ANALYTICAL REPORT

Job Number: 680-85860-4

SDG Number: 68085860-4

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
12/29/2012 10:53 AM

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12/29/2012

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CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-85860-4

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 12/15/2012 and 12/17/2012; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 3.6º C, 4.2º C and 5.6º C.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) LOW LEVEL PAH

Samples CV0511AE-GS (680-85860-61), CV0511TTT-GS (680-85860-63), CV0550A-CS (680-85860-70), CV0550B-CS (680-85860-71), FM0251A-CS (680-85860-72), FM0251B-CS (680-85860-73), FM0251C-CS (680-85860-74), HP0282B-CS (680-85860-75), HP0282A-CS (680-85860-76), CV0319A-CS (680-85860-77) and CV0319B-CS (680-85860-78) were analyzed for Semivolatile Organic Compounds (GC/MS) Low level PAH in accordance with EPA SW846 Method 8270C. The samples were prepared on 12/20/2012 and analyzed on 12/21/2012, 12/26/2012 and 12/27/2012.

Samples CV0550A-CS (680-85860-70)[10X], CV0550B-CS (680-85860-71)[10X], FM0251A-CS (680-85860-72)[10X], FM0251B-CS (680-85860-73)[10X], FM0251C-CS (680-85860-74)[10X], HP0282B-CS (680-85860-75)[10X], HP0282A-CS (680-85860-76)[10X], CV0319A-CS (680-85860-77)[10X] and CV0319B-CS (680-85860-78)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly. o-Terphenyl recovered outside the surrogate recovery criteria for these samples as they were diluted beyond the quantitation limit. Also, internal standard responses were outside of acceptance limits for the following samples: CV0319B-CS (680-85860-78). The sample(s) shows evidence of matrix interference.

Fluoranthene recovered outside the recovery criteria for the MS/MSD of sample CV0511TTT-GS (680-85860-63) in batch 680-261200.

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.

SAMPLE SUMMARY

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-85860-4
Sdg Number: 68085860-4

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-85860-61	CV0511AE-GS	Solid	12/13/2012 1515	12/15/2012 1003
680-85860-63	CV0511TTT-GS	Solid	12/13/2012 1540	12/17/2012 0924
680-85860-63MS	CV0511TTT-GS	Solid	12/13/2012 1540	12/17/2012 0924
680-85860-63MSD	CV0511TTT-GS	Solid	12/13/2012 1540	12/17/2012 0924
680-85860-70	CV0550A-CS	Solid	12/13/2012 0903	12/17/2012 0924
680-85860-71	CV0550B-CS	Solid	12/14/2012 0847	12/17/2012 0924
680-85860-72	FM0251A-CS	Solid	12/14/2012 1018	12/17/2012 0924
680-85860-73	FM0251B-CS	Solid	12/14/2012 1000	12/17/2012 0924
680-85860-74	FM0251C-CS	Solid	12/14/2012 1005	12/17/2012 0924
680-85860-75	HP0282B-CS	Solid	12/14/2012 1015	12/17/2012 0924
680-85860-76	HP0282A-CS	Solid	12/14/2012 1000	12/17/2012 0924
680-85860-77	CV0319A-CS	Solid	12/14/2012 0845	12/17/2012 0924
680-85860-78	CV0319B-CS	Solid	12/14/2012 0905	12/17/2012 0924

METHOD SUMMARY

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-85860-4
Sdg Number: 68085860-4

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	

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: 680-85860-4
Sdg Number: 68085860-4

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: 680-85860-4
Sdg Number: 68085860-4

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.
	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: 680-85860-4
Sdg Number: 68085860-4

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 680-260564					
LCS 680-260564/18-A	Lab Control Sample	T	Solid	3546	
MB 680-260564/17-A	Method Blank	T	Solid	3546	
680-85860-61	CV0511AE-GS	T	Solid	3546	
680-85860-63	CV0511TTT-GS	T	Solid	3546	
680-85860-63MS	Matrix Spike	T	Solid	3546	
680-85860-63MSD	Matrix Spike Duplicate	T	Solid	3546	
680-85860-70	CV0550A-CS	T	Solid	3546	
680-85860-71	CV0550B-CS	T	Solid	3546	
680-85860-72	FM0251A-CS	T	Solid	3546	
680-85860-73	FM0251B-CS	T	Solid	3546	
680-85860-74	FM0251C-CS	T	Solid	3546	
680-85860-75	HP0282B-CS	T	Solid	3546	
680-85860-76	HP0282A-CS	T	Solid	3546	
680-85860-77	CV0319A-CS	T	Solid	3546	
680-85860-78	CV0319B-CS	T	Solid	3546	
Analysis Batch:680-261200					
LCS 680-260564/18-A	Lab Control Sample	T	Solid	8270C_LL_PAH	680-260564
MB 680-260564/17-A	Method Blank	T	Solid	8270C_LL_PAH	680-260564
680-85860-61	CV0511AE-GS	T	Solid	8270C_LL_PAH	680-260564
680-85860-63	CV0511TTT-GS	T	Solid	8270C_LL_PAH	680-260564
680-85860-63MS	Matrix Spike	T	Solid	8270C_LL_PAH	680-260564
680-85860-63MSD	Matrix Spike Duplicate	T	Solid	8270C_LL_PAH	680-260564
680-85860-70	CV0550A-CS	T	Solid	8270C_LL_PAH	680-260564
680-85860-72	FM0251A-CS	T	Solid	8270C_LL_PAH	680-260564
680-85860-73	FM0251B-CS	T	Solid	8270C_LL_PAH	680-260564
Analysis Batch:680-261203					
680-85860-74	FM0251C-CS	T	Solid	8270C_LL_PAH	680-260564
680-85860-75	HP0282B-CS	T	Solid	8270C_LL_PAH	680-260564
Analysis Batch:680-261204					
680-85860-71	CV0550B-CS	T	Solid	8270C_LL_PAH	680-260564
Analysis Batch:680-261214					
680-85860-77	CV0319A-CS	T	Solid	8270C_LL_PAH	680-260564
Analysis Batch:680-261231					
680-85860-76	HP0282A-CS	T	Solid	8270C_LL_PAH	680-260564
680-85860-78	CV0319B-CS	T	Solid	8270C_LL_PAH	680-260564

Report Basis
T = Total

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-85860-4
Sdg Number: 68085860-4

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:680-260137					
680-85860-73	FM0251B-CS	T	Solid	Moisture	
Analysis Batch:680-260166					
680-85860-61	CV0511AE-GS	T	Solid	Moisture	
680-85860-63	CV0511TTT-GS	T	Solid	Moisture	
680-85860-63MS	Matrix Spike	T	Solid	Moisture	
680-85860-63MSD	Matrix Spike Duplicate	T	Solid	Moisture	
680-85860-70	CV0550A-CS	T	Solid	Moisture	
680-85860-71	CV0550B-CS	T	Solid	Moisture	
680-85860-72	FM0251A-CS	T	Solid	Moisture	
680-85860-74	FM0251C-CS	T	Solid	Moisture	
680-85860-75	HP0282B-CS	T	Solid	Moisture	
680-85860-76	HP0282A-CS	T	Solid	Moisture	
680-85860-77	CV0319A-CS	T	Solid	Moisture	
680-85860-78	CV0319B-CS	T	Solid	Moisture	

Report Basis
T = Total

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Instrument ID: MSK Analysis Batch Number: 261200

Lab Sample ID: 680-85860-61 Client Sample ID: CV0511AE-GS

Date Analyzed: 12/21/12 18:29 Lab File ID: kl2127.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1-Methylnaphthalene	5.58	Unspecified		
Benzo[b]fluoranthene	12.30	Unspecified		
Benzo[k]fluoranthene	12.33	Unspecified		

Lab Sample ID: 680-85860-63 Client Sample ID: CV0511TTT-GS

Date Analyzed: 12/21/12 19:16 Lab File ID: kl2129.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	12.30	Unspecified		
Benzo[k]fluoranthene	12.32	Unspecified		

Lab Sample ID: 680-85860-70 Client Sample ID: CV0550A-CS

Date Analyzed: 12/21/12 19:39 Lab File ID: kl2130.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	12.31	Unspecified		
Benzo[k]fluoranthene	12.33	Unspecified		

Lab Sample ID: 680-85860-73 Client Sample ID: FM0251B-CS

Date Analyzed: 12/21/12 20:03 Lab File ID: kl2131.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	11.10	Unspecified		
Benzo[b]fluoranthene	12.34	Unspecified		
Benzo[k]fluoranthene	12.36	Unspecified		

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Instrument ID: MSK Analysis Batch Number: 261200

Lab Sample ID: 680-85860-72 Client Sample ID: FM0251A-CS

Date Analyzed: 12/21/12 20:26 Lab File ID: kl2132.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	11.11	Unspecified		
Benzo[b]fluoranthene	12.34	Unspecified		
Benzo[k]fluoranthene	12.36	Unspecified		

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Instrument ID: MSK Analysis Batch Number: 261203

Lab Sample ID: 680-85860-74 Client Sample ID: FM0251C-CS

Date Analyzed: 12/26/12 20:12 Lab File ID: kl2625.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	10.95	Unspecified		
Benzo[b]fluoranthene	12.13	Unspecified		
Benzo[k]fluoranthene	12.16	Unspecified		

Lab Sample ID: 680-85860-75 Client Sample ID: HP0282B-CS

Date Analyzed: 12/26/12 20:36 Lab File ID: kl2626.d GC Column: RXi- 5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	12.10	Unspecified		
Benzo[k]fluoranthene	12.12	Unspecified		

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Instrument ID: MSY Analysis Batch Number: 261204

Lab Sample ID: 680-85860-71 Client Sample ID: CV0550B-CS

Date Analyzed: 12/21/12 19:54 Lab File ID: yl2127.d GC Column: HP-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	9.41	Unspecified		
Benzo[k]fluoranthene	9.44	Unspecified		

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Instrument ID: MSY Analysis Batch Number: 261214

Lab Sample ID: 680-85860-77 Client Sample ID: CV0319A-CS

Date Analyzed: 12/21/12 17:53 Lab File ID: yl2121.d GC Column: HP-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	9.41	Unspecified		
Benzo[k]fluoranthene	9.42	Unspecified		

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Instrument ID: MSY Analysis Batch Number: 261231

Lab Sample ID: 680-85860-76 Client Sample ID: HP0282A-CS

Date Analyzed: 12/27/12 16:17 Lab File ID: yl2706.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		

Lab Sample ID: 680-85860-78 Client Sample ID: CV0319B-CS

Date Analyzed: 12/27/12 17:08 Lab File ID: yl2708.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	9.34	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.: 680-85860-4

SDG No.: 68085860-4

Matrix: Solid Level: Low

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

Client Sample ID	Lab Sample ID	OTPH	#
CV0511AE-GS	680-85860-61	54	
CV0511TTT-GS	680-85860-63	54	
CV0550A-CS	680-85860-70	0	D
CV0550B-CS	680-85860-71	0	D
FM0251A-CS	680-85860-72	0	D
FM0251B-CS	680-85860-73	0	D
FM0251C-CS	680-85860-74	0	D
HP0282B-CS	680-85860-75	0	D
HP0282A-CS	680-85860-76	0	D
CV0319A-CS	680-85860-77	0	D
CV0319B-CS	680-85860-78	0	D
	MB 680-260564/17-A	67	
	LCS 680-260564/18-A	66	
CV0511TTT-GS MS	680-85860-63 MS	68	
CV0511TTT-GS MSD	680-85860-63 MSD	68	

	QC LIMITS
OTPH = o-Terphenyl	36-131

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.: 680-85860-4

SDG No.: 68085860-4

Matrix: Solid Level: Low Lab File ID: kl2108.d

Lab ID: LCS 680-260564/18-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1-Methylnaphthalene	333	240	72	36-130	
2-Methylnaphthalene	333	256	77	42-130	
Acenaphthene	333	264	79	33-130	
Acenaphthylene	333	262	79	37-131	
Anthracene	333	227	68	42-146	
Benzo[a]anthracene	333	273	82	39-157	
Benzo[a]pyrene	333	286	86	41-158	
Benzo[b]fluoranthene	333	278	84	35-152	
Benzo[g,h,i]perylene	333	276	83	32-150	
Benzo[k]fluoranthene	333	281	84	38-148	
Chrysene	333	275	83	38-147	
Dibenz(a,h)anthracene	333	297	89	32-155	
Fluoranthene	333	280	84	36-147	
Fluorene	333	273	82	36-138	
Indeno[1,2,3-cd]pyrene	333	295	89	35-148	
Naphthalene	333	246	74	33-130	
Pyrene	333	279	84	38-145	
Phenanthrene	333	272	82	40-135	

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.: 680-85860-4

SDG No.: 68085860-4

Matrix: Solid Level: Low Lab File ID: kl2115.d

Lab ID: 680-85860-63 MS Client ID: CV0511TTT-GS MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1-Methylnaphthalene	443	13	316	68	36-130	
2-Methylnaphthalene	443	19	337	72	42-130	
Acenaphthene	443	9.4	348	76	33-130	
Acenaphthylene	443	8.9 U	336	76	37-131	
Anthracene	443	20	281	59	42-146	
Benzo[a]anthracene	443	110	376	59	39-157	
Benzo[a]pyrene	443	130	398	62	41-158	
Benzo[b]fluoranthene	443	210	432	50	35-152	
Benzo[g,h,i]perylene	443	36	279	55	32-150	
Benzo[k]fluoranthene	443	86	378	66	38-148	
Chrysene	443	150	405	58	38-147	
Dibenz(a,h)anthracene	443	14	304	65	32-155	
Fluoranthene	443	280	420	31	36-147	F
Fluorene	443	8.7 J	360	79	36-138	
Indeno[1,2,3-cd]pyrene	443	30	266	53	35-148	
Naphthalene	443	20	326	69	33-130	
Pyrene	443	260	458	44	38-145	
Phenanthrene	443	120	366	56	40-135	

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.: 680-85860-4

SDG No.: 68085860-4

Matrix: Solid Level: Low Lab File ID: kl2116.d

Lab ID: 680-85860-63 MSD Client ID: CV0511TTT-GS MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1-Methylnaphthalene	439	274	60	14	50	36-130	
2-Methylnaphthalene	439	297	63	13	50	42-130	
Acenaphthene	439	303	67	14	50	33-130	
Acenaphthylene	439	296	68	13	50	37-131	
Anthracene	439	251	53	11	50	42-146	
Benzo[a]anthracene	439	345	53	9	50	39-157	
Benzo[a]pyrene	439	365	55	9	50	41-158	
Benzo[b]fluoranthene	439	385	40	12	50	35-152	
Benzo[g,h,i]perylene	439	226	43	21	50	32-150	
Benzo[k]fluoranthene	439	386	68	2	50	38-148	
Chrysene	439	374	51	8	50	38-147	
Dibenz(a,h)anthracene	439	253	54	18	50	32-155	
Fluoranthene	439	410	29	2	50	36-147	F
Fluorene	439	310	69	15	50	36-138	
Indeno[1,2,3-cd]pyrene	439	213	42	22	50	35-148	
Naphthalene	439	291	62	11	50	33-130	
Pyrene	439	464	46	1	50	38-145	
Phenanthrene	439	340	50	8	50	40-135	

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.: 680-85860-4

SDG No.: 68085860-4

Lab File ID: kl2105.d Lab Sample ID: MB 680-260564/17-A

Matrix: Solid Date Extracted: 12/20/2012 18:29

Instrument ID: MSK Date Analyzed: 12/21/2012 09:53

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-260564/18-A	kl2108.d	12/21/2012 11:03
CV0511TTT-GS MS	680-85860-63 MS	kl2115.d	12/21/2012 13:47
CV0511TTT-GS MSD	680-85860-63 MSD	kl2116.d	12/21/2012 14:11
CV0319A-CS	680-85860-77	yl2121.d	12/21/2012 17:53
CV0511AE-GS	680-85860-61	kl2127.d	12/21/2012 18:29
CV0511TTT-GS	680-85860-63	kl2129.d	12/21/2012 19:16
CV0550A-CS	680-85860-70	kl2130.d	12/21/2012 19:39
CV0550B-CS	680-85860-71	yl2127.d	12/21/2012 19:54
FM0251B-CS	680-85860-73	kl2131.d	12/21/2012 20:03
FM0251A-CS	680-85860-72	kl2132.d	12/21/2012 20:26
FM0251C-CS	680-85860-74	kl2625.d	12/26/2012 20:12
HP0282B-CS	680-85860-75	kl2626.d	12/26/2012 20:36
HP0282A-CS	680-85860-76	yl2706.d	12/27/2012 16:17
CV0319B-CS	680-85860-78	yl2708.d	12/27/2012 17:08

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

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Lab File ID: kl1402t.d DFTPP Injection Date: 12/14/2012

Instrument ID: MSK DFTPP Injection Time: 07:59

Analysis Batch No.: 259918

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0 % of mass 442	11.5	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	12.8	
70	Less than 2.0 % of mass 69	0.1	(1.0)1
127	10.0 - 80.0 % of mass 442	25.5	
197	Less than 2.0 % of mass 198	0.0	(0.0)1
198	Greater than 50.0 % of mass 442	53.1	
199	5.0 - 9.0 % of mass 198	3.8	(7.2)1
275	10.0 - 60.0 % of mass 442	14.5	
365	Greater than 1.0 % of mass 442	2.4	
441	Present but less than mass 443	0.0	
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
	IC 680-259918/2	kl1403q.d	12/14/2012	08:15
	IC 680-259918/3	kl1404q.d	12/14/2012	08:39
	IC 680-259918/4	kl1405q.d	12/14/2012	09:02
	IC 680-259918/5	kl1406q.d	12/14/2012	09:25
	IC 680-259918/6	kl1407q.d	12/14/2012	09:49
	IC 680-259918/7	kl1408q.d	12/14/2012	10:12
	ICIS 680-259918/8	kl1409q.d	12/14/2012	10:35

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

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Lab File ID: kl2102t.d DFTPP Injection Date: 12/21/2012

Instrument ID: MSK DFTPP Injection Time: 08:47

Analysis Batch No.: 261200

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0 % of mass 442	14.8	
68	Less than 2.0 % of mass 69	0.2	(1.0)1
69	Mass 69 relative abundance	15.5	
70	Less than 2.0 % of mass 69	0.2	(1.3)1
127	10.0 - 80.0 % of mass 442	28.6	
197	Less than 2.0 % of mass 198	0.0	(0.0)1
198	Greater than 50.0 % of mass 442	59.8	
199	5.0 - 9.0 % of mass 198	4.1	(6.9)1
275	10.0 - 60.0 % of mass 442	17.0	
365	Greater than 1.0 % of mass 442	2.1	
441	Present but less than mass 443	16.3	
442	Base Peak, 100% relative abundance	100.0	
443	15.0 - 24.0 % of mass 442	19.1	

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 680-261200/2	kl2103q.d	12/21/2012	09:04
	MB 680-260564/17-A	kl2105.d	12/21/2012	09:53
	LCS 680-260564/18-A	kl2108.d	12/21/2012	11:03
CV0511TTT-GS MS	680-85860-63 MS	kl2115.d	12/21/2012	13:47
CV0511TTT-GS MSD	680-85860-63 MSD	kl2116.d	12/21/2012	14:11
CV0511AE-GS	680-85860-61	kl2127.d	12/21/2012	18:29
CV0511TTT-GS	680-85860-63	kl2129.d	12/21/2012	19:16
CV0550A-CS	680-85860-70	kl2130.d	12/21/2012	19:39
FM0251B-CS	680-85860-73	kl2131.d	12/21/2012	20:03
FM0251A-CS	680-85860-72	kl2132.d	12/21/2012	20:26

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

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Lab File ID: kl2611t.d DFTPP Injection Date: 12/26/2012

Instrument ID: MSK DFTPP Injection Time: 14:51

Analysis Batch No.: 261203

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0 % of mass 442	10.8	
68	Less than 2.0 % of mass 69	0.0	(0.2)1
69	Mass 69 relative abundance	11.4	
70	Less than 2.0 % of mass 69	0.1	(0.9)1
127	10.0 - 80.0 % of mass 442	23.6	
197	Less than 2.0 % of mass 198	0.0	(0.0)1
198	Greater than 50.0 % of mass 442	52.0	
199	5.0 - 9.0 % of mass 198	3.5	(6.7)1
275	10.0 - 60.0 % of mass 442	14.2	
365	Greater than 1.0 % of mass 442	2.1	
441	Present but less than mass 443	0.0	
442	Base Peak, 100% relative abundance	100.0	
443	15.0 - 24.0 % of mass 442	19.3	

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 680-261203/2	kl2612q.d	12/26/2012	15:08
	IC 680-261203/3	kl2613q.d	12/26/2012	15:31
	IC 680-261203/4	kl2614q.d	12/26/2012	15:55
	IC 680-261203/5	kl2615q.d	12/26/2012	16:18
	IC 680-261203/6	kl2616q.d	12/26/2012	16:41
	IC 680-261203/7	kl2617q.d	12/26/2012	17:04
	ICIS 680-261203/8	kl2618q.d	12/26/2012	17:28
FM0251C-CS	680-85860-74	kl2625.d	12/26/2012	20:12
HP0282B-CS	680-85860-75	kl2626.d	12/26/2012	20:36

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

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

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
CV0319A-CS	680-85860-77	yl2121.d	12/21/2012	17:53

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

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Lab File ID: yl2125t.d DFTPP Injection Date: 12/21/2012

Instrument ID: MSY DFTPP Injection Time: 19:15

Analysis Batch No.: 261204

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0 % of mass 442	44.1	
68	Less than 2.0 % of mass 69	0.7	(1.5)1
69	Mass 69 relative abundance	45.6	
70	Less than 2.0 % of mass 69	0.0	(0.0)1
127	10.0 - 80.0 % of mass 442	68.7	
197	Less than 2.0 % of mass 198	1.5	(1.0)1
198	Greater than 50.0 % of mass 442	142.0	
199	5.0 - 9.0 % of mass 198	9.5	(6.7)1
275	10.0 - 60.0 % of mass 442	31.4	
365	Greater than 1.0 % of mass 442	2.5	
441	Present but less than mass 443	15.2	
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
	CCVIS 680-261204/2	yl2126q.d	12/21/2012	19:31
CV0550B-CS	680-85860-71	yl2127.d	12/21/2012	19:54

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

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Lab File ID: yl2701t.d DFTPP Injection Date: 12/27/2012

Instrument ID: MSY DFTPP Injection Time: 13:57

Analysis Batch No.: 261231

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0 % of mass 442	29.5	
68	Less than 2.0 % of mass 69	0.4	(1.3)1
69	Mass 69 relative abundance	32.4	
70	Less than 2.0 % of mass 69	0.0	(0.0)1
127	10.0 - 80.0 % of mass 442	46.8	
197	Less than 2.0 % of mass 198	1.0	(0.9)1
198	Greater than 50.0 % of mass 442	109.6	
199	5.0 - 9.0 % of mass 198	8.0	(7.3)1
275	10.0 - 60.0 % of mass 442	26.7	
365	Greater than 1.0 % of mass 442	3.6	
441	Present but less than mass 443	14.3	
442	Base Peak, 100% relative abundance	100.0	
443	15.0 - 24.0 % of mass 442	20.7	

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 680-261231/2	yl2702q.d	12/27/2012	14:13
HP0282A-CS	680-85860-76	yl2706.d	12/27/2012	16:17
CV0319B-CS	680-85860-78	yl2708.d	12/27/2012	17:08

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

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Sample No.: CCVIS 680-261200/2 Date Analyzed: 12/21/2012 09:04

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

Lab File ID (Standard): kl2103q.d Heated Purge: (Y/N) N

Calibration ID: 15193

		NPT		ANT		PHN	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1138560	4.78	613945	6.59	843703	8.22
UPPER LIMIT		2277120	5.28	1227890	7.09	1687406	8.72
LOWER LIMIT		569280	4.28	306973	6.09	421852	7.72
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 680-260564/17-A		1282185	4.77	711801	6.59	1009468	8.22
LCS 680-260564/18-A		1271570	4.77	734109	6.59	1107684	8.22
680-85860-63 MS	CV0511TTT-GS MS	1381882	4.77	812983	6.59	1281460	8.22
680-85860-63 MSD	CV0511TTT-GS MSD	1192491	4.77	658797	6.59	1022462	8.22
680-85860-61	CV0511AE-GS	1150077	4.77	596048	6.59	991934	8.22
680-85860-63	CV0511TTT-GS	1119743	4.77	601548	6.59	993799	8.22
680-85860-70	CV0550A-CS	879171	4.78	471454	6.59	797101	8.22
680-85860-73	FM0251B-CS	1070990	4.78	588537	6.59	1002281	8.22
680-85860-72	FM0251A-CS	1036772	4.78	562623	6.59	964716	8.22

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.: 680-85860-4

SDG No.: 68085860-4

Sample No.: CCVIS 680-261200/2 Date Analyzed: 12/21/2012 09:04

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

Lab File ID (Standard): kl2103q.d Heated Purge: (Y/N) N

Calibration ID: 15193

		CRY		PRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		796292	11.05	717234	12.84		
UPPER LIMIT		1592584	11.55	1434468	13.34		
LOWER LIMIT		398146	10.55	358617	12.34		
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 680-260564/17-A		929095	11.05	928031	12.84		
LCS 680-260564/18-A		1013507	11.05	1034147	12.84		
680-85860-63 MS	CV0511TTT-GS MS	1040630	11.05	898010	12.83		
680-85860-63 MSD	CV0511TTT-GS MSD	783753	11.06	642706	12.84		
680-85860-61	CV0511AE-GS	770526	11.05	584243	12.84		
680-85860-63	CV0511TTT-GS	799192	11.05	577040	12.83		
680-85860-70	CV0550A-CS	632946	11.06	452234	12.85		
680-85860-73	FM0251B-CS	715809	11.08	445701	12.88		
680-85860-72	FM0251A-CS	744219	11.08	461816	12.89		

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.: 680-85860-4

SDG No.: 68085860-4

Sample No.: ICIS 680-261203/8 Date Analyzed: 12/26/2012 17:28

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

Lab File ID (Standard): kl2618q.d Heated Purge: (Y/N) N

Calibration ID: 15366

		NPT		ANT		PHN	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		519296	4.67	276496	6.46	365419	8.08
UPPER LIMIT		1038592	5.17	552992	6.96	730838	8.58
LOWER LIMIT		259648	4.17	138248	5.96	182710	7.58
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-85860-74	FM0251C-CS	693569	4.67	414290	6.46	640484	8.08
680-85860-75	HP0282B-CS	670524	4.67	409680	6.46	630700	8.08

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.: 680-85860-4

SDG No.: 68085860-4

Sample No.: ICIS 680-261203/8 Date Analyzed: 12/26/2012 17:28

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

Lab File ID (Standard): kl2618q.d Heated Purge: (Y/N) N

Calibration ID: 15366

		CRY		PRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		273654	10.90	242925	12.60		
UPPER LIMIT		547308	11.40	485850	13.10		
LOWER LIMIT		136827	10.40	121463	12.10		
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-85860-74	FM0251C-CS	437475	10.93	314631	12.64		
680-85860-75	HP0282B-CS	391275	10.91	263485	12.61		

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.: 680-85860-4

SDG No.: 68085860-4

Sample No.: ICIS 680-261214/8 Date Analyzed: 12/21/2012 13:30

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

Lab File ID (Standard): yl2112q.d Heated Purge: (Y/N) N

Calibration ID: 15368

		NPT		ANT		PHN	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		97972	3.39	57081	4.91	82260	6.16
UPPER LIMIT		195944	3.89	114162	5.41	164520	6.66
LOWER LIMIT		48986	2.89	28541	4.41	41130	5.66
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-85860-77	CV0319A-CS	120256	3.39	80250	4.91	138205	6.16

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.: 680-85860-4

SDG No.: 68085860-4

Sample No.: ICIS 680-261214/8 Date Analyzed: 12/21/2012 13:30

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

Lab File ID (Standard): yl2112q.d Heated Purge: (Y/N) N

Calibration ID: 15368

		CRY		PRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		64790	8.47	58444	9.76		
UPPER LIMIT		129580	8.97	116888	10.26		
LOWER LIMIT		32395	7.97	29222	9.26		
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-85860-77	CV0319A-CS	109982	8.47	87218	9.76		

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.: 680-85860-4

SDG No.: 68085860-4

Sample No.: CCVIS 680-261204/2 Date Analyzed: 12/21/2012 19:31

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

Lab File ID (Standard): yl2126q.d Heated Purge: (Y/N) N

Calibration ID: 15177

		NPT		ANT		PHN	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		133991	3.39	85606	4.91	143011	6.16
UPPER LIMIT		267982	3.89	171212	5.41	286022	6.66
LOWER LIMIT		66996	2.89	42803	4.41	71506	5.66
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-85860-71	CV0550B-CS	119518	3.39	79013	4.91	139960	6.16

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.: 680-85860-4

SDG No.: 68085860-4

Sample No.: CCVIS 680-261204/2 Date Analyzed: 12/21/2012 19:31

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

Lab File ID (Standard): yl2126q.d Heated Purge: (Y/N) N

Calibration ID: 15177

		CRY		PRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		109600	8.47	94611	9.76		
UPPER LIMIT		219200	8.97	189222	10.26		
LOWER LIMIT		54800	7.97	47306	9.26		
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-85860-71	CV0550B-CS	109175	8.47	88172	9.76		

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.: 680-85860-4

SDG No.: 68085860-4

Sample No.: CCVIS 680-261231/2 Date Analyzed: 12/27/2012 14:13

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

Lab File ID (Standard): yl2702q.d Heated Purge: (Y/N) N

Calibration ID: 15368

		NPT		ANT		PHN	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		103224	3.32	64513	4.84	101494	6.09
UPPER LIMIT		206448	3.82	129026	5.34	202988	6.59
LOWER LIMIT		51612	2.82	32257	4.34	50747	5.59
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-85860-76	HP0282A-CS	71867	3.32	45743	4.84	82095	6.09
680-85860-78	CV0319B-CS	55486	3.32	34525	4.84	59916	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.: 680-85860-4

SDG No.: 68085860-4

Sample No.: CCVIS 680-261231/2 Date Analyzed: 12/27/2012 14:13

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

Lab File ID (Standard): yl2702q.d Heated Purge: (Y/N) N

Calibration ID: 15368

		CRY		PRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		73897	8.40	69052	9.67		
UPPER LIMIT		147794	8.90	138104	10.17		
LOWER LIMIT		36949	7.90	34526	9.17		
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-85860-76	HP0282A-CS	69314	8.40	59932	9.67		
680-85860-78	CV0319B-CS	40828	8.39	31478*	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 I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85860-4

SDG No.: 68085860-4

Client Sample ID: CV0511AE-GS | Lab Sample ID: 680-85860-61

Matrix: Solid | Lab File ID: kl2127.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/13/2012 15:15

Extract. Method: 3546 | Date Extracted: 12/20/2012 18:29

Sample wt/vol: 30.13(g) | Date Analyzed: 12/21/2012 18:29

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

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

% Moisture: 44.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261200 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	12	U	12	5.5
91-57-6	2-Methylnaphthalene	7.2	J	12	5.9
83-32-9	Acenaphthene	12	U	12	5.9
208-96-8	Acenaphthylene	12	U	12	5.9
120-12-7	Anthracene	12	U	12	5.9
56-55-3	Benzo[a]anthracene	12		12	5.9
50-32-8	Benzo[a]pyrene	14		12	2.1
205-99-2	Benzo[b]fluoranthene	21		12	5.9
191-24-2	Benzo[g,h,i]perylene	12	U	12	5.9
207-08-9	Benzo[k]fluoranthene	8.5	J	12	3.6
218-01-9	Chrysene	16		12	5.9
53-70-3	Dibenz(a,h)anthracene	12	U	12	5.9
206-44-0	Fluoranthene	29		12	5.9
86-73-7	Fluorene	12	U	12	5.9
193-39-5	Indeno[1,2,3-cd]pyrene	12	U	12	5.9
91-20-3	Naphthalene	13		12	5.9
129-00-0	Pyrene	28		12	5.9
85-01-8	Phenanthrene	17		12	4.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	54		36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k122112.b/kl2127.d
Lab Smp Id: 680-85860-A-61-A Client Smp ID: CV0511AE-GS
Inj Date : 21-DEC-2012 18:29
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85860-A-61-A
Misc Info : 680-85860-A-61-A
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122112.b/k-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 09:18 chemist Quant Type: ISTD
Cal Date : 14-DEC-2012 10:35 Cal File: kl1409q.d
Als bottle: 25
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	30.13000	Weight Extracted
M	44.04297	% 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	4.771	4.777	(1.000)	1150077	2.00000	
2 Naphthalene	128	4.789	4.800	(1.004)	151039	0.22233	13.18
3 2-Methylnaphthalene	142	5.482	5.482	(1.149)	52736	0.12172	7.21(a)
* 5 Acenaphthene-d10	164	6.586	6.586	(1.000)	596048	2.00000	
* 9 Phenanthrene-d10	188	8.220	8.220	(1.000)	991934	2.00000	
10 Phenanthrene	178	8.243	8.243	(1.003)	182060	0.28475	16.88
$ 15 o-Terphenyl	230	8.637	8.637	(0.781)	357030	1.08239	64.19

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
12 Fluoranthene	202	9.536	9.536	(1.160)	336644	0.49373	29.28
14 Pyrene	202	9.777	9.777	(0.885)	276385	0.47665	28.27
16 Benzo(a)Anthracene	228	11.040	11.040	(0.999)	102664	0.19748	11.71(a)
* 13 Chrysene-d12	240	11.052	11.052	(1.000)	770526	2.00000	
17 Chrysene	228	11.081	11.081	(1.003)	136237	0.26986	16.00
19 Benzo(b)fluoranthene	252	12.303	12.297	(0.958)	141782	0.34777	20.62(M)
20 Benzo(k)fluoranthene	252	12.333	12.333	(0.961)	56647	0.14355	8.51(aM)
21 Benzo(a)pyrene	252	12.756	12.756	(0.994)	79845	0.24327	14.42
* 18 Perylene-d12	264	12.838	12.838	(1.000)	584243	2.00000	

QC Flag Legend

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

Data File: kl2127.d

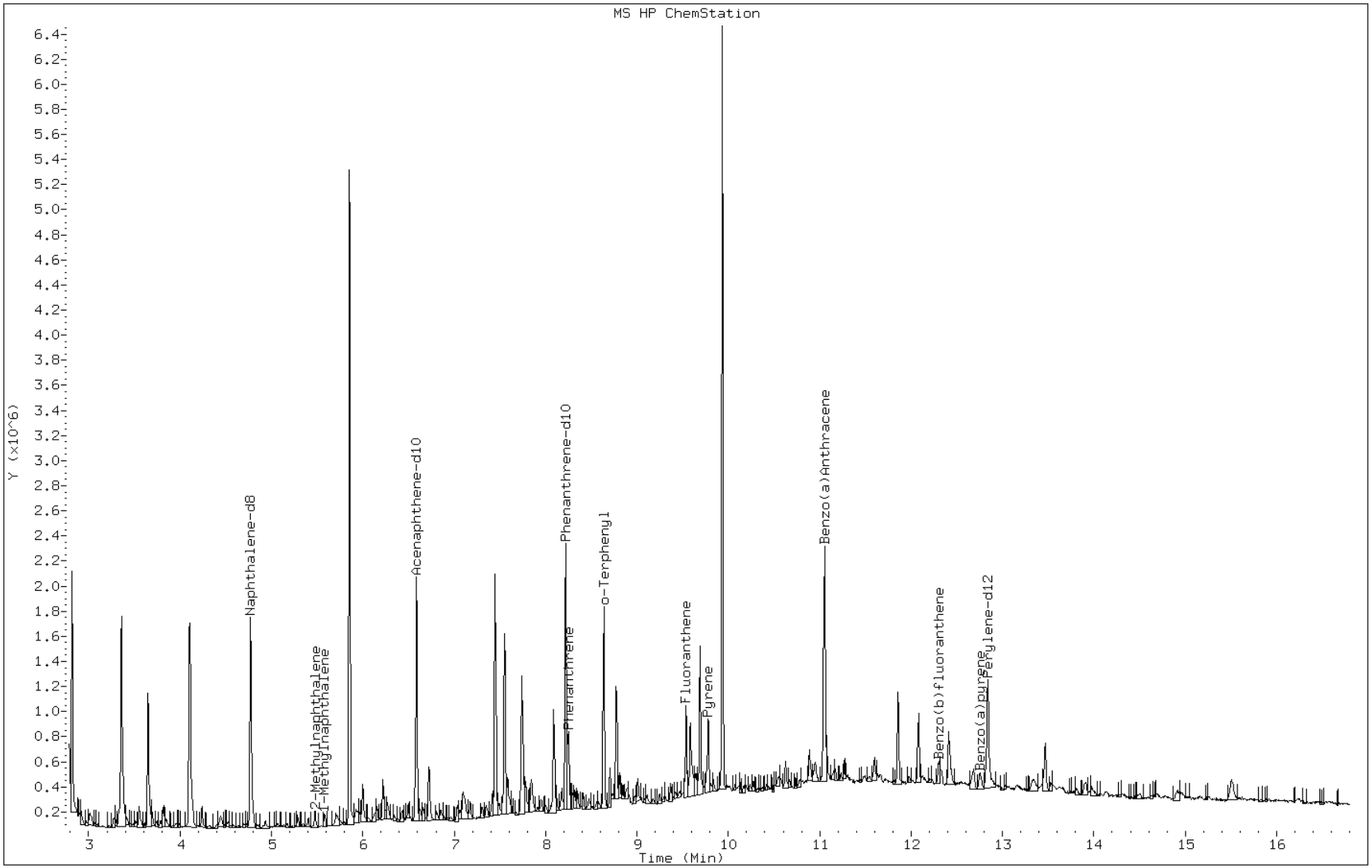
Date: 21-DEC-2012 18:29

Client ID: CV0511AE-GS

Instrument: MSK5973.i

Sample Info: 680-85860-A-61-A

Operator: LEG



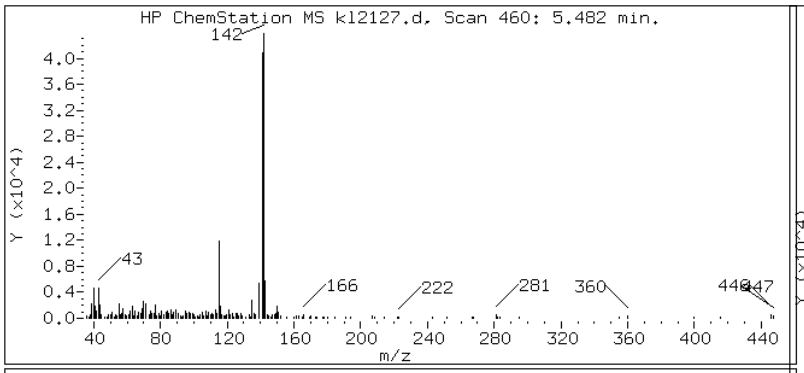
Data File: kl2127.d

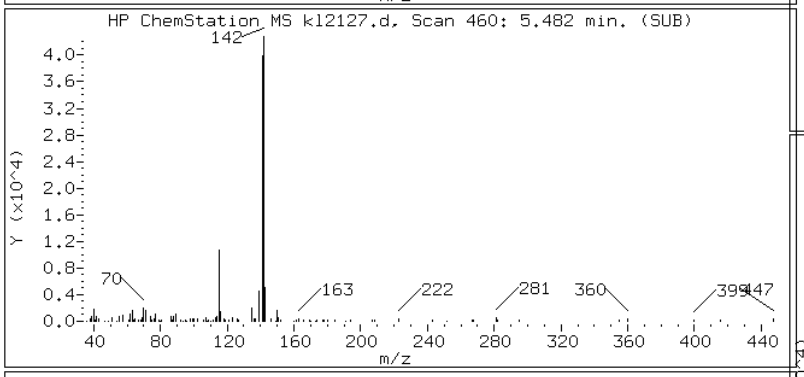
Date: 21-DEC-2012 18:29

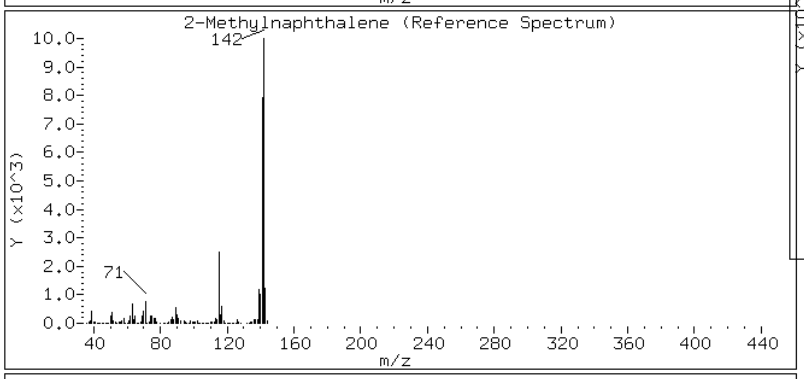
Client ID: CV0511AE-GS Instrument: MSK5973.i

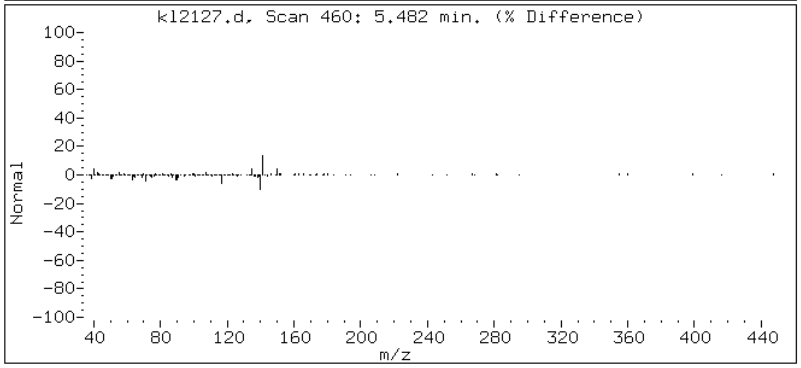
Sample Info: 680-85860-A-61-A Operator: LEG

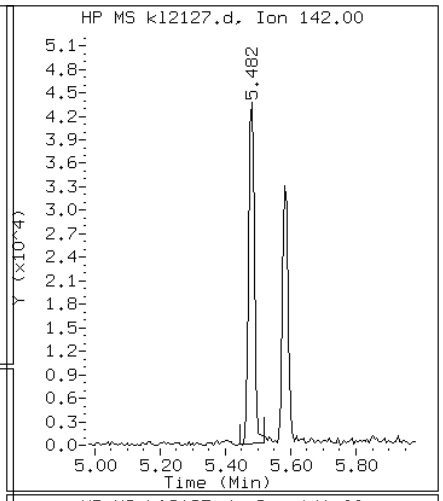
3 2-Methylnaphthalene

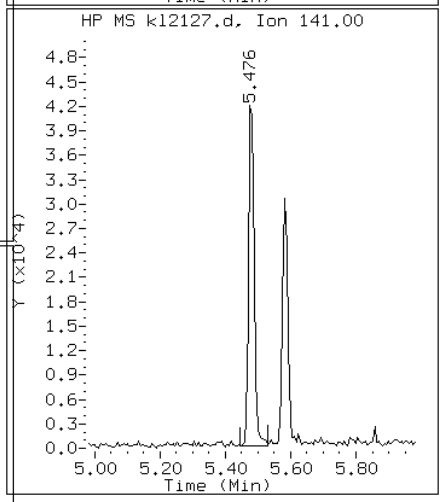












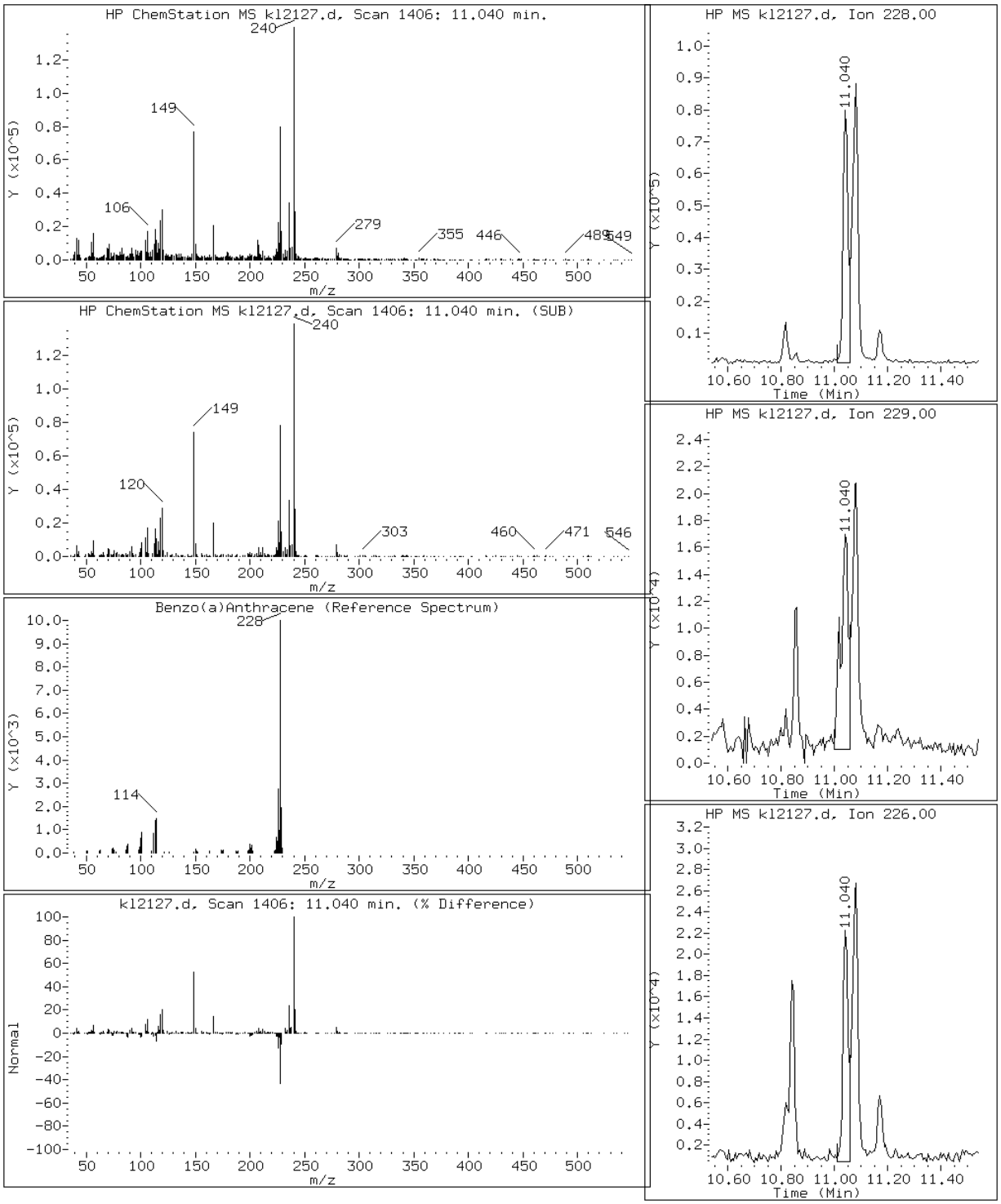
Data File: kl2127.d

Date: 21-DEC-2012 18:29

Client ID: CV0511AE-GS | Instrument: MSK5973.i

Sample Info: 680-85860-A-61-A | Operator: LEG

16 Benzo(a)Anthracene



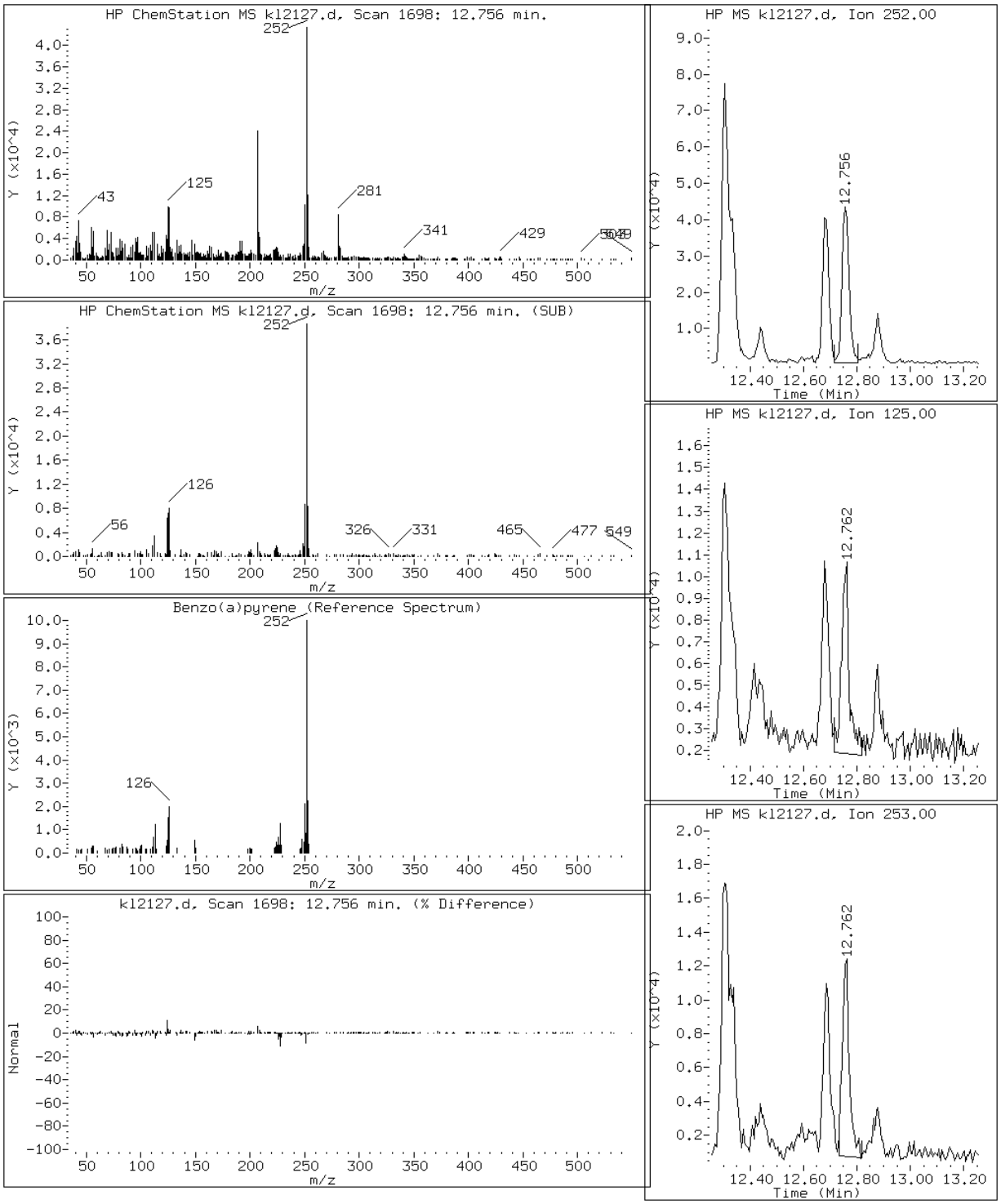
Data File: kl2127.d

Date: 21-DEC-2012 18:29

Client ID: CV0511AE-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-61-A Operator: LEG

21 Benzo(a)pyrene



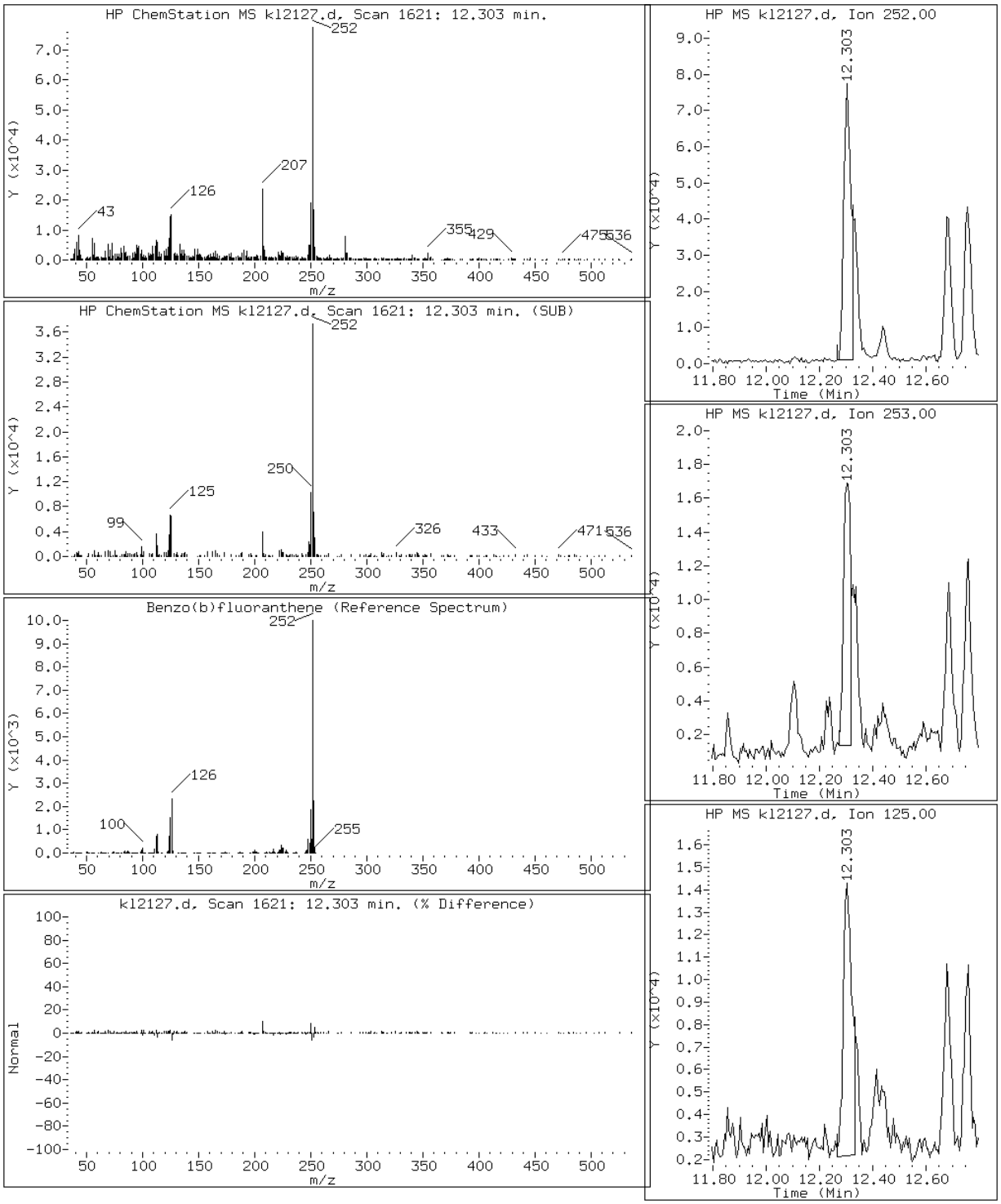
Data File: kl2127.d

Date: 21-DEC-2012 18:29

Client ID: CV0511AE-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-61-A Operator: LEG

19 Benzo(b)fluoranthene



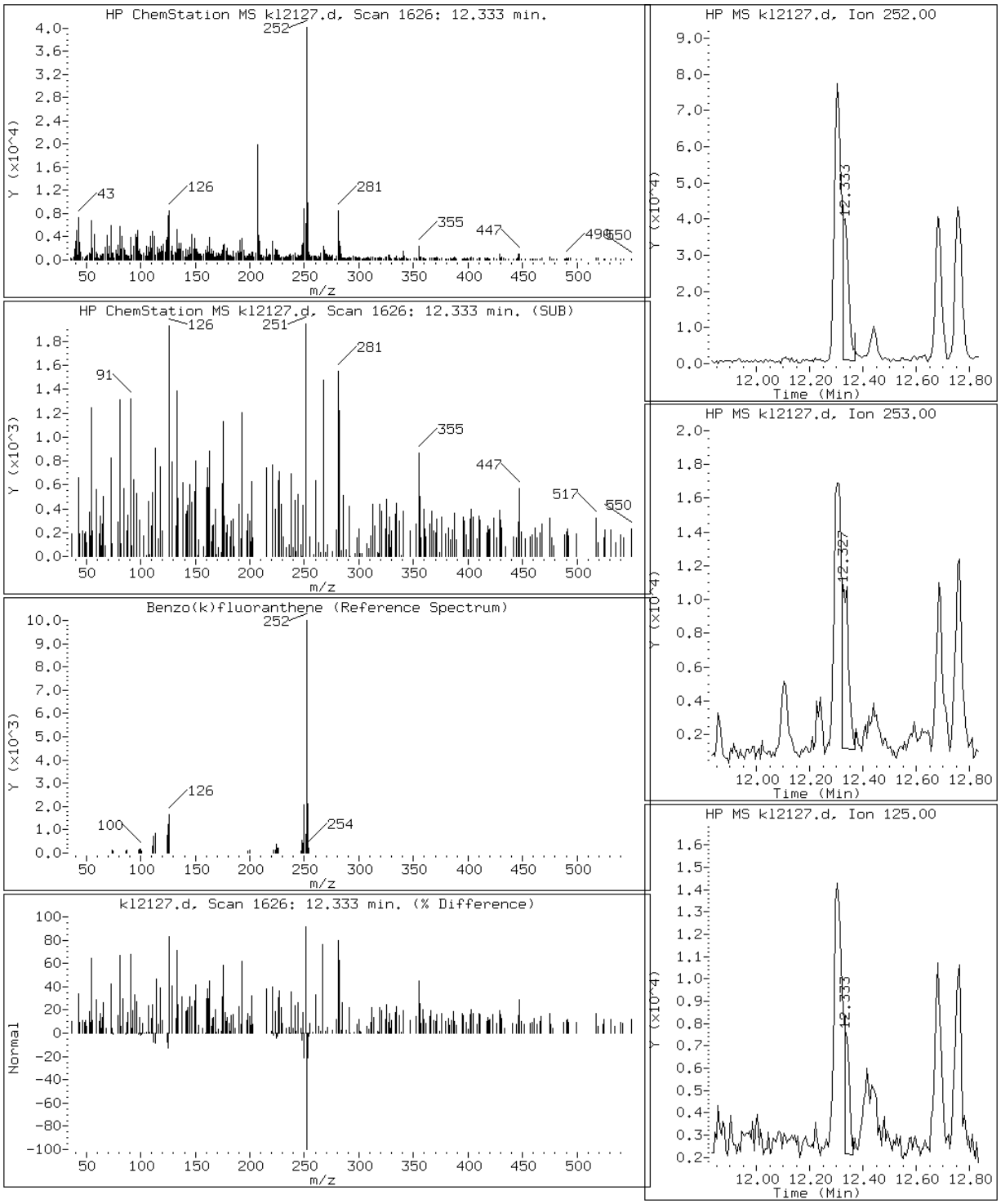
Data File: kl2127.d

Date: 21-DEC-2012 18:29

Client ID: CV0511AE-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-61-A Operator: LEG

20 Benzo(k)fluoranthene



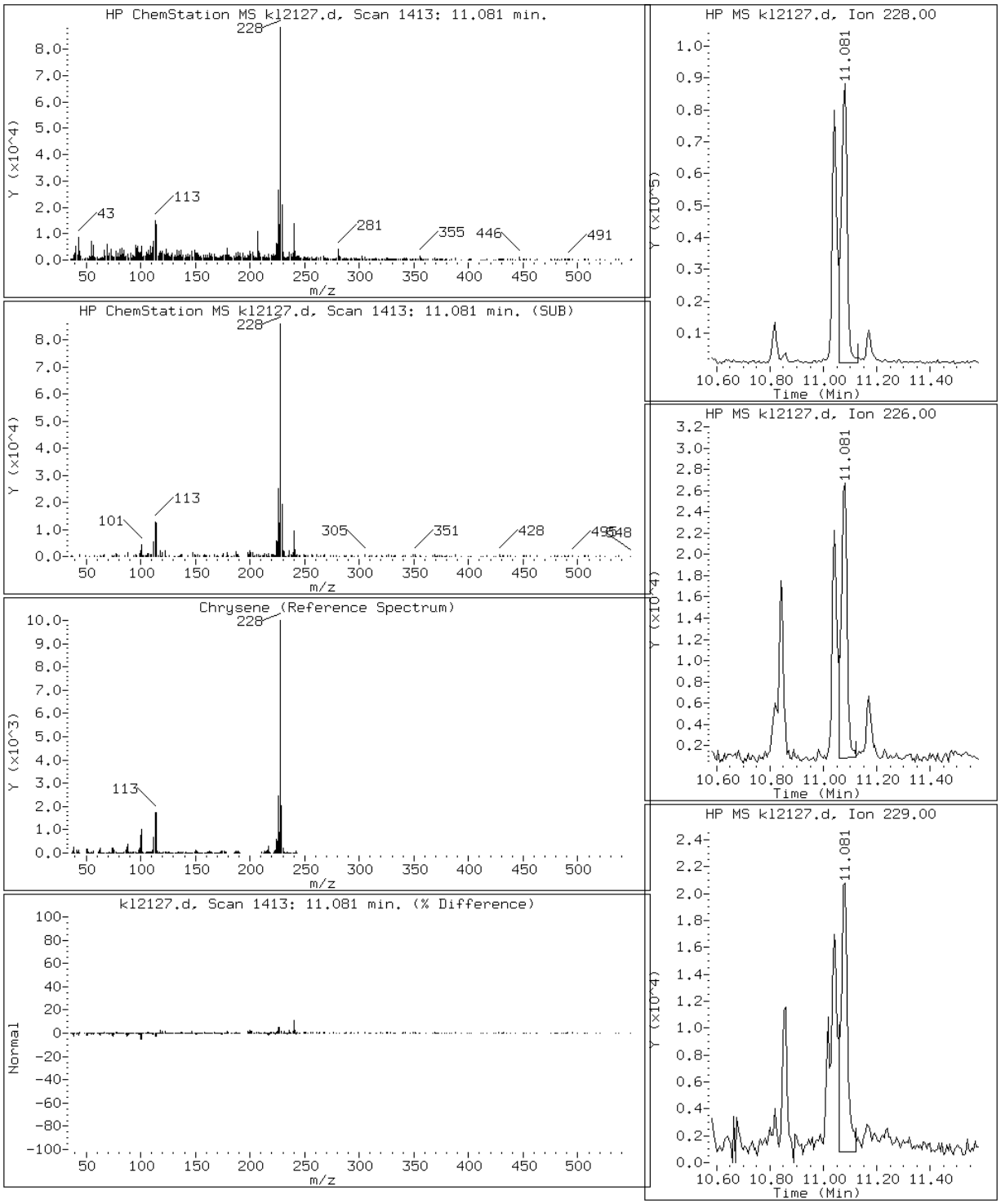
Data File: kl2127.d

Date: 21-DEC-2012 18:29

Client ID: CV0511AE-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-61-A Operator: LEG

17 Chrysene



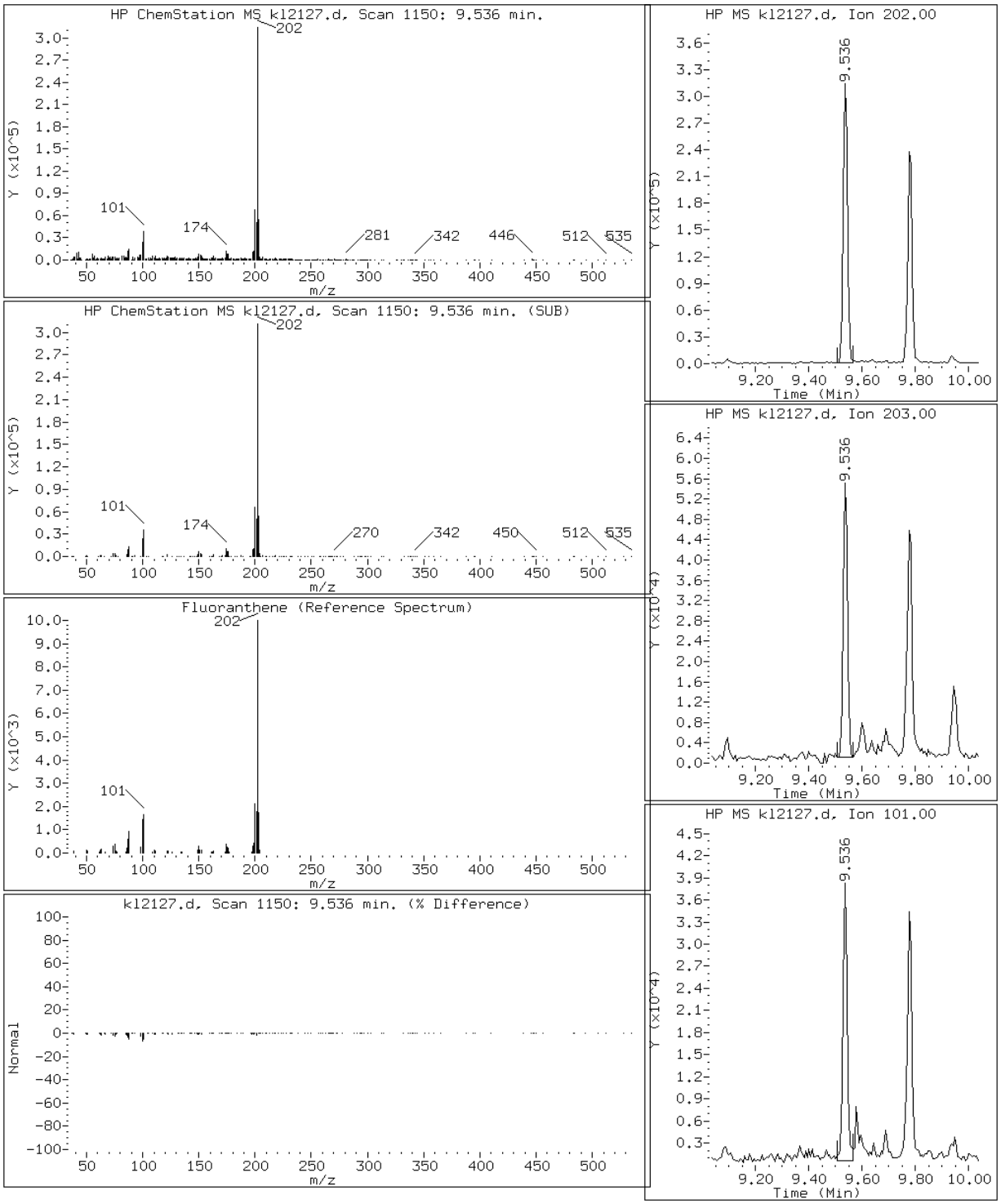
Data File: kl2127.d

Date: 21-DEC-2012 18:29

Client ID: CV0511AE-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-61-A Operator: LEG

12 Fluoranthene



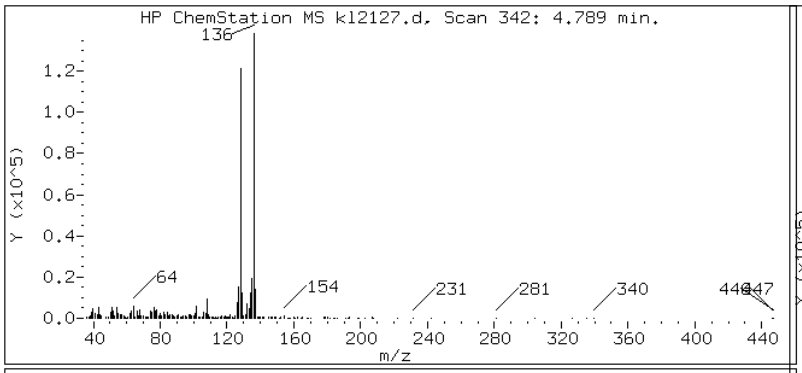
Data File: kl2127.d

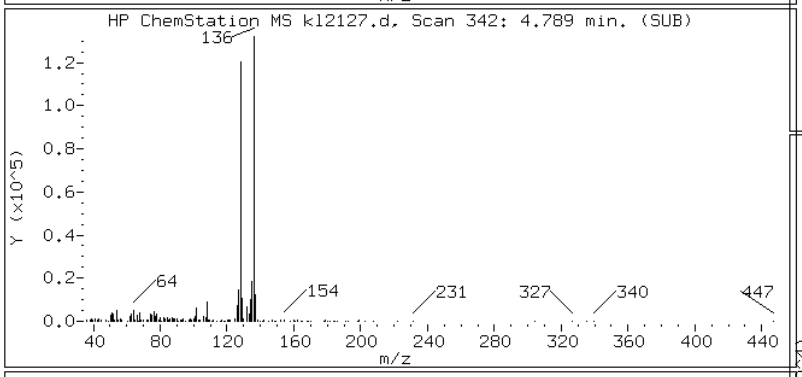
Date: 21-DEC-2012 18:29

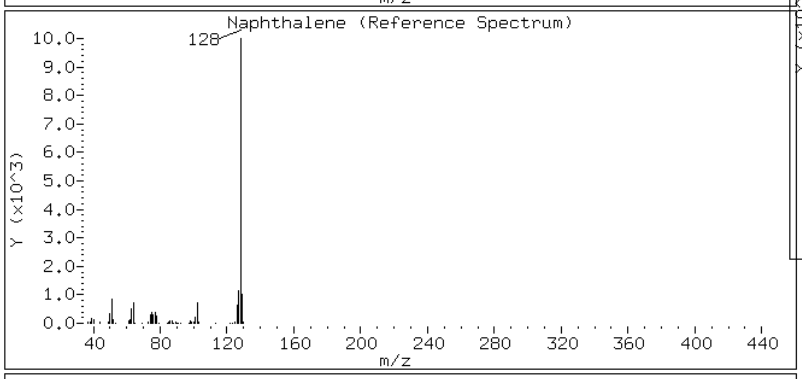
Client ID: CV0511AE-GS Instrument: MSK5973.i

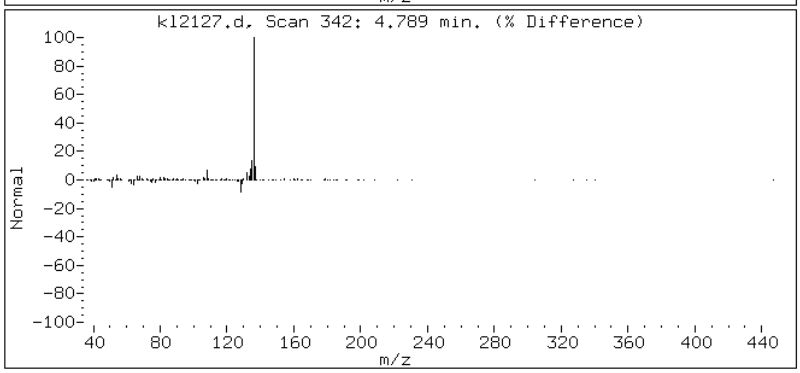
Sample Info: 680-85860-A-61-A Operator: LEG

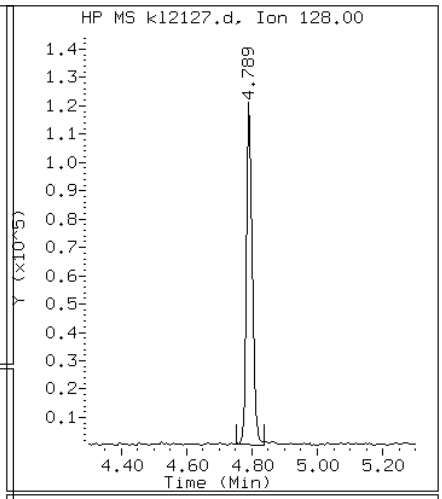
2 Naphthalene

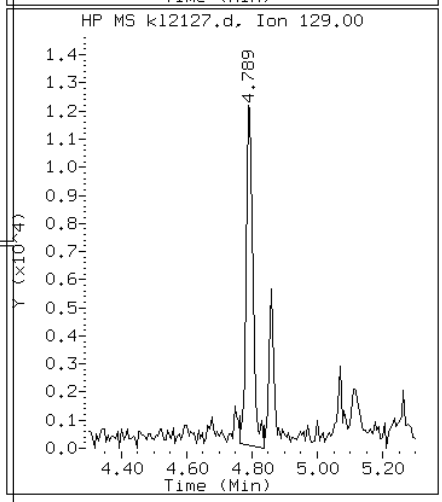












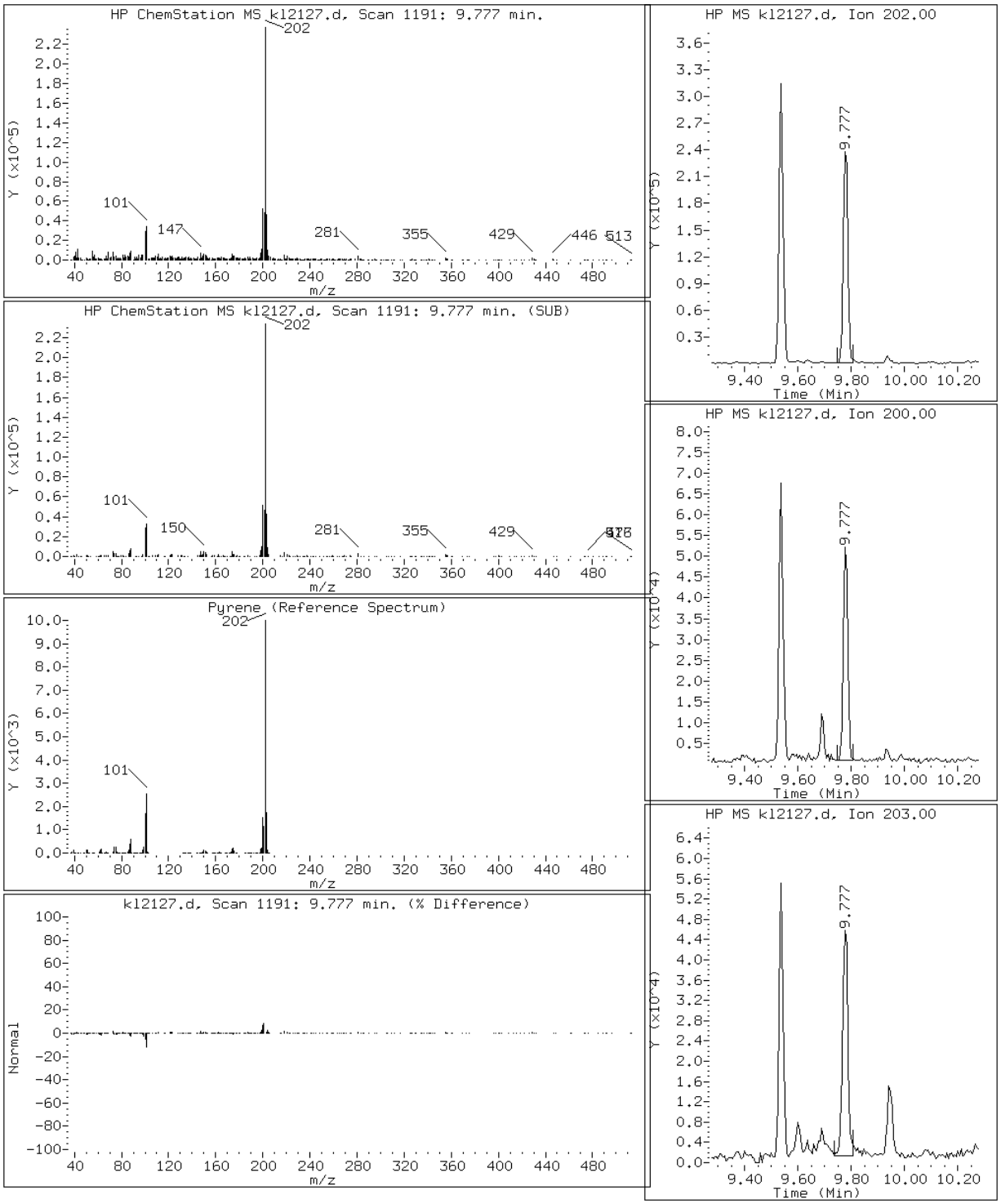
Data File: kl2127.d

Date: 21-DEC-2012 18:29

Client ID: CV0511AE-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-61-A Operator: LEG

14 Pyrene



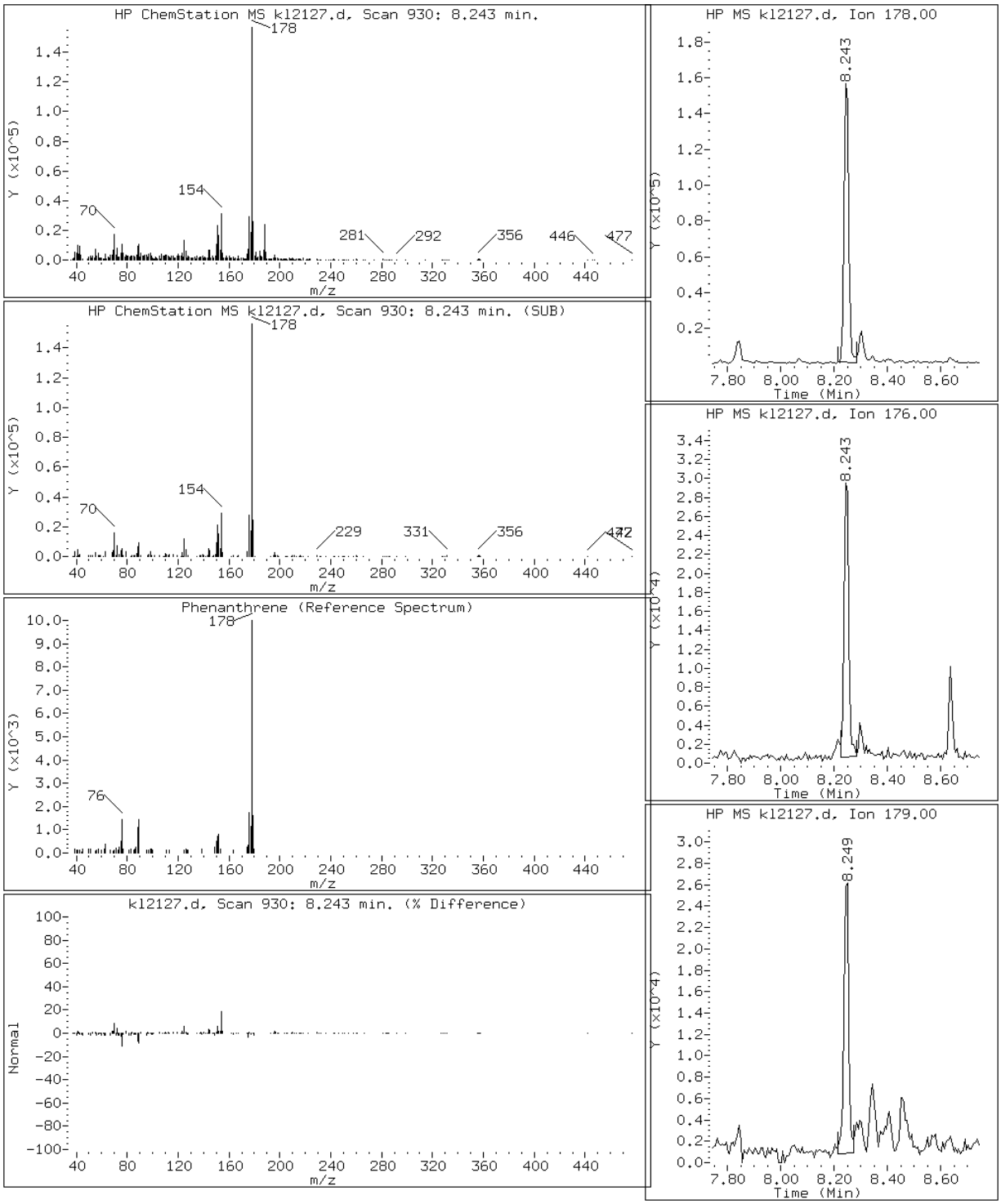
Data File: kl2127.d

Date: 21-DEC-2012 18:29

Client ID: CV0511AE-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-61-A Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: kl2127.d
Inj. Date and Time: 21-DEC-2012 18:29
Instrument ID: MSK5973.i
Client ID: CV0511AE-GS
Compound: 4 1-Methylnaphthalene
CAS #: 90-12-0
Report Date: 12/27/2012

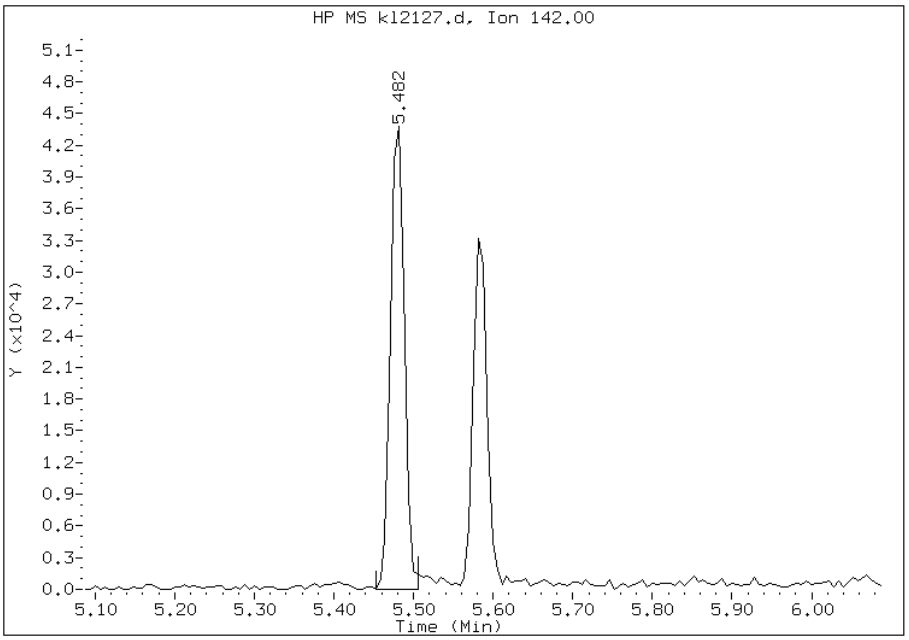
Processing Integration Results

RT: 5.48

Response: 52903

Amount: 0

Conc: 7



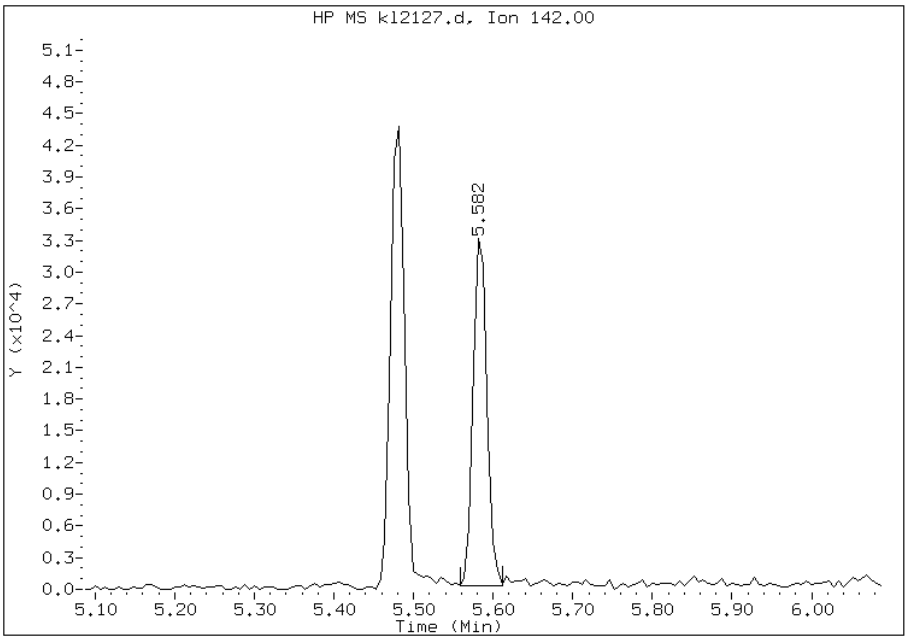
Manual Integration Results

RT: 5.58

Response: 38709

Amount: 0

Conc: 5



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

Manual Integration Report

Data File: kl2127.d
Inj. Date and Time: 21-DEC-2012 18:29
Instrument ID: MSK5973.i
Client ID: CV0511AE-GS
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 12/27/2012

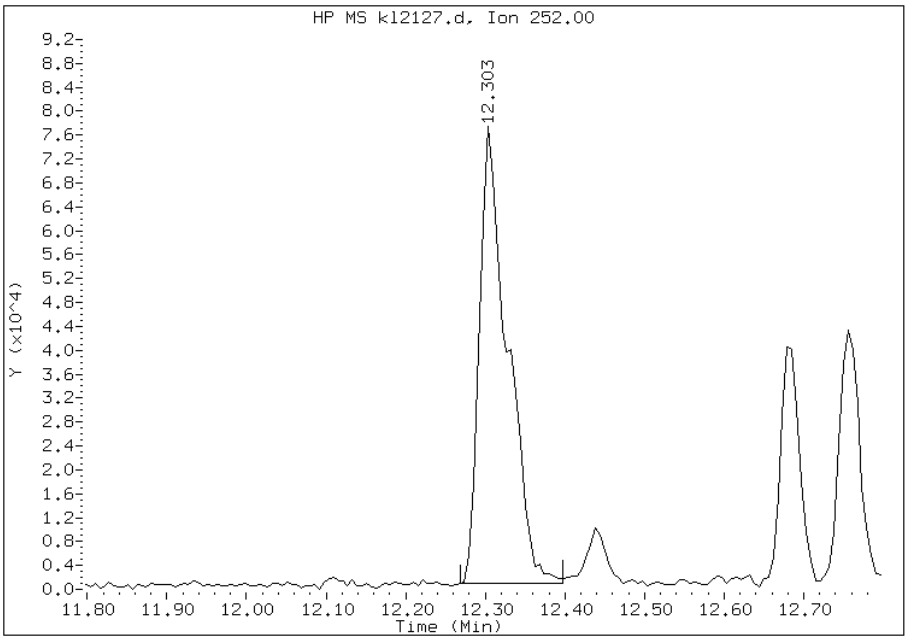
Processing Integration Results

RT: 12.30

Response: 186795

Amount: 0

Conc: 27



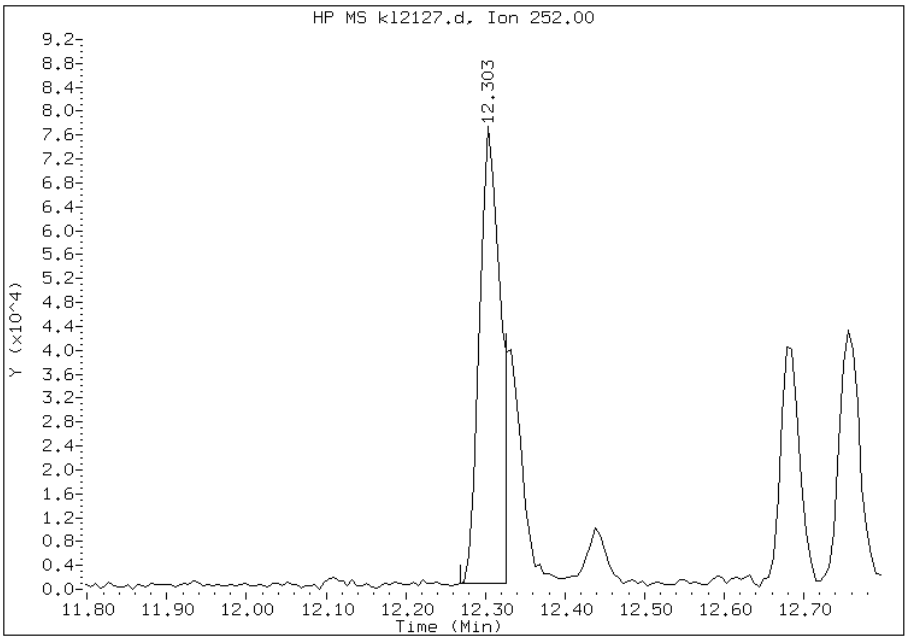
Manual Integration Results

RT: 12.30

Response: 141782

Amount: 0

Conc: 21



Manually Integrated By: chemist
Manual Integration Reason:

Manual Integration Report

Data File: kl2127.d
Inj. Date and Time: 21-DEC-2012 18:29
Instrument ID: MSK5973.i
Client ID: CV0511AE-GS
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 12/27/2012

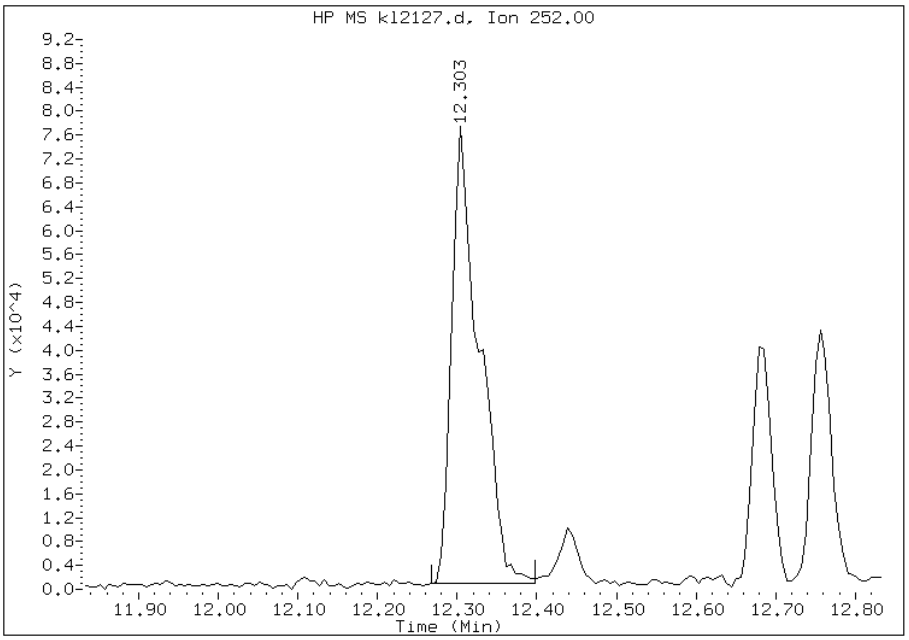
Processing Integration Results

RT: 12.30

Response: 186795

Amount: 0

Conc: 28



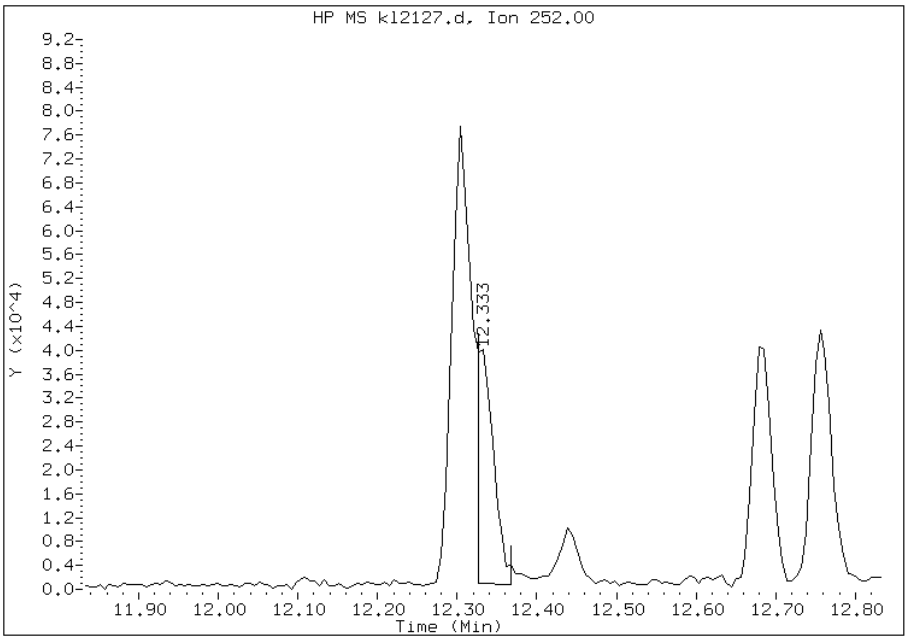
Manual Integration Results

RT: 12.33

Response: 56647

Amount: 0

Conc: 9



Manually Integrated By: chemist
Manual Integration Reason:

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85860-4

SDG No.: 68085860-4

Client Sample ID: CV0511TTT-GS | Lab Sample ID: 680-85860-63

Matrix: Solid | Lab File ID: kl2129.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/13/2012 15:40

Extract. Method: 3546 | Date Extracted: 12/20/2012 18:29

Sample wt/vol: 30.16(g) | Date Analyzed: 12/21/2012 19:16

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

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

% Moisture: 24.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261200 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	13		8.9	4.1
91-57-6	2-Methylnaphthalene	19		8.9	4.4
83-32-9	Acenaphthene	9.4		8.9	4.4
208-96-8	Acenaphthylene	8.9	U	8.9	4.4
120-12-7	Anthracene	20		8.9	4.4
56-55-3	Benzo[a]anthracene	110		8.9	4.4
50-32-8	Benzo[a]pyrene	130		8.9	1.6
205-99-2	Benzo[b]fluoranthene	210		8.9	4.4
191-24-2	Benzo[g,h,i]perylene	36		8.9	4.4
207-08-9	Benzo[k]fluoranthene	86		8.9	2.6
218-01-9	Chrysene	150		8.9	4.4
53-70-3	Dibenz(a,h)anthracene	14		8.9	4.4
206-44-0	Fluoranthene	280		8.9	4.4
86-73-7	Fluorene	8.7	J	8.9	4.4
193-39-5	Indeno[1,2,3-cd]pyrene	30		8.9	4.4
91-20-3	Naphthalene	20		8.9	4.4
129-00-0	Pyrene	260		8.9	4.4
85-01-8	Phenanthrene	120		8.9	3.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	54		36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k122112.b/kl2129.d
Lab Smp Id: 680-85860-A-63-A Client Smp ID: CV0511TTT-GS
Inj Date : 21-DEC-2012 19:16
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85860-A-63-A
Misc Info : 680-85860-A-63-A
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122112.b/k-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 09:18 chemist Quant Type: ISTD
Cal Date : 14-DEC-2012 10:35 Cal File: kl1409q.d
Als bottle: 27
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	30.16000	Weight Extracted
M	24.85437	% 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	4.771	4.777	(1.000)	1119743	2.00000	
2 Naphthalene	128	4.795	4.800	(1.005)	298133	0.45075	19.88
3 2-Methylnaphthalene	142	5.482	5.482	(1.149)	178776	0.42380	18.69
4 1-Methylnaphthalene	142	5.582	5.588	(1.170)	122315	0.28567	12.60
* 5 Acenaphthene-d10	164	6.587	6.586	(1.000)	601548	2.00000	
7 Acenaphthene	154	6.622	6.622	(1.005)	75855	0.21416	9.44
8 Fluorene	166	7.186	7.186	(1.091)	80204	0.19697	8.69(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 9 Phenanthrene-d10	188	8.220	8.220	(1.000)	993799	2.00000	
10 Phenanthrene	178	8.244	8.243	(1.003)	1745055	2.72426	120.20
11 Anthracene	178	8.302	8.302	(1.010)	288079	0.45416	20.03
$ 15 o-Terphenyl	230	8.637	8.637	(0.782)	369862	1.08108	47.70
12 Fluoranthene	202	9.542	9.536	(1.161)	4374739	6.40401	282.56
14 Pyrene	202	9.783	9.777	(0.886)	3597269	5.98126	263.91
16 Benzo(a)Anthracene	228	11.034	11.040	(0.999)	1390331	2.57852	113.77
* 13 Chrysene-d12	240	11.046	11.052	(1.000)	799192	2.00000	
17 Chrysene	228	11.076	11.081	(1.003)	1785823	3.41054	150.48
19 Benzo(b)fluoranthene	252	12.298	12.297	(0.958)	1918752	4.76516	210.25(M)
20 Benzo(k)fluoranthene	252	12.315	12.333	(0.960)	758933	1.94723	85.91(M)
21 Benzo(a)pyrene	252	12.750	12.756	(0.994)	918964	2.83487	125.08
* 18 Perylene-d12	264	12.832	12.838	(1.000)	577040	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	14.677	14.683	(1.329)	343111	0.69030	30.45
23 Dibenzo(a,h)anthracene	278	14.701	14.712	(1.146)	96341	0.32149	14.18
24 Benzo(g,h,i)perylene	276	15.241	15.241	(1.188)	255555	0.80778	35.64

QC Flag Legend

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

Data File: kl2129.d

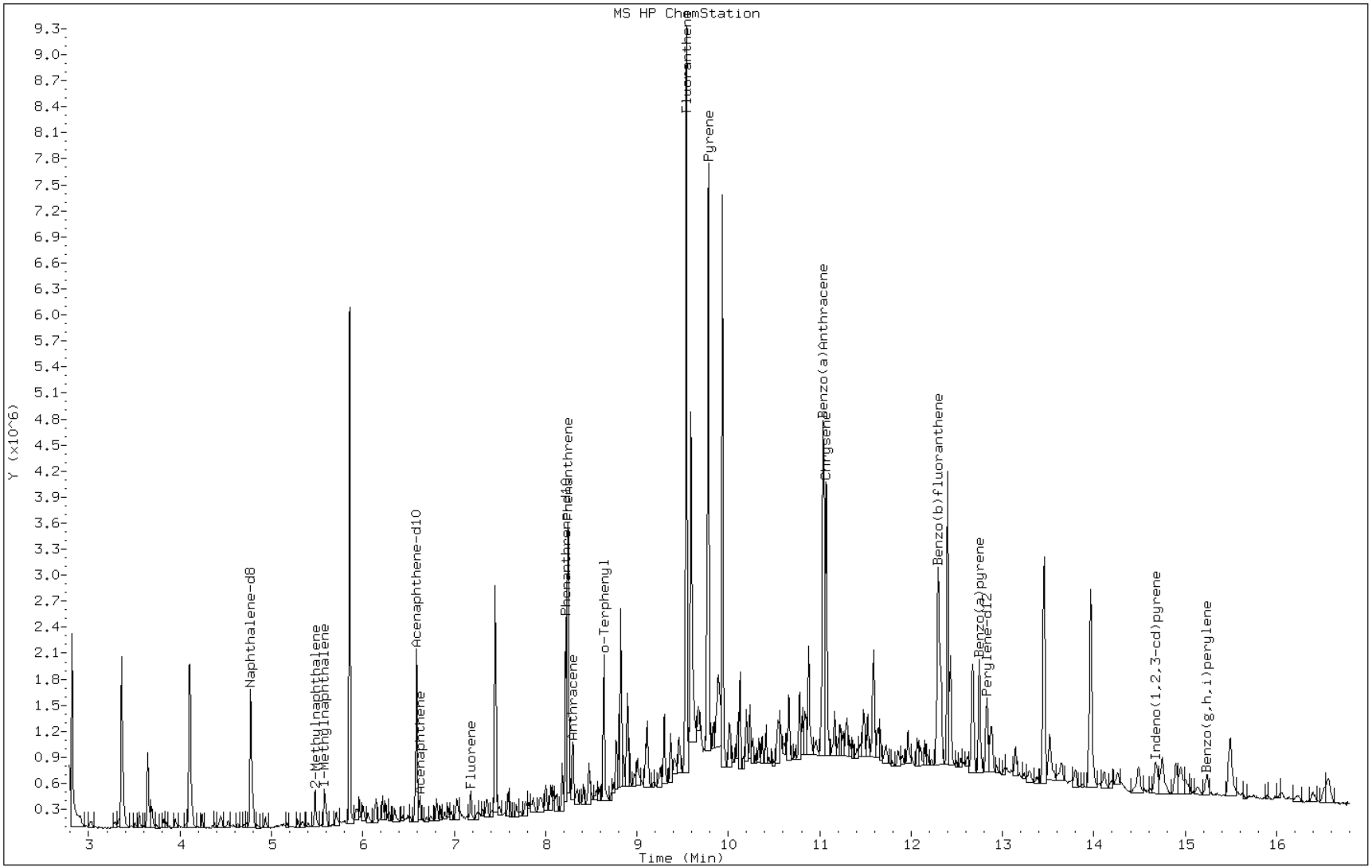
Date: 21-DEC-2012 19:16

Client ID: CV0511TTT-GS

Instrument: MSK5973.i

Sample Info: 680-85860-A-63-A

Operator: LEG



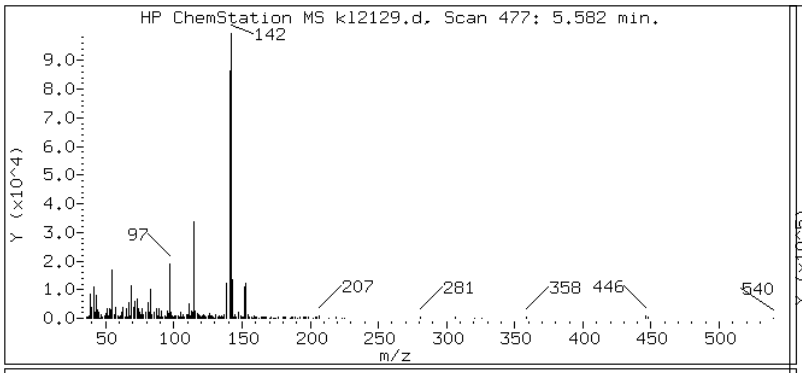
Data File: kl2129.d

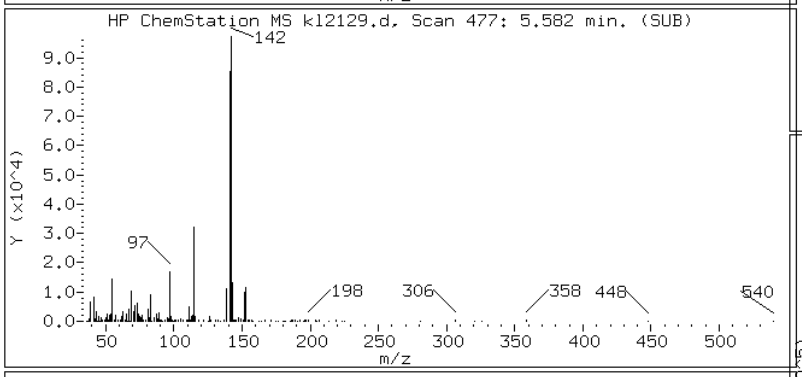
Date: 21-DEC-2012 19:16

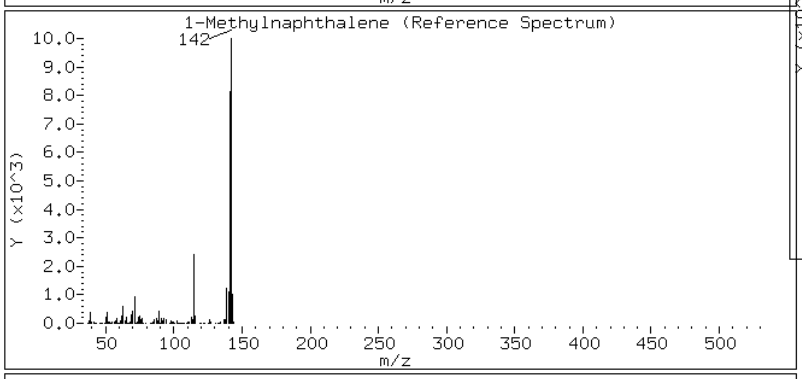
Client ID: CV0511TTT-GS Instrument: MSK5973.i

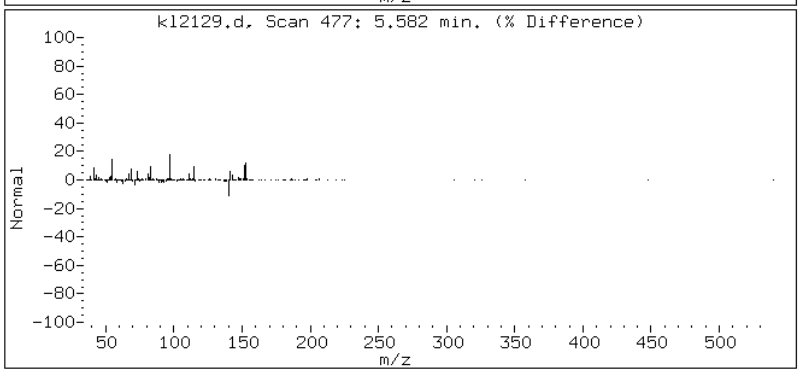
Sample Info: 680-85860-A-63-A Operator: LEG

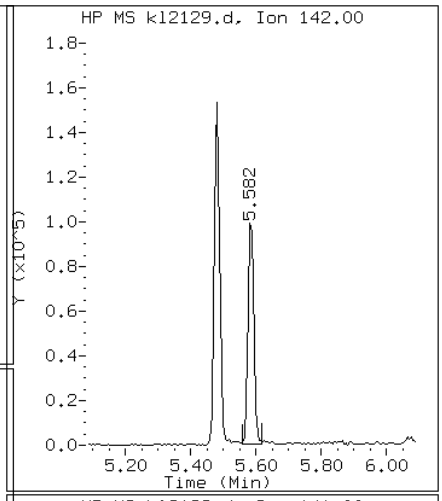
4 1-Methylnaphthalene

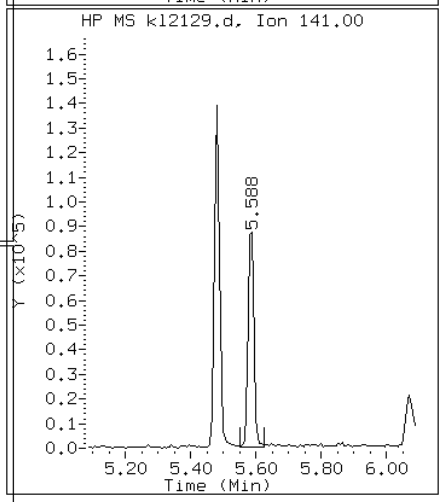












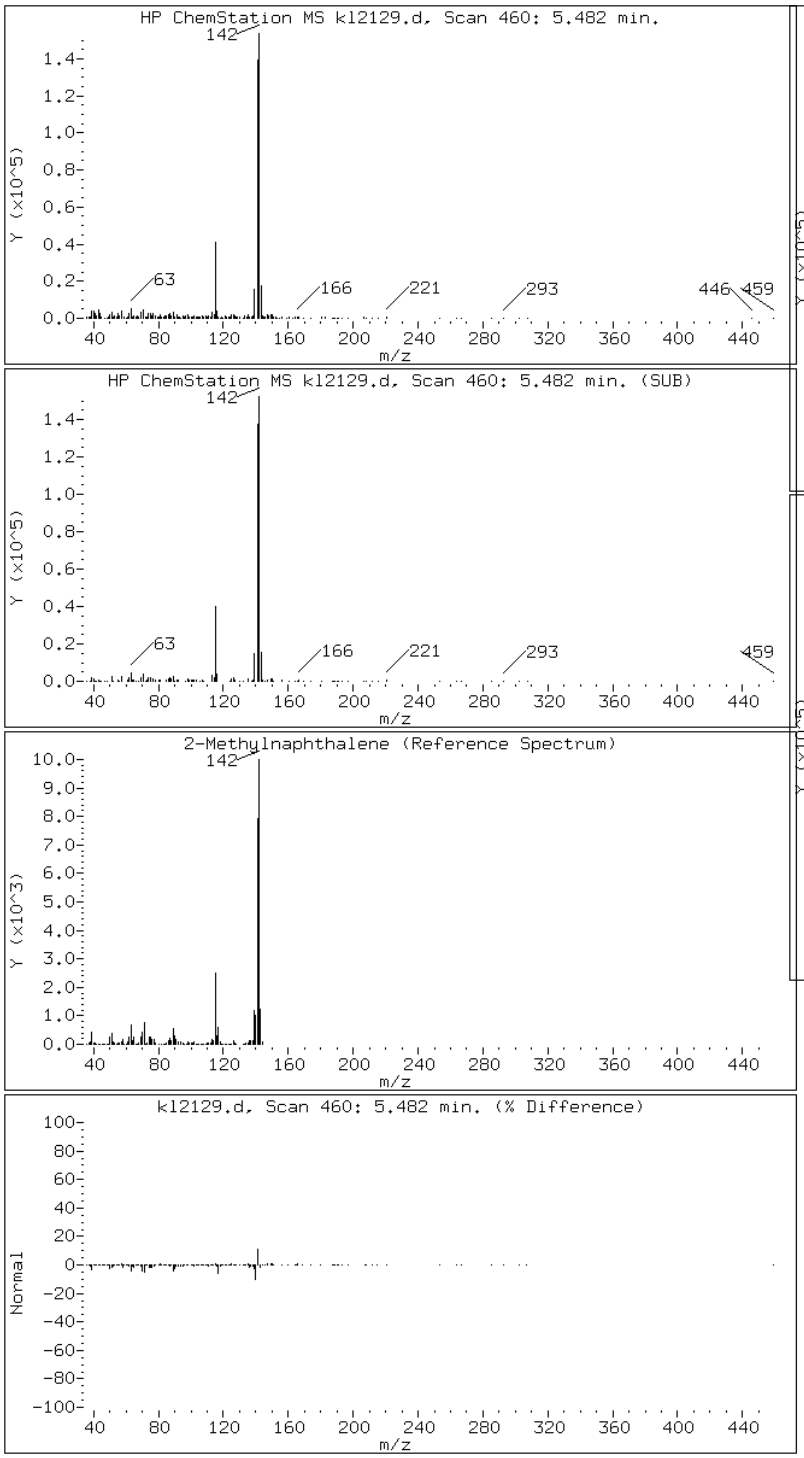
Data File: kl2129.d

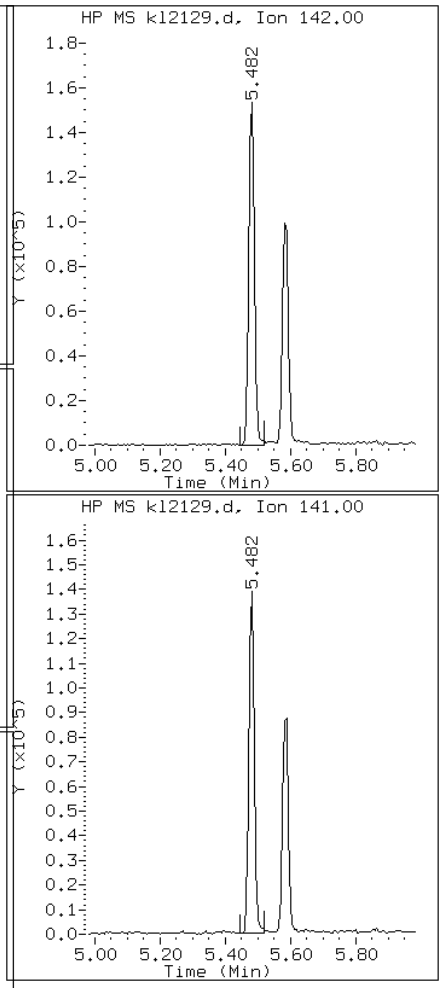
Date: 21-DEC-2012 19:16

Client ID: CV0511TTT-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-63-A Operator: LEG

3 2-Methylnaphthalene





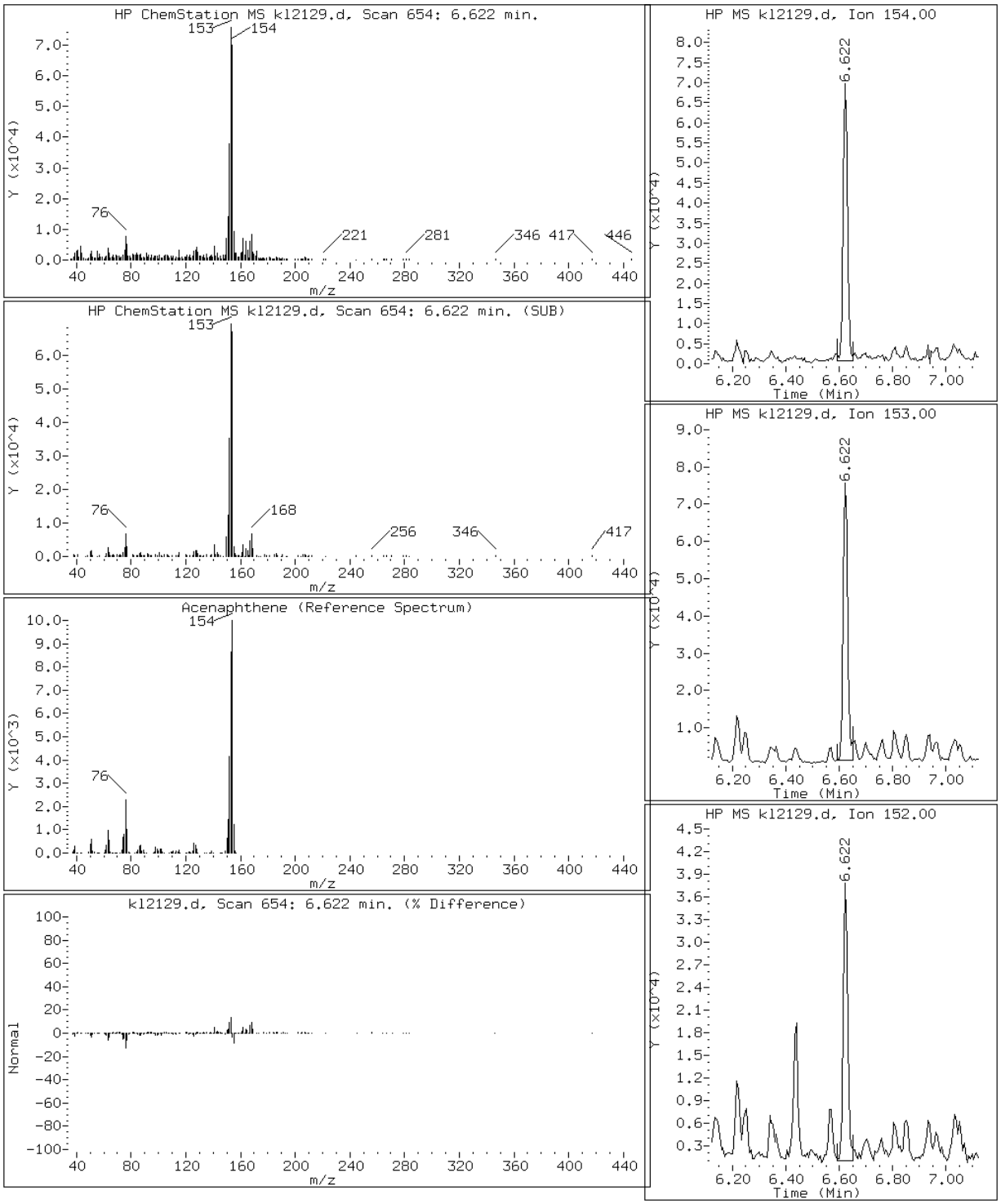
Data File: kl2129.d

Date: 21-DEC-2012 19:16

Client ID: CV0511TTT-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-63-A Operator: LEG

7 Acenaphthene



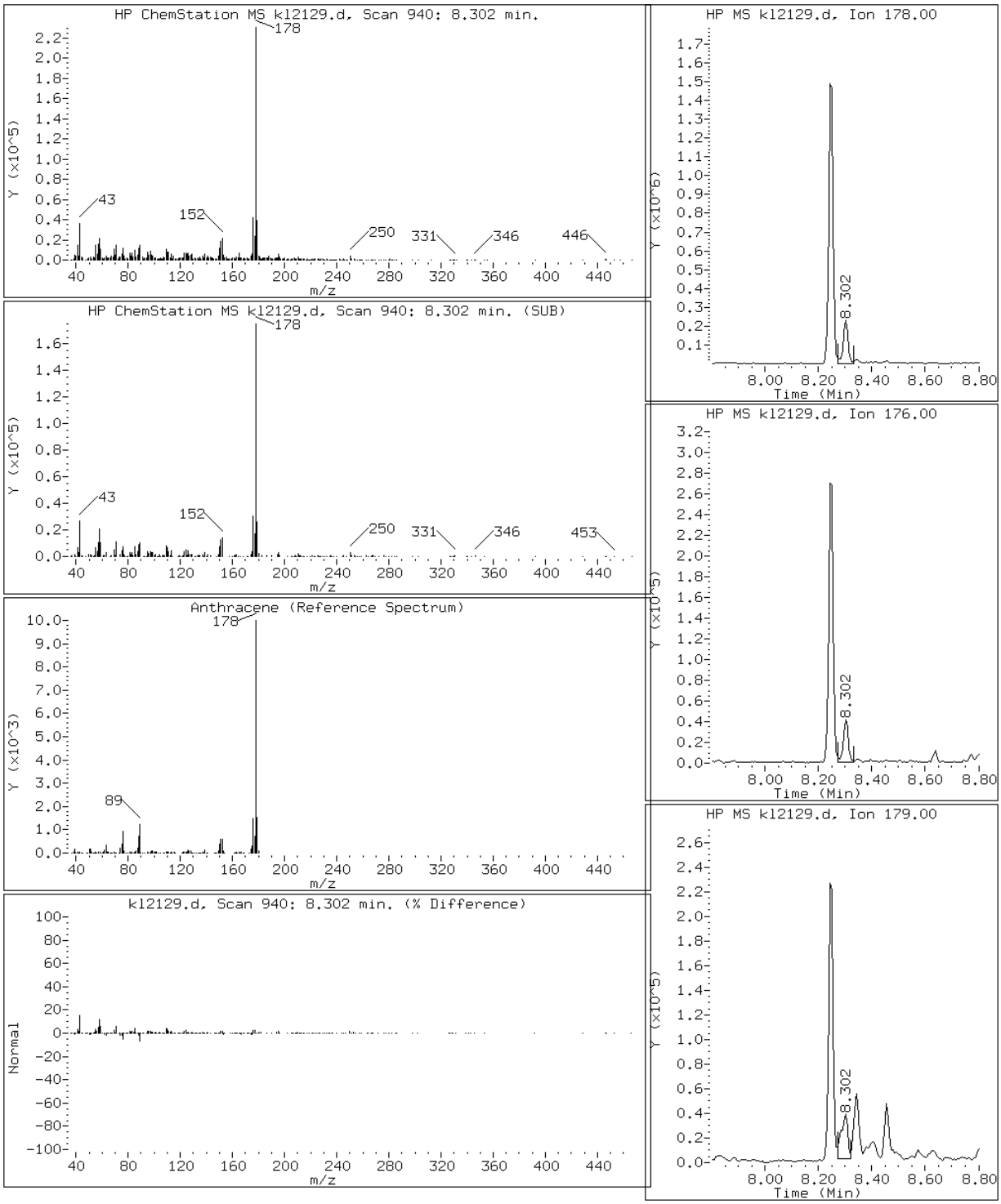
Data File: kl2129.d

Date: 21-DEC-2012 19:16

Client ID: CV0511TTT-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-63-A Operator: LEG

11 Anthracene



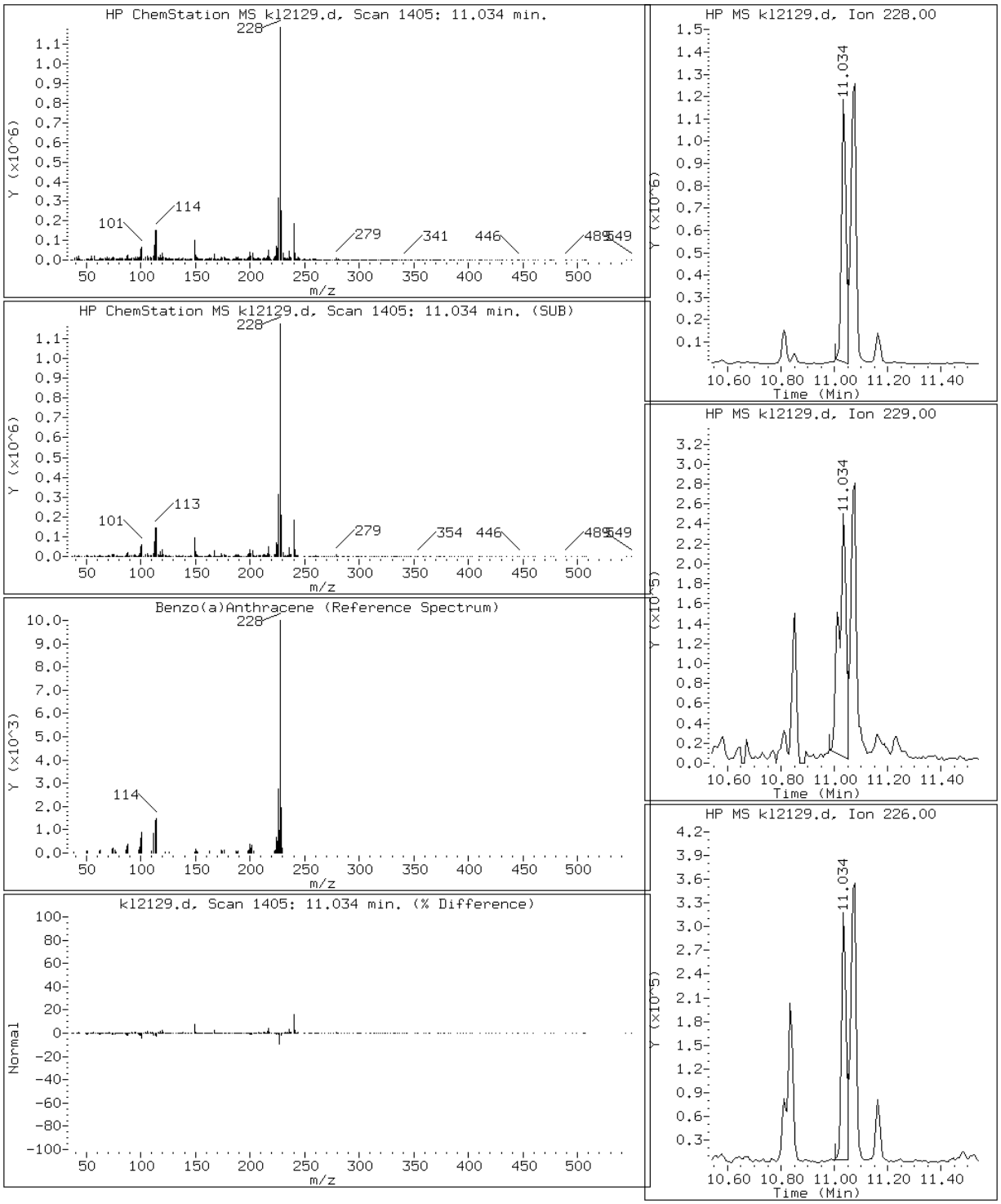
Data File: kl2129.d

Date: 21-DEC-2012 19:16

Client ID: CV0511TTT-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-63-A Operator: LEG

16 Benzo(a)Anthracene



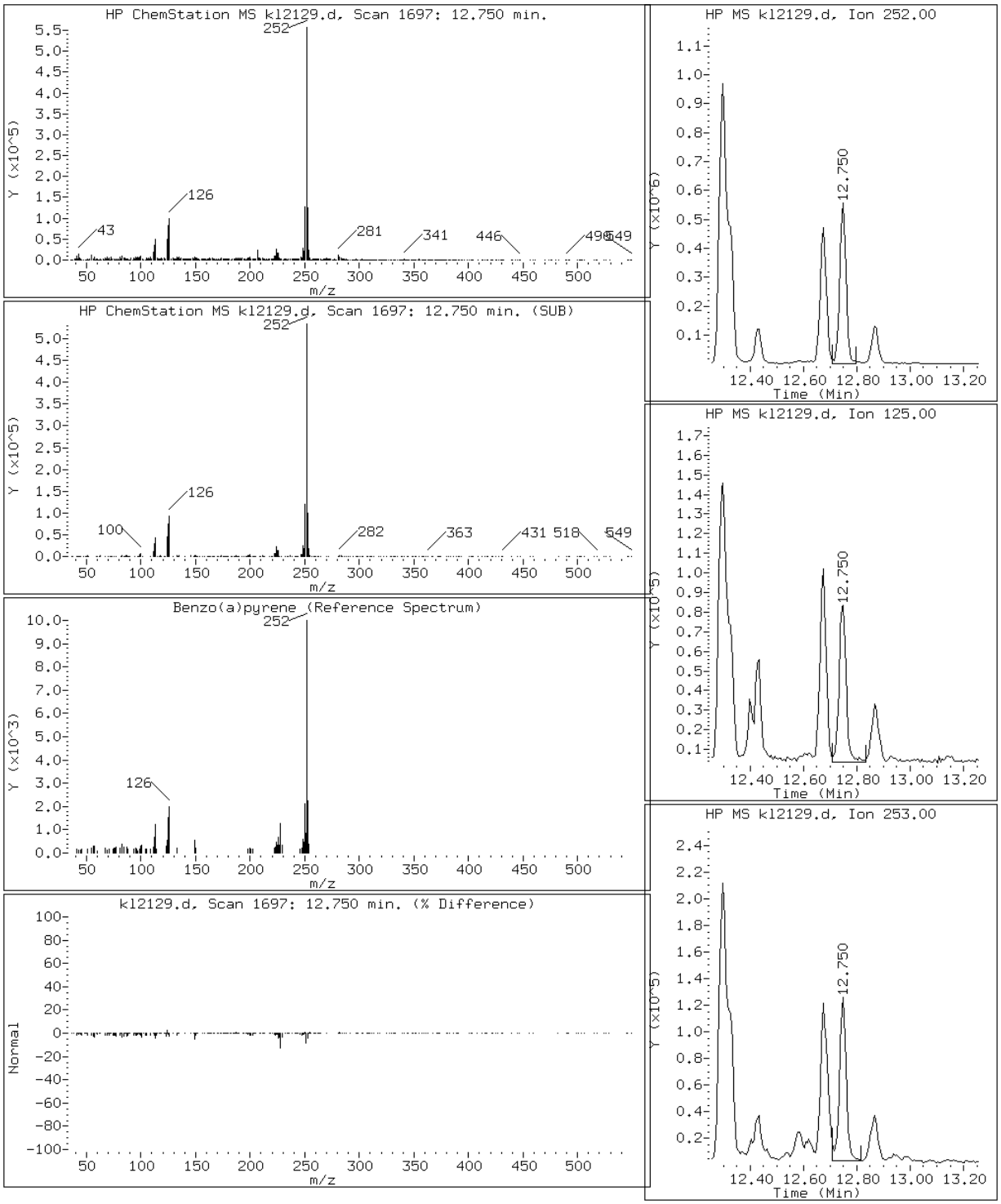
Data File: kl2129.d

Date: 21-DEC-2012 19:16

Client ID: CV0511TTT-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-63-A Operator: LEG

21 Benzo(a)pyrene



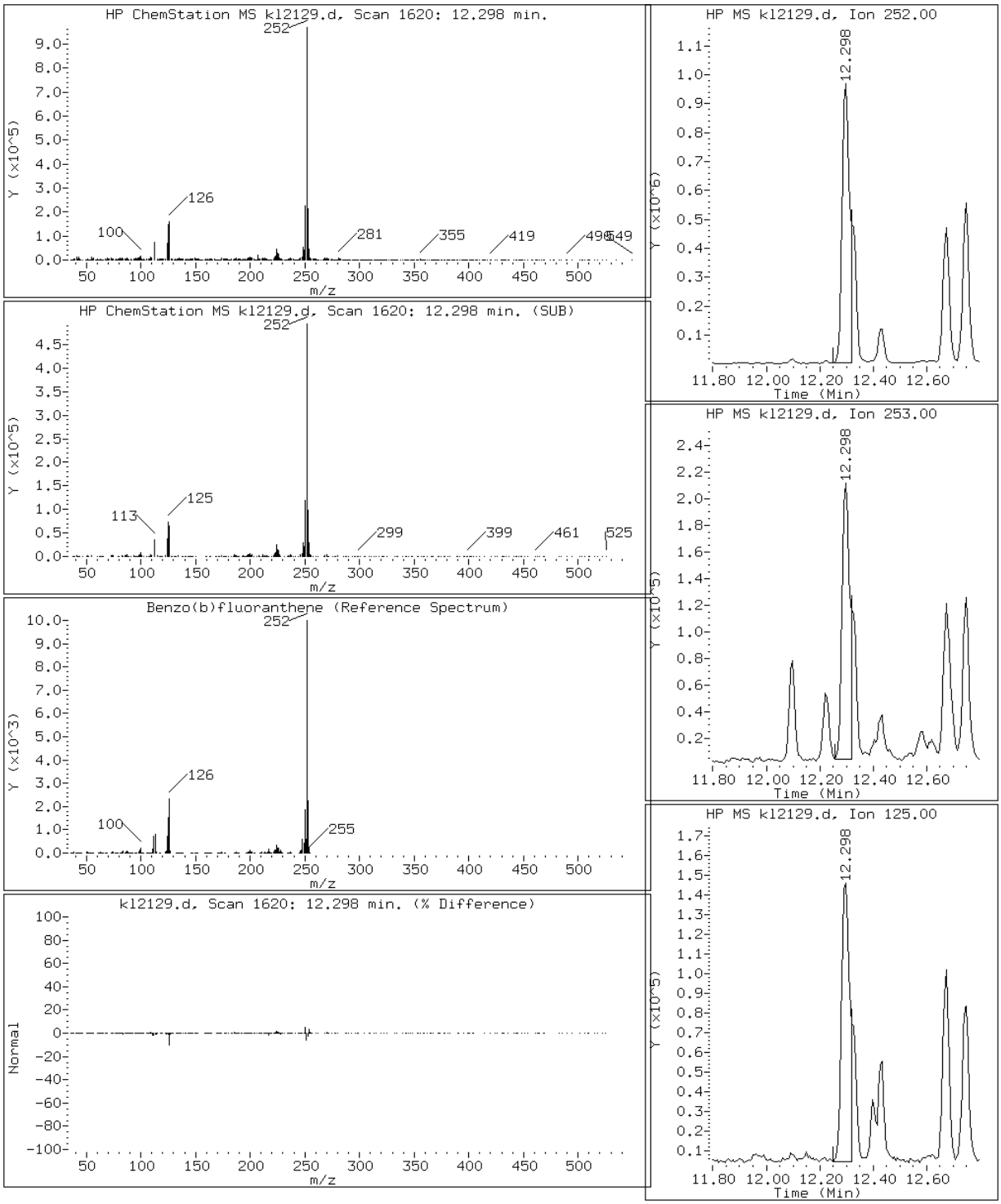
Data File: kl2129.d

Date: 21-DEC-2012 19:16

Client ID: CV0511TTT-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-63-A Operator: LEG

19 Benzo(b)fluoranthene



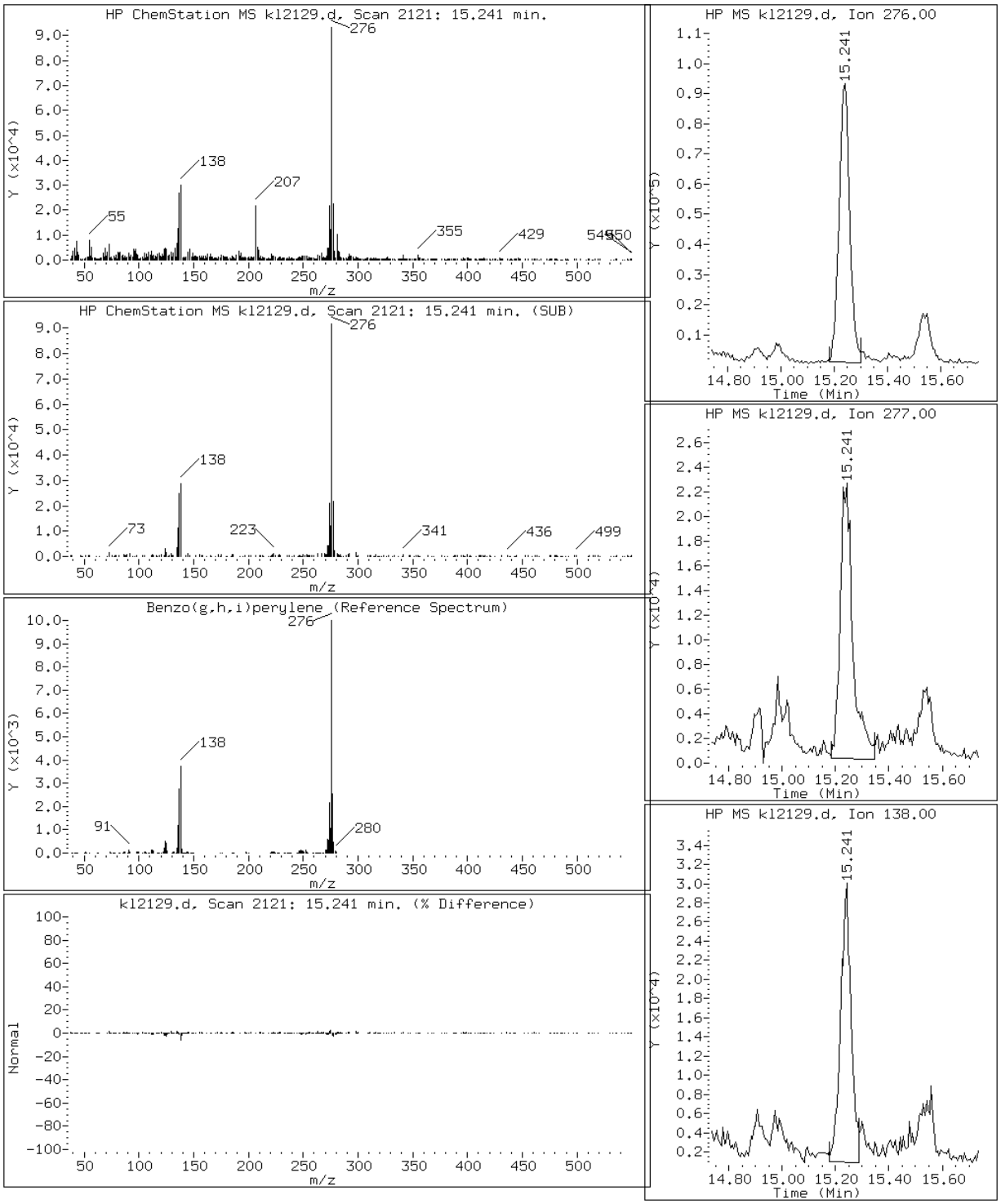
Data File: kl2129.d

Date: 21-DEC-2012 19:16

Client ID: CV0511TTT-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-63-A Operator: LEG

24 Benzo(g,h,i)perylene



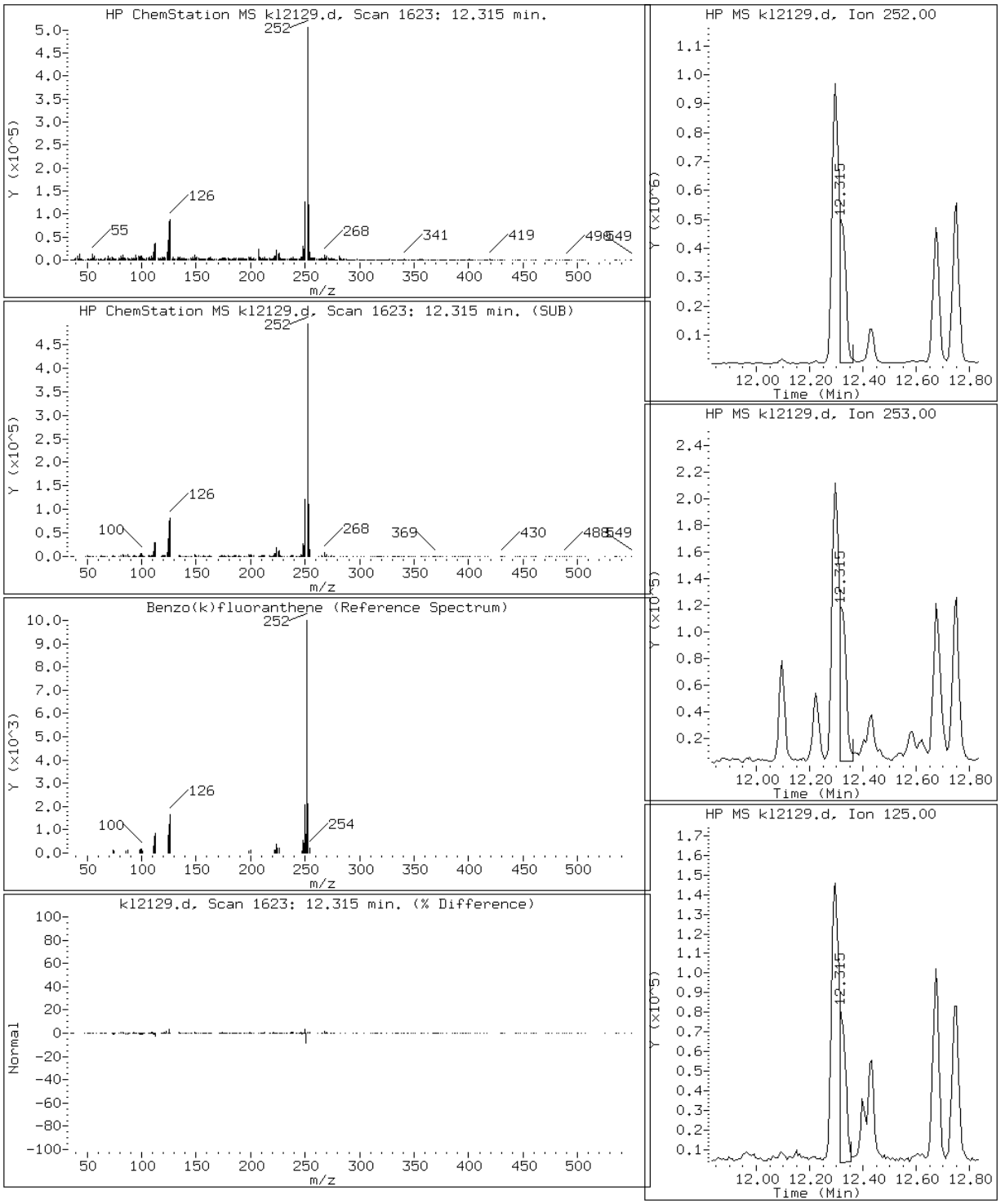
Data File: kl2129.d

Date: 21-DEC-2012 19:16

Client ID: CV0511TTT-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-63-A Operator: LEG

20 Benzo(k)fluoranthene



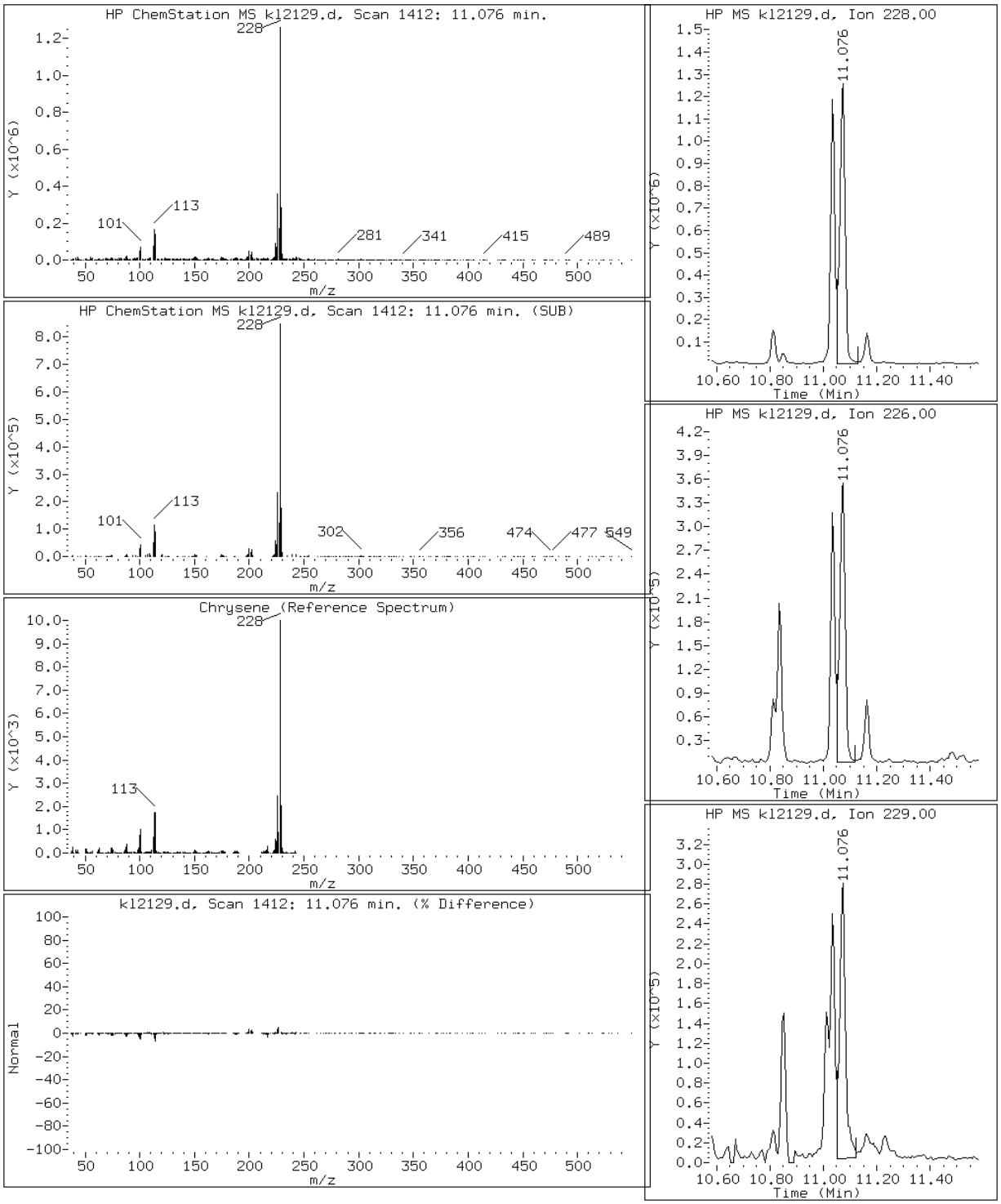
Data File: kl2129.d

Date: 21-DEC-2012 19:16

Client ID: CV0511TTT-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-63-A Operator: LEG

17 Chrysene



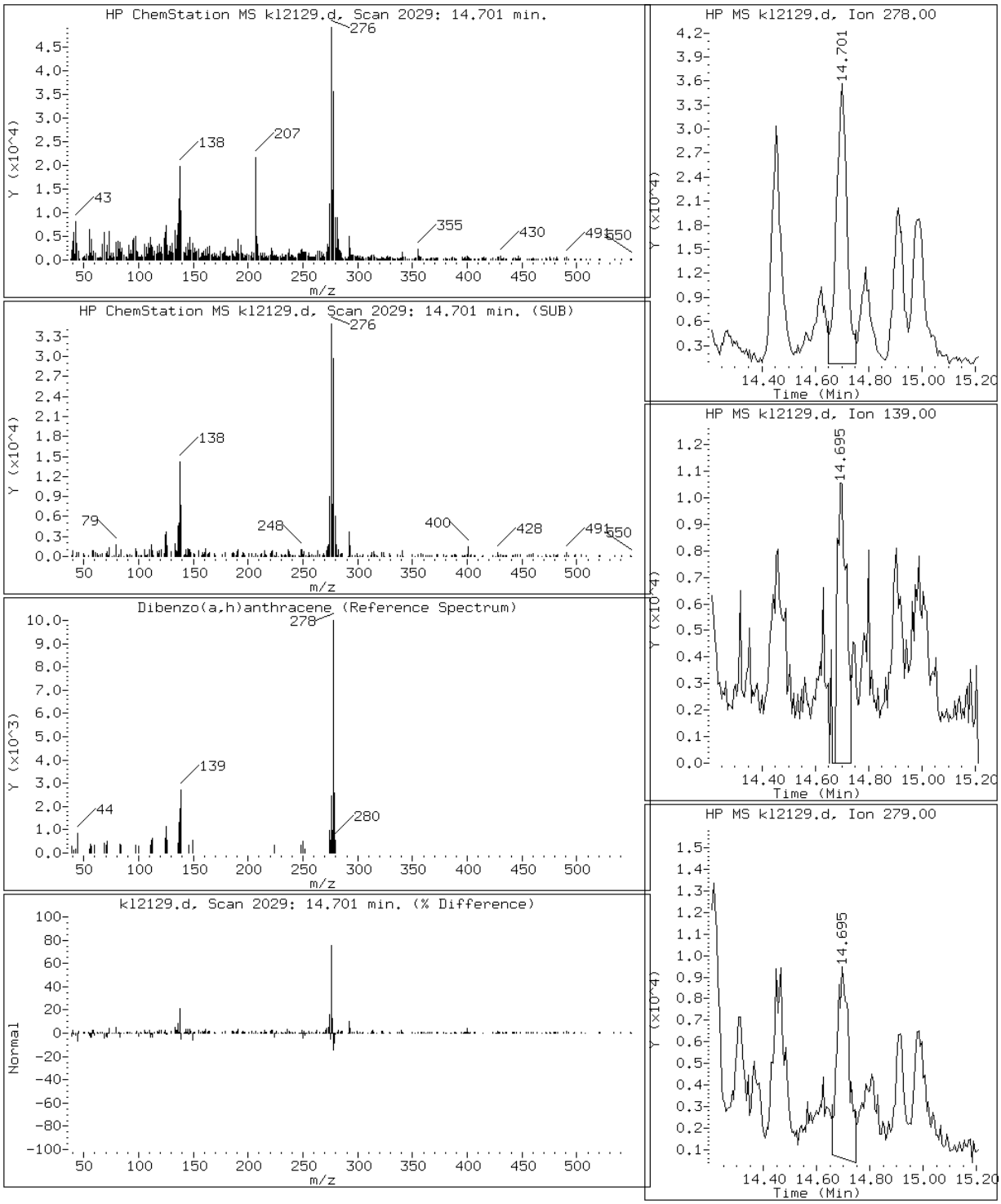
Data File: kl2129.d

Date: 21-DEC-2012 19:16

Client ID: CV0511TTT-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-63-A Operator: LEG

23 Dibenzo(a,h)anthracene



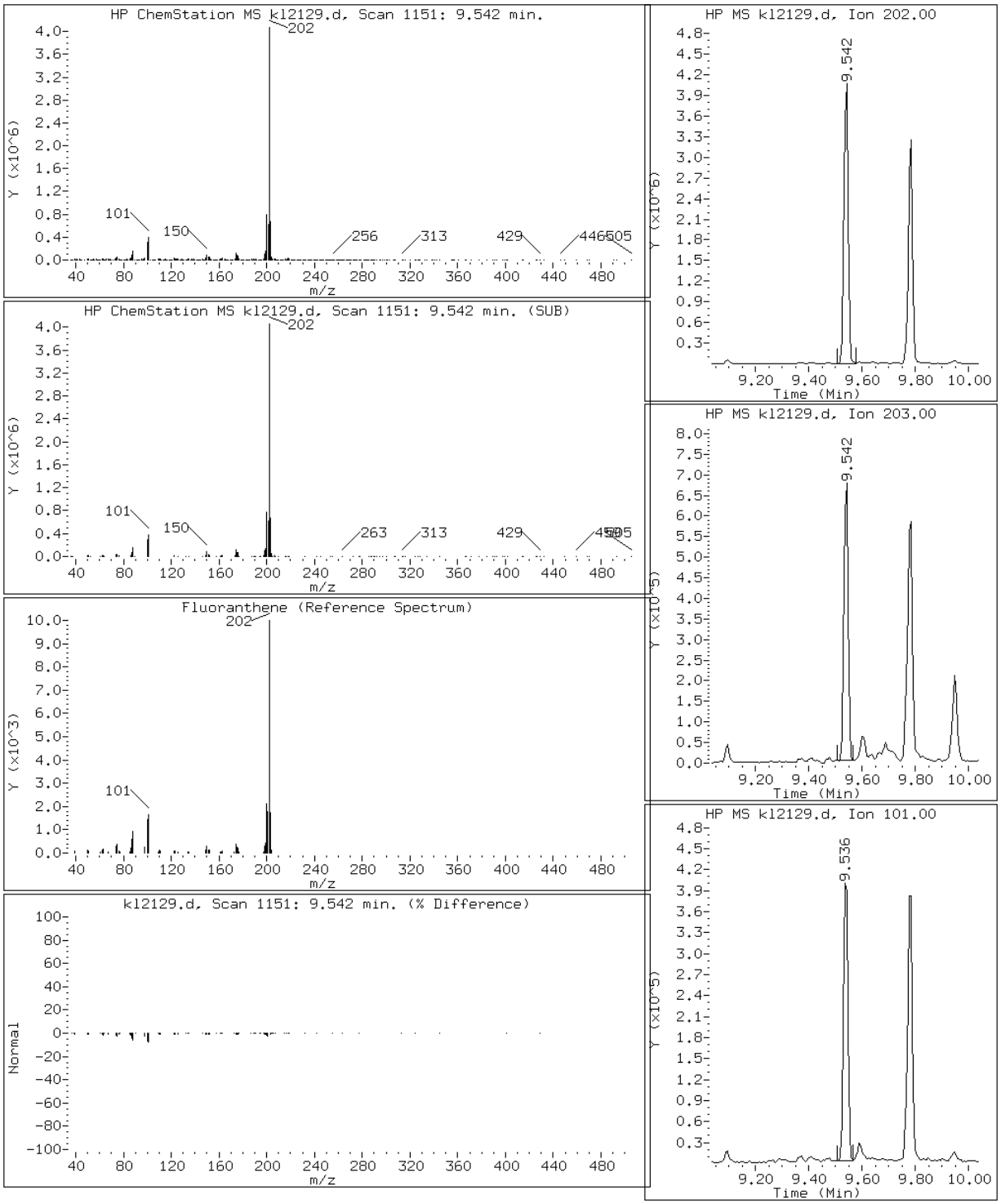
Data File: kl2129.d

Date: 21-DEC-2012 19:16

Client ID: CV0511TTT-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-63-A Operator: LEG

12 Fluoranthene



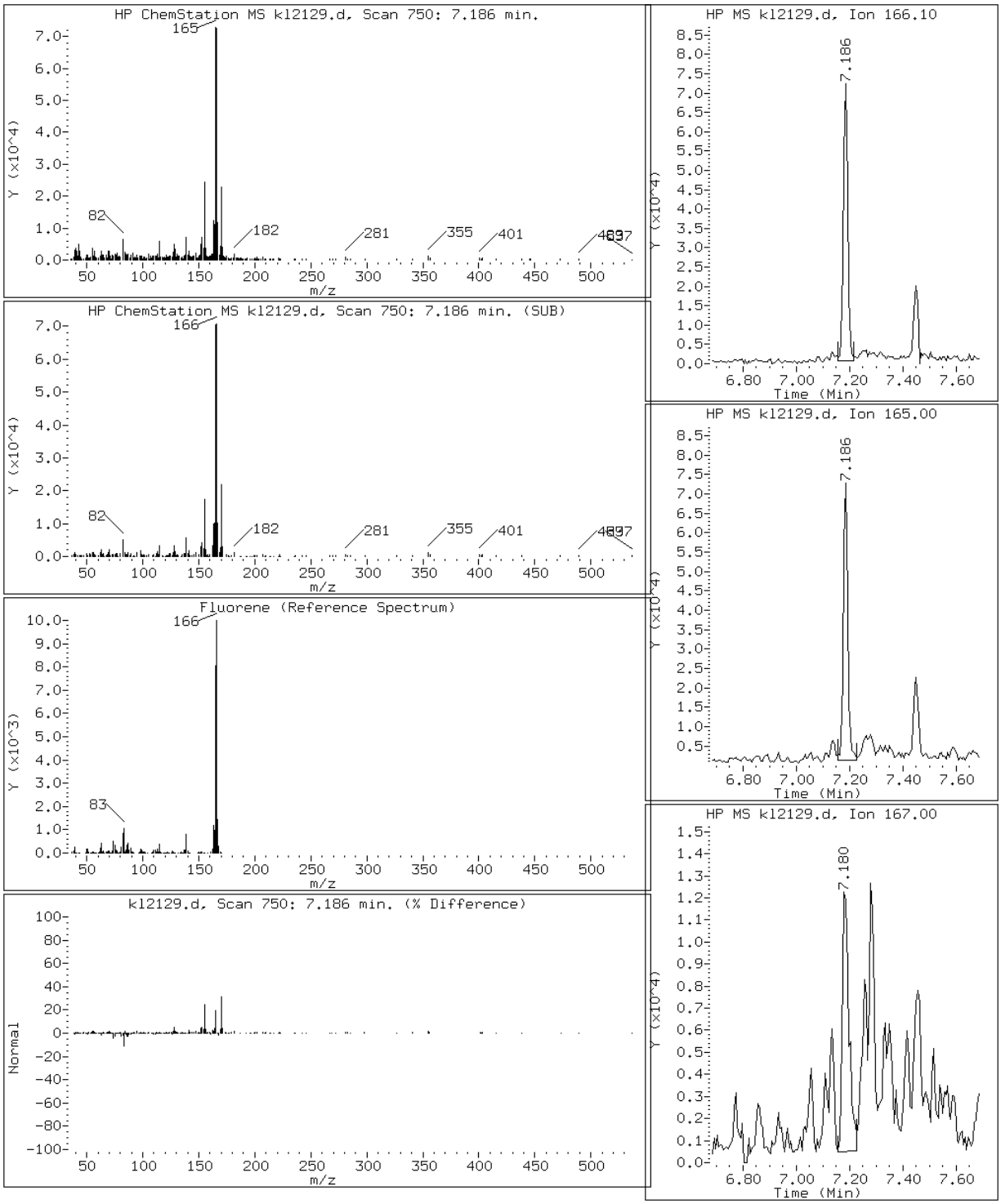
Data File: kl2129.d

Date: 21-DEC-2012 19:16

Client ID: CV0511TTT-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-63-A Operator: LEG

8 Fluorene



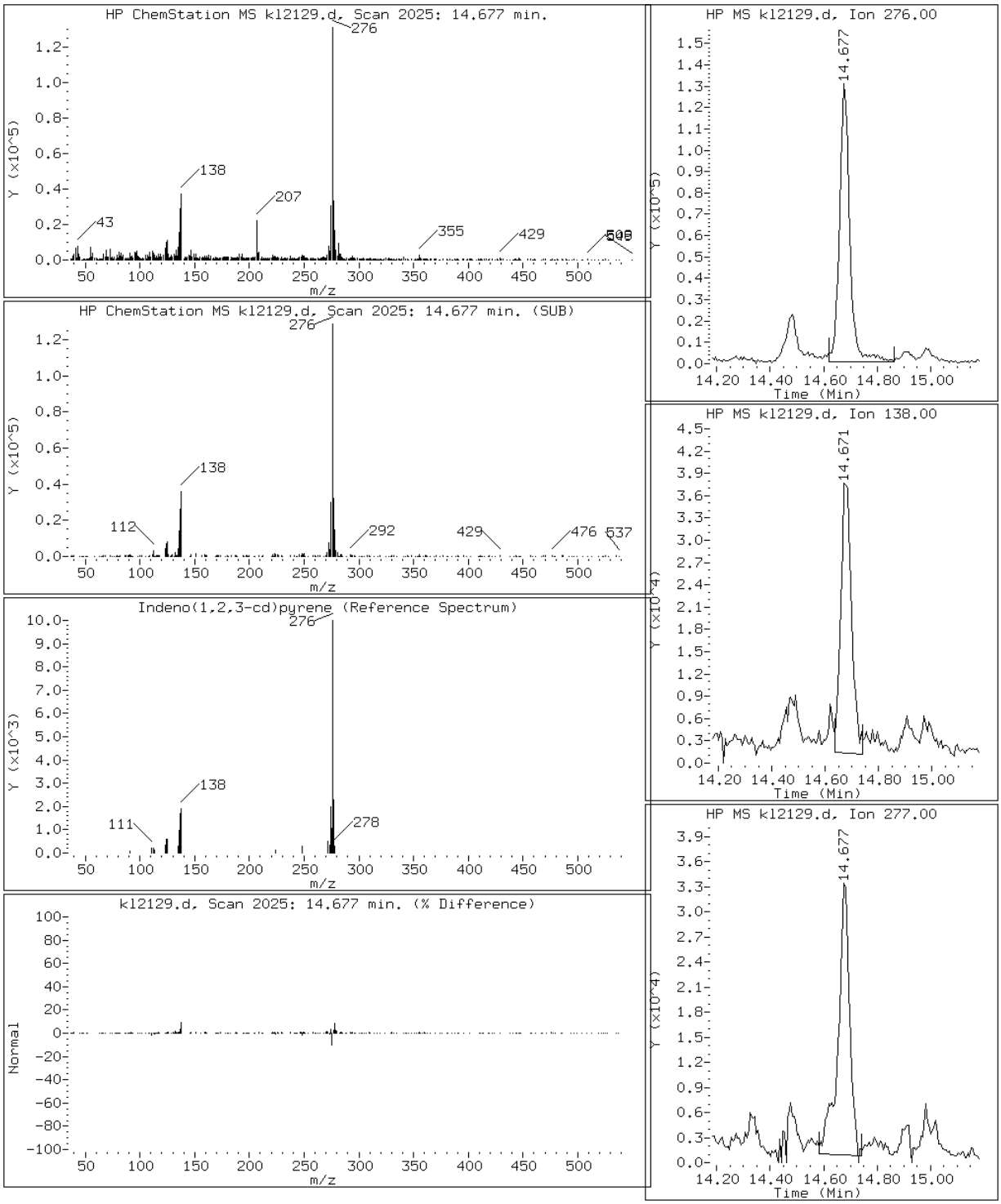
Data File: kl2129.d

Date: 21-DEC-2012 19:16

Client ID: CV0511TTT-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-63-A Operator: LEG

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



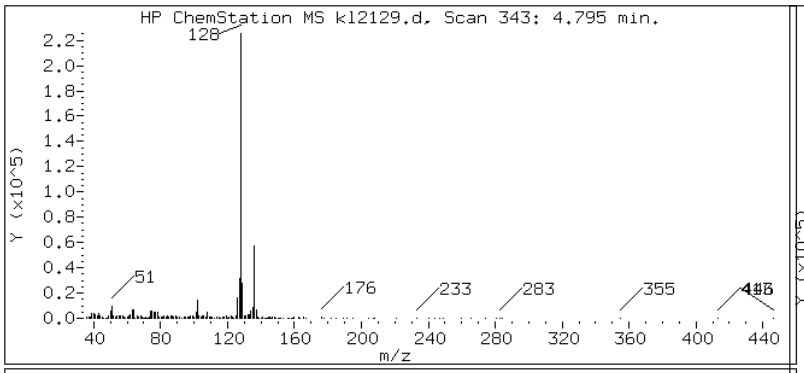
Data File: kl2129.d

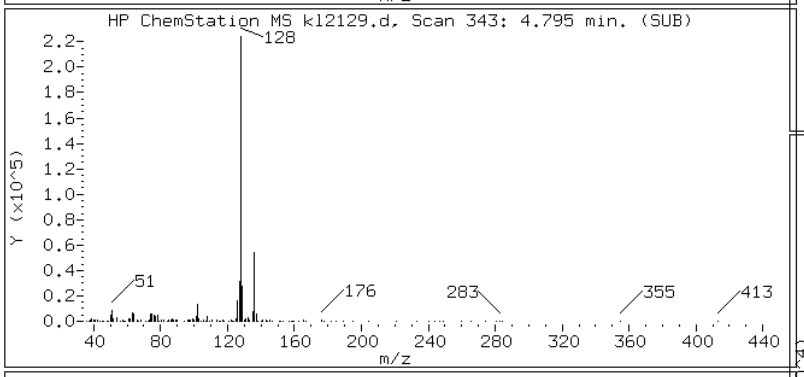
Date: 21-DEC-2012 19:16

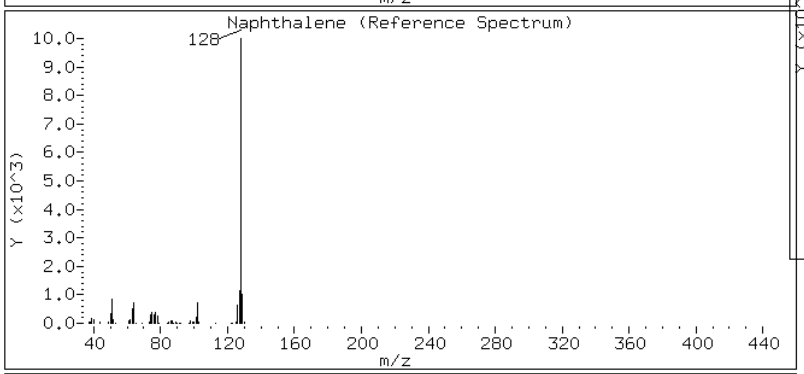
Client ID: CV0511TTT-GS Instrument: MSK5973.i

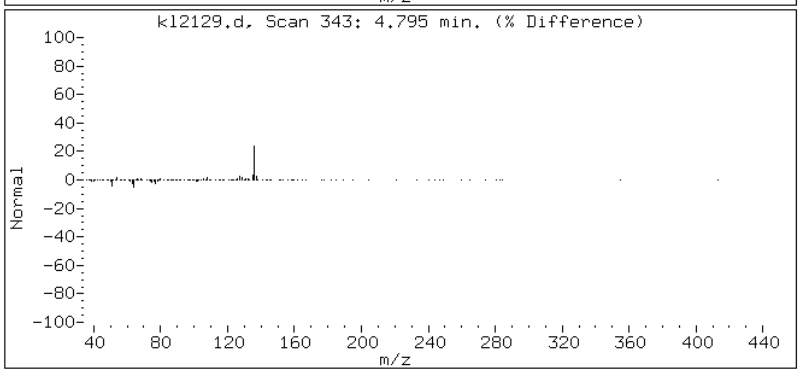
Sample Info: 680-85860-A-63-A Operator: LEG

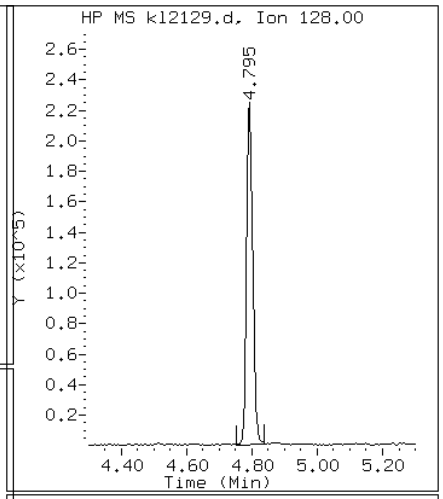
2 Naphthalene

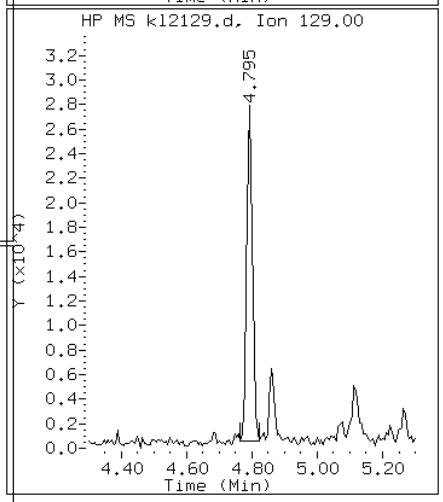












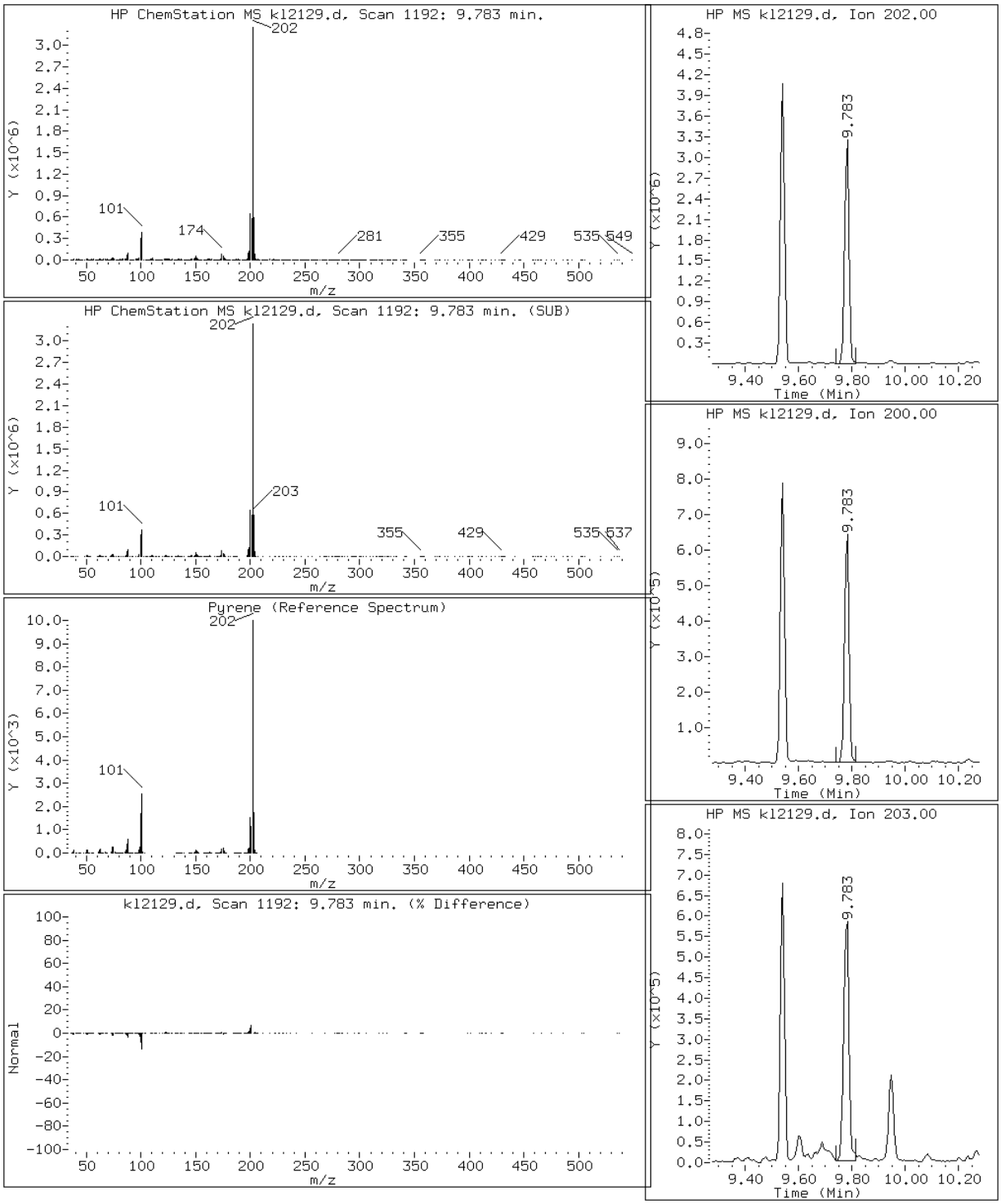
Data File: kl2129.d

Date: 21-DEC-2012 19:16

Client ID: CV0511TTT-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-63-A Operator: LEG

14 Pyrene



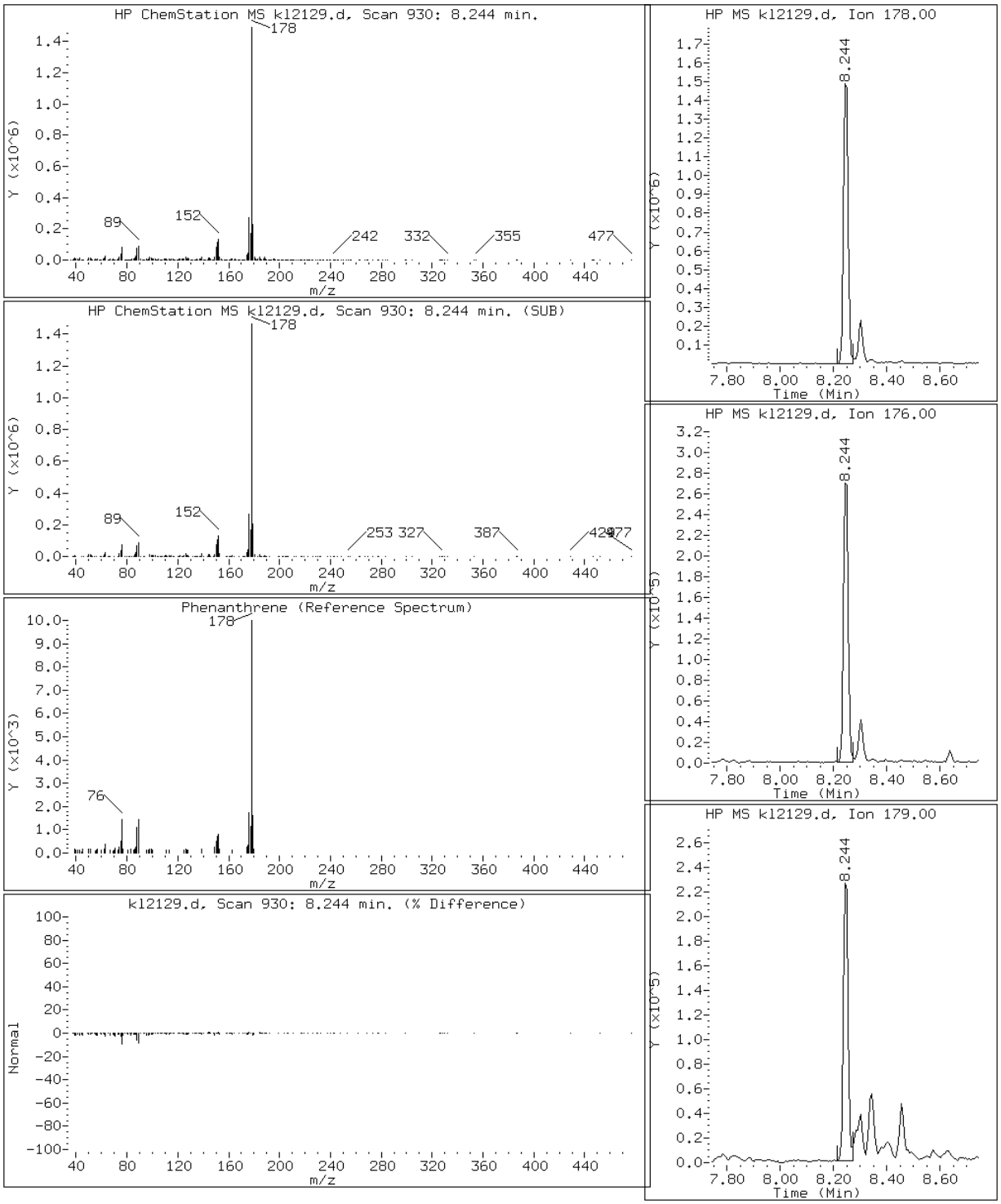
Data File: kl2129.d

Date: 21-DEC-2012 19:16

Client ID: CV0511TTT-GS Instrument: MSK5973.i

Sample Info: 680-85860-A-63-A Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: kl2129.d
Inj. Date and Time: 21-DEC-2012 19:16
Instrument ID: MSK5973.i
Client ID: CV0511TTT-GS
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 12/27/2012

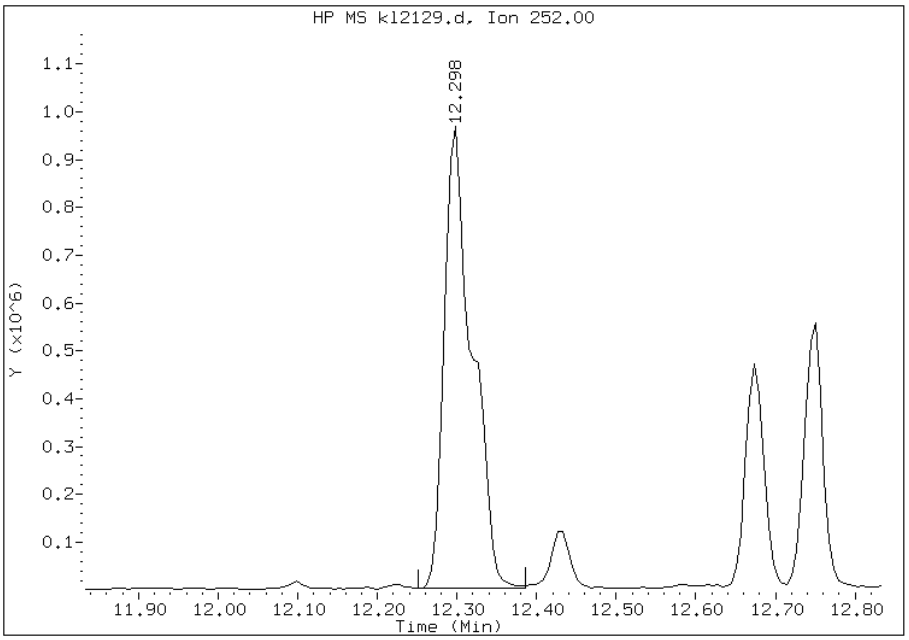
Processing Integration Results

RT: 12.30

Response: 2348188

Amount: 6

Conc: 266



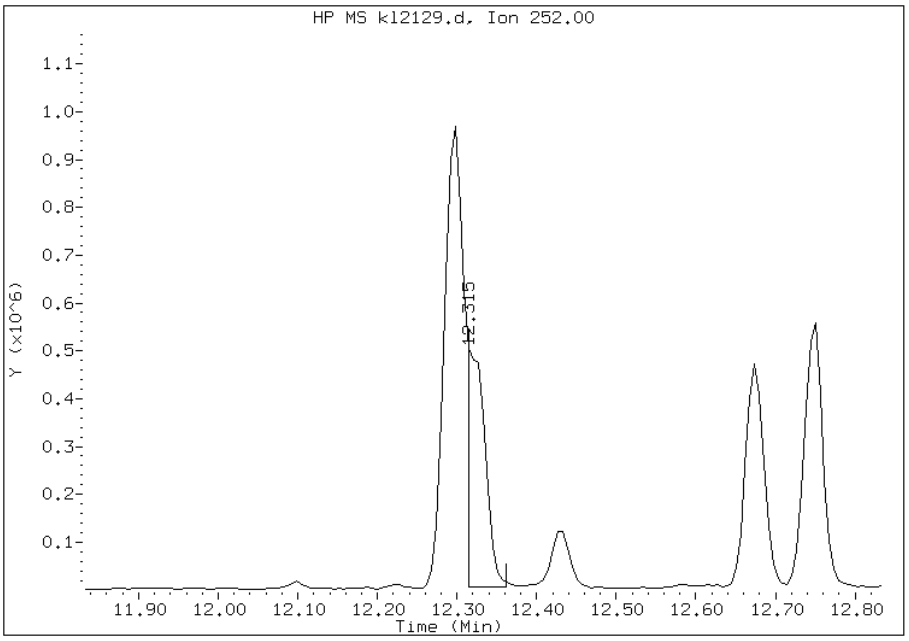
Manual Integration Results

RT: 12.32

Response: 758933

Amount: 2

Conc: 86



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.: 680-85860-4

SDG No.: 68085860-4

Client Sample ID: CV0550A-CS | Lab Sample ID: 680-85860-70

Matrix: Solid | Lab File ID: kl2130.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/13/2012 09:03

Extract. Method: 3546 | Date Extracted: 12/20/2012 18:29

Sample wt/vol: 30.16(g) | Date Analyzed: 12/21/2012 19:39

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

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

% Moisture: 24.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261200 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	68	J	89	41
91-57-6	2-Methylnaphthalene	100		89	44
83-32-9	Acenaphthene	89	U	89	44
208-96-8	Acenaphthylene	89	U	89	44
120-12-7	Anthracene	89	U	89	44
56-55-3	Benzo[a]anthracene	170		89	44
50-32-8	Benzo[a]pyrene	160		89	16
205-99-2	Benzo[b]fluoranthene	270		89	44
191-24-2	Benzo[g,h,i]perylene	60	J	89	44
207-08-9	Benzo[k]fluoranthene	120		89	26
218-01-9	Chrysene	230		89	44
53-70-3	Dibenz(a,h)anthracene	89	U	89	44
206-44-0	Fluoranthene	290		89	44
86-73-7	Fluorene	89	U	89	44
193-39-5	Indeno[1,2,3-cd]pyrene	48	J	89	44
91-20-3	Naphthalene	80	J	89	44
129-00-0	Pyrene	290		89	44
85-01-8	Phenanthrene	210		89	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/1k122112.b/kl2130.d
Lab Smp Id: 680-85860-A-70-A DL
Inj Date : 21-DEC-2012 19:39
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85860-A-70-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122112.b/k-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 09:18 chemist Quant Type: ISTD
Cal Date : 14-DEC-2012 10:35 Cal File: kl1409q.d
Als bottle: 28
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	4.777	4.777	(1.000)	879171	2.00000	
2 Naphthalene	128	4.800	4.800	(1.005)	93960	0.18093	60.31(a)
3 2-Methylnaphthalene	142	5.482	5.482	(1.148)	74795	0.22583	75.27
4 1-Methylnaphthalene	142	5.588	5.588	(1.170)	51818	0.15414	51.37(a)
* 5 Acenaphthene-d10	164	6.586	6.586	(1.000)	471454	2.00000	
* 9 Phenanthrene-d10	188	8.220	8.220	(1.000)	797101	2.00000	
10 Phenanthrene	178	8.243	8.243	(1.003)	242084	0.47118	157.06

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
12 Fluoranthene	202	9.536	9.536	(1.160)	355616	0.64903	216.34
14 Pyrene	202	9.777	9.777	(0.884)	315454	0.66228	220.75
16 Benzo(a)Anthracene	228	11.046	11.040	(0.999)	161052	0.37714	125.71
* 13 Chrysene-d12	240	11.058	11.052	(1.000)	632946	2.00000	
17 Chrysene	228	11.087	11.081	(1.003)	217577	0.52467	174.88
19 Benzo(b)fluoranthene	252	12.309	12.297	(0.958)	194399	0.61602	205.34(M)
20 Benzo(k)fluoranthene	252	12.333	12.333	(0.960)	80103	0.26224	87.41(M)
21 Benzo(a)pyrene	252	12.768	12.756	(0.994)	93077	0.36637	122.12
* 18 Perylene-d12	264	12.850	12.838	(1.000)	452234	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	14.701	14.683	(1.329)	43100	0.10949	36.49(a)
24 Benzo(g,h,i)perylene	276	15.259	15.241	(1.187)	33926	0.13683	45.61(a)

QC Flag Legend

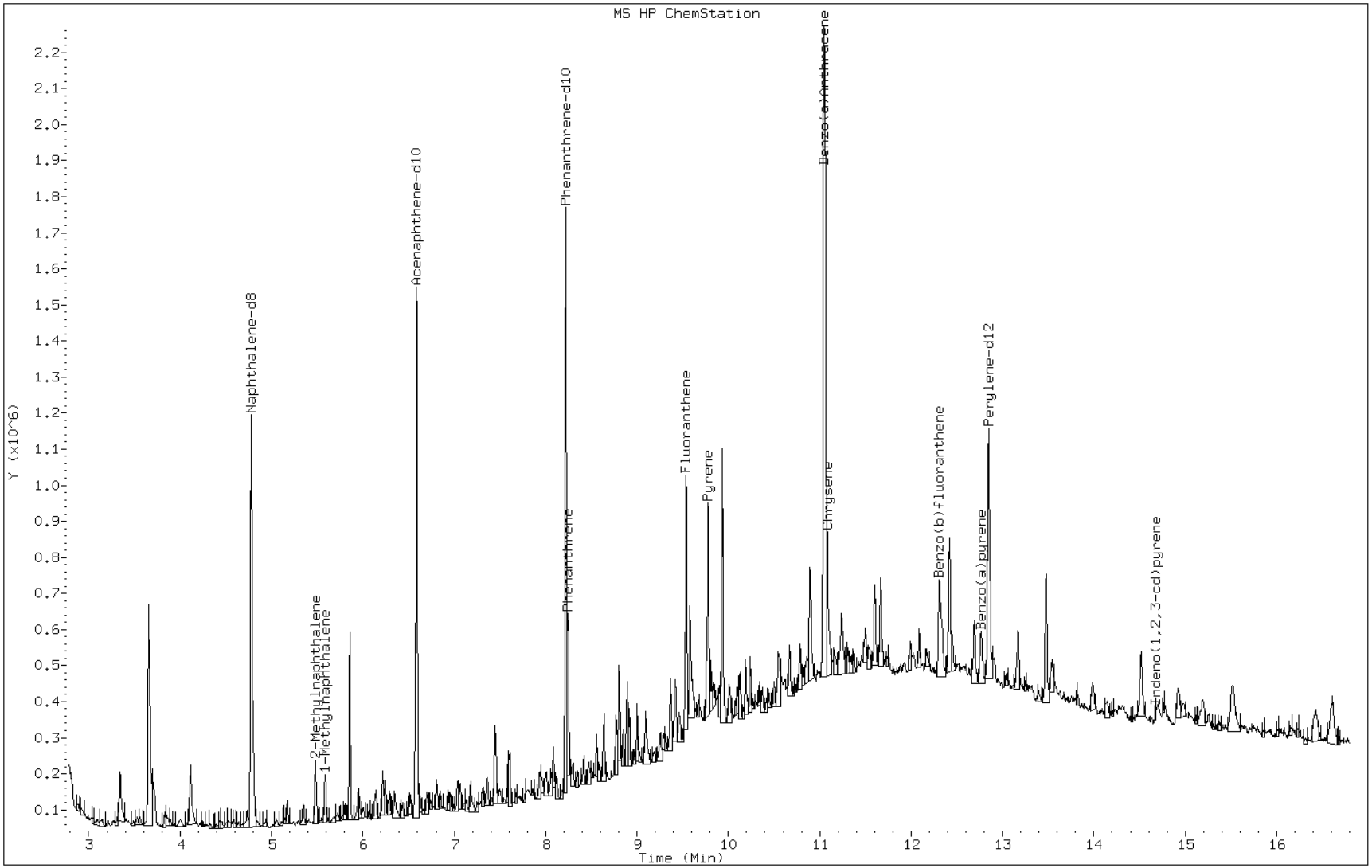
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: kl2130.d

Date: 21-DEC-2012 19:39

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-70-A DL=10 Operator: LEG



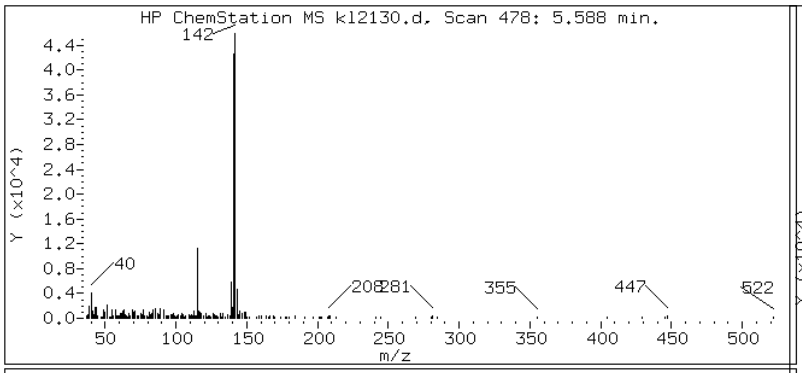
Data File: kl2130.d

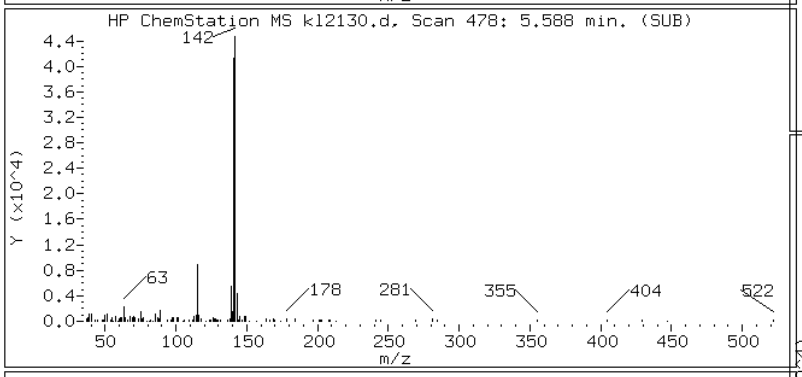
Date: 21-DEC-2012 19:39

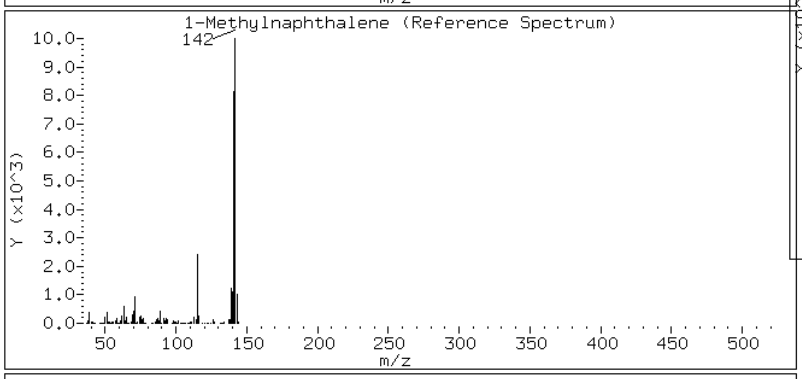
Client ID: Instrument: MSK5973.i

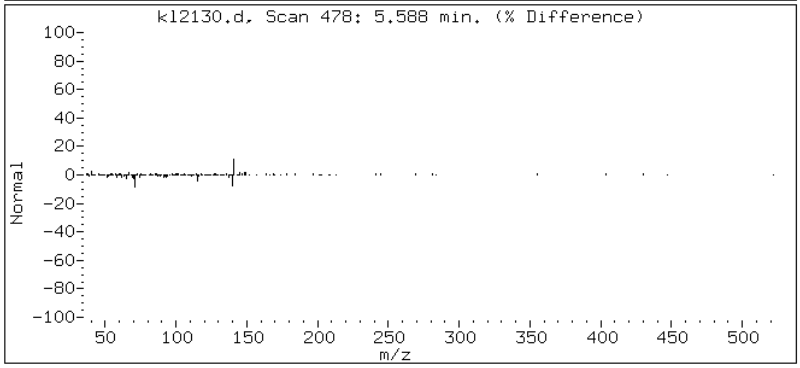
Sample Info: 680-85860-A-70-A DL=10 Operator: LEG

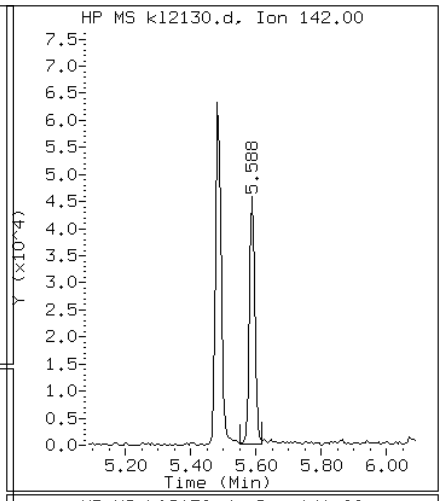
4 1-Methylnaphthalene

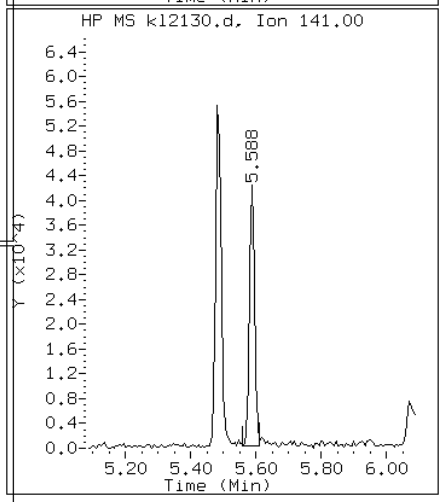












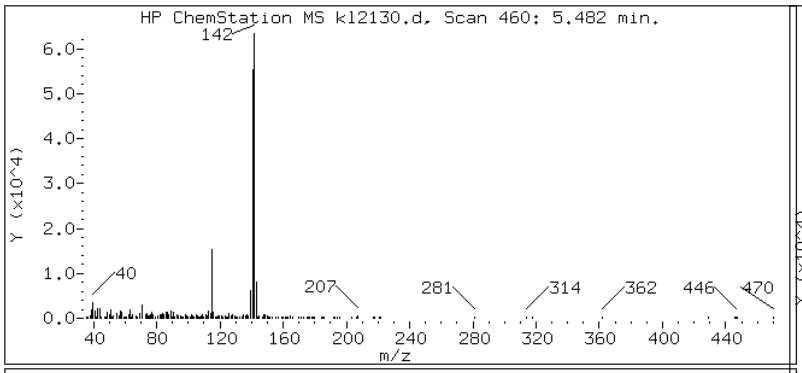
Data File: kl2130.d

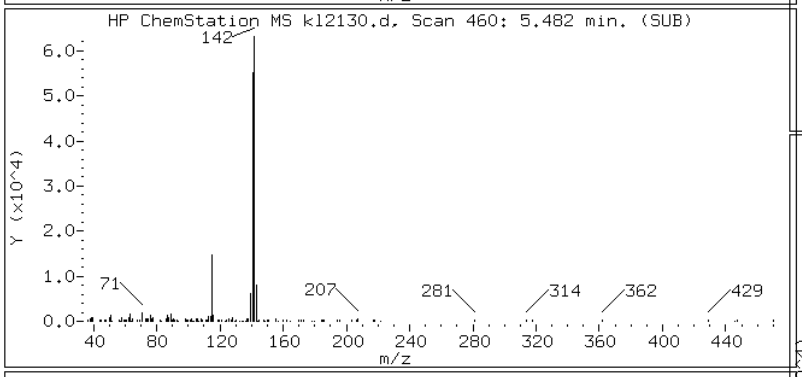
Date: 21-DEC-2012 19:39

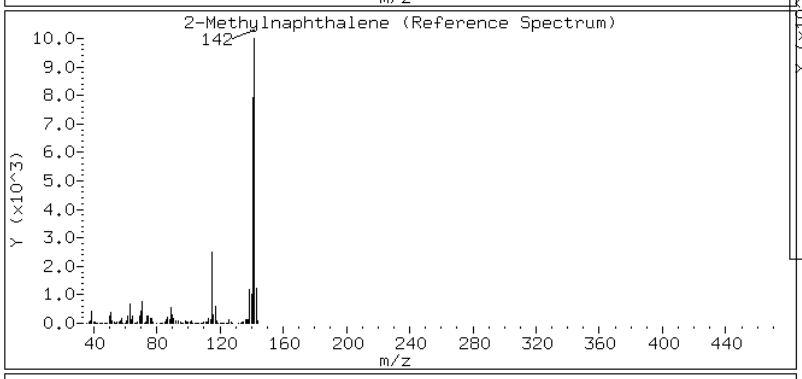
Client ID: Instrument: MSK5973.i

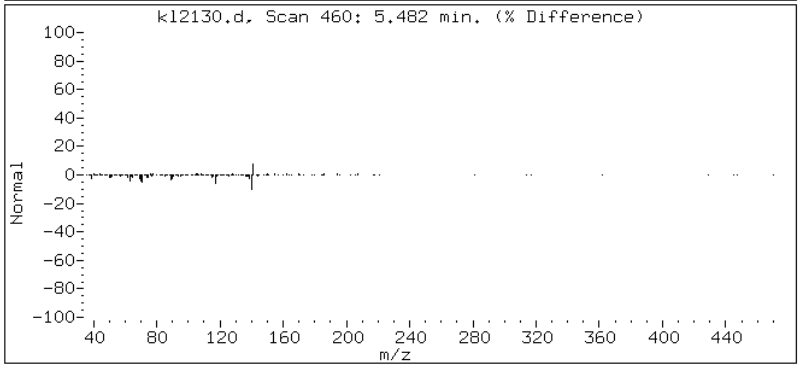
Sample Info: 680-85860-A-70-A DL=10 Operator: LEG

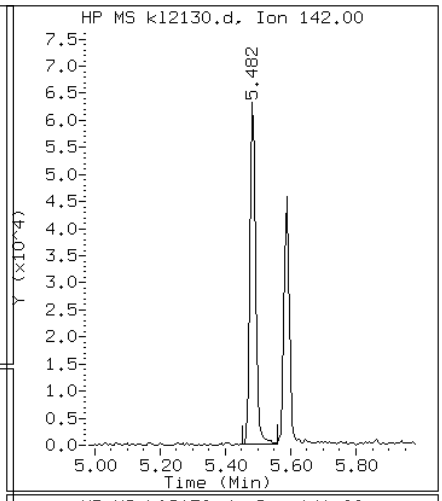
3 2-Methylnaphthalene

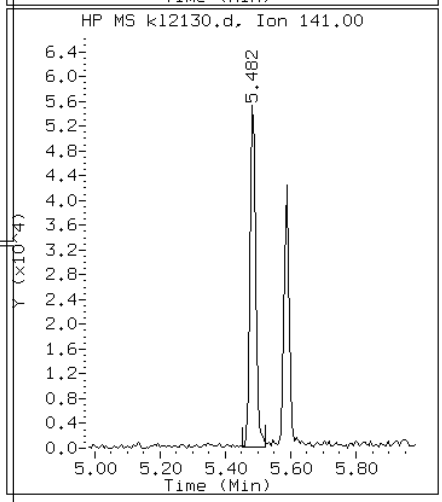












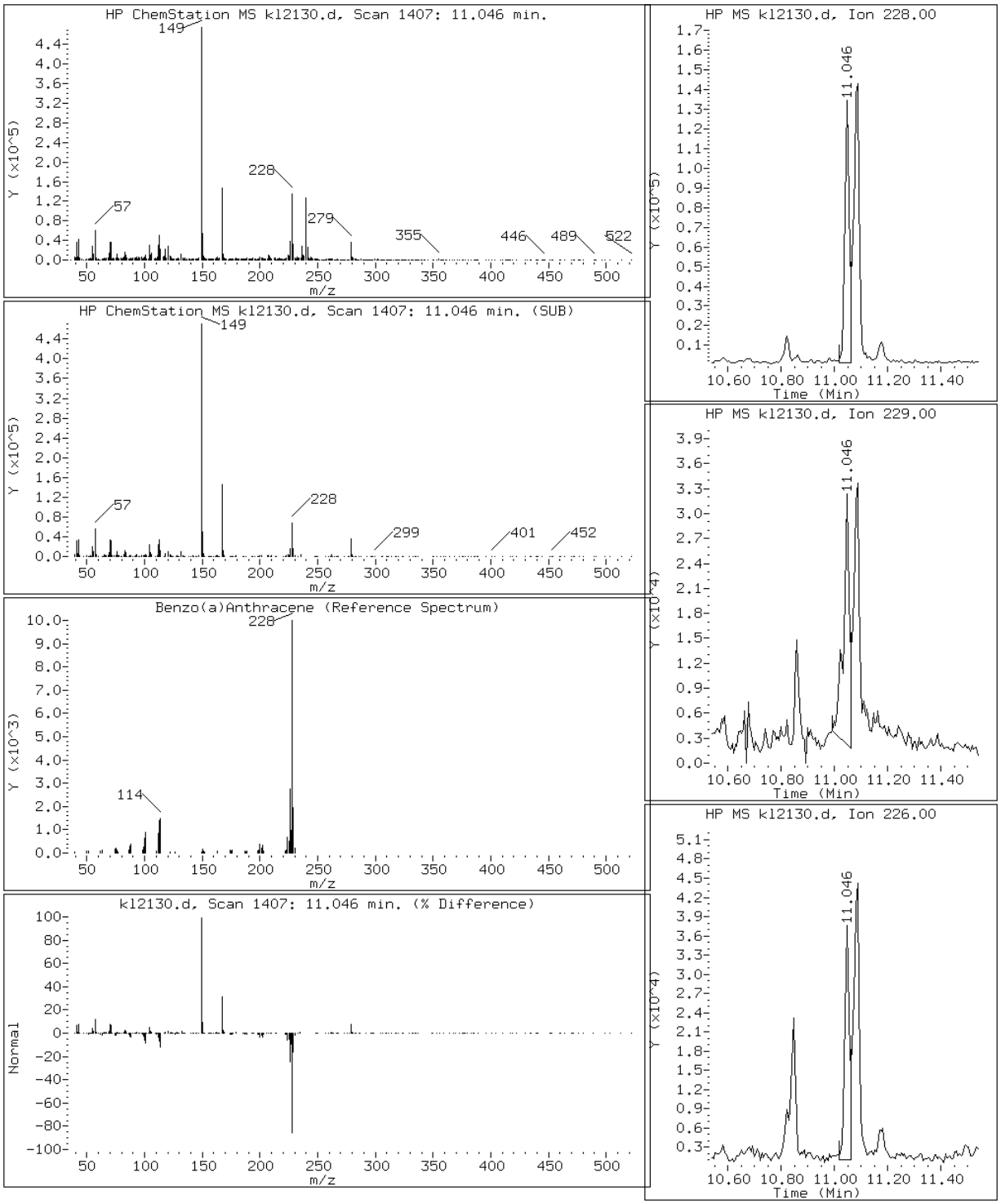
Data File: kl2130.d

Date: 21-DEC-2012 19:39

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-70-A DL=10 Operator: LEG

16 Benzo(a)Anthracene



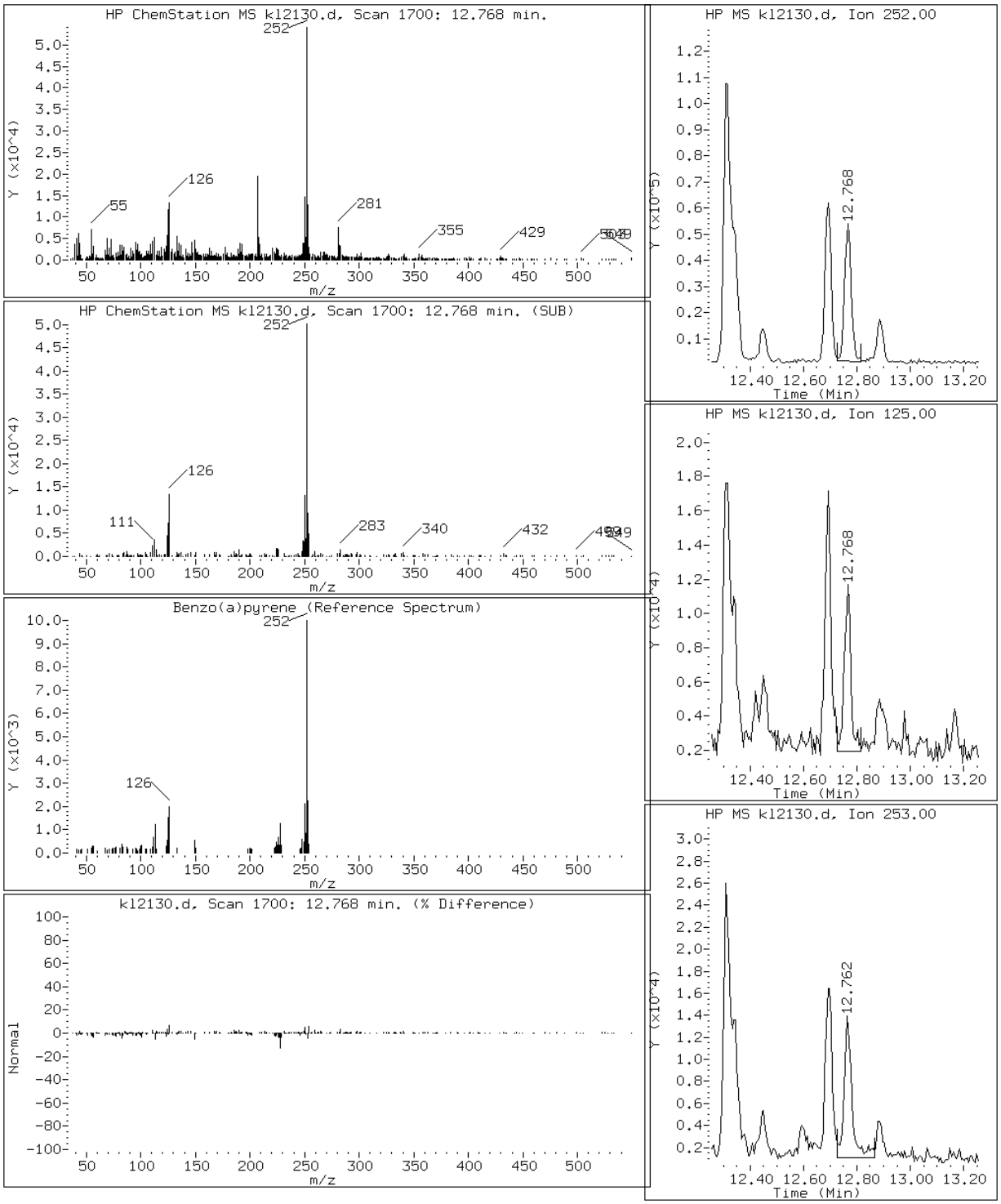
Data File: kl2130.d

Date: 21-DEC-2012 19:39

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-70-A DL=10 Operator: LEG

21 Benzo(a)pyrene



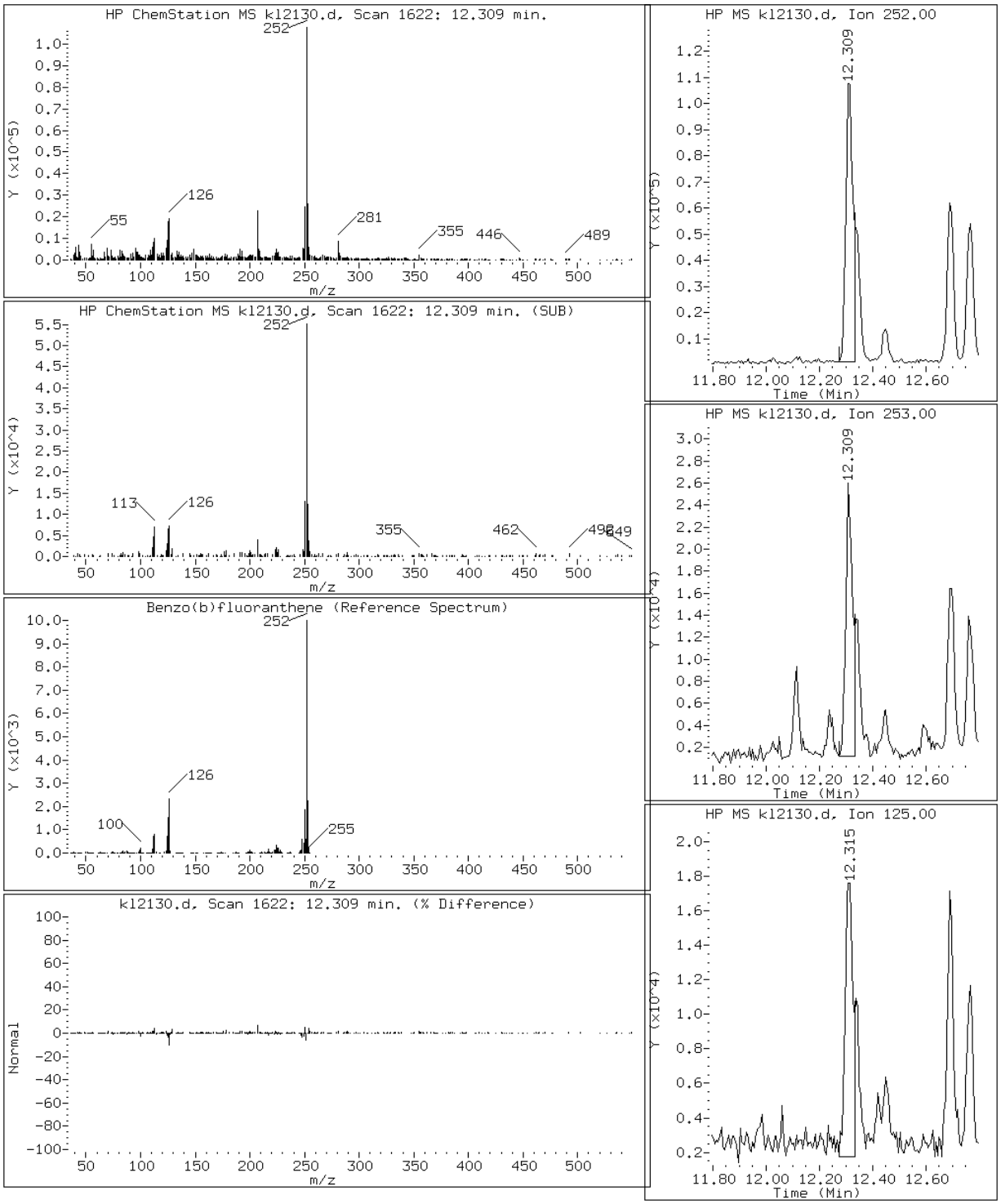
Data File: kl2130.d

Date: 21-DEC-2012 19:39

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-70-A DL=10 Operator: LEG

19 Benzo(b)fluoranthene



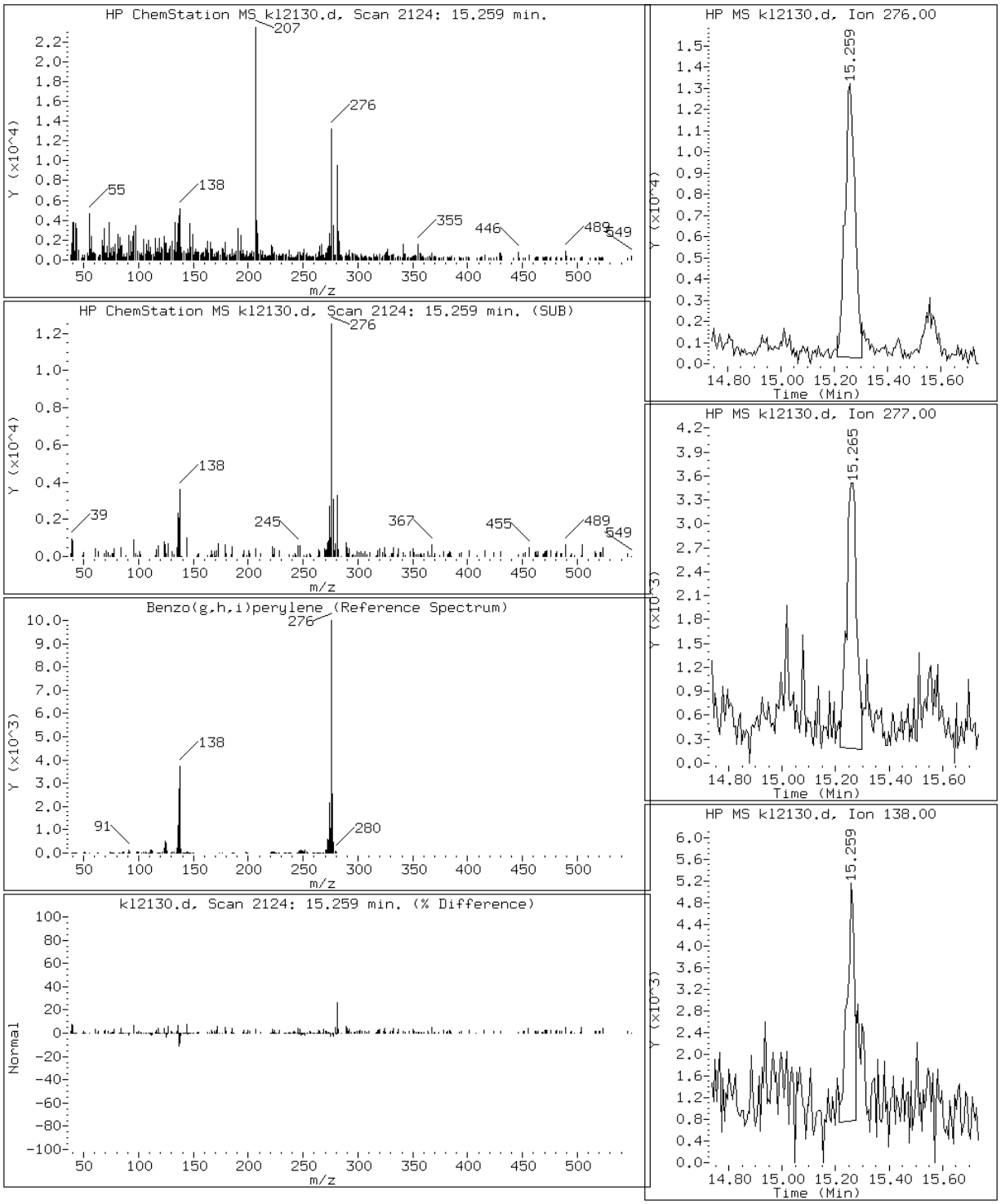
Data File: kl2130.d

Date: 21-DEC-2012 19:39

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-70-A DL=10 Operator: LEG

24 Benzo(g,h,i)perylene



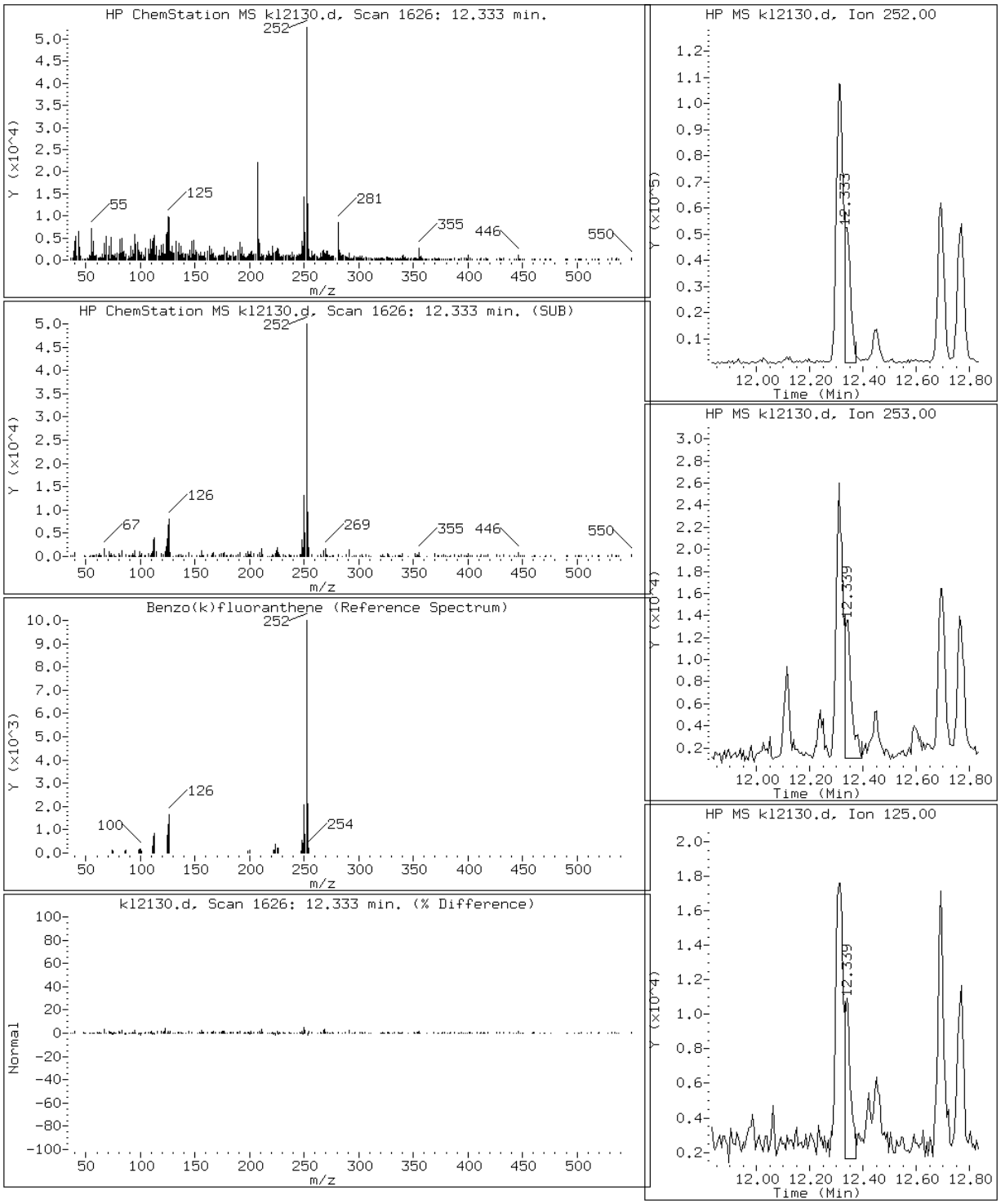
Data File: kl2130.d

Date: 21-DEC-2012 19:39

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-70-A DL=10 Operator: LEG

20 Benzo(k)fluoranthene



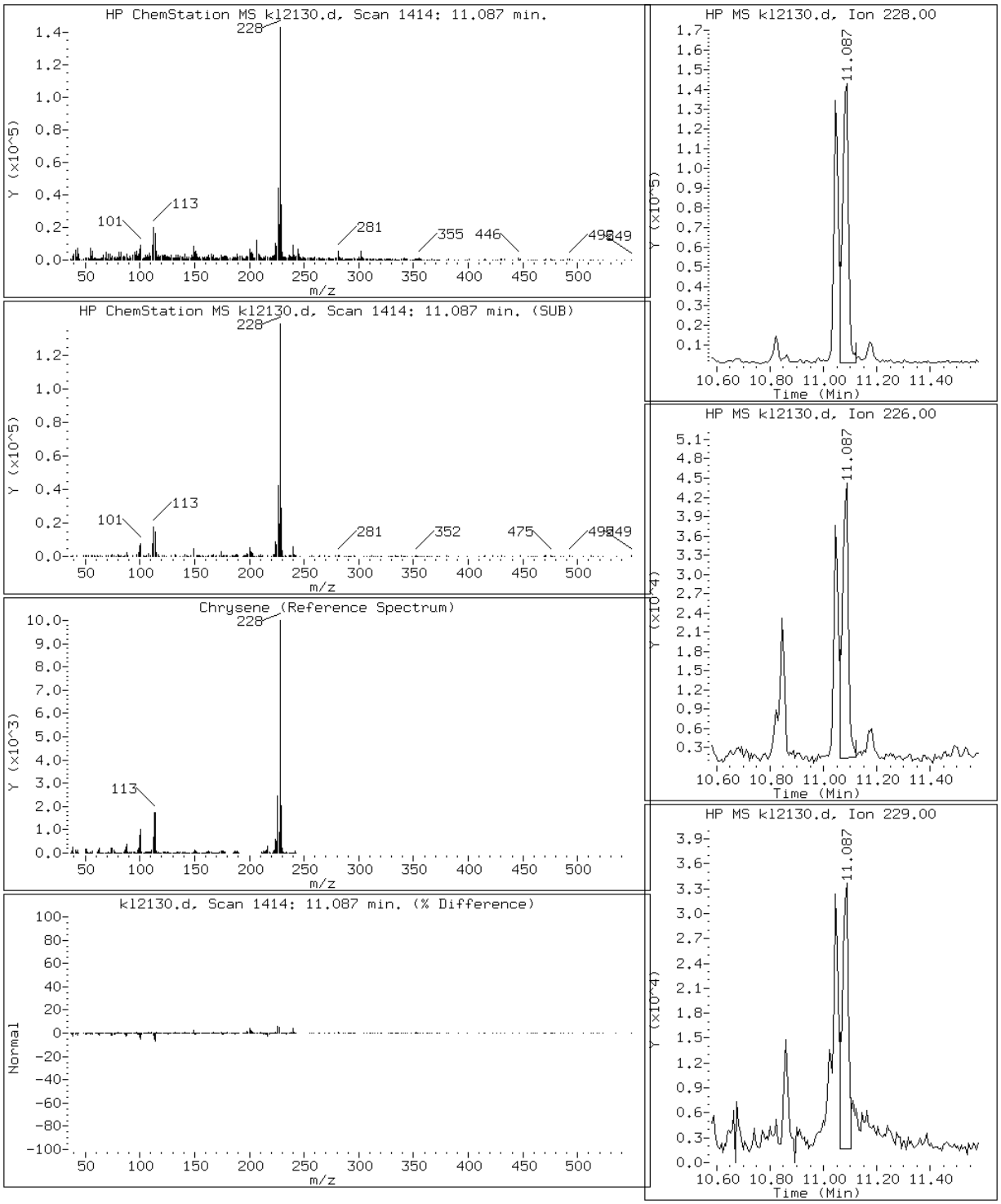
Data File: kl2130.d

Date: 21-DEC-2012 19:39

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-70-A DL=10 Operator: LEG

17 Chrysene



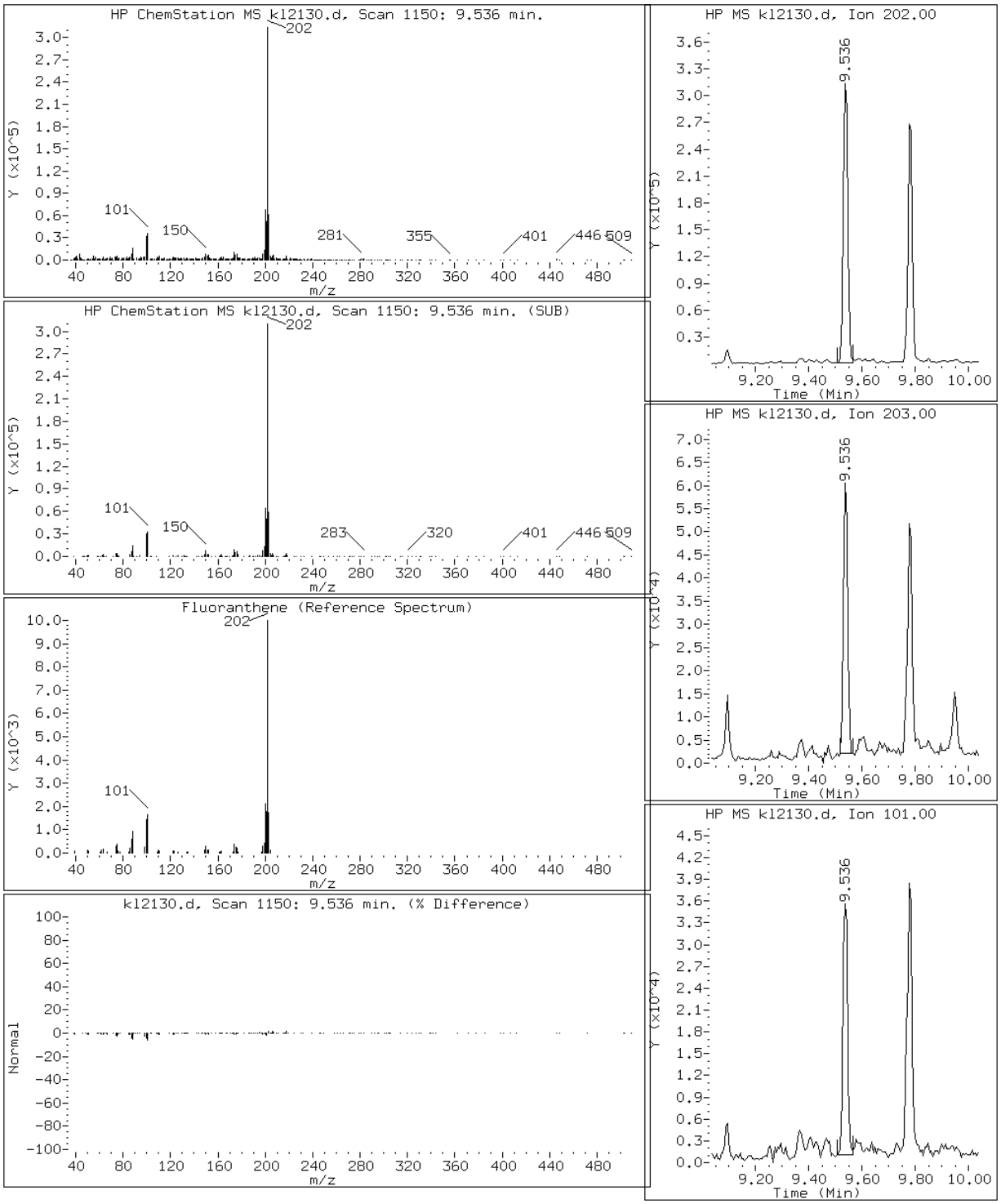
Data File: kl2130.d

Date: 21-DEC-2012 19:39

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-70-A DL=10 Operator: LEG

12 Fluoranthene



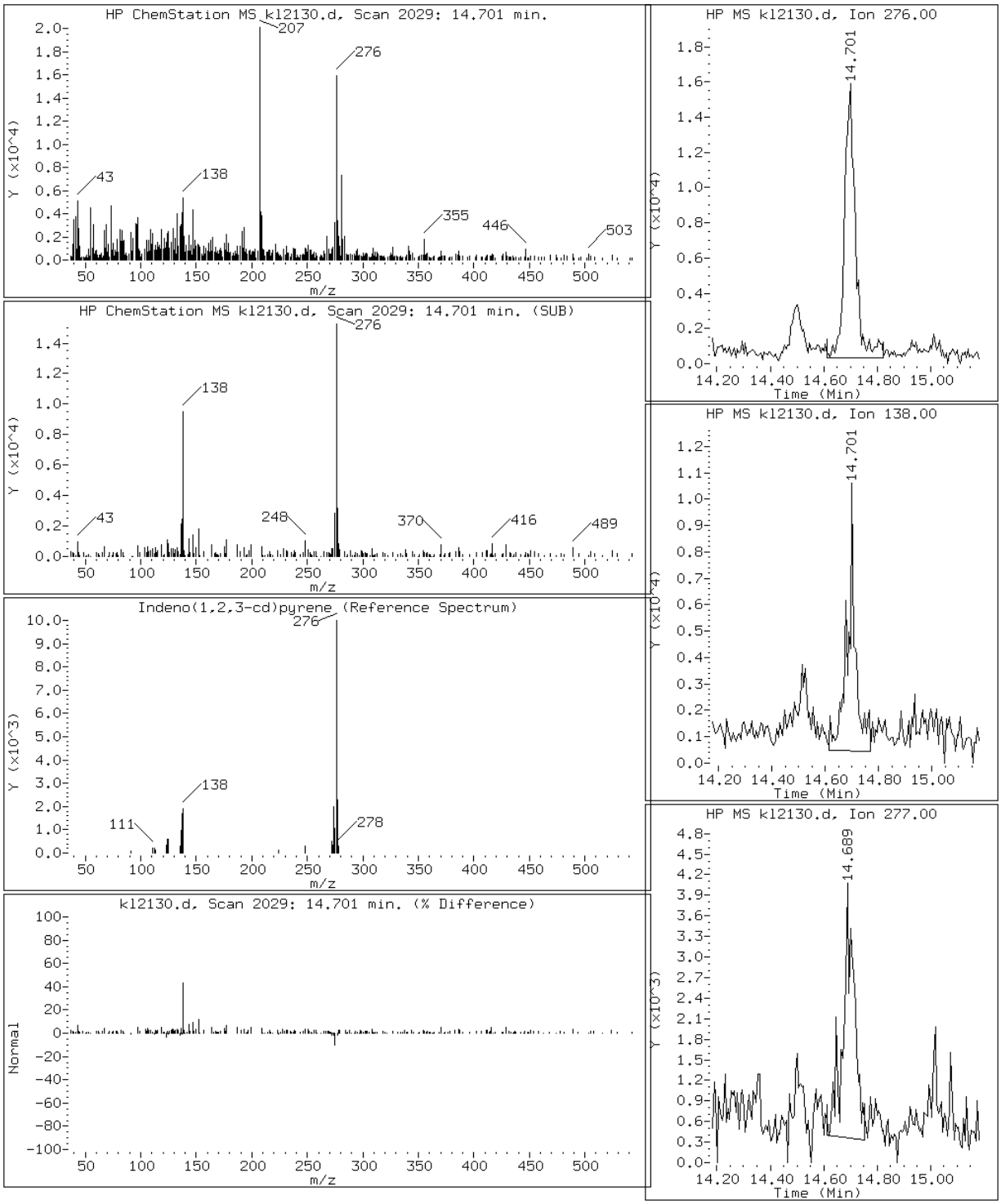
Data File: kl2130.d

Date: 21-DEC-2012 19:39

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-70-A DL=10 Operator: LEG

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



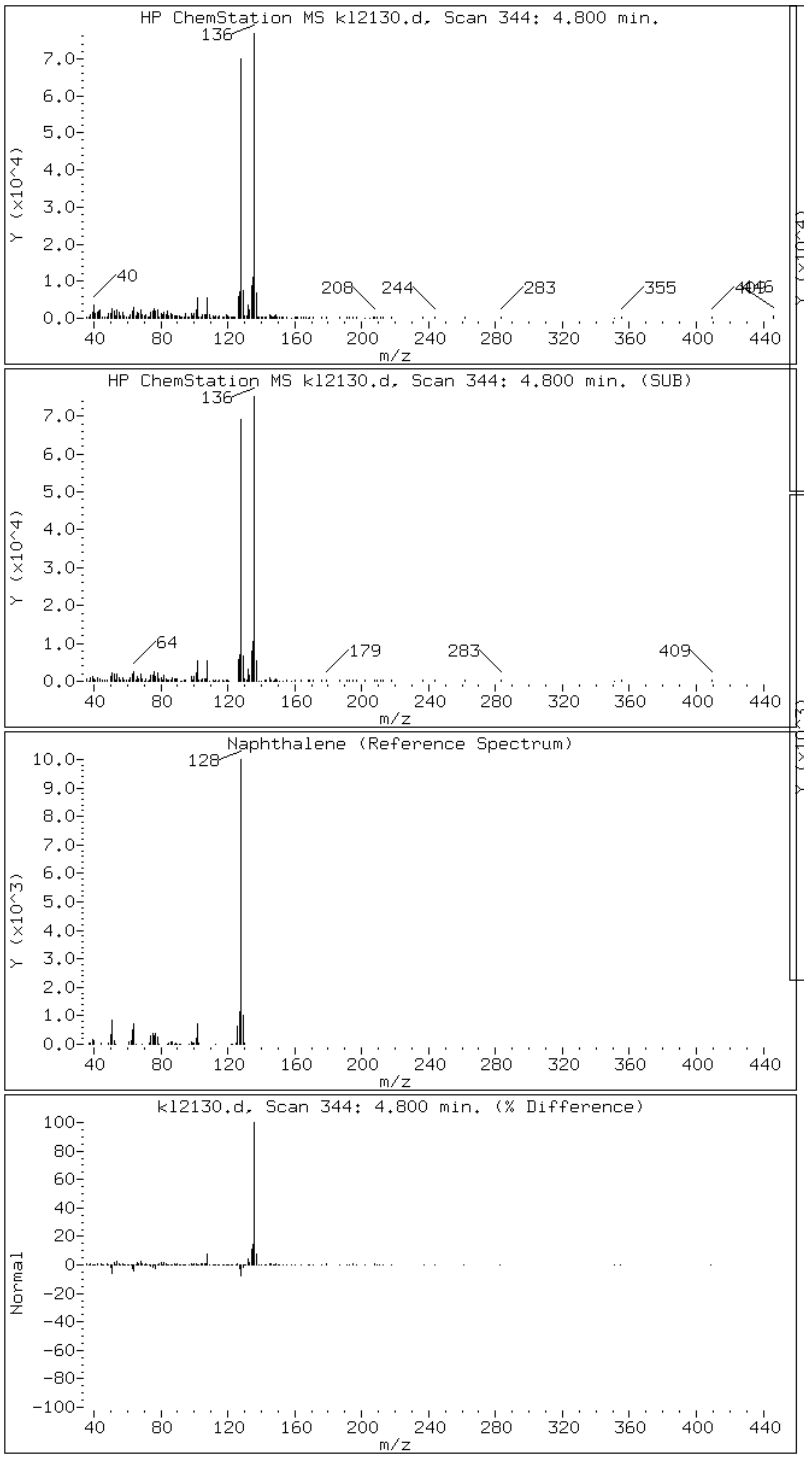
Data File: kl2130.d

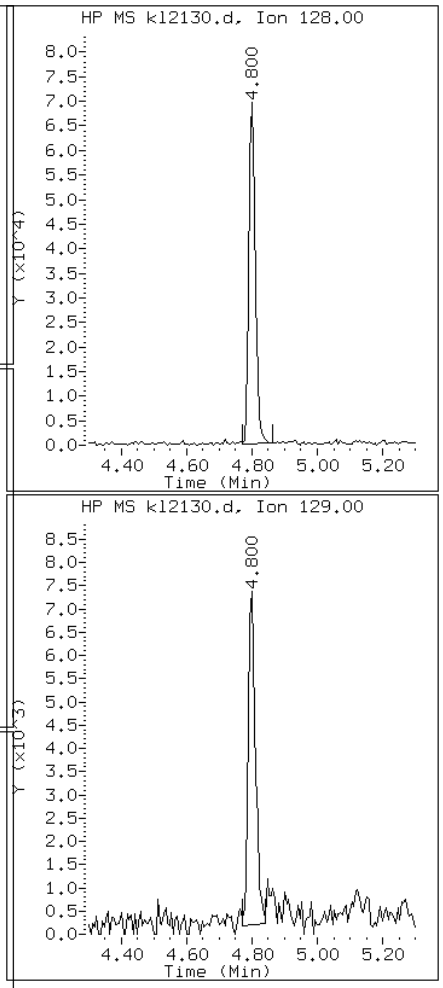
Date: 21-DEC-2012 19:39

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-70-A DL=10 Operator: LEG

2 Naphthalene





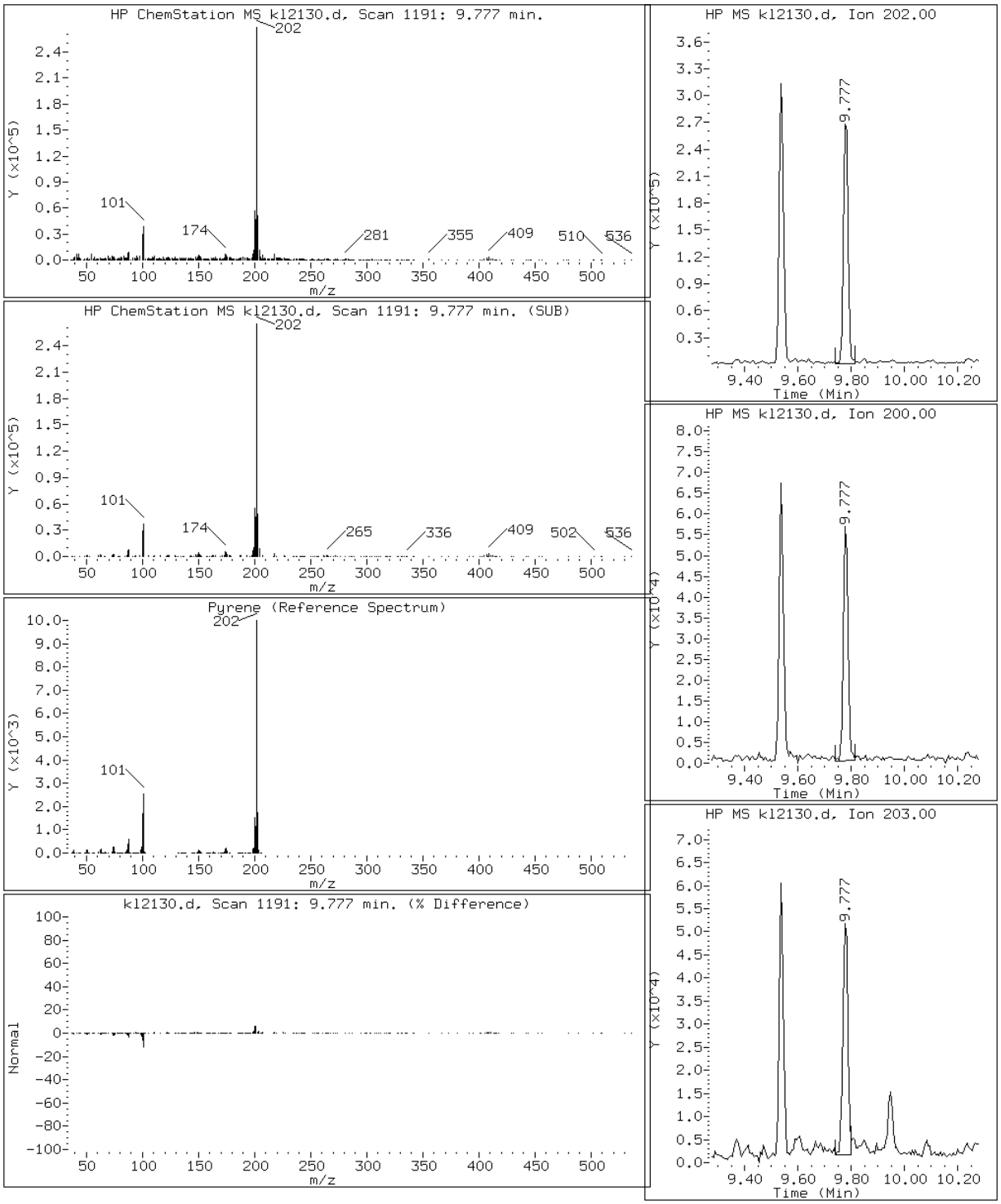
Data File: kl2130.d

Date: 21-DEC-2012 19:39

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-70-A DL=10 Operator: LEG

14 Pyrene



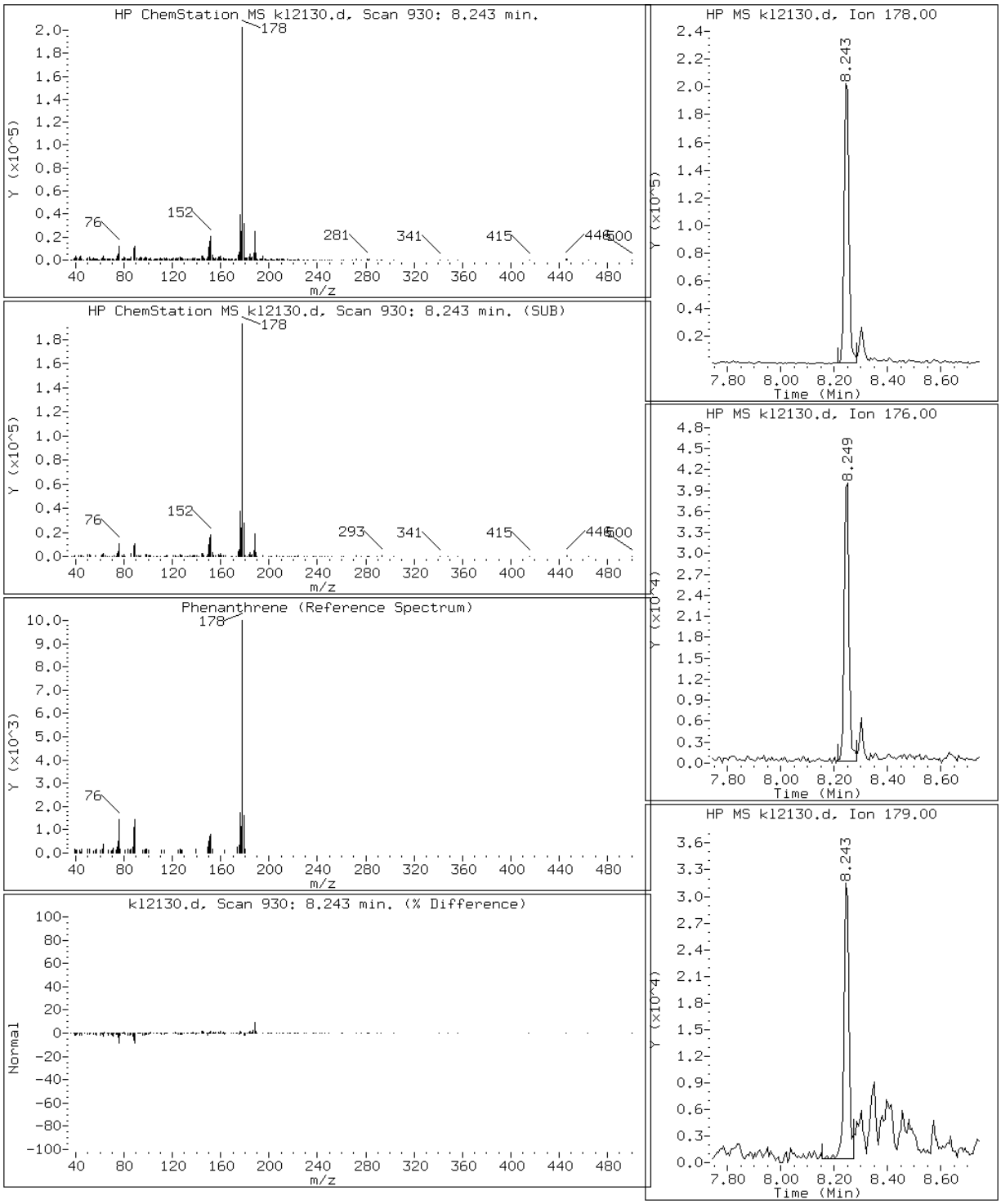
Data File: kl2130.d

Date: 21-DEC-2012 19:39

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-70-A DL=10 Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: kl2130.d
Inj. Date and Time: 21-DEC-2012 19:39
Instrument ID: MSK5973.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 12/27/2012

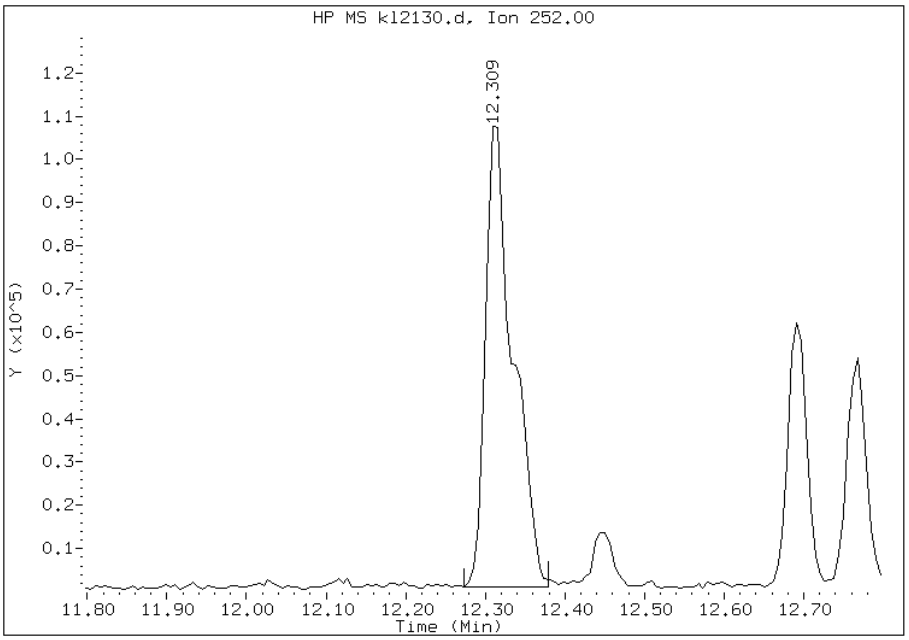
Processing Integration Results

RT: 12.31

Response: 256584

Amount: 1

Conc: 271



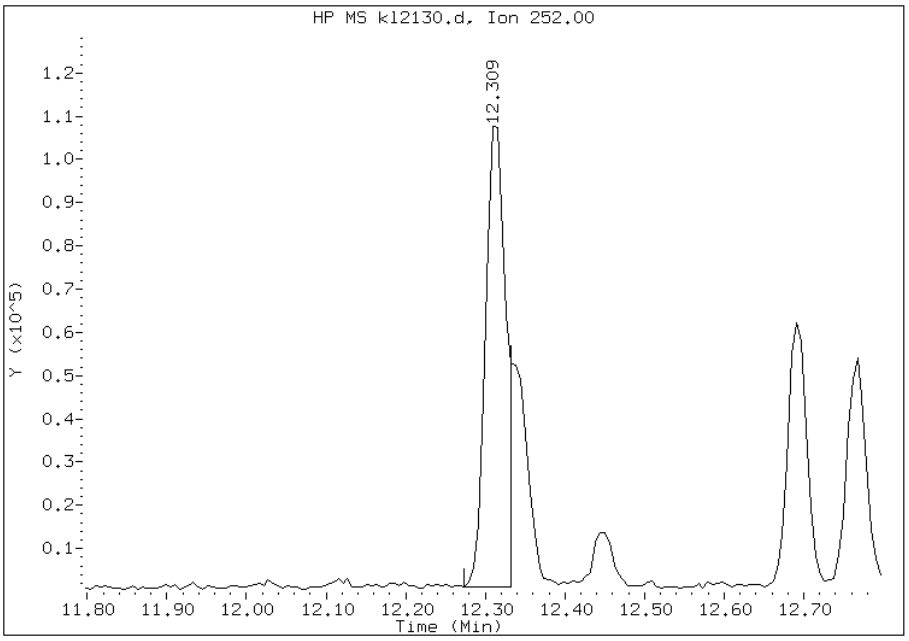
Manual Integration Results

RT: 12.31

Response: 194399

Amount: 1

Conc: 205



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: kl2130.d
Inj. Date and Time: 21-DEC-2012 19:39
Instrument ID: MSK5973.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 12/27/2012

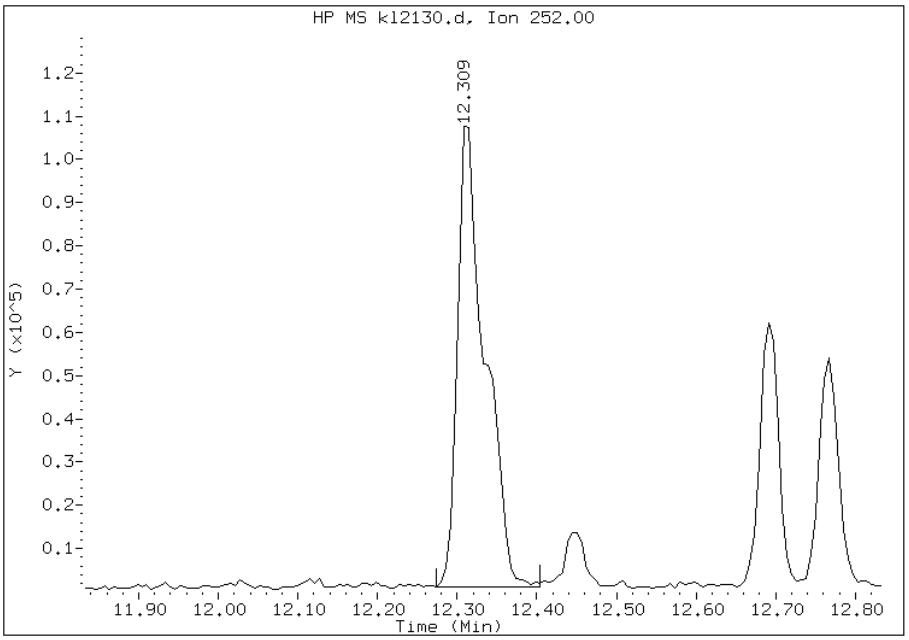
Processing Integration Results

RT: 12.31

Response: 257919

Amount: 1

Conc: 281



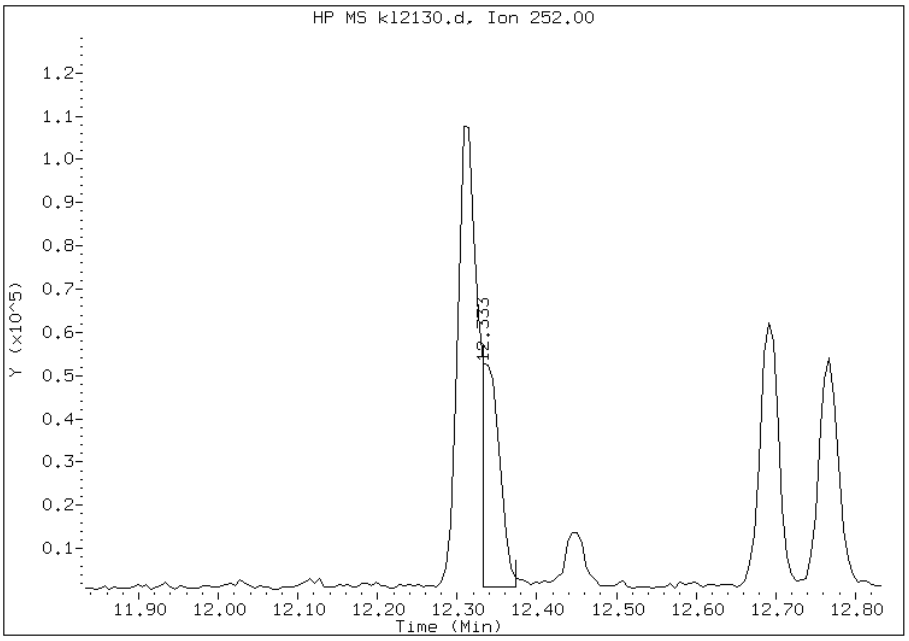
Manual Integration Results

RT: 12.33

Response: 80103

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.: 680-85860-4

SDG No.: 68085860-4

Client Sample ID: CV0550B-CS | Lab Sample ID: 680-85860-71

Matrix: Solid | Lab File ID: yl2127.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/14/2012 08:47

Extract. Method: 3546 | Date Extracted: 12/20/2012 18:29

Sample wt/vol: 30.03(g) | Date Analyzed: 12/21/2012 19:54

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

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

% Moisture: 25.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261204 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	49	J	89	41
91-57-6	2-Methylnaphthalene	67	J	89	44
83-32-9	Acenaphthene	89	U	89	44
208-96-8	Acenaphthylene	89	U	89	44
120-12-7	Anthracene	89	U	89	44
56-55-3	Benzo[a]anthracene	160		89	44
50-32-8	Benzo[a]pyrene	180		89	16
205-99-2	Benzo[b]fluoranthene	260		89	44
191-24-2	Benzo[g,h,i]perylene	130		89	44
207-08-9	Benzo[k]fluoranthene	95		89	27
218-01-9	Chrysene	210		89	44
53-70-3	Dibenz(a,h)anthracene	60	J	89	44
206-44-0	Fluoranthene	300		89	44
86-73-7	Fluorene	89	U	89	44
193-39-5	Indeno[1,2,3-cd]pyrene	110		89	44
91-20-3	Naphthalene	77	J	89	44
129-00-0	Pyrene	250		89	44
85-01-8	Phenanthrene	190		89	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/MSY5975.i/2y122112.b/yl2127.d
Lab Smp Id: 680-85860-A-71-A DL
Inj Date : 21-DEC-2012 19:54
Operator : VHB Inst ID: MSY5975.i
Smp Info : 680-85860-A-71-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y122112.b/Y-b8270CLLPAH-m.m
Meth Date : 24-Dec-2012 08:16 chemist Quant Type: ISTD
Cal Date : 21-DEC-2012 13:30 Cal File: yl2112q.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	3.392	3.392	(1.000)	119518	2.00000	
2 Naphthalene	128	3.408	3.408	(1.005)	12142	0.17238	57.46(a)
3 2-Methylnaphthalene	142	4.012	4.012	(1.183)	6671	0.15176	50.58(a)
4 1-Methylnaphthalene	142	4.092	4.098	(1.207)	5073	0.10967	36.55(a)
* 5 Acenaphthene-d10	164	4.905	4.911	(1.000)	79013	2.00000	
* 9 Phenanthrene-d10	188	6.162	6.162	(1.000)	139960	2.00000	
10 Phenanthrene	178	6.178	6.178	(1.003)	36428	0.42252	140.83

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
12 Fluoranthene	202	7.184	7.184	(1.166)	69055	0.68706	229.01
14 Pyrene	202	7.382	7.382	(0.871)	55590	0.56101	187.00
16 Benzo(a)Anthracene	228	8.462	8.462	(0.999)	27763	0.35843	119.47
* 13 Chrysene-d12	240	8.473	8.473	(1.000)	109175	2.00000	
17 Chrysene	228	8.500	8.494	(1.003)	32705	0.47411	158.03
19 Benzo(b)fluoranthene	252	9.414	9.414	(0.964)	37936	0.58810	196.03(M)
20 Benzo(k)fluoranthene	252	9.436	9.436	(0.967)	14097	0.21427	71.42(M)
21 Benzo(a)pyrene	252	9.703	9.703	(0.994)	20994	0.39459	131.53
* 18 Perylene-d12	264	9.762	9.757	(1.000)	88172	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	10.912	10.901	(1.288)	15292	0.25784	85.94
23 Dibenzo(a,h)anthracene	278	10.928	10.923	(1.119)	6015	0.13453	44.84(a)
24 Benzo(g,h,i)perylene	276	11.244	11.244	(1.152)	13767	0.29765	99.21

QC Flag Legend

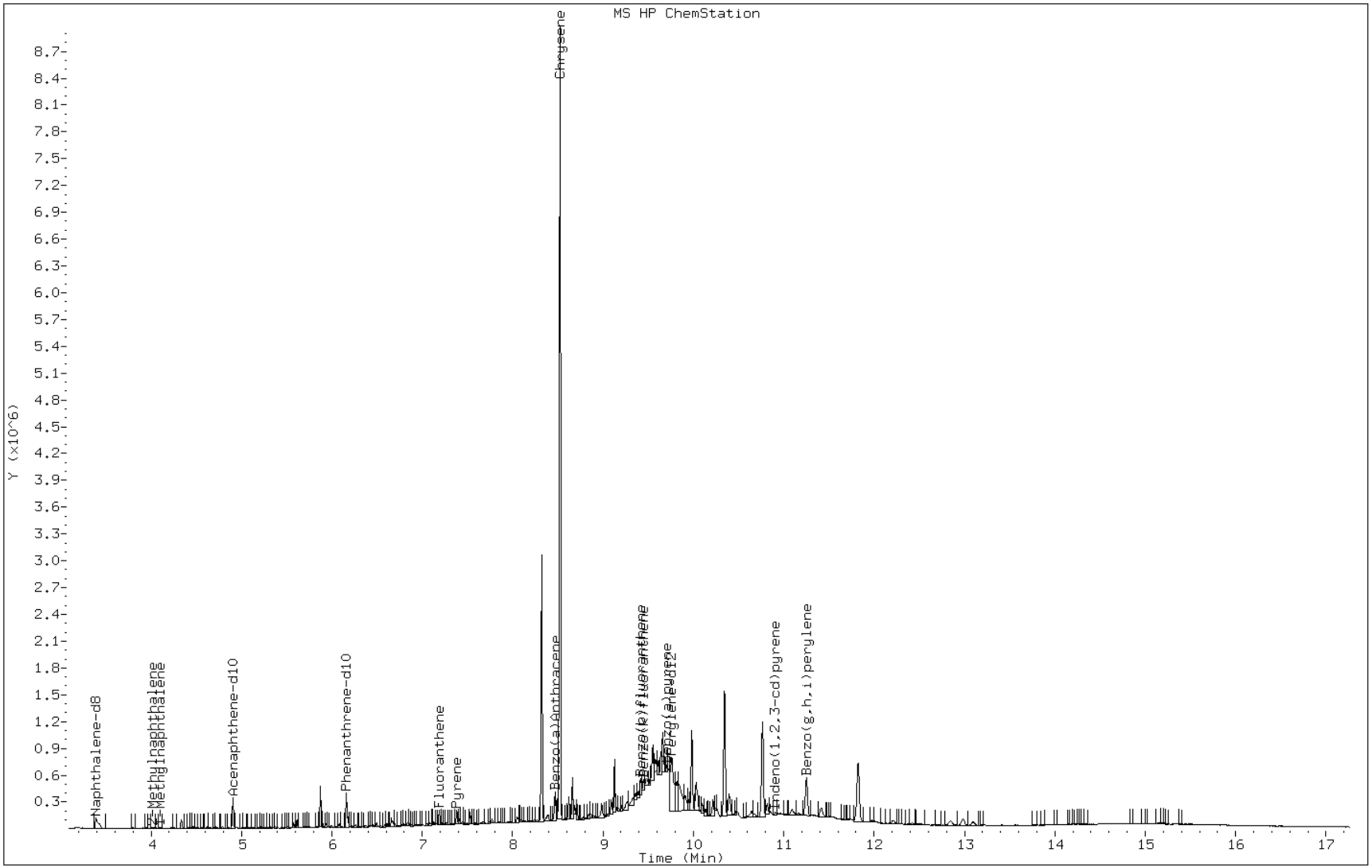
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: yl2127.d

Date: 21-DEC-2012 19:54

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-71-A DL=10 Operator: VHB



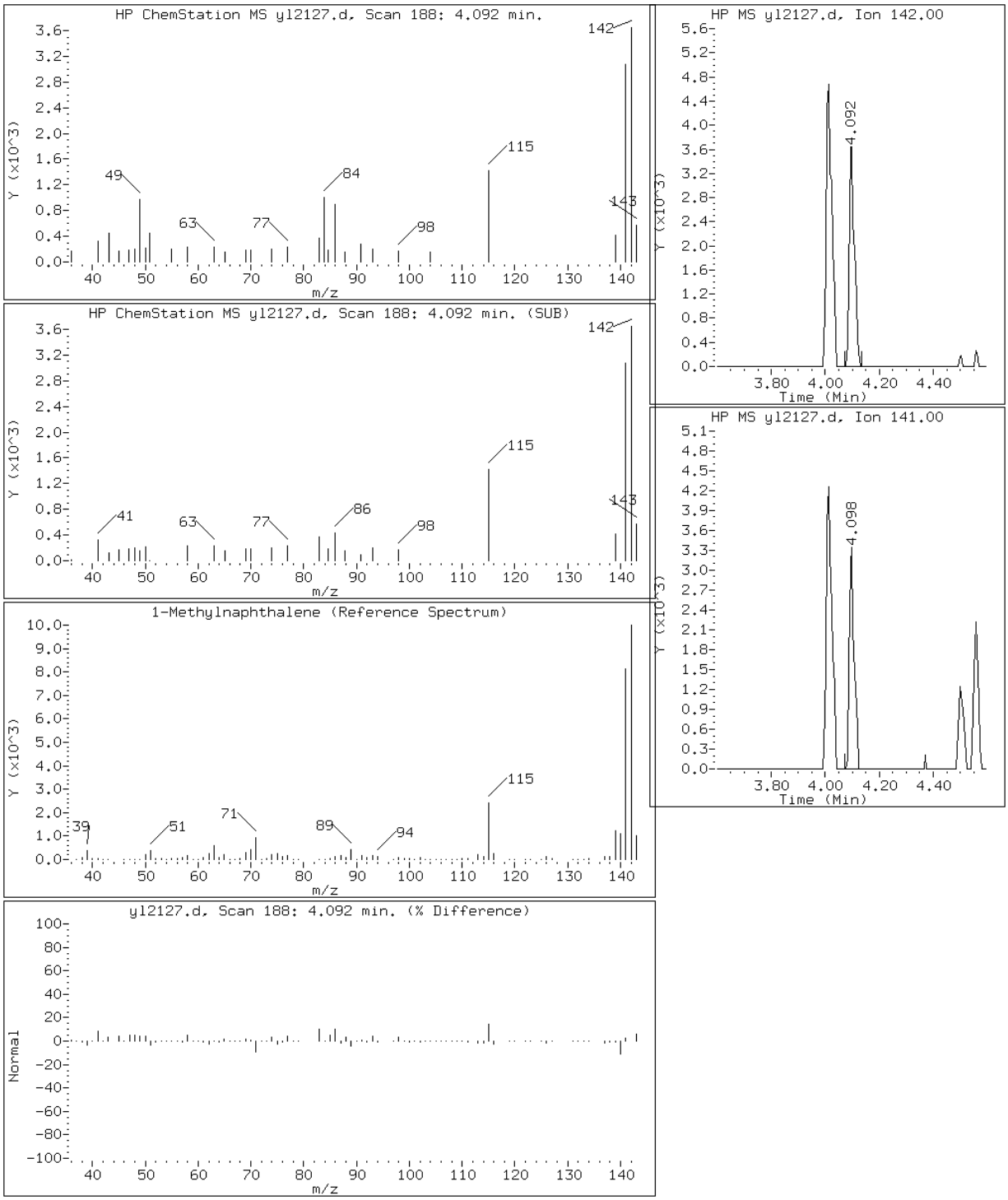
Data File: yl2127.d

Date: 21-DEC-2012 19:54

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-71-A DL=10 Operator: VHB

4 1-Methylnaphthalene



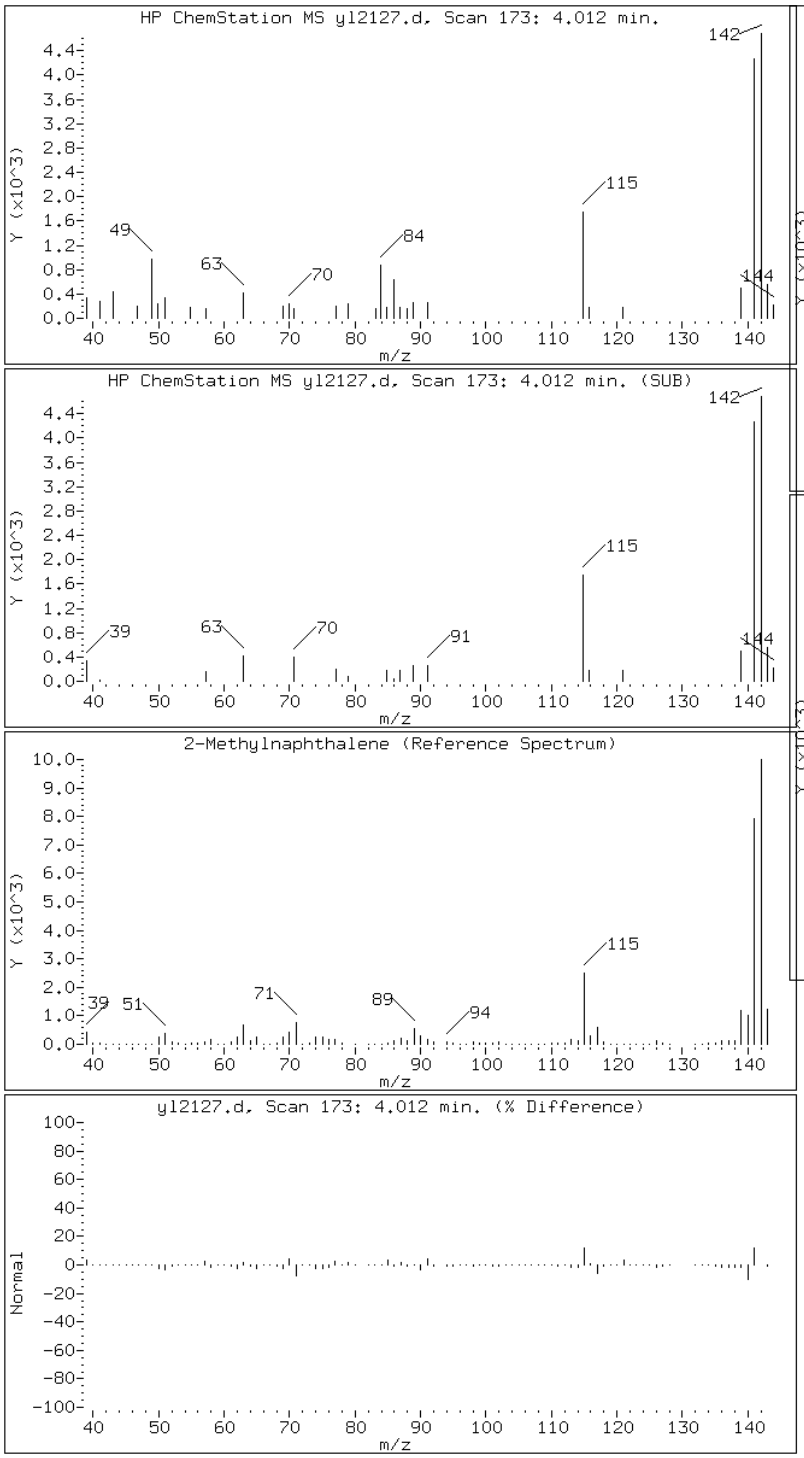
Data File: yl2127.d

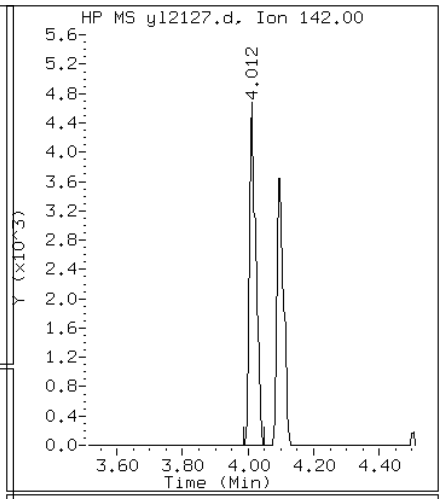
Date: 21-DEC-2012 19:54

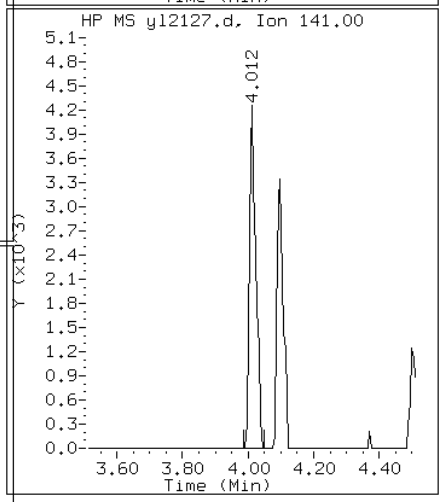
Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-71-A DL=10 Operator: VHB

3 2-Methylnaphthalene







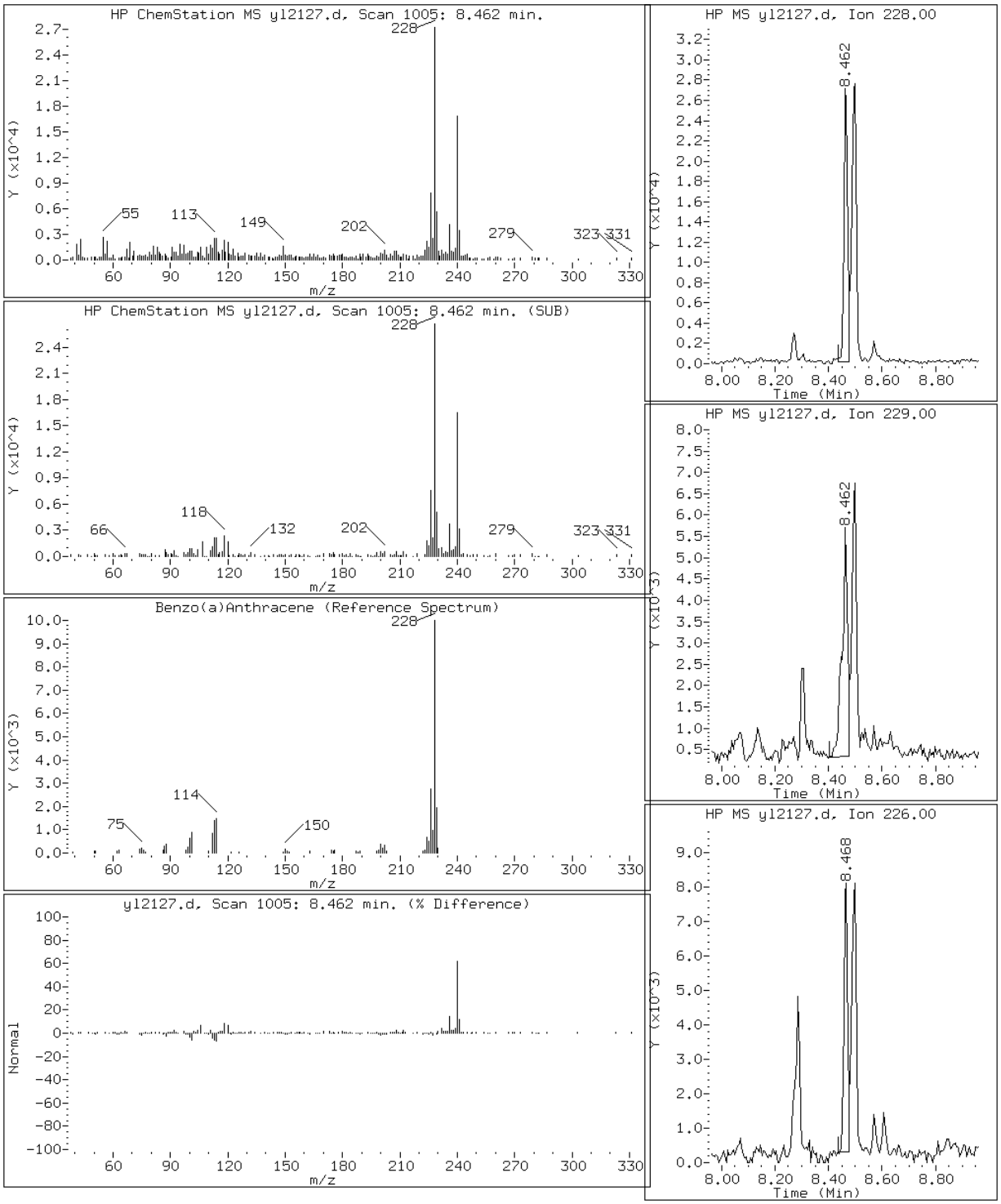
Data File: yl2127.d

Date: 21-DEC-2012 19:54

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-71-A DL=10 Operator: VHB

16 Benzo(a)Anthracene



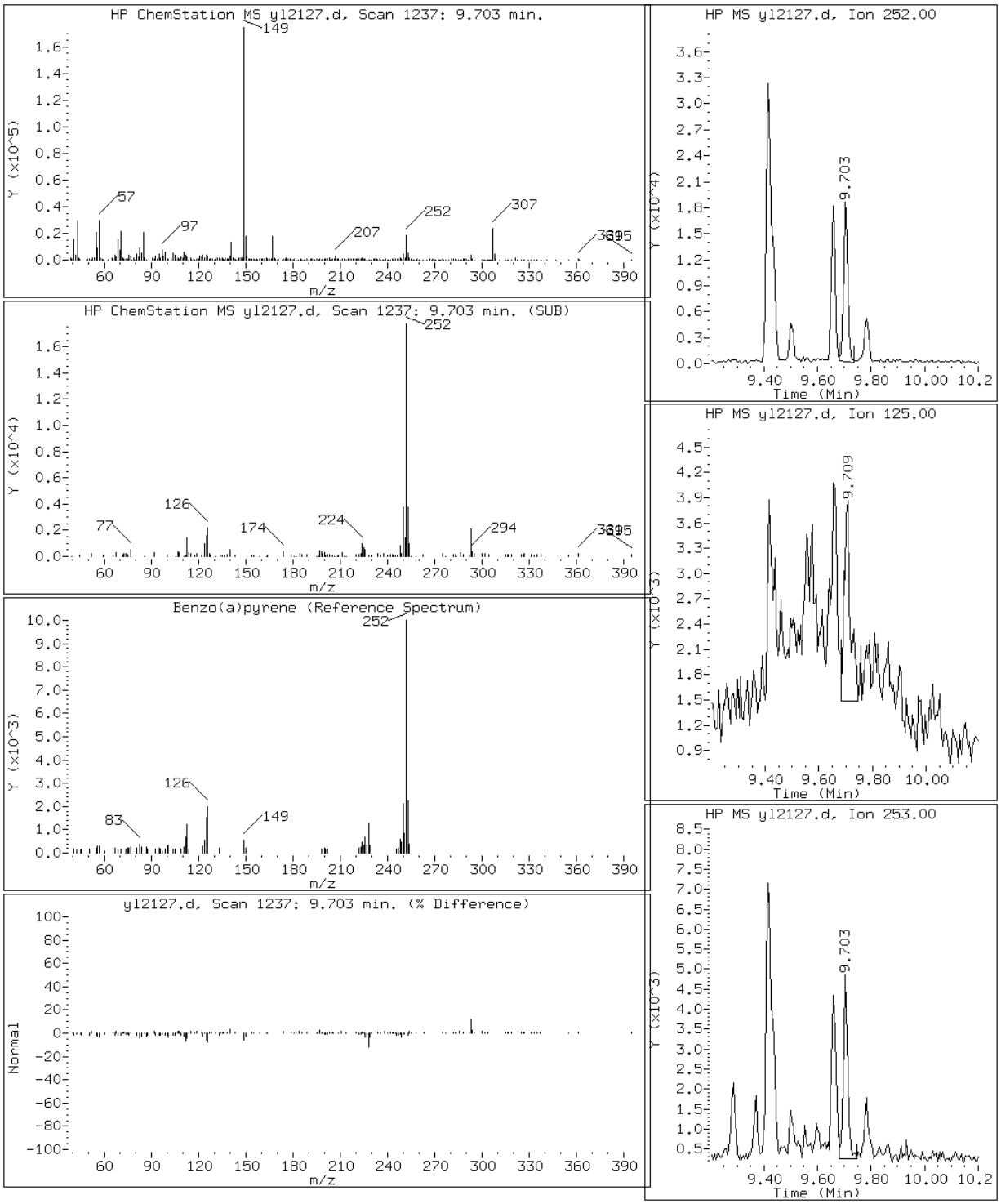
Data File: yl2127.d

Date: 21-DEC-2012 19:54

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-71-A DL=10 Operator: VHB

21 Benzo(a)pyrene



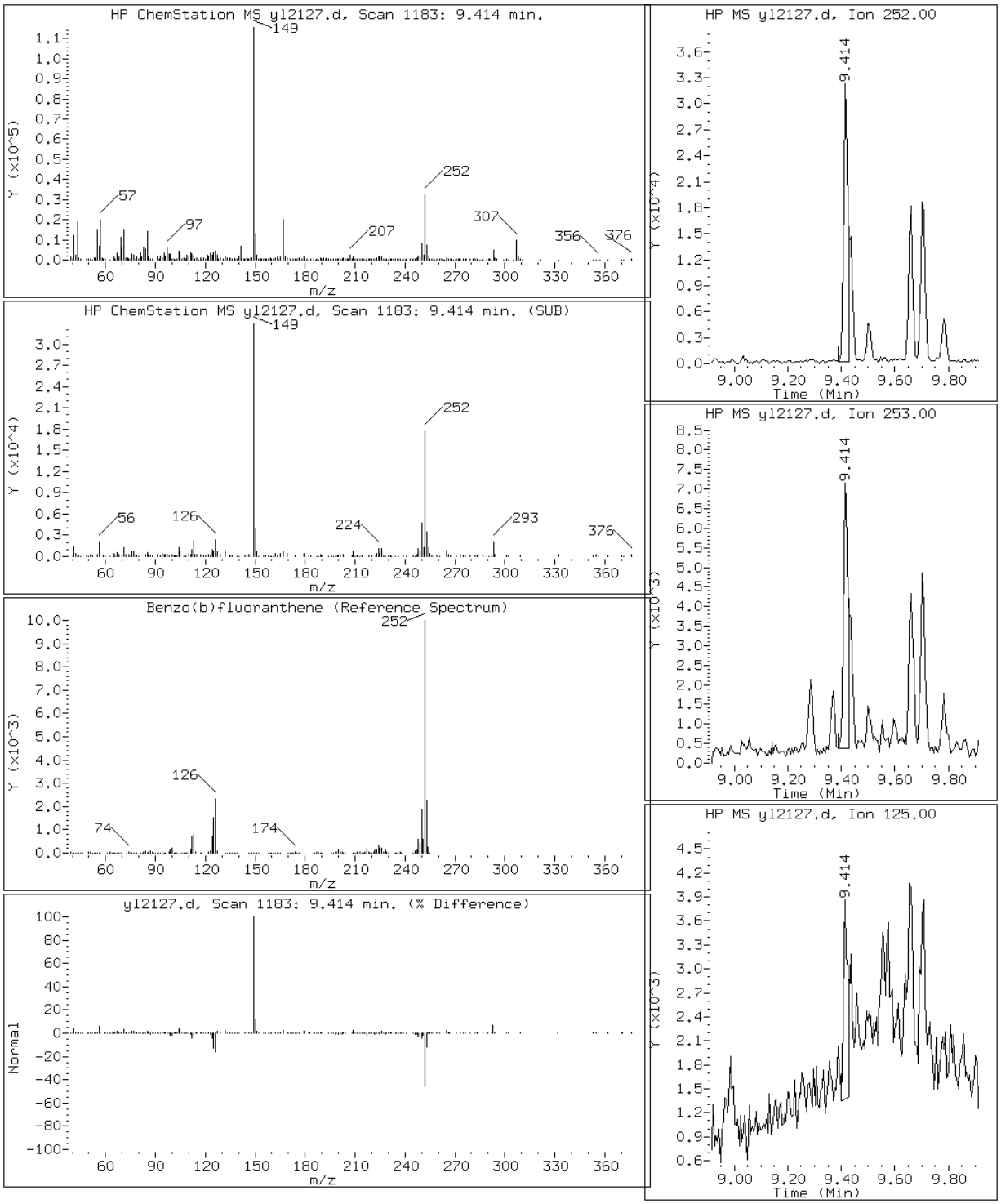
Data File: yl2127.d

Date: 21-DEC-2012 19:54

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-71-A DL=10 Operator: VHB

19 Benzo(b)fluoranthene



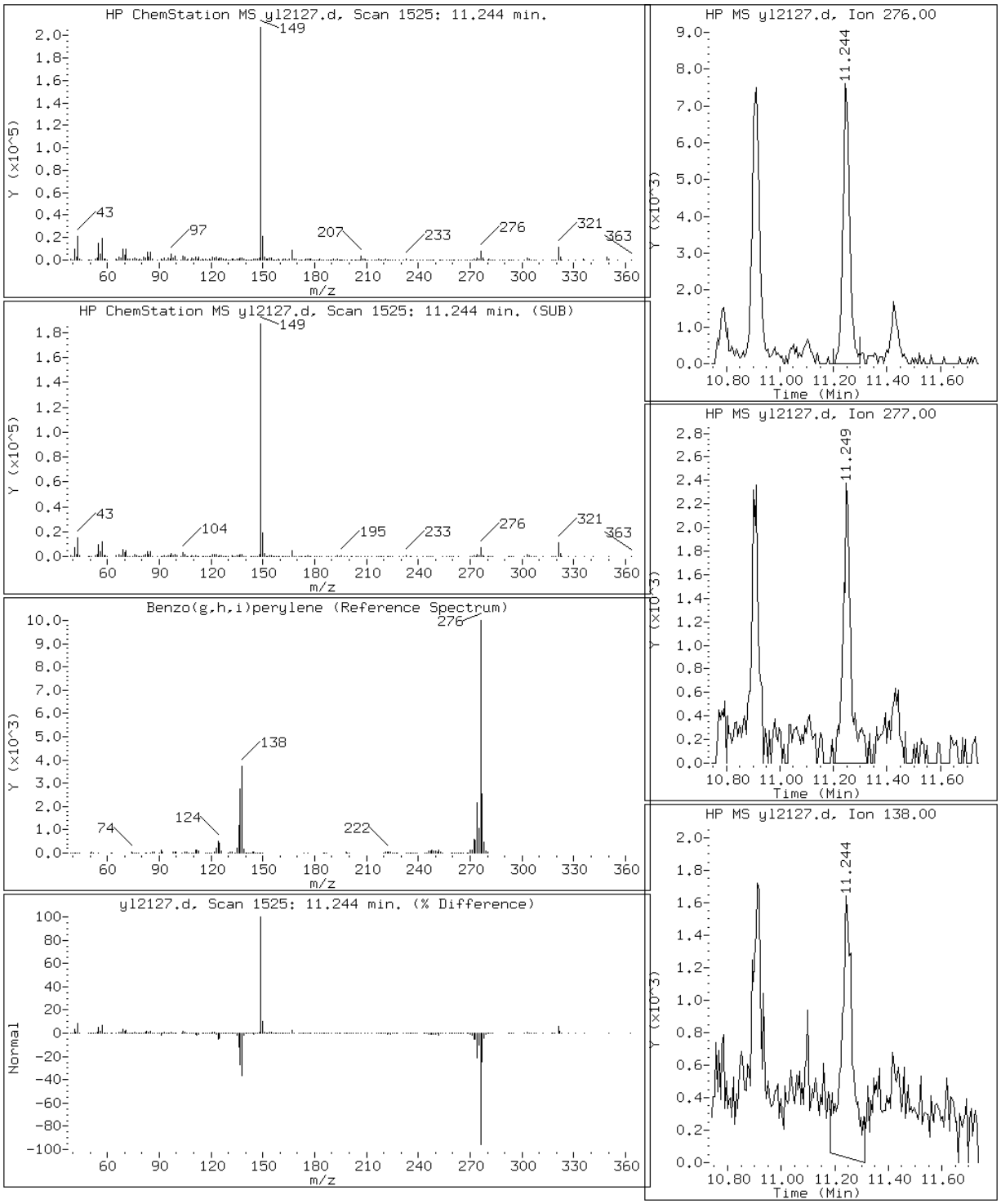
Data File: yl2127.d

Date: 21-DEC-2012 19:54

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-71-A DL=10 Operator: VHB

24 Benzo(g,h,i)perylene



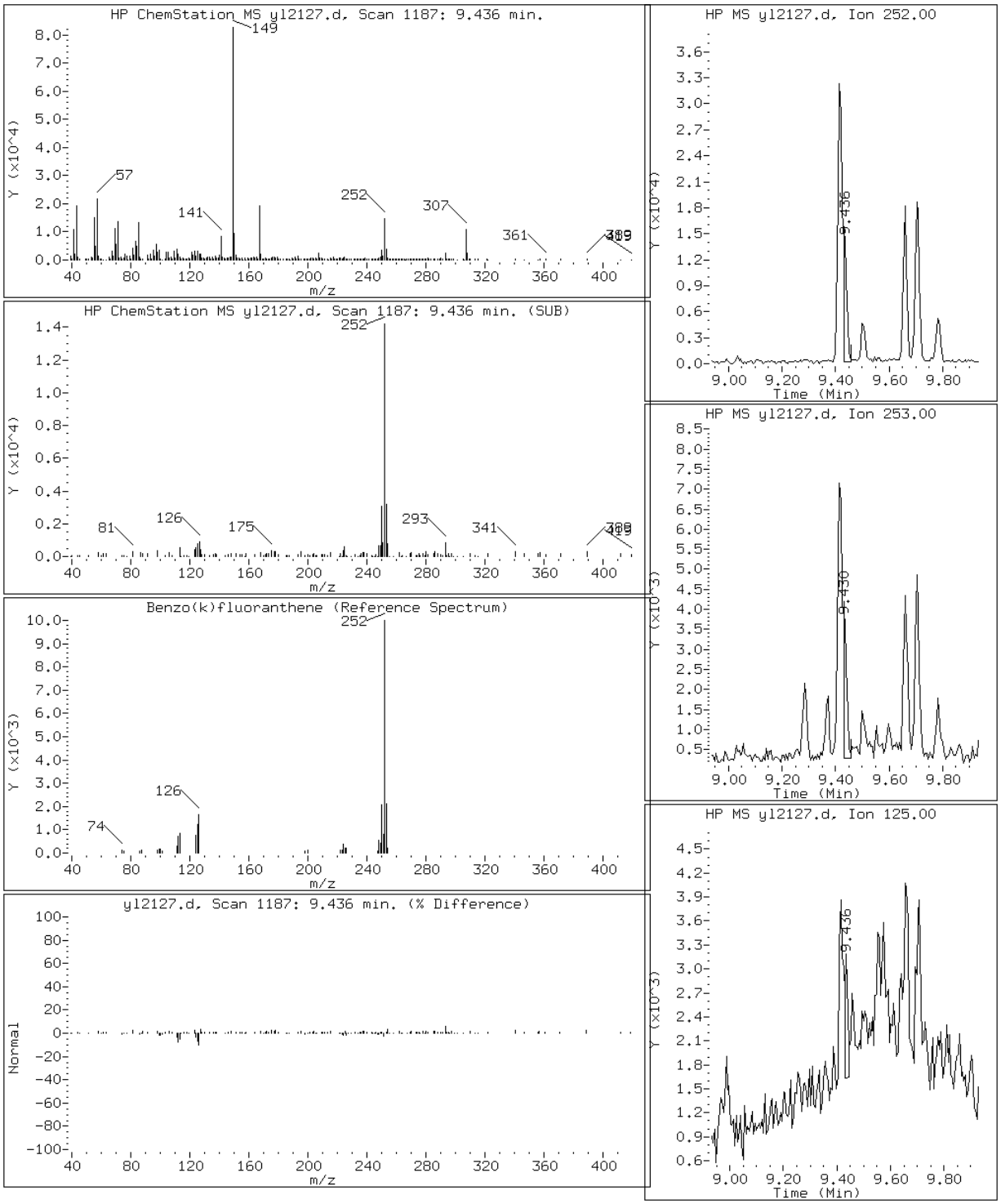
Data File: yl2127.d

Date: 21-DEC-2012 19:54

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-71-A DL=10 Operator: VHB

20 Benzo(k)fluoranthene



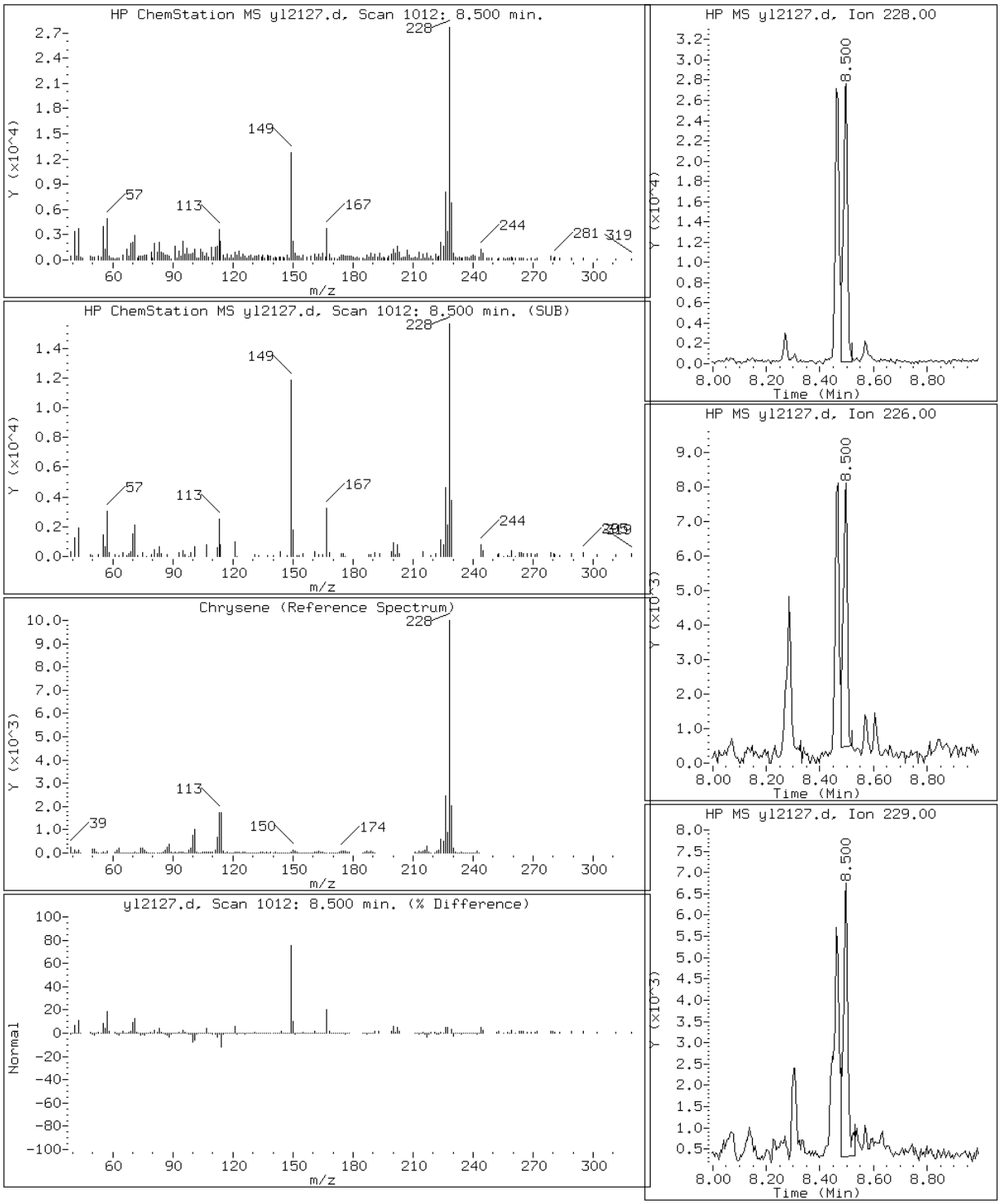
Data File: yl2127.d

Date: 21-DEC-2012 19:54

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-71-A DL=10 Operator: VHB

17 Chrysene



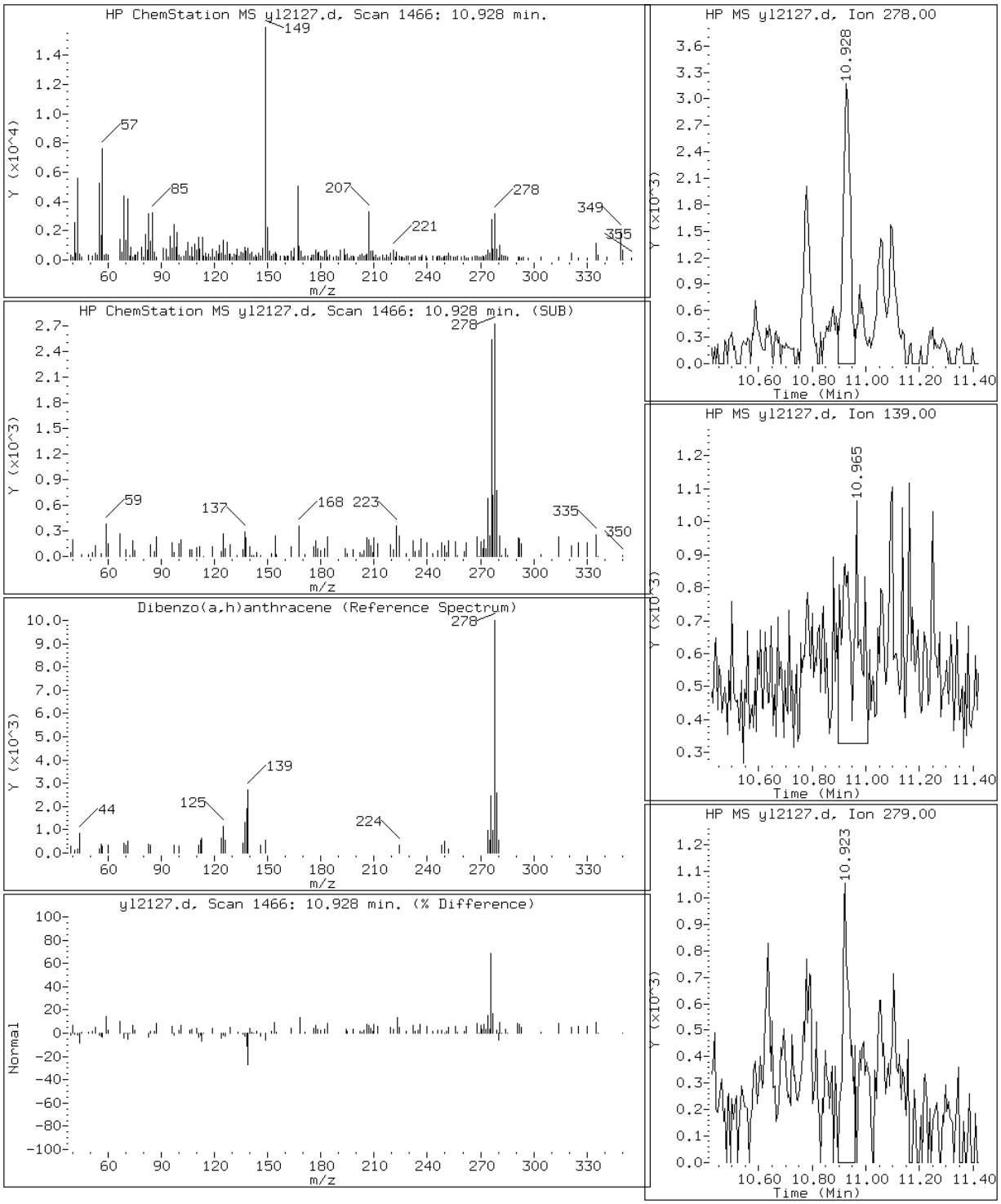
Data File: yl2127.d

Date: 21-DEC-2012 19:54

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-71-A DL=10 Operator: VHB

23 Dibenzo(a,h)anthracene



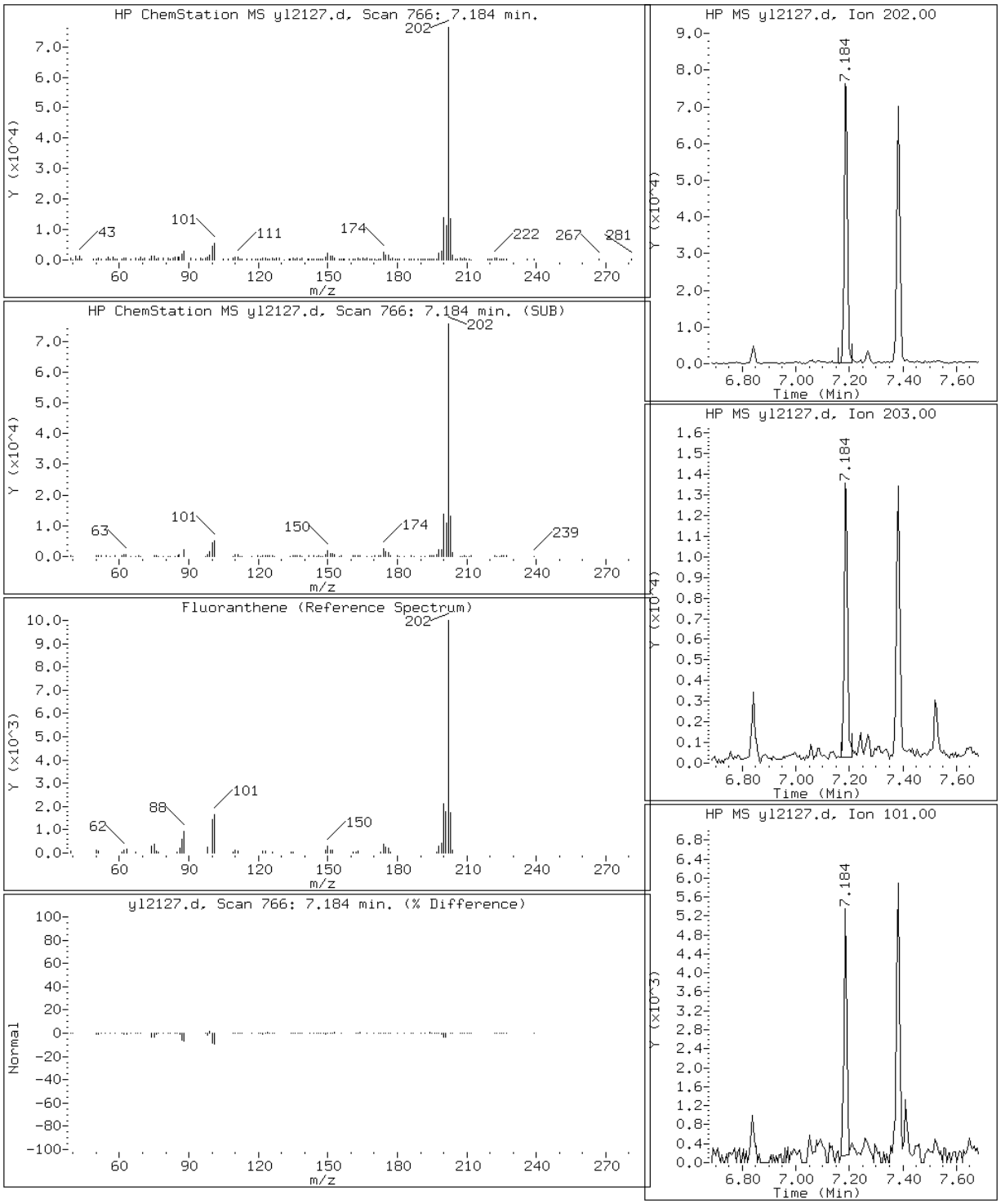
Data File: yl2127.d

Date: 21-DEC-2012 19:54

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-71-A DL=10 Operator: VHB

12 Fluoranthene



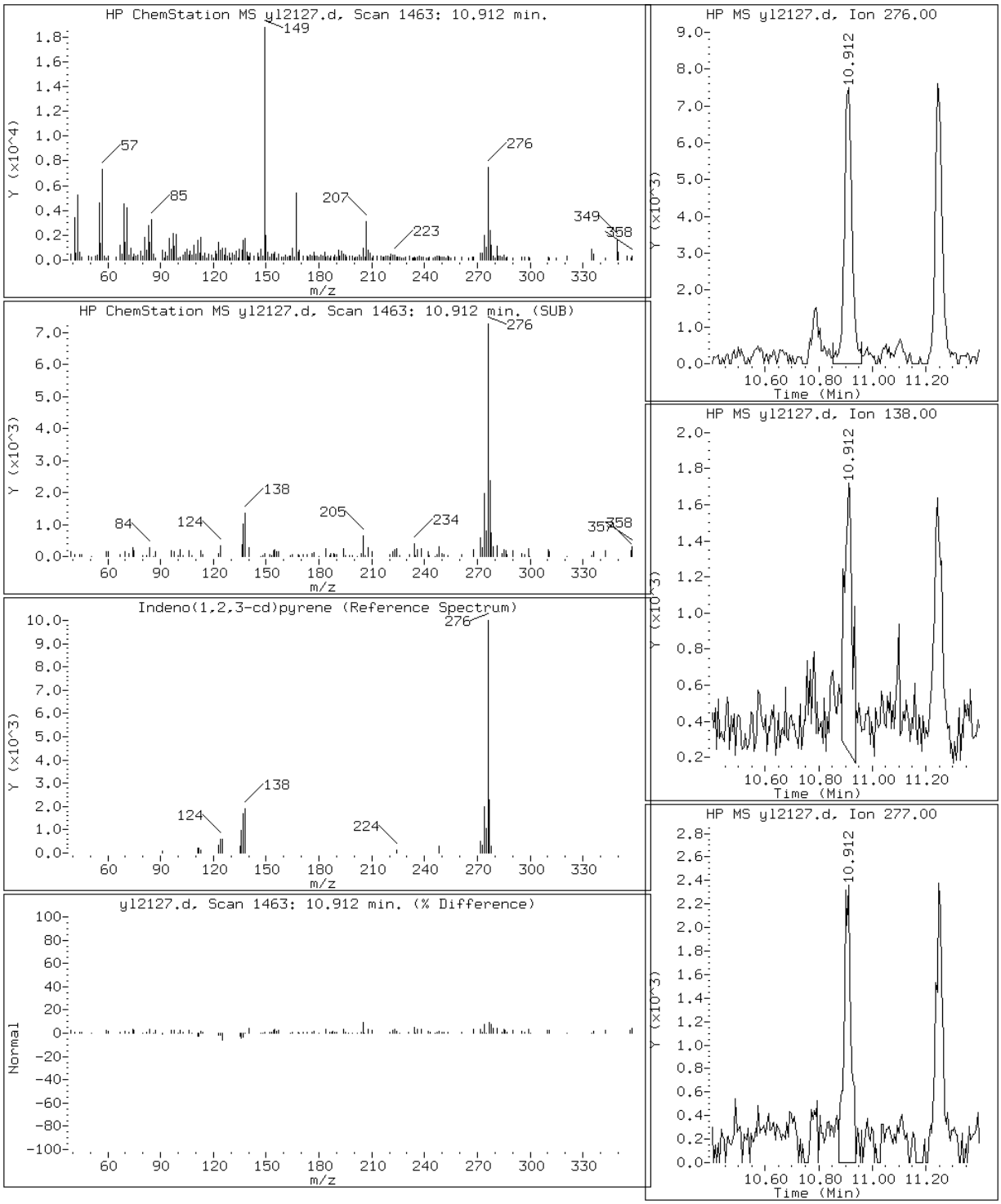
Data File: yl2127.d

Date: 21-DEC-2012 19:54

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-71-A DL=10 Operator: VHB

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



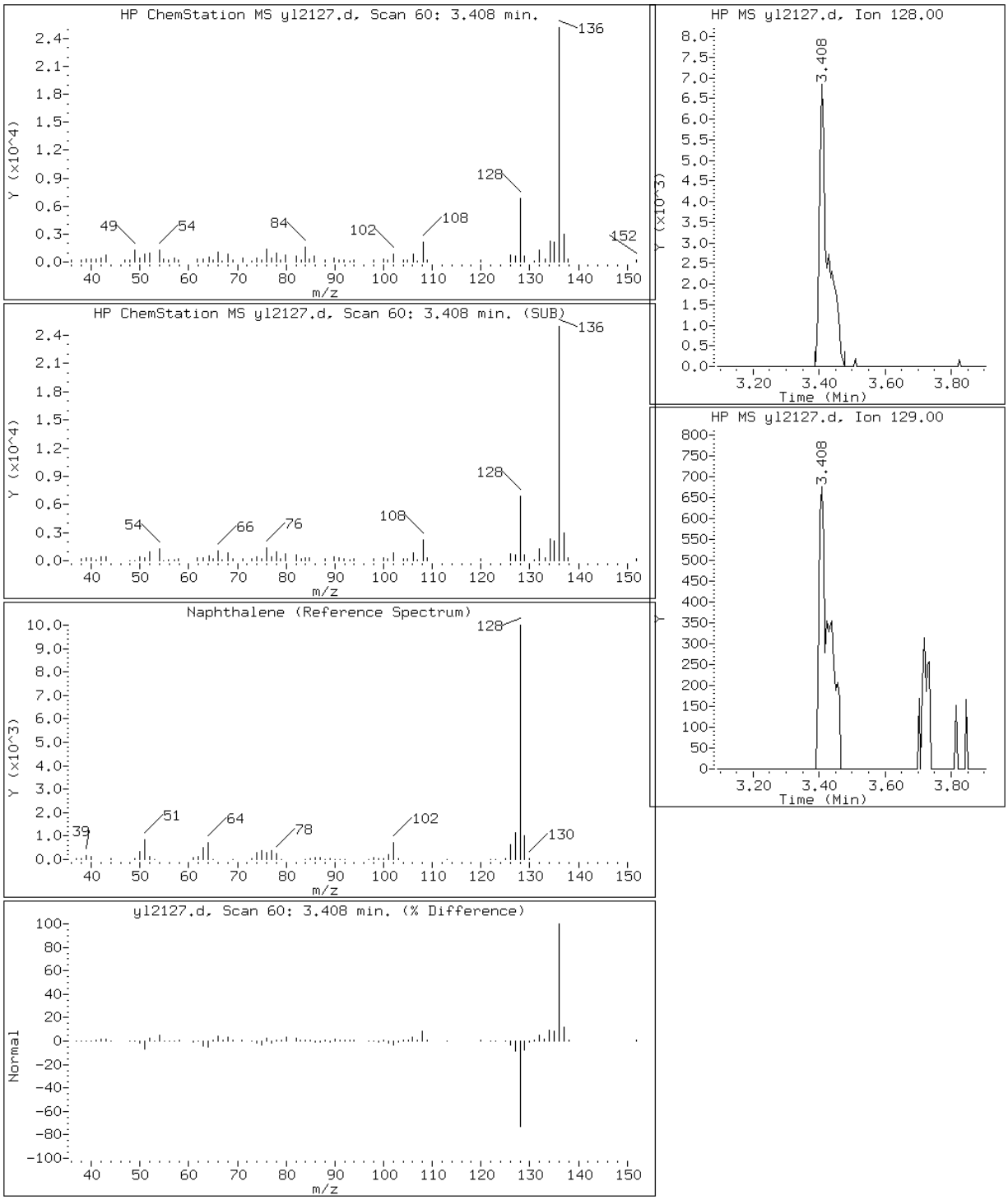
Data File: yl2127.d

Date: 21-DEC-2012 19:54

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-71-A DL=10 Operator: VHB

2 Naphthalene



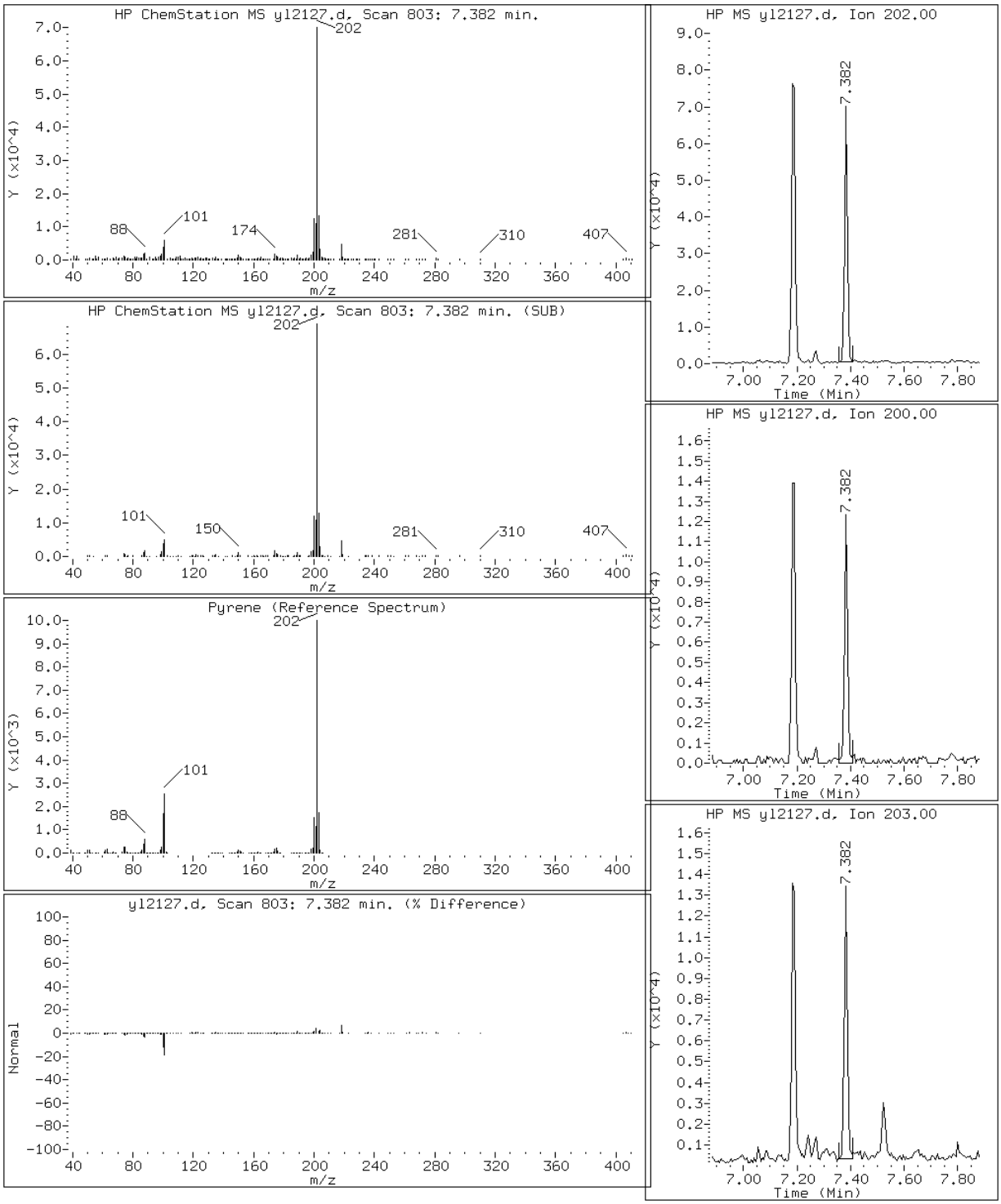
Data File: yl2127.d

Date: 21-DEC-2012 19:54

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-71-A DL=10 Operator: VHB

14 Pyrene



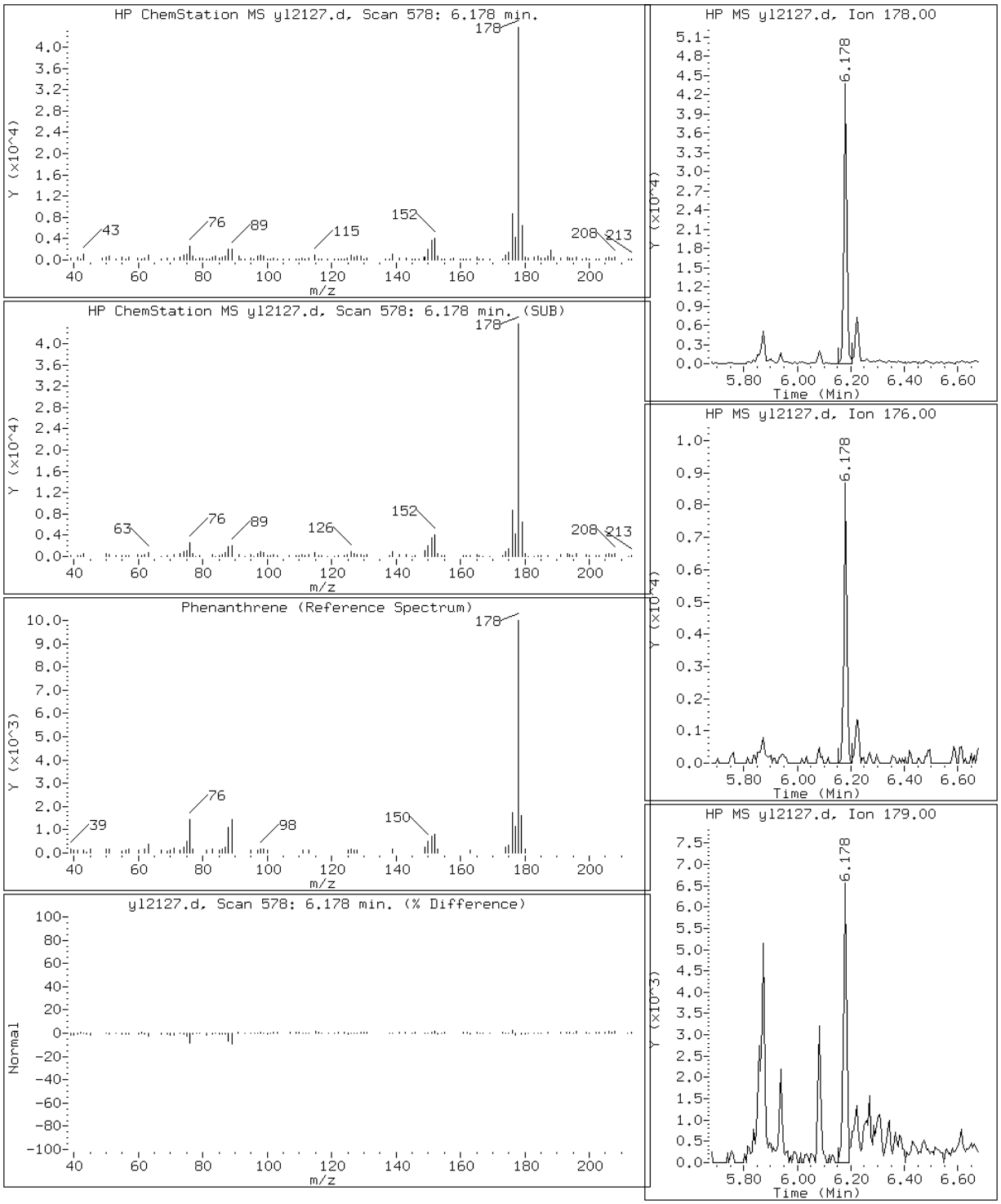
Data File: yl2127.d

Date: 21-DEC-2012 19:54

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-71-A DL=10 Operator: VHB

10 Phenanthrene



Manual Integration Report

Data File: yl2127.d
Inj. Date and Time: 21-DEC-2012 19:54
Instrument ID: MSY5975.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 12/27/2012

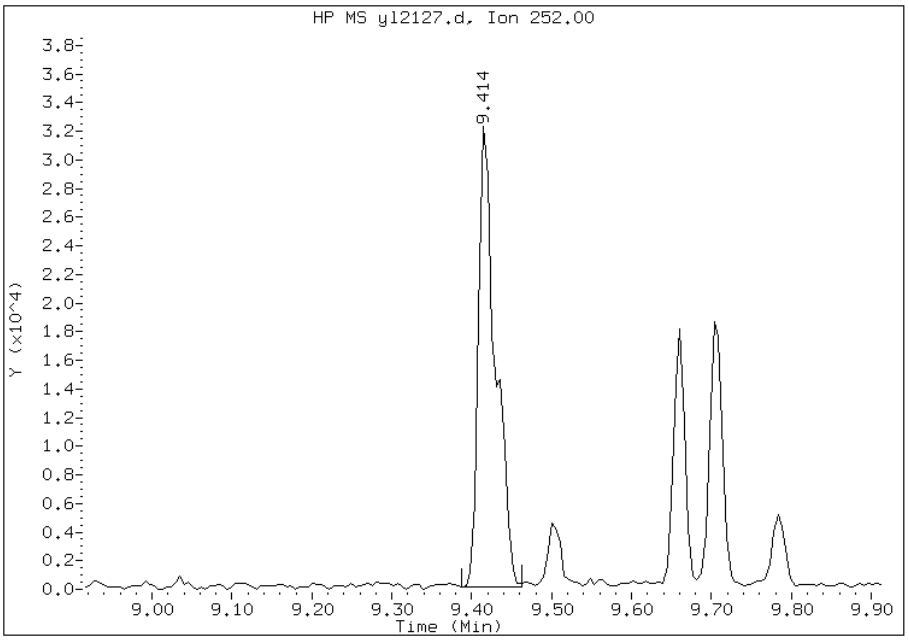
Processing Integration Results

RT: 9.41

Response: 47587

Amount: 1

Conc: 246



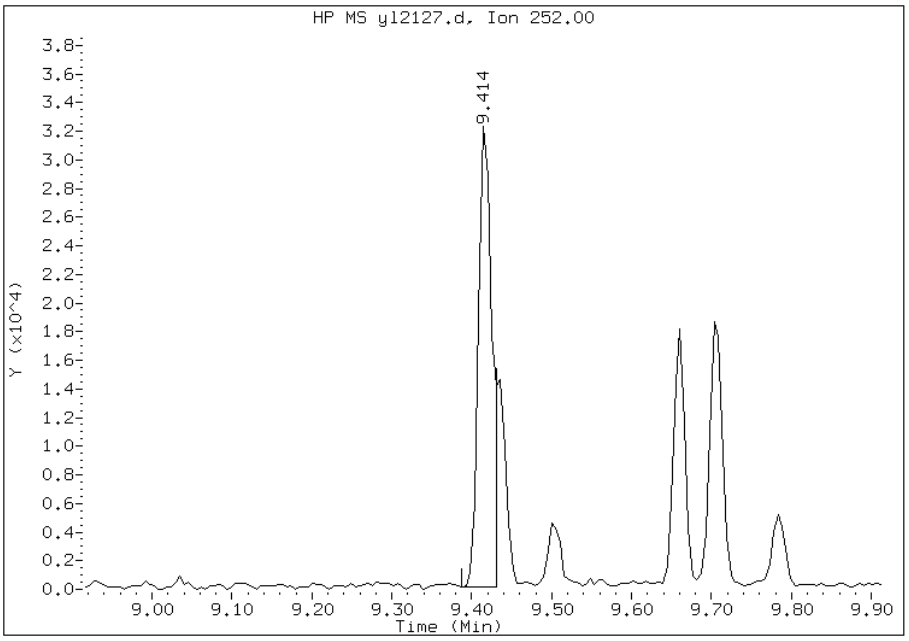
Manual Integration Results

RT: 9.41

Response: 37936

Amount: 1

Conc: 196



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: yl2127.d
Inj. Date and Time: 21-DEC-2012 19:54
Instrument ID: MSY5975.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 12/27/2012

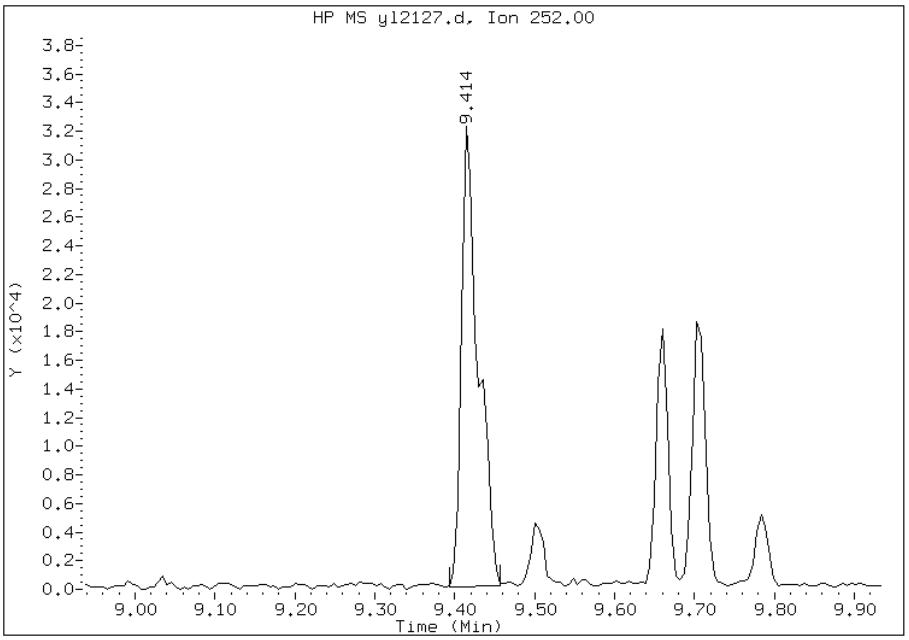
Processing Integration Results

RT: 9.41

Response: 47485

Amount: 1

Conc: 241



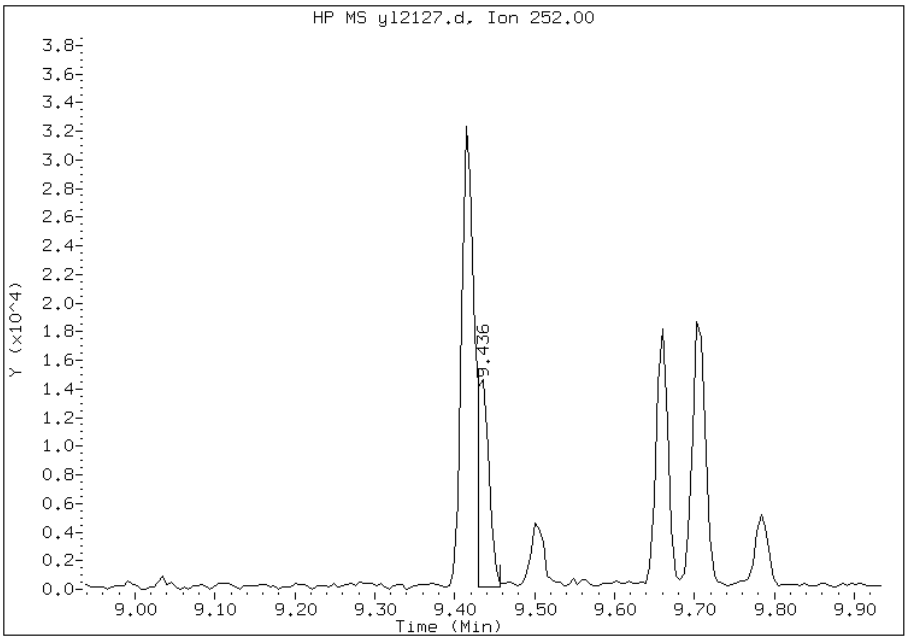
Manual Integration Results

RT: 9.44

Response: 14097

Amount: 0

Conc: 71



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.: 680-85860-4

SDG No.: 68085860-4

Client Sample ID: FM0251A-CS | Lab Sample ID: 680-85860-72

Matrix: Solid | Lab File ID: kl2132.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/14/2012 10:18

Extract. Method: 3546 | Date Extracted: 12/20/2012 18:29

Sample wt/vol: 30.43(g) | Date Analyzed: 12/21/2012 20:26

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

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

% Moisture: 18.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261200 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	47	J	81	38
91-57-6	2-Methylnaphthalene	76	J	81	40
83-32-9	Acenaphthene	81	U	81	40
208-96-8	Acenaphthylene	81	U	81	40
120-12-7	Anthracene	130		81	40
56-55-3	Benzo[a]anthracene	950		81	40
50-32-8	Benzo[a]pyrene	780		81	15
205-99-2	Benzo[b]fluoranthene	1500		81	40
191-24-2	Benzo[g,h,i]perylene	81	U	81	40
207-08-9	Benzo[k]fluoranthene	850		81	24
218-01-9	Chrysene	1000		81	40
53-70-3	Dibenz(a,h)anthracene	81	U	81	40
206-44-0	Fluoranthene	2000		81	40
86-73-7	Fluorene	81	U	81	40
193-39-5	Indeno[1,2,3-cd]pyrene	200		81	40
91-20-3	Naphthalene	110		81	40
129-00-0	Pyrene	1800		81	40
85-01-8	Phenanthrene	780		81	29

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/1k122112.b/kl2132.d
Lab Smp Id: 680-85860-A-72-A DL
Inj Date : 21-DEC-2012 20:26
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85860-A-72-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122112.b/k-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 09:18 chemist Quant Type: ISTD
Cal Date : 14-DEC-2012 10:35 Cal File: kl1409q.d
Als bottle: 30
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	4.777	4.777	(1.000)	1036772	2.00000	
2 Naphthalene	128	4.800	4.800	(1.005)	173211	0.28284	94.27
3 2-Methylnaphthalene	142	5.482	5.482	(1.148)	73660	0.18859	62.86(a)
4 1-Methylnaphthalene	142	5.588	5.588	(1.170)	46051	0.11616	38.72(a)
* 5 Acenaphthene-d10	164	6.586	6.586	(1.000)	562623	2.00000	
* 9 Phenanthrene-d10	188	8.220	8.220	(1.000)	964716	2.00000	
10 Phenanthrene	178	8.249	8.243	(1.004)	1201054	1.93153	643.84

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
11 Anthracene	178	8.302	8.302	(1.010)	204440	0.33202	110.67
12 Fluoranthene	202	9.542	9.536	(1.161)	3322208	5.00986	1669.95
14 Pyrene	202	9.783	9.777	(0.887)	2528875	4.51542	1505.13
16 Benzo(a)Anthracene	228	11.070	11.040	(1.003)	1182328	2.35473	784.90
* 13 Chrysene-d12	240	11.081	11.052	(1.000)	744219	2.00000	(H)
17 Chrysene	228	11.111	11.081	(1.003)	1240766	2.54463	848.21(M)
19 Benzo(b)fluoranthene	252	12.345	12.297	(0.958)	1202337	3.73097	1243.65(M)
20 Benzo(k)fluoranthene	252	12.362	12.333	(0.959)	654010	2.09669	698.89(M)
21 Benzo(a)pyrene	252	12.726	12.756	(0.992)	501060	1.93135	643.78
* 18 Perylene-d12	264	12.885	12.838	(1.000)	461816	2.00000	(H)
22 Indeno(1,2,3-cd)pyrene	276	14.736	14.683	(1.335)	229023	0.49480	164.93

QC Flag Legend

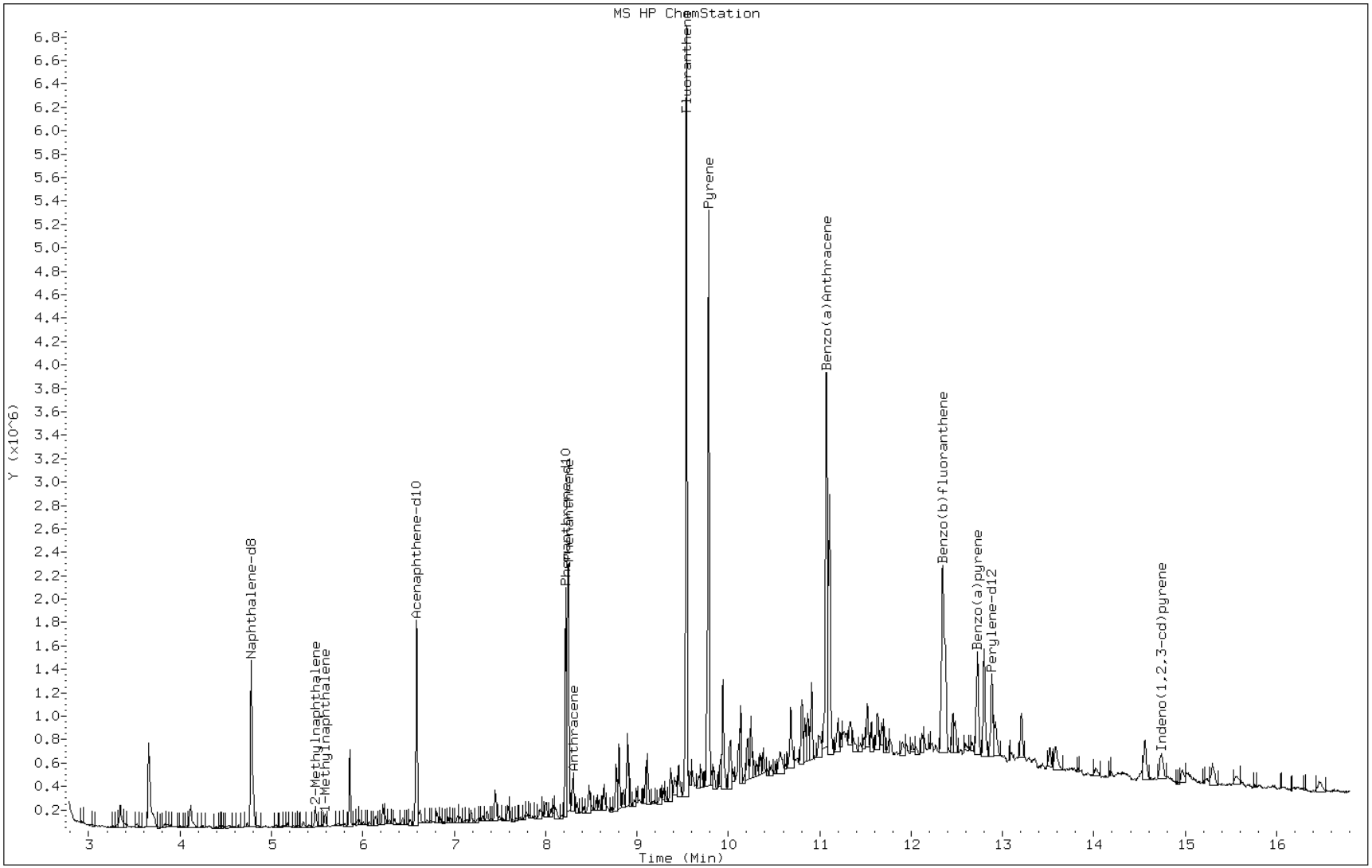
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: kl2132.d

Date: 21-DEC-2012 20:26

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-72-A DL=10 Operator: LEG



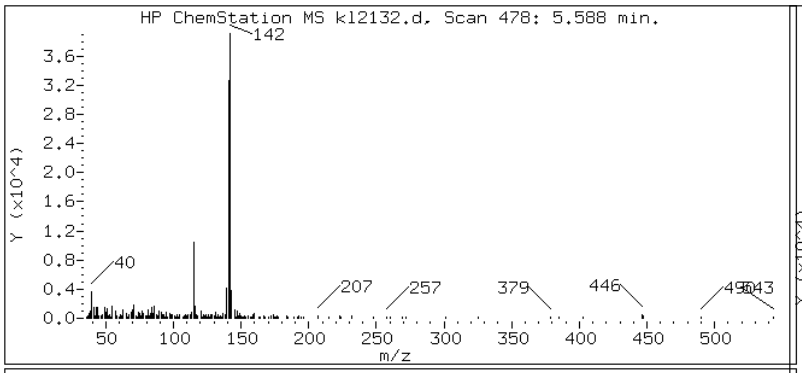
Data File: kl2132.d

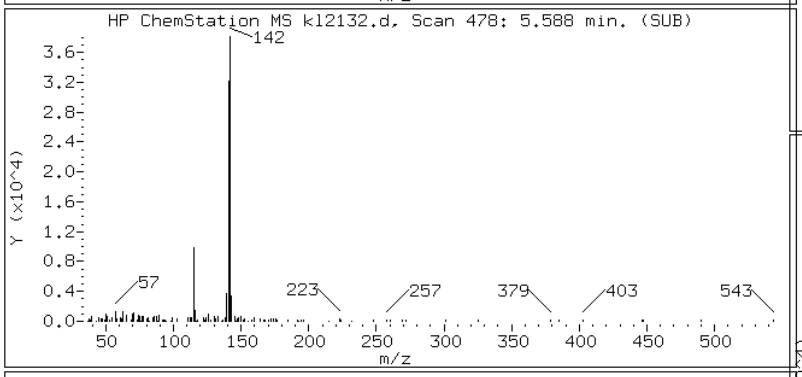
Date: 21-DEC-2012 20:26

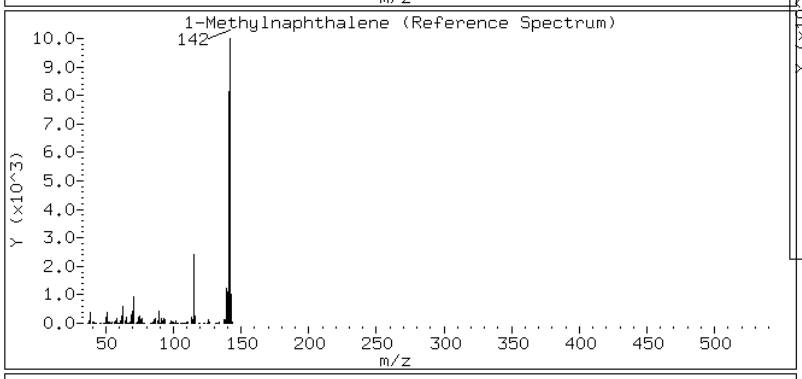
Client ID: Instrument: MSK5973.i

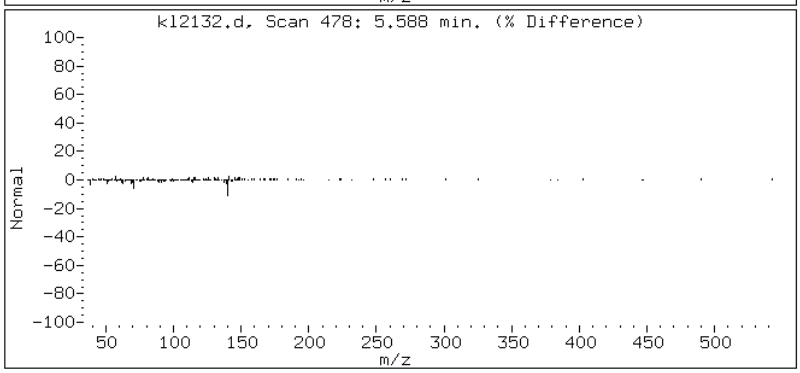
Sample Info: 680-85860-A-72-A DL=10 Operator: LEG

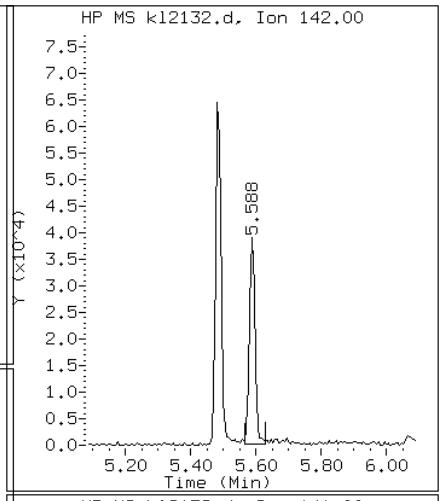
4 1-Methylnaphthalene

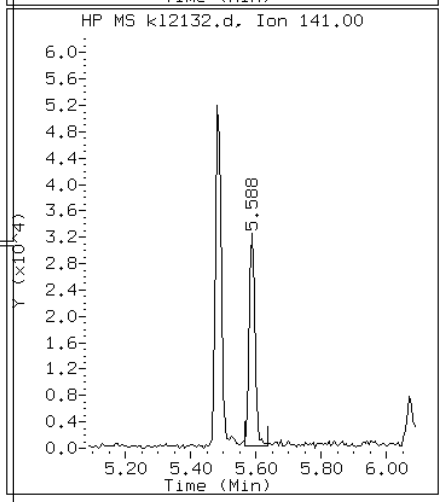












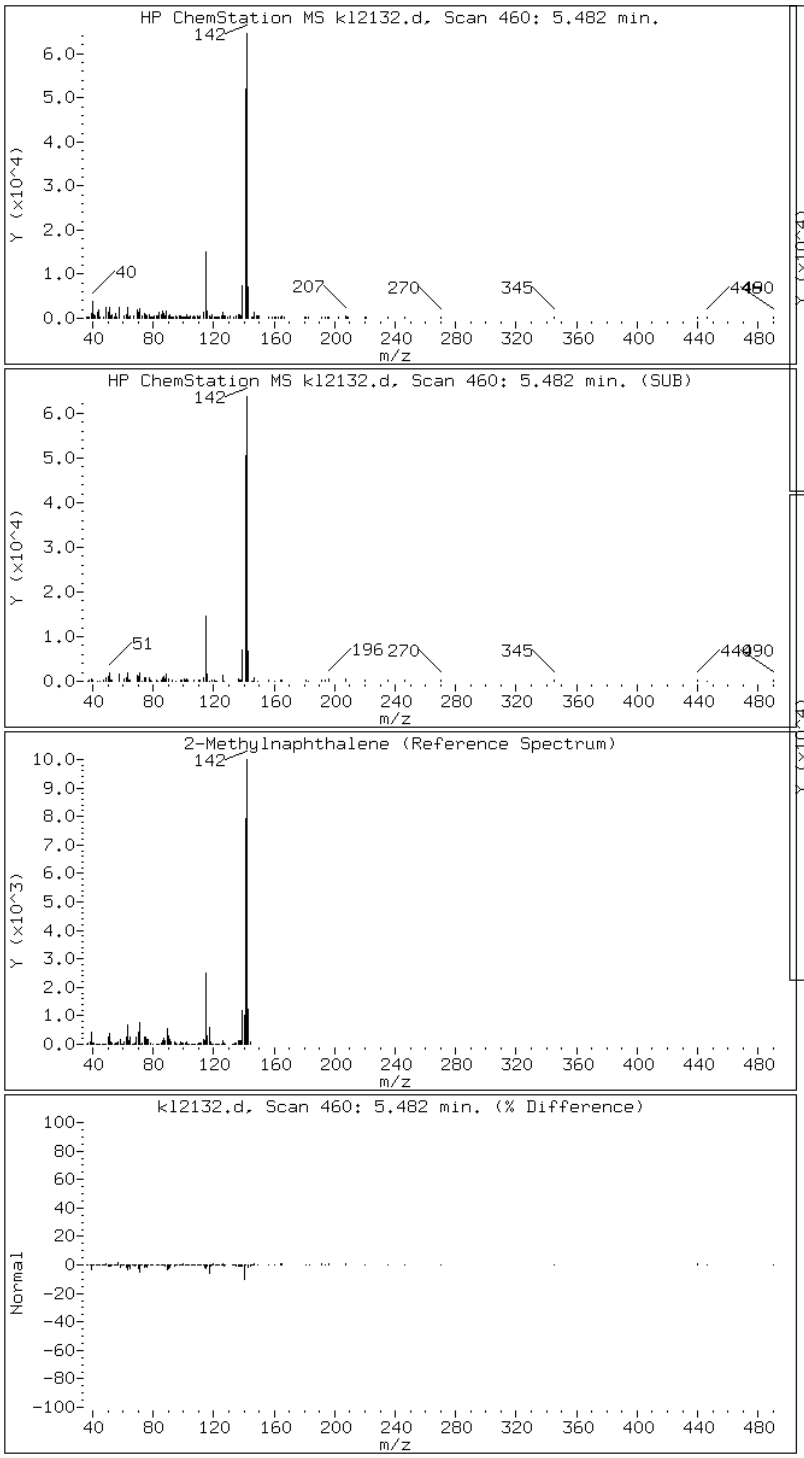
Data File: kl2132.d

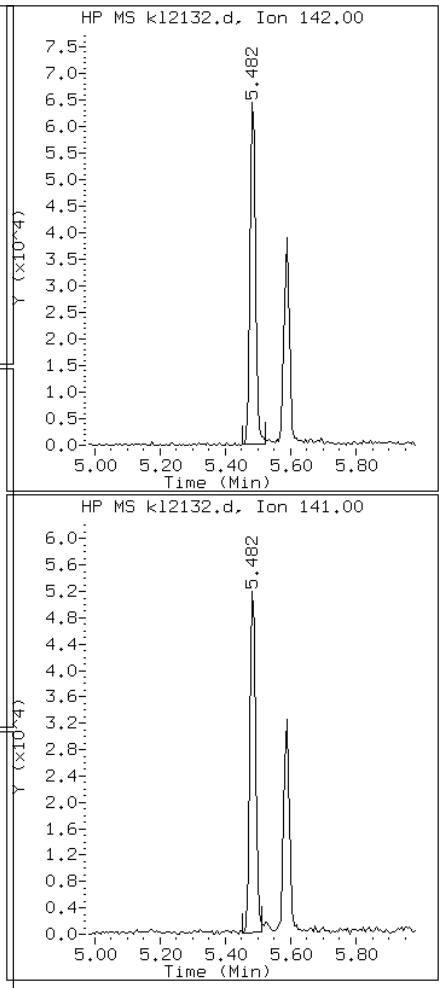
Date: 21-DEC-2012 20:26

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-72-A DL=10 Operator: LEG

3 2-Methylnaphthalene





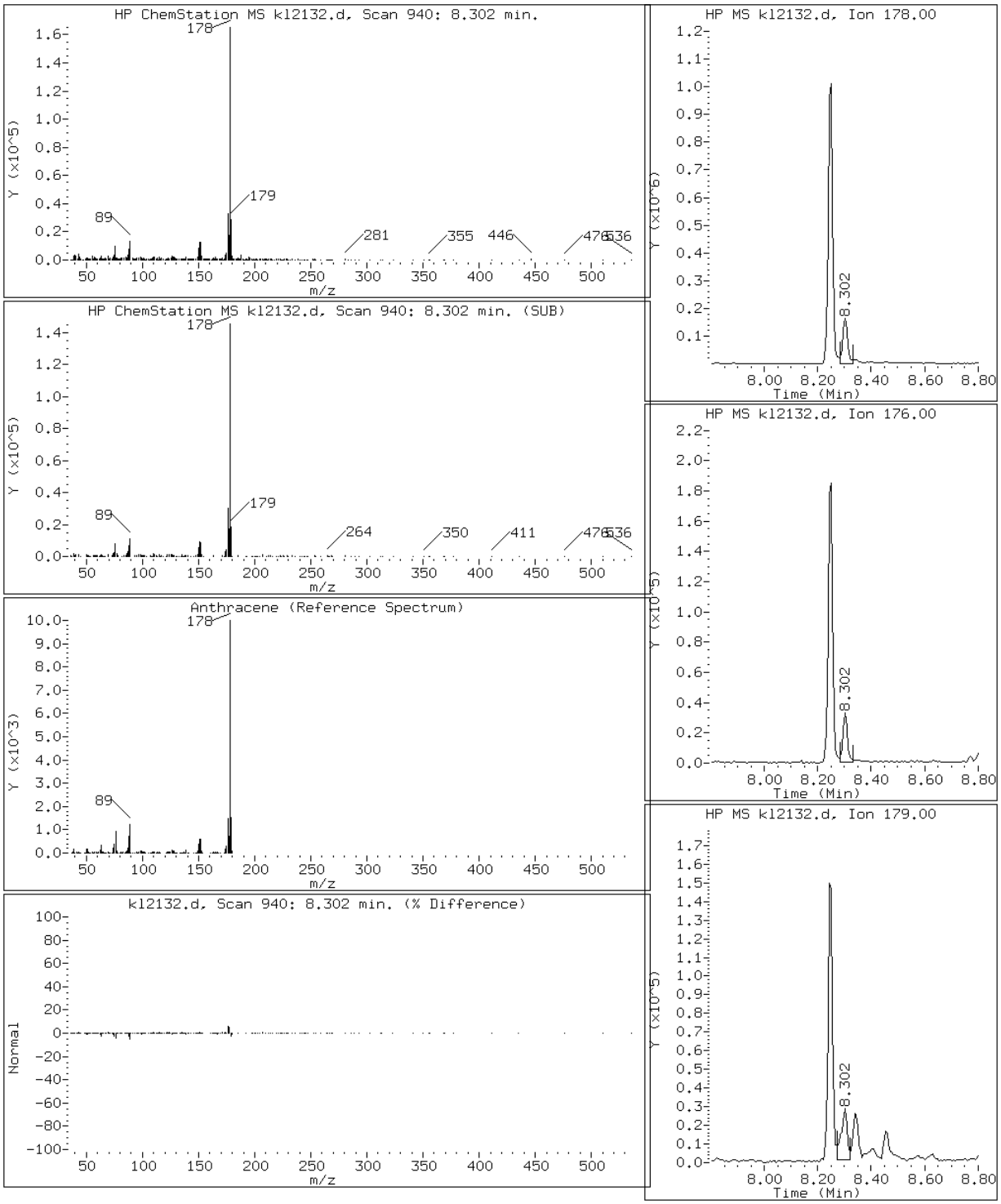
Data File: kl2132.d

Date: 21-DEC-2012 20:26

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-72-A DL=10 Operator: LEG

11 Anthracene



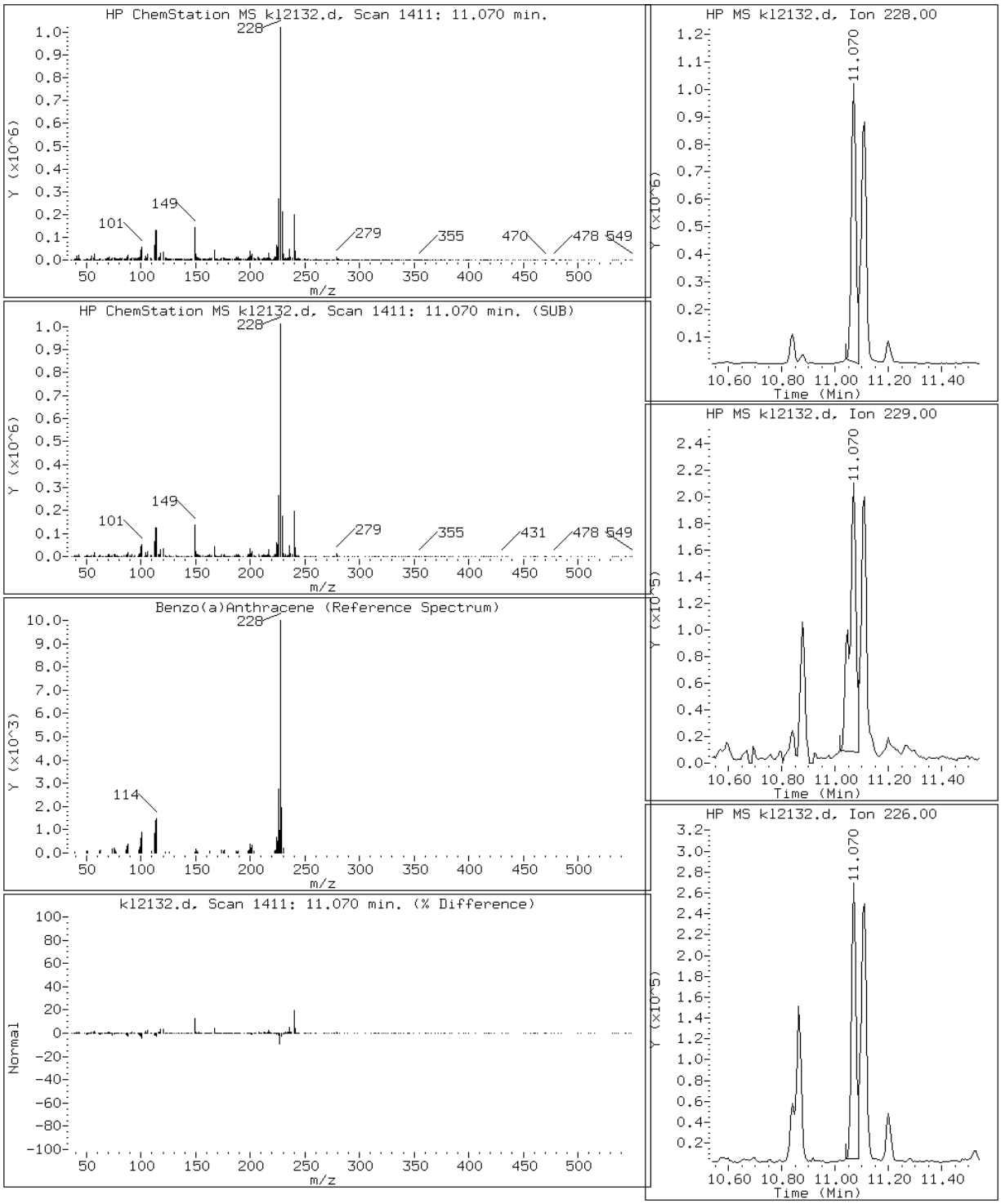
Data File: kl2132.d

Date: 21-DEC-2012 20:26

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-72-A DL=10 Operator: LEG

16 Benzo(a)Anthracene



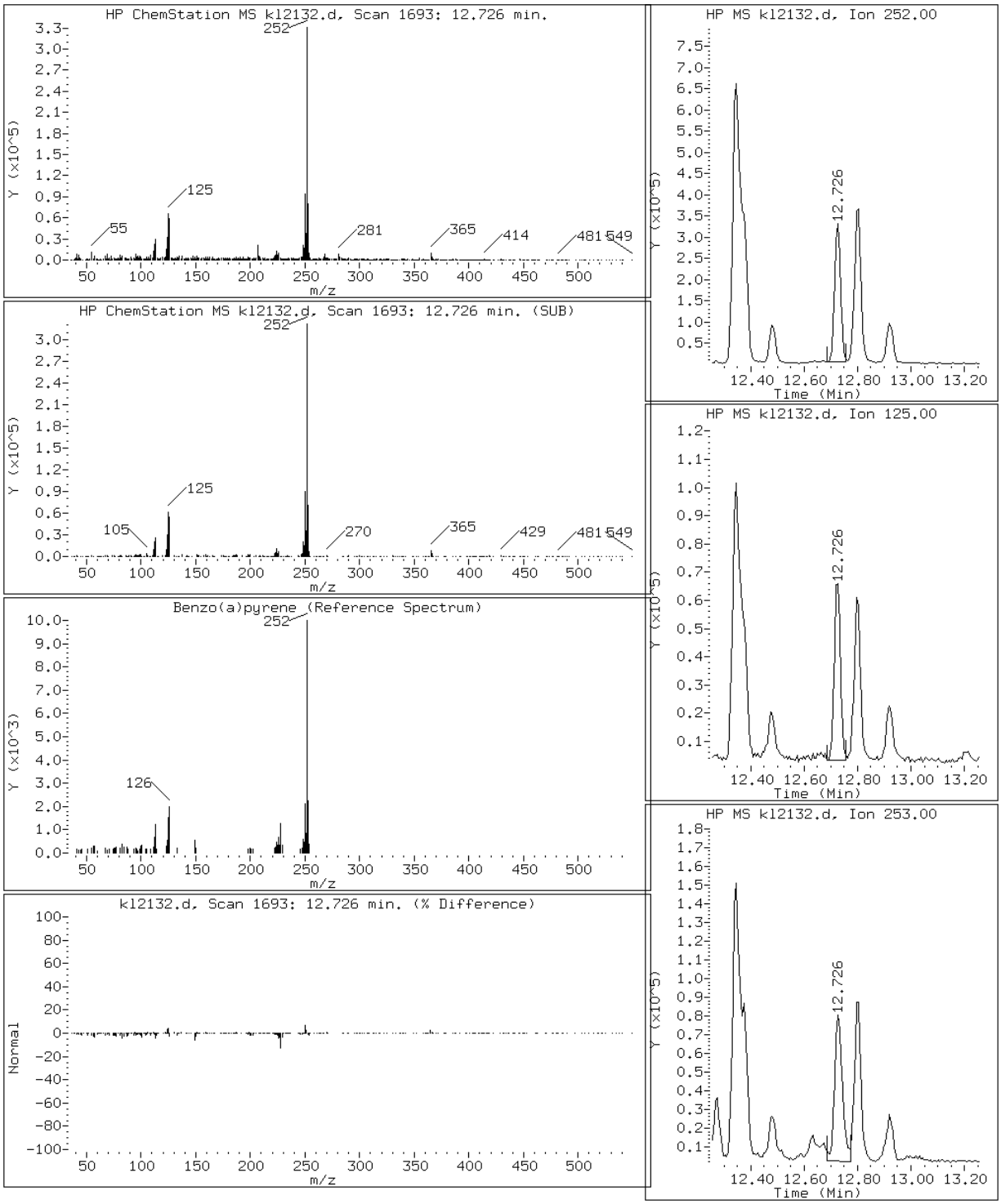
Data File: kl2132.d

Date: 21-DEC-2012 20:26

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-72-A DL=10 Operator: LEG

21 Benzo(a)pyrene



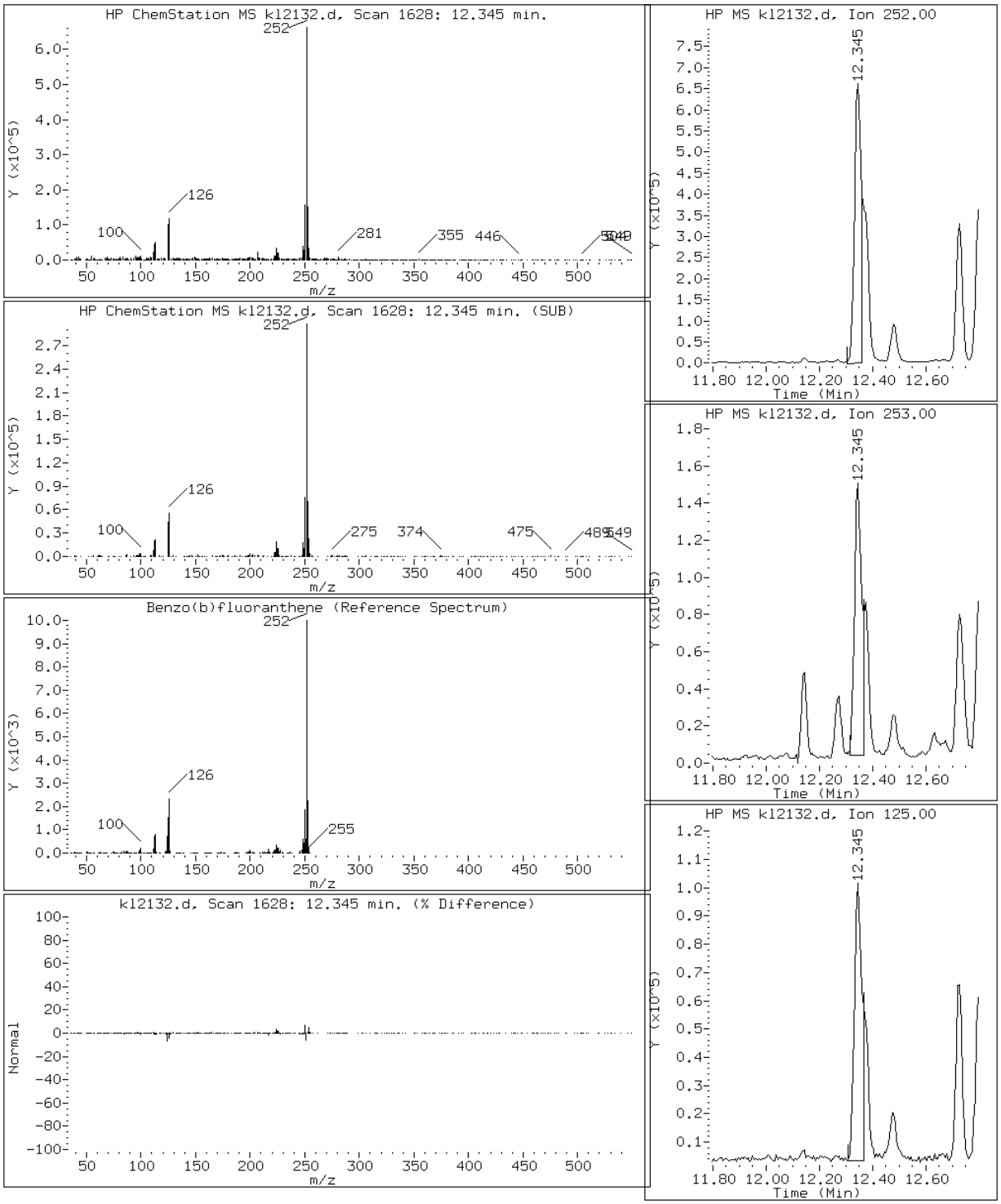
Data File: kl2132.d

Date: 21-DEC-2012 20:26

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-72-A DL=10 Operator: LEG

19 Benzo(b)fluoranthene



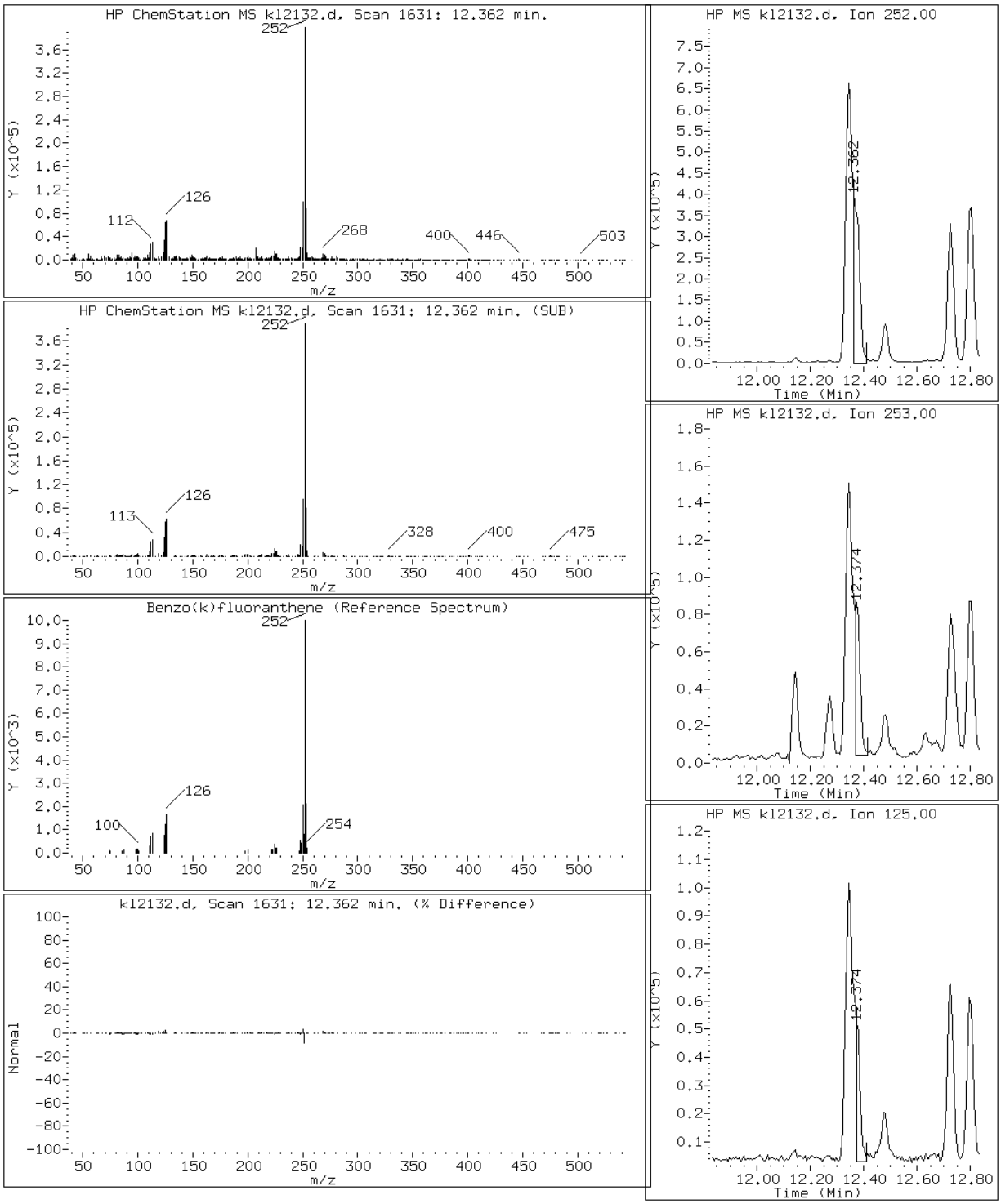
Data File: kl2132.d

Date: 21-DEC-2012 20:26

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-72-A DL=10 Operator: LEG

20 Benzo(k)fluoranthene



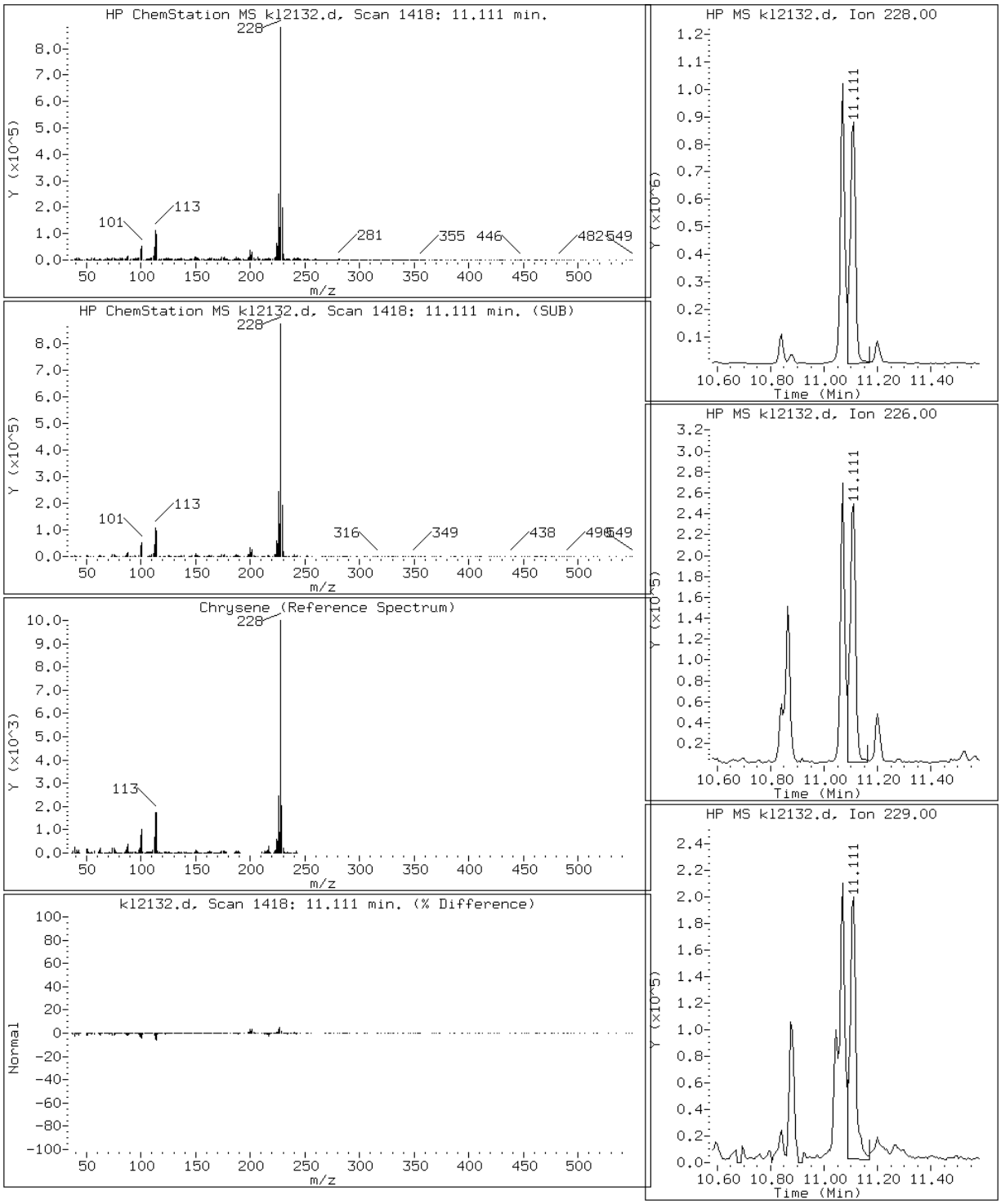
Data File: kl2132.d

Date: 21-DEC-2012 20:26

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-72-A DL=10 Operator: LEG

17 Chrysene



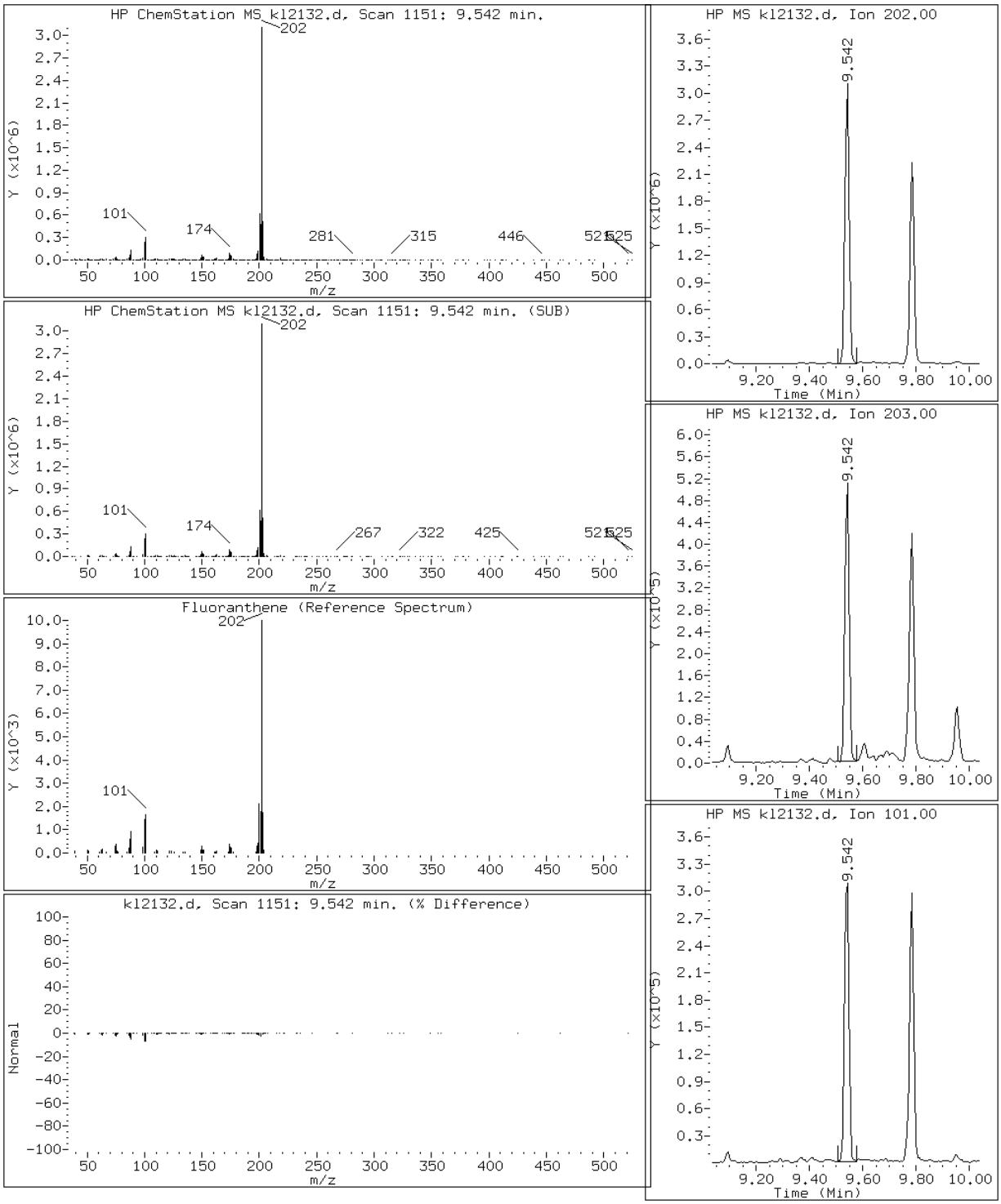
Data File: kl2132.d

Date: 21-DEC-2012 20:26

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-72-A DL=10 Operator: LEG

12 Fluoranthene



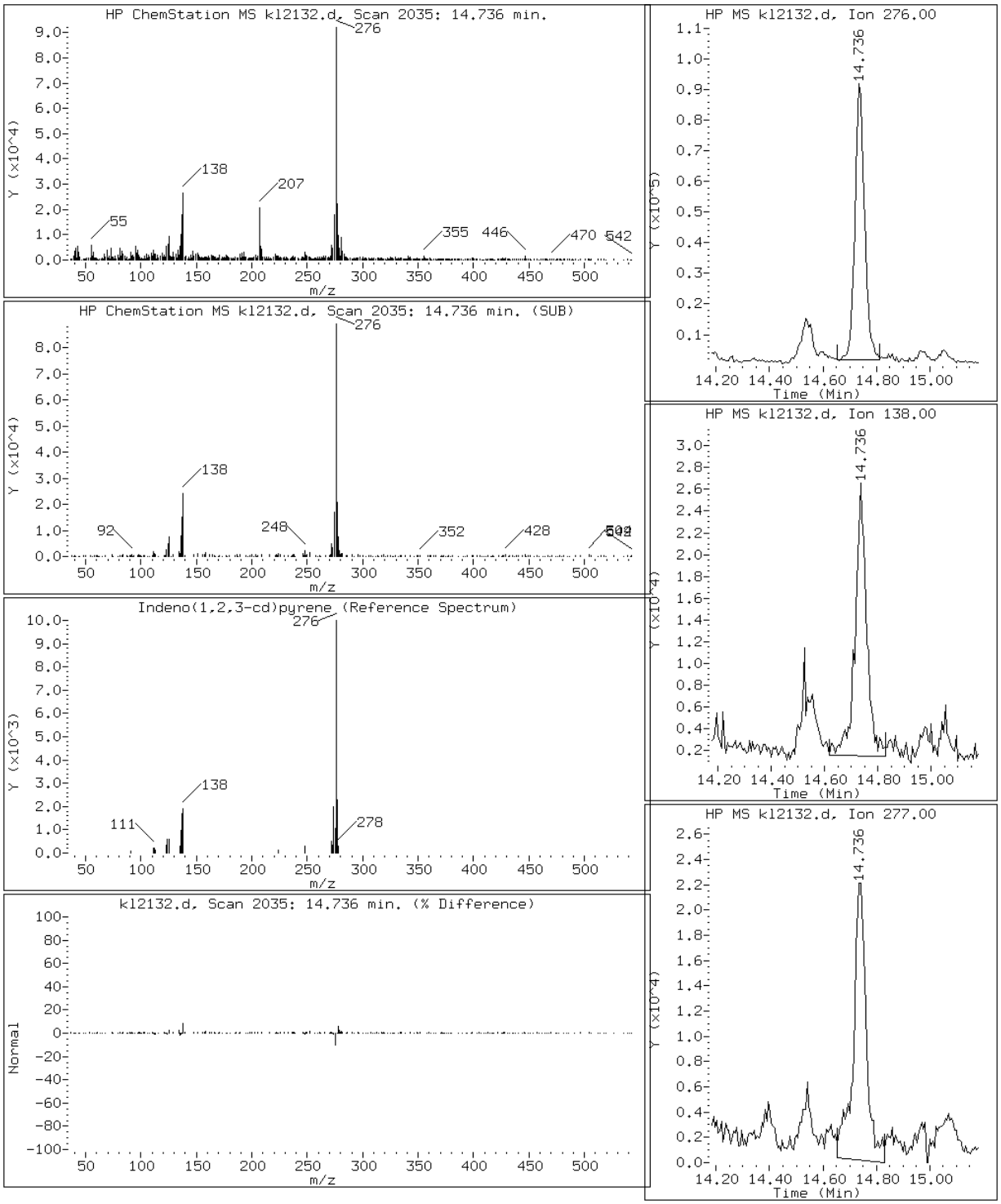
Data File: kl2132.d

Date: 21-DEC-2012 20:26

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-72-A DL=10 Operator: LEG

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



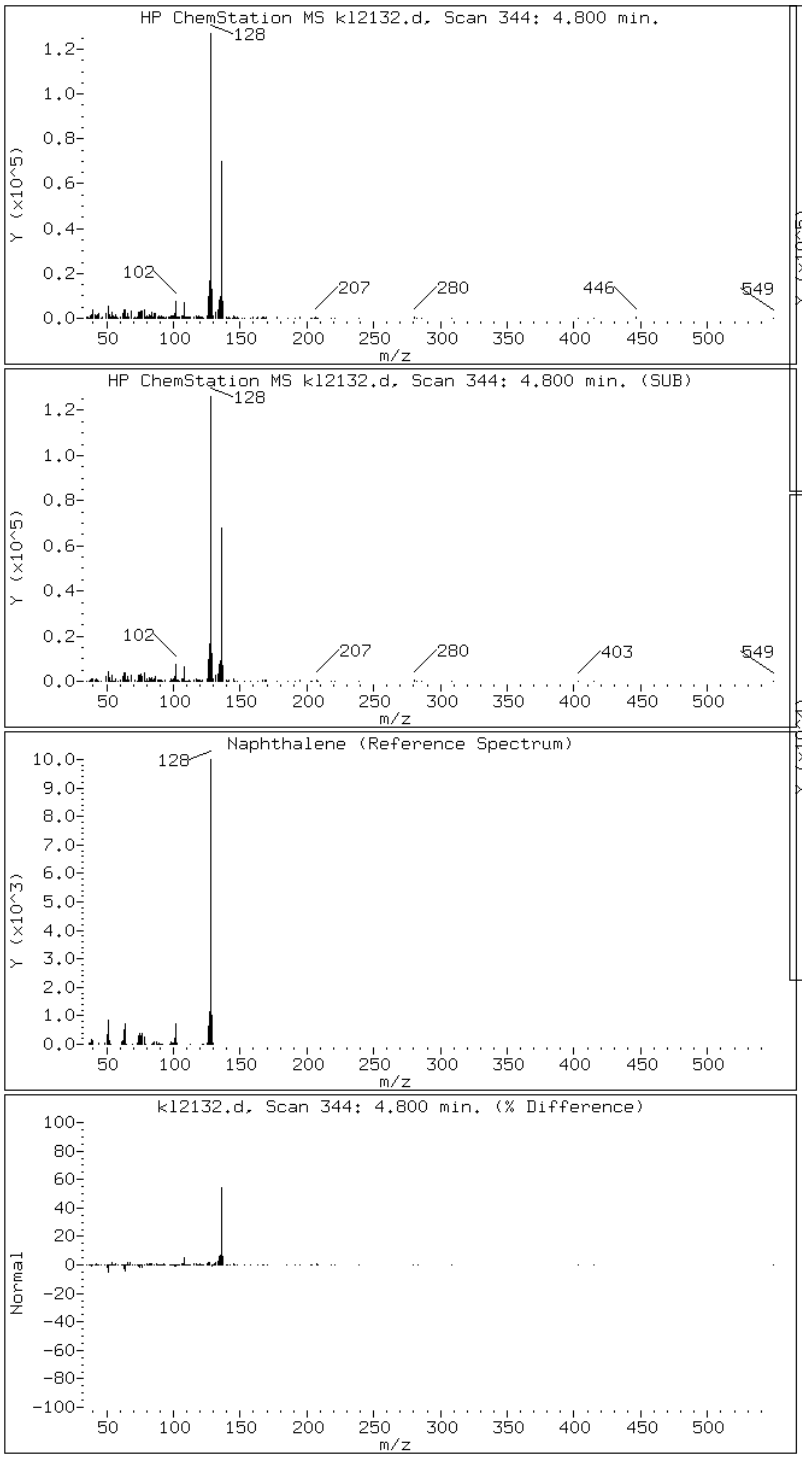
Data File: kl2132.d

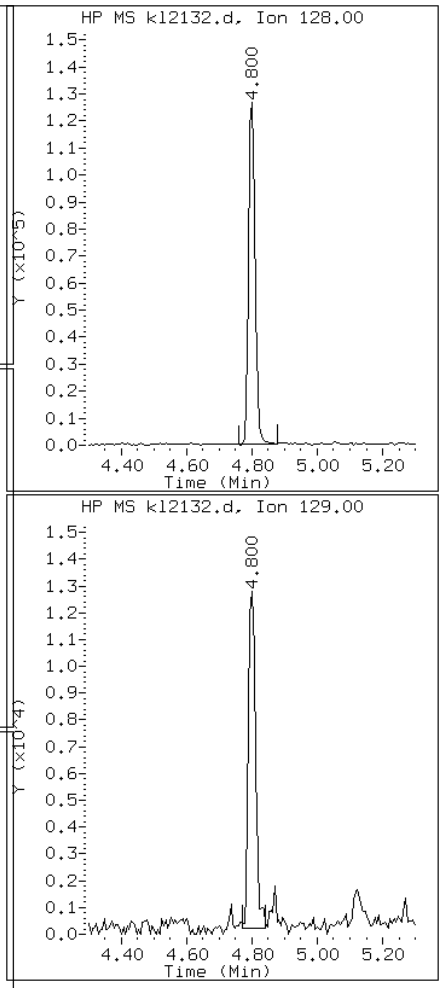
Date: 21-DEC-2012 20:26

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-72-A DL=10 Operator: LEG

2 Naphthalene





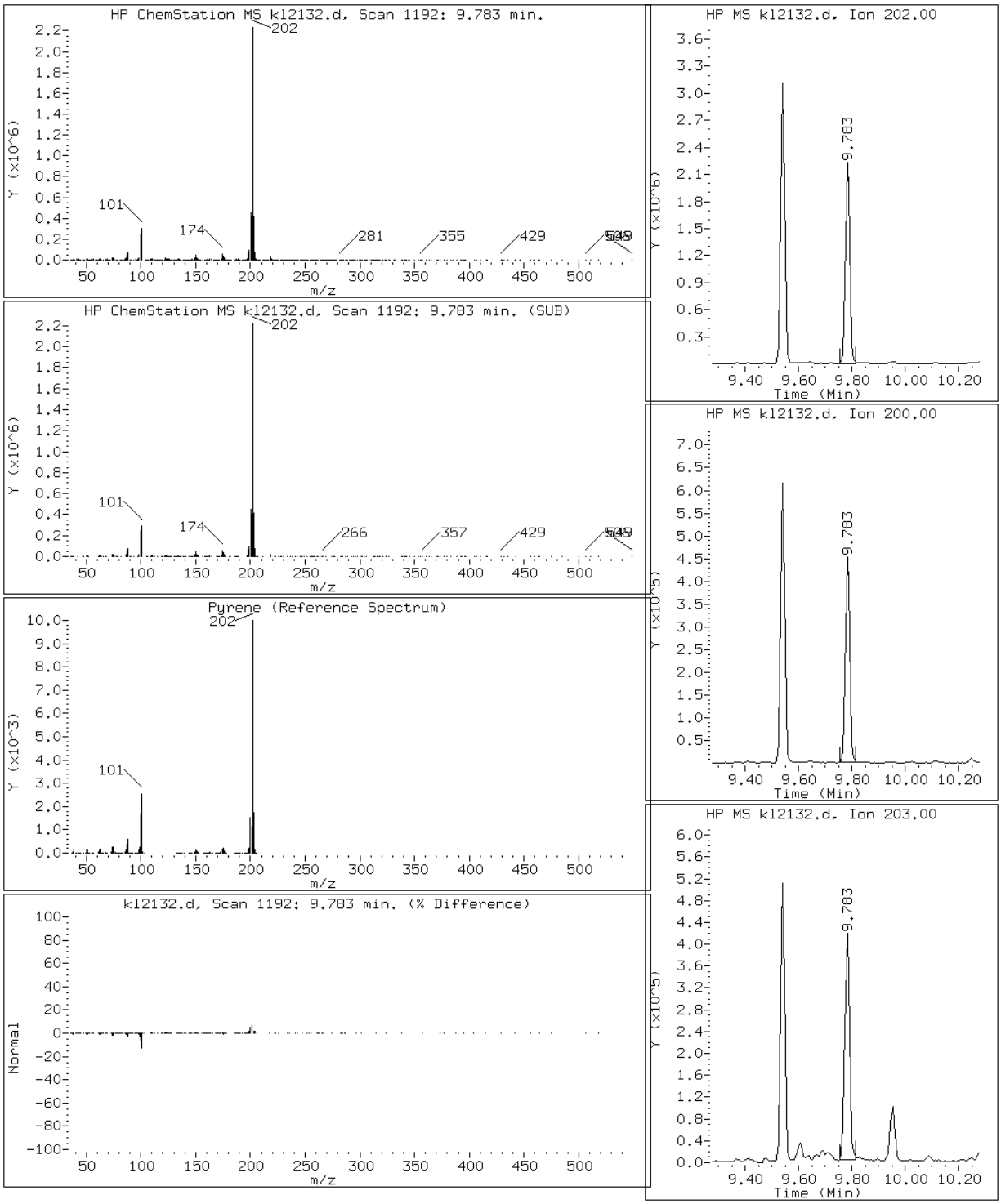
Data File: kl2132.d

Date: 21-DEC-2012 20:26

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-72-A DL=10 Operator: LEG

14 Pyrene



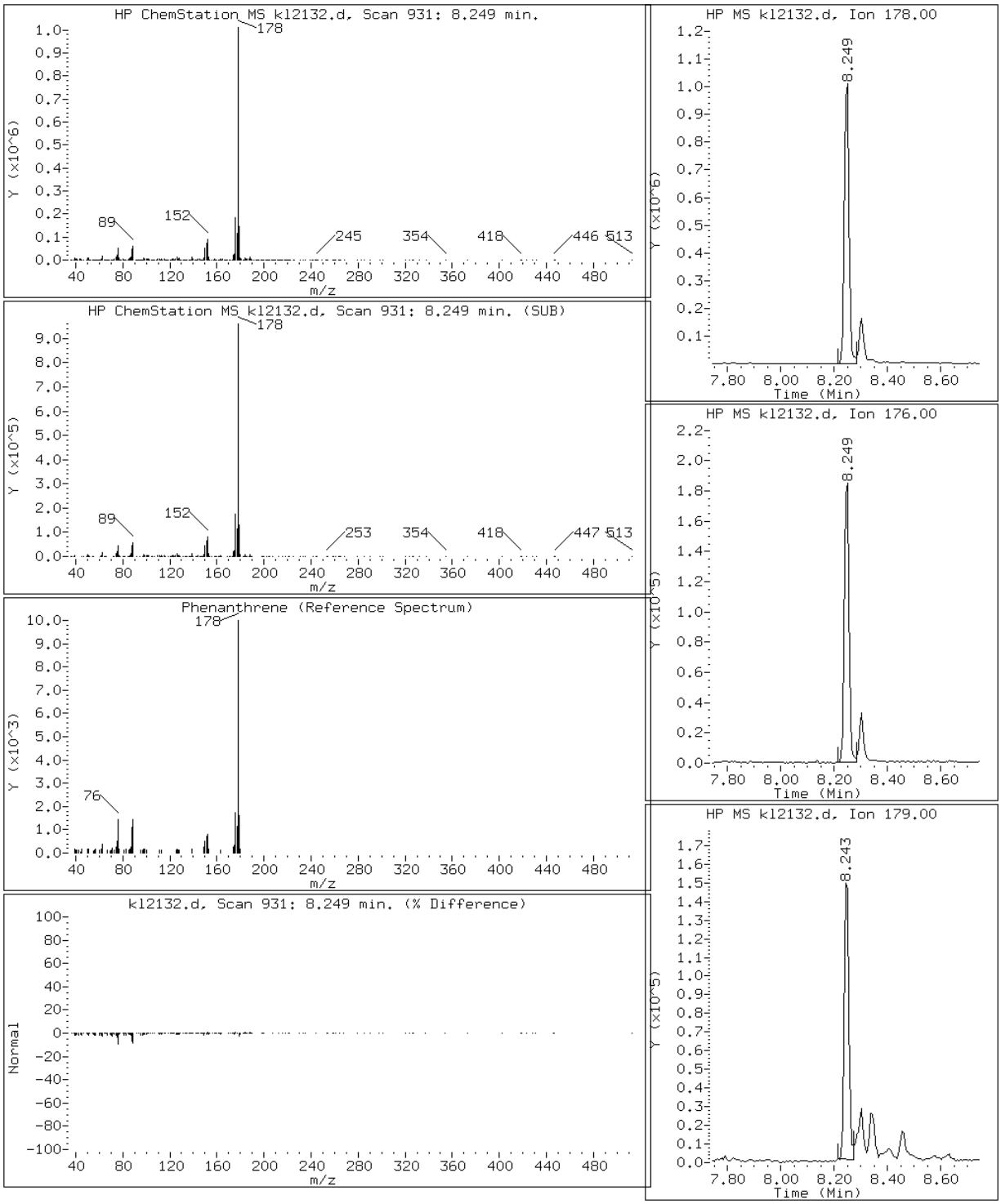
Data File: kl2132.d

Date: 21-DEC-2012 20:26

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-72-A DL=10 Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: kl2132.d
Inj. Date and Time: 21-DEC-2012 20:26
Instrument ID: MSK5973.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 12/27/2012

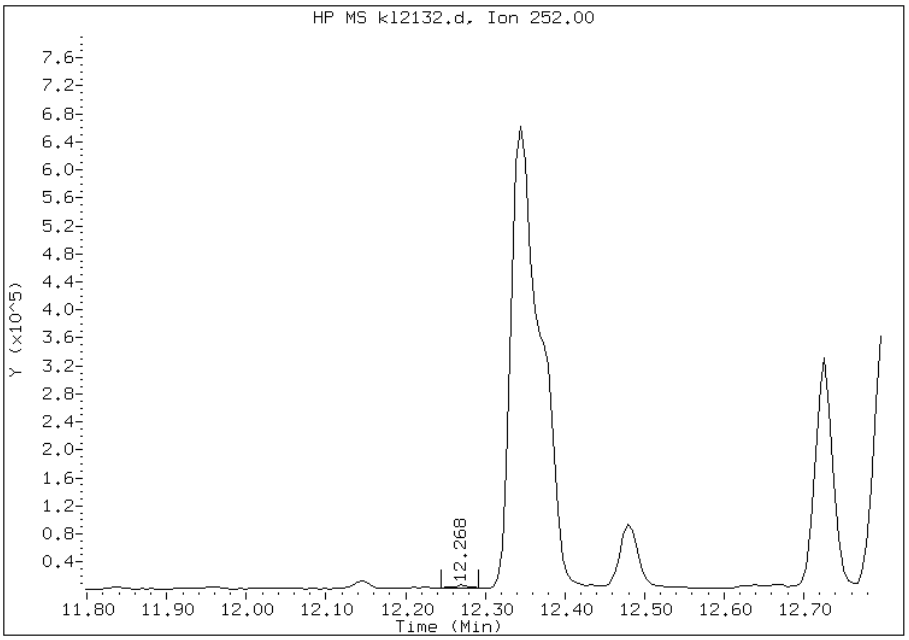
Processing Integration Results

RT: 12.27

Response: 7755

Amount: 0

Conc: 8



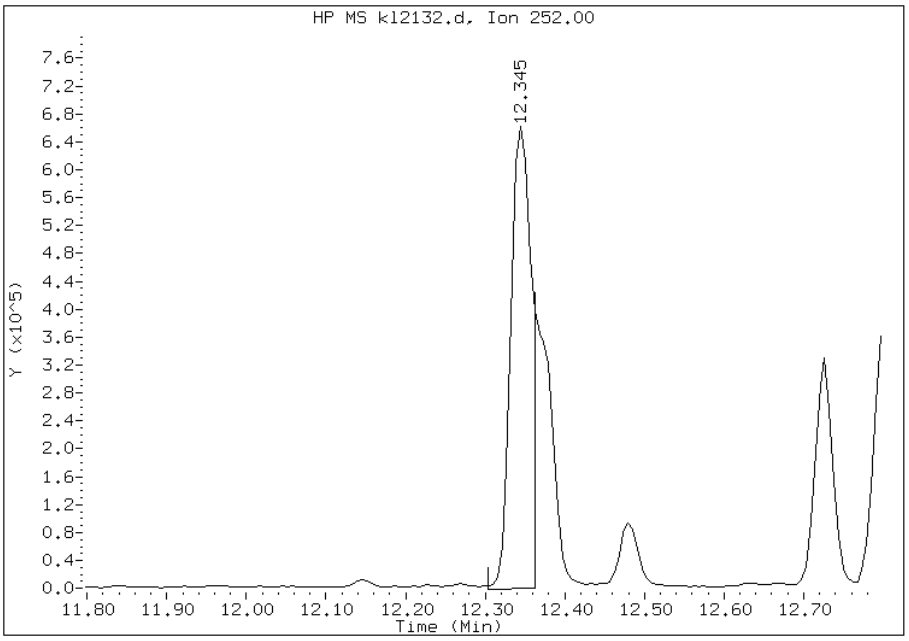
Manual Integration Results

RT: 12.34

Response: 1202337

Amount: 4

Conc: 1244



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

Manual Integration Report

Data File: kl2132.d
Inj. Date and Time: 21-DEC-2012 20:26
Instrument ID: MSK5973.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 12/27/2012

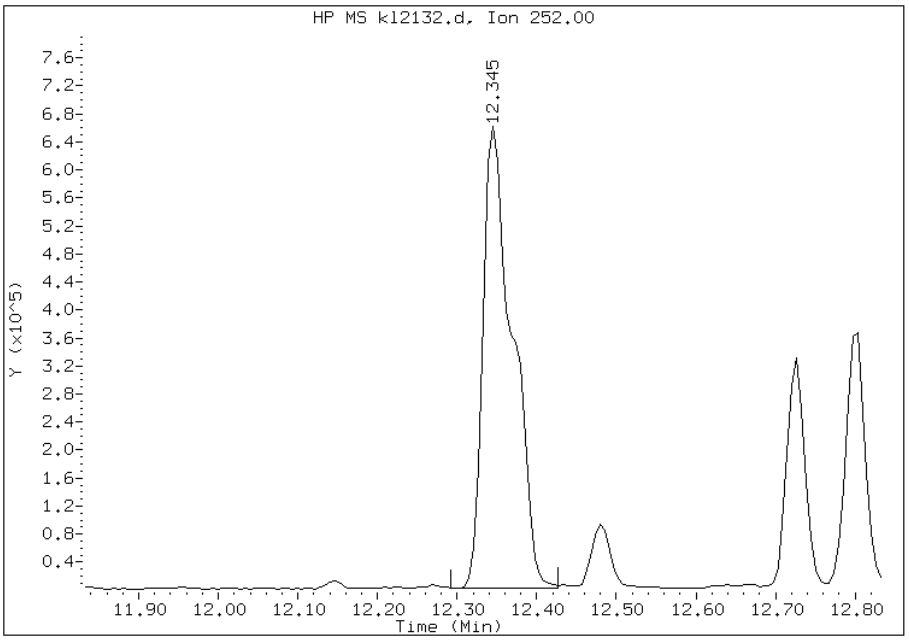
Processing Integration Results

RT: 12.34

Response: 1703677

Amount: 5

Conc: 1821



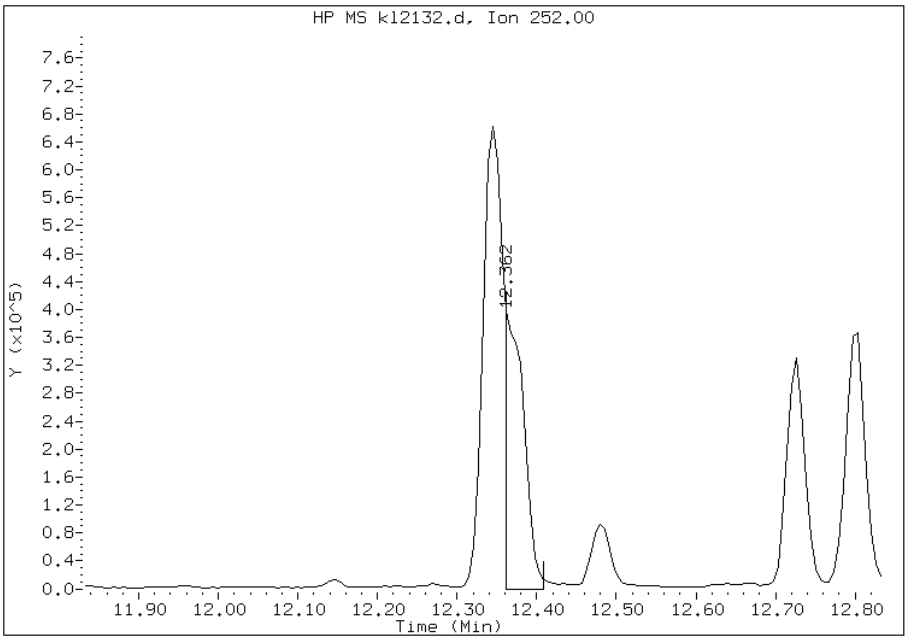
Manual Integration Results

RT: 12.36

Response: 654010

Amount: 2

Conc: 699



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: kl2132.d
Inj. Date and Time: 21-DEC-2012 20:26
Instrument ID: MSK5973.i
Client ID:
Compound: 17 Chrysene
CAS #: 218-01-9
Report Date: 12/27/2012

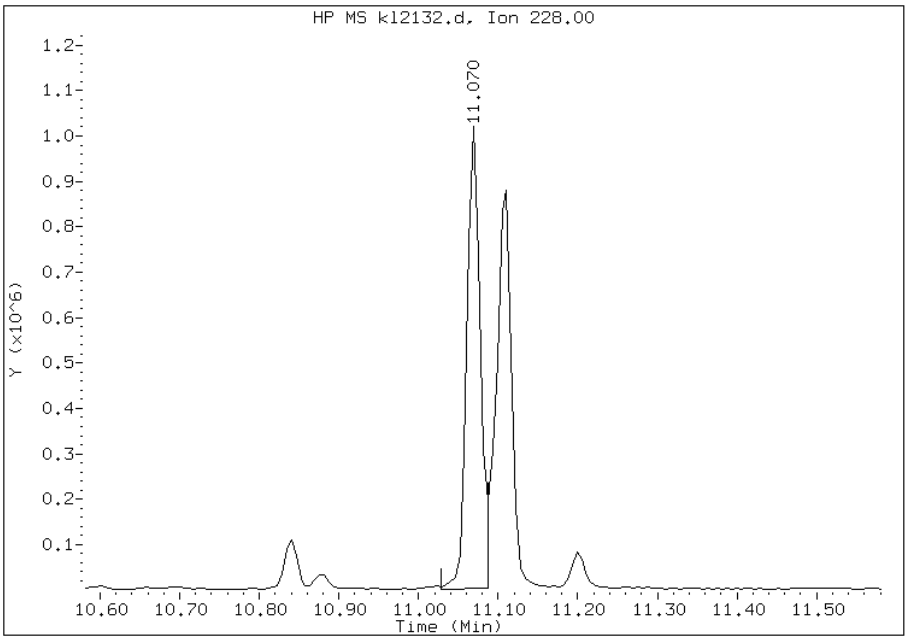
Processing Integration Results

RT: 11.07

Response: 1214301

Amount: 2

Conc: 830



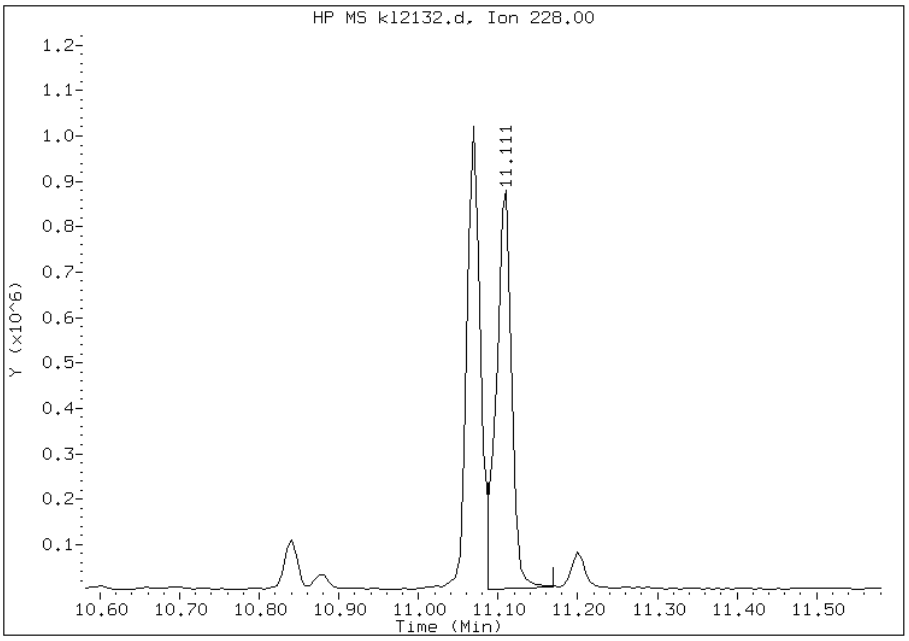
Manual Integration Results

RT: 11.11

Response: 1240766

Amount: 3

Conc: 848



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.: 680-85860-4

SDG No.: 68085860-4

Client Sample ID: FM0251B-CS | Lab Sample ID: 680-85860-73

Matrix: Solid | Lab File ID: kl2131.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/14/2012 10:00

Extract. Method: 3546 | Date Extracted: 12/20/2012 18:29

Sample wt/vol: 30.06(g) | Date Analyzed: 12/21/2012 20:03

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

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

% Moisture: 31.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261200 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	100		98	45
91-57-6	2-Methylnaphthalene	130		98	48
83-32-9	Acenaphthene	98	U	98	48
208-96-8	Acenaphthylene	98	U	98	48
120-12-7	Anthracene	130		98	48
56-55-3	Benzo[a]anthracene	740		98	48
50-32-8	Benzo[a]pyrene	790		98	17
205-99-2	Benzo[b]fluoranthene	1400		98	48
191-24-2	Benzo[g,h,i]perylene	290		98	48
207-08-9	Benzo[k]fluoranthene	600		98	29
218-01-9	Chrysene	980		98	48
53-70-3	Dibenz(a,h)anthracene	120		98	48
206-44-0	Fluoranthene	1500		98	48
86-73-7	Fluorene	61	J	98	48
193-39-5	Indeno[1,2,3-cd]pyrene	180		98	48
91-20-3	Naphthalene	150		98	48
129-00-0	Pyrene	1500		98	48
85-01-8	Phenanthrene	920		98	35

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/1k122112.b/kl2131.d
Lab Smp Id: 680-85860-A-73-A DL
Inj Date : 21-DEC-2012 20:03
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85860-A-73-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122112.b/k-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 09:18 chemist Quant Type: ISTD
Cal Date : 14-DEC-2012 10:35 Cal File: kl1409q.d
Als bottle: 29
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	4.777	4.777	(1.000)	1070990	2.00000	
2 Naphthalene	128	4.800	4.800	(1.005)	195858	0.30960	103.20
3 2-Methylnaphthalene	142	5.482	5.482	(1.148)	105966	0.26264	87.54
4 1-Methylnaphthalene	142	5.588	5.588	(1.170)	88523	0.21616	72.05
* 5 Acenaphthene-d10	164	6.592	6.586	(1.000)	588537	2.00000	
8 Fluorene	166	7.186	7.186	(1.090)	50126	0.12583	41.94(a)
* 9 Phenanthrene-d10	188	8.220	8.220	(1.000)	1002281	2.00000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
10 Phenanthrene	178	8.249	8.243	(1.004)	1230241	1.90432	634.77
11 Anthracene	178	8.302	8.302	(1.010)	173587	0.27134	90.44
12 Fluoranthene	202	9.542	9.536	(1.161)	2111675	3.06504	1021.67
14 Pyrene	202	9.783	9.777	(0.883)	1688468	3.13449	1044.82
16 Benzo(a)Anthracene	228	11.069	11.040	(0.999)	733070	1.51793	505.97
* 13 Chrysene-d12	240	11.075	11.052	(1.000)	715809	2.00000	
17 Chrysene	228	11.105	11.081	(1.003)	944955	2.01489	671.62(M)
19 Benzo(b)fluoranthene	252	12.339	12.297	(0.958)	908138	2.91993	973.31(M)
20 Benzo(k)fluoranthene	252	12.362	12.333	(0.960)	369342	1.22689	408.96(M)
21 Benzo(a)pyrene	252	12.721	12.756	(0.988)	405934	1.62126	540.41
* 18 Perylene-d12	264	12.879	12.838	(1.000)	445701	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	14.736	14.683	(1.331)	166356	0.37368	124.55
23 Dibenzo(a,h)anthracene	278	14.759	14.712	(1.146)	55487	0.23972	79.90
24 Benzo(g,h,i)perylene	276	15.294	15.241	(1.187)	144676	0.59206	197.35

QC Flag Legend

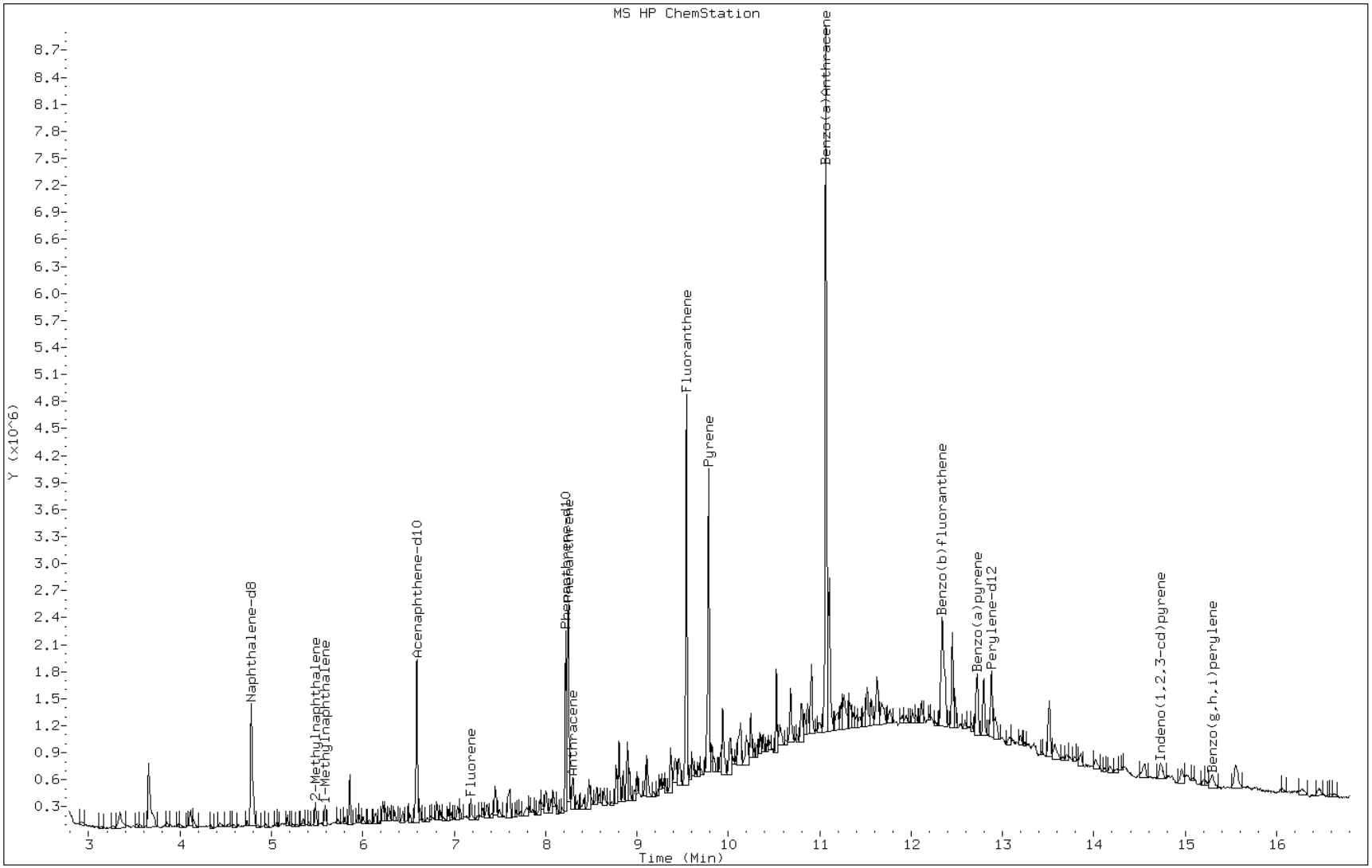
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: kl2131.d

Date: 21-DEC-2012 20:03

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-73-A DL=10 Operator: LEG



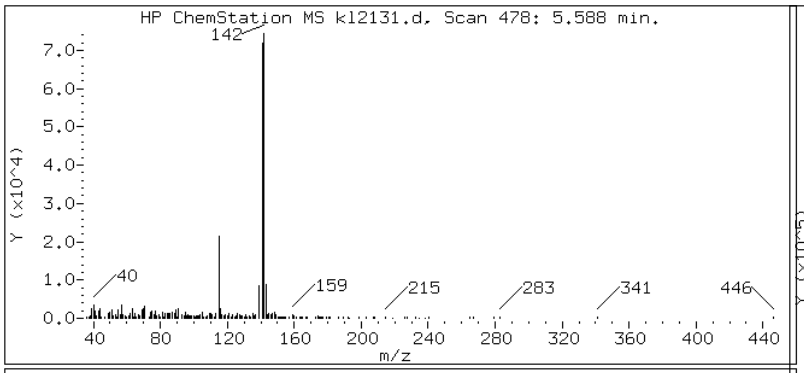
Data File: kl2131.d

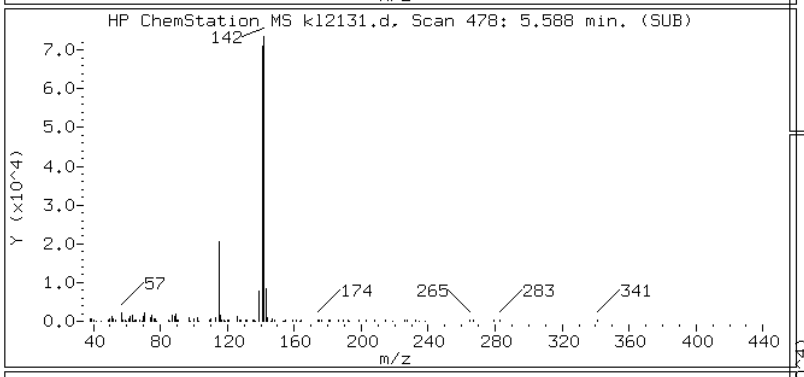
Date: 21-DEC-2012 20:03

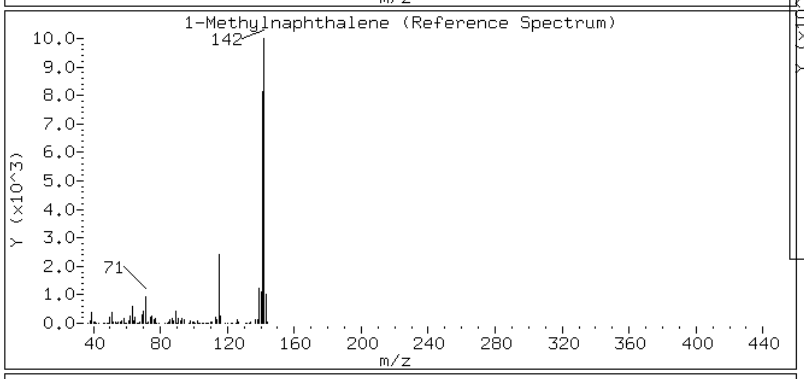
Client ID: Instrument: MSK5973.i

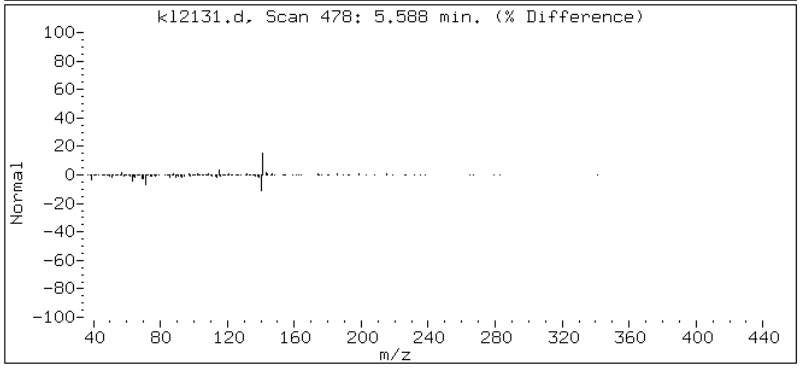
Sample Info: 680-85860-A-73-A DL=10 Operator: LEG

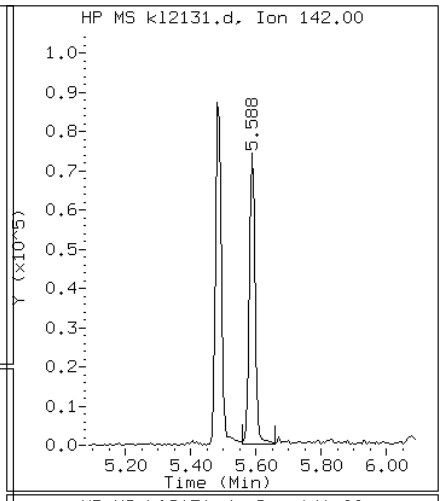
4 1-Methylnaphthalene

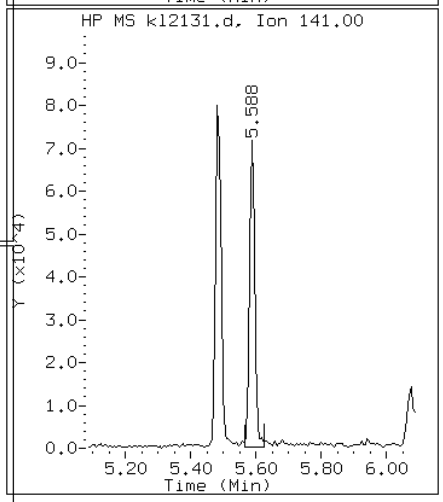












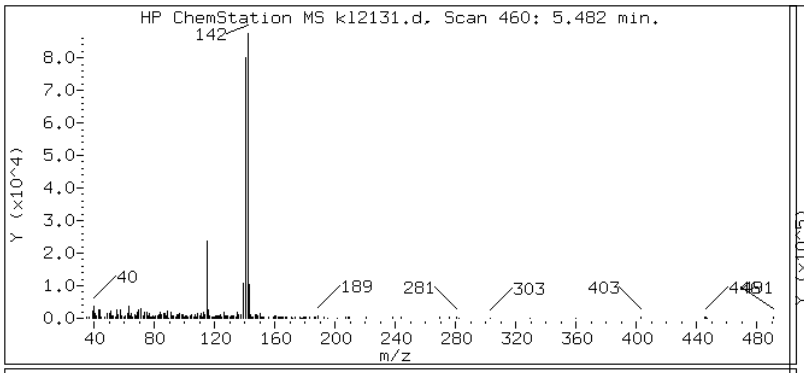
Data File: kl2131.d

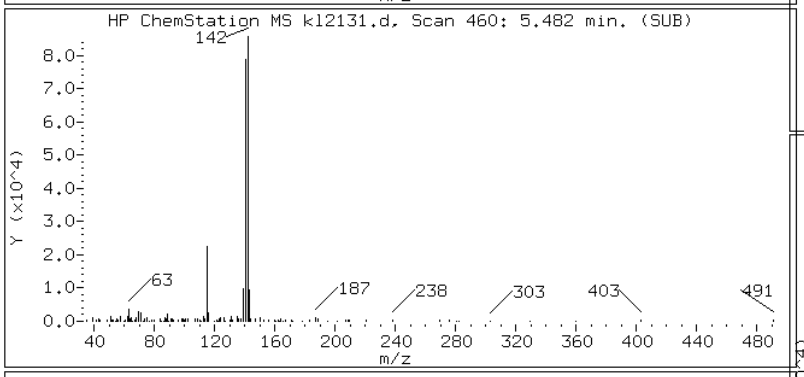
Date: 21-DEC-2012 20:03

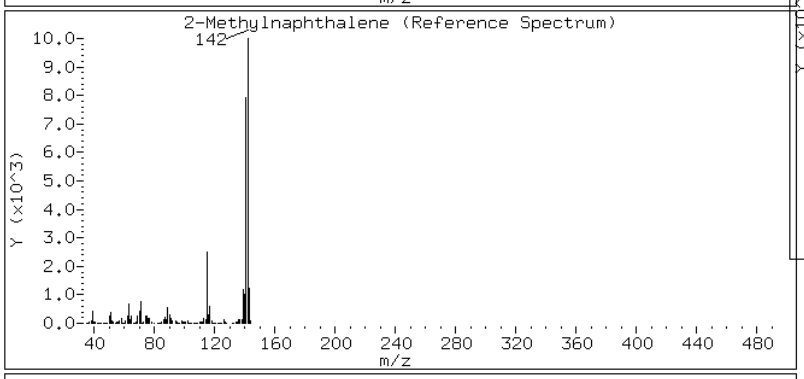
Client ID: Instrument: MSK5973.i

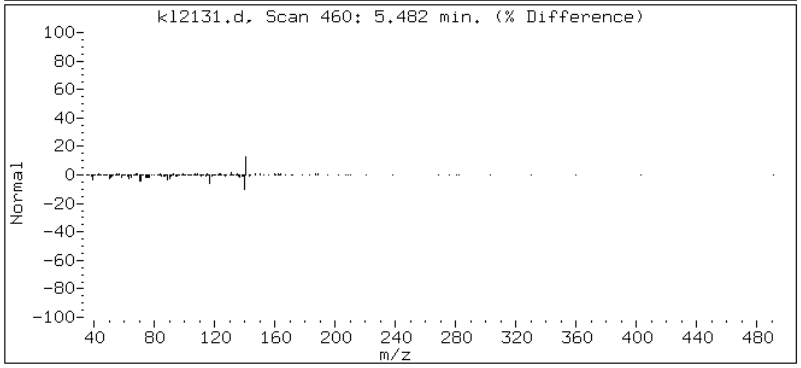
Sample Info: 680-85860-A-73-A DL=10 Operator: LEG

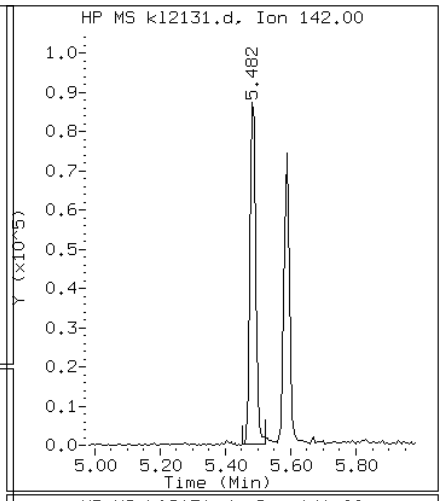
3 2-Methylnaphthalene

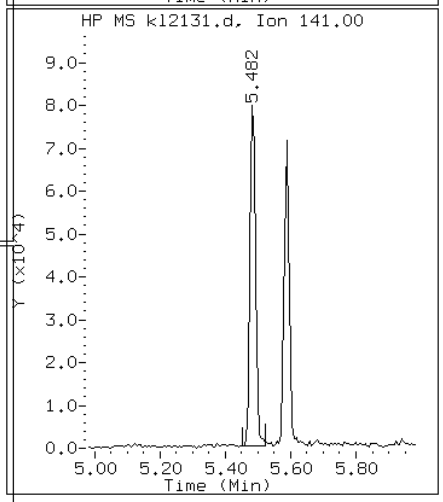












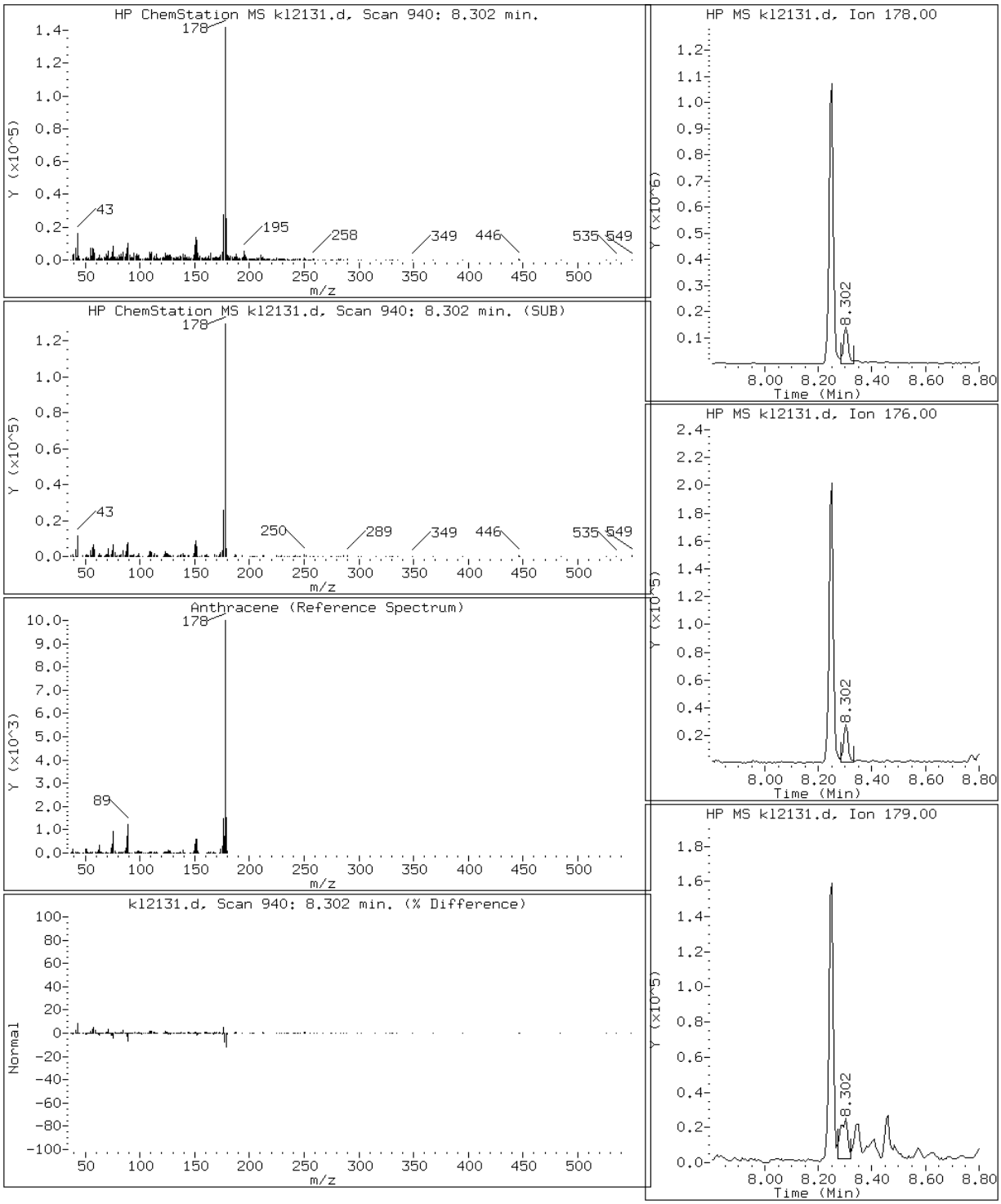
Data File: kl2131.d

Date: 21-DEC-2012 20:03

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-73-A DL=10 Operator: LEG

11 Anthracene



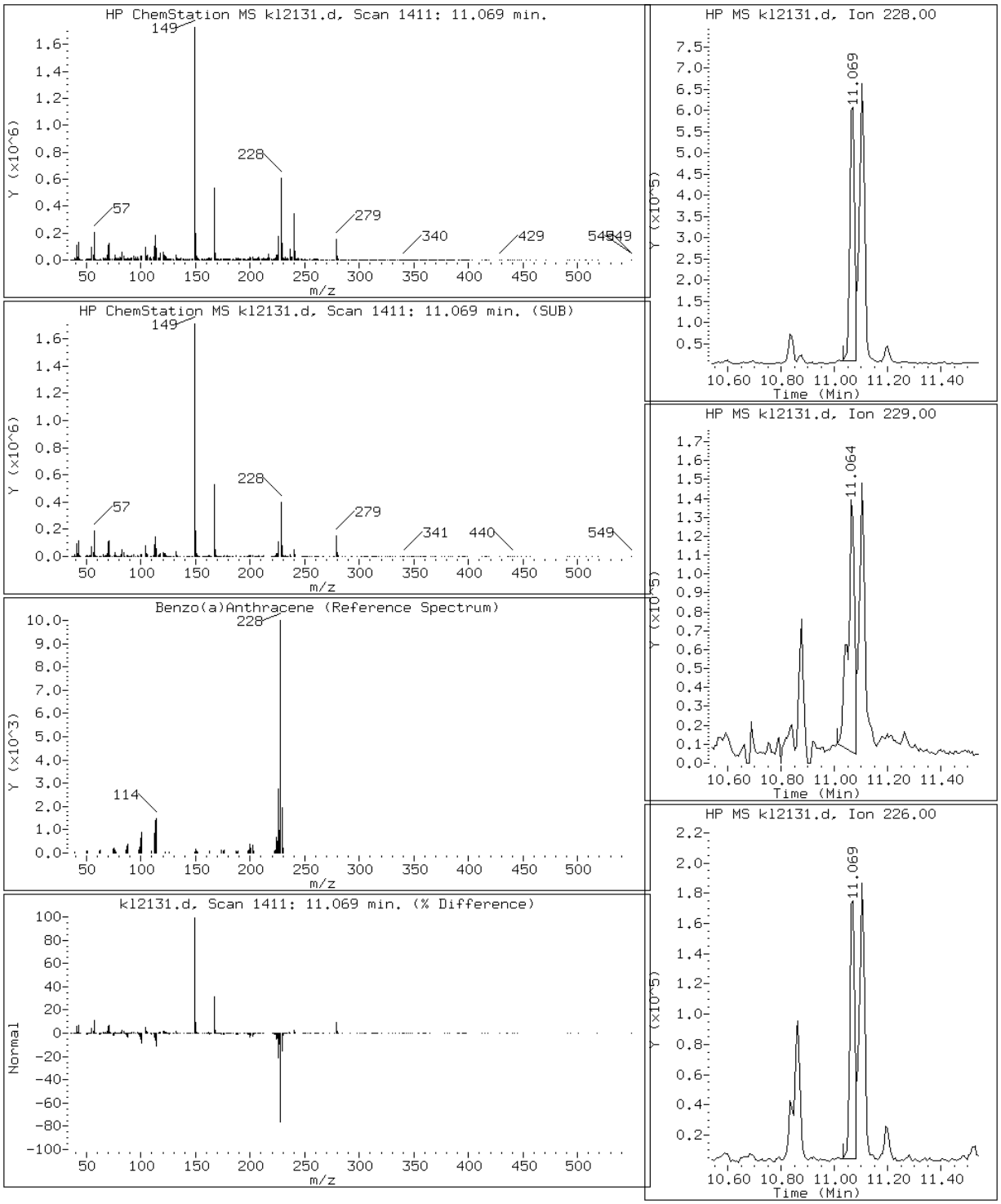
Data File: kl2131.d

Date: 21-DEC-2012 20:03

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-73-A DL=10 Operator: LEG

16 Benzo(a)Anthracene



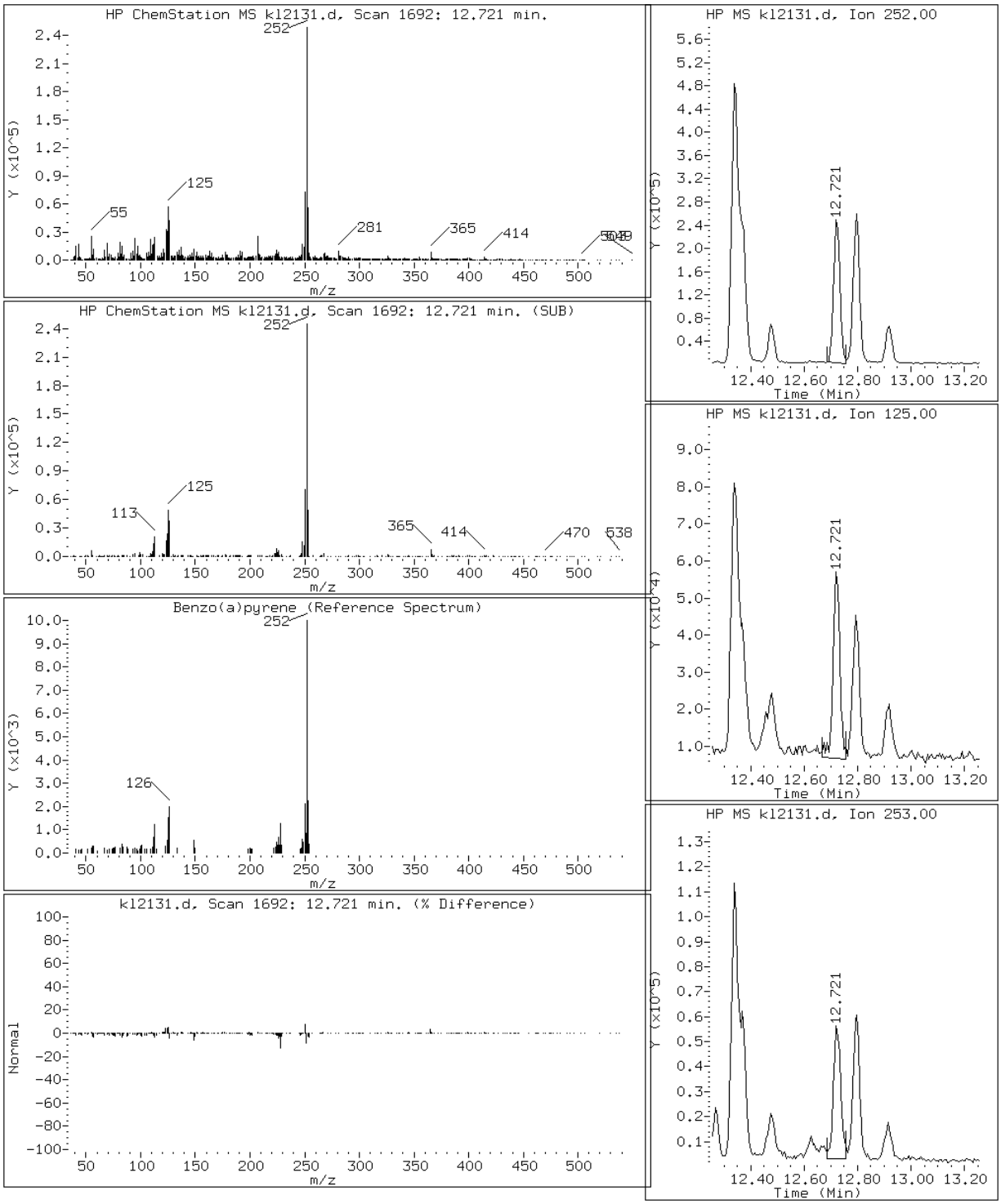
Data File: kl2131.d

Date: 21-DEC-2012 20:03

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-73-A DL=10 Operator: LEG

21 Benzo(a)pyrene



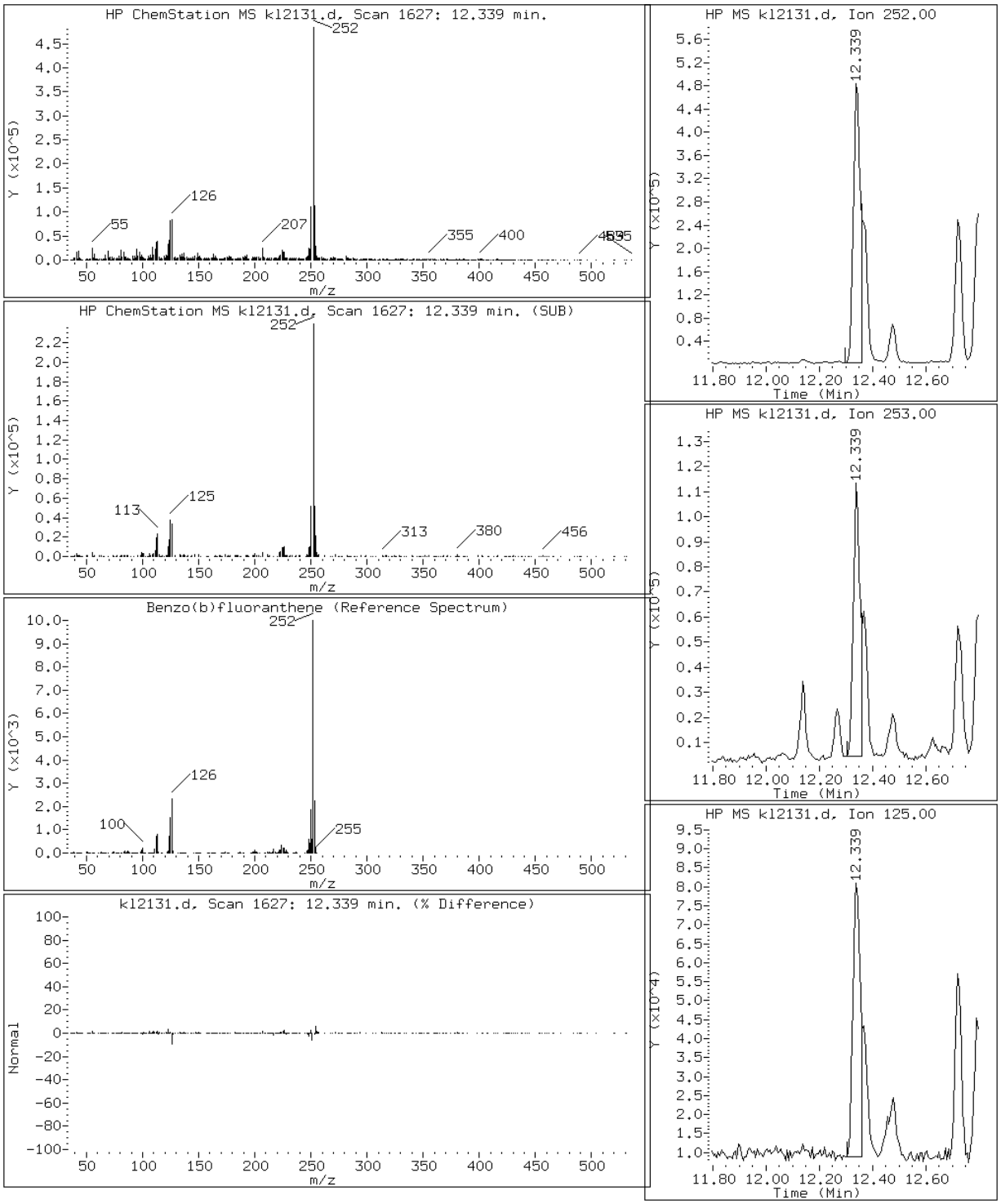
Data File: kl2131.d

Date: 21-DEC-2012 20:03

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-73-A DL=10 Operator: LEG

19 Benzo(b)fluoranthene



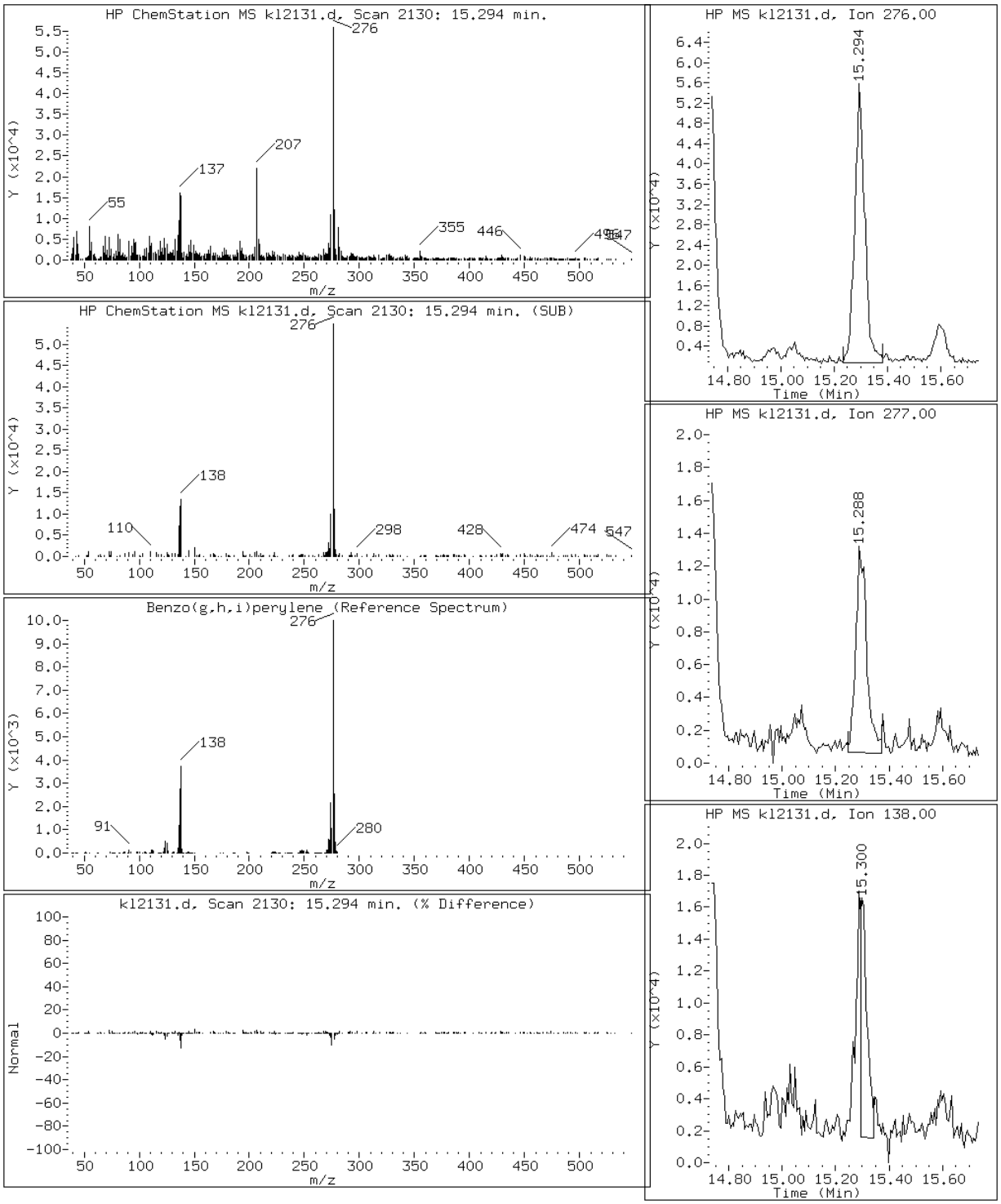
Data File: kl2131.d

Date: 21-DEC-2012 20:03

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-73-A DL=10 Operator: LEG

24 Benzo(g,h,i)perylene



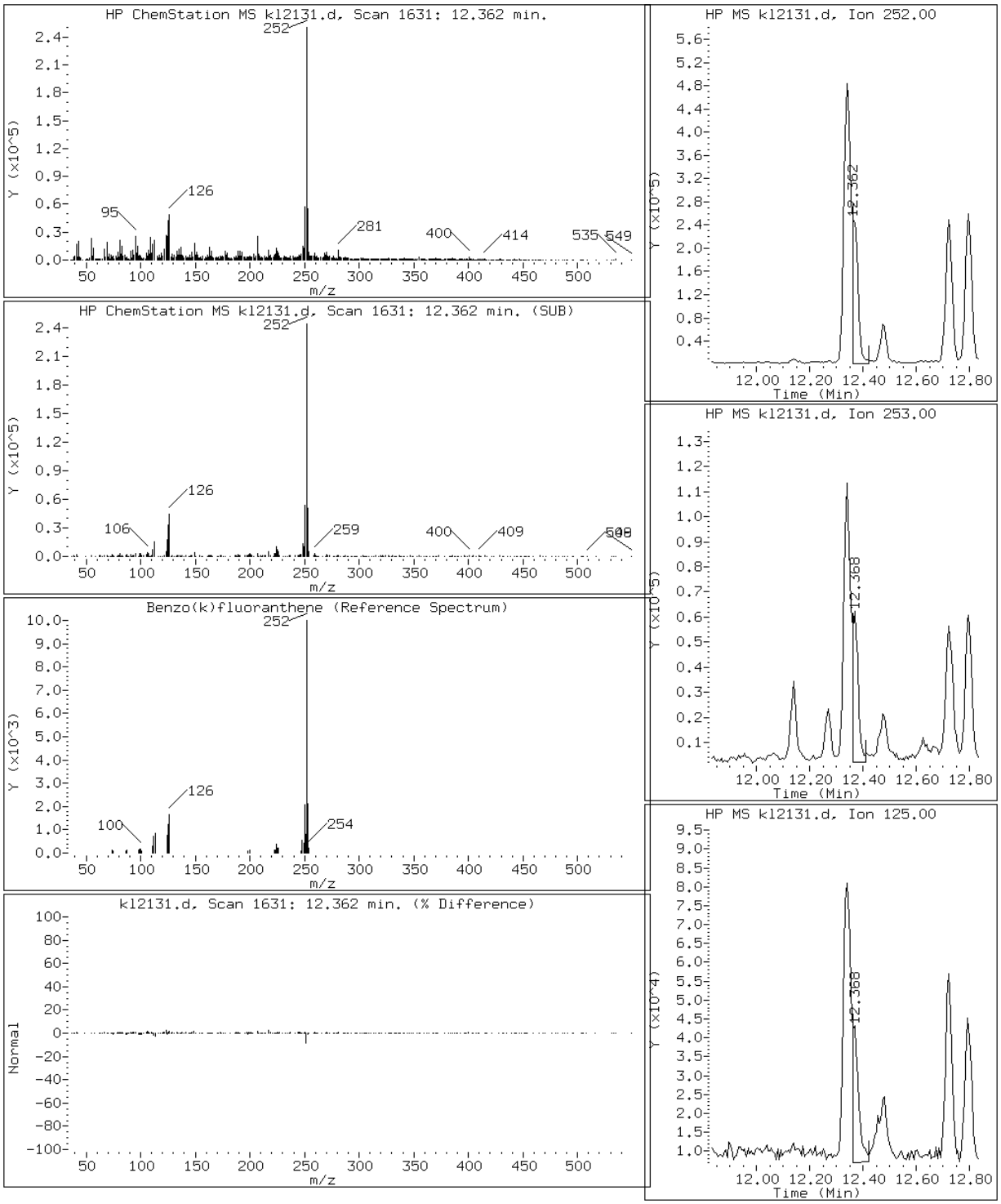
Data File: kl2131.d

Date: 21-DEC-2012 20:03

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-73-A DL=10 Operator: LEG

20 Benzo(k)fluoranthene



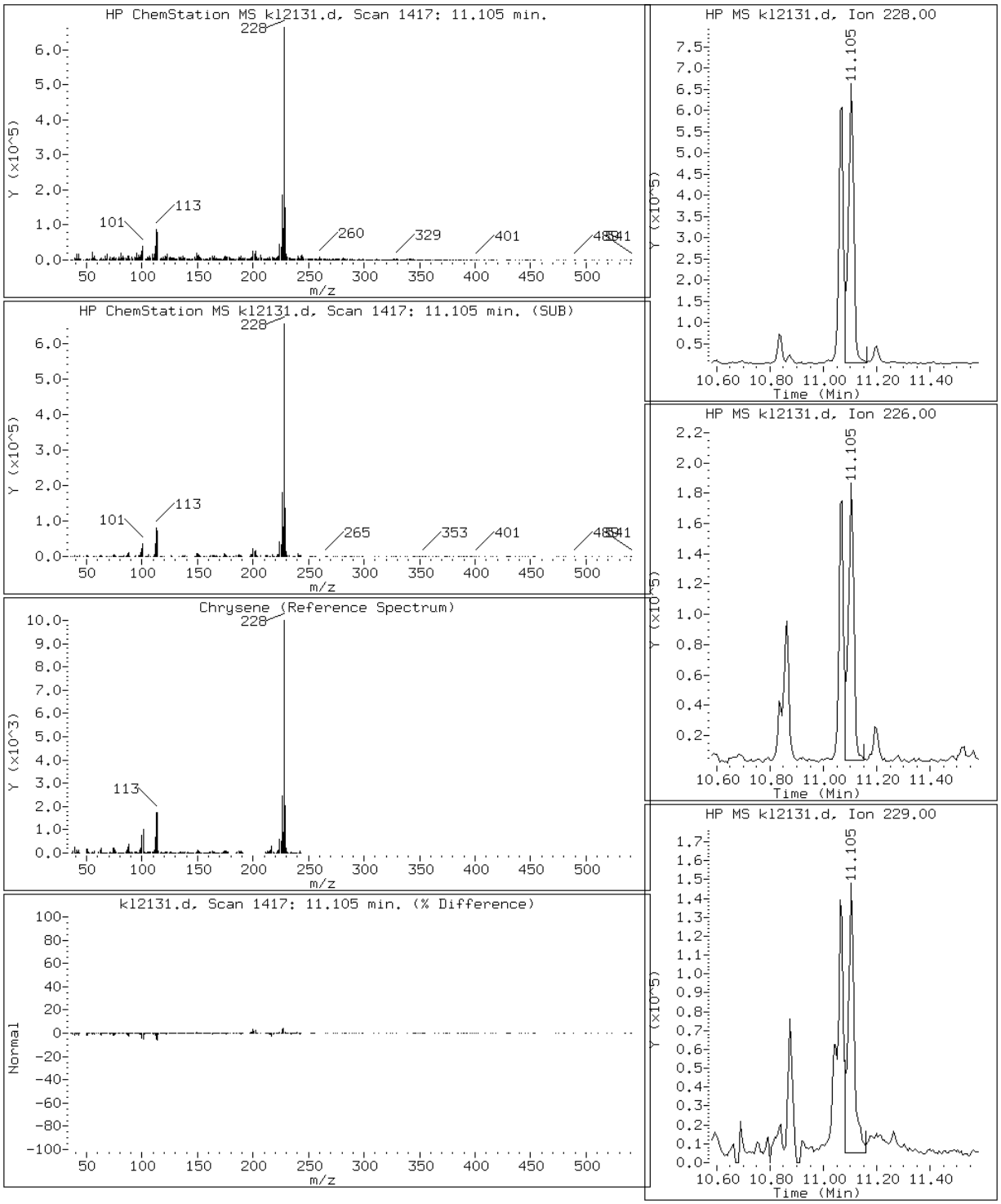
Data File: kl2131.d

Date: 21-DEC-2012 20:03

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-73-A DL=10 Operator: LEG

17 Chrysene



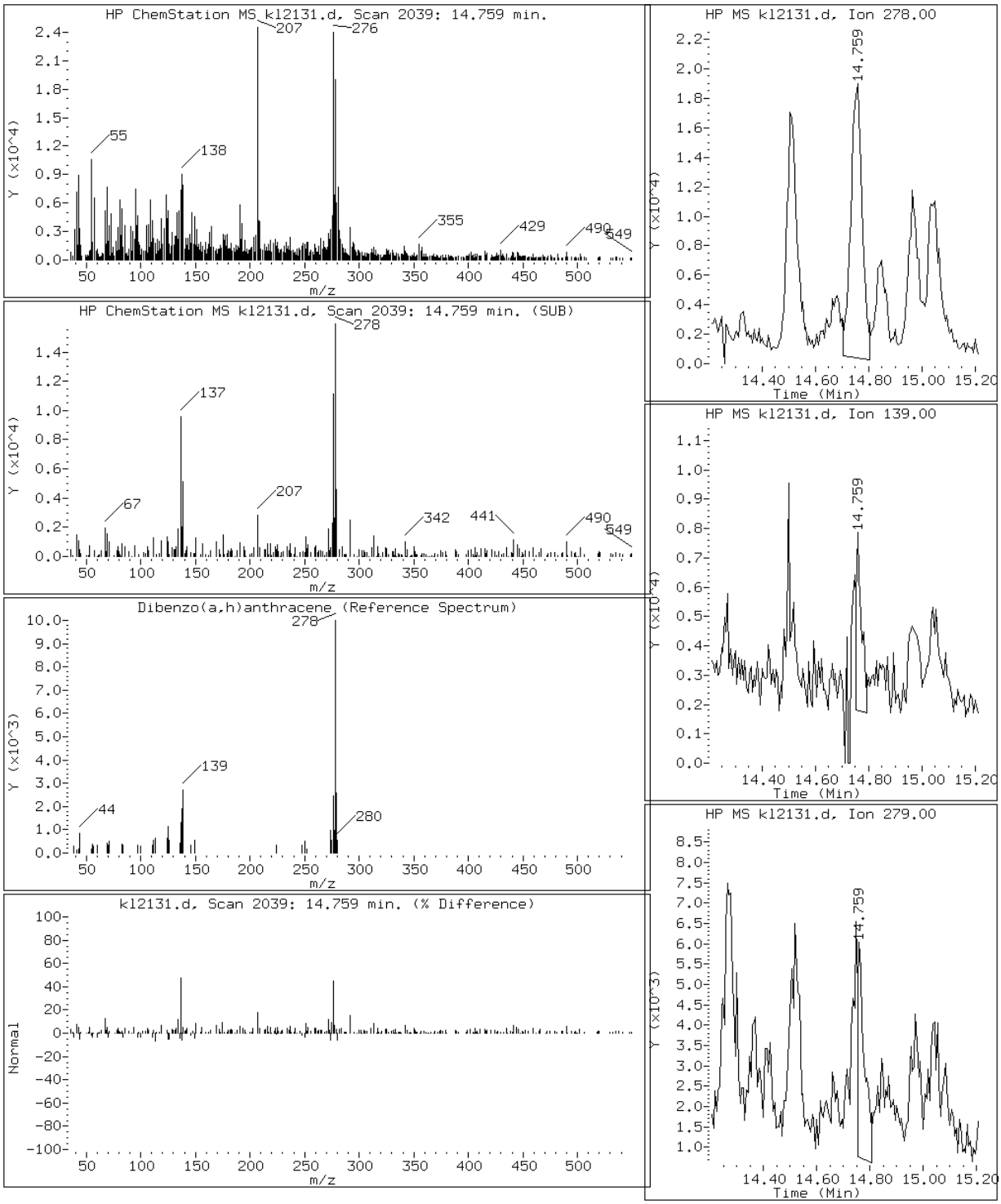
Data File: kl2131.d

Date: 21-DEC-2012 20:03

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-73-A DL=10 Operator: LEG

23 Dibenzo(a,h)anthracene



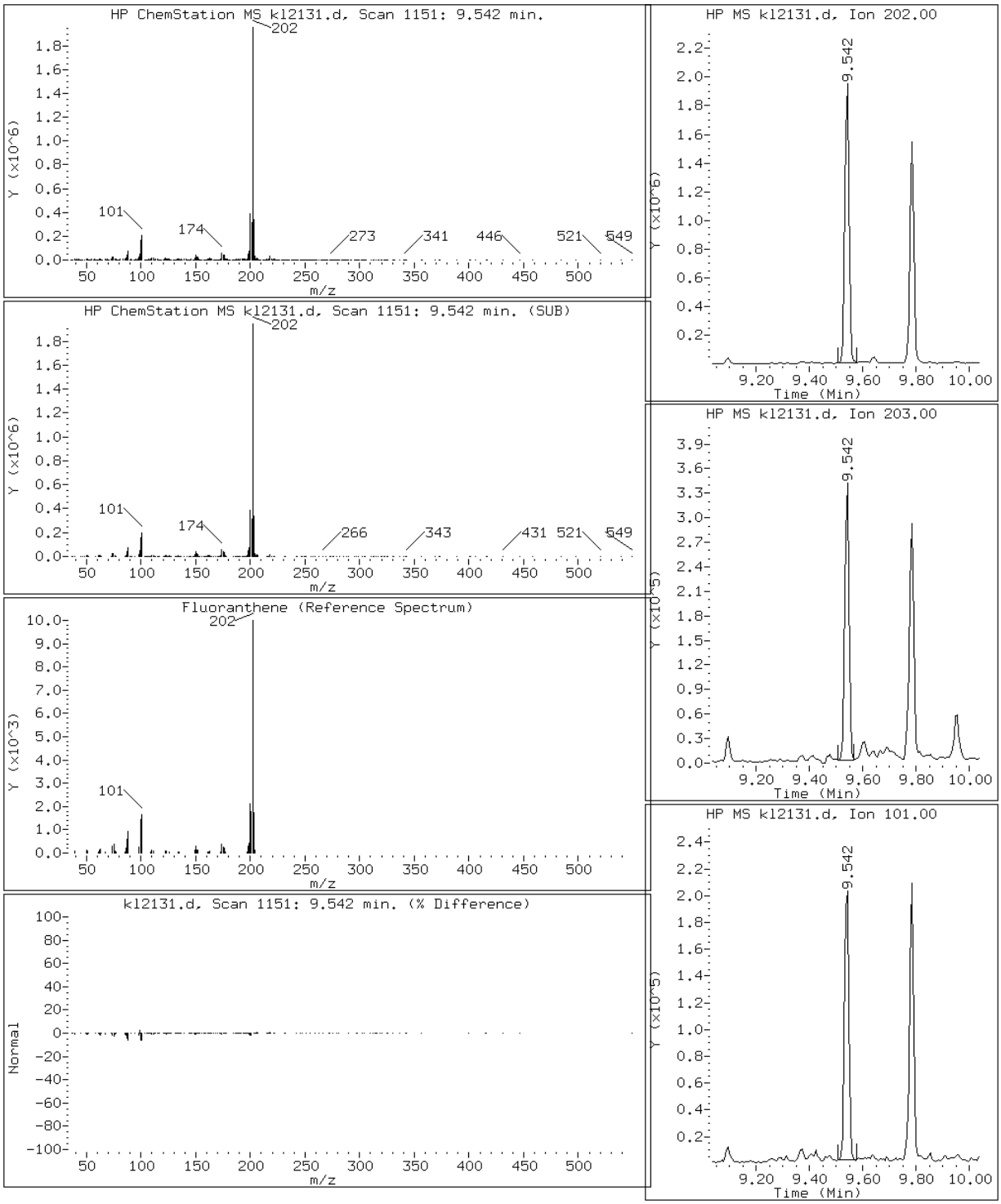
Data File: kl2131.d

Date: 21-DEC-2012 20:03

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-73-A DL=10 Operator: LEG

12 Fluoranthene



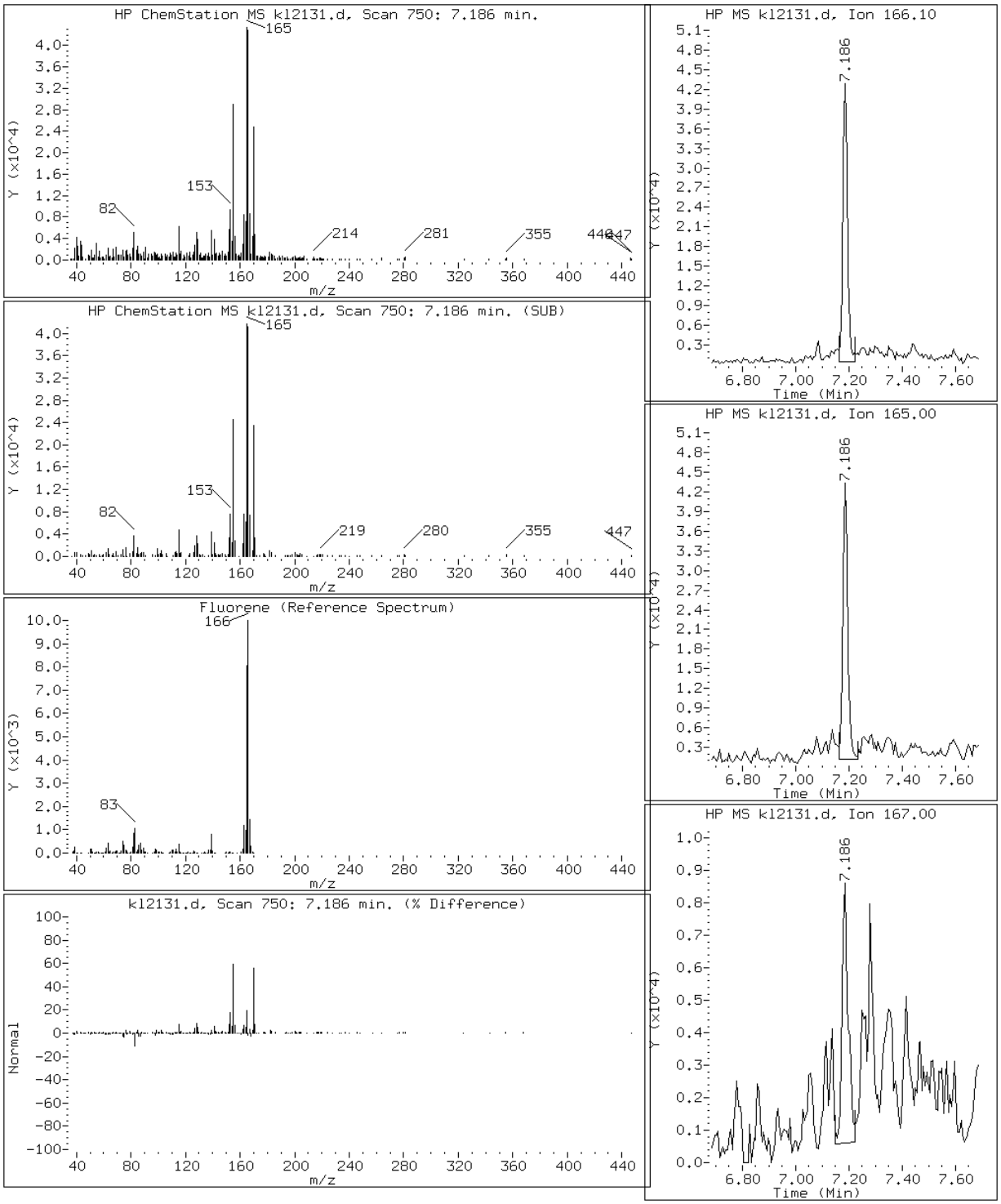
Data File: kl2131.d

Date: 21-DEC-2012 20:03

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-73-A DL=10 Operator: LEG

8 Fluorene



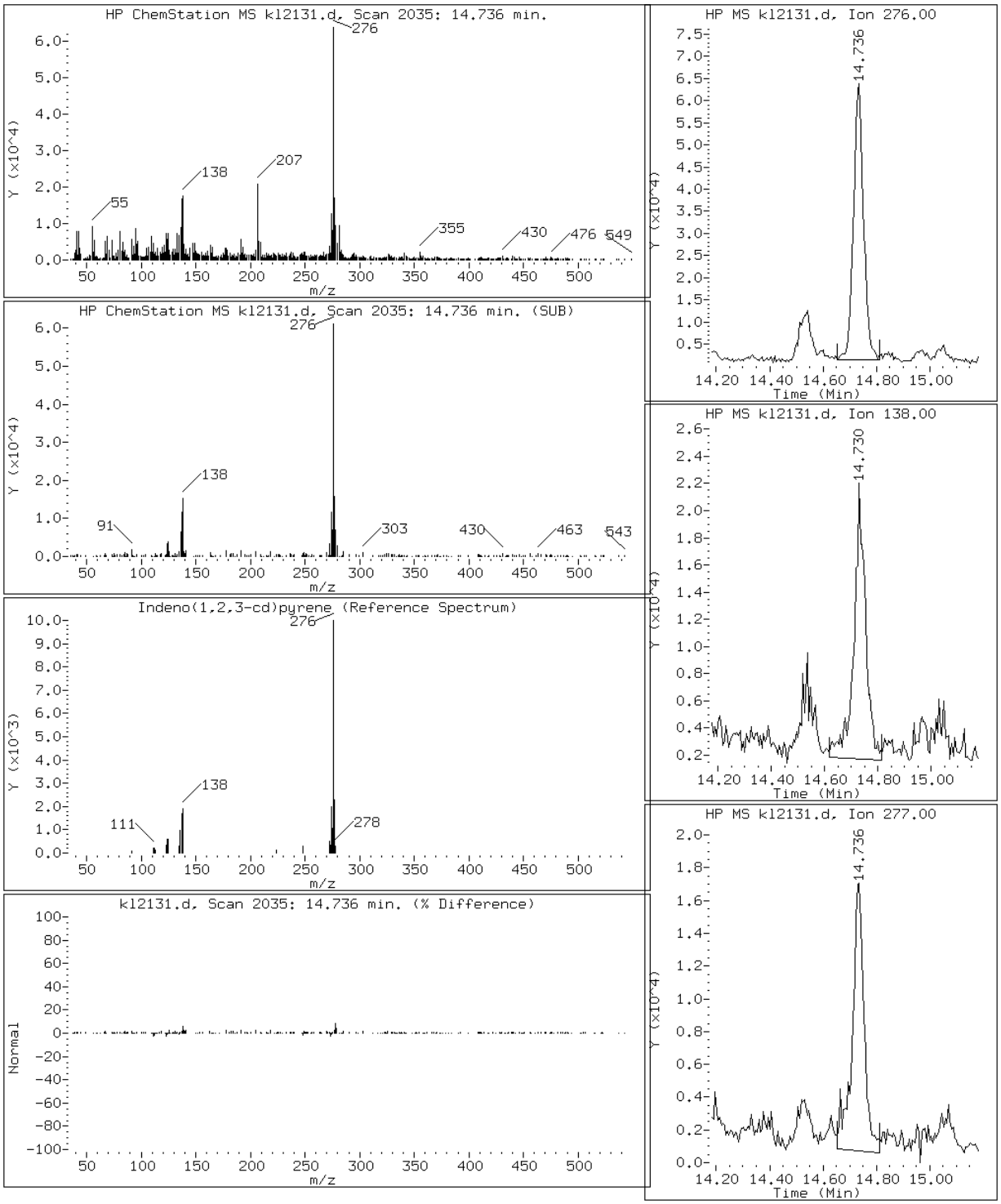
Data File: kl2131.d

Date: 21-DEC-2012 20:03

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-73-A DL=10 Operator: LEG

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



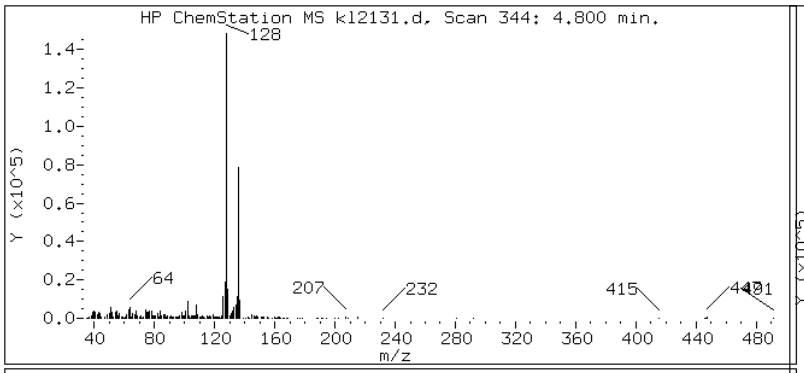
Data File: kl2131.d

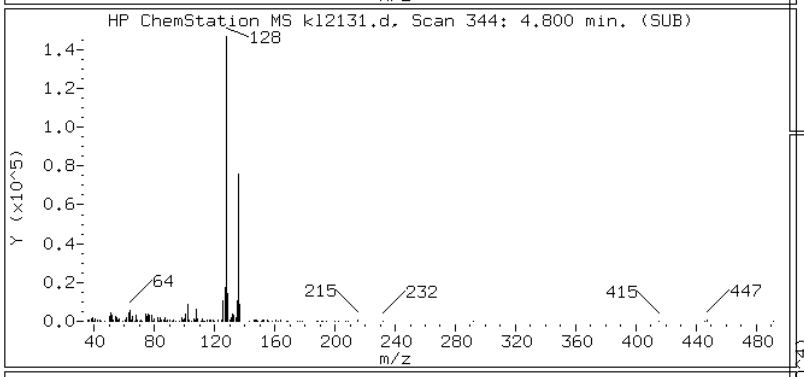
Date: 21-DEC-2012 20:03

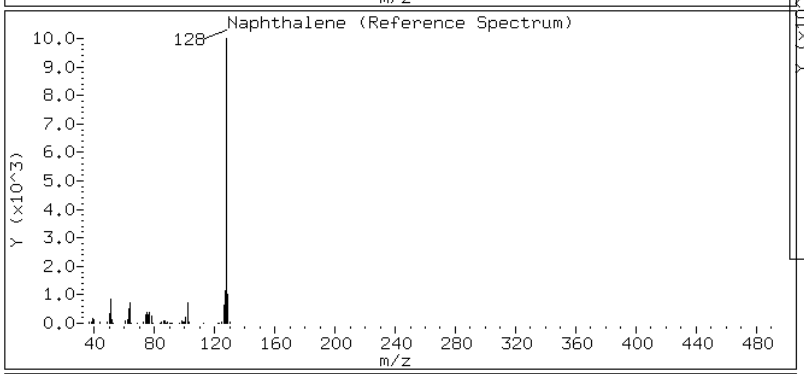
Client ID: Instrument: MSK5973.i

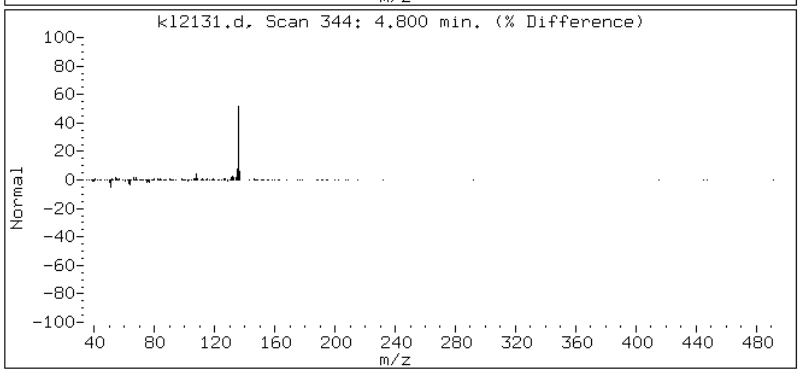
Sample Info: 680-85860-A-73-A DL=10 Operator: LEG

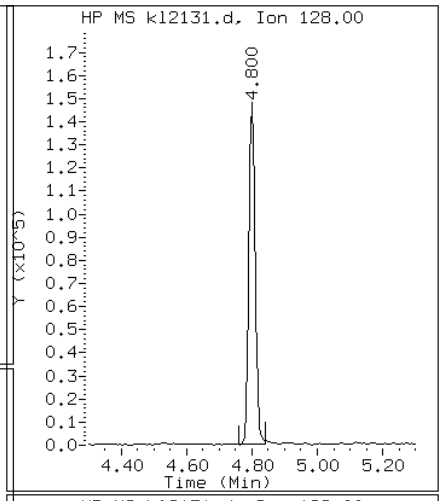
2 Naphthalene

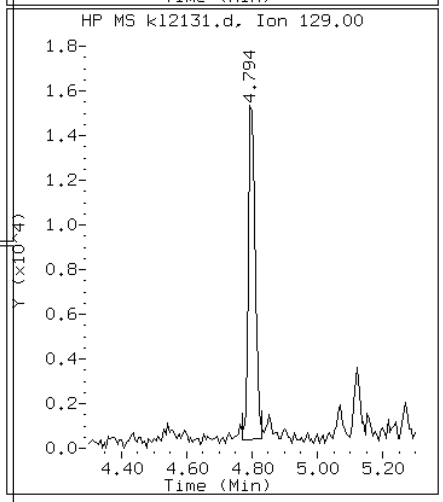












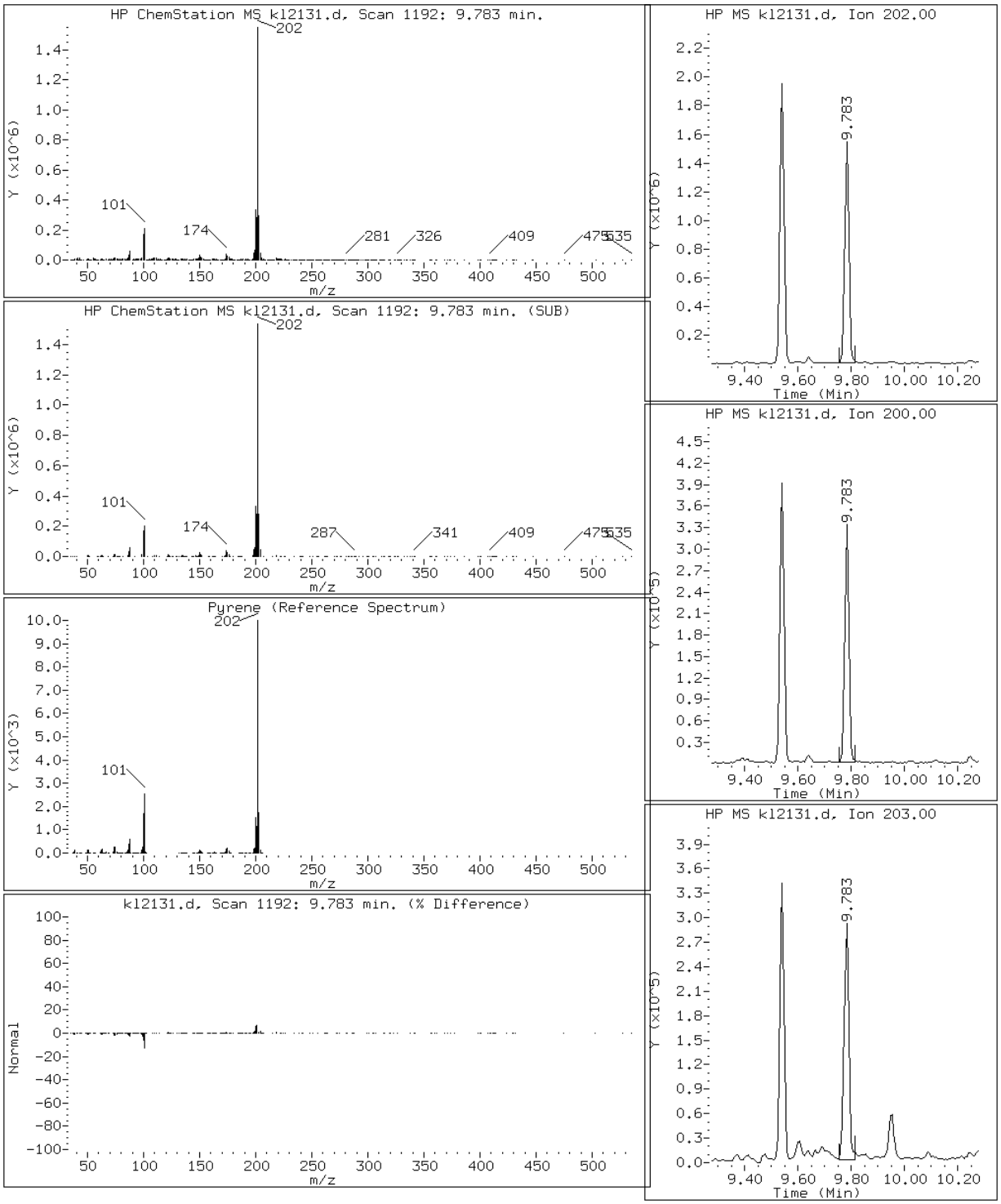
Data File: kl2131.d

Date: 21-DEC-2012 20:03

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-73-A DL=10 Operator: LEG

14 Pyrene



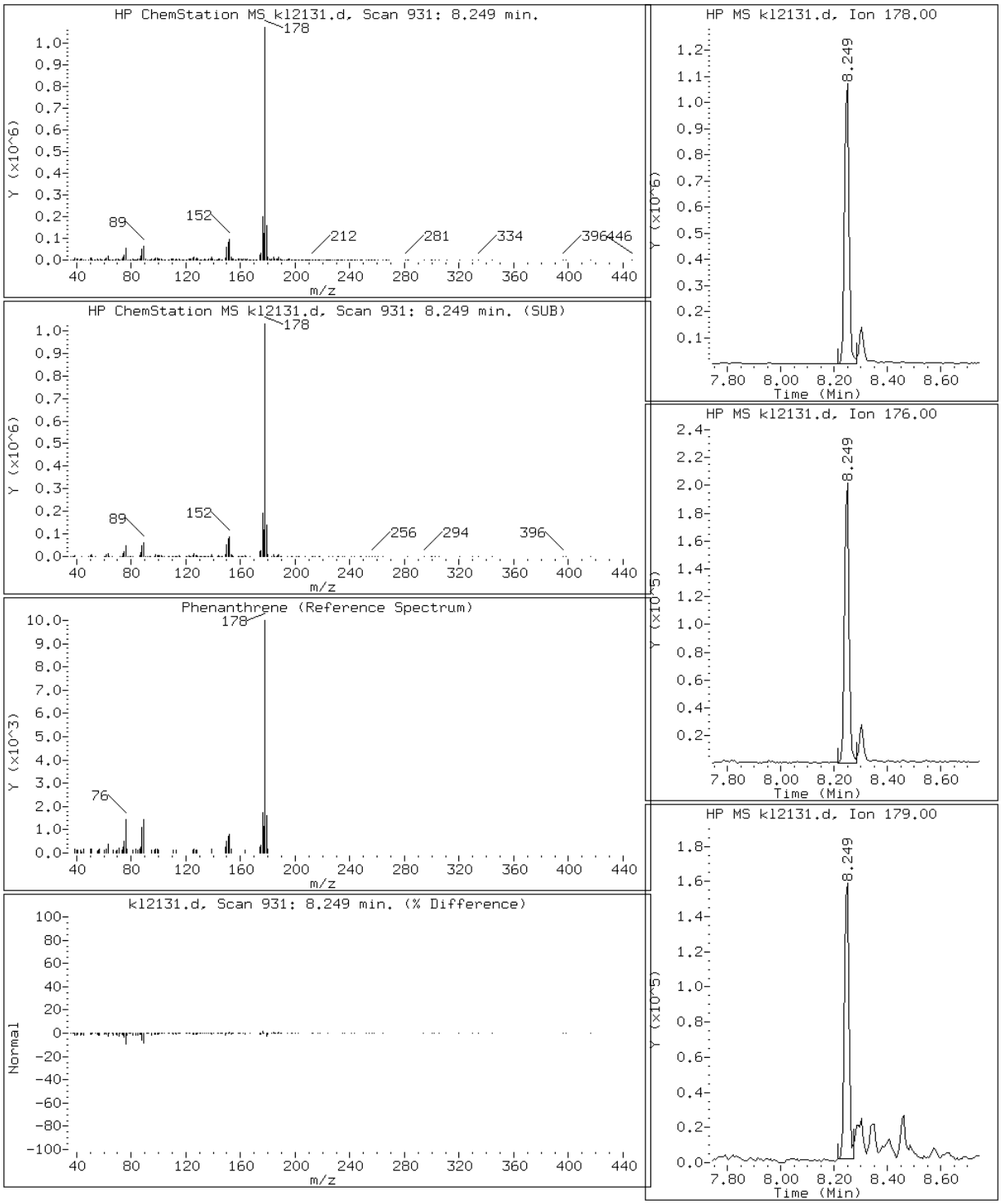
Data File: kl2131.d

Date: 21-DEC-2012 20:03

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-73-A DL=10 Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: kl2131.d
Inj. Date and Time: 21-DEC-2012 20:03
Instrument ID: MSK5973.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 12/27/2012

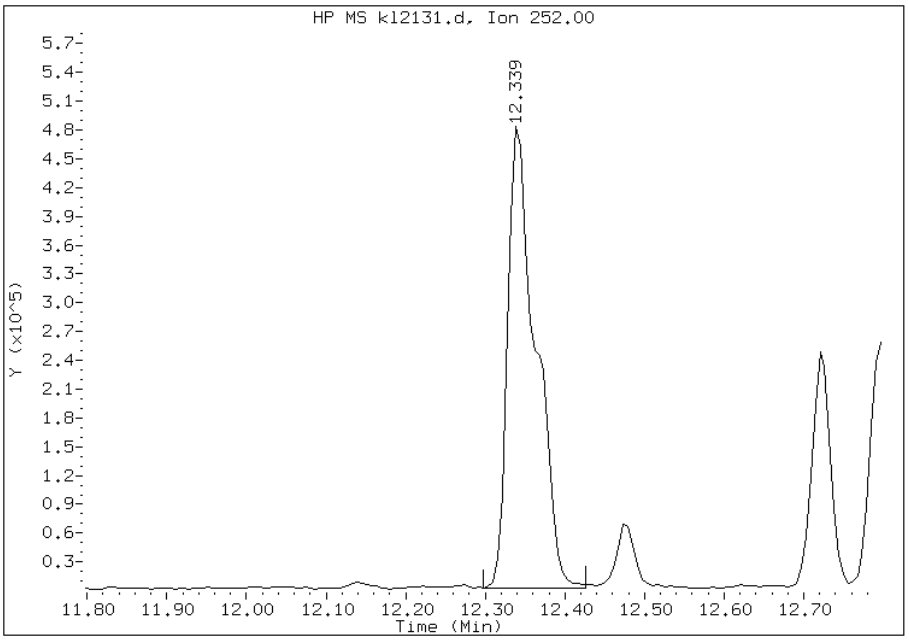
Processing Integration Results

RT: 12.34

Response: 1183958

Amount: 4

Conc: 1269



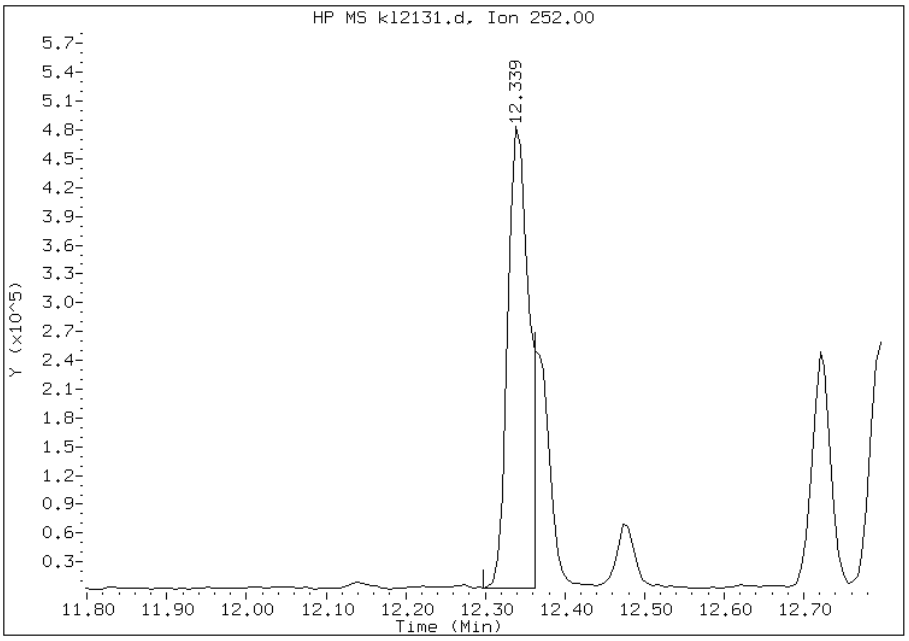
Manual Integration Results

RT: 12.34

Response: 908138

Amount: 3

Conc: 973



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: kl2131.d
Inj. Date and Time: 21-DEC-2012 20:03
Instrument ID: MSK5973.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 12/27/2012

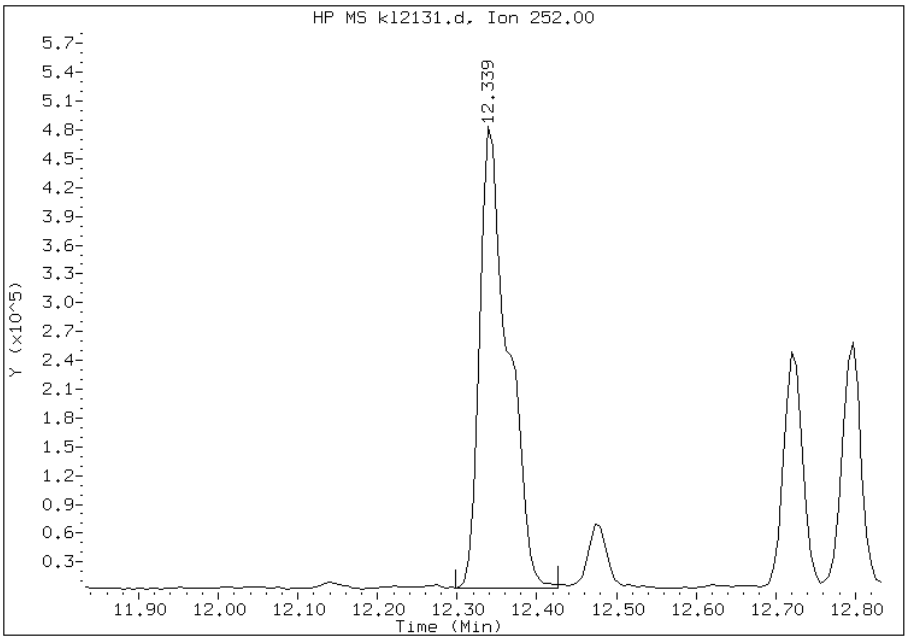
Processing Integration Results

RT: 12.34

Response: 1182758

Amount: 4

Conc: 1310



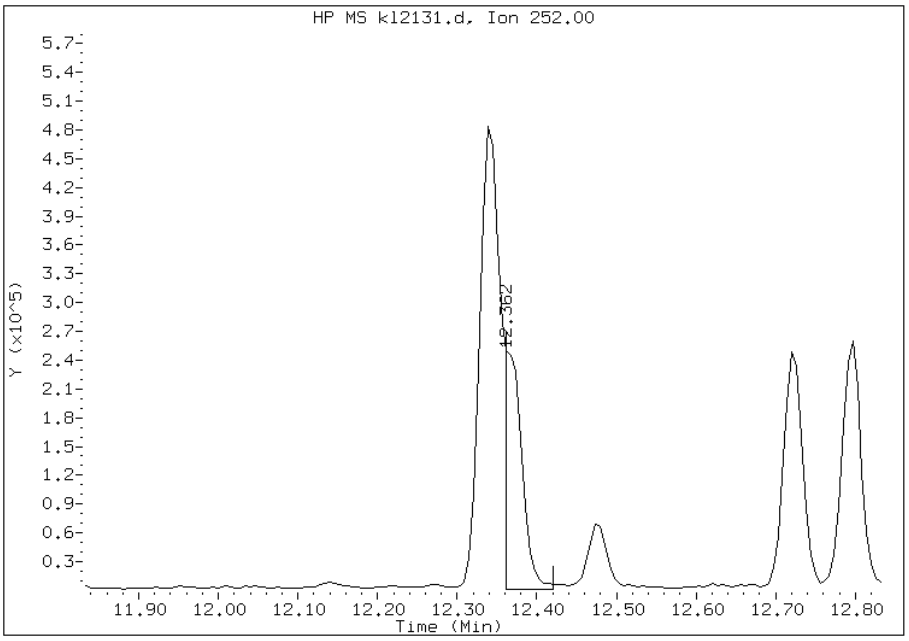
Manual Integration Results

RT: 12.36

Response: 369342

Amount: 1

Conc: 409



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: kl2131.d
Inj. Date and Time: 21-DEC-2012 20:03
Instrument ID: MSK5973.i
Client ID:
Compound: 17 Chrysene
CAS #: 218-01-9
Report Date: 12/27/2012

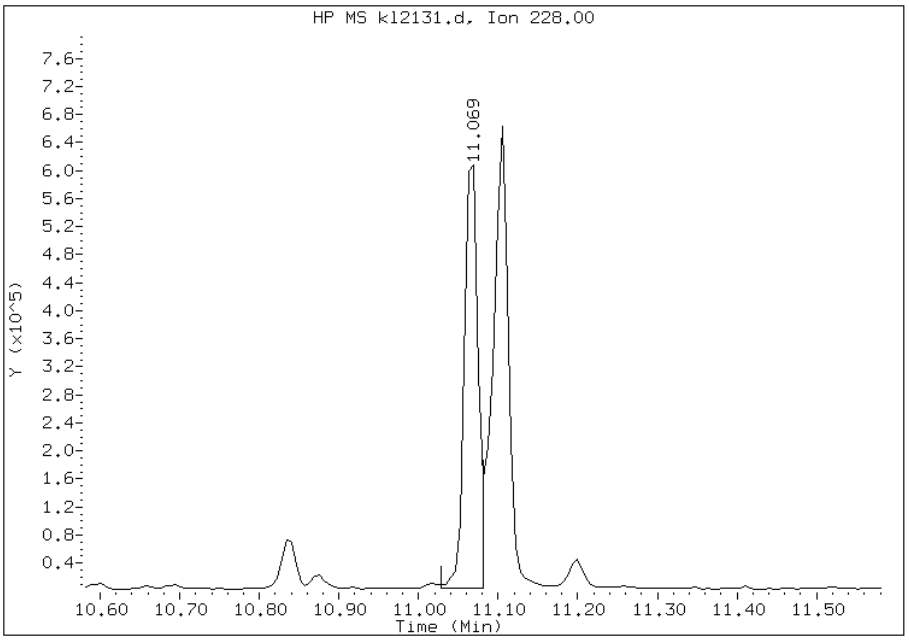
Processing Integration Results

RT: 11.07

Response: 753434

Amount: 2

Conc: 536



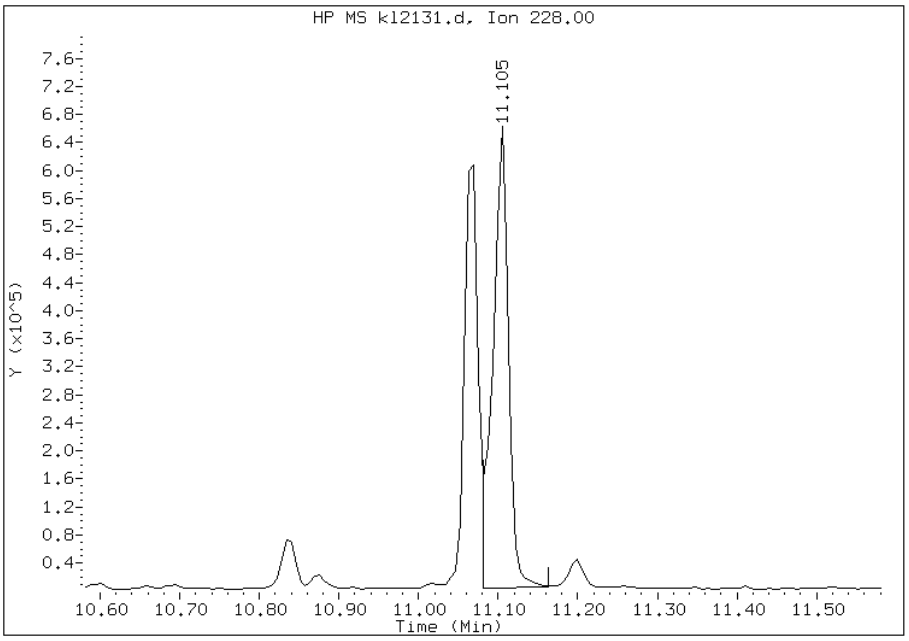
Manual Integration Results

RT: 11.10

Response: 944955

Amount: 2

Conc: 672



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.: 680-85860-4

SDG No.: 68085860-4

Client Sample ID: FM0251C-CS | Lab Sample ID: 680-85860-74

Matrix: Solid | Lab File ID: kl2625.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/14/2012 10:05

Extract. Method: 3546 | Date Extracted: 12/20/2012 18:29

Sample wt/vol: 30.40(g) | Date Analyzed: 12/26/2012 20:12

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

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

% Moisture: 23.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261203 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	66	J	87	40
91-57-6	2-Methylnaphthalene	93		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	290		87	43
50-32-8	Benzo[a]pyrene	310		87	16
205-99-2	Benzo[b]fluoranthene	510		87	43
191-24-2	Benzo[g,h,i]perylene	170		87	43
207-08-9	Benzo[k]fluoranthene	150		87	26
218-01-9	Chrysene	380		87	43
53-70-3	Dibenz(a,h)anthracene	87	U	87	43
206-44-0	Fluoranthene	550		87	43
86-73-7	Fluorene	87	U	87	43
193-39-5	Indeno[1,2,3-cd]pyrene	130		87	43
91-20-3	Naphthalene	160		87	43
129-00-0	Pyrene	470		87	43
85-01-8	Phenanthrene	310		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/1k122612.b/kl2625.d
Lab Smp Id: 680-85860-A-74-A DL
Inj Date : 26-DEC-2012 20:12
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85860-A-74-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122612.b/k-b8270CLLPAH-m.m
Meth Date : 27-Dec-2012 09:54 chemist Quant Type: ISTD
Cal Date : 26-DEC-2012 17:28 Cal File: kl2618q.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	4.671	4.671	(1.000)	693569	2.00000	
2 Naphthalene	128	4.689	4.689	(1.004)	146900	0.36281	120.93
3 2-Methylnaphthalene	142	5.364	5.364	(1.148)	54506	0.21574	71.91
4 1-Methylnaphthalene	142	5.470	5.470	(1.171)	39240	0.15201	50.66(a)
* 5 Acenaphthene-d10	164	6.463	6.463	(1.000)	414290	2.00000	
* 9 Phenanthrene-d10	188	8.085	8.085	(1.000)	640484	2.00000	
10 Phenanthrene	178	8.114	8.108	(1.004)	292603	0.71614	238.71

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
12 Fluoranthene	202	9.401	9.401	(1.163)	515074	1.26654	422.18
14 Pyrene	202	9.648	9.642	(0.883)	409086	1.09371	364.56
16 Benzo(a)Anthracene	228	10.917	10.887	(0.999)	184307	0.66289	220.96
* 13 Chrysene-d12	240	10.929	10.899	(1.000)	437475	2.00000	
17 Chrysene	228	10.952	10.928	(1.002)	251229	0.88831	296.10(M)
19 Benzo(b)fluoranthene	252	12.133	12.092	(0.960)	265907	1.19191	397.30(MH)
20 Benzo(k)fluoranthene	252	12.162	12.121	(0.962)	79955	0.34978	116.59(M)
21 Benzo(a)pyrene	252	12.497	12.521	(0.993)	122629	0.71412	238.03
* 18 Perylene-d12	264	12.644	12.603	(1.000)	314631	2.00000	(H)
22 Indeno(1,2,3-cd)pyrene	276	14.366	14.319	(1.315)	68829	0.30429	101.42
24 Benzo(g,h,i)perylene	276	14.900	14.848	(1.183)	62281	0.39664	132.21(H)

QC Flag Legend

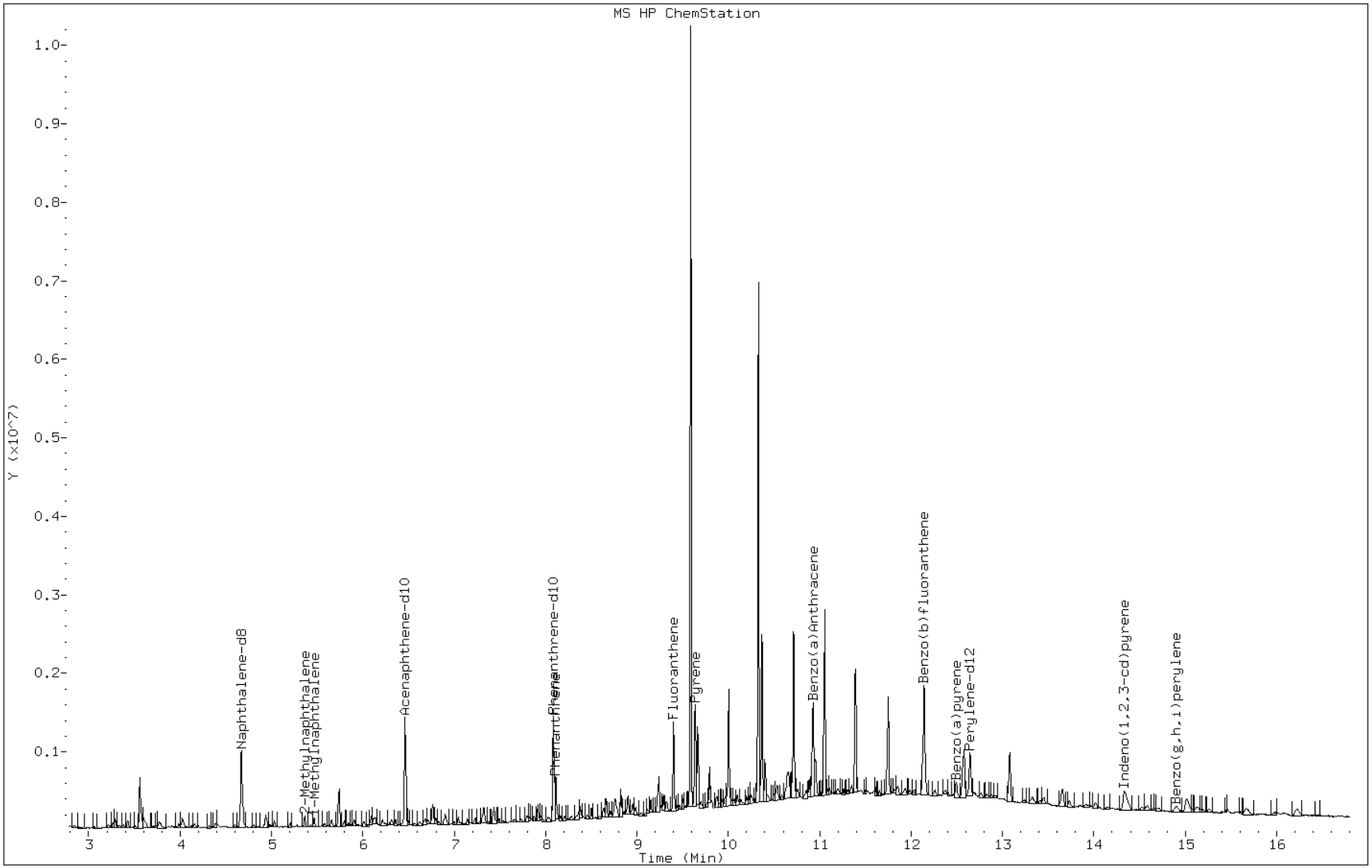
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: kl2625.d

Date: 26-DEC-2012 20:12

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-74-A DL=10 Operator: LEG



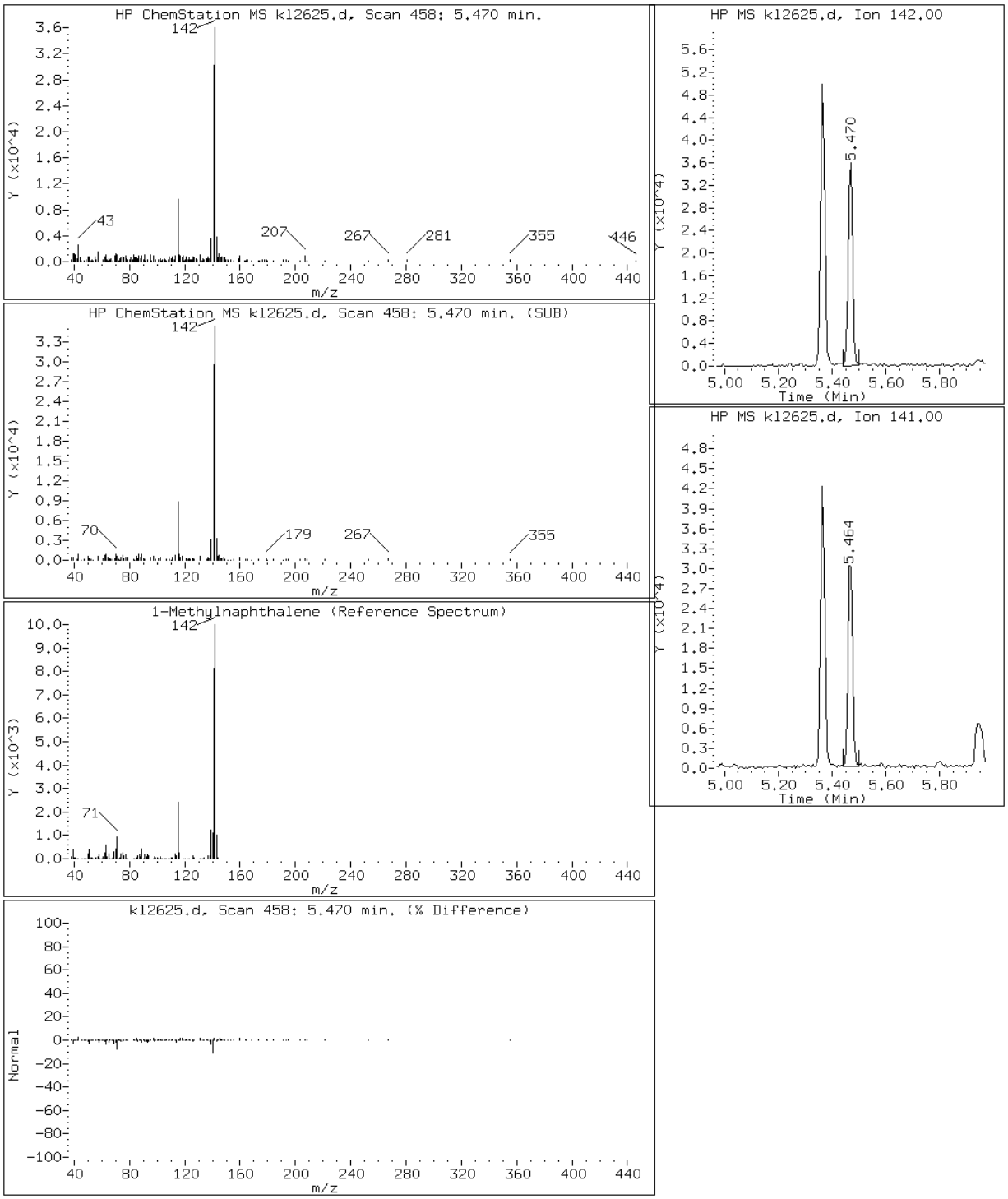
Data File: kl2625.d

Date: 26-DEC-2012 20:12

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-74-A DL=10 Operator: LEG

4 1-Methylnaphthalene



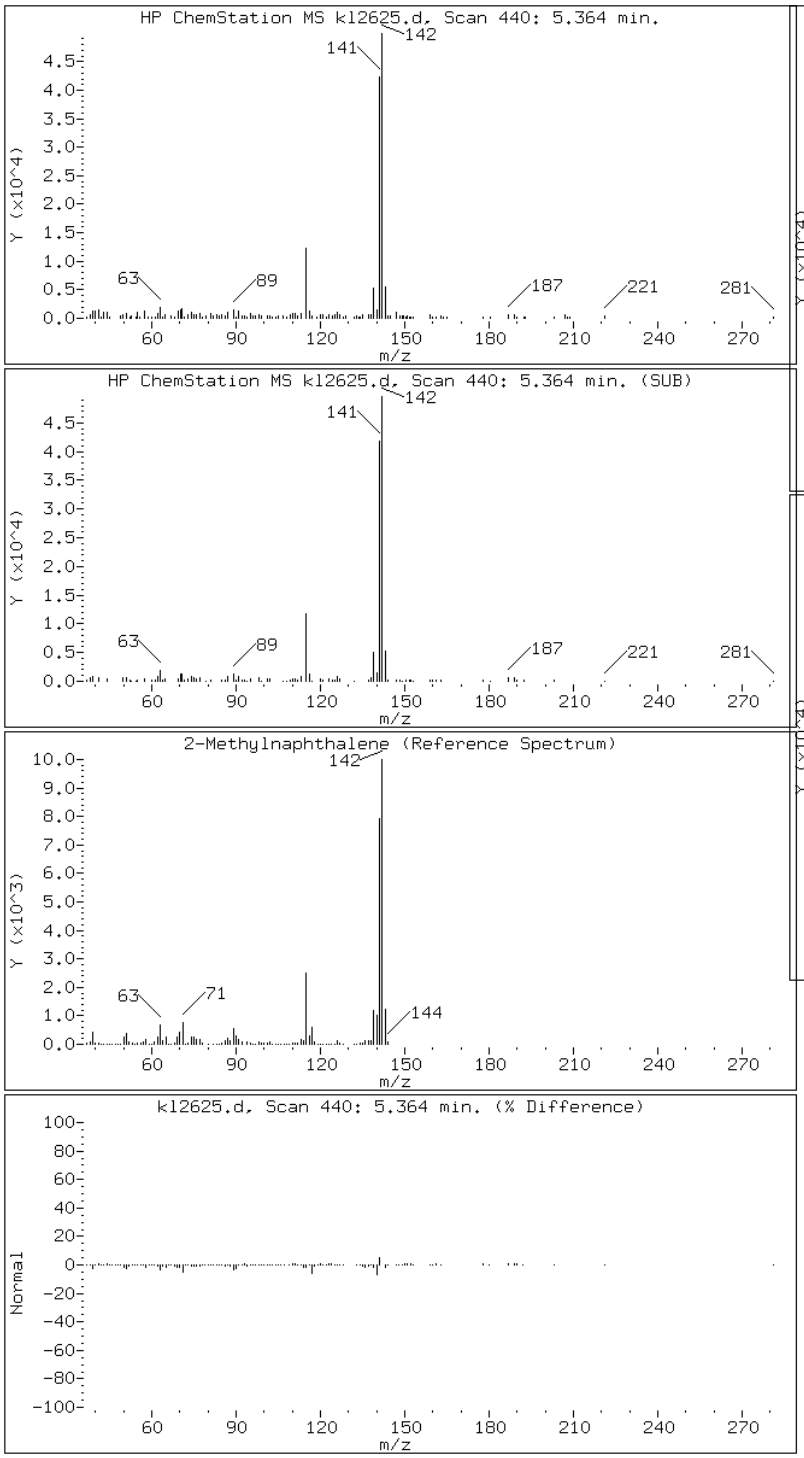
Data File: kl2625.d

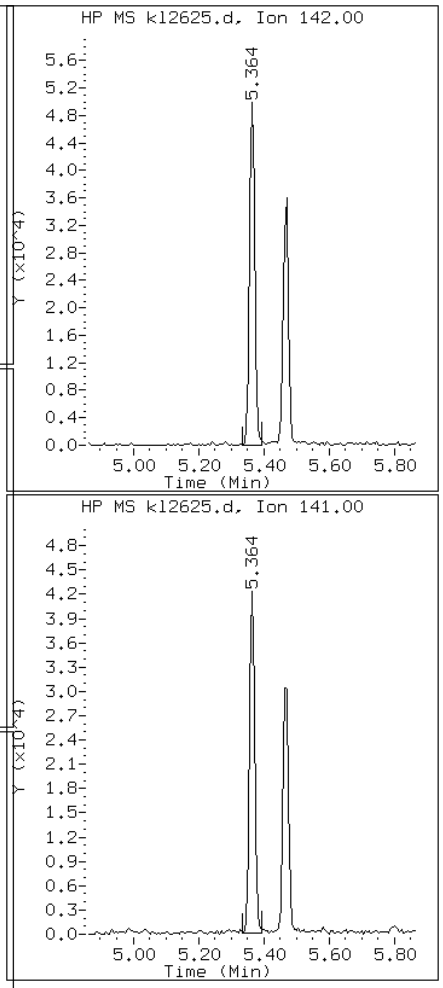
Date: 26-DEC-2012 20:12

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-74-A DL=10 Operator: LEG

3 2-Methylnaphthalene





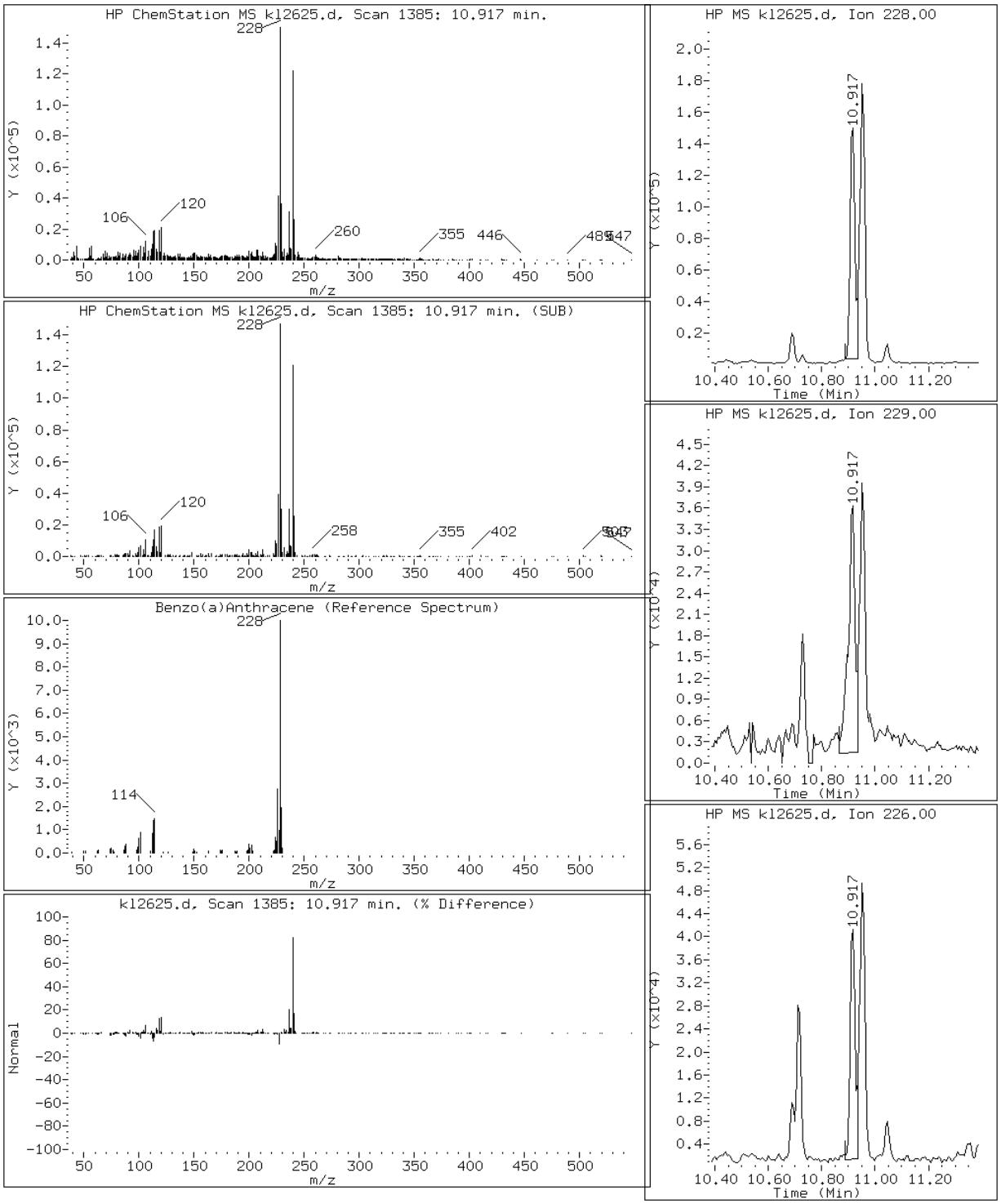
Data File: kl2625.d

Date: 26-DEC-2012 20:12

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-74-A DL=10 Operator: LEG

16 Benzo(a)Anthracene



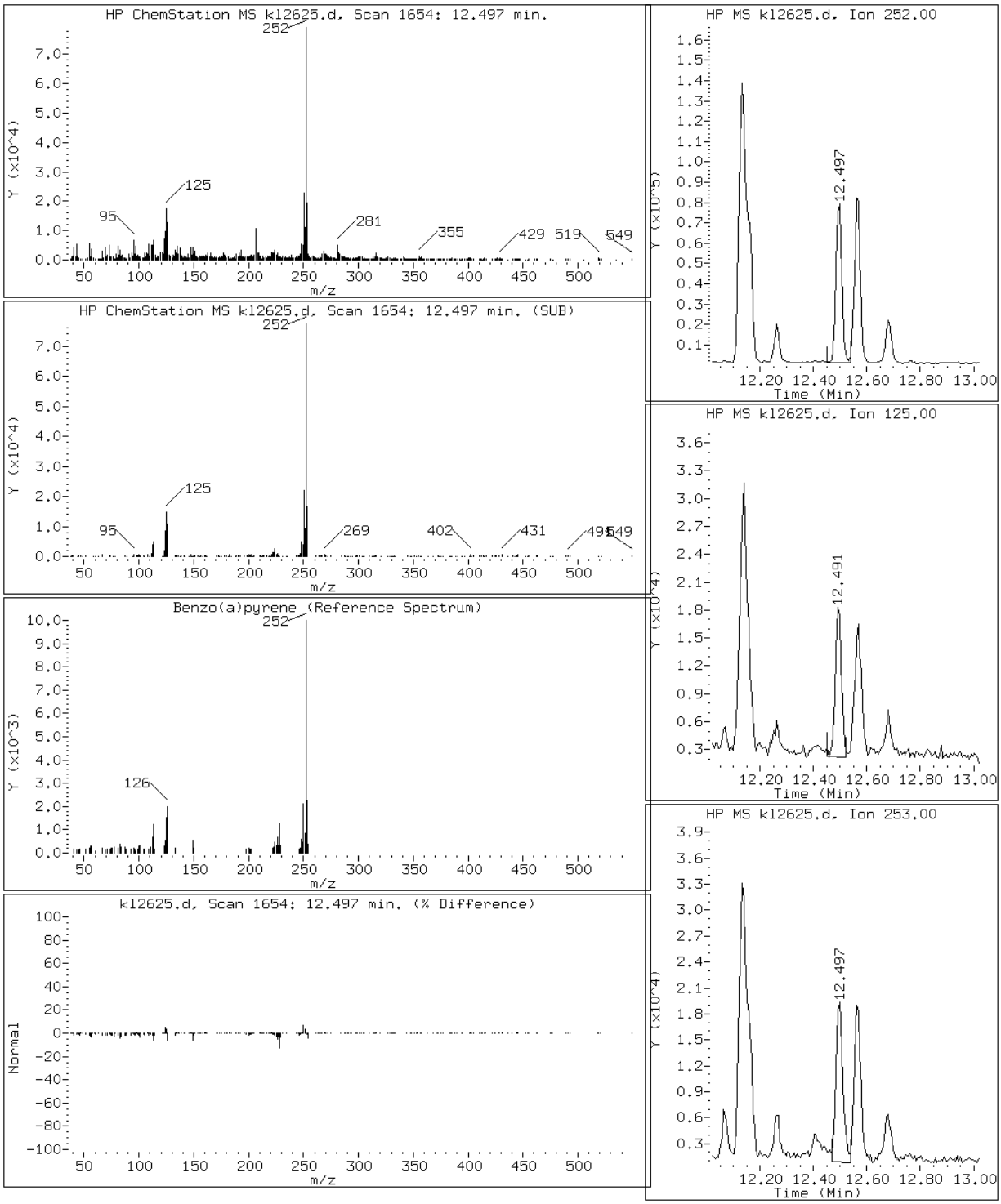
Data File: kl2625.d

Date: 26-DEC-2012 20:12

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-74-A DL=10 Operator: LEG

21 Benzo(a)pyrene



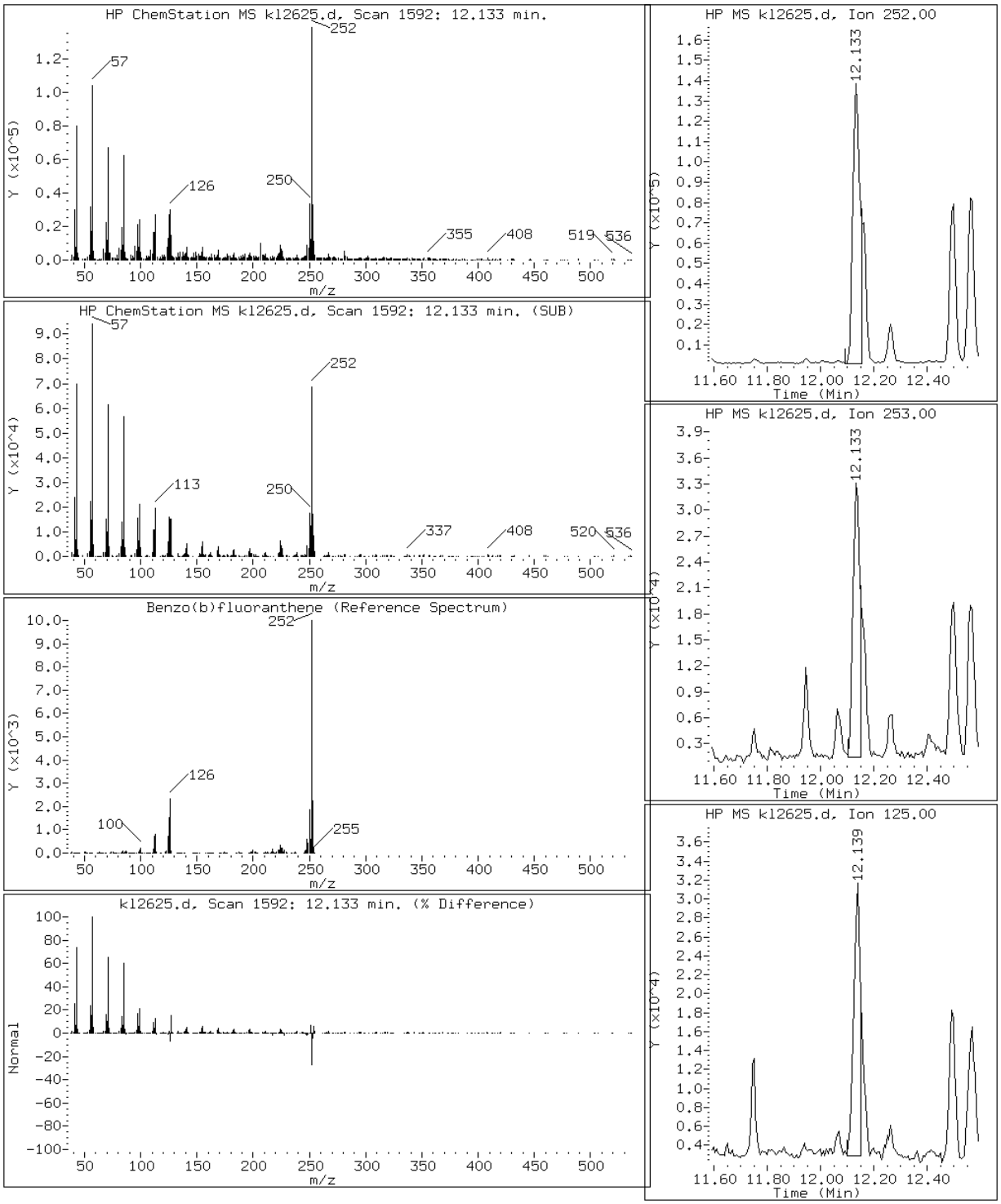
Data File: kl2625.d

Date: 26-DEC-2012 20:12

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-74-A DL=10 Operator: LEG

19 Benzo(b)fluoranthene



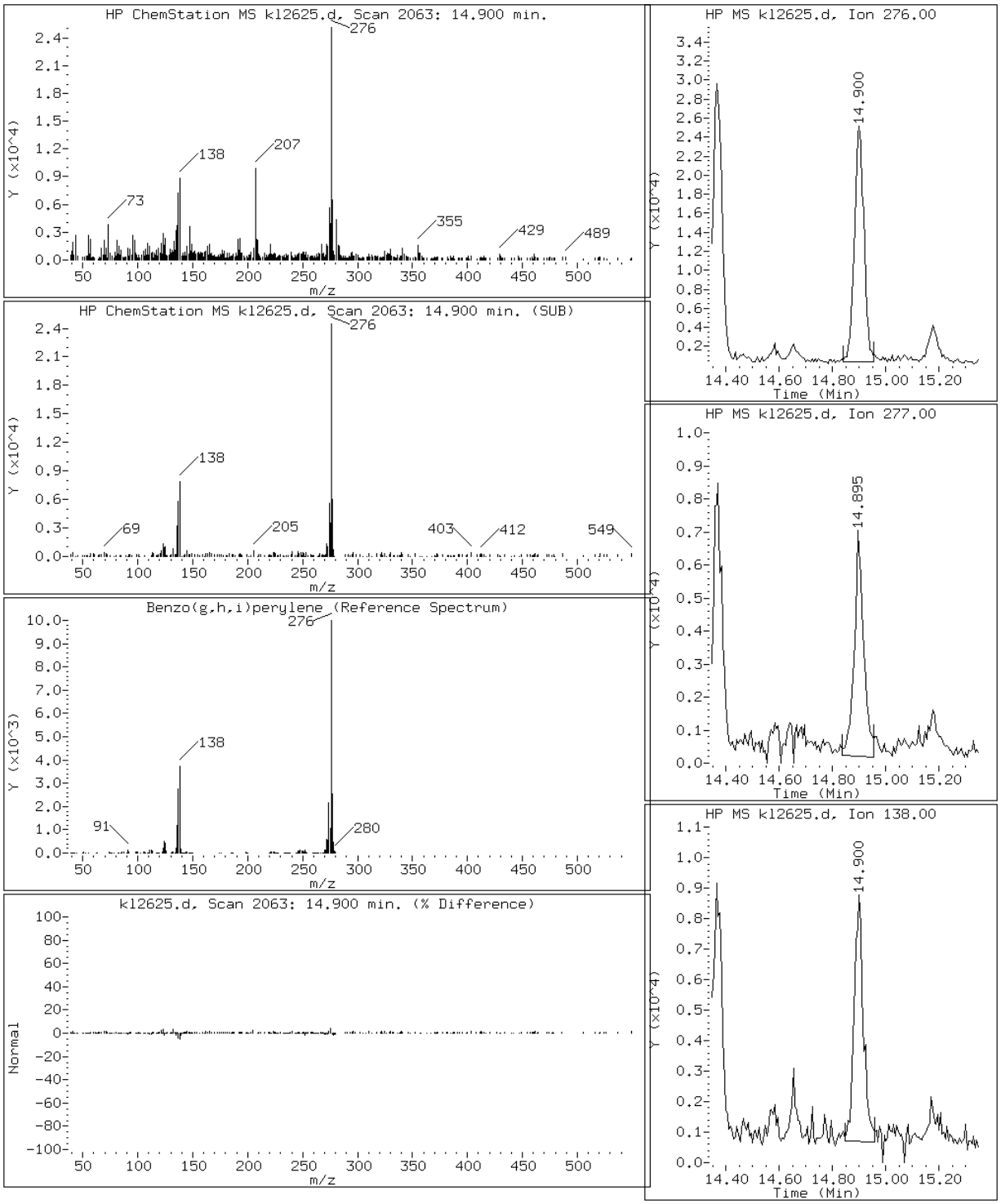
Data File: kl2625.d

Date: 26-DEC-2012 20:12

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-74-A DL=10 Operator: LEG

24 Benzo(g,h,i)perylene



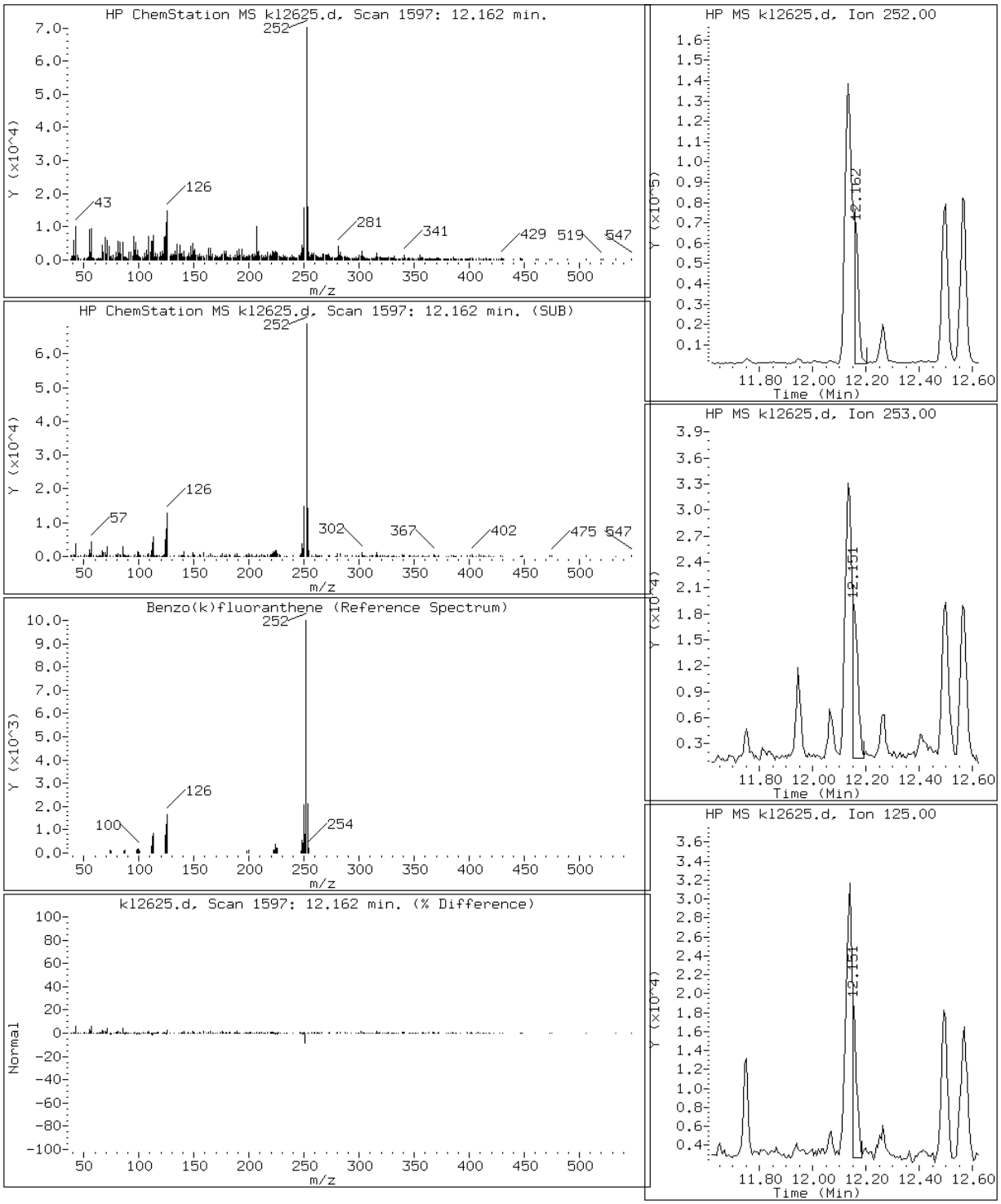
Data File: kl2625.d

Date: 26-DEC-2012 20:12

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-74-A DL=10 Operator: LEG

20 Benzo(k)fluoranthene



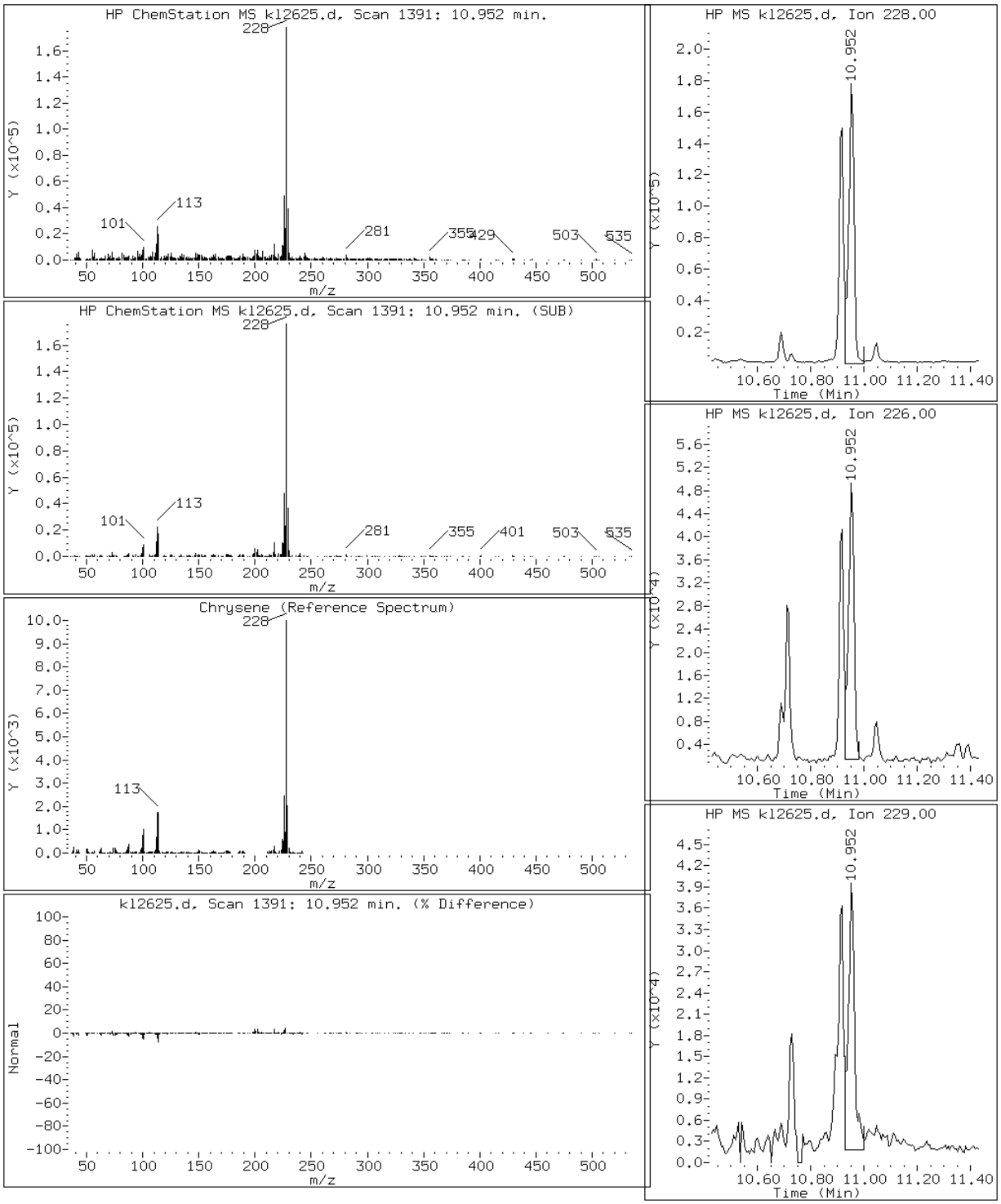
Data File: kl2625.d

Date: 26-DEC-2012 20:12

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-74-A DL=10 Operator: LEG

17 Chrysene



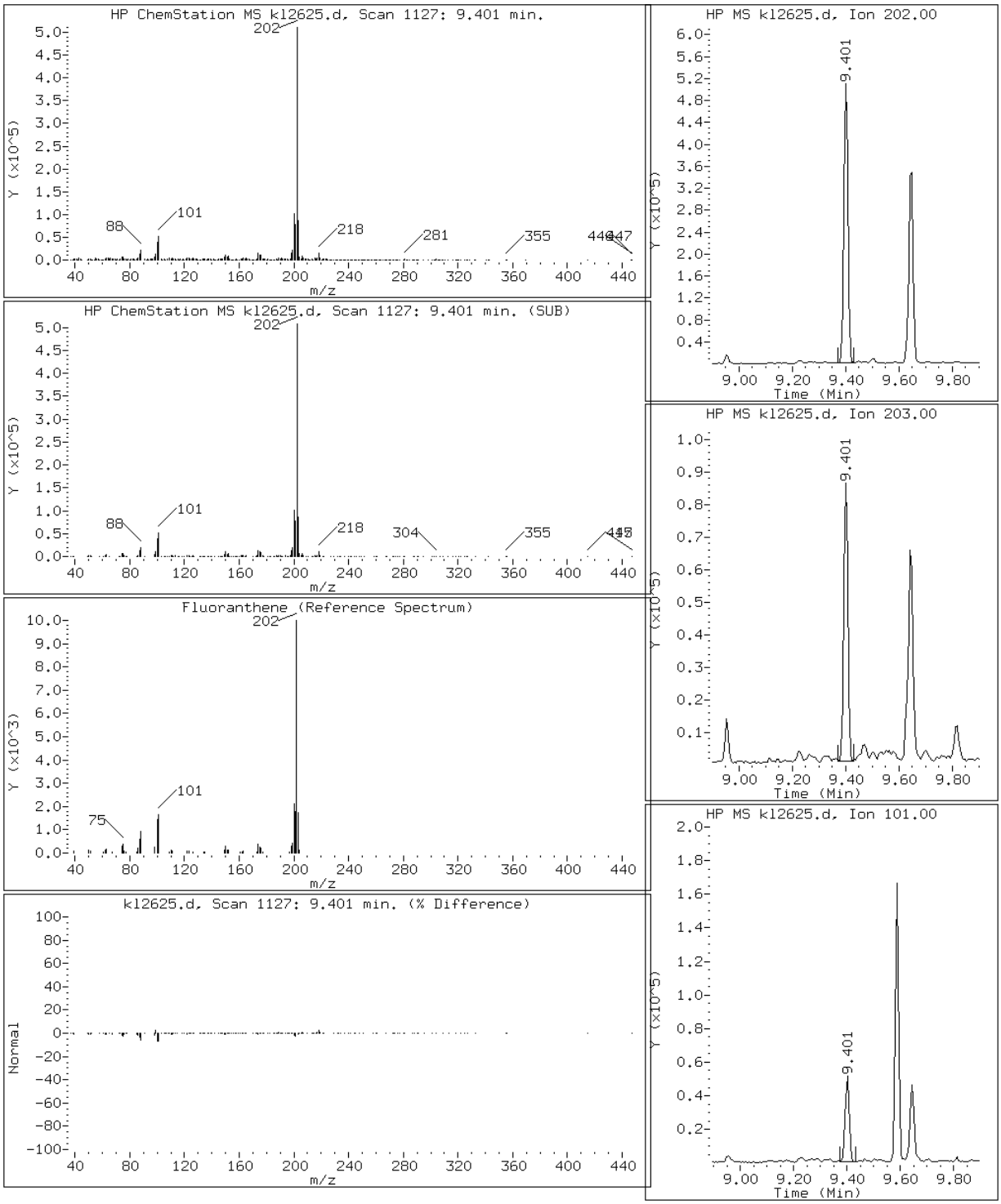
Data File: kl2625.d

Date: 26-DEC-2012 20:12

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-74-A DL=10 Operator: LEG

12 Fluoranthene



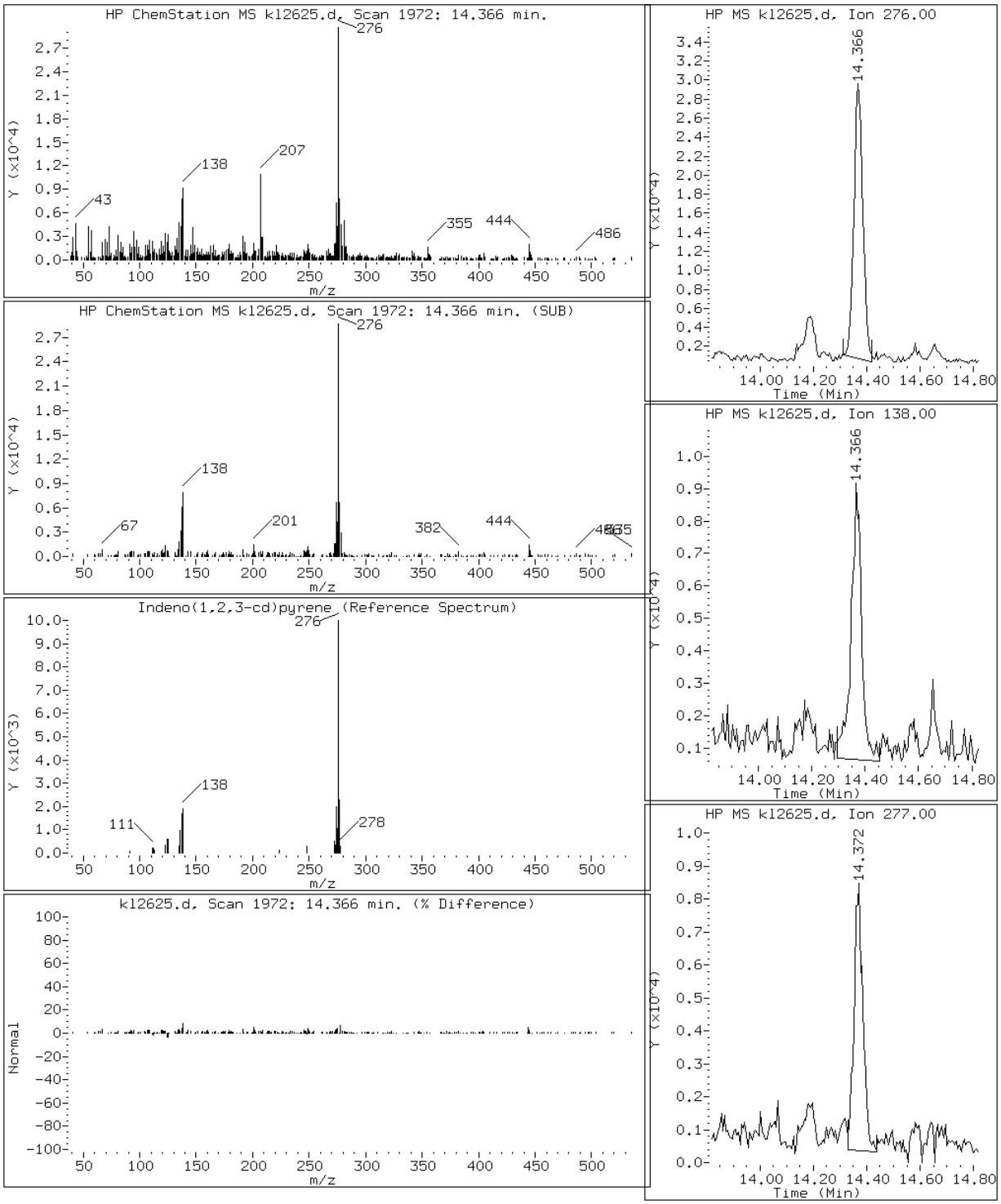
Data File: kl2625.d

Date: 26-DEC-2012 20:12

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-74-A DL=10 Operator: LEG

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



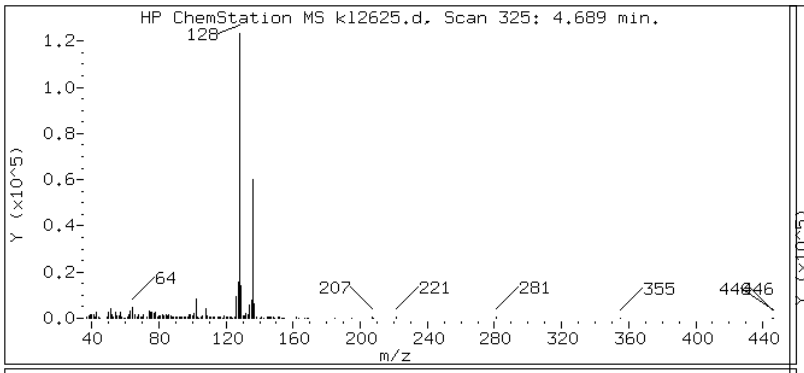
Data File: kl2625.d

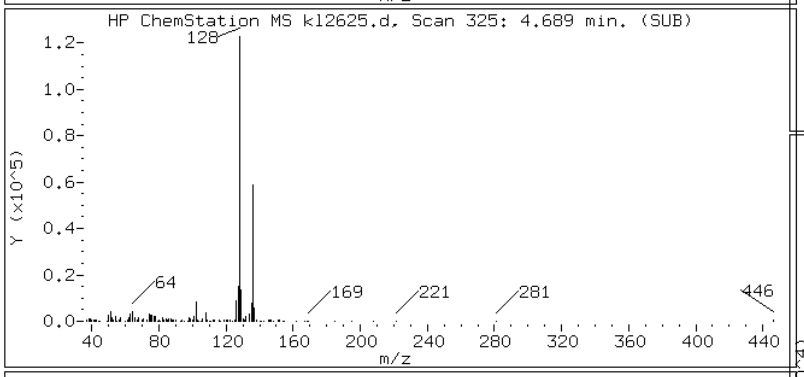
Date: 26-DEC-2012 20:12

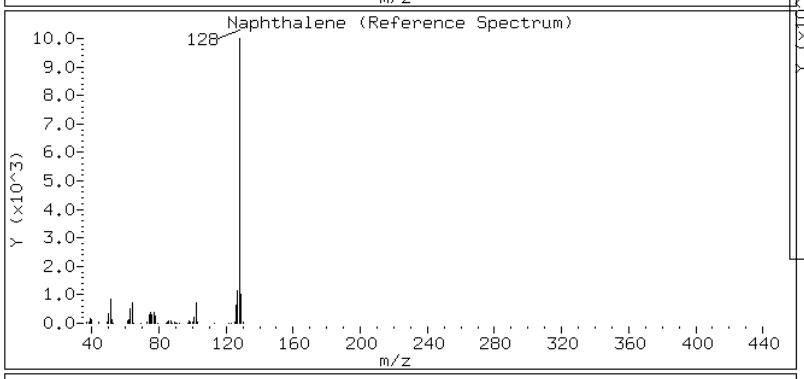
Client ID: Instrument: MSK5973.i

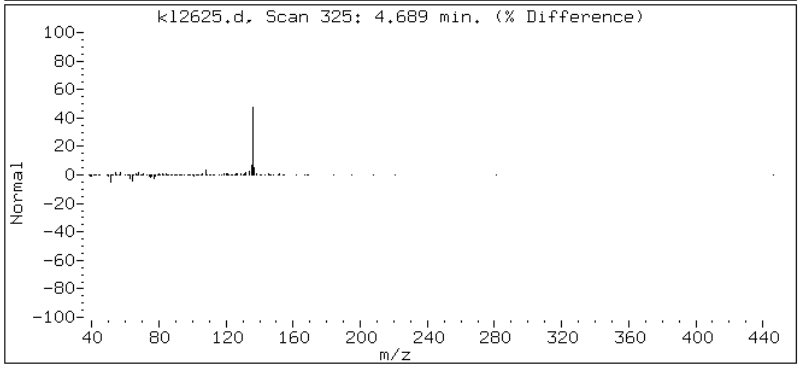
Sample Info: 680-85860-A-74-A DL=10 Operator: LEG

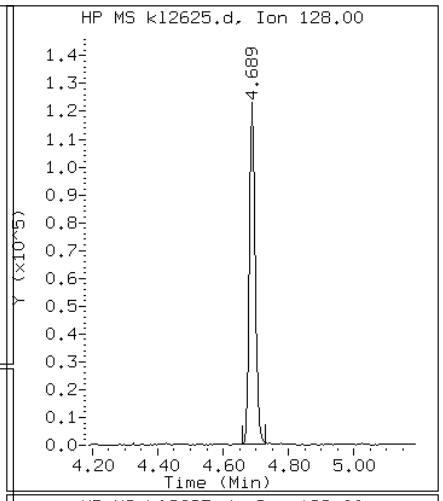
2 Naphthalene

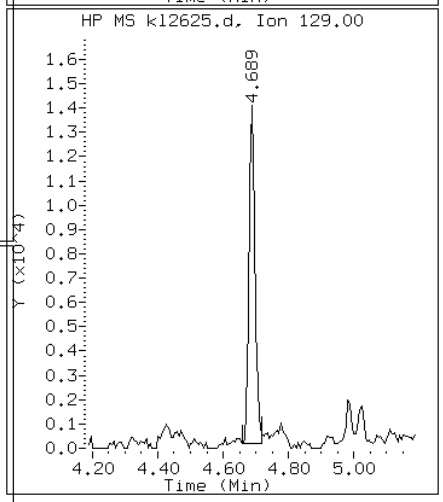












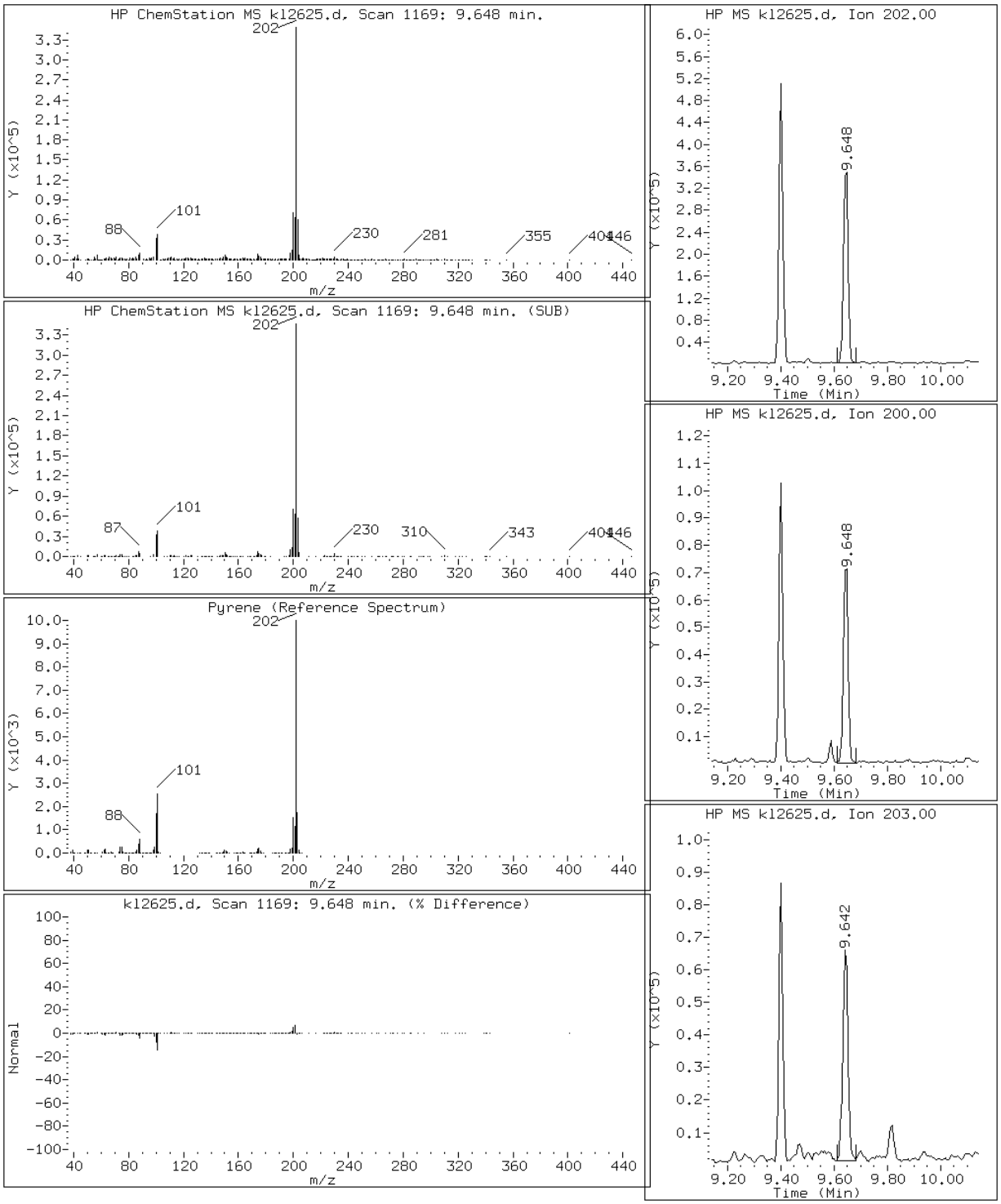
Data File: kl2625.d

Date: 26-DEC-2012 20:12

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-74-A DL=10 Operator: LEG

14 Pyrene



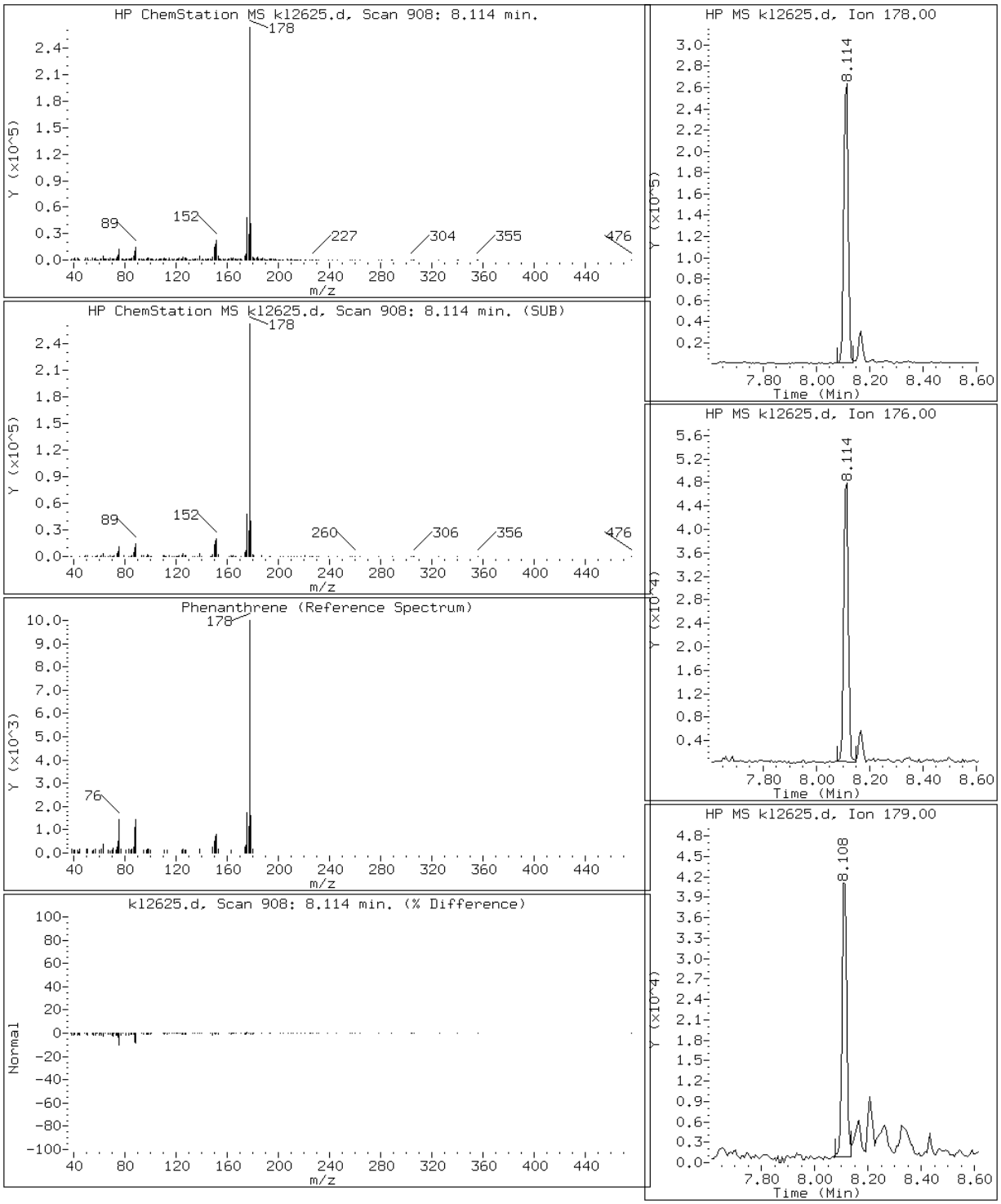
Data File: kl2625.d

Date: 26-DEC-2012 20:12

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-74-A DL=10 Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: kl2625.d
Inj. Date and Time: 26-DEC-2012 20:12
Instrument ID: MSK5973.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 12/27/2012

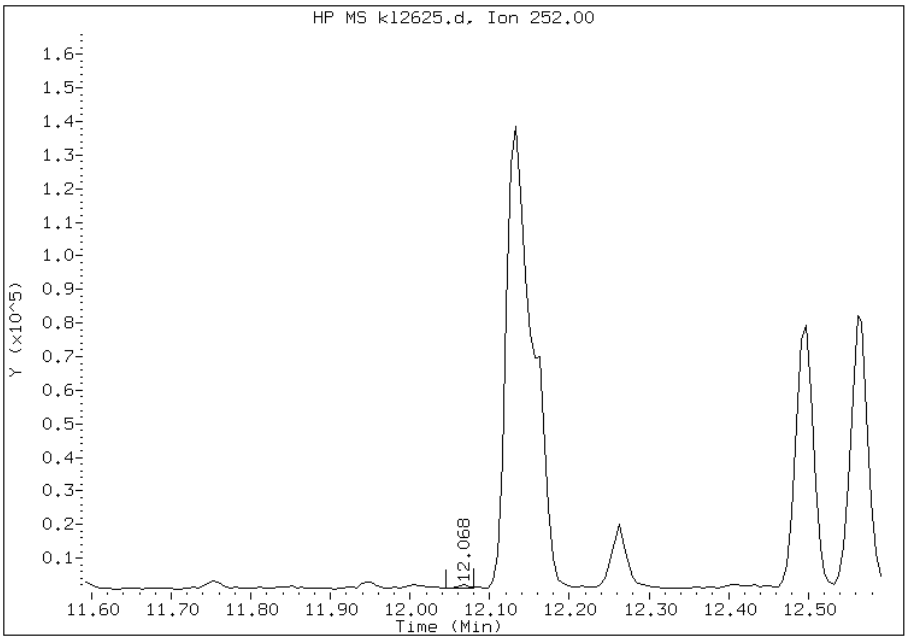
Processing Integration Results

RT: 12.07

Response: 1367

Amount: 0

Conc: 2



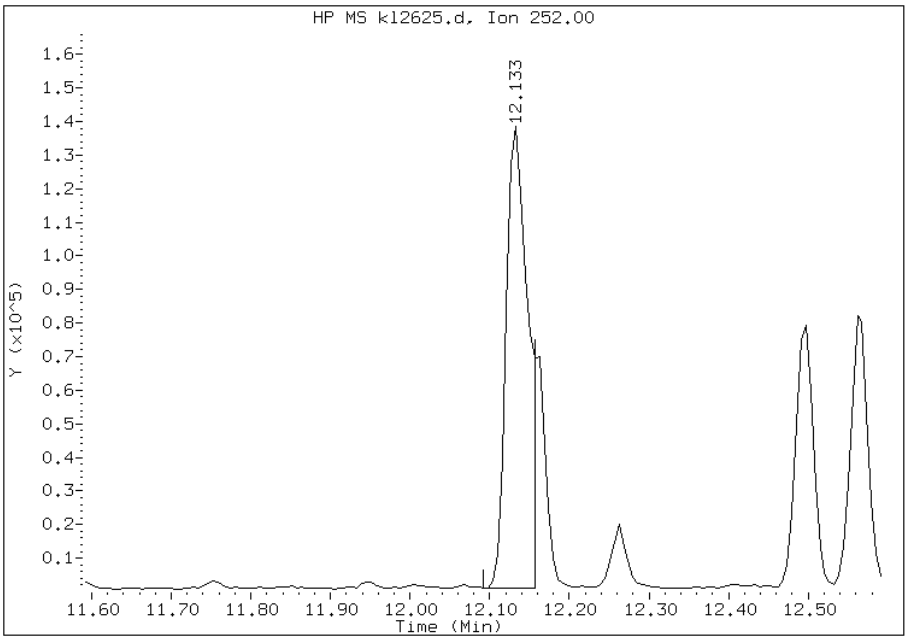
Manual Integration Results

RT: 12.13

Response: 265907

Amount: 1

Conc: 397



Manually Integrated By: chemist
Manual Integration Reason:

Manual Integration Report

Data File: kl2625.d
Inj. Date and Time: 26-DEC-2012 20:12
Instrument ID: MSK5973.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 12/27/2012

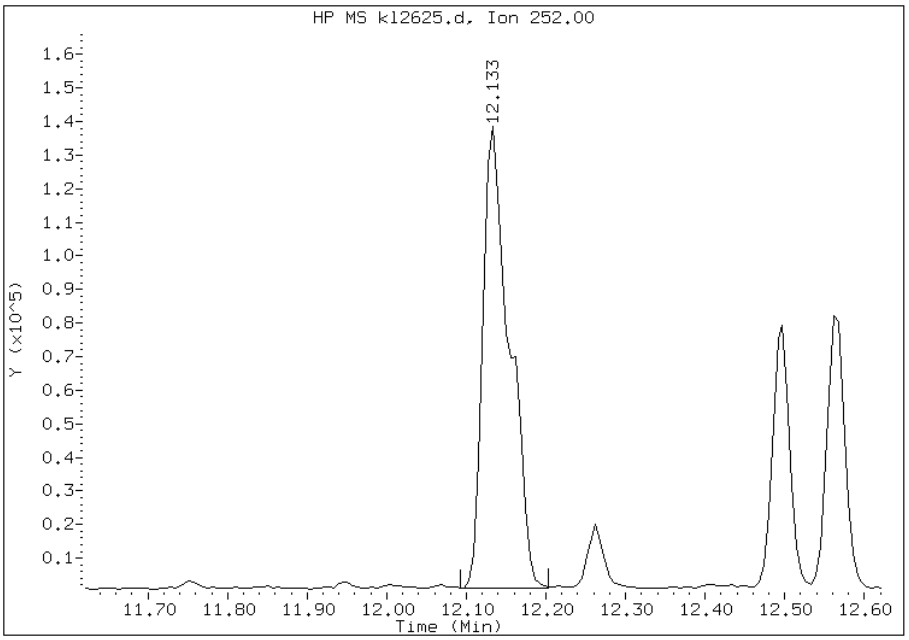
Processing Integration Results

RT: 12.13

Response: 321110

Amount: 1

Conc: 468



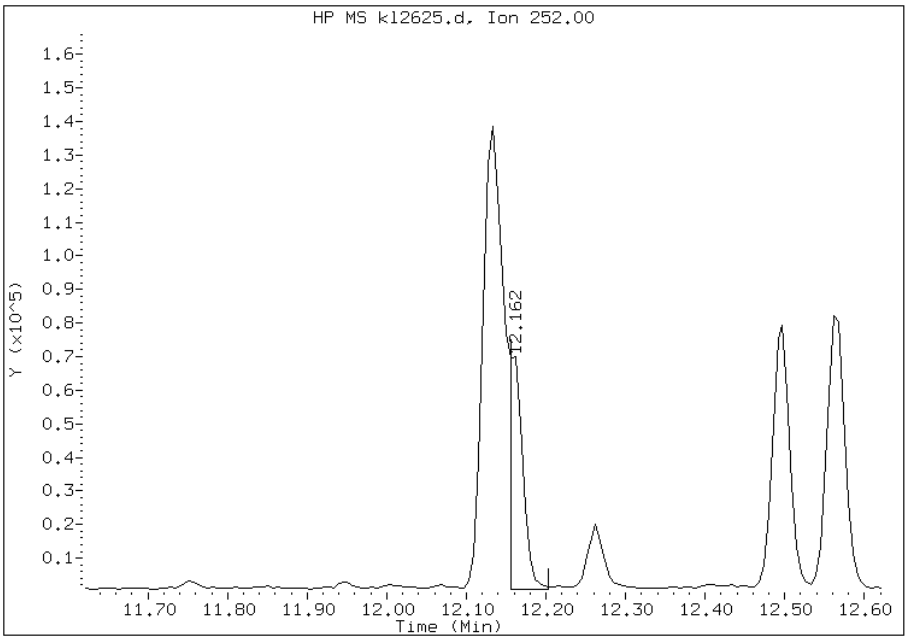
Manual Integration Results

RT: 12.16

Response: 79955

Amount: 0

Conc: 117



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: kl2625.d
Inj. Date and Time: 26-DEC-2012 20:12
Instrument ID: MSK5973.i
Client ID:
Compound: 17 Chrysene
CAS #: 218-01-9
Report Date: 12/27/2012

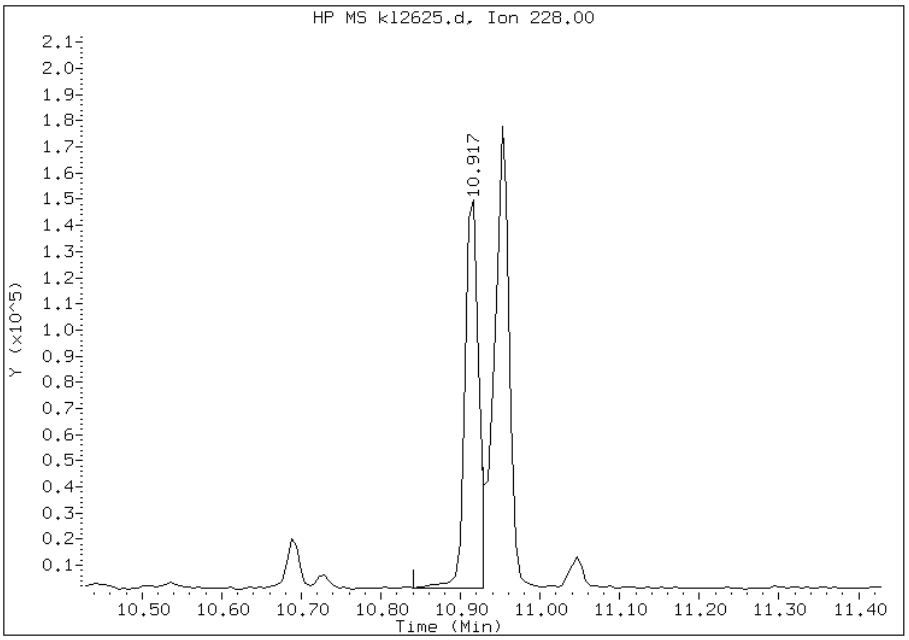
Processing Integration Results

RT: 10.92

Response: 181820

Amount: 1

Conc: 214



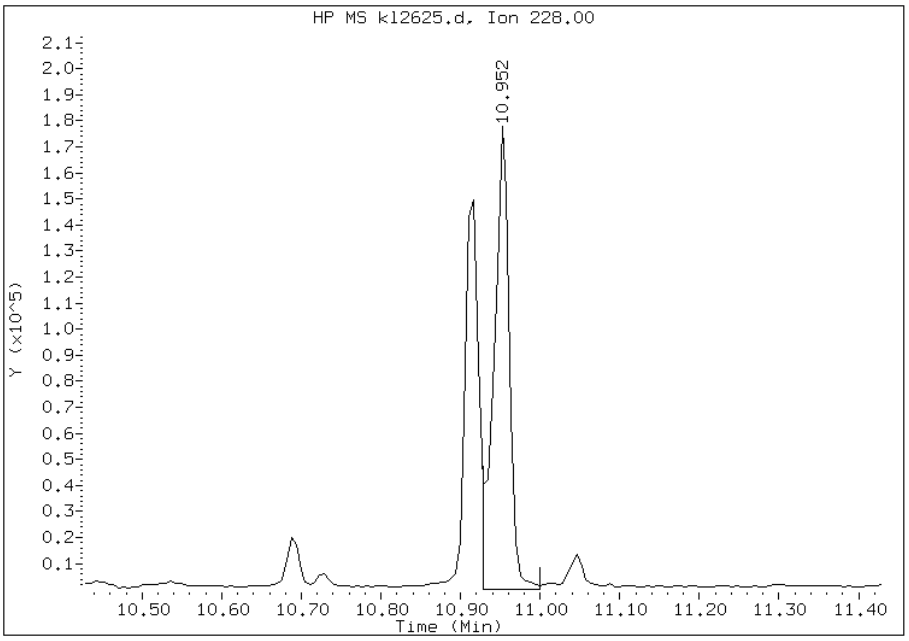
Manual Integration Results

RT: 10.95

Response: 251229

Amount: 1

Conc: 296



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.: 680-85860-4

SDG No.: 68085860-4

Client Sample ID: HP0282B-CS | Lab Sample ID: 680-85860-75

Matrix: Solid | Lab File ID: kl2626.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/14/2012 10:15

Extract. Method: 3546 | Date Extracted: 12/20/2012 18:29

Sample wt/vol: 30.26(g) | Date Analyzed: 12/26/2012 20:36

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

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

% Moisture: 26.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261203 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	77	J	90	42
91-57-6	2-Methylnaphthalene	150		90	44
83-32-9	Acenaphthene	90	U	90	44
208-96-8	Acenaphthylene	90	U	90	44
120-12-7	Anthracene	53	J	90	44
56-55-3	Benzo[a]anthracene	410		90	44
50-32-8	Benzo[a]pyrene	510		90	16
205-99-2	Benzo[b]fluoranthene	780		90	44
191-24-2	Benzo[g,h,i]perylene	300		90	44
207-08-9	Benzo[k]fluoranthene	380		90	27
218-01-9	Chrysene	590		90	44
53-70-3	Dibenz(a,h)anthracene	88	J	90	44
206-44-0	Fluoranthene	910		90	44
86-73-7	Fluorene	90	U	90	44
193-39-5	Indeno[1,2,3-cd]pyrene	220		90	44
91-20-3	Naphthalene	280		90	44
129-00-0	Pyrene	830		90	44
85-01-8	Phenanthrene	530		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/1k122612.b/kl2626.d
Lab Smp Id: 680-85860-A-75-A DL
Inj Date : 26-DEC-2012 20:36
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85860-A-75-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122612.b/k-b8270CLLPAH-m.m
Meth Date : 27-Dec-2012 09:54 chemist Quant Type: ISTD
Cal Date : 26-DEC-2012 17:28 Cal File: kl2618q.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	4.671	4.671	(1.000)	670524	2.00000	
2 Naphthalene	128	4.689	4.689	(1.004)	246292	0.62919	209.73
3 2-Methylnaphthalene	142	5.364	5.364	(1.148)	81140	0.33220	110.73
4 1-Methylnaphthalene	142	5.470	5.470	(1.171)	42675	0.17100	56.99(a)
* 5 Acenaphthene-d10	164	6.463	6.463	(1.000)	409680	2.00000	
* 9 Phenanthrene-d10	188	8.085	8.085	(1.000)	630700	2.00000	
10 Phenanthrene	178	8.114	8.108	(1.004)	470280	1.16886	389.62

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
11 Anthracene	178	8.167	8.167	(1.010)	43893	0.11714	39.04(a)
12 Fluoranthene	202	9.401	9.401	(1.163)	809180	2.02060	673.53
14 Pyrene	202	9.642	9.642	(0.884)	616066	1.84156	613.85
16 Benzo(a)Anthracene	228	10.893	10.887	(0.998)	224356	0.90221	300.73
* 13 Chrysene-d12	240	10.911	10.899	(1.000)	391275	2.00000	
17 Chrysene	228	10.935	10.928	(1.002)	329699	1.30341	434.46
19 Benzo(b)fluoranthene	252	12.104	12.092	(0.959)	325278	1.74106	580.35(M)
20 Benzo(k)fluoranthene	252	12.121	12.121	(0.961)	160210	0.83693	278.97(M)
21 Benzo(a)pyrene	252	12.533	12.521	(0.993)	163215	1.13497	378.32
* 18 Perylene-d12	264	12.615	12.603	(1.000)	263485	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	14.336	14.319	(1.314)	98199	0.48539	161.79
23 Dibenzo(a,h)anthracene	278	14.342	14.336	(1.137)	25398	0.19550	65.16(a)
24 Benzo(g,h,i)perylene	276	14.865	14.848	(1.178)	86634	0.65883	219.60

QC Flag Legend

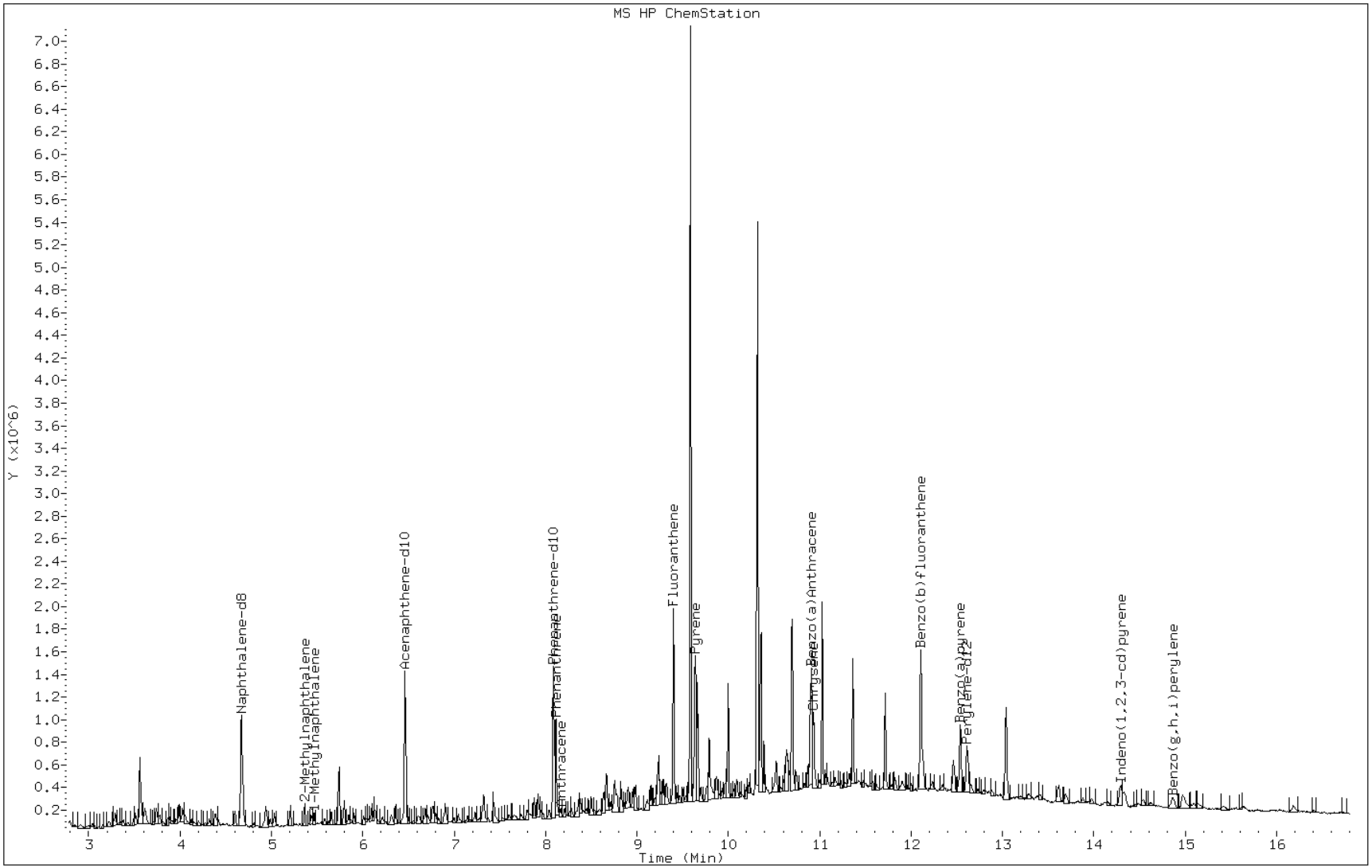
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: kl2626.d

Date: 26-DEC-2012 20:36

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-75-A DL=10 Operator: LEG



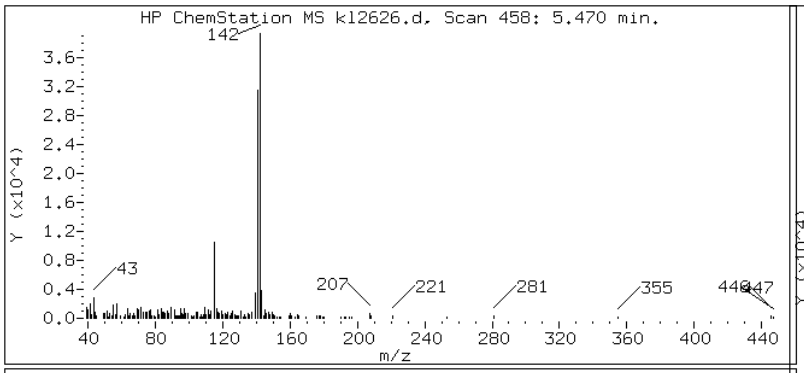
Data File: kl2626.d

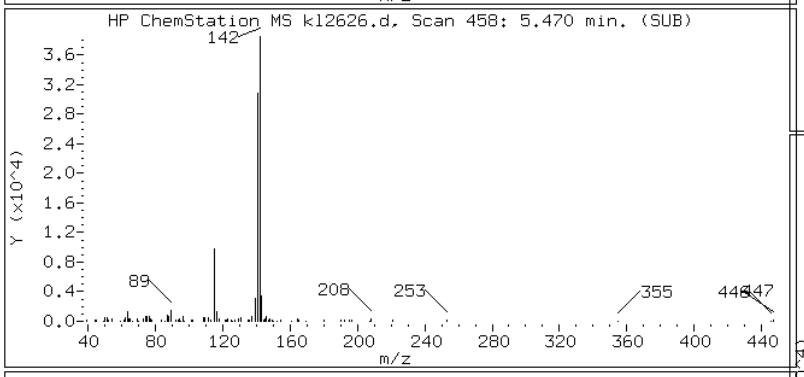
Date: 26-DEC-2012 20:36

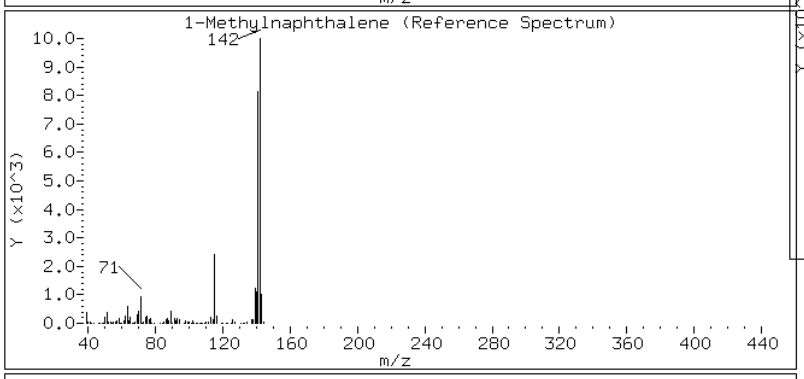
Client ID: Instrument: MSK5973.i

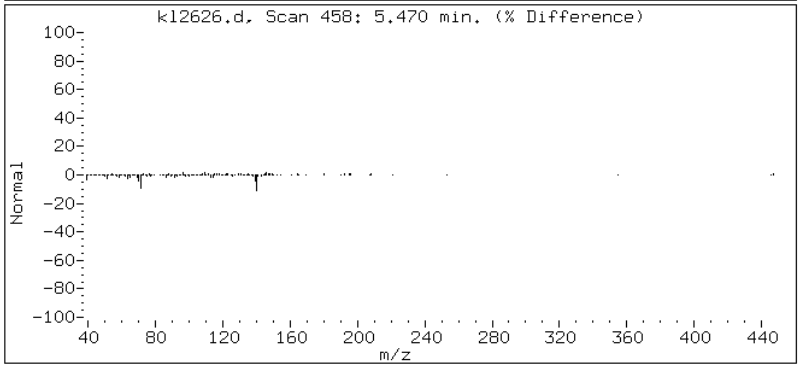
Sample Info: 680-85860-A-75-A DL=10 Operator: LEG

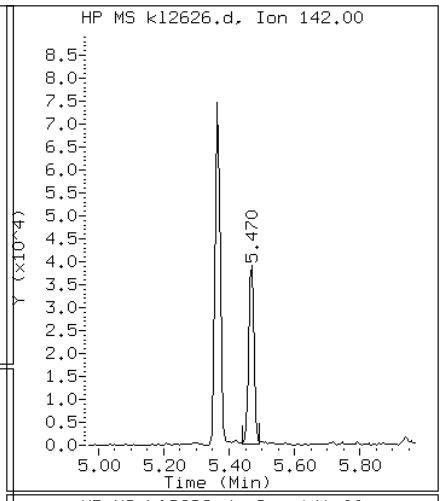
4 1-Methylnaphthalene

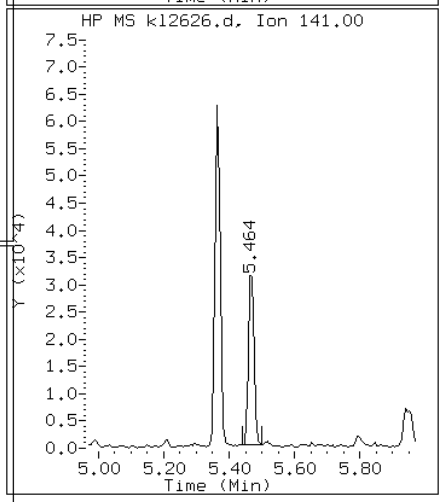












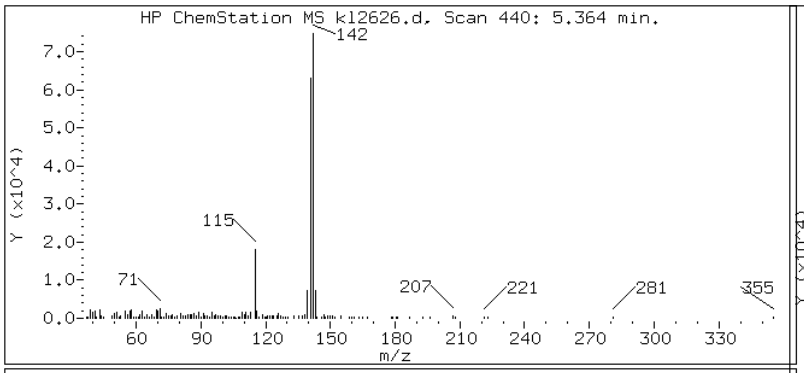
Data File: kl2626.d

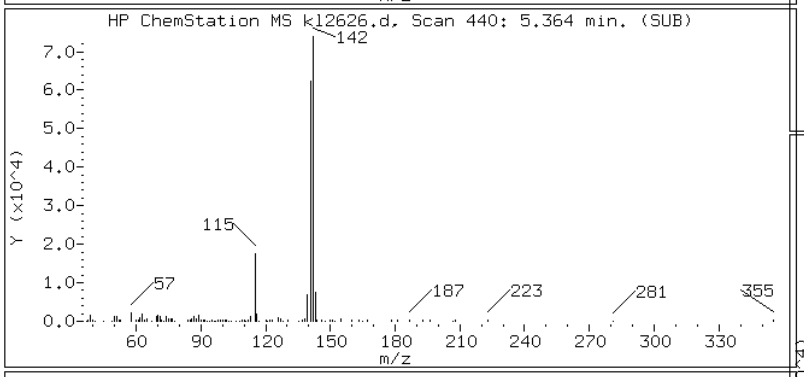
Date: 26-DEC-2012 20:36

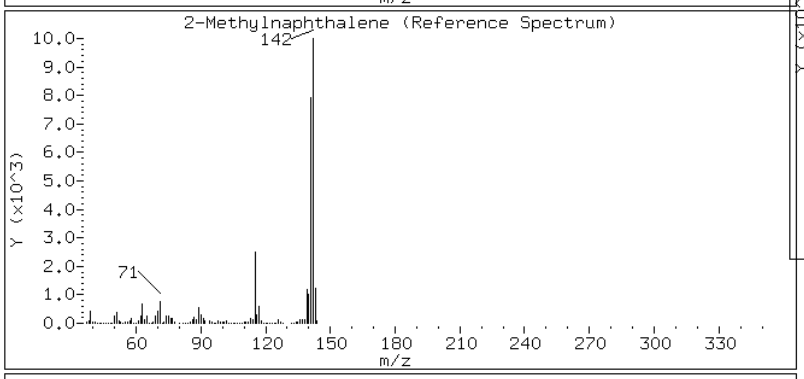
Client ID: Instrument: MSK5973.i

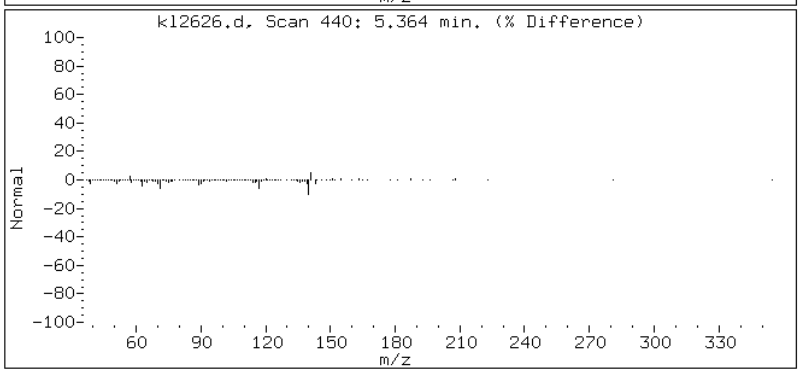
Sample Info: 680-85860-A-75-A DL=10 Operator: LEG

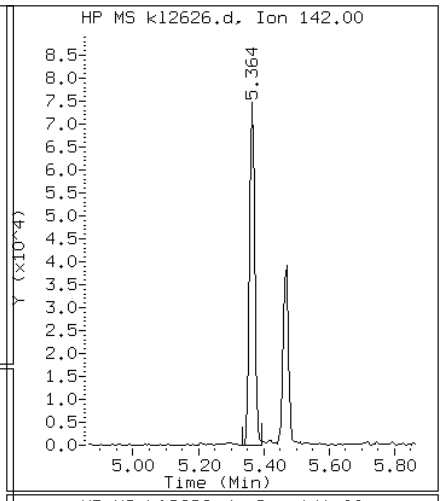
3 2-Methylnaphthalene

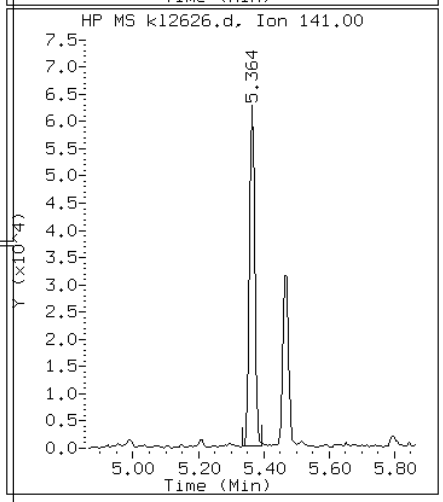












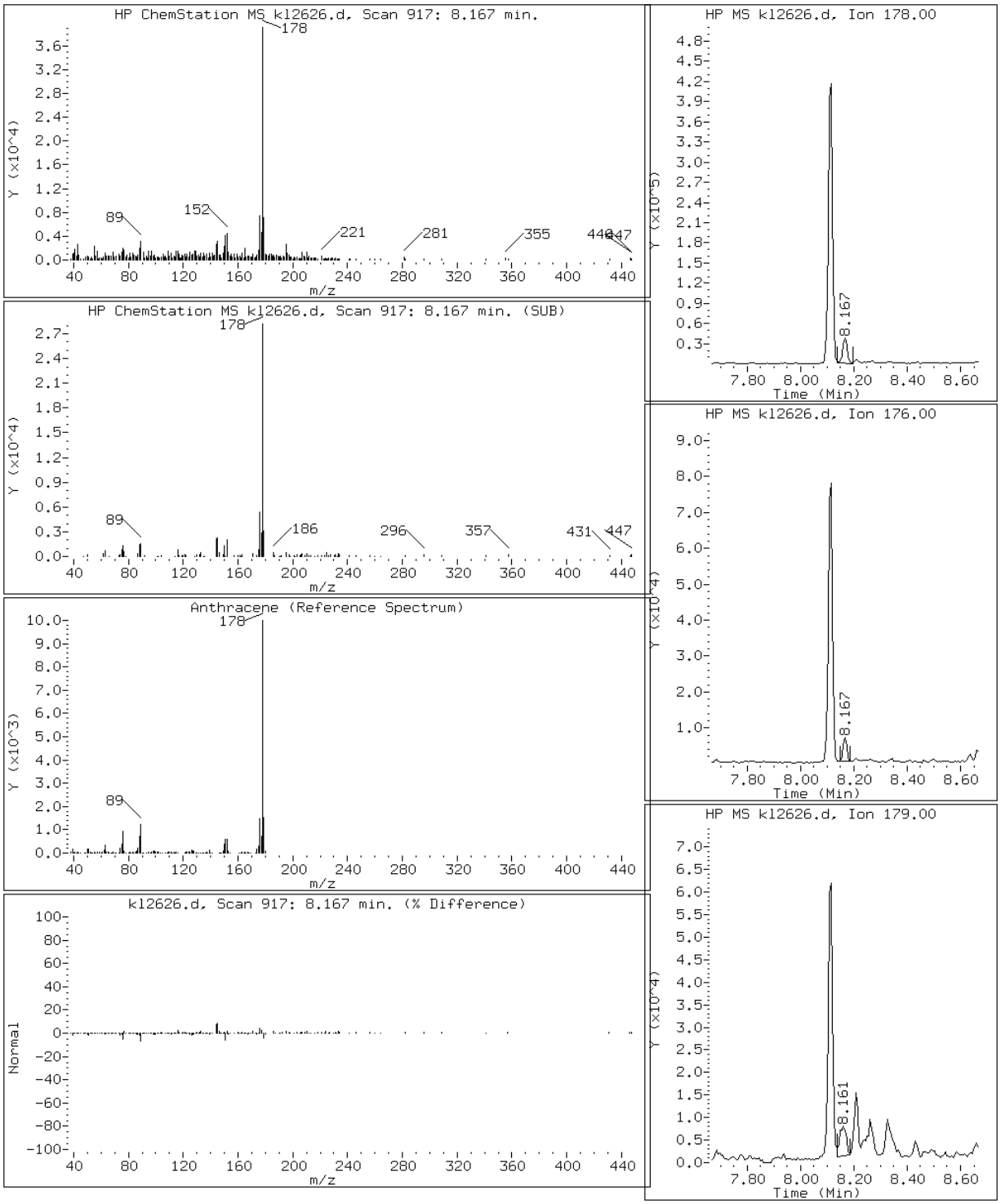
Data File: kl2626.d

Date: 26-DEC-2012 20:36

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-75-A DL=10 Operator: LEG

11 Anthracene



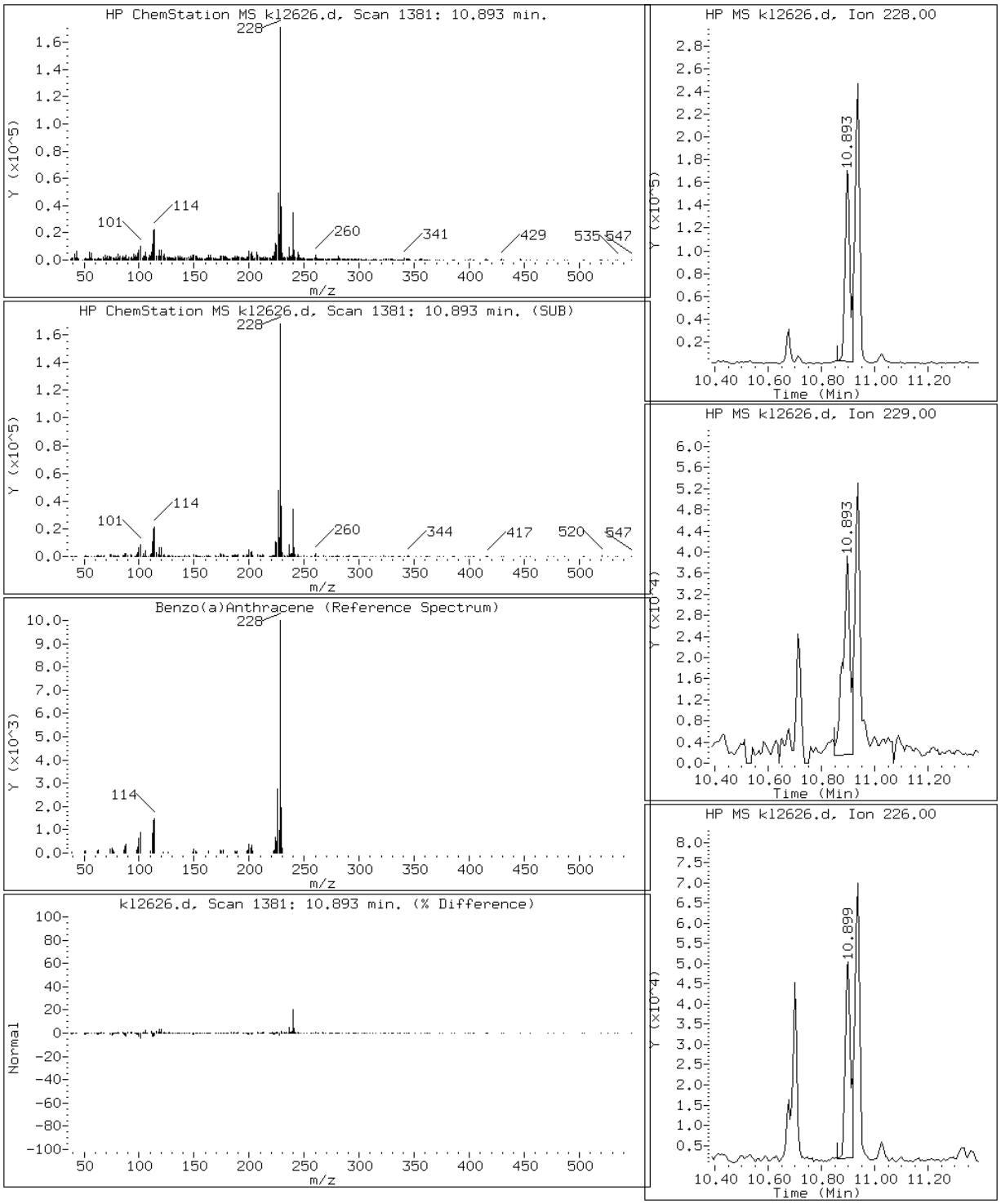
Data File: kl2626.d

Date: 26-DEC-2012 20:36

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-75-A DL=10 Operator: LEG

16 Benzo(a)Anthracene



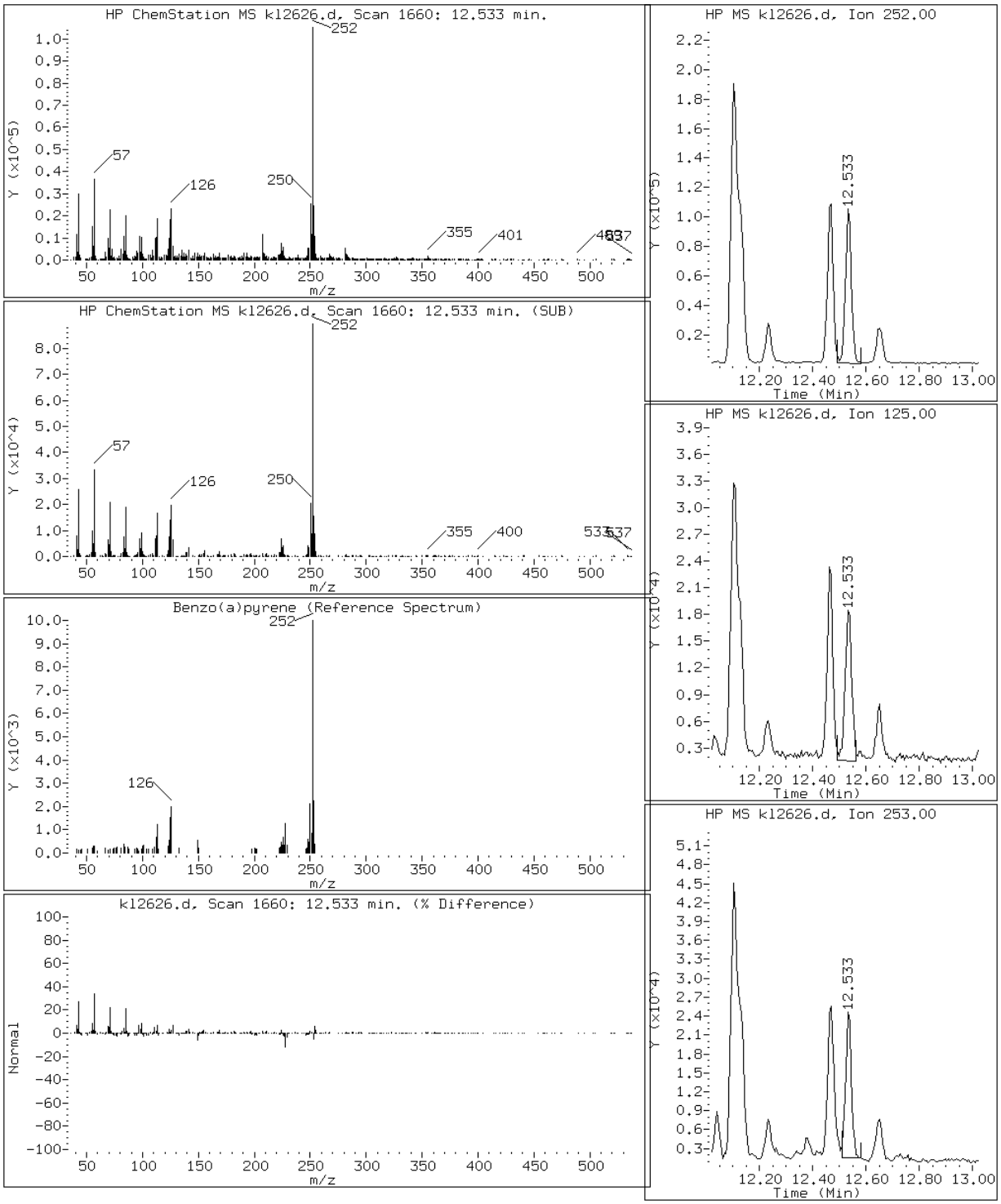
Data File: kl2626.d

Date: 26-DEC-2012 20:36

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-75-A DL=10 Operator: LEG

21 Benzo(a)pyrene



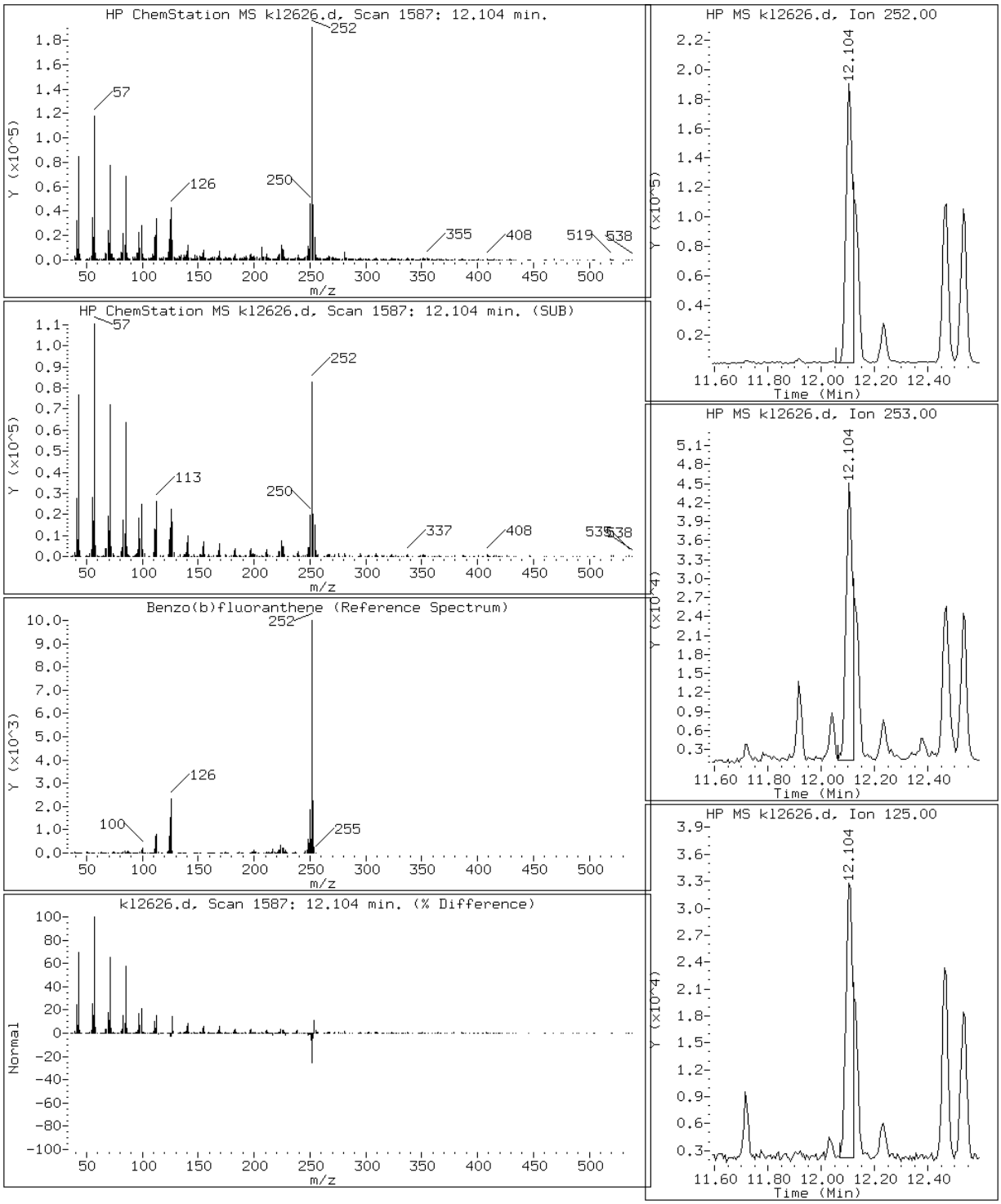
Data File: kl2626.d

Date: 26-DEC-2012 20:36

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-75-A DL=10 Operator: LEG

19 Benzo(b)fluoranthene



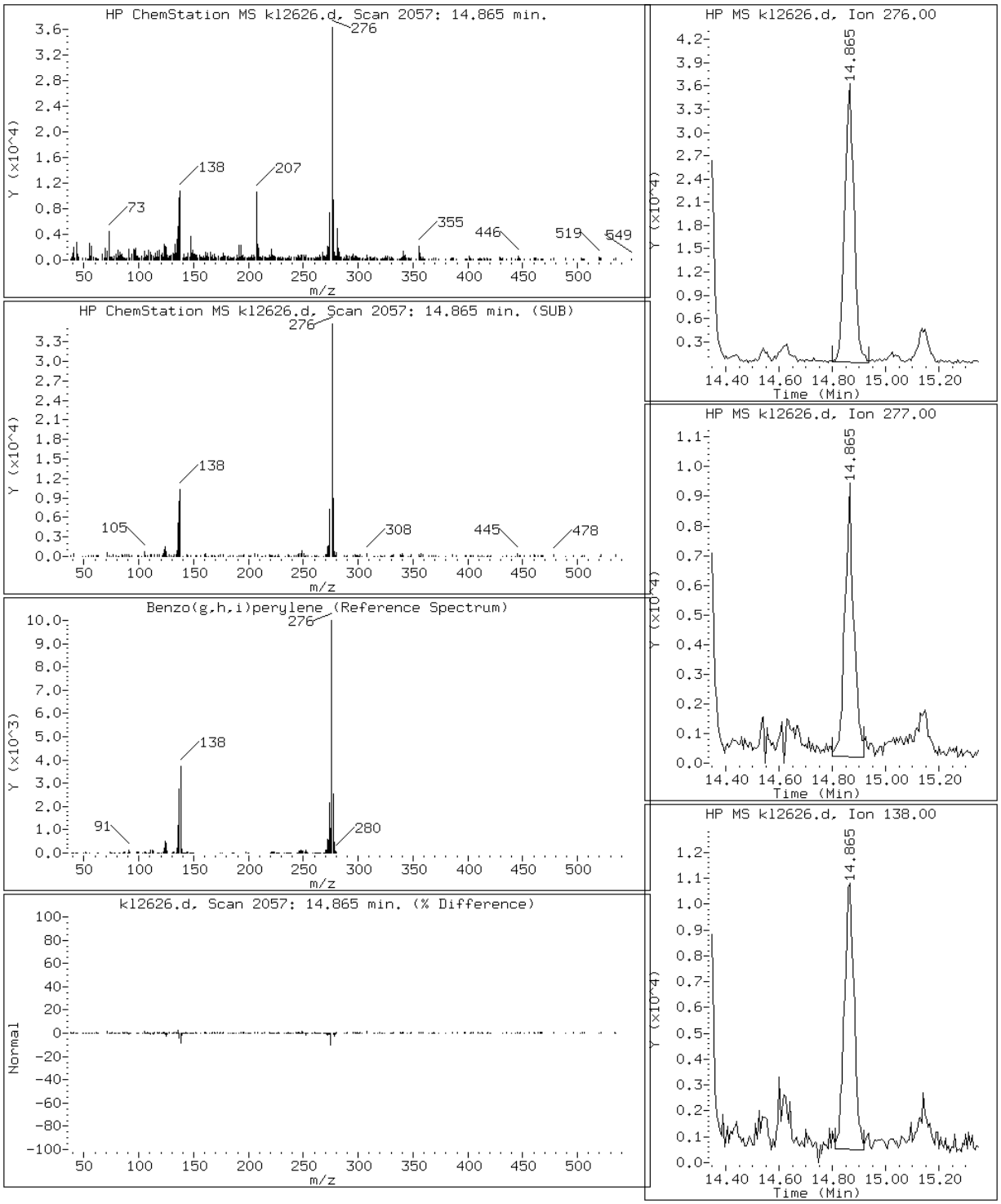
Data File: kl2626.d

Date: 26-DEC-2012 20:36

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-75-A DL=10 Operator: LEG

24 Benzo(g,h,i)perylene



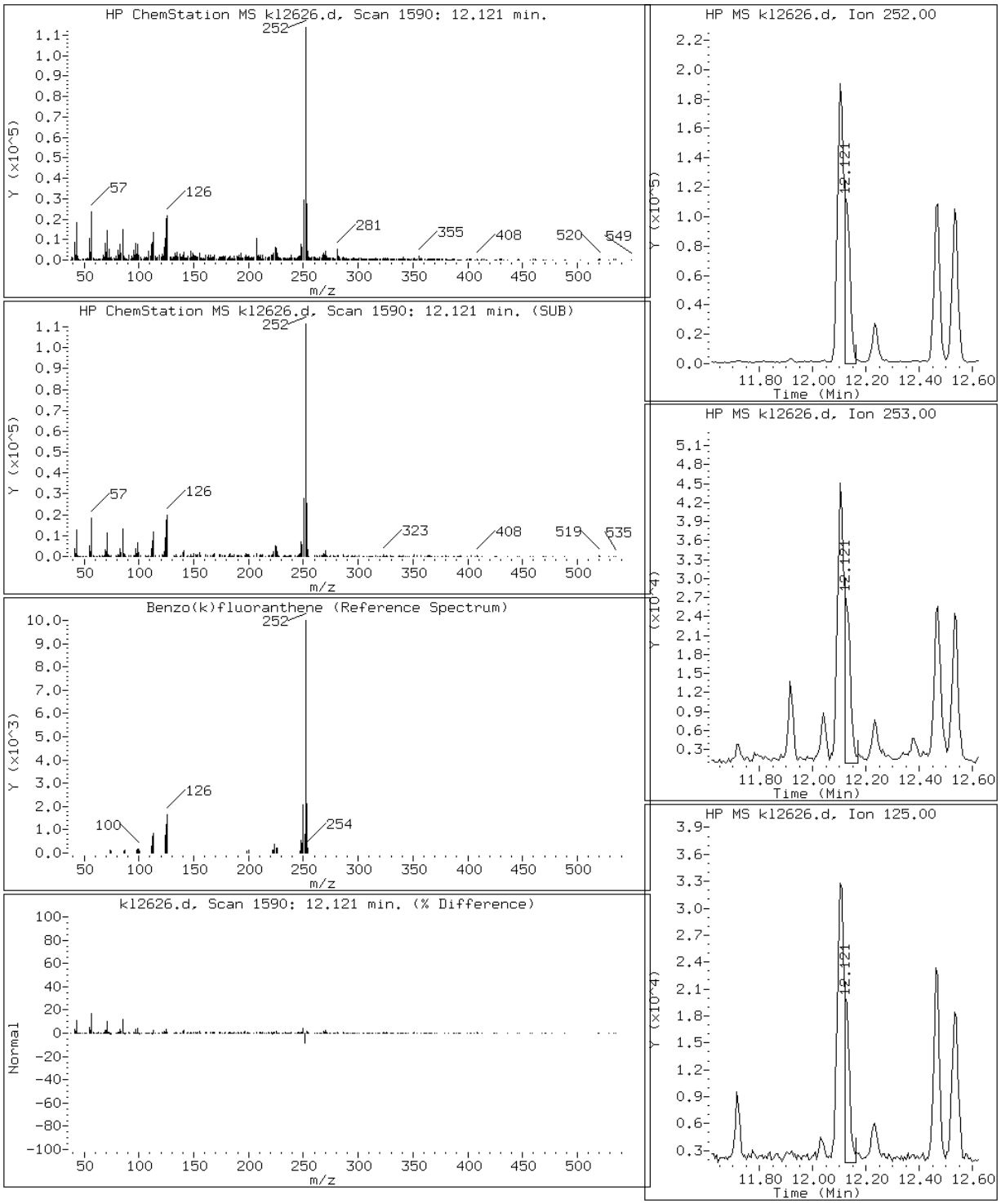
Data File: kl2626.d

Date: 26-DEC-2012 20:36

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-75-A DL=10 Operator: LEG

20 Benzo(k)fluoranthene



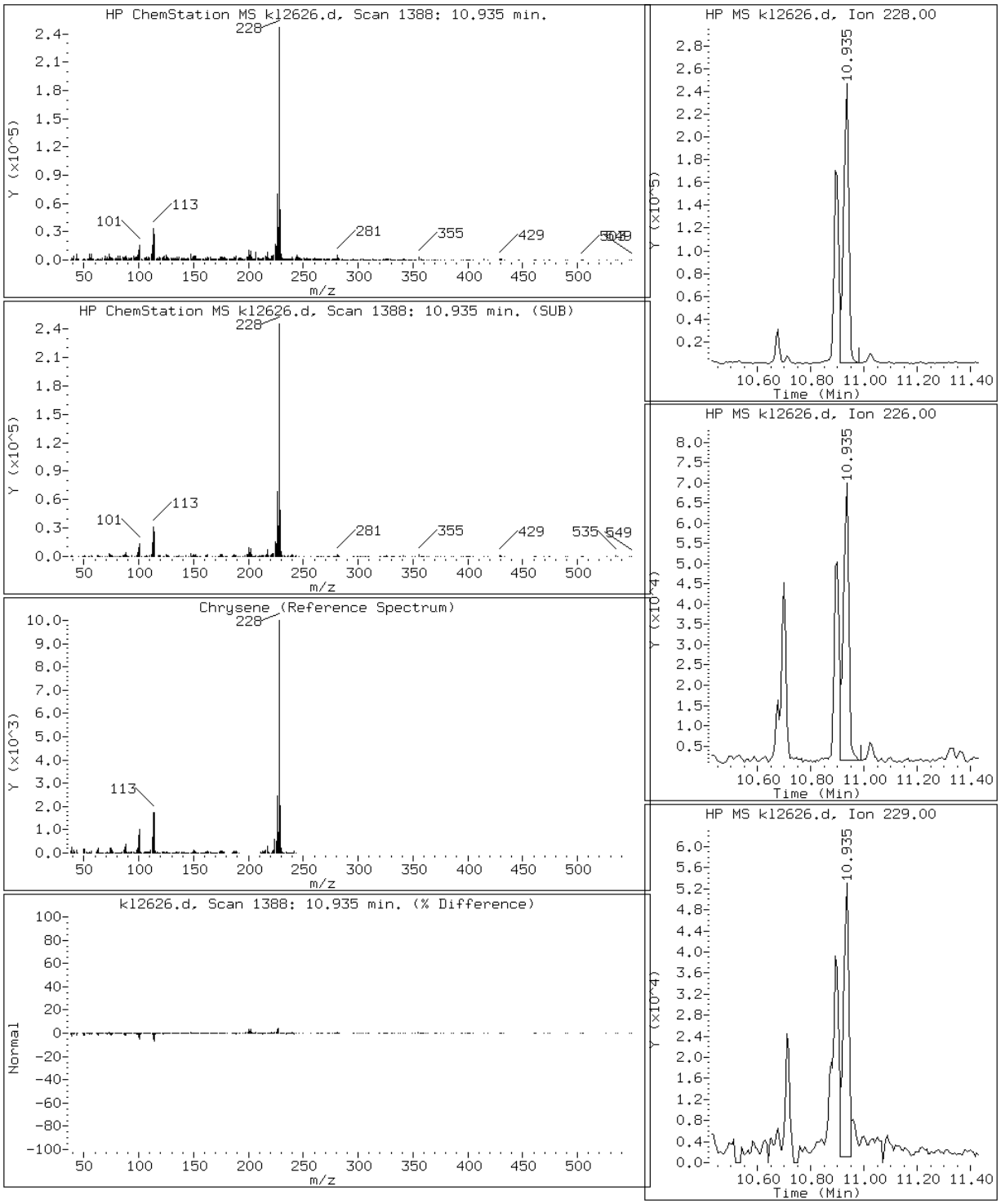
Data File: kl2626.d

Date: 26-DEC-2012 20:36

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-75-A DL=10 Operator: LEG

17 Chrysene



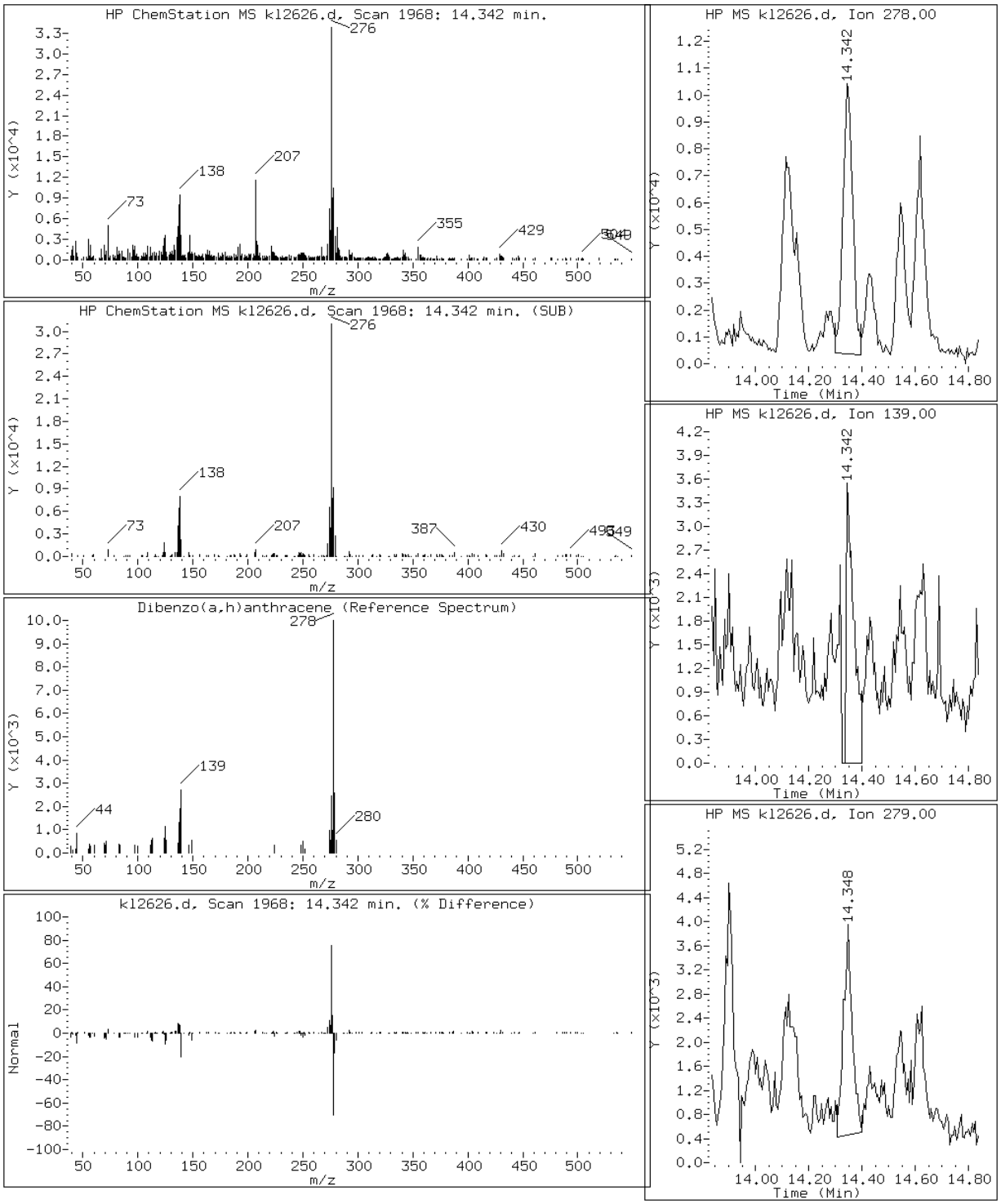
Data File: kl2626.d

Date: 26-DEC-2012 20:36

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-75-A DL=10 Operator: LEG

23 Dibenzo(a,h)anthracene



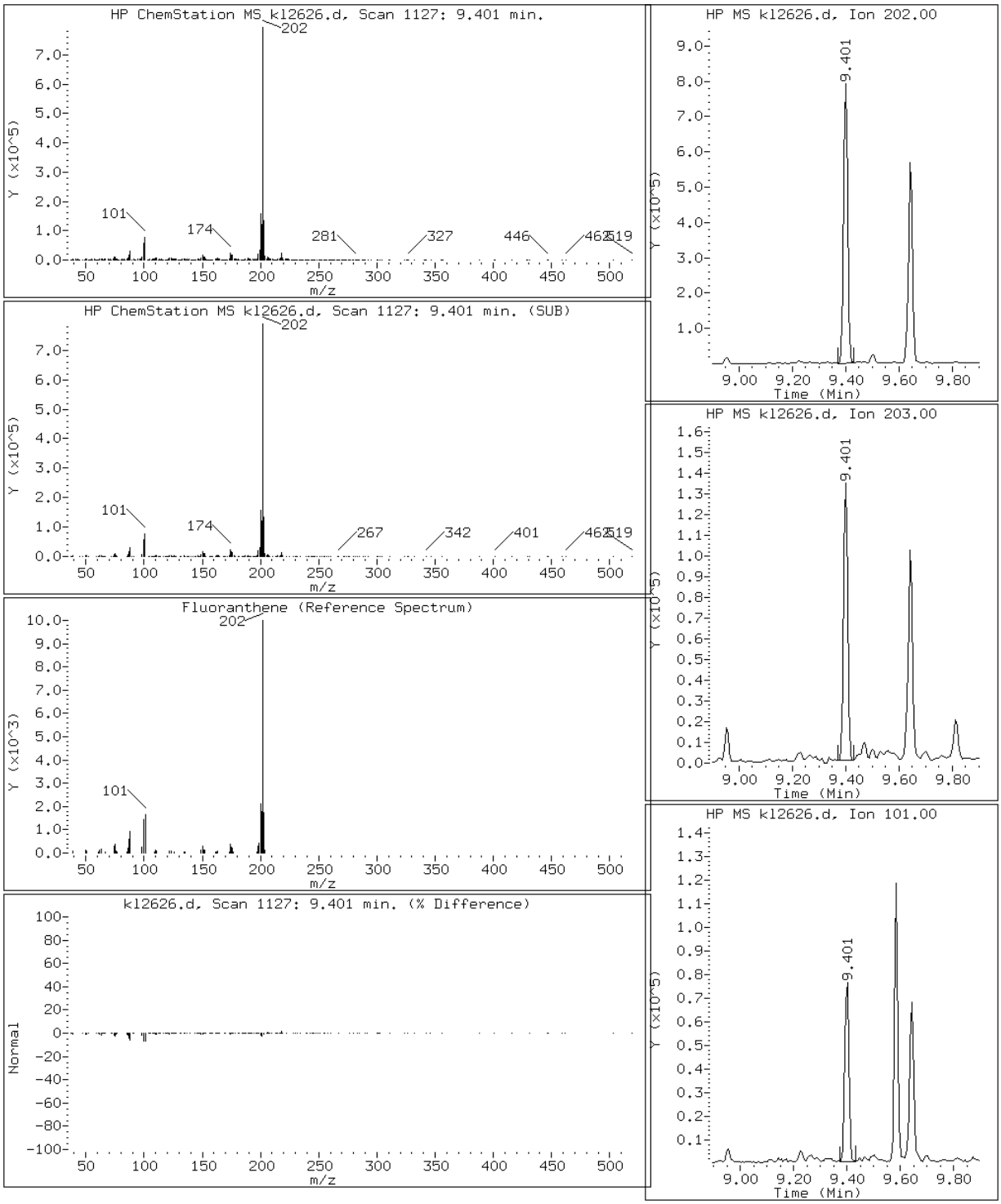
Data File: kl2626.d

Date: 26-DEC-2012 20:36

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-75-A DL=10 Operator: LEG

12 Fluoranthene



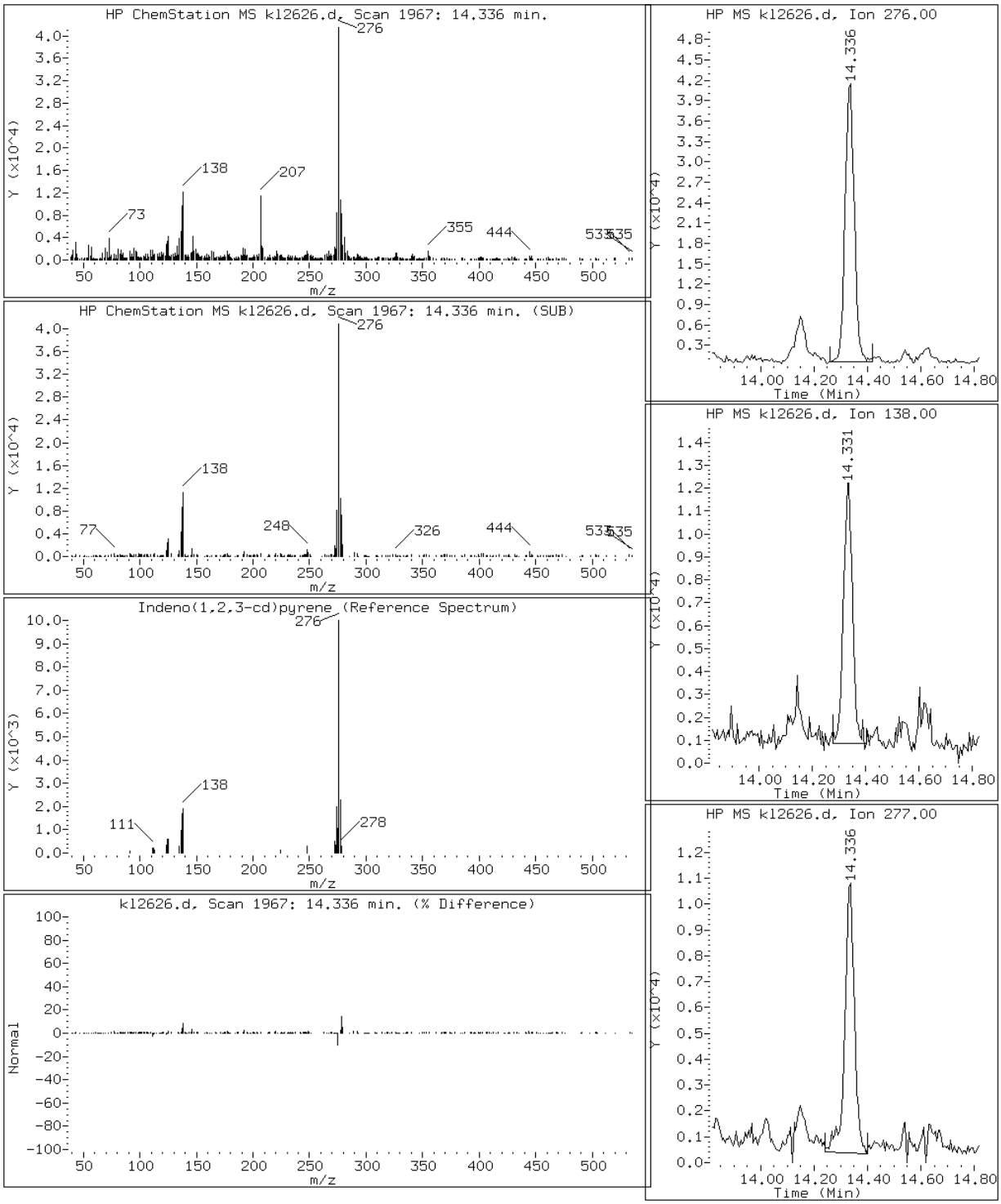
Data File: kl2626.d

Date: 26-DEC-2012 20:36

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-75-A DL=10 Operator: LEG

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



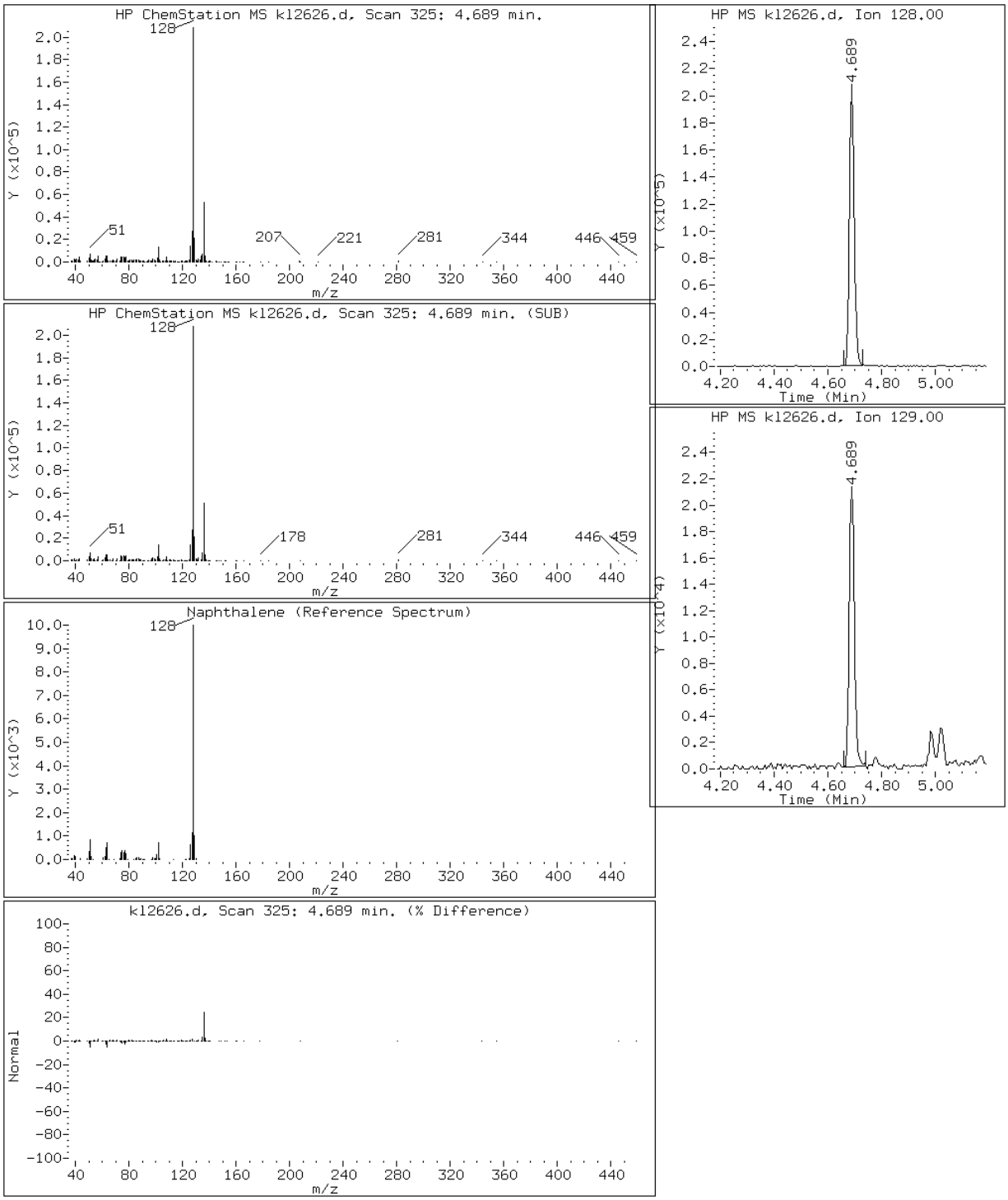
Data File: kl2626.d

Date: 26-DEC-2012 20:36

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-75-A DL=10 Operator: LEG

2 Naphthalene



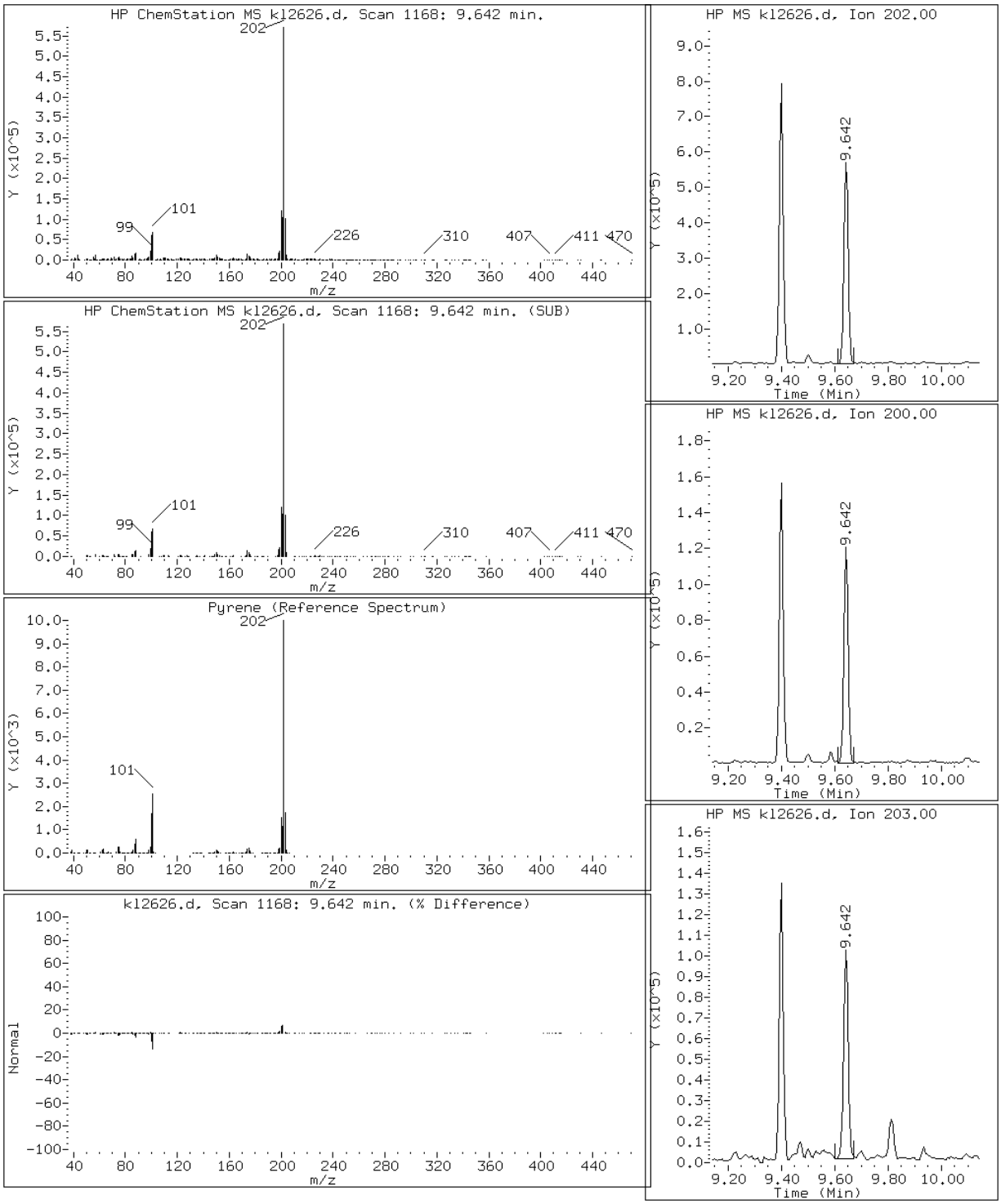
Data File: kl2626.d

Date: 26-DEC-2012 20:36

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-75-A DL=10 Operator: LEG

14 Pyrene



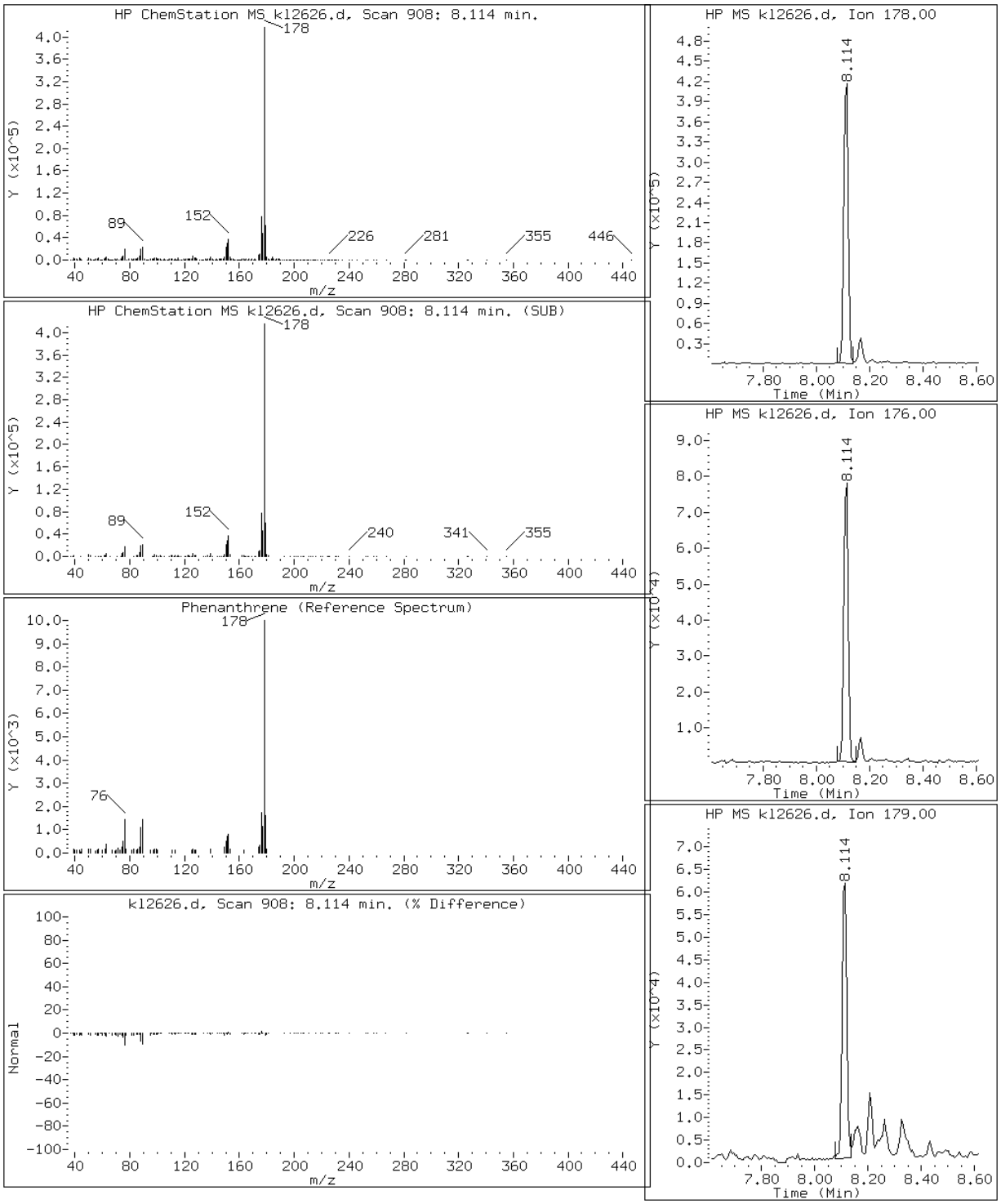
Data File: kl2626.d

Date: 26-DEC-2012 20:36

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-75-A DL=10 Operator: LEG

10 Phenanthrene



Manual Integration Report

Data File: kl2626.d
Inj. Date and Time: 26-DEC-2012 20:36
Instrument ID: MSK5973.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 12/27/2012

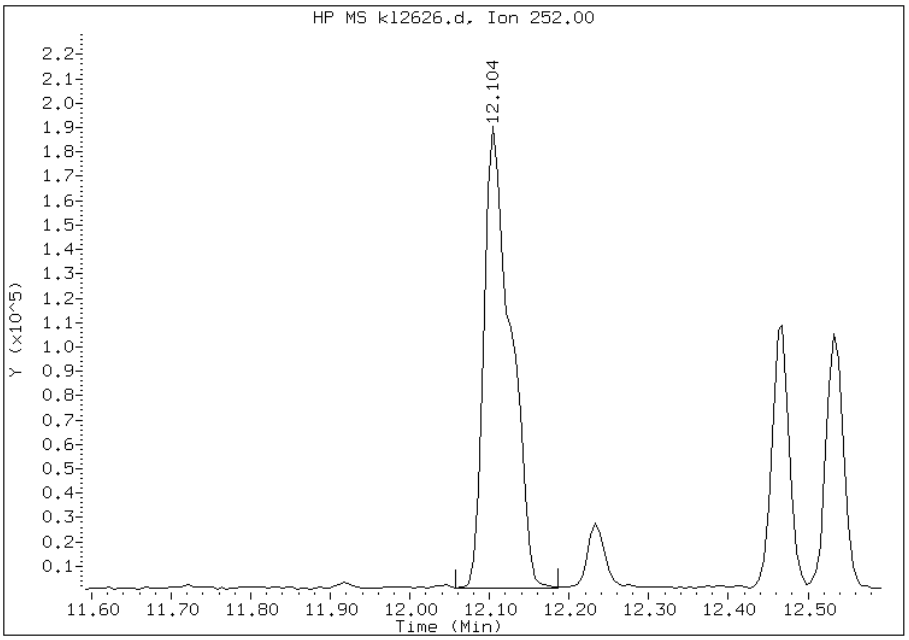
Processing Integration Results

RT: 12.10

Response: 444227

Amount: 2

Conc: 793



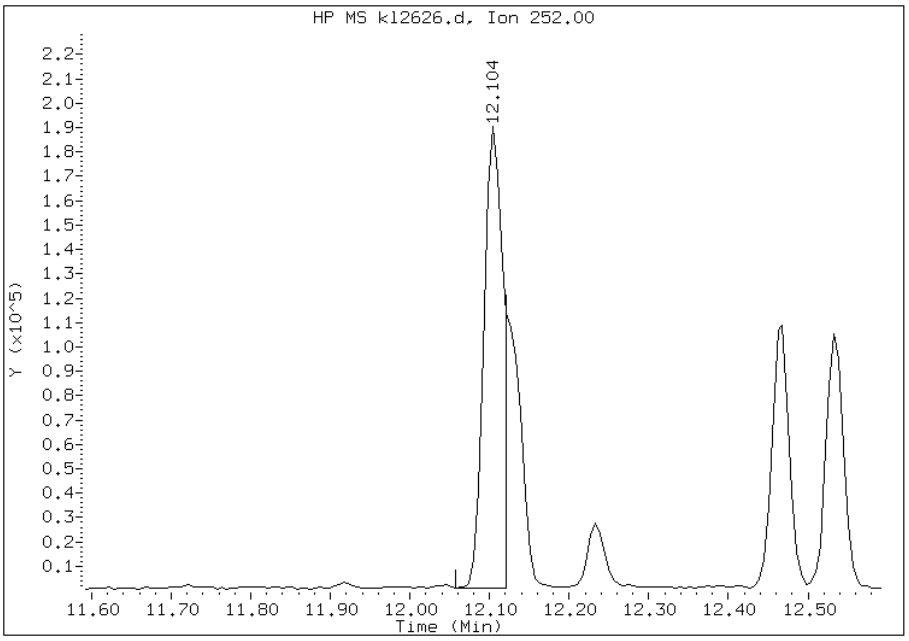
Manual Integration Results

RT: 12.10

Response: 325278

Amount: 2

Conc: 580



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: kl2626.d
Inj. Date and Time: 26-DEC-2012 20:36
Instrument ID: MSK5973.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 12/27/2012

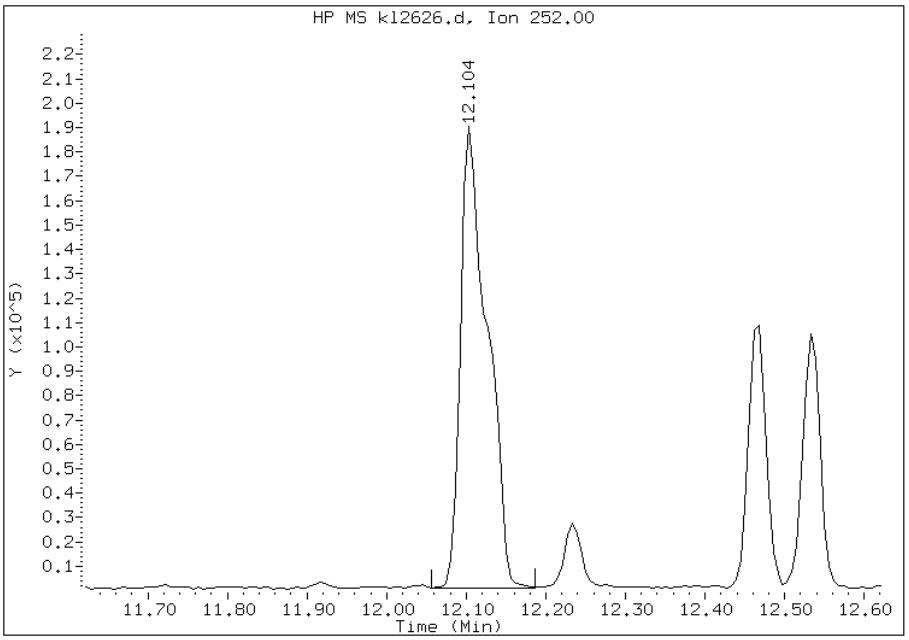
Processing Integration Results

RT: 12.10

Response: 443071

Amount: 2

Conc: 772



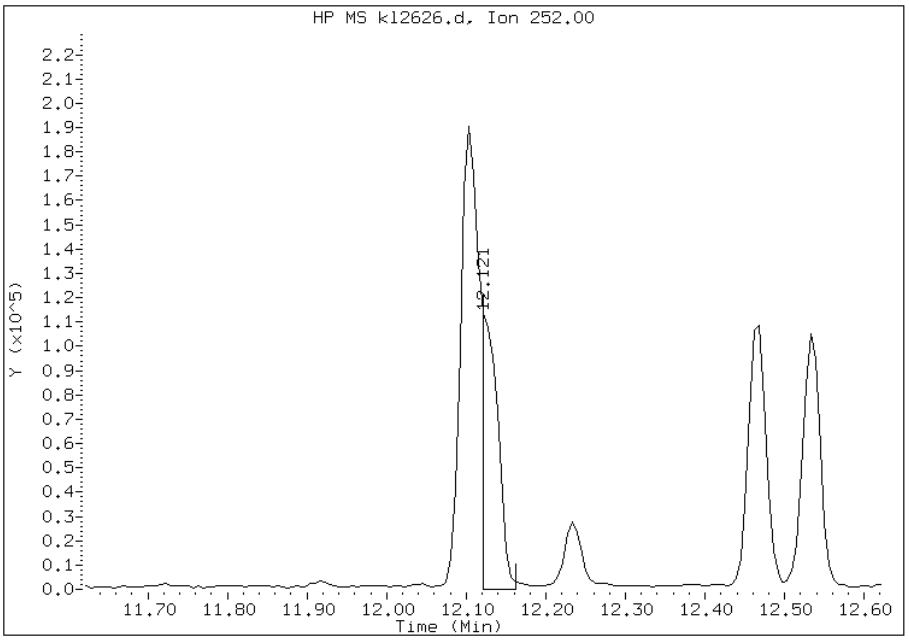
Manual Integration Results

RT: 12.12

Response: 160210

Amount: 1

Conc: 279



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.: 680-85860-4

SDG No.: 68085860-4

Client Sample ID: HP0282A-CS | Lab Sample ID: 680-85860-76

Matrix: Solid | Lab File ID: yl2706.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/14/2012 10:00

Extract. Method: 3546 | Date Extracted: 12/20/2012 18:29

Sample wt/vol: 30.47(g) | Date Analyzed: 12/27/2012 16:17

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

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

% Moisture: 21.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261231 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	39	J	84	39
91-57-6	2-Methylnaphthalene	57	J	84	41
83-32-9	Acenaphthene	84	U	84	41
208-96-8	Acenaphthylene	84	U	84	41
120-12-7	Anthracene	84	U	84	41
56-55-3	Benzo[a]anthracene	45	J	84	41
50-32-8	Benzo[a]pyrene	49	J	84	15
205-99-2	Benzo[b]fluoranthene	85		84	41
191-24-2	Benzo[g,h,i]perylene	44	J	84	41
207-08-9	Benzo[k]fluoranthene	27	J	84	25
218-01-9	Chrysene	91		84	41
53-70-3	Dibenz(a,h)anthracene	84	U	84	41
206-44-0	Fluoranthene	76	J	84	41
86-73-7	Fluorene	84	U	84	41
193-39-5	Indeno[1,2,3-cd]pyrene	84	U	84	41
91-20-3	Naphthalene	42	J	84	41
129-00-0	Pyrene	62	J	84	41
85-01-8	Phenanthrene	85		84	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/MSY5975.i/2y122712.b/yl2706.d
Lab Smp Id: 680-85860-A-76-A DL
Inj Date : 27-DEC-2012 16:17
Operator : VHB Inst ID: MSY5975.i
Smp Info : 680-85860-A-76-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y122712.b/Y-b8270CLLPAH-m.m
Meth Date : 27-Dec-2012 14:34 chemist Quant Type: ISTD
Cal Date : 21-DEC-2012 13:30 Cal File: yl2112q.d
Als bottle: 6
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	3.322	3.322	(1.000)	71867	2.00000	
2 Naphthalene	128	3.338	3.338	(1.005)	4290	0.10129	33.76(a)
3 2-Methylnaphthalene	142	3.942	3.943	(1.187)	3591	0.13585	45.28(a)
4 1-Methylnaphthalene	142	4.028	4.028	(1.213)	2615	0.09402	31.33(a)
* 5 Acenaphthene-d10	164	4.841	4.841	(1.000)	45743	2.00000	
* 9 Phenanthrene-d10	188	6.093	6.093	(1.000)	82095	2.00000	
10 Phenanthrene	178	6.109	6.109	(1.003)	10272	0.20312	67.70

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
12 Fluoranthene	202	7.114	7.114	(1.168)	10682	0.18119	60.39(a)
14 Pyrene	202	7.307	7.307	(0.870)	9400	0.14942	49.80(a)
16 Benzo(a)Anthracene	228	8.387	8.387	(0.999)	5309	0.10796	35.98(a)
* 13 Chrysene-d12	240	8.398	8.398	(1.000)	69314	2.00000	
17 Chrysene	228	8.419	8.419	(1.003)	9553	0.21813	72.70
19 Benzo(b)fluoranthene	252	9.334	9.334	(0.965)	8921	0.20348	67.82(M)
20 Benzo(k)fluoranthene	252	9.355	9.355	(0.967)	2869	0.06415	21.38(aM)
21 Benzo(a)pyrene	252	9.617	9.612	(0.994)	4263	0.11788	39.29(a)
* 18 Perylene-d12	264	9.671	9.666	(1.000)	59932	2.00000	
24 Benzo(g,h,i)perylene	276	11.104	11.099	(1.148)	3313	0.10538	35.12(a)

QC Flag Legend

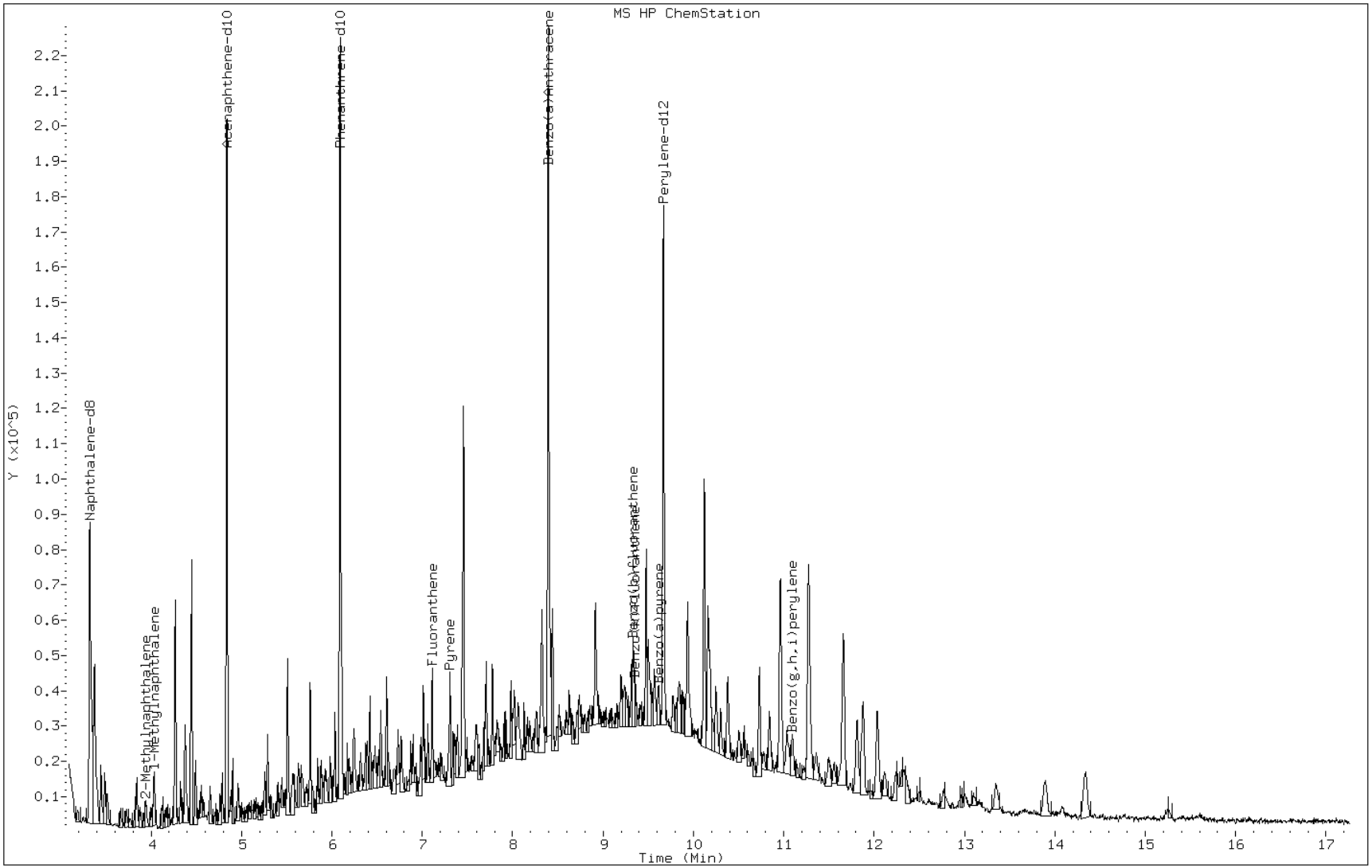
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: yl2706.d

Date: 27-DEC-2012 16:17

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-76-A DL=10 Operator: VHB



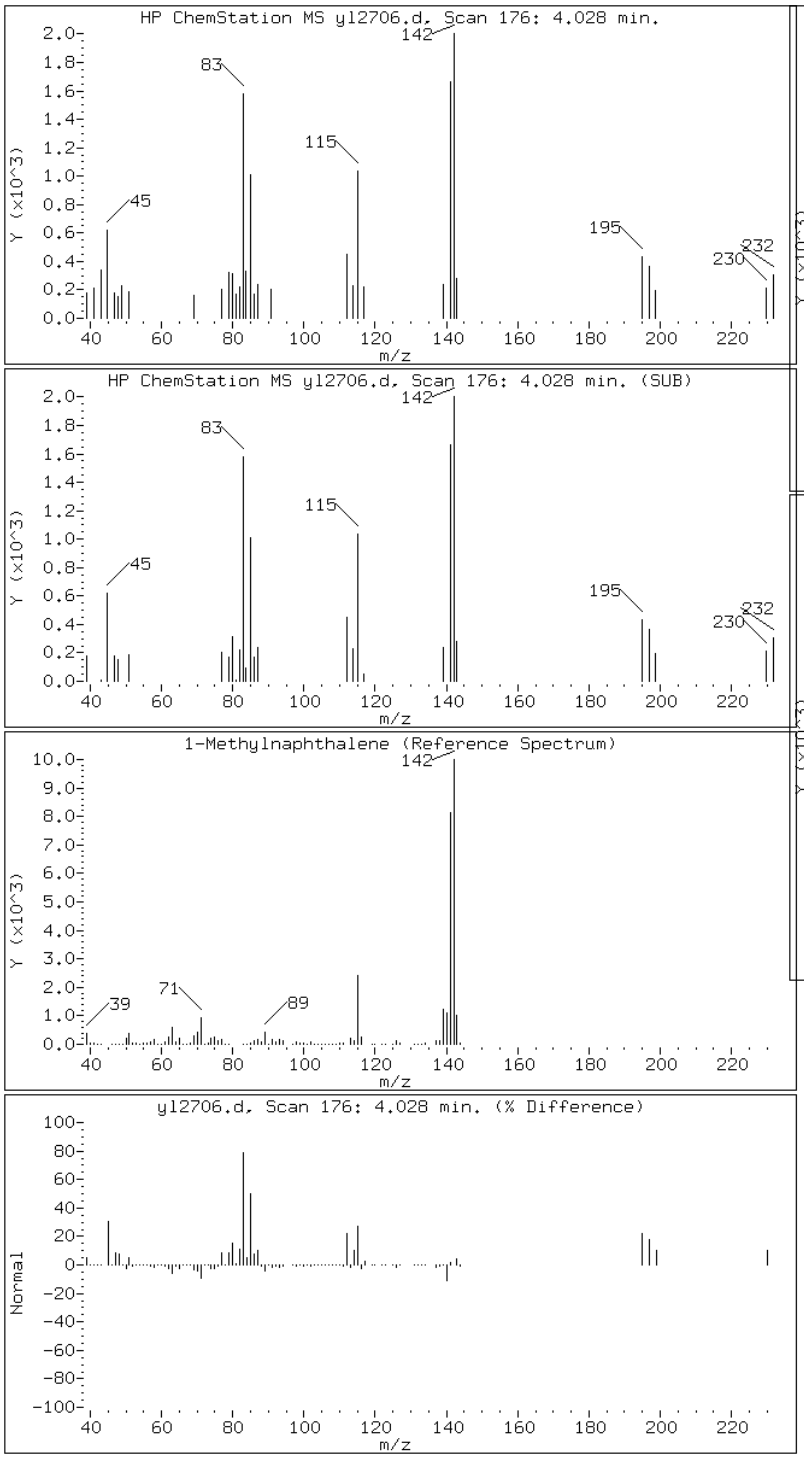
Data File: yl2706.d

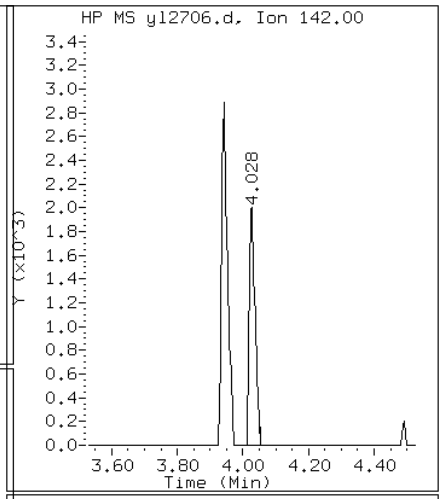
Date: 27-DEC-2012 16:17

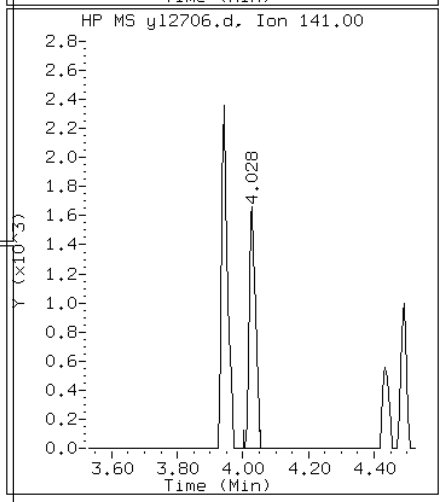
Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-76-A DL=10 Operator: VHB

4 1-Methylnaphthalene







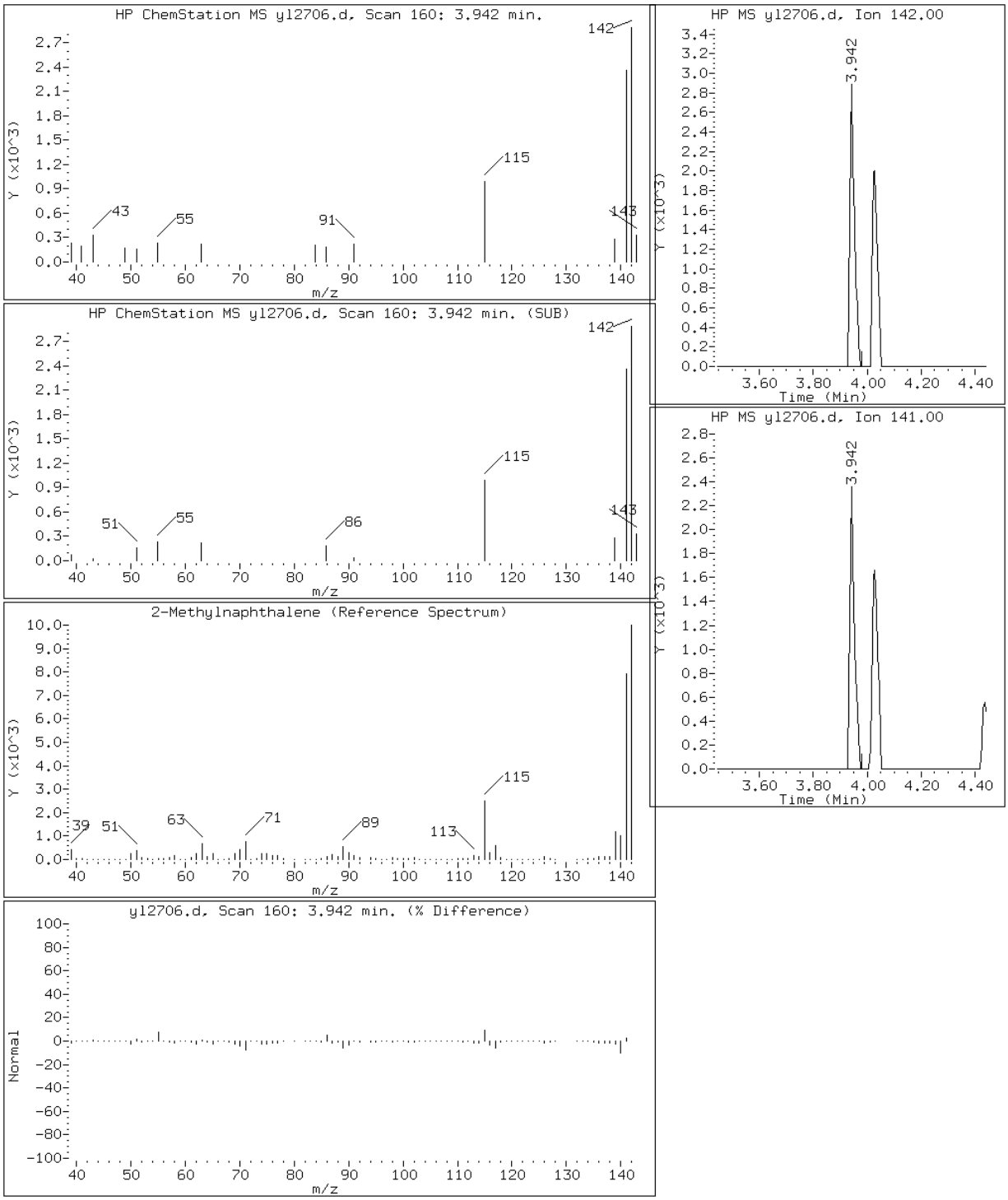
Data File: yl2706.d

Date: 27-DEC-2012 16:17

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-76-A DL=10 Operator: VHB

3 2-Methylnaphthalene



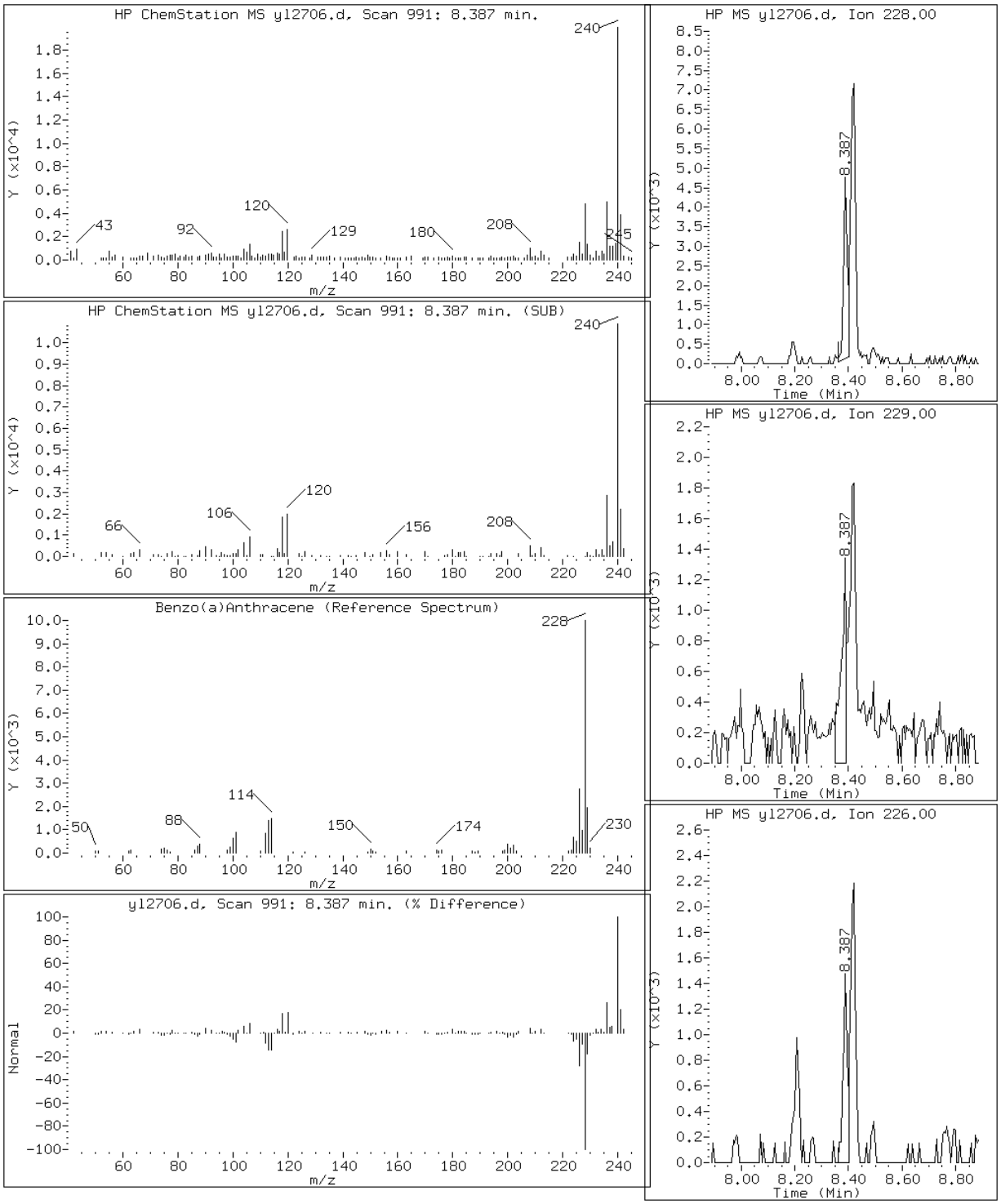
Data File: yl2706.d

Date: 27-DEC-2012 16:17

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-76-A DL=10 Operator: VHB

16 Benzo(a)Anthracene



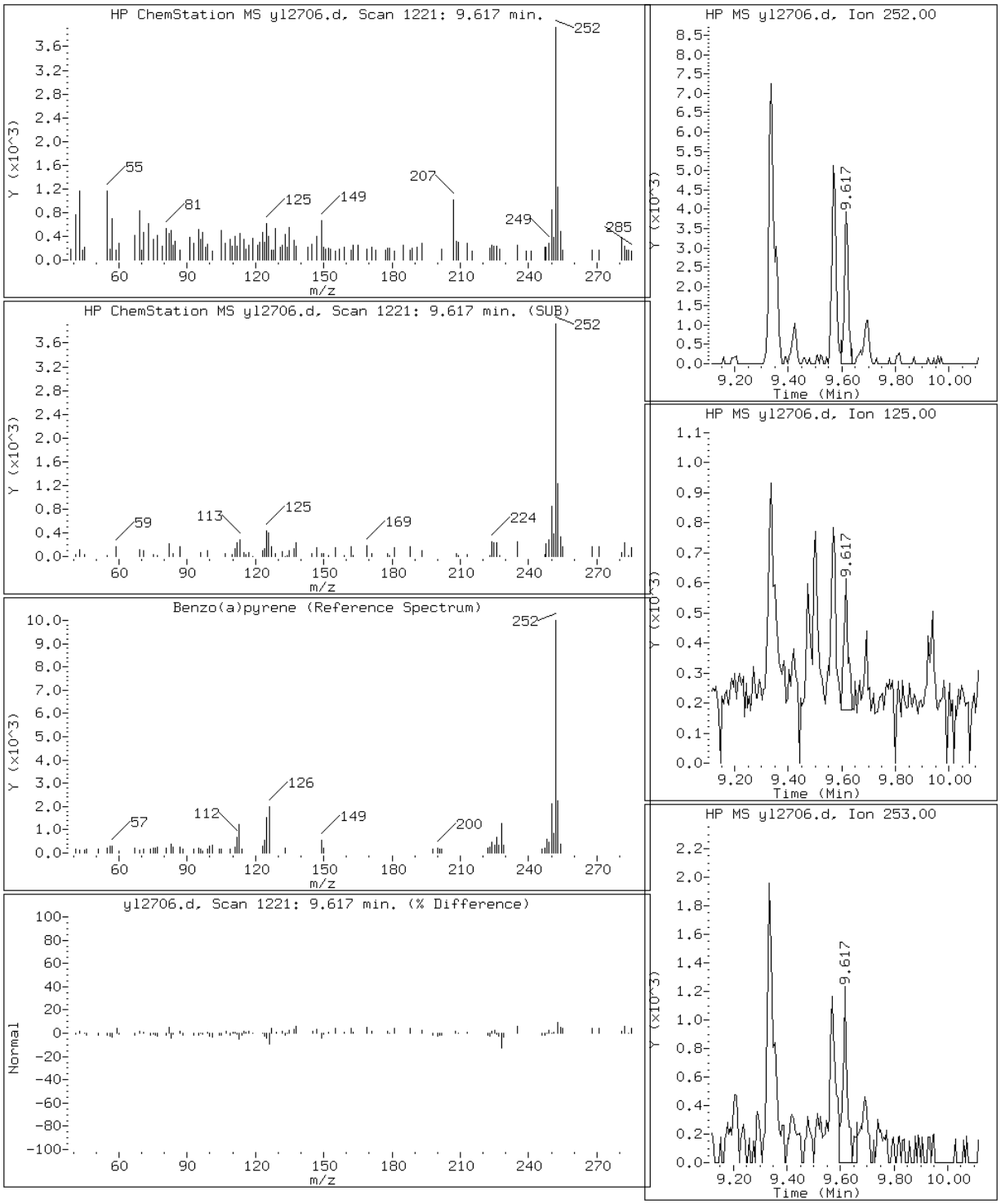
Data File: yl2706.d

Date: 27-DEC-2012 16:17

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-76-A DL=10 Operator: VHB

21 Benzo(a)pyrene



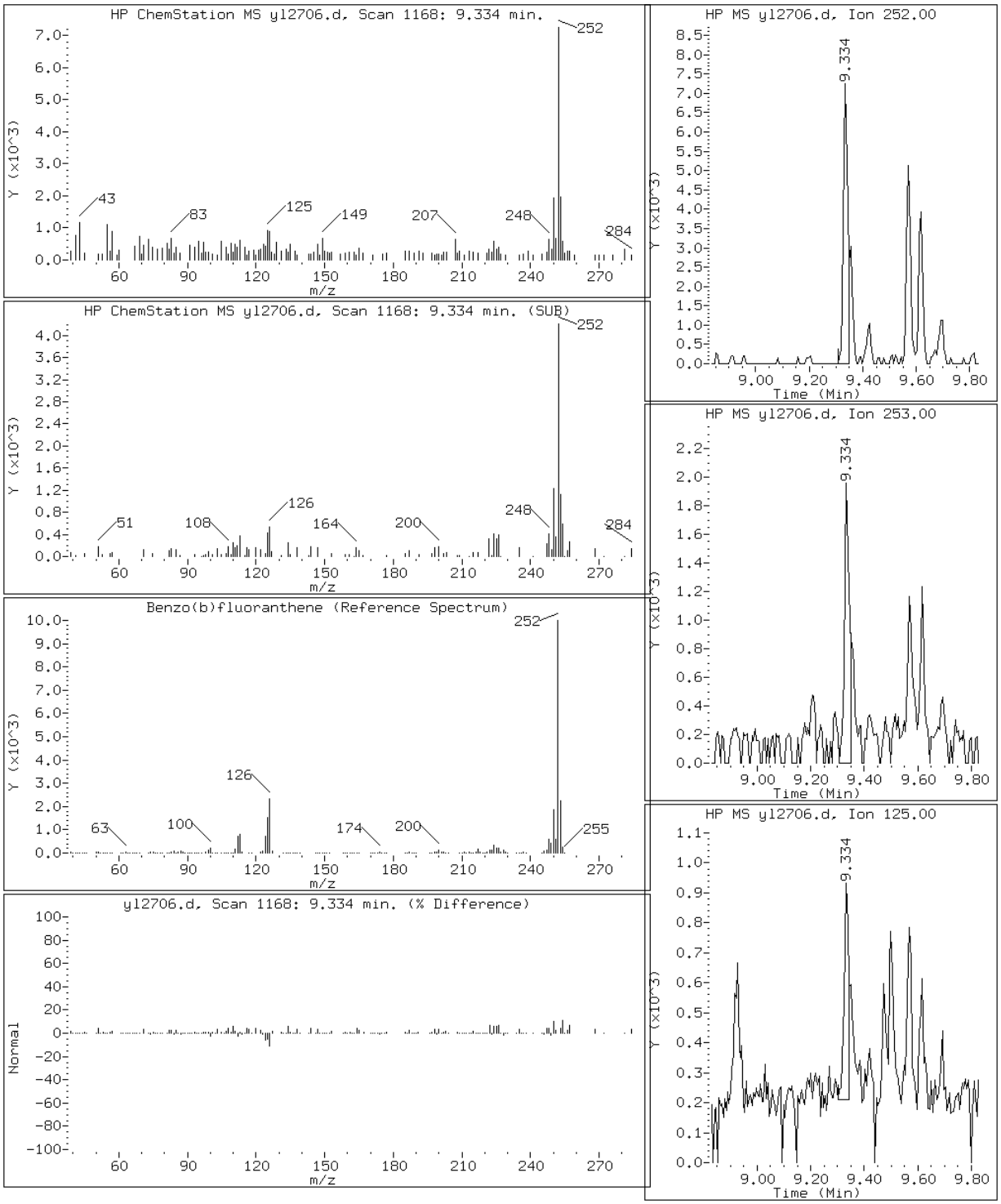
Data File: yl2706.d

Date: 27-DEC-2012 16:17

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-76-A DL=10 Operator: VHB

19 Benzo(b)fluoranthene



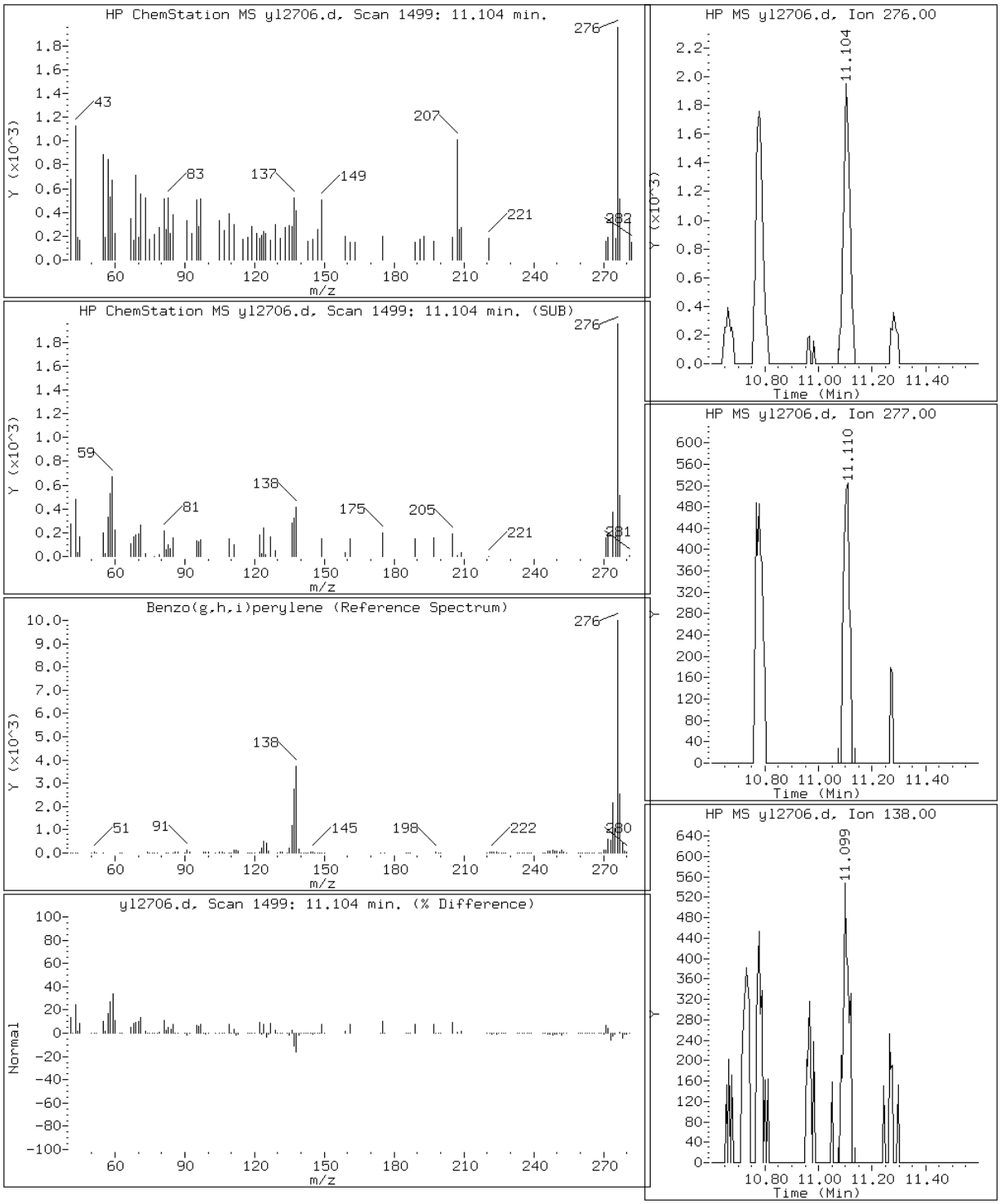
Data File: yl2706.d

Date: 27-DEC-2012 16:17

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-76-A DL=10 Operator: VHB

24 Benzo(g,h,i)perylene



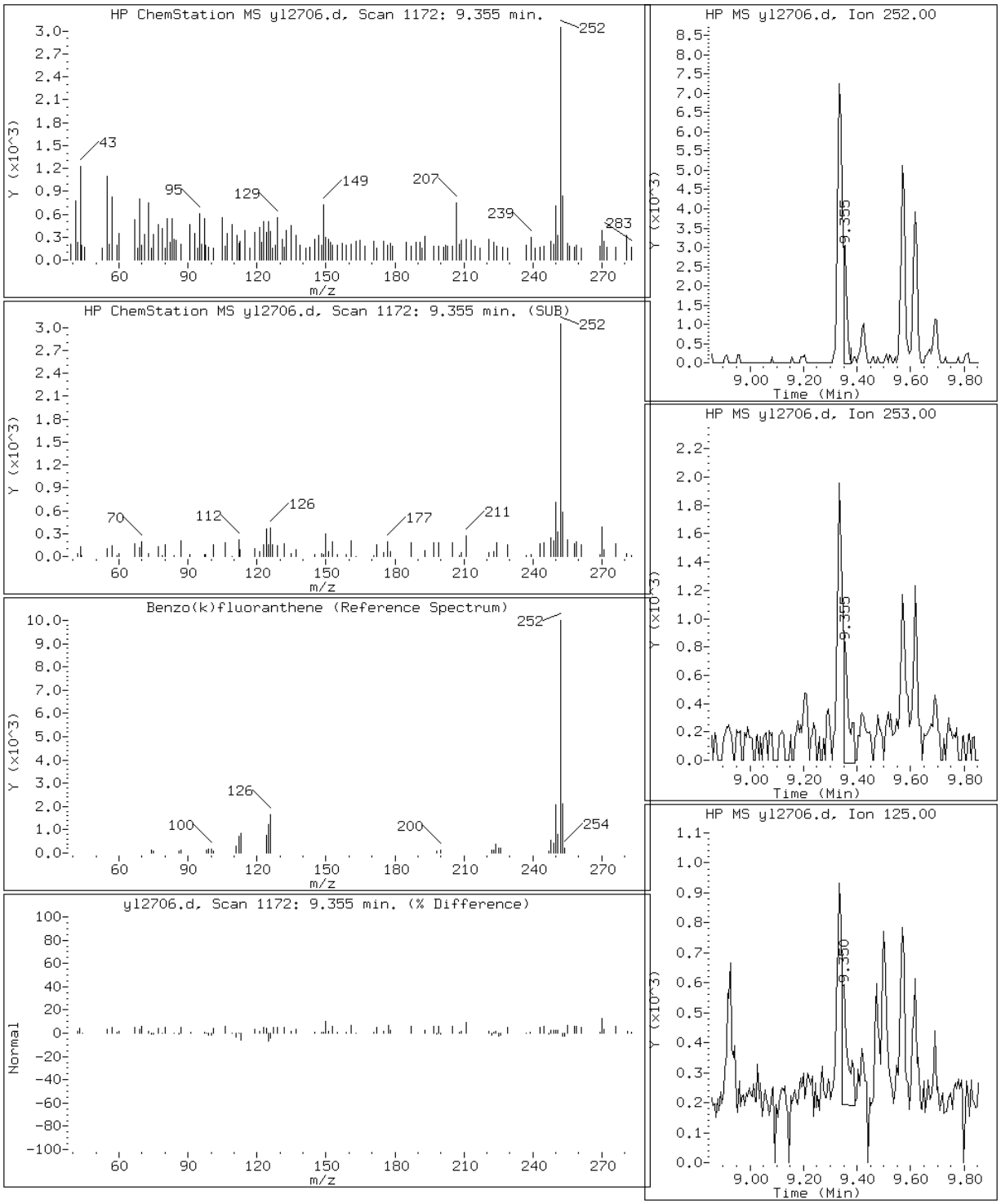
Data File: yl2706.d

Date: 27-DEC-2012 16:17

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-76-A DL=10 Operator: VHB

20 Benzo(k)fluoranthene



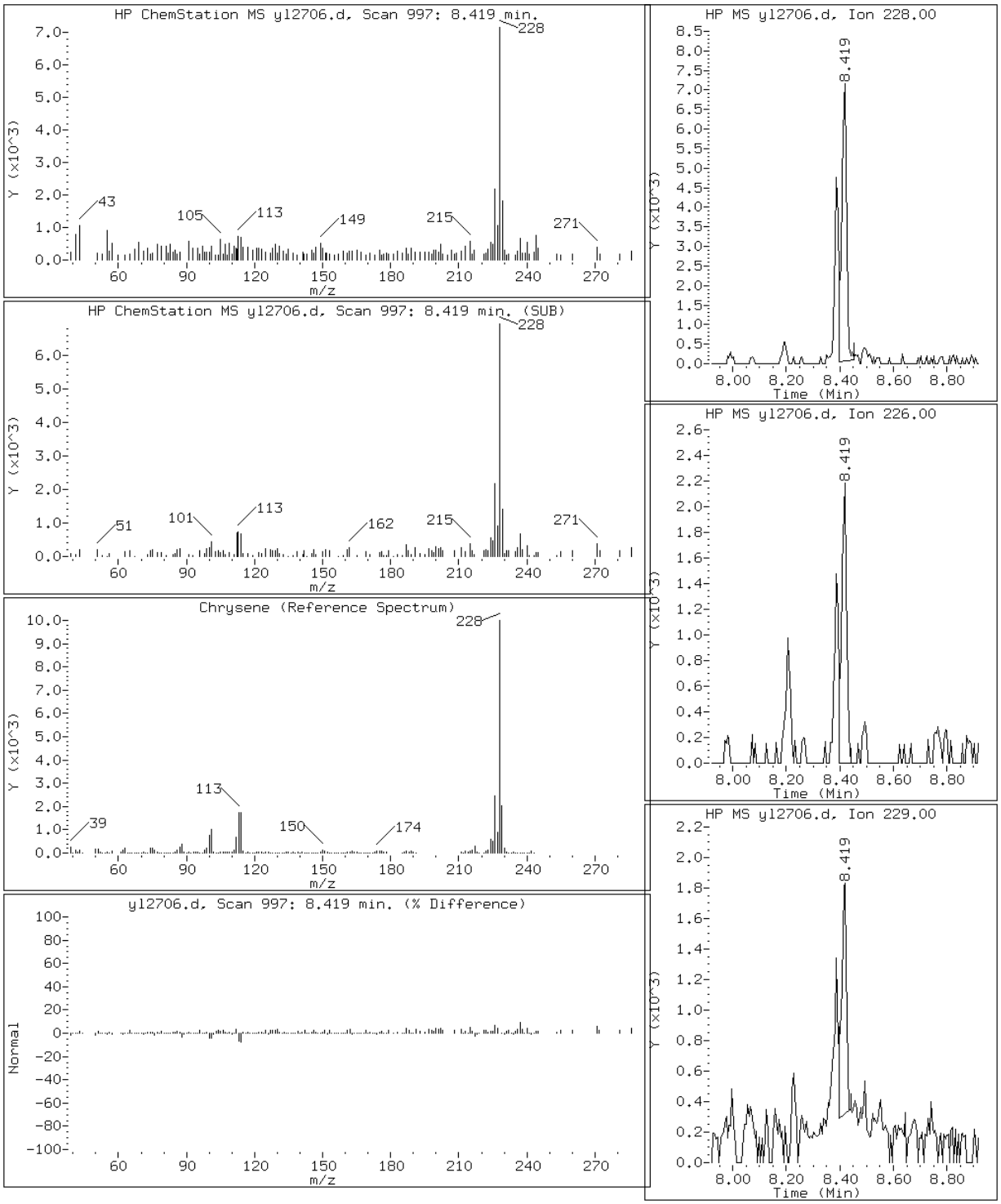
Data File: yl2706.d

Date: 27-DEC-2012 16:17

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-76-A DL=10 Operator: VHB

17 Chrysene



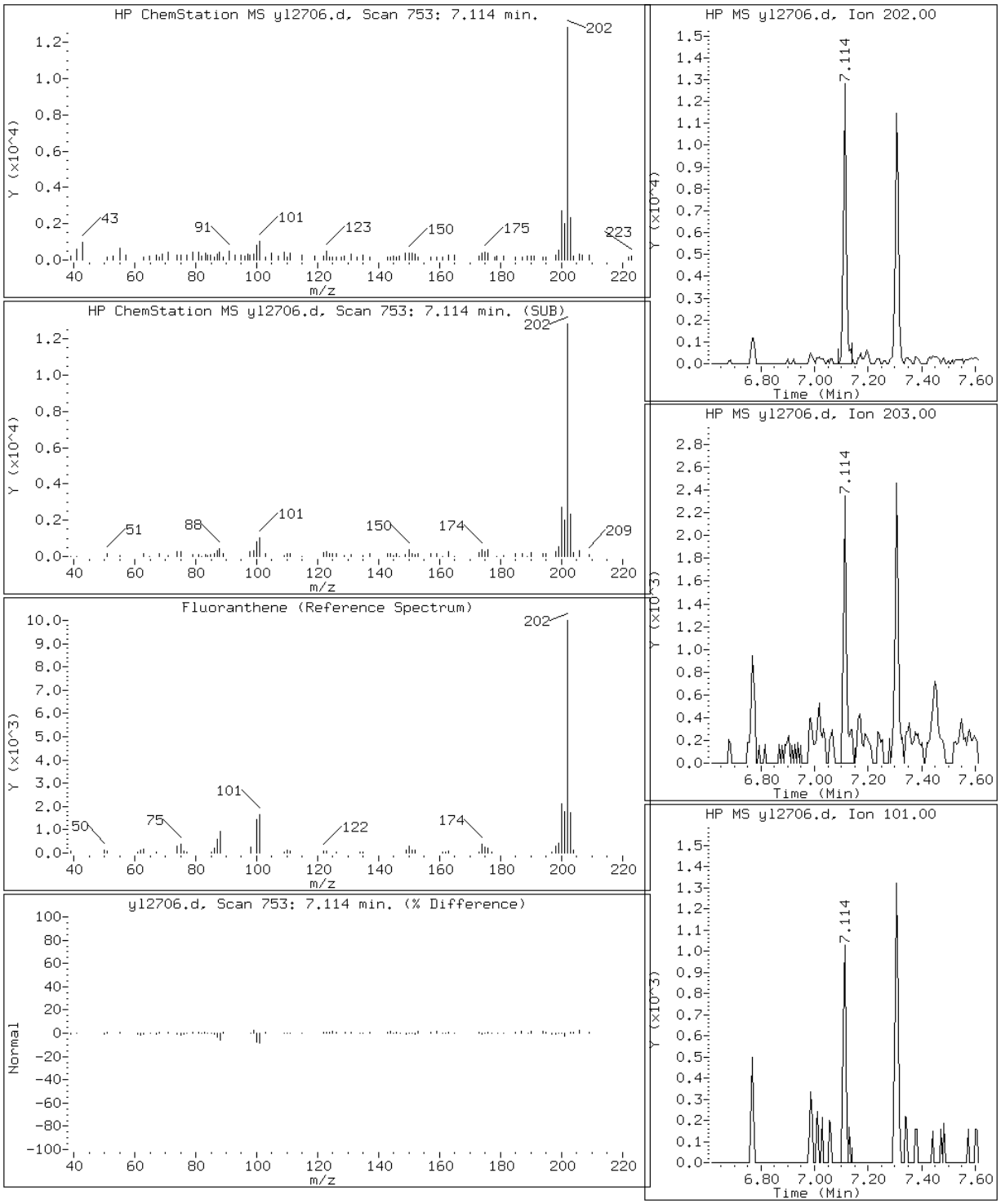
Data File: yl2706.d

Date: 27-DEC-2012 16:17

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-76-A DL=10 Operator: VHB

12 Fluoranthene



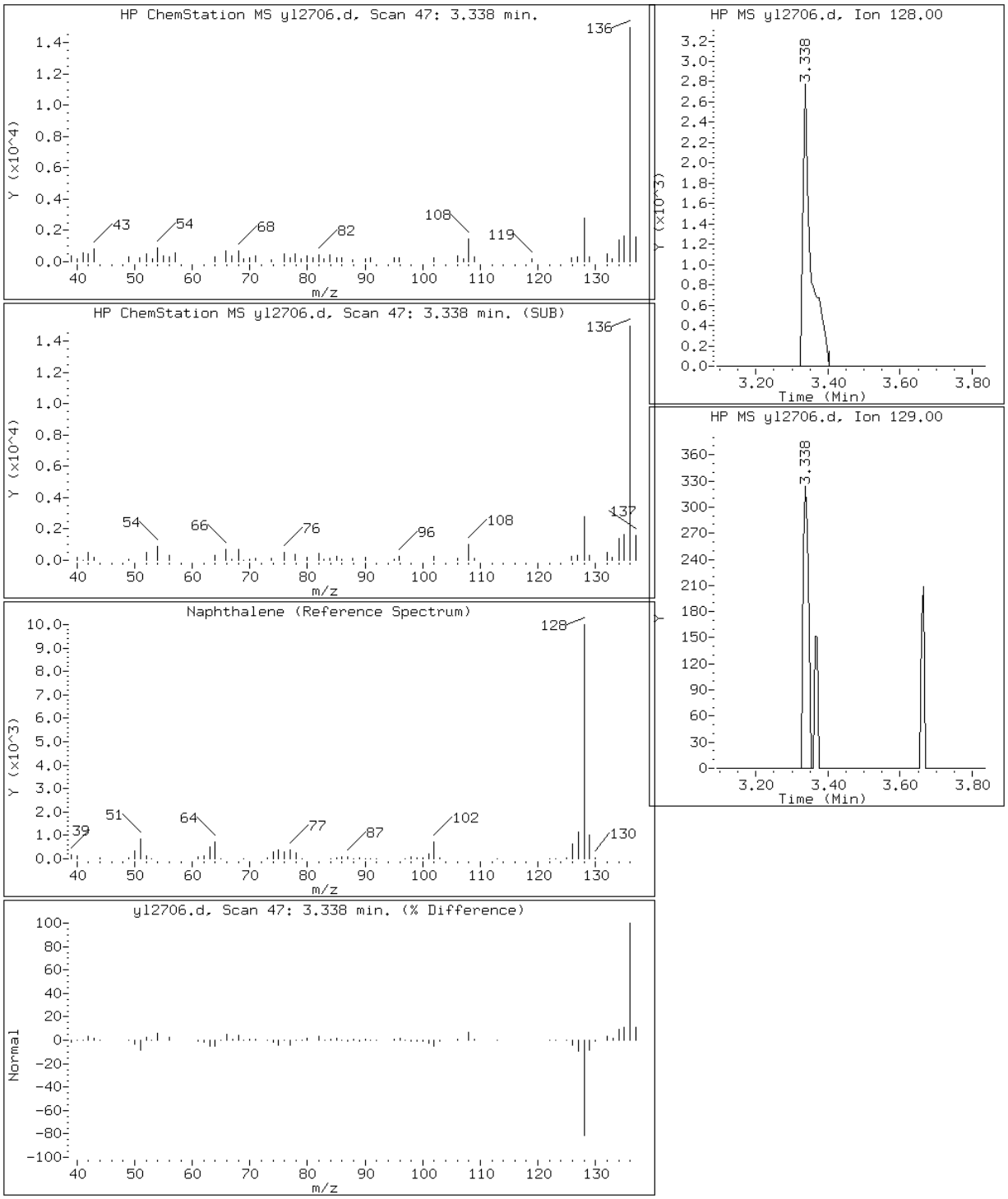
Data File: yl2706.d

Date: 27-DEC-2012 16:17

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-76-A DL=10 Operator: VHB

2 Naphthalene



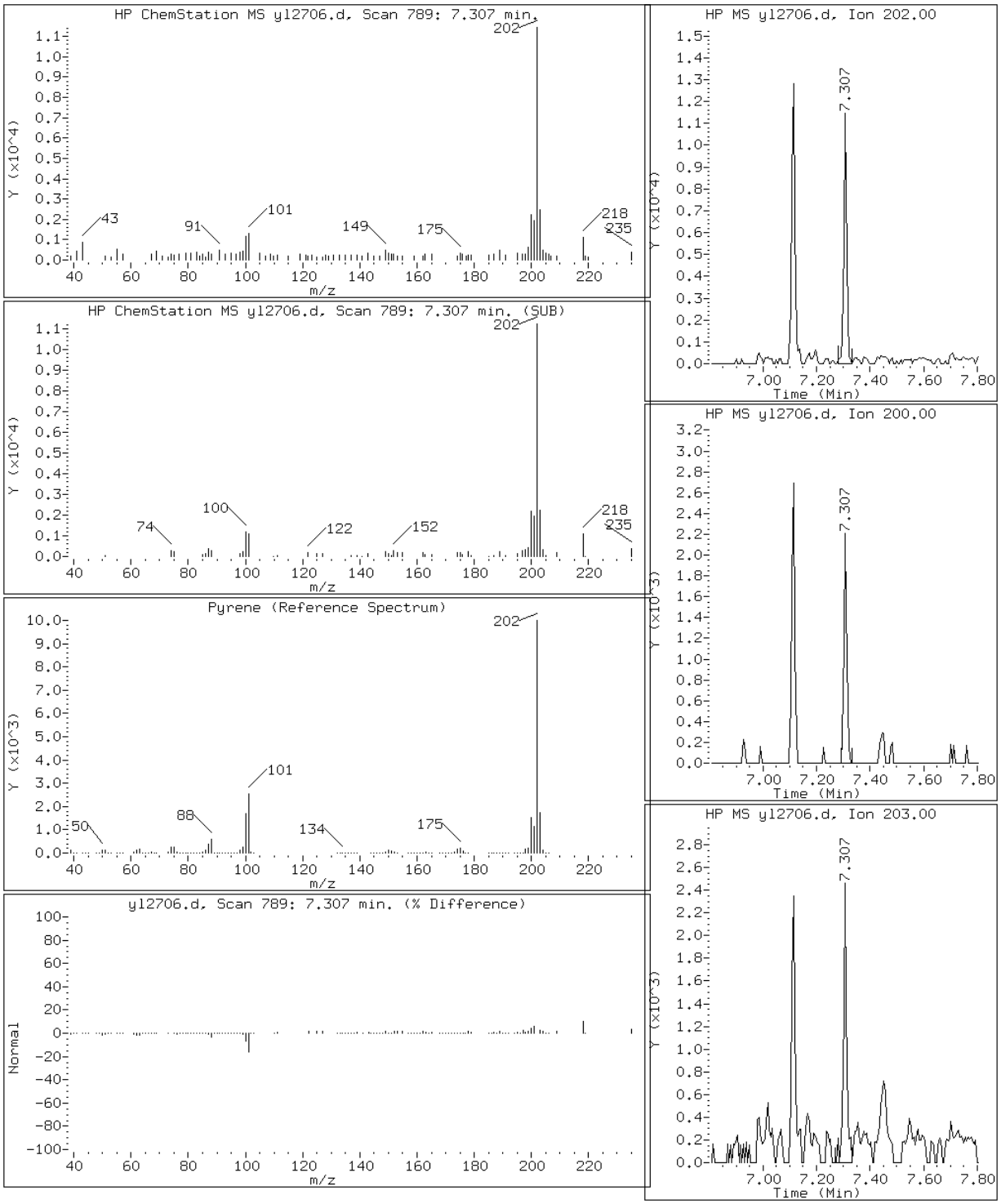
Data File: yl2706.d

Date: 27-DEC-2012 16:17

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-76-A DL=10 Operator: VHB

14 Pyrene



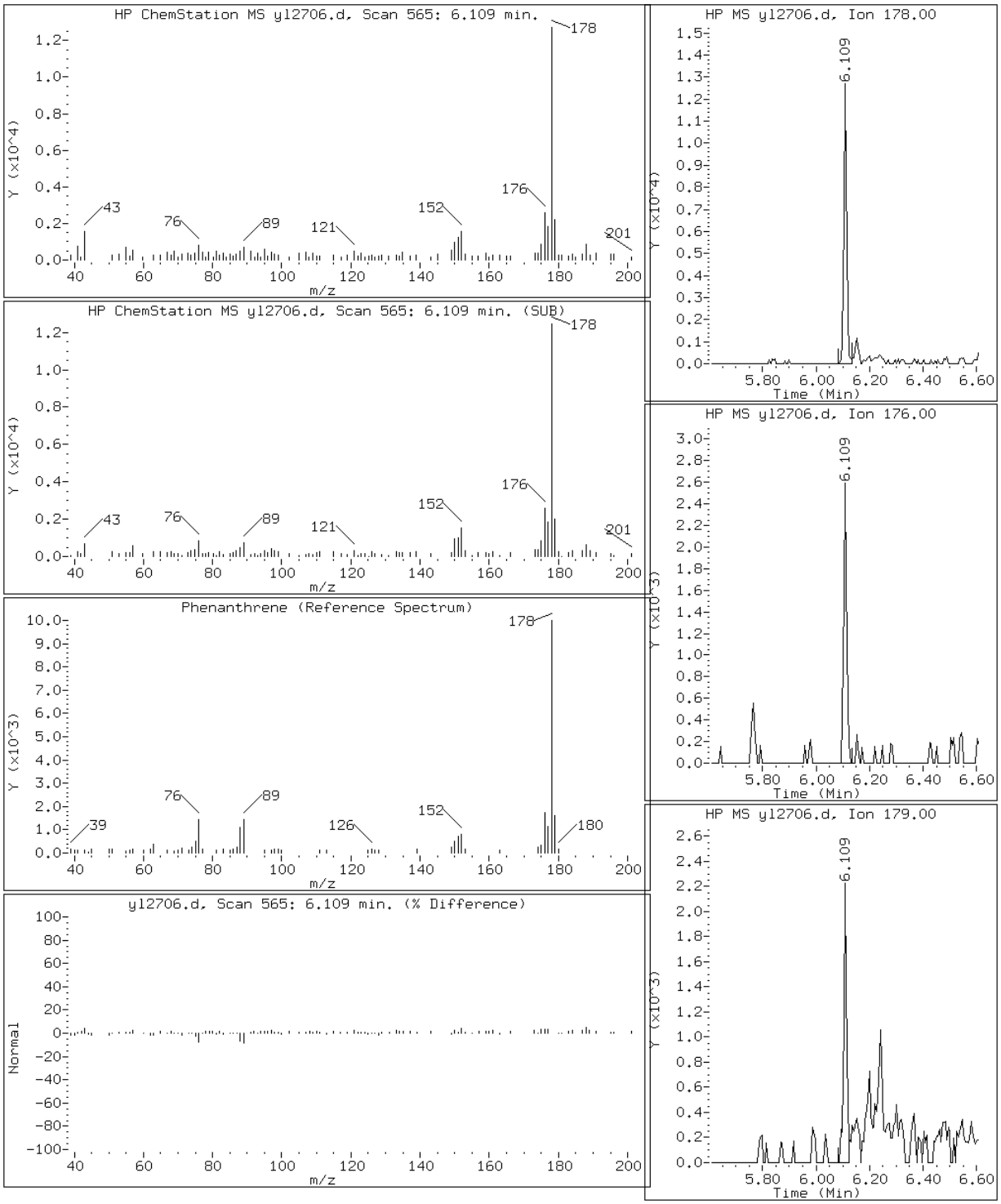
Data File: yl2706.d

Date: 27-DEC-2012 16:17

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-76-A DL=10 Operator: VHB

10 Phenanthrene



Manual Integration Report

Data File: yl2706.d
Inj. Date and Time: 27-DEC-2012 16:17
Instrument ID: MSY5975.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 12/28/2012

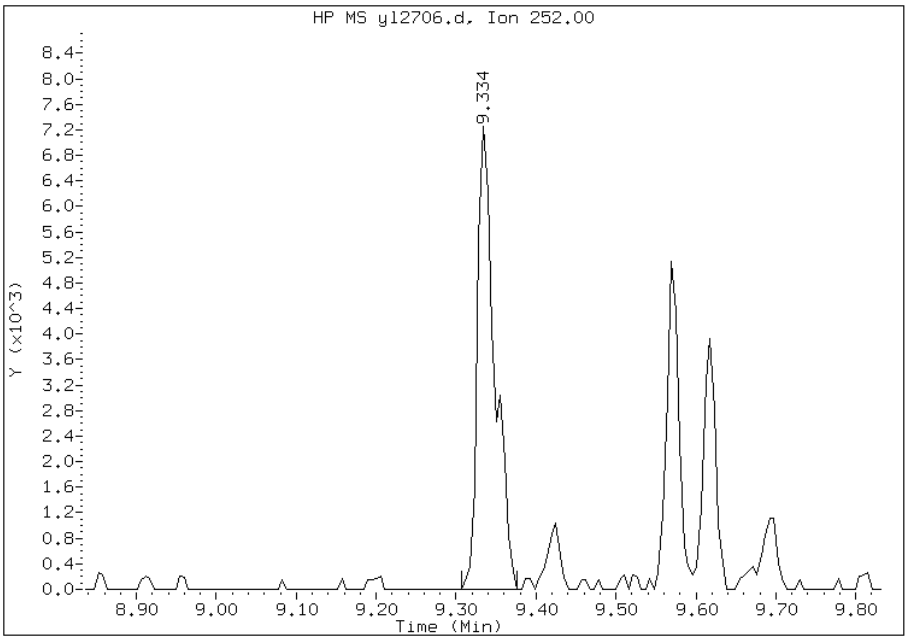
Processing Integration Results

RT: 9.33

Response: 10903

Amount: 0

Conc: 83



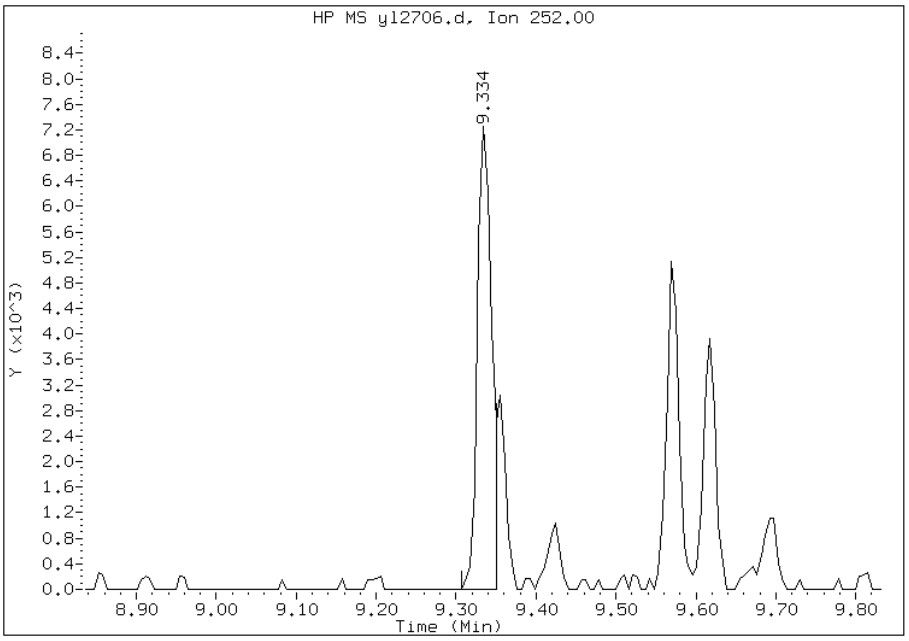
Manual Integration Results

RT: 9.33

Response: 8921

Amount: 0

Conc: 68



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: yl2706.d
Inj. Date and Time: 27-DEC-2012 16:17
Instrument ID: MSY5975.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 12/28/2012

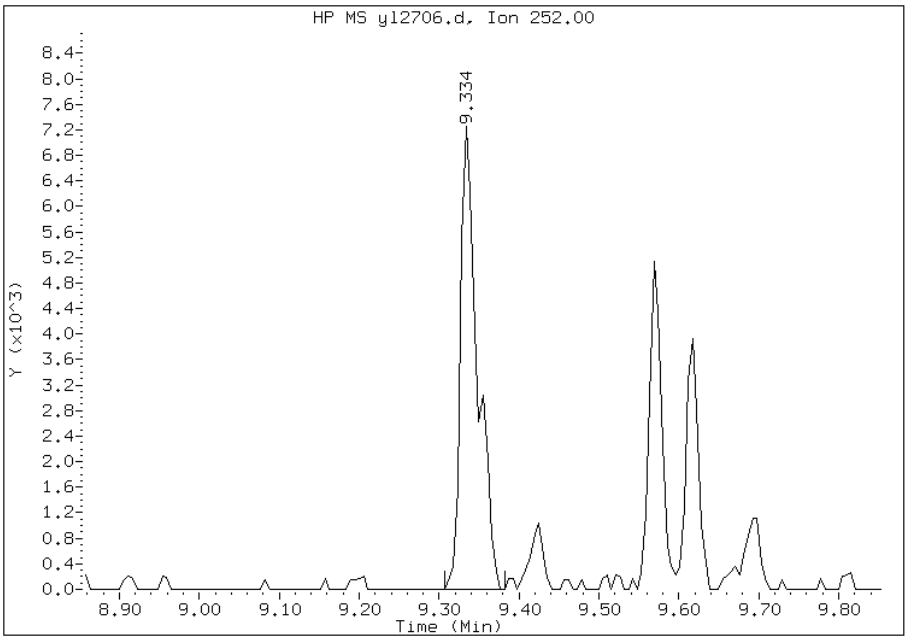
Processing Integration Results

RT: 9.33

Response: 10903

Amount: 0

Conc: 81



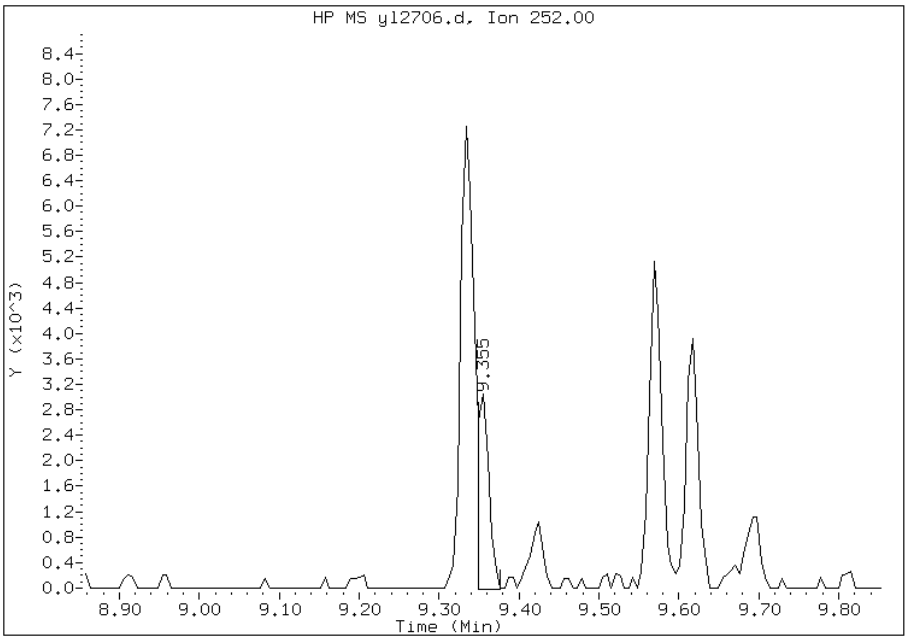
Manual Integration Results

RT: 9.36

Response: 2869

Amount: 0

Conc: 21



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.: 680-85860-4

SDG No.: 68085860-4

Client Sample ID: CV0319A-CS | Lab Sample ID: 680-85860-77

Matrix: Solid | Lab File ID: yl2121.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/14/2012 08:45

Extract. Method: 3546 | Date Extracted: 12/20/2012 18:29

Sample wt/vol: 30.43(g) | Date Analyzed: 12/21/2012 17:53

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

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

% Moisture: 21.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261214 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	44	J	84	39
91-57-6	2-Methylnaphthalene	70	J	84	41
83-32-9	Acenaphthene	84	U	84	41
208-96-8	Acenaphthylene	84	U	84	41
120-12-7	Anthracene	84	U	84	41
56-55-3	Benzo[a]anthracene	120		84	41
50-32-8	Benzo[a]pyrene	180		84	15
205-99-2	Benzo[b]fluoranthene	240		84	41
191-24-2	Benzo[g,h,i]perylene	140		84	41
207-08-9	Benzo[k]fluoranthene	130		84	25
218-01-9	Chrysene	190		84	41
53-70-3	Dibenz(a,h)anthracene	64	J	84	41
206-44-0	Fluoranthene	200		84	41
86-73-7	Fluorene	84	U	84	41
193-39-5	Indeno[1,2,3-cd]pyrene	120		84	41
91-20-3	Naphthalene	84	U	84	41
129-00-0	Pyrene	170		84	41
85-01-8	Phenanthrene	130		84	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/MSY5975.i/1y122112.b/yl2121.d
Lab Smp Id: 680-85860-A-77-A DL
Inj Date : 21-DEC-2012 17:53
Operator : VHB Inst ID: MSY5975.i
Smp Info : 680-85860-A-77-A DL=10
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: 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	3.392	3.392	(1.000)	120256	2.00000	
3 2-Methylnaphthalene	142	4.012	4.012	(1.183)	7408	0.16749	55.82(a)
4 1-Methylnaphthalene	142	4.098	4.098	(1.208)	4831	0.10380	34.59(a)
* 5 Acenaphthene-d10	164	4.911	4.911	(1.000)	80250	2.00000	
* 9 Phenanthrene-d10	188	6.162	6.162	(1.000)	138205	2.00000	
10 Phenanthrene	178	6.178	6.184	(1.003)	26699	0.31360	104.53
12 Fluoranthene	202	7.189	7.189	(1.167)	47617	0.47978	159.92

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
14 Pyrene	202	7.382	7.382	(0.871)	39499	0.39569	131.89
16 Benzo(a)Anthracene	228	8.462	8.462	(0.999)	21762	0.27890	92.96
* 13 Chrysene-d12	240	8.473	8.473	(1.000)	109982	2.00000	
17 Chrysene	228	8.494	8.494	(1.003)	31570	0.45430	151.43
19 Benzo(b)fluoranthene	252	9.414	9.414	(0.965)	36532	0.57253	190.84(M)
20 Benzo(k)fluoranthene	252	9.425	9.436	(0.966)	20008	0.30744	102.48(M)
21 Benzo(a)pyrene	252	9.703	9.703	(0.995)	23026	0.43752	145.83
* 18 Perylene-d12	264	9.757	9.757	(1.000)	87218	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	10.906	10.906	(1.287)	16672	0.27905	93.01
23 Dibenzo(a,h)anthracene	278	10.922	10.928	(1.119)	6703	0.15156	50.51(a)
24 Benzo(g,h,i)perylene	276	11.243	11.243	(1.152)	15641	0.34187	113.95

QC Flag Legend

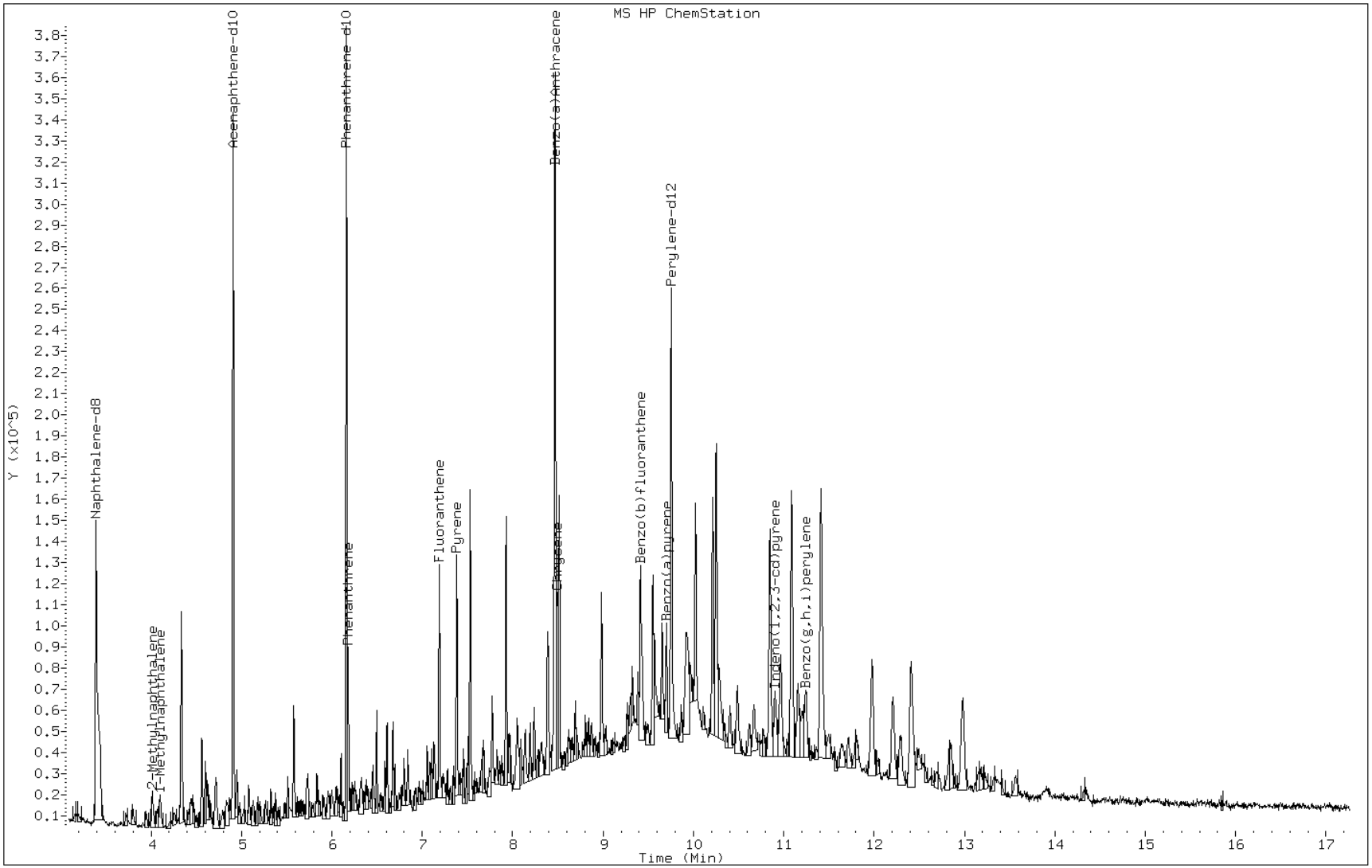
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: yl2121.d

Date: 21-DEC-2012 17:53

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-77-A DL=10 Operator: VHB



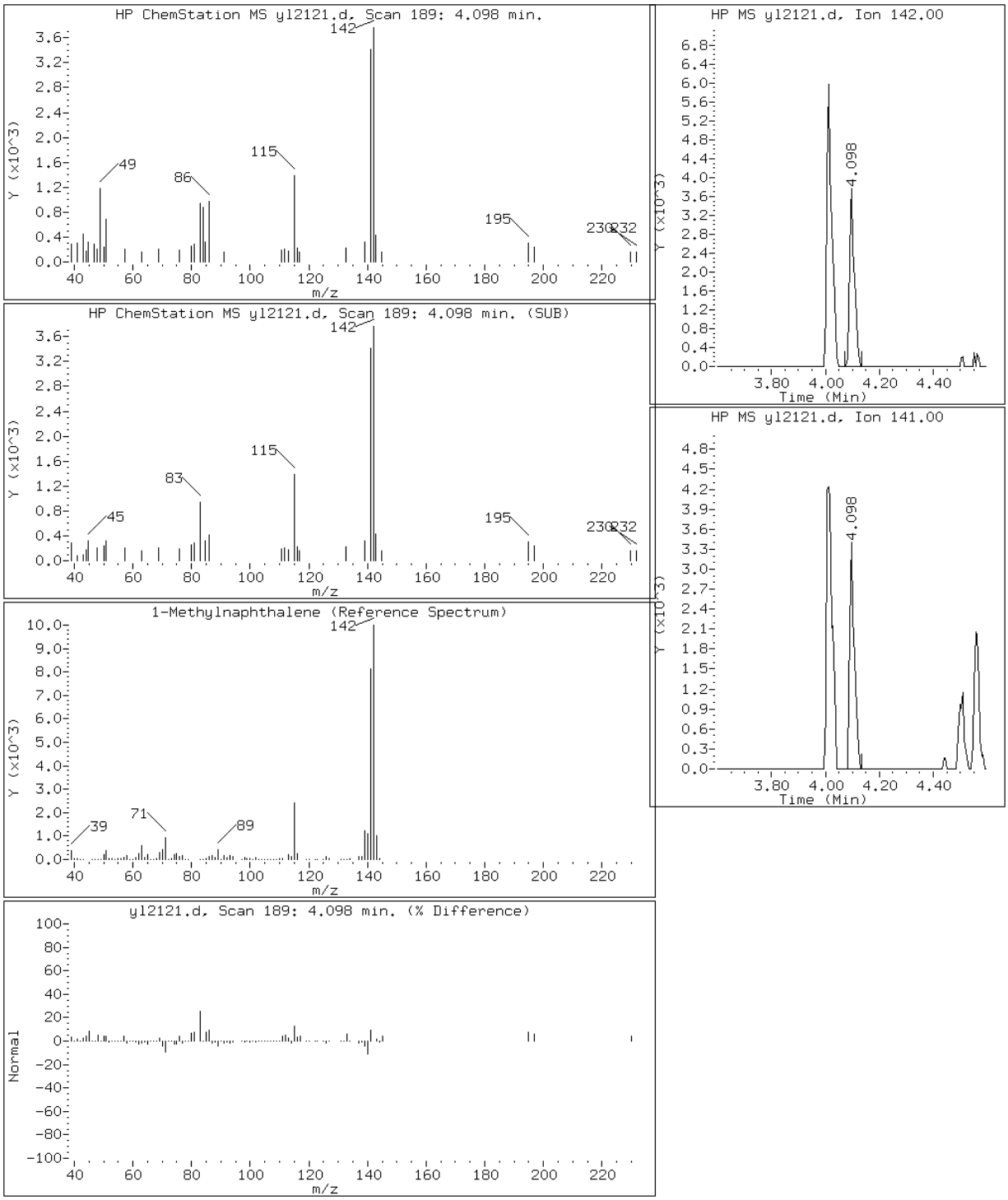
Data File: yl2121.d

Date: 21-DEC-2012 17:53

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-77-A DL=10 Operator: VHB

4 1-Methylnaphthalene



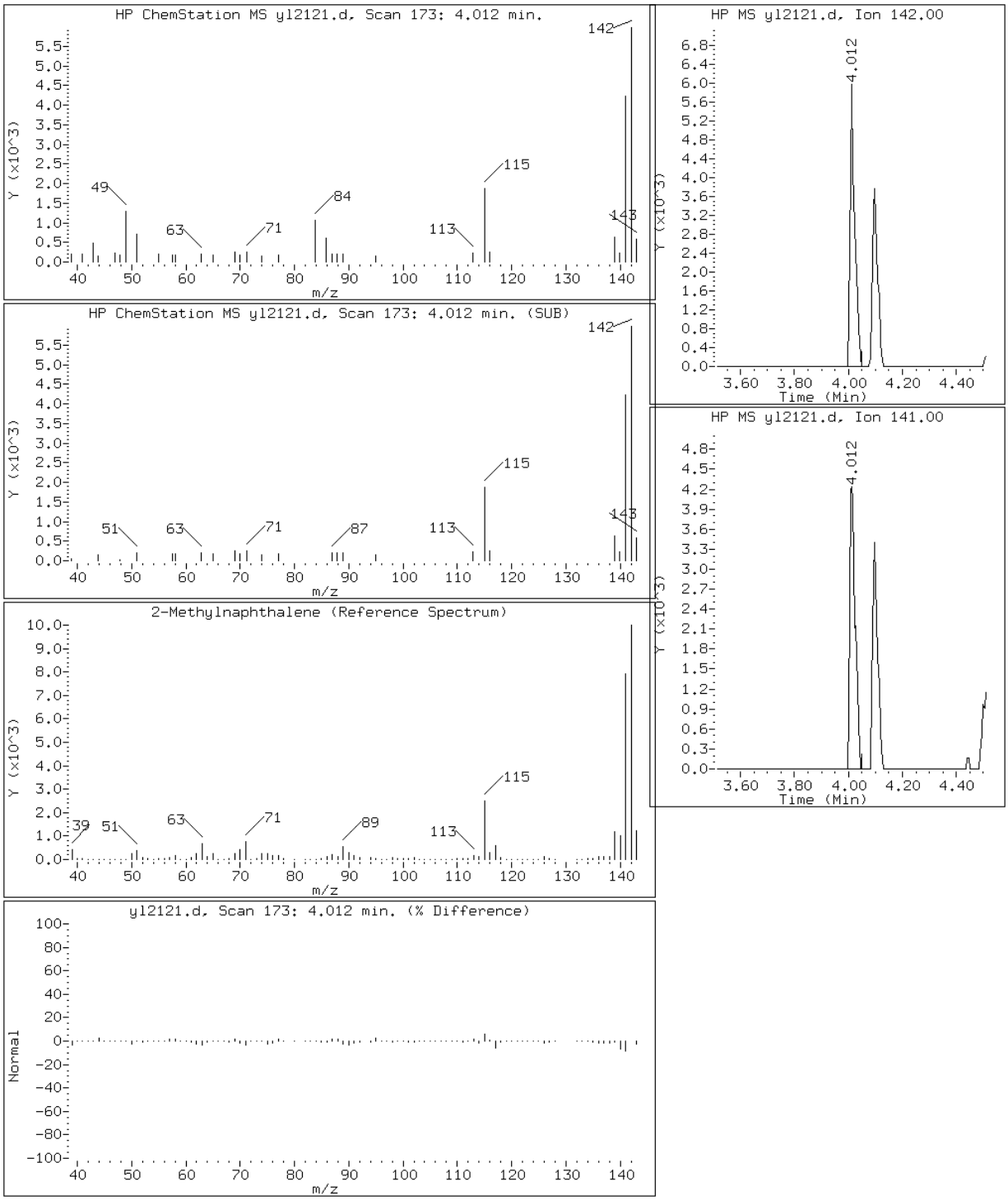
Data File: yl2121.d

Date: 21-DEC-2012 17:53

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-77-A DL=10 Operator: VHB

3 2-Methylnaphthalene



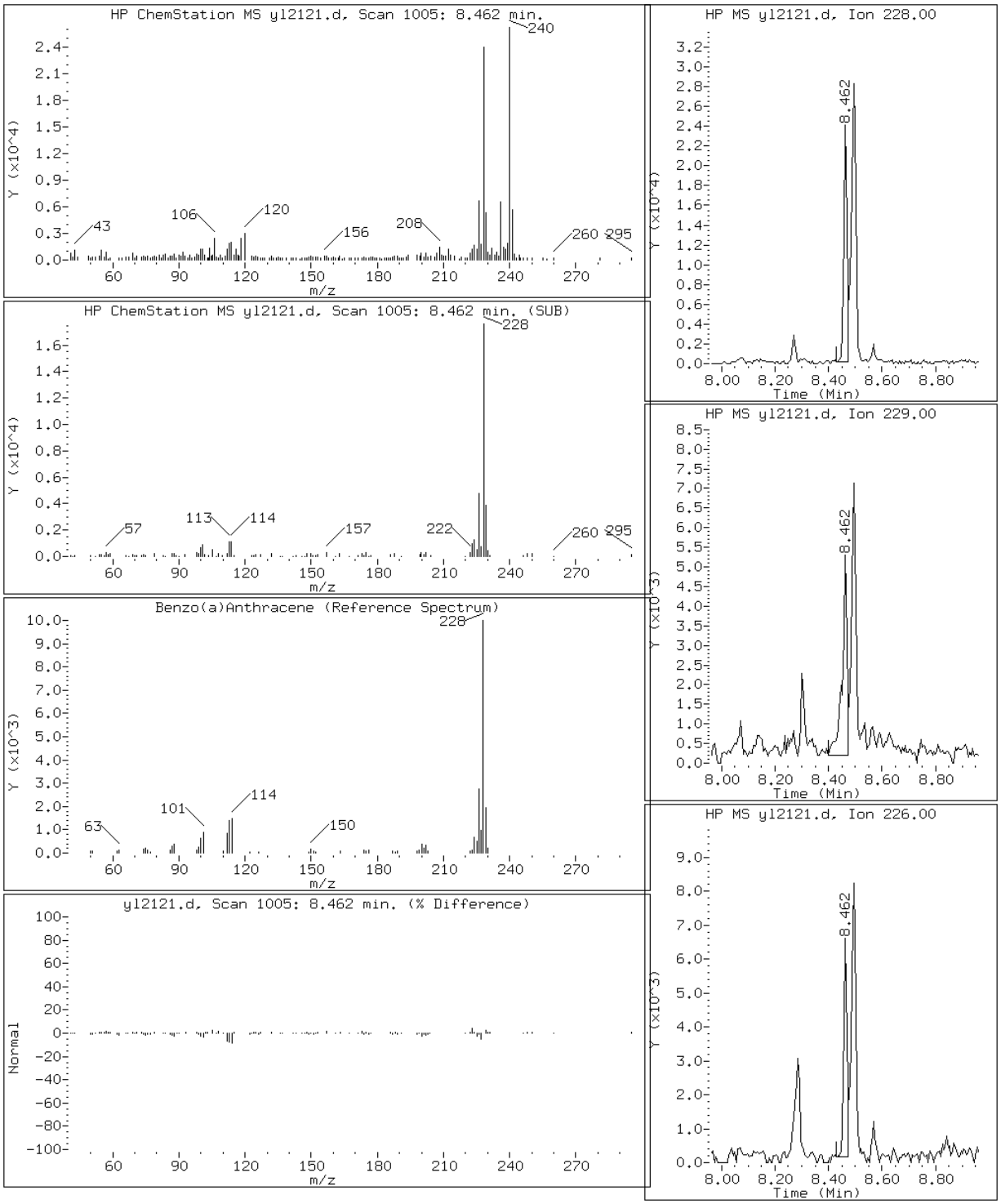
Data File: yl2121.d

Date: 21-DEC-2012 17:53

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-77-A DL=10 Operator: VHB

16 Benzo(a)Anthracene



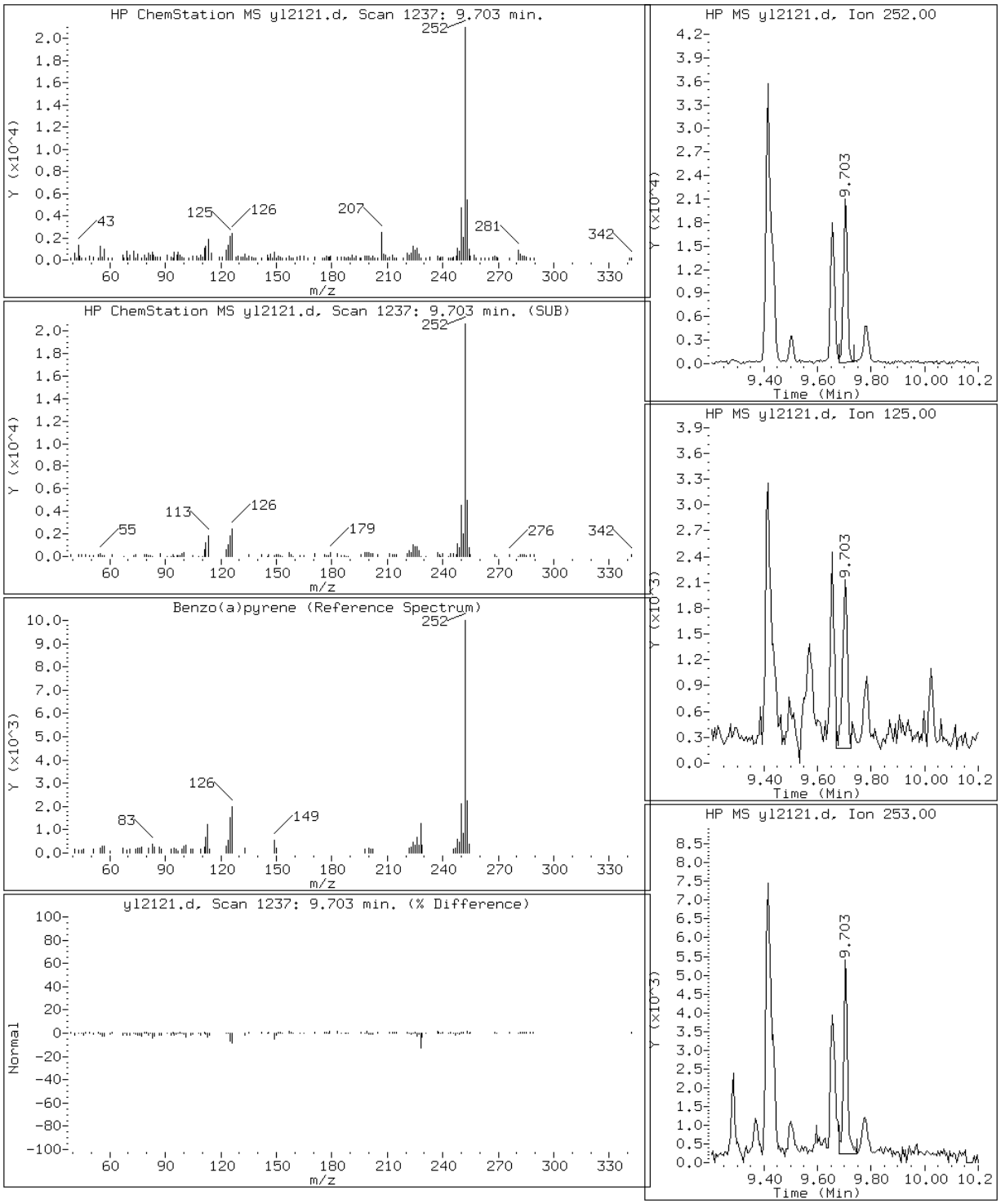
Data File: yl2121.d

Date: 21-DEC-2012 17:53

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-77-A DL=10 Operator: VHB

21 Benzo(a)pyrene



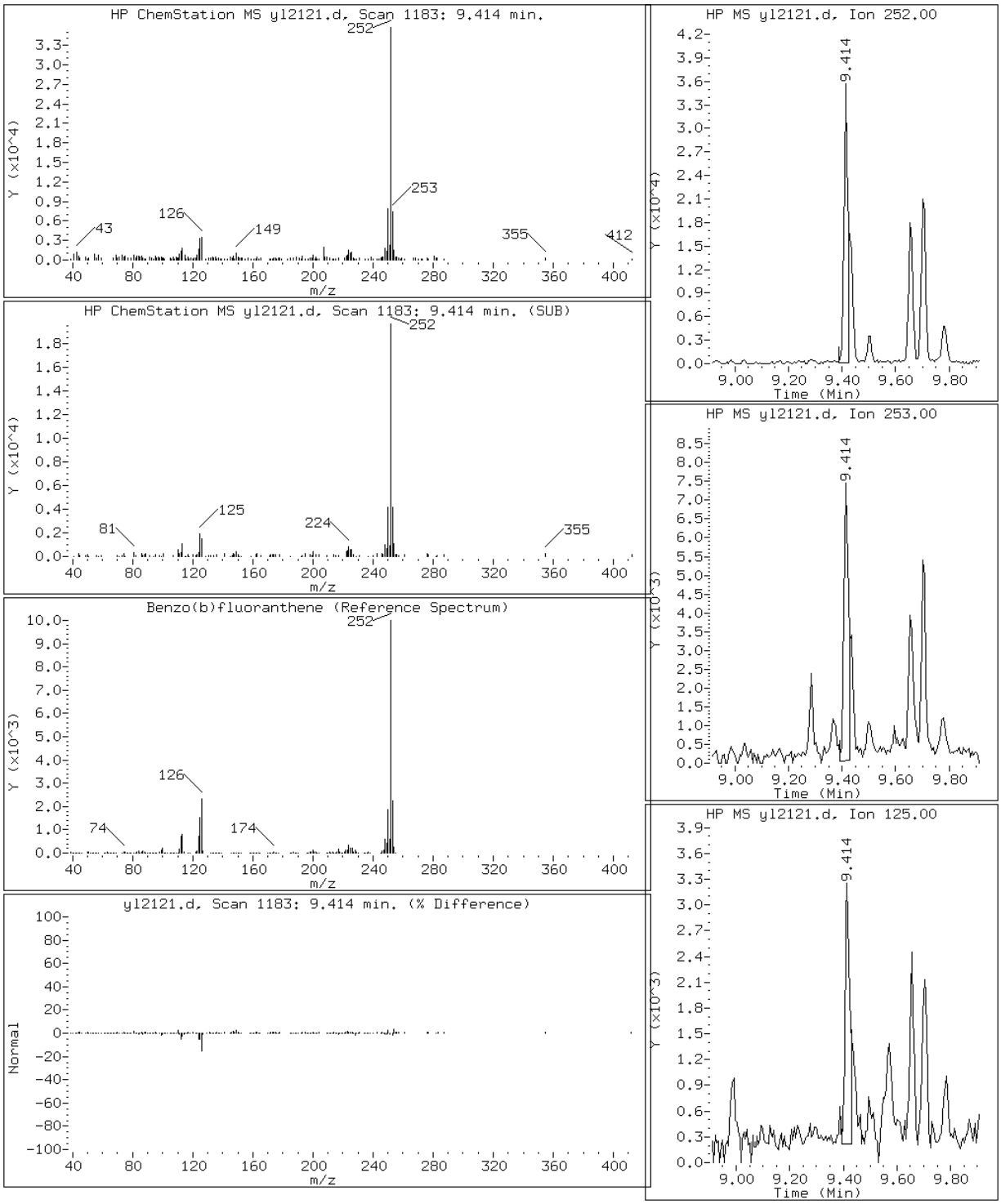
Data File: yl2121.d

Date: 21-DEC-2012 17:53

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-77-A DL=10 Operator: VHB

19 Benzo(b)fluoranthene



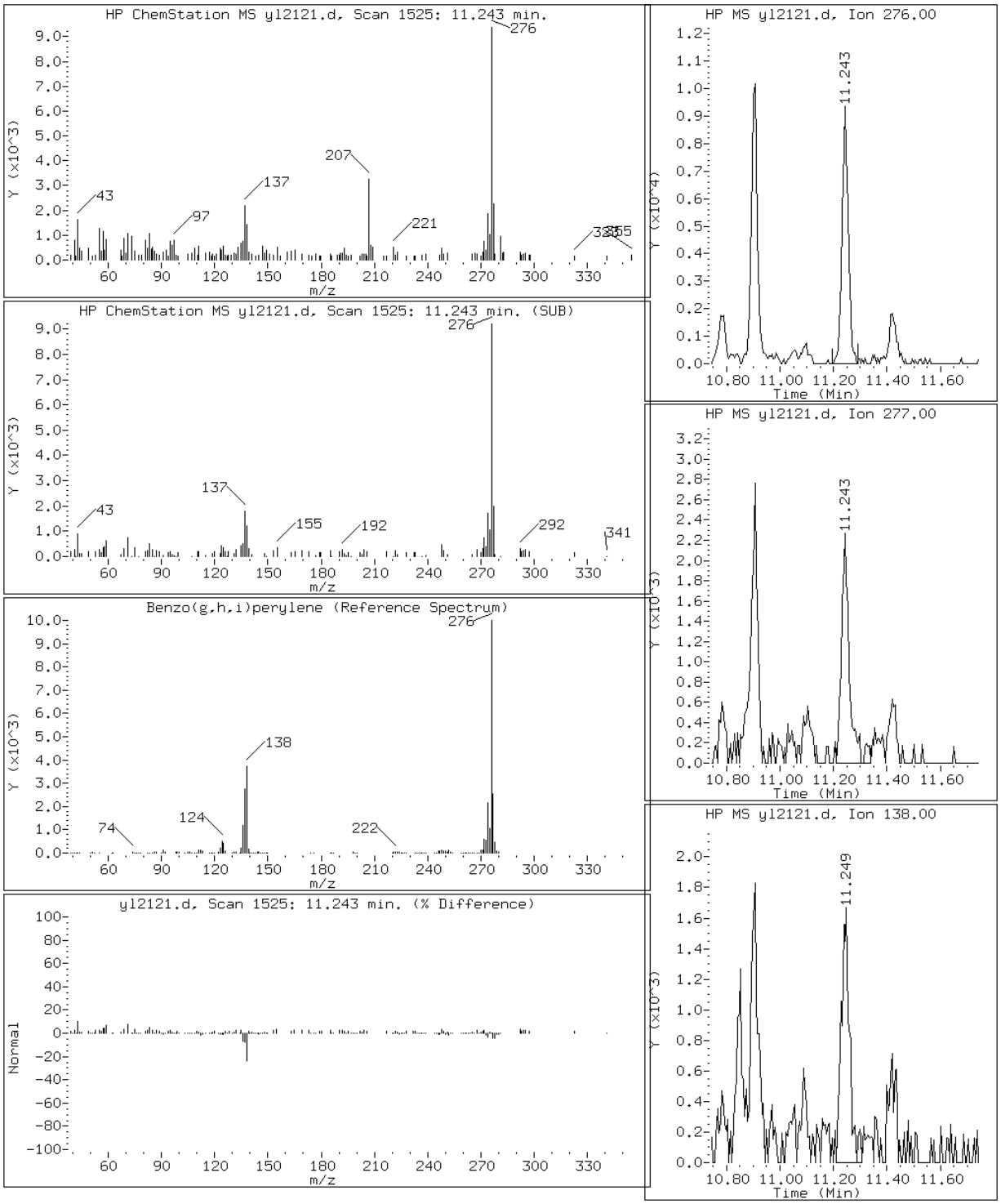
Data File: yl2121.d

Date: 21-DEC-2012 17:53

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-77-A DL=10 Operator: VHB

24 Benzo(g,h,i)perylene



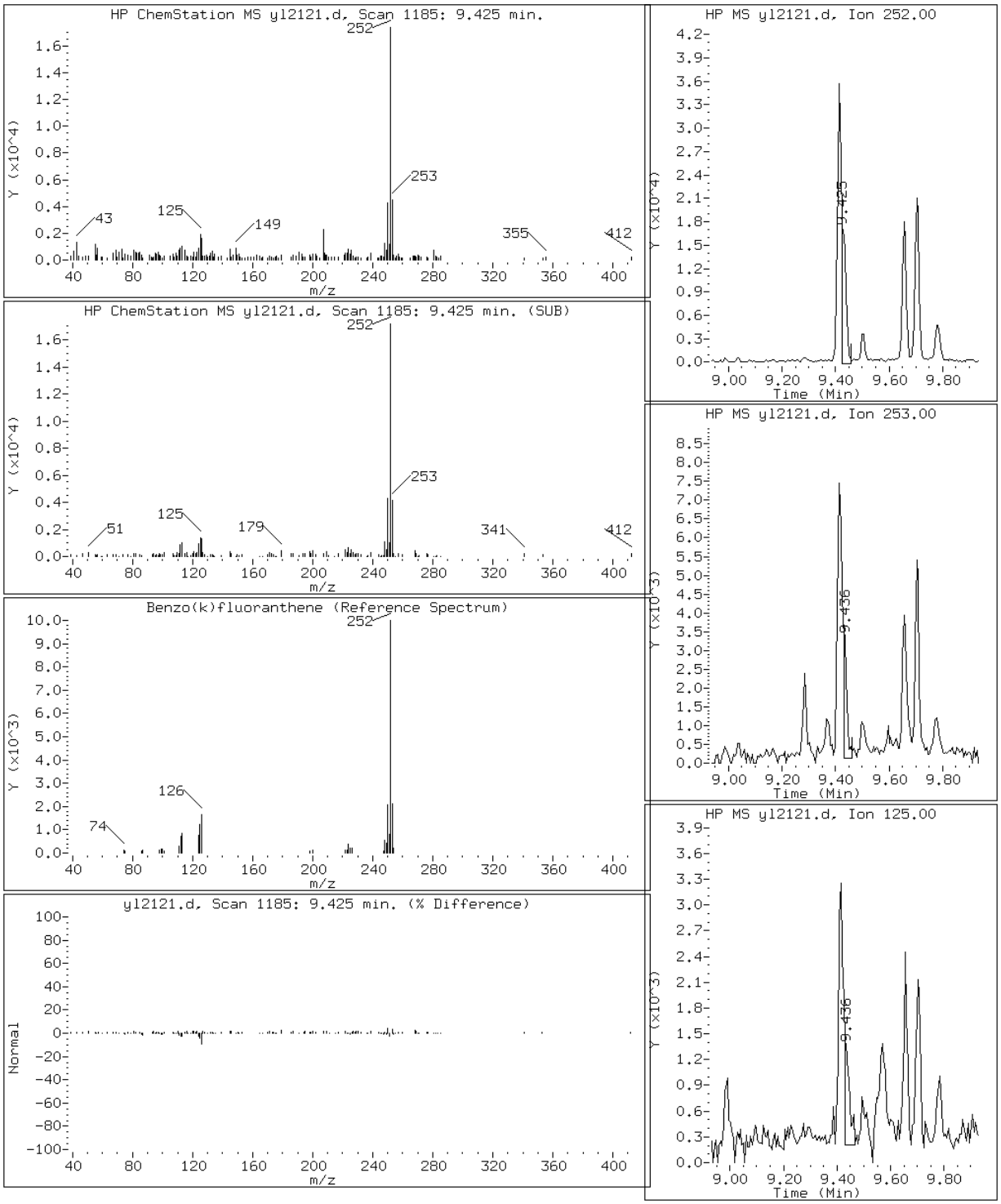
Data File: yl2121.d

Date: 21-DEC-2012 17:53

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-77-A DL=10 Operator: VHB

20 Benzo(k)fluoranthene



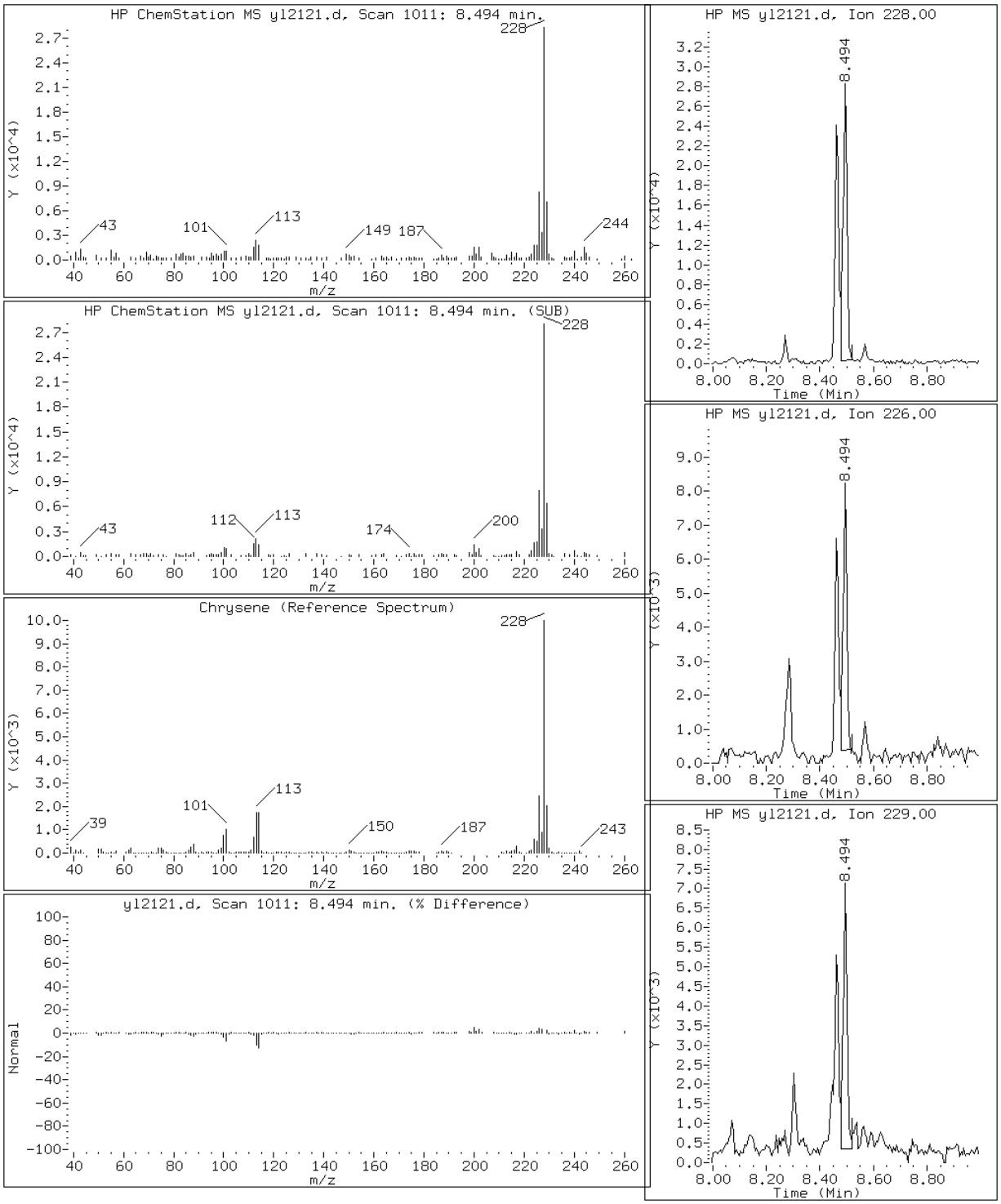
Data File: yl2121.d

Date: 21-DEC-2012 17:53

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-77-A DL=10 Operator: VHB

17 Chrysene



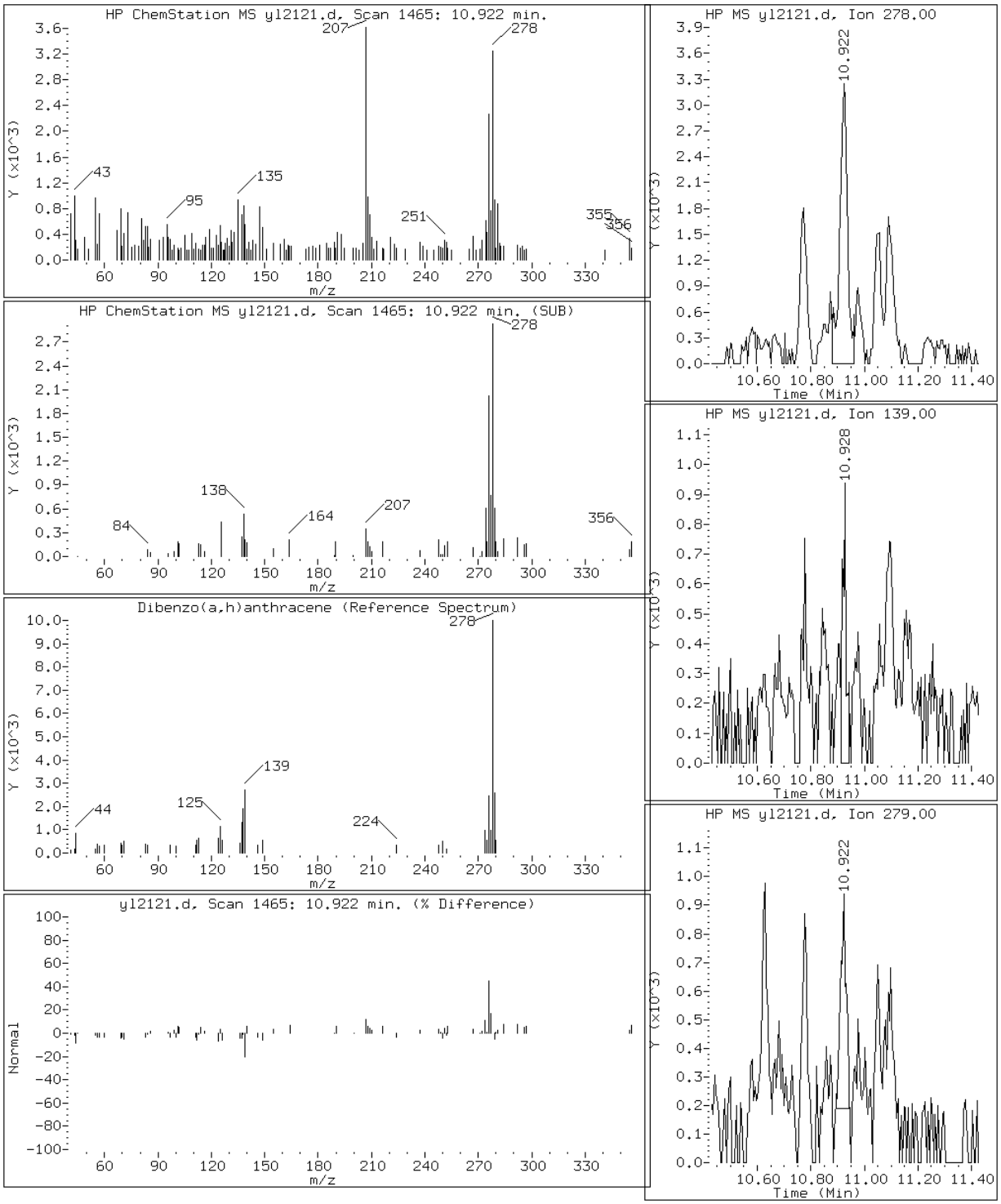
Data File: yl2121.d

Date: 21-DEC-2012 17:53

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-77-A DL=10 Operator: VHB

23 Dibenzo(a,h)anthracene



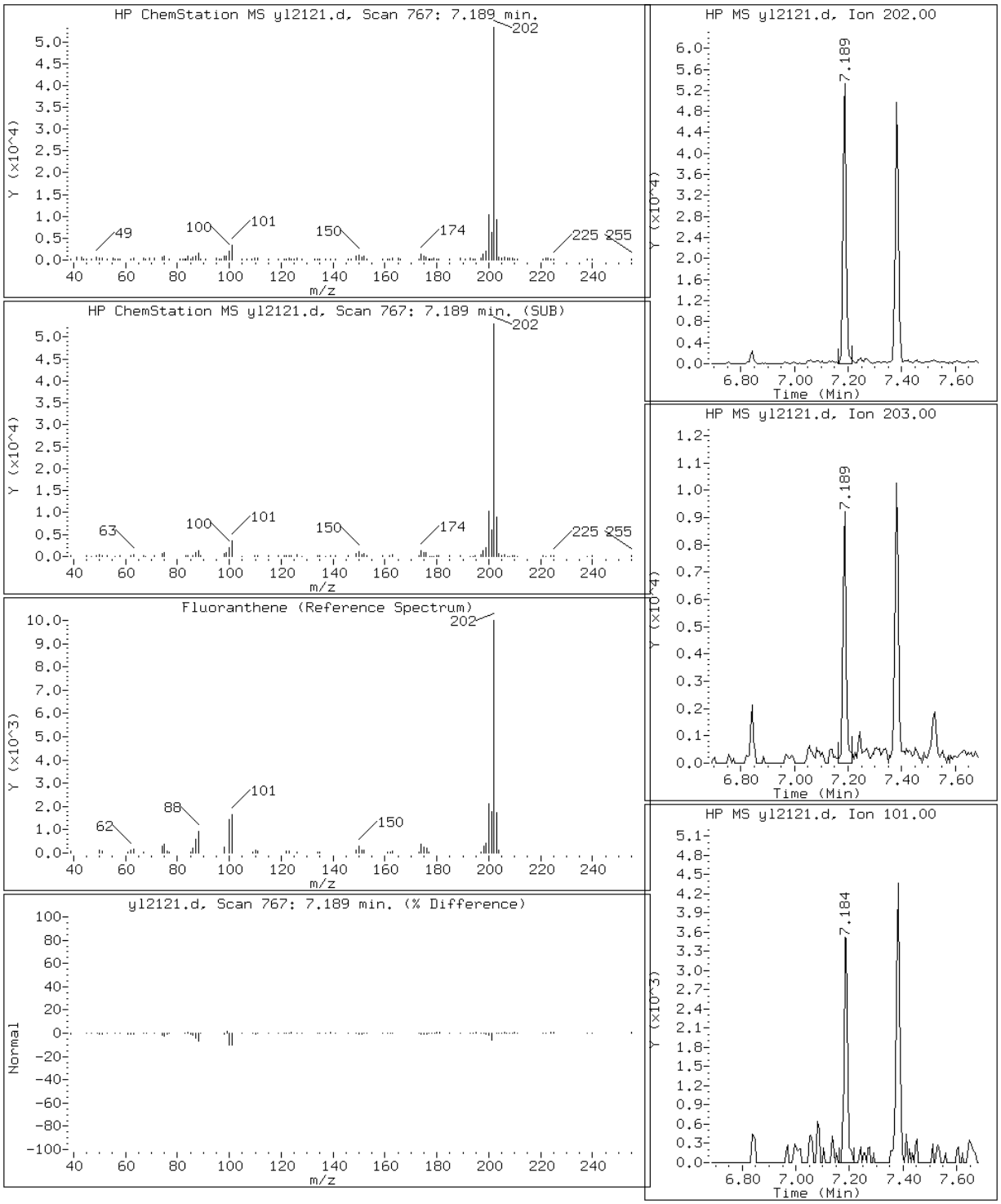
Data File: yl2121.d

Date: 21-DEC-2012 17:53

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-77-A DL=10 Operator: VHB

12 Fluoranthene



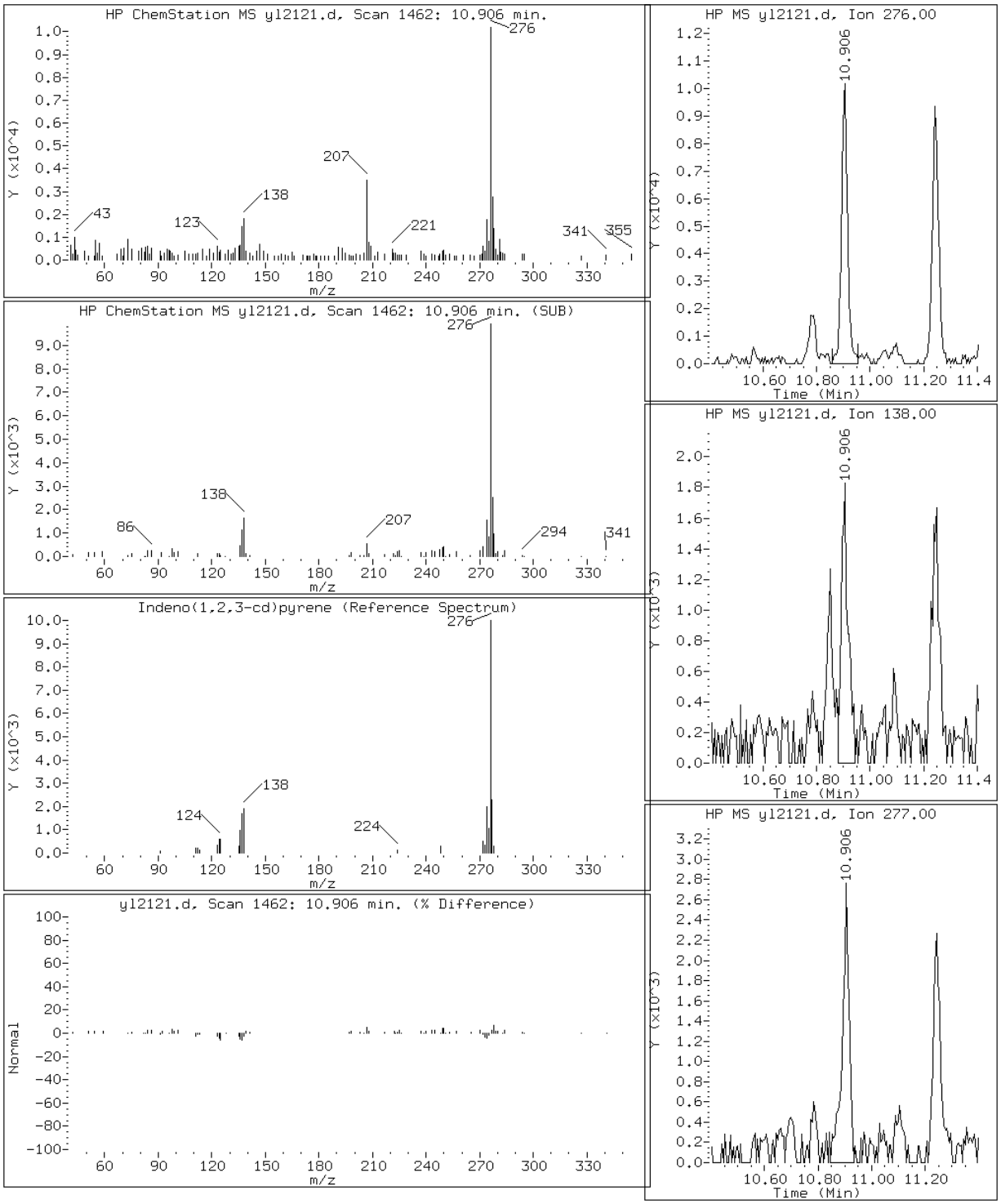
Data File: yl2121.d

Date: 21-DEC-2012 17:53

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-77-A DL=10 Operator: VHB

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



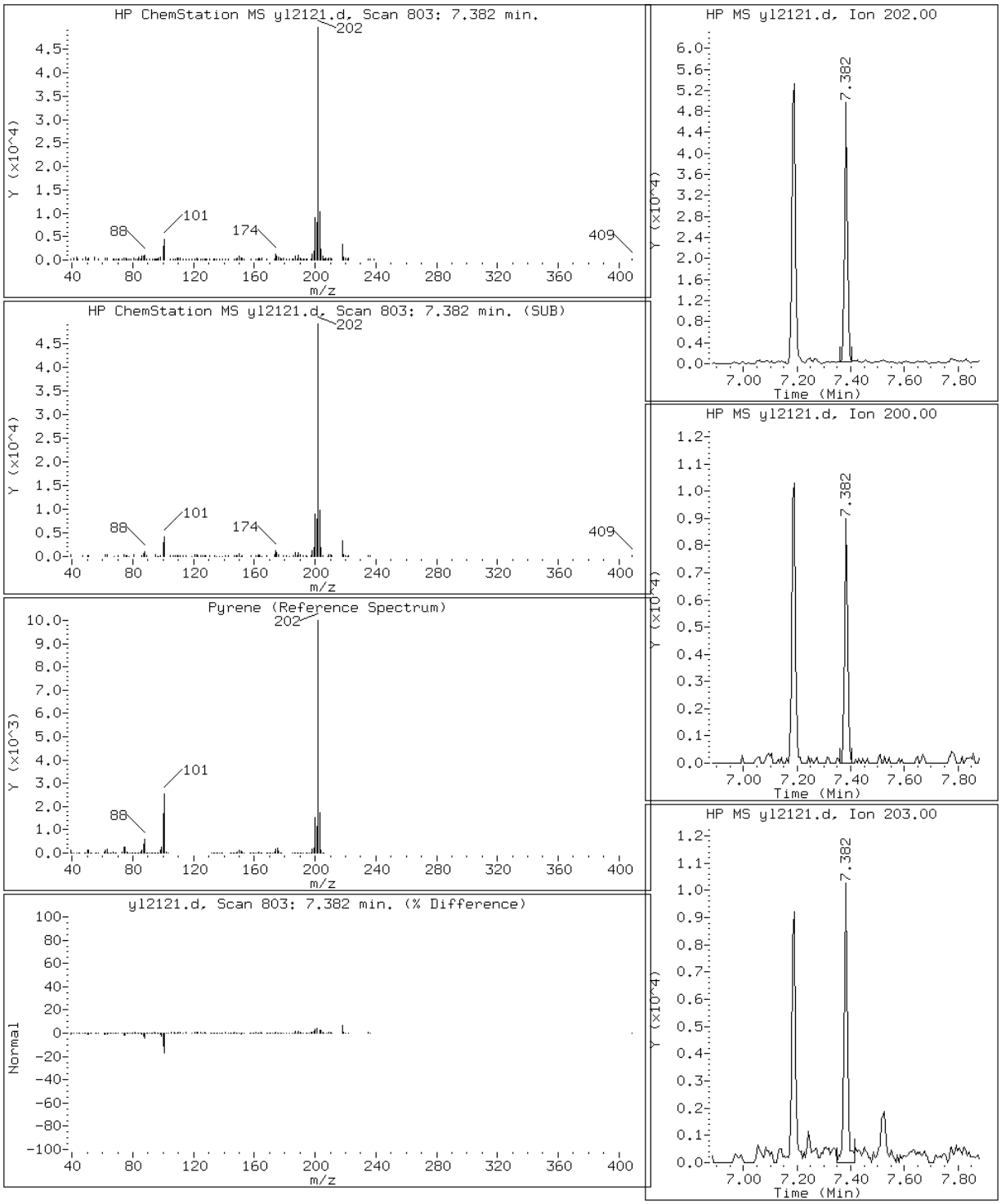
Data File: yl2121.d

Date: 21-DEC-2012 17:53

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-77-A DL=10 Operator: VHB

14 Pyrene



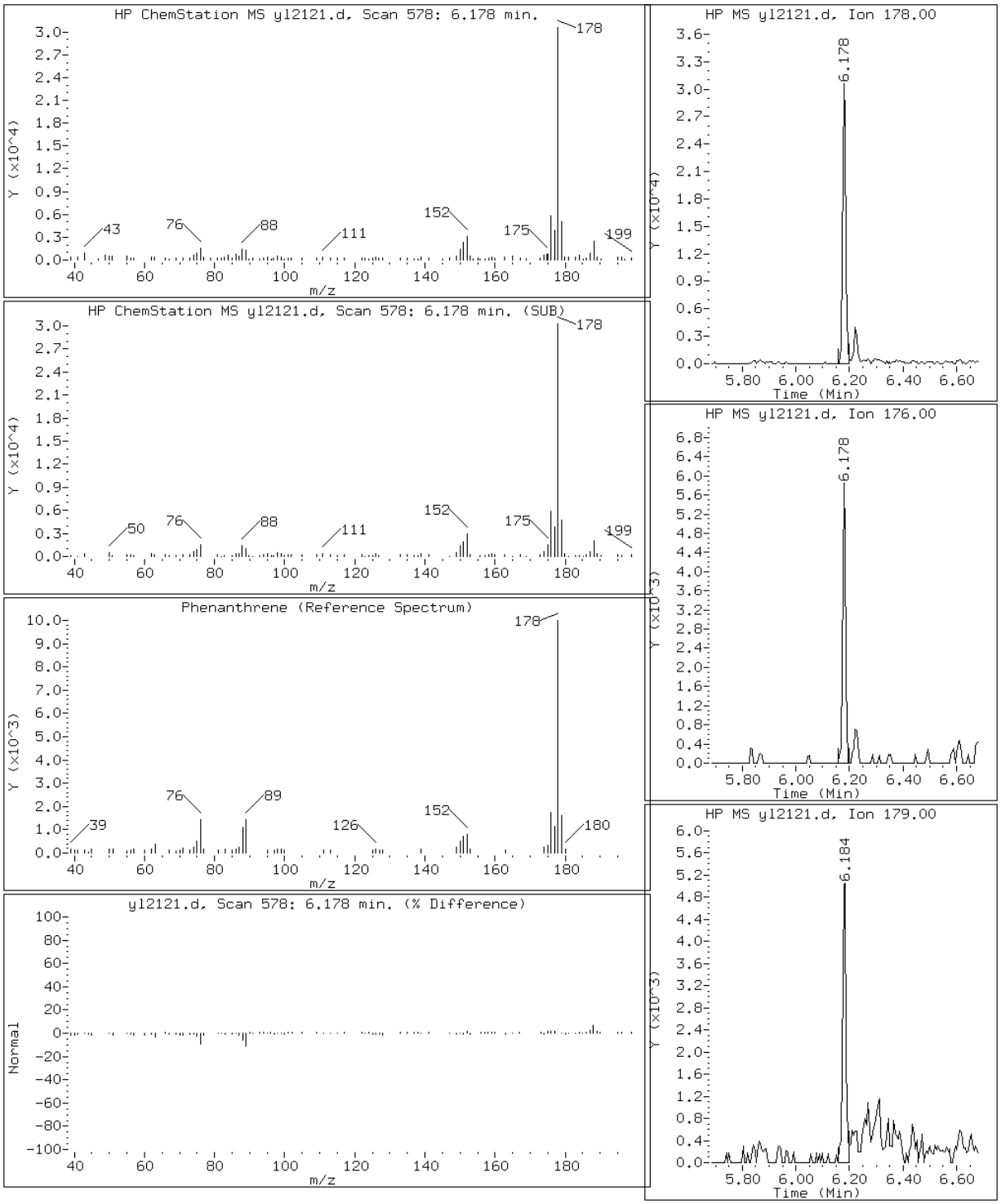
Data File: yl2121.d

Date: 21-DEC-2012 17:53

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-77-A DL=10 Operator: VHB

10 Phenanthrene



Manual Integration Report

Data File: yl2121.d
Inj. Date and Time: 21-DEC-2012 17:53
Instrument ID: MSY5975.i
Client ID:
Compound: 19 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 12/27/2012

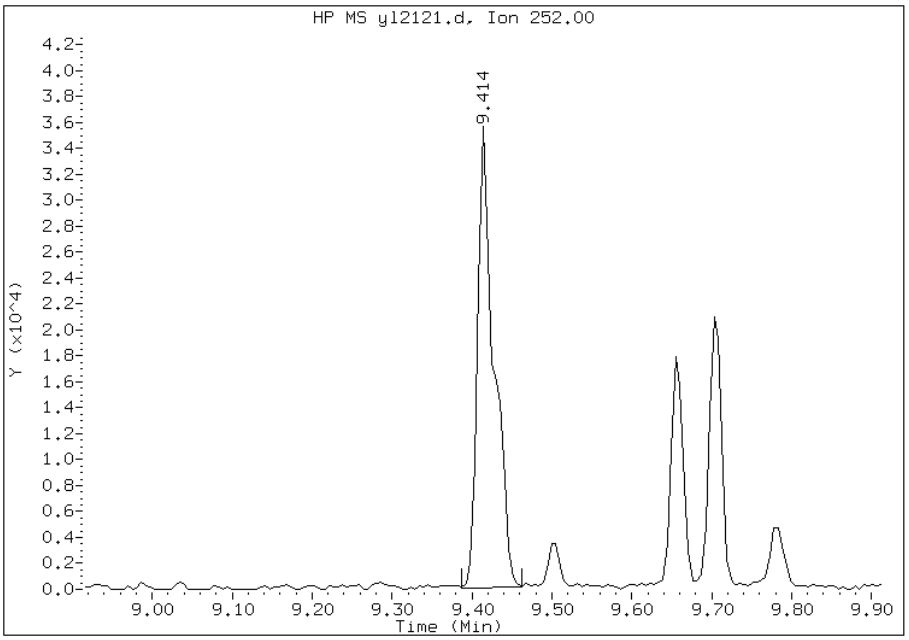
Processing Integration Results

RT: 9.41

Response: 50280

Amount: 1

Conc: 263



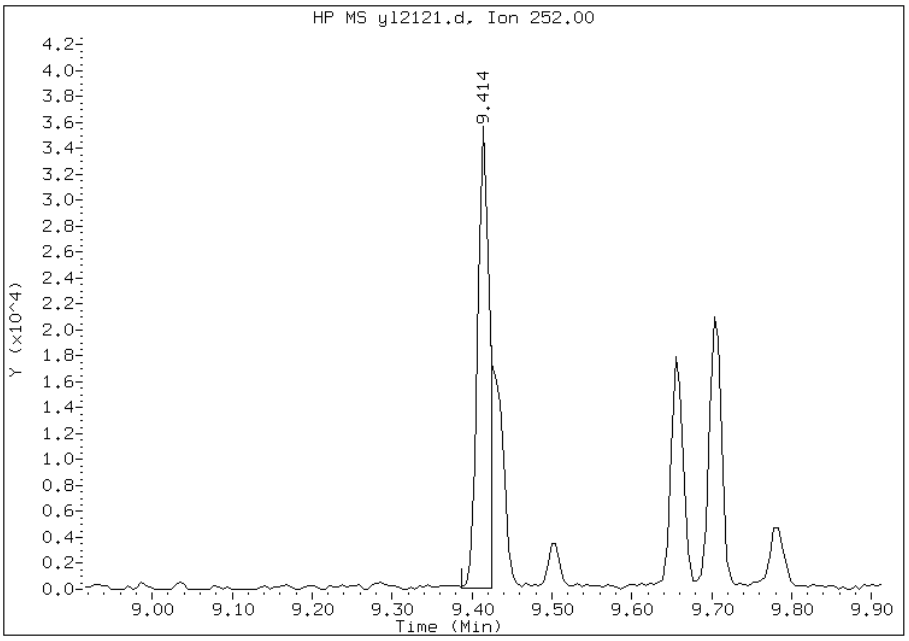
Manual Integration Results

RT: 9.41

Response: 36532

Amount: 1

Conc: 191



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

Manual Integration Report

Data File: yl2121.d
Inj. Date and Time: 21-DEC-2012 17:53
Instrument ID: MSY5975.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 12/27/2012

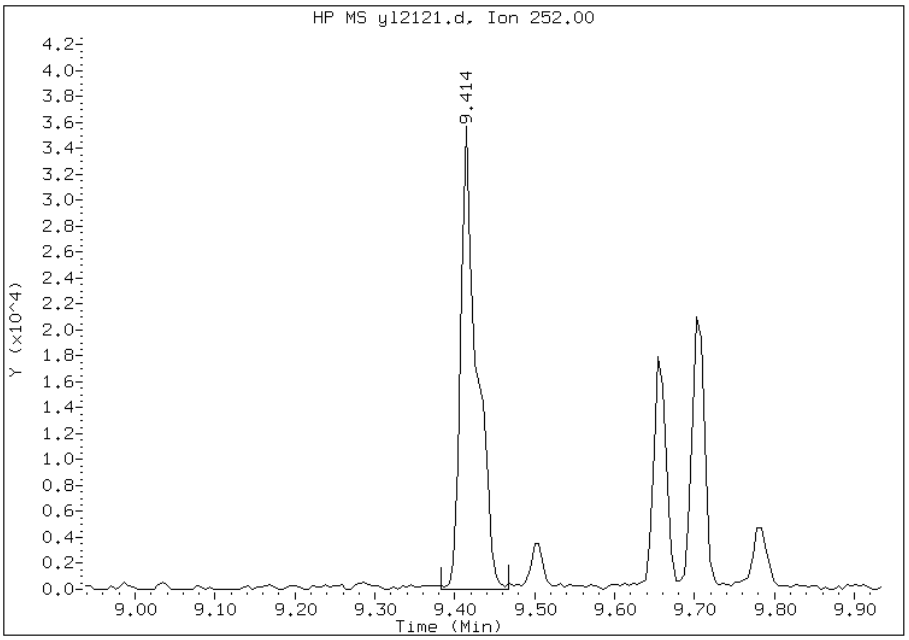
Processing Integration Results

RT: 9.41

Response: 51121

Amount: 1

Conc: 262



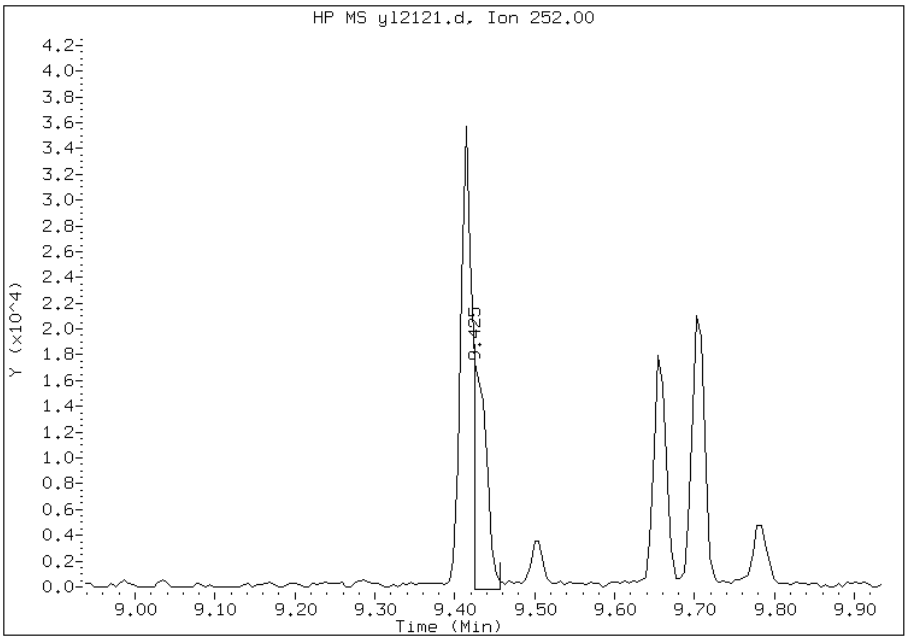
Manual Integration Results

RT: 9.42

Response: 20008

Amount: 0

Conc: 102



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.: 680-85860-4

SDG No.: 68085860-4

Client Sample ID: CV0319B-CS | Lab Sample ID: 680-85860-78

Matrix: Solid | Lab File ID: yl2708.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/14/2012 09:05

Extract. Method: 3546 | Date Extracted: 12/20/2012 18:29

Sample wt/vol: 30.24(g) | Date Analyzed: 12/27/2012 17:08

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

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

% Moisture: 26.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261231 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	62	J	90	42
91-57-6	2-Methylnaphthalene	100		90	45
83-32-9	Acenaphthene	90	U	90	45
208-96-8	Acenaphthylene	90	U	90	45
120-12-7	Anthracene	74	J	90	45
56-55-3	Benzo[a]anthracene	230		90	45
50-32-8	Benzo[a]pyrene	240		90	16
205-99-2	Benzo[b]fluoranthene	400		90	45
191-24-2	Benzo[g,h,i]perylene	170		90	45
207-08-9	Benzo[k]fluoranthene	170		90	27
218-01-9	Chrysene	310		90	45
53-70-3	Dibenz(a,h)anthracene	73	J	90	45
206-44-0	Fluoranthene	490		90	45
86-73-7	Fluorene	90	U	90	45
193-39-5	Indeno[1,2,3-cd]pyrene	130		90	45
91-20-3	Naphthalene	92		90	45
129-00-0	Pyrene	450		90	45
85-01-8	Phenanthrene	410		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/MSY5975.i/2y122712.b/yl2708.d
Lab Smp Id: 680-85860-A-78-A DL
Inj Date : 27-DEC-2012 17:08
Operator : VHB Inst ID: MSY5975.i
Smp Info : 680-85860-A-78-A DL=10
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y122712.b/Y-b8270CLLPAH-m.m
Meth Date : 27-Dec-2012 14:34 chemist Quant Type: ISTD
Cal Date : 21-DEC-2012 13:30 Cal File: yl2112q.d
Als bottle: 8
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	3.322	3.322	(1.000)	55486	2.00000	
2 Naphthalene	128	3.338	3.338	(1.005)	6661	0.20370	67.90
3 2-Methylnaphthalene	142	3.943	3.943	(1.187)	4735	0.23202	77.33
4 1-Methylnaphthalene	142	4.023	4.028	(1.211)	2963	0.13798	45.99(a)
* 5 Acenaphthene-d10	164	4.836	4.841	(1.000)	34525	2.00000	
* 9 Phenanthrene-d10	188	6.087	6.093	(1.000)	59916	2.00000	
10 Phenanthrene	178	6.109	6.109	(1.004)	34017	0.92165	307.21

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
11 Anthracene	178	6.152	6.152	(1.011)	5844	0.16553	55.17(a)
12 Fluoranthene	202	7.114	7.114	(1.169)	46976	1.09178	363.92
14 Pyrene	202	7.307	7.307	(0.871)	36754	0.99184	330.61
16 Benzo(a)Anthracene	228	8.387	8.387	(0.999)	14842	0.51239	170.79
* 13 Chrysene-d12	240	8.393	8.398	(1.000)	40828	2.00000	
17 Chrysene	228	8.419	8.419	(1.003)	17654	0.68435	228.11
19 Benzo(b)fluoranthene	252	9.334	9.334	(0.966)	20727	0.90002	300.00(M)
20 Benzo(k)fluoranthene	252	9.345	9.355	(0.967)	8765	0.37316	124.38(M)
21 Benzo(a)pyrene	252	9.617	9.612	(0.995)	10079	0.53063	176.87
* 18 Perylene-d12	264	9.666	9.666	(1.000)	31478	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	10.778	10.778	(1.284)	6469	0.29167	97.22
23 Dibenzo(a,h)anthracene	278	10.799	10.800	(1.117)	2577	0.16144	53.81(a)
24 Benzo(g,h,i)perylene	276	11.104	11.099	(1.149)	6196	0.37524	125.07

QC Flag Legend

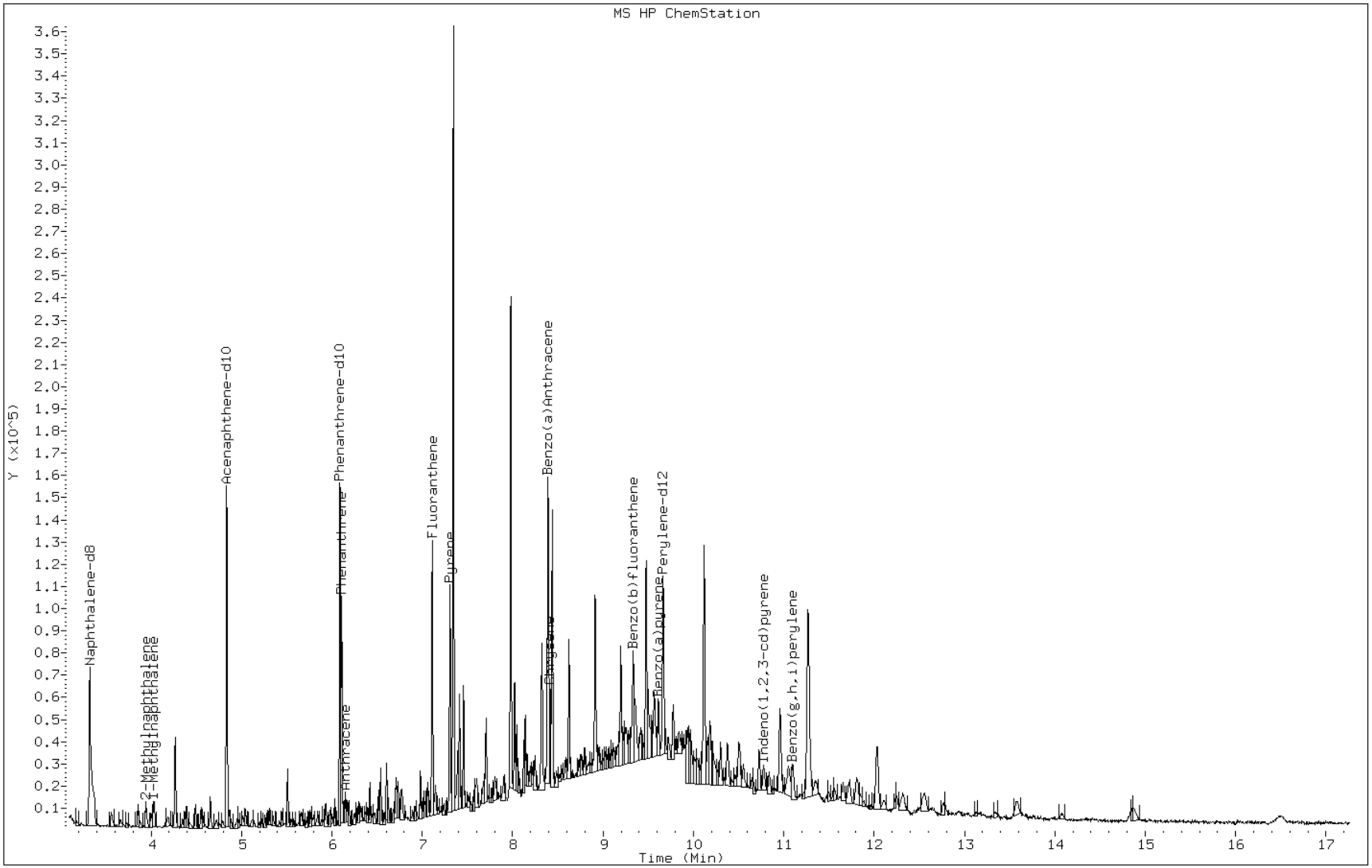
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: yl2708.d

Date: 27-DEC-2012 17:08

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-78-A DL=10 Operator: VHB



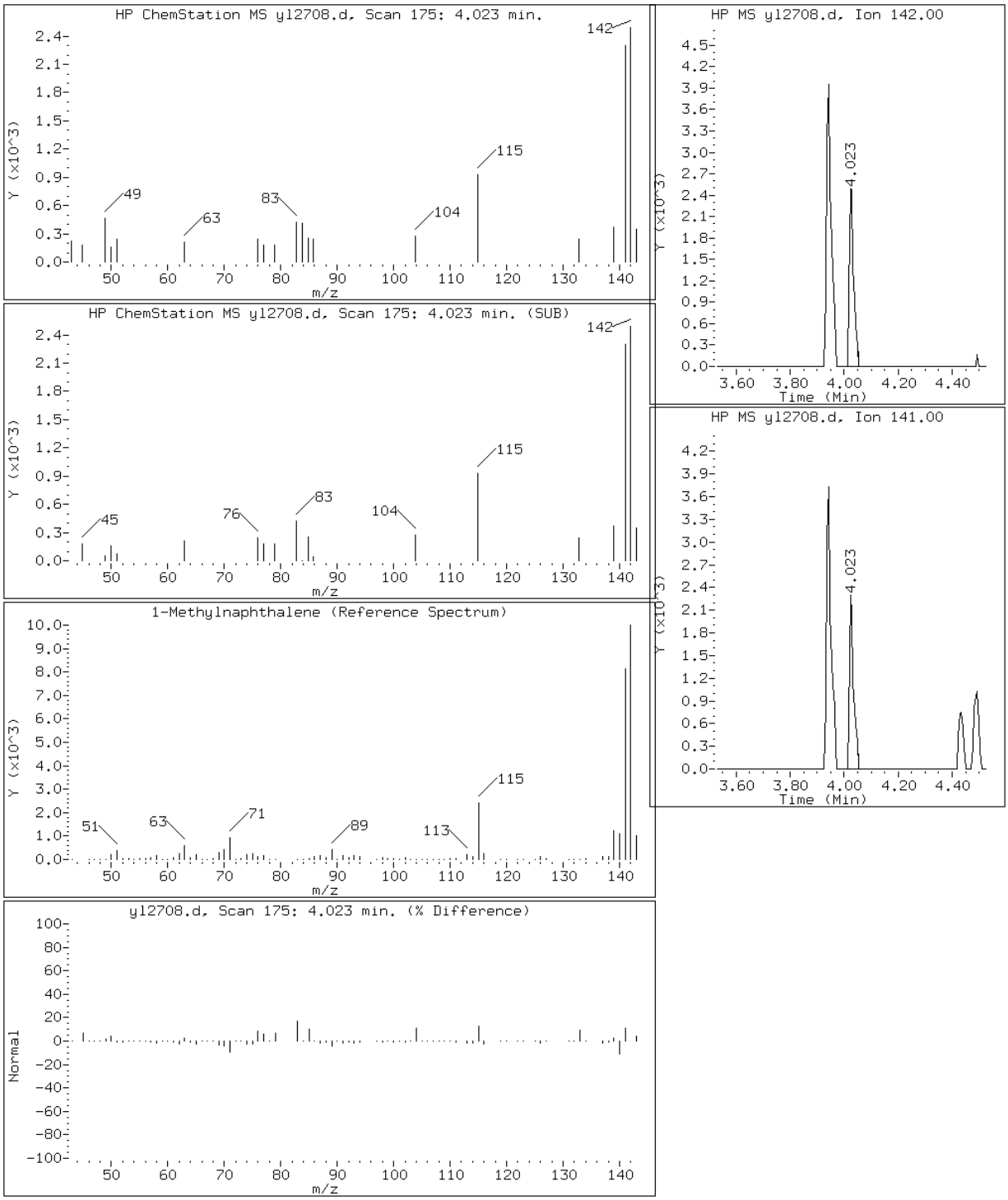
Data File: yl2708.d

Date: 27-DEC-2012 17:08

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-78-A DL=10 Operator: VHB

4 1-Methylnaphthalene



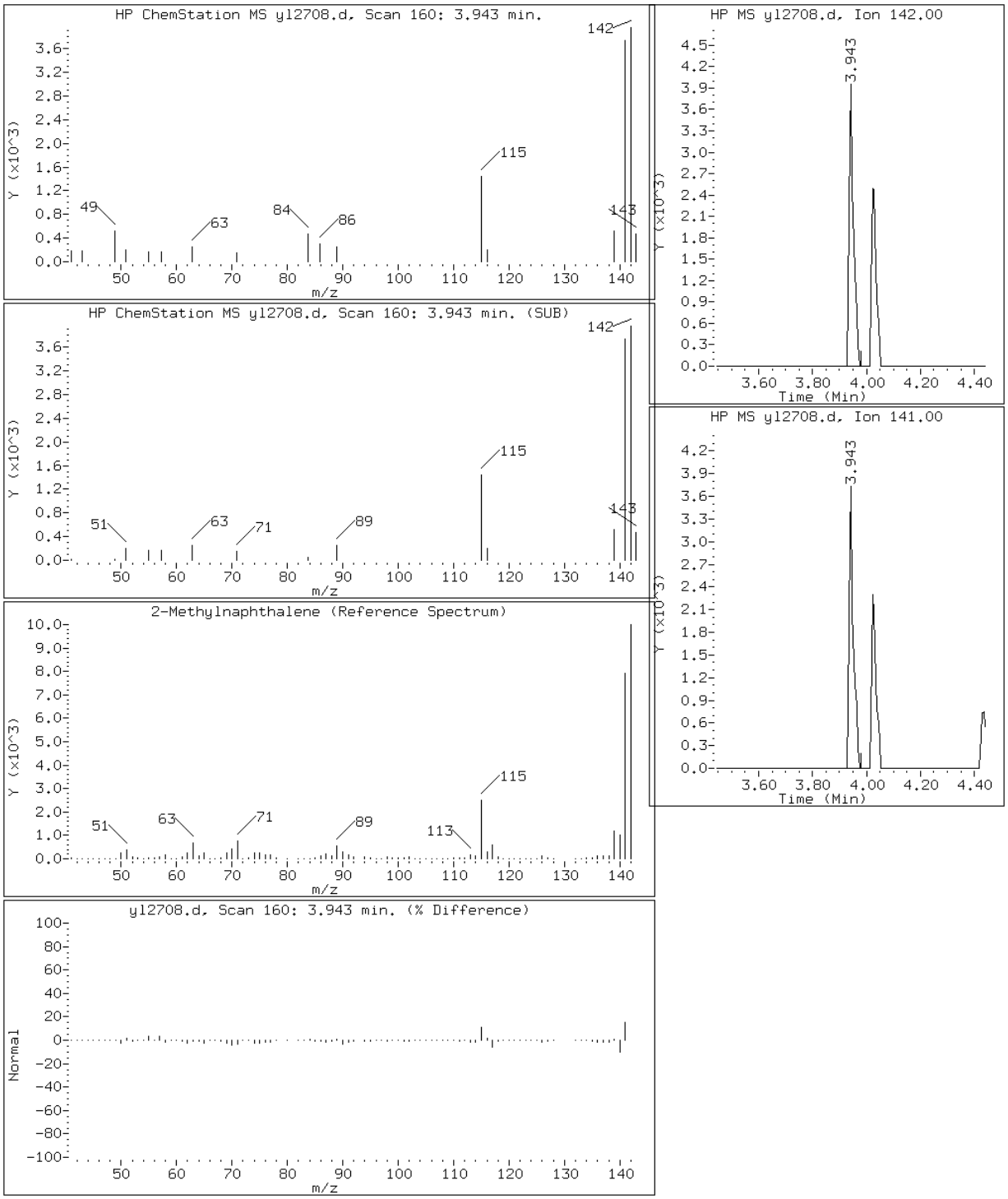
Data File: yl2708.d

Date: 27-DEC-2012 17:08

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-78-A DL=10 Operator: VHB

3 2-Methylnaphthalene



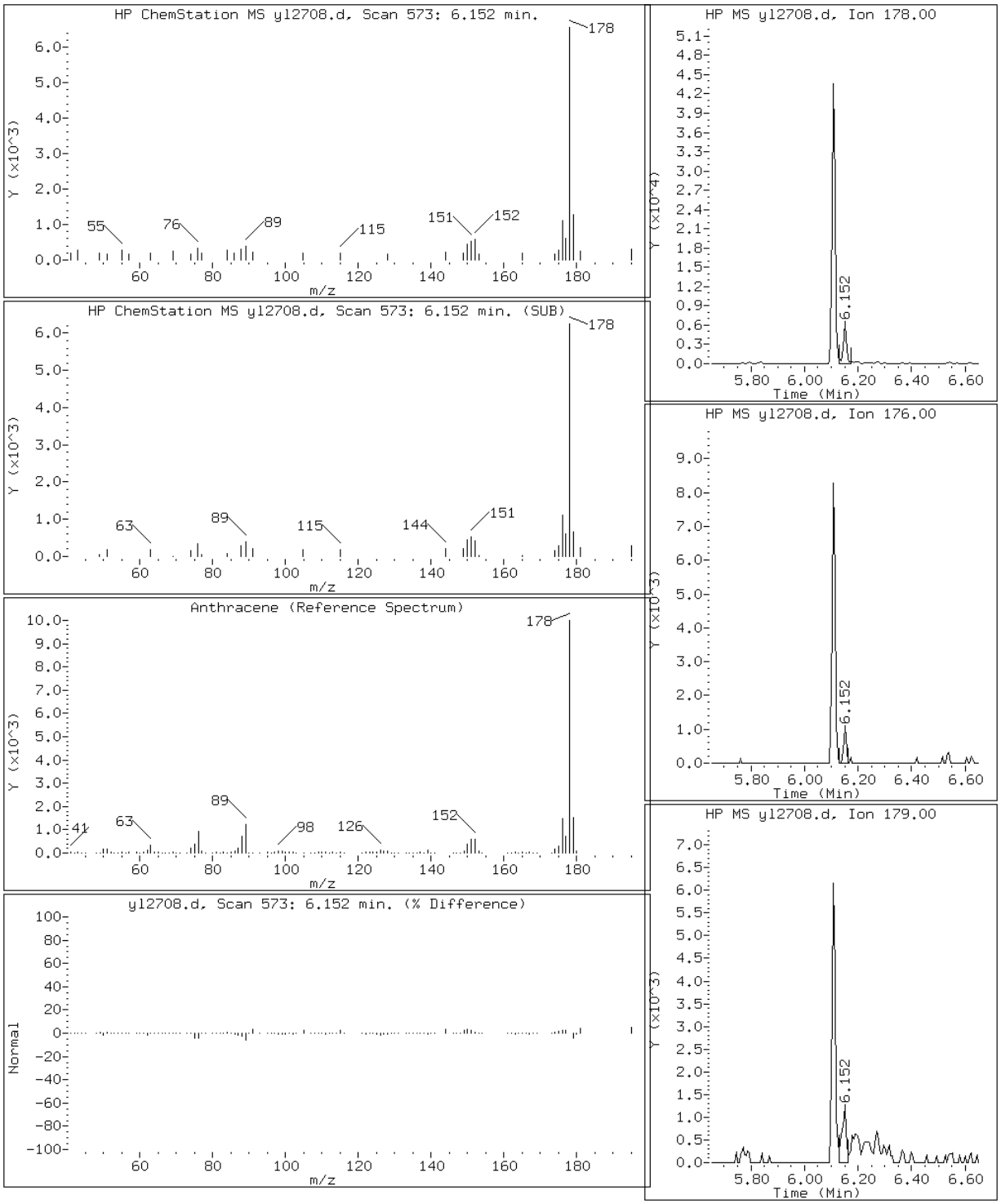
Data File: yl2708.d

Date: 27-DEC-2012 17:08

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-78-A DL=10 Operator: VHB

11 Anthracene



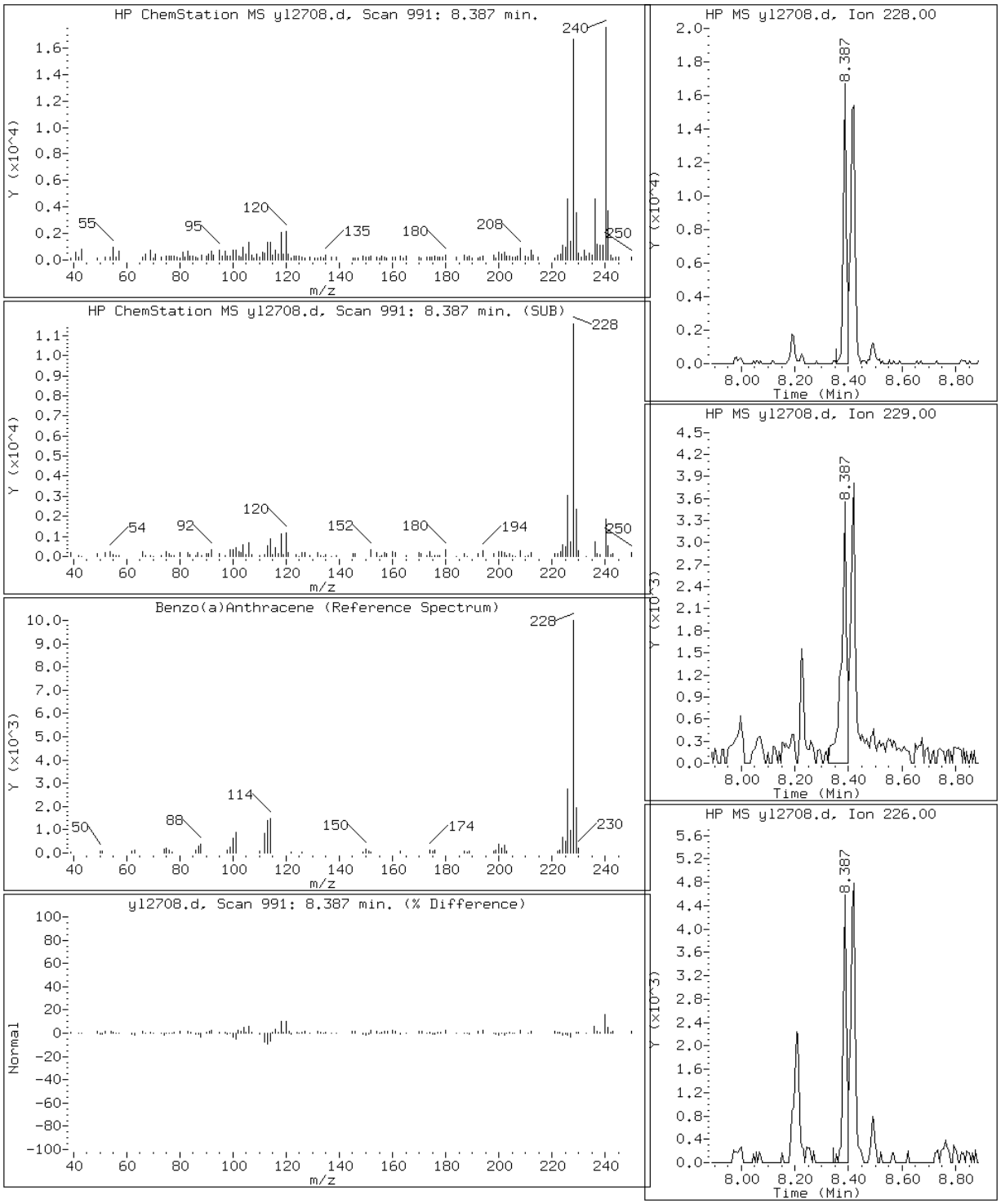
Data File: yl2708.d

Date: 27-DEC-2012 17:08

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-78-A DL=10 Operator: VHB

16 Benzo(a)Anthracene



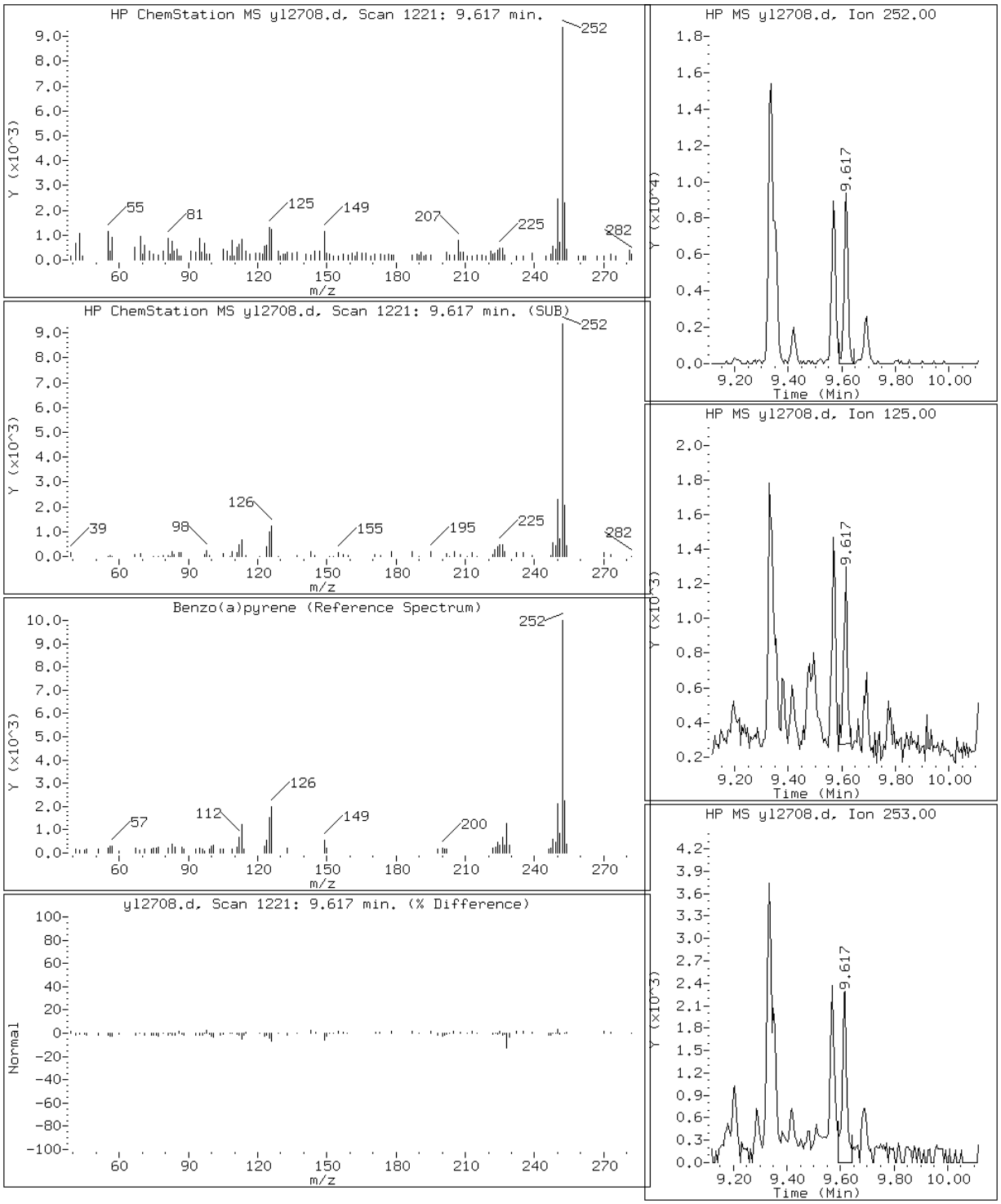
Data File: yl2708.d

Date: 27-DEC-2012 17:08

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-78-A DL=10 Operator: VHB

21 Benzo(a)pyrene



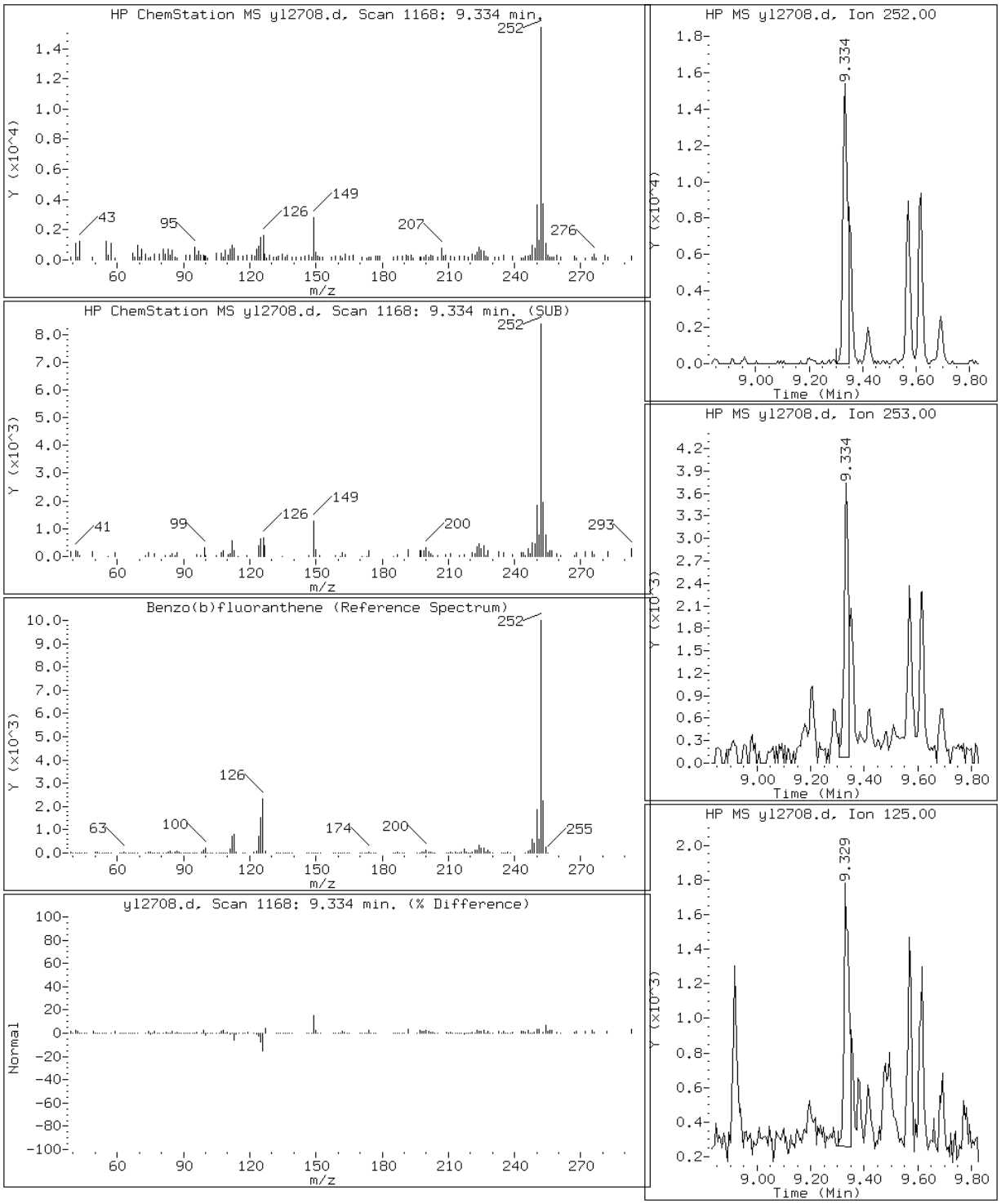
Data File: yl2708.d

Date: 27-DEC-2012 17:08

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-78-A DL=10 Operator: VHB

19 Benzo(b)fluoranthene



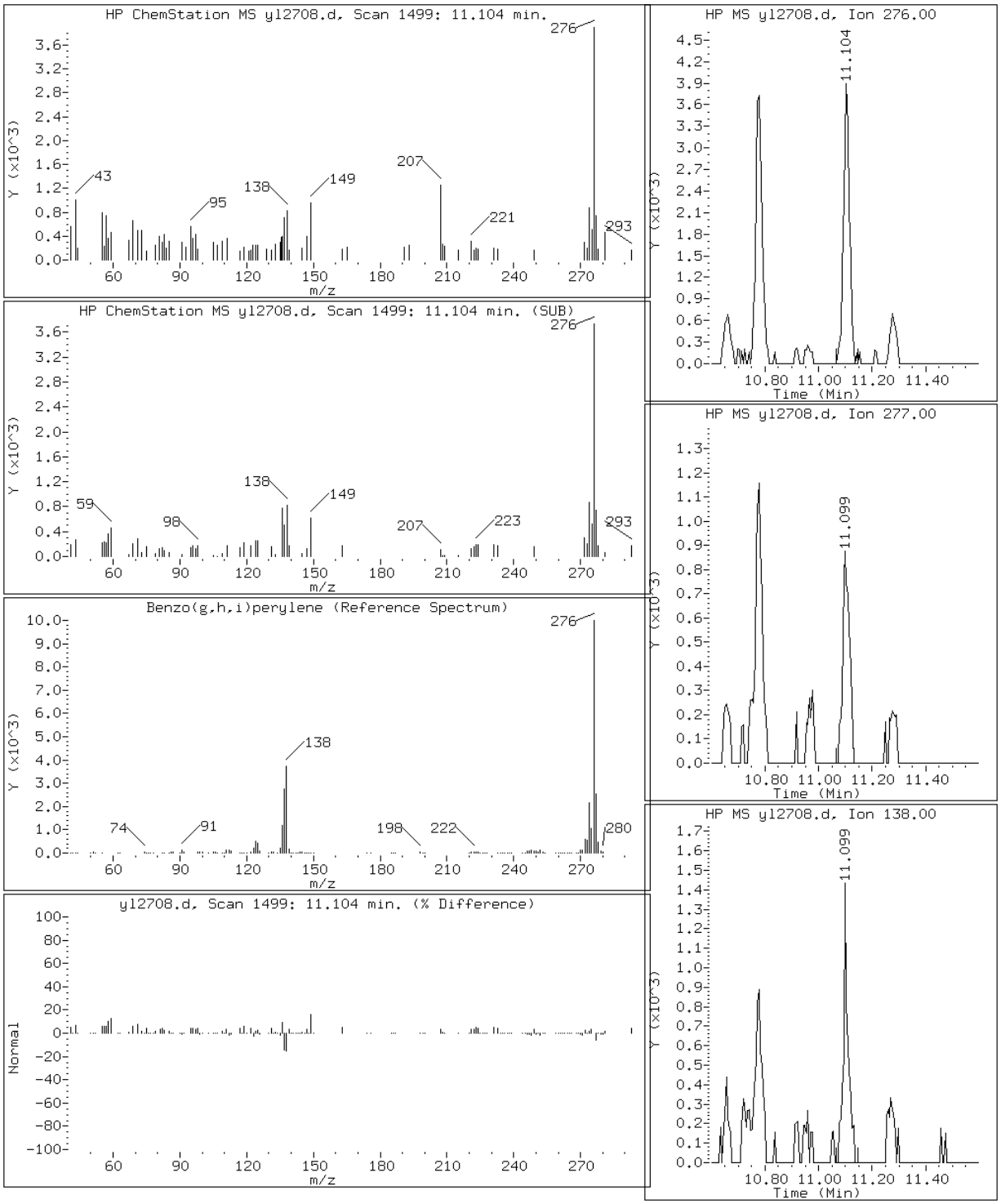
Data File: yl2708.d

Date: 27-DEC-2012 17:08

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-78-A DL=10 Operator: VHB

24 Benzo(g,h,i)perylene



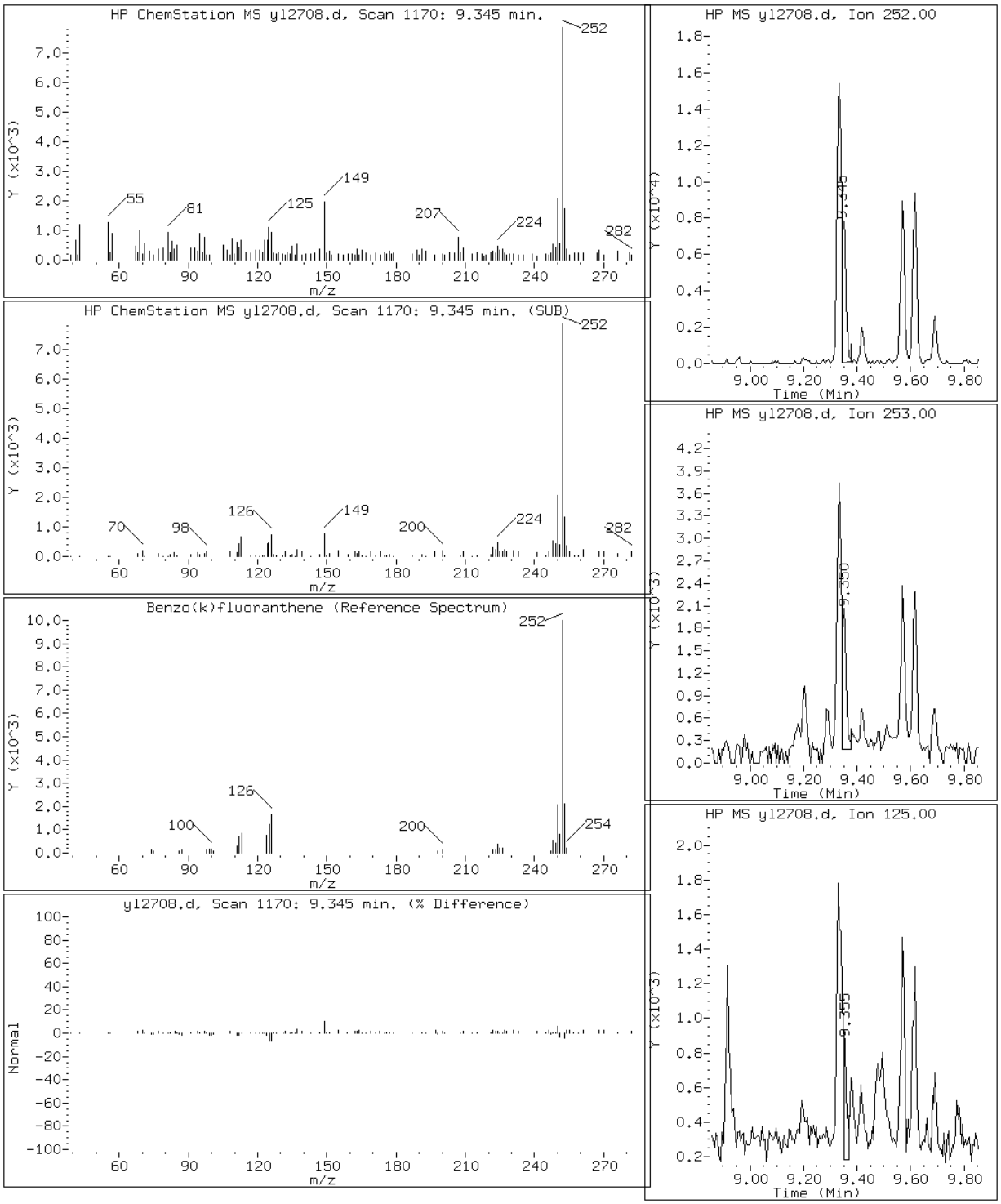
Data File: yl2708.d

Date: 27-DEC-2012 17:08

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-78-A DL=10 Operator: VHB

20 Benzo(k)fluoranthene



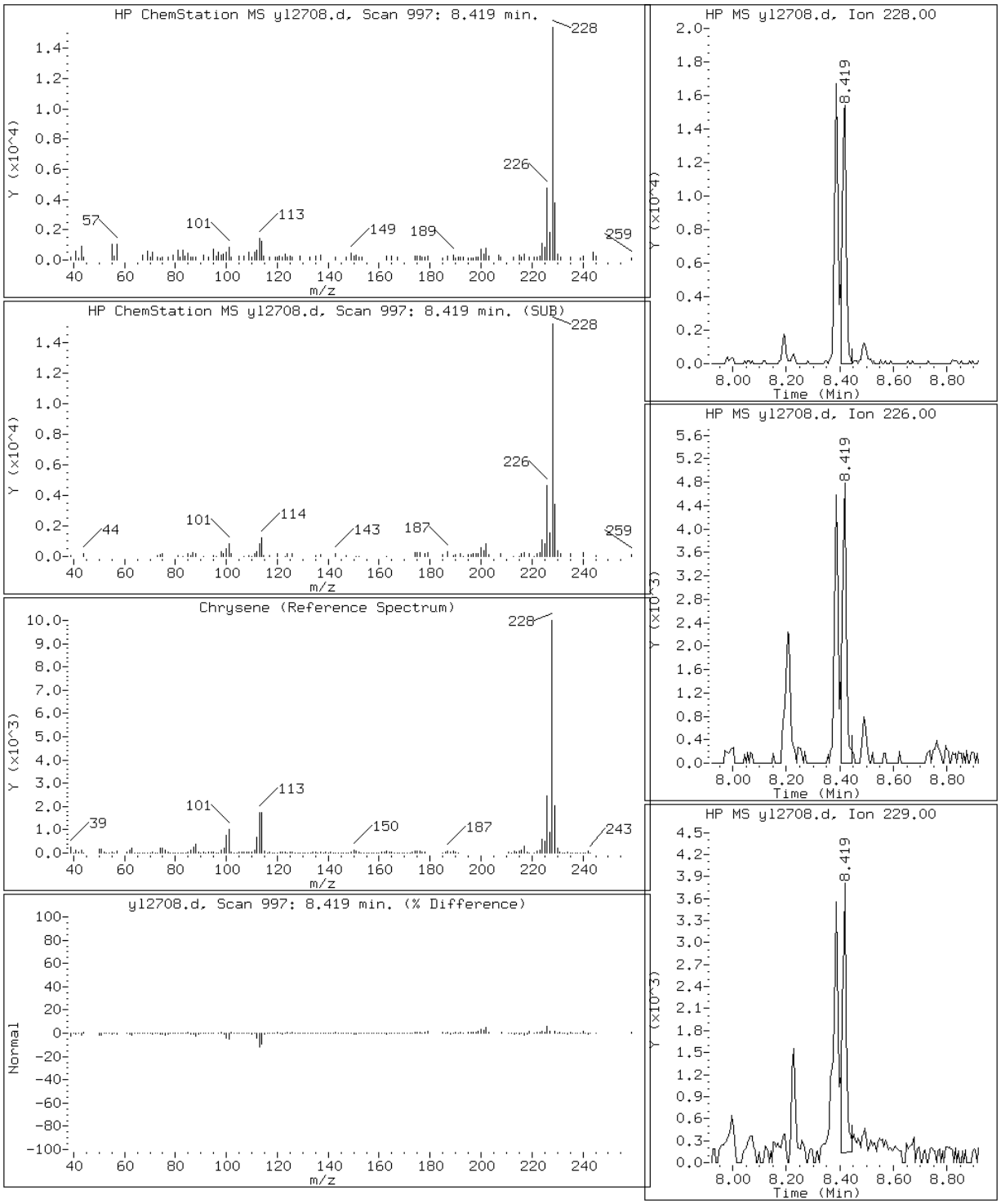
Data File: yl2708.d

Date: 27-DEC-2012 17:08

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-78-A DL=10 Operator: VHB

17 Chrysene



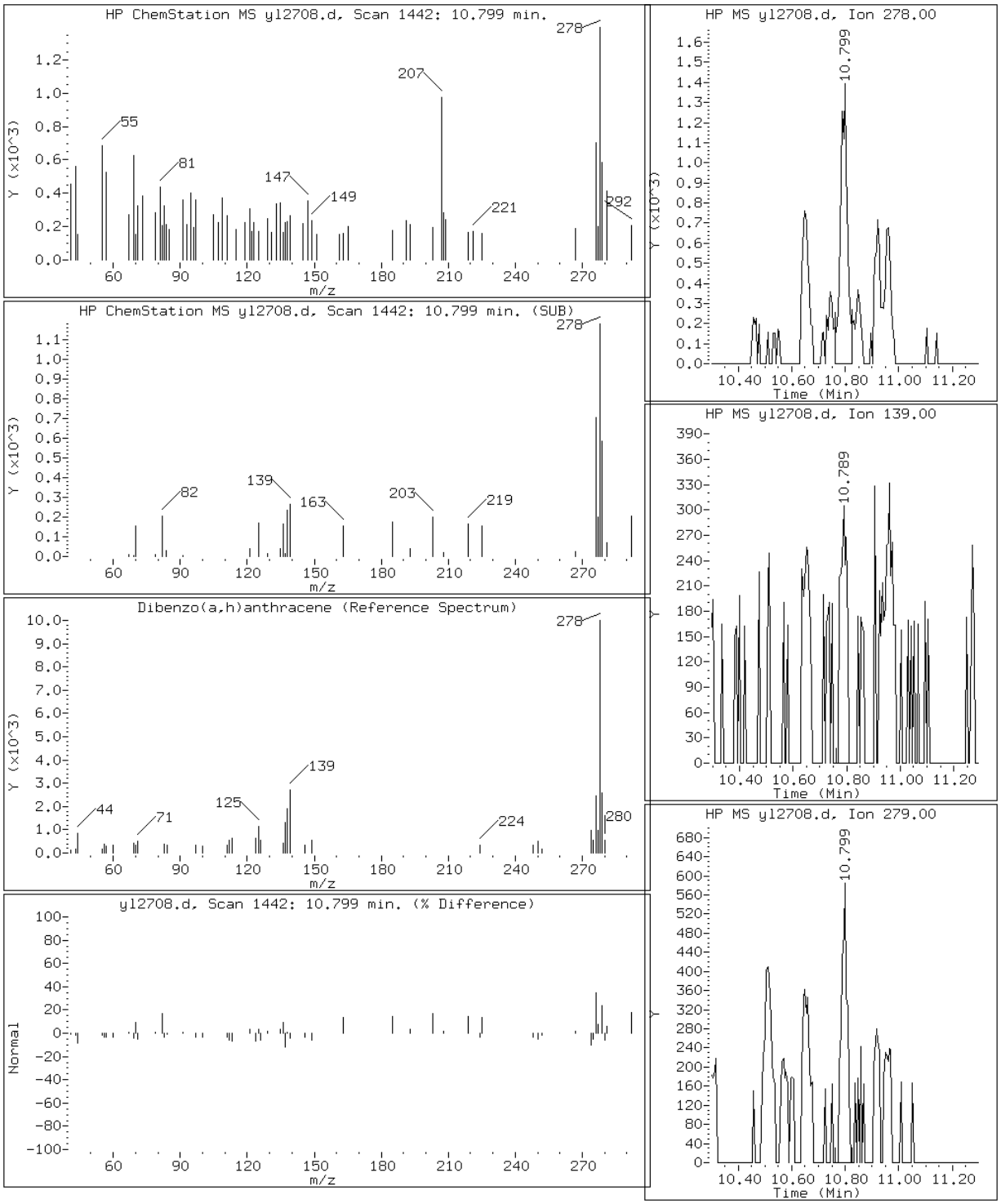
Data File: yl2708.d

Date: 27-DEC-2012 17:08

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-78-A DL=10 Operator: VHB

23 Dibenzo(a,h)anthracene



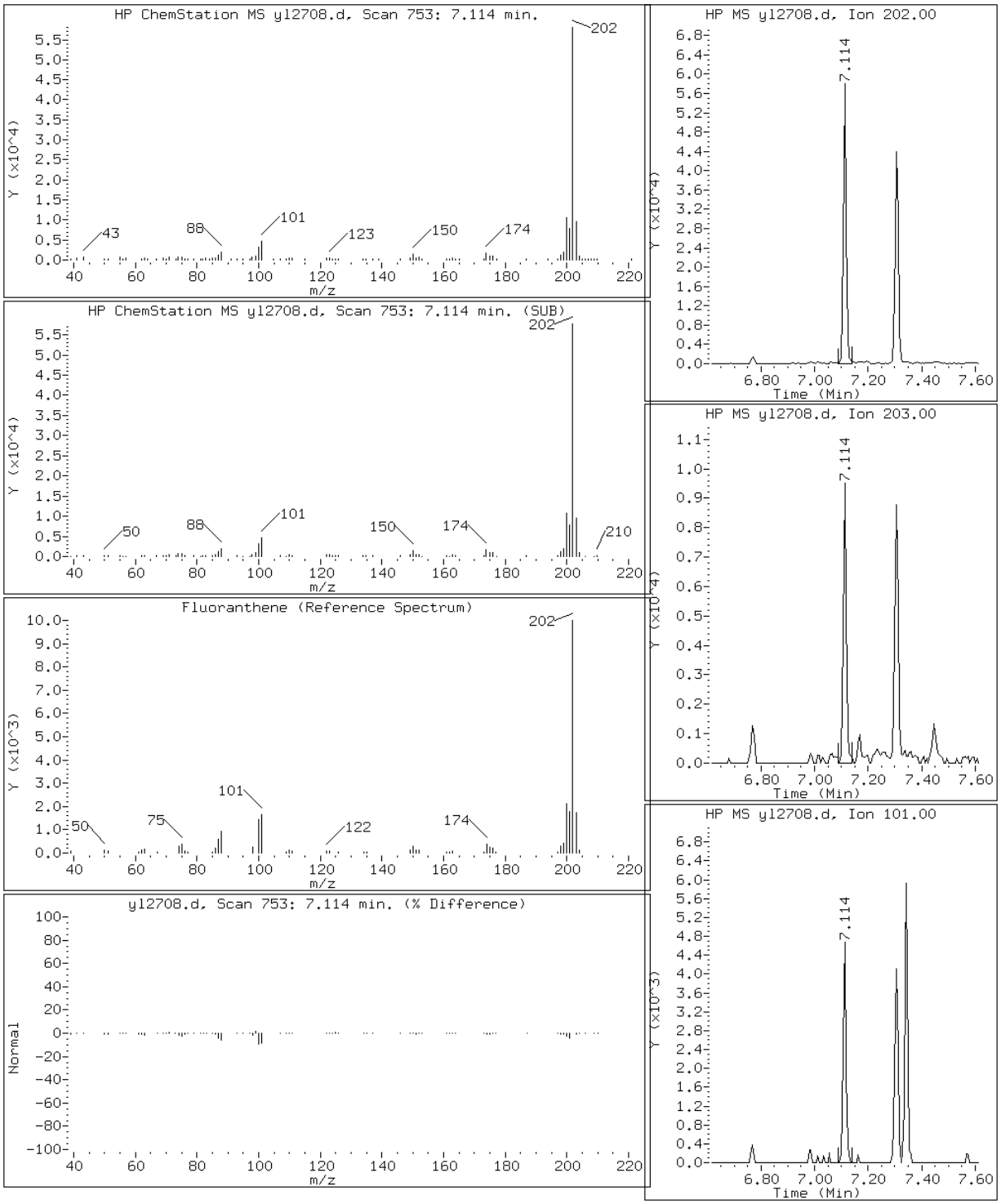
Data File: yl2708.d

Date: 27-DEC-2012 17:08

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-78-A DL=10 Operator: VHB

12 Fluoranthene



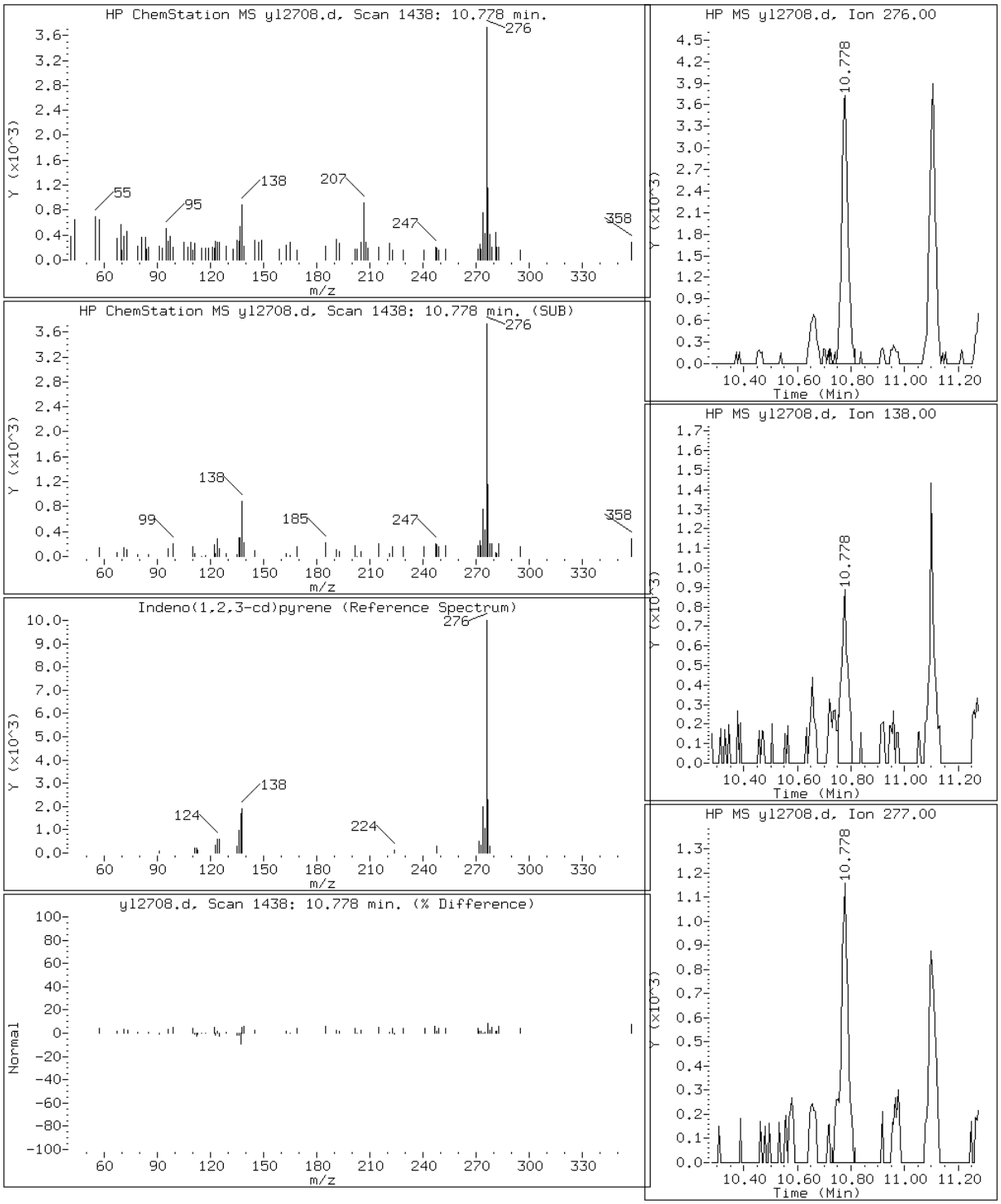
Data File: yl2708.d

Date: 27-DEC-2012 17:08

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-78-A DL=10 Operator: VHB

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



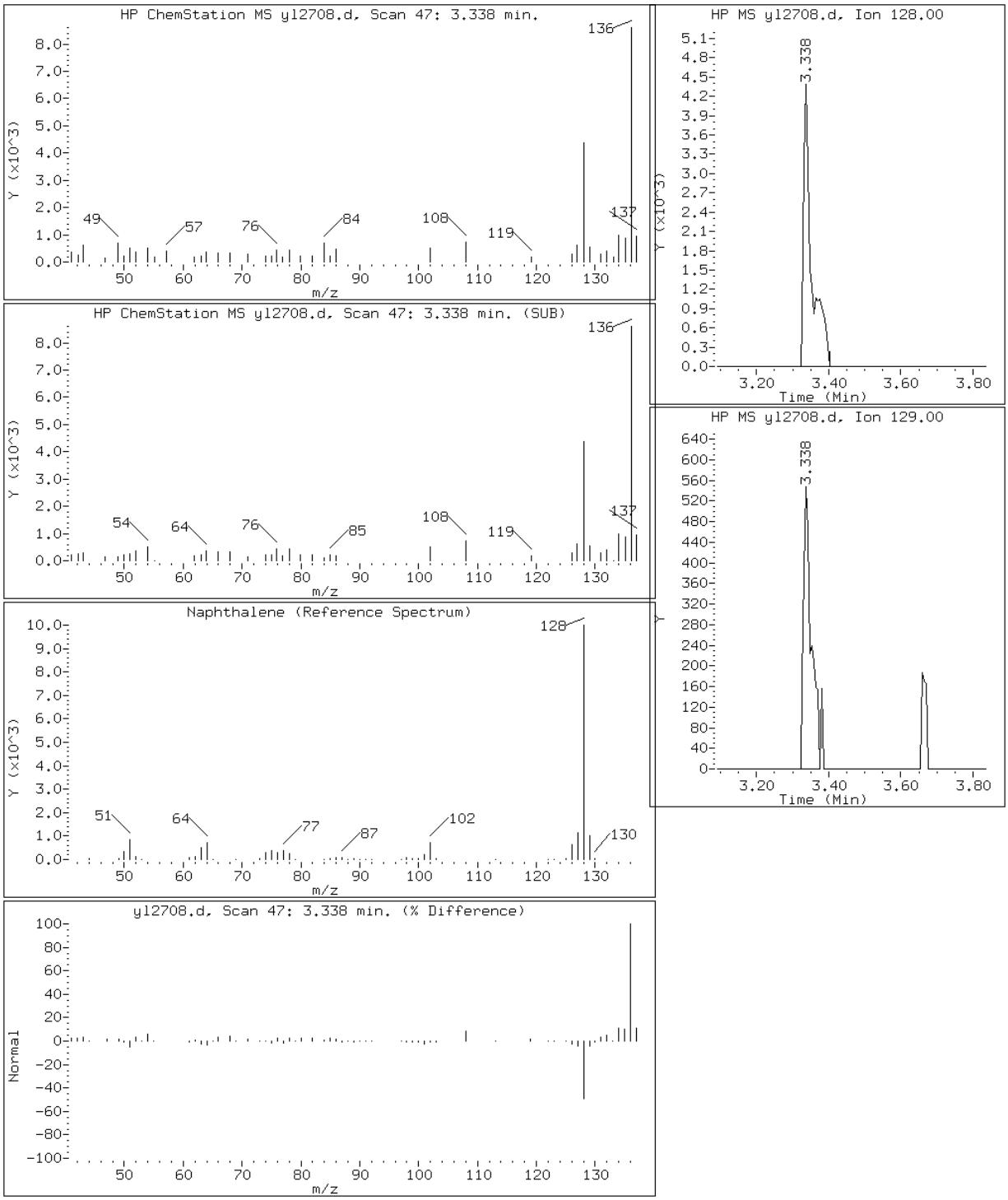
Data File: yl2708.d

Date: 27-DEC-2012 17:08

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-78-A DL=10 Operator: VHB

2 Naphthalene



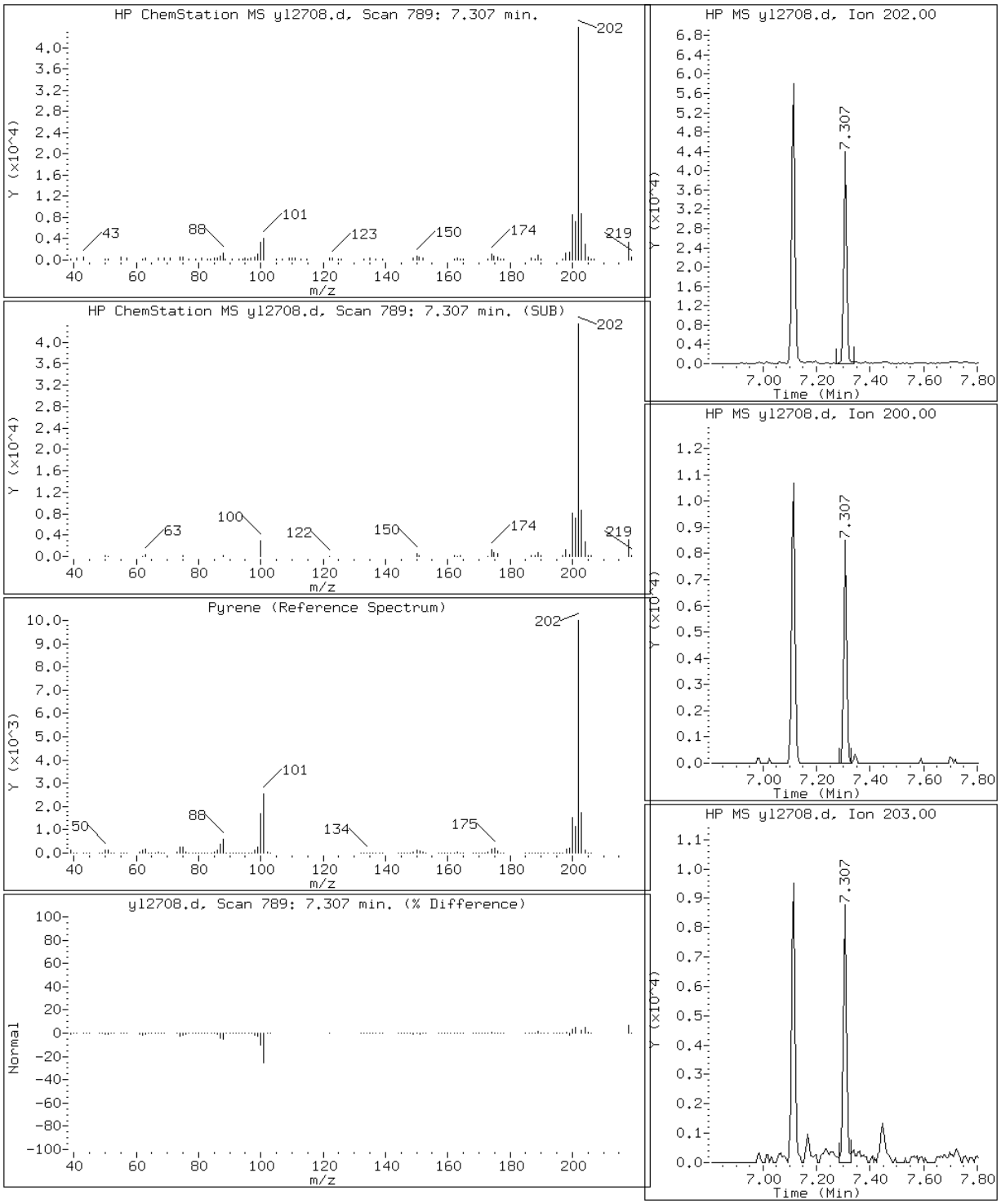
Data File: yl2708.d

Date: 27-DEC-2012 17:08

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-78-A DL=10 Operator: VHB

14 Pyrene



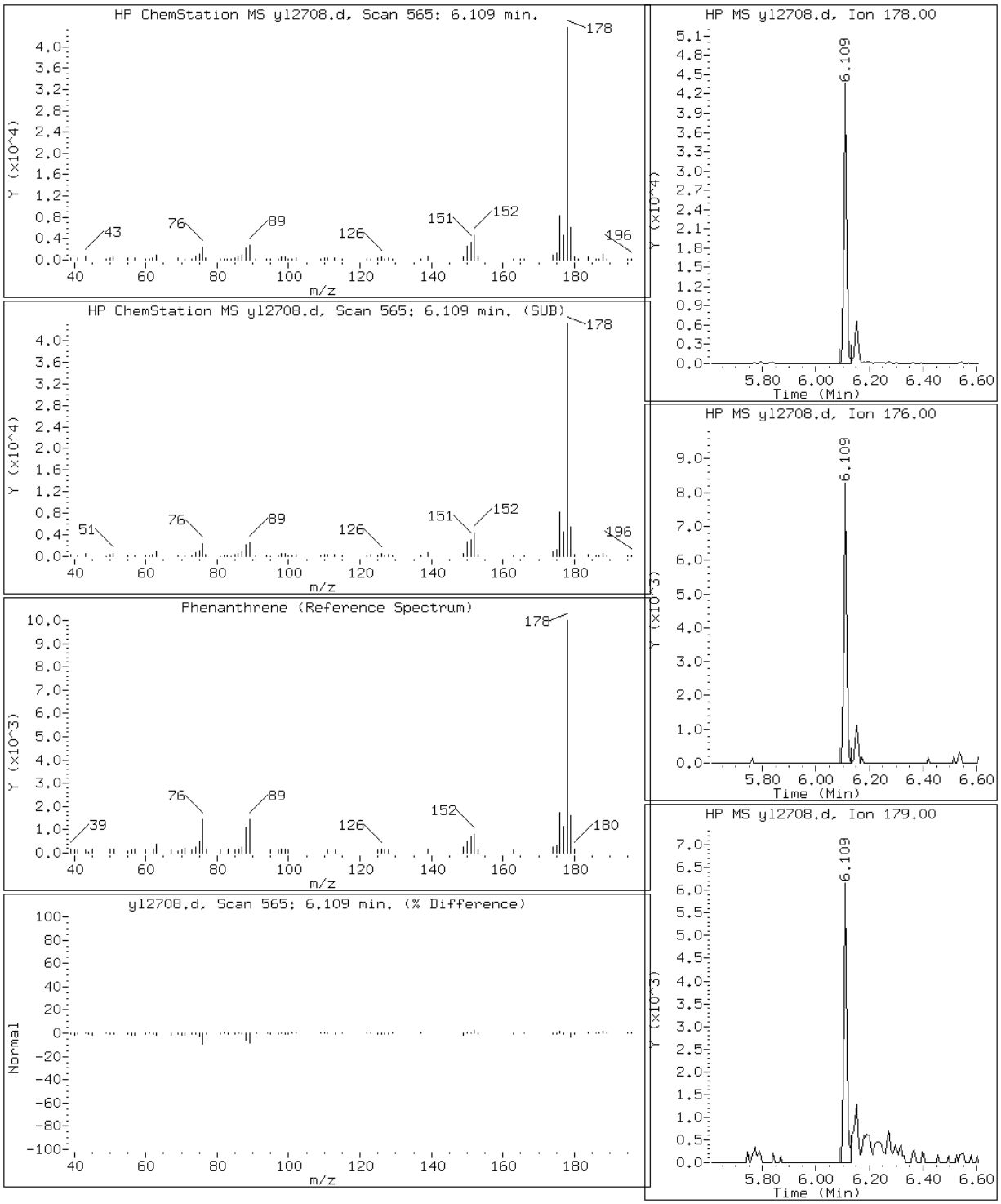
Data File: yl2708.d

Date: 27-DEC-2012 17:08

Client ID: Instrument: MSY5975.i

Sample Info: 680-85860-A-78-A DL=10 Operator: VHB

10 Phenanthrene



Manual Integration Report

Data File: yl2708.d
Inj. Date and Time: 27-DEC-2012 17:08
Instrument ID: MSY5975.i
Client ID:
Compound: 20 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 12/28/2012

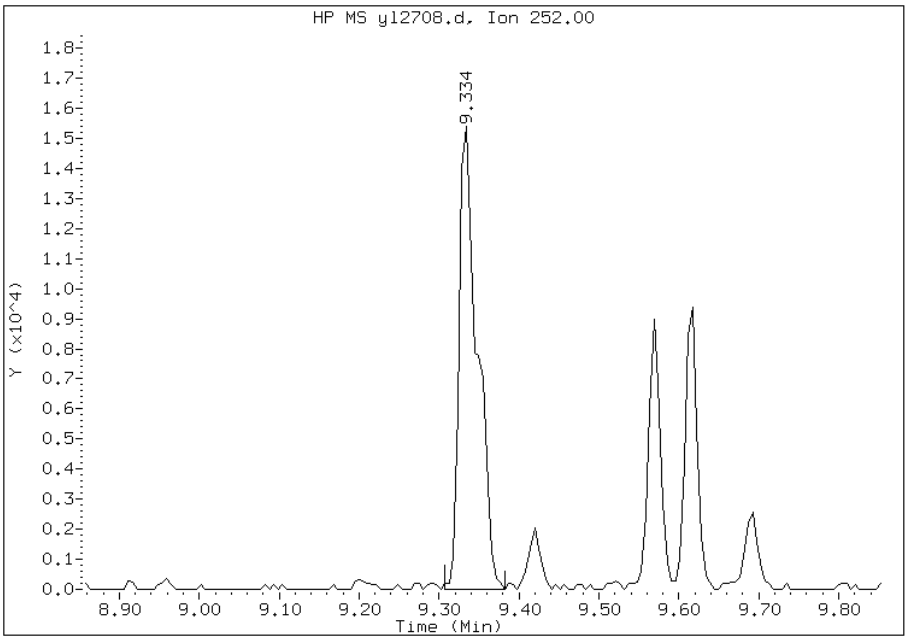
Processing Integration Results

RT: 9.33

Response: 24691

Amount: 1

Conc: 350



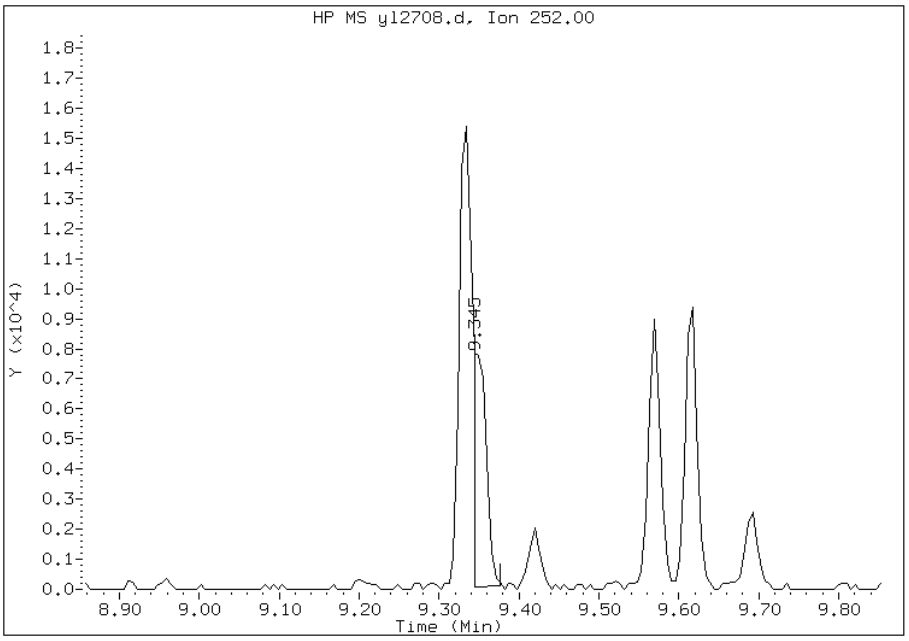
Manual Integration Results

RT: 9.34

Response: 8765

Amount: 0

Conc: 124



Manually Integrated By: chemist
Manual Integration Reason: Split Peak

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

Lab Name: TestAmerica Savannah Job No.: 680-85860-4 Analy Batch No.: 259918

SDG No.: 68085860-4

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

Calibration Start Date: 12/14/2012 08:15 Calibration End Date: 12/14/2012 10:35 Calibration ID: 15193

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-259918/7	kl1408q.d
Level 2	IC 680-259918/6	kl1407q.d
Level 3	IC 680-259918/5	kl1406q.d
Level 4	ICIS 680-259918/8	kl1409q.d
Level 5	IC 680-259918/4	kl1405q.d
Level 6	IC 680-259918/3	kl1404q.d
Level 7	IC 680-259918/2	kl1403q.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	1.2629 1.1722	1.1418 1.1401	1.1275	1.1956	1.2294	Ave		1.1814				4.3		15.0			
2-Methylnaphthalene	0.7891 0.7432	0.7352 0.7710	0.7081	0.7483	0.7793	Ave		0.7535				3.7		15.0			
1-Methylnaphthalene	0.8116 0.7389	0.7383 0.7842	0.7248	0.7681	0.7874	Ave		0.7648				4.2		15.0			
Acenaphthylene	2.2045 2.0479	1.9366 1.8995	1.9322	2.0237	2.2042	Ave		2.0355				6.2		15.0			
Acenaphthene	1.2603 1.1512	1.1633 1.1586	1.1087	1.1591	1.2420	Ave		1.1776				4.6		15.0			
Fluorene	1.4553 1.3169	1.3012 1.3805	1.2567	1.3533	1.4125	Ave		1.3538				5.0		15.0			
Phenanthrene	1.4082 1.2544	1.2693 1.2171	1.2282	1.2799	1.3666	Ave		1.2891				5.6		15.0			
Anthracene	1.3761 1.2439	1.2692 1.2040	1.2004	1.2937	1.3485	Ave		1.2766				5.3		15.0			
Fluoranthene	1.5096 1.3443	1.3877 1.2560	1.2666	1.4014	1.4565	Ave		1.3748				6.8		15.0			
Pyrene	1.6398 1.4914	1.4930 1.4199	1.4313	1.4476	1.6242	Ave		1.5051				6.1		15.0			
Benzo[a]anthracene	1.4331 1.3288	1.3049 1.3906	1.2427	1.3139	1.4376	Ave		1.3494				5.4		15.0			
Chrysene	1.4210 1.3050	1.2698 1.3193	1.2000	1.2749	1.3885	Ave		1.3104				5.7		15.0			
Benzo[b]fluoranthene	1.4930 1.3557	1.3451 1.4099	1.2489	1.3912	1.5256	Ave		1.3956				6.7		15.0			
Benzo[k]fluoranthene	1.3893 1.2918	1.3089 1.3998	1.3117	1.3582	1.3963	Ave		1.3509				3.4		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.: 680-85860-4 Analy Batch No.: 259918

SDG No.: 68085860-4

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

Calibration Start Date: 12/14/2012 08:15 Calibration End Date: 12/14/2012 10:35 Calibration ID: 15193

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	1.1818 1.1013	1.0625 1.1469	1.0643	1.1043	1.2037	Ave		1.1235				4.9		15.0			
Indeno[1,2,3-cd]pyrene	1.2476 1.2276	1.2259 1.2776	1.2287	1.2034	1.2947	Ave		1.2439				2.6		15.0			
Dibenz(a,h)anthracene	0.9985 1.0406	1.0074 1.0966	1.0155	0.9971	1.1150	Ave		1.0387				4.7		15.0			
Benzo[g,h,i]perylene	1.1220 1.0553	1.0982 1.0876	1.0809	1.0732	1.1584	Ave		1.0965				3.1		15.0			
o-Terphenyl	0.8735 0.8387	0.8570 0.8483	0.8479	0.8061	0.9254	Ave		0.8562				4.4		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.: 680-85860-4 Analy Batch No.: 259918

SDG No.: 68085860-4

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

Calibration Start Date: 12/14/2012 08:15 Calibration End Date: 12/14/2012 10:35 Calibration ID: 15193

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-259918/7	kl1408q.d
Level 2	IC 680-259918/6	kl1407q.d
Level 3	IC 680-259918/5	kl1406q.d
Level 4	ICIS 680-259918/8	kl1409q.d
Level 5	IC 680-259918/4	kl1405q.d
Level 6	IC 680-259918/3	kl1404q.d
Level 7	IC 680-259918/2	kl1403q.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	107559 5160552	242677 11929375	500031	1018458	2452171	0.200 10.0	0.500 20.0	1.00	2.00	5.00
2-Methylnaphthalene	NPT	Ave	67206 3272026	156258 8066686	314036	637436	1554309	0.200 10.0	0.500 20.0	1.00	2.00	5.00
1-Methylnaphthalene	NPT	Ave	69122 3252948	156917 8205214	321449	654317	1570465	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Acenaphthylene	ANT	Ave	104268 5082960	223122 11346303	469811	953349	2359629	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Acenaphthene	ANT	Ave	59609 2857466	134021 6921030	269580	546058	1329540	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Fluorene	ANT	Ave	68833 3268769	149911 8246480	305555	637557	1512125	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Phenanthrene	PHN	Ave	91831 4265307	190003 10268482	399253	833590	1975534	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Anthracene	PHN	Ave	89735 4229634	189991 10157469	390219	842586	1949384	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Fluoranthene	PHN	Ave	98440 4571054	207728 10596527	411713	912712	2105453	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Pyrene	CRY	Ave	101973 4634286	209814 10843032	418741	933247	2161144	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[a]anthracene	CRY	Ave	89123 4129046	183379 10618937	363576	847063	1912865	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Chrysene	CRY	Ave	88369 4055317	178444 10074234	351066	821925	1847603	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[b]fluoranthene	PRY	Ave	88471 4049103	185767 10411083	352344	862427	1901253	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[k]fluoranthene	PRY	Ave	82327 3858391	180768 10336375	370059	842005	1740157	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[a]pyrene	PRY	Ave	70031 3289199	146741 8469453	300262	684564	1500124	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.: 680-85860-4 Analy Batch No.: 259918

SDG No.: 68085860-4

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

Calibration Start Date: 12/14/2012 08:15 Calibration End Date: 12/14/2012 10:35 Calibration ID: 15193

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	77585 3814750	172266 9755674	359475	775826	1722783	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Dibenz(a,h)anthracene	PRY	Ave	59167 3108035	139127 8097534	286490	618106	1389586	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[g,h,i]perylene	PRY	Ave	66489 3151920	151672 8031288	304957	665308	1443596	0.200 10.0	0.500 20.0	1.00	2.00	5.00
o-Terphenyl	CRY	Ave	54321 2606287	120427 6477757	248074	519705	1231401	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/1k121412.b/kl1403q.d
Lab Smp Id: IC-2897217; LLPAH7
Inj Date : 14-DEC-2012 08:15
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-2897217; LLPAH7
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k121412.b/k-b8270CLLPAH-m.m
Meth Date : 14-Dec-2012 12:05 chemist Quant Type: ISTD
Cal Date : 14-DEC-2012 08:15 Cal File: kl1403q.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	4.906	4.906	(1.000)	1046318	2.00000	
2 Naphthalene	128	4.930	4.930	(1.005)	11929375	20.0000	19.30
3 2-Methylnaphthalene	142	5.617	5.617	(1.145)	8066686	20.0000	20.46(A)
4 1-Methylnaphthalene	142	5.723	5.723	(1.166)	8205214	20.0000	20.50(A)
6 Acenaphthylene	152	6.569	6.569	(0.976)	11346303	20.0000	18.66
* 5 Acenaphthene-d10	164	6.728	6.728	(1.000)	597343	2.00000	
7 Acenaphthene	154	6.763	6.763	(1.005)	6921030	20.0000	19.67
8 Fluorene	166	7.327	7.327	(1.089)	8246480	20.0000	20.39(A)
* 9 Phenanthrene-d10	188	8.361	8.361	(1.000)	843653	2.00000	
10 Phenanthrene	178	8.384	8.384	(1.003)	10268482	20.0000	18.88
11 Anthracene	178	8.443	8.443	(1.010)	10157469	20.0000	18.86
$ 15 o-Terphenyl	230	8.772	8.772	(0.780)	6477757	20.0000	138.50(A)
12 Fluoranthene	202	9.677	9.677	(1.157)	10596527	20.0000	18.27
14 Pyrene	202	9.924	9.924	(0.882)	10843032	20.0000	18.86
16 Benzo(a)Anthracene	228	11.234	11.234	(0.999)	10618937	20.0000	20.61(A)
* 13 Chrysene-d12	240	11.246	11.246	(1.000)	763623	2.00000	
17 Chrysene	228	11.275	11.275	(1.003)	10074234	20.0000	20.13(A)
19 Benzo(b)fluoranthene	252	12.556	12.556	(0.957)	10411083	20.0000	20.20(A)
20 Benzo(k)fluoranthene	252	12.597	12.597	(0.961)	10336375	20.0000	20.72(A)
21 Benzo(a)pyrene	252	13.038	13.038	(0.994)	8469453	20.0000	20.41(A)
* 18 Perylene-d12	264	13.114	13.114	(1.000)	738444	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	15.071	15.071	(1.340)	9755674	20.0000	20.54(A)
23 Dibenzo(a,h)anthracene	278	15.100	15.100	(1.151)	8097534	20.0000	21.11(A)
24 Benzo(g,h,i)perylene	276	15.664	15.664	(1.194)	8031288	20.0000	19.83

QC Flag Legend

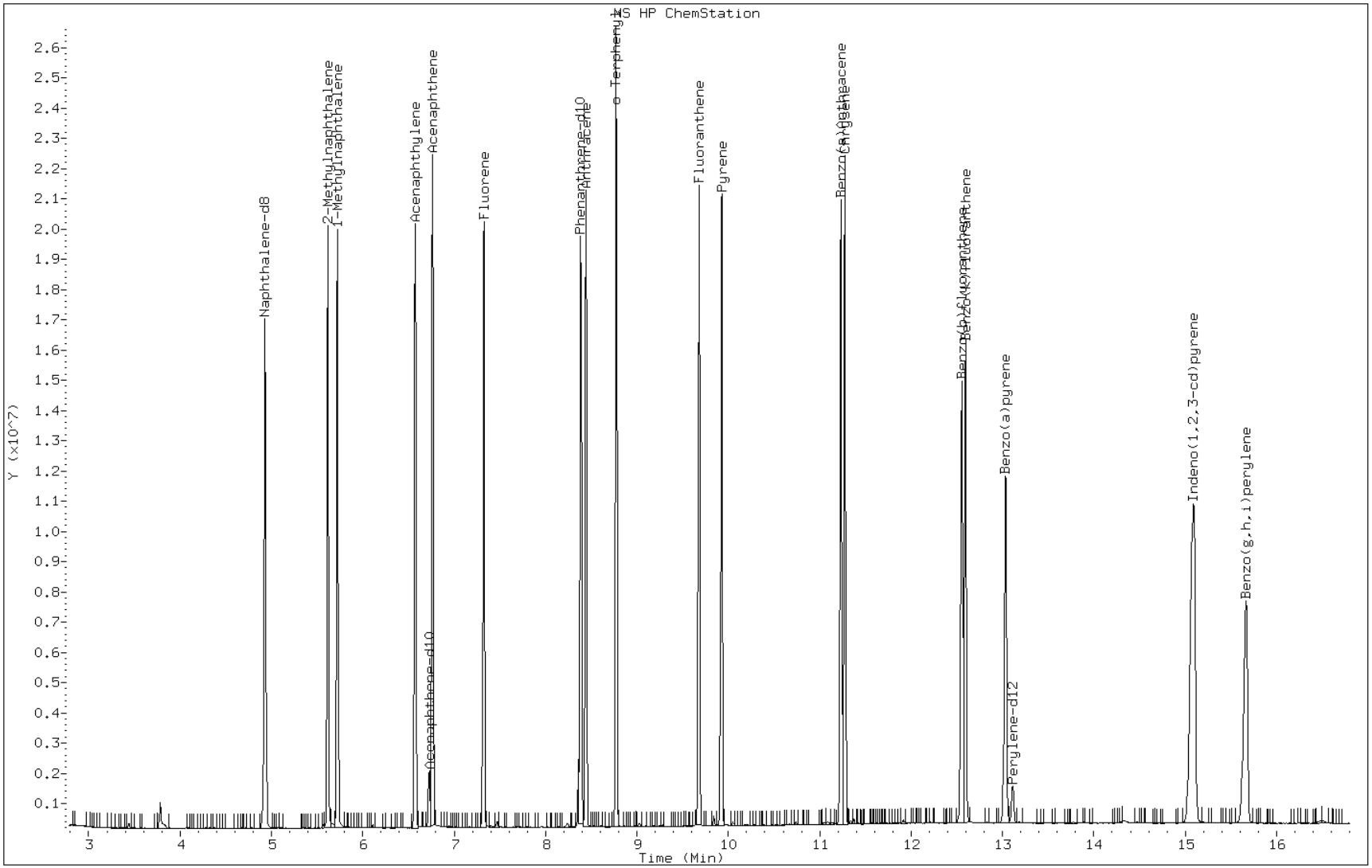
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: kl1403q.d

Date: 14-DEC-2012 08:15

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/1k121412.b/kl1404q.d
Lab Smp Id: IC-2897218; LLPAH6
Inj Date : 14-DEC-2012 08:39
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-2897218; LLPAH6
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k121412.b/k-b8270CLLPAH-m.m
Meth Date : 14-Dec-2012 12:05 chemist Quant Type: ISTD
Cal Date : 14-DEC-2012 08:39 Cal File: kl1404q.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	4.906	4.906	(1.000)	880493	2.00000	
	2 Naphthalene	128	4.930	4.930	(1.005)	5160552	10.0000	9.92
	3 2-Methylnaphthalene	142	5.617	5.617	(1.145)	3272026	10.0000	9.86
	4 1-Methylnaphthalene	142	5.723	5.723	(1.166)	3252948	10.0000	9.66
	6 Acenaphthylene	152	6.569	6.569	(0.977)	5082960	10.0000	10.06
*	5 Acenaphthene-d10	164	6.722	6.722	(1.000)	496416	2.00000	
	7 Acenaphthene	154	6.757	6.757	(1.005)	2857466	10.0000	9.77
	8 Fluorene	166	7.321	7.321	(1.089)	3268769	10.0000	9.72
*	9 Phenanthrene-d10	188	8.355	8.355	(1.000)	680065	2.00000	
	10 Phenanthrene	178	8.384	8.384	(1.004)	4265307	10.0000	9.73
	11 Anthracene	178	8.437	8.437	(1.010)	4229634	10.0000	9.74
$	15 o-Terphenyl	230	8.772	8.772	(0.782)	2606287	10.0000	34.62(A)
	12 Fluoranthene	202	9.677	9.677	(1.158)	4571054	10.0000	9.77
	14 Pyrene	202	9.918	9.918	(0.884)	4634286	10.0000	9.90
	16 Benzo(a)Anthracene	228	11.211	11.211	(0.999)	4129046	10.0000	9.84
*	13 Chrysene-d12	240	11.222	11.222	(1.000)	621482	2.00000	
	17 Chrysene	228	11.252	11.252	(1.003)	4055317	10.0000	9.95
	19 Benzo(b)fluoranthene	252	12.527	12.527	(0.957)	4049103	10.0000	9.71
	20 Benzo(k)fluoranthene	252	12.562	12.562	(0.960)	3858391	10.0000	9.56
	21 Benzo(a)pyrene	252	13.003	13.003	(0.994)	3289199	10.0000	9.80
*	18 Perylene-d12	264	13.085	13.085	(1.000)	597356	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	15.024	15.024	(1.339)	3814750	10.0000	9.86
	23 Dibenzo(a,h)anthracene	278	15.053	15.053	(1.150)	3108035	10.0000	10.01
	24 Benzo(g,h,i)perylene	276	15.611	15.611	(1.193)	3151920	10.0000	9.62

QC Flag Legend

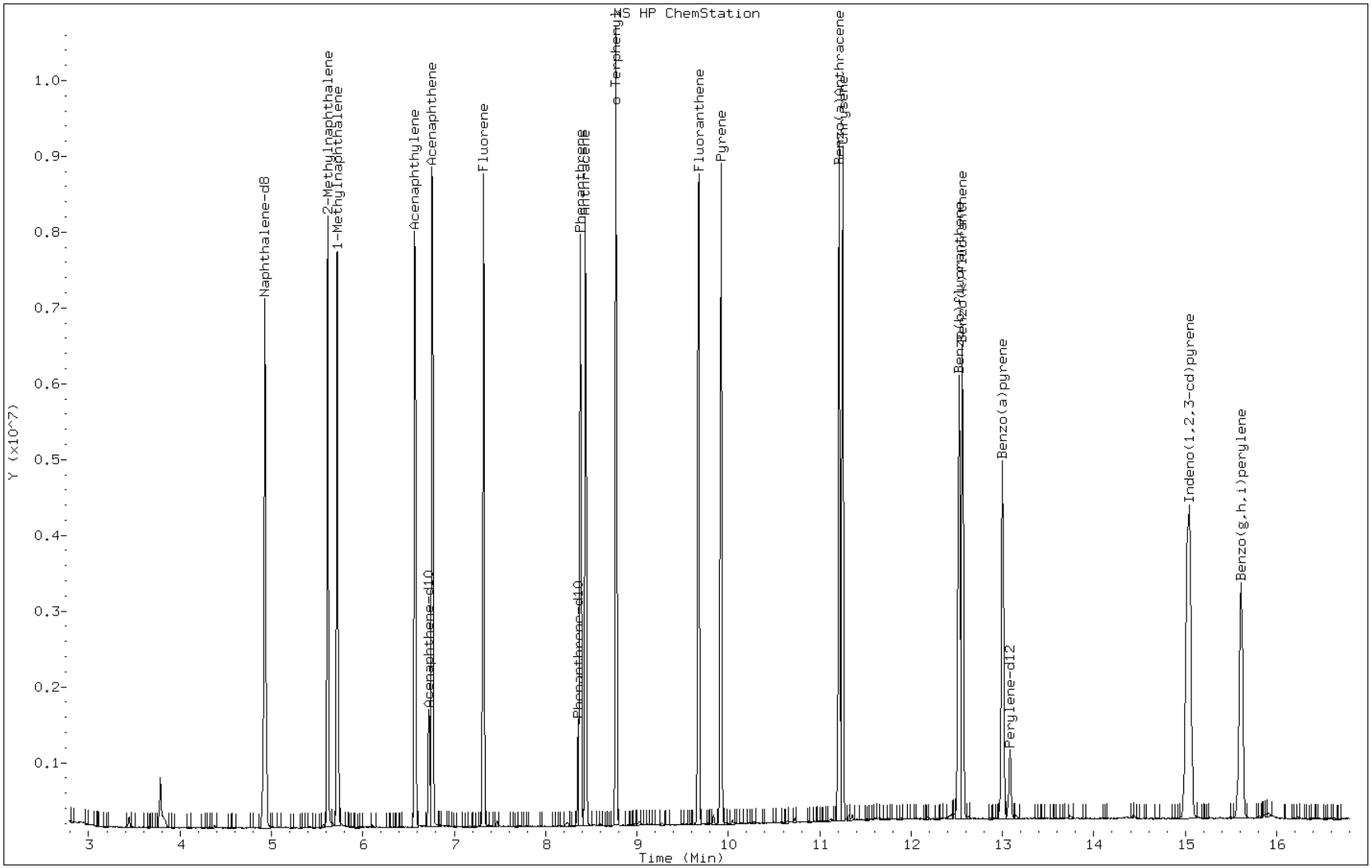
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: kl1404q.d

Date: 14-DEC-2012 08:39

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/1k121412.b/kl1405q.d
Lab Smp Id: IC-2897219; LLPAH5
Inj Date : 14-DEC-2012 09:02
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-2897219; LLPAH5
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k121412.b/k-b8270CLLPAH-m.m
Meth Date : 14-Dec-2012 12:05 chemist Quant Type: ISTD
Cal Date : 14-DEC-2012 09:02 Cal File: kl1405q.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

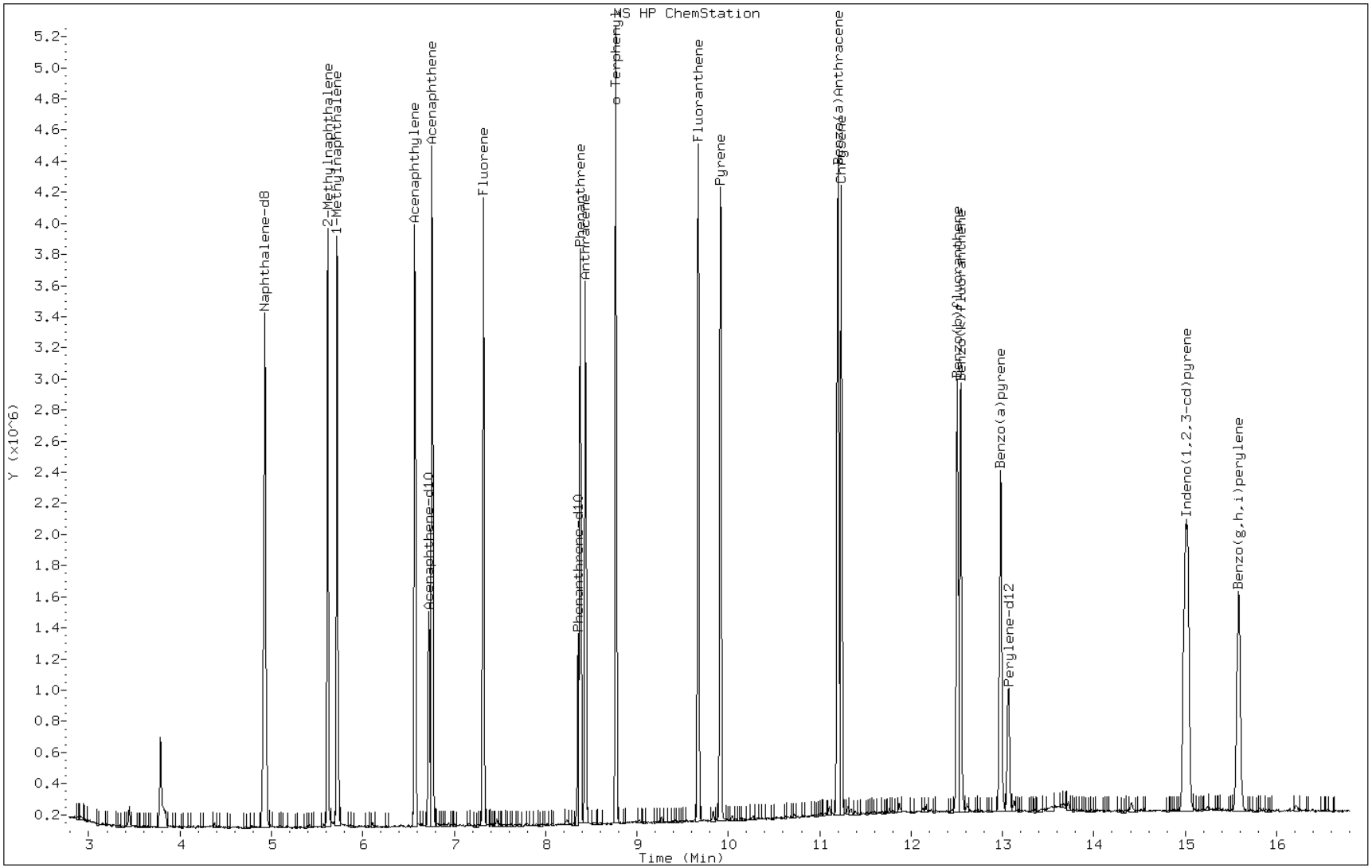
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	797817	2.00000	
	2 Naphthalene	128	4.930	4.930	(1.005)	2452171	5.00000	5.20
	3 2-Methylnaphthalene	142	5.617	5.617	(1.145)	1554309	5.00000	5.17
	4 1-Methylnaphthalene	142	5.717	5.717	(1.165)	1570465	5.00000	5.14
	6 Acenaphthylene	152	6.569	6.569	(0.977)	2359629	5.00000	5.41
*	5 Acenaphthene-d10	164	6.722	6.722	(1.000)	428203	2.00000	
	7 Acenaphthene	154	6.757	6.757	(1.005)	1329540	5.00000	5.27
	8 Fluorene	166	7.321	7.321	(1.089)	1512125	5.00000	5.21
*	9 Phenanthrene-d10	188	8.355	8.355	(1.000)	578222	2.00000	
	10 Phenanthrene	178	8.379	8.379	(1.003)	1975534	5.00000	5.30
	11 Anthracene	178	8.437	8.437	(1.010)	1949384	5.00000	5.28
$	15 o-Terphenyl	230	8.766	8.766	(0.782)	1231401	5.00000	12.36
	12 Fluoranthene	202	9.671	9.671	(1.158)	2105453	5.00000	5.29
	14 Pyrene	202	9.912	9.912	(0.884)	2161144	5.00000	5.39
	16 Benzo(a)Anthracene	228	11.199	11.199	(0.999)	1912865	5.00000	5.32
*	13 Chrysene-d12	240	11.211	11.211	(1.000)	532248	2.00000	
	17 Chrysene	228	11.234	11.234	(1.002)	1847603	5.00000	5.29
	19 Benzo(b)fluoranthene	252	12.503	12.503	(0.957)	1901253	5.00000	5.46
	20 Benzo(k)fluoranthene	252	12.544	12.544	(0.960)	1740157	5.00000	5.16
	21 Benzo(a)pyrene	252	12.979	12.979	(0.994)	1500124	5.00000	5.35
*	18 Perylene-d12	264	13.062	13.062	(1.000)	498494	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.995	14.995	(1.338)	1722783	5.00000	5.20
	23 Dibenzo(a,h)anthracene	278	15.030	15.030	(1.151)	1389586	5.00000	5.36
	24 Benzo(g,h,i)perylene	276	15.588	15.588	(1.193)	1443596	5.00000	5.28

Data File: kl1405q.d

Date: 14-DEC-2012 09:02

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/1k121412.b/kl1406q.d
Lab Smp Id: IC-2897222; LLPAH3
Inj Date : 14-DEC-2012 09:25
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-2897222; LLPAH3
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k121412.b/k-b8270CLLPAH-m.m
Meth Date : 14-Dec-2012 12:05 chemist Quant Type: ISTD
Cal Date : 14-DEC-2012 09:25 Cal File: kl1406q.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

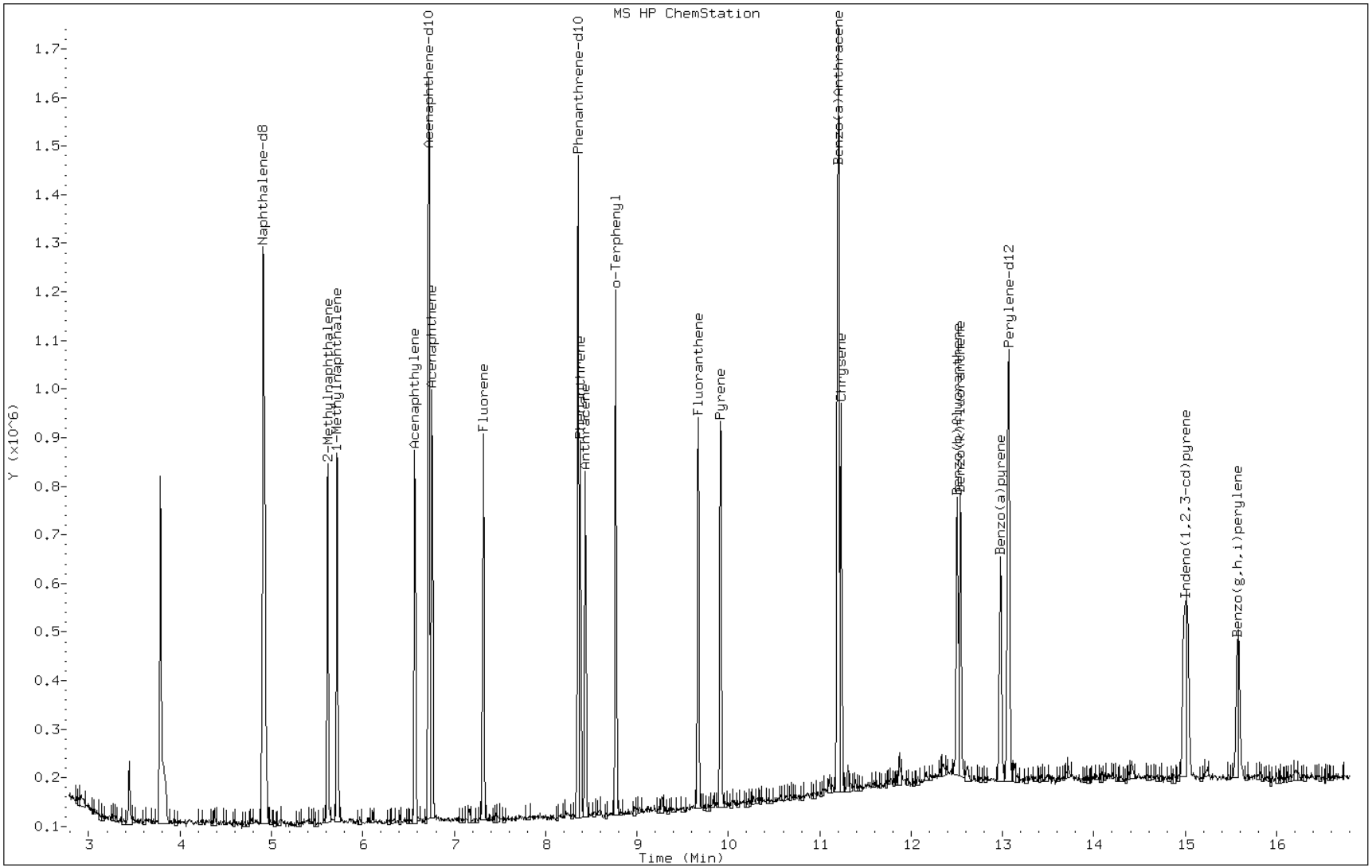
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	886985	2.00000	
	2 Naphthalene	128	4.929	4.929	(1.005)	500031	1.00000	0.95
	3 2-Methylnaphthalene	142	5.617	5.617	(1.145)	314036	1.00000	0.93
	4 1-Methylnaphthalene	142	5.717	5.717	(1.165)	321449	1.00000	0.94
	6 Acenaphthylene	152	6.569	6.569	(0.977)	469811	1.00000	0.94
*	5 Acenaphthene-d10	164	6.722	6.722	(1.000)	486286	2.00000	
	7 Acenaphthene	154	6.757	6.757	(1.005)	269580	1.00000	0.94
	8 Fluorene	166	7.321	7.321	(1.089)	305555	1.00000	0.92
*	9 Phenanthrene-d10	188	8.355	8.355	(1.000)	650122	2.00000	
	10 Phenanthrene	178	8.378	8.378	(1.003)	399253	1.00000	0.95
	11 Anthracene	178	8.437	8.437	(1.010)	390219	1.00000	0.94
$	15 o-Terphenyl	230	8.766	8.766	(0.782)	248074	1.00000	1.71
	12 Fluoranthene	202	9.671	9.671	(1.158)	411713	1.00000	0.92
	14 Pyrene	202	9.912	9.912	(0.885)	418741	1.00000	0.95
	16 Benzo(a)Anthracene	228	11.193	11.193	(0.999)	363576	1.00000	0.92
*	13 Chrysene-d12	240	11.205	11.205	(1.000)	585122	2.00000	
	17 Chrysene	228	11.234	11.234	(1.003)	351066	1.00000	0.91
	19 Benzo(b)fluoranthene	252	12.503	12.503	(0.957)	352344	1.00000	0.89
	20 Benzo(k)fluoranthene	252	12.538	12.538	(0.960)	370059	1.00000	0.97
	21 Benzo(a)pyrene	252	12.979	12.979	(0.993)	300262	1.00000	0.94
*	18 Perylene-d12	264	13.067	13.067	(1.000)	564245	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.988	14.988	(1.338)	359475	1.00000	0.98
	23 Dibenzo(a,h)anthracene	278	15.024	15.024	(1.150)	286490	1.00000	0.97
	24 Benzo(g,h,i)perylene	276	15.582	15.582	(1.192)	304957	1.00000	0.98

Data File: kl1406q.d

Date: 14-DEC-2012 09:25

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/1k121412.b/kl1407q.d
Lab Smp Id: IC-2898498; LLPAH2
Inj Date : 14-DEC-2012 09:49
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-2898498; LLPAH2
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k121412.b/k-b8270CLLPAH-m.m
Meth Date : 14-Dec-2012 12:05 chemist Quant Type: ISTD
Cal Date : 14-DEC-2012 09:49 Cal File: kl1407q.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

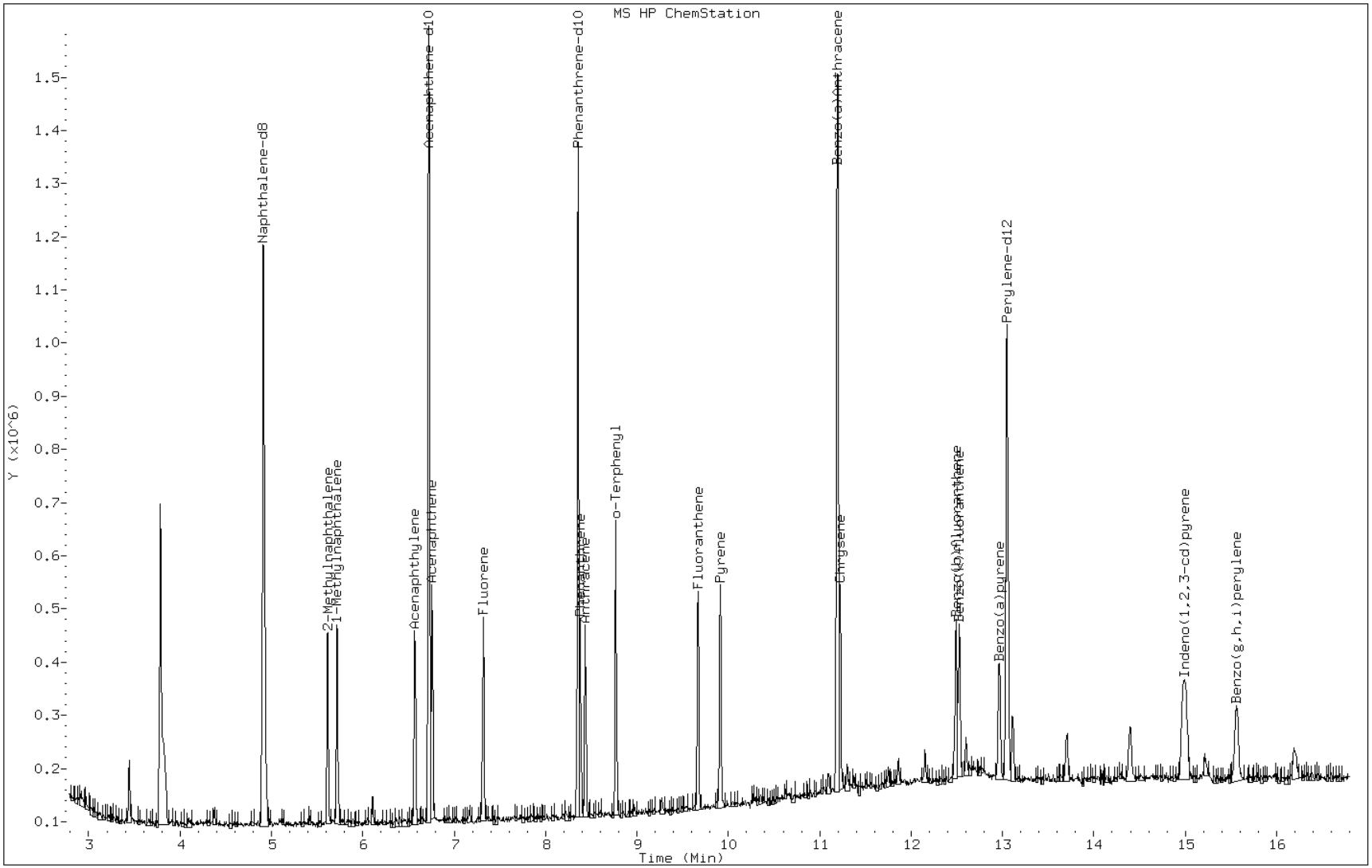
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	850123	2.00000	
	2 Naphthalene	128	4.930	4.930	(1.005)	242677	0.50000	0.48
	3 2-Methylnaphthalene	142	5.617	5.617	(1.145)	156258	0.50000	0.48
	4 1-Methylnaphthalene	142	5.717	5.717	(1.165)	156917	0.50000	0.48
	6 Acenaphthylene	152	6.569	6.569	(0.977)	223122	0.50000	0.47
*	5 Acenaphthene-d10	164	6.722	6.722	(1.000)	460847	2.00000	
	7 Acenaphthene	154	6.757	6.757	(1.005)	134021	0.50000	0.49
	8 Fluorene	166	7.321	7.321	(1.089)	149911	0.50000	0.48
*	9 Phenanthrene-d10	188	8.355	8.355	(1.000)	598777	2.00000	
	10 Phenanthrene	178	8.379	8.379	(1.003)	190003	0.50000	0.49
	11 Anthracene	178	8.437	8.437	(1.010)	189991	0.50000	0.49
$	15 o-Terphenyl	230	8.766	8.766	(0.783)	120427	0.50000	0.69
	12 Fluoranthene	202	9.671	9.671	(1.158)	207728	0.50000	0.50
	14 Pyrene	202	9.912	9.912	(0.885)	209814	0.50000	0.49
	16 Benzo(a)Anthracene	228	11.187	11.187	(0.999)	183379	0.50000	0.48
*	13 Chrysene-d12	240	11.199	11.199	(1.000)	562109	2.00000	
	17 Chrysene	228	11.228	11.228	(1.003)	178444	0.50000	0.48
	19 Benzo(b)fluoranthene	252	12.492	12.492	(0.957)	185767	0.50000	0.48
	20 Benzo(k)fluoranthene	252	12.527	12.527	(0.960)	180768	0.50000	0.48
	21 Benzo(a)pyrene	252	12.967	12.967	(0.994)	146741	0.50000	0.47
*	18 Perylene-d12	264	13.050	13.050	(1.000)	552432	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.971	14.971	(1.337)	172266	0.50000	0.49
	23 Dibenzo(a,h)anthracene	278	15.006	15.006	(1.150)	139127	0.50000	0.48
	24 Benzo(g,h,i)perylene	276	15.564	15.564	(1.193)	151672	0.50000	0.50

Data File: kl1407q.d

Date: 14-DEC-2012 09:49

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/1k121412.b/kl1408q.d
Lab Smp Id: IC-2898499; LLPAH1
Inj Date : 14-DEC-2012 10:12
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-2898499; LLPAH1
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k121412.b/k-b8270CLLPAH-m.m
Meth Date : 14-Dec-2012 12:05 chemist Quant Type: ISTD
Cal Date : 14-DEC-2012 10:12 Cal File: kl1408q.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

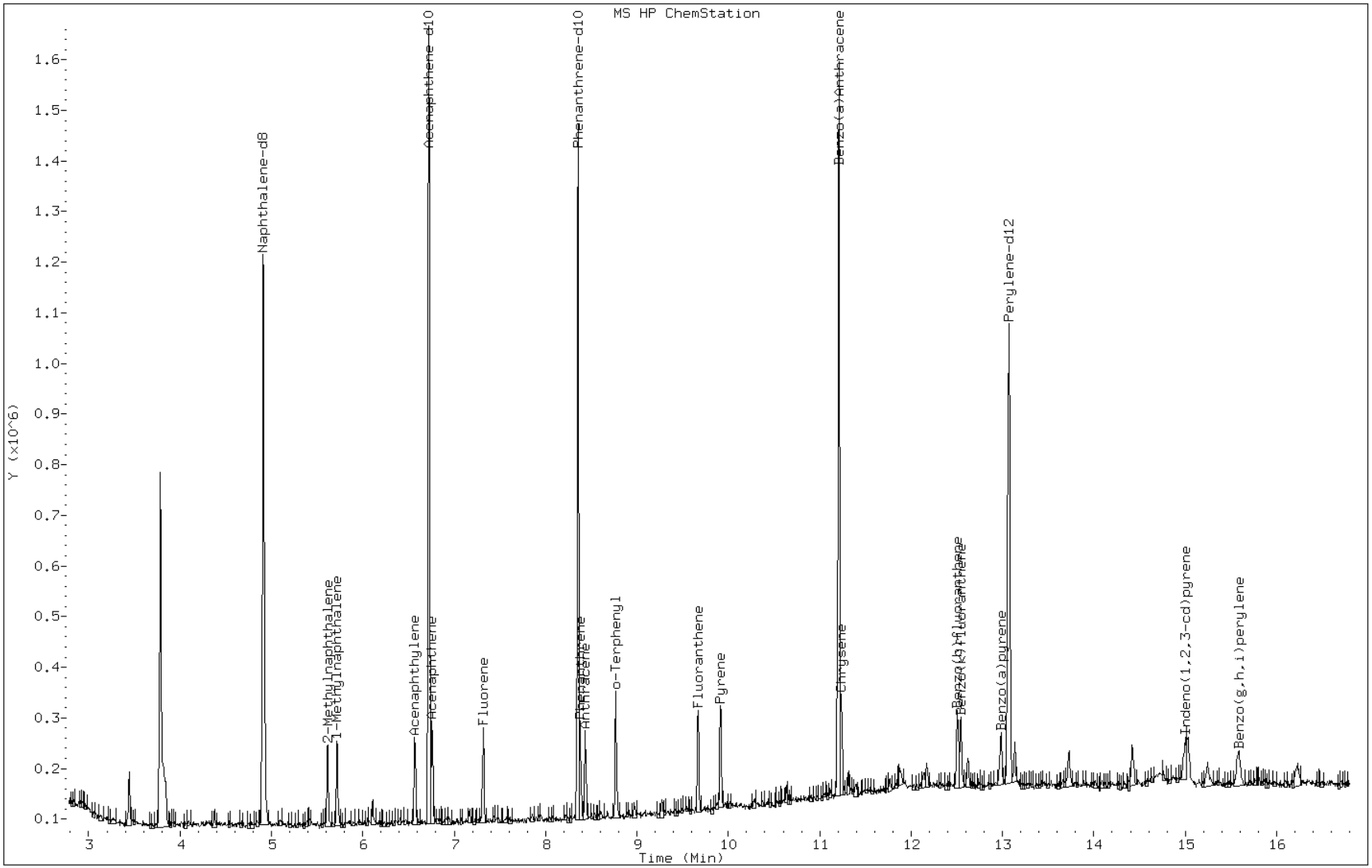
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	851708	2.00000	
	2 Naphthalene	128	4.930	4.930	(1.005)	107559	0.20000	0.21
	3 2-Methylnaphthalene	142	5.617	5.617	(1.145)	67206	0.20000	0.20
	4 1-Methylnaphthalene	142	5.717	5.717	(1.165)	69122	0.20000	0.21
	6 Acenaphthylene	152	6.569	6.569	(0.977)	104268	0.20000	0.21
*	5 Acenaphthene-d10	164	6.722	6.722	(1.000)	472987	2.00000	
	7 Acenaphthene	154	6.757	6.757	(1.005)	59609	0.20000	0.21
	8 Fluorene	166	7.321	7.321	(1.089)	68833	0.20000	0.21
*	9 Phenanthrene-d10	188	8.355	8.355	(1.000)	652104	2.00000	
	10 Phenanthrene	178	8.379	8.379	(1.003)	91831	0.20000	0.21
	11 Anthracene	178	8.437	8.437	(1.010)	89735	0.20000	0.21
$	15 o-Terphenyl	230	8.766	8.766	(0.782)	54321	0.20000	0.23
	12 Fluoranthene	202	9.671	9.671	(1.158)	98440	0.20000	0.21
	14 Pyrene	202	9.912	9.912	(0.884)	101973	0.20000	0.21
	16 Benzo(a)Anthracene	228	11.199	11.199	(0.999)	89123	0.20000	0.21
*	13 Chrysene-d12	240	11.211	11.211	(1.000)	621873	2.00000	
	17 Chrysene	228	11.240	11.240	(1.003)	88369	0.20000	0.21
	19 Benzo(b)fluoranthene	252	12.509	12.509	(0.957)	88471	0.20000	0.21
	20 Benzo(k)fluoranthene	252	12.544	12.544	(0.960)	82327	0.20000	0.20
	21 Benzo(a)pyrene	252	12.985	12.985	(0.994)	70031	0.20000	0.21
*	18 Perylene-d12	264	13.067	13.067	(1.000)	592568	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.994	14.994	(1.338)	77585	0.20000	0.20
	23 Dibenzo(a,h)anthracene	278	15.030	15.030	(1.150)	59167	0.20000	0.19
	24 Benzo(g,h,i)perylene	276	15.588	15.588	(1.193)	66489	0.20000	0.20

Data File: kl1408q.d

Date: 14-DEC-2012 10:12

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/1k121412.b/kl1409q.d
Lab Smp Id: IC-2897220; LLPAH4
Inj Date : 14-DEC-2012 10:35
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-2897220; LLPAH4
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k121412.b/k-b8270CLLPAH-m.m
Meth Date : 14-Dec-2012 16:00 gillinsl Quant Type: ISTD
Cal Date : 14-DEC-2012 10:35 Cal File: kl1409q.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

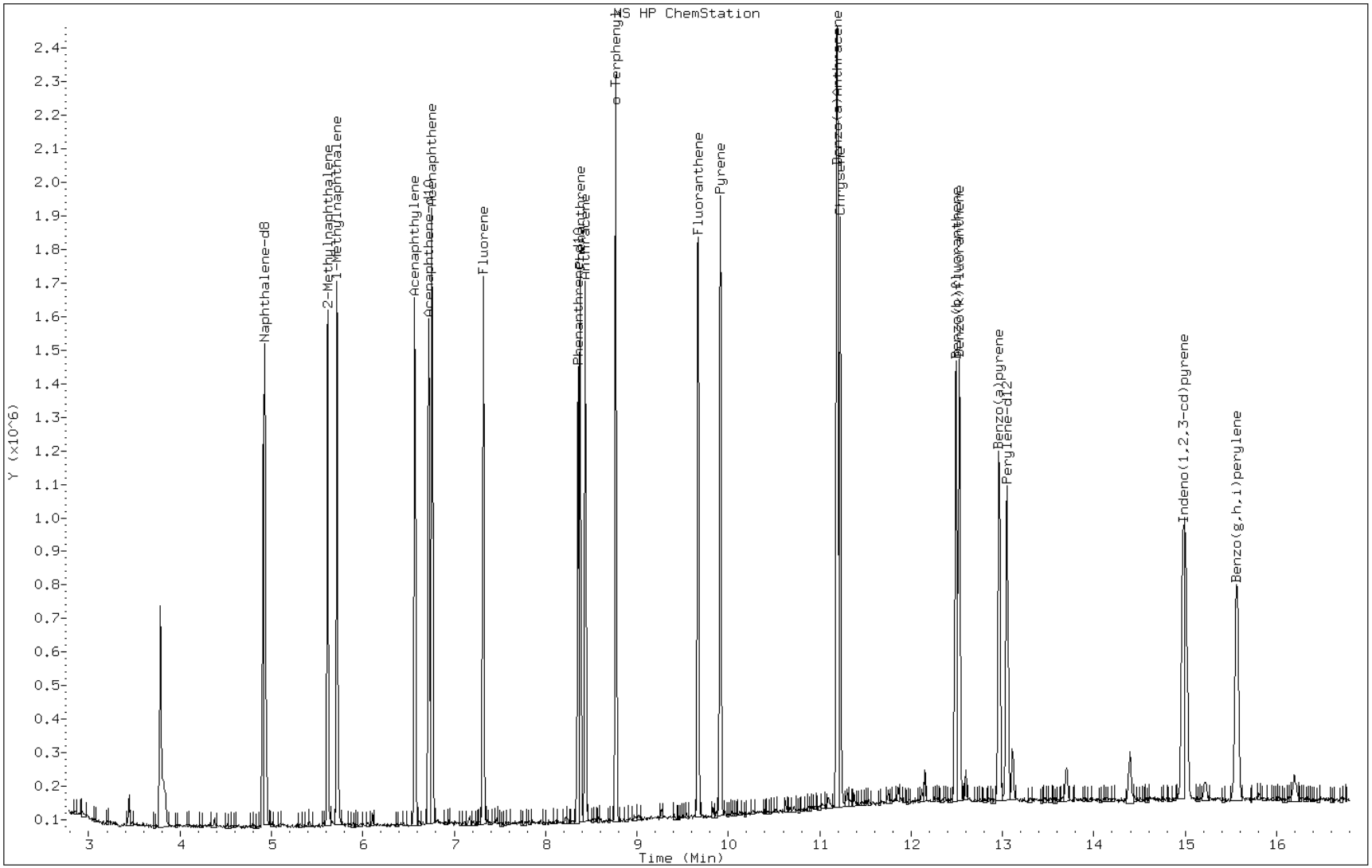
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	851828	2.00000	
	2 Naphthalene	128	4.930	4.930	(1.005)	1018458	2.00000	2.02
	3 2-Methylnaphthalene	142	5.617	5.617	(1.145)	637436	2.00000	1.98
	4 1-Methylnaphthalene	142	5.717	5.717	(1.165)	654317	2.00000	2.00
	6 Acenaphthylene	152	6.569	6.569	(0.977)	953349	2.00000	1.98
*	5 Acenaphthene-d10	164	6.722	6.722	(1.000)	471101	2.00000	
	7 Acenaphthene	154	6.757	6.757	(1.005)	546058	2.00000	1.96
	8 Fluorene	166	7.321	7.321	(1.089)	637557	2.00000	1.99
*	9 Phenanthrene-d10	188	8.355	8.355	(1.000)	651291	2.00000	
	10 Phenanthrene	178	8.379	8.379	(1.003)	833590	2.00000	1.98
	11 Anthracene	178	8.437	8.437	(1.010)	842586	2.00000	2.02
$	15 o-Terphenyl	230	8.766	8.766	(0.783)	519705	2.00000	1.88
	12 Fluoranthene	202	9.671	9.671	(1.158)	912712	2.00000	2.03
	14 Pyrene	202	9.912	9.912	(0.885)	933247	2.00000	1.92
	16 Benzo(a)Anthracene	228	11.187	11.187	(0.999)	847063	2.00000	1.94
*	13 Chrysene-d12	240	11.199	11.199	(1.000)	644678	2.00000	
	17 Chrysene	228	11.228	11.228	(1.003)	821925	2.00000	1.94
	19 Benzo(b)fluoranthene	252	12.491	12.491	(0.957)	862427	2.00000	1.99
	20 Benzo(k)fluoranthene	252	12.527	12.527	(0.960)	842005	2.00000	2.01
	21 Benzo(a)pyrene	252	12.962	12.962	(0.993)	684564	2.00000	1.96
*	18 Perylene-d12	264	13.050	13.050	(1.000)	619931	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.977	14.977	(1.337)	775826	2.00000	1.93
	23 Dibenzo(a,h)anthracene	278	15.006	15.006	(1.150)	618106	2.00000	1.91
	24 Benzo(g,h,i)perylene	276	15.564	15.564	(1.193)	665308	2.00000	1.95

Data File: kl1409q.d

Date: 14-DEC-2012 10:35

Client ID: Instrument: MSK5973.i

Sample Info: IC-2897220; LLPAH4 Operator: LEG



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

Lab Name: TestAmerica Savannah Job No.: 680-85860-4 Analy Batch No.: 261203

SDG No.: 68085860-4

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

Calibration Start Date: 12/26/2012 15:08 Calibration End Date: 12/26/2012 17:28 Calibration ID: 15366

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-261203/7	kl2617q.d
Level 2	IC 680-261203/6	kl2616q.d
Level 3	IC 680-261203/5	kl2615q.d
Level 4	ICIS 680-261203/8	kl2618q.d
Level 5	IC 680-261203/4	kl2614q.d
Level 6	IC 680-261203/3	kl2613q.d
Level 7	IC 680-261203/2	kl2612q.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	1.2620 1.1208	1.1438 1.1274	1.1113	1.1851	1.2227	Ave		1.1676				4.9		15.0			
2-Methylnaphthalene	0.7523 0.7212	0.7014 0.7139	0.6991	0.7359	0.7760	Ave		0.7285				3.9		15.0			
1-Methylnaphthalene	0.7913 0.7261	0.7158 0.7177	0.7265	0.7514	0.7819	Ave		0.7444				4.2		15.0			
Acenaphthylene	2.0197 1.9807	1.8064 1.9417	1.8238	1.9903	2.1560	Ave		1.9598				6.1		15.0			
Acenaphthene	1.2749 1.1129	1.0773 1.0949	1.1063	1.1784	1.2318	Ave		1.1538				6.6		15.0			
Fluorene	1.3700 1.3115	1.2298 1.2868	1.2251	1.3176	1.4269	Ave		1.3097				5.5		15.0			
Phenanthrene	1.3909 1.2128	1.2494 1.2230	1.2207	1.2813	1.3529	Ave		1.2758				5.5		15.0			
Anthracene	1.2746 1.1432	1.1407 1.1667	1.1075	1.2016	1.2834	Ave		1.1883				5.7		15.0			
Fluoranthene	1.3249 1.2945	1.2061 1.2673	1.1626	1.2823	1.3516	Ave		1.2699				5.2		15.0			
Pyrene	1.8525 1.6771	1.5406 1.6925	1.5863	1.7373	1.8814	Ave		1.7100				7.4		15.0			
Benzo[a]anthracene	1.2936 1.2845	1.2061 1.3666	1.1604	1.2332	1.3518	Ave		1.2711				5.9		15.0			
Chrysene	1.4079 1.2379	1.2650 1.2787	1.2092	1.2839	1.3666	Ave		1.2930				5.4		15.0			
Benzo[b]fluoranthene	1.4687 1.4735	1.3135 1.4876	1.3095	1.3608	1.5133	Ave		1.4181				6.1		15.0			
Benzo[k]fluoranthene	1.4424 1.4454	1.3288 1.5605	1.2792	1.4991	1.6158	Ave		1.4530				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 CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-85860-4 Analy Batch No.: 261203

SDG No.: 68085860-4

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

Calibration Start Date: 12/26/2012 15:08 Calibration End Date: 12/26/2012 17:28 Calibration ID: 15366

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	1.0786 1.1294	0.9880 1.1659	0.9856	1.0931	1.2068	Ave		1.0916				7.7		15.0			
Indeno[1,2,3-cd]pyrene	1.1522 0.9339	1.0608 0.8369	1.0591	1.1183	1.0797	Ave		1.0341				10.7		15.0			
Dibenz(a,h)anthracene	0.9757 0.9361	1.0082 0.9060	0.9773	1.0377	1.0619	Ave		0.9861				5.6		15.0			
Benzo[g,h,i]perylene	1.0420 0.9371	1.0275 0.9006	0.9679	1.0393	1.0727	Ave		0.9981				6.4		15.0			
o-Terphenyl	1.1681 0.9404	0.9724 0.9446	1.0360	1.0976	1.1276	Ave		1.0411				8.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Savannah Job No.: 680-85860-4 Analy Batch No.: 261203

SDG No.: 68085860-4

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

Calibration Start Date: 12/26/2012 15:08 Calibration End Date: 12/26/2012 17:28 Calibration ID: 15366

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-261203/7	kl2617q.d
Level 2	IC 680-261203/6	kl2616q.d
Level 3	IC 680-261203/5	kl2615q.d
Level 4	ICIS 680-261203/8	kl2618q.d
Level 5	IC 680-261203/4	kl2614q.d
Level 6	IC 680-261203/3	kl2613q.d
Level 7	IC 680-261203/2	kl2612q.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	65900 3611843	156963 6665577	324883	615402	1678943	0.200 10.0	0.500 20.0	1.00	2.00	5.00
2-Methylnaphthalene	NPT	Ave	39285 2324005	96255 4220886	204381	382142	1065495	0.200 10.0	0.500 20.0	1.00	2.00	5.00
1-Methylnaphthalene	NPT	Ave	41324 2340073	98231 4243231	212387	390219	1073577	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Acenaphthylene	ANT	Ave	57446 3549006	139065 6519087	292070	550316	1587330	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Acenaphthene	ANT	Ave	36262 1994148	82932 3675894	177158	325827	906884	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Fluorene	ANT	Ave	38969 2349985	94677 4320365	196191	364319	1050540	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Phenanthrene	PHN	Ave	50480 3128122	123004 5732976	255147	468211	1342675	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Anthracene	PHN	Ave	46258 2948531	112303 5469428	231489	439091	1273765	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Fluoranthene	PHN	Ave	48083 3338960	118745 5940792	242994	468581	1341443	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Pyrene	CRY	Ave	48939 3356289	122185 6070122	245421	475431	1389066	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[a]anthracene	CRY	Ave	34173 2570487	95658 4901558	179524	337472	998079	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Chrysene	CRY	Ave	37193 2477270	100328 4586167	187069	351346	1009013	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[b]fluoranthene	PRY	Ave	36623 2408388	95284 4073278	183607	330575	930831	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[k]fluoranthene	PRY	Ave	35967 2362480	96389 4273072	179352	364164	993912	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[a]pyrene	PRY	Ave	26897 1846030	71668 3192416	138188	265549	742299	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.: 680-85860-4 Analy Batch No.: 261203

SDG No.: 68085860-4

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

Calibration Start Date: 12/26/2012 15:08 Calibration End Date: 12/26/2012 17:28 Calibration ID: 15366

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	30438 1868842	84135 3001762	163849	306039	797147	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Dibenz(a,h)anthracene	PRY	Ave	24331 1530010	73136 2480675	137026	252078	653164	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Benzo[g,h,i]perylene	PRY	Ave	25983 1531674	74533 2465896	135705	252478	659806	0.200 10.0	0.500 20.0	1.00	2.00	5.00
o-Terphenyl	CRY	Ave	30860 1882009	77120 3387940	160277	300363	832488	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/1k122612.b/kl2612q.d
Lab Smp Id: IC-28972017; LLPAH7
Inj Date : 26-DEC-2012 15:08
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-28972017; LLPAH7
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122612.b/k-b8270CLLPAH-m.m
Meth Date : 26-Dec-2012 15:47 chemist Quant Type: ISTD
Cal Date : 26-DEC-2012 15:08 Cal File: kl2612q.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

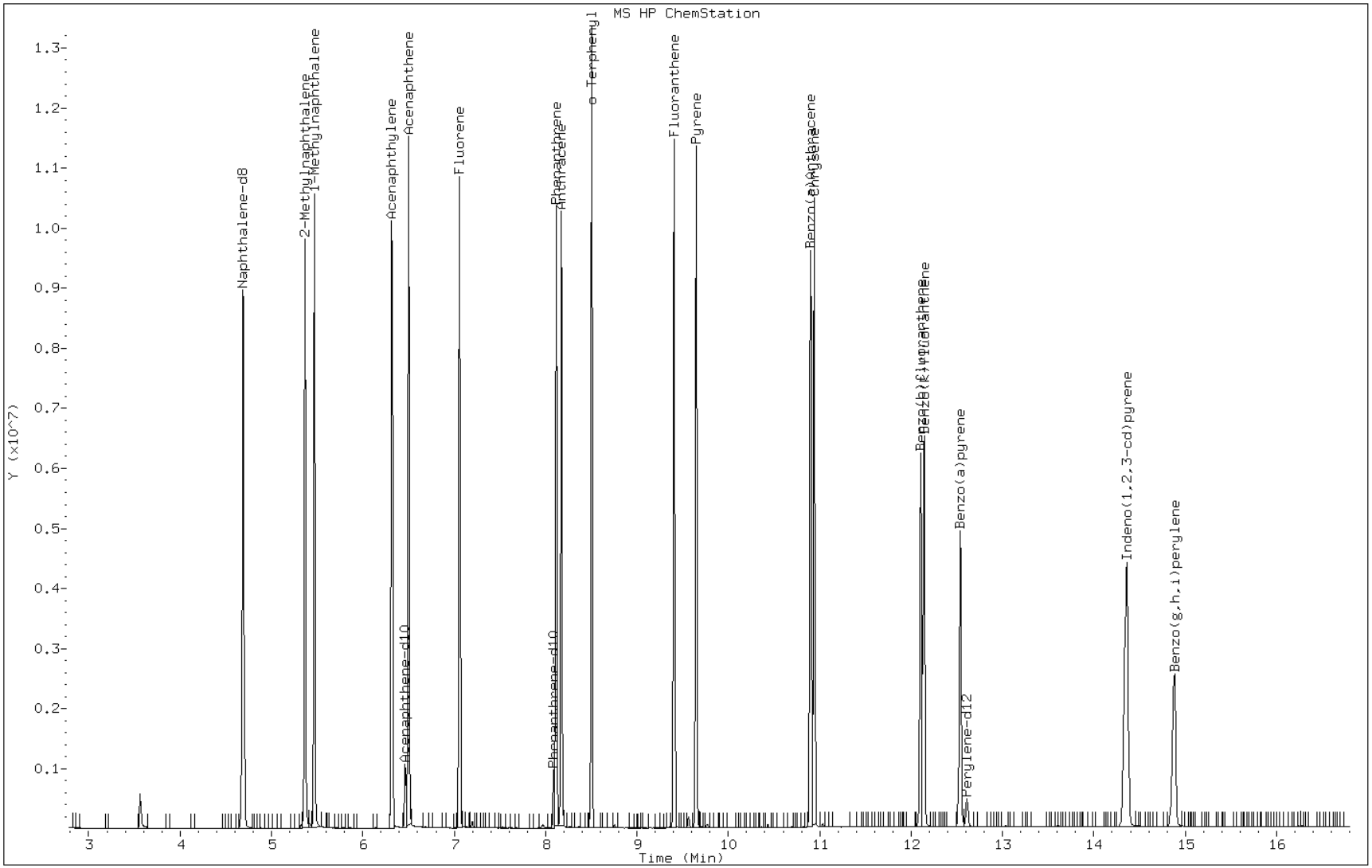
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.671	4.671	(1.000)	591252	2.00000	
	2 Naphthalene	128	4.695	4.695	(1.005)	6665577	20.0000	20.00
	3 2-Methylnaphthalene	142	5.370	5.370	(1.150)	4220886	20.0000	20.00
	4 1-Methylnaphthalene	142	5.470	5.470	(1.171)	4243231	20.0000	20.00
	6 Acenaphthylene	152	6.316	6.316	(0.977)	6519087	20.0000	20.00
*	5 Acenaphthene-d10	164	6.463	6.463	(1.000)	335743	2.00000	
	7 Acenaphthene	154	6.504	6.504	(1.006)	3675894	20.0000	20.00
	8 Fluorene	166	7.062	7.062	(1.093)	4320365	20.0000	20.00
*	9 Phenanthrene-d10	188	8.091	8.091	(1.000)	468776	2.00000	
	10 Phenanthrene	178	8.120	8.120	(1.004)	5732976	20.0000	20.00
	11 Anthracene	178	8.173	8.173	(1.010)	5469428	20.0000	20.00
$	15 o-Terphenyl	230	8.502	8.502	(0.779)	3387940	20.0000	20.00
	12 Fluoranthene	202	9.407	9.407	(1.163)	5940792	20.0000	20.00
	14 Pyrene	202	9.648	9.648	(0.884)	6070122	20.0000	20.00
	16 Benzo(a)Anthracene	228	10.899	10.899	(0.999)	4901558	20.0000	20.00
*	13 Chrysene-d12	240	10.911	10.911	(1.000)	358657	2.00000	
	17 Chrysene	228	10.940	10.940	(1.003)	4586167	20.0000	20.00
	19 Benzo(b)fluoranthene	252	12.109	12.109	(0.960)	4073278	20.0000	20.00
	20 Benzo(k)fluoranthene	252	12.145	12.145	(0.963)	4273072	20.0000	20.00
	21 Benzo(a)pyrene	252	12.538	12.538	(0.994)	3192416	20.0000	20.00
*	18 Perylene-d12	264	12.615	12.615	(1.000)	273819	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.348	14.348	(1.315)	3001762	20.0000	20.00
	23 Dibenzo(a,h)anthracene	278	14.366	14.366	(1.139)	2480675	20.0000	20.00
	24 Benzo(g,h,i)perylene	276	14.883	14.883	(1.180)	2465896	20.0000	20.00

Data File: kl2612q.d

Date: 26-DEC-2012 15:08

Client ID: Instrument: MSK5973.i

Sample Info: IC-28972017; LLPAH7 Operator: LEG



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k122612.b/kl2613q.d
Lab Smp Id: IC-28972018; LLPAH6
Inj Date : 26-DEC-2012 15:31
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-28972018; LLPAH6
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122612.b/k-b8270CLLPAH-m.m
Meth Date : 26-Dec-2012 15:48 chemist Quant Type: ISTD
Cal Date : 26-DEC-2012 15:31 Cal File: kl2613q.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

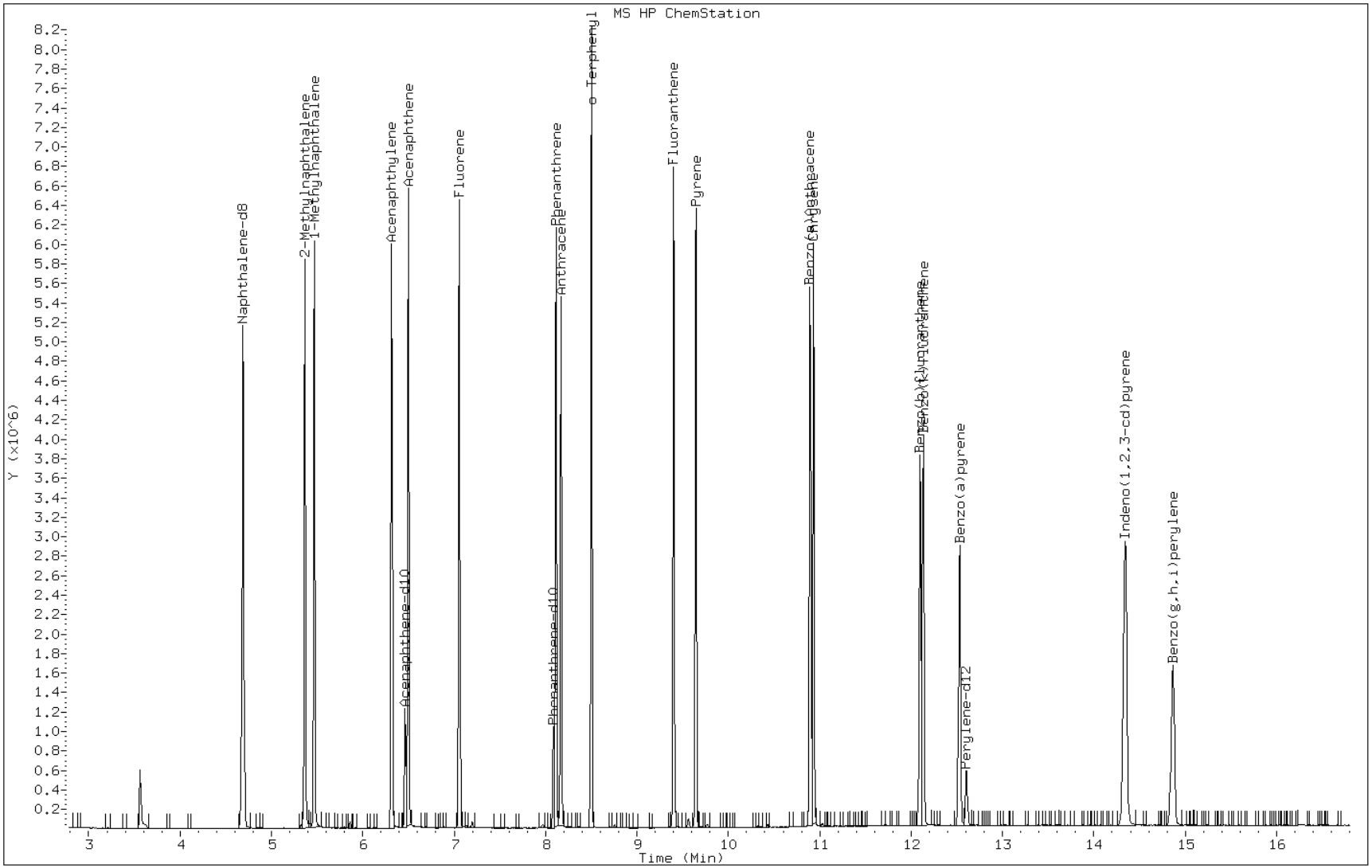
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.671	4.671	(1.000)	644519	2.00000	
	2 Naphthalene	128	4.689	4.689	(1.004)	3611843	10.0000	9.97
	3 2-Methylnaphthalene	142	5.364	5.364	(1.148)	2324005	10.0000	10.05
	4 1-Methylnaphthalene	142	5.470	5.470	(1.171)	2340073	10.0000	10.05
	6 Acenaphthylene	152	6.316	6.316	(0.977)	3549006	10.0000	10.09
*	5 Acenaphthene-d10	164	6.463	6.463	(1.000)	358360	2.00000	
	7 Acenaphthene	154	6.498	6.498	(1.005)	1994148	10.0000	10.08
	8 Fluorene	166	7.057	7.057	(1.092)	2349985	10.0000	10.09
*	9 Phenanthrene-d10	188	8.085	8.085	(1.000)	515850	2.00000	
	10 Phenanthrene	178	8.114	8.114	(1.004)	3128122	10.0000	9.95
	11 Anthracene	178	8.167	8.167	(1.010)	2948531	10.0000	9.89
$	15 o-Terphenyl	230	8.502	8.502	(0.780)	1882009	10.0000	9.97
	12 Fluoranthene	202	9.401	9.401	(1.163)	3338960	10.0000	10.10
	14 Pyrene	202	9.648	9.648	(0.885)	3356289	10.0000	9.95
	16 Benzo(a)Anthracene	228	10.893	10.893	(0.999)	2570487	10.0000	9.69
*	13 Chrysene-d12	240	10.905	10.905	(1.000)	400244	2.00000	
	17 Chrysene	228	10.934	10.934	(1.003)	2477270	10.0000	9.83
	19 Benzo(b)fluoranthene	252	12.098	12.098	(0.960)	2408388	10.0000	9.95
	20 Benzo(k)fluoranthene	252	12.133	12.133	(0.963)	2362480	10.0000	9.61
	21 Benzo(a)pyrene	252	12.533	12.533	(0.994)	1846030	10.0000	9.84
*	18 Perylene-d12	264	12.603	12.603	(1.000)	326891	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.336	14.336	(1.315)	1868842	10.0000	10.54
	23 Dibenzo(a,h)anthracene	278	14.354	14.354	(1.139)	1530010	10.0000	10.16
	24 Benzo(g,h,i)perylene	276	14.865	14.865	(1.179)	1531674	10.0000	10.19

Data File: kl2613q.d

Date: 26-DEC-2012 15:31

Client ID: Instrument: MSK5973.i

Sample Info: IC-28972018; LLPAH6 Operator: LEG



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k122612.b/kl2614q.d
Lab Smp Id: IC-28972019; LLPAH5
Inj Date : 26-DEC-2012 15:55
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-28972019; LLPAH5
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122612.b/k-b8270CLLPAH-m.m
Meth Date : 26-Dec-2012 16:05 chemist Quant Type: ISTD
Cal Date : 26-DEC-2012 15:55 Cal File: kl2614q.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

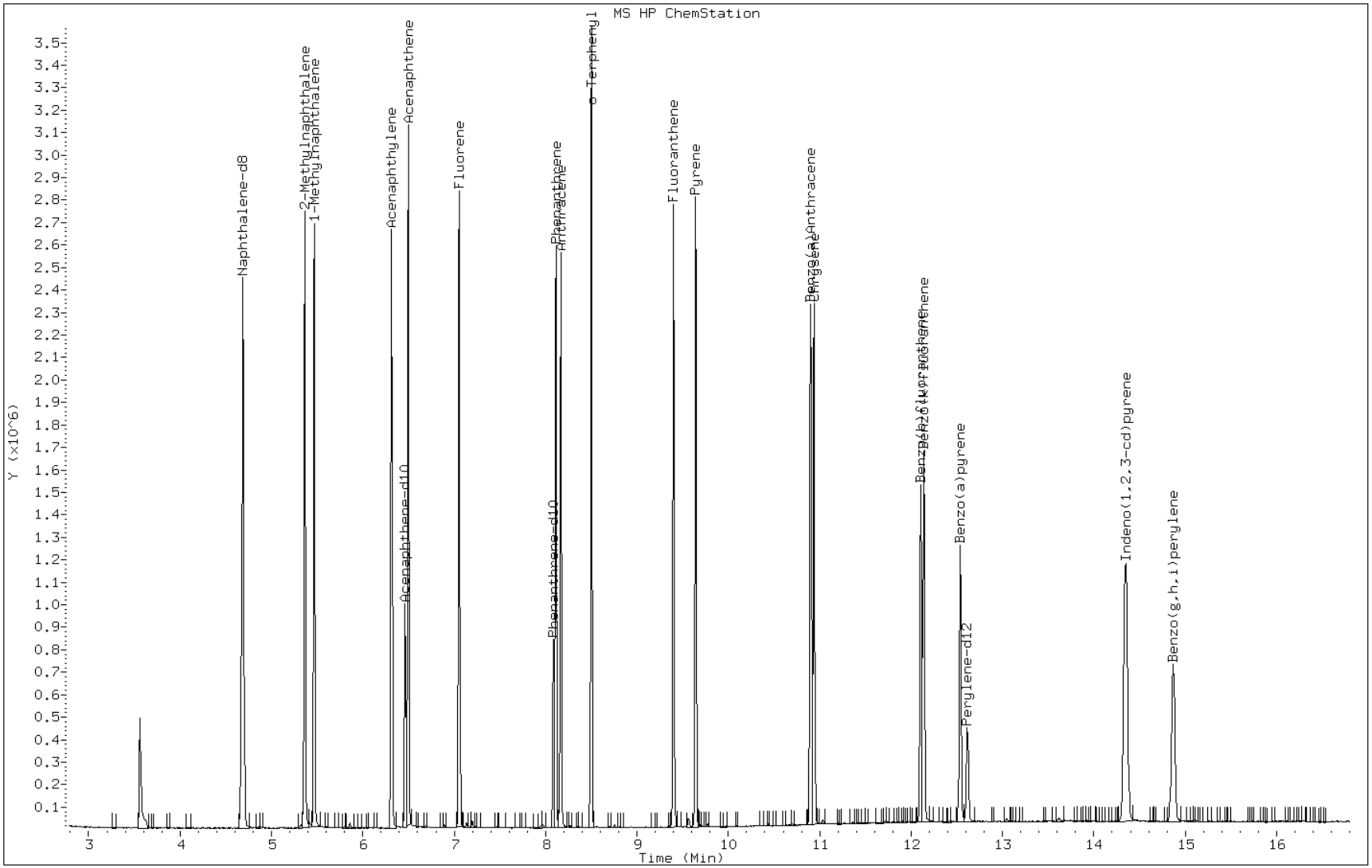
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.671	4.671	(1.000)	549247	2.00000	
	2 Naphthalene	128	4.689	4.689	(1.004)	1678943	5.00000	5.28
	3 2-Methylnaphthalene	142	5.364	5.364	(1.148)	1065495	5.00000	5.26
	4 1-Methylnaphthalene	142	5.470	5.470	(1.171)	1073577	5.00000	5.26
	6 Acenaphthylene	152	6.316	6.316	(0.977)	1587330	5.00000	5.32
*	5 Acenaphthene-d10	164	6.463	6.463	(1.000)	294501	2.00000	
	7 Acenaphthene	154	6.498	6.498	(1.005)	906884	5.00000	5.37
	8 Fluorene	166	7.056	7.056	(1.092)	1050540	5.00000	5.31
*	9 Phenanthrene-d10	188	8.085	8.085	(1.000)	396986	2.00000	
	10 Phenanthrene	178	8.114	8.114	(1.004)	1342675	5.00000	5.35
	11 Anthracene	178	8.167	8.167	(1.010)	1273765	5.00000	5.35
$	15 o-Terphenyl	230	8.502	8.502	(0.779)	832488	5.00000	5.61
	12 Fluoranthene	202	9.401	9.401	(1.163)	1341443	5.00000	5.18
	14 Pyrene	202	9.642	9.642	(0.884)	1389066	5.00000	5.37
	16 Benzo(a)Anthracene	228	10.899	10.899	(0.999)	998079	5.00000	5.06
*	13 Chrysene-d12	240	10.911	10.911	(1.000)	295326	2.00000	
	17 Chrysene	228	10.940	10.940	(1.003)	1009013	5.00000	5.27
	19 Benzo(b)fluoranthene	252	12.110	12.110	(0.960)	930831	5.00000	5.07
	20 Benzo(k)fluoranthene	252	12.139	12.139	(0.962)	993912	5.00000	5.24
	21 Benzo(a)pyrene	252	12.538	12.538	(0.994)	742299	5.00000	5.16
*	18 Perylene-d12	264	12.615	12.615	(1.000)	246044	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.336	14.336	(1.314)	797147	5.00000	5.68
	23 Dibenzo(a,h)anthracene	278	14.360	14.360	(1.138)	653164	5.00000	5.48
	24 Benzo(g,h,i)perylene	276	14.871	14.871	(1.179)	659806	5.00000	5.52

Data File: kl2614q.d

Date: 26-DEC-2012 15:55

Client ID: Instrument: MSK5973.i

Sample Info: IC-28972019; LLPAH5 Operator: LEG



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k122612.b/kl2615q.d
Lab Smp Id: IC-2897222; LLPAH3
Inj Date : 26-DEC-2012 16:18
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-2897222; LLPAH3
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122612.b/k-b8270CLLPAH-m.m
Meth Date : 26-Dec-2012 16:27 chemist Quant Type: ISTD
Cal Date : 26-DEC-2012 16:18 Cal File: kl2615q.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

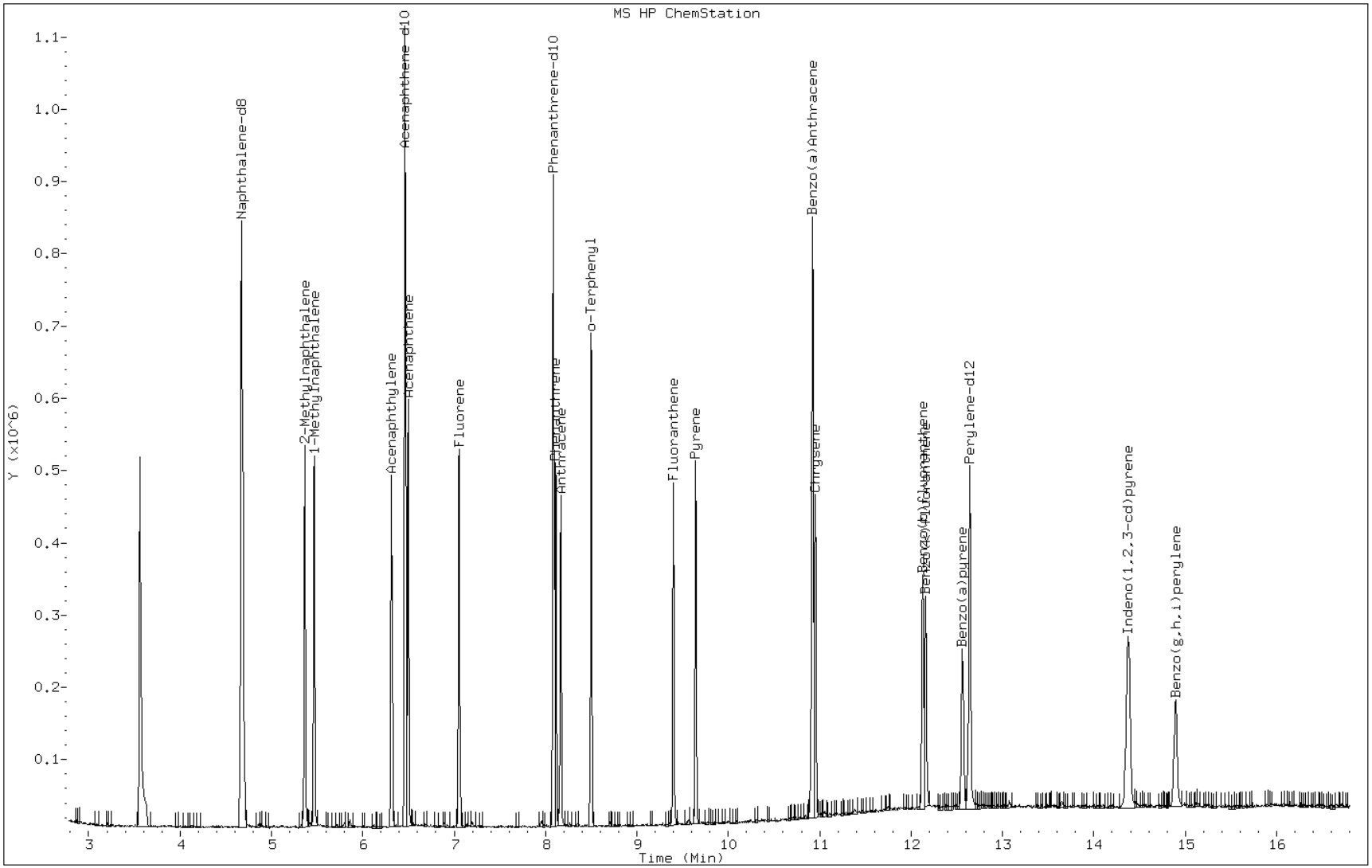
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.671	4.671	(1.000)	584696	2.00000	
	2 Naphthalene	128	4.689	4.689	(1.004)	324883	1.00000	0.97
	3 2-Methylnaphthalene	142	5.365	5.365	(1.148)	204381	1.00000	0.96
	4 1-Methylnaphthalene	142	5.470	5.470	(1.171)	212387	1.00000	0.98
	6 Acenaphthylene	152	6.316	6.316	(0.977)	292070	1.00000	0.92
*	5 Acenaphthene-d10	164	6.463	6.463	(1.000)	320282	2.00000	
	7 Acenaphthene	154	6.498	6.498	(1.005)	177158	1.00000	0.97
	8 Fluorene	166	7.057	7.057	(1.092)	196191	1.00000	0.93
*	9 Phenanthrene-d10	188	8.085	8.085	(1.000)	418023	2.00000	
	10 Phenanthrene	178	8.108	8.108	(1.003)	255147	1.00000	0.97
	11 Anthracene	178	8.167	8.167	(1.010)	231489	1.00000	0.94
$	15 o-Terphenyl	230	8.496	8.496	(0.777)	160277	1.00000	1.02
	12 Fluoranthene	202	9.401	9.401	(1.163)	242994	1.00000	0.91
	14 Pyrene	202	9.642	9.642	(0.882)	245421	1.00000	0.92
	16 Benzo(a)Anthracene	228	10.911	10.911	(0.998)	179524	1.00000	0.89
*	13 Chrysene-d12	240	10.929	10.929	(1.000)	309422	2.00000	
	17 Chrysene	228	10.952	10.952	(1.002)	187069	1.00000	0.94
	19 Benzo(b)fluoranthene	252	12.127	12.127	(0.959)	183607	1.00000	0.90
	20 Benzo(k)fluoranthene	252	12.163	12.163	(0.962)	179352	1.00000	0.86
	21 Benzo(a)pyrene	252	12.562	12.562	(0.993)	138188	1.00000	0.87
*	18 Perylene-d12	264	12.644	12.644	(1.000)	280420	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.366	14.366	(1.315)	163849	1.00000	1.08
	23 Dibenzo(a,h)anthracene	278	14.384	14.384	(1.138)	137026	1.00000	1.00
	24 Benzo(g,h,i)perylene	276	14.895	14.895	(1.178)	135705	1.00000	0.99

Data File: kl2615q.d

Date: 26-DEC-2012 16:18

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/1k122612.b/kl2616q.d
Lab Smp Id: IC-2898498; LLPAH2
Inj Date : 26-DEC-2012 16:41
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-2898498; LLPAH2
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122612.b/k-b8270CLLPAH-m.m
Meth Date : 26-Dec-2012 17:05 chemist Quant Type: ISTD
Cal Date : 26-DEC-2012 16:41 Cal File: kl2616q.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

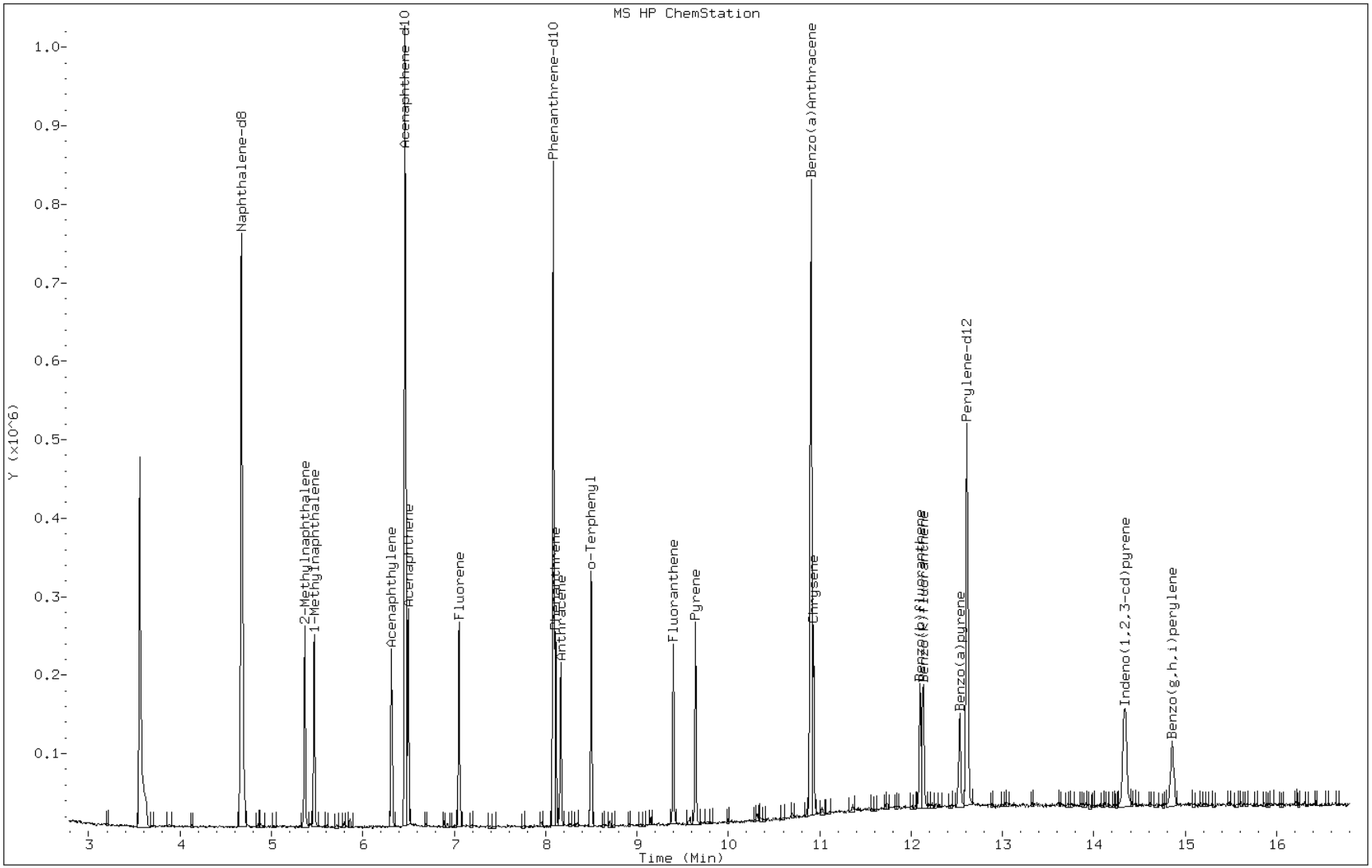
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.671	4.671	(1.000)	548930	2.00000	
	2 Naphthalene	128	4.689	4.689	(1.004)	156963	0.50000	0.49
	3 2-Methylnaphthalene	142	5.364	5.364	(1.148)	96255	0.50000	0.48
	4 1-Methylnaphthalene	142	5.470	5.470	(1.171)	98231	0.50000	0.48
	6 Acenaphthylene	152	6.316	6.316	(0.977)	139065	0.50000	0.46
*	5 Acenaphthene-d10	164	6.463	6.463	(1.000)	307932	2.00000	
	7 Acenaphthene	154	6.498	6.498	(1.005)	82932	0.50000	0.47
	8 Fluorene	166	7.057	7.057	(1.092)	94677	0.50000	0.47
*	9 Phenanthrene-d10	188	8.085	8.085	(1.000)	393807	2.00000	
	10 Phenanthrene	178	8.108	8.108	(1.003)	123004	0.50000	0.49
	11 Anthracene	178	8.167	8.167	(1.010)	112303	0.50000	0.48
$	15 o-Terphenyl	230	8.496	8.496	(0.779)	77120	0.50000	0.48
	12 Fluoranthene	202	9.395	9.395	(1.162)	118745	0.50000	0.47
	14 Pyrene	202	9.642	9.642	(0.884)	122185	0.50000	0.45
	16 Benzo(a)Anthracene	228	10.893	10.893	(0.999)	95658	0.50000	0.47
*	13 Chrysene-d12	240	10.905	10.905	(1.000)	317244	2.00000	
	17 Chrysene	228	10.935	10.935	(1.003)	100328	0.50000	0.49
	19 Benzo(b)fluoranthene	252	12.098	12.098	(0.959)	95284	0.50000	0.46
	20 Benzo(k)fluoranthene	252	12.133	12.133	(0.962)	96389	0.50000	0.45
	21 Benzo(a)pyrene	252	12.533	12.533	(0.994)	71668	0.50000	0.45
*	18 Perylene-d12	264	12.609	12.609	(1.000)	290160	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.325	14.325	(1.314)	84135	0.50000	0.53
	23 Dibenzo(a,h)anthracene	278	14.348	14.348	(1.138)	73136	0.50000	0.51
	24 Benzo(g,h,i)perylene	276	14.859	14.859	(1.178)	74533	0.50000	0.52

Data File: kl2616q.d

Date: 26-DEC-2012 16:41

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/1k122612.b/kl2617q.d
Lab Smp Id: IC-28972017; LLPAH1
Inj Date : 26-DEC-2012 17:04
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-28972017; LLPAH1
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122612.b/k-b8270CLLPAH-m.m
Meth Date : 26-Dec-2012 17:23 chemist Quant Type: ISTD
Cal Date : 26-DEC-2012 17:04 Cal File: kl2617q.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

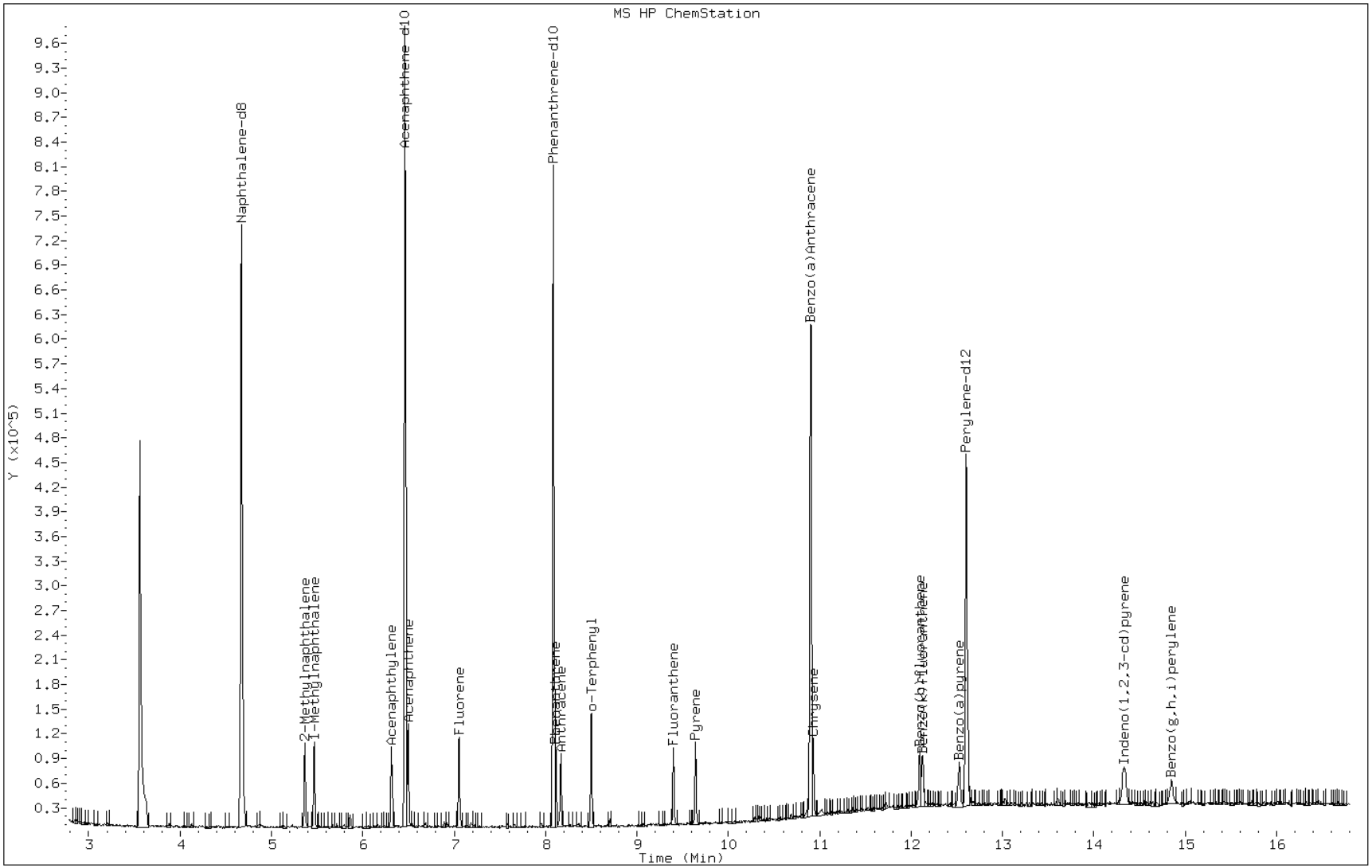
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	4.671	4.671	(1.000)	522207	2.00000	
	2 Naphthalene	128	4.689	4.689	(1.004)	65900	0.20000	0.21
	3 2-Methylnaphthalene	142	5.364	5.364	(1.148)	39285	0.20000	0.20
	4 1-Methylnaphthalene	142	5.470	5.470	(1.171)	41324	0.20000	0.21
	6 Acenaphthylene	152	6.316	6.316	(0.977)	57446	0.20000	0.20
*	5 Acenaphthene-d10	164	6.463	6.463	(1.000)	284435	2.00000	
	7 Acenaphthene	154	6.498	6.498	(1.005)	36262	0.20000	0.22
	8 Fluorene	166	7.057	7.057	(1.092)	38969	0.20000	0.20
*	9 Phenanthrene-d10	188	8.085	8.085	(1.000)	362931	2.00000	
	10 Phenanthrene	178	8.108	8.108	(1.003)	50480	0.20000	0.21
	11 Anthracene	178	8.167	8.167	(1.010)	46258	0.20000	0.21
$	15 o-Terphenyl	230	8.502	8.502	(0.780)	30860	0.20000	0.22
	12 Fluoranthene	202	9.401	9.401	(1.163)	48083	0.20000	0.20
	14 Pyrene	202	9.642	9.642	(0.884)	48939	0.20000	0.21
	16 Benzo(a)Anthracene	228	10.893	10.893	(0.999)	34173	0.20000	0.20
*	13 Chrysene-d12	240	10.905	10.905	(1.000)	264179	2.00000	
	17 Chrysene	228	10.929	10.929	(1.002)	37193	0.20000	0.21
	19 Benzo(b)fluoranthene	252	12.092	12.092	(0.959)	36623	0.20000	0.20
	20 Benzo(k)fluoranthene	252	12.127	12.127	(0.962)	35967	0.20000	0.19
	21 Benzo(a)pyrene	252	12.521	12.521	(0.993)	26897	0.20000	0.19
*	18 Perylene-d12	264	12.603	12.603	(1.000)	249360	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.325	14.325	(1.314)	30438	0.20000	0.22
	23 Dibenzo(a,h)anthracene	278	14.342	14.342	(1.138)	24331	0.20000	0.19
	24 Benzo(g,h,i)perylene	276	14.848	14.848	(1.178)	25983	0.20000	0.21

Data File: kl2617q.d

Date: 26-DEC-2012 17:04

Client ID: Instrument: MSK5973.i

Sample Info: IC-28972017; LLPAH1 Operator: LEG



TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k122612.b/kl2618q.d
Lab Smp Id: IC-2897220; LLPAH4
Inj Date : 26-DEC-2012 17:28
Operator : LEG Inst ID: MSK5973.i
Smp Info : IC-2897220; LLPAH4
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122612.b/k-b8270CLLPAH-m.m
Meth Date : 27-Dec-2012 09:54 chemist Quant Type: ISTD
Cal Date : 26-DEC-2012 17:28 Cal File: kl2618q.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	4.671	4.671	(1.000)	519296	2.00000	
2 Naphthalene	128	4.689	4.689	(1.004)	615402	2.00000	2.02
3 2-Methylnaphthalene	142	5.364	5.364	(1.148)	382142	2.00000	2.02
4 1-Methylnaphthalene	142	5.470	5.470	(1.171)	390219	2.00000	2.01
6 Acenaphthylene	152	6.316	6.316	(0.977)	550316	2.00000	2.03
* 5 Acenaphthene-d10	164	6.463	6.463	(1.000)	276496	2.00000	
7 Acenaphthene	154	6.498	6.498	(1.005)	325827	2.00000	2.04
8 Fluorene	166	7.056	7.056	(1.092)	364319	2.00000	2.01
* 9 Phenanthrene-d10	188	8.085	8.085	(1.000)	365419	2.00000	
10 Phenanthrene	178	8.108	8.108	(1.003)	468211	2.00000	2.00
11 Anthracene	178	8.167	8.167	(1.010)	439091	2.00000	2.02
$ 15 o-Terphenyl	230	8.502	8.502	(0.777)	300363	2.00000	2.10
12 Fluoranthene	202	9.401	9.401	(1.163)	468581	2.00000	2.01
14 Pyrene	202	9.642	9.642	(0.881)	475431	2.00000	2.03
16 Benzo(a)Anthracene	228	10.887	10.928	(0.995)	337472	2.00000	1.94(H)
* 13 Chrysene-d12	240	10.899	10.940	(1.000)	273654	2.00000	(H)
17 Chrysene	228	10.928	10.975	(0.999)	351346	2.00000	1.98(H)
19 Benzo(b)fluoranthene	252	12.092	12.092	(0.959)	330575	2.00000	1.91
20 Benzo(k)fluoranthene	252	12.121	12.121	(0.962)	364164	2.00000	2.06
21 Benzo(a)pyrene	252	12.521	12.521	(0.993)	265549	2.00000	2.00
* 18 Perylene-d12	264	12.603	12.603	(1.000)	242925	2.00000	
22 Indeno(1,2,3-cd)pyrene	276	14.319	14.319	(1.309)	306039	2.00000	2.16
23 Dibenzo(a,h)anthracene	278	14.336	14.336	(1.138)	252078	2.00000	2.10
24 Benzo(g,h,i)perylene	276	14.848	14.848	(1.178)	252478	2.00000	2.08

QC Flag Legend

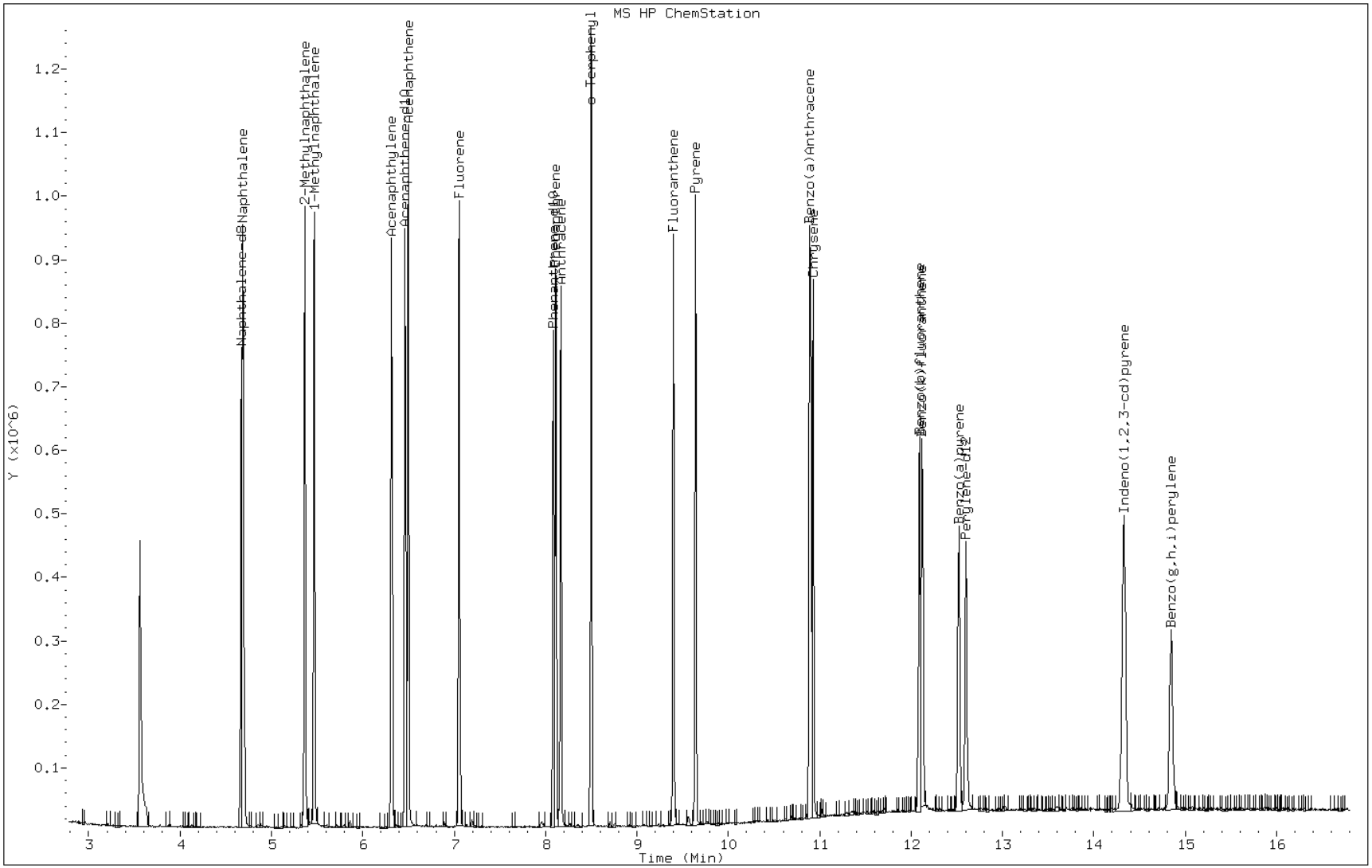
H - Operator selected an alternate compound hit.

Data File: kl2618q.d

Date: 26-DEC-2012 17:28

Client ID: Instrument: MSK5973.i

Sample Info: IC-2897220; LLPAH4 Operator: LEG



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

Lab Name: TestAmerica Savannah Job No.: 680-85860-4 Analy Batch No.: 261214

SDG No.: 68085860-4

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.: 680-85860-4 Analy Batch No.: 261214

SDG No.: 68085860-4

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.: 680-85860-4 Analy Batch No.: 261214

SDG No.: 68085860-4

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.: 680-85860-4 Analy Batch No.: 261214

SDG No.: 68085860-4

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

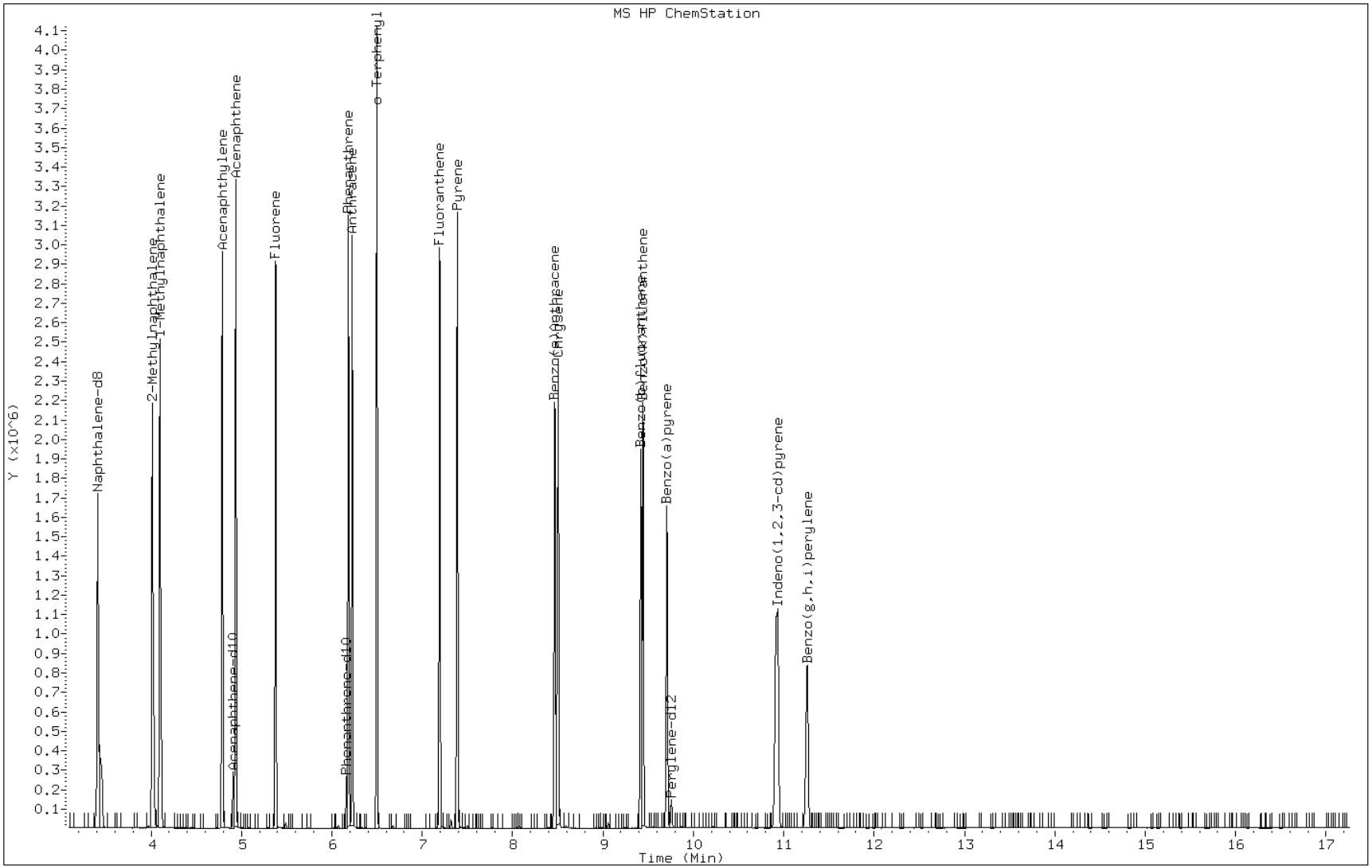
A - Target compound detected but, quantitated amount exceeded maximum amount.

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

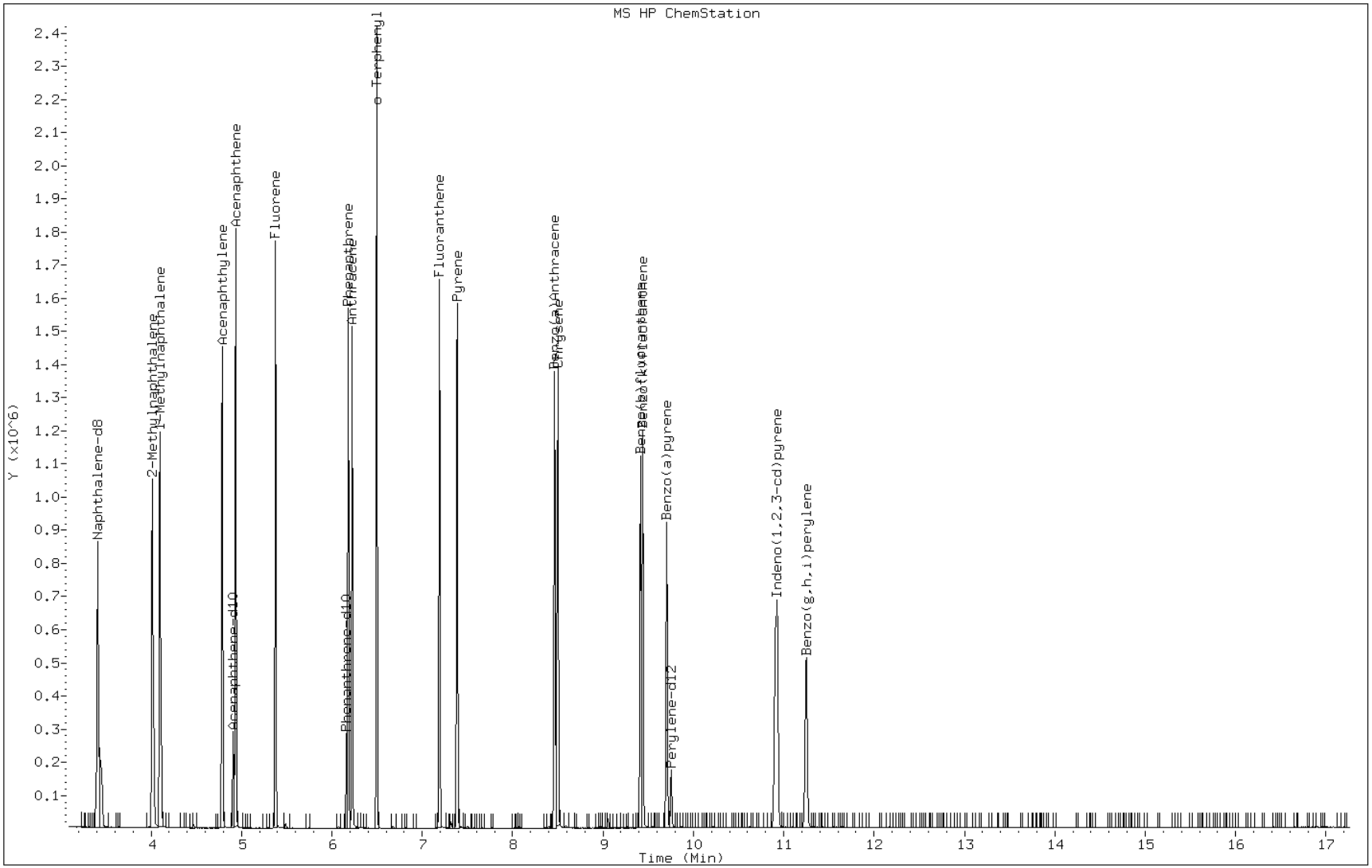
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	3.392	3.392	(1.000)	111940	2.00000	
	2 Naphthalene	128	3.408	3.408	(1.005)	655103	10.0000	9.93
	3 2-Methylnaphthalene	142	4.012	4.012	(1.183)	408563	10.0000	9.92
	4 1-Methylnaphthalene	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

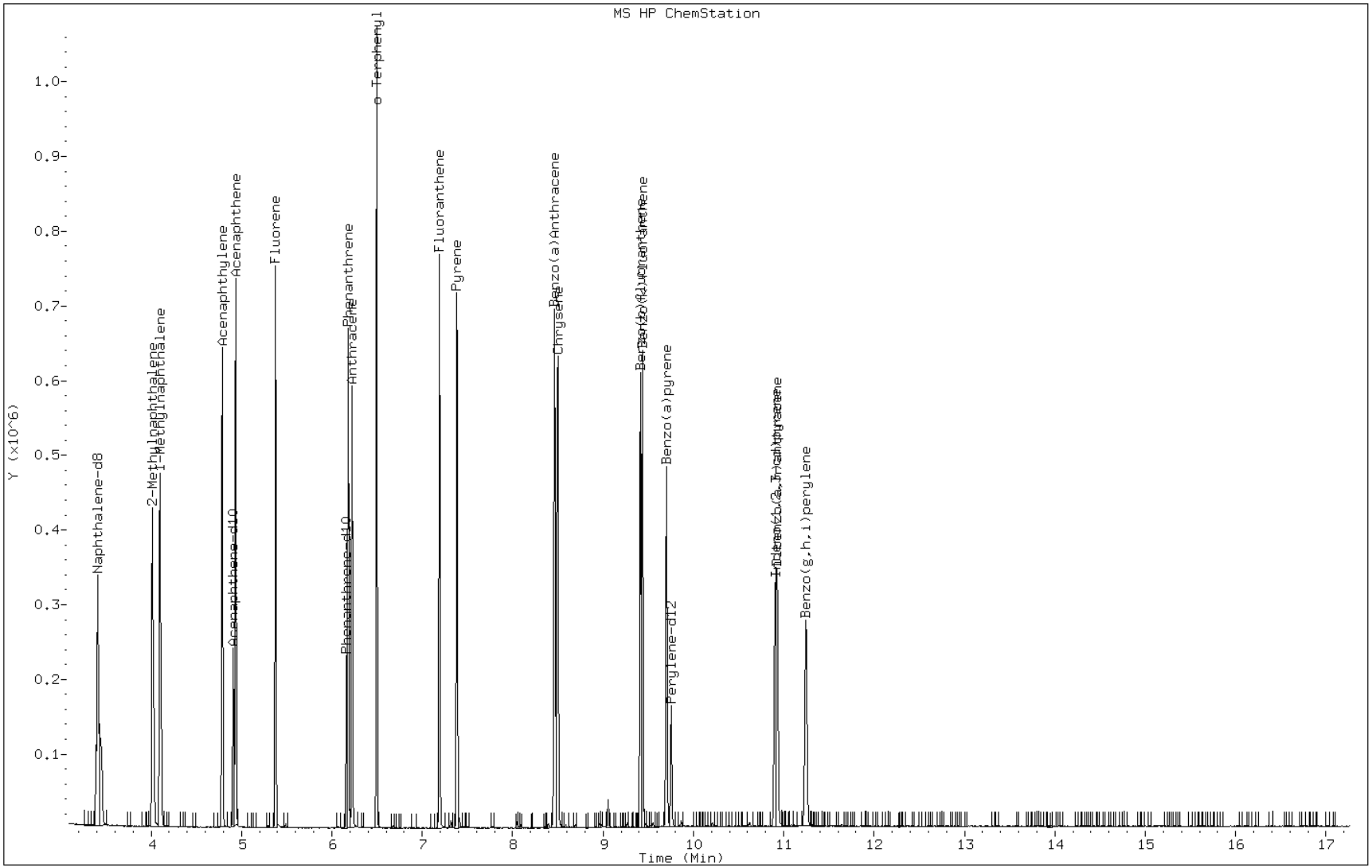
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	3.392	3.392	(1.000)	92818	2.00000	
	2 Naphthalene	128	3.408	3.408	(1.005)	285517	5.00000	5.14
	3 2-Methylnaphthalene	142	4.012	4.012	(1.183)	176944	5.00000	5.12
	4 1-Methylnaphthalene	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

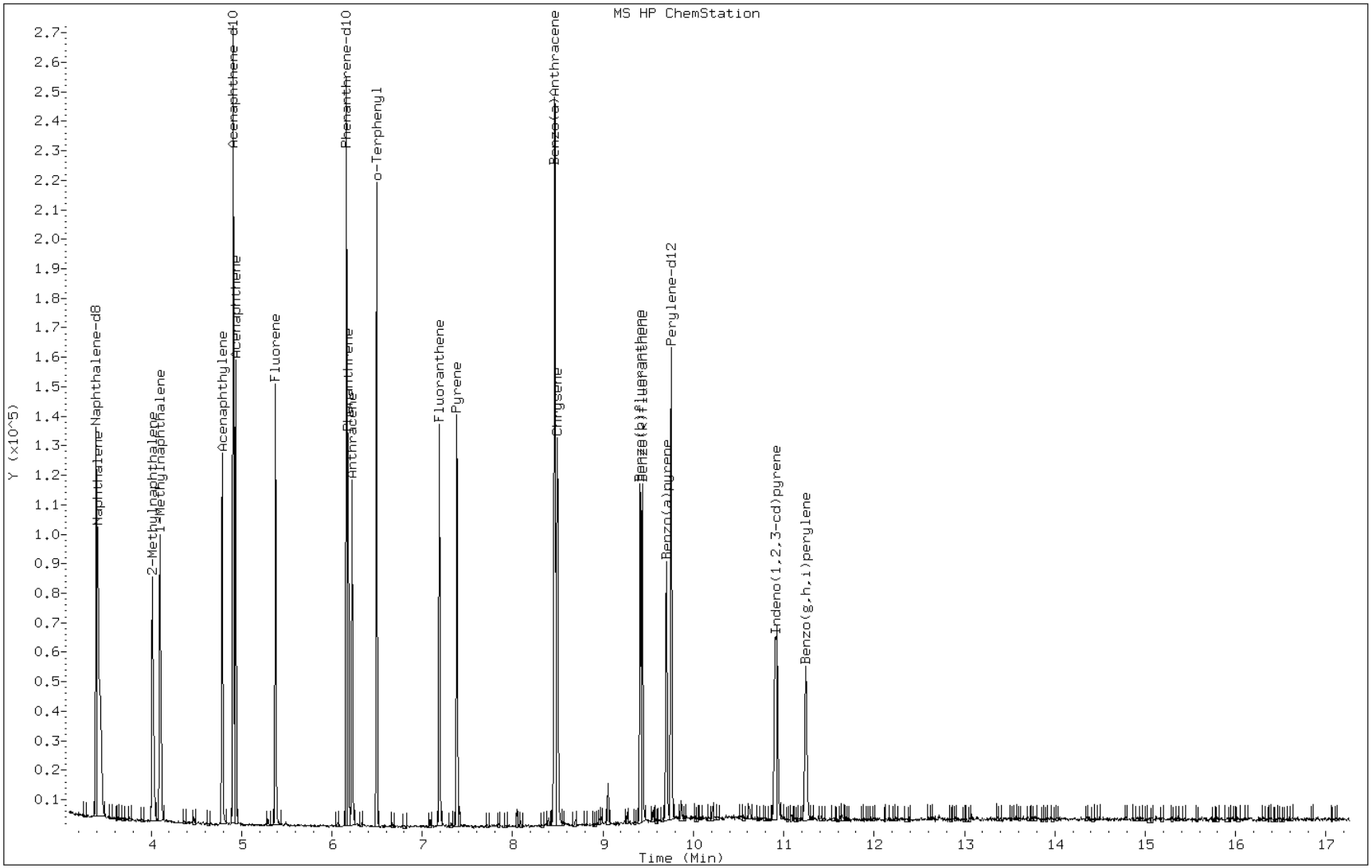
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	3.392	3.392	(1.000)	103455	2.00000	
	2 Naphthalene	128	3.408	3.408	(1.005)	58580	1.00000	0.95
	3 2-Methylnaphthalene	142	4.012	4.012	(1.183)	36650	1.00000	0.96
	4 1-Methylnaphthalene	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

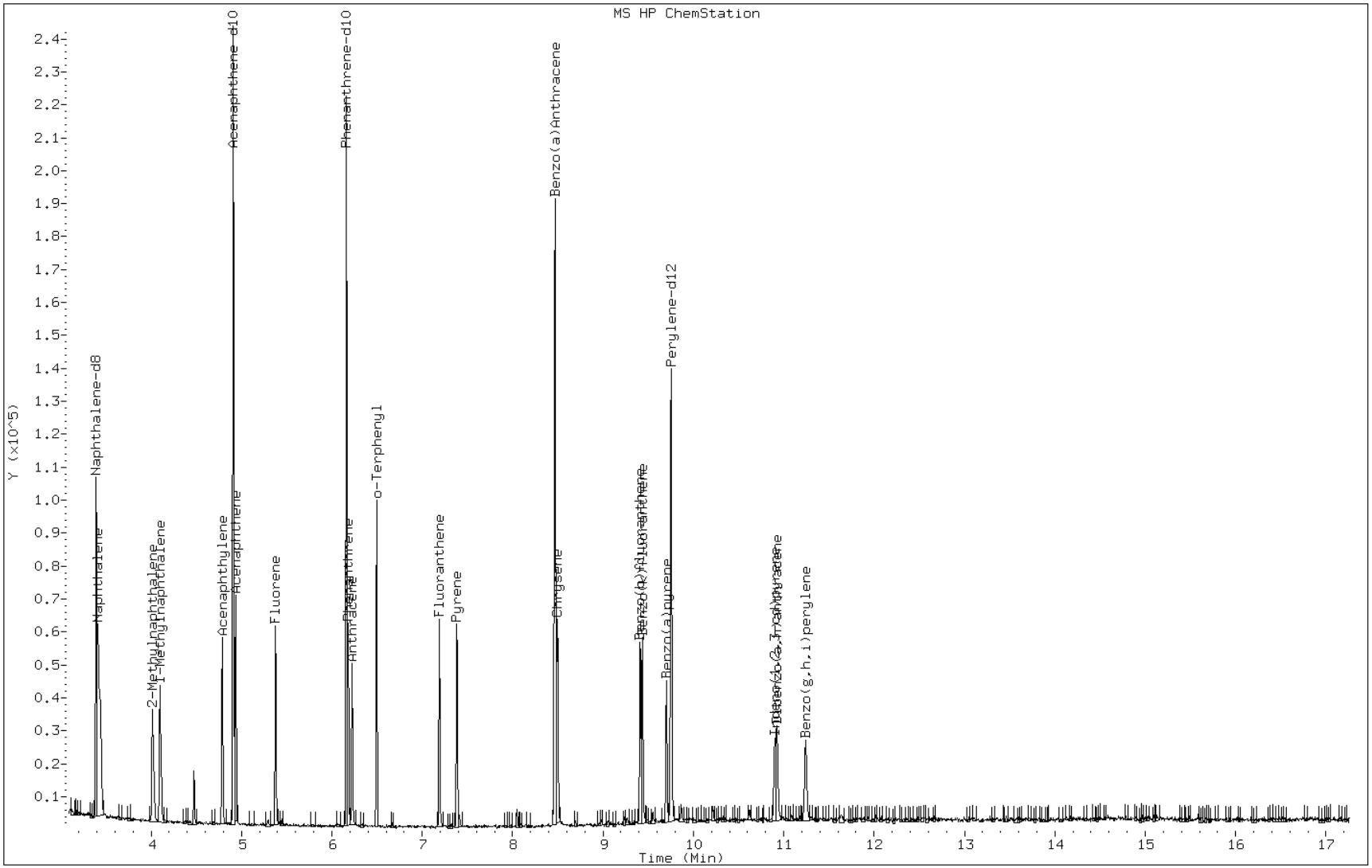
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	3.392	3.392	(1.000)	94162	2.00000	
	2 Naphthalene	128	3.413	3.413	(1.006)	26615	0.50000	0.48
	3 2-Methylnaphthalene	142	4.012	4.012	(1.183)	16956	0.50000	0.49
	4 1-Methylnaphthalene	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

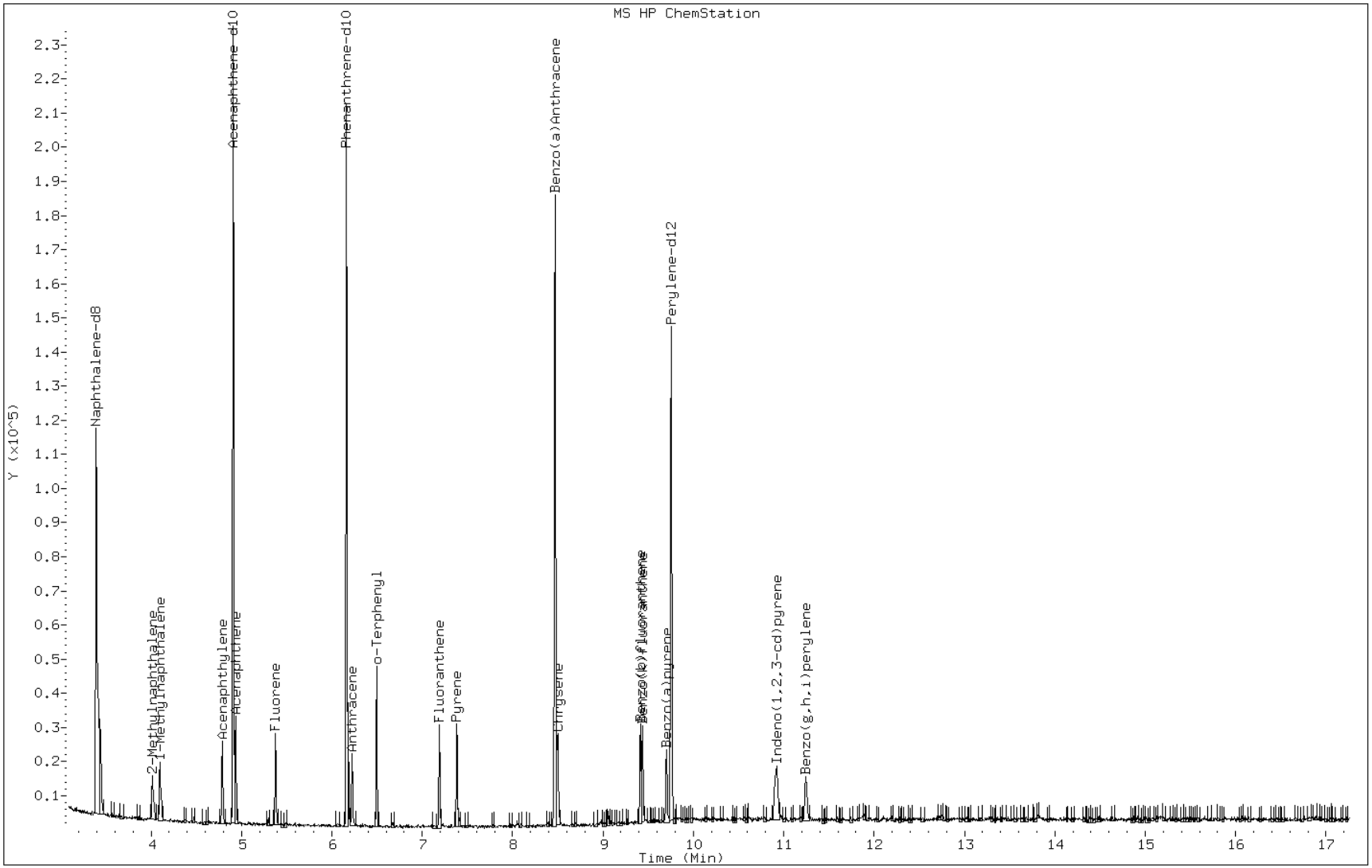
T - Target compound detected outside RT window.

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

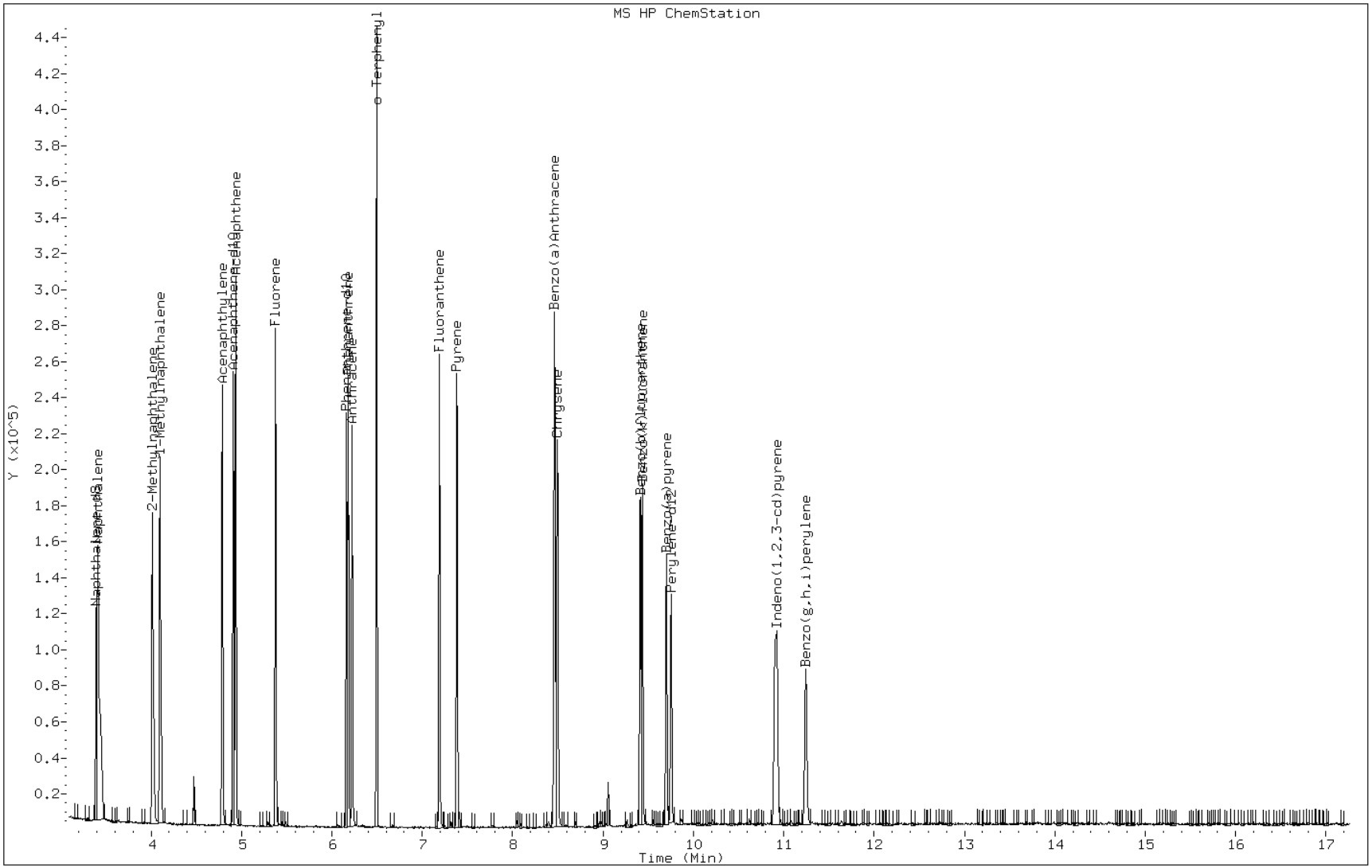
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
* 1 Naphthalene-d8	136	3.392	3.392	(1.000)	97972	2.00000	
2 Naphthalene	128	3.413	3.413	(1.006)	115402	2.00000	1.99
3 2-Methylnaphthalene	142	4.012	4.012	(1.183)	71128	2.00000	1.97
4 1-Methylnaphthalene	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 VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Lab Sample ID: CCVIS 680-261200/2 Calibration Date: 12/21/2012 09:04

Instrument ID: MSK Calib Start Date: 12/14/2012 08:15

GC Column: RXi- 5Sil MS ID: 0.25(mm) Calib End Date: 12/14/2012 10:35

Lab File ID: kl2103q.d Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.181	1.182		6.70	2.00	0.0	20.0
2-Methylnaphthalene	Ave	0.7535	0.7512		6.70	2.00	-0.3	20.0
1-Methylnaphthalene	Ave	0.7648	0.7689		6.70	2.00	0.5	20.0
Acenaphthylene	Ave	2.036	2.074		6.70	2.00	1.9	20.0
Acenaphthene	Ave	1.178	1.193		6.70	2.00	1.3	20.0
Fluorene	Ave	1.354	1.338		6.70	2.00	-1.2	20.0
Phenanthrene	Ave	1.289	1.309		6.70	2.00	1.5	20.0
Anthracene	Ave	1.277	1.256		6.70	2.00	-1.6	20.0
Fluoranthene	Ave	1.375	1.424		6.70	2.00	3.6	20.0
Pyrene	Ave	1.505	1.550		6.70	2.00	3.0	20.0
Benzo[a]anthracene	Ave	1.349	1.305		6.70	2.00	-3.3	20.0
Chrysene	Ave	1.310	1.314		6.70	2.00	0.3	20.0
Benzo[b]fluoranthene	Ave	1.396	1.349		6.70	2.00	-3.3	20.0
Benzo[k]fluoranthene	Ave	1.351	1.463		2.17	2.00	8.3	20.0
Benzo[a]pyrene	Ave	1.124	1.097		1.95	2.00	-2.4	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.244	1.076		6.70	2.00	-13.5	20.0
Dibenz(a,h)anthracene	Ave	1.039	0.9881		6.70	2.00	-4.9	20.0
Benzo[g,h,i]perylene	Ave	1.097	0.999		6.70	2.00	-8.9	20.0
o-Terphenyl	Ave	0.8562	0.8517		1.99	2.00	-0.5	20.0

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k122112.b/kl2103q.d
Lab Smp Id: CCVIS-2897220; LLPA
Inj Date : 21-DEC-2012 09:04
Operator : LEG Inst ID: MSK5973.i
Smp Info : CCVIS-2897220; LLPAH
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122112.b/k-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 09:18 chemist Quant Type: ISTD
Cal Date : 14-DEC-2012 10:35 Cal File: kl1409q.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

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)	ON-COL (ug/ml)
* 1 Naphthalene-d8	136	4.777	4.777	(1.000)	1138560	2.00000	(H)
2 Naphthalene	128	4.800	4.800	(0.991)	1345883	2.00000	2.00(H)
3 2-Methylnaphthalene	142	5.482	5.482	(1.132)	855249	2.00000	1.99(H)
4 1-Methylnaphthalene	142	5.588	5.588	(1.154)	875453	2.00000	2.01(H)
6 Acenaphthylene	152	6.434	6.434	(0.977)	1273598	2.00000	2.03
* 5 Acenaphthene-d10	164	6.586	6.586	(1.000)	613945	2.00000	
7 Acenaphthene	154	6.622	6.622	(1.005)	732166	2.00000	2.02
8 Fluorene	166	7.186	7.186	(1.091)	821567	2.00000	1.97
* 9 Phenanthrene-d10	188	8.220	8.220	(1.000)	843703	2.00000	(H)
10 Phenanthrene	178	8.243	8.243	(0.996)	1103982	2.00000	2.03(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
11 Anthracene	178	8.302	8.302	(1.003)	1059939	2.00000	1.96
$ 15 o-Terphenyl	230	8.637	8.637	(0.773)	678223	2.00000	1.98(H)
12 Fluoranthene	202	9.536	9.536	(1.152)	1201541	2.00000	2.07(H)
14 Pyrene	202	9.777	9.777	(0.875)	1234373	2.00000	2.05(H)
16 Benzo(a)Anthracene	228	11.040	11.040	(0.988)	1039406	2.00000	1.93(H)
* 13 Chrysene-d12	240	11.052	11.052	(1.000)	796292	2.00000	(H)
17 Chrysene	228	11.081	11.081	(0.992)	1046556	2.00000	2.00(H)
19 Benzo(b)fluoranthene	252	12.297	12.297	(0.950)	967558	2.00000	1.93(H)
20 Benzo(k)fluoranthene	252	12.333	12.333	(0.953)	1049373	2.00000	2.16(H)
21 Benzo(a)pyrene	252	12.756	12.756	(0.986)	786702	2.00000	1.95
* 18 Perylene-d12	264	12.838	12.838	(1.000)	717234	2.00000	(H)
22 Indeno(1,2,3-cd)pyrene	276	14.683	14.683	(1.315)	857006	2.00000	1.73(H)
23 Dibenzo(a,h)anthracene	278	14.712	14.712	(1.137)	708706	2.00000	1.90(H)
24 Benzo(g,h,i)perylene	276	15.241	15.241	(1.178)	716673	2.00000	1.82(H)

QC Flag Legend

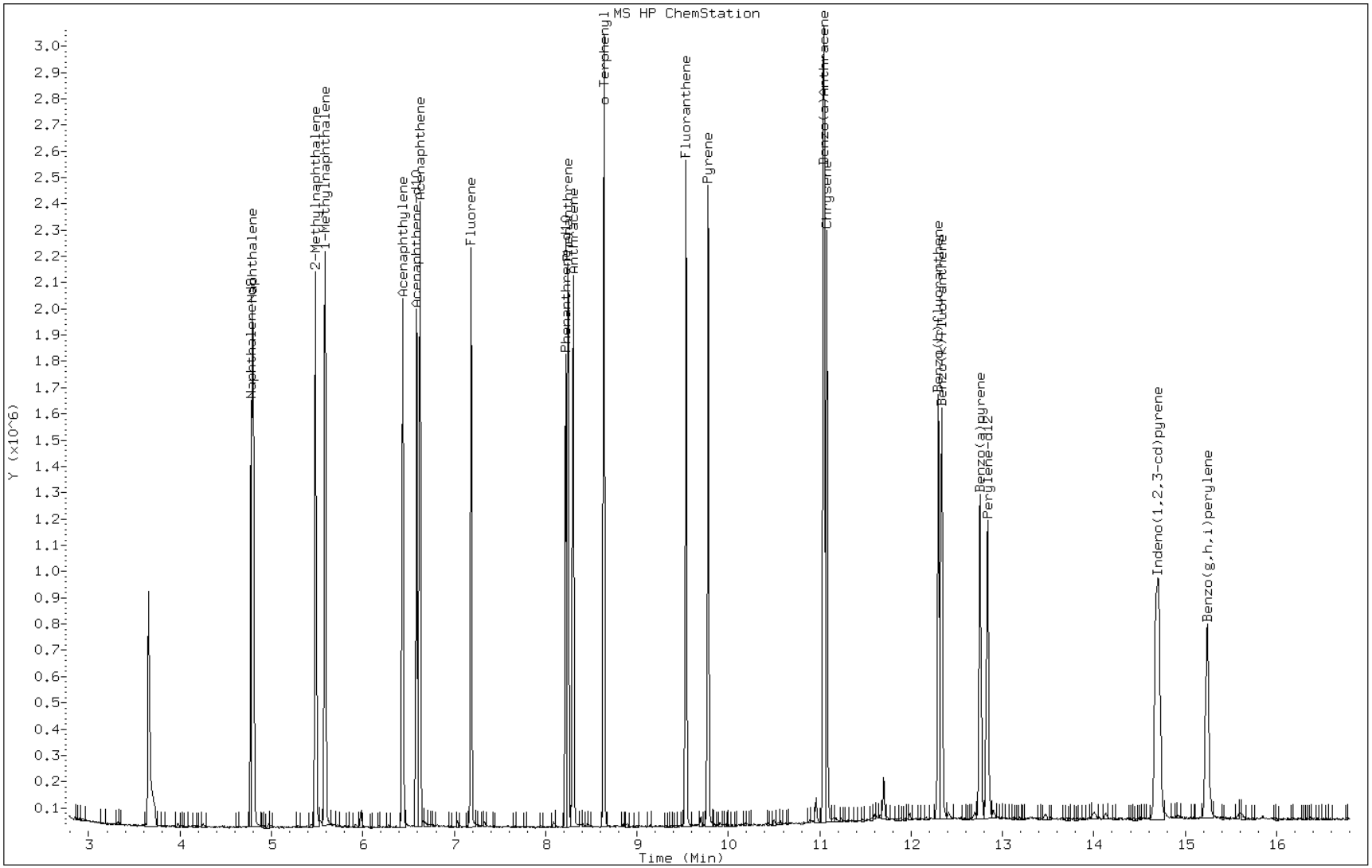
H - Operator selected an alternate compound hit.

Data File: kl2103q.d

Date: 21-DEC-2012 09:04

Client ID: Instrument: MSK5973.i

Sample Info: CCVIS-2897220; LLPAH Operator: LEG



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Lab Sample ID: CCVIS 680-261204/2 Calibration Date: 12/21/2012 19:31

Instrument ID: MSY Calib Start Date: 12/13/2012 16:54

GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 12/13/2012 19:09

Lab File ID: yl2126q.d Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.113	1.202		6.70	2.00	8.0	20.0
2-Methylnaphthalene	Ave	0.7622	0.7713		6.70	2.00	1.2	20.0
1-Methylnaphthalene	Ave	0.7722	0.7724		6.70	2.00	0.0	20.0
Acenaphthylene	Ave	2.087	2.057		6.70	2.00	-1.5	20.0
Acenaphthene	Ave	1.217	1.179		6.70	2.00	-3.1	20.0
Fluorene	Ave	1.414	1.448		6.70	2.00	2.4	20.0
Phenanthrene	Ave	1.311	1.202		6.70	2.00	-8.3	20.0
Anthracene	Ave	1.314	1.197		6.70	2.00	-8.9	20.0
Fluoranthene	Ave	1.376	1.354		6.70	2.00	-1.6	20.0
Pyrene	Ave	1.640	1.768		6.70	2.00	7.8	20.0
Benzo[a]anthracene	Ave	1.458	1.394		6.70	2.00	-4.4	20.0
Chrysene	Ave	1.428	1.300		6.70	2.00	-9.0	20.0
Benzo[b]fluoranthene	LinF	1.571	1.521		6.70	2.00	4.0	20.0
Benzo[k]fluoranthene	LinF	1.524	1.436		6.70	2.00	-3.8	20.0
Benzo[a]pyrene	LinF	1.283	1.209		2.00	2.00	0.2	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.483	1.121		6.70	2.00	-24.4*	20.0
Dibenz(a,h)anthracene	Ave	1.249	1.062		6.70	2.00	-14.9	20.0
Benzo[g,h,i]perylene	LinF	1.291	1.060		6.70	2.00	1.1	20.0
o-Terphenyl	Ave	0.8748	1.041		1.93	2.00	19.0	20.0

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y122112.b/yl2126q.d
Lab Smp Id: CCVIS-2897220; LLPA
Inj Date : 21-DEC-2012 19:31
Operator : VHB Inst ID: MSY5975.i
Smp Info : CCVIS-2897220; LLPAH
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y122112.b/Y-b8270CLLPAH-m.m
Meth Date : 24-Dec-2012 08:16 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

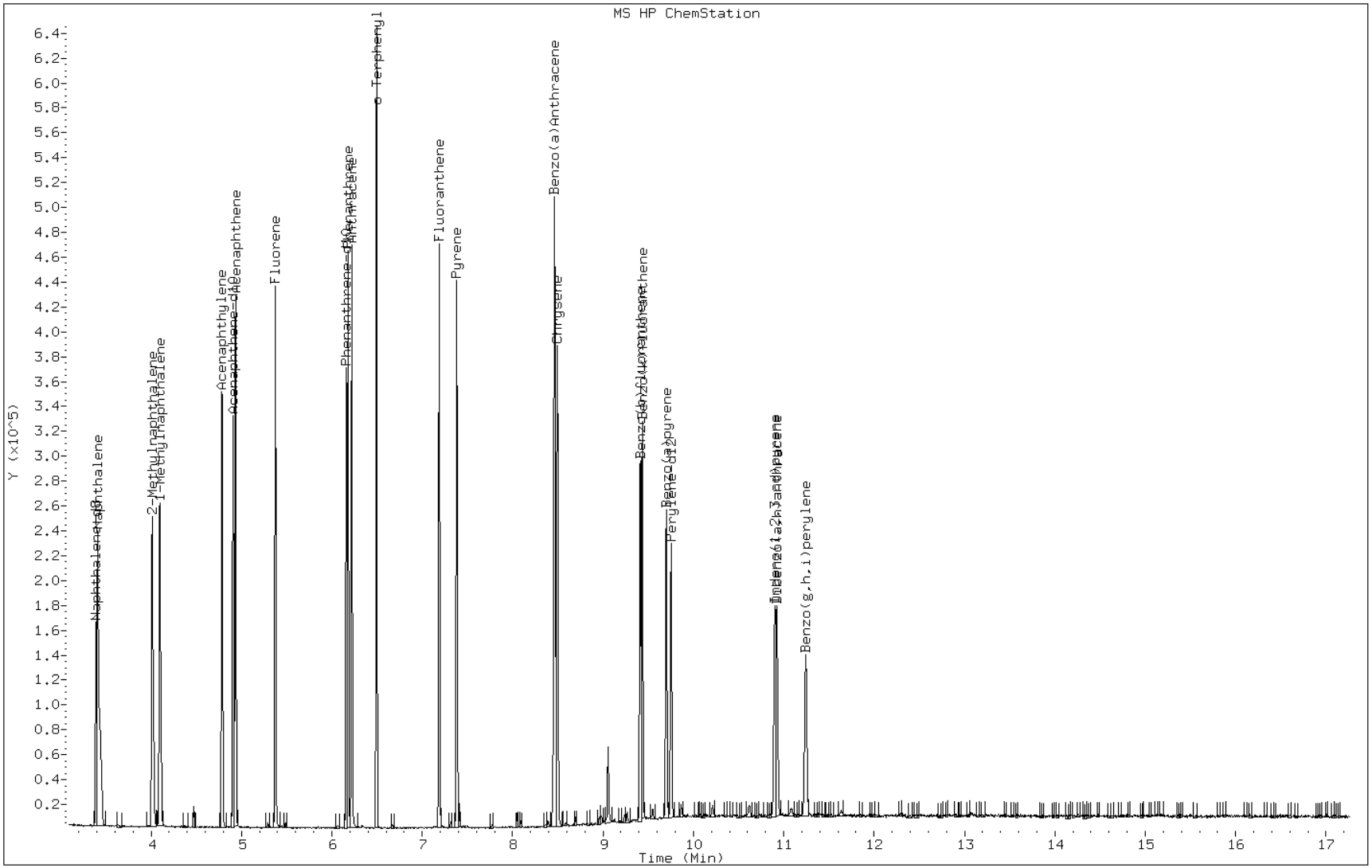
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	3.392	3.392	(1.000)	133991	2.00000	
	2 Naphthalene	128	3.408	3.408	(1.005)	161084	2.00000	2.03
	3 2-Methylnaphthalene	142	4.012	4.012	(1.183)	103344	2.00000	2.09
	4 1-Methylnaphthalene	142	4.098	4.098	(1.208)	103488	2.00000	1.99
	6 Acenaphthylene	152	4.788	4.788	(0.975)	176067	2.00000	1.99
*	5 Acenaphthene-d10	164	4.911	4.911	(1.000)	85606	2.00000	
	7 Acenaphthene	154	4.938	4.938	(1.005)	100923	2.00000	1.92
	8 Fluorene	166	5.376	5.376	(1.095)	123949	2.00000	2.10
*	9 Phenanthrene-d10	188	6.162	6.162	(1.000)	143011	2.00000	
	10 Phenanthrene	178	6.178	6.178	(1.003)	171838	2.00000	1.95
	11 Anthracene	178	6.221	6.221	(1.010)	171226	2.00000	2.03
$	15 o-Terphenyl	230	6.494	6.494	(0.766)	114139	2.00000	1.92
	12 Fluoranthene	202	7.184	7.184	(1.166)	193580	2.00000	1.88
	14 Pyrene	202	7.382	7.382	(0.871)	193807	2.00000	1.94
	16 Benzo(a)Anthracene	228	8.462	8.462	(0.999)	152730	2.00000	1.96
*	13 Chrysene-d12	240	8.473	8.473	(1.000)	109600	2.00000	
	17 Chrysene	228	8.494	8.494	(1.003)	142445	2.00000	2.05
	19 Benzo(b)fluoranthene	252	9.414	9.414	(0.965)	143943	2.00000	2.07
	20 Benzo(k)fluoranthene	252	9.436	9.436	(0.967)	135818	2.00000	1.92
	21 Benzo(a)pyrene	252	9.703	9.703	(0.995)	114422	2.00000	2.00
*	18 Perylene-d12	264	9.757	9.757	(1.000)	94611	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	10.901	10.901	(1.287)	122808	2.00000	2.06
	23 Dibenzo(a,h)anthracene	278	10.923	10.923	(1.119)	100521	2.00000	2.09
	24 Benzo(g,h,i)perylene	276	11.244	11.244	(1.152)	100312	2.00000	2.02

Data File: yl2126q.d

Date: 21-DEC-2012 19:31

Client ID: Instrument: MSY5975.i

Sample Info: CCVIS-2897220; LLPAH Operator: VHB



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Lab Sample ID: CCVIS 680-261231/2 Calibration Date: 12/27/2012 14:13

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: yl2702q.d Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.179	1.211		6.70	2.00	2.7	20.0
2-Methylnaphthalene	Ave	0.7356	0.7600		6.70	2.00	3.3	20.0
1-Methylnaphthalene	Ave	0.7741	0.7777		6.70	2.00	0.5	20.0
Acenaphthylene	Ave	2.067	2.057		6.70	2.00	-0.5	20.0
Acenaphthene	Ave	1.225	1.173		6.70	2.00	-4.2	20.0
Fluorene	Ave	1.374	1.424		6.70	2.00	3.6	20.0
Phenanthrene	Ave	1.232	1.201		6.70	2.00	-2.5	20.0
Anthracene	Ave	1.178	1.175		6.70	2.00	-0.3	20.0
Fluoranthene	Ave	1.436	1.310		6.70	2.00	-8.8	20.0
Pyrene	Ave	1.815	1.819		6.70	2.00	0.2	20.0
Benzo[a]anthracene	Ave	1.419	1.323		6.70	2.00	-6.7	20.0
Chrysene	LinF	1.442	1.382		6.70	2.00	9.3	20.0
Benzo[b]fluoranthene	LinF	1.680	1.498		6.70	2.00	2.4	20.0
Benzo[k]fluoranthene	LinF	1.641	1.615		2.16	2.00	8.2	20.0
Benzo[a]pyrene	LinF	1.337	1.222		2.03	2.00	1.3	20.0
Indeno[1,2,3-cd]pyrene	LinF	1.311	1.219		6.70	2.00	12.2	20.0
Dibenz(a,h)anthracene	LinF	1.207	1.091		6.70	2.00	7.5	20.0
Benzo[g,h,i]perylene	LinF	1.242	1.137		6.70	2.00	8.4	20.0
o-Terphenyl	Ave	1.080	1.061		1.97	2.00	-1.7	20.0

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSY5975.i/2y122712.b/yl2702q.d
Lab Smp Id: CCVIS-2897220; LLP
Inj Date : 27-DEC-2012 14:13
Operator : VHB Inst ID: MSY5975.i
Smp Info : CCVIS-2897220; LLPAH
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSY5975.i/2y122712.b/Y-b8270CLLPAH-m.m
Meth Date : 27-Dec-2012 14:34 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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
*	1 Naphthalene-d8	136	3.322	3.322	(1.000)	103224	2.00000	
	2 Naphthalene	128	3.338	3.338	(1.005)	124974	2.00000	2.05(H)
	3 2-Methylnaphthalene	142	3.943	3.943	(1.187)	78448	2.00000	2.06(H)
	4 1-Methylnaphthalene	142	4.028	4.028	(1.213)	80278	2.00000	2.00(H)
	6 Acenaphthylene	152	4.713	4.713	(0.973)	132696	2.00000	1.99
*	5 Acenaphthene-d10	164	4.841	4.841	(1.000)	64513	2.00000	
	7 Acenaphthene	154	4.868	4.868	(1.006)	75695	2.00000	1.91
	8 Fluorene	166	5.306	5.306	(1.096)	91844	2.00000	2.07
*	9 Phenanthrene-d10	188	6.093	6.093	(1.000)	101494	2.00000	
	10 Phenanthrene	178	6.109	6.109	(1.003)	121925	2.00000	1.95
	11 Anthracene	178	6.152	6.152	(1.010)	119268	2.00000	1.99
$	15 o-Terphenyl	230	6.424	6.424	(0.765)	78431	2.00000	1.96
	12 Fluoranthene	202	7.114	7.114	(1.168)	132924	2.00000	1.82
	14 Pyrene	202	7.307	7.307	(0.870)	134390	2.00000	2.00
	16 Benzo(a)Anthracene	228	8.387	8.387	(0.999)	97783	2.00000	1.86
*	13 Chrysene-d12	240	8.398	8.398	(1.000)	73897	2.00000	
	17 Chrysene	228	8.419	8.419	(1.003)	102113	2.00000	2.18
	19 Benzo(b)fluoranthene	252	9.334	9.334	(0.966)	103420	2.00000	2.04
	20 Benzo(k)fluoranthene	252	9.355	9.355	(0.968)	111493	2.00000	2.16
	21 Benzo(a)pyrene	252	9.612	9.612	(0.994)	84411	2.00000	2.02
*	18 Perylene-d12	264	9.666	9.666	(1.000)	69052	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	10.778	10.778	(1.283)	90110	2.00000	2.24
	23 Dibenzo(a,h)anthracene	278	10.800	10.800	(1.117)	75305	2.00000	2.15(H)
	24 Benzo(g,h,i)perylene	276	11.099	11.099	(1.148)	78529	2.00000	2.16

QC Flag Legend

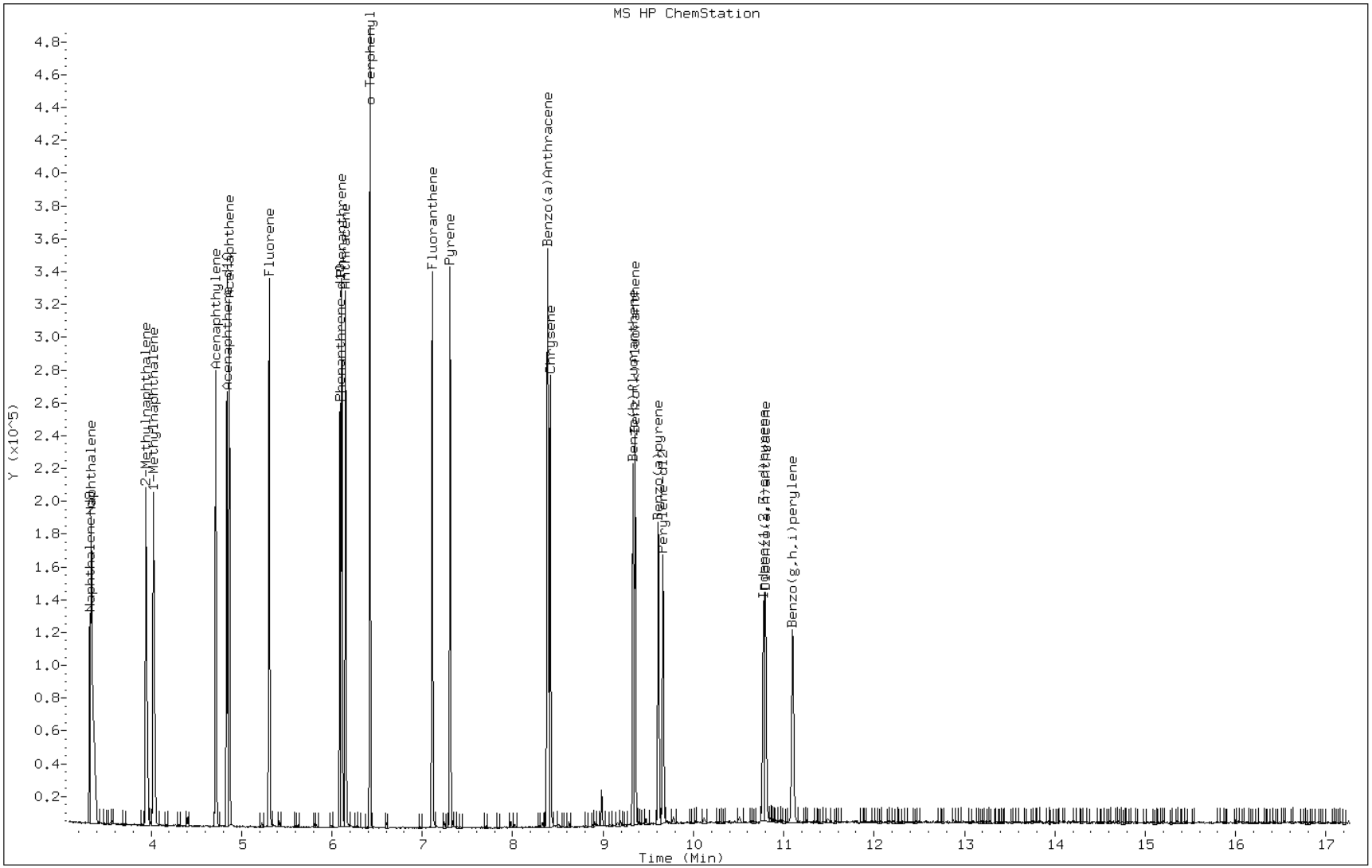
H - Operator selected an alternate compound hit.

Data File: yl2702q.d

Date: 27-DEC-2012 14:13

Client ID: Instrument: MSY5975.i

Sample Info: CCVIS-2897220; LLPAH Operator: VHB



TESTAMERICA SAVANNAH

Data file : /chem/SM/MSK5973.i/1k121412.b/kl1402t.d
Lab Smp Id: DFTPP Client Smp ID: DFTPP
Inj Date : 14-DEC-2012 07:59
Operator : VHB Inst ID: MSK5973.i
Smp Info : DFTPP-2888302
Misc Info :
Comment :
Method : /chem/SM/MSK5973.i/1k121412.b/k-dftppPAHLL-m.m
Meth Date : 25-Nov-2012 11:30 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

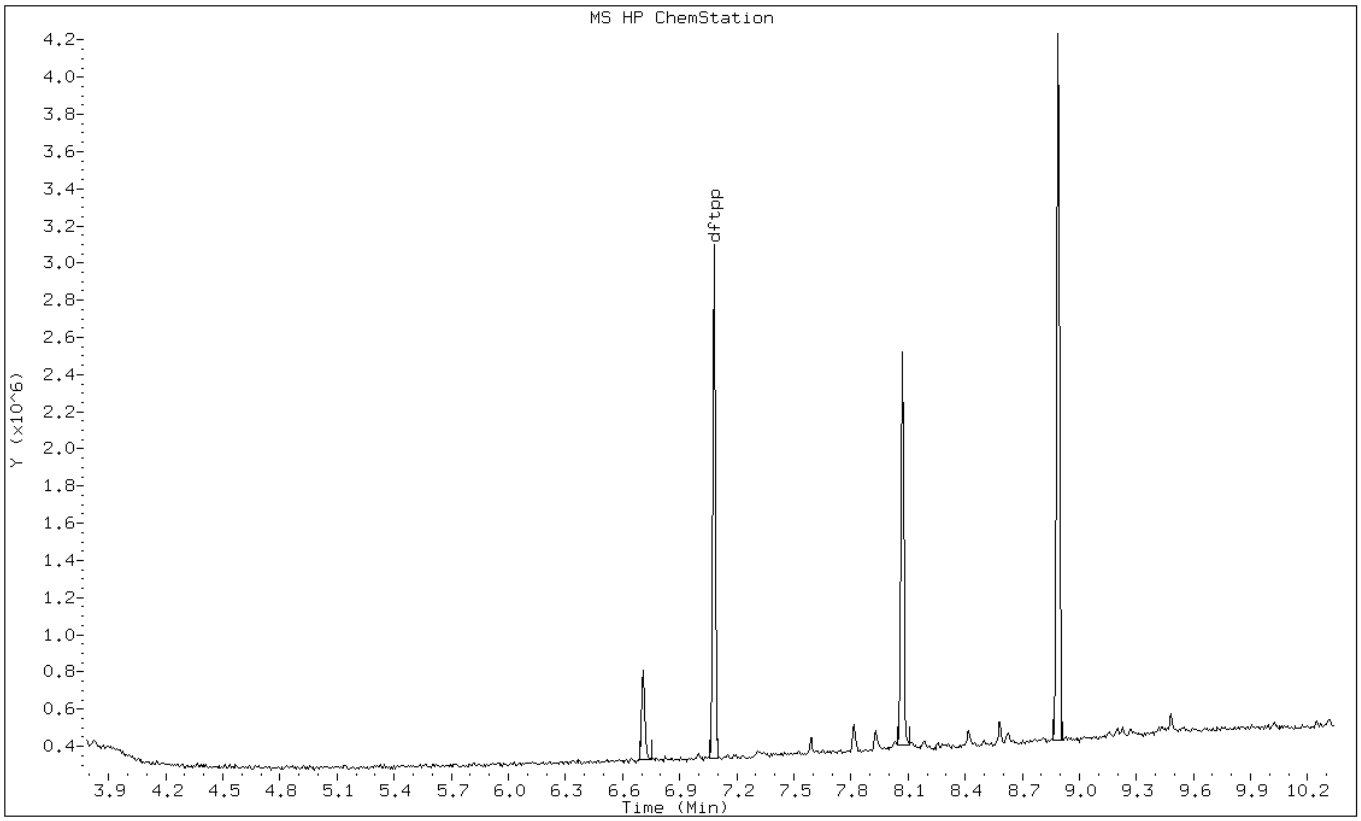
RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp					CAS #: 5074-71-5		
7.081	5.753 (0.000)	442	413248			0.00- 100.00	100.00
7.081	5.753 (0.000)	51	47537			10.00- 80.00	11.50
7.081	5.753 (0.000)	68	0			0.00- 2.00	0.00
7.081	5.753 (0.000)	69	52962			0.00- 0.00	12.82
7.081	5.753 (0.000)	70	530			0.00- 2.00	1.00
7.081	5.753 (0.000)	127	105527			10.00- 80.00	48.07
7.081	5.753 (0.000)	197	0			0.00- 2.00	0.00
7.081	5.753 (0.000)	198	219548			50.00- 0.00	53.13
7.081	5.753 (0.000)	199	15827			5.00- 9.00	7.21
7.081	5.753 (0.000)	275	59920			10.00- 60.00	14.50
7.081	5.753 (0.000)	365	9782			1.00- 0.00	2.37
7.081	5.753 (0.000)	441	0			0.00- 100.00	0.00
7.081	5.753 (0.000)	443	79520			15.00- 24.00	19.24

Data File: kl1402t.d

Date: 14-DEC-2012 07:59

Client ID: DFTPP | Instrument: MSK5973.i

Sample Info: DFTPP-2888302 | Operator: VHB



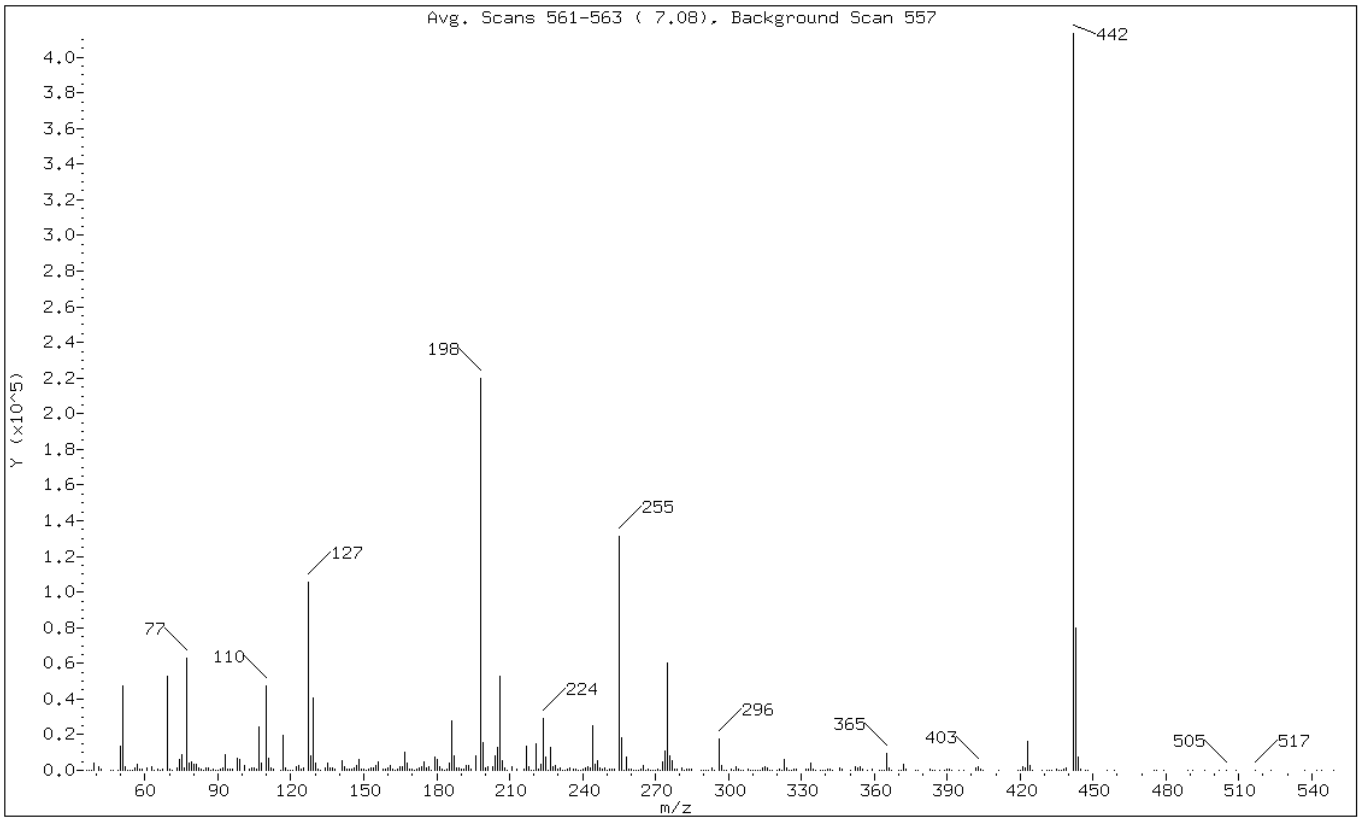
Data File: kl1402t.d

Date: 14-DEC-2012 07:59

Client ID: DFTPP Instrument: MSK5973.i

Sample Info: DFTPP-2888302 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	11.50
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	12.82
70	Less than 2.00% of mass 69	0.13 (1.00)
127	10.00 - 80.00% of mass 198	25.54 (48.07)
197	Less than 2.00% of mass 198	0.00 (0.00)
198	Greater than 50.00% of mass 442	53.13
199	5.00 - 9.00% of mass 198	3.83 (7.21)
275	10.00 - 60.00% of mass 442	14.50
365	Greater than 1.00% of mass 442	2.37
441	Less than 100.00% of mass 443	0.00 (0.00)
443	15.00 - 24.00% of mass 442	19.24

Data File: kl1402t.d

Date: 14-DEC-2012 07:59

Client ID: DFTPP Instrument: MSK5973.i

Sample Info: DFTPP-2888302 Operator: VHB

Data File: /chem/SM/MSK5973.i/1k121412.b/kl1402t.d
Spectrum: Avg. Scans 561-563 (7.08), Background Scan 557
Location of Maximum: 442.00
Number of points: 343

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	147	141.00	5079	235.00	1262	333.00	745
37.00	121	142.00	2000	236.00	698	334.00	4260
38.00	219	143.00	822	237.00	645	335.00	777
39.00	4090	144.00	439	238.00	89	336.00	98
41.00	1712	145.00	397	239.00	233	338.00	83
42.00	733	146.00	1018	240.00	453	339.00	236
46.00	19	147.00	2742	241.00	1120	340.00	251
47.00	276	148.00	5776	242.00	1903	341.00	893
49.00	141	149.00	352	243.00	1175	342.00	653
50.00	13565	150.00	441	244.00	24992	343.00	136
51.00	47536	151.00	292	245.00	3678	346.00	1445
52.00	2364	152.00	590	246.00	5100	347.00	356
53.00	177	153.00	1455	247.00	1211	350.00	61
54.00	97	154.00	1322	248.00	364	352.00	1923
55.00	157	155.00	2577	249.00	1444	353.00	1541
56.00	1408	156.00	4773	250.00	114	354.00	2359
57.00	3204	158.00	744	251.00	381	355.00	581
58.00	822	159.00	499	252.00	685	357.00	59
59.00	488	160.00	1595	253.00	740	359.00	388
61.00	1023	161.00	2658	255.00	131392	362.00	58
63.00	1851	162.00	339	256.00	18368	363.00	71
64.00	8	163.00	190	257.00	288	364.00	67
65.00	484	164.00	804	258.00	7379	365.00	9782
66.00	149	165.00	1840	259.00	985	366.00	1318
67.00	449	166.00	2072	260.00	423	367.00	152
69.00	52960	167.00	10120	261.00	268	370.00	63
70.00	530	168.00	3797	262.00	170	371.00	293
71.00	112	169.00	913	263.00	311	372.00	3541
73.00	1243	170.00	544	264.00	587	373.00	813
74.00	5954	171.00	174	265.00	2658	377.00	58
75.00	8789	172.00	868	266.00	296	378.00	77
76.00	1559	173.00	1207	267.00	352	383.00	834
77.00	63112	174.00	2305	268.00	48	384.00	214
78.00	3814	175.00	4533	269.00	23	385.00	5
79.00	4407	176.00	1321	270.00	268	387.00	54
80.00	3327	177.00	2265	271.00	395	389.00	92
81.00	3534	178.00	297	272.00	130	390.00	595
82.00	1465	179.00	7662	273.00	4775	391.00	485
83.00	839	180.00	5990	274.00	10636	392.00	292
84.00	22	181.00	2132	275.00	59920	395.00	77

85.00	1104	182.00	931	276.00	8404	397.00	100
86.00	1469	183.00	241	277.00	5111	402.00	1459
87.00	63	184.00	810	278.00	589	403.00	1890
88.00	396	185.00	4143	279.00	533	404.00	733
89.00	33	186.00	27816	281.00	1286	405.00	132
90.00	177	187.00	8134	282.00	148	411.00	109
91.00	589	188.00	1503	283.00	428	419.00	62
92.00	1261	189.00	1451	284.00	714	420.00	71
93.00	8722	190.00	611	285.00	395	421.00	2335
94.00	644	191.00	958	289.00	324	422.00	1607
95.00	623	192.00	2743	290.00	215	423.00	16060
96.00	607	193.00	2579	291.00	265	424.00	2917
98.00	6965	194.00	524	292.00	29	425.00	301
99.00	6407	196.00	7789	293.00	1240	429.00	91
101.00	2519	198.00	219520	294.00	262	431.00	2
103.00	899	199.00	15827	296.00	17624	432.00	110
104.00	1685	200.00	1352	297.00	2805	433.00	240
105.00	1586	201.00	1751	298.00	284	435.00	365
106.00	447	203.00	1967	299.00	6	436.00	271
107.00	24376	204.00	8172	301.00	342	437.00	284
108.00	3777	205.00	12973	302.00	334	438.00	644
110.00	47488	206.00	52528	303.00	1800	439.00	1302
111.00	7033	207.00	5279	304.00	911	442.00	413248
112.00	1069	208.00	1376	305.00	105	443.00	79520
113.00	828	209.00	189	306.00	82	444.00	7334
116.00	228	211.00	2199	308.00	460	445.00	572
117.00	19280	213.00	681	309.00	91	447.00	117
118.00	1328	216.00	541	310.00	214	448.00	198
119.00	43	217.00	13858	311.00	308	456.00	98
120.00	211	218.00	1926	312.00	125	459.00	53
121.00	68	219.00	153	313.00	158	475.00	131
122.00	1787	220.00	277	314.00	1305	476.00	157
123.00	2547	221.00	14887	315.00	2256	479.00	71
124.00	878	222.00	927	316.00	1050	489.00	78
125.00	1151	223.00	3643	317.00	186	491.00	109
127.00	105520	224.00	29264	318.00	158	496.00	50
128.00	8171	225.00	7700	320.00	138	502.00	83
129.00	40248	226.00	186	321.00	441	505.00	215
130.00	3769	227.00	12671	322.00	74	509.00	55
131.00	417	228.00	1827	323.00	6089	517.00	73
132.00	247	229.00	2989	324.00	1598	523.00	71
134.00	1285	230.00	414	325.00	303	537.00	54
135.00	3727	231.00	1126	326.00	165	542.00	55
136.00	1128	232.00	102	327.00	990	544.00	51
137.00	1310	233.00	187	328.00	527	549.00	48
138.00	699	234.00	484	332.00	531		

TESTAMERICA SAVANNAH

Data file : /chem/SM/MSK5973.i/1k122112.b/kl2102t.d
Lab Smp Id: DFTPP Client Smp ID: DFTPP
Inj Date : 21-DEC-2012 08:47
Operator : VHB Inst ID: MSK5973.i
Smp Info : DFTPP-2888302; LLPAH
Misc Info :
Comment :
Method : /chem/SM/MSK5973.i/1k122112.b/k-dftppPAHLL-m.m
Meth Date : 25-Nov-2012 11:30 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

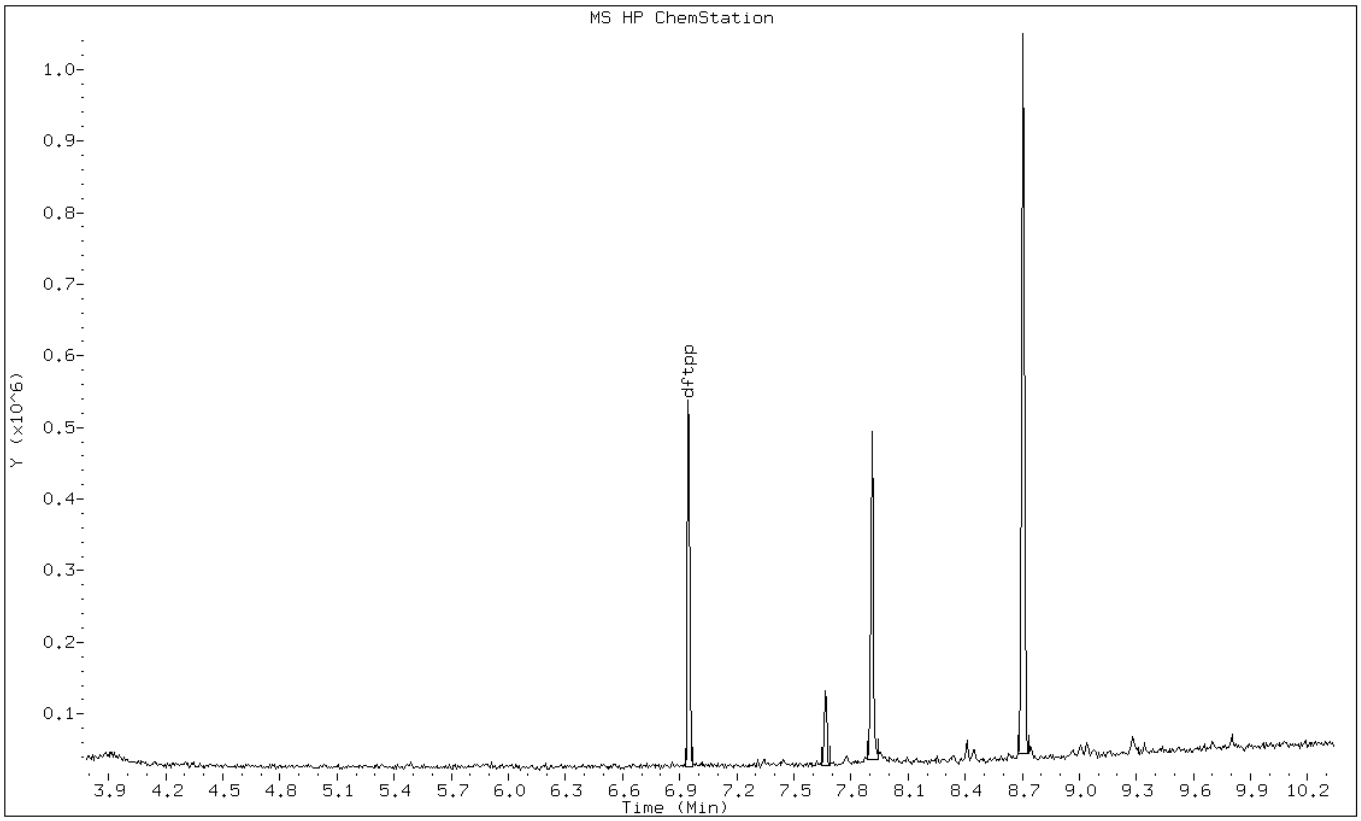
RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp					CAS #: 5074-71-5		
6.946	5.753 (0.000)	442	66527			0.00- 100.00	100.00
6.946	5.753 (0.000)	51	9818			10.00- 80.00	14.76
6.946	5.753 (0.000)	68	107			0.00- 2.00	1.04
6.946	5.753 (0.000)	69	10307			0.00- 0.00	15.49
6.946	5.753 (0.000)	70	130			0.00- 2.00	1.26
6.946	5.753 (0.000)	127	19051			10.00- 80.00	47.85
6.946	5.753 (0.000)	197	0			0.00- 2.00	0.00
6.946	5.753 (0.000)	198	39810			50.00- 0.00	59.84
6.946	5.753 (0.000)	199	2731			5.00- 9.00	6.86
6.946	5.753 (0.000)	275	11287			10.00- 60.00	16.97
6.946	5.753 (0.000)	365	1410			1.00- 0.00	2.12
6.946	5.753 (0.000)	441	10837			0.00- 100.00	85.24
6.946	5.753 (0.000)	443	12714			15.00- 24.00	19.11

Data File: kl2102t.d

Date: 21-DEC-2012 08:47

Client ID: DFTPP | Instrument: MSK5973.i

Sample Info: DFTPP-2888302; LLPAH | Operator: VHB



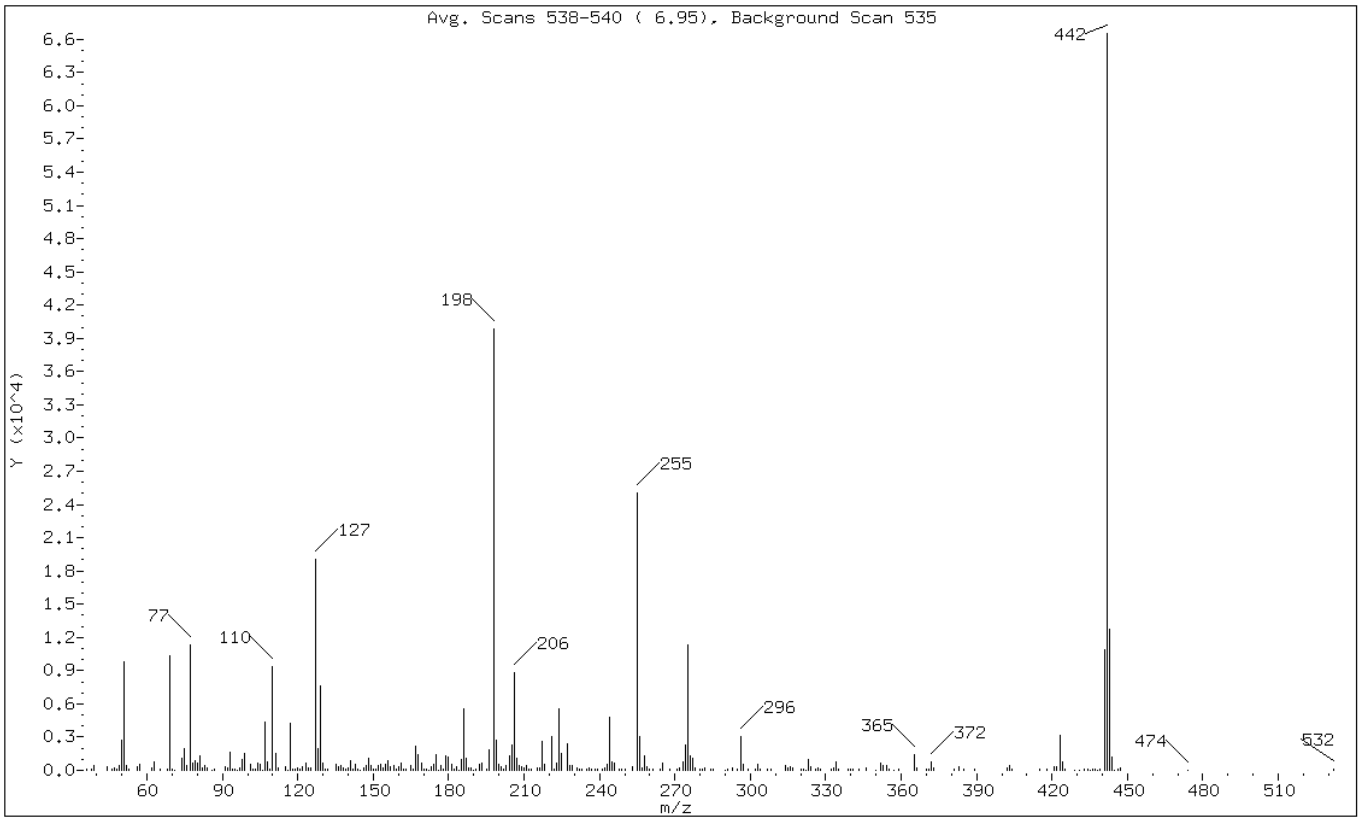
Data File: kl2102t.d

Date: 21-DEC-2012 08:47

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	14.76
68	Less than 2.00% of mass 69	0.16 (1.04)
69	Mass 69 relative abundance	15.49
70	Less than 2.00% of mass 69	0.20 (1.26)
127	10.00 - 80.00% of mass 198	28.64 (47.85)
197	Less than 2.00% of mass 198	0.00 (0.00)
198	Greater than 50.00% of mass 442	59.84
199	5.00 - 9.00% of mass 198	4.11 (6.86)
275	10.00 - 60.00% of mass 442	16.97
365	Greater than 1.00% of mass 442	2.12
441	Less than 100.00% of mass 443	16.29 (85.24)
443	15.00 - 24.00% of mass 442	19.11

Data File: kl2102t.d

Date: 21-DEC-2012 08:47

Client ID: DFTPP Instrument: MSK5973.i

Sample Info: DFTPP-2888302; LLPAH Operator: VHB

Data File: /chem/SM/MSK5973.i/1k122112.b/kl2102t.d
Spectrum: Avg. Scans 538-540 (6.95), Background Scan 535
Location of Maximum: 442.00
Number of points: 279

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	120	131.00	130	206.00	8854	304.00	69
38.00	107	132.00	139	207.00	1132	307.00	58
39.00	408	135.00	586	208.00	450	308.00	96
44.00	275	136.00	288	209.00	347	314.00	460
46.00	75	137.00	472	210.00	254	315.00	228
47.00	223	138.00	180	211.00	488	316.00	307
48.00	66	139.00	81	212.00	125	317.00	174
49.00	408	140.00	245	213.00	92	320.00	72
50.00	2710	141.00	828	215.00	209	321.00	135
51.00	9818	142.00	138	216.00	205	322.00	54
52.00	429	143.00	531	217.00	2638	323.00	957
53.00	82	144.00	74	218.00	514	324.00	364
56.00	290	145.00	16	221.00	3063	326.00	89
57.00	504	146.00	181	222.00	101	327.00	197
62.00	229	147.00	382	223.00	621	328.00	160
63.00	769	148.00	1068	224.00	5562	332.00	57
65.00	140	149.00	444	225.00	1567	333.00	167
68.00	107	150.00	144	227.00	2436	334.00	772
69.00	10307	151.00	124	228.00	393	335.00	92
70.00	130	152.00	397	229.00	479	339.00	160
71.00	54	153.00	540	231.00	206	340.00	58
74.00	1096	154.00	263	232.00	70	341.00	121
75.00	1969	155.00	503	233.00	78	343.00	91
76.00	478	156.00	919	235.00	55	346.00	229
77.00	11325	157.00	331	236.00	213	350.00	50
78.00	649	158.00	421	237.00	150	352.00	601
79.00	828	159.00	113	238.00	78	353.00	429
80.00	703	160.00	313	239.00	133	354.00	393
81.00	1324	161.00	662	241.00	78	355.00	125
82.00	262	162.00	141	242.00	270	357.00	51
83.00	440	163.00	152	243.00	491	359.00	111
84.00	166	165.00	465	244.00	4841	365.00	1410
86.00	35	166.00	130	245.00	804	366.00	206
87.00	100	167.00	2204	246.00	621	370.00	110
91.00	368	168.00	1399	248.00	107	371.00	132
92.00	236	169.00	619	249.00	152	372.00	742
93.00	1679	170.00	59	250.00	71	373.00	203
94.00	96	171.00	161	253.00	289	381.00	66
95.00	91	172.00	18	255.00	25048	383.00	300
96.00	3	173.00	334	256.00	3062	385.00	124

97.00	251	174.00	504
98.00	949	175.00	1375
99.00	1473	176.00	24
101.00	562	177.00	418
102.00	91	178.00	109
103.00	162	179.00	1335
104.00	671	180.00	1196
105.00	544	181.00	498
106.00	51	182.00	142
107.00	4323	183.00	305
108.00	812	184.00	53
109.00	130	185.00	954
110.00	9396	186.00	5506
111.00	1570	187.00	1132
112.00	259	188.00	184
115.00	301	189.00	225
116.00	30	190.00	50
117.00	4279	191.00	79
118.00	154	192.00	546
119.00	132	193.00	649
120.00	177	195.00	74
121.00	80	196.00	1840
122.00	325	198.00	39808
123.00	641	199.00	2731
124.00	202	200.00	490
125.00	239	201.00	369
127.00	19048	202.00	110
128.00	1964	203.00	391
129.00	7599	204.00	1318
130.00	613	205.00	2319

257.00	214	389.00	87
258.00	1339	402.00	258
259.00	291	403.00	414
260.00	75	404.00	67
261.00	63	415.00	60
264.00	146	418.00	94
265.00	612	421.00	374
268.00	62	422.00	375
271.00	81	423.00	3193
272.00	177	424.00	719
273.00	732	425.00	97
274.00	2257	429.00	50
275.00	11287	431.00	54
276.00	1255	433.00	88
277.00	1050	434.00	137
278.00	249	435.00	52
280.00	82	436.00	63
281.00	102	437.00	81
282.00	245	438.00	51
284.00	73	439.00	57
285.00	107	441.00	10837
290.00	53	442.00	66520
291.00	67	443.00	12714
293.00	183	444.00	1225
295.00	127	445.00	52
296.00	3025	446.00	126
297.00	562	447.00	214
299.00	63	474.00	52
302.00	119	532.00	67
303.00	528		

TESTAMERICA SAVANNAH

Data file : /chem/SM/MSK5973.i/1k122612.b/kl2611.d
Lab Smp Id: DFTPP Client Smp ID: DFTPP
Inj Date : 26-DEC-2012 14:51
Operator : VHB Inst ID: MSK5973.i
Smp Info : DFTPP-2888302; LLPAH
Misc Info :
Comment :
Method : /chem/SM/MSK5973.i/1k122612.b/k-dftppPAHLL-m.m
Meth Date : 25-Nov-2012 11:30 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

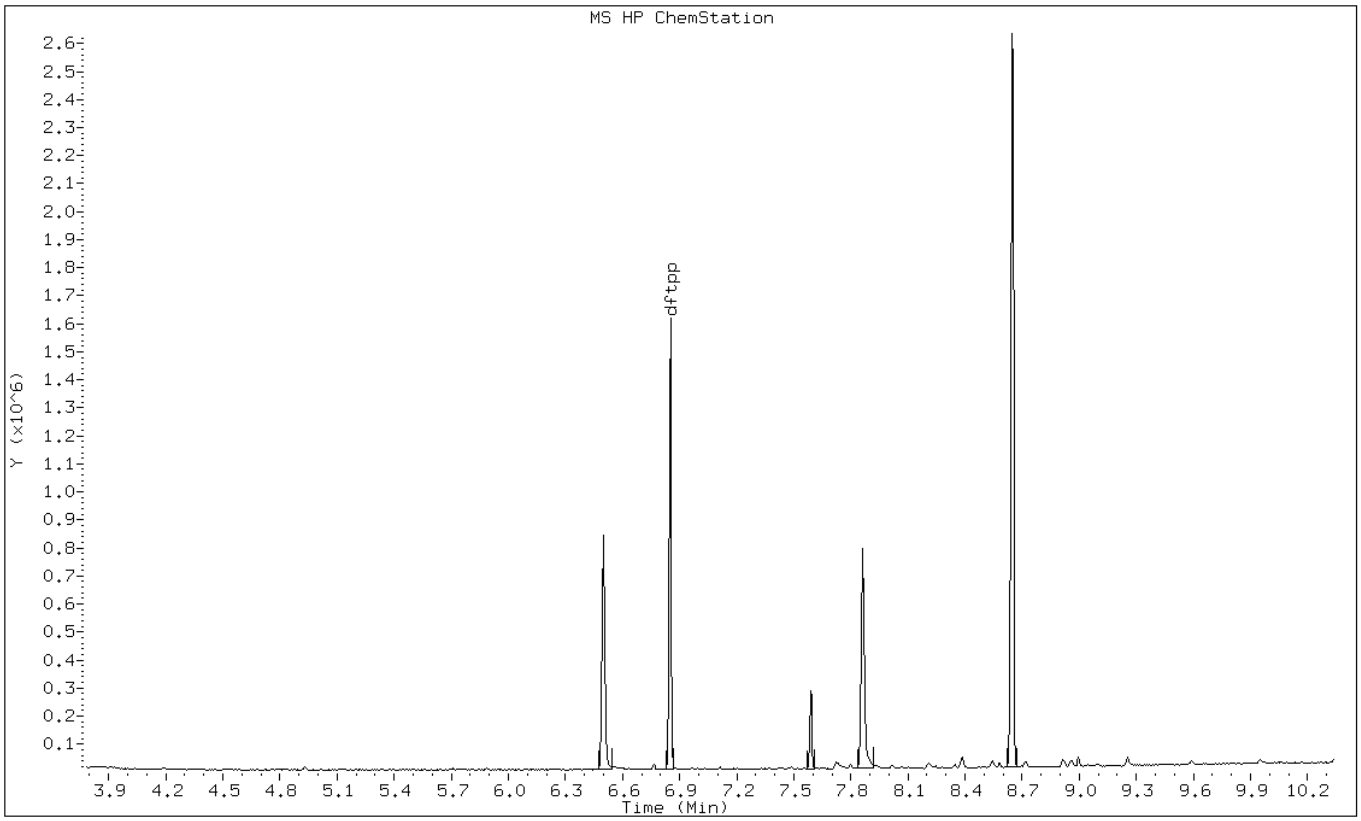
RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp					CAS #: 5074-71-5		
6.852	5.753 (0.000)	442	246016			0.00- 100.00	100.00
6.852	5.753 (0.000)	51	26645			10.00- 80.00	10.83
6.852	5.753 (0.000)	68	62			0.00- 2.00	0.22
6.852	5.753 (0.000)	69	28134			0.00- 0.00	11.44
6.852	5.753 (0.000)	70	246			0.00- 2.00	0.87
6.852	5.753 (0.000)	127	58120			10.00- 80.00	45.47
6.852	5.753 (0.000)	197	0			0.00- 2.00	0.00
6.852	5.753 (0.000)	198	127829			50.00- 0.00	51.96
6.852	5.753 (0.000)	199	8611			5.00- 9.00	6.74
6.852	5.753 (0.000)	275	34930			10.00- 60.00	14.20
6.852	5.753 (0.000)	365	5274			1.00- 0.00	2.14
6.852	5.753 (0.000)	441	0			0.00- 100.00	0.00
6.852	5.753 (0.000)	443	47568			15.00- 24.00	19.34

Data File: kl2611t.d

Date: 26-DEC-2012 14:51

Client ID: DFTPP | Instrument: MSK5973.i

Sample Info: DFTPP-2888302; LLPAH | Operator: VHB



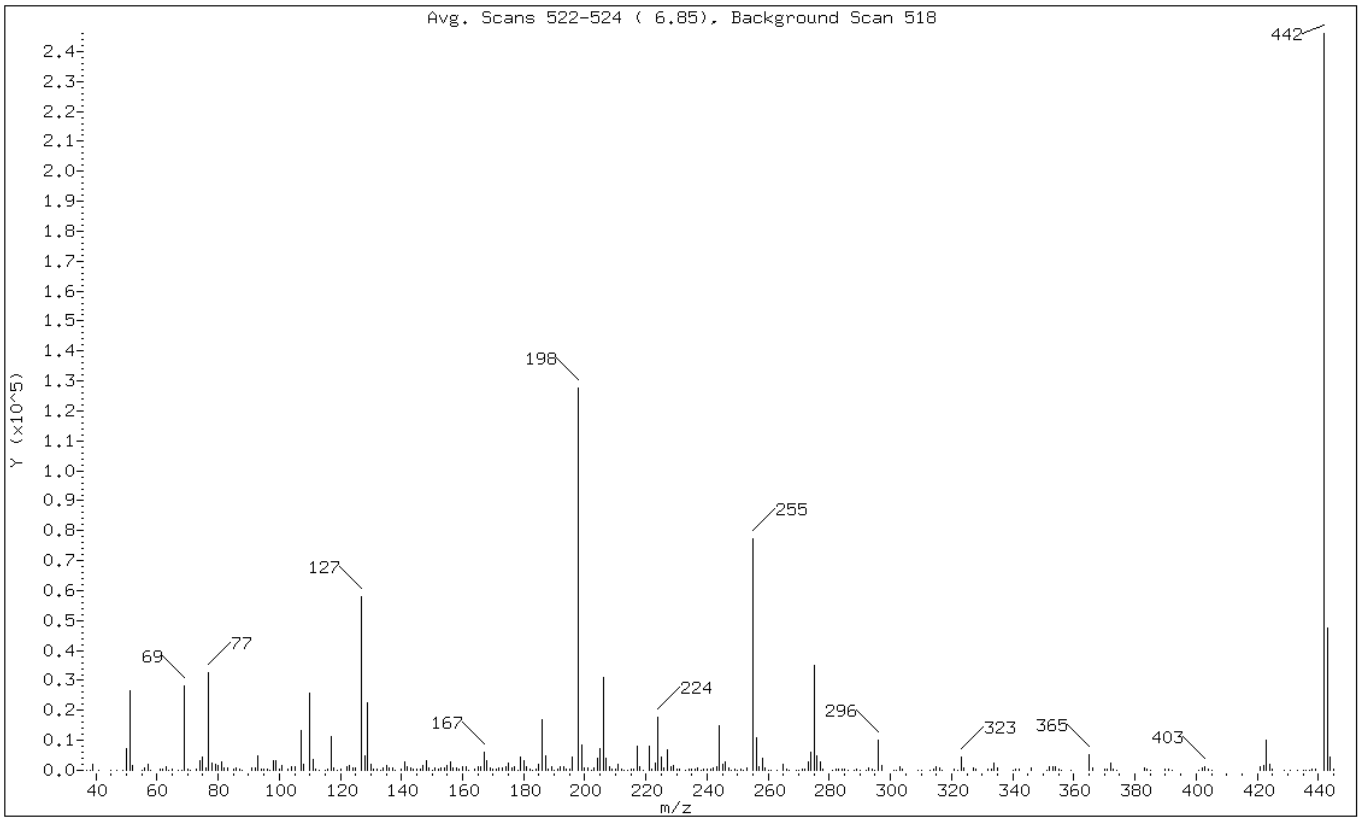
Data File: kl2611t.d

Date: 26-DEC-2012 14:51

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	10.83
68	Less than 2.00% of mass 69	0.03 (0.22)
69	Mass 69 relative abundance	11.44
70	Less than 2.00% of mass 69	0.10 (0.87)
127	10.00 - 80.00% of mass 198	23.62 (45.47)
197	Less than 2.00% of mass 198	0.00 (0.00)
198	Greater than 50.00% of mass 442	51.96
199	5.00 - 9.00% of mass 198	3.50 (6.74)
275	10.00 - 60.00% of mass 442	14.20
365	Greater than 1.00% of mass 442	2.14
441	Less than 100.00% of mass 443	0.00 (0.00)
443	15.00 - 24.00% of mass 442	19.34

Data File: kl2611t.d

Date: 26-DEC-2012 14:51

Client ID: DFTPP Instrument: MSK5973.i

Sample Info: DFTPP-2888302; LLPAH Operator: VHB

Data File: /chem/SM/MSK5973.i/1k122612.b/kl2611t.d
Spectrum: Avg. Scans 522-524 (6.85), Background Scan 518
Location of Maximum: 442.00
Number of points: 294

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	79	132.00	233	209.00	546	293.00	688
38.00	182	133.00	36	210.00	555	294.00	203
39.00	2154	134.00	680	211.00	1861	295.00	52
41.00	133	135.00	1807	212.00	217	296.00	9945
45.00	53	136.00	766	213.00	67	297.00	1558
47.00	62	137.00	934	214.00	66	301.00	201
49.00	92	138.00	187	215.00	210	302.00	159
50.00	7137	140.00	266	216.00	319	303.00	1301
51.00	26640	141.00	2796	217.00	8153	304.00	320
52.00	1456	142.00	1096	218.00	1227	309.00	67
55.00	30	143.00	820	219.00	188	310.00	78
56.00	755	144.00	216	221.00	8254	313.00	79
57.00	1907	145.00	231	222.00	209	314.00	580
58.00	149	146.00	363	223.00	2221	315.00	1331
61.00	406	147.00	1514	224.00	17584	316.00	701
62.00	603	148.00	3165	225.00	4494	317.00	93
63.00	1269	149.00	676	226.00	656	321.00	421
64.00	94	150.00	97	227.00	6955	322.00	72
65.00	581	151.00	644	228.00	1071	323.00	4269
67.00	58	152.00	290	229.00	1722	324.00	757
68.00	62	153.00	955	230.00	260	327.00	726
69.00	28128	154.00	831	231.00	584	328.00	327
70.00	246	155.00	1662	233.00	179	332.00	371
71.00	86	156.00	2717	234.00	483	333.00	342
73.00	290	157.00	925	235.00	571	334.00	2367
74.00	3052	158.00	663	236.00	359	335.00	692
75.00	4457	159.00	393	237.00	833	340.00	116
76.00	941	160.00	1014	238.00	61	341.00	364
77.00	32624	161.00	1283	239.00	393	342.00	206
78.00	2431	162.00	130	240.00	278	346.00	911
79.00	2210	164.00	287	241.00	442	351.00	63
80.00	1678	165.00	1008	242.00	974	352.00	1270
81.00	2936	166.00	1022	243.00	1188	353.00	1018
82.00	643	167.00	5914	244.00	14985	354.00	1296
83.00	771	168.00	3214	245.00	2064	355.00	426
85.00	522	169.00	714	246.00	2799	356.00	106
86.00	803	170.00	274	247.00	699	359.00	52
87.00	307	171.00	319	248.00	185	365.00	5274
88.00	98	172.00	624	249.00	572	366.00	876
91.00	773	173.00	669	250.00	150	370.00	239

92.00	872	174.00	1299	251.00	263	371.00	299
93.00	4640	175.00	2275	252.00	201	372.00	2337
94.00	451	176.00	651	253.00	747	373.00	521
95.00	243	177.00	1342	255.00	77144	374.00	85
96.00	265	178.00	68	256.00	10875	383.00	667
97.00	62	179.00	4450	257.00	1116	384.00	304
98.00	3371	180.00	3313	258.00	4076	385.00	59
99.00	3128	181.00	1409	259.00	607	390.00	337
100.00	530	182.00	213	260.00	148	391.00	313
101.00	1772	183.00	79	261.00	65	392.00	136
103.00	524	184.00	516	263.00	146	401.00	141
104.00	1231	185.00	2091	265.00	1976	402.00	818
105.00	1109	186.00	16776	266.00	283	403.00	1236
107.00	13347	187.00	4704	267.00	191	404.00	560
108.00	2150	188.00	471	269.00	54	405.00	105
110.00	25656	189.00	1055	270.00	57	421.00	1315
111.00	3690	190.00	184	271.00	252	422.00	1412
112.00	488	191.00	505	272.00	205	423.00	9891
113.00	179	192.00	1356	273.00	2776	424.00	2188
115.00	63	193.00	1284	274.00	6169	425.00	354
116.00	369	194.00	499	275.00	34928	429.00	159
117.00	11191	195.00	375	276.00	4942	431.00	57
118.00	993	196.00	4544	277.00	2839	433.00	66
119.00	164	198.00	127824	278.00	492	435.00	139
120.00	209	199.00	8611	281.00	89	436.00	151
122.00	1262	200.00	656	282.00	217	437.00	160
123.00	1723	201.00	802	283.00	356	438.00	285
124.00	715	202.00	108	284.00	334	439.00	564
125.00	738	203.00	999	285.00	593	442.00	246016
127.00	58120	204.00	3960	286.00	126	443.00	47568
128.00	4823	205.00	7311	288.00	50	444.00	4385
129.00	22728	206.00	30984	289.00	283	445.00	286
130.00	2045	207.00	3899	290.00	54		
131.00	442	208.00	1027	292.00	123		

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

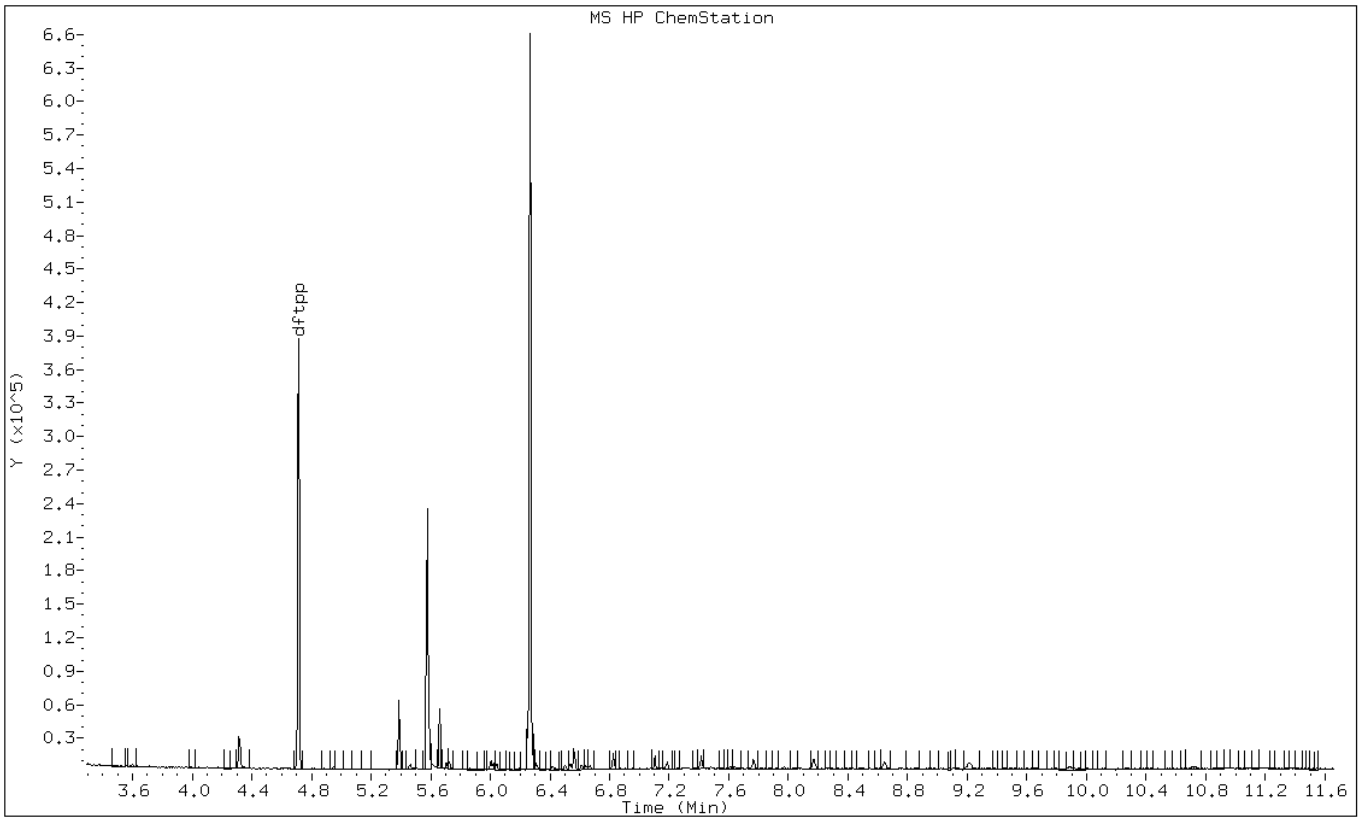
RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
4.715	5.785	(0.000)	442	38464			0.00- 100.00	100.00
4.715	5.785	(0.000)	51	7504			10.00- 80.00	19.51
4.715	5.785	(0.000)	68	156			0.00- 2.00	1.97
4.715	5.785	(0.000)	69	7933			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



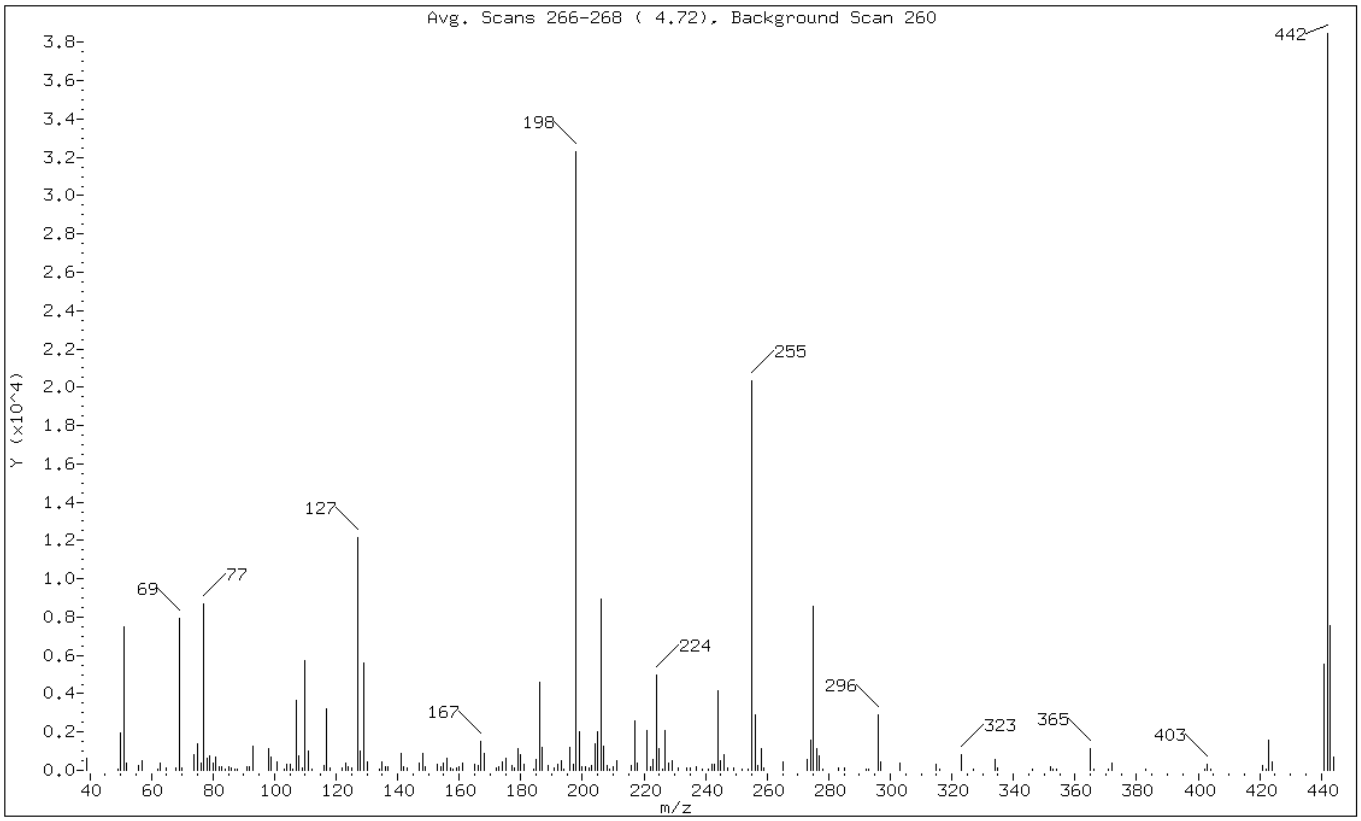
Data File: yl2105t.d

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/2y122112.b/yl2125t.d
Lab Smp Id: DFTPP Client Smp ID: DFTPP
Inj Date : 21-DEC-2012 19:15
Operator : VHB Inst ID: MSY5975.i
Smp Info : DFTPP 288302; LLPAH
Misc Info :
Comment :
Method : /chem/SM/MSY5975.i/2y122112.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

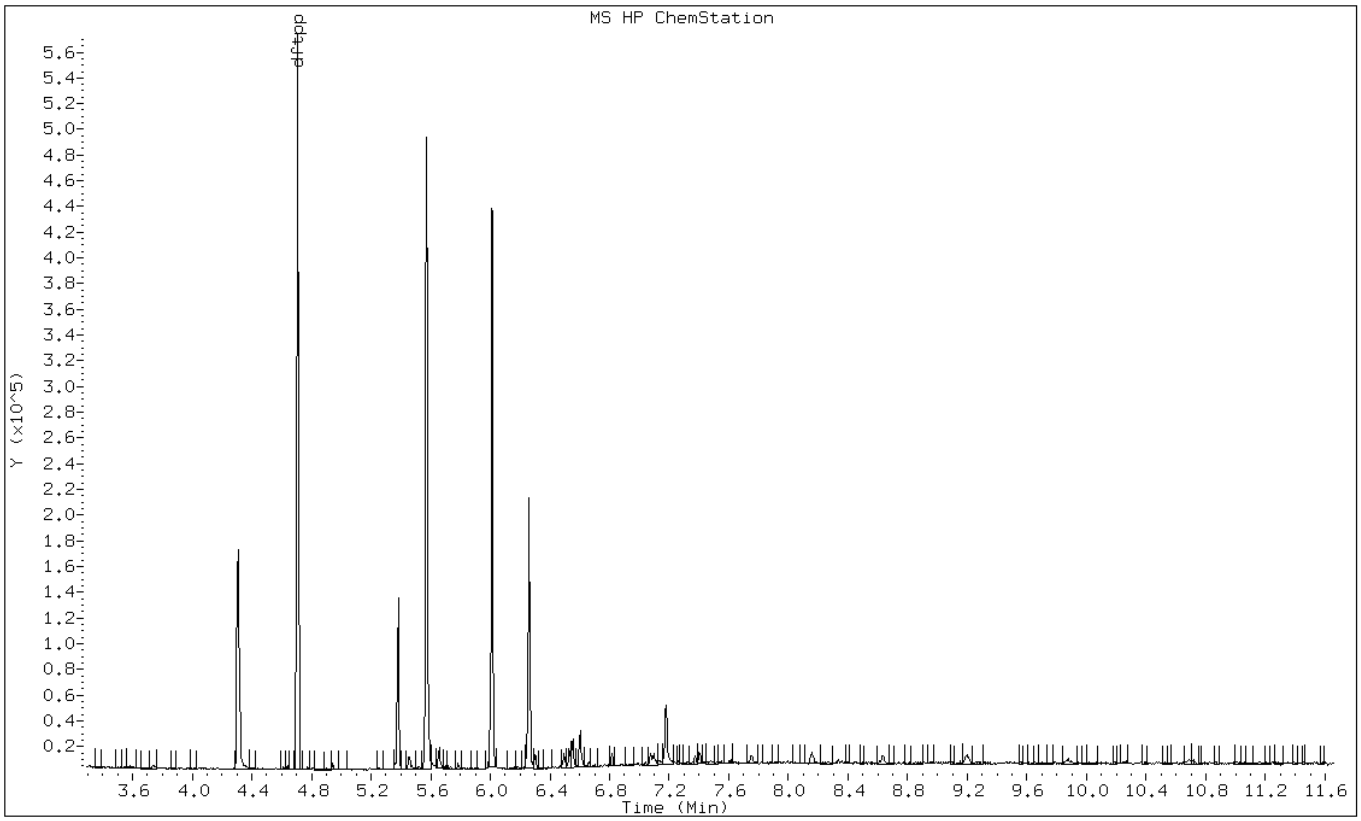
RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
4.710	5.785	(0.000)	442	28055			0.00- 100.00	70.41
4.710	5.785	(0.000)	51	12377			10.00- 80.00	44.12
4.710	5.785	(0.000)	68	191			0.00- 2.00	1.49
4.710	5.785	(0.000)	69	12804			0.00- 0.00	45.64
4.710	5.785	(0.000)	70	0			0.00- 2.00	0.00
4.710	5.785	(0.000)	127	19275			10.00- 80.00	48.37
4.710	5.785	(0.000)	197	408			0.00- 2.00	1.02
4.710	5.785	(0.000)	198	39848			50.00- 0.00	142.04
4.710	5.785	(0.000)	199	2666			5.00- 9.00	6.69
4.710	5.785	(0.000)	275	8812			10.00- 60.00	31.41
4.710	5.785	(0.000)	365	693			1.00- 0.00	2.47
4.710	5.785	(0.000)	441	4278			0.00- 100.00	77.95
4.710	5.785	(0.000)	443	5488			15.00- 24.00	19.56

Data File: yl2125t.d

Date: 21-DEC-2012 19:15

Client ID: DFTPP | Instrument: MSY5975.i

Sample Info: DFTPP 288302; LLPAH | Operator: VHB



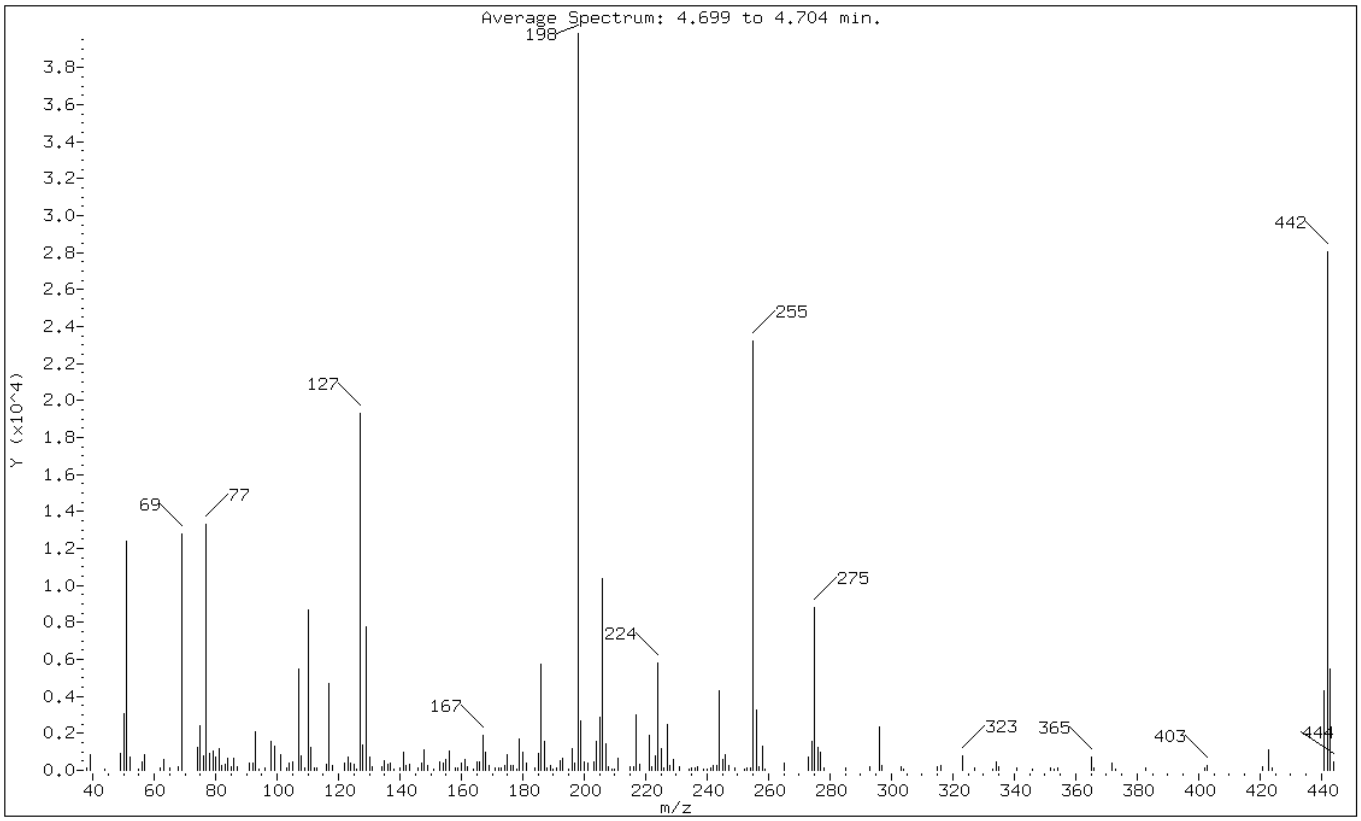
Data File: yl2125t.d

Date: 21-DEC-2012 19:15

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	44.12
68	Less than 2.00% of mass 69	0.68 (1.49)
69	Mass 69 relative abundance	45.64
70	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00% of mass 198	68.70 (48.37)
197	Less than 2.00% of mass 198	1.45 (1.02)
198	Greater than 50.00% of mass 442	142.04
199	5.00 - 9.00% of mass 198	9.50 (6.69)
275	10.00 - 60.00% of mass 442	31.41
365	Greater than 1.00% of mass 442	2.47
441	Less than 100.00% of mass 443	15.25 (77.95)
443	15.00 - 24.00% of mass 442	19.56

Data File: yl2125t.d

Date: 21-DEC-2012 19:15

Client ID: DFTPP Instrument: MSY5975.i

Sample Info: DFTPP 288302; LLPAH Operator: VHB

Data File: /chem/SM/MSY5975.i/2y122112.b/yl2125t.d
Spectrum: Average Spectrum: 4.699 to 4.704 min.
Location of Maximum: 198.00
Number of points: 201

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	101	123.00	692	186.00	5716	249.00	104
39.00	870	124.00	381	187.00	1587	252.00	75
44.00	79	125.00	334	188.00	114	253.00	155
49.00	917	126.00	75	189.00	267	254.00	136
50.00	3079	127.00	19272	190.00	96	255.00	23224
51.00	12377	128.00	1377	191.00	109	256.00	3260
52.00	687	129.00	7749	192.00	510	257.00	222
55.00	83	130.00	730	193.00	675	258.00	1297
56.00	438	131.00	202	195.00	79	259.00	97
57.00	871	134.00	171	196.00	1160	265.00	412
62.00	103	135.00	492	197.00	408	273.00	704
63.00	582	136.00	350	198.00	39848	274.00	1545
65.00	123	137.00	388	199.00	2666	275.00	8812
68.00	191	138.00	84	200.00	428	276.00	1233
69.00	12804	140.00	115	201.00	412	277.00	956
74.00	1255	141.00	953	203.00	446	278.00	151
75.00	2391	142.00	279	204.00	1539	285.00	145
76.00	783	143.00	325	205.00	2841	293.00	175
77.00	13333	146.00	124	206.00	10339	296.00	2367
78.00	926	147.00	405	207.00	1439	297.00	269
79.00	1074	148.00	1114	208.00	174	303.00	177
80.00	740	149.00	269	209.00	75	304.00	82
81.00	1188	151.00	76	210.00	94	315.00	200
82.00	278	153.00	476	211.00	629	316.00	233
83.00	328	154.00	363	215.00	179	323.00	792
84.00	664	155.00	561	216.00	181	327.00	153
85.00	182	156.00	1028	217.00	2971	333.00	85
86.00	630	158.00	158	218.00	332	334.00	459
87.00	170	159.00	120	221.00	1870	335.00	168
91.00	359	160.00	403	222.00	226	341.00	117
92.00	388	161.00	601	223.00	773	346.00	87
93.00	2076	162.00	169	224.00	5819	352.00	144
94.00	97	164.00	93	225.00	1177	353.00	84
96.00	98	165.00	443	226.00	113	354.00	133
98.00	1559	166.00	425	227.00	2507	365.00	693
99.00	1285	167.00	1874	228.00	255	366.00	142
101.00	823	168.00	953	229.00	574	372.00	377
103.00	107	169.00	259	231.00	215	373.00	76
104.00	395	171.00	103	234.00	80	383.00	119
105.00	470	172.00	136	235.00	126	402.00	127

107.00	5503	173.00	151	236.00	100	403.00	267
108.00	755	174.00	232	237.00	188	421.00	181
109.00	139	175.00	872	239.00	86	423.00	1109
110.00	8659	176.00	279	240.00	93	424.00	153
111.00	1216	177.00	235	241.00	114	441.00	4278
112.00	108	178.00	81	242.00	245	442.00	28048
113.00	98	179.00	1718	243.00	286	443.00	5488
116.00	307	180.00	952	244.00	4311	444.00	481
117.00	4694	181.00	406	245.00	559		
118.00	230	184.00	129	246.00	855		
122.00	421	185.00	885	247.00	230		

TESTAMERICA SAVANNAH

Data file : /chem/SM/MSY5975.i/2y122712.b/yl2701t.d
Lab Smp Id: DFTPP Client Smp ID: DFTPP
Inj Date : 27-DEC-2012 13:57
Operator : VHB Inst ID: MSY5975.i
Smp Info : DFTPP-2888302 ; LLPAH
Misc Info :
Comment :
Method : /chem/SM/MSY5975.i/2y122712.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

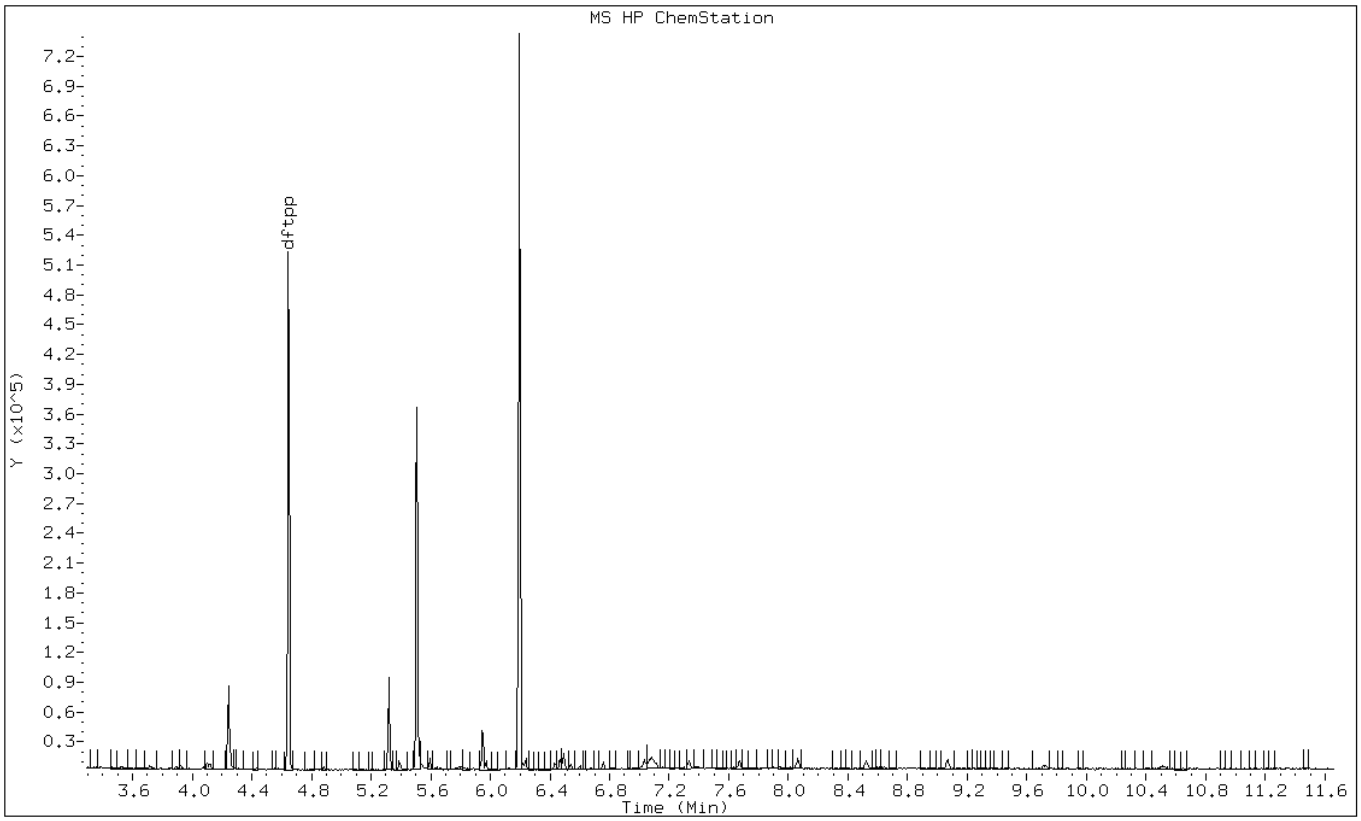
RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp					CAS #: 5074-71-5		
4.645	5.785 (0.000)	442	42166			0.00- 100.00	91.27
4.645	5.785 (0.000)	51	12443			10.00- 80.00	29.51
4.645	5.785 (0.000)	68	180			0.00- 2.00	1.32
4.645	5.785 (0.000)	69	13671			0.00- 0.00	32.42
4.645	5.785 (0.000)	70	0			0.00- 2.00	0.00
4.645	5.785 (0.000)	127	19734			10.00- 80.00	42.72
4.645	5.785 (0.000)	197	424			0.00- 2.00	0.92
4.645	5.785 (0.000)	198	46197			50.00- 0.00	109.56
4.645	5.785 (0.000)	199	3390			5.00- 9.00	7.34
4.645	5.785 (0.000)	275	11249			10.00- 60.00	26.68
4.645	5.785 (0.000)	365	1510			1.00- 0.00	3.58
4.645	5.785 (0.000)	441	6049			0.00- 100.00	69.17
4.645	5.785 (0.000)	443	8745			15.00- 24.00	20.74

Data File: yl2701t.d

Date: 27-DEC-2012 13:57

Client ID: DFTPP | Instrument: MSY5975.i

Sample Info: DFTPP-2888302 ; LLPAH | Operator: VHB



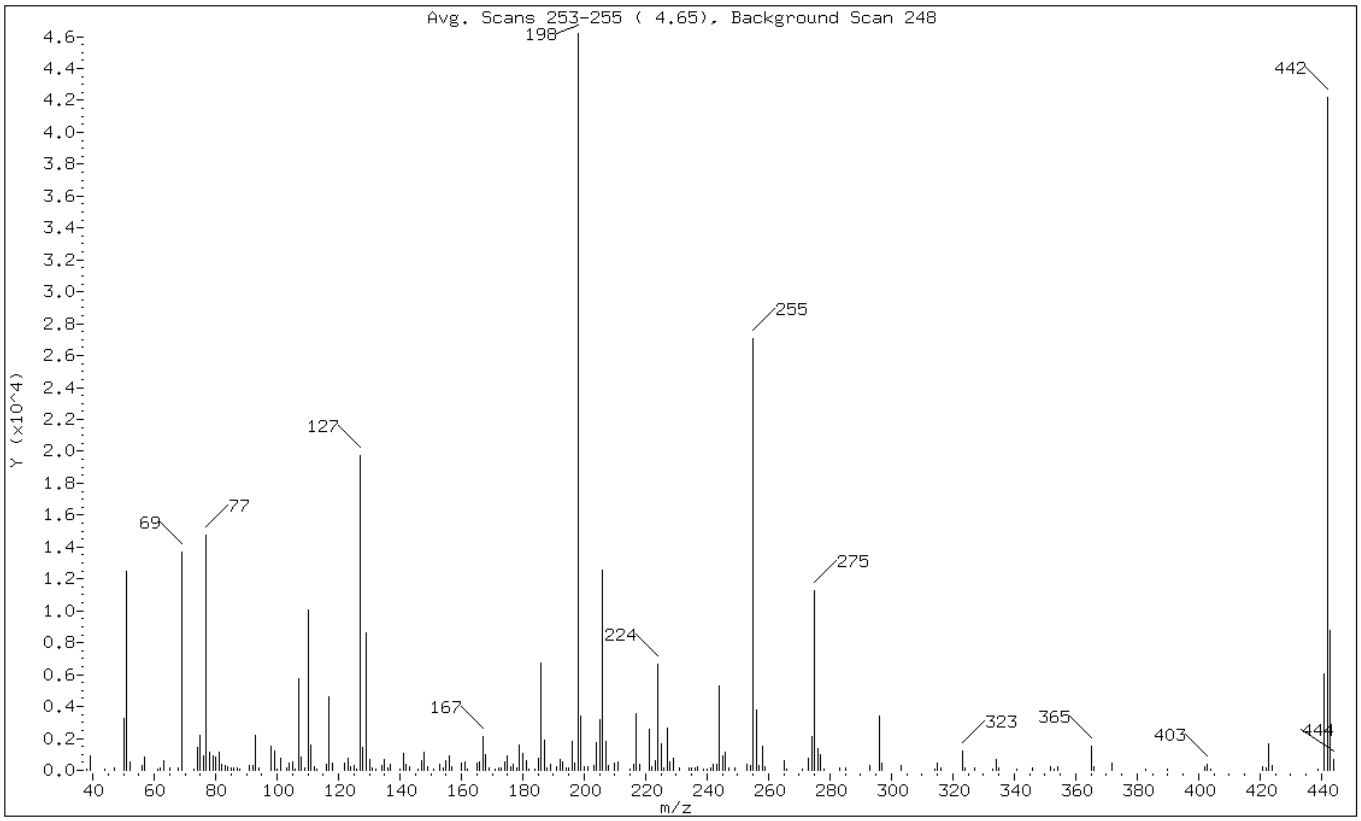
Data File: yl2701t.d

Date: 27-DEC-2012 13:57

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	29.51
68	Less than 2.00% of mass 69	0.43 (1.32)
69	Mass 69 relative abundance	32.42
70	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00% of mass 198	46.80 (42.72)
197	Less than 2.00% of mass 198	1.01 (0.92)
198	Greater than 50.00% of mass 442	109.56
199	5.00 - 9.00% of mass 198	8.04 (7.34)
275	10.00 - 60.00% of mass 442	26.68
365	Greater than 1.00% of mass 442	3.58
441	Less than 100.00% of mass 443	14.35 (69.17)
443	15.00 - 24.00% of mass 442	20.74

Data File: yl2701t.d

Date: 27-DEC-2012 13:57

Client ID: DFTPP Instrument: MSY5975.i

Sample Info: DFTPP-2888302 ; LLPAH Operator: VHB

Data File: /chem/SM/MSY5975.i/2y122712.b/yl2701t.d
Spectrum: Avg. Scans 253-255 (4.65), Background Scan 248
Location of Maximum: 198.00
Number of points: 208

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	60	122.00	490	188.00	154	257.00	330
39.00	890	123.00	768	189.00	352	258.00	1502
44.00	110	124.00	214	191.00	241	259.00	237
47.00	122	125.00	324	192.00	672	265.00	630
50.00	3226	126.00	77	193.00	559	266.00	54
51.00	12443	127.00	19728	194.00	170	271.00	52
52.00	545	128.00	1462	195.00	129	273.00	784
56.00	327	129.00	8625	196.00	1822	274.00	2094
57.00	851	130.00	677	197.00	424	275.00	11249
61.00	73	131.00	141	198.00	46192	276.00	1374
62.00	151	132.00	52	199.00	3390	277.00	949
63.00	594	134.00	298	200.00	244	278.00	51
65.00	123	135.00	662	201.00	191	283.00	146
68.00	180	136.00	178	203.00	272	285.00	174
69.00	13671	137.00	361	204.00	1747	293.00	309
73.00	58	140.00	56	205.00	3148	296.00	3395
74.00	1420	141.00	1048	206.00	12586	297.00	490
75.00	2197	142.00	385	207.00	1829	303.00	325
76.00	871	143.00	226	208.00	311	314.00	54
77.00	14738	146.00	74	210.00	427	315.00	465
78.00	1150	147.00	610	211.00	526	316.00	127
79.00	939	148.00	1161	215.00	63	323.00	1200
80.00	839	149.00	217	216.00	360	324.00	178
81.00	1142	151.00	98	217.00	3552	327.00	132
82.00	341	153.00	353	218.00	372	333.00	51
83.00	339	154.00	176	221.00	2564	334.00	668
84.00	200	155.00	598	222.00	227	335.00	161
85.00	149	156.00	928	223.00	631	341.00	73
86.00	146	157.00	250	224.00	6649	346.00	189
87.00	123	160.00	428	225.00	1643	352.00	239
88.00	52	161.00	514	226.00	173	353.00	61
91.00	299	162.00	109	227.00	2678	354.00	239
92.00	338	165.00	442	228.00	505	365.00	1510
93.00	2155	166.00	502	229.00	734	366.00	191
94.00	148	167.00	2118	231.00	187	372.00	491
98.00	1476	168.00	979	234.00	131	383.00	55
99.00	1201	169.00	154	235.00	176	390.00	58
100.00	70	171.00	56	236.00	168	402.00	239
101.00	755	172.00	160	237.00	221	403.00	386
103.00	127	173.00	183	239.00	64	404.00	50

104.00	476	174.00	535
105.00	523	175.00	930
106.00	61	176.00	258
107.00	5719	177.00	390
108.00	844	178.00	135
109.00	150	179.00	1593
110.00	10040	180.00	1030
111.00	1608	181.00	576
112.00	246	182.00	72
113.00	85	184.00	79
116.00	384	185.00	734
117.00	4601	186.00	6747
118.00	442	187.00	1870

240.00	70	421.00	212
241.00	149	422.00	171
242.00	389	423.00	1692
243.00	385	424.00	282
244.00	5325	439.00	71
245.00	919	441.00	6049
246.00	1128	442.00	42160
247.00	186	443.00	8745
249.00	165	444.00	713
253.00	349		
254.00	269		
255.00	27040		
256.00	3762		

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah
Job No.: 680-85860-4
SDG No.: 68085860-4
Client Sample ID:
Lab Sample ID: MB 680-260564/17-A
Matrix: Solid
Lab File ID: kl2105.d
Analysis Method: 8270C_LL_PAH
Date Collected:
Extract. Method: 3546
Date Extracted: 12/20/2012 18:29
Sample wt/vol: 30.14(g)
Date Analyzed: 12/21/2012 09:53
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.: 261200
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	6.7	U	6.7	3.1
91-57-6	2-Methylnaphthalene	6.7	U	6.7	3.3
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
86-73-7	Fluorene	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
129-00-0	Pyrene	6.7	U	6.7	3.3
85-01-8	Phenanthrene	6.7	U	6.7	2.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	67		36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k122112.b/kl2105.d
Lab Smp Id: mb 680-260564/17-A
Inj Date : 21-DEC-2012 09:53
Operator : LEG Inst ID: MSK5973.i
Smp Info : mb 680-260564/17-A
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122112.b/k-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 09:18 chemist Quant Type: ISTD
Cal Date : 14-DEC-2012 10:35 Cal File: kl1409q.d
Als bottle: 5 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

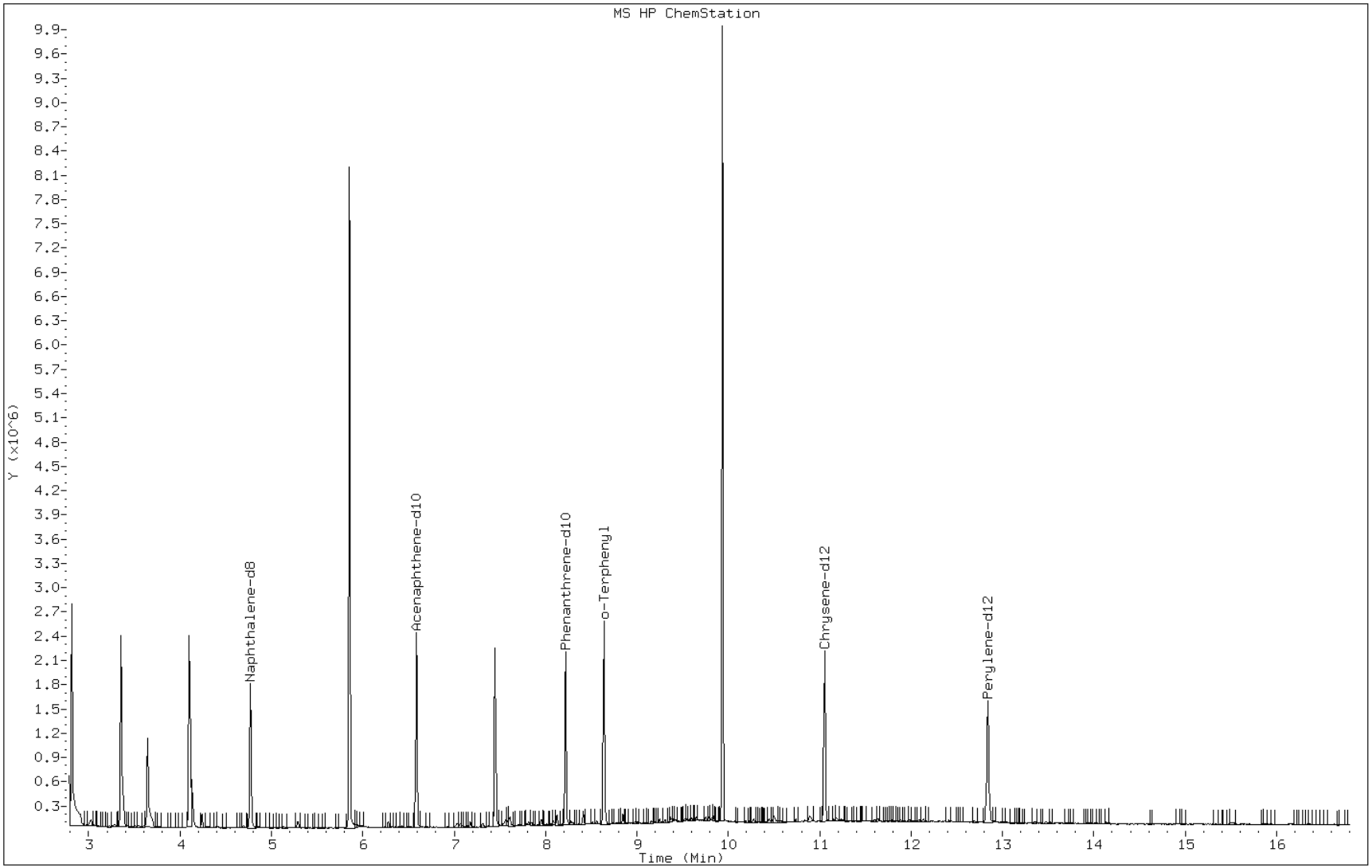
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
* 1 Naphthalene-d8	136	4.771	4.777	(1.000)	1282185	2.00000	
* 5 Acenaphthene-d10	164	6.587	6.586	(1.000)	711801	2.00000	
* 9 Phenanthrene-d10	188	8.220	8.220	(1.000)	1009468	2.00000	
$ 15 o-Terphenyl	230	8.637	8.637	(0.781)	534034	1.34269	44.75
* 13 Chrysene-d12	240	11.052	11.052	(1.000)	929095	2.00000	
* 18 Perylene-d12	264	12.838	12.838	(1.000)	928031	2.00000	

Data File: kl2105.d

Date: 21-DEC-2012 09:53

Client ID: Instrument: MSK5973.i

Sample Info: mb 680-260564/17-A Operator: LEG



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85860-4

SDG No.: 68085860-4

Client Sample ID: | Lab Sample ID: LCS 680-260564/18-A

Matrix: Solid | Lab File ID: kl2108.d

Analysis Method: 8270C_LL_PAH | Date Collected:

Extract. Method: 3546 | Date Extracted: 12/20/2012 18:29

Sample wt/vol: 30.06(g) | Date Analyzed: 12/21/2012 11:03

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.: 261200 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	240		6.7	3.1
91-57-6	2-Methylnaphthalene	256		6.7	3.3
83-32-9	Acenaphthene	264		6.7	3.3
208-96-8	Acenaphthylene	262		6.7	3.3
120-12-7	Anthracene	227		6.7	3.3
56-55-3	Benzo[a]anthracene	273		6.7	3.3
50-32-8	Benzo[a]pyrene	286		6.7	1.2
205-99-2	Benzo[b]fluoranthene	278		6.7	3.3
191-24-2	Benzo[g,h,i]perylene	276		6.7	3.3
207-08-9	Benzo[k]fluoranthene	281		6.7	2.0
218-01-9	Chrysene	275		6.7	3.3
53-70-3	Dibenz(a,h)anthracene	297		6.7	3.3
206-44-0	Fluoranthene	280		6.7	3.3
86-73-7	Fluorene	273		6.7	3.3
193-39-5	Indeno[1,2,3-cd]pyrene	295		6.7	3.3
91-20-3	Naphthalene	246		6.7	3.3
129-00-0	Pyrene	279		6.7	3.3
85-01-8	Phenanthrene	272		6.7	2.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	66		36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k122112.b/kl2108.d
Lab Smp Id: LCS 680-260564/18-A
Inj Date : 21-DEC-2012 11:03
Operator : LEG Inst ID: MSK5973.i
Smp Info : LCS 680-260564/18-A
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122112.b/k-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 09:18 chemist Quant Type: ISTD
Cal Date : 14-DEC-2012 10:35 Cal File: kl1409q.d
Als bottle: 8 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	4.771	4.777	(1.000)	1271570	2.00000	
2 Naphthalene	128	4.795	4.800	(1.005)	5546314	7.38429	246.14
3 2-Methylnaphthalene	142	5.482	5.482	(1.149)	3679691	7.68147	256.04
4 1-Methylnaphthalene	142	5.582	5.588	(1.170)	3508578	7.21599	240.53
6 Acenaphthylene	152	6.434	6.434	(0.977)	5889356	7.88252	262.75
* 5 Acenaphthene-d10	164	6.587	6.586	(1.000)	734109	2.00000	
7 Acenaphthene	154	6.628	6.622	(1.006)	3425321	7.92451	264.15

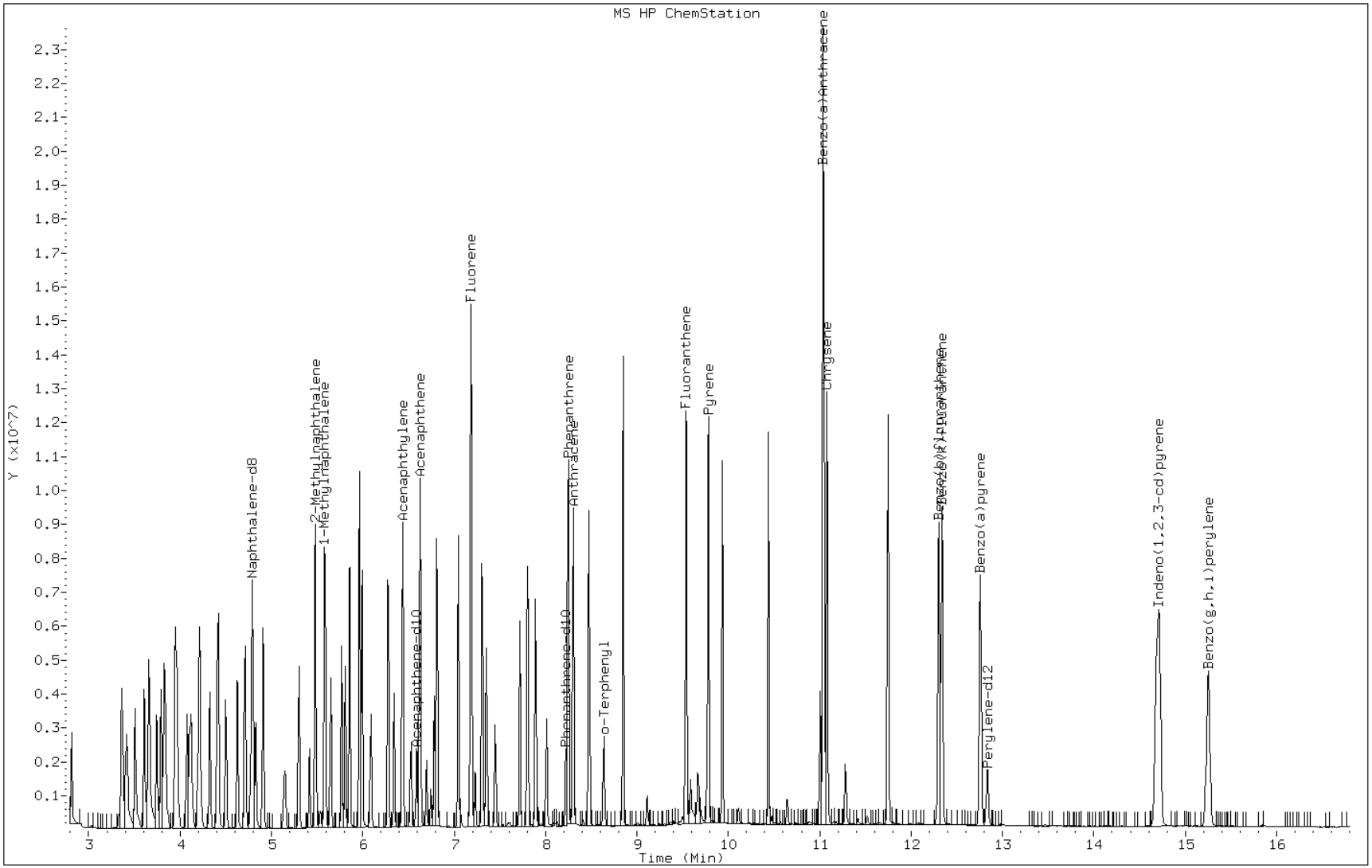
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kg)
	8 Fluorene	166	7.186	7.186	(1.091)	4081825	8.21437	273.81
*	9 Phenanthrene-d10	188	8.220	8.220	(1.000)	1107684	2.00000	
	10 Phenanthrene	178	8.249	8.243	(1.004)	5840464	8.18032	272.67
	11 Anthracene	178	8.302	8.302	(1.010)	4819406	6.81663	227.22
$	15 o-Terphenyl	230	8.637	8.637	(0.781)	573943	1.32285	44.09
	12 Fluoranthene	202	9.536	9.536	(1.160)	6404543	8.41145	280.38
	14 Pyrene	202	9.783	9.777	(0.885)	6406521	8.39975	279.99
	16 Benzo(a)Anthracene	228	11.040	11.040	(0.999)	5604081	8.19559	273.18
*	13 Chrysene-d12	240	11.052	11.052	(1.000)	1013507	2.00000	
	17 Chrysene	228	11.081	11.081	(1.003)	5489583	8.26701	275.56
	19 Benzo(b)fluoranthene	252	12.304	12.297	(0.958)	6031484	8.35808	278.60
	20 Benzo(k)fluoranthene	252	12.339	12.333	(0.961)	5892687	8.43626	281.20
	21 Benzo(a)pyrene	252	12.756	12.756	(0.994)	4998719	8.60433	286.81
*	18 Perylene-d12	264	12.838	12.838	(1.000)	1034147	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.689	14.683	(1.329)	5587180	8.86378	295.45
	23 Dibenzo(a,h)anthracene	278	14.718	14.712	(1.146)	4799448	8.93650	297.88
	24 Benzo(g,h,i)perylene	276	15.253	15.241	(1.188)	4704912	8.29817	276.60

Data File: kl2108.d

Date: 21-DEC-2012 11:03

Client ID: Instrument: MSK5973.i

Sample Info: LCS 680-260564/18-A Operator: LEG



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85860-4

SDG No.: 68085860-4

Client Sample ID: CV0511TTT-GS MS | Lab Sample ID: 680-85860-63 MS

Matrix: Solid | Lab File ID: kl2115.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/13/2012 15:40

Extract. Method: 3546 | Date Extracted: 12/20/2012 18:29

Sample wt/vol: 30.04(g) | Date Analyzed: 12/21/2012 13:47

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

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

% Moisture: 24.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261200 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	316		8.9	4.1
91-57-6	2-Methylnaphthalene	337		8.9	4.4
83-32-9	Acenaphthene	348		8.9	4.4
208-96-8	Acenaphthylene	336		8.9	4.4
120-12-7	Anthracene	281		8.9	4.4
56-55-3	Benzo[a]anthracene	376		8.9	4.4
50-32-8	Benzo[a]pyrene	398		8.9	1.6
205-99-2	Benzo[b]fluoranthene	432		8.9	4.4
191-24-2	Benzo[g,h,i]perylene	279		8.9	4.4
207-08-9	Benzo[k]fluoranthene	378		8.9	2.7
218-01-9	Chrysene	405		8.9	4.4
53-70-3	Dibenz(a,h)anthracene	304		8.9	4.4
206-44-0	Fluoranthene	420		8.9	4.4
86-73-7	Fluorene	360		8.9	4.4
193-39-5	Indeno[1,2,3-cd]pyrene	266		8.9	4.4
91-20-3	Naphthalene	326		8.9	4.4
129-00-0	Pyrene	458		8.9	4.4
85-01-8	Phenanthrene	366		8.9	3.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	68		36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k122112.b/kl2115.d
Lab Smp Id: 680-8560-A-63-B MS
Inj Date : 21-DEC-2012 13:47
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-8560-A-63-B MS
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122112.b/k-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 09:18 chemist Quant Type: ISTD
Cal Date : 14-DEC-2012 10:35 Cal File: kl1409q.d
Als bottle: 13 QC Sample: MS
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	4.771	4.777	(1.000)	1381882	2.00000	
2 Naphthalene	128	4.795	4.800	(1.005)	6001857	7.35292	245.09
3 2-Methylnaphthalene	142	5.482	5.482	(1.149)	3963834	7.61409	253.80
4 1-Methylnaphthalene	142	5.588	5.588	(1.171)	3769598	7.13394	237.79
6 Acenaphthylene	152	6.440	6.434	(0.978)	6274864	7.58369	252.78
* 5 Acenaphthene-d10	164	6.587	6.586	(1.000)	812983	2.00000	
7 Acenaphthene	154	6.628	6.622	(1.006)	3762409	7.85988	261.99

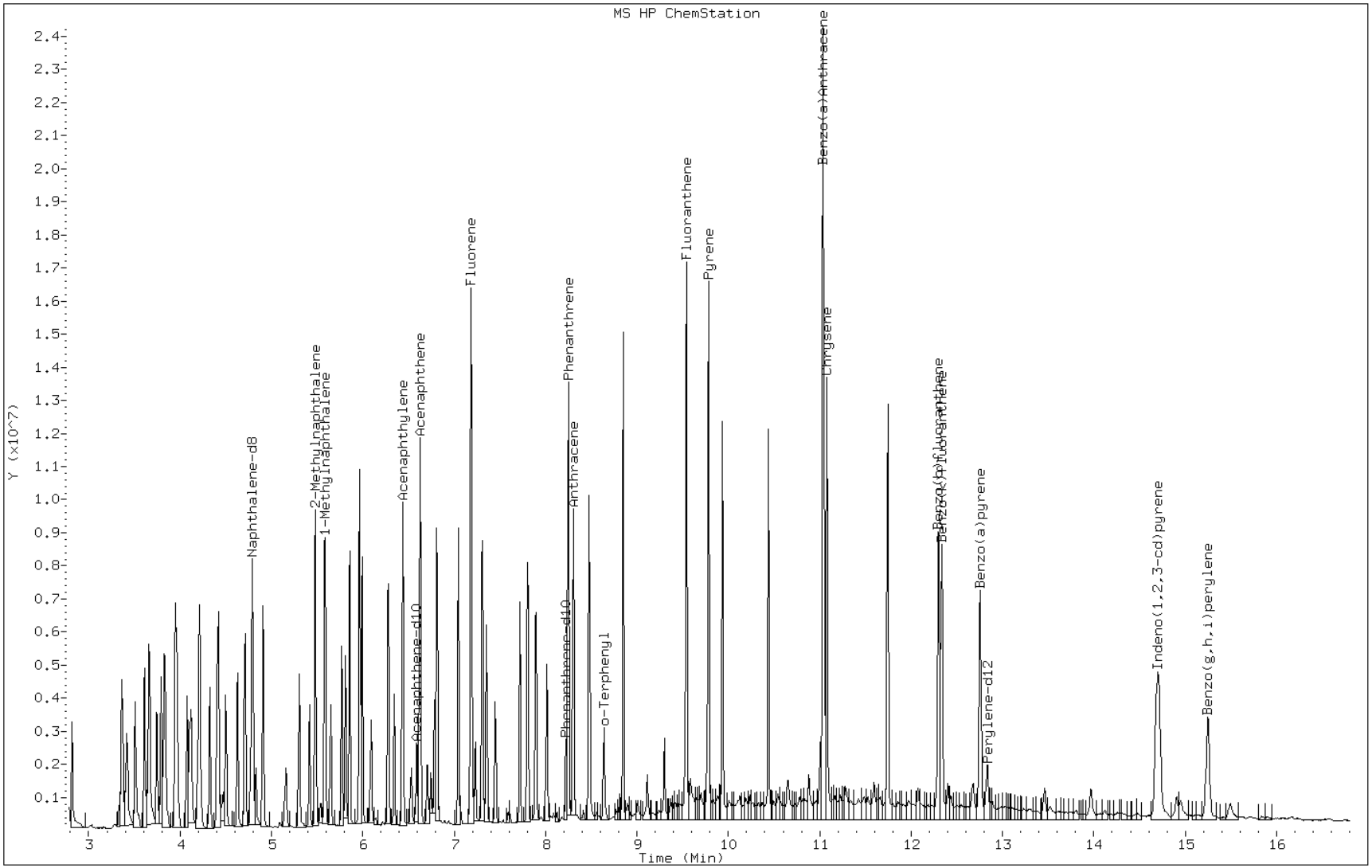
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kg)
	8 Fluorene	166	7.186	7.186	(1.091)	4476070	8.13384	271.12
*	9 Phenanthrene-d10	188	8.220	8.220	(1.000)	1281460	2.00000	
	10 Phenanthrene	178	8.249	8.243	(1.004)	6832493	8.27204	275.73
	11 Anthracene	178	8.308	8.302	(1.011)	5190696	6.34617	211.53
$	15 o-Terphenyl	230	8.637	8.637	(0.781)	606929	1.36241	45.41
	12 Fluoranthene	202	9.542	9.536	(1.161)	8341873	9.47015	315.67
	14 Pyrene	202	9.783	9.777	(0.885)	8097316	10.3399	344.66
	16 Benzo(a)Anthracene	228	11.040	11.040	(0.999)	5966028	8.49751	283.25
*	13 Chrysene-d12	240	11.052	11.052	(1.000)	1040630	2.00000	
	17 Chrysene	228	11.081	11.081	(1.003)	6237974	9.14920	304.97
	19 Benzo(b)fluoranthene	252	12.303	12.297	(0.959)	6116491	9.76080	325.35
	20 Benzo(k)fluoranthene	252	12.339	12.333	(0.962)	5172935	8.52854	284.28
	21 Benzo(a)pyrene	252	12.756	12.756	(0.994)	4529635	8.97888	299.29
*	18 Perylene-d12	264	12.832	12.838	(1.000)	898010	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.689	14.683	(1.329)	3890077	6.01056	200.35
	23 Dibenzo(a,h)anthracene	278	14.718	14.712	(1.147)	3203952	6.87010	229.00
	24 Benzo(g,h,i)perylene	276	15.253	15.241	(1.189)	3096081	6.28845	209.61

Data File: kl2115.d

Date: 21-DEC-2012 13:47

Client ID: Instrument: MSK5973.i

Sample Info: 680-8560-A-63-B MS Operator: LEG



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-85860-4

SDG No.: 68085860-4

Client Sample ID: CV0511TTT-GS MSD | Lab Sample ID: 680-85860-63 MSD

Matrix: Solid | Lab File ID: kl2116.d

Analysis Method: 8270C_LL_PAH | Date Collected: 12/13/2012 15:40

Extract. Method: 3546 | Date Extracted: 12/20/2012 18:29

Sample wt/vol: 30.31(g) | Date Analyzed: 12/21/2012 14:11

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

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

% Moisture: 24.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 261200 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
90-12-0	1-Methylnaphthalene	274		8.8	4.1
91-57-6	2-Methylnaphthalene	297		8.8	4.3
83-32-9	Acenaphthene	303		8.8	4.3
208-96-8	Acenaphthylene	296		8.8	4.3
120-12-7	Anthracene	251		8.8	4.3
56-55-3	Benzo[a]anthracene	345		8.8	4.3
50-32-8	Benzo[a]pyrene	365		8.8	1.6
205-99-2	Benzo[b]fluoranthene	385		8.8	4.3
191-24-2	Benzo[g,h,i]perylene	226		8.8	4.3
207-08-9	Benzo[k]fluoranthene	386		8.8	2.6
218-01-9	Chrysene	374		8.8	4.3
53-70-3	Dibenz(a,h)anthracene	253		8.8	4.3
206-44-0	Fluoranthene	410		8.8	4.3
86-73-7	Fluorene	310		8.8	4.3
193-39-5	Indeno[1,2,3-cd]pyrene	213		8.8	4.3
91-20-3	Naphthalene	291		8.8	4.3
129-00-0	Pyrene	464		8.8	4.3
85-01-8	Phenanthrene	340		8.8	3.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	68		36-131

TESTAMERICA SAVANNAH

Semivolatile REPORT SW-846 Method 8270C

Data file : /chem/SM/MSK5973.i/1k122112.b/kl2116.d
Lab Smp Id: 680-85860-A-63-C MS
Inj Date : 21-DEC-2012 14:11
Operator : LEG Inst ID: MSK5973.i
Smp Info : 680-85860-A-63-C MSD
Misc Info :
Comment : analysis of PAHs
Method : /chem/SM/MSK5973.i/1k122112.b/k-b8270CLLPAH-m.m
Meth Date : 21-Dec-2012 09:18 chemist Quant Type: ISTD
Cal Date : 14-DEC-2012 10:35 Cal File: kl1409q.d
Als bottle: 14 QC Sample: MSD
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	4.771	4.777	(1.000)	1192491	2.00000	
2 Naphthalene	128	4.794	4.800	(1.005)	4661546	6.61789	220.59
3 2-Methylnaphthalene	142	5.482	5.482	(1.149)	3040280	6.76755	225.58
4 1-Methylnaphthalene	142	5.582	5.588	(1.170)	2847113	6.24388	208.12
6 Acenaphthylene	152	6.434	6.434	(0.977)	4526388	6.75084	225.02
* 5 Acenaphthene-d10	164	6.586	6.586	(1.000)	658797	2.00000	
7 Acenaphthene	154	6.628	6.622	(1.006)	2674754	6.89546	229.84

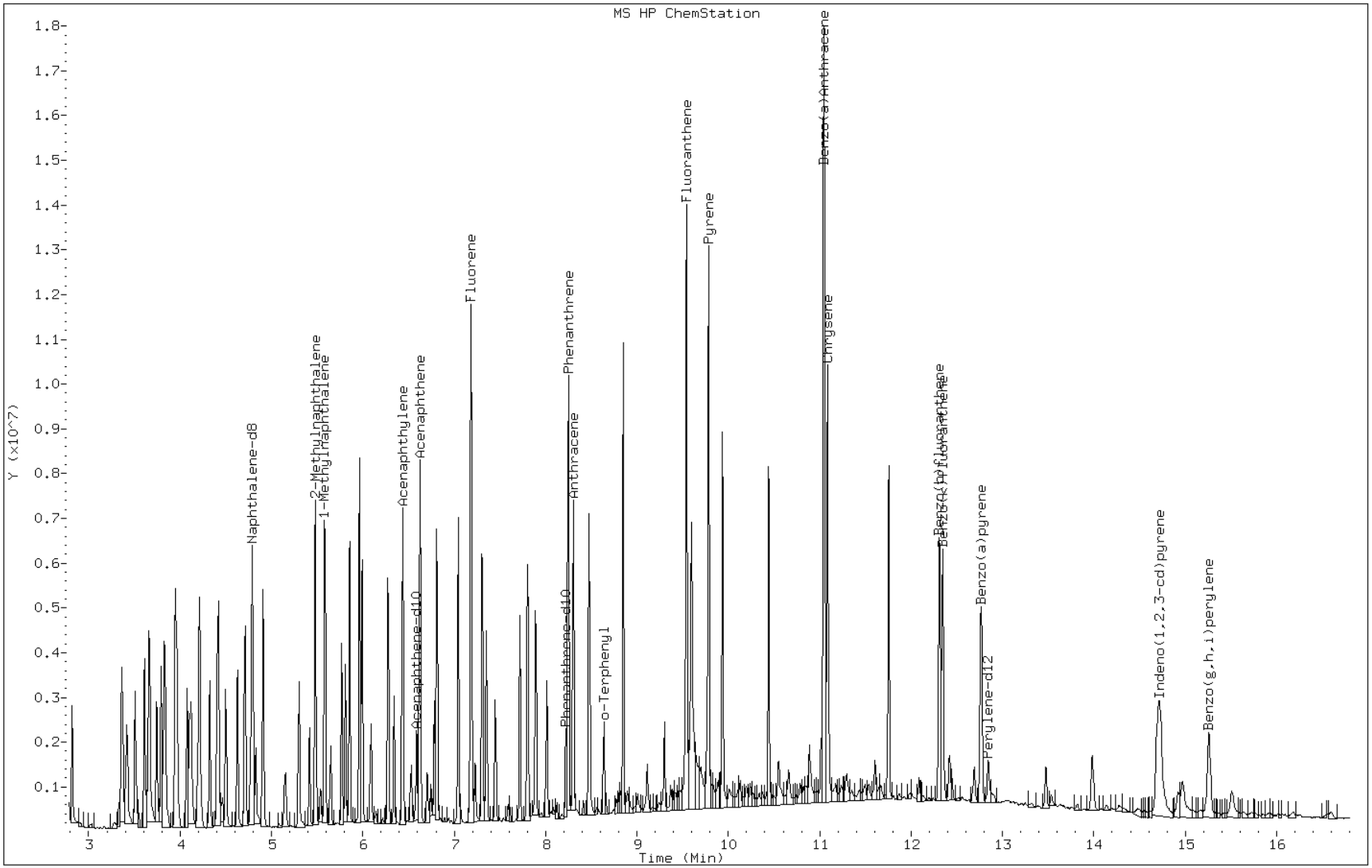
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
	8 Fluorene	166	7.186	7.186	(1.091)	3152101	7.06852	235.61
*	9 Phenanthrene-d10	188	8.220	8.220	(1.000)	1022462	2.00000	
	10 Phenanthrene	178	8.249	8.243	(1.004)	5097357	7.73457	257.81
	11 Anthracene	178	8.302	8.302	(1.010)	3728740	5.71356	190.45
$	15 o-Terphenyl	230	8.637	8.637	(0.781)	453122	1.35053	45.01
	12 Fluoranthene	202	9.542	9.536	(1.161)	6556243	9.32838	310.94
	14 Pyrene	202	9.783	9.777	(0.885)	6234436	10.5703	352.34
	16 Benzo(a)Anthracene	228	11.046	11.040	(0.999)	4149759	7.84777	261.59
*	13 Chrysene-d12	240	11.058	11.052	(1.000)	783753	2.00000	
	17 Chrysene	228	11.087	11.081	(1.003)	4369842	8.50986	283.66
	19 Benzo(b)fluoranthene	252	12.315	12.297	(0.959)	3935218	8.77446	292.48
	20 Benzo(k)fluoranthene	252	12.344	12.333	(0.961)	3820288	8.80040	293.34
	21 Benzo(a)pyrene	252	12.768	12.756	(0.994)	3002085	8.31478	277.15
*	18 Perylene-d12	264	12.844	12.838	(1.000)	642706	2.00000	
	22 Indeno(1,2,3-cd)pyrene	276	14.695	14.683	(1.329)	2365478	4.85280	161.76
	23 Dibenzo(a,h)anthracene	278	14.730	14.712	(1.147)	1926405	5.77156	192.38
	24 Benzo(g,h,i)perylene	276	15.259	15.241	(1.188)	1810595	5.13833	171.27

Data File: kl2116.d

Date: 21-DEC-2012 14:11

Client ID: Instrument: MSK5973.i

Sample Info: 680-85860-A-63-C MSD Operator: LEG



GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Instrument ID: MSK Start Date: 12/14/2012 07:59

Analysis Batch Number: 259918 End Date: 12/14/2012 18:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 680-259918/1		12/14/2012 07:59	1	kl1402t.d	RXi- 5Sil MS 0.25(mm)
IC 680-259918/2		12/14/2012 08:15	1	kl1403q.d	RXi- 5Sil MS 0.25(mm)
IC 680-259918/3		12/14/2012 08:39	1	kl1404q.d	RXi- 5Sil MS 0.25(mm)
IC 680-259918/4		12/14/2012 09:02	1	kl1405q.d	RXi- 5Sil MS 0.25(mm)
IC 680-259918/5		12/14/2012 09:25	1	kl1406q.d	RXi- 5Sil MS 0.25(mm)
IC 680-259918/6		12/14/2012 09:49	1	kl1407q.d	RXi- 5Sil MS 0.25(mm)
IC 680-259918/7		12/14/2012 10:12	1	kl1408q.d	RXi- 5Sil MS 0.25(mm)
ICIS 680-259918/8		12/14/2012 10:35	1	kl1409q.d	RXi- 5Sil MS 0.25(mm)
ICV 680-259918/9		12/14/2012 10:58	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 12:30	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 12:53	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 13:16	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 13:39	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 14:03	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 14:26	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 14:49	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 15:13	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 15:36	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 16:00	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 16:32	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 16:55	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 17:19	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 17:43	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 18:06	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 18:29	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/14/2012 18:53	1		RXi- 5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Instrument ID: MSK Start Date: 12/21/2012 08:47

Analysis Batch Number: 261200 End Date: 12/21/2012 20:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 680-261200/1		12/21/2012 08:47	1	kl2102t.d	RXi- 5Sil MS 0.25(mm)
CCVIS 680-261200/2		12/21/2012 09:04	1	kl2103q.d	RXi- 5Sil MS 0.25(mm)
MB 680-260564/17-A		12/21/2012 09:53	1	kl2105.d	RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/21/2012 10:16	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/21/2012 10:40	1		RXi- 5Sil MS 0.25(mm)
LCS 680-260564/18-A		12/21/2012 11:03	1	kl2108.d	RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/21/2012 11:27	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/21/2012 11:50	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/21/2012 13:00	10		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/21/2012 13:24	10		RXi- 5Sil MS 0.25(mm)
680-85860-63 MS	CV0511TTT-GS MS	12/21/2012 13:47	1	kl2115.d	RXi- 5Sil MS 0.25(mm)
680-85860-63 MSD	CV0511TTT-GS MSD	12/21/2012 14:11	1	kl2116.d	RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/21/2012 14:34	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/21/2012 14:58	10		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/21/2012 15:21	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/21/2012 15:45	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/21/2012 16:08	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/21/2012 16:55	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/21/2012 17:19	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/21/2012 17:42	1		RXi- 5Sil MS 0.25(mm)
680-85860-61	CV0511AE-GS	12/21/2012 18:29	1	kl2127.d	RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/21/2012 18:52	1		RXi- 5Sil MS 0.25(mm)
680-85860-63	CV0511TTT-GS	12/21/2012 19:16	1	kl2129.d	RXi- 5Sil MS 0.25(mm)
680-85860-70	CV0550A-CS	12/21/2012 19:39	10	kl2130.d	RXi- 5Sil MS 0.25(mm)
680-85860-73	FM0251B-CS	12/21/2012 20:03	10	kl2131.d	RXi- 5Sil MS 0.25(mm)
680-85860-72	FM0251A-CS	12/21/2012 20:26	10	kl2132.d	RXi- 5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Instrument ID: MSK Start Date: 12/26/2012 14:51

Analysis Batch Number: 261203 End Date: 12/27/2012 00:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 680-261203/1		12/26/2012 14:51	1	kl2611t.d	RXi- 5Sil MS 0.25(mm)
IC 680-261203/2		12/26/2012 15:08	1	kl2612q.d	RXi- 5Sil MS 0.25(mm)
IC 680-261203/3		12/26/2012 15:31	1	kl2613q.d	RXi- 5Sil MS 0.25(mm)
IC 680-261203/4		12/26/2012 15:55	1	kl2614q.d	RXi- 5Sil MS 0.25(mm)
IC 680-261203/5		12/26/2012 16:18	1	kl2615q.d	RXi- 5Sil MS 0.25(mm)
IC 680-261203/6		12/26/2012 16:41	1	kl2616q.d	RXi- 5Sil MS 0.25(mm)
IC 680-261203/7		12/26/2012 17:04	1	kl2617q.d	RXi- 5Sil MS 0.25(mm)
ICIS 680-261203/8		12/26/2012 17:28	1	kl2618q.d	RXi- 5Sil MS 0.25(mm)
ICV 680-261203/9		12/26/2012 17:51	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/26/2012 19:01	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/26/2012 19:25	10		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/26/2012 19:49	20		RXi- 5Sil MS 0.25(mm)
680-85860-74	FM0251C-CS	12/26/2012 20:12	10	kl2625.d	RXi- 5Sil MS 0.25(mm)
680-85860-75	HP0282B-CS	12/26/2012 20:36	10	kl2626.d	RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/26/2012 21:15	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/26/2012 21:39	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/26/2012 22:02	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/26/2012 22:26	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/26/2012 23:13	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/26/2012 23:37	1		RXi- 5Sil MS 0.25(mm)
ZZZZZ		12/27/2012 00:24	1		RXi- 5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Instrument ID: MSY Start Date: 12/21/2012 19:15

Analysis Batch Number: 261204 End Date: 12/22/2012 03:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 680-261204/1		12/21/2012 19:15	1	yl2125t.d	HP-5MS 0.25(mm)
CCVIS 680-261204/2		12/21/2012 19:31	1	yl2126q.d	HP-5MS 0.25(mm)
680-85860-71	CV0550B-CS	12/21/2012 19:54	10	yl2127.d	HP-5MS 0.25(mm)
ZZZZZ		12/21/2012 20:16	10		HP-5MS 0.25(mm)
ZZZZZ		12/21/2012 20:39	10		HP-5MS 0.25(mm)
ZZZZZ		12/21/2012 21:01	10		HP-5MS 0.25(mm)
ZZZZZ		12/21/2012 21:24	10		HP-5MS 0.25(mm)
ZZZZZ		12/21/2012 21:47	10		HP-5MS 0.25(mm)
ZZZZZ		12/21/2012 22:09	10		HP-5MS 0.25(mm)
ZZZZZ		12/21/2012 22:32	10		HP-5MS 0.25(mm)
ZZZZZ		12/21/2012 22:54	10		HP-5MS 0.25(mm)
ZZZZZ		12/21/2012 23:17	10		HP-5MS 0.25(mm)
ZZZZZ		12/21/2012 23:39	10		HP-5MS 0.25(mm)
ZZZZZ		12/22/2012 00:02	10		HP-5MS 0.25(mm)
ZZZZZ		12/22/2012 00:25	10		HP-5MS 0.25(mm)
ZZZZZ		12/22/2012 00:47	10		HP-5MS 0.25(mm)
ZZZZZ		12/22/2012 01:10	10		HP-5MS 0.25(mm)
ZZZZZ		12/22/2012 01:32	10		HP-5MS 0.25(mm)
ZZZZZ		12/22/2012 01:55	10		HP-5MS 0.25(mm)
ZZZZZ		12/22/2012 02:17	10		HP-5MS 0.25(mm)
ZZZZZ		12/22/2012 02:39	10		HP-5MS 0.25(mm)
ZZZZZ		12/22/2012 03:25	10		HP-5MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

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)
680-85860-77	CV0319A-CS	12/21/2012 17:53	10	yl2121.d	HP-5MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Instrument ID: MSY Start Date: 12/27/2012 13:57

Analysis Batch Number: 261231 End Date: 12/27/2012 17:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 680-261231/1		12/27/2012 13:57	1	y12701t.d	HP-5MS 0.25(mm)
CCVIS 680-261231/2		12/27/2012 14:13	1	y12702q.d	HP-5MS 0.25(mm)
ZZZZZ		12/27/2012 15:31	1		HP-5MS 0.25(mm)
680-85860-76	HP0282A-CS	12/27/2012 16:17	10	y12706.d	HP-5MS 0.25(mm)
ZZZZZ		12/27/2012 16:46	10		HP-5MS 0.25(mm)
680-85860-78	CV0319B-CS	12/27/2012 17:08	10	y12708.d	HP-5MS 0.25(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Batch Number: 260564 Batch Start Date: 12/20/12 18:29 Batch Analyst: Wright, Amanda J

Batch Method: 3546 Batch End Date: 12/20/12 18:59

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	BENZIDINwk 00138	BNAFULLSPK 00475	LLBNAwkSUR 00052	
680-85860-A-61	CV0511AE-GS	3546, 8270C_LL_PAH	T	30.13 g	1 mL			1 mL	
680-85860-A-63	CV0511TTT-GS	3546, 8270C_LL_PAH	T	30.16 g	1 mL			1 mL	
680-85860-A-70	CV0550A-CS	3546, 8270C_LL_PAH	T	30.16 g	1 mL			1 mL	
680-85860-A-71	CV0550B-CS	3546, 8270C_LL_PAH	T	30.03 g	1 mL			1 mL	
680-85860-A-72	FM0251A-CS	3546, 8270C_LL_PAH	T	30.43 g	1 mL			1 mL	
680-85860-A-73	FM0251B-CS	3546, 8270C_LL_PAH	T	30.06 g	1 mL			1 mL	
680-85860-A-74	FM0251C-CS	3546, 8270C_LL_PAH	T	30.40 g	1 mL			1 mL	
680-85860-A-75	HP0282B-CS	3546, 8270C_LL_PAH	T	30.26 g	1 mL			1 mL	
680-85860-A-76	HP0282A-CS	3546, 8270C_LL_PAH	T	30.47 g	1 mL			1 mL	
680-85860-A-77	CV0319A-CS	3546, 8270C_LL_PAH	T	30.43 g	1 mL			1 mL	
680-85860-A-78	CV0319B-CS	3546, 8270C_LL_PAH	T	30.24 g	1 mL			1 mL	
MB 680-260564/17		3546, 8270C_LL_PAH		30.14 g	1 mL			1 mL	
LCS 680-260564/18		3546, 8270C_LL_PAH		30.06 g	1 mL	100 uL	100 uL	1 mL	
680-85860-A-63 MS	CV0511TTT-GS	3546, 8270C_LL_PAH	T	30.04 g	1 mL	100 uL	100 uL	1 mL	
680-85860-A-63 MSD	CV0511TTT-GS	3546, 8270C_LL_PAH	T	30.31 g	1 mL	100 uL	100 uL	1 mL	

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Batch Number: 260564 Batch Start Date: 12/20/12 18:29 Batch Analyst: Wright, Amanda J

Batch Method: 3546 Batch End Date: 12/20/12 18:59

Batch Notes	
Balance ID	30
Batch Comment	8270LL box M165
Person's name who did the concentration	JCS/AJW
Exchange Solvent Lot #	2910367
Exchange Solvent Name	MECL2
Final Concentrator Volume	1 mL
MeCl2/Acetone Lot #	2768909
Microwave Start Time	1829
Microwave Stop Time	1859
Na2SO4 Lot Number	2913832
Ottawa Sand Lot #	2899320
Person's name who did the prep	JCS/AJW
Person who witnessed spiking	JCS

Basis	Basis Description
T	Total/NA

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah Job Number: 680-85860-4

SDG No.: 68085860-4

Project: 35th Avenue Superfund Site

Client Sample ID	Lab Sample ID
CV0511AE-GS	680-85860-61
CV0511TTT-GS	680-85860-63
CV0550A-CS	680-85860-70
CV0550B-CS	680-85860-71
FM0251A-CS	680-85860-72
FM0251B-CS	680-85860-73
FM0251C-CS	680-85860-74
HP0282B-CS	680-85860-75
HP0282A-CS	680-85860-76
CV0319A-CS	680-85860-77
CV0319B-CS	680-85860-78

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah Job Number: 680-85860-4

SDG Number: 68085860-4

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 01/01/2005 13:43

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.01	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah Job Number: 680-85860-4

SDG Number: 68085860-4

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 04/09/2011 17:03

Analyte	Wavelength/ Mass	XRL (%)	
Percent Moisture		0.01	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Instrument ID: NOEQUIP Method: Moisture

Start Date: 12/18/2012 09:21 End Date: 12/18/2012 09:21

Lab Sample ID	D/F	Type	Time	Analytes																			
				Moist																			
ZZZZZZ			09:21																				
ZZZZZZ			09:21																				
ZZZZZZ			09:21																				
ZZZZZZ			09:21																				
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ZZZZZZ			09:21																				
ZZZZZZ			09:21																				
ZZZZZZ			09:21																				
680-85860-73	1	T	09:21	X																			

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Instrument ID: NOEQUIP Method: Moisture

Start Date: 12/18/2012 11:08 End Date: 12/18/2012 11:08

Lab Sample ID	D/F	Type	Time	Analytes																			
				Moist																			
ZZZZZZ			11:08																				
ZZZZZZ			11:08																				
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ZZZZZZ			11:08																				
680-85860-61	1	T	11:08	X																			
680-85860-63	1	T	11:08	X																			
680-85860-63 MS	1	T	11:08	X																			
680-85860-63 MSD	1	T	11:08	X																			
680-85860-70	1	T	11:08	X																			
680-85860-71	1	T	11:08	X																			
680-85860-72	1	T	11:08	X																			
680-85860-74	1	T	11:08	X																			
680-85860-75	1	T	11:08	X																			
680-85860-76	1	T	11:08	X																			
680-85860-77	1	T	11:08	X																			
680-85860-78	1	T	11:08	X																			
ZZZZZZ			11:08																				
ZZZZZZ			11:08																				
ZZZZZZ			11:08																				

Prep Types
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Batch Number: 260137 Batch Start Date: 12/18/12 09:21 Batch Analyst: Swafford, Frances

Batch Method: Moisture Batch End Date: 12/18/12 16:35

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
680-85860-B-73	FM0251B-CS	Moisture	T	1.31 g	12.15 g	8.74 g			

Batch Notes	
Balance ID	19 No Unit
Date samples were placed in the oven	12/18/12
Oven Temp when samples are put in oven	107 Degrees C
Time samples were place in the oven	09:21
Date samples were removed from oven	12/18/12
Oven Temp when samples removed from oven	107 Degrees C
Time Samples were removed from oven	16:15
Oven ID	CU01
ID number of the thermometer	ME02-A

Basis	Basis Description
T	Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-85860-4

SDG No.: 68085860-4

Batch Number: 260166 Batch Start Date: 12/18/12 11:08 Batch Analyst: Swafford, Frances

Batch Method: Moisture Batch End Date: 12/18/12 16:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry	AnalysisComment		
680-85860-A-61	CV0511AE-GS	Moisture	T	1.28 g	11.52 g	7.01 g			
680-85860-A-63	CV0511TTT-GS	Moisture	T	1.32 g	11.62 g	9.06 g	same container		
680-85860-A-63 MS	CV0511TTT-GS	Moisture	T	1.32 g	11.62 g	9.06 g	same container		
680-85860-A-63 MSD	CV0511TTT-GS	Moisture	T	1.32 g	11.62 g	9.06 g	same container		
680-85860-A-70	CV0550A-CS	Moisture	T	1.31 g	12.51 g	9.73 g			
680-85860-A-71	CV0550B-CS	Moisture	T	1.31 g	12.48 g	9.69 g			
680-85860-A-72	FM0251A-CS	Moisture	T	1.30 g	11.15 g	9.31 g			
680-85860-A-74	FM0251C-CS	Moisture	T	1.27 g	11.05 g	8.72 g			
680-85860-A-75	HP0282B-CS	Moisture	T	1.28 g	11.33 g	8.67 g			
680-85860-A-76	HP0282A-CS	Moisture	T	1.32 g	12.23 g	9.91 g			
680-85860-A-77	CV0319A-CS	Moisture	T	1.31 g	11.91 g	9.62 g			
680-85860-A-78	CV0319B-CS	Moisture	T	1.33 g	12.24 g	9.35 g			

Batch Notes	
Balance ID	19 No Unit
Date samples were placed in the oven	12/18/12
Oven Temp when samples are put in oven	105 Degrees C
Time samples were place in the oven	11:08
Date samples were removed from oven	12/15/12
Oven Temp when samples removed from oven	106 Degrees C
Time Samples were removed from oven	16:15
Oven ID	CU01
ID number of the thermometer	ME02-A

Basis	Basis Description
T	Total/NA

Shipping and Receiving Documents

Serial Number 62/36

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): AL	PAGE 6 OF 7
TAL (LAB) PROJECT MANAGER: Lisa Harvey	P.O. NUMBER: 2005148-1356	CONTRACT NO.	STANDARD REPORT DELIVERY ○
CLIENT (SITE) PM: Russell Henderson	CLIENT PHONE: 678-355-5550	CLIENT FAX	DATE DUE
CLIENT NAME: OTIE	CLIENT E-MAIL		EXPEDITED REPORT DELIVERY (SURCHARGE) ○
CLIENT ADDRESS: 1220 Kennestone Circle Suite 106 Marietta, GA			DATE DUE
COMPANY CONTRACTING THIS WORK (if applicable)			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	PAH	Hg								REMARKS
								NUMBER OF CONTAINERS SUBMITTED										
3/13/12	1515	CV0511AE-GS	G		X			X										Due within
	1540	CV0511SSS-SW		X				X	X									14 days
	1540	CV0511TT-GS	G		X			X	X									
	945	CV0256C-CS (SIEVE)	C		X				X	X								Additional volume for MS/MSD
	1340	CV0621C-CS (SIEVE)	C		X				X									
	1030	CV0511UU-CS (SIEVE)	C		X				X									
	1100	FM0199A-CS-SP (SIEVE)	C		X				X									
	950	CV0256E-GS (SIEVE)	G		X				X									
	1340	CV0621A-CS (SIEVE)	C		X				X									

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
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]	12/13/12 12/17/12	1003 0924	YES ○ NO ○		6 80 85860	4.2°C / 3.6°C / 5.6°C 4, 5.

12/29/2012

TAL8240-680 (1008)

Serial Number 62738

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): AL	PAGE 7 OF 7
TAL (LAB) PROJECT MANAGER: Lisa Harvey	P.O. NUMBER: 2005148-1356	CONTRACT NO.	STANDARD REPORT DELIVERY ○ DATE DUE ____
CLIENT (SITE) PM: Russell Henderson	CLIENT PHONE: 678-355-5550	CLIENT FAX	EXPEDITED REPORT DELIVERY (SURCHARGE) ○ DATE DUE ____
CLIENT NAME: OTIE	CLIENT E-MAIL		
CLIENT ADDRESS: 1220 Kennestone Circle Suite 106 Marietta, GA			NUMBER OF COOLERS SUBMITTED PER SHIPMENT:
COMPANY CONTRACTING THIS WORK (if applicable)			

REQUIRED ANALYSIS: LL PAH; RCRA 8 Metals; CN (W)

PRESERVATIVE

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	LL PAH	RCRA 8 Metals	CN (W)								REMARKS
12/14/12	903	CV0550A-CS	C		X			X										
	847	CV0550B-CS	C		X			X										
	1018	FM0251A-CS	C		X			X										
	1000	FM0251B-CS	C		X			X	X	X								← add metals + CN per Russ Nelson 12-17-12
	1005	FM0251C-CS	C		X			X										
	1015	HP0282B-CS	C		X			X										
	1000	HP0282A-CS	C		X			X										
	845	CV0319A-CS	C		X			X										
	905	CV0319B-CS	C		X			X										
	1751	FM0251B-CS (Sieve)							X									

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
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]	12/17/12	0924	YES ○ NO ○		68 85860	5.6° 4. 5.

TAL 8240-680 (1008)

Login Sample Receipt Checklist

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-85860-4
SDG Number: 68085860-4

Login Number: 85860
List Number: 1
Creator: Barnett, Eddie T

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	-43: soil jar was cracked, contents placed into a new jar.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	