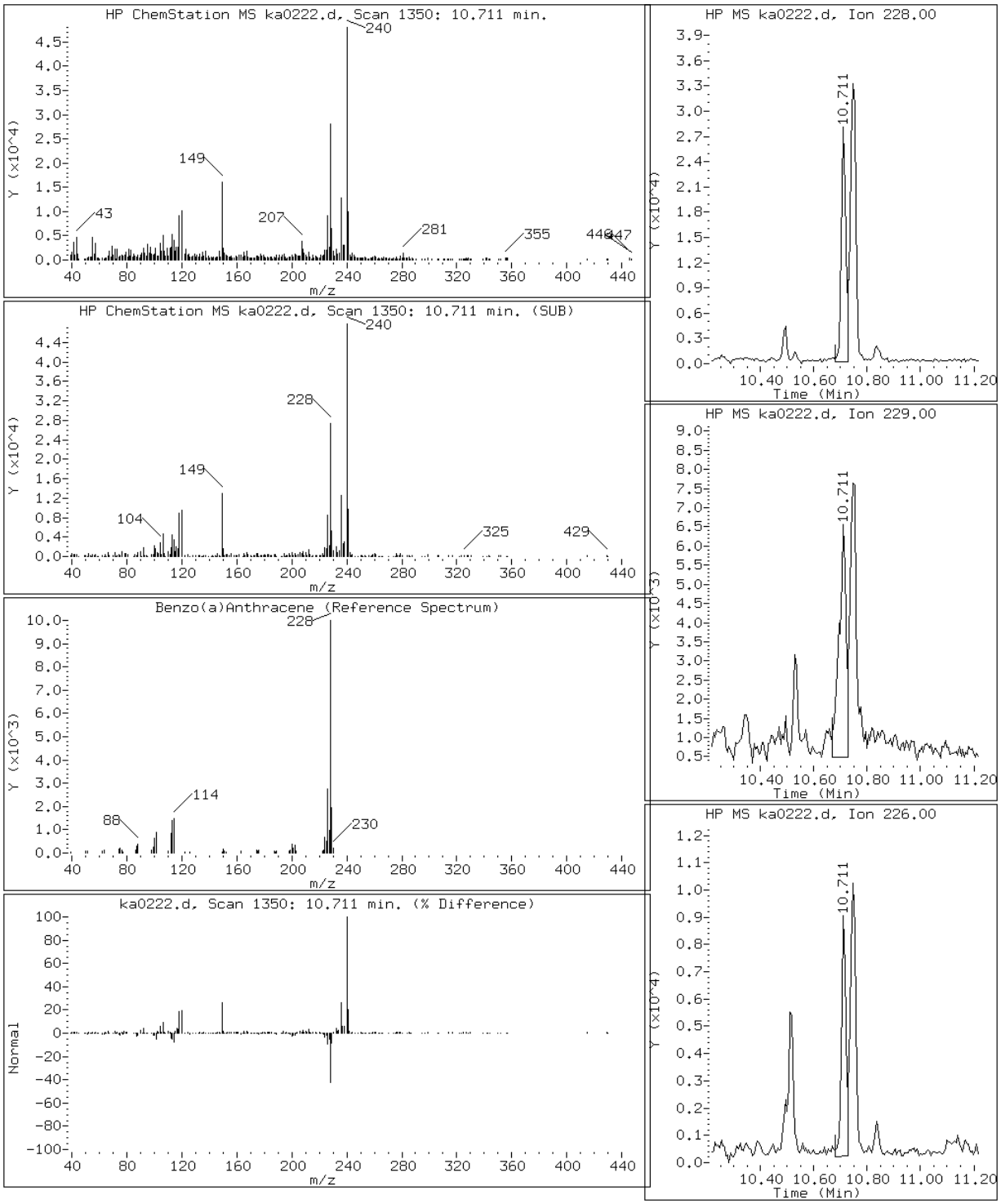
Data File: ka0222.d

Date: 02-JAN-2013 17:18

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-28-A DL=10 Operator: LEG

16 Benzo(a)Anthracene



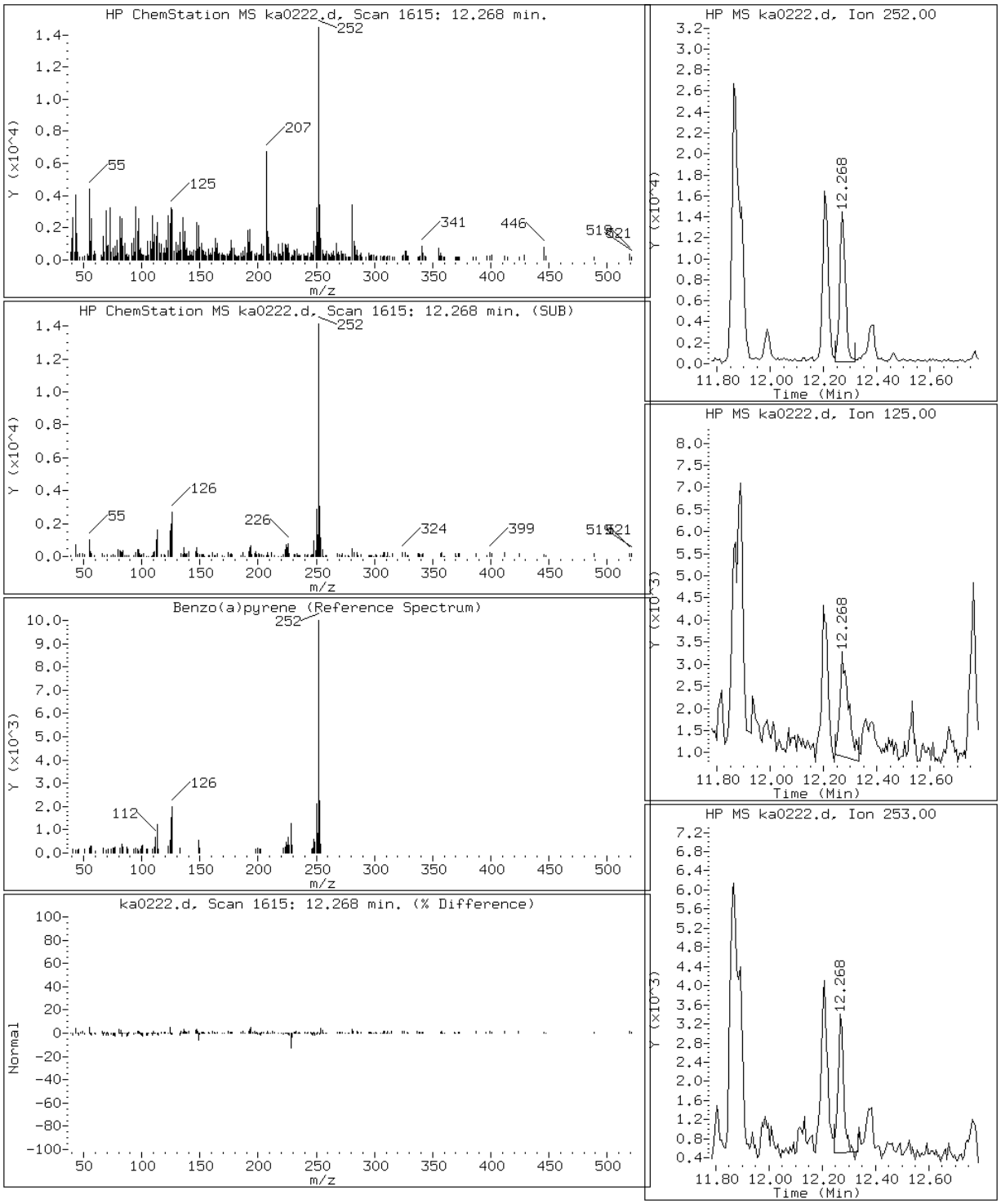
Data File: ka0222.d

Date: 02-JAN-2013 17:18

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-28-A DL=10 Operator: LEG

21 Benzo(a)pyrene



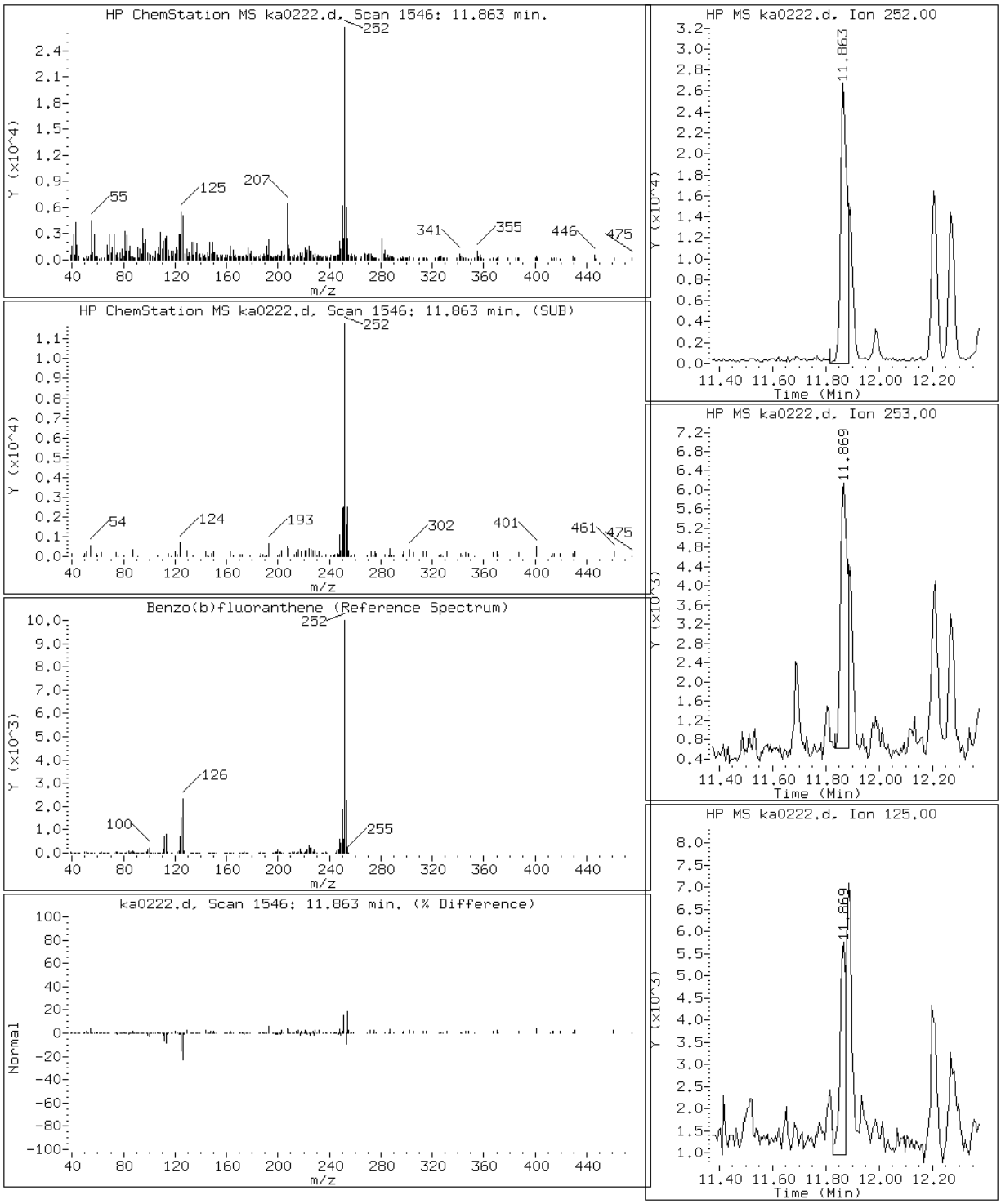
Data File: ka0222.d

Date: 02-JAN-2013 17:18

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-28-A DL=10 Operator: LEG

19 Benzo(b)fluoranthene



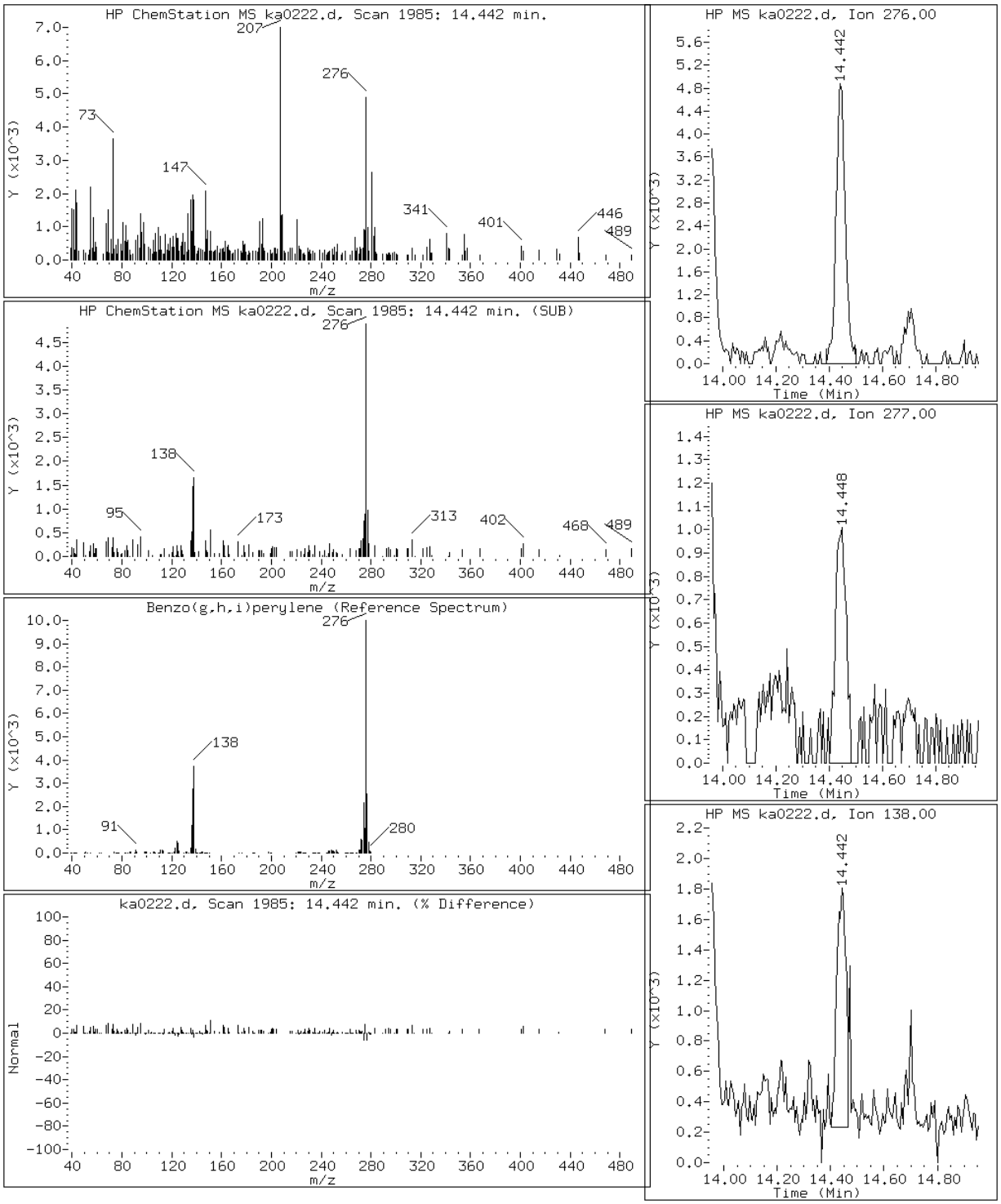
Data File: ka0222.d

Date: 02-JAN-2013 17:18

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-28-A DL=10 Operator: LEG

24 Benzo(g,h,i)perylene



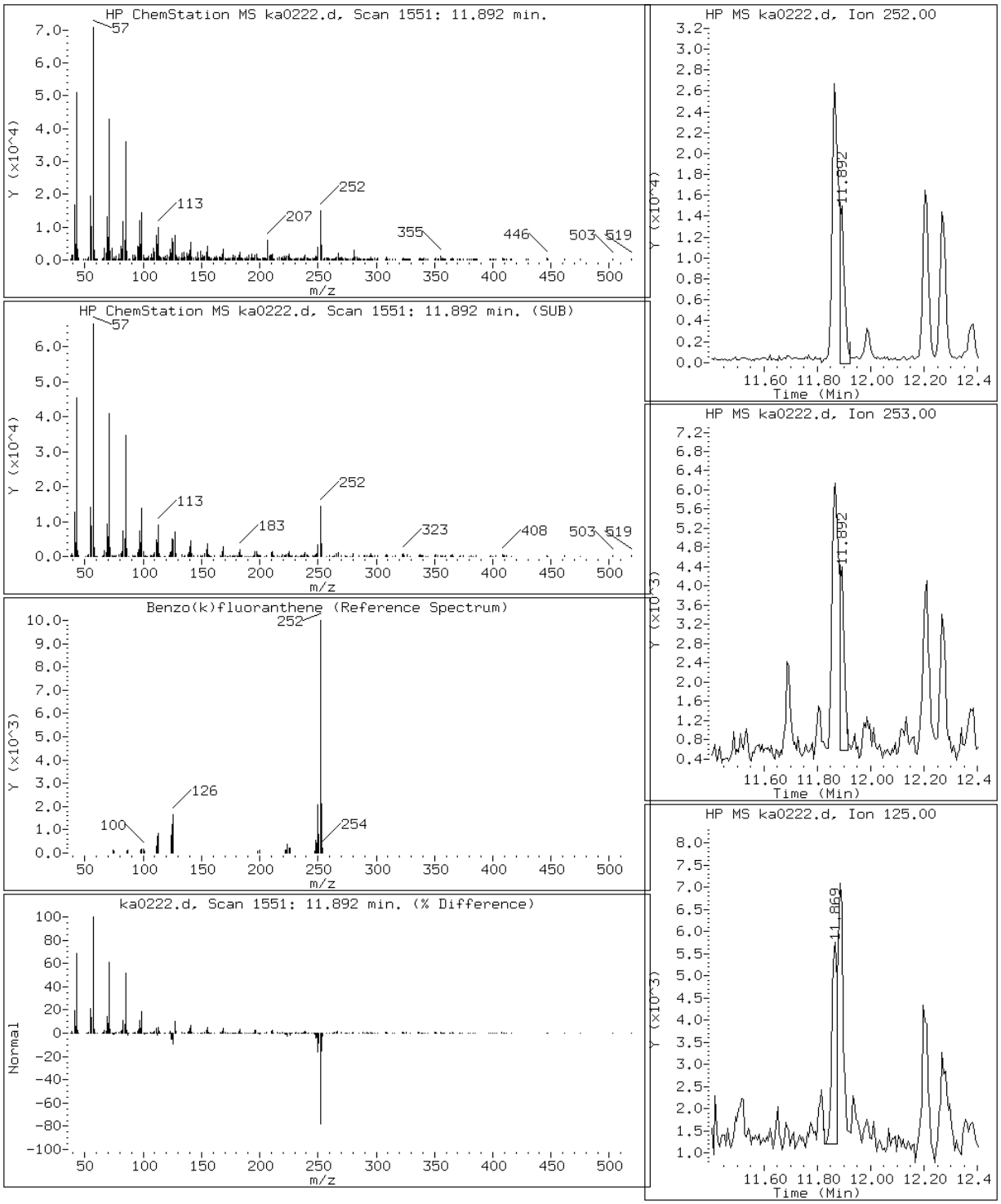
Data File: ka0222.d

Date: 02-JAN-2013 17:18

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-28-A DL=10 Operator: LEG

20 Benzo(k)fluoranthene



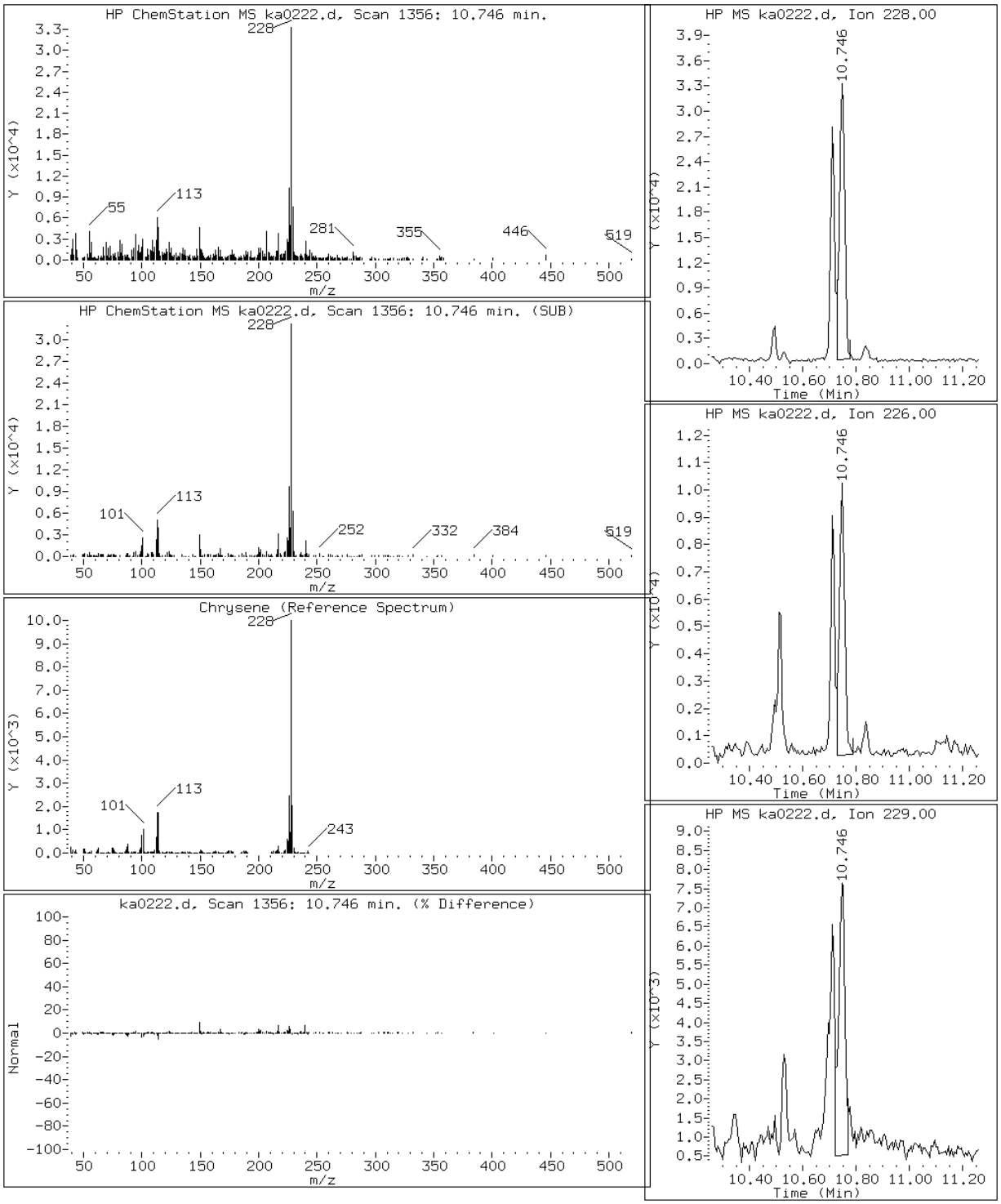
Data File: ka0222.d

Date: 02-JAN-2013 17:18

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-28-A DL=10 Operator: LEG

17 Chrysene



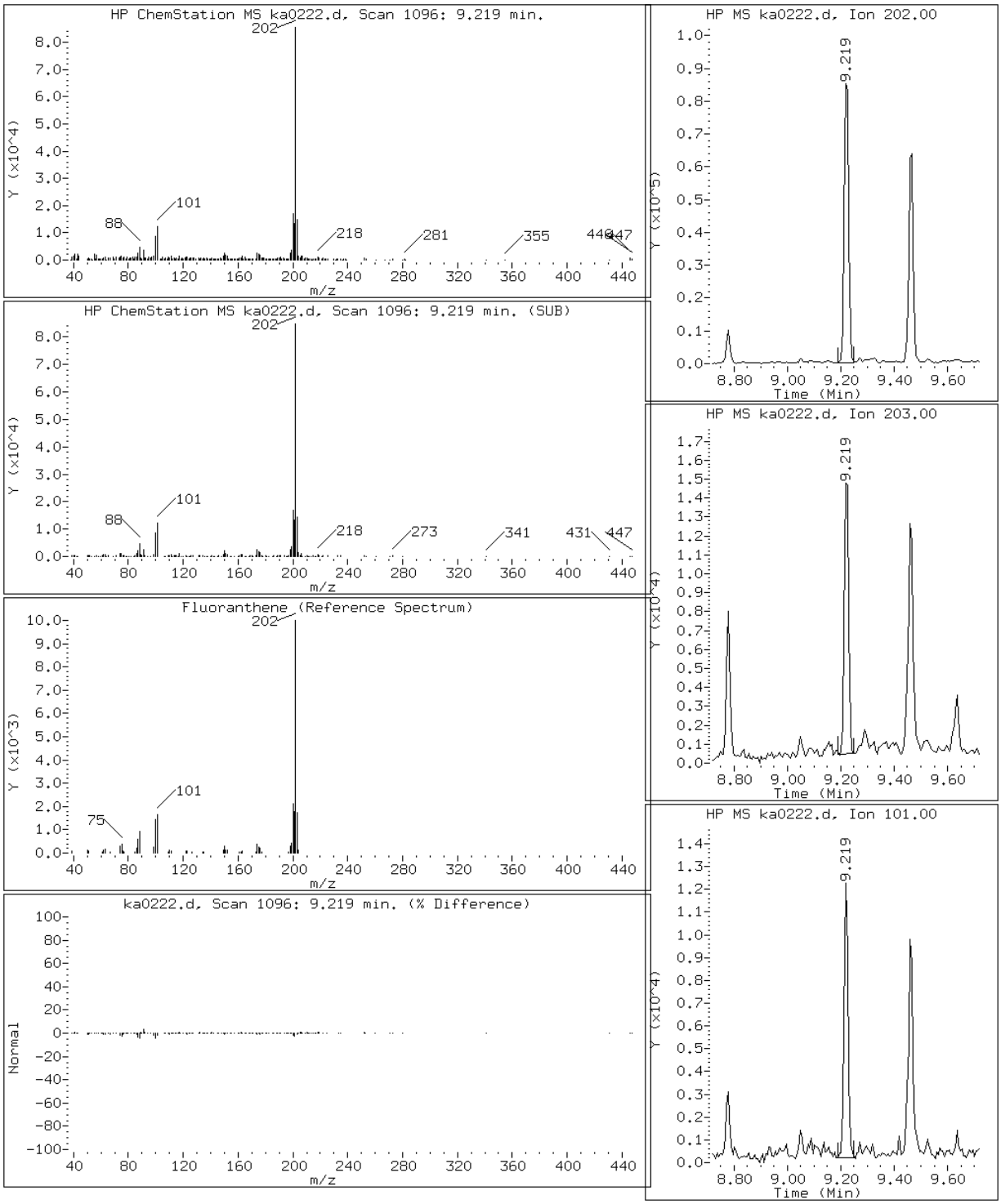
Data File: ka0222.d

Date: 02-JAN-2013 17:18

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-28-A DL=10 Operator: LEG

12 Fluoranthene



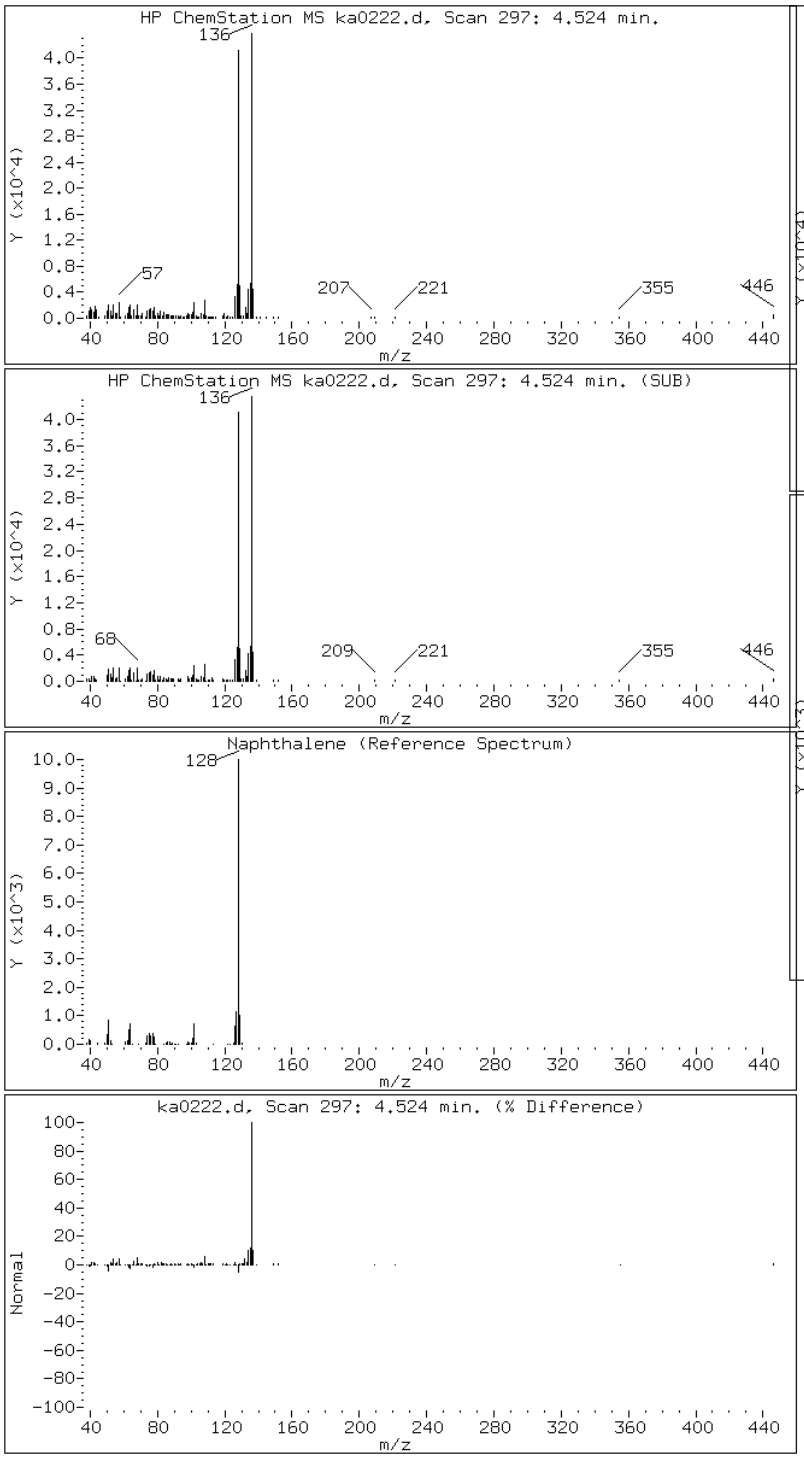
Data File: ka0222.d

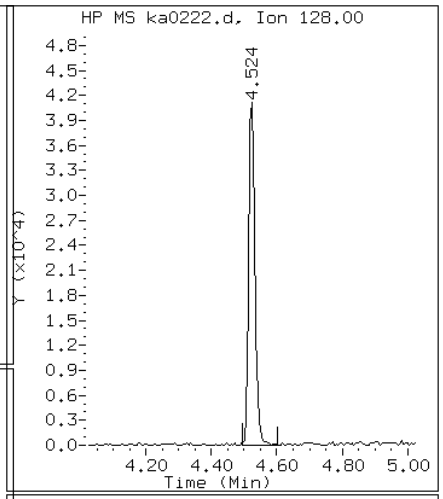
Date: 02-JAN-2013 17:18

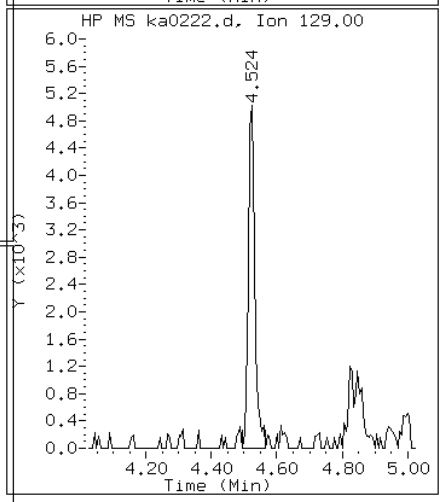
Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-28-A DL=10 Operator: LEG

2 Naphthalene







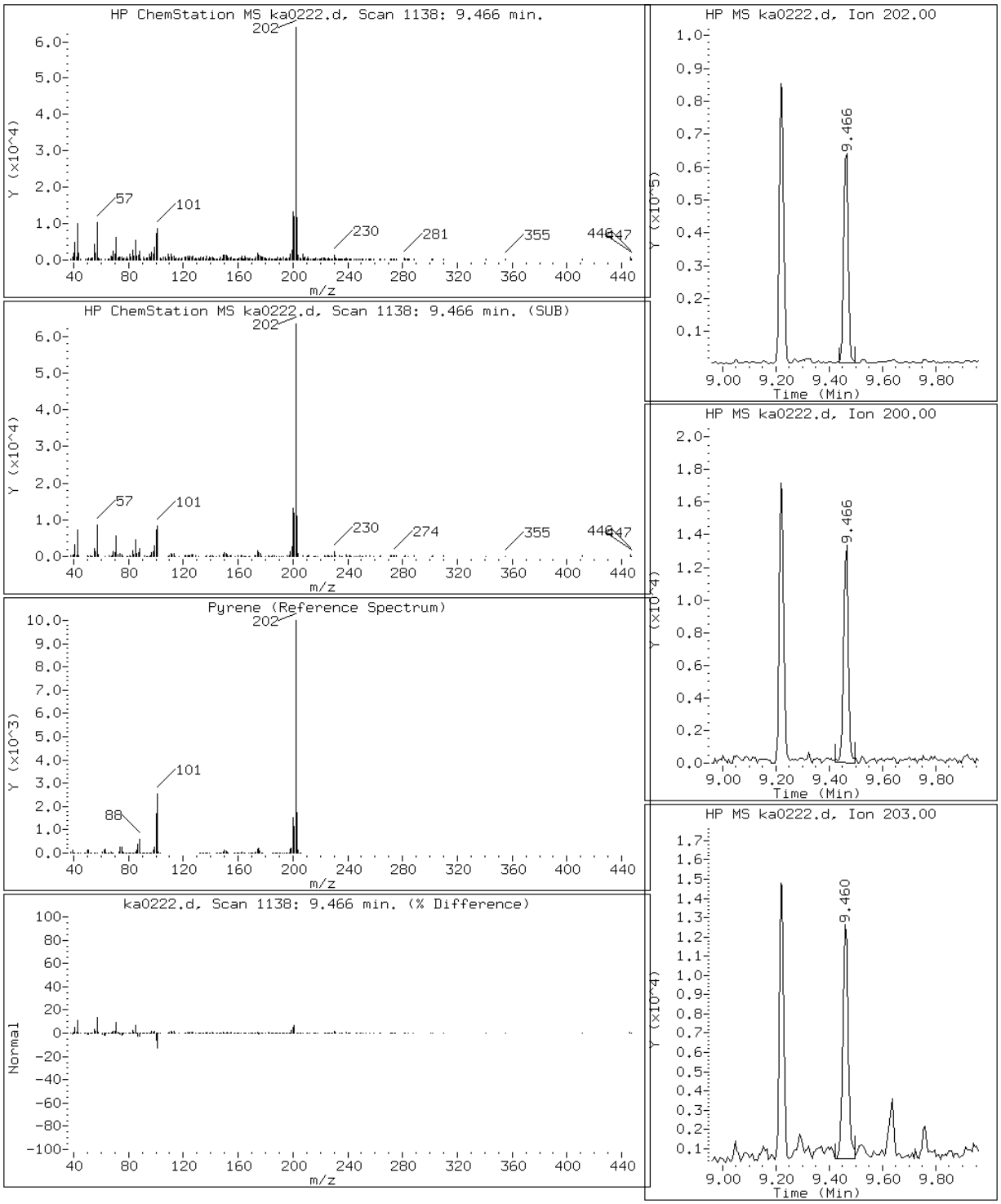
Data File: ka0222.d

Date: 02-JAN-2013 17:18

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-28-A DL=10 Operator: LEG

14 Pyrene



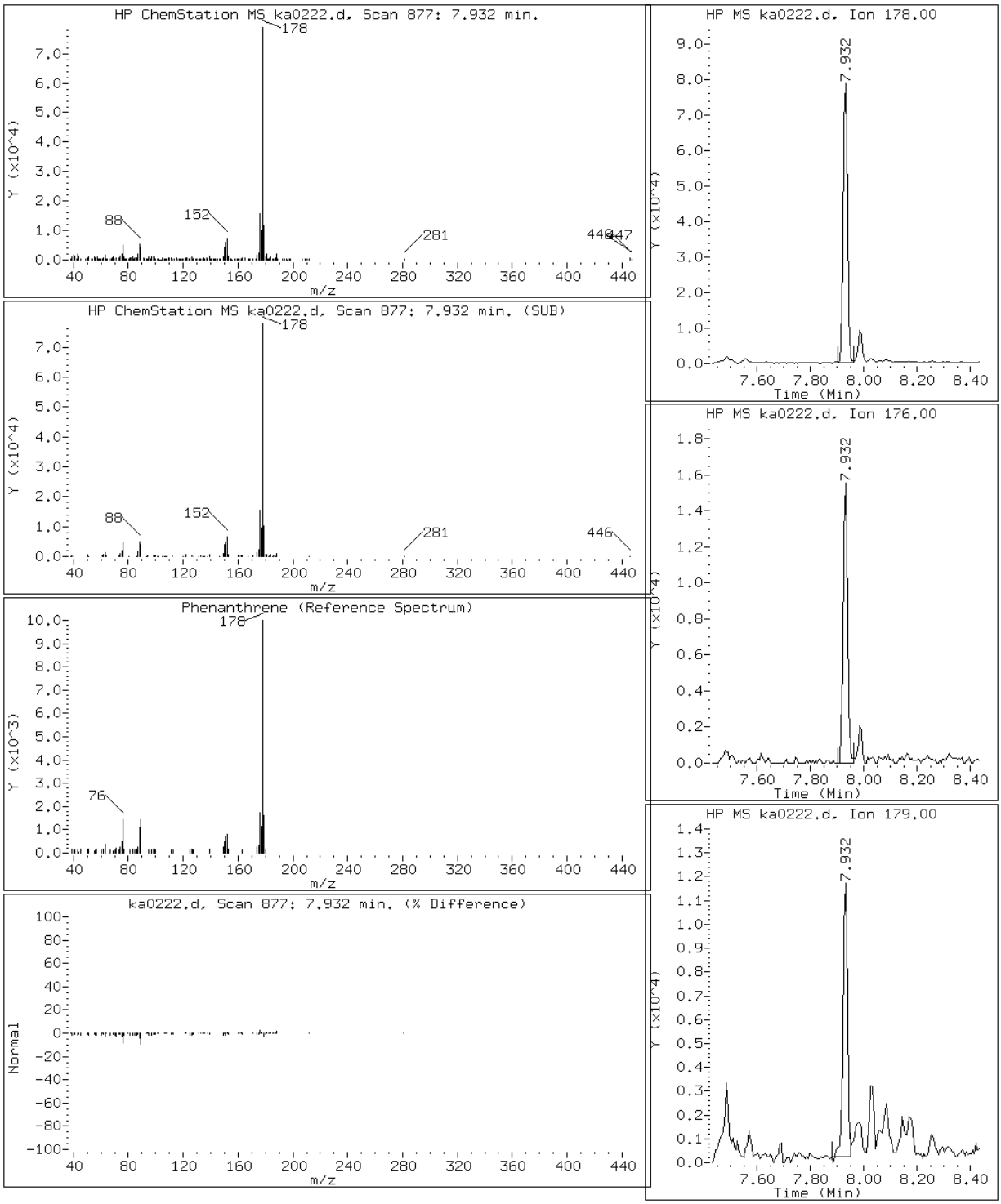
Data File: ka0222.d

Date: 02-JAN-2013 17:18

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-28-A DL=10 Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: ka0222.d
Inj. Date and Time: 02-JAN-2013 17:18
Instrument ID: MSK5973.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 01/03/2013

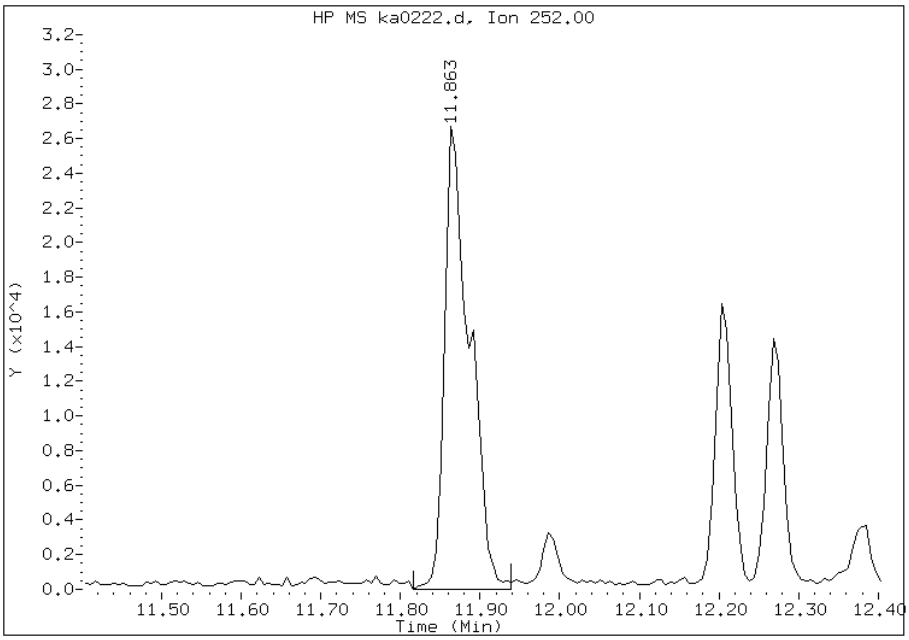
Processing Integration Results

RT: 11.86

Response: 58853

Amount: 0

Conc: 159



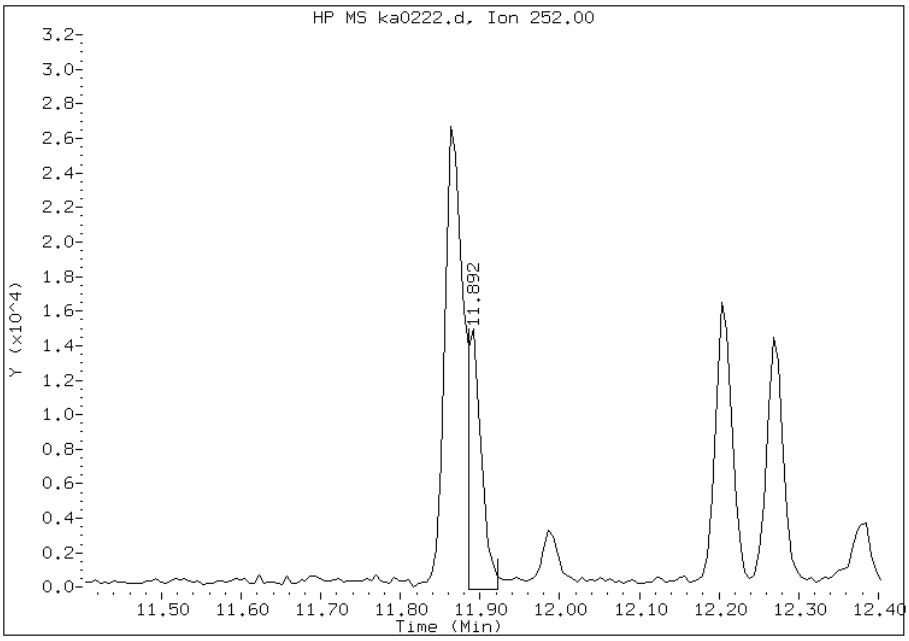
Manual Integration Results

RT: 11.89

Response: 17843

Amount: 0

Conc: 48



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: CV0235B-CS | Lab Sample ID: 680-85980-29

Matrix: Solid | Lab File ID: ka0223.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/18/2012 15:35

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.35(g) | Date Analyzed: 01/02/2013 17:41

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

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

% Moisture: 26.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	70	J	90	42
91-57-6	2-Methylnaphthalene	100		90	44
83-32-9	Acenaphthene	52	J	90	44
208-96-8	Acenaphthylene	90	U	90	44
120-12-7	Anthracene	110		90	44
56-55-3	Benzo[a]anthracene	490		90	44
50-32-8	Benzo[a]pyrene	460		90	16
205-99-2	Benzo[b]fluoranthene	560		90	44
191-24-2	Benzo[g,h,i]perylene	190		90	44
207-08-9	Benzo[k]fluoranthene	340		90	27
218-01-9	Chrysene	480		90	44
53-70-3	Dibenz(a,h)anthracene	63	J	90	44
206-44-0	Fluoranthene	1000		90	44
86-73-7	Fluorene	47	J	90	44
193-39-5	Indeno[1,2,3-cd]pyrene	160		90	44
91-20-3	Naphthalene	110		90	44
129-00-0	Pyrene	830		90	44
85-01-8	Phenanthrene	620		90	32

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0223.d
Lab Smp Id: 680-85980-B-29-A DL
Inj Date : 02-JAN-2013 17:41
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85980-B-29-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:58 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:24 Cal File: ka0212q.d
Als bottle: 19
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.501	4.501	(1.000)	476331	2.00000	
2 Naphthalene	128	4.524	4.524	(1.005)	71754	0.25566	85.21
3 2-Methylnaphthalene	142	5.194	5.194	(1.154)	38856	0.22274	74.24
4 1-Methylnaphthalene	142	5.300	5.300	(1.178)	27833	0.15739	52.46(a)
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	278479	2.00000	
7 Acenaphthene	154	6.322	6.322	(1.006)	19285	0.11710	39.03(a)
8 Fluorene	166	6.880	6.875	(1.094)	20419	0.10608	35.36(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 9 Phenanthrene-d10	188	7.908	7.903	(1.000)	441029	2.00000	
10 Phenanthrene	178	7.932	7.932	(1.003)	385102	1.38355	461.18
11 Anthracene	178	7.985	7.985	(1.010)	66747	0.25286	84.28
12 Fluoranthene	202	9.225	9.219	(1.166)	634282	2.26193	753.97
14 Pyrene	202	9.466	9.460	(0.883)	490879	1.85249	617.49
16 Benzo(a)Anthracene	228	10.711	10.717	(0.999)	221644	1.08901	363.00
* 13 Chrysene-d12	240	10.723	10.729	(1.000)	310881	2.00000	
17 Chrysene	228	10.746	10.758	(1.002)	213697	1.06718	355.72
19 Benzo(b)fluoranthene	252	11.869	11.875	(0.961)	195292	1.25767	419.22(M)
20 Benzo(k)fluoranthene	252	11.880	11.904	(0.962)	113157	0.75289	250.96(M)
21 Benzo(a)pyrene	252	12.268	12.280	(0.994)	122667	1.03326	344.41
* 18 Perylene-d12	264	12.345	12.356	(1.000)	208946	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	13.954	13.966	(1.301)	56913	0.35456	118.18
23 Dibenzo(a,h)anthracene	278	13.960	13.984	(1.131)	14992	0.14042	46.80(a)
24 Benzo(g,h,i)perylene	276	14.442	14.460	(1.170)	44834	0.42325	141.08

QC Flag Legend

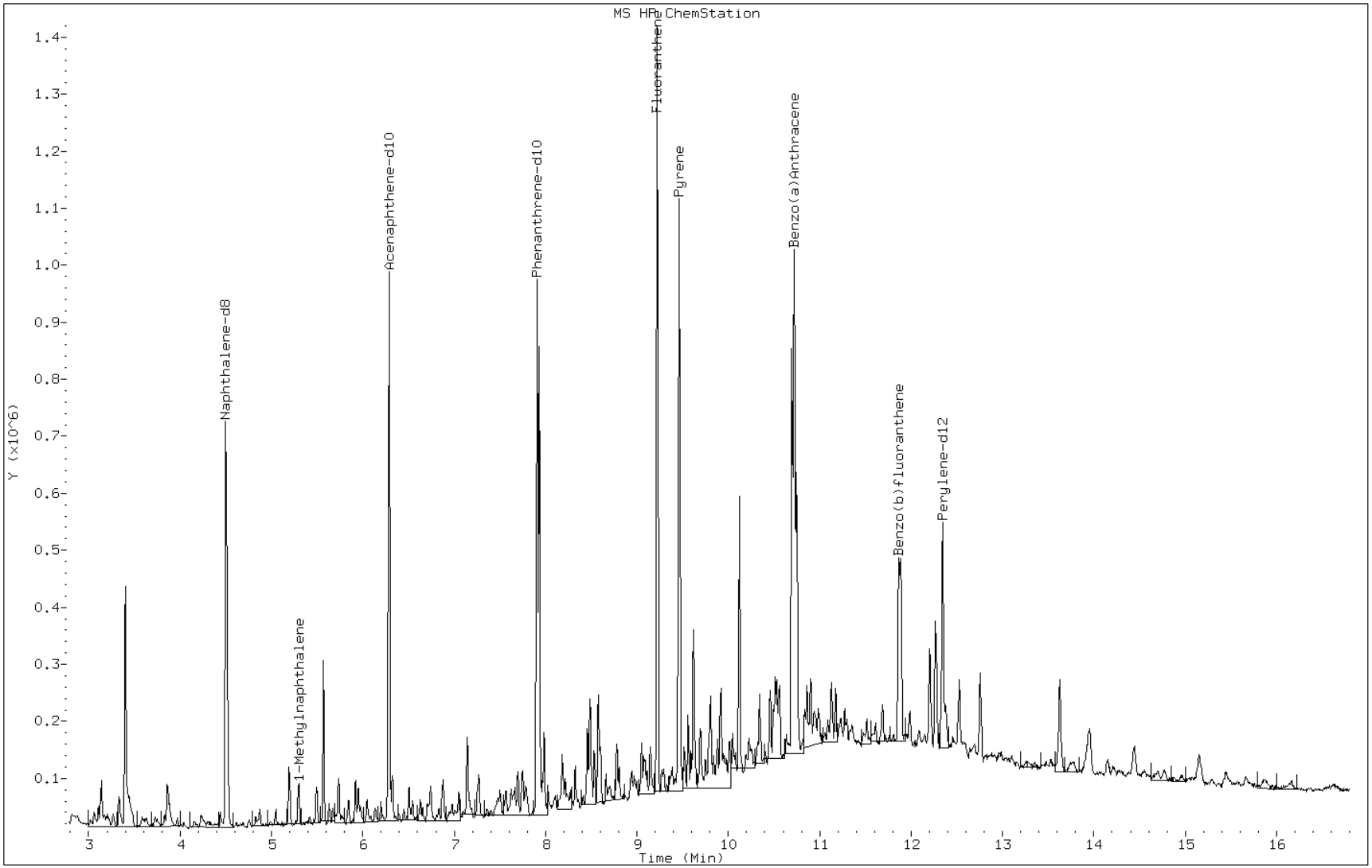
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: ka0223.d

Date: 02-JAN-2013 17:41

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-B-29-A DL=10 Operator: LEG



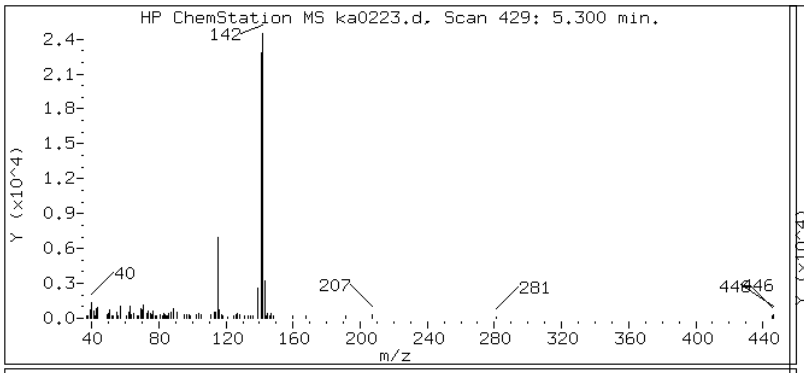
Data File: ka0223.d

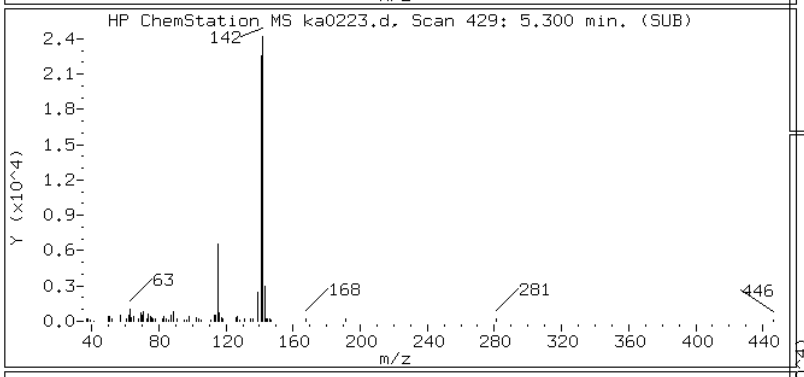
Date: 02-JAN-2013 17:41

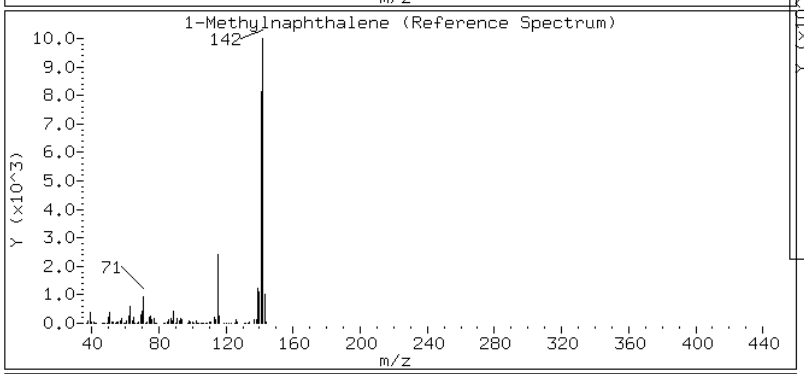
Client ID: Instrument: MSK5973.i

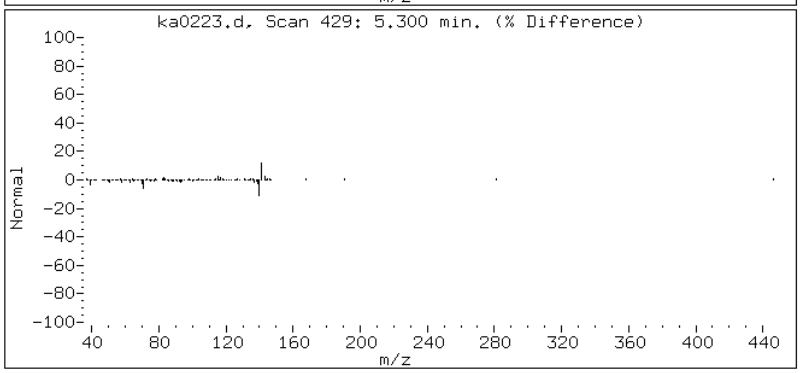
Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

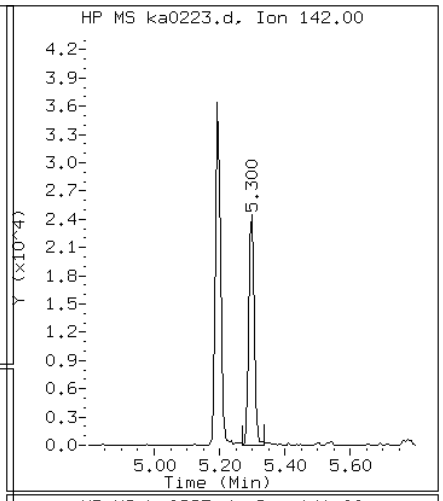
4 1-Methylnaphthalene

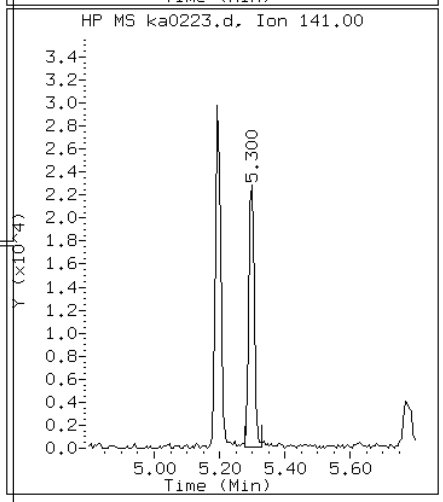












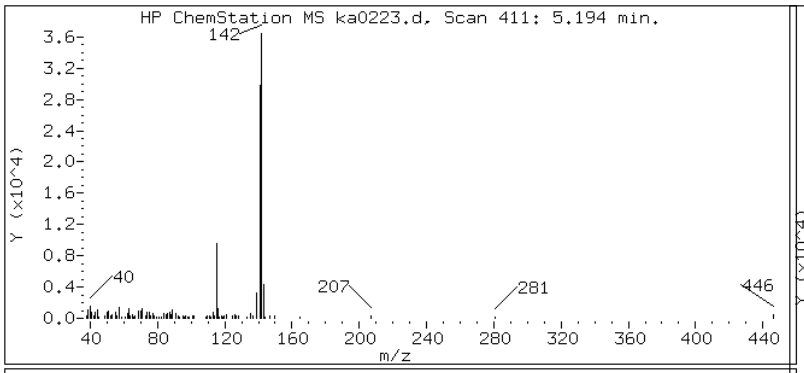
Data File: ka0223.d

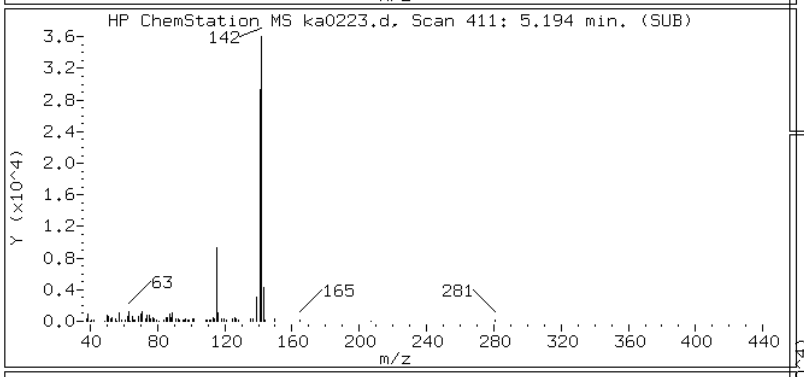
Date: 02-JAN-2013 17:41

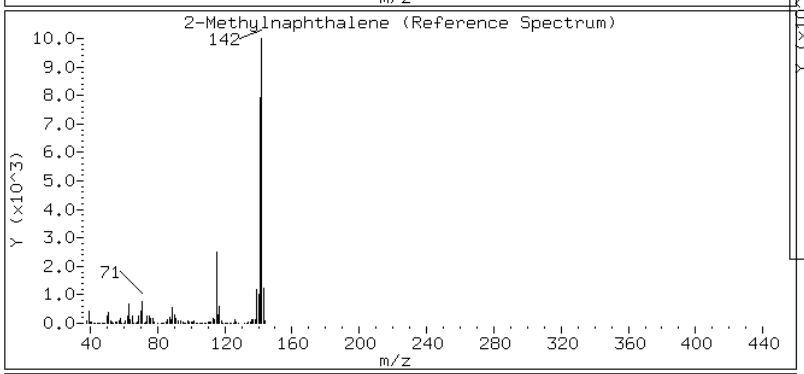
Client ID: Instrument: MSK5973.i

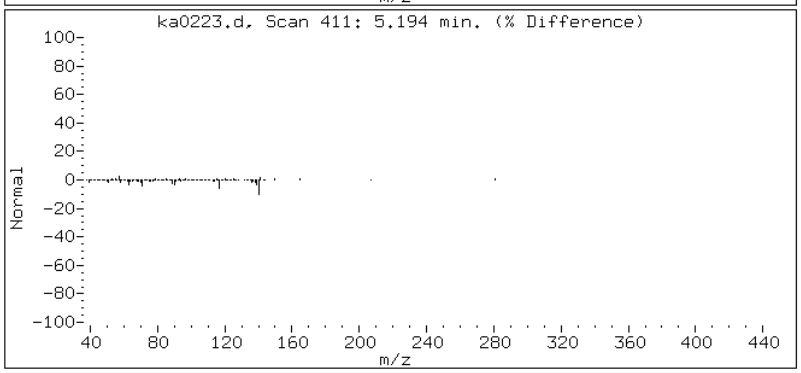
Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

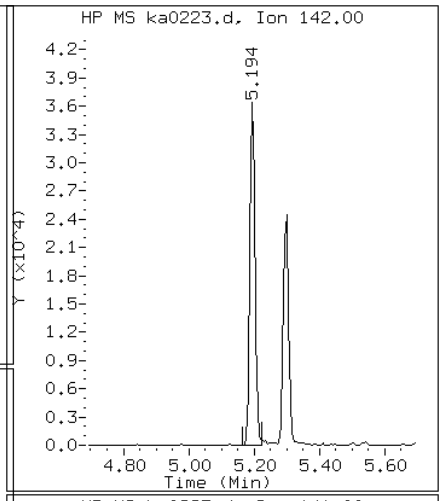
3 2-Methylnaphthalene

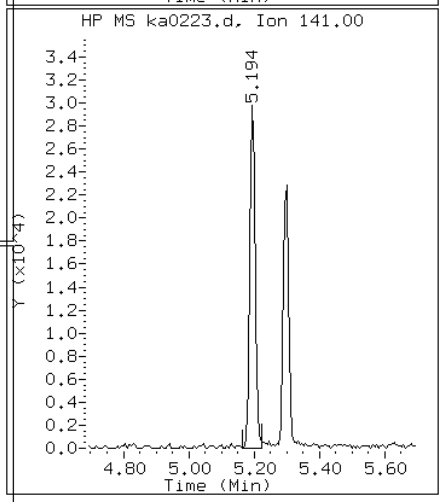












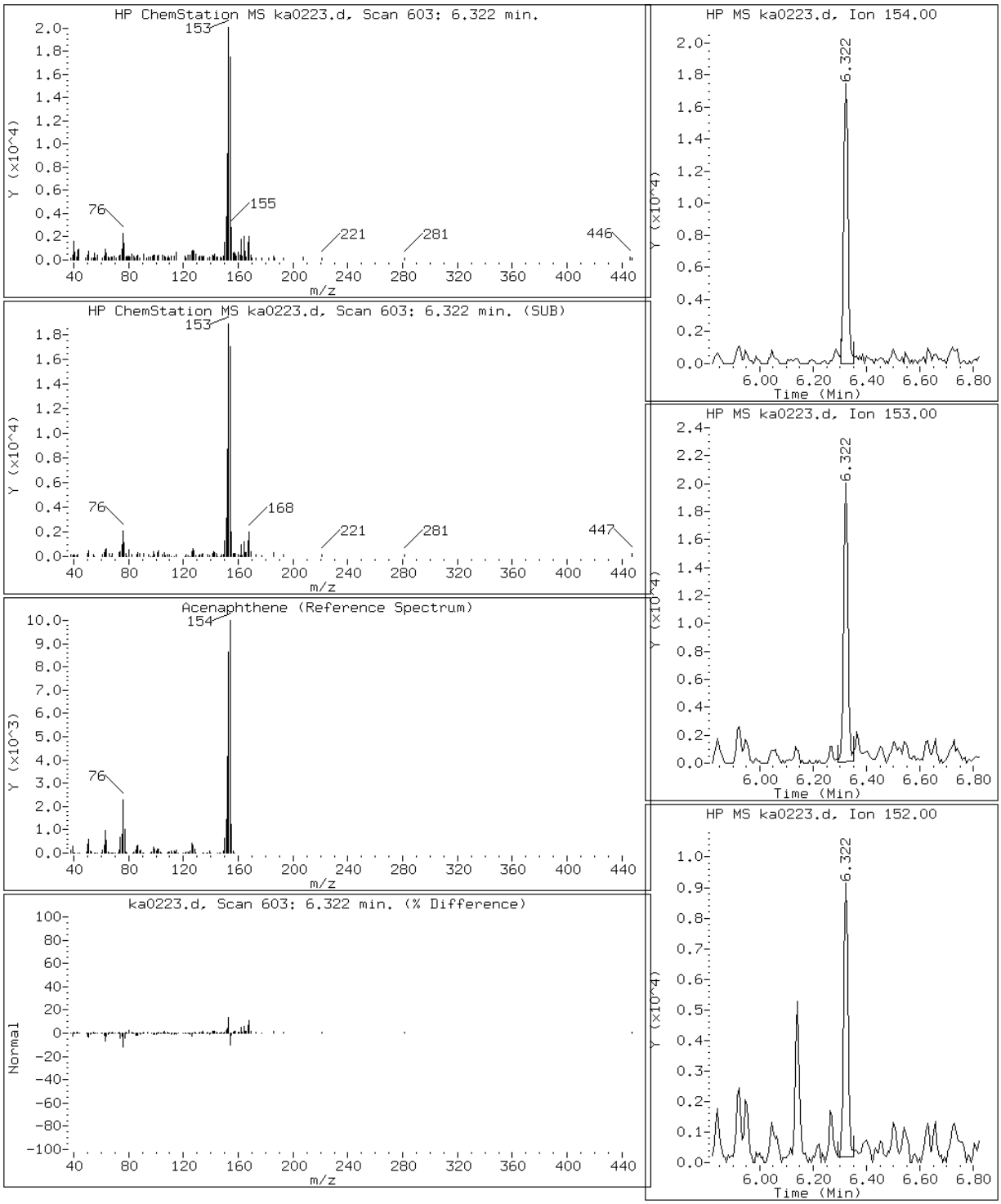
Data File: ka0223.d

Date: 02-JAN-2013 17:41

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

7 Acenaphthene



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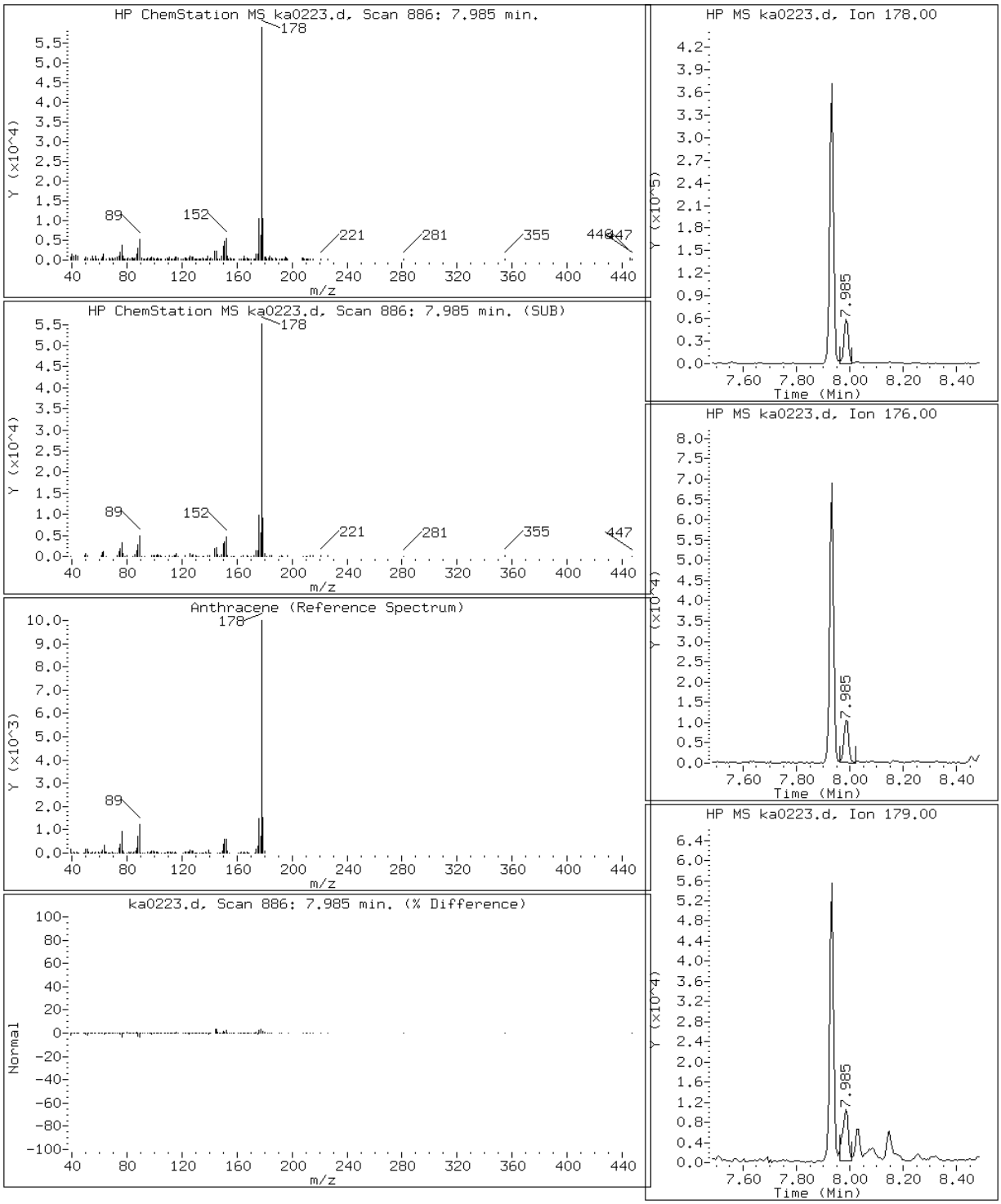
Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

11 Anthracene



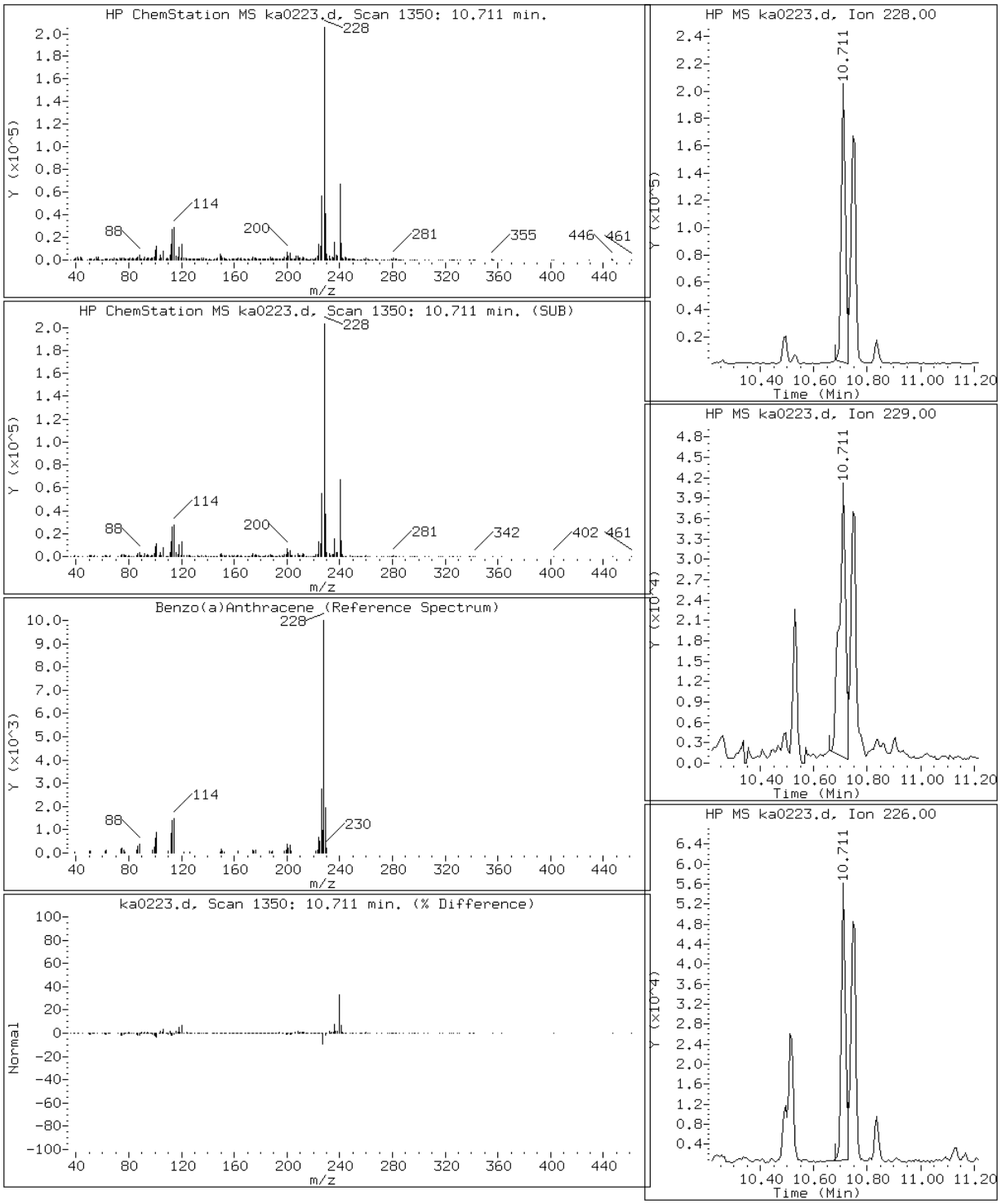
Data File: ka0223.d

Date: 02-JAN-2013 17:41

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

16 Benzo(a)Anthracene



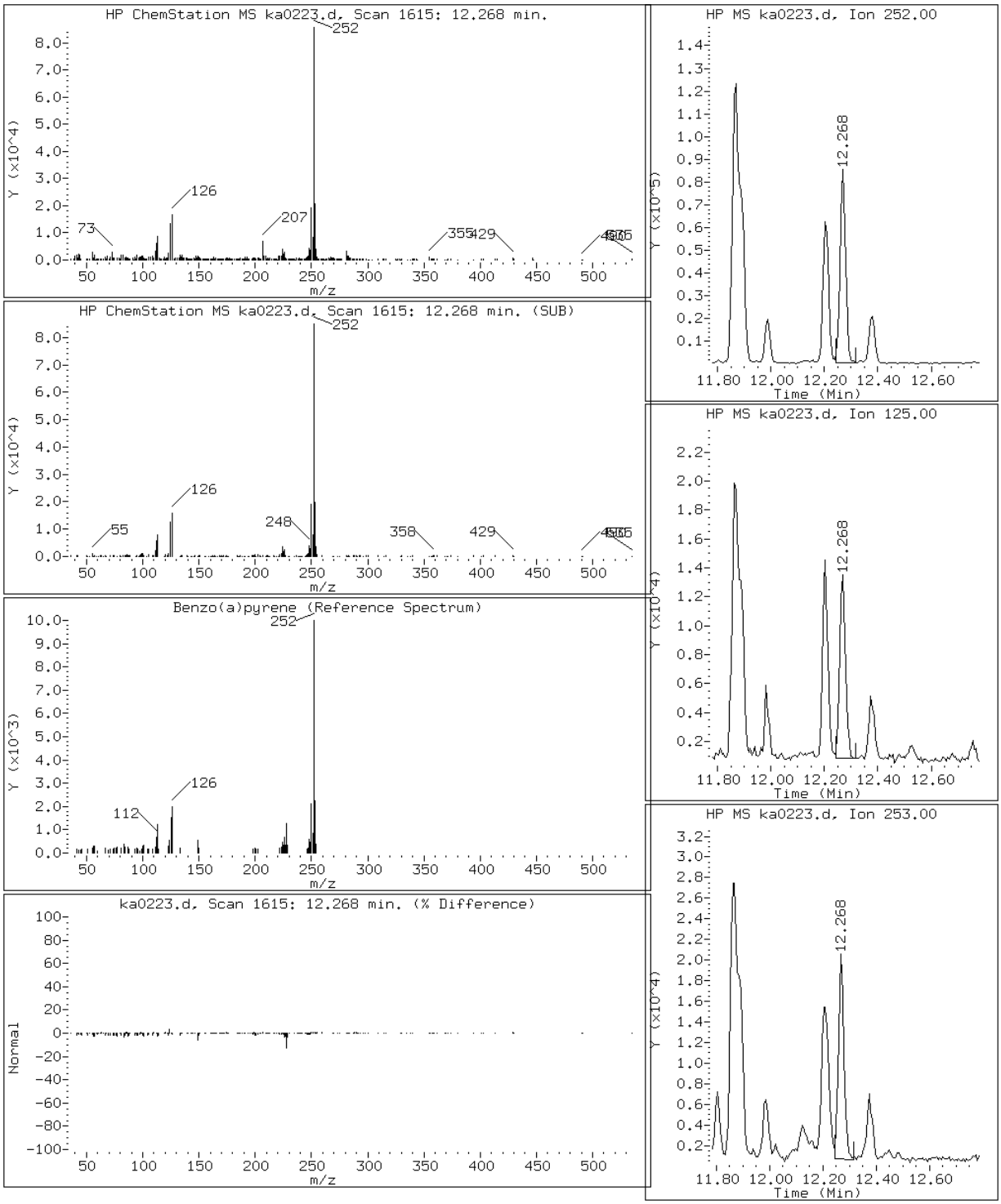
Data File: ka0223.d

Date: 02-JAN-2013 17:41

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

21 Benzo(a)pyrene



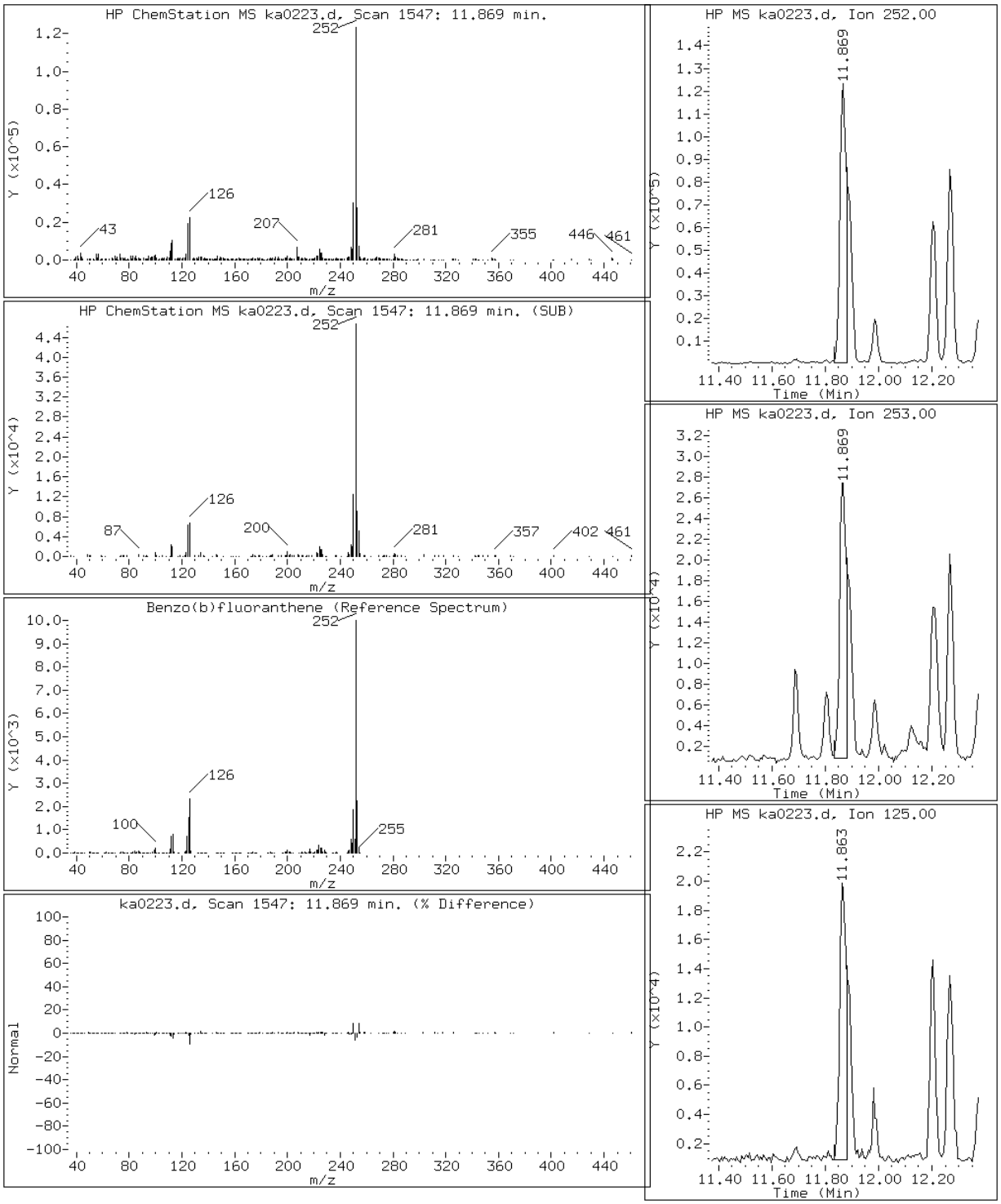
Data File: ka0223.d

Date: 02-JAN-2013 17:41

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

19 Benzo(b)fluoranthene



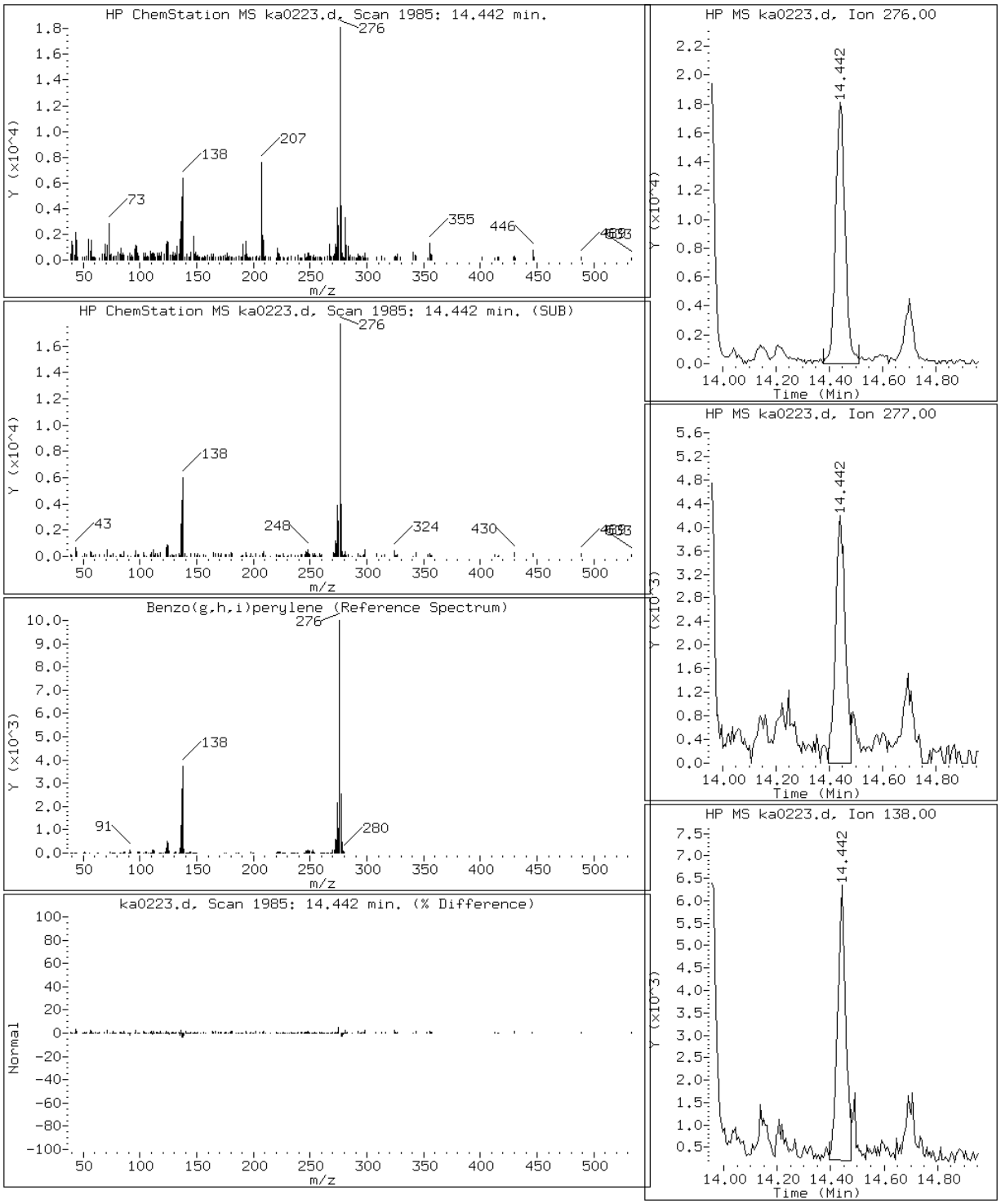
Data File: ka0223.d

Date: 02-JAN-2013 17:41

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

24 Benzo(g,h,i)perylene



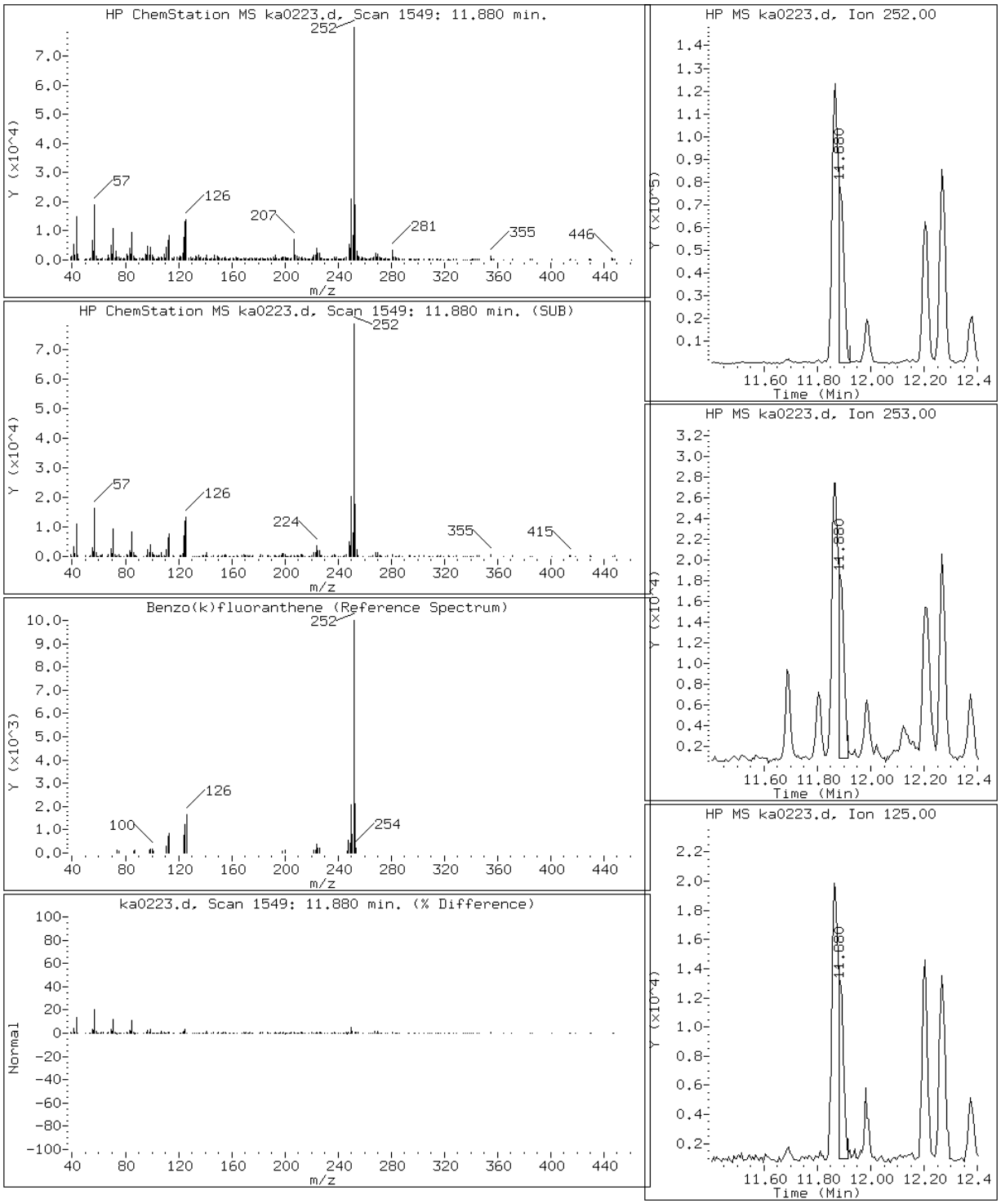
Data File: ka0223.d

Date: 02-JAN-2013 17:41

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

20 Benzo(k)fluoranthene



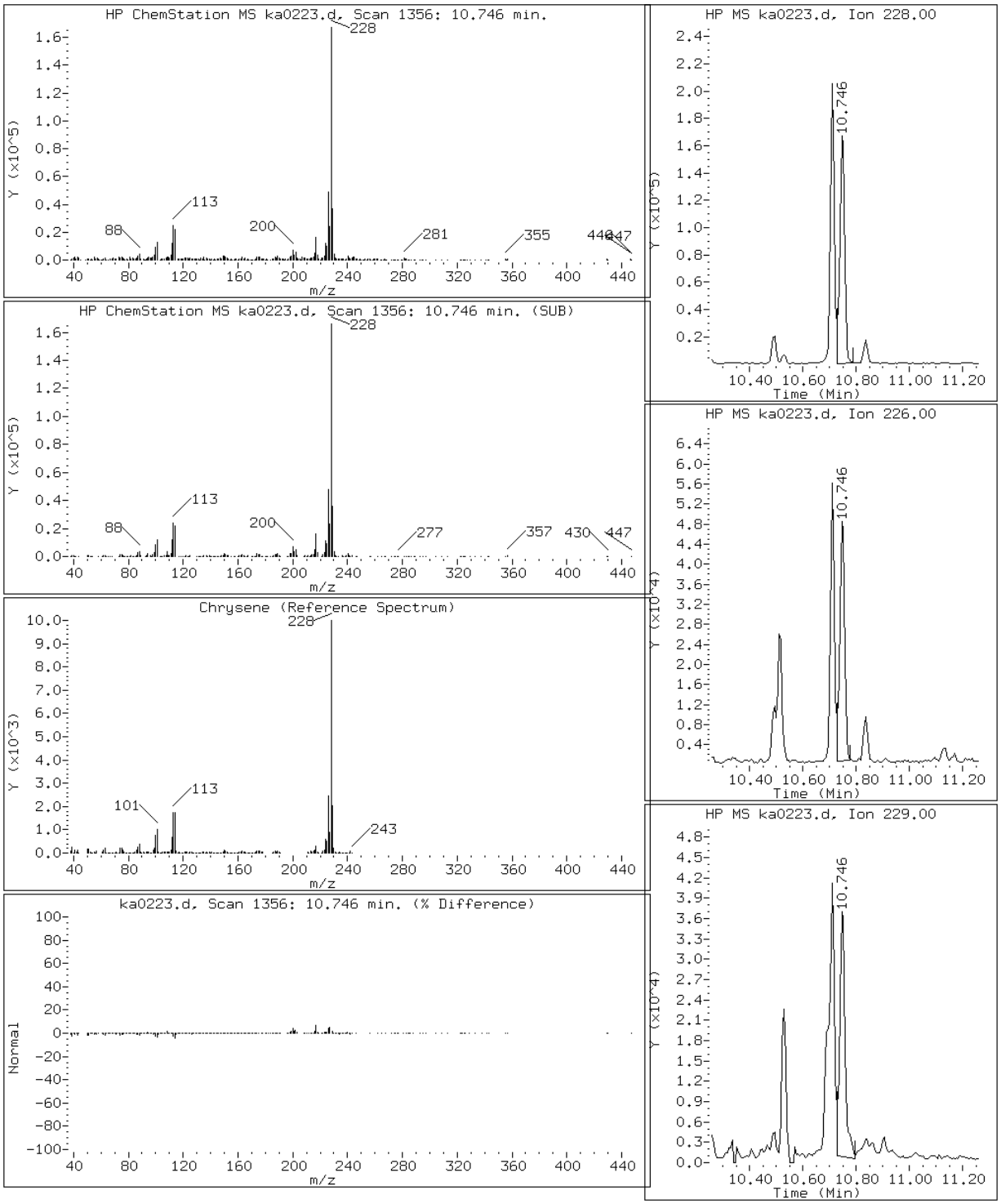
Data File: ka0223.d

Date: 02-JAN-2013 17:41

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

17 Chrysene



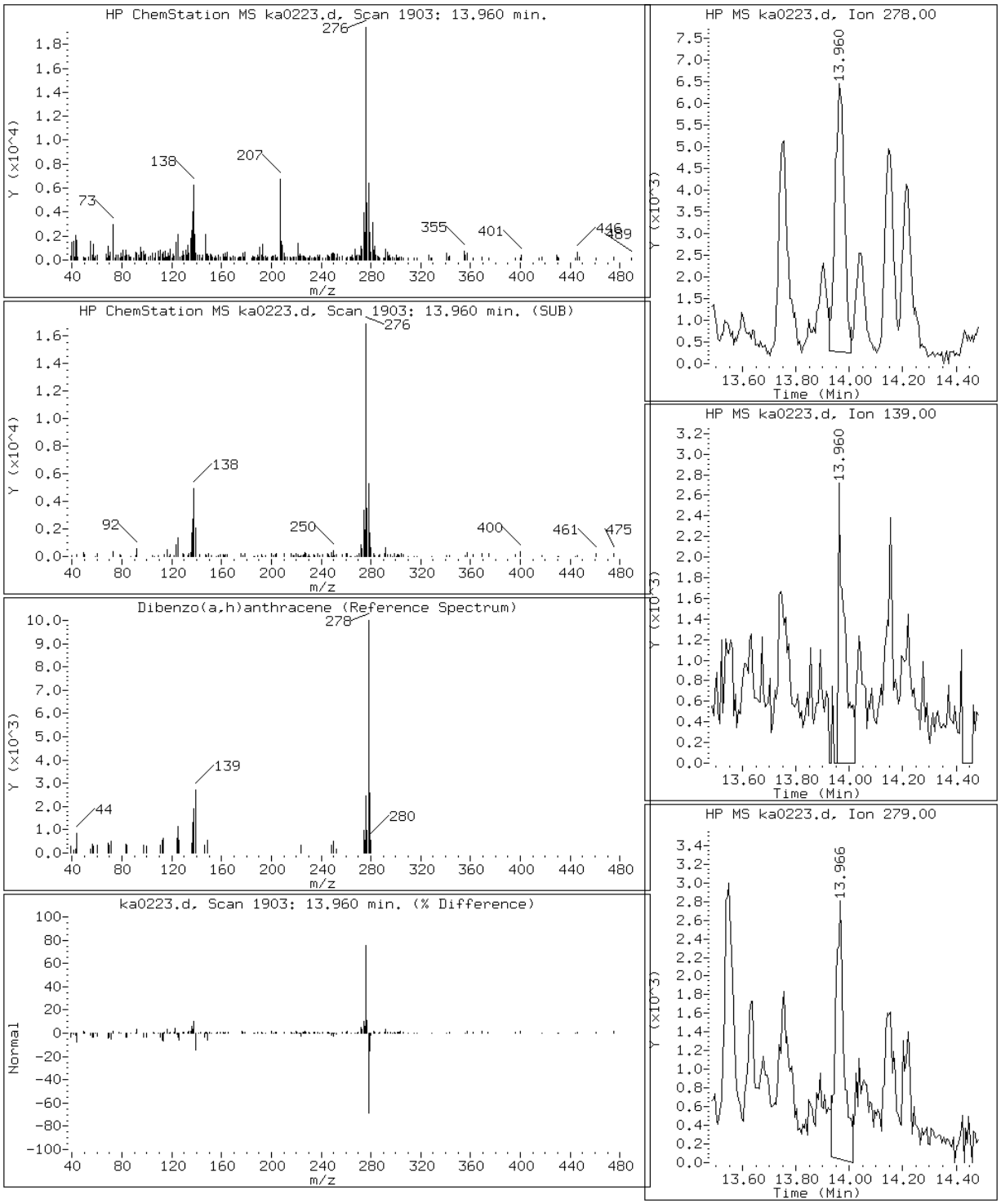
Data File: ka0223.d

Date: 02-JAN-2013 17:41

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

23 Dibenzo(a,h)anthracene



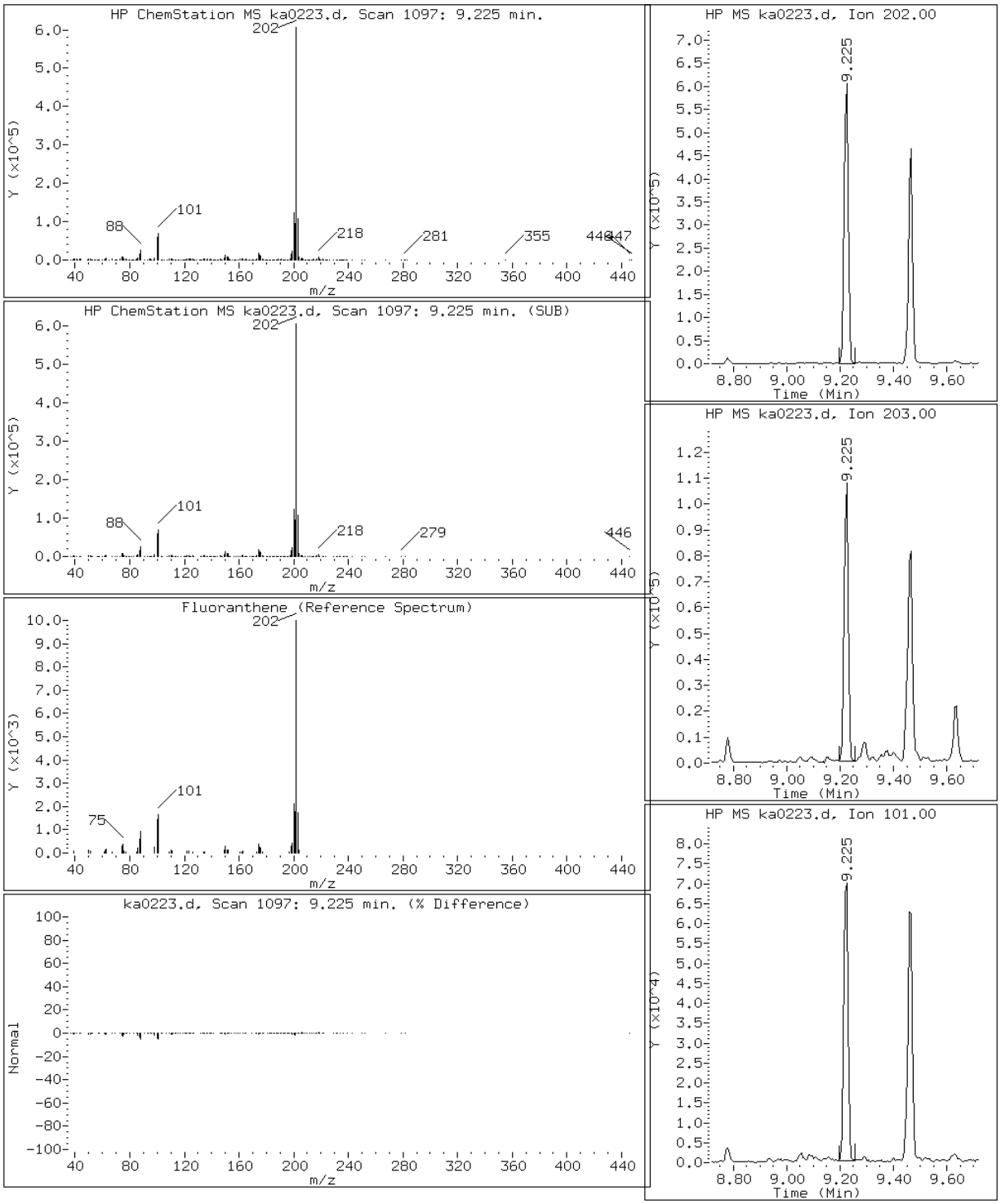
Data File: ka0223.d

Date: 02-JAN-2013 17:41

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

12 Fluoranthene



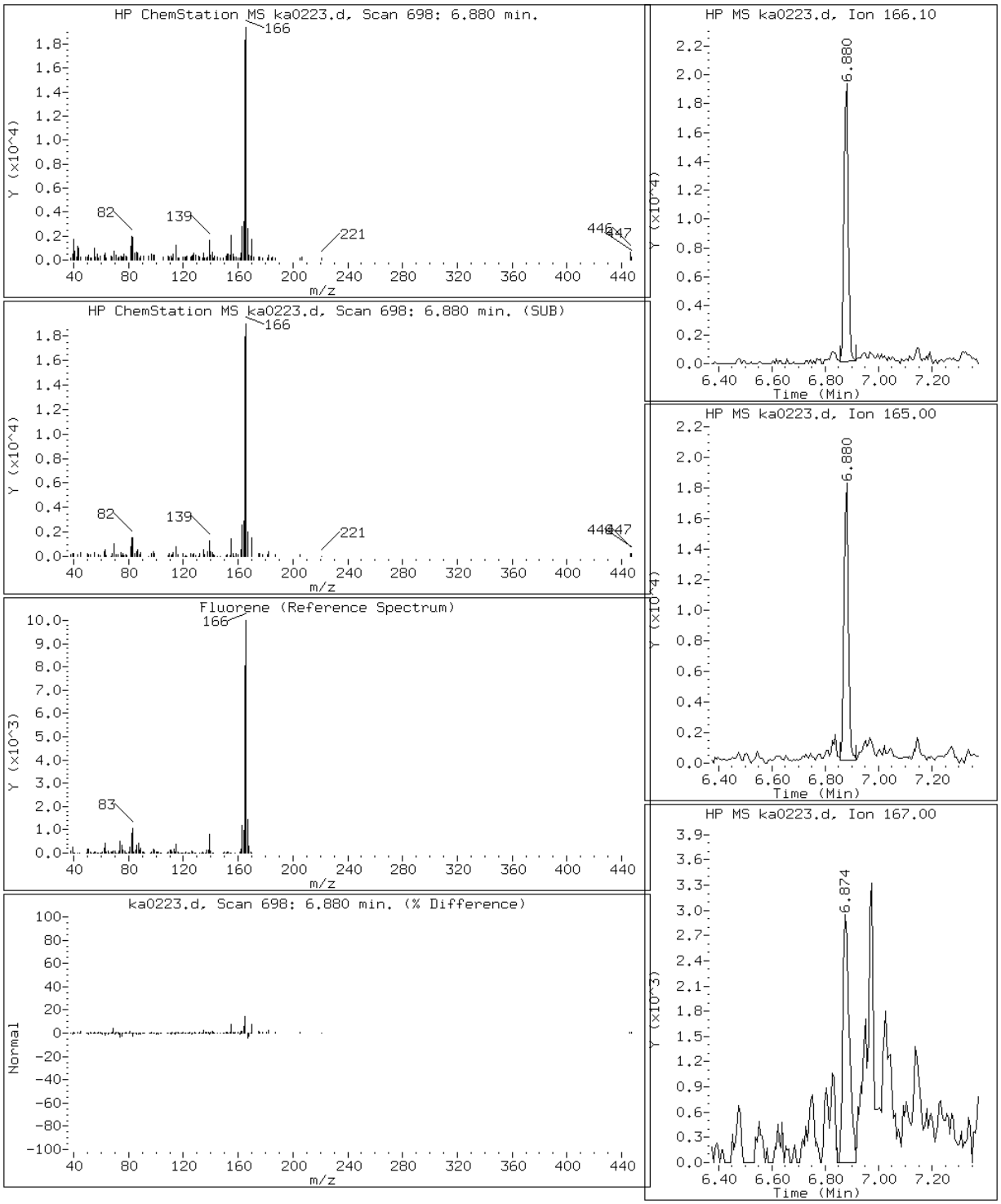
Data File: ka0223.d

Date: 02-JAN-2013 17:41

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

8 Fluorene



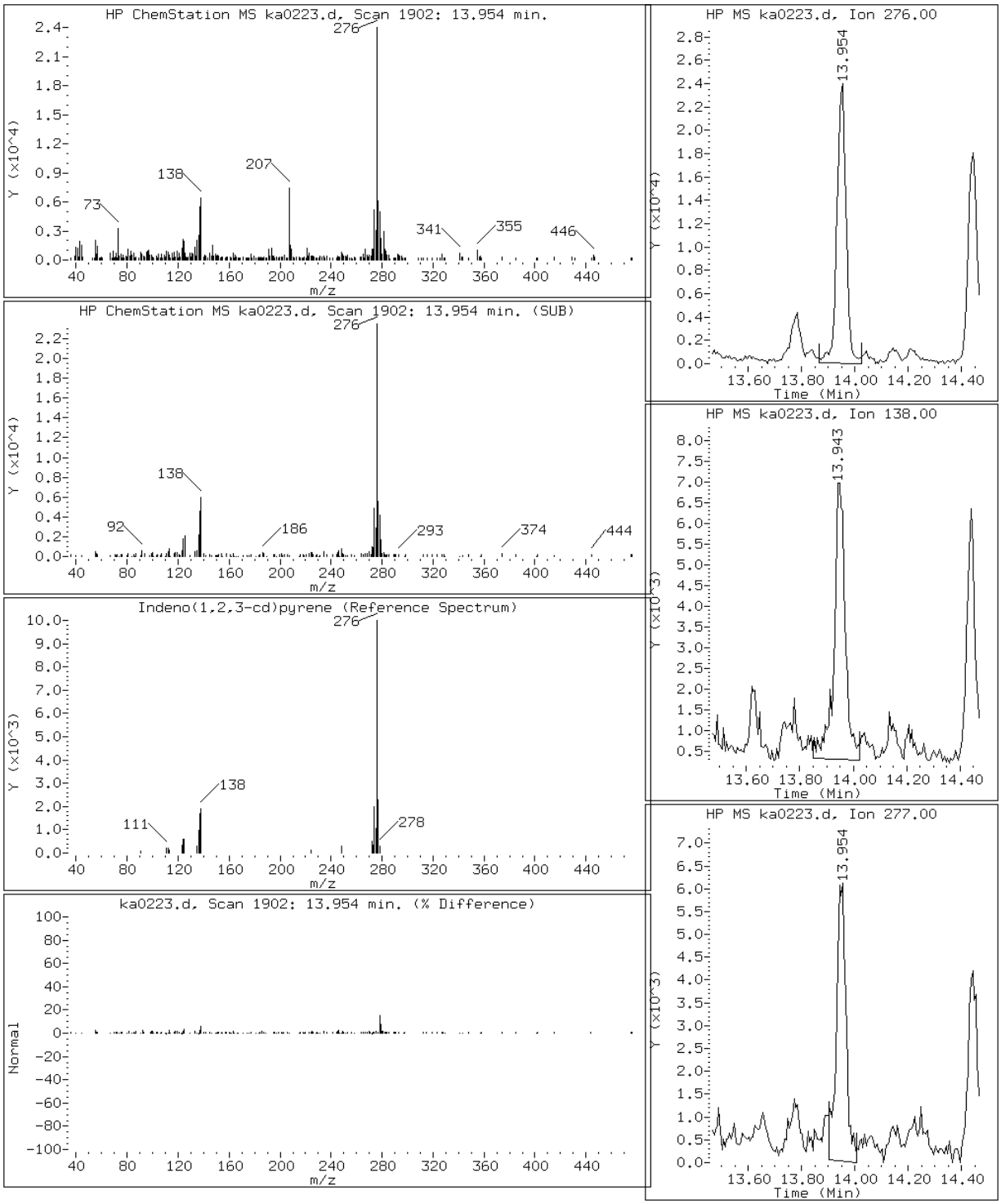
Data File: ka0223.d

Date: 02-JAN-2013 17:41

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

22 Indeno(1,2,3-cd)pyrene



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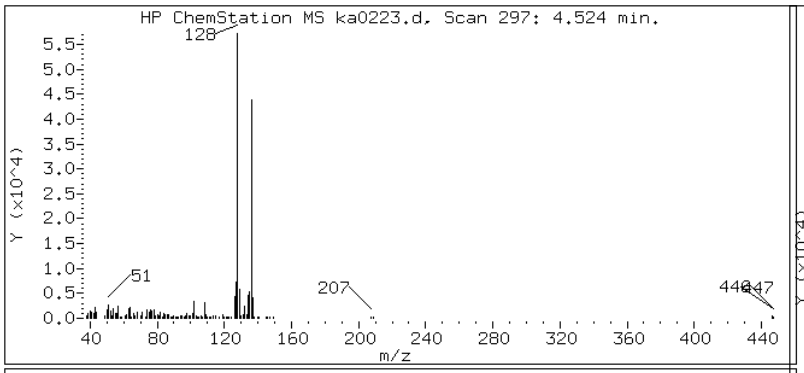
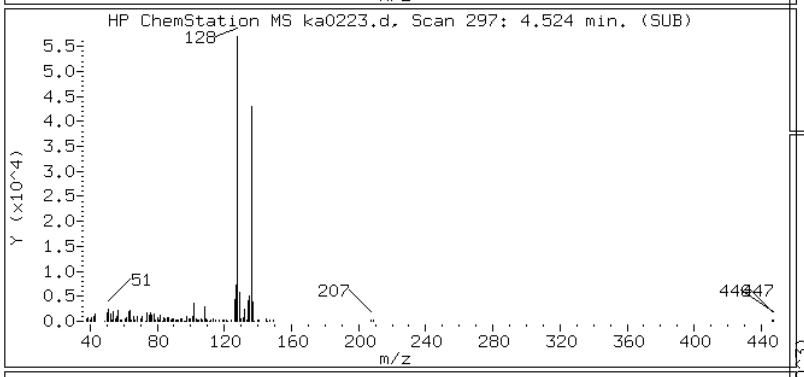
Date: 02-JAN-2013 17:41

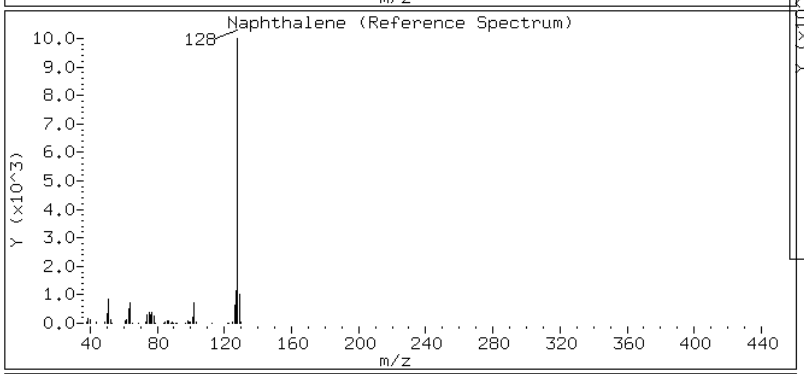
Client ID: Instrument: MSK5973.i

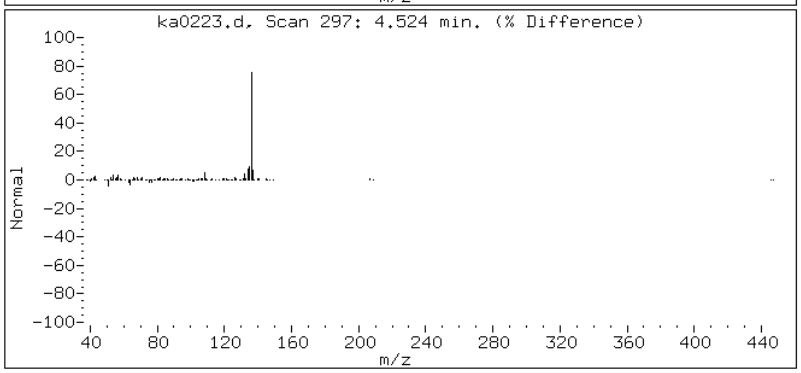
Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

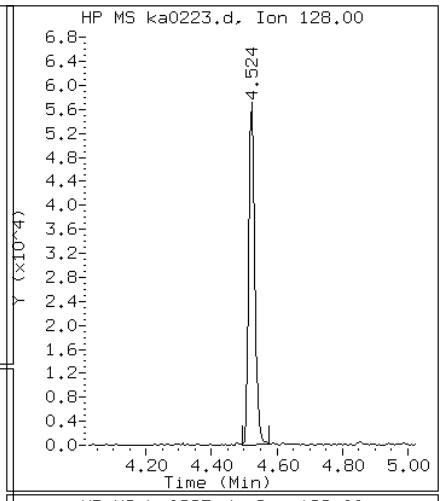
2 Naphthalene

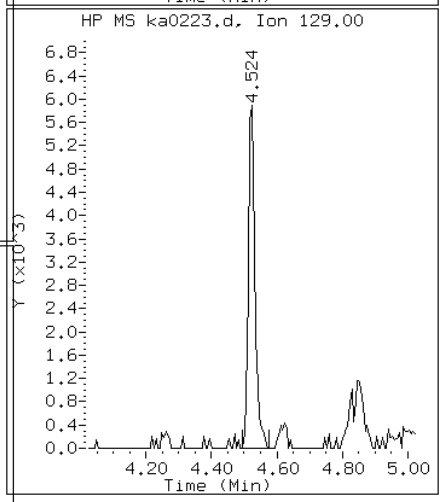












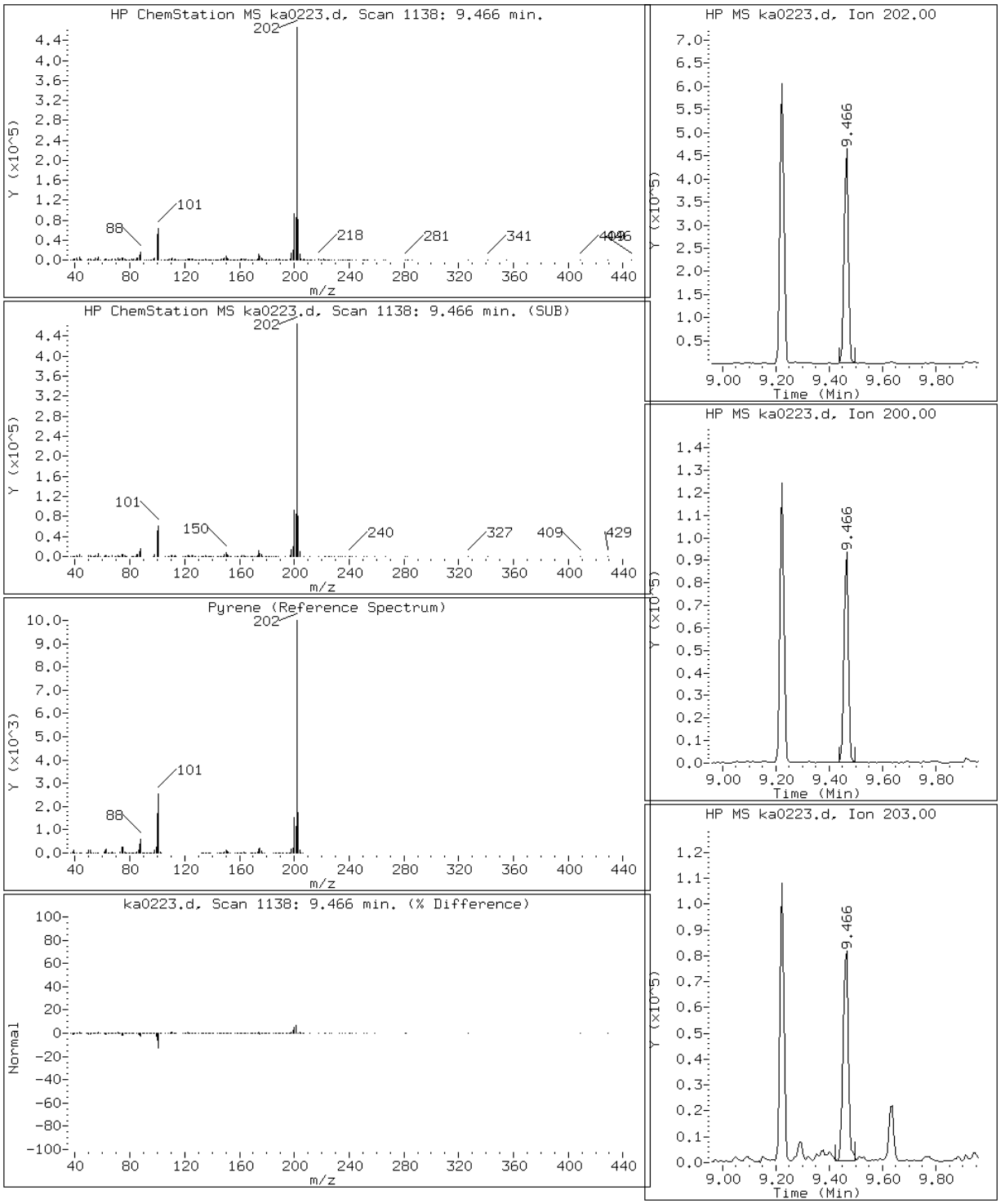
Data File: ka0223.d

Date: 02-JAN-2013 17:41

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

14 Pyrene



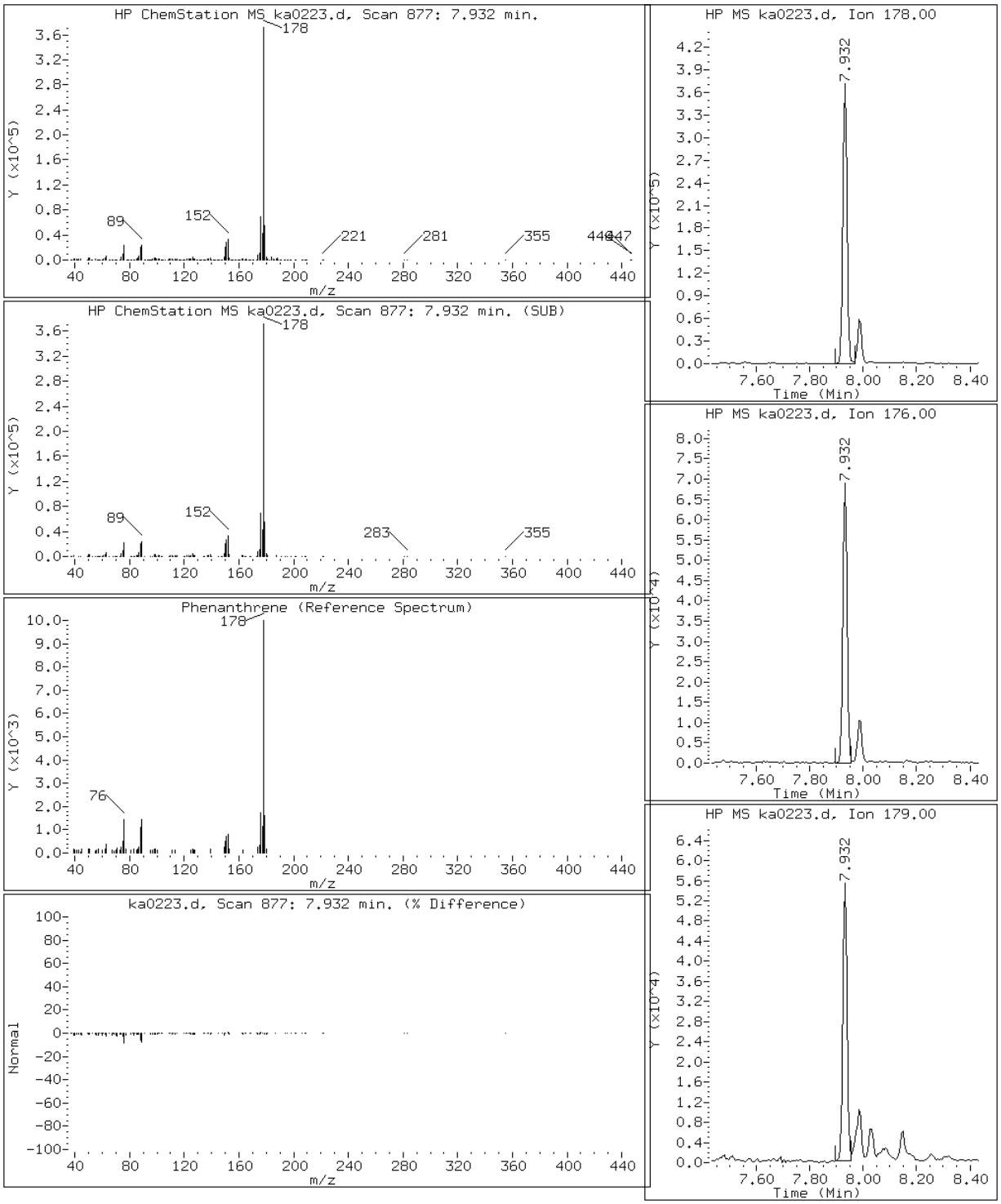
Data File: ka0223.d

Date: 02-JAN-2013 17:41

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-B-29-A DL=10 Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: ka0223.d
Inj. Date and Time: 02-JAN-2013 17:41
Instrument ID: MSK5973.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 01/03/2013

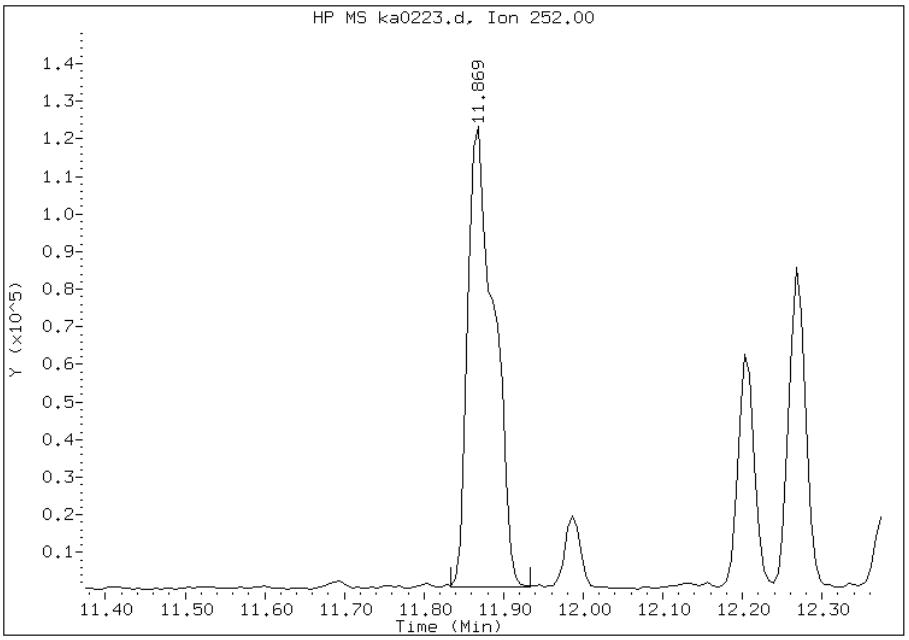
Processing Integration Results

RT: 11.87

Response: 280379

Amount: 2

Conc: 602



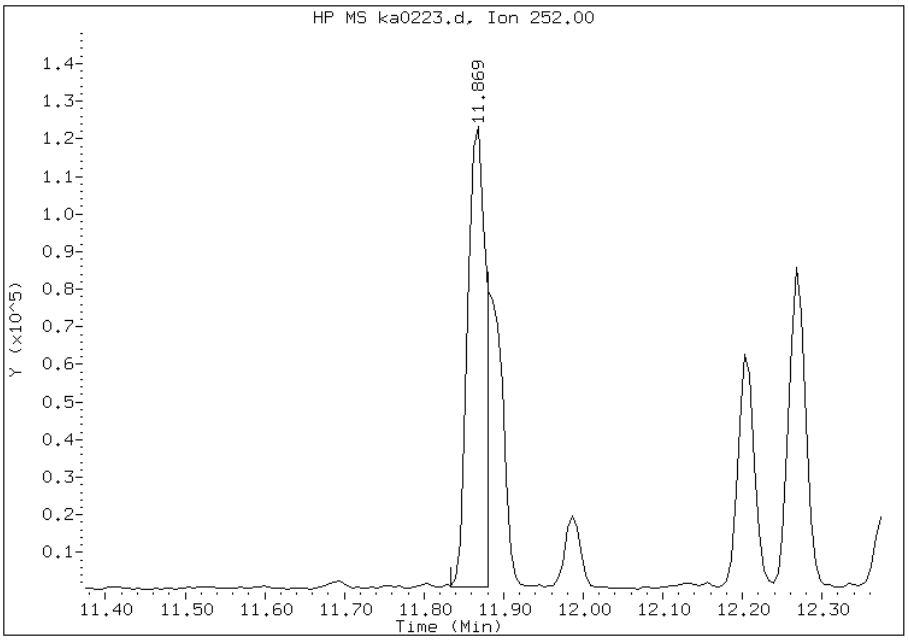
Manual Integration Results

RT: 11.87

Response: 195292

Amount: 1

Conc: 419



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: ka0223.d
Inj. Date and Time: 02-JAN-2013 17:41
Instrument ID: MSK5973.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 01/03/2013

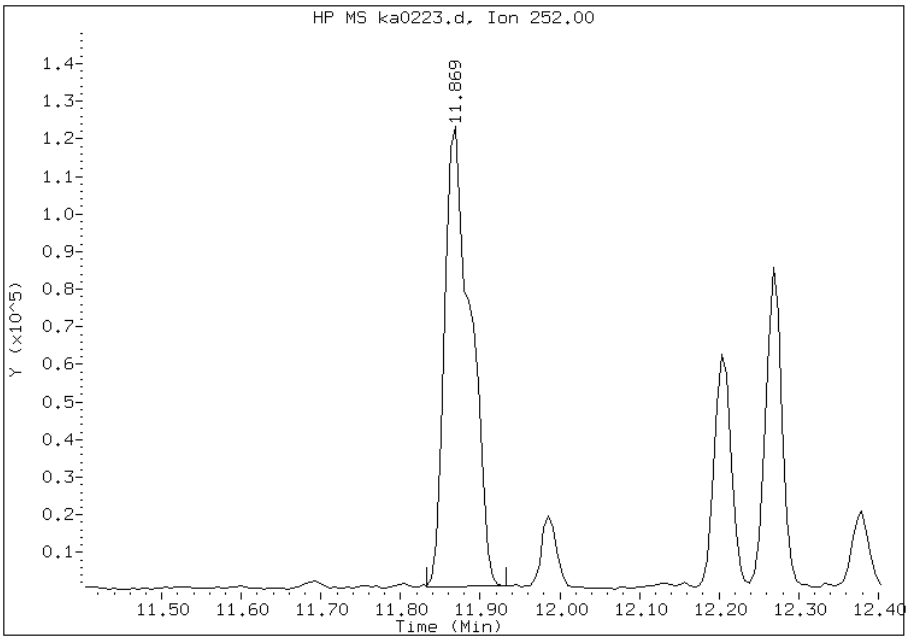
Processing Integration Results

RT: 11.87

Response: 279462

Amount: 2

Conc: 620



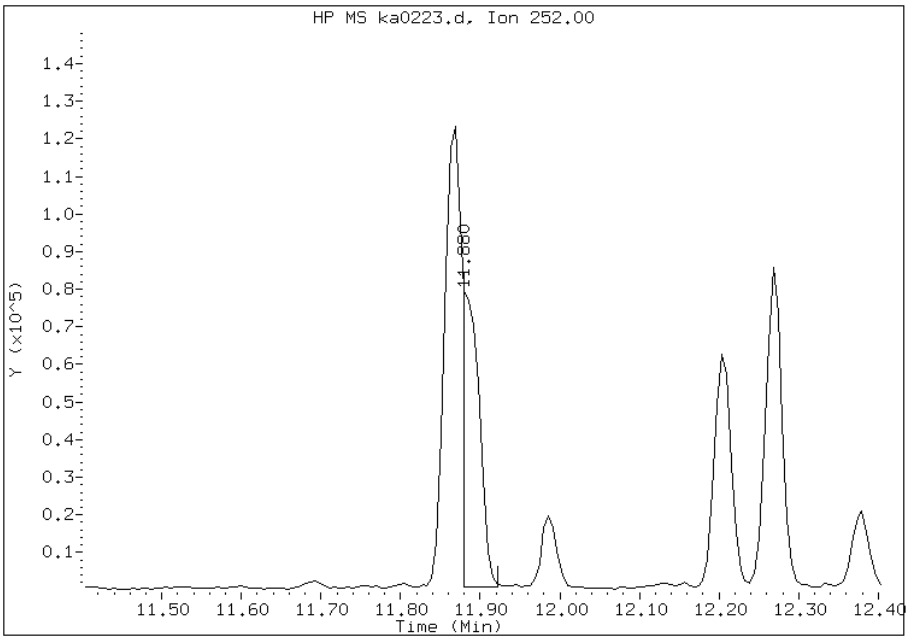
Manual Integration Results

RT: 11.88

Response: 113157

Amount: 1

Conc: 251



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: CV0294B-CS | Lab Sample ID: 680-85980-32

Matrix: Solid | Lab File ID: ya0214.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/18/2012 14:19

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.40(g) | Date Analyzed: 01/02/2013 21:43

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

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

% Moisture: 36.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261663 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	16		10	4.8
91-57-6	2-Methylnaphthalene	22		10	5.1
83-32-9	Acenaphthene	10	U	10	5.1
208-96-8	Acenaphthylene	10	U	10	5.1
120-12-7	Anthracene	5.7	J	10	5.1
56-55-3	Benzo[a]anthracene	24		10	5.1
50-32-8	Benzo[a]pyrene	26		10	1.9
205-99-2	Benzo[b]fluoranthene	39		10	5.1
191-24-2	Benzo[g,h,i]perylene	16		10	5.1
207-08-9	Benzo[k]fluoranthene	17		10	3.1
218-01-9	Chrysene	37		10	5.1
53-70-3	Dibenz(a,h)anthracene	10	U	10	5.1
206-44-0	Fluoranthene	60		10	5.1
86-73-7	Fluorene	10	U	10	5.1
193-39-5	Indeno[1,2,3-cd]pyrene	11		10	5.1
91-20-3	Naphthalene	26		10	5.1
129-00-0	Pyrene	42		10	5.1
85-01-8	Phenanthrene	39		10	3.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	28	X	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y010213.b/ya0214.d
Lab Smp Id: 680-85980-A-32-A Client Smp ID: CV0294B-CS
Inj Date : 02-JAN-2013 21:43
Operator : VHB Inst ID: MSY5975.i
Smp Info : 680-85980-A-32-A
Misc Info : 680-85980-A-32-A
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y010213.b/Y-b8270CLLPAH-m.m
Meth Date : 03-Jan-2013 07:09 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 19:25 Cal File: ya0208q.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.40000	Weight Extracted
M	36.27273	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.697	4.708	(1.000)	451629	2.00000	
2 Naphthalene	128	4.718	4.729	(1.005)	133509	0.50311	25.96
3 2-Methylnaphthalene	142	5.323	5.328	(1.133)	70241	0.42722	22.05
4 1-Methylnaphthalene	142	5.414	5.419	(1.153)	50534	0.30166	15.57
* 5 Acenaphthene-d10	164	6.248	6.253	(1.000)	269495	2.00000	
* 9 Phenanthrene-d10	188	7.558	7.558	(1.000)	434657	2.00000	
10 Phenanthrene	178	7.580	7.580	(1.003)	217799	0.76241	39.35

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
11 Anthracene	178	7.628	7.628	(1.009)	29857	0.11006	5.68(a)
$ 15 o-Terphenyl	230	7.869	7.869	(0.781)	101510	0.56401	29.11(R)
12 Fluoranthene	202	8.666	8.666	(1.146)	305197	1.15678	59.71
14 Pyrene	202	8.885	8.890	(0.882)	248032	0.81854	42.25
16 Benzo(a)Anthracene	228	10.067	10.067	(0.999)	104107	0.45819	23.65
* 13 Chrysene-d12	240	10.078	10.078	(1.000)	348349	2.00000	
17 Chrysene	228	10.110	10.110	(1.003)	161754	0.71692	37.00
19 Benzo(b)fluoranthene	252	11.458	11.452	(0.949)	150091	0.75686	39.06(M)
20 Benzo(k)fluoranthene	252	11.479	11.490	(0.950)	61928	0.32004	16.51(M)
21 Benzo(a)pyrene	252	11.982	11.982	(0.992)	77416	0.50014	25.81
* 18 Perylene-d12	264	12.078	12.073	(1.000)	262164	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	14.217	14.217	(1.411)	44128	0.21024	10.85
24 Benzo(g,h,i)perylene	276	14.886	14.886	(1.232)	44302	0.30087	15.53

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: ya0214.d

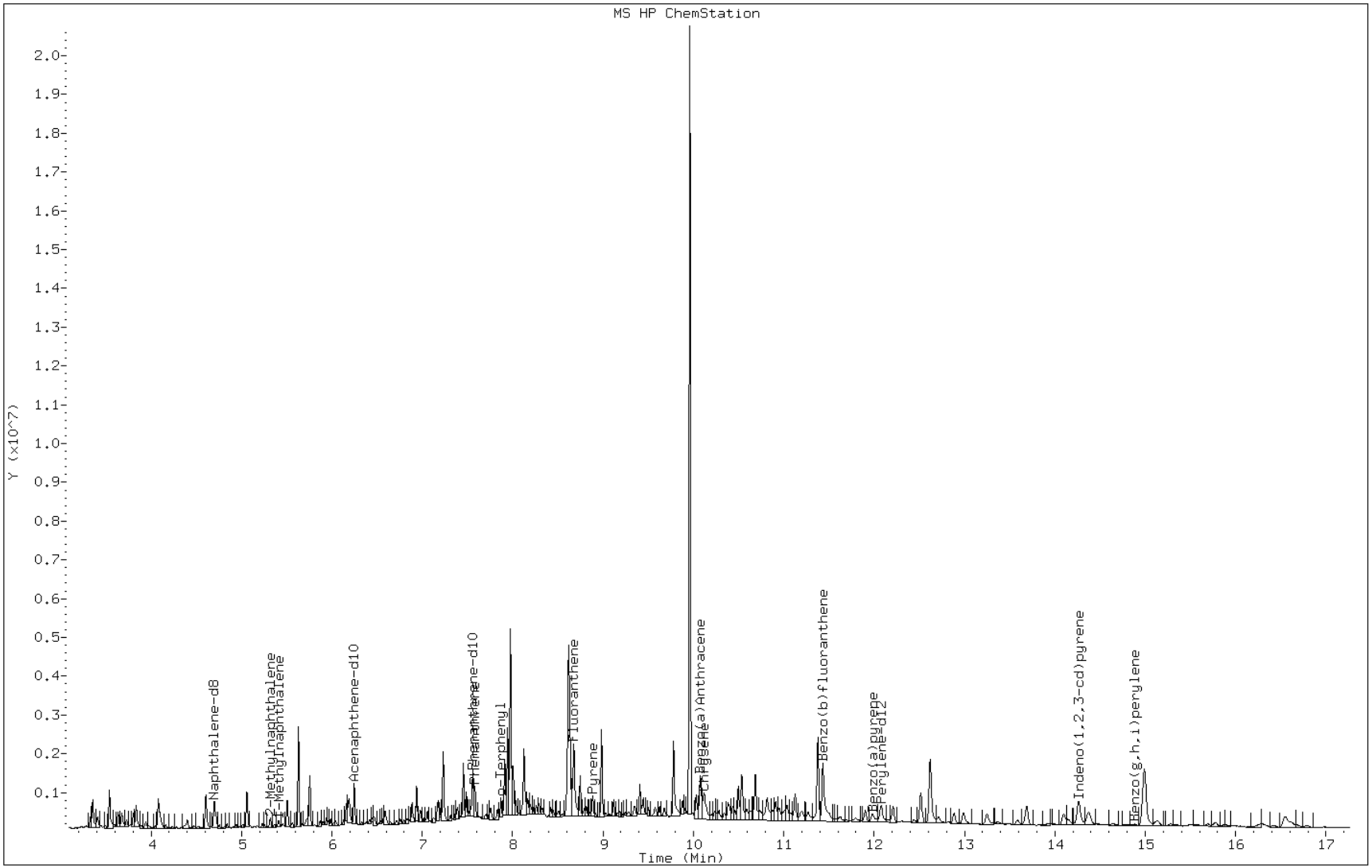
Date: 02-JAN-2013 21:43

Client ID: CV0294B-CS

Instrument: MSY5975.i

Sample Info: 680-85980-A-32-A

Operator: VHB



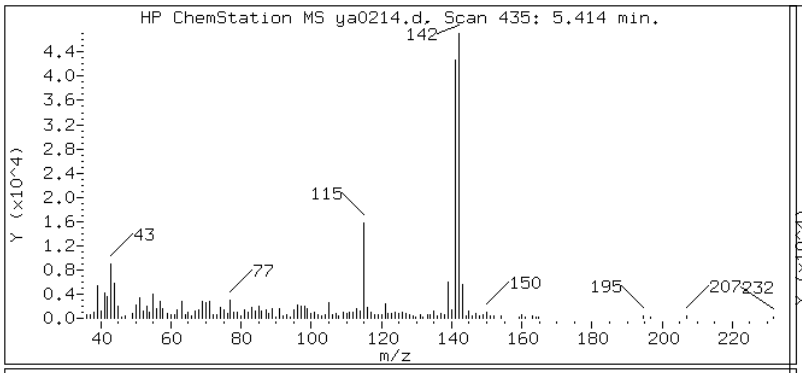
Data File: ya0214.d

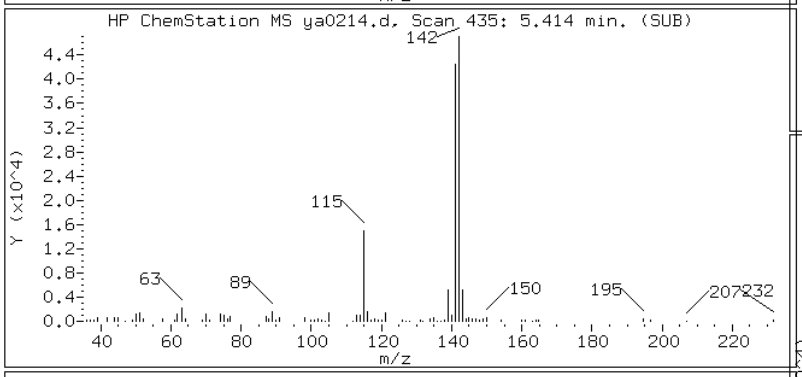
Date: 02-JAN-2013 21:43

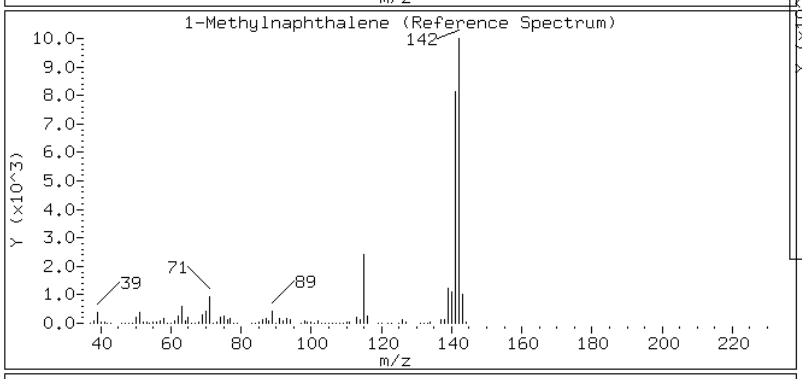
Client ID: CV0294B-CS Instrument: MSY5975.i

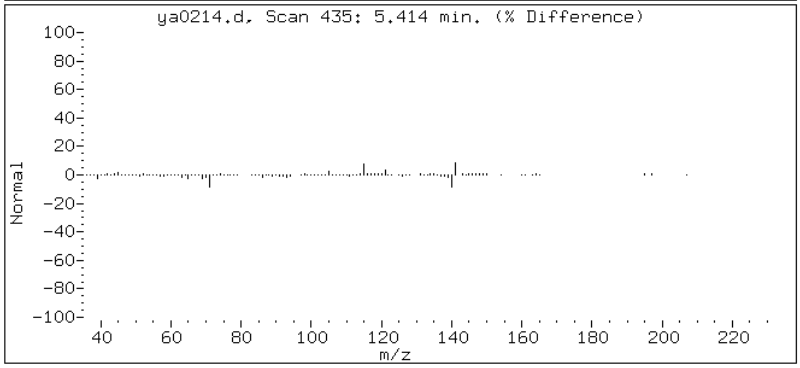
Sample Info: 680-85980-A-32-A Operator: VHB

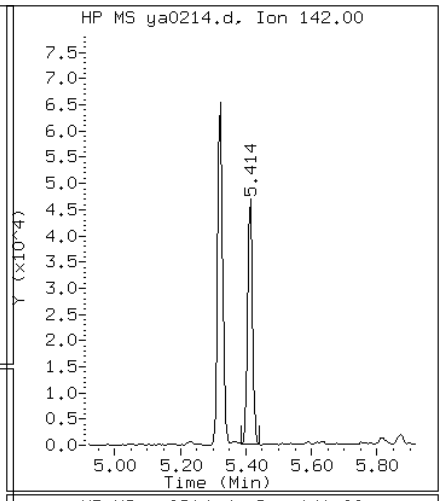
4 1-Methylnaphthalene

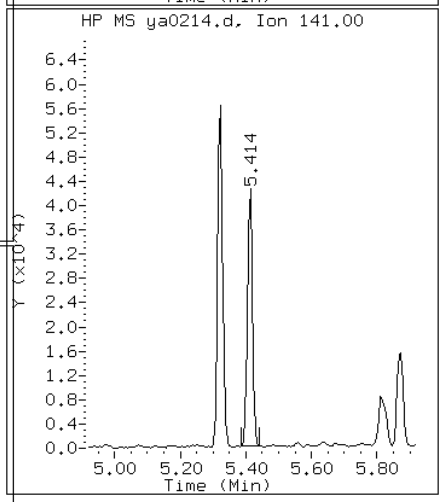












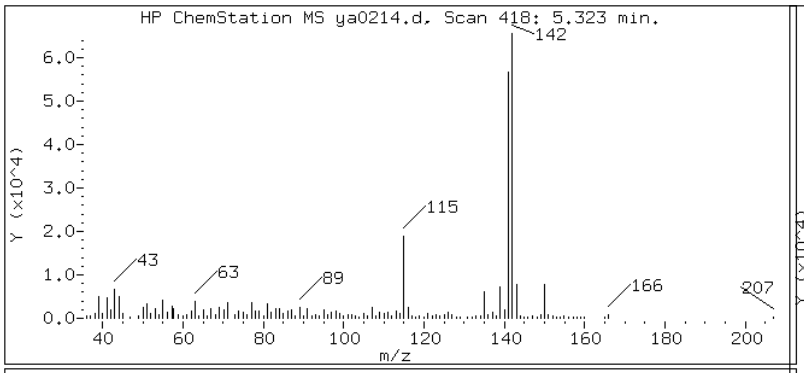
Data File: ya0214.d

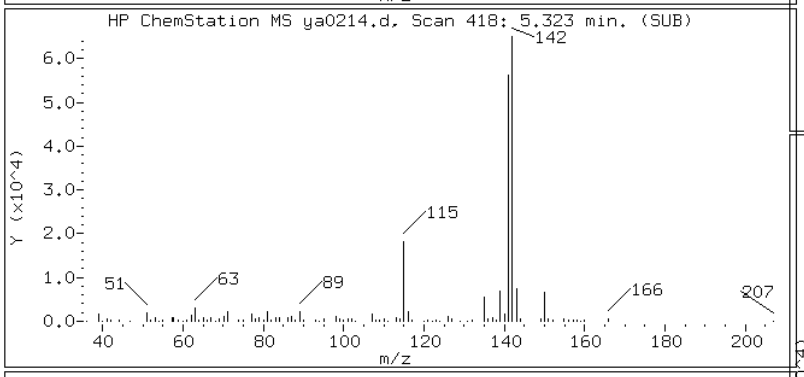
Date: 02-JAN-2013 21:43

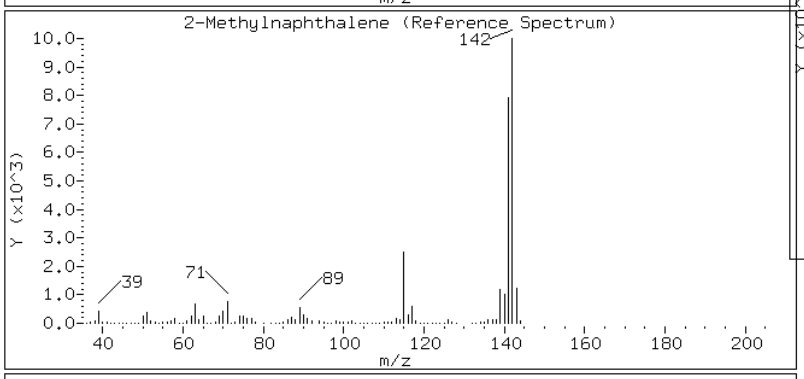
Client ID: CV0294B-CS Instrument: MSY5975.i

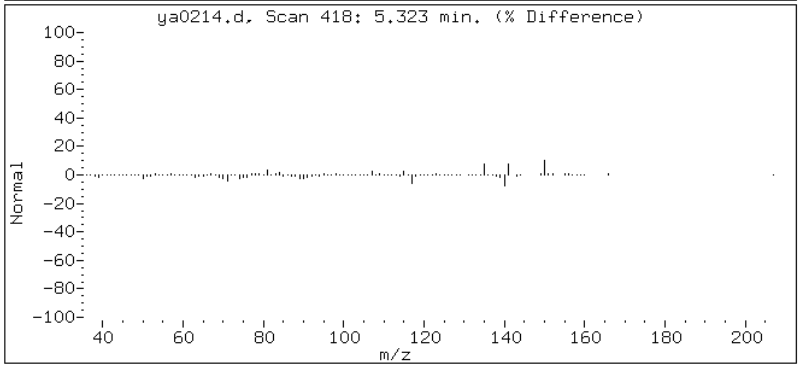
Sample Info: 680-85980-A-32-A Operator: VHB

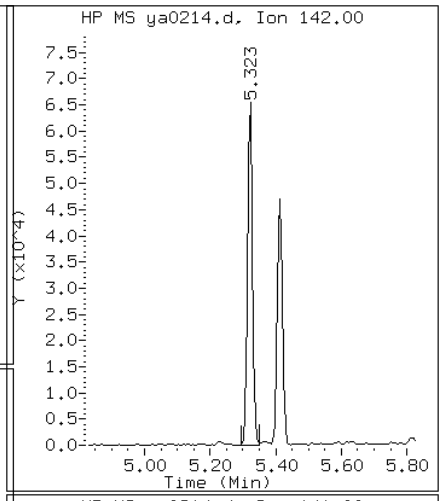
3 2-Methylnaphthalene

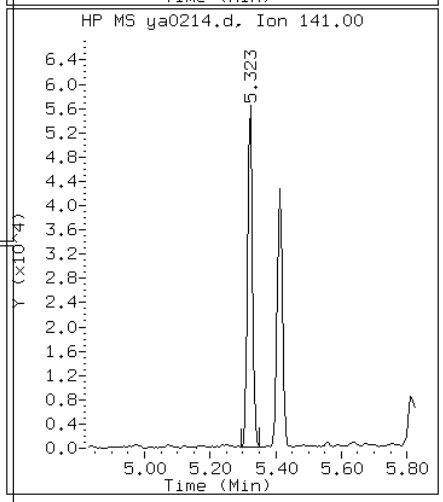












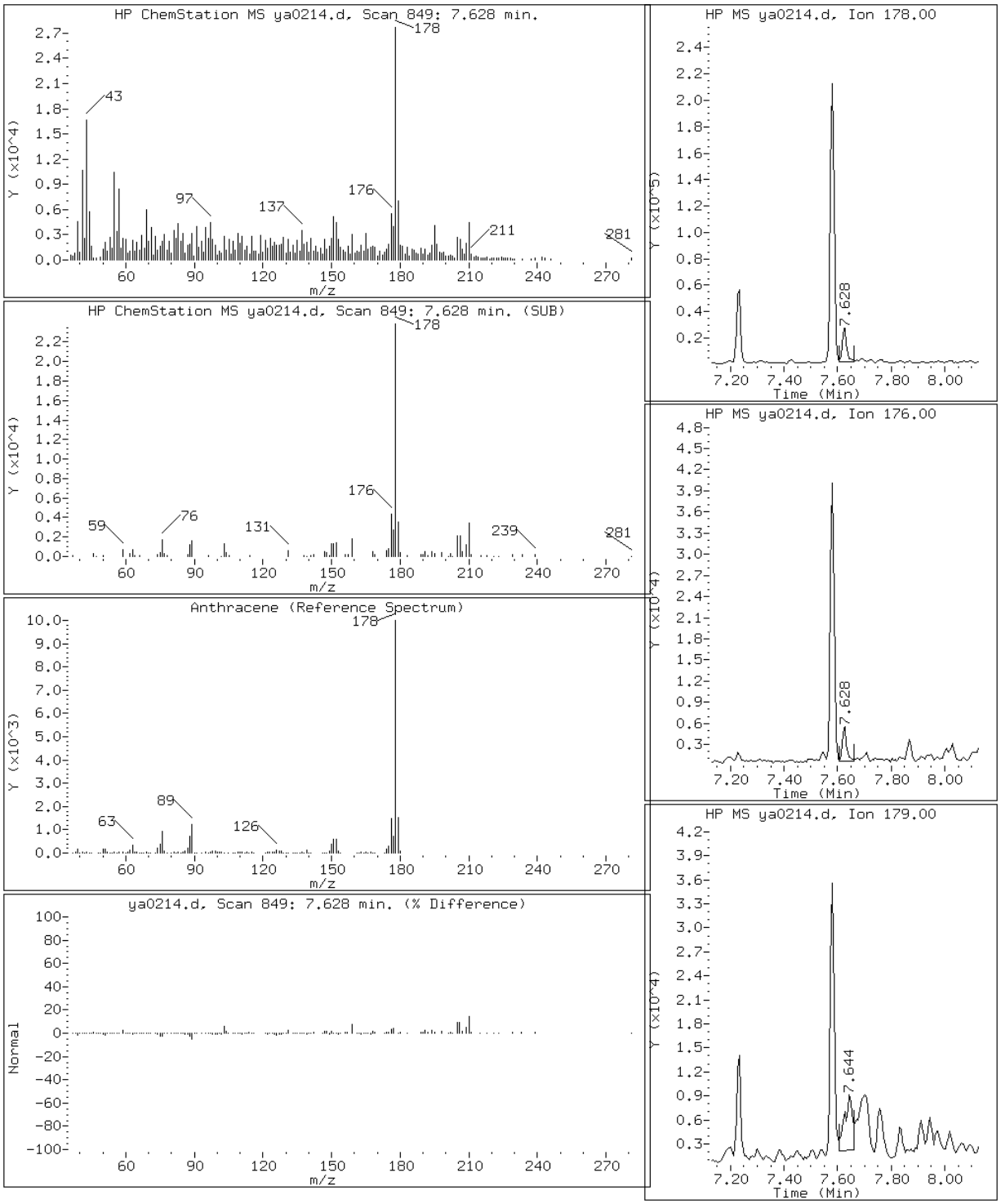
Data File: ya0214.d

Date: 02-JAN-2013 21:43

Client ID: CV0294B-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-32-A Operator: VHB

11 Anthracene



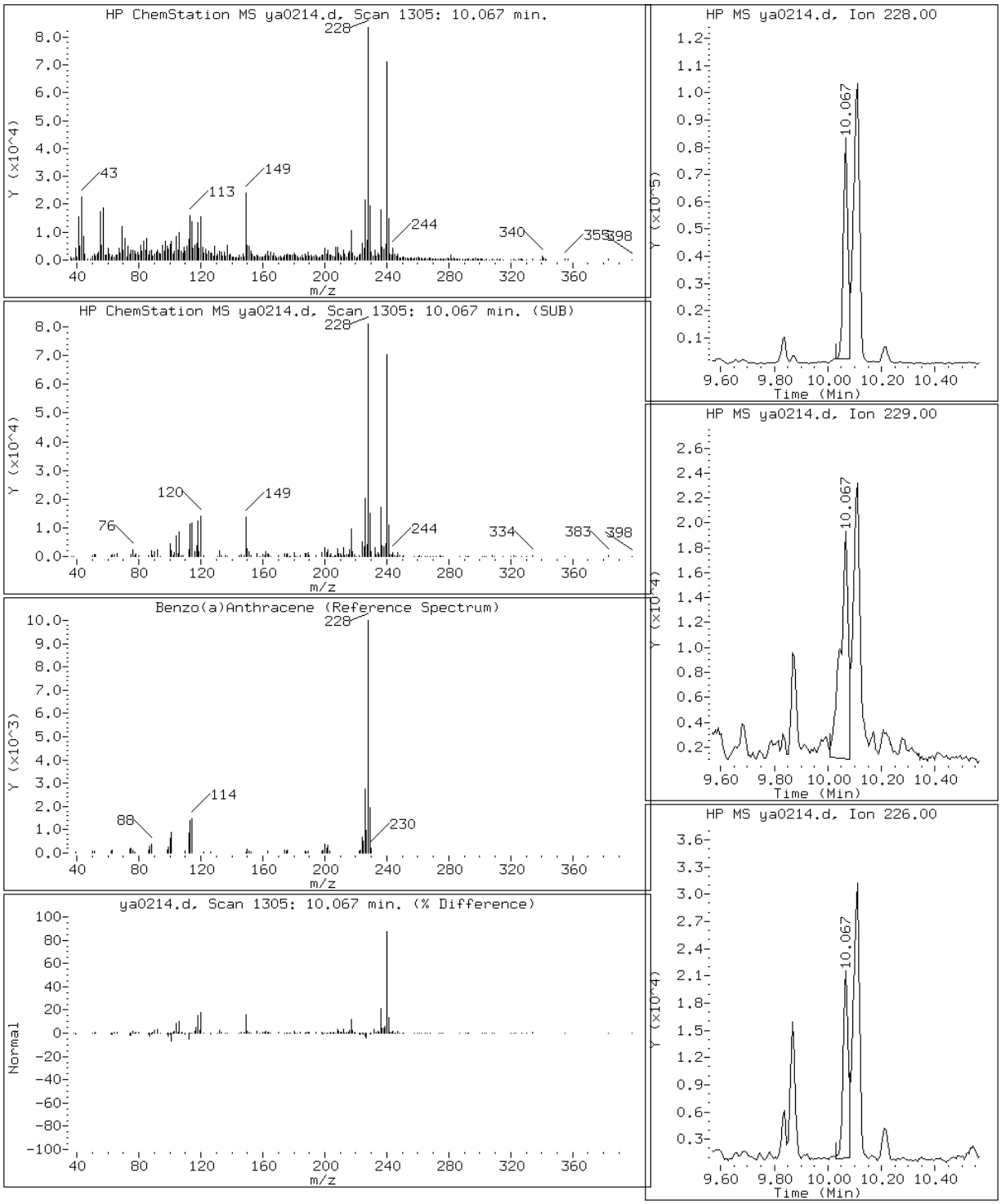
Data File: ya0214.d

Date: 02-JAN-2013 21:43

Client ID: CV0294B-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-32-A Operator: VHB

16 Benzo(a)Anthracene



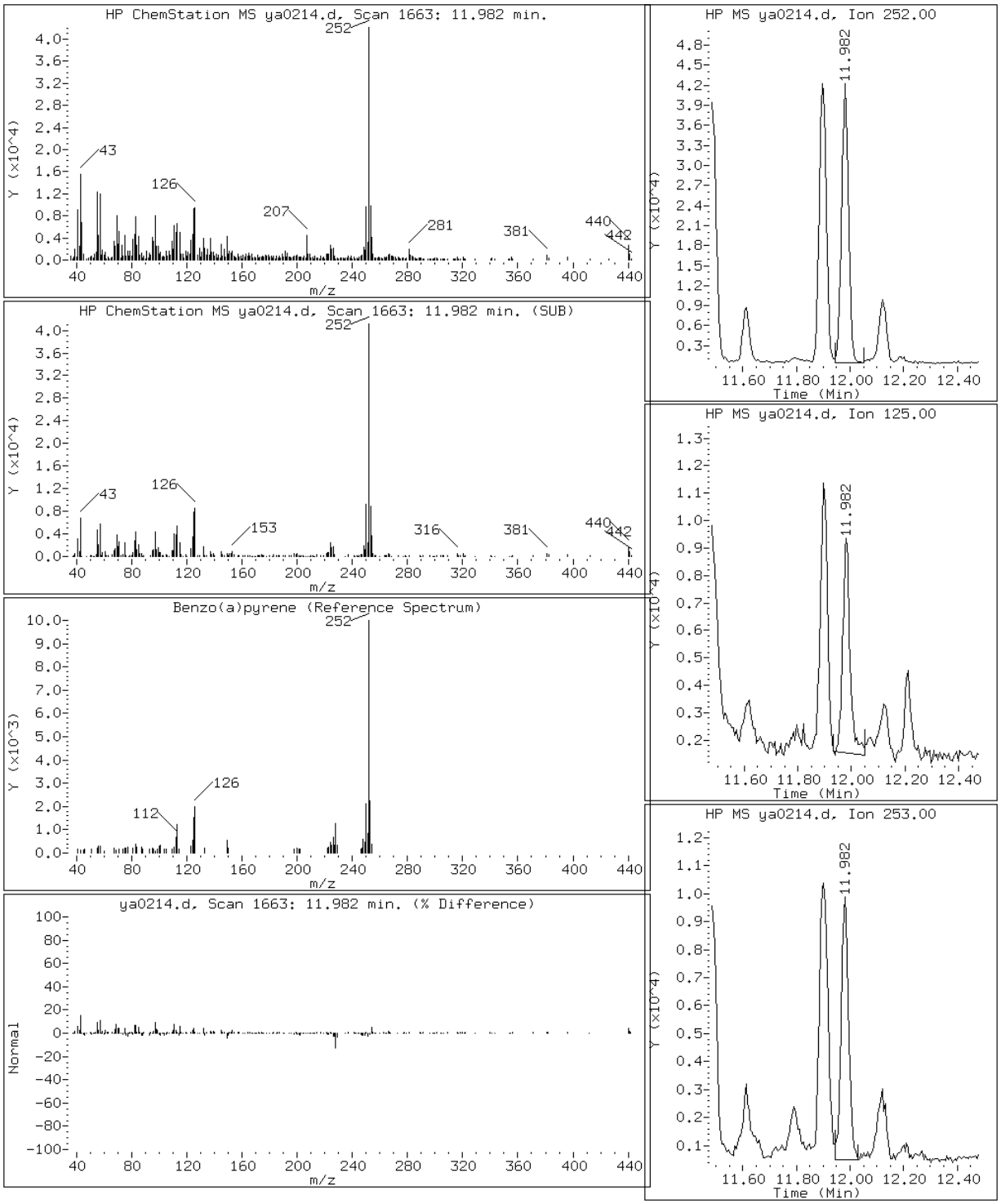
Data File: ya0214.d

Date: 02-JAN-2013 21:43

Client ID: CV0294B-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-32-A Operator: VHB

21 Benzo(a)pyrene



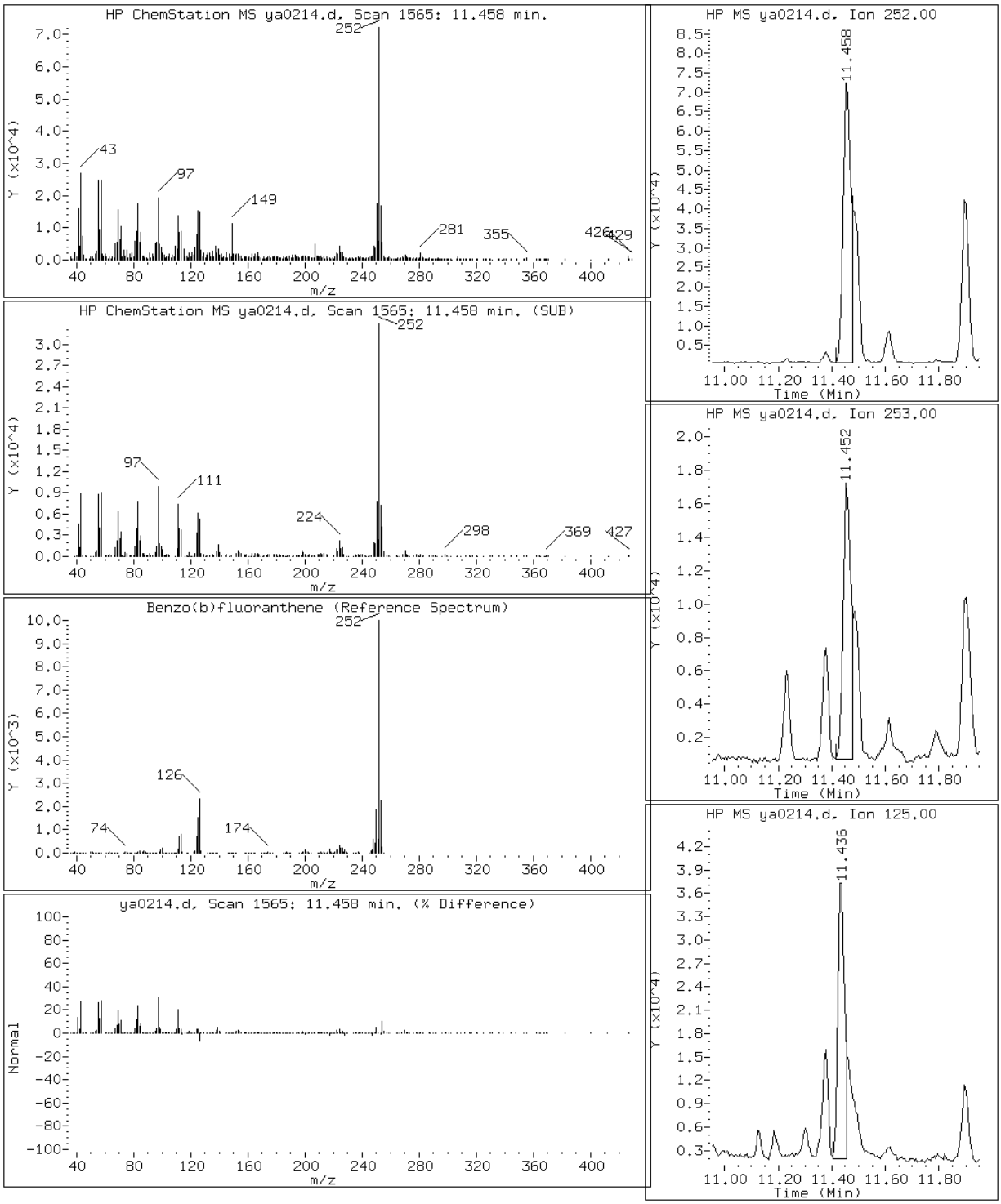
Data File: ya0214.d

Date: 02-JAN-2013 21:43

Client ID: CV0294B-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-32-A Operator: VHB

19 Benzo(b)fluoranthene



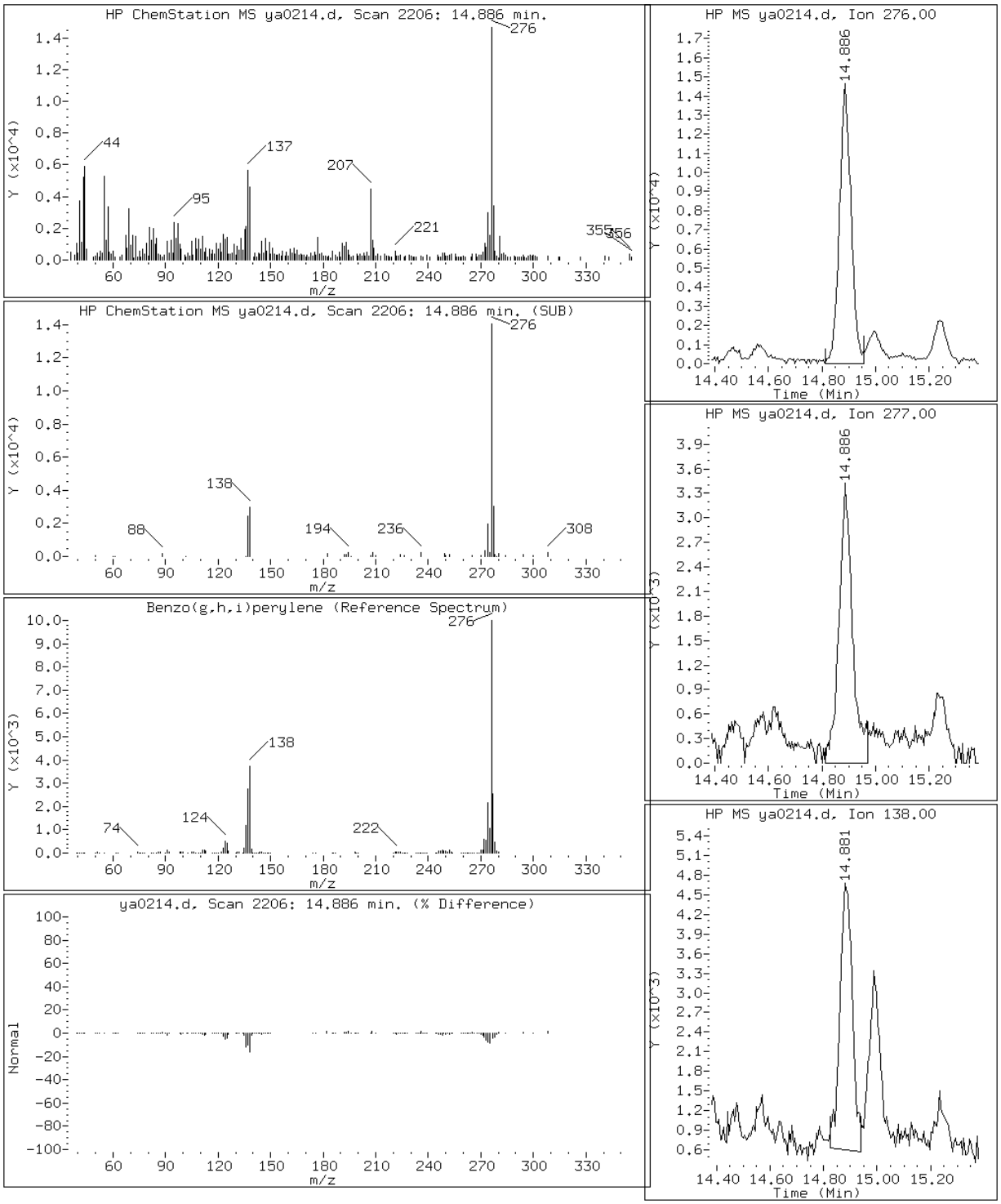
Data File: ya0214.d

Date: 02-JAN-2013 21:43

Client ID: CV0294B-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-32-A Operator: VHB

24 Benzo(g,h,i)perylene



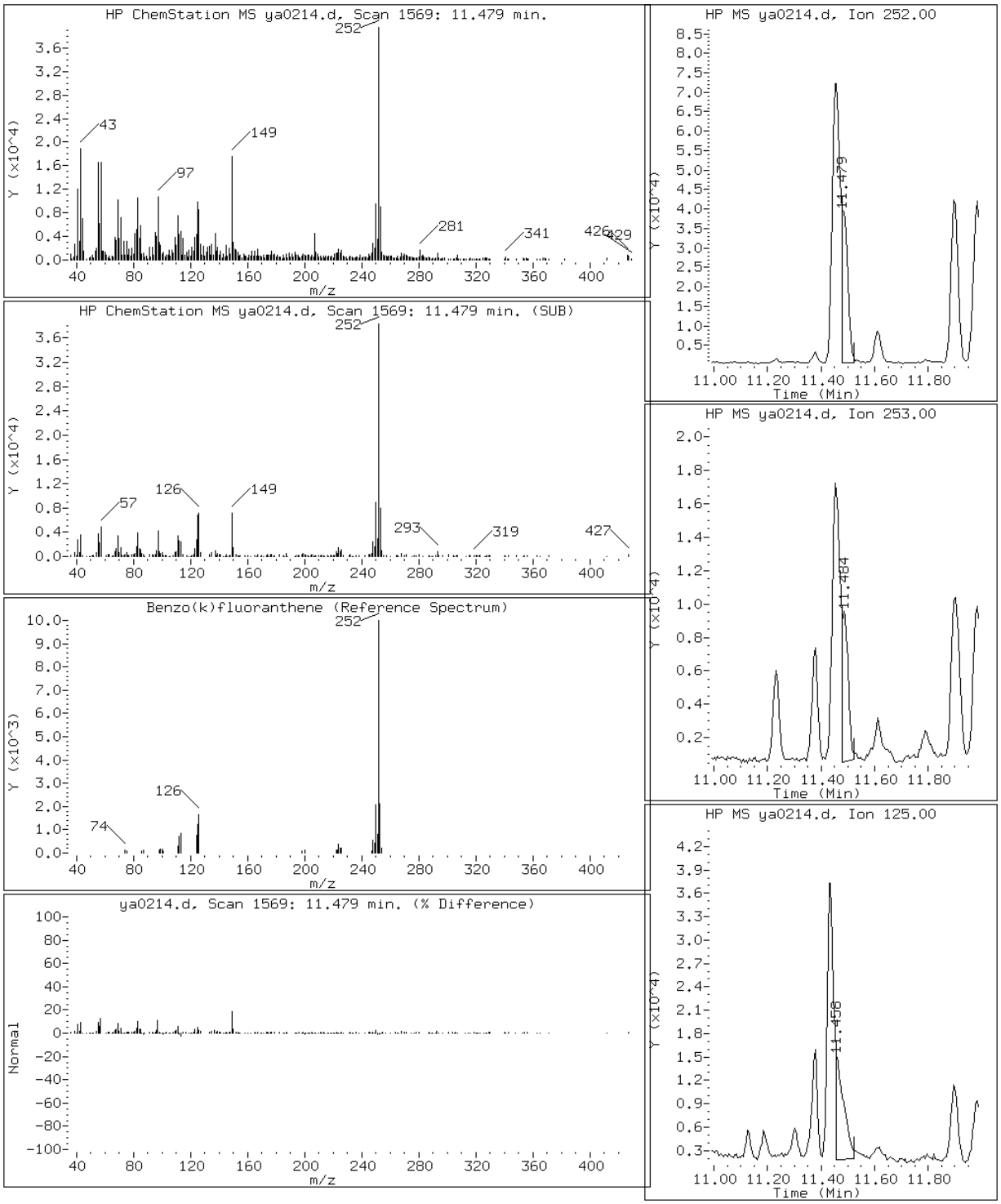
Data File: ya0214.d

Date: 02-JAN-2013 21:43

Client ID: CV0294B-CS | Instrument: MSY5975.i

Sample Info: 680-85980-A-32-A | Operator: VHB

20 Benzo(k)fluoranthene



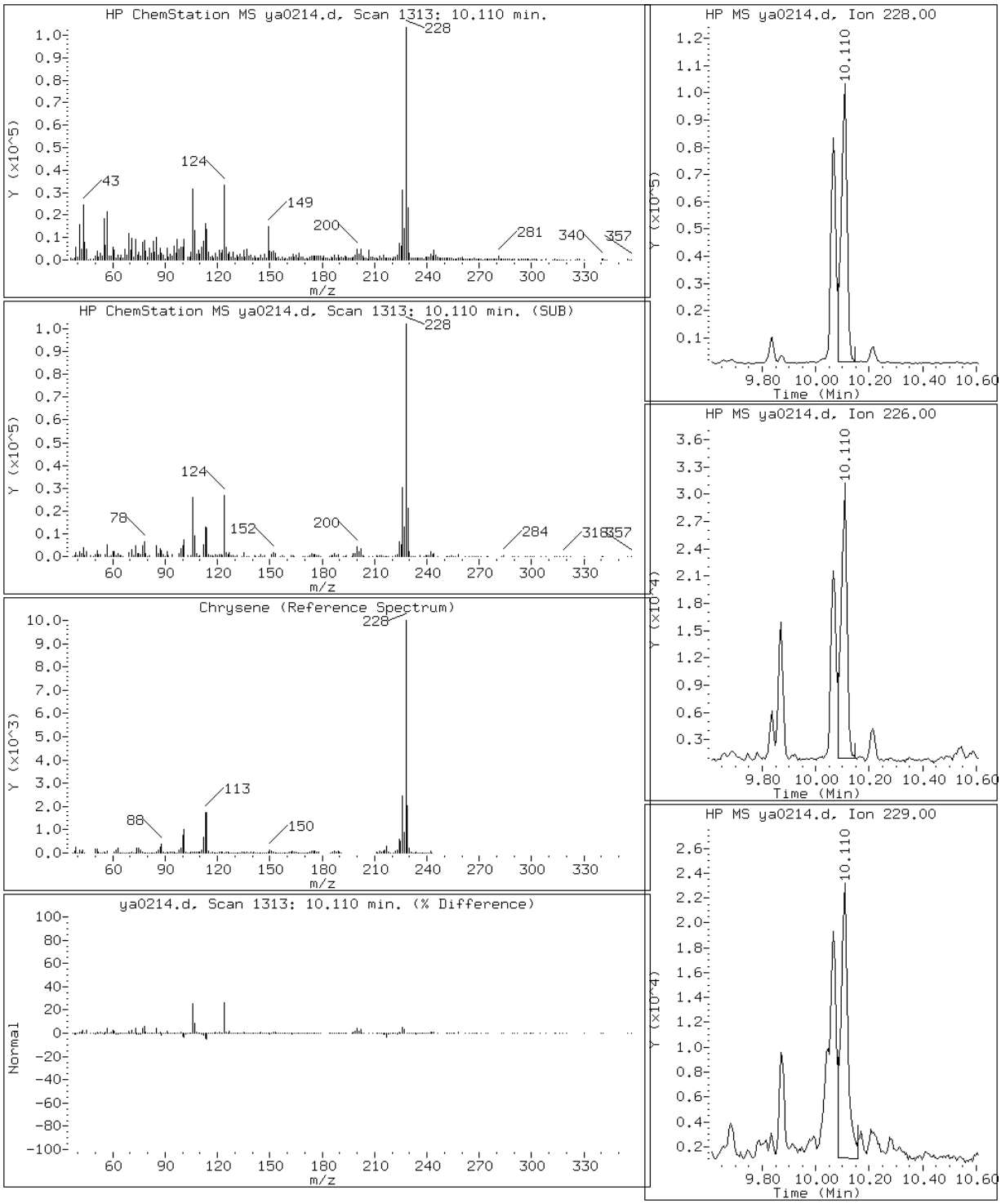
Data File: ya0214.d

Date: 02-JAN-2013 21:43

Client ID: CV0294B-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-32-A Operator: VHB

17 Chrysene



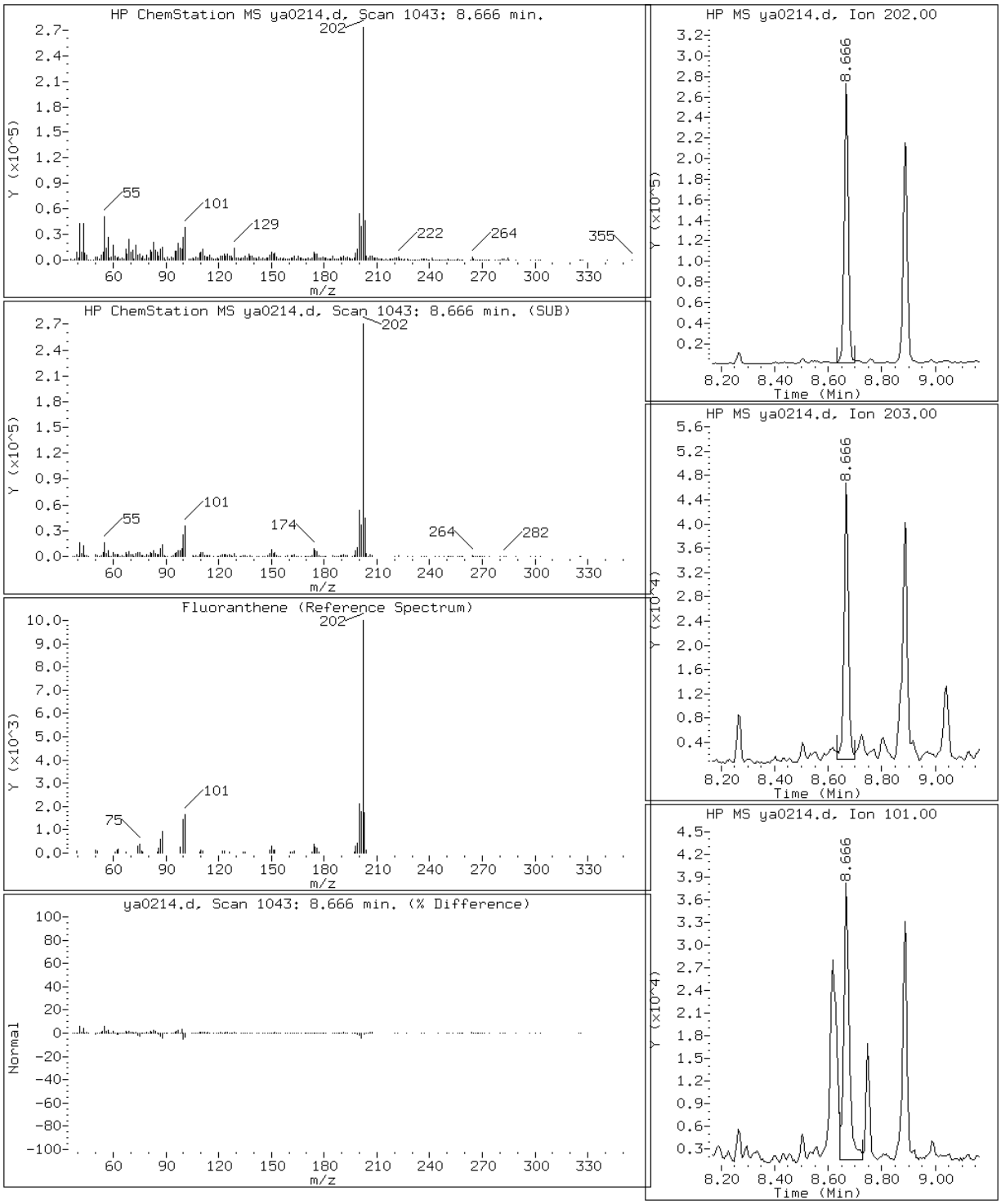
Data File: ya0214.d

Date: 02-JAN-2013 21:43

Client ID: CV0294B-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-32-A Operator: VHB

12 Fluoranthene



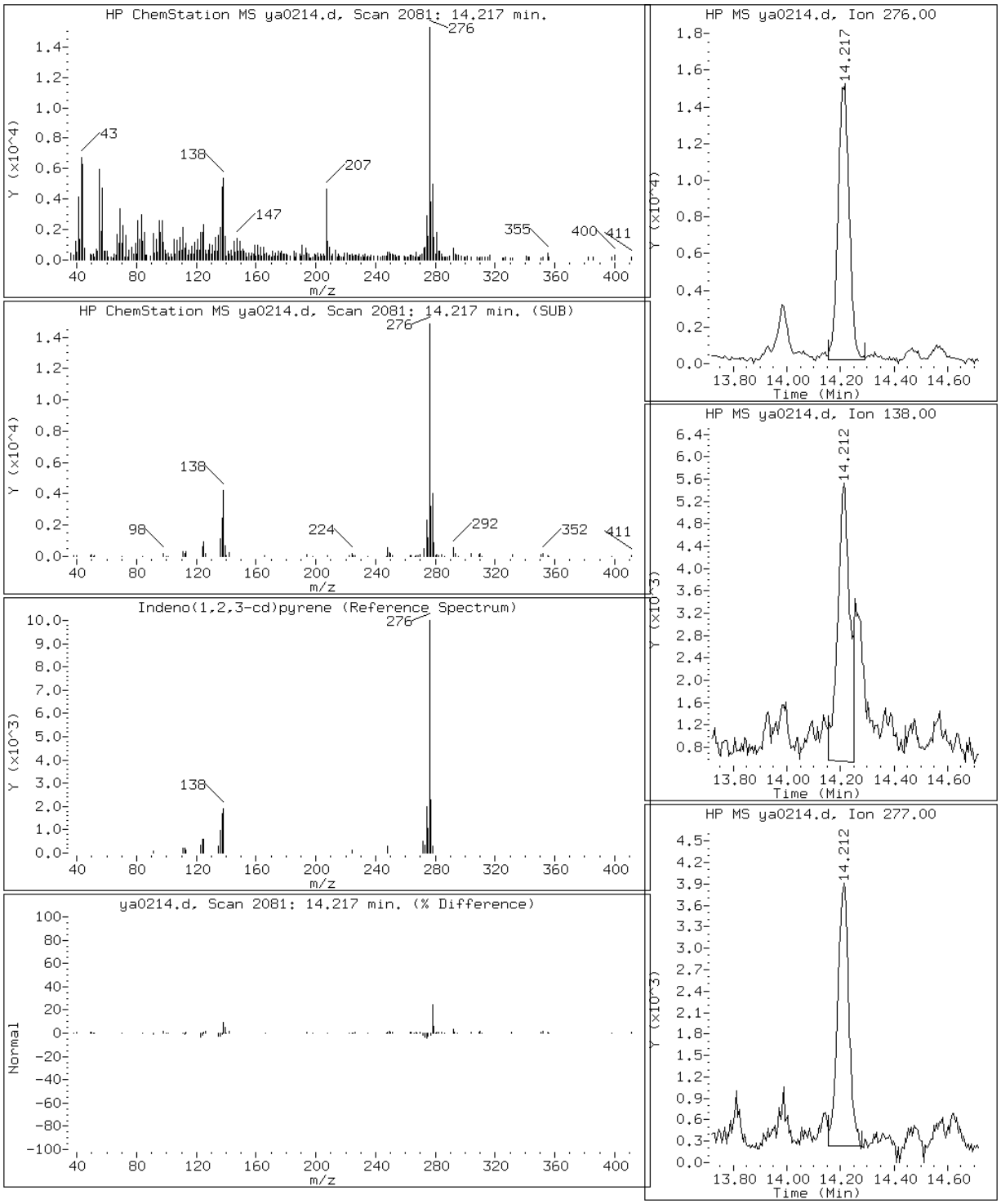
Data File: ya0214.d

Date: 02-JAN-2013 21:43

Client ID: CV0294B-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-32-A Operator: VHB

22 Indeno(1,2,3-cd)pyrene



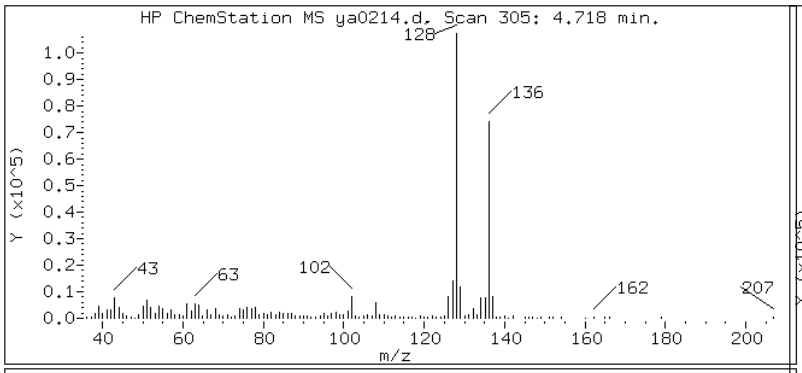
Data File: ya0214.d

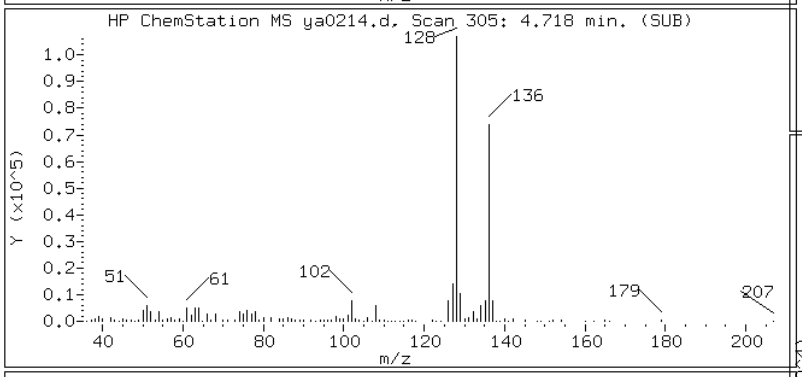
Date: 02-JAN-2013 21:43

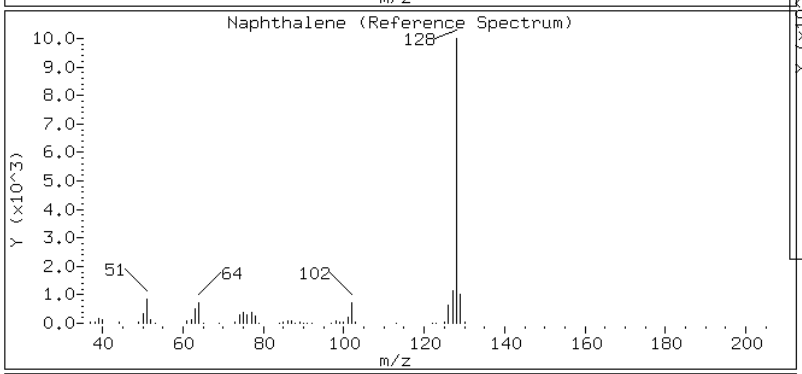
Client ID: CV0294B-CS Instrument: MSY5975.i

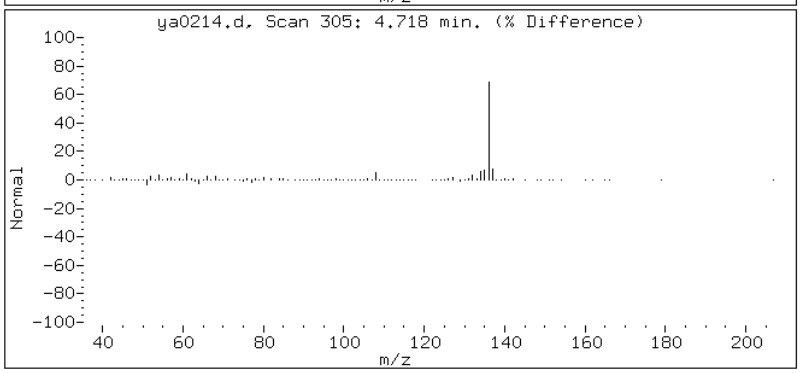
Sample Info: 680-85980-A-32-A Operator: VHB

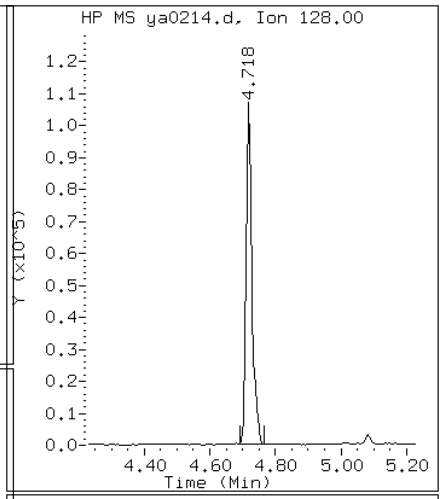
2 Naphthalene

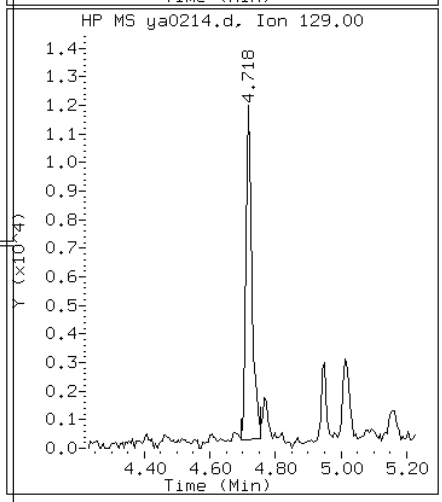












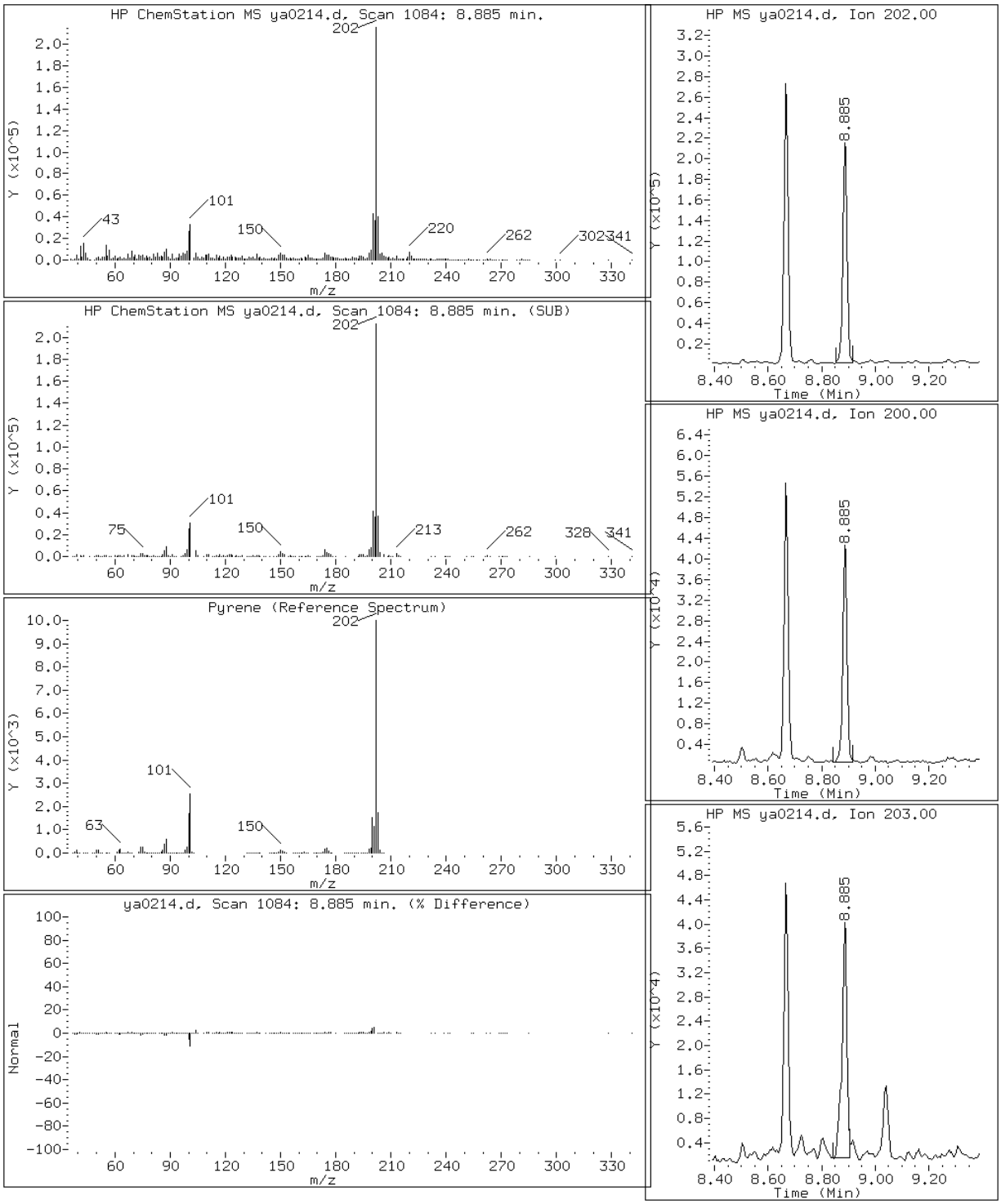
Data File: ya0214.d

Date: 02-JAN-2013 21:43

Client ID: CV0294B-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-32-A Operator: VHB

14 Pyrene



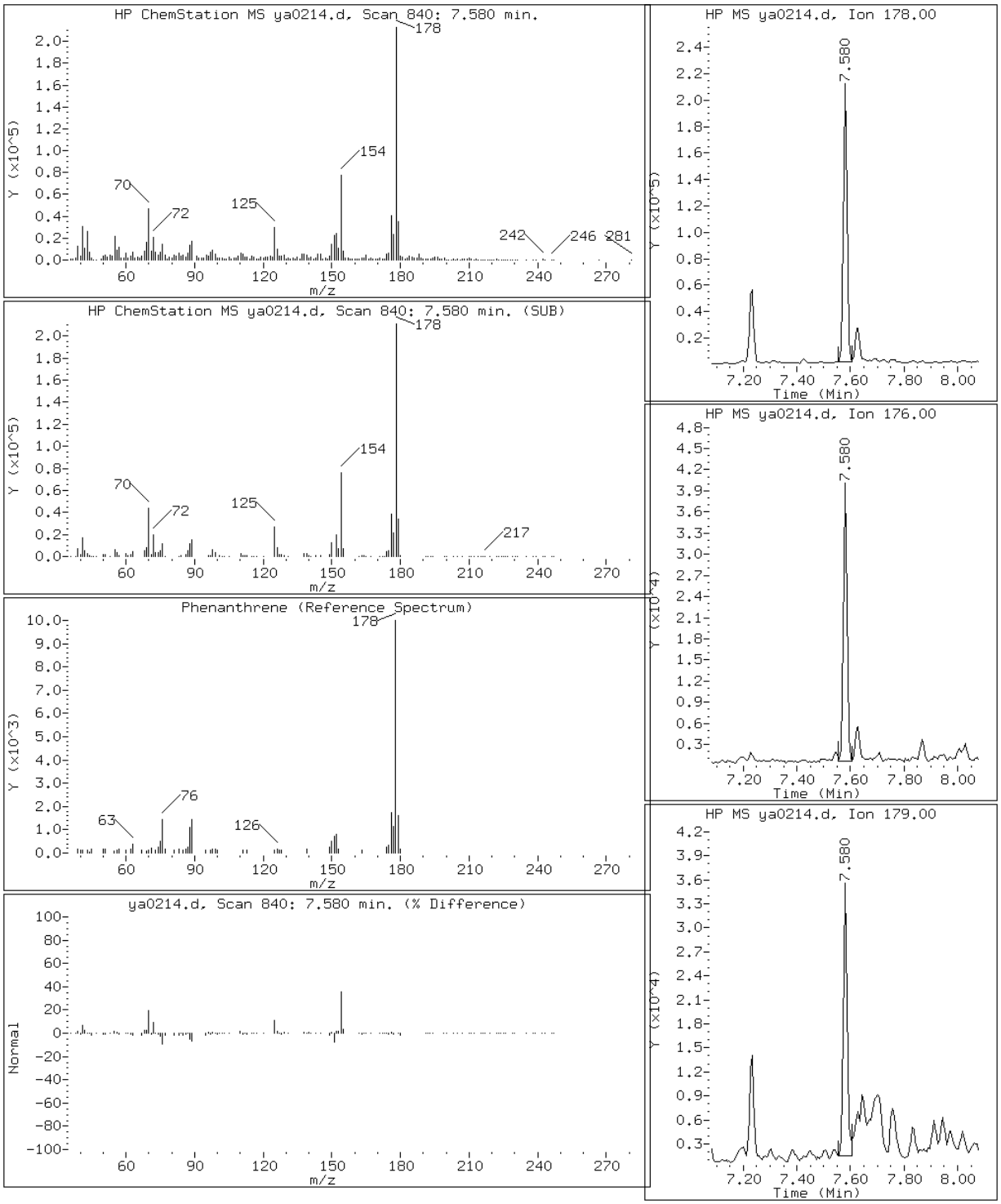
Data File: ya0214.d

Date: 02-JAN-2013 21:43

Client ID: CV0294B-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-32-A Operator: VHB

10 Phenanthrene



Manual Integration Report

Data File: ya0214.d
Inj. Date and Time: 02-JAN-2013 21:43
Instrument ID: MSY5975.i
Client ID: CV0294B-CS
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 01/03/2013

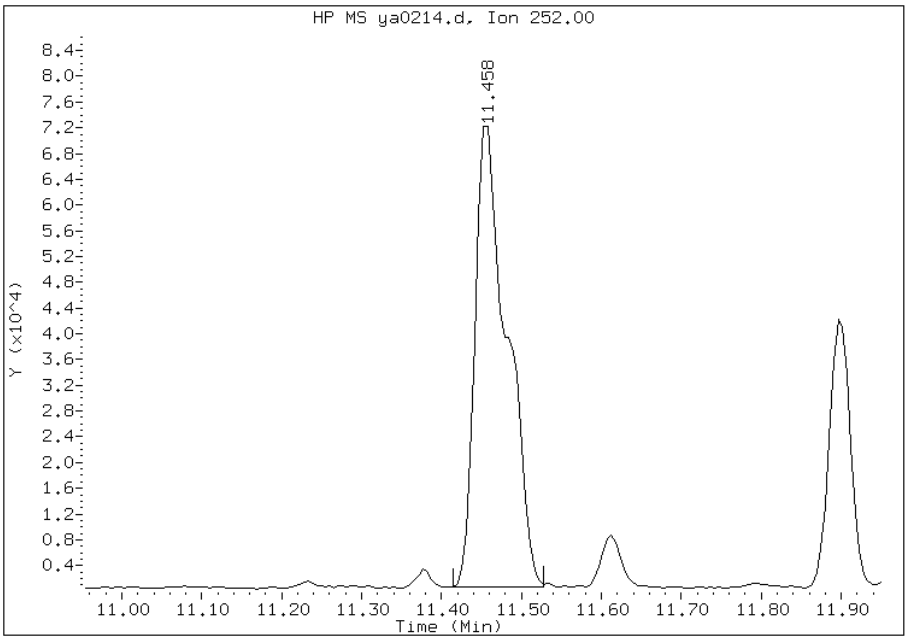
Processing Integration Results

RT: 11.46

Response: 199825

Amount: 1

Conc: 52



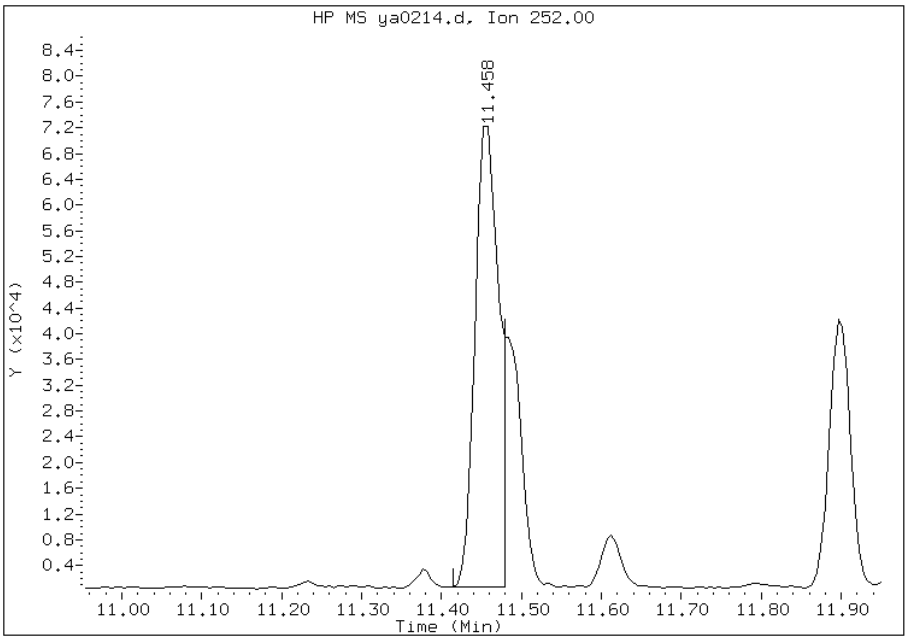
Manual Integration Results

RT: 11.46

Response: 150091

Amount: 1

Conc: 39



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: ya0214.d
Inj. Date and Time: 02-JAN-2013 21:43
Instrument ID: MSY5975.i
Client ID: CV0294B-CS
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 01/03/2013

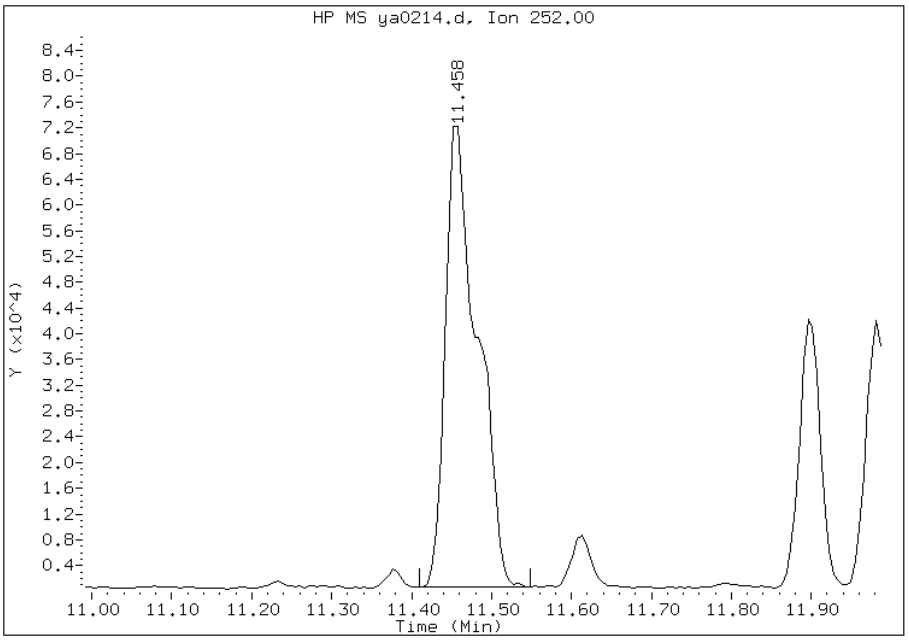
Processing Integration Results

RT: 11.46

Response: 200190

Amount: 1

Conc: 53



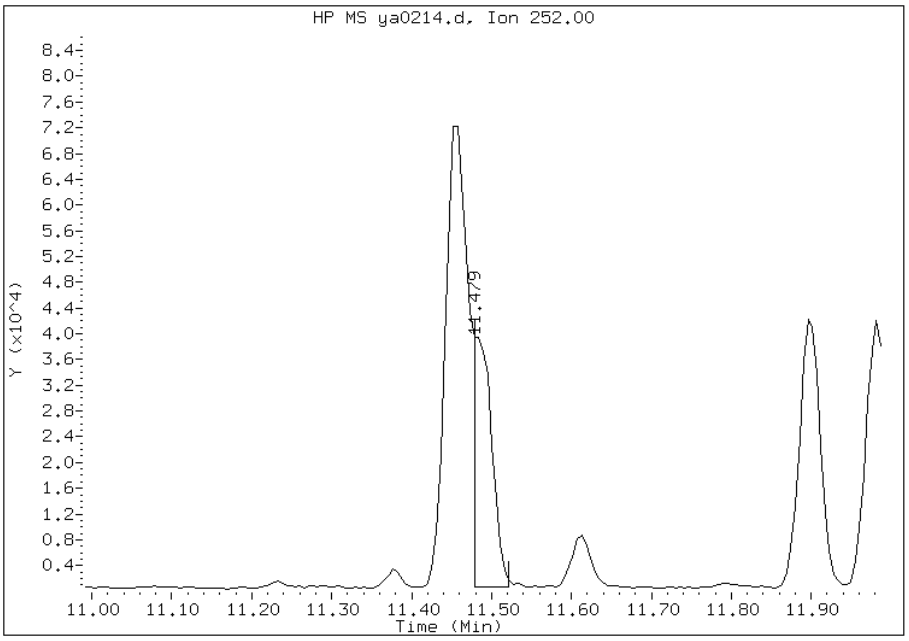
Manual Integration Results

RT: 11.48

Response: 61928

Amount: 0

Conc: 17



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: CV0294C-CS | Lab Sample ID: 680-85980-33

Matrix: Solid | Lab File ID: ya0215.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/18/2012 14:30

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.02(g) | Date Analyzed: 01/02/2013 22:06

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

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

% Moisture: 26.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261663 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	4.9	J	9.1	4.2
91-57-6	2-Methylnaphthalene	7.9	J	9.1	4.5
83-32-9	Acenaphthene	9.1	U	9.1	4.5
208-96-8	Acenaphthylene	9.1	U	9.1	4.5
120-12-7	Anthracene	17		9.1	4.5
56-55-3	Benzo[a]anthracene	12		9.1	4.5
50-32-8	Benzo[a]pyrene	13		9.1	1.6
205-99-2	Benzo[b]fluoranthene	16		9.1	4.5
191-24-2	Benzo[g,h,i]perylene	8.1	J	9.1	4.5
207-08-9	Benzo[k]fluoranthene	9.6		9.1	2.7
218-01-9	Chrysene	17		9.1	4.5
53-70-3	Dibenz(a,h)anthracene	9.1	U	9.1	4.5
206-44-0	Fluoranthene	26		9.1	4.5
86-73-7	Fluorene	9.1	U	9.1	4.5
193-39-5	Indeno[1,2,3-cd]pyrene	6.0	J	9.1	4.5
91-20-3	Naphthalene	10		9.1	4.5
129-00-0	Pyrene	18		9.1	4.5
85-01-8	Phenanthrene	16		9.1	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	38		36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y010213.b/ya0215.d
Lab Smp Id: 680-85980-A-33-A Client Smp ID: CV0294C-CS
Inj Date : 02-JAN-2013 22:06
Operator : VHB Inst ID: MSY5975.i
Smp Info : 680-85980-A-33-A
Misc Info : 680-85980-A-33-A
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y010213.b/Y-b8270CLLPAH-m.m
Meth Date : 03-Jan-2013 07:09 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 19:25 Cal File: ya0208q.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.02000	Weight Extracted
M	26.26812	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.697	4.708	(1.000)	457782	2.00000	
2 Naphthalene	128	4.718	4.729	(1.005)	61027	0.22688	10.25
3 2-Methylnaphthalene	142	5.323	5.328	(1.133)	29189	0.17515	7.91(a)
4 1-Methylnaphthalene	142	5.414	5.419	(1.153)	18259	0.10753	4.85(a)
* 5 Acenaphthene-d10	164	6.248	6.253	(1.000)	264113	2.00000	
* 9 Phenanthrene-d10	188	7.558	7.558	(1.000)	419751	2.00000	
10 Phenanthrene	178	7.580	7.580	(1.003)	96112	0.34839	15.73

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
11 Anthracene	178	7.580	7.628	(1.003)	96112	0.36688	16.57
$ 15 o-Terphenyl	230	7.869	7.869	(0.781)	130837	0.75646	34.17
12 Fluoranthene	202	8.666	8.666	(1.146)	148222	0.58175	26.28
14 Pyrene	202	8.885	8.890	(0.882)	118774	0.40788	18.42
16 Benzo(a)Anthracene	228	10.067	10.067	(0.999)	59587	0.27289	12.32
* 13 Chrysene-d12	240	10.078	10.078	(1.000)	334764	2.00000	
17 Chrysene	228	10.110	10.110	(1.003)	79312	0.36579	16.52
19 Benzo(b)fluoranthene	252	11.452	11.452	(0.948)	72719	0.35334	15.96(QM)
20 Benzo(k)fluoranthene	252	11.484	11.490	(0.951)	42791	0.21308	9.62(M)
21 Benzo(a)pyrene	252	11.982	11.982	(0.992)	46032	0.28656	12.94
* 18 Perylene-d12	264	12.078	12.073	(1.000)	272073	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	14.212	14.217	(1.410)	26741	0.13258	5.98(a)
24 Benzo(g,h,i)perylene	276	14.886	14.886	(1.232)	27384	0.17920	8.09(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: ya0215.d

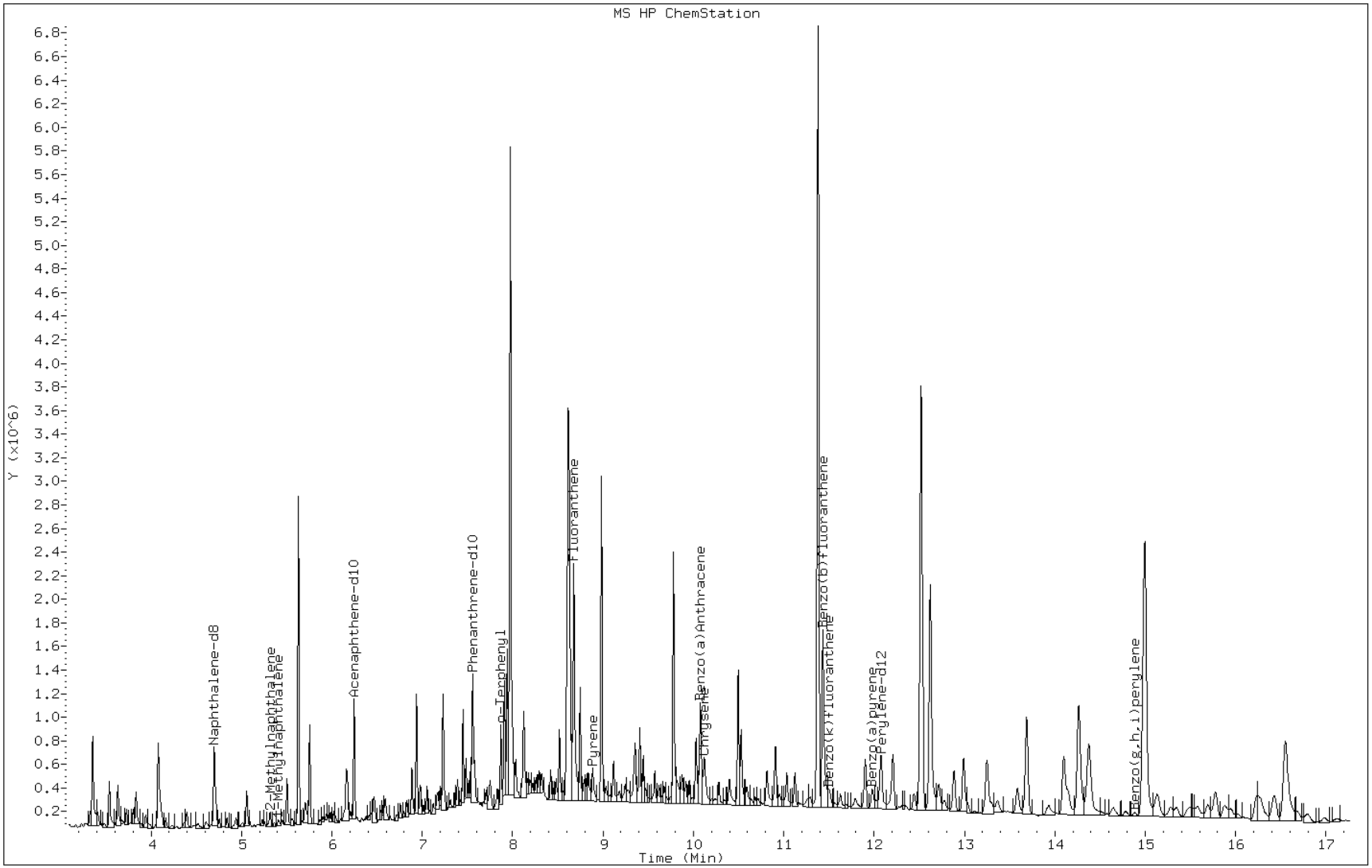
Date: 02-JAN-2013 22:06

Client ID: CV0294C-CS

Instrument: MSY5975.i

Sample Info: 680-85980-A-33-A

Operator: VHB



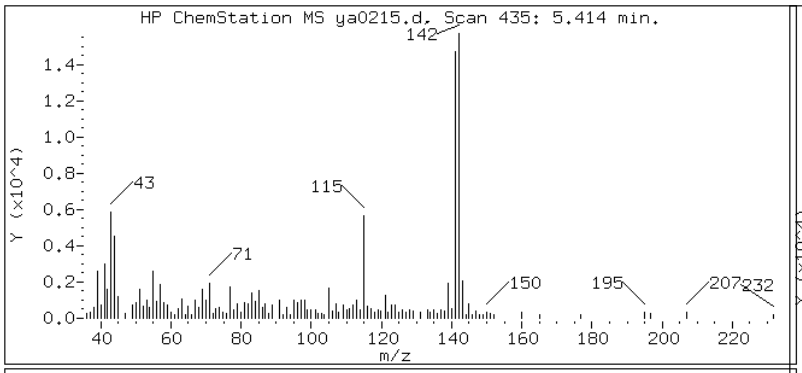
Data File: ya0215.d

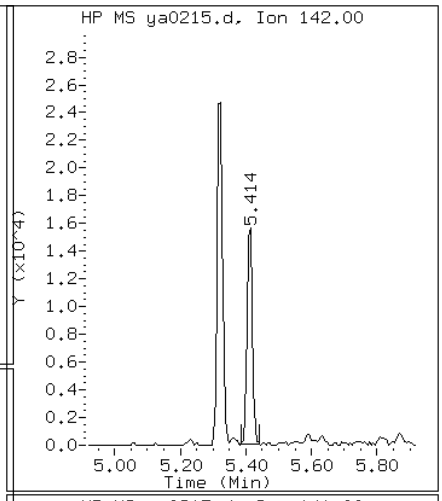
Date: 02-JAN-2013 22:06

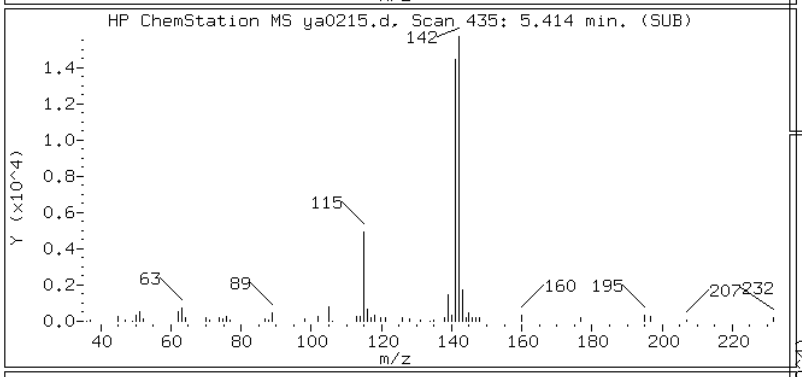
Client ID: CV0294C-CS Instrument: MSY5975.i

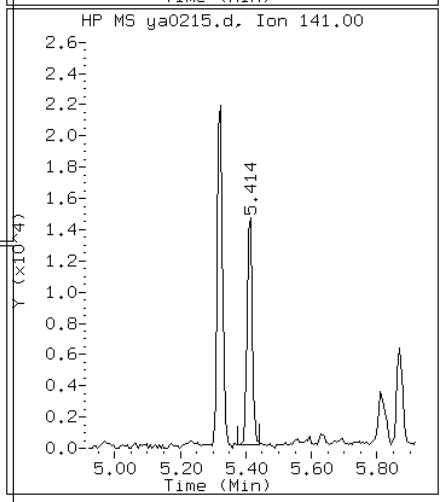
Sample Info: 680-85980-A-33-A Operator: VHB

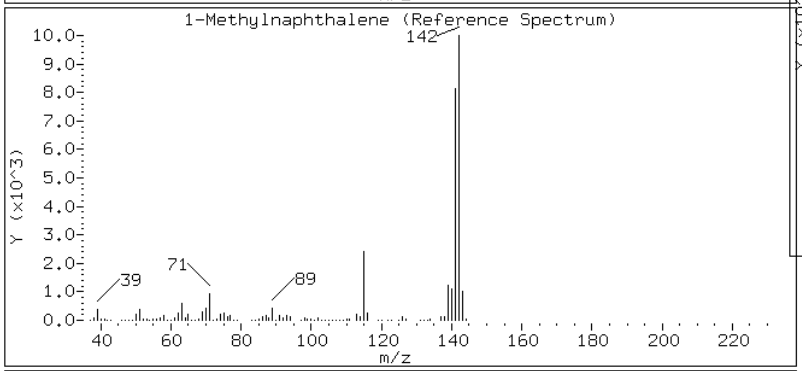
4 1-Methylnaphthalene

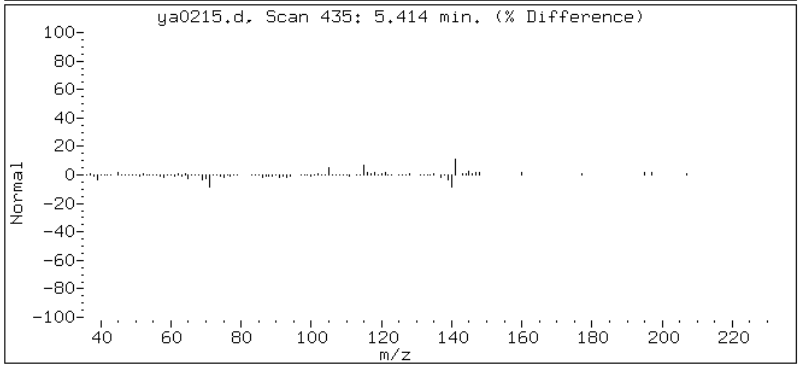












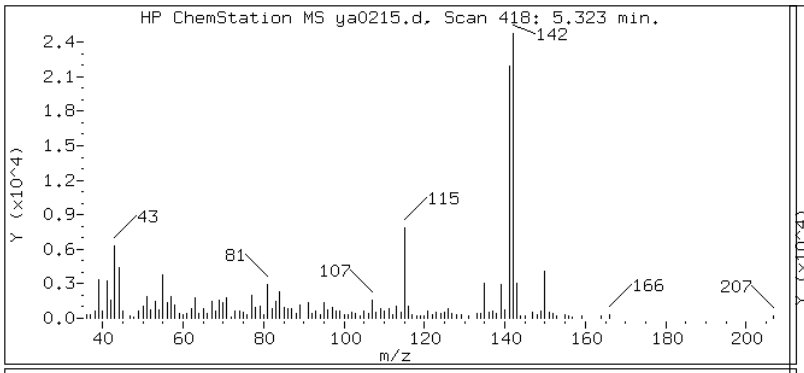
Data File: ya0215.d

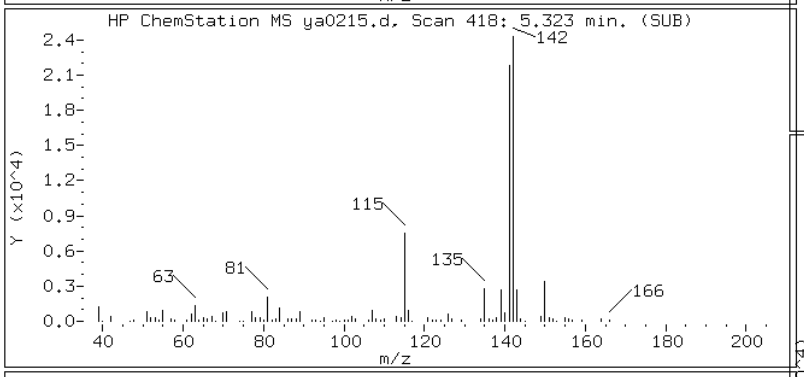
Date: 02-JAN-2013 22:06

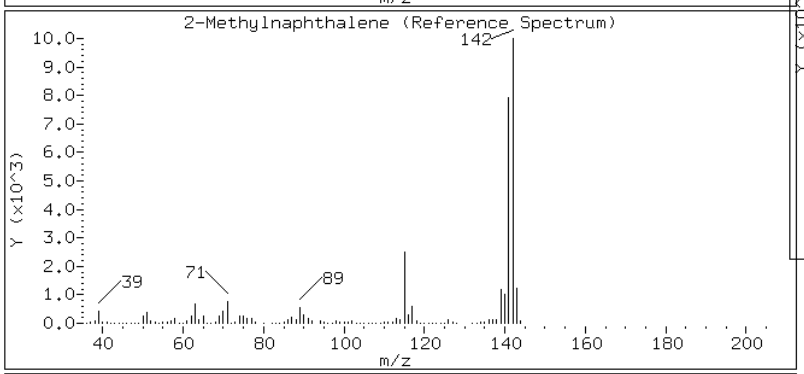
Client ID: CV0294C-CS Instrument: MSY5975.i

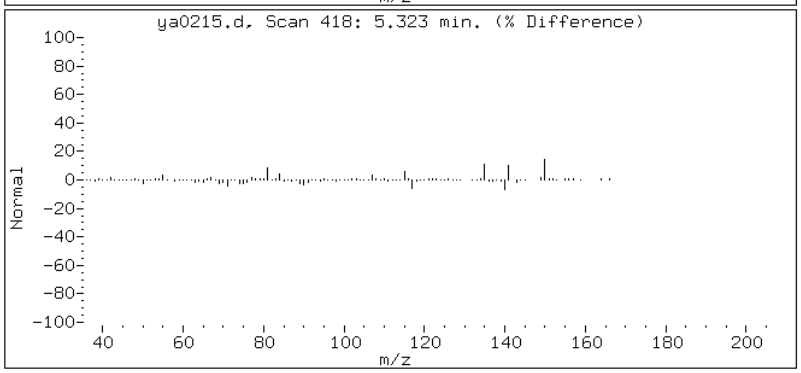
Sample Info: 680-85980-A-33-A Operator: VHB

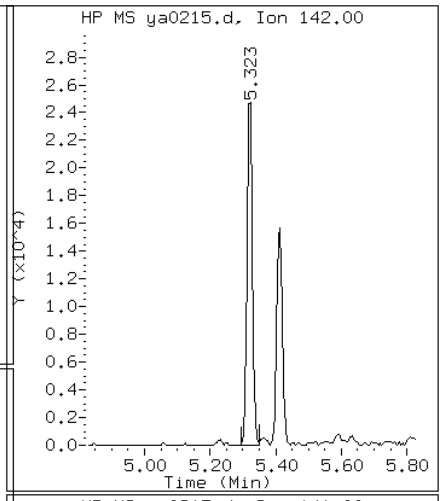
3 2-Methylnaphthalene

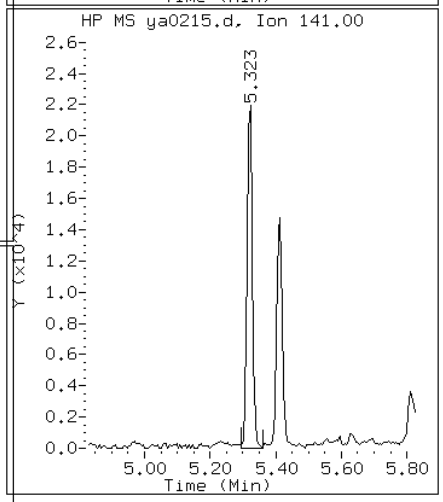












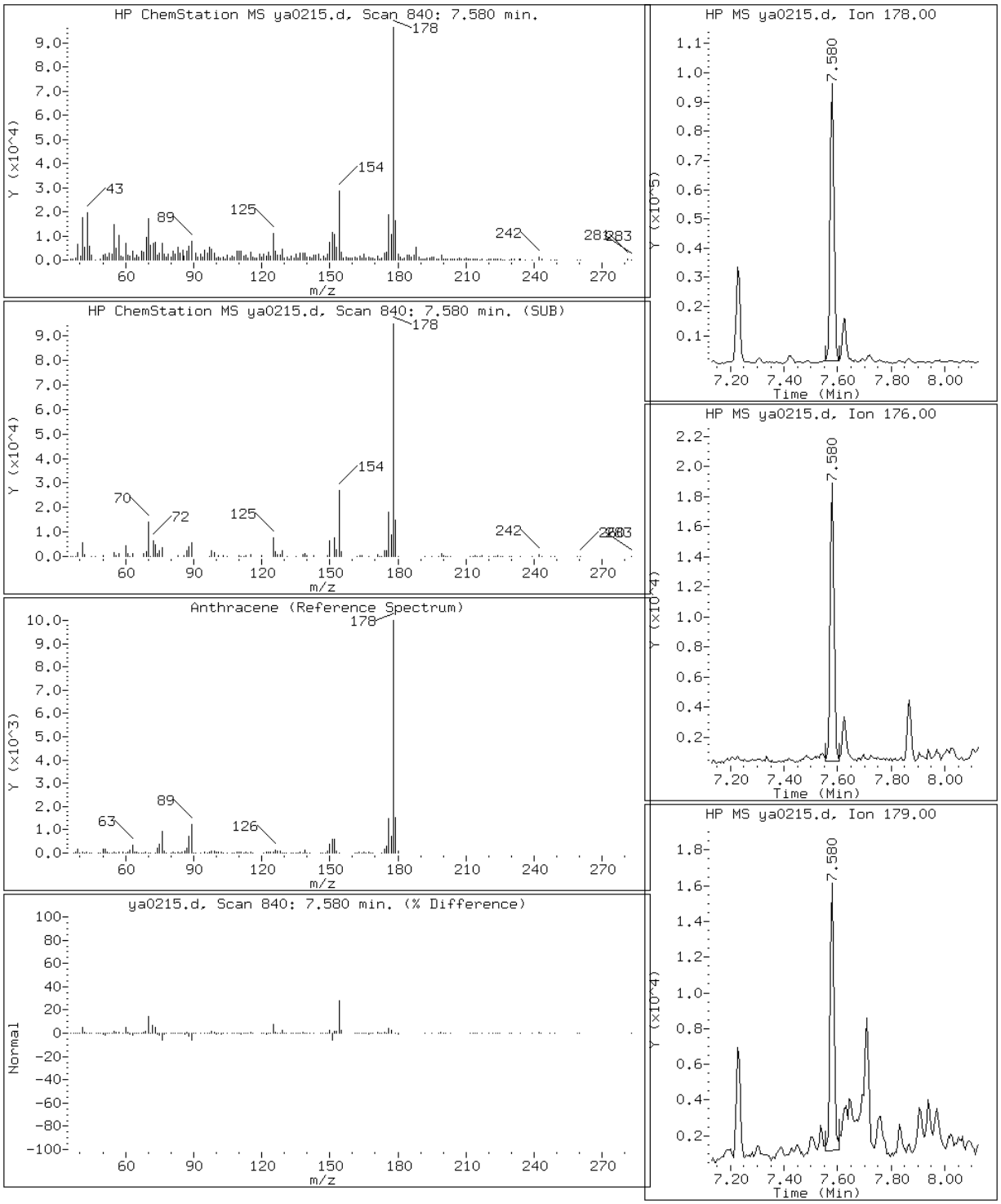
Data File: ya0215.d

Date: 02-JAN-2013 22:06

Client ID: CV0294C-CS | Instrument: MSY5975.i

Sample Info: 680-85980-A-33-A | Operator: VHB

11 Anthracene



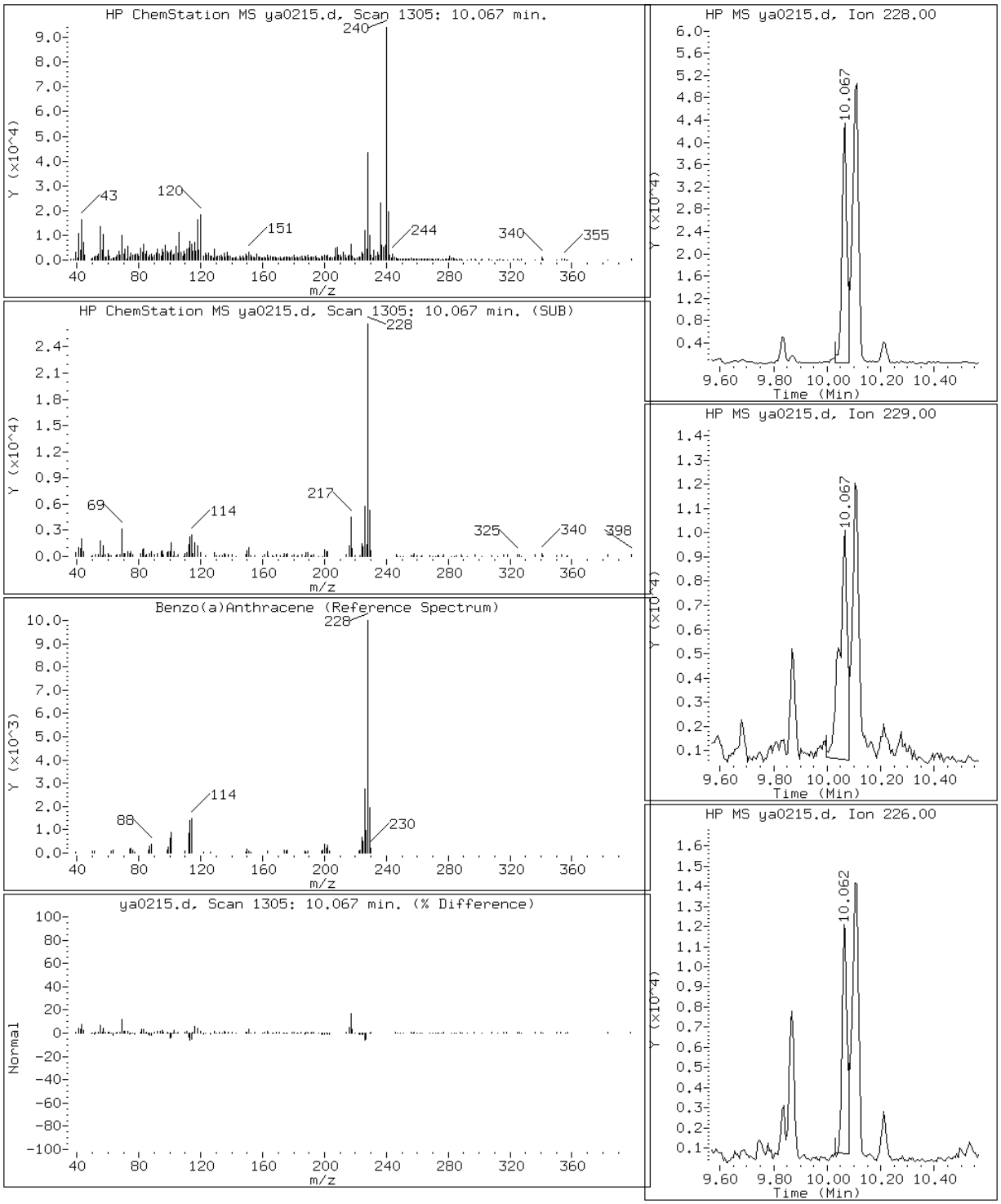
Data File: ya0215.d

Date: 02-JAN-2013 22:06

Client ID: CV0294C-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-33-A Operator: VHB

16 Benzo(a)Anthracene



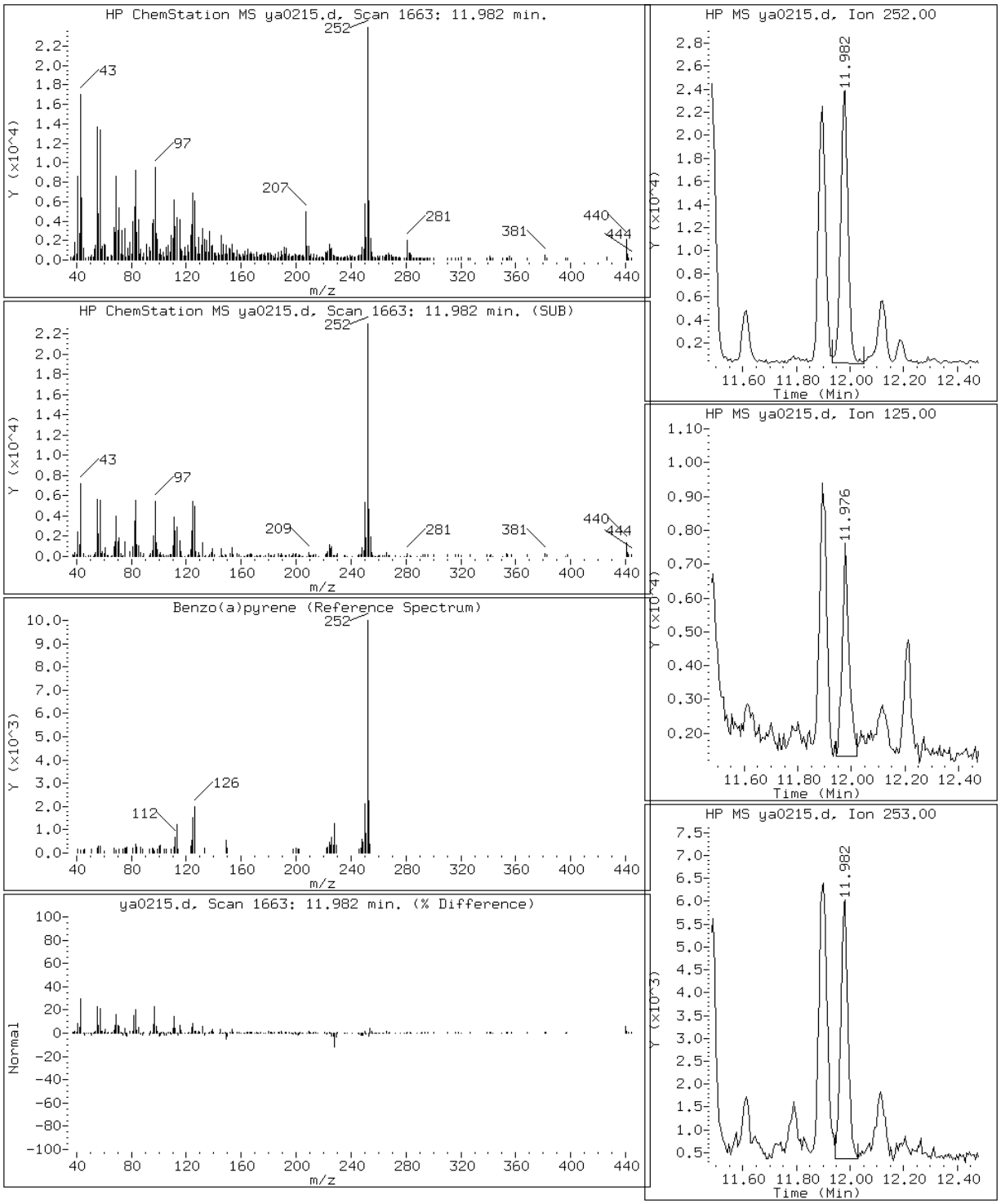
Data File: ya0215.d

Date: 02-JAN-2013 22:06

Client ID: CV0294C-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-33-A Operator: VHB

21 Benzo(a)pyrene



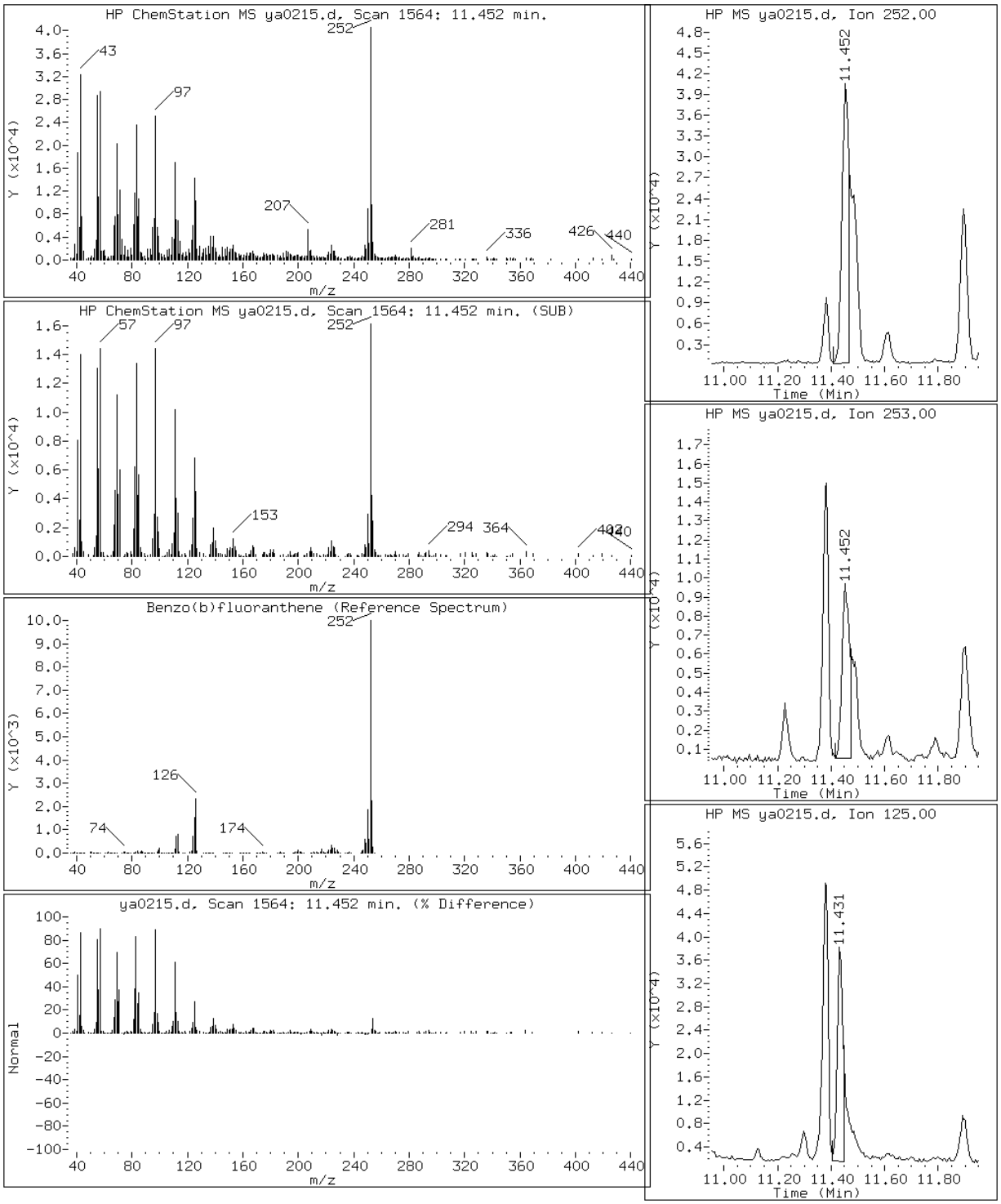
Data File: ya0215.d

Date: 02-JAN-2013 22:06

Client ID: CV0294C-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-33-A Operator: VHB

19 Benzo(b)fluoranthene



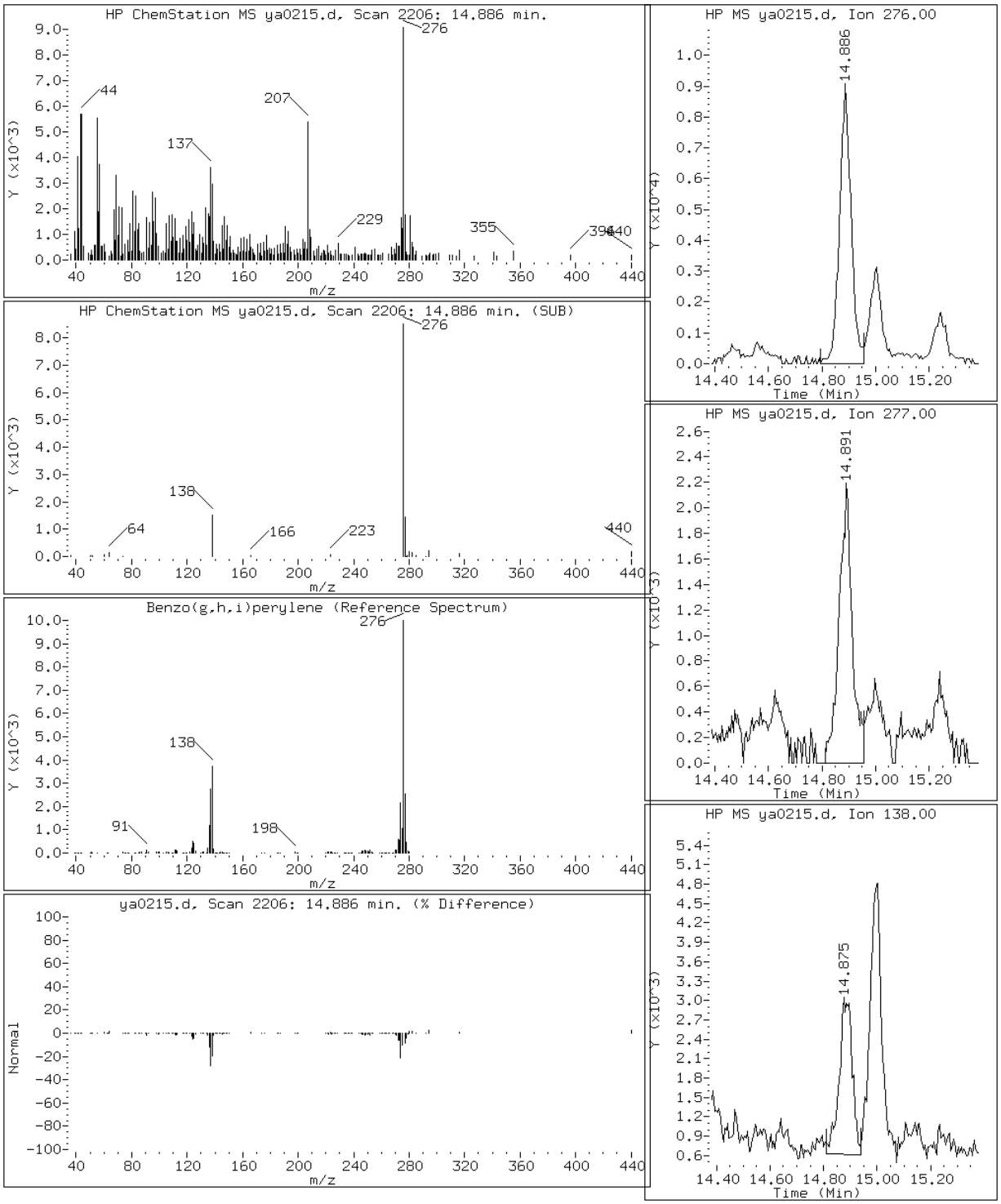
Data File: ya0215.d

Date: 02-JAN-2013 22:06

Client ID: CV0294C-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-33-A Operator: VHB

24 Benzo(g,h,i)perylene



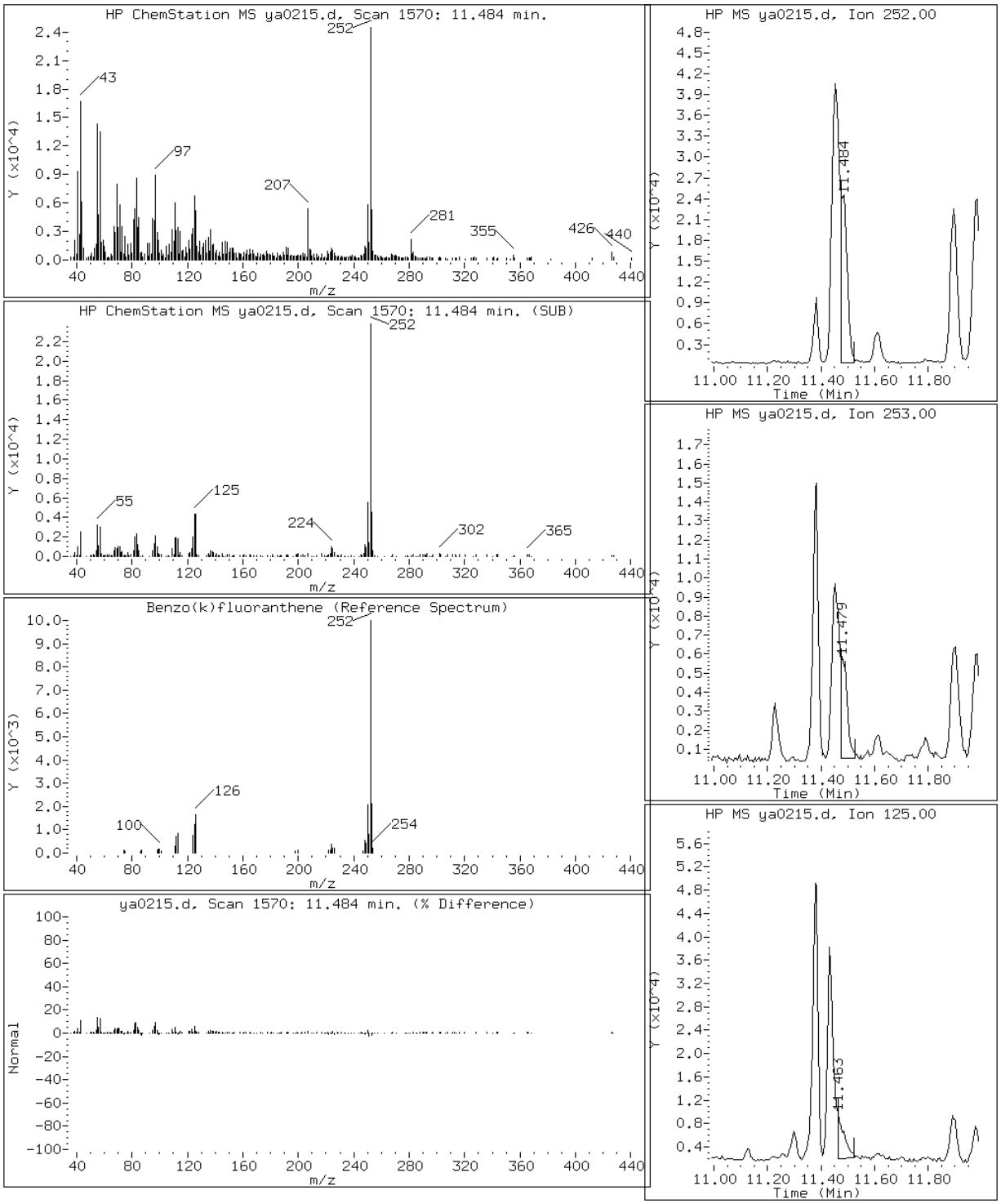
Data File: ya0215.d

Date: 02-JAN-2013 22:06

Client ID: CV0294C-CS | Instrument: MSY5975.i

Sample Info: 680-85980-A-33-A | Operator: VHB

20 Benzo(k)fluoranthene



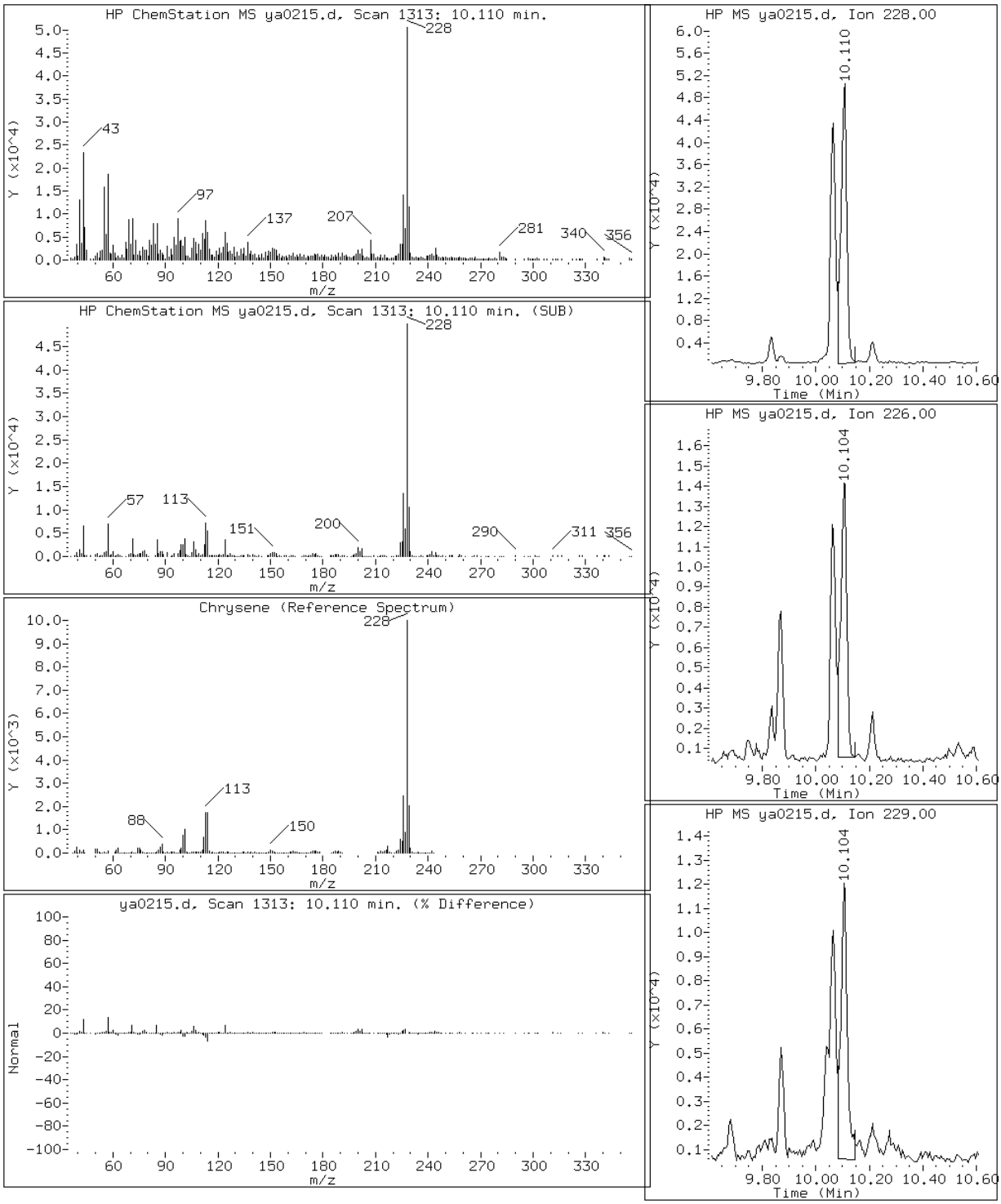
Data File: ya0215.d

Date: 02-JAN-2013 22:06

Client ID: CV0294C-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-33-A Operator: VHB

17 Chrysene



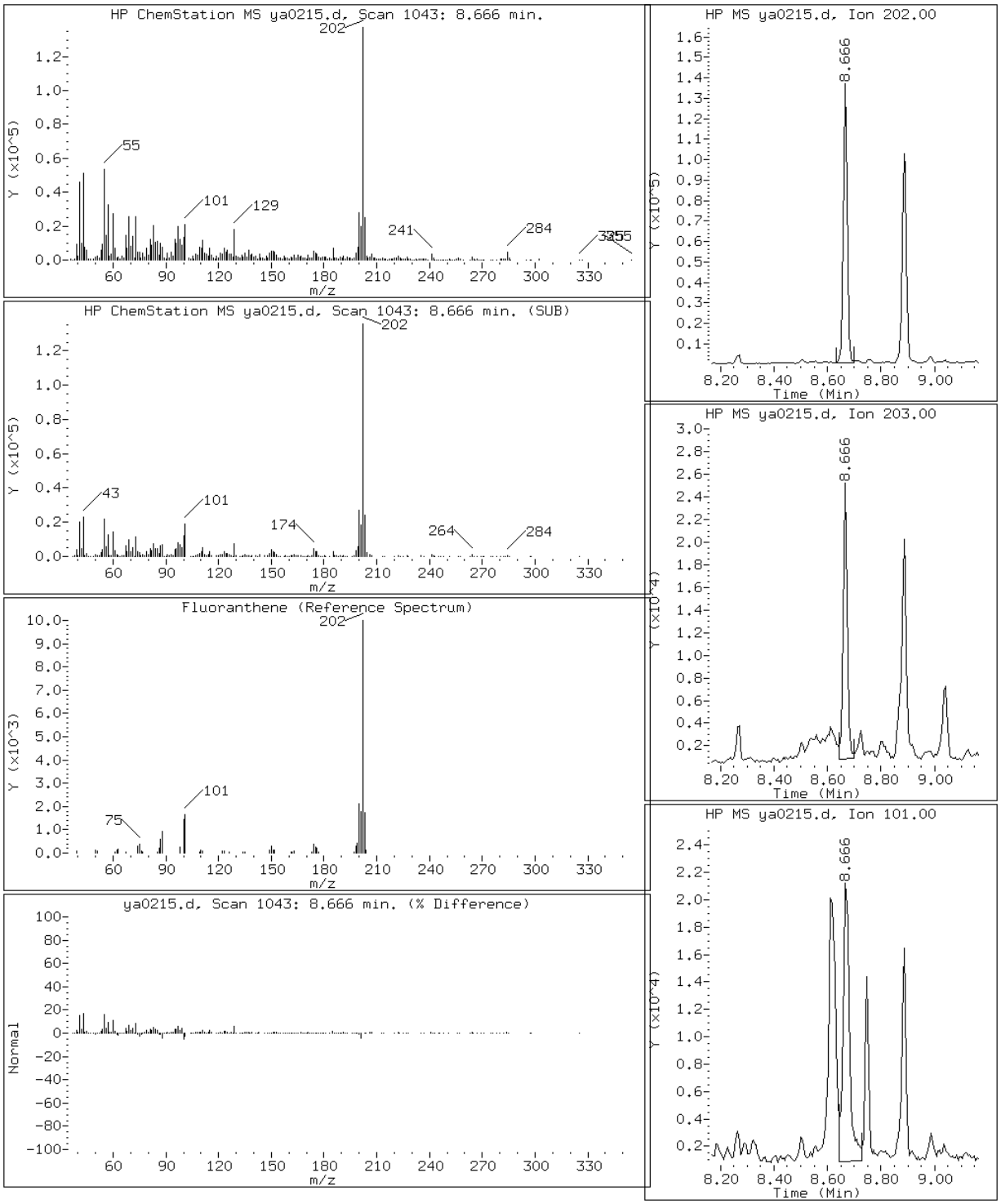
Data File: ya0215.d

Date: 02-JAN-2013 22:06

Client ID: CV0294C-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-33-A Operator: VHB

12 Fluoranthene



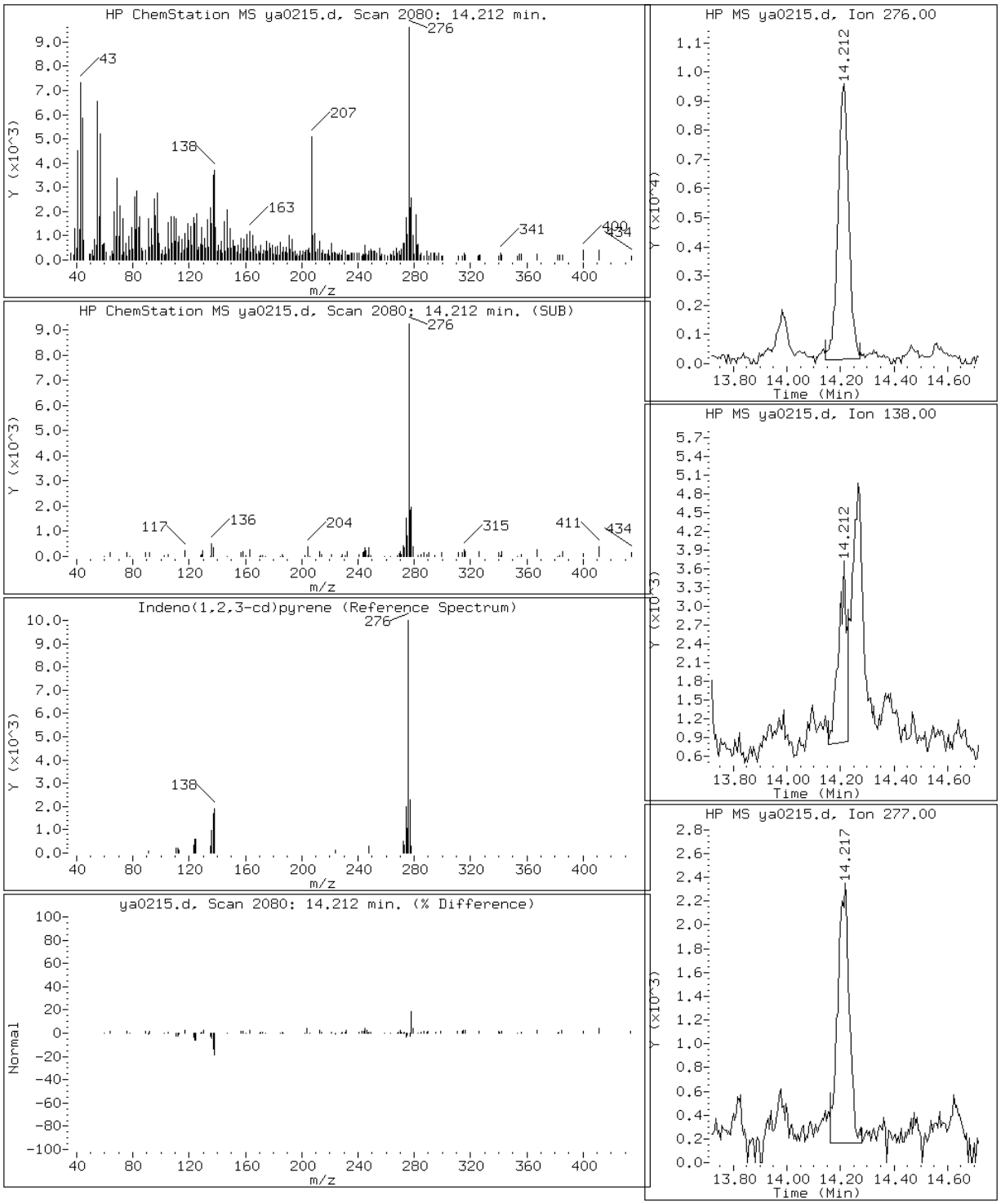
Data File: ya0215.d

Date: 02-JAN-2013 22:06

Client ID: CV0294C-CS | Instrument: MSY5975.i

Sample Info: 680-85980-A-33-A | Operator: VHB

22 Indeno(1,2,3-cd)pyrene



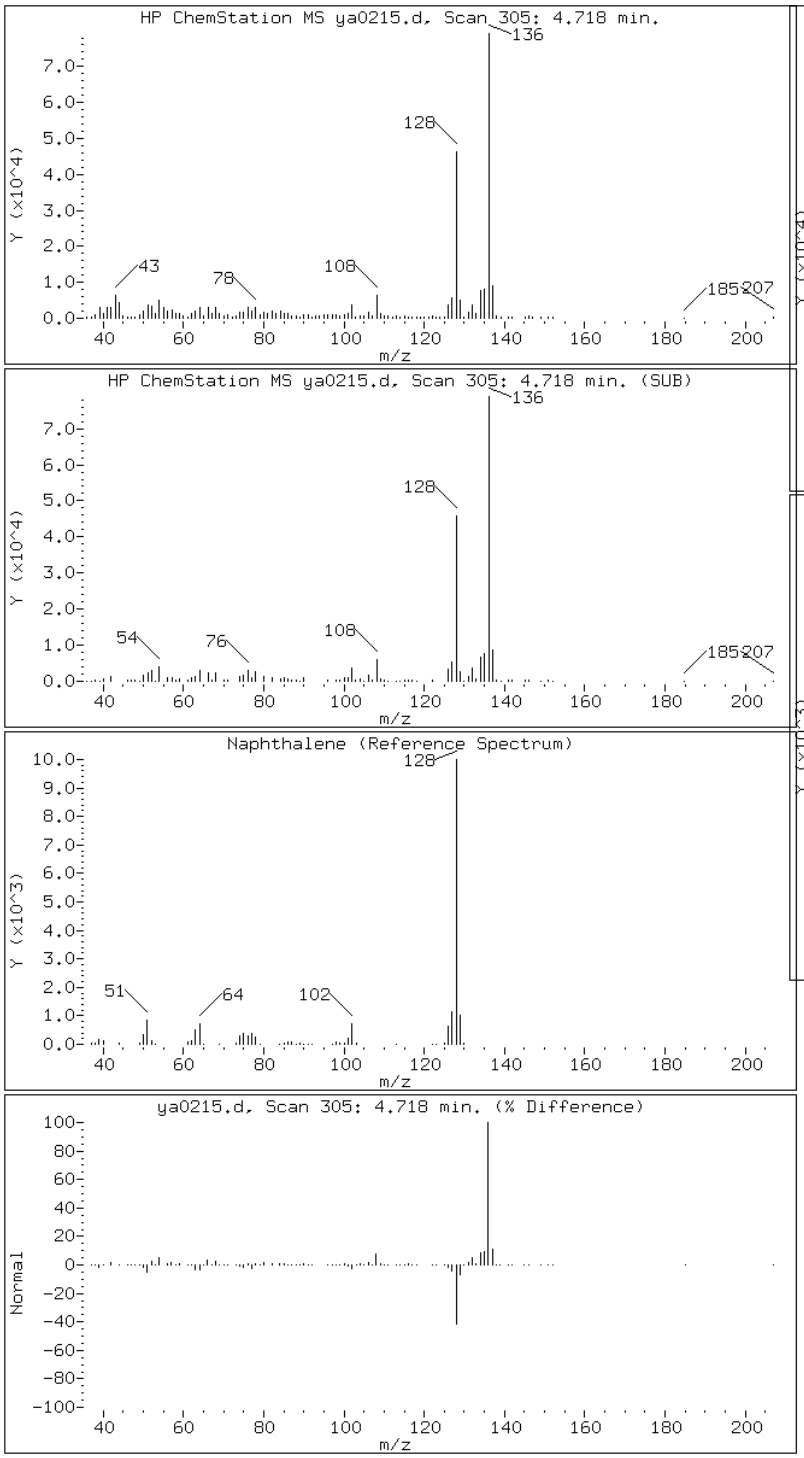
Data File: ya0215.d

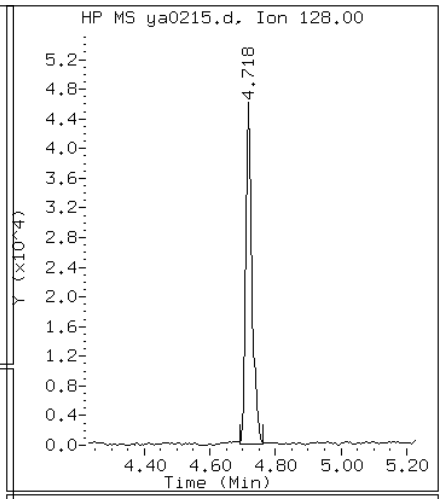
Date: 02-JAN-2013 22:06

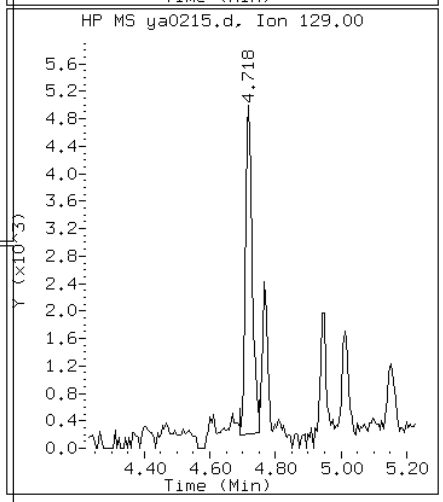
Client ID: CV0294C-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-33-A Operator: VHB

2 Naphthalene







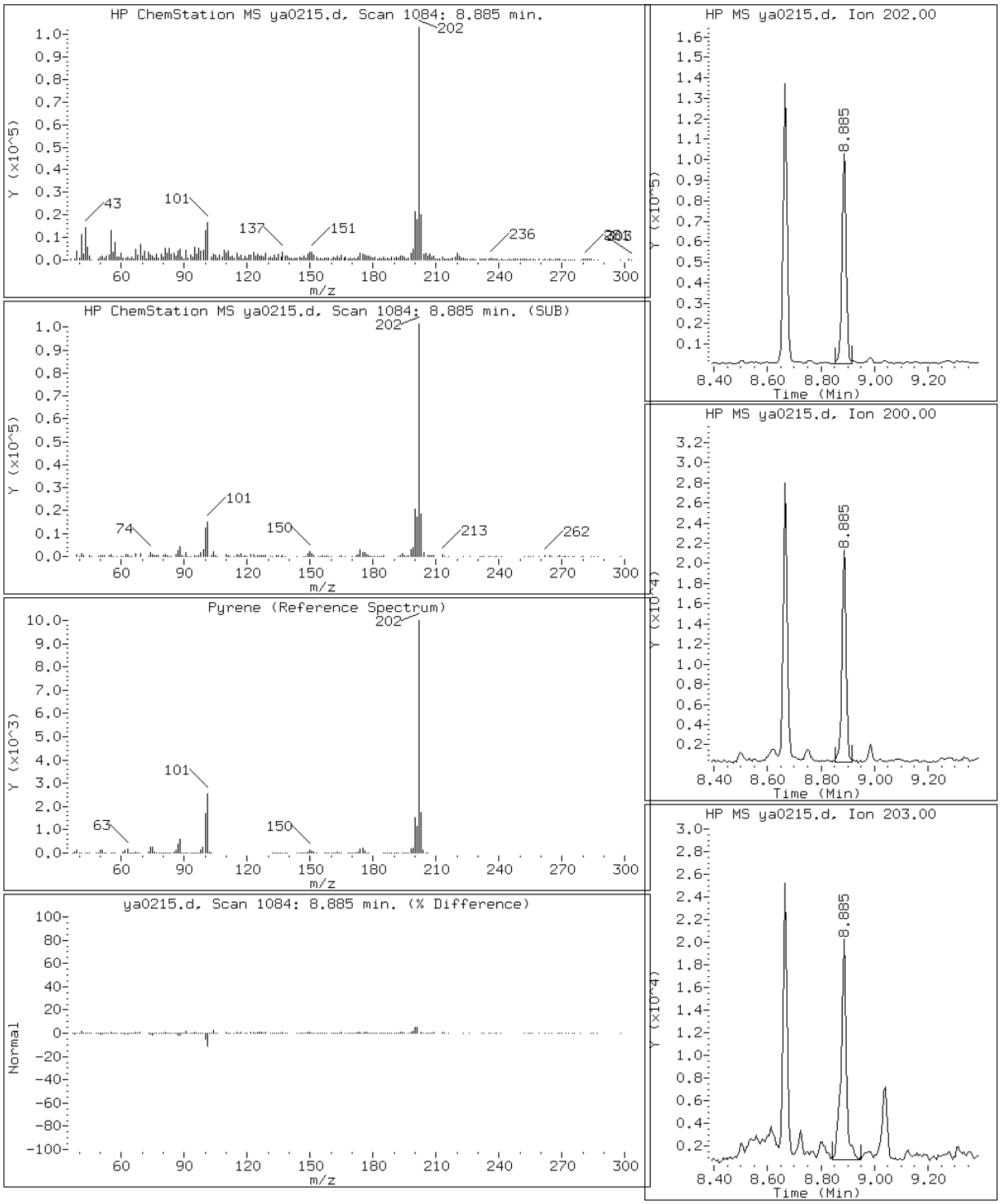
Data File: ya0215.d

Date: 02-JAN-2013 22:06

Client ID: CV0294C-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-33-A Operator: VHB

14 Pyrene



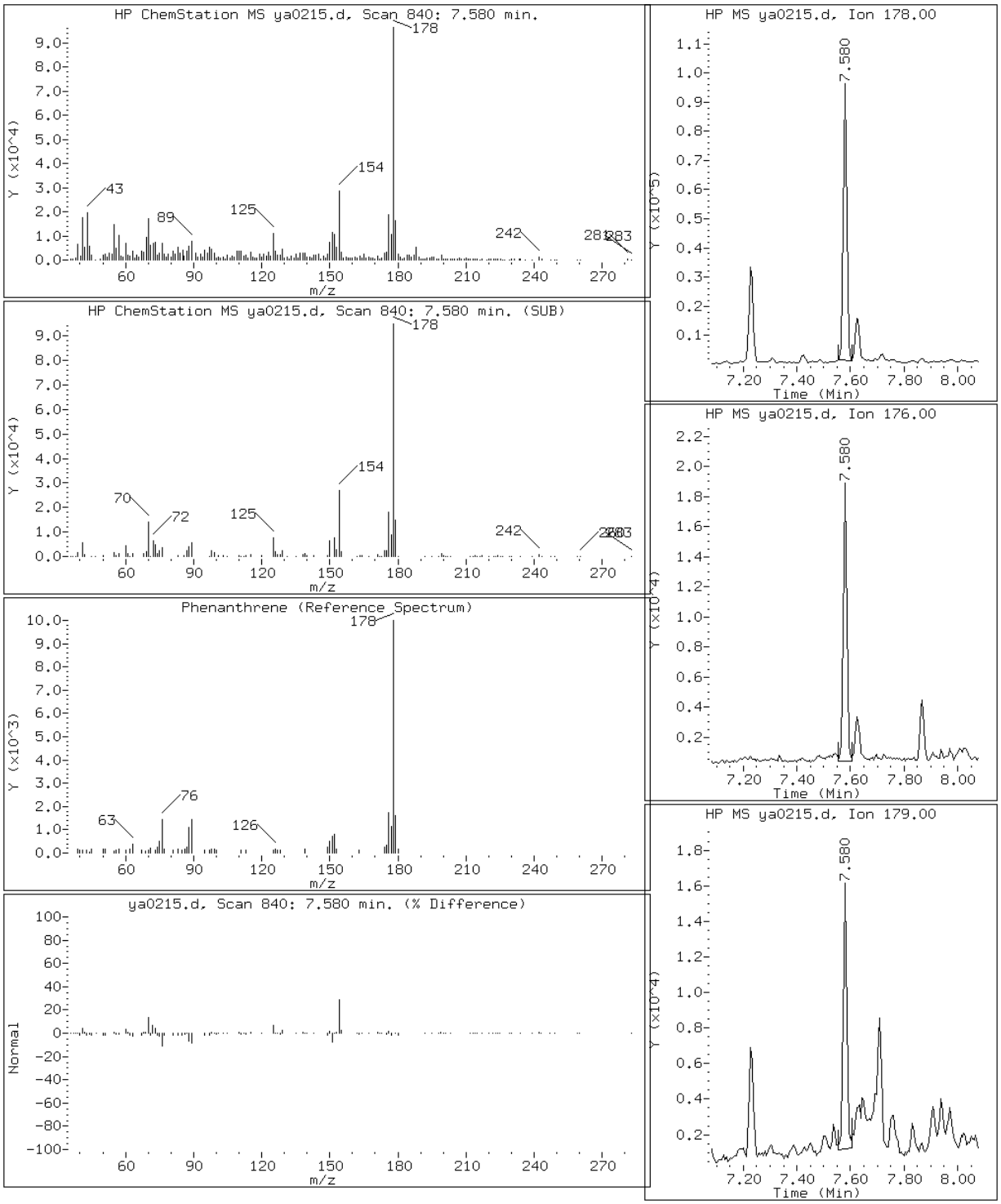
Data File: ya0215.d

Date: 02-JAN-2013 22:06

Client ID: CV0294C-CS Instrument: MSY5975.i

Sample Info: 680-85980-A-33-A Operator: VHB

10 Phenanthrene



Manual Integration Report

Data File: ya0215.d
Inj. Date and Time: 02-JAN-2013 22:06
Instrument ID: MSY5975.i
Client ID: CV0294C-CS
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 01/03/2013

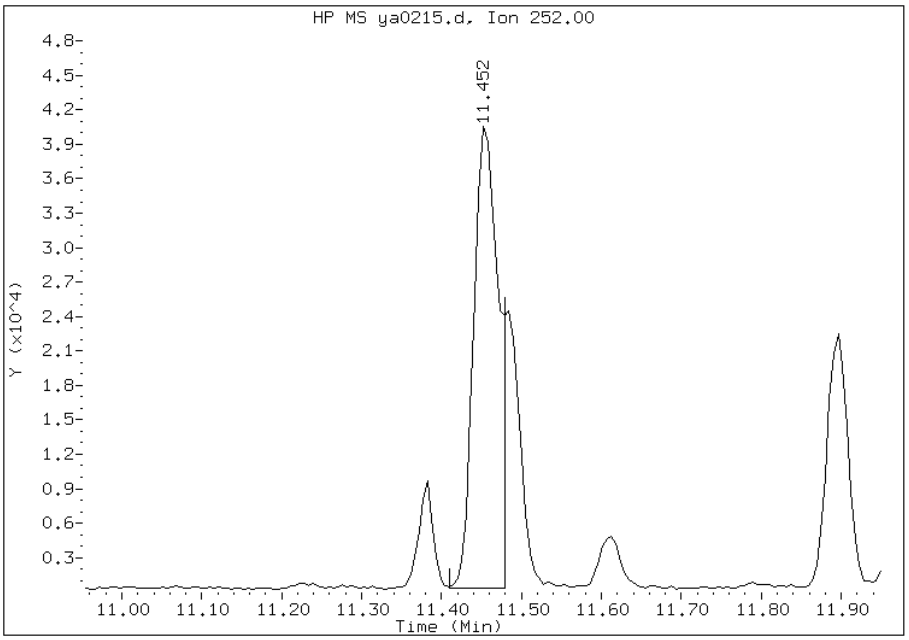
Processing Integration Results

RT: 11.45

Response: 88085

Amount: 0

Conc: 19



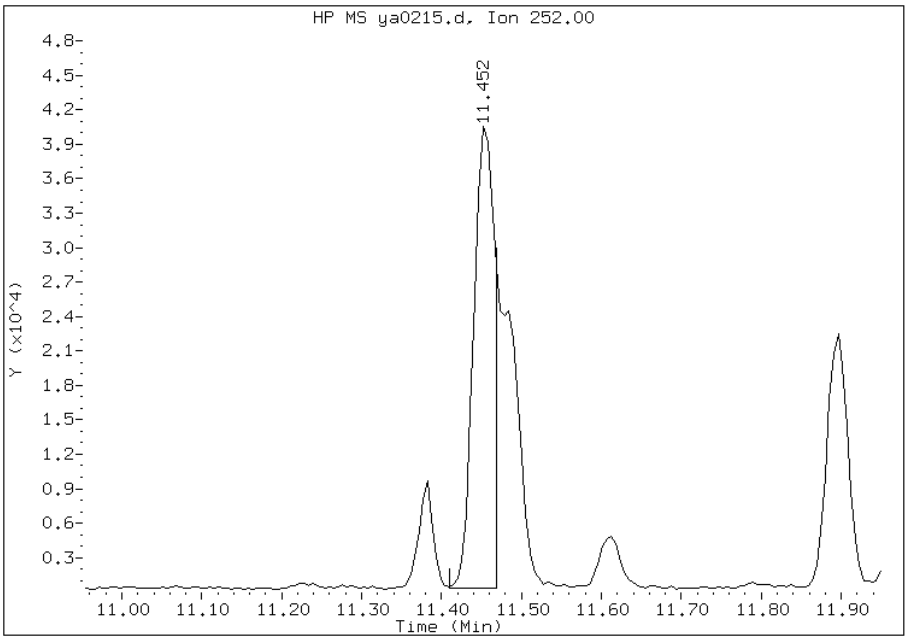
Manual Integration Results

RT: 11.45

Response: 72719

Amount: 0

Conc: 16



Manually Integrated By: chemist
Manual Integration Reason:

Manual Integration Report

Data File: ya0215.d
Inj. Date and Time: 02-JAN-2013 22:06
Instrument ID: MSY5975.i
Client ID: CV0294C-CS
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 01/03/2013

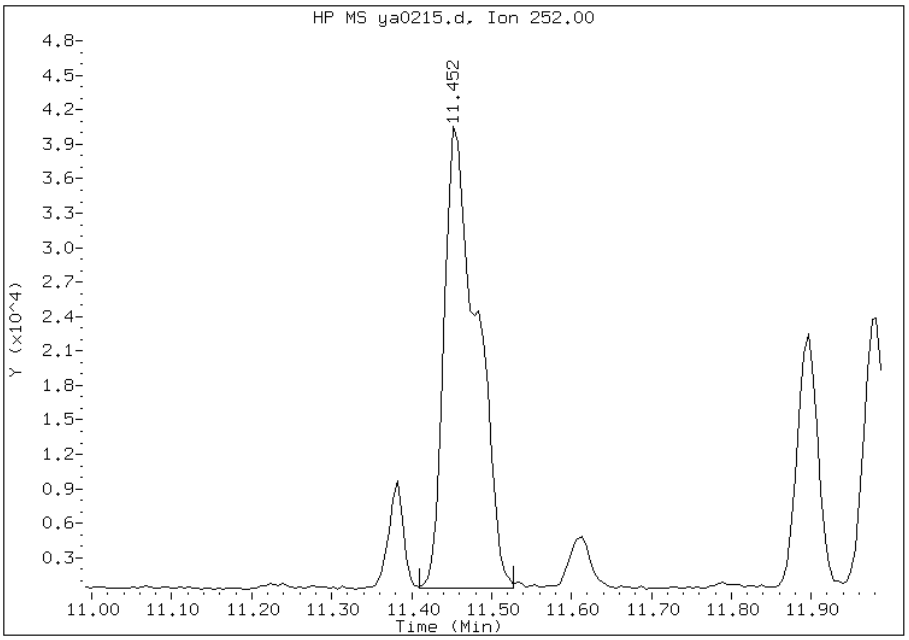
Processing Integration Results

RT: 11.45

Response: 115674

Amount: 1

Conc: 26



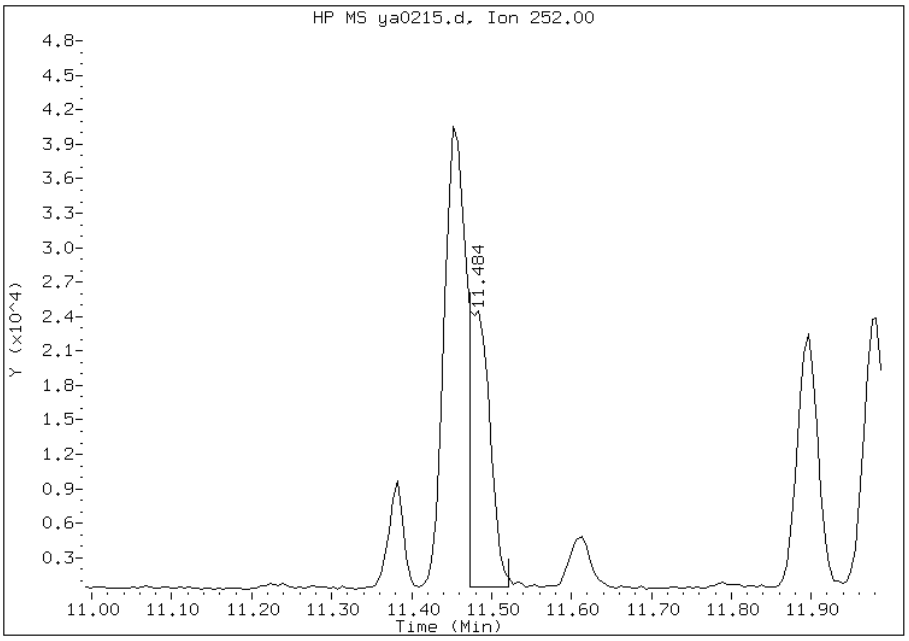
Manual Integration Results

RT: 11.48

Response: 42791

Amount: 0

Conc: 10



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: FM0016A-CS | Lab Sample ID: 680-85980-37

Matrix: Solid | Lab File ID: ka0227.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/19/2012 08:40

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.02(g) | Date Analyzed: 01/02/2013 19:16

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

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

% Moisture: 29.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	90	J	95	44
91-57-6	2-Methylnaphthalene	150		95	47
83-32-9	Acenaphthene	95	U	95	47
208-96-8	Acenaphthylene	95	U	95	47
120-12-7	Anthracene	95	U	95	47
56-55-3	Benzo[a]anthracene	120		95	47
50-32-8	Benzo[a]pyrene	110		95	17
205-99-2	Benzo[b]fluoranthene	190		95	47
191-24-2	Benzo[g,h,i]perylene	66	J	95	47
207-08-9	Benzo[k]fluoranthene	83	J	95	28
218-01-9	Chrysene	200		95	47
53-70-3	Dibenz(a,h)anthracene	95	U	95	47
206-44-0	Fluoranthene	240		95	47
86-73-7	Fluorene	95	U	95	47
193-39-5	Indeno[1,2,3-cd]pyrene	95	U	95	47
91-20-3	Naphthalene	120		95	47
129-00-0	Pyrene	210		95	47
85-01-8	Phenanthrene	210		95	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0227.d
Lab Smp Id: 680-85980-A-37-A DL
Inj Date : 02-JAN-2013 19:16
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85980-A-37-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:58 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:24 Cal File: ka0212q.d
Als bottle: 23
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.501	4.501	(1.000)	501600	2.00000	
2 Naphthalene	128	4.524	4.524	(1.005)	74874	0.25333	84.44
3 2-Methylnaphthalene	142	5.194	5.194	(1.154)	58761	0.31987	106.62
4 1-Methylnaphthalene	142	5.300	5.300	(1.178)	35271	0.18940	63.13(a)
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	289014	2.00000	
* 9 Phenanthrene-d10	188	7.909	7.903	(1.000)	455702	2.00000	
10 Phenanthrene	178	7.932	7.932	(1.003)	130258	0.45291	150.96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
12 Fluoranthene	202	9.225	9.219	(1.166)	146290	0.50489	168.29
14 Pyrene	202	9.466	9.460	(0.882)	114654	0.44761	149.20
16 Benzo(a)Anthracene	228	10.717	10.717	(0.999)	48267	0.24533	81.77
* 13 Chrysene-d12	240	10.729	10.729	(1.000)	300515	2.00000	
17 Chrysene	228	10.752	10.758	(1.002)	83641	0.43210	144.03
19 Benzo(b)fluoranthene	252	11.875	11.875	(0.961)	60425	0.39614	132.04(M)
20 Benzo(k)fluoranthene	252	11.892	11.904	(0.962)	25840	0.17502	58.34(aM)
21 Benzo(a)pyrene	252	12.280	12.280	(0.994)	27831	0.23865	79.55
* 18 Perylene-d12	264	12.356	12.356	(1.000)	205249	2.00000	
24 Benzo(g,h,i)perylene	276	14.460	14.460	(1.170)	14554	0.13987	46.62(a)

QC Flag Legend

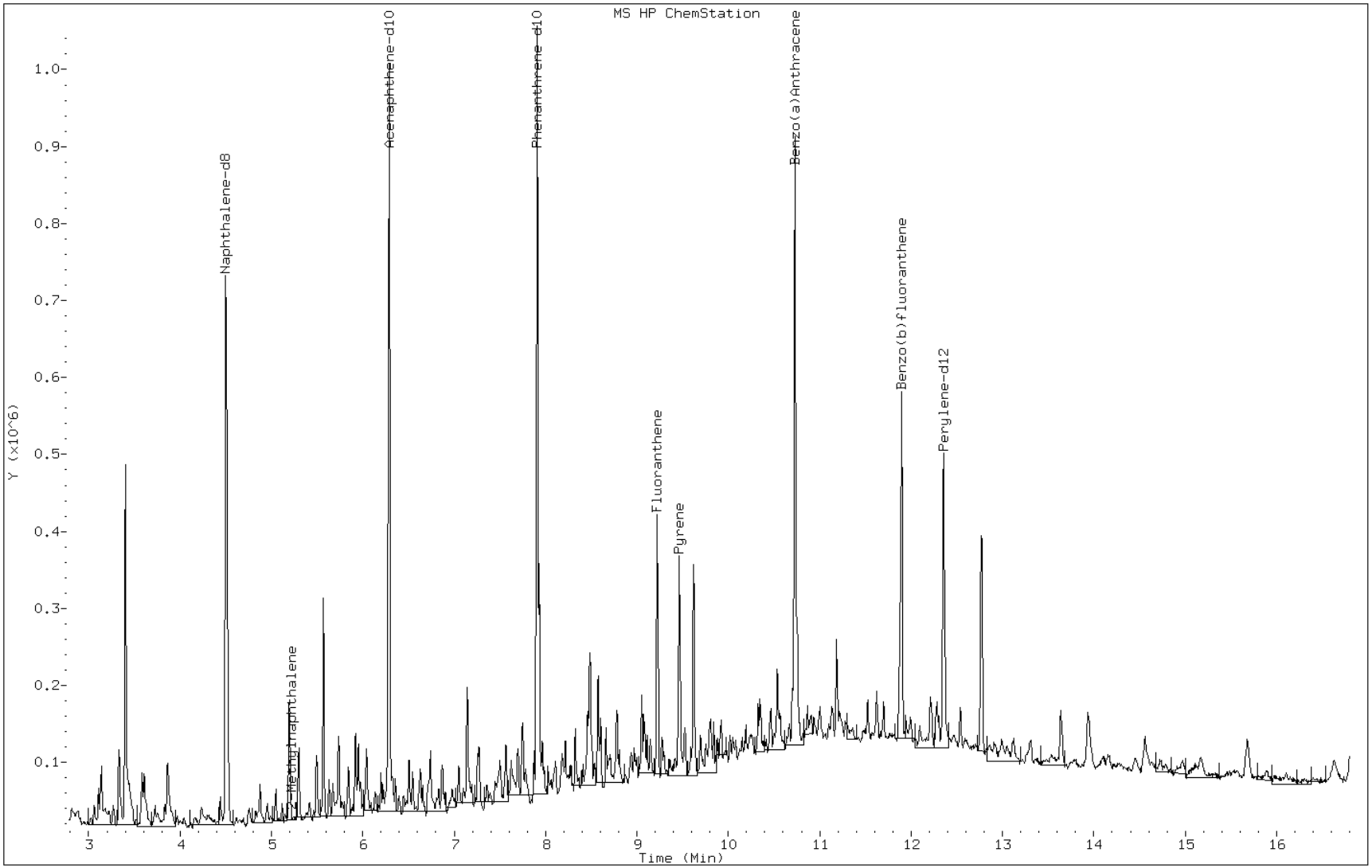
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: ka0227.d

Date: 02-JAN-2013 19:16

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-37-A DL=10 Operator: LEG



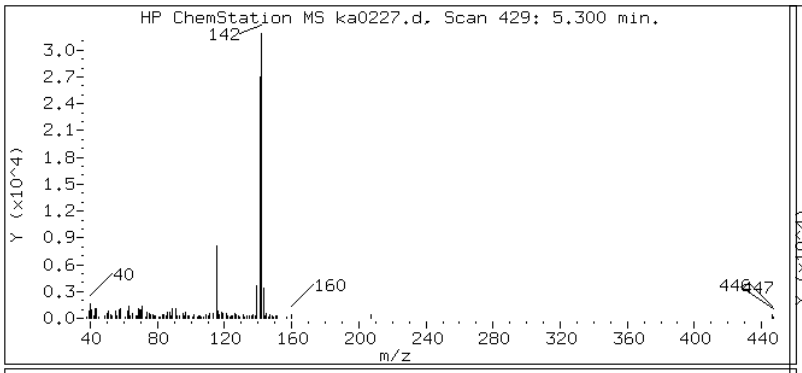
Data File: ka0227.d

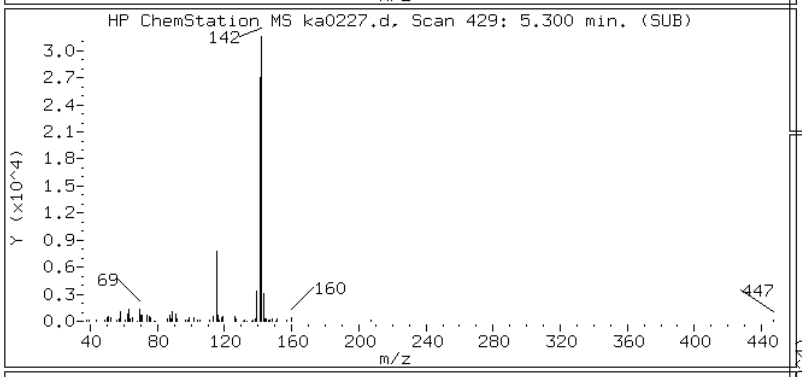
Date: 02-JAN-2013 19:16

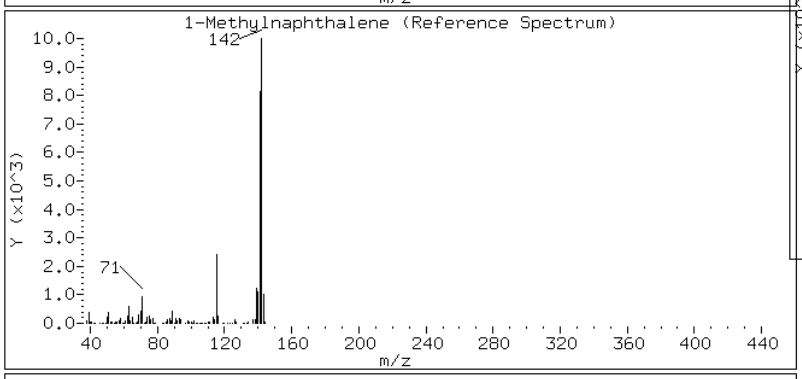
Client ID: Instrument: MSK5973.i

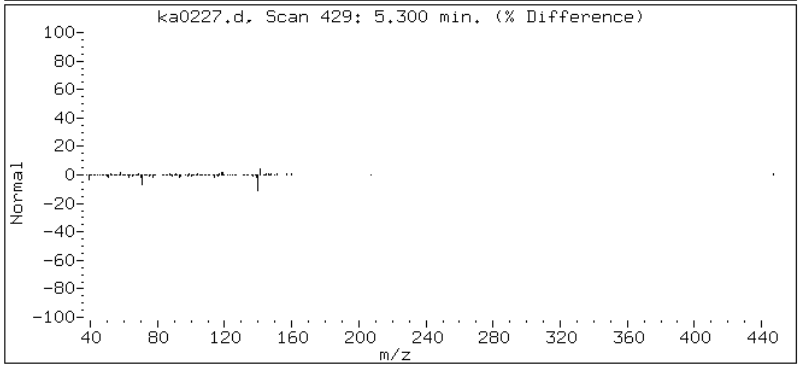
Sample Info: 680-85980-A-37-A DL=10 Operator: LEG

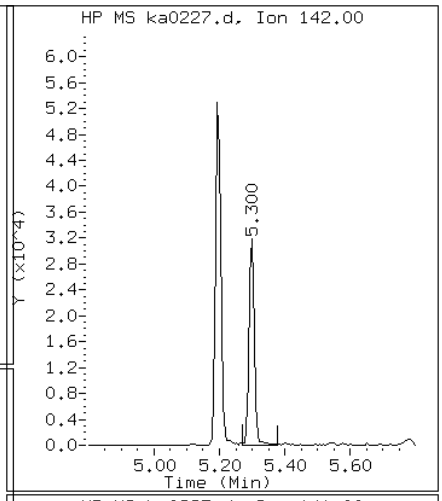
4 1-Methylnaphthalene

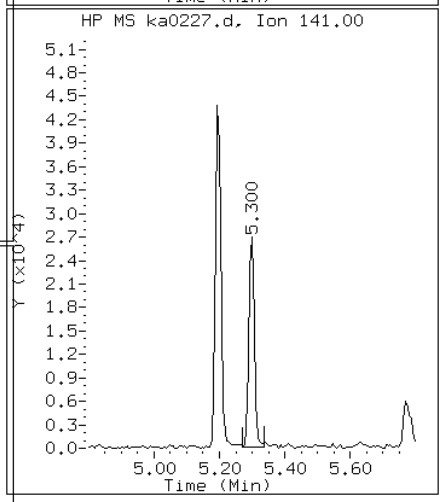












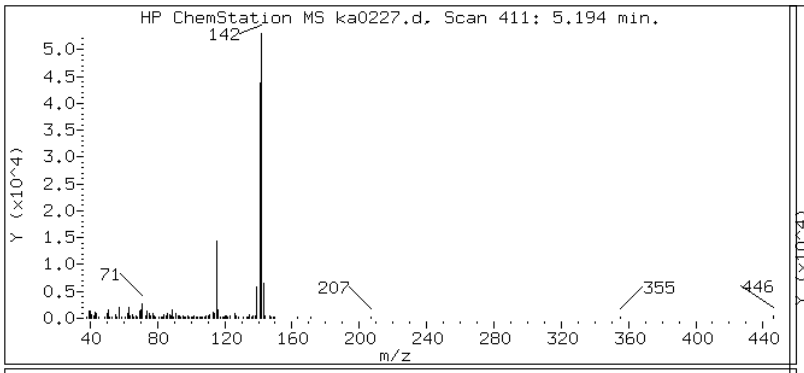
Data File: ka0227.d

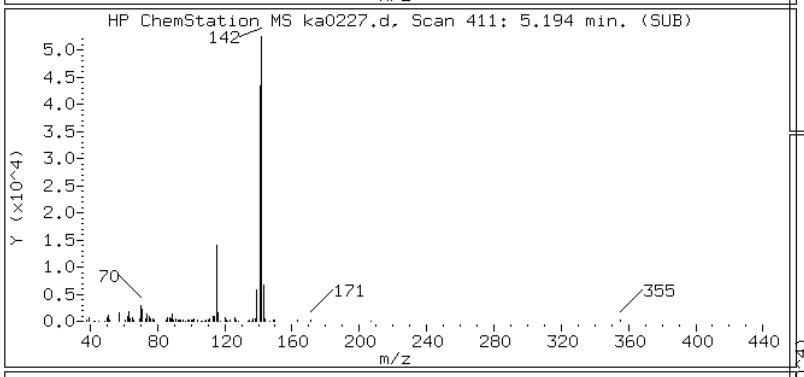
Date: 02-JAN-2013 19:16

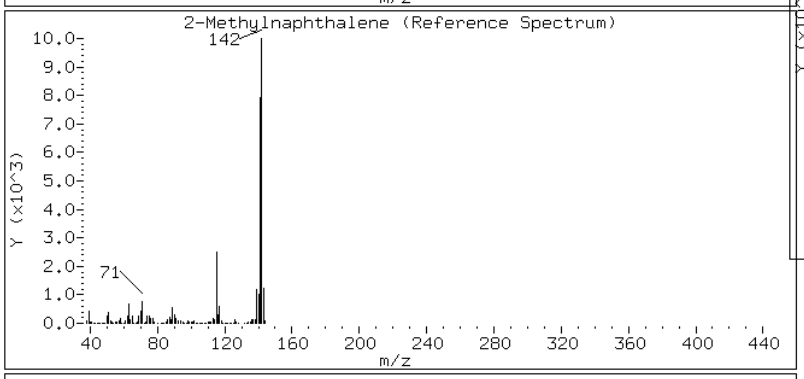
Client ID: Instrument: MSK5973.i

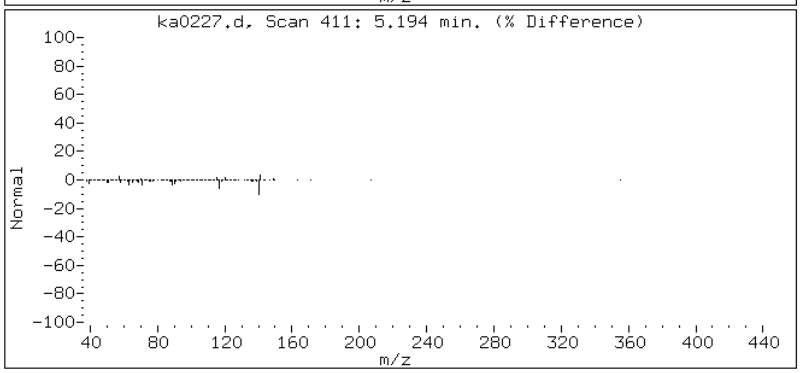
Sample Info: 680-85980-A-37-A DL=10 Operator: LEG

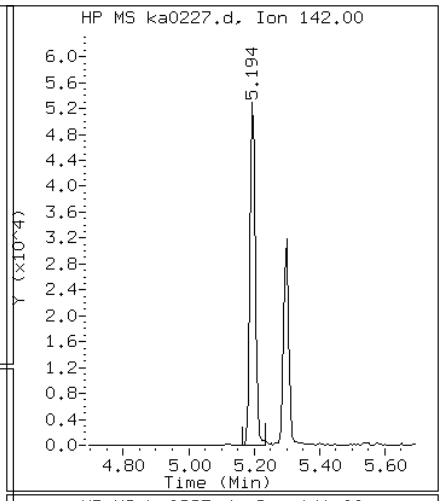
3 2-Methylnaphthalene

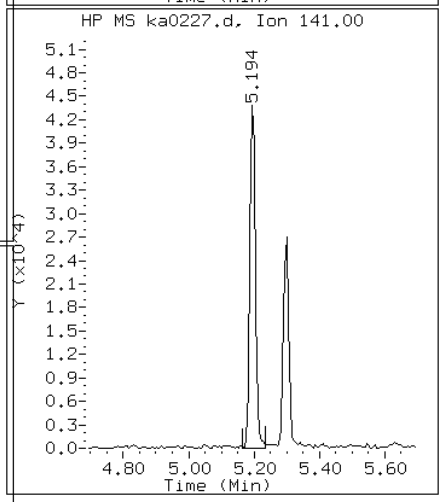












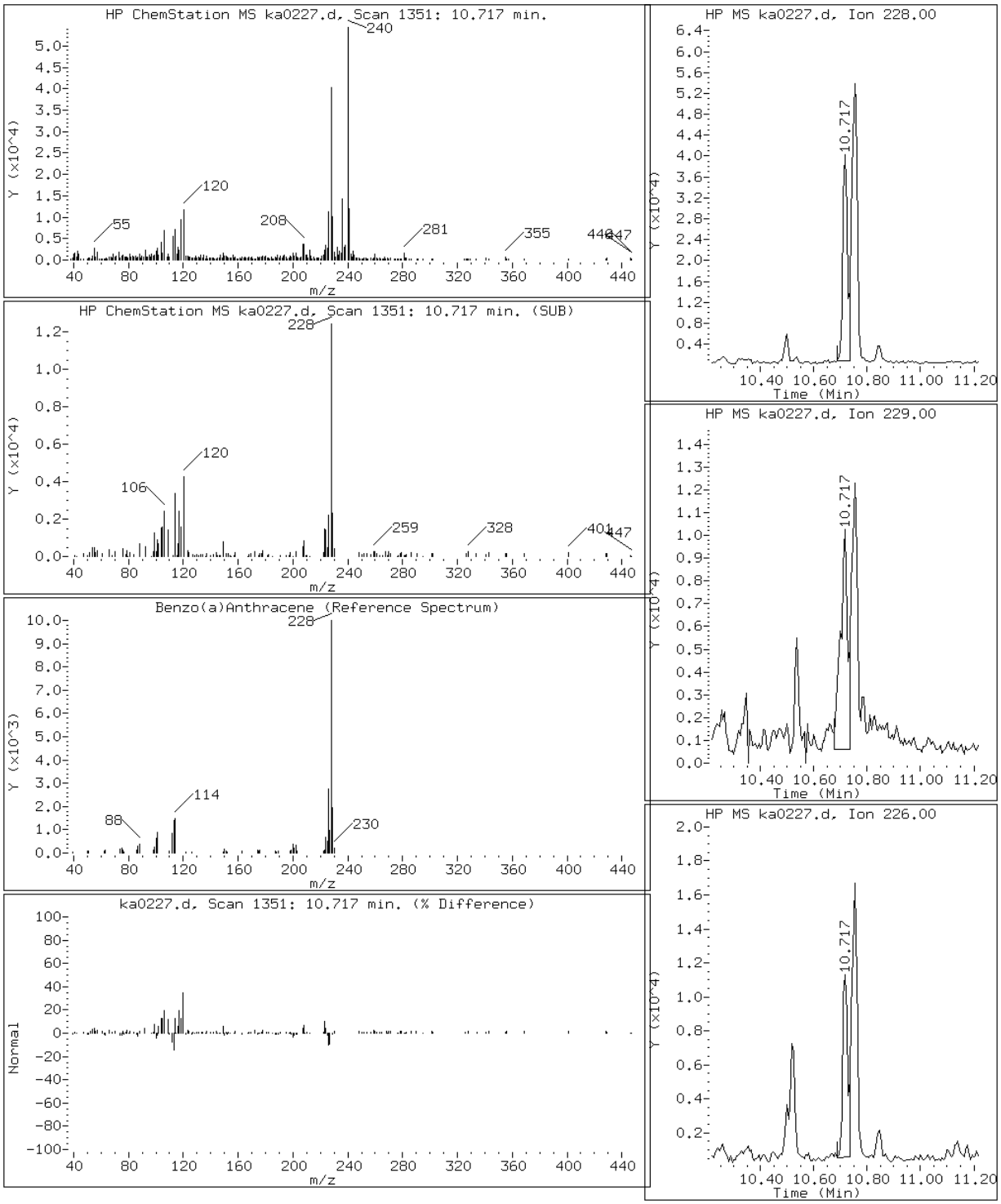
Data File: ka0227.d

Date: 02-JAN-2013 19:16

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-37-A DL=10 Operator: LEG

16 Benzo(a)Anthracene



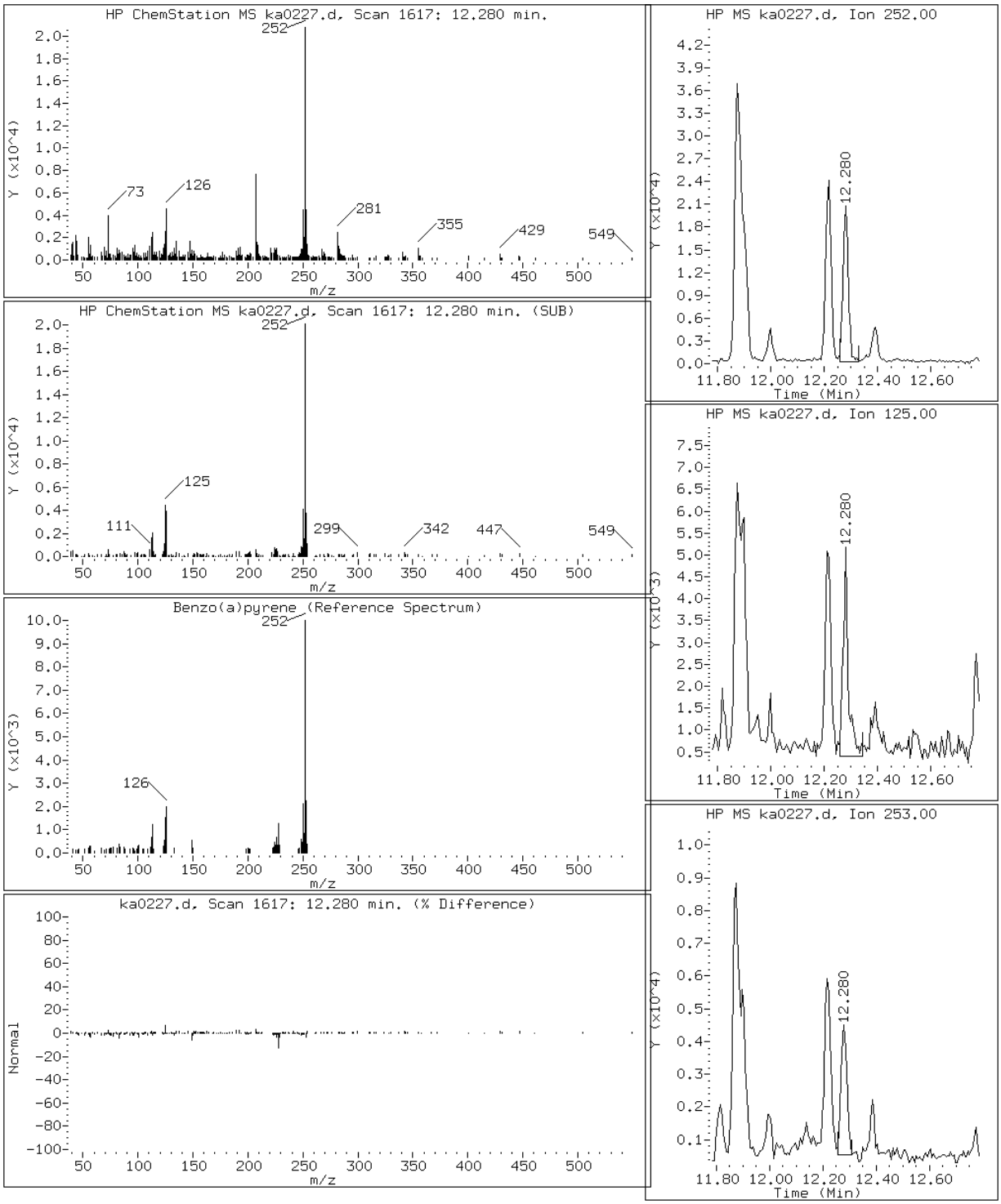
Data File: ka0227.d

Date: 02-JAN-2013 19:16

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-37-A DL=10 Operator: LEG

21 Benzo(a)pyrene



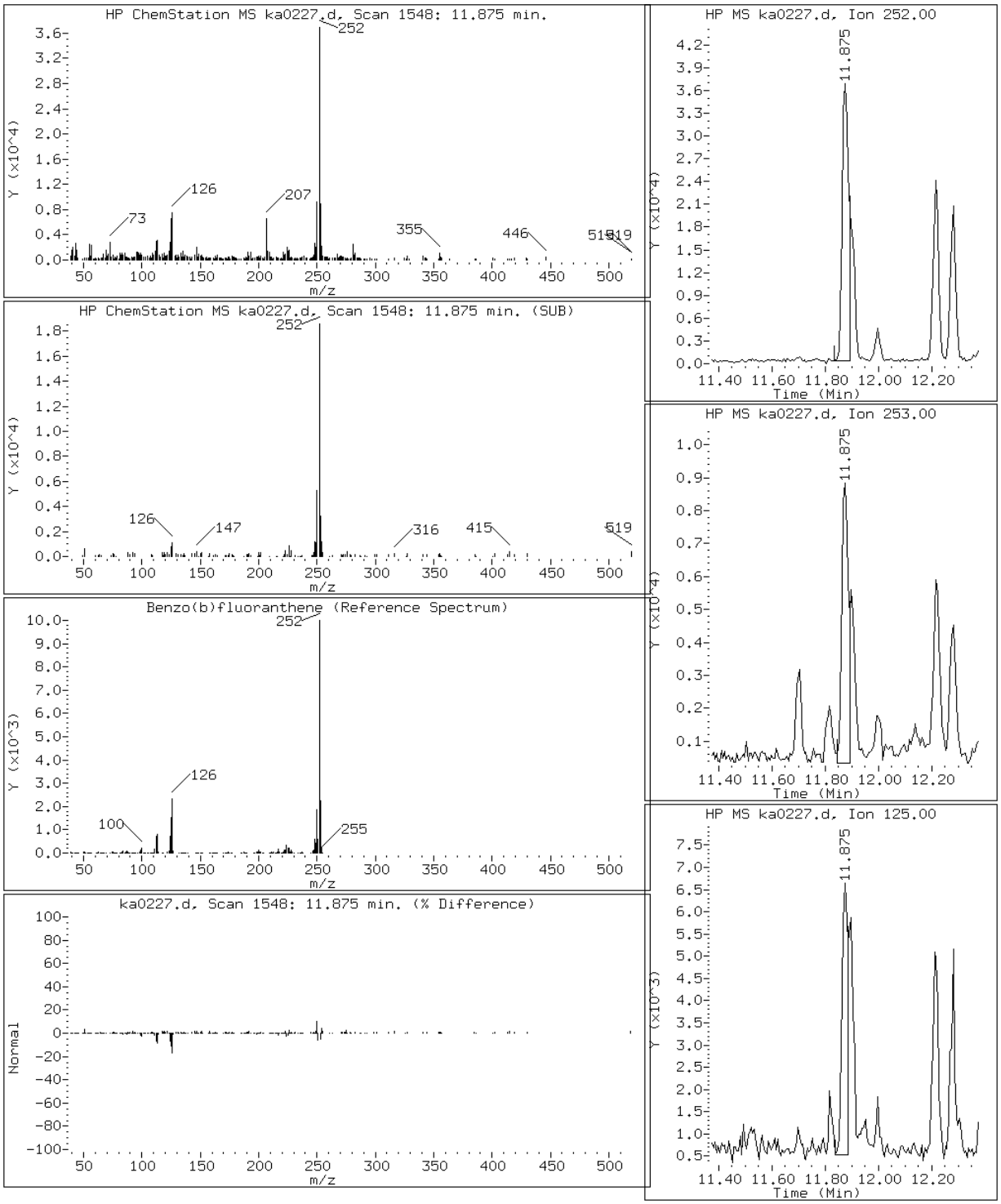
Data File: ka0227.d

Date: 02-JAN-2013 19:16

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-37-A DL=10 Operator: LEG

19 Benzo(b)fluoranthene



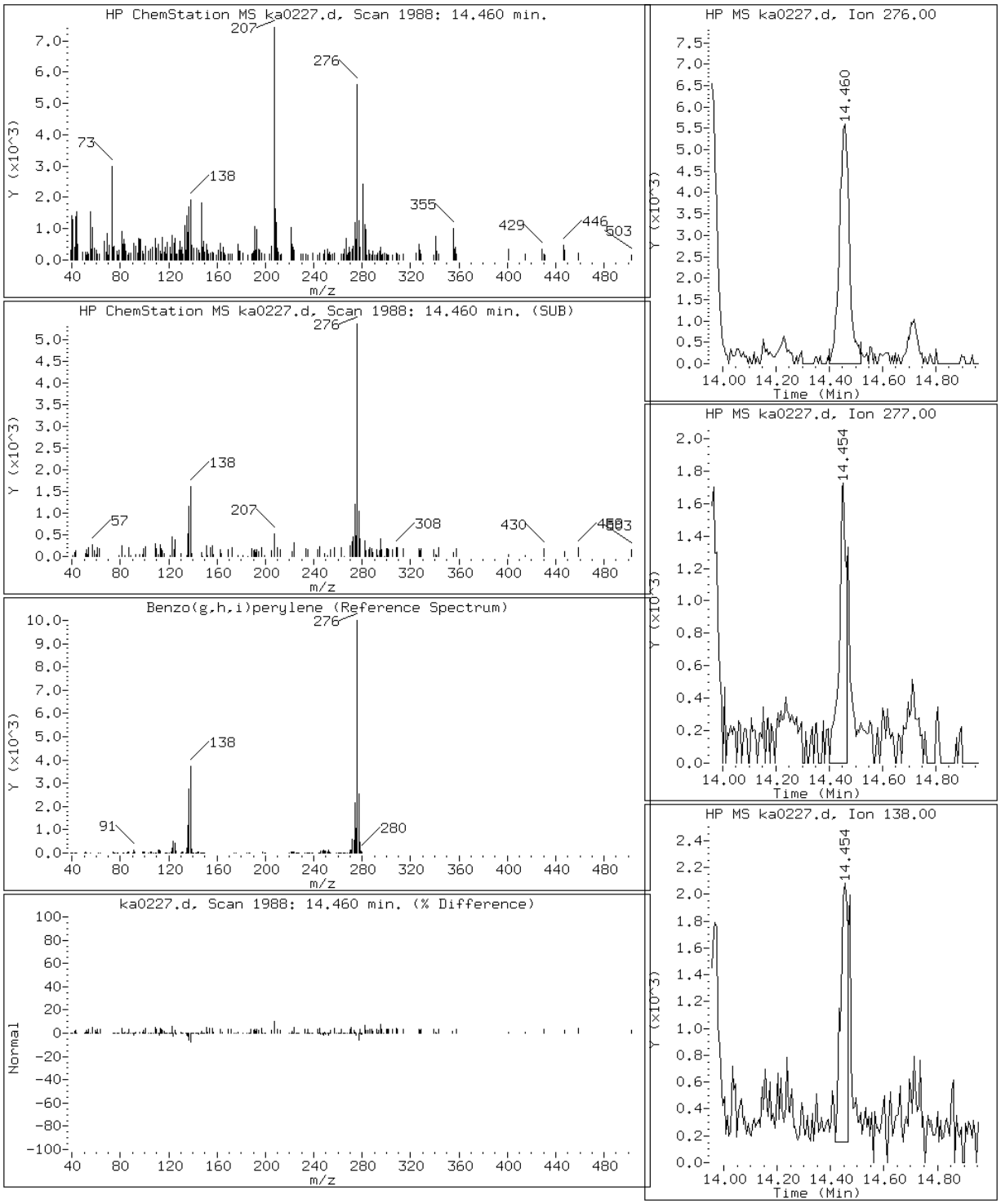
Data File: ka0227.d

Date: 02-JAN-2013 19:16

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-37-A DL=10 Operator: LEG

24 Benzo(g,h,i)perylene



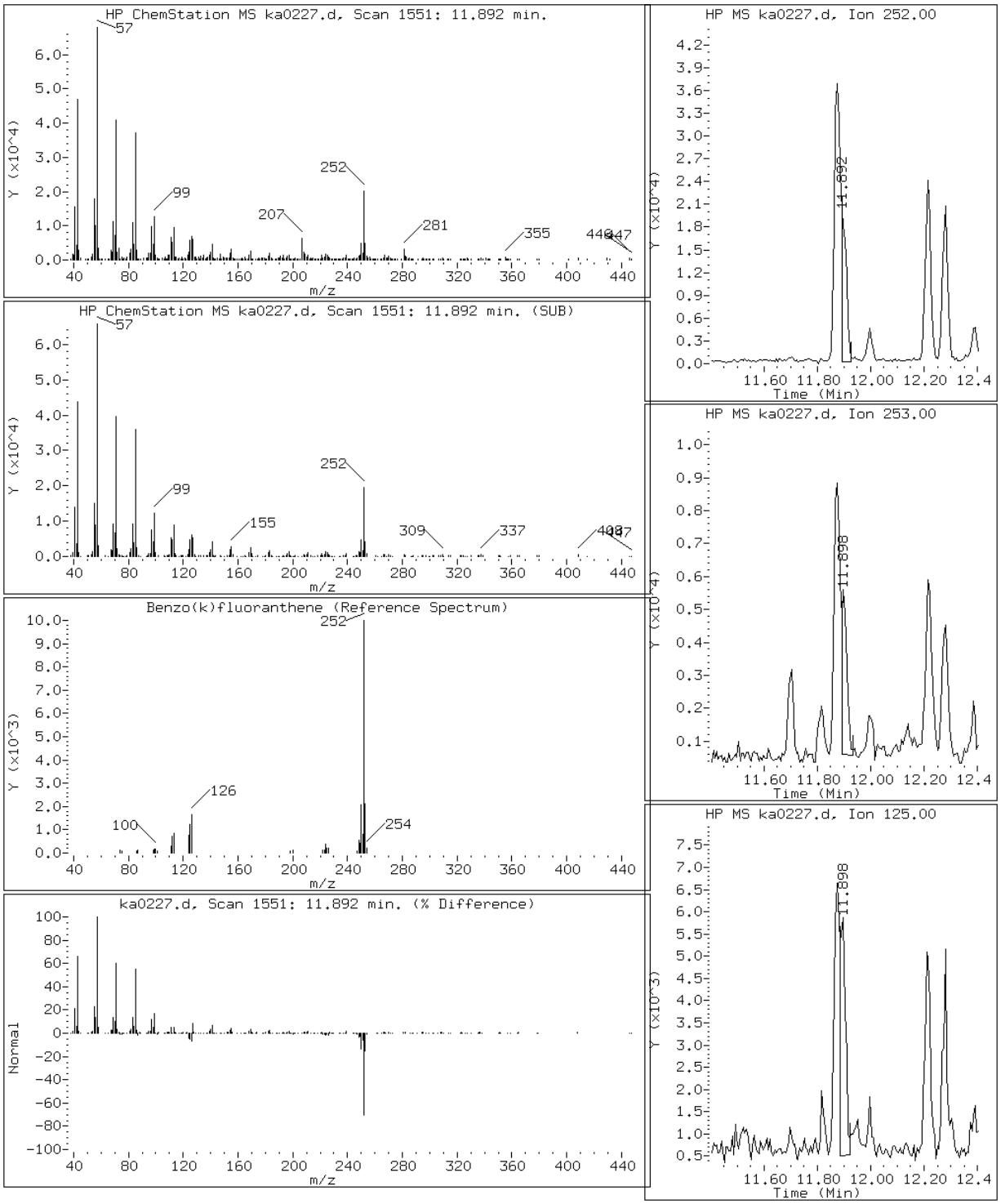
Data File: ka0227.d

Date: 02-JAN-2013 19:16

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-37-A DL=10 Operator: LEG

20 Benzo(k)fluoranthene



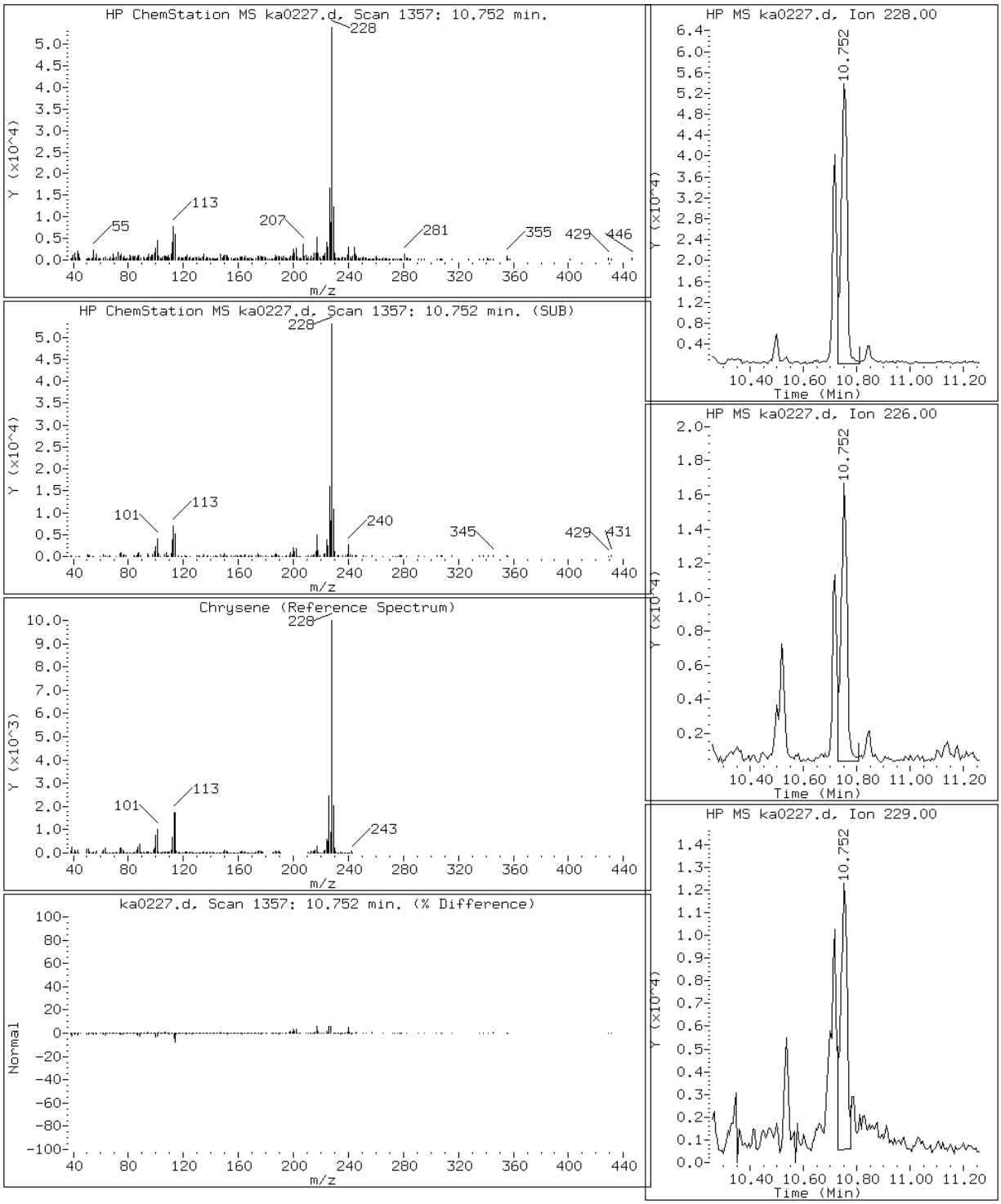
Data File: ka0227.d

Date: 02-JAN-2013 19:16

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-37-A DL=10 Operator: LEG

17 Chrysene



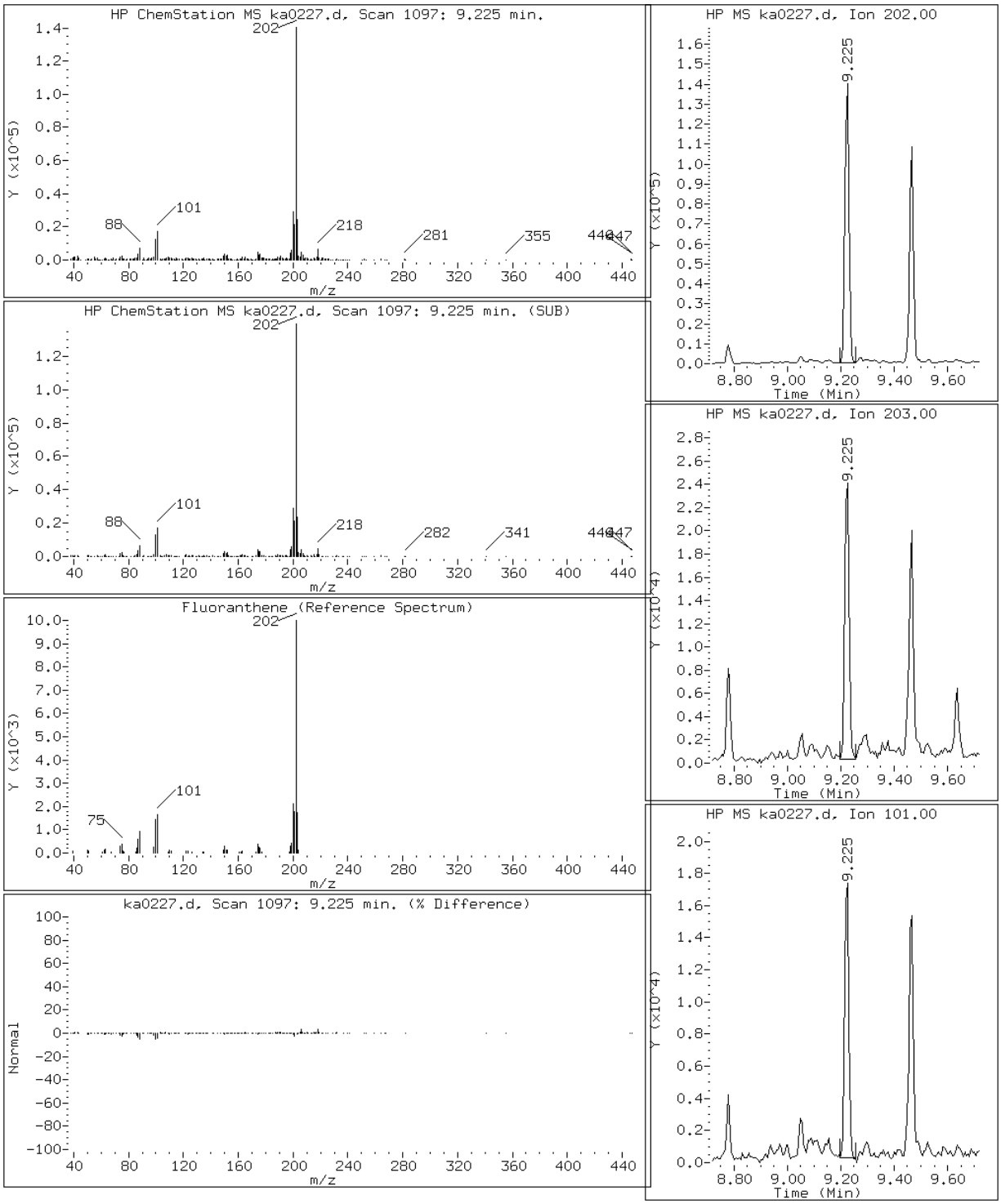
Data File: ka0227.d

Date: 02-JAN-2013 19:16

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-37-A DL=10 Operator: LEG

12 Fluoranthene



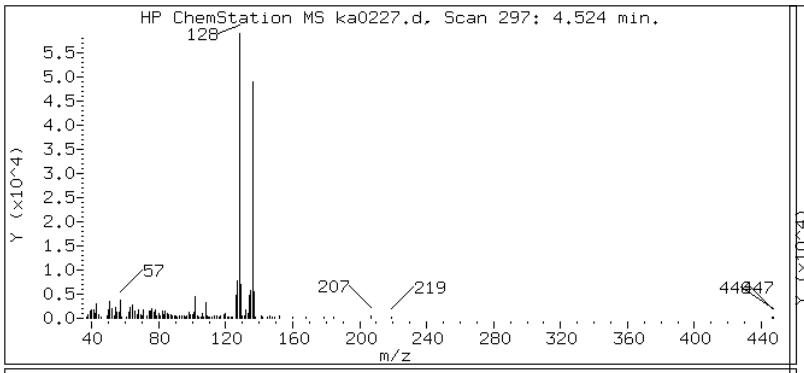
Data File: ka0227.d

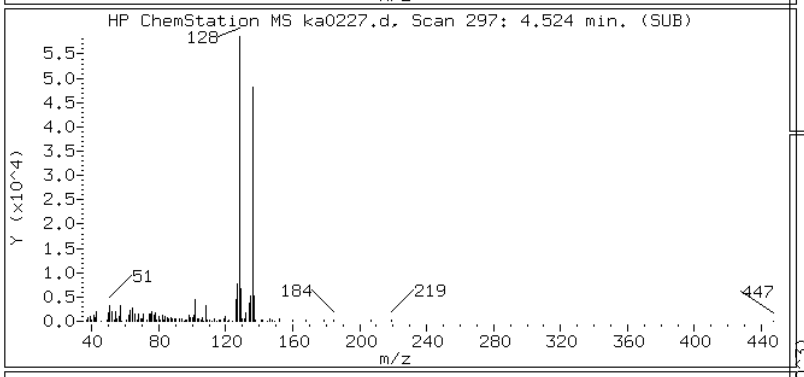
Date: 02-JAN-2013 19:16

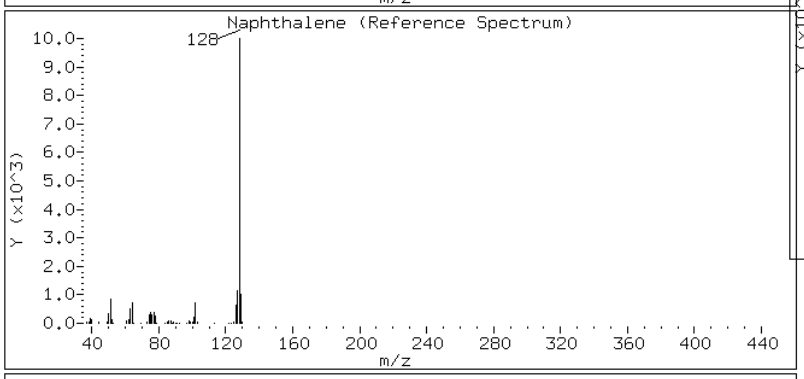
Client ID: Instrument: MSK5973.i

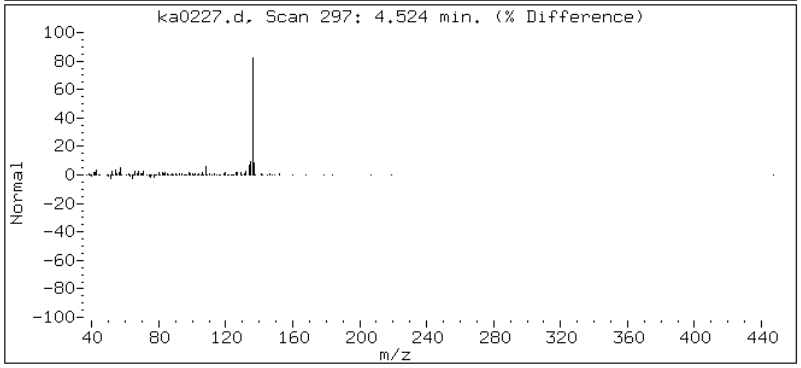
Sample Info: 680-85980-A-37-A DL=10 Operator: LEG

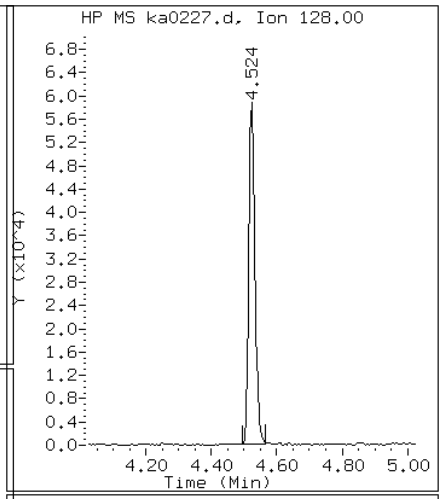
2 Naphthalene

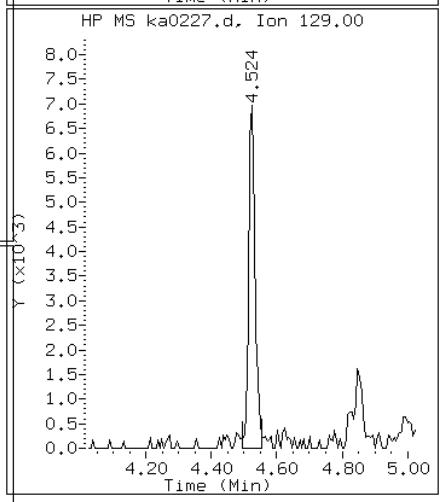












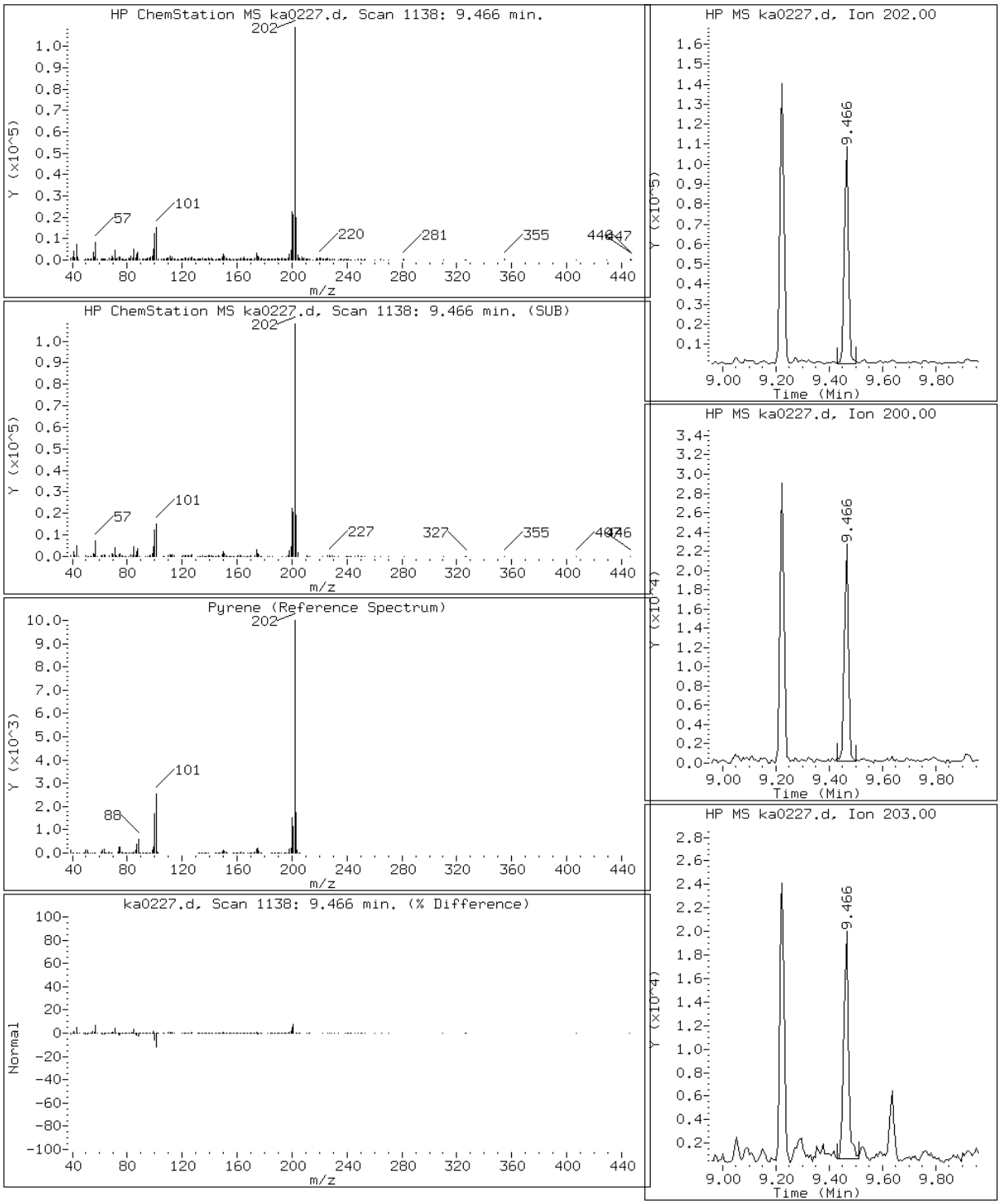
Data File: ka0227.d

Date: 02-JAN-2013 19:16

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-37-A DL=10 Operator: LEG

14 Pyrene



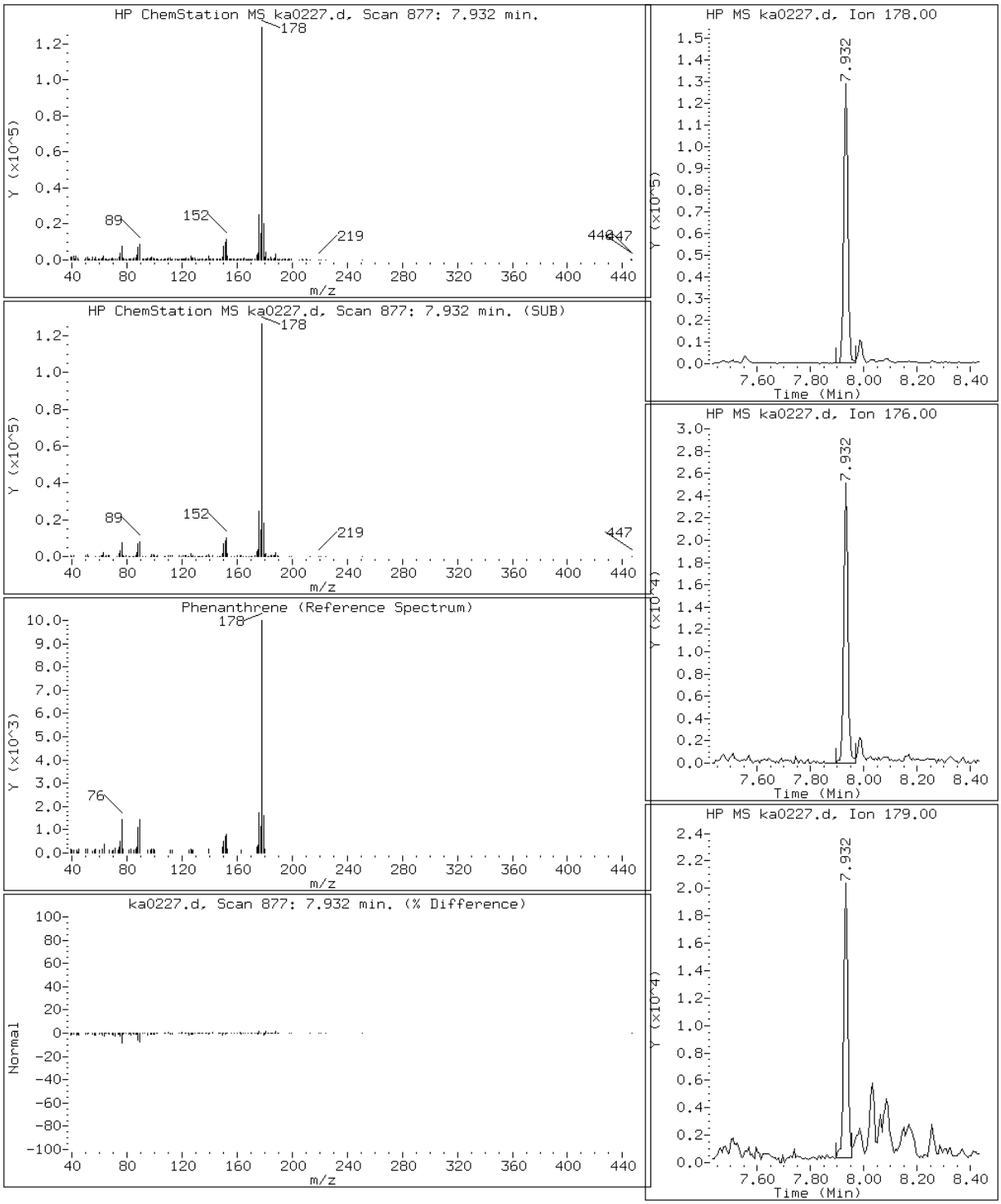
Data File: ka0227.d

Date: 02-JAN-2013 19:16

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-37-A DL=10 Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: ka0227.d
Inj. Date and Time: 02-JAN-2013 19:16
Instrument ID: MSK5973.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 01/03/2013

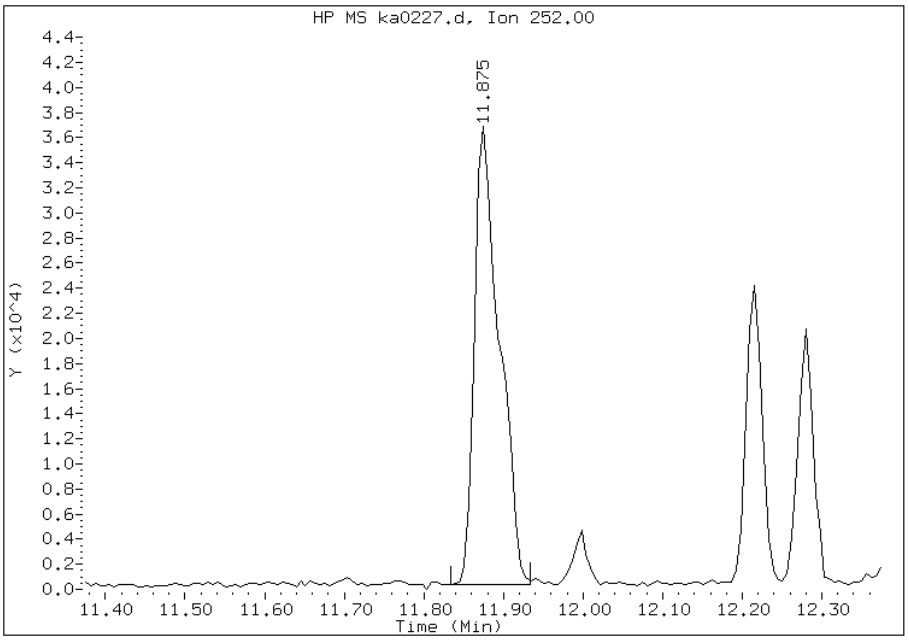
Processing Integration Results

RT: 11.87

Response: 79040

Amount: 1

Conc: 173



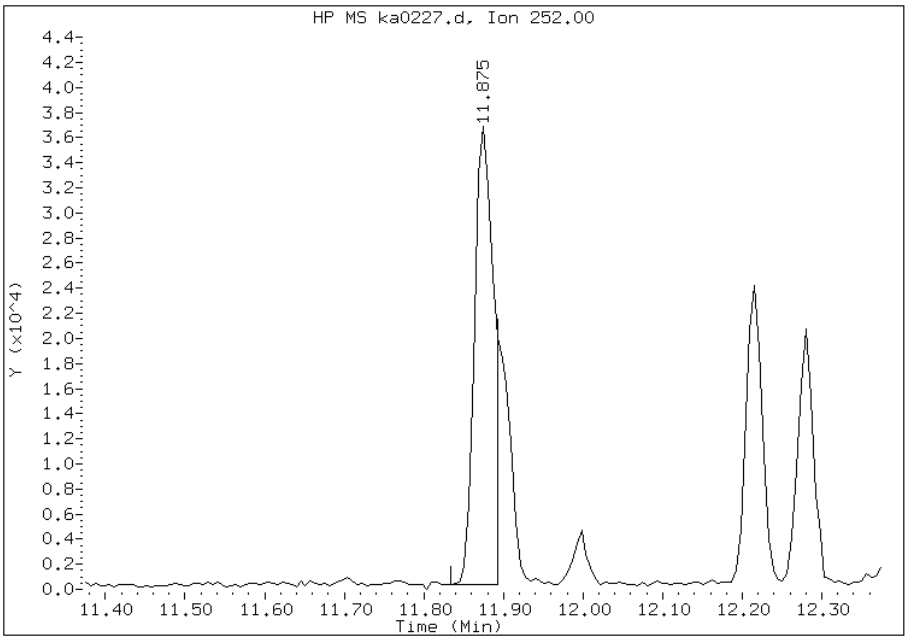
Manual Integration Results

RT: 11.87

Response: 60425

Amount: 0

Conc: 132



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: ka0227.d
Inj. Date and Time: 02-JAN-2013 19:16
Instrument ID: MSK5973.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 01/03/2013

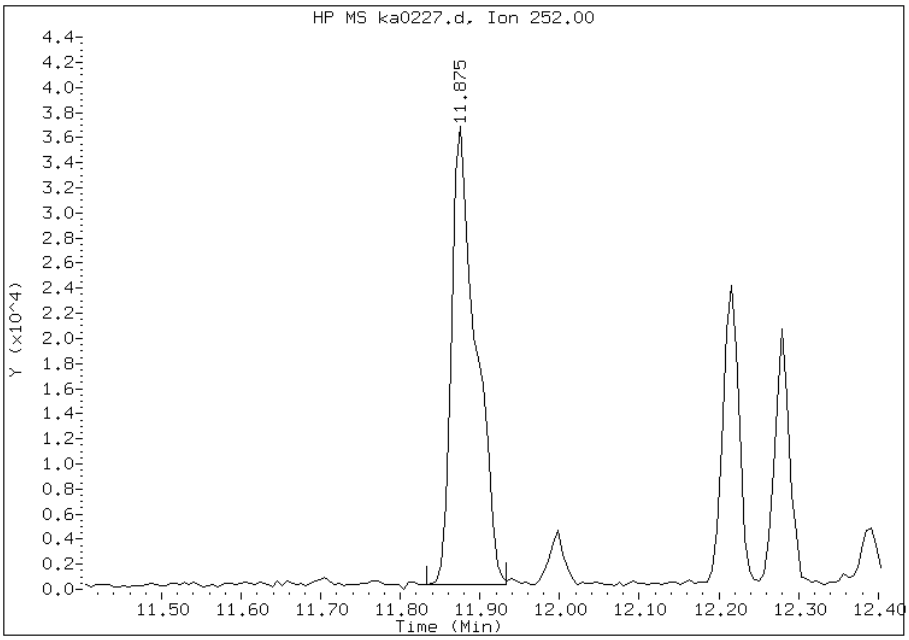
Processing Integration Results

RT: 11.87

Response: 79040

Amount: 1

Conc: 178



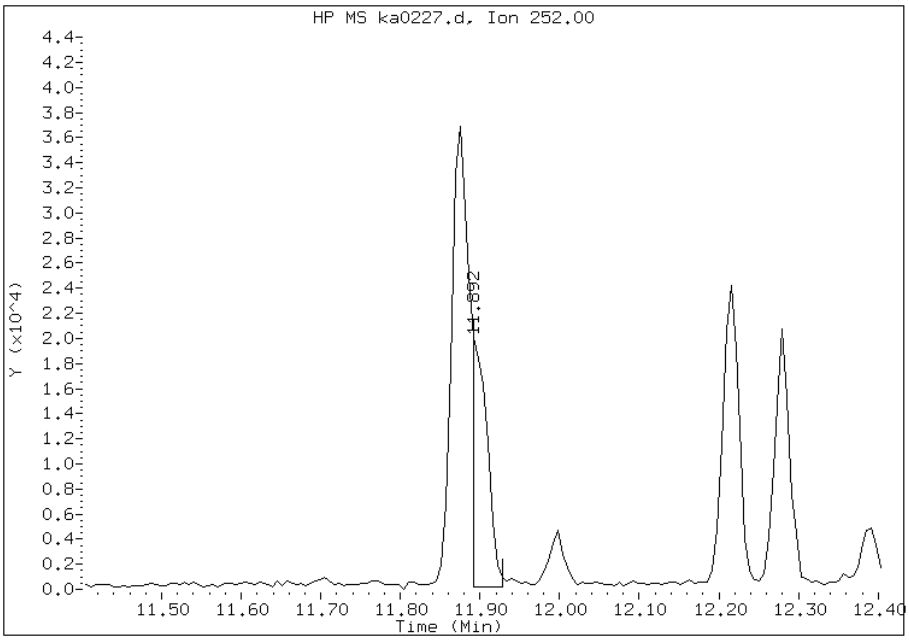
Manual Integration Results

RT: 11.89

Response: 25840

Amount: 0

Conc: 58



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: FM0016B-GS | Lab Sample ID: 680-85980-38

Matrix: Solid | Lab File ID: ya0212.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/19/2012 08:50

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.19(g) | Date Analyzed: 01/02/2013 20:57

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

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

% Moisture: 32.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261663 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	150		99	46
91-57-6	2-Methylnaphthalene	250		99	49
83-32-9	Acenaphthene	99	U	99	49
208-96-8	Acenaphthylene	99	U	99	49
120-12-7	Anthracene	99	U	99	49
56-55-3	Benzo[a]anthracene	210		99	49
50-32-8	Benzo[a]pyrene	180		99	18
205-99-2	Benzo[b]fluoranthene	270		99	49
191-24-2	Benzo[g,h,i]perylene	120		99	49
207-08-9	Benzo[k]fluoranthene	130		99	30
218-01-9	Chrysene	330		99	49
53-70-3	Dibenz(a,h)anthracene	99	U	99	49
206-44-0	Fluoranthene	480		99	49
86-73-7	Fluorene	99	U	99	49
193-39-5	Indeno[1,2,3-cd]pyrene	96	J	99	49
91-20-3	Naphthalene	170		99	49
129-00-0	Pyrene	340		99	49
85-01-8	Phenanthrene	410		99	36

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y010213.b/ya0212.d
Lab Smp Id: 680-85980-A-38-A DL
Inj Date : 02-JAN-2013 20:57
Operator : VHB Inst ID: MSY5975.i
Smp Info : 680-85980-A-38-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y010213.b/Y-b8270CLLPAH-m.m
Meth Date : 03-Jan-2013 07:09 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 19:25 Cal File: ya0208q.d
Als bottle: 12
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.707	4.708	(1.000)	473791	2.00000	
2 Naphthalene	128	4.729	4.729	(1.005)	94616	0.33987	113.29
3 2-Methylnaphthalene	142	5.328	5.328	(1.132)	86224	0.49991	166.63
4 1-Methylnaphthalene	142	5.419	5.419	(1.151)	52050	0.29617	98.72
* 5 Acenaphthene-d10	164	6.253	6.253	(1.000)	269911	2.00000	
* 9 Phenanthrene-d10	188	7.558	7.558	(1.000)	399571	2.00000	
10 Phenanthrene	178	7.580	7.580	(1.003)	218468	0.83190	277.30

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
12 Fluoranthene	202	8.665	8.666	(1.146)	236138	0.97362	324.54
14 Pyrene	202	8.885	8.890	(0.882)	183271	0.68648	228.82
16 Benzo(a)Anthracene	228	10.067	10.067	(0.999)	85300	0.42611	142.03
* 13 Chrysene-d12	240	10.077	10.078	(1.000)	306911	2.00000	
17 Chrysene	228	10.104	10.110	(1.003)	134424	0.67623	225.40
19 Benzo(b)fluoranthene	252	11.452	11.452	(0.949)	115198	0.55341	184.46(M)
20 Benzo(k)fluoranthene	252	11.473	11.490	(0.950)	53345	0.26263	87.54(M)
21 Benzo(a)pyrene	252	11.976	11.982	(0.992)	59387	0.36550	121.83
* 18 Perylene-d12	264	12.072	12.073	(1.000)	275194	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	14.207	14.217	(1.410)	35921	0.19425	64.74(a)
24 Benzo(g,h,i)perylene	276	14.880	14.886	(1.233)	37579	0.24313	81.04

QC Flag Legend

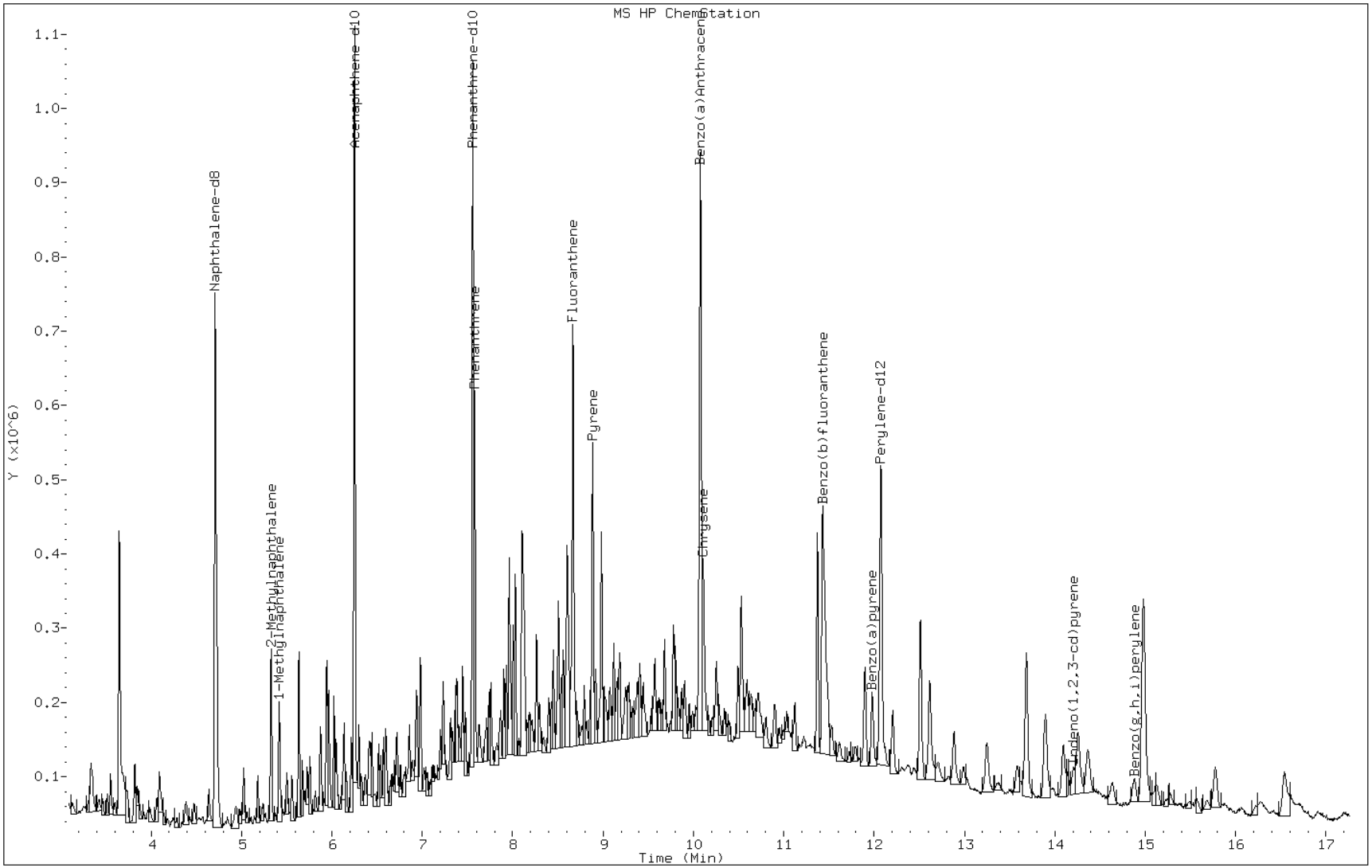
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: ya0212.d

Date: 02-JAN-2013 20:57

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-38-A DL=10 Operator: VHB



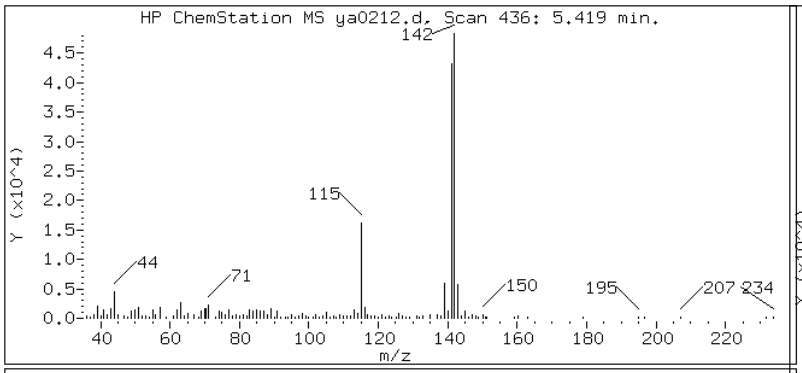
Data File: ya0212.d

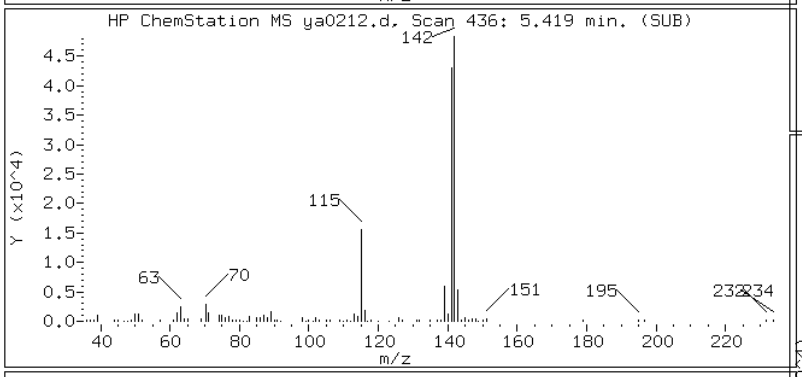
Date: 02-JAN-2013 20:57

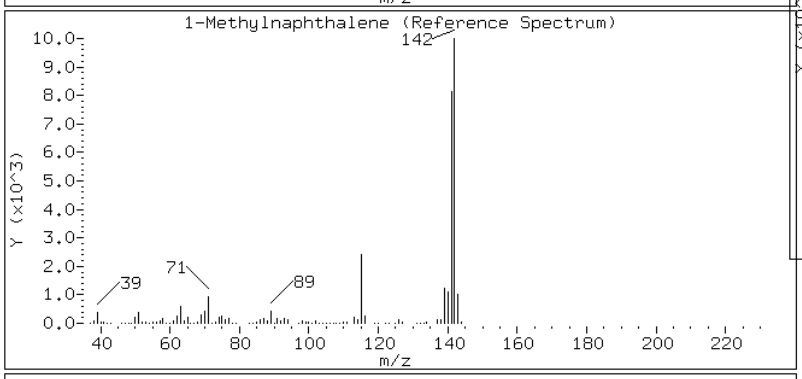
Client ID: Instrument: MSY5975.i

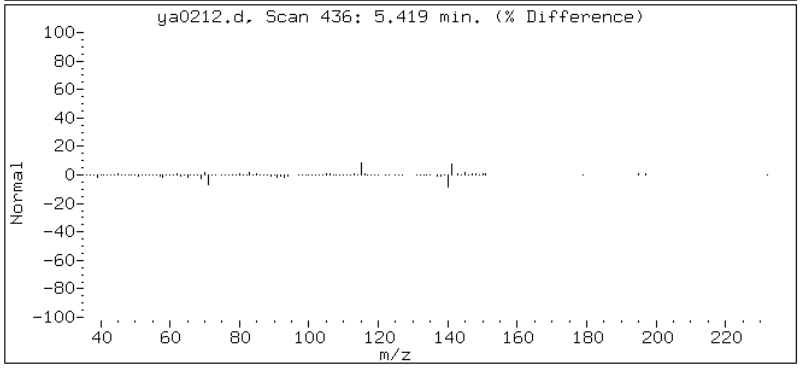
Sample Info: 680-85980-A-38-A DL=10 Operator: VHB

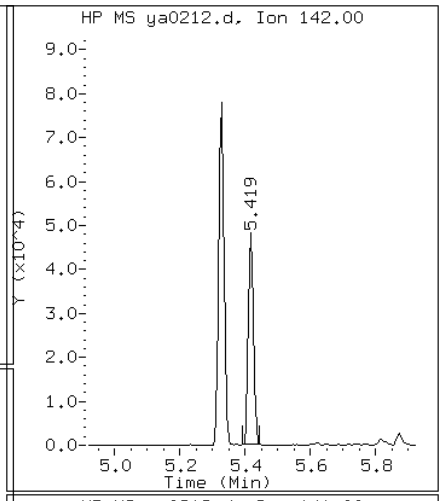
4 1-Methylnaphthalene

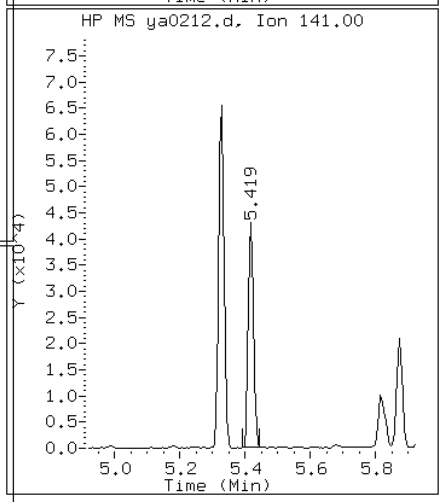












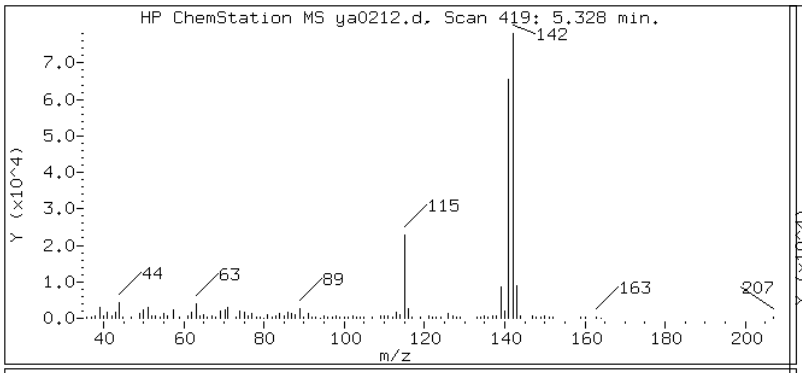
Data File: ya0212.d

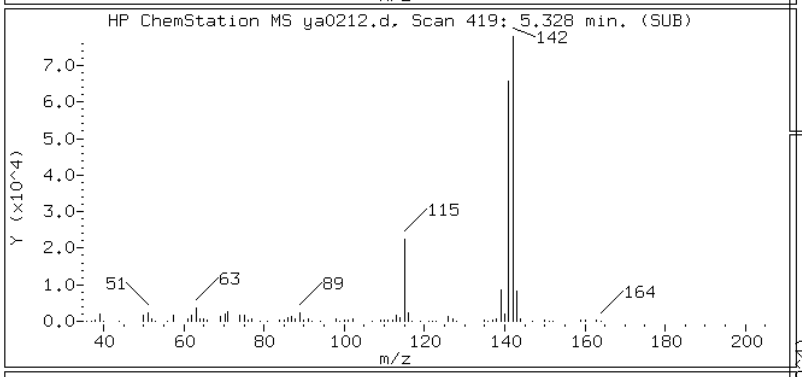
Date: 02-JAN-2013 20:57

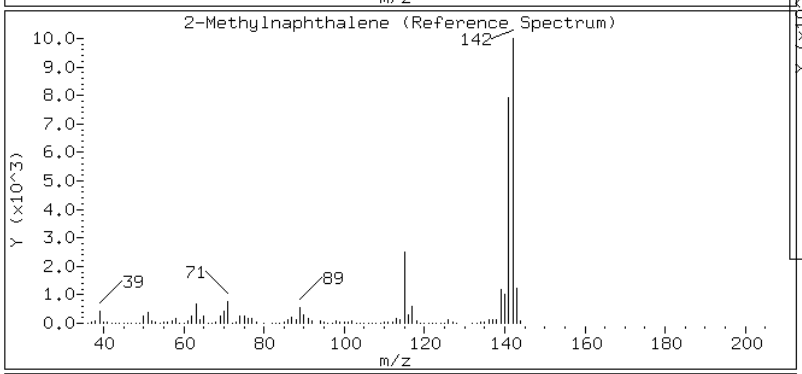
Client ID: Instrument: MSY5975.i

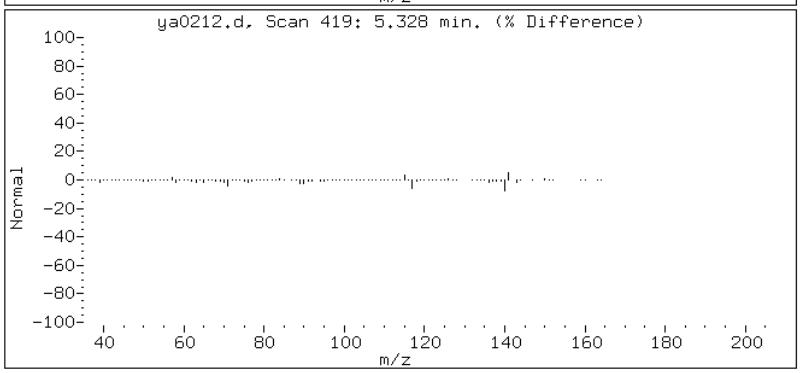
Sample Info: 680-85980-A-38-A DL=10 Operator: VHB

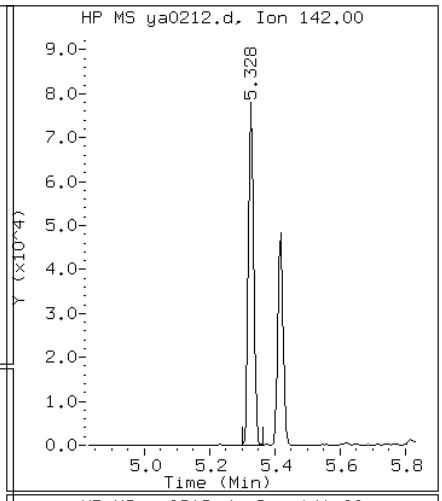
3 2-Methylnaphthalene

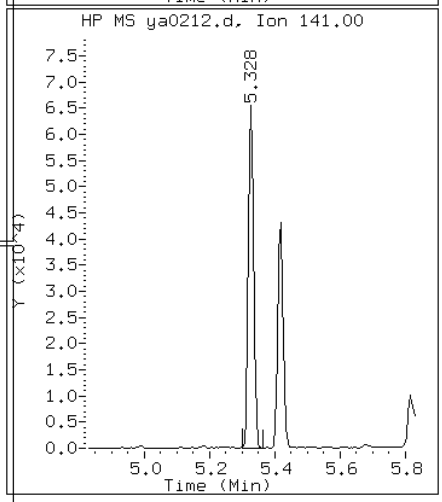












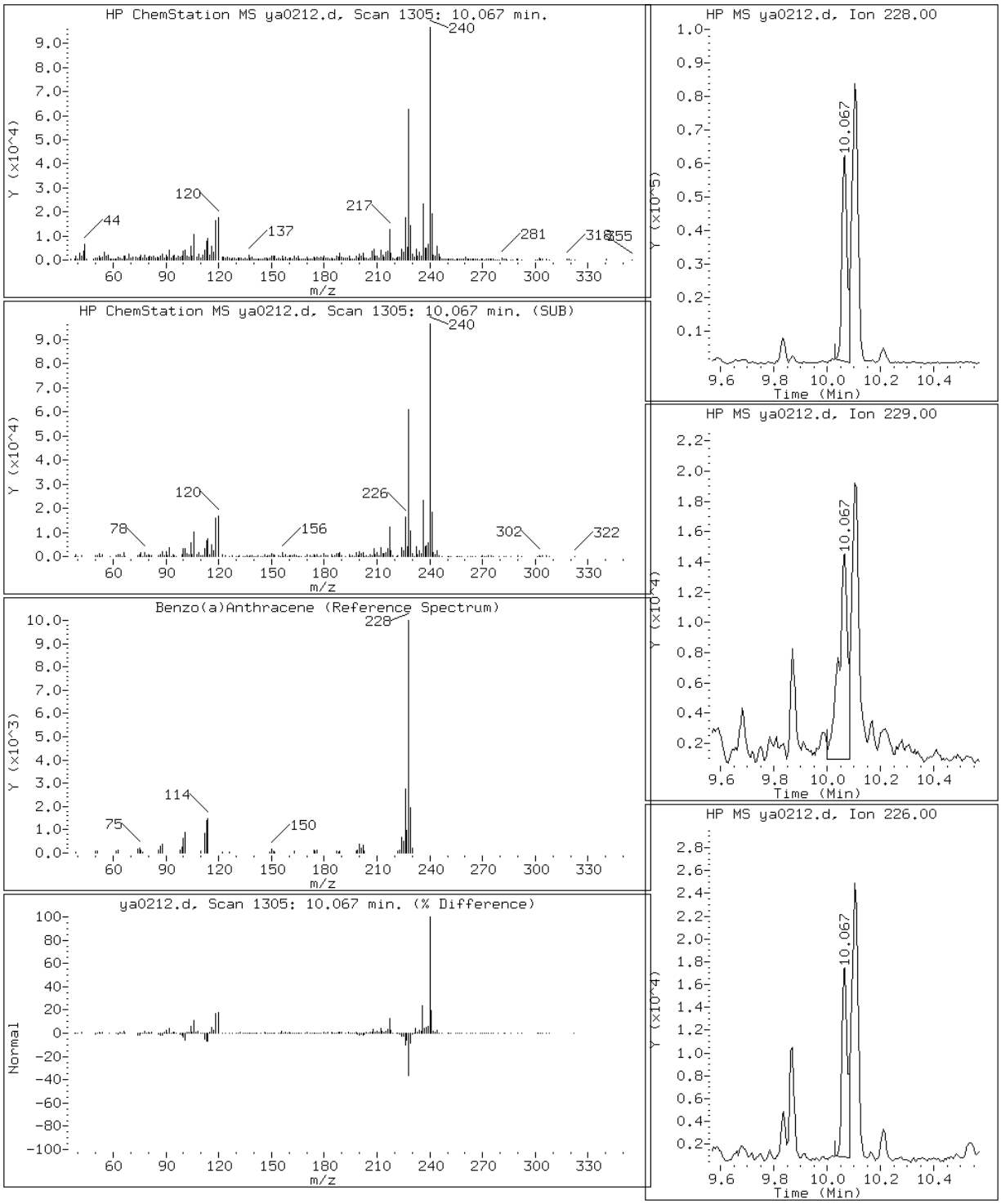
Data File: ya0212.d

Date: 02-JAN-2013 20:57

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-38-A DL=10 Operator: VHB

16 Benzo(a)Anthracene



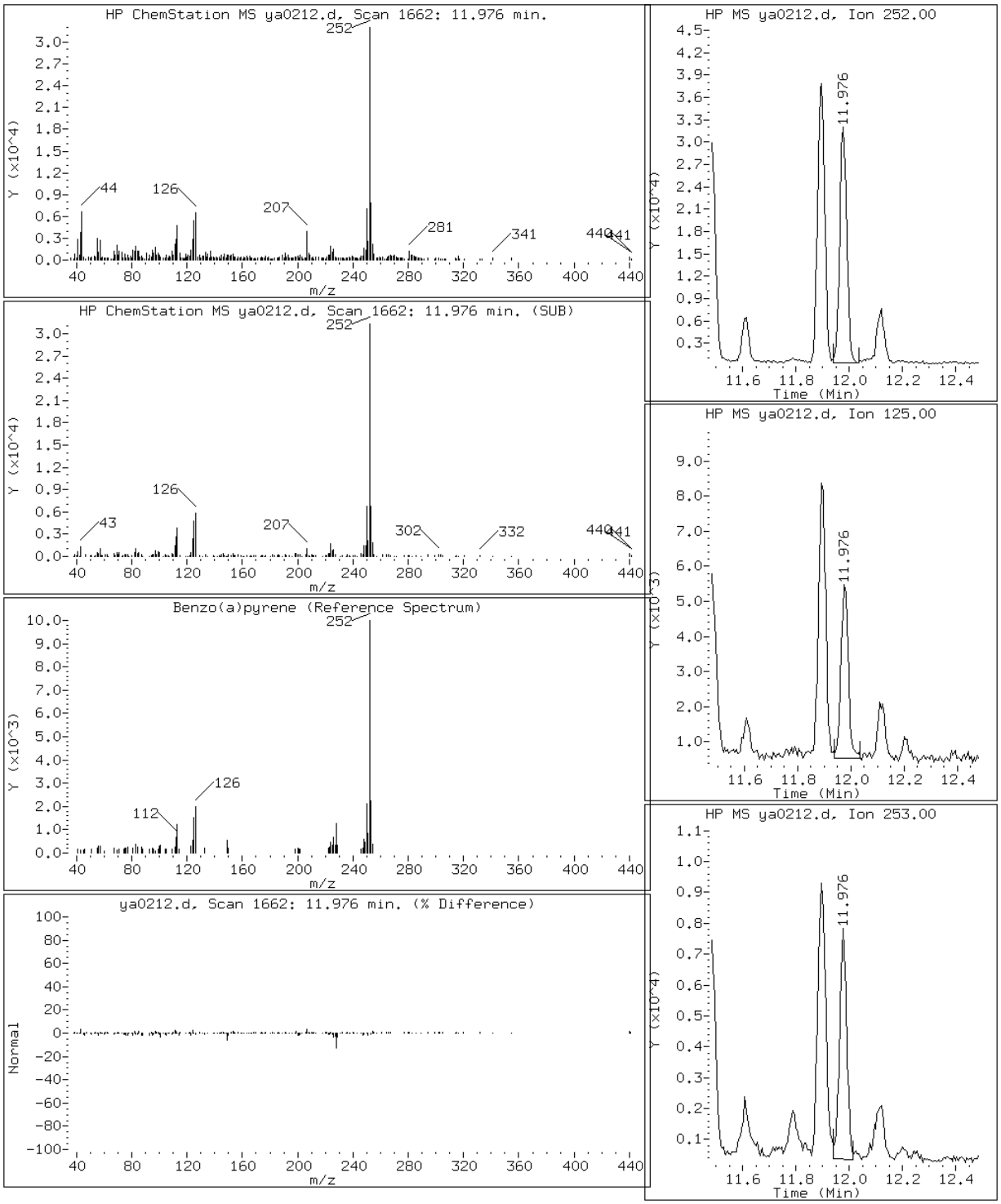
Data File: ya0212.d

Date: 02-JAN-2013 20:57

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-38-A DL=10 Operator: VHB

21 Benzo(a)pyrene



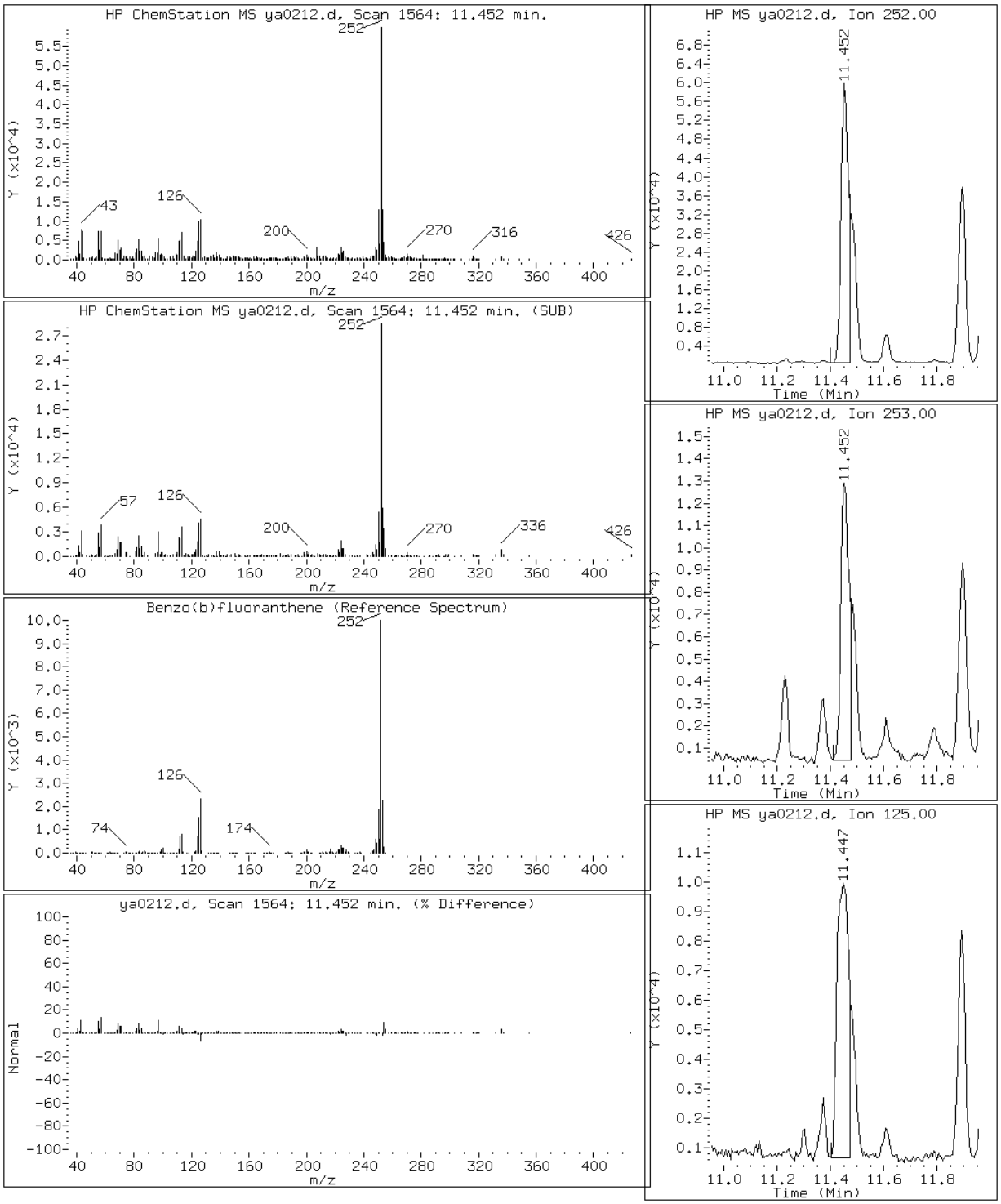
Data File: ya0212.d

Date: 02-JAN-2013 20:57

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-38-A DL=10 Operator: VHB

19 Benzo(b)fluoranthene



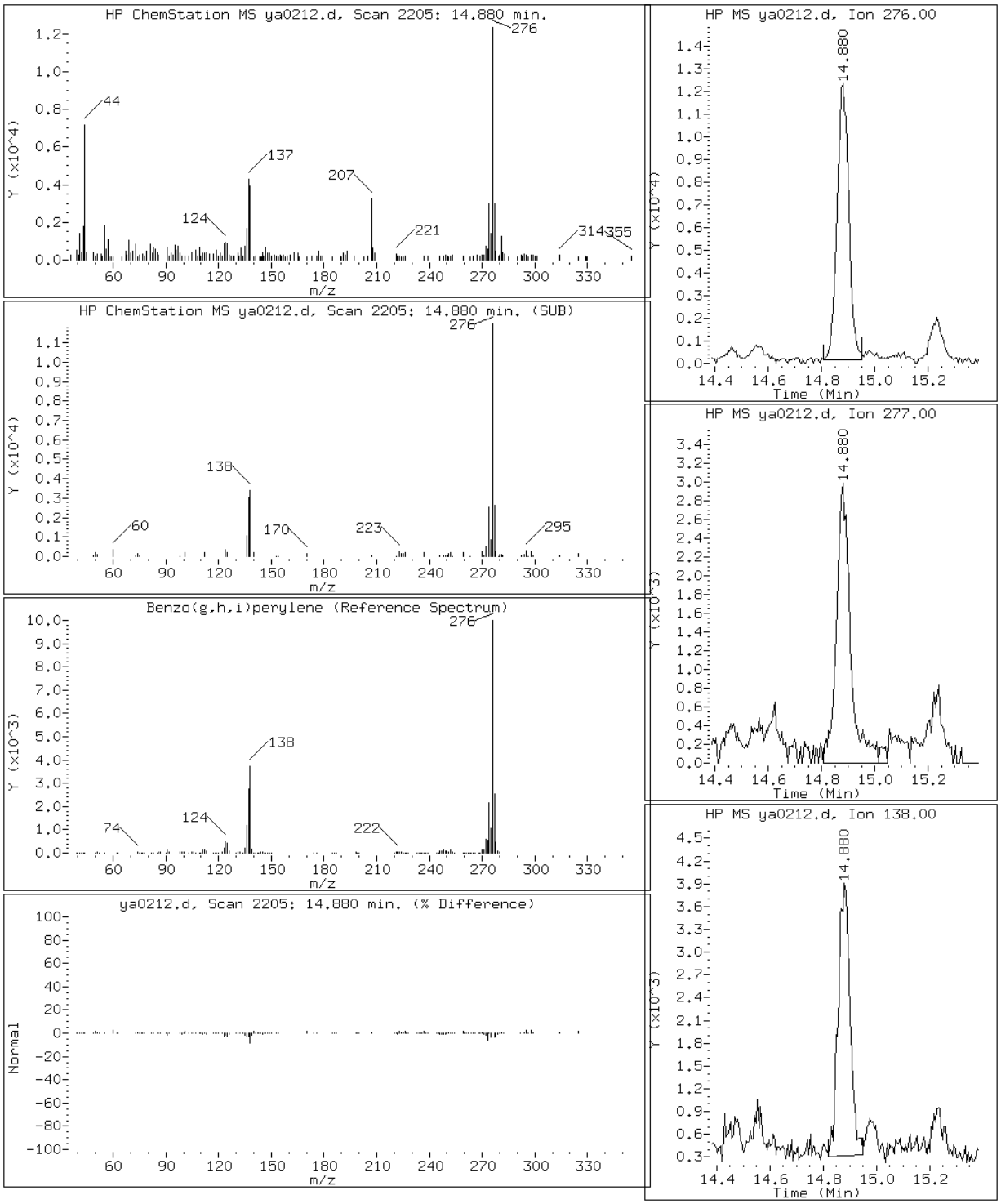
Data File: ya0212.d

Date: 02-JAN-2013 20:57

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-38-A DL=10 Operator: VHB

24 Benzo(g,h,i)perylene



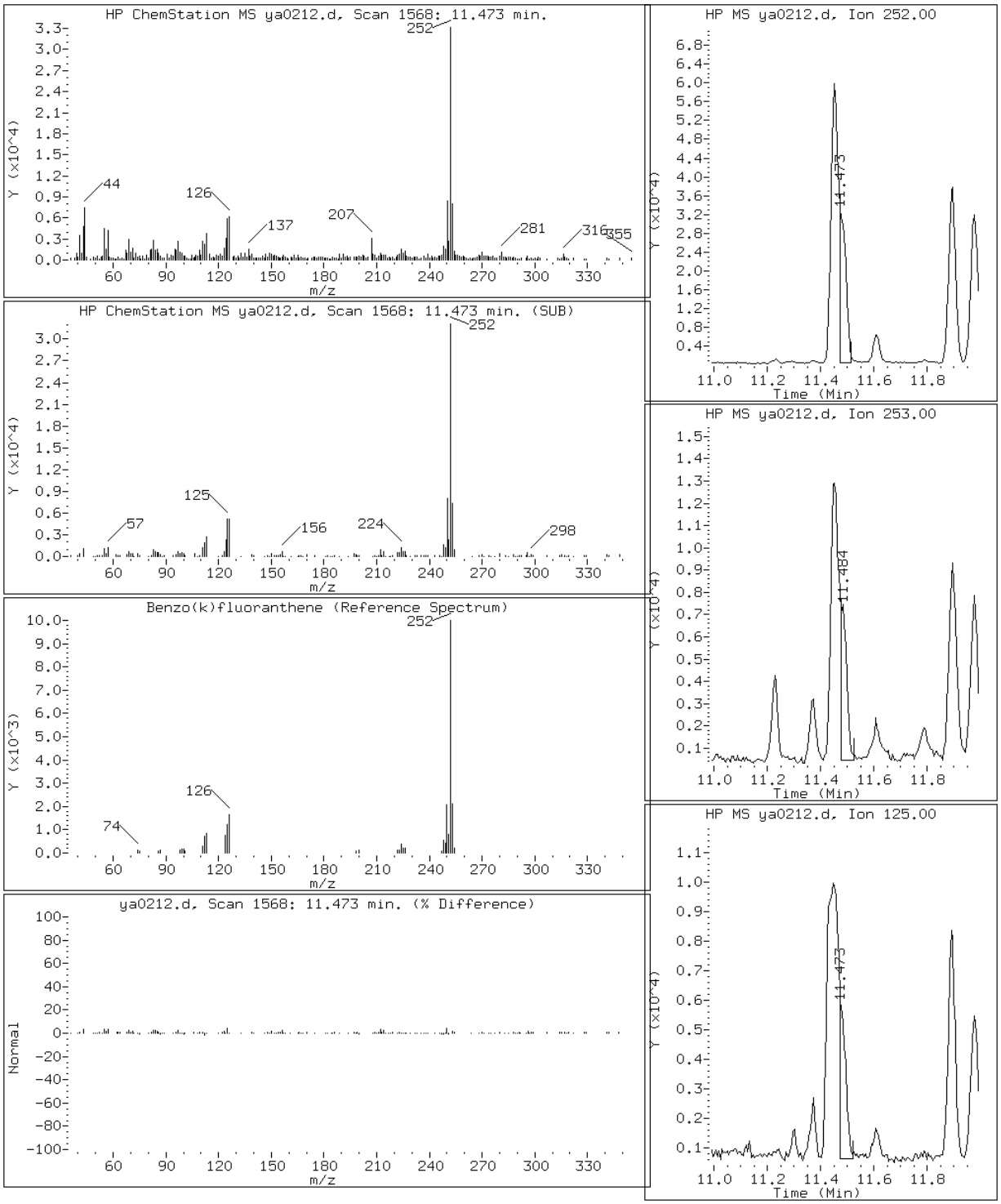
Data File: ya0212.d

Date: 02-JAN-2013 20:57

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-38-A DL=10 Operator: VHB

20 Benzo(k)fluoranthene



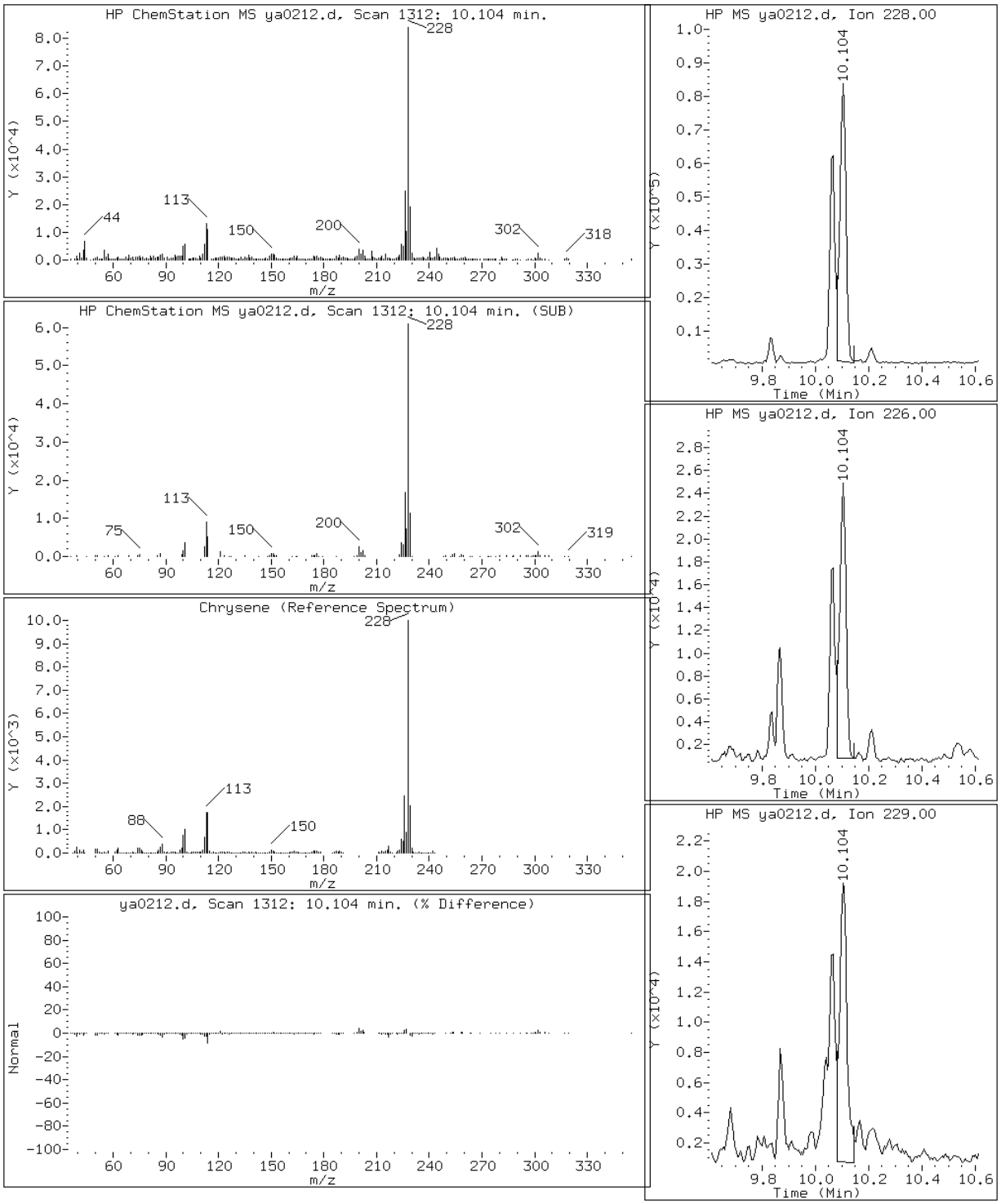
Data File: ya0212.d

Date: 02-JAN-2013 20:57

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-38-A DL=10 Operator: VHB

17 Chrysene



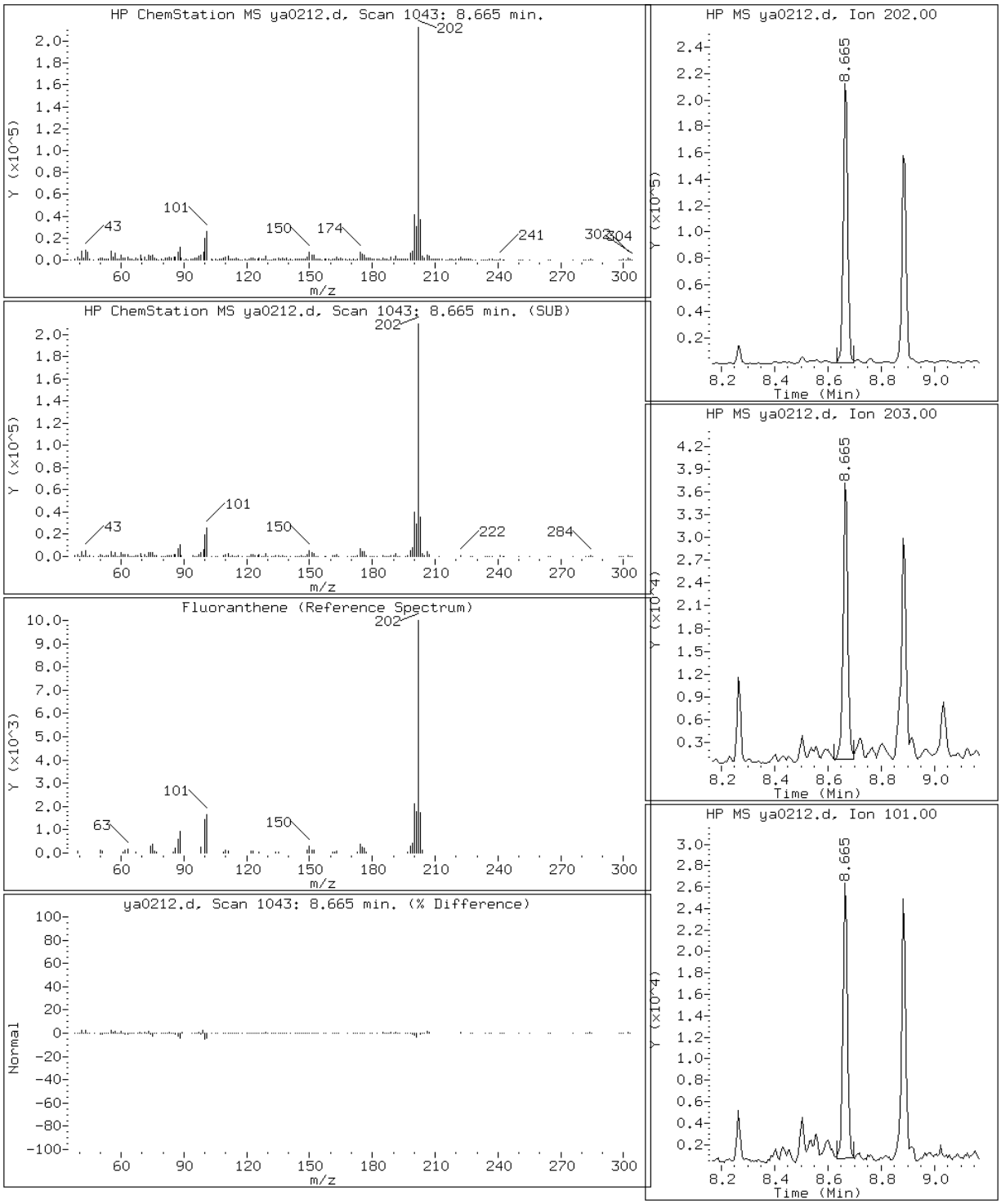
Data File: ya0212.d

Date: 02-JAN-2013 20:57

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-38-A DL=10 Operator: VHB

12 Fluoranthene



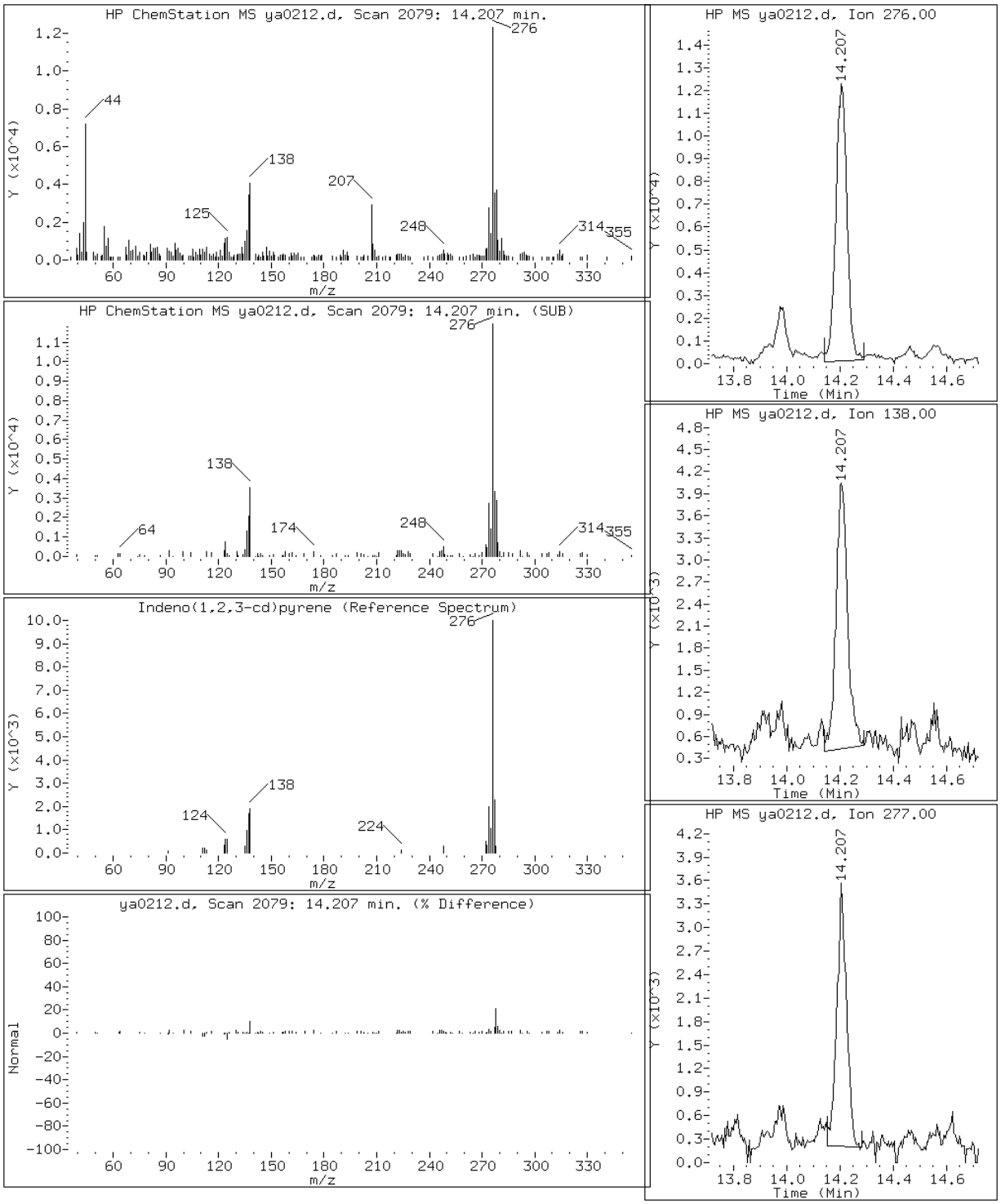
Data File: ya0212.d

Date: 02-JAN-2013 20:57

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-38-A DL=10 Operator: VHB

22 Indeno(1,2,3-cd)pyrene



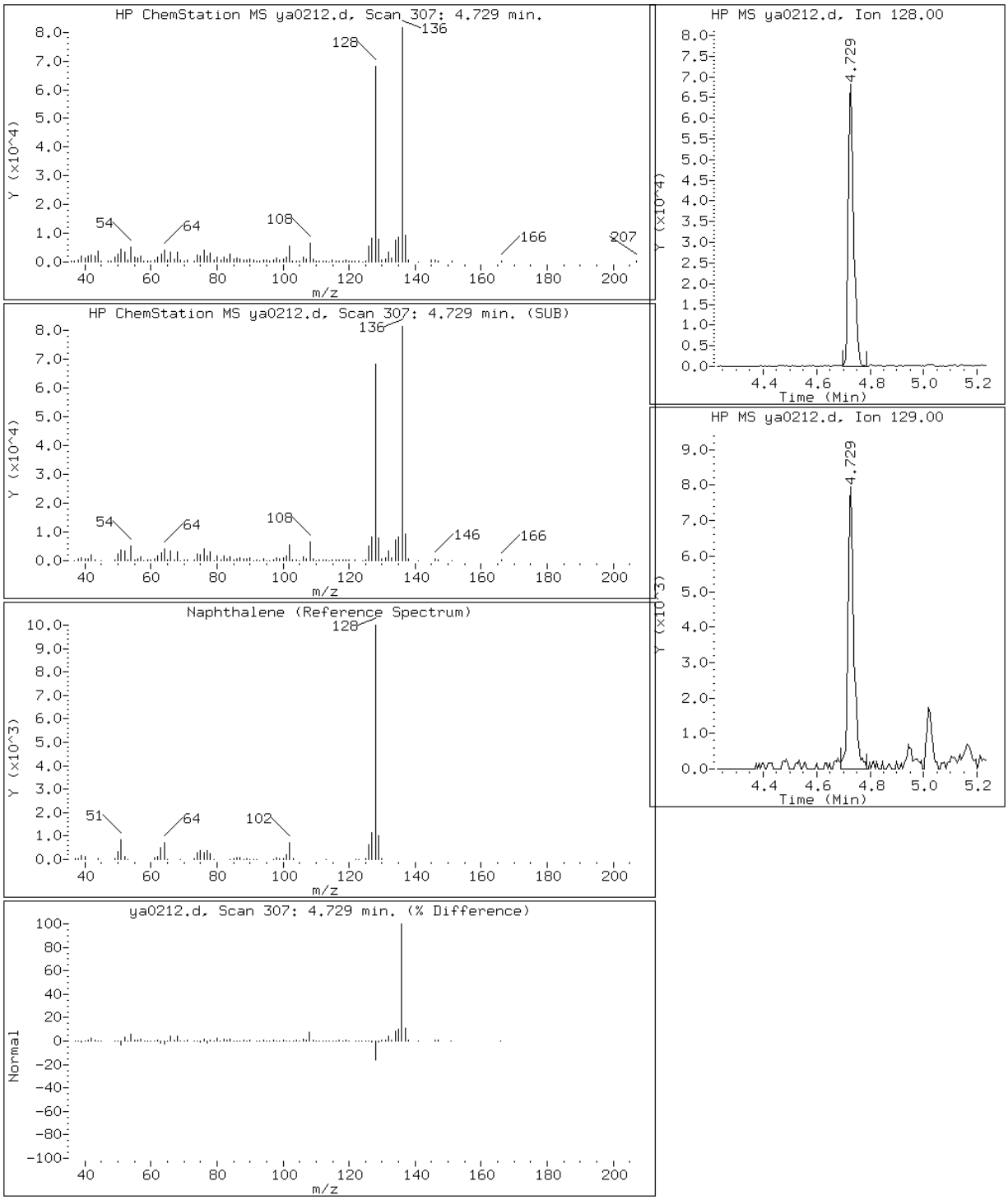
Data File: ya0212.d

Date: 02-JAN-2013 20:57

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-38-A DL=10 Operator: VHB

2 Naphthalene



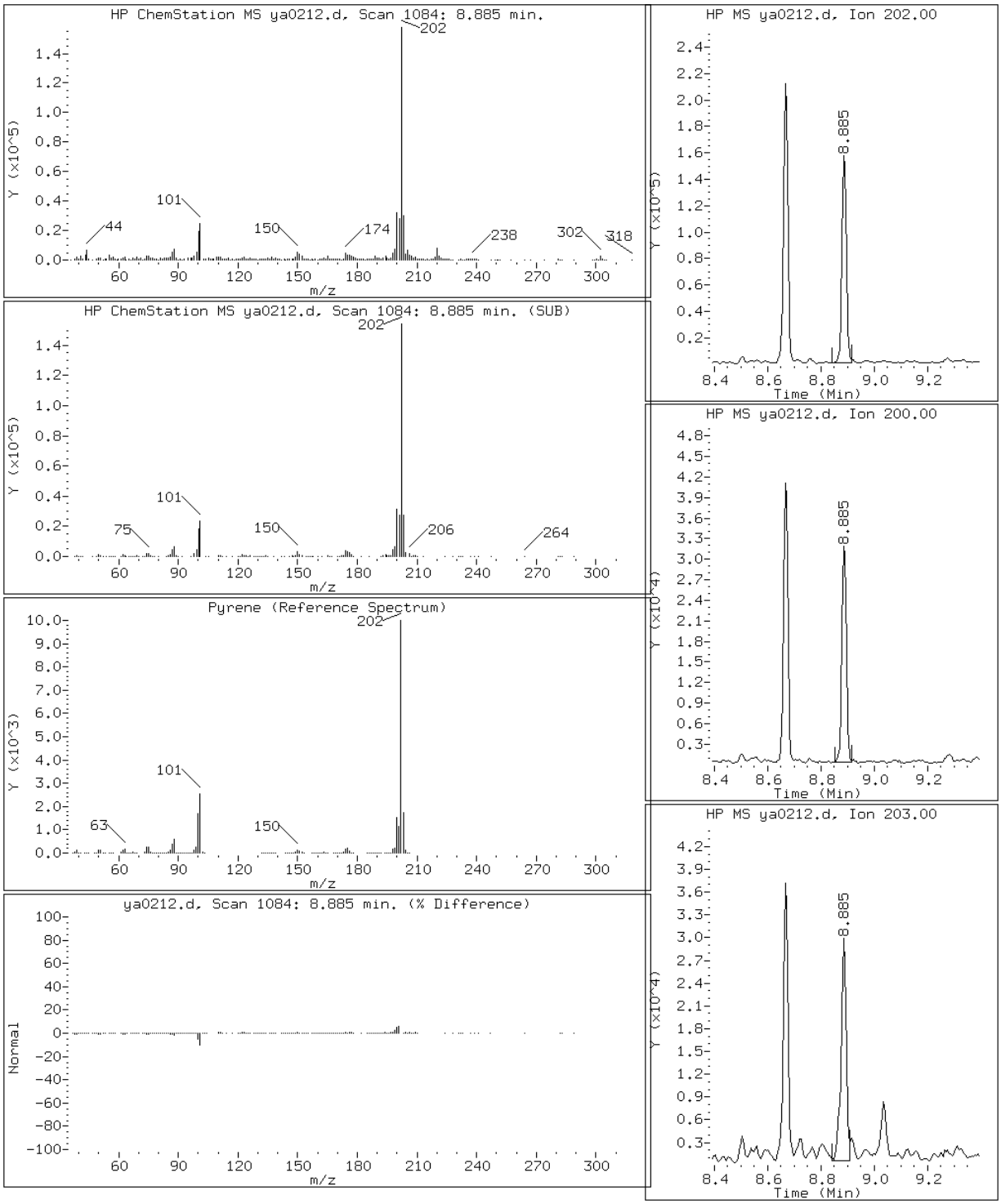
Data File: ya0212.d

Date: 02-JAN-2013 20:57

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-38-A DL=10 Operator: VHB

14 Pyrene



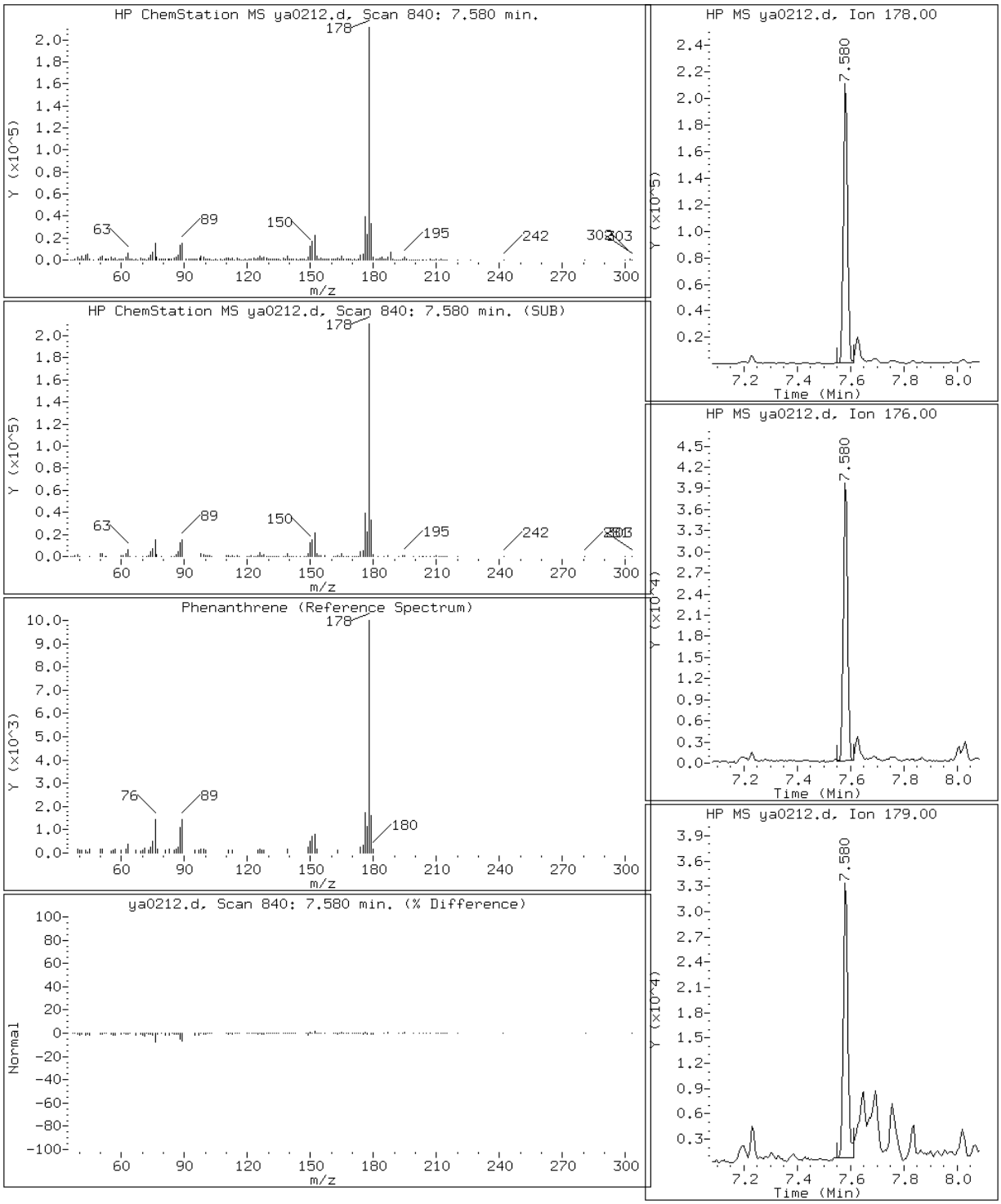
Data File: ya0212.d

Date: 02-JAN-2013 20:57

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-38-A DL=10 Operator: VHB

10 Phenanthrene



Manual Integration Report

Data File: ya0212.d
Inj. Date and Time: 02-JAN-2013 20:57
Instrument ID: MSY5975.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 01/03/2013

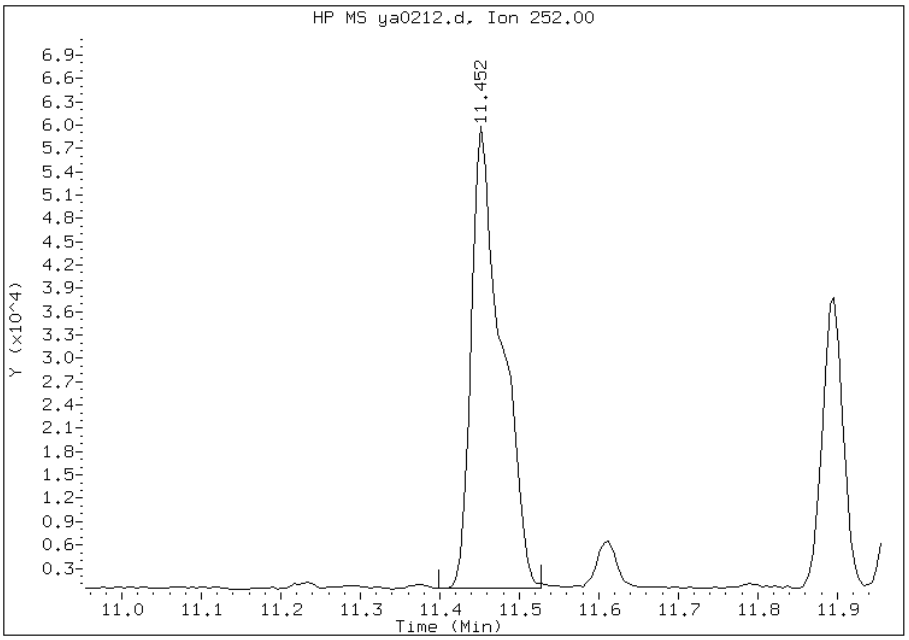
Processing Integration Results

RT: 11.45

Response: 158501

Amount: 1

Conc: 254



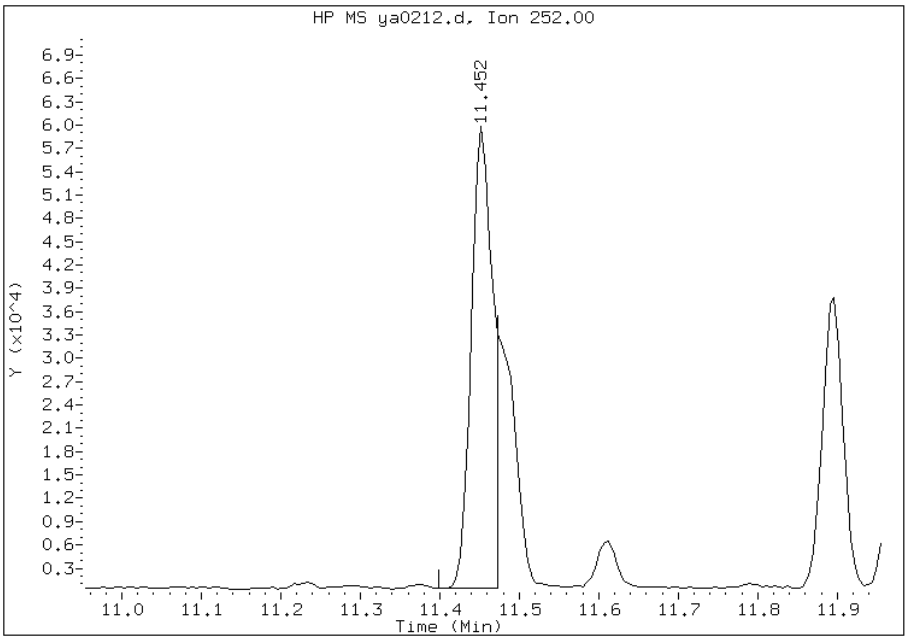
Manual Integration Results

RT: 11.45

Response: 115198

Amount: 1

Conc: 184



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: ya0212.d
Inj. Date and Time: 02-JAN-2013 20:57
Instrument ID: MSY5975.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 01/03/2013

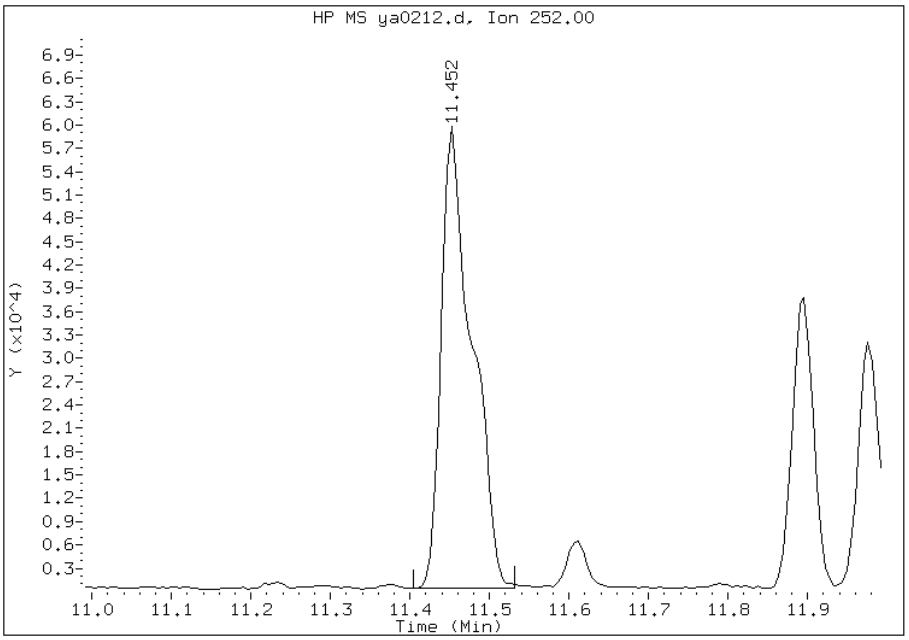
Processing Integration Results

RT: 11.45

Response: 158463

Amount: 1

Conc: 260



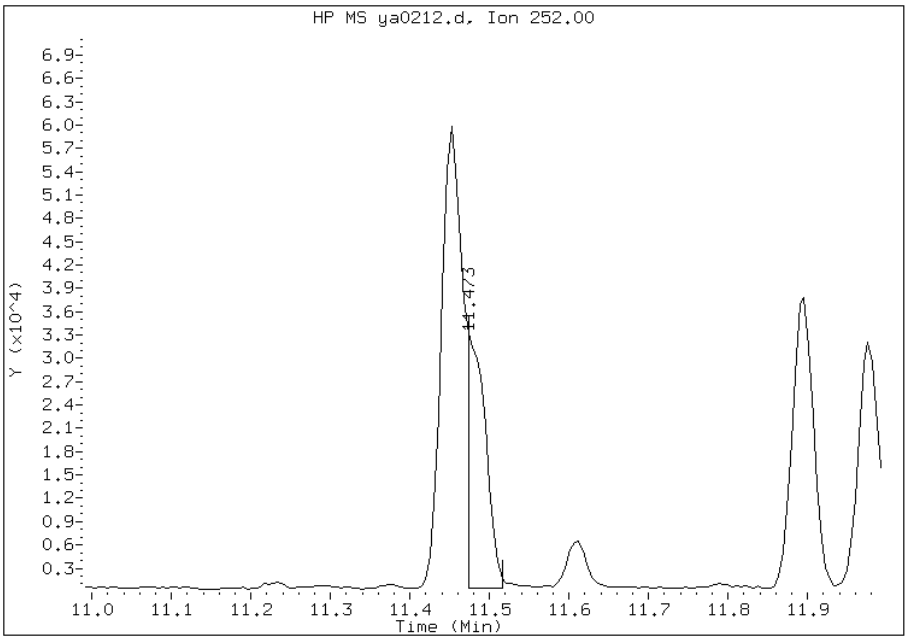
Manual Integration Results

RT: 11.47

Response: 53345

Amount: 0

Conc: 88



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: CV0627A-CS | Lab Sample ID: 680-85980-39

Matrix: Solid | Lab File ID: ka0226.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/19/2012 09:15

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.03(g) | Date Analyzed: 01/02/2013 18:52

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

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

% Moisture: 27.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	140		93	43
91-57-6	2-Methylnaphthalene	220		93	46
83-32-9	Acenaphthene	93	U	93	46
208-96-8	Acenaphthylene	93	U	93	46
120-12-7	Anthracene	93	U	93	46
56-55-3	Benzo[a]anthracene	200		93	46
50-32-8	Benzo[a]pyrene	190		93	17
205-99-2	Benzo[b]fluoranthene	370		93	46
191-24-2	Benzo[g,h,i]perylene	110		93	46
207-08-9	Benzo[k]fluoranthene	180		93	28
218-01-9	Chrysene	340		93	46
53-70-3	Dibenz(a,h)anthracene	93	U	93	46
206-44-0	Fluoranthene	330		93	46
86-73-7	Fluorene	93	U	93	46
193-39-5	Indeno[1,2,3-cd]pyrene	92	J	93	46
91-20-3	Naphthalene	280		93	46
129-00-0	Pyrene	310		93	46
85-01-8	Phenanthrene	310		93	33

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0226.d
Lab Smp Id: 680-85980-A-39-A DL
Inj Date : 02-JAN-2013 18:52
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85980-A-39-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:58 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:24 Cal File: ka0212q.d
Als bottle: 22
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.501	4.501	(1.000)	427059	2.00000	
2 Naphthalene	128	4.524	4.524	(1.005)	155329	0.61728	205.76
3 2-Methylnaphthalene	142	5.194	5.194	(1.154)	76141	0.48683	162.27
4 1-Methylnaphthalene	142	5.300	5.300	(1.178)	49705	0.31349	104.49
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	247368	2.00000	
* 9 Phenanthrene-d10	188	7.908	7.903	(1.000)	388365	2.00000	
10 Phenanthrene	178	7.932	7.932	(1.003)	163427	0.66676	222.25

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
12 Fluoranthene	202	9.225	9.219	(1.166)	176856	0.71622	238.73
14 Pyrene	202	9.465	9.460	(0.883)	156154	0.68121	227.07
16 Benzo(a)Anthracene	228	10.705	10.717	(0.999)	75427	0.42840	142.79
* 13 Chrysene-d12	240	10.717	10.729	(1.000)	268935	2.00000	
17 Chrysene	228	10.740	10.758	(1.002)	126793	0.73195	243.98
19 Benzo(b)fluoranthene	252	11.851	11.875	(0.961)	118679	0.80877	269.58(M)
20 Benzo(k)fluoranthene	252	11.869	11.904	(0.962)	56556	0.39820	132.73(M)
21 Benzo(a)pyrene	252	12.256	12.280	(0.994)	46599	0.41536	138.45
* 18 Perylene-d12	264	12.333	12.356	(1.000)	197454	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	13.937	13.966	(1.300)	27651	0.19913	66.37(a)
24 Benzo(g,h,i)perylene	276	14.430	14.460	(1.170)	23885	0.23860	79.53

QC Flag Legend

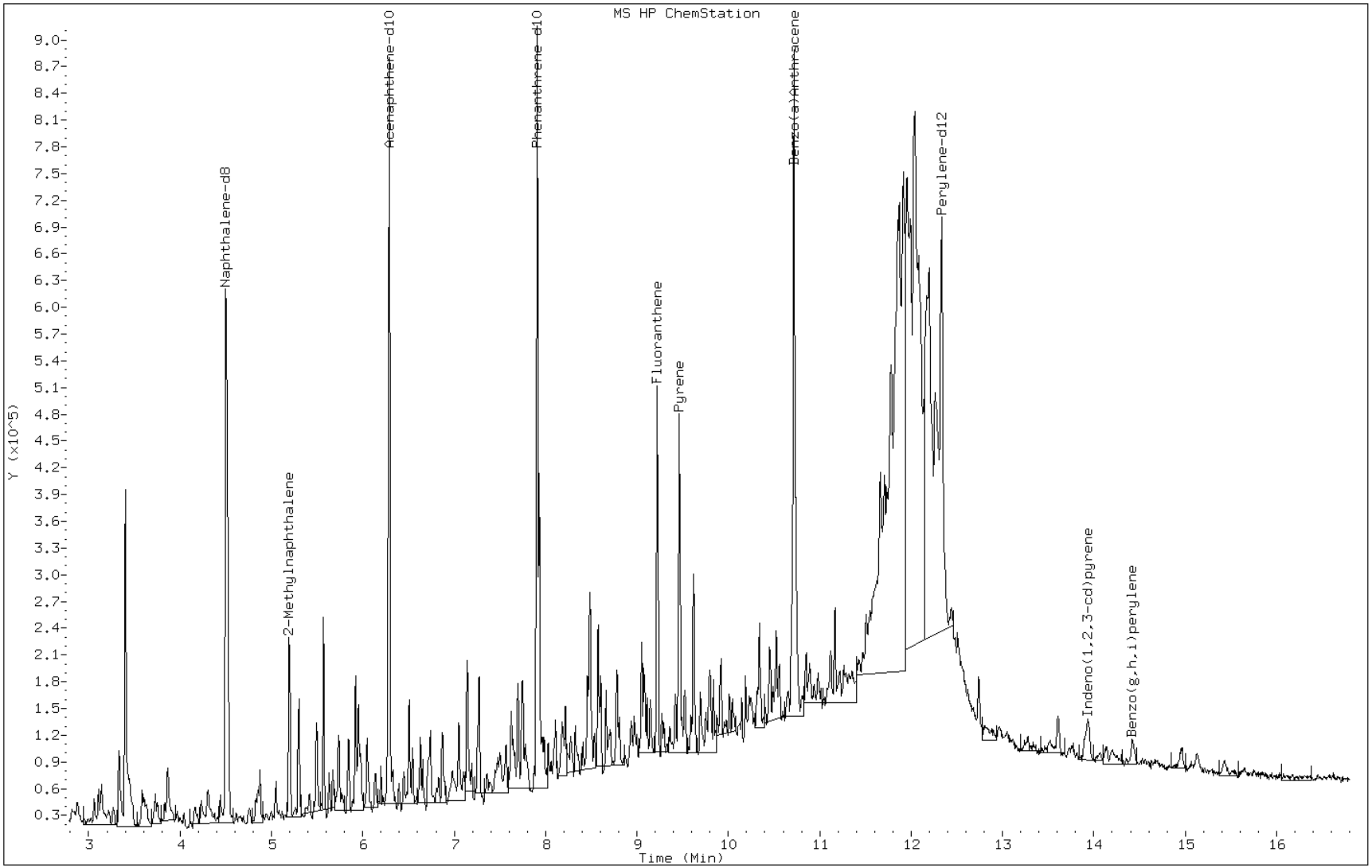
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: ka0226.d

Date: 02-JAN-2013 18:52

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-39-A DL=10 Operator: LEG



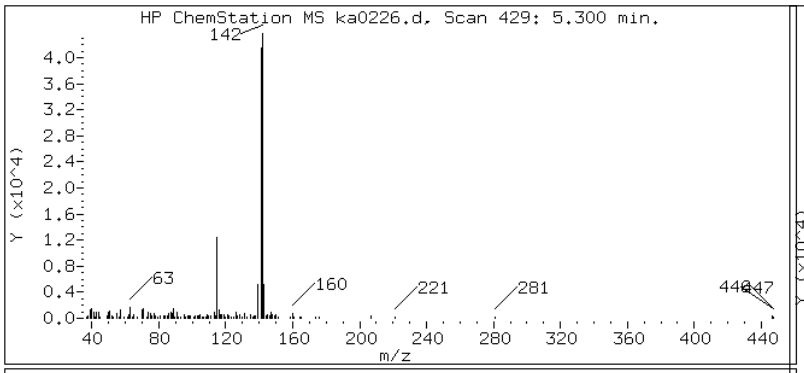
Data File: ka0226.d

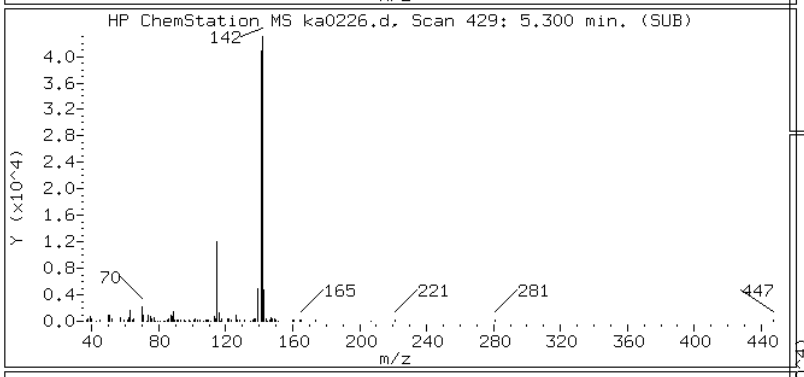
Date: 02-JAN-2013 18:52

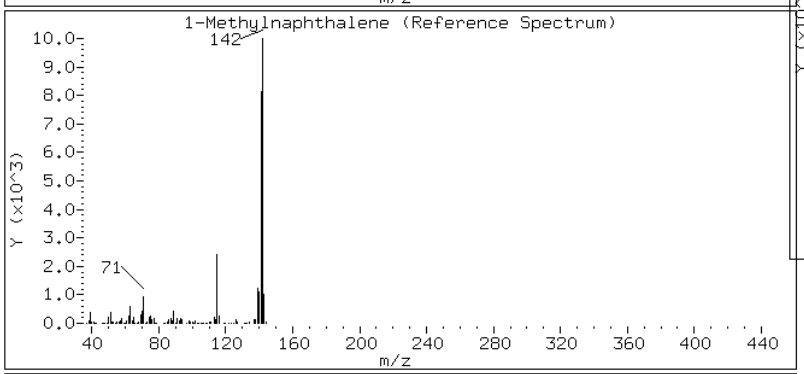
Client ID: Instrument: MSK5973.i

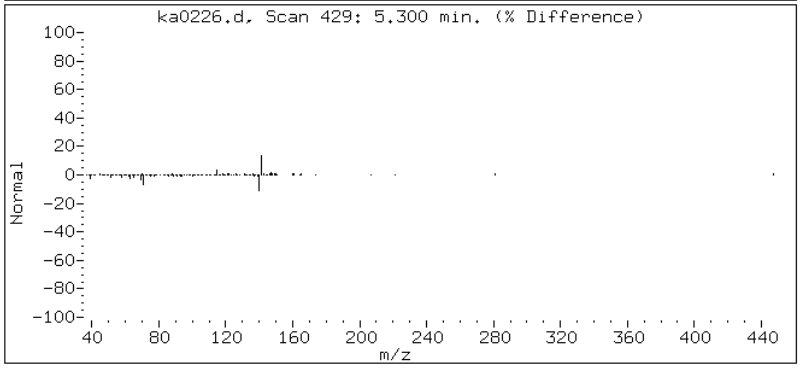
Sample Info: 680-85980-A-39-A DL=10 Operator: LEG

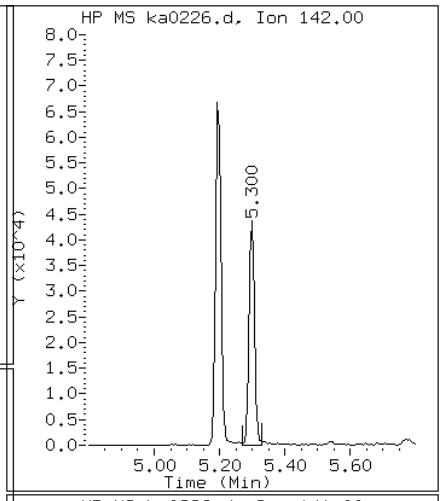
4 1-Methylnaphthalene

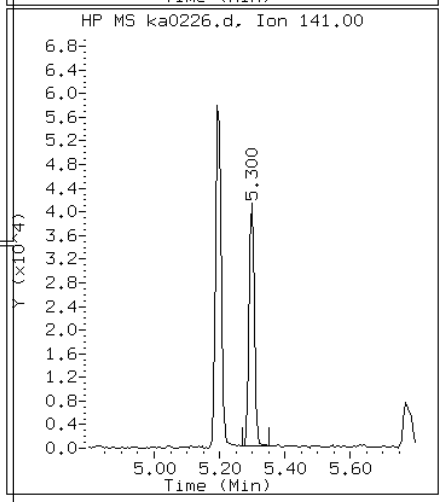












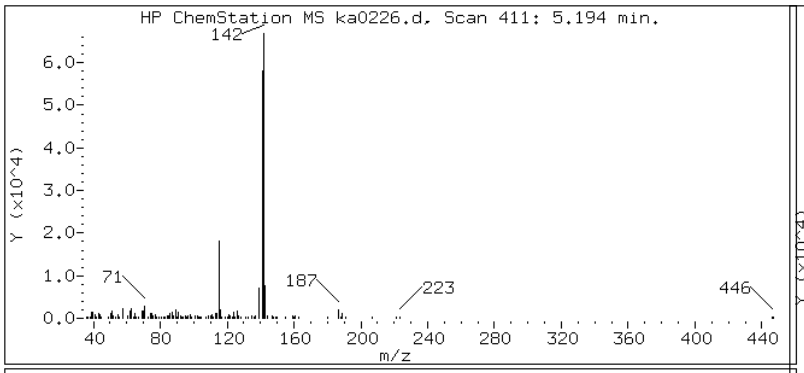
Data File: ka0226.d

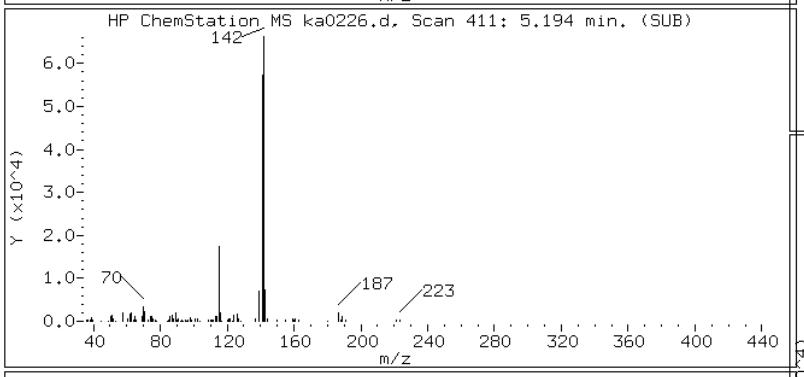
Date: 02-JAN-2013 18:52

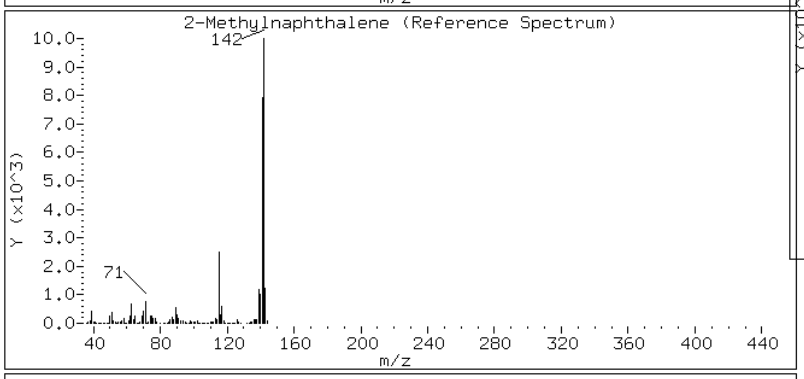
Client ID: Instrument: MSK5973.i

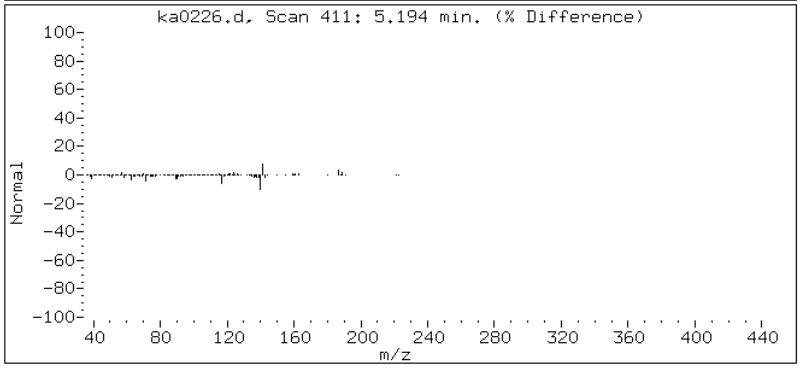
Sample Info: 680-85980-A-39-A DL=10 Operator: LEG

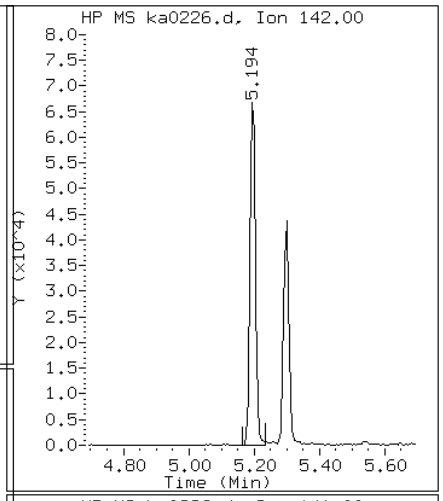
3 2-Methylnaphthalene

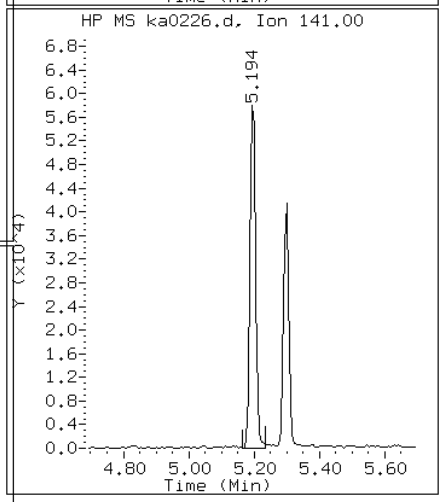












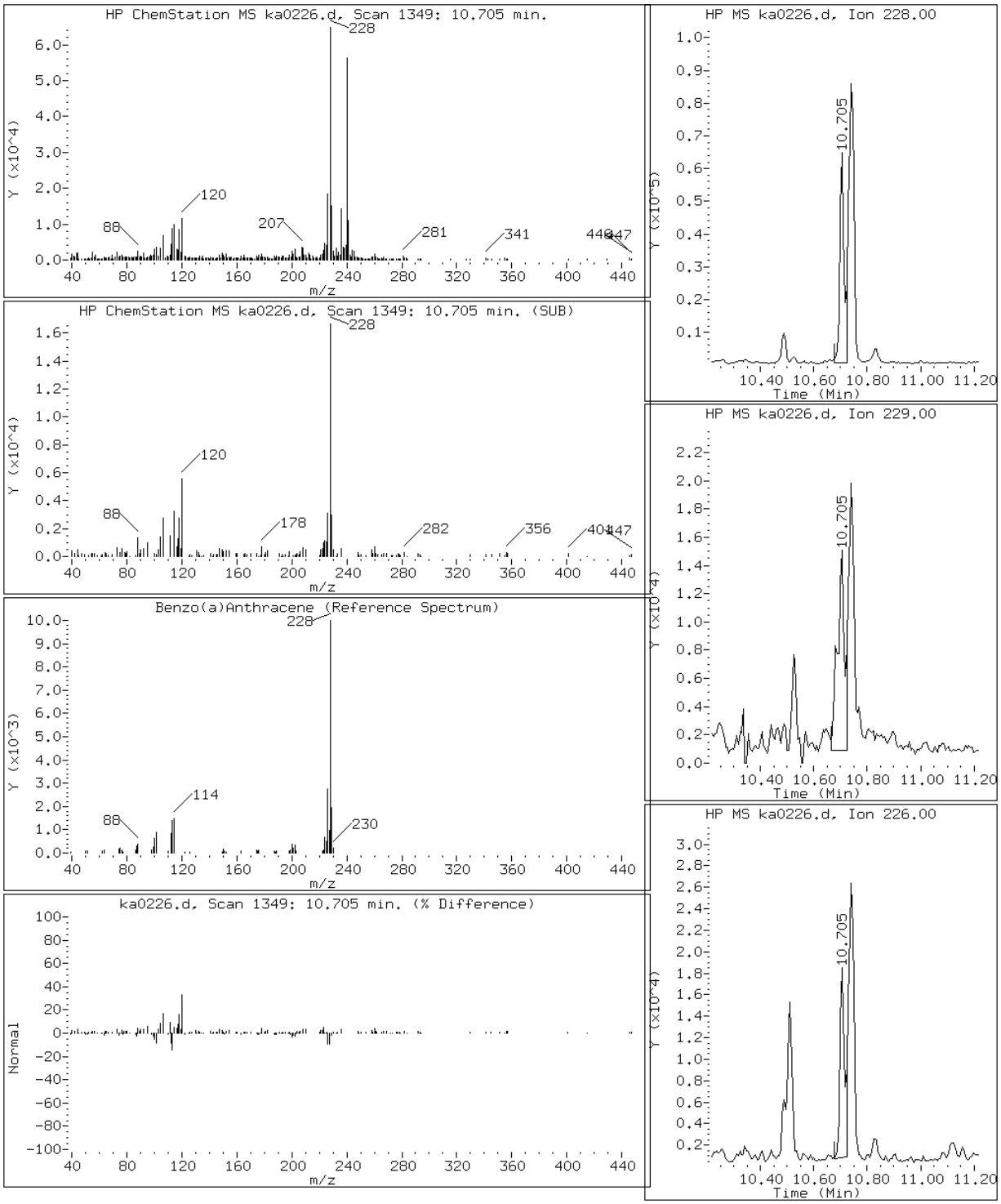
Data File: ka0226.d

Date: 02-JAN-2013 18:52

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-39-A DL=10 Operator: LEG

16 Benzo(a)Anthracene



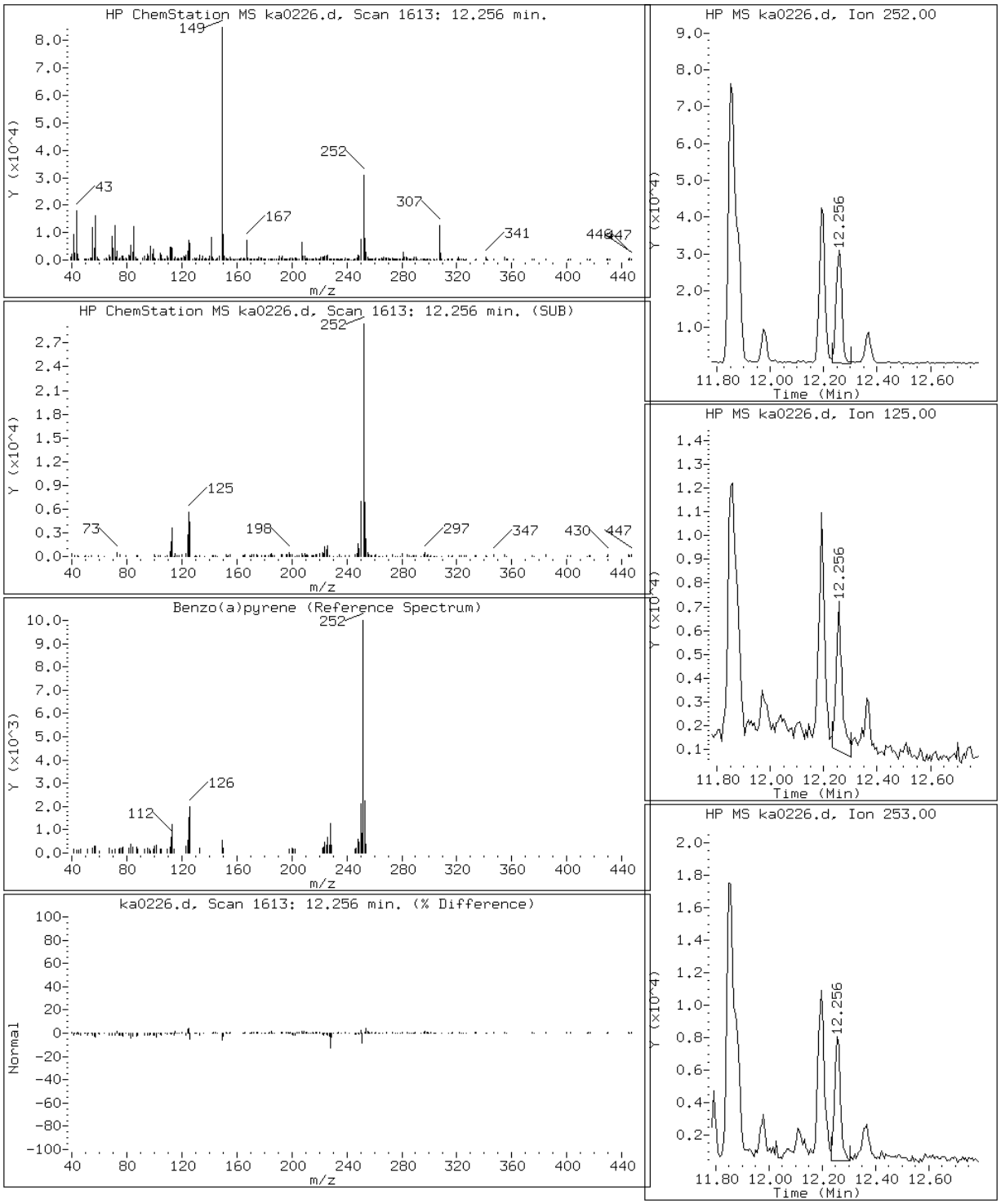
Data File: ka0226.d

Date: 02-JAN-2013 18:52

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-39-A DL=10 Operator: LEG

21 Benzo(a)pyrene



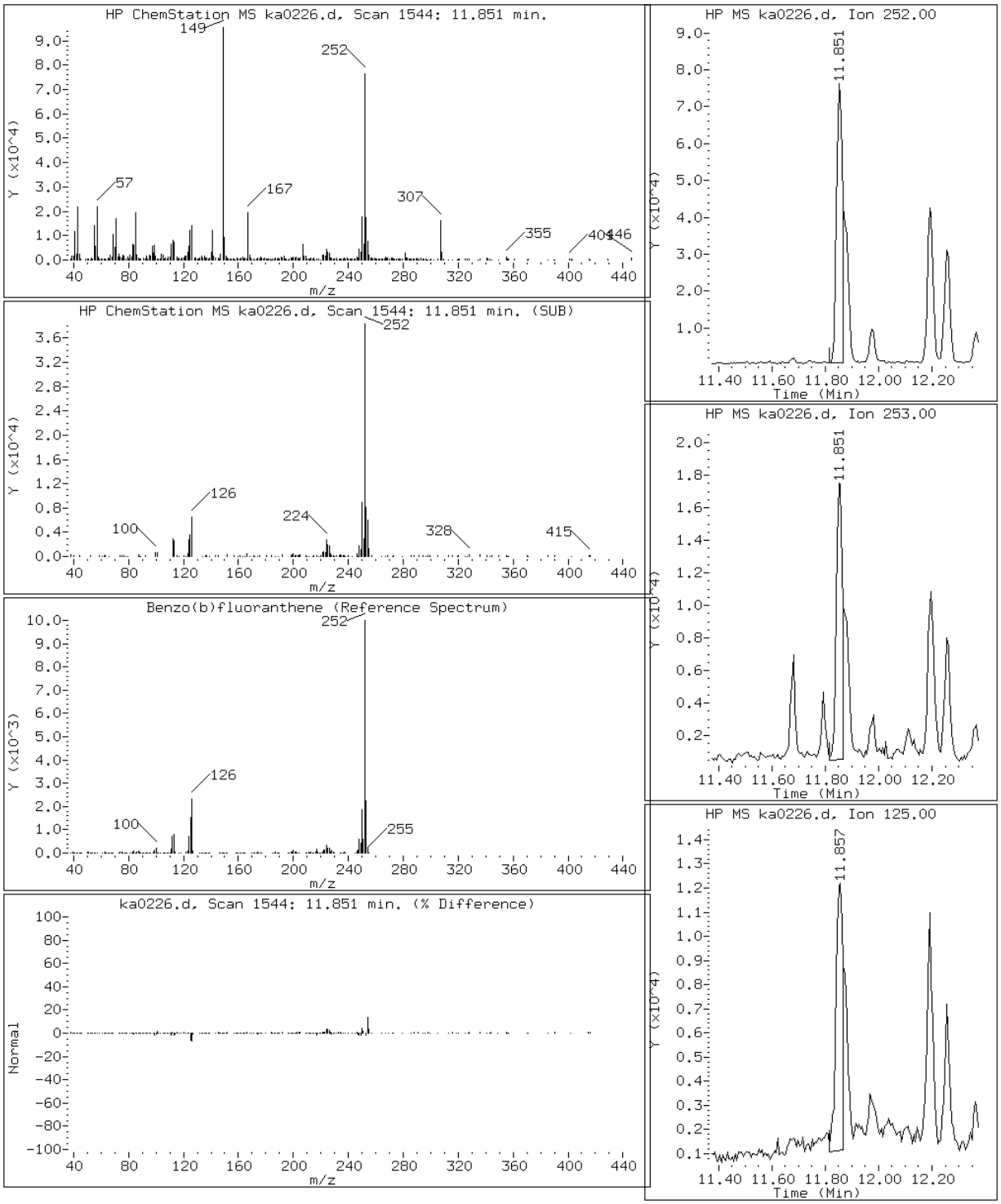
Data File: ka0226.d

Date: 02-JAN-2013 18:52

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-39-A DL=10 Operator: LEG

19 Benzo(b)fluoranthene



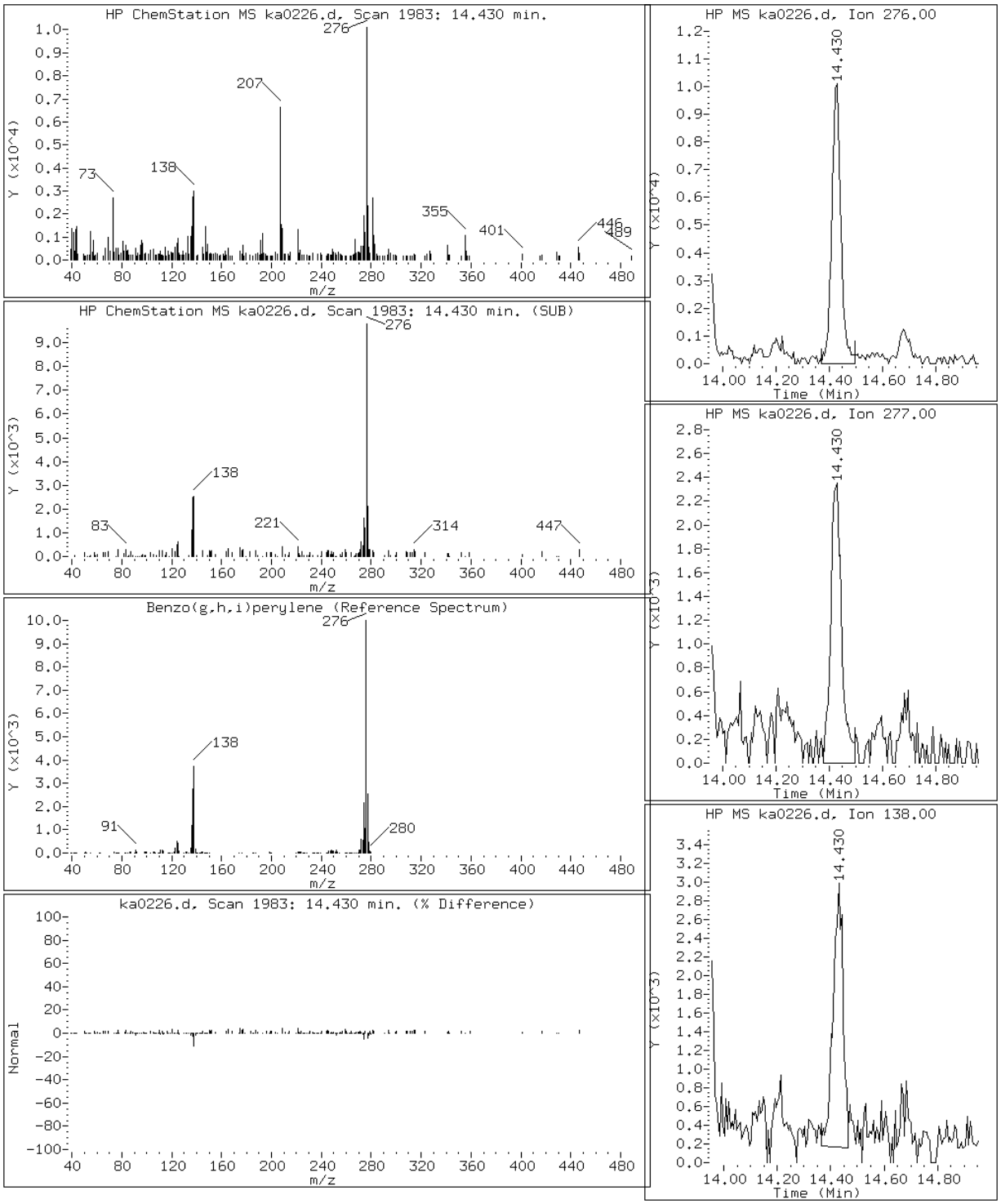
Data File: ka0226.d

Date: 02-JAN-2013 18:52

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-39-A DL=10 Operator: LEG

24 Benzo(g,h,i)perylene



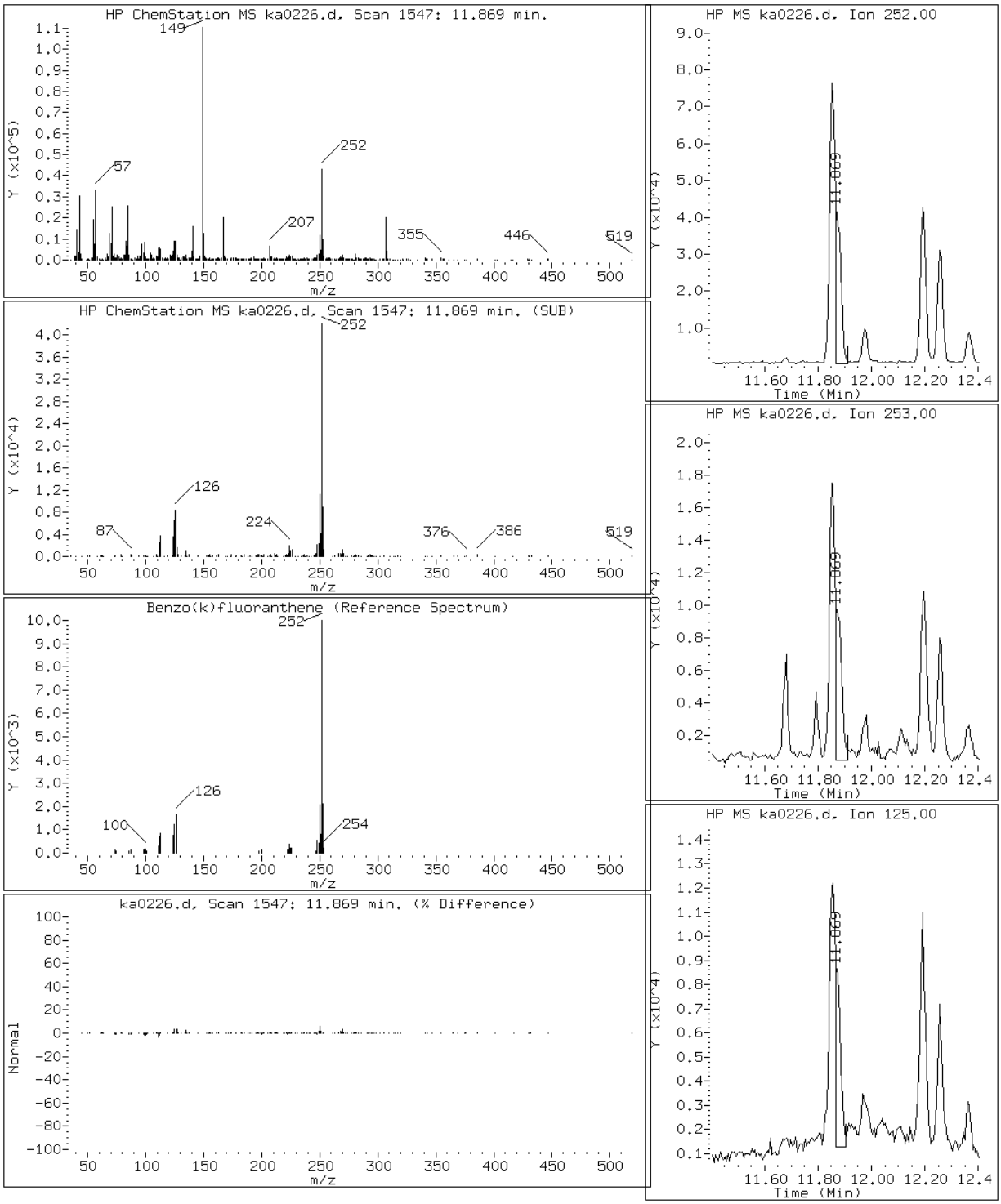
Data File: ka0226.d

Date: 02-JAN-2013 18:52

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-39-A DL=10 Operator: LEG

20 Benzo(k)fluoranthene



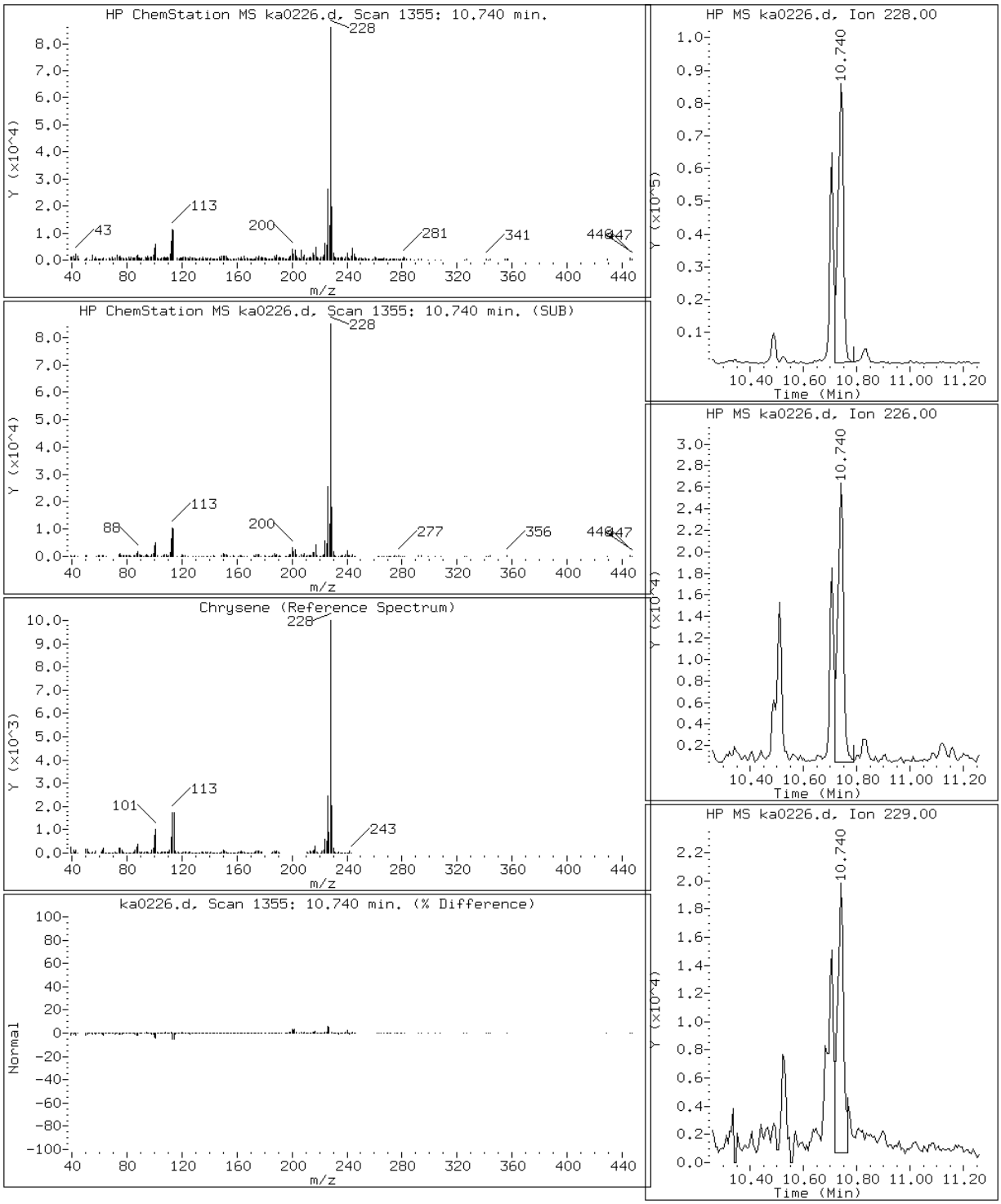
Data File: ka0226.d

Date: 02-JAN-2013 18:52

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-39-A DL=10 Operator: LEG

17 Chrysene



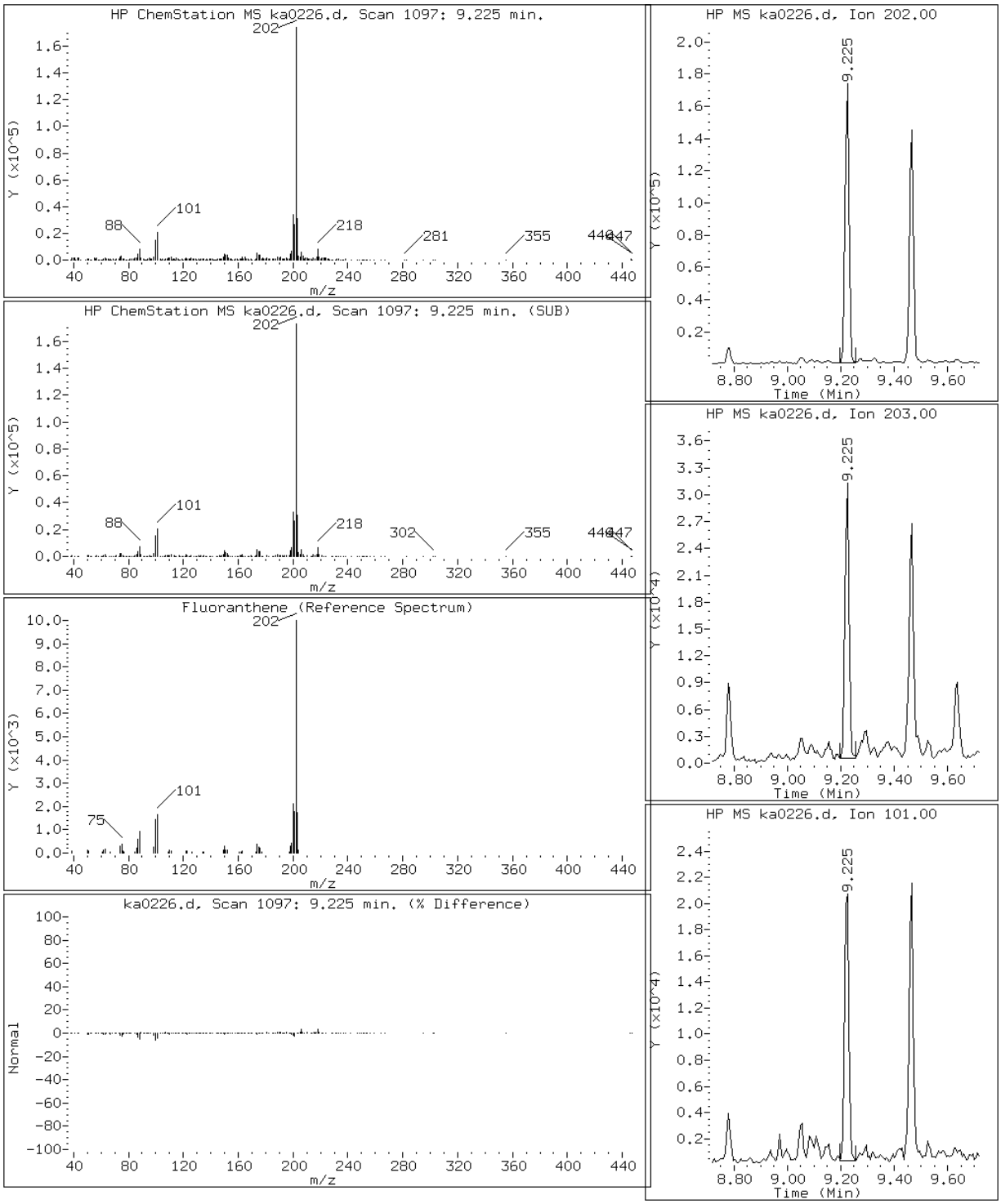
Data File: ka0226.d

Date: 02-JAN-2013 18:52

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-39-A DL=10 Operator: LEG

12 Fluoranthene



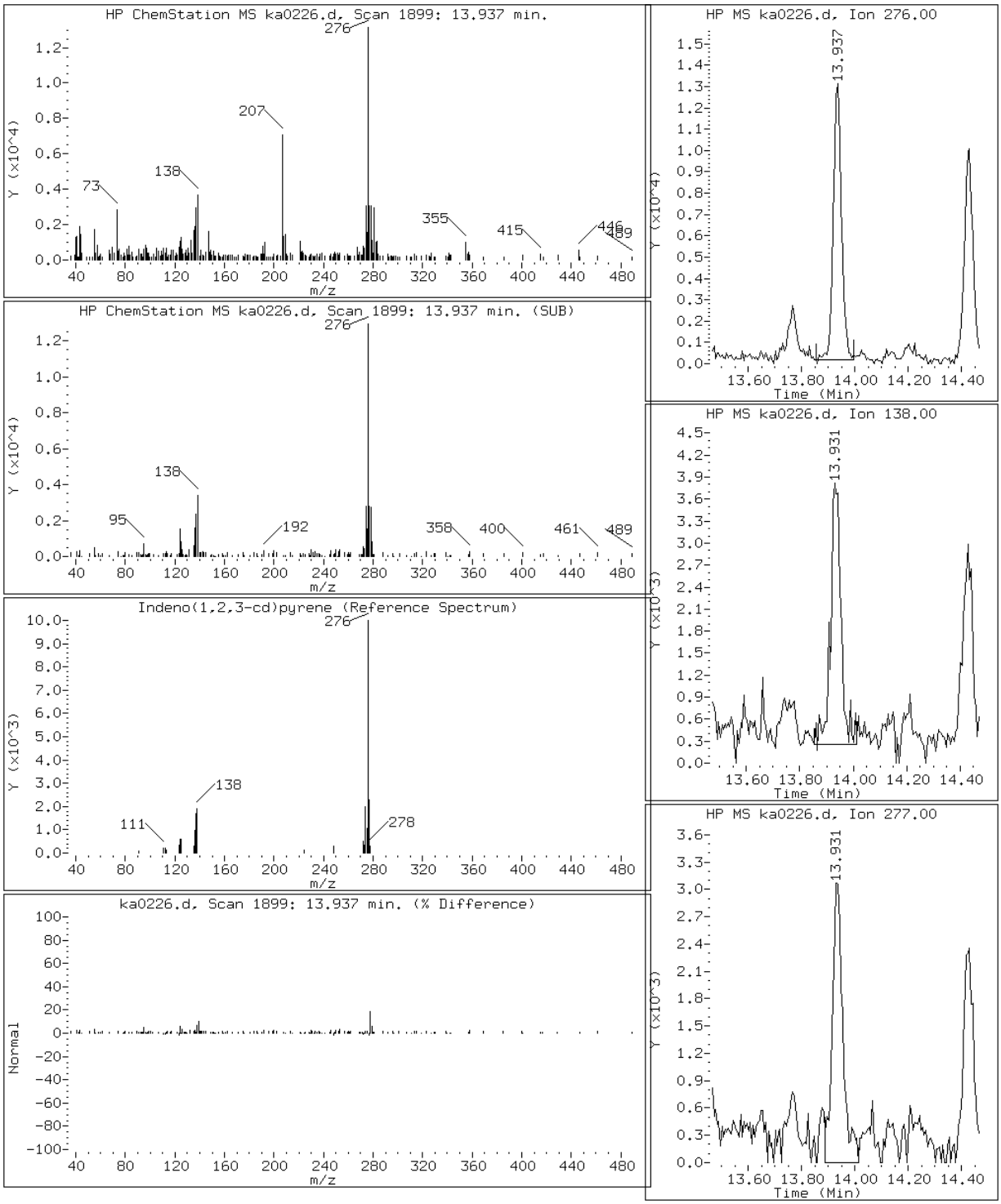
Data File: ka0226.d

Date: 02-JAN-2013 18:52

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-39-A DL=10 Operator: LEG

22 Indeno(1,2,3-cd)pyrene



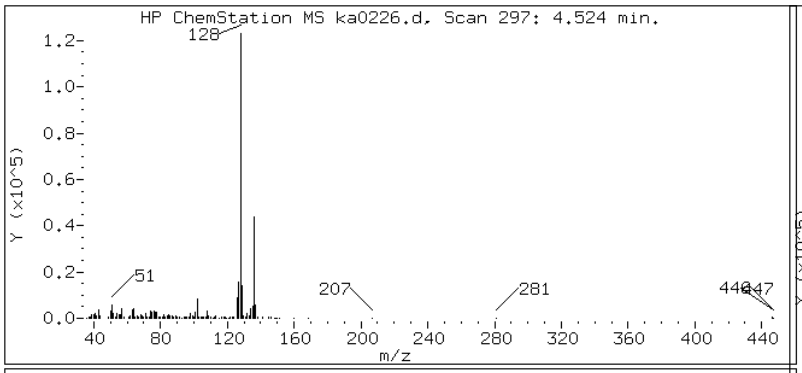
Data File: ka0226.d

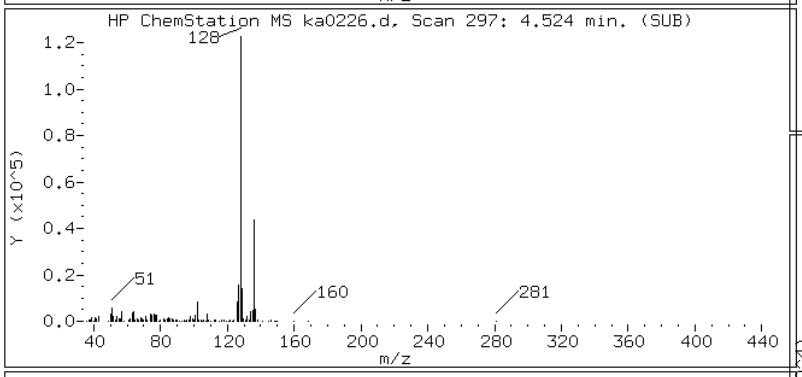
Date: 02-JAN-2013 18:52

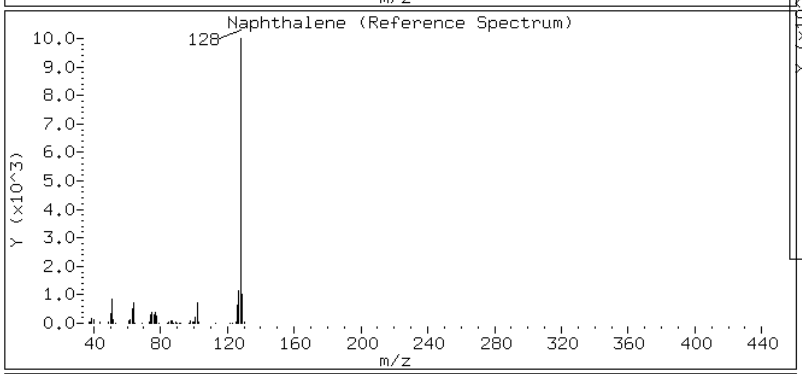
Client ID: Instrument: MSK5973.i

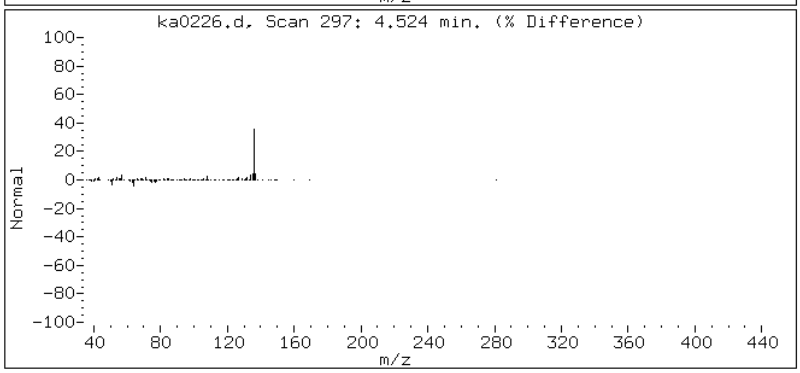
Sample Info: 680-85980-A-39-A DL=10 Operator: LEG

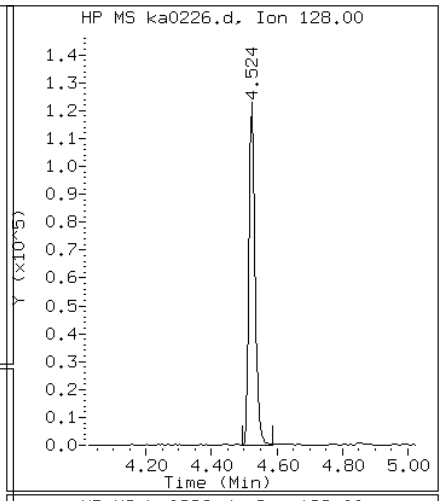
2 Naphthalene

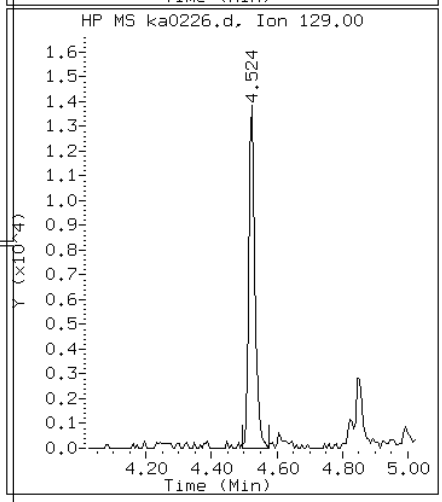












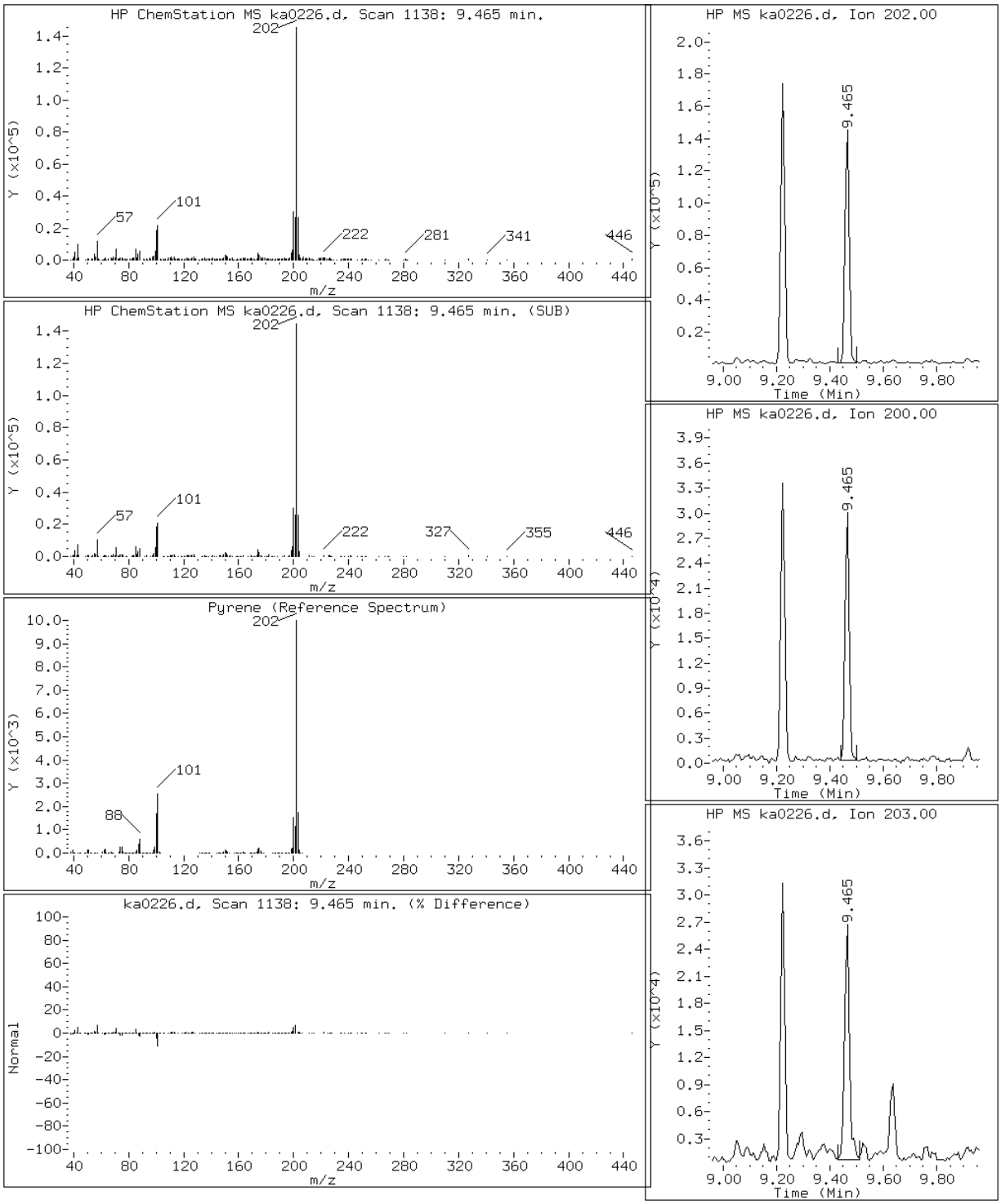
Data File: ka0226.d

Date: 02-JAN-2013 18:52

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-39-A DL=10 Operator: LEG

14 Pyrene



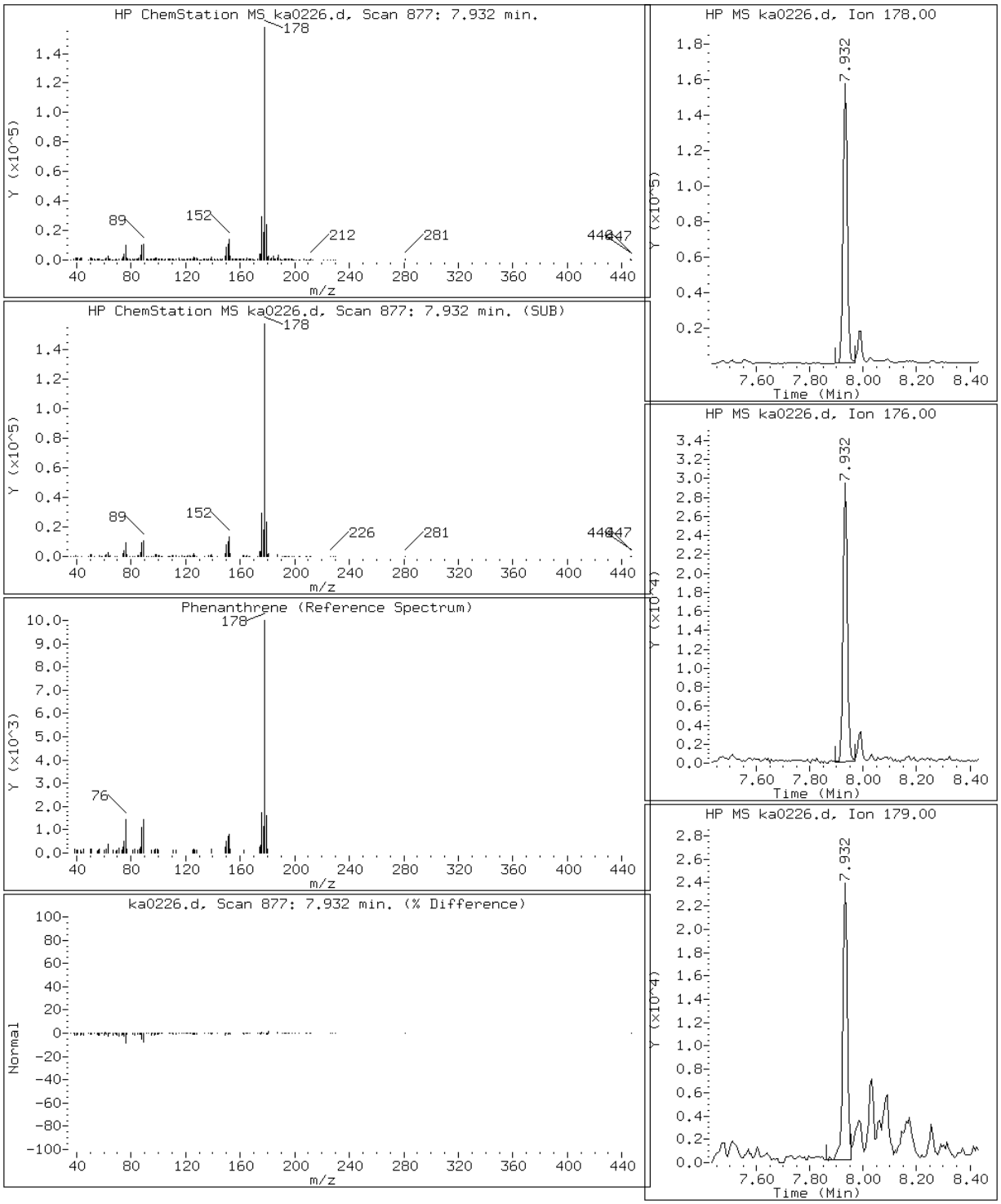
Data File: ka0226.d

Date: 02-JAN-2013 18:52

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-39-A DL=10 Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: ka0226.d
Inj. Date and Time: 02-JAN-2013 18:52
Instrument ID: MSK5973.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 01/03/2013

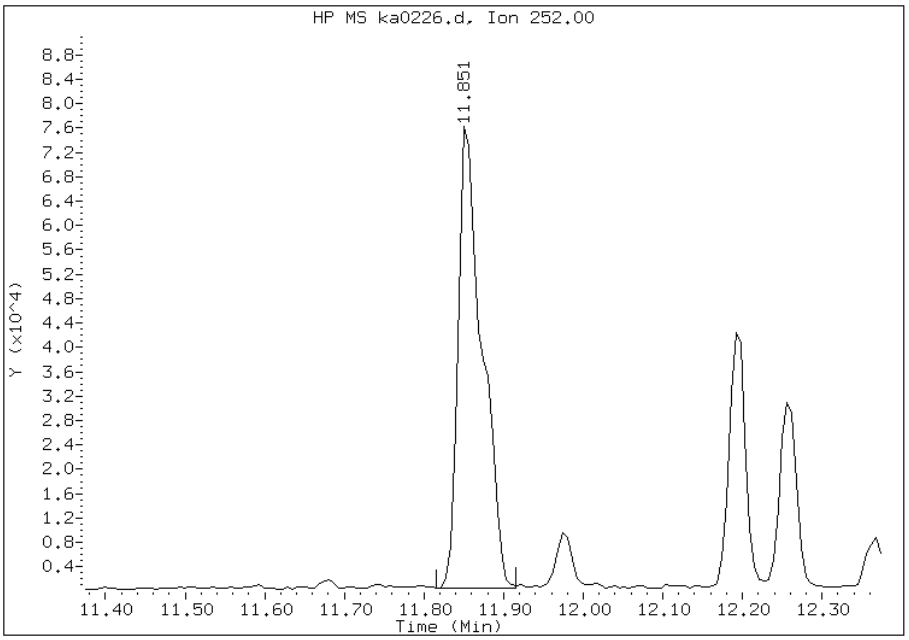
Processing Integration Results

RT: 11.85

Response: 159836

Amount: 1

Conc: 363



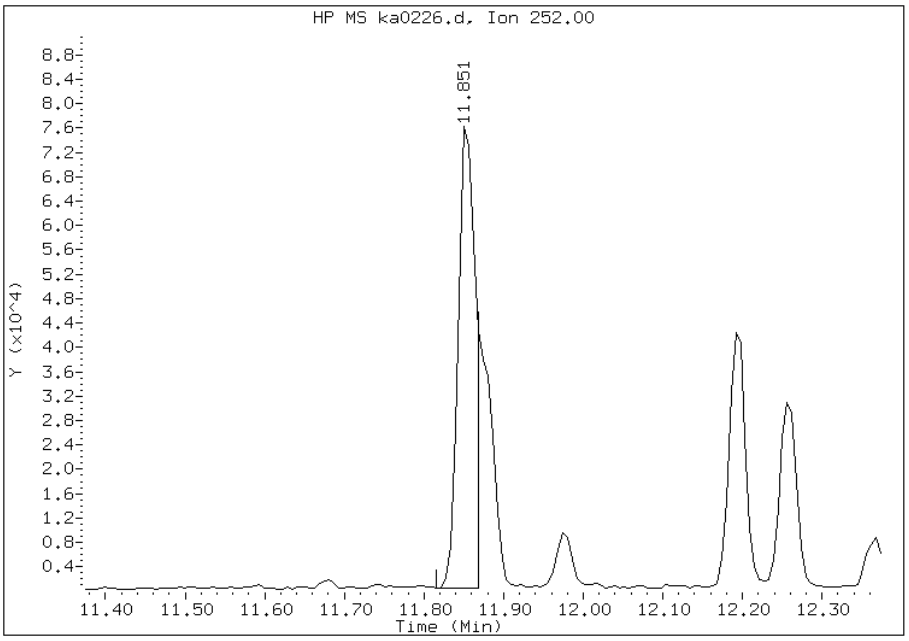
Manual Integration Results

RT: 11.85

Response: 118679

Amount: 1

Conc: 270



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: ka0226.d
Inj. Date and Time: 02-JAN-2013 18:52
Instrument ID: MSK5973.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 01/03/2013

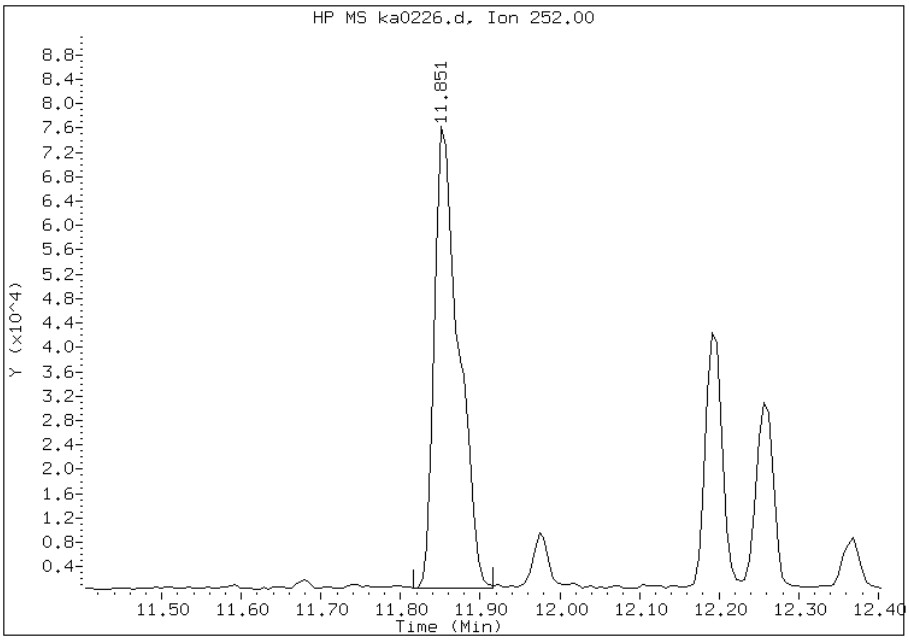
Processing Integration Results

RT: 11.85

Response: 159836

Amount: 1

Conc: 375



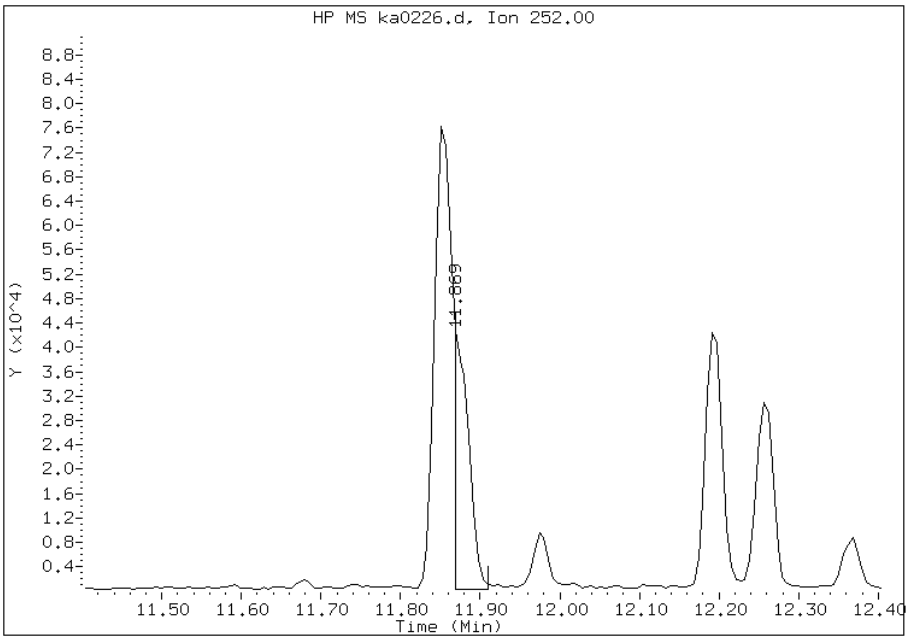
Manual Integration Results

RT: 11.87

Response: 56556

Amount: 0

Conc: 133



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: HP0190A-CS-SP | Lab Sample ID: 680-85980-41

Matrix: Solid | Lab File ID: ya0213.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/19/2012 09:50

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.12(g) | Date Analyzed: 01/02/2013 21:20

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

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

% Moisture: 23.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261663 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	88	U	88	41
91-57-6	2-Methylnaphthalene	48	J	88	43
83-32-9	Acenaphthene	88	U	88	43
208-96-8	Acenaphthylene	88	U	88	43
120-12-7	Anthracene	88	U	88	43
56-55-3	Benzo[a]anthracene	77	J	88	43
50-32-8	Benzo[a]pyrene	98		88	16
205-99-2	Benzo[b]fluoranthene	150		88	43
191-24-2	Benzo[g,h,i]perylene	79	J	88	43
207-08-9	Benzo[k]fluoranthene	58	J	88	26
218-01-9	Chrysene	110		88	43
53-70-3	Dibenz(a,h)anthracene	88	U	88	43
206-44-0	Fluoranthene	97		88	43
86-73-7	Fluorene	88	U	88	43
193-39-5	Indeno[1,2,3-cd]pyrene	60	J	88	43
91-20-3	Naphthalene	49	J	88	43
129-00-0	Pyrene	76	J	88	43
85-01-8	Phenanthrene	72	J	88	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y010213.b/ya0213.d
Lab Smp Id: 680-85980-A-41-A DL
Inj Date : 02-JAN-2013 21:20
Operator : VHB Inst ID: MSY5975.i
Smp Info : 680-85980-A-41-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y010213.b/Y-b8270CLLPAH-m.m
Meth Date : 03-Jan-2013 07:09 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 19:25 Cal File: ya0208q.d
Als bottle: 13
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.708	4.708	(1.000)	386315	2.00000	
2 Naphthalene	128	4.729	4.729	(1.005)	25616	0.11285	37.61(a)
3 2-Methylnaphthalene	142	5.328	5.328	(1.132)	15546	0.11054	36.84(a)
* 5 Acenaphthene-d10	164	6.253	6.253	(1.000)	219639	2.00000	
* 9 Phenanthrene-d10	188	7.558	7.558	(1.000)	326594	2.00000	
10 Phenanthrene	178	7.580	7.580	(1.003)	35444	0.16512	55.04(a)
12 Fluoranthene	202	8.665	8.666	(1.146)	44152	0.22272	74.24

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
14 Pyrene	202	8.885	8.890	(0.882)	37945	0.17486	58.28(a)
16 Benzo(a)Anthracene	228	10.062	10.067	(0.998)	28536	0.17538	58.45(a)
* 13 Chrysene-d12	240	10.078	10.078	(1.000)	249461	2.00000	
17 Chrysene	228	10.104	10.110	(1.003)	40135	0.24840	82.79
19 Benzo(b)fluoranthene	252	11.452	11.452	(0.949)	58682	0.34647	115.49
20 Benzo(k)fluoranthene	252	11.484	11.490	(0.951)	22149	0.13402	44.67(aM)
21 Benzo(a)pyrene	252	11.976	11.982	(0.992)	29714	0.22476	74.92
* 18 Perylene-d12	264	12.073	12.073	(1.000)	223909	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	14.212	14.217	(1.410)	20648	0.13737	45.79(a)
24 Benzo(g,h,i)perylene	276	14.881	14.886	(1.233)	22885	0.18198	60.65(a)

QC Flag Legend

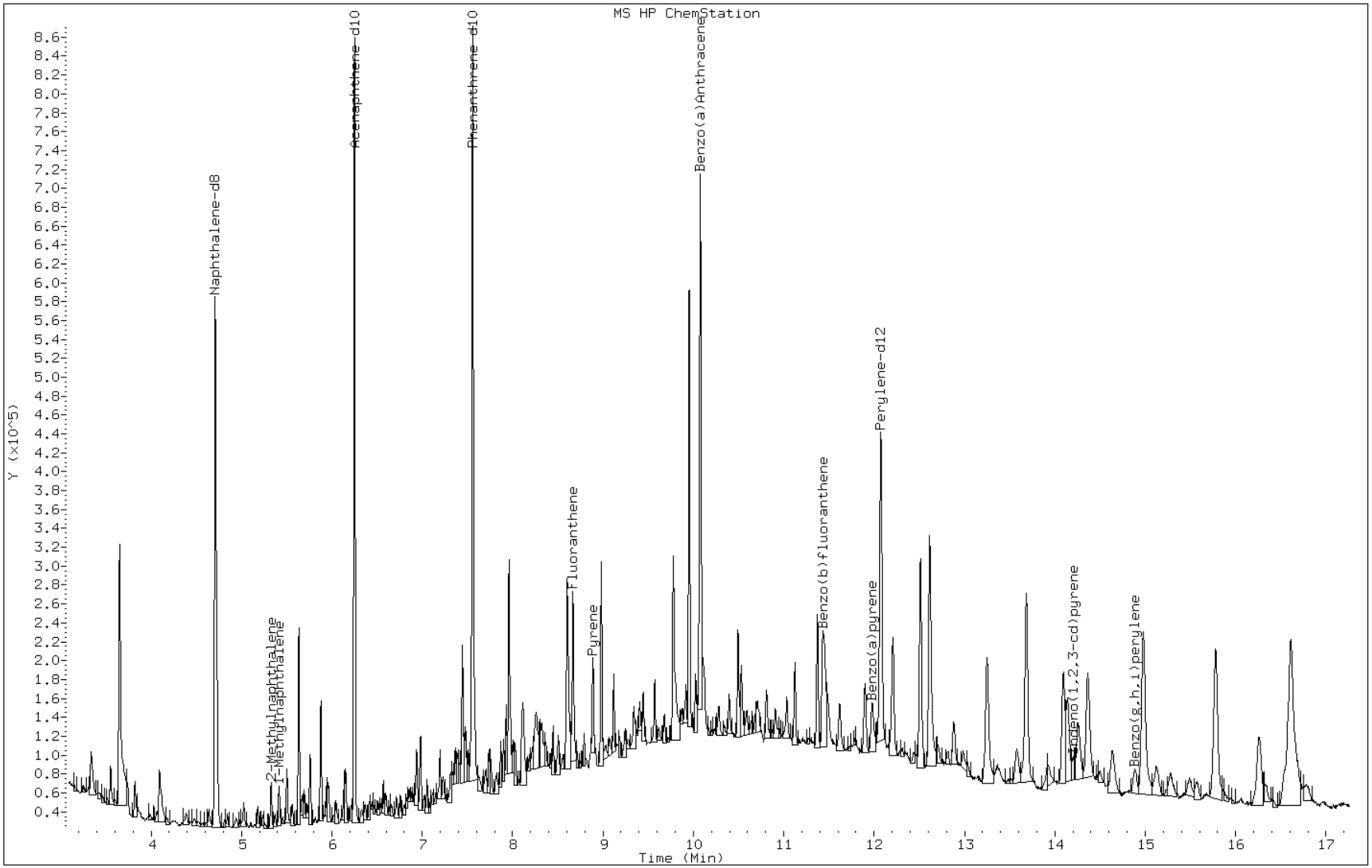
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: ya0213.d

Date: 02-JAN-2013 21:20

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-41-A DL=10 Operator: VHB



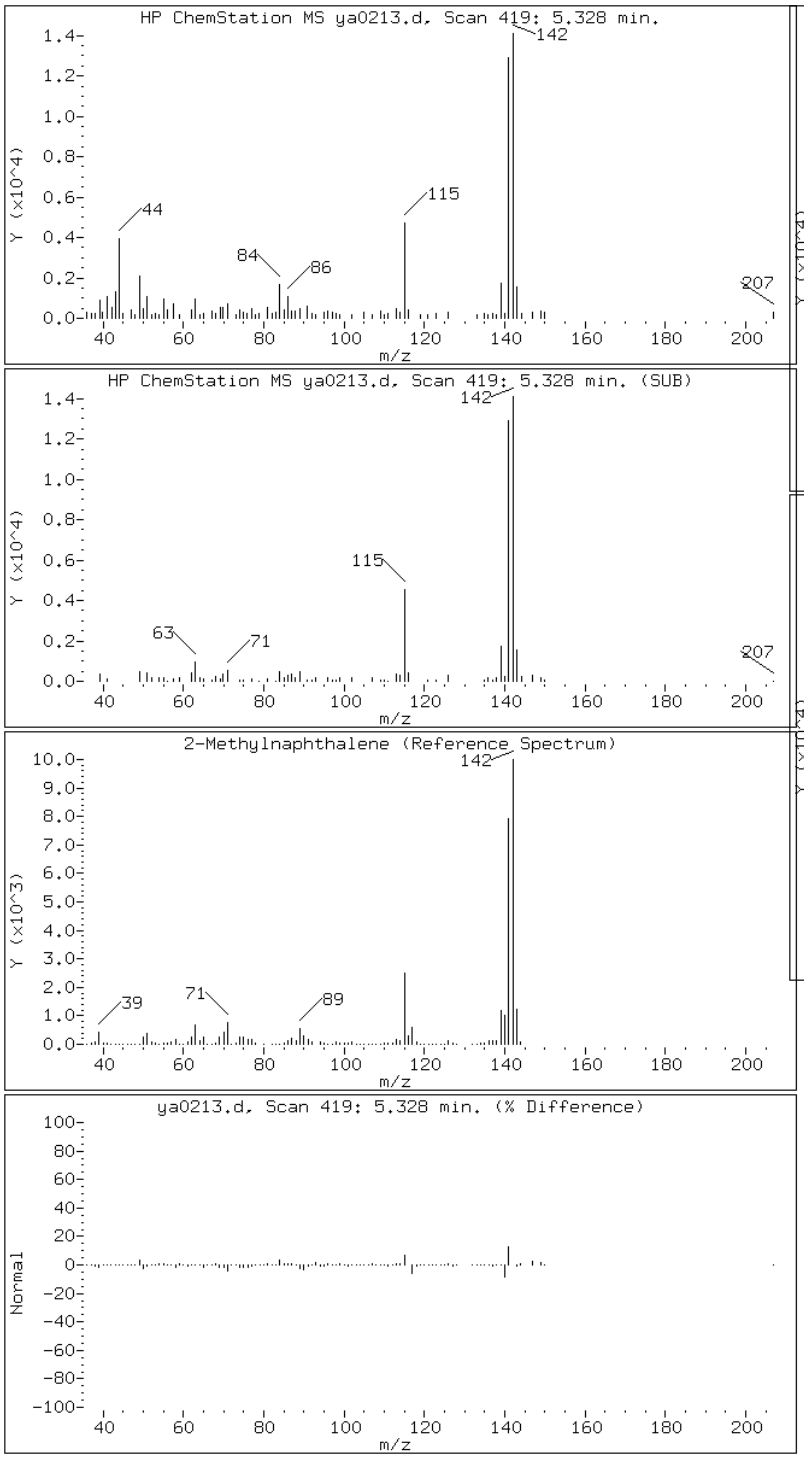
Data File: ya0213.d

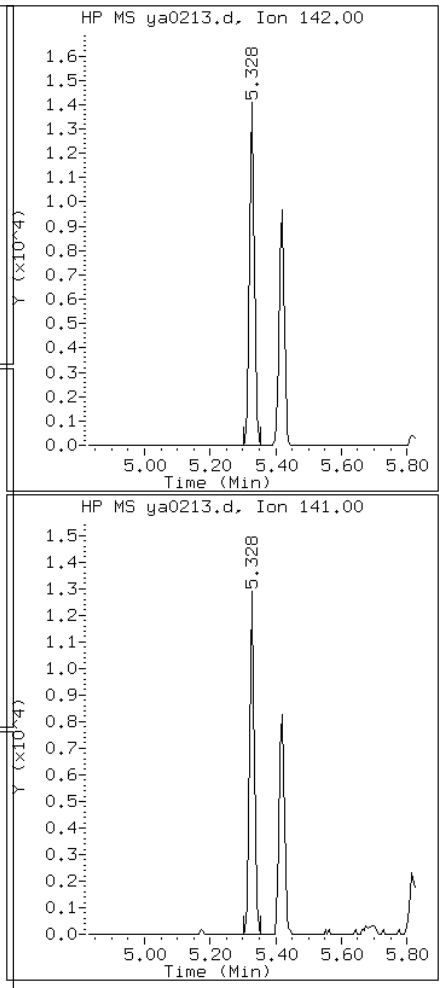
Date: 02-JAN-2013 21:20

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-41-A DL=10 Operator: VHB

3 2-Methylnaphthalene





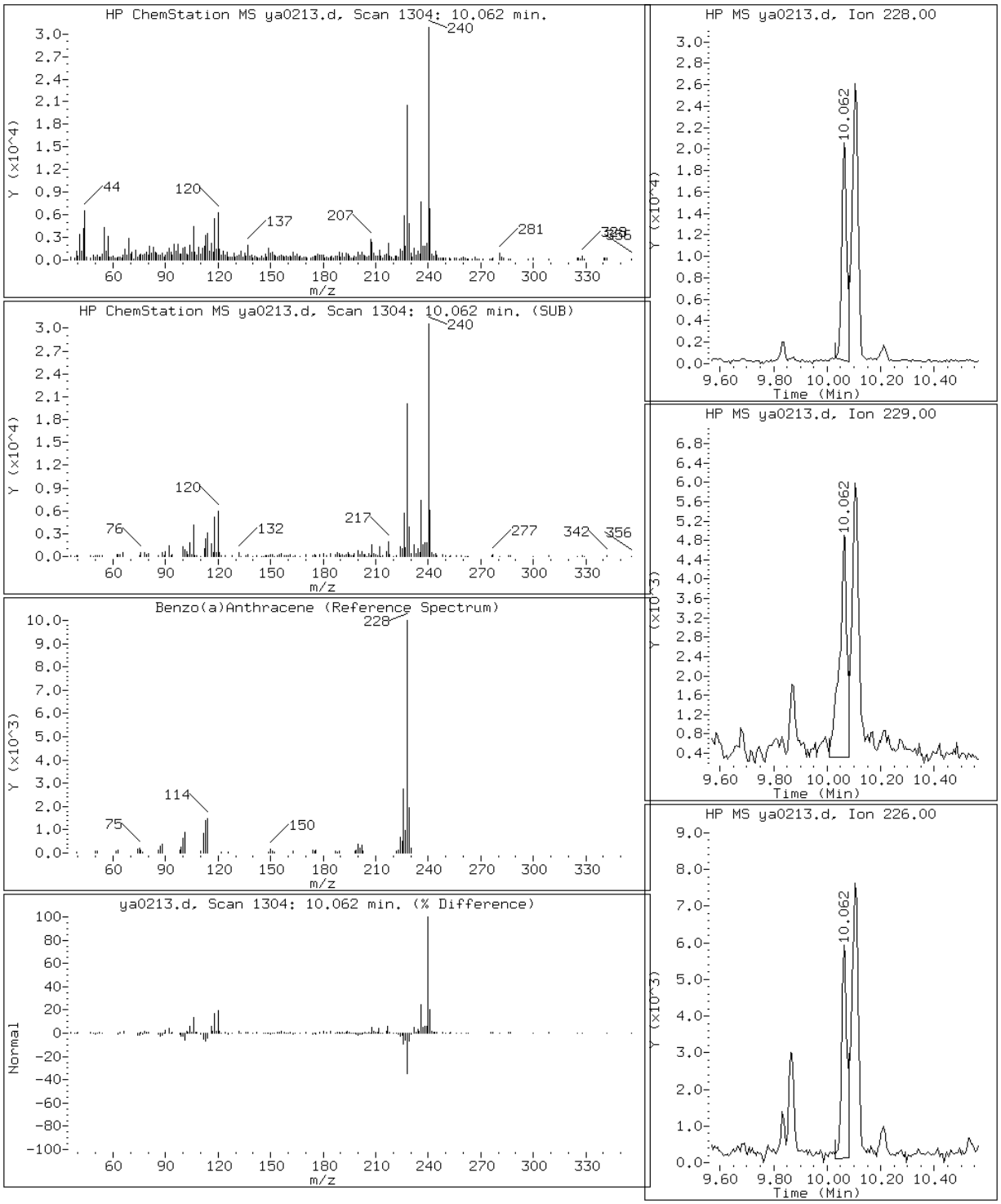
Data File: ya0213.d

Date: 02-JAN-2013 21:20

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-41-A DL=10 Operator: VHB

16 Benzo(a)Anthracene



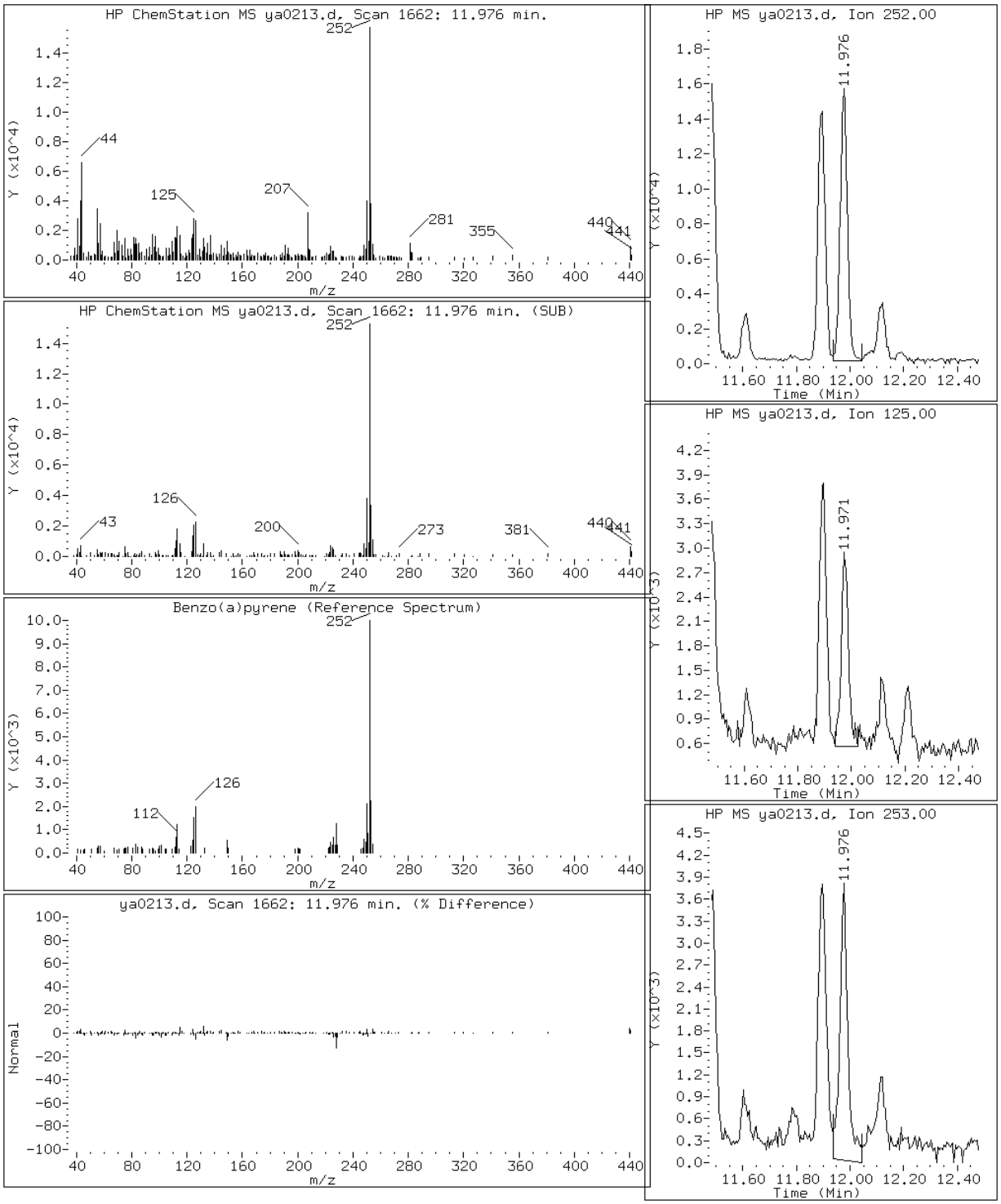
Data File: ya0213.d

Date: 02-JAN-2013 21:20

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-41-A DL=10 Operator: VHB

21 Benzo(a)pyrene



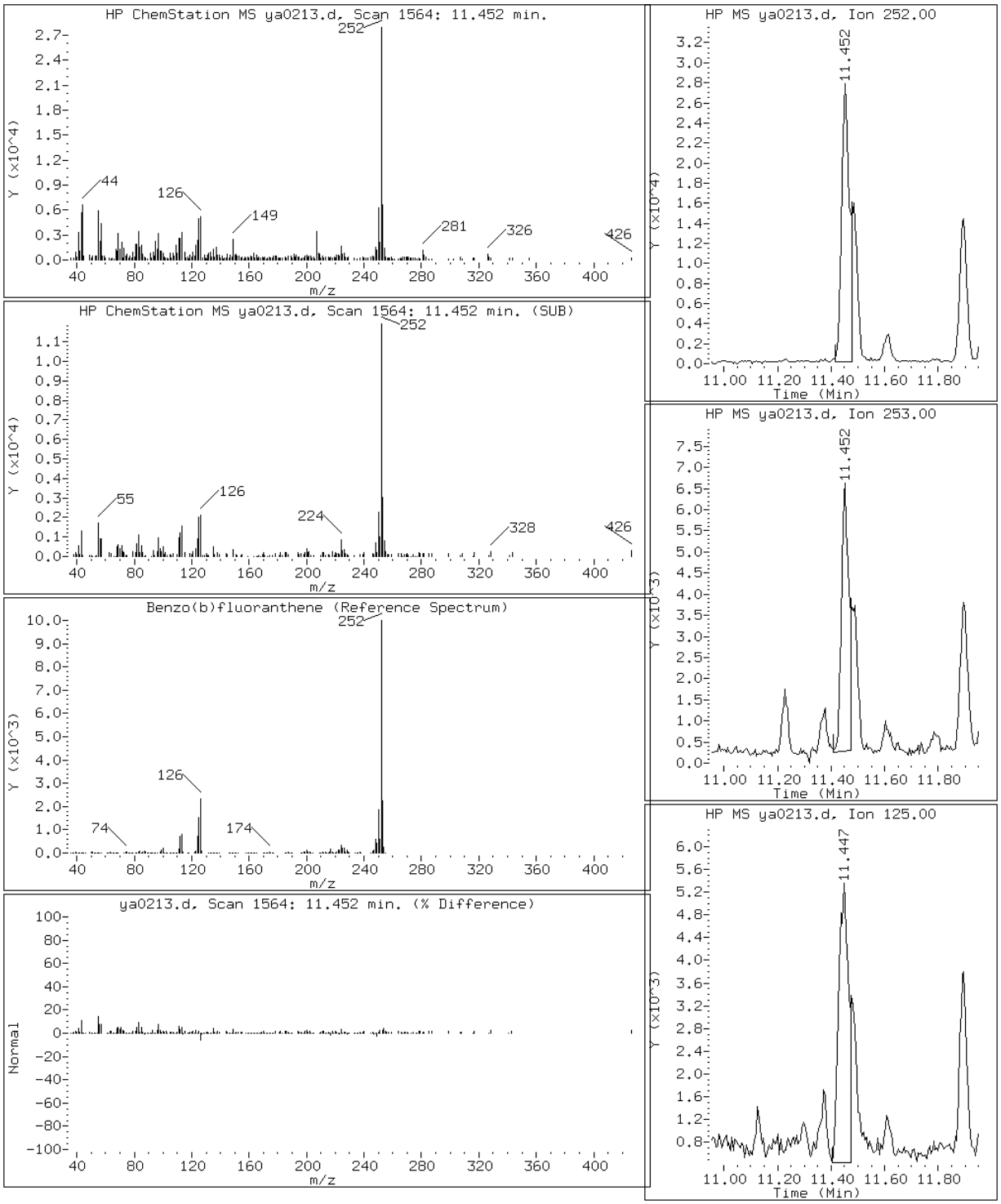
Data File: ya0213.d

Date: 02-JAN-2013 21:20

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-41-A DL=10 Operator: VHB

19 Benzo(b)fluoranthene



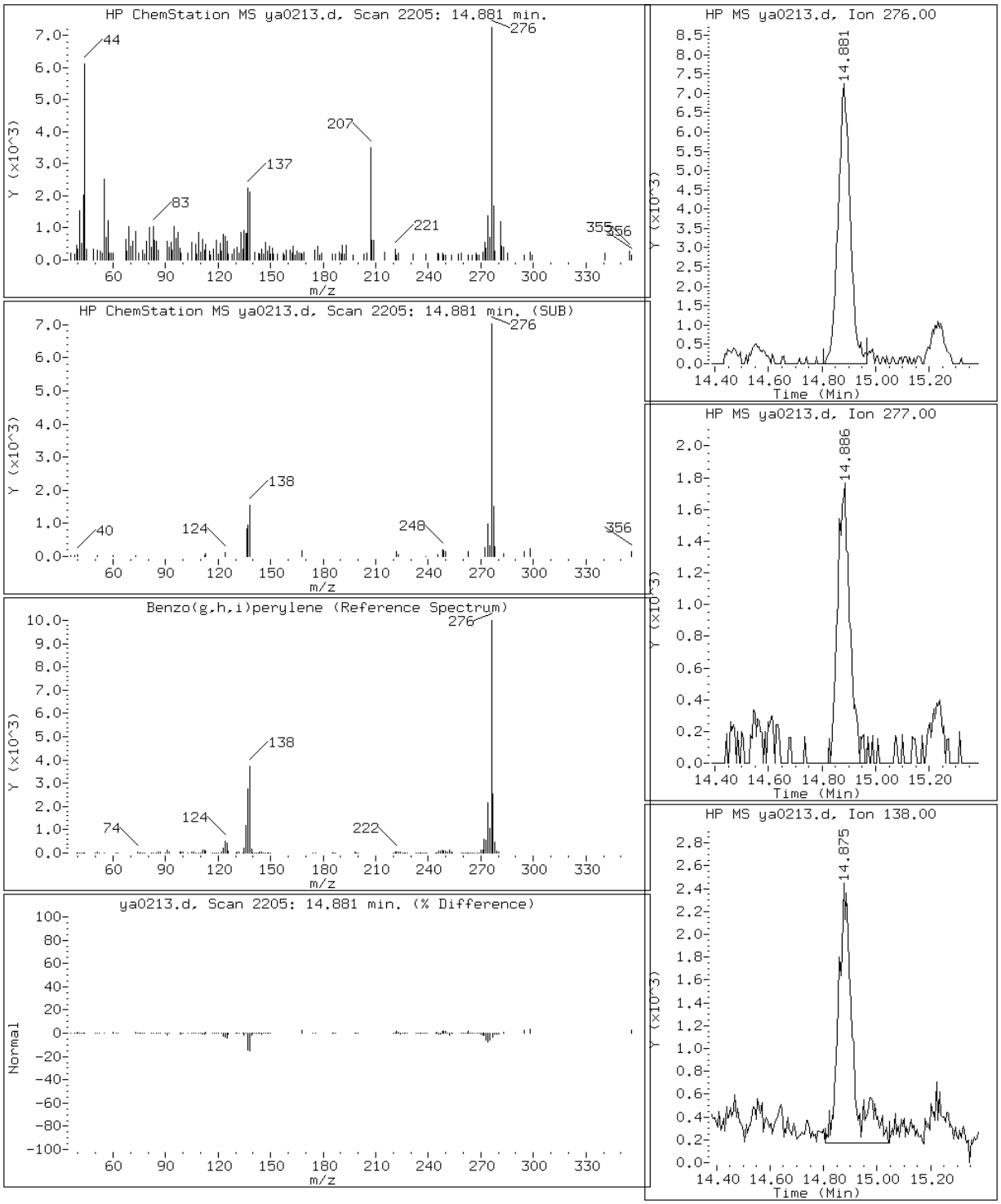
Data File: ya0213.d

Date: 02-JAN-2013 21:20

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-41-A DL=10 Operator: VHB

24 Benzo(g,h,i)perylene



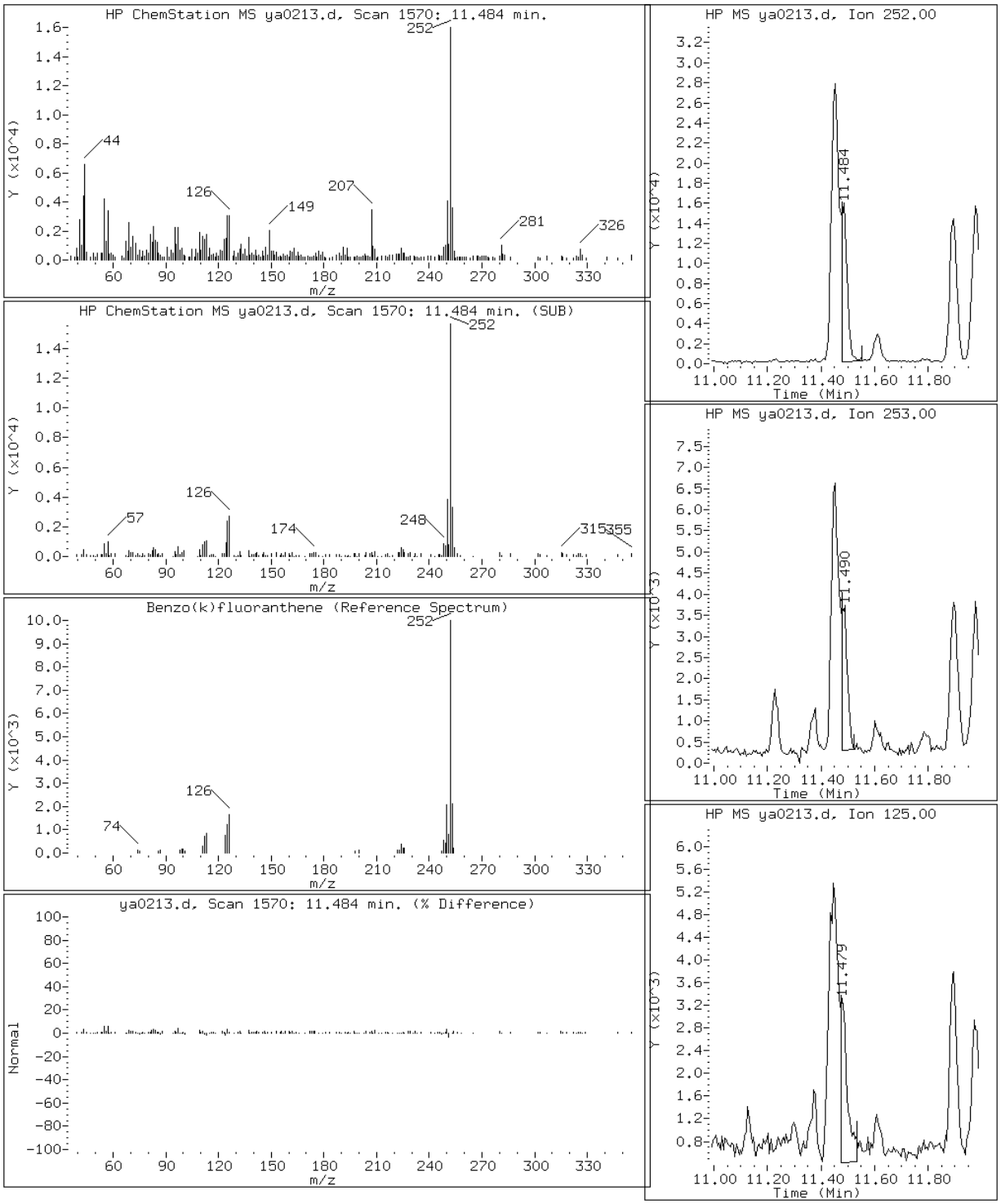
Data File: ya0213.d

Date: 02-JAN-2013 21:20

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-41-A DL=10 Operator: VHB

20 Benzo(k)fluoranthene



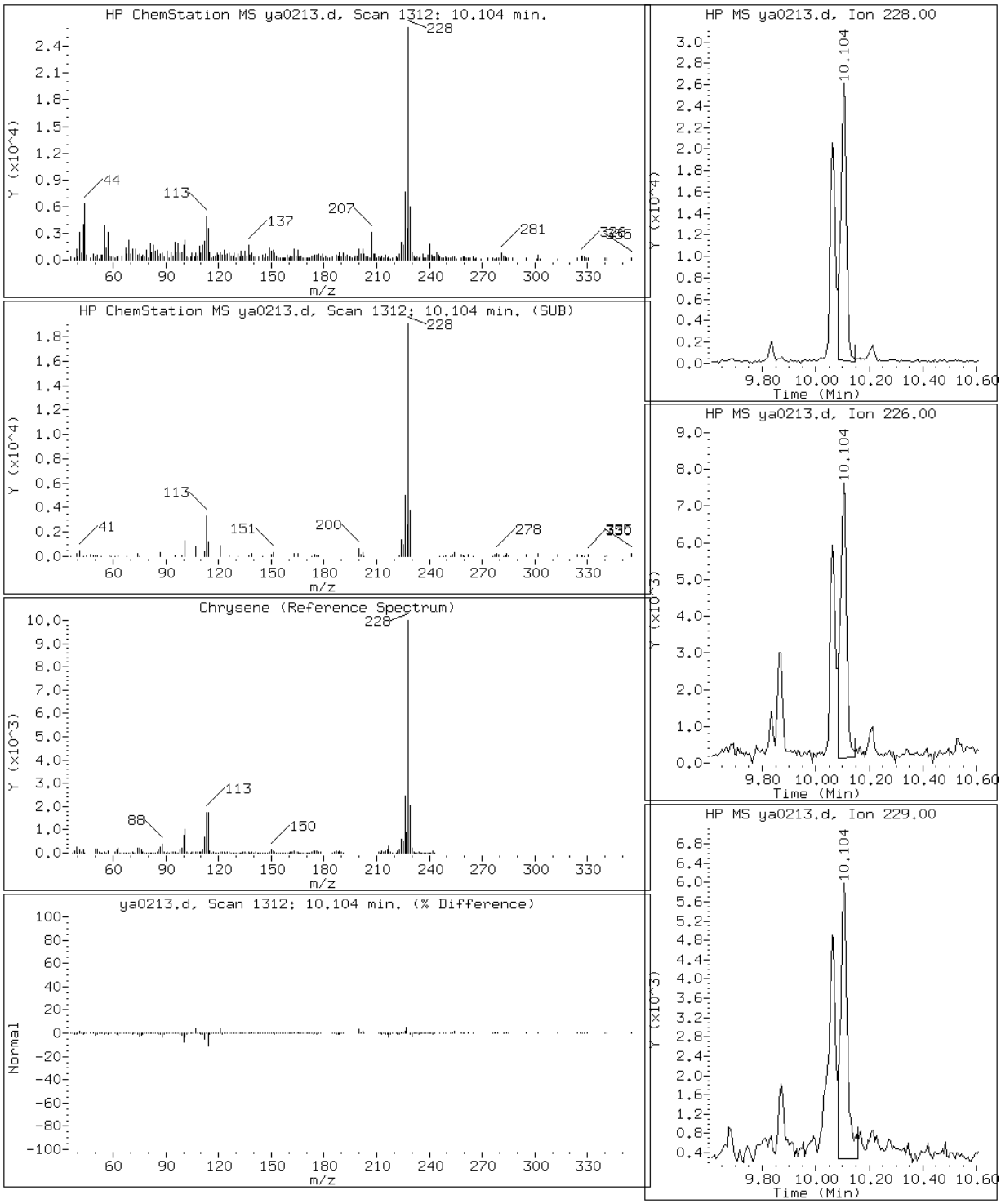
Data File: ya0213.d

Date: 02-JAN-2013 21:20

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-41-A DL=10 Operator: VHB

17 Chrysene



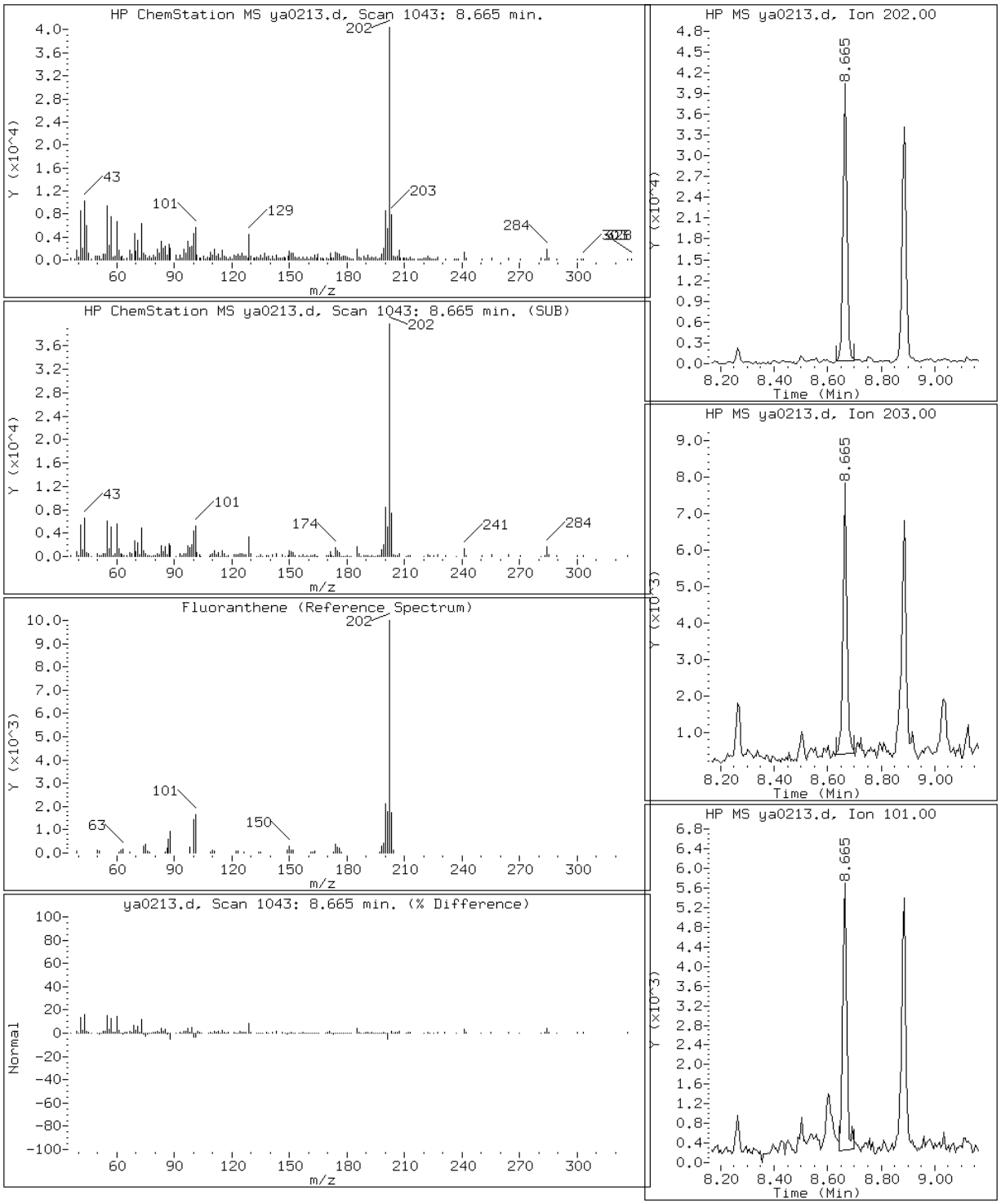
Data File: ya0213.d

Date: 02-JAN-2013 21:20

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-41-A DL=10 Operator: VHB

12 Fluoranthene



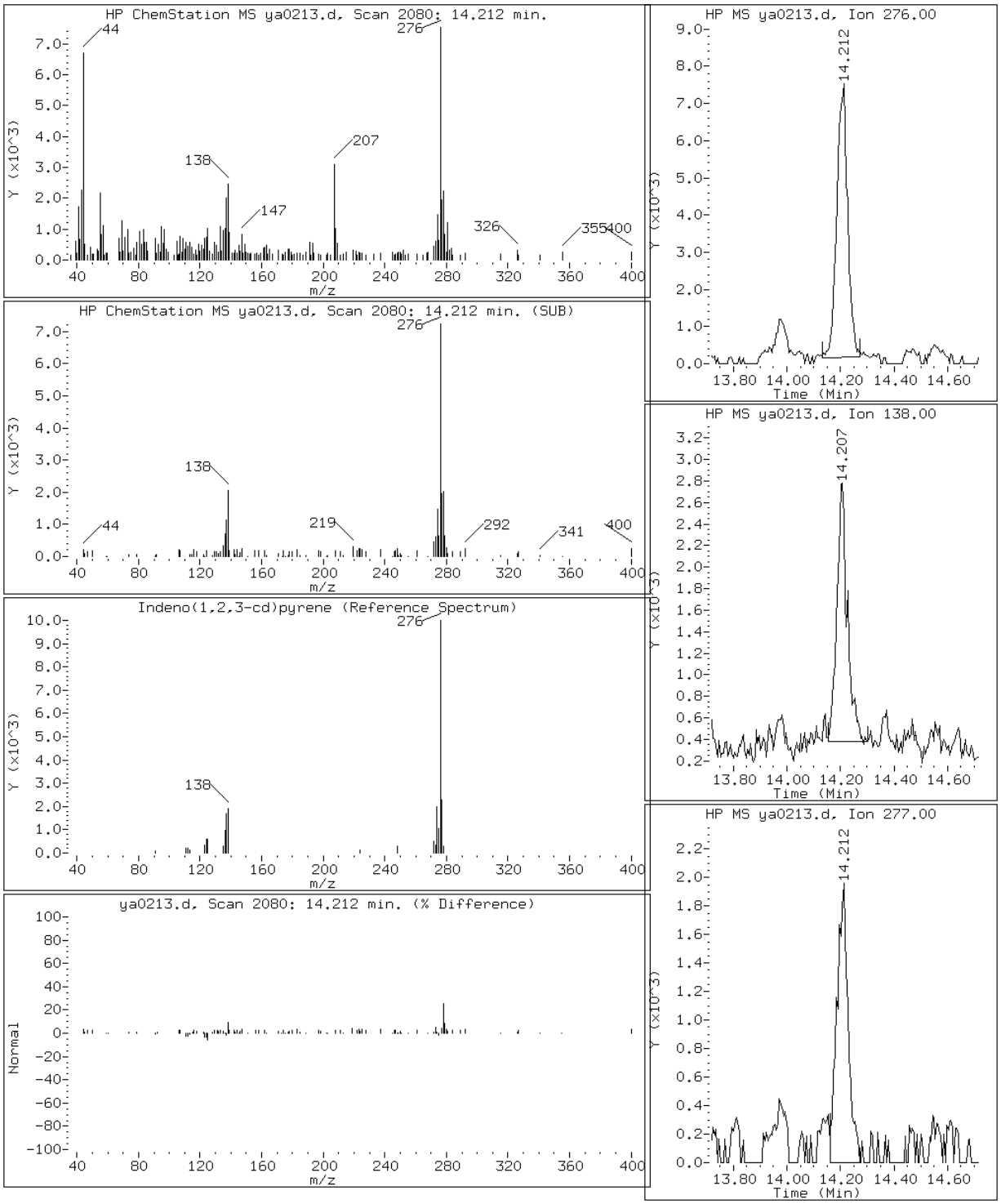
Data File: ya0213.d

Date: 02-JAN-2013 21:20

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-41-A DL=10 Operator: VHB

22 Indeno(1,2,3-cd)pyrene



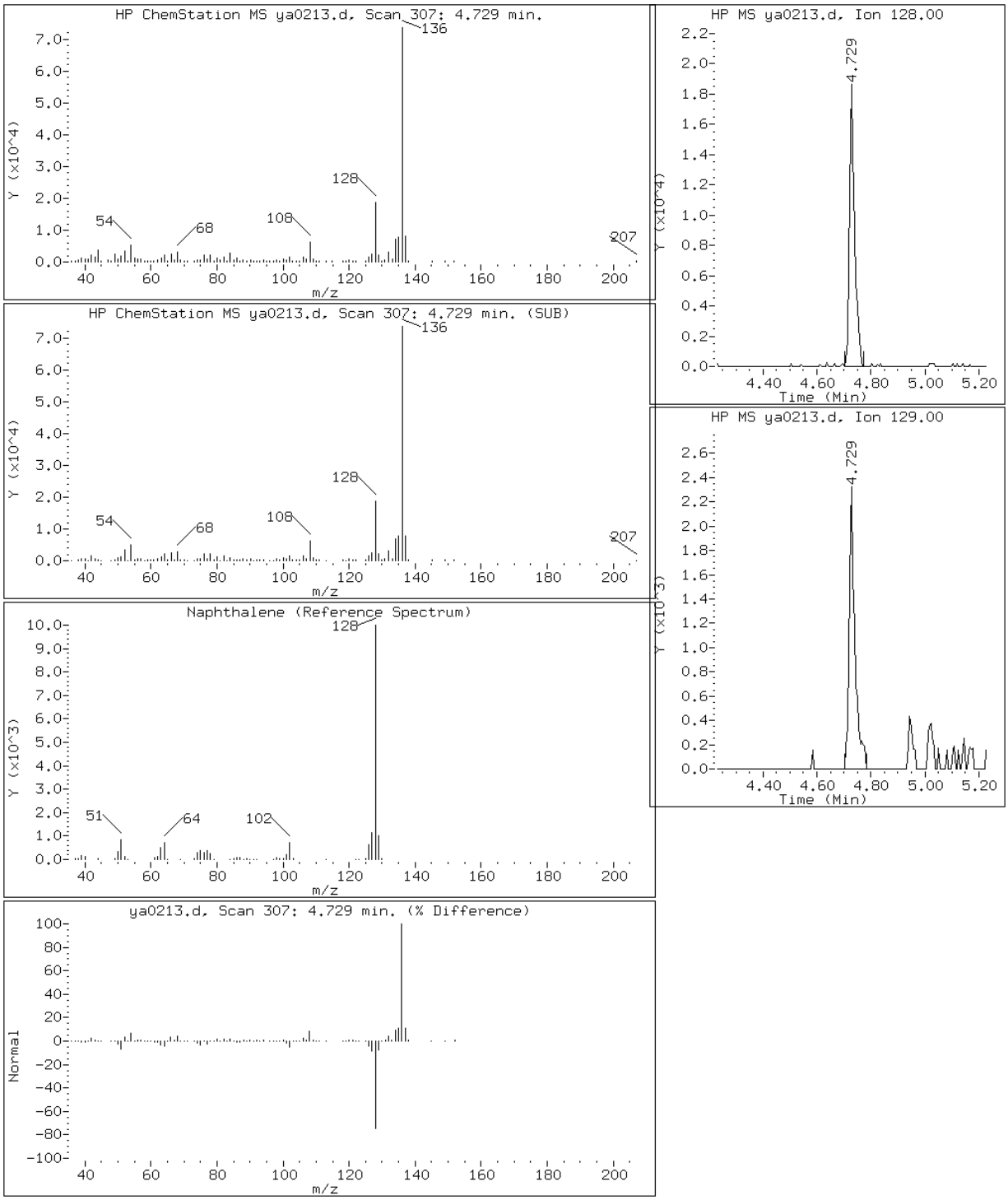
Data File: ya0213.d

Date: 02-JAN-2013 21:20

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-41-A DL=10 Operator: VHB

2 Naphthalene



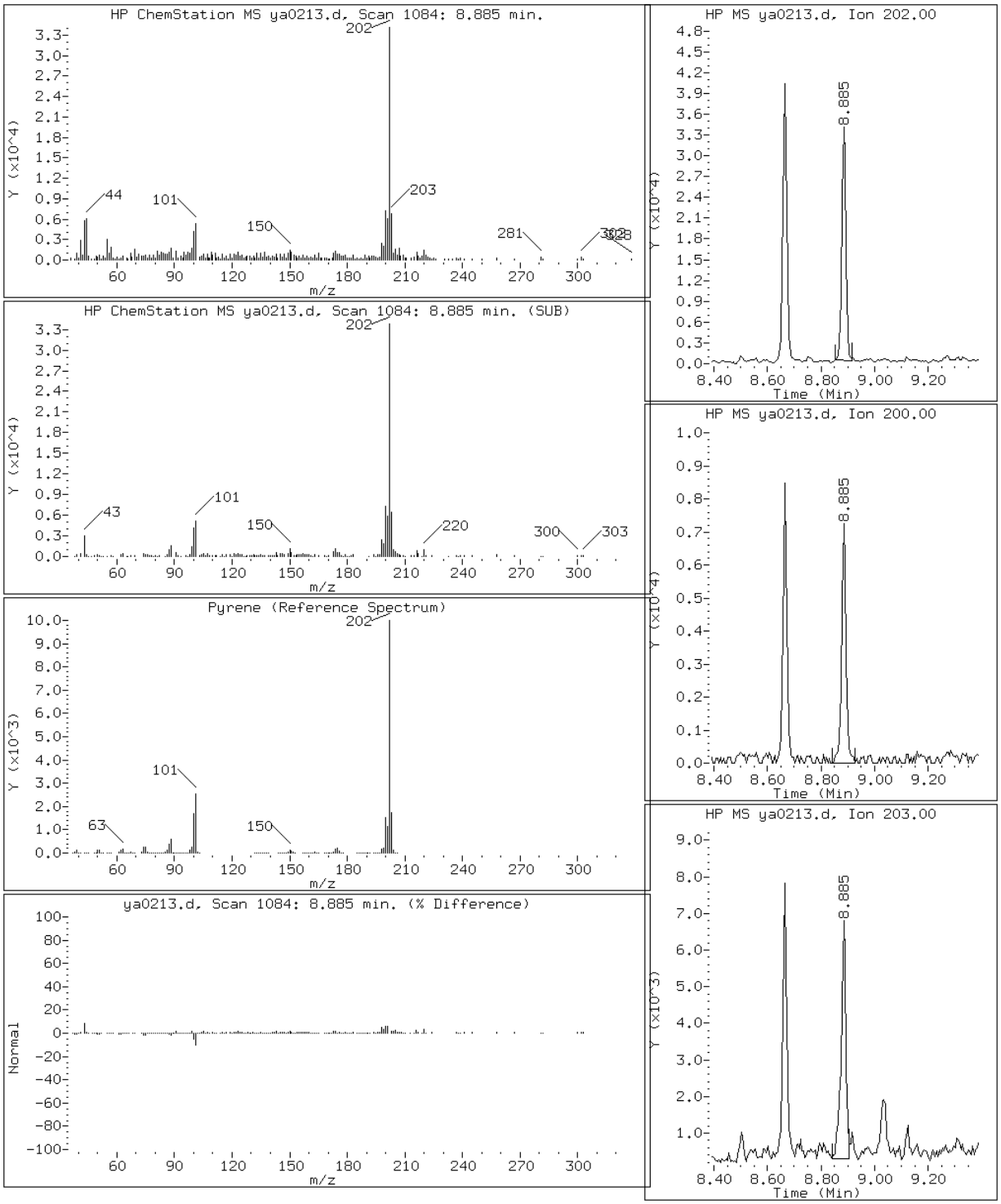
Data File: ya0213.d

Date: 02-JAN-2013 21:20

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-41-A DL=10 Operator: VHB

14 Pyrene



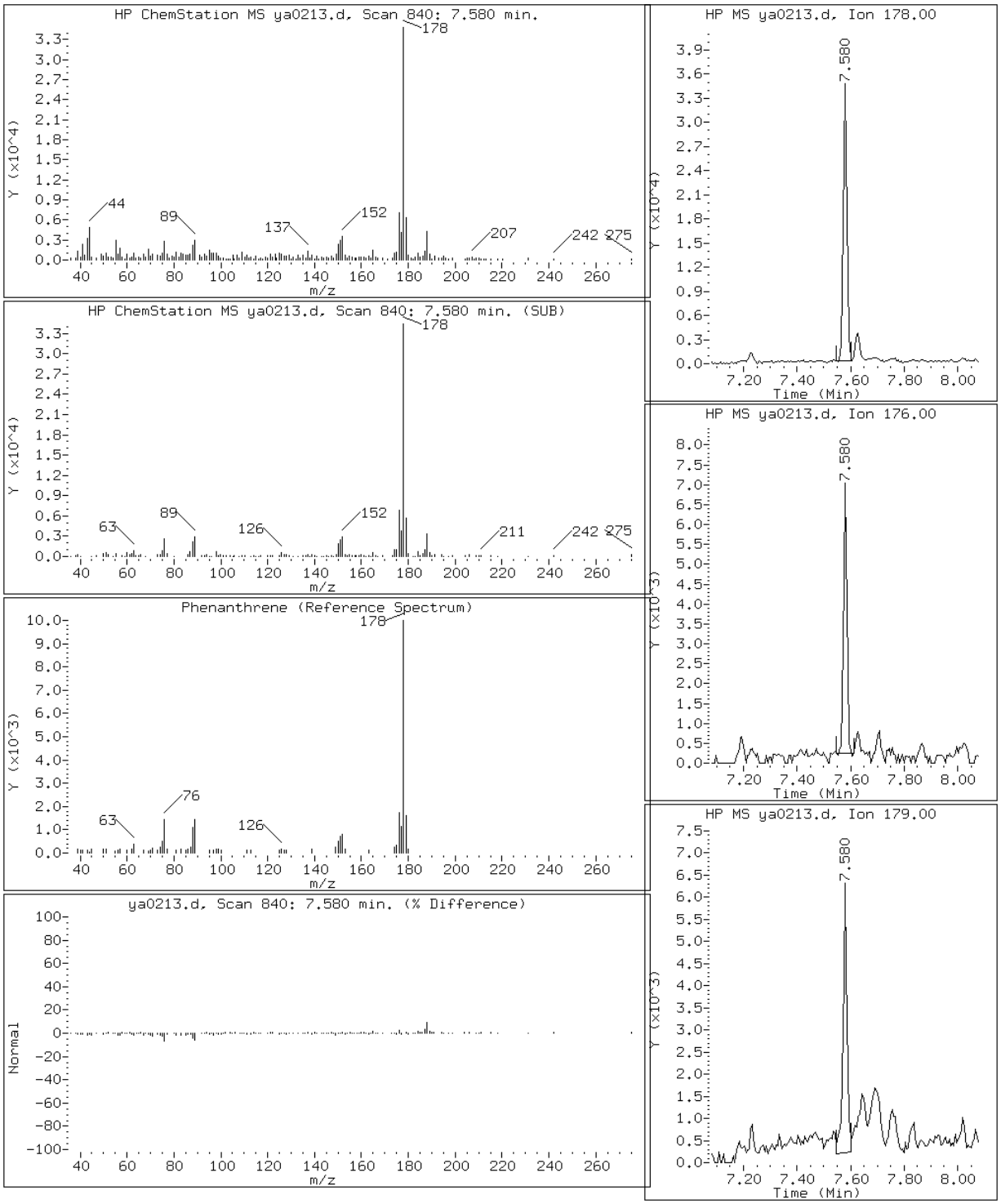
Data File: ya0213.d

Date: 02-JAN-2013 21:20

Client ID: Instrument: MSY5975.i

Sample Info: 680-85980-A-41-A DL=10 Operator: VHB

10 Phenanthrene



Manual Integration Report

Data File: ya0213.d
Inj. Date and Time: 02-JAN-2013 21:20
Instrument ID: MSY5975.i
Client ID:
Compound: 4 1-Methylnaphthalene
CAS #: 90-12-0
Report Date: 01/03/2013

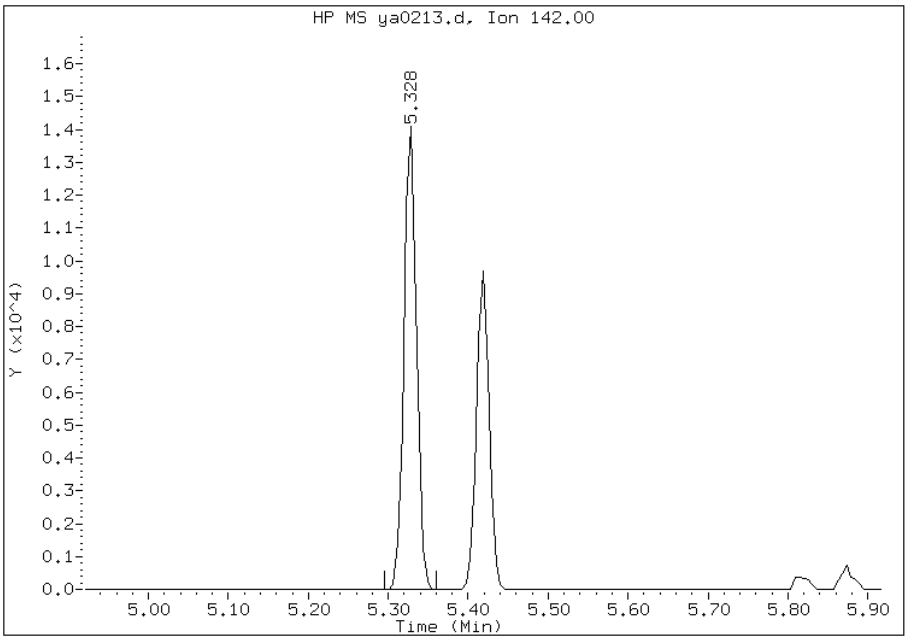
Processing Integration Results

RT: 5.33

Response: 15547

Amount: 0

Conc: 36



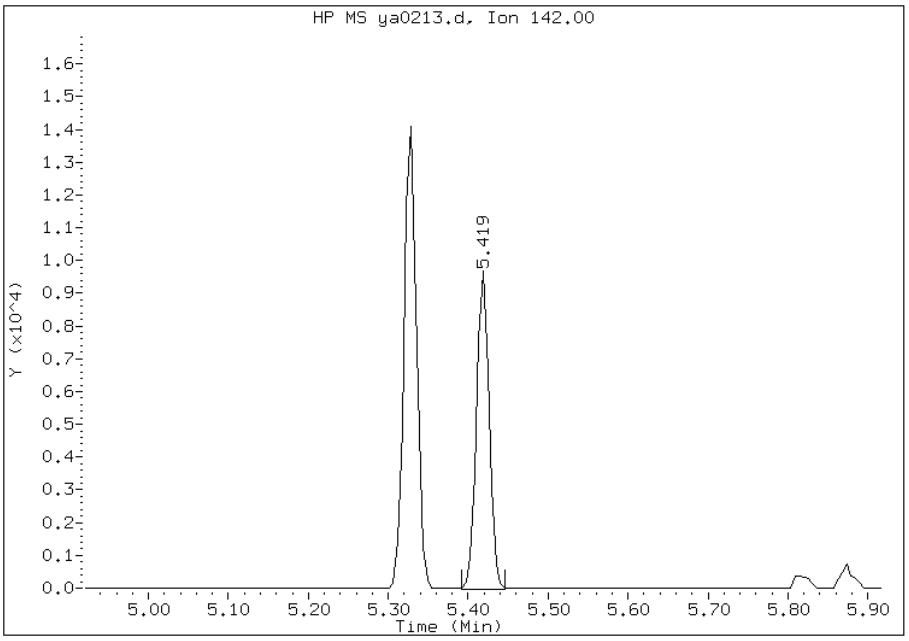
Manual Integration Results

RT: 5.42

Response: 10551

Amount: 0

Conc: 25



Manually Integrated By: chemist
Manual Integration Reason: Analyte Misidentified by the Data System

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: HP0190B-CS-SP | Lab Sample ID: 680-85980-42

Matrix: Solid | Lab File ID: ka0217.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/19/2012 10:00

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.04(g) | Date Analyzed: 01/02/2013 15:20

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

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

% Moisture: 26.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	91	U	91	42
91-57-6	2-Methylnaphthalene	91	U	91	45
83-32-9	Acenaphthene	91	U	91	45
208-96-8	Acenaphthylene	91	U	91	45
120-12-7	Anthracene	91	U	91	45
56-55-3	Benzo[a]anthracene	45	J	91	45
50-32-8	Benzo[a]pyrene	58	J	91	16
205-99-2	Benzo[b]fluoranthene	73	J	91	45
191-24-2	Benzo[g,h,i]perylene	46	J	91	45
207-08-9	Benzo[k]fluoranthene	44	J	91	27
218-01-9	Chrysene	62	J	91	45
53-70-3	Dibenz(a,h)anthracene	91	U	91	45
206-44-0	Fluoranthene	65	J	91	45
86-73-7	Fluorene	91	U	91	45
193-39-5	Indeno[1,2,3-cd]pyrene	91	U	91	45
91-20-3	Naphthalene	86	J	91	45
129-00-0	Pyrene	57	J	91	45
85-01-8	Phenanthrene	53	J	91	32

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0217.d
Lab Smp Id: 680-85980-A-42-A DL
Inj Date : 02-JAN-2013 15:20
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85980-A-42-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:58 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:24 Cal File: ka0212q.d
Als bottle: 13
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.501	4.501	(1.000)	487969	2.00000	
2 Naphthalene	128	4.524	4.524	(1.005)	54854	0.19078	63.59(a)
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	286429	2.00000	
* 9 Phenanthrene-d10	188	7.903	7.903	(1.000)	439329	2.00000	
10 Phenanthrene	178	7.932	7.932	(1.004)	32860	0.11851	39.50(a)
12 Fluoranthene	202	9.219	9.219	(1.167)	40581	0.14528	48.42(a)
14 Pyrene	202	9.466	9.460	(0.882)	34310	0.12648	42.15(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
16 Benzo(a)Anthracene	228	10.717	10.717	(0.999)	20721	0.09945	33.15(aM)
* 13 Chrysene-d12	240	10.729	10.729	(1.000)	318259	2.00000	
17 Chrysene	228	10.758	10.758	(1.003)	28385	0.13847	46.15(a)
19 Benzo(b)fluoranthene	252	11.880	11.875	(0.961)	30124	0.16237	54.12(aM)
20 Benzo(k)fluoranthene	252	11.892	11.904	(0.962)	17464	0.09726	32.41(aM)
21 Benzo(a)pyrene	252	12.280	12.280	(0.993)	18141	0.12790	42.63(a)
* 18 Perylene-d12	264	12.362	12.356	(1.000)	249643	2.00000	
24 Benzo(g,h,i)perylene	276	14.460	14.460	(1.170)	12808	0.10120	33.73(a)

QC Flag Legend

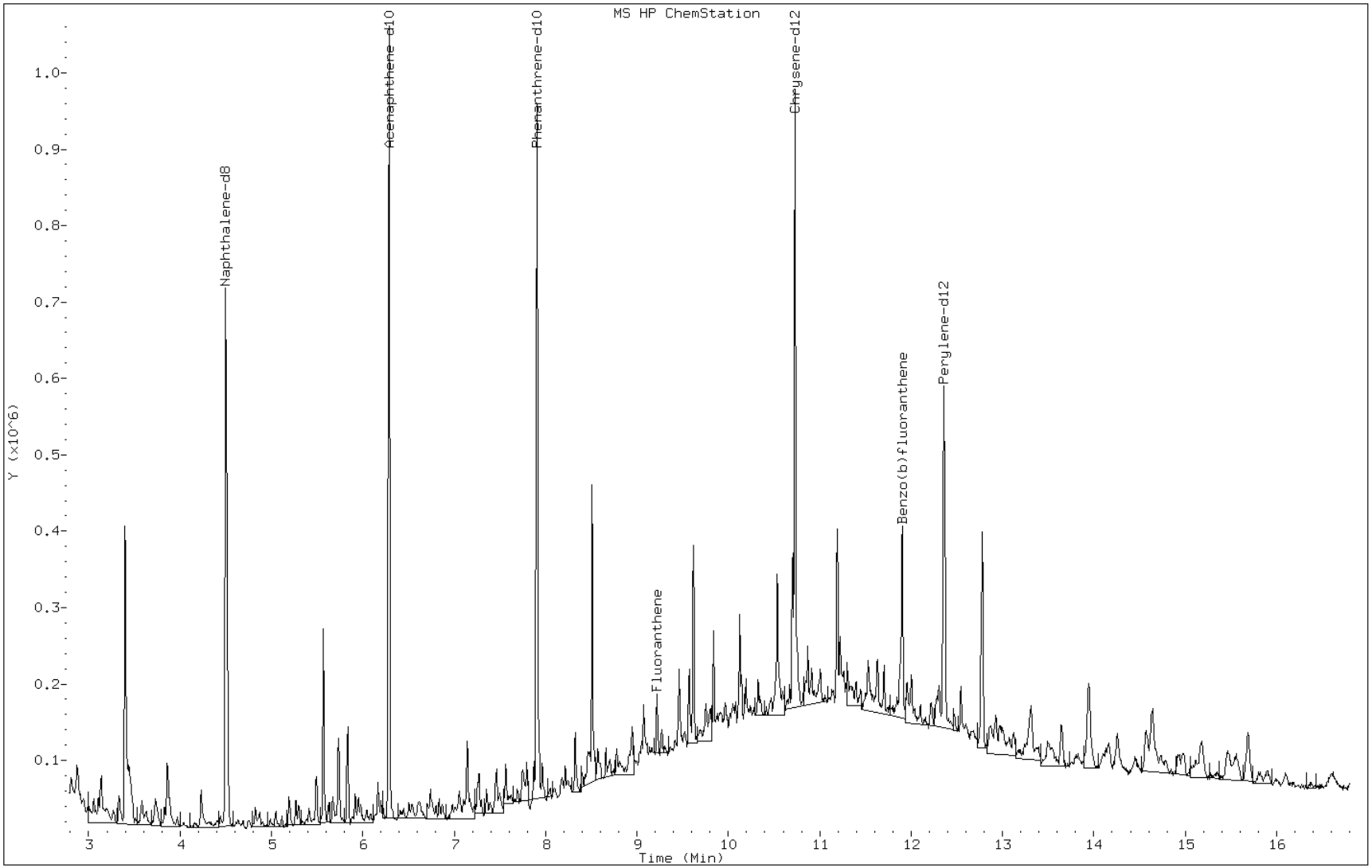
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: ka0217.d

Date: 02-JAN-2013 15:20

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-42-A DL=10 Operator: LEG



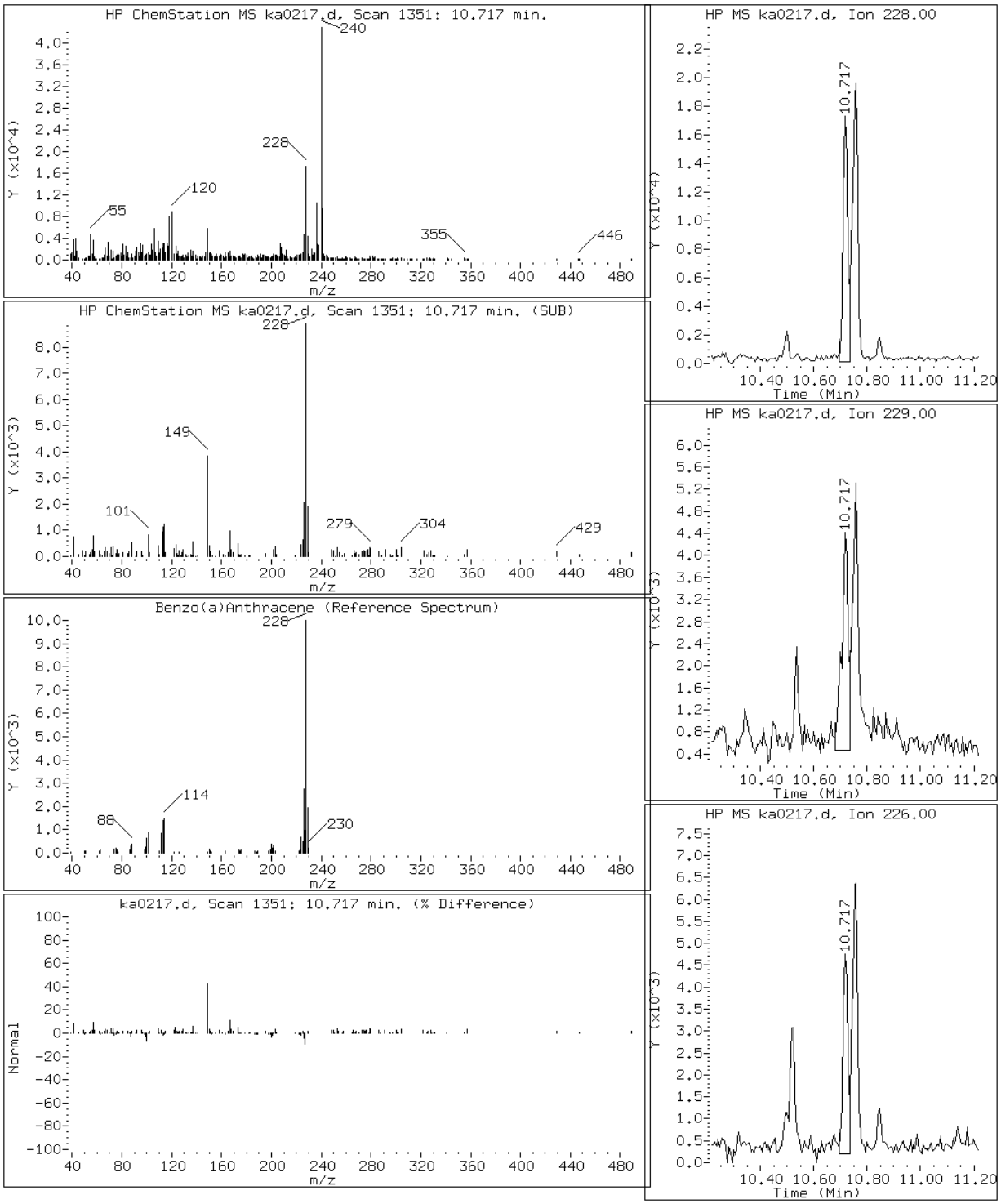
Data File: ka0217.d

Date: 02-JAN-2013 15:20

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-42-A DL=10 Operator: LEG

16 Benzo(a)Anthracene



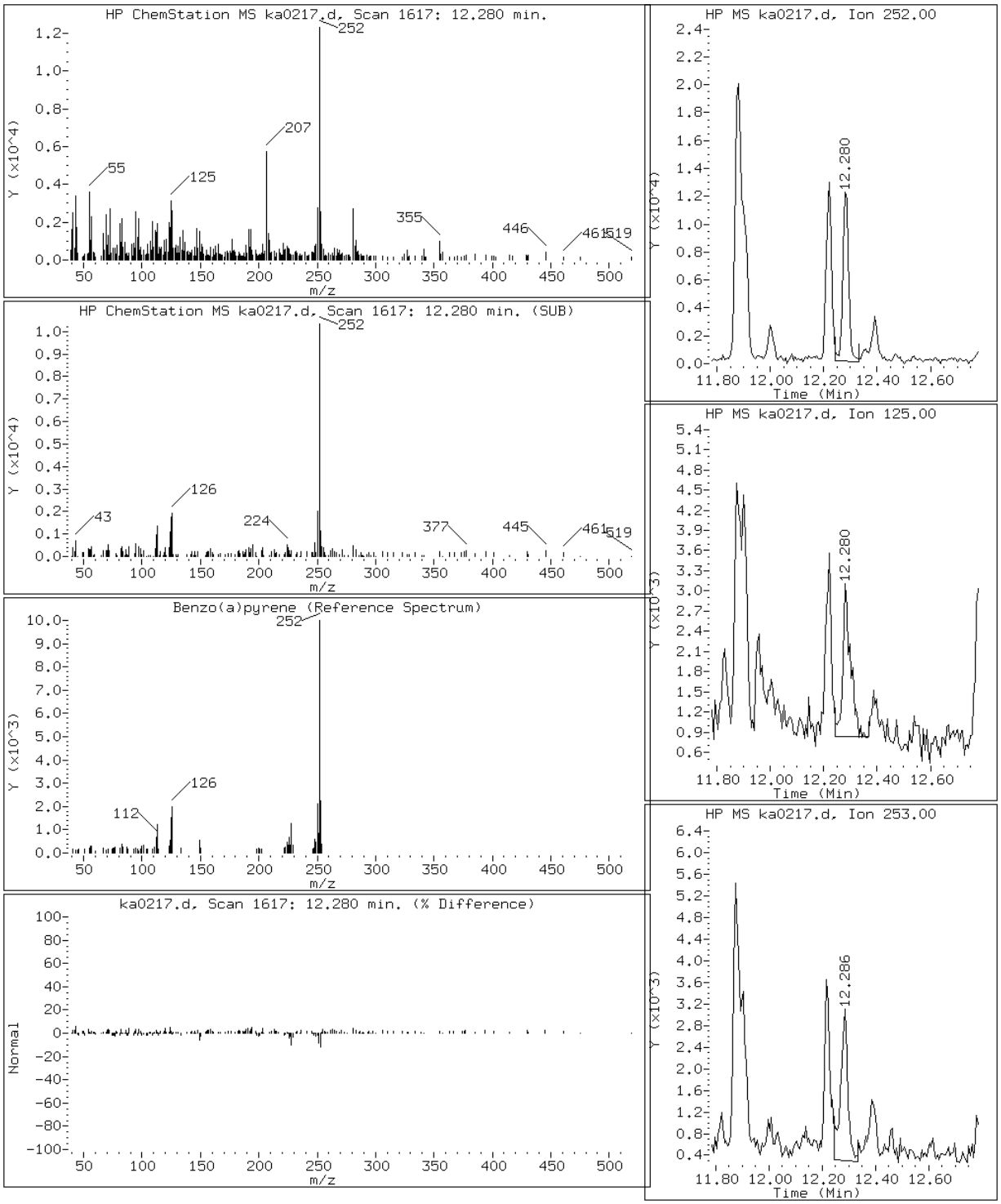
Data File: ka0217.d

Date: 02-JAN-2013 15:20

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-42-A DL=10 Operator: LEG

21 Benzo(a)pyrene



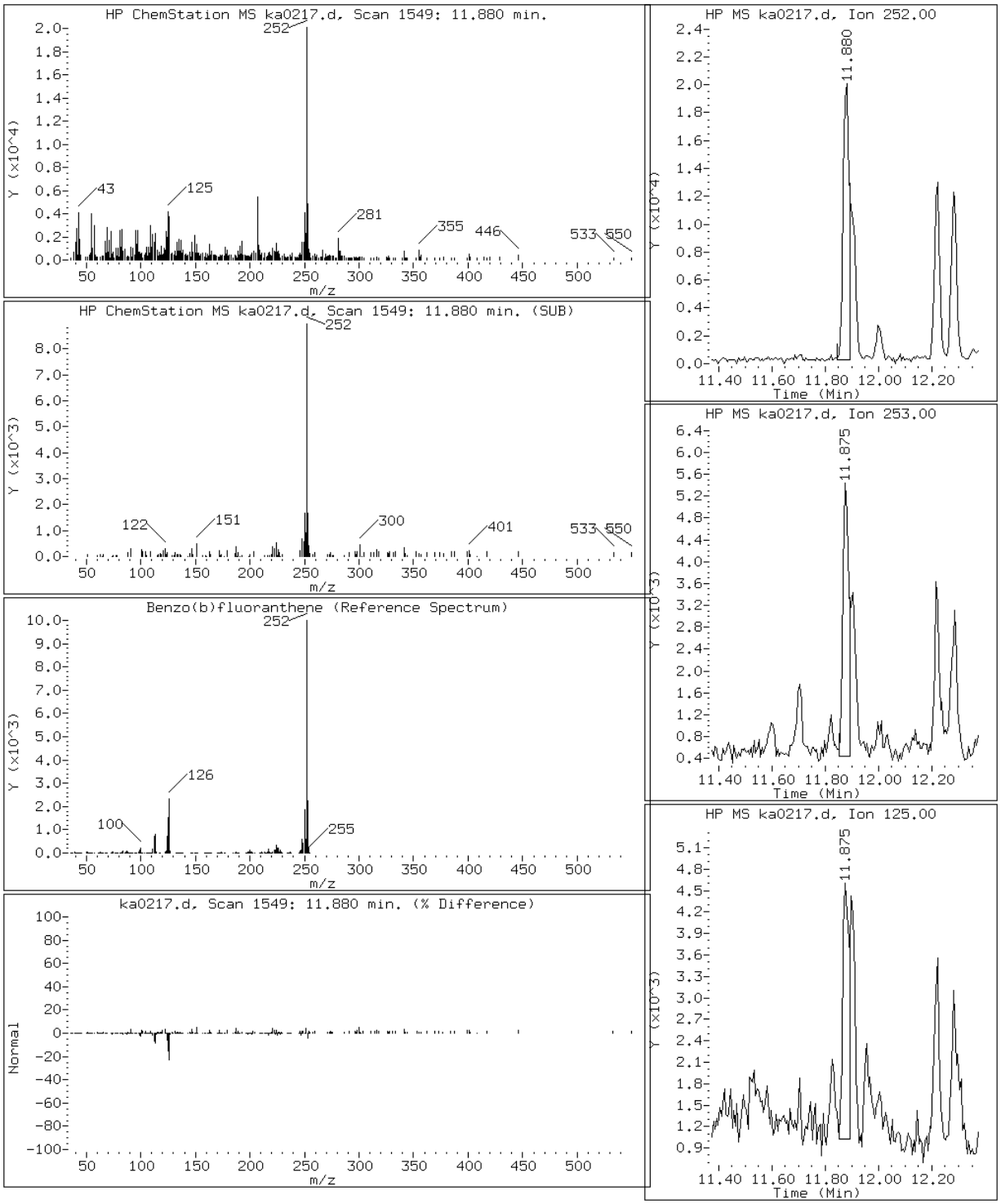
Data File: ka0217.d

Date: 02-JAN-2013 15:20

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-42-A DL=10 Operator: LEG

19 Benzo(b)fluoranthene



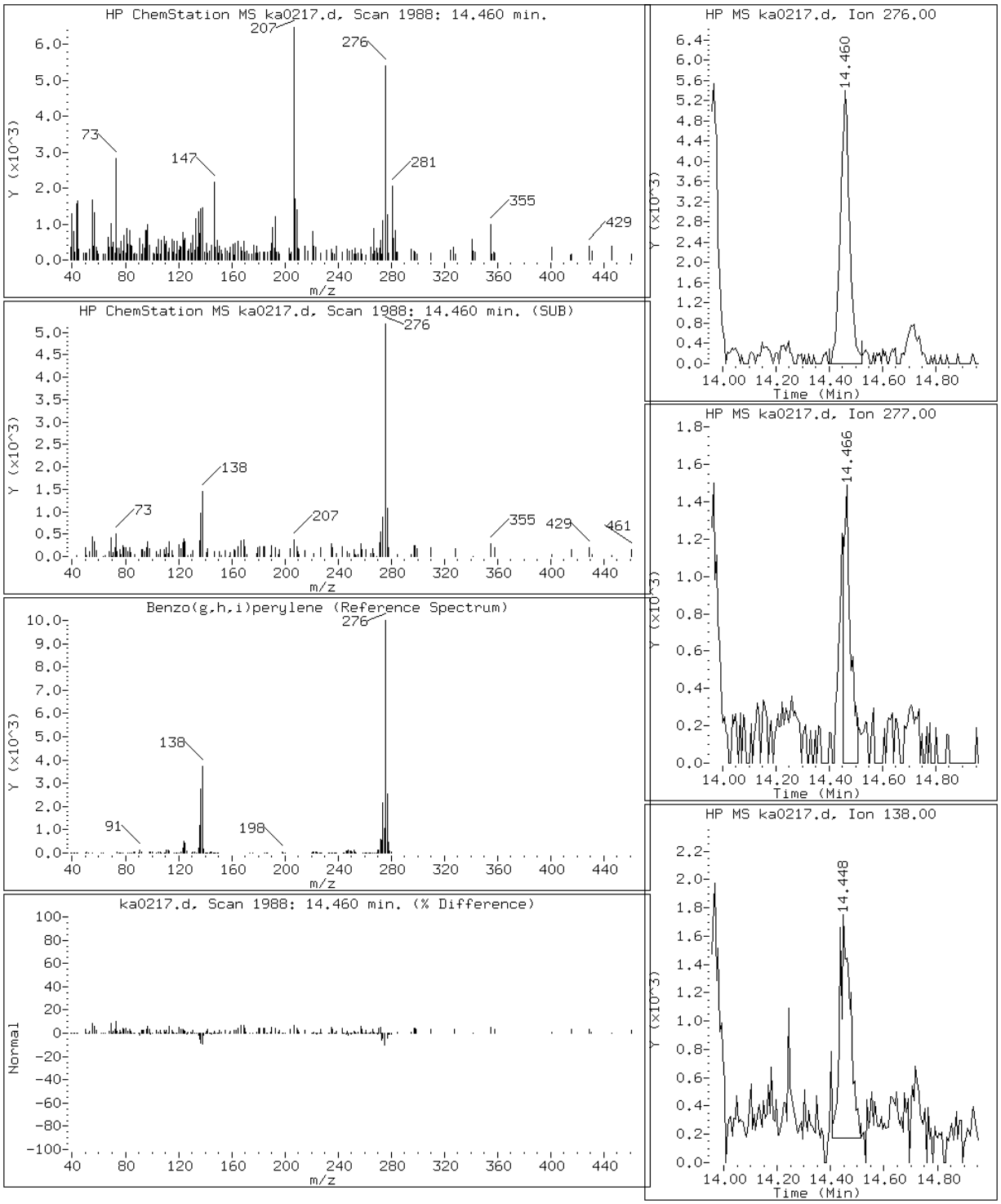
Data File: ka0217.d

Date: 02-JAN-2013 15:20

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-42-A DL=10 Operator: LEG

24 Benzo(g,h,i)perylene



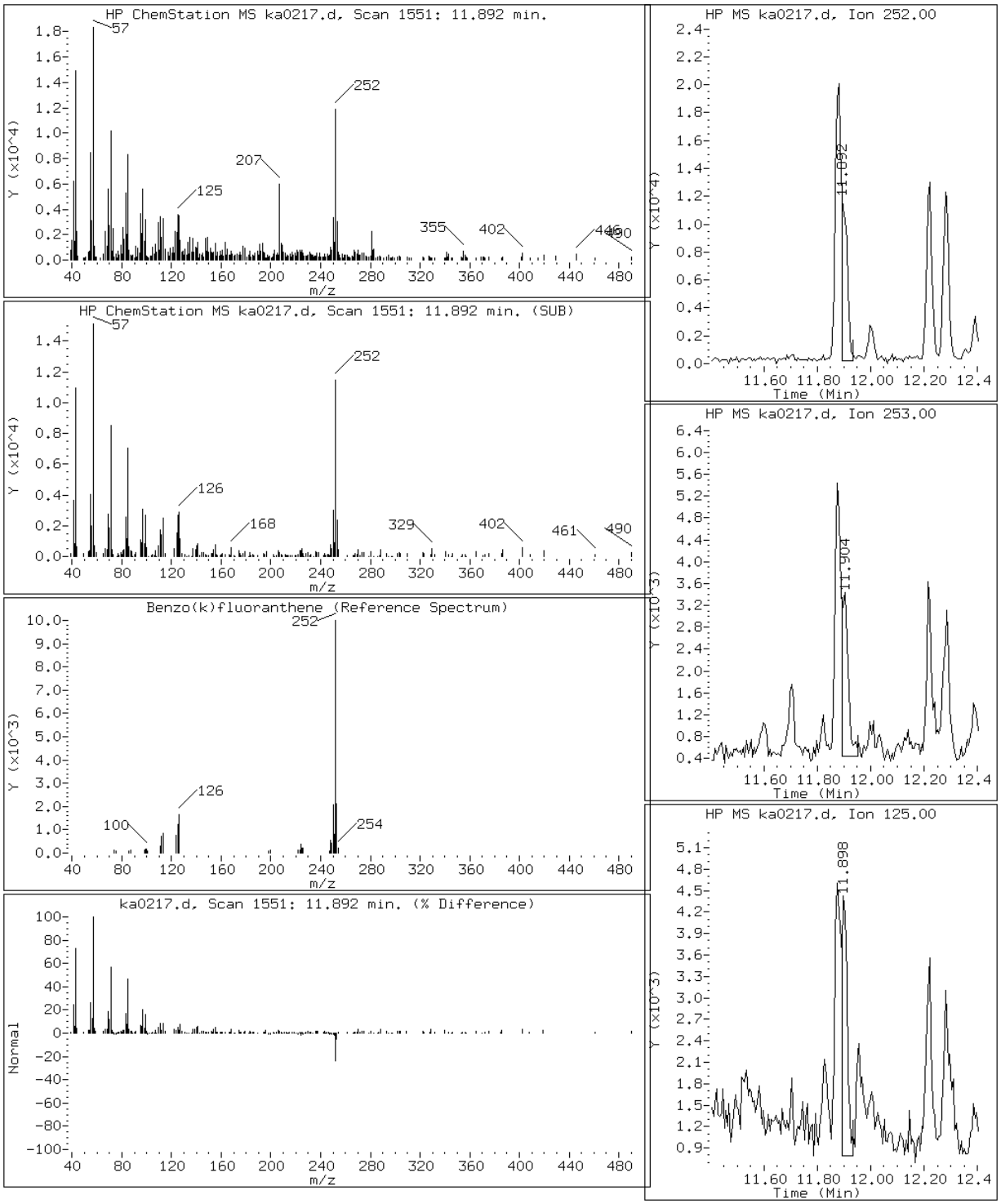
Data File: ka0217.d

Date: 02-JAN-2013 15:20

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-42-A DL=10 Operator: LEG

20 Benzo(k)fluoranthene



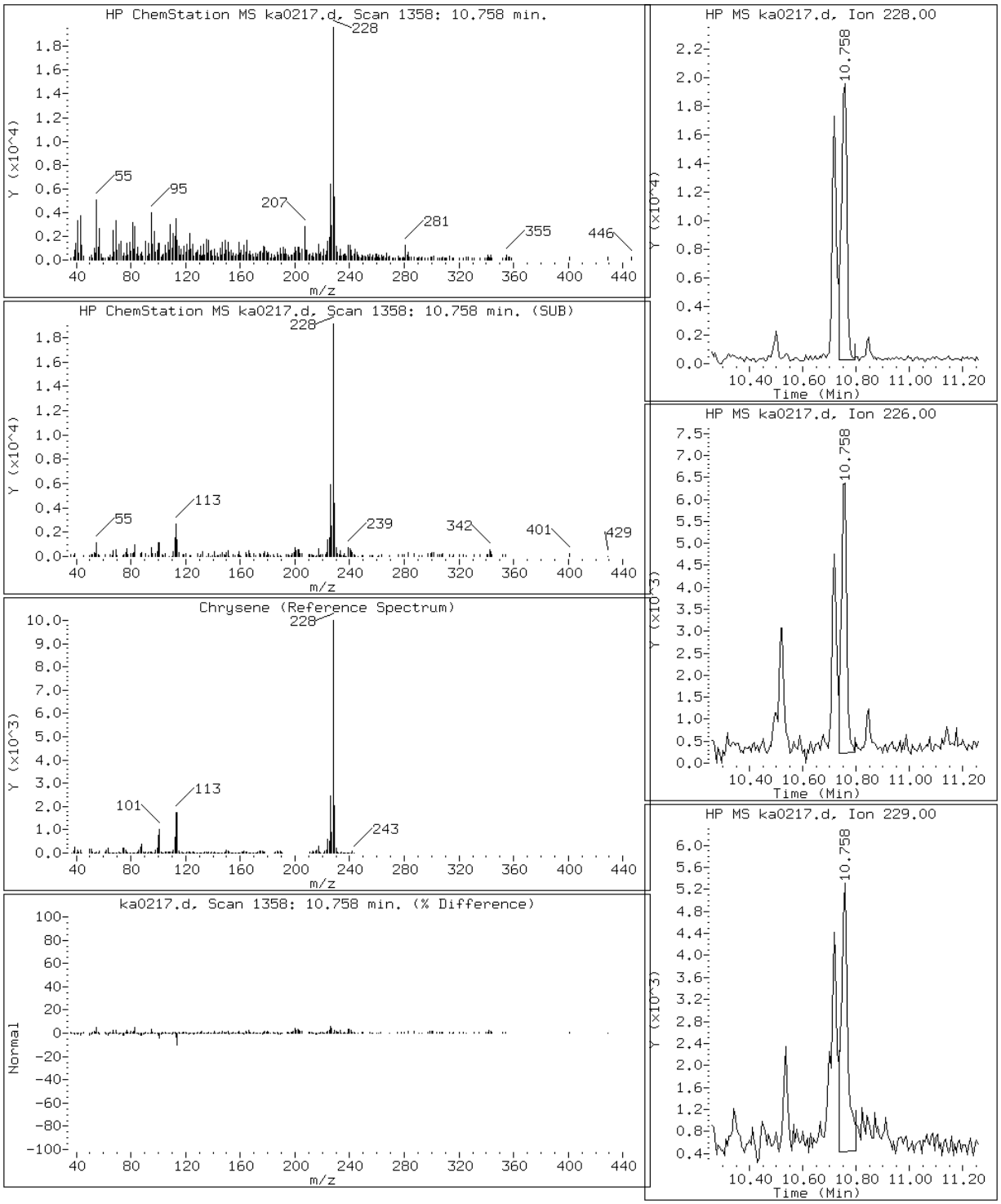
Data File: ka0217.d

Date: 02-JAN-2013 15:20

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-42-A DL=10 Operator: LEG

17 Chrysene



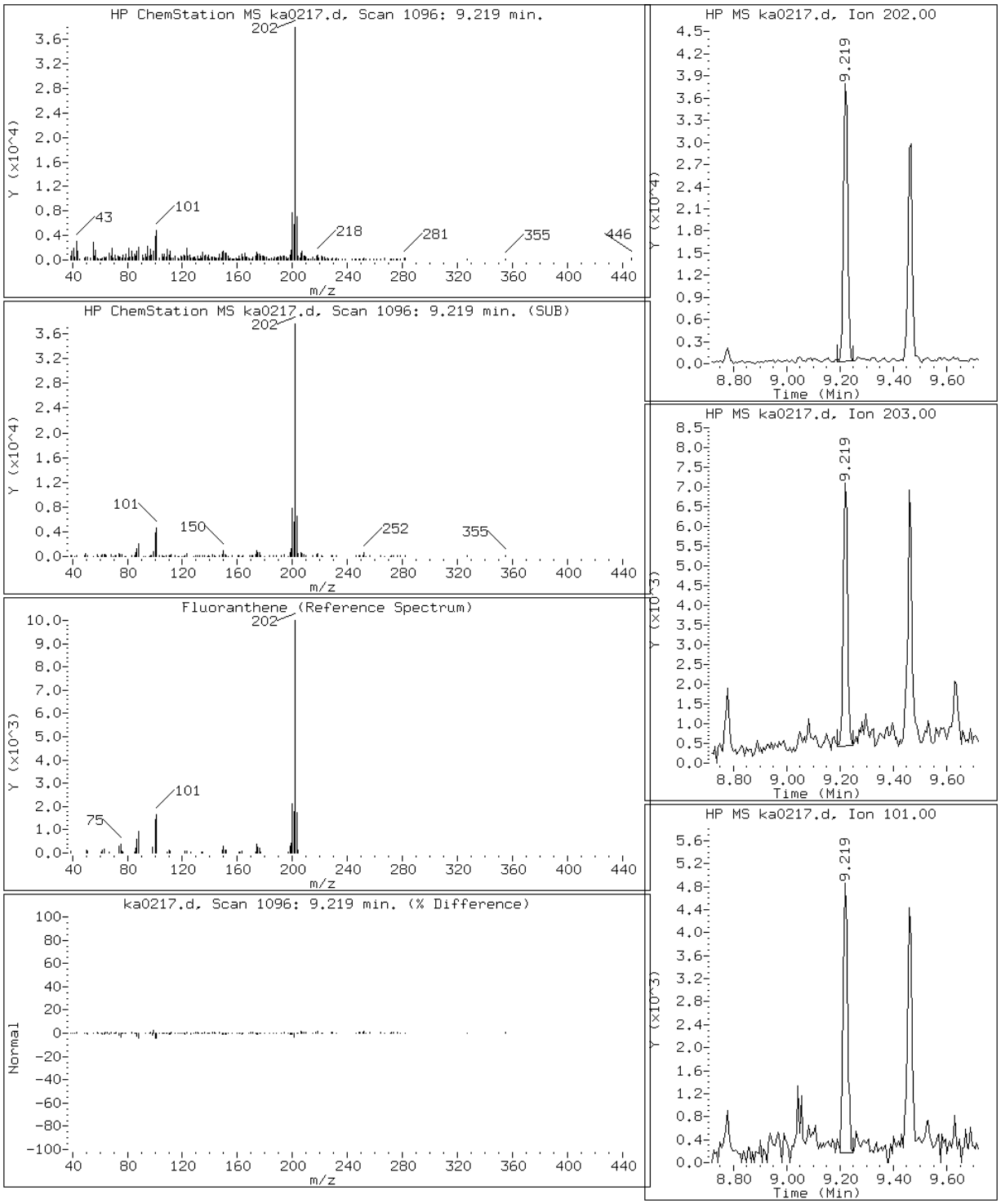
Data File: ka0217.d

Date: 02-JAN-2013 15:20

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-42-A DL=10 Operator: LEG

12 Fluoranthene



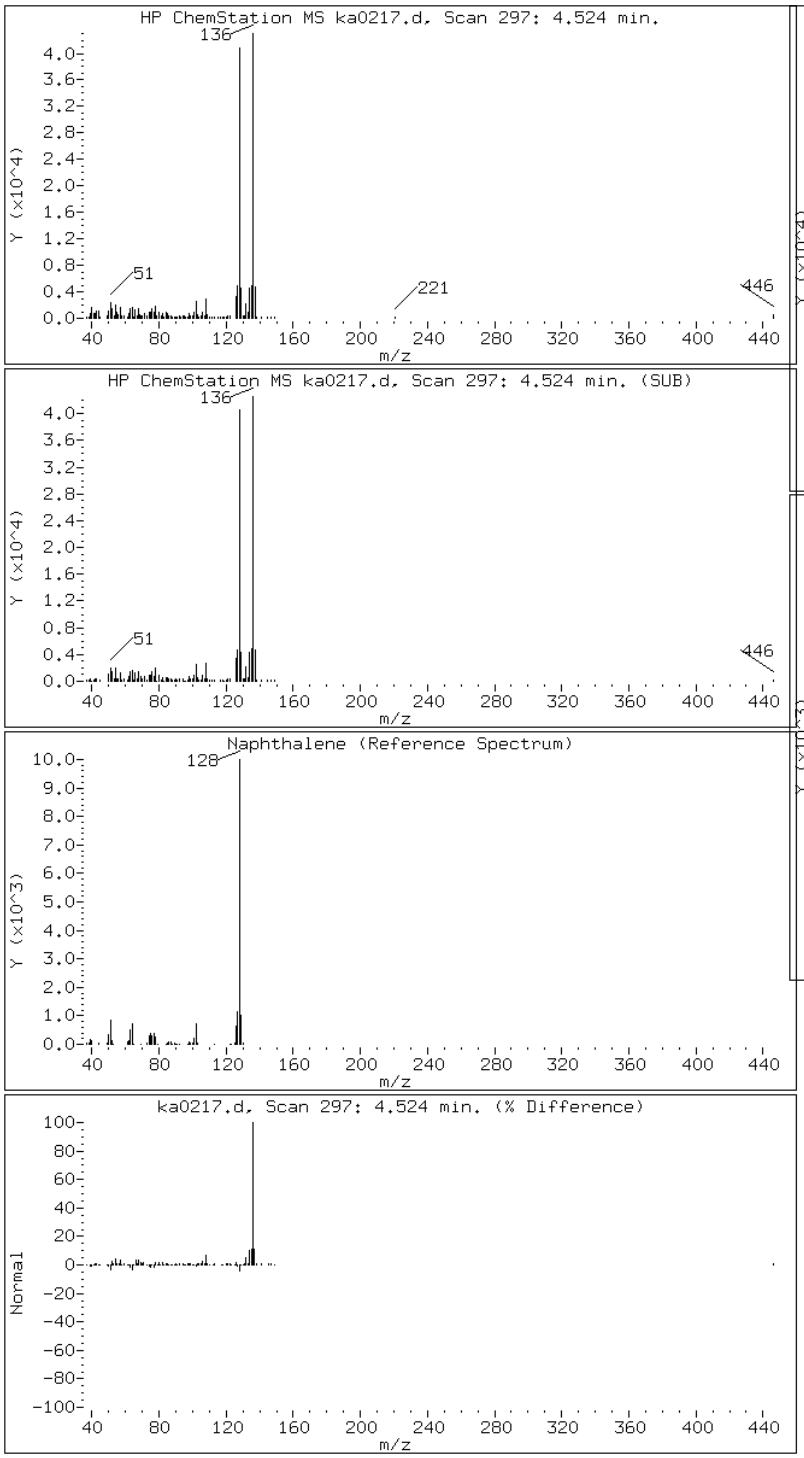
Data File: ka0217.d

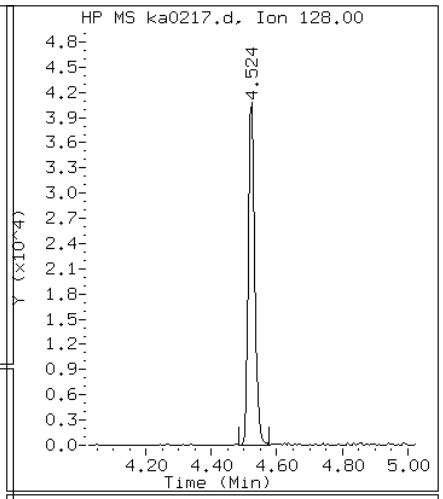
Date: 02-JAN-2013 15:20

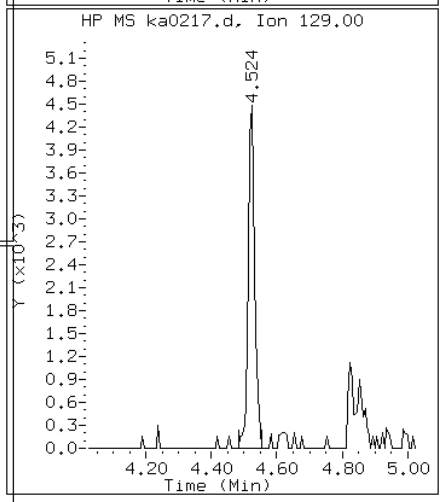
Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-42-A DL=10 Operator: LEG

2 Naphthalene







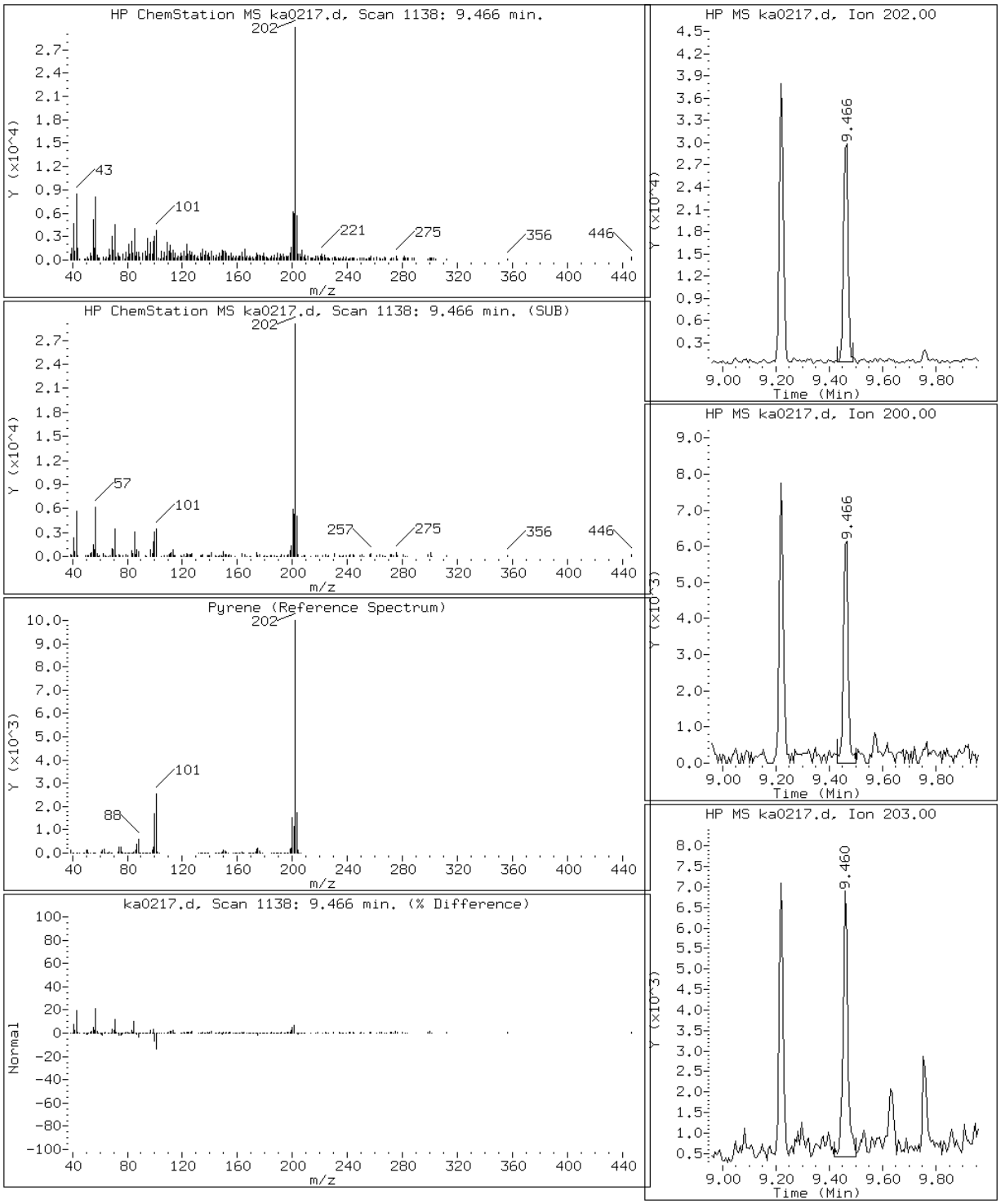
Data File: ka0217.d

Date: 02-JAN-2013 15:20

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-42-A DL=10 Operator: LEG

14 Pyrene



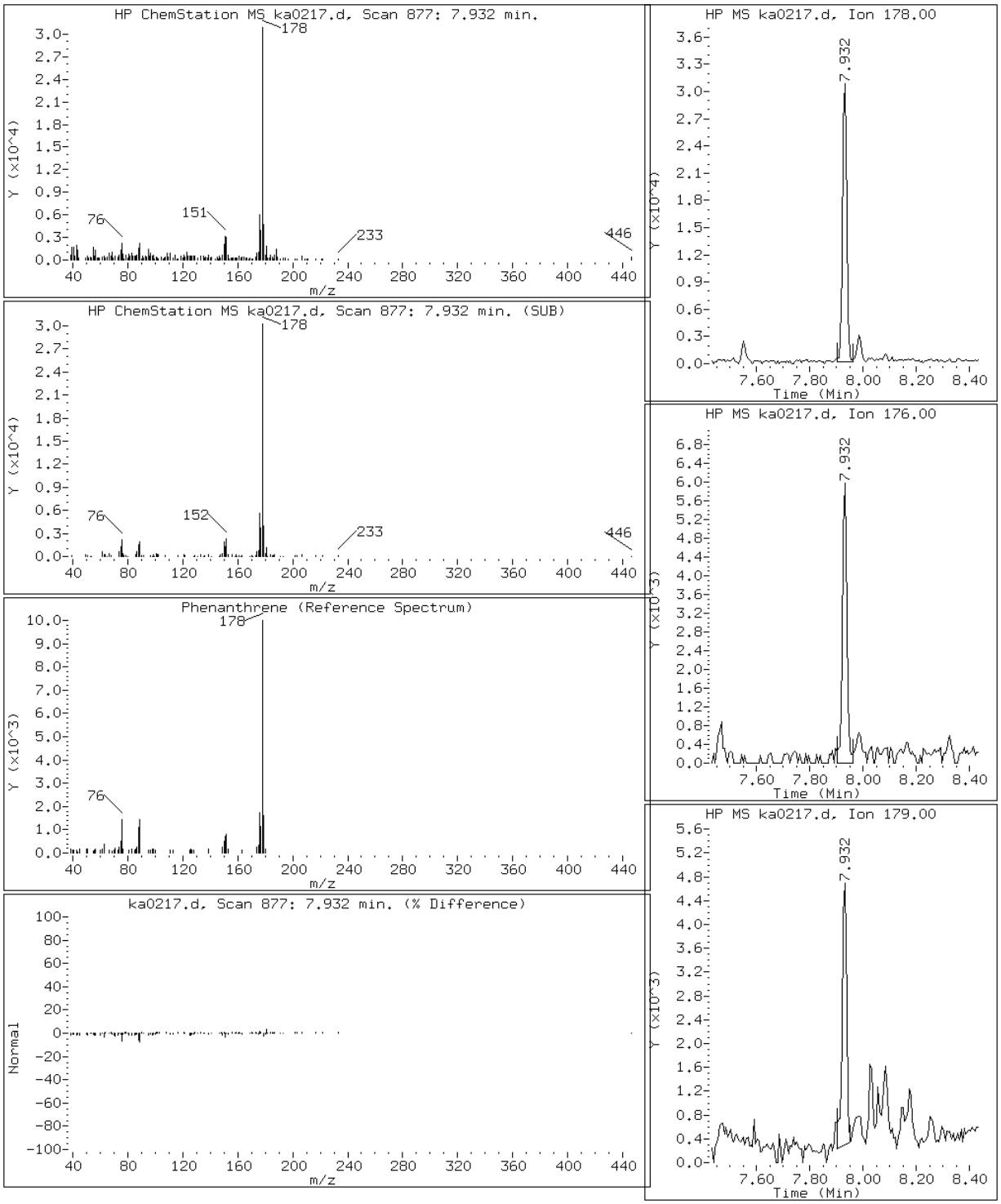
Data File: ka0217.d

Date: 02-JAN-2013 15:20

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-42-A DL=10 Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: ka0217.d
Inj. Date and Time: 02-JAN-2013 15:20
Instrument ID: MSK5973.i
Client ID:
Compound: 16 Benzo(a)Anthracene
CAS #: 56-55-3
Report Date: 01/03/2013

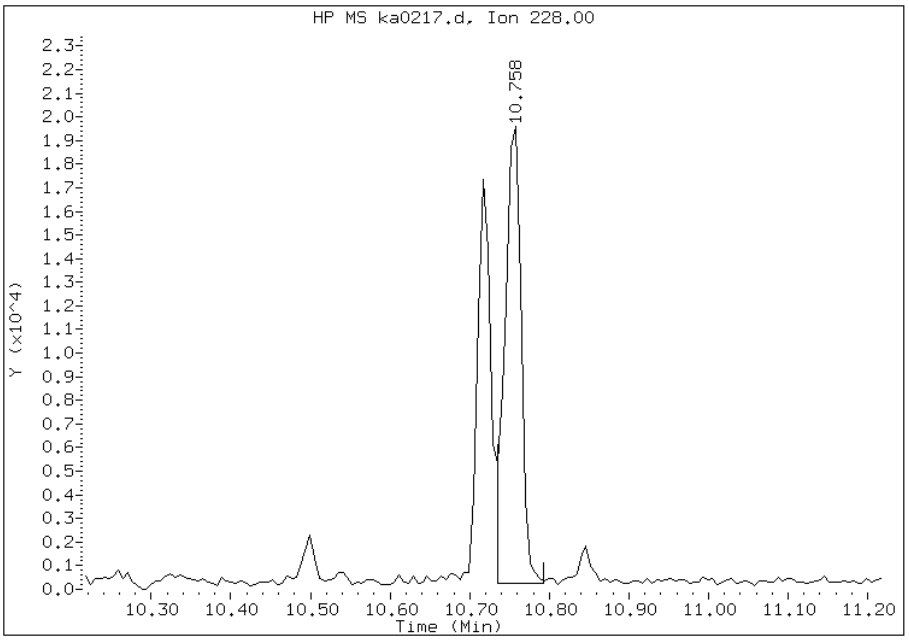
Processing Integration Results

RT: 10.76

Response: 28493

Amount: 0

Conc: 46



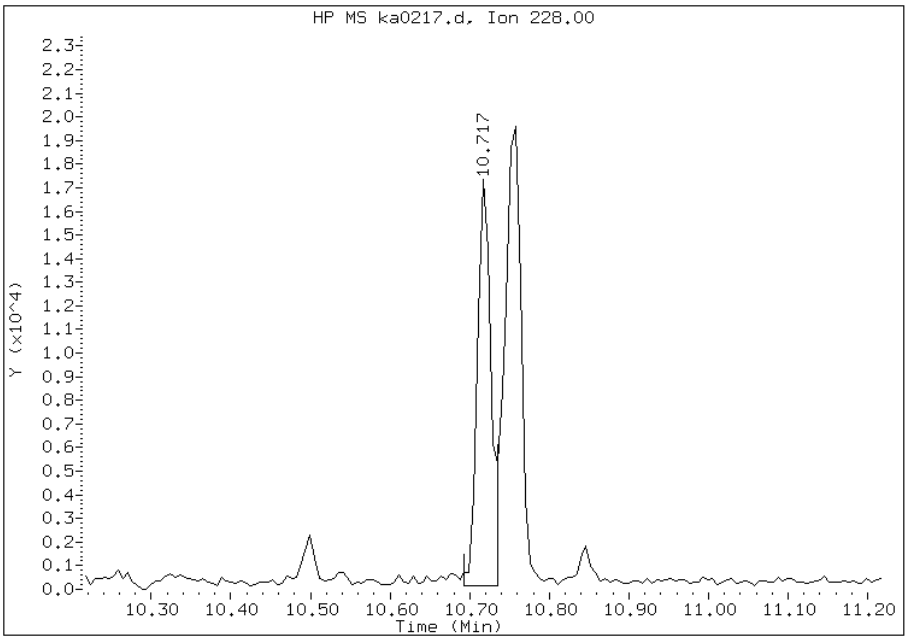
Manual Integration Results

RT: 10.72

Response: 20721

Amount: 0

Conc: 33



Manually Integrated By: chemist
Manual Integration Reason: Analyte Misidentified by the Data System

Manual Integration Report

Data File: ka0217.d
Inj. Date and Time: 02-JAN-2013 15:20
Instrument ID: MSK5973.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 01/03/2013

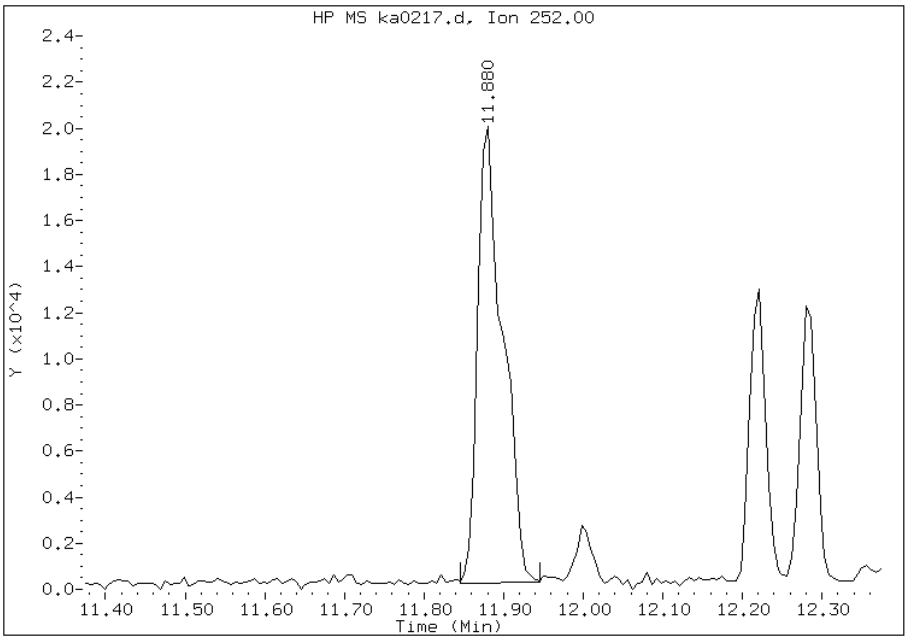
Processing Integration Results

RT: 11.88

Response: 43299

Amount: 0

Conc: 78



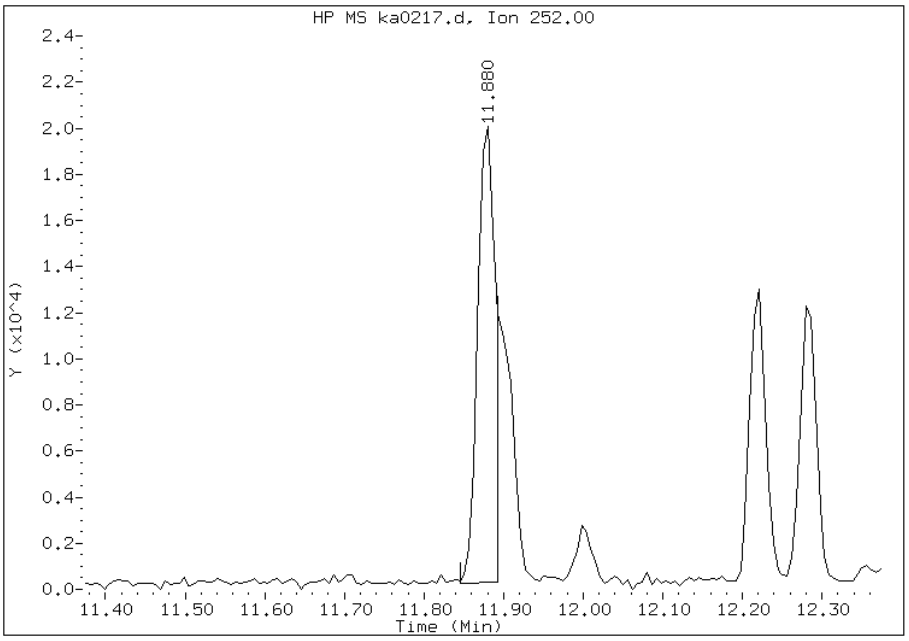
Manual Integration Results

RT: 11.88

Response: 30124

Amount: 0

Conc: 54



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: ka0217.d
Inj. Date and Time: 02-JAN-2013 15:20
Instrument ID: MSK5973.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 01/03/2013

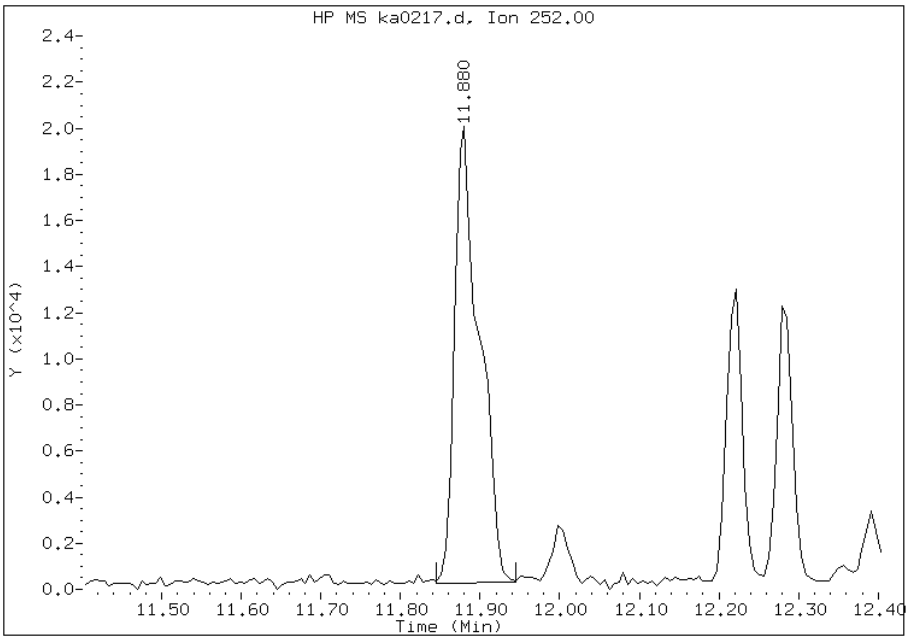
Processing Integration Results

RT: 11.88

Response: 43299

Amount: 0

Conc: 80



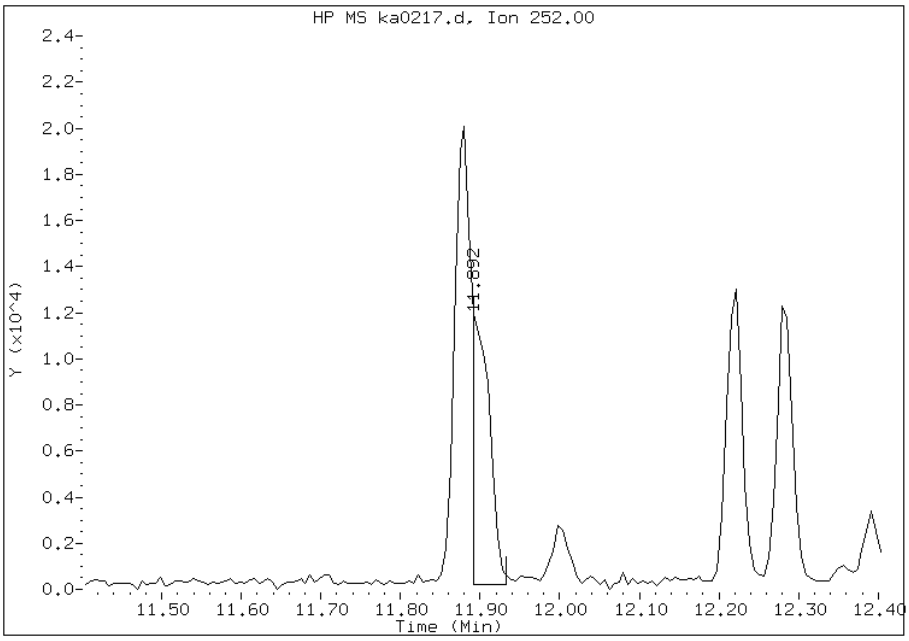
Manual Integration Results

RT: 11.89

Response: 17464

Amount: 0

Conc: 32



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: HP0190C-CS-SP | Lab Sample ID: 680-85980-43

Matrix: Solid | Lab File ID: ka0218.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/19/2012 10:15

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.15(g) | Date Analyzed: 01/02/2013 15:44

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

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

% Moisture: 23.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	87	U	87	40
91-57-6	2-Methylnaphthalene	87	U	87	43
83-32-9	Acenaphthene	87	U	87	43
208-96-8	Acenaphthylene	87	U	87	43
120-12-7	Anthracene	87	U	87	43
56-55-3	Benzo[a]anthracene	140		87	43
50-32-8	Benzo[a]pyrene	190		87	16
205-99-2	Benzo[b]fluoranthene	250		87	43
191-24-2	Benzo[g,h,i]perylene	130		87	43
207-08-9	Benzo[k]fluoranthene	110		87	26
218-01-9	Chrysene	170		87	43
53-70-3	Dibenz(a,h)anthracene	87	U	87	43
206-44-0	Fluoranthene	160		87	43
86-73-7	Fluorene	87	U	87	43
193-39-5	Indeno[1,2,3-cd]pyrene	96		87	43
91-20-3	Naphthalene	51	J	87	43
129-00-0	Pyrene	160		87	43
85-01-8	Phenanthrene	87		87	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0218.d
Lab Smp Id: 680-85980-A-43-A DL
Inj Date : 02-JAN-2013 15:44
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85980-A-43-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:58 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:24 Cal File: ka0212q.d
Als bottle: 14
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.501	4.501	(1.000)	502262	2.00000	
2 Naphthalene	128	4.524	4.524	(1.005)	35303	0.11929	39.76(a)
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	291167	2.00000	
* 9 Phenanthrene-d10	188	7.903	7.903	(1.000)	449585	2.00000	
10 Phenanthrene	178	7.932	7.932	(1.004)	57222	0.20167	67.22
12 Fluoranthene	202	9.219	9.219	(1.167)	104546	0.36573	121.90
14 Pyrene	202	9.466	9.460	(0.881)	95010	0.37150	123.83

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
16 Benzo(a)Anthracene	228	10.729	10.717	(0.999)	62716	0.31928	106.42
* 13 Chrysene-d12	240	10.741	10.729	(1.000)	300042	2.00000	
17 Chrysene	228	10.770	10.758	(1.003)	77286	0.39990	133.30
19 Benzo(b)fluoranthene	252	11.898	11.875	(0.961)	91715	0.56851	189.50(M)
20 Benzo(k)fluoranthene	252	11.916	11.904	(0.963)	40542	0.25964	86.54(M)
21 Benzo(a)pyrene	252	12.304	12.280	(0.994)	55274	0.44814	149.38
* 18 Perylene-d12	264	12.380	12.356	(1.000)	217080	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	13.990	13.966	(1.303)	34533	0.22291	74.30
24 Benzo(g,h,i)perylene	276	14.489	14.460	(1.170)	32569	0.29594	98.64

QC Flag Legend

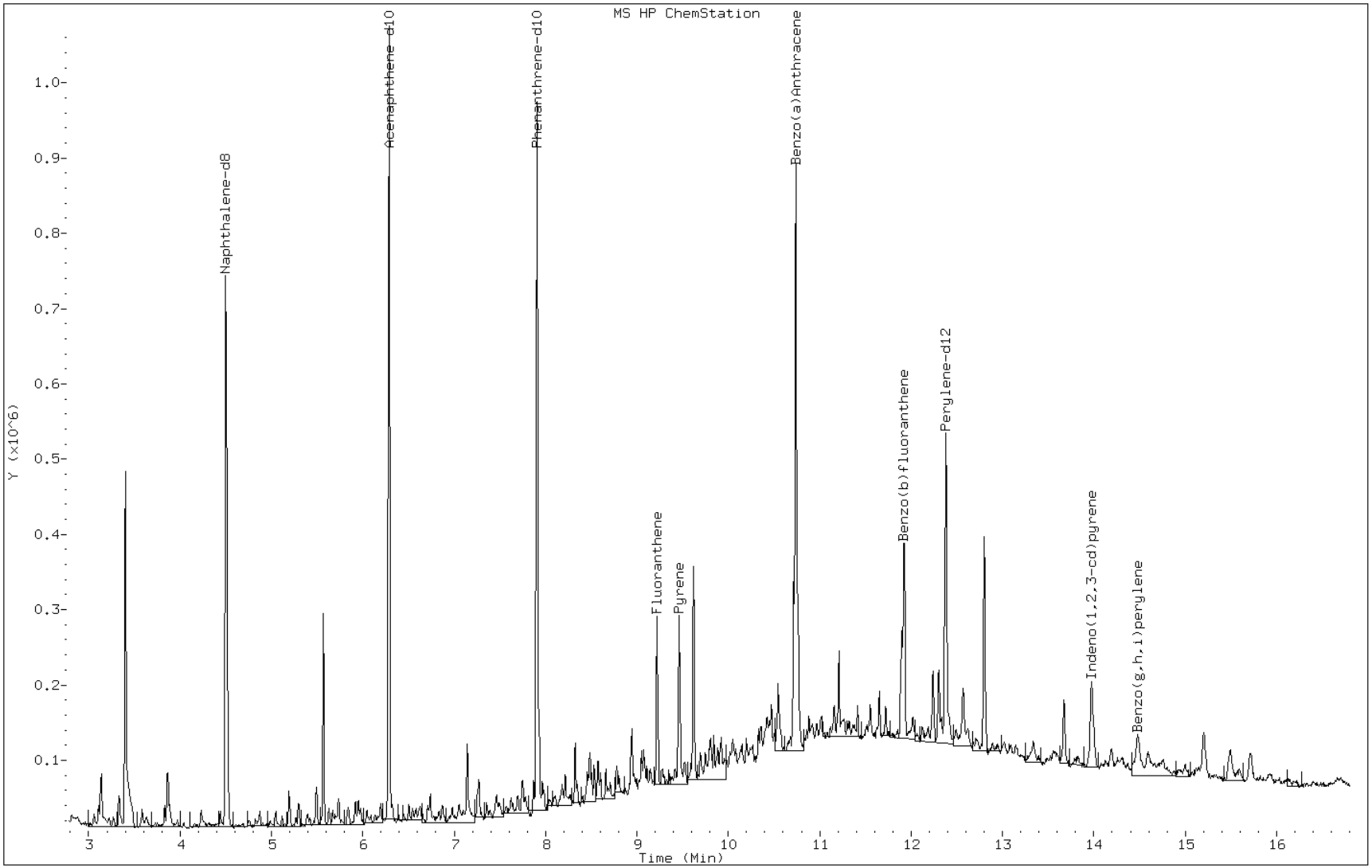
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: ka0218.d

Date: 02-JAN-2013 15:44

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-43-A DL=10 Operator: LEG



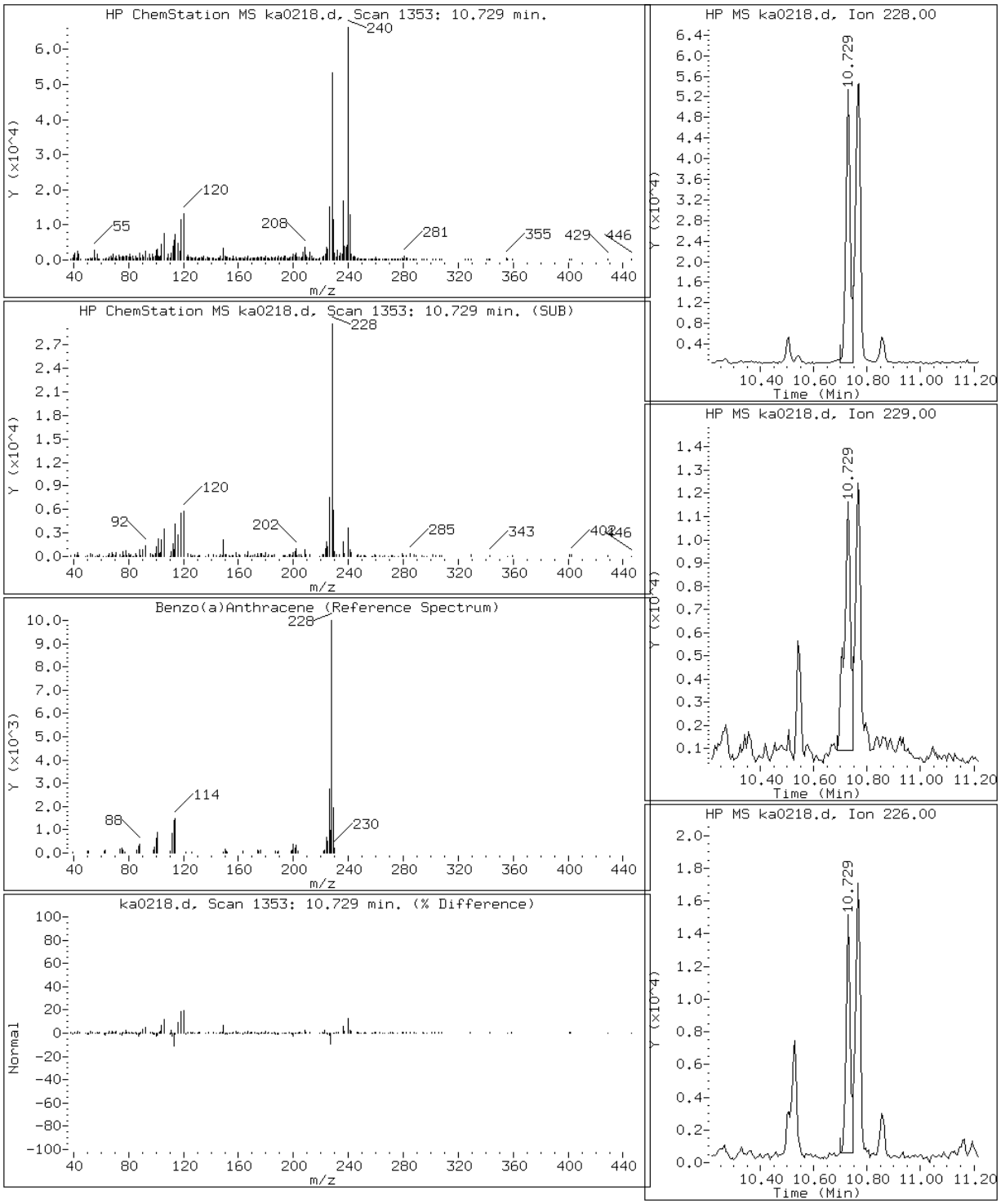
Data File: ka0218.d

Date: 02-JAN-2013 15:44

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-43-A DL=10 Operator: LEG

16 Benzo(a)Anthracene



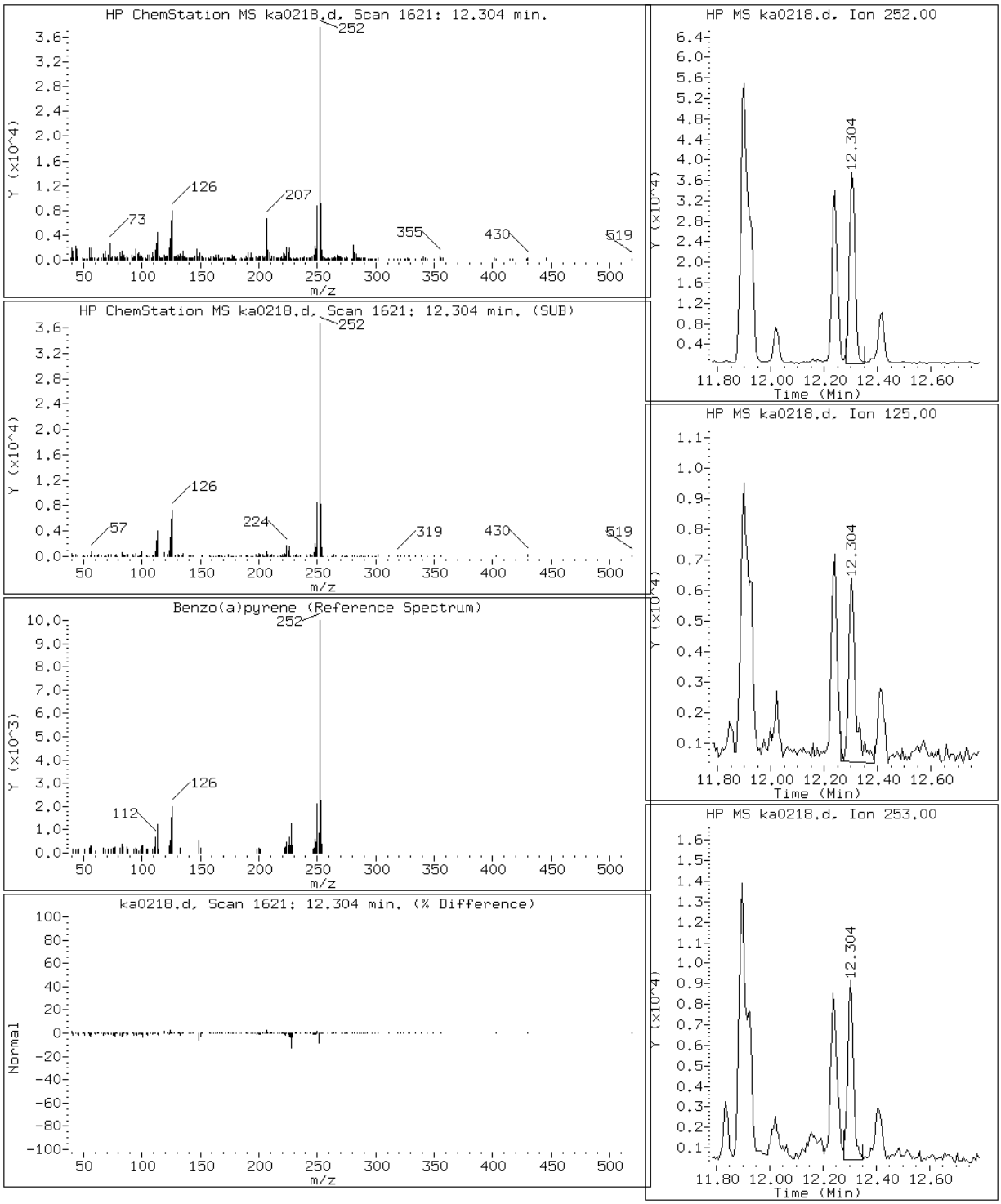
Data File: ka0218.d

Date: 02-JAN-2013 15:44

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-43-A DL=10 Operator: LEG

21 Benzo(a)pyrene



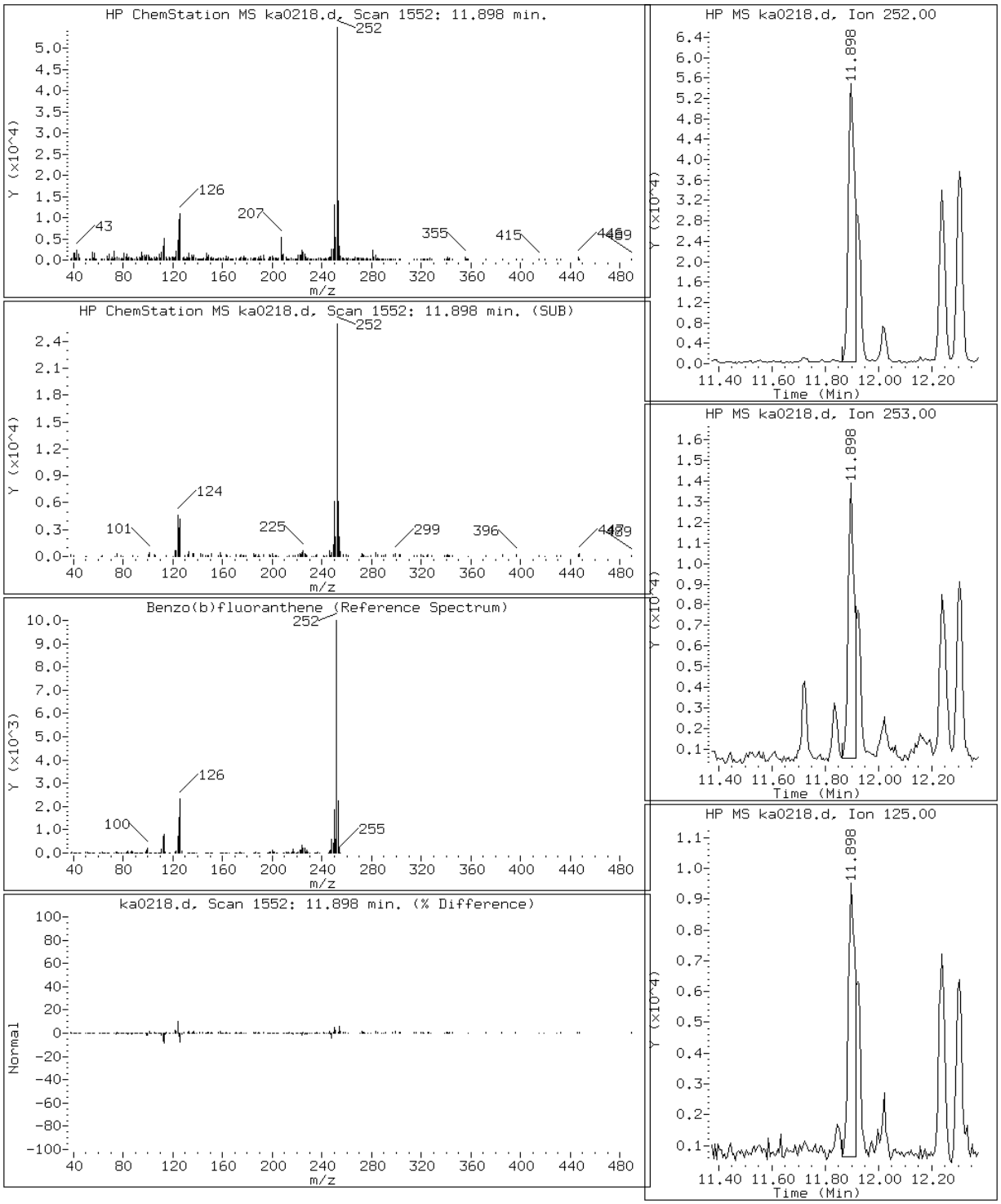
Data File: ka0218.d

Date: 02-JAN-2013 15:44

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-43-A DL=10 Operator: LEG

19 Benzo(b)fluoranthene



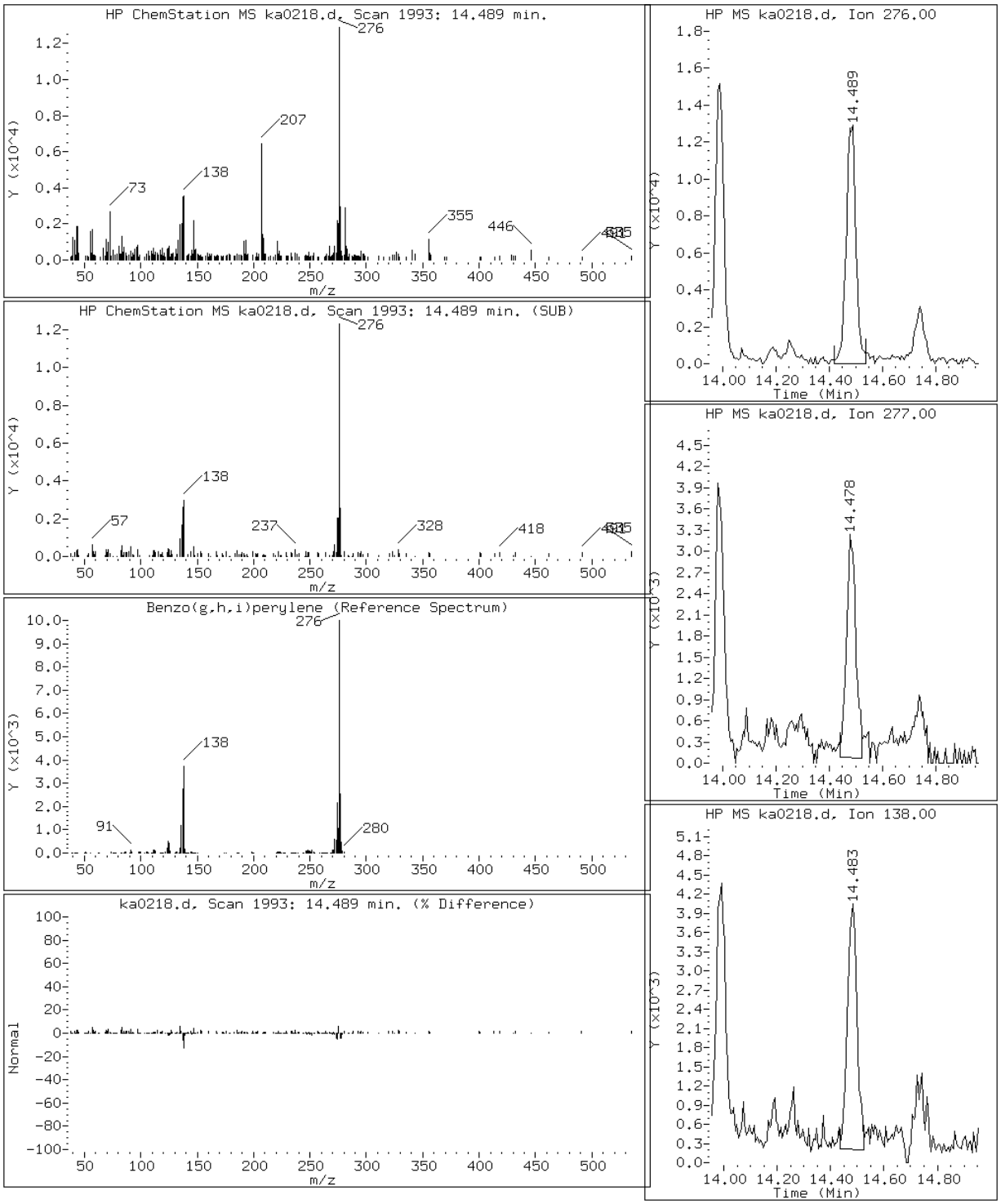
Data File: ka0218.d

Date: 02-JAN-2013 15:44

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-43-A DL=10 Operator: LEG

24 Benzo(g,h,i)perylene



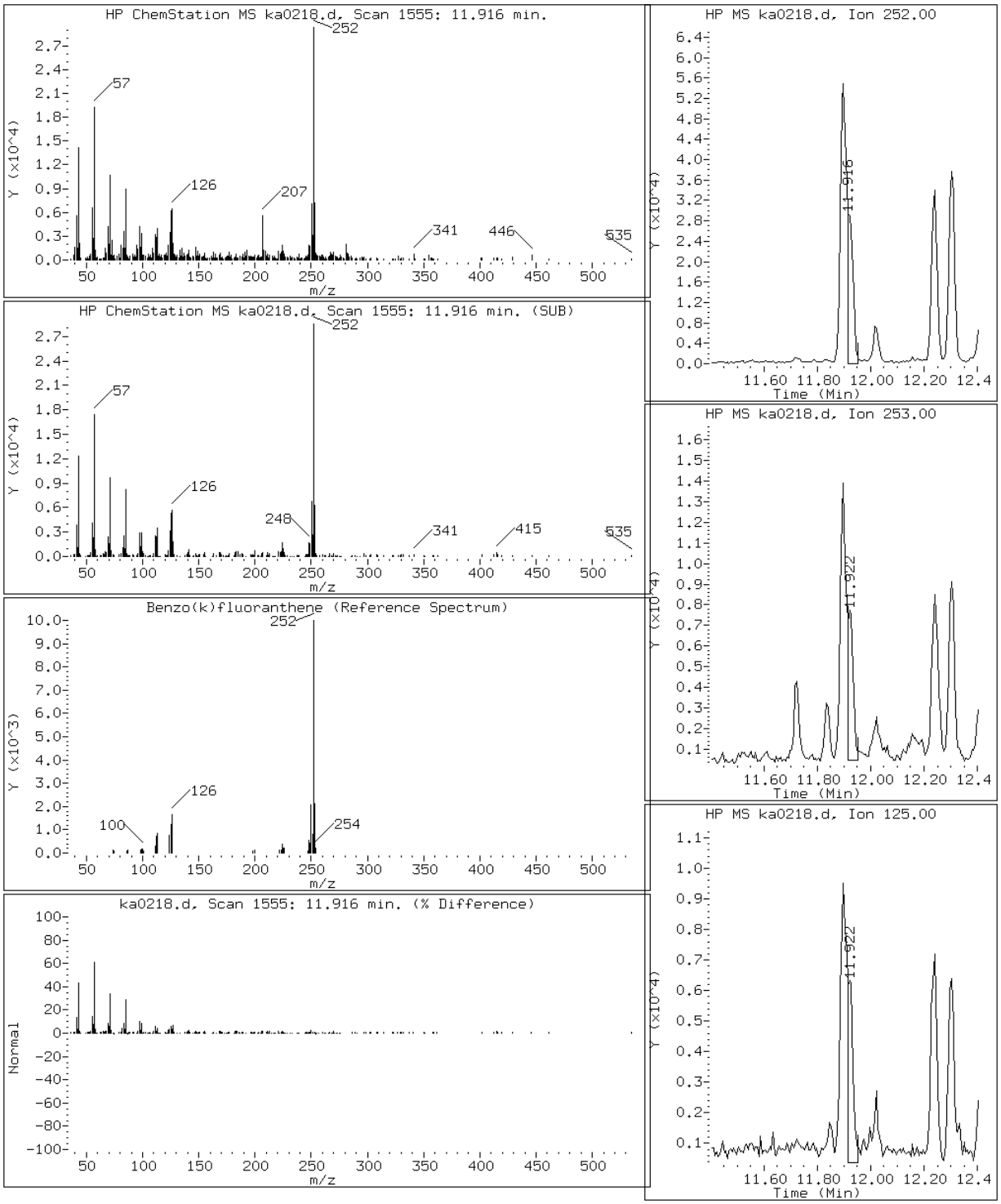
Data File: ka0218.d

Date: 02-JAN-2013 15:44

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-43-A DL=10 Operator: LEG

20 Benzo(k)fluoranthene



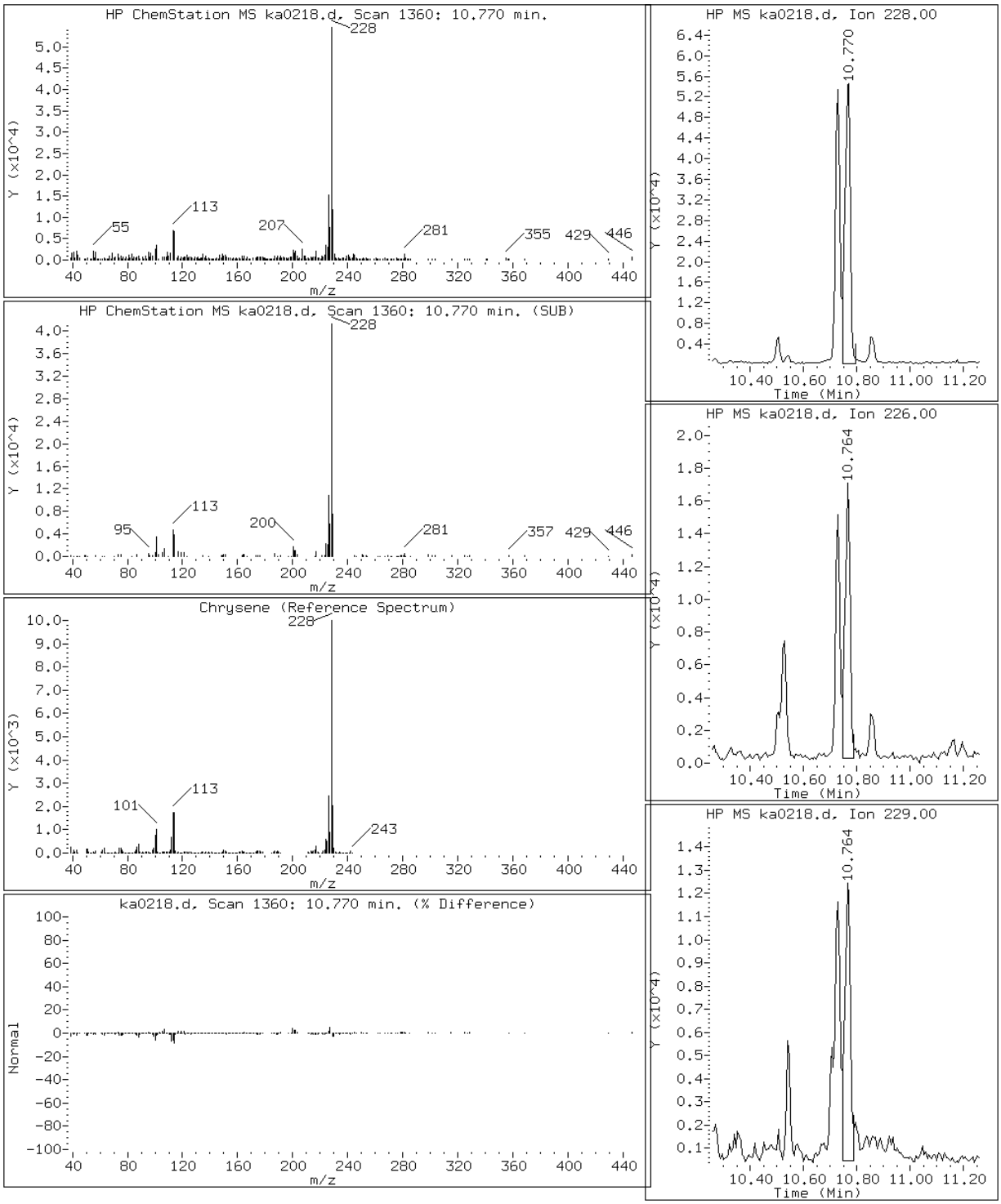
Data File: ka0218.d

Date: 02-JAN-2013 15:44

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-43-A DL=10 Operator: LEG

17 Chrysene



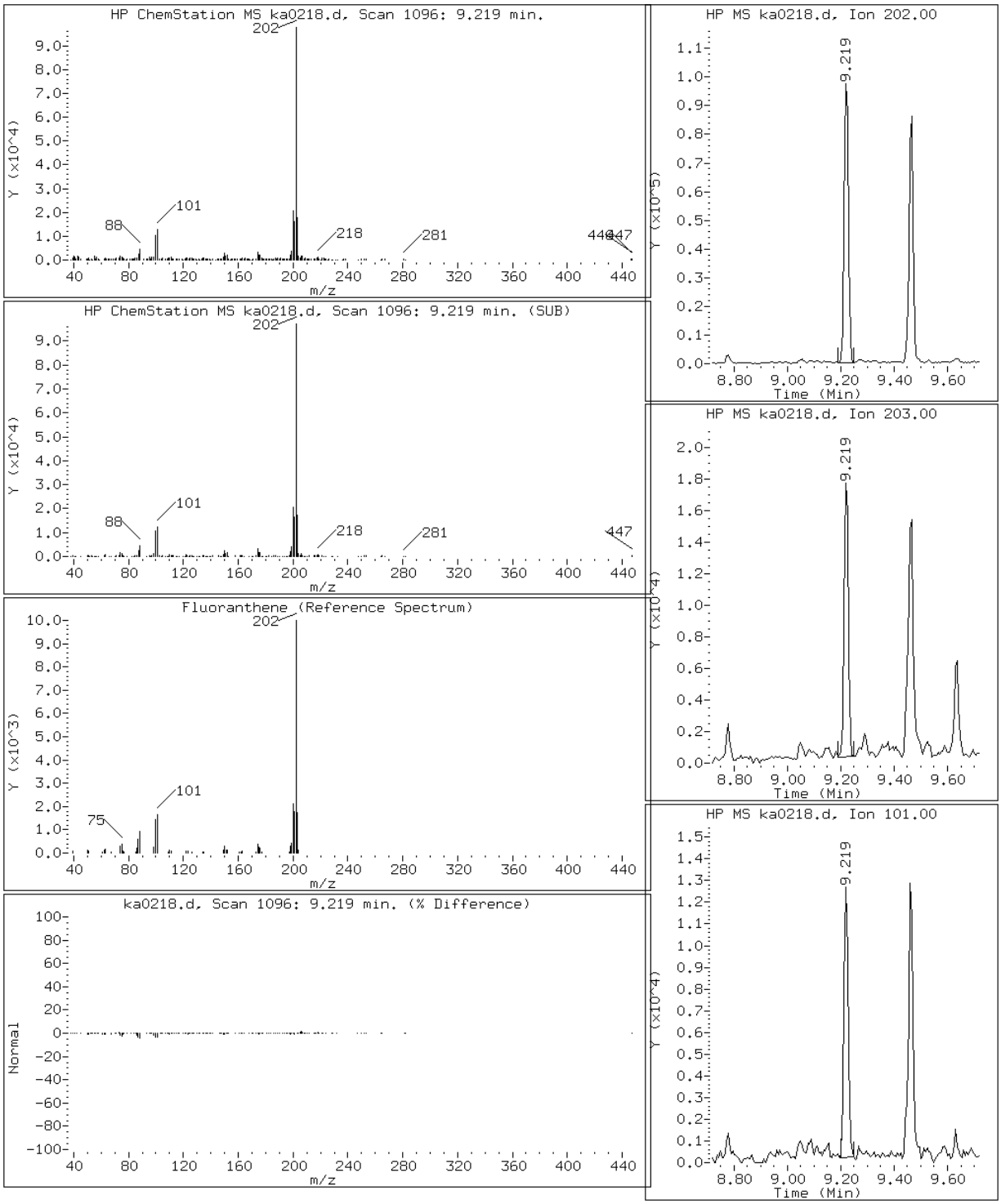
Data File: ka0218.d

Date: 02-JAN-2013 15:44

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-43-A DL=10 Operator: LEG

12 Fluoranthene



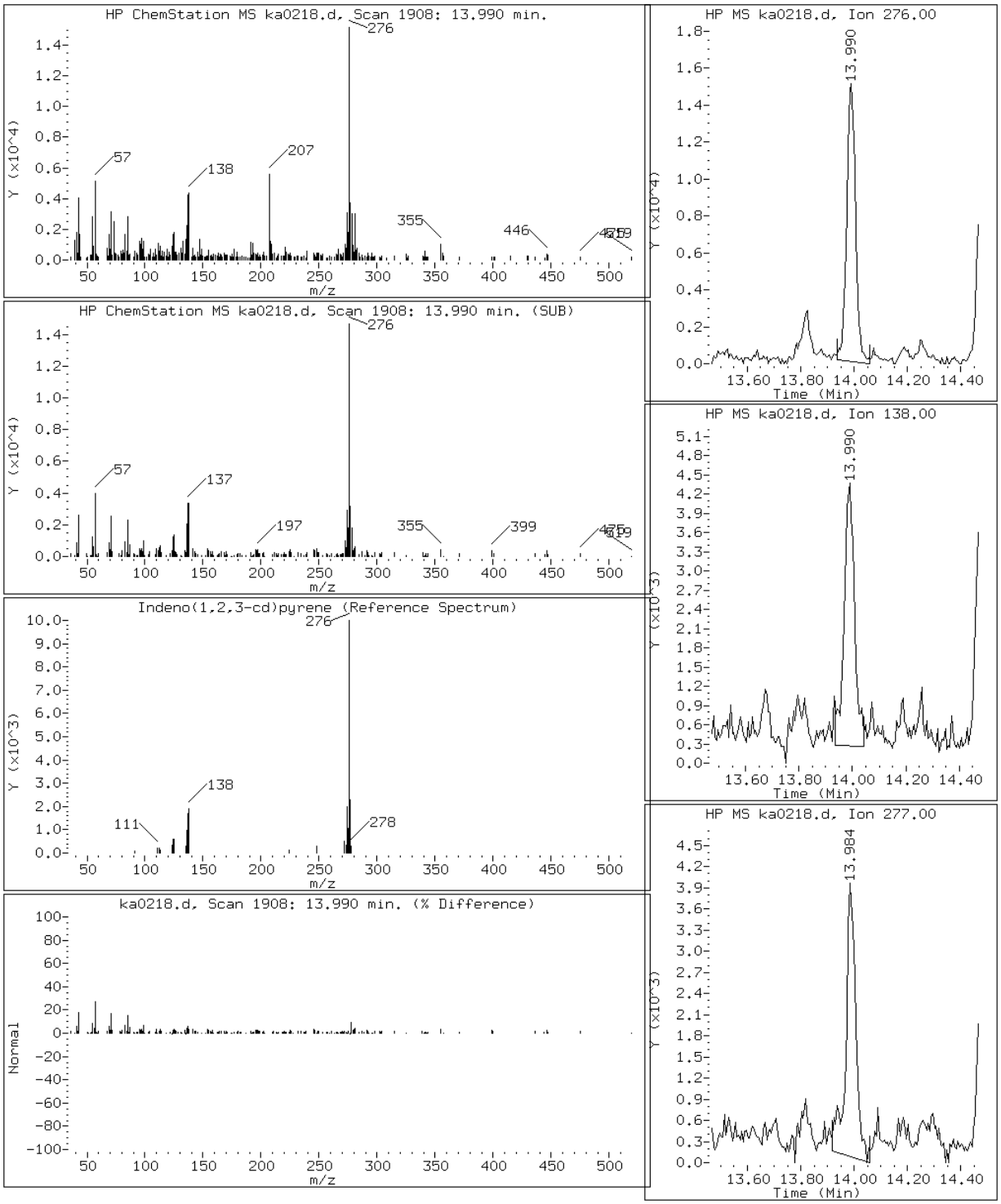
Data File: ka0218.d

Date: 02-JAN-2013 15:44

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-43-A DL=10 Operator: LEG

22 Indeno(1,2,3-cd)pyrene



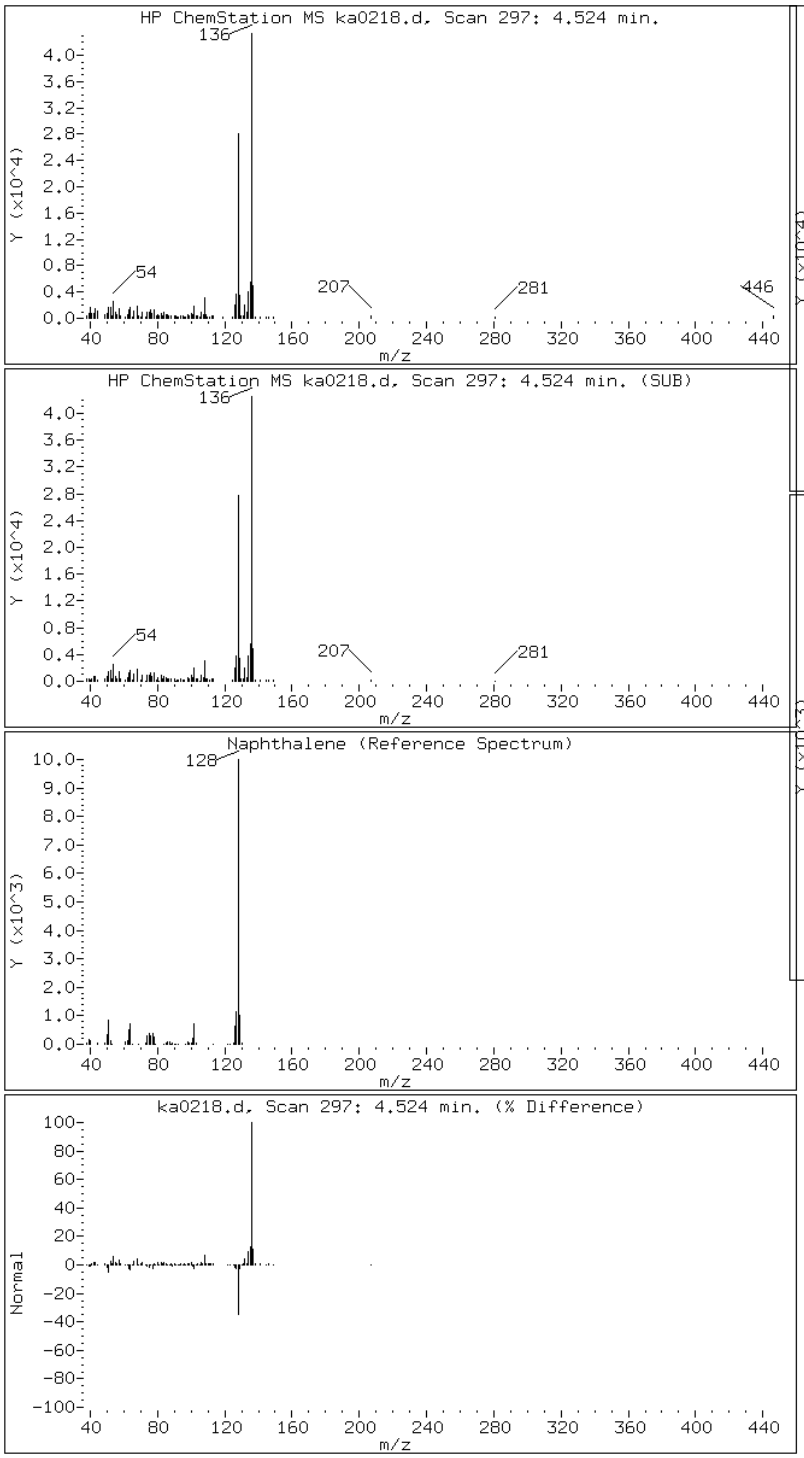
Data File: ka0218.d

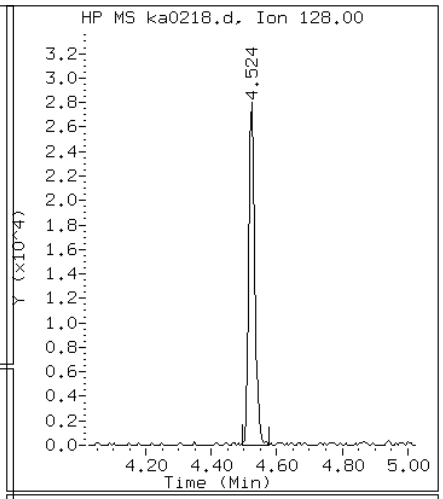
Date: 02-JAN-2013 15:44

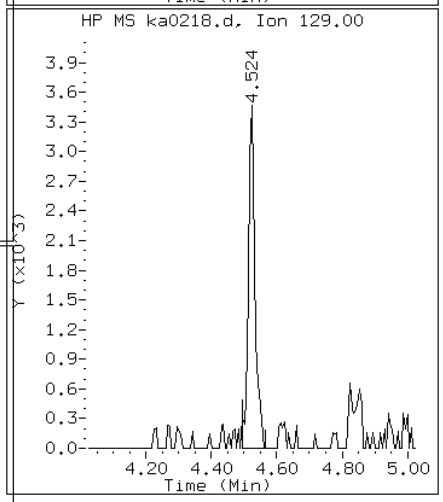
Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-43-A DL=10 Operator: LEG

2 Naphthalene







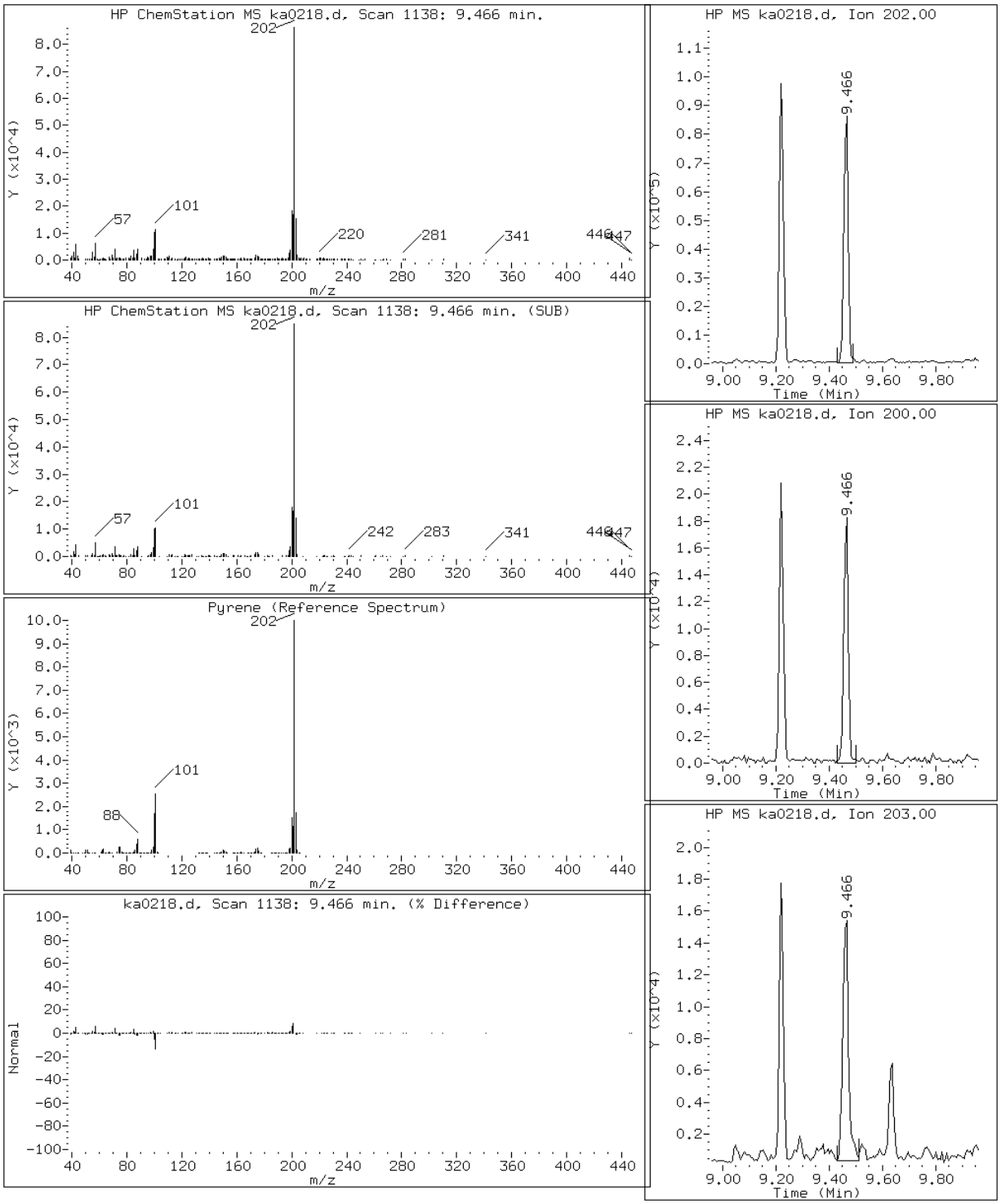
Data File: ka0218.d

Date: 02-JAN-2013 15:44

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-43-A DL=10 Operator: LEG

14 Pyrene



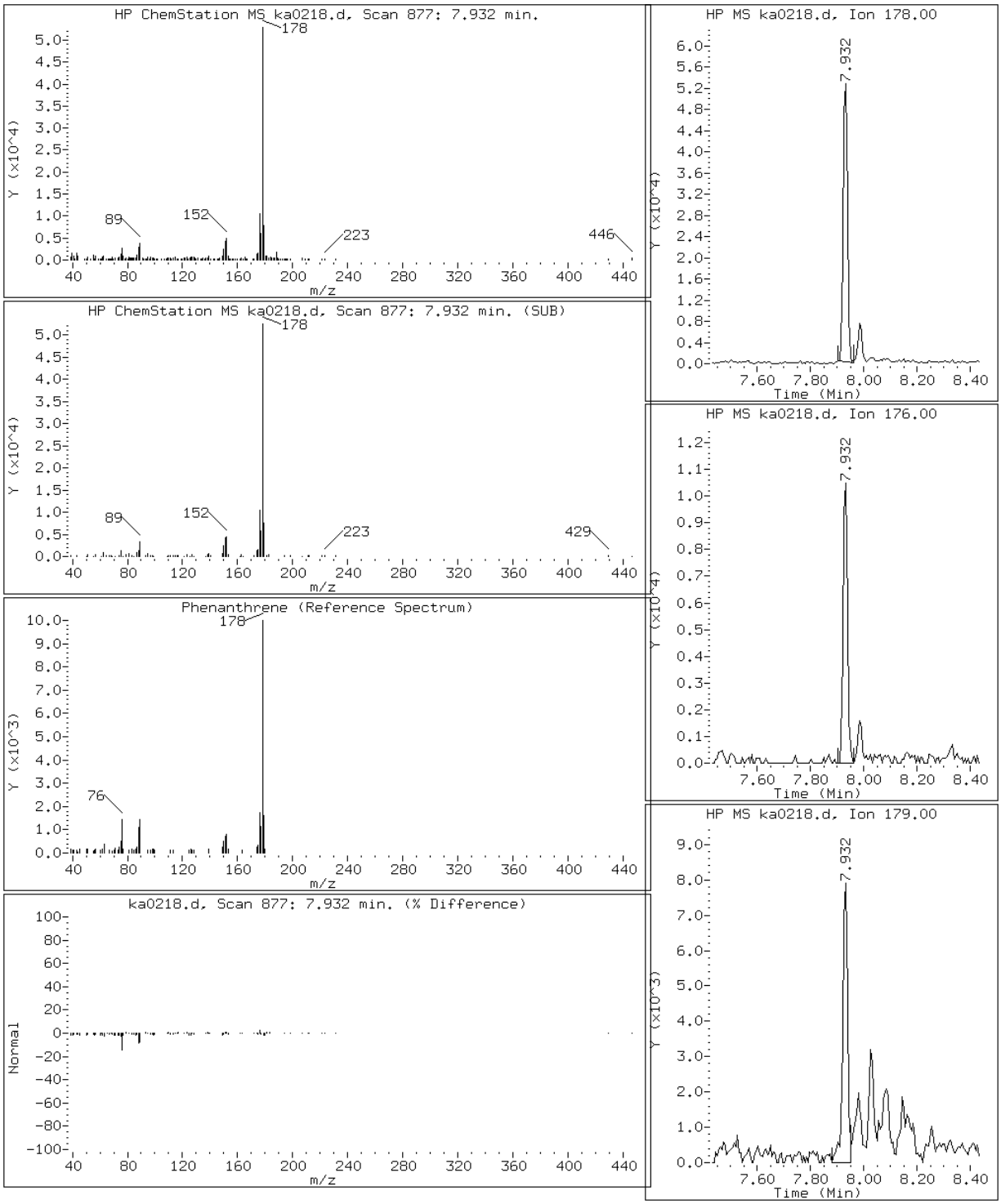
Data File: ka0218.d

Date: 02-JAN-2013 15:44

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-43-A DL=10 Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: ka0218.d
Inj. Date and Time: 02-JAN-2013 15:44
Instrument ID: MSK5973.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 01/03/2013

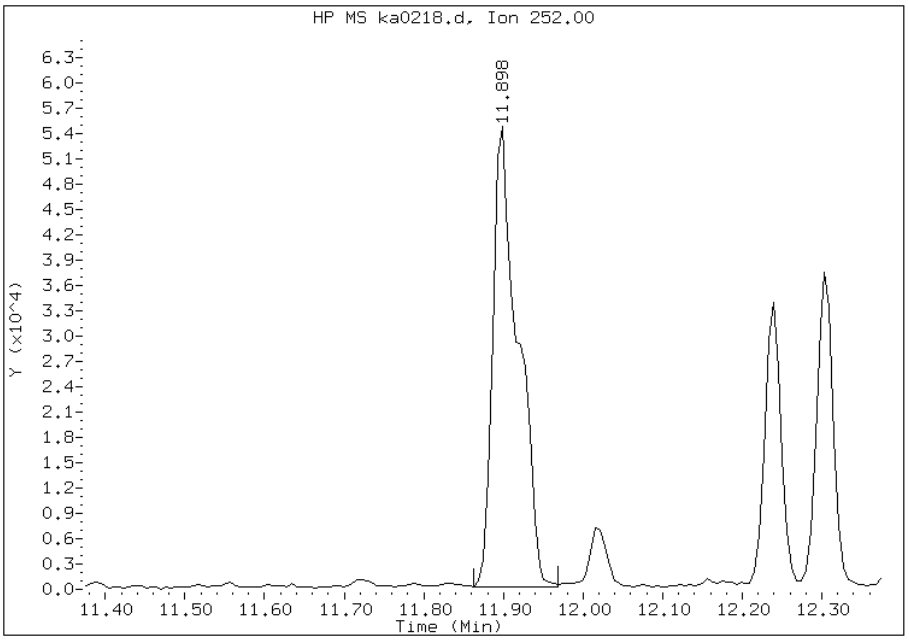
Processing Integration Results

RT: 11.90

Response: 121627

Amount: 1

Conc: 251



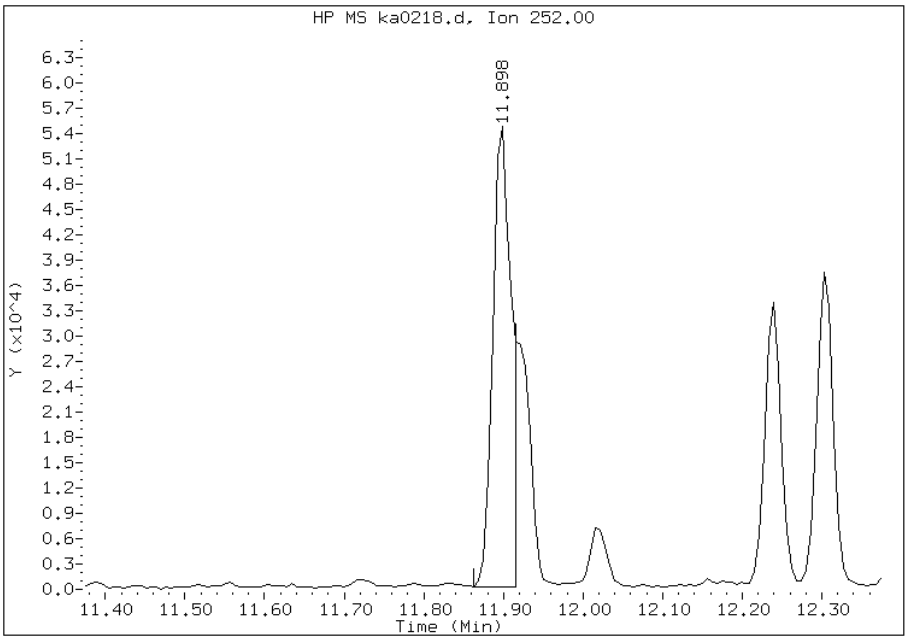
Manual Integration Results

RT: 11.90

Response: 91715

Amount: 1

Conc: 190



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: ka0218.d
Inj. Date and Time: 02-JAN-2013 15:44
Instrument ID: MSK5973.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 01/03/2013

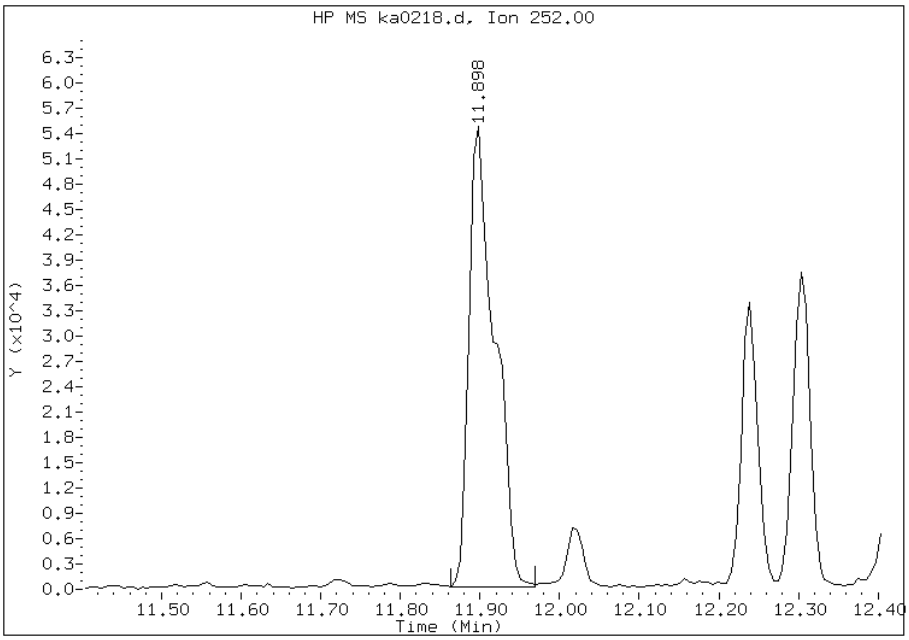
Processing Integration Results

RT: 11.90

Response: 121627

Amount: 1

Conc: 260



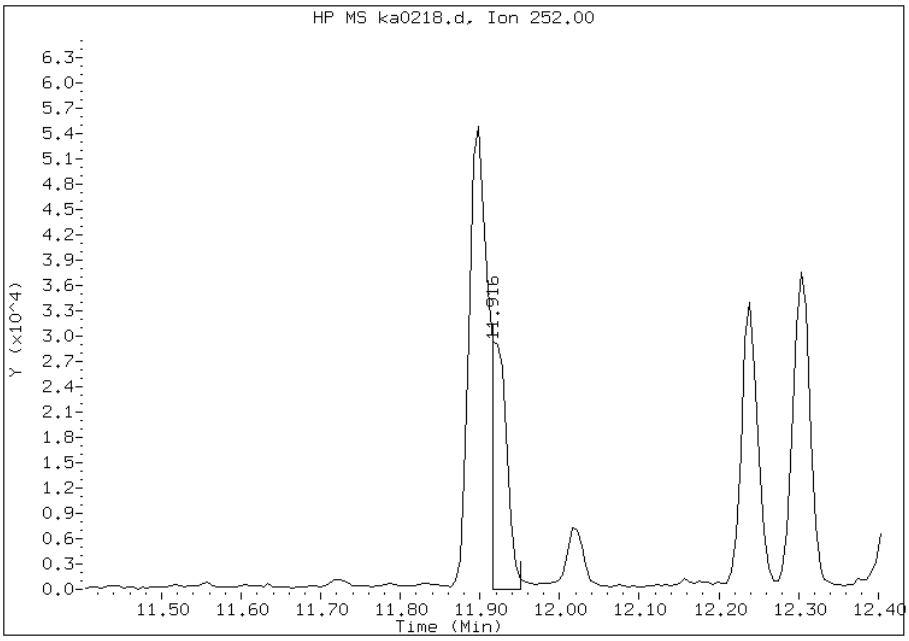
Manual Integration Results

RT: 11.92

Response: 40542

Amount: 0

Conc: 87



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: CV0451A-CS-SP | Lab Sample ID: 680-85980-44

Matrix: Solid | Lab File ID: ka0219.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/19/2012 09:00

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.00(g) | Date Analyzed: 01/02/2013 16:07

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

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

% Moisture: 23.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	64	J	88	41
91-57-6	2-Methylnaphthalene	130		88	43
83-32-9	Acenaphthene	88	U	88	43
208-96-8	Acenaphthylene	88	U	88	43
120-12-7	Anthracene	88	U	88	43
56-55-3	Benzo[a]anthracene	110		88	43
50-32-8	Benzo[a]pyrene	91		88	16
205-99-2	Benzo[b]fluoranthene	150		88	43
191-24-2	Benzo[g,h,i]perylene	58	J	88	43
207-08-9	Benzo[k]fluoranthene	50	J	88	26
218-01-9	Chrysene	130		88	43
53-70-3	Dibenz(a,h)anthracene	88	U	88	43
206-44-0	Fluoranthene	160		88	43
86-73-7	Fluorene	88	U	88	43
193-39-5	Indeno[1,2,3-cd]pyrene	46	J	88	43
91-20-3	Naphthalene	110		88	43
129-00-0	Pyrene	150		88	43
85-01-8	Phenanthrene	130		88	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0219.d
Lab Smp Id: 680-85980-A-44-A DL
Inj Date : 02-JAN-2013 16:07
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85980-A-44-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:58 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:24 Cal File: ka0212q.d
Als bottle: 15
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.501	4.501	(1.000)	529713	2.00000	
2 Naphthalene	128	4.524	4.524	(1.005)	76975	0.24662	82.20
3 2-Methylnaphthalene	142	5.194	5.194	(1.154)	55944	0.28837	96.12
4 1-Methylnaphthalene	142	5.294	5.300	(1.176)	28938	0.14714	49.04(a)
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	310450	2.00000	
* 9 Phenanthrene-d10	188	7.908	7.903	(1.000)	486027	2.00000	
10 Phenanthrene	178	7.932	7.932	(1.003)	92027	0.30001	100.00

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
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14 Pyrene	202	9.466	9.460	(0.882)	103090	0.34448	114.82
16 Benzo(a)Anthracene	228	10.717	10.717	(0.998)	55647	0.24209	80.69
* 13 Chrysene-d12	240	10.735	10.729	(1.000)	351099	2.00000	
17 Chrysene	228	10.758	10.758	(1.002)	66536	0.29421	98.07
19 Benzo(b)fluoranthene	252	11.880	11.875	(0.961)	64889	0.33655	112.18(M)
20 Benzo(k)fluoranthene	252	11.910	11.904	(0.963)	21534	0.11539	38.46(aM)
21 Benzo(a)pyrene	252	12.286	12.280	(0.994)	30848	0.20927	69.75
* 18 Perylene-d12	264	12.362	12.356	(1.000)	259443	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	13.972	13.966	(1.302)	19193	0.10587	35.29(a)
24 Benzo(g,h,i)perylene	276	14.460	14.460	(1.170)	17416	0.13241	44.13(a)

QC Flag Legend

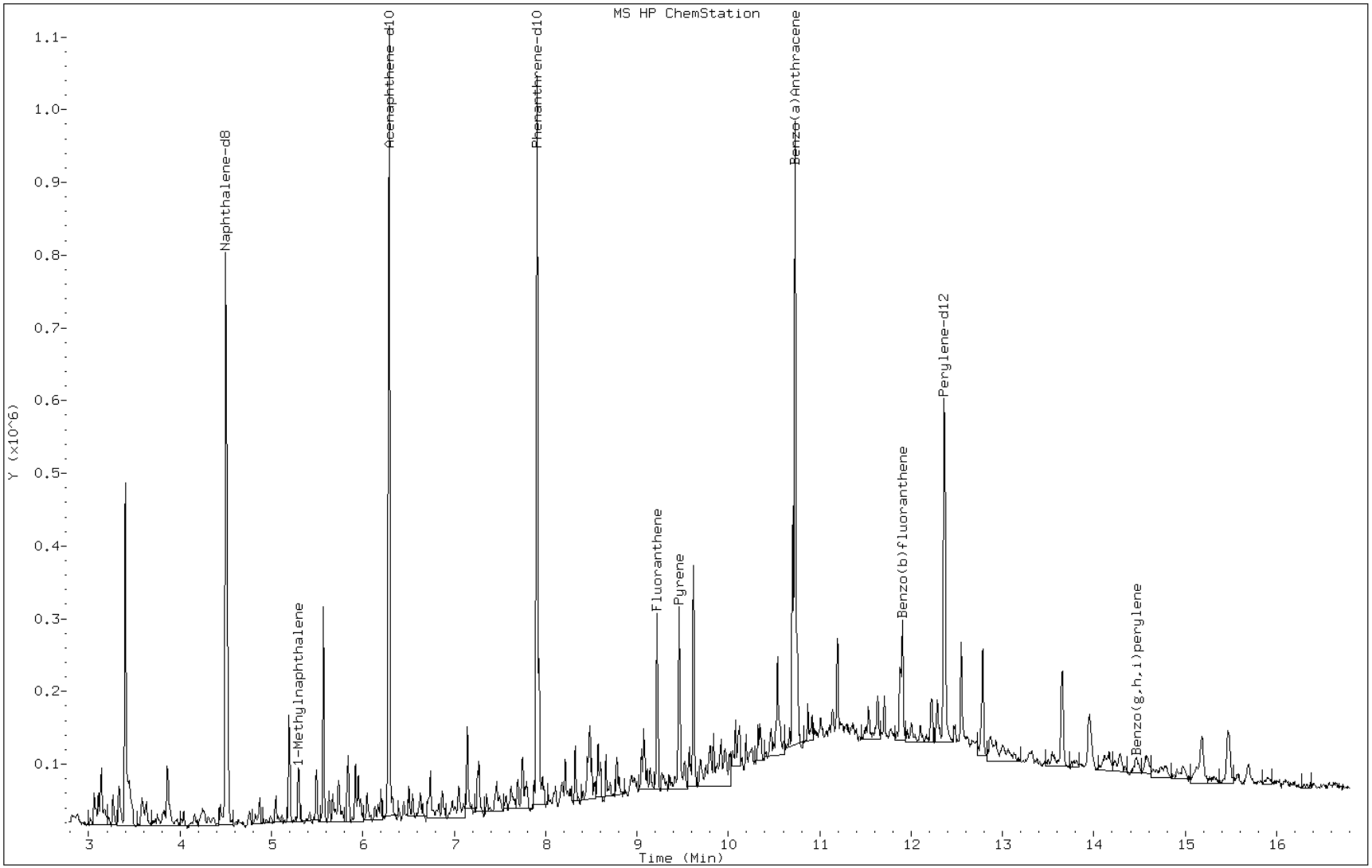
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: ka0219.d

Date: 02-JAN-2013 16:07

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-44-A DL=10 Operator: LEG



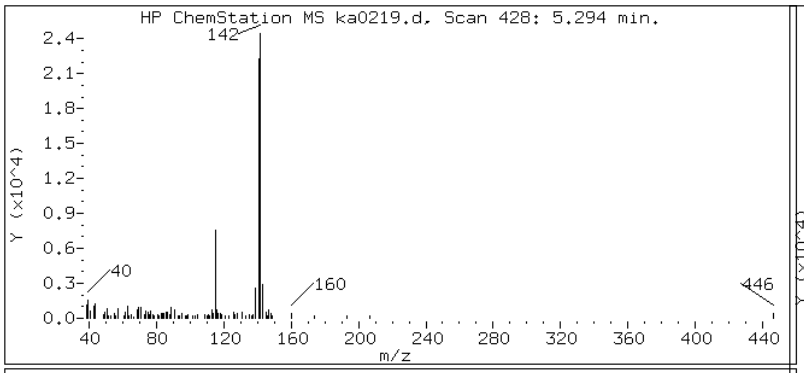
Data File: ka0219.d

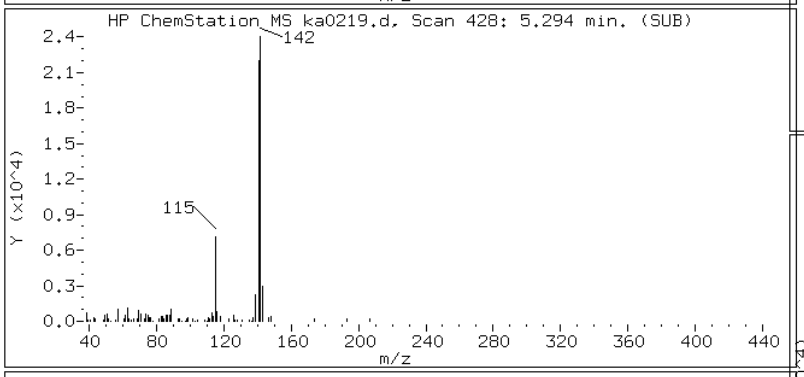
Date: 02-JAN-2013 16:07

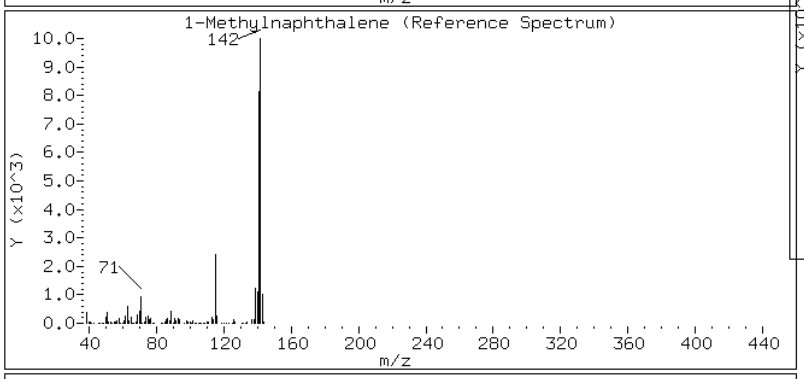
Client ID: Instrument: MSK5973.i

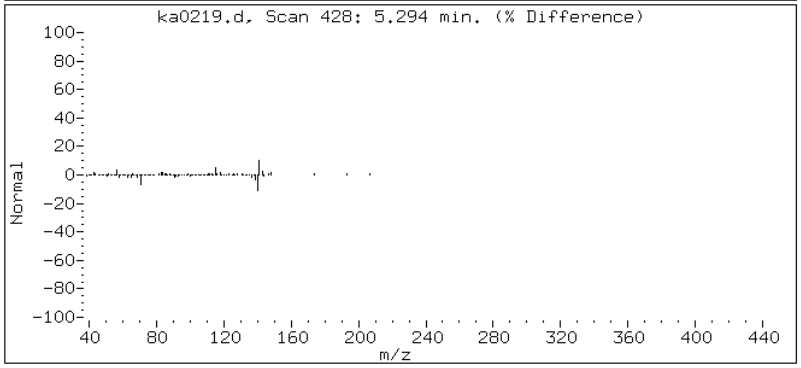
Sample Info: 680-85980-A-44-A DL=10 Operator: LEG

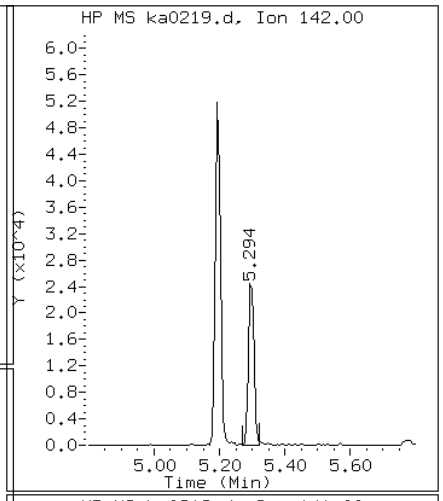
4 1-Methylnaphthalene

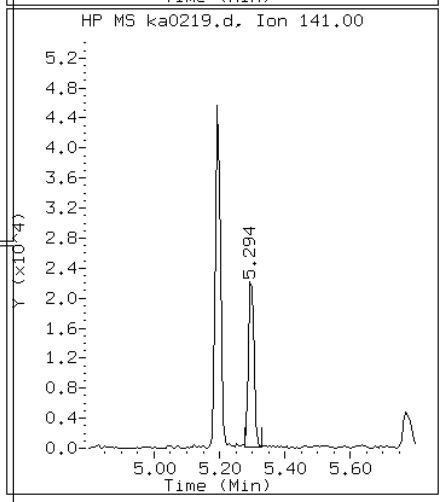












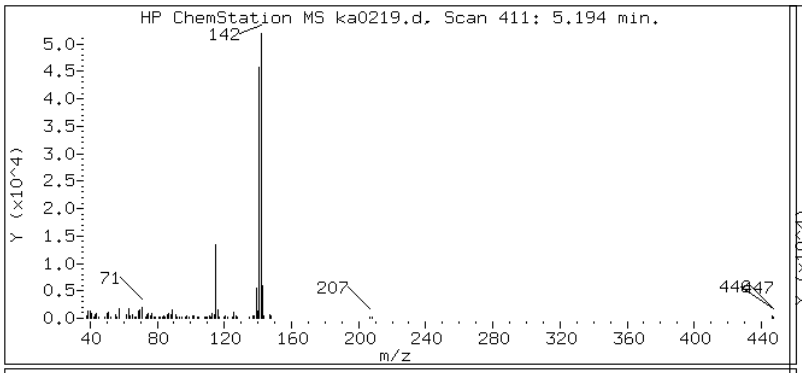
Data File: ka0219.d

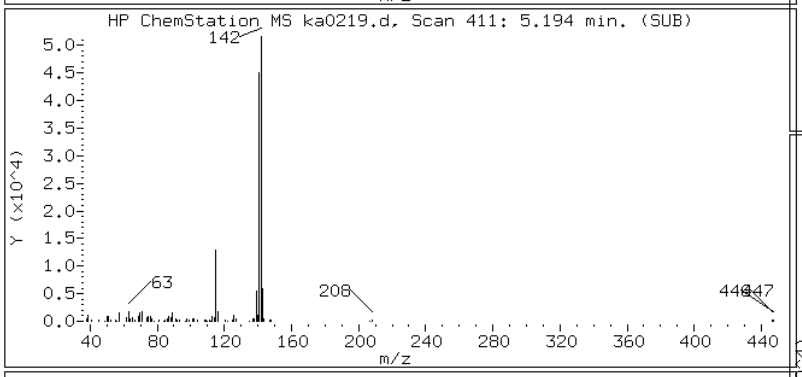
Date: 02-JAN-2013 16:07

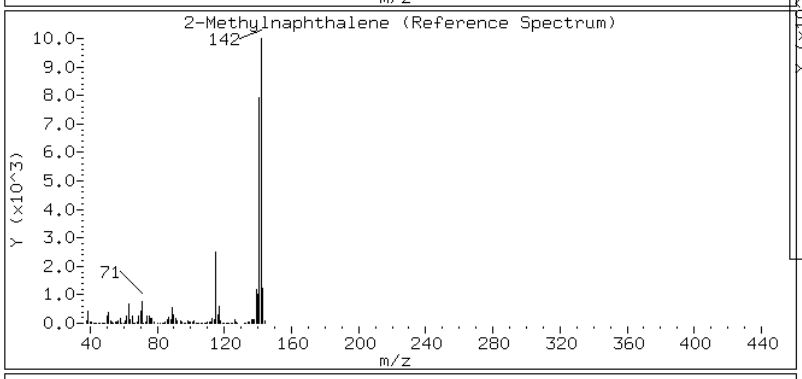
Client ID: Instrument: MSK5973.i

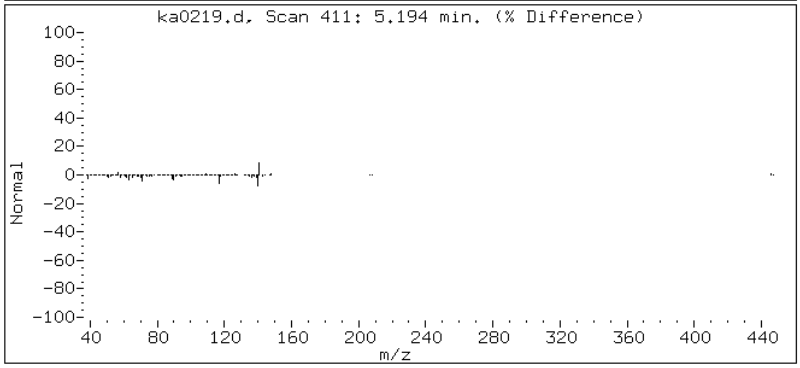
Sample Info: 680-85980-A-44-A DL=10 Operator: LEG

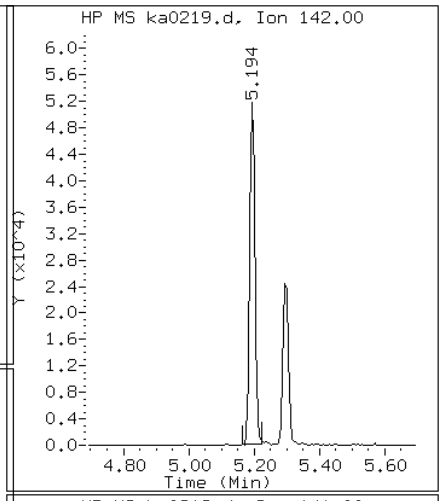
3 2-Methylnaphthalene

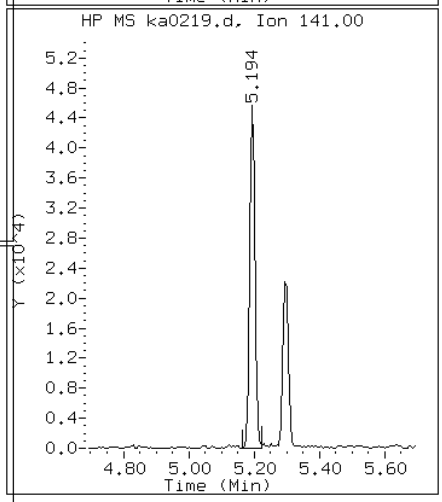












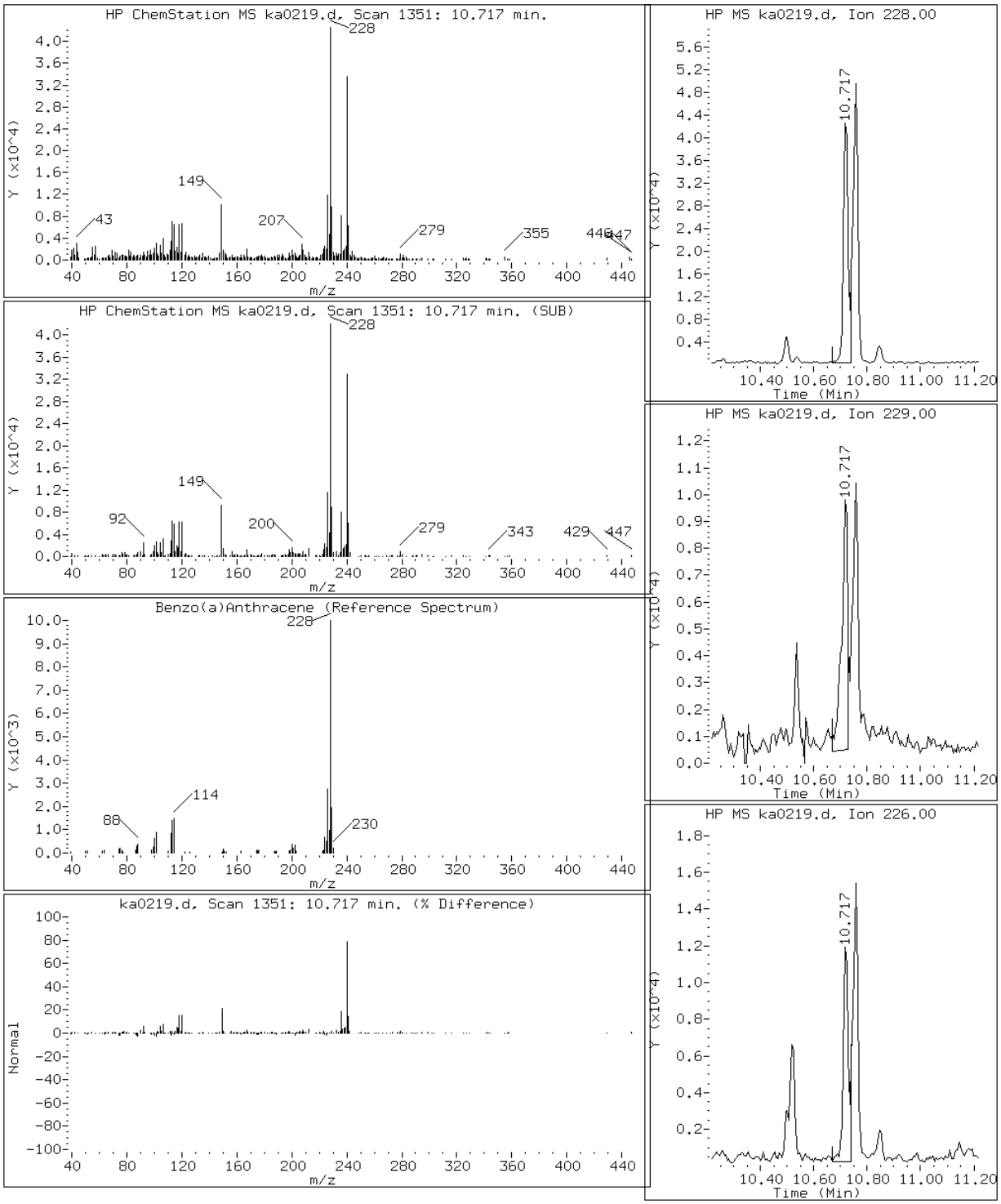
Data File: ka0219.d

Date: 02-JAN-2013 16:07

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-44-A DL=10 Operator: LEG

16 Benzo(a)Anthracene



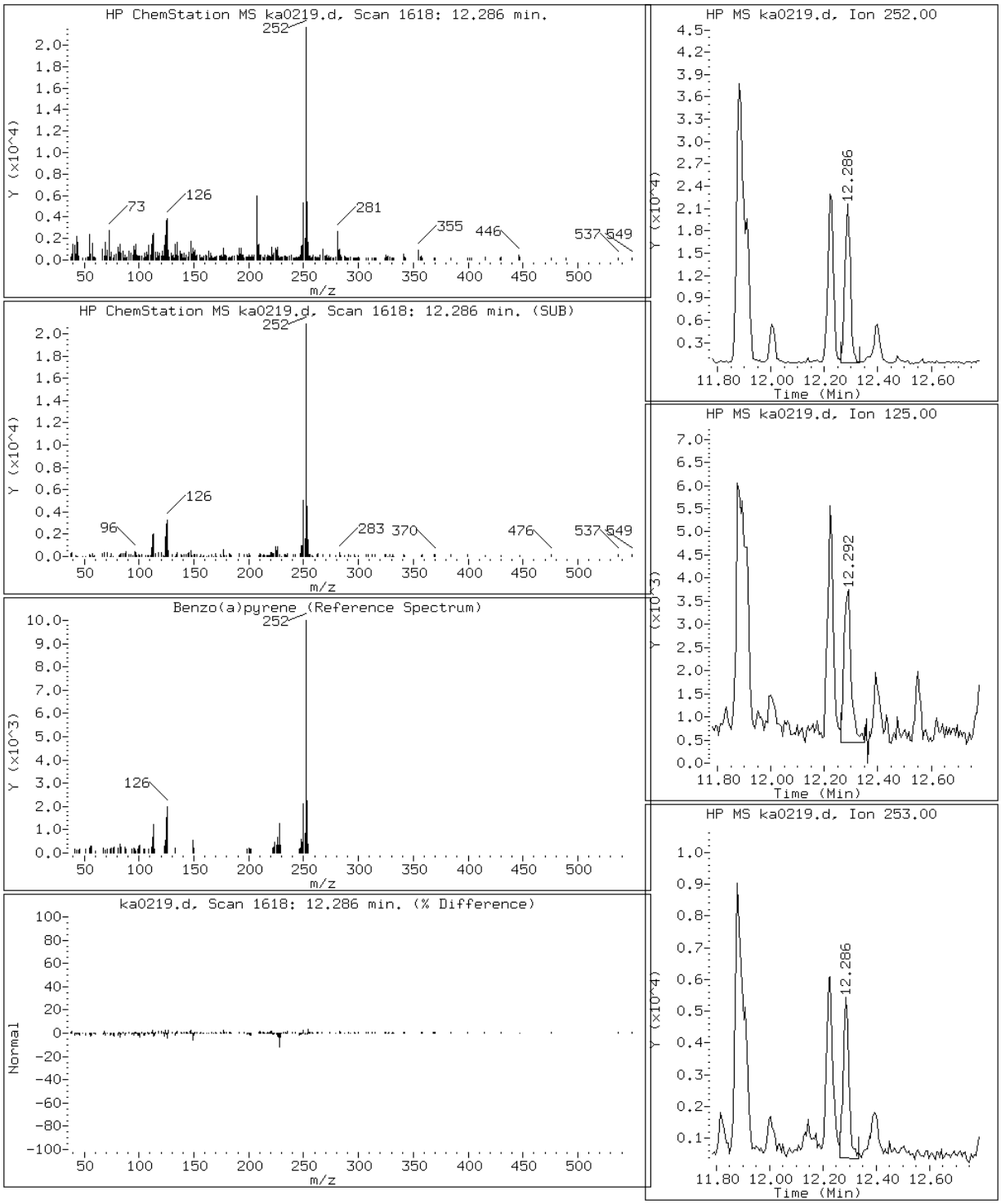
Data File: ka0219.d

Date: 02-JAN-2013 16:07

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-44-A DL=10 Operator: LEG

21 Benzo(a)pyrene



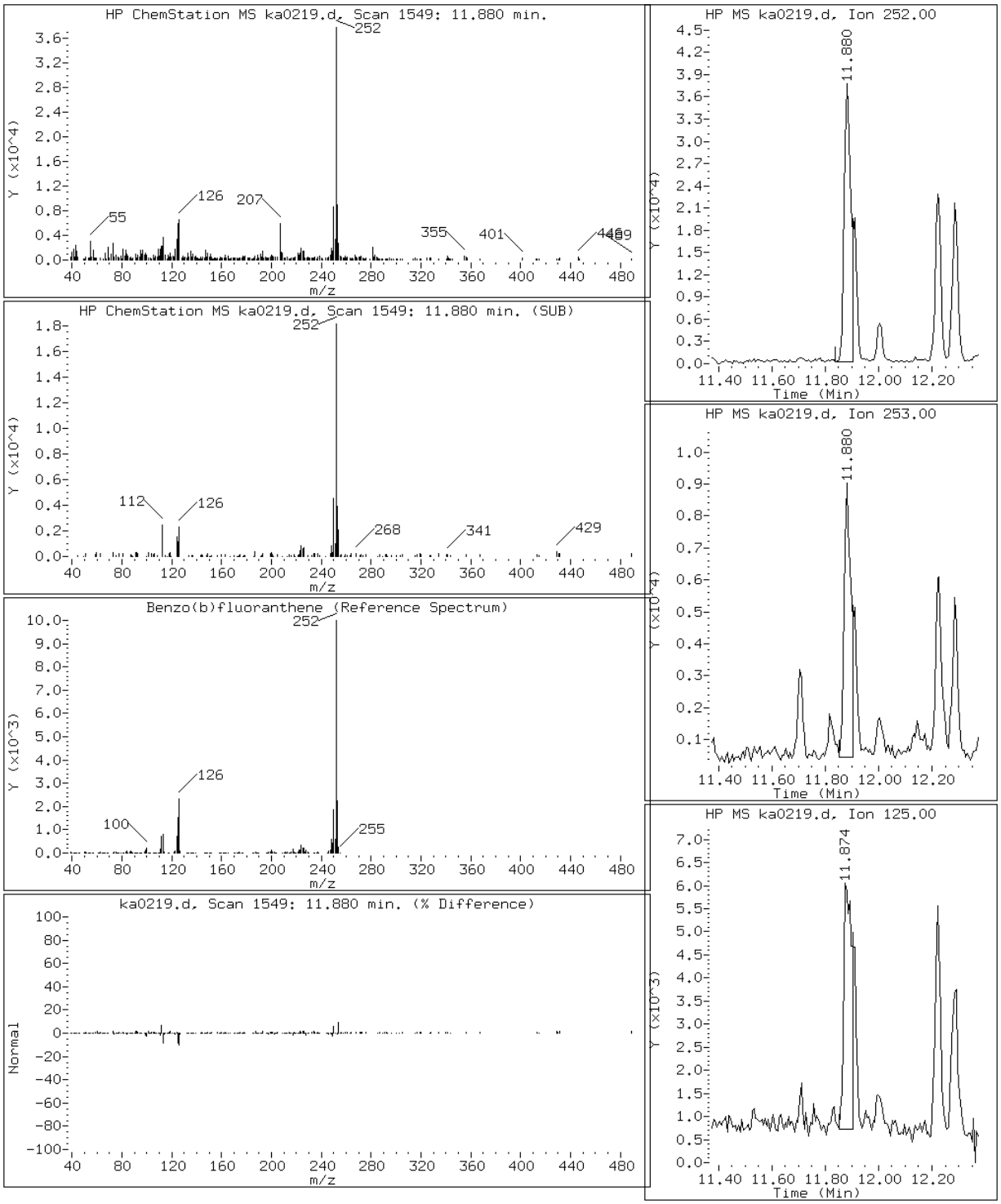
Data File: ka0219.d

Date: 02-JAN-2013 16:07

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-44-A DL=10 Operator: LEG

19 Benzo(b)fluoranthene



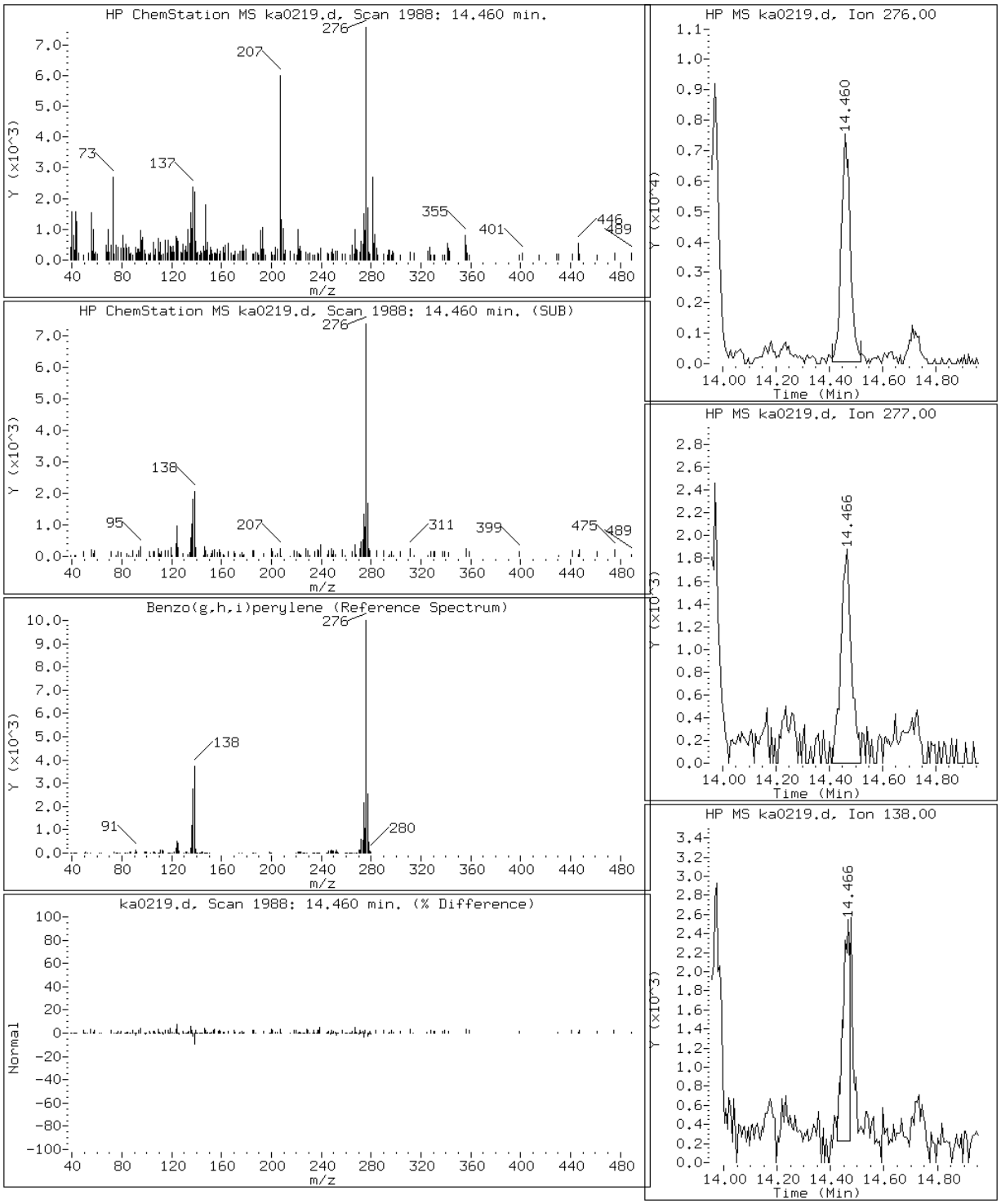
Data File: ka0219.d

Date: 02-JAN-2013 16:07

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-44-A DL=10 Operator: LEG

24 Benzo(g,h,i)perylene



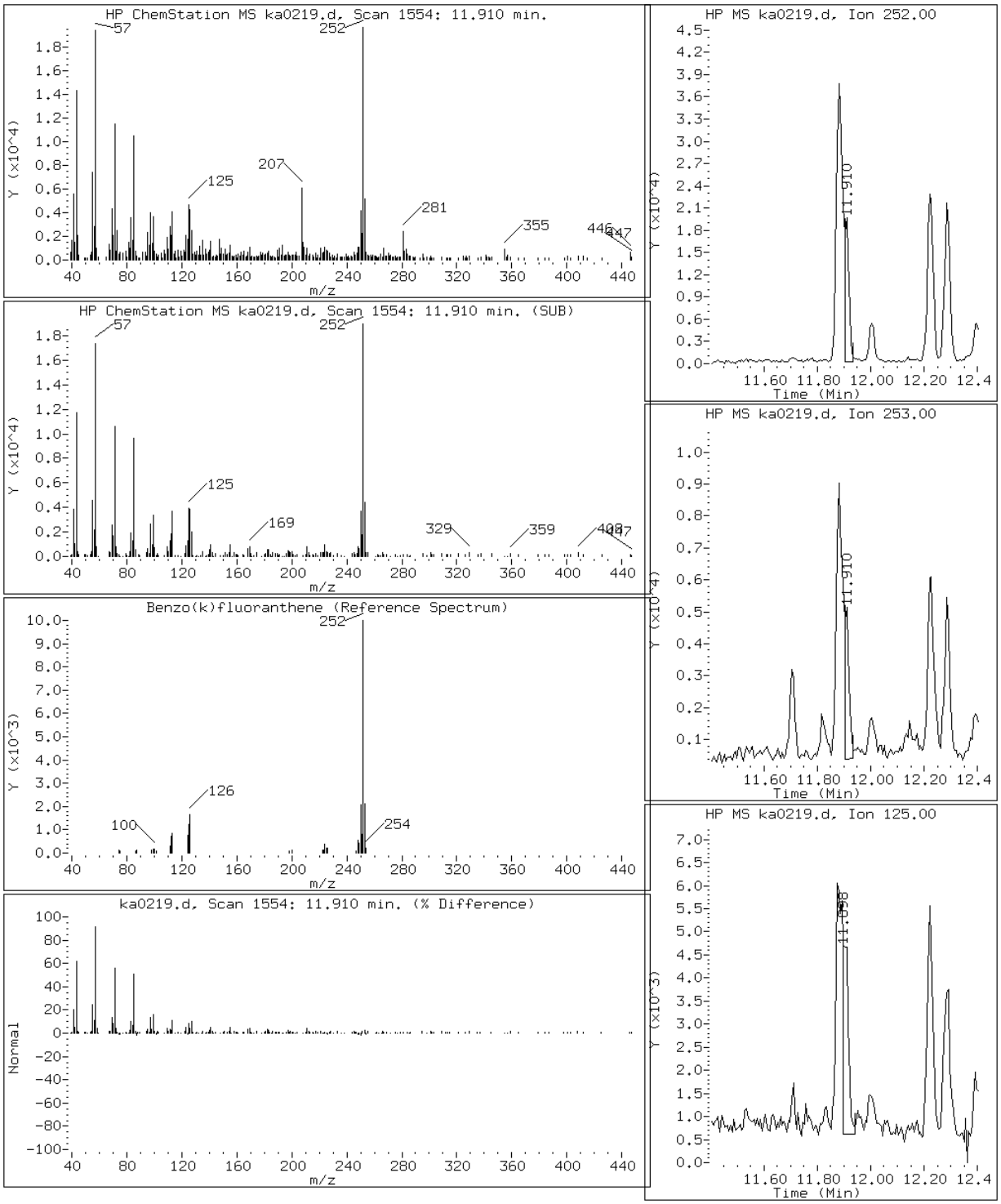
Data File: ka0219.d

Date: 02-JAN-2013 16:07

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-44-A DL=10 Operator: LEG

20 Benzo(k)fluoranthene



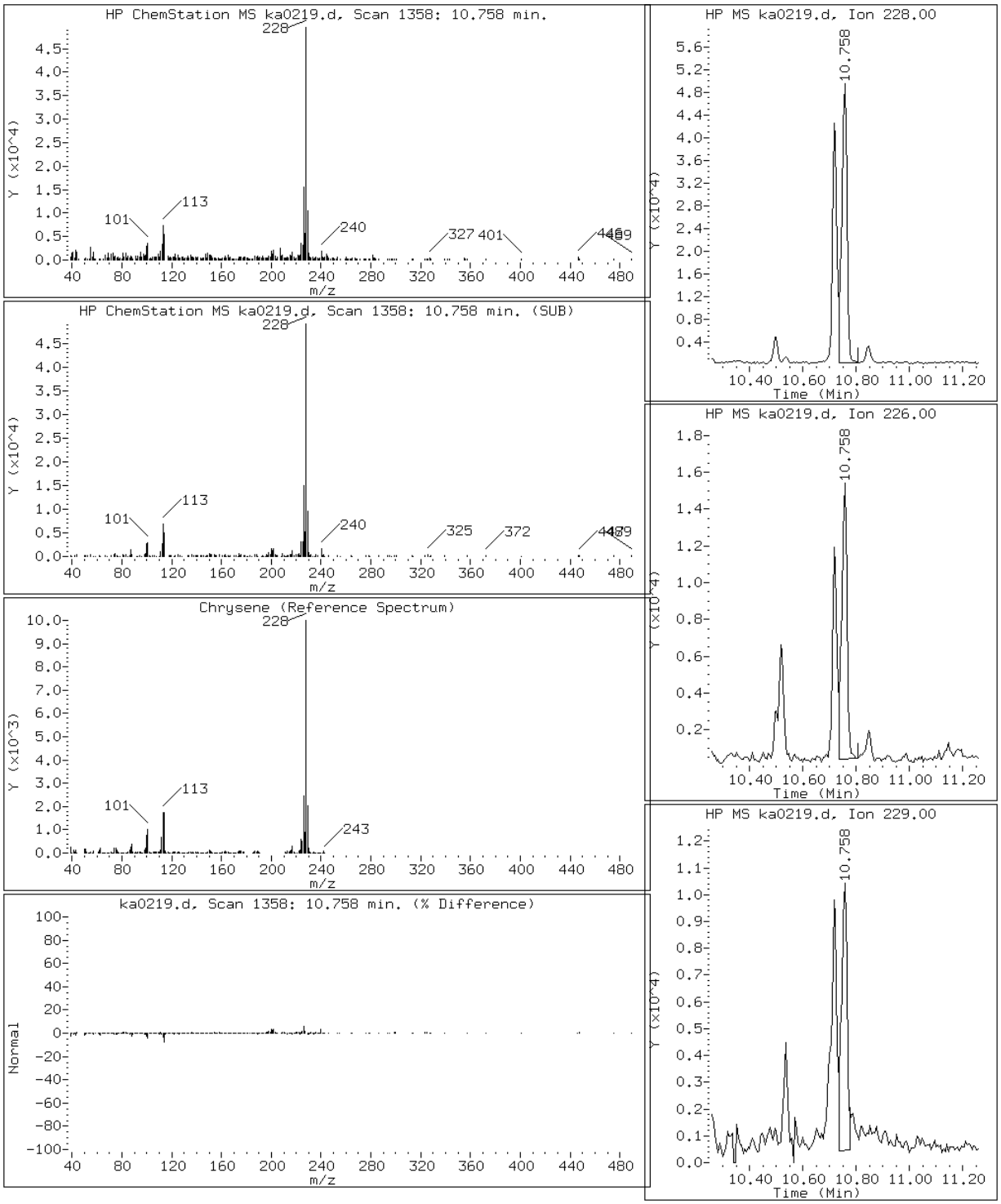
Data File: ka0219.d

Date: 02-JAN-2013 16:07

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-44-A DL=10 Operator: LEG

17 Chrysene



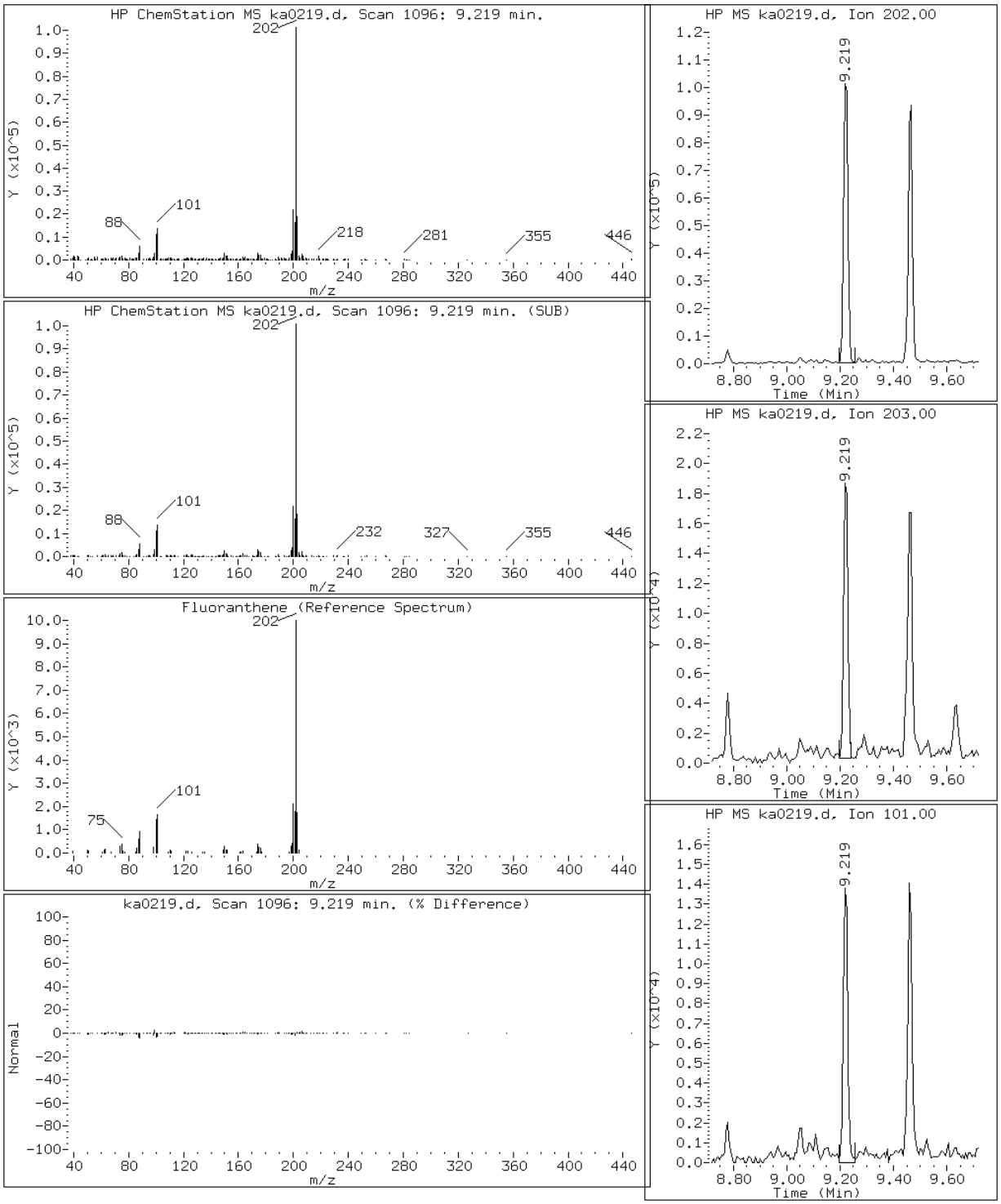
Data File: ka0219.d

Date: 02-JAN-2013 16:07

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-44-A DL=10 Operator: LEG

12 Fluoranthene



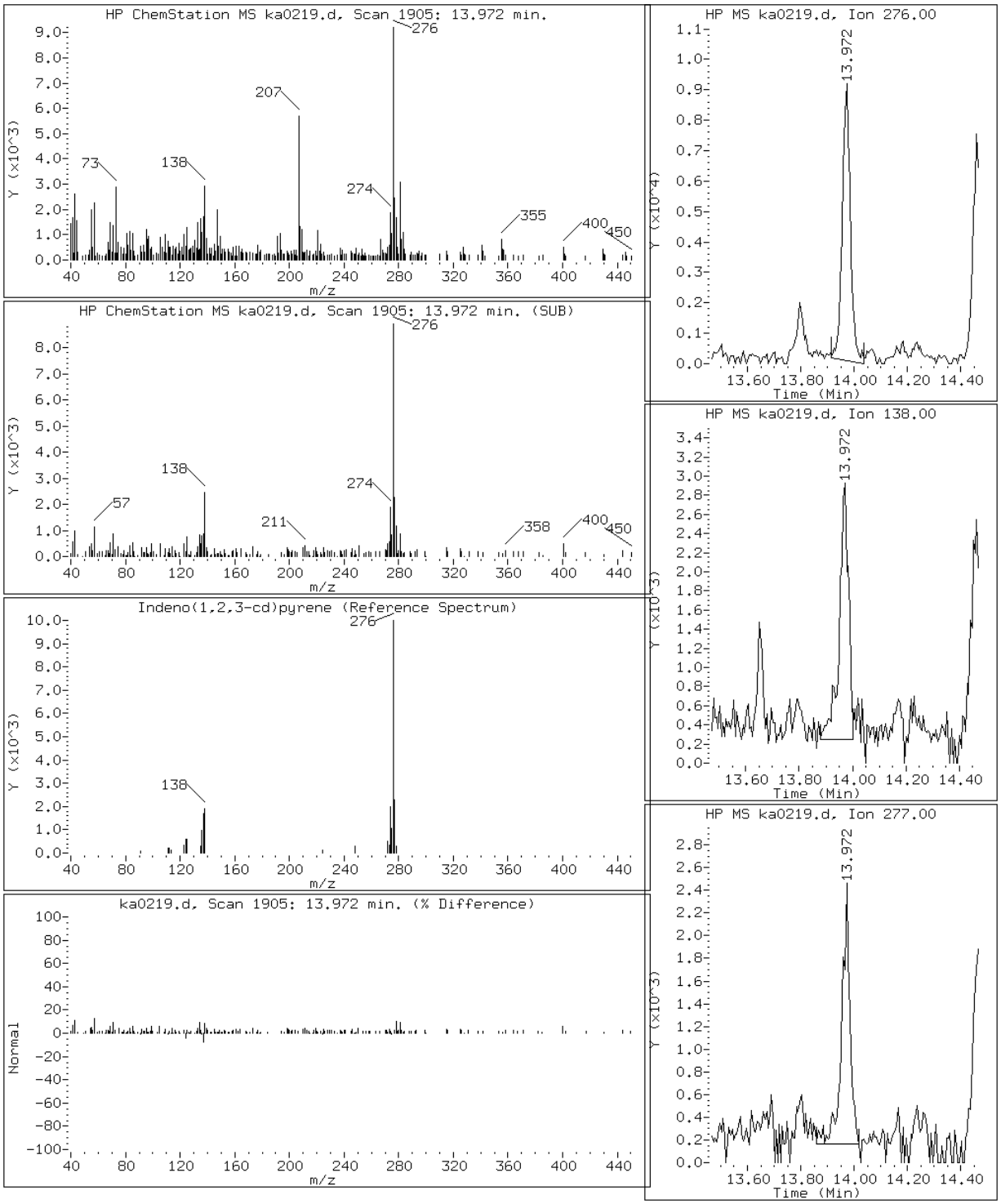
Data File: ka0219.d

Date: 02-JAN-2013 16:07

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-44-A DL=10 Operator: LEG

22 Indeno(1,2,3-cd)pyrene



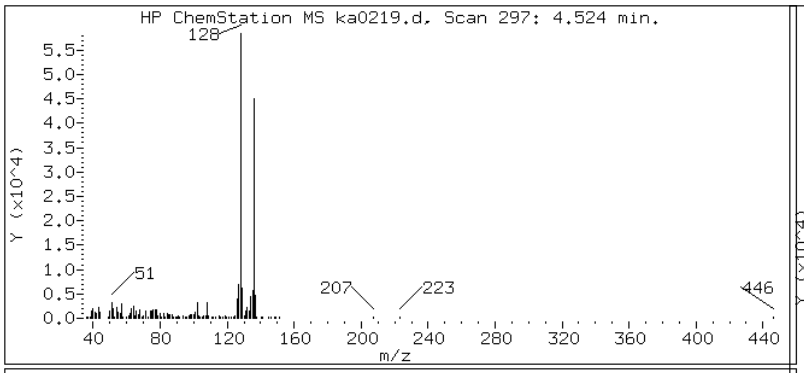
Data File: ka0219.d

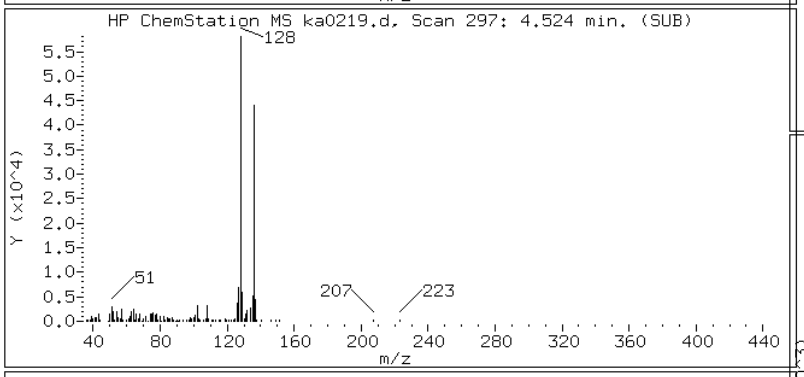
Date: 02-JAN-2013 16:07

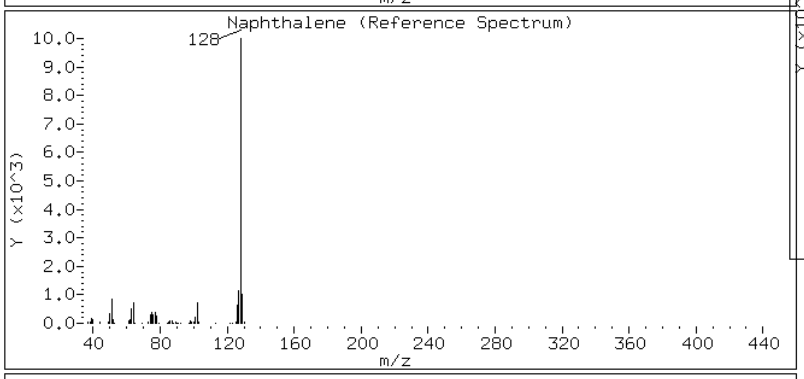
Client ID: Instrument: MSK5973.i

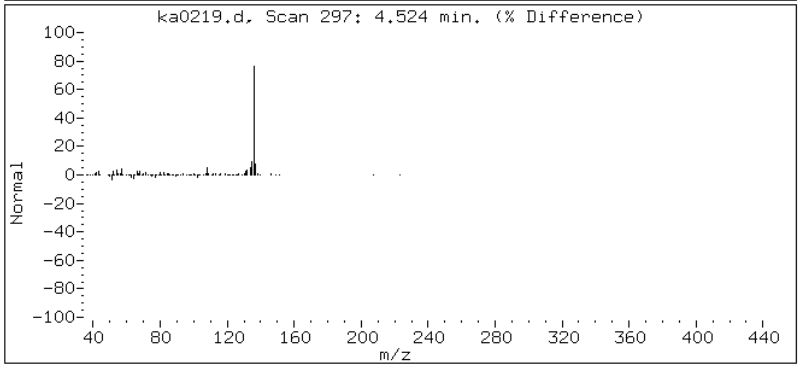
Sample Info: 680-85980-A-44-A DL=10 Operator: LEG

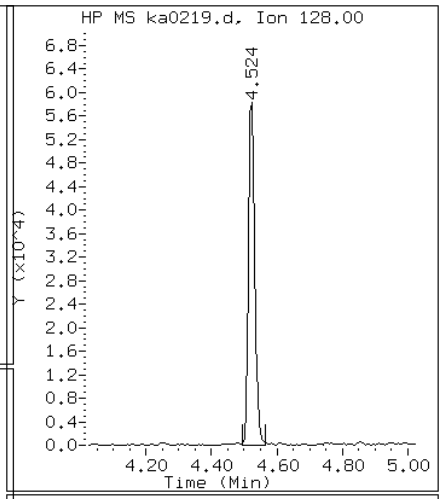
2 Naphthalene

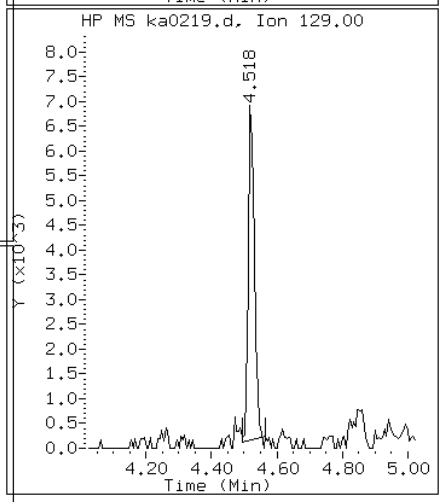












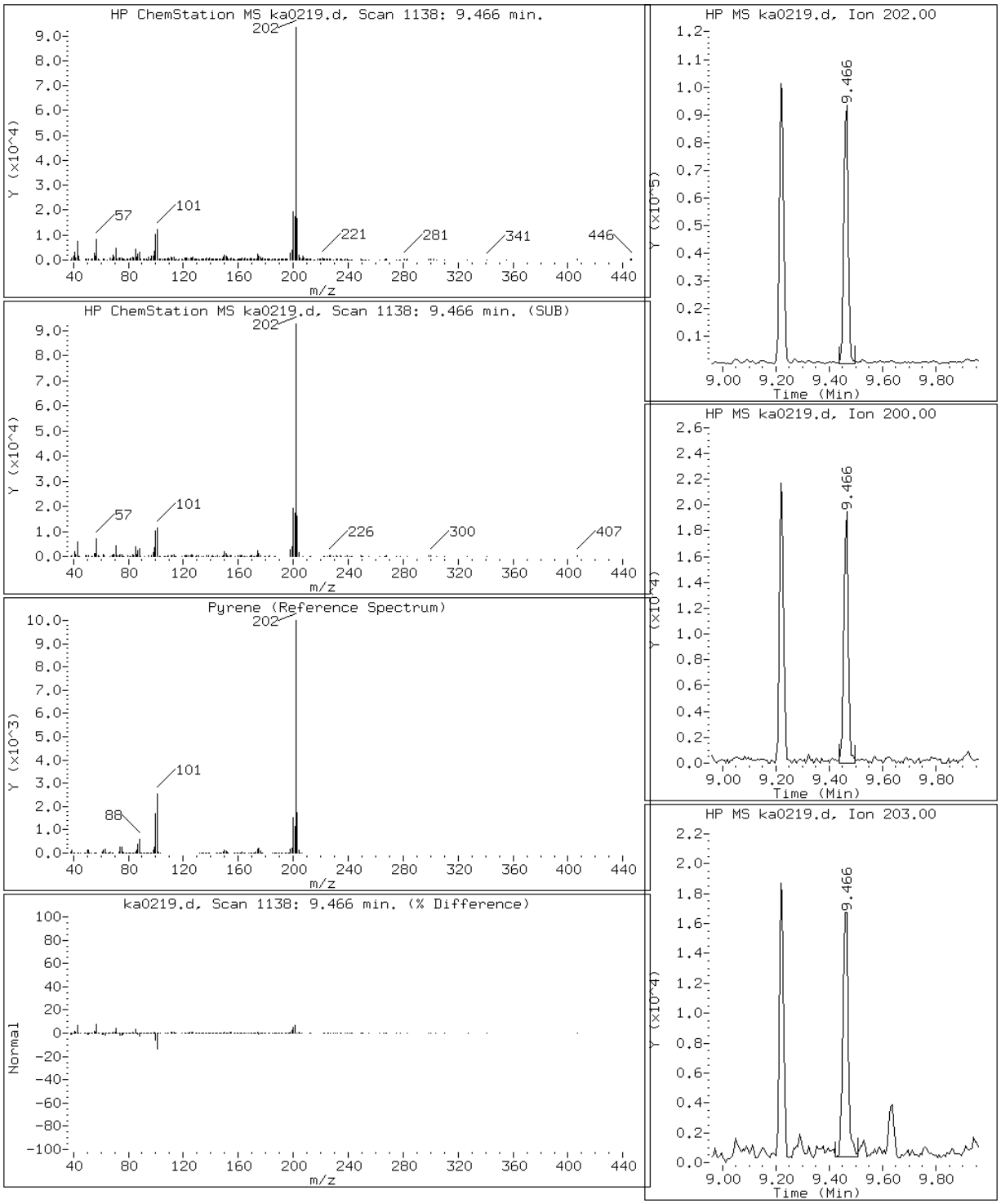
Data File: ka0219.d

Date: 02-JAN-2013 16:07

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-44-A DL=10 Operator: LEG

14 Pyrene



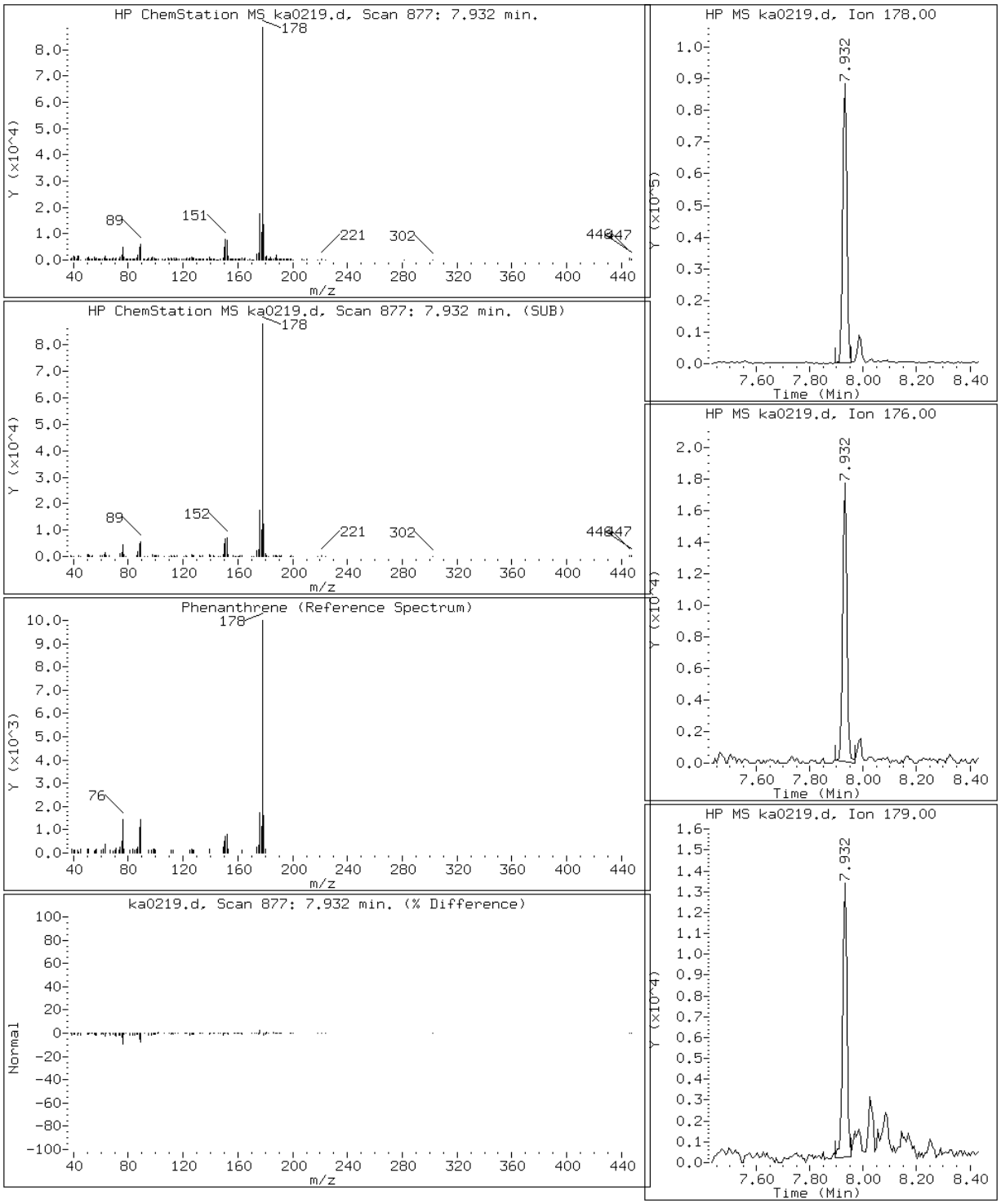
Data File: ka0219.d

Date: 02-JAN-2013 16:07

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-44-A DL=10 Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: ka0219.d
Inj. Date and Time: 02-JAN-2013 16:07
Instrument ID: MSK5973.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 01/03/2013

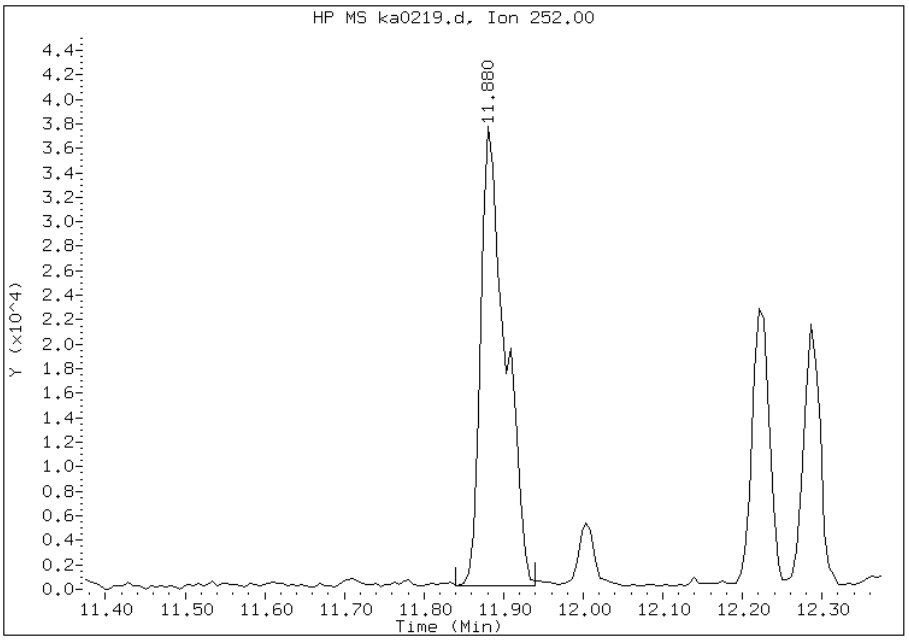
Processing Integration Results

RT: 11.88

Response: 80297

Amount: 0

Conc: 139



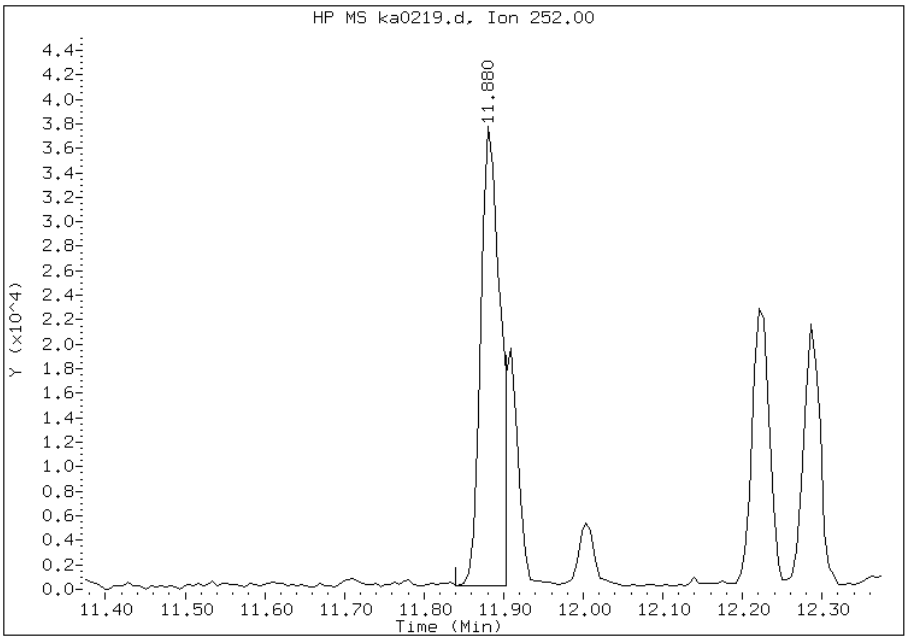
Manual Integration Results

RT: 11.88

Response: 64889

Amount: 0

Conc: 112



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: ka0219.d
Inj. Date and Time: 02-JAN-2013 16:07
Instrument ID: MSK5973.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 01/03/2013

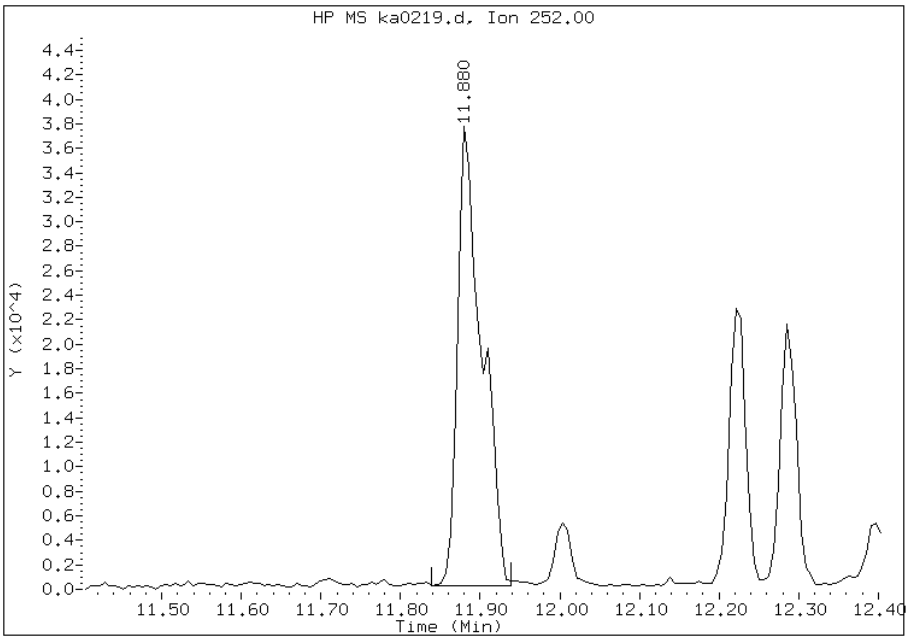
Processing Integration Results

RT: 11.88

Response: 80297

Amount: 0

Conc: 143



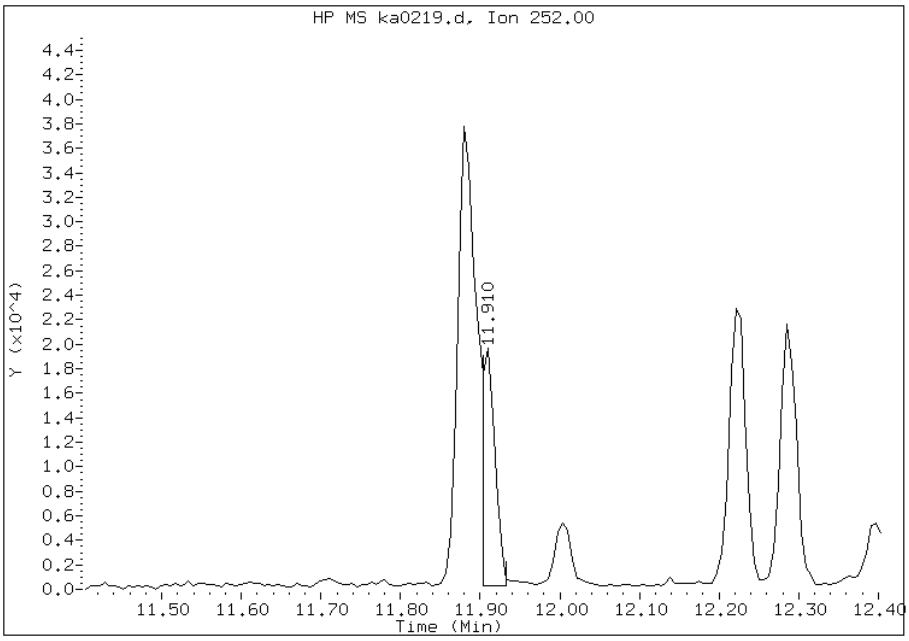
Manual Integration Results

RT: 11.91

Response: 21534

Amount: 0

Conc: 38



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: CV0451B-CS-SP | Lab Sample ID: 680-85980-45

Matrix: Solid | Lab File ID: ka0228.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/19/2012 09:15

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.20(g) | Date Analyzed: 01/02/2013 19:40

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

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

% Moisture: 24.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	46	J	88	41
91-57-6	2-Methylnaphthalene	80	J	88	43
83-32-9	Acenaphthene	88	U	88	43
208-96-8	Acenaphthylene	88	U	88	43
120-12-7	Anthracene	88	U	88	43
56-55-3	Benzo[a]anthracene	100		88	43
50-32-8	Benzo[a]pyrene	120		88	16
205-99-2	Benzo[b]fluoranthene	180		88	43
191-24-2	Benzo[g,h,i]perylene	68	J	88	43
207-08-9	Benzo[k]fluoranthene	81	J	88	26
218-01-9	Chrysene	140		88	43
53-70-3	Dibenz(a,h)anthracene	88	U	88	43
206-44-0	Fluoranthene	170		88	43
86-73-7	Fluorene	88	U	88	43
193-39-5	Indeno[1,2,3-cd]pyrene	49	J	88	43
91-20-3	Naphthalene	79	J	88	43
129-00-0	Pyrene	160		88	43
85-01-8	Phenanthrene	130		88	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0228.d
Lab Smp Id: 680-85980-A-45-A DL
Inj Date : 02-JAN-2013 19:40
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85980-A-45-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:58 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:24 Cal File: ka0212q.d
Als bottle: 24
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.501	4.501	(1.000)	488723	2.00000	
2 Naphthalene	128	4.524	4.524	(1.005)	52553	0.18250	60.83(a)
3 2-Methylnaphthalene	142	5.194	5.194	(1.154)	32893	0.18377	61.25(a)
4 1-Methylnaphthalene	142	5.300	5.300	(1.178)	19261	0.10615	35.38(a)
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	285196	2.00000	
* 9 Phenanthrene-d10	188	7.909	7.903	(1.000)	452301	2.00000	
10 Phenanthrene	178	7.932	7.932	(1.003)	82825	0.29015	96.71

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
12 Fluoranthene	202	9.225	9.219	(1.166)	114898	0.39953	133.17
14 Pyrene	202	9.466	9.460	(0.881)	95302	0.37700	125.66
16 Benzo(a)Anthracene	228	10.729	10.717	(0.999)	46294	0.23843	79.47
* 13 Chrysene-d12	240	10.741	10.729	(1.000)	296573	2.00000	
17 Chrysene	228	10.764	10.758	(1.002)	63038	0.32999	109.99
19 Benzo(b)fluoranthene	252	11.892	11.875	(0.961)	59612	0.40629	135.42(M)
20 Benzo(k)fluoranthene	252	11.910	11.904	(0.962)	26574	0.18712	62.37(aM)
21 Benzo(a)pyrene	252	12.298	12.280	(0.994)	29939	0.26689	88.96
* 18 Perylene-d12	264	12.374	12.356	(1.000)	197432	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	13.990	13.966	(1.303)	17068	0.11146	37.15(a)
24 Benzo(g,h,i)perylene	276	14.477	14.460	(1.170)	15660	0.15646	52.15(a)

QC Flag Legend

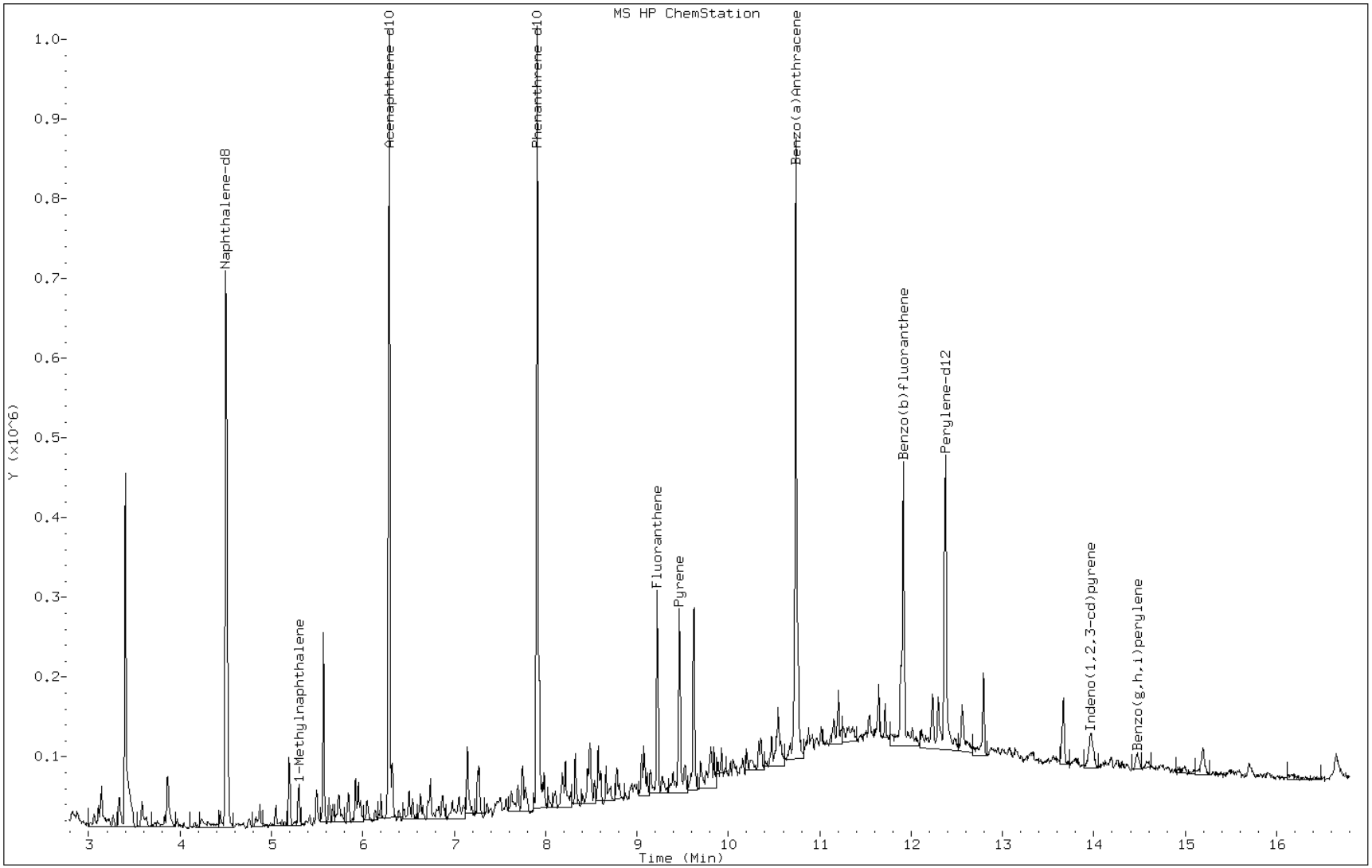
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: ka0228.d

Date: 02-JAN-2013 19:40

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-45-A DL=10 Operator: LEG



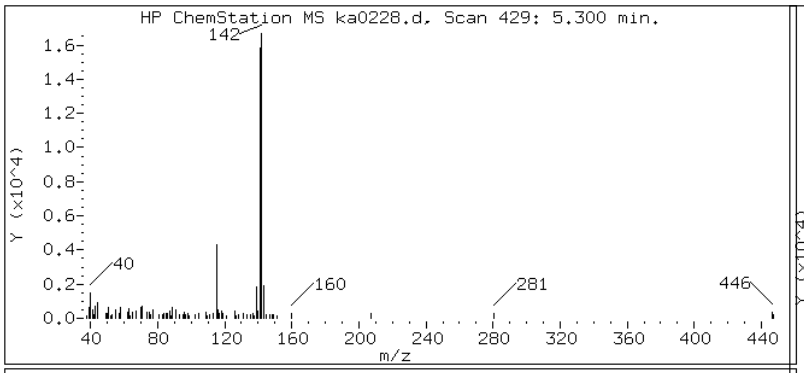
Data File: ka0228.d

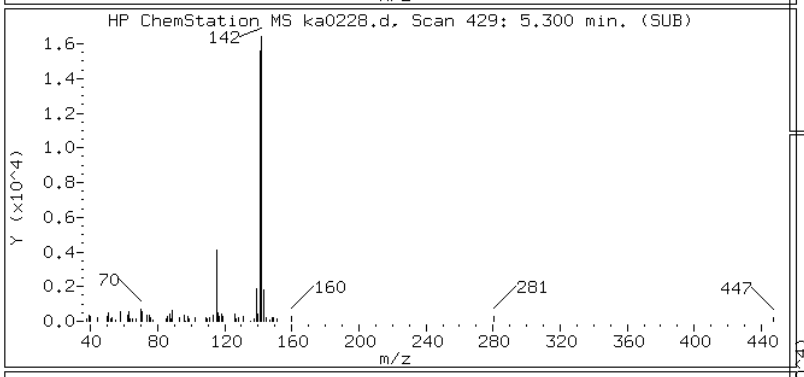
Date: 02-JAN-2013 19:40

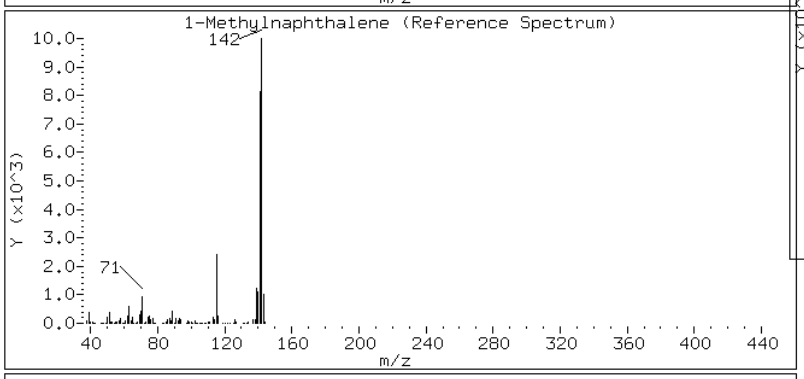
Client ID: Instrument: MSK5973.i

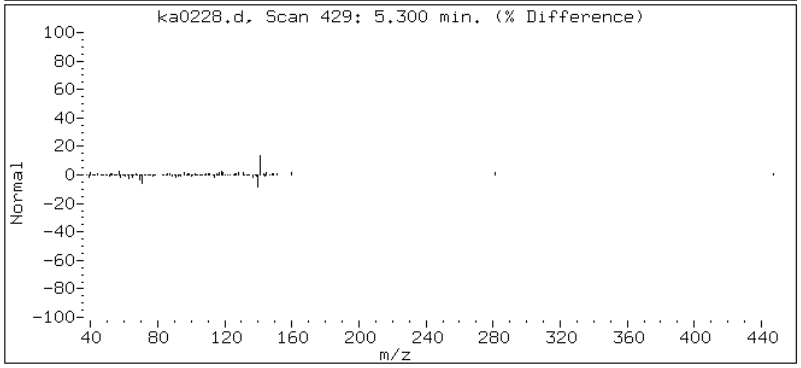
Sample Info: 680-85980-A-45-A DL=10 Operator: LEG

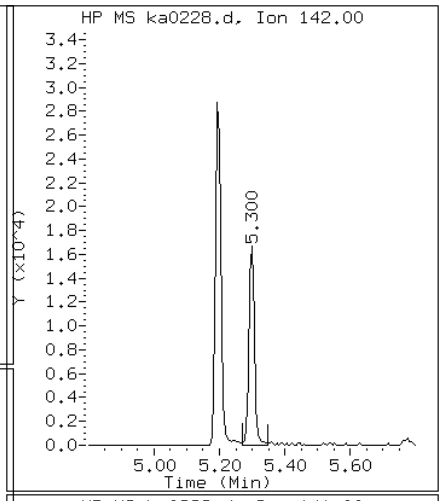
4 1-Methylnaphthalene

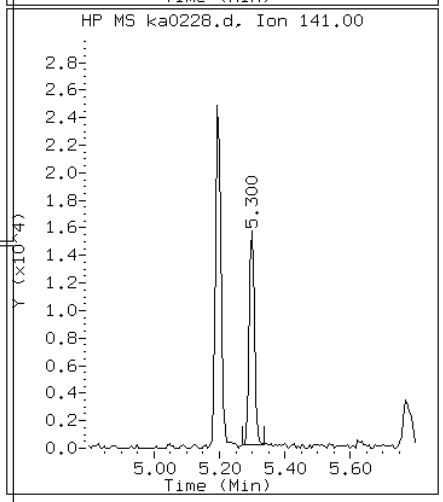












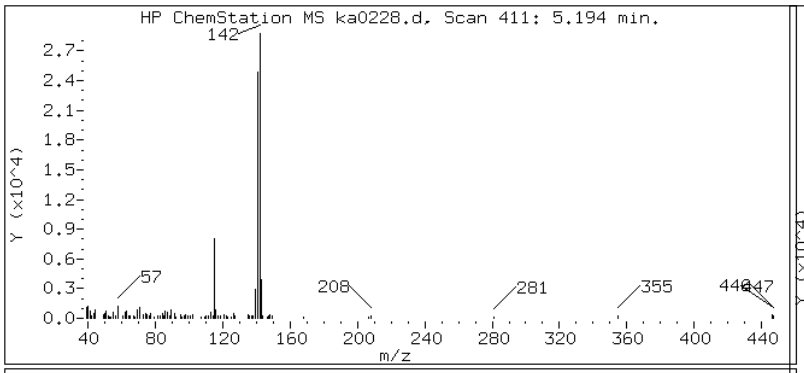
Data File: ka0228.d

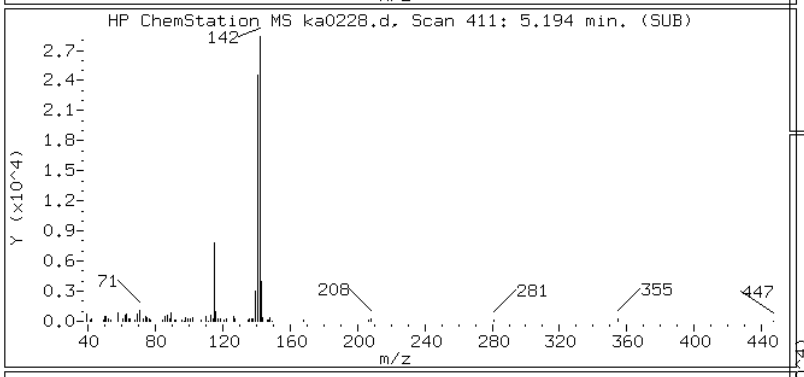
Date: 02-JAN-2013 19:40

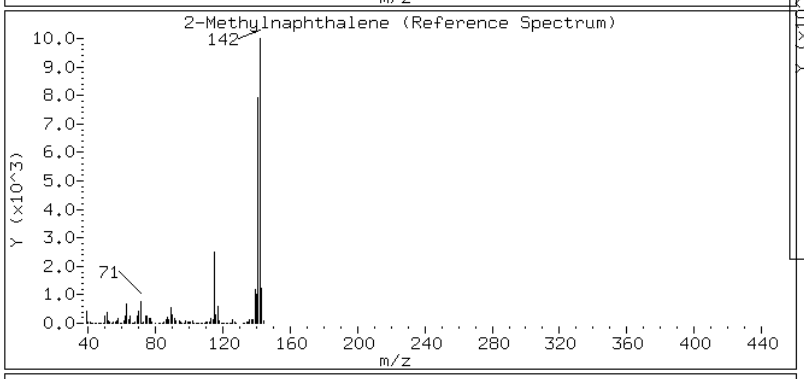
Client ID: Instrument: MSK5973.i

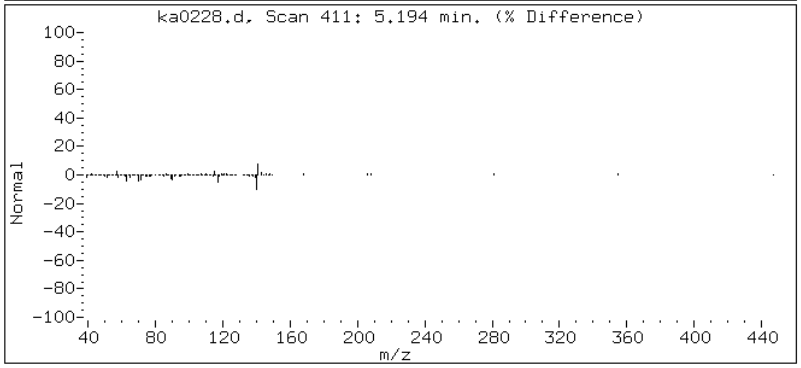
Sample Info: 680-85980-A-45-A DL=10 Operator: LEG

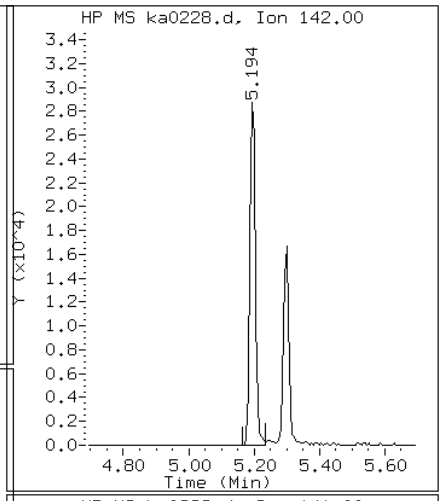
3 2-Methylnaphthalene

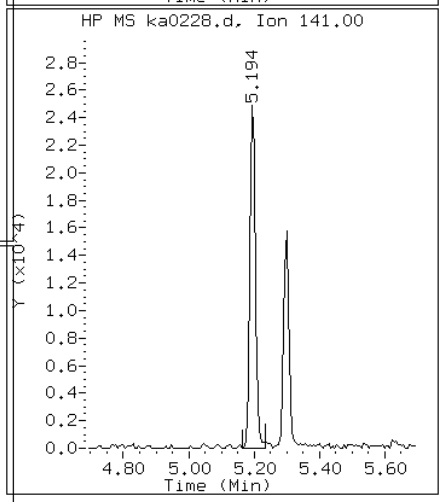












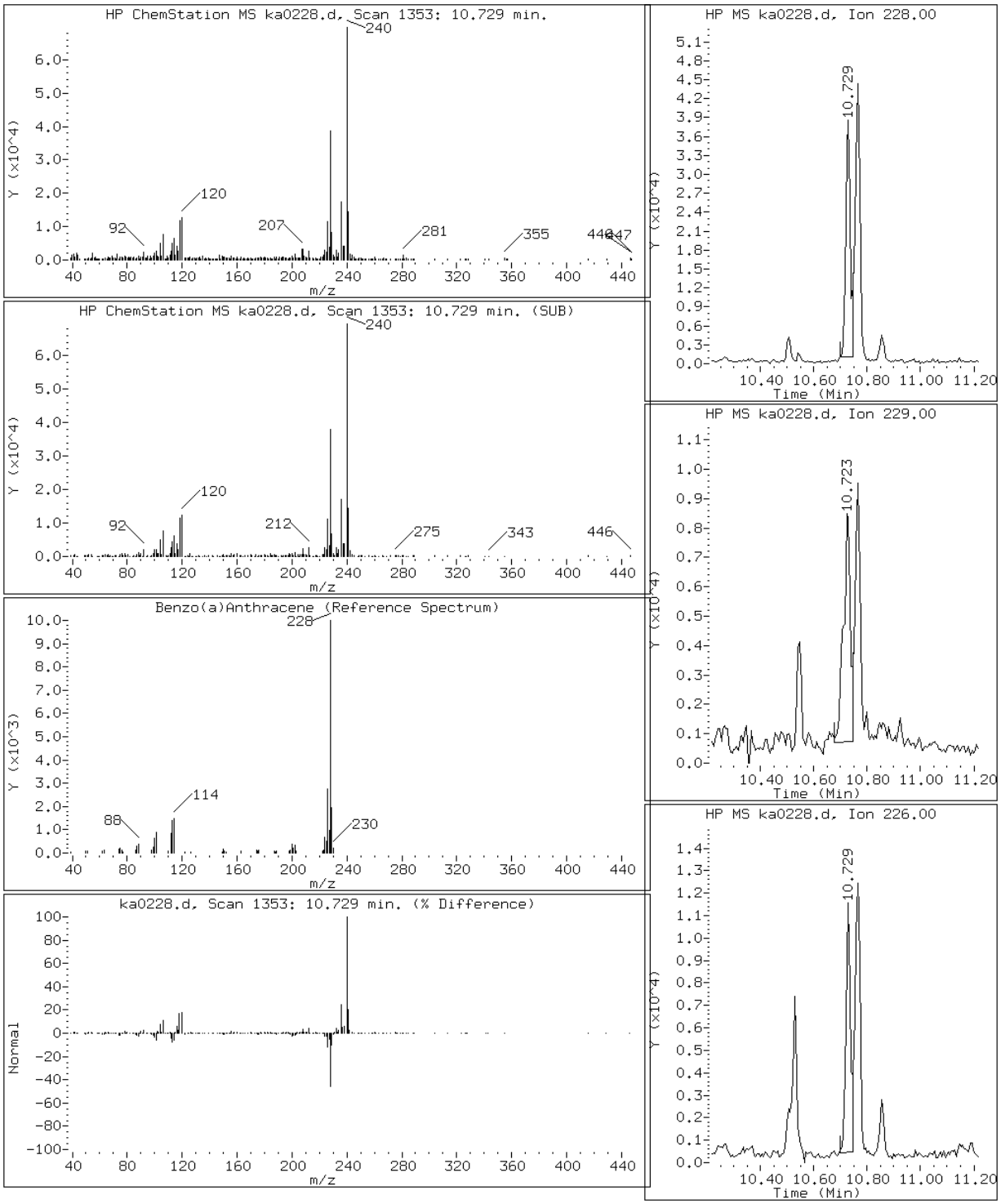
Data File: ka0228.d

Date: 02-JAN-2013 19:40

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-45-A DL=10 Operator: LEG

16 Benzo(a)Anthracene



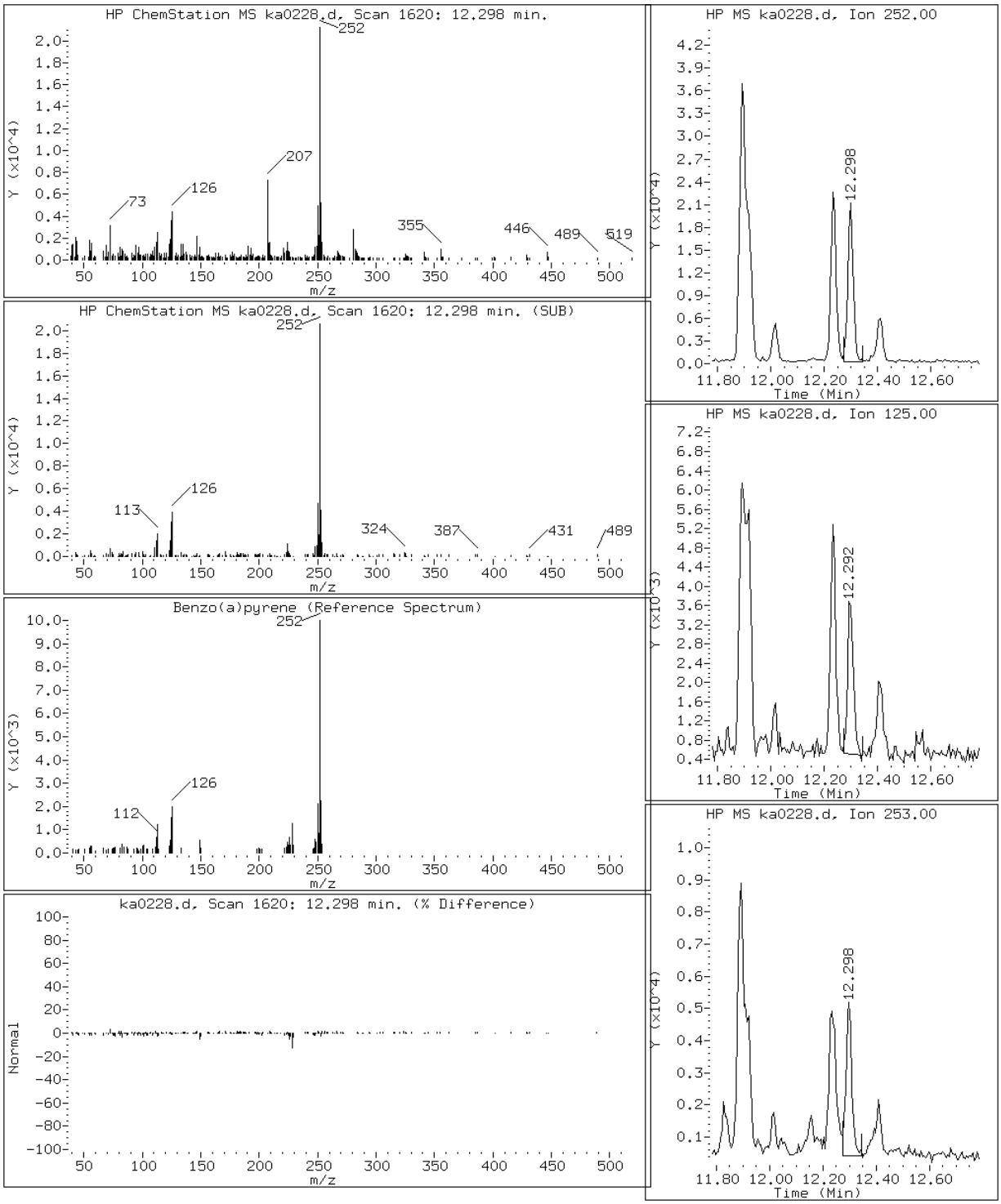
Data File: ka0228.d

Date: 02-JAN-2013 19:40

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-45-A DL=10 Operator: LEG

21 Benzo(a)pyrene



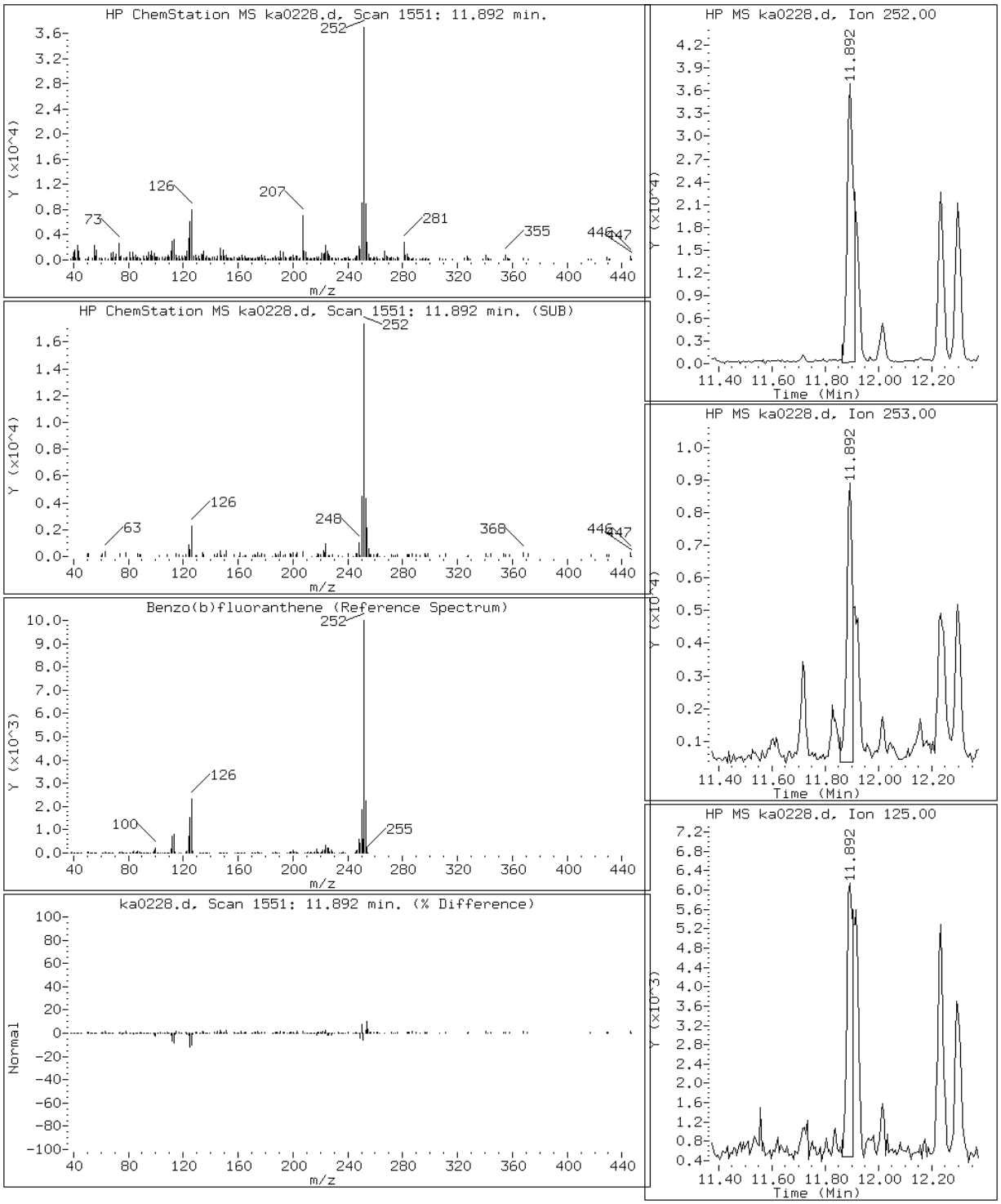
Data File: ka0228.d

Date: 02-JAN-2013 19:40

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-45-A DL=10 Operator: LEG

19 Benzo(b)fluoranthene



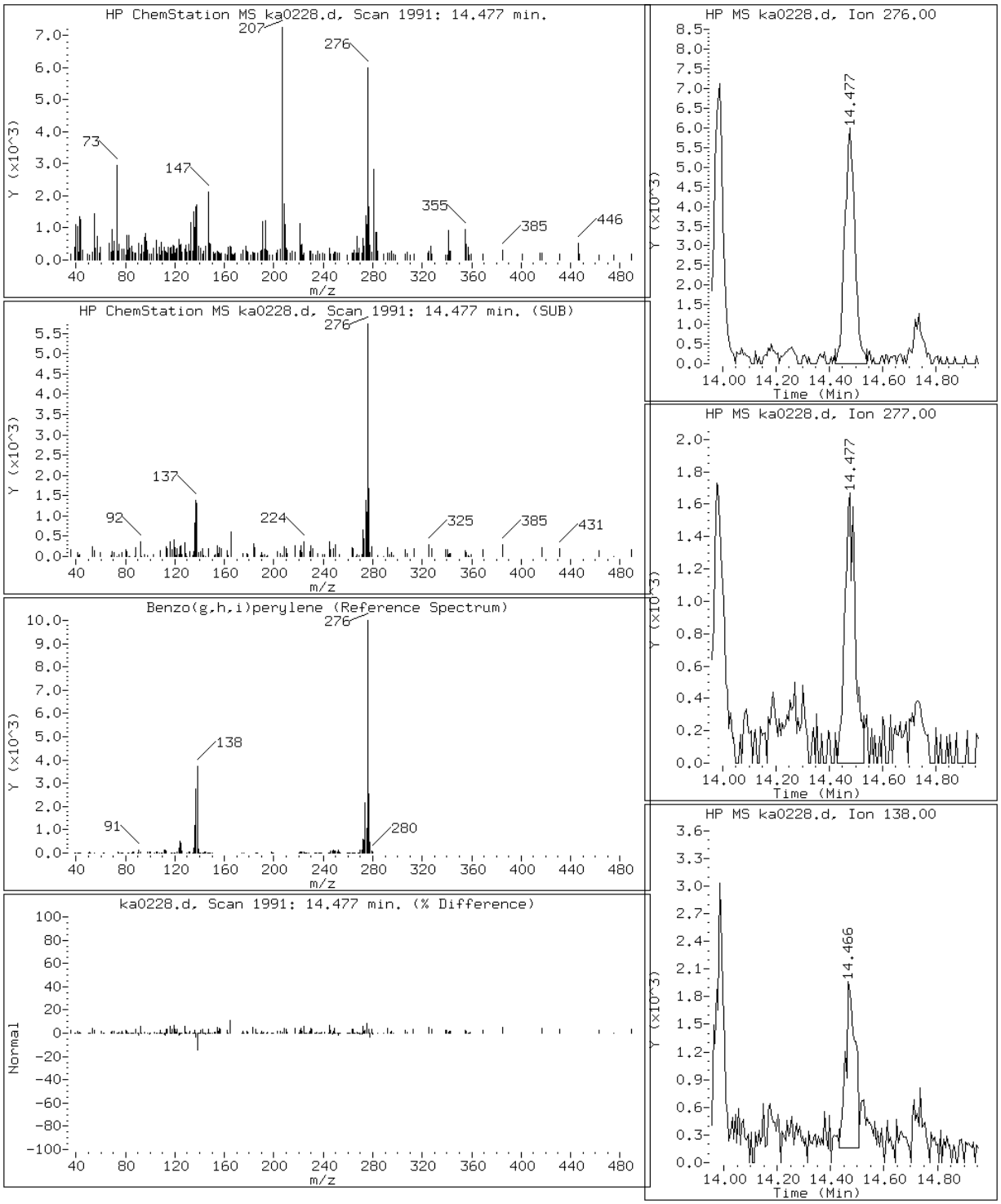
Data File: ka0228.d

Date: 02-JAN-2013 19:40

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-45-A DL=10 Operator: LEG

24 Benzo(g,h,i)perylene



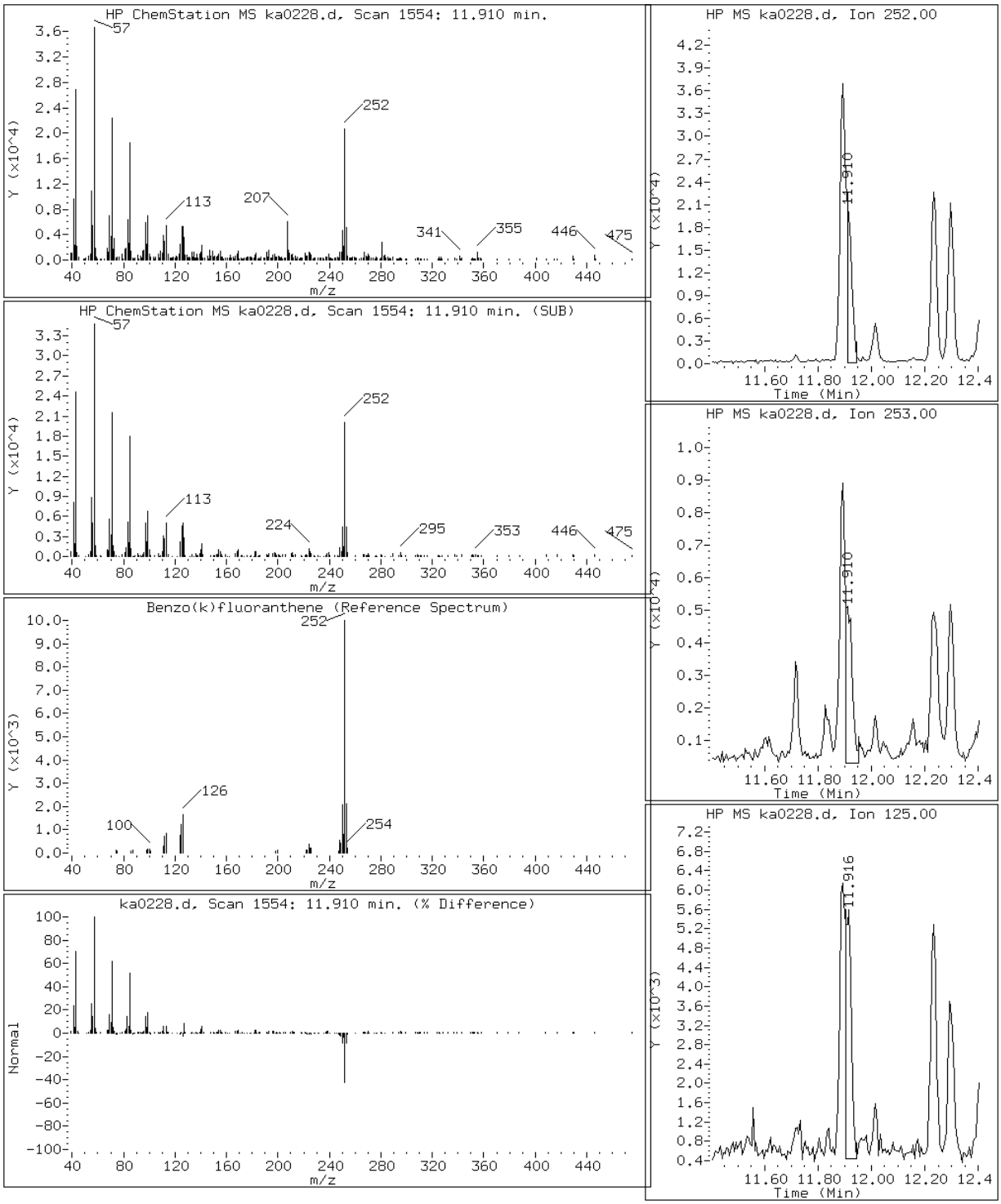
Data File: ka0228.d

Date: 02-JAN-2013 19:40

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-45-A DL=10 Operator: LEG

20 Benzo(k)fluoranthene



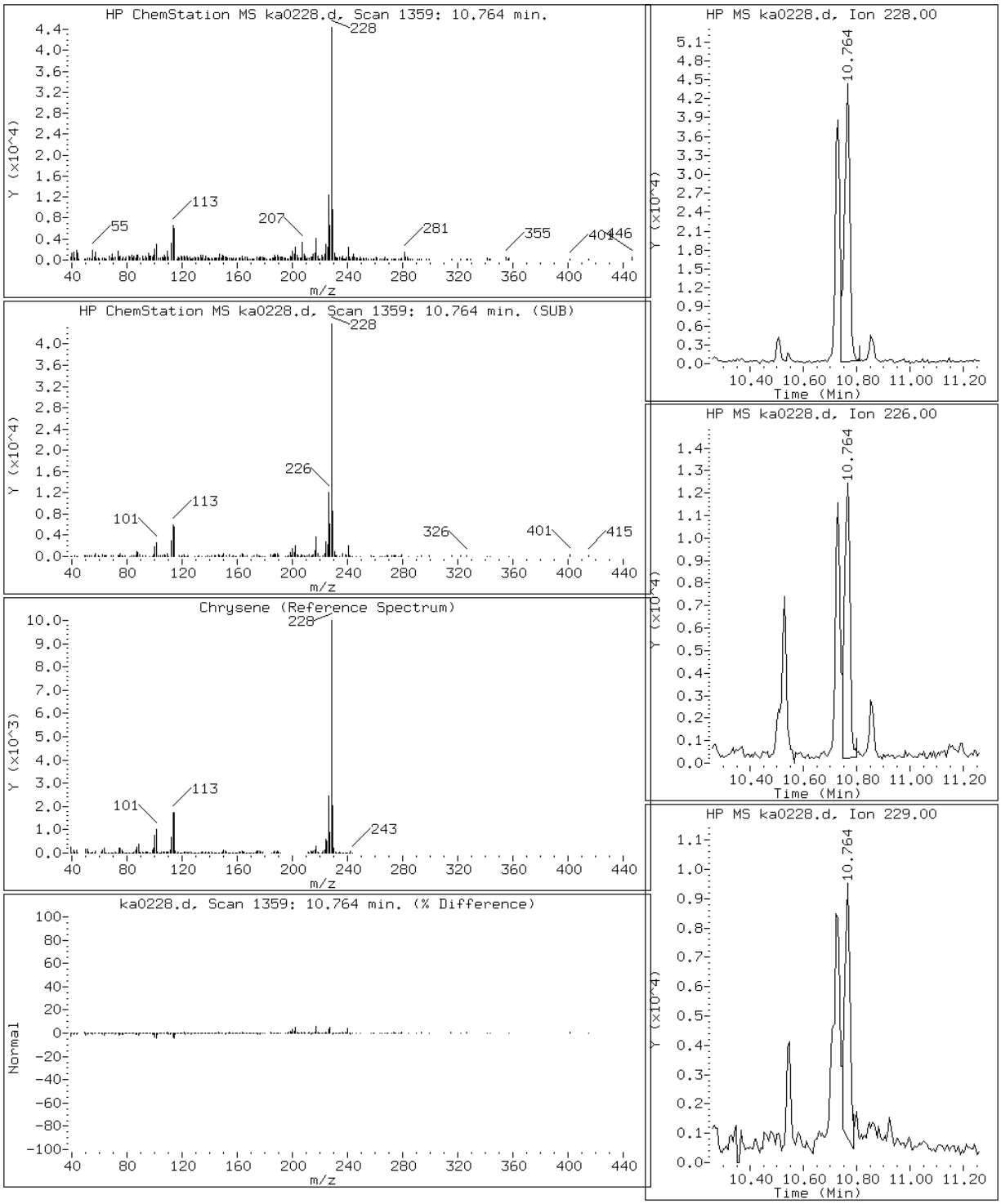
Data File: ka0228.d

Date: 02-JAN-2013 19:40

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-45-A DL=10 Operator: LEG

17 Chrysene



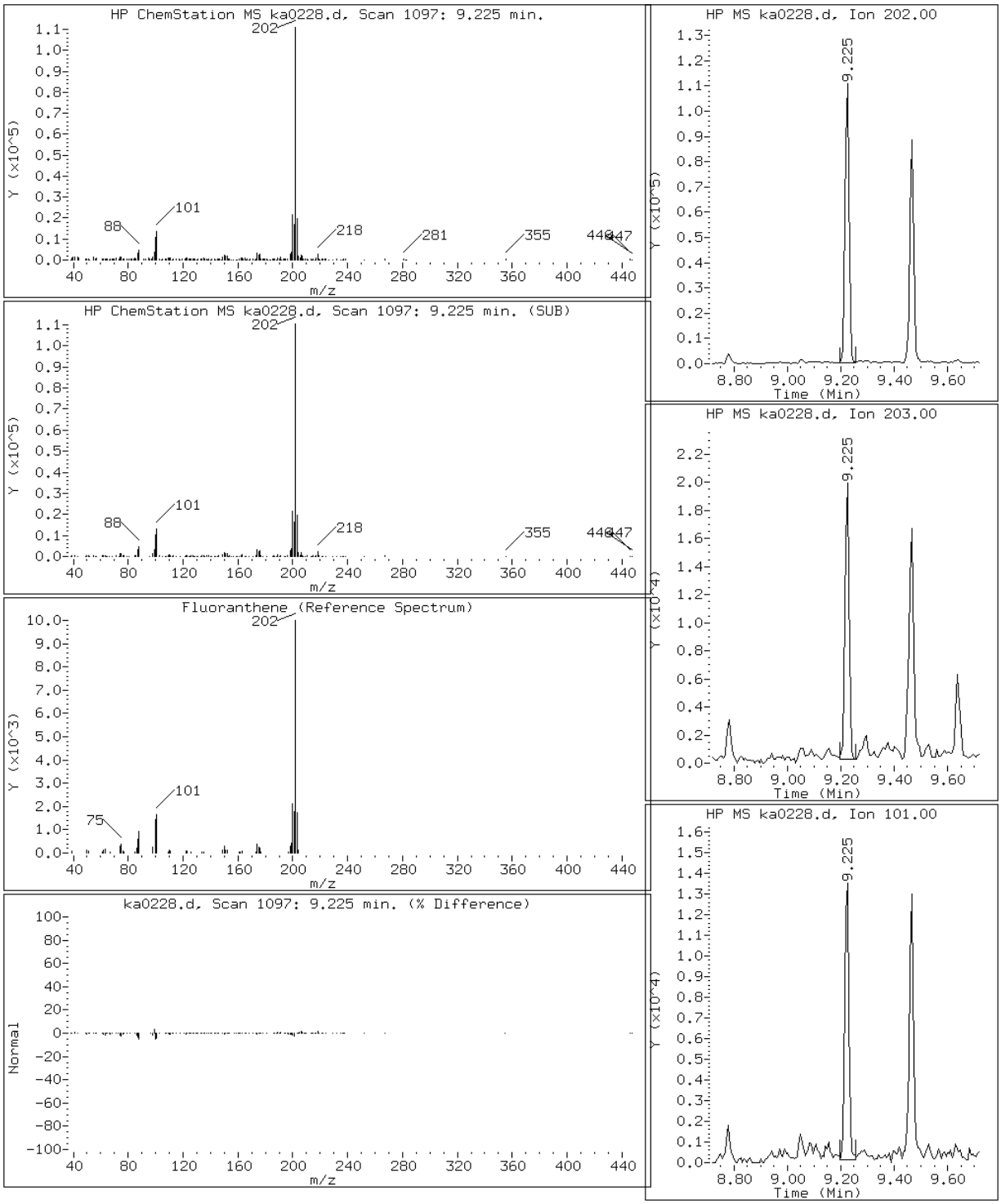
Data File: ka0228.d

Date: 02-JAN-2013 19:40

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-45-A DL=10 Operator: LEG

12 Fluoranthene



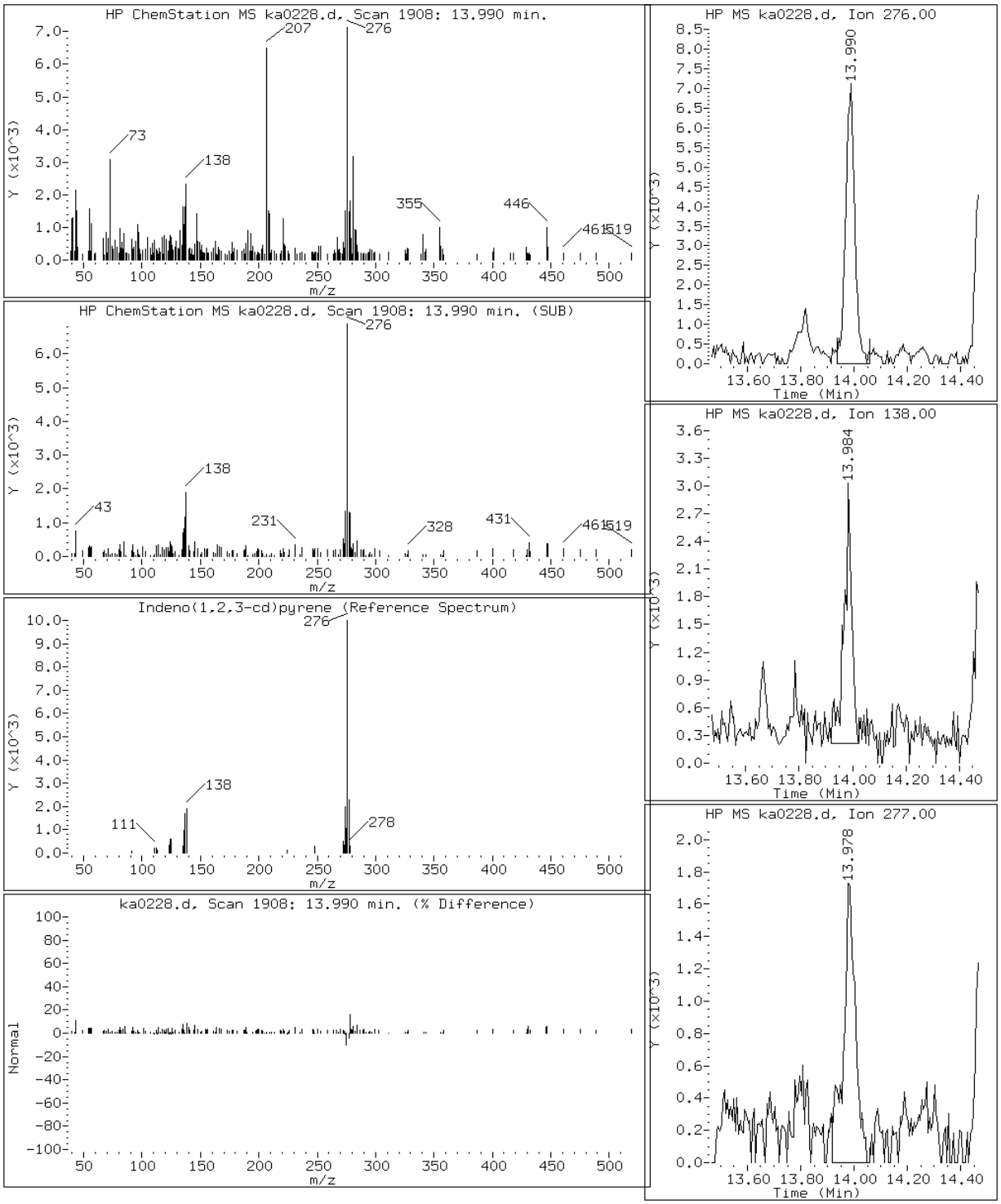
Data File: ka0228.d

Date: 02-JAN-2013 19:40

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-45-A DL=10 Operator: LEG

22 Indeno(1,2,3-cd)pyrene



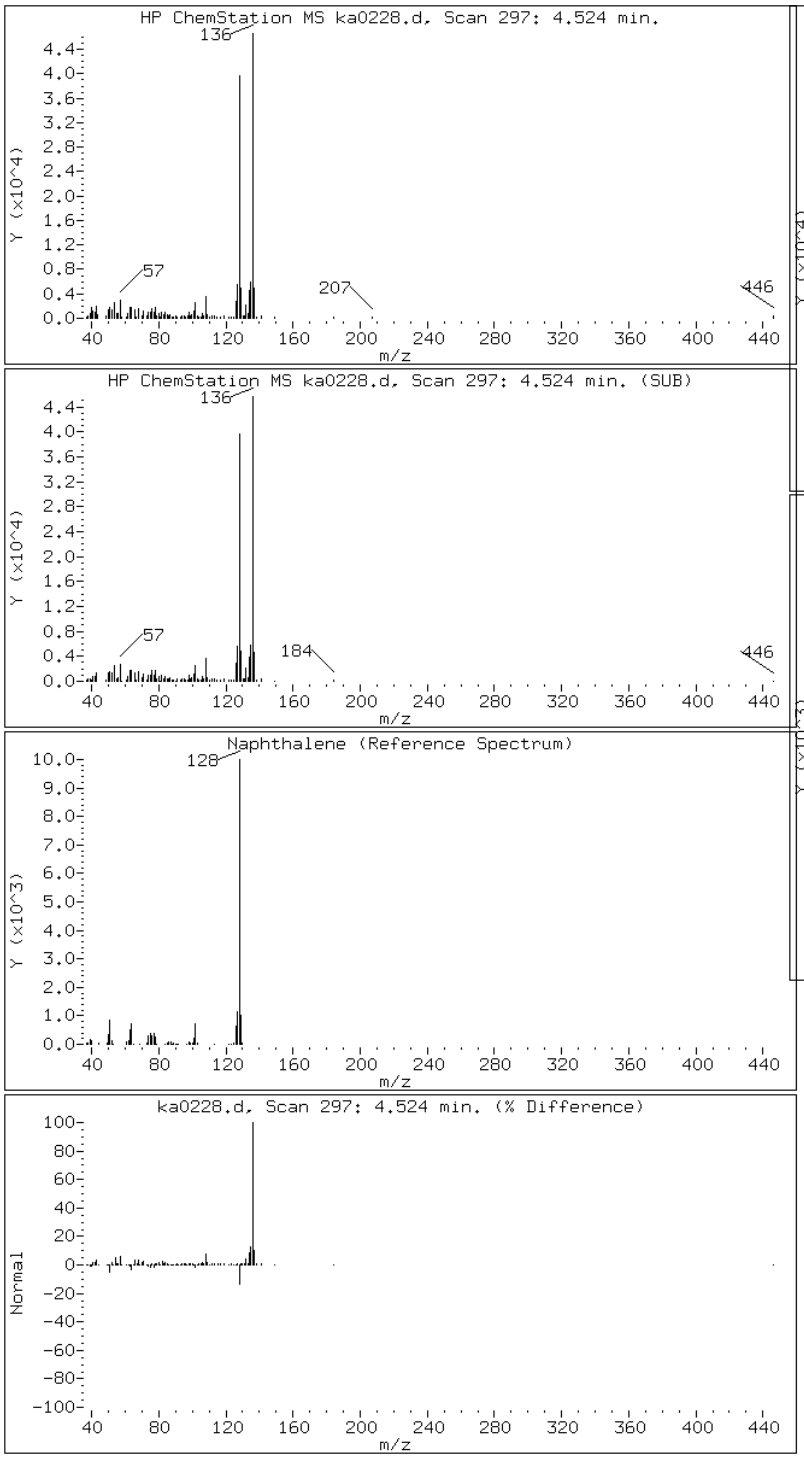
Data File: ka0228.d

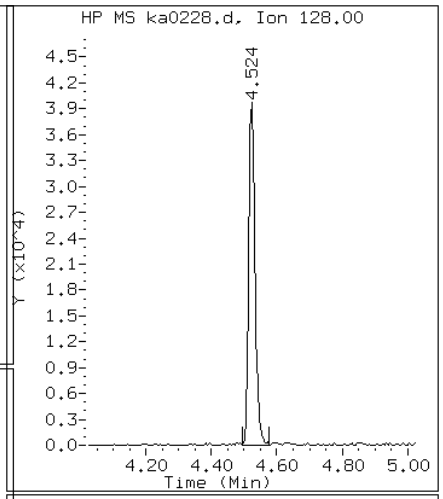
Date: 02-JAN-2013 19:40

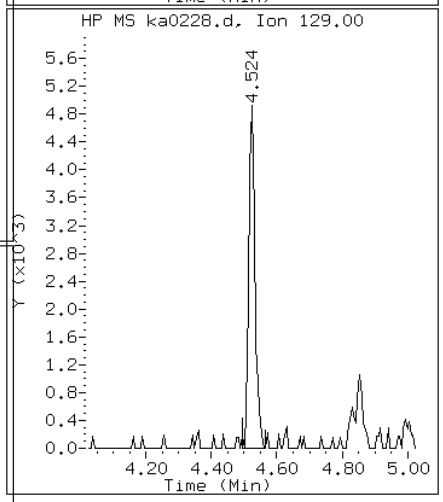
Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-45-A DL=10 Operator: LEG

2 Naphthalene







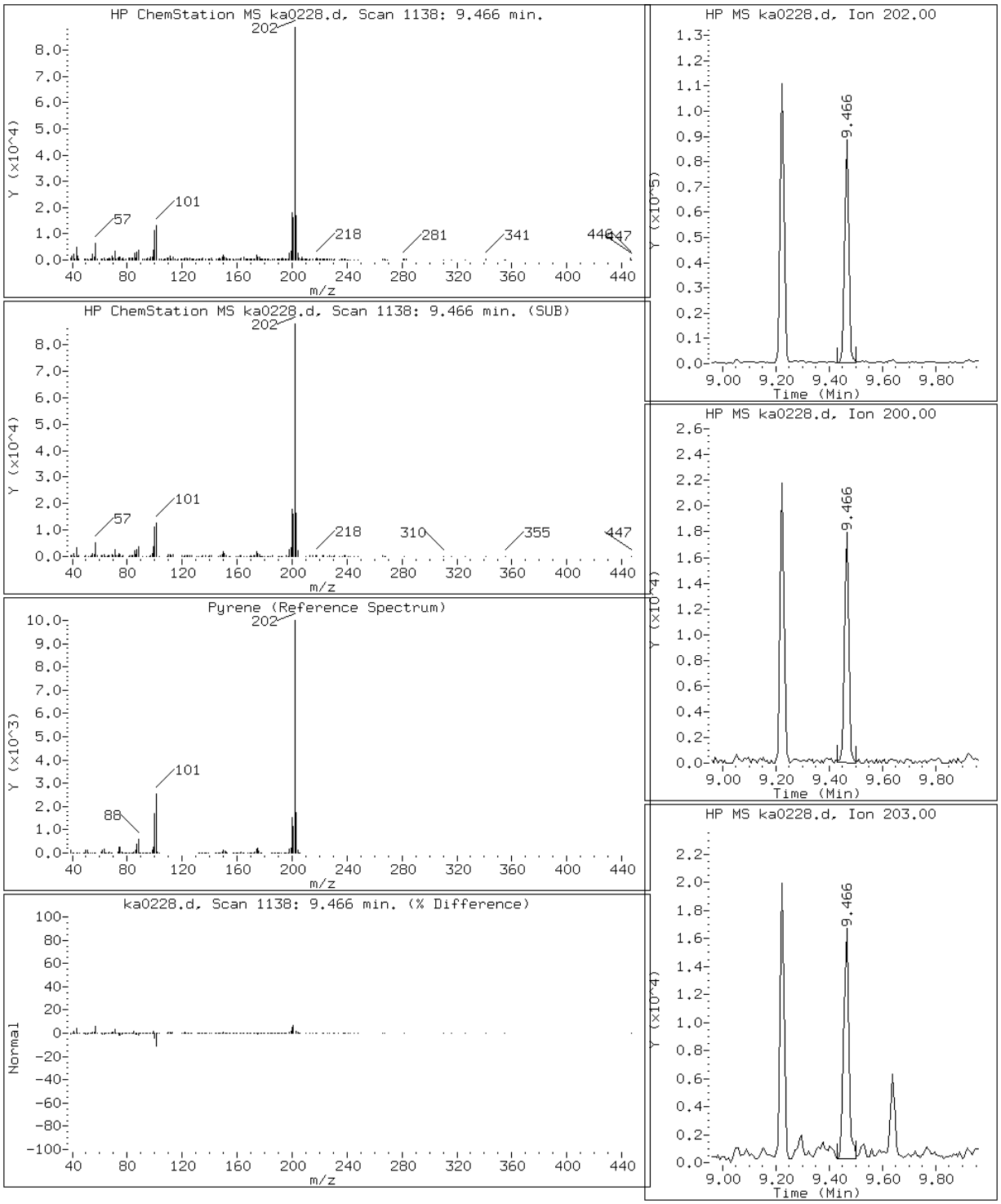
Data File: ka0228.d

Date: 02-JAN-2013 19:40

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-45-A DL=10 Operator: LEG

14 Pyrene



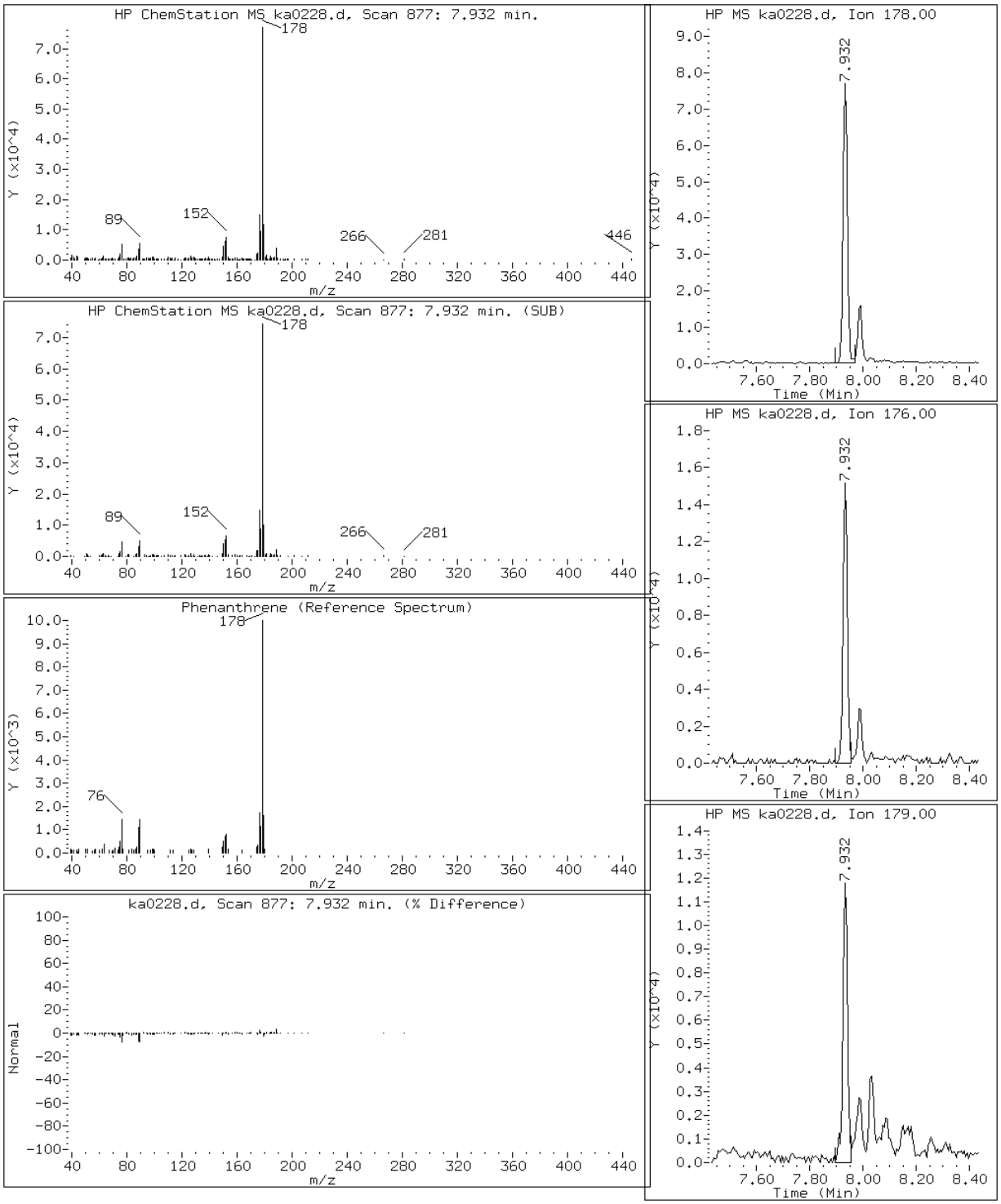
Data File: ka0228.d

Date: 02-JAN-2013 19:40

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-45-A DL=10 Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: ka0228.d
Inj. Date and Time: 02-JAN-2013 19:40
Instrument ID: MSK5973.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 01/03/2013

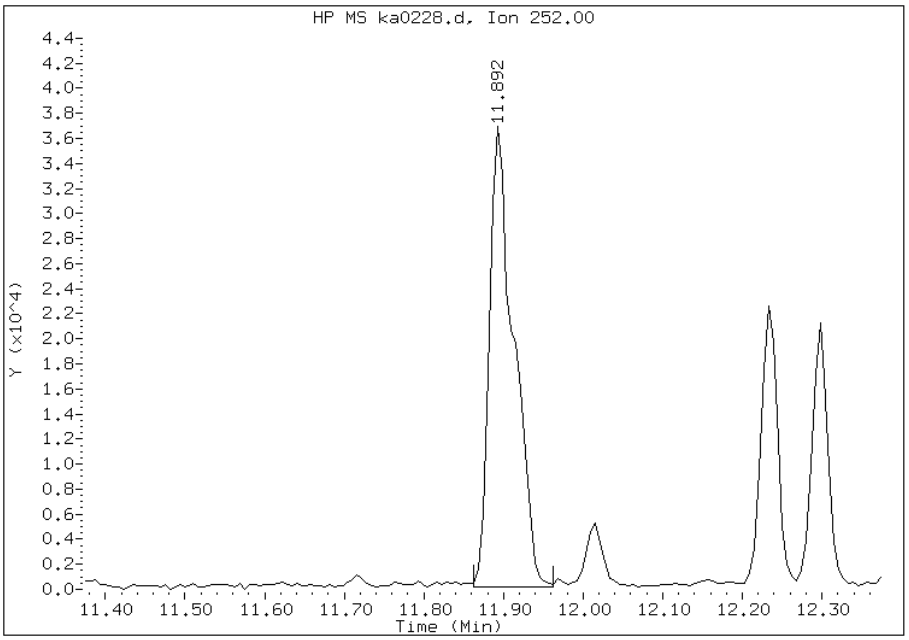
Processing Integration Results

RT: 11.89

Response: 79173

Amount: 1

Conc: 180



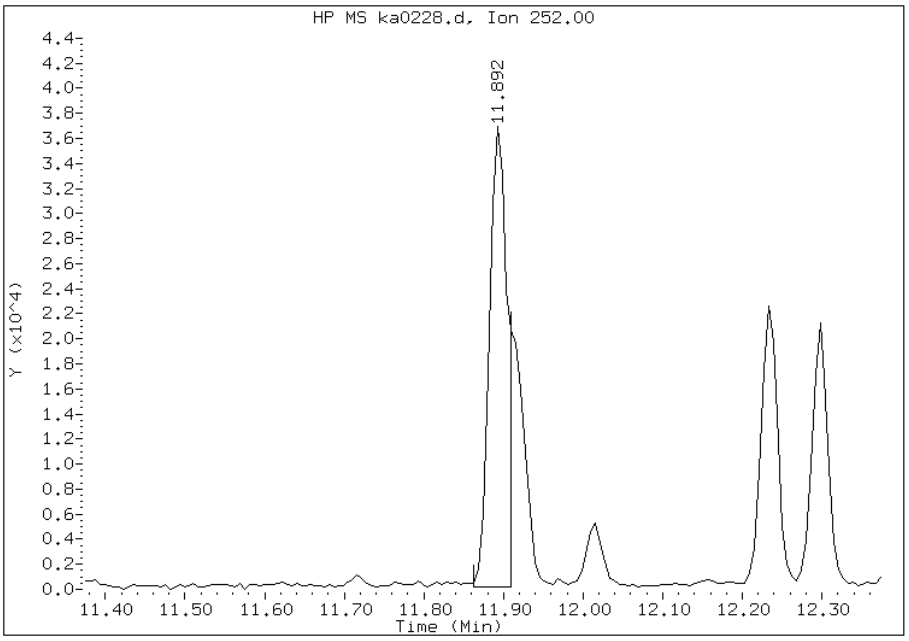
Manual Integration Results

RT: 11.89

Response: 59612

Amount: 0

Conc: 135



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: ka0228.d
Inj. Date and Time: 02-JAN-2013 19:40
Instrument ID: MSK5973.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 01/03/2013

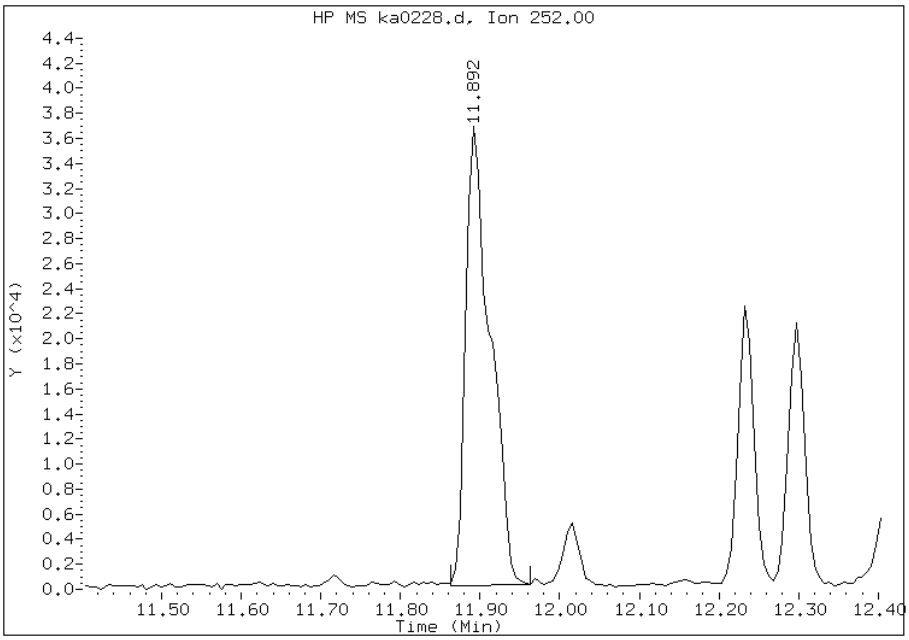
Processing Integration Results

RT: 11.89

Response: 78126

Amount: 1

Conc: 183



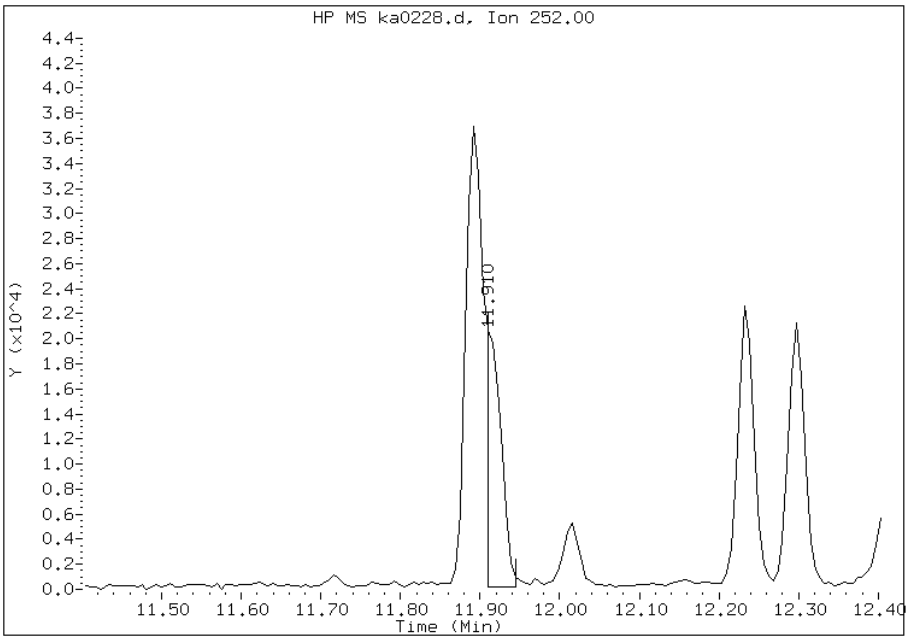
Manual Integration Results

RT: 11.91

Response: 26574

Amount: 0

Conc: 62



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: 121912-RB-SIEVE | Lab Sample ID: 680-85980-46

Matrix: Water | Lab File ID: yl2817.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/19/2012 12:00

Extract. Method: 3520C | Date Extracted: 12/26/2012 18:09

Sample wt/vol: 499.1(mL) | Date Analyzed: 12/28/2012 17:05

Con. Extract Vol.: 0.5(mL) | Dilution Factor: 1

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

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

Analysis Batch No.: 261362 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	0.20	U	0.20	0.10
208-96-8	Acenaphthylene	0.20	U	0.20	0.10
120-12-7	Anthracene	0.20	U	0.20	0.10
56-55-3	Benzo[a]anthracene	0.20	U	0.20	0.10
50-32-8	Benzo[a]pyrene	0.20	U	0.20	0.10
205-99-2	Benzo[b]fluoranthene	0.20	U	0.20	0.10
191-24-2	Benzo[g,h,i]perylene	0.20	U	0.20	0.10
207-08-9	Benzo[k]fluoranthene	0.20	U	0.20	0.10
218-01-9	Chrysene	0.11	J	0.20	0.045
53-70-3	Dibenz(a,h)anthracene	0.20	U	0.20	0.10
206-44-0	Fluoranthene	0.20	U	0.20	0.10
86-73-7	Fluorene	0.20	U	0.20	0.10
193-39-5	Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.10
90-12-0	1-Methylnaphthalene	0.40	U	0.40	0.40
91-57-6	2-Methylnaphthalene	0.20	U	0.20	0.10
91-20-3	Naphthalene	0.20	U	0.20	0.10
85-01-8	Phenanthrene	0.20	U	0.20	0.10
129-00-0	Pyrene	0.20	U	0.20	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	56		41-130

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y122812.b/yl2817.d
Lab Smp Id: 680-85980-A-46-A Client Smp ID: 121912-RB-SIEVE
Inj Date : 28-DEC-2012 17:05
Operator : VHB Inst ID: MSY5975.i
Smp Info : 680-85980-A-46-A
Misc Info : 680-85980-A-46-A
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y122812.b/Y-b8270CLLPAH-m.m
Meth Date : 28-Dec-2012 10:56 chemist Quant Type: ISTD
Cal Date : 21-DEC-2012 13:30 Cal File: yl2112q.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula: Amt * DF * 1/Vi * Vt/Vo * A * B * C * D * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	0.50000	Final Volume
Vo	499.10000	Sample Extract Volume
A	1000.00000	uL to mL conversion
B	1000.00000	mL to L conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1= if no con

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/l)
* 1 Naphthalene-d8	136	3.317	3.317	(1.000)	79299	2.00000	
* 5 Acenaphthene-d10	164	4.836	4.836	(1.000)	49362	2.00000	
* 9 Phenanthrene-d10	188	6.087	6.088	(1.000)	76696	2.00000	
$ 15 o-Terphenyl	230	6.424	6.419	(0.765)	35508	1.12004	1.12
* 13 Chrysene-d12	240	8.398	8.393	(1.000)	58732	2.00000	
17 Chrysene	228	8.419	8.414	(1.003)	3896	0.10499	0.10(a)
* 18 Perylene-d12	264	9.666	9.660	(1.000)	46119	2.00000	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: yl2817.d

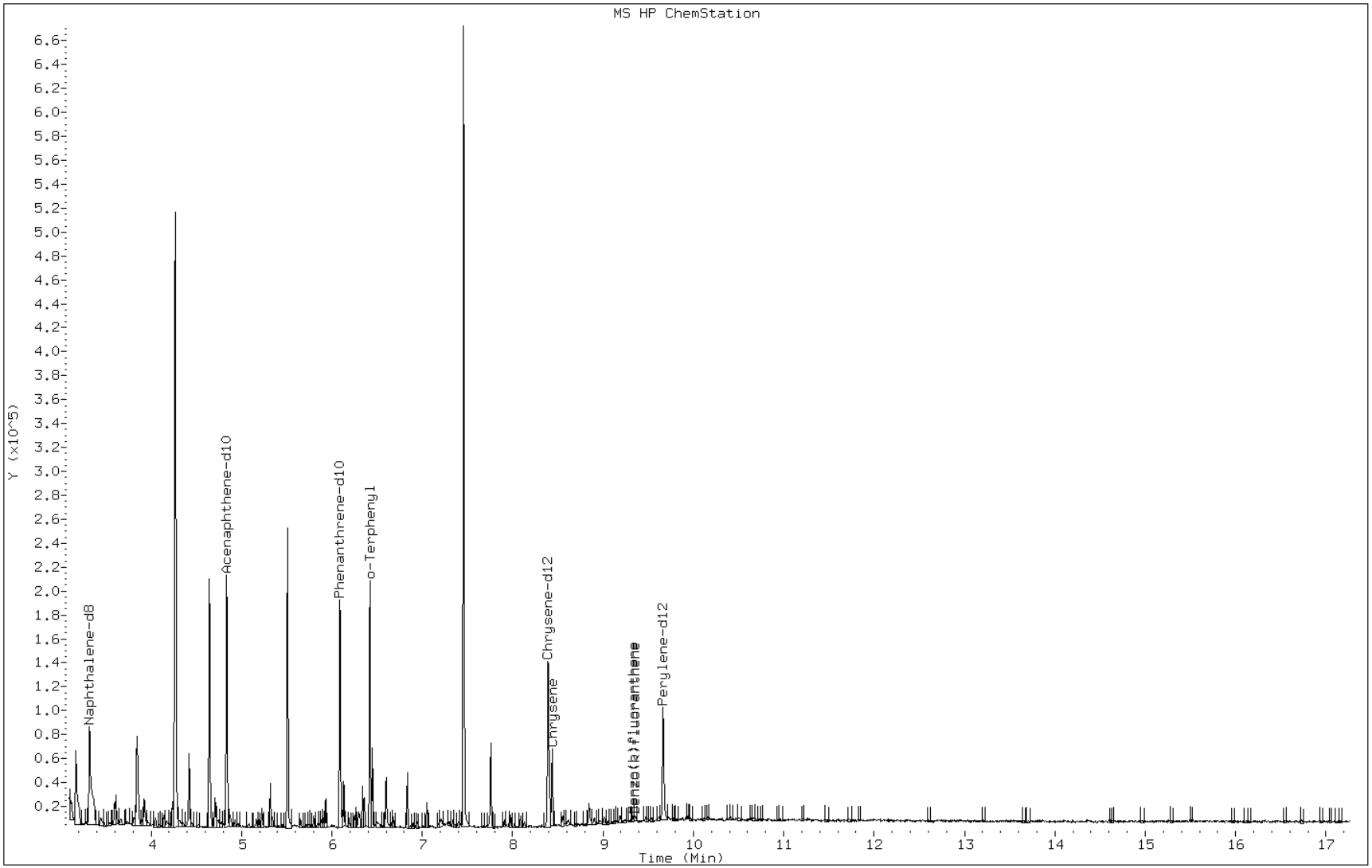
Date: 28-DEC-2012 17:05

Client ID: 121912-RB-SIEVE

Instrument: MSY5975.i

Sample Info: 680-85980-A-46-A

Operator: VHB



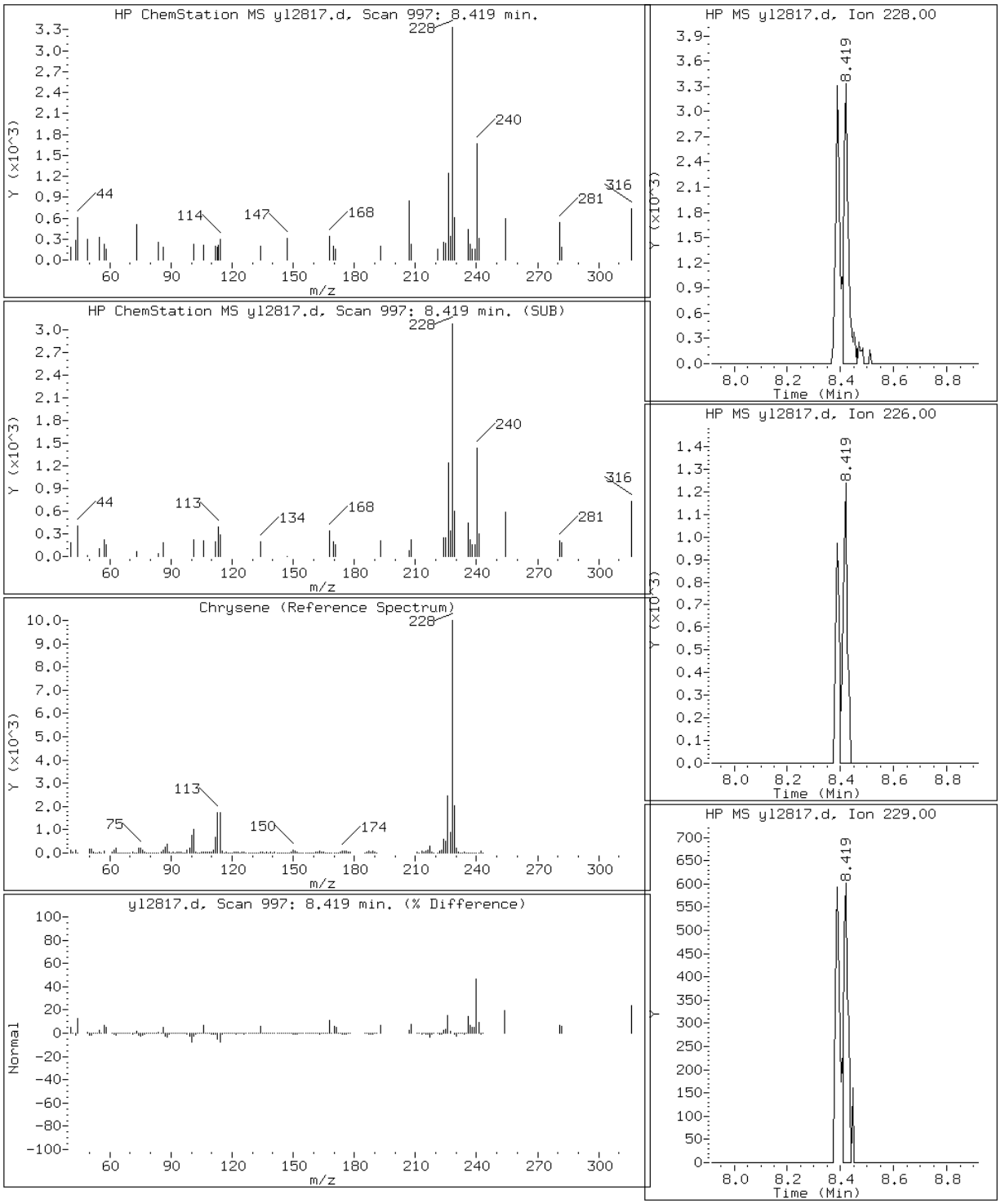
Data File: yl2817.d

Date: 28-DEC-2012 17:05

Client ID: 121912-RB-SIEVE Instrument: MSY5975.i

Sample Info: 680-85980-A-46-A Operator: VHB

17 Chrysene



Manual Integration Report

Data File: yl2817.d
Inj. Date and Time: 28-DEC-2012 17:05
Instrument ID: MSY5975.i
Client ID: 121912-RB-SIEVE
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 01/02/2013

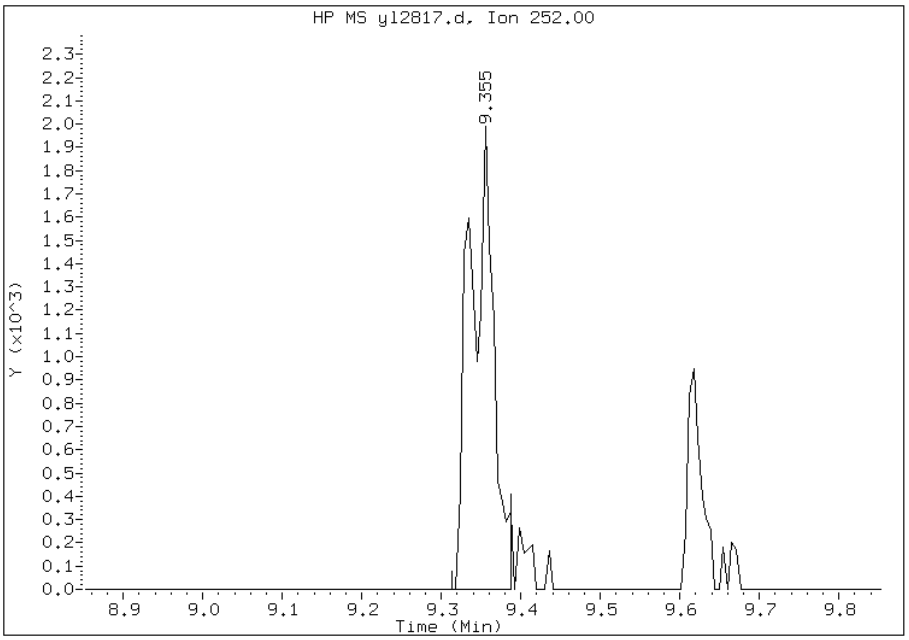
Processing Integration Results

RT: 9.36

Response: 4187

Amount: 0

Conc: 0



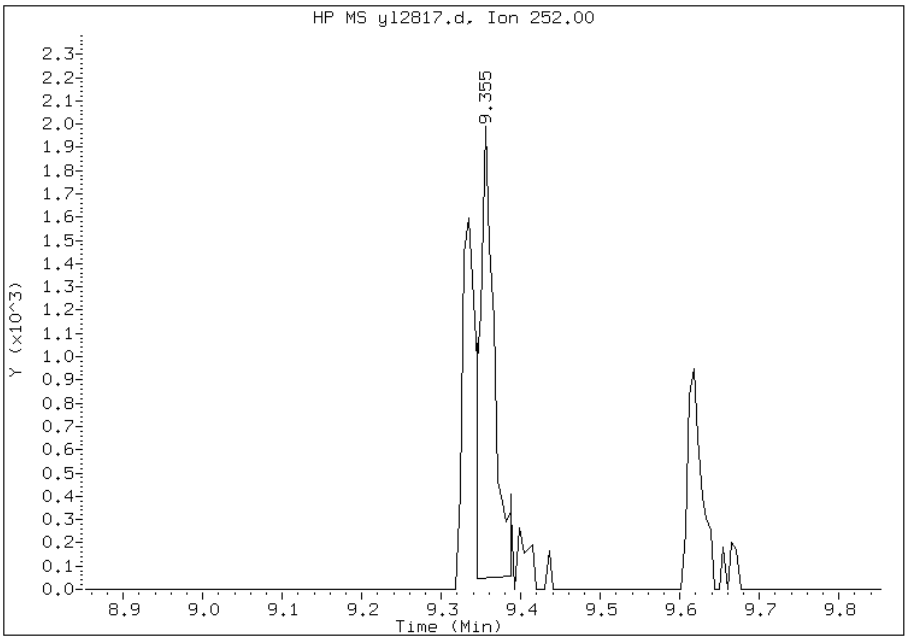
Manual Integration Results

RT: 9.36

Response: 2494

Amount: 0

Conc: 0



Manually Integrated By: chamberk
Manual Integration Reason:

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-85980-1 Analy Batch No.: 261629

SDG No.: 68085980-1

Instrument ID: MSK GC Column: RXi- 5Sil ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/02/2013 11:04 Calibration End Date: 01/02/2013 13:24 Calibration ID: 15399

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-261629/5	ka0209q.d
Level 2	IC 680-261629/4	ka0208q.d
Level 3	IC 680-261629/3	ka0207q.d
Level 4	ICIS 680-261629/8	ka0212q.d
Level 5	IC 680-261629/2	ka0206q.d
Level 6	IC 680-261629/7	ka0211q.d
Level 7	IC 680-261629/6	ka0210q.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 4	LVL 5		B	M1	M2								
Naphthalene	1.2418 1.1509	1.1444 1.1704	1.1302	1.1722	1.2393	Ave		1.1784				3.8		15.0			
2-Methylnaphthalene	0.7510 0.7139	0.7126 0.7342	0.7038	0.7257	0.7861	Ave		0.7325				3.9		15.0			
1-Methylnaphthalene	0.7783 0.7106	0.7208 0.7315	0.7286	0.7319	0.7960	Ave		0.7425				4.3		15.0			
Acenaphthylene	2.1530 2.0755	1.9961 2.0743	1.9275	2.0363	2.2454	Ave		2.0726				5.0		15.0			
Acenaphthene	1.3004 1.1575	1.1451 1.1390	1.1182	1.1695	1.2497	Ave		1.1828				5.6		15.0			
Fluorene	1.4607 1.3750	1.3136 1.3900	1.2902	1.3635	1.4856	Ave		1.3824				5.2		15.0			
Phenanthrene	1.3981 1.2043	1.2330 1.2241	1.2131	1.2304	1.3319	Ave		1.2622				5.8		15.0			
Anthracene	1.2159 1.1814	1.1481 1.1900	1.1616	1.1721	1.3094	Ave		1.1971				4.5		15.0			
Fluoranthene	1.3211 1.2617	1.1738 1.2841	1.2273	1.2077	1.4246	Ave		1.2716				6.5		15.0			
Pyrene	1.8187 1.6370	1.7626 1.6738	1.5872	1.6703	1.7834	Ave		1.7047				5.0		15.0			
Benzo[a]anthracene	1.4514 1.2971	1.2315 1.3735	1.2004	1.2464	1.3652	Ave		1.3094				6.9		15.0			
Chrysene	1.3984 1.2621	1.2381 1.2882	1.2151	1.2726	1.3431	Ave		1.2882				4.9		15.0			
Benzo[b]fluoranthene	1.4405 1.4691	1.4079 1.6137	1.3863	1.4534	1.6363	Ave		1.4863				6.6		15.0			
Benzo[k]fluoranthene	1.4947 1.4786	1.3696 1.4740	1.3032	1.3848	1.5684	Ave		1.4386				6.3		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 Savannah Job No.: 680-85980-1 Analy Batch No.: 261629

SDG No.: 68085980-1

Instrument ID: MSK GC Column: RXi- 5Sil ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/02/2013 11:04 Calibration End Date: 01/02/2013 13:24 Calibration ID: 15399

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 4	LVL 5		B	M1	M2								
Benzo[a]pyrene	1.2126 1.1368	1.0295 1.1968	1.0453	1.0850	1.2584	Ave		1.1364				7.9		15.0			
Indeno[1,2,3-cd]pyrene	1.0820 0.9916	0.9284 0.9825	1.0212	1.0555	1.1694	Ave		1.0327				7.6		15.0			
Dibenz(a,h)anthracene	1.0308 1.0255	0.9255 1.0801	0.9445	1.0045	1.1447	Ave		1.0219				7.4		15.0			
Benzo[g,h,i]perylene	1.0671 0.9915	0.9326 1.0255	0.9581	1.0063	1.1185	Ave		1.0139				6.3		15.0			
o-Terphenyl	1.1665 0.9549	1.1337 0.9858	0.9512	1.0415	1.0293	Ave		1.0375				8.2		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 Savannah Job No.: 680-85980-1 Analy Batch No.: 261629

SDG No.: 68085980-1

Instrument ID: MSK GC Column: RXi- 5Sil ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/02/2013 11:04 Calibration End Date: 01/02/2013 13:24 Calibration ID: 15399

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-261629/5	ka0209q.d
Level 2	IC 680-261629/4	ka0208q.d
Level 3	IC 680-261629/3	ka0207q.d
Level 4	ICIS 680-261629/8	ka0212q.d
Level 5	IC 680-261629/2	ka0206q.d
Level 6	IC 680-261629/7	ka0211q.d
Level 7	IC 680-261629/6	ka0210q.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Naphthalene	NPT	Ave	38998 2012329	95765 3981382	178993	385793	950314	0.200 10.0	0.500 20.0	1.00	2.00	5.00
2-Methylnaphthalene	NPT	Ave	23584 1248225	59632 2497515	111475	238845	602753	0.200 10.0	0.500 20.0	1.00	2.00	5.00
1-Methylnaphthalene	NPT	Ave	24442 1242582	60319 2488158	115398	240891	610346	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Acenaphthylene	ANT	Ave	35921 1906011	90279 3891560	166857	362287	934395	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Acenaphthene	ANT	Ave	21697 1062971	51791 2136834	96795	208074	520061	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Fluorene	ANT	Ave	24371 1262724	59412 2607741	111686	242596	618230	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Phenanthrene	PHN	Ave	31342 1661356	76255 3461018	145220	313656	793866	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Anthracene	PHN	Ave	27258 1629692	71002 3364743	139055	298790	780422	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Fluoranthene	PHN	Ave	29616 1740468	72594 3630855	146920	307870	849132	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Pyrene	CRY	Ave	29628 1742233	73974 3589111	148058	311274	854939	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[a]anthracene	CRY	Ave	23645 1380442	51685 2945206	111979	232265	654477	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Chrysene	CRY	Ave	22782 1343237	51960 2762246	113348	237154	643889	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[b]fluoranthene	PRY	Ave	20907 1262542	47500 2695038	114820	233669	663312	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[k]fluoranthene	PRY	Ave	21693 1270641	46207 2461660	107937	222647	635780	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[a]pyrene	PRY	Ave	17599 976913	34732 1998752	86576	174438	510108	0.200 10.0	0.500 20.0	1.00	2.00	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-85980-1 Analy Batch No.: 261629

SDG No.: 68085980-1

Instrument ID: MSK GC Column: RXi- 5Sil ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/02/2013 11:04 Calibration End Date: 01/02/2013 13:24 Calibration ID: 15399

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Indeno[1,2,3-cd]pyrene	CRY	Ave	17627 1055350	38963 2106707	95262	196698	560581	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Dibenz(a,h)anthracene	PRY	Ave	14960 881320	31224 1803838	78226	161504	464020	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[g,h,i]perylene	PRY	Ave	15487 852061	31465 1712727	79356	161785	453397	0.200 10.0	0.500 20.0	1.00	2.00	5.00
o-Terphenyl	CRY	Ave	19004 1016267	47577 2113778	88729	194080	493414	0.200 10.0	0.500 20.0	1.00	2.00	5.00

Curve Type Legend:
Ave = Average ISTD

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0206q.d
Lab Smp Id: IC-2897219; LLPAH5
Inj Date : 02-JAN-2013 11:04
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-2897219; LLPAH5
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 11:34 chamberk Quant Type: ISTD
Cal Date : 02-JAN-2013 11:04 Cal File: ka0206q.d
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.501	4.501	(1.000)	306720	2.00000	
	2 Naphthalene	128	4.524	4.524	(1.005)	950314	5.00000	5.00
	3 2-Methylnaphthalene	142	5.194	5.194	(1.154)	602753	5.00000	5.00
	4 1-Methylnaphthalene	142	5.300	5.300	(1.178)	610346	5.00000	5.00
	6 Acenaphthylene	152	6.140	6.140	(0.977)	934395	5.00000	5.00
*	5 Acenaphthene-d10	164	6.287	6.287	(1.000)	166454	2.00000	
	7 Acenaphthene	154	6.322	6.322	(1.006)	520061	5.00000	5.00
	8 Fluorene	166	6.880	6.880	(1.094)	618230	5.00000	5.00
*	9 Phenanthrene-d10	188	7.908	7.908	(1.000)	238413	2.00000	
	10 Phenanthrene	178	7.932	7.932	(1.003)	793866	5.00000	5.00
	11 Anthracene	178	7.991	7.991	(1.010)	780422	5.00000	5.00
$	15 o-Terphenyl	230	8.326	8.326	(0.775)	493414	5.00000	5.00
	12 Fluoranthene	202	9.225	9.225	(1.166)	849132	5.00000	5.00
	14 Pyrene	202	9.465	9.465	(0.881)	854939	5.00000	5.00
	16 Benzo(a)Anthracene	228	10.729	10.729	(0.999)	654477	5.00000	5.00
*	13 Chrysene-d12	240	10.740	10.740	(1.000)	191755	2.00000	
	17 Chrysene	228	10.770	10.770	(1.003)	643889	5.00000	5.00
	19 Benzo(b)fluoranthene	252	11.892	11.892	(0.953)	663312	5.00000	5.00(H)
	20 Benzo(k)fluoranthene	252	11.921	11.921	(0.956)	635780	5.00000	5.00(H)
	21 Benzo(a)pyrene	252	12.303	12.303	(0.986)	510108	5.00000	5.00(H)
*	18 Perylene-d12	264	12.374	12.374	(1.000)	162151	2.00000	(H)
	22 Indeno(1,2,3-cd)pyrene	276	13.990	13.990	(1.303)	560581	5.00000	5.00
	23 Dibenzo(a,h)anthracene	278	14.007	14.007	(1.123)	464020	5.00000	5.00(H)
	24 Benzo(g,h,i)perylene	276	14.483	14.483	(1.161)	453397	5.00000	5.00(H)

QC Flag Legend

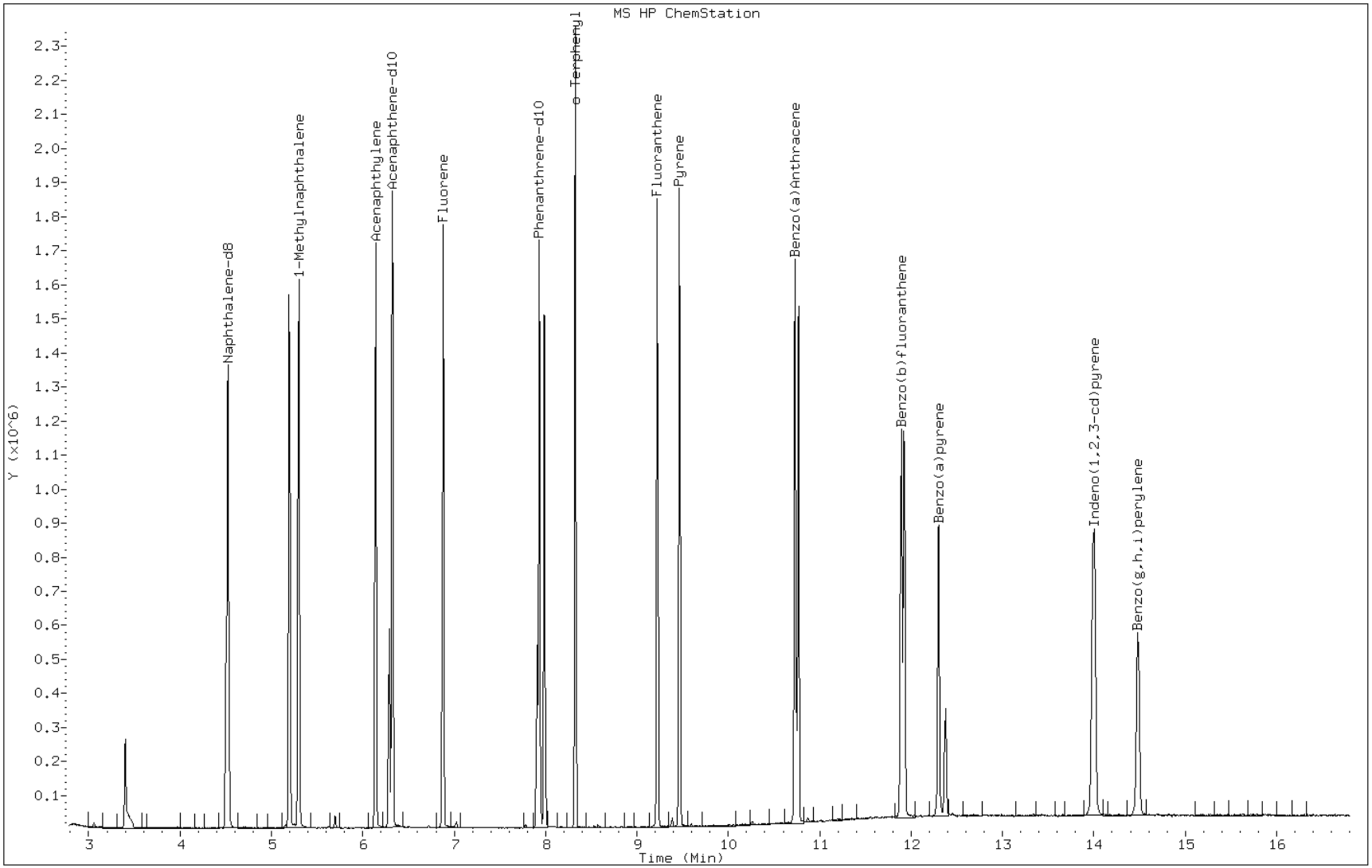
H - Operator selected an alternate compound hit.

Data File: ka0206q.d

Date: 02-JAN-2013 11:04

Client ID: Instrument: MSK5973.i

Sample Info: IC-2897219; LLPAH5 Operator: LEG



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0207q.d
Lab Smp Id: IC-2897222; LLPAH3
Inj Date : 02-JAN-2013 11:28
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-2897222; LLPAH3
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 12:30 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 11:28 Cal File: ka0207q.d
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

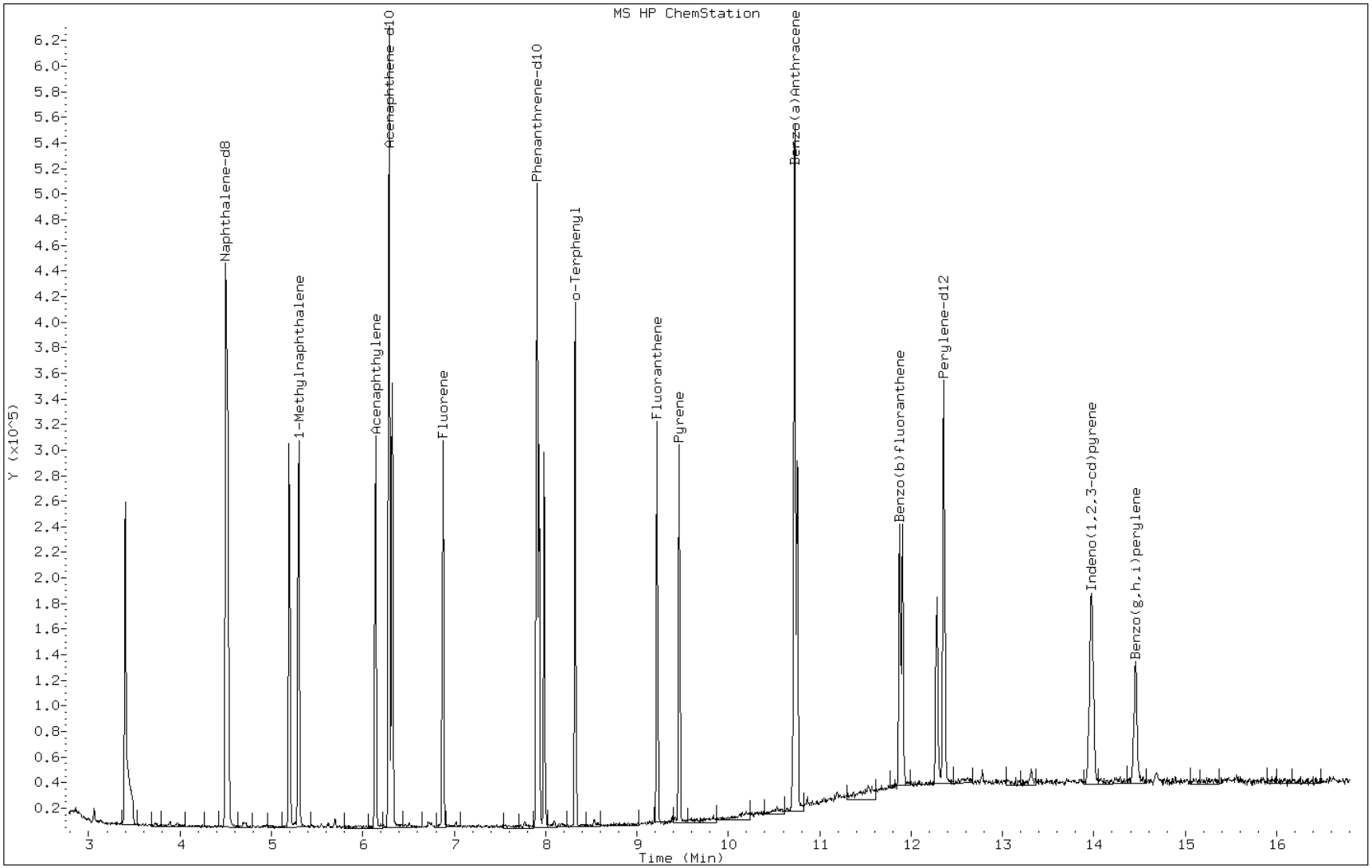
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.501	4.501	(1.000)	316759	2.00000	
	2 Naphthalene	128	4.524	4.524	(1.005)	178993	1.00000	0.95
	3 2-Methylnaphthalene	142	5.194	5.194	(1.154)	111475	1.00000	0.94
	4 1-Methylnaphthalene	142	5.300	5.300	(1.178)	115398	1.00000	0.95
	6 Acenaphthylene	152	6.140	6.140	(0.977)	166857	1.00000	0.92
*	5 Acenaphthene-d10	164	6.287	6.287	(1.000)	173130	2.00000	
	7 Acenaphthene	154	6.322	6.322	(1.006)	96795	1.00000	0.94
	8 Fluorene	166	6.880	6.880	(1.094)	111686	1.00000	0.92
*	9 Phenanthrene-d10	188	7.903	7.903	(1.000)	239423	2.00000	
	10 Phenanthrene	178	7.932	7.932	(1.004)	145220	1.00000	0.95
	11 Anthracene	178	7.985	7.985	(1.010)	139055	1.00000	0.94
$	15 o-Terphenyl	230	8.326	8.326	(0.776)	88729	1.00000	0.96
	12 Fluoranthene	202	9.219	9.219	(1.167)	146920	1.00000	0.92
	14 Pyrene	202	9.460	9.460	(0.882)	148058	1.00000	0.94
	16 Benzo(a)Anthracene	228	10.717	10.717	(0.999)	111979	1.00000	0.93
*	13 Chrysene-d12	240	10.729	10.729	(1.000)	186566	2.00000	
	17 Chrysene	228	10.758	10.758	(1.003)	113348	1.00000	0.94
	19 Benzo(b)fluoranthene	252	11.874	11.874	(0.961)	114820	1.00000	0.91
	20 Benzo(k)fluoranthene	252	11.904	11.904	(0.963)	107937	1.00000	0.90
	21 Benzo(a)pyrene	252	12.280	12.280	(0.994)	86576	1.00000	0.90
*	18 Perylene-d12	264	12.356	12.356	(1.000)	165645	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	13.966	13.966	(1.302)	95262	1.00000	0.93
	23 Dibenzo(a,h)anthracene	278	13.984	13.984	(1.132)	78226	1.00000	0.90
	24 Benzo(g,h,i)perylene	276	14.460	14.460	(1.170)	79356	1.00000	0.92

Data File: ka0207q.d

Date: 02-JAN-2013 11:28

Client ID: Instrument: MSK5973.i

Sample Info: IC-2897222; LLPAH3 Operator: LEG



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0208q.d
Lab Smp Id: IC-2898498; LLPAH2
Inj Date : 02-JAN-2013 11:51
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-2898498; LLPAH2
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 12:30 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 11:51 Cal File: ka0208q.d
Als bottle: 7 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

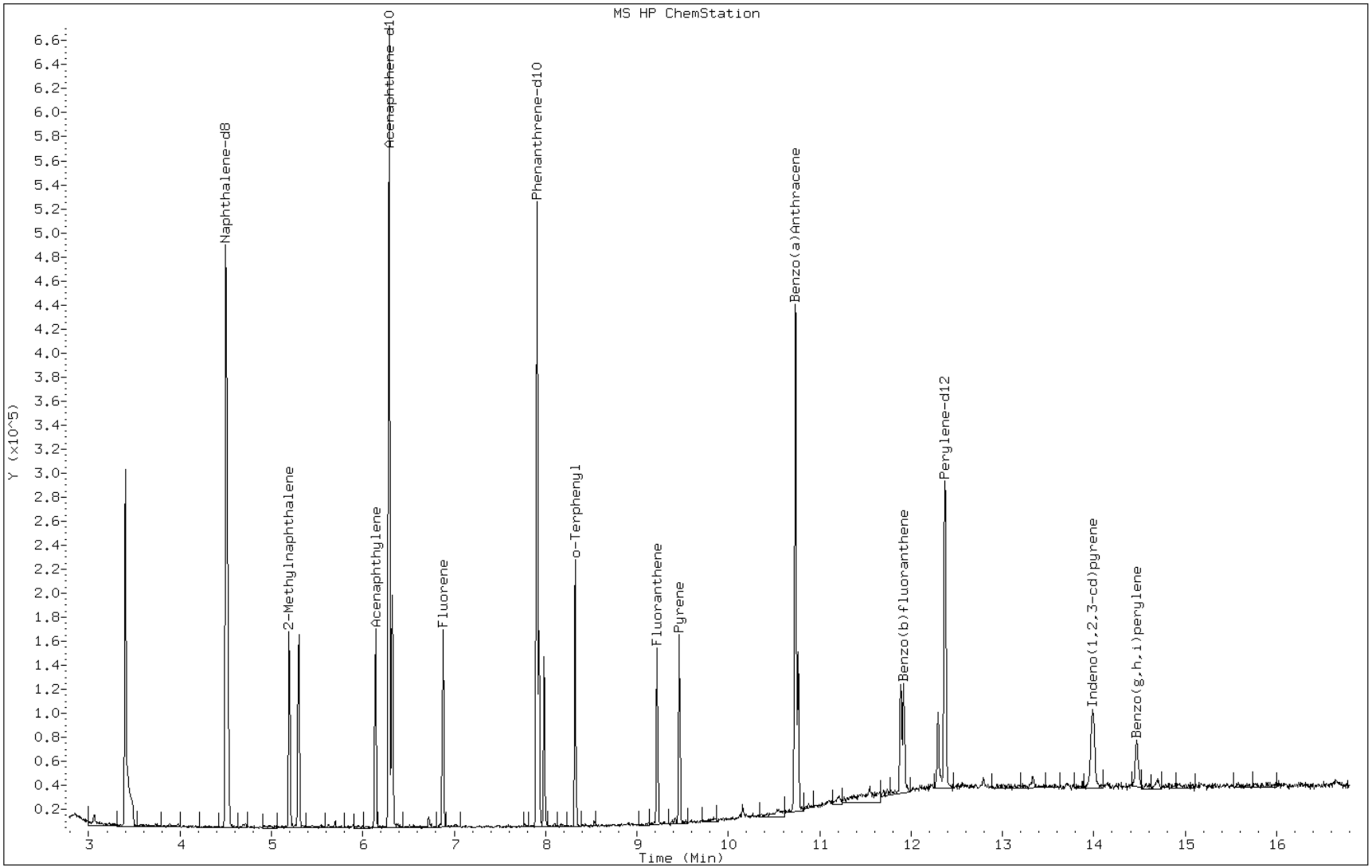
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.501	4.501	(1.000)	334737	2.00000	
	2 Naphthalene	128	4.524	4.524	(1.005)	95765	0.50000	0.48
	3 2-Methylnaphthalene	142	5.194	5.194	(1.154)	59632	0.50000	0.48
	4 1-Methylnaphthalene	142	5.300	5.300	(1.178)	60319	0.50000	0.48
	6 Acenaphthylene	152	6.140	6.140	(0.977)	90279	0.50000	0.48
*	5 Acenaphthene-d10	164	6.287	6.287	(1.000)	180910	2.00000	
	7 Acenaphthene	154	6.322	6.322	(1.006)	51791	0.50000	0.48
	8 Fluorene	166	6.880	6.880	(1.094)	59412	0.50000	0.48
*	9 Phenanthrene-d10	188	7.903	7.903	(1.000)	247379	2.00000	
	10 Phenanthrene	178	7.932	7.932	(1.004)	76255	0.50000	0.48
	11 Anthracene	178	7.985	7.985	(1.010)	71002	0.50000	0.47
$	15 o-Terphenyl	230	8.326	8.326	(0.775)	47577	0.50000	0.54
	12 Fluoranthene	202	9.225	9.225	(1.167)	72594	0.50000	0.46
	14 Pyrene	202	9.466	9.466	(0.881)	73974	0.50000	0.51
	16 Benzo(a)Anthracene	228	10.723	10.723	(0.998)	51685	0.50000	0.48
*	13 Chrysene-d12	240	10.741	10.741	(1.000)	167871	2.00000	
	17 Chrysene	228	10.764	10.764	(1.002)	51960	0.50000	0.48
	19 Benzo(b)fluoranthene	252	11.886	11.886	(0.961)	47500	0.50000	0.47
	20 Benzo(k)fluoranthene	252	11.922	11.922	(0.964)	46207	0.50000	0.48
	21 Benzo(a)pyrene	252	12.298	12.298	(0.994)	34732	0.50000	0.46
*	18 Perylene-d12	264	12.368	12.368	(1.000)	134949	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	13.984	13.984	(1.302)	38963	0.50000	0.44
	23 Dibenzo(a,h)anthracene	278	13.996	13.996	(1.132)	31224	0.50000	0.46
	24 Benzo(g,h,i)perylene	276	14.466	14.466	(1.170)	31465	0.50000	0.46

Data File: ka0208q.d

Date: 02-JAN-2013 11:51

Client ID: Instrument: MSK5973.i

Sample Info: IC-2898498; LLPAH2 Operator: LEG



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0209q.d
Lab Smp Id: IC-2898499; LLPAH1
Inj Date : 02-JAN-2013 12:15
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-2898499; LLPAH1
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 12:30 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 12:15 Cal File: ka0209q.d
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

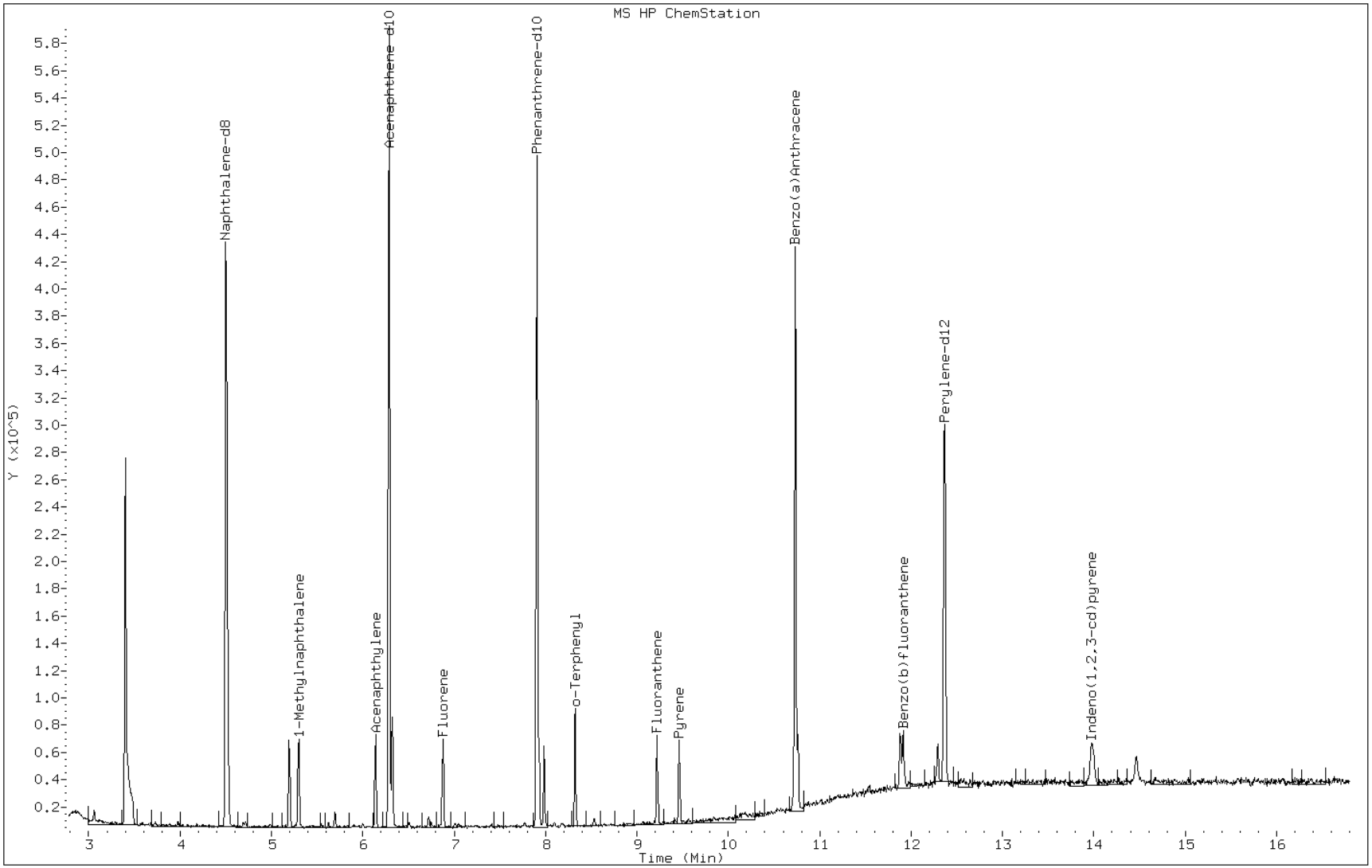
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
* 1 Naphthalene-d8	136	4.501	4.501	(1.000)	314047	2.00000	
2 Naphthalene	128	4.524	4.524	(1.005)	38998	0.20000	0.20
3 2-Methylnaphthalene	142	5.194	5.194	(1.154)	23584	0.20000	0.20
4 1-Methylnaphthalene	142	5.300	5.300	(1.178)	24442	0.20000	0.20
6 Acenaphthylene	152	6.140	6.140	(0.977)	35921	0.20000	0.20
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	166843	2.00000	
7 Acenaphthene	154	6.322	6.322	(1.006)	21697	0.20000	0.21
8 Fluorene	166	6.880	6.880	(1.094)	24371	0.20000	0.21
* 9 Phenanthrene-d10	188	7.903	7.903	(1.000)	224176	2.00000	
10 Phenanthrene	178	7.932	7.932	(1.004)	31342	0.20000	0.21
11 Anthracene	178	7.985	7.985	(1.010)	27258	0.20000	0.20
$ 15 o-Terphenyl	230	8.326	8.326	(0.776)	19004	0.20000	0.21
12 Fluoranthene	202	9.219	9.219	(1.167)	29616	0.20000	0.20
14 Pyrene	202	9.466	9.466	(0.882)	29628	0.20000	0.20
16 Benzo(a)Anthracene	228	10.723	10.723	(0.999)	23645	0.20000	0.22
* 13 Chrysene-d12	240	10.735	10.735	(1.000)	162910	2.00000	
17 Chrysene	228	10.764	10.764	(1.003)	22782	0.20000	0.21
19 Benzo(b)fluoranthene	252	11.880	11.880	(0.961)	20907	0.20000	0.19
20 Benzo(k)fluoranthene	252	11.916	11.916	(0.964)	21693	0.20000	0.20
21 Benzo(a)pyrene	252	12.292	12.292	(0.994)	17599	0.20000	0.21
* 18 Perylene-d12	264	12.362	12.362	(1.000)	145134	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	13.972	13.972	(1.302)	17627	0.20000	0.20
23 Dibenzo(a,h)anthracene	278	13.990	13.990	(1.132)	14960	0.20000	0.20
24 Benzo(g,h,i)perylene	276	14.466	14.466	(1.170)	15487	0.20000	0.20

Data File: ka0209q.d

Date: 02-JAN-2013 12:15

Client ID: Instrument: MSK5973.i

Sample Info: IC-2898499; LLPAH1 Operator: LEG



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0210q.d
Lab Smp Id: IC-2897217; LLPAH7
Inj Date : 02-JAN-2013 12:38
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-2897217; LLPAH7
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:17 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 12:38 Cal File: ka0210q.d
Als bottle: 3 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.501	4.501	(1.000)	340163	2.00000	
	2 Naphthalene	128	4.524	4.524	(1.005)	3981382	20.0000	19.75
	3 2-Methylnaphthalene	142	5.200	5.200	(1.155)	2497515	20.0000	19.90
	4 1-Methylnaphthalene	142	5.300	5.300	(1.178)	2488158	20.0000	19.47
	6 Acenaphthylene	152	6.140	6.140	(0.977)	3891560	20.0000	19.95
*	5 Acenaphthene-d10	164	6.287	6.287	(1.000)	187609	2.00000	
	7 Acenaphthene	154	6.328	6.328	(1.007)	2136834	20.0000	19.13
	8 Fluorene	166	6.880	6.880	(1.094)	2607741	20.0000	20.02(A)
*	9 Phenanthrene-d10	188	7.908	7.908	(1.000)	282744	2.00000	
	10 Phenanthrene	178	7.938	7.938	(1.004)	3461018	20.0000	19.12
	11 Anthracene	178	7.991	7.991	(1.010)	3364743	20.0000	19.75
$	15 o-Terphenyl	230	8.326	8.326	(0.775)	2113778	20.0000	18.71
	12 Fluoranthene	202	9.225	9.225	(1.166)	3630855	20.0000	19.96
	14 Pyrene	202	9.471	9.471	(0.882)	3589111	20.0000	19.40
	16 Benzo(a)Anthracene	228	10.729	10.729	(0.999)	2945206	20.0000	20.74(A)
*	13 Chrysene-d12	240	10.740	10.740	(1.000)	214429	2.00000	
	17 Chrysene	228	10.770	10.770	(1.003)	2762246	20.0000	19.87
	19 Benzo(b)fluoranthene	252	11.892	11.892	(0.962)	2695038	20.0000	21.55(A)
	20 Benzo(k)fluoranthene	252	11.927	11.927	(0.964)	2461660	20.0000	20.44(A)
	21 Benzo(a)pyrene	252	12.297	12.297	(0.994)	1998752	20.0000	20.84(A)
*	18 Perylene-d12	264	12.368	12.368	(1.000)	167009	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	13.996	13.996	(1.303)	2106707	20.0000	18.95
	23 Dibenzo(a,h)anthracene	278	14.007	14.007	(1.133)	1803838	20.0000	21.07(A)
	24 Benzo(g,h,i)perylene	276	14.489	14.489	(1.171)	1712727	20.0000	20.10(A)

QC Flag Legend

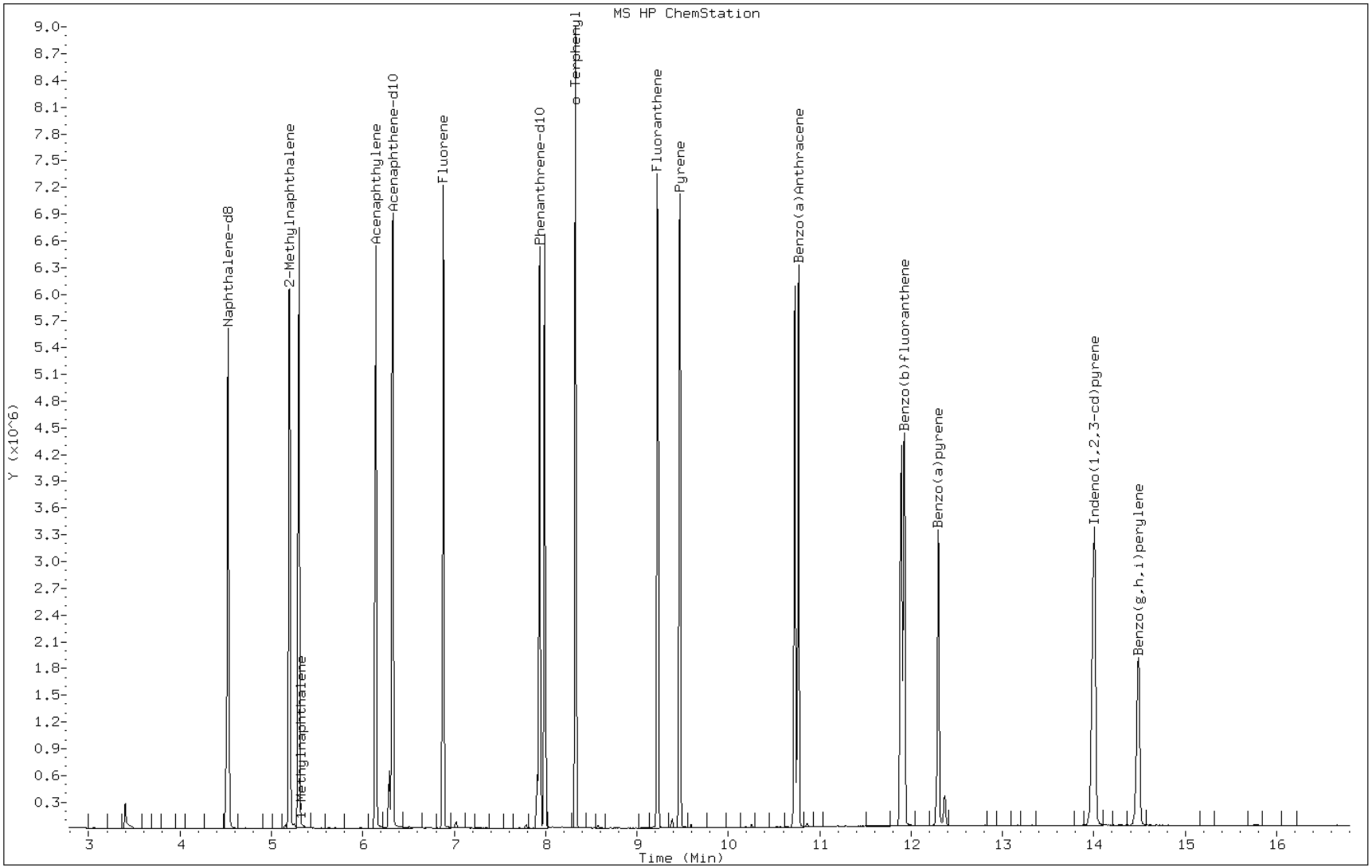
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: ka0210q.d

Date: 02-JAN-2013 12:38

Client ID: Instrument: MSK5973.i

Sample Info: IC-2897217; LLPAH7 Operator: LEG



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0211q.d
Lab Smp Id: IC-2897218; LLPAH6
Inj Date : 02-JAN-2013 13:01
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-2897218; LLPAH6
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:17 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:01 Cal File: ka0211q.d
Als bottle: 4 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

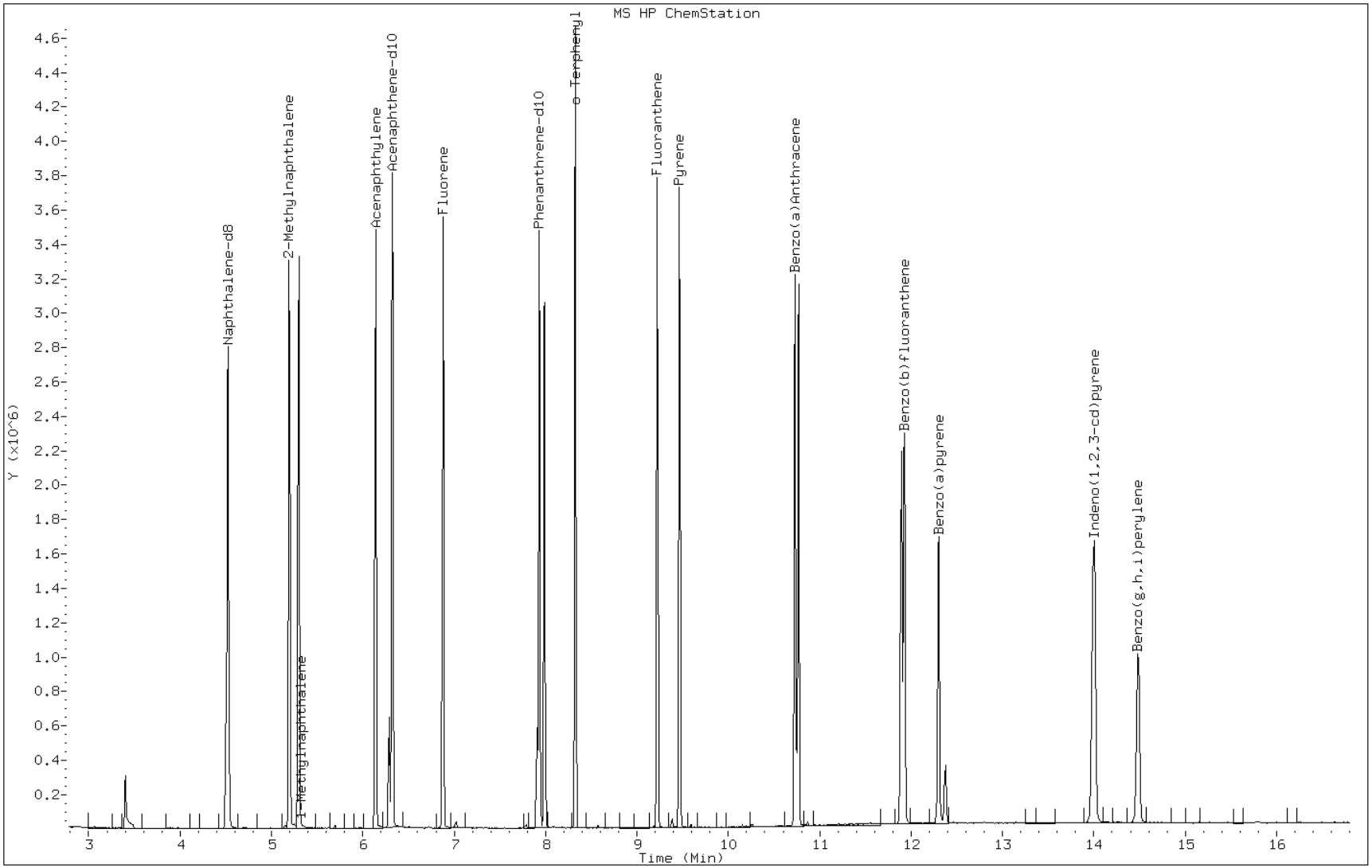
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.501	4.501	(1.000)	349708	2.00000	
	2 Naphthalene	128	4.524	4.524	(1.005)	2012329	10.0000	9.75
	3 2-Methylnaphthalene	142	5.194	5.194	(1.154)	1248225	10.0000	9.73
	4 1-Methylnaphthalene	142	5.300	5.300	(1.178)	1242582	10.0000	9.54
	6 Acenaphthylene	152	6.140	6.140	(0.977)	1906011	10.0000	9.98
*	5 Acenaphthene-d10	164	6.287	6.287	(1.000)	183665	2.00000	
	7 Acenaphthene	154	6.322	6.322	(1.006)	1062971	10.0000	9.76
	8 Fluorene	166	6.880	6.880	(1.094)	1262724	10.0000	9.92
*	9 Phenanthrene-d10	188	7.908	7.908	(1.000)	275897	2.00000	
	10 Phenanthrene	178	7.932	7.932	(1.003)	1661356	10.0000	9.50
	11 Anthracene	178	7.991	7.991	(1.010)	1629692	10.0000	9.83
$	15 o-Terphenyl	230	8.326	8.326	(0.775)	1016267	10.0000	9.20
	12 Fluoranthene	202	9.225	9.225	(1.166)	1740468	10.0000	9.84
	14 Pyrene	202	9.465	9.465	(0.881)	1742233	10.0000	9.57
	16 Benzo(a)Anthracene	228	10.729	10.729	(0.999)	1380442	10.0000	9.82
*	13 Chrysene-d12	240	10.740	10.740	(1.000)	212853	2.00000	
	17 Chrysene	228	10.770	10.770	(1.003)	1343237	10.0000	9.77
	19 Benzo(b)fluoranthene	252	11.892	11.892	(0.961)	1262542	10.0000	9.84
	20 Benzo(k)fluoranthene	252	11.927	11.927	(0.964)	1270641	10.0000	10.21
	21 Benzo(a)pyrene	252	12.303	12.303	(0.994)	976913	10.0000	9.91
*	18 Perylene-d12	264	12.374	12.374	(1.000)	171875	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	13.990	13.990	(1.303)	1055350	10.0000	9.63
	23 Dibenzo(a,h)anthracene	278	14.007	14.007	(1.132)	881320	10.0000	10.00
	24 Benzo(g,h,i)perylene	276	14.483	14.483	(1.170)	852061	10.0000	9.76

Data File: ka0211q.d

Date: 02-JAN-2013 13:01

Client ID: Instrument: MSK5973.i

Sample Info: IC-2897218; LLPAH6 Operator: LEG



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0212q.d
Lab Smp Id: ICIS-2897217; LLPAH
Inj Date : 02-JAN-2013 13:24
Operator : LEG Inst ID: MSK5973.i
Smp Info : ICIS-2897217; LLPAH4
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:58 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:24 Cal File: ka0212q.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

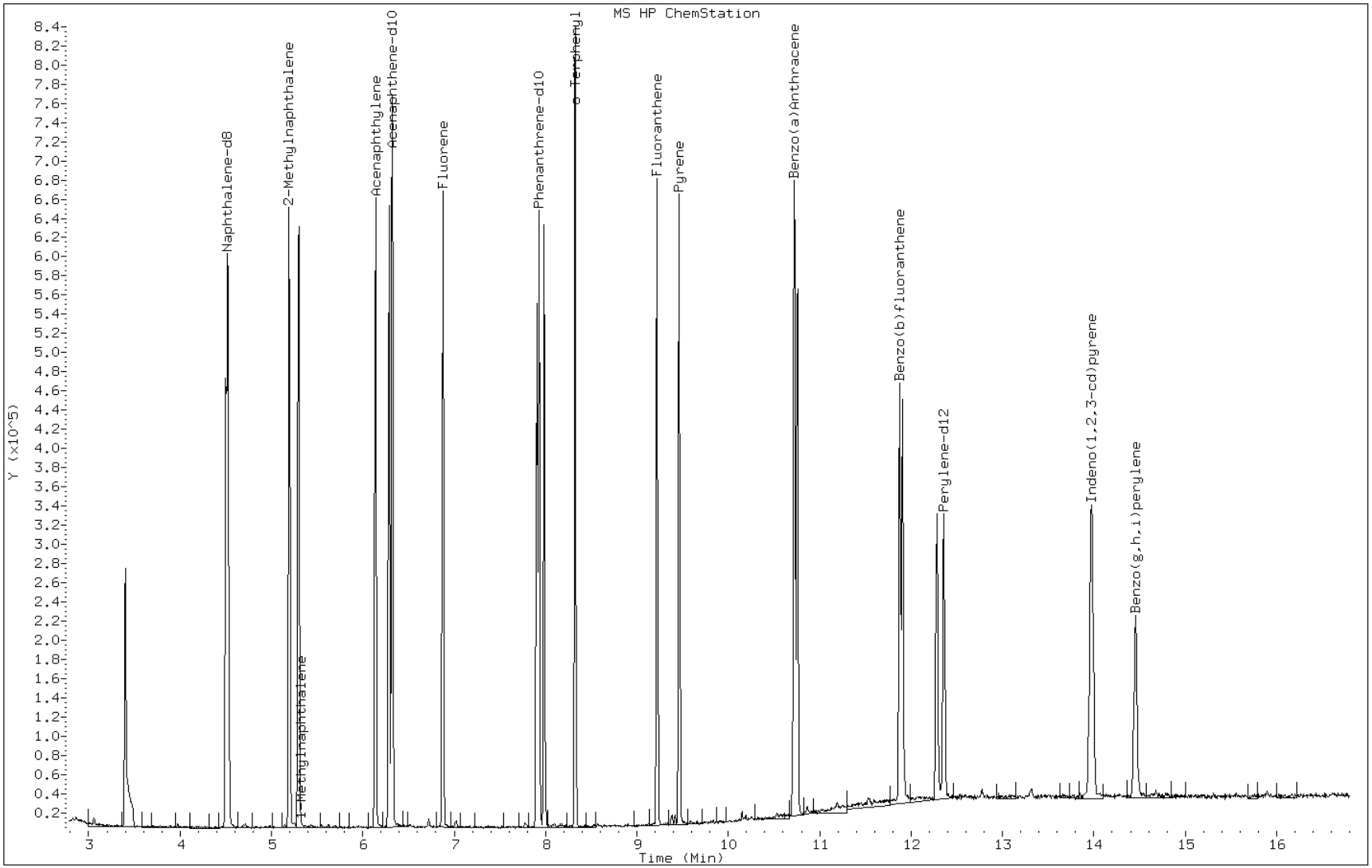
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
* 1 Naphthalene-d8	136	4.501	4.501	(1.000)	329115	2.00000	
2 Naphthalene	128	4.524	4.524	(1.005)	385793	2.00000	1.98
3 2-Methylnaphthalene	142	5.194	5.194	(1.154)	238845	2.00000	1.98
4 1-Methylnaphthalene	142	5.300	5.300	(1.178)	240891	2.00000	1.97
6 Acenaphthylene	152	6.140	6.140	(0.977)	362287	2.00000	1.96
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	177918	2.00000	
7 Acenaphthene	154	6.322	6.322	(1.006)	208074	2.00000	1.97
8 Fluorene	166	6.875	6.875	(1.093)	242596	2.00000	1.97
* 9 Phenanthrene-d10	188	7.903	7.903	(1.000)	254927	2.00000	
10 Phenanthrene	178	7.932	7.932	(1.004)	313656	2.00000	1.94
11 Anthracene	178	7.985	7.985	(1.010)	298790	2.00000	1.95
$ 15 o-Terphenyl	230	8.326	8.326	(0.776)	194080	2.00000	2.00
12 Fluoranthene	202	9.219	9.219	(1.167)	307870	2.00000	1.89
14 Pyrene	202	9.460	9.460	(0.882)	311274	2.00000	1.95
16 Benzo(a)Anthracene	228	10.717	10.717	(0.999)	232265	2.00000	1.90
* 13 Chrysene-d12	240	10.729	10.729	(1.000)	186355	2.00000	
17 Chrysene	228	10.758	10.758	(1.003)	237154	2.00000	1.97
19 Benzo(b)fluoranthene	252	11.875	11.875	(0.961)	233669	2.00000	1.95
20 Benzo(k)fluoranthene	252	11.904	11.904	(0.963)	222647	2.00000	1.92
21 Benzo(a)pyrene	252	12.280	12.280	(0.994)	174438	2.00000	1.90
* 18 Perylene-d12	264	12.356	12.356	(1.000)	160778	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	13.966	13.966	(1.302)	196698	2.00000	2.04
23 Dibenzo(a,h)anthracene	278	13.984	13.984	(1.132)	161504	2.00000	1.96
24 Benzo(g,h,i)perylene	276	14.460	14.460	(1.170)	161785	2.00000	1.98

Data File: ka0212q.d

Date: 02-JAN-2013 13:24

Client ID: Instrument: MSK5973.i

Sample Info: ICIS-2897217; LLPAH4 Operator: LEG



FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-85980-1 Analy Batch No.: 261214

SDG No.: 68085980-1

Instrument ID: MSY GC Column: HP-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/21/2012 11:14 Calibration End Date: 12/21/2012 13:30 Calibration ID: 15368

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-261214/7	yl2111q.d
Level 2	IC 680-261214/6	yl2110q.d
Level 3	IC 680-261214/5	yl2109q.d
Level 4	ICIS 680-261214/8	yl2112q.d
Level 5	IC 680-261214/4	yl2108q.d
Level 6	IC 680-261214/3	yl2107q.d
Level 7	IC 680-261214/2	yl2106q.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 4	LVL 5		B	M1	M2								
Naphthalene	1.2224 1.1705	1.1306 1.1865	1.1325	1.1779	1.2304	Ave		1.1787				3.3		15.0			
2-Methylnaphthalene	0.7614 0.7300	0.7203 0.7405	0.7085	0.7260	0.7625	Ave		0.7356				2.8		15.0			
1-Methylnaphthalene	0.8591 0.7530	0.7427 0.7589	0.7538	0.7555	0.7955	Ave		0.7741				5.3		15.0			
Acenaphthylene	2.2620 2.0131	2.0348 2.0109	1.9677	2.0007	2.1730	Ave		2.0667				5.2		15.0			
Acenaphthene	1.5242 1.1279	1.1691 1.1611	1.1740	1.1870	1.2342	Ave		1.2254				11.1		15.0			
Fluorene	1.5495 1.3290	1.3709 1.3293	1.2930	1.3138	1.4320	Ave		1.3739				6.5		15.0			
Phenanthrene	1.4570 1.1682	1.2352 1.1295	1.1804	1.1954	1.2631	Ave		1.2320				8.8		15.0			
Anthracene	1.4485 1.1326	1.1005 1.0952	1.1089	1.1373	1.2264	Ave		1.1785				10.8		15.0			
Fluoranthene	1.7811 1.3447	1.3815 1.3202	1.3751	1.3672	1.4839	Ave		1.4362				11.2		15.0			
Pyrene	2.1583 1.7013	1.7706 1.8182	1.7350	1.7365	1.7758	Ave		1.8152				8.6		15.0			
Benzo[a]anthracene	1.8035 1.2818	1.3941 1.3106	1.3866	1.2819	1.4282	Ave		1.4189				12.5		15.0			
Chrysene	1.9326 1.2348	1.5741 1.2608	1.4167	1.3425	1.3937	LinF		1.2637							0.9989		
Benzo[b]fluoranthene	2.2367 1.3855	1.7694 1.4699	1.7216	1.5776	1.6000	LinF		1.4632							0.9981		
Benzo[k]fluoranthene	2.0023 1.3601	2.0373 1.5222	1.6405	1.4427	1.4808	LinF		1.4924							0.9968		

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 Savannah Job No.: 680-85980-1 Analy Batch No.: 261214

SDG No.: 68085980-1

Instrument ID: MSY GC Column: HP-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/21/2012 11:14 Calibration End Date: 12/21/2012 13:30 Calibration ID: 15368

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 4	LVL 5		B	M1	M2								
Benzo[a]pyrene	1.7700 1.1842	1.3864 1.2036	1.2739	1.2108	1.3286	LinF		1.2068							0.9990		
Indeno[1,2,3-cd]pyrene	1.8061 1.1241	1.3371 1.0507	1.2510	1.2348	1.3696	LinF		1.0865							0.9925		
Dibenz(a,h)anthracene	1.6744 1.0186	1.2560 0.9968	1.1933	1.1075	1.2043	LinF		1.0142							0.9965		
Benzo[g,h,i]perylene	1.6840 1.0462	1.3269 1.0342	1.2090	1.1609	1.2318	LinF		1.0491							0.9970		
o-Terphenyl	1.2820 0.9917	1.0885 1.0619	1.0049	1.1310	0.9967	Ave		1.0796				9.6		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 Savannah Job No.: 680-85980-1 Analy Batch No.: 261214

SDG No.: 68085980-1

Instrument ID: MSY GC Column: HP-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/21/2012 11:14 Calibration End Date: 12/21/2012 13:30 Calibration ID: 15368

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-261214/7	yl2111q.d
Level 2	IC 680-261214/6	yl2110q.d
Level 3	IC 680-261214/5	yl2109q.d
Level 4	ICIS 680-261214/8	yl2112q.d
Level 5	IC 680-261214/4	yl2108q.d
Level 6	IC 680-261214/3	yl2107q.d
Level 7	IC 680-261214/2	yl2106q.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Naphthalene	NPT	Ave	10928 655103	26615 1303355	58580	115402	285517	0.200 10.0	0.500 20.0	1.00	2.00	5.00
2-Methylnaphthalene	NPT	Ave	6807 408563	16956 813407	36650	71128	176944	0.200 10.0	0.500 20.0	1.00	2.00	5.00
1-Methylnaphthalene	NPT	Ave	7680 421464	17483 833654	38990	74017	184595	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Acenaphthylene	ANT	Ave	11991 687669	27524 1351349	60647	114203	297037	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Acenaphthene	ANT	Ave	8080 385270	15814 780255	36185	67757	168710	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Fluorene	ANT	Ave	8214 453990	18543 893333	39852	74992	195748	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Phenanthrene	PHN	Ave	11432 598224	24440 1157165	53096	98330	263106	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Anthracene	PHN	Ave	11365 579984	21776 1121964	49878	93551	255464	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Fluoranthene	PHN	Ave	13975 688607	27335 1352542	61851	112469	309103	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Pyrene	CRY	Ave	14092 700800	29581 1363205	63932	112506	320036	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[a]anthracene	CRY	Ave	11775 527993	23292 982590	51093	83057	257391	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Chrysene	CRY	LinF	12618 508638	26299 945266	52203	86980	251185	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[b]fluoranthene	PRY	LinF	14066 506230	27084 934884	57417	92199	264968	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[k]fluoranthene	PRY	LinF	12592 496957	31185 968145	54714	84319	245237	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[a]pyrene	PRY	LinF	11131 432693	21221 765496	42487	70763	220028	0.200 10.0	0.500 20.0	1.00	2.00	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-85980-1 Analy Batch No.: 261214

SDG No.: 68085980-1

Instrument ID: MSY GC Column: HP-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/21/2012 11:14 Calibration End Date: 12/21/2012 13:30 Calibration ID: 15368

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Indeno[1,2,3-cd]pyrene	CRY	LinF	11792 463042	22339 787774	46096	80004	246836	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Dibenz(a,h)anthracene	PRY	LinF	10530 372188	19225 634006	39799	64729	199440	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[g,h,i]perylene	PRY	LinF	10590 382257	20311 657788	40323	67846	204002	0.200 10.0	0.500 20.0	1.00	2.00	5.00
o-Terphenyl	CRY	Ave	8370 408476	18185 796144	37029	73277	179634	0.200 10.0	0.500 20.0	1.00	2.00	5.00

Curve Type Legend:

Ave = Average ISTD
LinF = Linear ISTD forced zero

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/1y122112.b/yl2106q.d
Lab Smp Id: IC-2897217; LLPAH7
Inj Date : 21-DEC-2012 11:14
Operator : VHB Inst ID: MSY5975.i
Smp Info : IC-2897217; LLPAH7
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/1y122112.b/Y-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 11:35 chemist Quant Type: ISTD
Cal Date : 21-DEC-2012 11:14 Cal File: yl2106q.d
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
* 1 Naphthalene-d8	136	3.392	3.392	(1.000)	109851	2.00000	
2 Naphthalene	128	3.408	3.408	(1.005)	1303355	20.0000	20.00
3 2-Methylnaphthalene	142	4.012	4.012	(1.183)	813407	20.0000	20.00
4 1-Methylnaphthalene	142	4.098	4.098	(1.208)	833654	20.0000	20.00
6 Acenaphthylene	152	4.788	4.788	(0.975)	1351349	20.0000	20.00
* 5 Acenaphthene-d10	164	4.911	4.911	(1.000)	67202	2.00000	
7 Acenaphthene	154	4.938	4.938	(1.005)	780255	20.0000	20.00(A)
8 Fluorene	166	5.382	5.382	(1.096)	893333	20.0000	20.00
* 9 Phenanthrene-d10	188	6.162	6.162	(1.000)	102446	2.00000	
10 Phenanthrene	178	6.184	6.184	(1.003)	1157165	20.0000	20.00
11 Anthracene	178	6.227	6.227	(1.010)	1121964	20.0000	20.00(A)
$ 15 o-Terphenyl	230	6.494	6.494	(0.766)	796144	20.0000	20.00
12 Fluoranthene	202	7.189	7.189	(1.167)	1352542	20.0000	20.00
14 Pyrene	202	7.387	7.387	(0.871)	1363205	20.0000	20.00
16 Benzo(a)Anthracene	228	8.468	8.468	(0.999)	982590	20.0000	20.00
* 13 Chrysene-d12	240	8.478	8.478	(1.000)	74974	2.00000	
17 Chrysene	228	8.505	8.505	(1.003)	945266	20.0000	20.00
19 Benzo(b)fluoranthene	252	9.420	9.420	(0.965)	934884	20.0000	20.00
20 Benzo(k)fluoranthene	252	9.441	9.441	(0.968)	968145	20.0000	20.00
21 Benzo(a)pyrene	252	9.709	9.709	(0.995)	765496	20.0000	20.00
* 18 Perylene-d12	264	9.757	9.757	(1.000)	63602	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	10.912	10.912	(1.287)	787774	20.0000	20.00
23 Dibenzo(a,h)anthracene	278	10.933	10.933	(1.121)	634006	20.0000	20.00
24 Benzo(g,h,i)perylene	276	11.260	11.260	(1.154)	657788	20.0000	20.00

QC Flag Legend

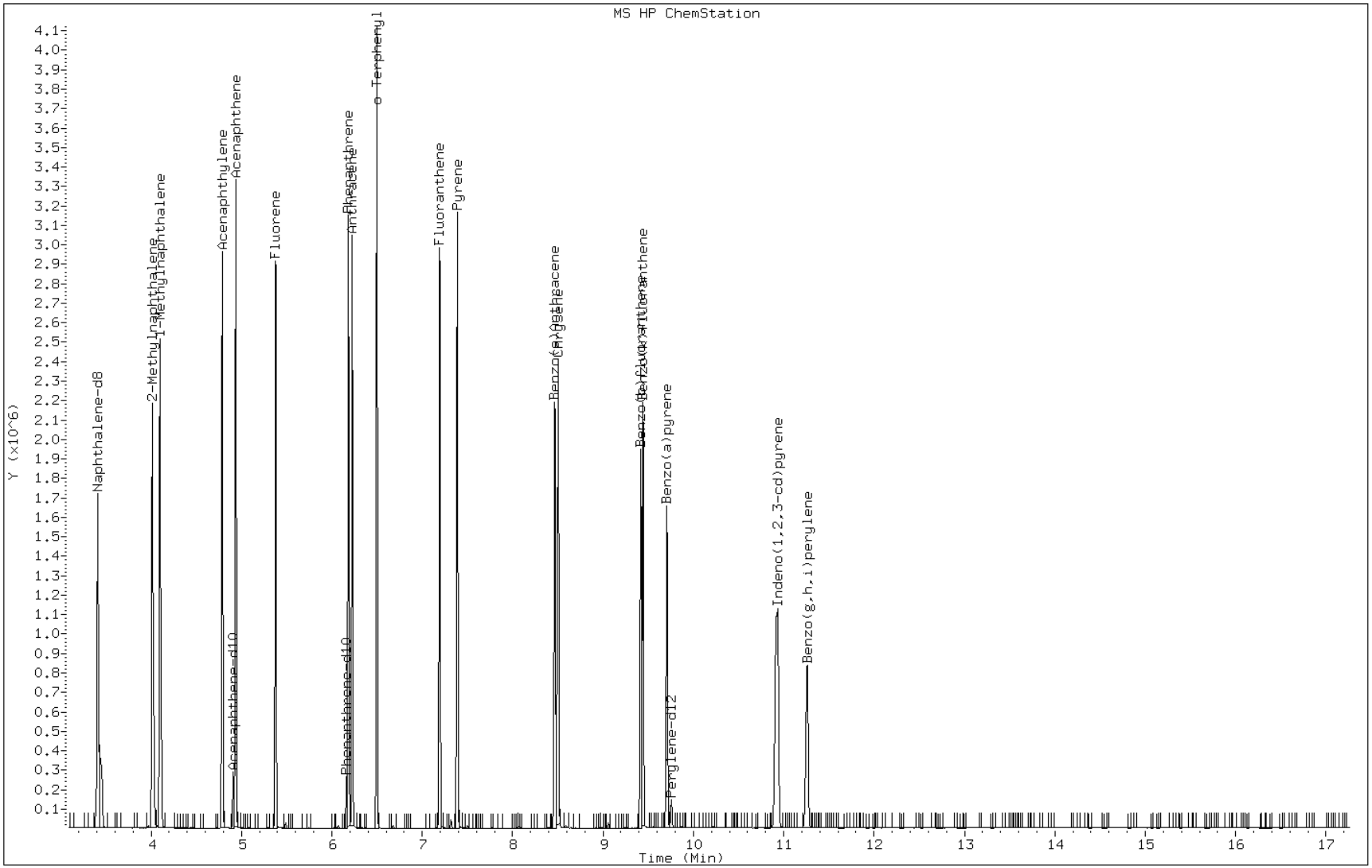
A - Target compound detected but, quantitated amount
exceeded maximum amount.

Data File: yl2106q.d

Date: 21-DEC-2012 11:14

Client ID: Instrument: MSY5975.i

Sample Info: IC-2897217; LLPAH7 Operator: VHB



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/1y122112.b/yl2107q.d
Lab Smp Id: IC-2897218; LLPAH6
Inj Date : 21-DEC-2012 11:37
Operator : VHB Inst ID: MSY5975.i
Smp Info : IC-2897218; LLPAH6
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/1y122112.b/Y-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 12:04 chemist Quant Type: ISTD
Cal Date : 21-DEC-2012 11:37 Cal File: yl2107q.d
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

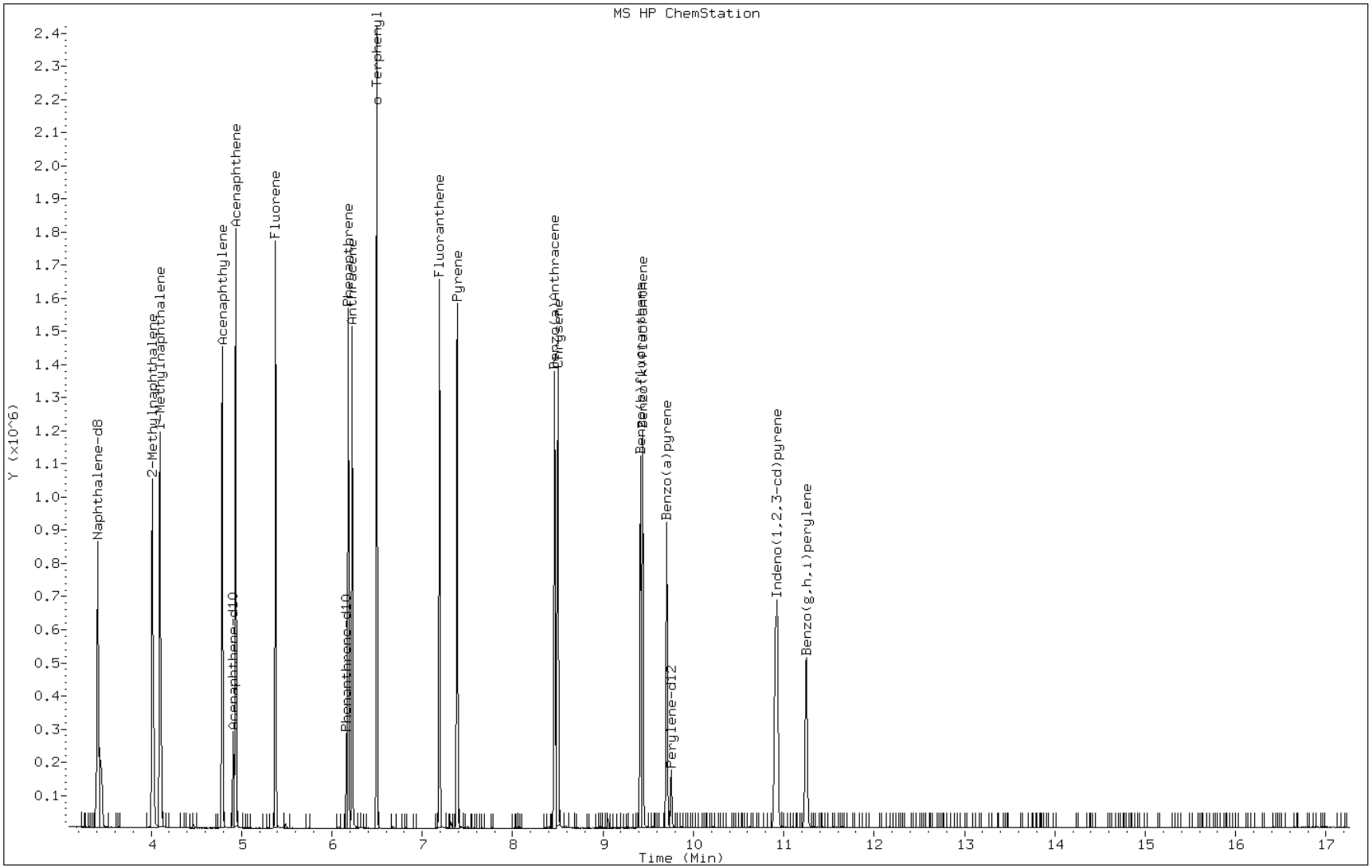
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	3.392	3.392	(1.000)	111940	2.00000	
	2 Naphthalene	128	3.408	3.408	(1.005)	655103	10.0000	9.93
	3 2-Methylnaphthalene	142	4.012	4.012	(1.183)	408563	10.0000	9.92
	4 1-Methylnaphthalene	142	4.098	4.098	(1.208)	421464	10.0000	9.96
	6 Acenaphthylene	152	4.788	4.788	(0.975)	687669	10.0000	10.00
*	5 Acenaphthene-d10	164	4.911	4.911	(1.000)	68319	2.00000	
	7 Acenaphthene	154	4.937	4.937	(1.005)	385270	10.0000	9.85
	8 Fluorene	166	5.376	5.376	(1.095)	453990	10.0000	9.99
*	9 Phenanthrene-d10	188	6.162	6.162	(1.000)	102420	2.00000	
	10 Phenanthrene	178	6.184	6.184	(1.003)	598224	10.0000	10.16
	11 Anthracene	178	6.227	6.227	(1.010)	579984	10.0000	10.16
$	15 o-Terphenyl	230	6.494	6.494	(0.766)	408476	10.0000	9.65
	12 Fluoranthene	202	7.189	7.189	(1.167)	688607	10.0000	10.09
	14 Pyrene	202	7.387	7.387	(0.872)	700800	10.0000	9.66
	16 Benzo(a)Anthracene	228	8.468	8.468	(0.999)	527993	10.0000	9.88
*	13 Chrysene-d12	240	8.473	8.473	(1.000)	82382	2.00000	
	17 Chrysene	228	8.500	8.500	(1.003)	508638	10.0000	9.89
	19 Benzo(b)fluoranthene	252	9.414	9.414	(0.965)	506230	10.0000	9.70
	20 Benzo(k)fluoranthene	252	9.441	9.441	(0.968)	496957	10.0000	9.43
	21 Benzo(a)pyrene	252	9.708	9.708	(0.995)	432693	10.0000	9.91
*	18 Perylene-d12	264	9.757	9.757	(1.000)	73078	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	10.907	10.907	(1.287)	463042	10.0000	10.33
	23 Dibenzo(a,h)anthracene	278	10.928	10.928	(1.120)	372188	10.0000	10.10
	24 Benzo(g,h,i)perylene	276	11.249	11.249	(1.153)	382257	10.0000	10.05

Data File: yl2107q.d

Date: 21-DEC-2012 11:37

Client ID: Instrument: MSY5975.i

Sample Info: IC-2897218; LLPAH6 Operator: VHB



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/1y122112.b/yl2108q.d
Lab Smp Id: IC-2897219; LLPAH5
Inj Date : 21-DEC-2012 11:59
Operator : VHB Inst ID: MSY5975.i
Smp Info : IC-2897219; LLPAH5
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/1y122112.b/Y-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 12:14 chemist Quant Type: ISTD
Cal Date : 21-DEC-2012 11:59 Cal File: yl2108q.d
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

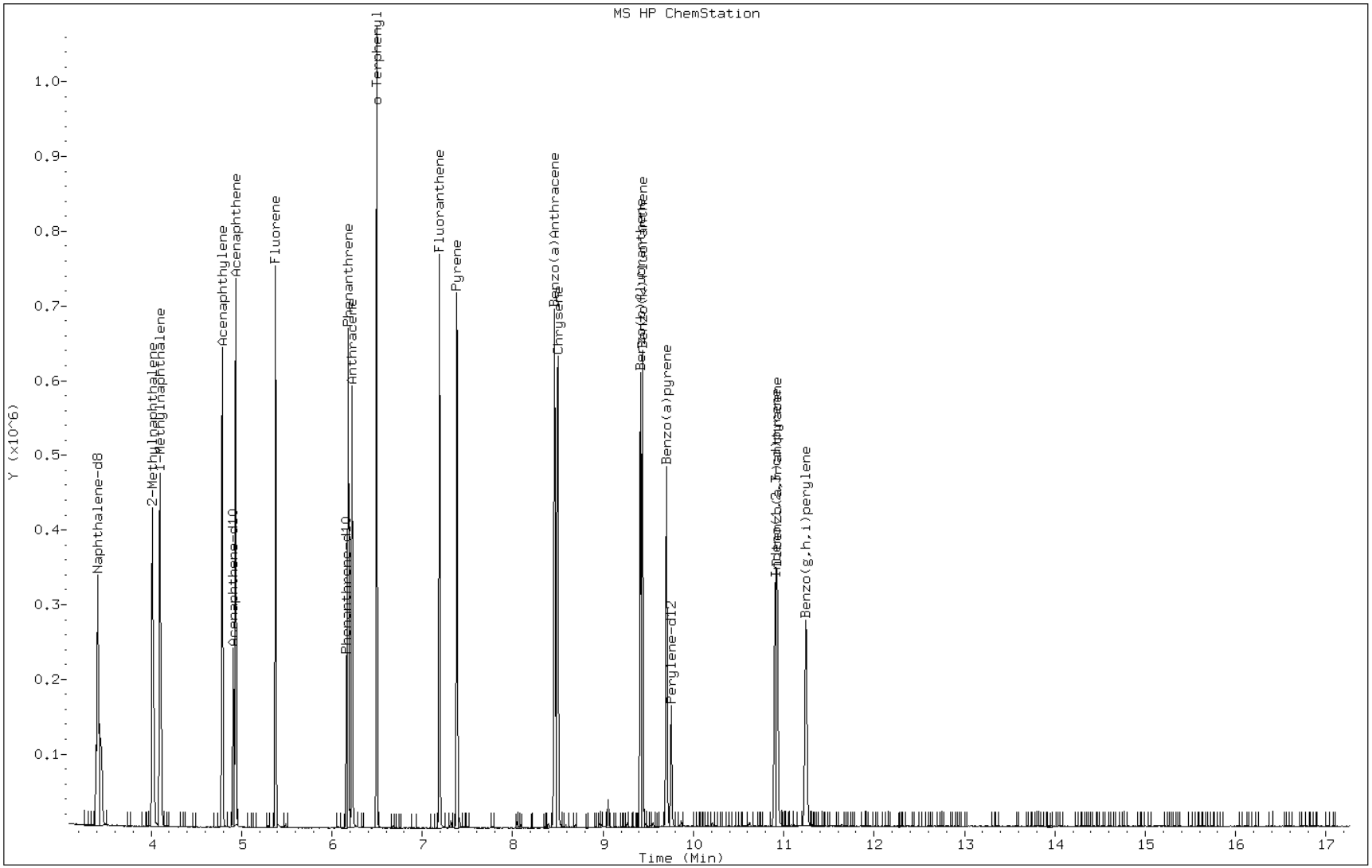
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	3.392	3.392	(1.000)	92818	2.00000	
	2 Naphthalene	128	3.408	3.408	(1.005)	285517	5.00000	5.14
	3 2-Methylnaphthalene	142	4.012	4.012	(1.183)	176944	5.00000	5.12
	4 1-Methylnaphthalene	142	4.098	4.098	(1.208)	184595	5.00000	5.17
	6 Acenaphthylene	152	4.788	4.788	(0.975)	297037	5.00000	5.25
*	5 Acenaphthene-d10	164	4.911	4.911	(1.000)	54678	2.00000	
	7 Acenaphthene	154	4.937	4.937	(1.005)	168710	5.00000	5.25
	8 Fluorene	166	5.376	5.376	(1.095)	195748	5.00000	5.25
*	9 Phenanthrene-d10	188	6.162	6.162	(1.000)	83324	2.00000	
	10 Phenanthrene	178	6.184	6.184	(1.003)	263106	5.00000	5.32
	11 Anthracene	178	6.226	6.226	(1.010)	255464	5.00000	5.32
$	15 o-Terphenyl	230	6.494	6.494	(0.766)	179634	5.00000	4.90
	12 Fluoranthene	202	7.189	7.189	(1.167)	309103	5.00000	5.36
	14 Pyrene	202	7.382	7.382	(0.871)	320036	5.00000	5.03
	16 Benzo(a)Anthracene	228	8.467	8.467	(0.999)	257391	5.00000	5.32
*	13 Chrysene-d12	240	8.473	8.473	(1.000)	72089	2.00000	
	17 Chrysene	228	8.500	8.500	(1.003)	251185	5.00000	5.37
	19 Benzo(b)fluoranthene	252	9.414	9.414	(0.965)	264968	5.00000	5.38
	20 Benzo(k)fluoranthene	252	9.436	9.436	(0.967)	245237	5.00000	5.09
	21 Benzo(a)pyrene	252	9.703	9.703	(0.995)	220028	5.00000	5.36
*	18 Perylene-d12	264	9.757	9.757	(1.000)	66243	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	10.906	10.906	(1.287)	246836	5.00000	5.79
	23 Dibenzo(a,h)anthracene	278	10.928	10.928	(1.120)	199440	5.00000	5.61
	24 Benzo(g,h,i)perylene	276	11.243	11.243	(1.152)	204002	5.00000	5.57

Data File: yl2108q.d

Date: 21-DEC-2012 11:59

Client ID: Instrument: MSY5975.i

Sample Info: IC-2897219; LLPAH5 Operator: VHB



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/1y122112.b/yl2109q.d
Lab Smp Id: IC-2897222; LLPAH3
Inj Date : 21-DEC-2012 12:22
Operator : VHB Inst ID: MSY5975.i
Smp Info : IC-2897222; LLPAH3
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/1y122112.b/Y-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 12:42 chemist Quant Type: ISTD
Cal Date : 21-DEC-2012 12:22 Cal File: yl2109q.d
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

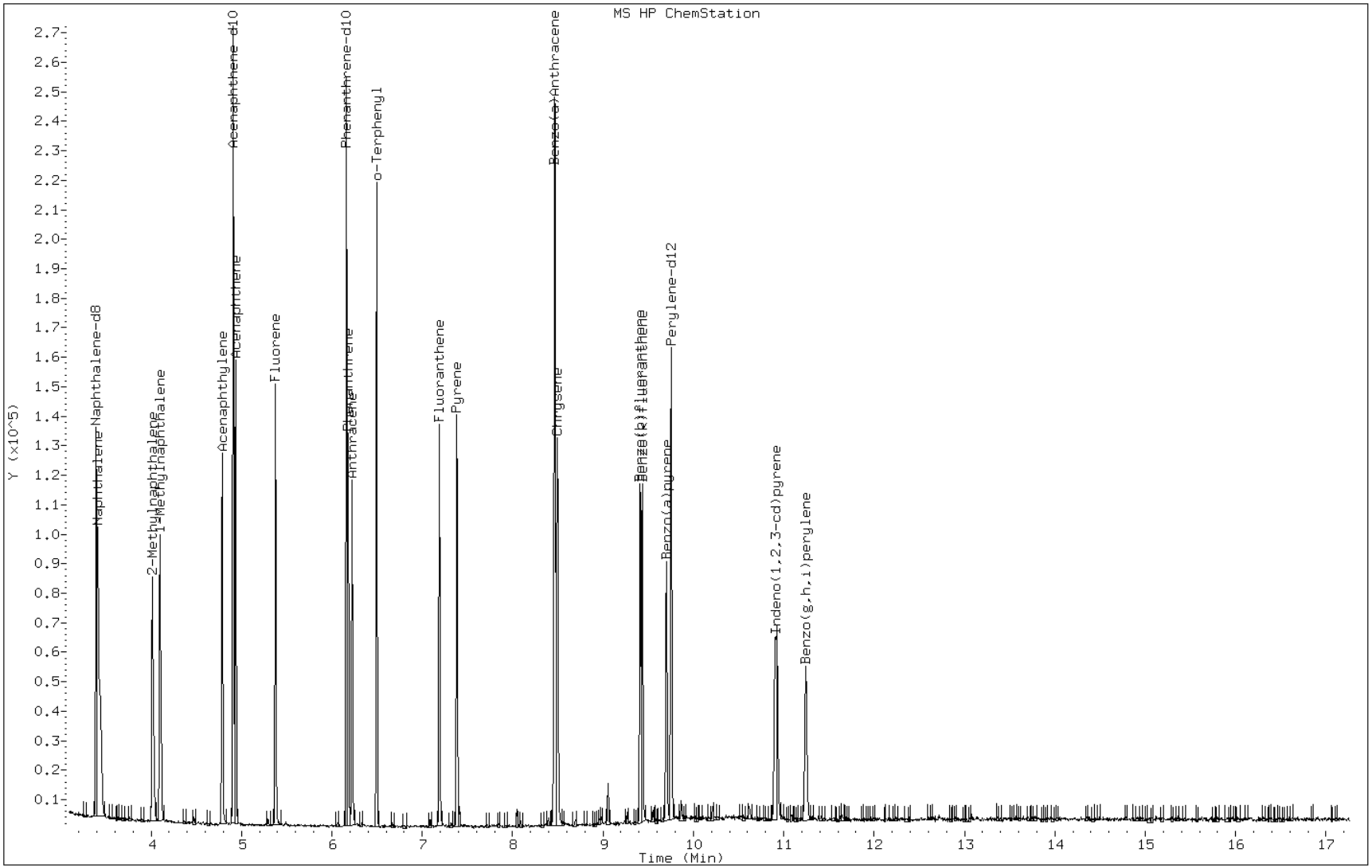
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	3.392	3.392	(1.000)	103455	2.00000	
	2 Naphthalene	128	3.408	3.408	(1.005)	58580	1.00000	0.95
	3 2-Methylnaphthalene	142	4.012	4.012	(1.183)	36650	1.00000	0.96
	4 1-Methylnaphthalene	142	4.098	4.098	(1.208)	38990	1.00000	0.98
	6 Acenaphthylene	152	4.788	4.788	(0.975)	60647	1.00000	0.96
*	5 Acenaphthene-d10	164	4.911	4.911	(1.000)	61643	2.00000	
	7 Acenaphthene	154	4.938	4.938	(1.005)	36185	1.00000	0.99
	8 Fluorene	166	5.376	5.376	(1.095)	39852	1.00000	0.96
*	9 Phenanthrene-d10	188	6.162	6.162	(1.000)	89960	2.00000	
	10 Phenanthrene	178	6.178	6.178	(1.003)	53096	1.00000	0.99
	11 Anthracene	178	6.227	6.227	(1.010)	49878	1.00000	0.97
$	15 o-Terphenyl	230	6.494	6.494	(0.766)	37029	1.00000	0.99
	12 Fluoranthene	202	7.189	7.189	(1.167)	61851	1.00000	0.99
	14 Pyrene	202	7.382	7.382	(0.871)	63932	1.00000	0.98
	16 Benzo(a)Anthracene	228	8.462	8.462	(0.999)	51093	1.00000	1.02
*	13 Chrysene-d12	240	8.473	8.473	(1.000)	73697	2.00000	
	17 Chrysene	228	8.494	8.494	(1.003)	52203	1.00000	1.06
	19 Benzo(b)fluoranthene	252	9.414	9.414	(0.965)	57417	1.00000	1.11
	20 Benzo(k)fluoranthene	252	9.436	9.436	(0.967)	54714	1.00000	1.09
	21 Benzo(a)pyrene	252	9.703	9.703	(0.995)	42487	1.00000	1.02
*	18 Perylene-d12	264	9.757	9.757	(1.000)	66703	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	10.901	10.901	(1.287)	46096	1.00000	1.04
	23 Dibenzo(a,h)anthracene	278	10.928	10.928	(1.120)	39799	1.00000	1.08
	24 Benzo(g,h,i)perylene	276	11.244	11.244	(1.152)	40323	1.00000	1.06

Data File: yl2109q.d

Date: 21-DEC-2012 12:22

Client ID: Instrument: MSY5975.i

Sample Info: IC-2897222; LLPAH3 Operator: VHB



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/1y122112.b/yl2110q.d
Lab Smp Id: IC-2898498; LLPAH2
Inj Date : 21-DEC-2012 12:44
Operator : VHB Inst ID: MSY5975.i
Smp Info : IC-2898498; LLPAH2
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/1y122112.b/Y-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 13:04 chemist Quant Type: ISTD
Cal Date : 21-DEC-2012 12:44 Cal File: yl2110q.d
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

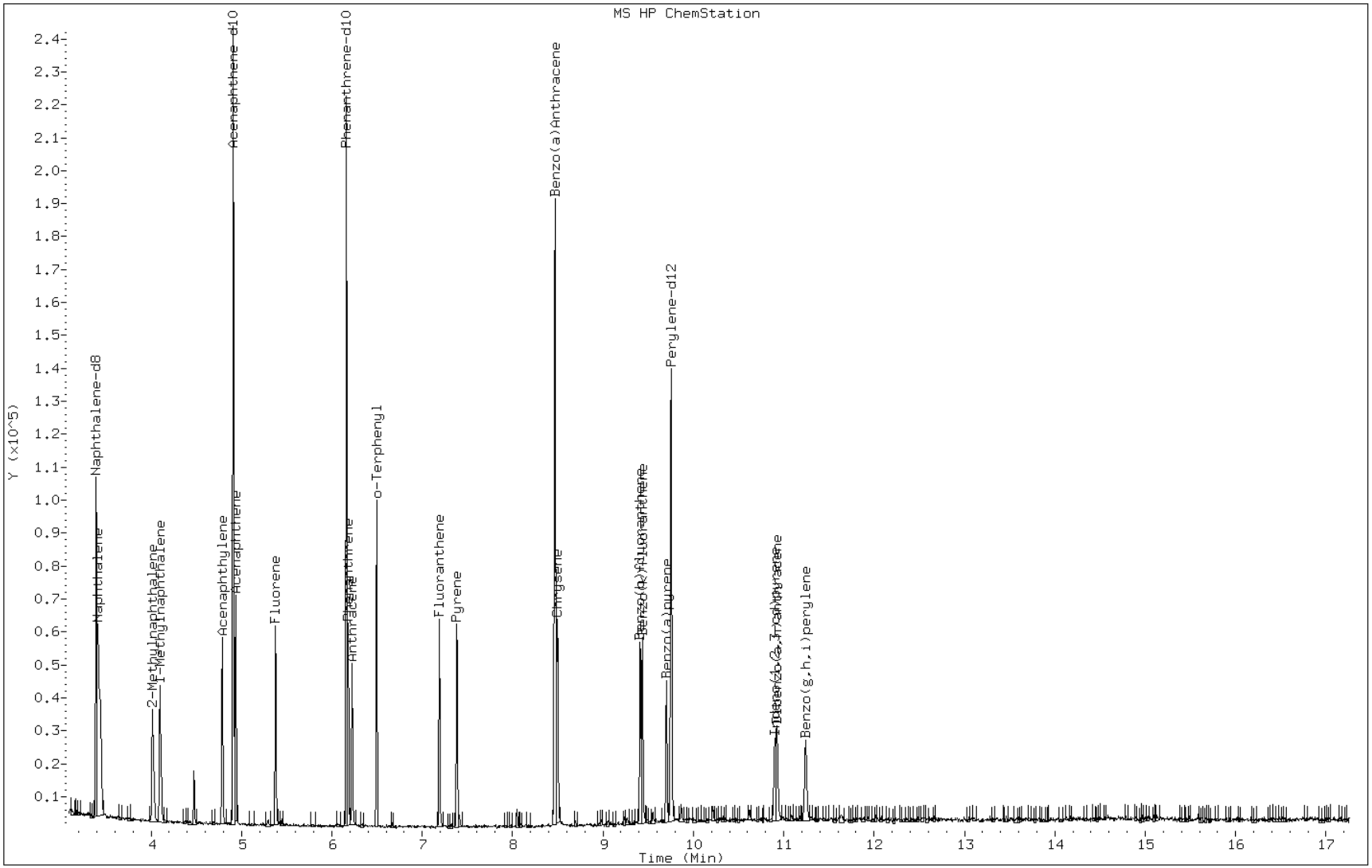
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	3.392	3.392	(1.000)	94162	2.00000	
	2 Naphthalene	128	3.413	3.413	(1.006)	26615	0.50000	0.48
	3 2-Methylnaphthalene	142	4.012	4.012	(1.183)	16956	0.50000	0.49
	4 1-Methylnaphthalene	142	4.098	4.098	(1.208)	17483	0.50000	0.48
	6 Acenaphthylene	152	4.788	4.788	(0.975)	27524	0.50000	0.49
*	5 Acenaphthene-d10	164	4.911	4.911	(1.000)	54106	2.00000	
	7 Acenaphthene	154	4.938	4.938	(1.005)	15814	0.50000	0.49
	8 Fluorene	166	5.376	5.376	(1.095)	18543	0.50000	0.50
*	9 Phenanthrene-d10	188	6.162	6.162	(1.000)	79146	2.00000	
	10 Phenanthrene	178	6.184	6.184	(1.003)	24440	0.50000	0.51
	11 Anthracene	178	6.227	6.227	(1.010)	21776	0.50000	0.48
$	15 o-Terphenyl	230	6.494	6.494	(0.766)	18185	0.50000	0.52
	12 Fluoranthene	202	7.189	7.189	(1.167)	27335	0.50000	0.50
	14 Pyrene	202	7.382	7.382	(0.871)	29581	0.50000	0.50
	16 Benzo(a)Anthracene	228	8.462	8.462	(0.999)	23292	0.50000	0.51
*	13 Chrysene-d12	240	8.473	8.473	(1.000)	66828	2.00000	
	17 Chrysene	228	8.494	8.494	(1.003)	26299	0.50000	0.57
	19 Benzo(b)fluoranthene	252	9.409	9.409	(0.964)	27084	0.50000	0.55
	20 Benzo(k)fluoranthene	252	9.436	9.436	(0.967)	31185	0.50000	0.63
	21 Benzo(a)pyrene	252	9.703	9.703	(0.995)	21221	0.50000	0.54
*	18 Perylene-d12	264	9.757	9.757	(1.000)	61228	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	10.901	10.901	(1.287)	22339	0.50000	0.54
	23 Dibenzo(a,h)anthracene	278	10.928	10.928	(1.120)	19225	0.50000	0.55
	24 Benzo(g,h,i)perylene	276	11.244	11.244	(1.152)	20311	0.50000	0.56

Data File: yl2110q.d

Date: 21-DEC-2012 12:44

Client ID: Instrument: MSY5975.i

Sample Info: IC-2898498; LLPAH2 Operator: VHB



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/1y122112.b/yl2111q.d
Lab Smp Id: IC-2898499; LLPAH1
Inj Date : 21-DEC-2012 13:07
Operator : VHB Inst ID: MSY5975.i
Smp Info : IC-2898499; LLPAH1
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/1y122112.b/Y-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 13:24 chemist Quant Type: ISTD
Cal Date : 21-DEC-2012 13:07 Cal File: yl2111q.d
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	3.392	3.392	(1.000)	89400	2.00000	
	2 Naphthalene	128	3.413	3.413	(1.006)	10928	0.20000	0.20
	3 2-Methylnaphthalene	142	4.012	4.012	(1.183)	6807	0.20000	0.20
	4 1-Methylnaphthalene	142	4.098	4.098	(1.208)	7680	0.20000	0.22
	6 Acenaphthylene	152	4.788	4.788	(0.975)	11991	0.20000	0.21
*	5 Acenaphthene-d10	164	4.911	4.911	(1.000)	53010	2.00000	
	7 Acenaphthene	154	4.937	4.937	(1.005)	8080	0.20000	0.24
	8 Fluorene	166	5.376	5.376	(1.095)	8214	0.20000	0.22
*	9 Phenanthrene-d10	188	6.162	6.162	(1.000)	78461	2.00000	
	10 Phenanthrene	178	6.184	6.184	(1.003)	11432	0.20000	0.23
	11 Anthracene	178	6.227	6.227	(1.010)	11365	0.20000	0.24
$	15 o-Terphenyl	230	6.494	6.494	(0.766)	8370	0.20000	0.23(T)
	12 Fluoranthene	202	7.189	7.189	(1.167)	13975	0.20000	0.24
	14 Pyrene	202	7.382	7.382	(0.871)	14092	0.20000	0.23
	16 Benzo(a)Anthracene	228	8.462	8.462	(0.999)	11775	0.20000	0.25
*	13 Chrysene-d12	240	8.473	8.473	(1.000)	65291	2.00000	
	17 Chrysene	228	8.500	8.500	(1.003)	12618	0.20000	0.26
	19 Benzo(b)fluoranthene	252	9.414	9.414	(0.965)	14066	0.20000	0.26
	20 Benzo(k)fluoranthene	252	9.436	9.436	(0.967)	12592	0.20000	0.23
	21 Benzo(a)pyrene	252	9.703	9.703	(0.995)	11131	0.20000	0.26
*	18 Perylene-d12	264	9.757	9.757	(1.000)	62887	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	10.907	10.907	(1.287)	11792	0.20000	0.27
	23 Dibenzo(a,h)anthracene	278	10.928	10.928	(1.120)	10530	0.20000	0.27
	24 Benzo(g,h,i)perylene	276	11.244	11.244	(1.152)	10590	0.20000	0.26

QC Flag Legend

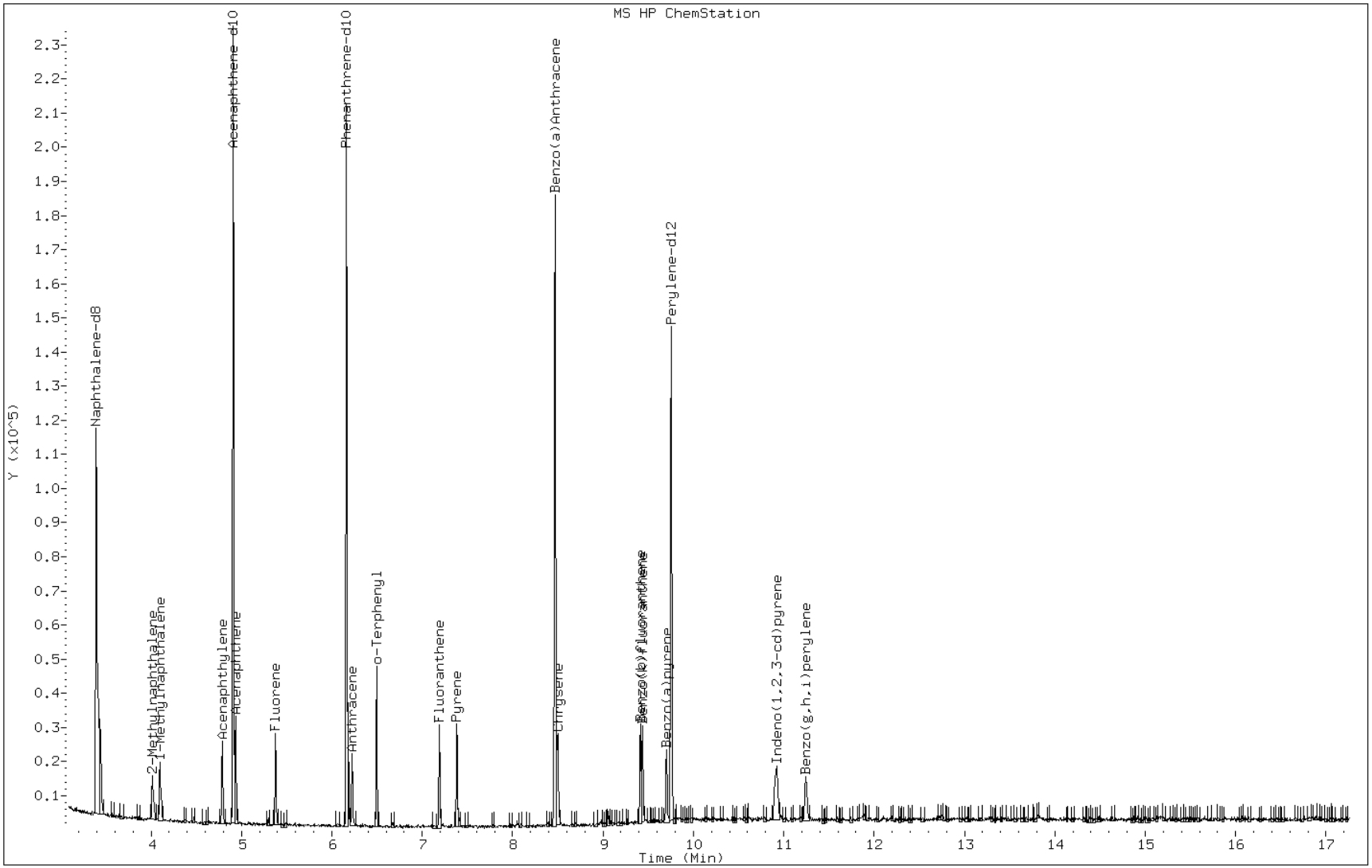
T - Target compound detected outside RT window.

Data File: yl2111q.d

Date: 21-DEC-2012 13:07

Client ID: Instrument: MSY5975.i

Sample Info: IC-2898499; LLPAH1 Operator: VHB



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/1y122112.b/yl2112q.d
Lab Smp Id: IC-2897220; LLPAH4
Inj Date : 21-DEC-2012 13:30
Operator : VHB Inst ID: MSY5975.i
Smp Info : IC-2897220; LLPAH4
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/1y122112.b/Y-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 14:12 chemist Quant Type: ISTD
Cal Date : 21-DEC-2012 13:30 Cal File: yl2112q.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

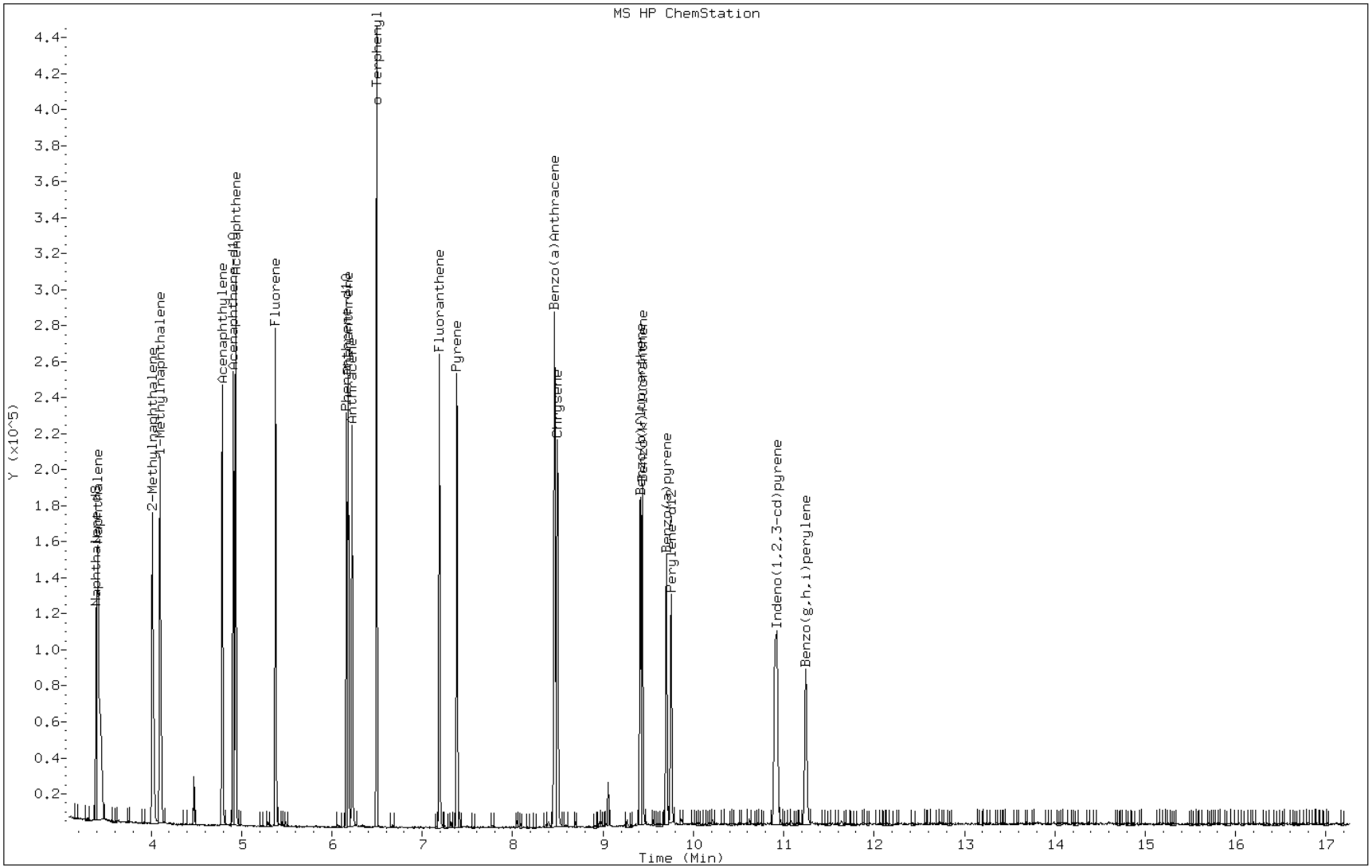
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
* 1 Naphthalene-d8	136	3.392	3.392	(1.000)	97972	2.00000	
2 Naphthalene	128	3.413	3.413	(1.006)	115402	2.00000	1.99
3 2-Methylnaphthalene	142	4.012	4.012	(1.183)	71128	2.00000	1.97
4 1-Methylnaphthalene	142	4.098	4.098	(1.208)	74017	2.00000	1.95
6 Acenaphthylene	152	4.788	4.788	(0.975)	114203	2.00000	1.93
* 5 Acenaphthene-d10	164	4.911	4.911	(1.000)	57081	2.00000	
7 Acenaphthene	154	4.937	4.937	(1.005)	67757	2.00000	1.93
8 Fluorene	166	5.376	5.376	(1.095)	74992	2.00000	1.91
* 9 Phenanthrene-d10	188	6.162	6.162	(1.000)	82260	2.00000	
10 Phenanthrene	178	6.184	6.184	(1.003)	98330	2.00000	1.94
11 Anthracene	178	6.226	6.226	(1.010)	93551	2.00000	1.93
$ 15 o-Terphenyl	230	6.494	6.494	(0.766)	73277	2.00000	2.09
12 Fluoranthene	202	7.189	7.189	(1.167)	112469	2.00000	1.90
14 Pyrene	202	7.382	7.382	(0.871)	112506	2.00000	1.91
16 Benzo(a)Anthracene	228	8.462	8.462	(0.999)	83057	2.00000	1.80
* 13 Chrysene-d12	240	8.473	8.473	(1.000)	64790	2.00000	
17 Chrysene	228	8.494	8.494	(1.003)	86980	2.00000	2.12
19 Benzo(b)fluoranthene	252	9.414	9.414	(0.965)	92199	2.00000	2.15
20 Benzo(k)fluoranthene	252	9.436	9.436	(0.967)	84319	2.00000	1.93
21 Benzo(a)pyrene	252	9.703	9.703	(0.995)	70763	2.00000	2.00
* 18 Perylene-d12	264	9.757	9.757	(1.000)	58444	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	10.906	10.906	(1.287)	80004	2.00000	2.27
23 Dibenzo(a,h)anthracene	278	10.928	10.928	(1.120)	64729	2.00000	2.18
24 Benzo(g,h,i)perylene	276	11.243	11.243	(1.152)	67846	2.00000	2.21

Data File: yl2112q.d

Date: 21-DEC-2012 13:30

Client ID: Instrument: MSY5975.i

Sample Info: IC-2897220; LLPAH4 Operator: VHB



FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-85980-1 Analy Batch No.: 261663

SDG No.: 68085980-1

Instrument ID: MSY GC Column: HP-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/02/2013 17:06 Calibration End Date: 01/02/2013 19:25 Calibration ID: 15404

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-261663/7	ya0207q.d
Level 2	IC 680-261663/6	ya0206q.d
Level 3	IC 680-261663/5	ya0205q.d
Level 4	ICIS 680-261663/8	ya0208q.d
Level 5	IC 680-261663/4	ya0204q.d
Level 6	IC 680-261663/3	ya0203q.d
Level 7	IC 680-261663/2	ya0202q.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 4	LVL 5		B	M1	M2								
Naphthalene	1.2227 1.1579	1.1457 1.1714	1.1089	1.1825	1.2371	Ave		1.1752				3.8		15.0			
2-Methylnaphthalene	0.7524 0.7267	0.6886 0.7498	0.6808	0.7156	0.7829	Ave		0.7281				5.0		15.0			
1-Methylnaphthalene	0.7527 0.7385	0.7195 0.7690	0.6915	0.7337	0.7881	Ave		0.7419				4.3		15.0			
Acenaphthylene	2.0221 1.9965	1.8497 2.0223	1.8613	2.0175	2.1382	Ave		1.9875				5.1		15.0			
Acenaphthene	1.2962 1.1940	1.1891 1.2123	1.1400	1.2201	1.2816	Ave		1.2190				4.5		15.0			
Fluorene	1.3899 1.3557	1.2415 1.3813	1.2431	1.3268	1.4443	Ave		1.3404				5.7		15.0			
Phenanthrene	1.4244 1.2866	1.2668 1.2799	1.2305	1.3042	1.4089	Ave		1.3145				5.6		15.0			
Anthracene	1.2930 1.2574	1.1476 1.2680	1.1556	1.2409	1.3751	Ave		1.2482				6.3		15.0			
Fluoranthene	1.2750 1.2169	1.1093 1.2323	1.1298	1.2290	1.3056	Ave		1.2140				5.9		15.0			
Pyrene	1.8174 1.7645	1.7200 1.7153	1.6494	1.6195	1.8940	Ave		1.7397				5.5		15.0			
Benzo[a]anthracene	2.0486 1.2939	1.5839 1.3002	1.3890	1.2805	1.3996	LinF		1.3045							0.9995		
Chrysene	2.2663 1.2672	1.6952 1.2931	1.4011	1.3489	1.4111	LinF		1.2954							0.9990		
Benzo[b]fluoranthene	1.9357 1.4097	1.6155 1.3841	1.3382	1.4338	1.4729	Ave		1.5128				13.6		15.0			
Benzo[k]fluoranthene	2.0918 1.4887	1.7265 1.4776	1.3919	1.4846	1.3961	LinF		1.4762							0.9997		

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 Savannah Job No.: 680-85980-1 Analy Batch No.: 261663

SDG No.: 68085980-1

Instrument ID: MSY GC Column: HP-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/02/2013 17:06 Calibration End Date: 01/02/2013 19:25 Calibration ID: 15404

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 4	LVL 5		B	M1	M2								
Benzo[a]pyrene	1.4640 1.1152	1.1475 1.1699	1.0704	1.0970	1.2019	Ave		1.1808				11.2		15.0			
Indeno[1,2,3-cd]pyrene	1.2191 1.2248	1.0841 1.2060	1.0603	1.3170	1.3202	Ave		1.2051				8.5		15.0			
Dibenz(a,h)anthracene	1.1047 1.0690	0.9932 1.0929	0.9322	1.0474	1.1327	Ave		1.0532				6.6		15.0			
Benzo[g,h,i]perylene	1.2345 1.1056	1.0792 1.1046	1.0176	1.1376	1.1839	Ave		1.1233				6.3		15.0			
o-Terphenyl	1.1054 1.0162	1.1204 0.9700	0.9739	0.9409	1.1065	Ave		1.0333				7.3		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 Savannah Job No.: 680-85980-1 Analy Batch No.: 261663

SDG No.: 68085980-1

Instrument ID: MSY GC Column: HP-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/02/2013 17:06 Calibration End Date: 01/02/2013 19:25 Calibration ID: 15404

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-261663/7	ya0207q.d
Level 2	IC 680-261663/6	ya0206q.d
Level 3	IC 680-261663/5	ya0205q.d
Level 4	ICIS 680-261663/8	ya0208q.d
Level 5	IC 680-261663/4	ya0204q.d
Level 6	IC 680-261663/3	ya0203q.d
Level 7	IC 680-261663/2	ya0202q.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Naphthalene	NPT	Ave	35562 1884456	83829 3219920	184121	400147	946055	0.200 10.0	0.500 20.0	1.00	2.00	5.00
2-Methylnaphthalene	NPT	Ave	21883 1182680	50384 2060988	113031	242155	598684	0.200 10.0	0.500 20.0	1.00	2.00	5.00
1-Methylnaphthalene	NPT	Ave	21893 1201868	52648 2113901	114821	248286	602652	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Acenaphthylene	ANT	Ave	31056 1805695	72765 3191076	164260	359508	903609	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Acenaphthene	ANT	Ave	19907 1079839	46778 1912868	100606	217404	541625	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Fluorene	ANT	Ave	21347 1226067	48841 2179537	109705	236424	610371	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Phenanthrene	PHN	Ave	28050 1574546	63300 2823113	143951	310251	781180	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Anthracene	PHN	Ave	25462 1538863	57344 2796724	135192	295193	762444	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Fluoranthene	PHN	Ave	25108 1489243	55429 2718010	132174	292362	723893	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Pyrene	CRY	Ave	25277 1515310	57030 2754510	135745	302697	743501	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[a]anthracene	CRY	LinF	28493 1111146	52515 2087950	114316	239343	549424	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Chrysene	CRY	LinF	31521 1088219	56207 2076480	115311	252128	553957	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[b]fluoranthene	PRY	Ave	25424 1137930	50680 2014350	103499	270509	552337	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[k]fluoranthene	PRY	LinF	27475 1201696	54163 2150474	107654	280093	523535	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[a]pyrene	PRY	Ave	19229 900178	35998 1702644	82784	206970	450733	0.200 10.0	0.500 20.0	1.00	2.00	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-85980-1 Analy Batch No.: 261663

SDG No.: 68085980-1

Instrument ID: MSY GC Column: HP-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/02/2013 17:06 Calibration End Date: 01/02/2013 19:25 Calibration ID: 15404

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Indeno[1,2,3-cd]pyrene	CRY	Ave	16956 1051787	35944 1936657	87267	246149	518245	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Dibenz(a,h)anthracene	PRY	Ave	14510 862893	31158 1590533	72096	197612	424758	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[g,h,i]perylene	PRY	Ave	16214 892416	33856 1607638	78706	214628	443976	0.200 10.0	0.500 20.0	1.00	2.00	5.00
o-Terphenyl	CRY	Ave	15374 872684	37148 1557608	80149	175854	434386	0.200 10.0	0.500 20.0	1.00	2.00	5.00

Curve Type Legend:

Ave = Average ISTD
LinF = Linear ISTD forced zero

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y010213.b/ya0202q.d
Lab Smp Id: IC-2897217; LLPAH7
Inj Date : 02-JAN-2013 17:06
Operator : VHB Inst ID: MSY5975.i
Smp Info : IC-2897217; LLPAH7
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y010213.b/Y-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 17:22 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 17:06 Cal File: ya0202q.d
Als bottle: 3 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.713	4.713	(1.000)	274885	2.00000	
	2 Naphthalene	128	4.734	4.734	(1.005)	3219920	20.0000	20.00
	3 2-Methylnaphthalene	142	5.333	5.333	(1.132)	2060988	20.0000	20.00
	4 1-Methylnaphthalene	142	5.424	5.424	(1.151)	2113901	20.0000	20.00
	6 Acenaphthylene	152	6.136	6.136	(0.980)	3191076	20.0000	20.00
*	5 Acenaphthene-d10	164	6.259	6.259	(1.000)	157792	2.00000	
	7 Acenaphthene	154	6.285	6.285	(1.004)	1912868	20.0000	20.00
	8 Fluorene	166	6.735	6.735	(1.076)	2179537	20.0000	20.00
*	9 Phenanthrene-d10	188	7.564	7.564	(1.000)	220568	2.00000	
	10 Phenanthrene	178	7.590	7.590	(1.004)	2823113	20.0000	20.00
	11 Anthracene	178	7.633	7.633	(1.009)	2796724	20.0000	20.00
$	15 o-Terphenyl	230	7.874	7.874	(0.781)	1557608	20.0000	20.00
	12 Fluoranthene	202	8.676	8.676	(1.147)	2718010	20.0000	20.00
	14 Pyrene	202	8.895	8.895	(0.882)	2754510	20.0000	20.00
	16 Benzo(a)Anthracene	228	10.072	10.072	(0.998)	2087950	20.0000	20.00
*	13 Chrysene-d12	240	10.088	10.088	(1.000)	160586	2.00000	
	17 Chrysene	228	10.120	10.120	(1.003)	2076480	20.0000	20.00
	19 Benzo(b)fluoranthene	252	11.468	11.468	(0.949)	2014350	20.0000	20.00
	20 Benzo(k)fluoranthene	252	11.506	11.506	(0.952)	2150474	20.0000	20.00
	21 Benzo(a)pyrene	252	11.992	11.992	(0.992)	1702644	20.0000	20.00
*	18 Perylene-d12	264	12.083	12.083	(1.000)	145537	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.244	14.244	(1.412)	1936657	20.0000	20.00
	23 Dibenzo(a,h)anthracene	278	14.255	14.255	(1.180)	1590533	20.0000	20.00(A)
	24 Benzo(g,h,i)perylene	276	14.918	14.720	(1.235)	1607638	20.0000	20.00(H)

QC Flag Legend

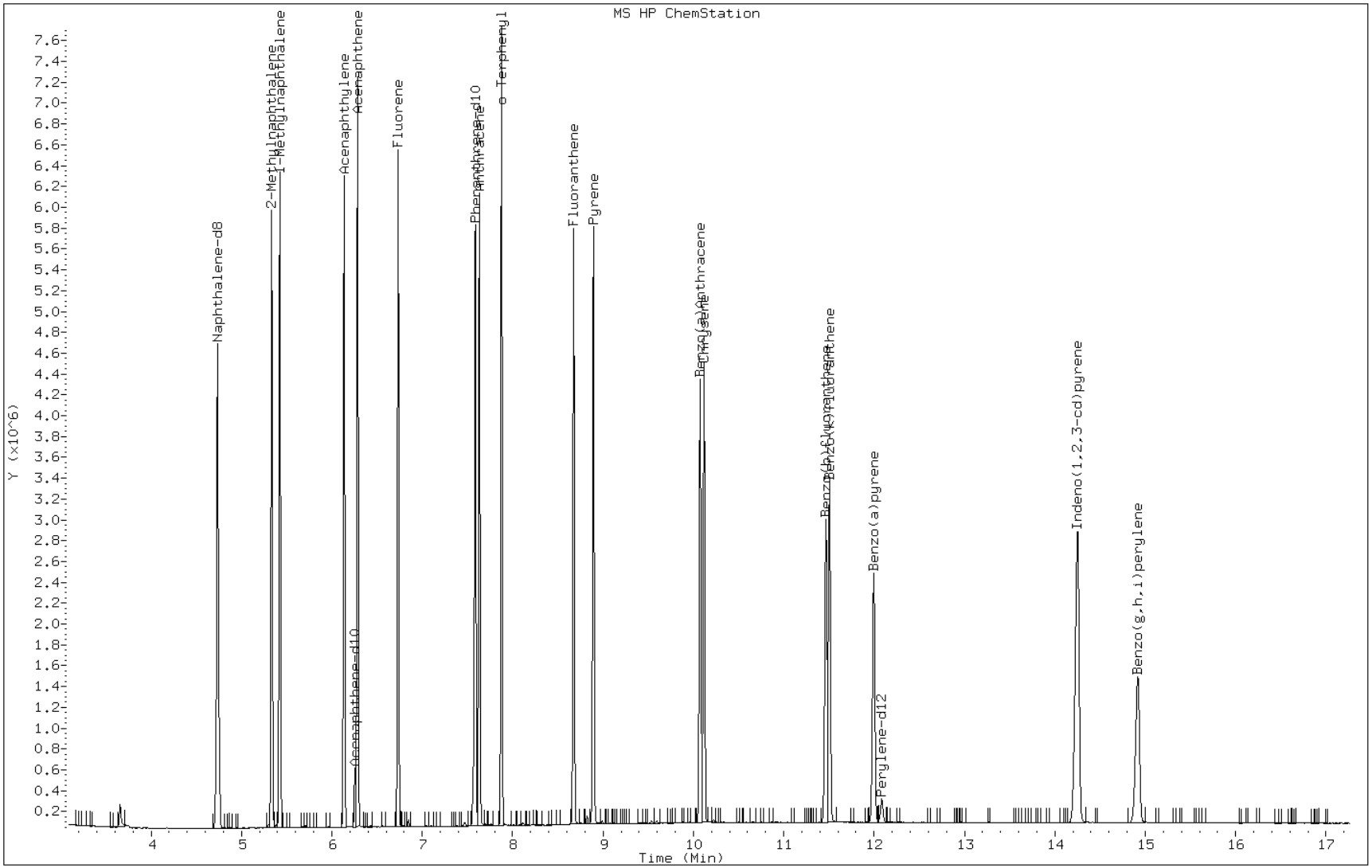
A - Target compound detected but, quantitated amount
    exceeded maximum amount.
H - Operator selected an alternate compound hit.

Data File: ya0202q.d

Date: 02-JAN-2013 17:06

Client ID: Instrument: MSY5975.i

Sample Info: IC-2897217; LLPAH7 Operator: VHB



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y010213.b/ya0203q.d
Lab Smp Id: IC-2897218; LLPAH6
Inj Date : 02-JAN-2013 17:29
Operator : VHB Inst ID: MSY5975.i
Smp Info : IC-2897218; LLPAH6
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y010213.b/Y-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 17:44 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 17:29 Cal File: ya0203q.d
Als bottle: 4 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

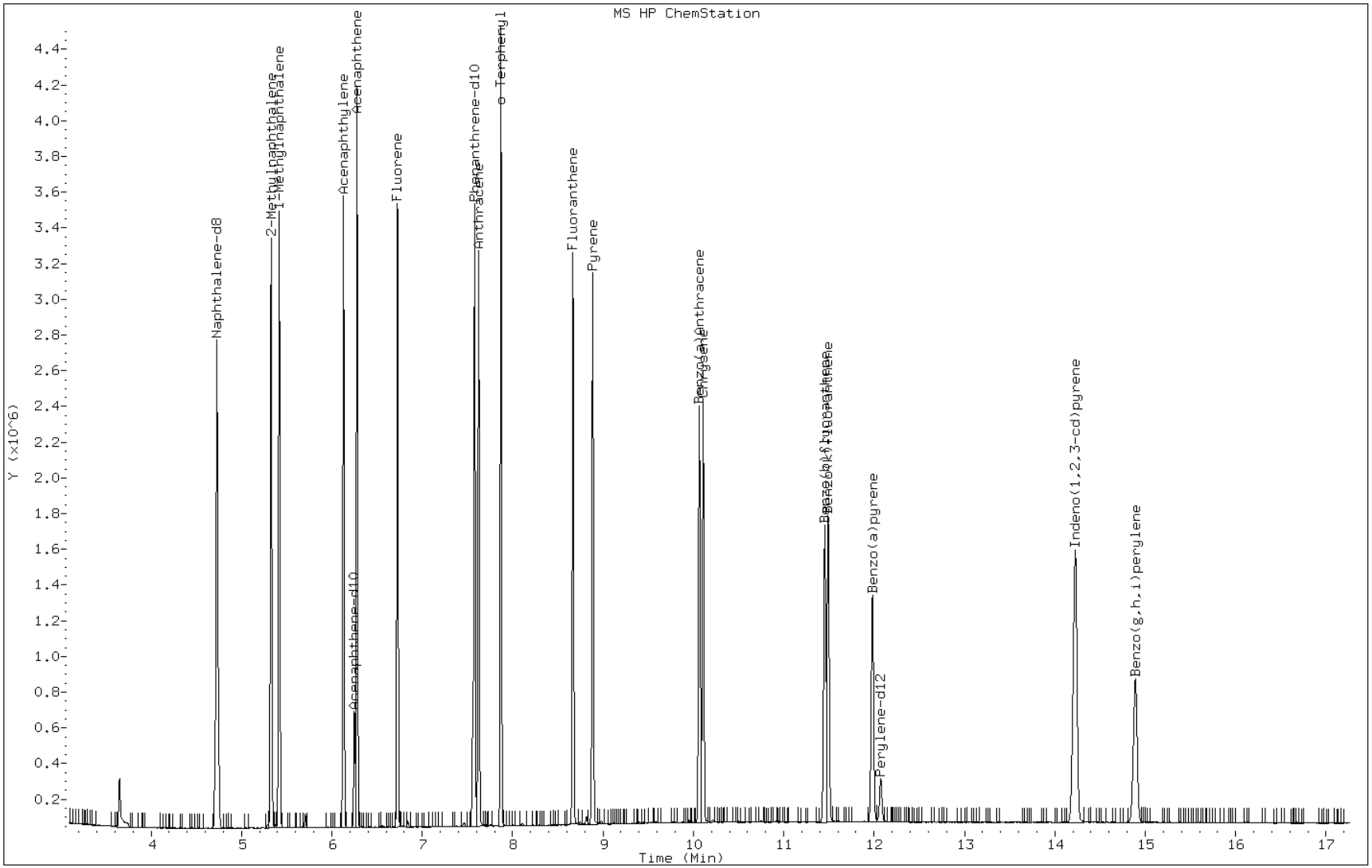
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.708	4.708	(1.000)	325508	2.00000	
	2 Naphthalene	128	4.729	4.729	(1.005)	1884456	10.0000	9.94
	3 2-Methylnaphthalene	142	5.328	5.328	(1.132)	1182680	10.0000	9.84
	4 1-Methylnaphthalene	142	5.419	5.419	(1.151)	1201868	10.0000	9.79
	6 Acenaphthylene	152	6.130	6.130	(0.981)	1805695	10.0000	9.93
*	5 Acenaphthene-d10	164	6.248	6.248	(1.000)	180882	2.00000	
	7 Acenaphthene	154	6.280	6.280	(1.005)	1079839	10.0000	9.92
	8 Fluorene	166	6.724	6.724	(1.076)	1226067	10.0000	9.90
*	9 Phenanthrene-d10	188	7.558	7.558	(1.000)	244762	2.00000	
	10 Phenanthrene	178	7.580	7.580	(1.003)	1574546	10.0000	10.02
	11 Anthracene	178	7.628	7.628	(1.009)	1538863	10.0000	9.95
$	15 o-Terphenyl	230	7.869	7.869	(0.781)	872684	10.0000	10.23
	12 Fluoranthene	202	8.666	8.666	(1.146)	1489243	10.0000	9.93
	14 Pyrene	202	8.885	8.885	(0.882)	1515310	10.0000	10.14
	16 Benzo(a)Anthracene	228	10.067	10.067	(0.999)	1111146	10.0000	9.97
*	13 Chrysene-d12	240	10.078	10.078	(1.000)	171755	2.00000	
	17 Chrysene	228	10.110	10.110	(1.003)	1088219	10.0000	9.89
	19 Benzo(b)fluoranthene	252	11.452	11.452	(0.949)	1137930	10.0000	10.09
	20 Benzo(k)fluoranthene	252	11.490	11.490	(0.952)	1201696	10.0000	10.03
	21 Benzo(a)pyrene	252	11.982	11.982	(0.992)	900178	10.0000	9.76
*	18 Perylene-d12	264	12.073	12.073	(1.000)	161438	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.223	14.223	(1.411)	1051787	10.0000	10.07
	23 Dibenzo(a,h)anthracene	278	14.233	14.233	(1.179)	862893	10.0000	9.88
	24 Benzo(g,h,i)perylene	276	14.891	14.891	(1.233)	892416	10.0000	10.00

Data File: ya0203q.d

Date: 02-JAN-2013 17:29

Client ID: Instrument: MSY5975.i

Sample Info: IC-2897218; LLPAH6 Operator: VHB



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y010213.b/ya0204q.d
Lab Smp Id: IC-2897219; LLPAH5
Inj Date : 02-JAN-2013 17:53
Operator : VHB Inst ID: MSY5975.i
Smp Info : IC-2897219; LLPAH5
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y010213.b/Y-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 18:10 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 17:53 Cal File: ya0204q.d
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
* 1 Naphthalene-d8	136	4.713	4.713	(1.000)	305891	2.00000	(a)
2 Naphthalene	128	4.729	4.729	(1.003)	946055	5.00000	5.20(a)
3 2-Methylnaphthalene	142	5.328	5.328	(1.131)	598684	5.00000	5.19(a)
4 1-Methylnaphthalene	142	5.419	5.419	(1.150)	602652	5.00000	5.14(a)
6 Acenaphthylene	152	6.130	6.130	(0.980)	903609	5.00000	5.20(a)
* 5 Acenaphthene-d10	164	6.253	6.253	(1.000)	169041	2.00000	(a)
7 Acenaphthene	154	6.280	6.280	(1.004)	541625	5.00000	5.21(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
8 Fluorene	166	6.729	6.729	(1.076)	610371	5.00000	5.18(a)
* 9 Phenanthrene-d10	188	7.564	7.564	(1.000)	221783	2.00000	(a)
10 Phenanthrene	178	7.585	7.585	(1.003)	781180	5.00000	5.31(a)
11 Anthracene	178	7.628	7.628	(1.008)	762444	5.00000	5.28(a)
$ 15 o-Terphenyl	230	7.868	7.868	(0.780)	434386	5.00000	5.36(a)
12 Fluoranthene	202	8.671	8.671	(1.146)	723893	5.00000	5.21(a)
14 Pyrene	202	8.890	8.890	(0.882)	743501	5.00000	5.28(a)
16 Benzo(a)Anthracene	228	10.067	10.067	(0.998)	549424	5.00000	5.25(a)
* 13 Chrysene-d12	240	10.083	10.083	(1.000)	157024	2.00000	(a)
17 Chrysene	228	10.109	10.109	(1.003)	553957	5.00000	5.32(a)
19 Benzo(b)fluoranthene	252	11.457	11.457	(0.949)	552337	5.00000	5.17(a)
20 Benzo(k)fluoranthene	252	11.495	11.495	(0.952)	523535	5.00000	4.80(a)
21 Benzo(a)pyrene	252	11.982	11.982	(0.992)	450733	5.00000	5.17(a)
* 18 Perylene-d12	264	12.078	12.078	(1.000)	150001	2.00000	(a)
22 Indeno(1,2,3-cd)pyrene	276	14.217	14.217	(1.410)	518245	5.00000	5.27(a)
23 Dibenzo(a,h)anthracene	278	14.233	14.233	(1.178)	424758	5.00000	5.15(a)
24 Benzo(g,h,i)perylene	276	14.891	14.891	(1.233)	443976	5.00000	5.23(a)

QC Flag Legend

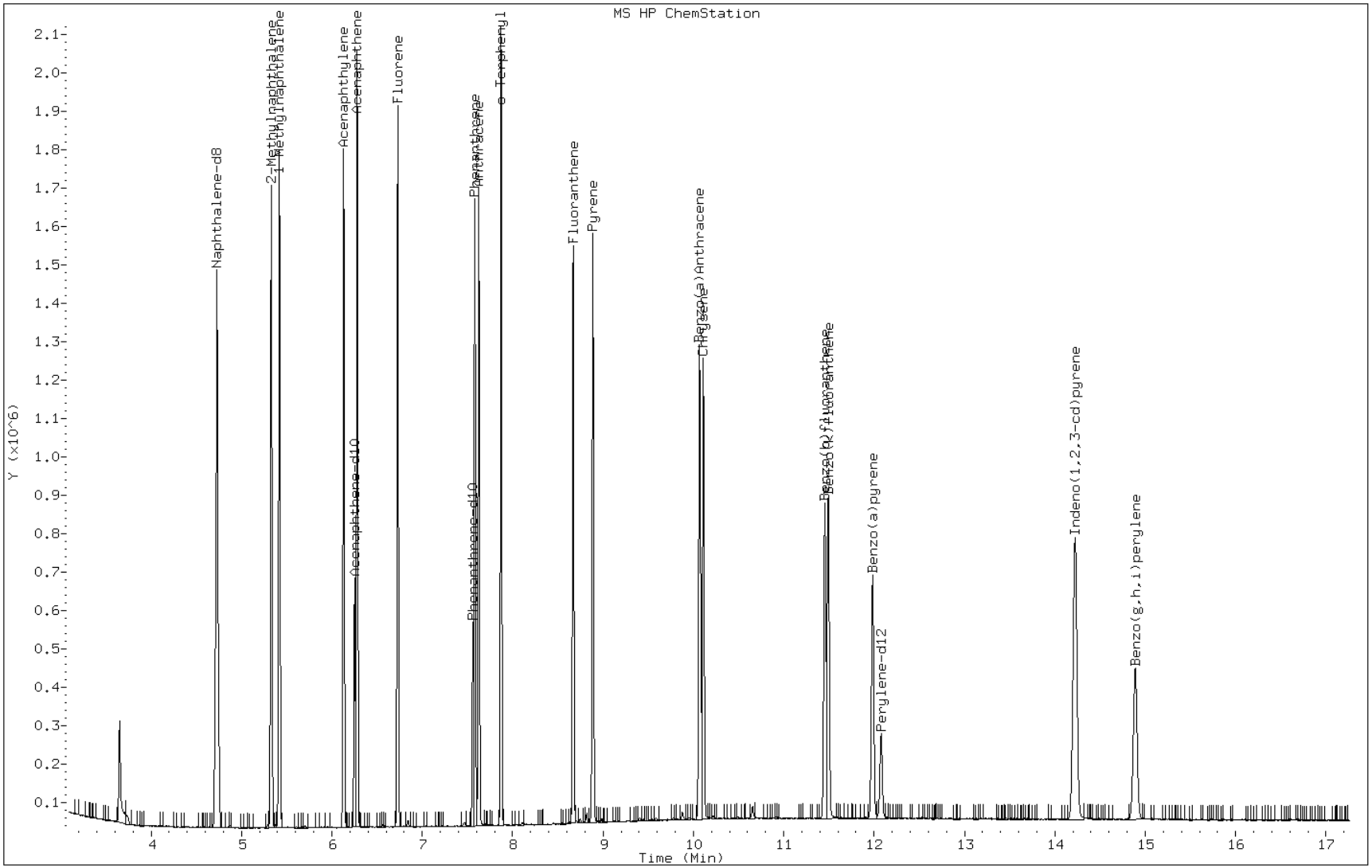
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: ya0204q.d

Date: 02-JAN-2013 17:53

Client ID: Instrument: MSY5975.i

Sample Info: IC-2897219; LLPAH5 Operator: VHB



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y010213.b/ya0205q.d
Lab Smp Id: IC-2897222; LLPAH3
Inj Date : 02-JAN-2013 18:16
Operator : VHB Inst ID: MSY5975.i
Smp Info : IC-2897222; LLPAH3
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y010213.b/Y-b8270CLLPAH-m.m
Meth Date : 03-Jan-2013 07:01 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 18:16 Cal File: ya0205q.d
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

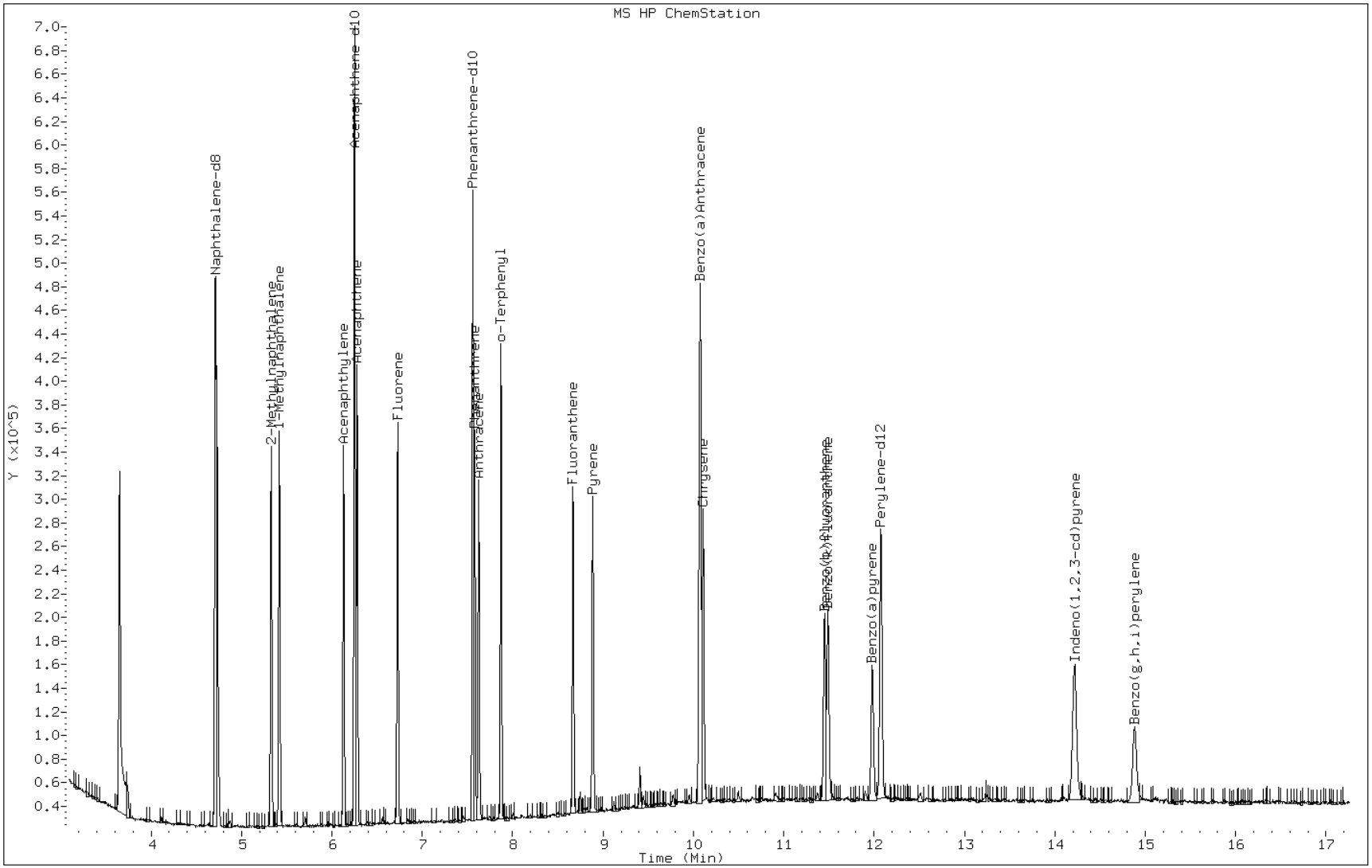
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
* 1 Naphthalene-d8	136	4.707	4.707	(1.000)	332071	2.00000	
2 Naphthalene	128	4.729	4.729	(1.005)	184121	1.00000	0.94
3 2-Methylnaphthalene	142	5.328	5.328	(1.132)	113031	1.00000	0.92
4 1-Methylnaphthalene	142	5.419	5.419	(1.151)	114821	1.00000	0.92
6 Acenaphthylene	152	6.130	6.130	(0.980)	164260	1.00000	0.92
* 5 Acenaphthene-d10	164	6.253	6.253	(1.000)	176503	2.00000	
7 Acenaphthene	154	6.280	6.280	(1.004)	100606	1.00000	0.94
8 Fluorene	166	6.729	6.729	(1.076)	109705	1.00000	0.91
* 9 Phenanthrene-d10	188	7.558	7.558	(1.000)	233971	2.00000	
10 Phenanthrene	178	7.580	7.580	(1.003)	143951	1.00000	0.94
11 Anthracene	178	7.628	7.628	(1.009)	135192	1.00000	0.91
$ 15 o-Terphenyl	230	7.868	7.868	(0.781)	80149	1.00000	0.95
12 Fluoranthene	202	8.665	8.665	(1.146)	132174	1.00000	0.92
14 Pyrene	202	8.890	8.890	(0.882)	135745	1.00000	0.93
16 Benzo(a)Anthracene	228	10.067	10.067	(0.999)	114316	1.00000	1.03
* 13 Chrysene-d12	240	10.077	10.077	(1.000)	164601	2.00000	
17 Chrysene	228	10.110	10.110	(1.003)	115311	1.00000	1.04
19 Benzo(b)fluoranthene	252	11.452	11.452	(0.949)	103499	1.00000	0.95
20 Benzo(k)fluoranthene	252	11.489	11.489	(0.952)	107654	1.00000	0.96
21 Benzo(a)pyrene	252	11.976	11.976	(0.992)	82784	1.00000	0.93
* 18 Perylene-d12	264	12.072	12.072	(1.000)	154685	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	14.212	14.212	(1.410)	87267	1.00000	0.88
23 Dibenzo(a,h)anthracene	278	14.223	14.223	(1.178)	72096	1.00000	0.88
24 Benzo(g,h,i)perylene	276	14.880	14.880	(1.233)	78706	1.00000	0.92

Data File: ya0205q.d

Date: 02-JAN-2013 18:16

Client ID: Instrument: MSY5975.i

Sample Info: IC-2897222; LLPAH3 Operator: VHB



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y010213.b/ya0206q.d
Lab Smp Id: IC-2898498;LLPAH2
Inj Date : 02-JAN-2013 18:39
Operator : VHB Inst ID: MSY5975.i
Smp Info : IC-2898498;LLPAH2
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y010213.b/Y-b8270CLLPAH-m.m
Meth Date : 03-Jan-2013 07:01 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 18:39 Cal File: ya0206q.d
Als bottle: 7 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

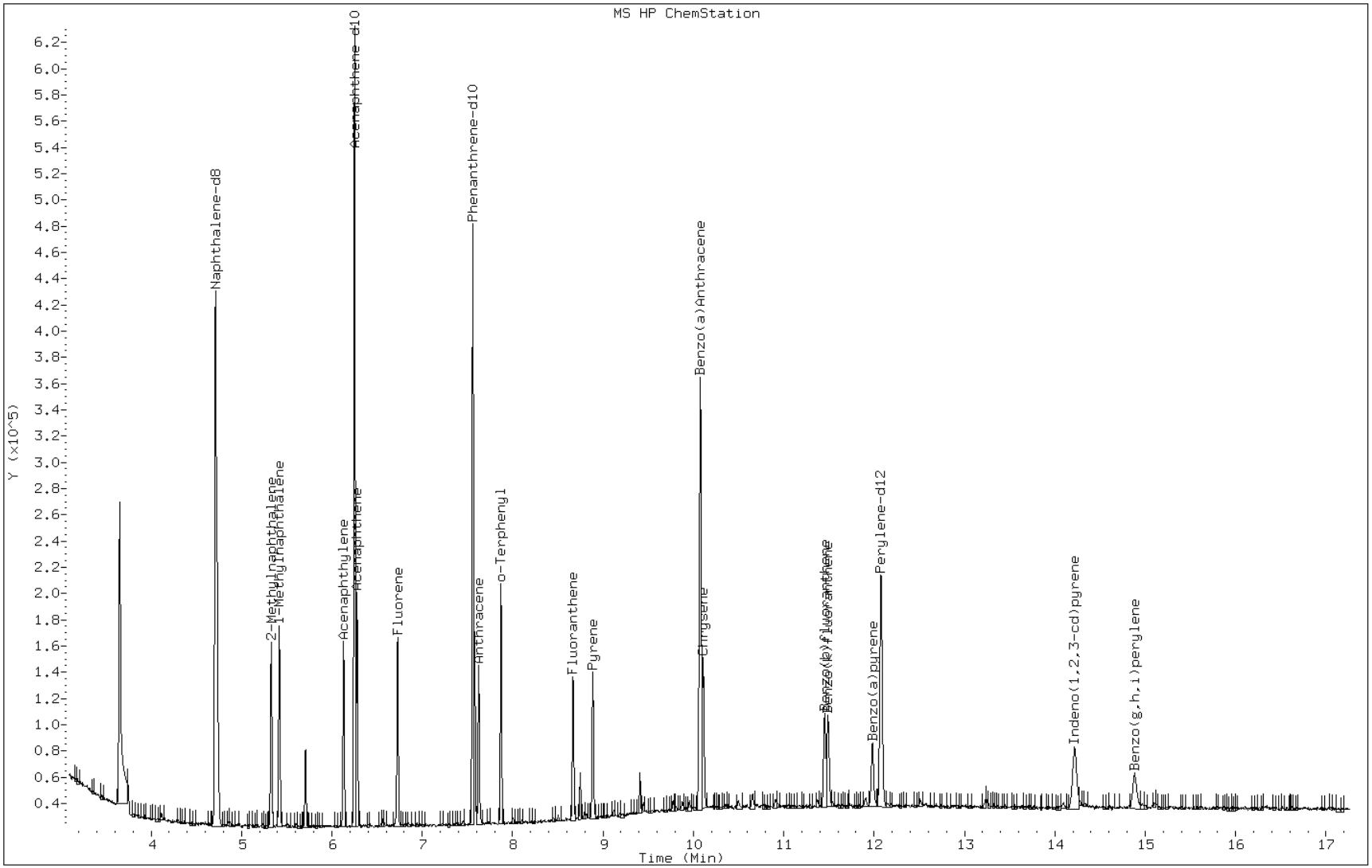
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.713	4.713	(1.000)	292684	2.00000	
	2 Naphthalene	128	4.729	4.729	(1.003)	83829	0.50000	0.49
	3 2-Methylnaphthalene	142	5.328	5.328	(1.131)	50384	0.50000	0.47
	4 1-Methylnaphthalene	142	5.419	5.419	(1.150)	52648	0.50000	0.48
	6 Acenaphthylene	152	6.130	6.130	(0.980)	72765	0.50000	0.46
*	5 Acenaphthene-d10	164	6.253	6.253	(1.000)	157356	2.00000	
	7 Acenaphthene	154	6.280	6.280	(1.004)	46778	0.50000	0.49
	8 Fluorene	166	6.729	6.729	(1.076)	48841	0.50000	0.46
*	9 Phenanthrene-d10	188	7.558	7.558	(1.000)	199877	2.00000	
	10 Phenanthrene	178	7.580	7.580	(1.003)	63300	0.50000	0.48
	11 Anthracene	178	7.628	7.628	(1.009)	57344	0.50000	0.46
$	15 o-Terphenyl	230	7.869	7.869	(0.781)	37148	0.50000	0.54
	12 Fluoranthene	202	8.666	8.666	(1.146)	55429	0.50000	0.46
	14 Pyrene	202	8.890	8.890	(0.882)	57030	0.50000	0.49
	16 Benzo(a)Anthracene	228	10.067	10.067	(0.999)	52515	0.50000	0.56
*	13 Chrysene-d12	240	10.078	10.078	(1.000)	132625	2.00000	
	17 Chrysene	228	10.110	10.110	(1.003)	56207	0.50000	0.59
	19 Benzo(b)fluoranthene	252	11.452	11.452	(0.949)	50680	0.50000	0.55
	20 Benzo(k)fluoranthene	252	11.490	11.490	(0.952)	54163	0.50000	0.57
	21 Benzo(a)pyrene	252	11.982	11.982	(0.992)	35998	0.50000	0.50
*	18 Perylene-d12	264	12.073	12.073	(1.000)	125485	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.212	14.212	(1.410)	35944	0.50000	0.45
	23 Dibenzo(a,h)anthracene	278	14.228	14.228	(1.179)	31158	0.50000	0.47
	24 Benzo(g,h,i)perylene	276	14.886	14.886	(1.233)	33856	0.50000	0.49

Data File: ya0206q.d

Date: 02-JAN-2013 18:39

Client ID: Instrument: MSY5975.i

Sample Info: IC-2898498;LLPAH2 Operator: VHB



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y010213.b/ya0207q.d
Lab Smp Id: IC-2898499; LLPAH1
Inj Date : 02-JAN-2013 19:02
Operator : VHB Inst ID: MSY5975.i
Smp Info : IC-2898499; LLPAH1
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y010213.b/Y-b8270CLLPAH-m.m
Meth Date : 03-Jan-2013 07:01 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 19:02 Cal File: ya0207q.d
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

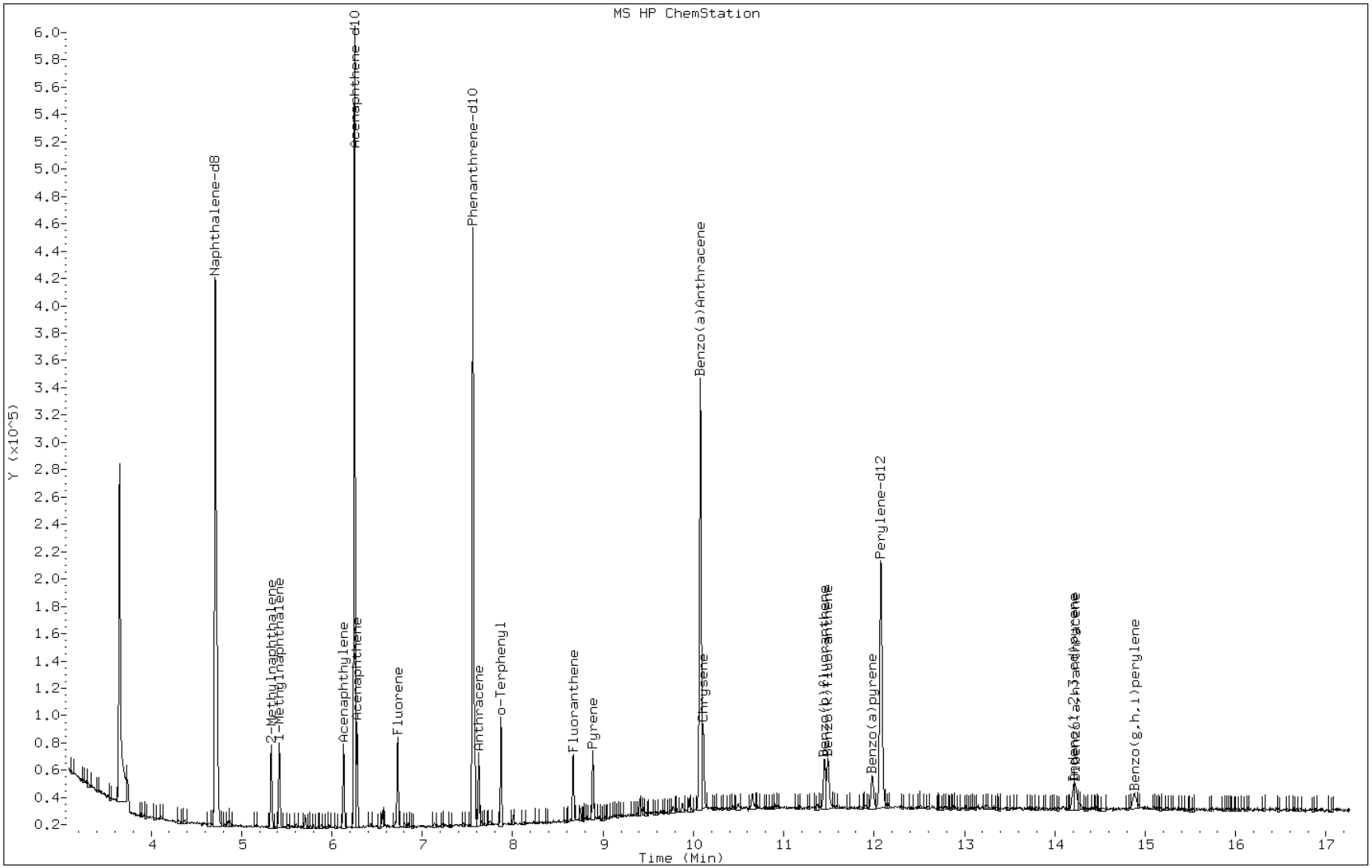
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.707	4.707	(1.000)	290854	2.00000	
	2 Naphthalene	128	4.729	4.729	(1.005)	35562	0.20000	0.20
	3 2-Methylnaphthalene	142	5.328	5.328	(1.132)	21883	0.20000	0.20
	4 1-Methylnaphthalene	142	5.419	5.419	(1.151)	21893	0.20000	0.20
	6 Acenaphthylene	152	6.130	6.130	(0.980)	31056	0.20000	0.20
*	5 Acenaphthene-d10	164	6.253	6.253	(1.000)	153585	2.00000	
	7 Acenaphthene	154	6.280	6.280	(1.004)	19907	0.20000	0.21
	8 Fluorene	166	6.729	6.729	(1.076)	21347	0.20000	0.20
*	9 Phenanthrene-d10	188	7.558	7.558	(1.000)	196920	2.00000	
	10 Phenanthrene	178	7.580	7.580	(1.003)	28050	0.20000	0.21
	11 Anthracene	178	7.628	7.628	(1.009)	25462	0.20000	0.20
$	15 o-Terphenyl	230	7.868	7.868	(0.781)	15374	0.20000	0.21
	12 Fluoranthene	202	8.671	8.671	(1.147)	25108	0.20000	0.21
	14 Pyrene	202	8.890	8.890	(0.882)	25277	0.20000	0.20
	16 Benzo(a)Anthracene	228	10.067	10.067	(0.999)	28493	0.20000	0.27
*	13 Chrysene-d12	240	10.077	10.077	(1.000)	139085	2.00000	
	17 Chrysene	228	10.110	10.110	(1.003)	31521	0.20000	0.29
	19 Benzo(b)fluoranthene	252	11.452	11.452	(0.949)	25424	0.20000	0.25
	20 Benzo(k)fluoranthene	252	11.489	11.489	(0.952)	27475	0.20000	0.26
	21 Benzo(a)pyrene	252	11.976	11.976	(0.992)	19229	0.20000	0.24
*	18 Perylene-d12	264	12.072	12.072	(1.000)	131345	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.207	14.207	(1.410)	16956	0.20000	0.20
	23 Dibenzo(a,h)anthracene	278	14.228	14.228	(1.179)	14510	0.20000	0.20
	24 Benzo(g,h,i)perylene	276	14.880	14.880	(1.233)	16214	0.20000	0.22

Data File: ya0207q.d

Date: 02-JAN-2013 19:02

Client ID: Instrument: MSY5975.i

Sample Info: IC-2898499; LLPAH1 Operator: VHB



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y010213.b/ya0208q.d
Lab Smp Id: ICIS-2897220; LLPAH
Inj Date : 02-JAN-2013 19:25
Operator : VHB Inst ID: MSY5975.i
Smp Info : ICIS-2897220; LLPAH4
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y010213.b/Y-b8270CLLPAH-m.m
Meth Date : 03-Jan-2013 07:09 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 19:25 Cal File: ya0208q.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

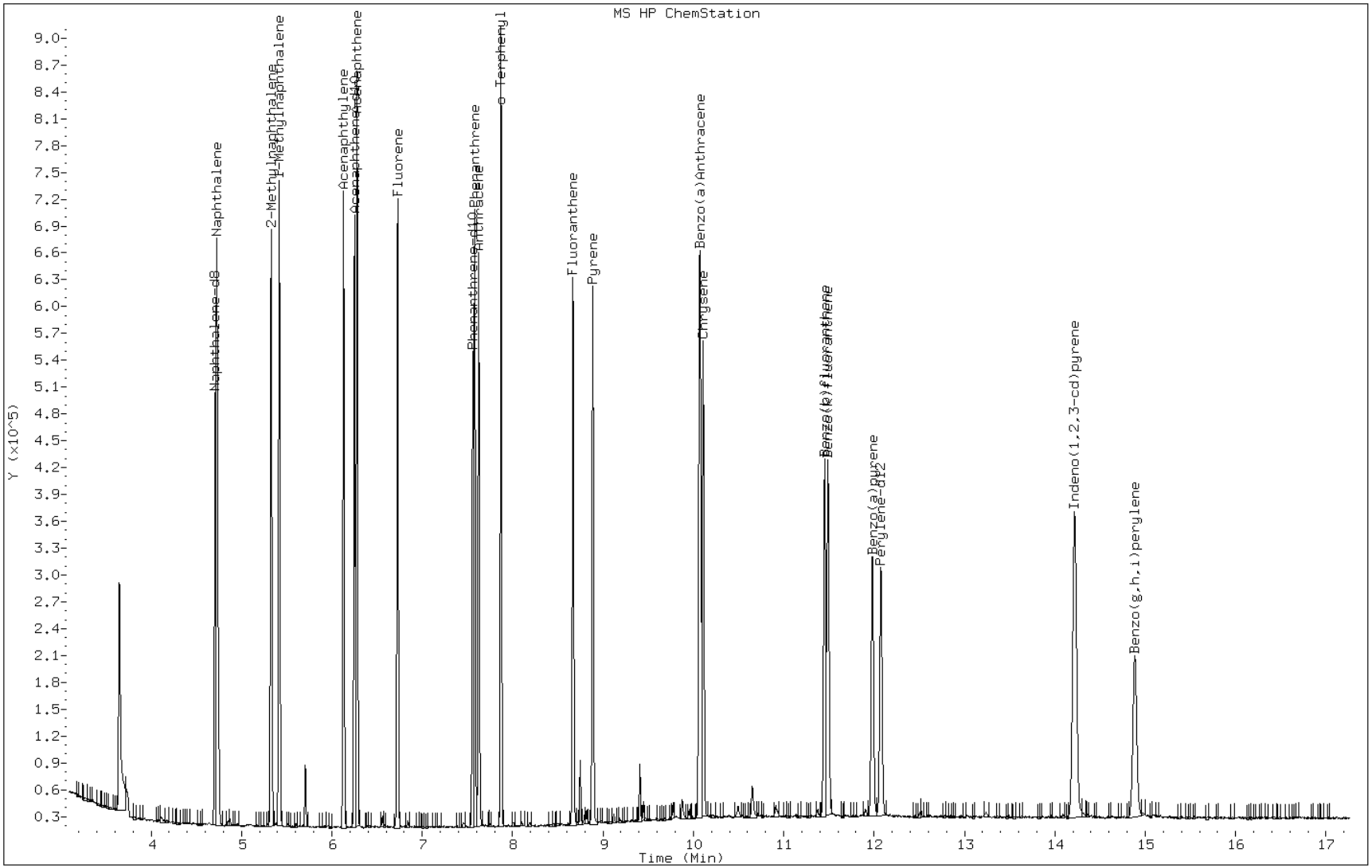
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.708	4.708	(1.000)	338403	2.00000	
	2 Naphthalene	128	4.729	4.729	(1.005)	400147	2.00000	2.01
	3 2-Methylnaphthalene	142	5.328	5.328	(1.132)	242155	2.00000	1.96
	4 1-Methylnaphthalene	142	5.419	5.419	(1.151)	248286	2.00000	1.97
	6 Acenaphthylene	152	6.130	6.130	(0.980)	360360	2.00000	2.03
*	5 Acenaphthene-d10	164	6.253	6.253	(1.000)	178192	2.00000	
	7 Acenaphthene	154	6.280	6.280	(1.004)	217404	2.00000	2.00
	8 Fluorene	166	6.729	6.729	(1.076)	236424	2.00000	1.97
*	9 Phenanthrene-d10	188	7.558	7.558	(1.000)	237891	2.00000	
	10 Phenanthrene	178	7.580	7.580	(1.003)	310251	2.00000	1.98
	11 Anthracene	178	7.628	7.628	(1.009)	295193	2.00000	1.98
$	15 o-Terphenyl	230	7.869	7.869	(0.781)	175863	2.00000	1.82
	12 Fluoranthene	202	8.666	8.666	(1.146)	292559	2.00000	2.02
	14 Pyrene	202	8.890	8.890	(0.882)	302324	2.00000	1.85
	16 Benzo(a)Anthracene	228	10.067	10.067	(0.999)	243814	2.00000	1.99
*	13 Chrysene-d12	240	10.078	10.078	(1.000)	186907	2.00000	
	17 Chrysene	228	10.110	10.110	(1.003)	252128	2.00000	2.08
	19 Benzo(b)fluoranthene	252	11.452	11.452	(0.949)	270509	2.00000	1.90
	20 Benzo(k)fluoranthene	252	11.490	11.490	(0.952)	280093	2.00000	2.02
	21 Benzo(a)pyrene	252	11.982	11.982	(0.992)	207227	2.00000	1.86
*	18 Perylene-d12	264	12.073	12.073	(1.000)	187732	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.217	14.217	(1.411)	246149	2.00000	2.18
	23 Dibenzo(a,h)anthracene	278	14.228	14.228	(1.179)	200286	2.00000	2.02
	24 Benzo(g,h,i)perylene	276	14.886	14.886	(1.233)	214628	2.00000	2.03

Data File: ya0208q.d

Date: 02-JAN-2013 19:25

Client ID: Instrument: MSY5975.i

Sample Info: ICIS-2897220; LLPAH4 Operator: VHB



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Lab Sample ID: CCVIS 680-261362/2 Calibration Date: 12/28/2012 10:37

Instrument ID: MSY Calib Start Date: 12/21/2012 11:14

GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 12/21/2012 13:30

Lab File ID: yl2802q.d Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.179	1.194		2.03	2.00	1.3	20.0
2-Methylnaphthalene	Ave	0.7356	0.7329		1.99	2.00	-0.4	20.0
1-Methylnaphthalene	Ave	0.7741	0.7583		1.96	2.00	-2.0	20.0
Acenaphthylene	Ave	2.067	2.127		2.06	2.00	2.9	20.0
Acenaphthene	Ave	1.225	1.205		1.97	2.00	-1.7	20.0
Fluorene	Ave	1.374	1.428		2.08	2.00	4.0	20.0
Phenanthrene	Ave	1.232	1.213		1.97	2.00	-1.5	20.0
Anthracene	Ave	1.178	1.135		1.93	2.00	-3.7	20.0
Fluoranthene	Ave	1.436	1.341		1.87	2.00	-6.6	20.0
Pyrene	Ave	1.815	1.912		2.11	2.00	5.3	20.0
Benzo[a]anthracene	Ave	1.419	1.282		1.81	2.00	-9.7	20.0
Chrysene	LinF	1.442	1.302		2.06	2.00	3.1	20.0
Benzo[b]fluoranthene	LinF	1.680	1.452		1.98	2.00	-0.8	20.0
Benzo[k]fluoranthene	LinF	1.641	1.302		1.74	2.00	-12.8	20.0
Benzo[a]pyrene	LinF	1.337	1.183		1.96	2.00	-1.9	20.0
Indeno[1,2,3-cd]pyrene	LinF	1.311	0.9502		1.75	2.00	-12.5	20.0
Dibenz(a,h)anthracene	LinF	1.207	0.9397		1.85	2.00	-7.3	20.0
Benzo[g,h,i]perylene	LinF	1.242	0.9905		1.89	2.00	-5.6	20.0
o-Terphenyl	Ave	1.080	1.152		2.13	2.00	6.7	20.0

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y122812.b/yl2802q.d
Lab Smp Id: CCVIS-2897220; LLP
Inj Date : 28-DEC-2012 10:37
Operator : VHB Inst ID: MSY5975.i
Smp Info : CCVIS-2897220; LLPAH
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y122812.b/Y-b8270CLLPAH-m.m
Meth Date : 28-Dec-2012 10:56 chemist Quant Type: ISTD
Cal Date : 21-DEC-2012 13:30 Cal File: yl2112q.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula: Amt * DF * 1/Vi * Vt/Vo * A * B * C * D * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Vo	1000.00000	Sample Extract Volume
A	1000.00000	uL to mL conversion
B	1000.00000	mL to L conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1= if no con

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
* 1 Naphthalene-d8	136	3.317	3.317	(1.000)	66613	2.00000	
2 Naphthalene	128	3.333	3.333	(1.005)	79545	2.00000	2.02
3 2-Methylnaphthalene	142	3.937	3.937	(1.187)	48821	2.00000	1.99
4 1-Methylnaphthalene	142	4.023	4.023	(1.213)	50510	2.00000	1.95
6 Acenaphthylene	152	4.713	4.713	(0.975)	80967	2.00000	2.05
* 5 Acenaphthene-d10	164	4.836	4.836	(1.000)	38066	2.00000	
7 Acenaphthene	154	4.863	4.863	(1.006)	45855	2.00000	1.96
8 Fluorene	166	5.301	5.301	(1.096)	54372	2.00000	2.07
* 9 Phenanthrene-d10	188	6.088	6.088	(1.000)	60271	2.00000	
10 Phenanthrene	178	6.109	6.109	(1.004)	73127	2.00000	1.96

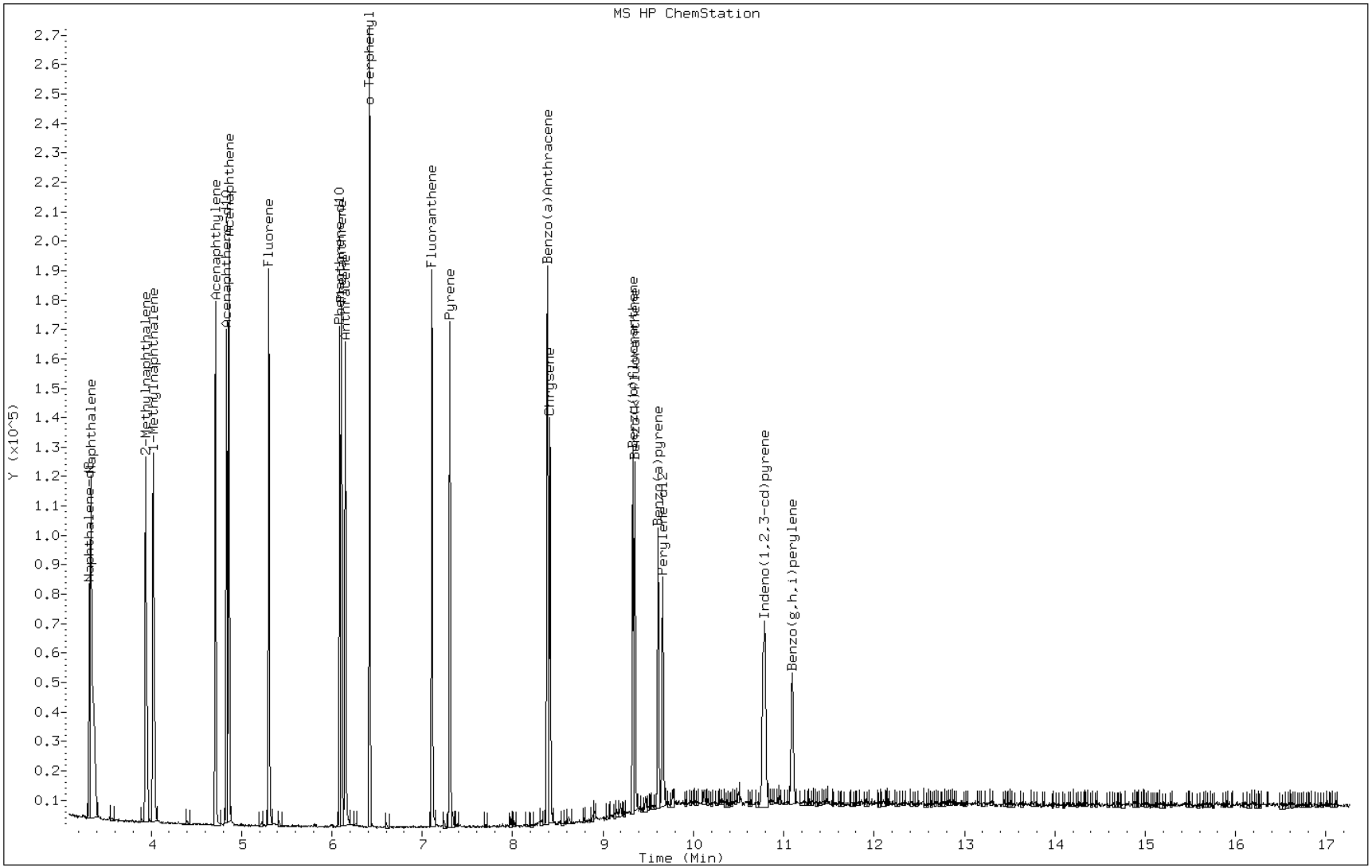
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
11 Anthracene	178	6.152	6.152	(1.011)	68433	2.00000	1.92
$ 15 o-Terphenyl	230	6.419	6.419	(0.765)	47963	2.00000	2.13
12 Fluoranthene	202	7.109	7.109	(1.168)	80839	2.00000	1.86
14 Pyrene	202	7.307	7.307	(0.871)	79597	2.00000	2.10
16 Benzo(a)Anthracene	228	8.382	8.382	(0.999)	53346	2.00000	1.80
* 13 Chrysene-d12	240	8.393	8.393	(1.000)	41627	2.00000	
17 Chrysene	228	8.414	8.414	(1.003)	54217	2.00000	2.06
19 Benzo(b)fluoranthene	252	9.329	9.329	(0.966)	48833	2.00000	1.98
20 Benzo(k)fluoranthene	252	9.350	9.350	(0.968)	43779	2.00000	1.74
21 Benzo(a)pyrene	252	9.612	9.612	(0.995)	39800	2.00000	1.96
* 18 Perylene-d12	264	9.660	9.660	(1.000)	33634	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	10.773	10.773	(1.284)	39553	2.00000	1.74
23 Dibenzo(a,h)anthracene	278	10.794	10.794	(1.117)	31606	2.00000	1.85
24 Benzo(g,h,i)perylene	276	11.099	11.099	(1.149)	33314	2.00000	1.88

Data File: yl2802q.d

Date: 28-DEC-2012 10:37

Client ID: Instrument: MSY5975.i

Sample Info: CCVIS-2897220; LLPAH Operator: VHB



TESTAMERICA SAVANNAH

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0205t.d
Lab Smp Id: DFTPP Client Smp ID: DFTPP
Inj Date : 02-JAN-2013 10:48
Operator : VHB Inst ID: MSK5973.i
Smp Info : DFTPP-2888302; LLPAH
Misc Info :
Comment :
Method : /chem/SM/MSK5973.i/1k010213.b/k-dftppPAHLL-m.m
Meth Date : 25-Nov-2012 11:30 gillinsl Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: savchem1

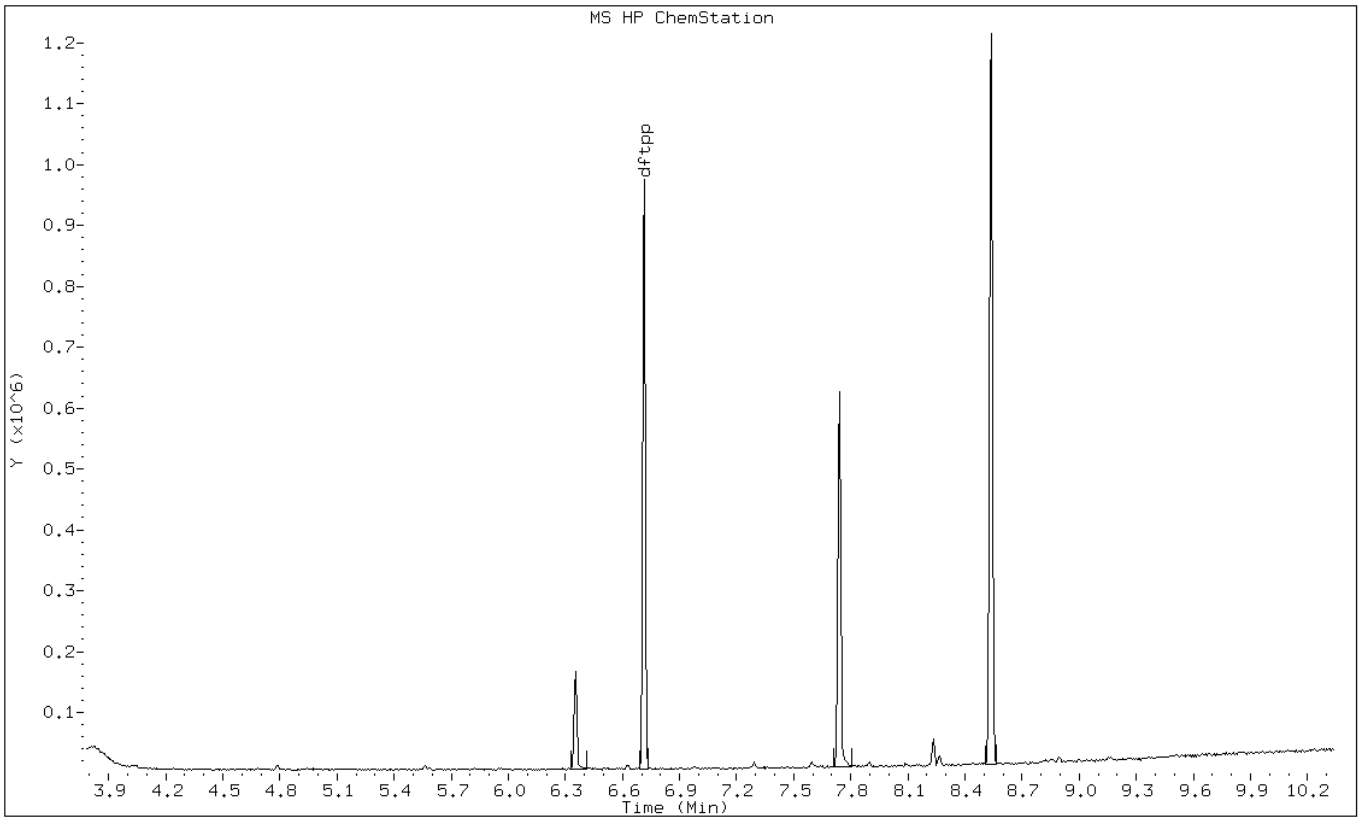
RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp					CAS #: 5074-71-5		
6.717	5.753 (0.000)	442	123960			0.00- 100.00	100.00
6.717	5.753 (0.000)	51	19581			10.00- 80.00	15.80
6.717	5.753 (0.000)	68	0			0.00- 2.00	0.00
6.717	5.753 (0.000)	69	18785			0.00- 0.00	15.15
6.717	5.753 (0.000)	70	51			0.00- 2.00	0.27
6.717	5.753 (0.000)	127	36108			10.00- 80.00	47.34
6.717	5.753 (0.000)	197	0			0.00- 2.00	0.00
6.717	5.753 (0.000)	198	76277			50.00- 0.00	61.53
6.717	5.753 (0.000)	199	4934			5.00- 9.00	6.47
6.717	5.753 (0.000)	275	20859			10.00- 60.00	16.83
6.717	5.753 (0.000)	365	3004			1.00- 0.00	2.42
6.717	5.753 (0.000)	441	20349			0.00- 100.00	82.48
6.717	5.753 (0.000)	443	24672			15.00- 24.00	19.90

Data File: ka0205t.d

Date: 02-JAN-2013 10:48

Client ID: DFTPP | Instrument: MSK5973.i

Sample Info: DFTPP-2888302; LLPAH | Operator: VHB



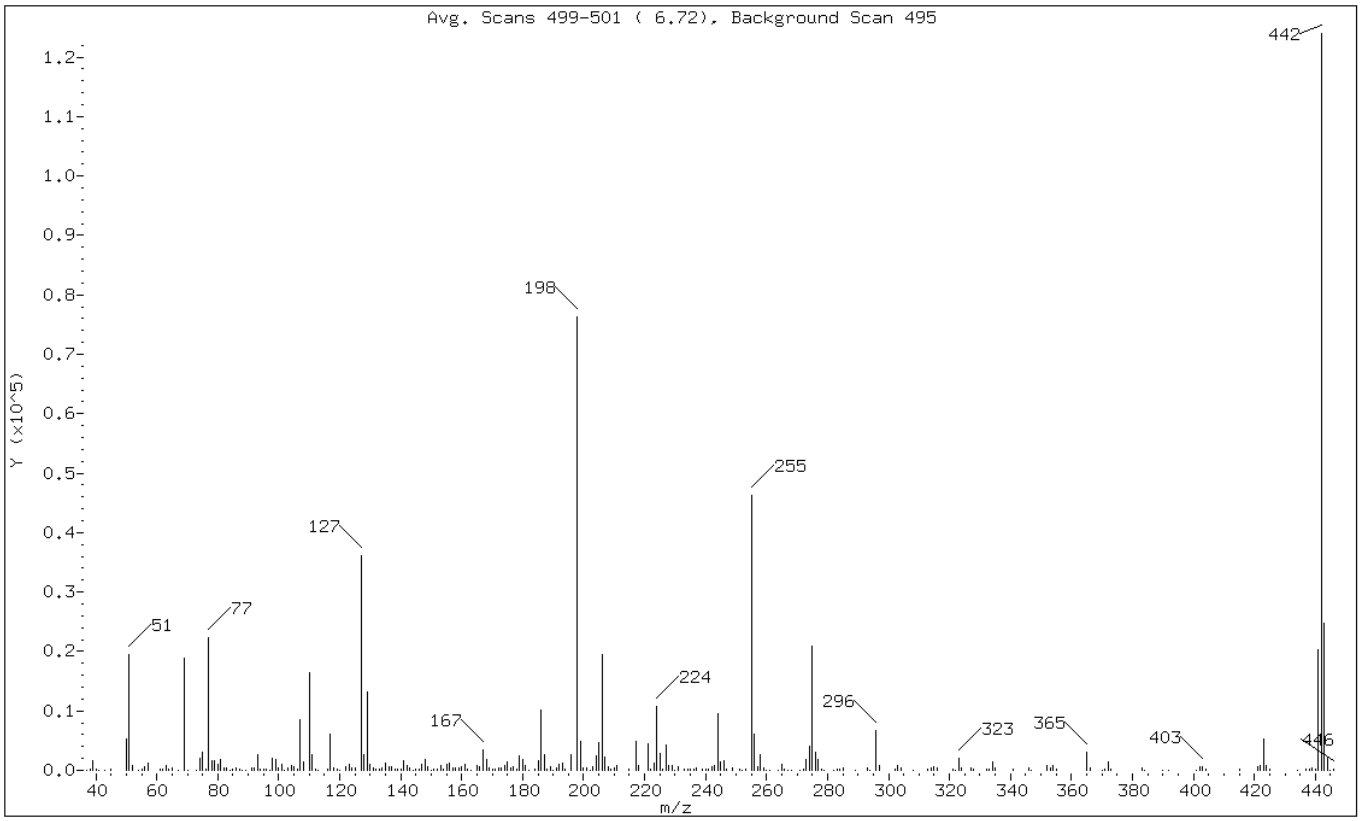
Data File: ka0205t.d

Date: 02-JAN-2013 10:48

Client ID: DFTPP Instrument: MSK5973.i

Sample Info: DFTPP-2888302; LLPAH Operator: VHB

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
442	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 442	15.80
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	15.15
70	Less than 2.00% of mass 69	0.04 (0.27)
127	10.00 - 80.00% of mass 198	29.13 (47.34)
197	Less than 2.00% of mass 198	0.00 (0.00)
198	Greater than 50.00% of mass 442	61.53
199	5.00 - 9.00% of mass 198	3.98 (6.47)
275	10.00 - 60.00% of mass 442	16.83
365	Greater than 1.00% of mass 442	2.42
441	Less than 100.00% of mass 443	16.42 (82.48)
443	15.00 - 24.00% of mass 442	19.90

Data File: ka0205t.d

Date: 02-JAN-2013 10:48

Client ID: DFTPP Instrument: MSK5973.i

Sample Info: DFTPP-2888302; LLPAH Operator: VHB

Data File: /chem/SM/MSK5973.i/1k010213.b/ka0205t.d
Spectrum: Avg. Scans 499-501 (6.72), Background Scan 495
Location of Maximum: 442.00
Number of points: 269

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	50	124.00	480	196.00	2667	282.00	64
38.00	246	125.00	448	198.00	76272	283.00	203
39.00	1599	127.00	36104	199.00	4934	284.00	126
40.00	117	128.00	2634	200.00	334	285.00	400
41.00	47	129.00	13122	201.00	419	289.00	52
43.00	24	130.00	1089	202.00	50	293.00	403
45.00	147	131.00	343	203.00	568	294.00	77
50.00	5212	132.00	138	204.00	2421	296.00	6658
51.00	19576	133.00	244	205.00	4661	297.00	891
52.00	791	134.00	362	206.00	19464	302.00	124
54.00	50	135.00	1291	207.00	2246	303.00	877
55.00	304	136.00	518	208.00	548	304.00	307
56.00	667	137.00	622	209.00	206	308.00	57
57.00	1164	138.00	197	210.00	329	313.00	109
61.00	225	139.00	171	211.00	897	314.00	321
62.00	285	140.00	254	215.00	154	315.00	680
63.00	736	141.00	1659	217.00	4935	316.00	336
64.00	173	142.00	773	218.00	740	321.00	201
65.00	428	143.00	355	221.00	4520	322.00	53
67.00	50	144.00	56	222.00	241	323.00	1982
69.00	18784	145.00	156	223.00	1287	324.00	402
70.00	51	146.00	293	224.00	10843	327.00	493
73.00	44	147.00	951	225.00	2778	328.00	248
74.00	2046	148.00	1823	226.00	103	332.00	154
75.00	3131	149.00	596	227.00	4297	333.00	112
76.00	116	150.00	57	228.00	714	334.00	1503
77.00	22288	151.00	260	229.00	905	335.00	430
78.00	1573	152.00	204	230.00	50	341.00	274
79.00	1687	153.00	729	231.00	513	346.00	433
80.00	1030	154.00	293	233.00	125	347.00	52
81.00	1762	155.00	1039	234.00	298	352.00	816
82.00	479	156.00	1315	235.00	293	353.00	396
83.00	461	157.00	374	236.00	109	354.00	721
84.00	89	158.00	379	237.00	373	355.00	176
85.00	291	159.00	338	239.00	211	365.00	3004
86.00	447	160.00	574	240.00	108	366.00	473
87.00	285	161.00	970	241.00	217	370.00	71
88.00	82	162.00	249	242.00	668	371.00	242
89.00	53	163.00	52	243.00	851	372.00	1372
91.00	410	165.00	812	244.00	9584	373.00	286

92.00	473	166.00	691	245.00	1378	383.00	406
93.00	2630	167.00	3437	246.00	1701	384.00	76
94.00	253	168.00	1787	247.00	297	390.00	92
95.00	181	169.00	379	249.00	403	392.00	55
96.00	183	170.00	260	251.00	166	401.00	94
97.00	75	171.00	147	252.00	72	402.00	529
98.00	2006	172.00	323	253.00	224	403.00	590
99.00	1825	173.00	335	255.00	46256	404.00	173
100.00	306	174.00	762	256.00	6120	415.00	108
101.00	1103	175.00	1347	257.00	547	421.00	697
102.00	50	176.00	419	258.00	2622	422.00	782
103.00	441	177.00	627	259.00	447	423.00	5185
104.00	716	178.00	106	260.00	66	424.00	882
105.00	567	179.00	2487	261.00	93	425.00	124
106.00	138	180.00	1834	264.00	67	434.00	53
107.00	8608	181.00	903	265.00	1065	437.00	143
108.00	1362	182.00	85	266.00	265	438.00	156
110.00	16347	184.00	217	267.00	82	439.00	359
111.00	2712	185.00	1607	268.00	52	440.00	260
112.00	300	186.00	10147	271.00	84	441.00	20344
113.00	55	187.00	2673	272.00	190	442.00	123960
116.00	166	188.00	232	273.00	1746	443.00	24672
117.00	6181	189.00	687	274.00	3980	444.00	2178
118.00	495	190.00	53	275.00	20856	445.00	51
119.00	111	191.00	438	276.00	2956	446.00	195
120.00	73	192.00	1003	277.00	1793		
122.00	652	193.00	1165	278.00	248		
123.00	946	194.00	220	279.00	65		

TESTAMERICA SAVANNAH

Data file : /chem/SM/MSY5975.i/1y122112.b/yl1305t.d
Lab Smp Id: DFTPP Client Smp ID: DFTPP
Inj Date : 21-DEC-2012 10:58
Operator : VHB Inst ID: MSY5975.i
Smp Info : DFTPP-288302; LLPAH
Misc Info :
Comment :
Method : /chem/SM/MSY5975.i/1y122112.b/Y-dftppPAHLL-m.m
Meth Date : 26-Nov-2012 08:37 gillinsl Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: savchem1

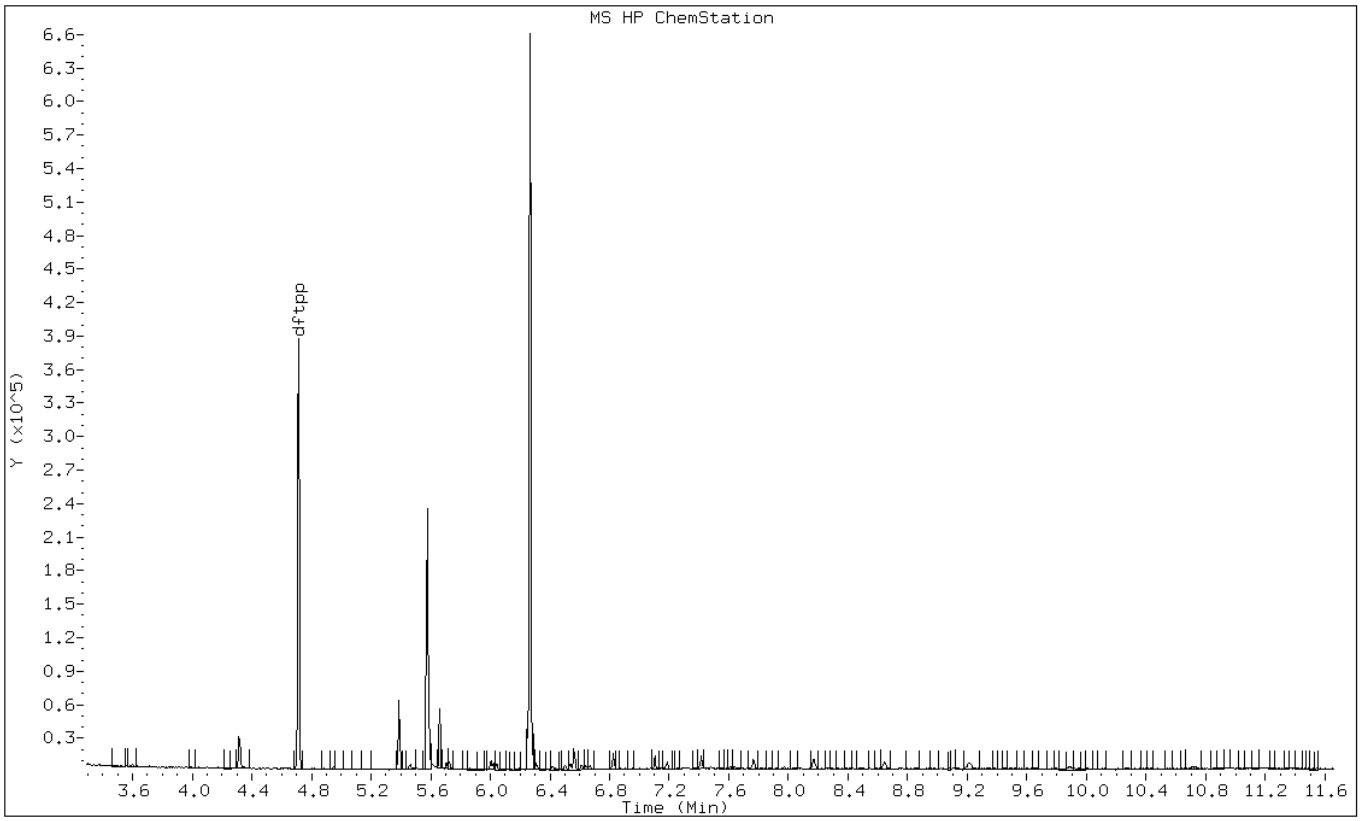
RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
4.715	5.785	(0.000)	442	38464			0.00- 100.00	100.00
4.715	5.785	(0.000)	51	7504			10.00- 80.00	19.51
4.715	5.785	(0.000)	68	156			0.00- 2.00	1.97
4.715	5.785	(0.000)	69	7933			0.00- 0.00	20.62
4.715	5.785	(0.000)	70	106			0.00- 2.00	1.34
4.715	5.785	(0.000)	127	12167			10.00- 80.00	37.69
4.715	5.785	(0.000)	197	320			0.00- 2.00	0.99
4.715	5.785	(0.000)	198	32286			50.00- 0.00	83.94
4.715	5.785	(0.000)	199	2023			5.00- 9.00	6.27
4.715	5.785	(0.000)	275	8550			10.00- 60.00	22.23
4.715	5.785	(0.000)	365	1161			1.00- 0.00	3.02
4.715	5.785	(0.000)	441	5558			0.00- 100.00	73.85
4.715	5.785	(0.000)	443	7526			15.00- 24.00	19.57

Data File: yl2105t.d

Date: 21-DEC-2012 10:58

Client ID: DFTPP | Instrument: MSY5975.i

Sample Info: DFTPP-288302; LLPAH | Operator: VHB



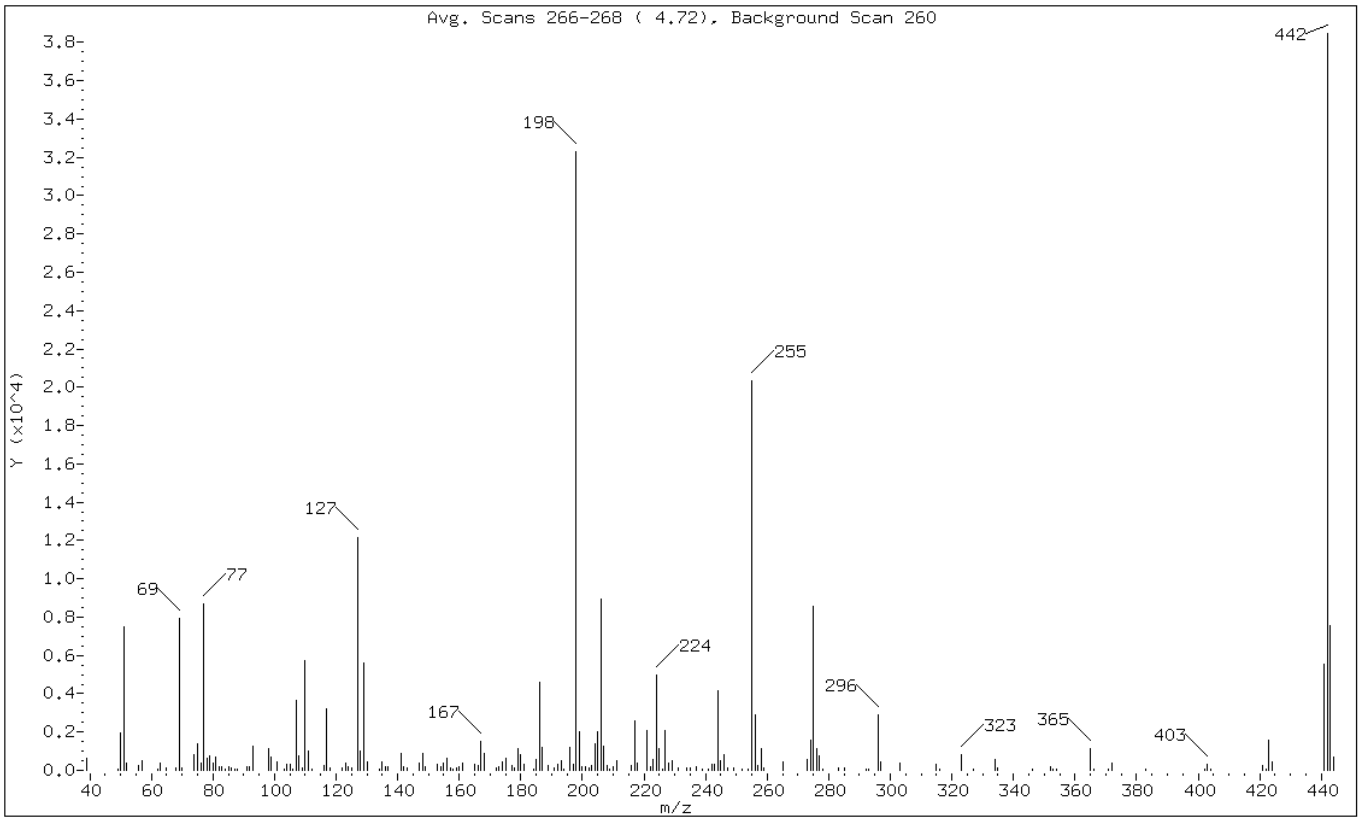
Data File: yl2105t.d

Date: 21-DEC-2012 10:58

Client ID: DFTPP Instrument: MSY5975.i

Sample Info: DFTPP-288302; LLPAH Operator: VHB

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
442	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 442	19.51
68	Less than 2.00% of mass 69	0.41 (1.97)
69	Mass 69 relative abundance	20.62
70	Less than 2.00% of mass 69	0.28 (1.34)
127	10.00 - 80.00% of mass 198	31.63 (37.69)
197	Less than 2.00% of mass 198	0.83 (0.99)
198	Greater than 50.00% of mass 442	83.94
199	5.00 - 9.00% of mass 198	5.26 (6.27)
275	10.00 - 60.00% of mass 442	22.23
365	Greater than 1.00% of mass 442	3.02
441	Less than 100.00% of mass 443	14.45 (73.85)
443	15.00 - 24.00% of mass 442	19.57

Data File: yl2105t.d

Date: 21-DEC-2012 10:58

Client ID: DFTPP Instrument: MSY5975.i

Sample Info: DFTPP-288302; LLPAH Operator: VHB

Data File: /chem/SM/MSY5975.i/1y122112.b/yl2105t.d
Spectrum: Avg. Scans 266-268 (4.72), Background Scan 260
Location of Maximum: 442.00
Number of points: 184

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	621	122.00	146	193.00	502	257.00	231
49.00	65	123.00	376	194.00	70	258.00	1159
50.00	1957	124.00	202	196.00	1225	259.00	156
51.00	7504	125.00	147	197.00	320	265.00	417
52.00	355	127.00	12167	198.00	32280	273.00	552
56.00	239	128.00	1017	199.00	2023	274.00	1552
57.00	481	129.00	5623	200.00	159	275.00	8550
62.00	73	130.00	447	201.00	194	276.00	1109
63.00	352	134.00	53	202.00	96	277.00	739
65.00	147	135.00	460	203.00	229	278.00	86
68.00	156	136.00	187	204.00	1367	283.00	115
69.00	7933	137.00	173	205.00	2024	285.00	127
70.00	106	141.00	857	206.00	8916	292.00	63
74.00	830	142.00	175	207.00	1277	293.00	71
75.00	1406	143.00	101	208.00	234	296.00	2909
76.00	390	147.00	372	209.00	65	297.00	416
77.00	8687	148.00	894	210.00	173	303.00	359
78.00	625	149.00	160	211.00	475	315.00	346
79.00	730	153.00	335	216.00	241	316.00	70
80.00	407	154.00	203	217.00	2570	323.00	842
81.00	685	155.00	353	218.00	387	327.00	63
82.00	180	156.00	609	221.00	2089	334.00	590
83.00	167	157.00	122	222.00	168	335.00	126
84.00	83	158.00	65	223.00	579	346.00	63
85.00	171	159.00	156	224.00	4980	352.00	185
86.00	120	160.00	170	225.00	1148	353.00	73
87.00	50	161.00	349	226.00	67	354.00	72
88.00	52	165.00	285	227.00	2072	365.00	1161
91.00	182	166.00	225	228.00	353	366.00	74
92.00	180	167.00	1506	229.00	475	371.00	55
93.00	1256	168.00	875	231.00	142	372.00	398
98.00	1112	172.00	140	234.00	101	383.00	68
99.00	666	173.00	177	235.00	116	402.00	90
101.00	451	174.00	415	237.00	163	403.00	304
103.00	78	175.00	613	239.00	53	404.00	50
104.00	324	177.00	235	241.00	82	421.00	232
105.00	322	178.00	113	242.00	318	422.00	94
106.00	59	179.00	1102	243.00	295	423.00	1592
107.00	3639	180.00	806	244.00	4159	424.00	413
108.00	727	181.00	337	245.00	519	441.00	5558

109.00	104	184.00	87	246.00	806	442.00	38464
110.00	5751	185.00	538	247.00	115	443.00	7526
111.00	1010	186.00	4616	249.00	130	444.00	692
112.00	62	187.00	1178	252.00	52		
116.00	258	189.00	236	254.00	92		
117.00	3204	191.00	109	255.00	20320		
118.00	156	192.00	302	256.00	2877		

TESTAMERICA SAVANNAH

Data file : /chem/SM/MSY5975.i/2y122812.b/yl2801t.d
Lab Smp Id: DFTPP Client Smp ID: DFTPP
Inj Date : 28-DEC-2012 10:20
Operator : VHB Inst ID: MSY5975.i
Smp Info : DFTPP-2888302 ; LLPAH
Misc Info :
Comment :
Method : /chem/SM/MSY5975.i/2y122812.b/Y-dftppPAHLL-m.m
Meth Date : 26-Nov-2012 08:37 gillinsl Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: savchem1

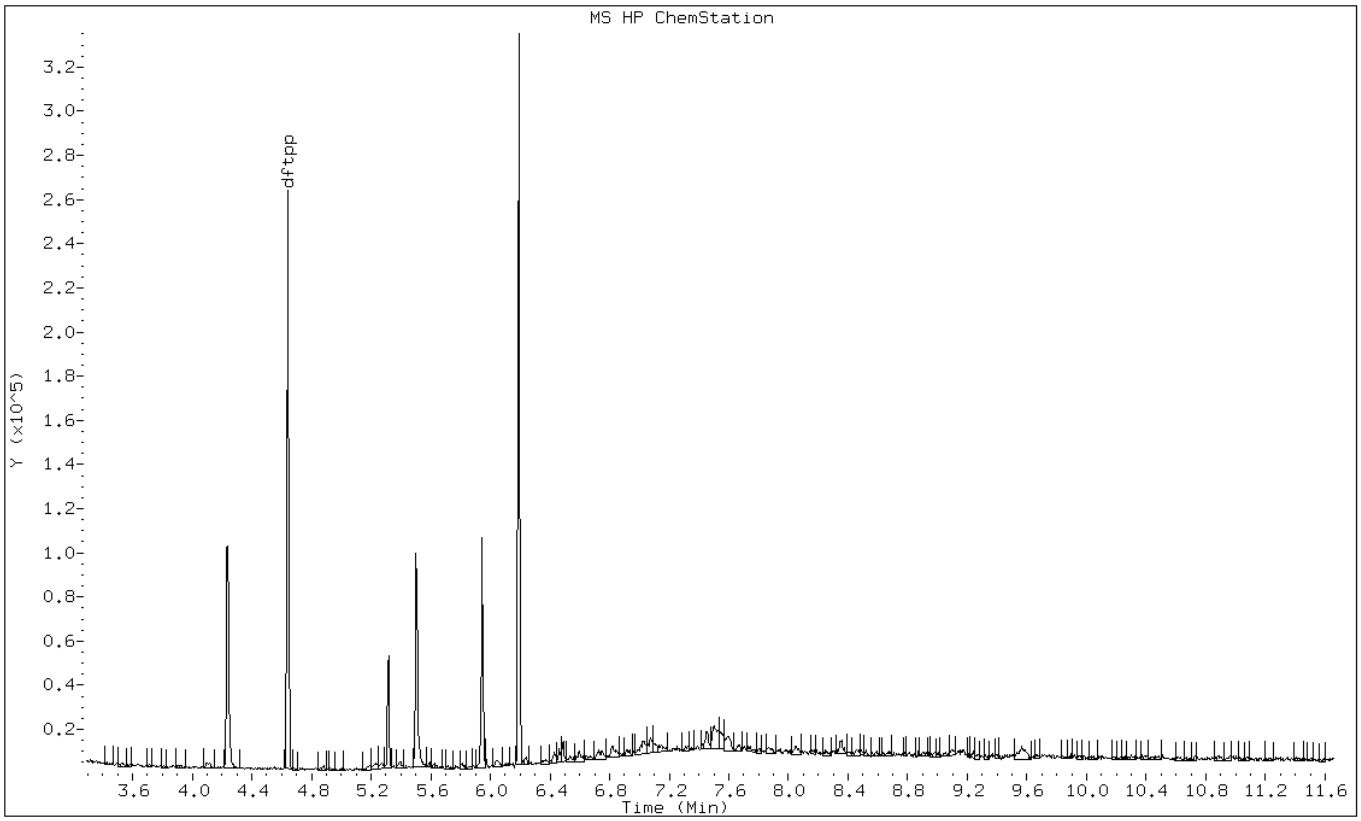
RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
4.640	5.785	(0.000)	442	21625			0.00- 100.00	89.82
4.640	5.785	(0.000)	51	6205			10.00- 80.00	28.69
4.640	5.785	(0.000)	68	60			0.00- 2.00	0.86
4.640	5.785	(0.000)	69	6969			0.00- 0.00	32.23
4.640	5.785	(0.000)	70	0			0.00- 2.00	0.00
4.640	5.785	(0.000)	127	10647			10.00- 80.00	44.22
4.640	5.785	(0.000)	197	208			0.00- 2.00	0.86
4.640	5.785	(0.000)	198	24075			50.00- 0.00	111.33
4.640	5.785	(0.000)	199	1565			5.00- 9.00	6.50
4.640	5.785	(0.000)	275	5783			10.00- 60.00	26.74
4.640	5.785	(0.000)	365	717			1.00- 0.00	3.32
4.640	5.785	(0.000)	441	3114			0.00- 100.00	74.89
4.640	5.785	(0.000)	443	4158			15.00- 24.00	19.23

Data File: yl2801t.d

Date: 28-DEC-2012 10:20

Client ID: DFTPP Instrument: MSY5975.i

Sample Info: DFTPP-2888302 ; LLPAH Operator: VHB



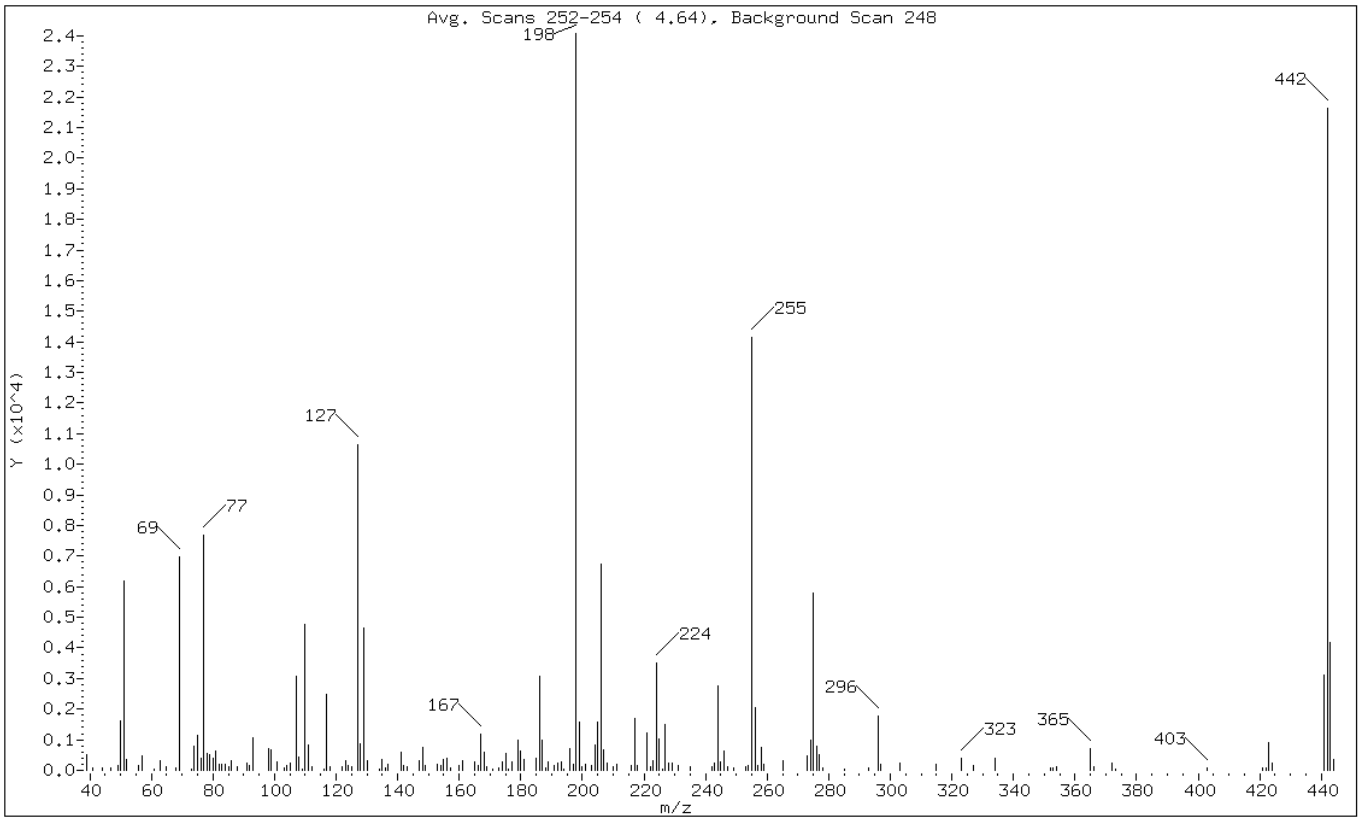
Data File: yl2801t.d

Date: 28-DEC-2012 10:20

Client ID: DFTPP Instrument: MSY5975.i

Sample Info: DFTPP-2888302 ; LLPAH Operator: VHB

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
442	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 442	28.69
68	Less than 2.00% of mass 69	0.28 (0.86)
69	Mass 69 relative abundance	32.23
70	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00% of mass 198	49.23 (44.22)
197	Less than 2.00% of mass 198	0.96 (0.86)
198	Greater than 50.00% of mass 442	111.33
199	5.00 - 9.00% of mass 198	7.24 (6.50)
275	10.00 - 60.00% of mass 442	26.74
365	Greater than 1.00% of mass 442	3.32
441	Less than 100.00% of mass 443	14.40 (74.89)
443	15.00 - 24.00% of mass 442	19.23

Data File: yl2801t.d

Date: 28-DEC-2012 10:20

Client ID: DFTPP Instrument: MSY5975.i

Sample Info: DFTPP-2888302 ; LLPAH Operator: VHB

Data File: /chem/SM/MSY5975.i/2y122812.b/yl2801t.d
Spectrum: Avg. Scans 252-254 (4.64), Background Scan 248
Location of Maximum: 198.00
Number of points: 170

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	514	111.00	813	181.00	358	247.00	113
41.00	72	112.00	127	185.00	396	249.00	67
44.00	65	116.00	58	186.00	3067	253.00	105
47.00	69	117.00	2483	187.00	987	254.00	140
49.00	149	118.00	119	188.00	67	255.00	14134
50.00	1599	122.00	129	189.00	283	256.00	2059
51.00	6205	123.00	302	191.00	160	257.00	142
52.00	368	124.00	147	192.00	236	258.00	750
56.00	148	125.00	129	193.00	292	259.00	193
57.00	458	127.00	10647	194.00	57	265.00	326
61.00	59	128.00	853	196.00	721	273.00	455
63.00	317	129.00	4655	197.00	208	274.00	966
65.00	111	130.00	299	198.00	24072	275.00	5783
68.00	60	134.00	52	199.00	1565	276.00	781
69.00	6969	135.00	352	200.00	109	277.00	496
73.00	55	136.00	70	201.00	201	278.00	89
74.00	802	137.00	211	203.00	177	285.00	51
75.00	1156	141.00	582	204.00	821	293.00	69
76.00	386	142.00	159	205.00	1588	296.00	1789
77.00	7674	143.00	135	206.00	6739	297.00	202
78.00	540	147.00	325	207.00	673	303.00	224
79.00	522	148.00	766	208.00	230	315.00	208
80.00	399	149.00	152	210.00	136	323.00	411
81.00	613	153.00	178	211.00	215	327.00	162
82.00	188	154.00	142	216.00	139	334.00	391
83.00	197	155.00	357	217.00	1676	352.00	76
84.00	216	156.00	405	218.00	149	353.00	70
85.00	133	157.00	69	221.00	1233	354.00	109
86.00	326	160.00	148	222.00	129	365.00	717
88.00	111	161.00	296	223.00	309	366.00	106
91.00	254	165.00	266	224.00	3515	372.00	220
92.00	145	166.00	147	225.00	1006	373.00	54
93.00	1050	167.00	1178	226.00	52	403.00	69
98.00	719	168.00	599	227.00	1493	421.00	63
99.00	664	169.00	105	228.00	243	422.00	90
101.00	283	171.00	50	229.00	254	423.00	889
103.00	77	173.00	69	231.00	173	424.00	223
104.00	157	174.00	273	235.00	115	441.00	3114
105.00	253	175.00	544	242.00	130	442.00	21624
107.00	3068	176.00	55	243.00	254	443.00	4158

108.00	451	177.00	268	244.00	2765	444.00	350
109.00	53	179.00	970	245.00	291		
110.00	4781	180.00	635	246.00	616		

TESTAMERICA SAVANNAH

Data file : /chem/SM/MSY5975.i/2y010213.b/ya0201tzz.d
Lab Smp Id: DFTPP Client Smp ID: DFTPP
Inj Date : 02-JAN-2013 16:44
Operator : VHB Inst ID: MSY5975.i
Smp Info : DFTPP-2925415 ; LLPAH
Misc Info :
Comment :
Method : /chem/SM/MSY5975.i/2y010213.b/Y-dftppPAHLL-m.m
Meth Date : 26-Nov-2012 08:37 gillinsl Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: savchem1

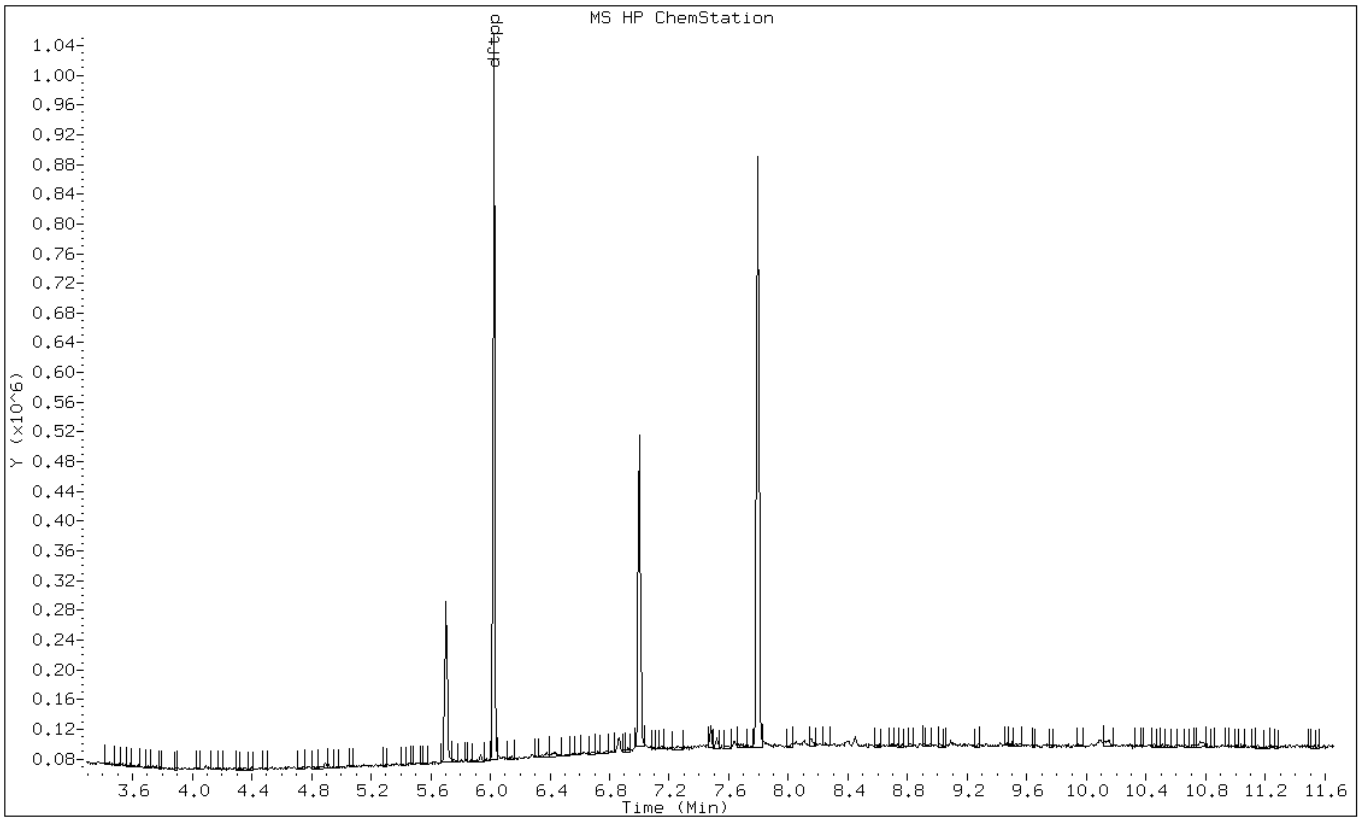
RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp					CAS #: 5074-71-5		
6.025	5.785 (0.000)	442	114613			0.00- 100.00	100.00
6.025	5.785 (0.000)	51	29834			10.00- 80.00	26.03
6.025	5.785 (0.000)	68	289			0.00- 2.00	1.23
6.025	5.785 (0.000)	69	23545			0.00- 0.00	20.54
6.025	5.785 (0.000)	70	99			0.00- 2.00	0.42
6.025	5.785 (0.000)	127	42146			10.00- 80.00	49.26
6.025	5.785 (0.000)	197	755			0.00- 2.00	0.88
6.025	5.785 (0.000)	198	85562			50.00- 0.00	74.65
6.025	5.785 (0.000)	199	5758			5.00- 9.00	6.73
6.025	5.785 (0.000)	275	20099			10.00- 60.00	17.54
6.025	5.785 (0.000)	365	2787			1.00- 0.00	2.43
6.025	5.785 (0.000)	441	16591			0.00- 100.00	73.74
6.025	5.785 (0.000)	443	22498			15.00- 24.00	19.63

Data File: ya0201tzz.d

Date: 02-JAN-2013 16:44

Client ID: DFTPP | Instrument: MSY5975.i

Sample Info: DFTPP-2925415 ; LLPAH | Operator: VHB



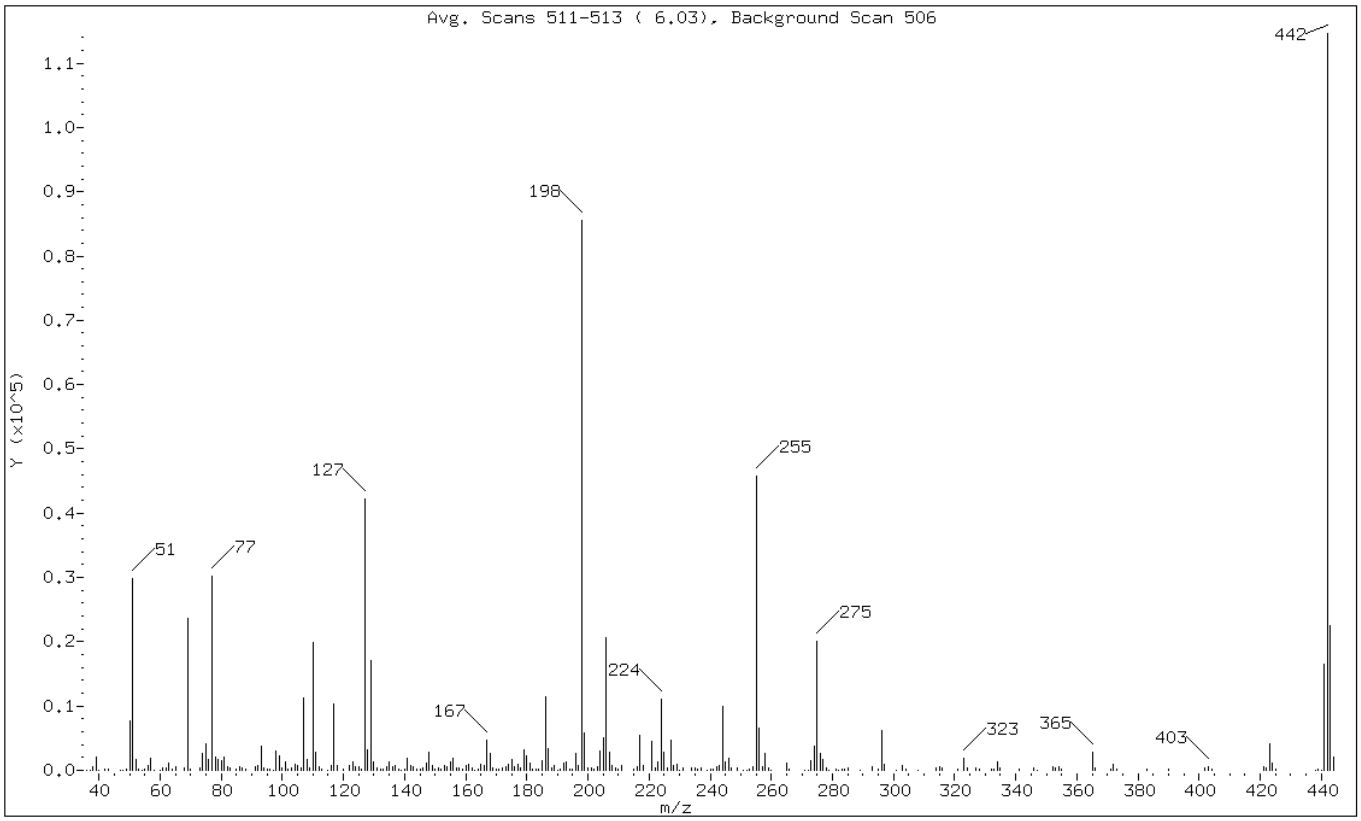
Data File: ya0201tzz.d

Date: 02-JAN-2013 16:44

Client ID: DFTPP Instrument: MSY5975.i

Sample Info: DFTPP-2925415 ; LLPAH Operator: VHB

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
442	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 442	26.03
68	Less than 2.00% of mass 69	0.25 (1.23)
69	Mass 69 relative abundance	20.54
70	Less than 2.00% of mass 69	0.09 (0.42)
127	10.00 - 80.00% of mass 198	36.77 (49.26)
197	Less than 2.00% of mass 198	0.66 (0.88)
198	Greater than 50.00% of mass 442	74.65
199	5.00 - 9.00% of mass 198	5.02 (6.73)
275	10.00 - 60.00% of mass 442	17.54
365	Greater than 1.00% of mass 442	2.43
441	Less than 100.00% of mass 443	14.48 (73.74)
443	15.00 - 24.00% of mass 442	19.63

Data File: ya0201tzz.d

Date: 02-JAN-2013 16:44

Client ID: DFTPP Instrument: MSY5975.i

Sample Info: DFTPP-2925415 ; LLPAH Operator: VHB

Data File: /chem/SM/MSY5975.i/2y010213.b/ya0201tzz.d
Spectrum: Avg. Scans 511-513 (6.03), Background Scan 506
Location of Maximum: 442.00
Number of points: 266

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	36	116.00	671	185.00	1548	266.00	179
37.00	59	117.00	10372	186.00	11501	271.00	53
38.00	563	118.00	682	187.00	3367	272.00	78
39.00	1979	120.00	189	188.00	325	273.00	1556
40.00	62	122.00	711	189.00	665	274.00	3841
42.00	111	123.00	1268	190.00	57	275.00	20096
43.00	170	124.00	509	191.00	255	276.00	2685
47.00	20	125.00	599	192.00	1139	277.00	1730
48.00	52	126.00	157	193.00	1312	278.00	291
49.00	152	127.00	42144	194.00	221	279.00	59
50.00	7685	128.00	3211	195.00	213	281.00	101
51.00	29832	129.00	17024	196.00	2673	282.00	63
52.00	1642	130.00	1333	197.00	755	283.00	252
53.00	193	131.00	336	198.00	85560	284.00	105
54.00	2	132.00	241	199.00	5758	285.00	391
55.00	170	133.00	251	200.00	432	289.00	55
56.00	825	134.00	529	201.00	343	293.00	485
57.00	1878	135.00	1365	202.00	163	295.00	200
58.00	74	136.00	527	203.00	567	296.00	6178
60.00	13	137.00	794	204.00	3029	297.00	849
61.00	409	138.00	148	205.00	5111	301.00	55
62.00	306	139.00	52	206.00	20544	303.00	803
63.00	1113	140.00	218	207.00	2809	304.00	130
64.00	230	141.00	1934	208.00	686	308.00	61
65.00	587	142.00	749	209.00	388	314.00	329
68.00	289	143.00	524	210.00	241	315.00	565
69.00	23544	144.00	132	211.00	806	316.00	437
70.00	99	145.00	168	215.00	229	321.00	207
73.00	323	146.00	412	216.00	577	323.00	1965
74.00	2693	147.00	1171	217.00	5480	324.00	390
75.00	4167	148.00	2795	218.00	728	327.00	428
76.00	1627	149.00	686	221.00	4537	328.00	176
77.00	30264	150.00	147	222.00	397	332.00	126
78.00	1975	151.00	319	223.00	1239	333.00	200
79.00	1705	152.00	262	224.00	11018	334.00	1322
80.00	1528	153.00	725	225.00	2855	335.00	363
81.00	1991	154.00	527	226.00	295	341.00	277
82.00	558	155.00	1271	227.00	4623	346.00	436
83.00	312	156.00	1874	228.00	680	347.00	50
85.00	208	157.00	397	229.00	981	352.00	529

86.00	572	158.00	332	230.00	57	353.00	458
87.00	436	159.00	245	231.00	421	354.00	572
88.00	266	160.00	697	234.00	325	355.00	178
91.00	502	161.00	976	235.00	356	365.00	2787
92.00	670	162.00	356	236.00	211	366.00	403
93.00	3733	163.00	52	237.00	424	371.00	151
94.00	332	164.00	144	239.00	75	372.00	1023
95.00	253	165.00	923	240.00	161	373.00	166
96.00	174	166.00	667	241.00	276	383.00	273
97.00	2	167.00	4681	242.00	621	390.00	134
98.00	2920	168.00	2556	243.00	743	402.00	453
99.00	2321	169.00	399	244.00	9864	403.00	590
100.00	312	170.00	126	245.00	1287	404.00	147
101.00	1263	171.00	269	246.00	1889	421.00	615
102.00	120	172.00	393	247.00	339	422.00	466
103.00	436	173.00	536	249.00	365	423.00	4186
104.00	943	174.00	924	251.00	63	424.00	1073
105.00	727	175.00	1686	252.00	85	425.00	132
106.00	309	176.00	572	253.00	224	438.00	53
107.00	11265	177.00	860	254.00	483	439.00	146
108.00	1691	178.00	300	255.00	45832	440.00	72
109.00	379	179.00	3201	256.00	6506	441.00	16584
110.00	19856	180.00	2221	257.00	487	442.00	114608
111.00	2875	181.00	1114	258.00	2700	443.00	22496
112.00	478	182.00	220	259.00	374	444.00	2099
113.00	133	183.00	110	260.00	50		
115.00	51	184.00	252	265.00	1069		

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: | Lab Sample ID: MB 680-261057/10-A

Matrix: Water | Lab File ID: yl2811z.d

Analysis Method: 8270C_LL_PAH | Date Collected:

Extract. Method: 3520C | Date Extracted: 12/26/2012 18:09

Sample wt/vol: 1000(mL) | Date Analyzed: 12/28/2012 14:50

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

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

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

Analysis Batch No.: 261362 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	0.20	U	0.20	0.10
208-96-8	Acenaphthylene	0.20	U	0.20	0.10
120-12-7	Anthracene	0.20	U	0.20	0.10
56-55-3	Benzo[a]anthracene	0.20	U	0.20	0.10
50-32-8	Benzo[a]pyrene	0.20	U	0.20	0.10
205-99-2	Benzo[b]fluoranthene	0.20	U	0.20	0.10
191-24-2	Benzo[g,h,i]perylene	0.20	U	0.20	0.10
207-08-9	Benzo[k]fluoranthene	0.20	U	0.20	0.10
218-01-9	Chrysene	0.20	U	0.20	0.045
53-70-3	Dibenz(a,h)anthracene	0.20	U	0.20	0.10
206-44-0	Fluoranthene	0.20	U	0.20	0.10
90-12-0	1-Methylnaphthalene	0.40	U	0.40	0.40
86-73-7	Fluorene	0.20	U	0.20	0.10
91-57-6	2-Methylnaphthalene	0.20	U	0.20	0.10
193-39-5	Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.10
91-20-3	Naphthalene	0.20	U	0.20	0.10
85-01-8	Phenanthrene	0.20	U	0.20	0.10
129-00-0	Pyrene	0.20	U	0.20	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	71		41-130

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y122812.b/yl2811z.d
Lab Smp Id: MB680-261057/10-A
Inj Date : 28-DEC-2012 14:50
Operator : VHB Inst ID: MSY5975.i
Smp Info : MB680-261057/10-A
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y122812.b/Y-b8270CLLPAH-m.m
Meth Date : 28-Dec-2012 10:56 chemist Quant Type: ISTD
Cal Date : 21-DEC-2012 13:30 Cal File: yl2112q.d
Als bottle: 10 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula: Amt * DF * 1/Vi * Vt/Vo * A * B * C * D * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Vo	1000.00000	Sample Extract Volume
A	1000.00000	uL to mL conversion
B	1000.00000	mL to L conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1= if no con

Cpnd Variable Local Compound Variable

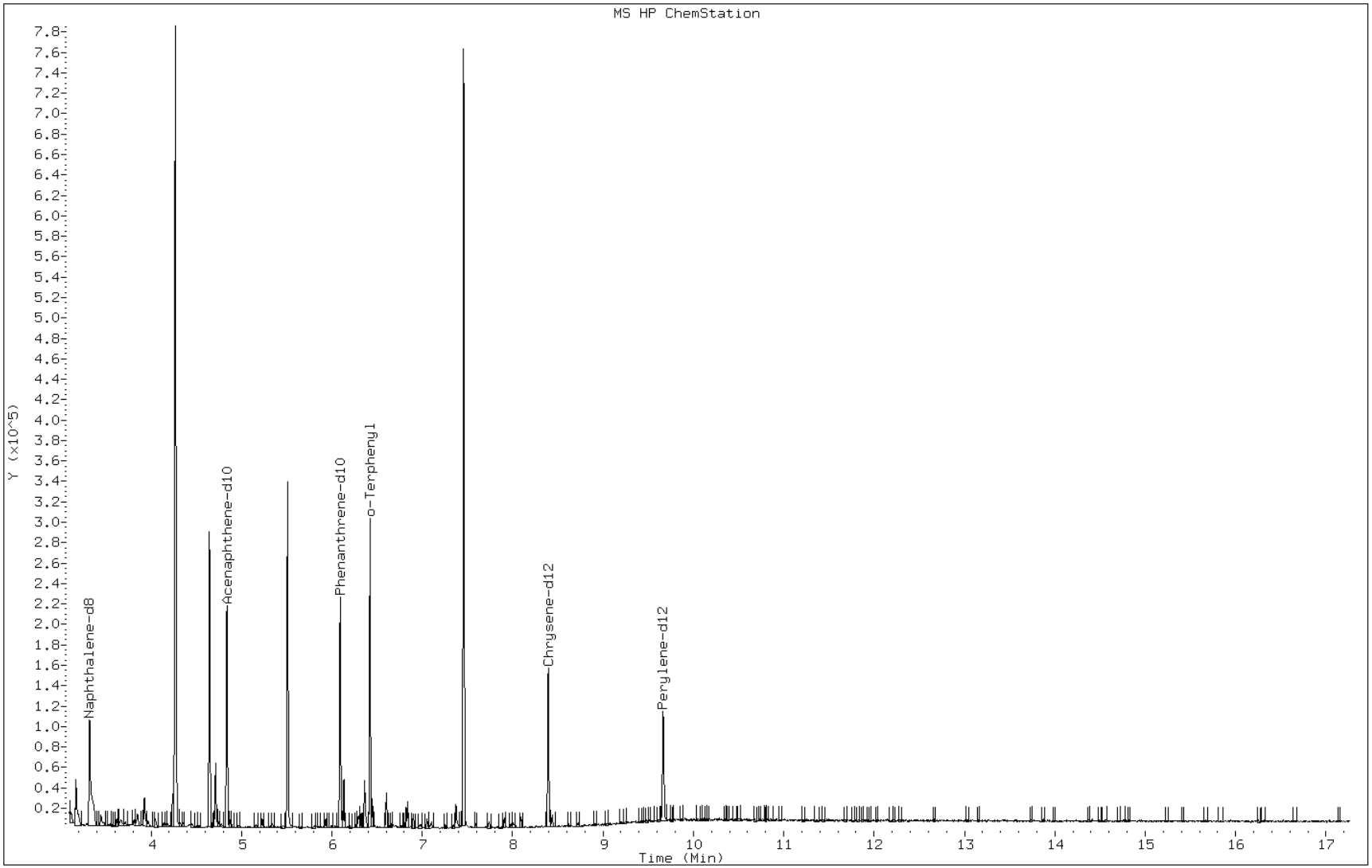
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/l)
* 1 Naphthalene-d8	136	3.317	3.317	(1.000)	87635	2.00000	
* 5 Acenaphthene-d10	164	4.841	4.836	(1.000)	52277	2.00000	
* 9 Phenanthrene-d10	188	6.093	6.088	(1.000)	82972	2.00000	
$ 15 o-Terphenyl	230	6.424	6.419	(0.765)	47955	1.42347	1.42
* 13 Chrysene-d12	240	8.398	8.393	(1.000)	62412	2.00000	
* 18 Perylene-d12	264	9.666	9.660	(1.000)	48777	2.00000	

Data File: yl2811z.d

Date: 28-DEC-2012 14:50

Client ID: Instrument: MSY5975.i

Sample Info: MB680-261057/10-A Operator: VHB



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah
Job No.: 680-85980-1
SDG No.: 68085980-1
Client Sample ID:
Lab Sample ID: MB 680-261484/17-A
Matrix: Solid
Lab File ID: ka02115.d
Analysis Method: 8270C_LL_PAH
Date Collected:
Extract. Method: 3546
Date Extracted: 12/31/2012 13:00
Sample wt/vol: 30.05(g)
Date Analyzed: 01/02/2013 14:34
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 261629
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	6.7	U	6.7	3.3
208-96-8	Acenaphthylene	6.7	U	6.7	3.3
120-12-7	Anthracene	6.7	U	6.7	3.3
56-55-3	Benzo[a]anthracene	6.7	U	6.7	3.3
50-32-8	Benzo[a]pyrene	6.7	U	6.7	1.2
205-99-2	Benzo[b]fluoranthene	6.7	U	6.7	3.3
191-24-2	Benzo[g,h,i]perylene	6.7	U	6.7	3.3
207-08-9	Benzo[k]fluoranthene	6.7	U	6.7	2.0
218-01-9	Chrysene	6.7	U	6.7	3.3
53-70-3	Dibenz(a,h)anthracene	6.7	U	6.7	3.3
206-44-0	Fluoranthene	6.7	U	6.7	3.3
90-12-0	1-Methylnaphthalene	6.7	U	6.7	3.1
86-73-7	Fluorene	6.7	U	6.7	3.3
91-57-6	2-Methylnaphthalene	6.7	U	6.7	3.3
193-39-5	Indeno[1,2,3-cd]pyrene	6.7	U	6.7	3.3
91-20-3	Naphthalene	6.7	U	6.7	3.3
85-01-8	Phenanthrene	6.7	U	6.7	2.4
129-00-0	Pyrene	6.7	U	6.7	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	50		36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka02115.d
Lab Smp Id: MB 680-261484/17-A
Inj Date : 02-JAN-2013 14:34
Operator : LEG Inst ID: MSK5973.i
Smp Info : MB 680-261484/17-A
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:58 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:24 Cal File: ka0212q.d
Als bottle: 11 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

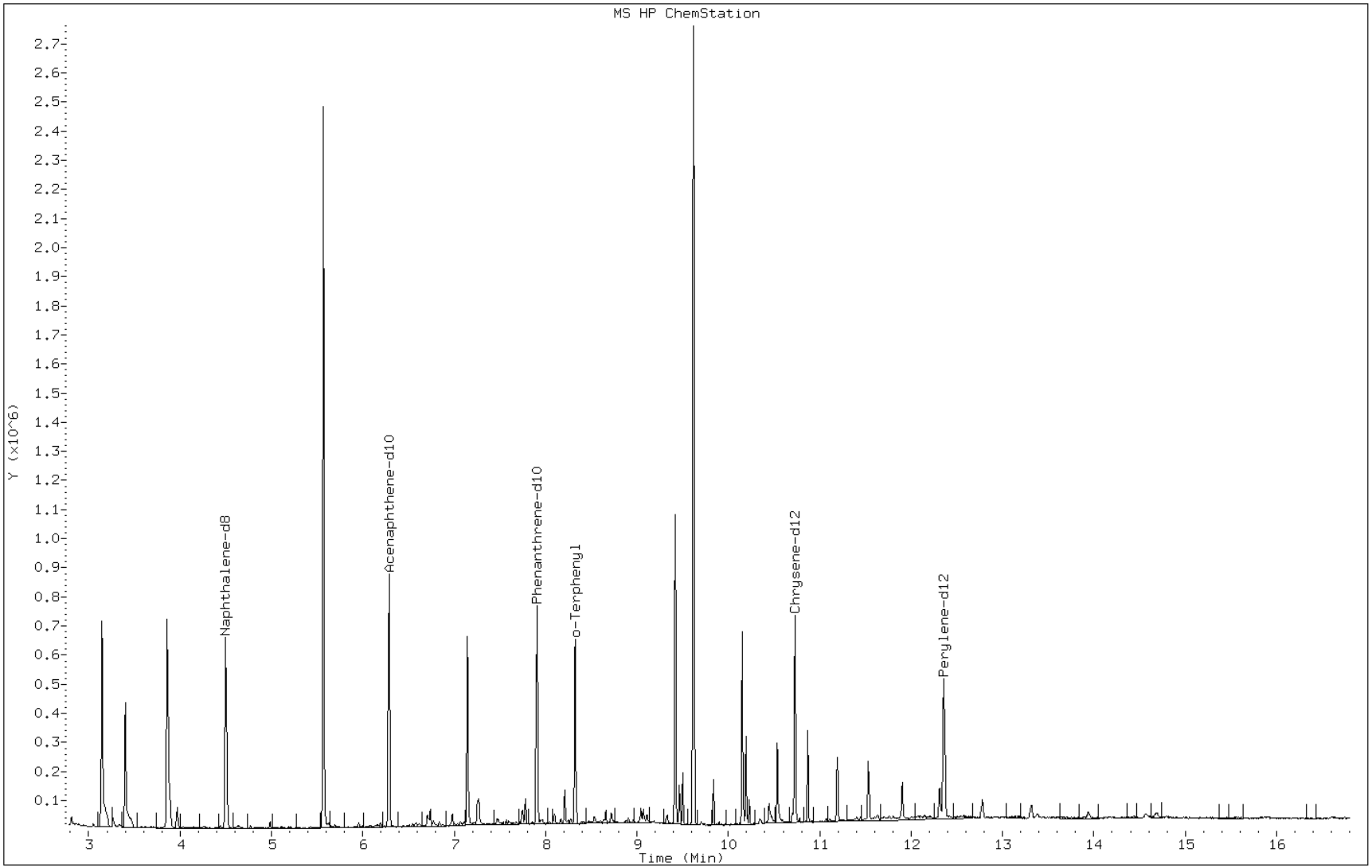
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.501	4.501	(1.000)	429122	2.00000	
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	240000	2.00000	
* 9 Phenanthrene-d10	188	7.903	7.903	(1.000)	353245	2.00000	
$ 15 o-Terphenyl	230	8.326	8.326	(0.776)	145382	0.99858	33.28
* 13 Chrysene-d12	240	10.729	10.729	(1.000)	280642	2.00000	
* 18 Perylene-d12	264	12.356	12.356	(1.000)	258707	2.00000	

Data File: ka02115.d

Date: 02-JAN-2013 14:34

Client ID: Instrument: MSK5973.i

Sample Info: MB 680-261484/17-A Operator: LEG



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: | Lab Sample ID: LCS 680-261057/11-A

Matrix: Water | Lab File ID: yl2812.d

Analysis Method: 8270C_LL_PAH | Date Collected:

Extract. Method: 3520C | Date Extracted: 12/26/2012 18:09

Sample wt/vol: 1000(mL) | Date Analyzed: 12/28/2012 15:12

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

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

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

Analysis Batch No.: 261362 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	6.11		0.20	0.10
208-96-8	Acenaphthylene	6.21		0.20	0.10
120-12-7	Anthracene	6.27		0.20	0.10
56-55-3	Benzo[a]anthracene	5.76		0.20	0.10
50-32-8	Benzo[a]pyrene	6.06		0.20	0.10
205-99-2	Benzo[b]fluoranthene	6.37		0.20	0.10
191-24-2	Benzo[g,h,i]perylene	5.80		0.20	0.10
207-08-9	Benzo[k]fluoranthene	5.82		0.20	0.10
218-01-9	Chrysene	6.09		0.20	0.045
53-70-3	Dibenz(a,h)anthracene	5.92		0.20	0.10
206-44-0	Fluoranthene	5.66		0.20	0.10
90-12-0	1-Methylnaphthalene	5.46		0.40	0.40
86-73-7	Fluorene	7.07		0.20	0.10
91-57-6	2-Methylnaphthalene	6.01		0.20	0.10
193-39-5	Indeno[1,2,3-cd]pyrene	5.24		0.20	0.10
91-20-3	Naphthalene	5.91		0.20	0.10
85-01-8	Phenanthrene	6.24		0.20	0.10
129-00-0	Pyrene	6.01		0.20	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	58		41-130

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y122812.b/yl2812.d
Lab Smp Id: LCS680-261057/11-A
Inj Date : 28-DEC-2012 15:12
Operator : VHB Inst ID: MSY5975.i
Smp Info : LCS680-261057/11-A
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y122812.b/Y-b8270CLLPAH-m.m
Meth Date : 28-Dec-2012 10:56 chemist Quant Type: ISTD
Cal Date : 21-DEC-2012 13:30 Cal File: yl2112q.d
Als bottle: 11 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula: Amt * DF * 1/Vi * Vt/Vo * A * B * C * D * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Vo	1000.00000	Sample Extract Volume
A	1000.00000	uL to mL conversion
B	1000.00000	mL to L conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1= if no con

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/l)
* 1 Naphthalene-d8	136	3.317	3.317	(1.000)	84497	2.00000	
2 Naphthalene	128	3.338	3.333	(1.006)	294456	5.91308	5.91(R)
3 2-Methylnaphthalene	142	3.943	3.937	(1.189)	186819	6.01127	6.01(R)
4 1-Methylnaphthalene	142	4.028	4.023	(1.214)	178673	5.46351	5.46(R)
6 Acenaphthylene	152	4.718	4.713	(0.975)	331451	6.21146	6.21(R)
* 5 Acenaphthene-d10	164	4.841	4.836	(1.000)	51639	2.00000	
7 Acenaphthene	154	4.868	4.863	(1.006)	193186	6.10600	6.10(R)
8 Fluorene	166	5.307	5.301	(1.096)	250826	7.07054	7.07(R)
* 9 Phenanthrene-d10	188	6.088	6.088	(1.000)	87718	2.00000	
10 Phenanthrene	178	6.109	6.109	(1.004)	337376	6.24359	6.24(R)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/l)
11 Anthracene	178	6.152	6.152	(1.011)	323894	6.26648	6.26(R)
$ 15 o-Terphenyl	230	6.424	6.419	(0.765)	40589	1.15590	1.15
12 Fluoranthene	202	7.114	7.109	(1.169)	356259	5.65555	5.65(R)
14 Pyrene	202	7.307	7.307	(0.871)	354730	6.00785	6.00(R)
16 Benzo(a)Anthracene	228	8.387	8.382	(0.999)	266074	5.76493	5.76(R)
* 13 Chrysene-d12	240	8.393	8.393	(1.000)	65054	2.00000	
17 Chrysene	228	8.419	8.414	(1.003)	250521	6.09482	6.09(R)
19 Benzo(b)fluoranthene	252	9.334	9.329	(0.966)	244083	6.36890	6.36(R)
20 Benzo(k)fluoranthene	252	9.356	9.350	(0.968)	227381	5.81709	5.81(R)
21 Benzo(a)pyrene	252	9.612	9.612	(0.994)	191509	6.05863	6.05(R)
* 18 Perylene-d12	264	9.666	9.660	(1.000)	52383	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	10.773	10.773	(1.284)	185119	5.23831	5.23(R)
23 Dibenzo(a,h)anthracene	278	10.794	10.794	(1.117)	157257	5.92004	5.92(R)
24 Benzo(g,h,i)perylene	276	11.105	11.099	(1.149)	159504	5.80469	5.80(R)

QC Flag Legend

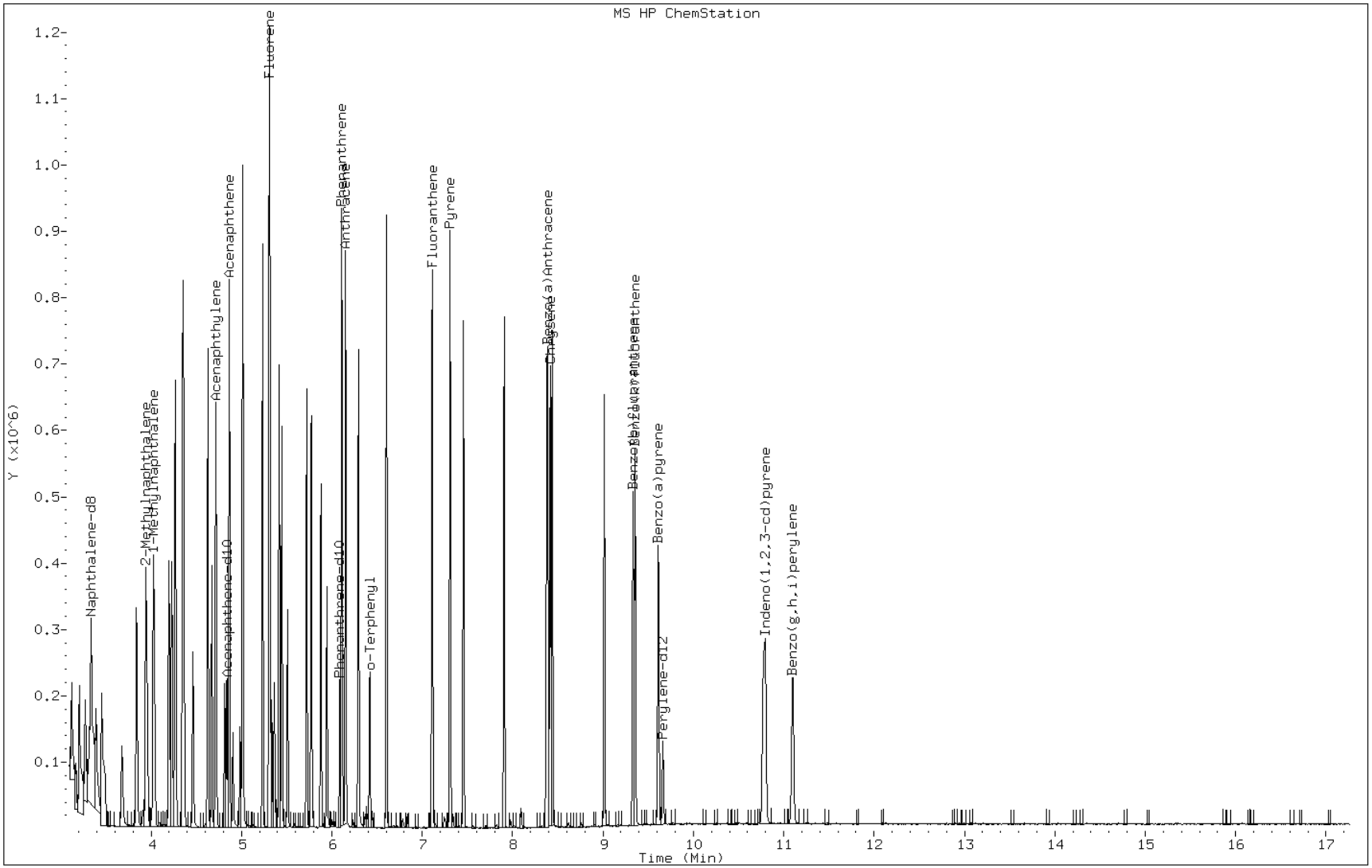
R - Spike/Surrogate failed recovery limits.

Data File: yl2812.d

Date: 28-DEC-2012 15:12

Client ID: Instrument: MSY5975.i

Sample Info: LCS680-261057/11-A Operator: VHB



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: | Lab Sample ID: LCS 680-261484/18-A

Matrix: Solid | Lab File ID: ka02116.d

Analysis Method: 8270C_LL_PAH | Date Collected:

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.15(g) | Date Analyzed: 01/02/2013 14:57

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

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

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

Analysis Batch No.: 261629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	166		6.7	3.3
208-96-8	Acenaphthylene	167		6.7	3.3
120-12-7	Anthracene	164		6.7	3.3
56-55-3	Benzo[a]anthracene	168		6.7	3.3
50-32-8	Benzo[a]pyrene	176		6.7	1.2
205-99-2	Benzo[b]fluoranthene	152		6.7	3.3
191-24-2	Benzo[g,h,i]perylene	171		6.7	3.3
207-08-9	Benzo[k]fluoranthene	175		6.7	2.0
218-01-9	Chrysene	163		6.7	3.3
53-70-3	Dibenz(a,h)anthracene	178		6.7	3.3
206-44-0	Fluoranthene	167		6.7	3.3
90-12-0	1-Methylnaphthalene	171		6.7	3.1
86-73-7	Fluorene	172		6.7	3.3
91-57-6	2-Methylnaphthalene	183		6.7	3.3
193-39-5	Indeno[1,2,3-cd]pyrene	182		6.7	3.3
91-20-3	Naphthalene	168		6.7	3.3
85-01-8	Phenanthrene	158		6.7	2.4
129-00-0	Pyrene	148		6.7	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	42		36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka02116.d
Lab Smp Id: LCS 680-261484/18-A
Inj Date : 02-JAN-2013 14:57
Operator : LEG Inst ID: MSK5973.i
Smp Info : LCS 680-261484/18-A
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:58 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:24 Cal File: ka0212q.d
Als bottle: 12 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.495	4.501	(1.000)	437752	2.00000	
2 Naphthalene	128	4.512	4.524	(1.004)	1307829	5.07040	169.01
3 2-Methylnaphthalene	142	5.188	5.194	(1.154)	886888	5.53201	184.40
4 1-Methylnaphthalene	142	5.294	5.300	(1.178)	836632	5.14781	171.59
6 Acenaphthylene	152	6.140	6.140	(0.977)	1334387	5.04435	168.14
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	255266	2.00000	
7 Acenaphthene	154	6.322	6.322	(1.006)	756837	5.01342	167.11(R)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
8 Fluorene	166	6.880	6.875	(1.094)	913011	5.17463	172.48(R)
* 9 Phenanthrene-d10	188	7.908	7.903	(1.000)	406857	2.00000	
10 Phenanthrene	178	7.932	7.932	(1.003)	1225401	4.77224	159.07(R)
11 Anthracene	178	7.985	7.985	(1.010)	1205341	4.94967	164.98(R)
$ 15 o-Terphenyl	230	8.326	8.326	(0.776)	152379	0.84611	28.20
12 Fluoranthene	202	9.225	9.219	(1.166)	1300663	5.02790	167.59(R)
14 Pyrene	202	9.466	9.460	(0.882)	1321693	4.46667	148.88(R)
16 Benzo(a)Anthracene	228	10.717	10.717	(0.999)	1154179	5.07830	169.27(R)
* 13 Chrysene-d12	240	10.729	10.729	(1.000)	347155	2.00000	
17 Chrysene	228	10.758	10.758	(1.003)	1097562	4.90838	163.61(R)
19 Benzo(b)fluoranthene	252	11.874	11.875	(0.961)	1062803	4.58531	152.84(R)
20 Benzo(k)fluoranthene	252	11.904	11.904	(0.964)	1181370	5.26586	175.52(R)
21 Benzo(a)pyrene	252	12.280	12.280	(0.994)	942578	5.31906	177.30
* 18 Perylene-d12	264	12.350	12.356	(1.000)	311887	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	13.966	13.966	(1.302)	982734	5.48262	182.75
23 Dibenzo(a,h)anthracene	278	13.984	13.984	(1.132)	856747	5.37605	179.20
24 Benzo(g,h,i)perylene	276	14.460	14.460	(1.171)	815900	5.16010	172.00

QC Flag Legend

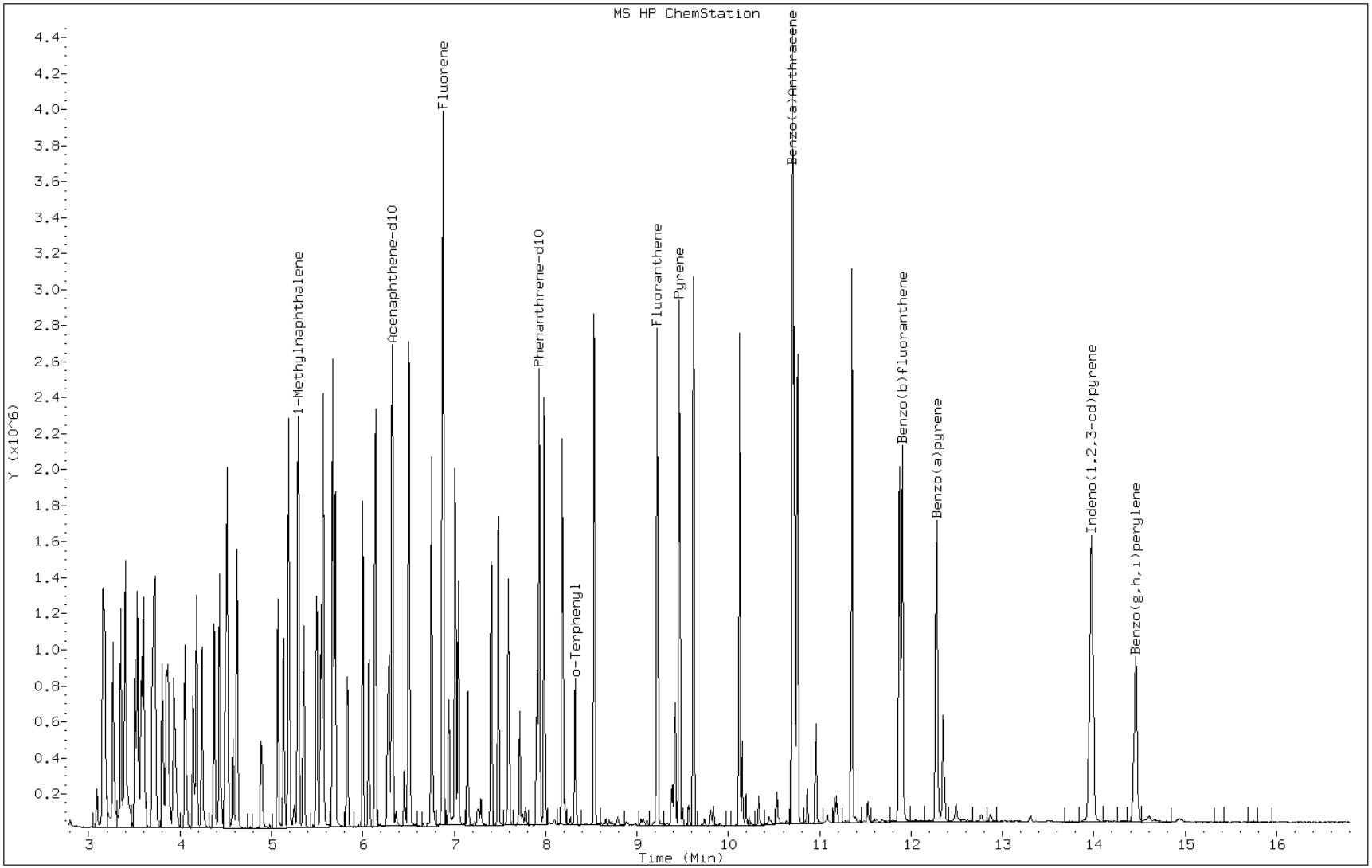
R - Spike/Surrogate failed recovery limits.

Data File: ka02116.d

Date: 02-JAN-2013 14:57

Client ID: Instrument: MSK5973.i

Sample Info: LCS 680-261484/18-A Operator: LEG



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: | Lab Sample ID: LCSD 680-261057/12-A

Matrix: Water | Lab File ID: yl2813.d

Analysis Method: 8270C_LL_PAH | Date Collected:

Extract. Method: 3520C | Date Extracted: 12/26/2012 18:09

Sample wt/vol: 1000(mL) | Date Analyzed: 12/28/2012 15:34

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

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

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

Analysis Batch No.: 261362 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	6.86		0.20	0.10
208-96-8	Acenaphthylene	6.99		0.20	0.10
120-12-7	Anthracene	6.88		0.20	0.10
56-55-3	Benzo[a]anthracene	6.90		0.20	0.10
50-32-8	Benzo[a]pyrene	6.68		0.20	0.10
205-99-2	Benzo[b]fluoranthene	7.13		0.20	0.10
191-24-2	Benzo[g,h,i]perylene	6.39		0.20	0.10
207-08-9	Benzo[k]fluoranthene	7.06		0.20	0.10
218-01-9	Chrysene	6.87		0.20	0.045
53-70-3	Dibenz(a,h)anthracene	6.67		0.20	0.10
206-44-0	Fluoranthene	6.48		0.20	0.10
90-12-0	1-Methylnaphthalene	6.21		0.40	0.40
86-73-7	Fluorene	8.02		0.20	0.10
91-57-6	2-Methylnaphthalene	6.87		0.20	0.10
193-39-5	Indeno[1,2,3-cd]pyrene	5.78		0.20	0.10
91-20-3	Naphthalene	6.71		0.20	0.10
85-01-8	Phenanthrene	7.04		0.20	0.10
129-00-0	Pyrene	6.85		0.20	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	61		41-130

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y122812.b/yl2813.d
Lab Smp Id: LCSD680-261057/12-A
Inj Date : 28-DEC-2012 15:34
Operator : VHB Inst ID: MSY5975.i
Smp Info : LCSD680-261057/12-A
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y122812.b/Y-b8270CLLPAH-m.m
Meth Date : 28-Dec-2012 10:56 chemist Quant Type: ISTD
Cal Date : 21-DEC-2012 13:30 Cal File: yl2112q.d
Als bottle: 12 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula: Amt * DF * 1/Vi * Vt/Vo * A * B * C * D * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Vo	1000.00000	Sample Extract Volume
A	1000.00000	uL to mL conversion
B	1000.00000	mL to L conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1= if no con

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/l)
* 1 Naphthalene-d8	136	3.317	3.317	(1.000)	85649	2.00000	
2 Naphthalene	128	3.338	3.333	(1.006)	338934	6.71473	6.71(R)
3 2-Methylnaphthalene	142	3.943	3.937	(1.189)	216283	6.86575	6.86(R)
4 1-Methylnaphthalene	142	4.023	4.023	(1.213)	206016	6.21491	6.21(R)
6 Acenaphthylene	152	4.713	4.713	(0.975)	387422	6.98833	6.98(R)
* 5 Acenaphthene-d10	164	4.836	4.836	(1.000)	53650	2.00000	
7 Acenaphthene	154	4.868	4.863	(1.007)	225587	6.86294	6.86(R)
8 Fluorene	166	5.307	5.301	(1.097)	295453	8.01648	8.01(R)
* 9 Phenanthrene-d10	188	6.093	6.088	(1.000)	93412	2.00000	
10 Phenanthrene	178	6.109	6.109	(1.003)	404894	7.03638	7.03(R)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/l)
11 Anthracene	178	6.152	6.152	(1.010)	378415	6.87507	6.87(R)
$ 15 o-Terphenyl	230	6.424	6.419	(0.765)	46825	1.21475	1.21
12 Fluoranthene	202	7.114	7.109	(1.168)	434990	6.48451	6.48(R)
14 Pyrene	202	7.307	7.307	(0.870)	443943	6.84938	6.84(R)
16 Benzo(a)Anthracene	228	8.387	8.382	(0.999)	349788	6.90397	6.90(R)
* 13 Chrysene-d12	240	8.398	8.393	(1.000)	71412	2.00000	
17 Chrysene	228	8.419	8.414	(1.003)	309967	6.86966	6.86(R)
19 Benzo(b)fluoranthene	252	9.334	9.329	(0.966)	295545	7.13157	7.13(R)
20 Benzo(k)fluoranthene	252	9.355	9.350	(0.968)	298317	7.05775	7.05(RM)
21 Benzo(a)pyrene	252	9.618	9.612	(0.995)	228424	6.68286	6.68(R)
* 18 Perylene-d12	264	9.666	9.660	(1.000)	56645	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	10.778	10.773	(1.283)	224411	5.78478	5.78(R)
23 Dibenzo(a,h)anthracene	278	10.800	10.794	(1.117)	191710	6.67412	6.67(R)
24 Benzo(g,h,i)perylene	276	11.104	11.099	(1.149)	189987	6.39389	6.39(R)

QC Flag Legend

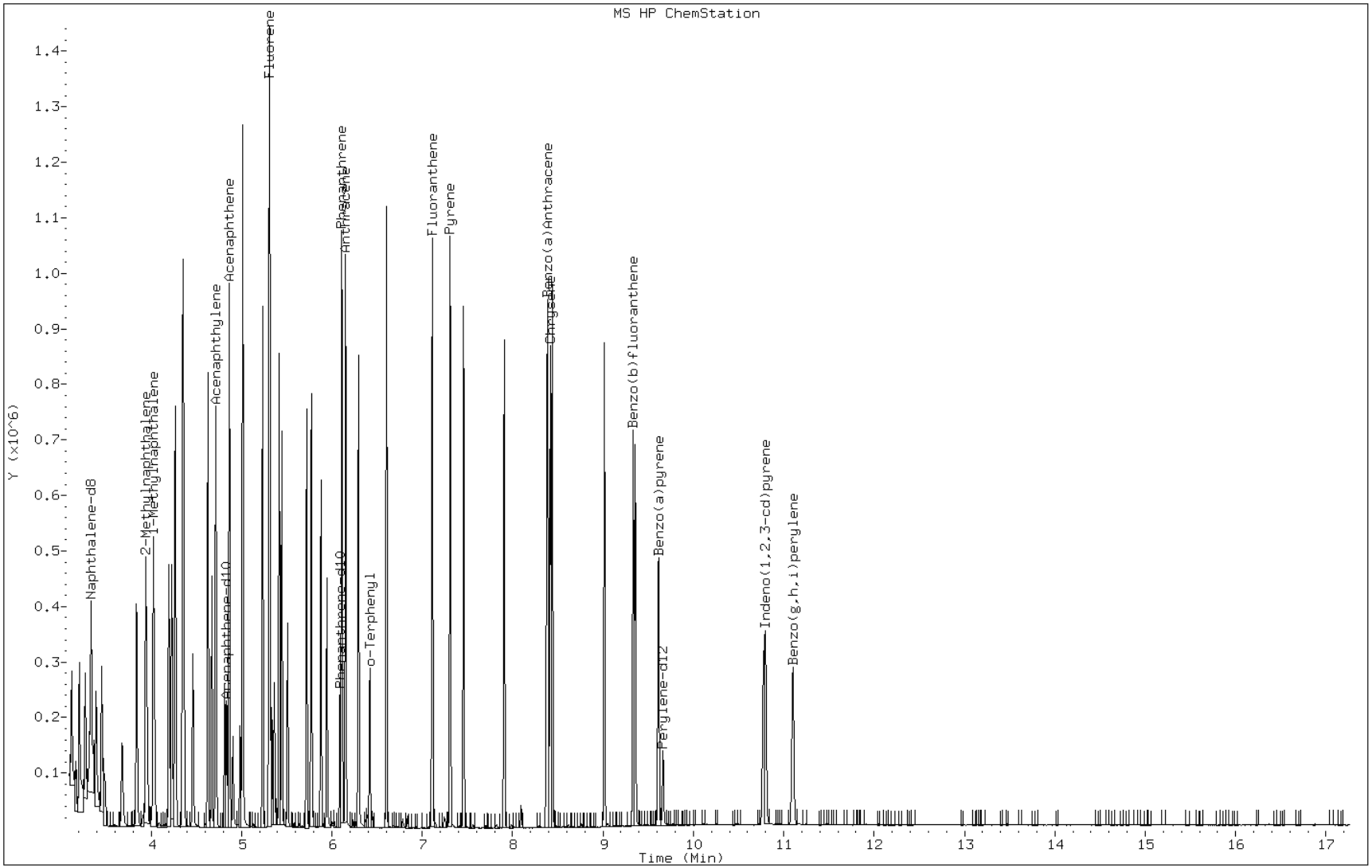
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: yl2813.d

Date: 28-DEC-2012 15:34

Client ID: Instrument: MSY5975.i

Sample Info: LCSD680-261057/12-A Operator: VHB



Manual Integration Report

Data File: yl2813.d
Inj. Date and Time: 28-DEC-2012 15:34
Instrument ID: MSY5975.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 12/31/2012

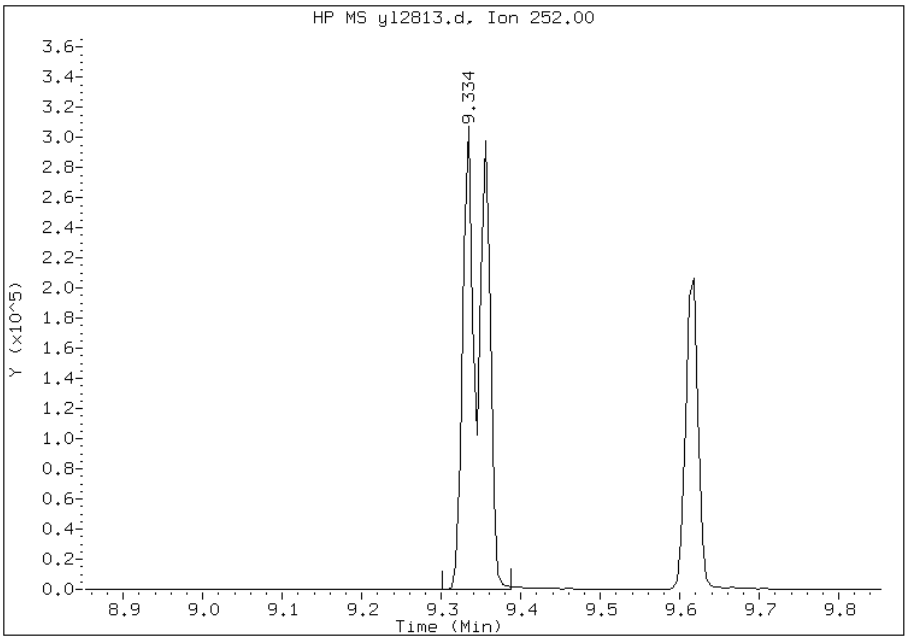
Processing Integration Results

RT: 9.33

Response: 551803

Amount: 13

Conc: 13



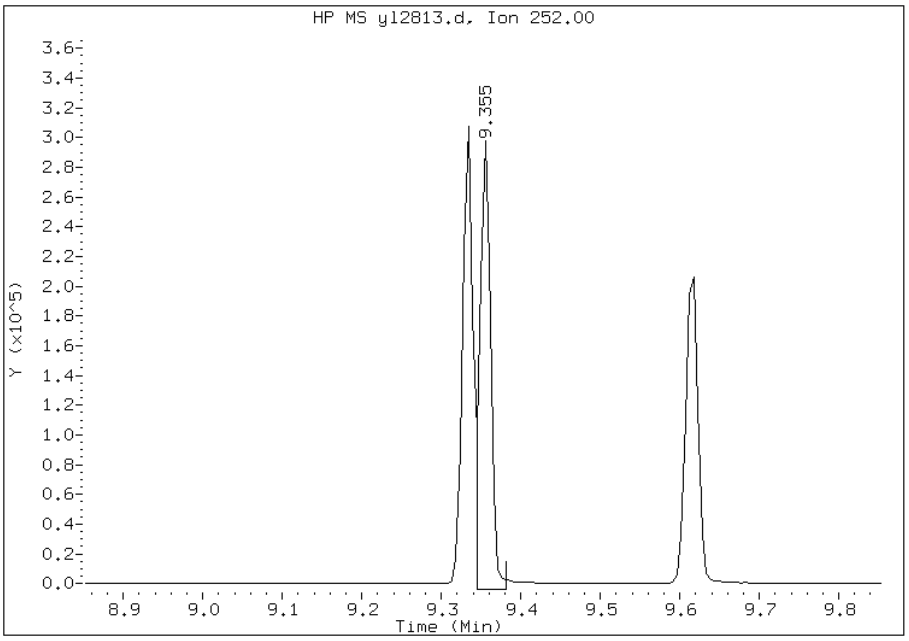
Manual Integration Results

RT: 9.36

Response: 298317

Amount: 7

Conc: 7



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: CV0627A-CS MS | Lab Sample ID: 680-85980-39 MS

Matrix: Solid | Lab File ID: ka0224.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/19/2012 09:15

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.35(g) | Date Analyzed: 01/02/2013 18:05

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

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

% Moisture: 27.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	315		92	42
91-57-6	2-Methylnaphthalene	378		92	45
83-32-9	Acenaphthene	223		92	45
208-96-8	Acenaphthylene	217		92	45
120-12-7	Anthracene	230		92	45
56-55-3	Benzo[a]anthracene	337		92	45
50-32-8	Benzo[a]pyrene	331		92	16
205-99-2	Benzo[b]fluoranthene	425		92	45
191-24-2	Benzo[g,h,i]perylene	197		92	45
207-08-9	Benzo[k]fluoranthene	335		92	27
218-01-9	Chrysene	425		92	45
53-70-3	Dibenz(a,h)anthracene	174		92	45
206-44-0	Fluoranthene	426		92	45
86-73-7	Fluorene	233		92	45
193-39-5	Indeno[1,2,3-cd]pyrene	183		92	45
91-20-3	Naphthalene	373		92	45
129-00-0	Pyrene	428		92	45
85-01-8	Phenanthrene	415		92	33

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0224.d
Lab Smp Id: 680-85980-A-39-B MS Client Smp ID: CV0627A-CS
Inj Date : 02-JAN-2013 18:05
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85980-A-39-B MS DL=10
Misc Info : 680-85980-A-39-B MS
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:58 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:24 Cal File: ka0212q.d
Als bottle: 20 QC Sample: MS
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.35000	Weight Extracted
M	27.75208	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.501	4.501	(1.000)	441674	2.00000	
2 Naphthalene	128	4.524	4.524	(1.005)	213050	0.81865	373.34
3 2-Methylnaphthalene	142	5.194	5.194	(1.154)	134113	0.82911	378.11
4 1-Methylnaphthalene	142	5.300	5.300	(1.178)	113205	0.69037	314.84
6 Acenaphthylene	152	6.140	6.140	(0.977)	127953	0.47676	217.42(R)
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	258979	2.00000	
7 Acenaphthene	154	6.322	6.322	(1.006)	74903	0.48906	223.03(R)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
8 Fluorene	166	6.880	6.875	(1.094)	91460	0.51093	233.01(R)
* 9 Phenanthrene-d10	188	7.909	7.903	(1.000)	410561	2.00000	
10 Phenanthrene	178	7.932	7.932	(1.003)	235758	0.90986	414.94
11 Anthracene	178	7.985	7.985	(1.010)	123879	0.50411	229.90(R)
12 Fluoranthene	202	9.225	9.219	(1.166)	244111	0.93513	426.47
14 Pyrene	202	9.466	9.460	(0.882)	231924	0.93812	427.83
16 Benzo(a)Anthracene	228	10.717	10.717	(0.999)	140162	0.73814	336.62
* 13 Chrysene-d12	240	10.729	10.729	(1.000)	290043	2.00000	
17 Chrysene	228	10.752	10.758	(1.002)	174299	0.93297	425.48
19 Benzo(b)fluoranthene	252	11.869	11.875	(0.961)	144274	0.93251	425.27
20 Benzo(k)fluoranthene	252	11.898	11.904	(0.963)	110080	0.73509	335.23
21 Benzo(a)pyrene	252	12.280	12.280	(0.994)	85840	0.72570	330.95
* 18 Perylene-d12	264	12.350	12.356	(1.000)	208185	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	13.960	13.966	(1.301)	60121	0.40146	183.08
23 Dibenzo(a,h)anthracene	278	13.978	13.984	(1.132)	40502	0.38075	173.64(R)
24 Benzo(g,h,i)perylene	276	14.454	14.460	(1.170)	45683	0.43284	197.39(R)

QC Flag Legend

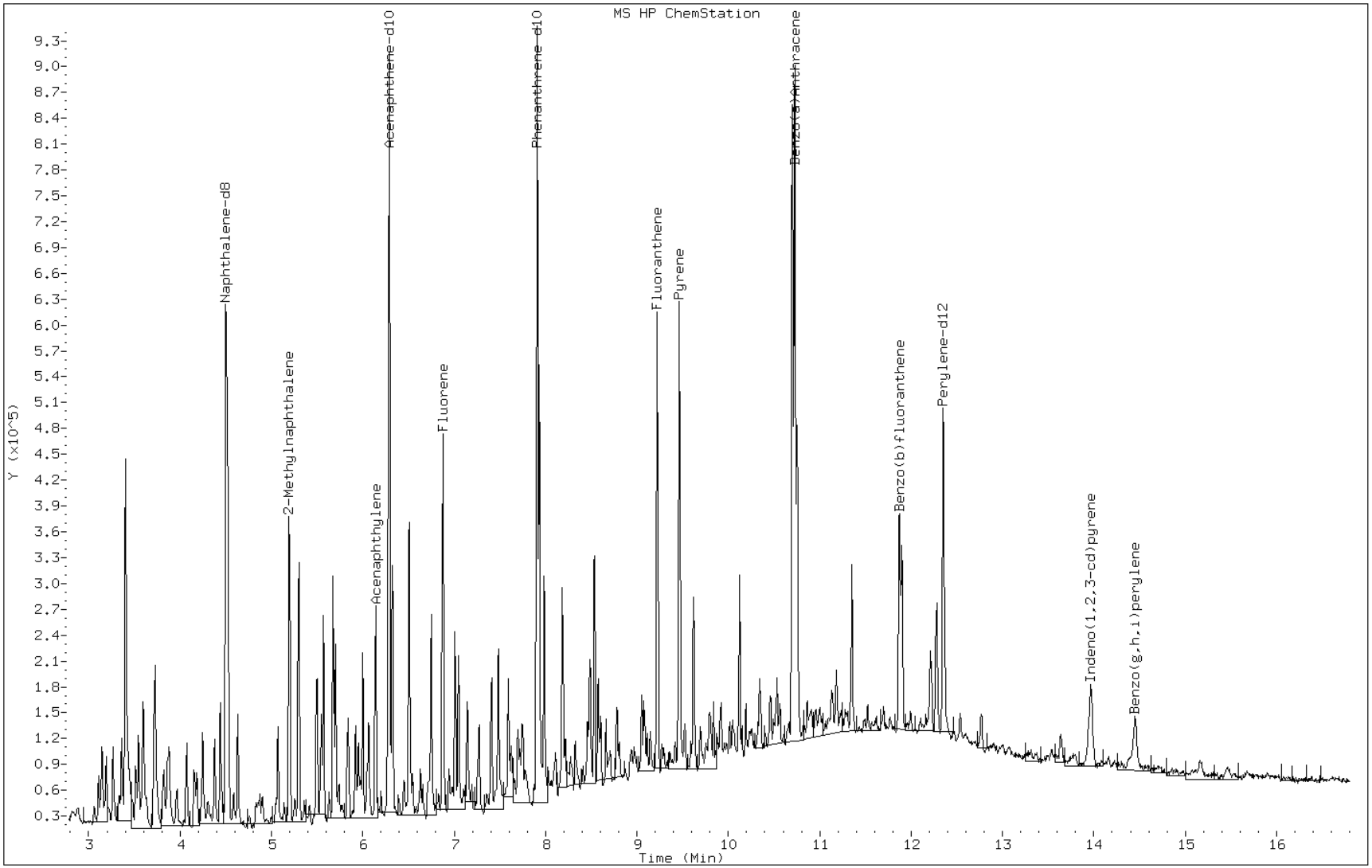
R - Spike/Surrogate failed recovery limits.

Data File: ka0224.d

Date: 02-JAN-2013 18:05

Client ID: CV0627A-CS Instrument: MSK5973.i

Sample Info: 680-85980-A-39-B MS DL=10 Operator: LEG



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85980-1

SDG No.: 68085980-1

Client Sample ID: CV0627A-CS MSD | Lab Sample ID: 680-85980-39 MSD

Matrix: Solid | Lab File ID: ka0225.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/19/2012 09:15

Extract. Method: 3546 | Date Extracted: 12/31/2012 13:00

Sample wt/vol: 30.43(g) | Date Analyzed: 01/02/2013 18:28

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

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

% Moisture: 27.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261629 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	272		91	42
91-57-6	2-Methylnaphthalene	317		91	45
83-32-9	Acenaphthene	192		91	45
208-96-8	Acenaphthylene	189		91	45
120-12-7	Anthracene	214		91	45
56-55-3	Benzo[a]anthracene	333		91	45
50-32-8	Benzo[a]pyrene	300		91	16
205-99-2	Benzo[b]fluoranthene	415		91	45
191-24-2	Benzo[g,h,i]perylene	179		91	45
207-08-9	Benzo[k]fluoranthene	294		91	27
218-01-9	Chrysene	397		91	45
53-70-3	Dibenz(a,h)anthracene	155		91	45
206-44-0	Fluoranthene	391		91	45
86-73-7	Fluorene	215		91	45
193-39-5	Indeno[1,2,3-cd]pyrene	168		91	45
91-20-3	Naphthalene	302		91	45
129-00-0	Pyrene	407		91	45
85-01-8	Phenanthrene	370		91	33

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k010213.b/ka0225.d
Lab Smp Id: 680-85980-A-39-C MS
Inj Date : 02-JAN-2013 18:28
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85980-A-39-C MSD DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k010213.b/k-b8270CLLPAH-m.m
Meth Date : 02-Jan-2013 13:58 chemist Quant Type: ISTD
Cal Date : 02-JAN-2013 13:24 Cal File: ka0212q.d
Als bottle: 21 QC Sample: MSD
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TL2007.sub
Target Version: 3.50
Processing Host: savchem1

Concentration Formula:
Amt * DF * 1/Vi * Vt/Ws * 100/(100 - M) * A * B * C * D * GPC * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Vi	1.00000	Injection Volume
Vt	1.00000	Final Volume
Ws	30.00000	Weight Extracted
M	0.00000	% Moisture
A	1000.00000	uL to mL conversion
B	1000.00000	g to kg conversion
C	0.00100	ng to ug conversion
D	1.00000	ug to mg conversion(value = 1 if no conv
GPC	1.00000	GPC FACTOR

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.501	4.501	(1.000)	446881	2.00000	
2 Naphthalene	128	4.524	4.524	(1.005)	175008	0.66464	221.54
3 2-Methylnaphthalene	142	5.194	5.194	(1.154)	114240	0.69802	232.67
4 1-Methylnaphthalene	142	5.300	5.300	(1.178)	99130	0.59749	199.16
6 Acenaphthylene	152	6.140	6.140	(0.977)	111067	0.41511	138.37(R)
* 5 Acenaphthene-d10	164	6.287	6.287	(1.000)	258188	2.00000	
7 Acenaphthene	154	6.322	6.322	(1.006)	64343	0.42140	140.46(R)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
	8 Fluorene	166	6.880	6.875	(1.094)	84320	0.47249	157.49(R)
*	9 Phenanthrene-d10	188	7.909	7.903	(1.000)	414360	2.00000	
	10 Phenanthrene	178	7.932	7.932	(1.003)	212689	0.81330	271.10
	11 Anthracene	178	7.985	7.985	(1.010)	116578	0.47005	156.68(R)
	12 Fluoranthene	202	9.225	9.219	(1.166)	226278	0.85887	286.29
	14 Pyrene	202	9.466	9.460	(0.883)	219150	0.89429	298.09
	16 Benzo(a)Anthracene	228	10.705	10.717	(0.998)	137672	0.73143	243.81
*	13 Chrysene-d12	240	10.723	10.729	(1.000)	287501	2.00000	
	17 Chrysene	228	10.746	10.758	(1.002)	161597	0.87262	290.87
	19 Benzo(b)fluoranthene	252	11.857	11.875	(0.961)	149009	0.91170	303.90(M)
	20 Benzo(k)fluoranthene	252	11.886	11.904	(0.963)	102302	0.64668	215.56
	21 Benzo(a)pyrene	252	12.262	12.280	(0.994)	82417	0.65956	219.85
*	18 Perylene-d12	264	12.339	12.356	(1.000)	219925	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	13.943	13.966	(1.300)	54766	0.36893	122.97(R)
	23 Dibenzo(a,h)anthracene	278	13.960	13.984	(1.131)	38311	0.34092	113.64(R)
	24 Benzo(g,h,i)perylene	276	14.436	14.460	(1.170)	43796	0.39281	130.93(R)

QC Flag Legend

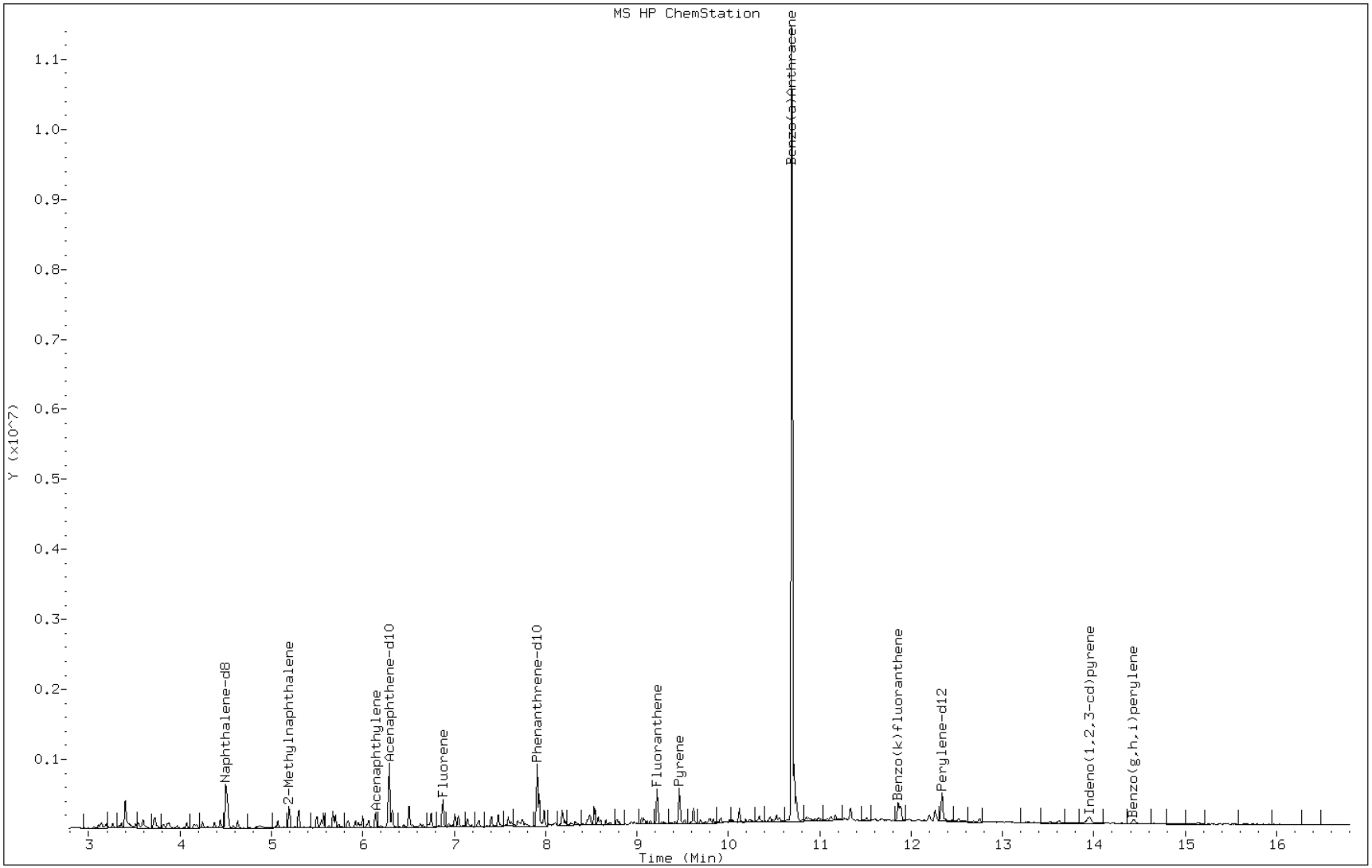
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: ka0225.d

Date: 02-JAN-2013 18:28

Client ID: Instrument: MSK5973.i

Sample Info: 680-85980-A-39-C MSD DL=10 Operator: LEG



Manual Integration Report

Data File: ka0225.d
Inj. Date and Time: 02-JAN-2013 18:28
Instrument ID: MSK5973.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 01/03/2013

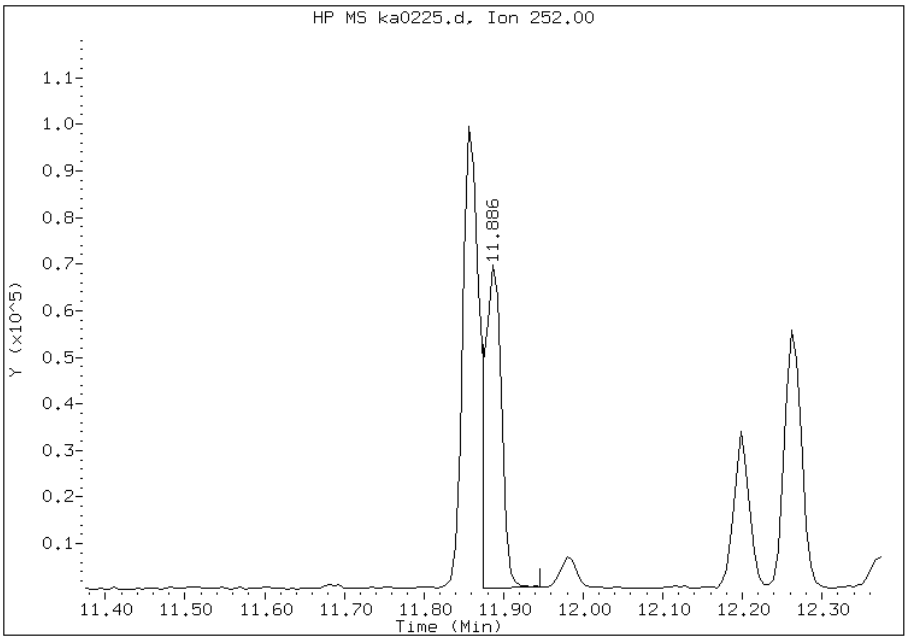
Processing Integration Results

RT: 11.89

Response: 102296

Amount: 1

Conc: 209



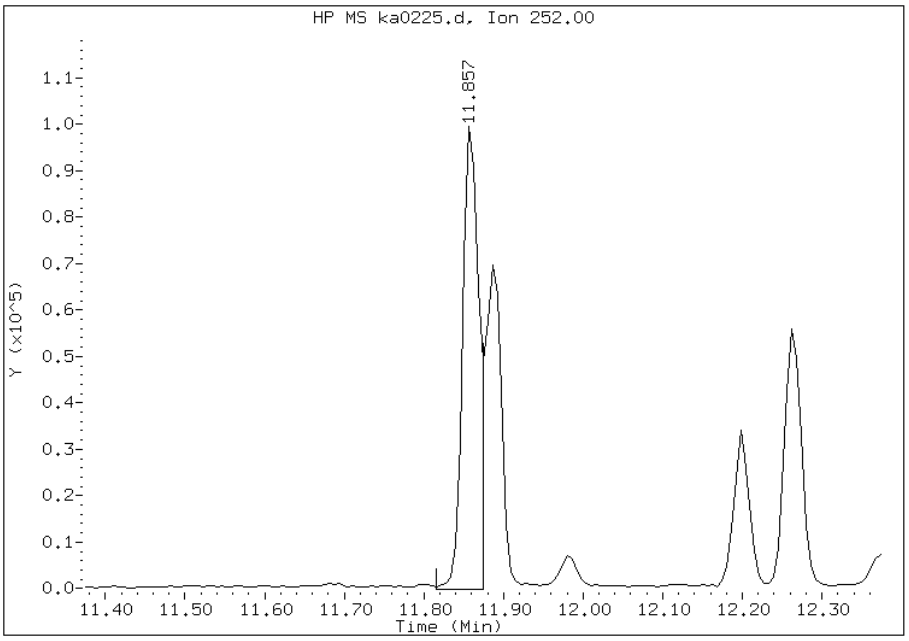
Manual Integration Results

RT: 11.86

Response: 149009

Amount: 1

Conc: 304



Manually Integrated By: chemist
Manual Integration Reason: Analyte Misidentified by the Data System

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Instrument ID: MSK Start Date: 01/02/2013 10:48

Analysis Batch Number: 261629 End Date: 01/02/2013 20:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 680-261629/1		01/02/2013 10:48	1	ka0205t.d	RXi- 5Sil MS 0.25(mm)
IC 680-261629/2		01/02/2013 11:04	1	ka0206q.d	RXi- 5Sil MS 0.25(mm)
IC 680-261629/3		01/02/2013 11:28	1	ka0207q.d	RXi- 5Sil MS 0.25(mm)
IC 680-261629/4		01/02/2013 11:51	1	ka0208q.d	RXi- 5Sil MS 0.25(mm)
IC 680-261629/5		01/02/2013 12:15	1	ka0209q.d	RXi- 5Sil MS 0.25(mm)
IC 680-261629/6		01/02/2013 12:38	1	ka0210q.d	RXi- 5Sil MS 0.25(mm)
IC 680-261629/7		01/02/2013 13:01	1	ka0211q.d	RXi- 5Sil MS 0.25(mm)
ICIS 680-261629/8		01/02/2013 13:24	1	ka0212q.d	RXi- 5Sil MS 0.25(mm)
ICV 680-261629/9		01/02/2013 13:47	1		RXi- 5Sil MS 0.25(mm)
MB 680-261484/17-A		01/02/2013 14:34	1	ka02115.d	RXi- 5Sil MS 0.25(mm)
LCS 680-261484/18-A		01/02/2013 14:57	1	ka02116.d	RXi- 5Sil MS 0.25(mm)
680-85980-42	HP0190B-CS-SP	01/02/2013 15:20	10	ka0217.d	RXi- 5Sil MS 0.25(mm)
680-85980-43	HP0190C-CS-SP	01/02/2013 15:44	10	ka0218.d	RXi- 5Sil MS 0.25(mm)
680-85980-44	CV0451A-CS-SP	01/02/2013 16:07	10	ka0219.d	RXi- 5Sil MS 0.25(mm)
680-85980-26	CV0424A-CS-SP	01/02/2013 16:31	10	ka0220.d	RXi- 5Sil MS 0.25(mm)
680-85980-27	CV0424B-CS-SP	01/02/2013 16:54	10	ka0221.d	RXi- 5Sil MS 0.25(mm)
680-85980-28	CV0235A-CS	01/02/2013 17:18	10	ka0222.d	RXi- 5Sil MS 0.25(mm)
680-85980-29	CV0235B-CS	01/02/2013 17:41	10	ka0223.d	RXi- 5Sil MS 0.25(mm)
680-85980-39 MS	CV0627A-CS MS	01/02/2013 18:05	10	ka0224.d	RXi- 5Sil MS 0.25(mm)
680-85980-39 MSD	CV0627A-CS MSD	01/02/2013 18:28	10	ka0225.d	RXi- 5Sil MS 0.25(mm)
680-85980-39	CV0627A-CS	01/02/2013 18:52	10	ka0226.d	RXi- 5Sil MS 0.25(mm)
680-85980-37	FM0016A-CS	01/02/2013 19:16	10	ka0227.d	RXi- 5Sil MS 0.25(mm)
680-85980-45	CV0451B-CS-SP	01/02/2013 19:40	10	ka0228.d	RXi- 5Sil MS 0.25(mm)
680-85980-9	CV0228B-CS-SP	01/02/2013 20:04	10	ka0229.d	RXi- 5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Instrument ID: MSY Start Date: 12/21/2012 10:58

Analysis Batch Number: 261214 End Date: 12/21/2012 17:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 680-261214/1		12/21/2012 10:58	1	yl2105t.d	HP-5MS 0.25(mm)
IC 680-261214/2		12/21/2012 11:14	1	yl2106q.d	HP-5MS 0.25(mm)
IC 680-261214/3		12/21/2012 11:37	1	yl2107q.d	HP-5MS 0.25(mm)
IC 680-261214/4		12/21/2012 11:59	1	yl2108q.d	HP-5MS 0.25(mm)
IC 680-261214/5		12/21/2012 12:22	1	yl2109q.d	HP-5MS 0.25(mm)
IC 680-261214/6		12/21/2012 12:44	1	yl2110q.d	HP-5MS 0.25(mm)
IC 680-261214/7		12/21/2012 13:07	1	yl2111q.d	HP-5MS 0.25(mm)
ICIS 680-261214/8		12/21/2012 13:30	1	yl2112q.d	HP-5MS 0.25(mm)
ICV 680-261214/9		12/21/2012 13:52	1		HP-5MS 0.25(mm)
ZZZZZ		12/21/2012 16:31	10		HP-5MS 0.25(mm)
ZZZZZ		12/21/2012 17:53	10		HP-5MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Instrument ID: MSY Start Date: 12/28/2012 10:20

Analysis Batch Number: 261362 End Date: 12/28/2012 19:42

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 680-261362/1		12/28/2012 10:20	1	yl2801t.d	HP-5MS 0.25(mm)
CCVIS 680-261362/2		12/28/2012 10:37	1	yl2802q.d	HP-5MS 0.25(mm)
ZZZZZ		12/28/2012 11:28	10		HP-5MS 0.25(mm)
ZZZZZ		12/28/2012 11:50	10		HP-5MS 0.25(mm)
ZZZZZ		12/28/2012 12:13	10		HP-5MS 0.25(mm)
ZZZZZ		12/28/2012 12:35	10		HP-5MS 0.25(mm)
ZZZZZ		12/28/2012 12:58	10		HP-5MS 0.25(mm)
ZZZZZ		12/28/2012 13:38	1		HP-5MS 0.25(mm)
MB 680-261057/10-A		12/28/2012 14:50	1	yl2811z.d	HP-5MS 0.25(mm)
LCS 680-261057/11-A		12/28/2012 15:12	1	yl2812.d	HP-5MS 0.25(mm)
LCSD 680-261057/12-A		12/28/2012 15:34	1	yl2813.d	HP-5MS 0.25(mm)
ZZZZZ		12/28/2012 15:57	1		HP-5MS 0.25(mm)
ZZZZZ		12/28/2012 16:20	1		HP-5MS 0.25(mm)
680-85980-46	121912-RB-SIEVE	12/28/2012 17:05	1	yl2817.d	HP-5MS 0.25(mm)
ZZZZZ		12/28/2012 17:27	1		HP-5MS 0.25(mm)
ZZZZZ		12/28/2012 17:50	1		HP-5MS 0.25(mm)
ZZZZZ		12/28/2012 18:12	1		HP-5MS 0.25(mm)
ZZZZZ		12/28/2012 18:35	1		HP-5MS 0.25(mm)
ZZZZZ		12/28/2012 18:57	1		HP-5MS 0.25(mm)
ZZZZZ		12/28/2012 19:20	1		HP-5MS 0.25(mm)
ZZZZZ		12/28/2012 19:42	1		HP-5MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Instrument ID: MSY Start Date: 01/02/2013 16:44

Analysis Batch Number: 261663 End Date: 01/03/2013 02:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 680-261663/1		01/02/2013 16:44	1	ya0201tzz.d	HP-5MS 0.25(mm)
IC 680-261663/2		01/02/2013 17:06	1	ya0202q.d	HP-5MS 0.25(mm)
IC 680-261663/3		01/02/2013 17:29	1	ya0203q.d	HP-5MS 0.25(mm)
IC 680-261663/4		01/02/2013 17:53	1	ya0204q.d	HP-5MS 0.25(mm)
IC 680-261663/5		01/02/2013 18:16	1	ya0205q.d	HP-5MS 0.25(mm)
IC 680-261663/6		01/02/2013 18:39	1	ya0206q.d	HP-5MS 0.25(mm)
IC 680-261663/7		01/02/2013 19:02	1	ya0207q.d	HP-5MS 0.25(mm)
ICIS 680-261663/8		01/02/2013 19:25	1	ya0208q.d	HP-5MS 0.25(mm)
ICV 680-261663/9		01/02/2013 19:48	1		HP-5MS 0.25(mm)
680-85980-10	CV0230A-CS-SP	01/02/2013 20:34	10	ya0211.d	HP-5MS 0.25(mm)
680-85980-38	FM0016B-GS	01/02/2013 20:57	10	ya0212.d	HP-5MS 0.25(mm)
680-85980-41	HP0190A-CS-SP	01/02/2013 21:20	10	ya0213.d	HP-5MS 0.25(mm)
680-85980-32	CV0294B-CS	01/02/2013 21:43	1	ya0214.d	HP-5MS 0.25(mm)
680-85980-33	CV0294C-CS	01/02/2013 22:06	1	ya0215.d	HP-5MS 0.25(mm)
ZZZZZ		01/02/2013 22:53	20		HP-5MS 0.25(mm)
ZZZZZ		01/02/2013 23:16	10		HP-5MS 0.25(mm)
ZZZZZ		01/02/2013 23:39	10		HP-5MS 0.25(mm)
ZZZZZ		01/03/2013 00:02	10		HP-5MS 0.25(mm)
ZZZZZ		01/03/2013 00:25	10		HP-5MS 0.25(mm)
ZZZZZ		01/03/2013 00:48	10		HP-5MS 0.25(mm)
ZZZZZ		01/03/2013 01:11	10		HP-5MS 0.25(mm)
ZZZZZ		01/03/2013 01:34	10		HP-5MS 0.25(mm)
ZZZZZ		01/03/2013 02:21	10		HP-5MS 0.25(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Batch Number: 261057 Batch Start Date: 12/26/12 18:09 Batch Analyst: Phillips, Sheldon S

Batch Method: 3520C Batch End Date: 12/27/12 12:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH	BENZIDINwk 00139	BNAFULLSPK 00477
680-85980-A-46	121912-RB-SIEVE	3520C, 8270C_LL_PAH	T	499.1 mL	0.5 mL	7	<2		
MB 680-261057/10		3520C, 8270C_LL_PAH		1000 mL	1 mL	6	<2		
LCS 680-261057/11		3520C, 8270C_LL_PAH		1000 mL	1 mL	6	<2	100 uL	100 uL
LCSD 680-261057/12		3520C, 8270C_LL_PAH		1000 mL	1 mL	6	<2	100 uL	100 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	LLBNAwkSUR 00052	AnalysisComment				
680-85980-A-46	121912-RB-SIEVE	3520C, 8270C_LL_PAH	T	0.5 mL	No residual chlorine detected				
MB 680-261057/10		3520C, 8270C_LL_PAH		1 mL	No residual chlorine detected				
LCS 680-261057/11		3520C, 8270C_LL_PAH		1 mL	No residual chlorine detected				
LCSD 680-261057/12		3520C, 8270C_LL_PAH		1 mL	No residual chlorine detected				

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Batch Number: 261057 Batch Start Date: 12/26/12 18:09 Batch Analyst: Phillips, Sheldon S

Batch Method: 3520C Batch End Date: 12/27/12 12:10

Batch Notes	
Acid used for pH adjustment	Sulfuric Acid 1:1
Acid used for pH adjust Lot #	2873082
Balance ID	23
Batch Comment	8270LL PAH box M165
Concentration End Time	1540
Concentration Start Time	1356
Person's name who did the concentration	MV
Exchange Solvent Lot #	2900544
Exchange Solvent Name	MeCL2
Time the first extraction ended 24hr	1210
Time the first extraction started 24 hr	1809
Prep Solvent Lot #	2902965
Prep Solvent Name	MECL2
Prep Solvent Volume Used	70 mL
Person's name who did the prep	SP
Person's name who witnessed reagent drop	JCS
Sufficient volume for MS/MSD?	Yes
Water Bath Temperature	50 Celsius

Basis	Basis Description
T	Total/NA

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Batch Number: 261484 Batch Start Date: 12/31/12 13:00 Batch Analyst: Vasquez, Melissa A

Batch Method: 3546 Batch End Date: 12/31/12 13:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	BENZIDINwk 00139	BNAFULLSPK 00478	LLBNAwkSUR 00052	AnalysisComment
680-85980-A-9	CV0228B-CS-SP	3546, 8270C_LL_PAH	T	30.35 g	1 mL			1 mL	
680-85980-A-10	CV0230A-CS-SP	3546, 8270C_LL_PAH	T	30.04 g	1 mL			1 mL	
680-85980-A-26	CV0424A-CS-SP	3546, 8270C_LL_PAH	T	30.02 g	1 mL			1 mL	
680-85980-A-27	CV0424B-CS-SP	3546, 8270C_LL_PAH	T	30.07 g	1 mL			1 mL	
680-85980-A-28	CV0235A-CS	3546, 8270C_LL_PAH	T	30.01 g	1 mL			1 mL	
680-85980-B-29	CV0235B-CS	3546, 8270C_LL_PAH	T	30.35 g	1 mL			1 mL	
680-85980-A-32	CV0294B-CS	3546, 8270C_LL_PAH	T	30.40 g	1 mL			1 mL	
680-85980-A-33	CV0294C-CS	3546, 8270C_LL_PAH	T	30.02 g	1 mL			1 mL	
680-85980-A-37	FM0016A-CS	3546, 8270C_LL_PAH	T	30.02 g	1 mL			1 mL	
680-85980-A-38	FM0016B-GS	3546, 8270C_LL_PAH	T	30.19 g	1 mL			1 mL	
680-85980-A-39	CV0627A-CS	3546, 8270C_LL_PAH	T	30.03 g	1 mL			1 mL	
680-85980-A-41	HP0190A-CS-SP	3546, 8270C_LL_PAH	T	30.12 g	1 mL			1 mL	
680-85980-A-42	HP0190B-CS-SP	3546, 8270C_LL_PAH	T	30.04 g	1 mL			1 mL	
680-85980-A-43	HP0190C-CS-SP	3546, 8270C_LL_PAH	T	30.15 g	1 mL			1 mL	
680-85980-A-44	CV0451A-CS-SP	3546, 8270C_LL_PAH	T	30.00 g	1 mL			1 mL	
680-85980-A-45	CV0451B-CS-SP	3546, 8270C_LL_PAH	T	30.20 g	1 mL			1 mL	
MB 680-261484/17		3546, 8270C_LL_PAH		30.05 g	1 mL			1 mL	
LCS 680-261484/18		3546, 8270C_LL_PAH		30.15 g	1 mL	100 uL	100 uL	1 mL	LLBNA/ BENZ
680-85980-A-39 MS	CV0627A-CS	3546, 8270C_LL_PAH	T	30.35 g	1 mL	100 uL	100 uL	1 mL	LLBNA/ BENZ
680-85980-A-39 MSD	CV0627A-CS	3546, 8270C_LL_PAH	T	30.43 g	1 mL	100 uL	100 uL	1 mL	LLBNA/ BENZ

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-85980-1

SDG No.: 68085980-1

Batch Number: 261484 Batch Start Date: 12/31/12 13:00 Batch Analyst: Vasquez, Melissa A

Batch Method: 3546 Batch End Date: 12/31/12 13:30

Batch Notes	
Balance ID	30
Batch Comment	8270 LL box M177
Person's name who did the concentration	MV
Exchange Solvent Lot #	2900546
Exchange Solvent Name	MECL2
Final Concentrator Volume	1 mL
MeCl2/Acetone Lot #	2768909
Microwave Start Time	1300
Microwave Stop Time	1330
Na2SO4 Lot Number	2924973
Ottawa Sand Lot #	2899320
Person's name who did the prep	MV
Person who witnessed spiking	CV

Basis	Basis Description
T	Total/NA

Serial Number 62475 .

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE: 35th Ave. Removal	PROJECT NO.	PROJECT LOCATION (STATE)
TAL (LAB) PROJECT MANAGER: Lisa Harvey	P.O. NUMBER: 200148-1356	CONTRACT NO.
CLIENT (SITE) PM: Russell Henderson	CLIENT PHONE: 678-355-5550	CLIENT FAX
CLIENT NAME: OTIE	CLIENT E-MAIL	
CLIENT ADDRESS: 1220 Kennestone Circle Marietta, Ga		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 1 OF 4

STANDARD REPORT DELIVERY ◯

DATE DUE _____

EXPEDITED REPORT DELIVERY (SURCHARGE) ◯

DATE DUE _____

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	2 PAH	RCRA 3 Metals									REMARKS
								PRESERVATIVE										
								NUMBER OF CONTAINERS SUBMITTED										
12-18-12	1050	CV0422B-CS-SP	C		X			X										
	0910	FM0140A-CS-SP	C		X			X										
	0930	FM0140B-CS-SP	C		X			X	X									
	1000	FM0298A-CS-SP	C		X			X										
	1230	CV0361A-CS	C		X			X										
	1235	CV0361B-CS	C		X			X										
	1245	CV0361C-CS	C		X			X										
	1430	CV0228A-CS-SP	C		X			X	X									
	1450	CV0228B-CS-SP	C		X			X										
	1515	CV0230A-CS-SP	C		X			X										
	1535	CV0230B-CS-SP	C		X			X	X									
	1320	CV0421A-CS-SP	C		X			X										

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
[signature]	12-19-12	1300						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
[signature]	12/20/12	1027	YES ◯ NO ◯		85980	4.2°

TAL8240-680 (1008)

Serial Number 62474

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

◯ TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

◯ Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
35th Ave. Tonnel		

TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Lisa Hovey	2005148-1556	

CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX

CLIENT NAME	CLIENT E-MAIL
OTIE	

CLIENT ADDRESS

COMPANY CONTRACTING THIS WORK (if applicable)

PAGE 2 OF 4

STANDARD REPORT DELIVERY ◯

DATE DUE _____

EXPEDITED REPORT DELIVERY (SURCHARGE) ◯

DATE DUE _____

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

REQUIRED ANALYSIS: 16 PAH; PCB's Wipes

PRESERVATIVE

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	16 PAH	PCB's Wipes									REMARKS
12-8-12	0840	HP0156A-CS	C		X			X										
	0845	HP0156B-CS	C		X			X										
	1020	CV0570A-CS	C		X			X										
	1025	CV0570B-CS	C		X			X										
	1035	CV0570C-CS	G		X			X										
	0915	CV0648A-CS	C		X			X										
	0915	CV0648A-CSD	C		X			X										
	0920	CV0648B-CS	C		X			X										
	0920	CV0648B-CSD	C		X			X										
	0955	CV0412A-CS	C		X			X										
	0950	CV0412B-CS	C		X			X										
	1037	CV0422A-CS-SP	C		X			X										

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
[signature]	12-7-12	1300						

RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
[signature]	12/20/12	1027	YES ◯ NO ◯		680 85980	4.2°

TAL8240-680 (1008)

Serial Number 62476

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

◯ TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

◯ Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE: 35th Ave. Removal	PROJECT NO.	PROJECT LOCATION (STATE)
TAL (LAB) PROJECT MANAGER: Lisa Harvey	P.O. NUMBER: 2005148-1356	CONTRACT NO.
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
CLIENT NAME: OTIE	CLIENT E-MAIL	
CLIENT ADDRESS		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 3 OF 4

STANDARD REPORT DELIVERY ◯

DATE DUE _____

EXPEDITED REPORT DELIVERY (SURCHARGE) ◯

DATE DUE _____

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

MATRIX TYPE: COMPOSITE (C) OR GRAB (G) INDICATE; AQUEOUS (WATER); SOLID OR SEMISOLID; AIR; NONAQUEOUS LIQUID (OIL, SOLVENT, ...)

REQUIRED ANALYSIS: LL PAH; RCRA Metals

PRESERVATIVE

NUMBER OF CONTAINERS SUBMITTED

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G)	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	LL PAH	RCRA Metals	REMARKS
12 18 12	1357	CV0421B-CS-SP	C		X			X		
	1245	CV0424A-CS-SP	C		X			X		
	1300	CV0424B-CS-SP	C		X			X		
	1515	CV0235A-CS	C		X			X		
	1535	CV0235B-CS	C		X			X		
	1540	CV0235C-CS	C		X			X		
	1410	CV0294A-CS	C		X			X		
	1419	CV0294B-CS	C		X			X		
	1430	CV0294C-CS	C		X			X		
	0230	FM0140B-CS-SP (sieved)	C		X				X	
	1430	~~FM0228A-CS-SP~~ (sieved) CV 12/20/12	C		X				X	
	1535	CV0230B-CS-SP (sieved)	C		X				X	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
R Austin	12-19-12	1300						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
CHA	12/21/12	1027	YES ◯ NO ◯		650L 85980	4.2°

TAL8240-680 (1008)

01/03/2013

Serial Number 62479 .

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
35th Ave. Removal		

TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Lisa Harvey	2005148-1356	

CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX

CLIENT NAME	CLIENT E-MAIL
OTIE	

CLIENT ADDRESS

COMPANY CONTRACTING THIS WORK (if applicable)

PAGE 4 OF 4

STANDARD REPORT DELIVERY ◯

DATE DUE _____

EXPEDITED REPORT DELIVERY (SURCHARGE) ◯

DATE DUE _____

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	LL PAH	RI47 Metals									REMARKS
								PRESERVATIVE										
								NUMBER OF CONTAINERS SUBMITTED										
12-17-12	08:40	FM0010A-GS	C		X			X										
	08:50	FM0010B-GS	G		X			X										
	0915	CV0627A-GS	C		X			X	X									
	0925	CV0627B-GS	G		X			X										
	0950	HP0190A-GS-SP	C		X			X										
	1000	HP0190B-GS-SP	C		X			X										
	1015	HP0190C-GS-SP	C		X			X										
	0900	CV0751A-GS-SP	C		X			X										
	0915	CV0751B-GS-SP	C		X			X										
	1200	121912-RB-Steve		X				X	X									
	0915	CV0627A-GS (Grad)	C		X				X									

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
[signature]	12-19-12	1300						

RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
[signature]	12/20/12	1027	YES ◯ NO ◯		680-85980	4.2°

TAL8240-680 (1008)