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Automated Report

Technical Report for

Anderson Mulholland and Assoc.

BMSMC Phase 2A Release Assessment, Humacao, PR

02I

SGS Accutest Job Number: MC46783

Sampling Dates: 07/06/16 - 07/07/16

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Total number of pages in report: 400

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Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Summary of Hits **5**
Section 4: Sample Results **6**
4.1: MC46783-1: OSGP6-GWS 7
4.2: MC46783-2: OSGP6D-GWS 8
4.3: MC46783-3: OSGP8-GWD 9
4.4: MC46783-4: OSGP8-GWS 10
4.5: MC46783-5: OSGP1-GWD 11
Section 5: Misc. Forms **12**
5.1: Chain of Custody 13
5.2: Sample Tracking Chronicle 15
5.3: Internal Chain of Custody 16
Section 6: GC Semi-volatiles - QC Data Summaries **17**
6.1: Method Blank Summary 18
6.2: Blank Spike/Blank Spike Duplicate Summary 19
6.3: Matrix Spike/Matrix Spike Duplicate Summary 20
6.4: Surrogate Recovery Summaries 21
6.5: GC Surrogate Retention Time Summaries 22
6.6: Initial and Continuing Calibration Summaries 24
Section 7: GC Semi-volatiles - Raw Data **36**
7.1: Samples 37
7.2: Method Blanks 83
7.3: Blank Spike/Blank Spike Duplicates 89
7.4: Matrix Spike/Matrix Spike Duplicates 115
7.5: Initial and Continuing Calibrations 135
7.6: Instrument Run Logs 377
7.7: Prep Logs 400

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Sample Summary

Anderson Mulholland and Assoc.

Job No: MC46783

BMSMC Phase 2A Release Assessment, Humacao, PR
Project No: 02I

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC46783-1	07/06/16	10:20	TT	07/08/16	AQ	Ground Water	OSGP6-GWS
MC46783-2	07/06/16	10:45	TT	07/08/16	AQ	Ground Water	OSGP6D-GWS
MC46783-3	07/06/16	13:40	TT	07/08/16	AQ	Ground Water	OSGP8-GWD
MC46783-4	07/07/16	10:00	TT	07/08/16	AQ	Ground Water	OSGP8-GWS
MC46783-4D	07/07/16	10:00	TT	07/08/16	AQ	Water Dup/MSD	OSGP8-GWS
MC46783-4S	07/07/16	10:00	TT	07/08/16	AQ	Water Matrix Spike	OSGP8-GWS
MC46783-5	07/07/16	13:30	TT	07/08/16	AQ	Ground Water	OSGP1-GWD

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Anderson Mulholland and Assoc.	**Job No**	MC46783
Site:	BMSMC Phase 2A Release Assessment, Humacao, PR	**Report Date**	7/13/2016 5:13:51 PM

5 Sample(s) were collected on between 07/06/2016 and 07/07/2016 and were received at SGS Accutest New England on 07/08/2016 properly preserved, at 5.6 Deg. C and intact. These Samples received a job number of MC46783. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC By Method MADEP EPH REV 1.1

Matrix: AQ **Batch ID:** OP48098

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) MC46783-4MS, MC46783-4MSD were used as the QC samples indicated.
- Sample(s) MC46783-1, MC46783-2, MC46783-3, MC46783-4, MC46783-5 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- MC46783-2,3,5: Confirmation run.
- MC46783-3,5 for 1-Chlorooctadecane: Outside control limits due to possible matrix interference. Confirmed by refractionation/reanalysis.
- MC46783-2 for 2-Bromonaphthalene, 1-Chlorooctadecane: Outside control limits due to possible matrix interference.Sample results confirmed by refractionation/re-analysis.

SGS Accutest New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC46783).

Summary of Hits

Job Number: MC46783
Account: Anderson Mulholland and Assoc.
Project: BMSMC Phase 2A Release Assessment, Humacao, PR
Collected: 07/06/16 thru 07/07/16

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC46783-1	**OSGP6-GWS**					
C11-C22 Aromatics (Unadj.)		37.4 JB	120	34	ug/l	MADEP EPH REV 1.1
C9-C18 Aliphatics		25.3 JB	120	20	ug/l	MADEP EPH REV 1.1
C19-C36 Aliphatics		36.1 JB	120	32	ug/l	MADEP EPH REV 1.1
C11-C22 Aromatics		36.6 JB	120	34	ug/l	MADEP EPH REV 1.1
MC46783-2	**OSGP6D-GWS**					
2-Methylnaphthalene		0.87 JB	5.6	0.51	ug/l	MADEP EPH REV 1.1
Naphthalene		2.2 JB	5.6	1.1	ug/l	MADEP EPH REV 1.1
C11-C22 Aromatics (Unadj.)		43.4 JB	110	32	ug/l	MADEP EPH REV 1.1
C9-C18 Aliphatics		24.4 JB	110	19	ug/l	MADEP EPH REV 1.1
C19-C36 Aliphatics		35.7 JB	110	30	ug/l	MADEP EPH REV 1.1
C11-C22 Aromatics		40.3 JB	110	32	ug/l	MADEP EPH REV 1.1
MC46783-3	**OSGP8-GWD**					
C11-C22 Aromatics (Unadj.)		41.1 JB	110	33	ug/l	MADEP EPH REV 1.1
C9-C18 Aliphatics		26.6 JB	110	19	ug/l	MADEP EPH REV 1.1
C19-C36 Aliphatics		41.5 JB	110	31	ug/l	MADEP EPH REV 1.1
C11-C22 Aromatics		39.5 JB	110	33	ug/l	MADEP EPH REV 1.1
MC46783-4	**OSGP8-GWS**					
2-Methylnaphthalene		0.61 JB	5.8	0.53	ug/l	MADEP EPH REV 1.1
Naphthalene		1.3 JB	5.8	1.1	ug/l	MADEP EPH REV 1.1
C11-C22 Aromatics (Unadj.)		44.8 JB	120	33	ug/l	MADEP EPH REV 1.1
C9-C18 Aliphatics		26.4 JB	120	19	ug/l	MADEP EPH REV 1.1
C19-C36 Aliphatics		44.0 JB	120	31	ug/l	MADEP EPH REV 1.1
C11-C22 Aromatics		42.9 JB	120	33	ug/l	MADEP EPH REV 1.1
MC46783-5	**OSGP1-GWD**					
C11-C22 Aromatics (Unadj.)		39.4 JB	110	33	ug/l	MADEP EPH REV 1.1
C9-C18 Aliphatics		24.7 JB	110	19	ug/l	MADEP EPH REV 1.1
C19-C36 Aliphatics		51.5 JB	110	31	ug/l	MADEP EPH REV 1.1
C11-C22 Aromatics		38.0 JB	110	33	ug/l	MADEP EPH REV 1.1

Sample Results

Report of Analysis

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Report of Analysis

Client Sample ID:	OSGP6-GWS		
Lab Sample ID:	MC46783-1	**Date Sampled:**	07/06/16
Matrix:	AQ - Ground Water	**Date Received:**	07/08/16
Method:	MADEP EPH REV 1.1 SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC Phase 2A Release Assessment, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DE14798.D	1	07/11/16	TA	07/08/16	OP48098	GDE823
Run #2							

	Initial Volume	Final Volume
Run #1	850 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.9	1.8	ug/l	
208-96-8	Acenaphthylene	ND	5.9	0.42	ug/l	
120-12-7	Anthracene	ND	5.9	0.68	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.9	0.36	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.9	0.34	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.9	0.53	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.9	0.44	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.9	0.42	ug/l	
218-01-9	Chrysene	ND	5.9	0.51	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.9	0.46	ug/l	
206-44-0	Fluoranthene	ND	5.9	0.39	ug/l	
86-73-7	Fluorene	ND	5.9	0.47	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.9	0.34	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.9	0.53	ug/l	
91-20-3	Naphthalene	ND	5.9	1.1	ug/l	
85-01-8	Phenanthrene	ND	5.9	0.36	ug/l	
129-00-0	Pyrene	ND	5.9	0.70	ug/l	
	C11-C22 Aromatics (Unadj.)	37.4	120	34	ug/l	JB
	C9-C18 Aliphatics	25.3	120	20	ug/l	JB
	C19-C36 Aliphatics	36.1	120	32	ug/l	JB
	C11-C22 Aromatics	36.6	120	34	ug/l	JB

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	62%		40-140%
321-60-8	2-Fluorobiphenyl	76%		40-140%
3386-33-2	1-Chlorooctadecane	45%		40-140%
580-13-2	2-Bromonaphthalene	82%		40-140%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	OSGP6D-GWS		
Lab Sample ID:	MC46783-2	**Date Sampled:**	07/06/16
Matrix:	AQ - Ground Water	**Date Received:**	07/08/16
Method:	MADEP EPH REV 1.1 SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC Phase 2A Release Assessment, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DE14799.D	1	07/11/16	TA	07/08/16	OP48098	GDE823
Run #2 [a]	DE14822.D	1	07/13/16	TA	07/08/16	OP48098	GDE825

	Initial Volume	Final Volume
Run #1	890 ml	2.0 ml
Run #2	890 ml	2.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.6	1.8	ug/l	
208-96-8	Acenaphthylene	ND	5.6	0.40	ug/l	
120-12-7	Anthracene	ND	5.6	0.65	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.6	0.34	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.6	0.33	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.6	0.50	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.6	0.42	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.6	0.40	ug/l	
218-01-9	Chrysene	ND	5.6	0.49	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.6	0.44	ug/l	
206-44-0	Fluoranthene	ND	5.6	0.38	ug/l	
86-73-7	Fluorene	ND	5.6	0.45	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.6	0.33	ug/l	
91-57-6	2-Methylnaphthalene	0.87	5.6	0.51	ug/l	JB
91-20-3	Naphthalene	2.2	5.6	1.1	ug/l	JB
85-01-8	Phenanthrene	ND	5.6	0.34	ug/l	
129-00-0	Pyrene	ND	5.6	0.67	ug/l	
	C11-C22 Aromatics (Unadj.)	43.4	110	32	ug/l	JB
	C9-C18 Aliphatics	24.4	110	19	ug/l	JB
	C19-C36 Aliphatics	35.7	110	30	ug/l	JB
	C11-C22 Aromatics	40.3	110	32	ug/l	JB

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	59%	47%	40-140%
321-60-8	2-Fluorobiphenyl	81%	46%	40-140%
3386-33-2	1-Chlorooctadecane	34% [b]	43%	40-140%
580-13-2	2-Bromonaphthalene	89%	5% [b]	40-140%

(a) Confirmation run.
(b) Outside control limits due to possible matrix interference.Sample results confirmed by refractionation/re-analysis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	OSGP8-GWD		
Lab Sample ID:	MC46783-3	**Date Sampled:**	07/06/16
Matrix:	AQ - Ground Water	**Date Received:**	07/08/16
Method:	MADEP EPH REV 1.1 SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC Phase 2A Release Assessment, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DE14800.D	1	07/11/16	TA	07/08/16	OP48098	GDE823
Run #2 [a]	DE14823.D	1	07/13/16	TA	07/08/16	OP48098	GDE825

	Initial Volume	Final Volume
Run #1	880 ml	2.0 ml
Run #2	880 ml	2.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.7	1.8	ug/l	
208-96-8	Acenaphthylene	ND	5.7	0.40	ug/l	
120-12-7	Anthracene	ND	5.7	0.66	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.7	0.34	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.7	0.33	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.7	0.51	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.7	0.42	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.7	0.40	ug/l	
218-01-9	Chrysene	ND	5.7	0.49	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.7	0.44	ug/l	
206-44-0	Fluoranthene	ND	5.7	0.38	ug/l	
86-73-7	Fluorene	ND	5.7	0.45	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.7	0.33	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.7	0.51	ug/l	
91-20-3	Naphthalene	ND	5.7	1.1	ug/l	
85-01-8	Phenanthrene	ND	5.7	0.35	ug/l	
129-00-0	Pyrene	ND	5.7	0.68	ug/l	
	C11-C22 Aromatics (Unadj.)	41.1	110	33	ug/l	JB
	C9-C18 Aliphatics	26.6	110	19	ug/l	JB
	C19-C36 Aliphatics	41.5	110	31	ug/l	JB
	C11-C22 Aromatics	39.5	110	33	ug/l	JB

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	53%	42%	40-140%
321-60-8	2-Fluorobiphenyl	77%	59%	40-140%
3386-33-2	1-Chlorooctadecane	29% [b]	28% [b]	40-140%
580-13-2	2-Bromonaphthalene	86%	62%	40-140%

(a) Confirmation run.
(b) Outside control limits due to possible matrix interference. Confirmed by refractionation/reanalysis.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	OSGP8-GWS		
Lab Sample ID:	MC46783-4	**Date Sampled:**	07/07/16
Matrix:	AQ - Ground Water	**Date Received:**	07/08/16
Method:	MADEP EPH REV 1.1 SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC Phase 2A Release Assessment, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DE14801.D	1	07/11/16	TA	07/08/16	OP48098	GDE823
Run #2							

	Initial Volume	Final Volume
Run #1	860 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.8	1.8	ug/l	
208-96-8	Acenaphthylene	ND	5.8	0.41	ug/l	
120-12-7	Anthracene	ND	5.8	0.67	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.8	0.35	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.8	0.34	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.8	0.52	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.8	0.43	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.8	0.41	ug/l	
218-01-9	Chrysene	ND	5.8	0.50	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.8	0.45	ug/l	
206-44-0	Fluoranthene	ND	5.8	0.39	ug/l	
86-73-7	Fluorene	ND	5.8	0.46	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.8	0.34	ug/l	
91-57-6	2-Methylnaphthalene	0.61	5.8	0.53	ug/l	JB
91-20-3	Naphthalene	1.3	5.8	1.1	ug/l	JB
85-01-8	Phenanthrene	ND	5.8	0.35	ug/l	
129-00-0	Pyrene	ND	5.8	0.70	ug/l	
	C11-C22 Aromatics (Unadj.)	44.8	120	33	ug/l	JB
	C9-C18 Aliphatics	26.4	120	19	ug/l	JB
	C19-C36 Aliphatics	44.0	120	31	ug/l	JB
	C11-C22 Aromatics	42.9	120	33	ug/l	JB

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%		40-140%
321-60-8	2-Fluorobiphenyl	74%		40-140%
3386-33-2	1-Chlorooctadecane	47%		40-140%
580-13-2	2-Bromonaphthalene	83%		40-140%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	OSGP1-GWD		
Lab Sample ID:	MC46783-5	**Date Sampled:**	07/07/16
Matrix:	AQ - Ground Water	**Date Received:**	07/08/16
Method:	MADEP EPH REV 1.1 SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC Phase 2A Release Assessment, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DE14802.D	1	07/11/16	TA	07/08/16	OP48098	GDE823
Run #2 [a]	DE14824.D	1	07/13/16	TA	07/08/16	OP48098	GDE825

	Initial Volume	Final Volume
Run #1	880 ml	2.0 ml
Run #2	880 ml	2.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.7	1.8	ug/l	
208-96-8	Acenaphthylene	ND	5.7	0.40	ug/l	
120-12-7	Anthracene	ND	5.7	0.66	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.7	0.34	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.7	0.33	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.7	0.51	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.7	0.42	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.7	0.40	ug/l	
218-01-9	Chrysene	ND	5.7	0.49	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.7	0.44	ug/l	
206-44-0	Fluoranthene	ND	5.7	0.38	ug/l	
86-73-7	Fluorene	ND	5.7	0.45	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.7	0.33	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.7	0.51	ug/l	
91-20-3	Naphthalene	ND	5.7	1.1	ug/l	
85-01-8	Phenanthrene	ND	5.7	0.35	ug/l	
129-00-0	Pyrene	ND	5.7	0.68	ug/l	
	C11-C22 Aromatics (Unadj.)	39.4	110	33	ug/l	JB
	C9-C18 Aliphatics	24.7	110	19	ug/l	JB
	C19-C36 Aliphatics	51.5	110	31	ug/l	JB
	C11-C22 Aromatics	38.0	110	33	ug/l	JB

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	44%	54%	40-140%
321-60-8	2-Fluorobiphenyl	70%	82%	40-140%
3386-33-2	1-Chlorooctadecane	34% [b]	27% [b]	40-140%
580-13-2	2-Bromonaphthalene	75%	91%	40-140%

(a) Confirmation run.
(b) Outside control limits due to possible matrix interference. Confirmed by refractionation/reanalysis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

PAGE 1 OF 1

NE

50 D'Angelo Dr., Building One, Marlborough, MA 01752
TEL. 508-481-6200 FAX. 508-481-7753
www.accutest.com

80996056218 1

Bottle Order Control #

Accutest Quote #

Accutest Job # MC46783

Client / Reporting Information

Company Name: Anderson Mulholland & Associates
Street Address: 2700 Westchester Avenue, Suite 417
City: Purchase State: NY Zip: 10577
Project Contact: Terry Taylor E-mail:
Phone #: 914-251-0400 Fax #:
Sampler(s) Name(s): N. Rivera, R. Stuart, R. O'Reilly, T. Taylor Phone #:

Project Information

Project Name: BMSMC Phase 2A Release Assessment
Street:
City: Humacao State: PR
Project #: 02i
Client Purchase Order #:
Project Manager: Terry Taylor

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	C11 - C22 Aromatics via BMA EPH R	BMA EPH	LAB USE ONLY
-1	OSGP 6 - GWS		7/6/16	1020	TT	GW	2	2								X	X	
-2	OSGP 6D - GWS		7/6/16	1045	TT	GW	2	2								X	X	
-3	OSGP 8 - GWD		7/6/16	1340	TT	GW	2	2								X	X	
	OSGP 8 - GWS		7/7/16	1000	TT	GW	2	2								X	X	
-4	OSGP 8MS - GWS		7/7/16	1030	TT	GW	2	2								X	X	
	OSGP 8MSD - GWS		7/7/16	1100	TT	GW	2	2								X	X	
-5	OSGP1 - GWD		7/7/16	1330	TT	GW	2	2								X	X	16B
						EB												

Turnaround Time (Business days)

- ☐ Std. 15 Business Days
- ☐ Std. 10 Business Days (by Contract only)
- ☐ 10 Day *RUSH*
- ☐ 5 Day *RUSH*
- ☒ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

RUSH!

Data Deliverable Information

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☒ FULLT1 (Level 3+4)
- ☐ NJ Reduced
- ☐ Commercial "C"
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format
- ☐ Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

INITIAL ASESSMENT BR
LABEL VERIFICATION VL

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	7/7/16 1700	1 Fed Ex	2 FX	7-9-16	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 365 366 ☐ Intact ☐ Not intact	Preserved where applicable ☐	On Ice ☒ Cooler Temp. 5.6°C 3.9°C

5.1

5

MC46783: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: MC46783 **Client:** ANDERSON MULHOLLAND ASSO **Project:** BMSMC

Date / Time Received: 7/8/2016 9:30:00 AM **Delivery Method:** FedEx **Airbill #'s:** 8099 6056 2181

Cooler Temps (Initial/Adjusted): #2: (3.9/3.9); #1: (5.6/5.6);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer ID:	IRGUN1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

MC46783: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

Anderson Mulholland and Assoc.

Job No: MC46783

BMSMC Phase 2A Release Assessment, Humacao, PR
Project No: 02I

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC46783-1 Collected: 06-JUL-16 10:20 By: TT OSGP6-GWS			Received: 08-JUL-16 By: NT			
MC46783-1	MADEP EPH REV 1.1	11-JUL-16 10:37	TA	08-JUL-16	PA	BMAEPH
MC46783-2 Collected: 06-JUL-16 10:45 By: TT OSGP6D-GWS			Received: 08-JUL-16 By: NT			
MC46783-2	MADEP EPH REV 1.1	11-JUL-16 11:05	TA	08-JUL-16	PA	BMAEPH
MC46783-2	MADEP EPH REV 1.1	13-JUL-16 14:56	TA	08-JUL-16	PA	BMAEPH
MC46783-3 Collected: 06-JUL-16 13:40 By: TT OSGP8-GWD			Received: 08-JUL-16 By: NT			
MC46783-3	MADEP EPH REV 1.1	11-JUL-16 11:32	TA	08-JUL-16	PA	BMAEPH
MC46783-3	MADEP EPH REV 1.1	13-JUL-16 15:24	TA	08-JUL-16	PA	BMAEPH
MC46783-4 Collected: 07-JUL-16 10:00 By: TT OSGP8-GWS			Received: 08-JUL-16 By: NT			
MC46783-4	MADEP EPH REV 1.1	11-JUL-16 12:00	TA	08-JUL-16	PA	BMAEPH
MC46783-5 Collected: 07-JUL-16 13:30 By: TT OSGP1-GWD			Received: 08-JUL-16 By: NT			
MC46783-5	MADEP EPH REV 1.1	11-JUL-16 12:28	TA	08-JUL-16	PA	BMAEPH
MC46783-5	MADEP EPH REV 1.1	13-JUL-16 15:52	TA	08-JUL-16	PA	BMAEPH

SGS Accutest Internal Chain of Custody

Job Number: MC46783
Account: AMANYWP Anderson Mulholland and Assoc.
Project: BMSMC Phase 2A Release Assessment, Humacao, PR
Received: 07/08/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC46783-1.2	Walk In Ref #22	Forrest Thompson	07/08/16 12:08	Retrieve from Storage
MC46783-1.2	Forrest Thompson		07/13/16 08:58	Depleted
MC46783-2.2	Walk In Ref #22	Forrest Thompson	07/08/16 12:08	Retrieve from Storage
MC46783-2.2	Forrest Thompson		07/13/16 08:58	Depleted
MC46783-3.2	Walk In Ref #22	Forrest Thompson	07/08/16 12:08	Retrieve from Storage
MC46783-3.2	Forrest Thompson		07/13/16 08:58	Depleted
MC46783-4.1	Walk In Ref #22	Forrest Thompson	07/08/16 12:08	Retrieve from Storage
MC46783-4.1	Forrest Thompson		07/13/16 08:58	Depleted
MC46783-4.3	Walk In Ref #22	Forrest Thompson	07/08/16 12:08	Retrieve from Storage
MC46783-4.3	Forrest Thompson		07/13/16 08:58	Depleted
MC46783-4.5	Walk In Ref #22	Forrest Thompson	07/08/16 12:08	Retrieve from Storage
MC46783-4.5	Forrest Thompson		07/13/16 08:58	Depleted
MC46783-5.1	Walk In Ref #22	Forrest Thompson	07/08/16 12:08	Retrieve from Storage
MC46783-5.1	Forrest Thompson		07/13/16 08:58	Depleted

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: MC46783
Account: AMANYWP Anderson Mulholland and Assoc.
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48098-MB	DE14797.D	1	07/11/16	TA	07/08/16	OP48098	GDE823

The QC reported here applies to the following samples: **Method:** MADEP EPH REV 1.1

MC46783-1, MC46783-2, MC46783-3, MC46783-4, MC46783-5

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	1.6	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.36	ug/l	
120-12-7	Anthracene	ND	5.0	0.58	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.30	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.29	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.45	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.37	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.35	ug/l	
218-01-9	Chrysene	ND	5.0	0.43	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.0	0.39	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.33	ug/l	
86-73-7	Fluorene	ND	5.0	0.40	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.29	ug/l	
91-57-6	2-Methylnaphthalene	0.65	5.0	0.45	ug/l	J
91-20-3	Naphthalene	1.7	5.0	0.96	ug/l	J
85-01-8	Phenanthrene	ND	5.0	0.30	ug/l	
129-00-0	Pyrene	ND	5.0	0.60	ug/l	
	C11-C22 Aromatics (Unadj.)	40.4	100	29	ug/l	J
	C9-C18 Aliphatics	25.5	100	17	ug/l	J
	C19-C36 Aliphatics	29.7	100	27	ug/l	J
	C11-C22 Aromatics	38.0	100	29	ug/l	J

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	69%	40-140%
321-60-8	2-Fluorobiphenyl	75%	40-140%
3386-33-2	1-Chlorooctadecane	57%	40-140%
580-13-2	2-Bromonaphthalene	71%	40-140%

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC46783
Account: AMANYWP Anderson Mulholland and Assoc.
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48098-BS	DE14795.D	1	07/11/16	TA	07/08/16	OP48098	GDE823
OP48098-BSD	DE14796.D	1	07/11/16	TA	07/08/16	OP48098	GDE823

The QC reported here applies to the following samples: **Method:** MADEP EPH REV 1.1

MC46783-1, MC46783-2, MC46783-3, MC46783-4, MC46783-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	50	34.0	68	33.1	66	3	40-140/25
208-96-8	Acenaphthylene	50	32.3	65	31.8	64	2	40-140/25
120-12-7	Anthracene	50	35.6	71	34.8	70	2	40-140/25
56-55-3	Benzo(a)anthracene	50	39.8	80	39.8	80	0	40-140/25
50-32-8	Benzo(a)pyrene	50	40.8	82	41.3	83	1	40-140/25
205-99-2	Benzo(b)fluoranthene	50	40.3	81	42.5	85	5	40-140/25
191-24-2	Benzo(g,h,i)perylene	50	42.3	85	42.9	86	1	40-140/25
207-08-9	Benzo(k)fluoranthene	50	39.2	78	37.6	75	4	40-140/25
218-01-9	Chrysene	50	38.9	78	39.5	79	2	40-140/25
53-70-3	Dibenz(a,h)anthracene	50	41.9	84	43.1	86	3	40-140/25
206-44-0	Fluoranthene	50	37.6	75	37.3	75	1	40-140/25
86-73-7	Fluorene	50	33.4	67	32.8	66	2	40-140/25
193-39-5	Indeno(1,2,3-cd)pyrene	50	41.2	82	41.0	82	0	40-140/25
91-57-6	2-Methylnaphthalene	50	31.7	63	30.6	61	4	40-140/25
91-20-3	Naphthalene	50	32.4	65	30.5	61	6	40-140/25
85-01-8	Phenanthrene	50	34.2	68	34.0	68	1	40-140/25
129-00-0	Pyrene	50	37.7	75	37.3	75	1	40-140/25
	C11-C22 Aromatics (Unadj.)	800	683	85	675	84	1	40-140/25
	C9-C18 Aliphatics	300	219	73	220	73	0	40-140/25
	C19-C36 Aliphatics	400	338	85	333	83	1	40-140/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	71%	60%	40-140%
321-60-8	2-Fluorobiphenyl	75%	70%	40-140%
3386-33-2	1-Chlorooctadecane	55%	45%	40-140%
580-13-2	2-Bromonaphthalene	74%	71%	40-140%

Sample	Compound	Col #1	Col #2	Breakthrough	Limit
OP48098-BS	2-Methylnaphthalene	31.7	ND	0.0%	5.0
OP48098-BS	Naphthalene	32.4	ND	0.0%	5.0
OP48098-BSD	2-Methylnaphthalene	30.6	ND	0.0%	5.0
OP48098-BSD	Naphthalene	30.5	ND	0.0%	5.0

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC46783
Account: AMANYWP Anderson Mulholland and Assoc.
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48098-MS	DE14803.D	1	07/11/16	TA	07/08/16	OP48098	GDE823
OP48098-MSD	DE14804.D	1	07/11/16	TA	07/08/16	OP48098	GDE823
MC46783-4	DE14801.D	1	07/11/16	TA	07/08/16	OP48098	GDE823

The QC reported here applies to the following samples: **Method:** MADEP EPH REV 1.1

MC46783-1, MC46783-2, MC46783-3, MC46783-4, MC46783-5

CAS No.	Compound	MC46783-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		58.1	39.4	68	58.1	39.3	68	0	40-140/25
208-96-8	Acenaphthylene	ND		58.1	37.9	65	58.1	37.4	64	1	40-140/25
120-12-7	Anthracene	ND		58.1	42.0	72	58.1	40.7	70	3	40-140/25
56-55-3	Benzo(a)anthracene	ND		58.1	47.1	81	58.1	46.5	80	1	40-140/25
50-32-8	Benzo(a)pyrene	ND		58.1	48.8	84	58.1	48.3	83	1	40-140/25
205-99-2	Benzo(b)fluoranthene	ND		58.1	47.1	81	58.1	45.7	79	3	40-140/25
191-24-2	Benzo(g,h,i)perylene	ND		58.1	50.3	87	58.1	49.9	86	1	40-140/25
207-08-9	Benzo(k)fluoranthene	ND		58.1	47.0	81	58.1	45.2	78	4	40-140/25
218-01-9	Chrysene	ND		58.1	46.3	80	58.1	46.0	79	1	40-140/25
53-70-3	Dibenz(a,h)anthracene	ND		58.1	50.7	87	58.1	50.4	87	1	40-140/25
206-44-0	Fluoranthene	ND		58.1	44.5	77	58.1	44.0	76	1	40-140/25
86-73-7	Fluorene	ND		58.1	39.3	68	58.1	38.8	67	1	40-140/25
193-39-5	Indeno(1,2,3-cd)pyrene	ND		58.1	48.4	83	58.1	47.7	82	1	40-140/25
91-57-6	2-Methylnaphthalene	0.61	JB	58.1	36.1	61	58.1	35.1	59	3	40-140/25
91-20-3	Naphthalene	1.3	JB	58.1	35.1	58	58.1	32.9	54	6	40-140/25
85-01-8	Phenanthrene	ND		58.1	40.3	69	58.1	40.0	69	1	40-140/25
129-00-0	Pyrene	ND		58.1	44.1	76	58.1	43.5	75	1	40-140/25
	C11-C22 Aromatics (Unadj.)	44.8	JB	930	806	82	930	786	80	3	40-140/25
	C9-C18 Aliphatics	26.4	JB	349	271	70	349	258	66	5	40-140/25
	C19-C36 Aliphatics	44.0	JB	465	453	88	465	427	82	6	40-140/25

CAS No.	Surrogate Recoveries	MS	MSD	MC46783-4	Limits
84-15-1	o-Terphenyl	67%	67%	68%	40-140%
321-60-8	2-Fluorobiphenyl	75%	77%	74%	40-140%
3386-33-2	1-Chlorooctadecane	54%	50%	47%	40-140%
580-13-2	2-Bromonaphthalene	74%	76%	83%	40-140%

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: MC46783
Account: AMANYWP Anderson Mulholland and Assoc.
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

Method: MADEP EPH REV 1.1 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]	S3 [b]	S4 [a]
MC46783-1	DE14798.D	62	76	45	82
MC46783-2	DE14822.D	47	46	43	5* [c]
MC46783-2	DE14799.D	59	81	34* [c]	89
MC46783-3	DE14823.D	42	59	28* [d]	62
MC46783-3	DE14800.D	53	77	29* [d]	86
MC46783-4	DE14801.D	68	74	47	83
MC46783-5	DE14824.D	54	82	27* [d]	91
MC46783-5	DE14802.D	44	70	34* [d]	75
OP48098-BS	DE14795.D	71	75	55	74
OP48098-BSD	DE14796.D	60	70	45	71
OP48098-MB	DE14797.D	69	75	57	71
OP48098-MS	DE14803.D	67	75	54	74
OP48098-MSD	DE14804.D	67	77	50	76

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	40-140%
S2 = 2-Fluorobiphenyl	40-140%
S3 = 1-Chlorooctadecane	40-140%
S4 = 2-Bromonaphthalene	40-140%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2
(c) Outside control limits due to possible matrix interference.Sample results confirmed by refractionation/re-analysis.
(d) Outside control limits due to possible matrix interference. Confirmed by refractionation/reanalysis.

GC Surrogate Retention Time Summary

Job Number: MC46783
Account: AMANYWP Anderson Mulholland and Assoc.
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

Check Std:	GDE823-CC815	**Injection Date:**	07/11/16
Lab File ID:	DE14794.D	**Injection Time:**	08:14
Instrument ID:	GCDE	**Method:**	MADEP EPH REV 1.1

	S1 [a] RT	S2 [a] RT	S3 [b] RT	S4 [a] RT
Check Std	9.75	6.49	11.21	7.21

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [b] RT	S4 [a] RT
OP48098-BS	DE14795.D	07/11/16	09:15	9.74	6.49	11.21	7.21
OP48098-BSD	DE14796.D	07/11/16	09:42	9.74	6.49	11.21	7.21
OP48098-MB	DE14797.D	07/11/16	10:10	9.74	6.49	11.21	7.21
MC46783-1	DE14798.D	07/11/16	10:37	9.75	6.49	11.21	7.21
MC46783-2	DE14799.D	07/11/16	11:05	9.75	6.49	11.21	7.21
MC46783-3	DE14800.D	07/11/16	11:32	9.75	6.49	11.21	7.21
MC46783-4	DE14801.D	07/11/16	12:00	9.75	6.49	11.21	7.21
MC46783-5	DE14802.D	07/11/16	12:28	9.75	6.49	11.21	7.21
OP48098-MS	DE14803.D	07/11/16	12:55	9.75	6.49	11.21	7.21
OP48098-MSD	DE14804.D	07/11/16	13:23	9.75	6.49	11.21	7.21

Surrogate Compounds

S1 = o-Terphenyl
S2 = 2-Fluorobiphenyl
S3 = 1-Chlorooctadecane
S4 = 2-Bromonaphthalene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: MC46783
Account: AMANYWP Anderson Mulholland and Assoc.
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

Check Std:	GDE825-CC815	**Injection Date:**	07/13/16
Lab File ID:	DE14821.D	**Injection Time:**	13:44
Instrument ID:	GCDE	**Method:**	MADEP EPH REV 1.1

	S1 [a] RT	S2 [a] RT	S3 [b] RT	S4 [a] RT
Check Std	9.76	6.50	11.21	7.22

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [b] RT	S4 [a] RT
MC46783-2	DE14822.D	07/13/16	14:56	9.76	6.50	11.21	7.23
MC46783-3	DE14823.D	07/13/16	15:24	9.75	6.50	11.21	7.22
MC46783-5	DE14824.D	07/13/16	15:52	9.75	6.50	11.21	7.22

Surrogate Compounds

S1 = o-Terphenyl
S2 = 2-Fluorobiphenyl
S3 = 1-Chlorooctadecane
S4 = 2-Bromonaphthalene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: MC46783 **Sample:** GDE815-ICC815
Account: AMANYWP Anderson Mulholland and Assoc. **Lab FileID:** DE14670.D
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

Response Factor Report GCDE

Method : C:\msdchem\1\METHODS\EPH160622W.M (RTE Integrator)
Title : BMAEPH-working method
Last Update : Thu Jun 23 08:10:23 2016
Response via : Initial Calibration

Calibration Files
1 =de14672.d 2 =de14671.d 3 =de14670.d 4 =de14669.d
5 =de14668.d 6 =de14667.d 7 =de14666.d

Compound	1	2	3	4	5	6	7	Avg	%RSD
1)h c11-c22 Aromatics	1.248							1.248 E5	0.00
2) naphthalene	1.196	1.198	1.325	1.381	1.228	1.320	1.139	1.255 E5	6.94
3) 2-methylnaphthale	1.187	1.176	1.290	1.379	1.294	1.400	1.104	1.261 E5	8.71
4)s 2-fluorobiphenyl	1.078	1.073	1.184	1.235	1.154	1.217	1.071	1.145 E5	6.17
5) acenaphthylene	1.178	1.175	1.293	1.350	1.263	1.369	1.229	1.265 E5	6.13
6)s 2-bromonaphthalen	7.359	7.309	7.967	8.112	6.757	6.785	5.902	7.170 E4	10.66
7) acenaphthene	1.232	1.232	1.368	1.455	1.382	1.590	1.491	1.393 E5	9.49
8) fluorene	1.204	1.203	1.323	1.374	1.286	1.408	1.195	1.285 E5	6.82
9) phenanthrene	1.205	1.209	1.322	1.340	1.213	1.310	1.146	1.249 E5	5.90
10) anthracene	1.139	1.149	1.248	1.358	1.369	1.605	1.443	1.330 E5	12.54
11)s o-terphenyl	1.206	1.210	1.334	1.378	1.314	1.481	1.338	1.323 E5	7.23
12) fluoranthene	1.171	1.189	1.305	1.339	1.270	1.426	1.278	1.283 E5	6.81
13) pyrene	1.197	1.220	1.338	1.367	1.291	1.461	1.319	1.313 E5	6.83
14) benzo(a)anthracen	1.115	1.151	1.257	1.278	1.179	1.350	1.175	1.215 E5	6.80
15) chrysene	1.124	1.161	1.262	1.287	1.247	1.454	1.400	1.276 E5	9.31
16) benzo(B)fluoranth	1.141	1.220	1.255	1.233	1.170	1.243	1.025	1.184 E5	6.86
17) benzo(k)fluoranth	1.087	1.097	1.261	1.257	1.225	1.601	1.436	1.280 E5	14.33
18) benzo(a)pyrene	1.063	1.100	1.194	1.210	1.141	1.332	1.218	1.180 E5	7.51
19) indeno(1,2,3-cd)p	1.227	1.120	1.194	1.206	1.095	1.237	1.114	1.170 E5	5.05
20) dibenzo(ah)anthra	0.955	1.050	1.160	1.179	1.130	1.276	1.181	1.133 E5	9.13
21) benzo(ghi)perylen	1.085	1.070	1.154	1.169	1.082	1.233	1.150	1.135 E5	5.17
22)s bht								0.000	-1.00
23) bht								0.000	-1.00

Signal #2

25)h c-9	8.431							8.431 E4	0.00
26)h c-10	8.431							8.431 E4	0.00
27) naphthalene #2	0.840	0.850	0.918	0.954	0.925	1.002	0.874	0.909 E5	6.41
28) c-12	8.431							8.431 E4	0.00
29) 2-methylnaphthale	8.328	8.454	9.130	9.516	9.247	9.776	8.504	8.994 E4	6.33
30) c-14	8.431							8.431 E4	0.00
31) c-16	8.431							8.431 E4	0.00
32) c-18	8.431							8.431 E4	0.00
33) c-19	7.782							7.782 E4	0.00
34) c-20	7.782							7.782 E4	0.00
35)s 1-chlorooctadecan	5.973	6.056	6.546	6.812	6.649	7.158	6.412	6.515 E4	6.38
36) c-22	7.782							7.782 E4	0.00
37) c-24	7.782							7.782 E4	0.00
38) c-26	7.782							7.782 E4	0.00
39) c-28	7.782							7.782 E4	0.00
40)h c-30	7.782							7.782 E4	0.00
41)h c-36	7.782							7.782 E4	0.00
42)s bht								0.000	-1.00
43)s bht								0.000	-1.00
44)s bht								0.000	-1.00
45)s bht								0.000	-1.00

Initial Calibration Summary

Job Number: MC46783 **Sample:** GDE815-ICC815
Account: AMANYWP Anderson Mulholland and Assoc. **Lab FileID:** DE14670.D
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

(#) = Out of Range

EPH160622W.M Thu Jun 23 08:18:25 2016

Initial Calibration Verification

Job Number: MC46783 **Sample:** GDE815-ICV815
Account: AMANYWP Anderson Mulholland and Assoc. **Lab FileID:** DE14673.D
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

Evaluate Continuing Calibration Report

```
Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch  Signal #2: FID2B.ch
Acq On    : 22 Jun 2016   9:32 pm
Operator  : thomasa
Sample    : icv815-50
Misc      : op47862,gde815,1000,,,2,,w
ALS Vial  : 116   Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:13:26 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title  : BMAEPH-working method
QLast Update : Thu Jun 23 08:10:23 2016
Response via : Initial Calibration
Integrator: RTE

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


Min. RRF     :   0.000  Min. Rel. Area :  80%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 120%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
2		naphthalene	125.536	118.400 E3	5.7	89	0.00
3		2-methylnaphthalene	126.144	114.132 E3	9.5	88	0.00
4	s	2-fluorobiphenyl	114.477	106.641 E3	6.8	90	0.00
5		acenaphthylene	126.525	114.925 E3	9.2	89	0.00
6	s	2-bromonaphthalene	71.704	69.891 E3	2.5	88	0.00
7		acenaphthene	139.287	119.150 E3	14.5	87	0.00
8		fluorene	128.466	116.386 E3	9.4	88	0.00
9		phenanthrene	124.916	114.194 E3	8.6	86	0.00
10		anthracene	133.036	117.554 E3	11.6	94	0.00
11	s	o-terphenyl	132.308	116.369 E3	12.0	87	0.00
12		fluoranthene	128.264	116.865 E3	8.9	90	0.00
13		pyrene	131.341	122.669 E3	6.6	92	0.00
14		benzo(a)anthracene	121.482	111.862 E3	7.9	89	0.00
15		chrysene	127.650	108.382 E3	15.1	86	0.00
16		benzo(B)fluoranthene	118.397	113.722 E3	3.9	91	0.00
17		benzo(k)fluoranthene	128.030	105.933 E3	17.3	84	0.00
18		benzo(a)pyrene	117.959	98.642 E3	16.4	83	0.00
19		indeno(1,2,3-cd)pyrene	117.046	103.786 E3	11.3	87	0.00
20		dibenzo(ah)anthracene	113.307	103.349 E3	8.8	89	0.00
21		benzo(ghi)perylene	113.475	102.782 E3	9.4	89	0.00
Signal #2							
25	h	c-9	84.306	83.905 E3	0.5	0#	0.00
26	h	c-10	84.306	85.812 E3	-1.8	0#	0.00
27		naphthalene #2	90.911	92.685 E3	-2.0	101	0.00
28		c-12	84.306	84.160 E3	0.2	0#	0.00
29		2-methylnaphthalene #2	89.937	91.148 E3	-1.3	100	0.00
30		c-14	84.306	83.295 E3	1.2	0#	0.00
31		c-16	84.306	82.055 E3	2.7	0#	0.00

Initial Calibration Verification

Job Number: MC46783 **Sample:** GDE815-ICV815
Account: AMANYWP Anderson Mulholland and Assoc. **Lab FileID:** DE14673.D
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

32		c-18	84.306	80.423	E3	4.6	0#	0.00
33		c-19	77.824	79.025	E3	-1.5	0#	0.00
34		c-20	77.824	78.089	E3	-0.3	0#	0.00
35	s	1-chlorooctadecane	65.153	76.577	E3	-17.5	117	0.00
36		c-22	77.824	78.551	E3	-0.9	0#	0.00
37		c-24	77.824	77.444	E3	0.5	0#	0.00
38		c-26	77.824	75.126	E3	3.5	0#	0.00
39		c-28	77.824	73.682	E3	5.3	0#	0.00
40	h	c-30	77.824	72.107	E3	7.3	0#	0.00
41	h	c-36	77.824	64.762	E3	16.8	0#	0.00

Evaluate Continuing Calibration Report - Not Founds

1	h	c11-c22 Aromatics (Unadj.)	124.757	0.000	E3	100.0#	0#	-5.10#
22	s	bht	0.000	0.000		0.0	0#	-20.00#
23		bht	0.000	0.000		0.0	0#	-20.00#

Signal #2

42	s	bht	0.000	0.000		0.0	0#	-23.00#
43	s	bht	0.000	0.000		0.0	0#	-23.00#
44	s	bht	0.000	0.000		0.0	0#	-23.00#
45	s	bht	0.000	0.000		0.0	0#	-23.00#

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

EPH160622W.M Thu Jun 23 08:18:21 2016

Continuing Calibration Summary

Job Number: MC46783 **Sample:** GDE823-CC815
Account: AMANYWP Anderson Mulholland and Assoc. **Lab FileID:** DE14794.D
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

Evaluate Continuing Calibration Report

```
Data Path : C:\msdchem\1\DATA\DE160711EPH\
Data File : de14794.d
Signal(s) : Signal #1: FID1A.ch  Signal #2: FID2B.ch
Acq On    : 11 Jul 2016   8:14 am
Operator  : thomasa
Sample    : cc815-50,gde823
Misc      : op47862,gde823,1000,,,2,,w
ALS Vial  : 142   Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 11 09:04:31 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title  : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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


Min. RRF     :   0.000  Min. Rel. Area :  75%  Max. R.T. Dev  0.50min
Max. RRF Dev :  25%     Max. Rel. Area : 125%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
2		naphthalene	125.536	138.315 E3	-10.2	104	0.00
3		2-methylnaphthalene	126.144	138.103 E3	-9.5	107	0.00
4	s	2-fluorobiphenyl	114.477	124.320 E3	-8.6	105	0.00
5		acenaphthylene	126.525	134.829 E3	-6.6	104	0.00
6	s	2-bromonaphthalene	71.704	83.081 E3	-15.9	104	0.00
7		acenaphthene	139.287	142.574 E3	-2.4	104	0.00
8		fluorene	128.466	137.802 E3	-7.3	104	0.00
9		phenanthrene	124.916	137.286 E3	-9.9	104	0.00
10		anthracene	133.036	134.761 E3	-1.3	108	0.00
11	s	o-terphenyl	132.308	138.408 E3	-4.6	104	0.00
12		fluoranthene	128.264	135.960 E3	-6.0	104	0.00
13		pyrene	131.341	138.971 E3	-5.8	104	0.00
14		benzo(a)anthracene	121.482	130.028 E3	-7.0	103	0.00
15		chrysene	127.650	133.024 E3	-4.2	105	0.00
16		benzo(B)fluoranthene	118.397	131.315 E3	-10.9	105	0.00
17		benzo(k)fluoranthene	128.030	135.283 E3	-5.7	107	0.00
18		benzo(a)pyrene	117.959	126.566 E3	-7.3	106	0.00
19		indeno(1,2,3-cd)pyrene	117.046	129.881 E3	-11.0	109	0.00
20		dibenzo(ah)anthracene	113.307	124.980 E3	-10.3	108	0.00
21		benzo(ghi)perylene	113.475	125.229 E3	-10.4	109	0.00
Signal #2							
25	h	c-9	84.306	88.686 E3	-5.2	0#	0.00
26	h	c-10	84.306	89.206 E3	-5.8	0#	0.00
27		naphthalene #2	90.911	94.524 E3	-4.0	103	0.00
28		c-12	84.306	87.646 E3	-4.0	0#	0.00
29		2-methylnaphthalene #2	89.937	93.994 E3	-4.5	103	0.00
30		c-14	84.306	86.538 E3	-2.6	0#	0.00
31		c-16	84.306	84.885 E3	-0.7	0#	0.00

Continuing Calibration Summary

Job Number: MC46783 **Sample:** GDE823-CC815
Account: AMANYWP Anderson Mulholland and Assoc. **Lab FileID:** DE14794.D
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

32		c-18	84.306	84.468	E3	-0.2	0#	0.00
33		c-19	77.824	83.023	E3	-6.7	0#	0.00
34		c-20	77.824	81.194	E3	-4.3	0#	0.00
35	s	1-chlorooctadecane	65.153	64.602	E3	0.8	99	0.00
36		c-22	77.824	80.371	E3	-3.3	0#	0.00
37		c-24	77.824	74.910	E3	3.7	0#	0.00
38		c-26	77.824	79.846	E3	-2.6	0#	0.00
39		c-28	77.824	77.390	E3	0.6	0#	0.00
40	h	c-30	77.824	77.461	E3	0.5	0#	0.00
41	h	c-36	77.824	68.616	E3	11.8	0#	0.00

Evaluate Continuing Calibration Report - Not Founds

1	h	c11-c22 Aromatics (Unadj.)	124.757	0.000	E3	100.0#	0#	-5.10#
22	s	bht	0.000	0.000		0.0	0#	-20.00#
23		bht	0.000	0.000		0.0	0#	-20.00#

Signal #2

42	s	bht	0.000	0.000		0.0	0#	-23.00#
43	s	bht	0.000	0.000		0.0	0#	-23.00#
44	s	bht	0.000	0.000		0.0	0#	-23.00#
45	s	bht	0.000	0.000		0.0	0#	-23.00#

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

EPH160711W.M Tue Jul 12 10:50:11 2016

Continuing Calibration Summary

Job Number: MC46783 **Sample:** GDE823-CC815
Account: AMANYWP Anderson Mulholland and Assoc. **Lab FileID:** DE14805.D
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

Evaluate Continuing Calibration Report

```
Data Path : C:\msdchem\1\DATA\DE160711EPH\
Data File : de14805.d
Signal(s) : Signal #1: FID1A.ch  Signal #2: FID2B.ch
Acq On    : 11 Jul 2016   1:50 pm
Operator  : thomasa
Sample    : cc815-50,gde823
Misc      : op47862,gde823,1000,,,2,,w
ALS Vial  : 142   Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 07:47:41 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title  : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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


Min. RRF     :   0.000  Min. Rel. Area :  75%  Max. R.T. Dev  0.50min
Max. RRF Dev :  25%     Max. Rel. Area : 125%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
2		naphthalene	125.536	137.077 E3	-9.2	103	0.00
3		2-methylnaphthalene	126.144	136.924 E3	-8.5	106	0.00
4	s	2-fluorobiphenyl	114.477	122.691 E3	-7.2	104	0.00
5		acenaphthylene	126.525	132.624 E3	-4.8	103	0.00
6	s	2-bromonaphthalene	71.704	80.386 E3	-12.1	101	0.00
7		acenaphthene	139.287	138.260 E3	0.7	101	0.00
8		fluorene	128.466	134.944 E3	-5.0	102	0.00
9		phenanthrene	124.916	132.884 E3	-6.4	101	0.00
10		anthracene	133.036	129.394 E3	2.7	104	0.00
11	s	o-terphenyl	132.308	134.285 E3	-1.5	101	0.00
12		fluoranthene	128.264	130.281 E3	-1.6	100	0.00
13		pyrene	131.341	133.455 E3	-1.6	100	0.00
14		benzo(a)anthracene	121.482	124.061 E3	-2.1	99	0.00
15		chrysene	127.650	126.225 E3	1.1	100	0.00
16		benzo(B)fluoranthene	118.397	128.399 E3	-8.4	102	0.00
17		benzo(k)fluoranthene	128.030	123.437 E3	3.6	98	0.00
18		benzo(a)pyrene	117.959	119.627 E3	-1.4	100	0.00
19		indeno(1,2,3-cd)pyrene	117.046	120.996 E3	-3.4	101	0.00
20		dibenzo(ah)anthracene	113.307	117.865 E3	-4.0	102	0.00
21		benzo(ghi)perylene	113.475	117.369 E3	-3.4	102	0.00
Signal #2							
25	h	c-9	84.306	87.436 E3	-3.7	0#	0.00
26	h	c-10	84.306	88.196 E3	-4.6	0#	0.00
27		naphthalene #2	90.911	93.950 E3	-3.3	102	0.00
28		c-12	84.306	87.166 E3	-3.4	0#	0.00
29		2-methylnaphthalene #2	89.937	94.112 E3	-4.6	103	0.00
30		c-14	84.306	87.220 E3	-3.5	0#	0.00
31		c-16	84.306	86.859 E3	-3.0	0#	0.00

Continuing Calibration Summary

Job Number: MC46783 **Sample:** GDE823-CC815
Account: AMANYWP Anderson Mulholland and Assoc. **Lab FileID:** DE14805.D
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

32		c-18	84.306	87.212	E3	-3.4	0#	0.00
33		c-19	77.824	86.937	E3	-11.7	0#	0.00
34		c-20	77.824	84.926	E3	-9.1	0#	0.00
35	s	1-chlorooctadecane	65.153	68.435	E3	-5.0	105	0.00
36		c-22	77.824	85.058	E3	-9.3	0#	0.00
37		c-24	77.824	79.103	E3	-1.6	0#	0.00
38		c-26	77.824	84.981	E3	-9.2	0#	0.00
39		c-28	77.824	82.414	E3	-5.9	0#	0.00
40	h	c-30	77.824	82.042	E3	-5.4	0#	0.00
41	h	c-36	77.824	75.809	E3	2.6	0#	0.00

Evaluate Continuing Calibration Report - Not Founds

1	h	c11-c22 Aromatics (Unadj.)	124.757	0.000	E3	100.0#	0#	-5.10#
22	s	bht	0.000	0.000		0.0	0#	-20.00#
23		bht	0.000	0.000		0.0	0#	-20.00#

Signal #2

42	s	bht	0.000	0.000		0.0	0#	-23.00#
43	s	bht	0.000	0.000		0.0	0#	-23.00#
44	s	bht	0.000	0.000		0.0	0#	-23.00#
45	s	bht	0.000	0.000		0.0	0#	-23.00#

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

EPH160711W.M Tue Jul 12 10:50:05 2016

Continuing Calibration Summary

Job Number: MC46783 **Sample:** GDE825-CC815
Account: AMANYWP Anderson Mulholland and Assoc. **Lab FileID:** DE14821.D
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

Evaluate Continuing Calibration Report

```
Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14821.d
Signal(s) : Signal #1: FID1A.ch  Signal #2: FID2B.ch
Acq On    : 13 Jul 2016   1:44 pm
Operator  : thomasa
Sample    : cc815-50,gde825
Misc      : op47862,gde825,1000,,,2,,w
ALS Vial  : 142   Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 15:15:15 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title  : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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


Min. RRF     :   0.000  Min. Rel. Area :  75%  Max. R.T. Dev  0.50min
Max. RRF Dev :  25%     Max. Rel. Area : 125%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
2		naphthalene	125.536	136.311 E3	-8.6	103	0.00
3		2-methylnaphthalene	126.144	132.868 E3	-5.3	103	0.00
4	s	2-fluorobiphenyl	114.477	122.386 E3	-6.9	103	0.00
5		acenaphthylene	126.525	132.698 E3	-4.9	103	0.00
6	s	2-bromonaphthalene	71.704	81.407 E3	-13.5	102	0.00
7		acenaphthene	139.287	140.547 E3	-0.9	103	0.00
8		fluorene	128.466	135.330 E3	-5.3	102	0.00
9		phenanthrene	124.916	133.317 E3	-6.7	101	0.00
10		anthracene	133.036	127.041 E3	4.5	102	0.00
11	s	o-terphenyl	132.308	136.017 E3	-2.8	102	0.00
12		fluoranthene	128.264	131.982 E3	-2.9	101	0.00
13		pyrene	131.341	135.031 E3	-2.8	101	0.00
14		benzo(a)anthracene	121.482	126.107 E3	-3.8	100	0.00
15		chrysene	127.650	129.630 E3	-1.6	103	0.00
16		benzo(B)fluoranthene	118.397	126.905 E3	-7.2	101	0.00
17		benzo(k)fluoranthene	128.030	130.740 E3	-2.1	104	0.00
18		benzo(a)pyrene	117.959	122.620 E3	-4.0	103	0.00
19		indeno(1,2,3-cd)pyrene	117.046	125.073 E3	-6.9	105	0.00
20		dibenzo(ah)anthracene	113.307	121.842 E3	-7.5	105	0.00
21		benzo(ghi)perylene	113.475	120.906 E3	-6.5	105	0.00

Signal #2

25	h	c-9	84.306	79.044 E3	6.2	0#	0.00
26	h	c-10	84.306	79.640 E3	5.5	0#	0.00
27		naphthalene #2	90.911	85.043 E3	6.5	93	0.00
28		c-12	84.306	78.651 E3	6.7	0#	0.00
29		2-methylnaphthalene #2	89.937	84.483 E3	6.1	93	0.00
30		c-14	84.306	77.806 E3	7.7	0#	0.00
31		c-16	84.306	76.827 E3	8.9	0#	0.00

Continuing Calibration Summary

Job Number: MC46783 **Sample:** GDE825-CC815
Account: AMANYWP Anderson Mulholland and Assoc. **Lab FileID:** DE14821.D
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

32		c-18	84.306	76.514	E3	9.2	0#	0.00
33		c-19	77.824	75.645	E3	2.8	0#	0.00
34		c-20	77.824	73.909	E3	5.0	0#	0.00
35	s	1-chlorooctadecane	65.153	59.478	E3	8.7	91	0.00
36		c-22	77.824	73.260	E3	5.9	0#	0.00
37		c-24	77.824	67.855	E3	12.8	0#	0.00
38		c-26	77.824	72.415	E3	7.0	0#	0.00
39		c-28	77.824	70.727	E3	9.1	0#	0.00
40	h	c-30	77.824	70.707	E3	9.1	0#	0.00
41	h	c-36	77.824	64.007	E3	17.8	0#	0.00

Evaluate Continuing Calibration Report - Not Founds

1	h	c11-c22 Aromatics (Unadj.)	124.757	0.000	E3	100.0#	0#	-5.10#
22	s	bht	0.000	0.000		0.0	0#	-20.00#
23		bht	0.000	0.000		0.0	0#	-20.00#

Signal #2

42	s	bht	0.000	0.000		0.0	0#	-23.00#
43	s	bht	0.000	0.000		0.0	0#	-23.00#
44	s	bht	0.000	0.000		0.0	0#	-23.00#
45	s	bht	0.000	0.000		0.0	0#	-23.00#

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

EPH160713W.M Wed Jul 13 16:10:02 2016

Continuing Calibration Summary

Job Number: MC46783 **Sample:** GDE825-CC815
Account: AMANYWP Anderson Mulholland and Assoc. **Lab FileID:** DE14825.D
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

Evaluate Continuing Calibration Report

```
Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14825.d
Signal(s) : Signal #1: FID1A.ch  Signal #2: FID2B.ch
Acq On    : 13 Jul 2016   4:20 pm
Operator  : thomasa
Sample    : cc815-50,gde825
Misc      : op47862,gde825,1000,,,2,,w
ALS Vial  : 142   Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 16:42:20 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title  : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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


Min. RRF     :   0.000  Min. Rel. Area :  75%  Max. R.T. Dev  0.50min
Max. RRF Dev :  25%     Max. Rel. Area : 125%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
2		naphthalene	125.536	127.510 E3	-1.6	96	0.00
3		2-methylnaphthalene	126.144	125.502 E3	0.5	97	0.00
4	s	2-fluorobiphenyl	114.477	115.967 E3	-1.3	98	0.00
5		acenaphthylene	126.525	127.142 E3	-0.5	98	0.00
6	s	2-bromonaphthalene	71.704	78.014 E3	-8.8	98	0.00
7		acenaphthene	139.287	135.688 E3	2.6	99	0.00
8		fluorene	128.466	131.288 E3	-2.2	99	0.00
9		phenanthrene	124.916	131.576 E3	-5.3	100	0.00
10		anthracene	133.036	128.691 E3	3.3	103	0.00
11	s	o-terphenyl	132.308	133.796 E3	-1.1	100	0.00
12		fluoranthene	128.264	130.954 E3	-2.1	100	0.00
13		pyrene	131.341	134.131 E3	-2.1	100	0.00
14		benzo(a)anthracene	121.482	124.990 E3	-2.9	99	0.00
15		chrysene	127.650	126.685 E3	0.8	100	0.00
16		benzo(B)fluoranthene	118.397	123.719 E3	-4.5	99	0.00
17		benzo(k)fluoranthene	128.030	127.504 E3	0.4	101	0.00
18		benzo(a)pyrene	117.959	119.233 E3	-1.1	100	0.00
19		indeno(1,2,3-cd)pyrene	117.046	119.989 E3	-2.5	100	0.00
20		dibenzo(ah)anthracene	113.307	117.296 E3	-3.5	101	0.00
21		benzo(ghi)perylene	113.475	116.212 E3	-2.4	101	0.00

Signal #2

25	h	c-9	84.306	90.403 E3	-7.2	0#	0.00
26	h	c-10	84.306	91.315 E3	-8.3	0#	0.00
27		naphthalene #2	90.911	96.368 E3	-6.0	105	0.00
28		c-12	84.306	89.481 E3	-6.1	0#	0.00
29		2-methylnaphthalene #2	89.937	96.017 E3	-6.8	105	0.00
30		c-14	84.306	89.130 E3	-5.7	0#	0.00
31		c-16	84.306	88.526 E3	-5.0	0#	0.00

Continuing Calibration Summary

Job Number: MC46783 **Sample:** GDE825-CC815
Account: AMANYWP Anderson Mulholland and Assoc. **Lab FileID:** DE14825.D
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

32		c-18	84.306	88.600	E3	-5.1	0#	0.00
33		c-19	77.824	88.348	E3	-13.5	0#	0.00
34		c-20	77.824	86.047	E3	-10.6	0#	0.00
35	s	1-chlorooctadecane	65.153	69.843	E3	-7.2	107	0.00
36		c-22	77.824	85.915	E3	-10.4	0#	0.00
37		c-24	77.824	80.152	E3	-3.0	0#	0.00
38		c-26	77.824	85.482	E3	-9.8	0#	0.00
39		c-28	77.824	82.850	E3	-6.5	0#	0.00
40	h	c-30	77.824	82.789	E3	-6.4	0#	0.00
41	h	c-36	77.824	75.467	E3	3.0	0#	0.00

Evaluate Continuing Calibration Report - Not Founds

1	h	c11-c22 Aromatics (Unadj.)	124.757	0.000	E3	100.0#	0#	-5.10#
22	s	bht	0.000	0.000		0.0	0#	-20.00#
23		bht	0.000	0.000		0.0	0#	-20.00#

Signal #2

42	s	bht	0.000	0.000		0.0	0#	-23.00#
43	s	bht	0.000	0.000		0.0	0#	-23.00#
44	s	bht	0.000	0.000		0.0	0#	-23.00#
45	s	bht	0.000	0.000		0.0	0#	-23.00#

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

EPH160713W.M Wed Jul 13 16:42:24 2016

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160711EPH\
Data File : de14798.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 10:37 am
Operator : thomasa
Sample : mc46783-1,op48098
Misc : op48098,gde823,850,,,2,,w
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 09:47:59 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) s 2-fluorobiphenyl	6.492	1749841	15.286 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 76.43%#	
6) s 2-bromonaphthalene	7.212	1179935	16.456 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 82.28%#	
11) s o-terphenyl	9.747	1653442	12.497 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 62.48%#	
35) s 1-chlorooctadecane	11.212	580971	8.917 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 44.58%#	
Target Compounds			
1) h c11-c22 Aromatics (Un...	5.097	1983744	15.901 µg/mlm
2) naphthalene	5.052	43698	0.348 µg/ml
25) h c-9	2.647	906921	10.758 µg/mlm
41) h c-36	16.983	1193593	15.337 µg/mlm

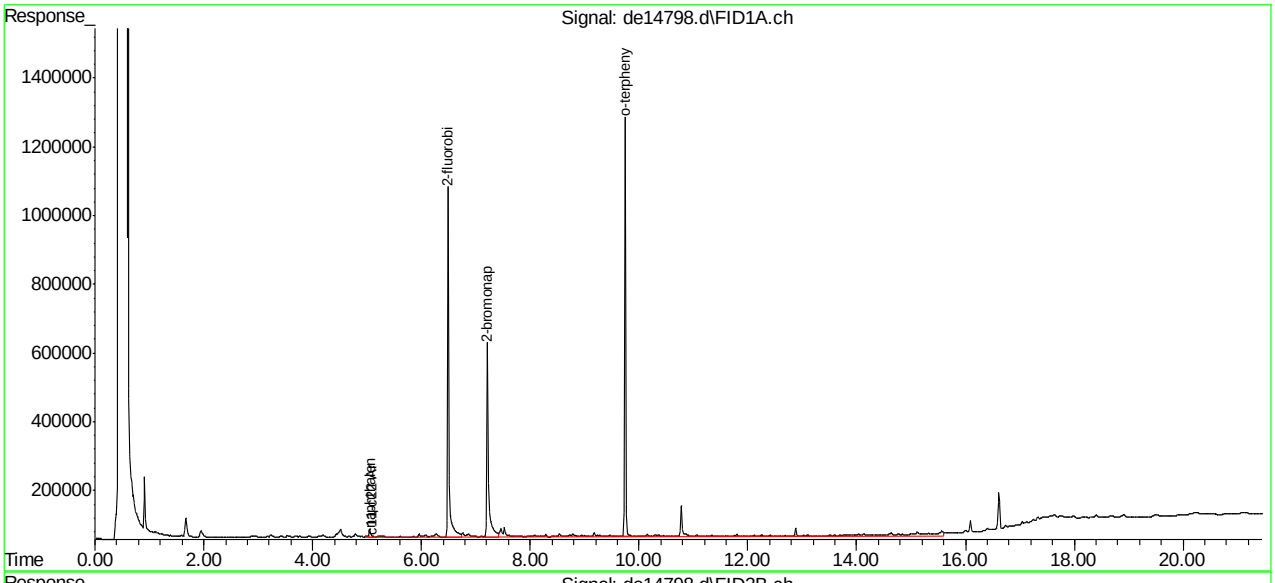
(f)=RT Delta > 1/2 Window (m)=manual int.

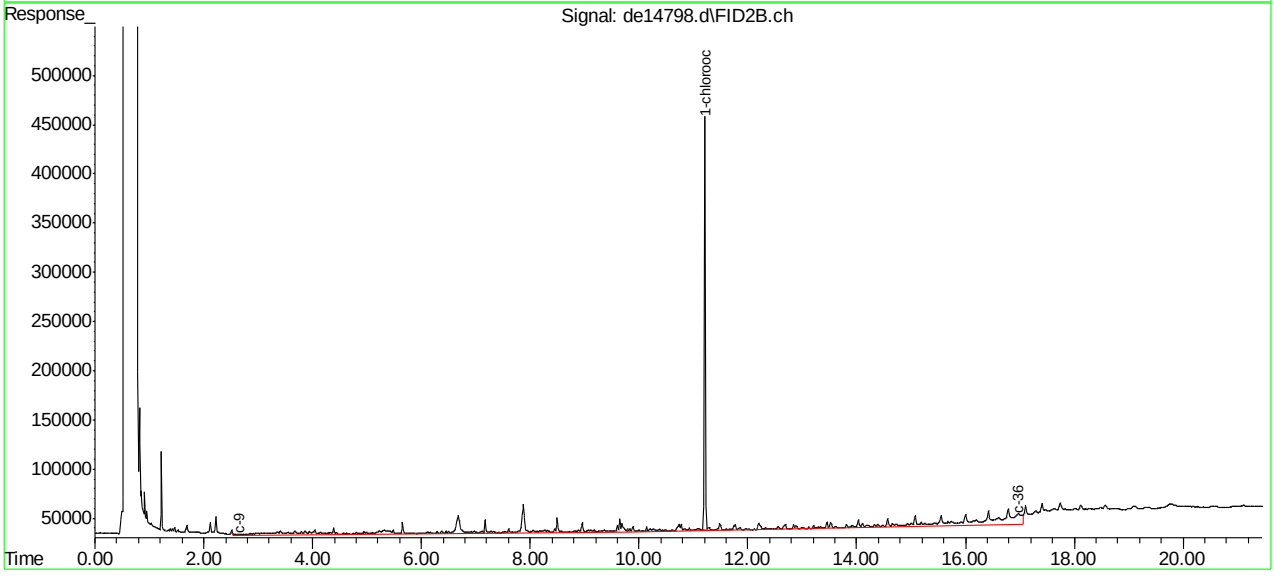
Quantitation Report (QT Reviewed)

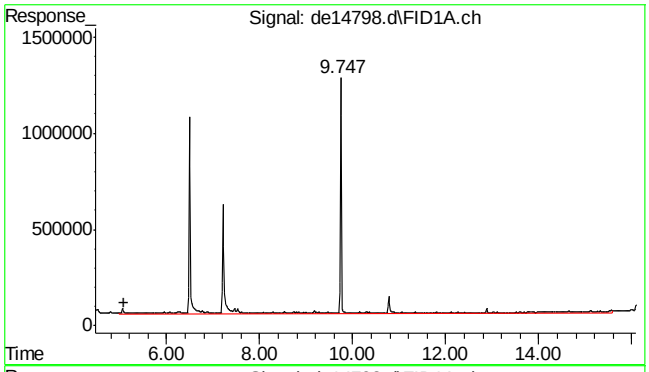
Data Path : C:\msdchem\1\DATA\DE160711EPH\
Data File : de14798.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 10:37 am
Operator : thomasa
Sample : mc46783-1,op48098
Misc : op48098,gde823,850,,,2,,w
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 09:47:59 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

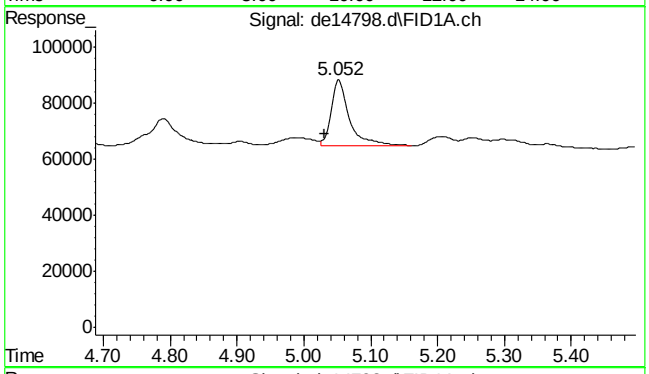






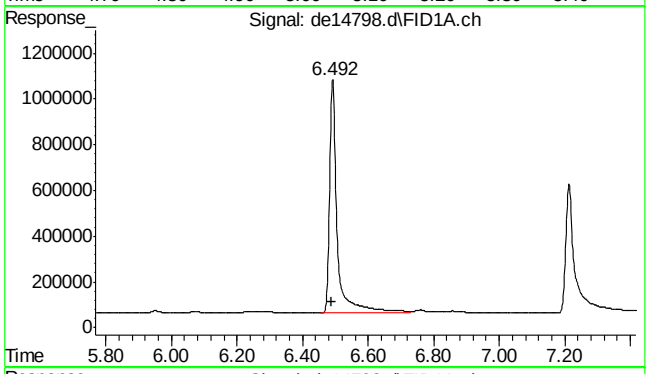
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 1983744
Conc: 15.90 µg/ml m



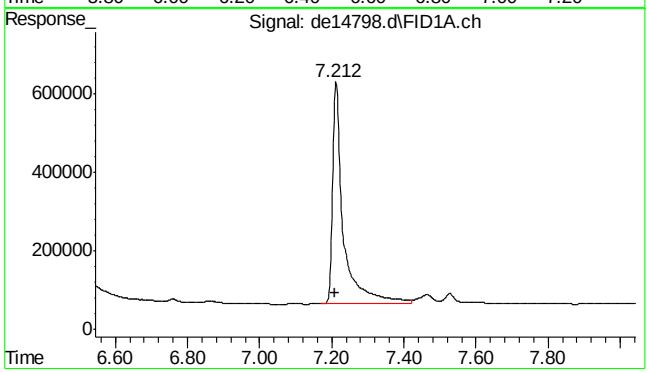
#2 naphthalene

R.T.: 5.052 min
Delta R.T.: 0.020 min
Response: 43698
Conc: 0.35 µg/ml



#4 2-fluorobiphenyl

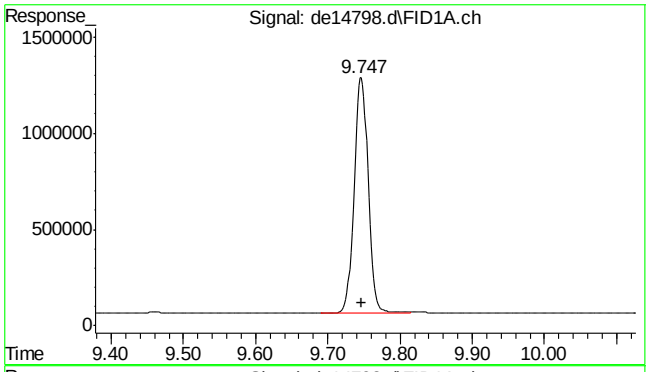
R.T.: 6.492 min
Delta R.T.: 0.005 min
Response: 1749841
Conc: 15.29 µg/ml



#6 2-bromonaphthalene

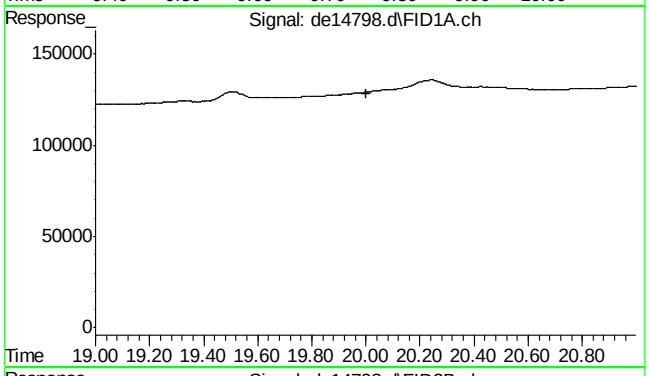
R.T.: 7.212 min
Delta R.T.: 0.003 min
Response: 1179935
Conc: 16.46 µg/ml

SGS ACCUTEST MC46783



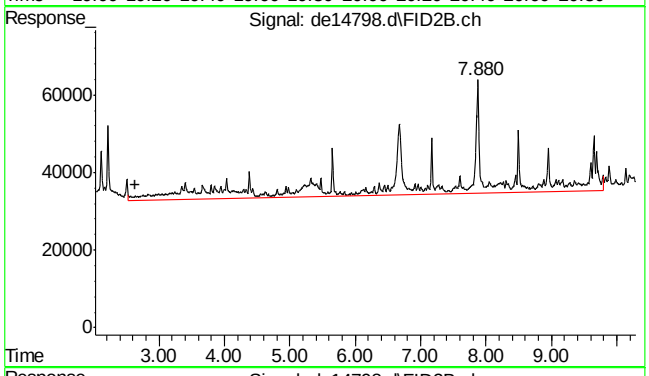
#11 o-terphenyl

R.T.: 9.747 min
Delta R.T.: 0.000 min
Response: 1653442
Conc: 12.50 µg/ml



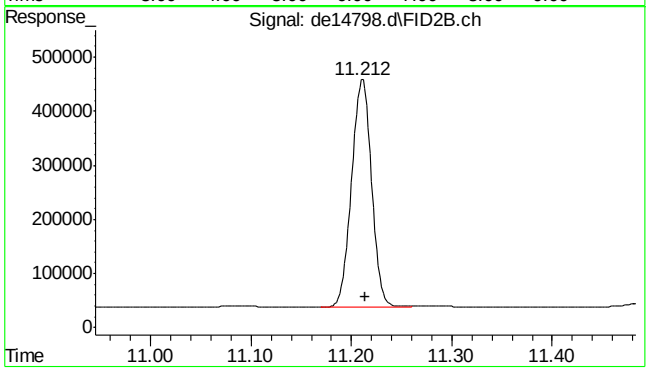
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



#25 c-9

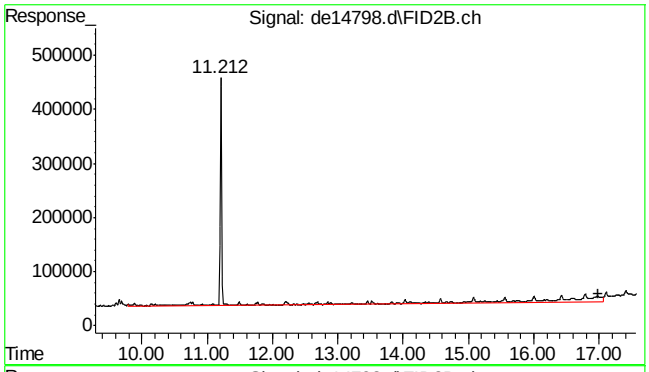
R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 906921
Conc: 10.76 µg/ml m



#35 1-chlorooctadecane

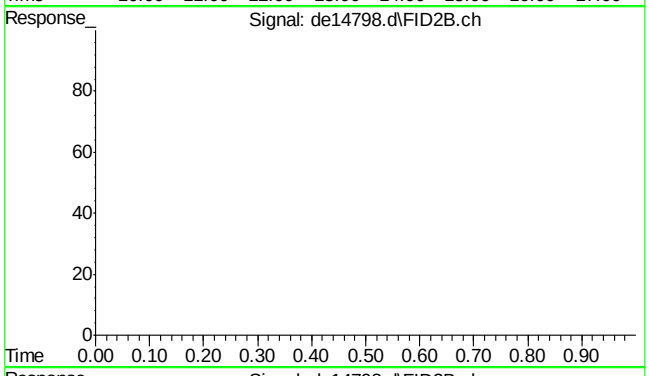
R.T.: 11.212 min
Delta R.T.: -0.002 min
Response: 580971
Conc: 8.92 µg/ml

SGS ACCUTEST MC46783



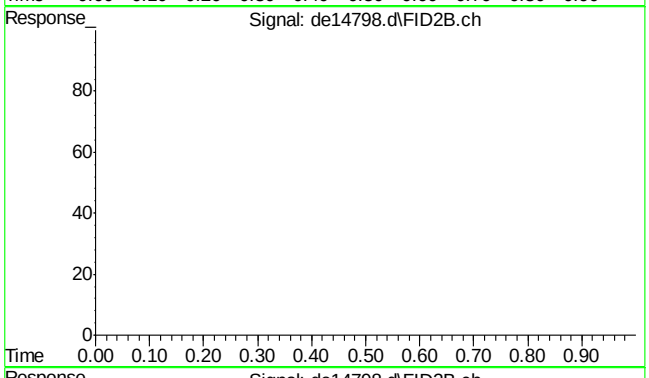
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1193593
Conc: 15.34 µg/ml m



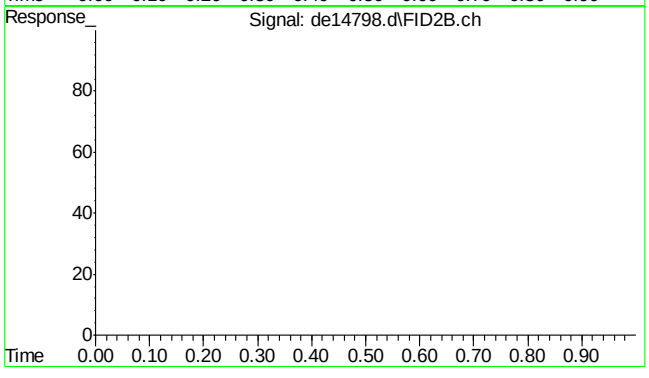
#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



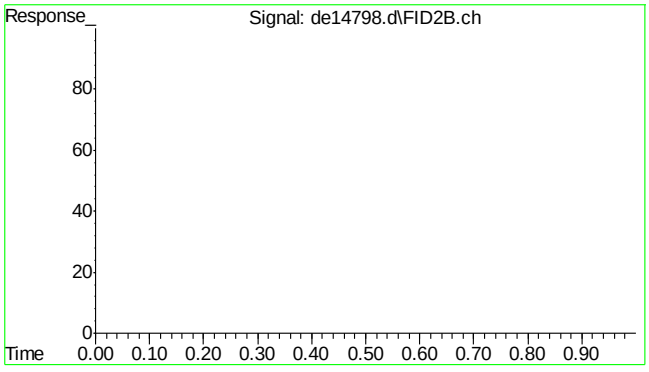
#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#44 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#45 bht

R.T.:	0.000 min
Exp R.T. :	23.000 min
Response:	0
Conc:	N.D.

711

7

SGS ACCUTEST MC46783

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160711EPH\
Data File : de14799.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 11:05 am
Operator : thomasa
Sample : mc46783-2,op48098
Misc : op48098,gde823,890,,,2,,w
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 09:50:41 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) s 2-fluorobiphenyl	6.490	1856855	16.220 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 81.10%#	
6) s 2-bromonaphthalene	7.212	1274635	17.776 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 88.88%#	
11) s o-terphenyl	9.747	1558090	11.776 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 58.88%#	
35) s 1-chlorooctadecane	11.210	449297	6.896 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 34.48%#	
Target Compounds			
1) h c11-c22 Aromatics (Un...	5.097	2411511	19.330 µg/mlm
2) naphthalene	5.047	124672	0.993 µg/ml
3) 2-methylnaphthalene	5.948	48825	0.387 µg/ml
25) h c-9	2.647	914858	10.852 µg/mlm
41) h c-36	16.983	1235941	15.881 µg/mlm

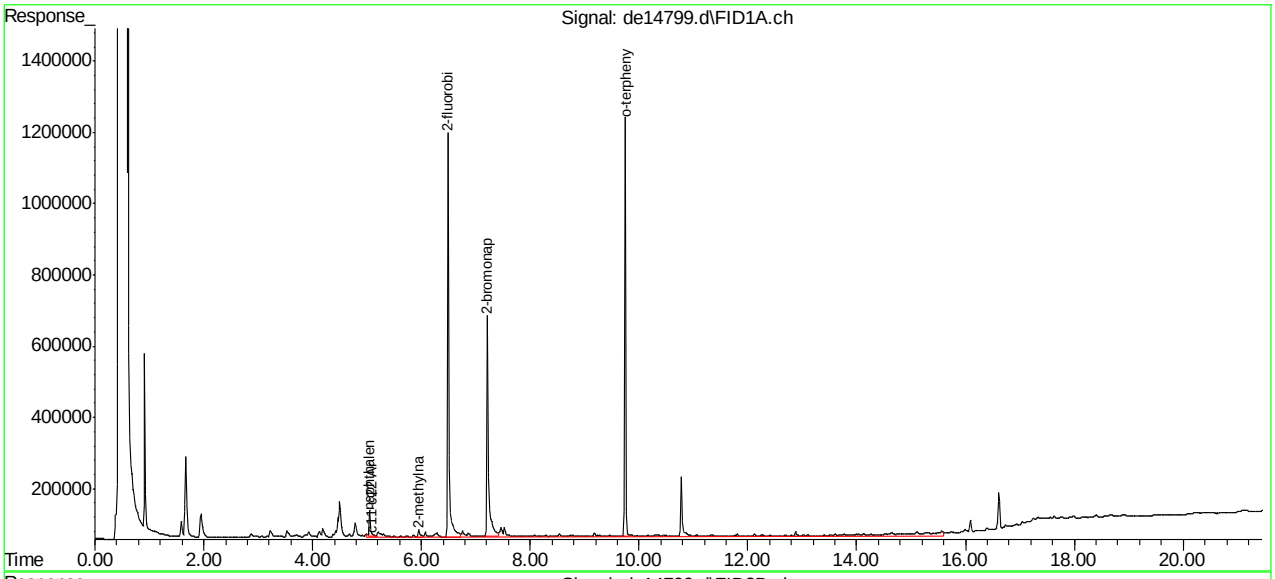
(f)=RT Delta > 1/2 Window (m)=manual int.

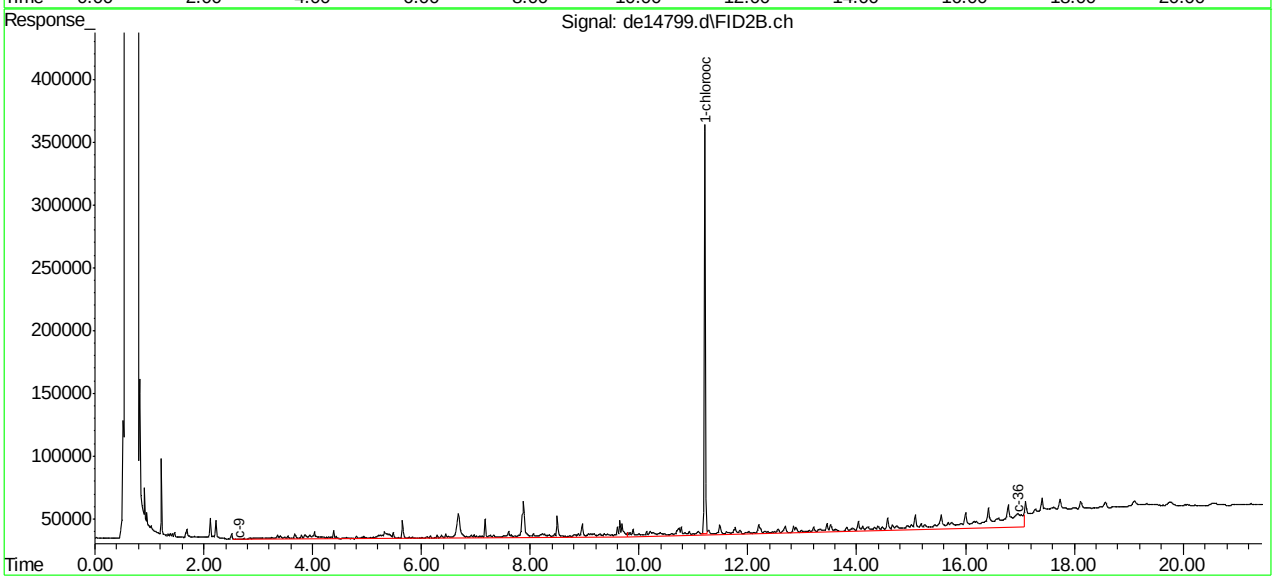
Quantitation Report (QT Reviewed)

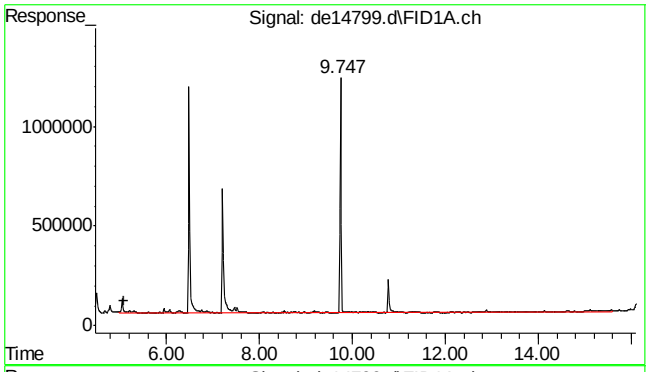
Data Path : C:\msdchem\1\DATA\DE160711EPH\
Data File : de14799.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 11:05 am
Operator : thomasa
Sample : mc46783-2,op48098
Misc : op48098,gde823,890,,,2,,w
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 09:50:41 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

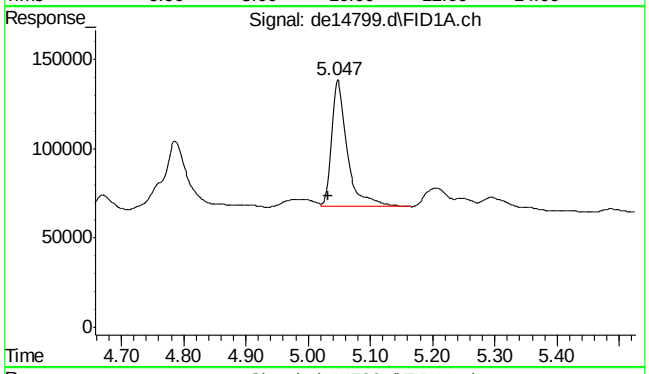






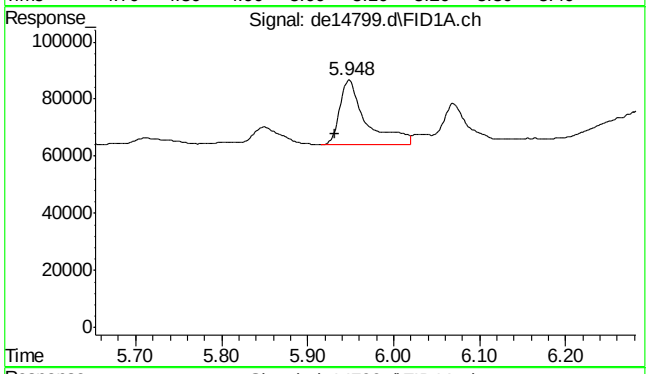
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 2411511
Conc: 19.33 µg/ml m



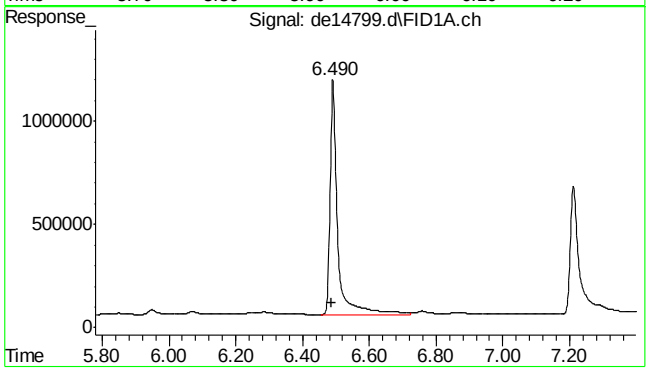
#2 naphthalene

R.T.: 5.047 min
Delta R.T.: 0.015 min
Response: 124672
Conc: 0.99 µg/ml



#3 2-methylnaphthalene

R.T.: 5.948 min
Delta R.T.: 0.017 min
Response: 48825
Conc: 0.39 µg/ml



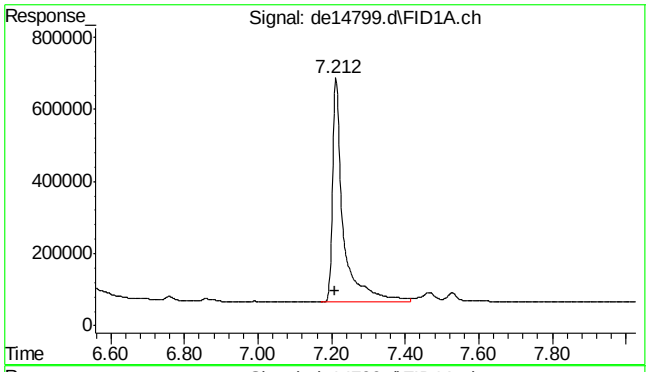
#4 2-fluorobiphenyl

R.T.: 6.490 min
Delta R.T.: 0.003 min
Response: 1856855
Conc: 16.22 µg/ml

7.1.2

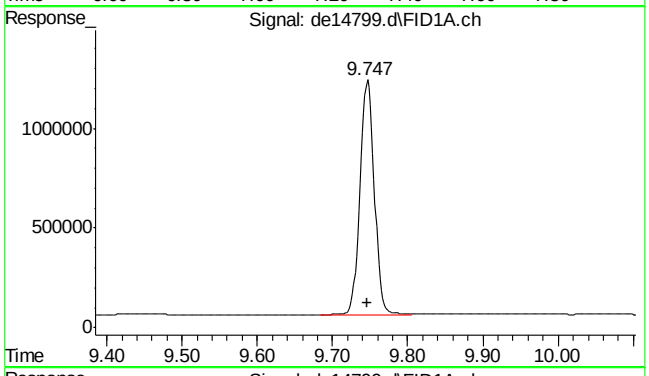
7

SGS ACCUTEST MC46783



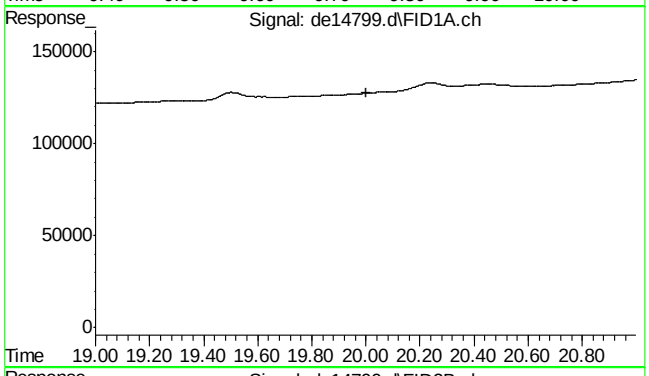
#6 2-bromonaphthalene

R.T.: 7.212 min
Delta R.T.: 0.003 min
Response: 1274635
Conc: 17.78 µg/ml



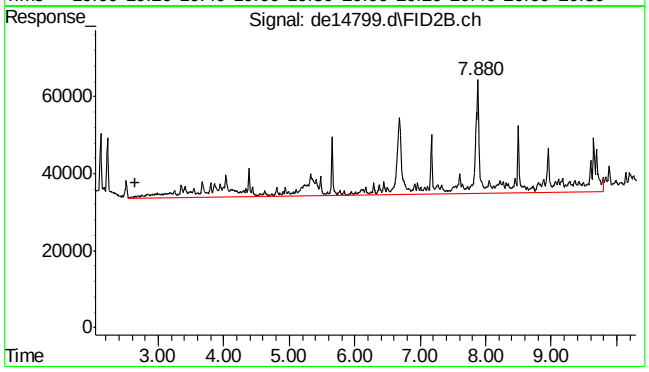
#11 o-terphenyl

R.T.: 9.747 min
Delta R.T.: 0.000 min
Response: 1558090
Conc: 11.78 µg/ml



#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



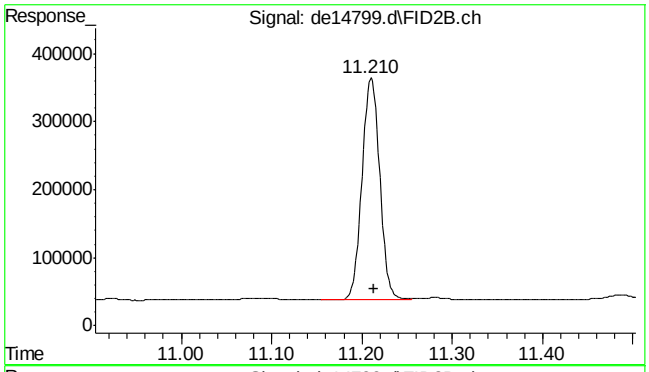
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 914858
Conc: 10.85 µg/ml m

7.1.2

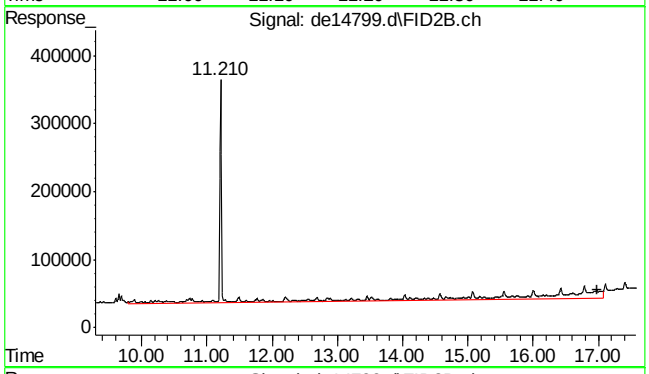
7

SGS ACCUTEST MC46783



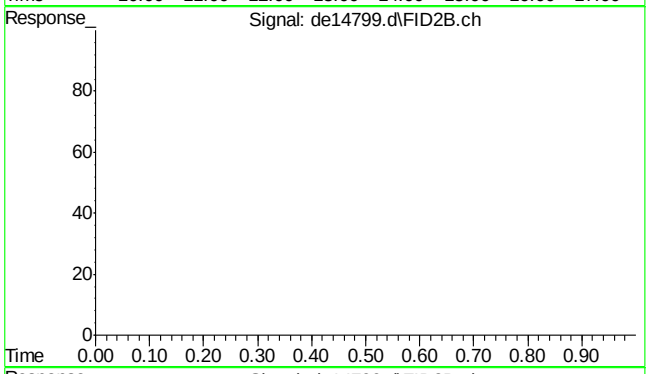
#35 1-chlorooctadecane

R.T.: 11.210 min
Delta R.T.: -0.003 min
Response: 449297
Conc: 6.90 µg/ml



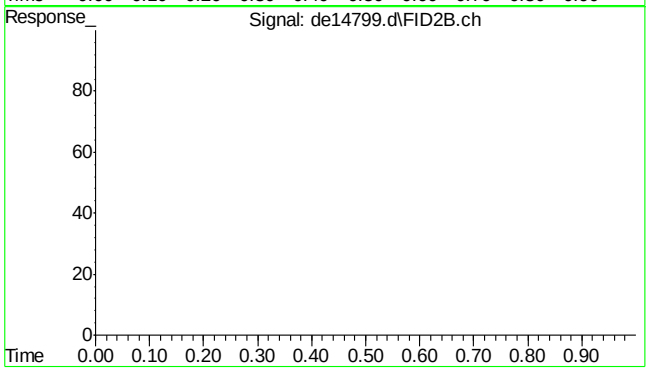
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1235941
Conc: 15.88 µg/ml m



#42 bht

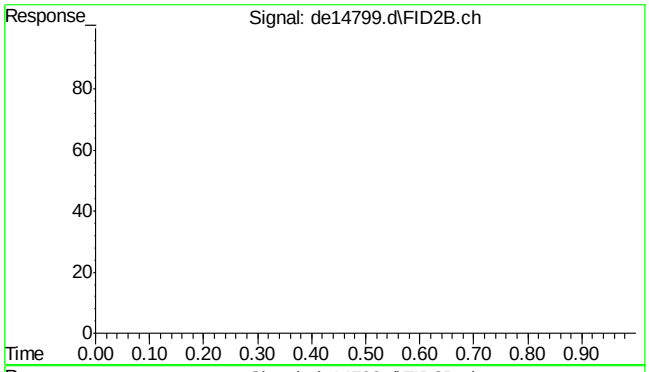
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#43 bht

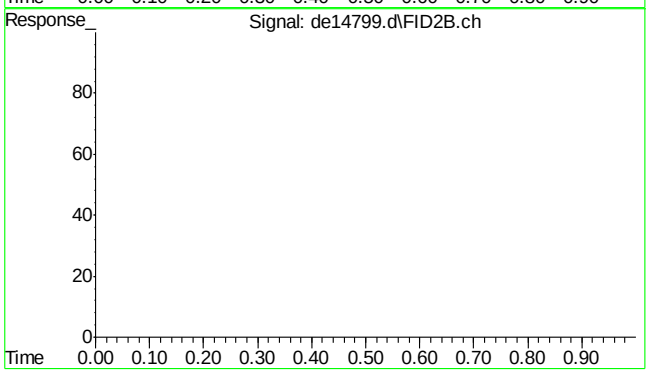
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

SGS ACCUTEST MC46783



#44 bht

```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```



#45 bht

```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```


SGS ACCUTEST MC46783

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14822.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 2:56 pm
Operator : thomasa
Sample : mc46783-2cf,op48098 (Sig #1); mc46783-2,op48098 (Sig #2)
Misc : op48098,gde825,890,,,2,,w
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 15:32:07 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) s 2-fluorobiphenyl	6.505	1047447	9.150 µg/ml
Spiked Amount 20.000 Range 8 - 28	Recovery = 45.75%#		
6) s 2-bromonaphthalene	7.230	77154	1.076 µg/ml
Spiked Amount 20.000 Range 8 - 28	Recovery = 5.38%#		
11) s o-terphenyl	9.758	1246408	9.421 µg/ml
Spiked Amount 20.000 Range 8 - 28	Recovery = 47.10%#		
35) s 1-chlorooctadecane	11.213	560843	8.608 µg/ml
Spiked Amount 20.000 Range 8 - 28	Recovery = 43.04%#		
Target Compounds			
1) h c11-c22 Aromatics (Un...	5.097	5910572	47.377 µg/ml
10) anthracene	9.178	106337	0.799 µg/ml
14) benzo(a)anthracene	12.418	38048	0.313 µg/ml
25) h c-9	2.647	2663193	31.590 µg/mlm
41) h c-36	16.983	1570553	20.181 µg/mlm

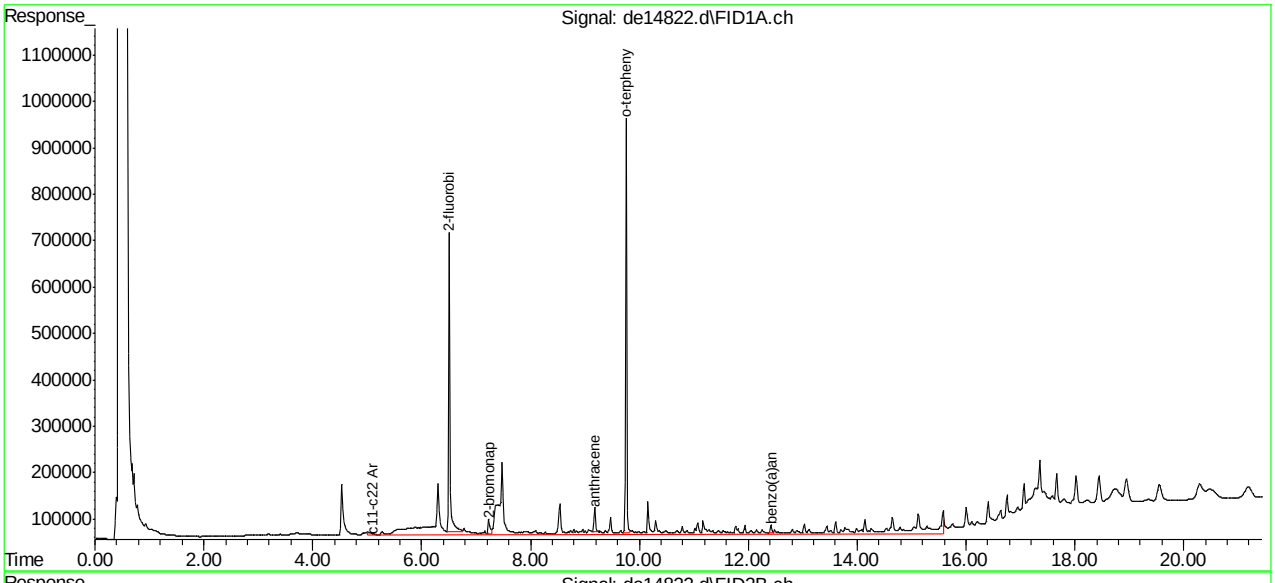
(f)=RT Delta > 1/2 Window (m)=manual int.

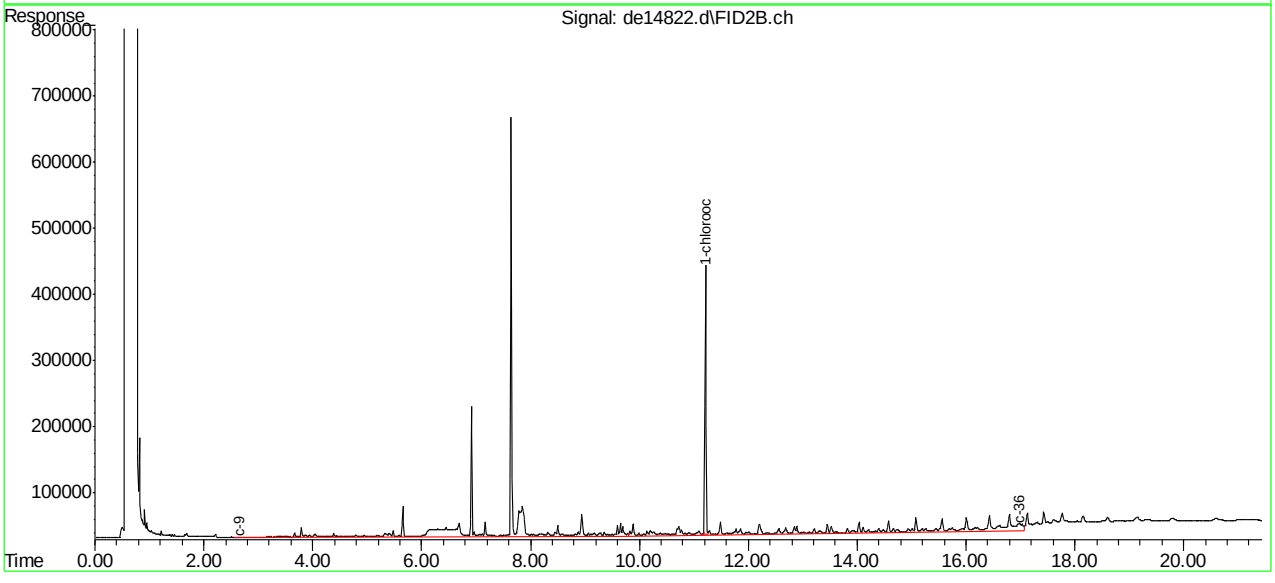
Quantitation Report (QT Reviewed)

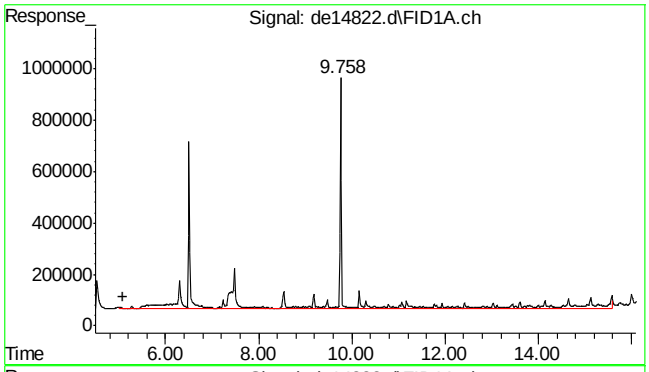
Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14822.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 2:56 pm
Operator : thomasa
Sample : mc46783-2cf,op48098 (Sig #1); mc46783-2,op48098 (Sig #2)
Misc : op48098,gde825,890,,,2,,w
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 15:32:07 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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

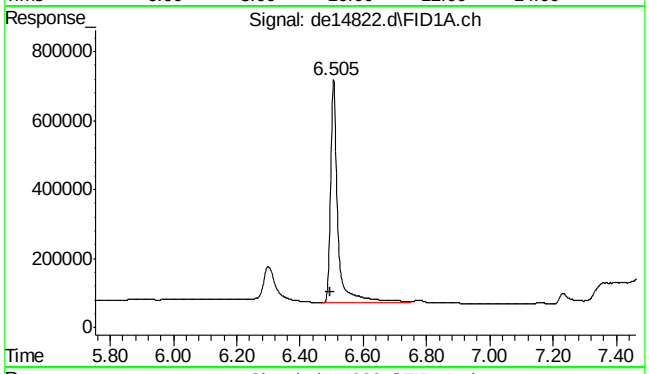






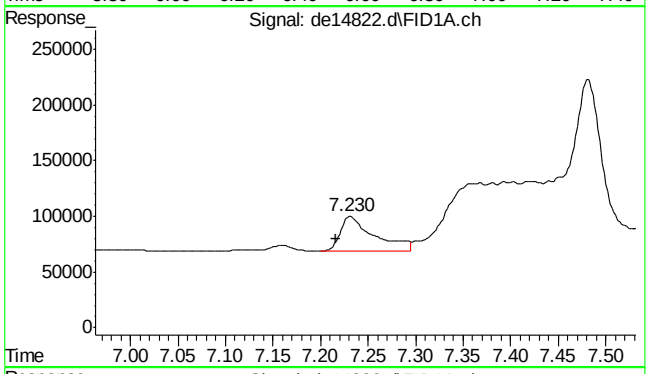
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 5910572
Conc: 47.38 µg/ml



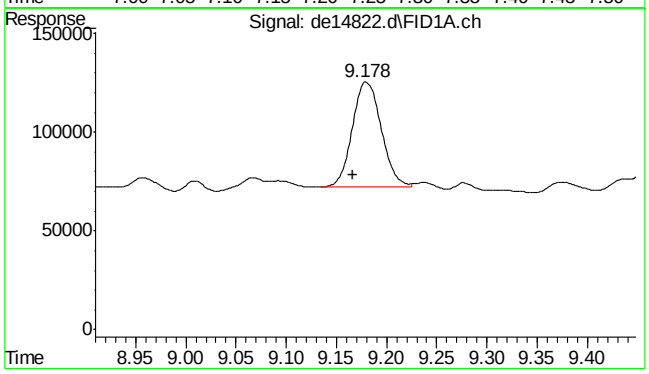
#4 2-fluorobiphenyl

R.T.: 6.505 min
Delta R.T.: 0.008 min
Response: 1047447
Conc: 9.15 µg/ml



#6 2-bromonaphthalene

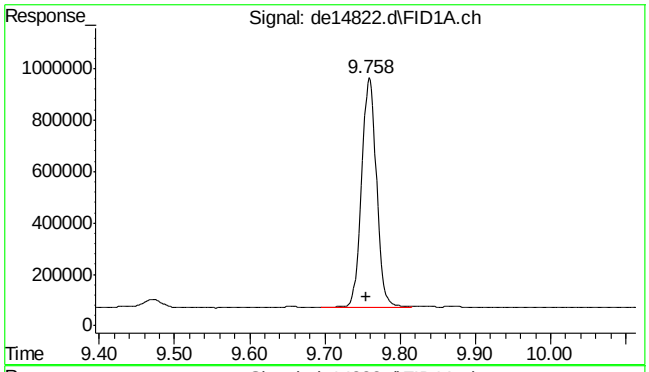
R.T.: 7.230 min
Delta R.T.: 0.013 min
Response: 77154
Conc: 1.08 µg/ml



#10 anthracene

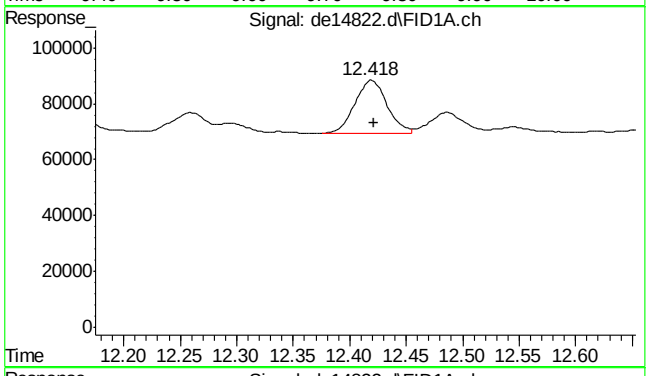
R.T.: 9.178 min
Delta R.T.: 0.012 min
Response: 106337
Conc: 0.80 µg/ml

SGS ACCUTEST MC46783



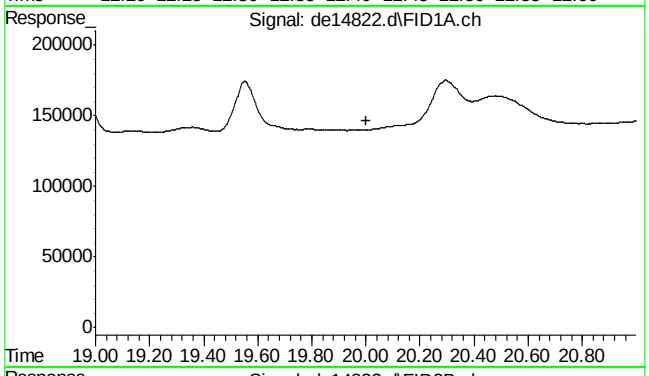
#11 o-terphenyl

R.T.: 9.758 min
Delta R.T.: 0.003 min
Response: 1246408
Conc: 9.42 µg/ml



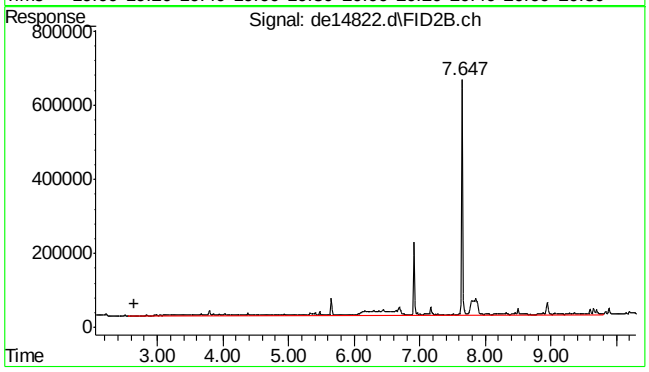
#14 benzo(a)anthracene

R.T.: 12.418 min
Delta R.T.: -0.003 min
Response: 38048
Conc: 0.31 µg/ml



#22 bht

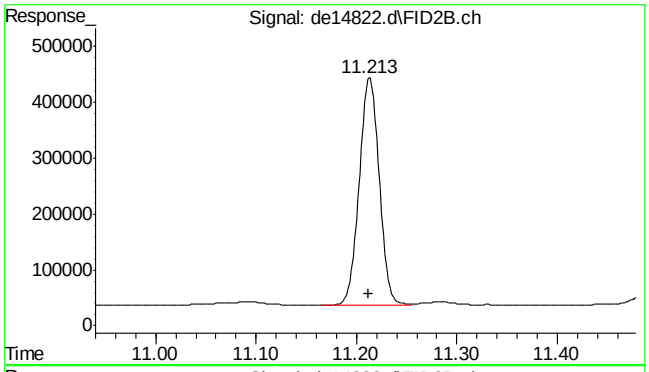
R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



#25 c-9

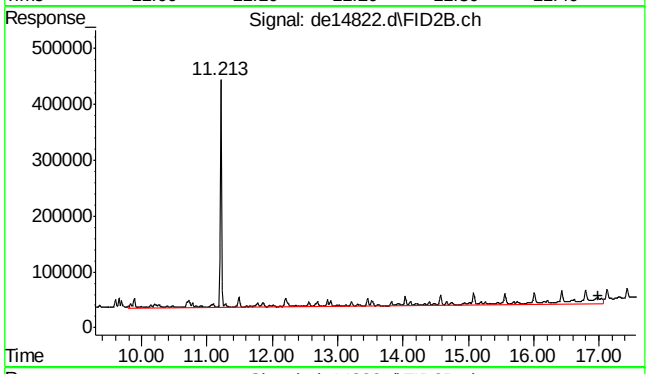
R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 2663193
Conc: 31.59 µg/ml m

SGS ACCUTEST MC46783



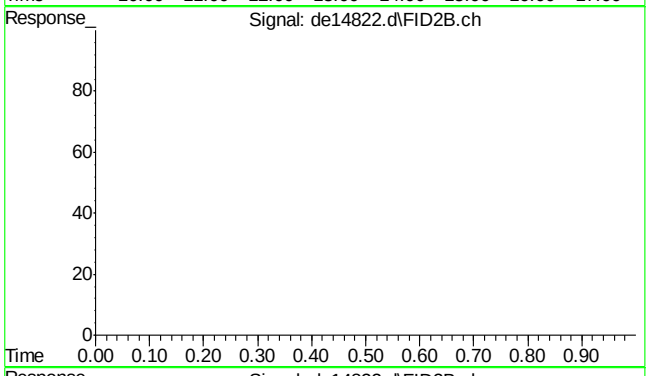
#35 1-chlorooctadecane

R.T.: 11.213 min
Delta R.T.: 0.002 min
Response: 560843
Conc: 8.61 µg/ml



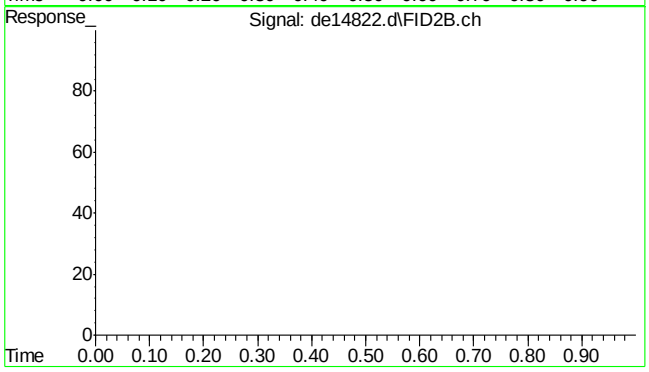
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1570553
Conc: 20.18 µg/ml m



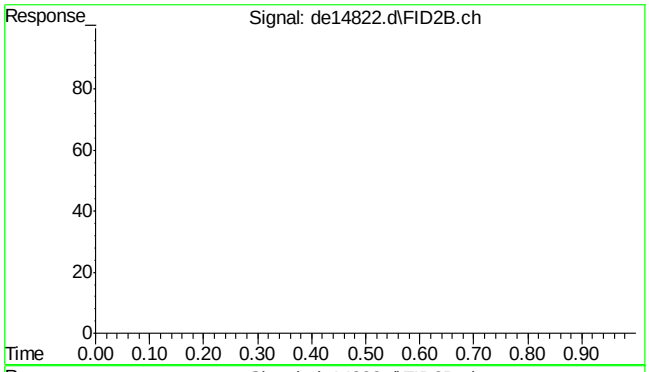
#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



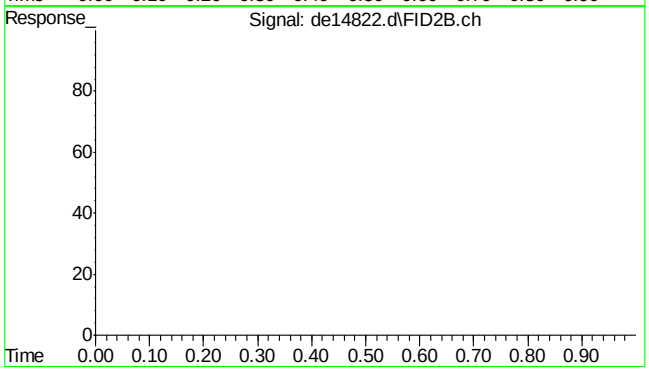
#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#44 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#45 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160711EPH\
Data File : de14800.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 11:32 am
Operator : thomasa
Sample : mc46783-3,op48098
Misc : op48098,gde823,880,,,2,,w
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 09:52:29 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) s 2-fluorobiphenyl	6.492	1761131	15.384 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 76.92%#	
6) s 2-bromonaphthalene	7.212	1230092	17.155 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 85.78%#	
11) s o-terphenyl	9.747	1402381	10.599 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 53.00%#	
35) s 1-chlorooctadecane	11.210	372062	5.711 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 28.56%#	
Target Compounds			
1) h c11-c22 Aromatics (Un...	5.097	2254594	18.072 µg/mlm
2) naphthalene	5.052	60398	0.481 µg/ml
3) 2-methylnaphthalene	5.950	23970	0.190 µg/ml
25) h c-9	2.647	987297	11.711 µg/mlm
41) h c-36	16.983	1421774	18.269 µg/mlm

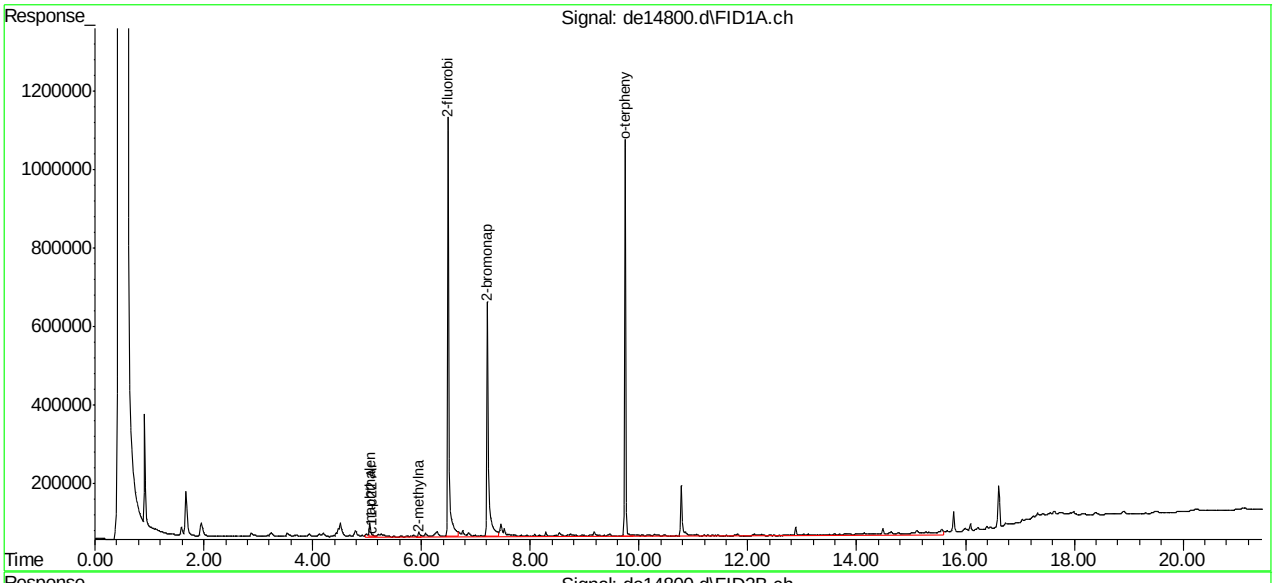
(f)=RT Delta > 1/2 Window (m)=manual int.

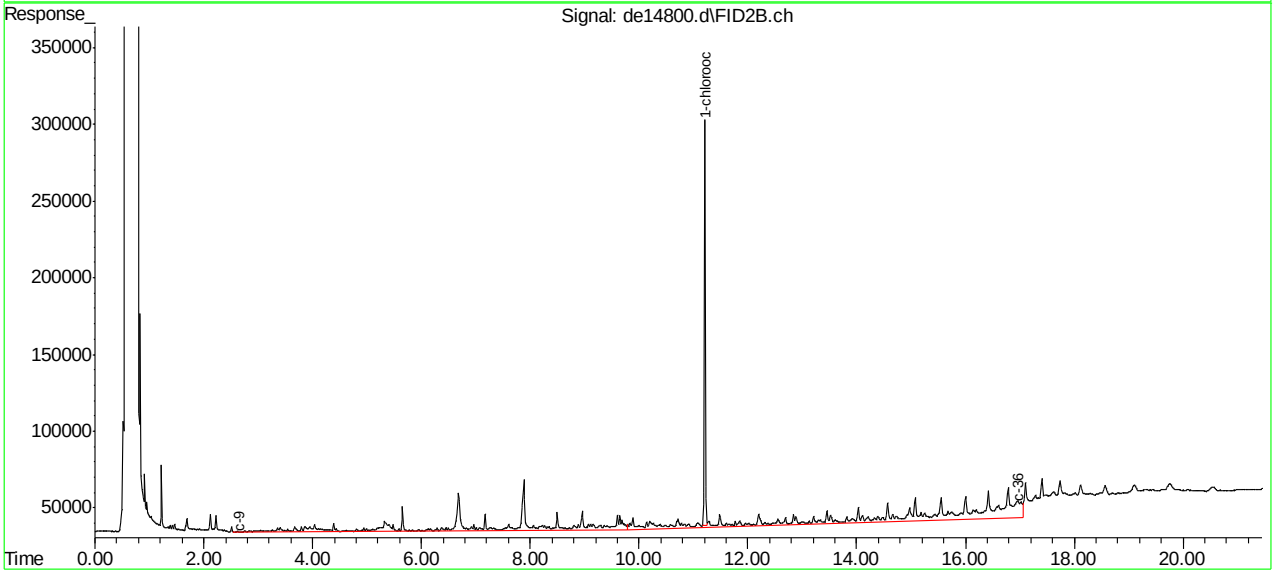
Quantitation Report (QT Reviewed)

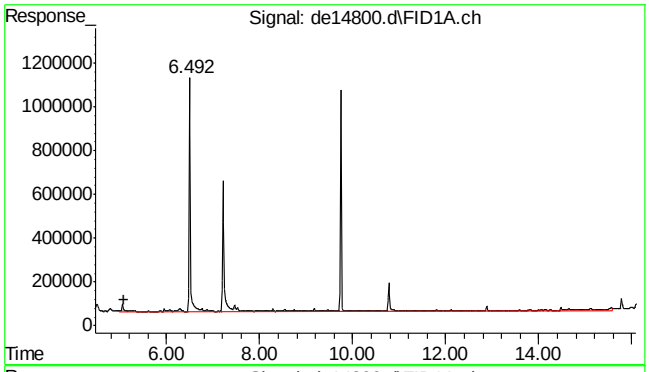
Data Path : C:\msdchem\1\DATA\DE160711EPH\
Data File : de14800.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 11:32 am
Operator : thomasa
Sample : mc46783-3,op48098
Misc : op48098,gde823,880,,,2,,w
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 09:52:29 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

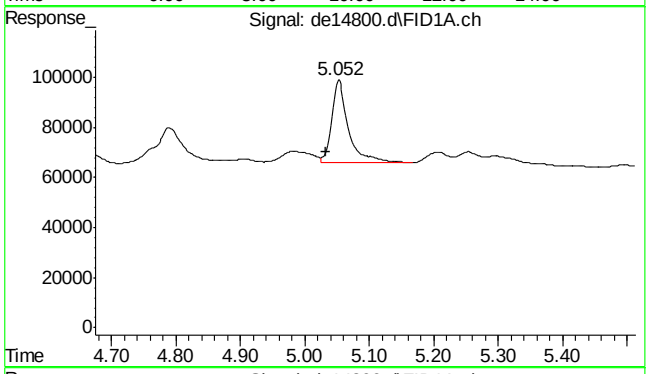






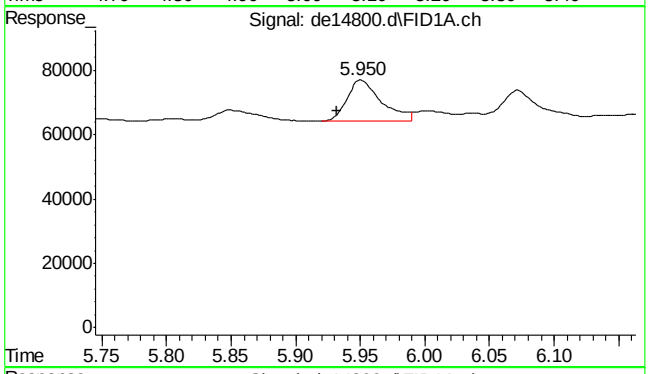
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 2254594
Conc: 18.07 µg/ml m



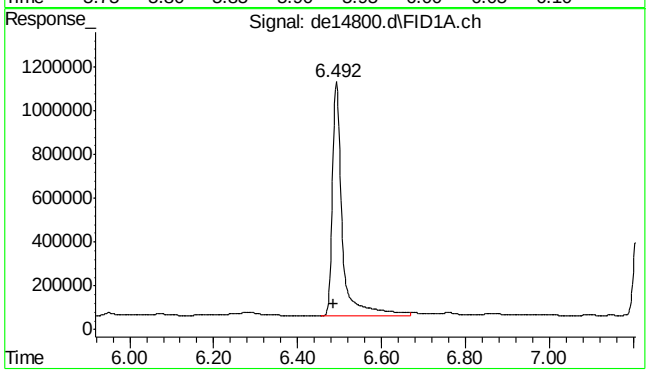
#2 naphthalene

R.T.: 5.052 min
Delta R.T.: 0.020 min
Response: 60398
Conc: 0.48 µg/ml



#3 2-methylnaphthalene

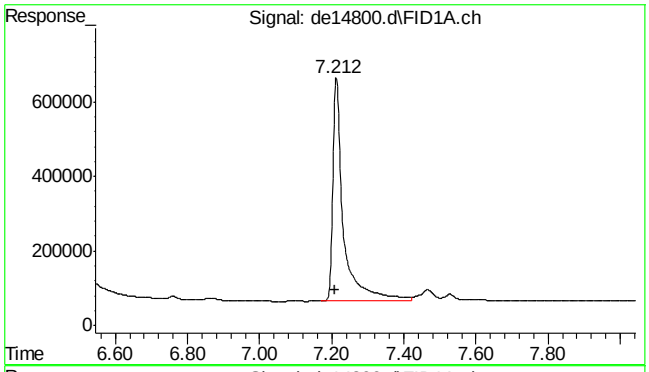
R.T.: 5.950 min
Delta R.T.: 0.018 min
Response: 23970
Conc: 0.19 µg/ml



#4 2-fluorobiphenyl

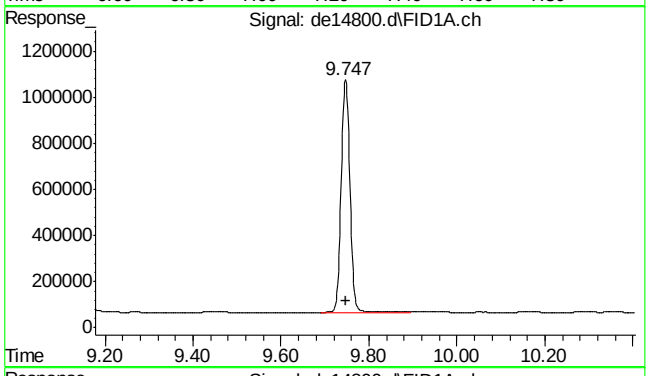
R.T.: 6.492 min
Delta R.T.: 0.005 min
Response: 1761131
Conc: 15.38 µg/ml

SGS ACCUTEST MC46783



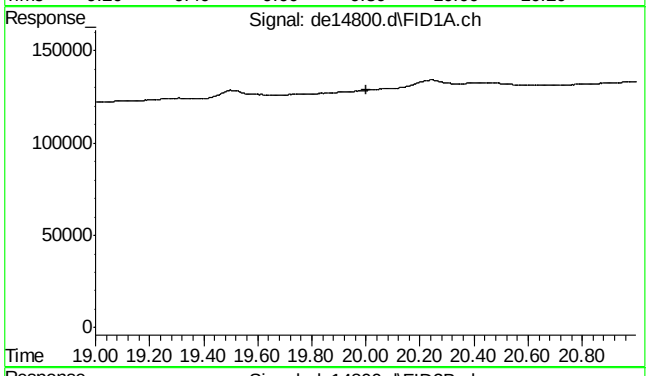
#6 2-bromonaphthalene

R.T.: 7.212 min
Delta R.T.: 0.003 min
Response: 1230092
Conc: 17.16 µg/ml



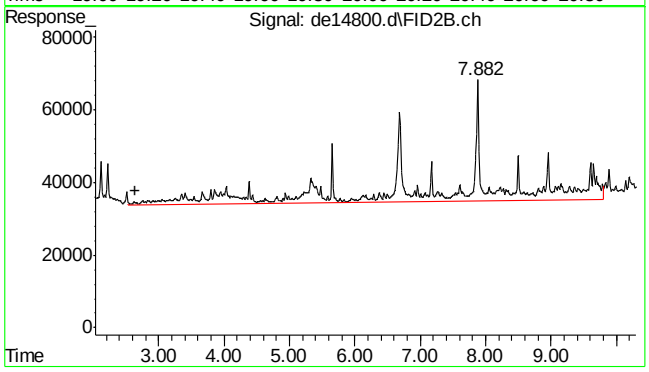
#11 o-terphenyl

R.T.: 9.747 min
Delta R.T.: 0.000 min
Response: 1402381
Conc: 10.60 µg/ml



#22 bht

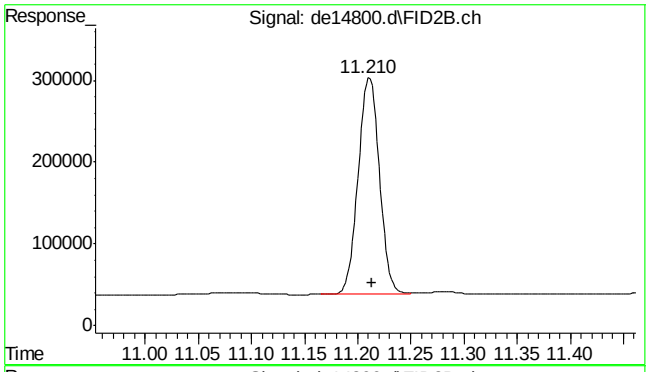
R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



#25 c-9

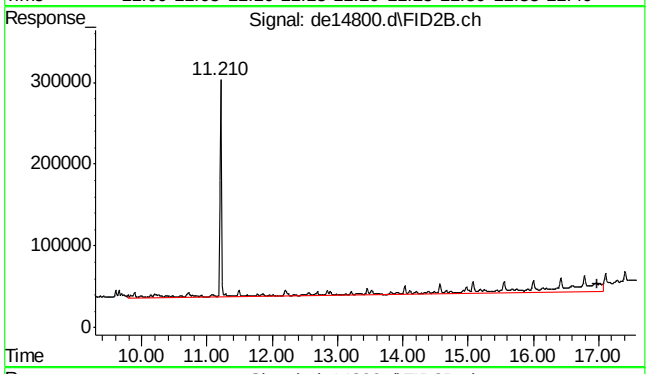
R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 987297
Conc: 11.71 µg/ml m

SGS ACCUTEST MC46783



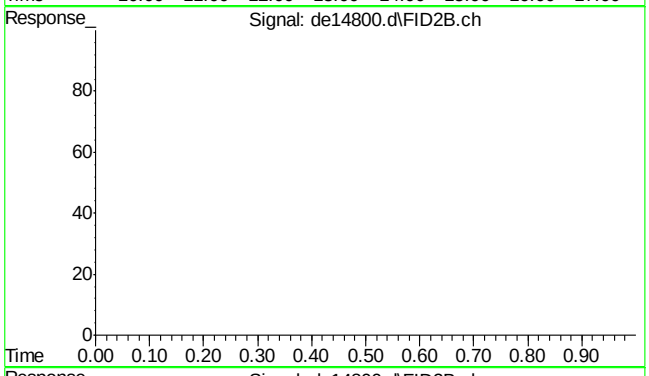
#35 1-chlorooctadecane

R.T.: 11.210 min
Delta R.T.: -0.003 min
Response: 372062
Conc: 5.71 µg/ml



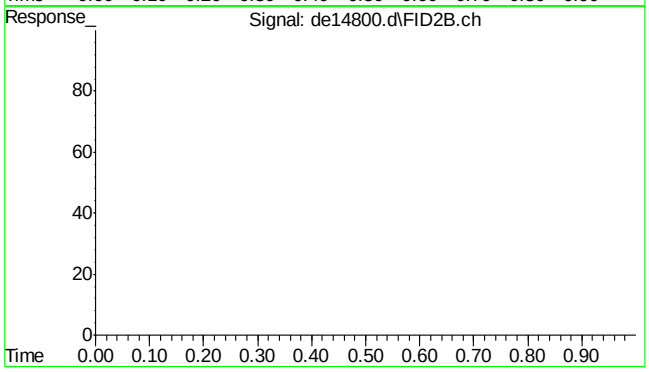
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1421774
Conc: 18.27 µg/ml m



#42 bht

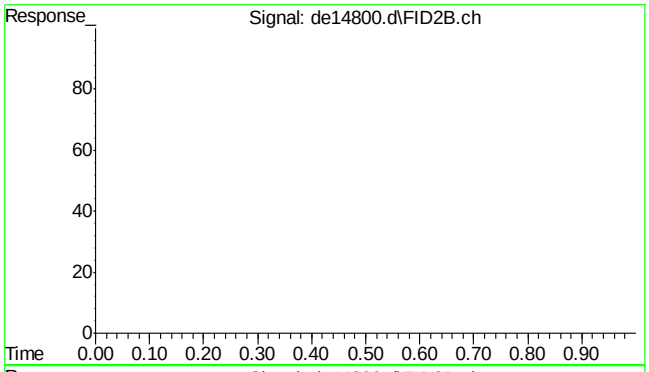
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#43 bht

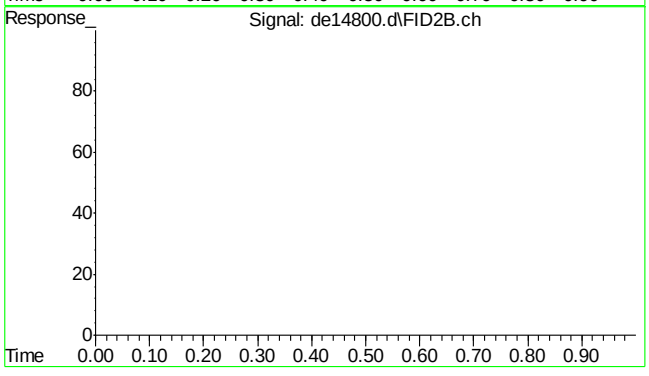
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

SGS ACCUTEST MC46783



#44 bht

```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```



#45 bht

```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```


SGS ACCUTEST MC46783

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14823.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 3:24 pm
Operator : thomasa
Sample : mc46783-3cf,op48098 (Sig #1); mc46783-3,op48098 (Sig #2)
Misc : op48098,gde825,880,,,2,,w
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 15:50:41 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) s 2-fluorobiphenyl	6.500	1344023	11.741 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 58.70%#	
6) s 2-bromonaphthalene	7.220	895521	12.489 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 62.45%#	
11) s o-terphenyl	9.753	1100226	8.316 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 41.58%#	
35) s 1-chlorooctadecane	11.210	370545	5.687 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 28.43%#	
Target Compounds			
1) h c11-c22 Aromatics (Un...	5.097	1970707	15.796 µg/mlm
25) h c-9	2.647	816520	9.685 µg/mlm
41) h c-36	16.983	894536	11.494 µg/mlm

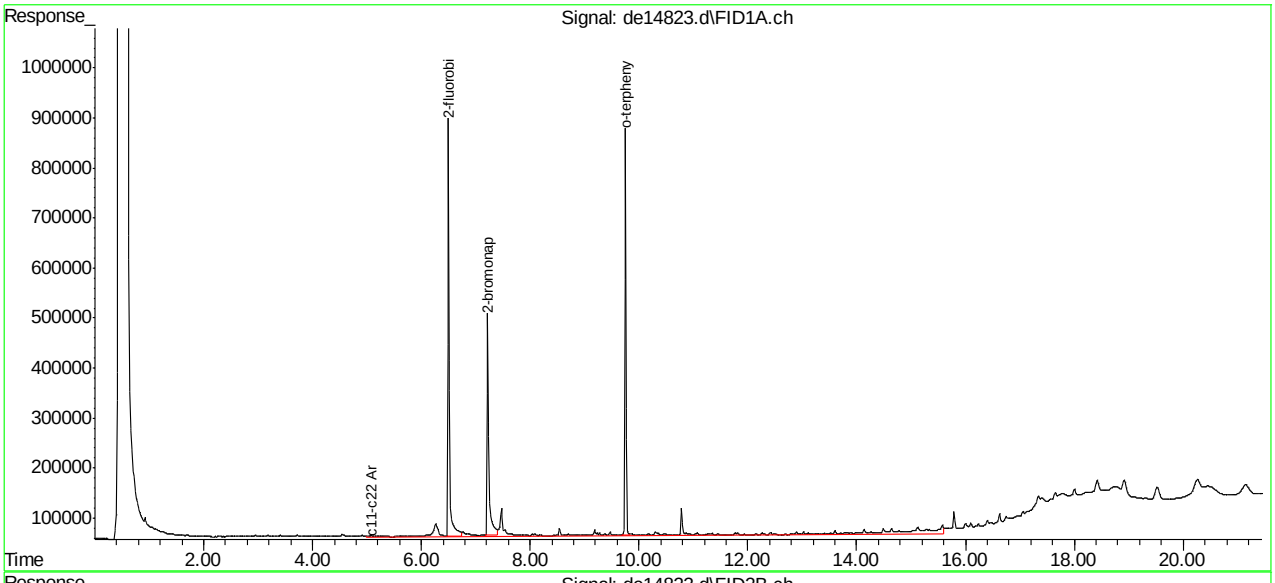
(f)=RT Delta > 1/2 Window (m)=manual int.

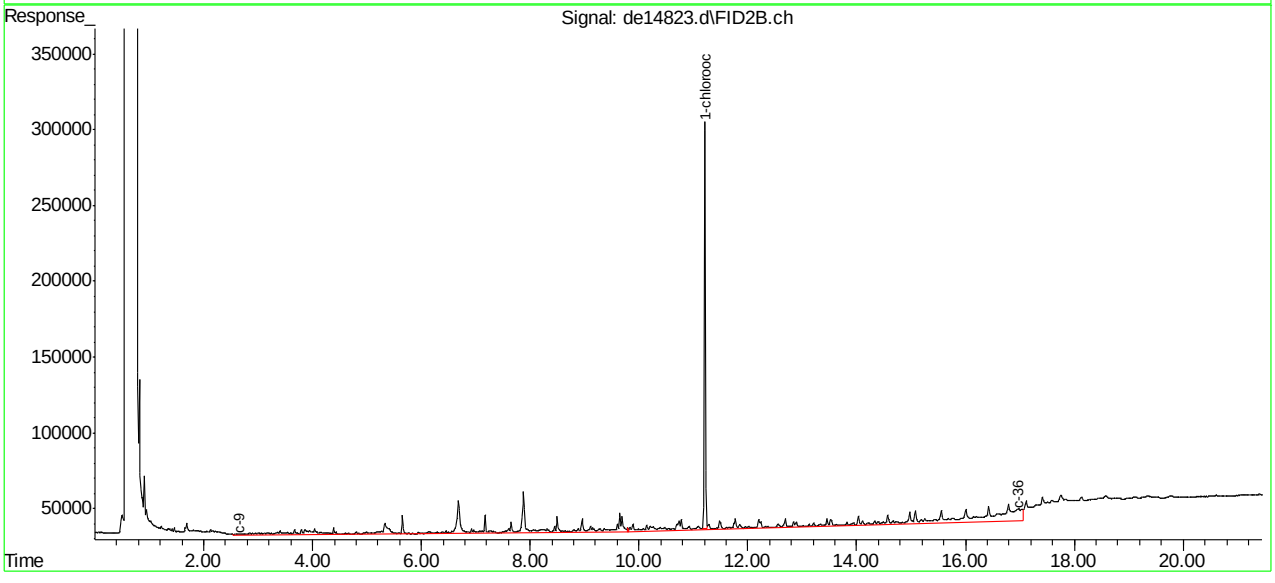
Quantitation Report (QT Reviewed)

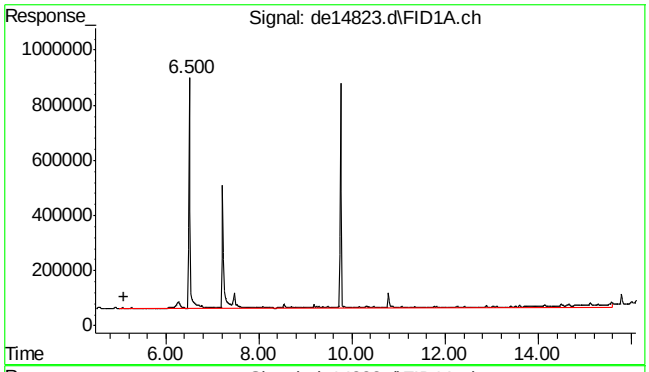
Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14823.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 3:24 pm
Operator : thomasa
Sample : mc46783-3cf,op48098 (Sig #1); mc46783-3,op48098 (Sig #2)
Misc : op48098,gde825,880,,,2,,w
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 15:50:41 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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

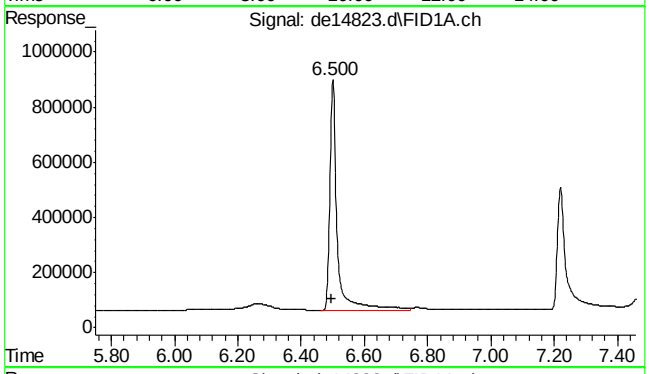






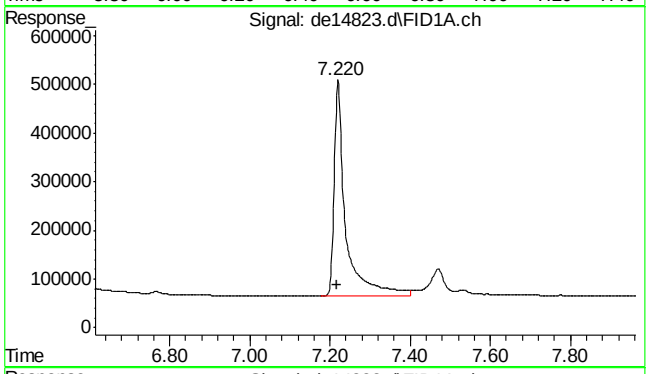
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 1970707
Conc: 15.80 µg/ml m



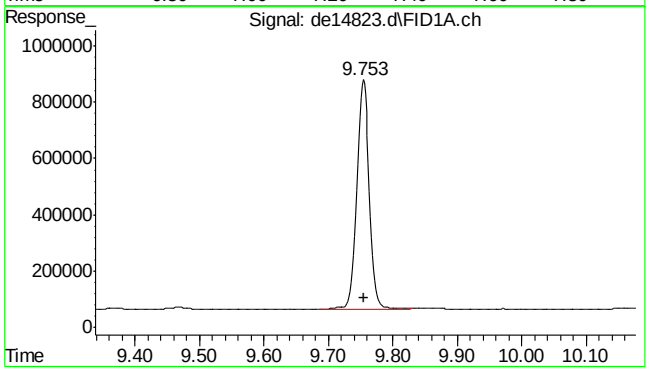
#4 2-fluorobiphenyl

R.T.: 6.500 min
Delta R.T.: 0.003 min
Response: 1344023
Conc: 11.74 µg/ml



#6 2-bromonaphthalene

R.T.: 7.220 min
Delta R.T.: 0.003 min
Response: 895521
Conc: 12.49 µg/ml



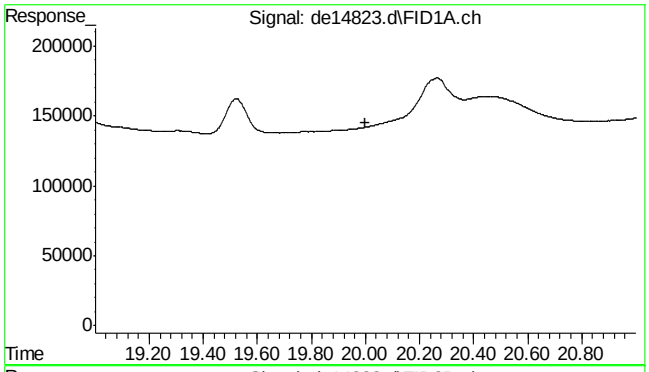
#11 o-terphenyl

R.T.: 9.753 min
Delta R.T.: -0.002 min
Response: 1100226
Conc: 8.32 µg/ml

7.1.5

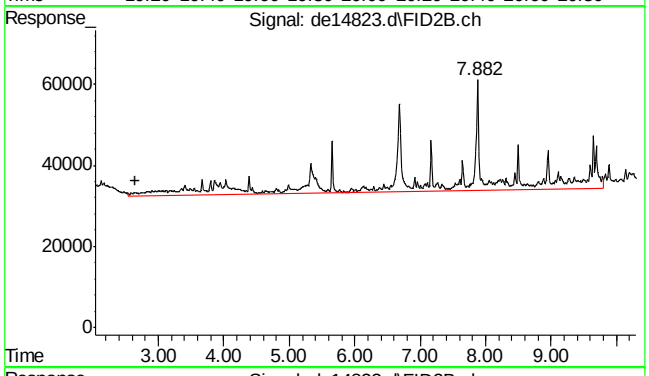
7

SGS ACCUTEST MC46783



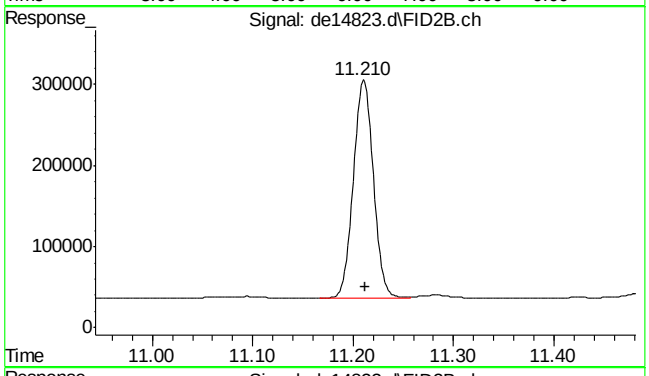
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



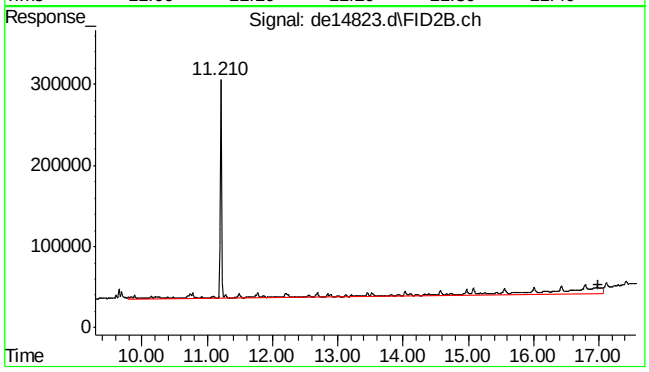
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 816520
Conc: 9.69 µg/ml m



#35 1-chlorooctadecane

R.T.: 11.210 min
Delta R.T.: -0.002 min
Response: 370545
Conc: 5.69 µg/ml



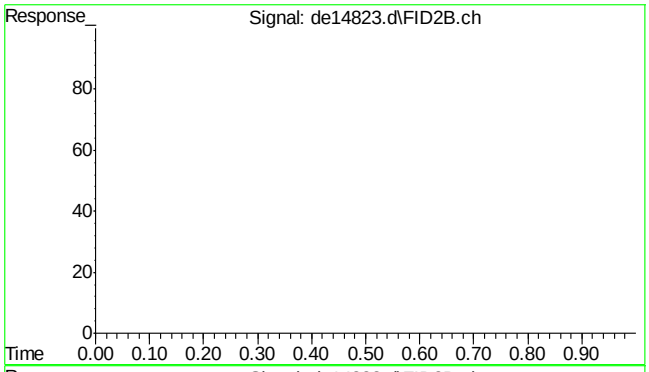
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 894536
Conc: 11.49 µg/ml m

7.1.5

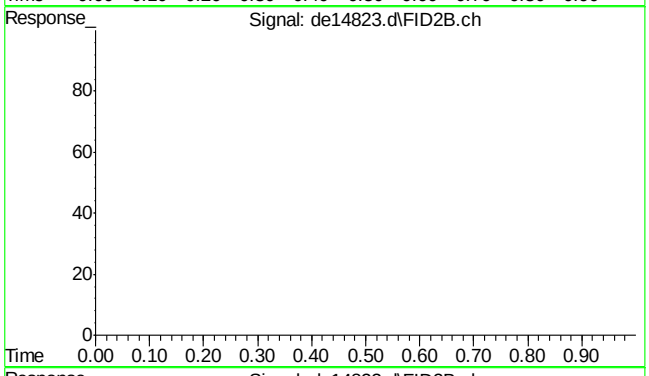
7

SGS ACCUTEST MC46783



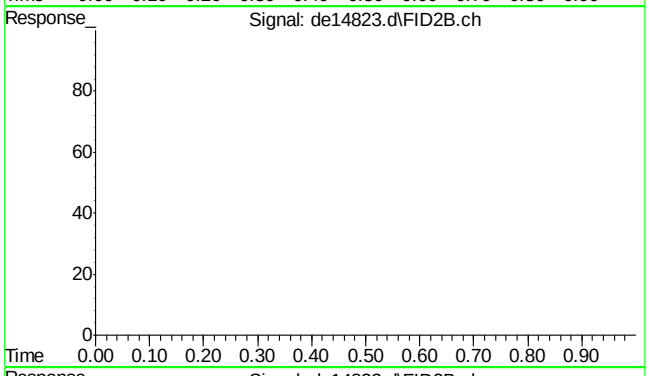
#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



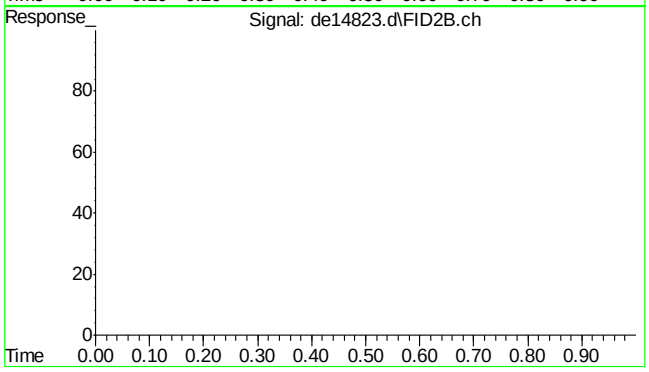
#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#44 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#45 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160711EPH\
Data File : de14801.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 12:00 pm
Operator : thomasa
Sample : mc46783-4,op48098
Misc : op48098,gde823,860,,,2,,w
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 10:39:16 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) s 2-fluorobiphenyl	6.492	1694150	14.799 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 74.00%#	
6) s 2-bromonaphthalene	7.212	1191624	16.619 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 83.09%#	
11) s o-terphenyl	9.747	1795688	13.572 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 67.86%#	
35) s 1-chlorooctadecane	11.210	613649	9.419 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 47.10%#	
Target Compounds			
1) h c11-c22 Aromatics (Un...	5.097	2403885	19.269 µg/mlm
2) naphthalene	5.050	72784	0.580 µg/ml
3) 2-methylnaphthalene	5.948	32901	0.261 µg/ml
25) h c-9	2.647	957967	11.363 µg/mlm
41) h c-36	16.983	1472297	18.918 µg/mlm

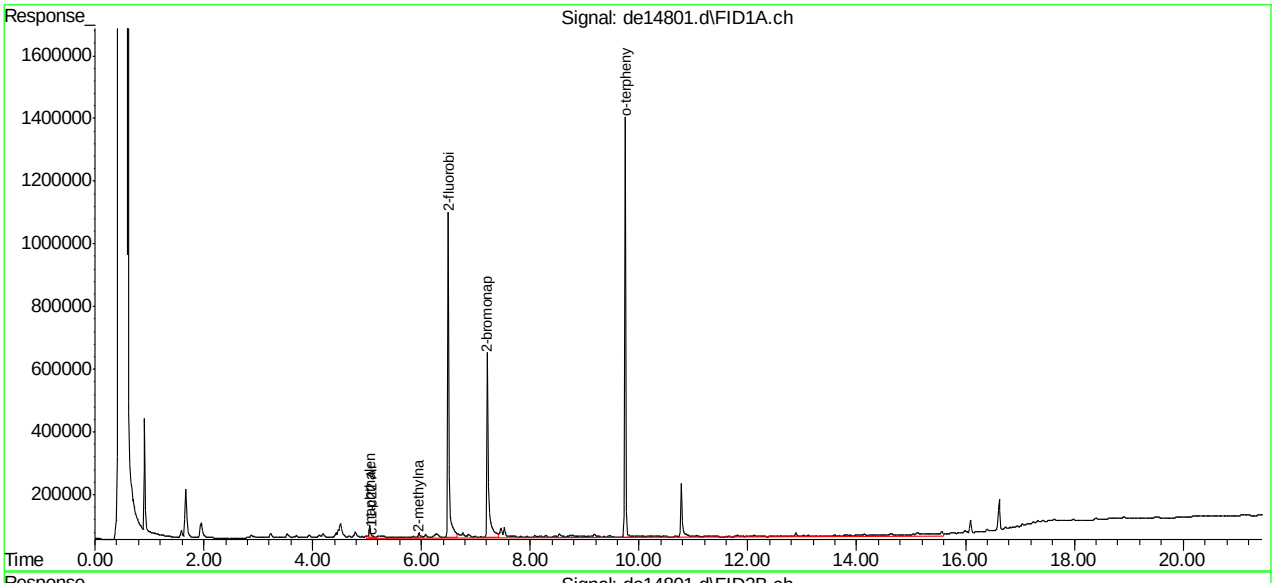
(f)=RT Delta > 1/2 Window (m)=manual int.

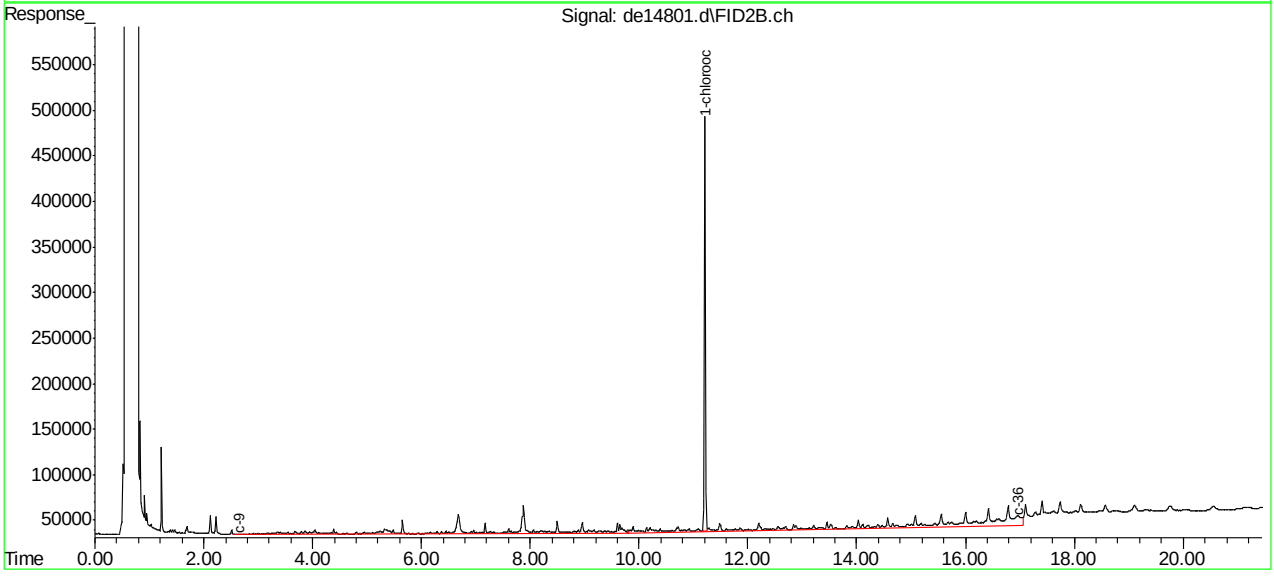
Quantitation Report (QT Reviewed)

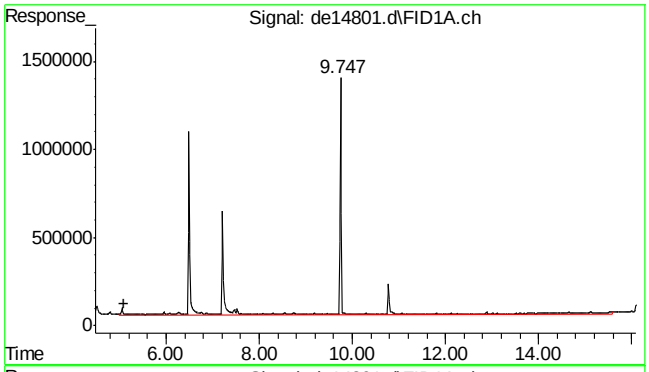
Data Path : C:\msdchem\1\DATA\DE160711EPH\
Data File : de14801.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 12:00 pm
Operator : thomasa
Sample : mc46783-4,op48098
Misc : op48098,gde823,860,,,2,,w
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 10:39:16 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

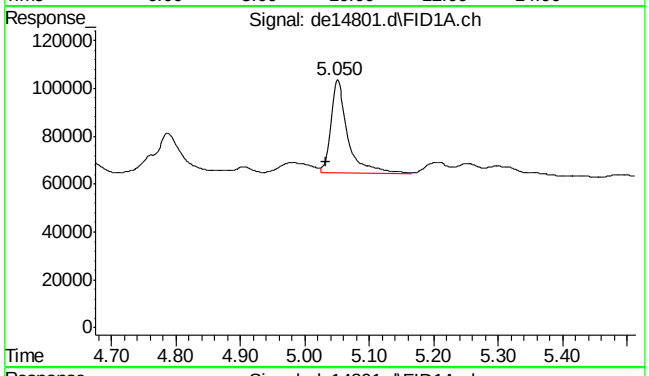






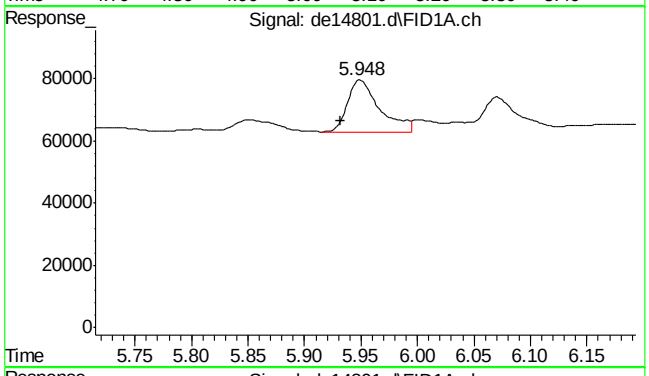
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 2403885
Conc: 19.27 µg/ml m



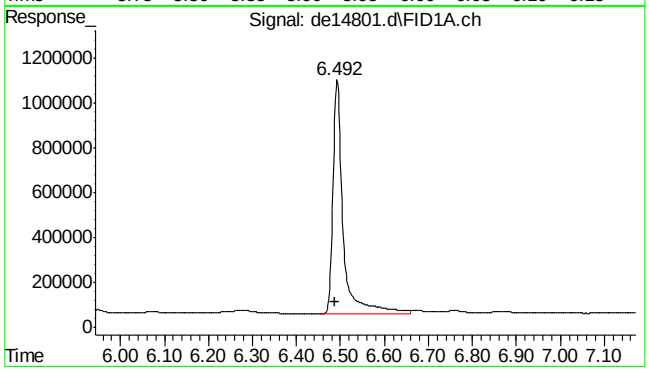
#2 naphthalene

R.T.: 5.050 min
Delta R.T.: 0.018 min
Response: 72784
Conc: 0.58 µg/ml



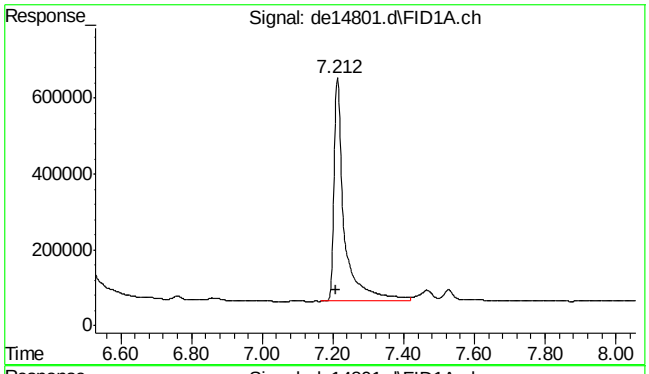
#3 2-methylnaphthalene

R.T.: 5.948 min
Delta R.T.: 0.017 min
Response: 32901
Conc: 0.26 µg/ml



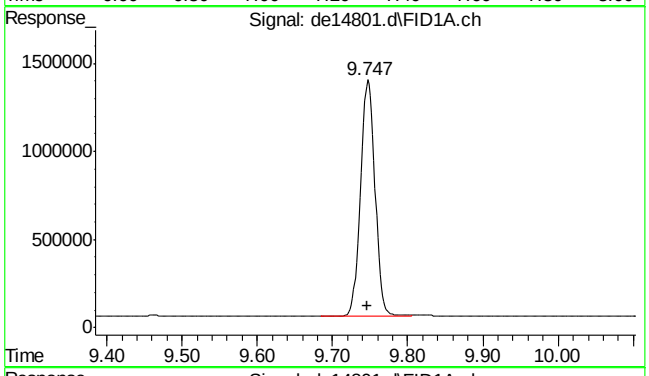
#4 2-fluorobiphenyl

R.T.: 6.492 min
Delta R.T.: 0.005 min
Response: 1694150
Conc: 14.80 µg/ml



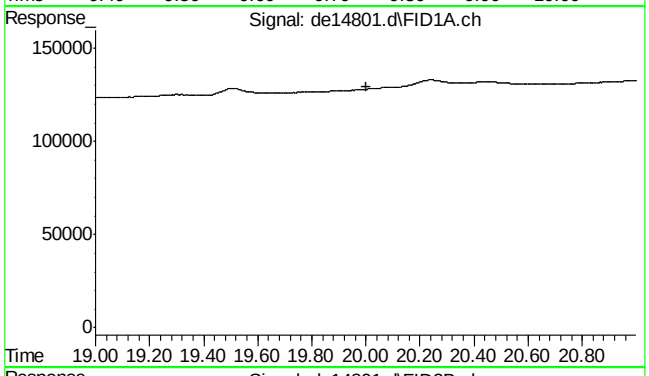
#6 2-bromonaphthalene

R.T.: 7.212 min
Delta R.T.: 0.003 min
Response: 1191624
Conc: 16.62 µg/ml



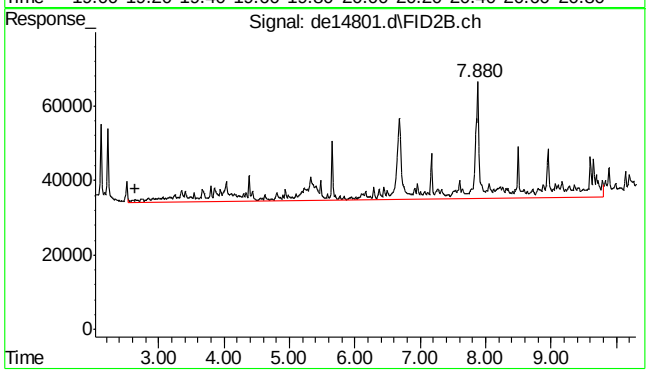
#11 o-terphenyl

R.T.: 9.747 min
Delta R.T.: 0.000 min
Response: 1795688
Conc: 13.57 µg/ml



#22 bht

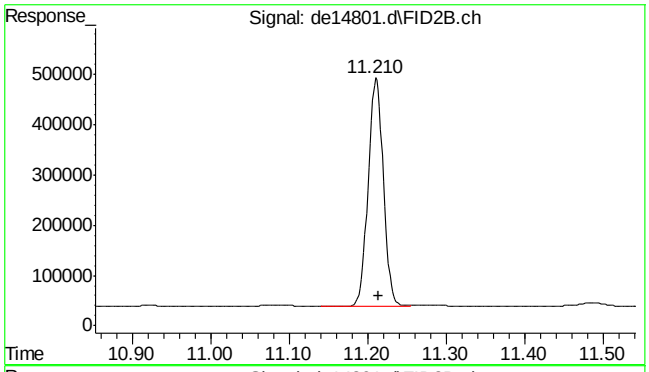
R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



#25 c-9

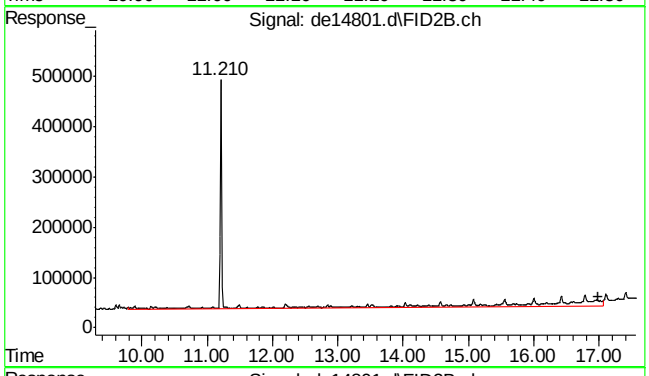
R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 957967
Conc: 11.36 µg/ml m

SGS ACCUTEST MC46783



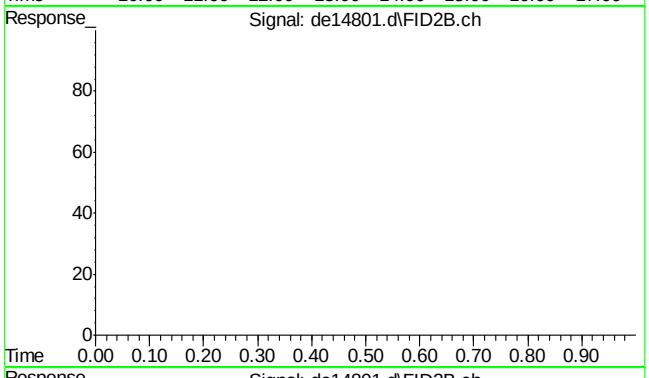
#35 1-chlorooctadecane

R.T.: 11.210 min
Delta R.T.: -0.003 min
Response: 613649
Conc: 9.42 µg/ml



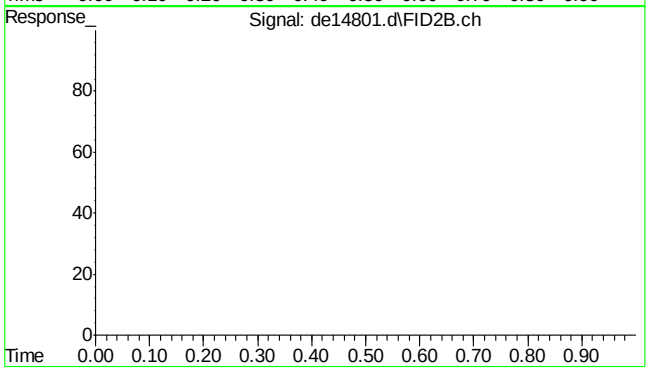
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1472297
Conc: 18.92 µg/ml m



#42 bht

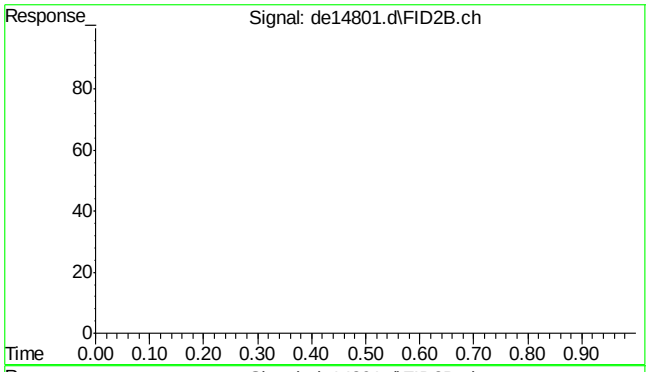
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#43 bht

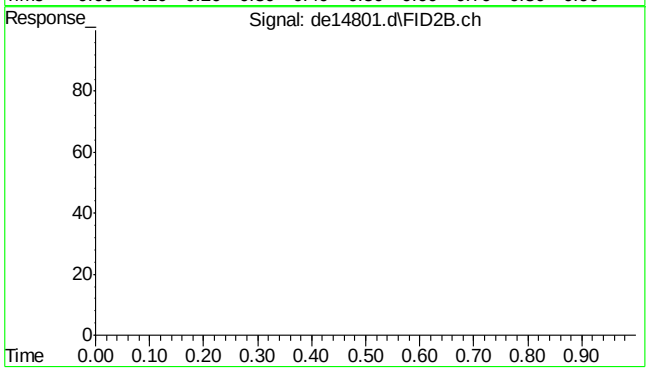
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

SGS ACCUTEST MC46783



#44 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#45 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

7.1.6

7

SGS ACCUTEST MC46783

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160711EPH\
Data File : de14802.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 12:28 pm
Operator : thomasa
Sample : mc46783-5,op48098
Misc : op48098,gde823,880,,,2,,w
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 10:41:30 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) s 2-fluorobiphenyl	6.493	1591362	13.901 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 69.50%#	
6) s 2-bromonaphthalene	7.213	1081654	15.085 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 75.43%#	
11) s o-terphenyl	9.747	1152510	8.711 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 43.56%#	
35) s 1-chlorooctadecane	11.210	437221	6.711 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 33.56%#	
Target Compounds			
1) h c11-c22 Aromatics (Un...	5.097	2161374	17.325 µg/mlm
2) naphthalene	5.052	52276	0.416 µg/ml
3) 2-methylnaphthalene	5.950	25437	0.202 µg/ml
25) h c-9	2.647	917588	10.884 µg/mlm
41) h c-36	16.983	1765054	22.680 µg/mlm

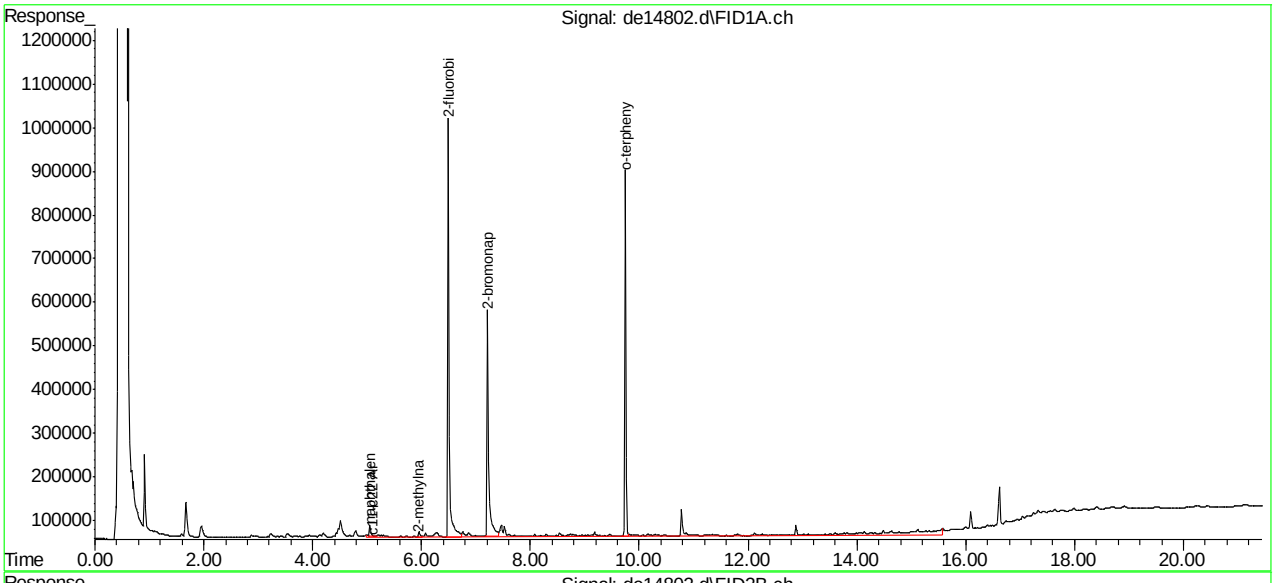
(f)=RT Delta > 1/2 Window (m)=manual int.

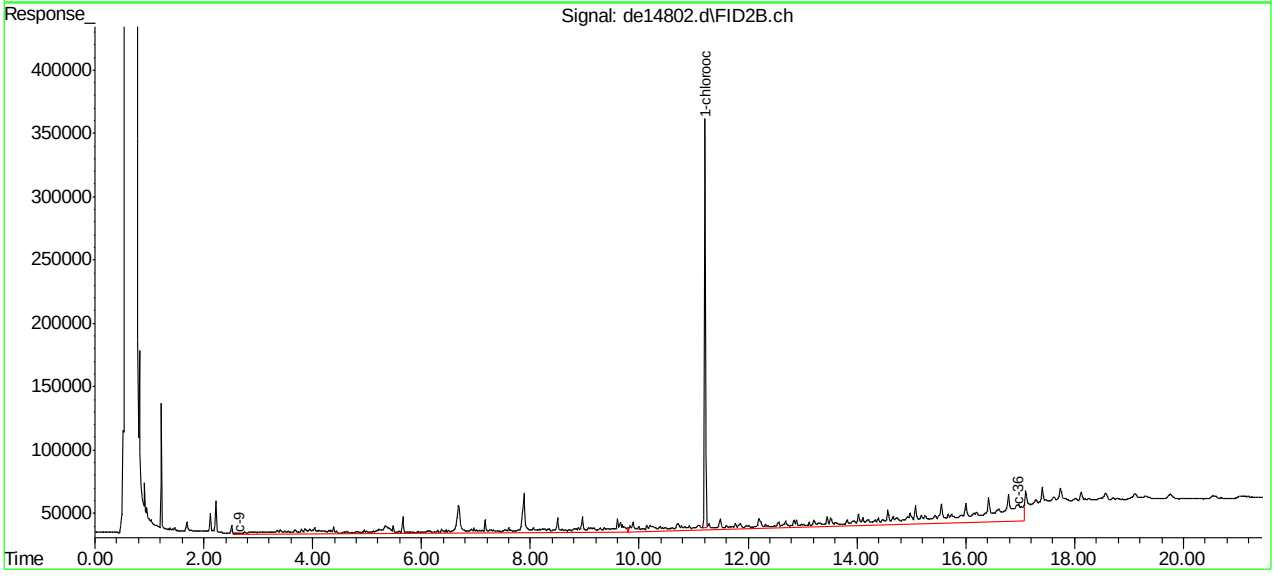
Quantitation Report (QT Reviewed)

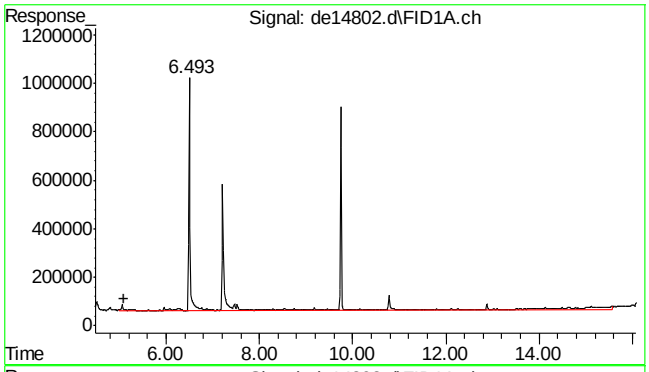
Data Path : C:\msdchem\1\DATA\DE160711EPH\
Data File : de14802.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 12:28 pm
Operator : thomasa
Sample : mc46783-5,op48098
Misc : op48098,gde823,880,,,2,,w
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 10:41:30 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

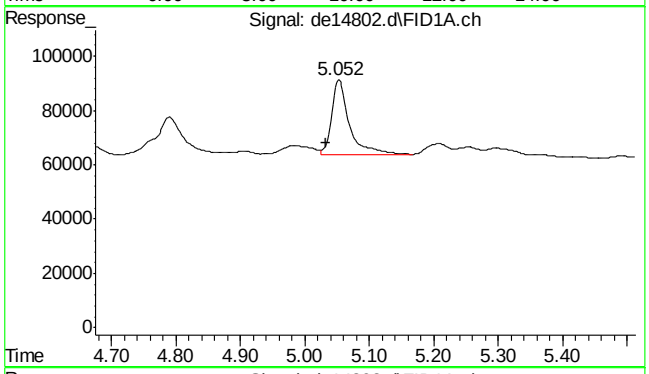






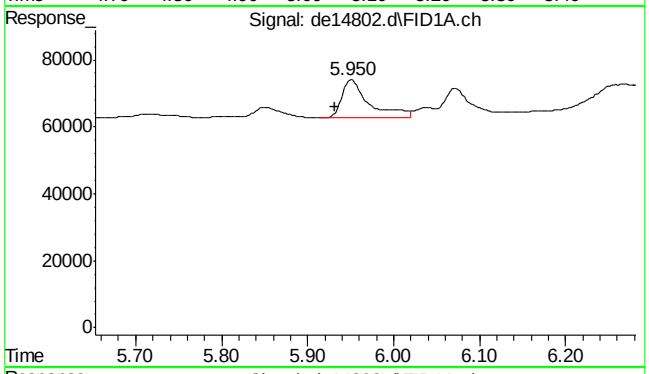
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 2161374
Conc: 17.32 µg/ml m



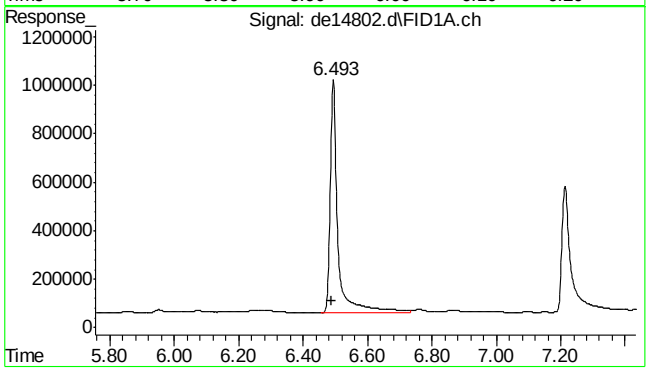
#2 naphthalene

R.T.: 5.052 min
Delta R.T.: 0.020 min
Response: 52276
Conc: 0.42 µg/ml



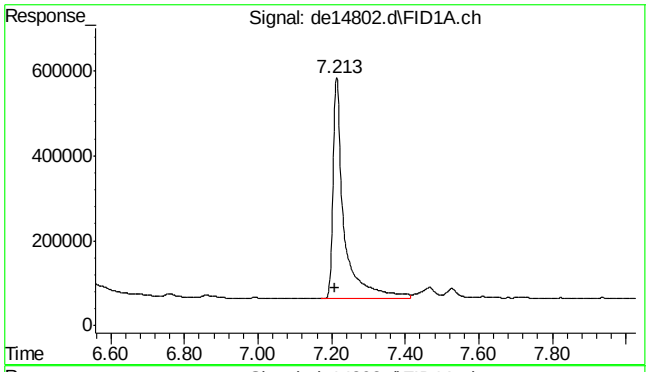
#3 2-methylnaphthalene

R.T.: 5.950 min
Delta R.T.: 0.018 min
Response: 25437
Conc: 0.20 µg/ml



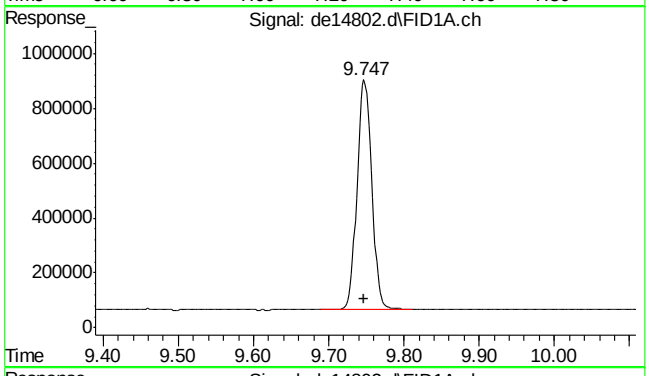
#4 2-fluorobiphenyl

R.T.: 6.493 min
Delta R.T.: 0.007 min
Response: 1591362
Conc: 13.90 µg/ml



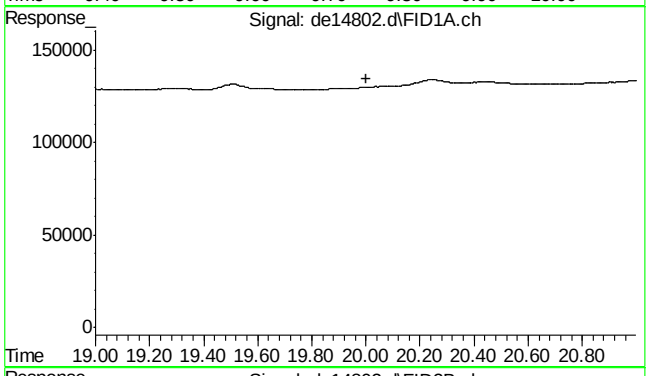
#6 2-bromonaphthalene

R.T.: 7.213 min
Delta R.T.: 0.005 min
Response: 1081654
Conc: 15.09 µg/ml



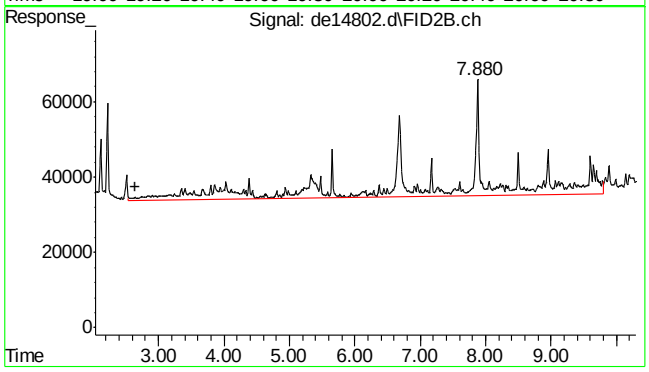
#11 o-terphenyl

R.T.: 9.747 min
Delta R.T.: 0.000 min
Response: 1152510
Conc: 8.71 µg/ml



#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



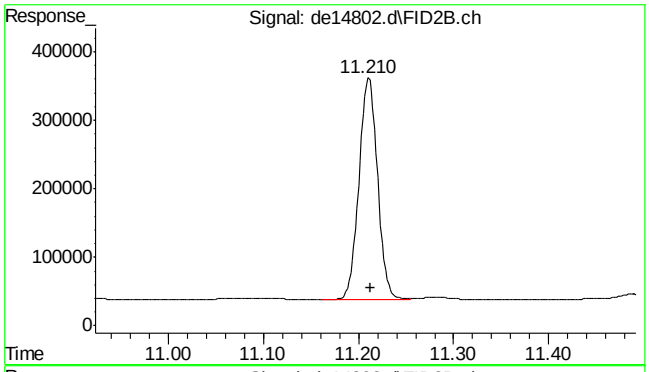
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 917588
Conc: 10.88 µg/ml m

7.1.7

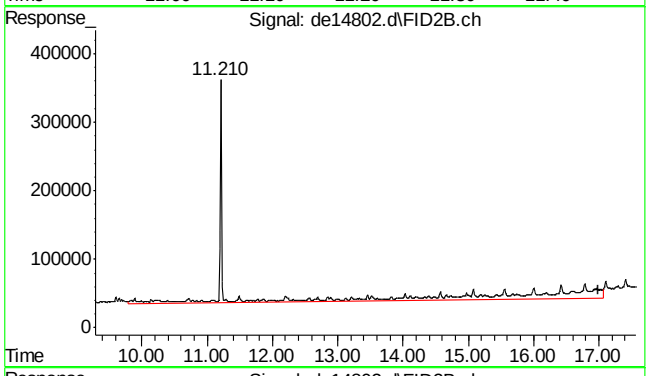
7

SGS ACCUTEST MC46783



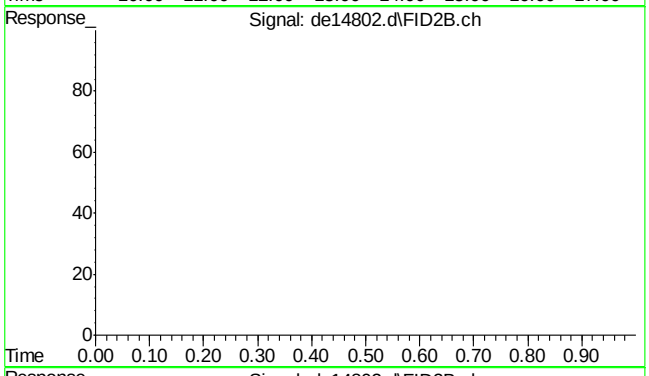
#35 1-chlorooctadecane

R.T.: 11.210 min
Delta R.T.: -0.003 min
Response: 437221
Conc: 6.71 µg/ml



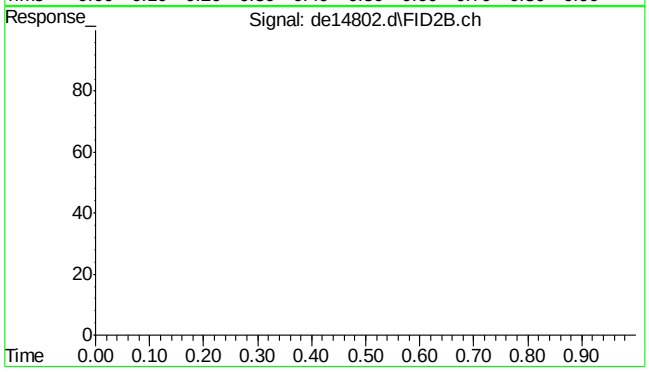
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1765054
Conc: 22.68 µg/ml m



#42 bht

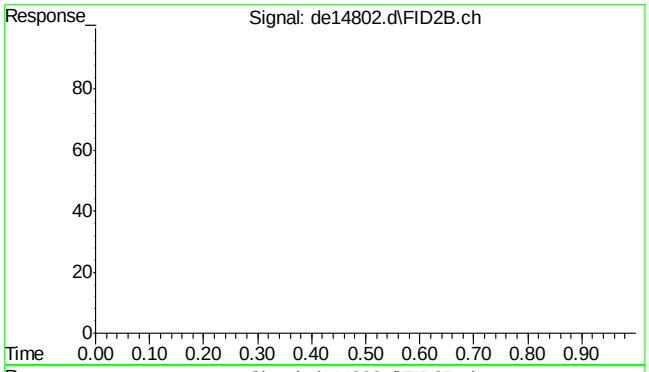
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#43 bht

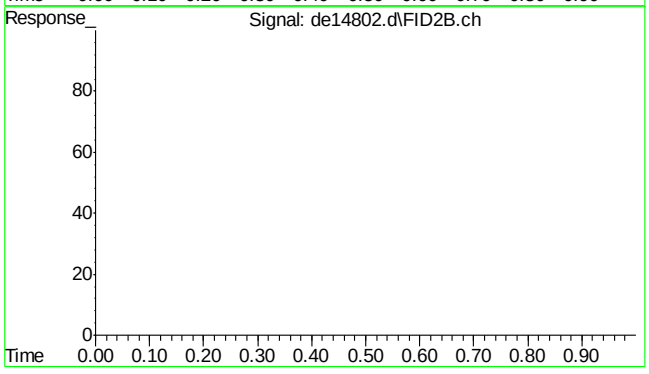
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

SGS ACCUTEST MC46783



#44 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#45 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

7.1.7

7

SGS ACCUTEST MC46783

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14824.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 3:52 pm
Operator : thomasa
Sample : mc46783-5cf,op48098 (Sig #1); mc46783-5,op48098 (Sig #2)
Misc : op48098,gde825,880,,,2,,w
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 16:18:16 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) s 2-fluorobiphenyl	6.500	1885487	16.470 µg/ml
Spiked Amount 20.000 Range 8 - 28	Recovery = 82.35%#		
6) s 2-bromonaphthalene	7.220	1298029	18.103 µg/ml
Spiked Amount 20.000 Range 8 - 28	Recovery = 90.52%#		
11) s o-terphenyl	9.753	1441215	10.893 µg/ml
Spiked Amount 20.000 Range 8 - 28	Recovery = 54.47%#		
35) s 1-chlorooctadecane	11.210	353554	5.427 µg/ml
Spiked Amount 20.000 Range 8 - 28	Recovery = 27.13%		
Target Compounds			
1) h c11-c22 Aromatics (Un...	5.097	2393123	19.182 µg/mlm
25) h c-9	2.647	765475	9.080 µg/mlm
41) h c-36	16.983	1151483	14.796 µg/mlm

(f)=RT Delta > 1/2 Window (m)=manual int.

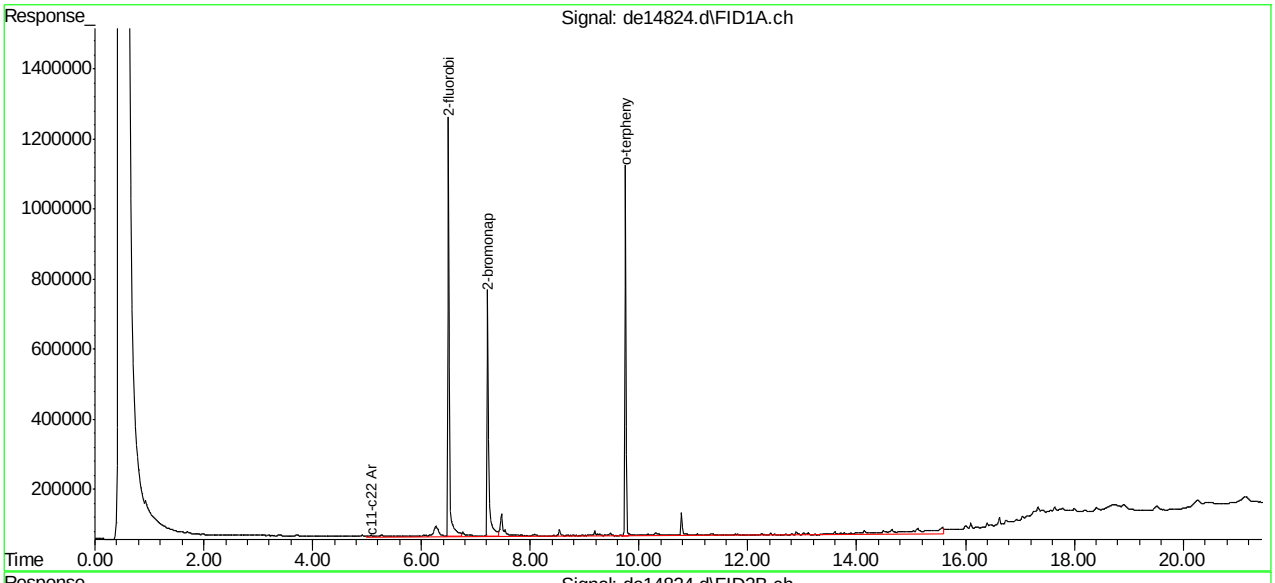
SGS ACCUTEST MC46783

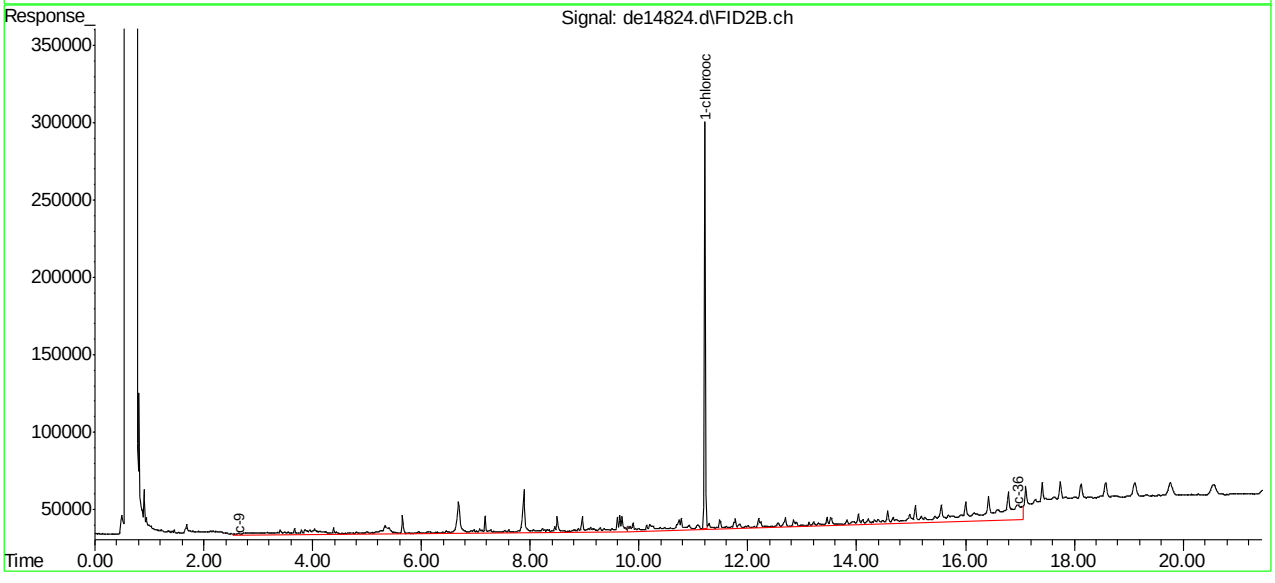
Quantitation Report (QT Reviewed)

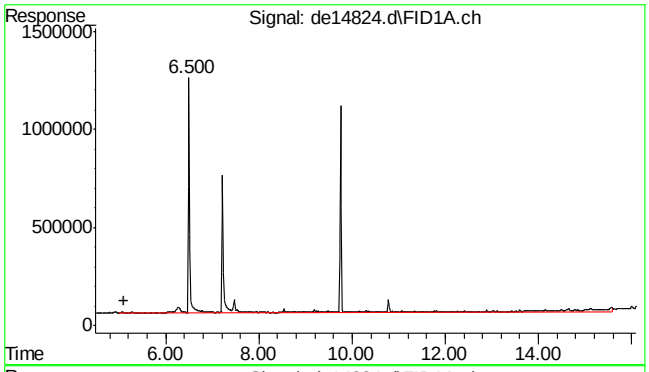
Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14824.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 3:52 pm
Operator : thomasa
Sample : mc46783-5cf,op48098 (Sig #1); mc46783-5,op48098 (Sig #2)
Misc : op48098,gde825,880,,,2,,w
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 16:18:16 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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

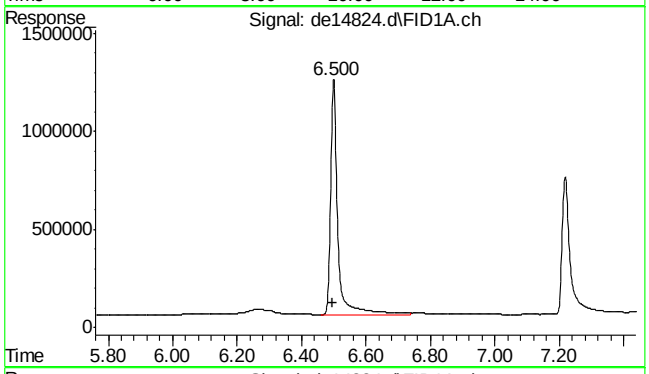






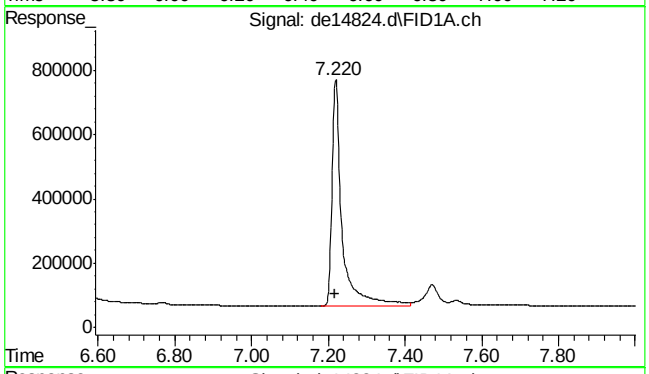
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 2393123
Conc: 19.18 µg/ml m



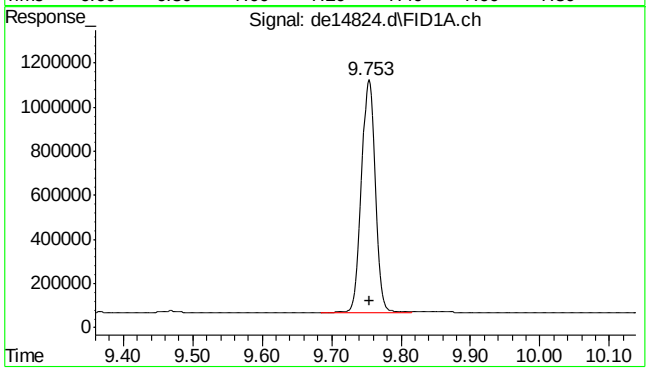
#4 2-fluorobiphenyl

R.T.: 6.500 min
Delta R.T.: 0.003 min
Response: 1885487
Conc: 16.47 µg/ml



#6 2-bromonaphthalene

R.T.: 7.220 min
Delta R.T.: 0.003 min
Response: 1298029
Conc: 18.10 µg/ml



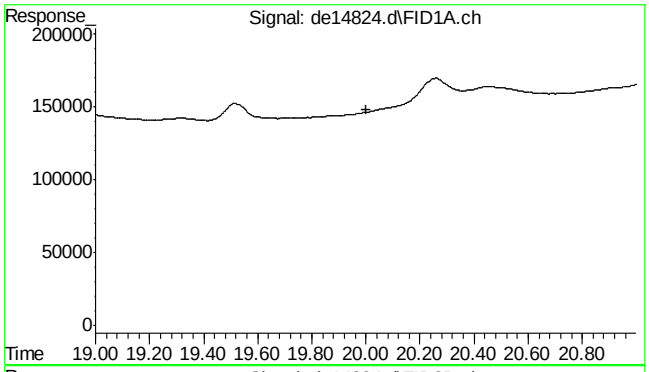
#11 o-terphenyl

R.T.: 9.753 min
Delta R.T.: -0.002 min
Response: 1441215
Conc: 10.89 µg/ml

7.1.8

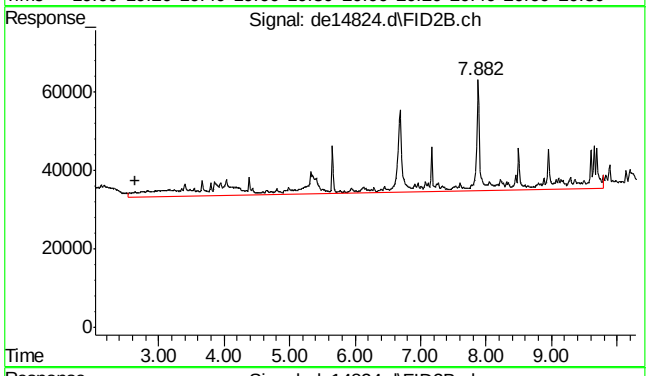
7

SGS ACCUTEST MC46783



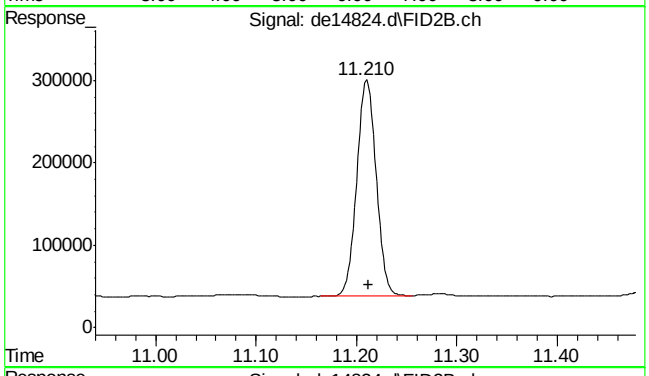
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



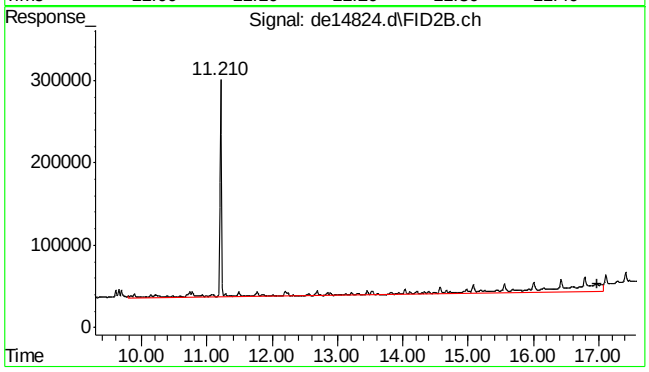
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 765475
Conc: 9.08 µg/ml m



#35 1-chlorooctadecane

R.T.: 11.210 min
Delta R.T.: -0.002 min
Response: 353554
Conc: 5.43 µg/ml



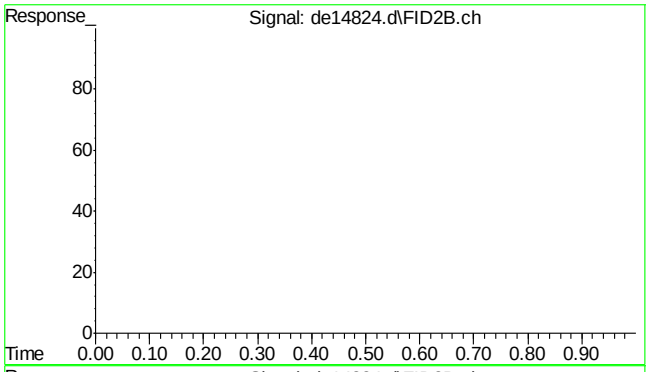
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1151483
Conc: 14.80 µg/ml m

7.1.8

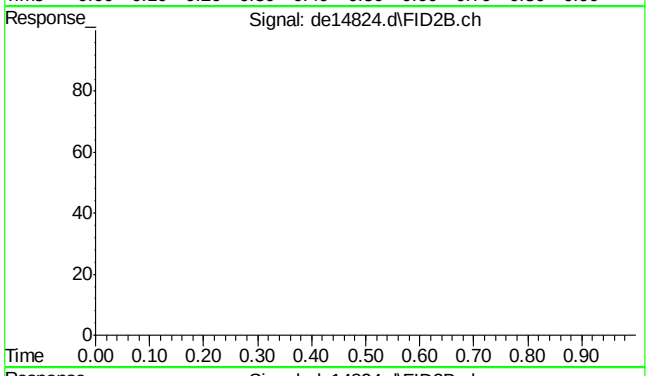
7

SGS ACCUTEST MC46783



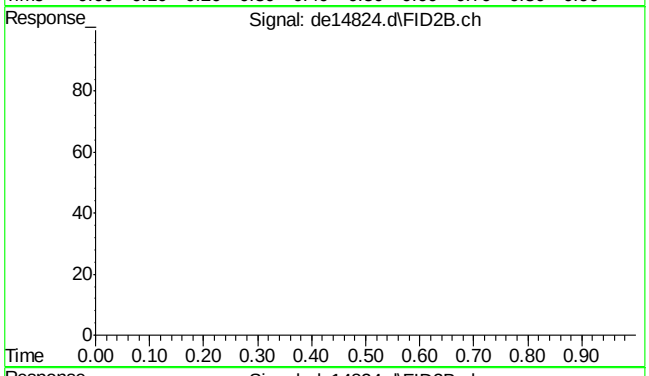
#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



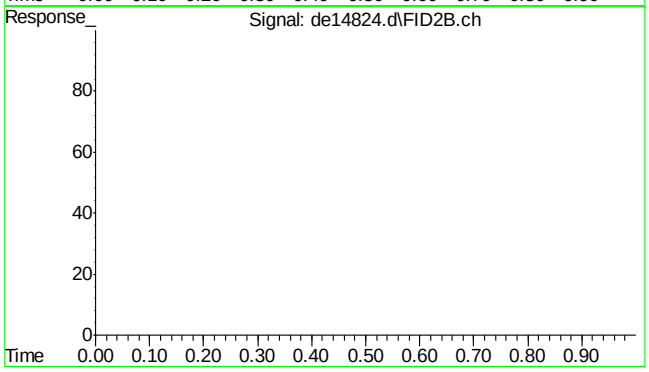
#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#44 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#45 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

Quantitation Report (QT Reviewed)

```
Data Path : G:\1\DATA\DE160711EPH\
Data File : de14797.d
Signal(s) : Signal #1: FID1A.ch  Signal #2: FID2B.ch
Acq On    : 11 Jul 2016  10:10 am
Operator  : thomasa
Sample    : op48098-mb
Misc      : op48098,gde823,1000,,,2,,w
ALS Vial  : 6   Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 09:45:37 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title  : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

        Compound                      R.T.       Response    Conc Units
 ---------------------------------------------------------------------------

 System Monitoring Compounds
 4) s   2-fluorobiphenyl              6.490        1719710   15.022 µg/ml
Spiked Amount     20.000   Range   8 -  28    Recovery   =   75.11%#
 6) s   2-bromonaphthalene            7.210        1022291   14.257 µg/ml
Spiked Amount     20.000   Range   8 -  28    Recovery   =   71.28%#
11) s   o-terphenyl                  9.745        1814185   13.712 µg/ml
Spiked Amount     20.000   Range   8 -  28    Recovery   =   68.56%#
35) s   1-chlorooctadecane          11.210         737927   11.326 µg/ml
Spiked Amount     20.000   Range   8 -  28    Recovery   =   56.63%#

 Target Compounds
 1) h   c11-c22 Aromatics (Un...     5.097        2518470   20.187 µg/mlm
 2)     naphthalene                  5.047         106582    0.849 µg/ml
 3)     2-methylnaphthalene          5.947          41211    0.327 µg/ml
25) h   c-9                          2.647        1074716   12.748 µg/mlm
41) h   c-36                        16.983        1155526   14.848 µg/mlm
 ---------------------------------------------------------------------------

(f)=RT Delta > 1/2 Window                                (m)=manual int.
```

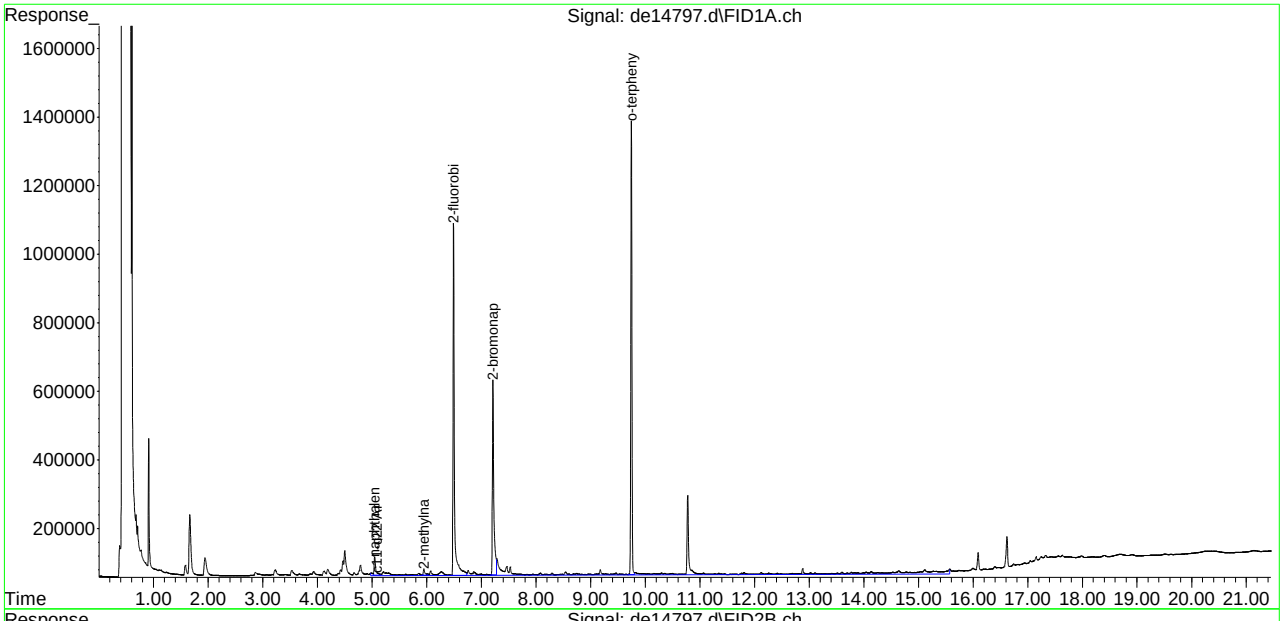

SGS ACCUTEST MC46783

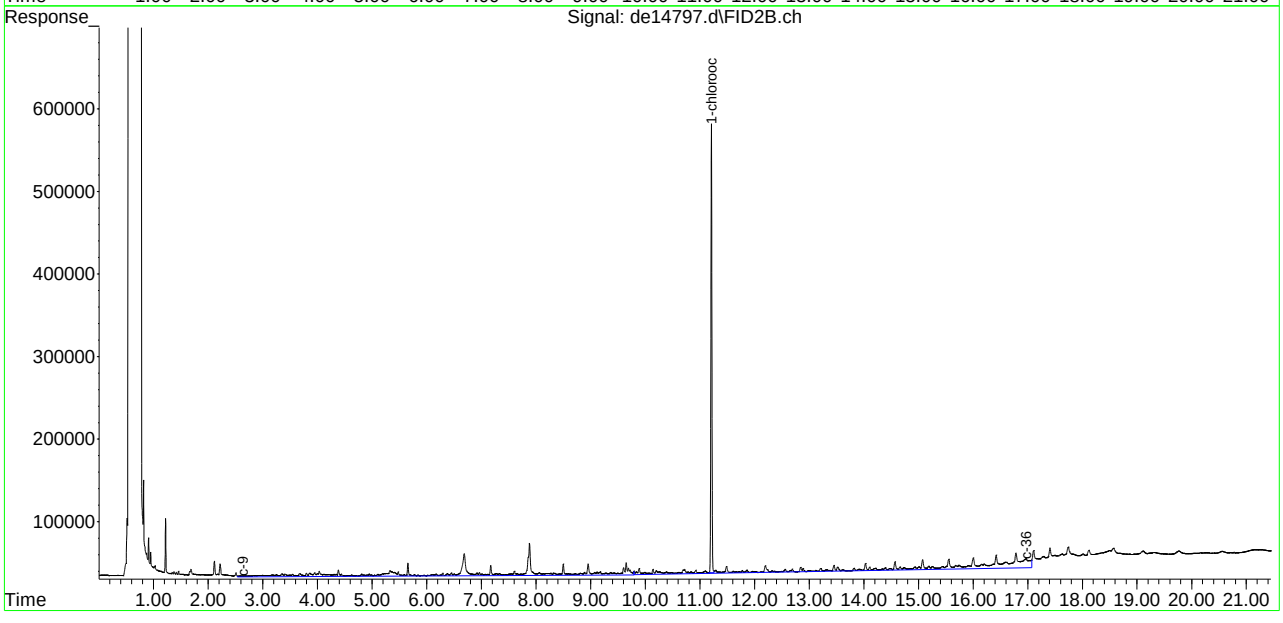
Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160711EPH\
Data File : de14797.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 10:10 am
Operator : thomasa
Sample : op48098-mb
Misc : op48098,gde823,1000,,,2,,w
ALS Vial : 6 Sample Multiplier: 1

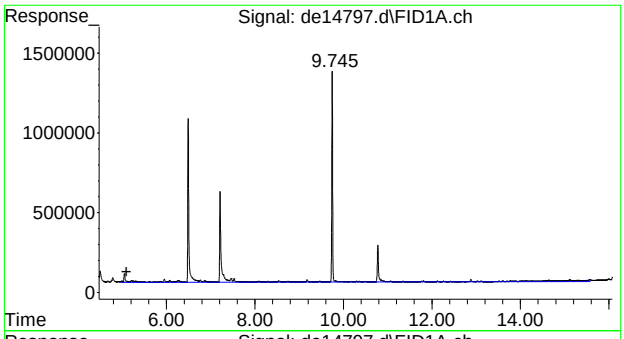
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 09:45:37 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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



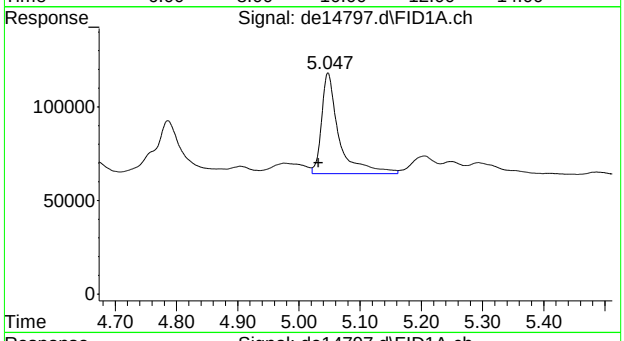


SGS ACCUTEST MC46783



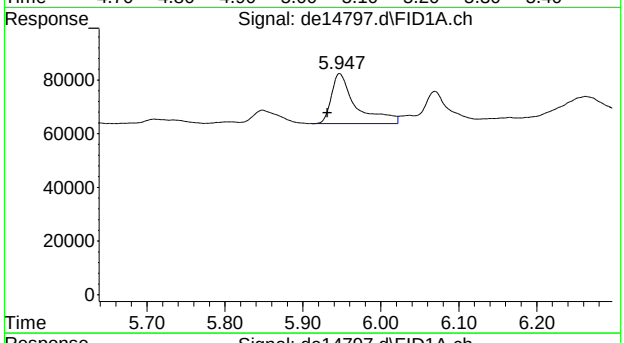
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 2518470
Conc: 20.19 µg/ml m



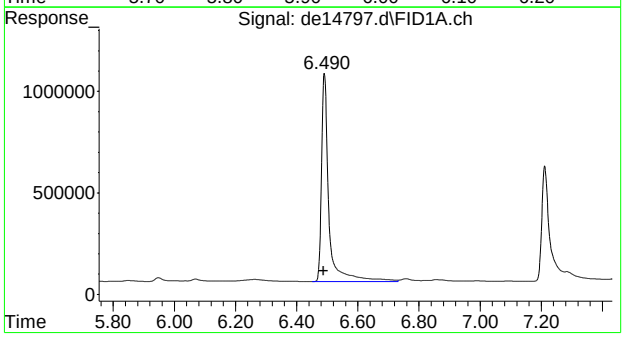
#2 naphthalene

R.T.: 5.047 min
Delta R.T.: 0.015 min
Response: 106582
Conc: 0.85 µg/ml



#3 2-methylnaphthalene

R.T.: 5.947 min
Delta R.T.: 0.015 min
Response: 41211
Conc: 0.33 µg/ml



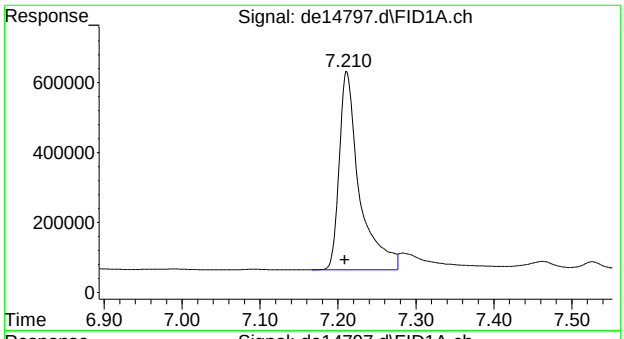
#4 2-fluorobiphenyl

R.T.: 6.490 min
Delta R.T.: 0.003 min
Response: 1719710
Conc: 15.02 µg/ml

7.2.1

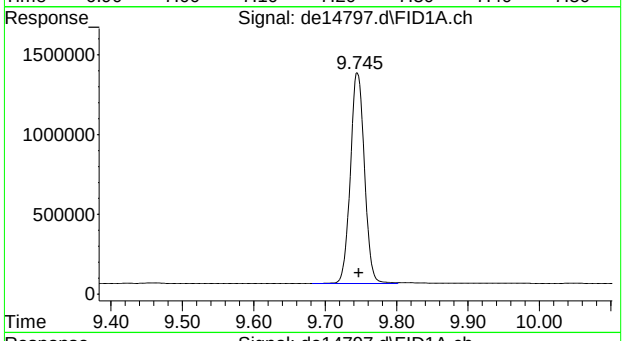
7

SGS ACCUTEST MC46783



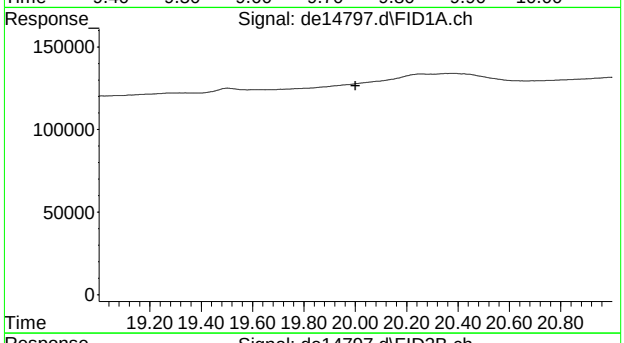
#6 2-bromonaphthalene

R.T.: 7.210 min
Delta R.T.: 0.002 min
Response: 1022291
Conc: 14.26 µg/ml



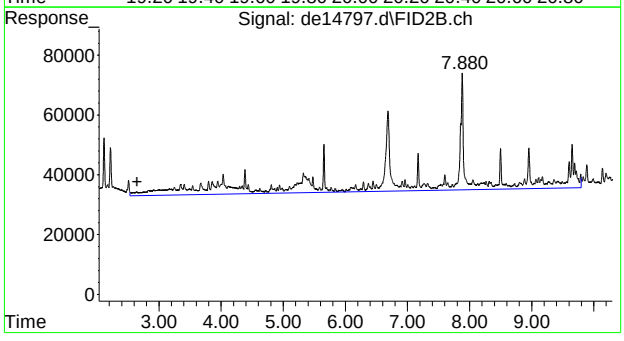
#11 o-terphenyl

R.T.: 9.745 min
Delta R.T.: -0.002 min
Response: 1814185
Conc: 13.71 µg/ml



#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



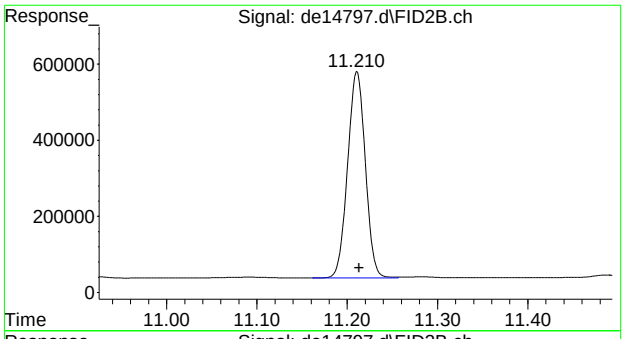
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 1074716
Conc: 12.75 µg/ml m

7.2.1

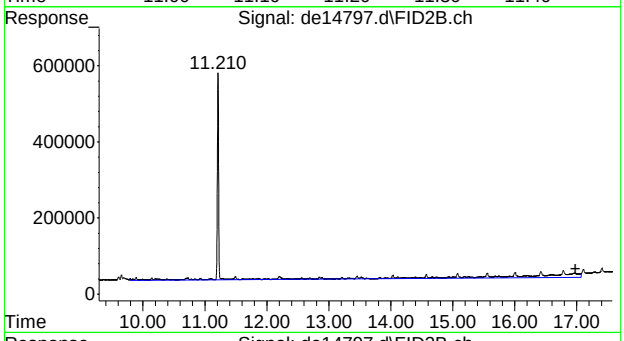
7

SGS ACCUTEST MC46783



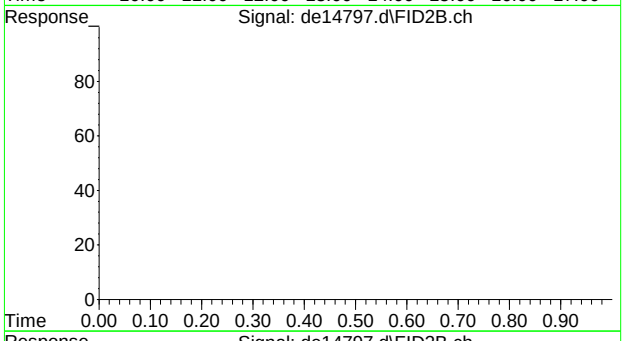
#35 1-chlorooctadecane

R.T.: 11.210 min
Delta R.T.: -0.003 min
Response: 737927
Conc: 11.33 µg/ml



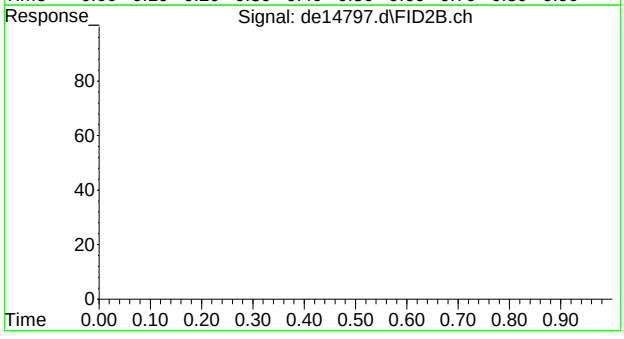
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1155526
Conc: 14.85 µg/ml m



#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



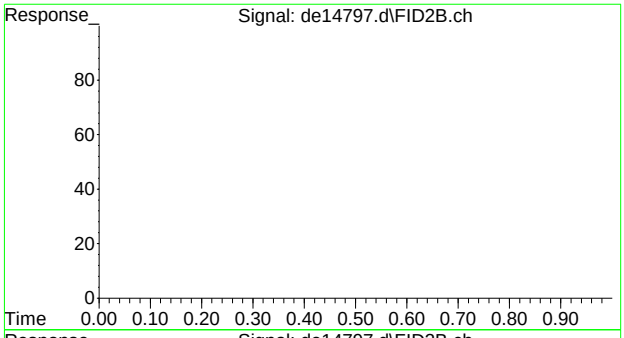
#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

7.2.1

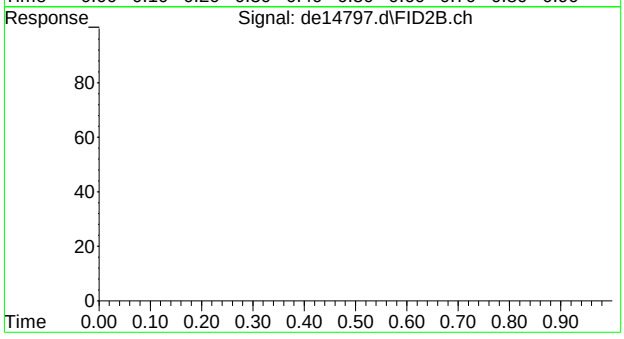
7

SGS ACCUTEST MC46783



#44 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#45 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

SGS ACCUTEST MC46783

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160711EPH\
Data File : de14795.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 9:15 am
Operator : thomasa
Sample : op48098-bs
Misc : op48098,gde823,1000,,,2,,w
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 11 10:29:17 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) s	2-fluorobiphenyl	6.490	1714379	14.976 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 74.88%#
6) s	2-bromonaphthalene	7.208	1061647	14.806 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 74.03%#
11) s	o-terphenyl	9.743	1874851	14.170 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 70.85%#
35) s	1-chlorooctadecane	11.210	715315	10.979 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 54.89%#
	Target Compounds			
1) h	c11-c22 Aromatics (Un...	5.097	42625924	341.673 µg/mlm
2)	naphthalene	5.035	2034059	16.203 µg/ml
3)	2-methylnaphthalene	5.933	1996839	15.830 µg/ml
5)	acenaphthylene	7.040	2045711	16.168 µg/ml
7)	acenaphthene	7.280	2366179	16.988 µg/ml
8)	fluorene	7.923	2142509	16.678 µg/ml
9)	phenanthrene	9.097	2134673	17.089 µg/ml
10)	anthracene	9.155	2364808	17.776 µg/ml
12)	fluoranthene	10.595	2413612	18.818 µg/ml
13)	pyrene	10.848	2478987	18.874 µg/ml
14)	benzo(a)anthracene	12.410	2419664	19.918 µg/ml
15)	chrysene	12.453	2480422	19.431 µg/ml
16)	benzo(B)fluoranthene	13.702	2388390	20.173 µg/ml
17)	benzo(k)fluoranthene	13.727	2507130	19.582 µg/ml
18)	benzo(a)pyrene	14.030	2405914	20.396 µg/ml
19)	indeno(1,2,3-cd)pyrene	15.165	2410089	20.591 µg/ml
20)	dibenzo(ah)anthracene	15.208	2373526	20.948 µg/ml
21)	benzo(ghi)perylene	15.383	2401585	21.164 µg/ml
25) h	c-9	2.647	1281879	15.205 µg/mlm
26) h	c-10	3.800	1483650	17.598 µg/ml
27)	naphthalene #2	5.477	10962	0.121 µg/ml
28)	c-12	5.653	1564213	18.554 µg/ml
30)	c-14	7.170	1596102	18.932 µg/ml
31)	c-16	8.498	1608540	19.080 µg/ml
32)	c-18	9.692	1699588	20.160 µg/ml
33)	c-19	10.247	1717988	22.075 µg/ml
34)	c-20	10.777	1741708	22.380 µg/ml
36)	c-22	11.772	1784585	22.931 µg/ml
37)	c-24	12.690	1771205	22.759 µg/ml
38)	c-26	13.542	1729666	22.225 µg/ml
39)	c-28	14.333	1679809	21.585 µg/ml
40) h	c-30	15.082	1615066	20.753 µg/ml
41) h	c-36	16.983	1122445	14.423 µg/mlm

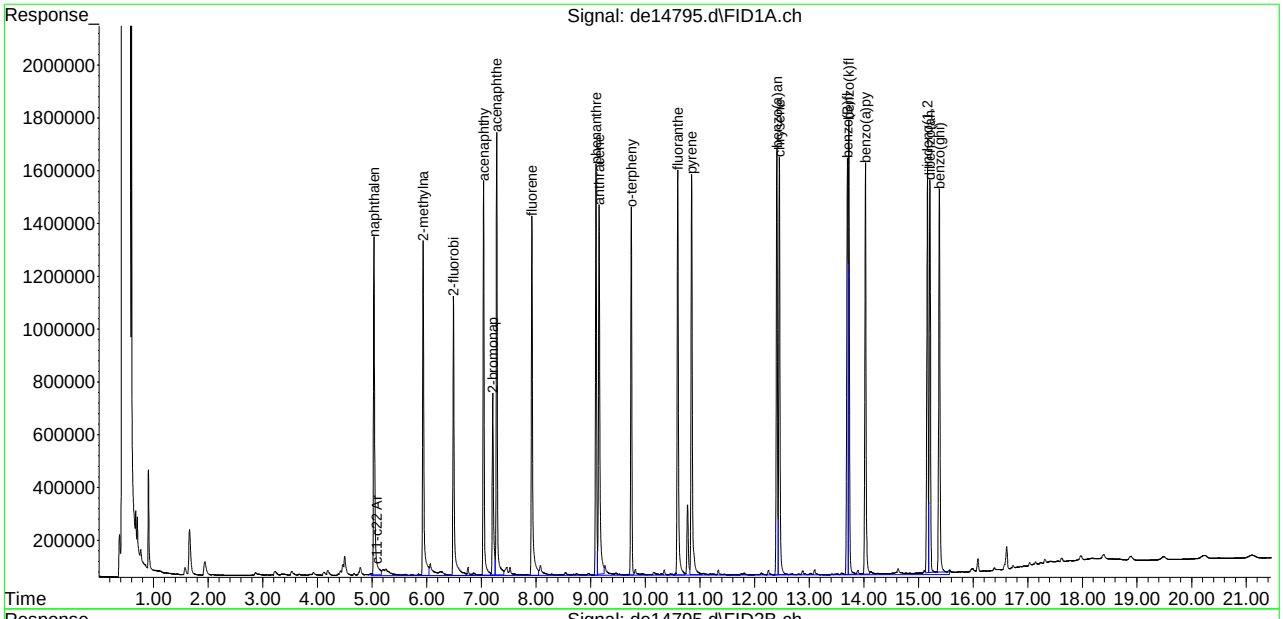
(f)=RT Delta > 1/2 Window (m)=manual int.

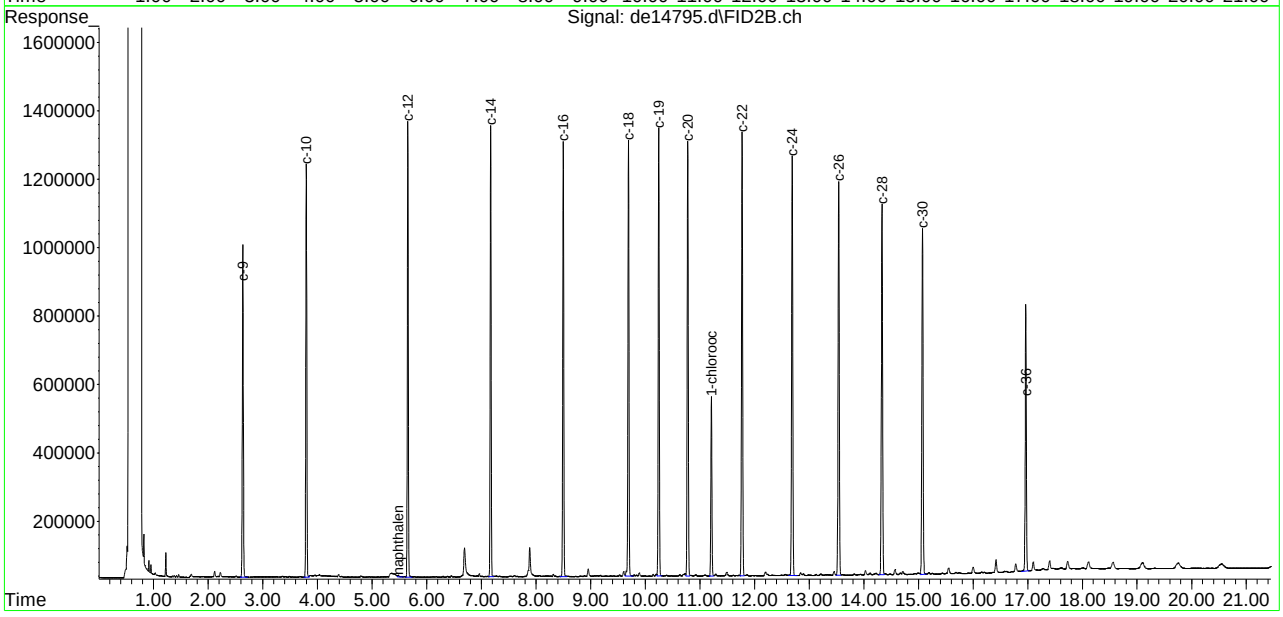
Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160711EPH\
Data File : de14795.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 9:15 am
Operator : thomasa
Sample : op48098-bs
Misc : op48098,gde823,1000,,,2,,w
ALS Vial : 2 Sample Multiplier: 1

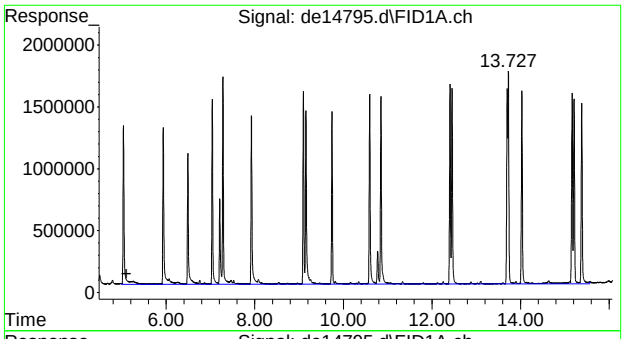
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 11 10:29:17 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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



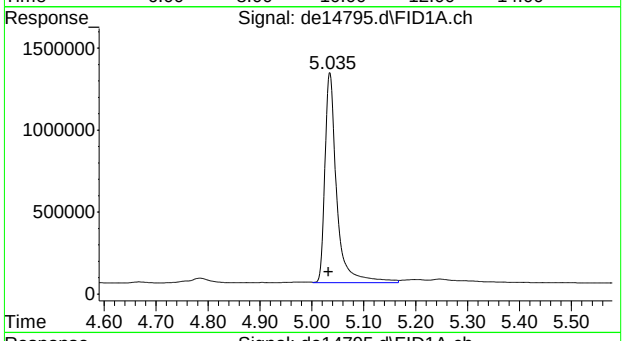


SGS ACCUTEST MC46783



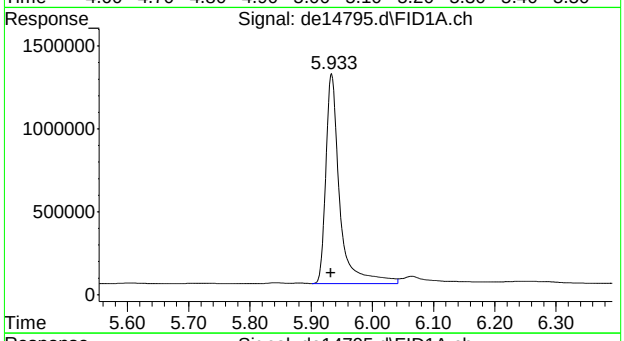
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 42625924
Conc: 341.67 µg/ml m



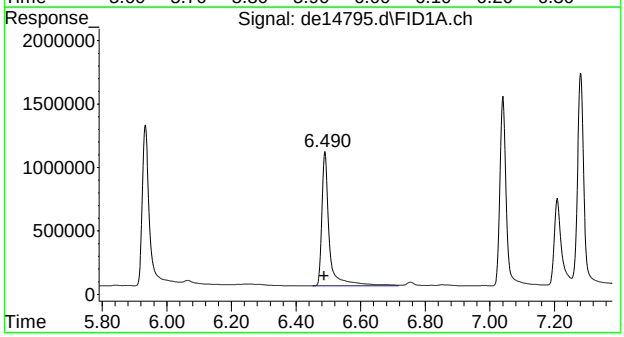
#2 naphthalene

R.T.: 5.035 min
Delta R.T.: 0.003 min
Response: 2034059
Conc: 16.20 µg/ml



#3 2-methylnaphthalene

R.T.: 5.933 min
Delta R.T.: 0.002 min
Response: 1996839
Conc: 15.83 µg/ml



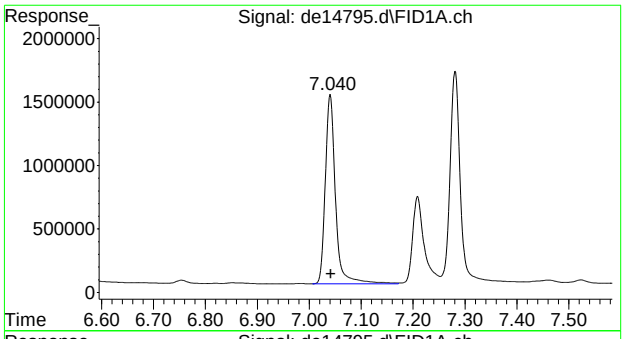
#4 2-fluorobiphenyl

R.T.: 6.490 min
Delta R.T.: 0.003 min
Response: 1714379
Conc: 14.98 µg/ml

7.3.1

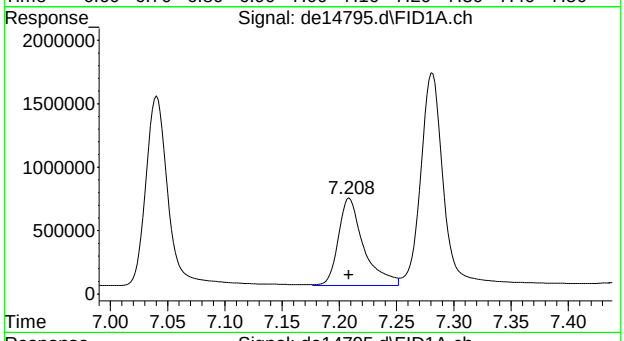
7

SGS ACCUTEST MC46783



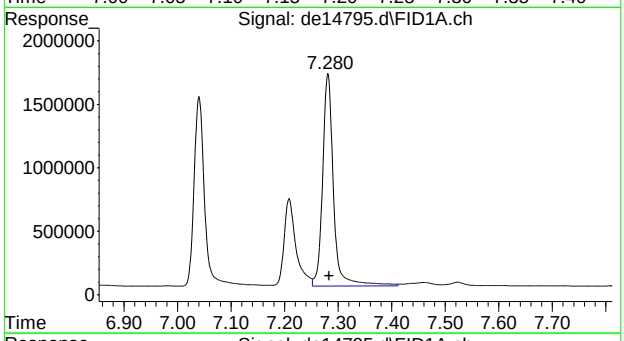
#5 acenaphthylene

R.T.: 7.040 min
Delta R.T.: -0.002 min
Response: 2045711
Conc: 16.17 µg/ml



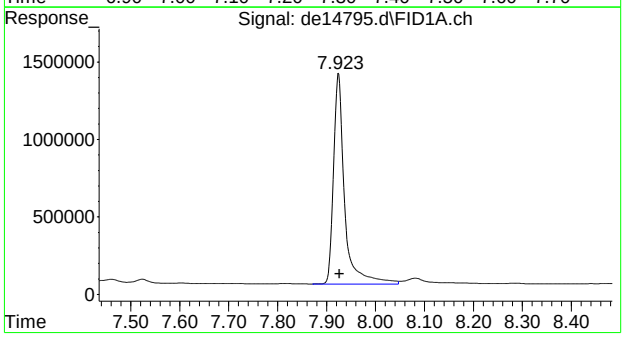
#6 2-bromonaphthalene

R.T.: 7.208 min
Delta R.T.: 0.000 min
Response: 1061647
Conc: 14.81 µg/ml



#7 acenaphthene

R.T.: 7.280 min
Delta R.T.: -0.003 min
Response: 2366179
Conc: 16.99 µg/ml



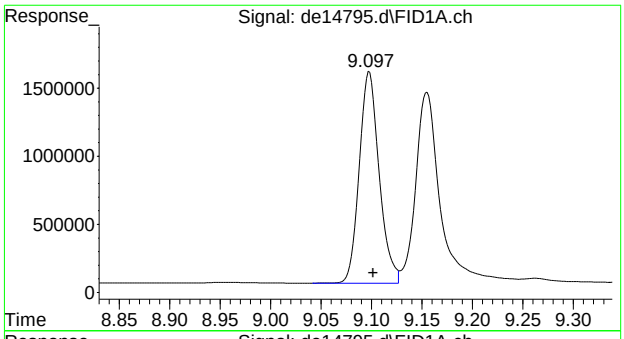
#8 fluorene

R.T.: 7.923 min
Delta R.T.: -0.003 min
Response: 2142509
Conc: 16.68 µg/ml

7.3.1

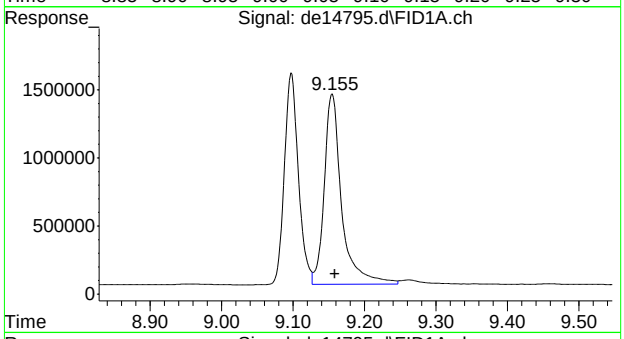
7

SGS ACCUTEST MC46783



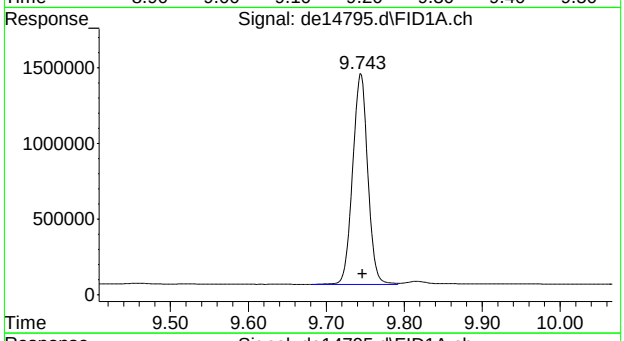
#9 phenanthrene

R.T.: 9.097 min
Delta R.T.: -0.005 min
Response: 2134673
Conc: 17.09 µg/ml



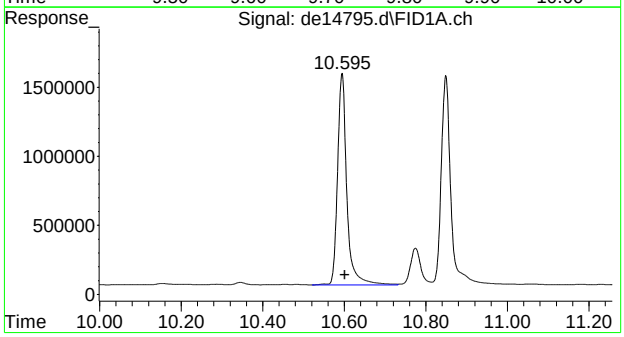
#10 anthracene

R.T.: 9.155 min
Delta R.T.: -0.003 min
Response: 2364808
Conc: 17.78 µg/ml



#11 o-terphenyl

R.T.: 9.743 min
Delta R.T.: -0.003 min
Response: 1874851
Conc: 14.17 µg/ml



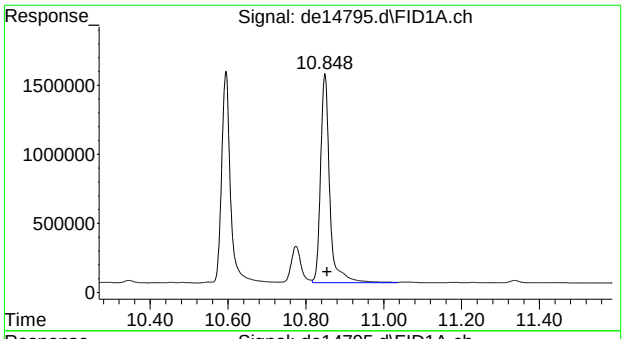
#12 fluoranthene

R.T.: 10.595 min
Delta R.T.: -0.007 min
Response: 2413612
Conc: 18.82 µg/ml

7.3.1

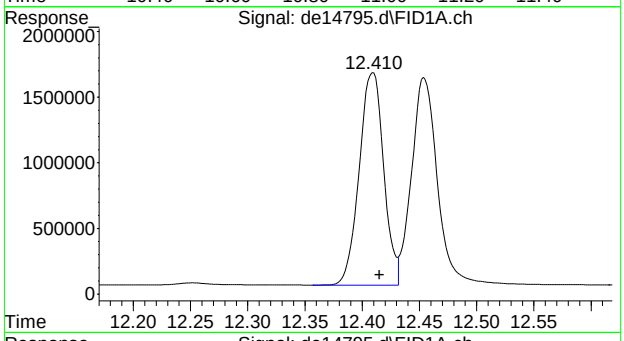
7

SGS ACCUTEST MC46783



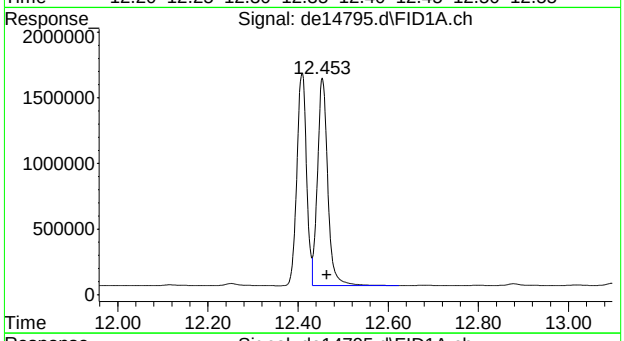
#13 pyrene

R.T.: 10.848 min
Delta R.T.: -0.007 min
Response: 2478987
Conc: 18.87 µg/ml



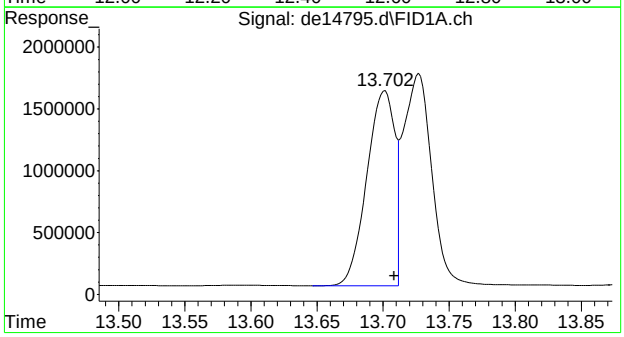
#14 benzo(a)anthracene

R.T.: 12.410 min
Delta R.T.: -0.005 min
Response: 2419664
Conc: 19.92 µg/ml



#15 chrysene

R.T.: 12.453 min
Delta R.T.: -0.010 min
Response: 2480422
Conc: 19.43 µg/ml



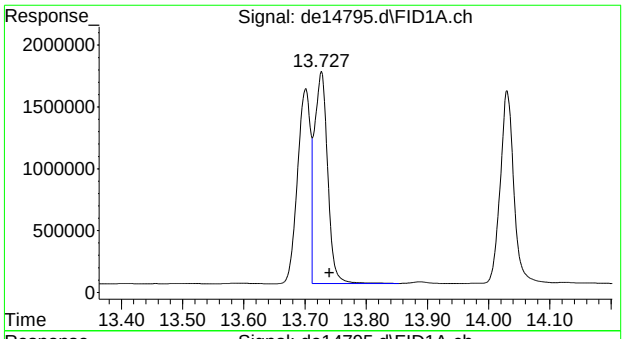
#16 benzo(B)fluoranthene

R.T.: 13.702 min
Delta R.T.: -0.007 min
Response: 2388390
Conc: 20.17 µg/ml

7.3.1

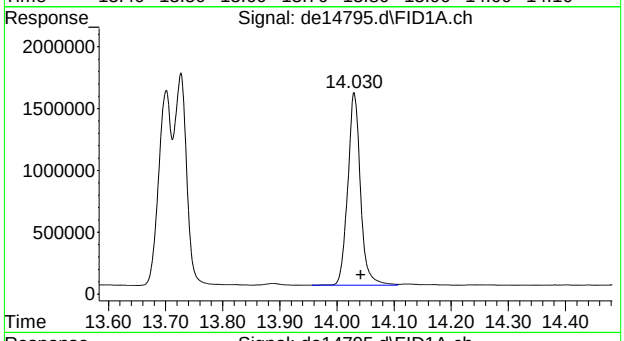
7

SGS ACCUTEST MC46783



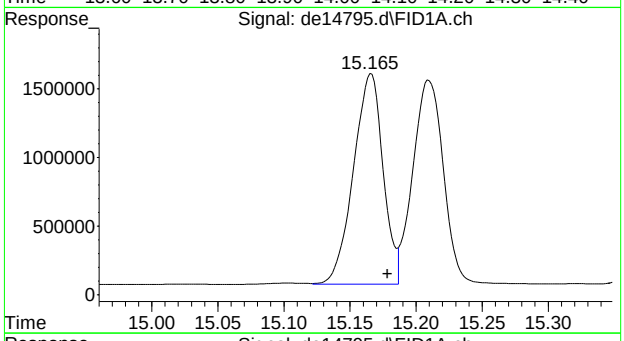
#17 benzo(k)fluoranthene

R.T.: 13.727 min
Delta R.T.: -0.013 min
Response: 2507130
Conc: 19.58 µg/ml



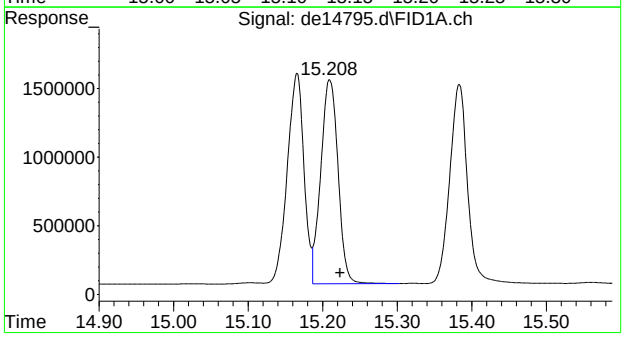
#18 benzo(a)pyrene

R.T.: 14.030 min
Delta R.T.: -0.012 min
Response: 2405914
Conc: 20.40 µg/ml



#19 indeno(1,2,3-cd)pyrene

R.T.: 15.165 min
Delta R.T.: -0.013 min
Response: 2410089
Conc: 20.59 µg/ml



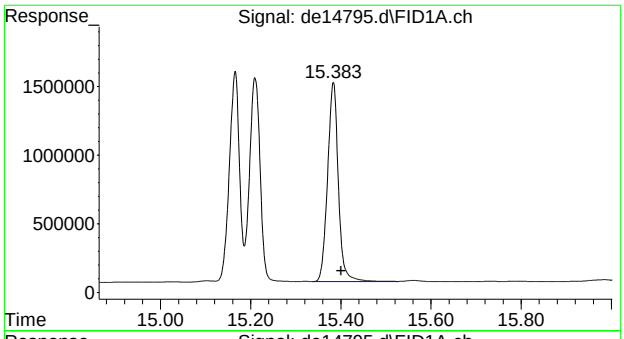
#20 dibenzo(ah)anthracene

R.T.: 15.208 min
Delta R.T.: -0.015 min
Response: 2373526
Conc: 20.95 µg/ml

7.3.1

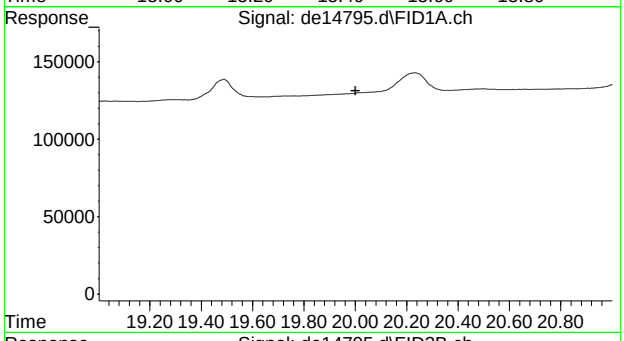
7

SGS ACCUTEST MC46783



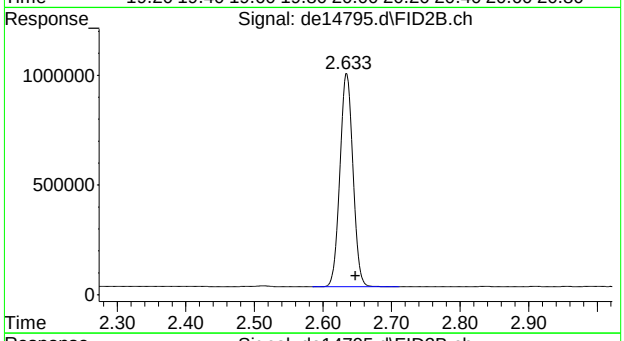
#21 benzo(ghi)perylene

R.T.: 15.383 min
Delta R.T.: -0.017 min
Response: 2401585
Conc: 21.16 µg/ml



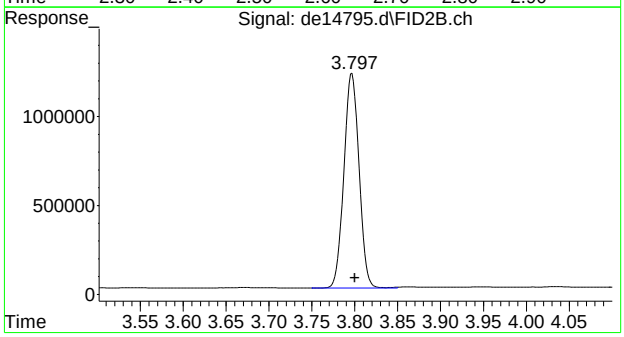
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



#25 c-9

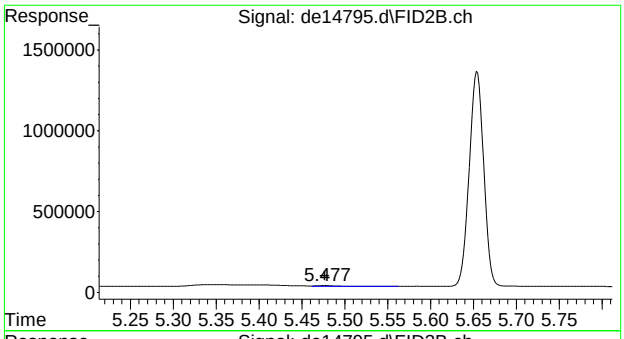
R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 1281879
Conc: 15.21 µg/ml m



#26 c-10

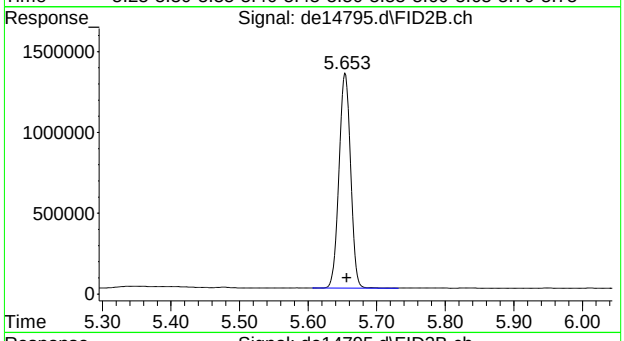
R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 1483650
Conc: 17.60 µg/ml

SGS ACCUTEST MC46783



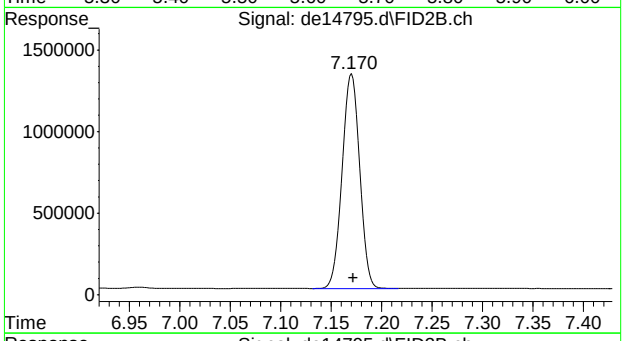
#27 naphthalene #2

R.T.: 5.477 min
Delta R.T.: 0.000 min
Response: 10962
Conc: 0.12 µg/ml



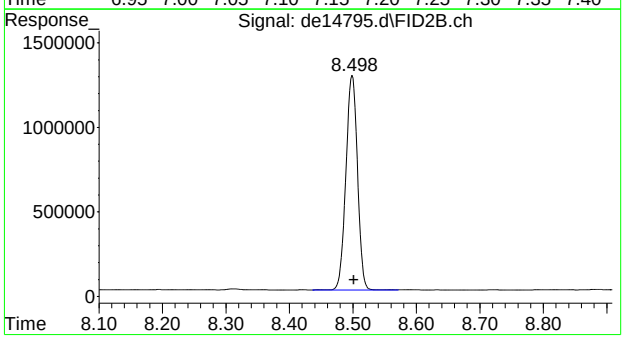
#28 c-12

R.T.: 5.653 min
Delta R.T.: -0.003 min
Response: 1564213
Conc: 18.55 µg/ml



#30 c-14

R.T.: 7.170 min
Delta R.T.: -0.002 min
Response: 1596102
Conc: 18.93 µg/ml



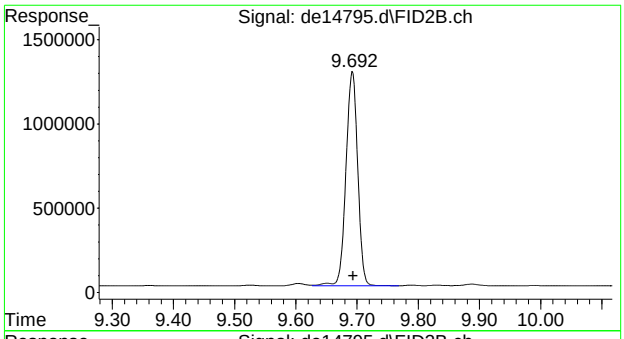
#31 c-16

R.T.: 8.498 min
Delta R.T.: -0.003 min
Response: 1608540
Conc: 19.08 µg/ml

7.3.1

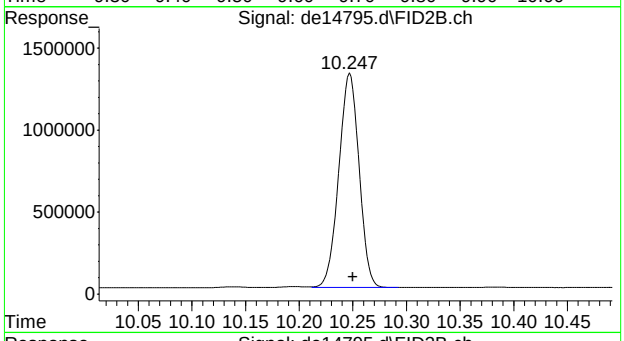
7

SGS ACCUTEST MC46783



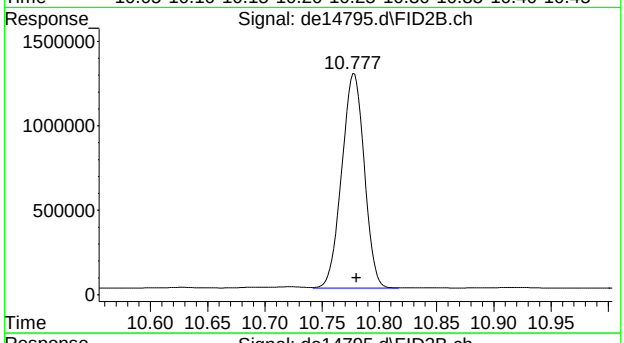
#32 c-18

R.T.: 9.692 min
Delta R.T.: -0.002 min
Response: 1699588
Conc: 20.16 µg/ml



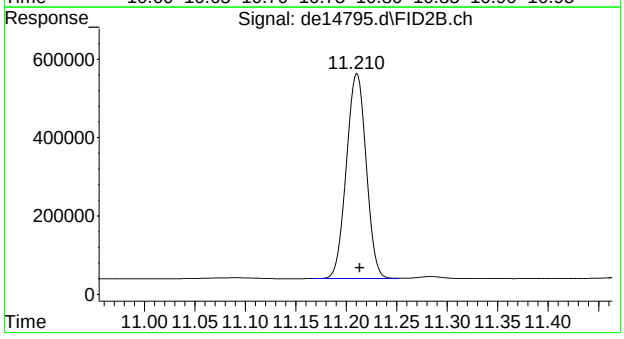
#33 c-19

R.T.: 10.247 min
Delta R.T.: -0.003 min
Response: 1717988
Conc: 22.08 µg/ml



#34 c-20

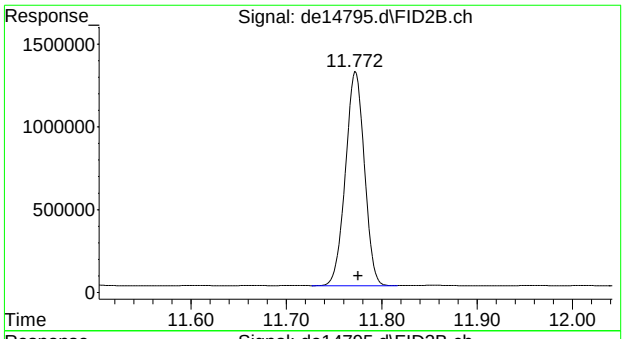
R.T.: 10.777 min
Delta R.T.: -0.003 min
Response: 1741708
Conc: 22.38 µg/ml



#35 1-chlorooctadecane

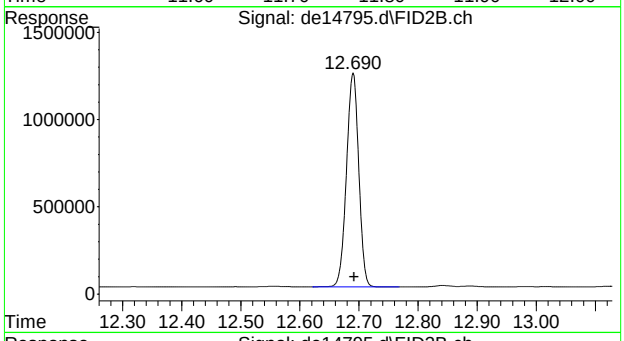
R.T.: 11.210 min
Delta R.T.: -0.003 min
Response: 715315
Conc: 10.98 µg/ml

SGS ACCUTEST MC46783



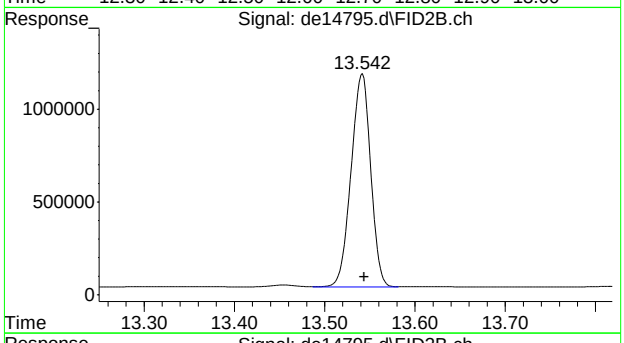
#36 c-22

R.T.: 11.772 min
Delta R.T.: -0.003 min
Response: 1784585
Conc: 22.93 µg/ml



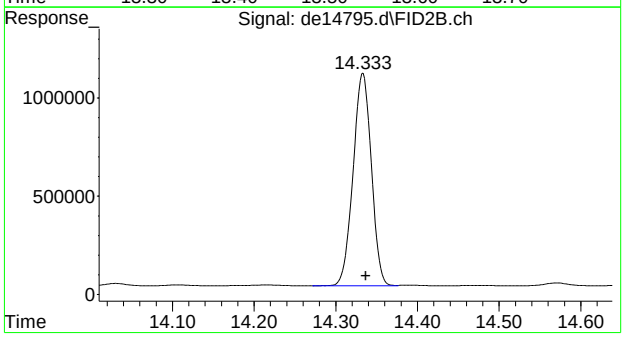
#37 c-24

R.T.: 12.690 min
Delta R.T.: -0.002 min
Response: 1771205
Conc: 22.76 µg/ml



#38 c-26

R.T.: 13.542 min
Delta R.T.: -0.002 min
Response: 1729666
Conc: 22.23 µg/ml



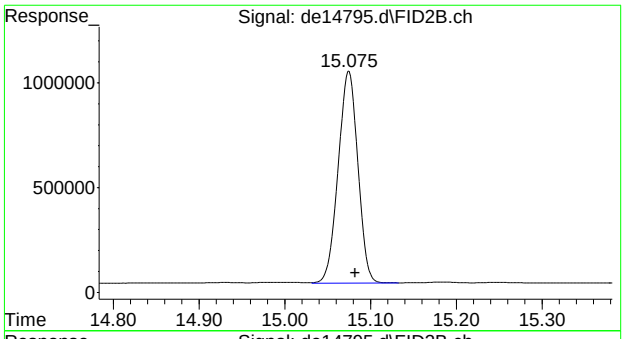
#39 c-28

R.T.: 14.333 min
Delta R.T.: -0.003 min
Response: 1679809
Conc: 21.58 µg/ml

7.3.1

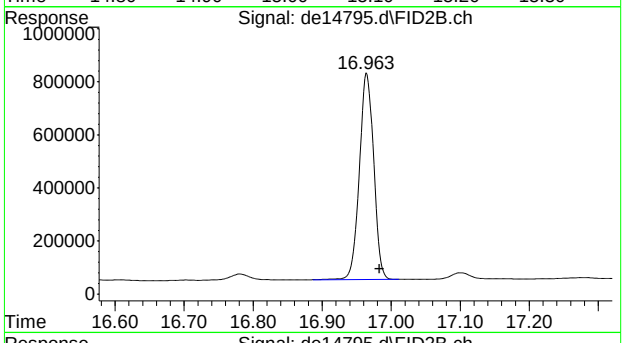
7

SGS ACCUTEST MC46783



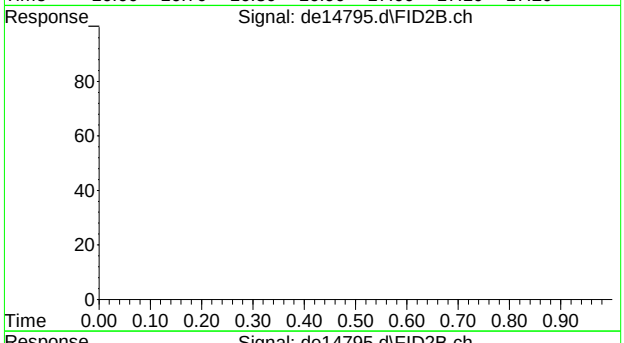
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 1615066
Conc: 20.75 µg/ml



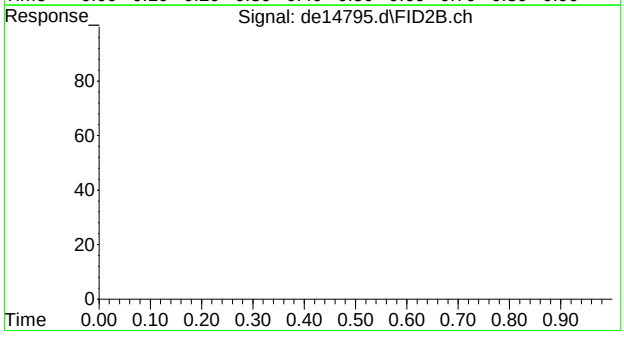
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1122445
Conc: 14.42 µg/ml m



#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



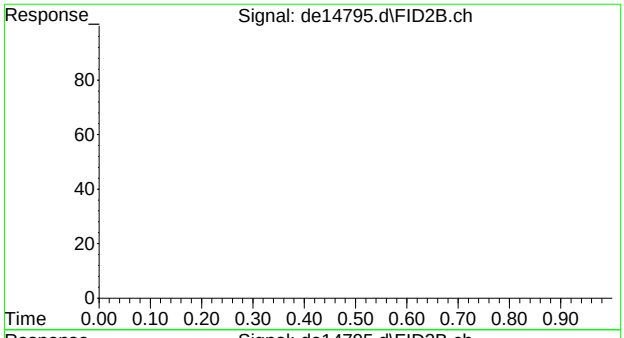
#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

7.3.1

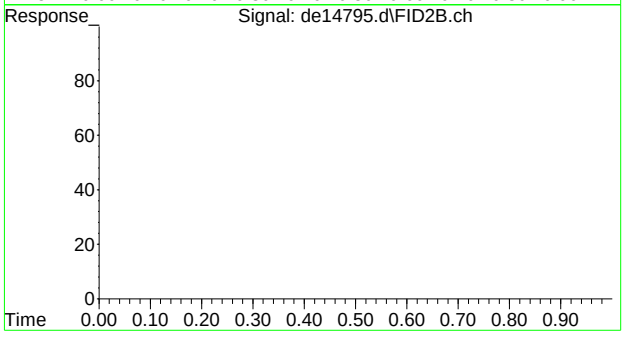
7

SGS ACCUTEST MC46783



#44 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#45 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

7.3.1

7

SGS ACCUTEST MC46783

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri
07/12/16 13:18

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160711EPH\
Data File : de14796.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 9:42 am
Operator : thomasa
Sample : op48098-bsd
Misc : op48098,gde823,1000,,,2,,w
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 10:45:37 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) s 2-fluorobiphenyl	6.490	1611958	14.081 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery =	70.41%#
6) s 2-bromonaphthalene	7.210	1014664	14.151 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery =	70.75%#
11) s o-terphenyl	9.745	1578428	11.930 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery =	59.65%#
35) s 1-chlorooctadecane	11.210	589620	9.050 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery =	45.25%#
Target Compounds			
1) h c11-c22 Aromatics (Un...	5.097	42088439	337.364 µg/mlm
2) naphthalene	5.035	1916391	15.266 µg/ml
3) 2-methylnaphthalene	5.933	1931319	15.310 µg/ml
5) acenaphthylene	7.042	2008700	15.876 µg/ml
7) acenaphthene	7.282	2304778	16.547 µg/ml
8) fluorene	7.925	2104988	16.386 µg/ml
9) phenanthrene	9.098	2124775	17.010 µg/ml
10) anthracene	9.155	2313934	17.393 µg/ml
12) fluoranthene	10.597	2390792	18.640 µg/ml
13) pyrene	10.850	2447945	18.638 µg/ml
14) benzo(a)anthracene	12.410	2417887	19.903 µg/ml
15) chrysene	12.455	2522149	19.758 µg/ml
16) benzo(B)fluoranthene	13.702	2518803	21.274 µg/mlm
17) benzo(k)fluoranthene	13.728	2410138	18.825 µg/mlm
18) benzo(a)pyrene	14.033	2434491	20.638 µg/ml
19) indeno(1,2,3-cd)pyrene	15.168	2401422	20.517 µg/ml
20) dibenzo(ah)anthracene	15.212	2442558	21.557 µg/ml
21) benzo(ghi)perylene	15.385	2431797	21.430 µg/ml
25) h c-9	2.647	1217887	14.446 µg/mlm
26) h c-10	3.800	1455081	17.260 µg/ml
27) naphthalene #2	5.477	6853	0.075 µg/ml
28) c-12	5.653	1588474	18.842 µg/ml
29) 2-methylnaphthalene #2	6.372	5868	0.065 µg/ml
30) c-14	7.170	1636242	19.408 µg/ml
31) c-16	8.498	1646202	19.527 µg/ml
32) c-18	9.692	1739164	20.629 µg/ml
33) c-19	10.248	1766007	22.692 µg/ml
34) c-20	10.778	1801738	23.151 µg/ml
36) c-22	11.772	1827432	23.482 µg/ml
37) c-24	12.690	1831830	23.538 µg/ml
38) c-26	13.540	1792839	23.037 µg/ml
39) c-28	14.333	1737733	22.329 µg/ml
40) h c-30	15.082	1575996	20.251 µg/ml
41) h c-36	16.983	617629	7.936 µg/mlm

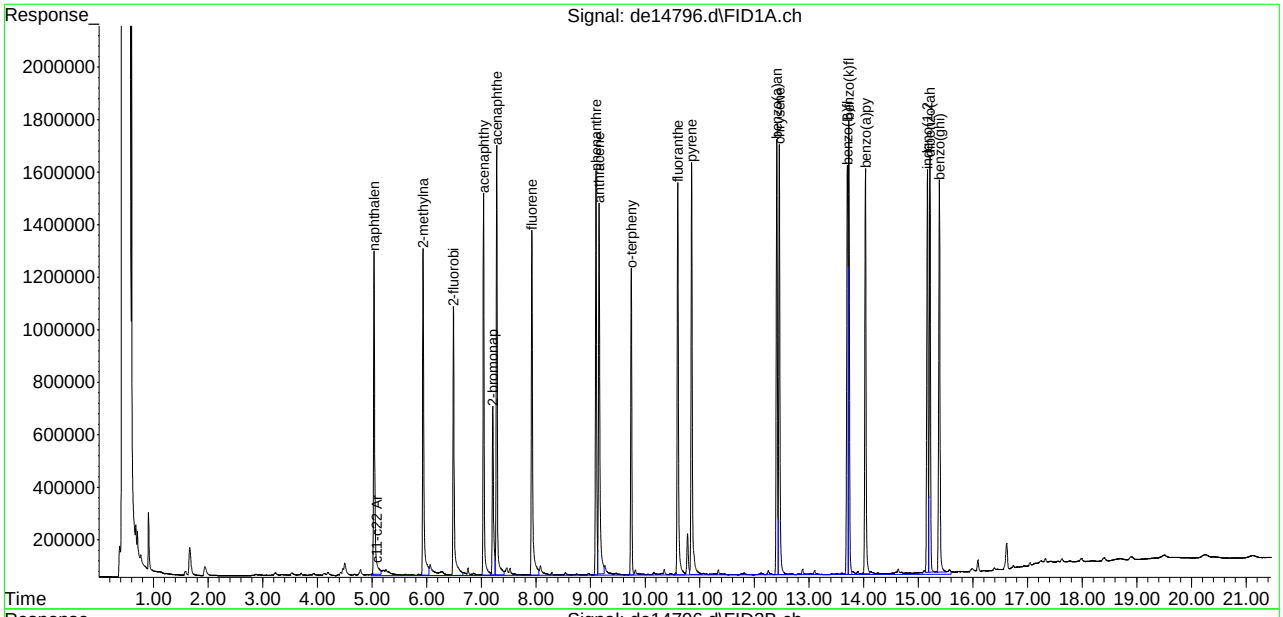
(f)=RT Delta > 1/2 Window (m)=manual int.

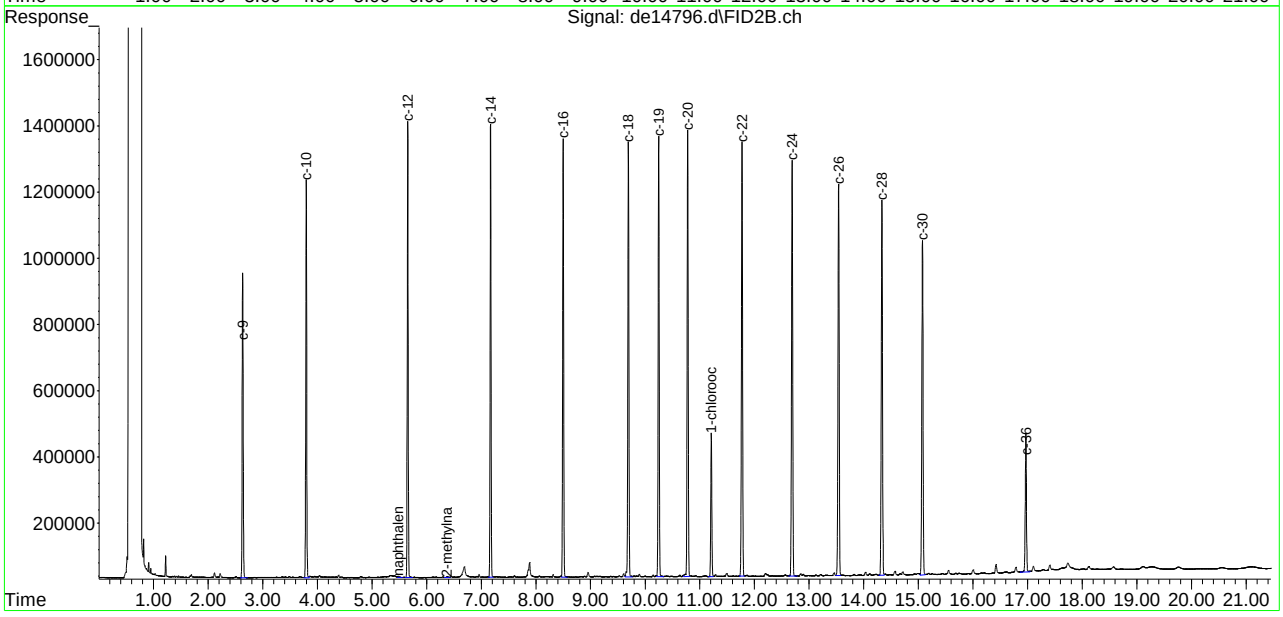
Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160711EPH\
Data File : de14796.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 9:42 am
Operator : thomasa
Sample : op48098-bsd
Misc : op48098,gde823,1000,,,2,,w
ALS Vial : 4 Sample Multiplier: 1

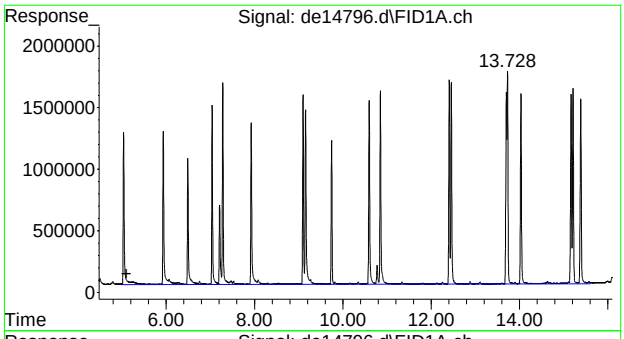
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 10:45:37 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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



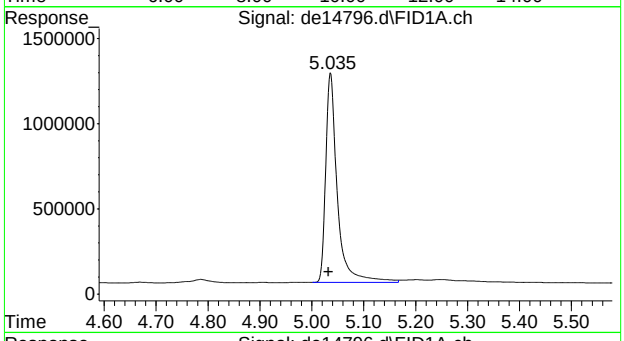


SGS ACCUTEST MC46783



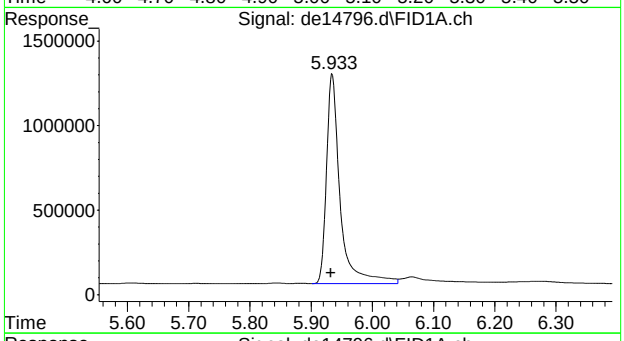
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 42088439
Conc: 337.36 µg/ml m



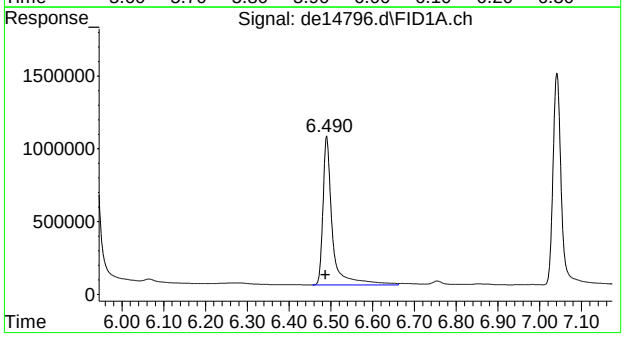
#2 naphthalene

R.T.: 5.035 min
Delta R.T.: 0.003 min
Response: 1916391
Conc: 15.27 µg/ml



#3 2-methylnaphthalene

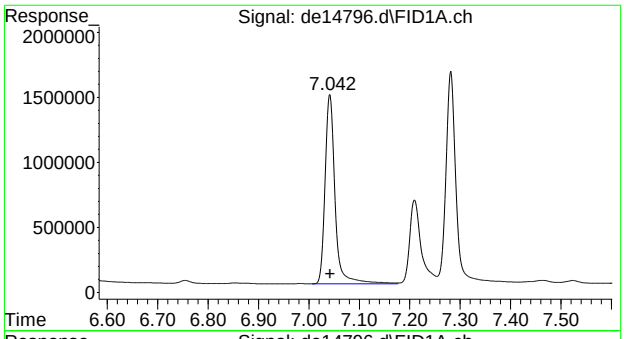
R.T.: 5.933 min
Delta R.T.: 0.002 min
Response: 1931319
Conc: 15.31 µg/ml



#4 2-fluorobiphenyl

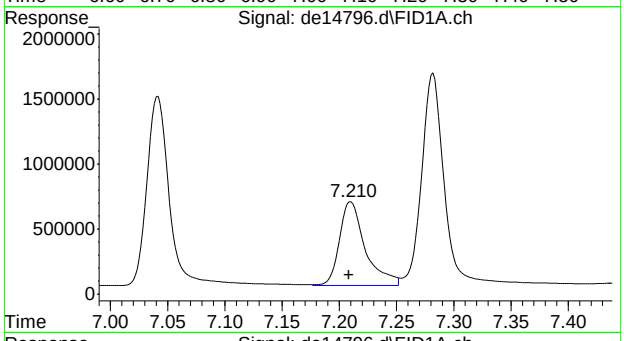
R.T.: 6.490 min
Delta R.T.: 0.003 min
Response: 1611958
Conc: 14.08 µg/ml

SGS ACCUTEST MC46783



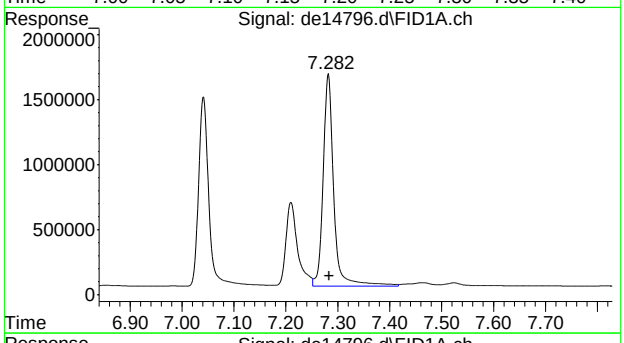
#5 acenaphthylene

R.T.: 7.042 min
Delta R.T.: 0.000 min
Response: 2008700
Conc: 15.88 µg/ml



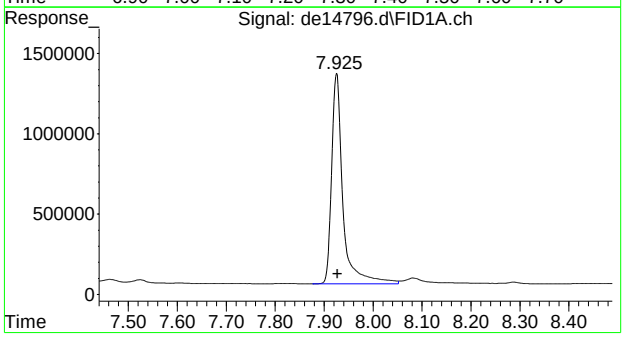
#6 2-bromonaphthalene

R.T.: 7.210 min
Delta R.T.: 0.002 min
Response: 1014664
Conc: 14.15 µg/ml



#7 acenaphthene

R.T.: 7.282 min
Delta R.T.: -0.002 min
Response: 2304778
Conc: 16.55 µg/ml



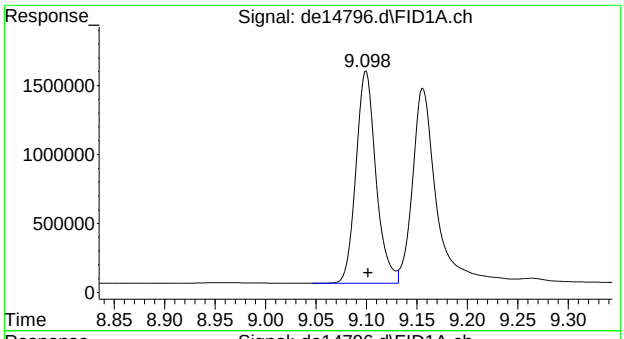
#8 fluorene

R.T.: 7.925 min
Delta R.T.: -0.002 min
Response: 2104988
Conc: 16.39 µg/ml

7.3.2

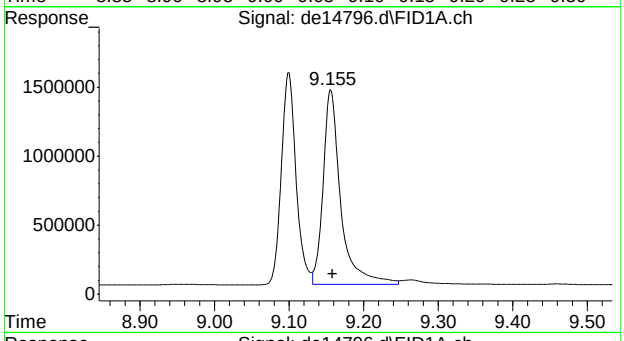
7

SGS ACCUTEST MC46783



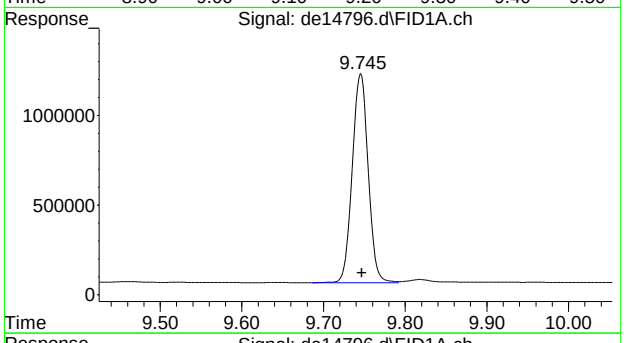
#9 phenanthrene

R.T.: 9.098 min
Delta R.T.: -0.003 min
Response: 2124775
Conc: 17.01 µg/ml



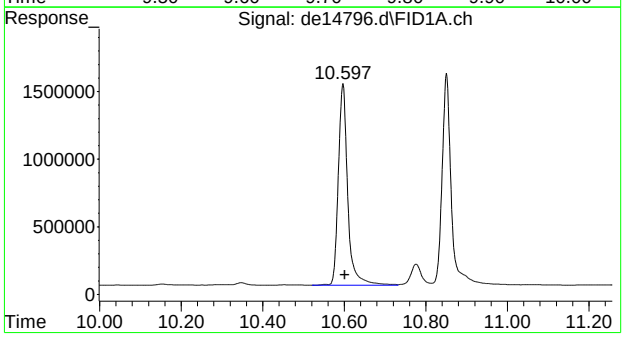
#10 anthracene

R.T.: 9.155 min
Delta R.T.: -0.003 min
Response: 2313934
Conc: 17.39 µg/ml



#11 o-terphenyl

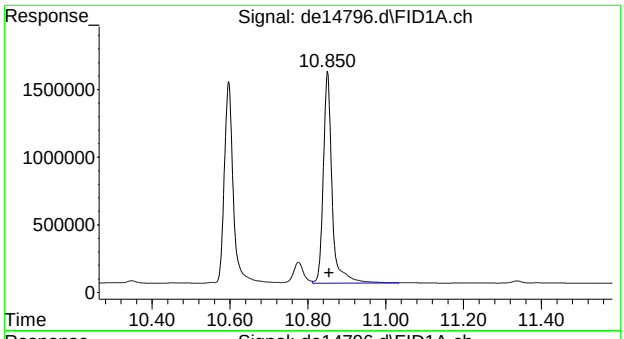
R.T.: 9.745 min
Delta R.T.: -0.002 min
Response: 1578428
Conc: 11.93 µg/ml



#12 fluoranthene

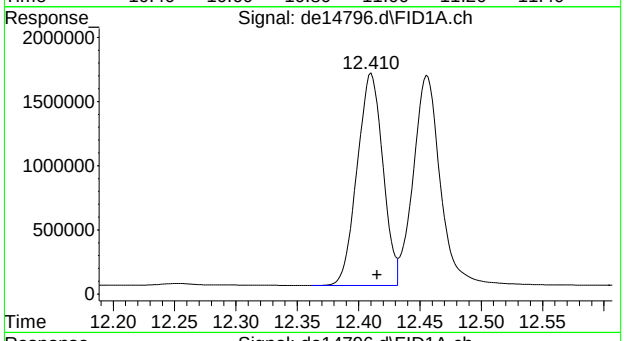
R.T.: 10.597 min
Delta R.T.: -0.005 min
Response: 2390792
Conc: 18.64 µg/ml

SGS ACCUTEST MC46783



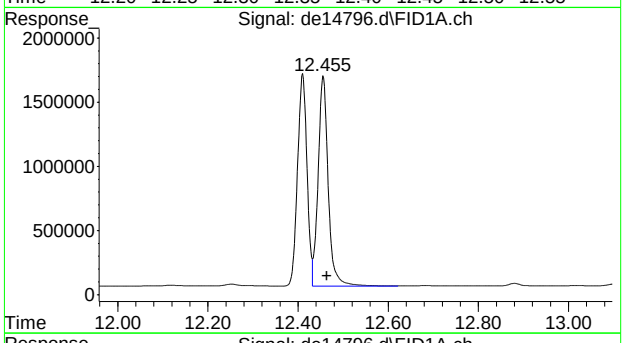
#13 pyrene

R.T.: 10.850 min
Delta R.T.: -0.005 min
Response: 2447945
Conc: 18.64 µg/ml



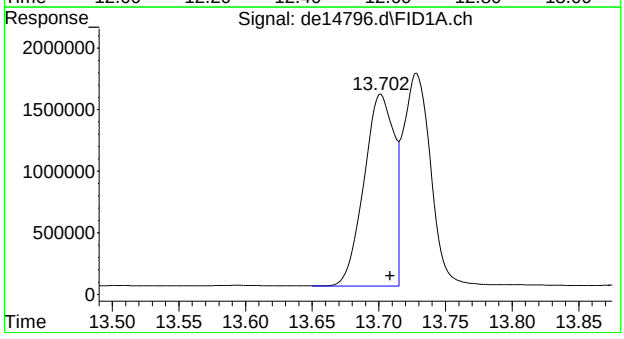
#14 benzo(a)anthracene

R.T.: 12.410 min
Delta R.T.: -0.005 min
Response: 2417887
Conc: 19.90 µg/ml



#15 chrysene

R.T.: 12.455 min
Delta R.T.: -0.008 min
Response: 2522149
Conc: 19.76 µg/ml



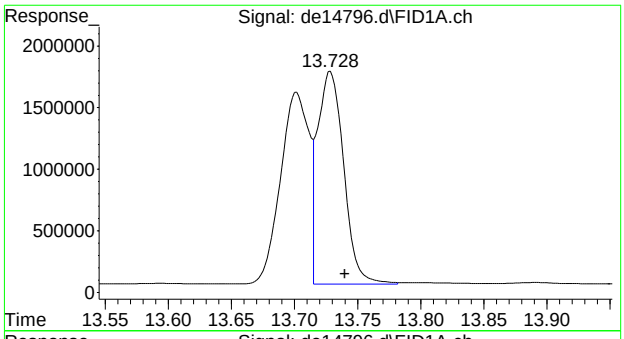
#16 benzo(B)fluoranthene

R.T.: 13.702 min
Delta R.T.: -0.007 min
Response: 2518803
Conc: 21.27 µg/ml m

7.3.2

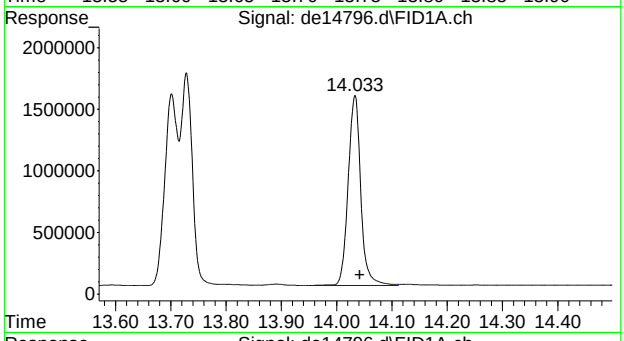
7

SGS ACCUTEST MC46783



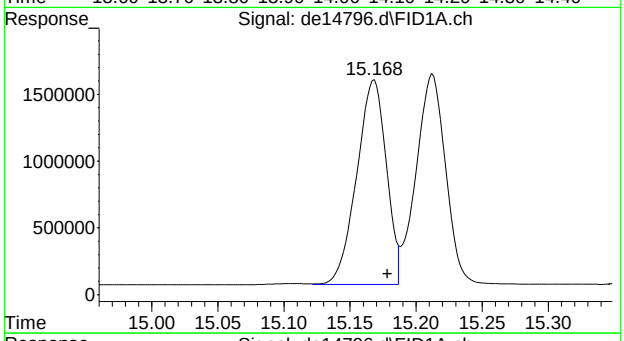
#17 benzo(k)fluoranthene

R.T.: 13.728 min
Delta R.T.: -0.012 min
Response: 2410138
Conc: 18.82 µg/ml m



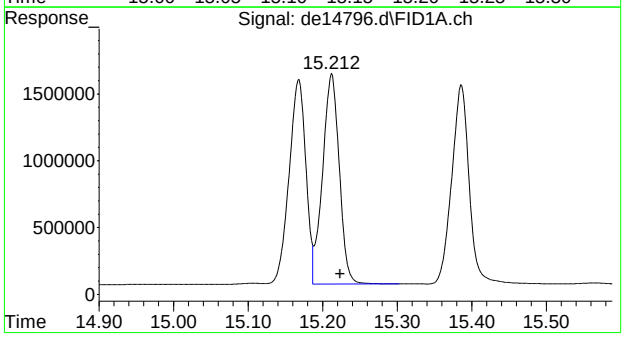
#18 benzo(a)pyrene

R.T.: 14.033 min
Delta R.T.: -0.008 min
Response: 2434491
Conc: 20.64 µg/ml



#19 indeno(1,2,3-cd)pyrene

R.T.: 15.168 min
Delta R.T.: -0.010 min
Response: 2401422
Conc: 20.52 µg/ml



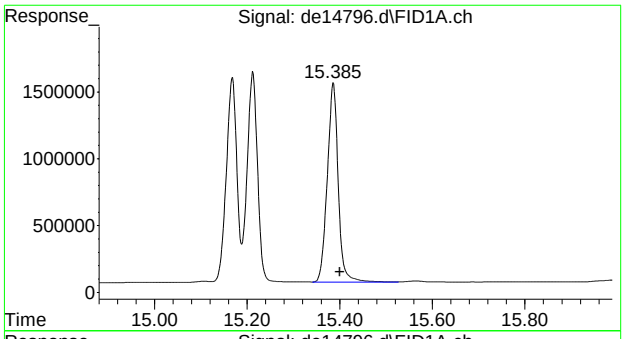
#20 dibenzo(ah)anthracene

R.T.: 15.212 min
Delta R.T.: -0.012 min
Response: 2442558
Conc: 21.56 µg/ml

7.3.2

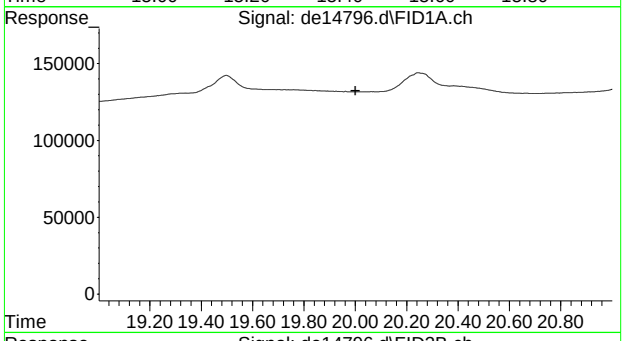
7

SGS ACCUTEST MC46783



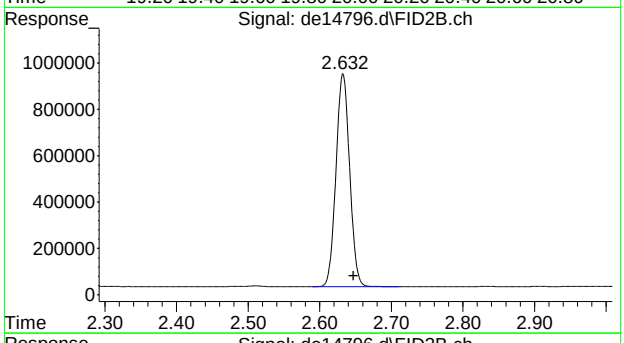
#21 benzo(ghi)perylene

R.T.: 15.385 min
Delta R.T.: -0.015 min
Response: 2431797
Conc: 21.43 µg/ml



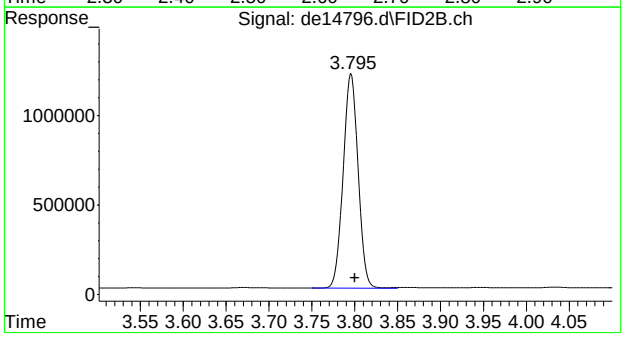
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



#25 c-9

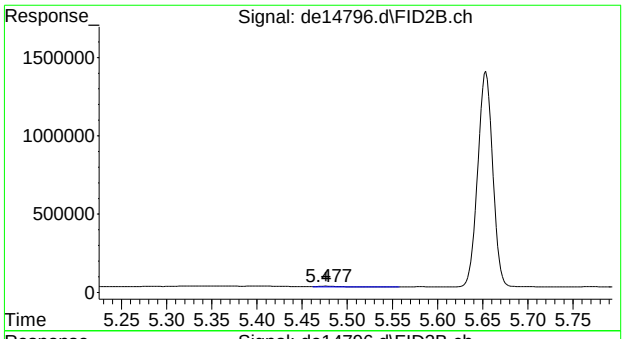
R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 1217887
Conc: 14.45 µg/ml m



#26 c-10

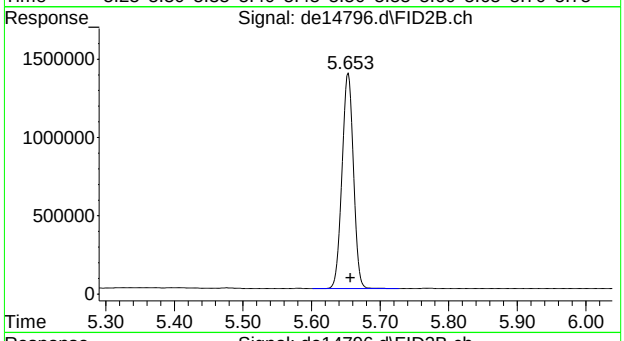
R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 1455081
Conc: 17.26 µg/ml

SGS ACCUTEST MC46783



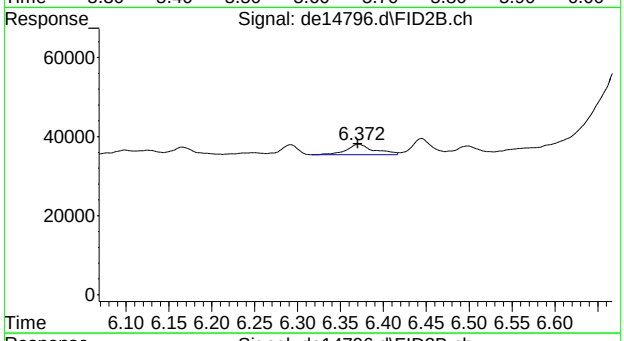
#27 naphthalene #2

R.T.: 5.477 min
Delta R.T.: 0.000 min
Response: 6853
Conc: 0.08 µg/ml



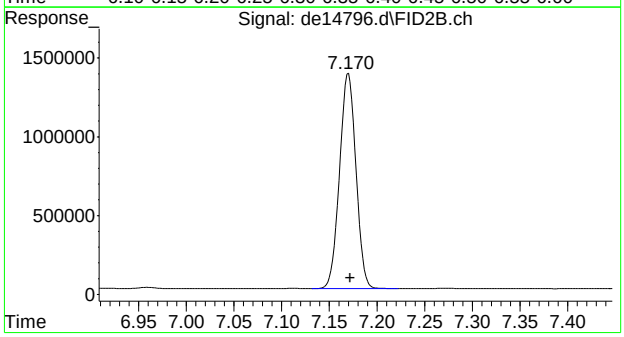
#28 c-12

R.T.: 5.653 min
Delta R.T.: -0.003 min
Response: 1588474
Conc: 18.84 µg/ml



#29 2-methylnaphthalene #2

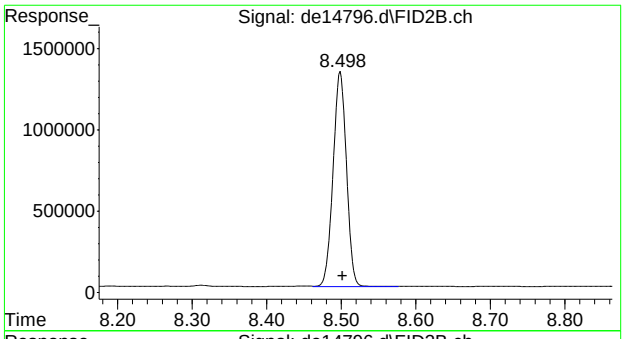
R.T.: 6.372 min
Delta R.T.: 0.002 min
Response: 5868
Conc: 0.07 µg/ml



#30 c-14

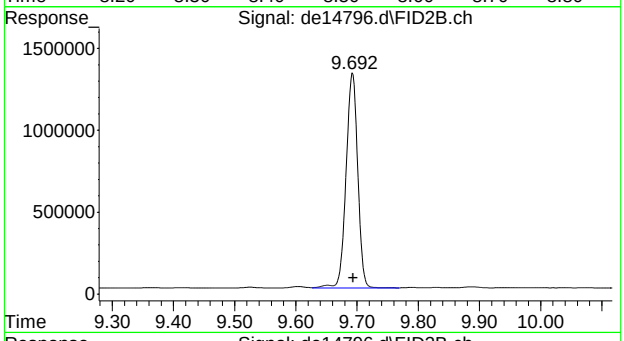
R.T.: 7.170 min
Delta R.T.: -0.002 min
Response: 1636242
Conc: 19.41 µg/ml

SGS ACCUTEST MC46783



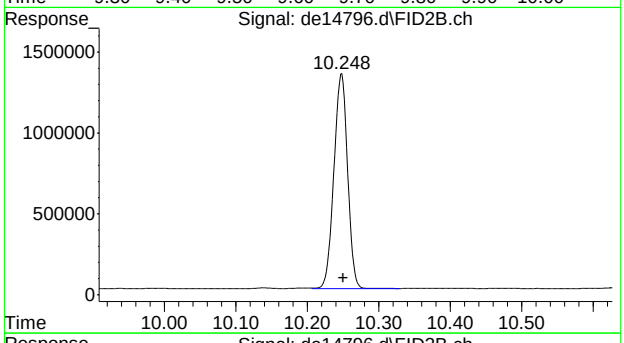
#31 c-16

R.T.: 8.498 min
Delta R.T.: -0.003 min
Response: 1646202
Conc: 19.53 µg/ml



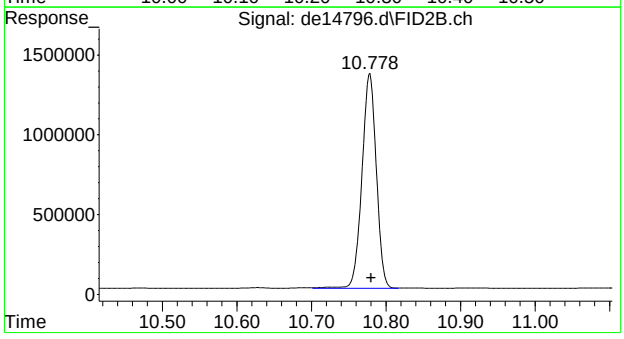
#32 c-18

R.T.: 9.692 min
Delta R.T.: -0.002 min
Response: 1739164
Conc: 20.63 µg/ml



#33 c-19

R.T.: 10.248 min
Delta R.T.: -0.002 min
Response: 1766007
Conc: 22.69 µg/ml



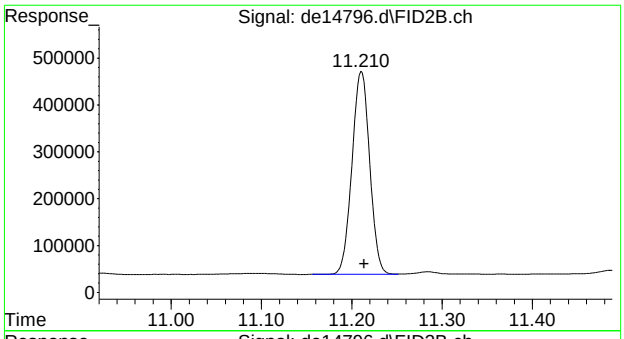
#34 c-20

R.T.: 10.778 min
Delta R.T.: -0.002 min
Response: 1801738
Conc: 23.15 µg/ml

7.3.2

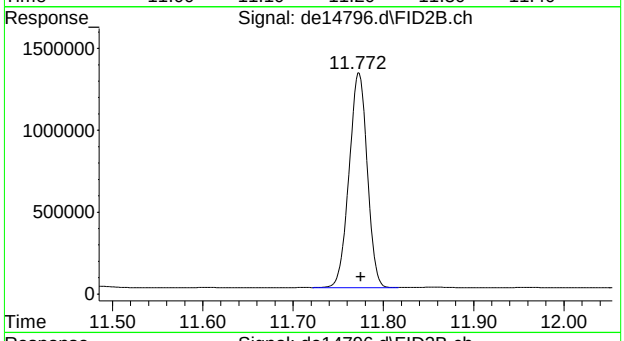
7

SGS ACCUTEST MC46783



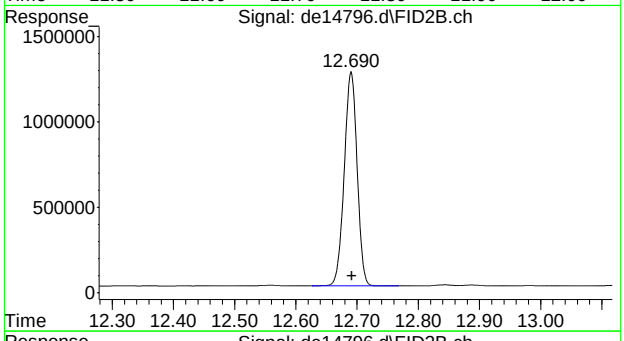
#35 1-chlorooctadecane

R.T.: 11.210 min
Delta R.T.: -0.003 min
Response: 589620
Conc: 9.05 µg/ml



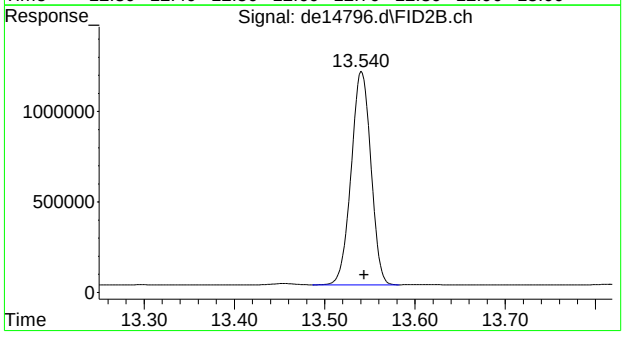
#36 c-22

R.T.: 11.772 min
Delta R.T.: -0.003 min
Response: 1827432
Conc: 23.48 µg/ml



#37 c-24

R.T.: 12.690 min
Delta R.T.: -0.002 min
Response: 1831830
Conc: 23.54 µg/ml



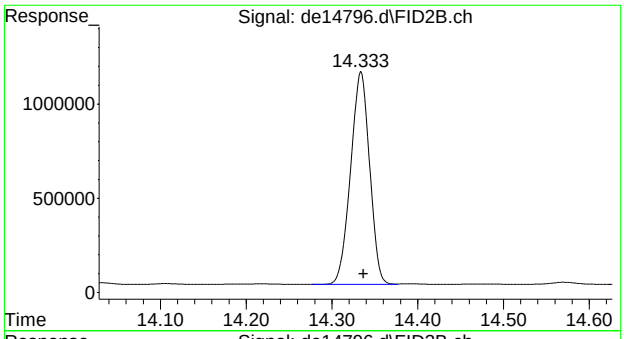
#38 c-26

R.T.: 13.540 min
Delta R.T.: -0.003 min
Response: 1792839
Conc: 23.04 µg/ml

7.3.2

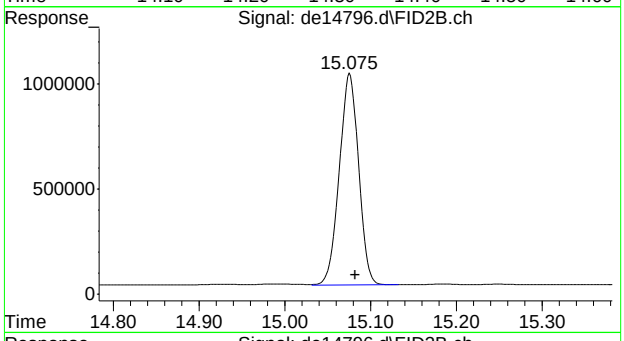
7

SGS ACCUTEST MC46783



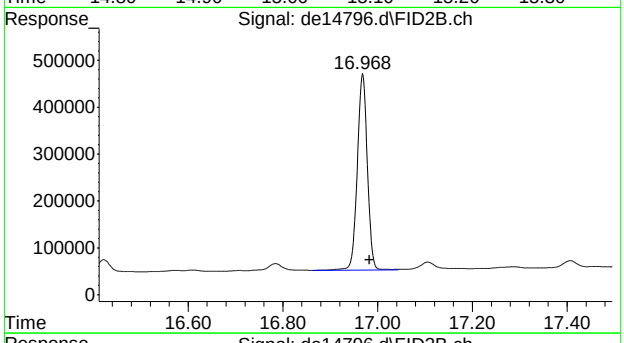
#39 c-28

R.T.: 14.333 min
Delta R.T.: -0.003 min
Response: 1737733
Conc: 22.33 µg/ml



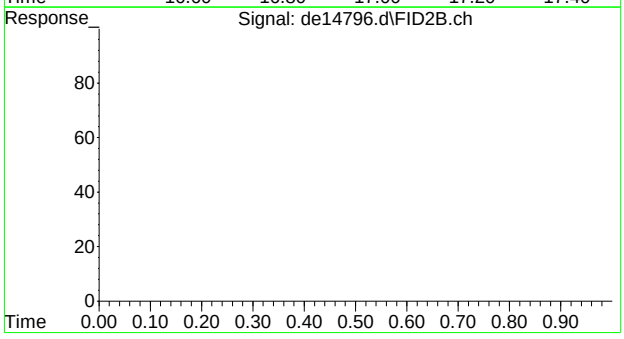
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 1575996
Conc: 20.25 µg/ml



#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 617629
Conc: 7.94 µg/ml m



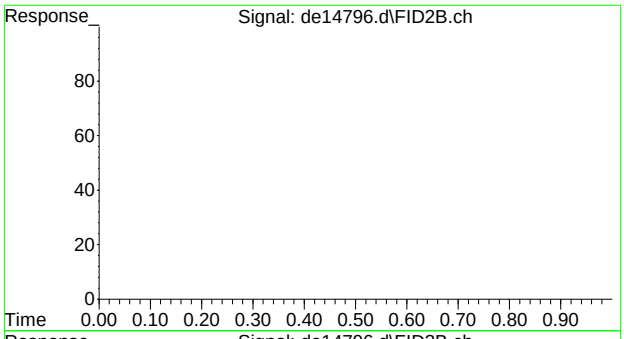
#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

7.3.2

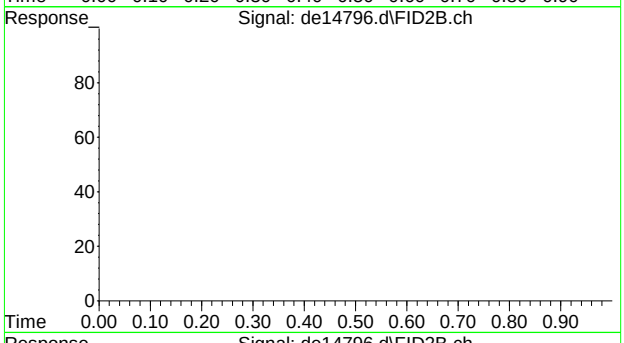
7

SGS ACCUTEST MC46783



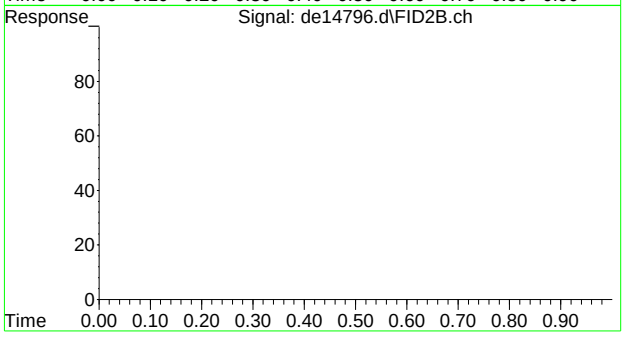
#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#44 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#45 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

SGS ACCUTEST MC46783

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160711EPH\
Data File : de14803.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 12:55 pm
Operator : thomasa
Sample : op48098-ms
Misc : op48098,gde823,860,,,2,,w
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 10:44:33 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) s 2-fluorobiphenyl	6.492	1717983	15.007 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 75.03%#	
6) s 2-bromonaphthalene	7.212	1065108	14.854 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 74.27%#	
11) s o-terphenyl	9.747	1770570	13.382 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 66.91%#	
35) s 1-chlorooctadecane	11.212	703103	10.792 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 53.96%#	
Target Compounds			
1) h c11-c22 Aromatics (Un...	5.097	43216733	346.408 µg/ml
2) naphthalene	5.038	1897330	15.114 µg/ml
3) 2-methylnaphthalene	5.937	1957785	15.520 µg/ml
5) acenaphthylene	7.043	2059641	16.278 µg/ml
7) acenaphthene	7.285	2361892	16.957 µg/ml
8) fluorene	7.927	2169911	16.891 µg/ml
9) phenanthrene	9.102	2164135	17.325 µg/ml
10) anthracene	9.158	2401106	18.049 µg/ml
12) fluoranthene	10.598	2456130	19.149 µg/ml
13) pyrene	10.853	2492244	18.975 µg/ml
14) benzo(a)anthracene	12.412	2459432	20.245 µg/ml
15) chrysene	12.458	2539555	19.895 µg/ml
16) benzo(B)fluoranthene	13.703	2396307	20.240 µg/ml
17) benzo(k)fluoranthene	13.732	2585641	20.196 µg/ml
18) benzo(a)pyrene	14.033	2475547	20.986 µg/ml
19) indeno(1,2,3-cd)pyrene	15.168	2434412	20.799 µg/ml
20) dibenzo(ah)anthracene	15.215	2470183	21.801 µg/ml
21) benzo(ghi)perylene	15.388	2454291	21.628 µg/ml
25) h c-9	2.647	9807837	116.337 µg/mlm
41) h c-36	16.983	15142622	194.575 µg/mlm

(f)=RT Delta > 1/2 Window (m)=manual int.

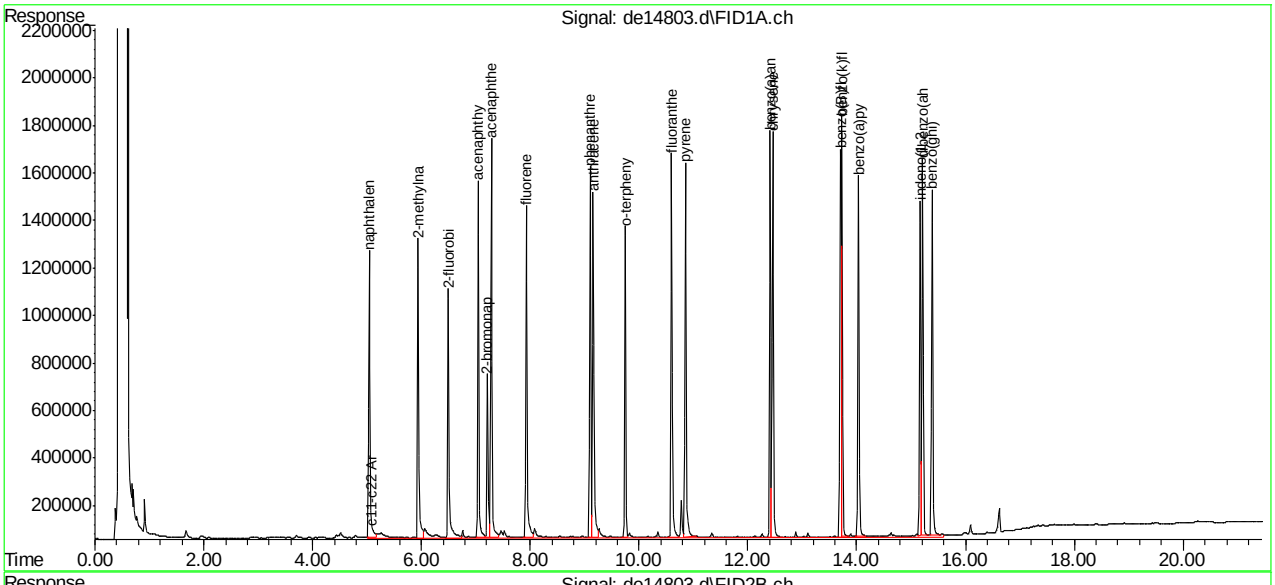
SGS ACCUTEST MC46783

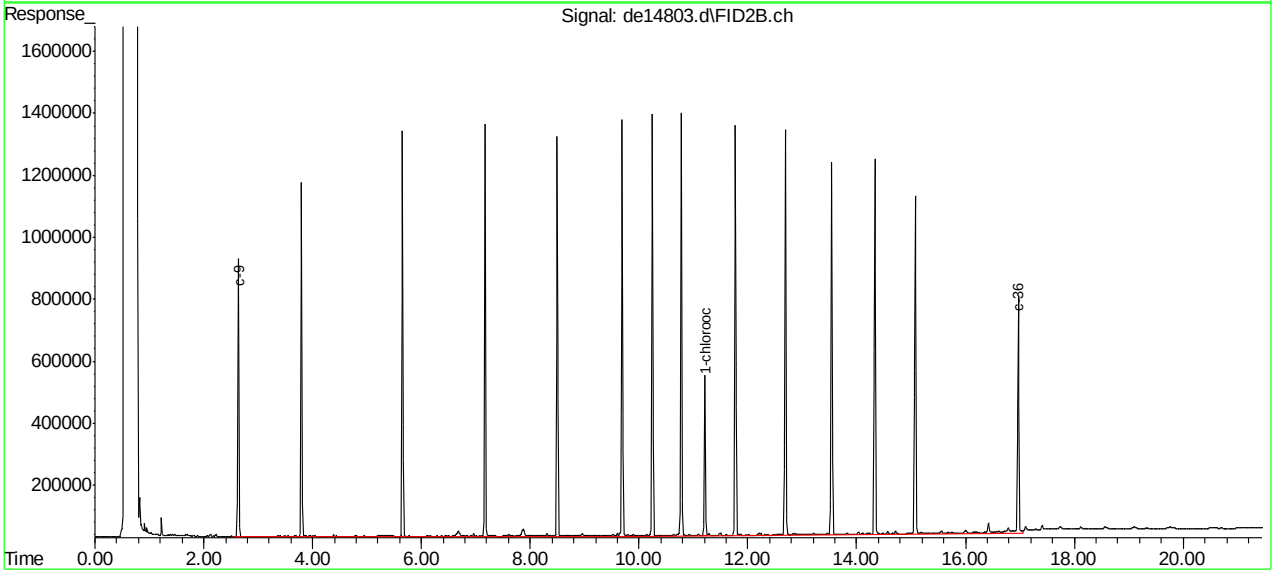
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160711EPH\
Data File : de14803.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 12:55 pm
Operator : thomasa
Sample : op48098-ms
Misc : op48098,gde823,860,,,2,,w
ALS Vial : 18 Sample Multiplier: 1

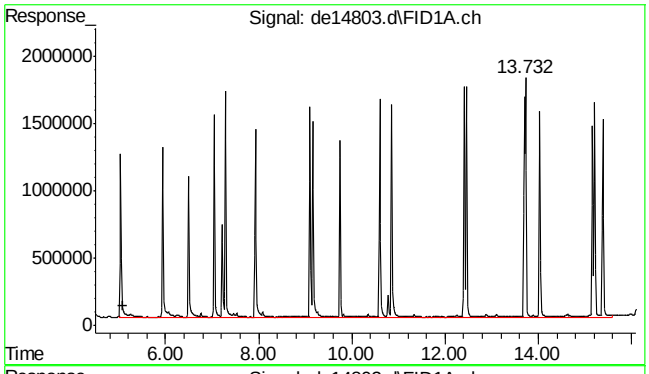
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 10:44:33 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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



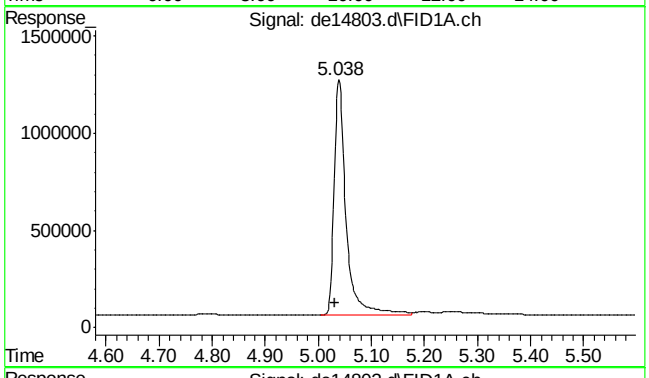


EPH160711W.M Wed Jul 13 16:47:32 2016 Page: 2



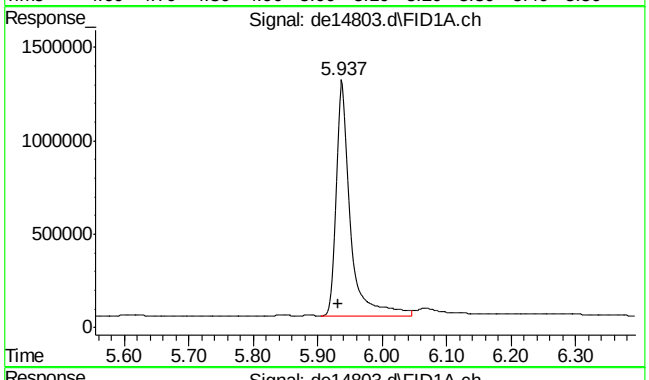
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 43216733
Conc: 346.41 µg/ml



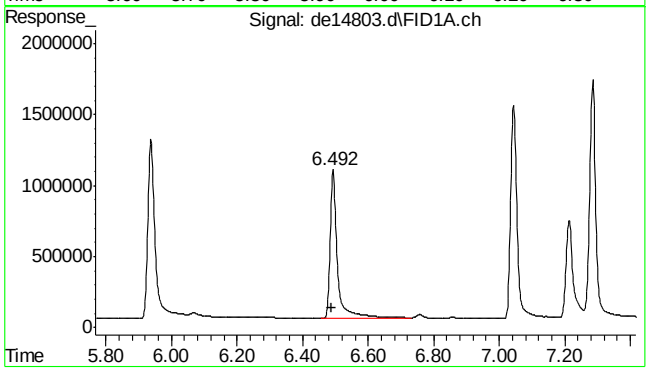
#2 naphthalene

R.T.: 5.038 min
Delta R.T.: 0.007 min
Response: 1897330
Conc: 15.11 µg/ml



#3 2-methylnaphthalene

R.T.: 5.937 min
Delta R.T.: 0.005 min
Response: 1957785
Conc: 15.52 µg/ml



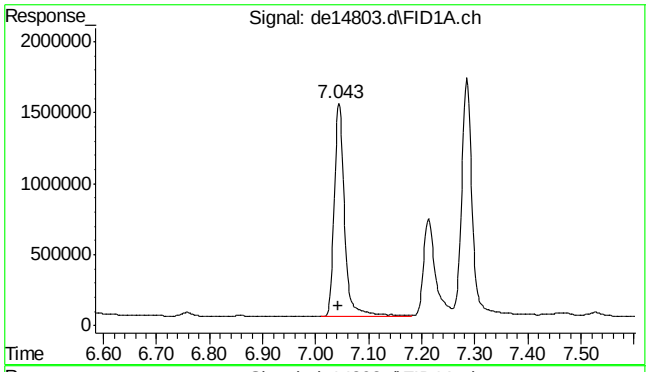
#4 2-fluorobiphenyl

R.T.: 6.492 min
Delta R.T.: 0.005 min
Response: 1717983
Conc: 15.01 µg/ml

7.4.1

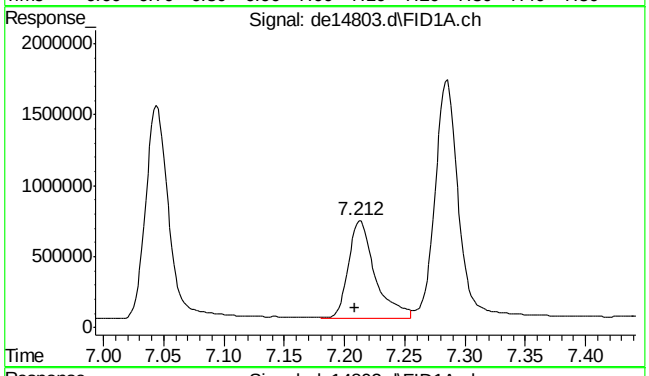
7

SGS ACCUTEST MC46783



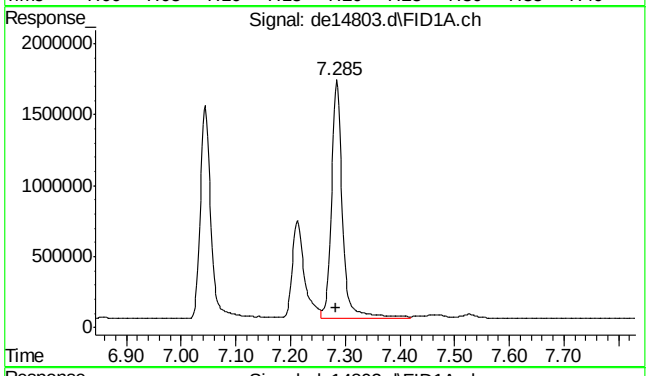
#5 acenaphthylene

R.T.: 7.043 min
Delta R.T.: 0.002 min
Response: 2059641
Conc: 16.28 µg/ml



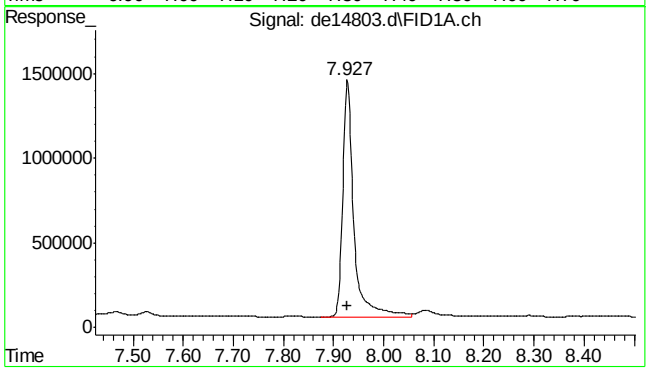
#6 2-bromonaphthalene

R.T.: 7.212 min
Delta R.T.: 0.003 min
Response: 1065108
Conc: 14.85 µg/ml



#7 acenaphthene

R.T.: 7.285 min
Delta R.T.: 0.002 min
Response: 2361892
Conc: 16.96 µg/ml



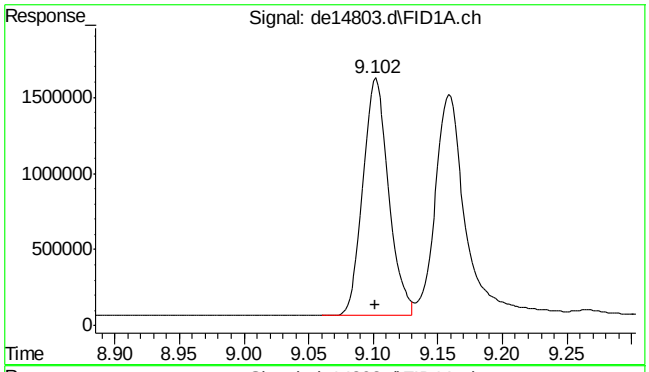
#8 fluorene

R.T.: 7.927 min
Delta R.T.: 0.000 min
Response: 2169911
Conc: 16.89 µg/ml

7.4.1

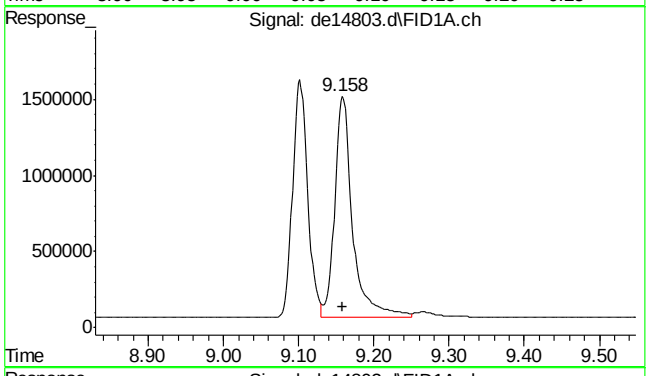
7

SGS ACCUTEST MC46783



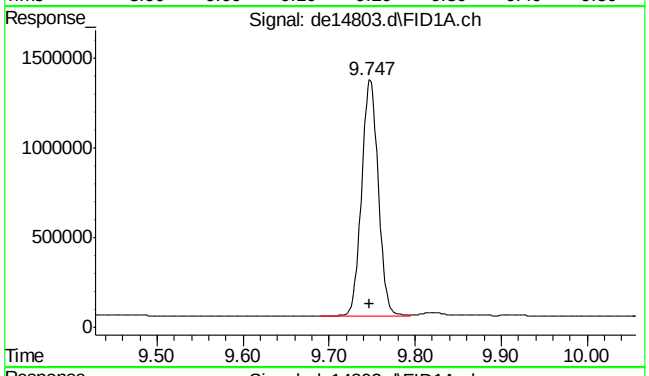
#9 phenanthrene

R.T.: 9.102 min
Delta R.T.: 0.000 min
Response: 2164135
Conc: 17.32 µg/ml



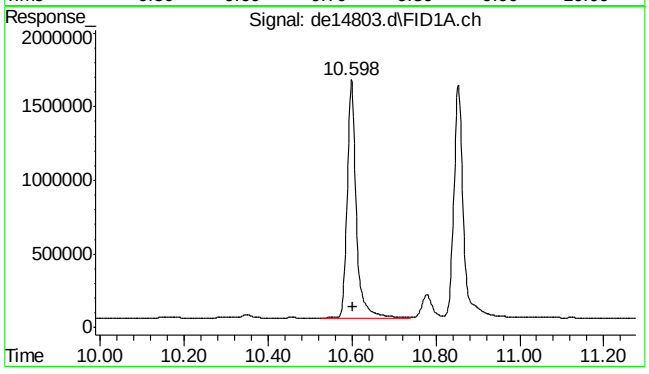
#10 anthracene

R.T.: 9.158 min
Delta R.T.: 0.000 min
Response: 2401106
Conc: 18.05 µg/ml



#11 o-terphenyl

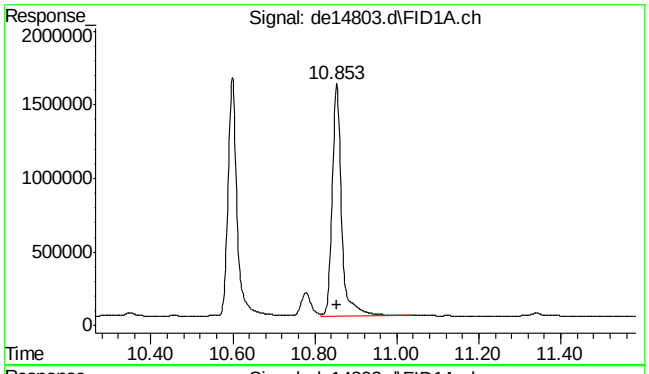
R.T.: 9.747 min
Delta R.T.: 0.000 min
Response: 1770570
Conc: 13.38 µg/ml



#12 fluoranthene

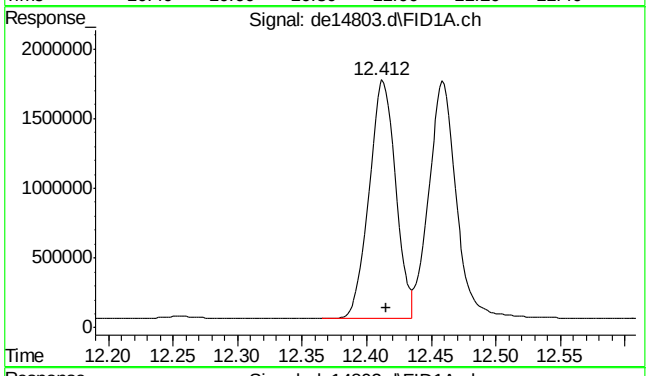
R.T.: 10.598 min
Delta R.T.: -0.003 min
Response: 2456130
Conc: 19.15 µg/ml

SGS ACCUTEST MC46783



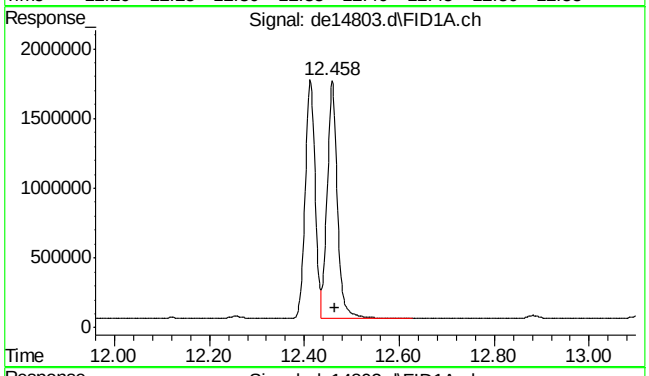
#13 pyrene

R.T.: 10.853 min
Delta R.T.: -0.002 min
Response: 2492244
Conc: 18.98 µg/ml



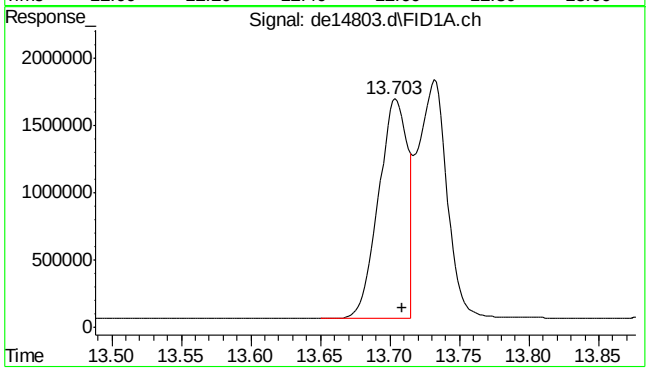
#14 benzo(a)anthracene

R.T.: 12.412 min
Delta R.T.: -0.003 min
Response: 2459432
Conc: 20.25 µg/ml



#15 chrysene

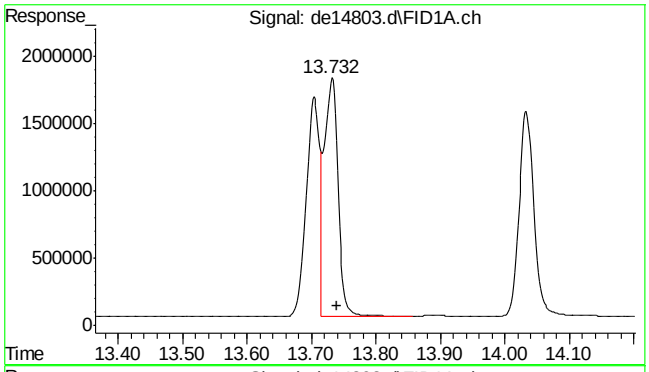
R.T.: 12.458 min
Delta R.T.: -0.005 min
Response: 2539555
Conc: 19.89 µg/ml



#16 benzo(B)fluoranthene

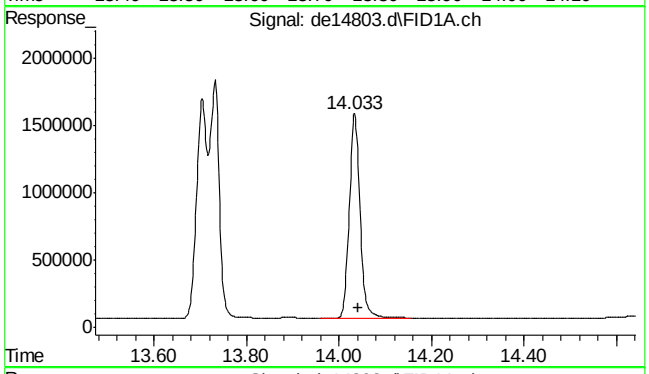
R.T.: 13.703 min
Delta R.T.: -0.005 min
Response: 2396307
Conc: 20.24 µg/ml

SGS ACCUTEST MC46783



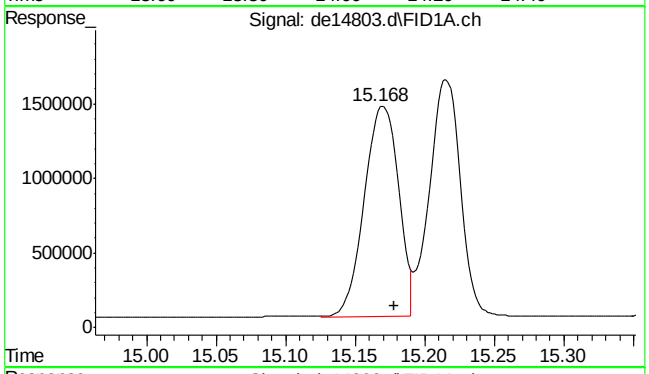
#17 benzo(k)fluoranthene

R.T.: 13.732 min
Delta R.T.: -0.008 min
Response: 2585641
Conc: 20.20 µg/ml



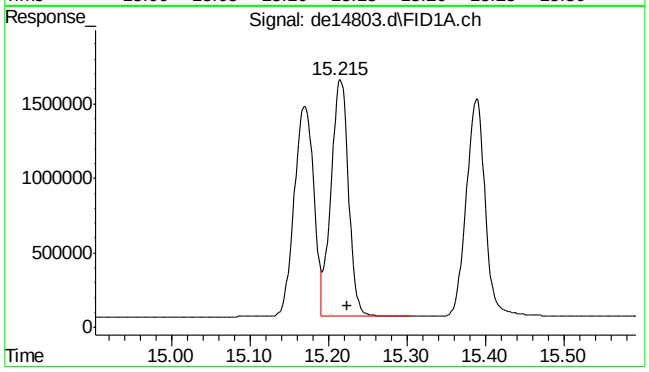
#18 benzo(a)pyrene

R.T.: 14.033 min
Delta R.T.: -0.008 min
Response: 2475547
Conc: 20.99 µg/ml



#19 indeno(1,2,3-cd)pyrene

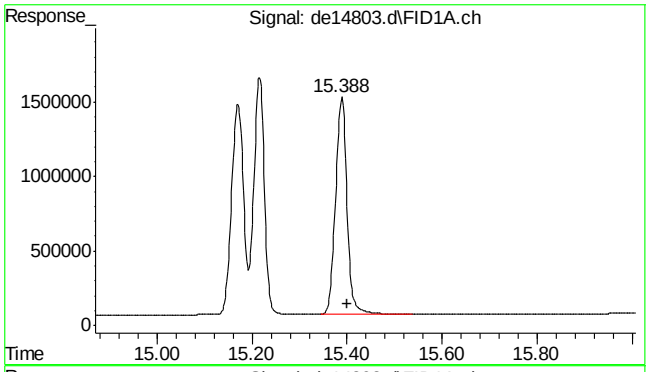
R.T.: 15.168 min
Delta R.T.: -0.010 min
Response: 2434412
Conc: 20.80 µg/ml



#20 dibenzo(ah)anthracene

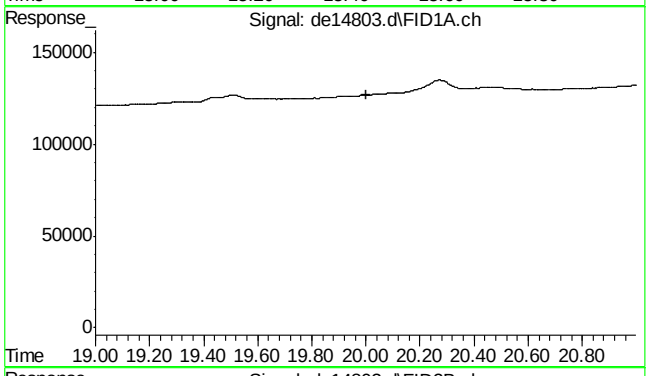
R.T.: 15.215 min
Delta R.T.: -0.008 min
Response: 2470183
Conc: 21.80 µg/ml

SGS ACCUTEST MC46783



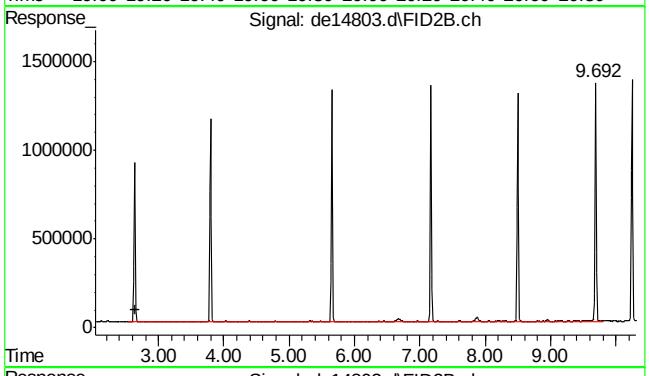
#21 benzo(ghi)perylene

R.T.: 15.388 min
Delta R.T.: -0.012 min
Response: 2454291
Conc: 21.63 µg/ml



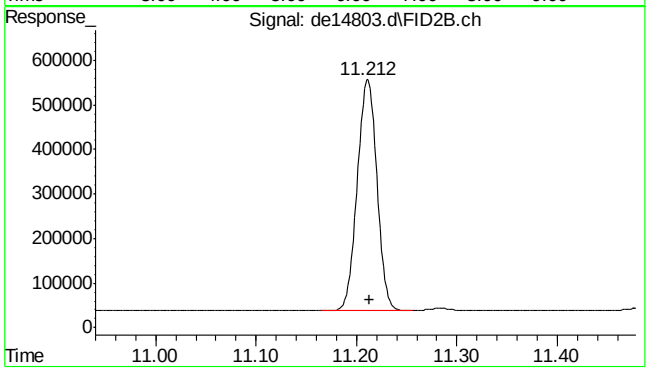
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 9807837
Conc: 116.34 µg/ml m



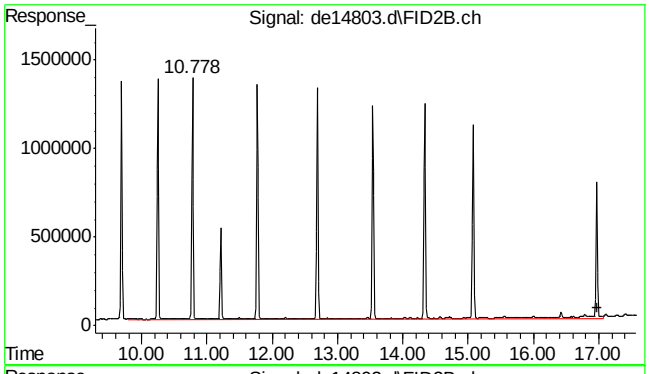
#35 1-chlorooctadecane

R.T.: 11.212 min
Delta R.T.: -0.002 min
Response: 703103
Conc: 10.79 µg/ml

7.4.1

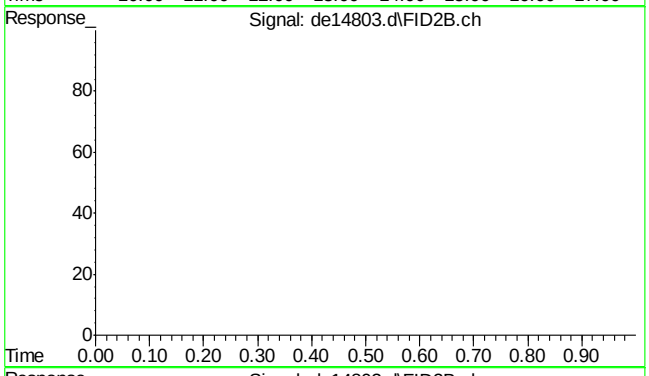
7

SGS ACCUTEST MC46783



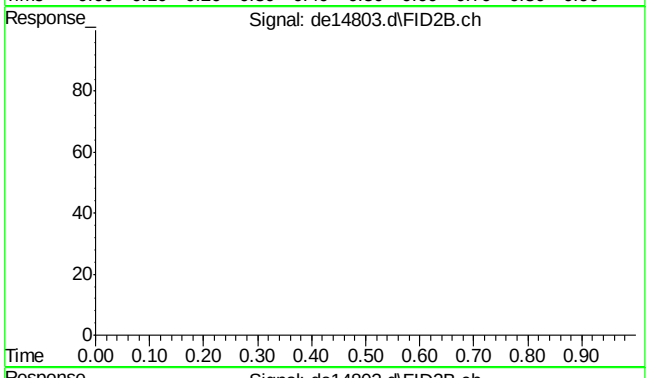
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 15142622
Conc: 194.58 µg/ml m



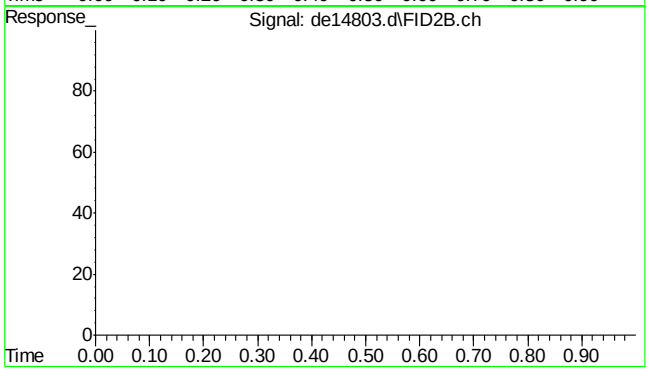
#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



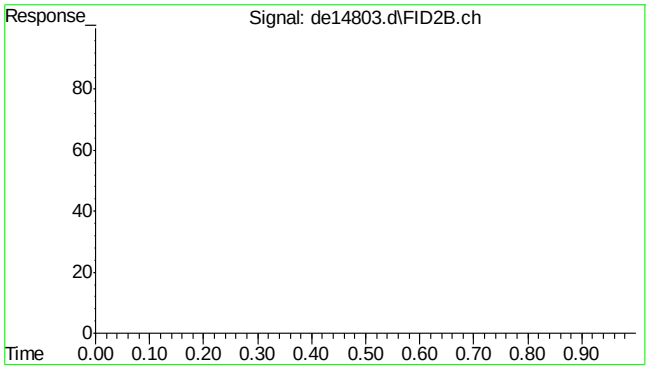
#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#44 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#45 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

7.4.1

7

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri
07/13/16 16:53

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160711EPH\
Data File : de14804.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 1:23 pm
Operator : thomasa
Sample : op48098-msd
Misc : op48098,gde823,860,,,2,,w
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 10:49:55 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) s 2-fluorobiphenyl	6.493	1766113	15.428 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 77.14%#	
6) s 2-bromonaphthalene	7.213	1087255	15.163 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 75.81%#	
11) s o-terphenyl	9.748	1768569	13.367 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 66.83%#	
35) s 1-chlorooctadecane	11.212	655703	10.064 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 50.32%#	
Target Compounds			
1) h c11-c22 Aromatics (Un...	5.097	42157144	337.915 µg/mlm
2) naphthalene	5.040	1778423	14.167 µg/ml
3) 2-methylnaphthalene	5.938	1905076	15.102 µg/ml
5) acenaphthylene	7.045	2037101	16.100 µg/ml
7) acenaphthene	7.285	2355084	16.908 µg/ml
8) fluorene	7.928	2142648	16.679 µg/ml
9) phenanthrene	9.103	2146048	17.180 µg/ml
10) anthracene	9.158	2325599	17.481 µg/ml
12) fluoranthene	10.598	2427017	18.922 µg/ml
13) pyrene	10.853	2458348	18.717 µg/ml
14) benzo(a)anthracene	12.412	2431593	20.016 µg/ml
15) chrysene	12.458	2527564	19.801 µg/ml
16) benzo(B)fluoranthene	13.703	2327541	19.659 µg/ml
17) benzo(k)fluoranthene	13.732	2486150	19.418 µg/mlm
18) benzo(a)pyrene	14.035	2448871	20.760 µg/ml
19) indeno(1,2,3-cd)pyrene	15.172	2401672	20.519 µg/ml
20) dibenzo(ah)anthracene	15.218	2453261	21.651 µg/ml
21) benzo(ghi)perylene	15.390	2434854	21.457 µg/ml
25) h c-9	2.647	9358959	111.012 µg/mlm
41) h c-36	16.983	14277739	183.462 µg/mlm

(f)=RT Delta > 1/2 Window (m)=manual int.

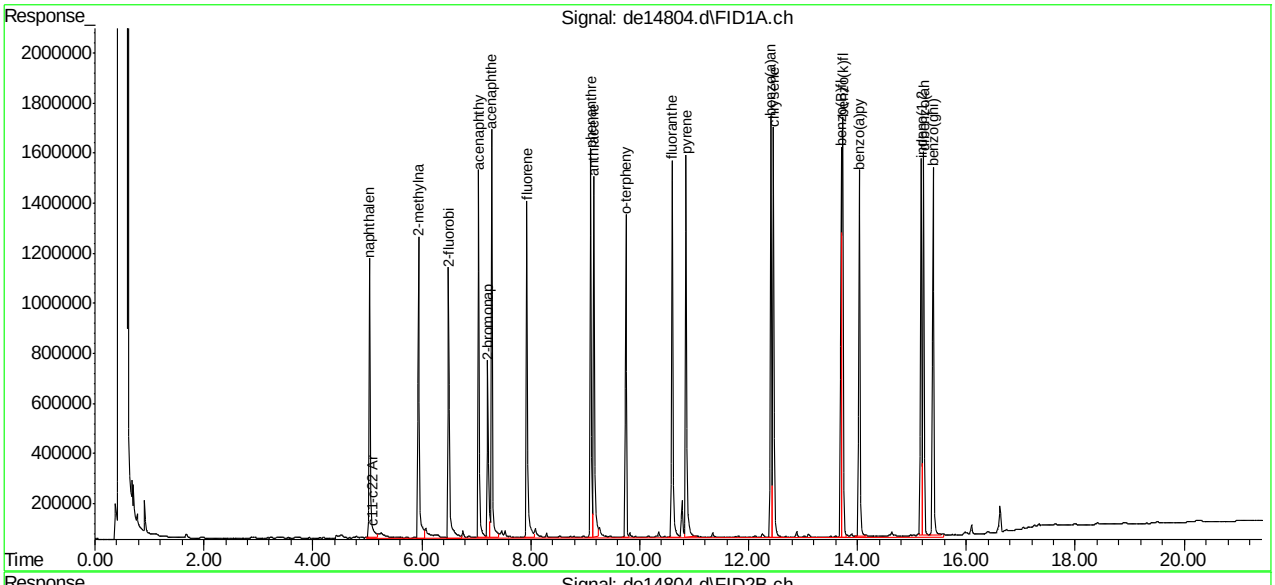
SGS ACCUTEST MC46783

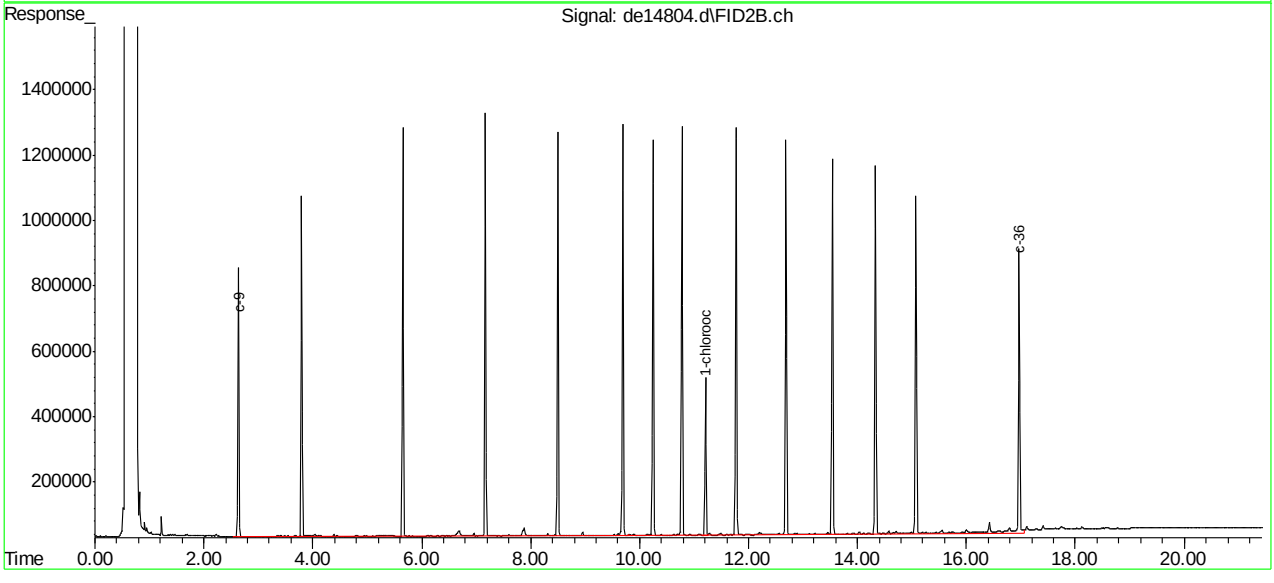
Quantitation Report (QT Reviewed)

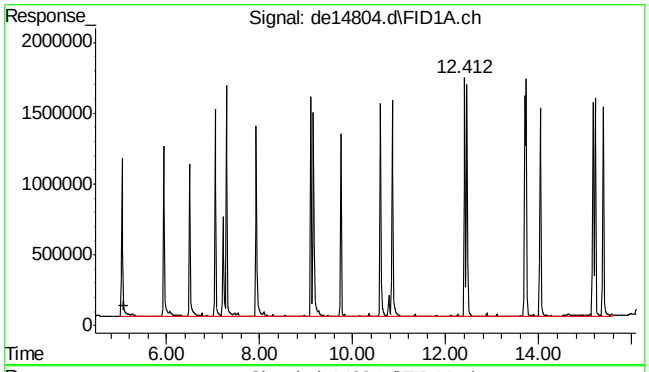
Data Path : C:\msdchem\1\DATA\DE160711EPH\
Data File : de14804.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 1:23 pm
Operator : thomasa
Sample : op48098-msd
Misc : op48098,gde823,860,,,2,,w
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 10:49:55 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

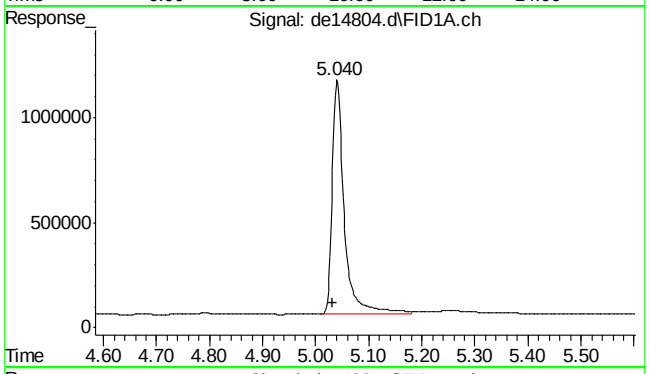






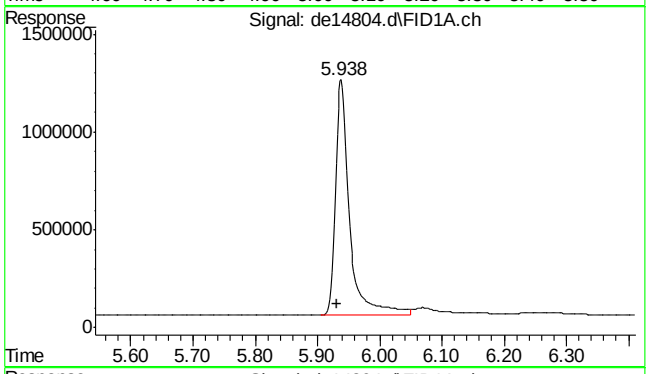
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 42157144
Conc: 337.92 µg/ml m



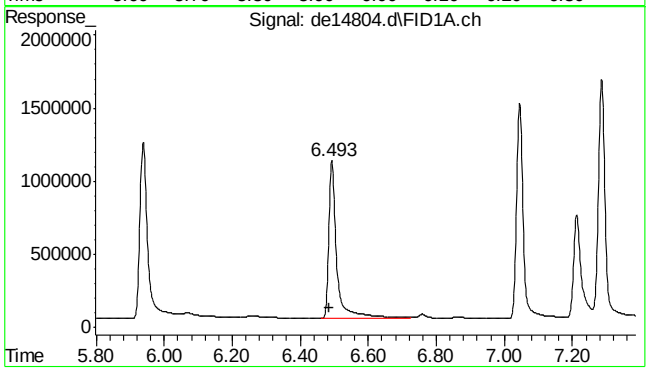
#2 naphthalene

R.T.: 5.040 min
Delta R.T.: 0.008 min
Response: 1778423
Conc: 14.17 µg/ml



#3 2-methylnaphthalene

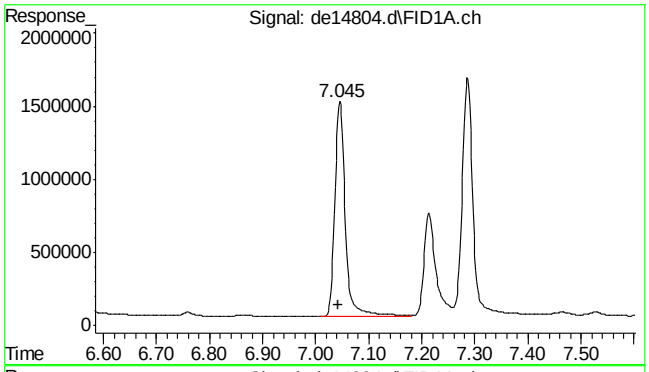
R.T.: 5.938 min
Delta R.T.: 0.007 min
Response: 1905076
Conc: 15.10 µg/ml



#4 2-fluorobiphenyl

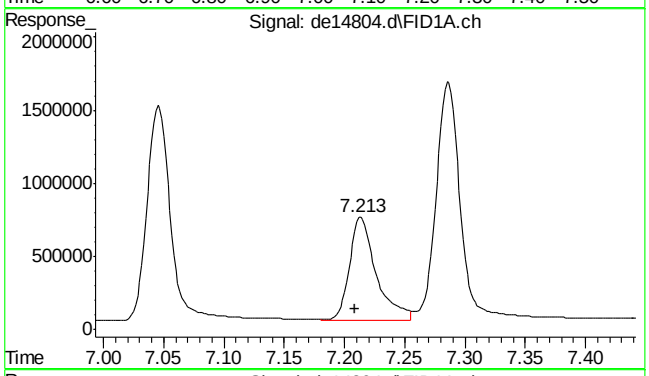
R.T.: 6.493 min
Delta R.T.: 0.007 min
Response: 1766113
Conc: 15.43 µg/ml

SGS ACCUTEST MC46783



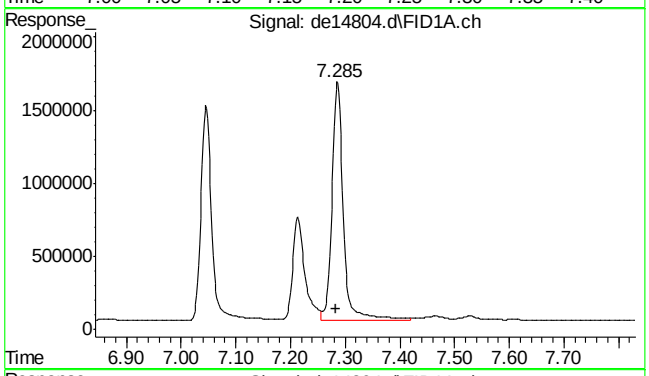
#5 acenaphthylene

R.T.: 7.045 min
Delta R.T.: 0.003 min
Response: 2037101
Conc: 16.10 µg/ml



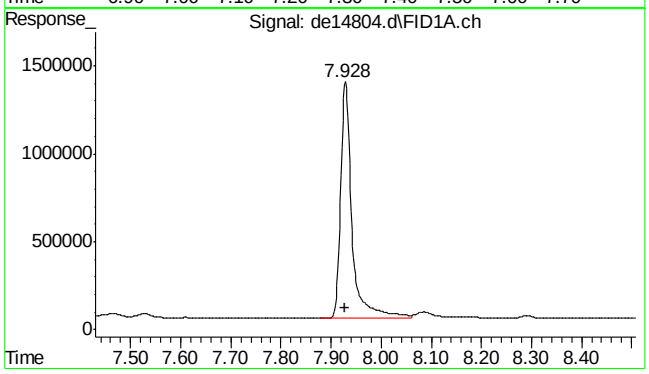
#6 2-bromonaphthalene

R.T.: 7.213 min
Delta R.T.: 0.005 min
Response: 1087255
Conc: 15.16 µg/ml



#7 acenaphthene

R.T.: 7.285 min
Delta R.T.: 0.002 min
Response: 2355084
Conc: 16.91 µg/ml



#8 fluorene

R.T.: 7.928 min
Delta R.T.: 0.002 min
Response: 2142648
Conc: 16.68 µg/ml

7.4.2

7

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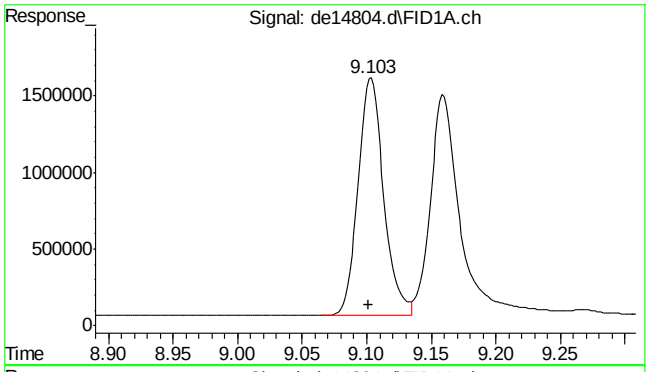
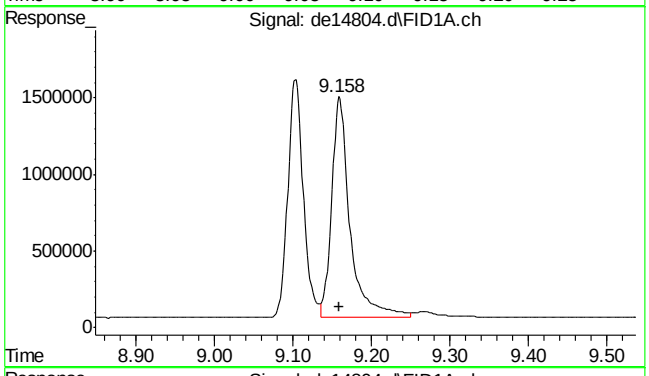


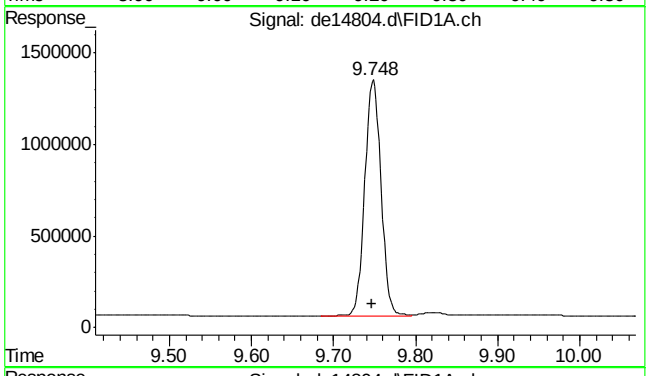
#9 phenanthrene

R.T.: 9.103 min
Delta R.T.: 0.002 min
Response: 2146048
Conc: 17.18 µg/ml



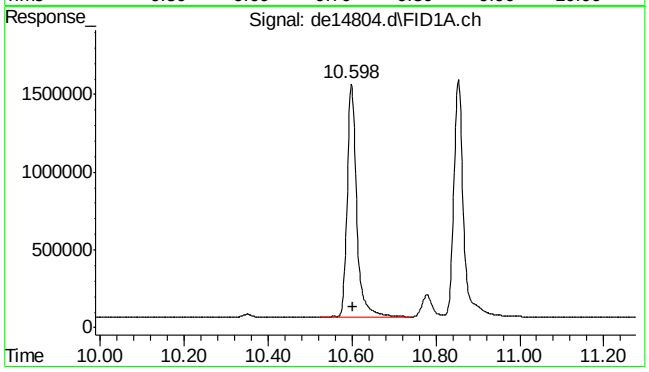
#10 anthracene

R.T.: 9.158 min
Delta R.T.: 0.000 min
Response: 2325599
Conc: 17.48 µg/ml



#11 o-terphenyl

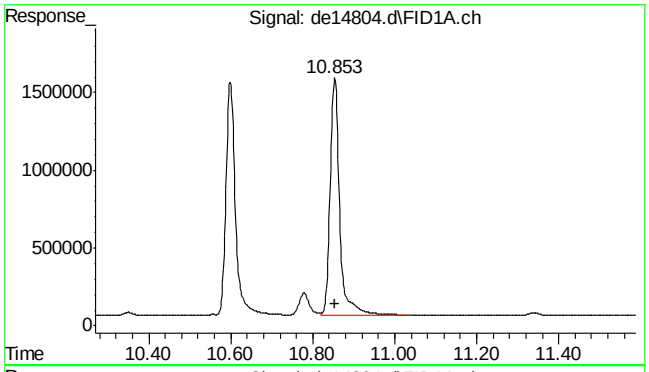
R.T.: 9.748 min
Delta R.T.: 0.002 min
Response: 1768569
Conc: 13.37 µg/ml



#12 fluoranthene

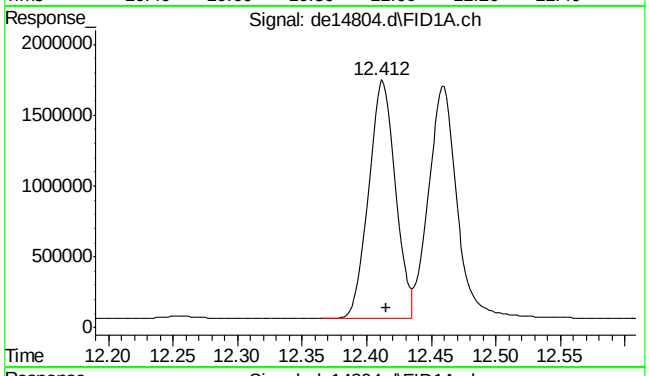
R.T.: 10.598 min
Delta R.T.: -0.003 min
Response: 2427017
Conc: 18.92 µg/ml

SGS ACCUTEST MC46783



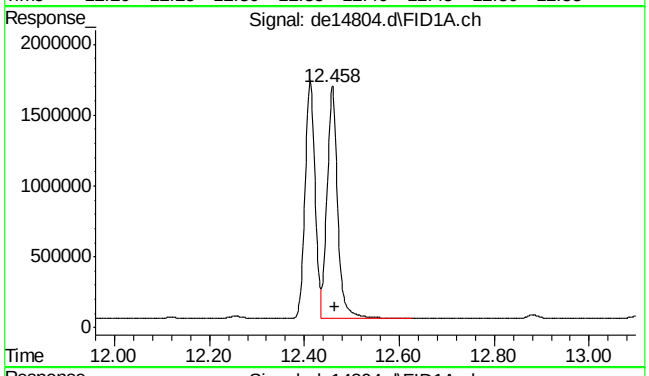
#13 pyrene

R.T.: 10.853 min
Delta R.T.: -0.002 min
Response: 2458348
Conc: 18.72 µg/ml



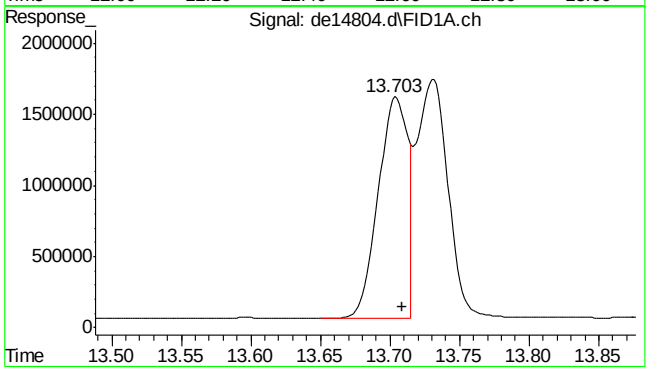
#14 benzo(a)anthracene

R.T.: 12.412 min
Delta R.T.: -0.003 min
Response: 2431593
Conc: 20.02 µg/ml



#15 chrysene

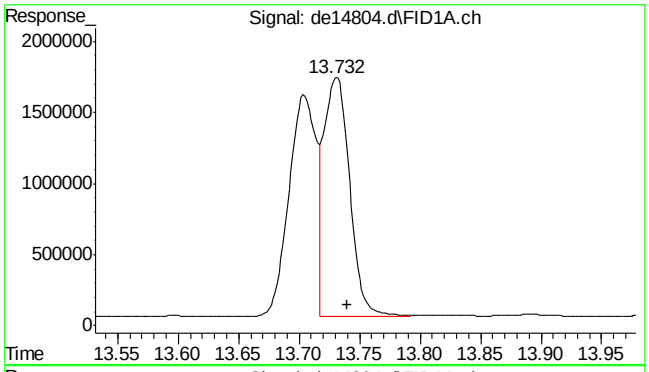
R.T.: 12.458 min
Delta R.T.: -0.005 min
Response: 2527564
Conc: 19.80 µg/ml



#16 benzo(B)fluoranthene

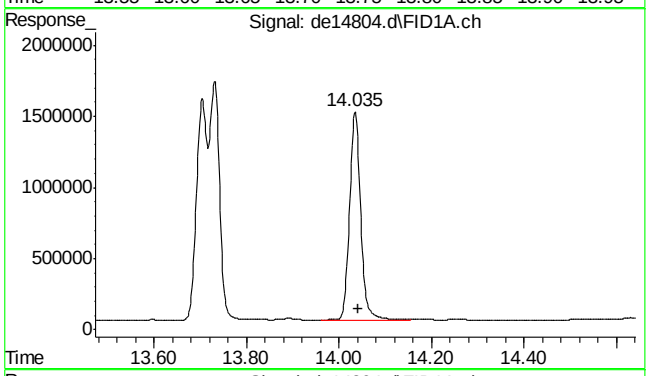
R.T.: 13.703 min
Delta R.T.: -0.005 min
Response: 2327541
Conc: 19.66 µg/ml

SGS ACCUTEST MC46783



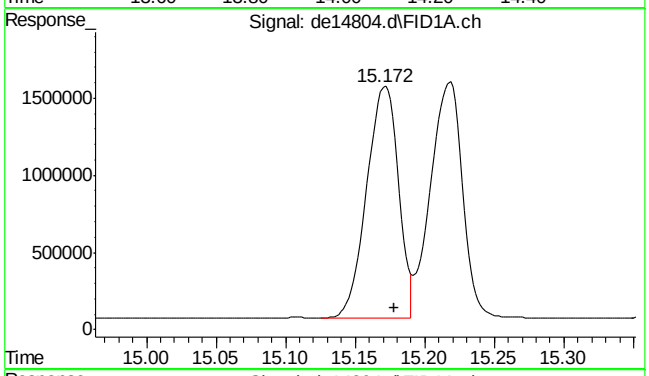
#17 benzo(k)fluoranthene

R.T.: 13.732 min
Delta R.T.: -0.008 min
Response: 2486150
Conc: 19.42 µg/ml m



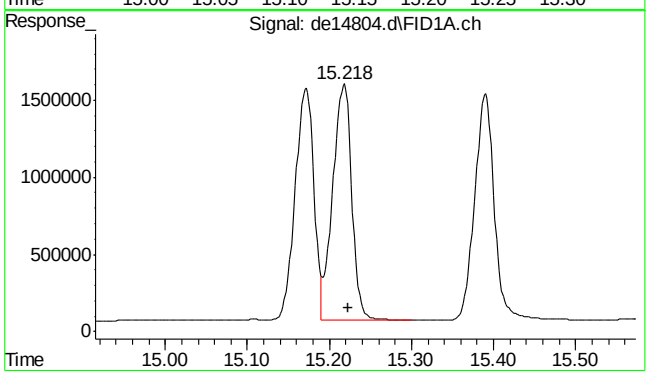
#18 benzo(a)pyrene

R.T.: 14.035 min
Delta R.T.: -0.007 min
Response: 2448871
Conc: 20.76 µg/ml



#19 indeno(1,2,3-cd)pyrene

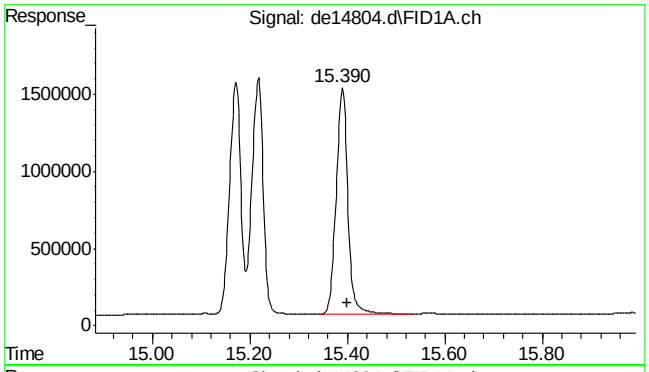
R.T.: 15.172 min
Delta R.T.: -0.007 min
Response: 2401672
Conc: 20.52 µg/ml



#20 dibenzo(ah)anthracene

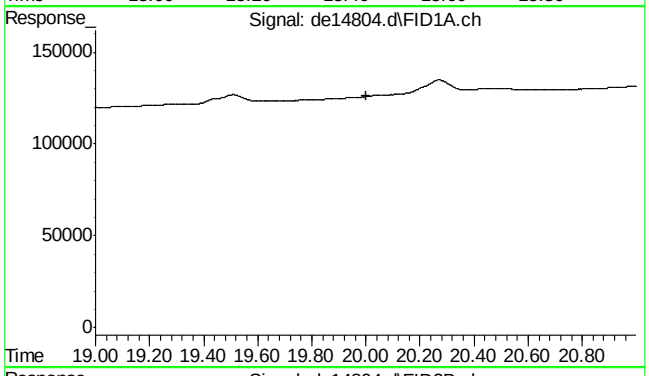
R.T.: 15.218 min
Delta R.T.: -0.005 min
Response: 2453261
Conc: 21.65 µg/ml

SGS ACCUTEST MC46783



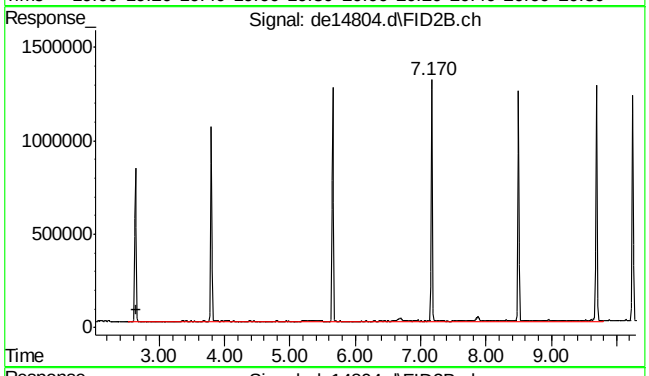
#21 benzo(ghi)perylene

R.T.: 15.390 min
Delta R.T.: -0.010 min
Response: 2434854
Conc: 21.46 µg/ml



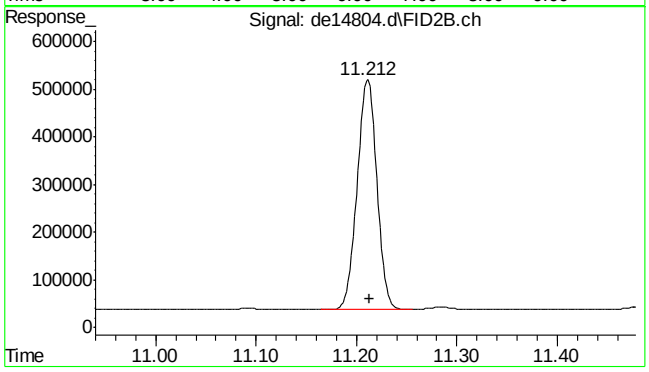
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



#25 c-9

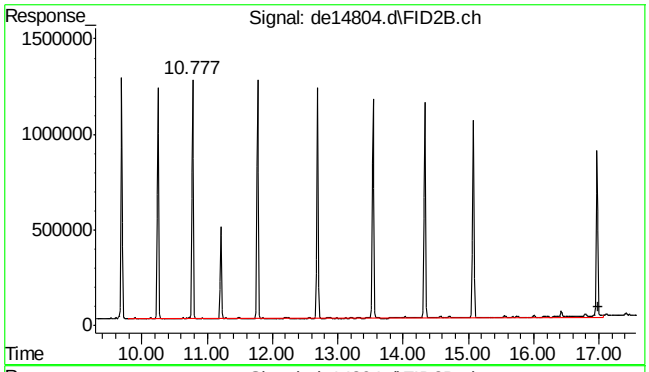
R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 9358959
Conc: 111.01 µg/ml m



#35 1-chlorooctadecane

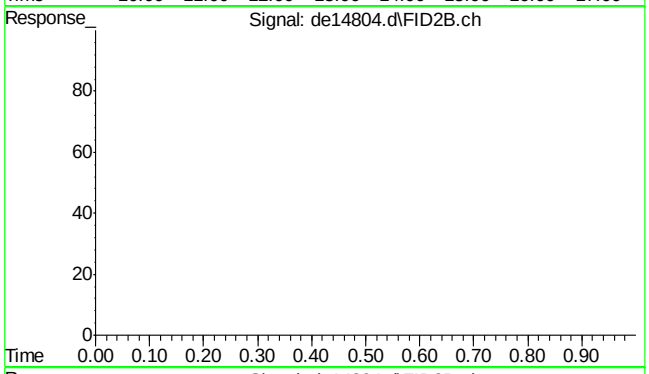
R.T.: 11.212 min
Delta R.T.: -0.002 min
Response: 655703
Conc: 10.06 µg/ml

SGS ACCUTEST MC46783



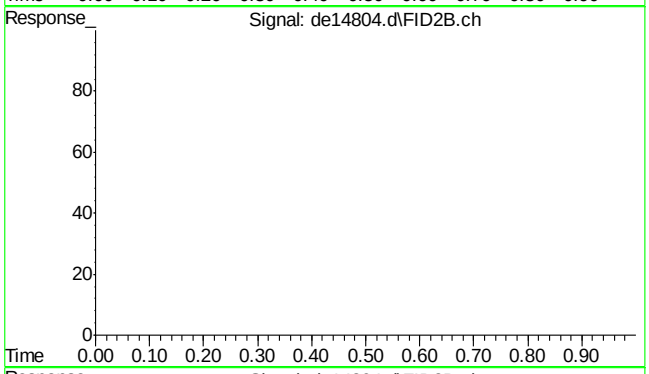
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 14277739
Conc: 183.46 µg/ml m



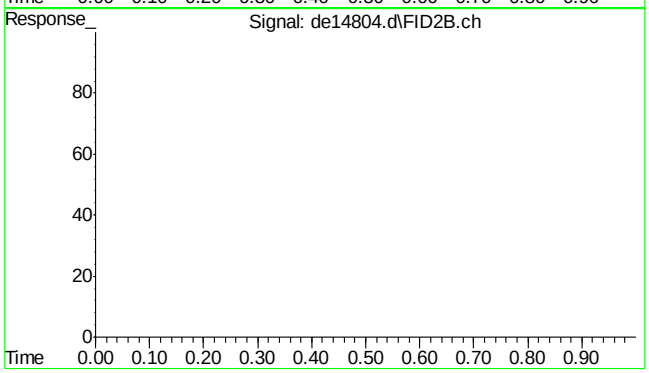
#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#44 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

7.4.2

7

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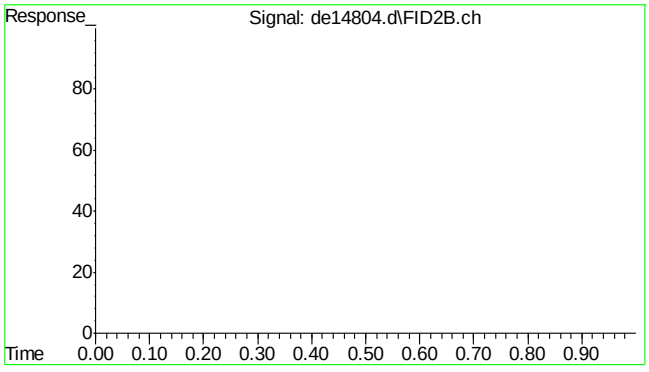


#45 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

7.4.2

7

SGS ACCUTEST MC46783

Manual Integrations
APPROVED
(compounds with "m" flag)
Andri Piluri
06/23/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14666.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:17 pm
Operator : thomasa
Sample : ic815-1 (Sig #1); cc815-1 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 102 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:50:07 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:48:06 2016
Response via : Initial Calibration
Integrator: RTE

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) s 2-fluorobiphenyl	6.490	107132	1.121 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery =	5.61%#
6) s 2-bromonaphthalene	7.210	59024	0.910 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery =	4.55%#
11) s o-terphenyl	9.745	133778	1.257 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery =	6.28%#
35) s 1-chlorooctadecane	11.213	64123	1.100 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery =	5.50%#
Target Compounds			
2) naphthalene	5.037	113943	1.067 µg/ml
3) 2-methylnaphthalene	5.935	110362	1.043 µg/ml
5) acenaphthylene	7.040	122875	1.179 µg/ml
7) acenaphthene	7.282	149113	1.386 µg/ml
8) fluorene	7.925	119469	1.133 µg/ml
9) phenanthrene	9.100	114628	1.084 µg/ml
10) anthracene	9.157	144305	1.434 µg/ml
12) fluoranthene	10.597	127841	1.228 µg/ml
13) pyrene	10.850	131934	1.245 µg/ml
14) benzo(a)anthracene	12.413	117526	1.167 µg/ml
15) chrysene	12.458	140012	1.383 µg/ml
16) benzo(B)fluoranthene	13.703	102498	0.998 µg/mlm
17) benzo(k)fluoranthene	13.727f	143585	1.459 µg/ml
18) benzo(a)pyrene	14.037	121812	1.269 µg/ml
19) indeno(1,2,3-cd)pyrene	15.170	111401	1.138 µg/mlm
20) dibenzo(ah)anthracene	15.217	118078	1.248 µg/ml
21) benzo(ghi)perylene	15.385f	114951	1.208 µg/ml
25) h c-9	2.647	80145	1.007 µg/mlm
26) h c-10	3.800	81660	1.021 µg/mlm
27) naphthalene #2	5.477	87389	1.064 µg/ml
28) c-12	5.655	80147	1.008 µg/ml
29) 2-methylnaphthalene #2	6.370	85044	1.028 µg/ml
30) c-14	7.172	80327	1.015 µg/ml
31) c-16	8.500	83899	1.066 µg/ml
32) c-18	9.695	80411	1.027 µg/ml
33) c-19	10.248	84447	1.129 µg/ml
34) c-20	10.780	77747	1.053 µg/ml
36) c-22	11.775	79966	1.088 µg/ml
37) c-24	12.693	75293	1.064 µg/ml
38) c-26	13.543	77835	1.062 µg/ml

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14666.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:17 pm
Operator : thomasa
Sample : ic815-1 (Sig #1); cc815-1 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 102 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:50:07 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:48:06 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc Units
39)	c-28	14.337	72455	1.007 µg/ml
40) h	c-30	15.082	93535	1.301 µg/mlm
41) h	c-36	16.983	59371	0.865 µg/mlm

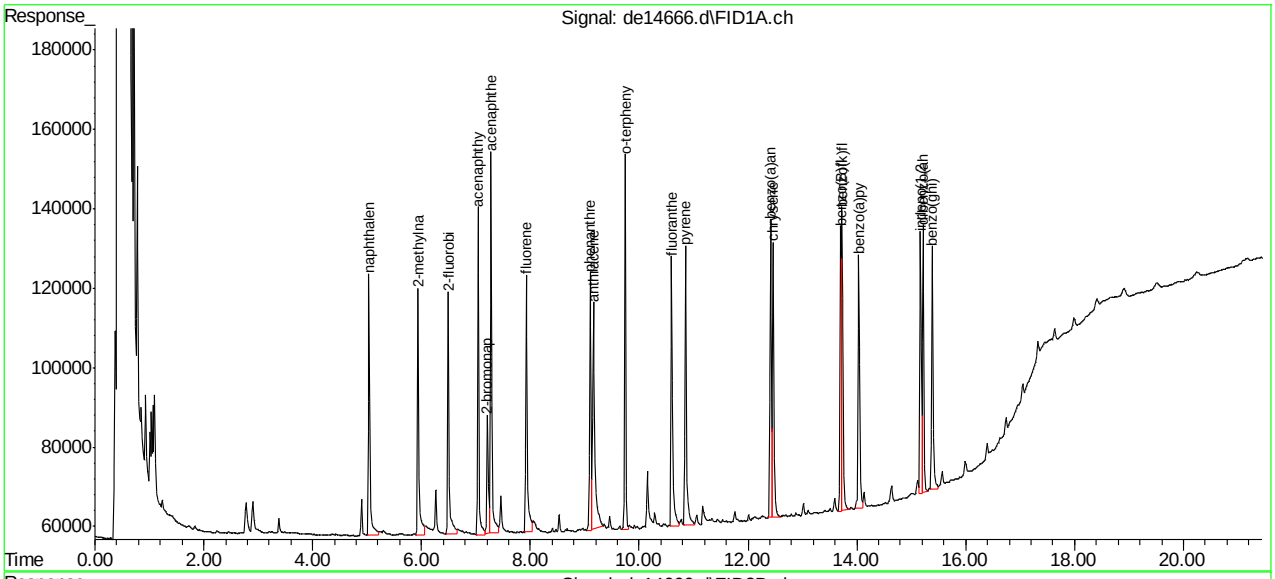
(f)=RT Delta > 1/2 Window (m)=manual int.

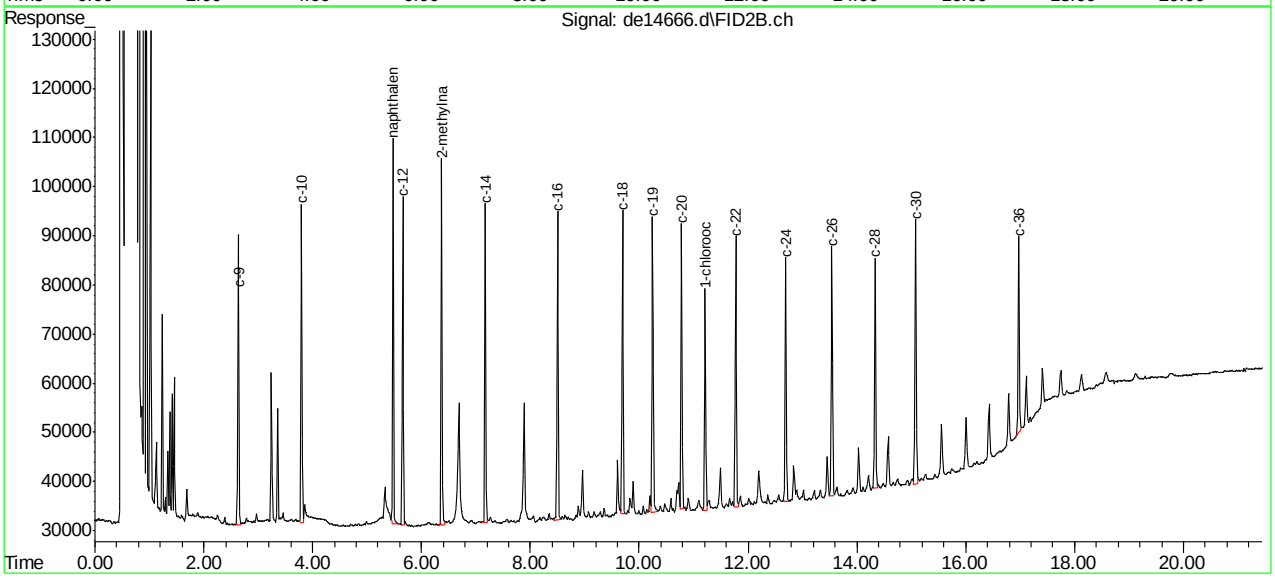
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14666.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:17 pm
Operator : thomasa
Sample : ic815-1 (Sig #1); cc815-1 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 102 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:50:07 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:48:06 2016
Response via : Initial Calibration
Integrator: RTE

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





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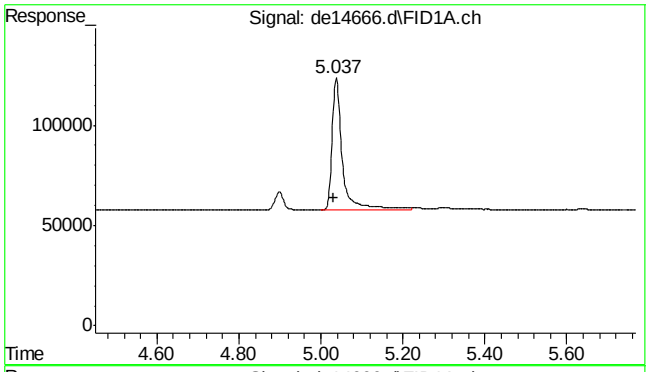
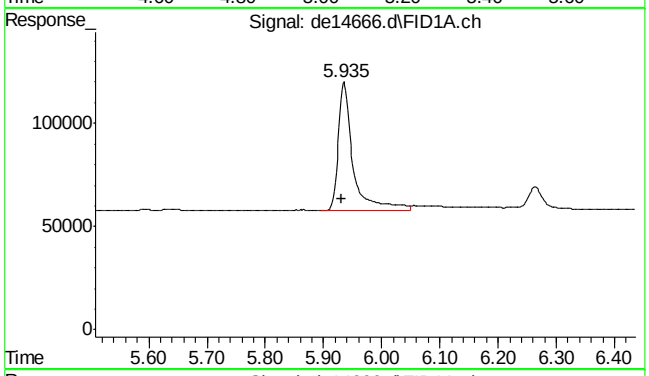


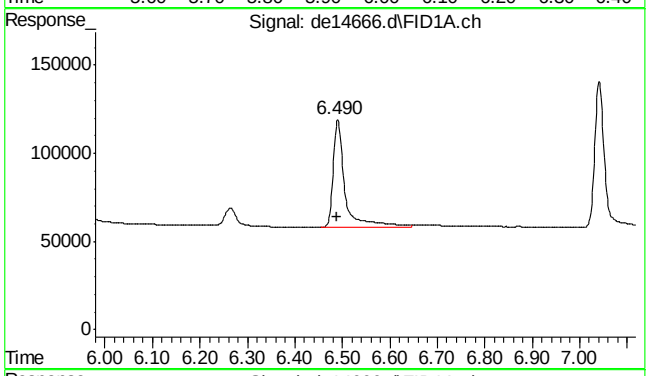
#2 naphthalene

R.T.: 5.037 min
Delta R.T.: 0.007 min
Response: 113943
Conc: 1.07 µg/ml



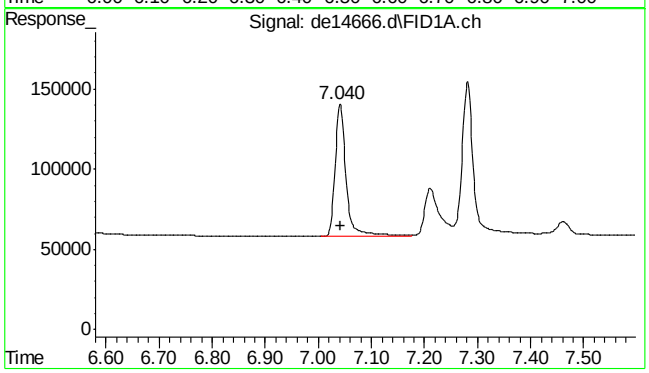
#3 2-methylnaphthalene

R.T.: 5.935 min
Delta R.T.: 0.003 min
Response: 110362
Conc: 1.04 µg/ml



#4 2-fluorobiphenyl

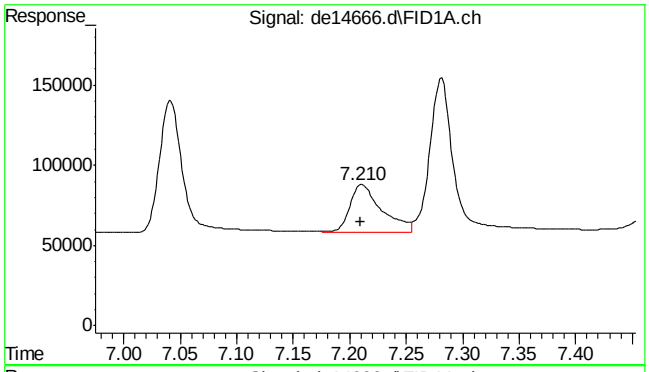
R.T.: 6.490 min
Delta R.T.: 0.002 min
Response: 107132
Conc: 1.12 µg/ml



#5 acenaphthylene

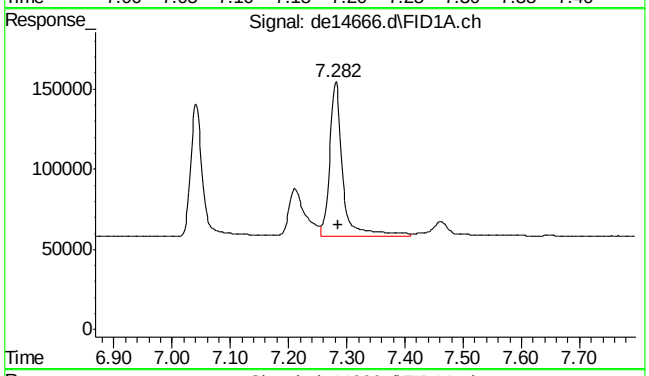
R.T.: 7.040 min
Delta R.T.: -0.002 min
Response: 122875
Conc: 1.18 µg/ml

SGS ACCUTEST MC46783



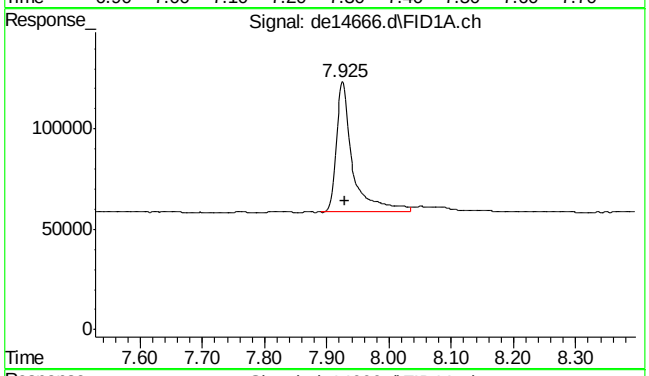
#6 2-bromonaphthalene

R.T.: 7.210 min
Delta R.T.: 0.000 min
Response: 59024
Conc: 0.91 µg/ml



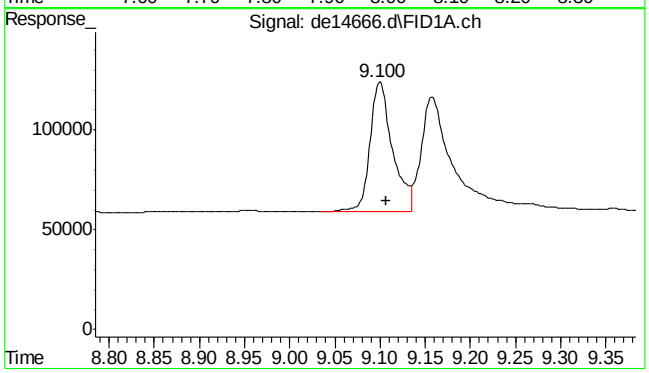
#7 acenaphthene

R.T.: 7.282 min
Delta R.T.: -0.003 min
Response: 149113
Conc: 1.39 µg/ml



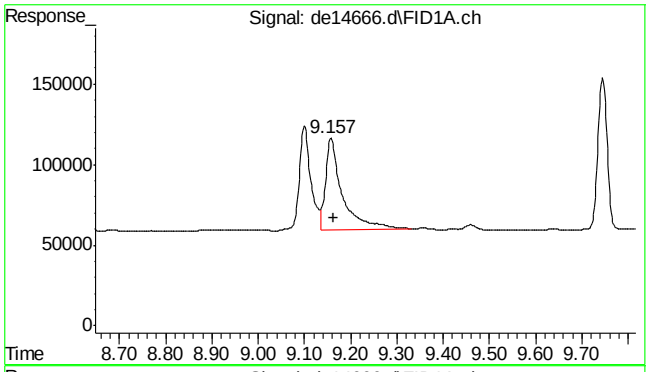
#8 fluorene

R.T.: 7.925 min
Delta R.T.: -0.003 min
Response: 119469
Conc: 1.13 µg/ml



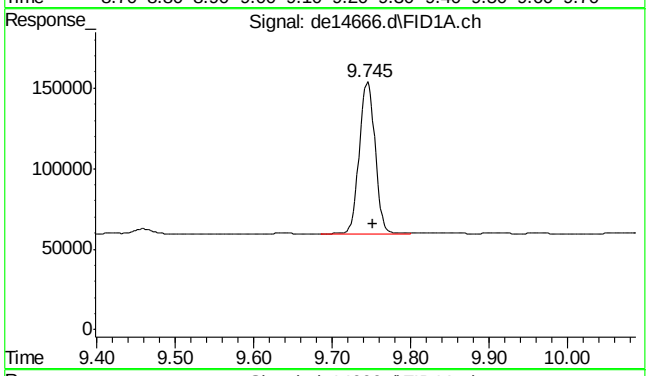
#9 phenanthrene

R.T.: 9.100 min
Delta R.T.: -0.007 min
Response: 114628
Conc: 1.08 µg/ml



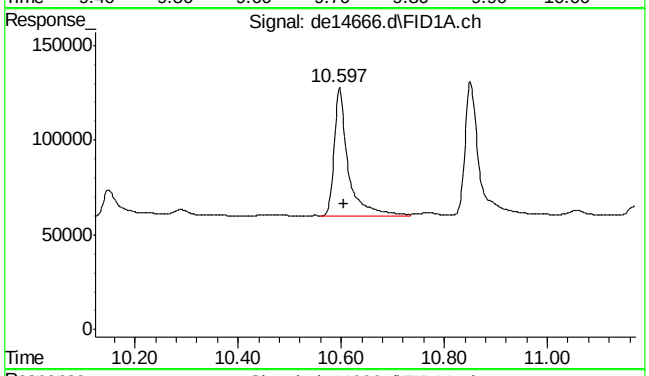
#10 anthracene

R.T.: 9.157 min
Delta R.T.: -0.007 min
Response: 144305
Conc: 1.43 µg/ml



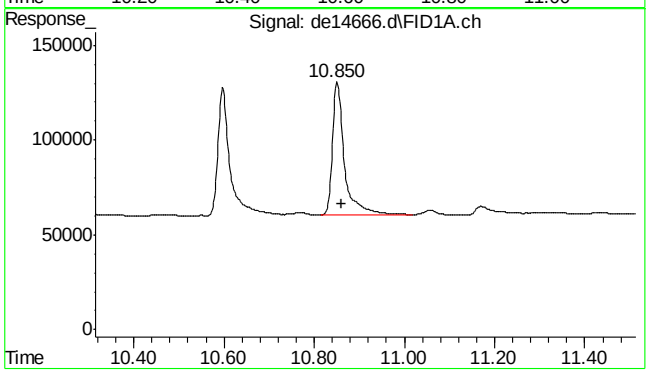
#11 o-terphenyl

R.T.: 9.745 min
Delta R.T.: -0.007 min
Response: 133778
Conc: 1.26 µg/ml



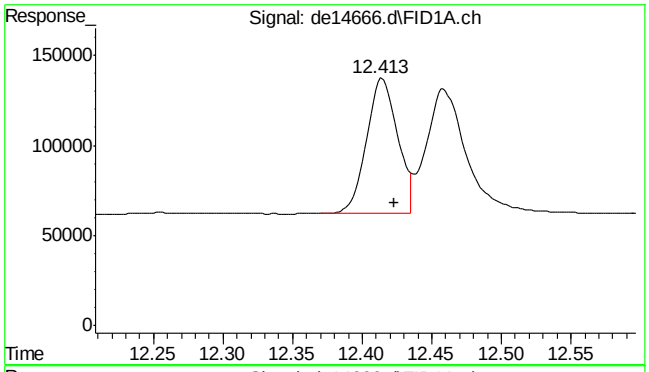
#12 fluoranthene

R.T.: 10.597 min
Delta R.T.: -0.008 min
Response: 127841
Conc: 1.23 µg/ml



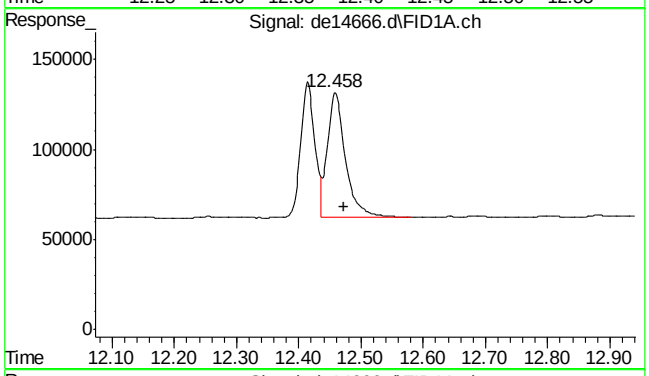
#13 pyrene

R.T.: 10.850 min
Delta R.T.: -0.012 min
Response: 131934
Conc: 1.25 µg/ml



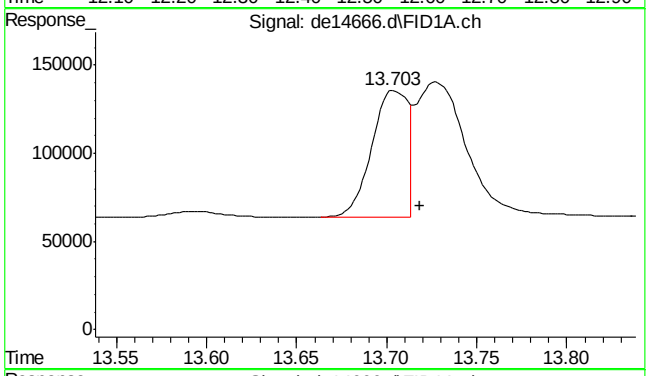
#14 benzo(a)anthracene

R.T.: 12.413 min
Delta R.T.: -0.010 min
Response: 117526
Conc: 1.17 µg/ml



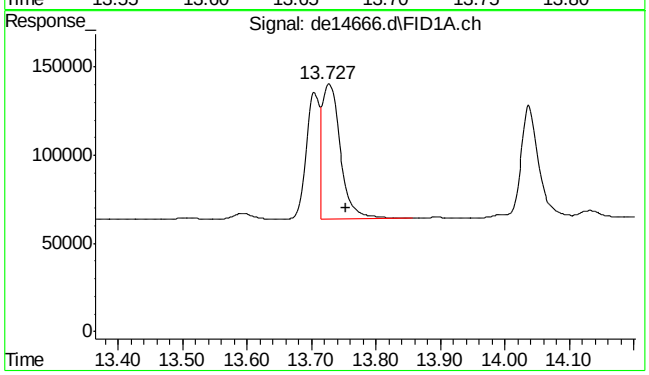
#15 chrysene

R.T.: 12.458 min
Delta R.T.: -0.013 min
Response: 140012
Conc: 1.38 µg/ml



#16 benzo(B)fluoranthene

R.T.: 13.703 min
Delta R.T.: -0.015 min
Response: 102498
Conc: 1.00 µg/ml m



#17 benzo(k)fluoranthene

R.T.: 13.727 min
Delta R.T.: -0.027 min
Response: 143585
Conc: 1.46 µg/ml

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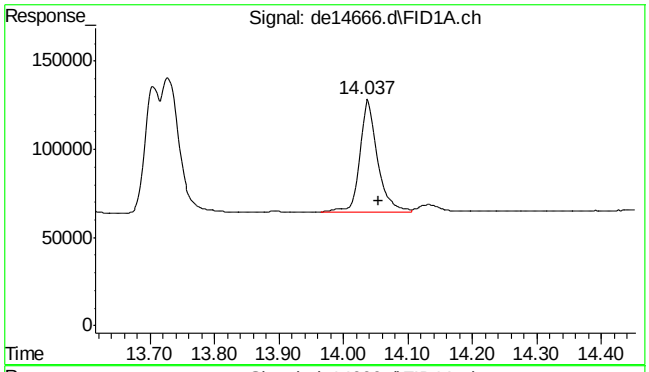
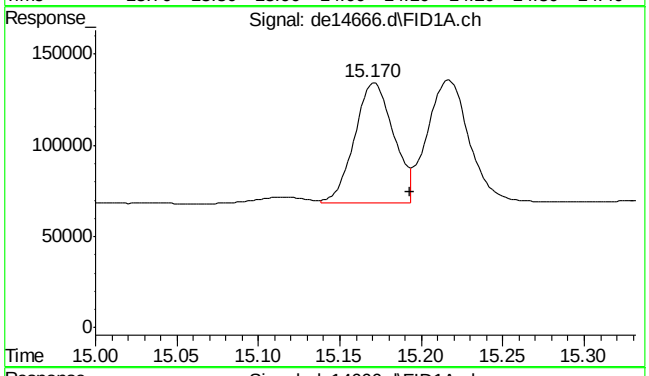


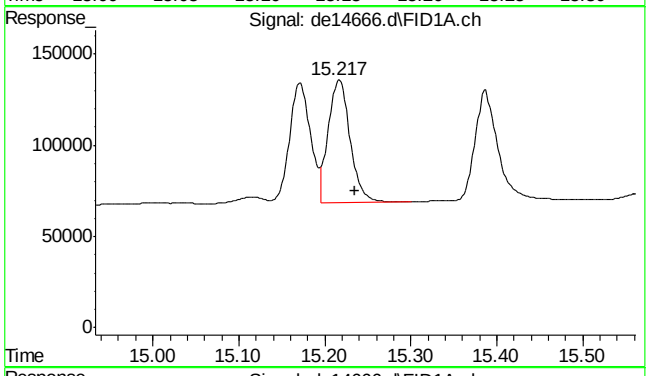
#18 benzo(a)pyrene

R.T.: 14.037 min
Delta R.T.: -0.017 min
Response: 121812
Conc: 1.27 µg/ml



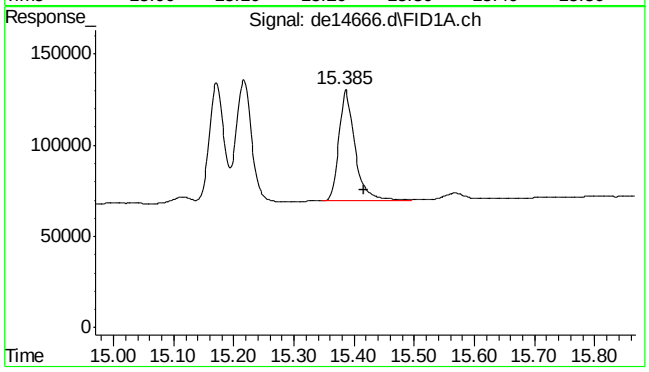
#19 indeno(1,2,3-cd)pyrene

R.T.: 15.170 min
Delta R.T.: -0.023 min
Response: 111401
Conc: 1.14 µg/ml m



#20 dibenzo(ah)anthracene

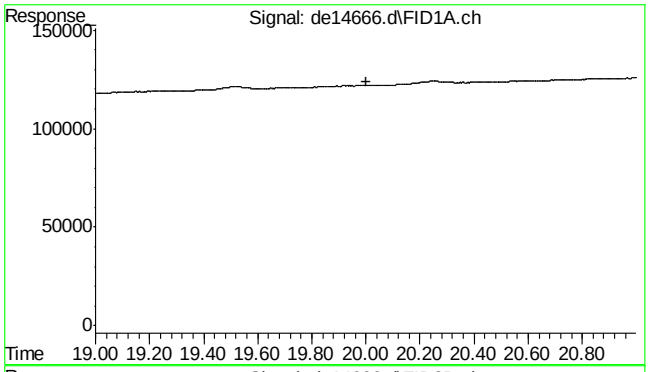
R.T.: 15.217 min
Delta R.T.: -0.018 min
Response: 118078
Conc: 1.25 µg/ml



#21 benzo(ghi)perylene

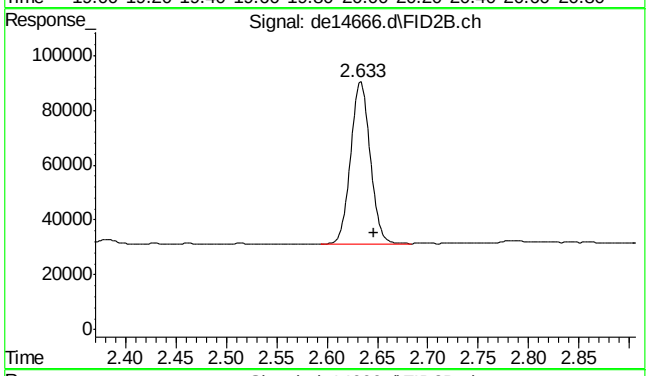
R.T.: 15.385 min
Delta R.T.: -0.032 min
Response: 114951
Conc: 1.21 µg/ml

SGS ACCUTEST MC46783



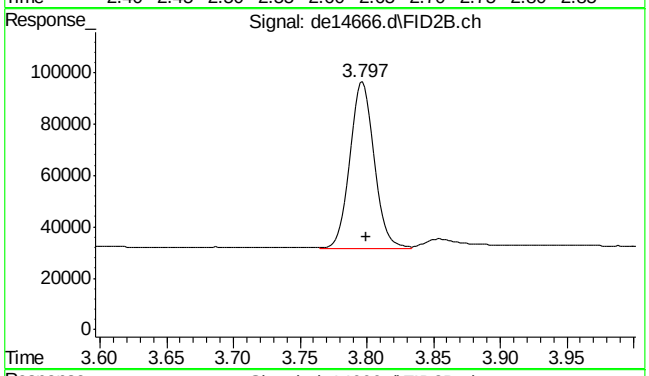
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



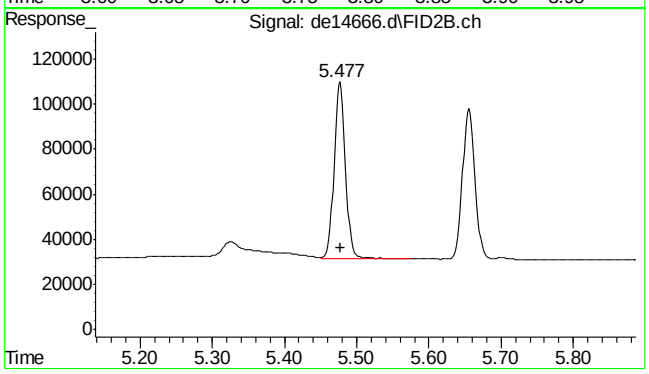
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 80145
Conc: 1.01 µg/ml m



#26 c-10

R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 81660
Conc: 1.02 µg/ml m



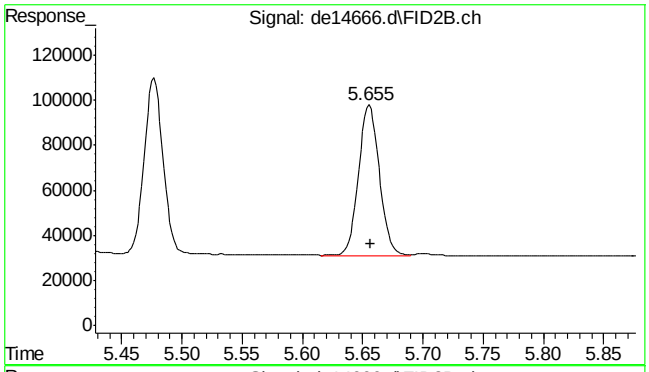
#27 naphthalene #2

R.T.: 5.477 min
Delta R.T.: -0.002 min
Response: 87389
Conc: 1.06 µg/ml

7.5.1

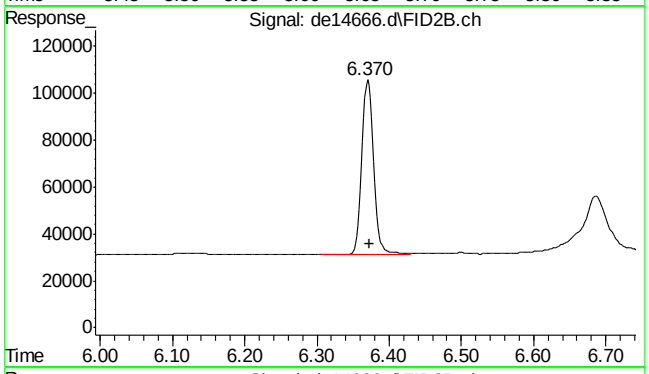
7

SGS ACCUTEST MC46783



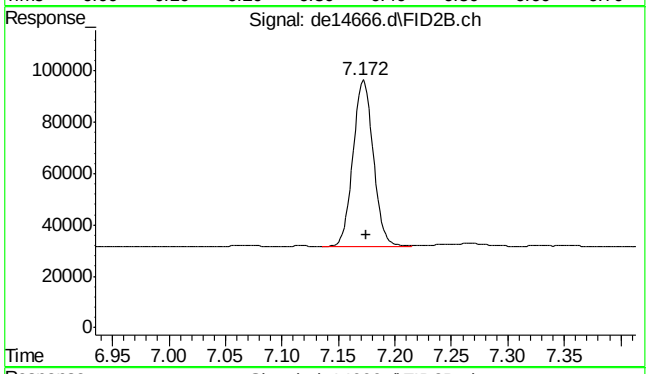
#28 c-12

R.T.: 5.655 min
Delta R.T.: -0.002 min
Response: 80147
Conc: 1.01 µg/ml



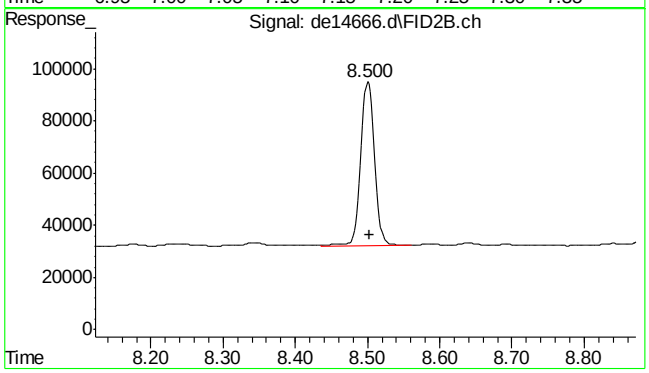
#29 2-methylnaphthalene #2

R.T.: 6.370 min
Delta R.T.: -0.003 min
Response: 85044
Conc: 1.03 µg/ml



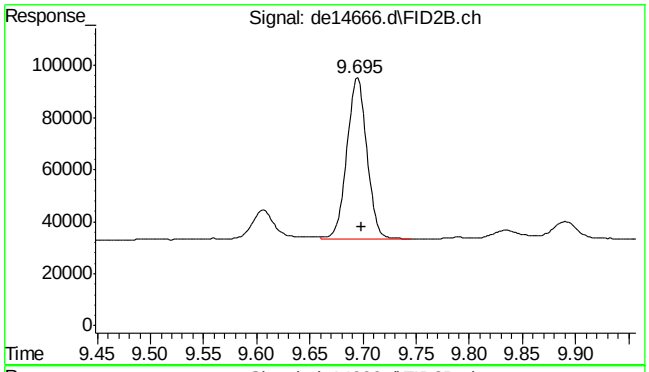
#30 c-14

R.T.: 7.172 min
Delta R.T.: -0.003 min
Response: 80327
Conc: 1.01 µg/ml



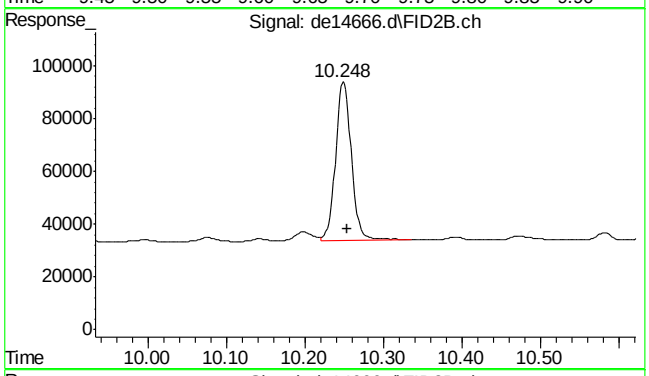
#31 c-16

R.T.: 8.500 min
Delta R.T.: -0.003 min
Response: 83899
Conc: 1.07 µg/ml



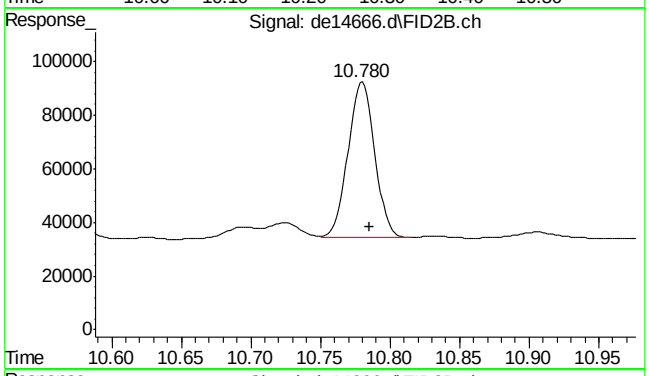
#32 c-18

R.T.: 9.695 min
Delta R.T.: -0.003 min
Response: 80411
Conc: 1.03 µg/ml



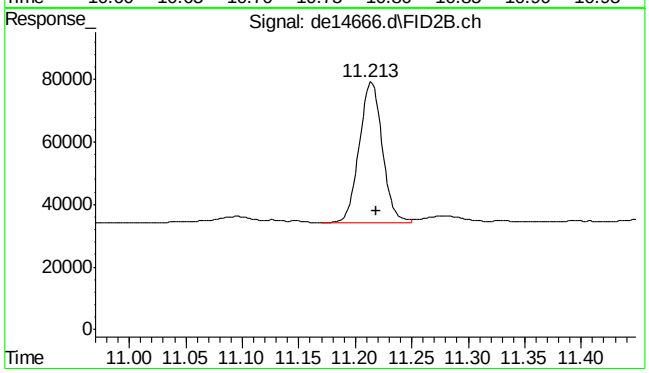
#33 c-19

R.T.: 10.248 min
Delta R.T.: -0.005 min
Response: 84447
Conc: 1.13 µg/ml



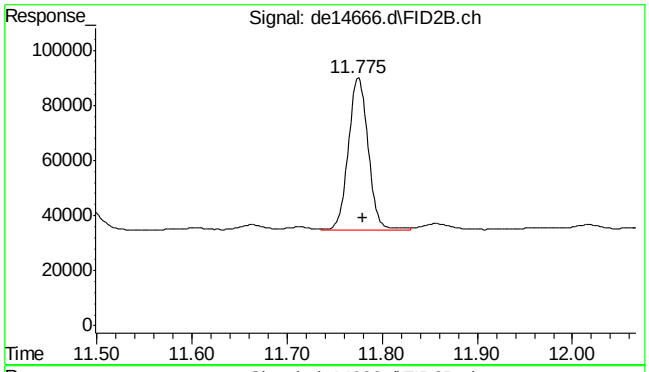
#34 c-20

R.T.: 10.780 min
Delta R.T.: -0.005 min
Response: 77747
Conc: 1.05 µg/ml



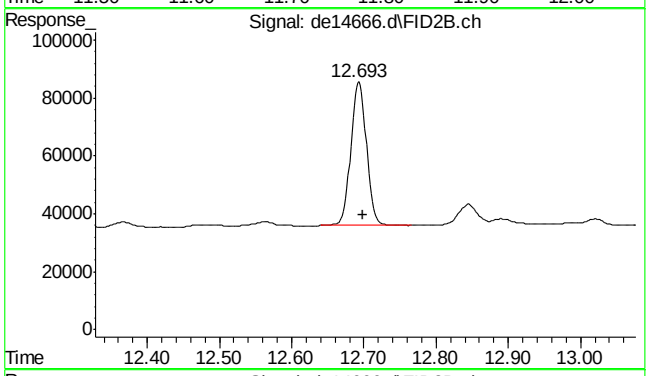
#35 1-chlorooctadecane

R.T.: 11.213 min
Delta R.T.: -0.005 min
Response: 64123
Conc: 1.10 µg/ml



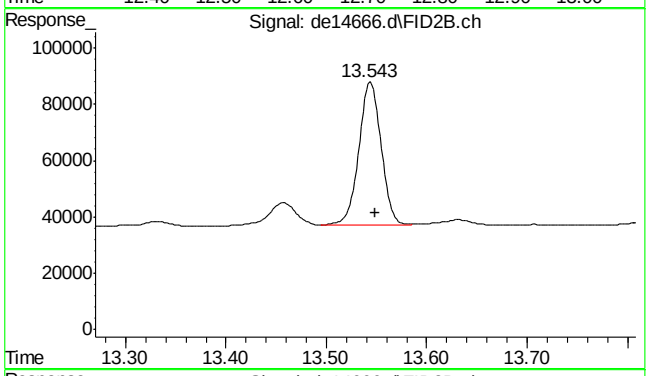
#36 c-22

R.T.: 11.775 min
Delta R.T.: -0.005 min
Response: 79966
Conc: 1.09 µg/ml



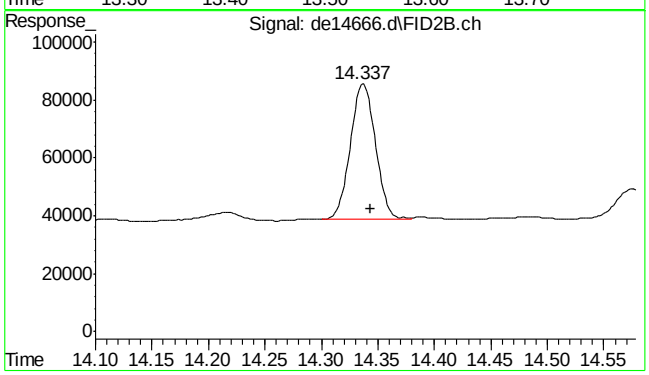
#37 c-24

R.T.: 12.693 min
Delta R.T.: -0.005 min
Response: 75293
Conc: 1.06 µg/ml



#38 c-26

R.T.: 13.543 min
Delta R.T.: -0.005 min
Response: 77835
Conc: 1.06 µg/ml



#39 c-28

R.T.: 14.337 min
Delta R.T.: -0.007 min
Response: 72455
Conc: 1.01 µg/ml

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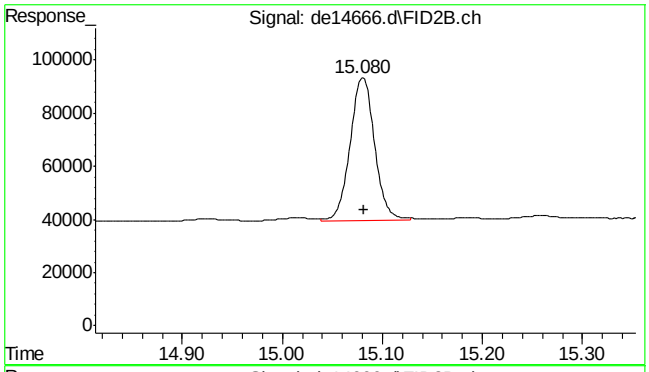
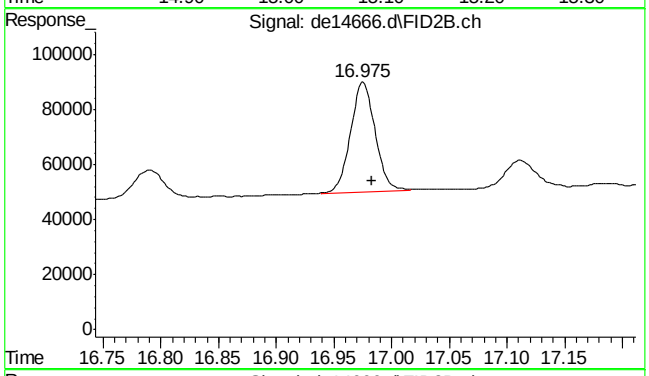


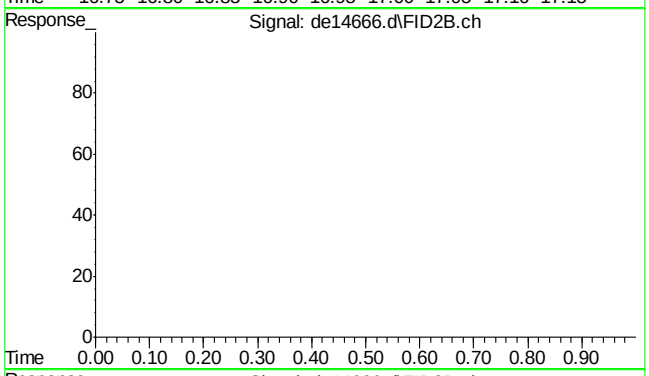
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 93535
Conc: 1.30 µg/ml m



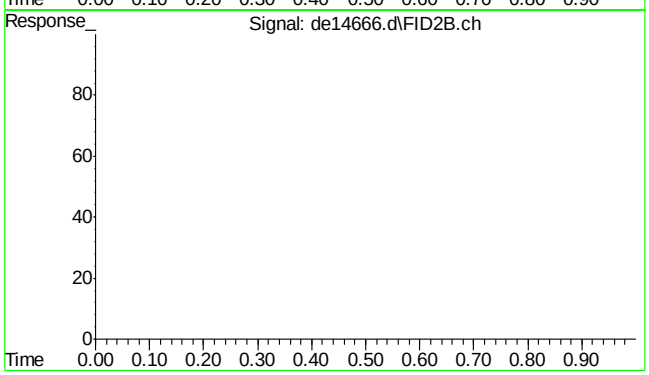
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 59371
Conc: 0.86 µg/ml m



#42 bht

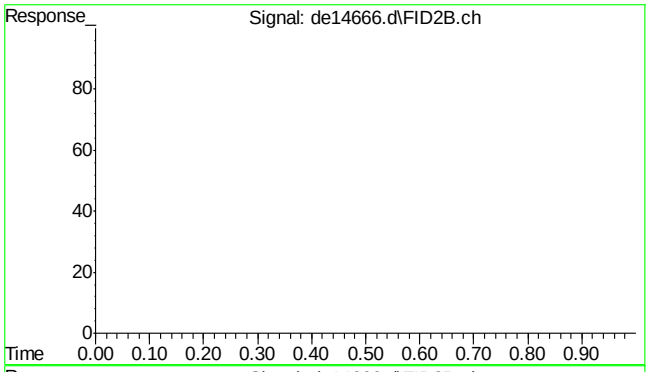
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#43 bht

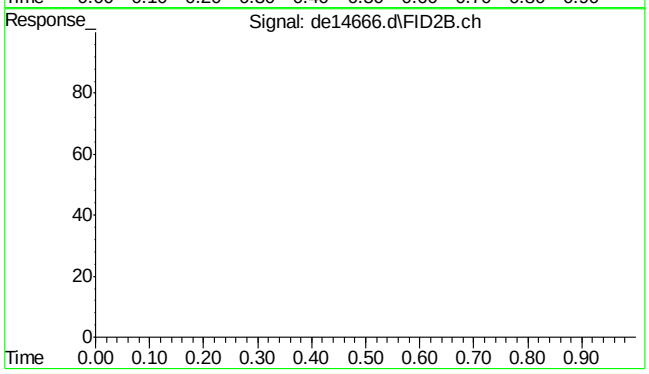
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

SGS ACCUTEST MC46783



#44 bht

```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```



#45 bht

```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```

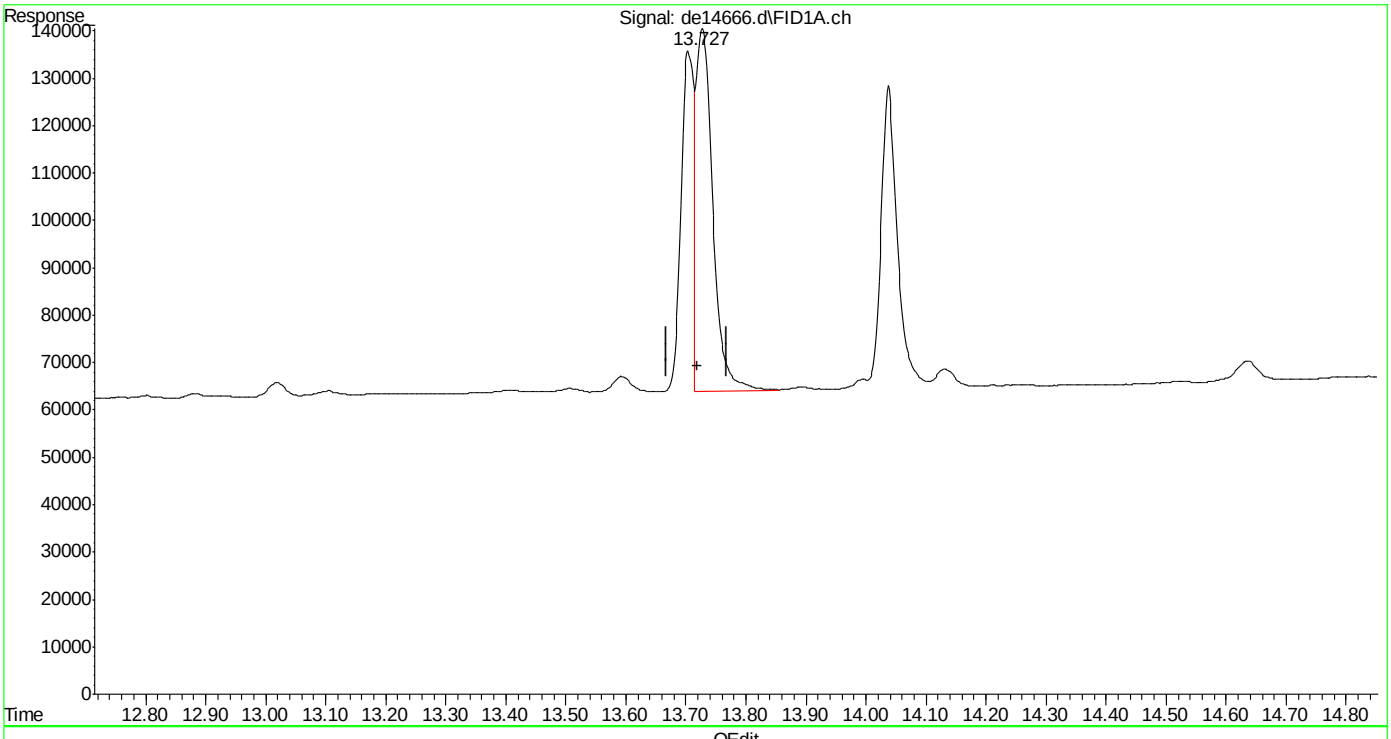

SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14666.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:17 pm
Operator : thomasa
Sample : cc815-1
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 102 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:48:33 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:48:06 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.727min 1.398 µg/ml
response 143585

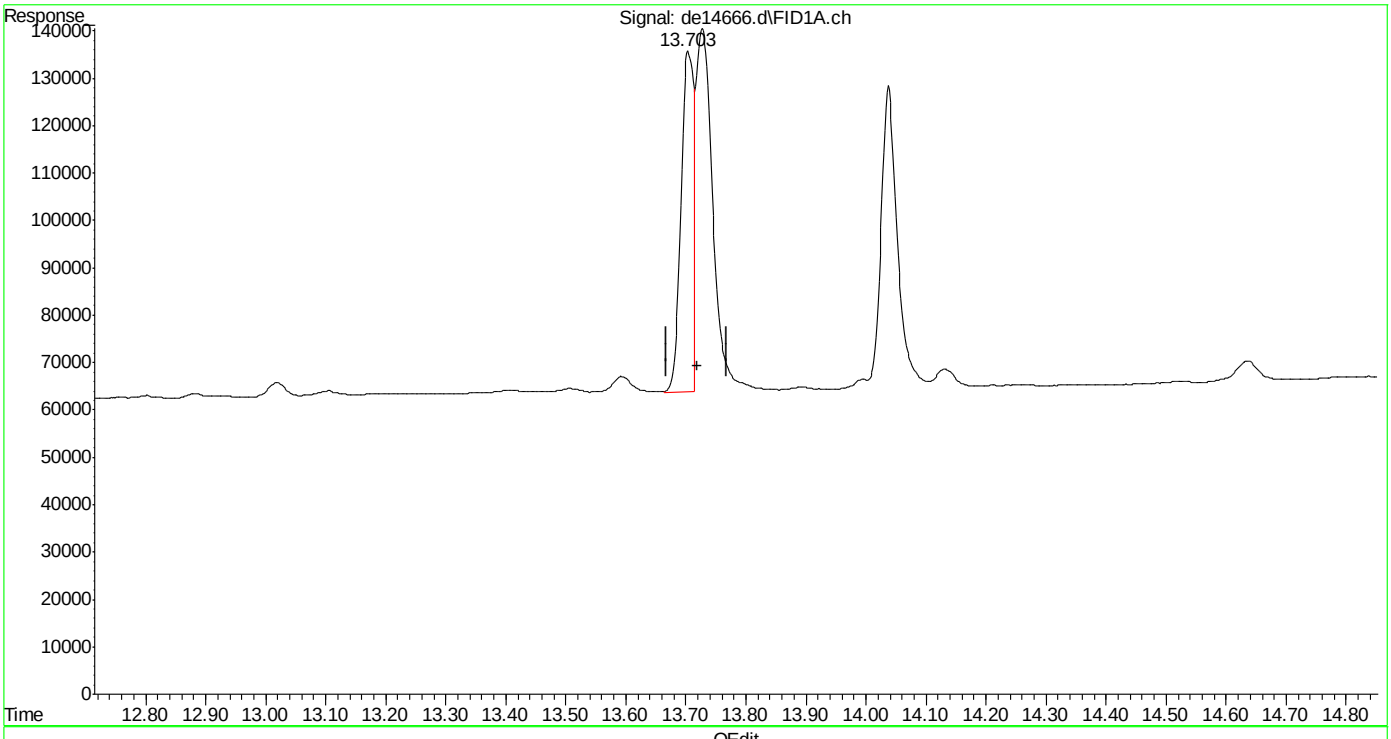
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:48:50 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14666.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:17 pm
Operator : thomasa
Sample : cc815-1
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 102 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:48:33 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:48:06 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.703min 0.998 µg/ml m
response 102498

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:49:00 2016

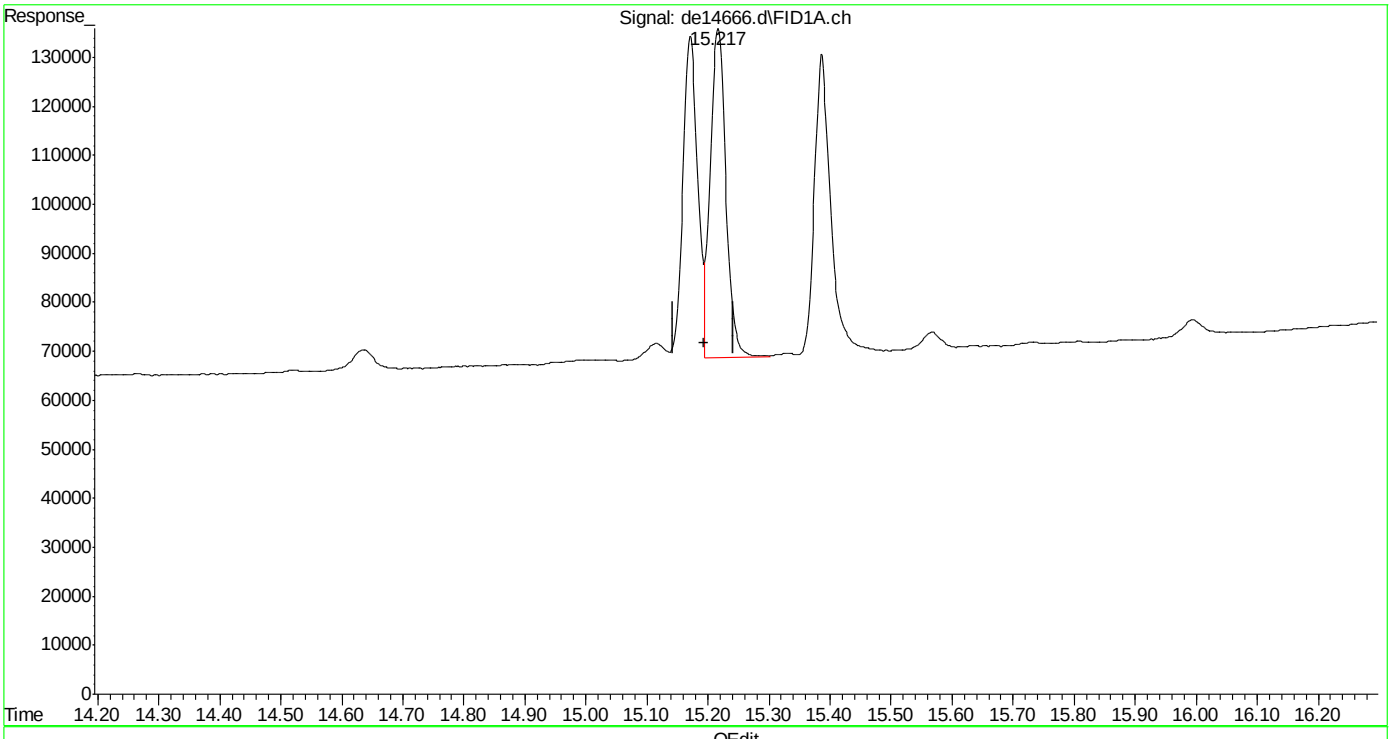
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14666.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:17 pm
Operator : thomasa
Sample : cc815-1
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 102 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:48:33 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:48:06 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.217min 1.207 µg/ml
response 118078

(+) = Expected Retention Time

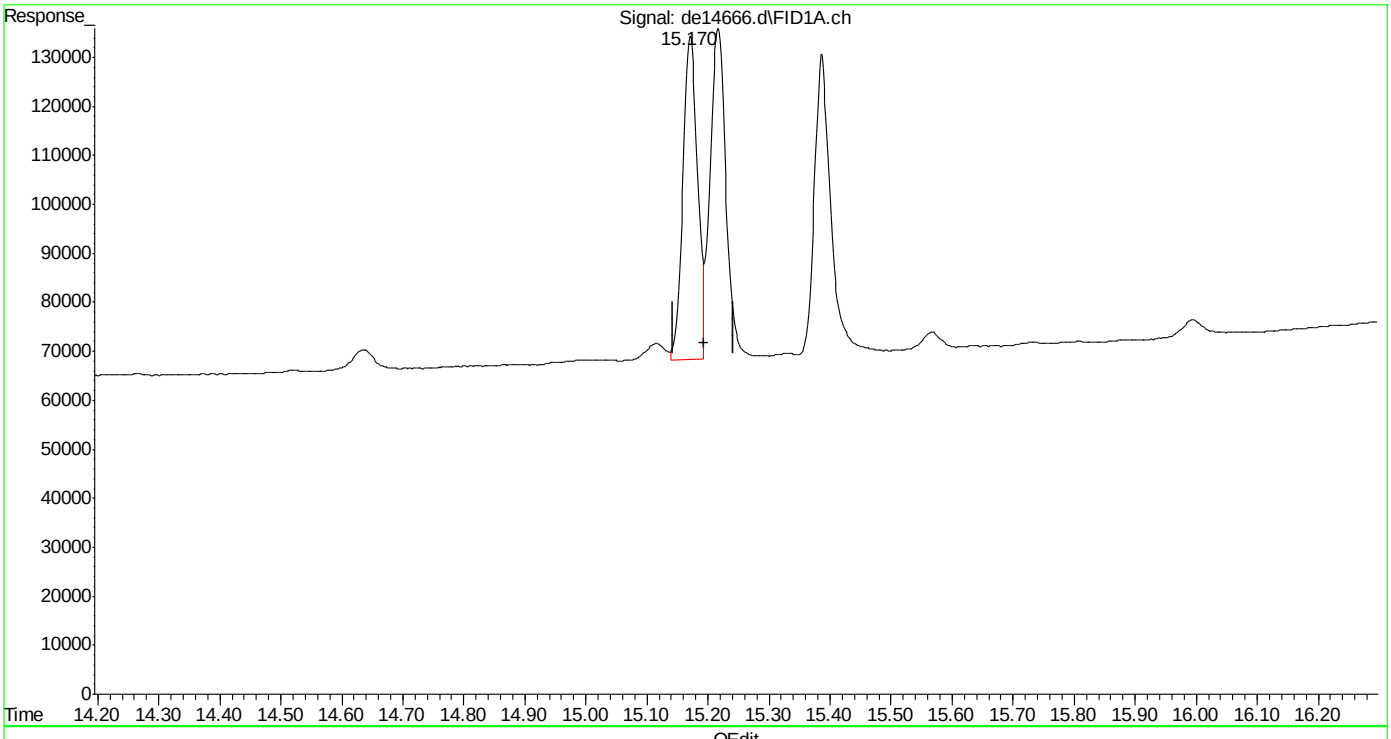
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14666.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:17 pm
Operator : thomasa
Sample : cc815-1
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 102 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:48:33 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:48:06 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.170min 1.138 µg/ml m
response 111401

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:49:23 2016

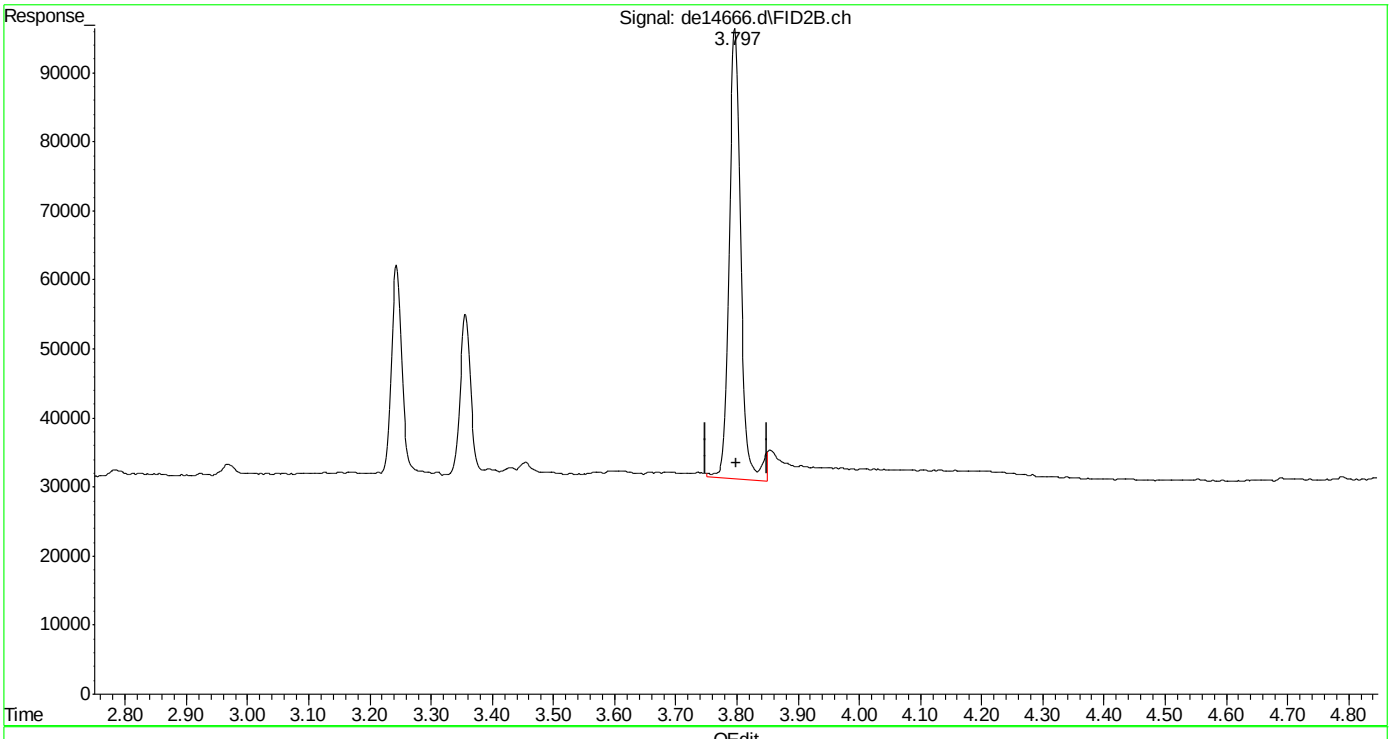
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14666.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:17 pm
Operator : thomasa
Sample : cc815-1
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 102 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:48:33 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:48:06 2016
Response via : Initial Calibration
Integrator: RTE

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



(26) c-10 (h)
3.800min 1.080 µg/ml
response 86392

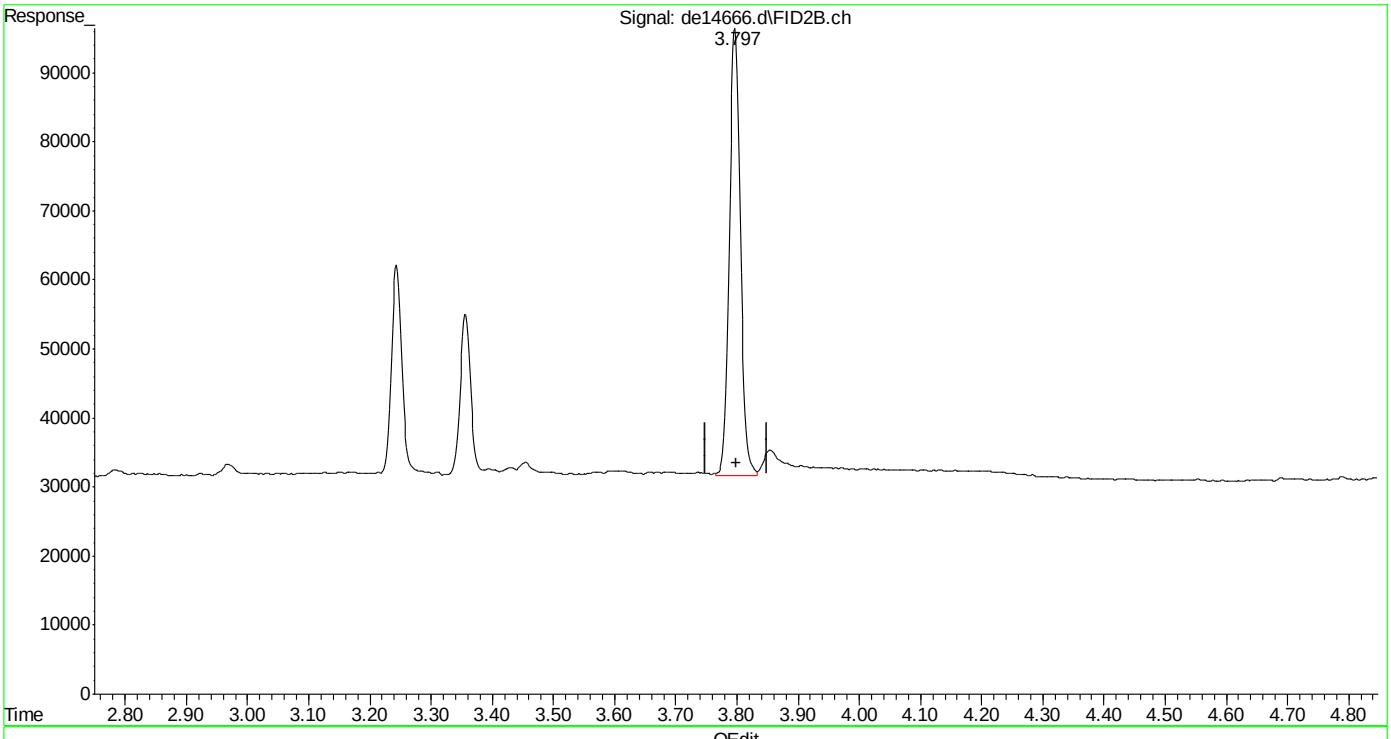
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14666.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:17 pm
Operator : thomasa
Sample : cc815-1
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 102 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:48:33 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:48:06 2016
Response via : Initial Calibration
Integrator: RTE

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



(26) c-10 (h)
3.800min 1.021 µg/ml m
response 81660

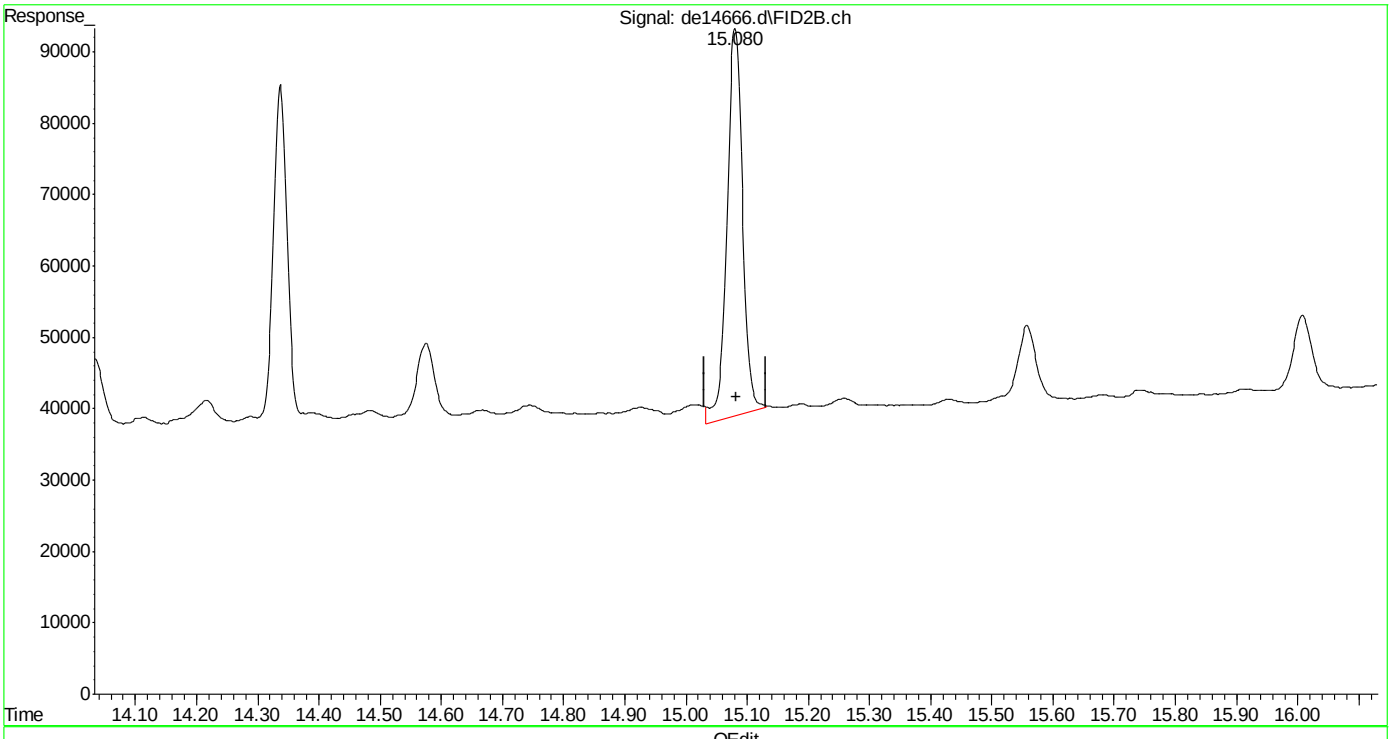
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14666.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:17 pm
Operator : thomasa
Sample : cc815-1
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 102 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:48:33 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:48:06 2016
Response via : Initial Calibration
Integrator: RTE

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



(40) c-30 (h)
15.082min 1.345 µg/ml
response 96730

(+) = Expected Retention Time

EPH160622W.M Thu Jun 23 07:49:48 2016

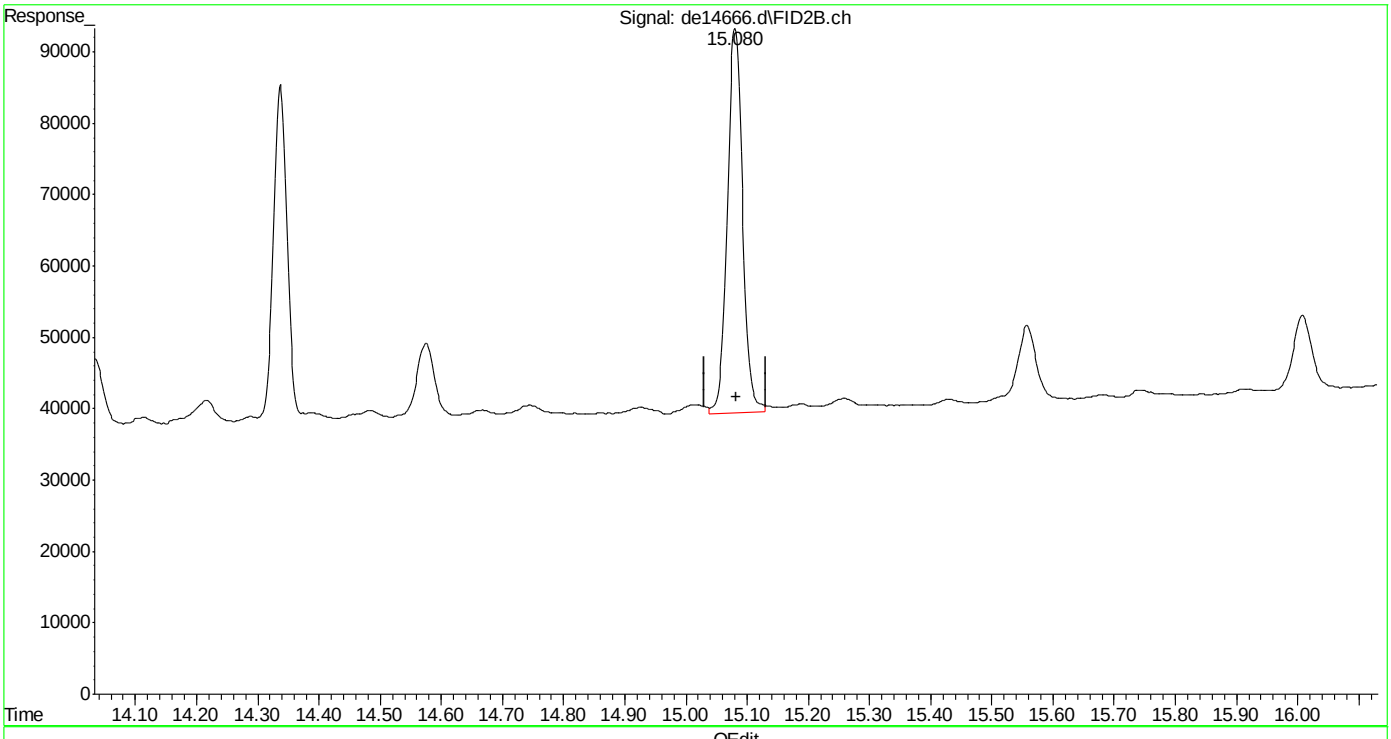
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14666.d
Signal(s) : Signal #1: FID1A.ch  Signal #2: FID2B.ch
Acq On    : 22 Jun 2016   6:17 pm
Operator  : thomasa
Sample    : cc815-1
Misc      : op47862,gde815,1000,,,2,,w
ALS Vial  : 102   Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:48:33 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title  : BMAEPH-working method
QLast Update : Thu Jun 23 07:48:06 2016
Response via : Initial Calibration
Integrator: RTE

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



(40) c-30 (h)

15.082min 1.301 µg/ml m

response 93535

(+) = Expected Retention Time

EPH160622W.M Thu Jun 23 07:49:56 2016

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri
06/23/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14667.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:44 pm
Operator : thomasa
Sample : ic815-2 (Sig #1); cc815-2 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 104 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:51:43 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:50:15 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) s	2-fluorobiphenyl	6.488	243434	2.495 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 12.48%
6) s	2-bromonaphthalene	7.208	135704	2.106 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 10.53%
11) s	o-terphenyl	9.743	296252	2.672 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 13.36%
35) s	1-chlorooctadecane	11.213	143160	2.439 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 12.20%
	Target Compounds			
2)	naphthalene	5.035	264011	2.430 µg/ml
3)	2-methylnaphthalene	5.933	279926	2.620 µg/ml
5)	acenaphthylene	7.038	273879	2.547 µg/ml
7)	acenaphthene	7.280	317977	2.780 µg/ml
8)	fluorene	7.923	281653	2.604 µg/ml
9)	phenanthrene	9.098	261923	2.435 µg/ml
10)	anthracene	9.157	321096	2.987 µg/ml
12)	fluoranthene	10.597	285254	2.652 µg/ml
13)	pyrene	10.850	292246	2.664 µg/ml
14)	benzo(a)anthracene	12.412	269926	2.618 µg/ml
15)	chrysene	12.457	290892	2.721 µg/ml
16)	benzo(B)fluoranthene	13.702	248683	2.416 µg/mlm
17)	benzo(k)fluoranthene	13.728f	320118	3.041 µg/ml
18)	benzo(a)pyrene	14.033	266332	2.667 µg/ml
19)	indeno(1,2,3-cd)pyrene	15.170	247469	2.468 µg/mlm
20)	dibenzo(ah)anthracene	15.215	255274	2.599 µg/ml
21)	benzo(ghi)perylene	15.385f	246509	2.509 µg/ml
25) h	c-9	2.647	185709	2.327 µg/mlm
26) h	c-10	3.800	187715	2.331 µg/mlm
27)	naphthalene #2	5.477	200322	2.417 µg/ml
28)	c-12	5.655	183928	2.308 µg/ml
29)	2-methylnaphthalene #2	6.370	195523	2.366 µg/ml
30)	c-14	7.172	186756	2.347 µg/ml
31)	c-16	8.500	188090	2.338 µg/ml
32)	c-18	9.693	183338	2.321 µg/ml
33)	c-19	10.248	187087	2.398 µg/ml
34)	c-20	10.780	178236	2.373 µg/ml
36)	c-22	11.775	172417	2.279 µg/ml
37)	c-24	12.693	167132	2.312 µg/ml
38)	c-26	13.543	174403	2.332 µg/ml

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14667.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:44 pm
Operator : thomasa
Sample : ic815-2 (Sig #1); cc815-2 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 104 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:51:43 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:50:15 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc Units
39)	c-28	14.337	160693	2.228 µg/ml
40) h	c-30	15.082	187403	2.369 µg/mlm
41) h	c-36	16.983	136856	2.088 µg/mlm

(f)=RT Delta > 1/2 Window (m)=manual int.

7.5.2

7

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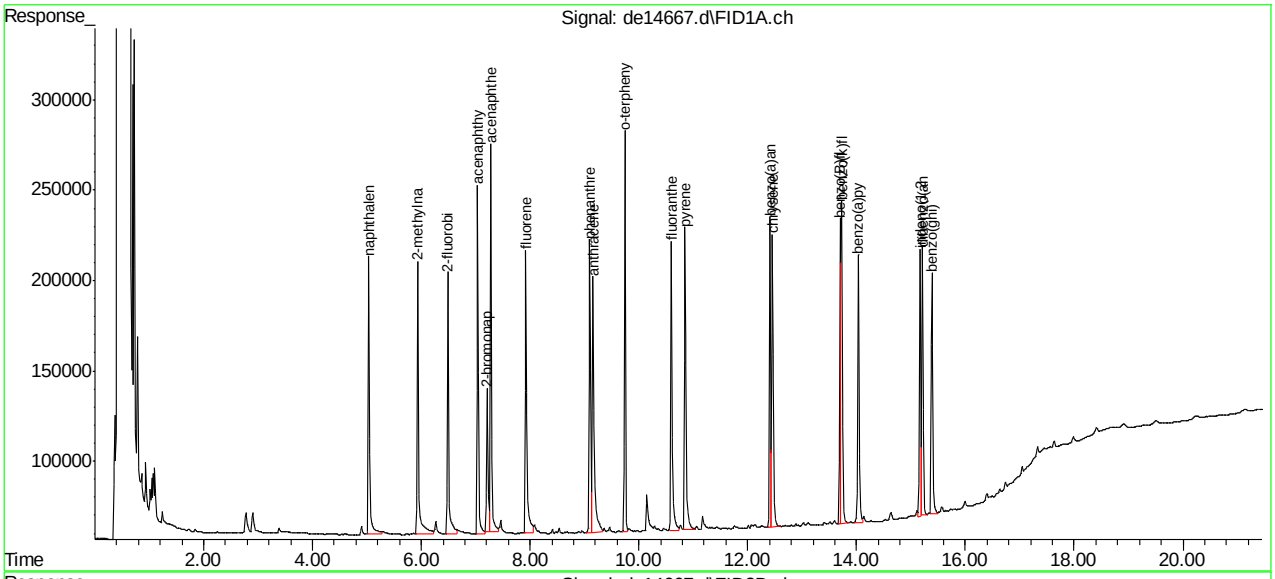
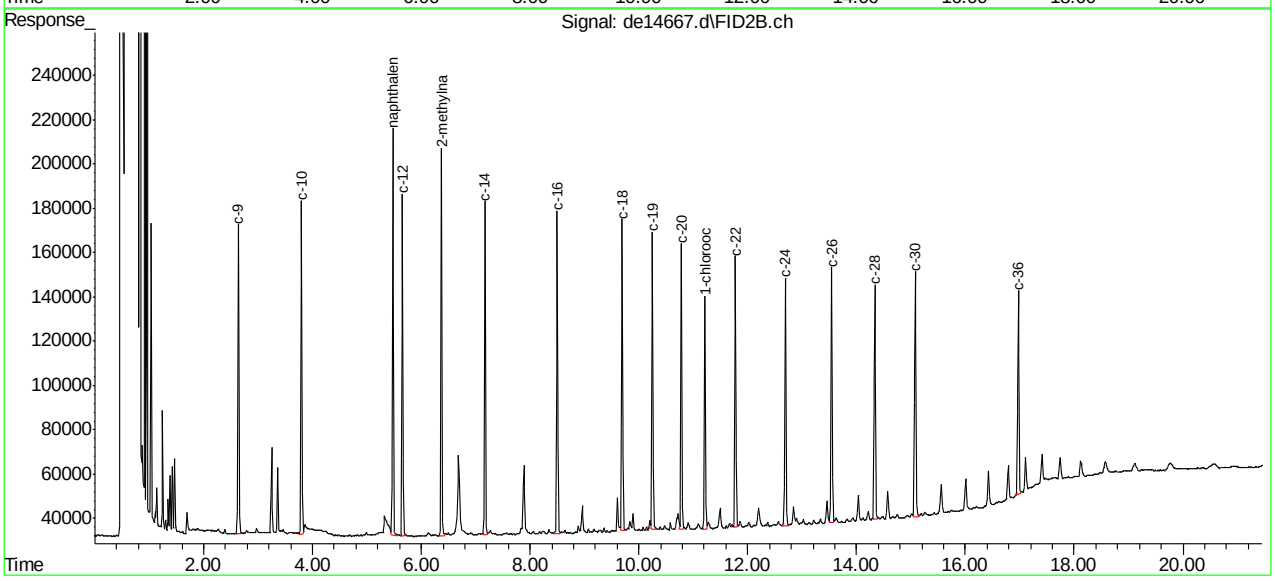
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14667.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:44 pm
Operator : thomasa
Sample : ic815-2 (Sig #1); cc815-2 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 104 Sample Multiplier: 1

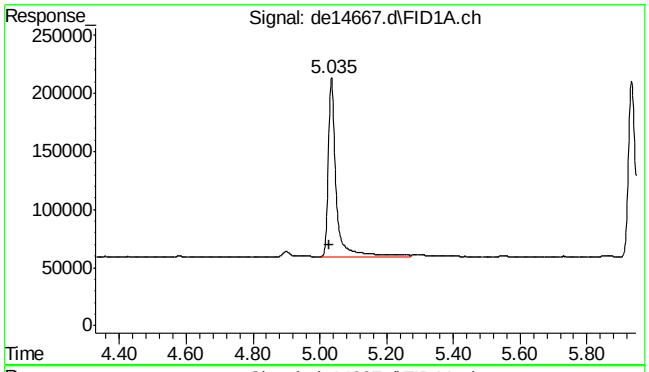
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:51:43 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:50:15 2016
Response via : Initial Calibration
Integrator: RTE

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



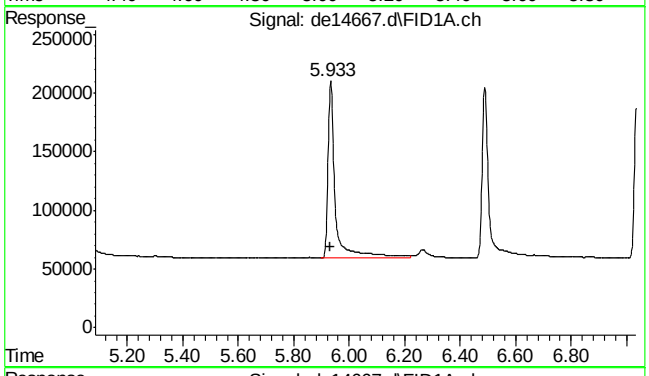


SGS ACCUTEST MC46783



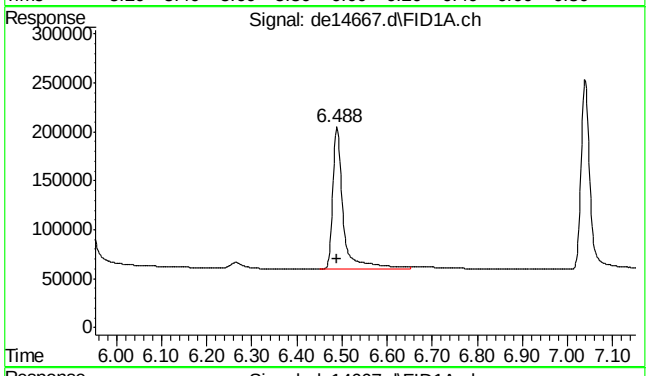
#2 naphthalene

R.T.: 5.035 min
Delta R.T.: 0.005 min
Response: 264011
Conc: 2.43 µg/ml



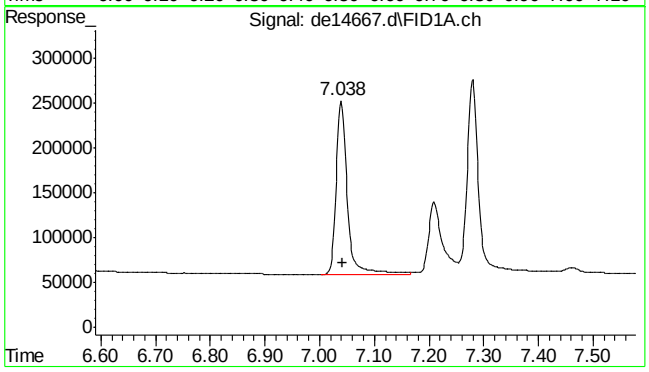
#3 2-methylnaphthalene

R.T.: 5.933 min
Delta R.T.: 0.002 min
Response: 279926
Conc: 2.62 µg/ml



#4 2-fluorobiphenyl

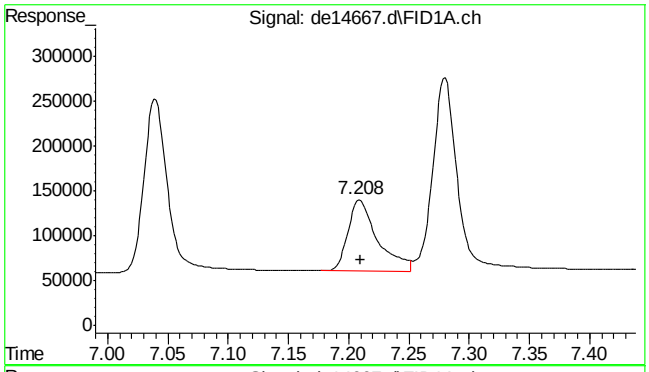
R.T.: 6.488 min
Delta R.T.: 0.000 min
Response: 243434
Conc: 2.50 µg/ml



#5 acenaphthylene

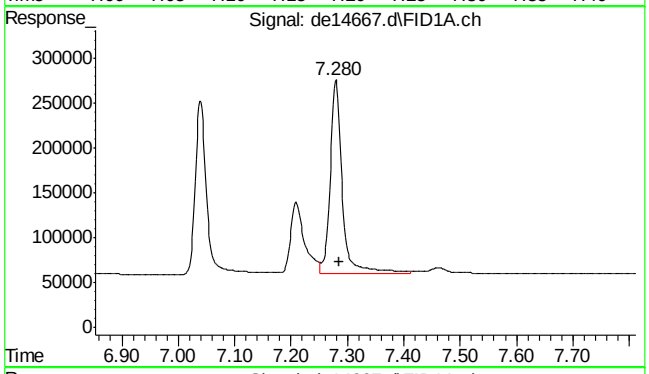
R.T.: 7.038 min
Delta R.T.: -0.003 min
Response: 273879
Conc: 2.55 µg/ml

SGS ACCUTEST MC46783



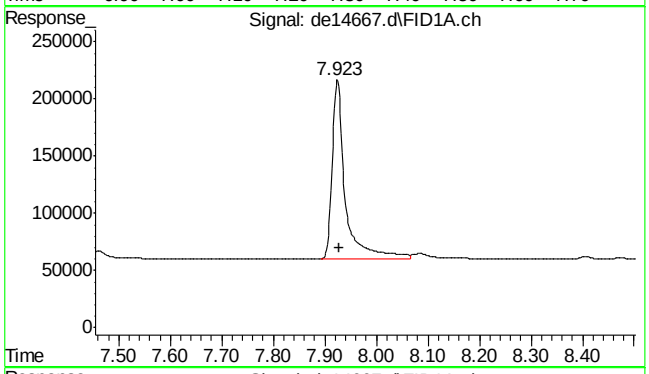
#6 2-bromonaphthalene

R.T.: 7.208 min
Delta R.T.: -0.002 min
Response: 135704
Conc: 2.11 µg/ml



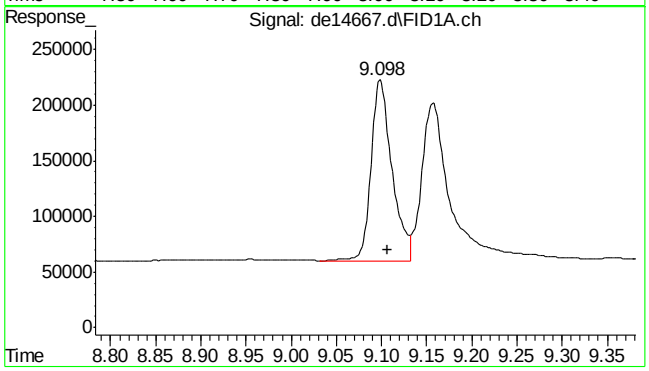
#7 acenaphthene

R.T.: 7.280 min
Delta R.T.: -0.005 min
Response: 317977
Conc: 2.78 µg/ml



#8 fluorene

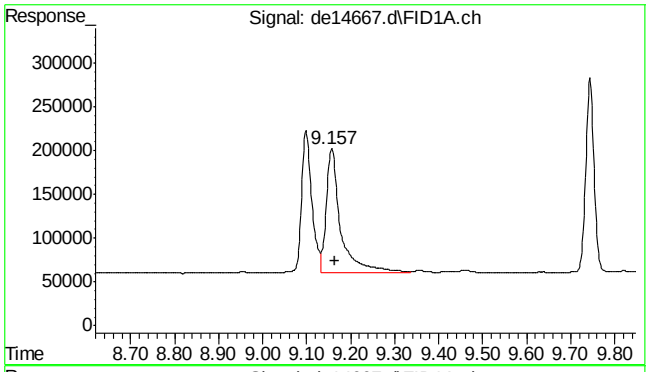
R.T.: 7.923 min
Delta R.T.: -0.005 min
Response: 281653
Conc: 2.60 µg/ml



#9 phenanthrene

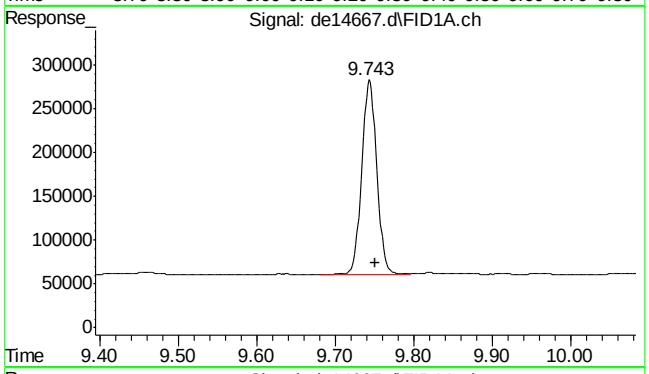
R.T.: 9.098 min
Delta R.T.: -0.008 min
Response: 261923
Conc: 2.44 µg/ml

SGS ACCUTEST MC46783



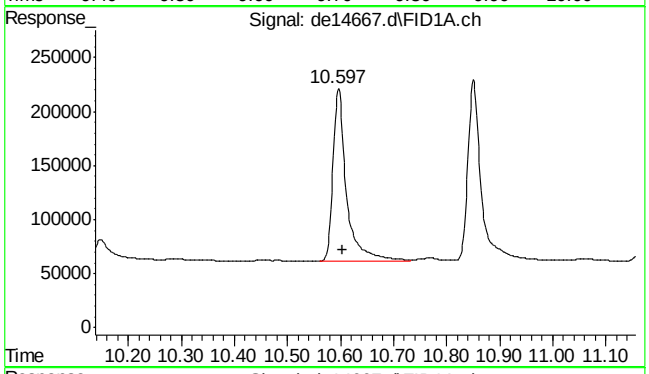
#10 anthracene

R.T.: 9.157 min
Delta R.T.: -0.007 min
Response: 321096
Conc: 2.99 µg/ml



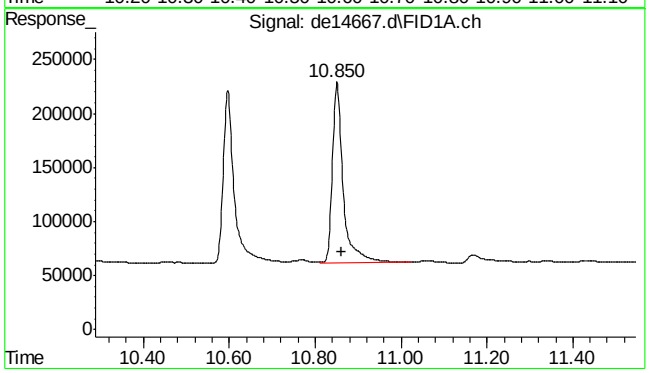
#11 o-terphenyl

R.T.: 9.743 min
Delta R.T.: -0.008 min
Response: 296252
Conc: 2.67 µg/ml



#12 fluoranthene

R.T.: 10.597 min
Delta R.T.: -0.008 min
Response: 285254
Conc: 2.65 µg/ml



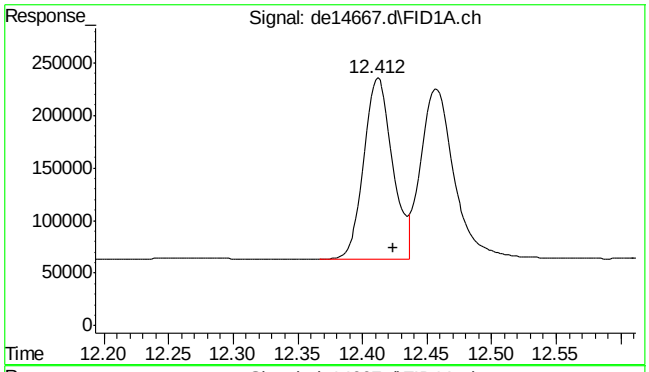
#13 pyrene

R.T.: 10.850 min
Delta R.T.: -0.012 min
Response: 292246
Conc: 2.66 µg/ml

7.5.2

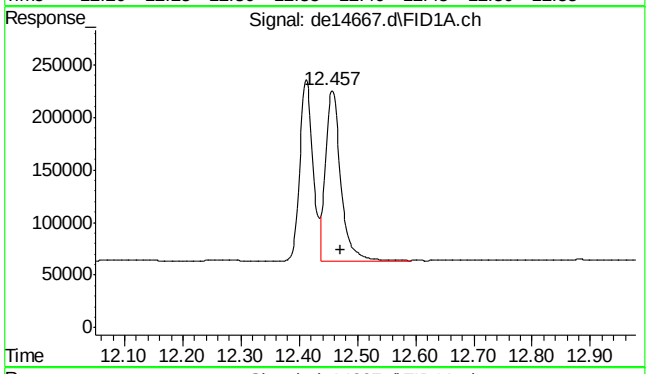
7

SGS ACCUTEST MC46783



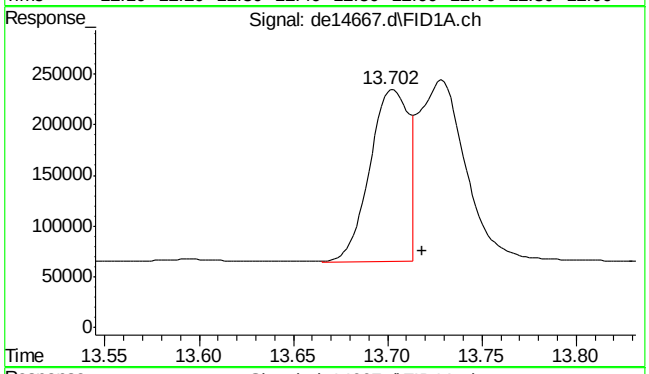
#14 benzo(a)anthracene

R.T.: 12.412 min
Delta R.T.: -0.012 min
Response: 269926
Conc: 2.62 µg/ml



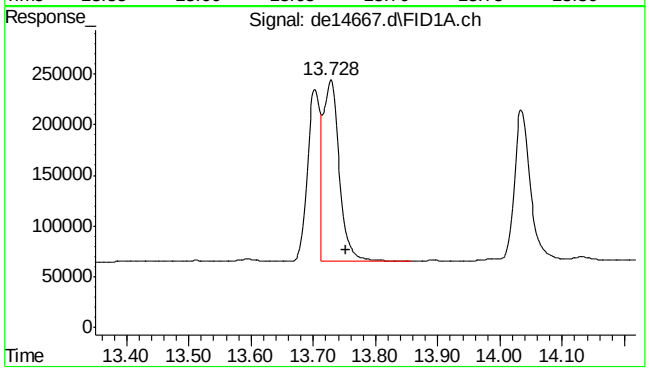
#15 chrysene

R.T.: 12.457 min
Delta R.T.: -0.015 min
Response: 290892
Conc: 2.72 µg/ml



#16 benzo(B)fluoranthene

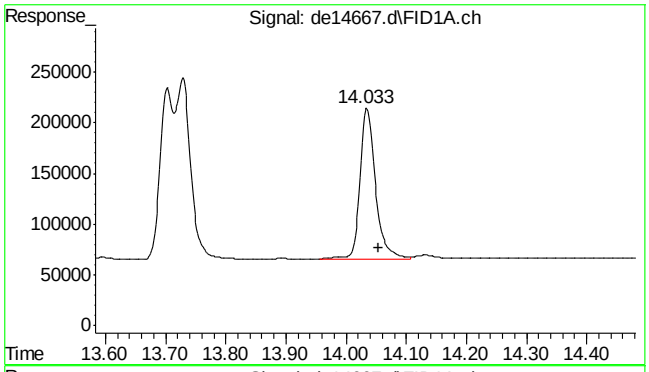
R.T.: 13.702 min
Delta R.T.: -0.017 min
Response: 248683
Conc: 2.42 µg/ml m



#17 benzo(k)fluoranthene

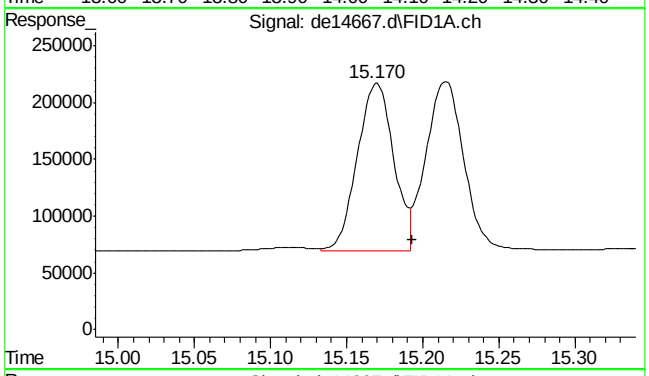
R.T.: 13.728 min
Delta R.T.: -0.025 min
Response: 320118
Conc: 3.04 µg/ml

SGS ACCUTEST MC46783



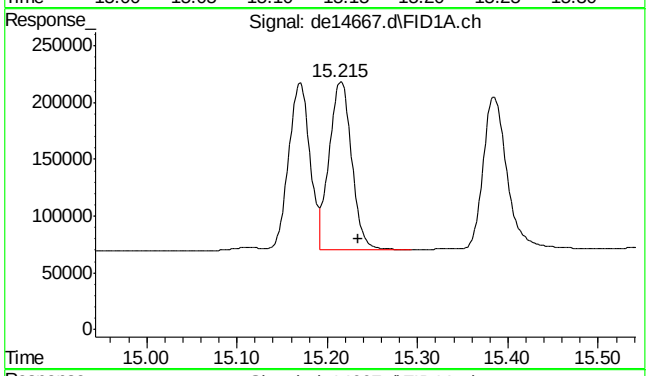
#18 benzo(a)pyrene

R.T.: 14.033 min
Delta R.T.: -0.020 min
Response: 266332
Conc: 2.67 µg/ml



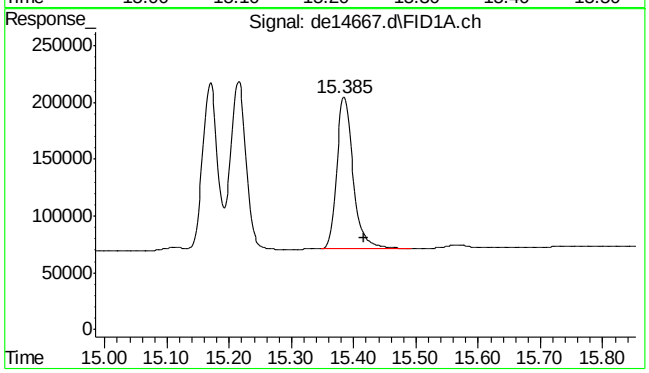
#19 indeno(1,2,3-cd)pyrene

R.T.: 15.170 min
Delta R.T.: -0.023 min
Response: 247469
Conc: 2.47 µg/ml m



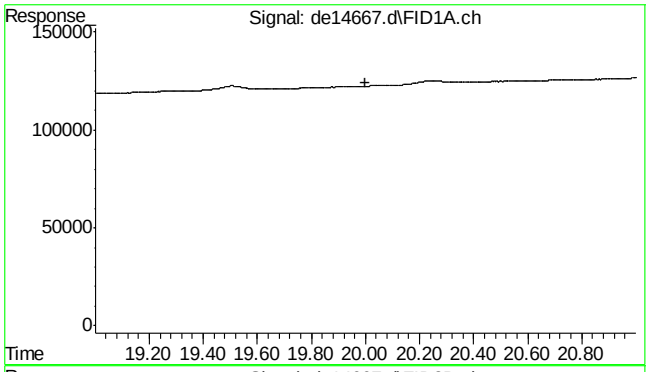
#20 dibenzo(ah)anthracene

R.T.: 15.215 min
Delta R.T.: -0.020 min
Response: 255274
Conc: 2.60 µg/ml



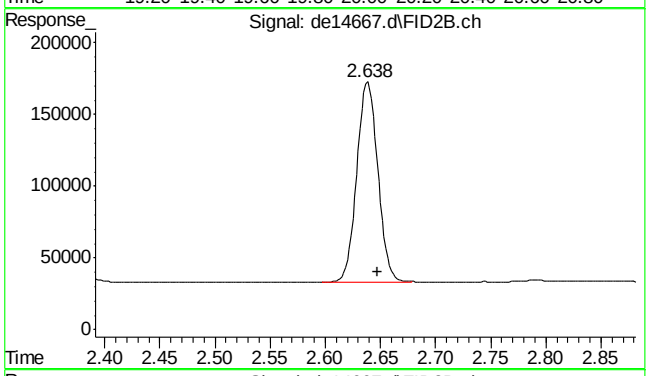
#21 benzo(ghi)perylene

R.T.: 15.385 min
Delta R.T.: -0.032 min
Response: 246509
Conc: 2.51 µg/ml



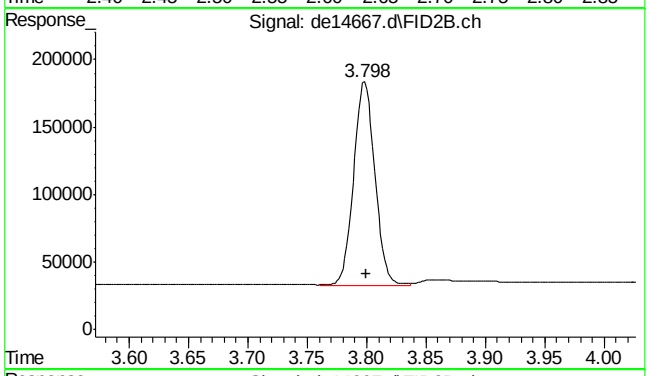
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



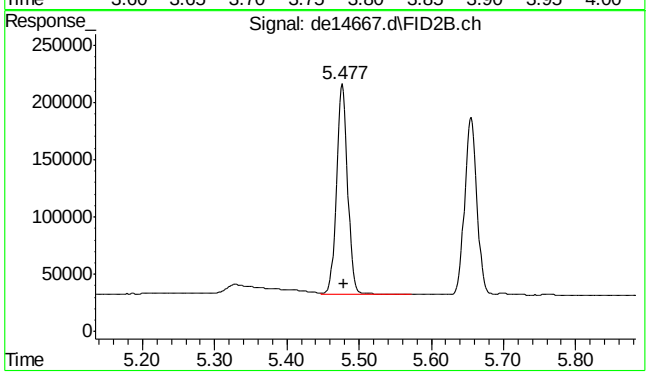
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 185709
Conc: 2.33 µg/ml m



#26 c-10

R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 187715
Conc: 2.33 µg/ml m



#27 naphthalene #2

R.T.: 5.477 min
Delta R.T.: -0.002 min
Response: 200322
Conc: 2.42 µg/ml

7.5.2

7

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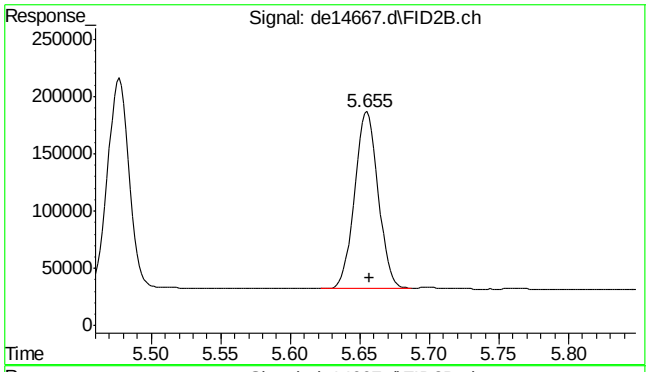
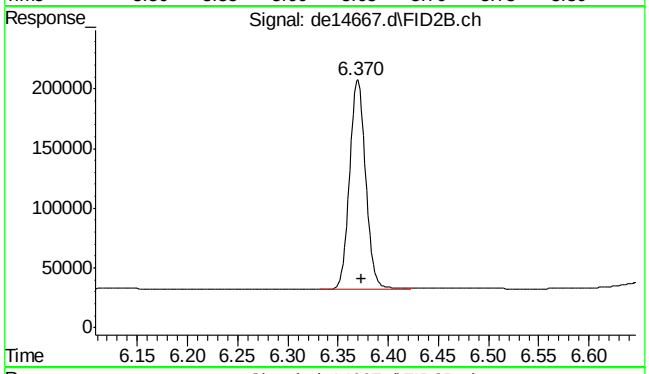


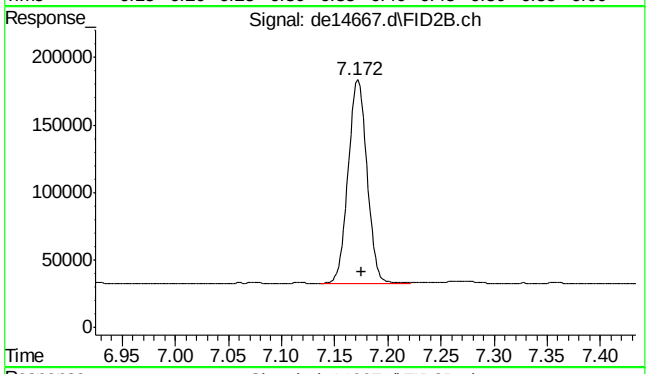
#28 c-12

R.T.: 5.655 min
Delta R.T.: -0.002 min
Response: 183928
Conc: 2.31 µg/ml



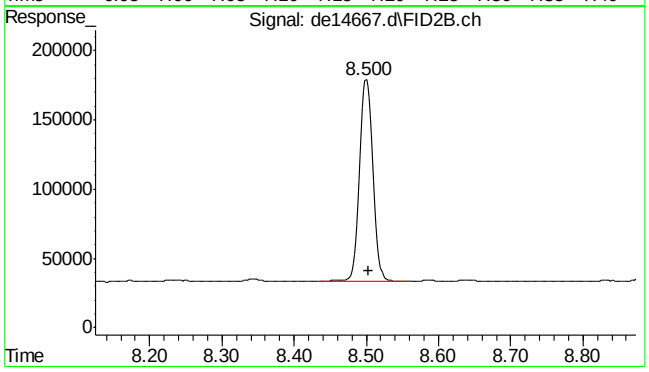
#29 2-methylnaphthalene #2

R.T.: 6.370 min
Delta R.T.: -0.003 min
Response: 195523
Conc: 2.37 µg/ml



#30 c-14

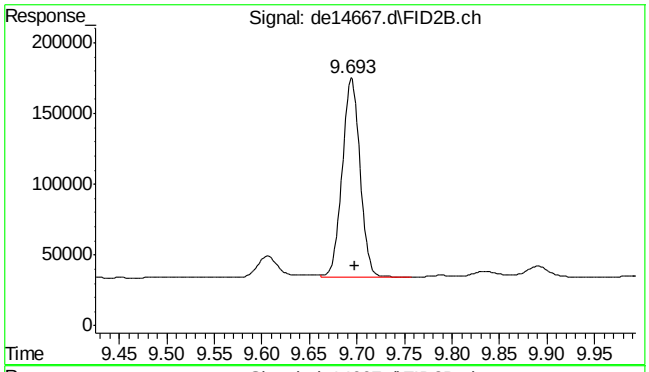
R.T.: 7.172 min
Delta R.T.: -0.003 min
Response: 186756
Conc: 2.35 µg/ml



#31 c-16

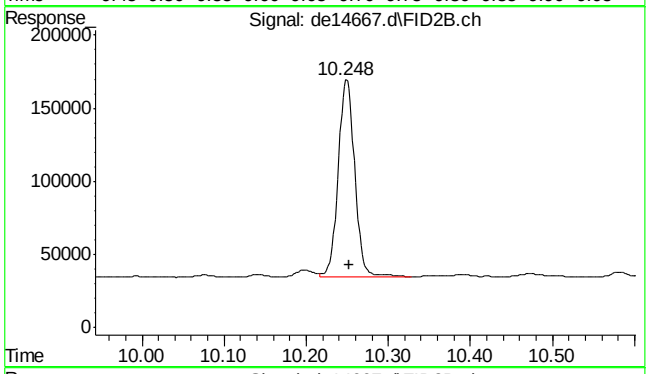
R.T.: 8.500 min
Delta R.T.: -0.003 min
Response: 188090
Conc: 2.34 µg/ml

SGS ACCUTEST MC46783



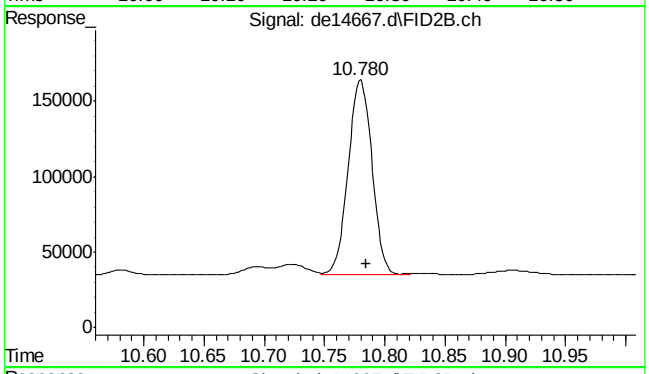
#32 c-18

R.T.: 9.693 min
Delta R.T.: -0.005 min
Response: 183338
Conc: 2.32 µg/ml



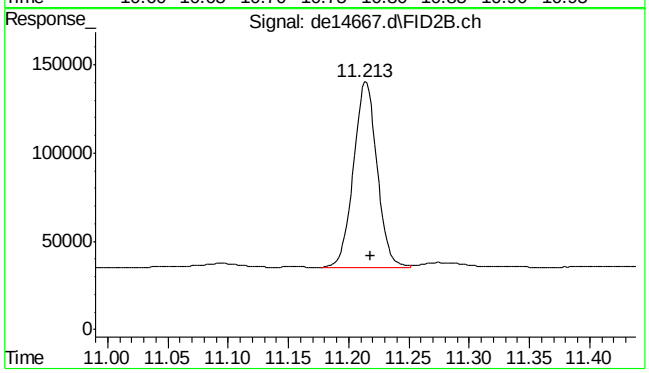
#33 c-19

R.T.: 10.248 min
Delta R.T.: -0.005 min
Response: 187087
Conc: 2.40 µg/ml



#34 c-20

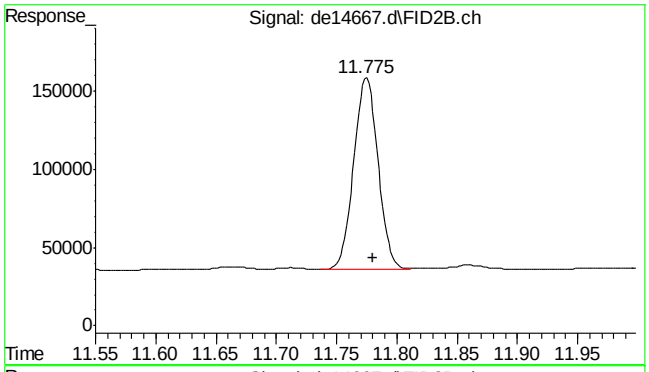
R.T.: 10.780 min
Delta R.T.: -0.005 min
Response: 178236
Conc: 2.37 µg/ml



#35 1-chlorooctadecane

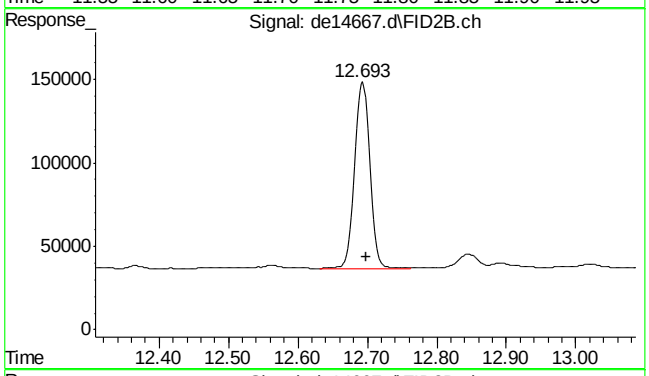
R.T.: 11.213 min
Delta R.T.: -0.005 min
Response: 143160
Conc: 2.44 µg/ml

SGS ACCUTEST MC46783



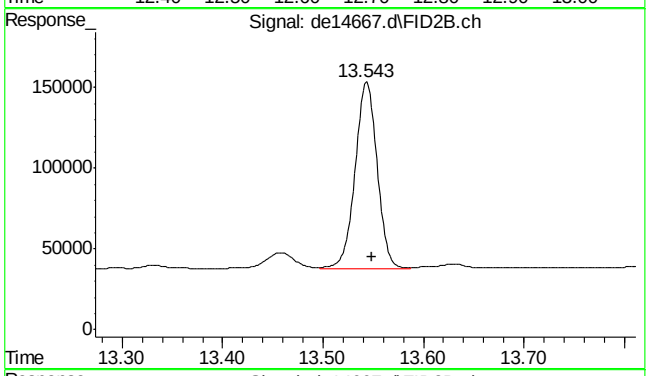
#36 c-22

R.T.: 11.775 min
Delta R.T.: -0.005 min
Response: 172417
Conc: 2.28 µg/ml



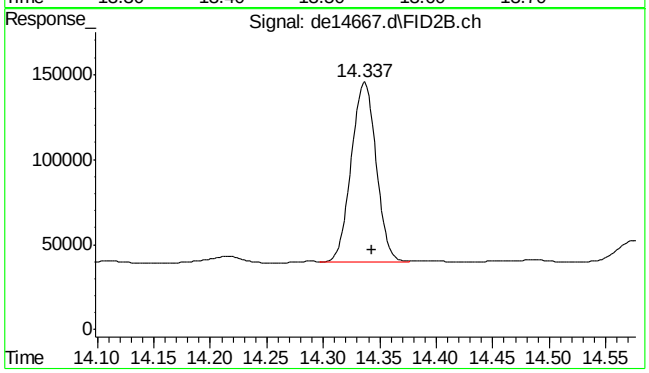
#37 c-24

R.T.: 12.693 min
Delta R.T.: -0.005 min
Response: 167132
Conc: 2.31 µg/ml



#38 c-26

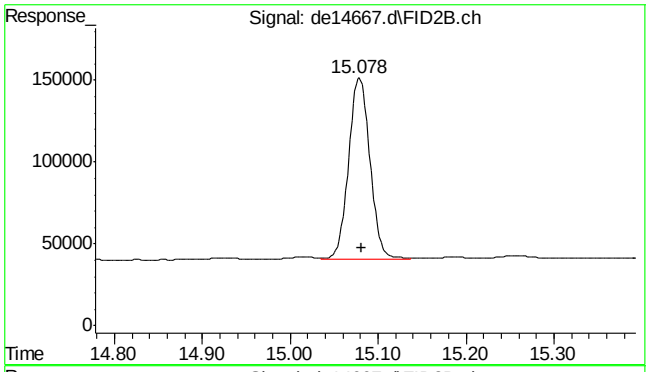
R.T.: 13.543 min
Delta R.T.: -0.005 min
Response: 174403
Conc: 2.33 µg/ml



#39 c-28

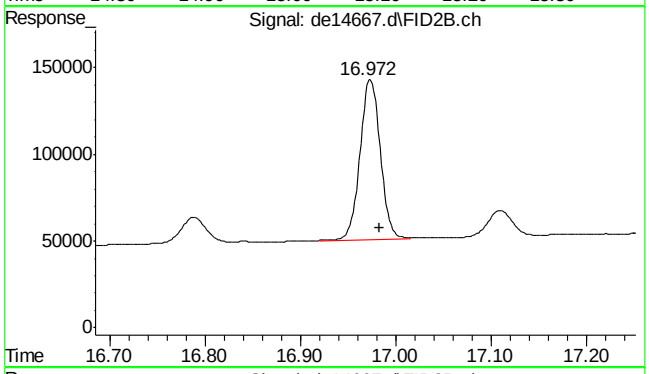
R.T.: 14.337 min
Delta R.T.: -0.007 min
Response: 160693
Conc: 2.23 µg/ml

SGS ACCUTEST MC46783



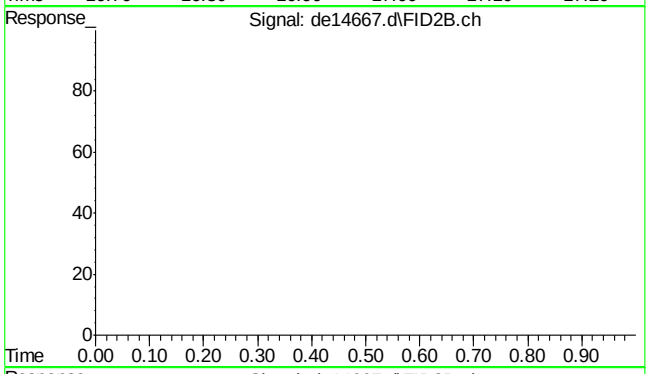
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 187403
Conc: 2.37 µg/ml m



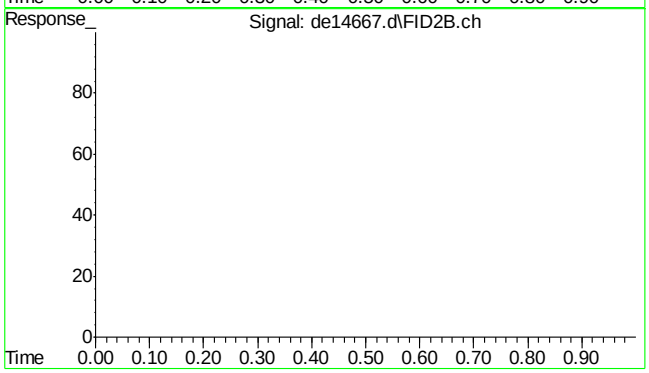
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 136856
Conc: 2.09 µg/ml m



#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



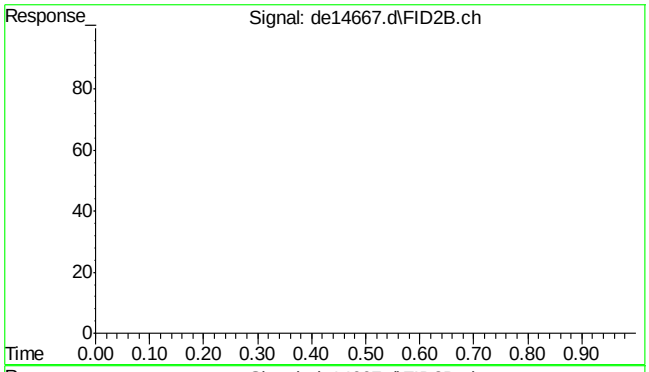
#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

7.5.2

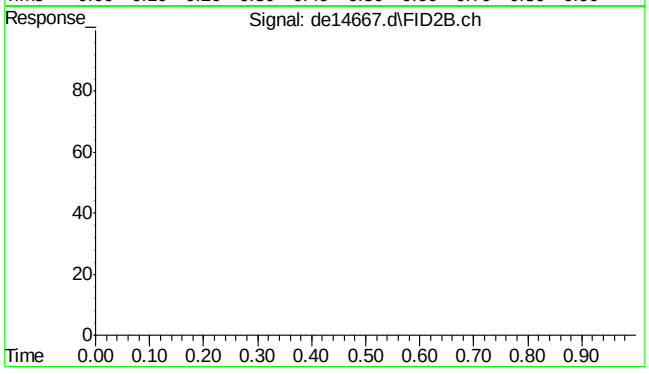
7

SGS ACCUTEST MC46783



#44 bht

```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```



#45 bht

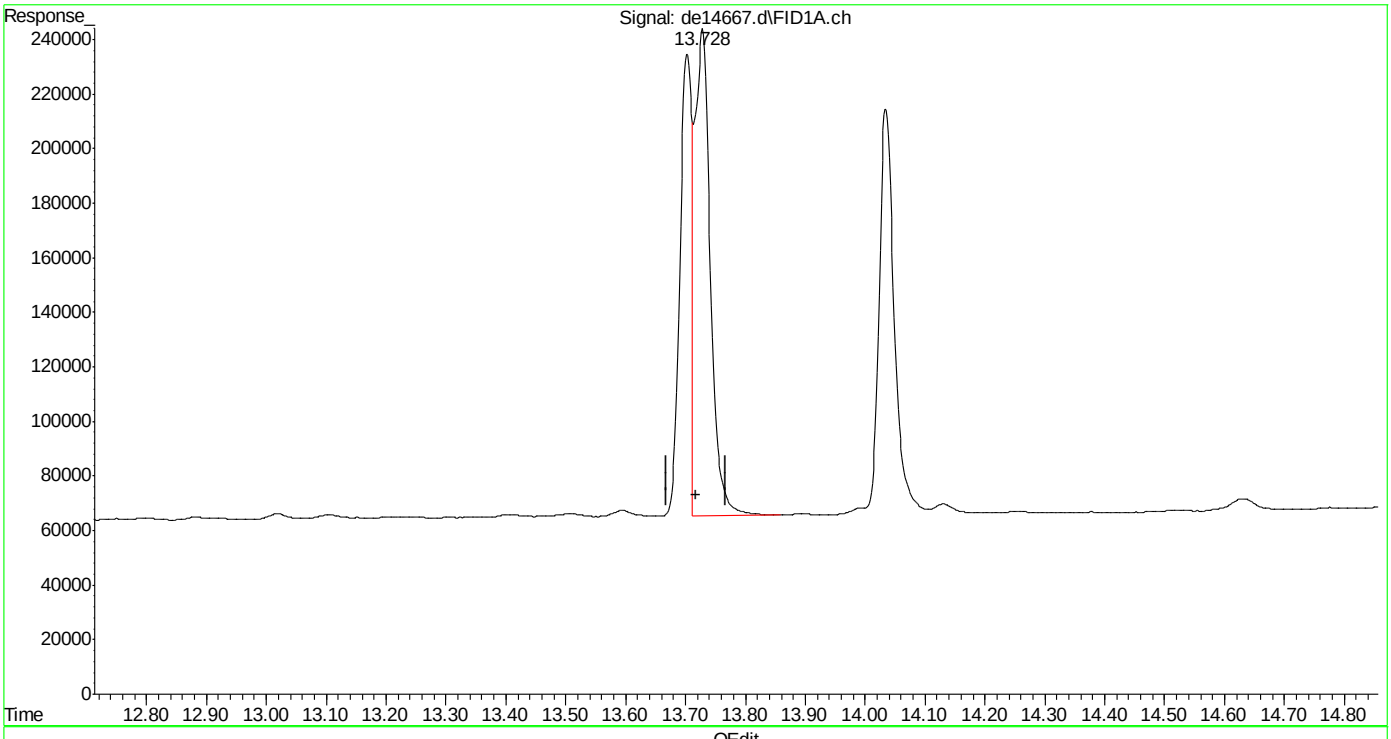
```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14667.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:44 pm
Operator : thomasa
Sample : cc815-2
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 104 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:50:25 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:50:15 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.728min 3.110 µg/ml
response 320118

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:50:40 2016

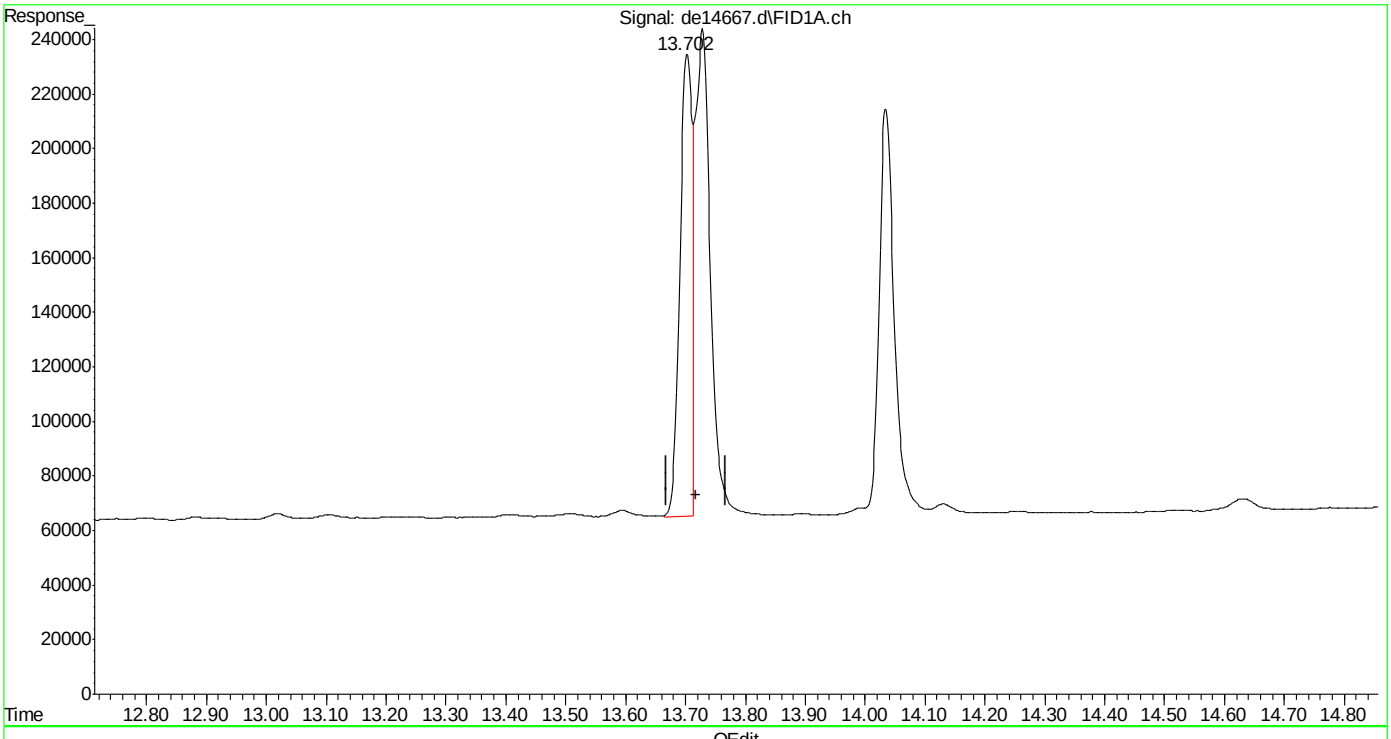
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14667.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:44 pm
Operator : thomasa
Sample : cc815-2
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 104 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:50:25 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:50:15 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.702min 2.416 µg/ml m
response 248683

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:50:51 2016

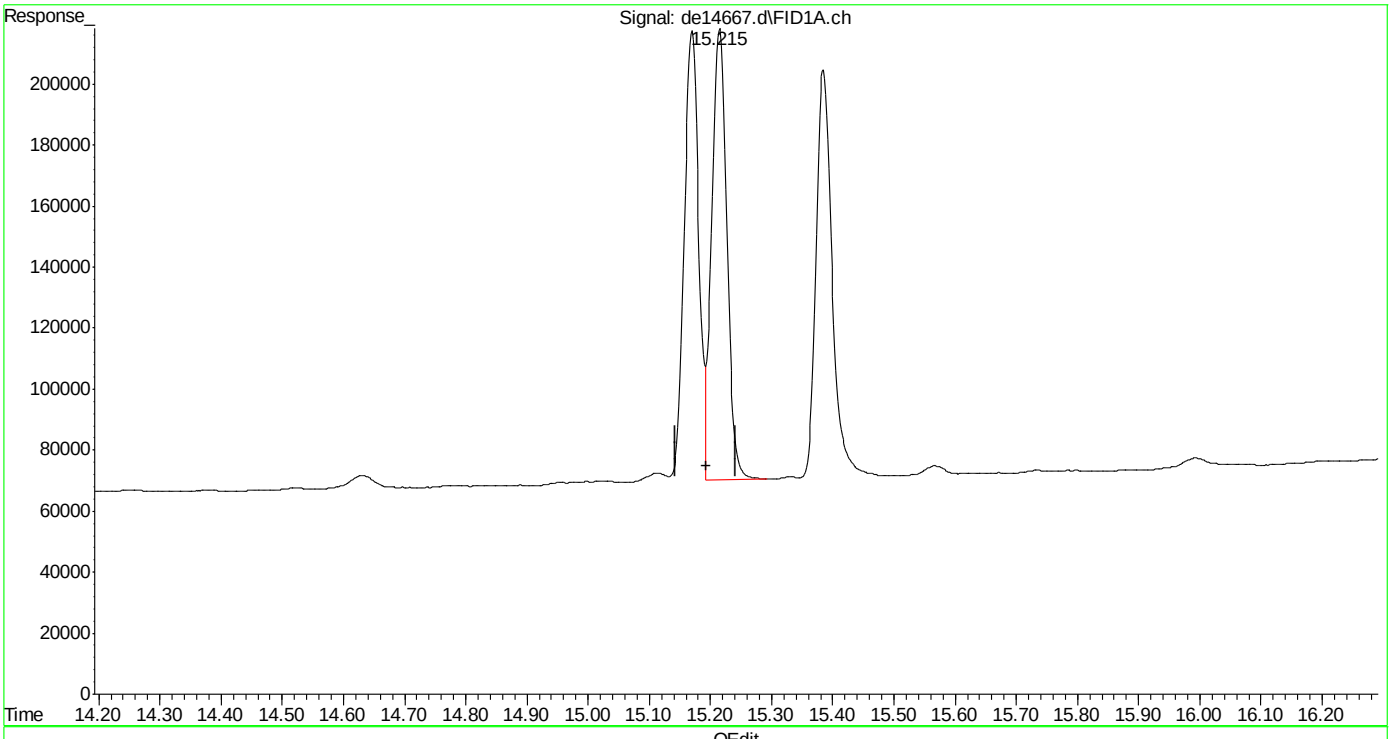
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14667.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:44 pm
Operator : thomasa
Sample : cc815-2
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 104 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:50:25 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:50:15 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.215min 2.546 µg/ml
response 255274

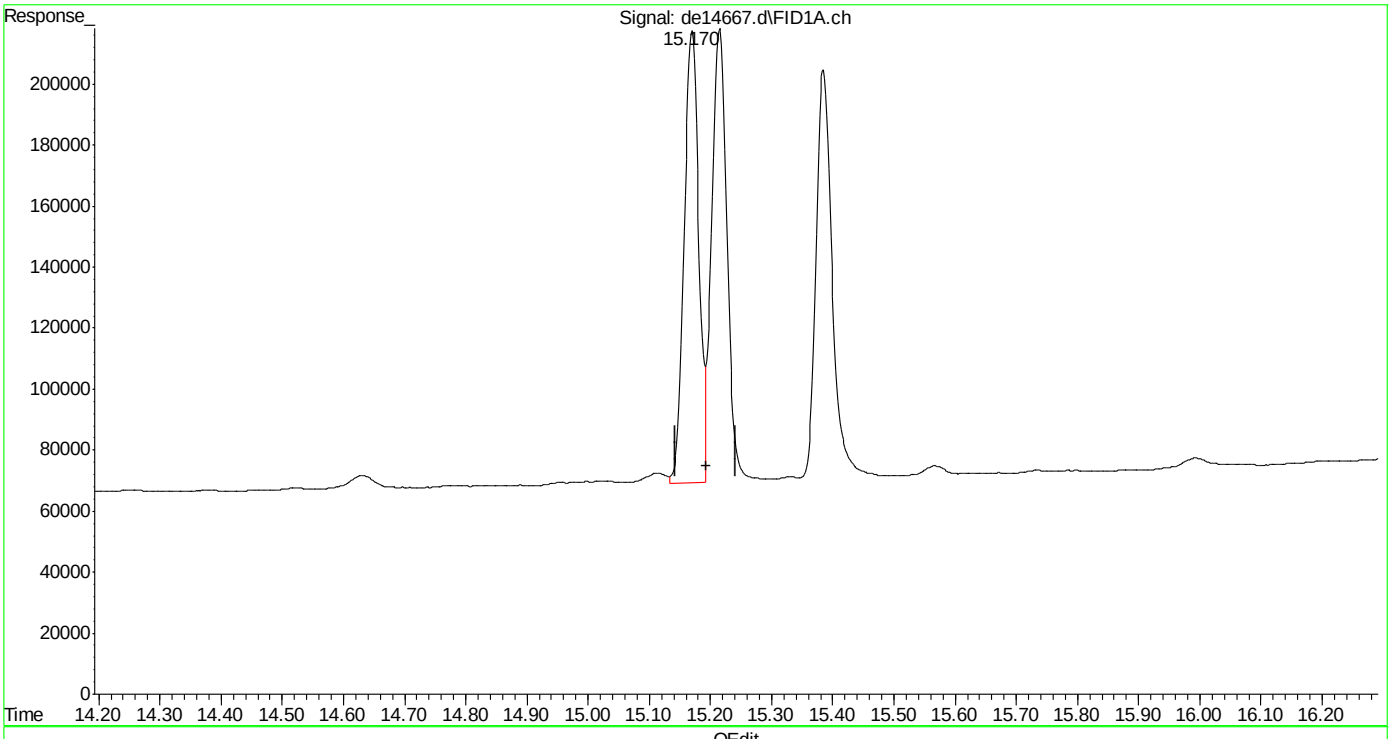
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:50:55 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14667.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:44 pm
Operator : thomasa
Sample : cc815-2
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 104 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:50:25 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:50:15 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.170min 2.468 µg/ml m
response 247469

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:51:03 2016

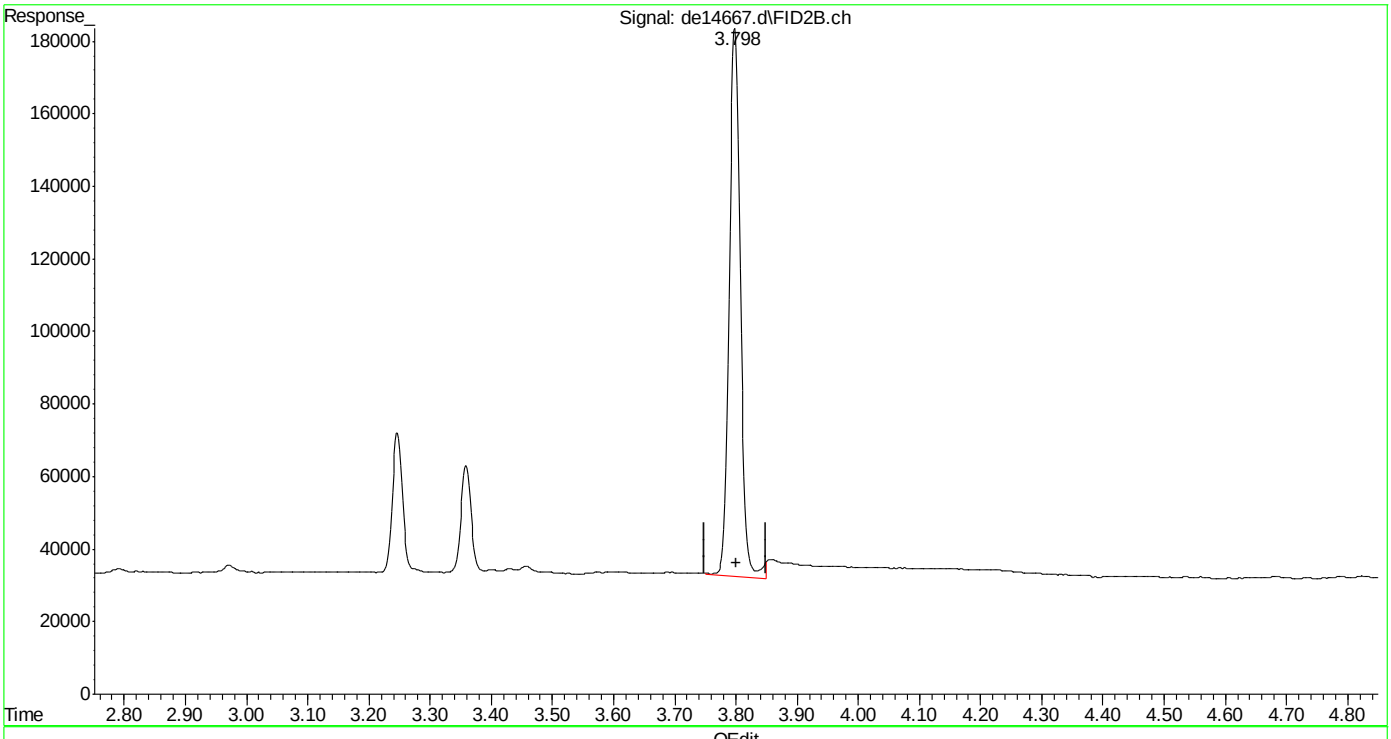
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14667.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:44 pm
Operator : thomasa
Sample : cc815-2
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 104 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:50:25 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:50:15 2016
Response via : Initial Calibration
Integrator: RTE

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



(26) c-10 (h)
3.800min 2.392 µg/ml
response 192627

(+) = Expected Retention Time

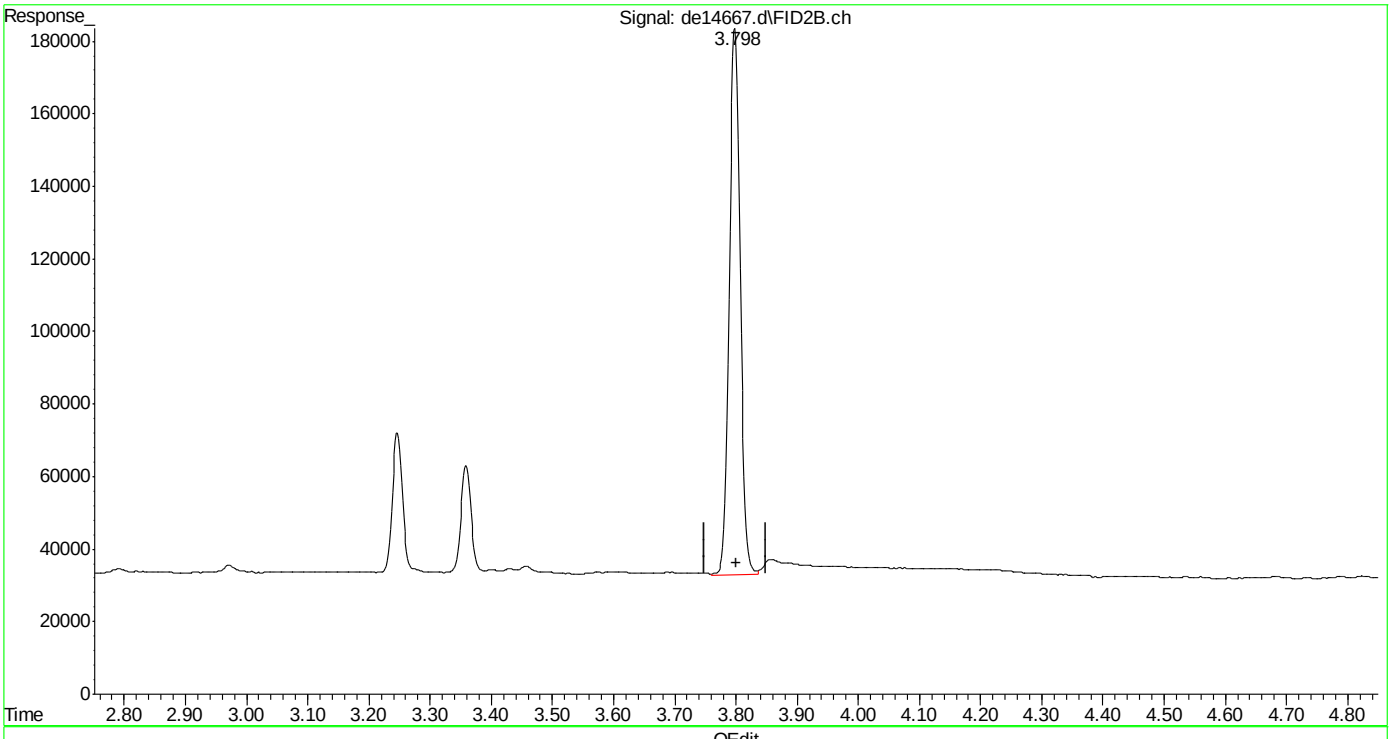
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14667.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:44 pm
Operator : thomasa
Sample : cc815-2
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 104 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:50:25 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:50:15 2016
Response via : Initial Calibration
Integrator: RTE

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



(26) c-10 (h)
3.800min 2.331 µg/ml m
response 187715

(+) = Expected Retention Time

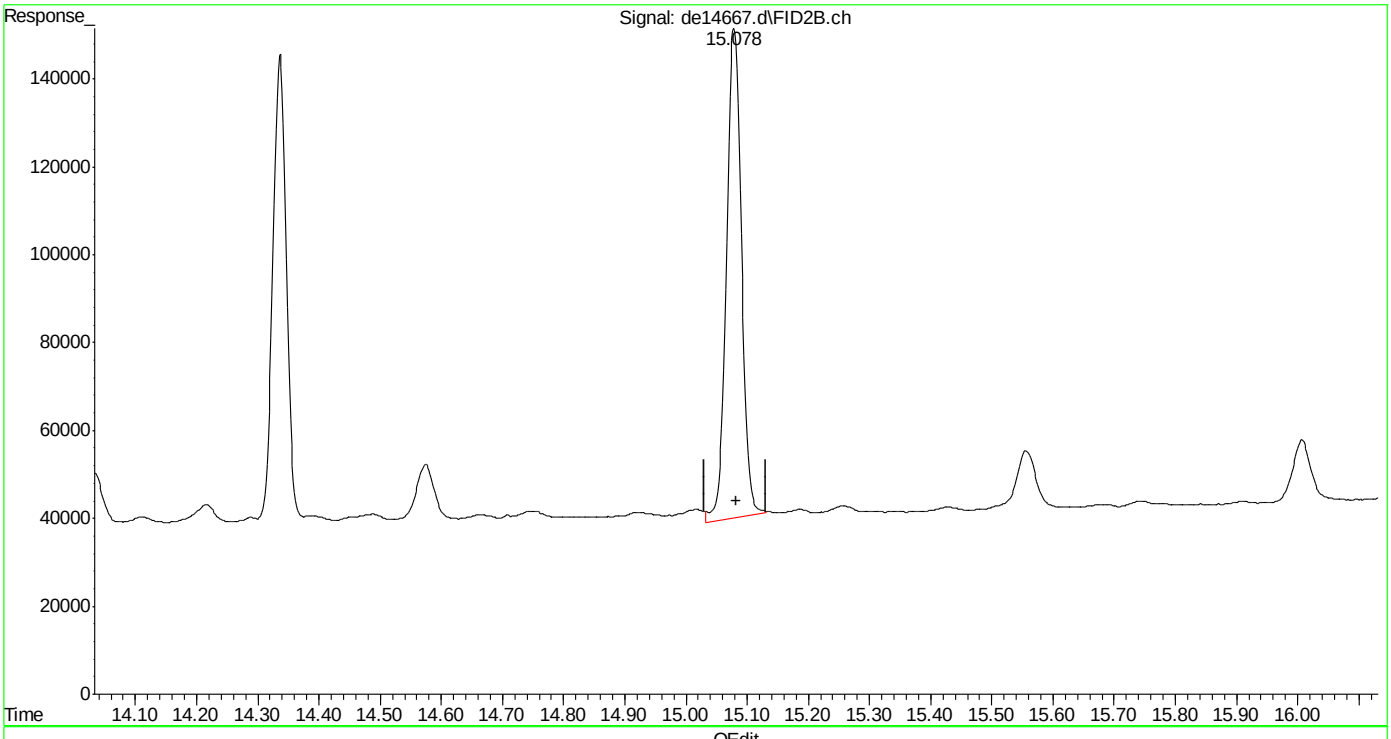
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14667.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:44 pm
Operator : thomasa
Sample : cc815-2
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 104 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:50:25 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:50:15 2016
Response via : Initial Calibration
Integrator: RTE

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



(40) c-30 (h)
15.082min 2.413 µg/ml
response 190915

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:51:27 2016

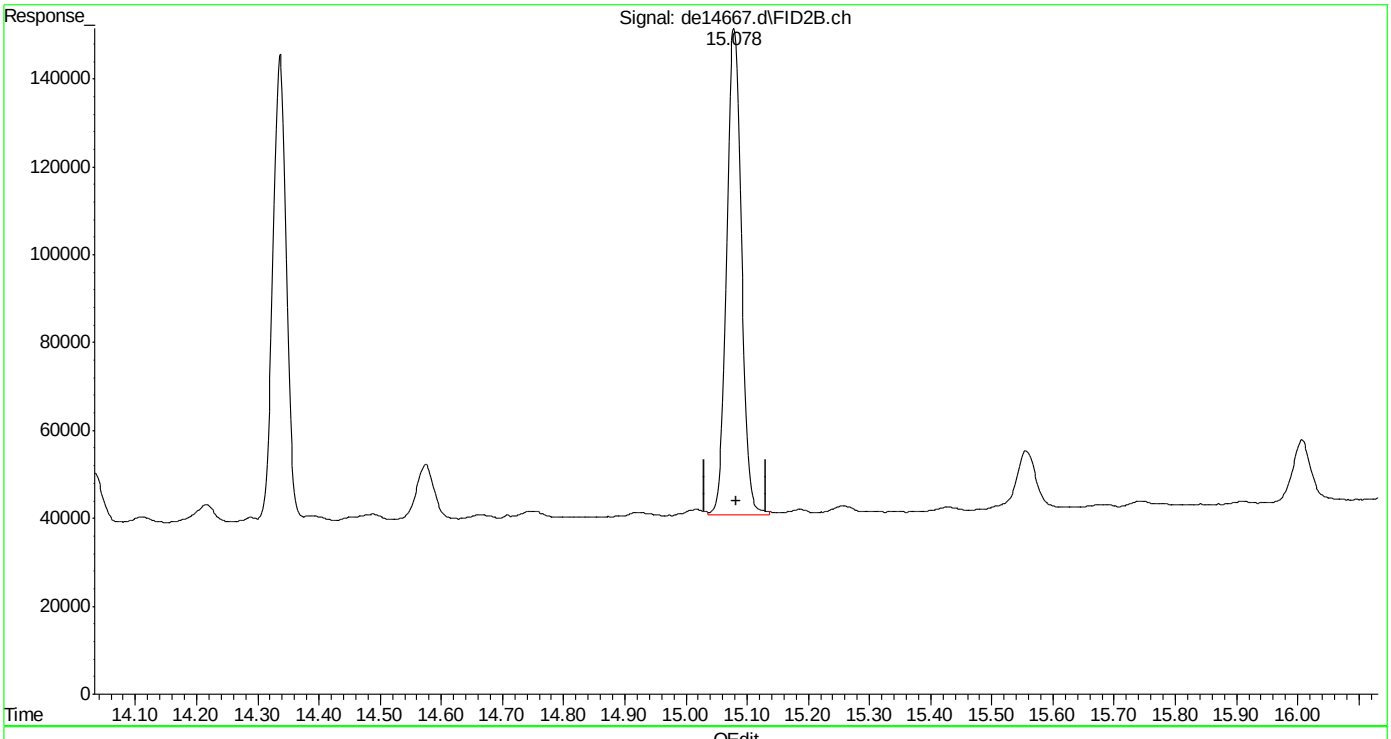
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14667.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:44 pm
Operator : thomasa
Sample : cc815-2
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 104 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:50:25 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:50:15 2016
Response via : Initial Calibration
Integrator: RTE

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



(40) c-30 (h)
15.082min 2.369 µg/ml m
response 187403

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:51:33 2016

SGS ACCUTEST MC46783

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri
06/23/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14668.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:12 pm
Operator : thomasa
Sample : ic815-5 (Sig #1); cc815-5 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 106 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:53:48 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:51:49 2016
Response via : Initial Calibration
Integrator: RTE

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) s 2-fluorobiphenyl	6.487	577215	5.672 µg/ml
Spiked Amount 20.000 Range 8 - 28	Recovery = 28.36%#		
6) s 2-bromonaphthalene	7.207	337863	5.188 µg/ml
Spiked Amount 20.000 Range 8 - 28	Recovery = 25.94%		
11) s o-terphenyl	9.743	657004	5.608 µg/ml
Spiked Amount 20.000 Range 8 - 28	Recovery = 28.04%#		
35) s 1-chlorooctadecane	11.213	332474	5.506 µg/ml
Spiked Amount 20.000 Range 8 - 28	Recovery = 27.53%		
Target Compounds			
2) naphthalene	5.032	613912	5.441 µg/ml
3) 2-methylnaphthalene	5.932	647160	5.767 µg/ml
5) acenaphthylene	7.038	631728	5.609 µg/ml
7) acenaphthene	7.280	690779	5.650 µg/ml
8) fluorene	7.922	642877	5.655 µg/ml
9) phenanthrene	9.098	606352	5.439 µg/ml
10) anthracene	9.155	684741	5.892 µg/ml
12) fluoranthene	10.597	635011	5.600 µg/ml
13) pyrene	10.852	645412	5.571 µg/ml
14) benzo(a)anthracene	12.410	589300	5.443 µg/ml
15) chrysene	12.455	623706	5.494 µg/ml
16) benzo(B)fluoranthene	13.702	584753	5.486 µg/mlm
17) benzo(k)fluoranthene	13.728f	612352	5.358 µg/ml
18) benzo(a)pyrene	14.035	570345	5.397 µg/ml
19) indeno(1,2,3-cd)pyrene	15.168	547262	5.232 µg/mlm
20) dibenzo(ah)anthracene	15.215	564801	5.475 µg/ml
21) benzo(ghi)perylene	15.388f	541223	5.273 µg/ml
25) h c-9	2.647	436956	5.261 µg/mlm
26) h c-10	3.800	446232	5.321 µg/ml
27) naphthalene #2	5.475	462504	5.433 µg/ml
28) c-12	5.655	432854	5.230 µg/ml
29) 2-methylnaphthalene #2	6.368	462342	5.483 µg/ml
30) c-14	7.172	433815	5.226 µg/ml
31) c-16	8.500	435918	5.199 µg/ml
32) c-18	9.693	428513	5.216 µg/ml
33) c-19	10.248	421112	5.143 µg/ml
34) c-20	10.780	414796	5.276 µg/ml
36) c-22	11.775	410716	5.245 µg/ml
37) c-24	12.693	382937	5.099 µg/ml
38) c-26	13.543	406080	5.213 µg/ml

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14668.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:12 pm
Operator : thomasa
Sample : ic815-5 (Sig #1); cc815-5 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 106 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:53:48 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:51:49 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc Units
39)	c-28	14.337	391589	5.279 µg/ml
40) h	c-30	15.082	408558	4.936 µg/ml
41) h	c-36	16.983	339764	5.127 µg/mlm

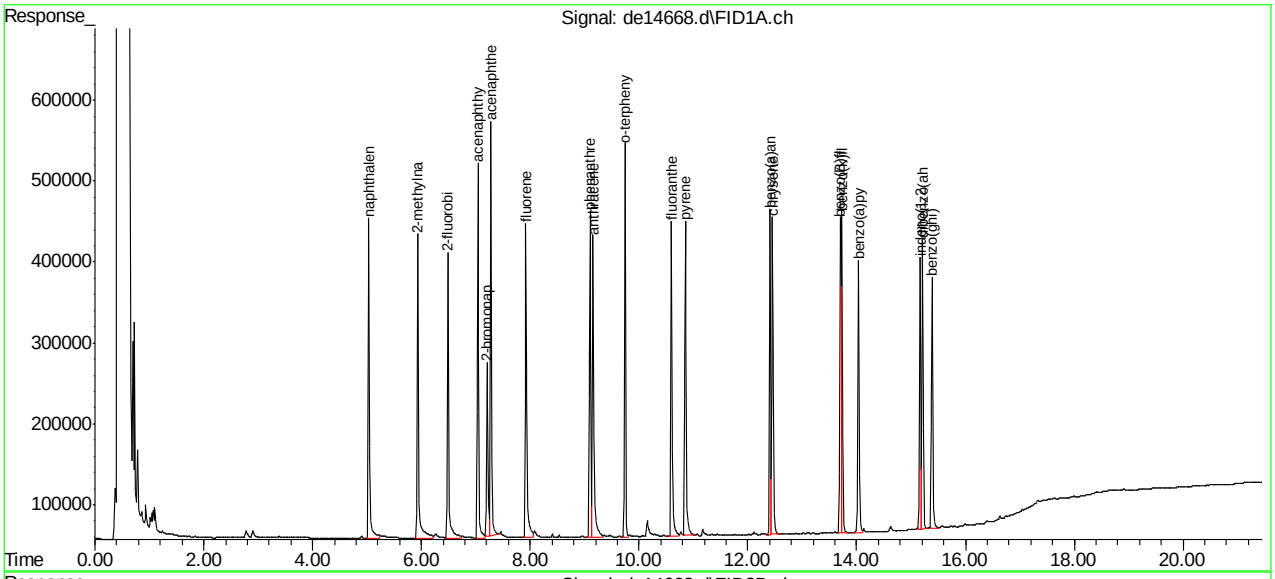
(f)=RT Delta > 1/2 Window (m)=manual int.

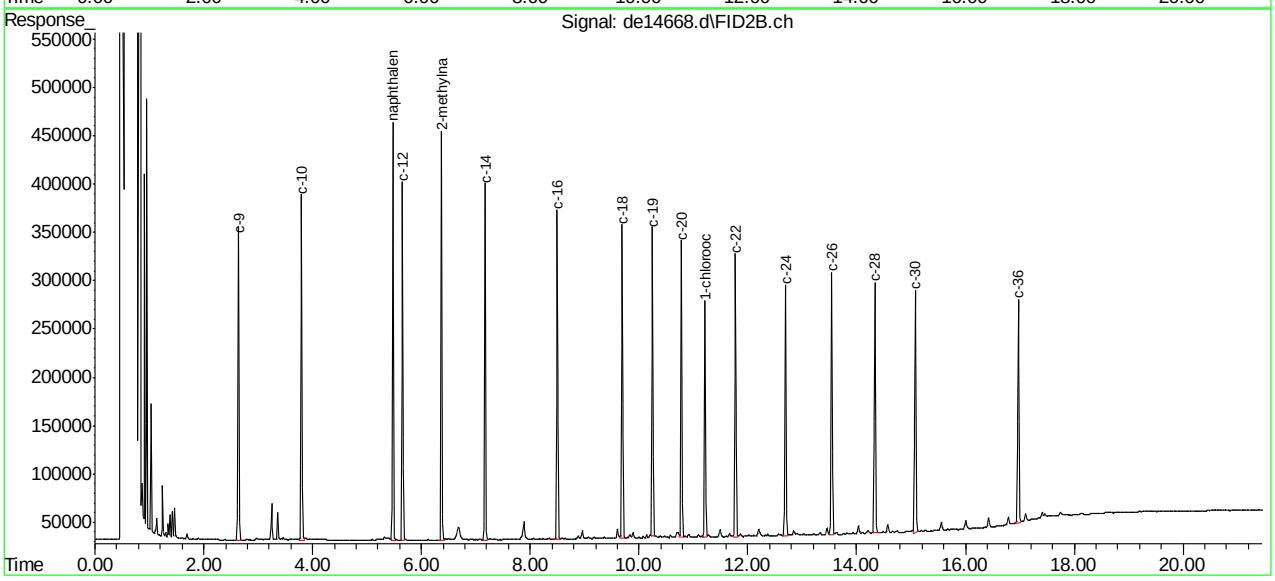
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14668.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:12 pm
Operator : thomasa
Sample : ic815-5 (Sig #1); cc815-5 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 106 Sample Multiplier: 1

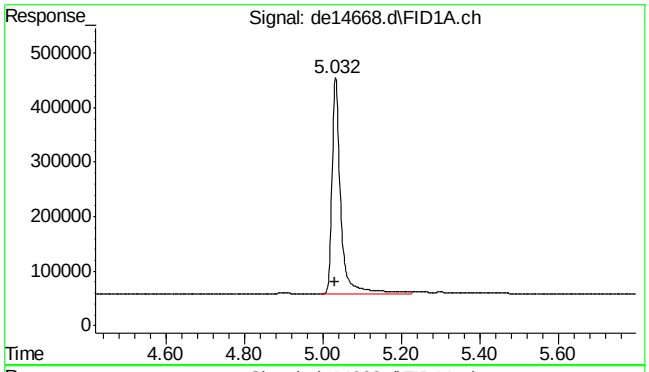
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:53:48 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:51:49 2016
Response via : Initial Calibration
Integrator: RTE

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



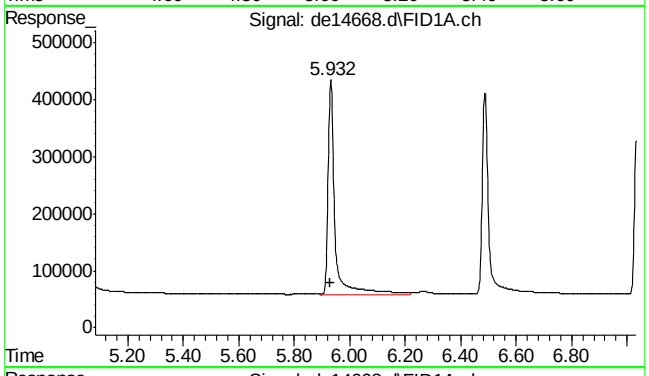


SGS ACCUTEST MC46783



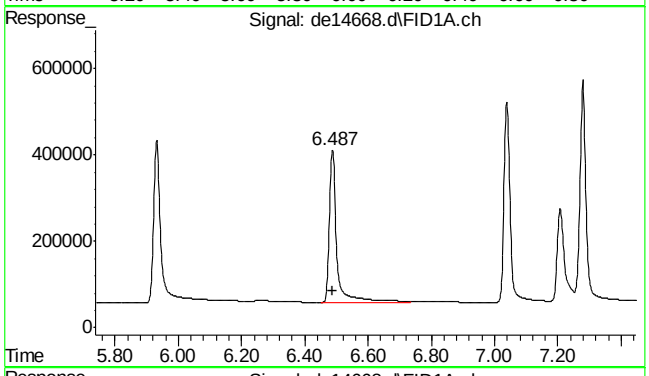
#2 naphthalene

R.T.: 5.032 min
Delta R.T.: 0.002 min
Response: 613912
Conc: 5.44 µg/ml



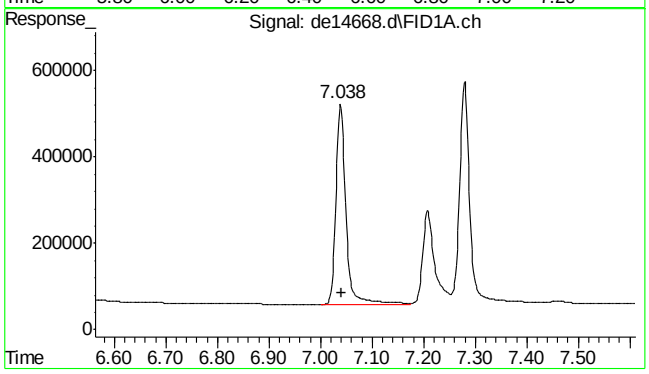
#3 2-methylnaphthalene

R.T.: 5.932 min
Delta R.T.: 0.000 min
Response: 647160
Conc: 5.77 µg/ml



#4 2-fluorobiphenyl

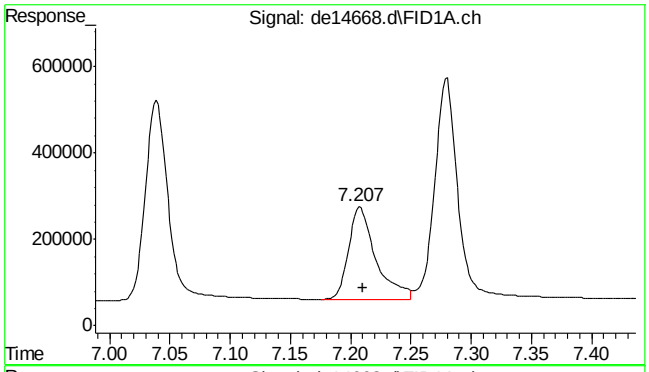
R.T.: 6.487 min
Delta R.T.: -0.002 min
Response: 577215
Conc: 5.67 µg/ml



#5 acenaphthylene

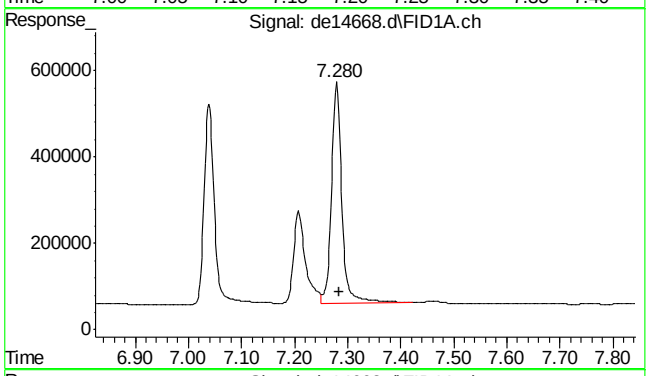
R.T.: 7.038 min
Delta R.T.: -0.003 min
Response: 631728
Conc: 5.61 µg/ml

SGS ACCUTEST MC46783



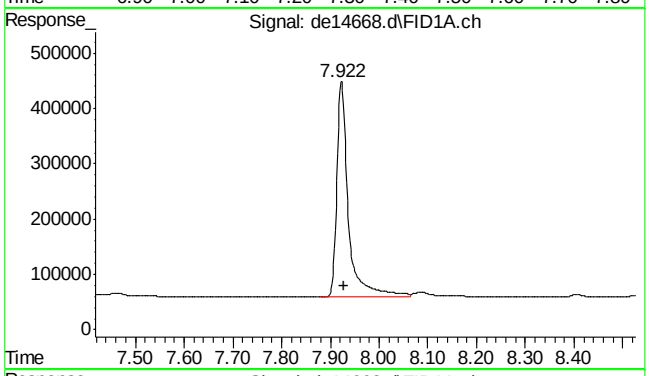
#6 2-bromonaphthalene

R.T.: 7.207 min
Delta R.T.: -0.003 min
Response: 337863
Conc: 5.19 µg/ml



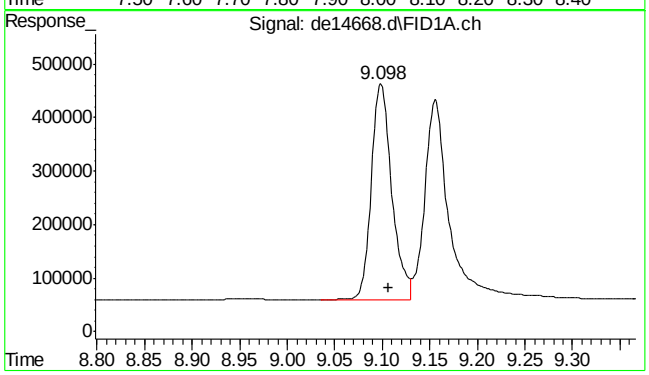
#7 acenaphthene

R.T.: 7.280 min
Delta R.T.: -0.005 min
Response: 690779
Conc: 5.65 µg/ml



#8 fluorene

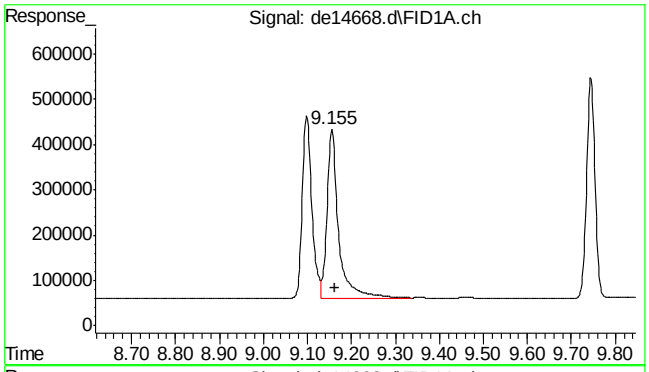
R.T.: 7.922 min
Delta R.T.: -0.007 min
Response: 642877
Conc: 5.66 µg/ml



#9 phenanthrene

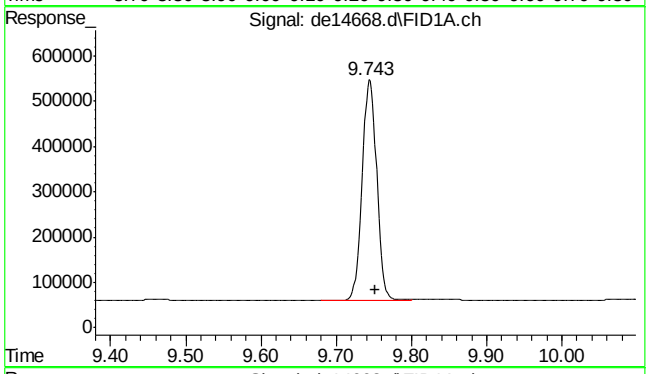
R.T.: 9.098 min
Delta R.T.: -0.008 min
Response: 606352
Conc: 5.44 µg/ml

SGS ACCUTEST MC46783



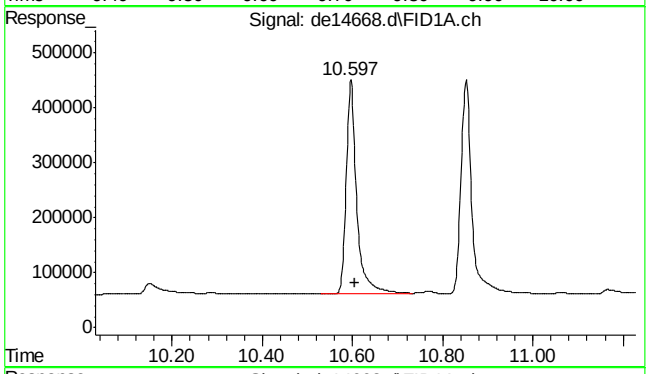
#10 anthracene

R.T.: 9.155 min
Delta R.T.: -0.008 min
Response: 684741
Conc: 5.89 µg/ml



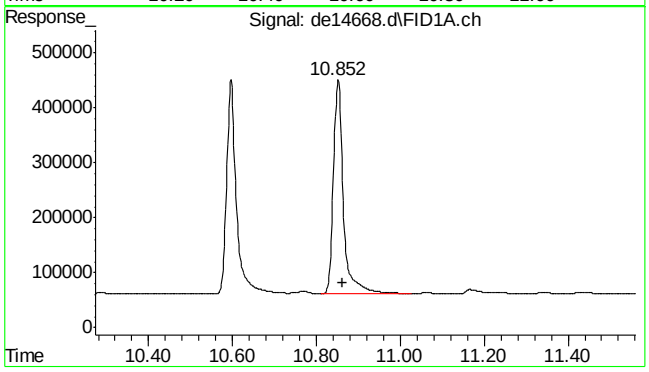
#11 o-terphenyl

R.T.: 9.743 min
Delta R.T.: -0.008 min
Response: 657004
Conc: 5.61 µg/ml



#12 fluoranthene

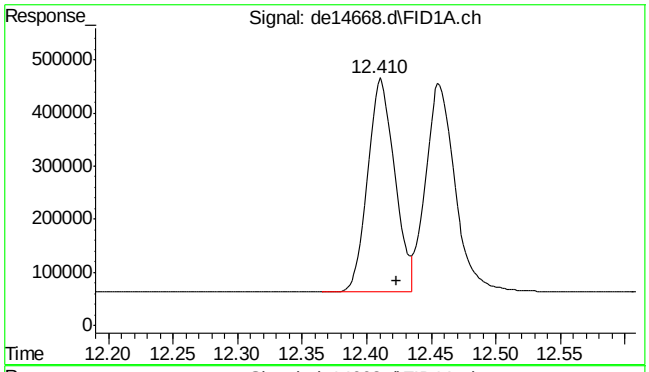
R.T.: 10.597 min
Delta R.T.: -0.008 min
Response: 635011
Conc: 5.60 µg/ml



#13 pyrene

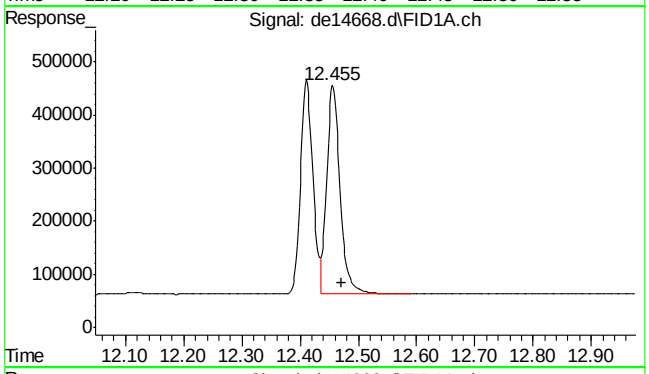
R.T.: 10.852 min
Delta R.T.: -0.010 min
Response: 645412
Conc: 5.57 µg/ml

SGS ACCUTEST MC46783



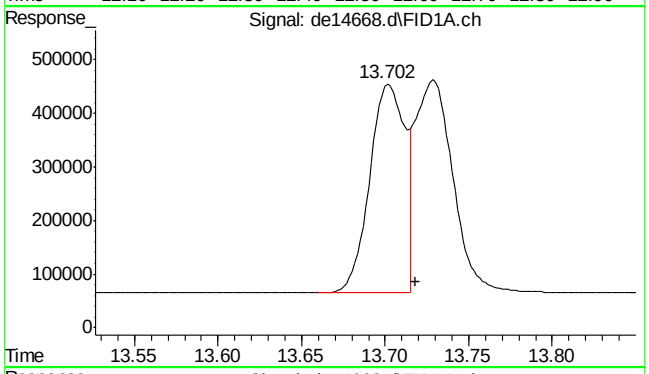
#14 benzo(a)anthracene

R.T.: 12.410 min
Delta R.T.: -0.013 min
Response: 589300
Conc: 5.44 µg/ml



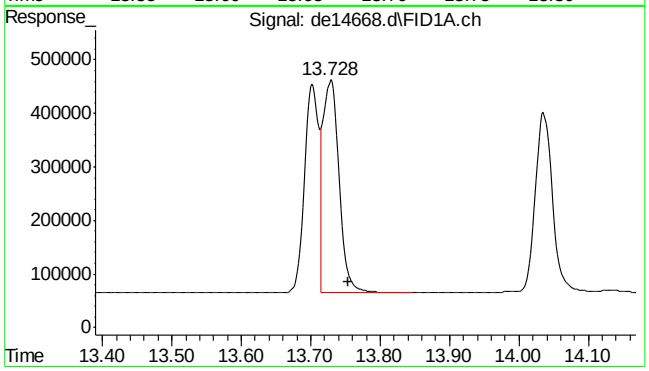
#15 chrysene

R.T.: 12.455 min
Delta R.T.: -0.017 min
Response: 623706
Conc: 5.49 µg/ml



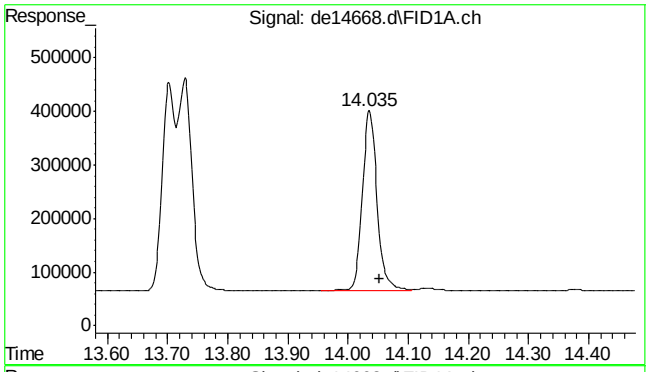
#16 benzo(B)fluoranthene

R.T.: 13.702 min
Delta R.T.: -0.017 min
Response: 584753
Conc: 5.49 µg/ml m



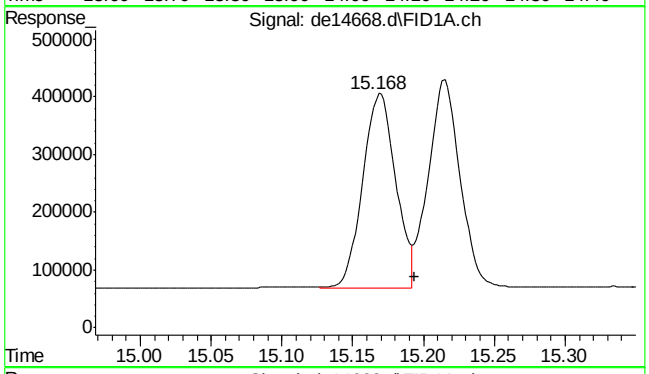
#17 benzo(k)fluoranthene

R.T.: 13.728 min
Delta R.T.: -0.025 min
Response: 612352
Conc: 5.36 µg/ml



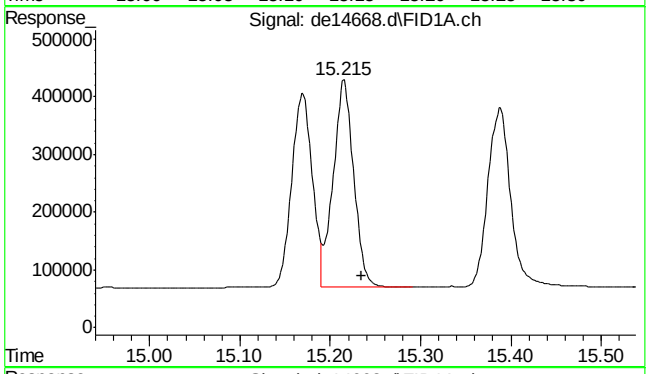
#18 benzo(a)pyrene

R.T.: 14.035 min
Delta R.T.: -0.018 min
Response: 570345
Conc: 5.40 µg/ml



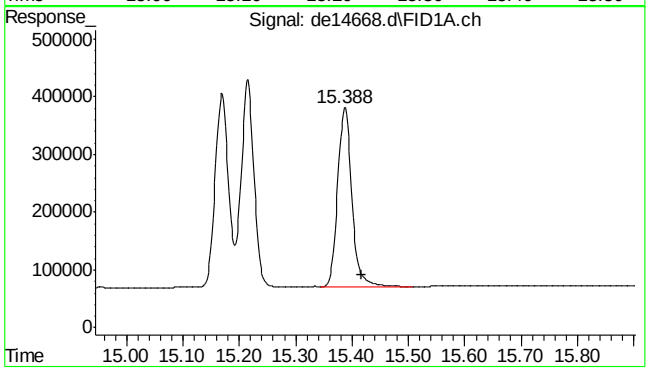
#19 indeno(1,2,3-cd)pyrene

R.T.: 15.168 min
Delta R.T.: -0.025 min
Response: 547262
Conc: 5.23 µg/ml m



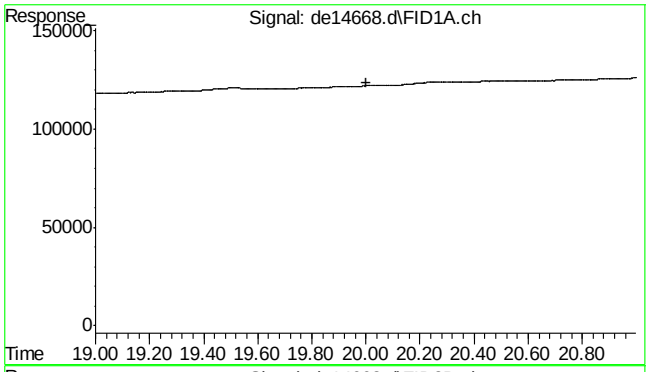
#20 dibenzo(ah)anthracene

R.T.: 15.215 min
Delta R.T.: -0.020 min
Response: 564801
Conc: 5.48 µg/ml



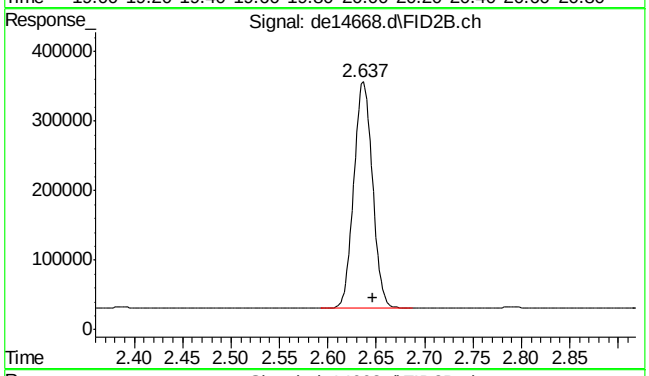
#21 benzo(ghi)perylene

R.T.: 15.388 min
Delta R.T.: -0.028 min
Response: 541223
Conc: 5.27 µg/ml



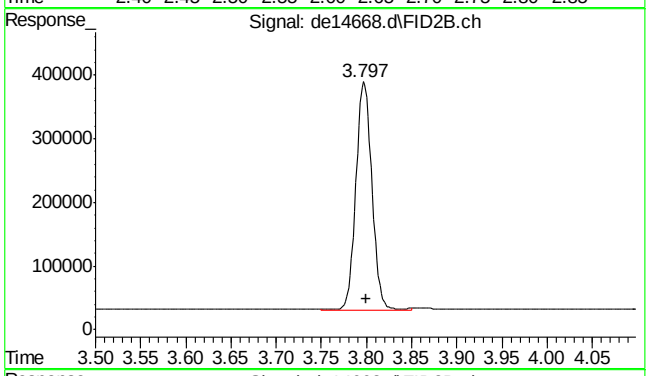
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



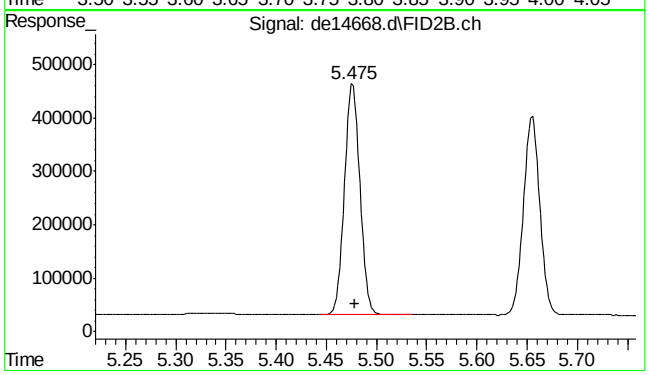
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 436956
Conc: 5.26 µg/ml m



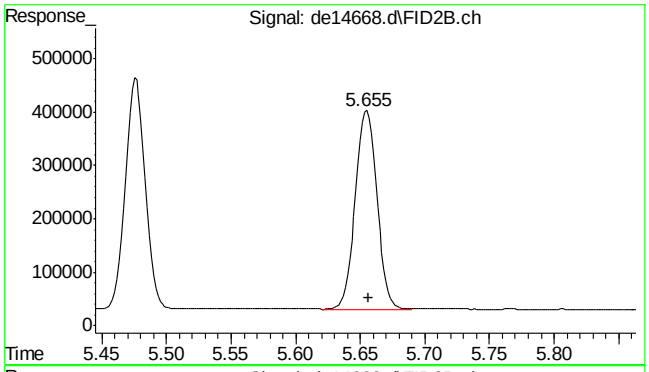
#26 c-10

R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 446232
Conc: 5.32 µg/ml



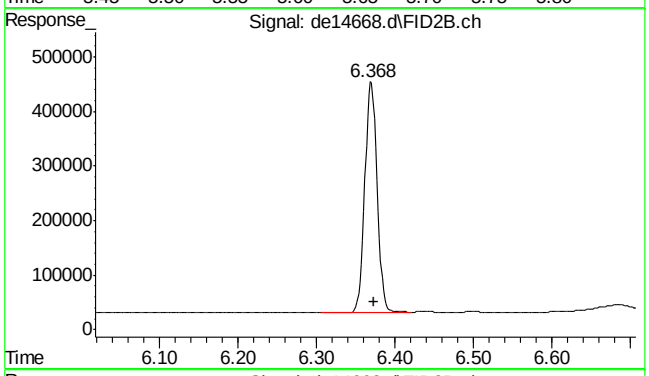
#27 naphthalene #2

R.T.: 5.475 min
Delta R.T.: -0.003 min
Response: 462504
Conc: 5.43 µg/ml



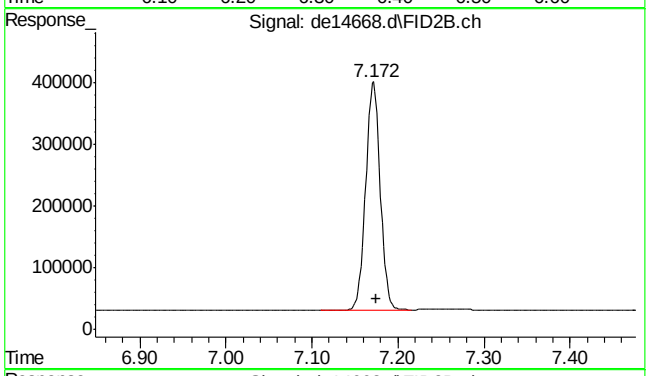
#28 c-12

R.T.: 5.655 min
Delta R.T.: -0.002 min
Response: 432854
Conc: 5.23 µg/ml



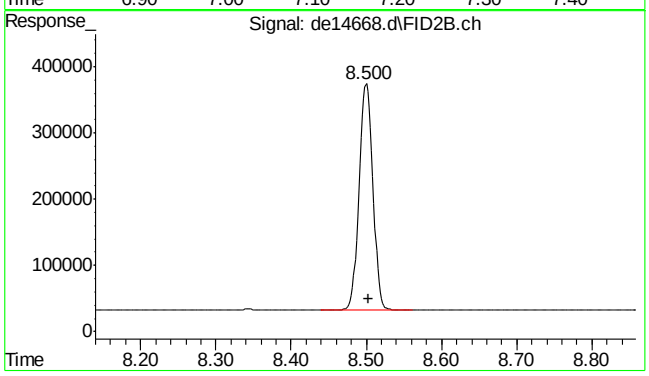
#29 2-methylnaphthalene #2

R.T.: 6.368 min
Delta R.T.: -0.005 min
Response: 462342
Conc: 5.48 µg/ml



#30 c-14

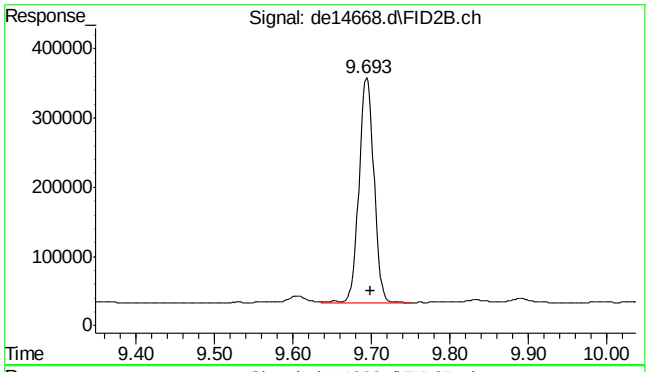
R.T.: 7.172 min
Delta R.T.: -0.003 min
Response: 433815
Conc: 5.23 µg/ml



#31 c-16

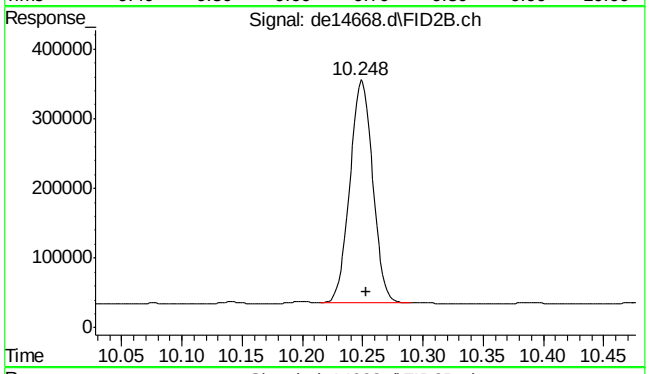
R.T.: 8.500 min
Delta R.T.: -0.003 min
Response: 435918
Conc: 5.20 µg/ml

SGS ACCUTEST MC46783



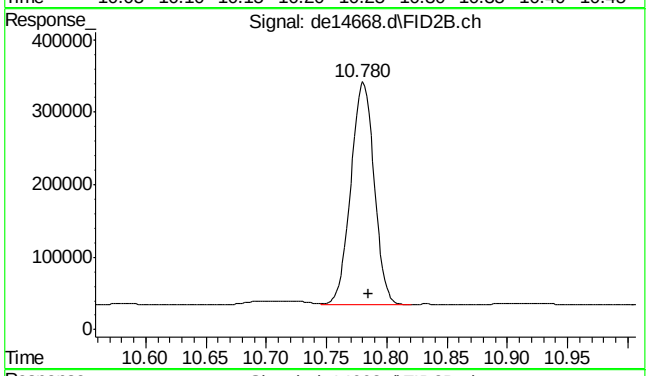
#32 c-18

R.T.: 9.693 min
Delta R.T.: -0.005 min
Response: 428513
Conc: 5.22 µg/ml



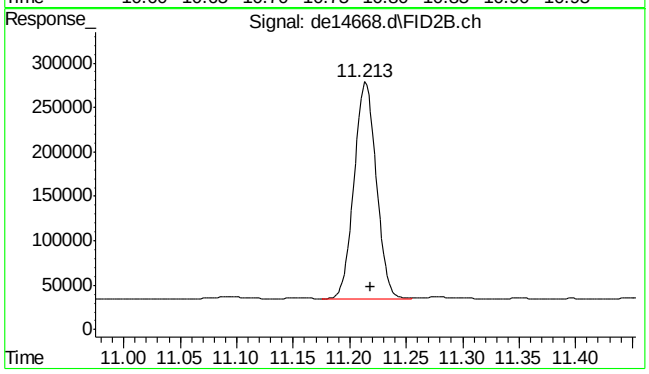
#33 c-19

R.T.: 10.248 min
Delta R.T.: -0.005 min
Response: 421112
Conc: 5.14 µg/ml



#34 c-20

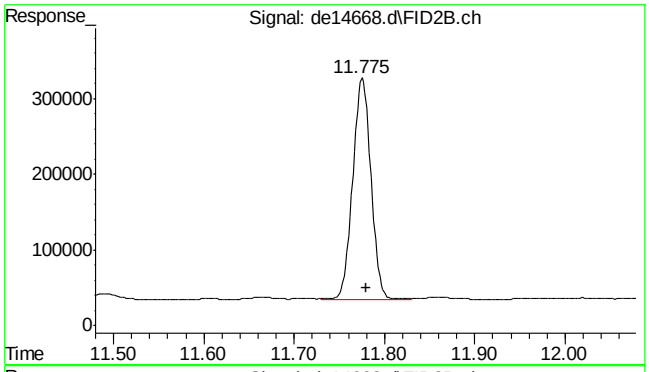
R.T.: 10.780 min
Delta R.T.: -0.005 min
Response: 414796
Conc: 5.28 µg/ml



#35 1-chlorooctadecane

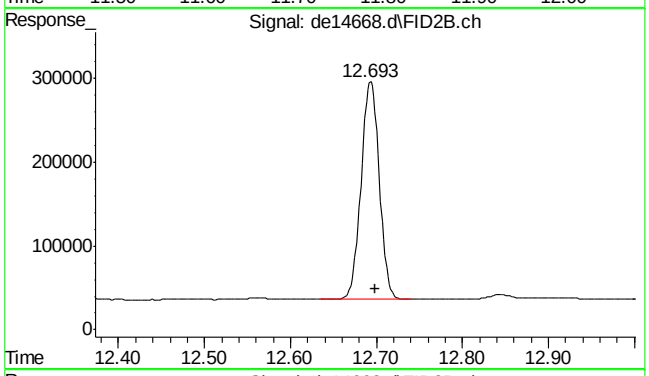
R.T.: 11.213 min
Delta R.T.: -0.005 min
Response: 332474
Conc: 5.51 µg/ml

SGS ACCUTEST MC46783



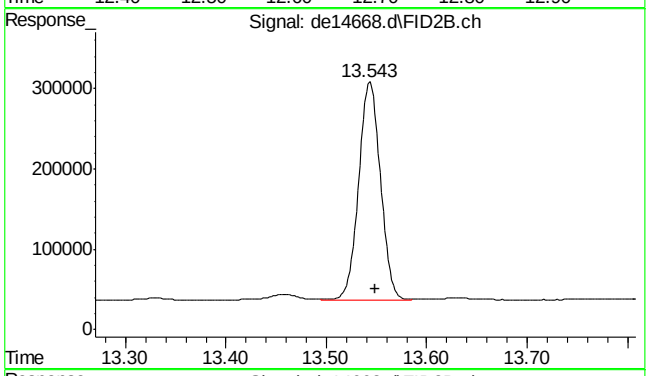
#36 c-22

R.T.: 11.775 min
Delta R.T.: -0.005 min
Response: 410716
Conc: 5.25 µg/ml



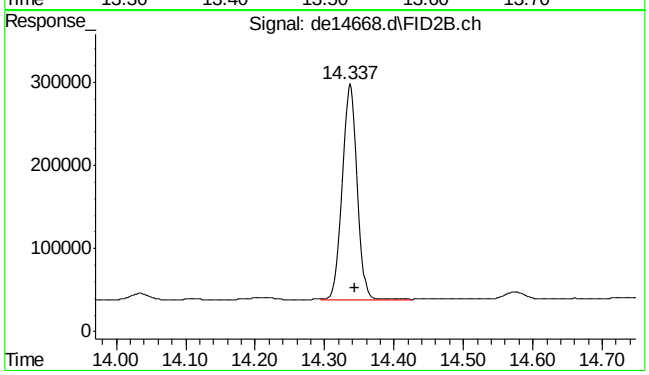
#37 c-24

R.T.: 12.693 min
Delta R.T.: -0.005 min
Response: 382937
Conc: 5.10 µg/ml



#38 c-26

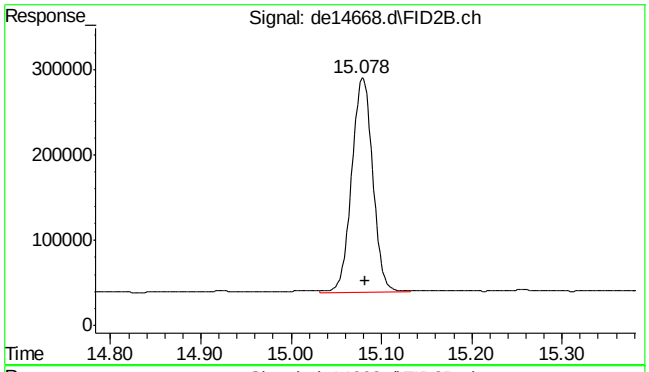
R.T.: 13.543 min
Delta R.T.: -0.005 min
Response: 406080
Conc: 5.21 µg/ml



#39 c-28

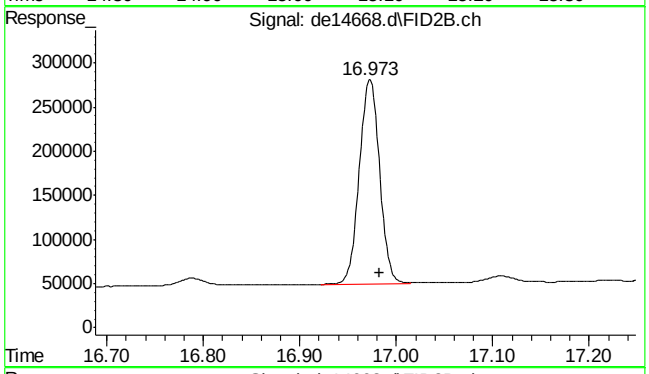
R.T.: 14.337 min
Delta R.T.: -0.007 min
Response: 391589
Conc: 5.28 µg/ml

SGS ACCUTEST MC46783



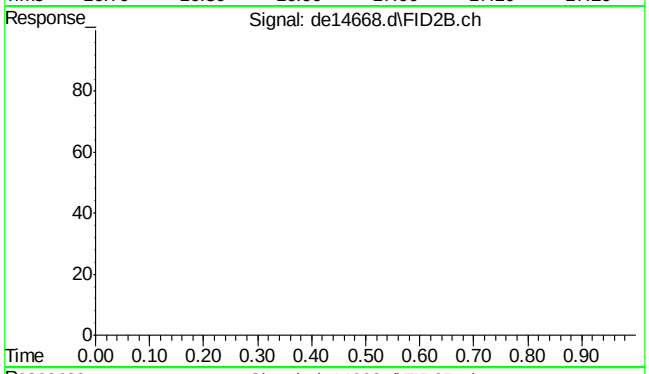
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 408558
Conc: 4.94 µg/ml



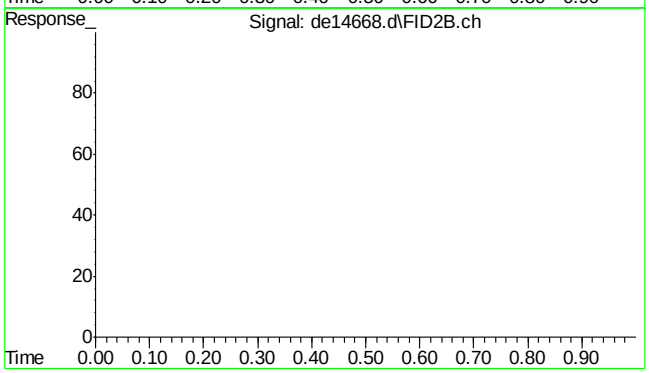
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 339764
Conc: 5.13 µg/ml m



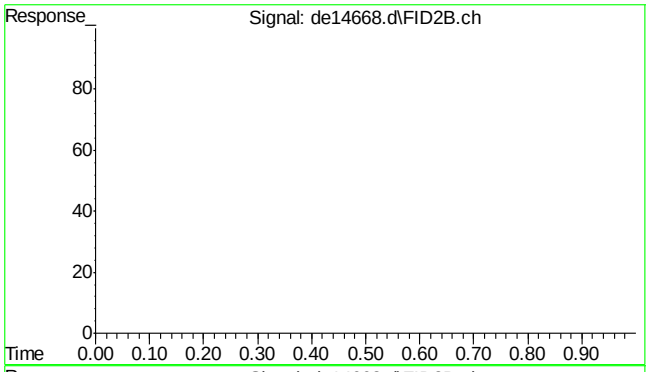
#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



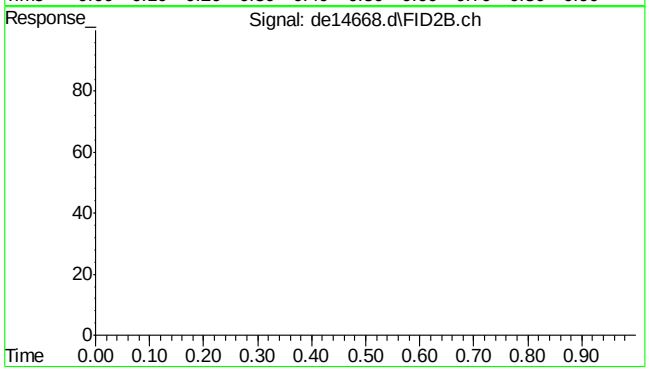
#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#44 bht

```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```



#45 bht

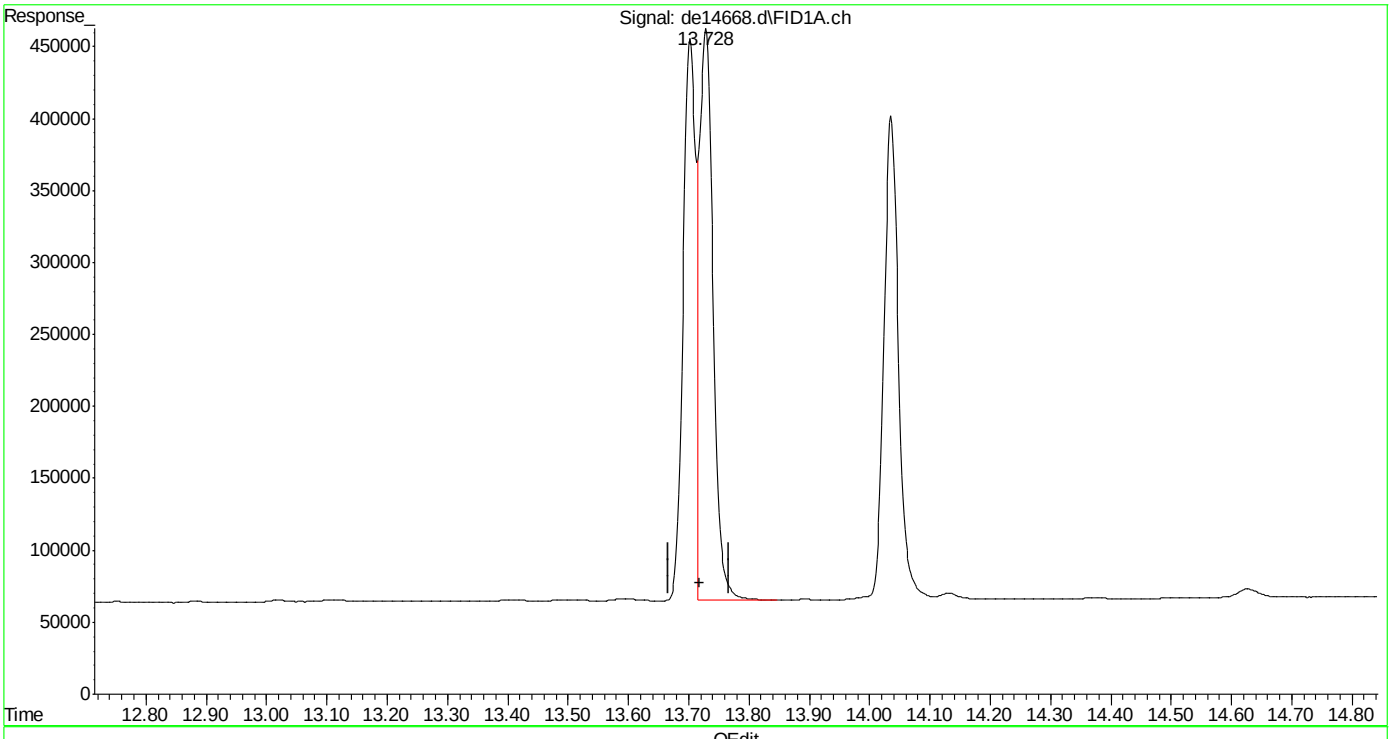
```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14668.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:12 pm
Operator : thomasa
Sample : cc815-5
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 106 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:52:47 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:51:49 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.728min 5.745 µg/ml
response 612352

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:52:59 2016

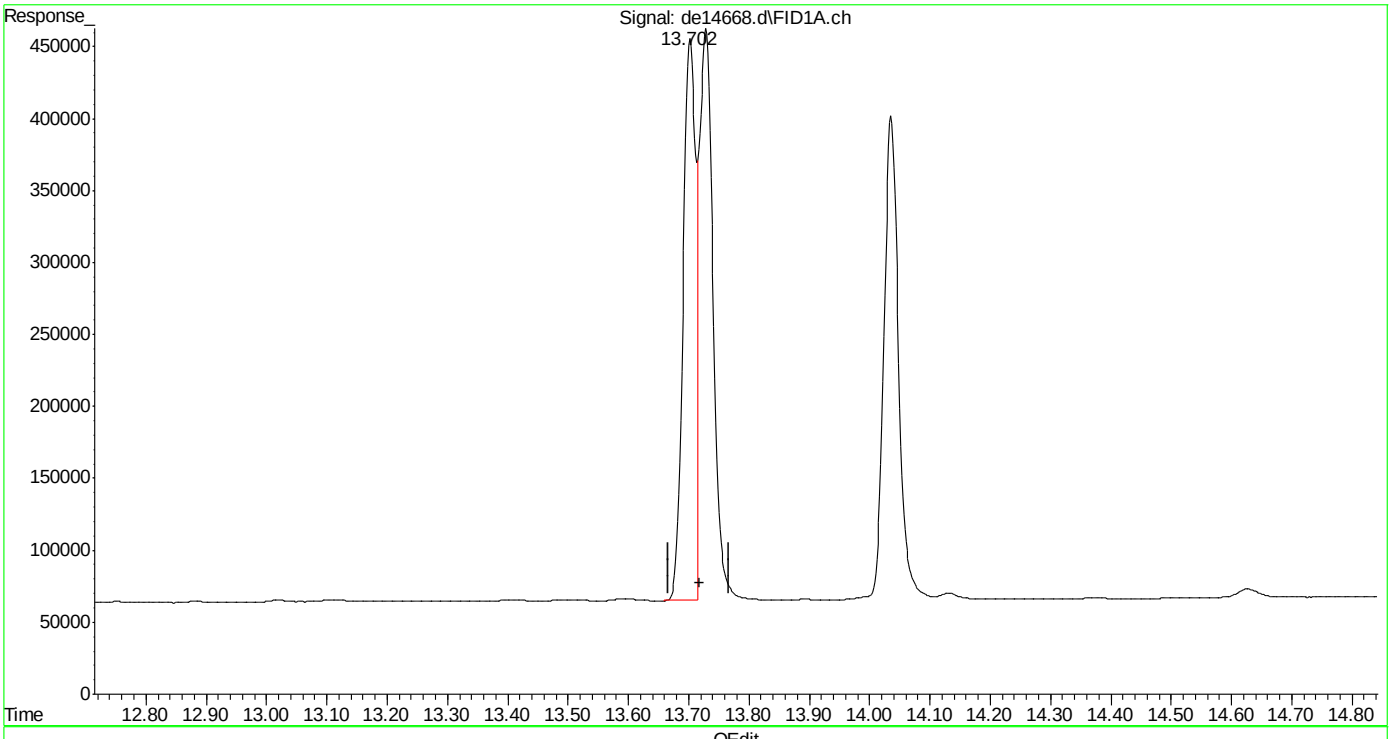
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14668.d
Signal(s) : Signal #1: FID1A.ch  Signal #2: FID2B.ch
Acq On    : 22 Jun 2016   7:12 pm
Operator  : thomasa
Sample    : cc815-5
Misc      : op47862,gde815,1000,,,2,,w
ALS Vial  : 106   Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:52:47 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title  : BMAEPH-working method
QLast Update : Thu Jun 23 07:51:49 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene

13.702min 5.486 µg/ml m

response 584753

(+) = Expected Retention Time

EPH160622W.M Thu Jun 23 07:53:13 2016

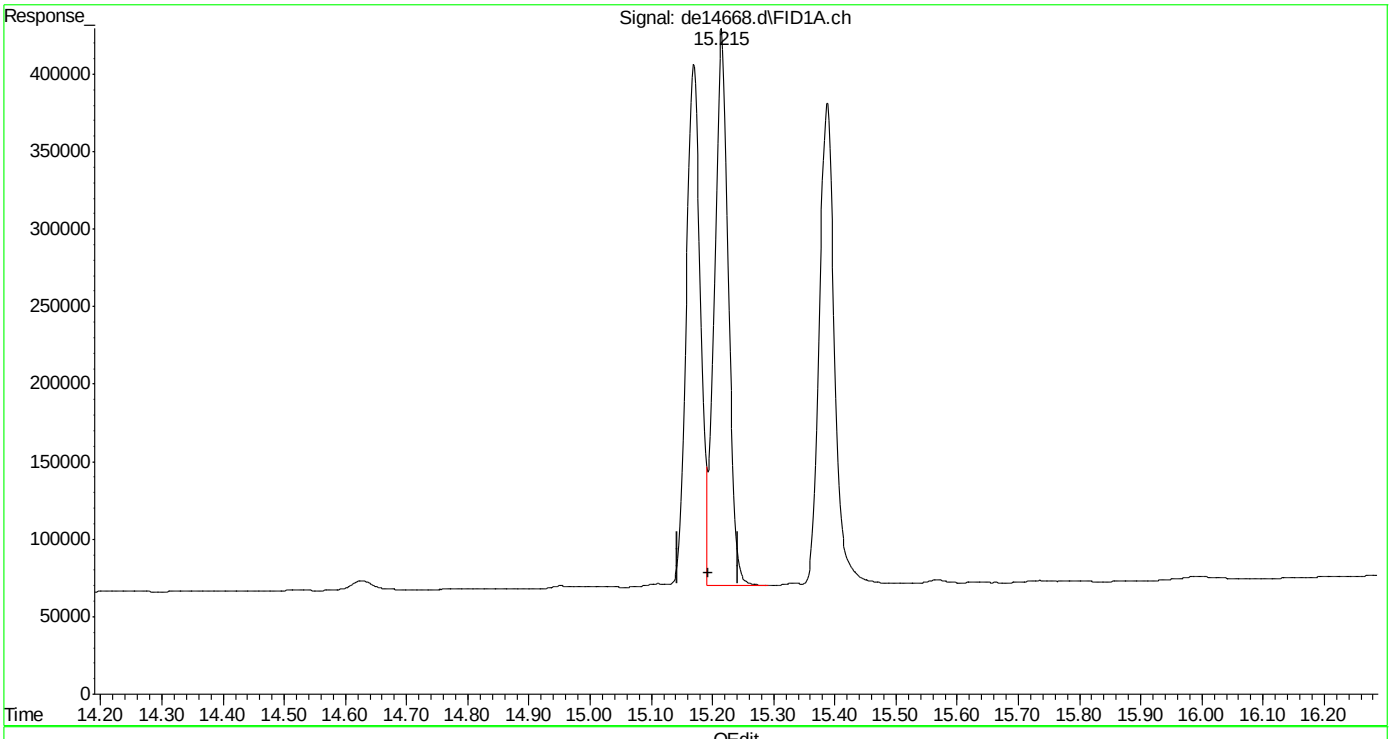
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14668.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:12 pm
Operator : thomasa
Sample : cc815-5
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 106 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:52:47 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:51:49 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.215min 5.400 µg/ml
response 564801

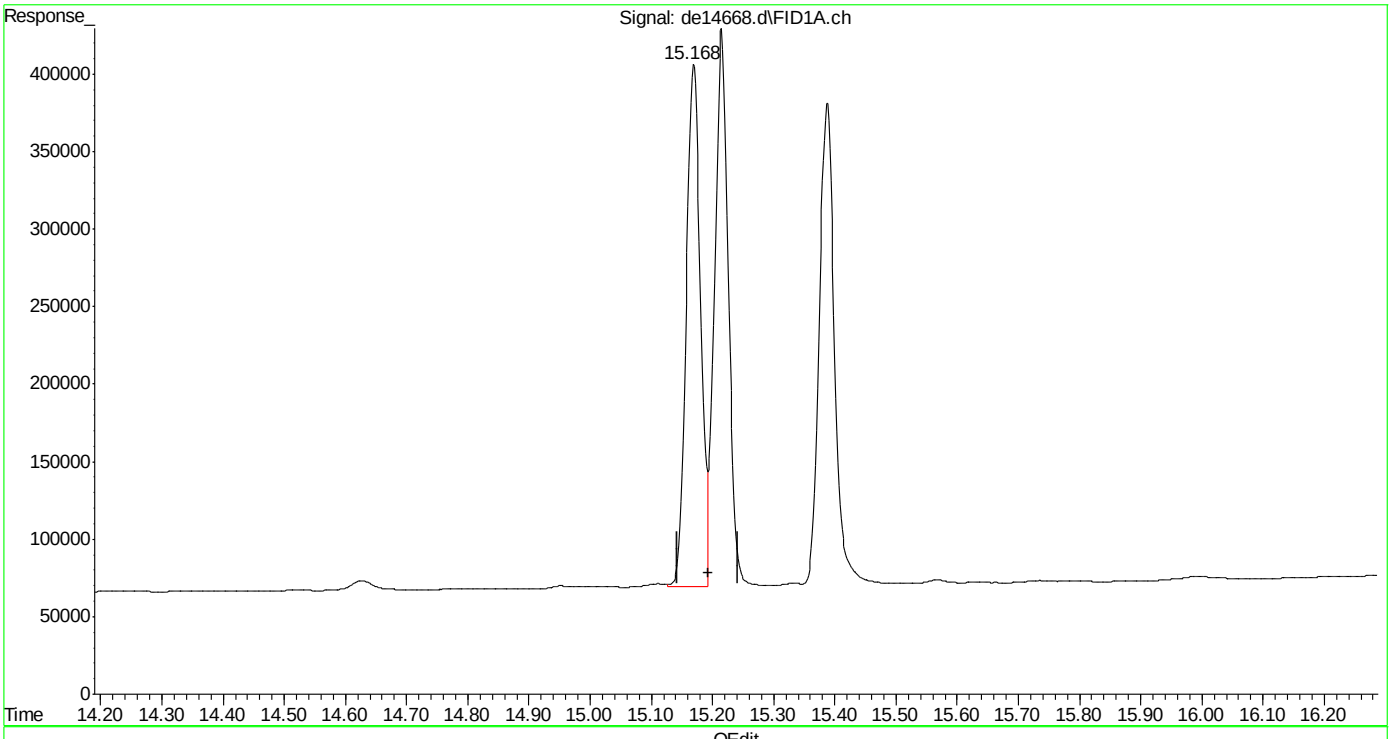
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:53:17 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14668.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:12 pm
Operator : thomasa
Sample : cc815-5
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 106 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:52:47 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:51:49 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.168min 5.232 µg/ml m
response 547262

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:53:25 2016

SGS ACCUTEST MC46783

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri
06/23/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14669.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:40 pm
Operator : thomasa
Sample : ic815-20 (Sig #1); cc815-20 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 108 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:56:12 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:53:54 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) s	2-fluorobiphenyl	6.485	2470175	23.541 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 117.71%#
6) s	2-bromonaphthalene	7.207	1622495	24.701 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 123.51%#
11) s	o-terphenyl	9.745	2756185	22.744 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 113.72%#
35) s	1-chlorooctadecane	11.215	1362404	22.204 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 111.02%#
	Target Compounds			
2)	naphthalene	5.028	2761210	23.921 µg/ml
3)	2-methylnaphthalene	5.928	2757665	23.797 µg/ml
5)	acenaphthylene	7.038	2699454	23.271 µg/ml
7)	acenaphthene	7.280	2910644	22.916 µg/ml
8)	fluorene	7.923	2748574	23.430 µg/ml
9)	phenanthrene	9.100	2679317	23.480 µg/ml
10)	anthracene	9.157	2716250	22.315 µg/ml
12)	fluoranthene	10.598	2677937	22.848 µg/ml
13)	pyrene	10.852	2734764	22.820 µg/ml
14)	benzo(a)anthracene	12.412	2555074	22.964 µg/ml
15)	chrysene	12.460	2573974	21.927 µg/ml
16)	benzo(B)fluoranthene	13.707	2466504	22.625 µg/mlm
17)	benzo(k)fluoranthene	13.733	2513496	21.260 µg/mlm
18)	benzo(a)pyrene	14.037	2419189	22.252 µg/ml
19)	indeno(1,2,3-cd)pyrene	15.173	2411740	22.594 µg/mlm
20)	dibenzo(ah)anthracene	15.218	2357845	22.253 µg/mlm
21)	benzo(ghi)perylene	15.392	2338304	22.300 µg/ml
25) h	c-9	2.647	1780249	21.212 µg/mlm
26) h	c-10	3.800	1799081	21.180 µg/ml
27)	naphthalene #2	5.477	1908539	22.158 µg/ml
28)	c-12	5.655	1778842	21.296 µg/ml
29)	2-methylnaphthalene #2	6.370	1903208	22.324 µg/ml
30)	c-14	7.172	1773611	21.174 µg/ml
31)	c-16	8.502	1757632	20.796 µg/ml
32)	c-18	9.695	1741774	21.020 µg/ml
33)	c-19	10.252	1723593	20.929 µg/ml
34)	c-20	10.782	1694193	21.314 µg/ml
36)	c-22	11.777	1677797	21.219 µg/ml
37)	c-24	12.693	1563000	20.728 µg/ml
38)	c-26	13.545	1663159	21.171 µg/ml

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14669.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:40 pm
Operator : thomasa
Sample : ic815-20 (Sig #1); cc815-20 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 108 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:56:12 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:53:54 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc	Units
39)	c-28	14.338	1607781	21.434	µg/ml
40) h	c-30	15.082	1615388	19.568	µg/ml
41) h	c-36	16.983	1450363	21.774	µg/mlm

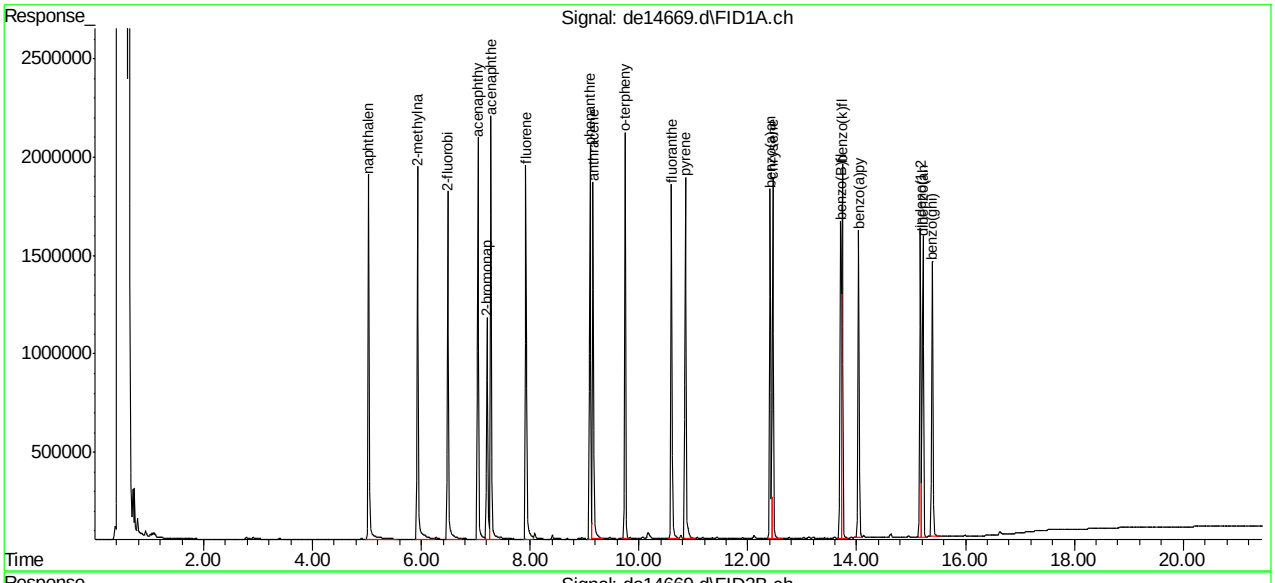
(f)=RT Delta > 1/2 Window (m)=manual int.

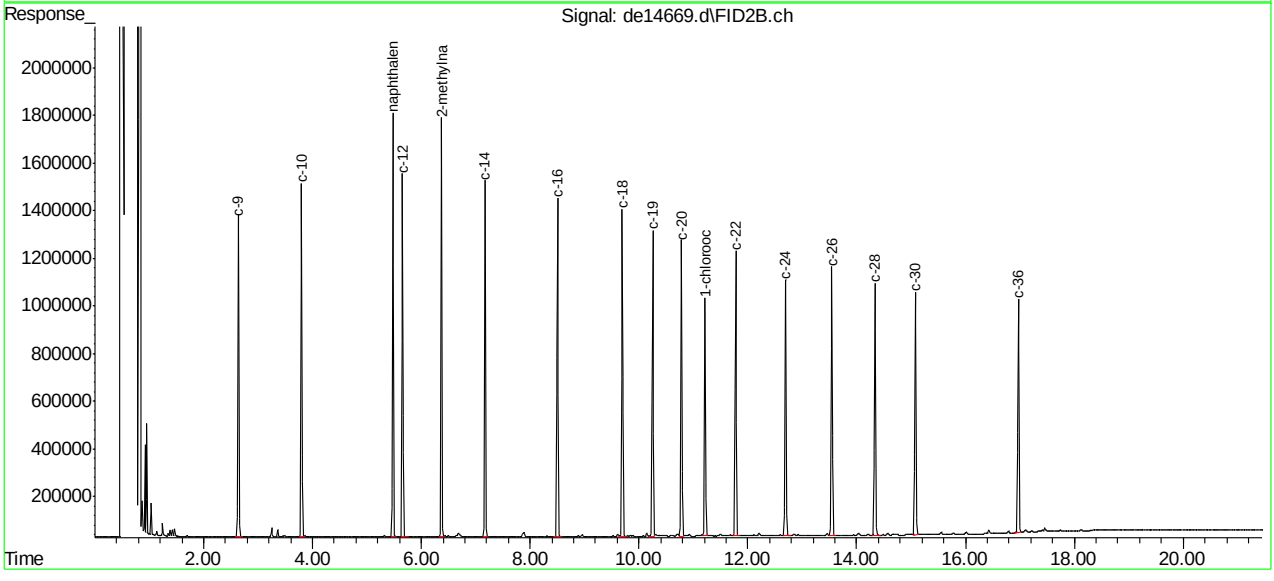
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14669.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:40 pm
Operator : thomasa
Sample : ic815-20 (Sig #1); cc815-20 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 108 Sample Multiplier: 1

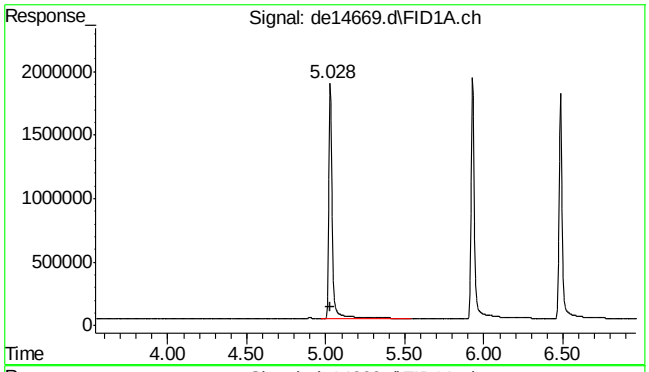
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:56:12 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:53:54 2016
Response via : Initial Calibration
Integrator: RTE

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



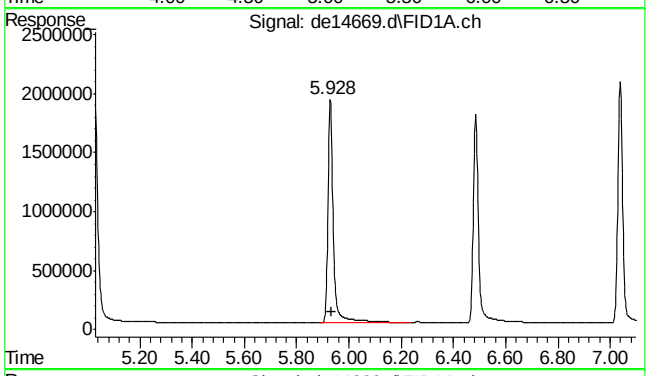


EPH160622W.M Thu Jun 23 08:17:35 2016 Page: 3



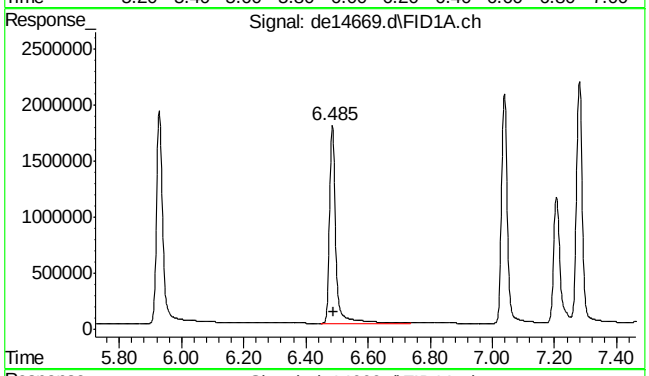
#2 naphthalene

R.T.: 5.028 min
Delta R.T.: -0.002 min
Response: 2761210
Conc: 23.92 µg/ml



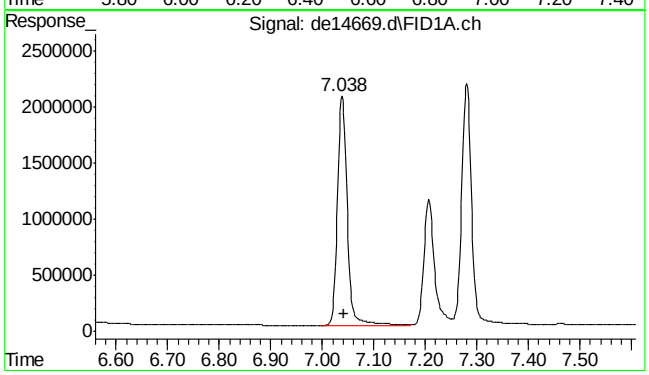
#3 2-methylnaphthalene

R.T.: 5.928 min
Delta R.T.: -0.003 min
Response: 2757665
Conc: 23.80 µg/ml



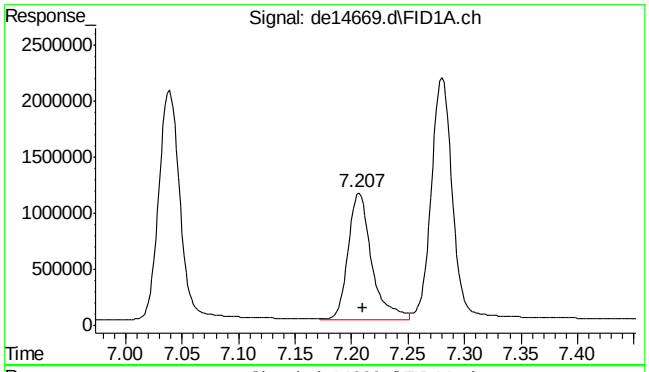
#4 2-fluorobiphenyl

R.T.: 6.485 min
Delta R.T.: -0.003 min
Response: 2470175
Conc: 23.54 µg/ml



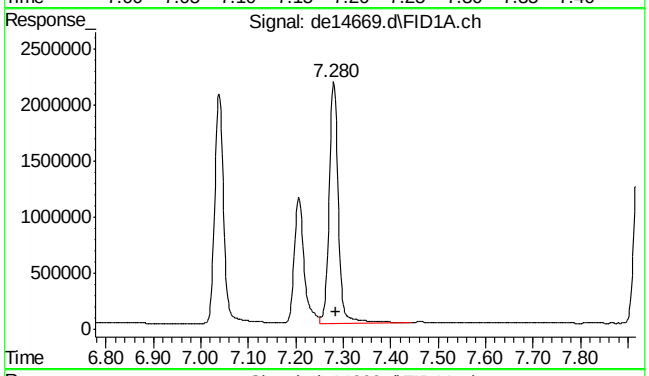
#5 acenaphthylene

R.T.: 7.038 min
Delta R.T.: -0.003 min
Response: 2699454
Conc: 23.27 µg/ml



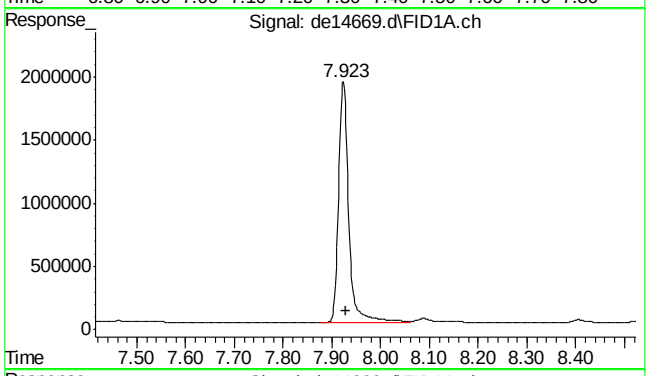
#6 2-bromonaphthalene

R.T.: 7.207 min
Delta R.T.: -0.003 min
Response: 1622495
Conc: 24.70 µg/ml



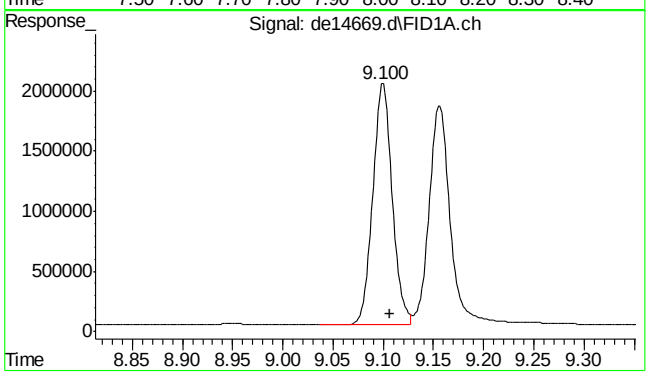
#7 acenaphthene

R.T.: 7.280 min
Delta R.T.: -0.005 min
Response: 2910644
Conc: 22.92 µg/ml



#8 fluorene

R.T.: 7.923 min
Delta R.T.: -0.005 min
Response: 2748574
Conc: 23.43 µg/ml



#9 phenanthrene

R.T.: 9.100 min
Delta R.T.: -0.007 min
Response: 2679317
Conc: 23.48 µg/ml

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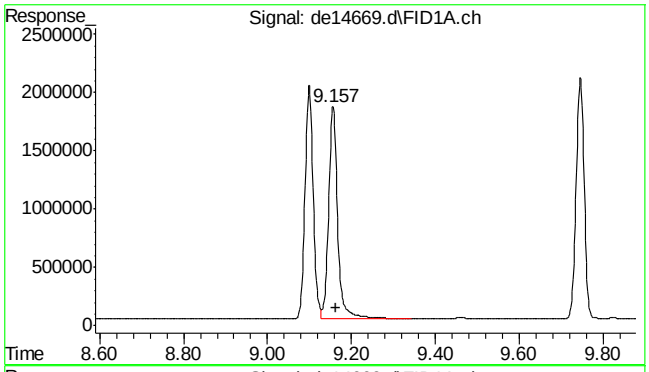
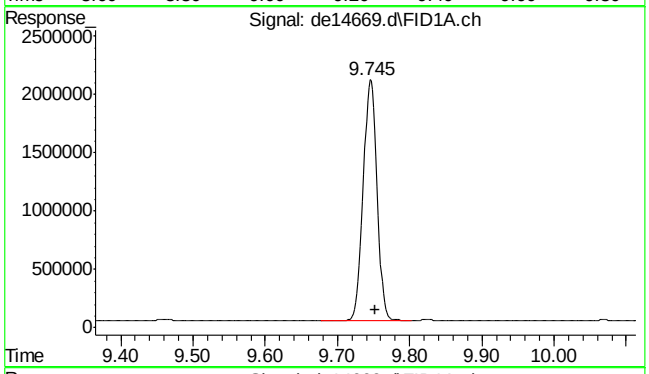


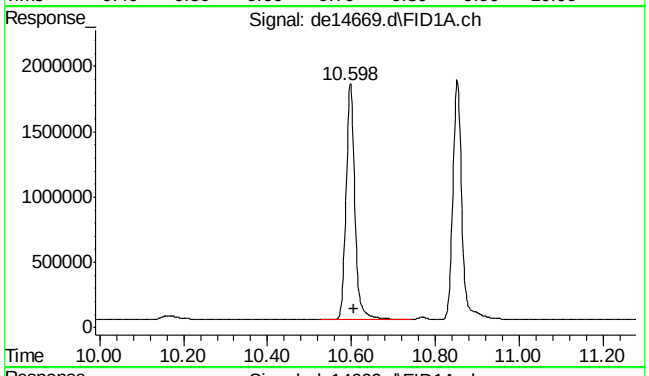
#10 anthracene

R.T.: 9.157 min
Delta R.T.: -0.007 min
Response: 2716250
Conc: 22.31 µg/ml



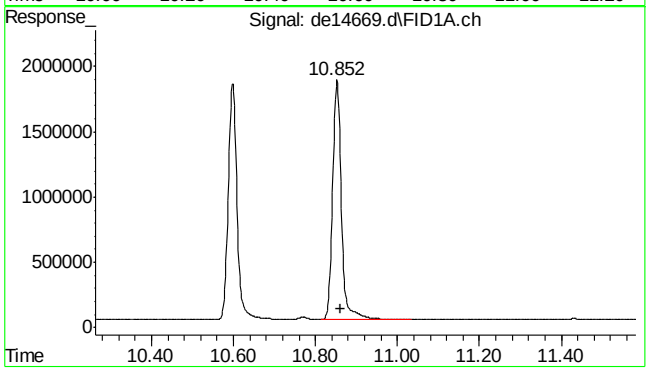
#11 o-terphenyl

R.T.: 9.745 min
Delta R.T.: -0.007 min
Response: 2756185
Conc: 22.74 µg/ml



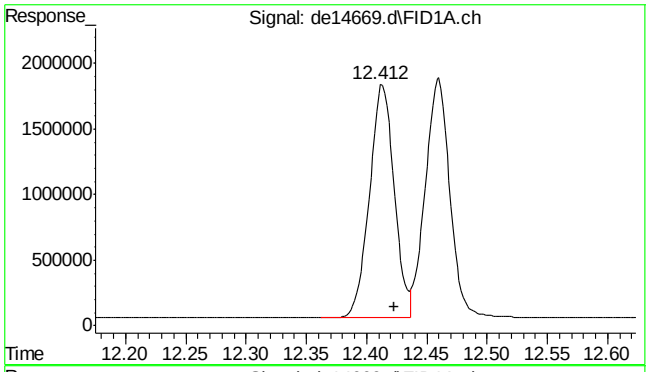
#12 fluoranthene

R.T.: 10.598 min
Delta R.T.: -0.007 min
Response: 2677937
Conc: 22.85 µg/ml



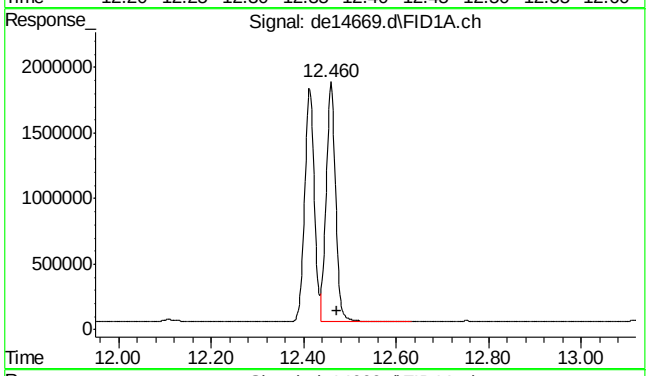
#13 pyrene

R.T.: 10.852 min
Delta R.T.: -0.010 min
Response: 2734764
Conc: 22.82 µg/ml



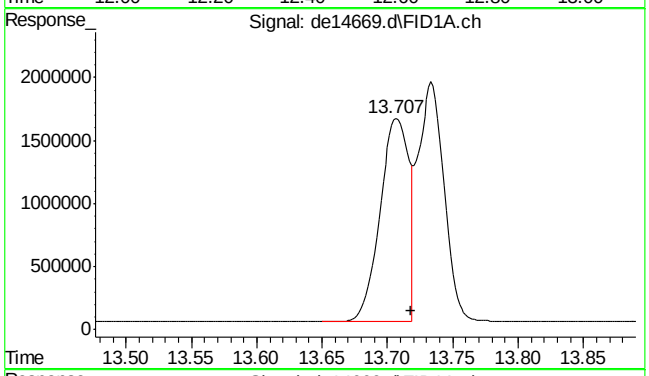
#14 benzo(a)anthracene

R.T.: 12.412 min
Delta R.T.: -0.012 min
Response: 2555074
Conc: 22.96 µg/ml



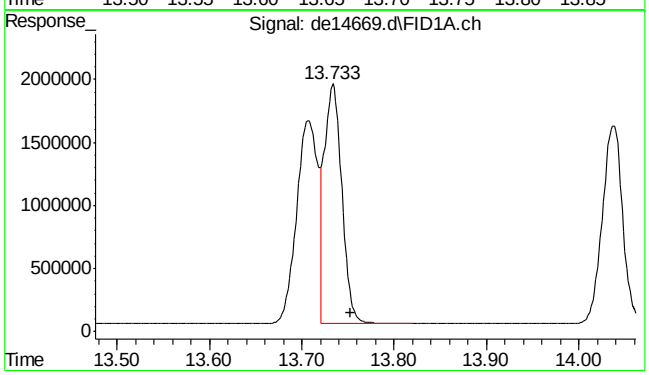
#15 chrysene

R.T.: 12.460 min
Delta R.T.: -0.012 min
Response: 2573974
Conc: 21.93 µg/ml



#16 benzo(B)fluoranthene

R.T.: 13.707 min
Delta R.T.: -0.012 min
Response: 2466504
Conc: 22.62 µg/ml m



#17 benzo(k)fluoranthene

R.T.: 13.733 min
Delta R.T.: -0.020 min
Response: 2513496
Conc: 21.26 µg/ml m

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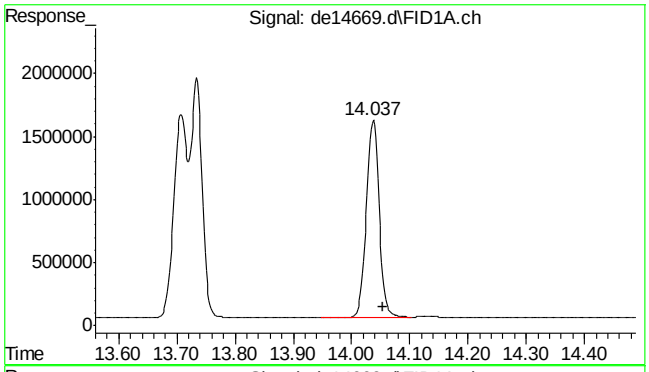
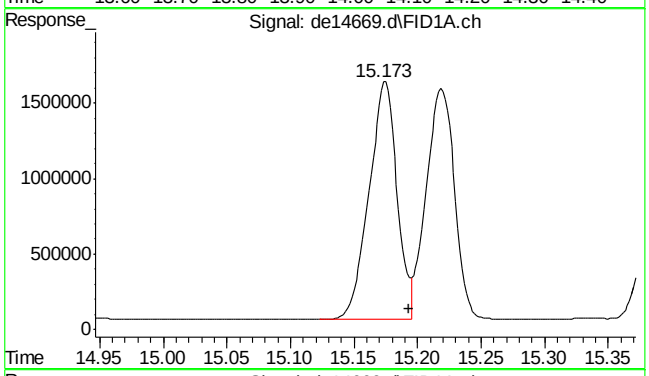


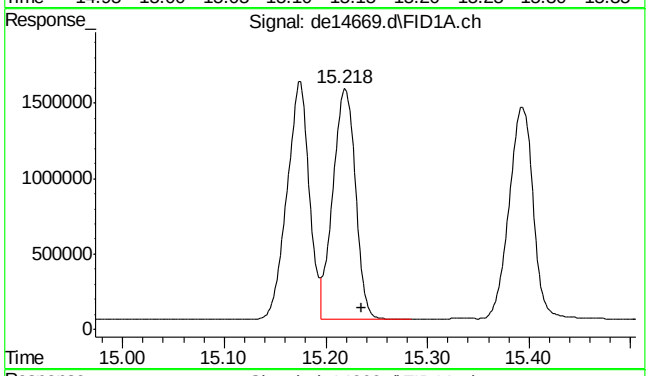
#18 benzo(a)pyrene

R.T.: 14.037 min
Delta R.T.: -0.017 min
Response: 2419189
Conc: 22.25 µg/ml



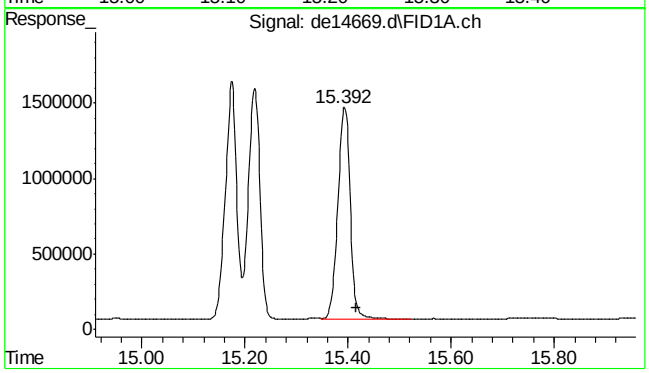
#19 indeno(1,2,3-cd)pyrene

R.T.: 15.173 min
Delta R.T.: -0.020 min
Response: 2411740
Conc: 22.59 µg/ml m



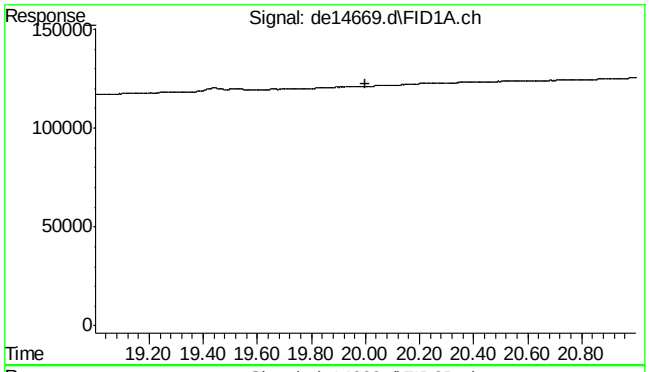
#20 dibenzo(ah)anthracene

R.T.: 15.218 min
Delta R.T.: -0.017 min
Response: 2357845
Conc: 22.25 µg/ml m



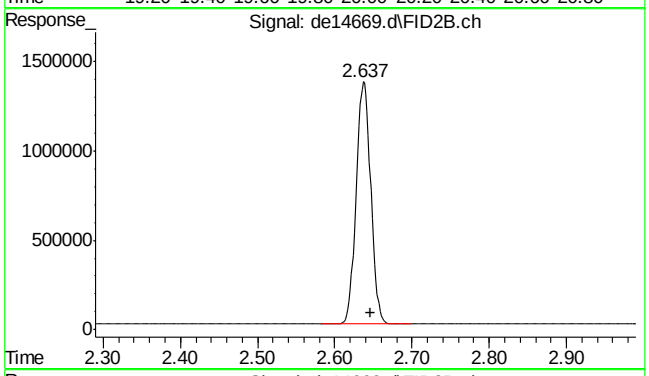
#21 benzo(ghi)perylene

R.T.: 15.392 min
Delta R.T.: -0.025 min
Response: 2338304
Conc: 22.30 µg/ml



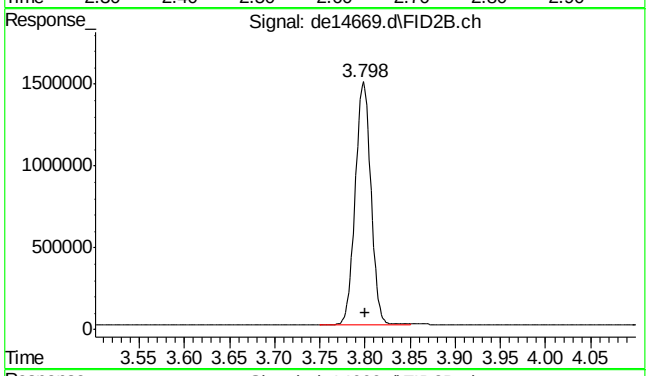
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



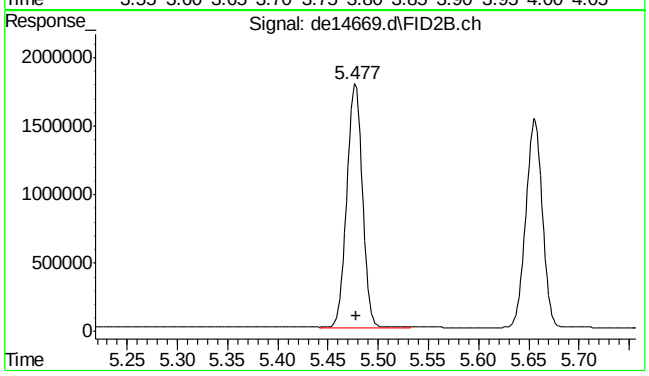
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 1780249
Conc: 21.21 µg/ml m



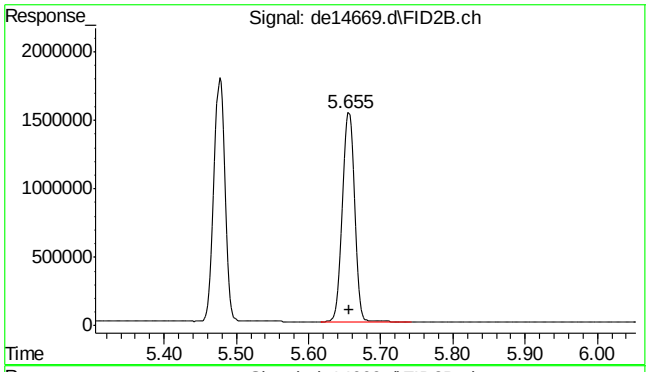
#26 c-10

R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 1799081
Conc: 21.18 µg/ml



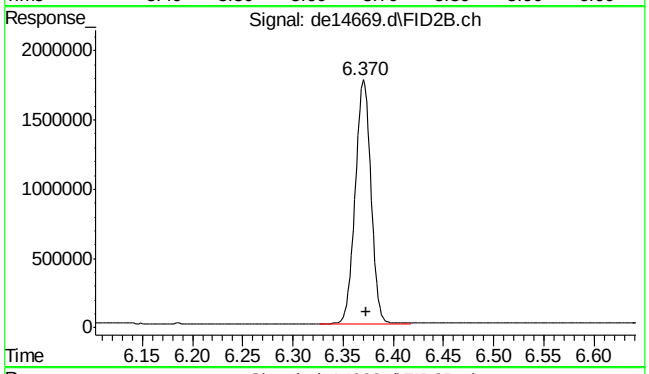
#27 naphthalene #2

R.T.: 5.477 min
Delta R.T.: -0.002 min
Response: 1908539
Conc: 22.16 µg/ml



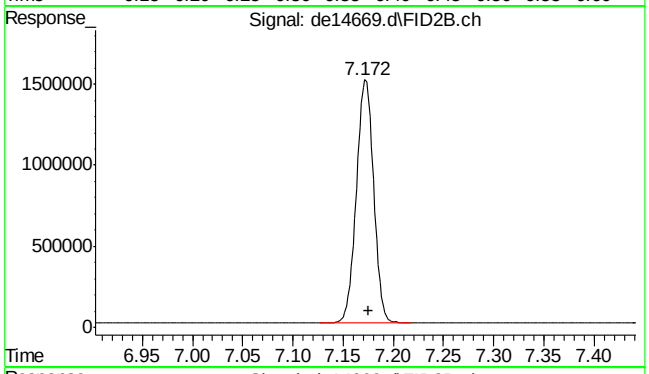
#28 c-12

R.T.: 5.655 min
Delta R.T.: -0.002 min
Response: 1778842
Conc: 21.30 µg/ml



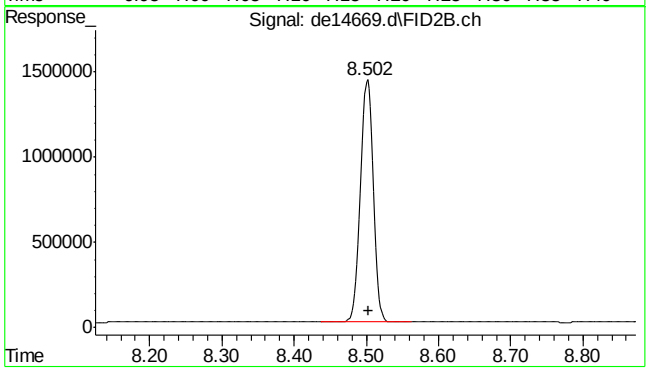
#29 2-methylnaphthalene #2

R.T.: 6.370 min
Delta R.T.: -0.003 min
Response: 1903208
Conc: 22.32 µg/ml



#30 c-14

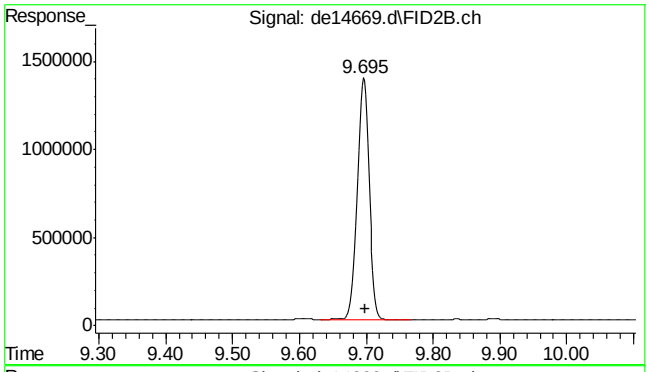
R.T.: 7.172 min
Delta R.T.: -0.003 min
Response: 1773611
Conc: 21.17 µg/ml



#31 c-16

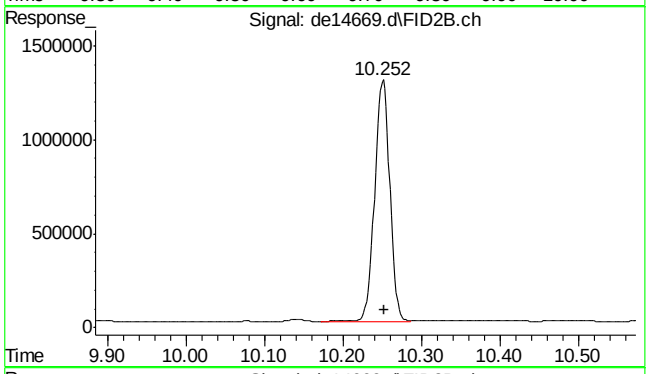
R.T.: 8.502 min
Delta R.T.: -0.002 min
Response: 1757632
Conc: 20.80 µg/ml

SGS ACCUTEST MC46783



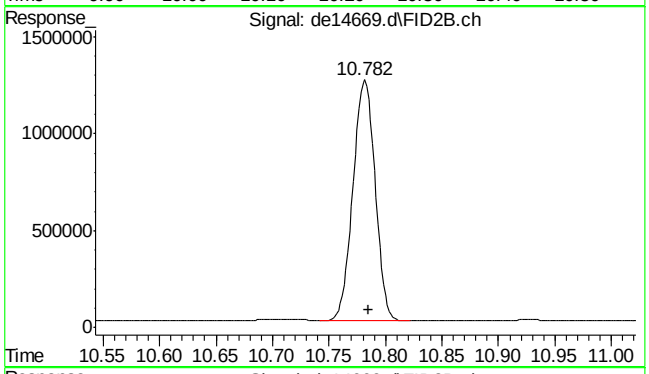
#32 c-18

R.T.: 9.695 min
Delta R.T.: -0.003 min
Response: 1741774
Conc: 21.02 µg/ml



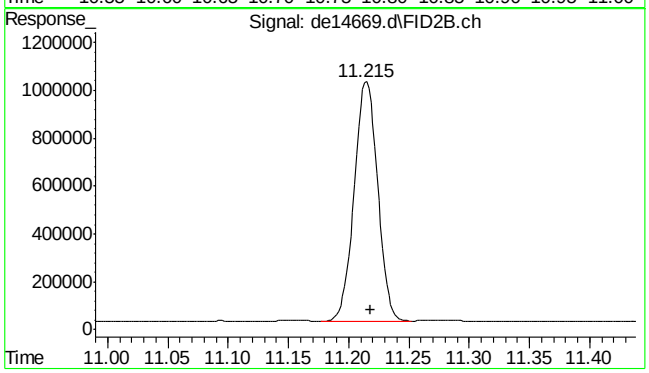
#33 c-19

R.T.: 10.252 min
Delta R.T.: -0.002 min
Response: 1723593
Conc: 20.93 µg/ml



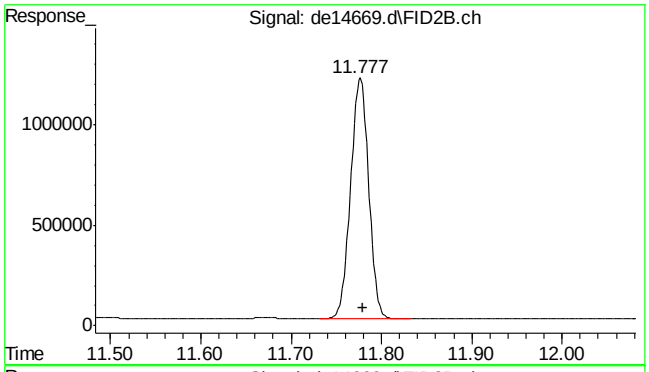
#34 c-20

R.T.: 10.782 min
Delta R.T.: -0.003 min
Response: 1694193
Conc: 21.31 µg/ml



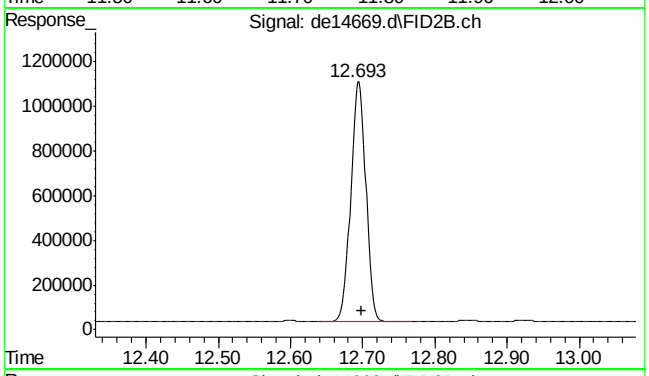
#35 1-chlorooctadecane

R.T.: 11.215 min
Delta R.T.: -0.003 min
Response: 1362404
Conc: 22.20 µg/ml



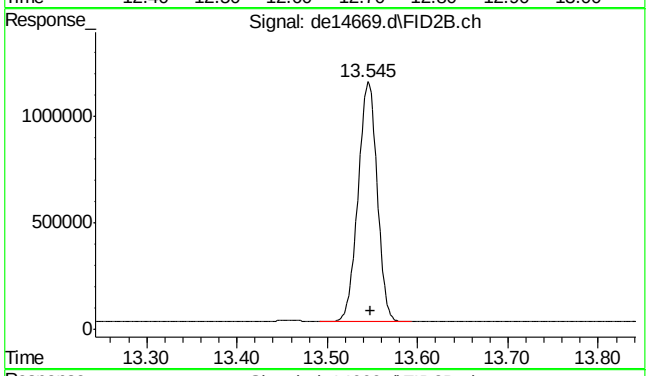
#36 c-22

R.T.: 11.777 min
Delta R.T.: -0.003 min
Response: 1677797
Conc: 21.22 µg/ml



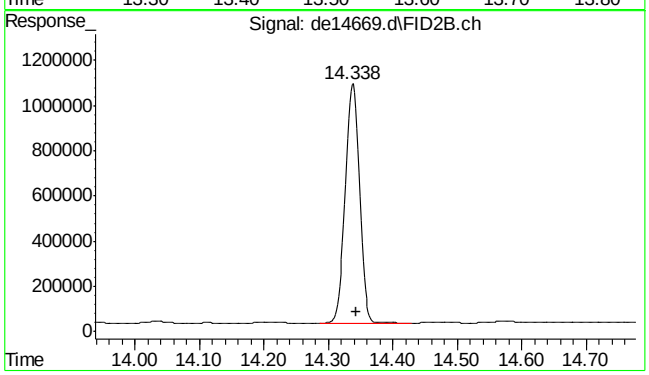
#37 c-24

R.T.: 12.693 min
Delta R.T.: -0.005 min
Response: 1563000
Conc: 20.73 µg/ml



#38 c-26

R.T.: 13.545 min
Delta R.T.: -0.003 min
Response: 1663159
Conc: 21.17 µg/ml



#39 c-28

R.T.: 14.338 min
Delta R.T.: -0.005 min
Response: 1607781
Conc: 21.43 µg/ml

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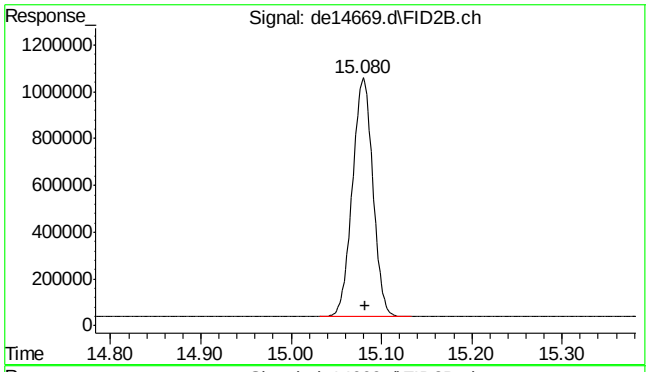
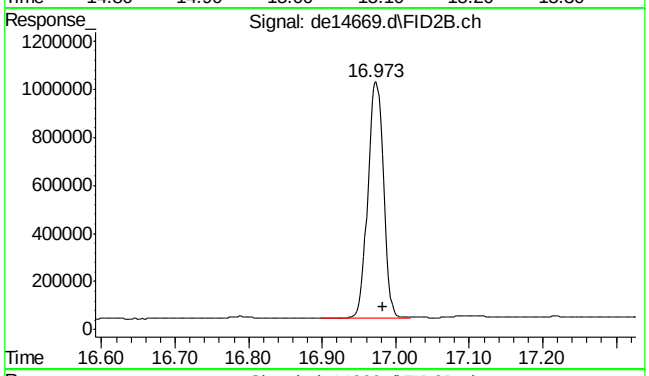


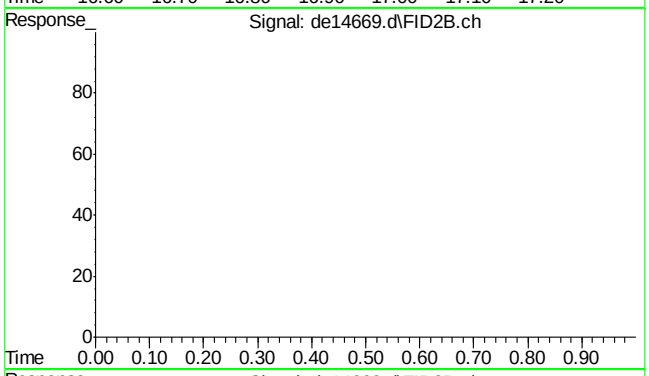
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 1615388
Conc: 19.57 µg/ml



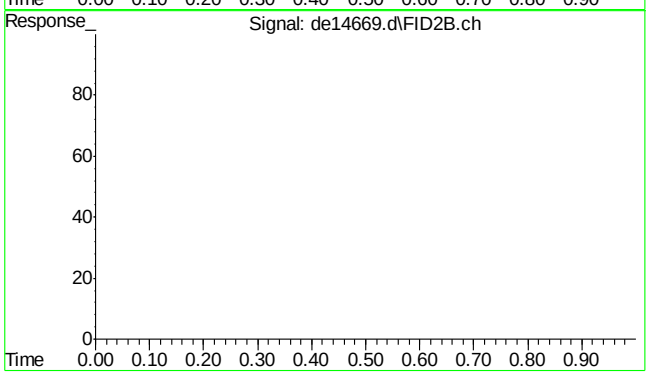
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1450363
Conc: 21.77 µg/ml m



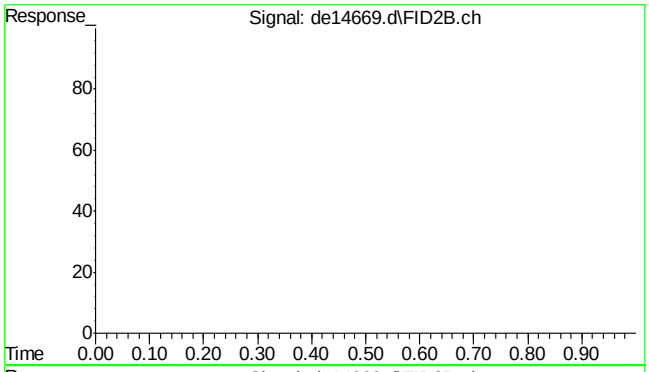
#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



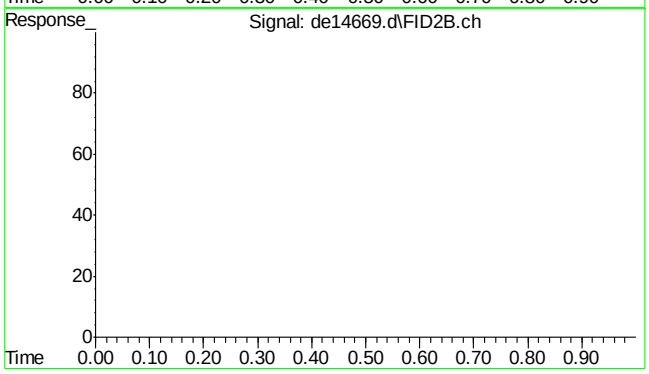
#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#44 bht

```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```



#45 bht

```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```

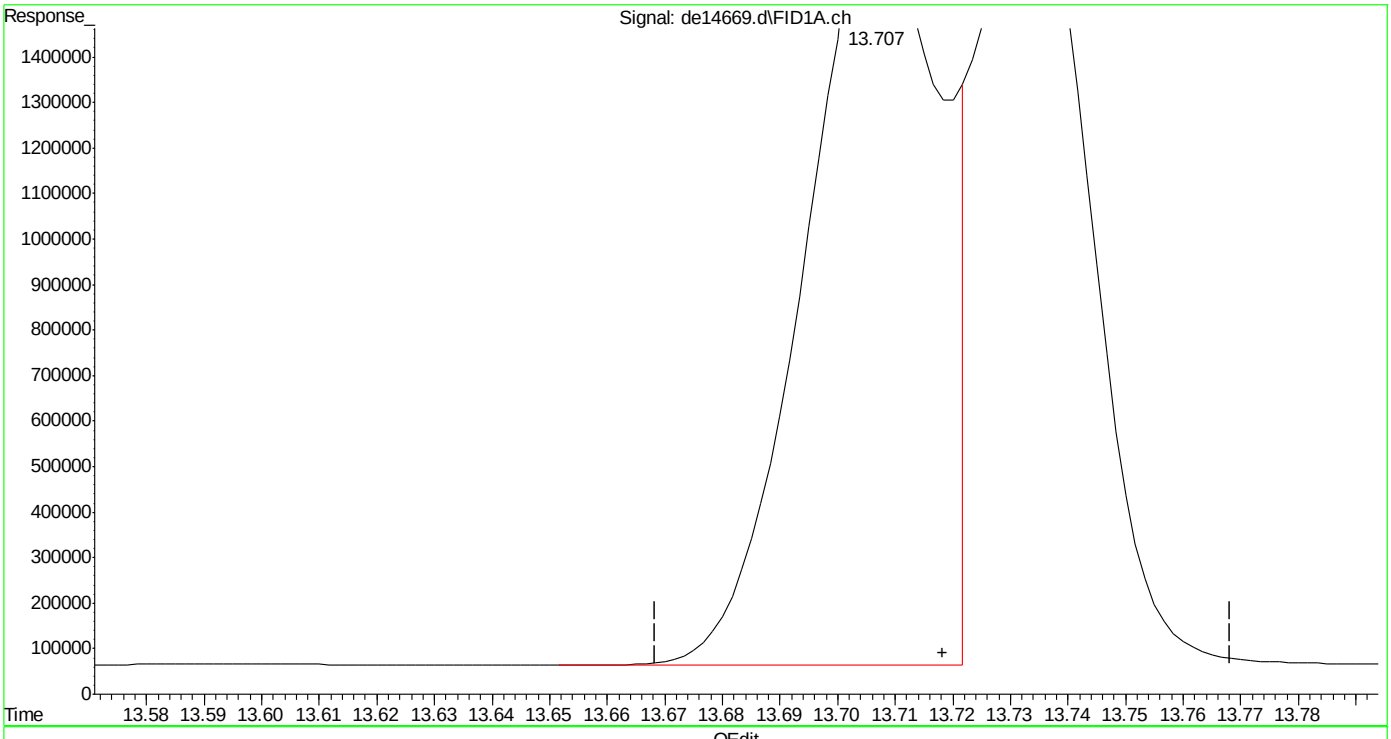

SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14669.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:40 pm
Operator : thomasa
Sample : cc815-20
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 108 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:54:02 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:53:54 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.707min 24.928 µg/ml
response 2717636

(+) = Expected Retention Time

EPH160622W.M Thu Jun 23 07:54:26 2016

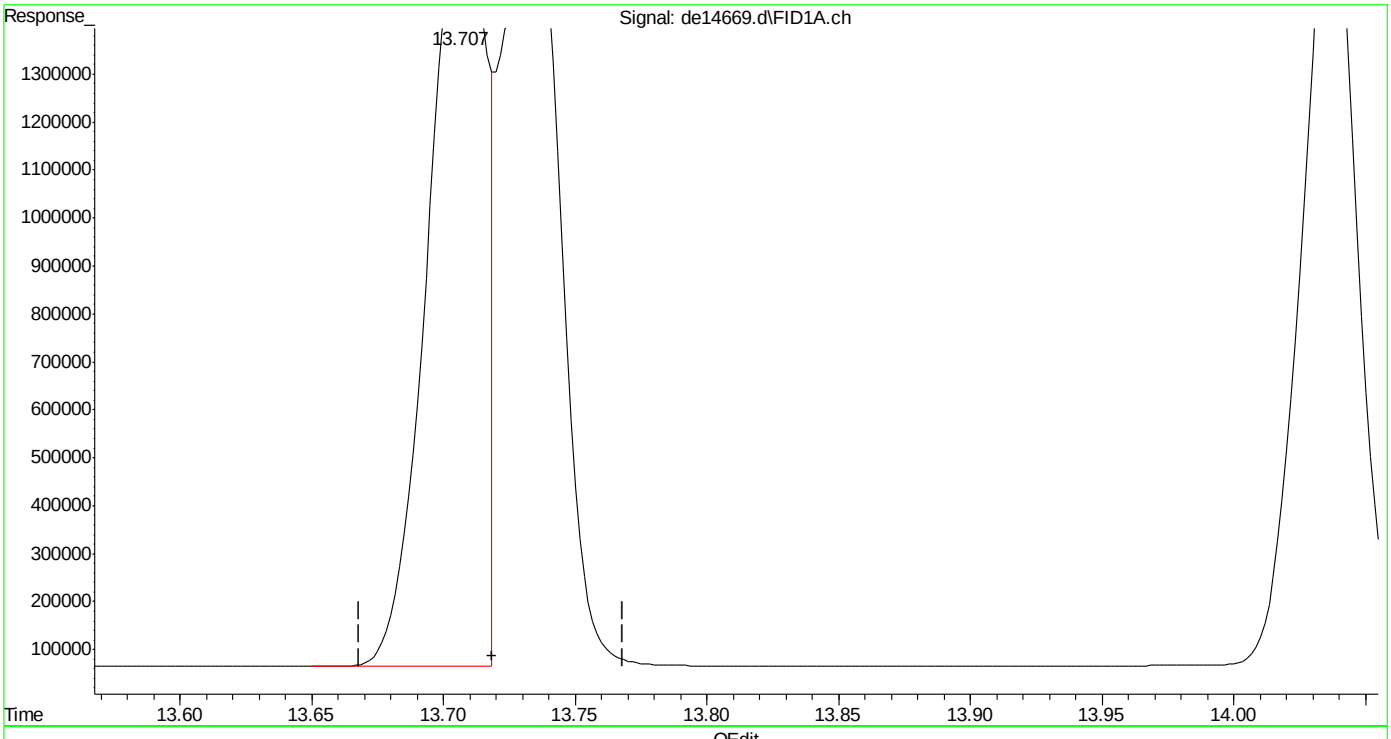
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14669.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:40 pm
Operator : thomasa
Sample : cc815-20
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 108 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:54:02 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:53:54 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.707min 22.625 µg/ml m
response 2466504

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:54:50 2016

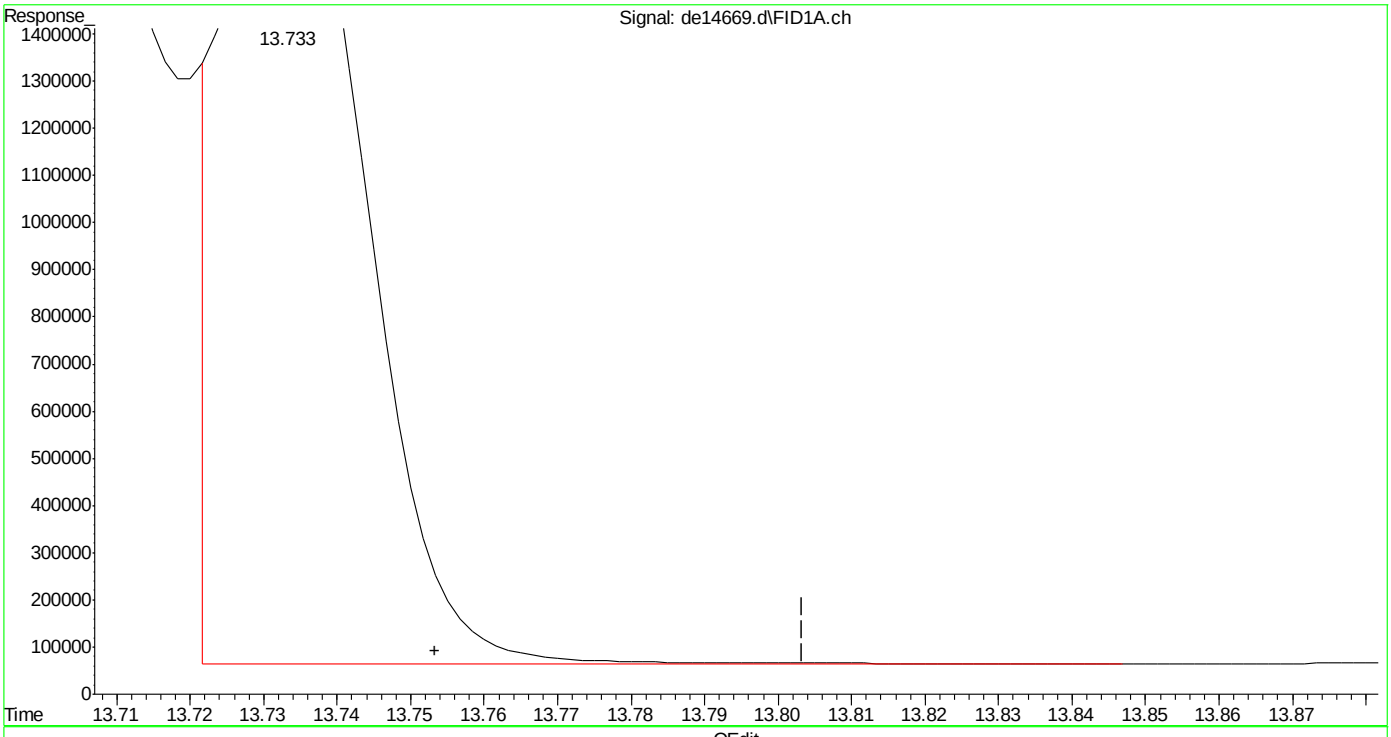
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14669.d
Signal(s) : Signal #1: FID1A.ch  Signal #2: FID2B.ch
Acq On    : 22 Jun 2016   7:40 pm
Operator  : thomasa
Sample    : cc815-20
Misc      : op47862,gde815,1000,,,2,,w
ALS Vial  : 108   Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:54:02 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title  : BMAEPH-working method
QLast Update : Thu Jun 23 07:53:54 2016
Response via : Initial Calibration
Integrator: RTE

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



(17) benzo(k)fluoranthene

13.733min 20.163 µg/ml

response 2383767

(+) = Expected Retention Time

EPH160622W.M Thu Jun 23 07:54:57 2016

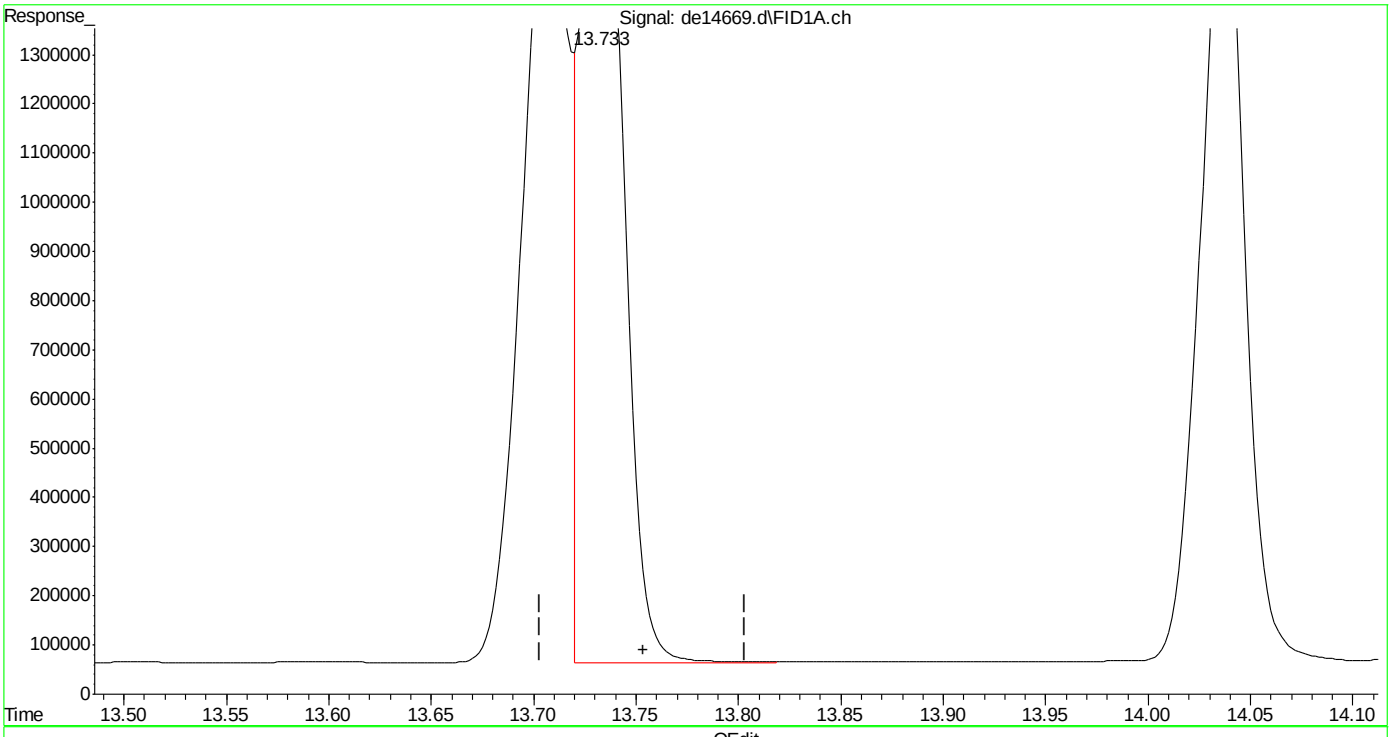
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14669.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:40 pm
Operator : thomasa
Sample : cc815-20
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 108 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:54:02 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:53:54 2016
Response via : Initial Calibration
Integrator: RTE

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



(17) benzo(k)fluoranthene
13.733min 21.260 µg/ml m
response 2513496

(+) = Expected Retention Time

EPH160622W.M Thu Jun 23 07:55:10 2016

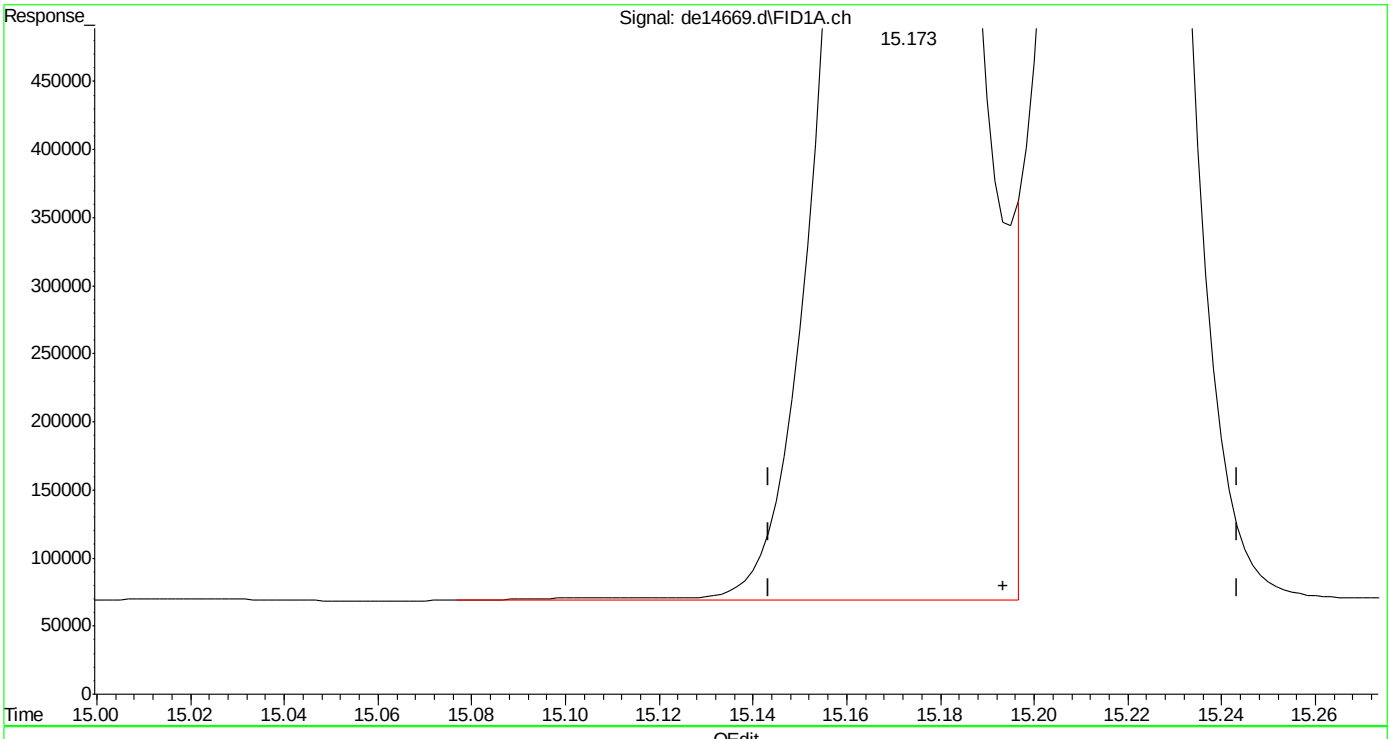
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14669.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:40 pm
Operator : thomasa
Sample : cc815-20
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 108 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:54:02 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:53:54 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.173min 22.905 µg/ml
response 2445015

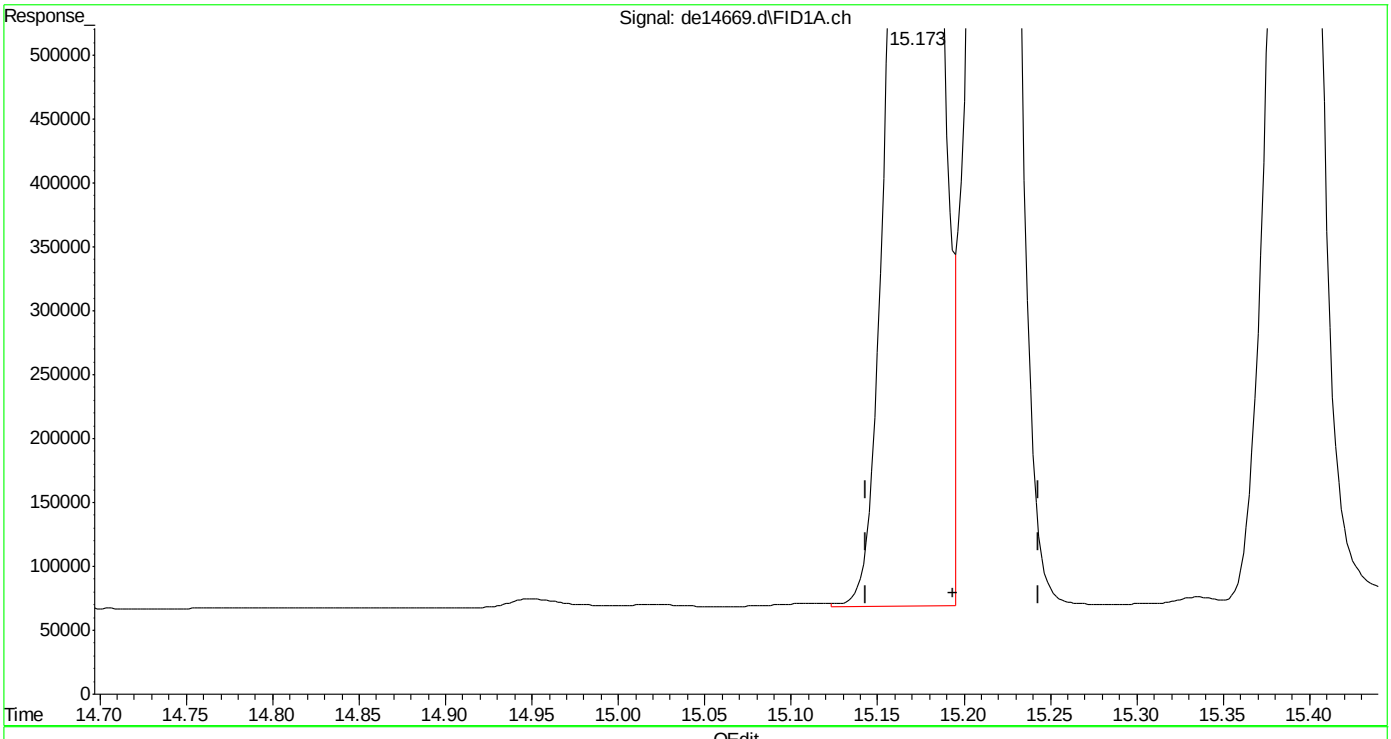
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14669.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:40 pm
Operator : thomasa
Sample : cc815-20
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 108 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:54:02 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:53:54 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.173min 22.594 µg/ml m
response 2411740

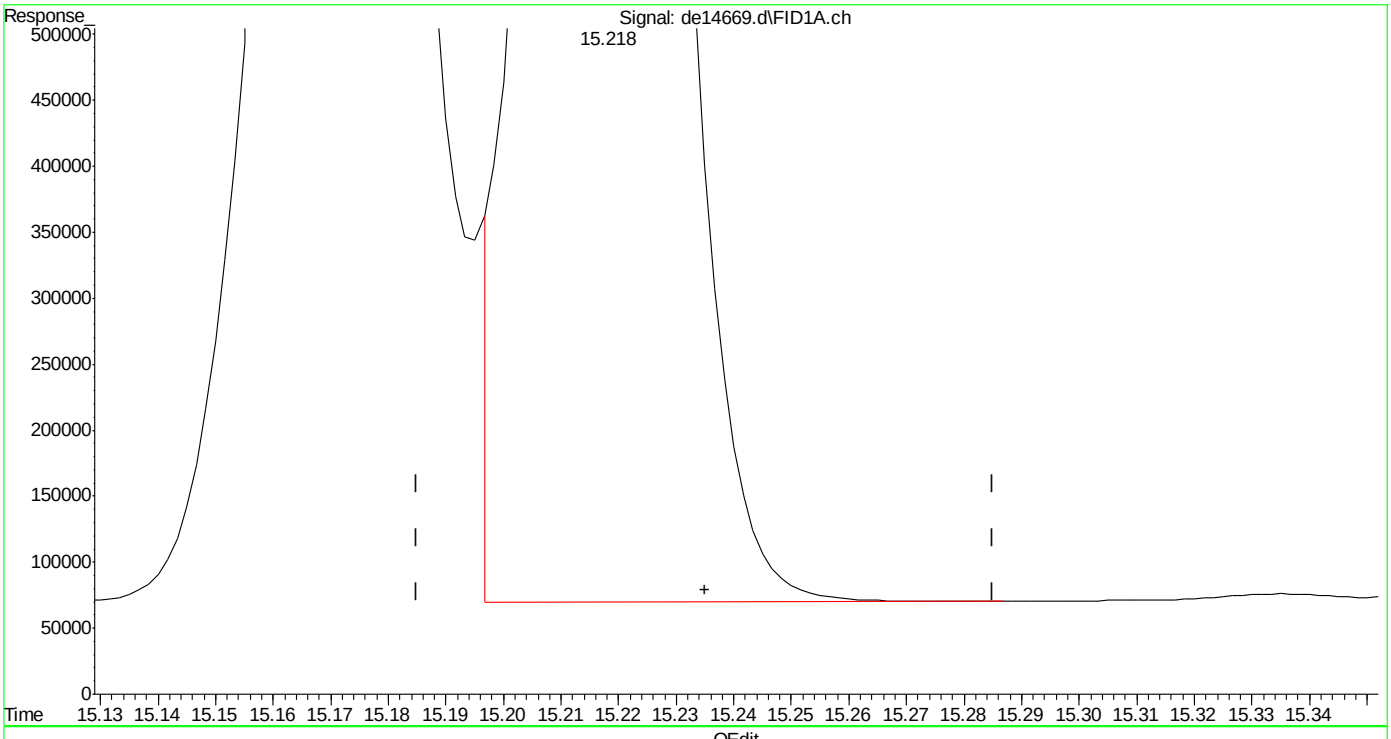
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14669.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:40 pm
Operator : thomasa
Sample : cc815-20
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 108 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:54:02 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:53:54 2016
Response via : Initial Calibration
Integrator: RTE

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



(20) dibenzo(ah)anthracene
15.218min 21.960 µg/ml
response 2326853

(+) = Expected Retention Time

EPH160622W.M Thu Jun 23 07:55:31 2016

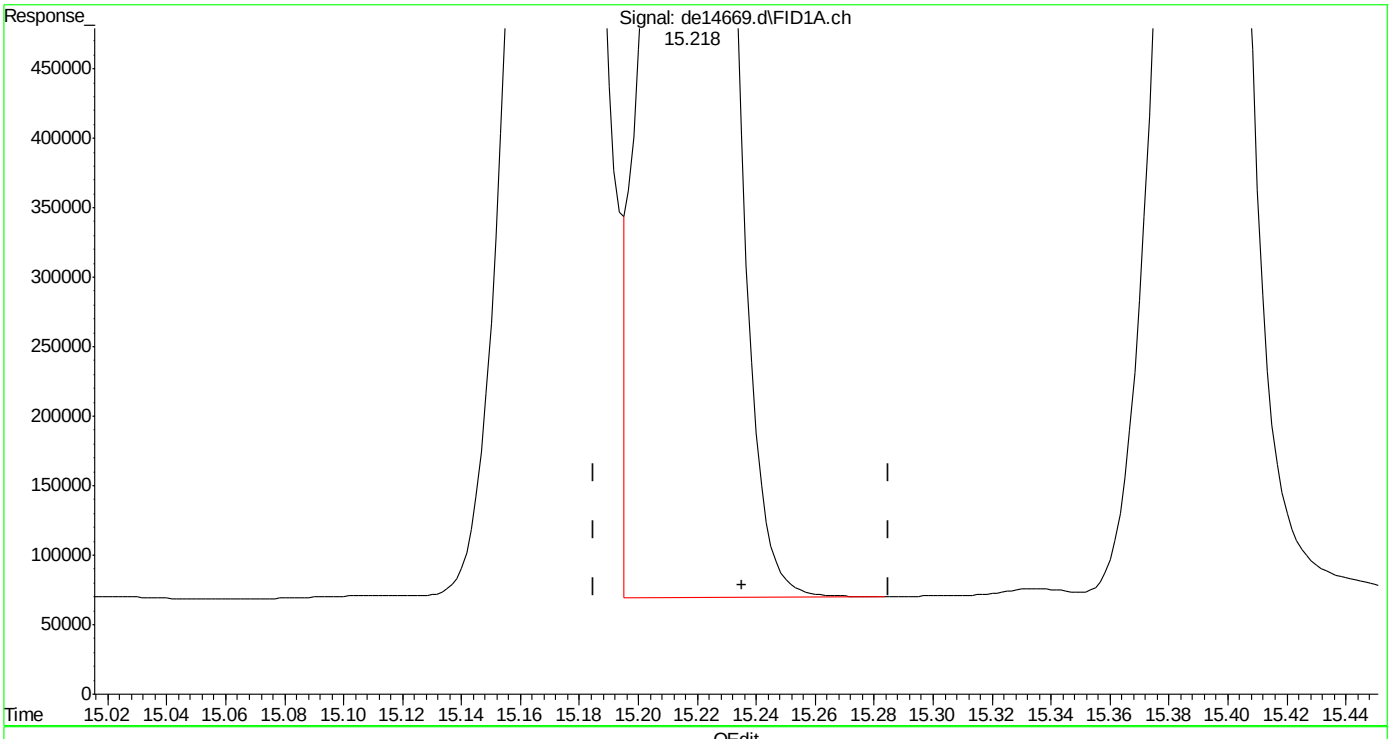
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14669.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:40 pm
Operator : thomasa
Sample : cc815-20
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 108 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:54:02 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:53:54 2016
Response via : Initial Calibration
Integrator: RTE

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



(20) dibenzo(ah)anthracene
15.218min 22.253 µg/ml m
response 2357845

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:55:44 2016

SGS ACCUTEST MC46783

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri
06/23/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14670.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:08 pm
Operator : thomasa
Sample : icc815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 110 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:47:33 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jun 22 16:21:57 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) s	2-fluorobiphenyl	6.485	5918591	64.172 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 320.86%#
6) s	2-bromonaphthalene	7.207	3983702	63.480 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 317.40%#
11) s	o-terphenyl	9.748	6671623	65.136 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 325.68%#
35) s	1-chlorooctadecane	11.217	3273211	57.856 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 289.28%#
	Target Compounds			
2)	naphthalene	5.027	6623759	64.221 µg/ml
3)	2-methylnaphthalene	5.930	6449170	62.930 µg/ml
5)	acenaphthylene	7.042	6467035	64.284 µg/ml
7)	acenaphthene	7.283	6839743	66.164 µg/ml
8)	fluorene	7.927	6614321	65.122 µg/ml
9)	phenanthrene	9.103	6609576	64.951 µg/ml
10)	anthracene	9.162	6241594	64.341 µg/ml
12)	fluoranthene	10.602	6526164	65.300 µg/ml
13)	pyrene	10.860	6691657	65.952 µg/ml
14)	benzo(a)anthracene	12.418	6286876	65.031 µg/ml
15)	chrysene	12.467	6308858	64.812 µg/ml
16)	benzo(B)fluoranthene	13.715	6276008	63.392 µg/mlm
17)	benzo(k)fluoranthene	13.747	6302924	66.696 µg/mlm
18)	benzo(a)pyrene	14.047	5968168	64.566 µg/ml
19)	indeno(1,2,3-cd)pyrene	15.187	5972476	63.095 µg/mlm
20)	dibenzo(ah)anthracene	15.230	5802054	63.481 µg/mlm
21)	benzo(ghi)perylene	15.408	5770697	62.641 µg/ml
25) h	c-9	2.647	4268198	57.778 µg/mlm
26) h	c-10	3.800	4303580	58.257 µg/ml
27)	naphthalene #2	5.478	4591998	57.492 µg/ml
28)	c-12	5.657	4254199	57.589 µg/ml
29)	2-methylnaphthalene #2	6.373	4565165	56.663 µg/ml
30)	c-14	7.173	4224254	57.183 µg/ml
31)	c-16	8.503	4179046	56.571 µg/ml
32)	c-18	9.698	4132964	55.948 µg/ml
33)	c-19	10.253	4137861	61.938 µg/ml
34)	c-20	10.785	4040583	60.482 µg/ml
36)	c-22	11.780	4011818	60.051 µg/ml
37)	c-24	12.695	3738267	55.957 µg/ml
38)	c-26	13.547	3986914	59.679 µg/ml

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14670.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:08 pm
Operator : thomasa
Sample : icc815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 110 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:47:33 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jun 22 16:21:57 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc	Units
39)	c-28	14.340	3856562	57.727	µg/ml
40) h	c-30	15.082	3850472	57.636	µg/ml
41) h	c-36	16.983	3524293	52.754	µg/mlm

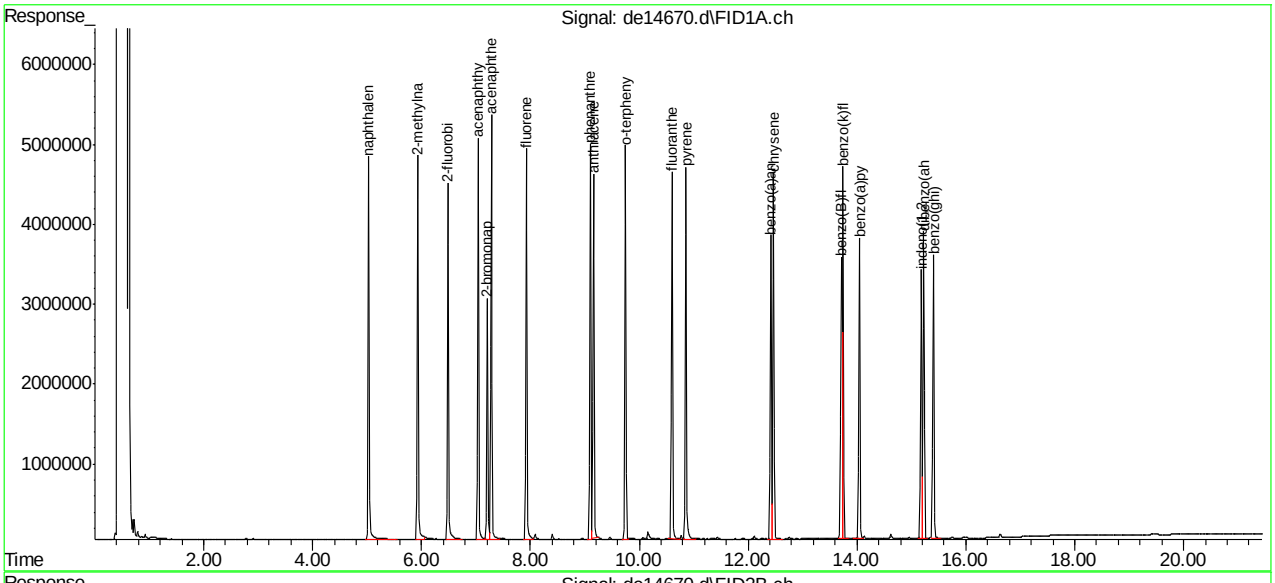
(f)=RT Delta > 1/2 Window (m)=manual int.

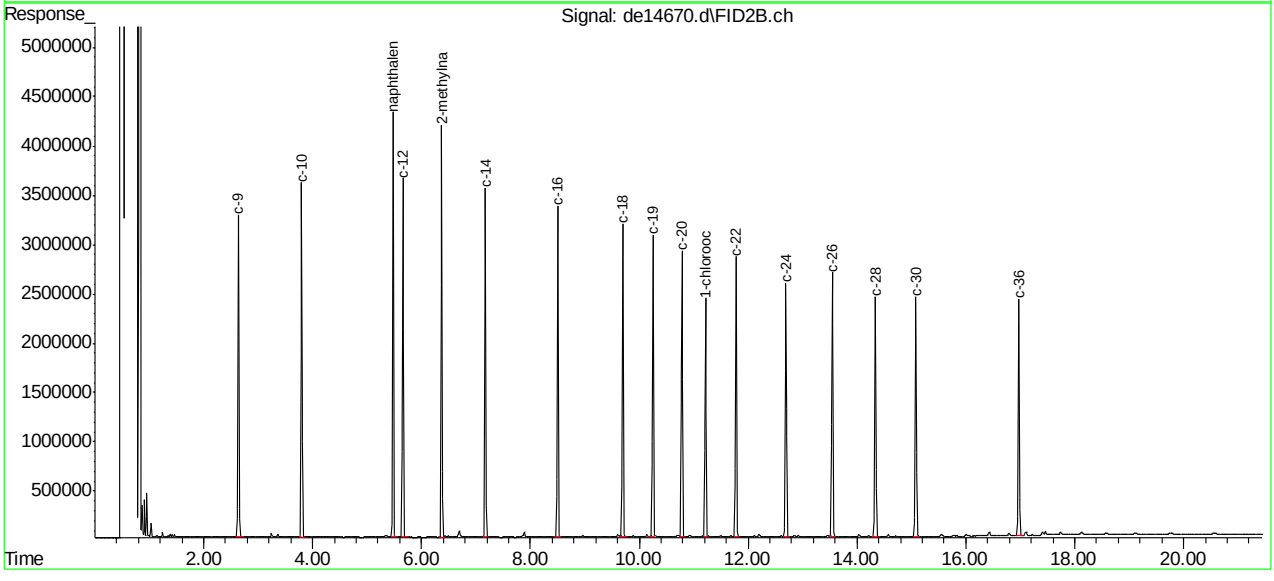
Quantitation Report (QT Reviewed)

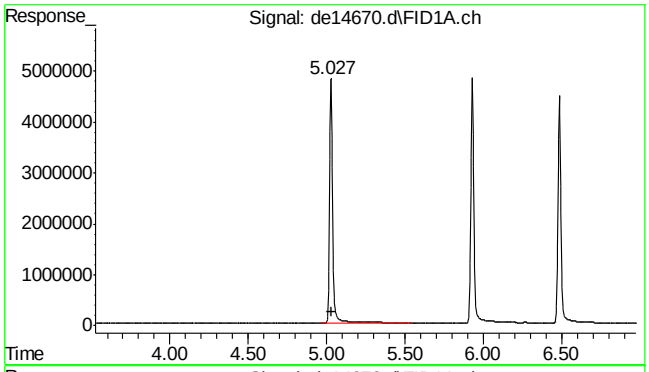
Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14670.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:08 pm
Operator : thomasa
Sample : icc815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 110 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:47:33 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jun 22 16:21:57 2016
Response via : Initial Calibration
Integrator: RTE

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

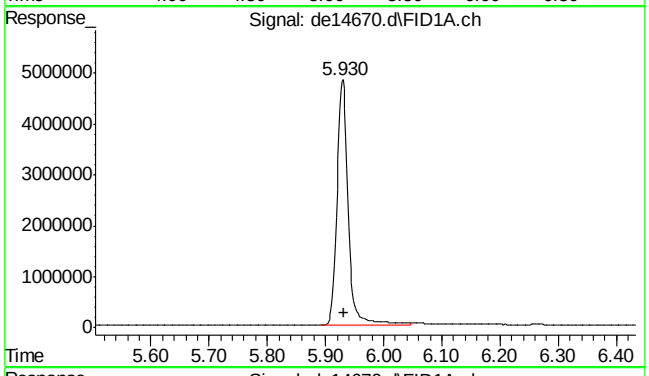






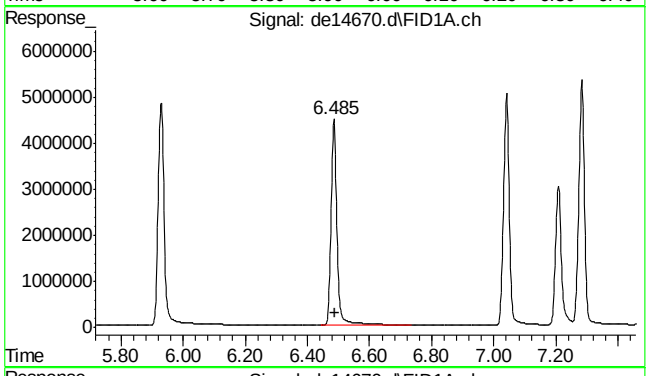
#2 naphthalene

R.T.: 5.027 min
Delta R.T.: -0.003 min
Response: 6623759
Conc: 64.22 µg/ml



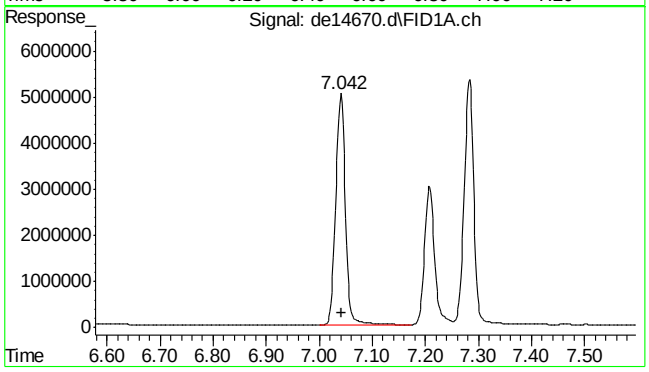
#3 2-methylnaphthalene

R.T.: 5.930 min
Delta R.T.: -0.002 min
Response: 6449170
Conc: 62.93 µg/ml



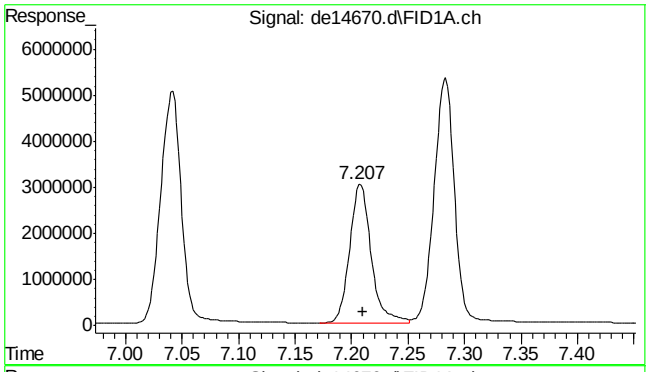
#4 2-fluorobiphenyl

R.T.: 6.485 min
Delta R.T.: -0.003 min
Response: 5918591
Conc: 64.17 µg/ml



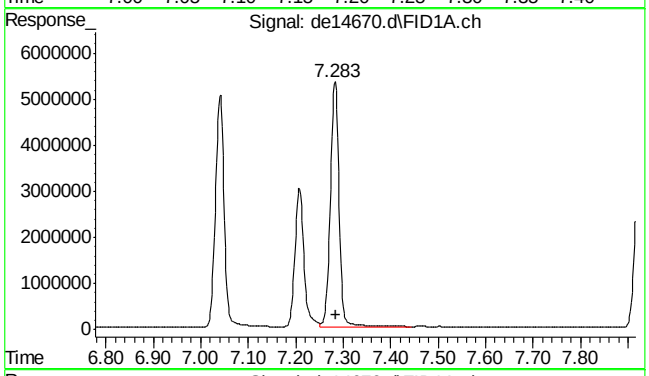
#5 acenaphthylene

R.T.: 7.042 min
Delta R.T.: 0.000 min
Response: 6467035
Conc: 64.28 µg/ml



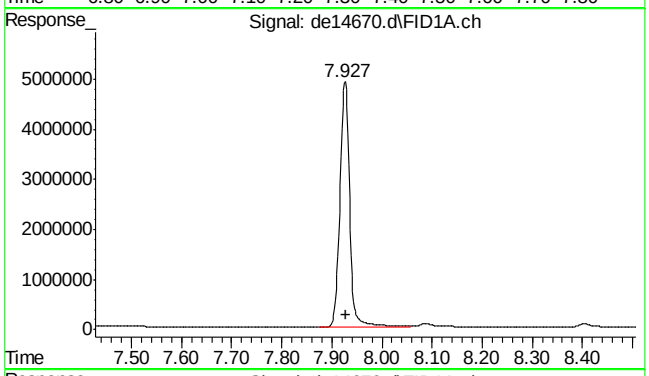
#6 2-bromonaphthalene

R.T.: 7.207 min
Delta R.T.: -0.003 min
Response: 3983702
Conc: 63.48 µg/ml



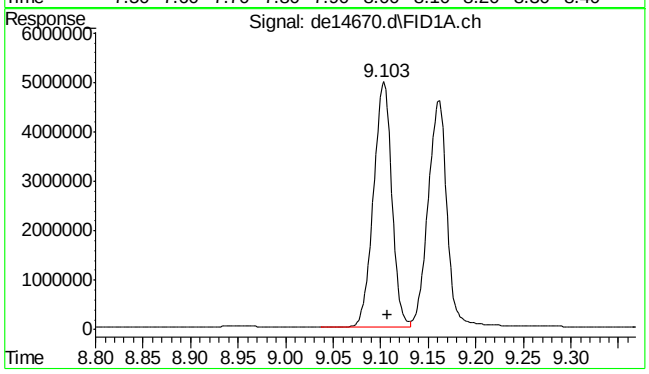
#7 acenaphthene

R.T.: 7.283 min
Delta R.T.: -0.002 min
Response: 6839743
Conc: 66.16 µg/ml



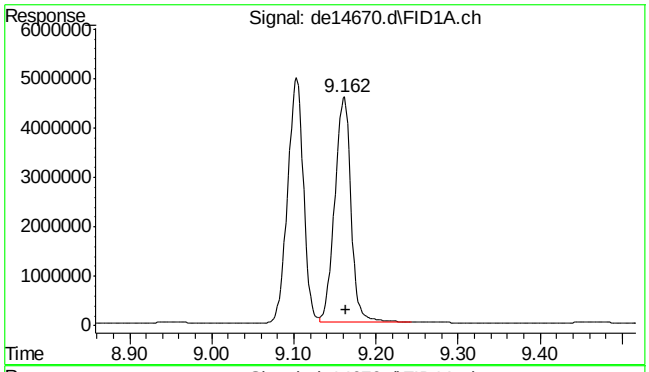
#8 fluorene

R.T.: 7.927 min
Delta R.T.: -0.002 min
Response: 6614321
Conc: 65.12 µg/ml



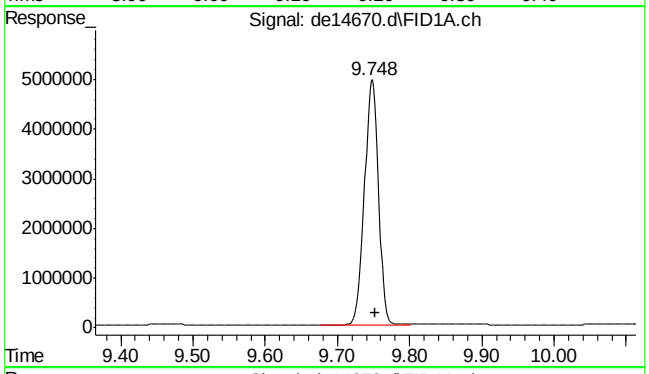
#9 phenanthrene

R.T.: 9.103 min
Delta R.T.: -0.003 min
Response: 6609576
Conc: 64.95 µg/ml



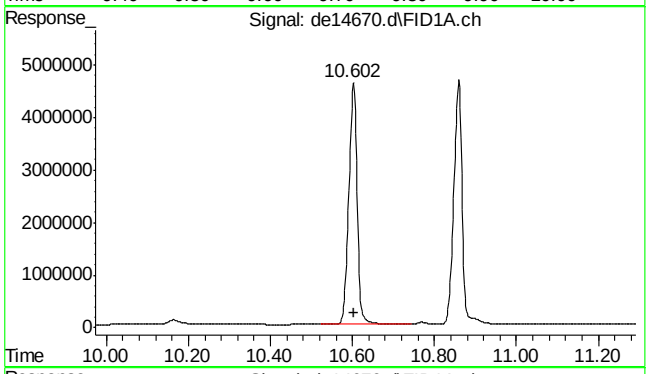
#10 anthracene

R.T.: 9.162 min
Delta R.T.: -0.002 min
Response: 6241594
Conc: 64.34 µg/ml



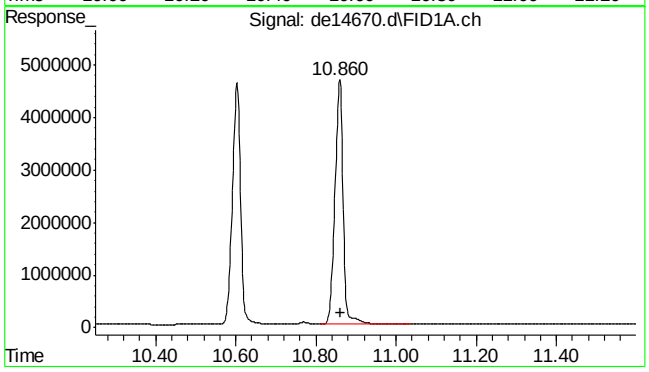
#11 o-terphenyl

R.T.: 9.748 min
Delta R.T.: -0.003 min
Response: 6671623
Conc: 65.14 µg/ml



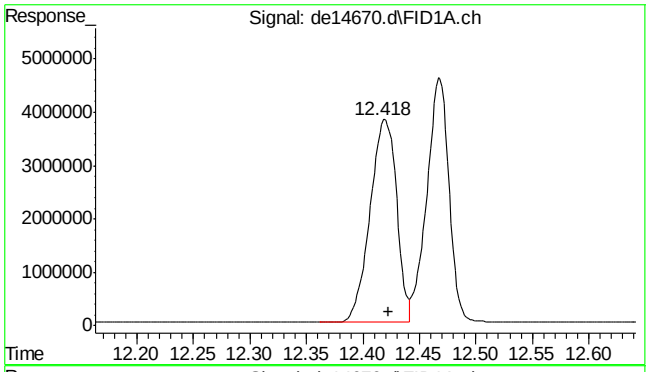
#12 fluoranthene

R.T.: 10.602 min
Delta R.T.: -0.003 min
Response: 6526164
Conc: 65.30 µg/ml



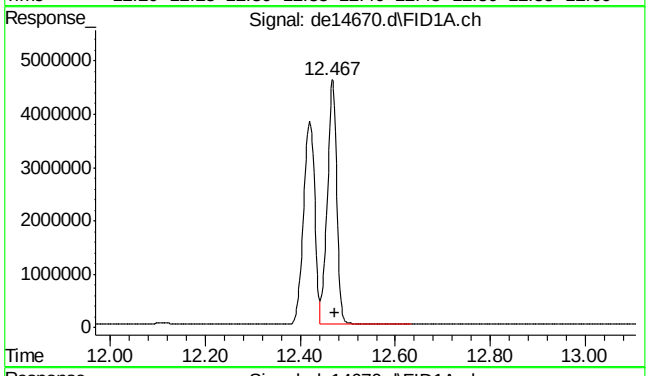
#13 pyrene

R.T.: 10.860 min
Delta R.T.: -0.002 min
Response: 6691657
Conc: 65.95 µg/ml



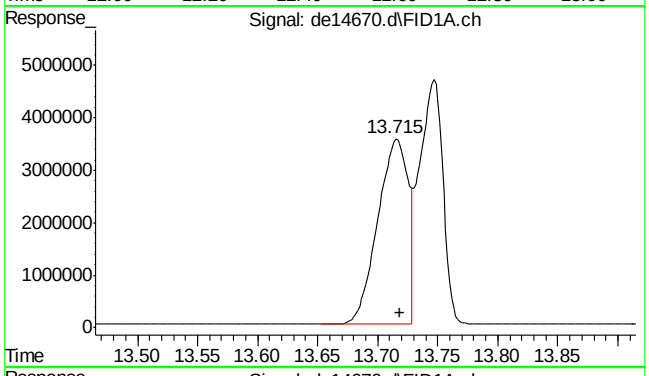
#14 benzo(a)anthracene

R.T.: 12.418 min
Delta R.T.: -0.005 min
Response: 6286876
Conc: 65.03 µg/ml



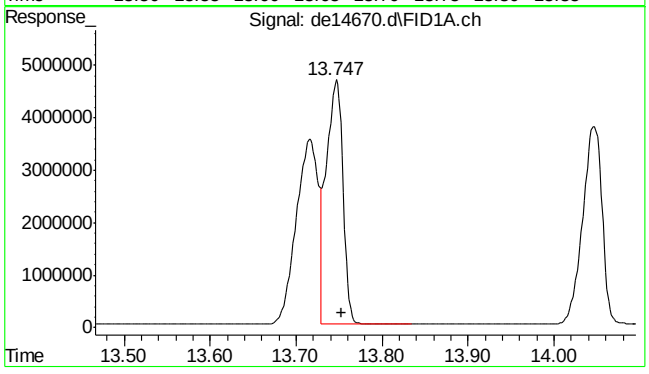
#15 chrysene

R.T.: 12.467 min
Delta R.T.: -0.005 min
Response: 6308858
Conc: 64.81 µg/ml



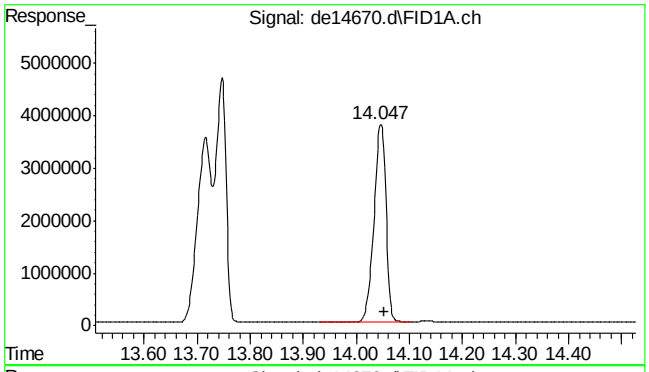
#16 benzo(B)fluoranthene

R.T.: 13.715 min
Delta R.T.: -0.003 min
Response: 6276008
Conc: 63.39 µg/ml m



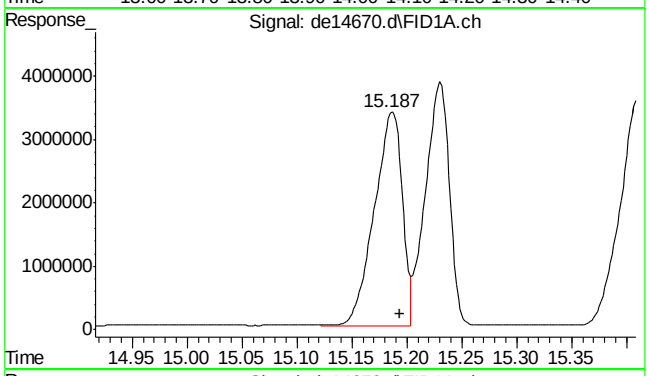
#17 benzo(k)fluoranthene

R.T.: 13.747 min
Delta R.T.: -0.007 min
Response: 6302924
Conc: 66.70 µg/ml m



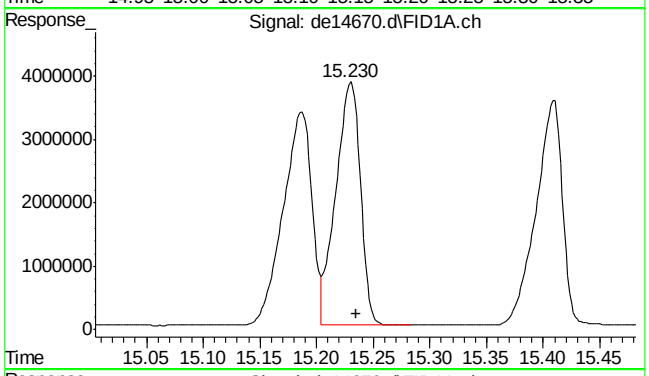
#18 benzo(a)pyrene

R.T.: 14.047 min
Delta R.T.: -0.007 min
Response: 5968168
Conc: 64.57 µg/ml



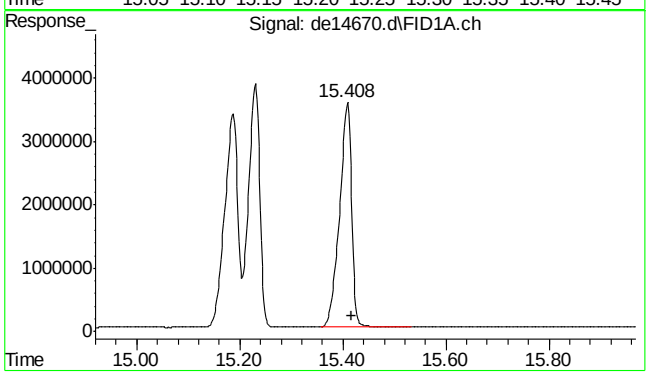
#19 indeno(1,2,3-cd)pyrene

R.T.: 15.187 min
Delta R.T.: -0.007 min
Response: 5972476
Conc: 63.10 µg/ml m



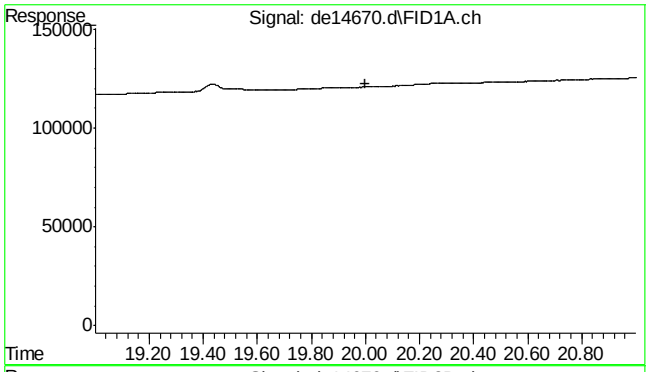
#20 dibenzo(ah)anthracene

R.T.: 15.230 min
Delta R.T.: -0.005 min
Response: 5802054
Conc: 63.48 µg/ml m



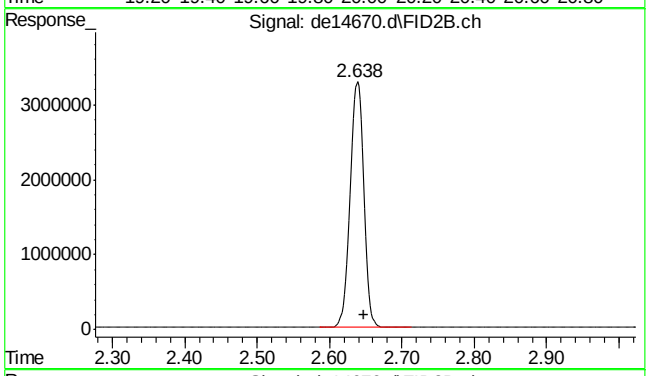
#21 benzo(ghi)perylene

R.T.: 15.408 min
Delta R.T.: -0.008 min
Response: 5770697
Conc: 62.64 µg/ml



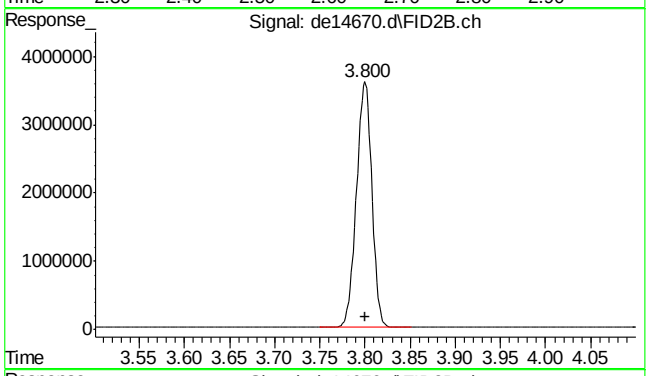
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



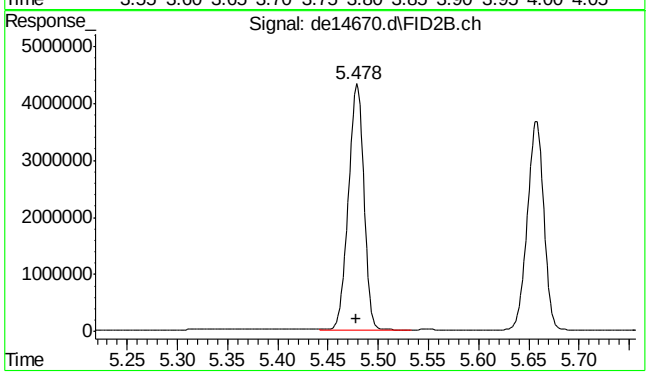
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 4268198
Conc: 57.78 µg/ml m



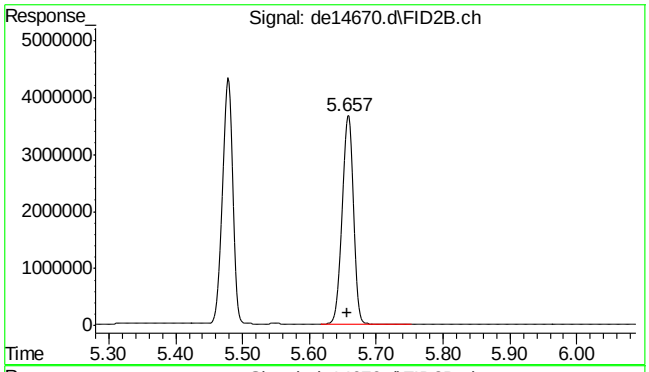
#26 c-10

R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 4303580
Conc: 58.26 µg/ml



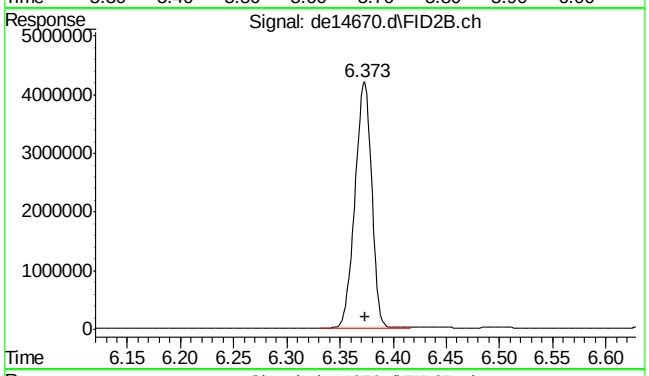
#27 naphthalene #2

R.T.: 5.478 min
Delta R.T.: 0.000 min
Response: 4591998
Conc: 57.49 µg/ml



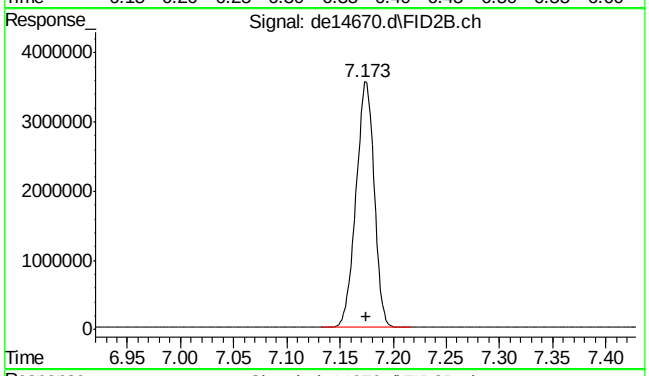
#28 c-12

R.T.: 5.657 min
Delta R.T.: 0.000 min
Response: 4254199
Conc: 57.59 µg/ml



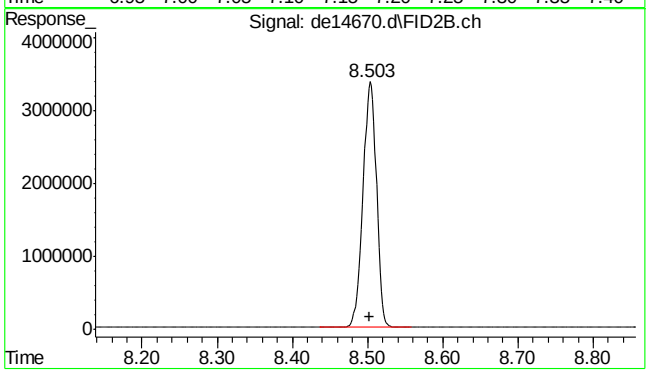
#29 2-methylnaphthalene #2

R.T.: 6.373 min
Delta R.T.: 0.000 min
Response: 4565165
Conc: 56.66 µg/ml



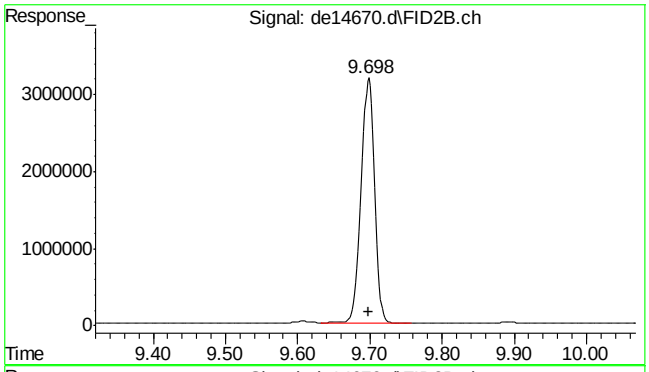
#30 c-14

R.T.: 7.173 min
Delta R.T.: -0.002 min
Response: 4224254
Conc: 57.18 µg/ml



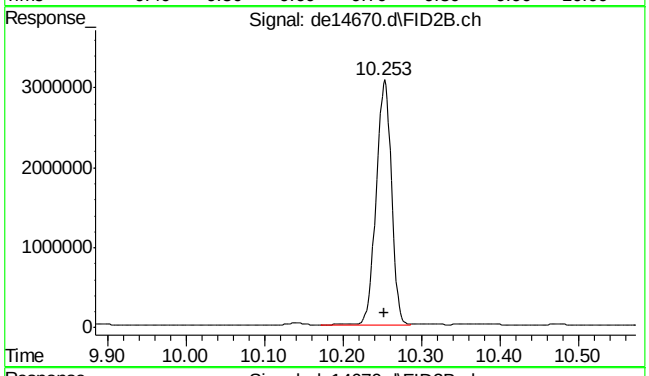
#31 c-16

R.T.: 8.503 min
Delta R.T.: 0.000 min
Response: 4179046
Conc: 56.57 µg/ml



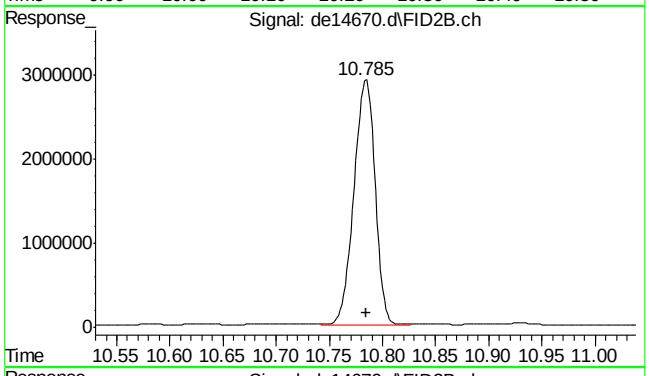
#32 c-18

R.T.: 9.698 min
Delta R.T.: 0.000 min
Response: 4132964
Conc: 55.95 µg/ml



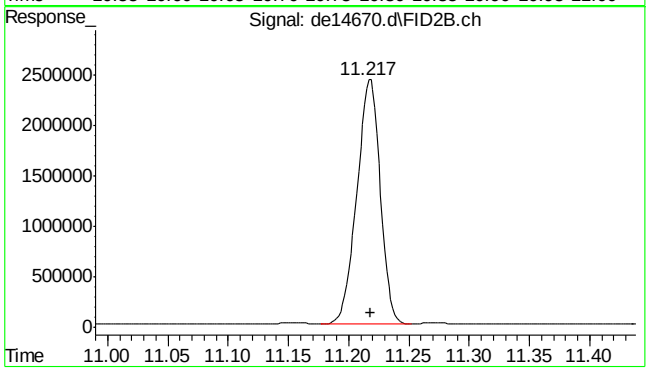
#33 c-19

R.T.: 10.253 min
Delta R.T.: 0.000 min
Response: 4137861
Conc: 61.94 µg/ml



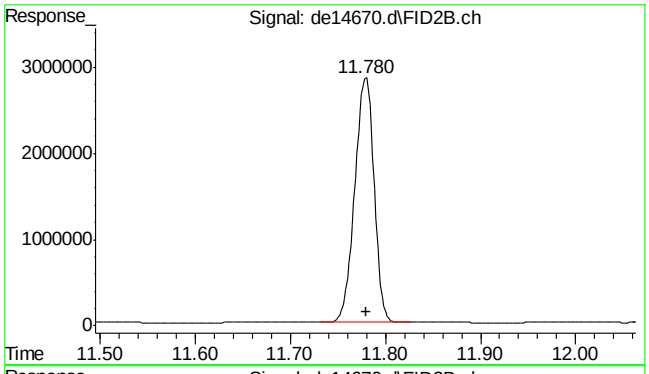
#34 c-20

R.T.: 10.785 min
Delta R.T.: 0.000 min
Response: 4040583
Conc: 60.48 µg/ml



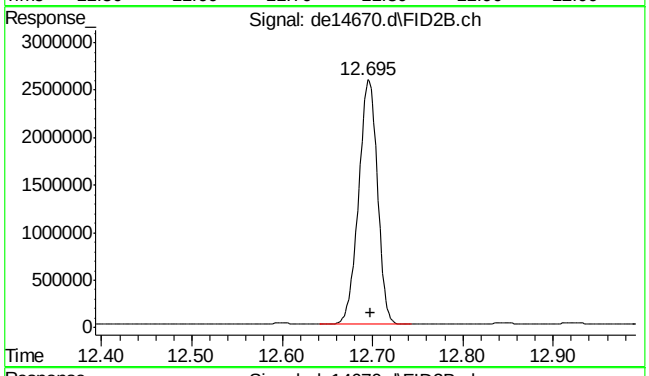
#35 1-chlorooctadecane

R.T.: 11.217 min
Delta R.T.: -0.002 min
Response: 3273211
Conc: 57.86 µg/ml



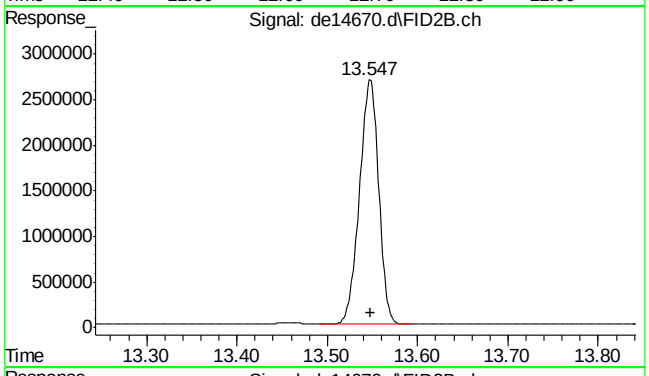
#36 c-22

R.T.: 11.780 min
Delta R.T.: 0.000 min
Response: 4011818
Conc: 60.05 µg/ml



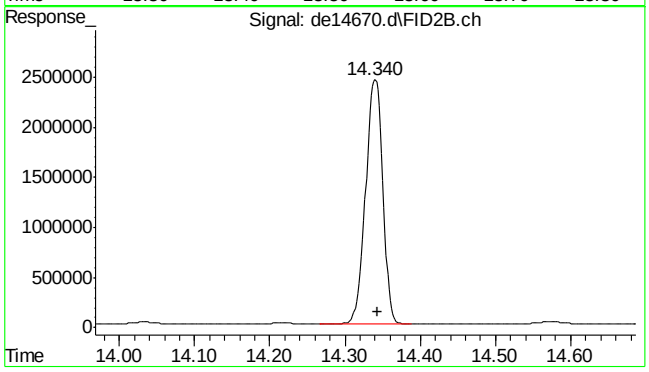
#37 c-24

R.T.: 12.695 min
Delta R.T.: -0.003 min
Response: 3738267
Conc: 55.96 µg/ml



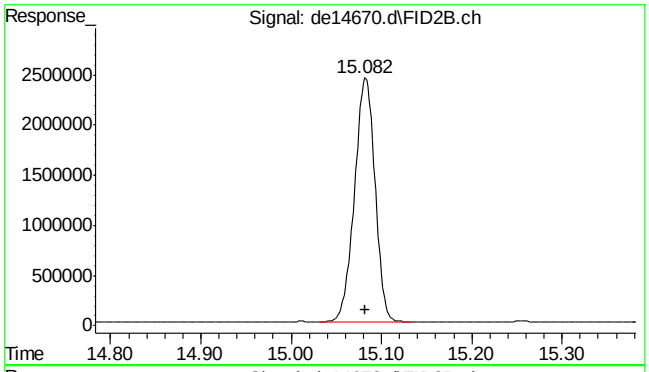
#38 c-26

R.T.: 13.547 min
Delta R.T.: -0.002 min
Response: 3986914
Conc: 59.68 µg/ml



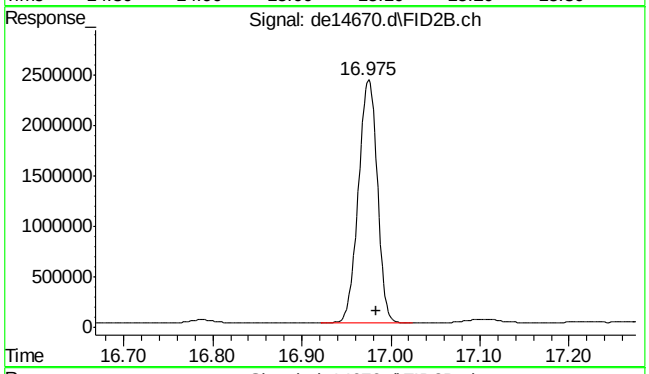
#39 c-28

R.T.: 14.340 min
Delta R.T.: -0.003 min
Response: 3856562
Conc: 57.73 µg/ml



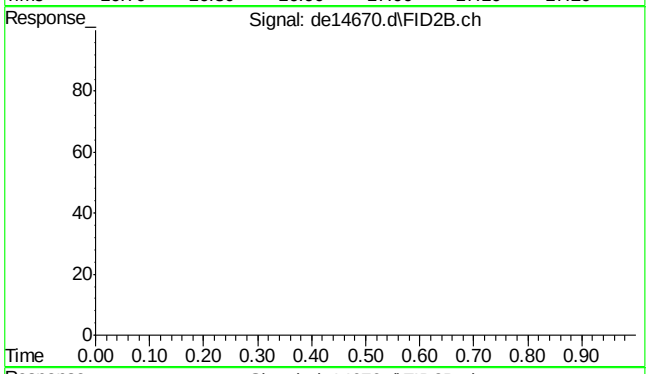
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 3850472
Conc: 57.64 µg/ml



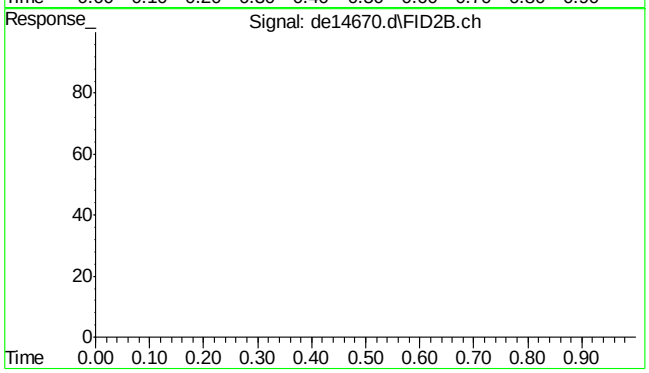
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 3524293
Conc: 52.75 µg/ml m



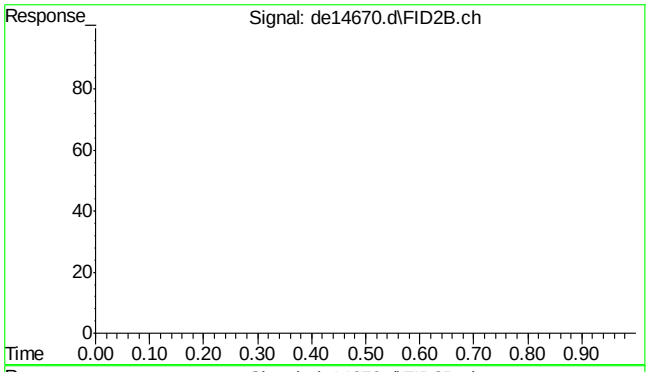
#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



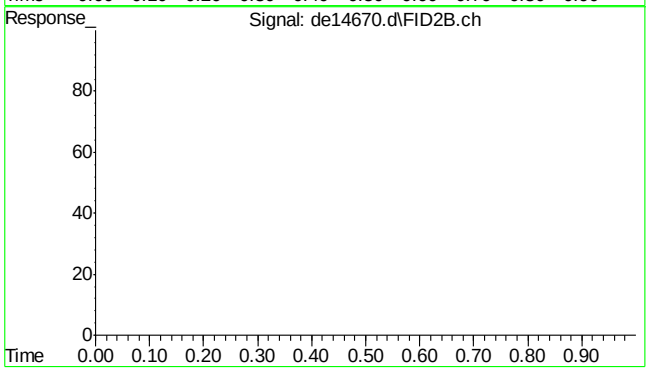
#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#44 bht

```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```



#45 bht

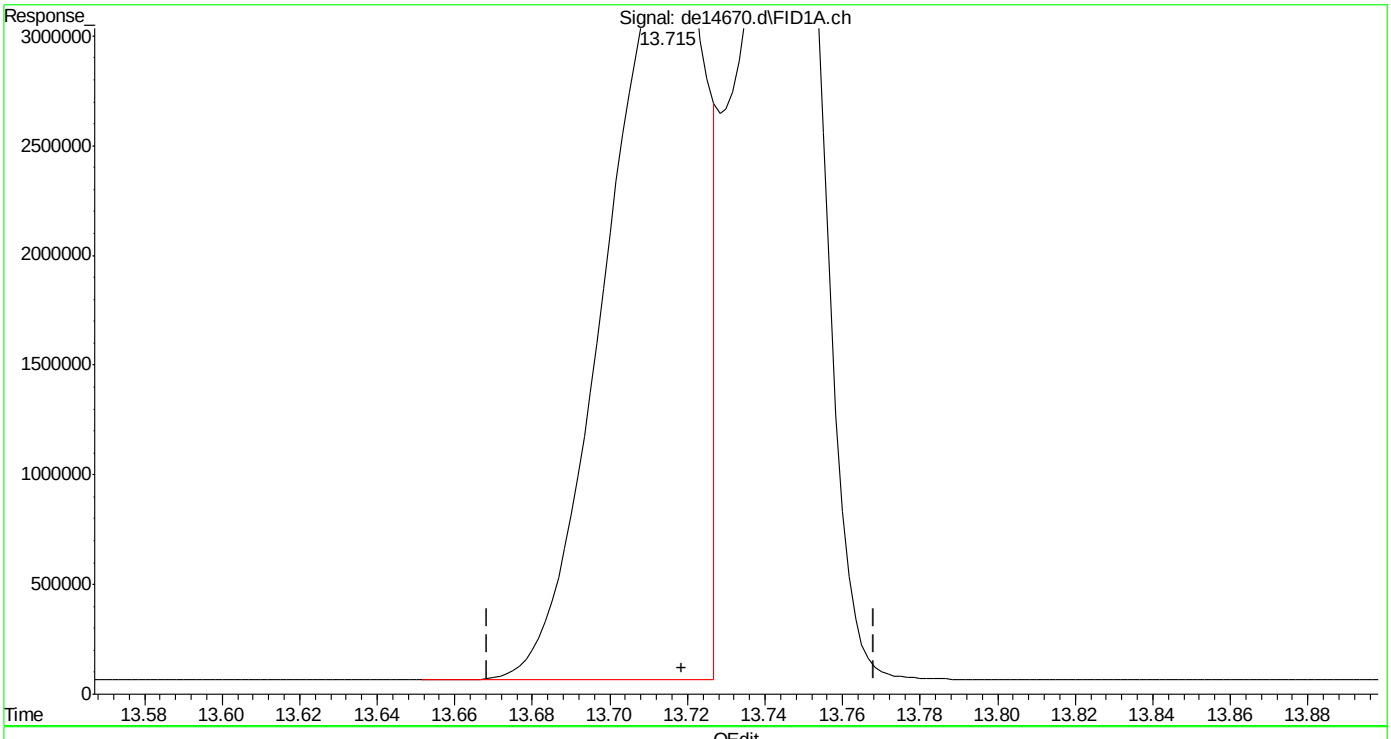
```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14670.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:08 pm
Operator : thomasa
Sample : icc815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 110 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:44:56 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jun 22 16:21:57 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.715min 60.781 µg/ml
response 6017485

(+) = Expected Retention Time

EPH160622W.M Thu Jun 23 07:45:40 2016

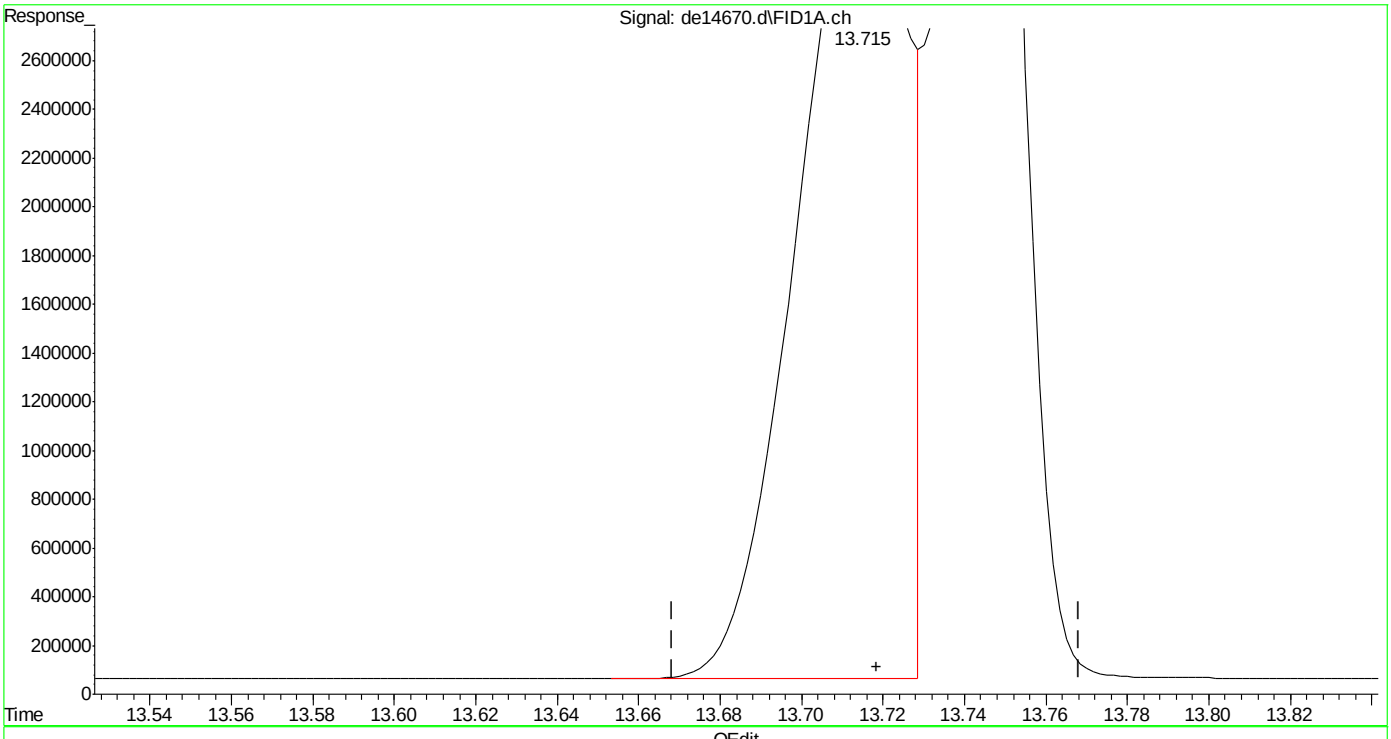
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14670.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:08 pm
Operator : thomasa
Sample : icc815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 110 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:44:56 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jun 22 16:21:57 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.715min 63.392 µg/ml m
response 6276008

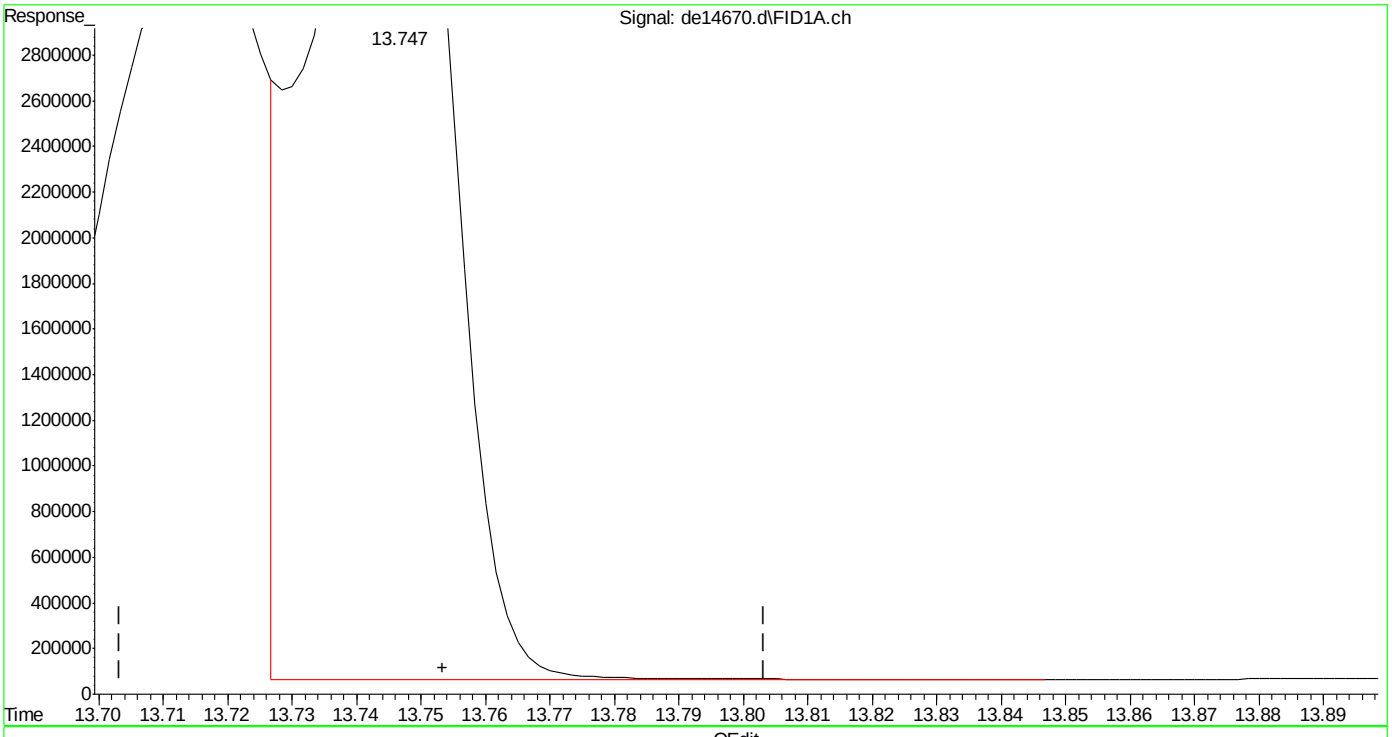
(+) = Expected Retention Time

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14670.d
Signal(s) : Signal #1: FID1A.ch  Signal #2: FID2B.ch
Acq On    : 22 Jun 2016   8:08 pm
Operator  : thomasa
Sample    : icc815-50
Misc      : op47862,gde815,1000,,,2,,w
ALS Vial  : 110   Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:44:56 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title  : BMAEPH-working method
QLast Update : Wed Jun 22 16:21:57 2016
Response via : Initial Calibration
Integrator: RTE

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



(17) benzo(k)fluoranthene

13.747min 69.378 µg/ml

response 6556409

(+) = Expected Retention Time

EPH160622W.M Thu Jun 23 07:46:01 2016

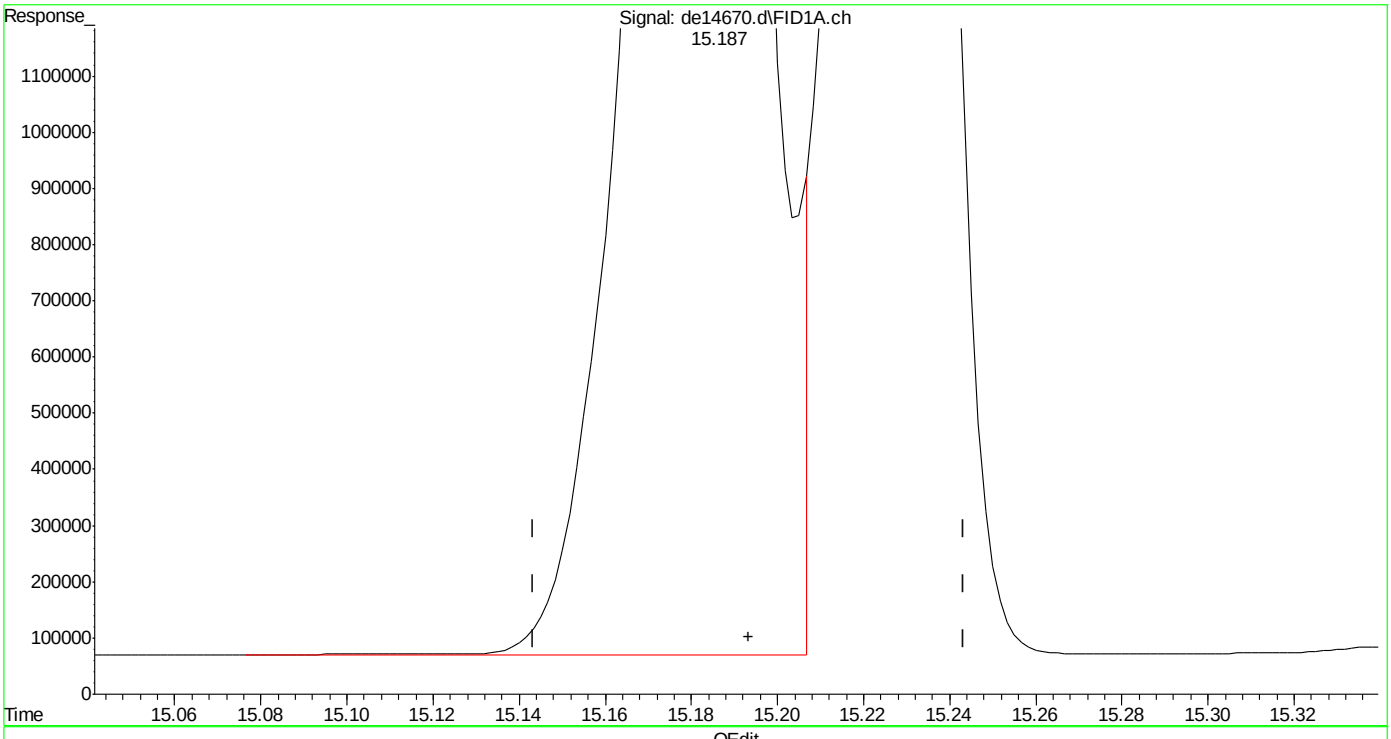
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14670.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:08 pm
Operator : thomasa
Sample : icc815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 110 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:44:56 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jun 22 16:21:57 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.187min 64.835 µg/ml
response 6137190

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:46:16 2016

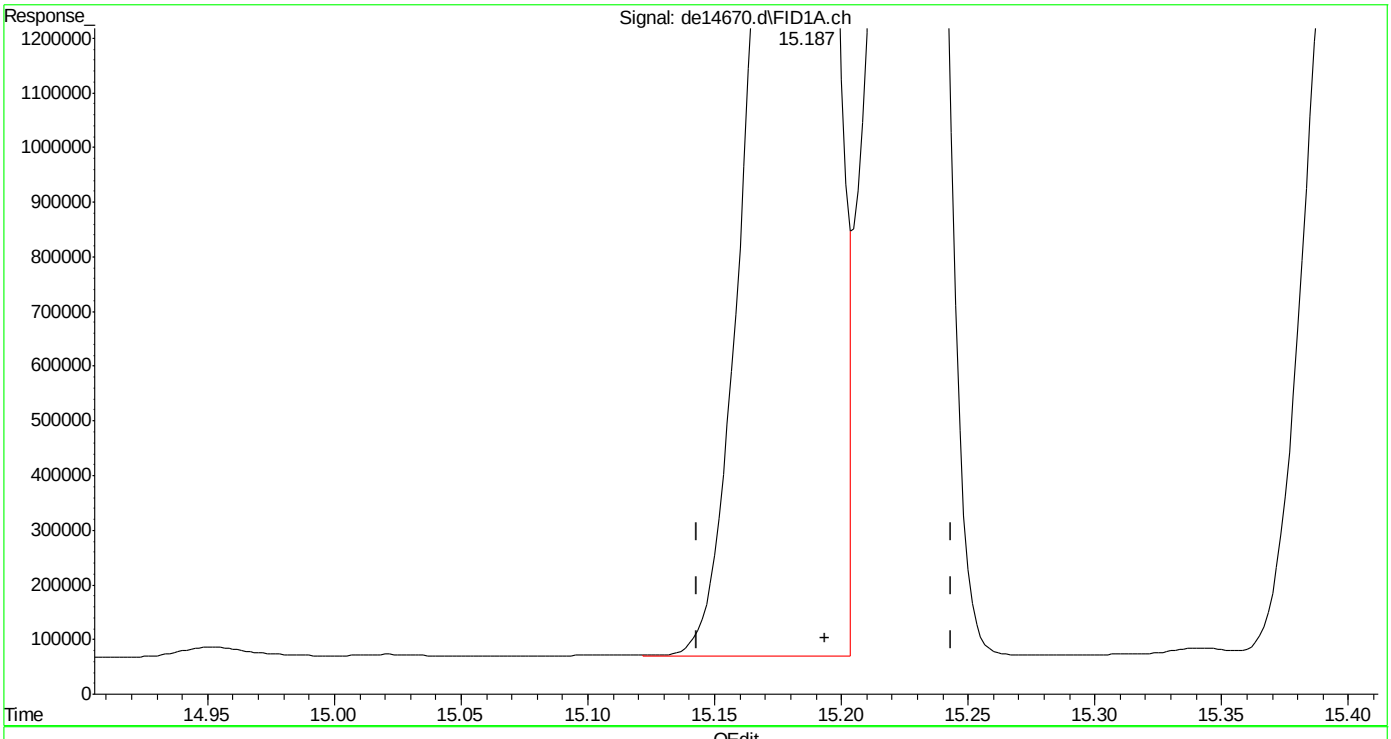
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14670.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:08 pm
Operator : thomasa
Sample : icc815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 110 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:44:56 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jun 22 16:21:57 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.187min 63.095 µg/ml m
response 5972476

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:46:39 2016

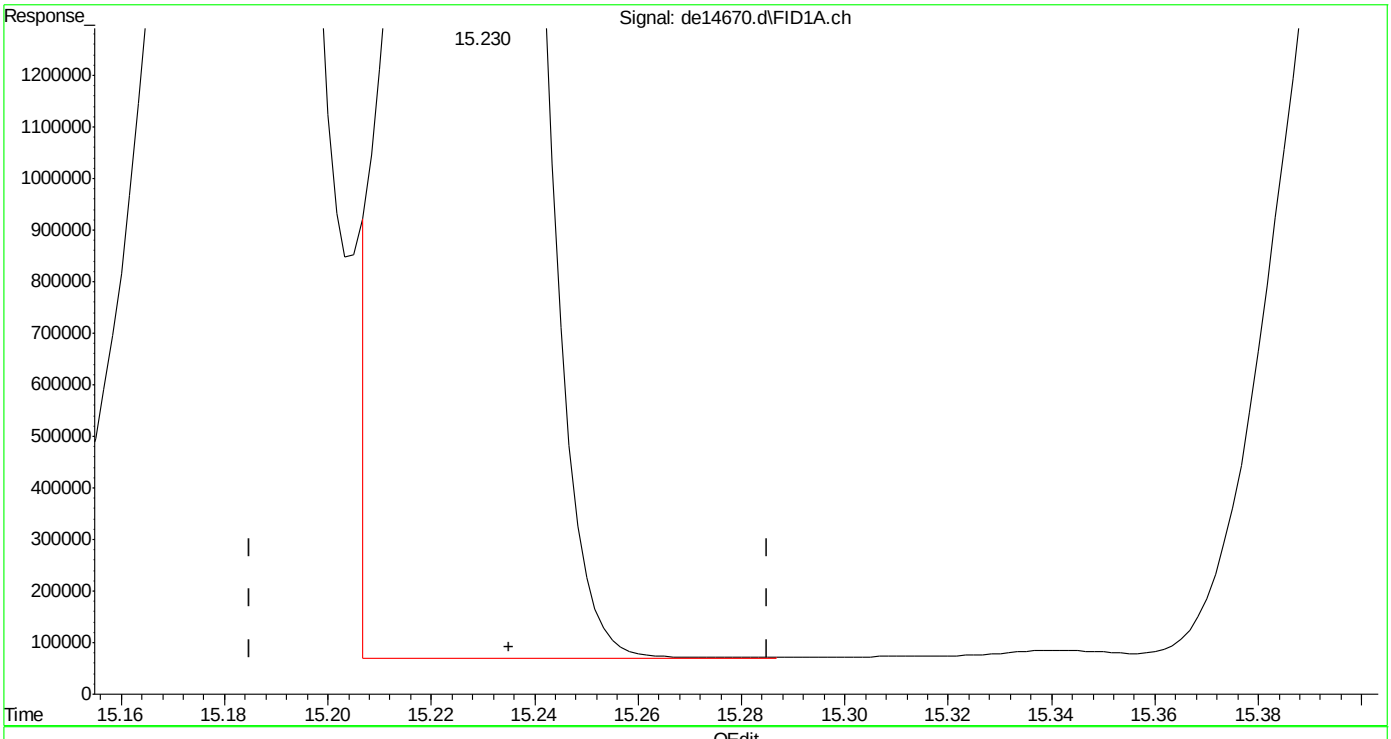
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14670.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:08 pm
Operator : thomasa
Sample : icc815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 110 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:44:56 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jun 22 16:21:57 2016
Response via : Initial Calibration
Integrator: RTE

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



(20) dibenzo(ah)anthracene
15.230min 61.689 µg/ml
response 5638284

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:46:43 2016

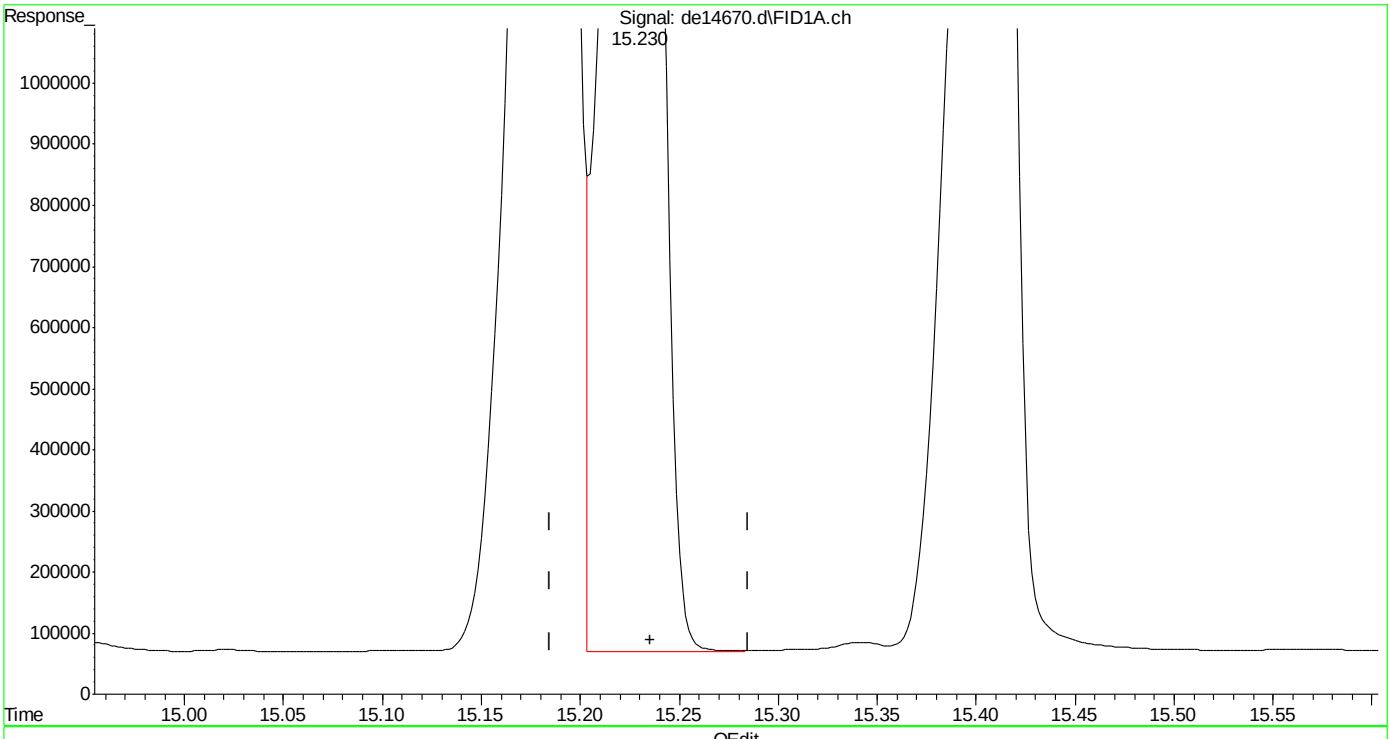
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14670.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:08 pm
Operator : thomasa
Sample : icc815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 110 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:44:56 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jun 22 16:21:57 2016
Response via : Initial Calibration
Integrator: RTE

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



(20) dibenzo(ah)anthracene
15.230min 63.481 µg/ml m
response 5802054

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:47:05 2016

SGS ACCUTEST MC46783

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri
06/23/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14671.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:36 pm
Operator : thomasa
Sample : ic815-100 (Sig #1); cc815-100 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 112 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:58:39 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:56:20 2016
Response via : Initial Calibration
Integrator: RTE

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) s 2-fluorobiphenyl	6.488	10731985	98.609 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 493.04%#	
6) s 2-bromonaphthalene	7.212	7308924	107.707 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 538.53%#	
11) s o-terphenyl	9.752	12101379	96.382 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 481.91%#	
35) s 1-chlorooctadecane	11.220	6055700	96.667 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 483.34%#	
Target Compounds			
2) naphthalene	5.030	11983627	100.108 µg/ml
3) 2-methylnaphthalene	5.932	11763665	97.767 µg/ml
5) acenaphthylene	7.045	11745266	97.684 µg/ml
7) acenaphthene	7.288	12324034	93.153 µg/ml
8) fluorene	7.932	12025206	98.790 µg/ml
9) phenanthrene	9.108	12085999	102.391 µg/ml
10) anthracene	9.167	11487748	90.765 µg/ml
12) fluoranthene	10.610	11886285	97.833 µg/ml
13) pyrene	10.865	12197688	98.014 µg/ml
14) benzo(a)anthracene	12.428	11507490	99.885 µg/mlm
15) chrysene	12.480	11612003	95.708 µg/mlm
16) benzo(B)fluoranthene	13.722	12199538	109.244 µg/ml
17) benzo(k)fluoranthene	13.762	10965306	89.712 µg/ml
18) benzo(a)pyrene	14.060	10999807	98.011 µg/ml
19) indeno(1,2,3-cd)pyrene	15.197	11203362	101.798 µg/mlm
20) dibenzo(ah)anthracene	15.247	10503451	96.371 µg/mlm
21) benzo(ghi)perylene	15.427	10703286	99.223 µg/ml
25) h c-9	2.647	7937669	93.634 µg/mlm
26) h c-10	3.800	8047408	93.818 µg/ml
27) naphthalene #2	5.483	8501971	97.041 µg/ml
28) c-12	5.660	7886242	93.406 µg/ml
29) 2-methylnaphthalene #2	6.377	8454340	97.490 µg/ml
30) c-14	7.177	7814489	92.387 µg/ml
31) c-16	8.507	7764221	91.261 µg/ml
32) c-18	9.700	7676676	91.862 µg/ml
33) c-19	10.257	7623083	91.852 µg/ml
34) c-20	10.787	7477882	93.056 µg/ml
36) c-22	11.782	7420088	92.896 µg/ml
37) c-24	12.700	6931545	91.371 µg/ml
38) c-26	13.552	7429512	93.658 µg/ml

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14671.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:36 pm
Operator : thomasa
Sample : ic815-100 (Sig #1); cc815-100 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 112 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:58:39 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:56:20 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc Units
39)	c-28	14.343	7155151	94.261 µg/ml
40) h	c-30	15.082	7181147	87.303 µg/ml
41) h	c-36	16.983	6572820	97.240 µg/mlm

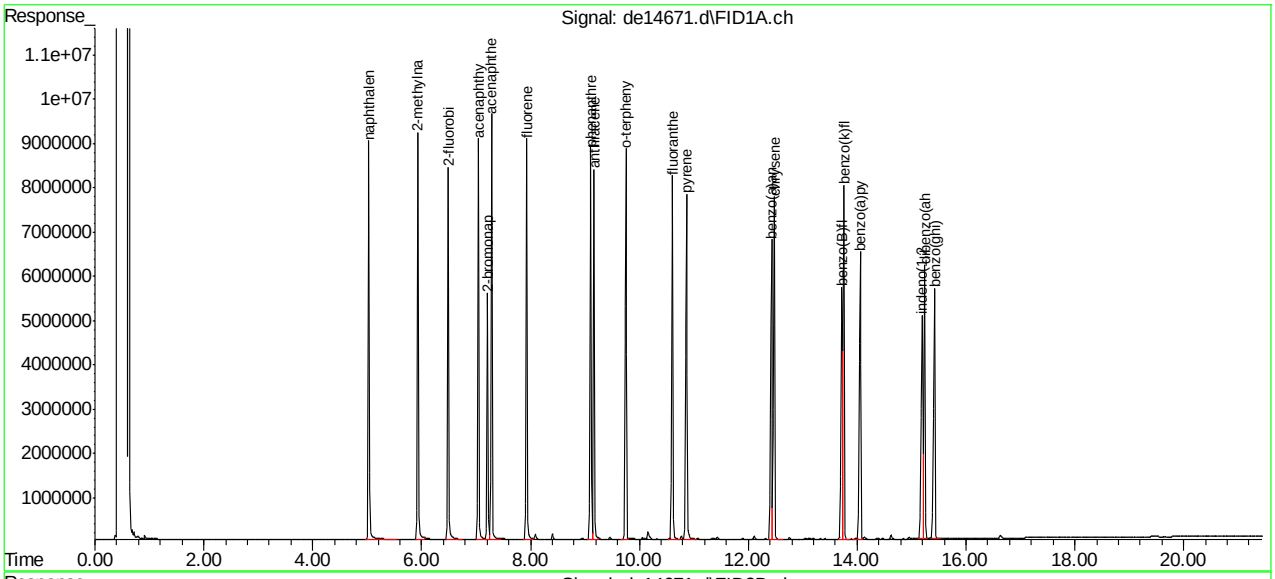
(f)=RT Delta > 1/2 Window (m)=manual int.

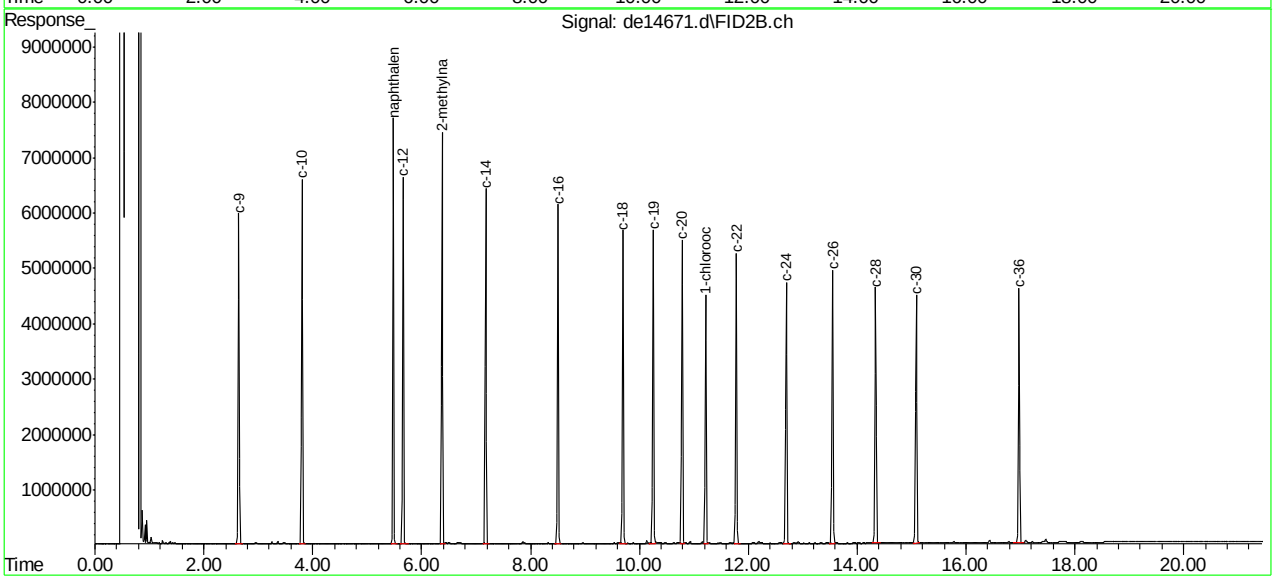
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14671.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:36 pm
Operator : thomasa
Sample : ic815-100 (Sig #1); cc815-100 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 112 Sample Multiplier: 1

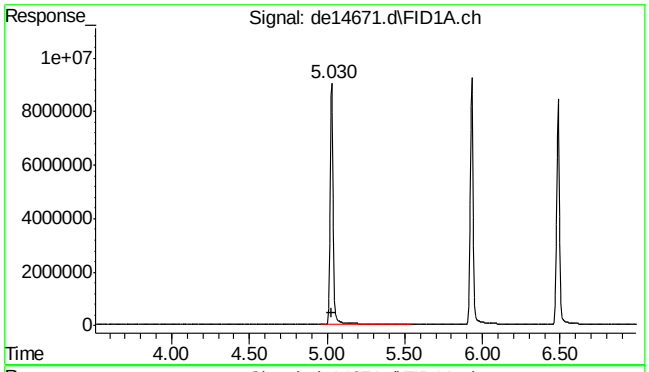
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:58:39 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:56:20 2016
Response via : Initial Calibration
Integrator: RTE

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



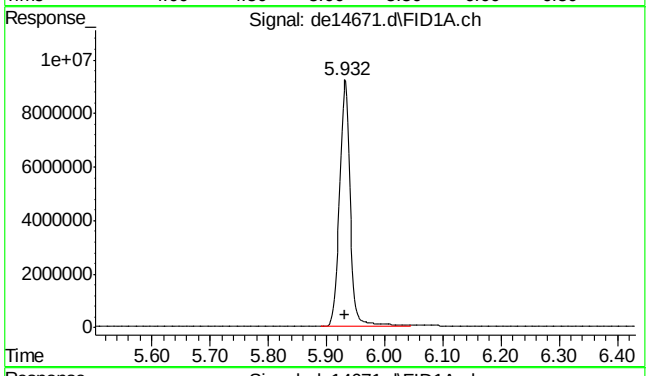


SGS ACCUTEST MC46783



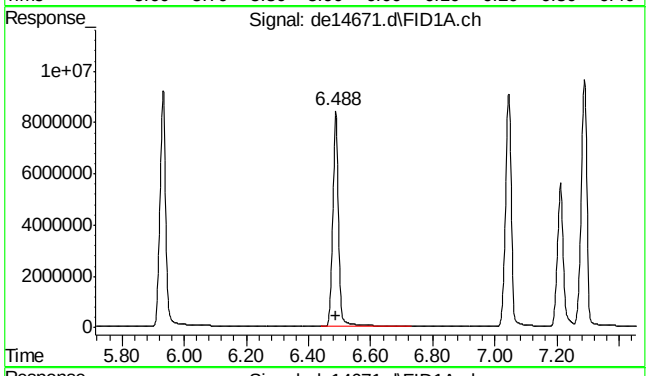
#2 naphthalene

R.T.: 5.030 min
Delta R.T.: 0.000 min
Response: 11983627
Conc: 100.11 µg/ml



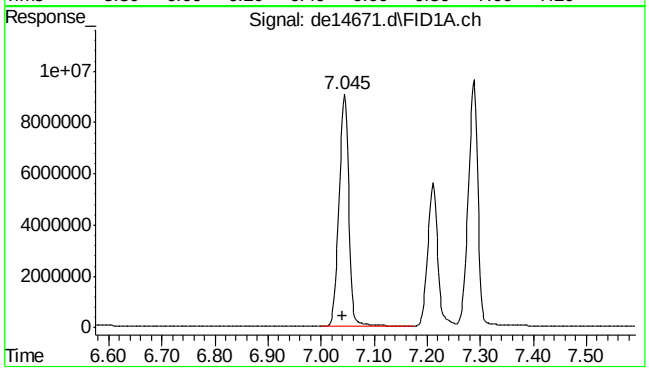
#3 2-methylnaphthalene

R.T.: 5.932 min
Delta R.T.: 0.000 min
Response: 11763665
Conc: 97.77 µg/ml



#4 2-fluorobiphenyl

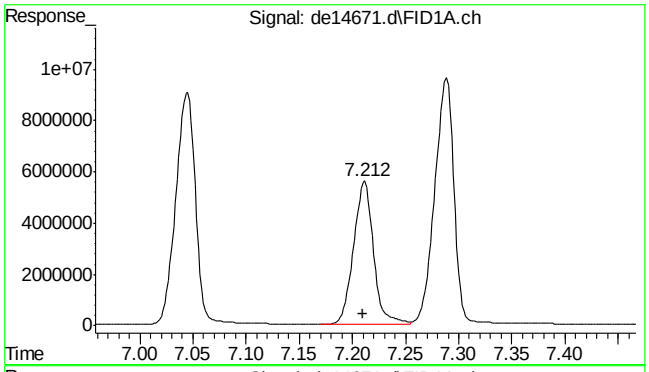
R.T.: 6.488 min
Delta R.T.: 0.000 min
Response: 10731985
Conc: 98.61 µg/ml



#5 acenaphthylene

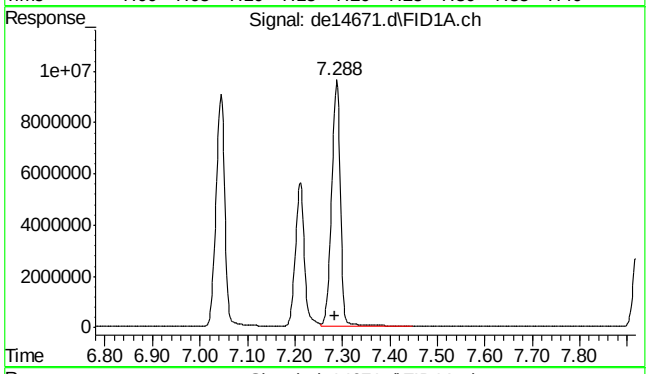
R.T.: 7.045 min
Delta R.T.: 0.003 min
Response: 11745266
Conc: 97.68 µg/ml

SGS ACCUTEST MC46783



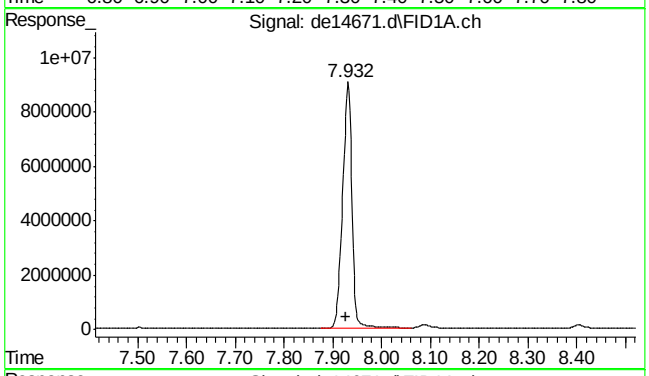
#6 2-bromonaphthalene

R.T.: 7.212 min
Delta R.T.: 0.002 min
Response: 7308924
Conc: 107.71 µg/ml



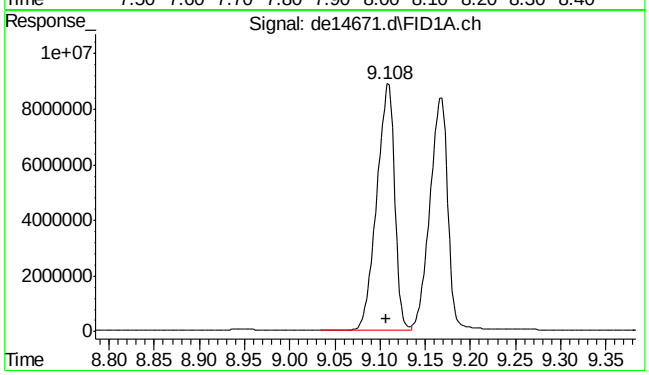
#7 acenaphthene

R.T.: 7.288 min
Delta R.T.: 0.003 min
Response: 12324034
Conc: 93.15 µg/ml



#8 fluorene

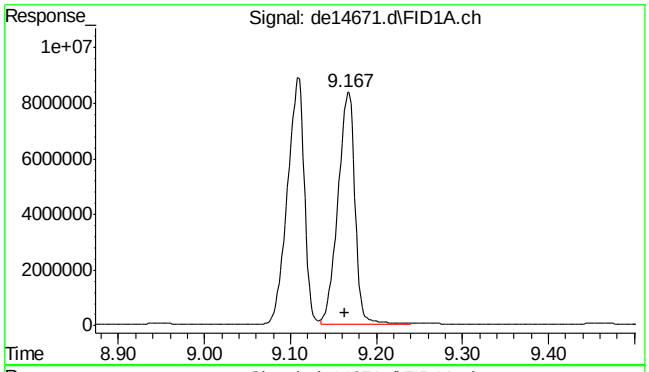
R.T.: 7.932 min
Delta R.T.: 0.003 min
Response: 12025206
Conc: 98.79 µg/ml



#9 phenanthrene

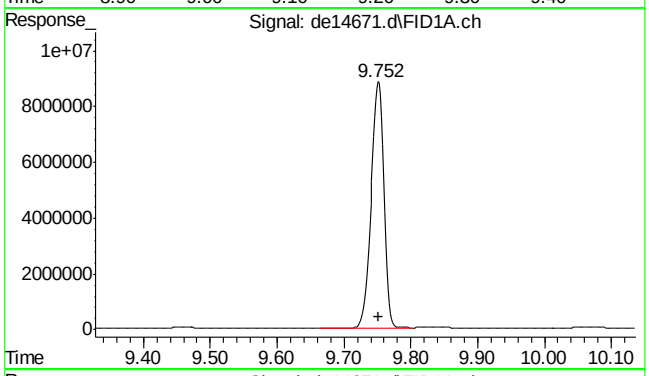
R.T.: 9.108 min
Delta R.T.: 0.002 min
Response: 12085999
Conc: 102.39 µg/ml

SGS ACCUTEST MC46783



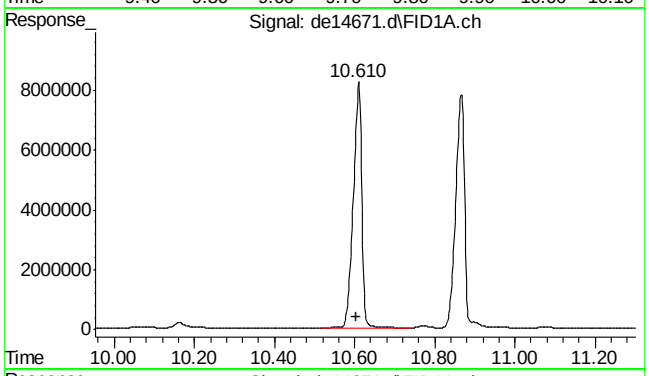
#10 anthracene

R.T.: 9.167 min
Delta R.T.: 0.003 min
Response: 11487748
Conc: 90.76 µg/ml



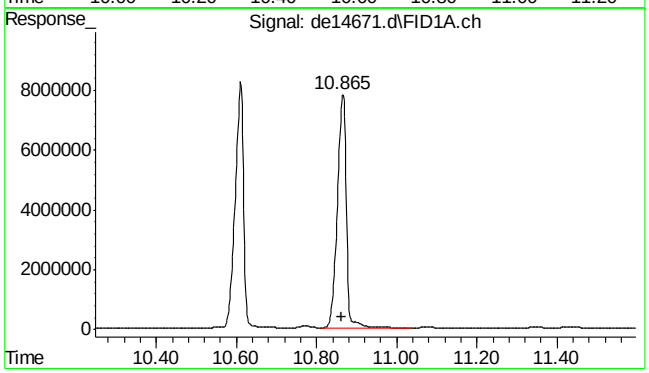
#11 o-terphenyl

R.T.: 9.752 min
Delta R.T.: 0.000 min
Response: 12101379
Conc: 96.38 µg/ml



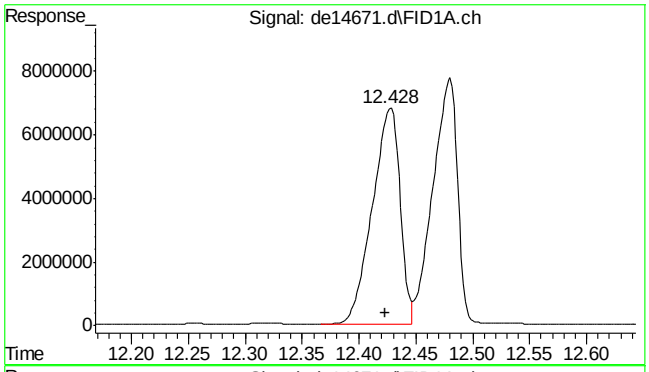
#12 fluoranthene

R.T.: 10.610 min
Delta R.T.: 0.005 min
Response: 11886285
Conc: 97.83 µg/ml



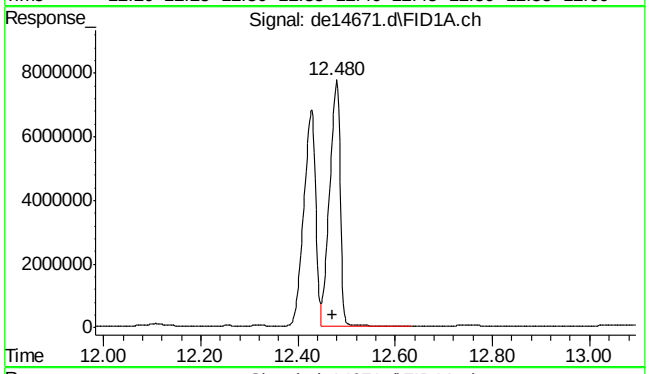
#13 pyrene

R.T.: 10.865 min
Delta R.T.: 0.003 min
Response: 12197688
Conc: 98.01 µg/ml



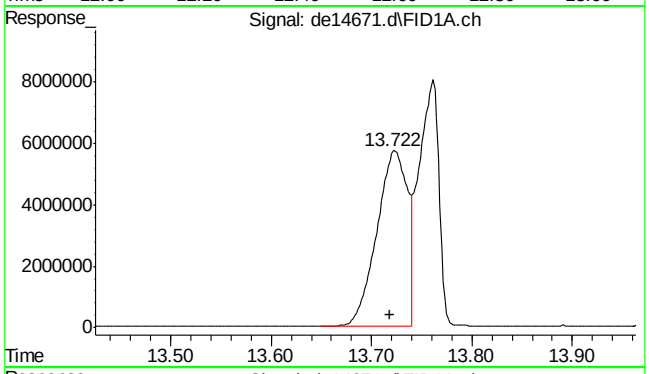
#14 benzo(a)anthracene

R.T.: 12.428 min
Delta R.T.: 0.005 min
Response: 11507490
Conc: 99.89 µg/ml m



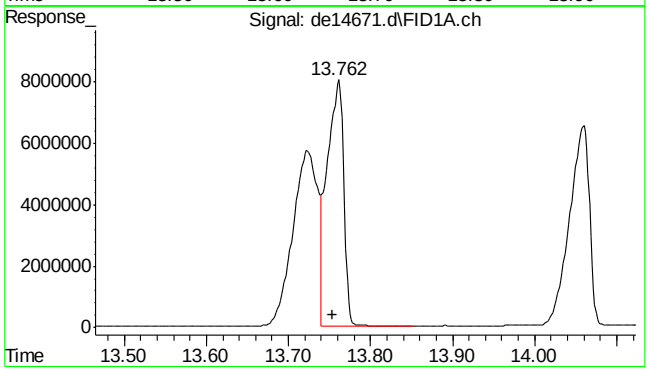
#15 chrysene

R.T.: 12.480 min
Delta R.T.: 0.008 min
Response: 11612003
Conc: 95.71 µg/ml m



#16 benzo(B)fluoranthene

R.T.: 13.722 min
Delta R.T.: 0.003 min
Response: 12199538
Conc: 109.24 µg/ml



#17 benzo(k)fluoranthene

R.T.: 13.762 min
Delta R.T.: 0.008 min
Response: 10965306
Conc: 89.71 µg/ml

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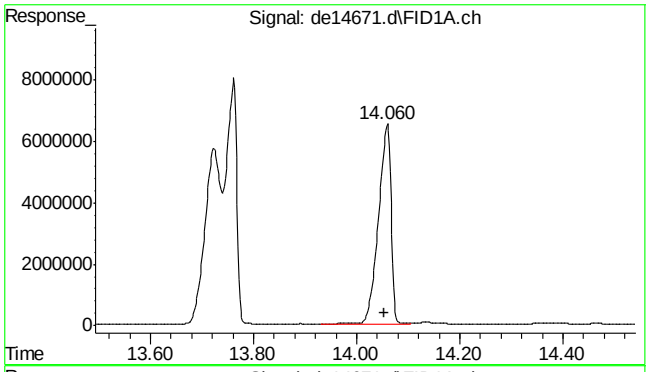
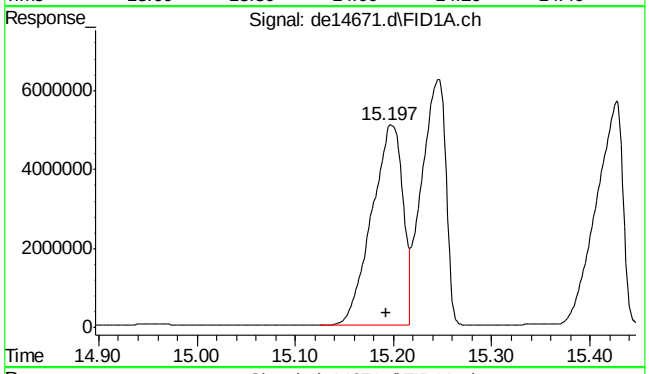


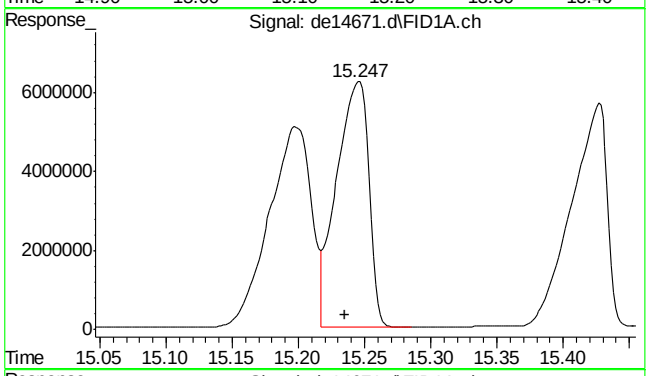
#18 benzo(a)pyrene

R.T.: 14.060 min
Delta R.T.: 0.007 min
Response: 10999807
Conc: 98.01 µg/ml



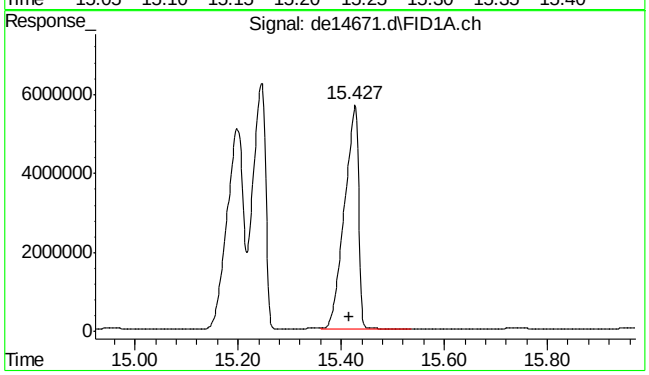
#19 indeno(1,2,3-cd)pyrene

R.T.: 15.197 min
Delta R.T.: 0.003 min
Response: 11203362
Conc: 101.80 µg/ml m



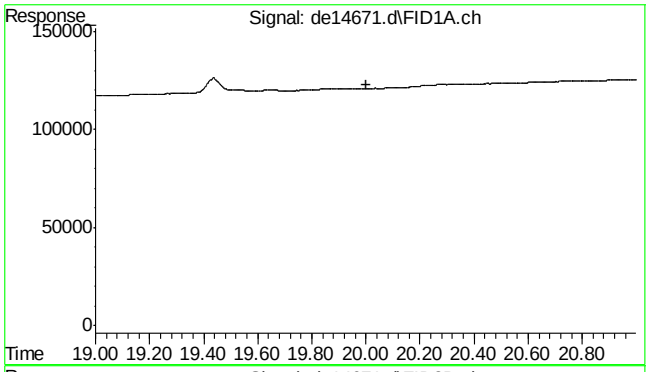
#20 dibenzo(ah)anthracene

R.T.: 15.247 min
Delta R.T.: 0.012 min
Response: 10503451
Conc: 96.37 µg/ml m



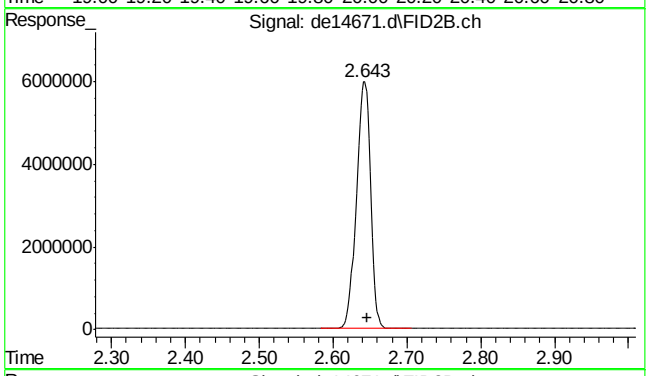
#21 benzo(ghi)perylene

R.T.: 15.427 min
Delta R.T.: 0.010 min
Response: 10703286
Conc: 99.22 µg/ml



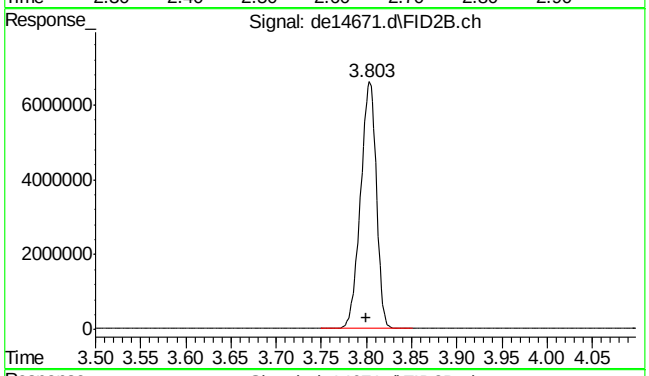
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



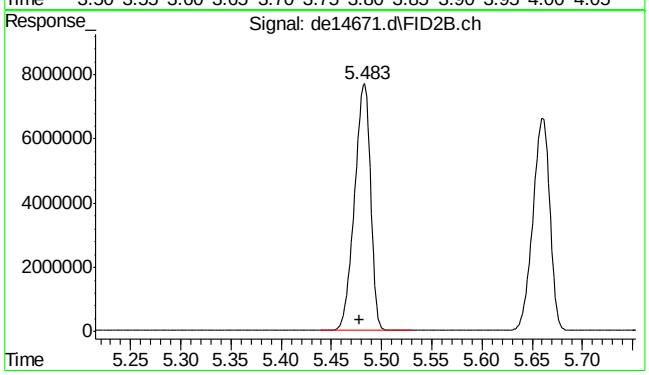
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 7937669
Conc: 93.63 µg/ml m



#26 c-10

R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 8047408
Conc: 93.82 µg/ml



#27 naphthalene #2

R.T.: 5.483 min
Delta R.T.: 0.005 min
Response: 8501971
Conc: 97.04 µg/ml

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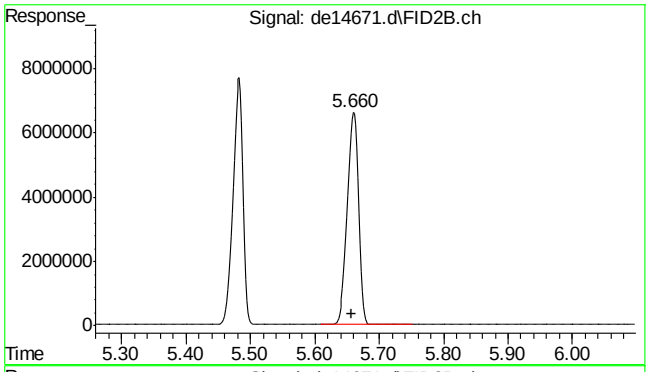
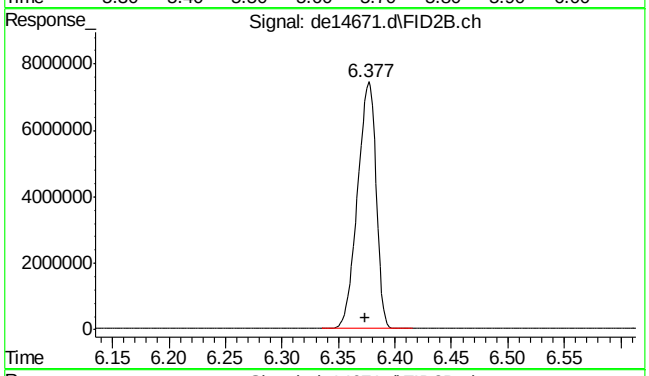


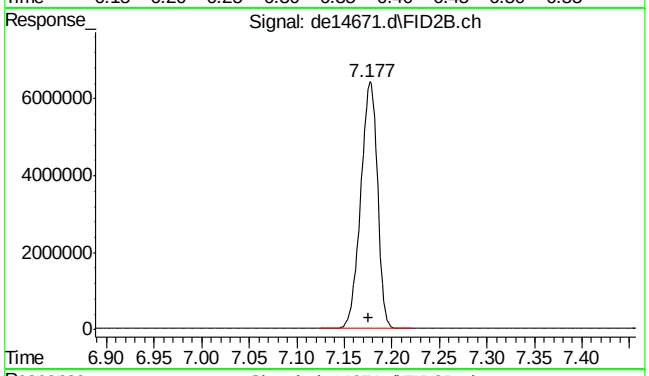
#28 c-12

R.T.: 5.660 min
Delta R.T.: 0.003 min
Response: 7886242
Conc: 93.41 µg/ml



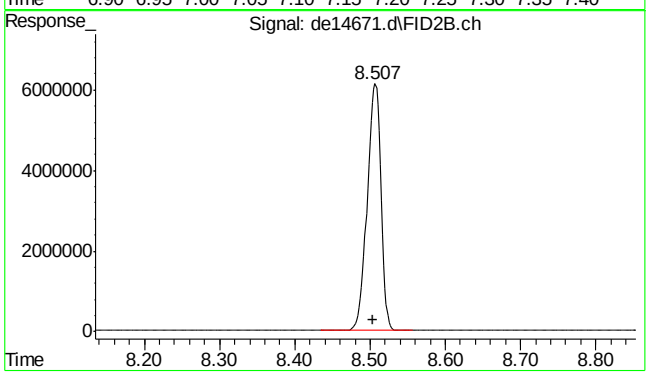
#29 2-methylnaphthalene #2

R.T.: 6.377 min
Delta R.T.: 0.003 min
Response: 8454340
Conc: 97.49 µg/ml



#30 c-14

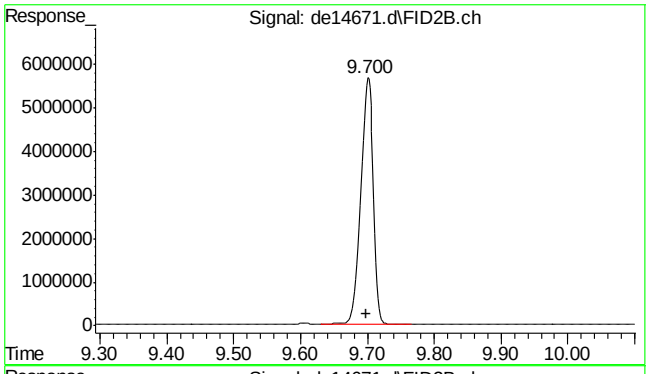
R.T.: 7.177 min
Delta R.T.: 0.002 min
Response: 7814489
Conc: 92.39 µg/ml



#31 c-16

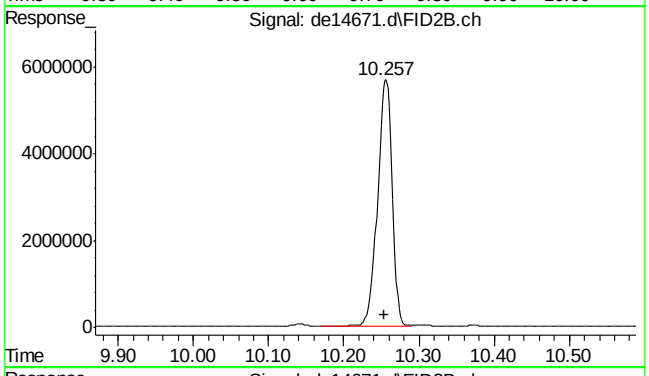
R.T.: 8.507 min
Delta R.T.: 0.003 min
Response: 7764221
Conc: 91.26 µg/ml

SGS ACCUTEST MC46783



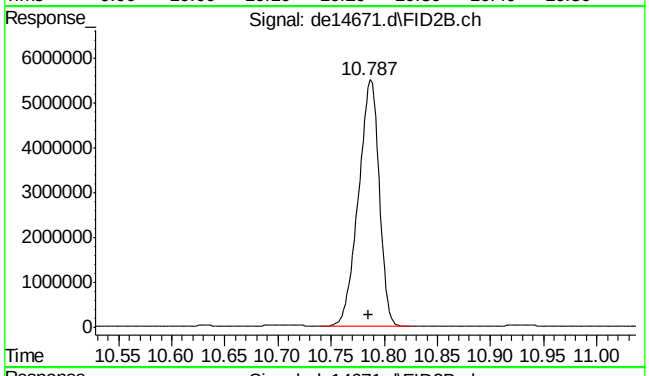
#32 c-18

R.T.: 9.700 min
Delta R.T.: 0.002 min
Response: 7676676
Conc: 91.86 µg/ml



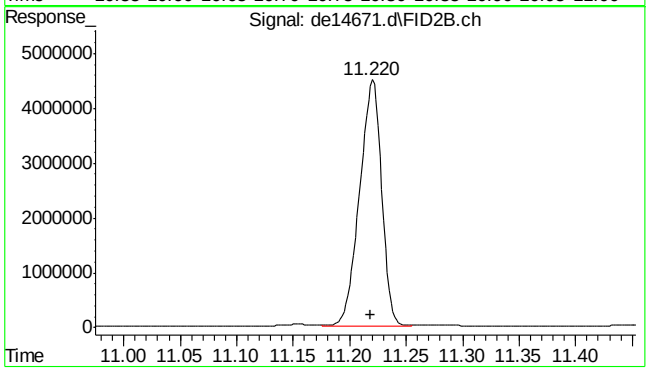
#33 c-19

R.T.: 10.257 min
Delta R.T.: 0.003 min
Response: 7623083
Conc: 91.85 µg/ml



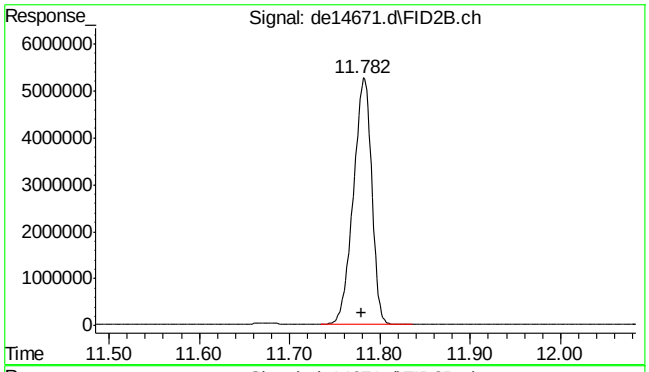
#34 c-20

R.T.: 10.787 min
Delta R.T.: 0.002 min
Response: 7477882
Conc: 93.06 µg/ml



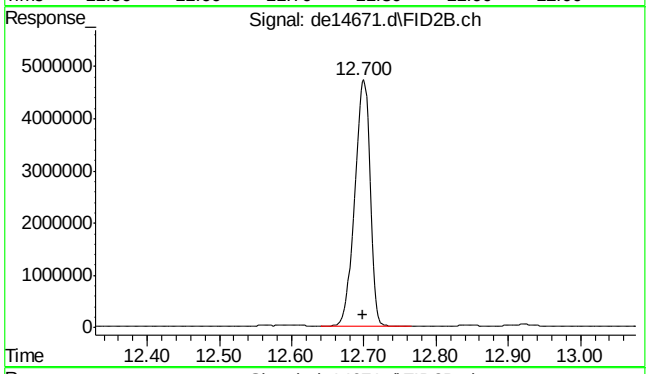
#35 1-chlorooctadecane

R.T.: 11.220 min
Delta R.T.: 0.002 min
Response: 6055700
Conc: 96.67 µg/ml



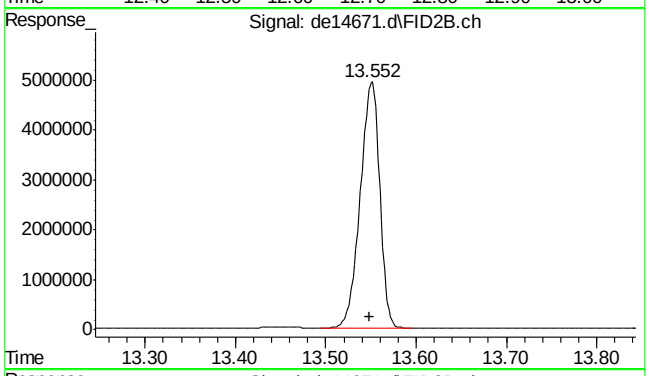
#36 c-22

R.T.: 11.782 min
Delta R.T.: 0.002 min
Response: 7420088
Conc: 92.90 µg/ml



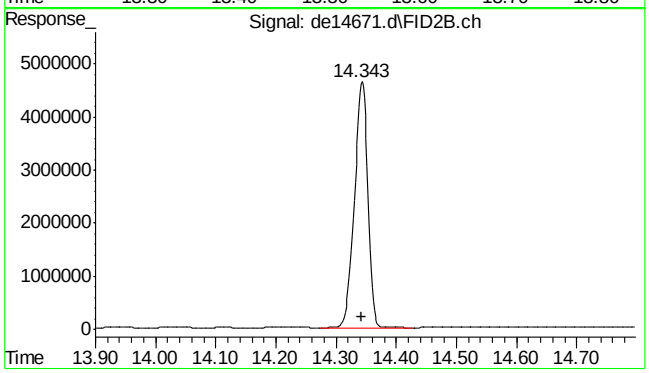
#37 c-24

R.T.: 12.700 min
Delta R.T.: 0.002 min
Response: 6931545
Conc: 91.37 µg/ml



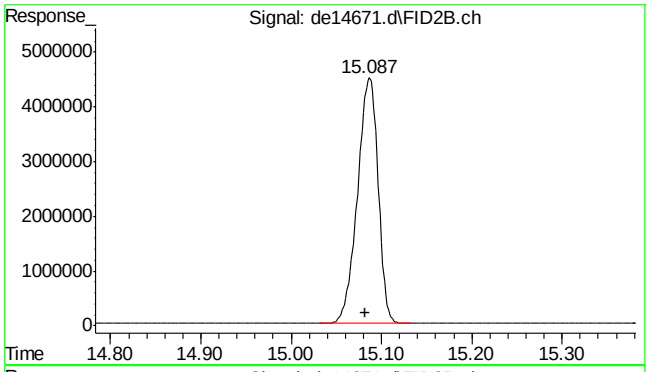
#38 c-26

R.T.: 13.552 min
Delta R.T.: 0.003 min
Response: 7429512
Conc: 93.66 µg/ml



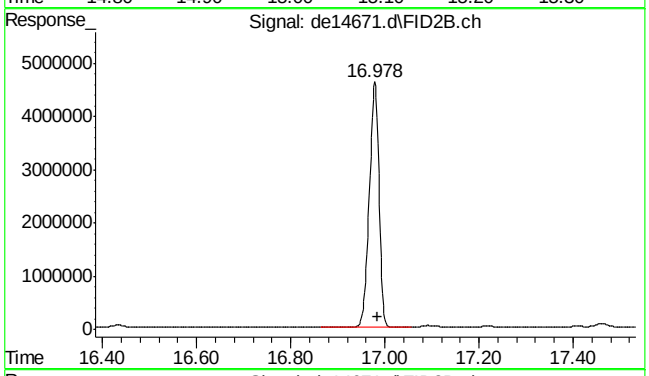
#39 c-28

R.T.: 14.343 min
Delta R.T.: 0.000 min
Response: 7155151
Conc: 94.26 µg/ml



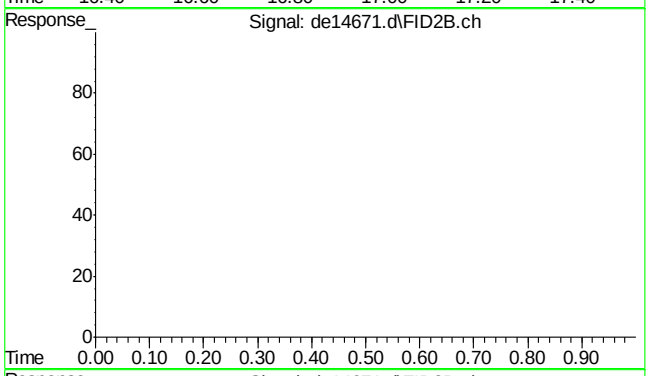
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 7181147
Conc: 87.30 µg/ml



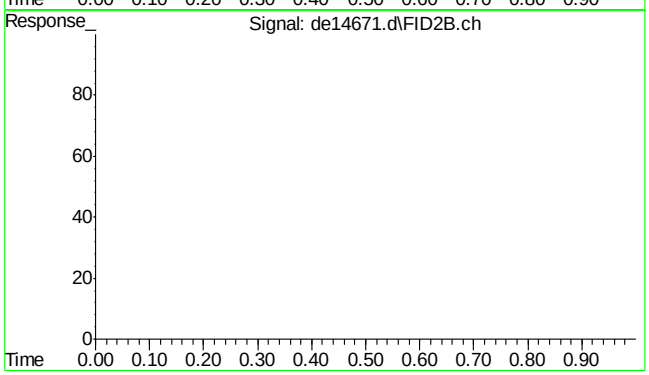
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 6572820
Conc: 97.24 µg/ml m



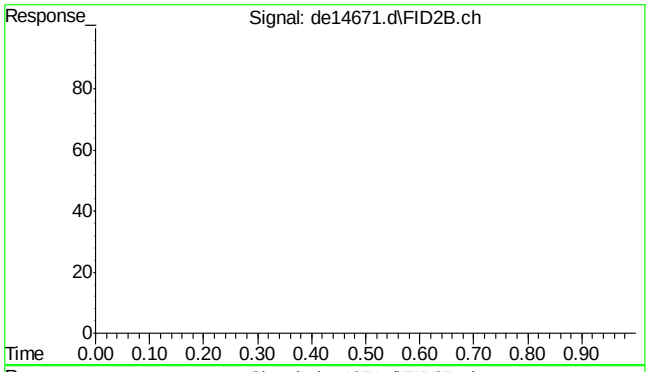
#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



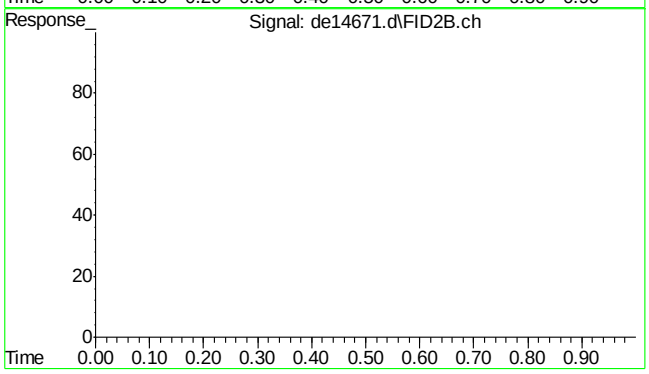
#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#44 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#45 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

7.5.6

7

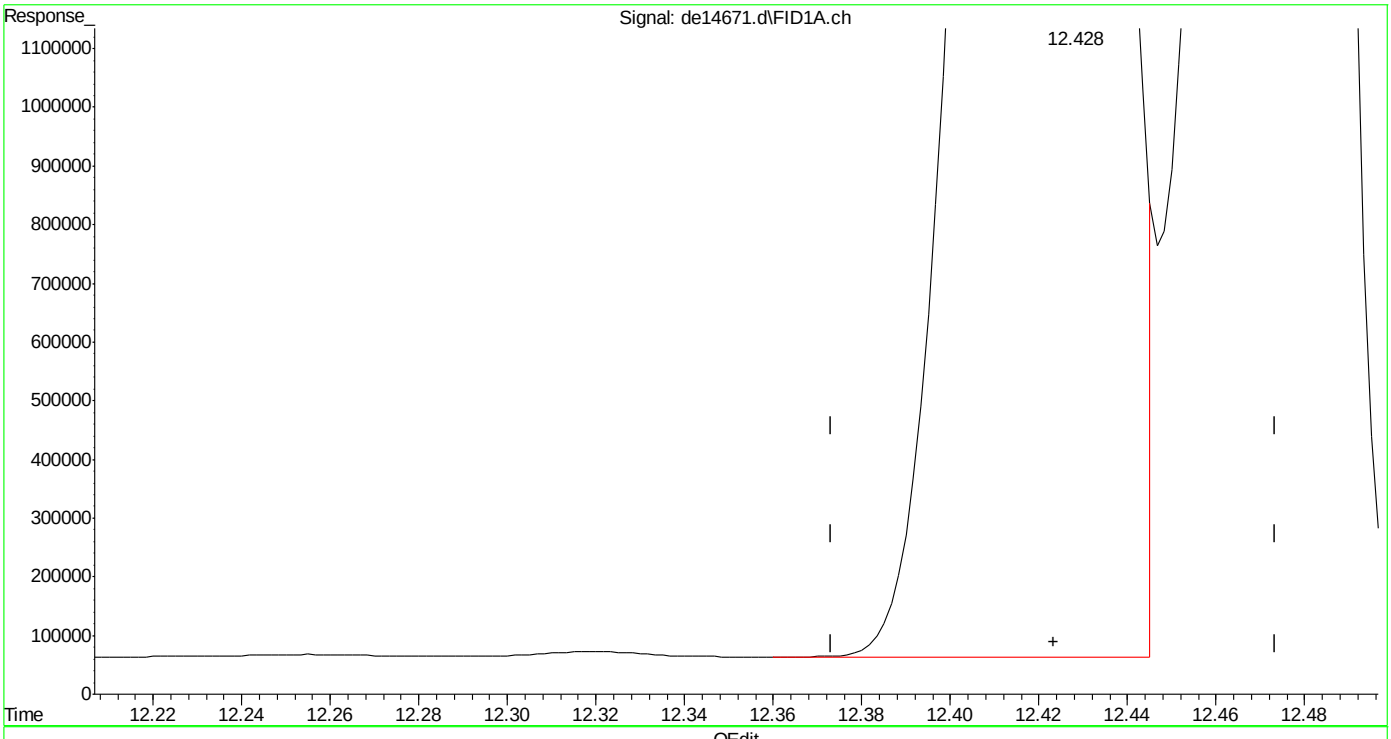
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14671.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:36 pm
Operator : thomasa
Sample : cc815-100
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 112 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:56:42 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:56:20 2016
Response via : Initial Calibration
Integrator: RTE

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



(14) benzo(a)anthracene
12.428min 99.281 µg/ml
response 11437844

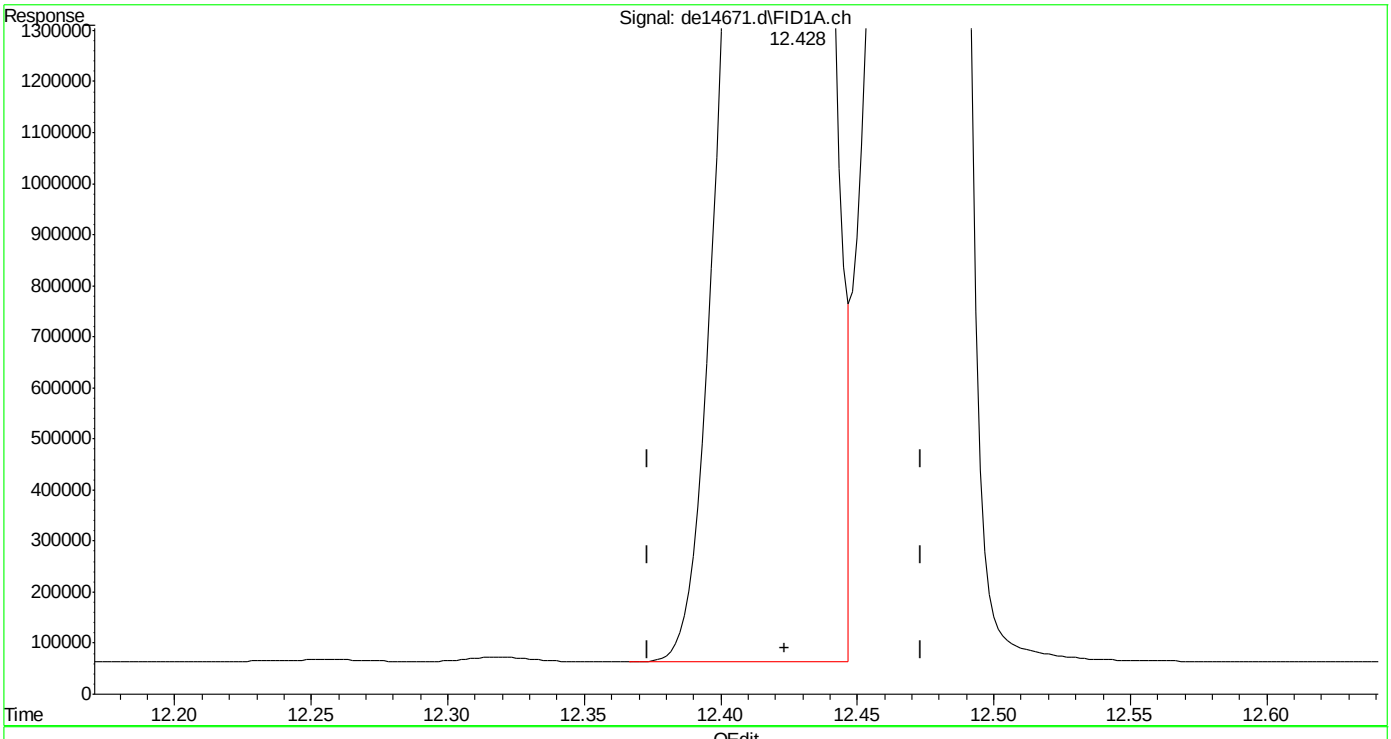
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:56:54 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14671.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:36 pm
Operator : thomasa
Sample : cc815-100
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 112 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:56:42 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:56:20 2016
Response via : Initial Calibration
Integrator: RTE

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



(14) benzo(a)anthracene
12.428min 99.885 µg/ml m
response 11507490

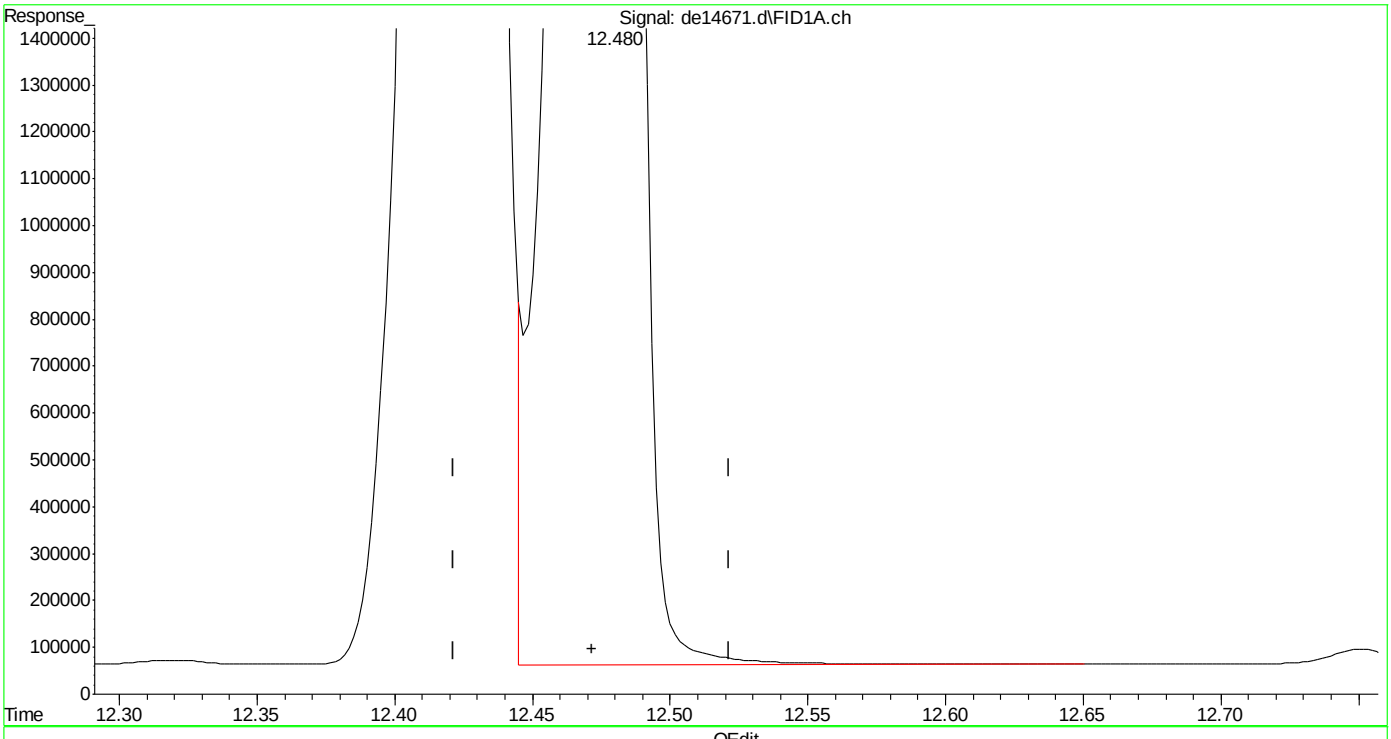
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:57:08 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14671.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:36 pm
Operator : thomasa
Sample : cc815-100
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 112 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:56:42 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:56:20 2016
Response via : Initial Calibration
Integrator: RTE

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



(15) chrysene
12.480min 96.301 µg/ml
response 11683884

(+) = Expected Retention Time

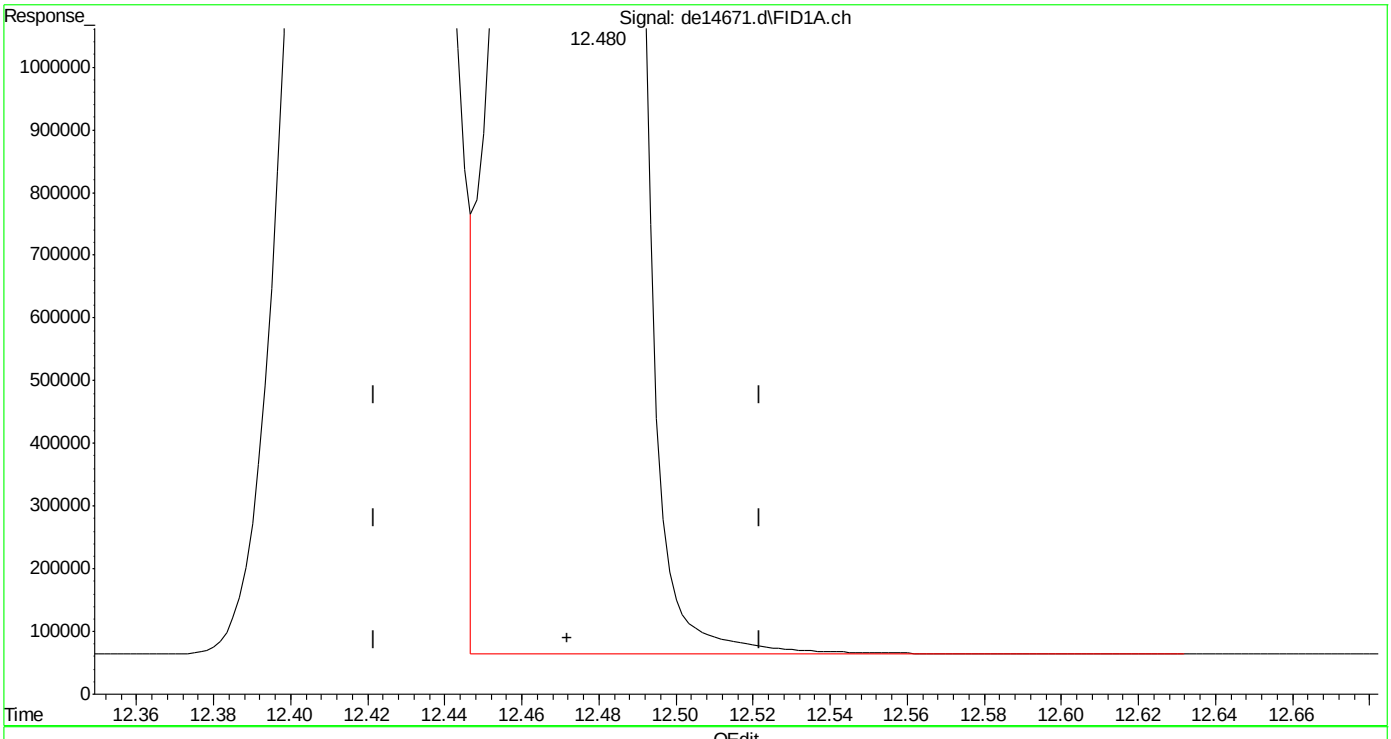
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14671.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:36 pm
Operator : thomasa
Sample : cc815-100
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 112 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:56:42 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:56:20 2016
Response via : Initial Calibration
Integrator: RTE

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



(15) chrysene
12.480min 95.708 µg/ml m
response 11612003

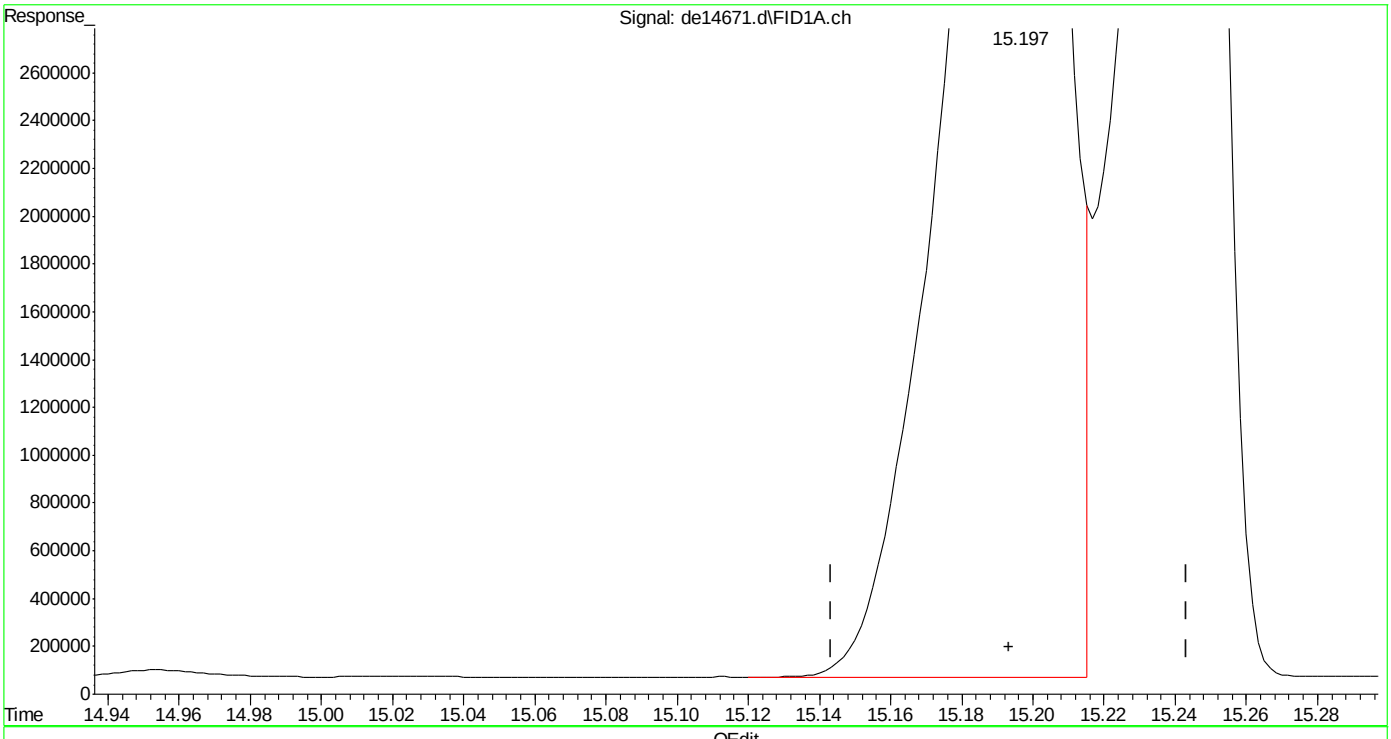
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14671.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:36 pm
Operator : thomasa
Sample : cc815-100
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 112 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:56:42 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:56:20 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.197min 100.041 µg/ml
response 11009953

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:57:46 2016

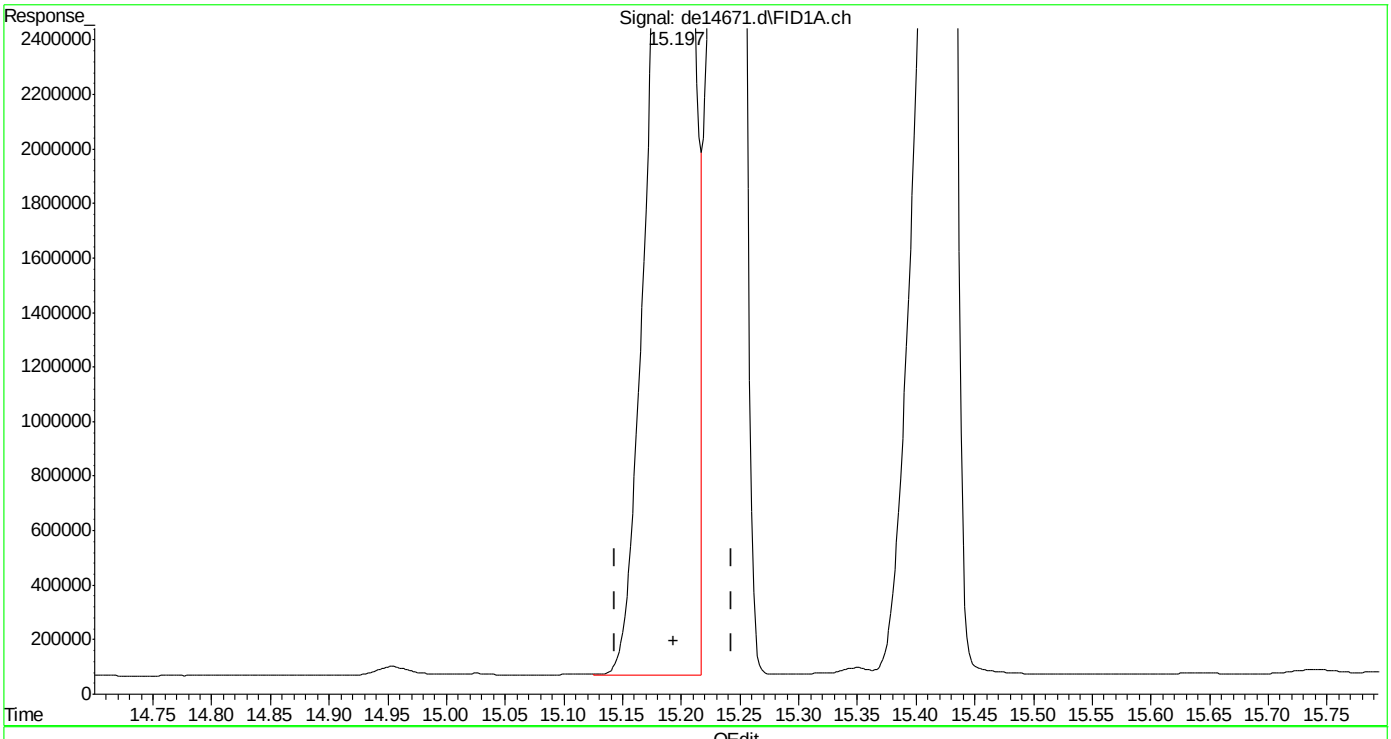
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14671.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:36 pm
Operator : thomasa
Sample : cc815-100
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 112 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:56:42 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:56:20 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.197min 101.798 µg/ml m
response 11203362

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:58:01 2016

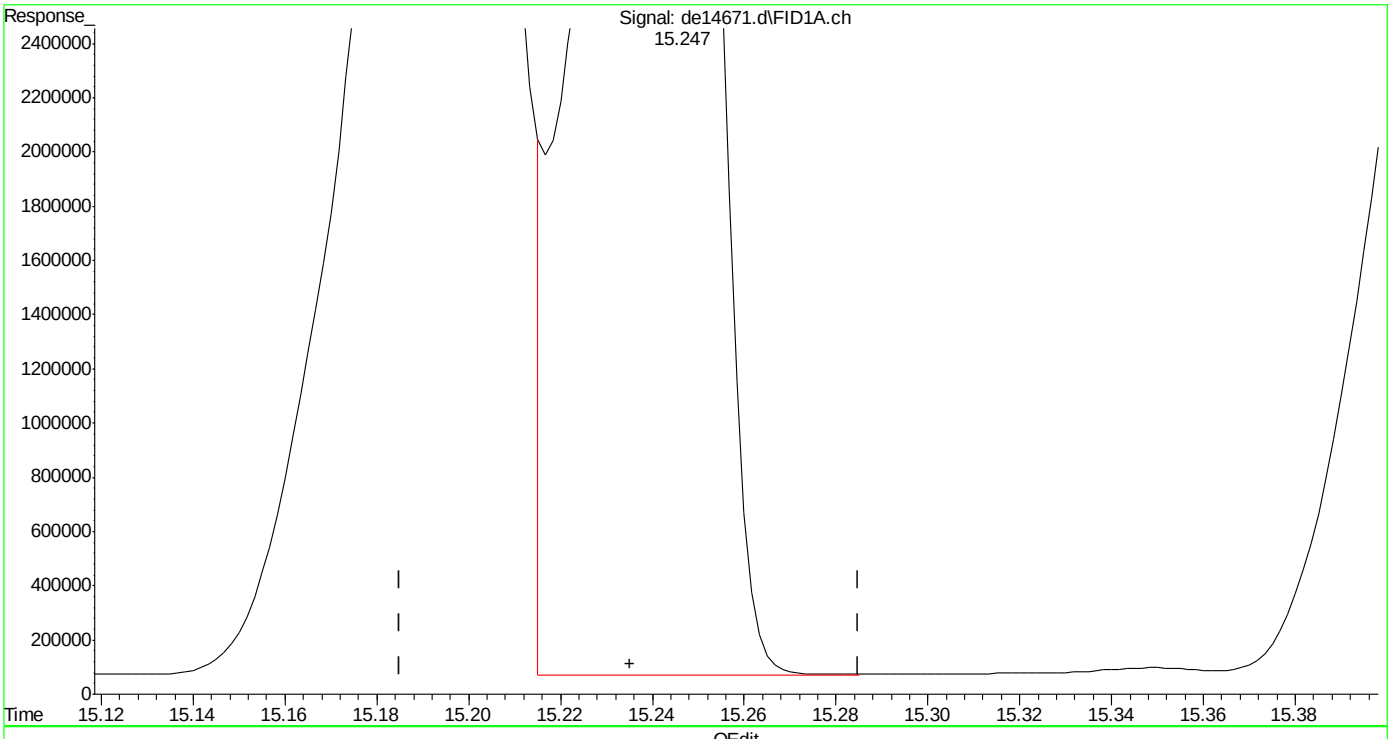
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14671.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:36 pm
Operator : thomasa
Sample : cc815-100
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 112 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:56:42 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:56:20 2016
Response via : Initial Calibration
Integrator: RTE

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



(20) dibenzo(ah)anthracene
15.247min 98.125 µg/ml
response 10694568

(+) = Expected Retention Time

EPH160622W.M Thu Jun 23 07:58:05 2016

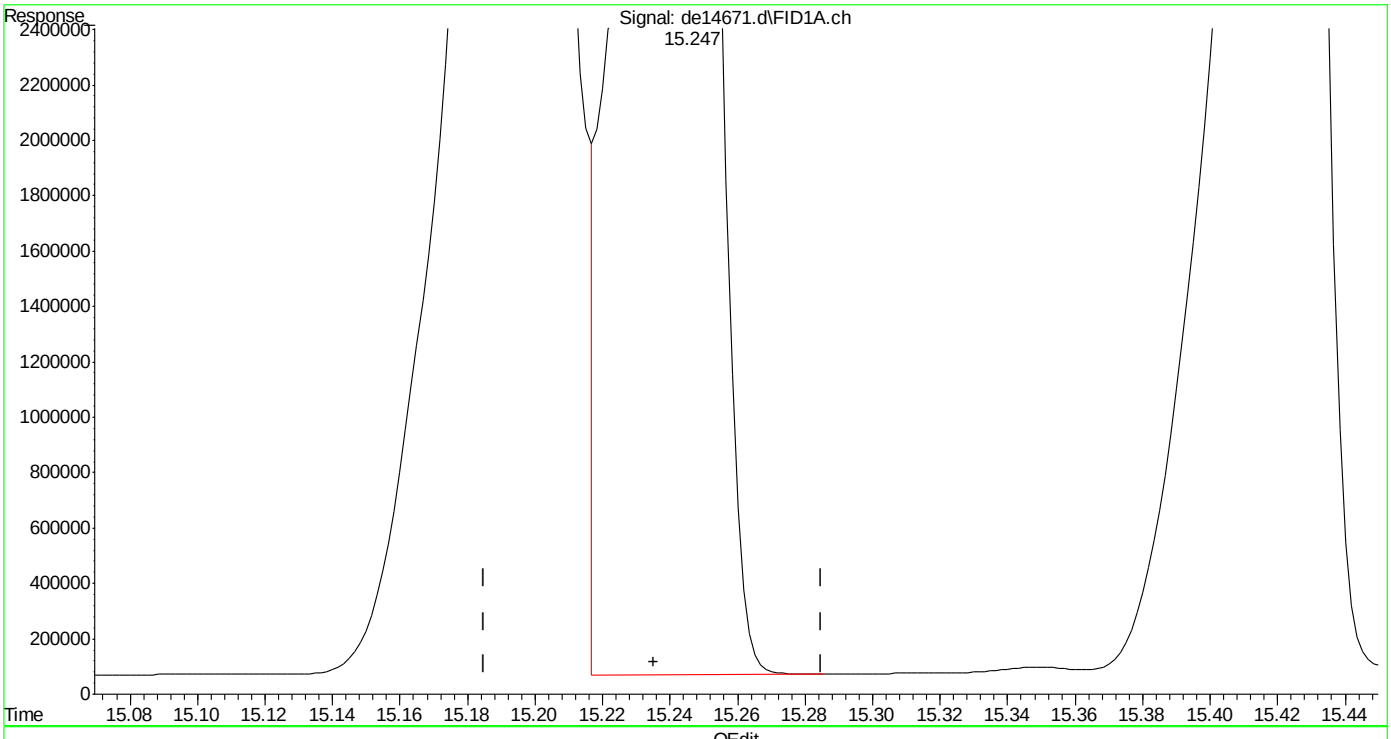
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14671.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:36 pm
Operator : thomasa
Sample : cc815-100
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 112 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:56:42 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:56:20 2016
Response via : Initial Calibration
Integrator: RTE

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



(20) dibenzo(ah)anthracene
15.247min 96.371 µg/ml m
response 10503451

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:58:15 2016

SGS ACCUTEST MC46783

DE14672.D

Manual Integrations APPROVED (compounds with "m" flag)

Andri Piluri 06/23/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14672.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:04 pm
Operator : thomasa
Sample : ic815-200 (Sig #1); cc815-200 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 114 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:01:09 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:58:49 2016
Response via : Initial Calibration
Integrator: RTE

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) s 2-fluorobiphenyl	6.493	21568821	193.728 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 968.64%#	
6) s 2-bromonaphthalene	7.218	14717575	211.593 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 1057.96%#	
11) s o-terphenyl	9.762	24118725	187.478 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 937.39%#	
35) s 1-chlorooctadecane	11.227	11946306	187.627 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 938.14%#	
Target Compounds			
2) naphthalene	5.035	23929928	195.607 µg/ml
3) 2-methylnaphthalene	5.940	23749913	193.332 µg/ml
5) acenaphthylene	7.053f	23550221	191.386 µg/ml
7) acenaphthene	7.298	24636559	181.842 µg/ml
8) fluorene	7.942	24085117	193.029 µg/ml
9) phenanthrene	9.118	24106717	198.906 µg/ml
10) anthracene	9.178	22785902	175.846 µg/ml
12) fluoranthene	10.623	23418788	187.771 µg/ml
13) pyrene	10.880	23940175	187.378 µg/ml
14) benzo(a)anthracene	12.442	22291957	188.395 µg/ml
15) chrysene	12.497f	22470484	180.477 µg/ml
16) benzo(B)fluoranthene	13.737	22828942	197.507 µg/mlm
17) benzo(k)fluoranthene	13.782f	21742175	174.577 µg/mlm
18) benzo(a)pyrene	14.078f	21269399	184.730 µg/ml
19) indeno(1,2,3-cd)pyrene	15.227f	24533309	217.381 µg/ml
20) dibenzo(ah)anthracene	15.268f	19101555	171.272 µg/mlm
21) benzo(ghi)perylene	15.453f	21702878	196.424 µg/ml
25) h c-9	2.647	15645868	186.255 µg/mlm
26) h c-10	3.800	15836986	186.275 µg/ml
27) naphthalene #2	5.490	16808167	189.047 µg/ml
28) c-12	5.667	15551710	185.948 µg/ml
29) 2-methylnaphthalene #2	6.385	16655254	189.284 µg/ml
30) c-14	7.185	15402298	184.096 µg/ml
31) c-16	8.513	15150013	180.325 µg/ml
32) c-18	9.708	15122313	183.089 µg/ml
33) c-19	10.265	15097457	184.055 µg/ml
34) c-20	10.795	14729110	185.129 µg/ml
36) c-22	11.790	14630809	185.049 µg/ml
37) c-24	12.707	13632931	181.951 µg/ml
38) c-26	13.558	14575529	185.422 µg/ml

SGS ACCUTEST MC46783

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14672.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:04 pm
Operator : thomasa
Sample : ic815-200 (Sig #1); cc815-200 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 114 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:01:09 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:58:49 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc	Units
39)	c-28	14.352	14116516	187.507	µg/ml
40) h	c-30	15.082	13936754	172.562	µg/ml
41) h	c-36	16.983	13213232	196.254	µg/mlm

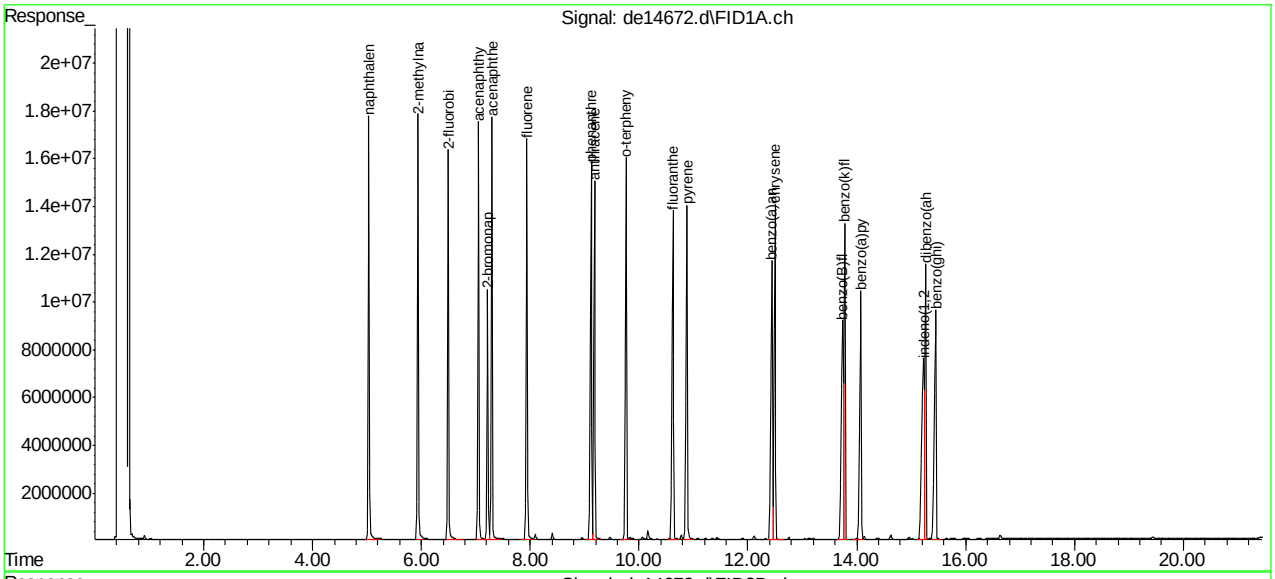
(f)=RT Delta > 1/2 Window (m)=manual int.

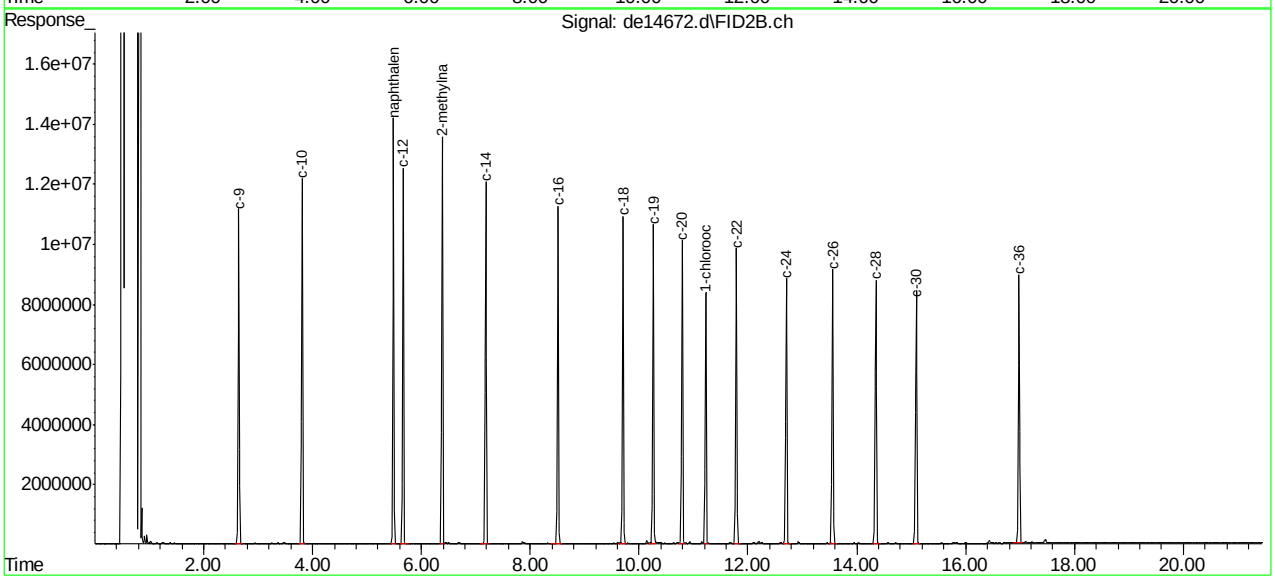
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14672.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:04 pm
Operator : thomasa
Sample : ic815-200 (Sig #1); cc815-200 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 114 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:01:09 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:58:49 2016
Response via : Initial Calibration
Integrator: RTE

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





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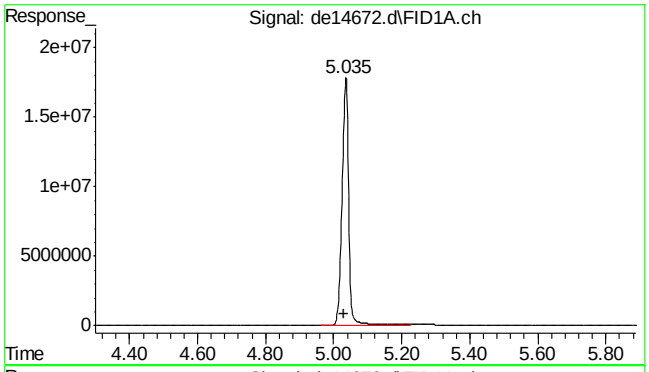
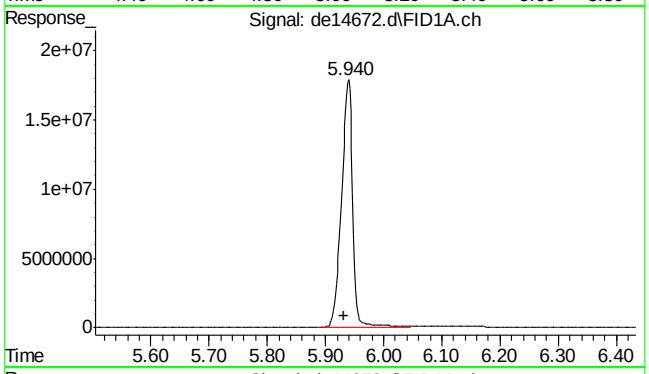


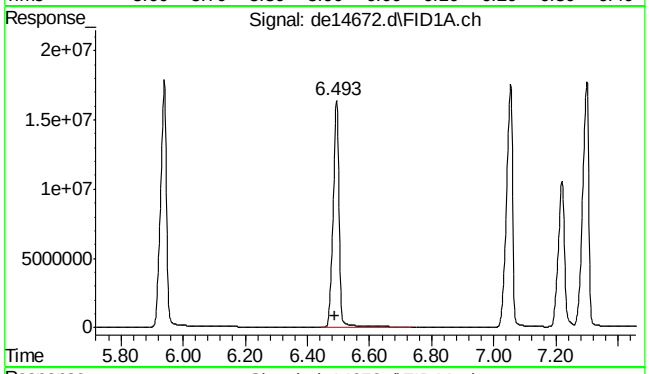
#2 naphthalene

R.T.: 5.035 min
Delta R.T.: 0.005 min
Response: 23929928
Conc: 195.61 µg/ml



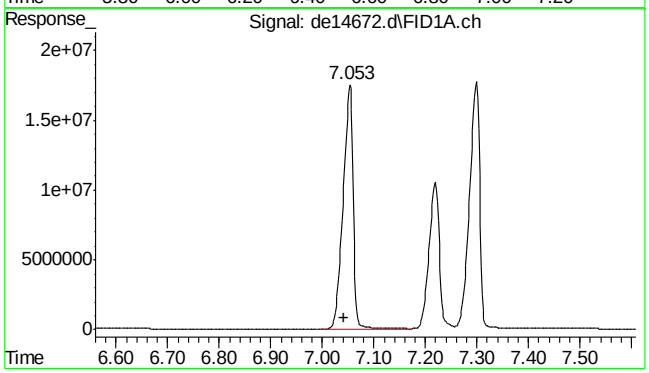
#3 2-methylnaphthalene

R.T.: 5.940 min
Delta R.T.: 0.008 min
Response: 23749913
Conc: 193.33 µg/ml



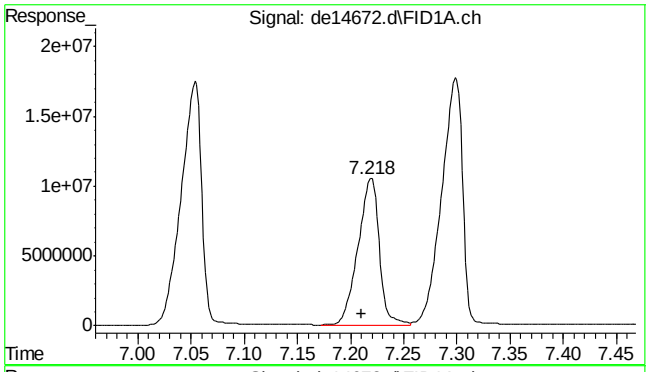
#4 2-fluorobiphenyl

R.T.: 6.493 min
Delta R.T.: 0.005 min
Response: 21568821
Conc: 193.73 µg/ml



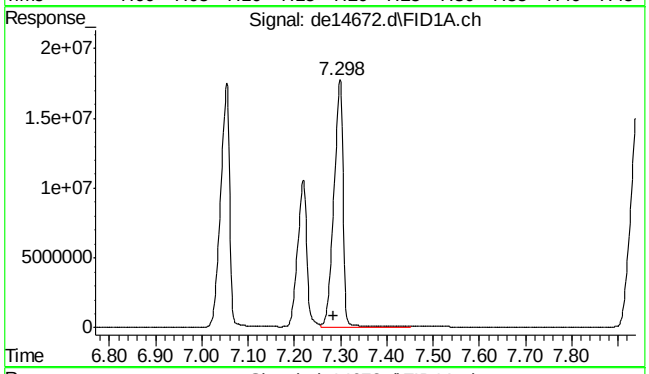
#5 acenaphthylene

R.T.: 7.053 min
Delta R.T.: 0.012 min
Response: 23550221
Conc: 191.39 µg/ml



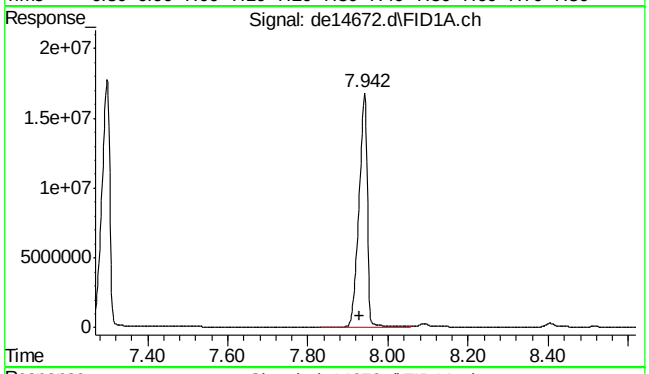
#6 2-bromonaphthalene

R.T.: 7.218 min
Delta R.T.: 0.008 min
Response: 14717575
Conc: 211.59 µg/ml



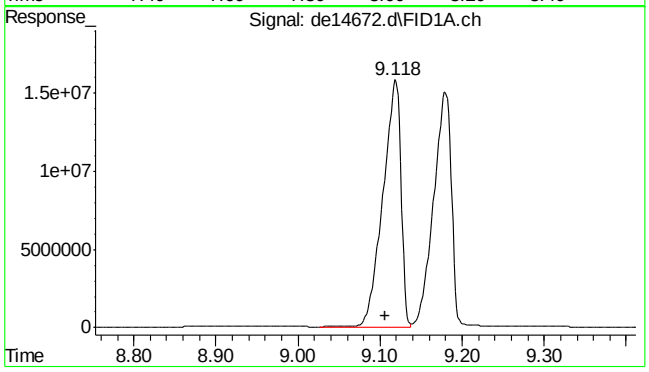
#7 acenaphthene

R.T.: 7.298 min
Delta R.T.: 0.013 min
Response: 24636559
Conc: 181.84 µg/ml



#8 fluorene

R.T.: 7.942 min
Delta R.T.: 0.013 min
Response: 24085117
Conc: 193.03 µg/ml



#9 phenanthrene

R.T.: 9.118 min
Delta R.T.: 0.012 min
Response: 24106717
Conc: 198.91 µg/ml

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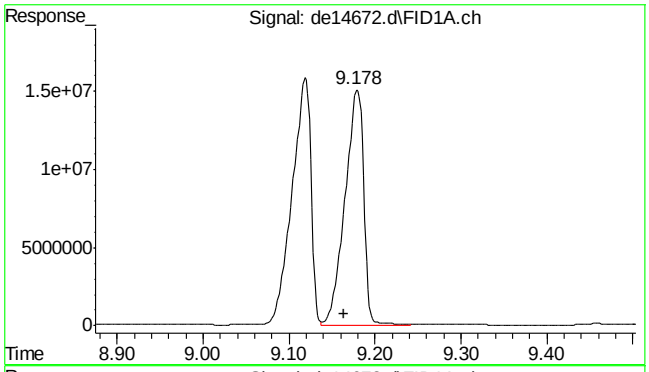
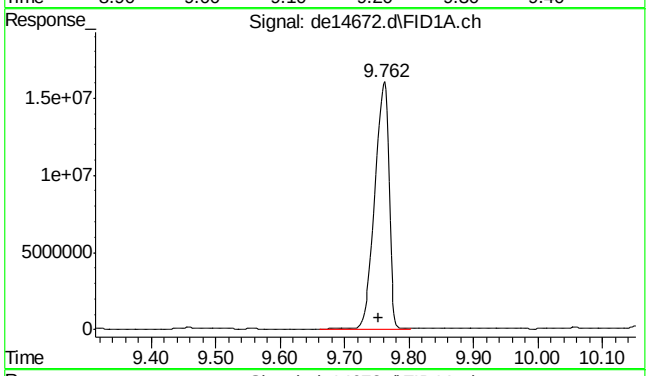


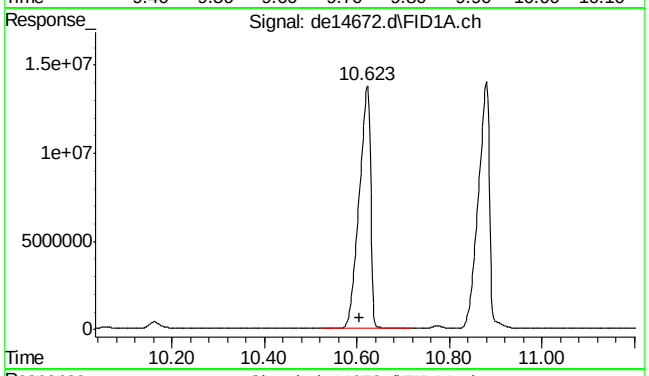
#10 anthracene

R.T.: 9.178 min
Delta R.T.: 0.015 min
Response: 22785902
Conc: 175.85 µg/ml



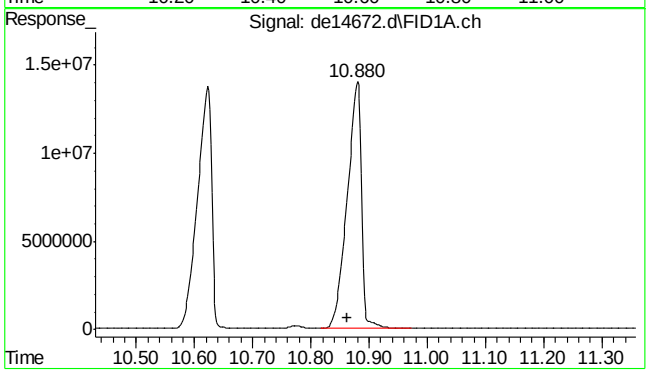
#11 o-terphenyl

R.T.: 9.762 min
Delta R.T.: 0.010 min
Response: 24118725
Conc: 187.48 µg/ml



#12 fluoranthene

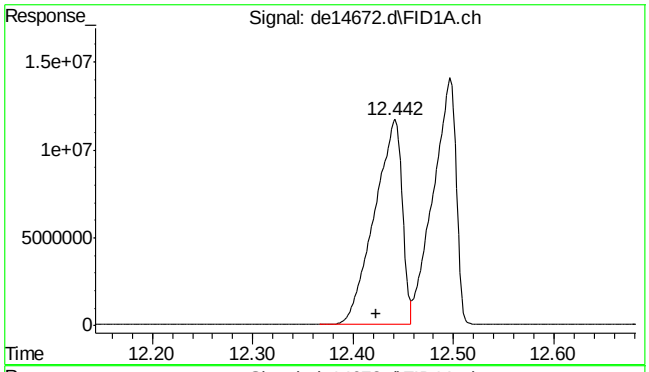
R.T.: 10.623 min
Delta R.T.: 0.018 min
Response: 23418788
Conc: 187.77 µg/ml



#13 pyrene

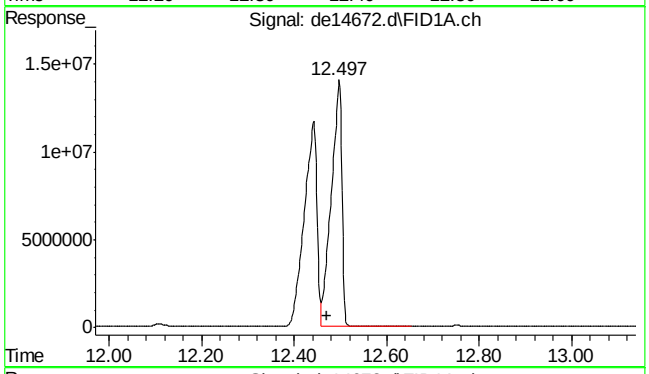
R.T.: 10.880 min
Delta R.T.: 0.018 min
Response: 23940175
Conc: 187.38 µg/ml

SGS ACCUTEST MC46783



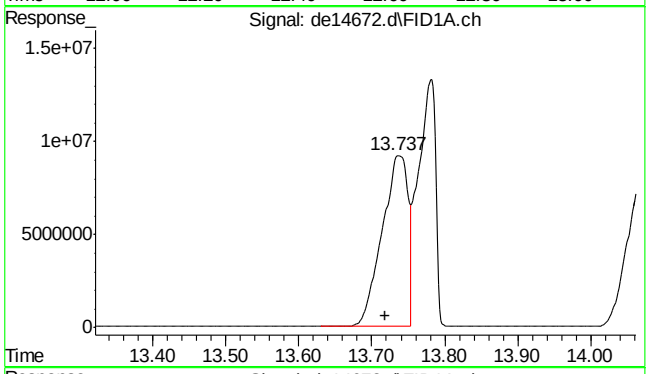
#14 benzo(a)anthracene

R.T.: 12.442 min
Delta R.T.: 0.018 min
Response: 22291957
Conc: 188.39 µg/ml



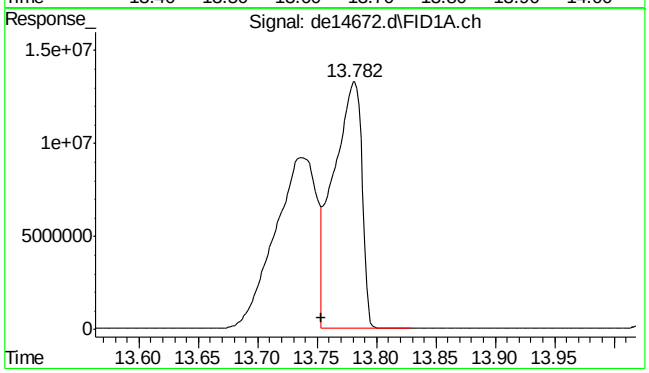
#15 chrysene

R.T.: 12.497 min
Delta R.T.: 0.025 min
Response: 22470484
Conc: 180.48 µg/ml



#16 benzo(B)fluoranthene

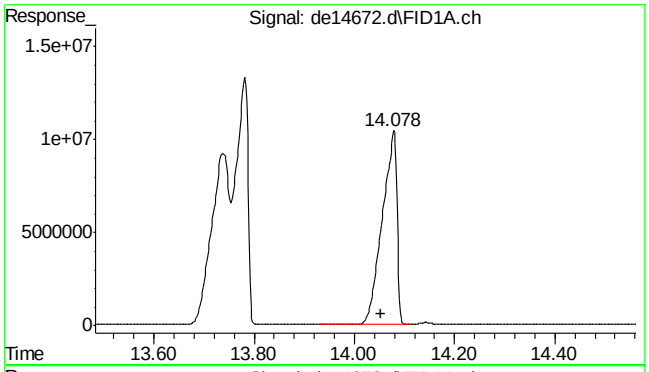
R.T.: 13.737 min
Delta R.T.: 0.018 min
Response: 22828942
Conc: 197.51 µg/ml m



#17 benzo(k)fluoranthene

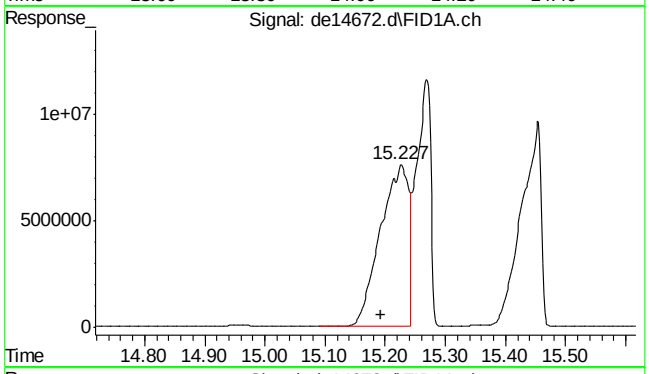
R.T.: 13.782 min
Delta R.T.: 0.028 min
Response: 21742175
Conc: 174.58 µg/ml m

SGS ACCUTEST MC46783



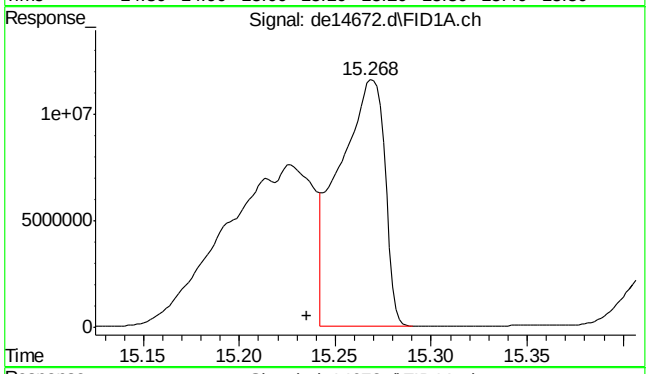
#18 benzo(a)pyrene

R.T.: 14.078 min
Delta R.T.: 0.025 min
Response: 21269399
Conc: 184.73 µg/ml



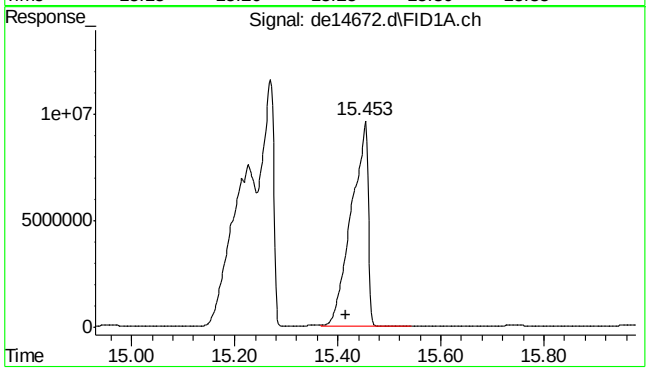
#19 indeno(1,2,3-cd)pyrene

R.T.: 15.227 min
Delta R.T.: 0.033 min
Response: 24533309
Conc: 217.38 µg/ml



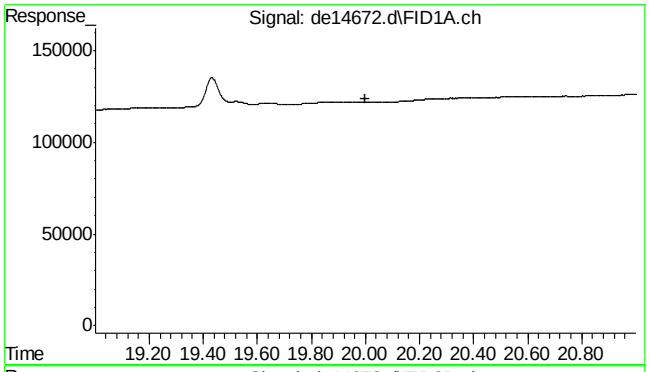
#20 dibenzo(ah)anthracene

R.T.: 15.268 min
Delta R.T.: 0.033 min
Response: 19101555
Conc: 171.27 µg/ml m



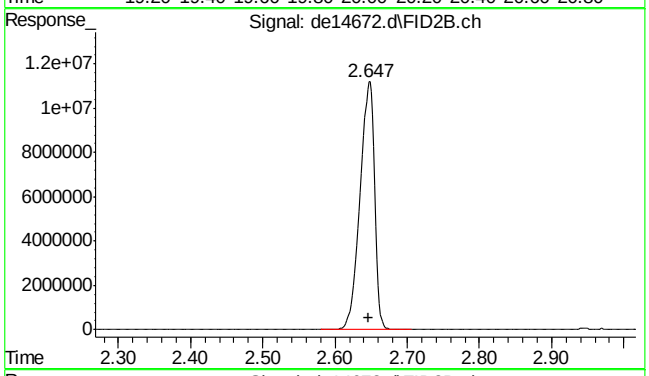
#21 benzo(ghi)perylene

R.T.: 15.453 min
Delta R.T.: 0.037 min
Response: 21702878
Conc: 196.42 µg/ml



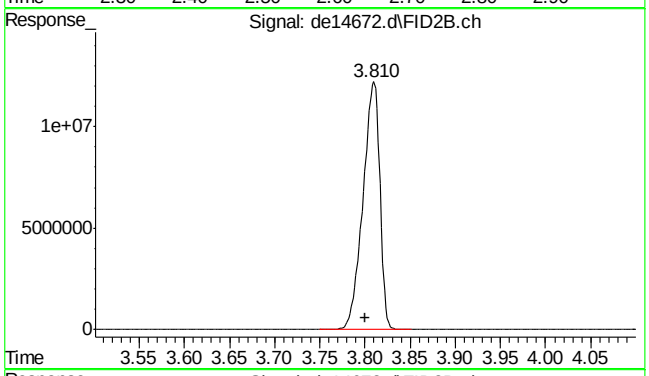
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



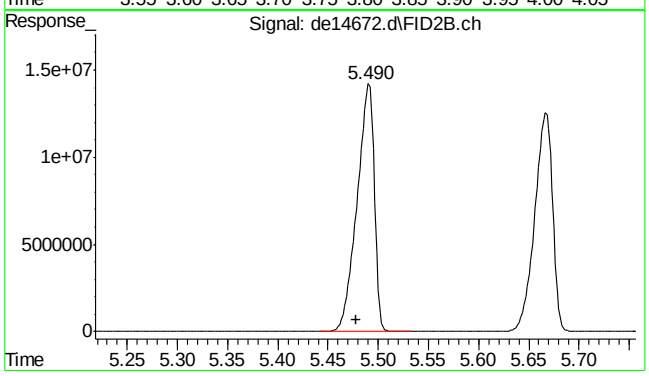
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 15645868
Conc: 186.26 µg/ml m



#26 c-10

R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 15836986
Conc: 186.27 µg/ml



#27 naphthalene #2

R.T.: 5.490 min
Delta R.T.: 0.012 min
Response: 16808167
Conc: 189.05 µg/ml

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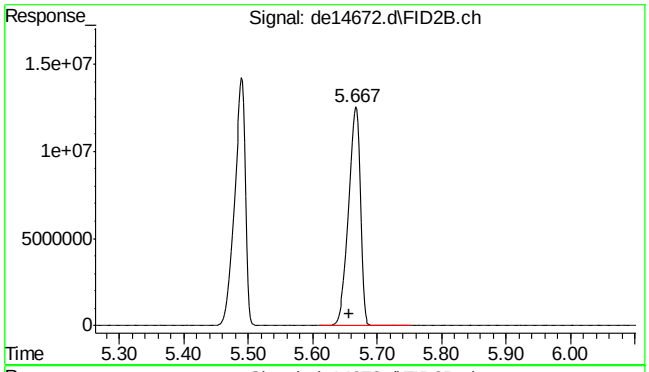
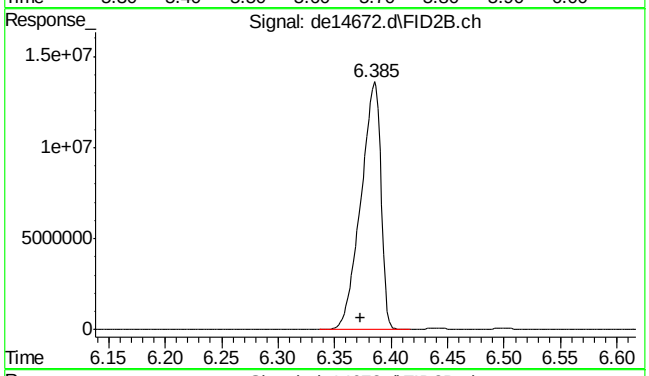


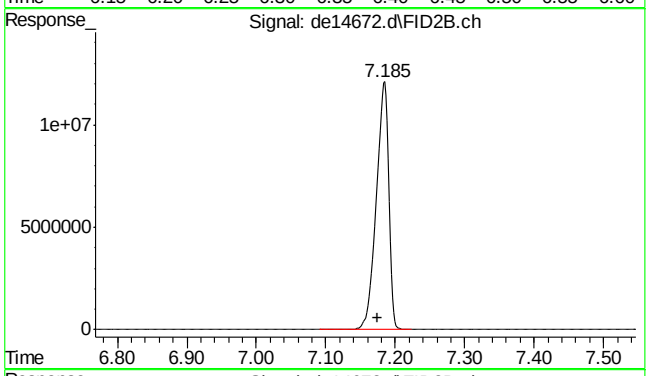
#28 c-12

R.T.: 5.667 min
Delta R.T.: 0.010 min
Response: 15551710
Conc: 185.95 µg/ml



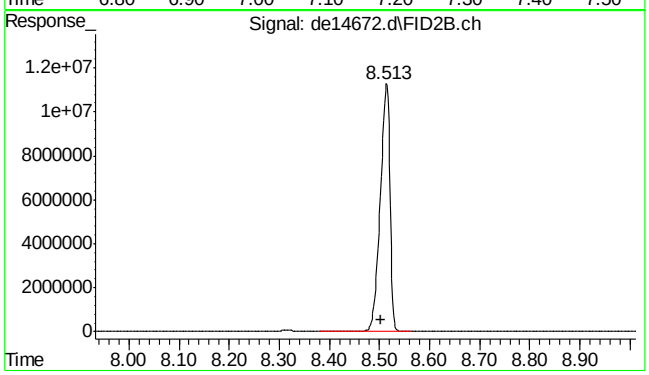
#29 2-methylnaphthalene #2

R.T.: 6.385 min
Delta R.T.: 0.012 min
Response: 16655254
Conc: 189.28 µg/ml



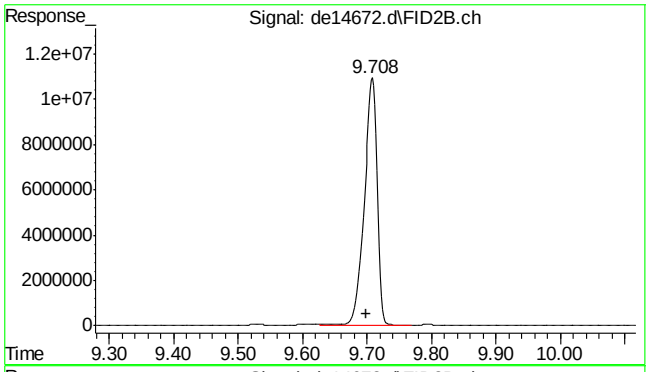
#30 c-14

R.T.: 7.185 min
Delta R.T.: 0.010 min
Response: 15402298
Conc: 184.10 µg/ml



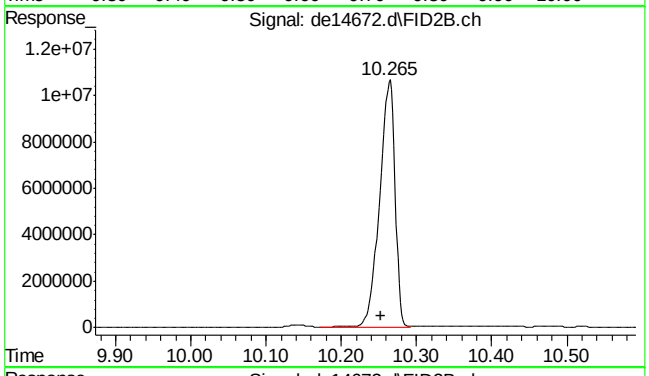
#31 c-16

R.T.: 8.513 min
Delta R.T.: 0.010 min
Response: 15150013
Conc: 180.33 µg/ml



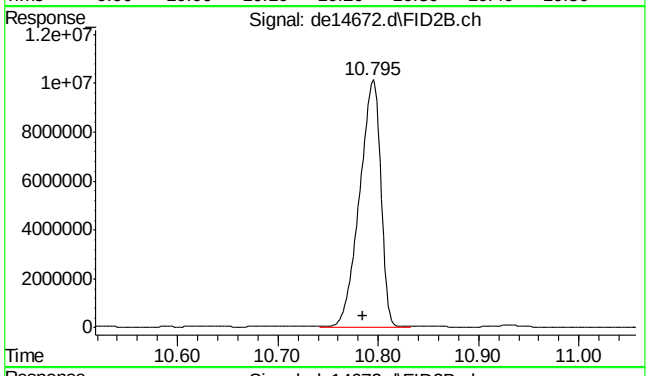
#32 c-18

R.T.: 9.708 min
Delta R.T.: 0.010 min
Response: 15122313
Conc: 183.09 µg/ml



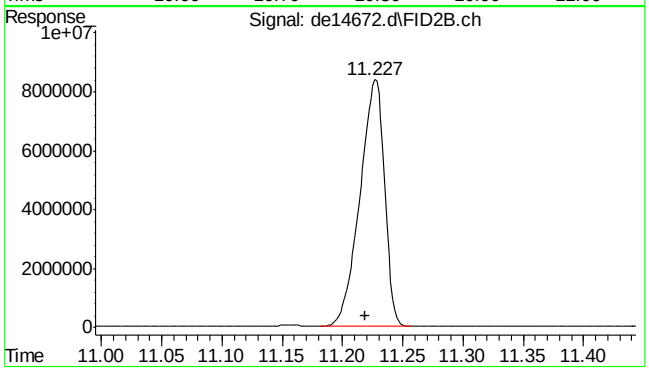
#33 c-19

R.T.: 10.265 min
Delta R.T.: 0.012 min
Response: 15097457
Conc: 184.06 µg/ml



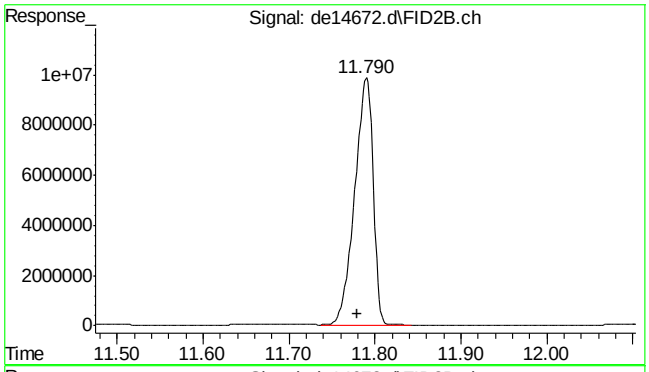
#34 c-20

R.T.: 10.795 min
Delta R.T.: 0.010 min
Response: 14729110
Conc: 185.13 µg/ml



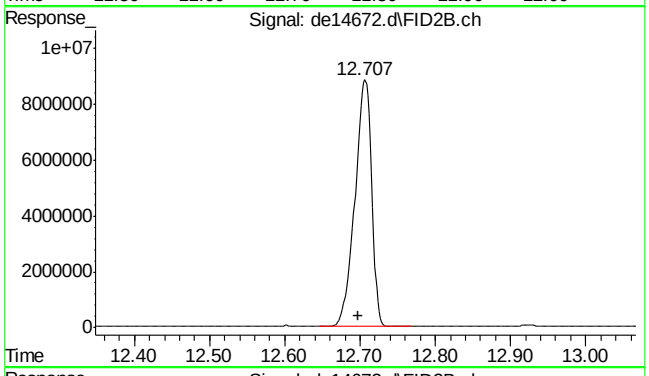
#35 1-chlorooctadecane

R.T.: 11.227 min
Delta R.T.: 0.008 min
Response: 11946306
Conc: 187.63 µg/ml



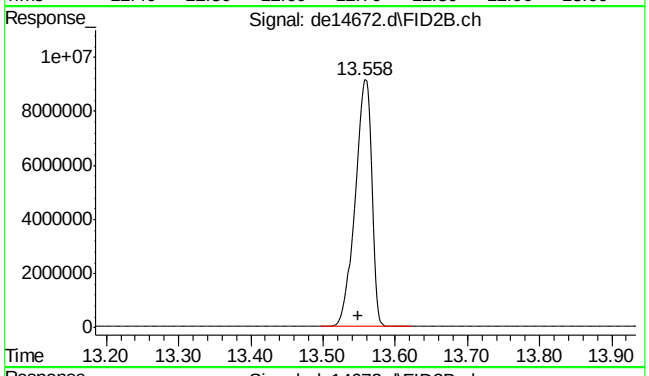
#36 c-22

R.T.: 11.790 min
Delta R.T.: 0.010 min
Response: 14630809
Conc: 185.05 µg/ml



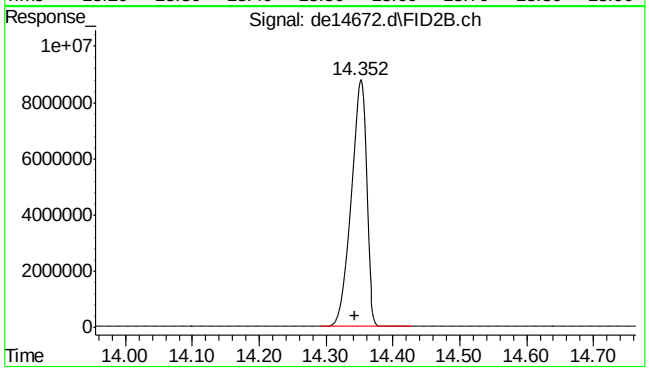
#37 c-24

R.T.: 12.707 min
Delta R.T.: 0.008 min
Response: 13632931
Conc: 181.95 µg/ml



#38 c-26

R.T.: 13.558 min
Delta R.T.: 0.010 min
Response: 14575529
Conc: 185.42 µg/ml



#39 c-28

R.T.: 14.352 min
Delta R.T.: 0.008 min
Response: 14116516
Conc: 187.51 µg/ml

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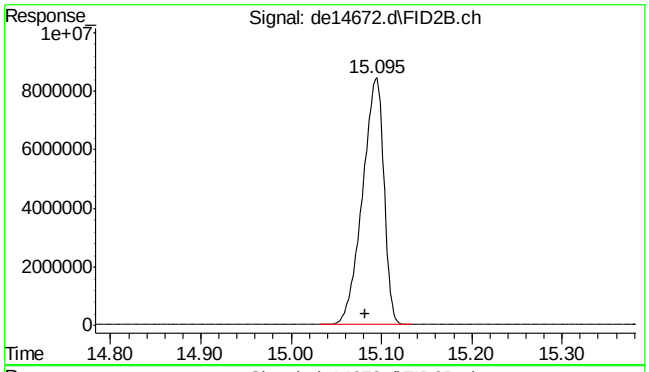
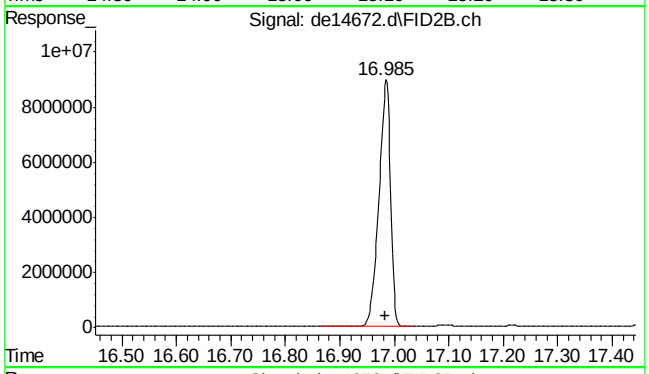


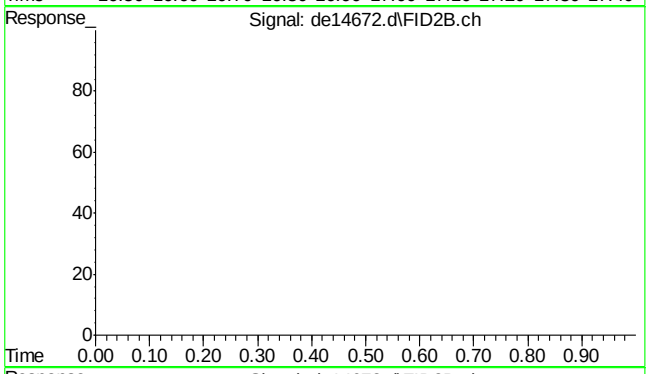
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 13936754
Conc: 172.56 µg/ml



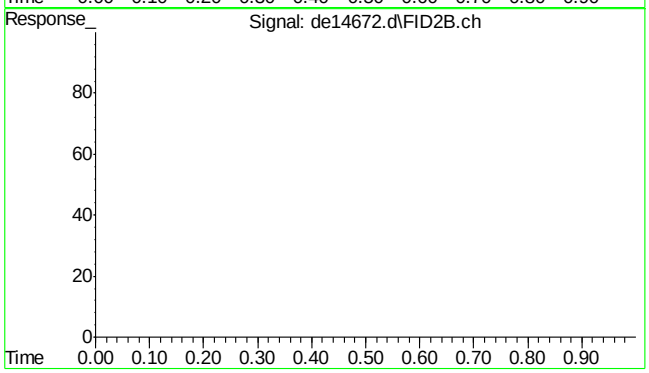
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 13213232
Conc: 196.25 µg/ml m



#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

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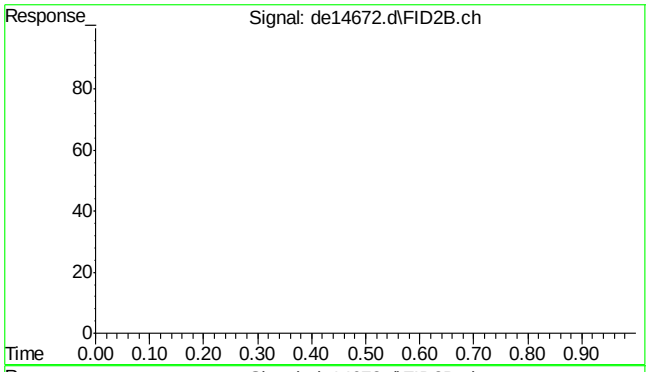
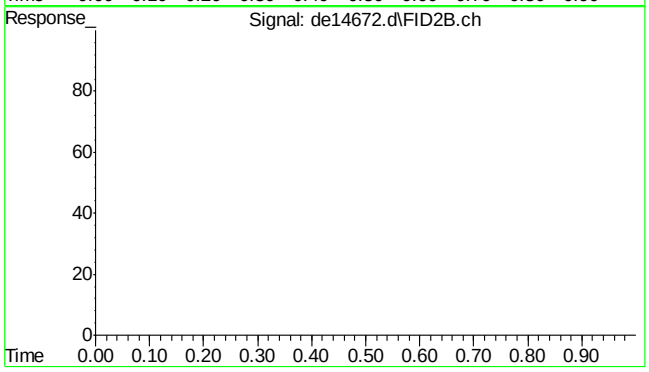


#44 bht

```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```



#45 bht

```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```

7.5.7

7

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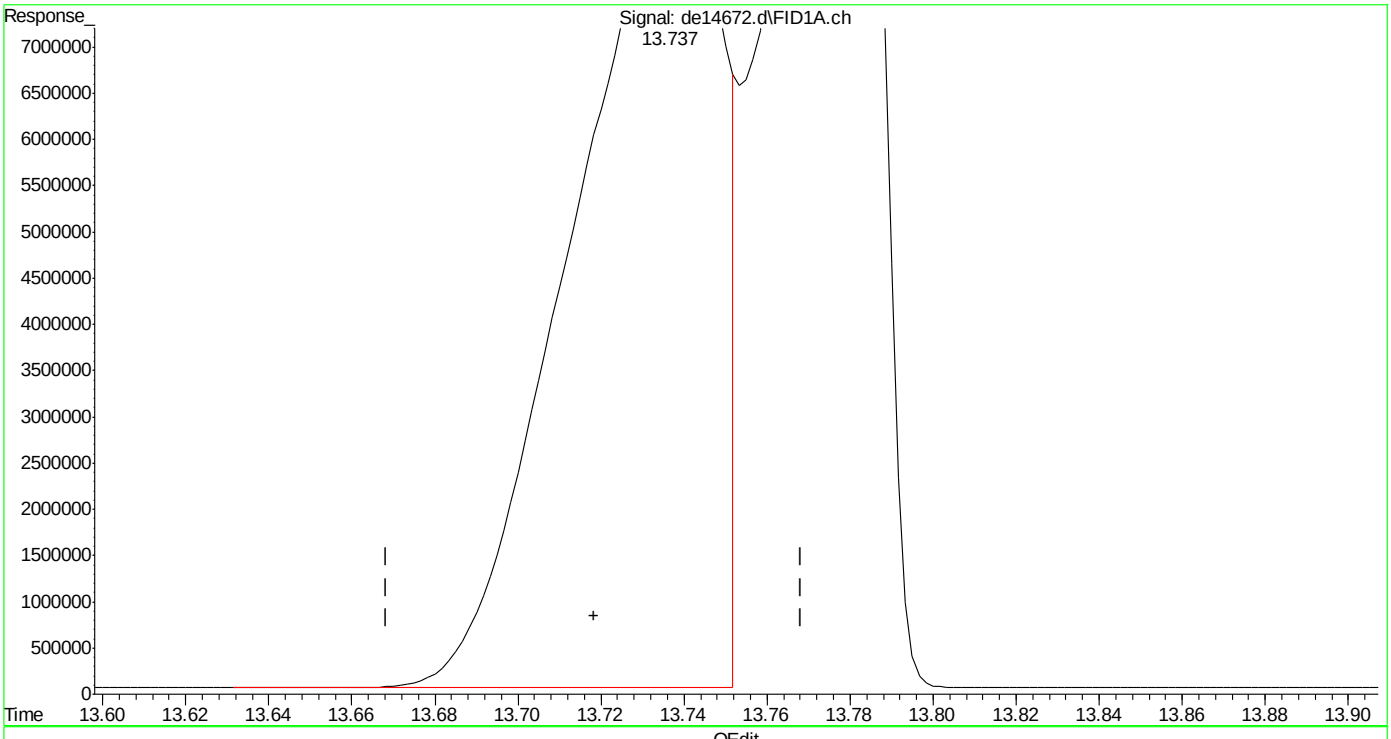
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14672.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:04 pm
Operator : thomasa
Sample : cc815-200
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 114 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:59:00 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:58:49 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.737min 191.862 µg/ml
response 22176370

(+) = Expected Retention Time

EPH160622W.M Thu Jun 23 07:59:11 2016

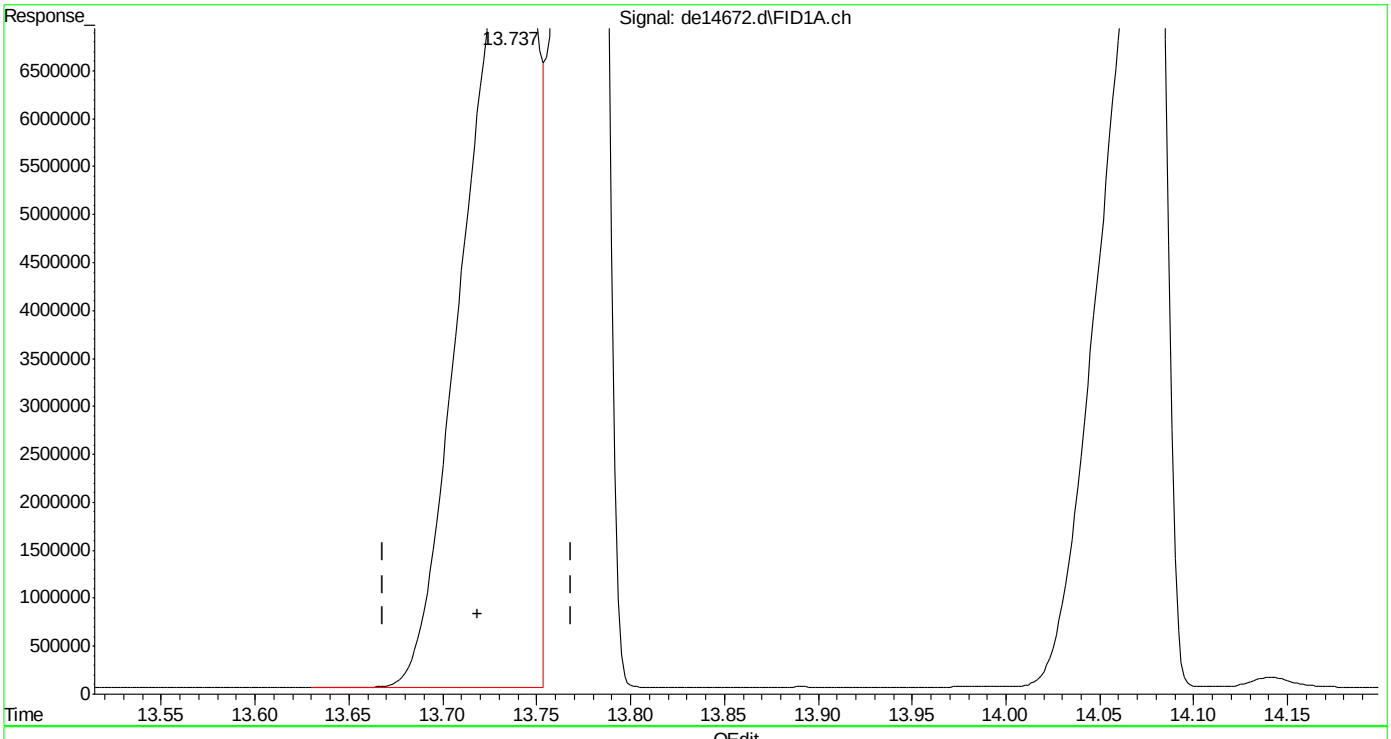
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14672.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:04 pm
Operator : thomasa
Sample : cc815-200
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 114 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:59:00 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:58:49 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.737min 197.507 µg/ml m
response 22828942

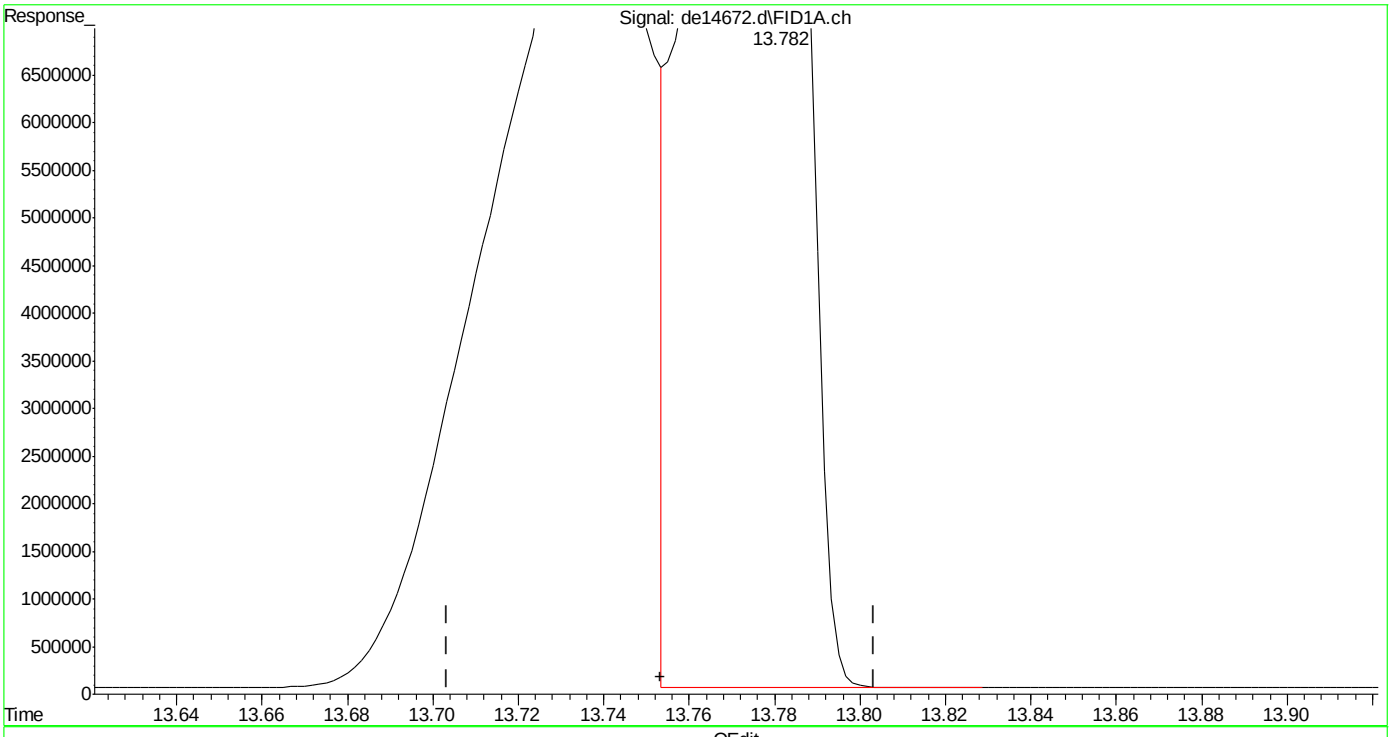
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:59:27 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14672.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:04 pm
Operator : thomasa
Sample : cc815-200
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 114 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:59:00 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:58:49 2016
Response via : Initial Calibration
Integrator: RTE

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



(17) benzo(k)fluoranthene
13.782min 174.577 µg/ml m
response 21742175

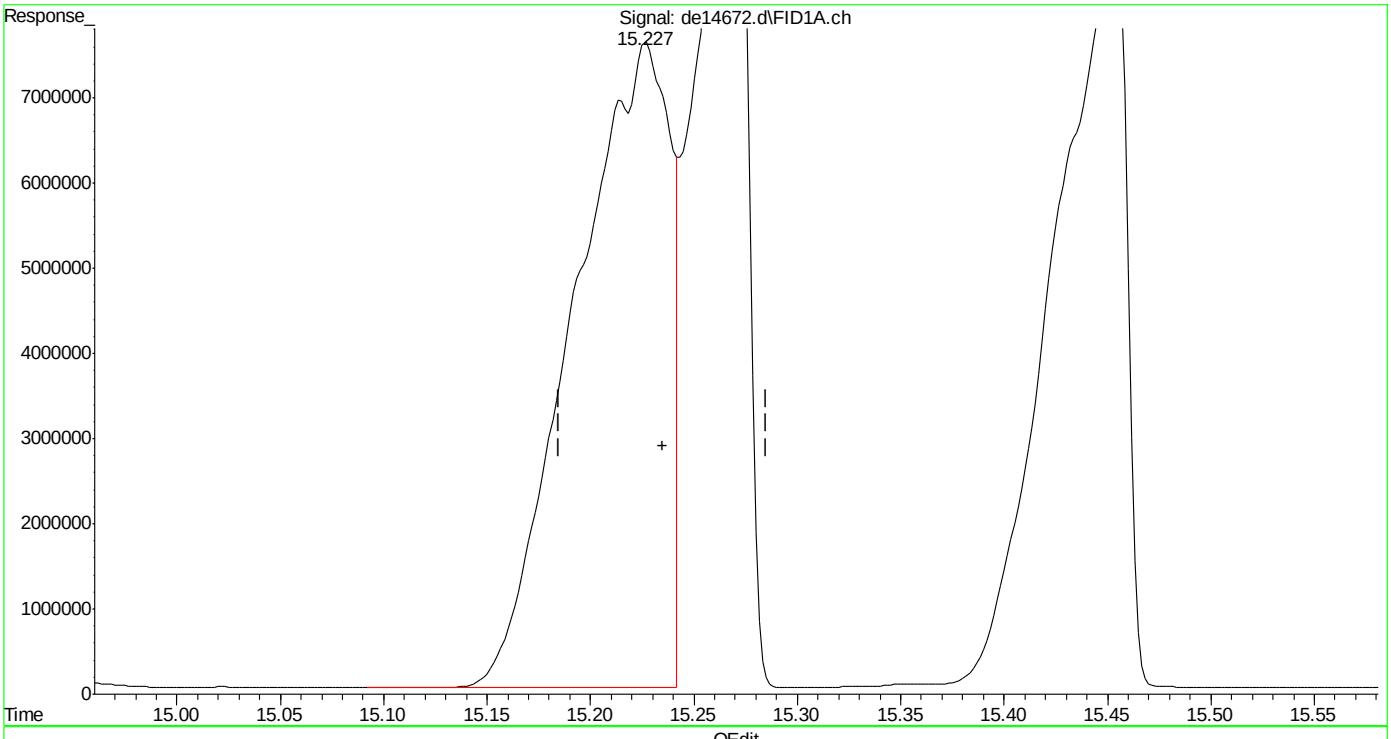
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14672.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:04 pm
Operator : thomasa
Sample : cc815-200
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 114 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:59:00 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:58:49 2016
Response via : Initial Calibration
Integrator: RTE

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



(20) dibenzo(ah)anthracene
15.227min 219.975 µg/ml
response 24533309

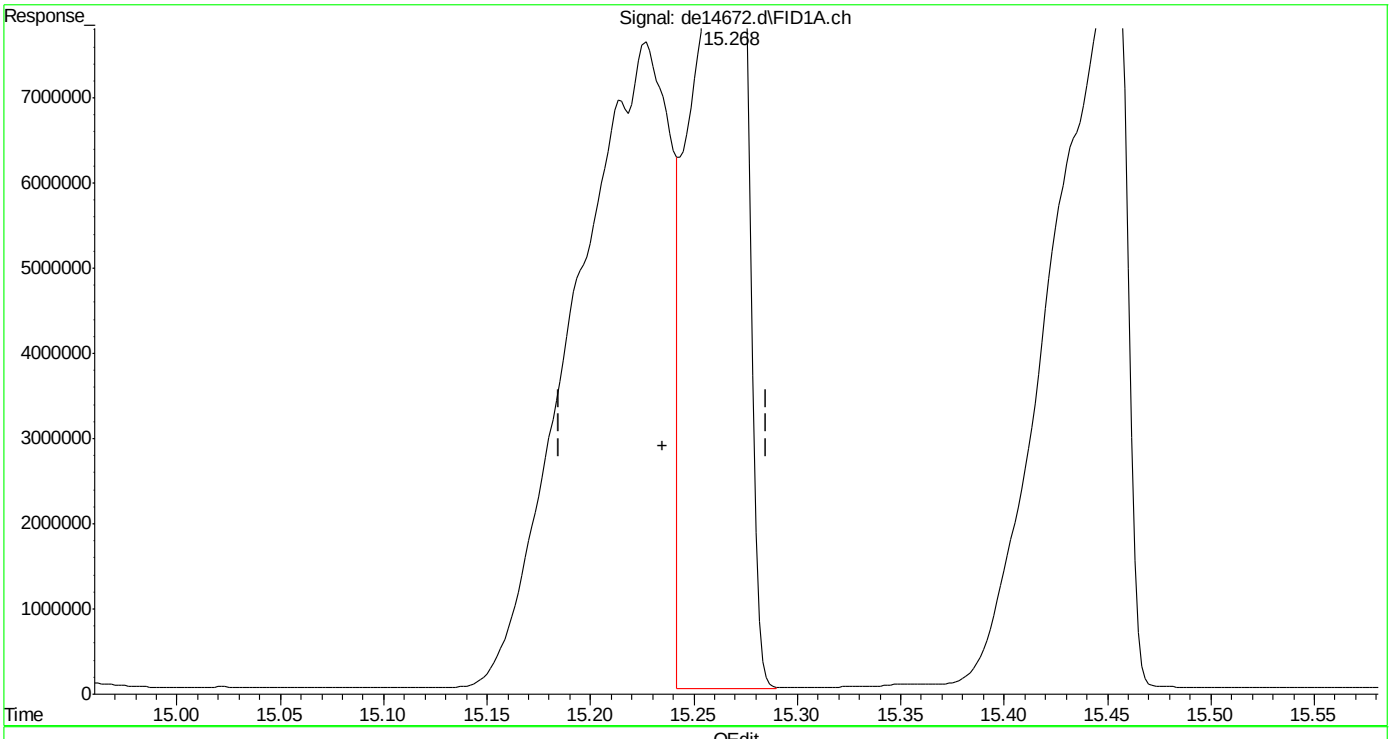
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14672.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:04 pm
Operator : thomasa
Sample : cc815-200
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 114 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:59:00 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:58:49 2016
Response via : Initial Calibration
Integrator: RTE

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



(20) dibenzo(ah)anthracene
15.268min 171.272 µg/ml m
response 19101555

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 08:00:43 2016

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Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri
06/23/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:13:26 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:10:23 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) s	2-fluorobiphenyl	6.485	5332046	46.578 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 232.89%#
6) s	2-bromonaphthalene	7.208	3494534	48.736 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 243.68%#
11) s	o-terphenyl	9.748	5818429	43.976 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 219.88%#
35) s	1-chlorooctadecane	11.218	3828846	58.767 µg/mlm
Spiked Amount	20.000	Range	8 - 28	Recovery = 293.84%#
	Target Compounds			
2)	naphthalene	5.028	5919992	47.158 µg/ml
3)	2-methylnaphthalene	5.930	5706597	45.239 µg/ml
5)	acenaphthylene	7.040	5746230	45.416 µg/ml
7)	acenaphthene	7.282	5957493	42.771 µg/ml
8)	fluorene	7.927	5819321	45.298 µg/ml
9)	phenanthrene	9.102	5709676	45.708 µg/ml
10)	anthracene	9.160	5877713	44.181 µg/ml
12)	fluoranthene	10.602	5843258	45.557 µg/ml
13)	pyrene	10.858	6133432	46.698 µg/ml
14)	benzo(a)anthracene	12.418	5593098	46.041 µg/ml
15)	chrysene	12.467	5419101	42.453 µg/ml
16)	benzo(B)fluoranthene	13.713	5686083	48.026 µg/mlm
17)	benzo(k)fluoranthene	13.743	5296656	41.370 µg/mlm
18)	benzo(a)pyrene	14.045	4932114	41.812 µg/ml
19)	indeno(1,2,3-cd)pyrene	15.183	5189319	44.336 µg/mlm
20)	dibenzo(ah)anthracene	15.228	5167436	45.606 µg/mlm
21)	benzo(ghi)perylene	15.408	5139087	45.288 µg/ml
25) h	c-9	2.647	4195241	49.762 µg/mlm
26) h	c-10	3.800	4290577	50.893 µg/ml
27)	naphthalene #2	5.478	4634254	50.976 µg/ml
28)	c-12	5.658	4207991	49.914 µg/ml
29)	2-methylnaphthalene #2	6.373	4557390	50.673 µg/ml
30)	c-14	7.175	4164771	49.401 µg/ml
31)	c-16	8.503	4102769	48.665 µg/ml
32)	c-18	9.698	4021156	47.697 µg/ml
33)	c-19	10.253	3951249	50.772 µg/ml
34)	c-20	10.785	3904441	50.170 µg/ml
36)	c-22	11.780	3927561	50.467 µg/ml
37)	c-24	12.697	3872214	49.756 µg/ml
38)	c-26	13.548	3756324	48.267 µg/ml

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:13:26 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:10:23 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc	Units
39)	c-28	14.340	3684091	47.339	µg/ml
40) h	c-30	15.082	3605357	46.327	µg/ml
41) h	c-36	16.983	3238093	41.608	µg/mlm

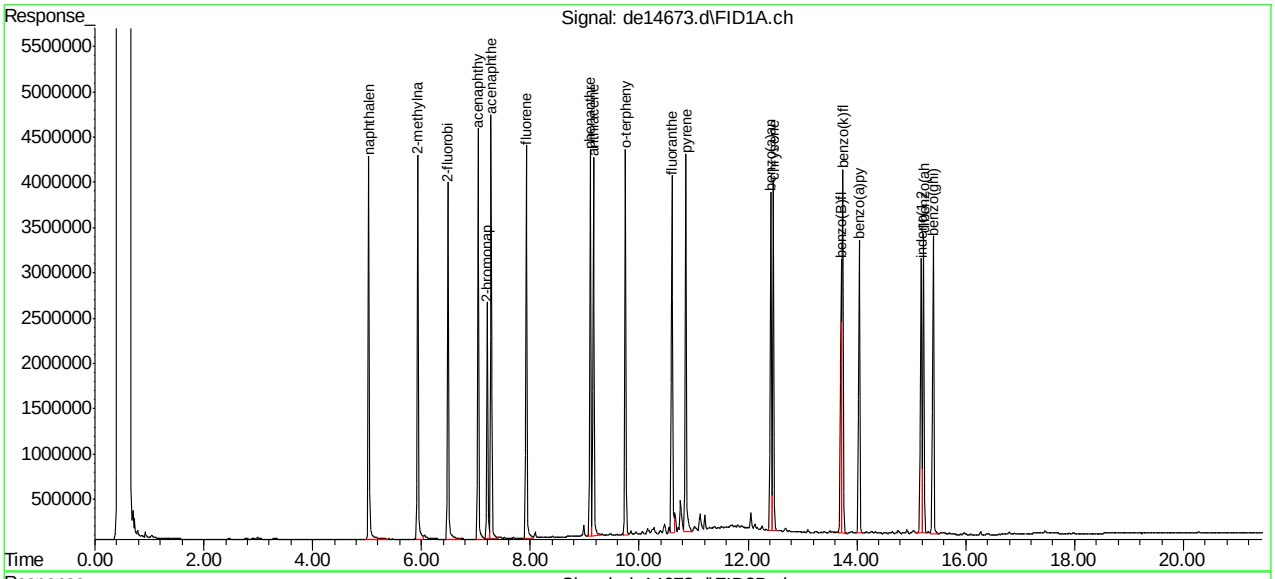
(f)=RT Delta > 1/2 Window (m)=manual int.

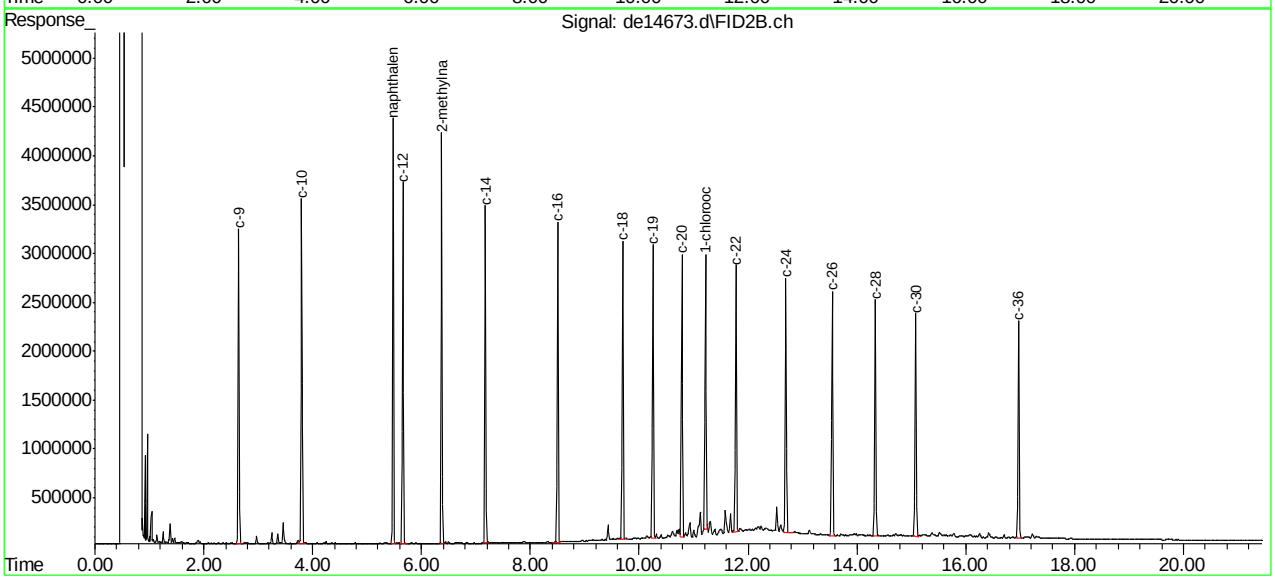
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:13:26 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:10:23 2016
Response via : Initial Calibration
Integrator: RTE

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





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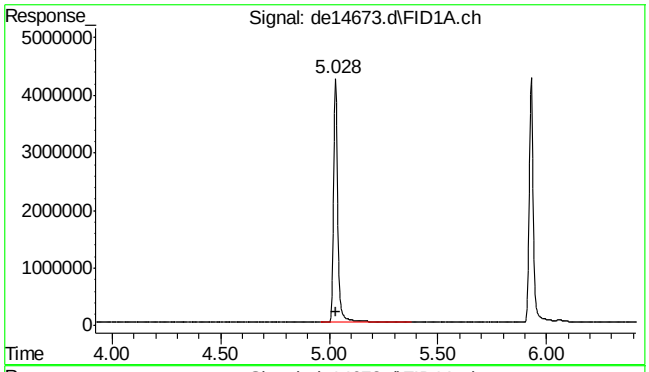
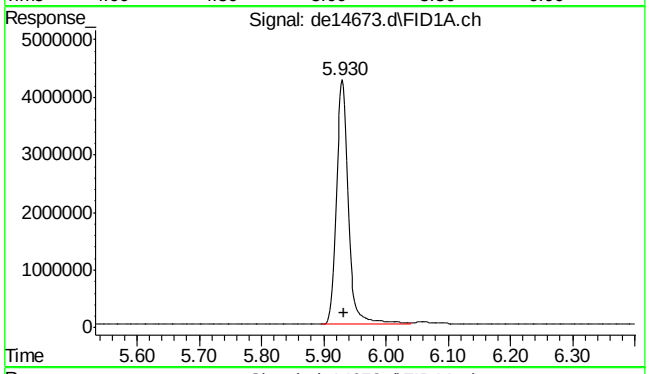


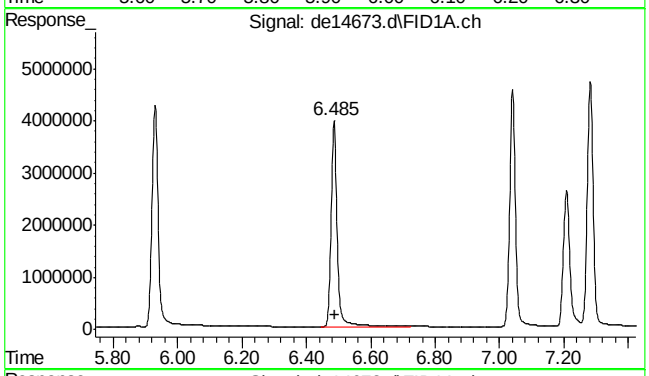
#2 naphthalene

R.T.: 5.028 min
Delta R.T.: -0.002 min
Response: 5919992
Conc: 47.16 µg/ml



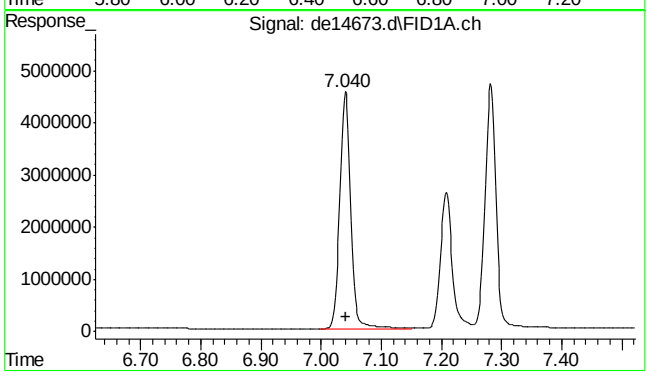
#3 2-methylnaphthalene

R.T.: 5.930 min
Delta R.T.: -0.002 min
Response: 5706597
Conc: 45.24 µg/ml



#4 2-fluorobiphenyl

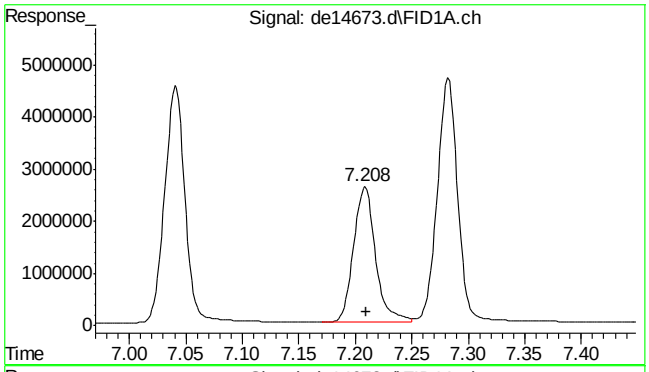
R.T.: 6.485 min
Delta R.T.: -0.003 min
Response: 5332046
Conc: 46.58 µg/ml



#5 acenaphthylene

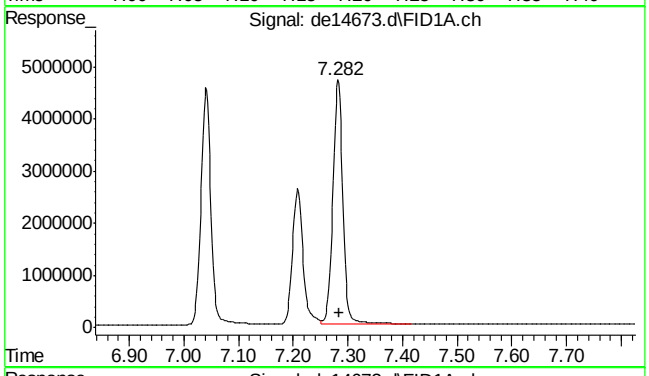
R.T.: 7.040 min
Delta R.T.: -0.002 min
Response: 5746230
Conc: 45.42 µg/ml

SGS ACCUTEST MC46783



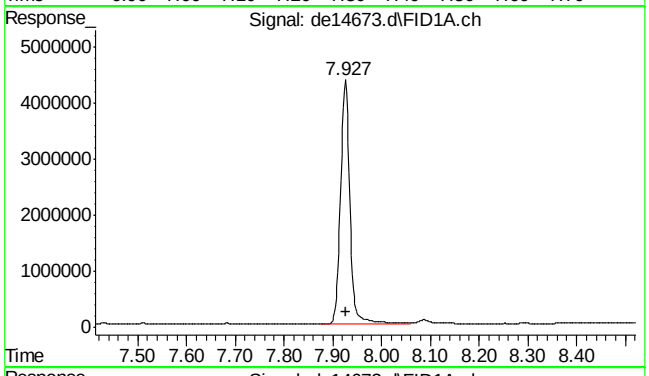
#6 2-bromonaphthalene

R.T.: 7.208 min
Delta R.T.: -0.002 min
Response: 3494534
Conc: 48.74 µg/ml



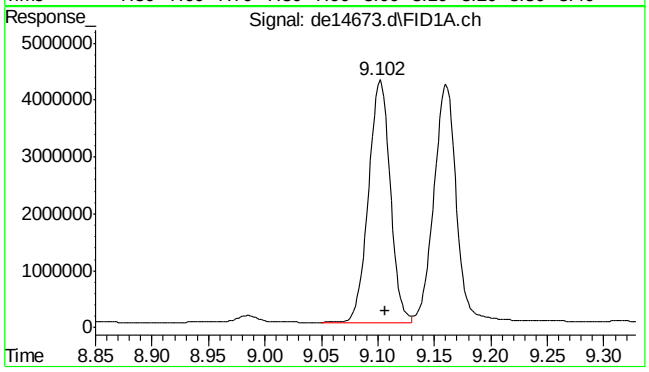
#7 acenaphthene

R.T.: 7.282 min
Delta R.T.: -0.003 min
Response: 5957493
Conc: 42.77 µg/ml



#8 fluorene

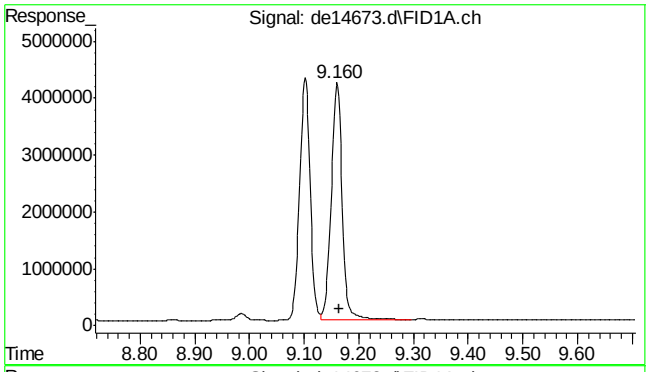
R.T.: 7.927 min
Delta R.T.: -0.002 min
Response: 5819321
Conc: 45.30 µg/ml



#9 phenanthrene

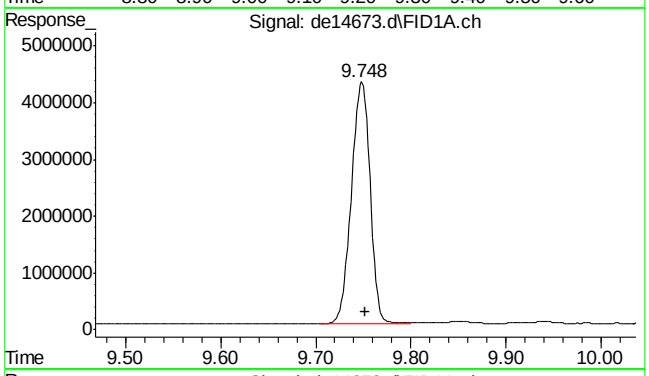
R.T.: 9.102 min
Delta R.T.: -0.005 min
Response: 5709676
Conc: 45.71 µg/ml

SGS ACCUTEST MC46783



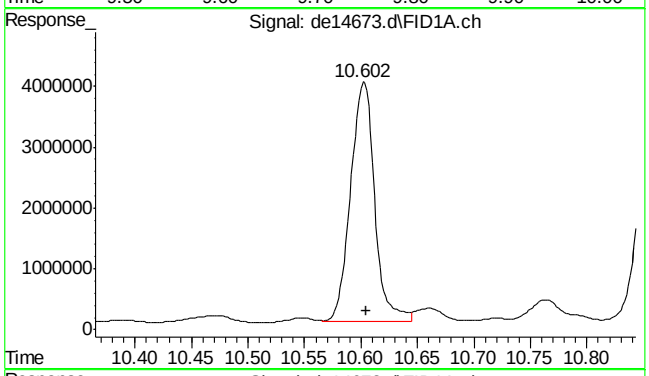
#10 anthracene

R.T.: 9.160 min
Delta R.T.: -0.003 min
Response: 5877713
Conc: 44.18 µg/ml



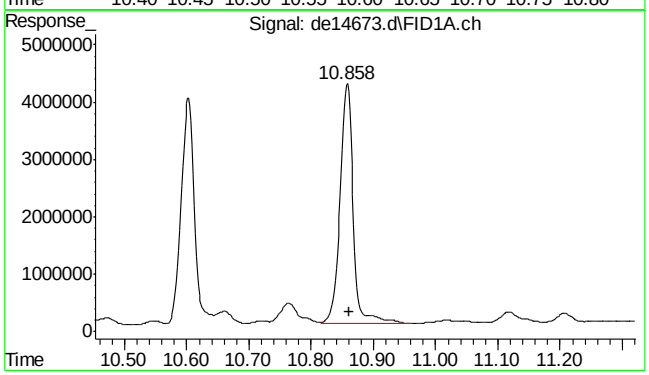
#11 o-terphenyl

R.T.: 9.748 min
Delta R.T.: -0.003 min
Response: 5818429
Conc: 43.98 µg/ml



#12 fluoranthene

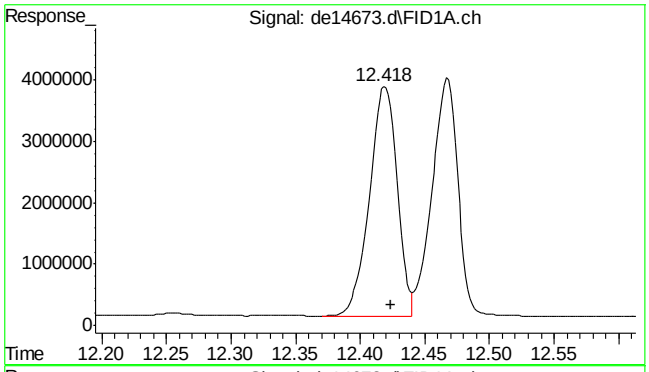
R.T.: 10.602 min
Delta R.T.: -0.003 min
Response: 5843258
Conc: 45.56 µg/ml



#13 pyrene

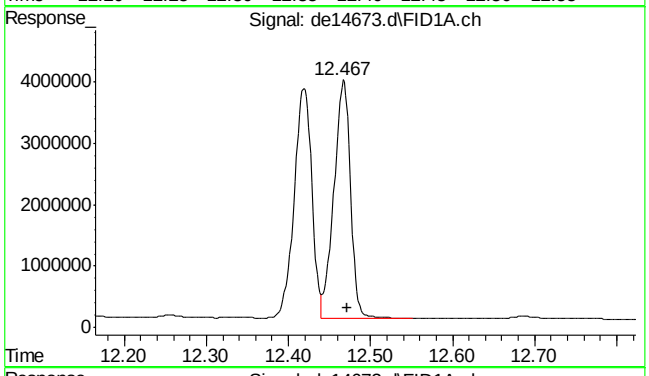
R.T.: 10.858 min
Delta R.T.: -0.003 min
Response: 6133432
Conc: 46.70 µg/ml

SGS ACCUTEST MC46783



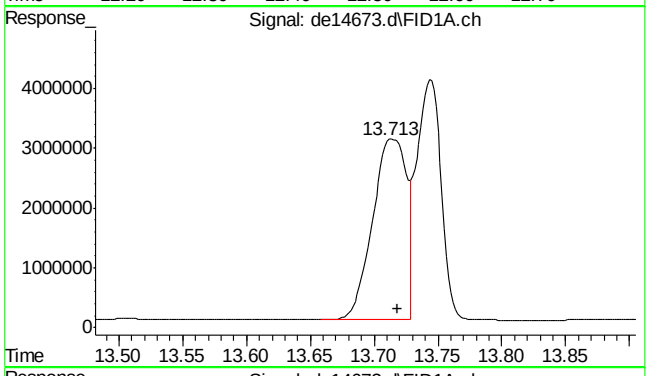
#14 benzo(a)anthracene

R.T.: 12.418 min
Delta R.T.: -0.005 min
Response: 5593098
Conc: 46.04 µg/ml



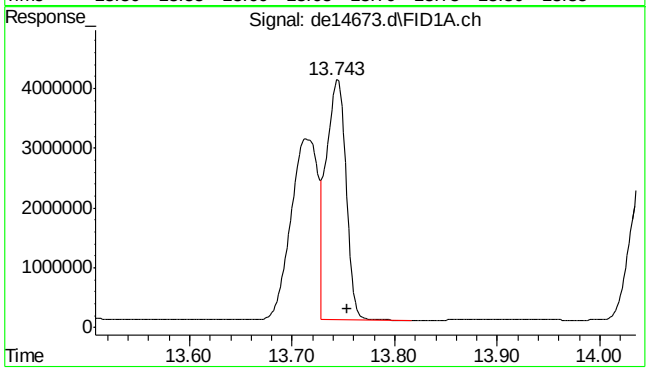
#15 chrysene

R.T.: 12.467 min
Delta R.T.: -0.005 min
Response: 5419101
Conc: 42.45 µg/ml



#16 benzo(B)fluoranthene

R.T.: 13.713 min
Delta R.T.: -0.005 min
Response: 5686083
Conc: 48.03 µg/ml m



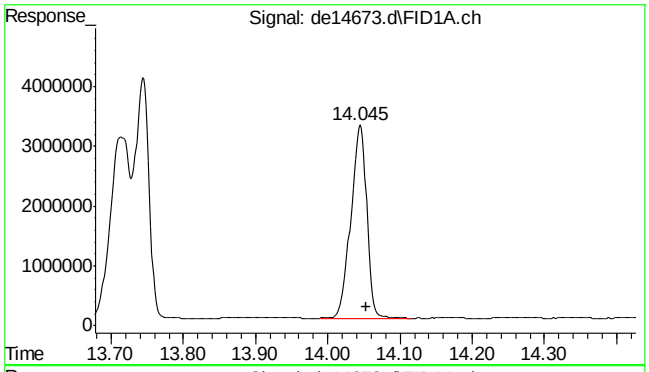
#17 benzo(k)fluoranthene

R.T.: 13.743 min
Delta R.T.: -0.010 min
Response: 5296656
Conc: 41.37 µg/ml m

7.5.8

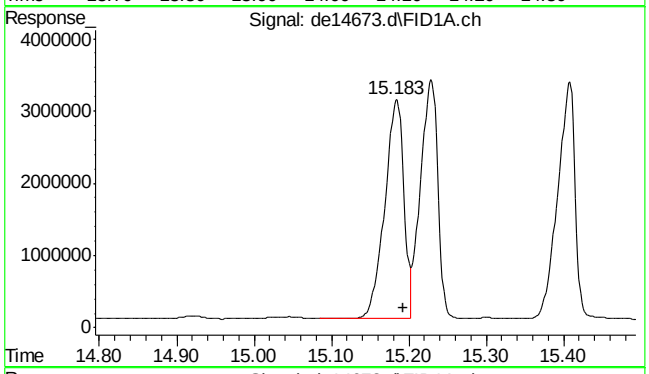
7

SGS ACCUTEST MC46783



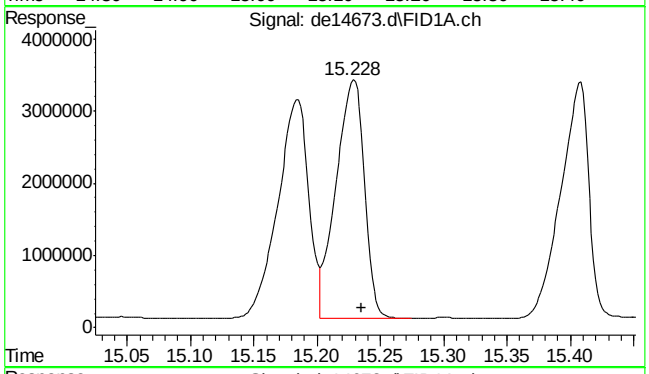
#18 benzo(a)pyrene

R.T.: 14.045 min
Delta R.T.: -0.008 min
Response: 4932114
Conc: 41.81 µg/ml



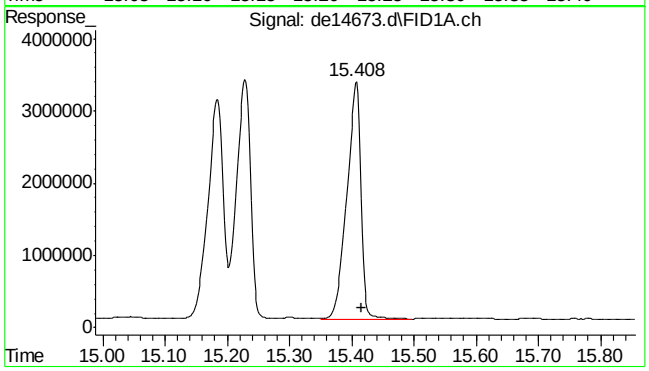
#19 indeno(1,2,3-cd)pyrene

R.T.: 15.183 min
Delta R.T.: -0.010 min
Response: 5189319
Conc: 44.34 µg/ml m



#20 dibenzo(ah)anthracene

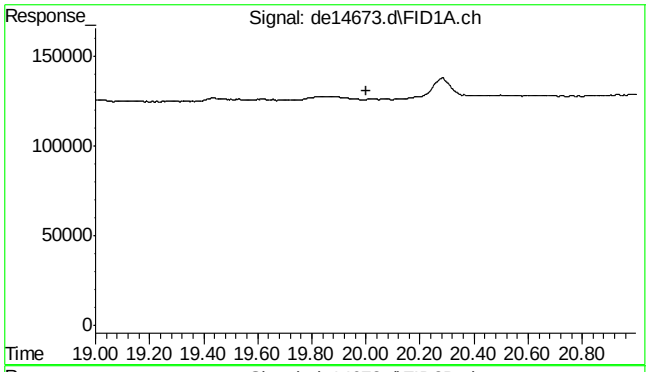
R.T.: 15.228 min
Delta R.T.: -0.007 min
Response: 5167436
Conc: 45.61 µg/ml m



#21 benzo(ghi)perylene

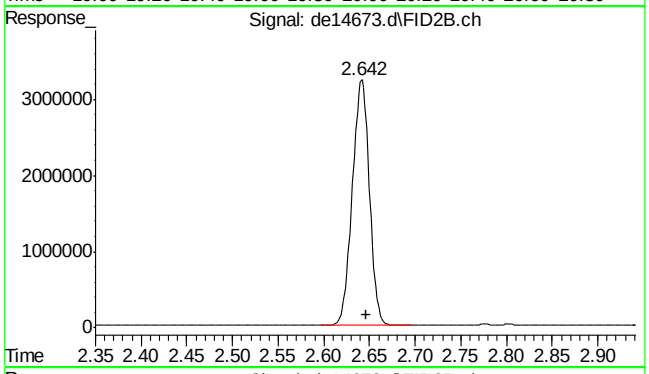
R.T.: 15.408 min
Delta R.T.: -0.008 min
Response: 5139087
Conc: 45.29 µg/ml

SGS ACCUTEST MC46783



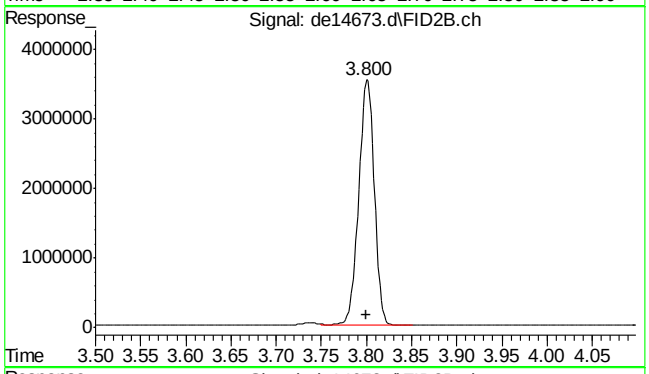
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



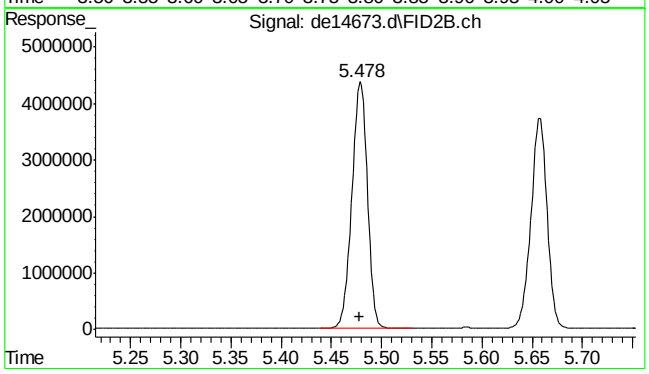
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 4195241
Conc: 49.76 µg/ml m



#26 c-10

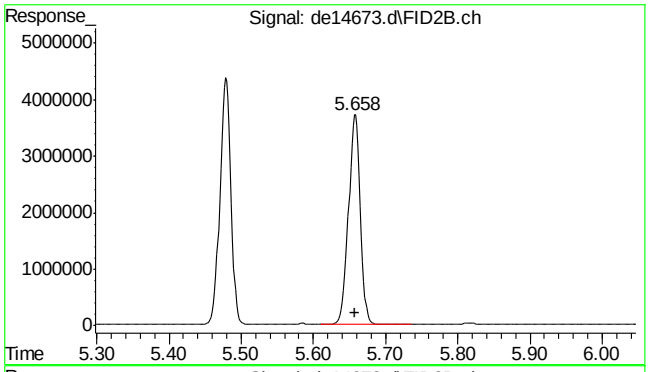
R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 4290577
Conc: 50.89 µg/ml



#27 naphthalene #2

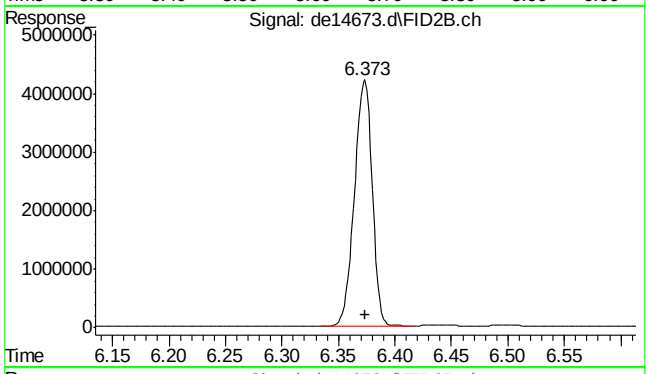
R.T.: 5.478 min
Delta R.T.: 0.000 min
Response: 4634254
Conc: 50.98 µg/ml

SGS ACCUTEST MC46783



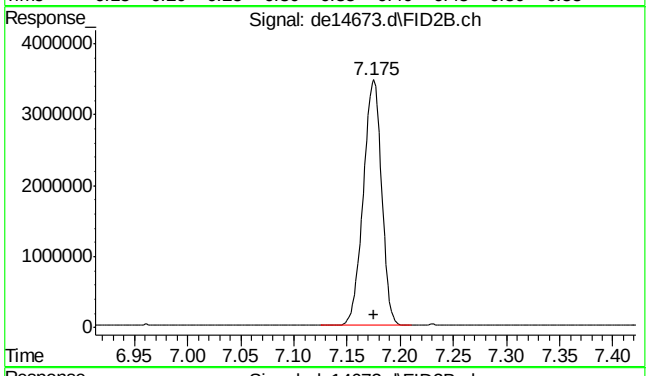
#28 c-12

R.T.: 5.658 min
Delta R.T.: 0.001 min
Response: 4207991
Conc: 49.91 µg/ml



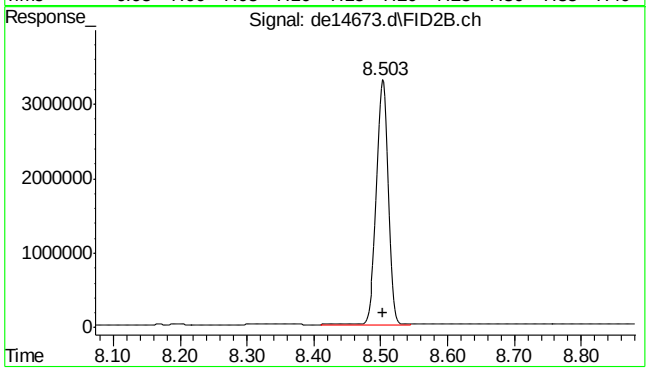
#29 2-methylnaphthalene #2

R.T.: 6.373 min
Delta R.T.: 0.000 min
Response: 4557390
Conc: 50.67 µg/ml



#30 c-14

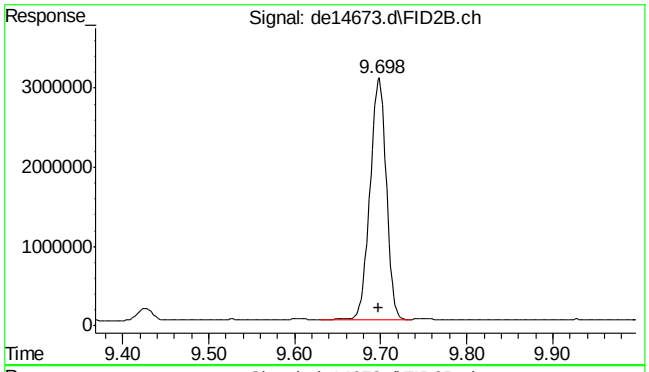
R.T.: 7.175 min
Delta R.T.: 0.000 min
Response: 4164771
Conc: 49.40 µg/ml



#31 c-16

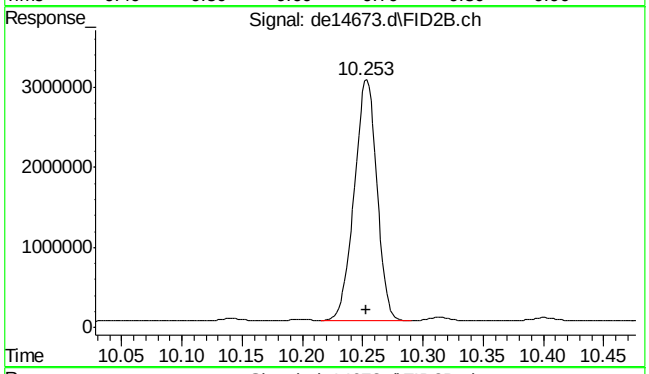
R.T.: 8.503 min
Delta R.T.: 0.000 min
Response: 4102769
Conc: 48.67 µg/ml

SGS ACCUTEST MC46783



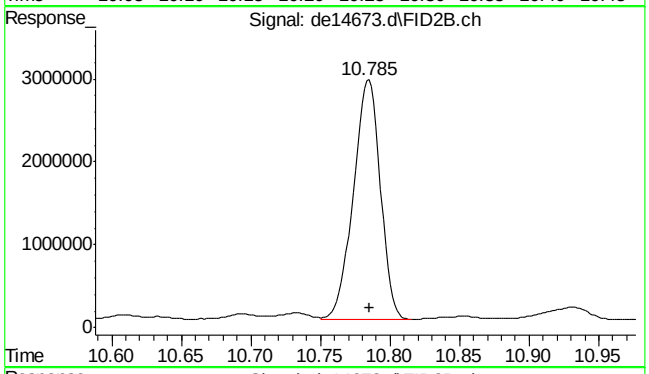
#32 c-18

R.T.: 9.698 min
Delta R.T.: 0.000 min
Response: 4021156
Conc: 47.70 µg/ml



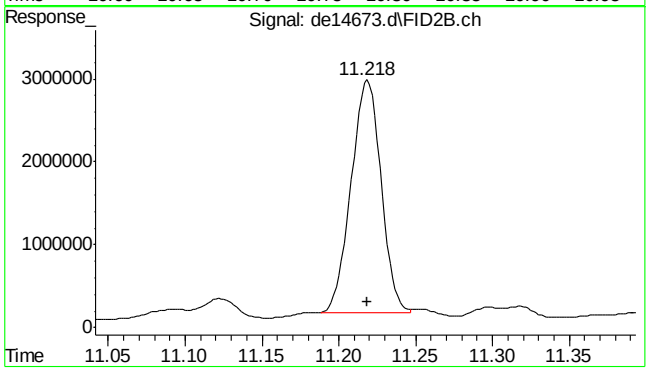
#33 c-19

R.T.: 10.253 min
Delta R.T.: 0.000 min
Response: 3951249
Conc: 50.77 µg/ml



#34 c-20

R.T.: 10.785 min
Delta R.T.: 0.000 min
Response: 3904441
Conc: 50.17 µg/ml



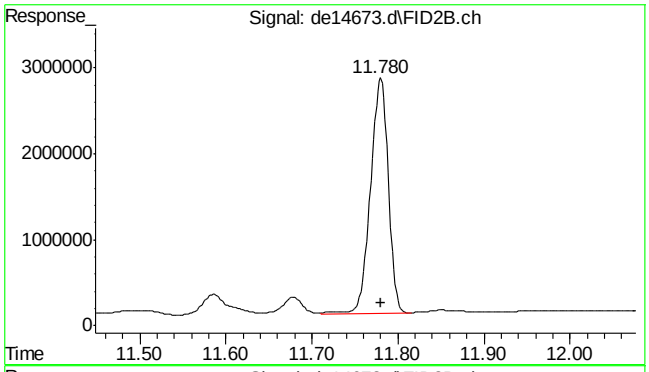
#35 1-chlorooctadecane

R.T.: 11.218 min
Delta R.T.: 0.000 min
Response: 3828846
Conc: 58.77 µg/ml m

7.5.8

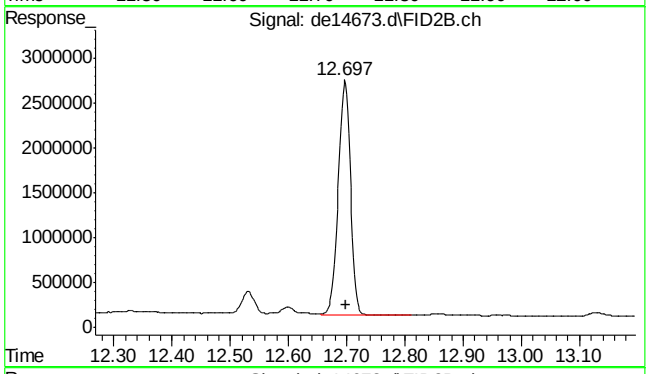
7

SGS ACCUTEST MC46783



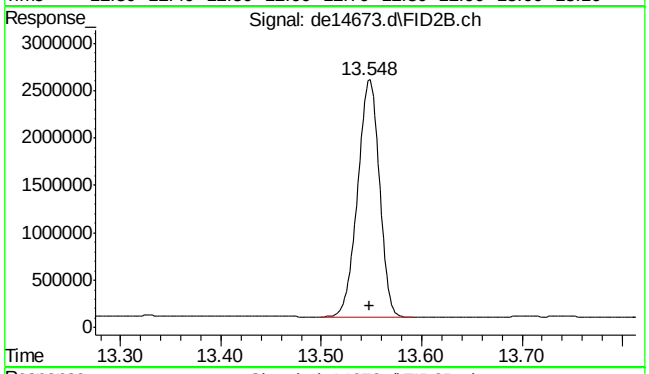
#36 c-22

R.T.: 11.780 min
Delta R.T.: 0.000 min
Response: 3927561
Conc: 50.47 µg/ml



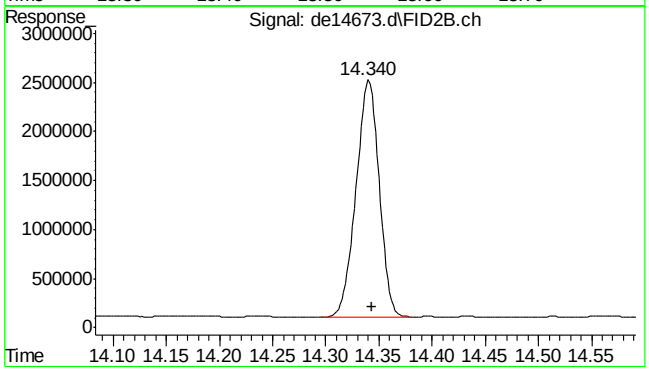
#37 c-24

R.T.: 12.697 min
Delta R.T.: -0.001 min
Response: 3872214
Conc: 49.76 µg/ml



#38 c-26

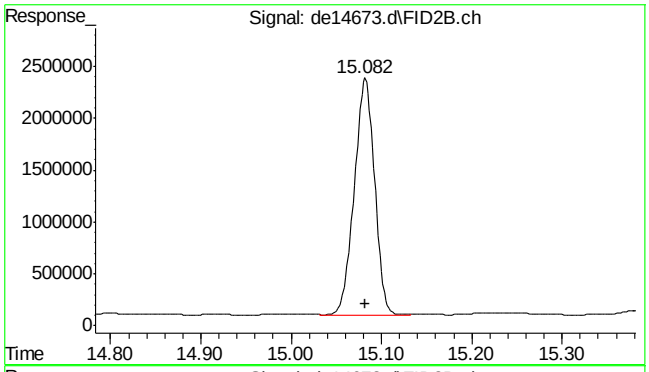
R.T.: 13.548 min
Delta R.T.: 0.000 min
Response: 3756324
Conc: 48.27 µg/ml



#39 c-28

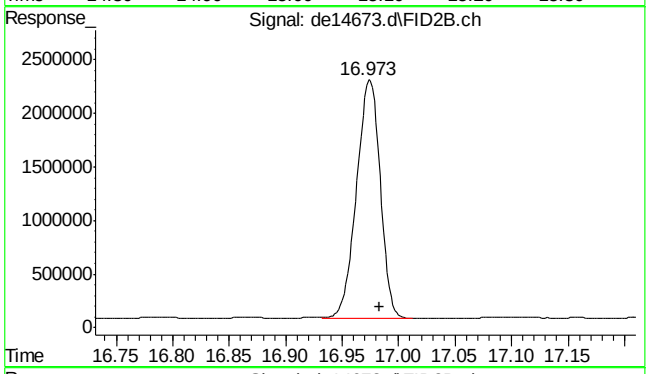
R.T.: 14.340 min
Delta R.T.: -0.003 min
Response: 3684091
Conc: 47.34 µg/ml

SGS ACCUTEST MC46783



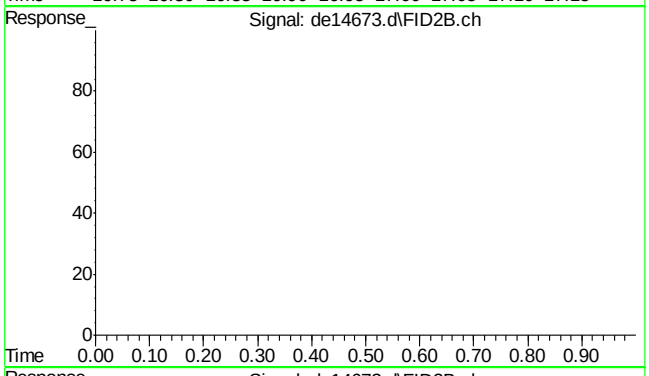
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 3605357
Conc: 46.33 µg/ml



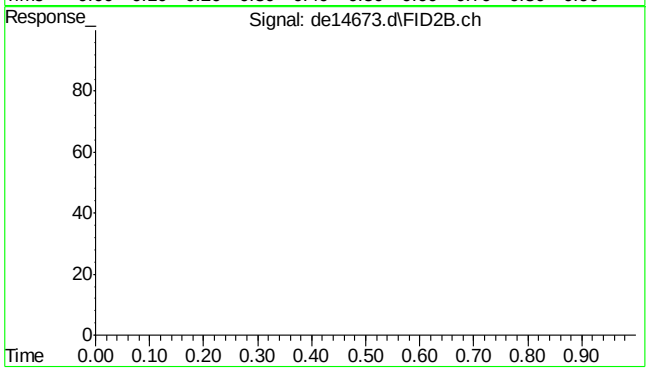
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 3238093
Conc: 41.61 µg/ml m



#42 bht

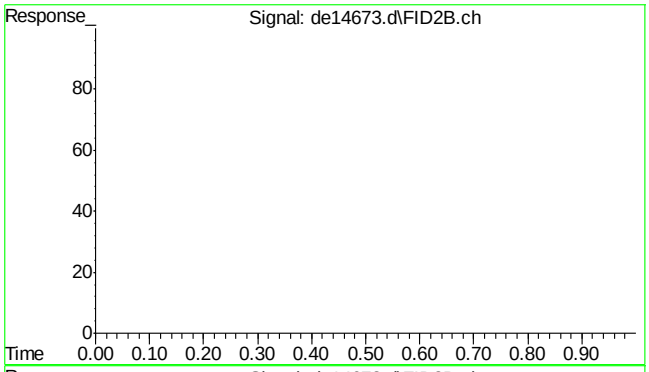
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#43 bht

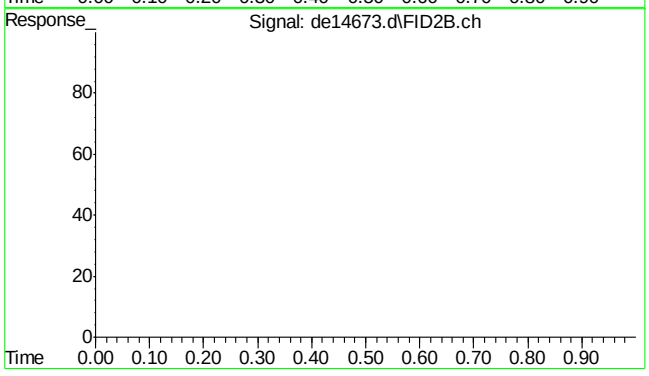
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

SGS ACCUTEST MC46783



#44 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#45 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

7.5.8

7

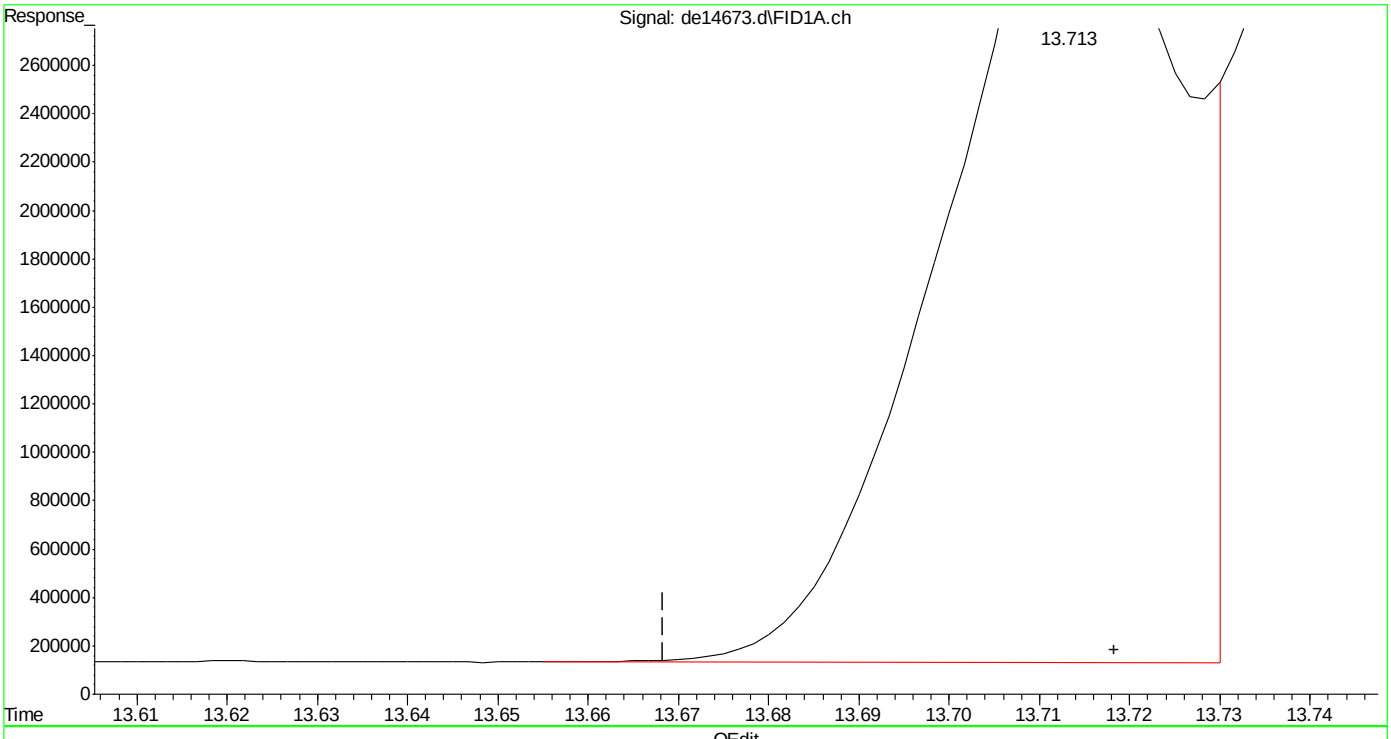
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:03:43 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:01:14 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.713min 50.044 µg/ml
response 5925029

(+) = Expected Retention Time

EPH160622W.M Thu Jun 23 08:03:58 2016

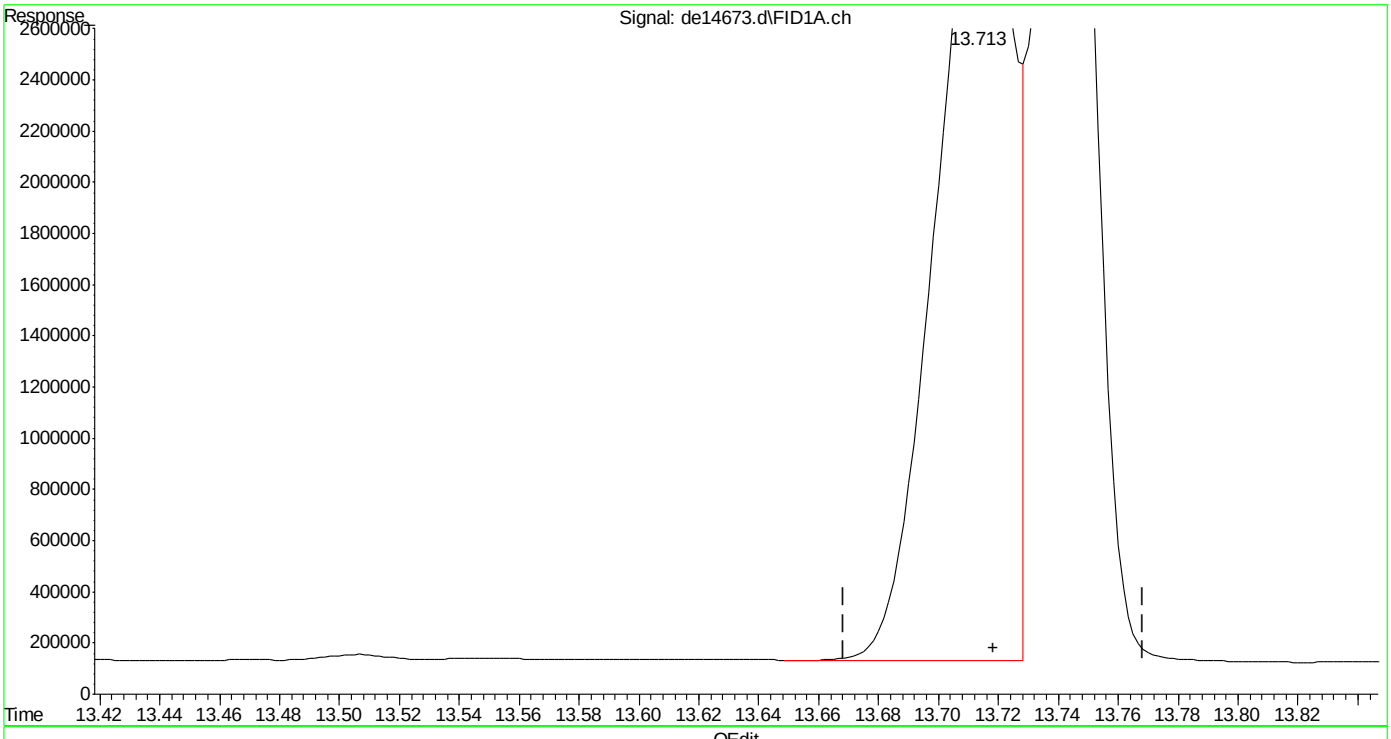
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:03:43 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:01:14 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.713min 48.032 µg/ml m
response 5686875

(+) = Expected Retention Time

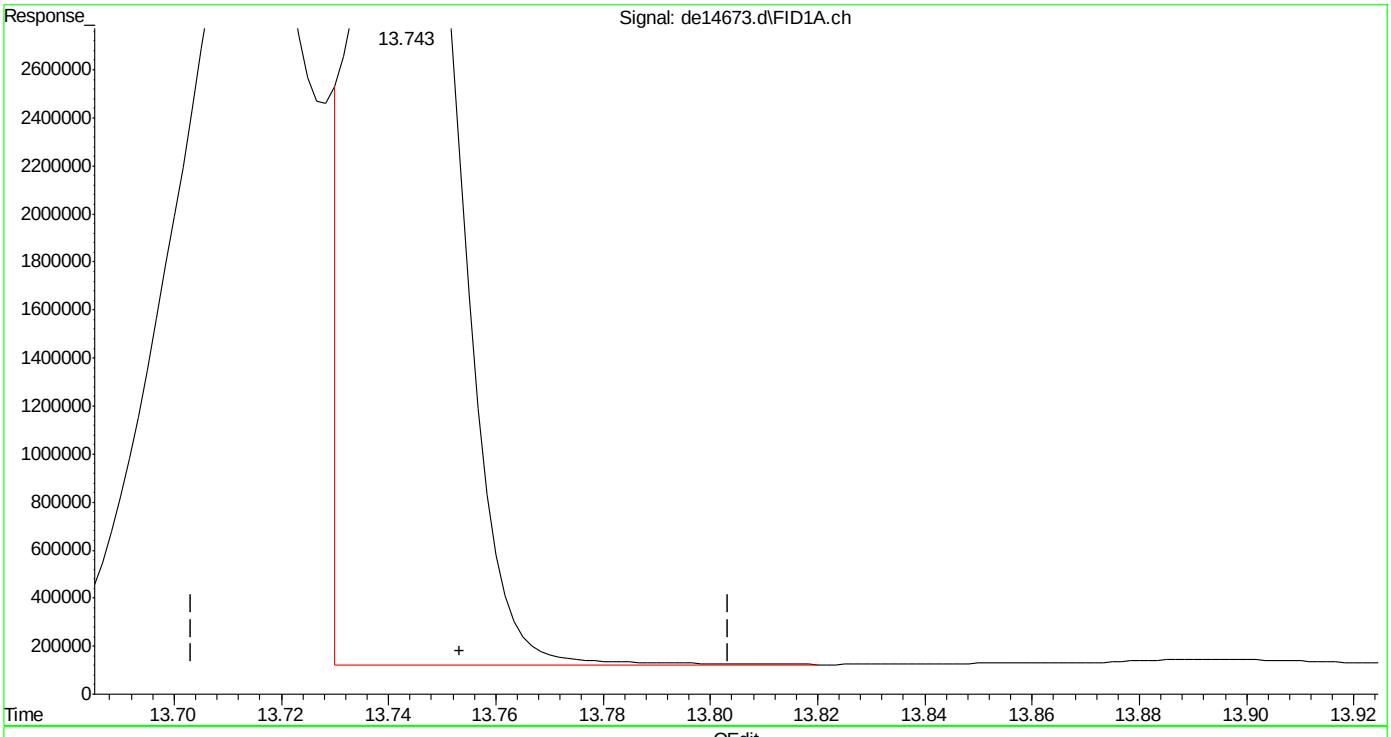
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:03:43 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:01:14 2016
Response via : Initial Calibration
Integrator: RTE

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



(17) benzo(k)fluoranthene
13.743min 39.639 µg/ml
response 5074972

(+) = Expected Retention Time

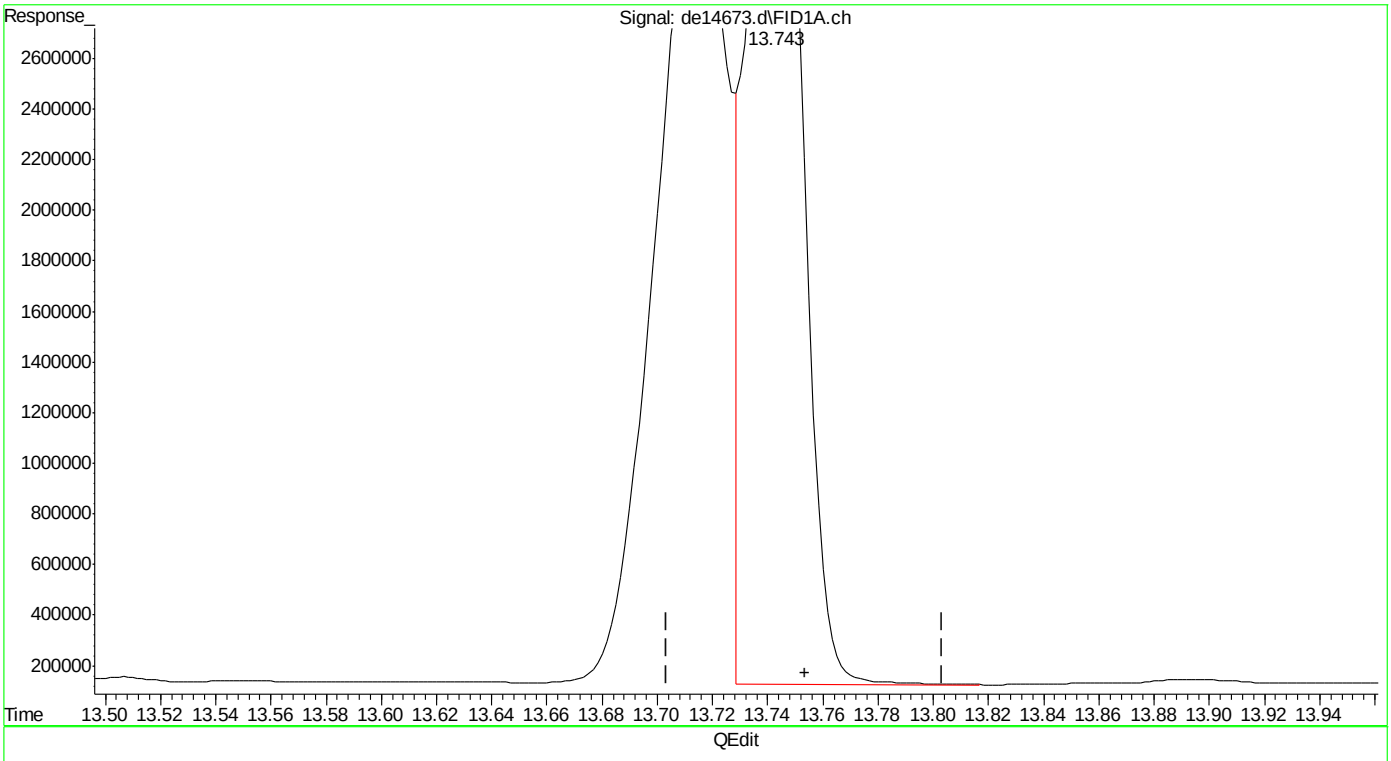
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:03:43 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:01:14 2016
Response via : Initial Calibration
Integrator: RTE

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



(17) benzo(k)fluoranthene
13.743min 41.502 µg/ml m
response 5313542

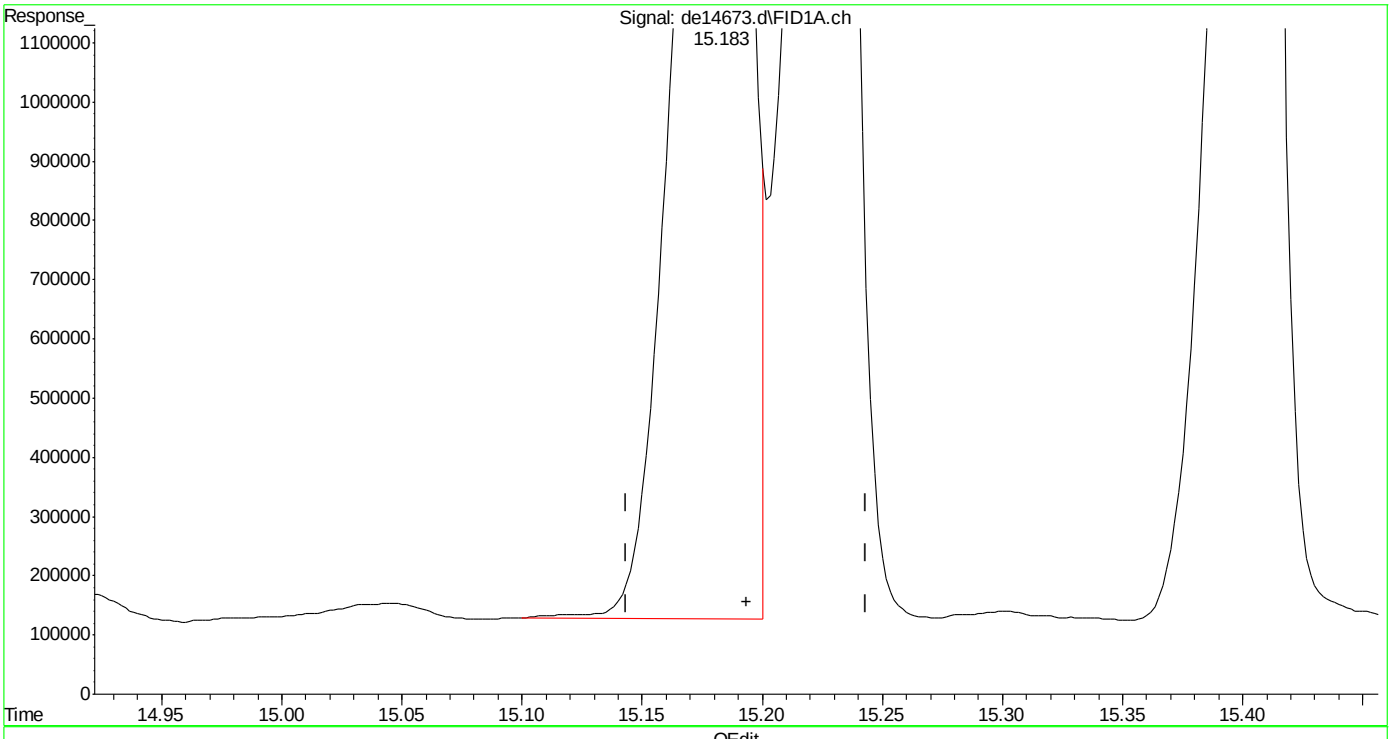
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:03:43 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:01:14 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.183min 43.751 µg/ml
response 5120914

(+) = Expected Retention Time

EPH160622W.M Thu Jun 23 08:04:29 2016

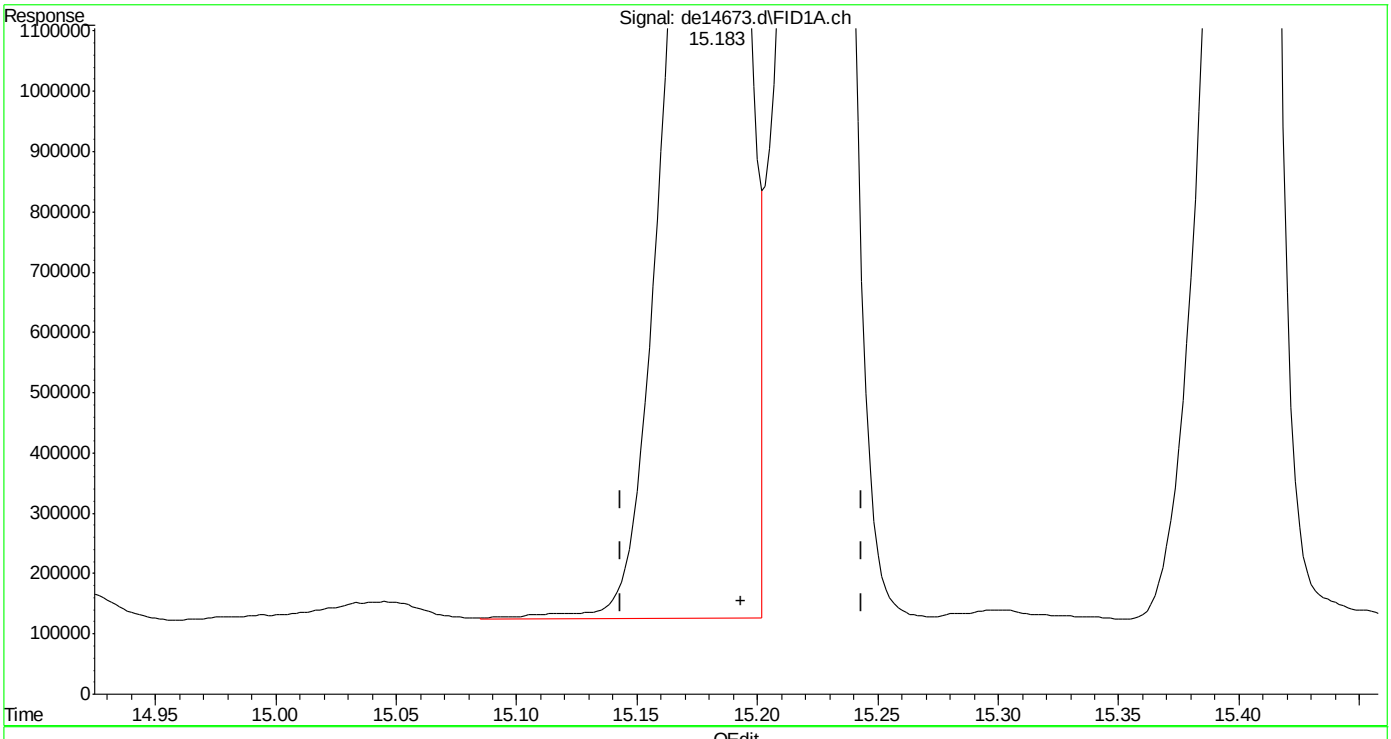
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:03:43 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:01:14 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.183min 44.472 µg/ml m
response 5205335

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 08:04:44 2016

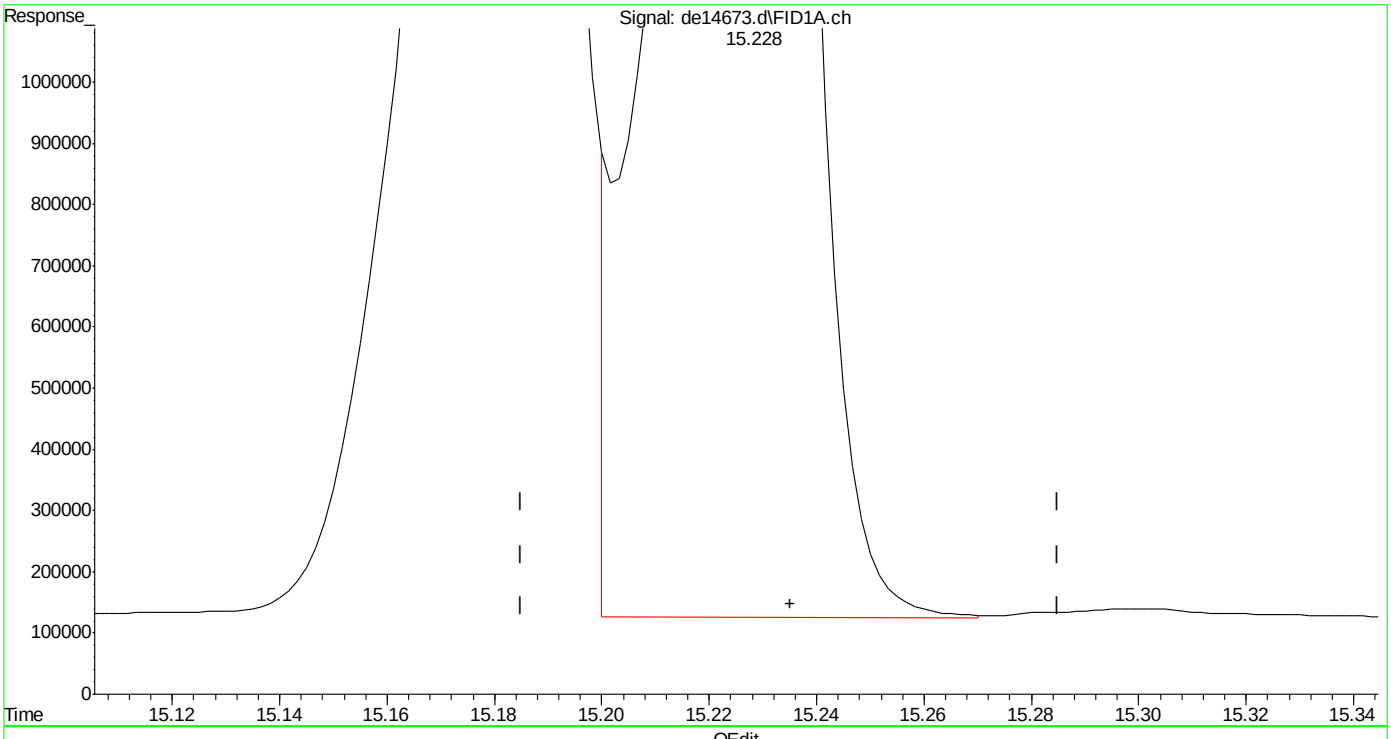
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:03:43 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:01:14 2016
Response via : Initial Calibration
Integrator: RTE

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



(20) dibenzo(ah)anthracene
15.228min 46.183 µg/ml
response 5232864

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 08:04:48 2016

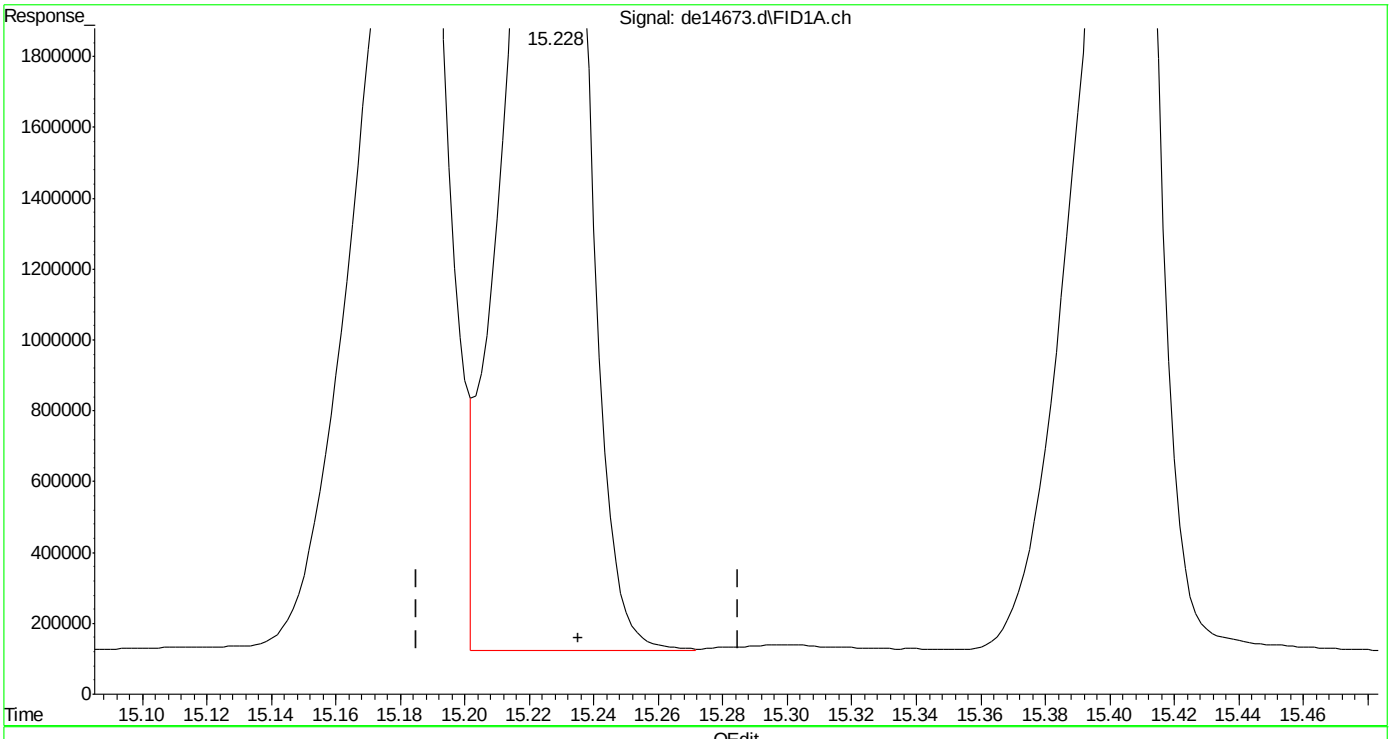
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:03:43 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:01:14 2016
Response via : Initial Calibration
Integrator: RTE

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



(20) dibenzo(ah)anthracene
15.228min 45.649 µg/ml m
response 5172329

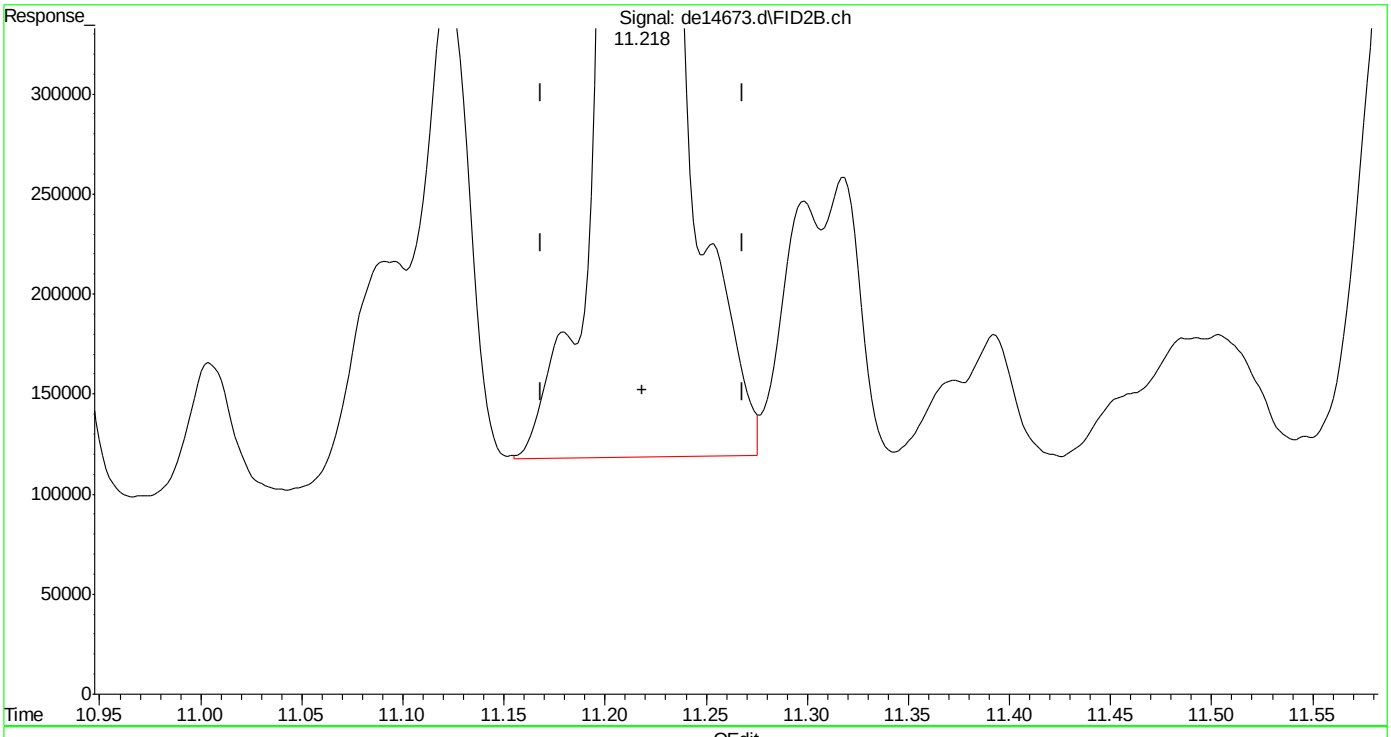
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:03:43 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:01:14 2016
Response via : Initial Calibration
Integrator: RTE

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



(35) 1-chlorooctadecane (s)
11.218min 64.775 µg/ml
response 4220313

(+) = Expected Retention Time

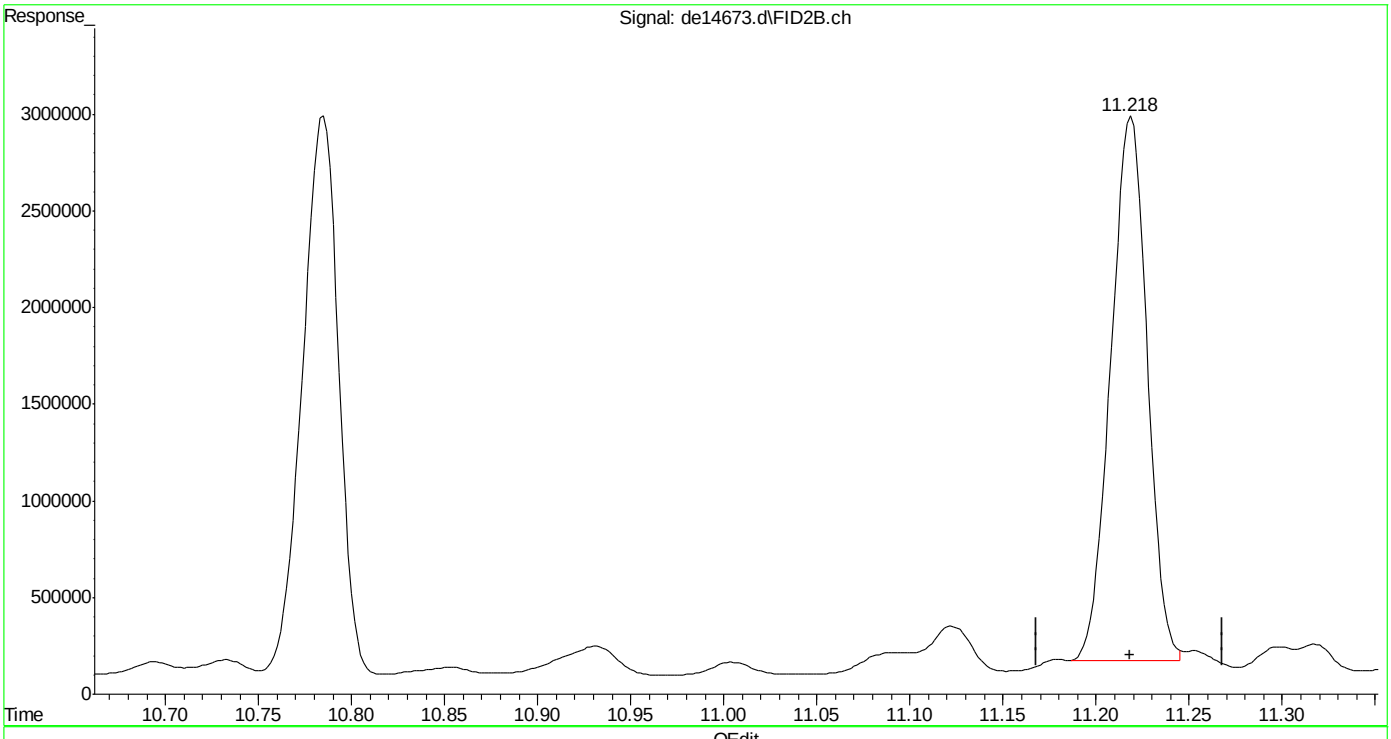
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:03:43 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:01:14 2016
Response via : Initial Calibration
Integrator: RTE

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



(35) 1-chlorooctadecane (s)
11.218min 58.820 µg/ml m
response 3832299

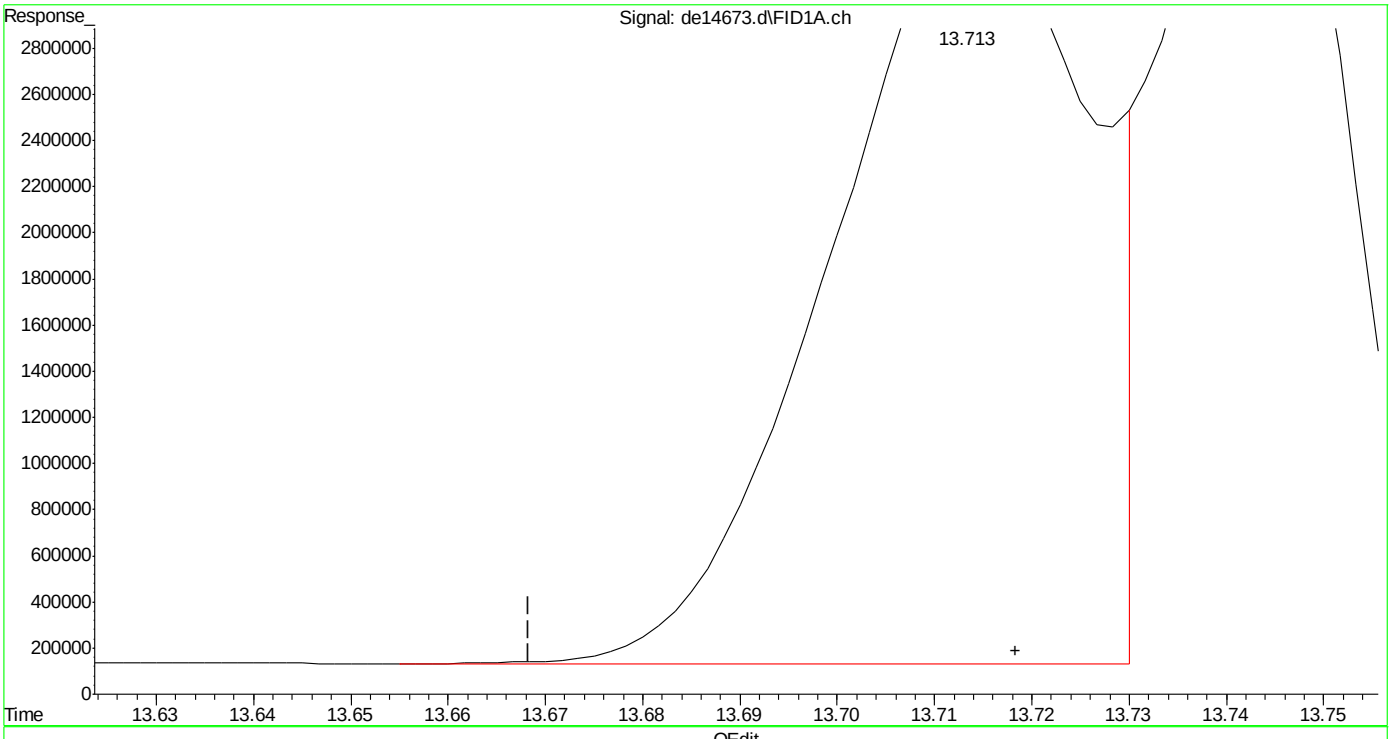
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 08:05:47 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:10:31 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:10:23 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.713min 50.044 µg/ml
response 5925029

(+) = Expected Retention Time

EPH160622W.M Thu Jun 23 08:10:45 2016

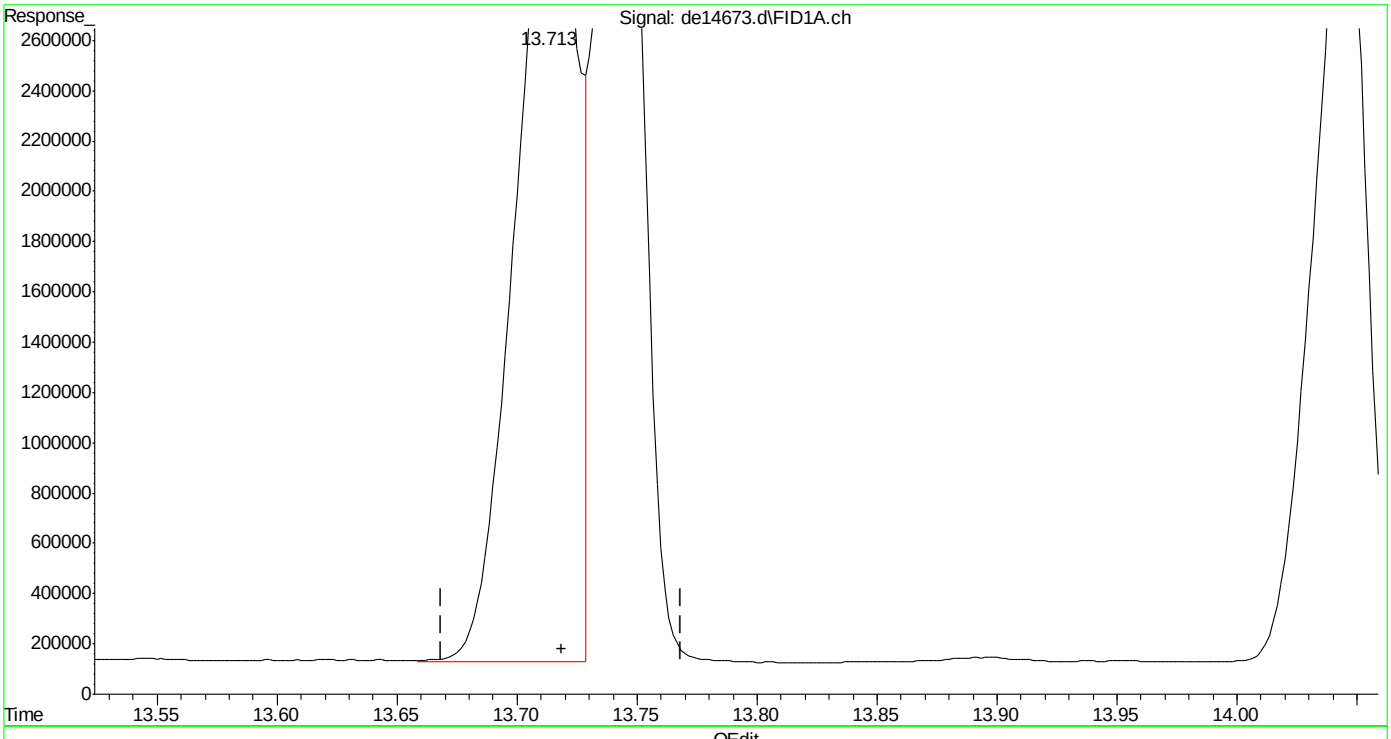
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:10:31 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:10:23 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.713min 48.026 µg/ml m
response 5686083

(+) = Expected Retention Time

EPH160622W.M Thu Jun 23 08:10:55 2016

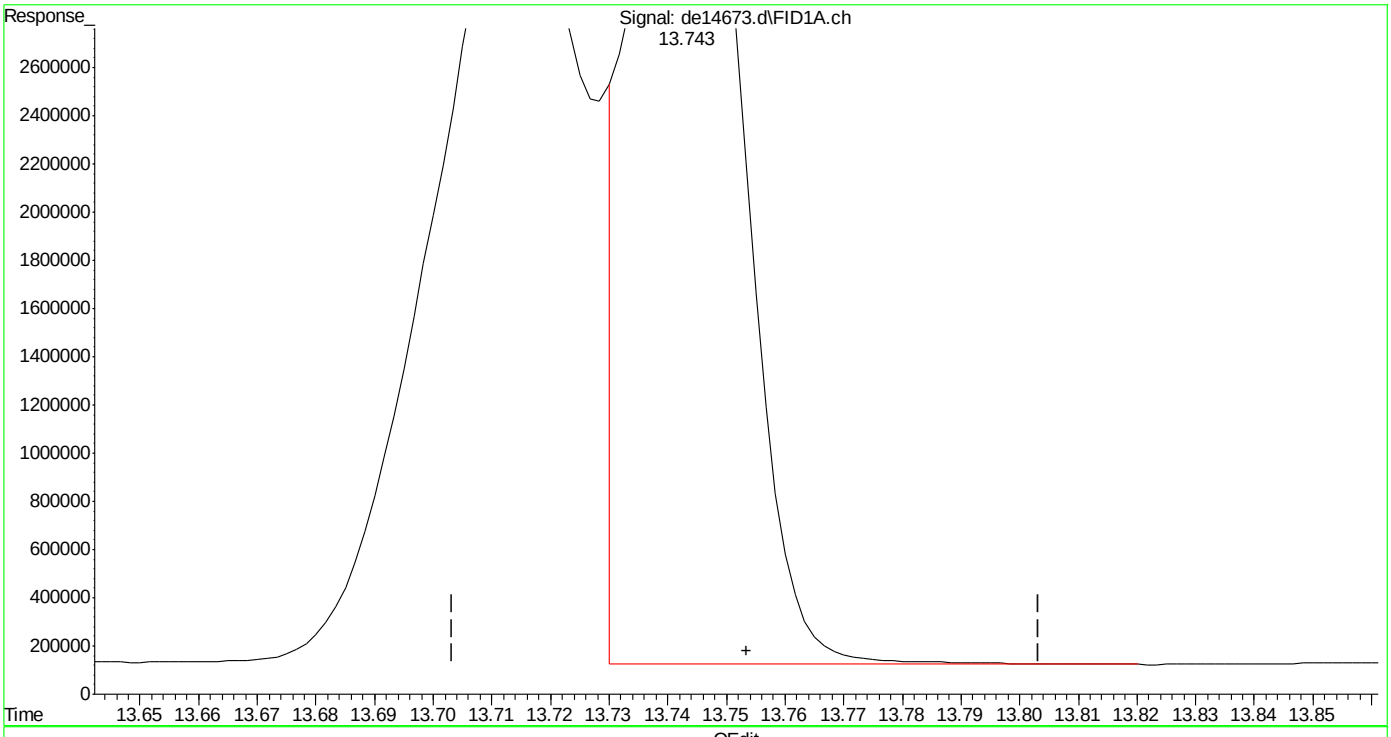
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:10:31 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:10:23 2016
Response via : Initial Calibration
Integrator: RTE

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



(17) benzo(k)fluoranthene
13.743min 39.639 µg/ml
response 5074972

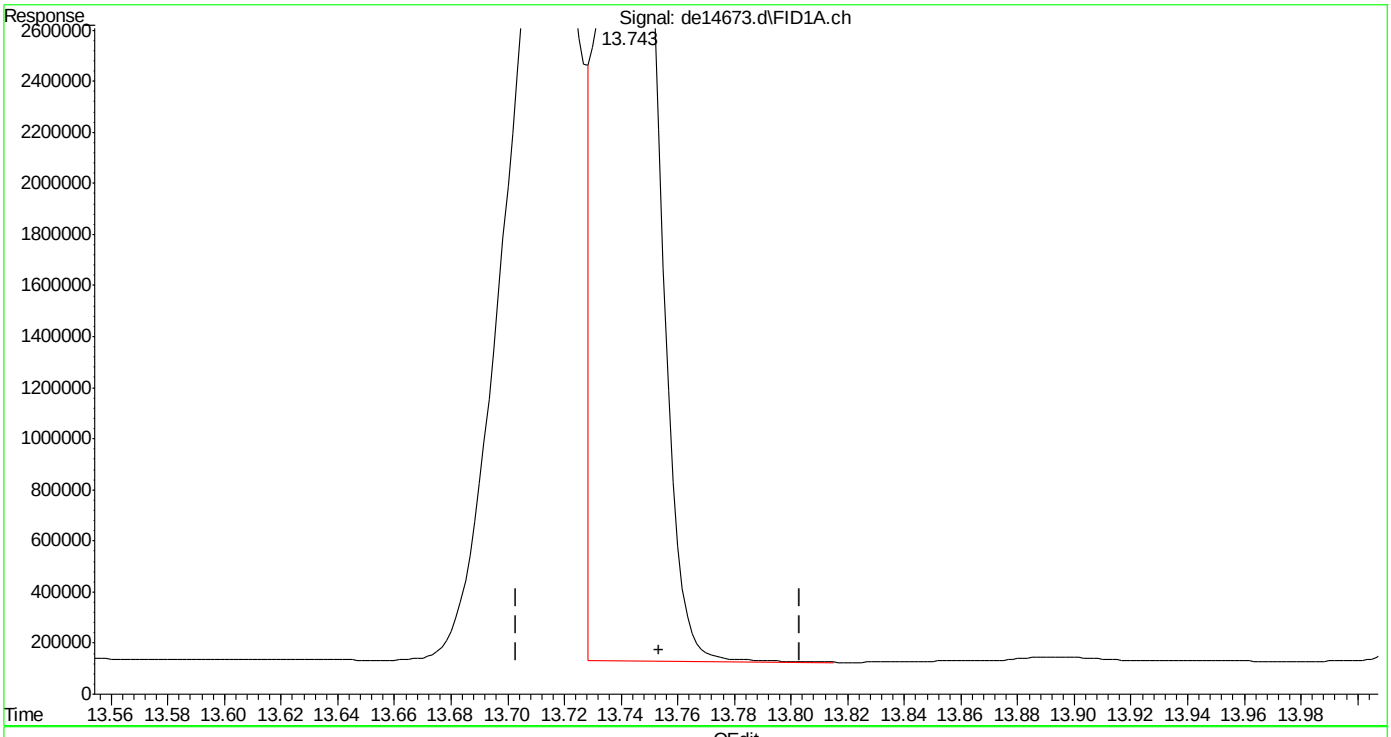
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 08:10:59 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:10:31 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:10:23 2016
Response via : Initial Calibration
Integrator: RTE

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



(17) benzo(k)fluoranthene
13.743min 41.370 µg/ml m
response 5296656

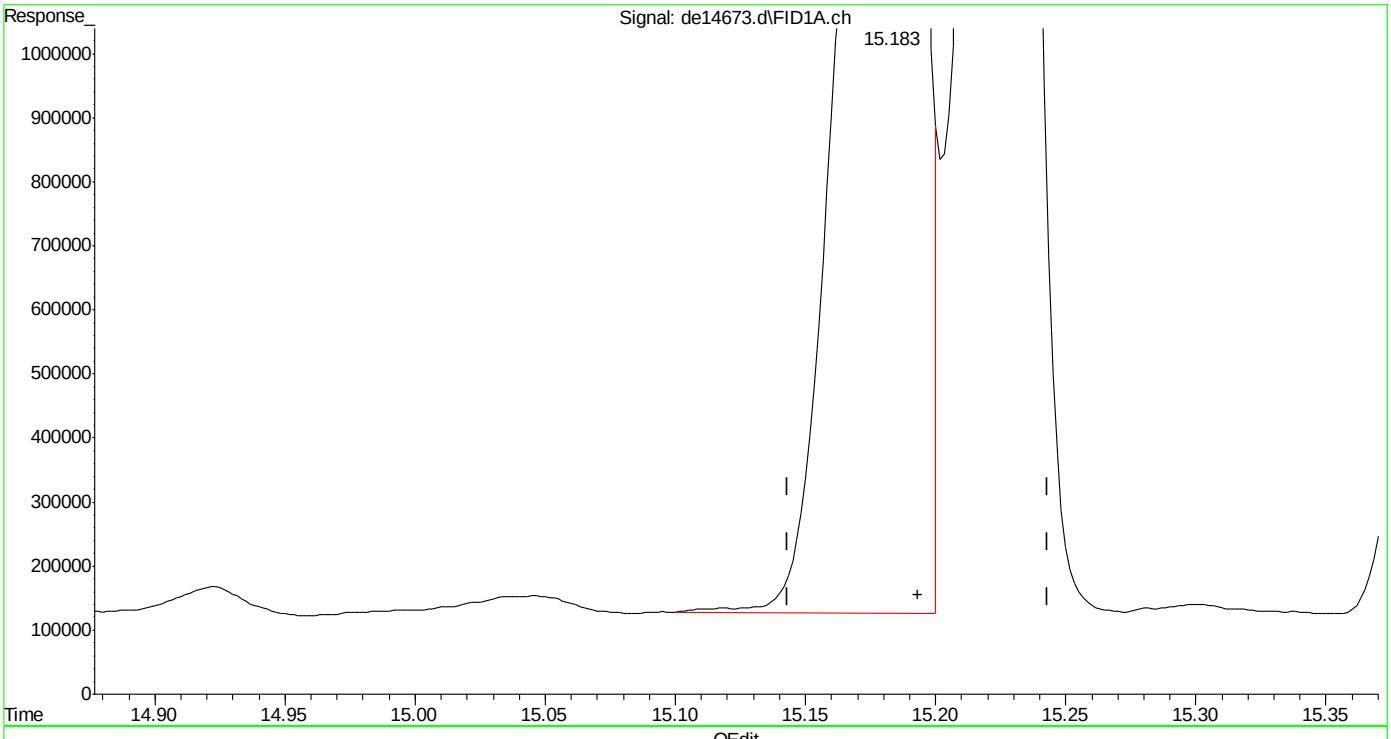
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 08:11:09 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:10:31 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:10:23 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.183min 43.751 µg/ml
response 5120914

(+) = Expected Retention Time

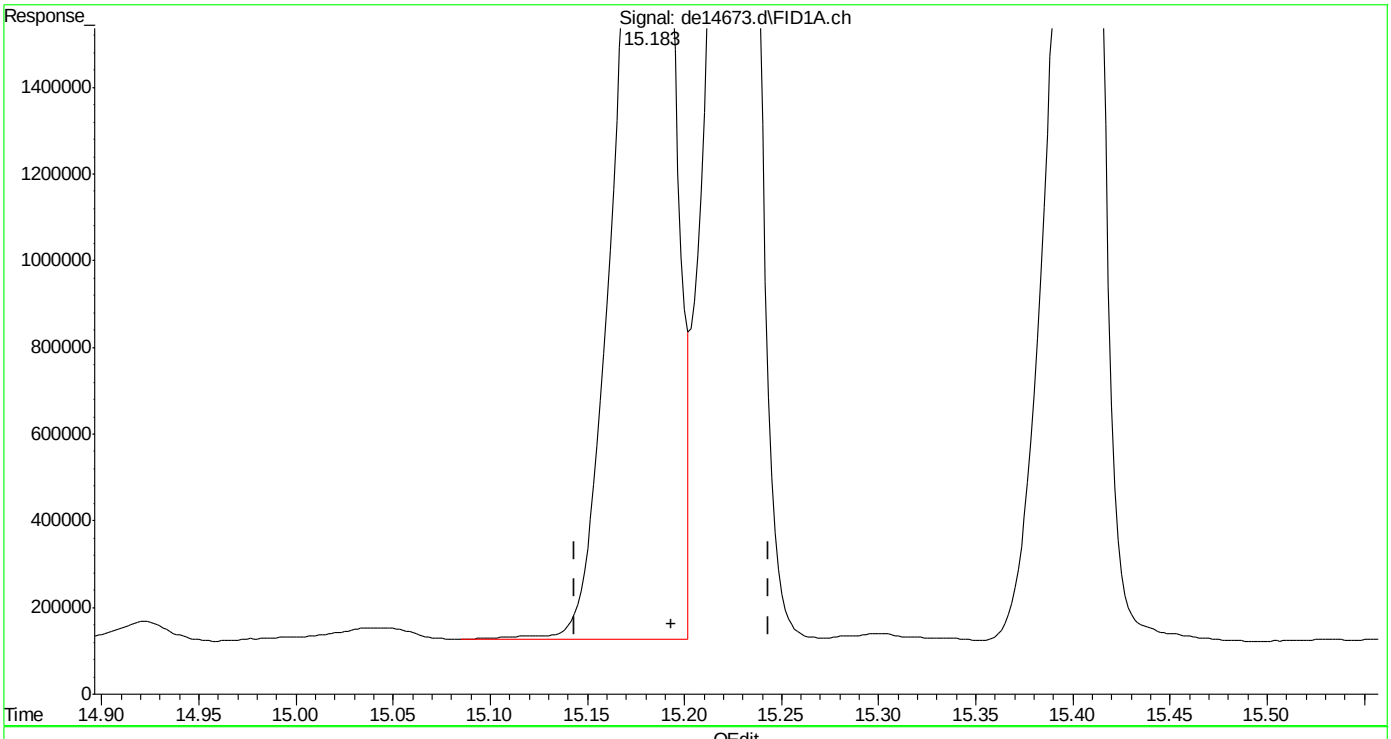
EPH160622W.M Thu Jun 23 08:11:14 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:10:31 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:10:23 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.183min 44.336 µg/ml m
response 5189319

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 08:11:21 2016

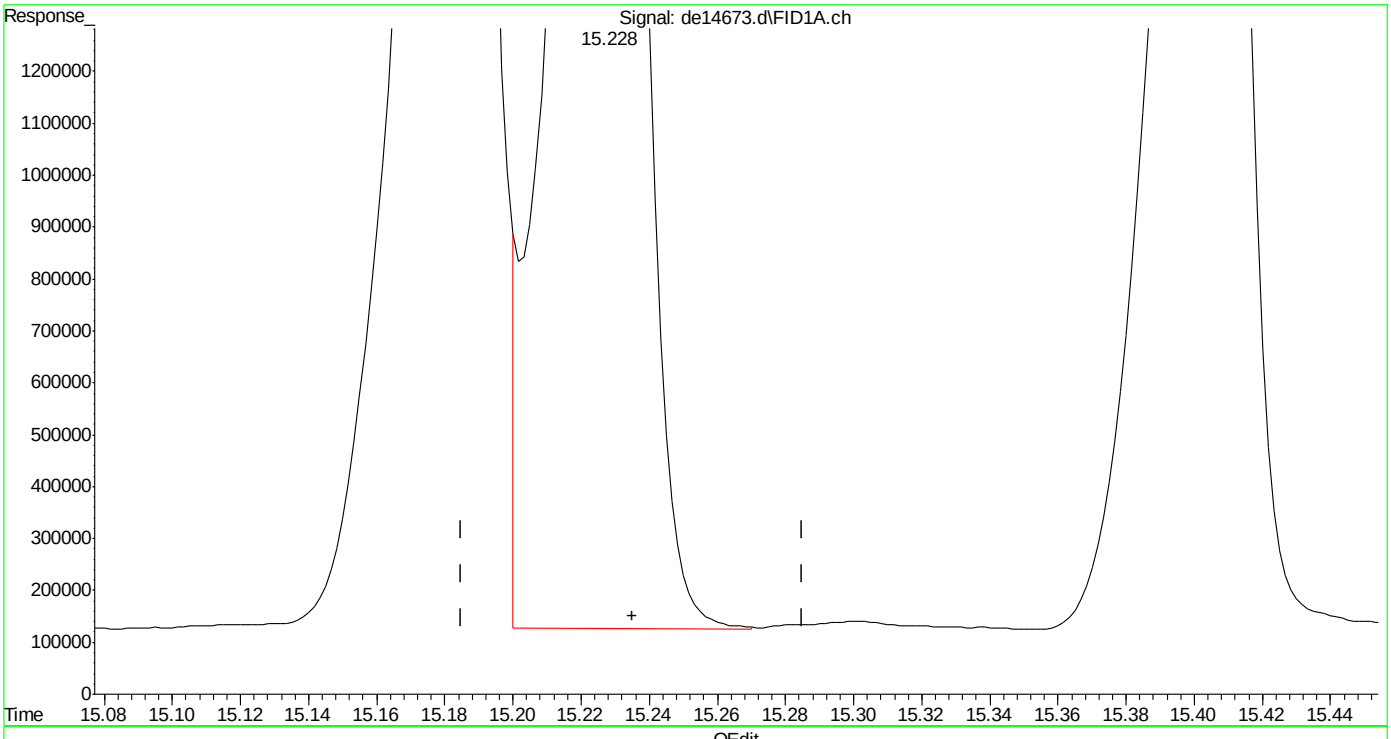
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:10:31 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:10:23 2016
Response via : Initial Calibration
Integrator: RTE

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



(20) dibenzo(ah)anthracene
15.228min 46.183 µg/ml
response 5232864

(+) = Expected Retention Time

EPH160622W.M Thu Jun 23 08:11:26 2016

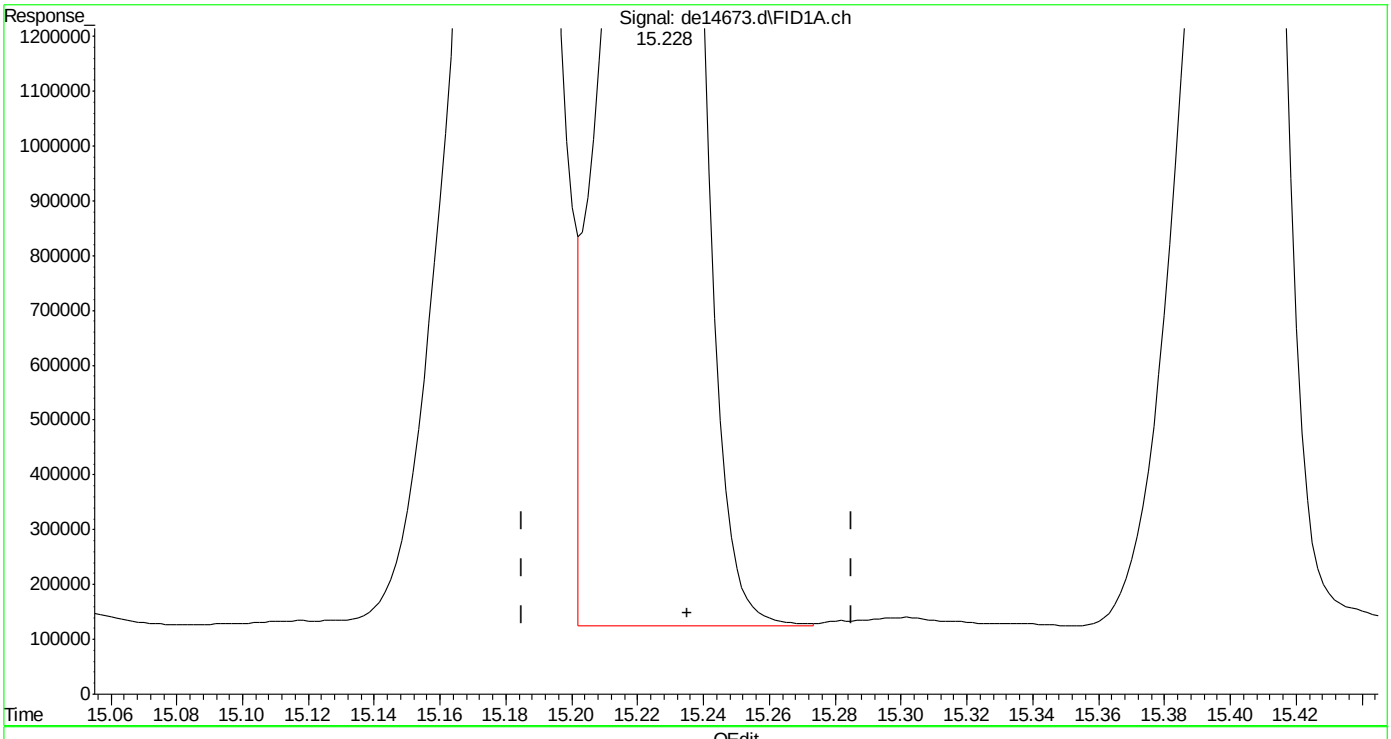
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:10:31 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:10:23 2016
Response via : Initial Calibration
Integrator: RTE

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



(20) dibenzo(ah)anthracene
15.228min 45.606 µg/ml m
response 5167436

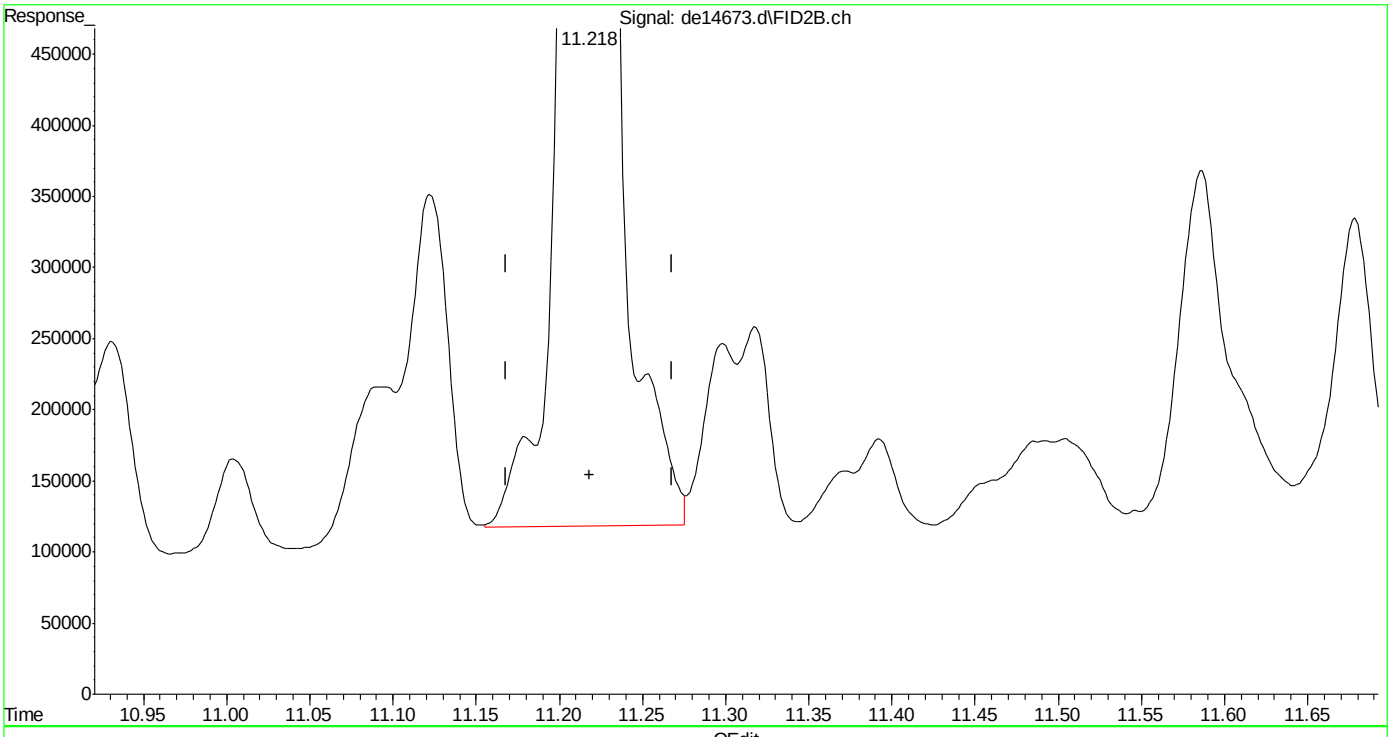
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:10:31 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:10:23 2016
Response via : Initial Calibration
Integrator: RTE

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



(35) 1-chlorooctadecane (s)
11.218min 64.775 µg/ml
response 4220313

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 08:12:00 2016

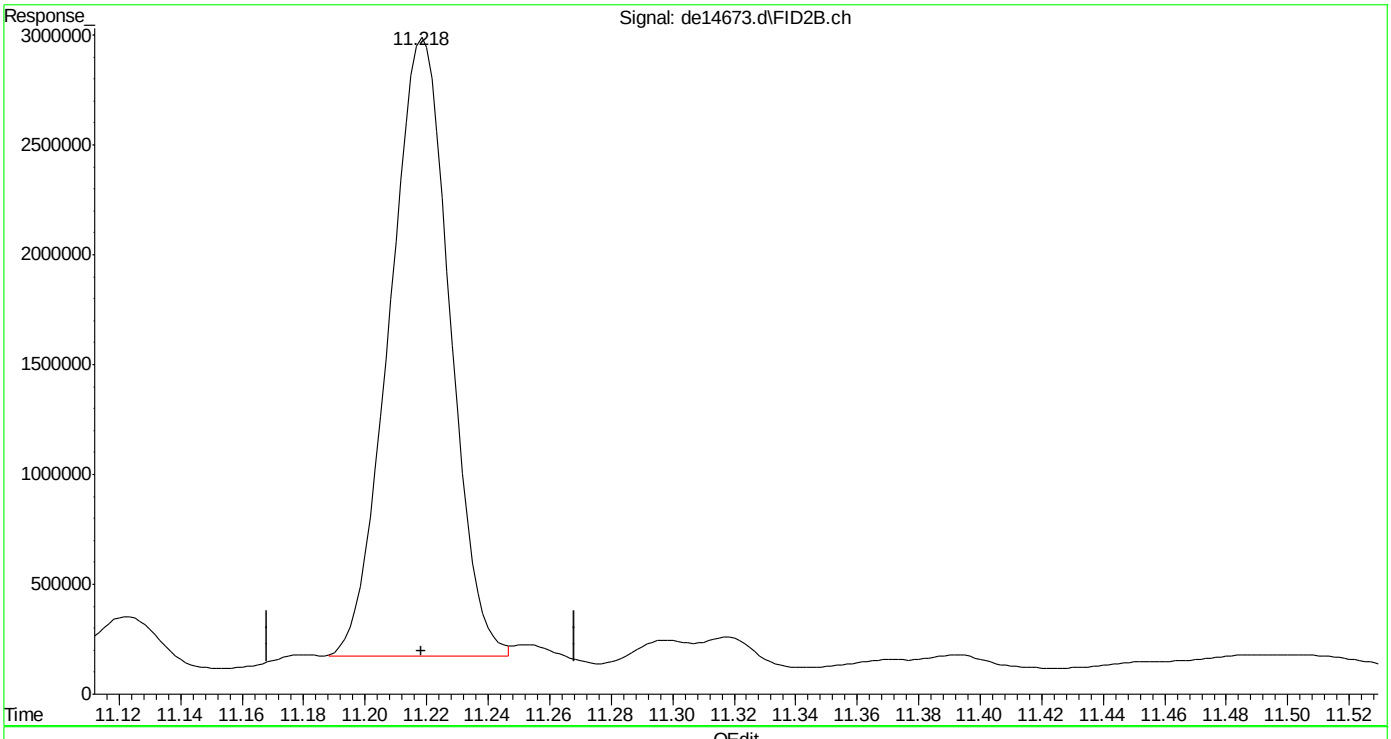
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14673.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 9:32 pm
Operator : thomasa
Sample : icv815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 116 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:10:31 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:10:23 2016
Response via : Initial Calibration
Integrator: RTE

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



(35) 1-chlorooctadecane (s)
11.218min 58.767 µg/ml m
response 3828846

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 08:12:11 2016

SGS ACCUTEST MC46783

Manual Integrations
APPROVED
(compounds with "m" flag)
Andri Piluri
07/12/16 13:18

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160711EPH\
Data File : de14794.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 8:14 am
Operator : thomasa
Sample : cc815-50,gde823
Misc : op47862,gde823,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 11 09:04:31 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) s	2-fluorobiphenyl	6.487	6216017	54.299 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 271.50%#
6) s	2-bromonaphthalene	7.208	4154033	57.933 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 289.67%#
11) s	o-terphenyl	9.747	6920410	52.305 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 261.53%#
35) s	1-chlorooctadecane	11.213	3230076	49.577 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 247.88%#
	Target Compounds			
2)	naphthalene	5.032	6915768	55.090 µg/ml
3)	2-methylnaphthalene	5.932	6905172	54.740 µg/ml
5)	acenaphthylene	7.042	6741462	53.282 µg/ml
7)	acenaphthene	7.283	7128676	51.180 µg/ml
8)	fluorene	7.927	6890086	53.633 µg/ml
9)	phenanthrene	9.102	6864306	54.951 µg/ml
10)	anthracene	9.158	6738026	50.648 µg/ml
12)	fluoranthene	10.602	6798021	53.000 µg/ml
13)	pyrene	10.855	6948562	52.905 µg/ml
14)	benzo(a)anthracene	12.415	6501391	53.517 µg/ml
15)	chrysene	12.463	6651191	52.105 µg/ml
16)	benzo(B)fluoranthene	13.708	6565760	55.456 µg/mlm
17)	benzo(k)fluoranthene	13.740	6764137	52.832 µg/mlm
18)	benzo(a)pyrene	14.042	6328301	53.648 µg/ml
19)	indeno(1,2,3-cd)pyrene	15.178	6494062	55.483 µg/mlm
20)	dibenzo(ah)anthracene	15.223	6249004	55.151 µg/mlm
21)	benzo(ghi)perylene	15.400	6261460	55.179 µg/ml
25) h	c-9	2.647	4434310	52.598 µg/mlm
26) h	c-10	3.800	4460319	52.907 µg/ml
27)	naphthalene #2	5.477	4726207	51.987 µg/ml
28)	c-12	5.657	4382323	51.981 µg/ml
29)	2-methylnaphthalene #2	6.370	4699712	52.256 µg/ml
30)	c-14	7.172	4326924	51.324 µg/ml
31)	c-16	8.502	4244231	50.343 µg/ml
32)	c-18	9.693	4223398	50.096 µg/ml
33)	c-19	10.250	4151145	53.340 µg/ml
34)	c-20	10.780	4059722	52.165 µg/ml
36)	c-22	11.775	4018559	51.636 µg/ml
37)	c-24	12.692	3745507	48.128 µg/ml
38)	c-26	13.543	3992318	51.299 µg/ml
39)	c-28	14.337	3869521	49.721 µg/ml
40) h	c-30	15.082	3873039	49.767 µg/ml
41) h	c-36	16.983	3430786	44.084 µg/mlm

(f)=RT Delta > 1/2 Window (m)=manual int.

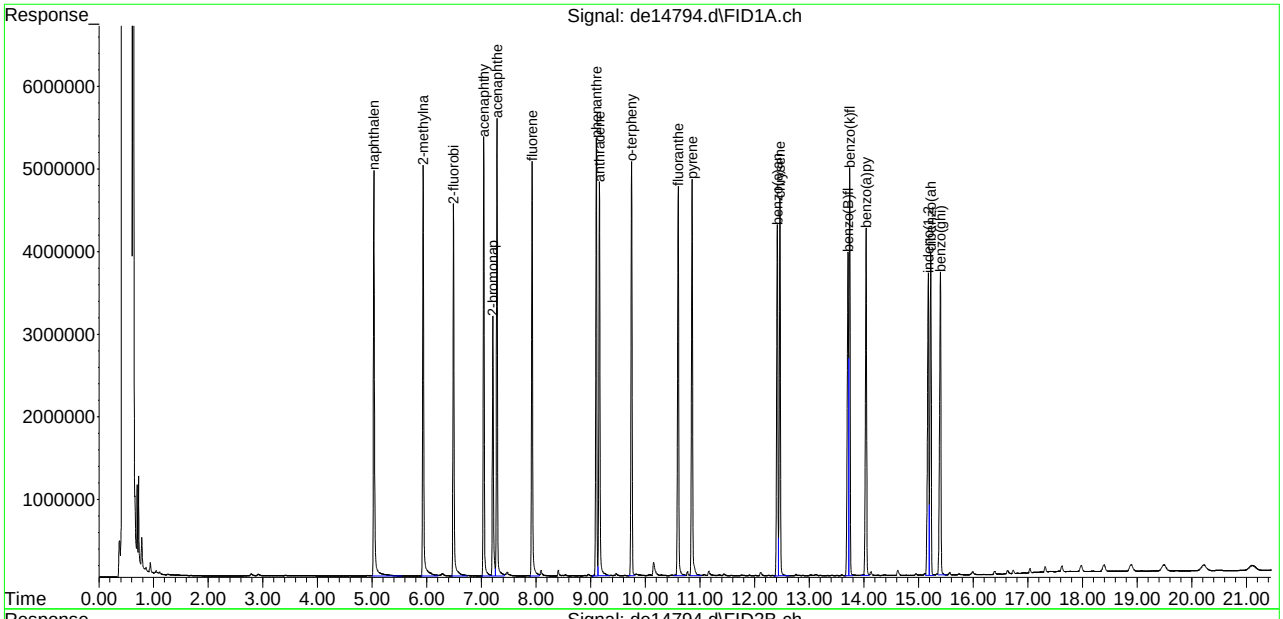
SGS ACCUTEST MC46783

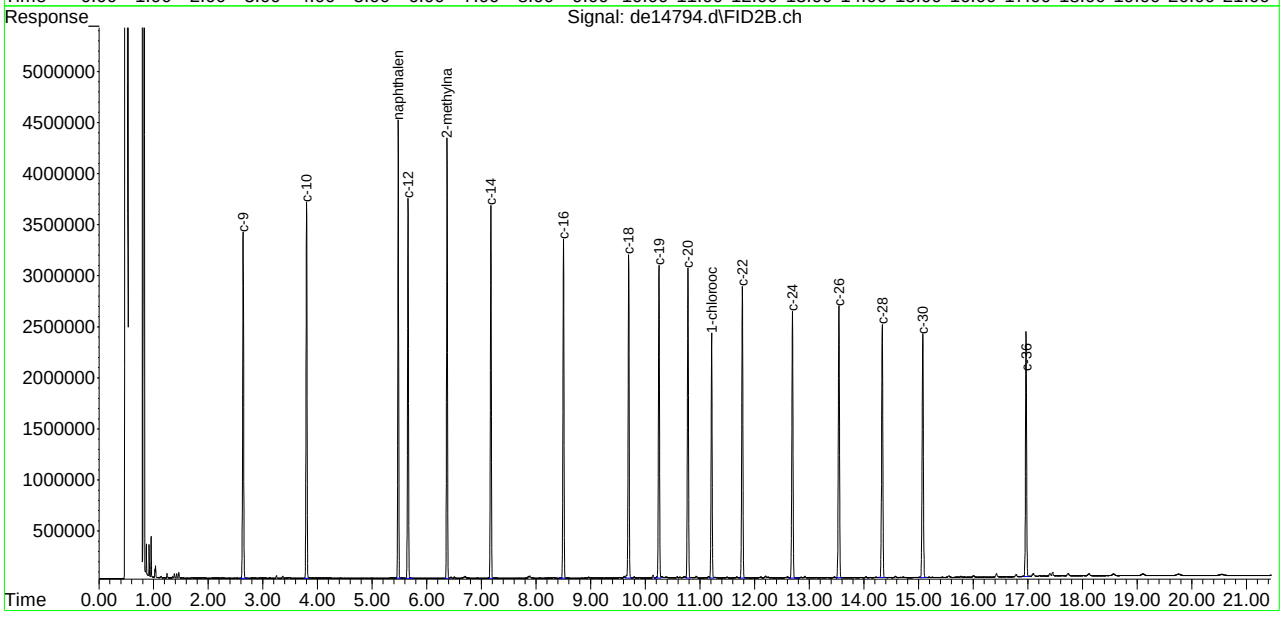
Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160711EPH\
Data File : de14794.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 8:14 am
Operator : thomasa
Sample : cc815-50,gde823
Misc : op47862,gde823,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

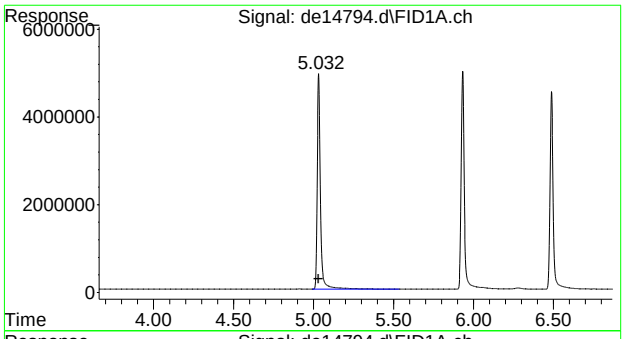
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 11 09:04:31 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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



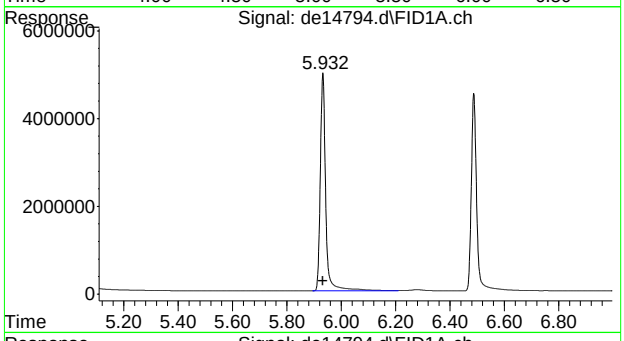


SGS ACCUTEST MC46783



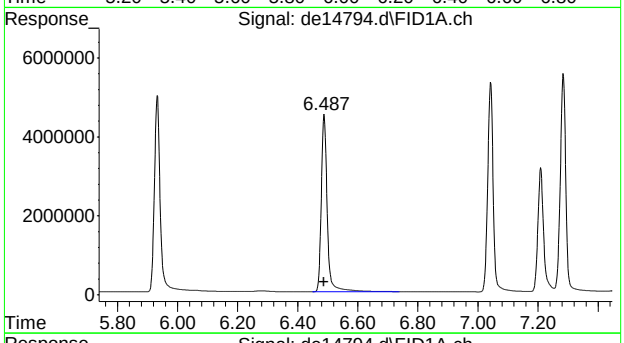
#2 naphthalene

R.T.: 5.032 min
Delta R.T.: 0.000 min
Response: 6915768
Conc: 55.09 µg/ml



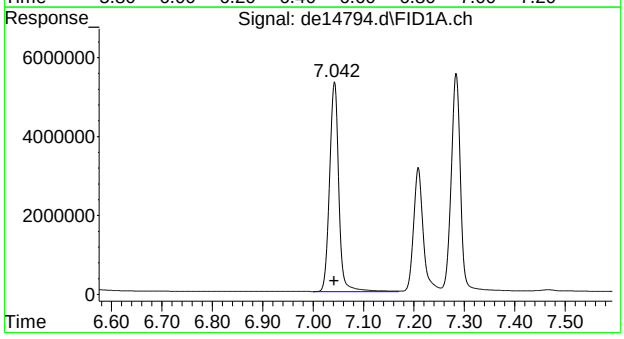
#3 2-methylnaphthalene

R.T.: 5.932 min
Delta R.T.: 0.000 min
Response: 6905172
Conc: 54.74 µg/ml



#4 2-fluorobiphenyl

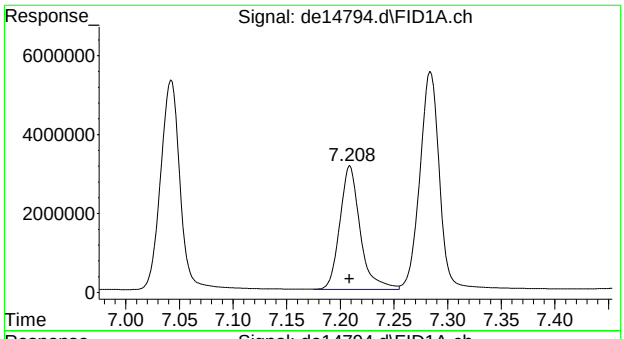
R.T.: 6.487 min
Delta R.T.: 0.000 min
Response: 6216017
Conc: 54.30 µg/ml



#5 acenaphthylene

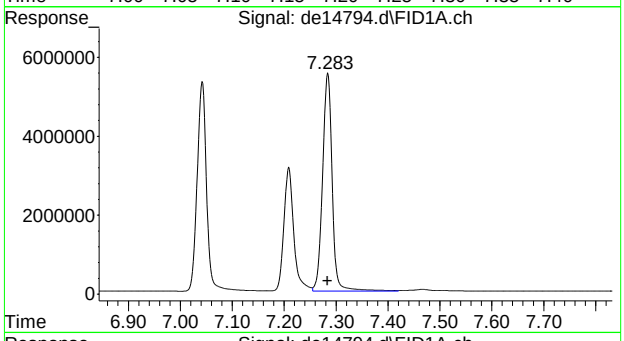
R.T.: 7.042 min
Delta R.T.: 0.000 min
Response: 6741462
Conc: 53.28 µg/ml

SGS ACCUTEST MC46783



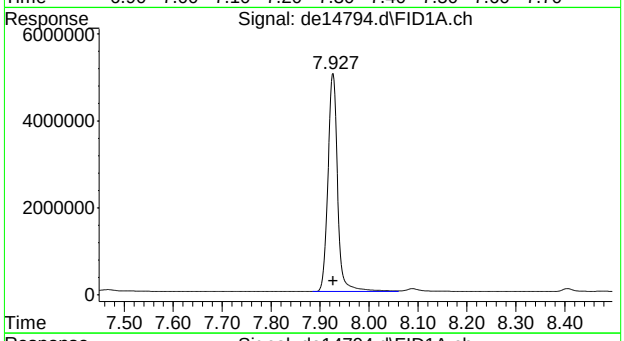
#6 2-bromonaphthalene

R.T.: 7.208 min
Delta R.T.: 0.000 min
Response: 4154033
Conc: 57.93 µg/ml



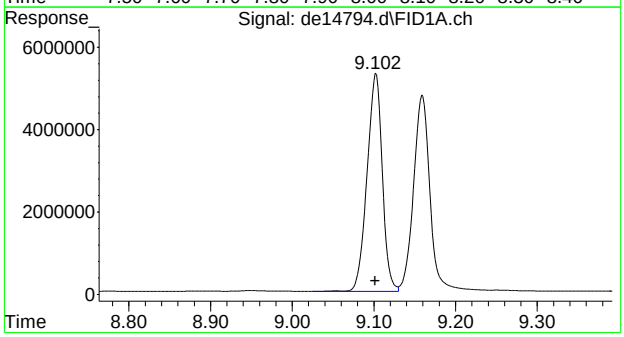
#7 acenaphthene

R.T.: 7.283 min
Delta R.T.: 0.000 min
Response: 7128676
Conc: 51.18 µg/ml



#8 fluorene

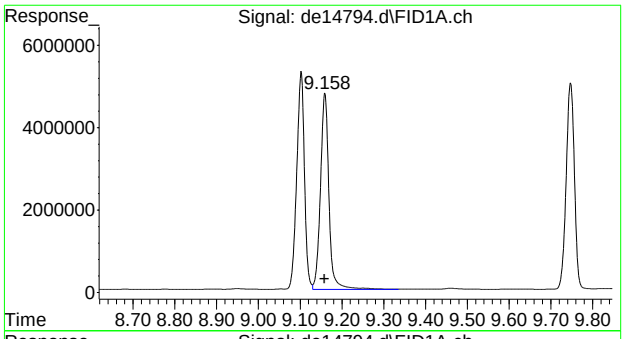
R.T.: 7.927 min
Delta R.T.: 0.000 min
Response: 6890086
Conc: 53.63 µg/ml



#9 phenanthrene

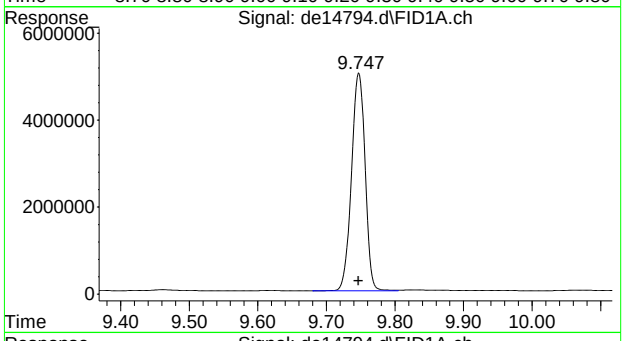
R.T.: 9.102 min
Delta R.T.: 0.000 min
Response: 6864306
Conc: 54.95 µg/ml

SGS ACCUTEST MC46783



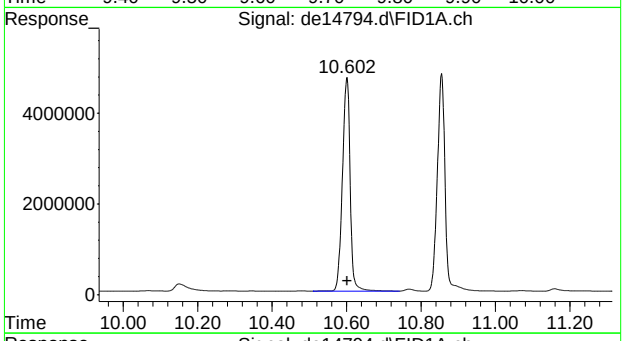
#10 anthracene

R.T.: 9.158 min
Delta R.T.: 0.000 min
Response: 6738026
Conc: 50.65 µg/ml



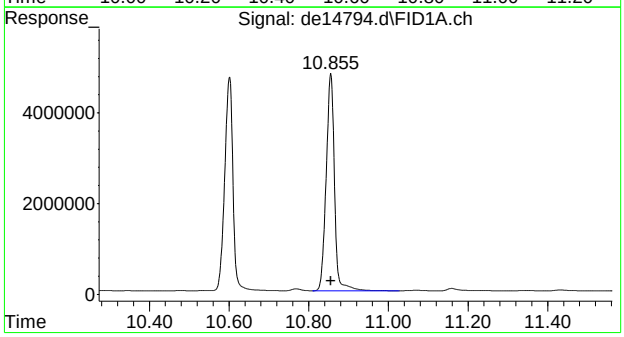
#11 o-terphenyl

R.T.: 9.747 min
Delta R.T.: 0.000 min
Response: 6920410
Conc: 52.31 µg/ml



#12 fluoranthene

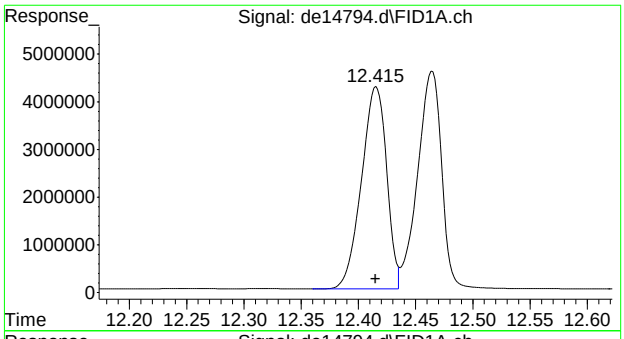
R.T.: 10.602 min
Delta R.T.: 0.000 min
Response: 6798021
Conc: 53.00 µg/ml



#13 pyrene

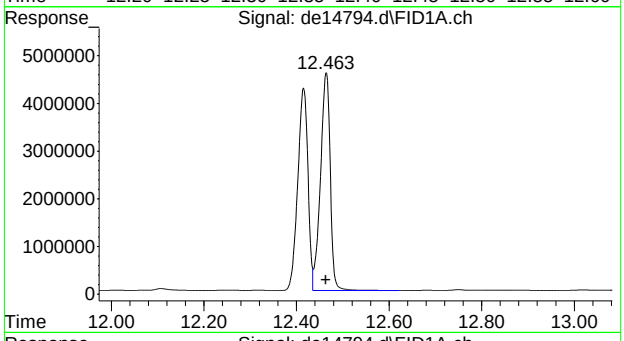
R.T.: 10.855 min
Delta R.T.: 0.000 min
Response: 6948562
Conc: 52.90 µg/ml

SGS ACCUTEST MC46783



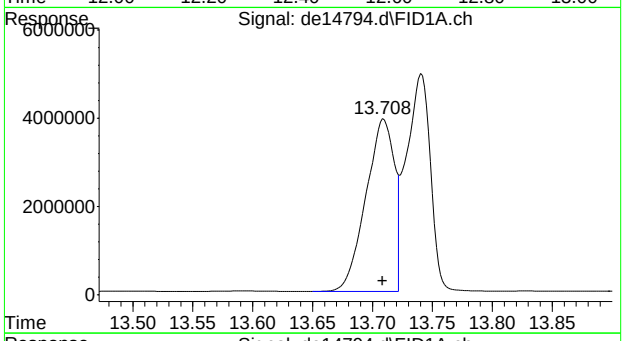
#14 benzo(a)anthracene

R.T.: 12.415 min
Delta R.T.: 0.000 min
Response: 6501391
Conc: 53.52 µg/ml



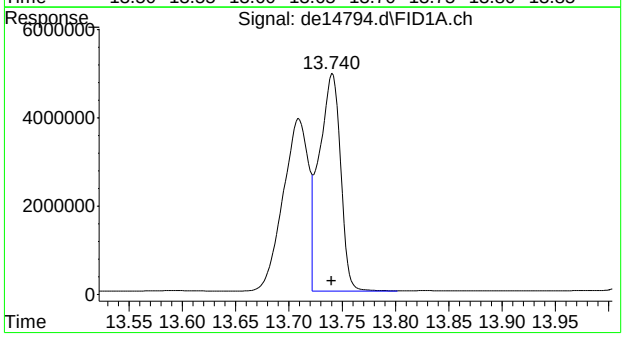
#15 chrysene

R.T.: 12.463 min
Delta R.T.: 0.000 min
Response: 6651191
Conc: 52.11 µg/ml



#16 benzo(B)fluoranthene

R.T.: 13.708 min
Delta R.T.: 0.000 min
Response: 6565760
Conc: 55.46 µg/ml m



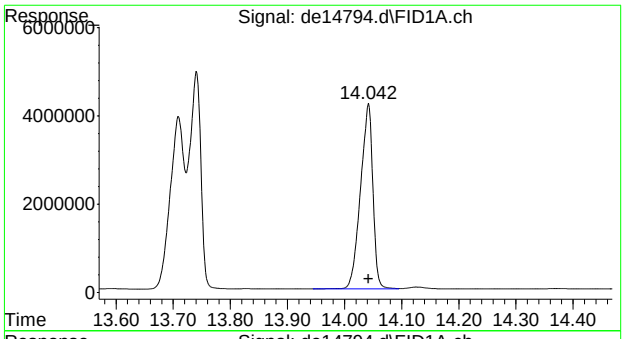
#17 benzo(k)fluoranthene

R.T.: 13.740 min
Delta R.T.: 0.000 min
Response: 6764137
Conc: 52.83 µg/ml m

7.5.9

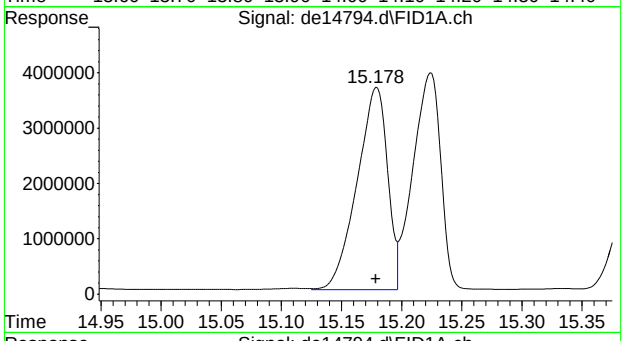
7

SGS ACCUTEST MC46783



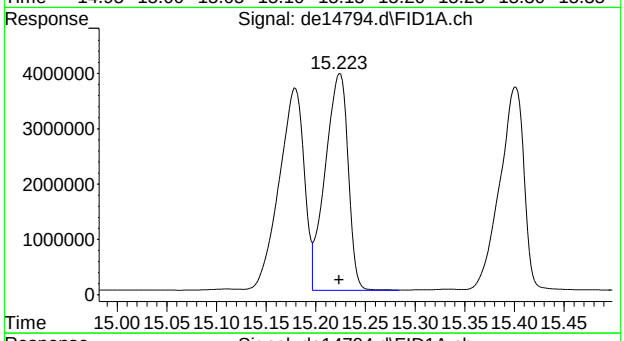
#18 benzo(a)pyrene

R.T.: 14.042 min
Delta R.T.: 0.000 min
Response: 6328301
Conc: 53.65 µg/ml



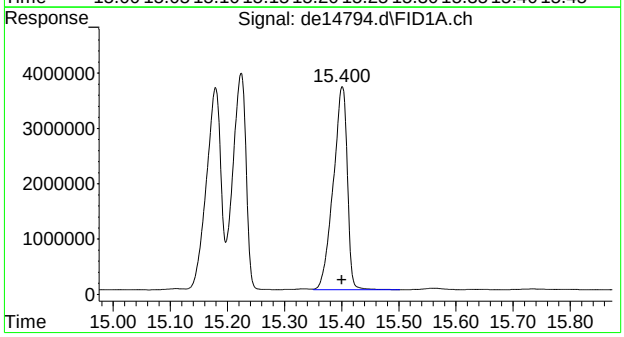
#19 indeno(1,2,3-cd)pyrene

R.T.: 15.178 min
Delta R.T.: 0.000 min
Response: 6494062
Conc: 55.48 µg/ml m



#20 dibenzo(ah)anthracene

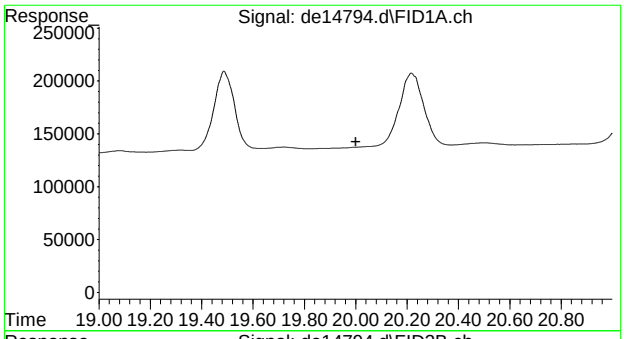
R.T.: 15.223 min
Delta R.T.: 0.000 min
Response: 6249004
Conc: 55.15 µg/ml m



#21 benzo(ghi)perylene

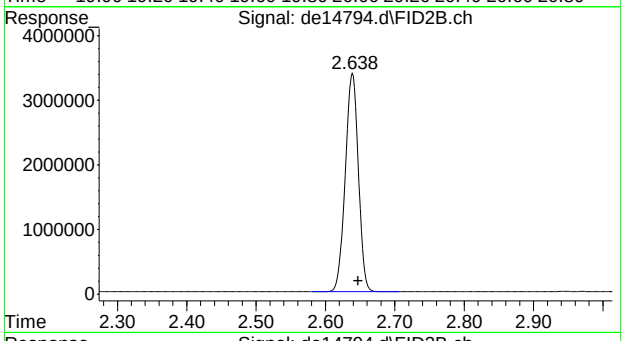
R.T.: 15.400 min
Delta R.T.: 0.000 min
Response: 6261460
Conc: 55.18 µg/ml

SGS ACCUTEST MC46783



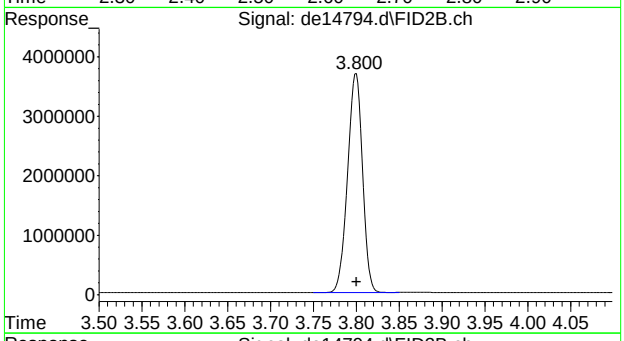
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



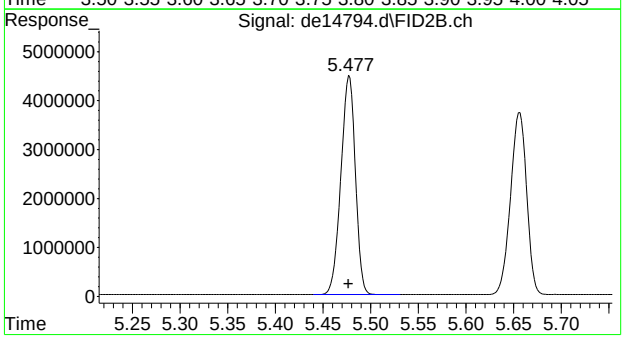
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 4434310
Conc: 52.60 µg/ml m



#26 c-10

R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 4460319
Conc: 52.91 µg/ml



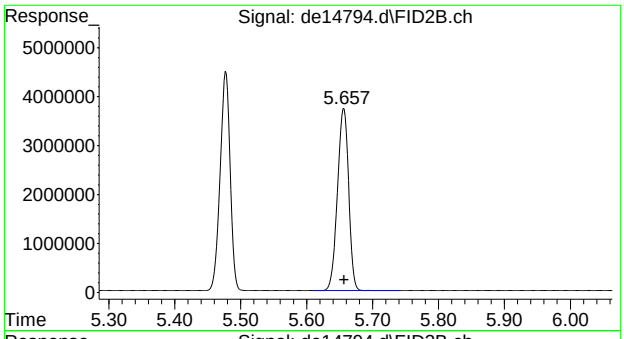
#27 naphthalene #2

R.T.: 5.477 min
Delta R.T.: 0.000 min
Response: 4726207
Conc: 51.99 µg/ml

7.5.9

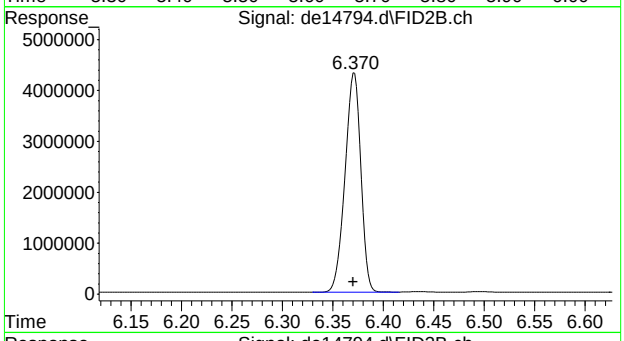
7

SGS ACCUTEST MC46783



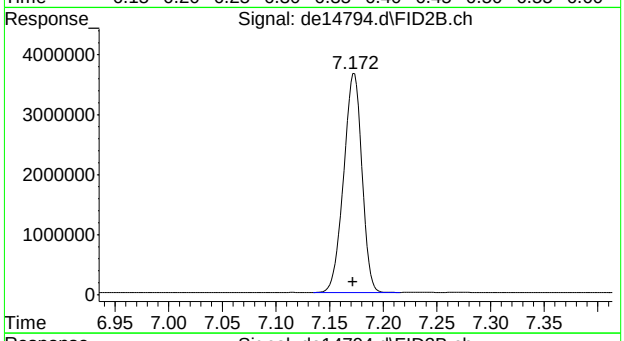
#28 c-12

R.T.: 5.657 min
Delta R.T.: 0.000 min
Response: 4382323
Conc: 51.98 µg/ml



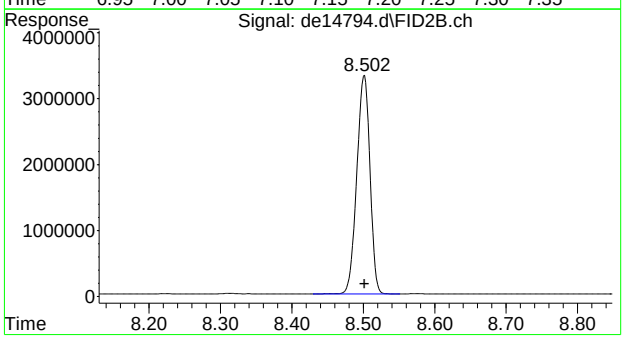
#29 2-methylnaphthalene #2

R.T.: 6.370 min
Delta R.T.: 0.000 min
Response: 4699712
Conc: 52.26 µg/ml



#30 c-14

R.T.: 7.172 min
Delta R.T.: 0.000 min
Response: 4326924
Conc: 51.32 µg/ml



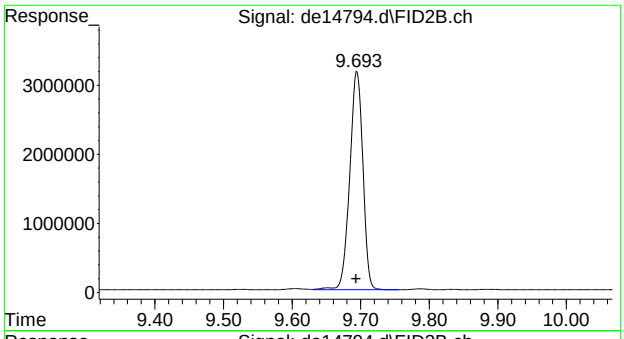
#31 c-16

R.T.: 8.502 min
Delta R.T.: 0.000 min
Response: 4244231
Conc: 50.34 µg/ml

7.5.9

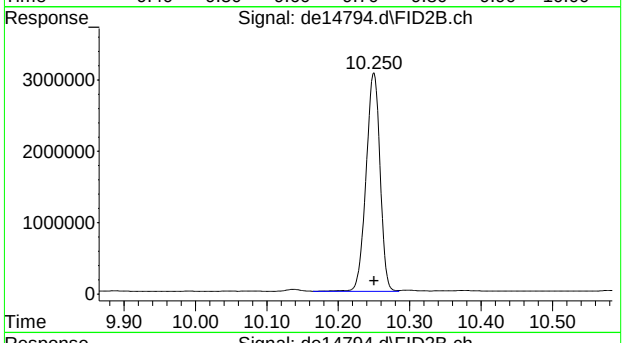
7

SGS ACCUTEST MC46783



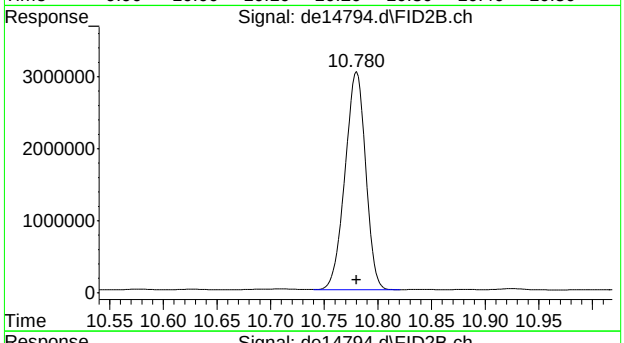
#32 c-18

R.T.: 9.693 min
Delta R.T.: 0.000 min
Response: 4223398
Conc: 50.10 µg/ml



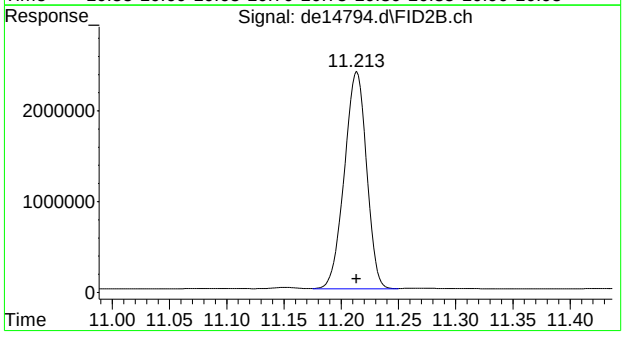
#33 c-19

R.T.: 10.250 min
Delta R.T.: 0.000 min
Response: 4151145
Conc: 53.34 µg/ml



#34 c-20

R.T.: 10.780 min
Delta R.T.: 0.000 min
Response: 4059722
Conc: 52.17 µg/ml



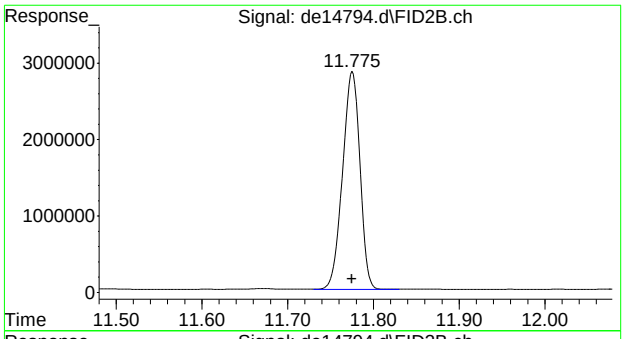
#35 1-chlorooctadecane

R.T.: 11.213 min
Delta R.T.: 0.000 min
Response: 3230076
Conc: 49.58 µg/ml

7.5.9

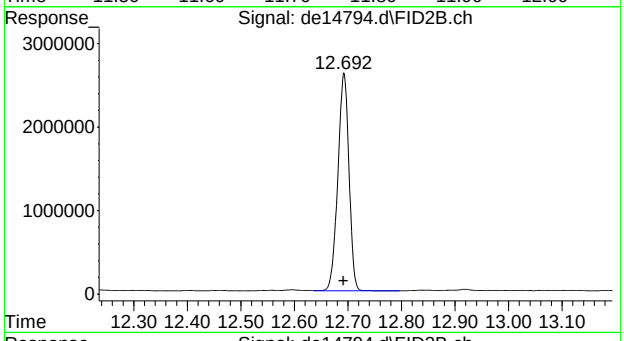
7

SGS ACCUTEST MC46783



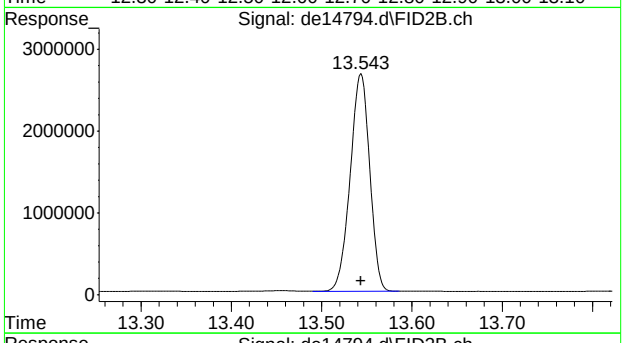
#36 c-22

R.T.: 11.775 min
Delta R.T.: 0.000 min
Response: 4018559
Conc: 51.64 µg/ml



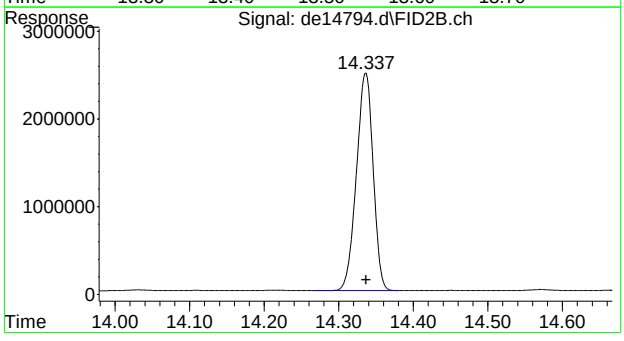
#37 c-24

R.T.: 12.692 min
Delta R.T.: 0.000 min
Response: 3745507
Conc: 48.13 µg/ml



#38 c-26

R.T.: 13.543 min
Delta R.T.: 0.000 min
Response: 3992318
Conc: 51.30 µg/ml



#39 c-28

R.T.: 14.337 min
Delta R.T.: 0.000 min
Response: 3869521
Conc: 49.72 µg/ml

7.5.9

7

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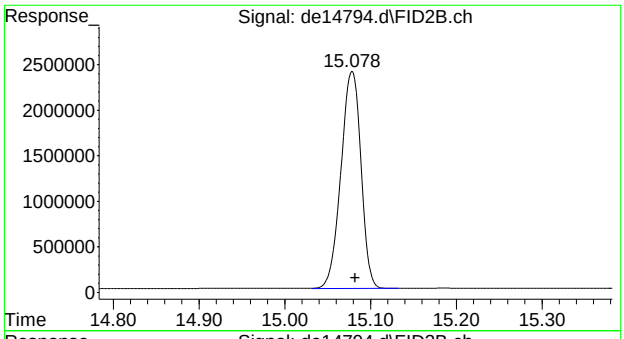
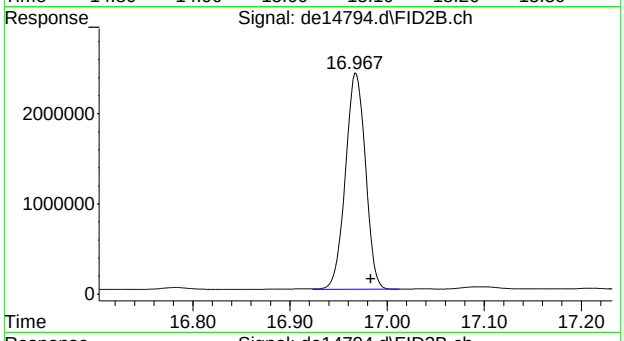


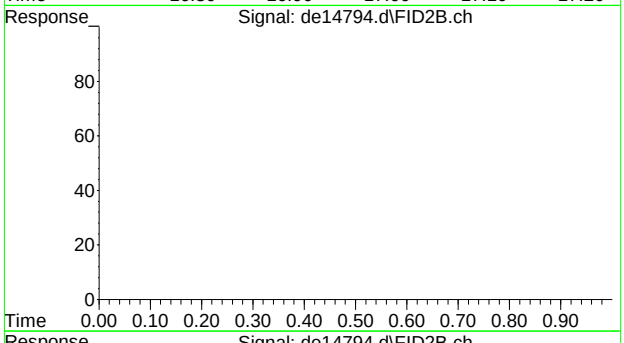
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 3873039
Conc: 49.77 µg/ml



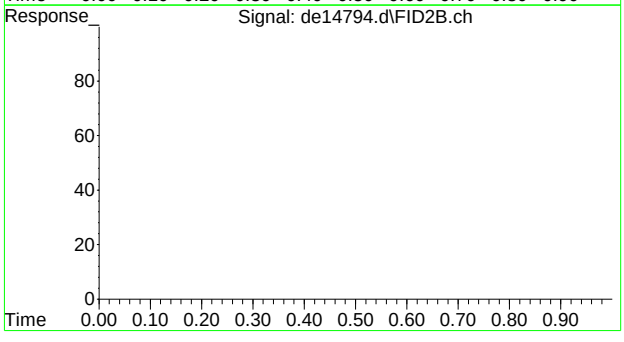
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 3430786
Conc: 44.08 µg/ml m



#42 bht

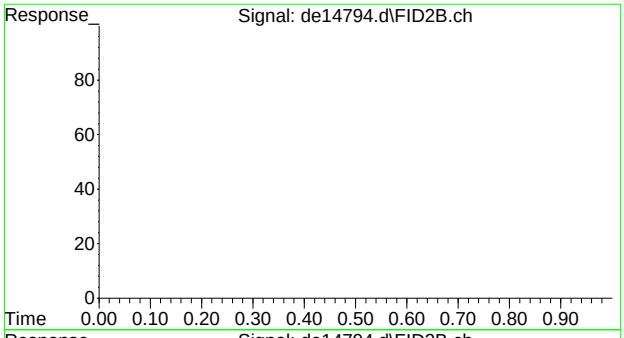
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#43 bht

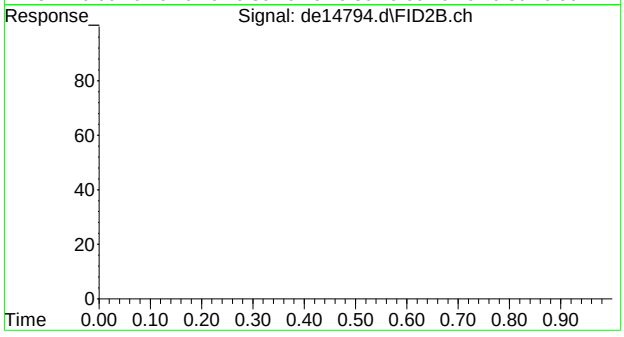
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

SGS ACCUTEST MC46783



#44 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#45 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

SGS ACCUTEST MC46783

Manual Integrations
APPROVED
(compounds with "m" flag)
Andri Piluri
07/12/16 13:18

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160711EPH\
Data File : de14805.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 1:50 pm
Operator : thomasa
Sample : cc815-50,gde823
Misc : op47862,gde823,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 07:47:41 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) s	2-fluorobiphenyl	6.492	6134550	53.588 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 267.94%#
6) s	2-bromonaphthalene	7.213	4019292	56.054 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 280.27%#
11) s	o-terphenyl	9.752	6714261	50.747 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 253.74%#
35) s	1-chlorooctadecane	11.213	3421769	52.519 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 262.60%#
	Target Compounds			
2)	naphthalene	5.037	6853861	54.597 µg/ml
3)	2-methylnaphthalene	5.937	6846215	54.273 µg/ml
5)	acenaphthylene	7.047	6631193	52.410 µg/ml
7)	acenaphthene	7.288	6913007	49.631 µg/ml
8)	fluorene	7.930	6747205	52.521 µg/ml
9)	phenanthrene	9.107	6644218	53.190 µg/ml
10)	anthracene	9.163	6469679	48.631 µg/ml
12)	fluoranthene	10.603	6514062	50.786 µg/ml
13)	pyrene	10.860	6672763	50.805 µg/ml
14)	benzo(a)anthracene	12.418	6203065	51.062 µg/ml
15)	chrysene	12.468	6311243	49.442 µg/ml
16)	benzo(B)fluoranthene	13.710	6419940	54.224 µg/mlm
17)	benzo(k)fluoranthene	13.743	6171857	48.206 µg/mlm
18)	benzo(a)pyrene	14.045	5981362	50.707 µg/ml
19)	indeno(1,2,3-cd)pyrene	15.185	6049811	51.687 µg/ml
20)	dibenzo(ah)anthracene	15.228	5893227	52.011 µg/ml
21)	benzo(ghi)perylene	15.403	5868468	51.716 µg/ml
25) h	c-9	2.647	4371805	51.857 µg/mlm
26) h	c-10	3.800	4409793	52.307 µg/ml
27)	naphthalene #2	5.477	4697495	51.671 µg/ml
28)	c-12	5.655	4358317	51.697 µg/ml
29)	2-methylnaphthalene #2	6.370	4705618	52.321 µg/ml
30)	c-14	7.172	4360986	51.728 µg/ml
31)	c-16	8.502	4342951	51.514 µg/ml
32)	c-18	9.695	4360592	51.724 µg/ml
33)	c-19	10.250	4346845	55.855 µg/ml
34)	c-20	10.780	4246294	54.563 µg/ml
36)	c-22	11.775	4252924	54.648 µg/ml
37)	c-24	12.692	3955174	50.822 µg/ml
38)	c-26	13.543	4249038	54.598 µg/ml
39)	c-28	14.337	4120704	52.949 µg/ml
40) h	c-30	15.082	4102088	52.710 µg/ml
41) h	c-36	16.983	3790465	48.706 µg/mlm

(f)=RT Delta > 1/2 Window (m)=manual int.

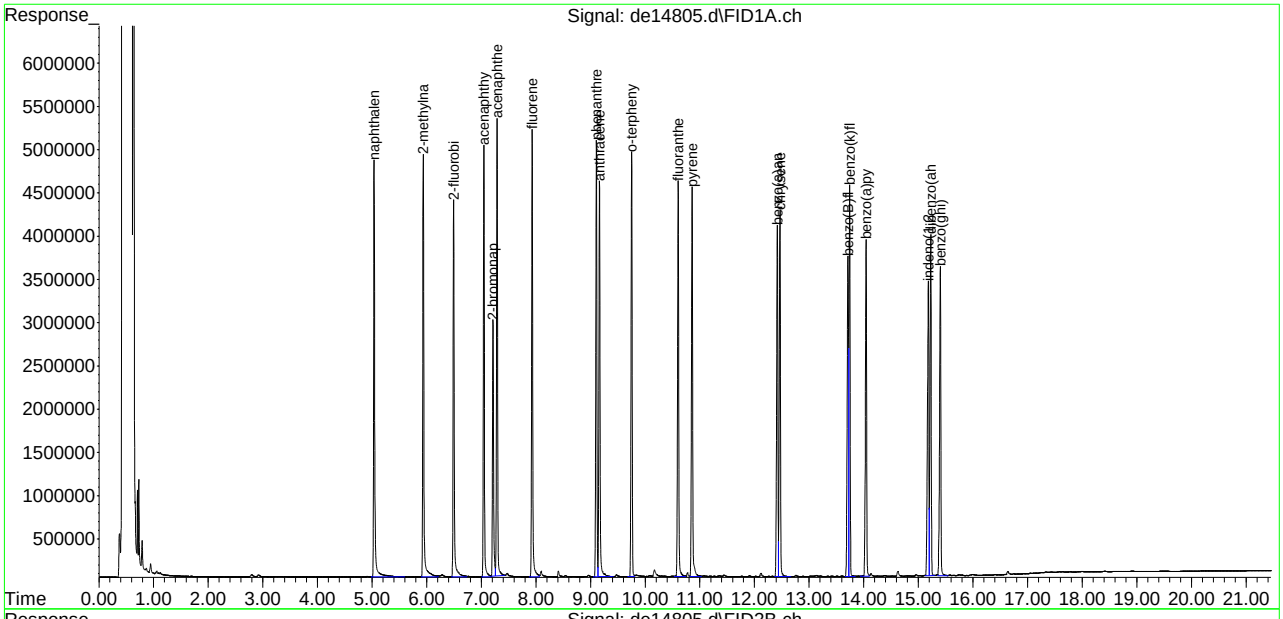
SGS ACCUTEST MC46783

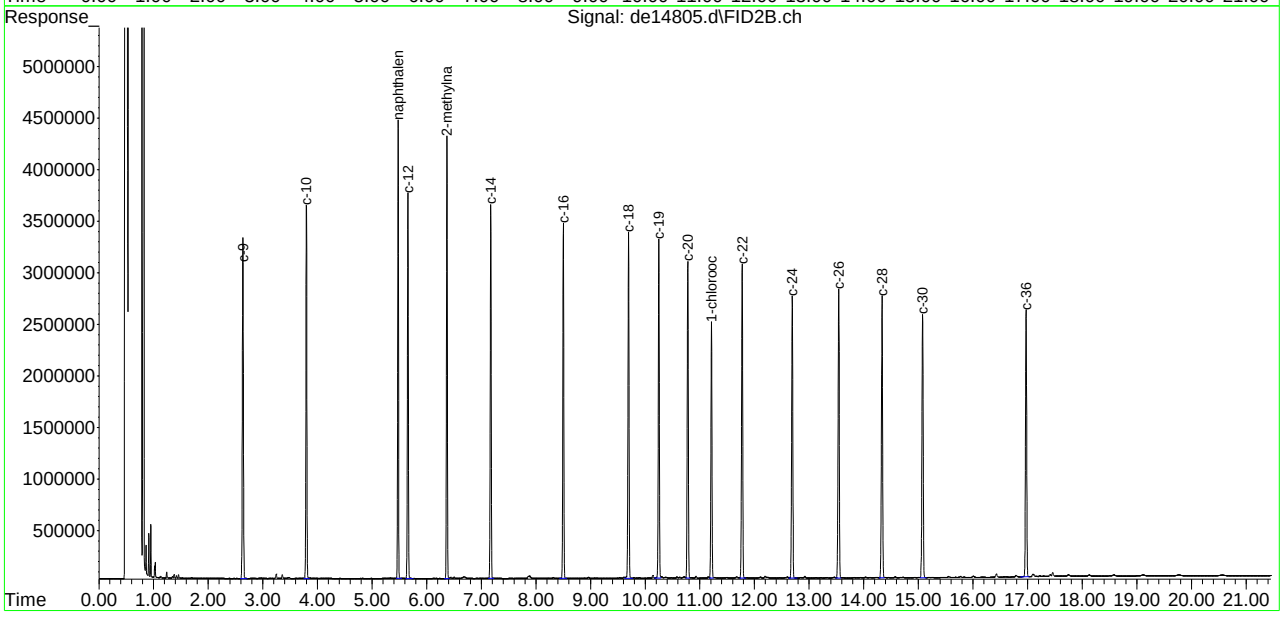
Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160711EPH\
Data File : de14805.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 11 Jul 2016 1:50 pm
Operator : thomasa
Sample : cc815-50,gde823
Misc : op47862,gde823,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

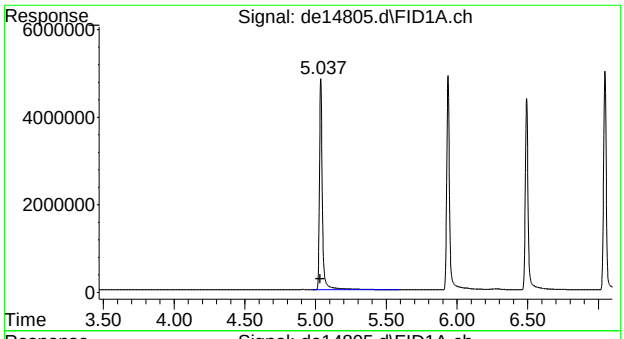
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 12 07:47:41 2016
Quant Method : C:\msdchem\1\METHODS\EPH160711W.M
Quant Title : BMAEPH-working method
QLast Update : Mon Jul 11 08:59:36 2016
Response via : Initial Calibration
Integrator: RTE

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



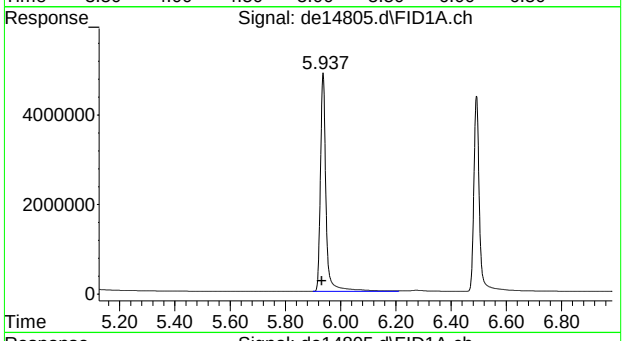


SGS ACCUTEST MC46783



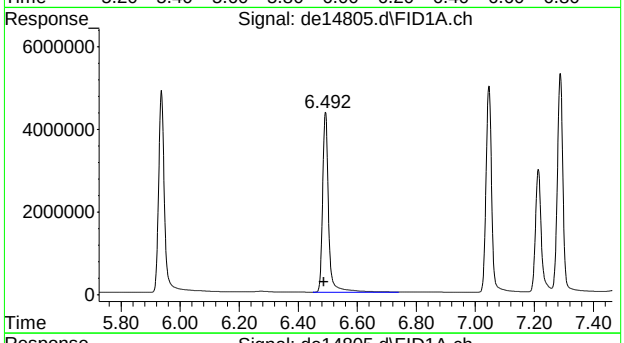
#2 naphthalene

R.T.: 5.037 min
Delta R.T.: 0.005 min
Response: 6853861
Conc: 54.60 µg/ml



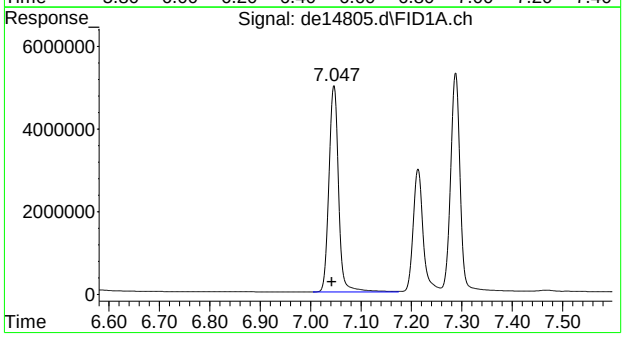
#3 2-methylnaphthalene

R.T.: 5.937 min
Delta R.T.: 0.005 min
Response: 6846215
Conc: 54.27 µg/ml



#4 2-fluorobiphenyl

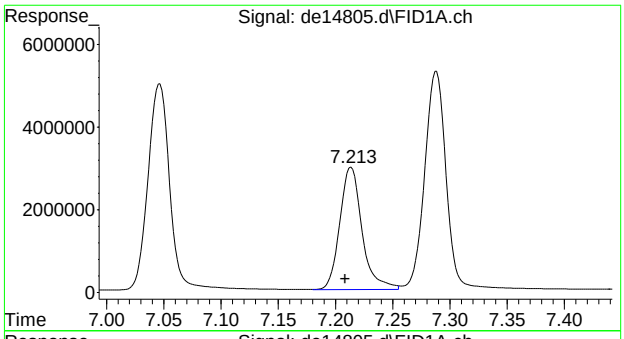
R.T.: 6.492 min
Delta R.T.: 0.005 min
Response: 6134550
Conc: 53.59 µg/ml



#5 acenaphthylene

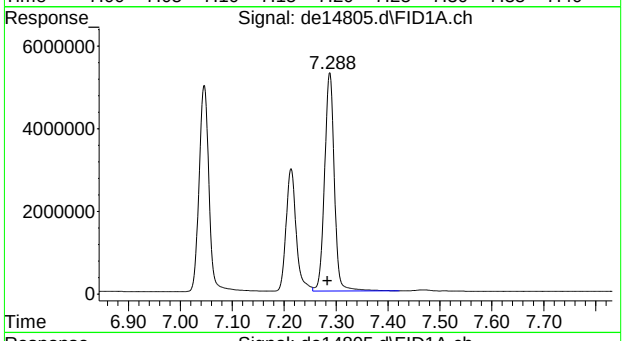
R.T.: 7.047 min
Delta R.T.: 0.005 min
Response: 6631193
Conc: 52.41 µg/ml

SGS ACCUTEST MC46783



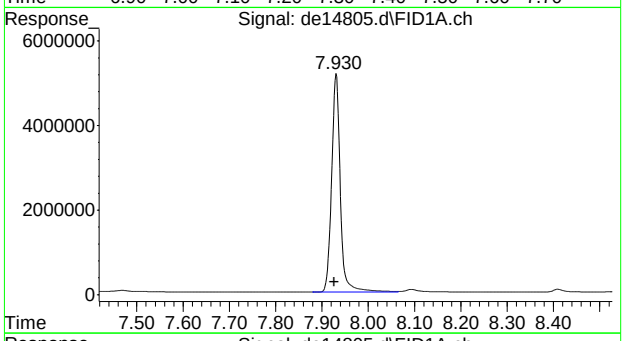
#6 2-bromonaphthalene

R.T.: 7.213 min
Delta R.T.: 0.005 min
Response: 4019292
Conc: 56.05 µg/ml



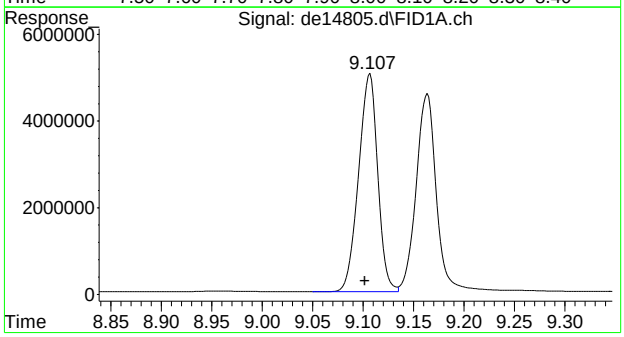
#7 acenaphthene

R.T.: 7.288 min
Delta R.T.: 0.005 min
Response: 6913007
Conc: 49.63 µg/ml



#8 fluorene

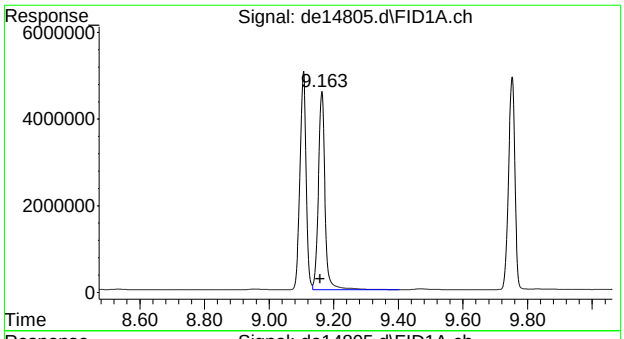
R.T.: 7.930 min
Delta R.T.: 0.003 min
Response: 6747205
Conc: 52.52 µg/ml



#9 phenanthrene

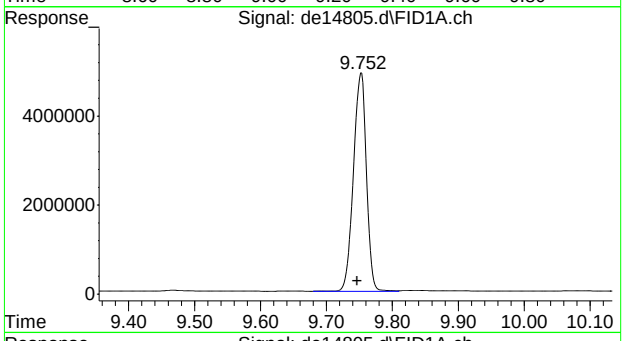
R.T.: 9.107 min
Delta R.T.: 0.005 min
Response: 6644218
Conc: 53.19 µg/ml

SGS ACCUTEST MC46783



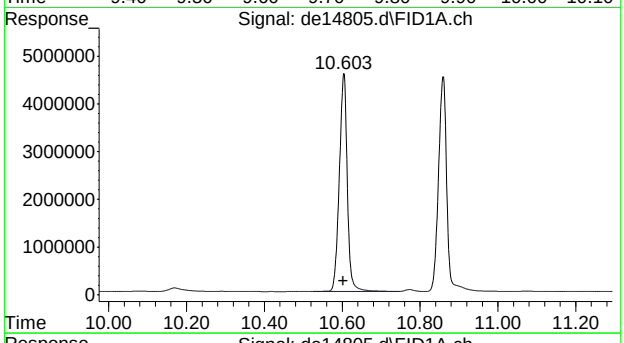
#10 anthracene

R.T.: 9.163 min
Delta R.T.: 0.005 min
Response: 6469679
Conc: 48.63 µg/ml



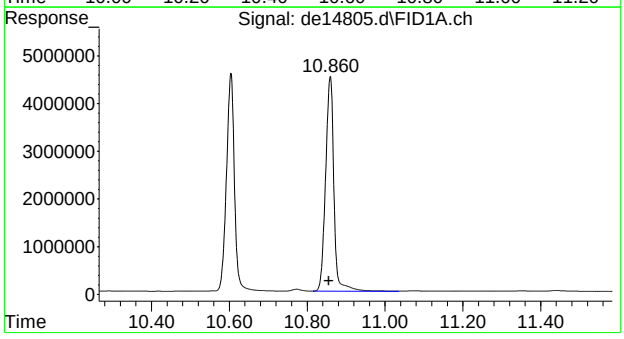
#11 o-terphenyl

R.T.: 9.752 min
Delta R.T.: 0.005 min
Response: 6714261
Conc: 50.75 µg/ml



#12 fluoranthene

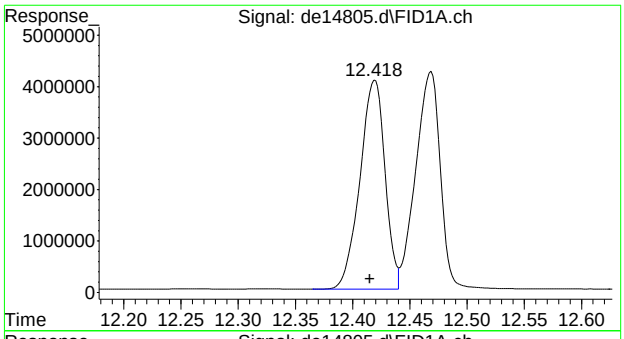
R.T.: 10.603 min
Delta R.T.: 0.002 min
Response: 6514062
Conc: 50.79 µg/ml



#13 pyrene

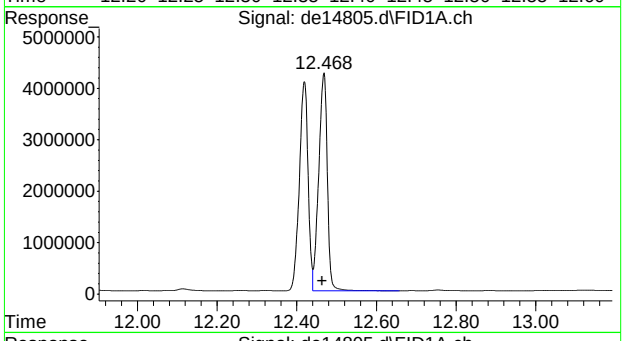
R.T.: 10.860 min
Delta R.T.: 0.005 min
Response: 6672763
Conc: 50.80 µg/ml

SGS ACCUTEST MC46783



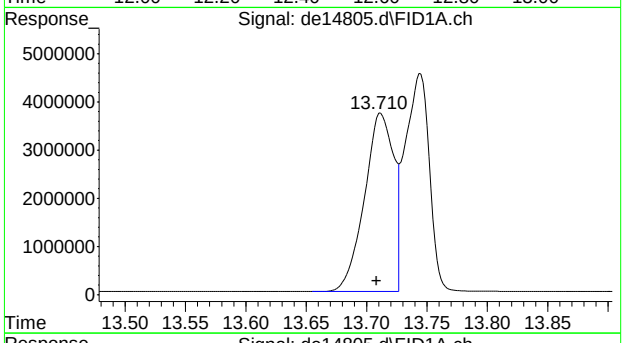
#14 benzo(a)anthracene

R.T.: 12.418 min
Delta R.T.: 0.003 min
Response: 6203065
Conc: 51.06 µg/ml



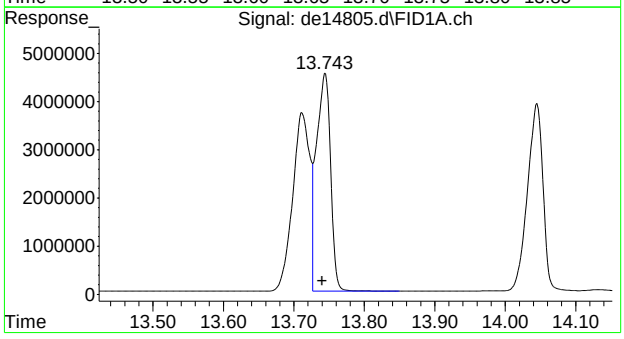
#15 chrysene

R.T.: 12.468 min
Delta R.T.: 0.005 min
Response: 6311243
Conc: 49.44 µg/ml



#16 benzo(B)fluoranthene

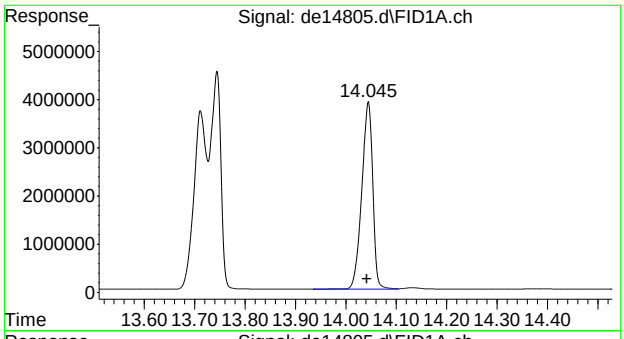
R.T.: 13.710 min
Delta R.T.: 0.002 min
Response: 6419940
Conc: 54.22 µg/ml m



#17 benzo(k)fluoranthene

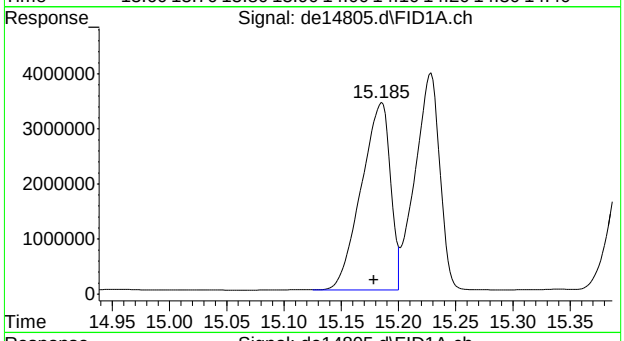
R.T.: 13.743 min
Delta R.T.: 0.003 min
Response: 6171857
Conc: 48.21 µg/ml m

SGS ACCUTEST MC46783



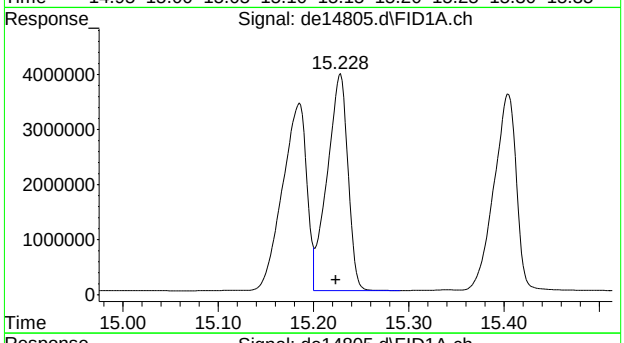
#18 benzo(a)pyrene

R.T.: 14.045 min
Delta R.T.: 0.003 min
Response: 5981362
Conc: 50.71 µg/ml



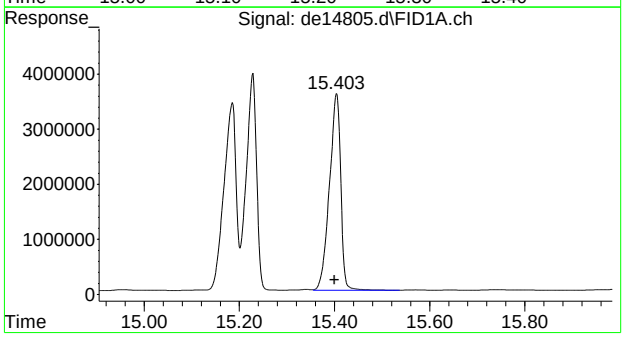
#19 indeno(1,2,3-cd)pyrene

R.T.: 15.185 min
Delta R.T.: 0.007 min
Response: 6049811
Conc: 51.69 µg/ml



#20 dibenzo(ah)anthracene

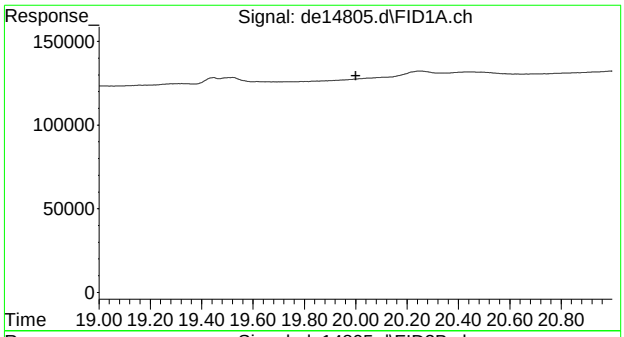
R.T.: 15.228 min
Delta R.T.: 0.005 min
Response: 5893227
Conc: 52.01 µg/ml



#21 benzo(ghi)perylene

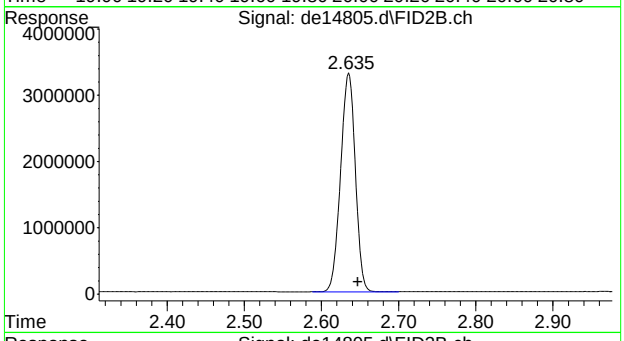
R.T.: 15.403 min
Delta R.T.: 0.003 min
Response: 5868468
Conc: 51.72 µg/ml

SGS ACCUTEST MC46783



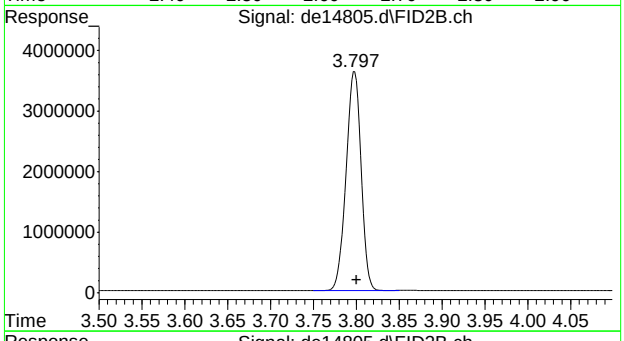
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



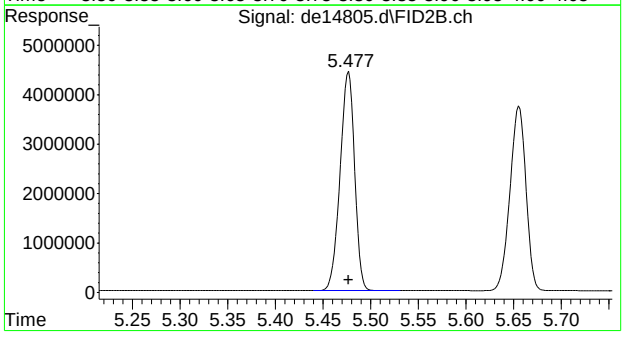
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 4371805
Conc: 51.86 µg/ml m



#26 c-10

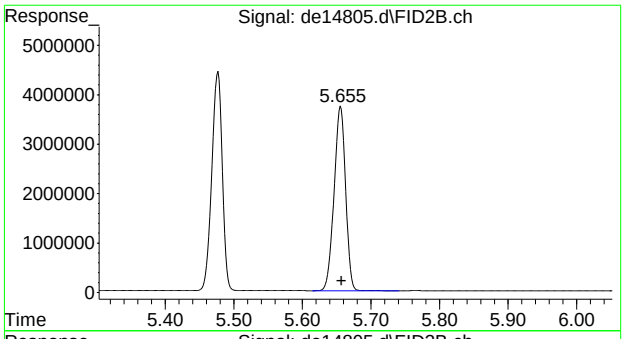
R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 4409793
Conc: 52.31 µg/ml



#27 naphthalene #2

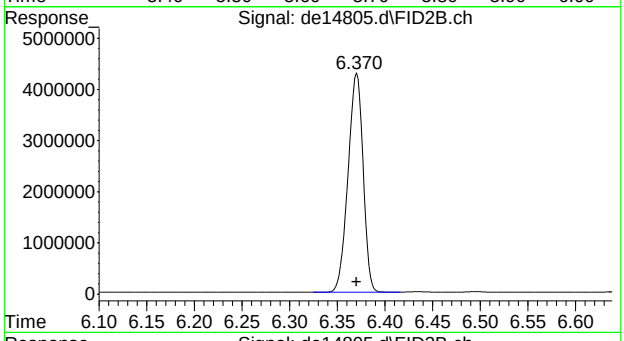
R.T.: 5.477 min
Delta R.T.: 0.000 min
Response: 4697495
Conc: 51.67 µg/ml

SGS ACCUTEST MC46783



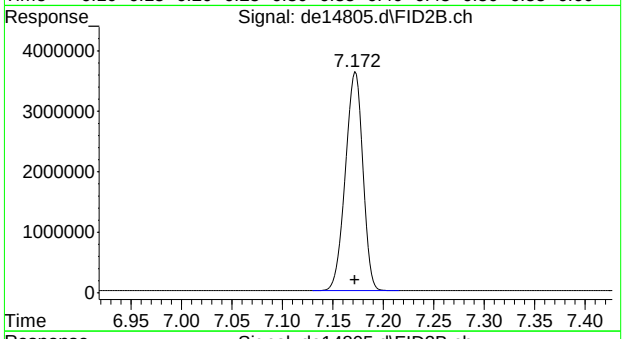
#28 c-12

R.T.: 5.655 min
Delta R.T.: -0.002 min
Response: 4358317
Conc: 51.70 µg/ml



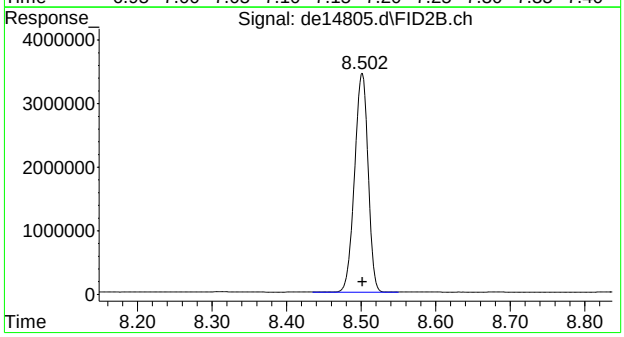
#29 2-methylnaphthalene #2

R.T.: 6.370 min
Delta R.T.: 0.000 min
Response: 4705618
Conc: 52.32 µg/ml



#30 c-14

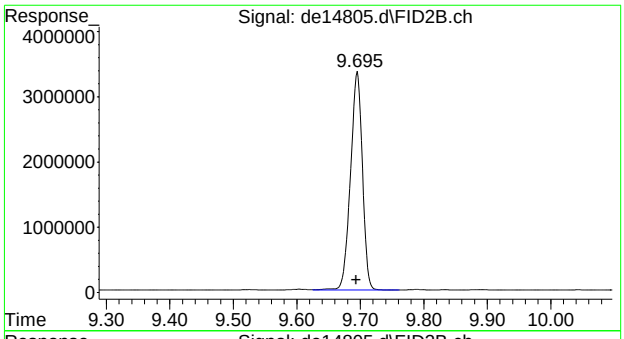
R.T.: 7.172 min
Delta R.T.: 0.000 min
Response: 4360986
Conc: 51.73 µg/ml



#31 c-16

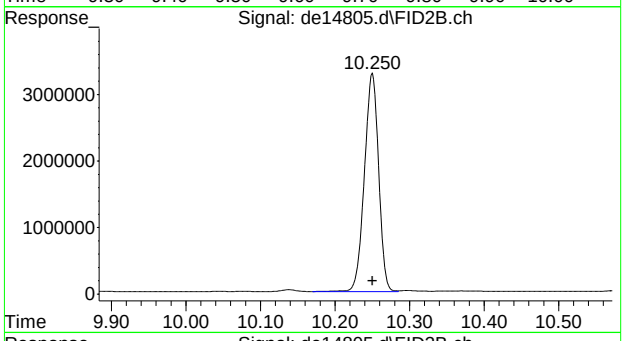
R.T.: 8.502 min
Delta R.T.: 0.000 min
Response: 4342951
Conc: 51.51 µg/ml

SGS ACCUTEST MC46783



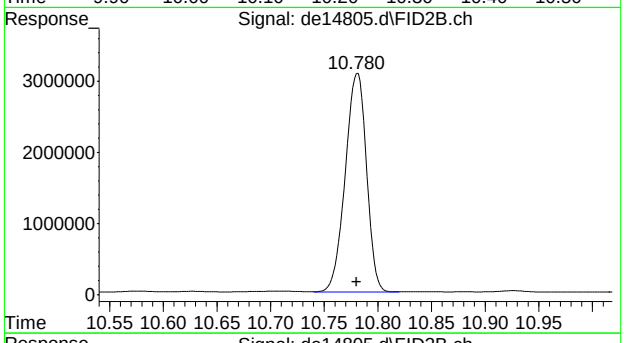
#32 c-18

R.T.: 9.695 min
Delta R.T.: 0.002 min
Response: 4360592
Conc: 51.72 µg/ml



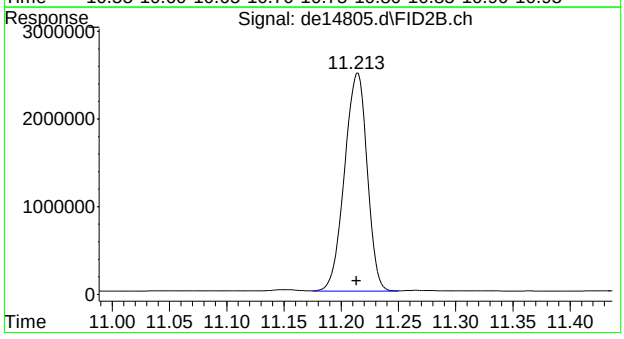
#33 c-19

R.T.: 10.250 min
Delta R.T.: 0.000 min
Response: 4346845
Conc: 55.85 µg/ml



#34 c-20

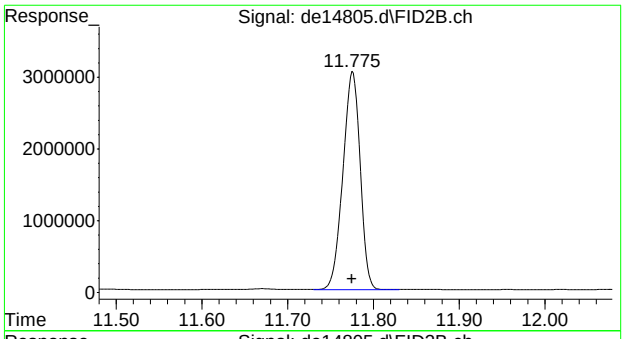
R.T.: 10.780 min
Delta R.T.: 0.000 min
Response: 4246294
Conc: 54.56 µg/ml



#35 1-chlorooctadecane

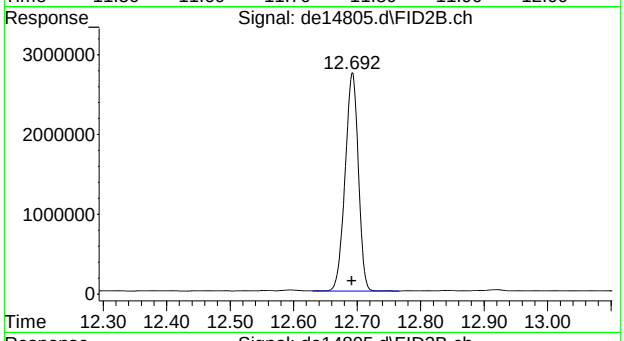
R.T.: 11.213 min
Delta R.T.: 0.000 min
Response: 3421769
Conc: 52.52 µg/ml

SGS ACCUTEST MC46783



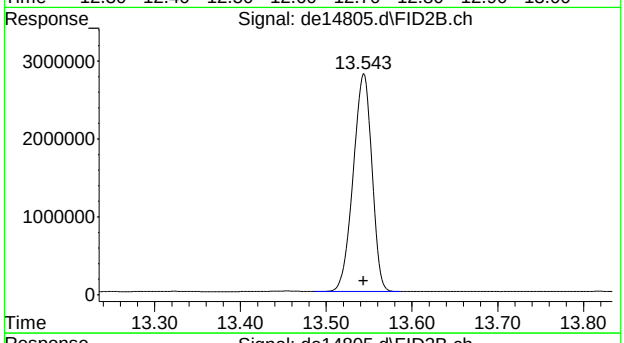
#36 c-22

R.T.: 11.775 min
Delta R.T.: 0.000 min
Response: 4252924
Conc: 54.65 µg/ml



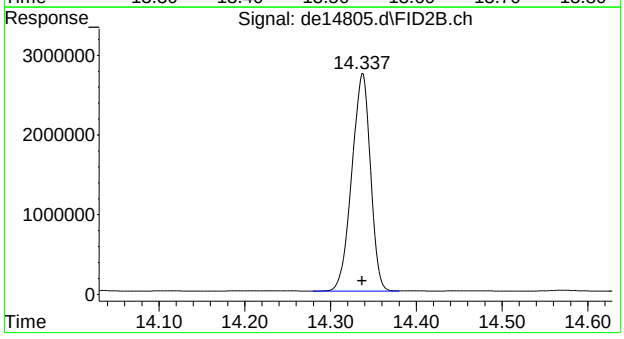
#37 c-24

R.T.: 12.692 min
Delta R.T.: 0.000 min
Response: 3955174
Conc: 50.82 µg/ml



#38 c-26

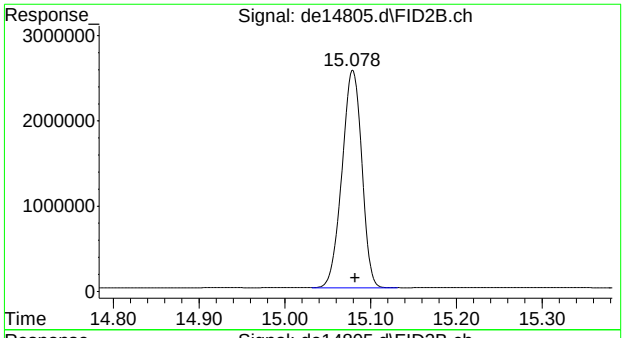
R.T.: 13.543 min
Delta R.T.: 0.000 min
Response: 4249038
Conc: 54.60 µg/ml



#39 c-28

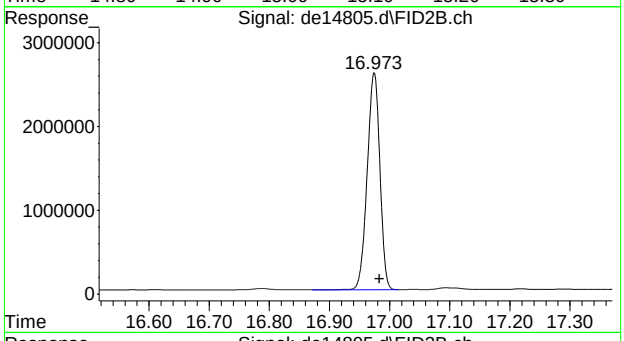
R.T.: 14.337 min
Delta R.T.: 0.000 min
Response: 4120704
Conc: 52.95 µg/ml

SGS ACCUTEST MC46783



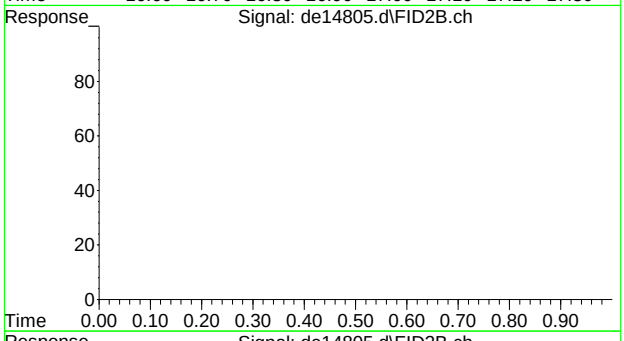
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 4102088
Conc: 52.71 µg/ml



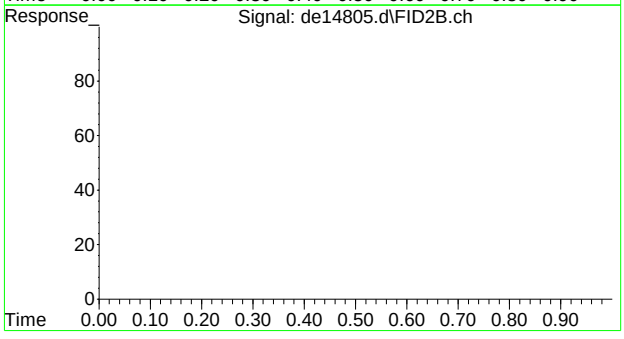
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 3790465
Conc: 48.71 µg/ml m



#42 bht

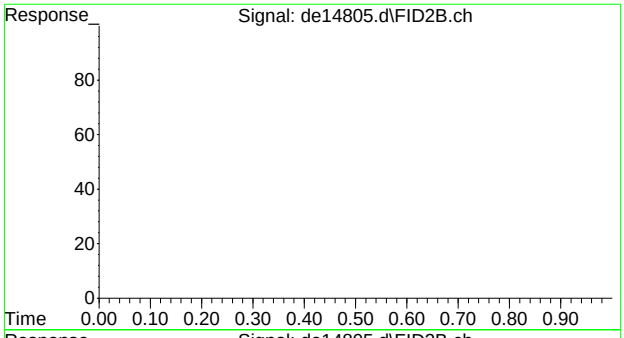
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#43 bht

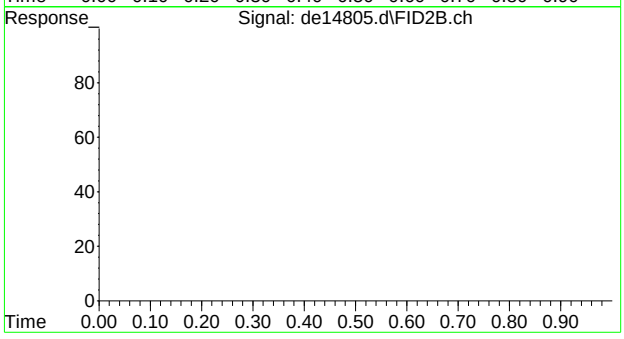
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

SGS ACCUTEST MC46783



#44 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#45 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

SGS ACCUTEST MC46783

Manual Integrations APPROVED (compounds with "m" flag)
Andri Piluri
07/13/16 16:37

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14821.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 1:44 pm
Operator : thomasa
Sample : cc815-50,gde825
Misc : op47862,gde825,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 15:15:15 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) s	2-fluorobiphenyl	6.497	6119323	53.455 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 267.27%#
6) s	2-bromonaphthalene	7.217	4070360	56.767 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 283.84%#
11) s	o-terphenyl	9.755	6800850	51.402 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 257.01%#
35) s	1-chlorooctadecane	11.212	2973878	45.645 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 228.23%#
	Target Compounds			
2)	naphthalene	5.042	6815565	54.292 µg/ml
3)	2-methylnaphthalene	5.942	6643391	52.665 µg/ml
5)	acenaphthylene	7.050	6634901	52.439 µg/ml
7)	acenaphthene	7.292	7027361	50.452 µg/ml
8)	fluorene	7.935	6766522	52.672 µg/ml
9)	phenanthrene	9.110	6665848	53.363 µg/ml
10)	anthracene	9.167	6352068	47.747 µg/ml
12)	fluoranthene	10.607	6599119	51.450 µg/ml
13)	pyrene	10.862	6751564	51.405 µg/ml
14)	benzo(a)anthracene	12.422	6305370	51.904 µg/ml
15)	chrysene	12.470	6481491	50.776 µg/ml
16)	benzo(B)fluoranthene	13.717	6345257	53.593 µg/mlm
17)	benzo(k)fluoranthene	13.747	6536984	51.058 µg/mlm
18)	benzo(a)pyrene	14.048	6131006	51.976 µg/ml
19)	indeno(1,2,3-cd)pyrene	15.187	6253629	53.429 µg/mlm
20)	dibenzo(ah)anthracene	15.230	6092075	53.766 µg/mlm
21)	benzo(ghi)perylene	15.408	6045325	53.274 µg/ml
25) h	c-9	2.647	3952198	46.879 µg/mlm
26) h	c-10	3.800	3982024	47.233 µg/ml
27)	naphthalene #2	5.477	4252174	46.773 µg/ml
28)	c-12	5.655	3932573	46.647 µg/ml
29)	2-methylnaphthalene #2	6.370	4224153	46.968 µg/ml
30)	c-14	7.172	3890280	46.145 µg/ml
31)	c-16	8.500	3841369	45.565 µg/ml
32)	c-18	9.693	3825678	45.379 µg/ml
33)	c-19	10.248	3782229	48.600 µg/ml
34)	c-20	10.780	3695459	47.485 µg/ml
36)	c-22	11.775	3662993	47.068 µg/ml
37)	c-24	12.692	3392732	43.595 µg/ml
38)	c-26	13.543	3620741	46.525 µg/ml

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14821.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 1:44 pm
Operator : thomasa
Sample : cc815-50,gde825
Misc : op47862,gde825,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 15:15:15 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc	Units
39)	c-28	14.333	3536369	45.441	µg/ml
40) h	c-30	15.082	3535370	45.428	µg/ml
41) h	c-36	16.983	3200373	41.123	µg/mlm

(f)=RT Delta > 1/2 Window (m)=manual int.

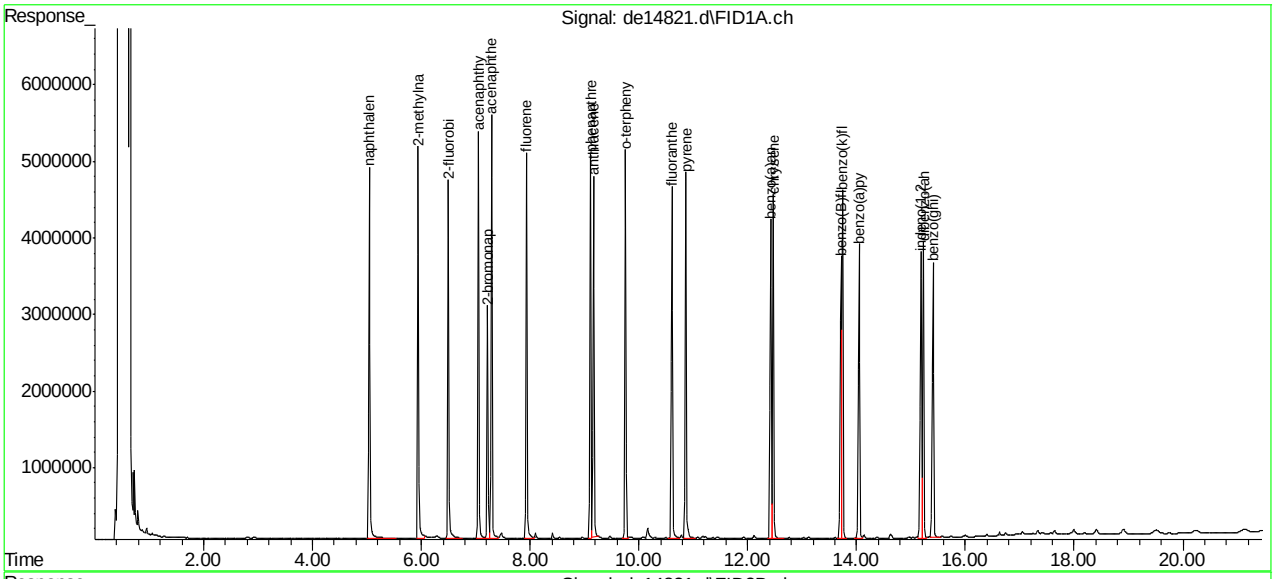
SGS ACCUTEST MC46783

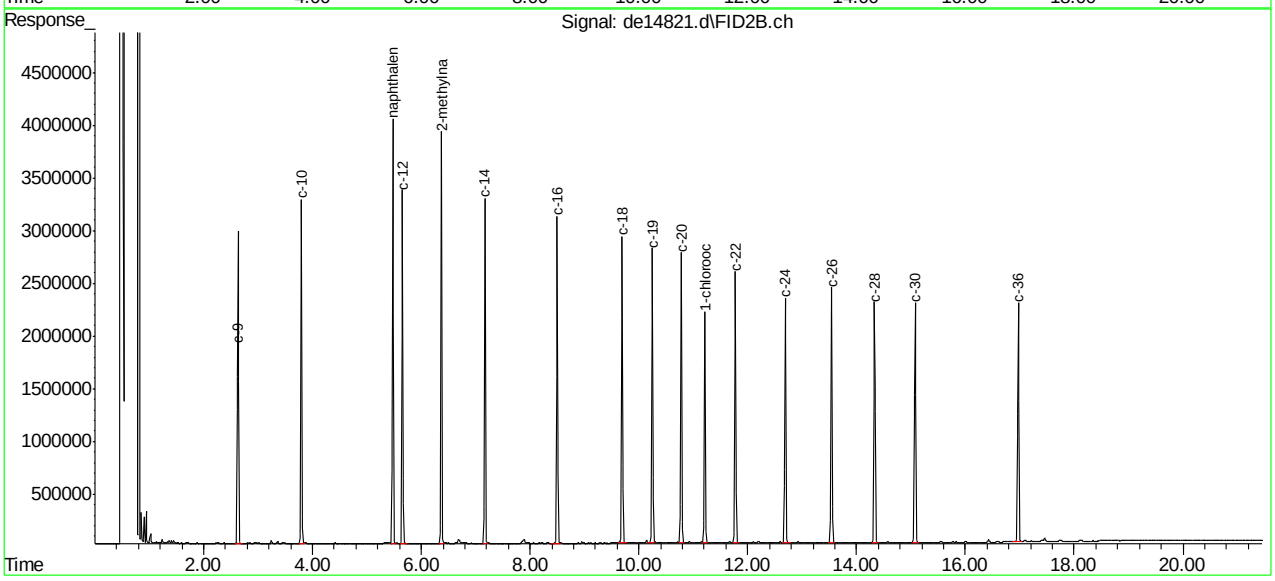
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14821.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 1:44 pm
Operator : thomasa
Sample : cc815-50,gde825
Misc : op47862,gde825,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

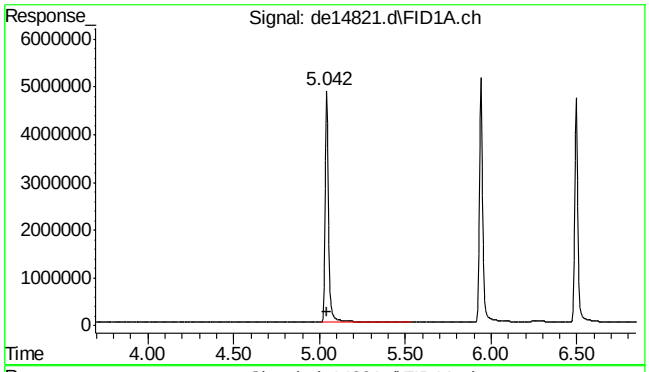
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 15:15:15 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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



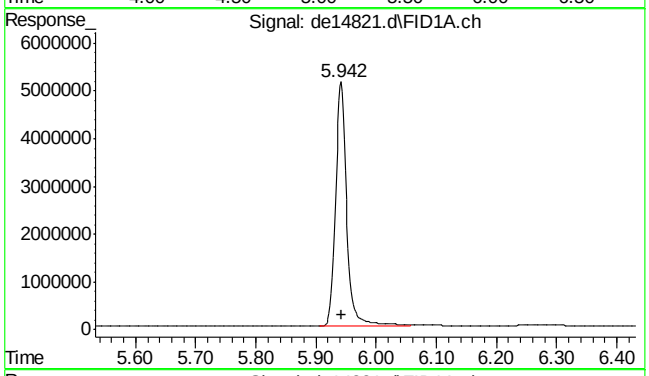


SGS ACCUTEST MC46783



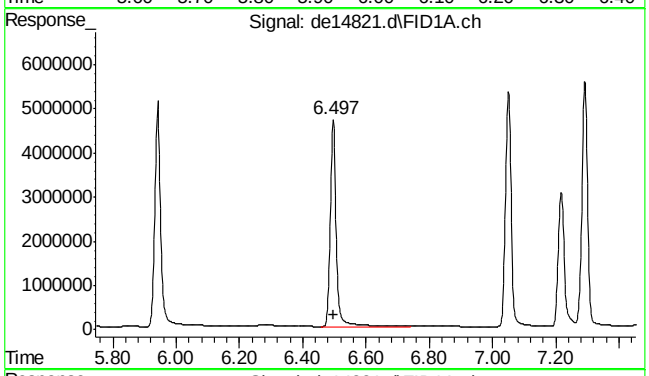
#2 naphthalene

R.T.: 5.042 min
Delta R.T.: 0.000 min
Response: 6815565
Conc: 54.29 µg/ml



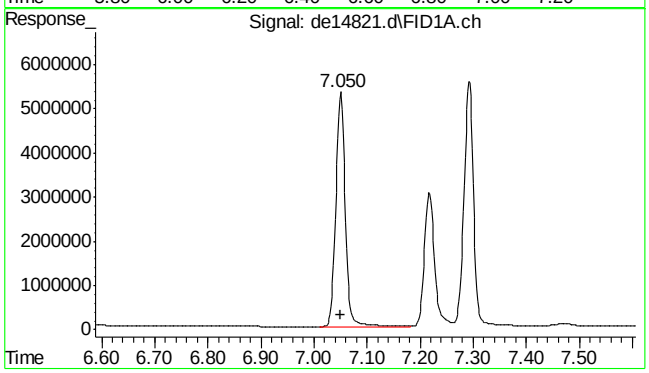
#3 2-methylnaphthalene

R.T.: 5.942 min
Delta R.T.: 0.000 min
Response: 6643391
Conc: 52.67 µg/ml



#4 2-fluorobiphenyl

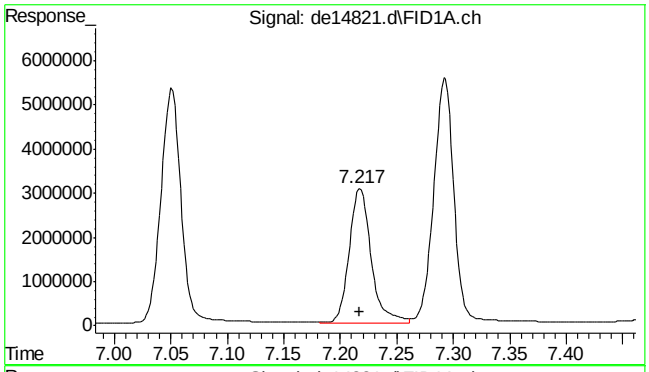
R.T.: 6.497 min
Delta R.T.: 0.000 min
Response: 6119323
Conc: 53.45 µg/ml



#5 acenaphthylene

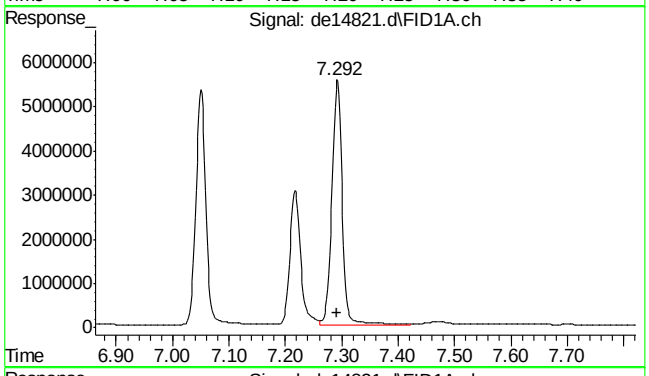
R.T.: 7.050 min
Delta R.T.: 0.000 min
Response: 6634901
Conc: 52.44 µg/ml

SGS ACCUTEST MC46783



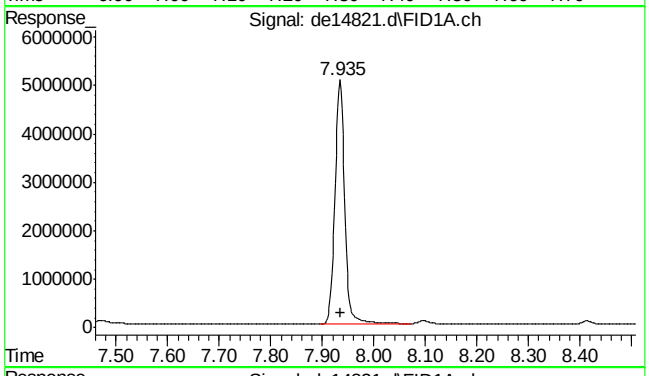
#6 2-bromonaphthalene

R.T.: 7.217 min
Delta R.T.: 0.000 min
Response: 4070360
Conc: 56.77 µg/ml



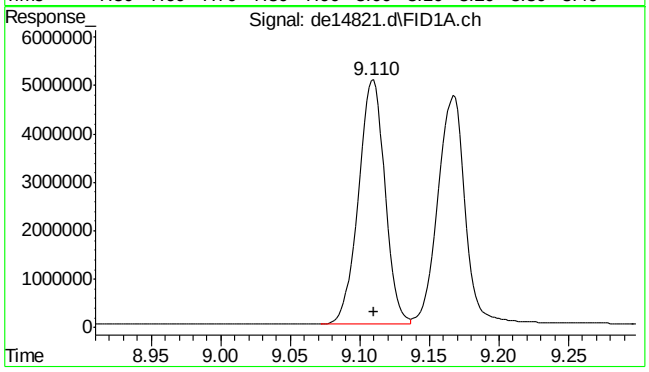
#7 acenaphthene

R.T.: 7.292 min
Delta R.T.: 0.000 min
Response: 7027361
Conc: 50.45 µg/ml



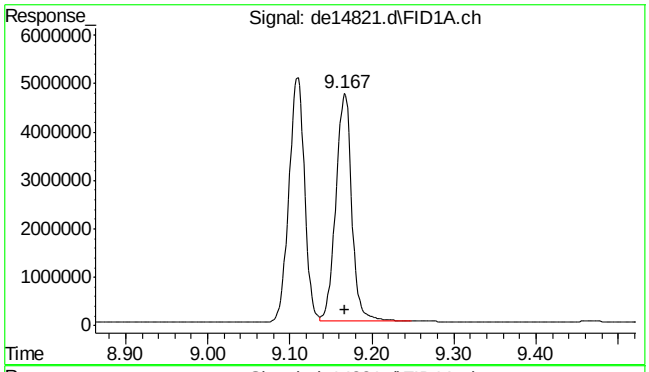
#8 fluorene

R.T.: 7.935 min
Delta R.T.: 0.000 min
Response: 6766522
Conc: 52.67 µg/ml



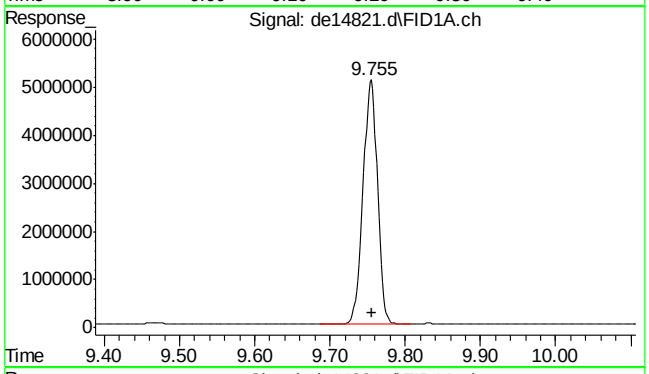
#9 phenanthrene

R.T.: 9.110 min
Delta R.T.: 0.000 min
Response: 6665848
Conc: 53.36 µg/ml



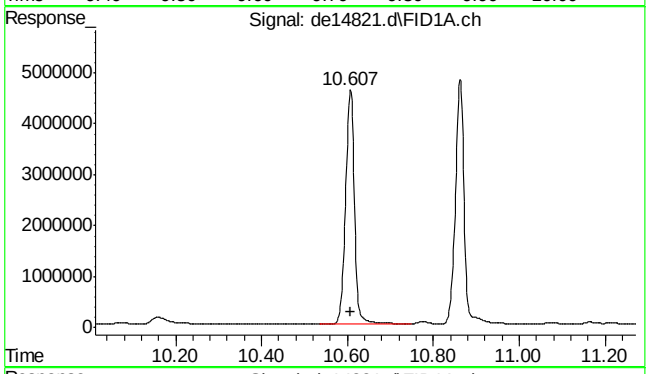
#10 anthracene

R.T.: 9.167 min
Delta R.T.: 0.000 min
Response: 6352068
Conc: 47.75 µg/ml



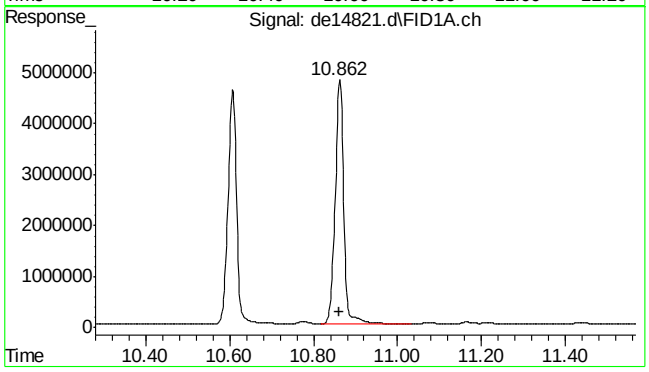
#11 o-terphenyl

R.T.: 9.755 min
Delta R.T.: 0.000 min
Response: 6800850
Conc: 51.40 µg/ml



#12 fluoranthene

R.T.: 10.607 min
Delta R.T.: 0.000 min
Response: 6599119
Conc: 51.45 µg/ml



#13 pyrene

R.T.: 10.862 min
Delta R.T.: 0.000 min
Response: 6751564
Conc: 51.40 µg/ml

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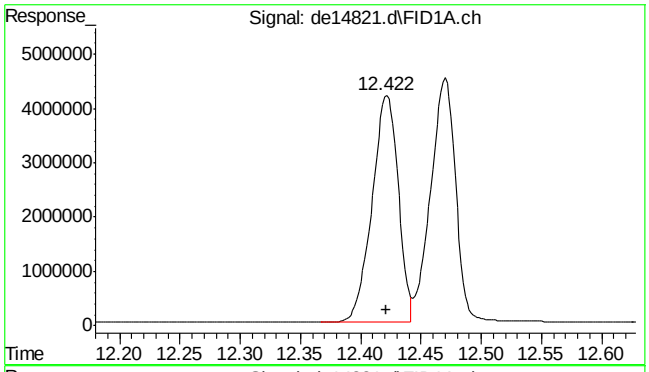
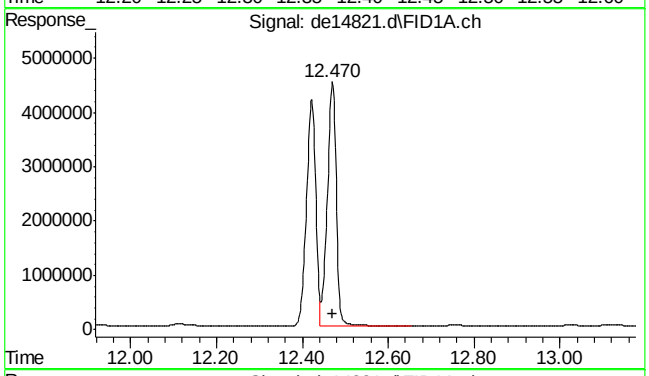


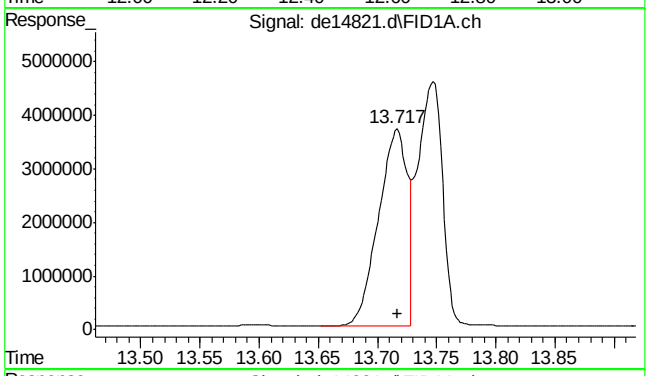
#14 benzo(a)anthracene

R.T.: 12.422 min
Delta R.T.: 0.000 min
Response: 6305370
Conc: 51.90 µg/ml



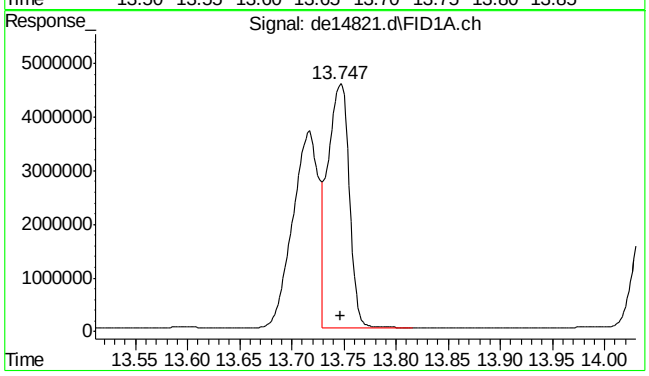
#15 chrysene

R.T.: 12.470 min
Delta R.T.: 0.000 min
Response: 6481491
Conc: 50.78 µg/ml



#16 benzo(B)fluoranthene

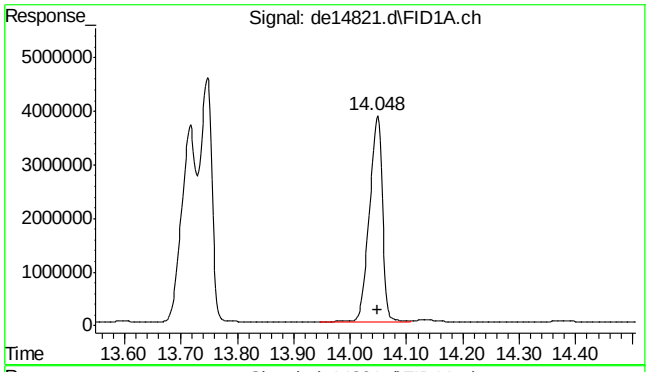
R.T.: 13.717 min
Delta R.T.: 0.000 min
Response: 6345257
Conc: 53.59 µg/ml m



#17 benzo(k)fluoranthene

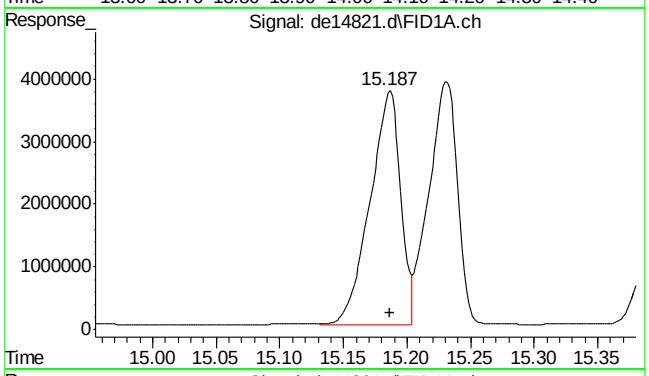
R.T.: 13.747 min
Delta R.T.: 0.000 min
Response: 6536984
Conc: 51.06 µg/ml m

SGS ACCUTEST MC46783



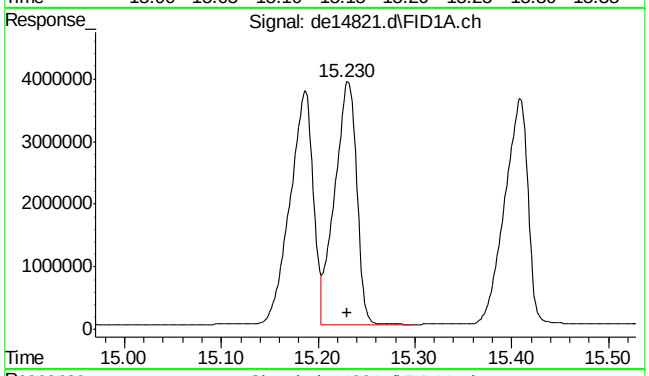
#18 benzo(a)pyrene

R.T.: 14.048 min
Delta R.T.: 0.000 min
Response: 6131006
Conc: 51.98 µg/ml



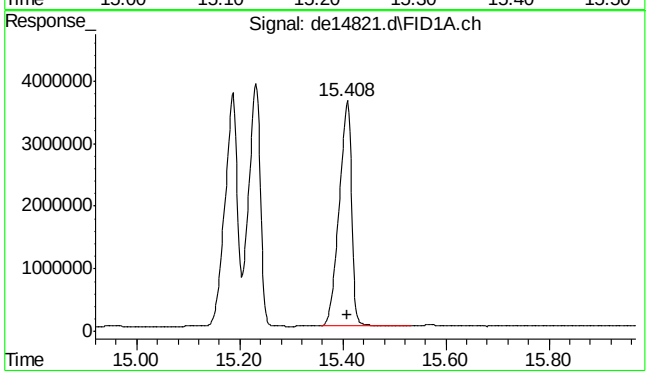
#19 indeno(1,2,3-cd)pyrene

R.T.: 15.187 min
Delta R.T.: 0.000 min
Response: 6253629
Conc: 53.43 µg/ml m



#20 dibenzo(ah)anthracene

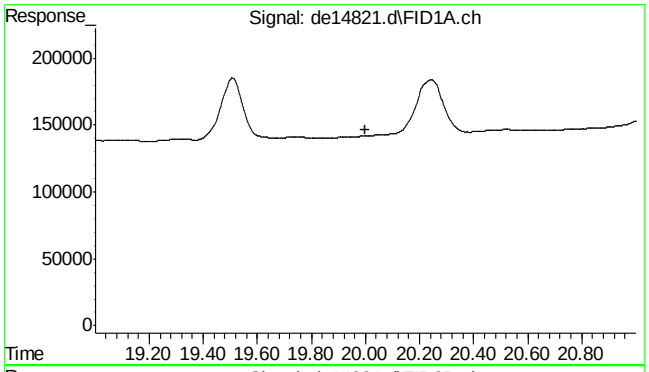
R.T.: 15.230 min
Delta R.T.: 0.000 min
Response: 6092075
Conc: 53.77 µg/ml m



#21 benzo(ghi)perylene

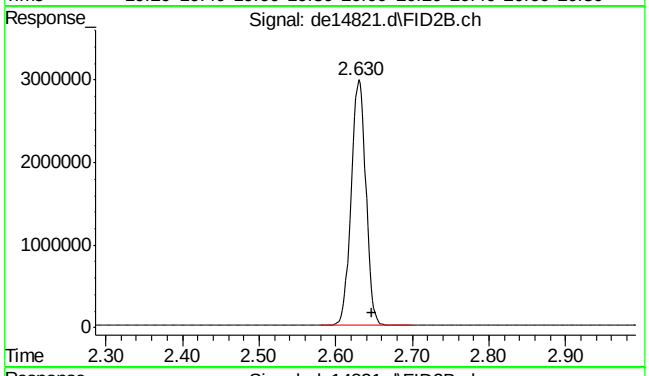
R.T.: 15.408 min
Delta R.T.: 0.000 min
Response: 6045325
Conc: 53.27 µg/ml

SGS ACCUTEST MC46783



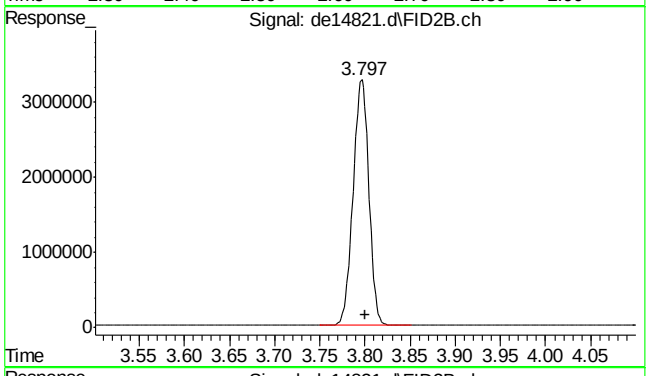
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



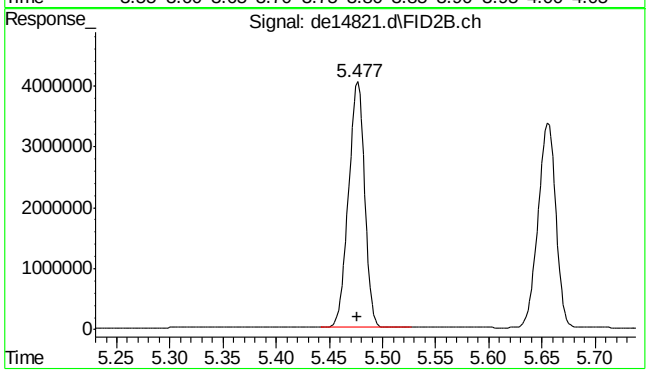
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 3952198
Conc: 46.88 µg/ml m



#26 c-10

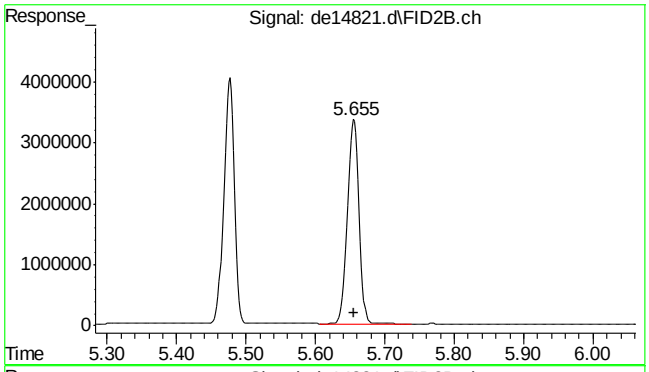
R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 3982024
Conc: 47.23 µg/ml



#27 naphthalene #2

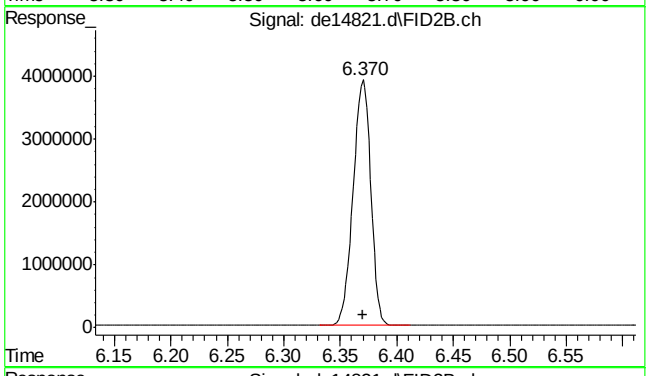
R.T.: 5.477 min
Delta R.T.: 0.000 min
Response: 4252174
Conc: 46.77 µg/ml

SGS ACCUTEST MC46783



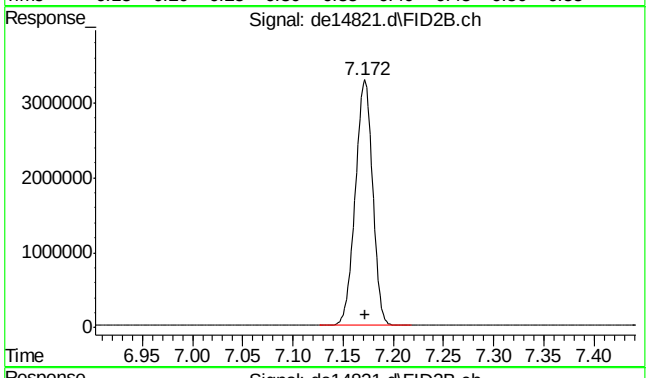
#28 c-12

R.T.: 5.655 min
Delta R.T.: 0.000 min
Response: 3932573
Conc: 46.65 µg/ml



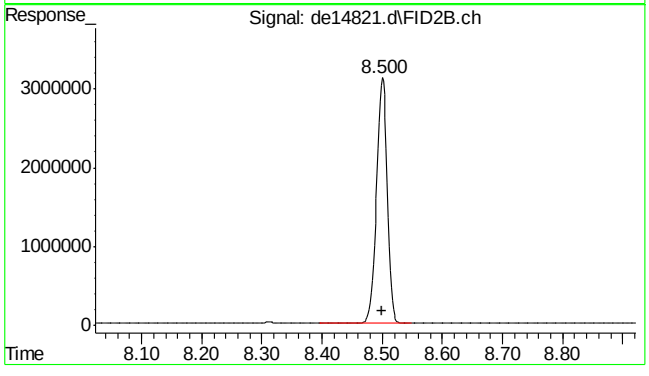
#29 2-methylnaphthalene #2

R.T.: 6.370 min
Delta R.T.: 0.000 min
Response: 4224153
Conc: 46.97 µg/ml



#30 c-14

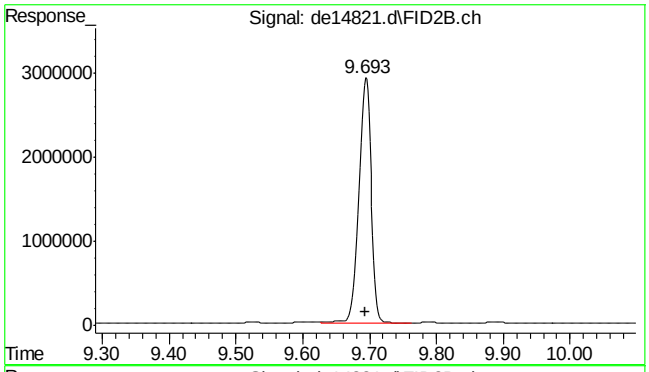
R.T.: 7.172 min
Delta R.T.: 0.000 min
Response: 3890280
Conc: 46.15 µg/ml



#31 c-16

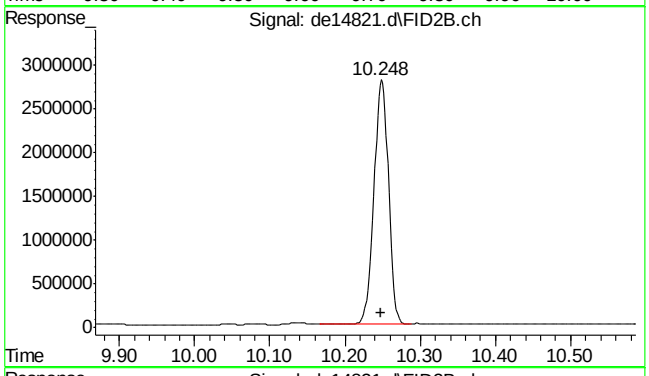
R.T.: 8.500 min
Delta R.T.: 0.000 min
Response: 3841369
Conc: 45.56 µg/ml

SGS ACCUTEST MC46783



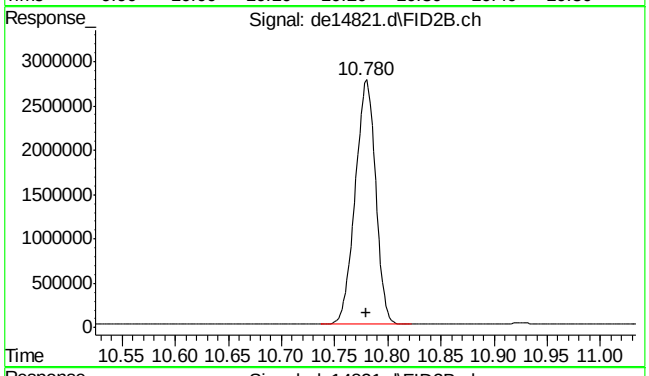
#32 c-18

R.T.: 9.693 min
Delta R.T.: 0.000 min
Response: 3825678
Conc: 45.38 µg/ml



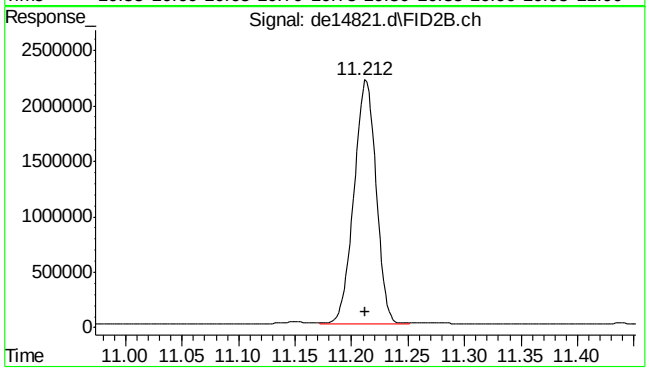
#33 c-19

R.T.: 10.248 min
Delta R.T.: 0.000 min
Response: 3782229
Conc: 48.60 µg/ml



#34 c-20

R.T.: 10.780 min
Delta R.T.: 0.000 min
Response: 3695459
Conc: 47.48 µg/ml



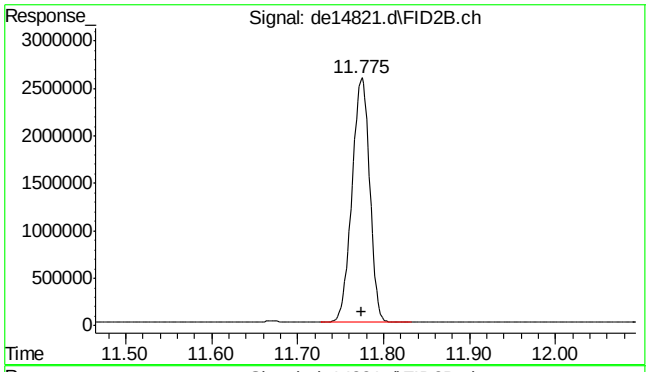
#35 1-chlorooctadecane

R.T.: 11.212 min
Delta R.T.: 0.000 min
Response: 2973878
Conc: 45.64 µg/ml

7.5.11

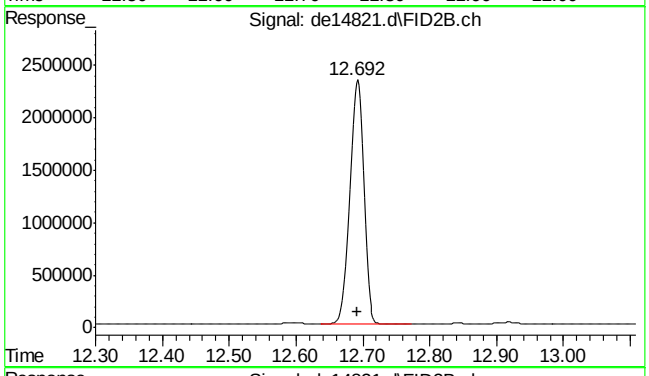
7

SGS ACCUTEST MC46783



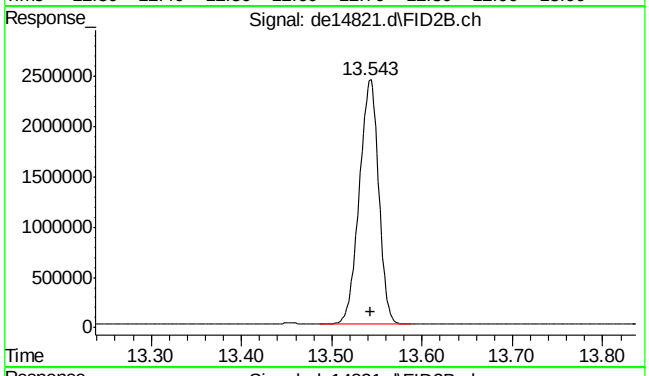
#36 c-22

R.T.: 11.775 min
Delta R.T.: 0.000 min
Response: 3662993
Conc: 47.07 µg/ml



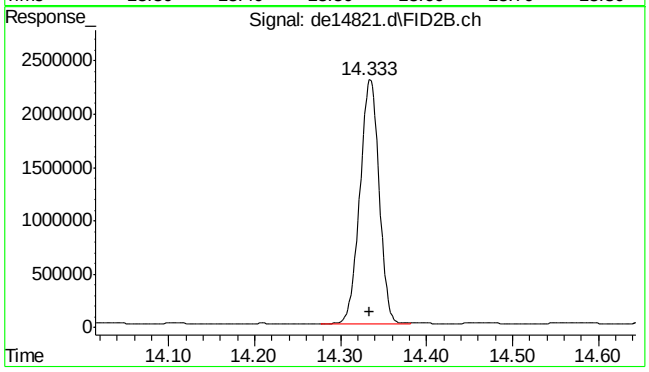
#37 c-24

R.T.: 12.692 min
Delta R.T.: 0.000 min
Response: 3392732
Conc: 43.59 µg/ml



#38 c-26

R.T.: 13.543 min
Delta R.T.: 0.000 min
Response: 3620741
Conc: 46.52 µg/ml



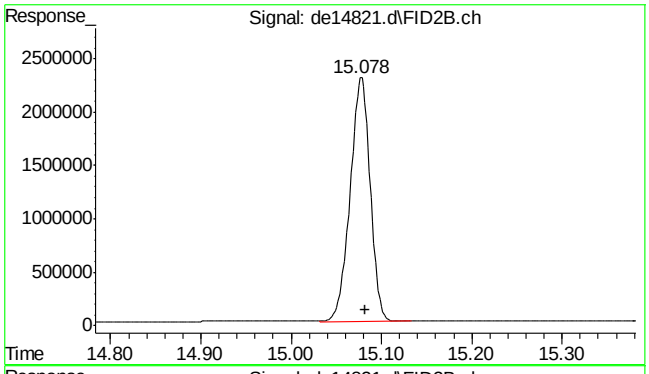
#39 c-28

R.T.: 14.333 min
Delta R.T.: 0.000 min
Response: 3536369
Conc: 45.44 µg/ml

7.5.11

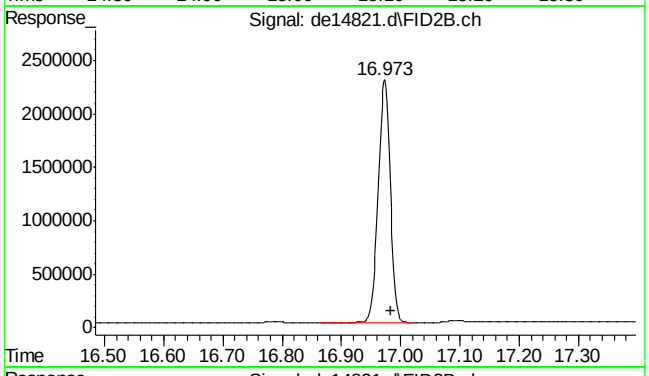
7

SGS ACCUTEST MC46783



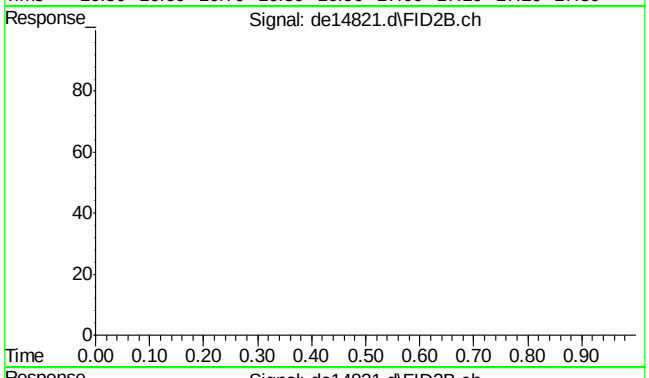
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 3535370
Conc: 45.43 µg/ml



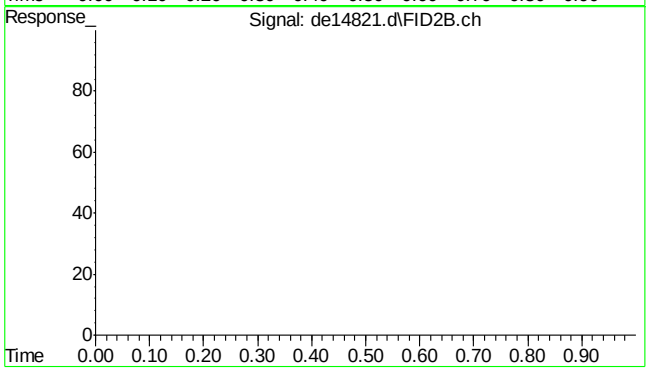
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 3200373
Conc: 41.12 µg/ml m



#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



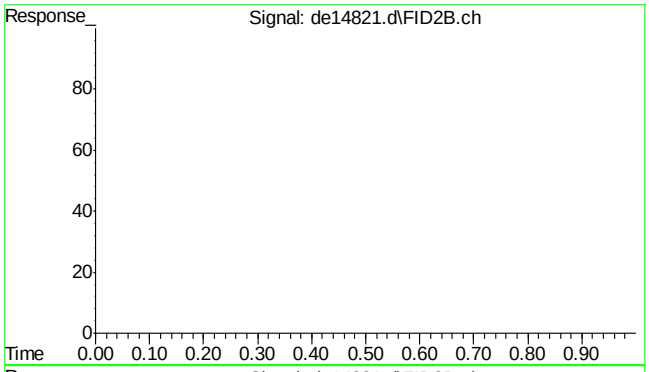
#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

7.5.11

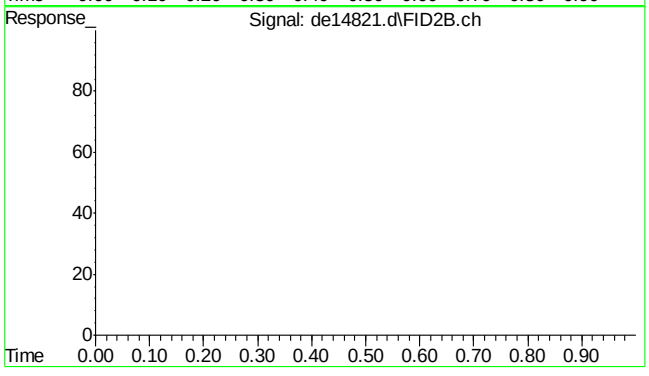
7

SGS ACCUTEST MC46783



#44 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#45 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

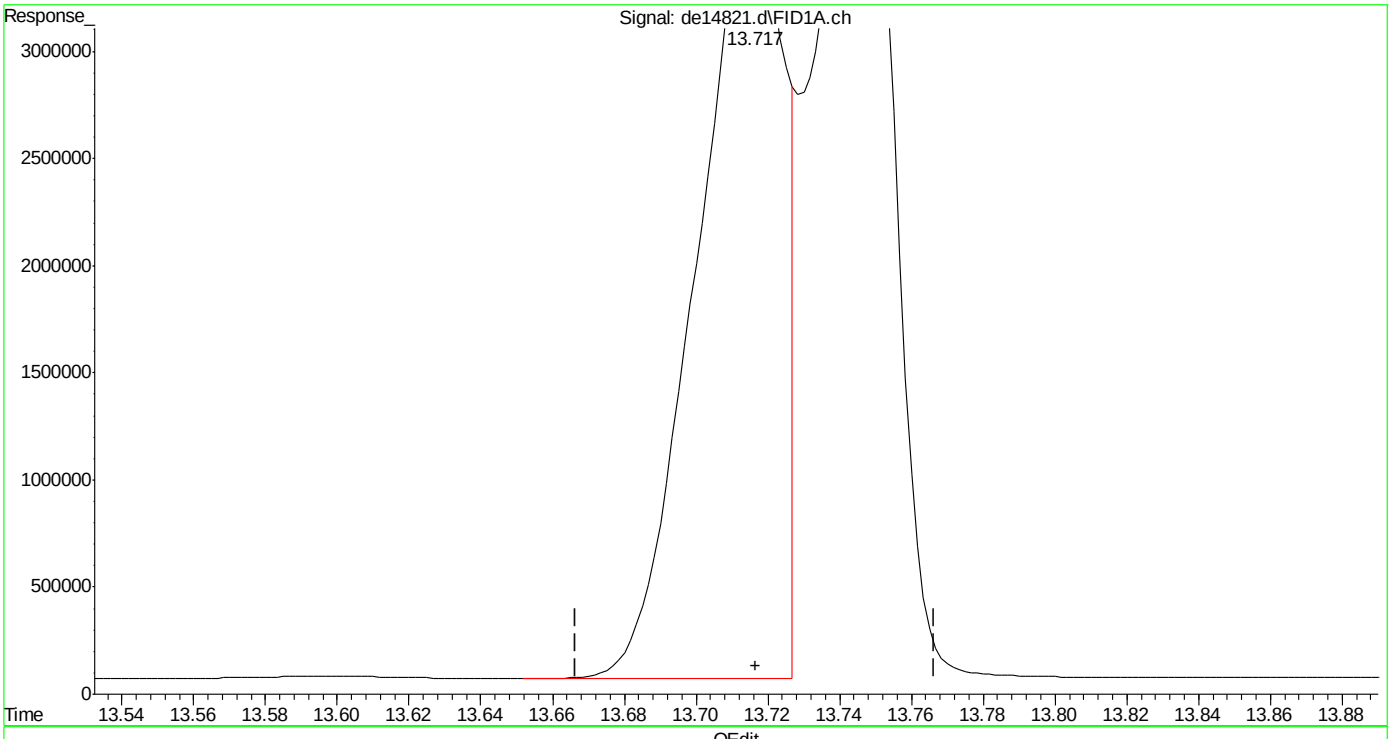
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14821.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 1:44 pm
Operator : thomasa
Sample : cc815-50,gde825
Misc : op47862,gde825,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 14:11:57 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.717min 51.281 µg/ml
response 6071541

(+) = Expected Retention Time
EPH160713W.M Wed Jul 13 15:13:33 2016

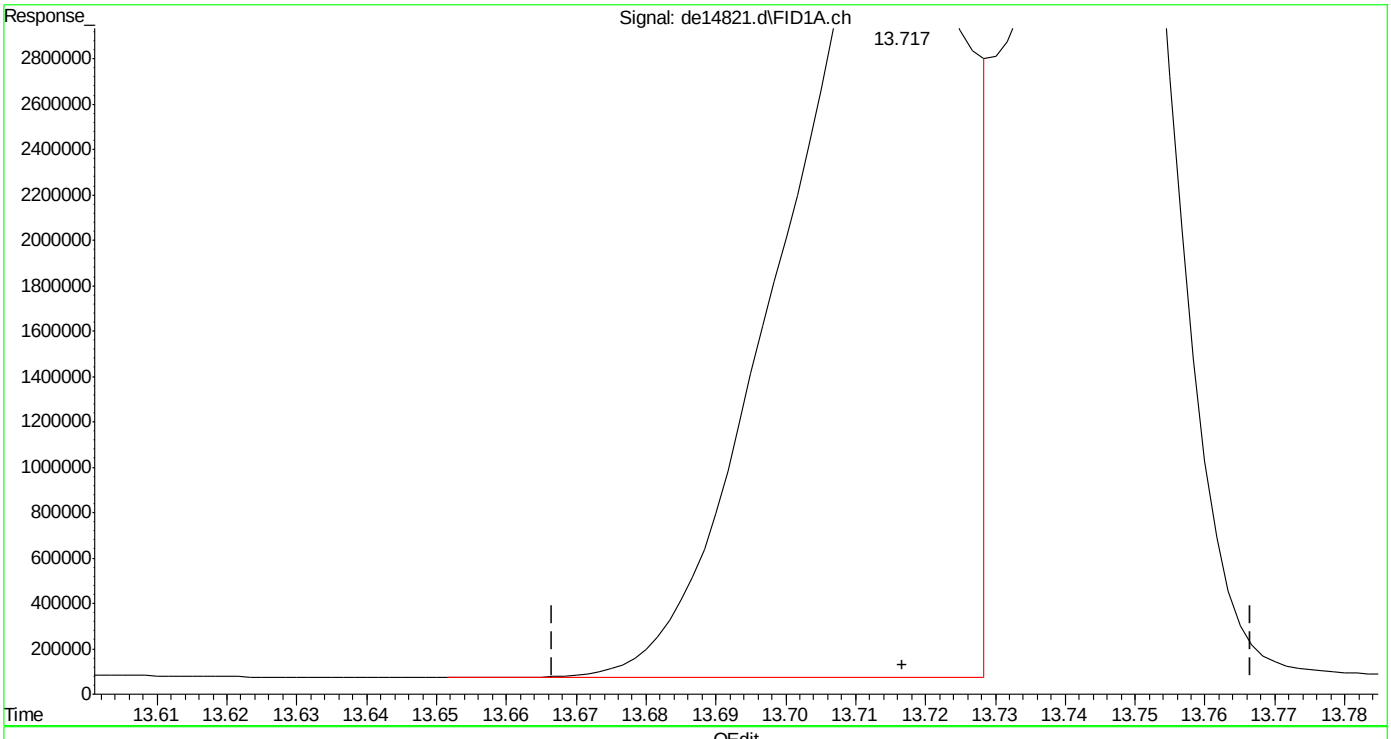
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14821.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 1:44 pm
Operator : thomasa
Sample : cc815-50,gde825
Misc : op47862,gde825,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 14:11:57 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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



(16) benzo(B)fluoranthene
13.717min 53.593 µg/ml m
response 6345257

(+) = Expected Retention Time

EPH160713W.M Wed Jul 13 15:13:46 2016

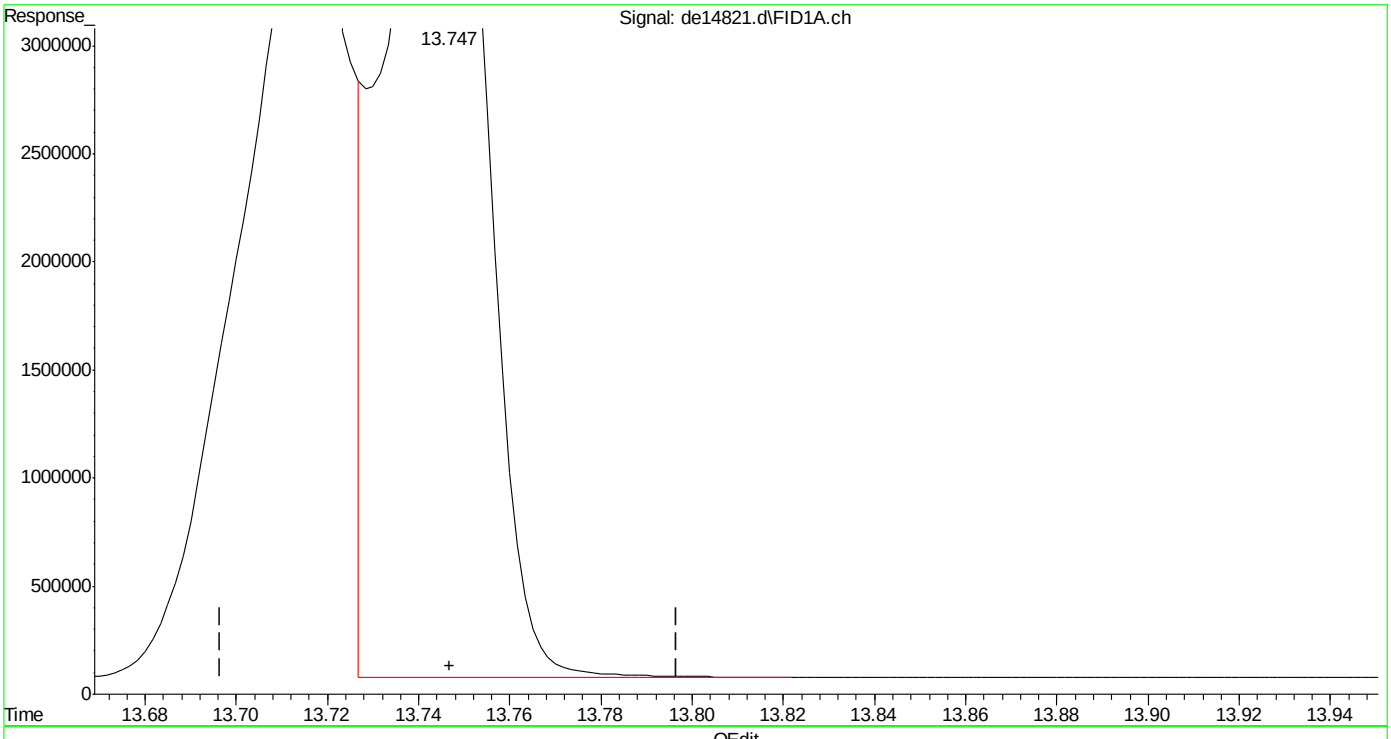
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14821.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 1:44 pm
Operator : thomasa
Sample : cc815-50,gde825
Misc : op47862,gde825,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 14:11:57 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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



(17) benzo(k)fluoranthene
13.747min 53.059 µg/ml
response 6793205

(+) = Expected Retention Time
EPH160713W.M Wed Jul 13 15:13:50 2016

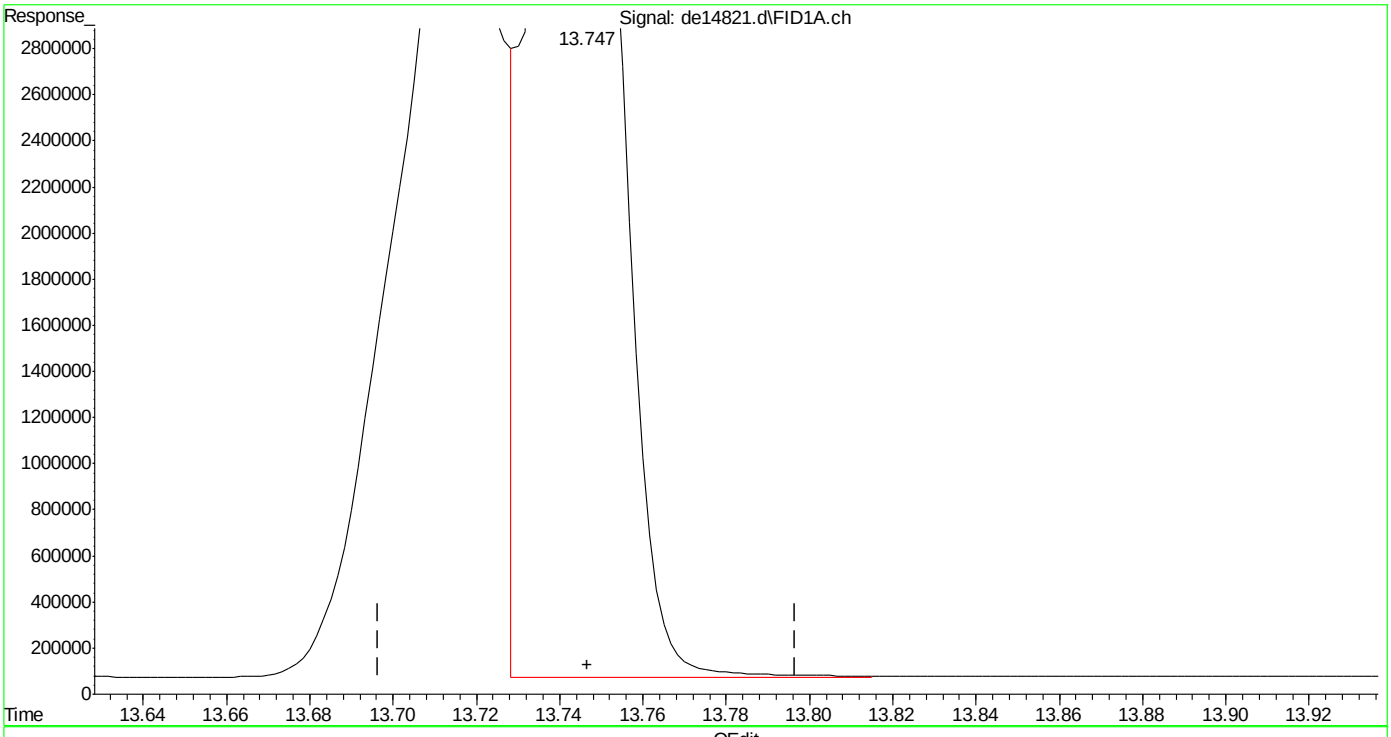
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14821.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 1:44 pm
Operator : thomasa
Sample : cc815-50,gde825
Misc : op47862,gde825,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 14:11:57 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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



(17) benzo(k)fluoranthene
13.747min 51.058 µg/ml m
response 6536984

(+) = Expected Retention Time

EPH160713W.M Wed Jul 13 15:14:04 2016

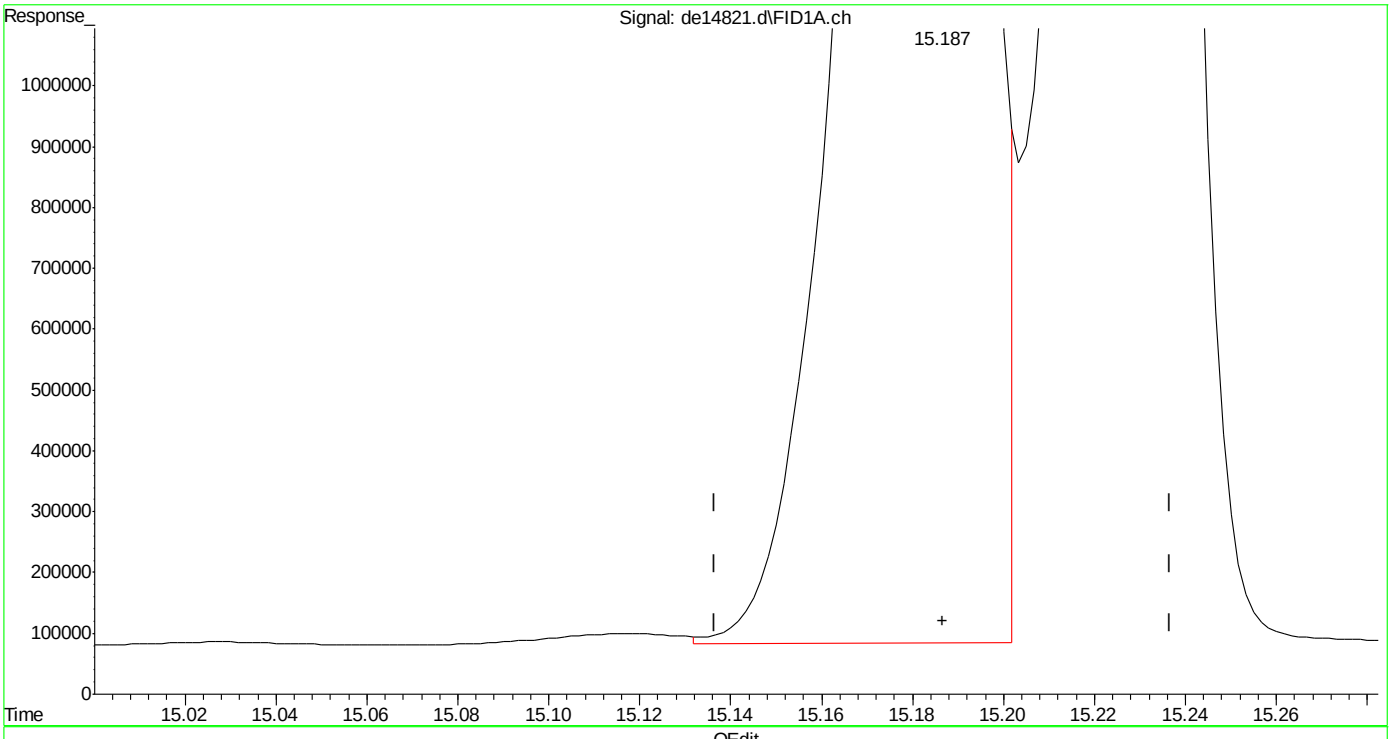
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14821.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 1:44 pm
Operator : thomasa
Sample : cc815-50,gde825
Misc : op47862,gde825,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 14:11:57 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.187min 52.630 µg/ml
response 6160166

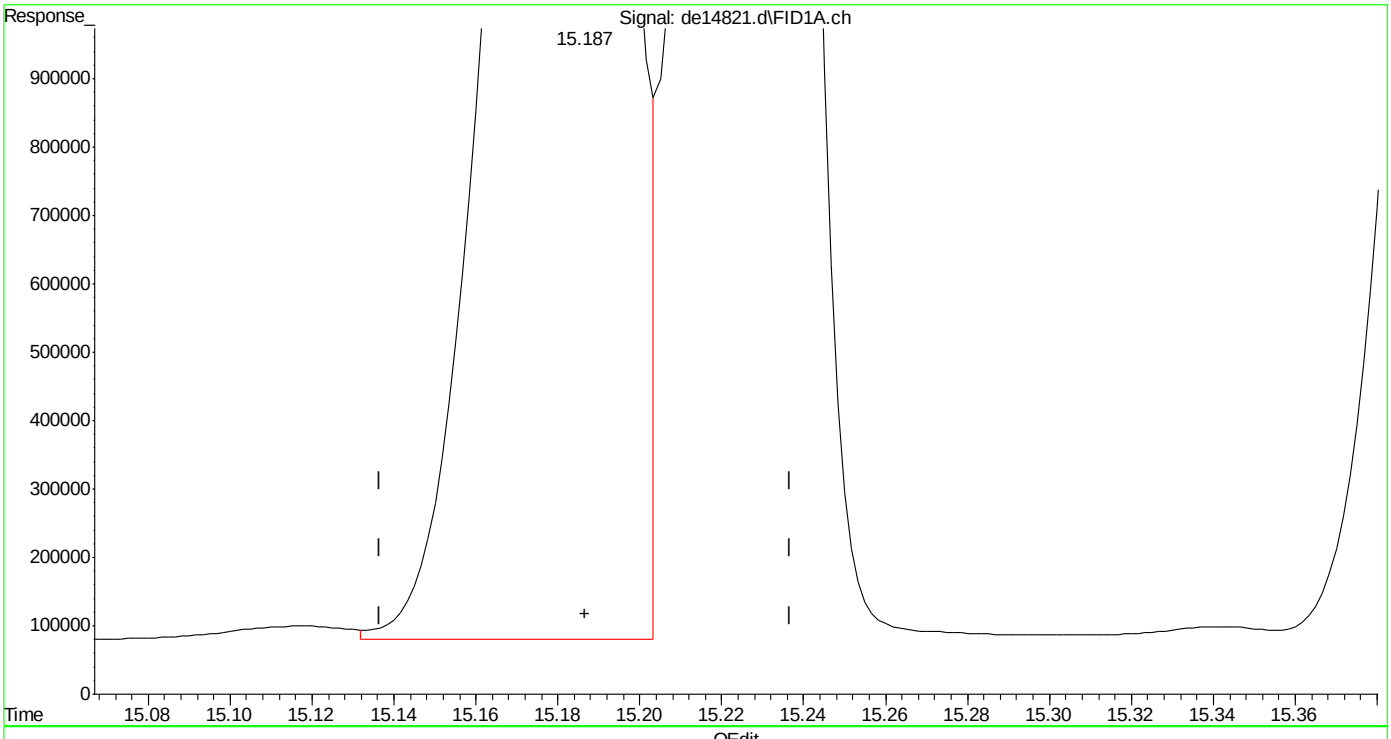
(+) = Expected Retention Time
EPH160713W.M Wed Jul 13 15:14:08 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14821.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 1:44 pm
Operator : thomasa
Sample : cc815-50,gde825
Misc : op47862,gde825,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 14:11:57 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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



(19) indeno(1,2,3-cd)pyrene
15.187min 53.429 µg/ml m
response 6253629

(+) = Expected Retention Time

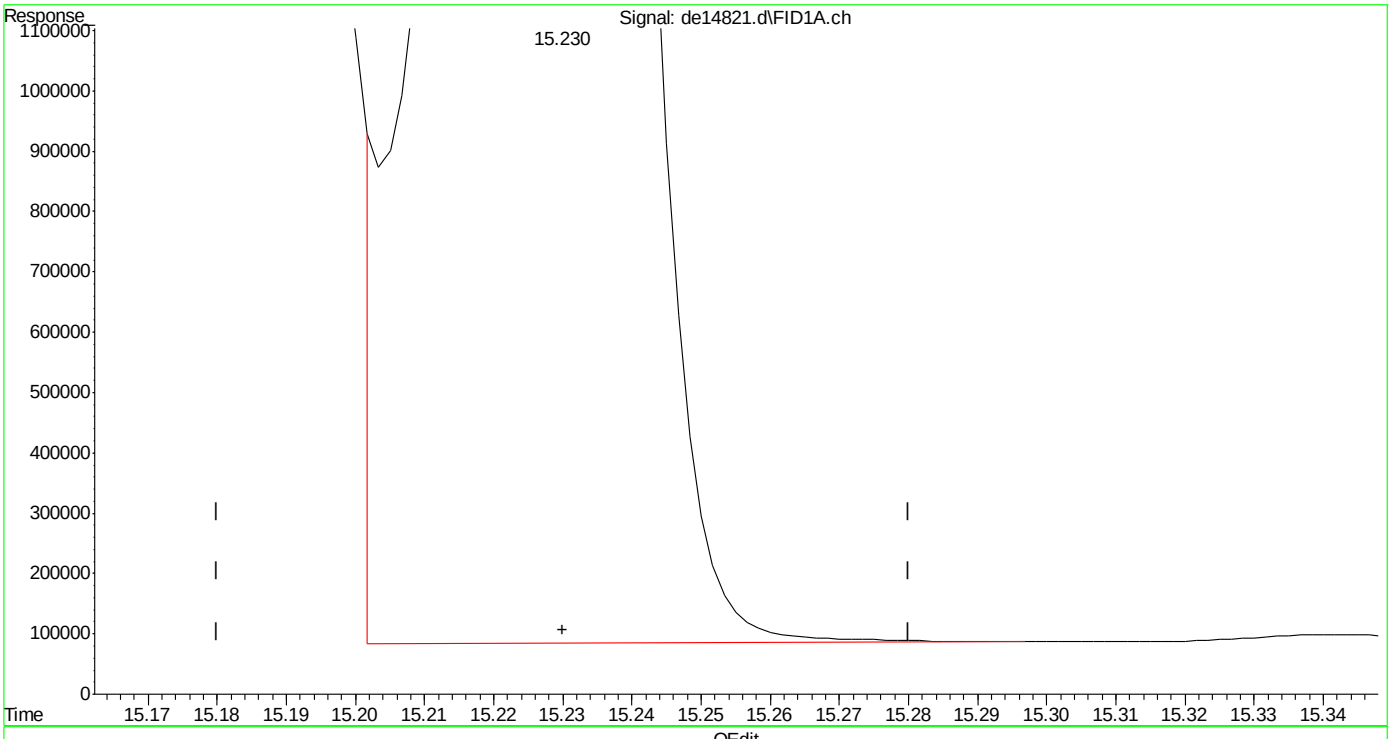
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14821.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 1:44 pm
Operator : thomasa
Sample : cc815-50,gde825
Misc : op47862,gde825,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 14:11:57 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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



(20) dibenzo(ah)anthracene
15.230min 54.236 µg/ml
response 6145358

(+) = Expected Retention Time

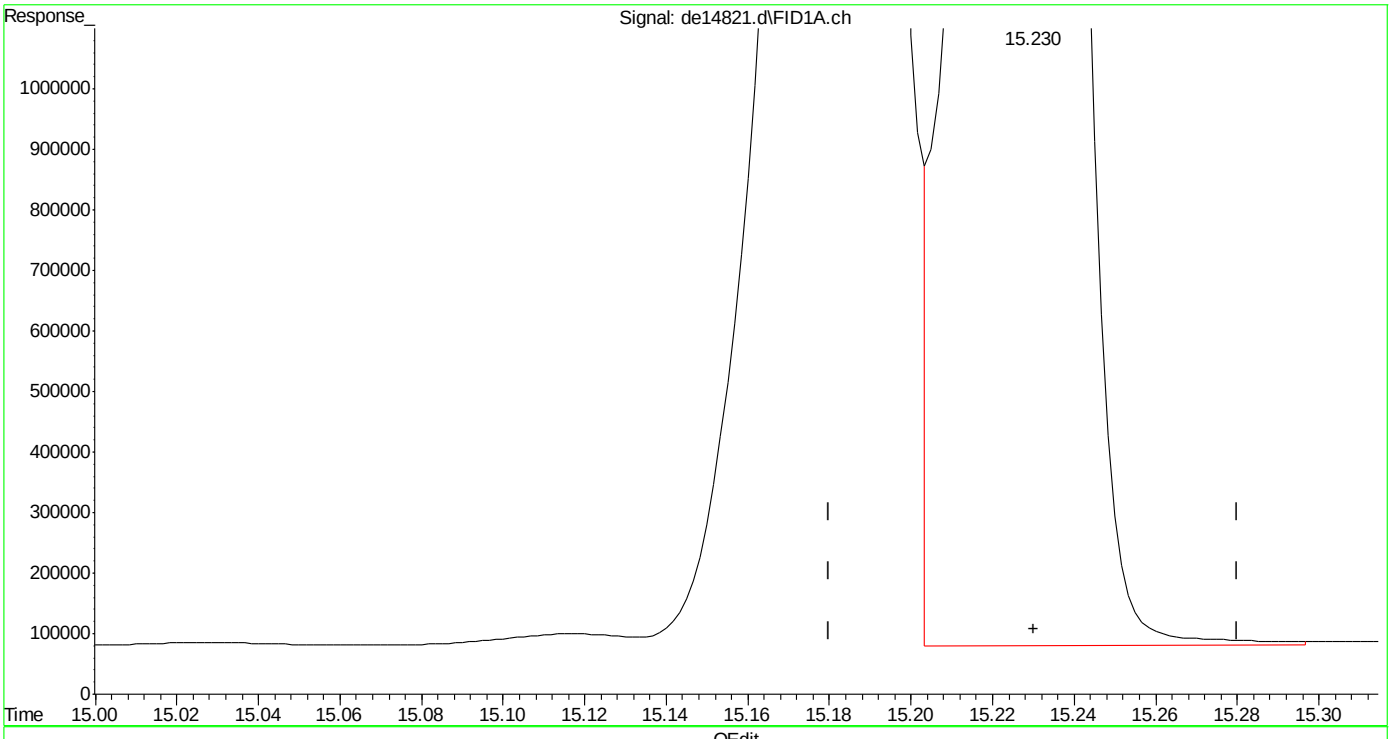
SGS ACCUTEST MC46783

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14821.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 1:44 pm
Operator : thomasa
Sample : cc815-50,gde825
Misc : op47862,gde825,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 14:11:57 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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



(20) dibenzo(ah)anthracene
15.230min 53.766 µg/ml m
response 6092075

(+) = Expected Retention Time
EPH160713W.M Wed Jul 13 15:14:38 2016

SGS ACCUTEST MC46783

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14825.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 4:20 pm
Operator : thomasa
Sample : cc815-50,gde825
Misc : op47862,gde825,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 16:42:20 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) s	2-fluorobiphenyl	6.497	5798336	50.651 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 253.26%#
6) s	2-bromonaphthalene	7.218	3900699	54.400 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 272.00%#
11) s	o-terphenyl	9.755	6689810	50.563 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 252.82%#
35) s	1-chlorooctadecane	11.213	3492144	53.599 µg/ml
Spiked Amount	20.000	Range	8 - 28	Recovery = 268.00%#
	Target Compounds			
2)	naphthalene	5.042	6375507	50.786 µg/ml
3)	2-methylnaphthalene	5.942	6275120	49.746 µg/ml
5)	acenaphthylene	7.052	6357114	50.244 µg/ml
7)	acenaphthene	7.293	6784384	48.708 µg/ml
8)	fluorene	7.937	6564417	51.098 µg/ml
9)	phenanthrene	9.110	6578803	52.666 µg/ml
10)	anthracene	9.168	6434561	48.367 µg/ml
12)	fluoranthene	10.608	6547677	51.048 µg/ml
13)	pyrene	10.863	6706527	51.062 µg/ml
14)	benzo(a)anthracene	12.425	6249487	51.444 µg/ml
15)	chrysene	12.472	6334257	49.622 µg/ml
16)	benzo(B)fluoranthene	13.715	6185954	52.248 µg/ml
17)	benzo(k)fluoranthene	13.748	6375178	49.794 µg/ml
18)	benzo(a)pyrene	14.050	5961666	50.540 µg/ml
19)	indeno(1,2,3-cd)pyrene	15.188	5999444	51.257 µg/ml
20)	dibenzo(ah)anthracene	15.233	5864786	51.760 µg/ml
21)	benzo(ghi)perylene	15.410	5810622	51.206 µg/ml
25) h	c-9	2.647	4520130	53.616 µg/mlm
26) h	c-10	3.800	4565739	54.157 µg/ml
27)	naphthalene #2	5.477	4818425	53.001 µg/ml
28)	c-12	5.655	4474038	53.069 µg/ml
29)	2-methylnaphthalene #2	6.370	4800850	53.380 µg/ml
30)	c-14	7.172	4456491	52.861 µg/ml
31)	c-16	8.502	4426281	52.503 µg/ml
32)	c-18	9.695	4430022	52.547 µg/ml
33)	c-19	10.250	4417412	56.762 µg/ml
34)	c-20	10.780	4302364	55.283 µg/ml
36)	c-22	11.775	4295743	55.198 µg/ml
37)	c-24	12.693	4007617	51.496 µg/ml
38)	c-26	13.543	4274079	54.920 µg/ml

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14825.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 4:20 pm
Operator : thomasa
Sample : cc815-50,gde825
Misc : op47862,gde825,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 16:42:20 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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

	Compound	R.T.	Response	Conc	Units
39)	c-28	14.337	4142478	53.229	µg/ml
40) h	c-30	15.082	4139465	53.190	µg/ml
41) h	c-36	16.983	3773355	48.486	µg/mlm

(f)=RT Delta > 1/2 Window (m)=manual int.

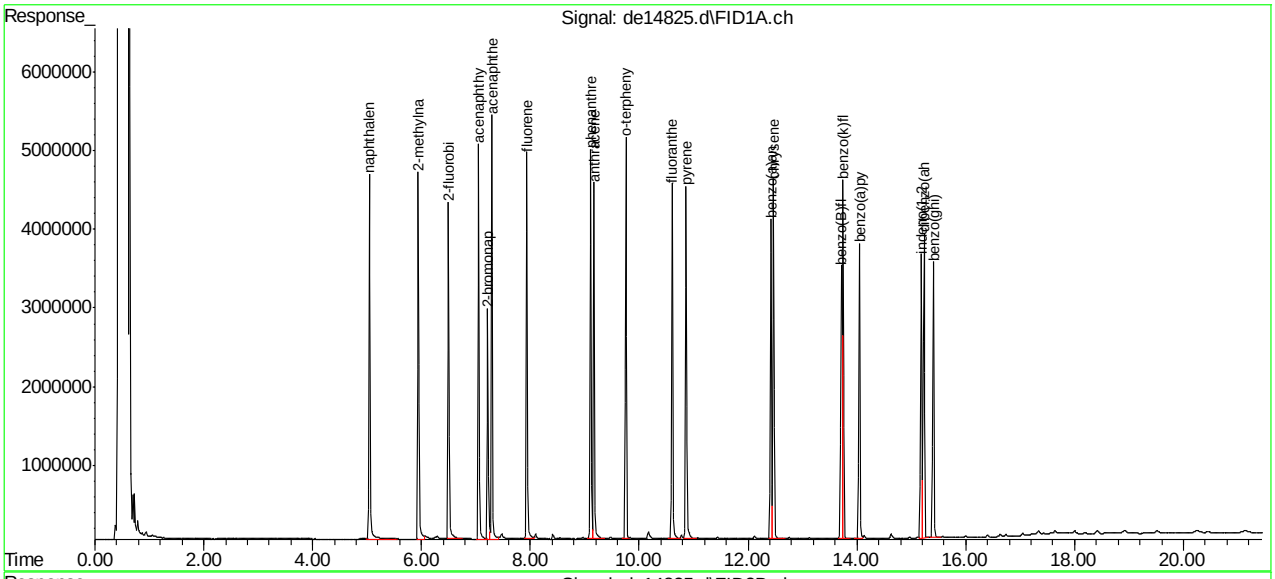
SGS ACCUTEST MC46783

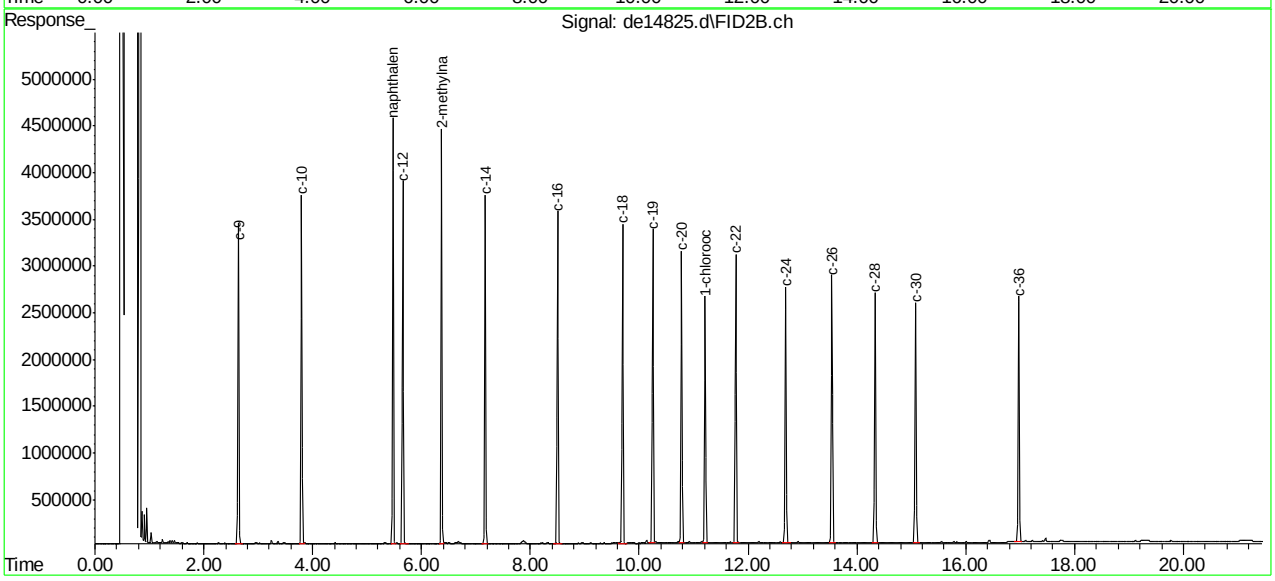
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\DE160713EPH\
Data File : de14825.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 13 Jul 2016 4:20 pm
Operator : thomasa
Sample : cc815-50,gde825
Misc : op47862,gde825,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

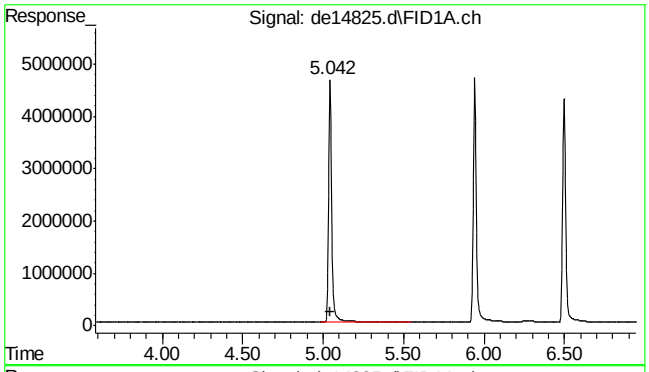
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 13 16:42:20 2016
Quant Method : C:\msdchem\1\METHODS\EPH160713W.M
Quant Title : BMAEPH-working method
QLast Update : Wed Jul 13 14:11:43 2016
Response via : Initial Calibration
Integrator: RTE

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



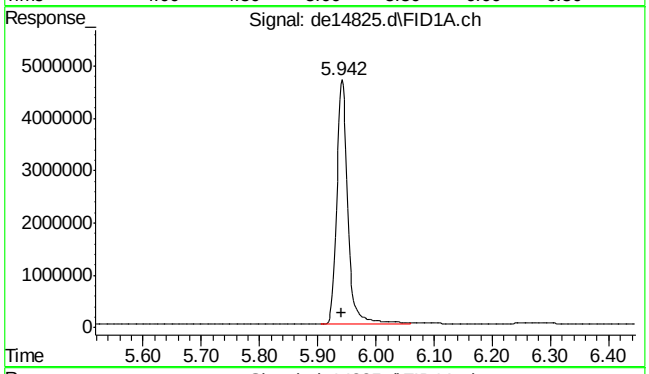


SGS ACCUTEST MC46783



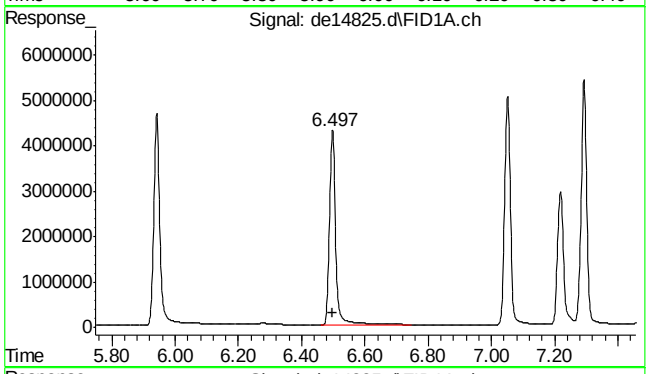
#2 naphthalene

R.T.: 5.042 min
Delta R.T.: 0.000 min
Response: 6375507
Conc: 50.79 µg/ml



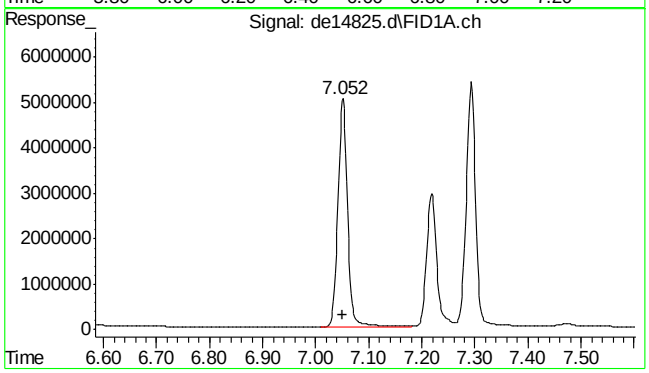
#3 2-methylnaphthalene

R.T.: 5.942 min
Delta R.T.: 0.000 min
Response: 6275120
Conc: 49.75 µg/ml



#4 2-fluorobiphenyl

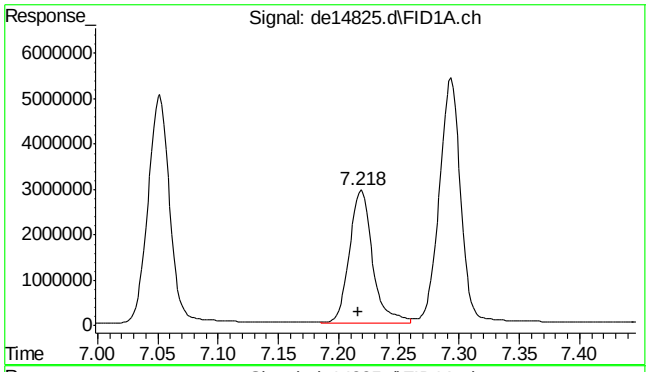
R.T.: 6.497 min
Delta R.T.: 0.000 min
Response: 5798336
Conc: 50.65 µg/ml



#5 acenaphthylene

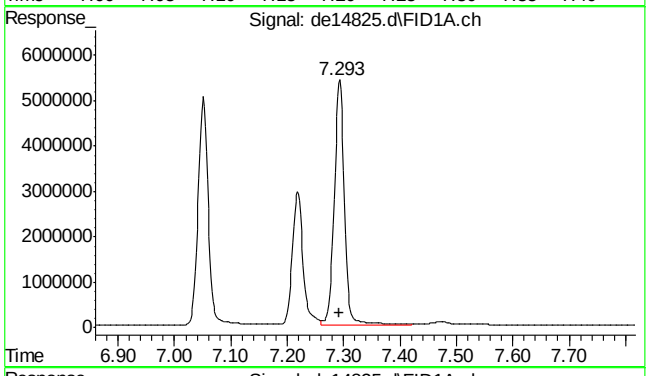
R.T.: 7.052 min
Delta R.T.: 0.002 min
Response: 6357114
Conc: 50.24 µg/ml

SGS ACCUTEST MC46783



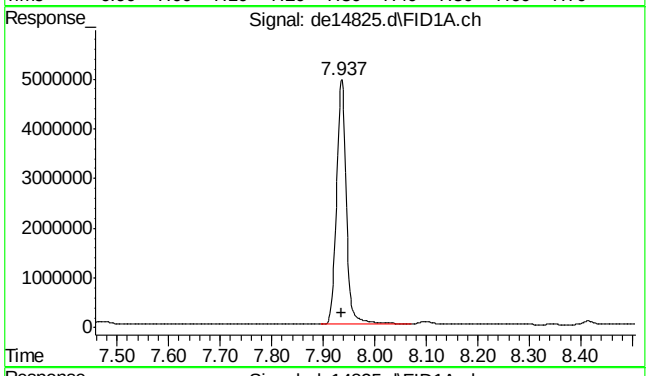
#6 2-bromonaphthalene

R.T.: 7.218 min
Delta R.T.: 0.002 min
Response: 3900699
Conc: 54.40 µg/ml



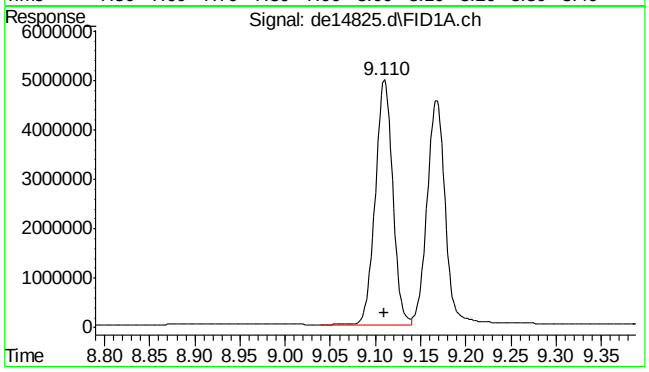
#7 acenaphthene

R.T.: 7.293 min
Delta R.T.: 0.002 min
Response: 6784384
Conc: 48.71 µg/ml



#8 fluorene

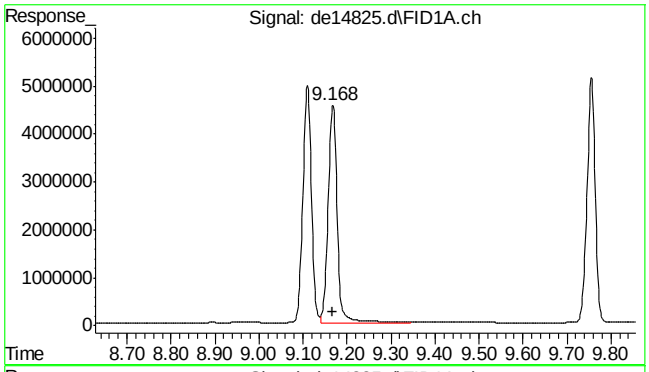
R.T.: 7.937 min
Delta R.T.: 0.002 min
Response: 6564417
Conc: 51.10 µg/ml



#9 phenanthrene

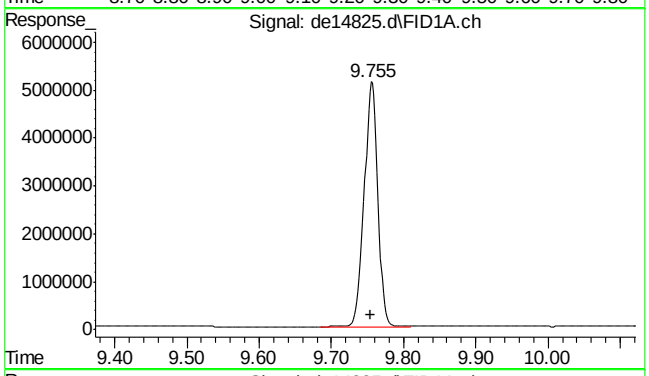
R.T.: 9.110 min
Delta R.T.: 0.000 min
Response: 6578803
Conc: 52.67 µg/ml

SGS ACCUTEST MC46783



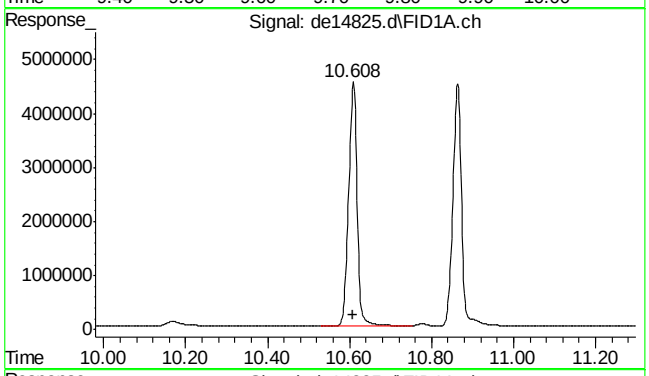
#10 anthracene

R.T.: 9.168 min
Delta R.T.: 0.002 min
Response: 6434561
Conc: 48.37 µg/ml



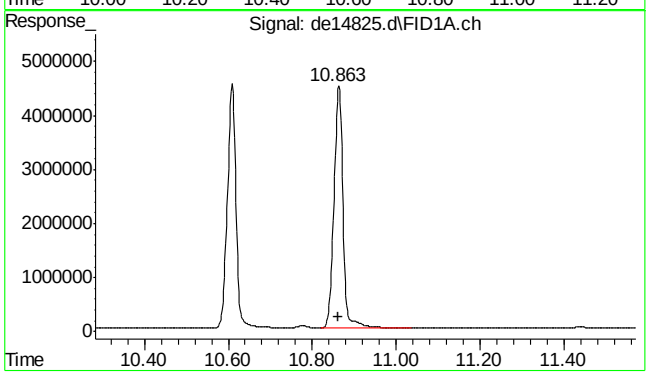
#11 o-terphenyl

R.T.: 9.755 min
Delta R.T.: 0.000 min
Response: 6689810
Conc: 50.56 µg/ml



#12 fluoranthene

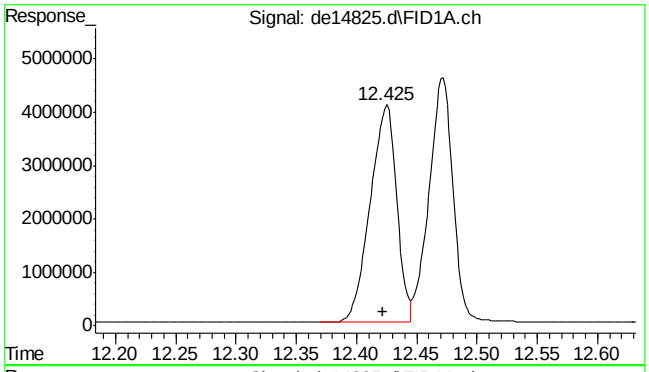
R.T.: 10.608 min
Delta R.T.: 0.002 min
Response: 6547677
Conc: 51.05 µg/ml



#13 pyrene

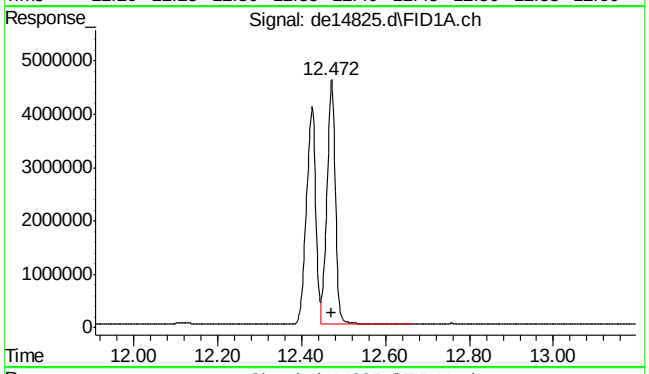
R.T.: 10.863 min
Delta R.T.: 0.002 min
Response: 6706527
Conc: 51.06 µg/ml

SGS ACCUTEST MC46783



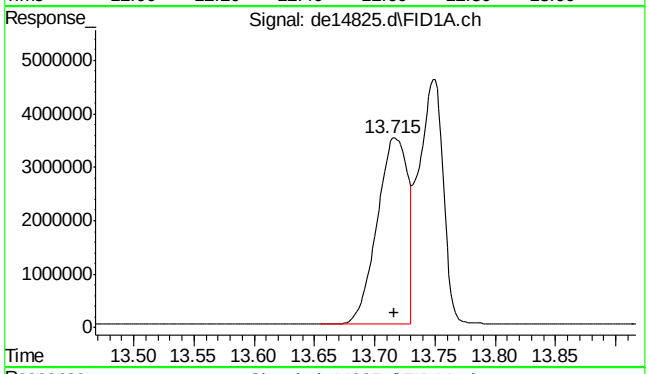
#14 benzo(a)anthracene

R.T.: 12.425 min
Delta R.T.: 0.003 min
Response: 6249487
Conc: 51.44 µg/ml



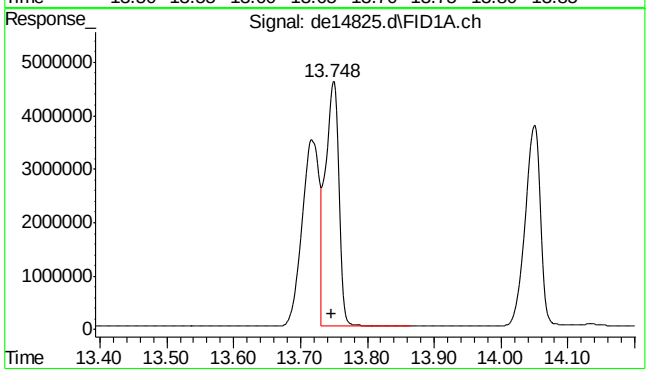
#15 chrysene

R.T.: 12.472 min
Delta R.T.: 0.002 min
Response: 6334257
Conc: 49.62 µg/ml



#16 benzo(B)fluoranthene

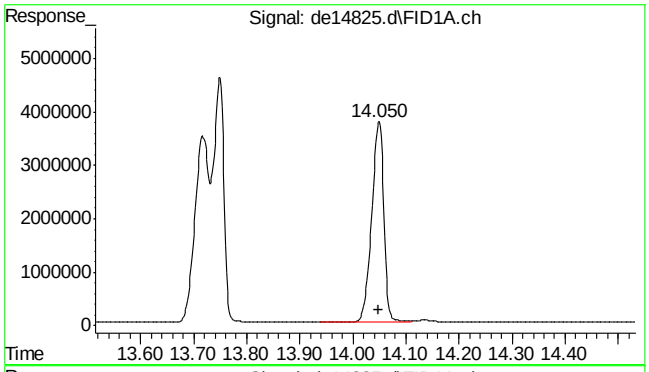
R.T.: 13.715 min
Delta R.T.: -0.002 min
Response: 6185954
Conc: 52.25 µg/ml



#17 benzo(k)fluoranthene

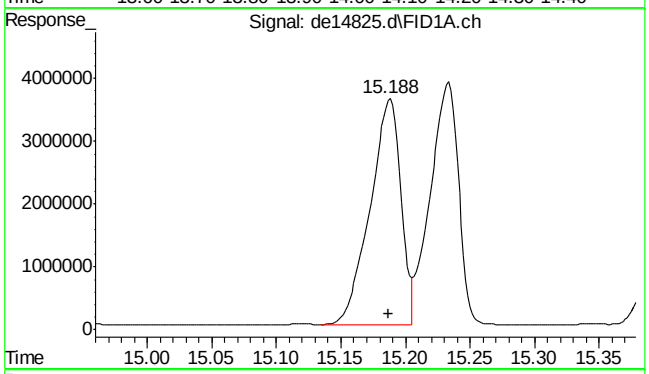
R.T.: 13.748 min
Delta R.T.: 0.002 min
Response: 6375178
Conc: 49.79 µg/ml

SGS ACCUTEST MC46783



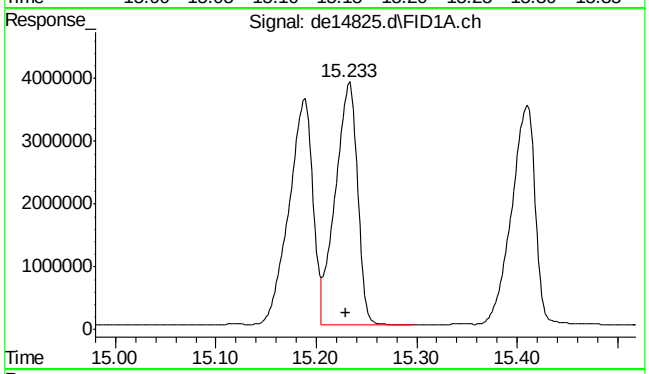
#18 benzo(a)pyrene

R.T.: 14.050 min
Delta R.T.: 0.002 min
Response: 5961666
Conc: 50.54 µg/ml



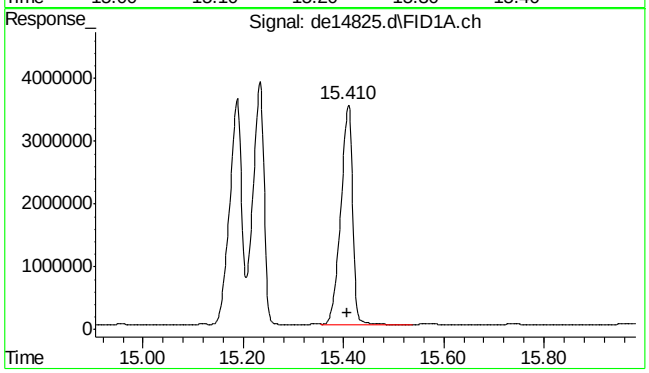
#19 indeno(1,2,3-cd)pyrene

R.T.: 15.188 min
Delta R.T.: 0.002 min
Response: 5999444
Conc: 51.26 µg/ml



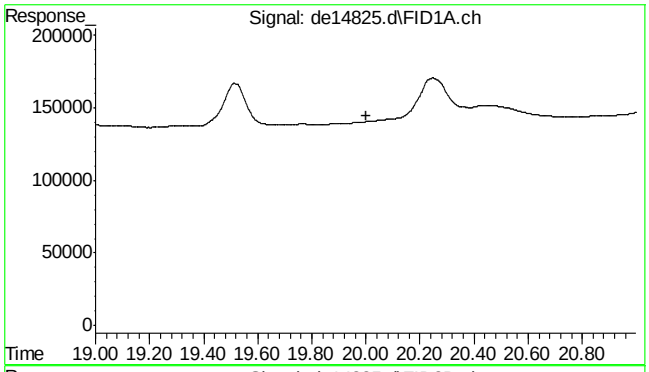
#20 dibenzo(ah)anthracene

R.T.: 15.233 min
Delta R.T.: 0.003 min
Response: 5864786
Conc: 51.76 µg/ml



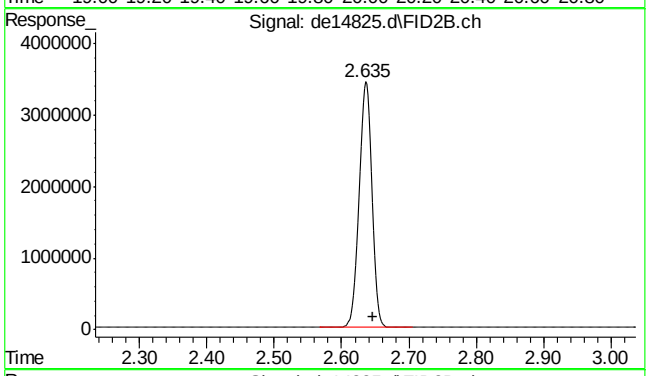
#21 benzo(ghi)perylene

R.T.: 15.410 min
Delta R.T.: 0.002 min
Response: 5810622
Conc: 51.21 µg/ml



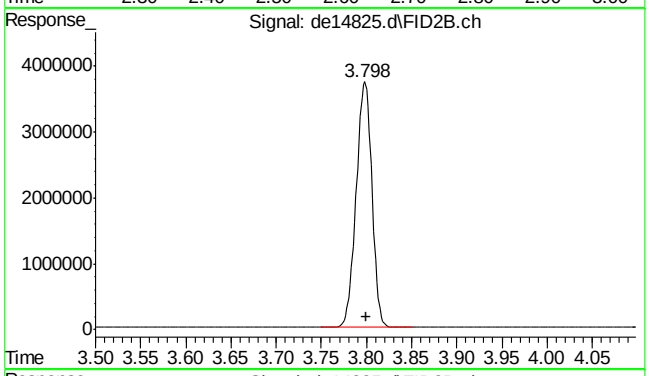
#22 bht

R.T.: 0.000 min
Exp R.T. : 20.000 min
Response: 0
Conc: N.D.



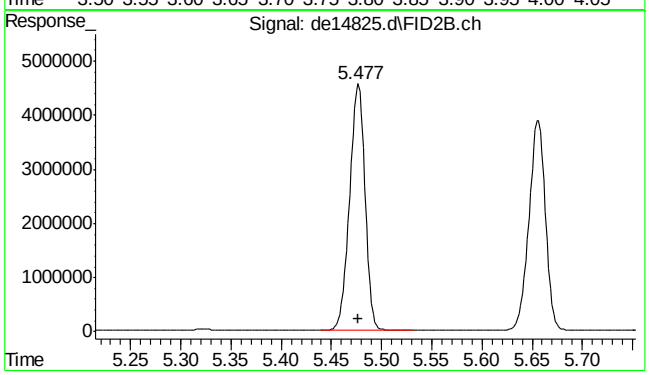
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 4520130
Conc: 53.62 µg/ml m



#26 c-10

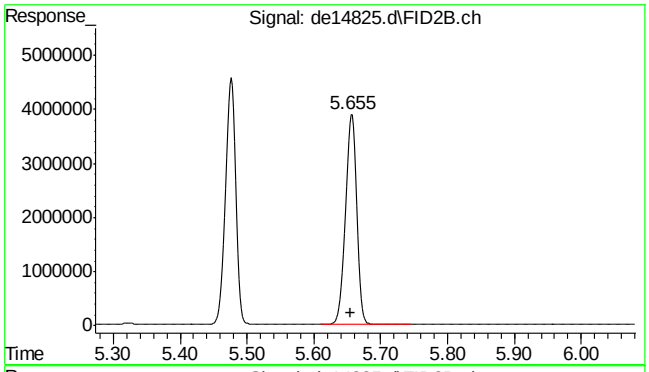
R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 4565739
Conc: 54.16 µg/ml



#27 naphthalene #2

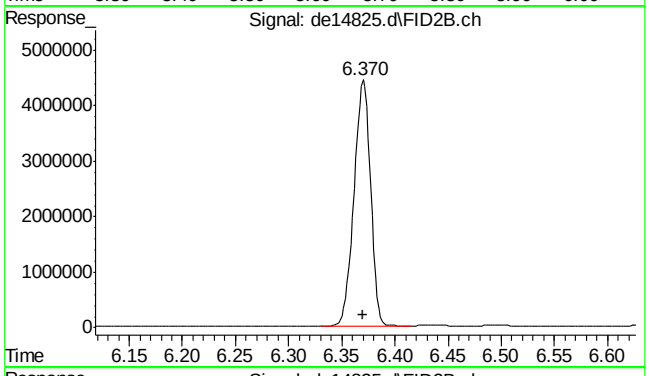
R.T.: 5.477 min
Delta R.T.: 0.000 min
Response: 4818425
Conc: 53.00 µg/ml

SGS ACCUTEST MC46783



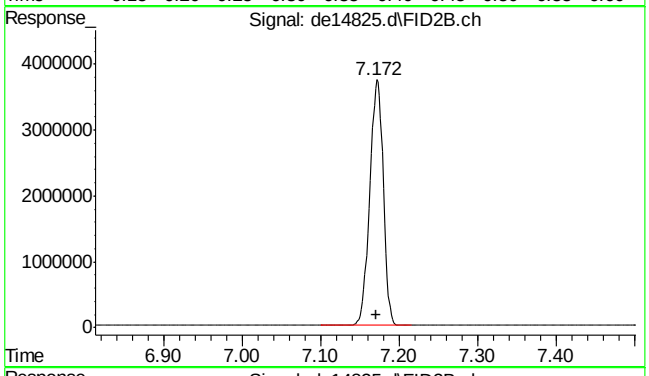
#28 c-12

R.T.: 5.655 min
Delta R.T.: 0.000 min
Response: 4474038
Conc: 53.07 µg/ml



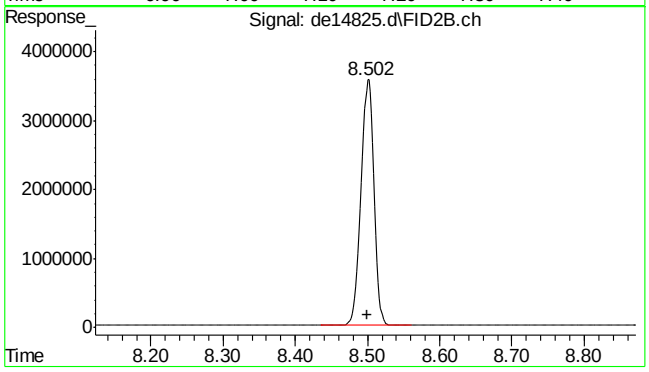
#29 2-methylnaphthalene #2

R.T.: 6.370 min
Delta R.T.: 0.000 min
Response: 4800850
Conc: 53.38 µg/ml



#30 c-14

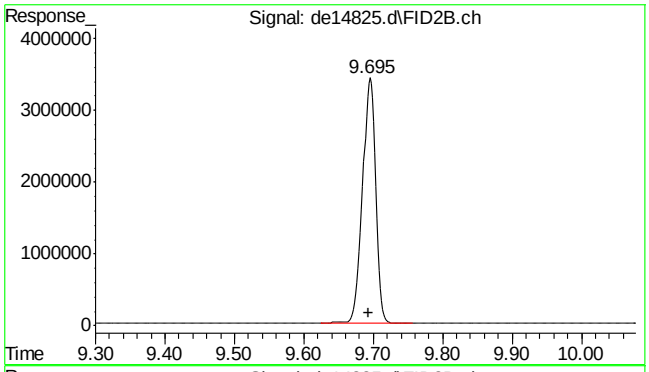
R.T.: 7.172 min
Delta R.T.: 0.000 min
Response: 4456491
Conc: 52.86 µg/ml



#31 c-16

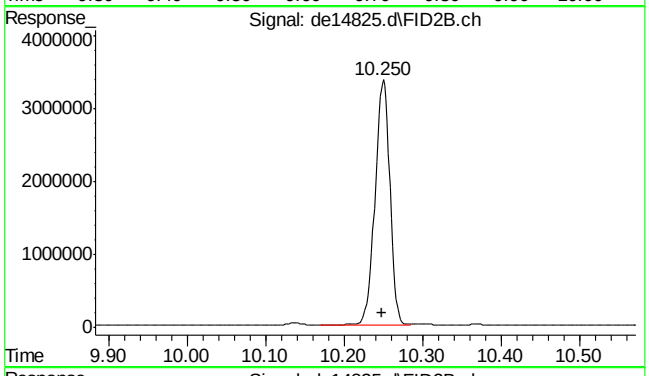
R.T.: 8.502 min
Delta R.T.: 0.002 min
Response: 4426281
Conc: 52.50 µg/ml

SGS ACCUTEST MC46783



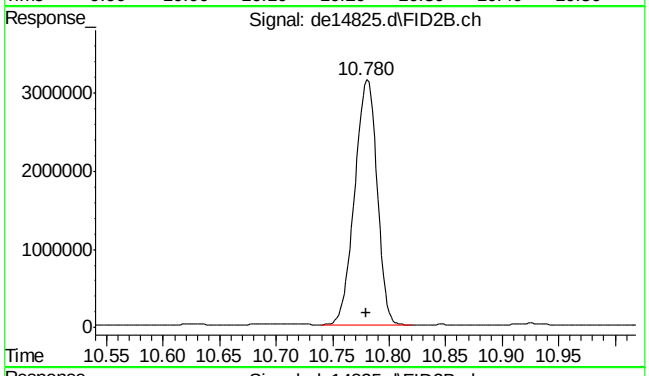
#32 c-18

R.T.: 9.695 min
Delta R.T.: 0.002 min
Response: 4430022
Conc: 52.55 µg/ml



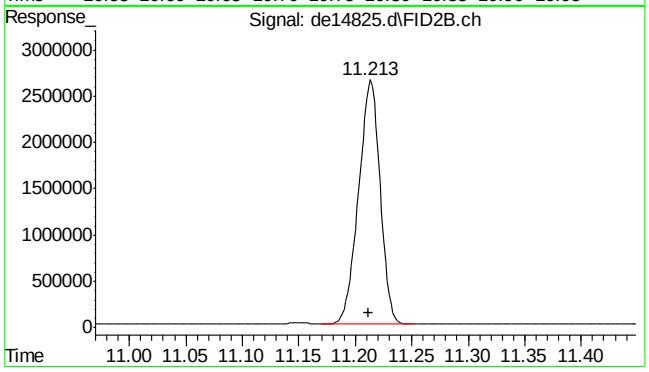
#33 c-19

R.T.: 10.250 min
Delta R.T.: 0.002 min
Response: 4417412
Conc: 56.76 µg/ml



#34 c-20

R.T.: 10.780 min
Delta R.T.: 0.000 min
Response: 4302364
Conc: 55.28 µg/ml



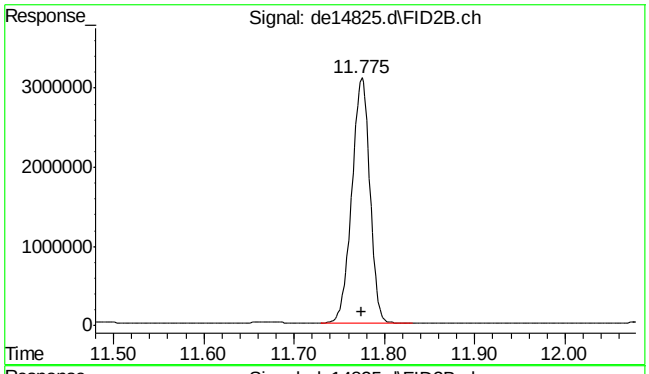
#35 1-chlorooctadecane

R.T.: 11.213 min
Delta R.T.: 0.002 min
Response: 3492144
Conc: 53.60 µg/ml

7.5.12

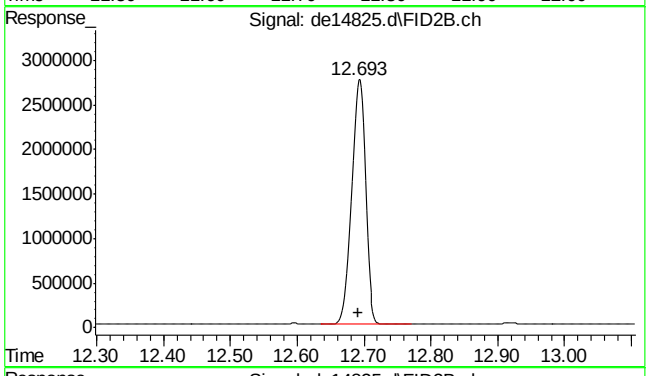
7

SGS ACCUTEST MC46783



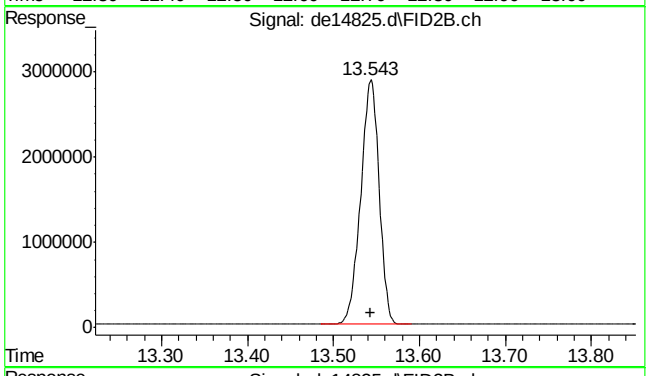
#36 c-22

R.T.: 11.775 min
Delta R.T.: 0.000 min
Response: 4295743
Conc: 55.20 µg/ml



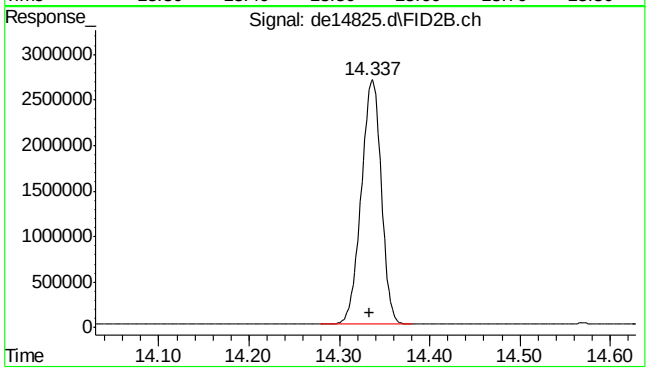
#37 c-24

R.T.: 12.693 min
Delta R.T.: 0.002 min
Response: 4007617
Conc: 51.50 µg/ml



#38 c-26

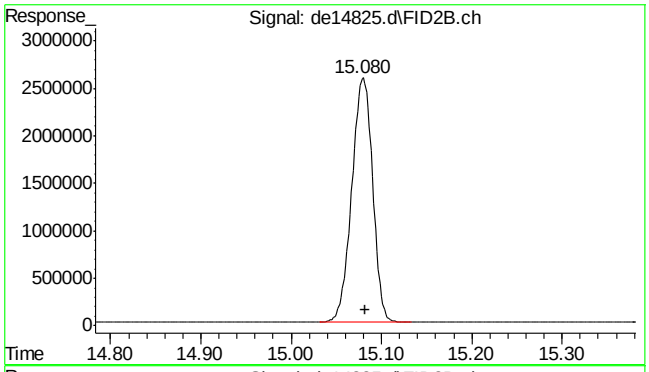
R.T.: 13.543 min
Delta R.T.: 0.000 min
Response: 4274079
Conc: 54.92 µg/ml



#39 c-28

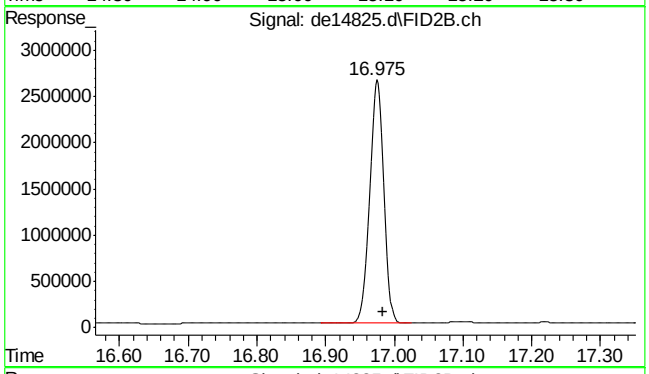
R.T.: 14.337 min
Delta R.T.: 0.003 min
Response: 4142478
Conc: 53.23 µg/ml

SGS ACCUTEST MC46783



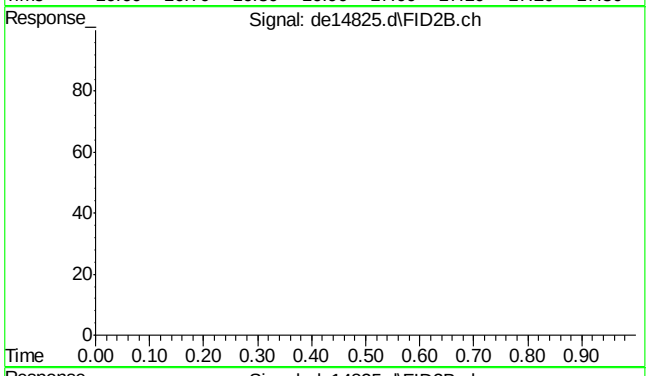
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 4139465
Conc: 53.19 µg/ml



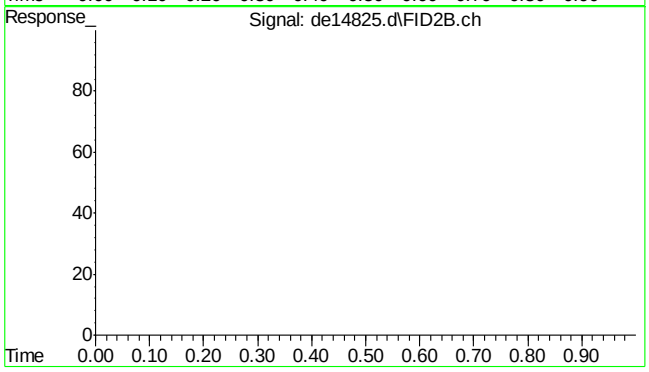
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 3773355
Conc: 48.49 µg/ml m



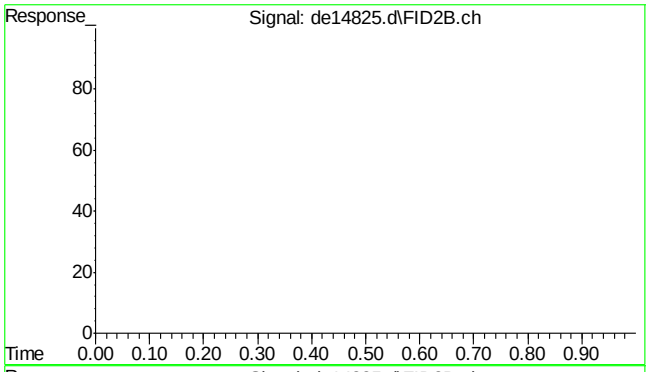
#42 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



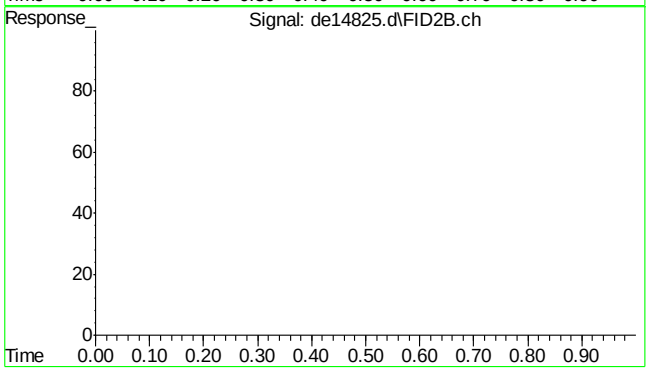
#43 bht

R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#44 bht

```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```



#45 bht

```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```

SGS Accutest, Inc.

Instrument: GC 32 (DE)

GC Analysis Log - Extractables

Run Date: 6.22.16

Analyst Signature:

Standard Data

Lot #	Description	Conc
~~GS18062~~	~~Ai CCV~~	
~~L 055~~	~~Aro CCV~~	
GS18250	Ai CCV	50ug/ml
L 251	Aro CCV	50ug/ml

Column Information: Front: Pest RTX-5 Alternate:
Rear : Pest2 RTX-5 Alternate:
Sequence File: 160622EPH.S
Quantitation Methods: EPH160622W.m
Instrument Run Batches: GDE 815
Data Acquisition Methods: EPH DUAL W Inj. Vol: 1ml
Inj. Vol:

Date of ICAL: 6.22.16 ICAL Verified ✓ Sample positions verified against sequence: ✓

Vial #	Data File ID	Sample ID	Ext.Batch	Analysis	Matrix	Dilution	Comments
101/102	DE14665	Prime	N/A	MA EPH	N/A	N/A	
101/102	66	IC815-1					1:200 Dilution of STOCK STDS
103/104	67	-2					1:100
105/106	68	-5					1:40
107/108	69	-20					1:10
109/110	70	IC815-50					1:4
111/112	71	IC815-100					1:2
113/114	72	-200					Ai = GS18060 / Aro = GS18053 (STOCK STDS)
115/116	73	ICV815-50					ICV = GOOD - Ai = GS18059 / Aro = GS18052
121/122	74	MC46445-1	OP47897		S		
1/2	75	OP47910-BS	OP47910		W		
3/4	76	-BSD					
5/6	77	-MB					
7/8	78	MC46422-1					LOD 1
9/10	79	-2					2
11/12	80	-3					3
13/14	81	-4					4
15/16	82	-5					5
17/18	83	-6					LOQ 1
141/142	84	IC815-50	N/A		N/A		
19/20	85	MC46422-7	OP47910		W		LOQ 2
21/22	86	-8					3
23/24	87	-9					4
25/26	88	OP47912-BS	OP47912		S		
27/28	89	-BSD					
29/30	90	-MB					
31/32	DE14691	MC46416-1					LOD 1

MTX = Matrix: Designate **W** for water, **S** for soil, **O** for oil. Dilution Solvent:_____ Lot#:_____

GC014-01
Date: 9/15/10

Review:_____

SGS Accutest, Inc.

Instrument: GC 32 (DE)

GC Analysis Log - Extractables

Run Date: 6-22-16

Analyst Signature: [signature]

Standard Data

Lot #	Description	Conc
	see page 1	

Column Information: Front: Pest RTX-5 Alternate:
Rear : Pest2 RTX-5 Alternate:
Sequence File:
Quantitation Methods:
Instrument Run Batches: see page 1
Data Acquisition Methods: Inj. Vol:
Inj. Vol:

Date of ICAL: 6-22-16 ICAL Verified ✓ Sample positions verified against sequence: ✓

Vial #	Data File ID	Sample ID	Ext.Batch	Analysis	Matrix	Dilution	Comments
33/34	DE14692	mc46416-2	op47912	MA EPH	S	N/A	LOD 2
35/36	93	-3					3
37/38	94	-4					4
141/142	95	CC815-50	N/A		N/A		ok
39/40	96	mc46416-5	op47912		S		LOQ 1
41/42	97	-6					2
43/44	98	-7					3
45/46	DE14699	-8					4
141/142	DE14700	CC815-50	N/A		N/A		ok

MTX = Matrix: Designate **W** for water, **S** for soil, **O** for oil. Dilution Solvent: N/A Lot#: N/A

GC014-01
Date: 9/15/10

Review:

SGS ACCUTEST MC46783

BMAEPH - Aliphatic Continuing Calibration Report

Data File Name	de14673.d
Operator	thomasa
Instrument Name	GCDE
Sample Name	icv815-50

Name	Amount	Response
c-9	49.76	4195241
c-10	50.89	4290577
c-12	49.91	4207991
c-14	49.40	4164771
c-16	48.67	4102769
c-18	47.70	4021156
c-19	50.77	3951249
c-20	50.17	3904441
c-22	50.47	3927561
c-24	49.76	3872214
c-26	48.27	3756324
c-28	47.34	3684091
c-30	46.33	3605357
c-36	41.61	3238093
1-chlorooctadecane	58.77	3828846
naphthalene #2	50.98	4634254
2-methylnaphthalene	50.67	4557390

	Continuing Avg. RF	Initial Avg. RF	%Diff	
C9-C18	83275	84306	**1.23**	**In Criteria**
C19-C36	74848	77824	**3.90**	**In Criteria**
c28/c20 Percentage:			94.36	

BMAEPH - Aliphatic Continuing Calibration Report

Data File Name	de14684.d
Operator	thomasa
Instrument Name	GCDE
Sample Name	cc815-50,gde815

Name	Amount	Response
c-9	51.72	4360013
c-10	52.41	4418750
c-12	51.27	4322472
c-14	50.81	4283569
c-16	50.39	4247877
c-18	49.38	4163154
c-19	52.84	4112130
c-20	51.48	4006070
c-22	51.23	3986727
c-24	48.07	3741265
c-26	50.92	3962863
c-28	49.29	3835912
c-30	50.07	3896601
c-36	44.80	3486644

	Continuing Avg. RF	Initial Avg. RF	%Diff	
C9-C18	85986	84306	**1.97**	**In Criteria**
C19-C36	77571	77824	**0.33**	**In Criteria**

c28/c20 Percentage: 95.75

1-chlorooctadecane	49.93	3253399
naphthalene #2	51.46	4678638
2-methylnaphthalene	51.43	4625207

BMAEPH - Aliphatic Continuing Calibration Report

Data File Name	de14695.d
Operator	thomasa
Instrument Name	GCDE
Sample Name	cc815-50,gde815

Name	Amount	Response
c-9	52.39	4416416
c-10	52.71	4443558
c-12	52.24	4403938
c-14	51.92	4377235
c-16	51.11	4308985
c-18	51.07	4305740
c-19	55.03	4282428
c-20	53.87	4192663
c-22	53.47	4161601
c-24	50.13	3901240
c-26	53.43	4158086
c-28	51.52	4009593
c-30	52.11	4055521
c-36	46.76	3639315
1-chlorooctadecane	52.12	3395960
naphthalene #2	51.89	4717292
2-methylnaphthalene	52.25	4699085

	Continuing Avg. RF	Initial Avg. RF	%Diff	
C9-C18	87520	84306	**3.74**	**In Criteria**
C19-C36	81001	77824	**4.00**	**In Criteria**

c28/c20 Percentage: 95.63

BMAEPH - Aliphatic Continuing Calibration Report

Data File Name	de14700.d
Operator	thomasa
Instrument Name	GCDE
Sample Name	cc815-50,gde815

Name	Amount	Response
c-9	54.99	4635661
c-10	55.48	4677229
c-12	54.09	4559854
c-14	53.84	4539211
c-16	52.41	4418733
c-18	51.62	4351911
c-19	55.79	4341478
c-20	53.87	4192730
c-22	53.36	4152734
c-24	49.98	3889501
c-26	53.19	4139722
c-28	51.46	4005038
c-30	52.36	4074754
c-36	46.77	3640022

	Continuing Avg. RF	Initial Avg. RF	%Diff	
C9-C18	90609	84306	**7.21**	**In Criteria**
C19-C36	81090	77824	**4.11**	**In Criteria**
c28/c20 Percentage:			95.52	

1-chlorooctadecane	52.22	3402363
naphthalene #2	54.03	4912021
2-methylnaphthalene	54.59	4909207

BMAEPH - BS/BSD Report

Operator thomasa
Instrument Name GCDE
Sample Name op47910-bs

Aromatic Recovery

Name		Amount	Spiked	Recovery	Outside Limits?
naphthalene		15.83	50	63.32	
2-methylnaphthalene		15.64	50	62.55	
2-fluorobiphenyl	s	15.90	40	79.48	
acenaphthylene		15.91	50	63.62	
2-bromonaphthalene	s	15.96	40	79.82	
acenaphthene		15.73	50	62.93	
fluorene		16.24	50	64.97	
phenanthrene		16.57	50	66.27	
anthracene		16.79	50	67.15	
o-terphenyl	s	14.63	40	73.17	
fluoranthene		17.74	50	70.96	
pyrene		17.57	50	70.26	
benzo(a)anthracene		18.44	50	73.76	
chrysene		18.27	50	73.07	
benzo(B)fluoranthene		19.29	50	77.14	
benzo(k)fluoranthene		17.43	50	69.74	
benzo(a)pyrene		18.93	50	75.70	
indeno(1,2,3-cd)pyrene		18.88	50	75.52	
dibenzo(ah)anthracene		19.57	50	78.28	
benzo(ghi)perylene		19.53	50	78.12	

Aliphatic Recovery Name		Amount	Spiked	Recovery	Outside Limits?
c-9		15.89	50	63.55	
c-10		19.05	50	76.20	
c-12		20.46	50	81.82	
c-14		20.65	50	82.59	
c-16		20.81	50	83.23	
c-18		21.99	50	87.96	
c-19		24.40	50	97.58	
c-20		24.95	50	99.81	
1-chlorooctadecane	s	15.92	40	79.60	
c-22		25.54	50	102.17	
c-24		25.06	50	100.26	
c-26		24.35	50	97.40	
c-28		23.81	50	95.26	
c-30		23.87	50	95.47	
c-36		20.48	50	81.90	

Recovery C9-C18
79.22

Recovery C19-C36
96.23

naphthalene #2	0.07	**Naphthalene Breakthrough**	**2-Methylnaphthalene Breakthrough**
2-methylnaphthalene #2	0.06	0.42	0.37

BMAEPH - BS/BSD Report

Operator thomasa
Instrument Name GCDE
Sample Name op47910-bsd

Aromatic Recovery

Name		Amount	Spiked	Recovery	Outside Limits?
naphthalene		14.54	50	58.18	
2-methylnaphthalene		14.77	50	59.09	
2-fluorobiphenyl	s	15.89	40	79.47	
acenaphthylene		15.24	50	60.97	
2-bromonaphthalene	s	15.54	40	77.69	
acenaphthene		15.25	50	61.01	
fluorene		15.74	50	62.95	
phenanthrene		16.37	50	65.46	
anthracene		16.56	50	66.26	
o-terphenyl	s	14.07	40	70.35	
fluoranthene		17.79	50	71.16	
pyrene		17.33	50	69.34	
benzo(a)anthracene		18.89	50	75.54	
chrysene		18.28	50	73.13	
benzo(B)fluoranthene		20.52	50	82.06	
benzo(k)fluoranthene		16.56	50	66.25	
benzo(a)pyrene		19.16	50	76.62	
indeno(1,2,3-cd)pyrene		19.12	50	76.46	
dibenzo(ah)anthracene		19.32	50	77.27	
benzo(ghi)perylene		19.50	50	78.02	

Aliphatic Recovery Name		Amount	Spiked	Recovery	Outside Limits?
c-9		13.22	50	52.89	
c-10		16.09	50	64.35	
c-12		17.92	50	71.67	
c-14		17.54	50	70.18	
c-16		17.80	50	71.22	
c-18		19.17	50	76.70	
c-19		21.30	50	85.21	
c-20		22.06	50	88.24	
1-chlorooctadecane	s	17.63	40	88.17	
c-22		22.33	50	89.34	
c-24		21.80	50	87.18	
c-26		21.13	50	84.50	
c-28		20.83	50	83.31	
c-30		20.83	50	83.33	
c-36		17.83	50	71.32	

Recovery C9-C18
67.83

Recovery C19-C36
84.05

naphthalene #2	0.40	**Naphthalene Breakthrough**	**2-Methylnaphthalene Breakthrough**
2-methylnaphthalene #2	0.19	2.69	1.28

BMAEPH - BS/BSD Report

Operator thomasa
Instrument Name GCDE
Sample Name op47912-bs

Aromatic Recovery

Name		Amount	Spiked	Recovery	Outside Limits?
naphthalene		10.64	50	42.55	
2-methylnaphthalene		10.60	50	42.40	
2-fluorobiphenyl	s	13.83	40	69.14	
acenaphthylene		11.27	50	45.08	
2-bromonaphthalene	s	13.21	40	66.06	
acenaphthene		11.46	50	45.82	
fluorene		11.70	50	46.81	
phenanthrene		12.47	50	49.89	
anthracene		13.09	50	52.35	
o-terphenyl	s	11.28	40	56.38	
fluoranthene		14.46	50	57.85	
pyrene		14.36	50	57.45	
benzo(a)anthracene		15.46	50	61.83	
chrysene		15.16	50	60.66	
benzo(B)fluoranthene		16.12	50	64.47	
benzo(k)fluoranthene		14.62	50	58.49	
benzo(a)pyrene		15.85	50	63.41	
indeno(1,2,3-cd)pyrene		15.72	50	62.87	
dibenzo(ah)anthracene		16.44	50	65.75	
benzo(ghi)perylene		16.29	50	65.18	

Aliphatic Recovery Name		Amount	Spiked	Recovery	Outside Limits?
c-9		12.43	50	49.73	
c-10		14.63	50	58.51	
c-12		15.53	50	62.13	
c-14		15.76	50	63.05	
c-16		16.43	50	65.72	
c-18		18.18	50	72.74	
c-19		20.23	50	80.93	
c-20		20.76	50	83.06	
1-chlorooctadecane	s	13.88	40	69.41	
c-22		21.21	50	84.84	
c-24		21.16	50	84.64	
c-26		20.61	50	82.43	
c-28		20.29	50	81.17	
c-30		20.24	50	80.95	
c-36		17.43	50	69.71	

Recovery C9-C18
61.98

Recovery C19-C36
80.97

naphthalene #2	0.06	**Naphthalene Breakthrough**	**2-Methylnaphthalene Breakthrough**
2-methylnaphthalene #2	0.07	0.57	0.69

BMAEPH - BS/BSD Report

Operator thomasa
Instrument Name GCDE
Sample Name op47912-bsd

Aromatic Recovery

Name		Amount	Spiked	Recovery	Outside Limits?
naphthalene		13.74	50	54.94	
2-methylnaphthalene		14.03	50	56.12	
2-fluorobiphenyl	s	14.42	40	72.08	
acenaphthylene		14.65	50	58.59	
2-bromonaphthalene	s	14.57	40	72.84	
acenaphthene		14.53	50	58.12	
fluorene		15.23	50	60.91	
phenanthrene		15.80	50	63.20	
anthracene		16.25	50	65.00	
o-terphenyl	s	13.25	40	66.26	
fluoranthene		17.41	50	69.65	
pyrene		17.46	50	69.84	
benzo(a)anthracene		18.43	50	73.74	
chrysene		18.23	50	72.91	
benzo(B)fluoranthene		19.60	50	78.42	
benzo(k)fluoranthene		16.77	50	67.09	
benzo(a)pyrene		18.83	50	75.33	
indeno(1,2,3-cd)pyrene		18.80	50	75.20	
dibenzo(ah)anthracene		19.15	50	76.62	
benzo(ghi)perylene		19.25	50	77.01	

Aliphatic Recovery Name		Amount	Spiked	Recovery	Outside Limits?
c-9		14.70	50	58.79	
c-10		17.04	50	68.15	
c-12		18.28	50	73.11	
c-14		18.48	50	73.90	
c-16		18.93	50	75.71	
c-18		19.94	50	79.78	
c-19		22.17	50	88.68	
c-20		22.41	50	89.65	
1-chlorooctadecane	s	13.78	40	68.89	
c-22		23.21	50	92.85	
c-24		23.07	50	92.27	
c-26		22.60	50	90.39	
c-28		22.16	50	88.63	
c-30		22.32	50	89.27	
c-36		19.72	50	78.89	

Recovery C9-C18
71.57

Recovery C19-C36
88.83

naphthalene #2	0.00	**Naphthalene Breakthrough**	**2-Methylnaphthalene Breakthrough**
2-methylnaphthalene #2	0.00	0.00	0.00

Operator thomasa
Instrument Nai GCDE

BMAEPH - Aromatic Calibration

	de14672.d	de14671.d	de14670.d	de14669.d	de14668.d	de14667.d	de14666.d
	200	100	50	20	5	2	1
naphthalene	23929928	11983627	6623759	2761210	613912	264011	113943
2-methylnaphthalene	23749913	11763665	6449170	2757665	647160	279926	110362
acenaphthylene	23550221	11745266	6467035	2699454	631728	273879	122875
acenaphthene	24636559	12324034	6839743	2910644	690779	317977	149113
fluorene	24085117	12025206	6614321	2748574	642877	281653	119469
phenanthrene	24106717	12085999	6609576	2679317	606352	261923	114628
anthracene	22785902	11487748	6241594	2716250	684741	321096	144305
fluoranthene	23418788	11886285	6526164	2677937	635011	285254	127841
pyrene	23940175	12197688	6691657	2734764	645412	292246	131934
benzo(a)anthracene	22291957	11507490	6286876	2555074	589300	269926	117526
chrysene	22470484	11612003	6308858	2573974	623706	290892	140012
benzo(B)fluoranthene	22828942	12199538	6276008	2466504	584753	248683	102498
benzo(k)fluoranthene	21742175	10965306	6302924	2513496	612352	320118	143585
benzo(a)pyrene	21269399	10999807	5968168	2419189	570345	266332	121812
indeno(1,2,3-cd)pyrene	24533309	11203362	5972476	2411740	547262	247469	111401
dibenzo(ah)anthracene	19101555	10503451	5802054	2357845	564801	255274	118078
benzo(ghi)perylene	21702878	10703286	5770697	2338304	541223	246509	114951
Total Mass (Targets)	3400	1700	850	340	85	34	17
Total Area (Targets)	390144019	197193761	107751080	44321941	10431714	4723168	2104333
RF	114748	115996	126766	130359	122726	138917	123784
Average RF	124757						

% RSD **6.19** **<25%**
C11-C22 Aromatics **24951321** **Insert into 200ppm level**

BMAEPH - Aliphatic Calibration

Instrument Name GCDE
Operator thomasa

	de14672.d	de14671.d	de14670.d	de14669.d	de14668.d	de14667.d	de14666.d
	200	100	50	20	5	2	1
c-9	15645868	7937669	4268198	1780249	436956	185709	80145
c-10	15836986	8047408	4303580	1799081	446232	187715	81660
c-12	15551710	7886242	4254199	1778842	432854	183928	80147
c-14	15402298	7814489	4224254	1773611	433815	186756	80327
c-16	15150013	7764221	4179046	1757632	435918	188090	83899
c-18	15122313	7676676	4132964	1741774	428513	183338	80411
Total Mass	1200	600	300	120	30	12	6
Total Area	92709188	47126705	25362241	10631189	2614288	1115536	486589
RF	77258	78545	84541	88593	87143	92961	81098
Average RF	84306						
% RSD	6.25	**<25%**					
C9 -C18	16861104	**Inserted into 200 ppm level**					

c-19	15097457	7623083	4137861	1723593	421112	187087	84447
c-20	14729110	7477882	4040583	1694193	414796	178236	77747
c-22	14630809	7420088	4011818	1677797	410716	172417	79966
c-24	13632931	6931545	3738267	1563000	382937	167132	75293
c-26	14575529	7429512	3986914	1663159	406080	174403	77835
c-28	14116516	7155151	3856562	1607781	391589	160693	72455
c-30	13936754	7181147	3850472	1615388	408558	187403	93535
c-36	13213232	6572820	3524293	1450363	339764	136856	59371
Total Mass	1600	800	400	160	40	16	8
Total Area	113932338	57791228	31146770	12995274	3175552	1364227	620649
RF	71208	72239	77867	81220	79389	85264	77581
Aerage RF	77824						
% RSD	5.84	**<25%**					
C19-C36	15564807	**Inserted into 200 ppm level**					

SGS Accutest, Inc.

Instrument: GC 32 (DE)

GC Analysis Log - Extractables

Run Date: 7.11.16

Analyst Signature: [signature]

Standard Data

Lot #	Description	Conc
G518250	Air CCV	50 ng/ml
↓ 251	Air CCV	50 ng/ml

Column Information: Front: Pest RTX-5 Alternate:
Rear : Pest2 RTX-5 Alternate:
Sequence File: 160711.S
Quantitation Methods: DE16711W.M
Instrument Run Batches: GDE 823
Data Acquisition Methods: EPH DUAL W Inj. Vol: 1uL
Inj. Vol:

Date of ICAL: 6-22-16 ICAL Verified ✓ Sample positions verified against sequence: ✓

Vial #	Data File ID	Sample ID	Ext.Batch	Analysis	Matrix	Dilution	Comments
141/142	DE14794	CC815-50	N.A	MA EPH	N.A	N.A	(OK) OK
1/2	95	OP48098-BS	OP48098		W		
3/4	96	-BSD					
5/6	97	-MB					
7/8	98	MC46783-1					
9/10	99	-2					LOW COD/ND - RR non Frac
11/12	DE14800	-3					
13/14	01	-4					
15/16	02	-5					LOW COD/ND - RR non Frac
17/18	03	OP48098-MS					
19/20	04	-MSD					
141/143	05	CC815-50	N/A		N.A		N/A OK
21/22	06	OP48092-BS	OP48092		S		
23/24	07	-BSD					
25/26	08	-MB					
27/28	09	-MS					
29/30	10	-MSD					
31/32	11	MC46773-1					
33/34	12	-2					
35/36	13	-3					
37/38	14	MC46758-1					
141/142	DE14815	CC815-50	N.A		N.A		(OK) OK

MTX = Matrix: Designate **W** for water, **S** for soil, **O** for oil. Dilution Solvent: N/A Lot#: N/A

GC014-01
Date: 9/15/10

Review:

2

7.6.2

7

BMAEPH - Aliphatic Continuing Calibration Report

Data File Name	de14794.d
Operator	thomasa
Instrument Name	GCDE
Sample Name	cc815-50,gde823

Name	Amount	Response
c-9	52.60	4434310
c-10	52.91	4460319
c-12	51.98	4382323
c-14	51.32	4326924
c-16	50.34	4244231
c-18	50.10	4223398
c-19	53.34	4151145
c-20	52.17	4059722
c-22	51.64	4018559
c-24	48.13	3745507
c-26	51.30	3992318
c-28	49.72	3869521
c-30	49.77	3873039
c-36	44.08	3430786
1-chlorooctadecane	49.58	3230076
naphthalene #2	51.99	4726207
2-methylnaphthalene	52.26	4699712

	Continuing Avg. RF	Initial Avg. RF	%Diff	
C9-C18	86905	84306	**3.04**	**In Criteria**
C19-C36	77851	77824	**0.04**	**In Criteria**
c28/c20 Percentage:			95.31	

7.6.2

7

SGS ACCUTEST MC46783

BMAEPH - Aliphatic Continuing Calibration Report

Data File Name	de14805.d
Operator	thomasa
Instrument Name	GCDE
Sample Name	cc815-50,gde823

Name	Amount	Response
c-9	51.86	4371805
c-10	52.31	4409793
c-12	51.70	4358317
c-14	51.73	4360986
c-16	51.51	4342951
c-18	51.72	4360592
c-19	55.85	4346845
c-20	54.56	4246294
c-22	54.65	4252924
c-24	50.82	3955174
c-26	54.60	4249038
c-28	52.95	4120704
c-30	52.71	4102088
c-36	48.71	3790465
1-chlorooctadecane	52.52	3421769
naphthalene #2	51.67	4697495
2-methylnaphthalene	52.32	4705618

	Continuing Avg. RF	Initial Avg. RF	%Diff	
C9-C18	87348	84306	**3.55**	**In Criteria**
C19-C36	82659	77824	**6.03**	**In Criteria**
c28/c20 Percentage:			97.04	

BMAEPH - Aliphatic Continuing Calibration Report

Data File Name	de14815.d
Operator	thomasa
Instrument Name	GCDE
Sample Name	ecc815-50,gde823

Name	Amount	Response		Continuing Avg. RF	Initial Avg. RF	%Diff	
c-9	52.86	4456790					
c-10	53.39	4501427					
c-12	52.78	4449328	**C9-C18**	88777	84306	**5.17**	**In Criteria**
c-14	52.37	4415092					
c-16	52.18	4399089					
c-18	52.33	4411386					
c-19	56.26	4378377	**C19-C36**	83196	77824	**6.67**	**In Criteria**
c-20	55.13	4290422					
c-22	54.90	4272271					
c-24	51.26	3989388		c28/c20 Percentage:		96.34	
c-26	54.81	4265491					
c-28	53.11	4133317					
c-30	53.19	4139290					
c-36	48.96	3810043					

1-chlorooctadecane	53.15	3462932
naphthalene #2	52.75	4795260
2-methylnaphthalene	53.02	4768708

BMAEPH - BS/BSD Report

Operator thomasa
Instrument Name GCDE
Sample Name op48098-bs

Aromatic Recovery

Name		Amount	Spiked	Recovery	Outside Limits?
naphthalene		16.20	50	64.81	
2-methylnaphthalene		15.83	50	63.32	
2-fluorobiphenyl	s	14.98	40	74.88	
acenaphthylene		16.17	50	64.67	
2-bromonaphthalene	s	14.81	40	74.03	
acenaphthene		16.99	50	67.95	
fluorene		16.68	50	66.71	
phenanthrene		17.09	50	68.36	
anthracene		17.78	50	71.10	
o-terphenyl	s	14.17	40	70.85	
fluoranthene		18.82	50	75.27	
pyrene		18.87	50	75.50	
benzo(a)anthracene		19.92	50	79.67	
chrysene		19.43	50	77.73	
benzo(B)fluoranthene		20.17	50	80.69	
benzo(k)fluoranthene		19.58	50	78.33	
benzo(a)pyrene		20.40	50	81.58	
indeno(1,2,3-cd)pyrene		20.59	50	82.36	
dibenzo(ah)anthracene		20.95	50	83.79	
benzo(ghi)perylene		21.16	50	84.66	

Aliphatic Recovery Name		Amount	Spiked	Recovery	Outside Limits?
c-9		15.21	50	60.82	
c-10		17.60	50	70.39	
c-12		18.55	50	74.22	
c-14		18.93	50	75.73	
c-16		19.08	50	76.32	
c-18		20.16	50	80.64	
c-19		22.08	50	88.30	
c-20		22.38	50	89.52	
1-chlorooctadecane	s	10.98	40	54.90	
c-22		22.93	50	91.72	
c-24		22.76	50	91.04	
c-26		22.23	50	88.90	
c-28		21.58	50	86.34	
c-30		20.75	50	83.01	
c-36		14.42	50	57.69	

Recovery C9-C18
73.02

Recovery C19-C36
84.57

naphthalene #2	0.12	**Naphthalene Breakthrough**	**2-Methylnaphthalene Breakthrough**
2-methylnaphthalene #2	0.00	0.74	0.00

BMAEPH - BS/BSD Report

Operator thomasa
Instrument Name GCDE
Sample Name op48098-bsd

Aromatic Recovery

Name		Amount	Spiked	Recovery	Outside Limits?
naphthalene		15.27	50	61.06	
2-methylnaphthalene		15.31	50	61.24	
2-fluorobiphenyl	s	14.08	40	70.41	
acenaphthylene		15.88	50	63.50	
2-bromonaphthalene	s	14.15	40	70.75	
acenaphthene		16.55	50	66.19	
fluorene		16.39	50	65.54	
phenanthrene		17.01	50	68.04	
anthracene		17.39	50	69.57	
o-terphenyl	s	11.93	40	59.65	
fluoranthene		18.64	50	74.56	
pyrene		18.64	50	74.55	
benzo(a)anthracene		19.90	50	79.61	
chrysene		19.76	50	79.03	
benzo(B)fluoranthene		21.27	50	85.10	
benzo(k)fluoranthene		18.82	50	75.30	
benzo(a)pyrene		20.64	50	82.55	
indeno(1,2,3-cd)pyrene		20.52	50	82.07	
dibenzo(ah)anthracene		21.56	50	86.23	
benzo(ghi)perylene		21.43	50	85.72	

Aliphatic Recovery Name		Amount	Spiked	Recovery	Outside Limits?
c-9		14.45	50	57.78	
c-10		17.26	50	69.04	
c-12		18.84	50	75.37	
c-14		19.41	50	77.63	
c-16		19.53	50	78.11	
c-18		20.63	50	82.52	
c-19		22.69	50	90.77	
c-20		23.15	50	92.61	
1-chlorooctadecane	s	9.05	40	45.25	
c-22		23.48	50	93.93	
c-24		23.54	50	94.15	
c-26		23.04	50	92.15	
c-28		22.33	50	89.32	
c-30		20.25	50	81.00	
c-36		7.94	50	31.74	

Recovery C9-C18
73.41

Recovery C19-C36
83.21

naphthalene #2	0.08	**Naphthalene Breakthrough**	**2-Methylnaphthalene Breakthrough**
2-methylnaphthalene #2	0.07	0.49	0.42

SGS ACCUTEST MC46783

BMAEPH - BS/BSD Report

Operator thomasa
Instrument Name GCDE
Sample Name op48092-bs

Aromatic Recovery Name		Amount	Spiked	Recovery	Outside Limits?
naphthalene		11.21	50	44.85	
2-methylnaphthalene		11.74	50	46.97	
2-fluorobiphenyl	s	15.84	40	79.22	
acenaphthylene		13.13	50	52.52	
2-bromonaphthalene	s	15.91	40	79.56	
acenaphthene		13.78	50	55.13	
fluorene		13.93	50	55.72	
phenanthrene		14.80	50	59.19	
anthracene		15.25	50	60.98	
o-terphenyl	s	12.82	40	64.10	
fluoranthene		16.07	50	64.27	
pyrene		15.87	50	63.46	
benzo(a)anthracene		16.71	50	66.83	
chrysene		16.48	50	65.90	
benzo(B)fluoranthene		16.91	50	67.63	
benzo(k)fluoranthene		16.40	50	65.61	
benzo(a)pyrene		17.16	50	68.66	
indeno(1,2,3-cd)pyrene		16.98	50	67.91	
dibenzo(ah)anthracene		18.05	50	72.19	
benzo(ghi)perylene		17.55	50	70.19	

Aliphatic Recovery Name		Amount	Spiked	Recovery	Outside Limits?
c-9		7.83	50	31.32	
c-10		11.40	50	45.58	
c-12		14.17	50	56.68	
c-14		15.56	50	62.24	
c-16		16.93	50	67.74	
c-18		17.82	50	71.29	
c-19		19.25	50	76.99	
c-20		19.19	50	76.74	
1-chlorooctadecane	s	13.22	40	66.08	
c-22		19.10	50	76.39	
c-24		18.69	50	74.74	
c-26		18.24	50	72.98	
c-28		18.05	50	72.20	
c-30		17.87	50	71.49	
c-36		15.82	50	63.27	

Recovery C9-C18
55.81

Recovery C19-C36
73.10

naphthalene #2	0.00	**Naphthalene Breakthrough**	**2-Methylnaphthalene Breakthrough**
2-methylnaphthalene #2	0.00	0.00	0.00

BMAEPH - BS/BSD Report

Operator thomasa
Instrument Name GCDE
Sample Name op48092-bsd

Aromatic Recovery

Name		Amount	Spiked	Recovery	Outside Limits?
naphthalene		10.86	50	43.44	
2-methylnaphthalene		11.29	50	45.15	
2-fluorobiphenyl	s	14.34	40	71.71	
acenaphthylene		12.53	50	50.11	
2-bromonaphthalene	s	14.27	40	71.36	
acenaphthene		12.91	50	51.64	
fluorene		13.44	50	53.75	
phenanthrene		14.12	50	56.48	
anthracene		14.67	50	58.67	
o-terphenyl	s	11.79	40	58.94	
fluoranthene		15.14	50	60.55	
pyrene		14.98	50	59.94	
benzo(a)anthracene		15.82	50	63.29	
chrysene		15.87	50	63.49	
benzo(B)fluoranthene		15.18	50	60.71	
benzo(k)fluoranthene		16.54	50	66.14	
benzo(a)pyrene		16.48	50	65.90	
indeno(1,2,3-cd)pyrene		16.22	50	64.88	
dibenzo(ah)anthracene		17.45	50	69.80	
benzo(ghi)perylene		16.91	50	67.64	

Aliphatic Recovery Name		Amount	Spiked	Recovery	Outside Limits?
c-9		9.59	50	38.35	
c-10		12.73	50	50.91	
c-12		14.98	50	59.93	
c-14		16.00	50	63.99	
c-16		17.46	50	69.84	
c-18		18.21	50	72.83	
c-19		19.31	50	77.22	
c-20		19.25	50	76.99	
1-chlorooctadecane	s	13.77	40	68.83	
c-22		19.03	50	76.10	
c-24		18.79	50	75.16	
c-26		18.55	50	74.22	
c-28		18.13	50	72.53	
c-30		18.22	50	72.86	
c-36		15.74	50	62.95	

Recovery C9-C18
59.31

Recovery C19-C36
73.50

naphthalene #2	0.00	**Naphthalene Breakthrough**	**2-Methylnaphthalene Breakthrough**
2-methylnaphthalene #2	0.06	0.00	0.49

SGS Accutest, Inc.

Instrument: GC 32 (DE)

GC Analysis Log - Extractables

Run Date: 7.13.16

Analyst Signature:

Standard Data

Lot #	Description	Conc
WS18250	All CLV	50ug/ml
↓ 251	ARO CLV	50ug/ml

Column Information: Front: Pest RTX-5 Alternate:
Rear : Pest2 RTX-5 Alternate:
Sequence File: 160713.S
Quantitation Methods: EPH 160713W.M

Instrument Run Batches: GDE 825

Data Acquisition Methods: EPH DUAL W Inj. Vol: 1ml
Inj. Vol:

Date of ICAL: 1.7.16 ICAL Verified ✓ Sample positions verified against sequence: ✓

Vial #	Data File ID	Sample ID	Ext.Batch	Analysis	Matrix	Dilution	Comments
141/142	DE1482	CC815-50	N/A	MA EPH	N/A	N/A	ok
1/2	22	MC46783-2	OP48028		W		CF's only
3/4	23	-3					
5/6	24	-5					
141/142	DE1483 25	CC815-50	N/A		N/A		OK

MTX = Matrix: Designate **W** for water, **S** for soil, **O** for oil. Dilution Solvent: N/A Lot#: N/A

GC014-01
Date: 9/15/10

Review:

5

7.6.3

7

BMAEPH - Aliphatic Continuing Calibration Report

Data File Name	de14821.d
Operator	thomasa
Instrument Name	GCDE
Sample Name	cc815-50,gde825

Name	Amount	Response
c-9	46.88	3952198
c-10	47.23	3982024
c-12	46.65	3932573
c-14	46.15	3890280
c-16	45.56	3841369
c-18	45.38	3825678
c-19	48.60	3782229
c-20	47.48	3695459
c-22	47.07	3662993
c-24	43.59	3392732
c-26	46.52	3620741
c-28	45.44	3536369
c-30	45.43	3535370
c-36	41.12	3200373

	Continuing Avg. RF	Initial Avg. RF	%Diff	
C9-C18	78080	84306	**7.67**	**In Criteria**
C19-C36	71066	77824	**9.08**	**In Criteria**
c28/c20 Percentage:			95.69	

1-chlorooctadecane	45.64	2973878
naphthalene #2	46.77	4252174
2-methylnaphthalene	46.97	4224153

BMAEPH - Aliphatic Continuing Calibration Report

Data File Name	de14825.d
Operator	thomasa
Instrument Name	GCDE
Sample Name	cc815-50,gde825

Name	Amount	Response		Continuing Avg. RF	Initial Avg. RF	%Diff	
c-9	53.62	4520130					
c-10	54.16	4565739					
c-12	53.07	4474038	**C9-C18**	89576	84306	**6.06**	**In Criteria**
c-14	52.86	4456491					
c-16	52.50	4426281					
c-18	52.55	4430022					
c-19	56.76	4417412	**C19-C36**	83381	77824	**6.89**	**In Criteria**
c-20	55.28	4302364					
c-22	55.20	4295743					
c-24	51.50	4007617		c28/c20 Percentage:		96.28	
c-26	54.92	4274079					
c-28	53.23	4142478					
c-30	53.19	4139465					
c-36	48.49	3773355					

1-chlorooctadecane	53.60	3492144
naphthalene #2	53.00	4818425
2-methylnaphthalene	53.38	4800850

SGS ACCUTEST

Extraction Log - Aqueous

Extraction Method:		Analysis method and test code: BMAEPH	
Sep Funnel SW3510C	MSE EPA3511	EPA 608	SW846 8315/8330/8011
Waste Dilution SW3580A		EPA 504	EPA 625

Spike ID	Lot #	Conc. (ug/ml)	Vol. (ul)
EPH	7731	200	250

Surrogate	Lot #	Conc. (ug/ml)	Vol. (ul)
EPH	7483	2000	20
Fluo	P07782	40	1mL

	Sample #		Sample Bottle	Acid pH	Base pH	Sample Initial Volume (mL)	Final Extract Final Volume (mL)	Comments
	DP48098	MB	NA	2	NA	1000	2.0	
	↓	BS	↓	↓	↓	↓	↓	
	↓	BSD	↓	↓	↓	↓	↓	
	MC46783-4	MS	3	2	NA	860	↓	
	↓ -4	MSD	5	↓	↓	860	↓	
1	MC46783-1		2	2	NA	850	2.0	
2	-2		2	↓	↓	890	↓	
3	-3		2	↓	↓	880	↓	
4	-4		1	↓	↓	860	↓	
5	-5		1	↓	↓	880	↓	
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Comments:

Supervisor Approval:

Clean up Methods: Check
Copper: 3660B
Silica: 3630
Florisil: 3620
Acid: 3665

BATCH # OP48098	INITIALS	DATE	TIME
Extracted by:	[illegible]	7/8/16	1400
Spike Witness:	NE	7/8/16	1400
Concentrated by:	PA	7/9/16	
Fractionated by:	↓	Volume (ml): 12.5	
Received by:			

Tray # 57 1

Equipment/ Range	ID	Temp (°C)	Press/Flow
Buchi (55-71 °C)			
Waterbath Temp °C	OBE2	80	
NEVAP (32-38 °C)	OP005	40	
Chiller	2	13	
Balance		N/A	N/A

SOLVENT	LOT #	BRAND
HEXANE Only	163916	Fisher
ETHER		Fisher
ACETONITRILE		Fisher
ACETONE		Fisher
DCM	163038	Fisher

REAGENT	LOT #	BRAND
SPE MFG	3062895	Phenomenex
SILICA GEL		
SODIUM SULFATE	D-026	Fisher
CITRATE BUFFER		
COPPER		
FLORISIL		
SULFURIC ACID		
NaOH		
DNPH		
FILTER PAPER	9696387	Fisher
POREPAK RDX CARTRIDGES		
pH PAPER	216814	HYDRION

Filtered by: Init./Date:

SGS ACCUTEST - MARLBOROUGH
Form: OP018-03
Rev Date: 4/26/16