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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: MC46737

Sampling Dates: 06/30/16 - 07/05/16

Report to:

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ATTN: Terry Taylor

Total number of pages in report: 333

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Robert Soll 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Sample Summary

Anderson Mulholland and Assoc.

Job No: MC46737

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC46737-1	06/30/16	15:10	TT	07/06/16	AQ	Ground Water	OSGP4-GWD
MC46737-2	06/30/16	17:15	TT	07/06/16	AQ	Ground Water	OSGP4-GWS
MC46737-3	07/01/16	13:45	TT	07/06/16	AQ	Ground Water	OSGP5-GWD
MC46737-4	07/05/16	11:00	TT	07/06/16	AQ	Ground Water	OSGP5-GWS
MC46737-5	07/05/16	13:40	TT	07/06/16	AQ	Ground Water	OSGP6-GWD

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Anderson Mulholland and Assoc.	**Job No:**	MC46737
Site:	BMSMC Phase 2A Release Assessment, Humacao, PR	**Report Date**	7/11/2016 2:26:46 PM

5 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on between 06/30/2016 and 07/05/2016 and were received at SGS Accutest New England on 07/06/2016 properly preserved, at 2.4 Deg. C and intact. These Samples received a job number of MC46737. 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:** OP48079

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) MC46737-1, MC46737-2, MC46737-3, MC46737-4, MC46737-5 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.

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(MC46737).

Summary of Hits

Job Number: MC46737
Account: Anderson Mulholland and Assoc.
Project: BMSMC Phase 2A Release Assessment, Humacao, PR
Collected: 06/30/16 thru 07/05/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC46737-1	**OSGP4-GWD**					
C11-C22 Aromatics (Unadj.)		43.3 J	120	34	ug/l	MADEP EPH REV 1.1
C9-C18 Aliphatics		40.7 JB	120	20	ug/l	MADEP EPH REV 1.1
C19-C36 Aliphatics		60.5 JB	120	32	ug/l	MADEP EPH REV 1.1
C11-C22 Aromatics		43.3 J	120	34	ug/l	MADEP EPH REV 1.1
MC46737-2	**OSGP4-GWS**					
C11-C22 Aromatics (Unadj.)		39.6 J	120	33	ug/l	MADEP EPH REV 1.1
C9-C18 Aliphatics		35.9 JB	120	19	ug/l	MADEP EPH REV 1.1
C19-C36 Aliphatics		49.6 JB	120	31	ug/l	MADEP EPH REV 1.1
C11-C22 Aromatics		39.6 J	120	33	ug/l	MADEP EPH REV 1.1
MC46737-3	**OSGP5-GWD**					
C11-C22 Aromatics (Unadj.)		35.5 J	120	34	ug/l	MADEP EPH REV 1.1
C9-C18 Aliphatics		32.9 JB	120	20	ug/l	MADEP EPH REV 1.1
C19-C36 Aliphatics		51.6 JB	120	32	ug/l	MADEP EPH REV 1.1
C11-C22 Aromatics		35.5 J	120	34	ug/l	MADEP EPH REV 1.1
MC46737-4	**OSGP5-GWS**					
C11-C22 Aromatics (Unadj.)		54.3 J	110	33	ug/l	MADEP EPH REV 1.1
C9-C18 Aliphatics		32.3 JB	110	19	ug/l	MADEP EPH REV 1.1
C19-C36 Aliphatics		42.9 JB	110	31	ug/l	MADEP EPH REV 1.1
C11-C22 Aromatics		53.8 J	110	33	ug/l	MADEP EPH REV 1.1
MC46737-5	**OSGP6-GWD**					
C11-C22 Aromatics (Unadj.)		39.9 J	110	32	ug/l	MADEP EPH REV 1.1
C9-C18 Aliphatics		32.2 JB	110	19	ug/l	MADEP EPH REV 1.1
C19-C36 Aliphatics		53.5 JB	110	30	ug/l	MADEP EPH REV 1.1
C11-C22 Aromatics		39.9 J	110	32	ug/l	MADEP EPH REV 1.1

Sample Results

Report of Analysis

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Report of Analysis

Client Sample ID:	OSGP4-GWD		
Lab Sample ID:	MC46737-1	**Date Sampled:**	06/30/16
Matrix:	AQ - Ground Water	**Date Received:**	07/06/16
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	DE14788.D	1	07/08/16	TA	07/06/16	OP48079	GDE822
Run #2							

	Initial Volume	Final Volume
Run #1	835 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	6.0	1.9	ug/l	
208-96-8	Acenaphthylene	ND	6.0	0.43	ug/l	
120-12-7	Anthracene	ND	6.0	0.69	ug/l	
56-55-3	Benzo(a)anthracene	ND	6.0	0.36	ug/l	
50-32-8	Benzo(a)pyrene	ND	6.0	0.35	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	6.0	0.54	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	6.0	0.44	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	6.0	0.42	ug/l	
218-01-9	Chrysene	ND	6.0	0.52	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	6.0	0.46	ug/l	
206-44-0	Fluoranthene	ND	6.0	0.40	ug/l	
86-73-7	Fluorene	ND	6.0	0.47	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	6.0	0.35	ug/l	
91-57-6	2-Methylnaphthalene	ND	6.0	0.54	ug/l	
91-20-3	Naphthalene	ND	6.0	1.1	ug/l	
85-01-8	Phenanthrene	ND	6.0	0.36	ug/l	
129-00-0	Pyrene	ND	6.0	0.72	ug/l	
	C11-C22 Aromatics (Unadj.)	43.3	120	34	ug/l	J
	C9-C18 Aliphatics	40.7	120	20	ug/l	JB
	C19-C36 Aliphatics	60.5	120	32	ug/l	JB
	C11-C22 Aromatics	43.3	120	34	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	52%		40-140%
321-60-8	2-Fluorobiphenyl	77%		40-140%
3386-33-2	1-Chlorooctadecane	50%		40-140%
580-13-2	2-Bromonaphthalene	85%		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:	OSGP4-GWS		
Lab Sample ID:	MC46737-2	**Date Sampled:**	06/30/16
Matrix:	AQ - Ground Water	**Date Received:**	07/06/16
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	DE14789.D	1	07/08/16	TA	07/06/16	OP48079	GDE822
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	ND	5.8	0.53	ug/l	
91-20-3	Naphthalene	ND	5.8	1.1	ug/l	
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.)	39.6	120	33	ug/l	J
	C9-C18 Aliphatics	35.9	120	19	ug/l	JB
	C19-C36 Aliphatics	49.6	120	31	ug/l	JB
	C11-C22 Aromatics	39.6	120	33	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	52%		40-140%
321-60-8	2-Fluorobiphenyl	77%		40-140%
3386-33-2	1-Chlorooctadecane	46%		40-140%
580-13-2	2-Bromonaphthalene	83%		40-140%

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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:	OSGP5-GWD		
Lab Sample ID:	MC46737-3	**Date Sampled:**	07/01/16
Matrix:	AQ - Ground Water	**Date Received:**	07/06/16
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	DE14790.D	1	07/08/16	TA	07/06/16	OP48079	GDE822
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.)	35.5	120	34	ug/l	J
	C9-C18 Aliphatics	32.9	120	20	ug/l	JB
	C19-C36 Aliphatics	51.6	120	32	ug/l	JB
	C11-C22 Aromatics	35.5	120	34	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	54%		40-140%
321-60-8	2-Fluorobiphenyl	71%		40-140%
3386-33-2	1-Chlorooctadecane	44%		40-140%
580-13-2	2-Bromonaphthalene	78%		40-140%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	OSGP5-GWS		
Lab Sample ID:	MC46737-4	**Date Sampled:**	07/05/16
Matrix:	AQ - Ground Water	**Date Received:**	07/06/16
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	DE14791.D	1	07/08/16	TA	07/06/16	OP48079	GDE822
Run #2							

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

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.)	54.3	110	33	ug/l	J
	C9-C18 Aliphatics	32.3	110	19	ug/l	JB
	C19-C36 Aliphatics	42.9	110	31	ug/l	JB
	C11-C22 Aromatics	53.8	110	33	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	67%		40-140%
321-60-8	2-Fluorobiphenyl	83%		40-140%
3386-33-2	1-Chlorooctadecane	59%		40-140%
580-13-2	2-Bromonaphthalene	89%		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:	OSGP6-GWD		
Lab Sample ID:	MC46737-5	**Date Sampled:**	07/05/16
Matrix:	AQ - Ground Water	**Date Received:**	07/06/16
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	DE14792.D	1	07/08/16	TA	07/06/16	OP48079	GDE822
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.6	1.7	ug/l	
208-96-8	Acenaphthylene	ND	5.6	0.40	ug/l	
120-12-7	Anthracene	ND	5.6	0.64	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.6	0.34	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.6	0.32	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	0.41	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.6	0.39	ug/l	
218-01-9	Chrysene	ND	5.6	0.48	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.6	0.43	ug/l	
206-44-0	Fluoranthene	ND	5.6	0.37	ug/l	
86-73-7	Fluorene	ND	5.6	0.44	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.6	0.32	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.6	0.50	ug/l	
91-20-3	Naphthalene	ND	5.6	1.1	ug/l	
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.)	39.9	110	32	ug/l	J
	C9-C18 Aliphatics	32.2	110	19	ug/l	JB
	C19-C36 Aliphatics	53.5	110	30	ug/l	JB
	C11-C22 Aromatics	39.9	110	32	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	49%		40-140%
321-60-8	2-Fluorobiphenyl	82%		40-140%
3386-33-2	1-Chlorooctadecane	40%		40-140%
580-13-2	2-Bromonaphthalene	79%		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

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

Accutest Quote # 809960562229

Bottle Order Control # MCY6737

Accutest Job # Get from NJ

Client / Reporting Information	Project Information
Company Name: Anderson Mulholland & Associates	Project Name: BMSMC Phase 2A Release Assessment
Street Address: 2700 Westchester Avenue, Suite 417	Street:
City / State / Zip: Purchase NY 10577	City / State: Humacao PR
Project Contact / E-mail: Terry Taylor	Project #: 021
Phone # / Fax #: 914-251-0400	Client Purchase Order #:
Sampler(s) Name(s) / Phone #: N. Rivera, R. Stuart, R. O'Reilly, T. Taylor	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): C11 - C22 Aromatics via MADEP EPH R

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 MADEP EPH R	LAB USE ONLY
-1	OSGP4 - GWD		6/30/16	1510	TT	GW	2	2								X	
-2	OSGP4 - GWS		6/30/16	1715	TT	GW	2	2								X	
-3	OSGP 5 - GWD		7/1/16	1345	TT	GW	2	2								X	
-4	OSGP 5 - GWS		7/5/16	1100	TT	GW	2	2								X	
-5	OSGP 6 - GWD		7/5/16	1340	TT	GW	2	2								X	
	~~OSGP~~ DX					~~GW~~	~~2~~	~~2~~								~~X~~	16B
						EB											

Number of preserved Bottles

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*
- [x] 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)
- [x] 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 ASSESSMENT
LABEL VERIFICATION

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	7/5/16 1700	1 FedEX	2 FX	7-6-16 930	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 # 378200	Intact / Not intact	Preserved where applicable / On Ice / Cooler Temp. 1.7C 2.4C

MC46737: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: MC46737 **Client:** ANDERSON MUL **Project:** BMSMC PHASE 2A

Date / Time Received: 7/6/2016 9:30:00 AM **Delivery Method:** FedEx **Airbill #'s:** 8099 6056 2229 0402

Cooler Temps (Initial/Adjusted): #: (2.4/2.4); #1: (1.8/1.8);

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

5.1

5

MC46737: Chain of Custody

Page 2 of 2

Internal Sample Tracking Chronicle

Anderson Mulholland and Assoc.

Job No: MC46737

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC46737-1 Collected: 30-JUN-16 15:10 By: TT OSGP4-GWD			Received: 06-JUL-16 By: NT			
MC46737-1	MADEP EPH REV 1.1	08-JUL-16 13:42	TA	06-JUL-16	AJ	BMAEPH
MC46737-2 Collected: 30-JUN-16 17:15 By: TT OSGP4-GWS			Received: 06-JUL-16 By: NT			
MC46737-2	MADEP EPH REV 1.1	08-JUL-16 14:10	TA	06-JUL-16	AJ	BMAEPH
MC46737-3 Collected: 01-JUL-16 13:45 By: TT OSGP5-GWD			Received: 06-JUL-16 By: NT			
MC46737-3	MADEP EPH REV 1.1	08-JUL-16 14:37	TA	06-JUL-16	AJ	BMAEPH
MC46737-4 Collected: 05-JUL-16 11:00 By: TT OSGP5-GWS			Received: 06-JUL-16 By: NT			
MC46737-4	MADEP EPH REV 1.1	08-JUL-16 15:05	TA	06-JUL-16	AJ	BMAEPH
MC46737-5 Collected: 05-JUL-16 13:40 By: TT OSGP6-GWD			Received: 06-JUL-16 By: NT			
MC46737-5	MADEP EPH REV 1.1	08-JUL-16 15:32	TA	06-JUL-16	AJ	BMAEPH

SGS Accutest Internal Chain of Custody

Job Number: MC46737
Account: AMANYWP Anderson Mulholland and Assoc.
Project: BMSMC Phase 2A Release Assessment, Humacao, PR
Received: 07/06/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC46737-1.1	Walk In Ref #22	Ilir Capi	07/06/16 19:37	Retrieve from Storage
MC46737-1.1	Ilir Capi		07/11/16 14:22	Depleted
MC46737-2.1	Walk In Ref #22	Ilir Capi	07/06/16 19:37	Retrieve from Storage
MC46737-2.1	Ilir Capi		07/11/16 14:22	Depleted
MC46737-3.2	Walk In Ref #22	Ilir Capi	07/06/16 19:37	Retrieve from Storage
MC46737-3.2	Ilir Capi		07/11/16 14:22	Depleted
MC46737-4.2	Walk In Ref #22	Ilir Capi	07/06/16 19:37	Retrieve from Storage
MC46737-4.2	Ilir Capi		07/11/16 14:22	Depleted
MC46737-5.2	Walk In Ref #22	Ilir Capi	07/06/16 19:37	Retrieve from Storage
MC46737-5.2	Ilir Capi		07/11/16 14:22	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: MC46737
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
OP48079-MB	DE14787.D	1	07/08/16	TA	07/06/16	OP48079	GDE822

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

MC46737-1, MC46737-2, MC46737-3, MC46737-4, MC46737-5

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	ND	5.0	0.45	ug/l	
91-20-3	Naphthalene	ND	5.0	0.96	ug/l	
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.)	ND	100	29	ug/l	
	C9-C18 Aliphatics	32.5	100	17	ug/l	J
	C19-C36 Aliphatics	39.1	100	27	ug/l	J
	C11-C22 Aromatics	ND	100	29	ug/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	76%	40-140%
321-60-8	2-Fluorobiphenyl	90%	40-140%
3386-33-2	1-Chlorooctadecane	58%	40-140%
580-13-2	2-Bromonaphthalene	98%	40-140%

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC46737
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
OP48079-BS	DE14785.D	1	07/08/16	TA	07/06/16	OP48079	GDE822
OP48079-BSD	DE14786.D	1	07/08/16	TA	07/06/16	OP48079	GDE822

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

MC46737-1, MC46737-2, MC46737-3, MC46737-4, MC46737-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	50	35.5	71	32.2	64	10	40-140/25
208-96-8	Acenaphthylene	50	33.9	68	30.2	60	12	40-140/25
120-12-7	Anthracene	50	37.3	75	34.0	68	9	40-140/25
56-55-3	Benzo(a)anthracene	50	41.2	82	37.7	75	9	40-140/25
50-32-8	Benzo(a)pyrene	50	42.7	85	38.7	77	10	40-140/25
205-99-2	Benzo(b)fluoranthene	50	44.3	89	37.1	74	18	40-140/25
191-24-2	Benzo(g,h,i)perylene	50	43.9	88	40.1	80	9	40-140/25
207-08-9	Benzo(k)fluoranthene	50	38.3	77	37.9	76	1	40-140/25
218-01-9	Chrysene	50	40.9	82	37.0	74	10	40-140/25
53-70-3	Dibenz(a,h)anthracene	50	44.0	88	40.2	80	9	40-140/25
206-44-0	Fluoranthene	50	39.9	80	35.9	72	11	40-140/25
86-73-7	Fluorene	50	35.2	70	31.3	63	12	40-140/25
193-39-5	Indeno(1,2,3-cd)pyrene	50	42.9	86	38.7	77	10	40-140/25
91-57-6	2-Methylnaphthalene	50	32.3	65	28.7	57	12	40-140/25
91-20-3	Naphthalene	50	32.1	64	28.6	57	12	40-140/25
85-01-8	Phenanthrene	50	37.1	74	32.7	65	13	40-140/25
129-00-0	Pyrene	50	40.0	80	35.6	71	12	40-140/25
	C11-C22 Aromatics (Unadj.)	800	709	89	644	81	10	40-140/25
	C9-C18 Aliphatics	300	190	63	208	69	9	40-140/25
	C19-C36 Aliphatics	400	303	76	324	81	7	40-140/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	78%	76%	40-140%
321-60-8	2-Fluorobiphenyl	93%	81%	40-140%
3386-33-2	1-Chlorooctadecane	57%	68%	40-140%
580-13-2	2-Bromonaphthalene	93%	82%	40-140%

Sample	Compound	Col #1	Col #2	Breakthrough	Limit
OP48079-BS	2-Methylnaphthalene	32.3	ND	0.0%	5.0
OP48079-BS	Naphthalene	32.1	ND	0.0%	5.0
OP48079-BSD	2-Methylnaphthalene	28.7	ND	0.0%	5.0
OP48079-BSD	Naphthalene	28.6	ND	0.0%	5.0

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: MC46737
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]
MC46737-1	DE14788.D	52	77	50	85
MC46737-2	DE14789.D	52	77	46	83
MC46737-3	DE14790.D	54	71	44	78
MC46737-4	DE14791.D	67	83	59	89
MC46737-5	DE14792.D	49	82	40	79
OP48079-BS	DE14785.D	78	93	57	93
OP48079-BSD	DE14786.D	76	81	68	82
OP48079-MB	DE14787.D	76	90	58	98

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

GC Surrogate Retention Time Summary

Job Number: MC46737
Account: AMANYWP Anderson Mulholland and Assoc.
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

Check Std:	GDE822-CC815	**Injection Date:**	07/08/16
Lab File ID:	DE14784.D	**Injection Time:**	11:36
Instrument ID:	GCDE	**Method:**	MADEP EPH REV 1.1

	S1 [a] RT	S2 [a] RT	S3 [b] RT	S4 [a] RT
Check Std	9.74	6.48	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
OP48079-BS	DE14785.D	07/08/16	12:19	9.74	6.48	11.21	7.20
OP48079-BSD	DE14786.D	07/08/16	12:47	9.74	6.49	11.21	7.21
OP48079-MB	DE14787.D	07/08/16	13:14	9.74	6.49	11.21	7.21
MC46737-1	DE14788.D	07/08/16	13:42	9.74	6.49	11.21	7.21
MC46737-2	DE14789.D	07/08/16	14:10	9.74	6.49	11.21	7.21
MC46737-3	DE14790.D	07/08/16	14:37	9.74	6.49	11.21	7.21
MC46737-4	DE14791.D	07/08/16	15:05	9.74	6.49	11.21	7.21
MC46737-5	DE14792.D	07/08/16	15:32	9.74	6.49	11.21	7.21
GDE822-ECC815	DE14793.D	07/08/16	16:00	9.75	6.49	11.22	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

Initial Calibration Summary

Job Number: MC46737 **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: MC46737
Account: AMANYWP Anderson Mulholland and Assoc.
Project: BMSMC Phase 2A Release Assessment, Humacao, PR
Sample: GDE815-ICC815
Lab FileID: DE14670.D

```
--------------------------------------------------------------------------------
(#) = Out of Range

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

Initial Calibration Verification

Job Number: MC46737 **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: MC46737 **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: MC46737 **Sample:** GDE822-CC815
Account: AMANYWP Anderson Mulholland and Assoc. **Lab FileID:** DE14784.D
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

Evaluate Continuing Calibration Report

```
Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch  Signal #2: FID2B.ch
Acq On    :  8 Jul 2016  11:36 am
Operator  : thomasa
Sample    : cc815-50,gde822
Misc      : op47862,gde822,1000,,,2,,w
ALS Vial  : 142   Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:11:14 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title  : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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	143.405 E3	-14.2	108	0.00
3		2-methylnaphthalene	126.144	138.572 E3	-9.9	107	0.00
4	s	2-fluorobiphenyl	114.477	126.759 E3	-10.7	107	0.00
5		acenaphthylene	126.525	136.904 E3	-8.2	106	0.00
6	s	2-bromonaphthalene	71.704	83.113 E3	-15.9	104	0.00
7		acenaphthene	139.287	144.326 E3	-3.6	106	0.00
8		fluorene	128.466	136.926 E3	-6.6	104	0.00
9		phenanthrene	124.916	133.421 E3	-6.8	101	0.00
10		anthracene	133.036	129.946 E3	2.3	104	0.00
11	s	o-terphenyl	132.308	134.367 E3	-1.6	101	0.00
12		fluoranthene	128.264	129.885 E3	-1.3	100	0.00
13		pyrene	131.341	132.899 E3	-1.2	99	0.00
14		benzo(a)anthracene	121.482	122.362 E3	-0.7	97	0.00
15		chrysene	127.650	124.820 E3	2.2	99	0.00
16		benzo(B)fluoranthene	118.397	124.980 E3	-5.6	100	0.00
17		benzo(k)fluoranthene	128.030	123.137 E3	3.8	98	0.00
18		benzo(a)pyrene	117.959	118.133 E3	-0.1	99	0.00
19		indeno(1,2,3-cd)pyrene	117.046	121.774 E3	-4.0	102	0.00
20		dibenzo(ah)anthracene	113.307	116.395 E3	-2.7	100	0.00
21		benzo(ghi)perylene	113.475	117.461 E3	-3.5	102	0.00
Signal #2							
25	h	c-9	84.306	86.537 E3	-2.6	0#	0.00
26	h	c-10	84.306	87.502 E3	-3.8	0#	0.00
27		naphthalene #2	90.911	92.967 E3	-2.3	101	0.00
28		c-12	84.306	85.909 E3	-1.9	0#	0.00
29		2-methylnaphthalene #2	89.937	91.896 E3	-2.2	101	0.00
30		c-14	84.306	84.713 E3	-0.5	0#	0.00
31		c-16	84.306	83.712 E3	0.7	0#	0.00

Continuing Calibration Summary

Job Number: MC46737 **Sample:** GDE822-CC815
Account: AMANYWP Anderson Mulholland and Assoc. **Lab FileID:** DE14784.D
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

32		c-18	84.306	85.247	E3	-1.1	0#	0.00
33		c-19	77.824	82.654	E3	-6.2	0#	0.00
34		c-20	77.824	81.077	E3	-4.2	0#	0.00
35	s	1-chlorooctadecane	65.153	62.556	E3	4.0	96	0.00
36		c-22	77.824	80.580	E3	-3.5	0#	0.00
37		c-24	77.824	75.352	E3	3.2	0#	0.00
38		c-26	77.824	80.446	E3	-3.4	0#	0.00
39		c-28	77.824	78.050	E3	-0.3	0#	0.00
40	h	c-30	77.824	78.103	E3	-0.4	0#	0.00
41	h	c-36	77.824	68.506	E3	12.0	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

EPH160708W.M Mon Jul 11 08:42:22 2016

Continuing Calibration Summary

Job Number: MC46737 **Sample:** GDE822-ECC815
Account: AMANYWP Anderson Mulholland and Assoc. **Lab FileID:** DE14793.D
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

Evaluate Continuing Calibration Report

```
Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14793.d
Signal(s) : Signal #1: FID1A.ch  Signal #2: FID2B.ch
Acq On    :  8 Jul 2016   4:00 pm
Operator  : thomasa
Sample    : ecc815-50,gde822
Misc      : op47862,gde822,1000,,,2,,w
ALS Vial  : 142   Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 11 12:55:49 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.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	136.348 E3	-8.6	103	0.00
3		2-methylnaphthalene	126.144	135.087 E3	-7.1	105	0.00
4	s	2-fluorobiphenyl	114.477	120.587 E3	-5.3	102	0.00
5		acenaphthylene	126.525	130.250 E3	-2.9	101	0.00
6	s	2-bromonaphthalene	71.704	79.445 E3	-10.8	100	0.00
7		acenaphthene	139.287	138.073 E3	0.9	101	0.00
8		fluorene	128.466	131.438 E3	-2.3	99	0.00
9		phenanthrene	124.916	128.824 E3	-3.1	97	0.00
10		anthracene	133.036	125.513 E3	5.7	101	0.00
11	s	o-terphenyl	132.308	129.550 E3	2.1	97	0.00
12		fluoranthene	128.264	125.565 E3	2.1	96	0.00
13		pyrene	131.341	128.396 E3	2.2	96	0.00
14		benzo(a)anthracene	121.482	119.197 E3	1.9	95	0.00
15		chrysene	127.650	121.377 E3	4.9	96	0.00
16		benzo(B)fluoranthene	118.397	118.532 E3	-0.1	94	0.00
17		benzo(k)fluoranthene	128.030	124.368 E3	2.9	99	0.00
18		benzo(a)pyrene	117.959	115.825 E3	1.8	97	0.00
19		indeno(1,2,3-cd)pyrene	117.046	121.003 E3	-3.4	101	0.00
20		dibenzo(ah)anthracene	113.307	112.315 E3	0.9	97	0.00
21		benzo(ghi)perylene	113.475	115.059 E3	-1.4	100	0.00
Signal #2							
25	h	c-9	84.306	86.325 E3	-2.4	0#	0.00
26	h	c-10	84.306	87.133 E3	-3.4	0#	0.00
27		naphthalene #2	90.911	92.685 E3	-2.0	101	0.00
28		c-12	84.306	86.030 E3	-2.0	0#	0.00
29		2-methylnaphthalene #2	89.937	92.351 E3	-2.7	101	0.00
30		c-14	84.306	85.699 E3	-1.7	0#	0.00
31		c-16	84.306	85.967 E3	-2.0	0#	0.00

Continuing Calibration Summary

Job Number: MC46737 **Sample:** GDE822-ECC815
Account: AMANYWP Anderson Mulholland and Assoc. **Lab FileID:** DE14793.D
Project: BMSMC Phase 2A Release Assessment, Humacao, PR

32		c-18	84.306	86.687	E3	-2.8	0#	0.00
33		c-19	77.824	85.683	E3	-10.1	0#	0.00
34		c-20	77.824	84.115	E3	-8.1	0#	0.00
35	s	1-chlorooctadecane	65.153	67.285	E3	-3.3	103	0.00
36		c-22	77.824	83.580	E3	-7.4	0#	0.00
37		c-24	77.824	77.704	E3	0.2	0#	0.00
38		c-26	77.824	83.033	E3	-6.7	0#	0.00
39		c-28	77.824	80.450	E3	-3.4	0#	0.00
40	h	c-30	77.824	80.547	E3	-3.5	0#	0.00
41	h	c-36	77.824	74.035	E3	4.9	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

EPH160708W.M Mon Jul 11 12:55:58 2016

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160708EPH\
Data File : de14788.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 1:42 pm
Operator : thomasa
Sample : mc46737-1,op48079
Misc : op48079,gde822,835,,,2,,w
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:52:45 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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	1768134	15.445 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery =	77.22%#
6) s 2-bromonaphthalene	7.207	1220604	17.023 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery =	85.11%#
11) s o-terphenyl	9.742	1377336	10.410 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery =	52.05%#
35) s 1-chlorooctadecane	11.212	650249	9.980 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery =	49.90%#
Target Compounds			
1) h c11-c22 Aromatics (Un...	5.097	2253246	18.061 µg/mlm
25) h c-9	2.647	1432137	16.987 µg/mlm
41) h c-36	16.983	1965161	25.251 µg/mlm

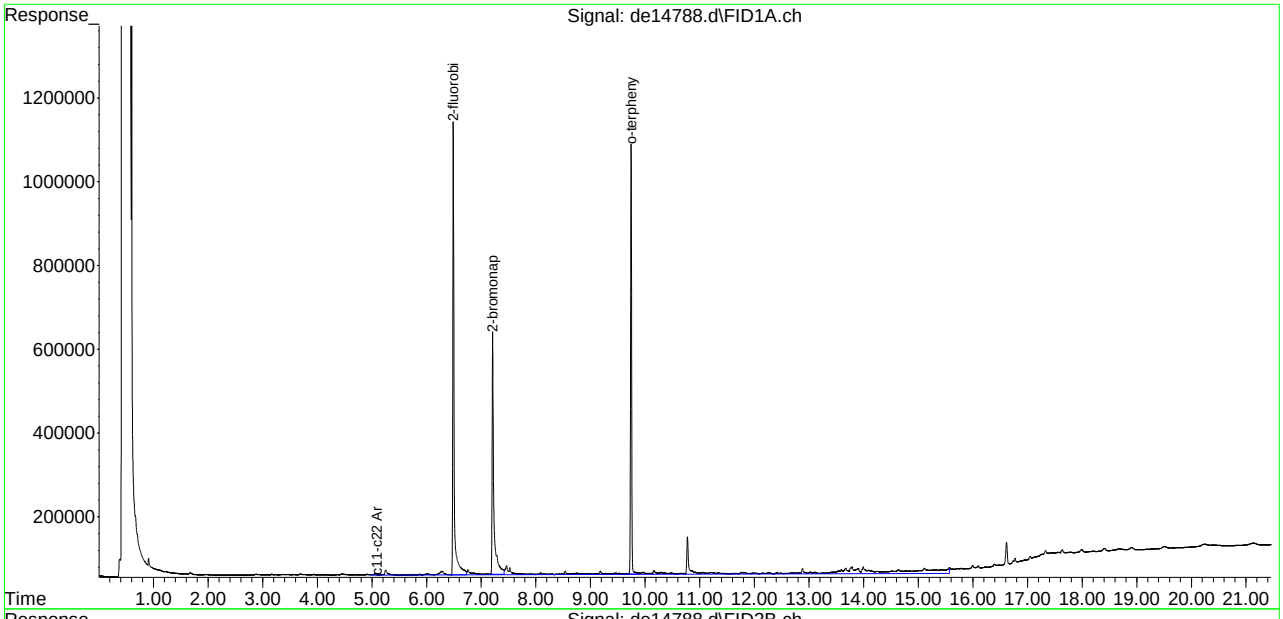
(f)=RT Delta > 1/2 Window (m)=manual int.

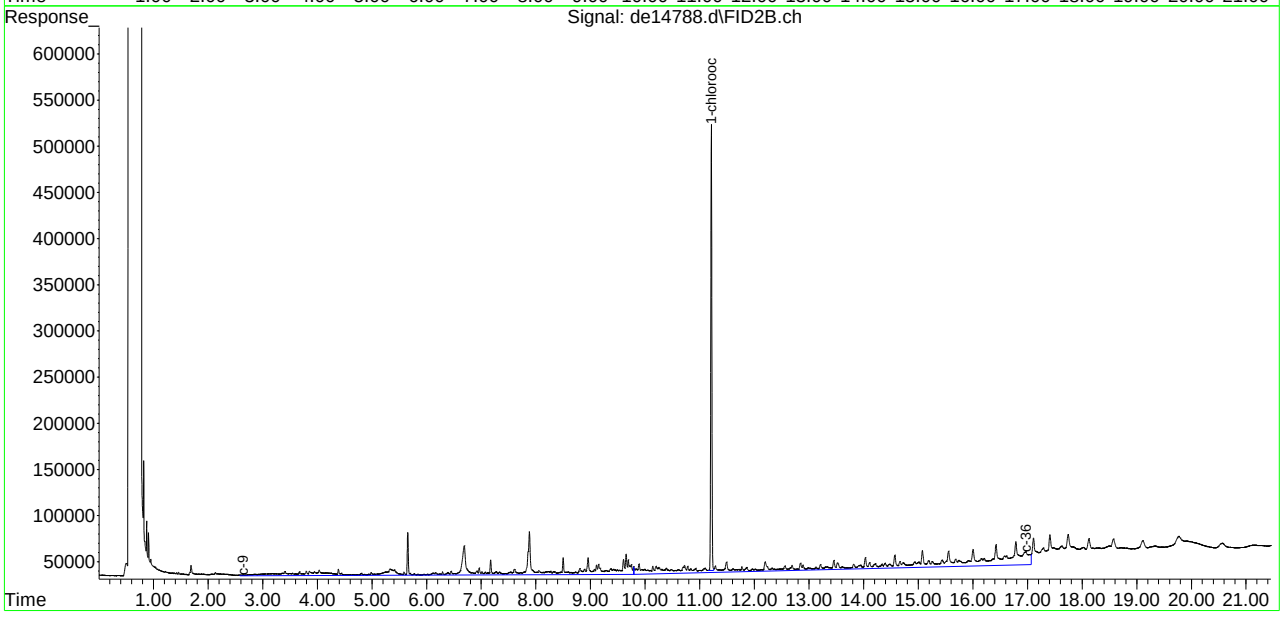
Quantitation Report (QT Reviewed)

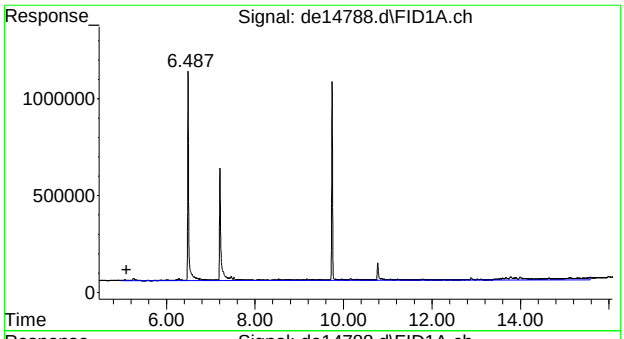
Data Path : G:\1\DATA\DE160708EPH\
Data File : de14788.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 1:42 pm
Operator : thomasa
Sample : mc46737-1,op48079
Misc : op48079,gde822,835,,,2,,w
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:52:45 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 2016
Response via : Initial Calibration
Integrator: RTE

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

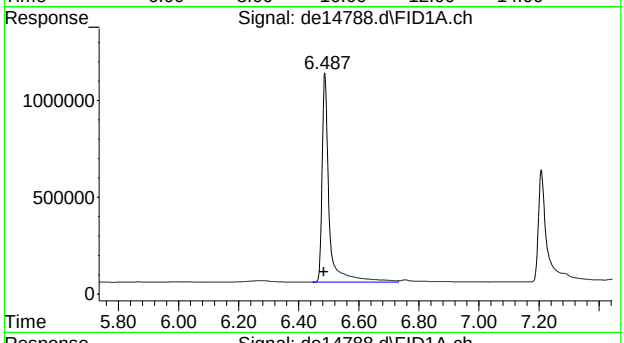






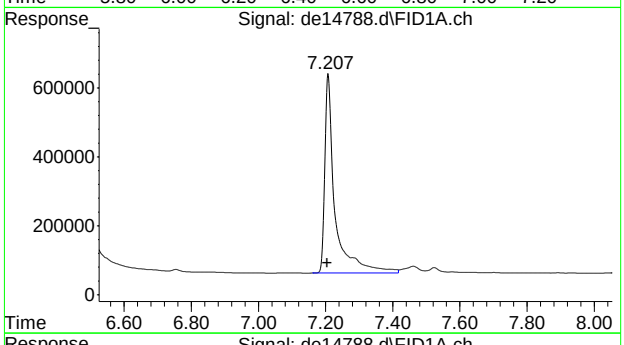
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 2253246
Conc: 18.06 µg/ml m



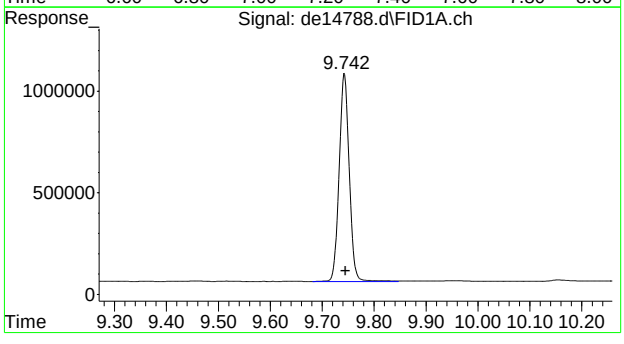
#4 2-fluorobiphenyl

R.T.: 6.487 min
Delta R.T.: 0.003 min
Response: 1768134
Conc: 15.45 µg/ml



#6 2-bromonaphthalene

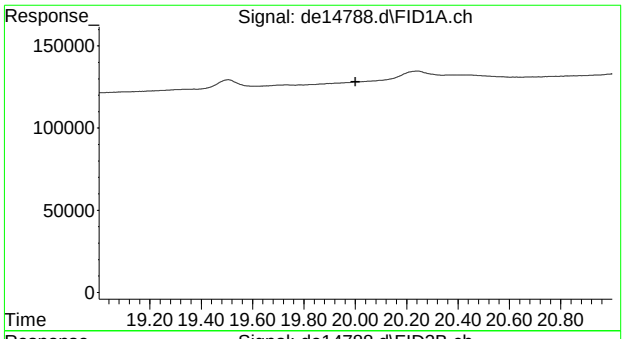
R.T.: 7.207 min
Delta R.T.: 0.002 min
Response: 1220604
Conc: 17.02 µg/ml



#11 o-terphenyl

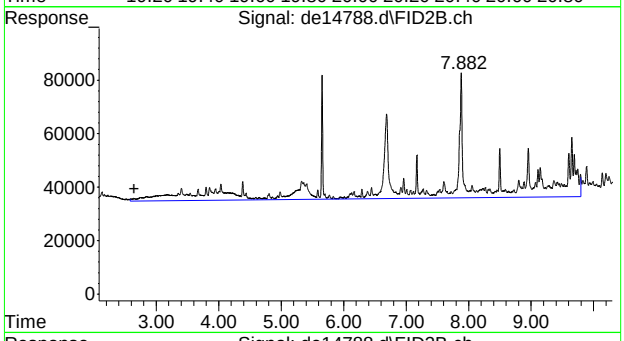
R.T.: 9.742 min
Delta R.T.: -0.003 min
Response: 1377336
Conc: 10.41 µg/ml

SGS ACCUTEST MC46737



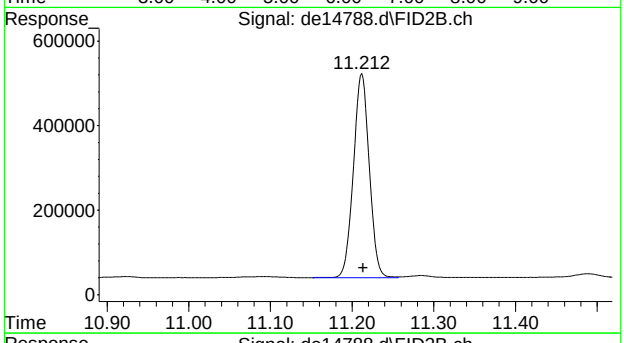
#22 bht

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



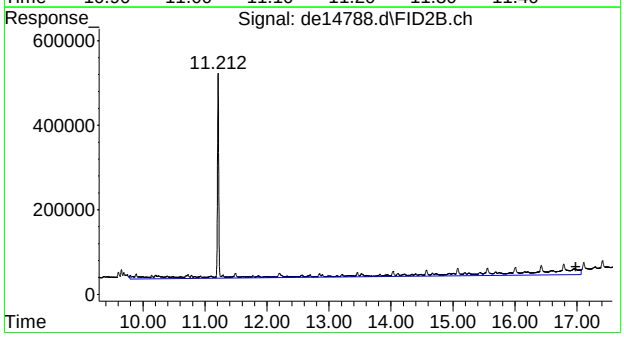
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 1432137
Conc: 16.99 µg/ml m



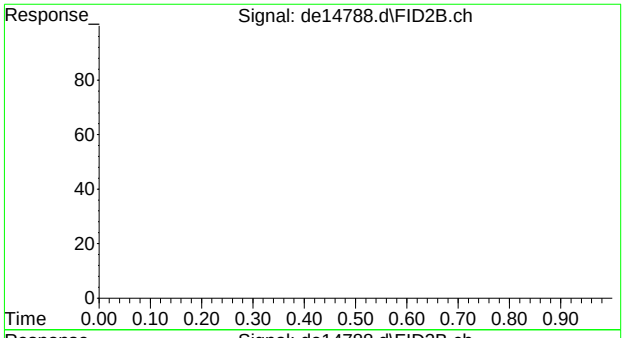
#35 1-chlorooctadecane

R.T.: 11.212 min
Delta R.T.: -0.002 min
Response: 650249
Conc: 9.98 µg/ml



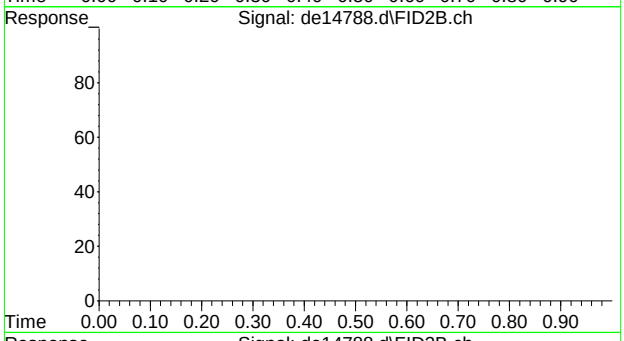
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1965161
Conc: 25.25 µg/ml m



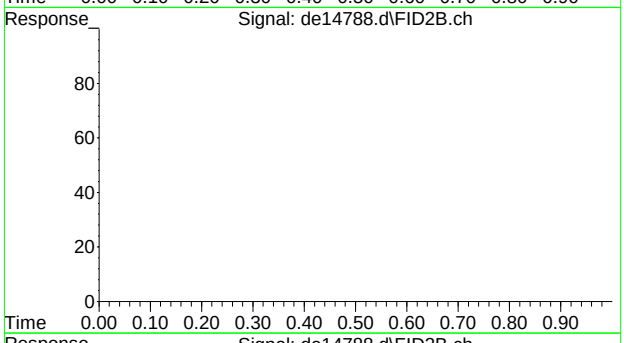
#42 bht

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



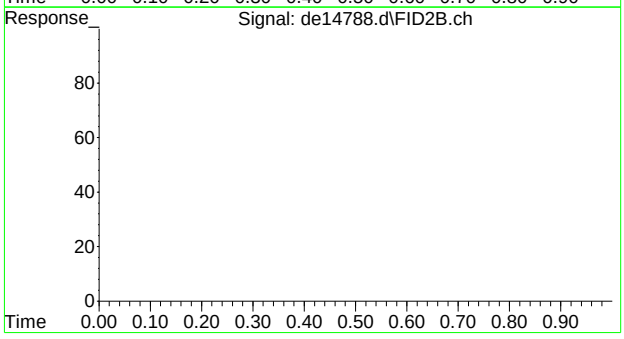
#43 bht

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



#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 MC46737

Quantitation Report (QT Reviewed)

```
Data Path : G:\1\DATA\DE160708EPH\
Data File : de14789.d
Signal(s) : Signal #1: FID1A.ch  Signal #2: FID2B.ch
Acq On    :  8 Jul 2016   2:10 pm
Operator  : thomasa
Sample    : mc46737-2,op48079
Misc      : op48079,gde822,860,,,2,,w
ALS Vial  : 10   Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:57:43 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title  : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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        1753855   15.321 µg/ml
Spiked Amount     20.000   Range   8 -  28    Recovery   =   76.61%#
 6) s   2-bromonaphthalene            7.208        1184523   16.520 µg/ml
Spiked Amount     20.000   Range   8 -  28    Recovery   =   82.60%#
11) s   o-terphenyl                   9.743        1363749   10.307 µg/ml
Spiked Amount     20.000   Range   8 -  28    Recovery   =   51.53%#
35) s   1-chlorooctadecane           11.212         593969    9.117 µg/ml
Spiked Amount     20.000   Range   8 -  28    Recovery   =   45.59%#

 Target Compounds
 1) h   c11-c22 Aromatics (Un...      5.097        2126348   17.044 µg/mlm
25) h   c-9                          2.647        1301840   15.442 µg/mlm
41) h   c-36                        16.983        1658582   21.312 µg/mlm
 ---------------------------------------------------------------------------

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

7.1.2

7

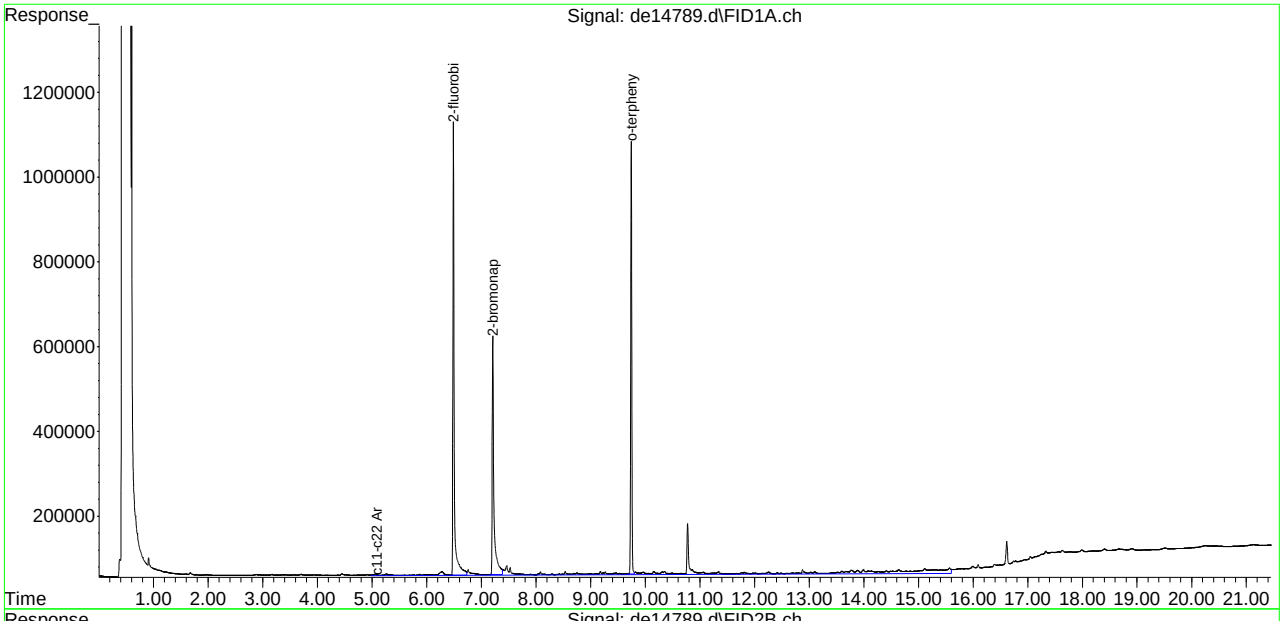
SGS ACCUTEST MC46737

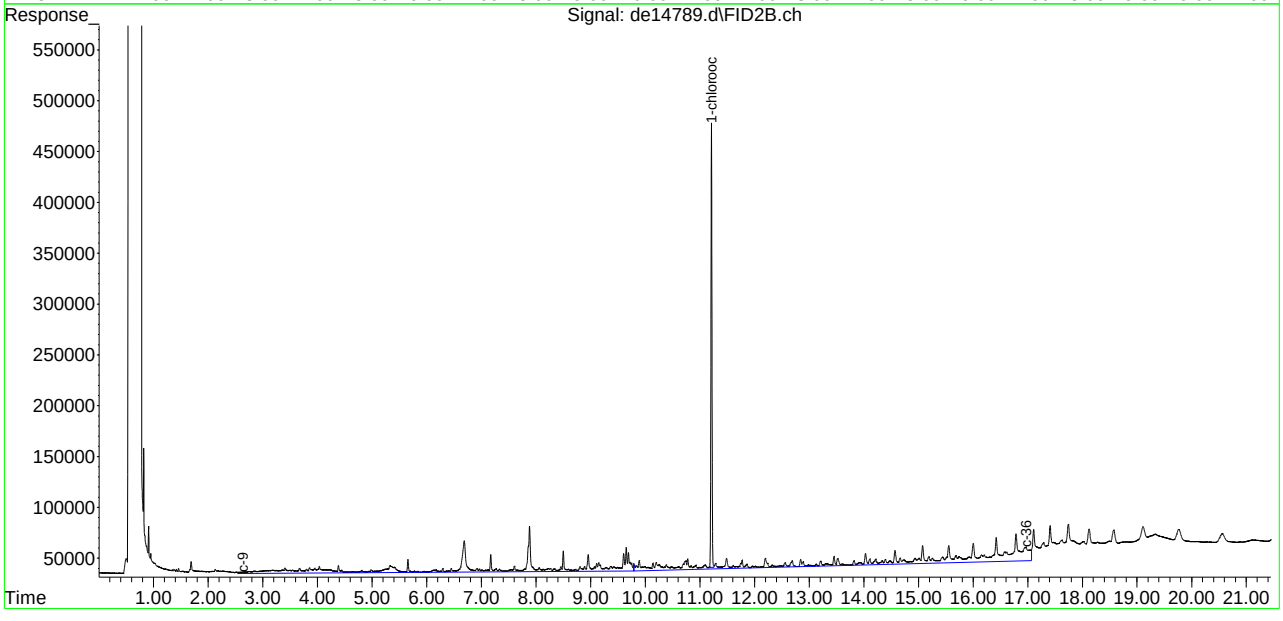
Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160708EPH\
Data File : de14789.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 2:10 pm
Operator : thomasa
Sample : mc46737-2,op48079
Misc : op48079,gde822,860,,,2,,w
ALS Vial : 10 Sample Multiplier: 1

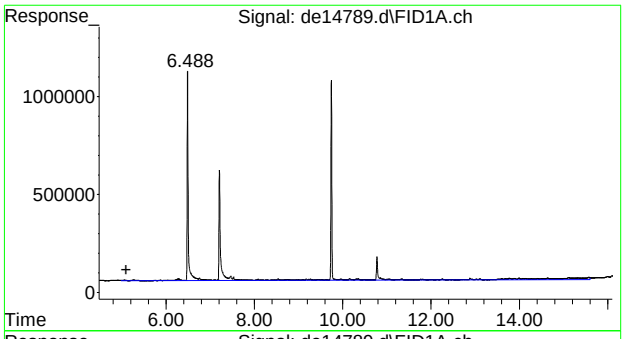
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:57:43 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 2016
Response via : Initial Calibration
Integrator: RTE

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



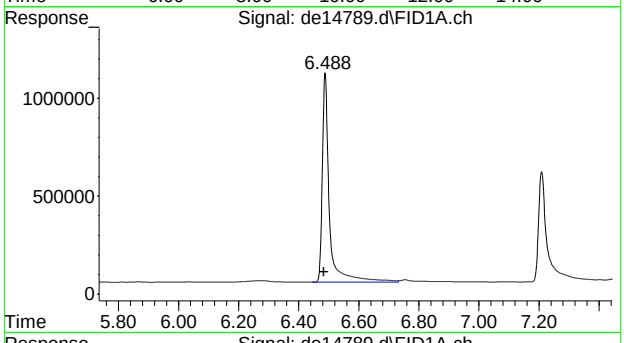


SGS ACCUTEST MC46737



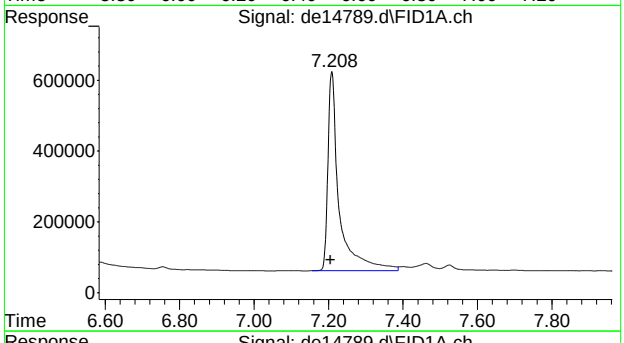
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 2126348
Conc: 17.04 µg/ml m



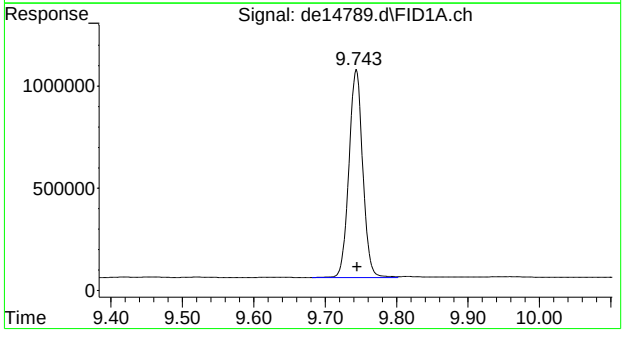
#4 2-fluorobiphenyl

R.T.: 6.488 min
Delta R.T.: 0.005 min
Response: 1753855
Conc: 15.32 µg/ml



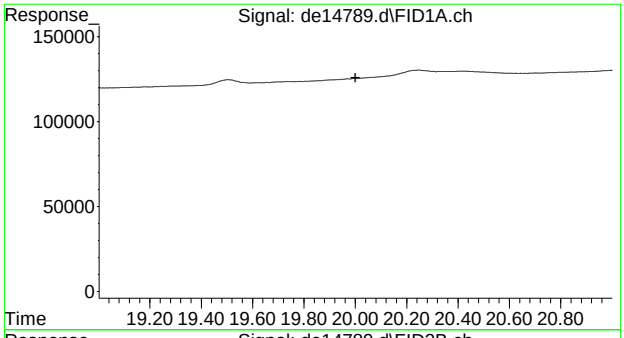
#6 2-bromonaphthalene

R.T.: 7.208 min
Delta R.T.: 0.003 min
Response: 1184523
Conc: 16.52 µg/ml



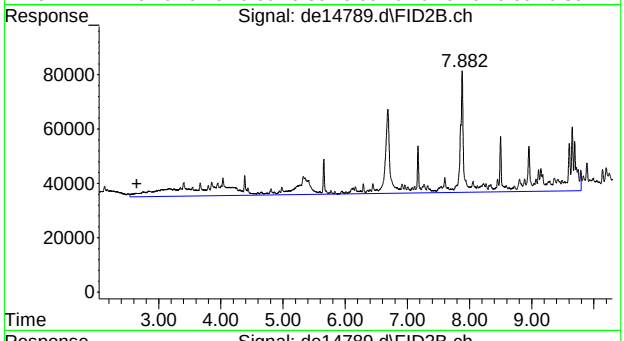
#11 o-terphenyl

R.T.: 9.743 min
Delta R.T.: -0.002 min
Response: 1363749
Conc: 10.31 µg/ml



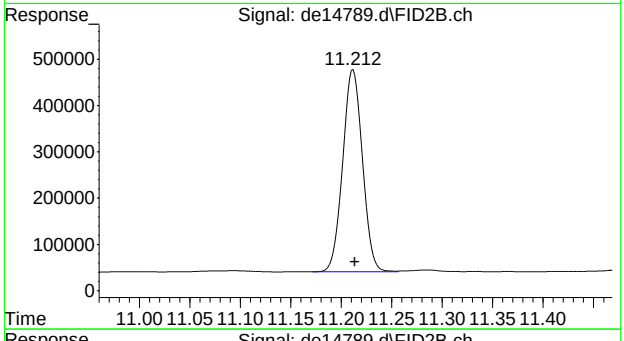
#22 bht

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



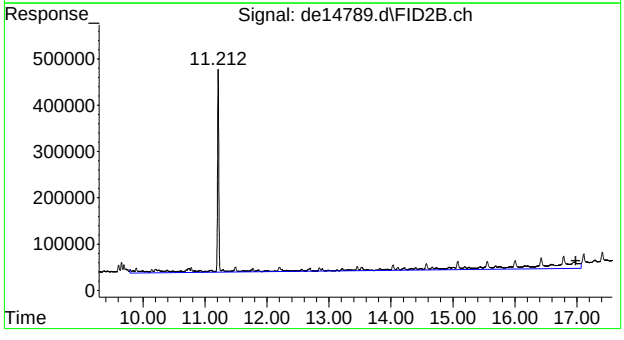
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 1301840
Conc: 15.44 µg/ml m



#35 1-chlorooctadecane

R.T.: 11.212 min
Delta R.T.: -0.002 min
Response: 593969
Conc: 9.12 µg/ml



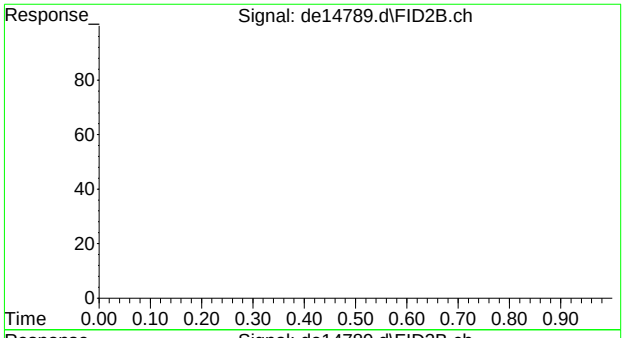
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1658582
Conc: 21.31 µg/ml m

7.1.2

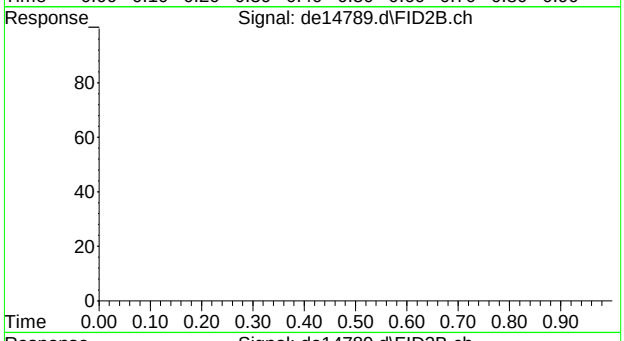
7

SGS ACCUTEST MC46737



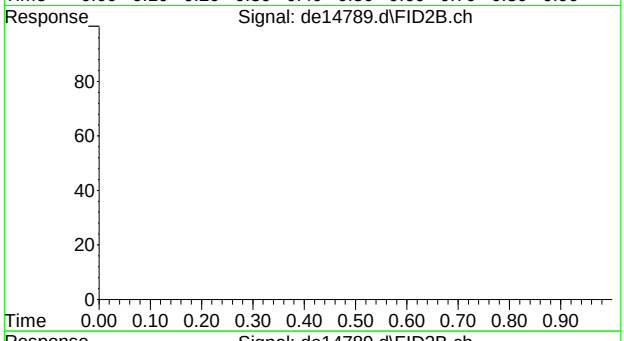
#42 bht

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



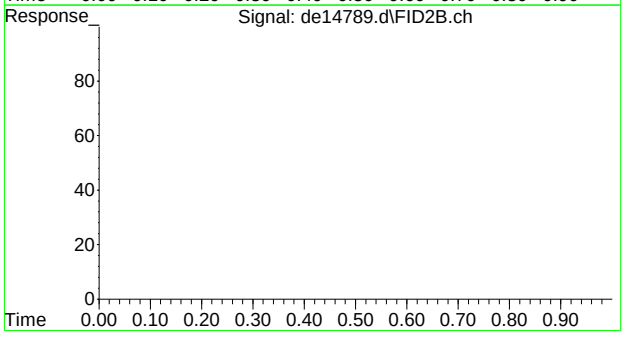
#43 bht

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 MC46737

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160708EPH\
Data File : de14790.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 2:37 pm
Operator : thomasa
Sample : mc46737-3,op48079
Misc : op48079,gde822,850,,,2,,w
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 15:01:09 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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	1630973	14.247 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 71.23%#	
6) s 2-bromonaphthalene	7.208	1122026	15.648 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 78.24%#	
11) s o-terphenyl	9.743	1426798	10.784 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 53.92%#	
35) s 1-chlorooctadecane	11.212	578667	8.882 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery = 44.41%#	
Target Compounds			
1) h c11-c22 Aromatics (Un...	5.097	1879841	15.068 µg/mlm
25) h c-9	2.647	1178297	13.977 µg/mlm
41) h c-36	16.983	1705303	21.912 µg/mlm

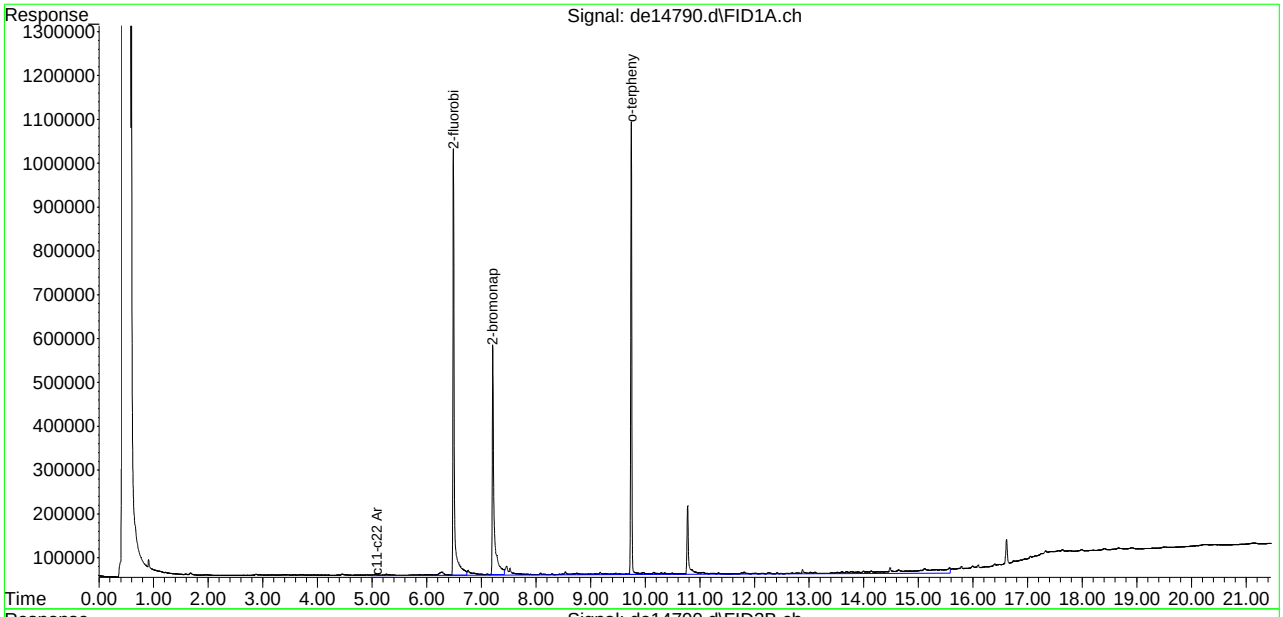
(f)=RT Delta > 1/2 Window (m)=manual int.

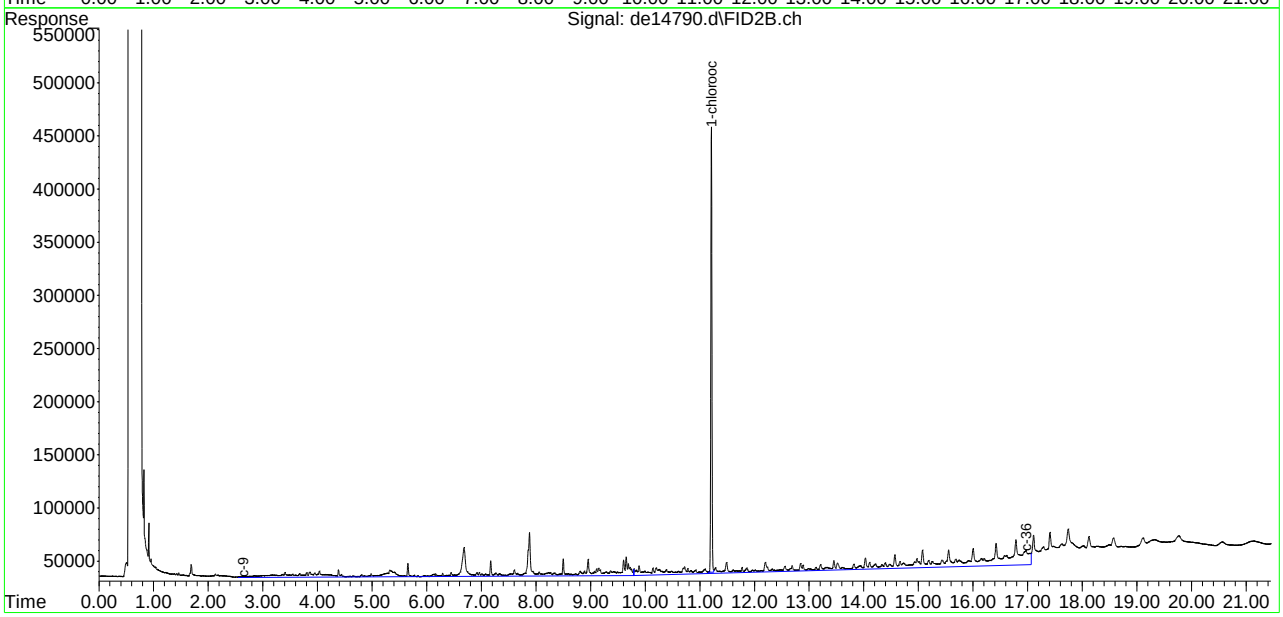
Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160708EPH\
Data File : de14790.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 2:37 pm
Operator : thomasa
Sample : mc46737-3,op48079
Misc : op48079,gde822,850,,,2,,w
ALS Vial : 12 Sample Multiplier: 1

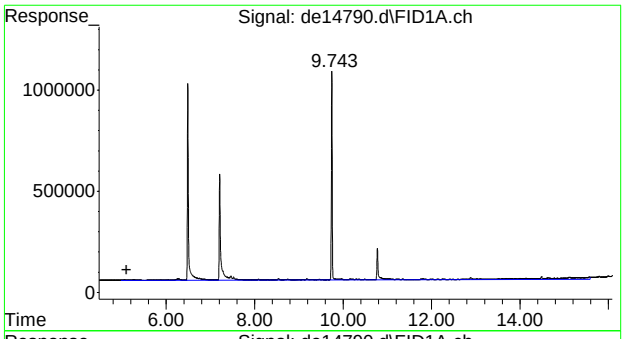
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 15:01:09 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 2016
Response via : Initial Calibration
Integrator: RTE

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



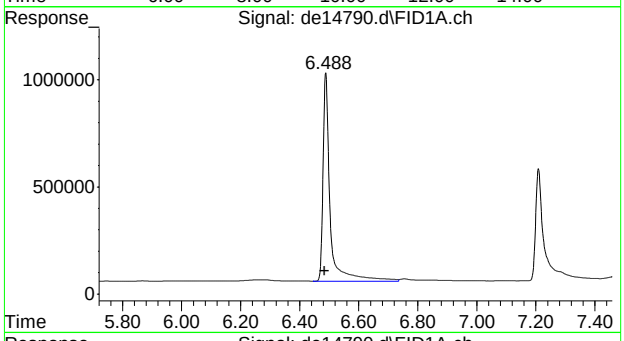


SGS ACCUTEST MC46737



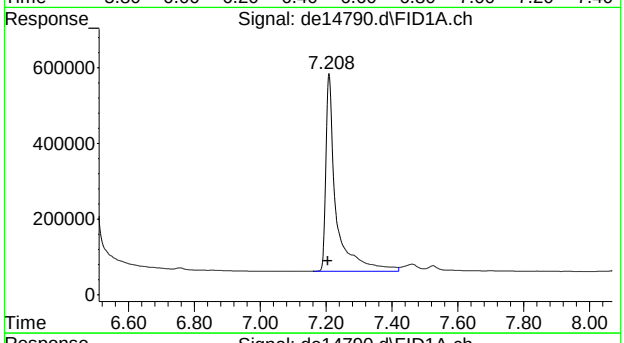
#1 c11-c22 Aromatics (Unadj.)

```
      R.T.:    5.097 min
Delta R.T.:    0.000 min
  Response:   1879841
      Conc:  15.07 µg/ml m
```



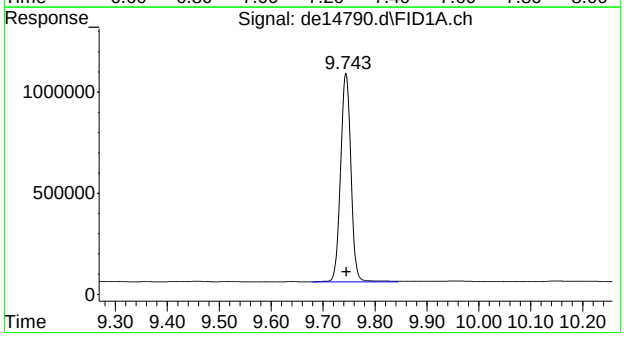
#4 2-fluorobiphenyl

```
      R.T.:    6.488 min
Delta R.T.:    0.005 min
  Response:   1630973
      Conc:  14.25 µg/ml
```



#6 2-bromonaphthalene

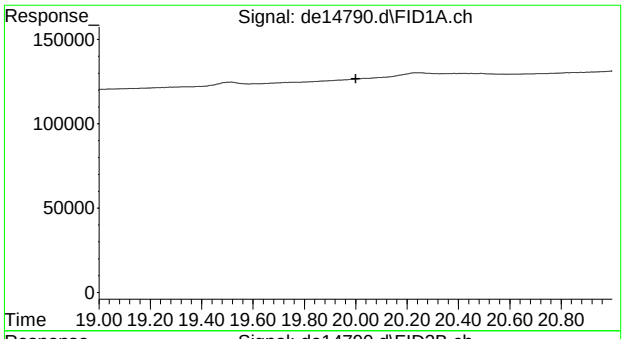
```
      R.T.:    7.208 min
Delta R.T.:    0.003 min
  Response:   1122026
      Conc:  15.65 µg/ml
```



#11 o-terphenyl

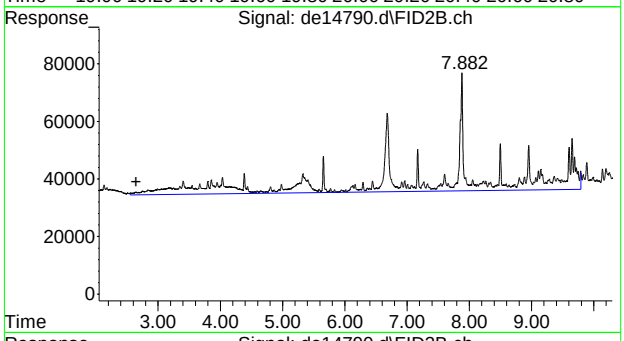
```
      R.T.:    9.743 min
Delta R.T.:   -0.002 min
  Response:   1426798
      Conc:  10.78 µg/ml
```


SGS ACCUTEST MC46737



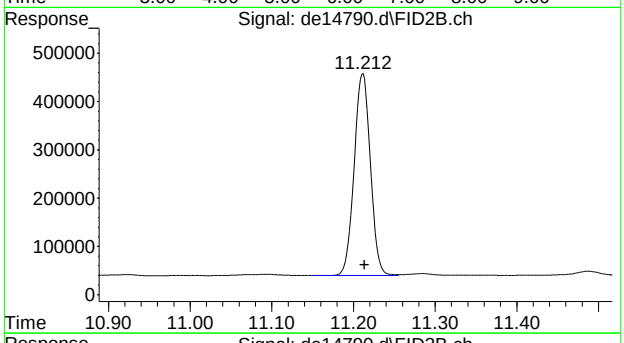
#22 bht

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



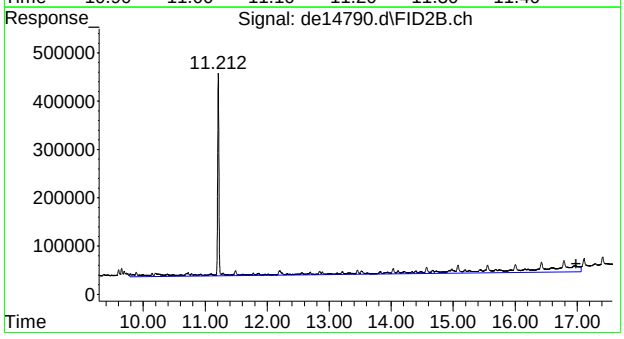
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 1178297
Conc: 13.98 µg/ml m



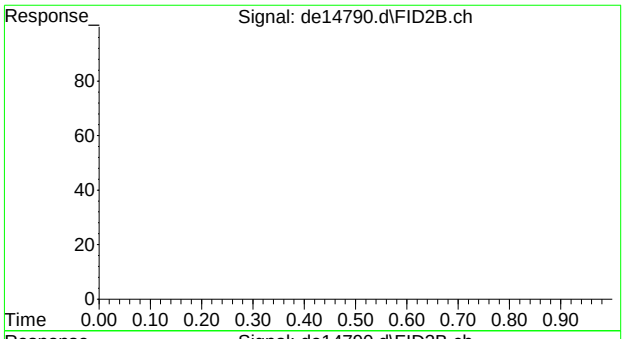
#35 1-chlorooctadecane

R.T.: 11.212 min
Delta R.T.: -0.002 min
Response: 578667
Conc: 8.88 µg/ml



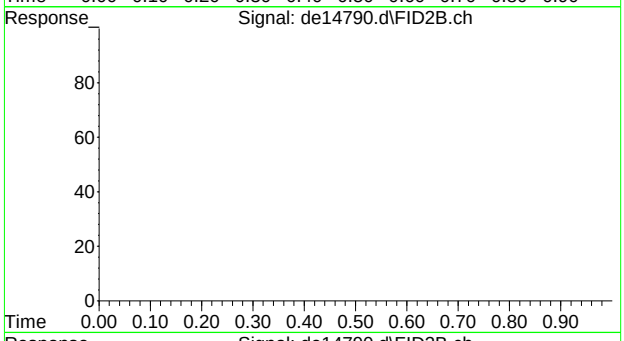
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1705303
Conc: 21.91 µg/ml m



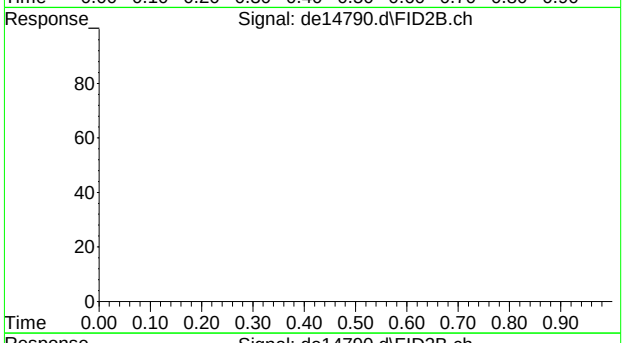
#42 bht

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



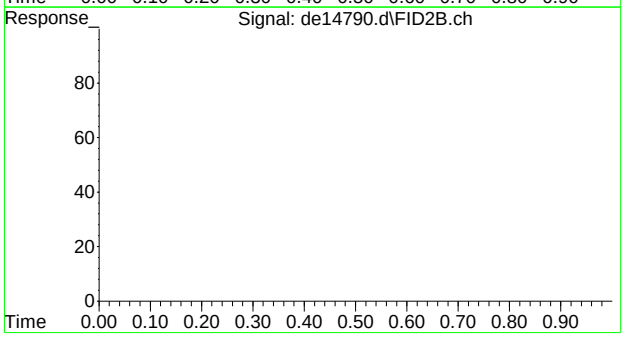
#43 bht

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 MC46737

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160708EPH\
Data File : de14791.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 3:05 pm
Operator : thomasa
Sample : mc46737-4,op48079
Misc : op48079,gde822,880,,,2,,w
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 15:31:16 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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	1890283	16.512 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery =	82.56%#
6) s 2-bromonaphthalene	7.210	1274072	17.769 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery =	88.84%#
11) s o-terphenyl	9.745	1776700	13.429 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery =	67.14%#
35) s 1-chlorooctadecane	11.212	765425	11.748 µg/ml
Spiked Amount 20.000 Range 8 - 28		Recovery =	58.74%#
Target Compounds			
1) h c11-c22 Aromatics (Un...	5.097	2979597	23.883 µg/mlm
10) anthracene	9.175	27927	0.210 µg/ml
25) h c-9	2.647	1197672	14.206 µg/mlm
41) h c-36	16.983	1468990	18.876 µg/mlm

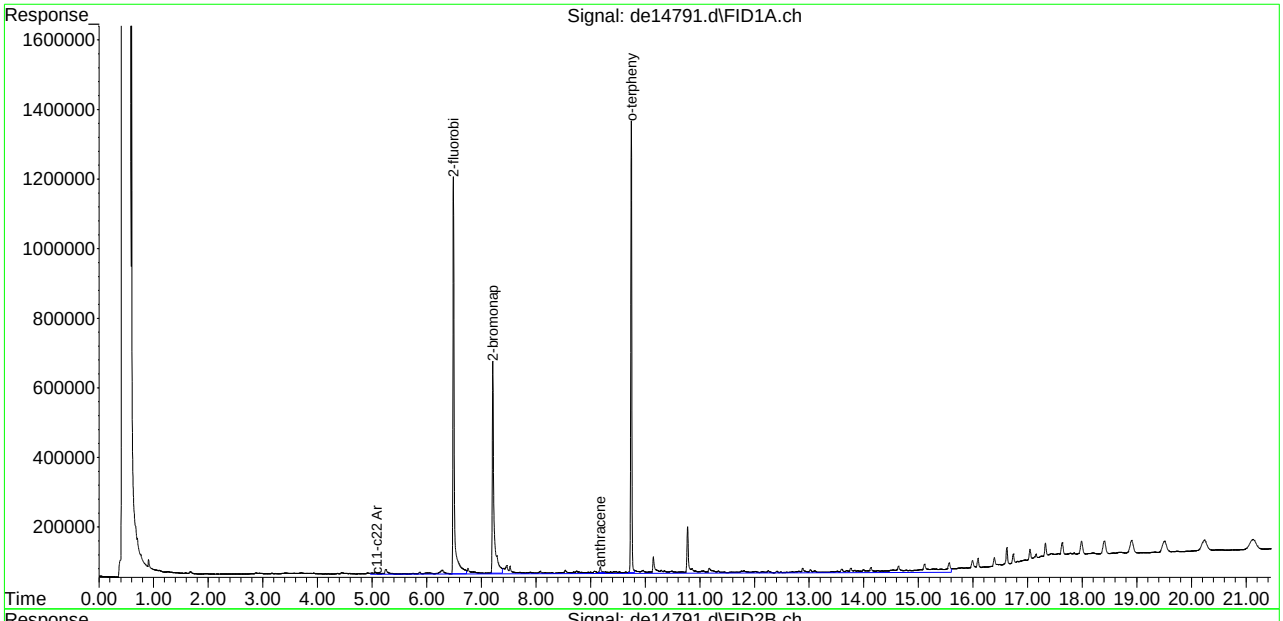
(f)=RT Delta > 1/2 Window (m)=manual int.

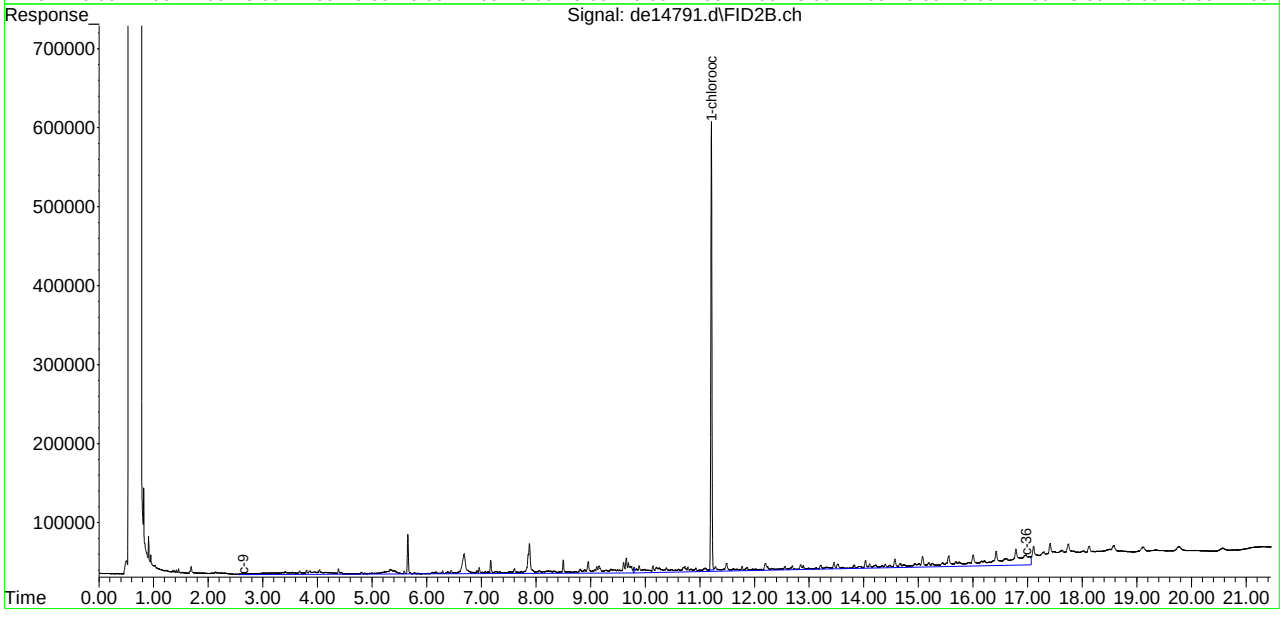
Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160708EPH\
Data File : de14791.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 3:05 pm
Operator : thomasa
Sample : mc46737-4,op48079
Misc : op48079,gde822,880,,,2,,w
ALS Vial : 14 Sample Multiplier: 1

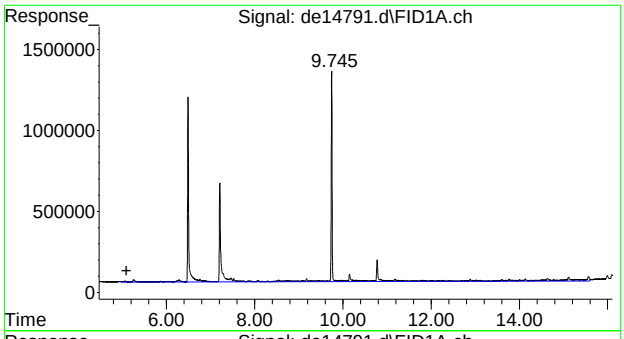
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 15:31:16 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 2016
Response via : Initial Calibration
Integrator: RTE

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



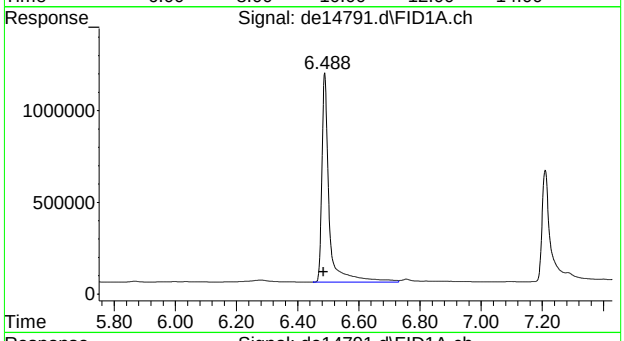


SGS ACCUTEST MC46737



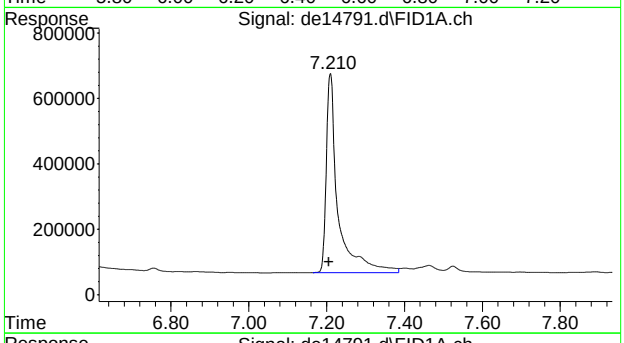
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 2979597
Conc: 23.88 µg/ml m



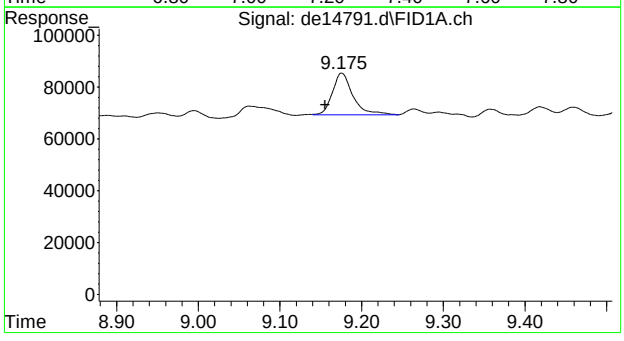
#4 2-fluorobiphenyl

R.T.: 6.488 min
Delta R.T.: 0.005 min
Response: 1890283
Conc: 16.51 µg/ml



#6 2-bromonaphthalene

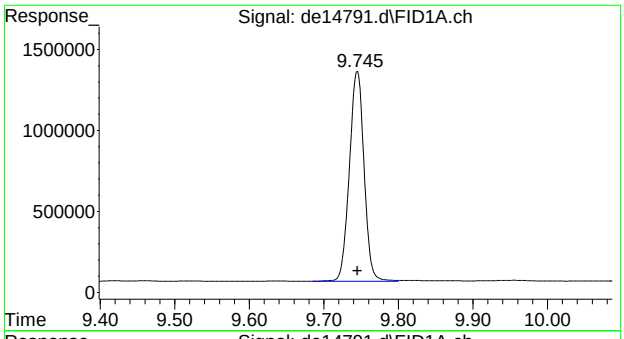
R.T.: 7.210 min
Delta R.T.: 0.005 min
Response: 1274072
Conc: 17.77 µg/ml



#10 anthracene

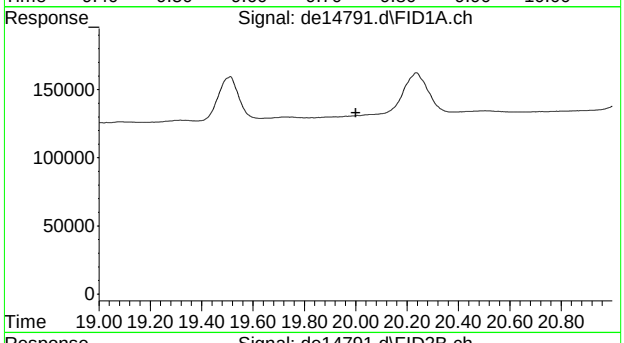
R.T.: 9.175 min
Delta R.T.: 0.020 min
Response: 27927
Conc: 0.21 µg/ml

SGS ACCUTEST MC46737



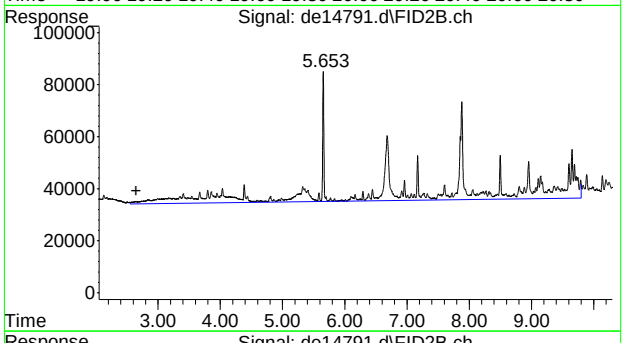
#11 o-terphenyl

R.T.: 9.745 min
Delta R.T.: 0.000 min
Response: 1776700
Conc: 13.43 µg/ml



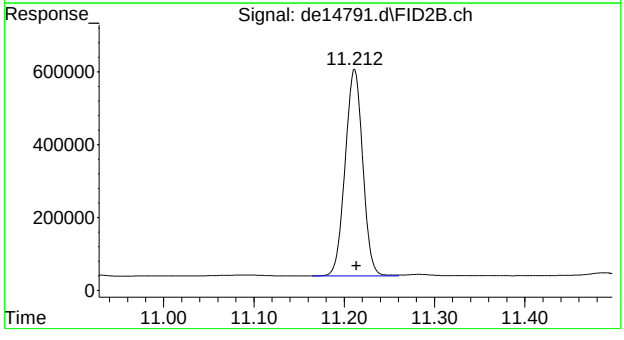
#22 bht

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



#25 c-9

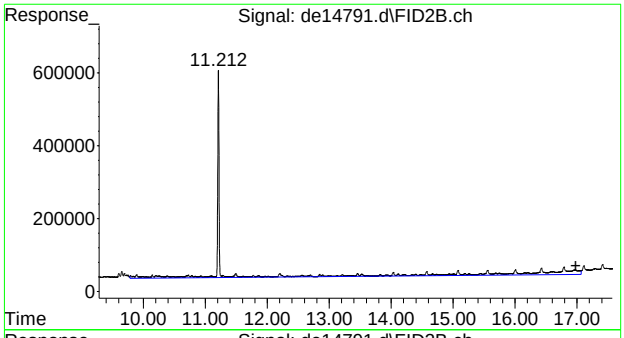
R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 1197672
Conc: 14.21 µg/ml m



#35 1-chlorooctadecane

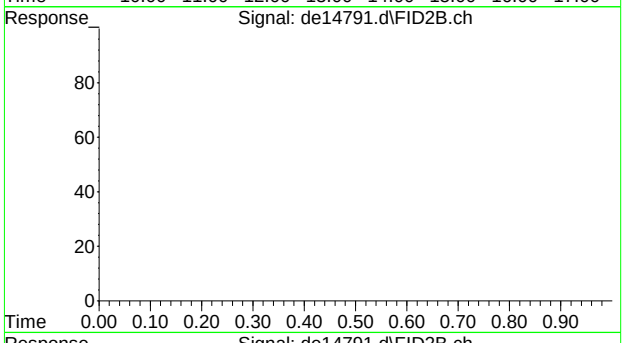
R.T.: 11.212 min
Delta R.T.: -0.002 min
Response: 765425
Conc: 11.75 µg/ml

SGS ACCUTEST MC46737



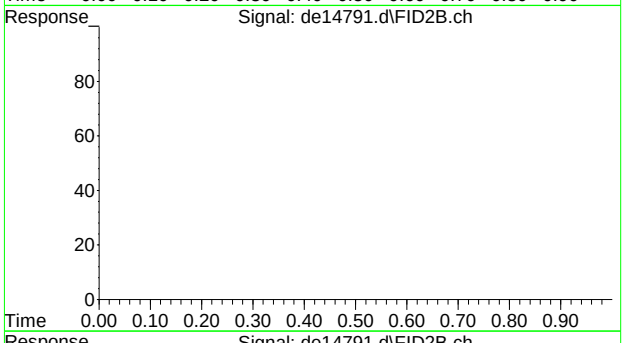
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1468990
Conc: 18.88 µg/ml m



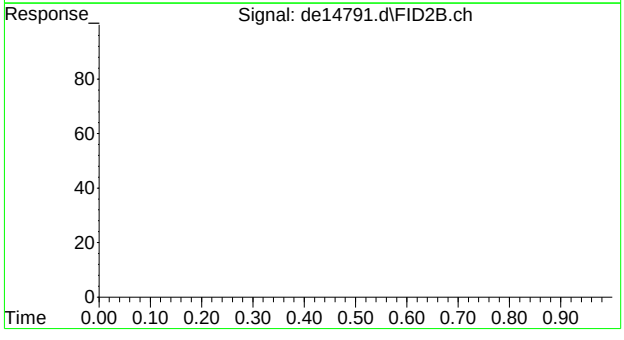
#42 bht

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



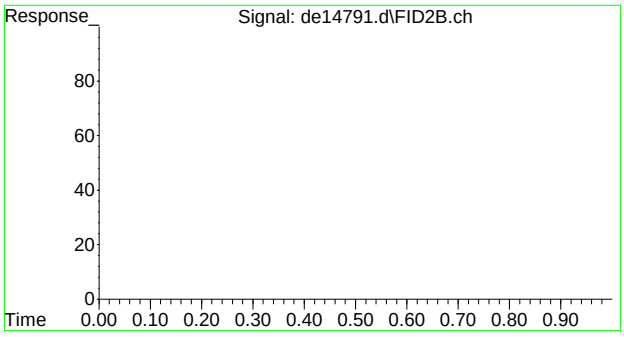
#43 bht

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



#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\DE160708EPH\
Data File : de14792.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 3:32 pm
Operator : thomasa
Sample : mc46737-5,op48079
Misc : op48079,gde822,900,,,2,,w
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 11 07:53:00 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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	1881035	16.432 µg/ml
Spiked Amount 20.000 Range 8 - 28	Recovery = 82.16%#		
6) s 2-bromonaphthalene	7.208	1129974	15.759 µg/ml
Spiked Amount 20.000 Range 8 - 28	Recovery = 78.80%#		
11) s o-terphenyl	9.745	1305182	9.865 µg/ml
Spiked Amount 20.000 Range 8 - 28	Recovery = 49.33%#		
35) s 1-chlorooctadecane	11.212	520011	7.981 µg/ml
Spiked Amount 20.000 Range 8 - 28	Recovery = 39.91%#		
Target Compounds			
1) h c11-c22 Aromatics (Un...	5.097	2241581	17.968 µg/mlm
25) h c-9	2.647	1220348	14.475 µg/mlm
41) h c-36	16.983	1872124	24.056 µg/mlm

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

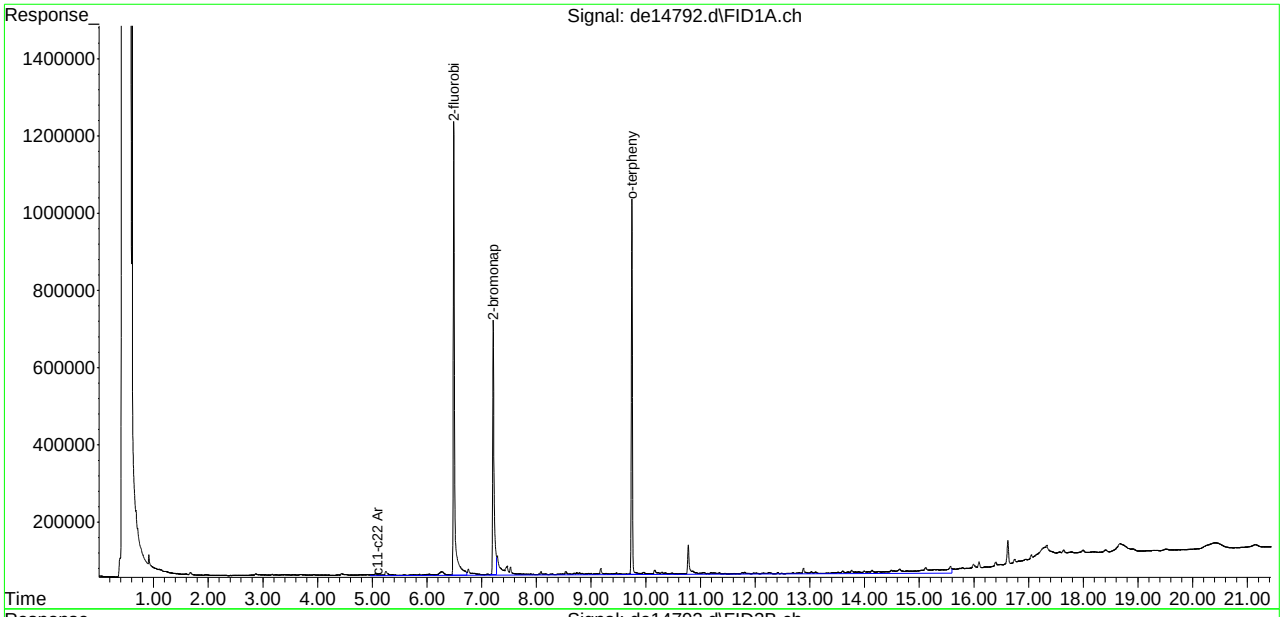
SGS ACCUTEST MC46737

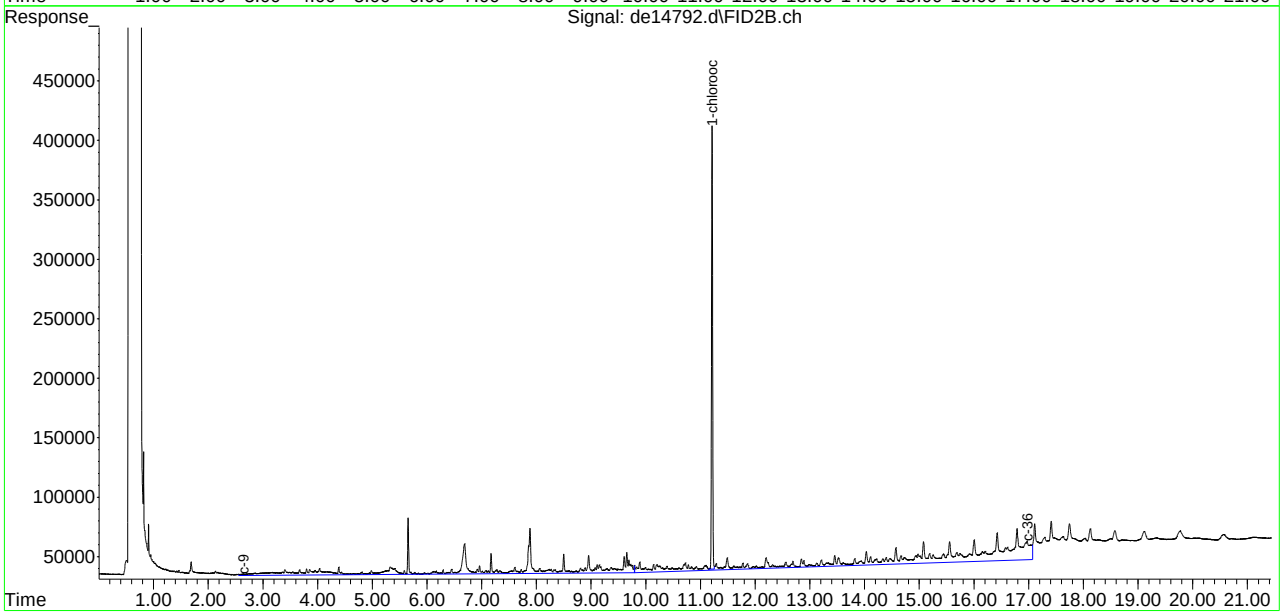
Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160708EPH\
Data File : de14792.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 3:32 pm
Operator : thomasa
Sample : mc46737-5,op48079
Misc : op48079,gde822,900,,,2,,w
ALS Vial : 16 Sample Multiplier: 1

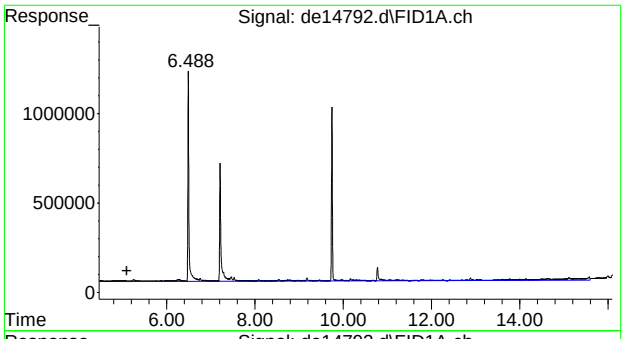
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 11 07:53:00 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 2016
Response via : Initial Calibration
Integrator: RTE

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



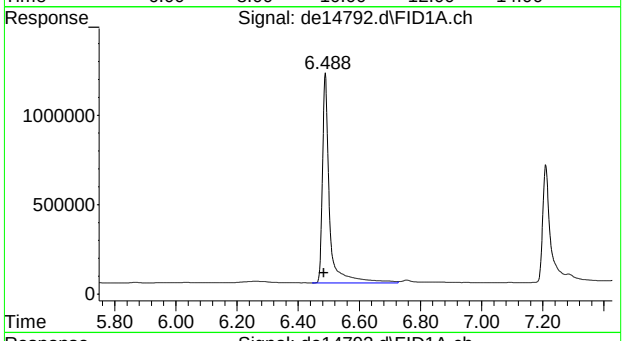


SGS ACCUTEST MC46737



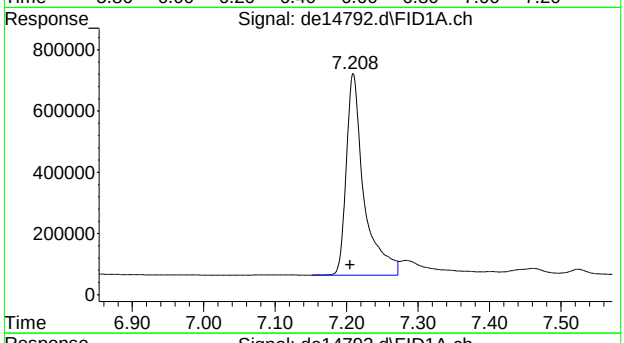
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 2241581
Conc: 17.97 µg/ml m



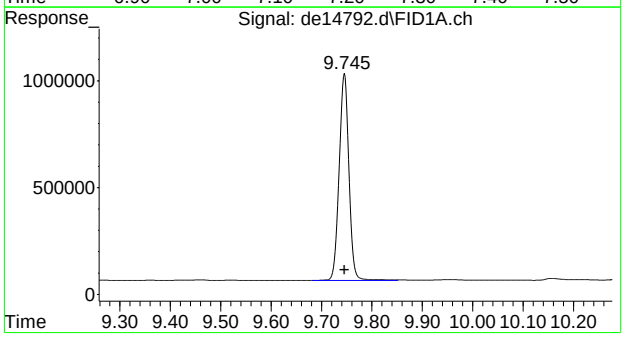
#4 2-fluorobiphenyl

R.T.: 6.488 min
Delta R.T.: 0.005 min
Response: 1881035
Conc: 16.43 µg/ml



#6 2-bromonaphthalene

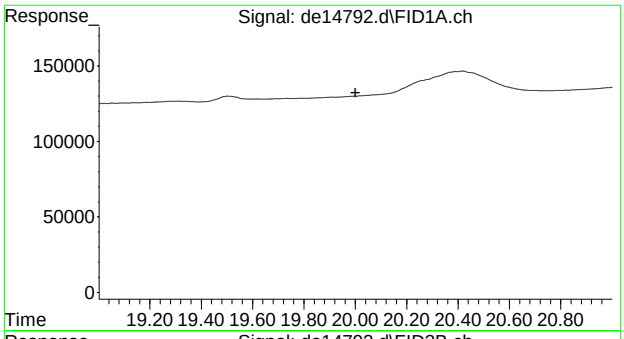
R.T.: 7.208 min
Delta R.T.: 0.003 min
Response: 1129974
Conc: 15.76 µg/ml



#11 o-terphenyl

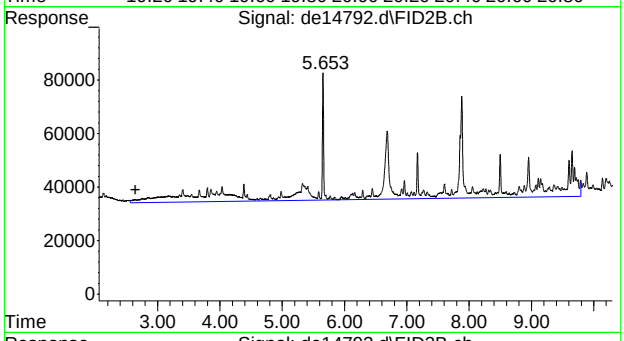
R.T.: 9.745 min
Delta R.T.: 0.000 min
Response: 1305182
Conc: 9.86 µg/ml

SGS ACCUTEST MC46737



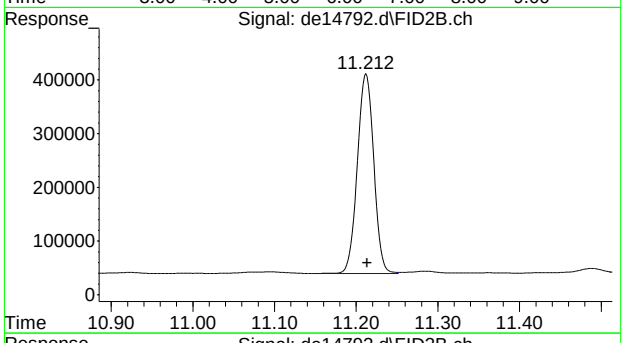
#22 bht

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



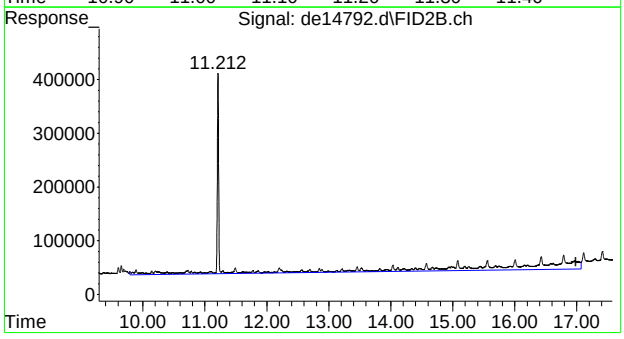
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 1220348
Conc: 14.48 µg/ml m



#35 1-chlorooctadecane

R.T.: 11.212 min
Delta R.T.: -0.002 min
Response: 520011
Conc: 7.98 µg/ml



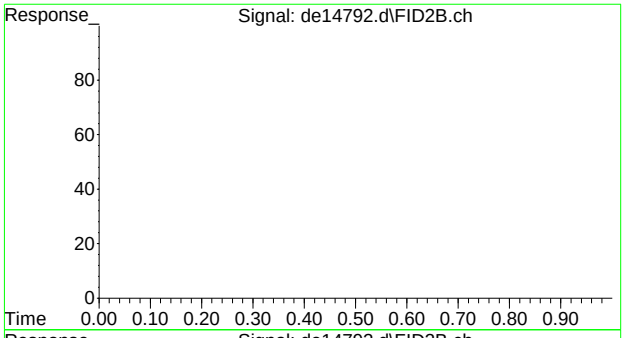
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1872124
Conc: 24.06 µg/ml m

7.1.5

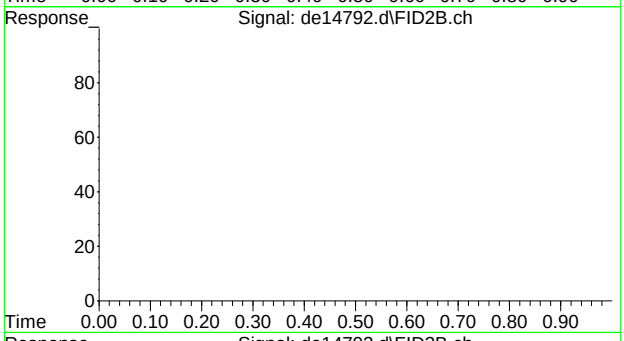
7

SGS ACCUTEST MC46737



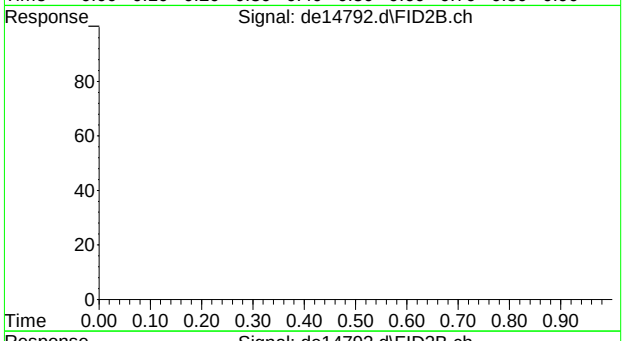
#42 bht

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



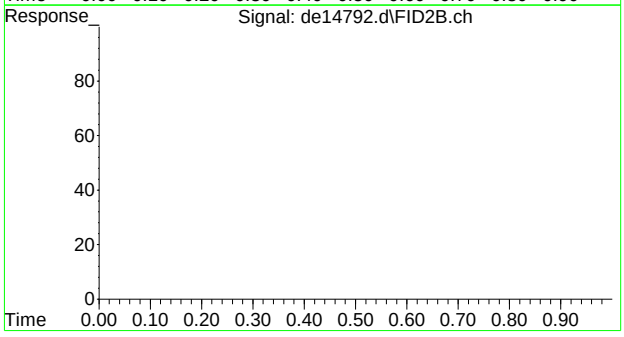
#43 bht

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 MC46737

Quantitation Report (QT Reviewed)

```
Data Path : G:\1\DATA\DE160708EPH\
Data File : de14787.d
Signal(s) : Signal #1: FID1A.ch  Signal #2: FID2B.ch
Acq On    :  8 Jul 2016   1:14 pm
Operator  : thomasa
Sample    : op48079-mb
Misc      : op48079,gde822,1000,,,2,,w
ALS Vial  : 6   Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:43:20 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title  : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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        2064286   18.032 µg/ml
Spiked Amount     20.000   Range   8 -  28    Recovery   =   90.16%#
 6) s   2-bromonaphthalene            7.207        1399666   19.520 µg/ml
Spiked Amount     20.000   Range   8 -  28    Recovery   =   97.60%#
11) s   o-terphenyl                   9.743        1998824   15.107 µg/ml
Spiked Amount     20.000   Range   8 -  28    Recovery   =   75.53%#
35) s   1-chlorooctadecane           11.212         759309   11.654 µg/ml
Spiked Amount     20.000   Range   8 -  28    Recovery   =   58.27%#

 Target Compounds
 1) h   c11-c22 Aromatics (Un...      5.097        1753776   14.058 µg/mlm
25) h   c-9                          2.647        1370331   16.254 µg/mlm
41) h   c-36                        16.983        1520386   19.536 µg/mlm
 ---------------------------------------------------------------------------

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

7.2.1

7

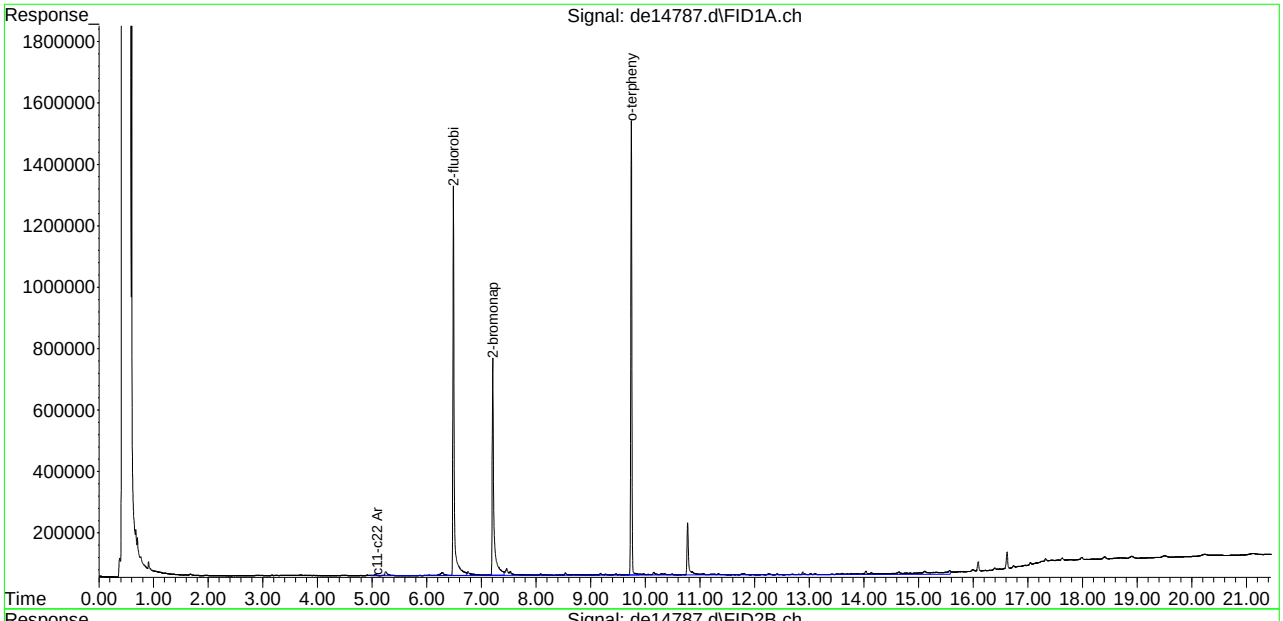
SGS ACCUTEST MC46737

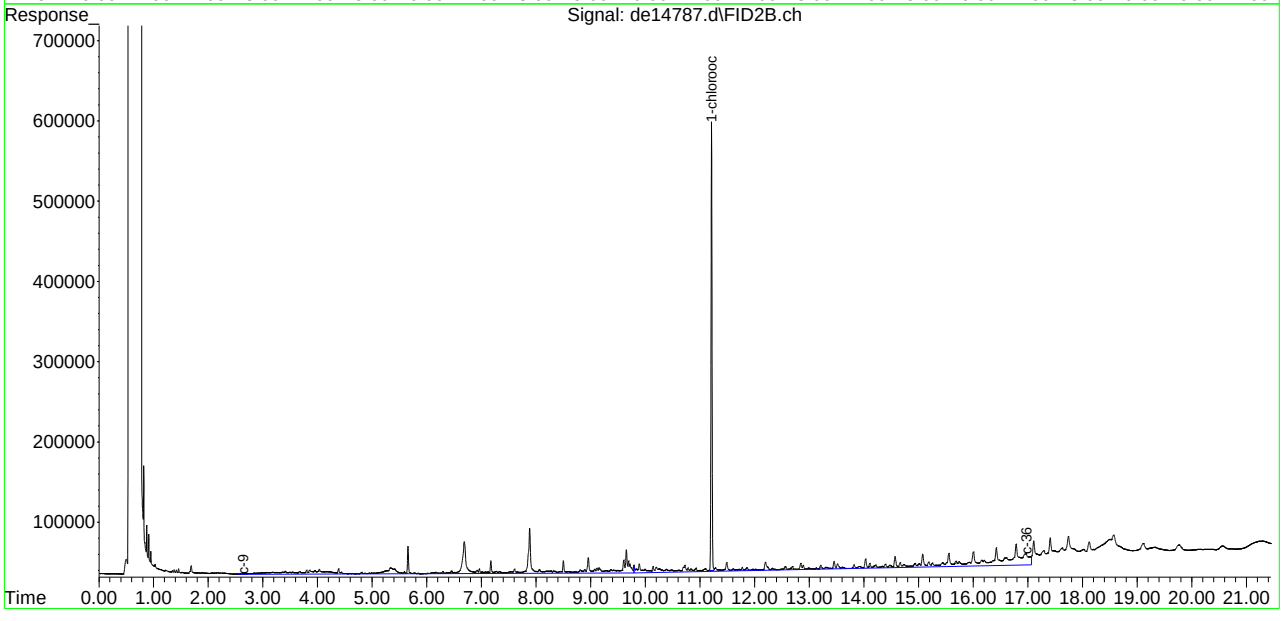
Quantitation Report (QT Reviewed)

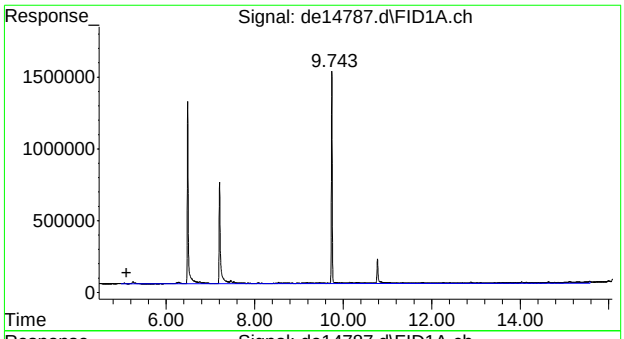
Data Path : G:\1\DATA\DE160708EPH\
Data File : de14787.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 1:14 pm
Operator : thomasa
Sample : op48079-mb
Misc : op48079,gde822,1000,,,2,,w
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:43:20 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 2016
Response via : Initial Calibration
Integrator: RTE

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

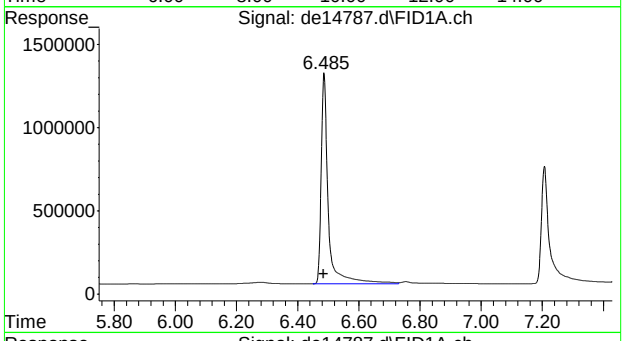






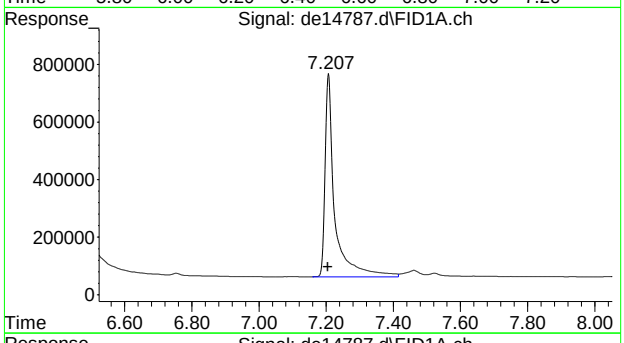
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 1753776
Conc: 14.06 µg/ml m



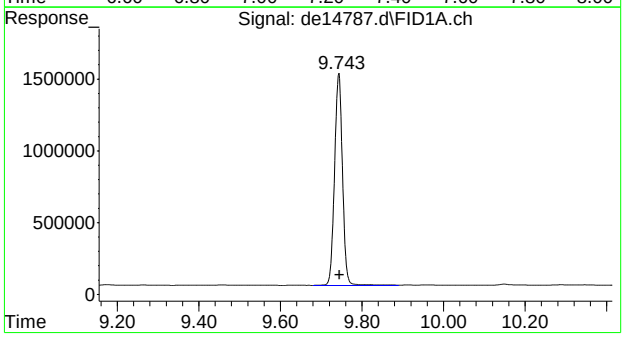
#4 2-fluorobiphenyl

R.T.: 6.485 min
Delta R.T.: 0.002 min
Response: 2064286
Conc: 18.03 µg/ml



#6 2-bromonaphthalene

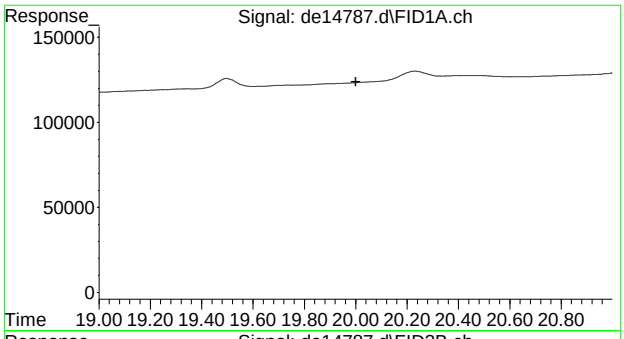
R.T.: 7.207 min
Delta R.T.: 0.002 min
Response: 1399666
Conc: 19.52 µg/ml



#11 o-terphenyl

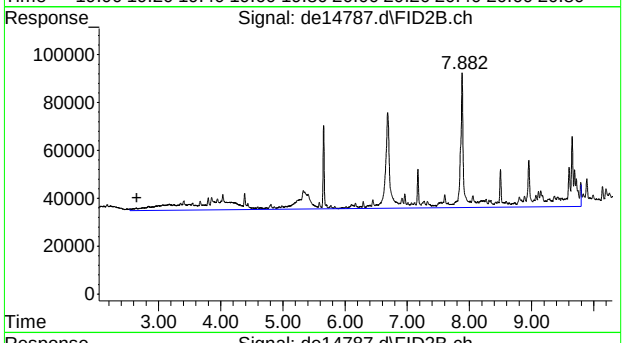
R.T.: 9.743 min
Delta R.T.: -0.002 min
Response: 1998824
Conc: 15.11 µg/ml

SGS ACCUTEST MC46737



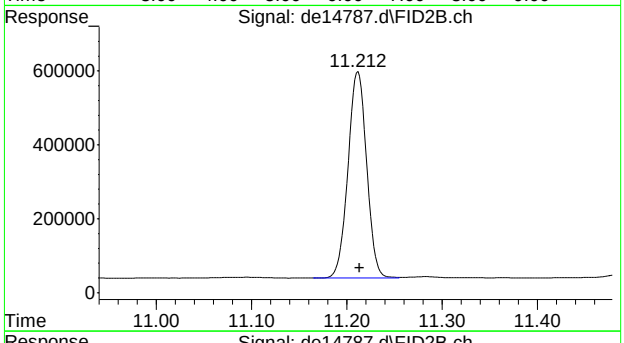
#22 bht

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



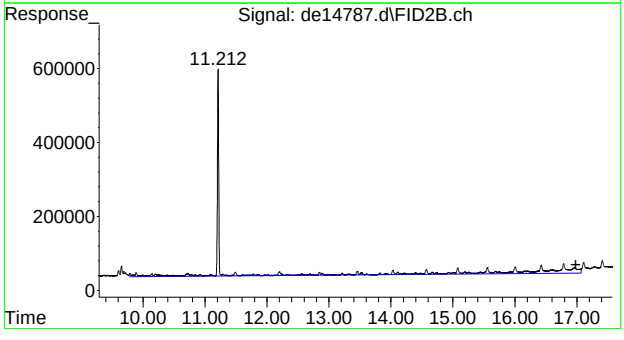
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 1370331
Conc: 16.25 µg/ml m



#35 1-chlorooctadecane

R.T.: 11.212 min
Delta R.T.: -0.002 min
Response: 759309
Conc: 11.65 µg/ml



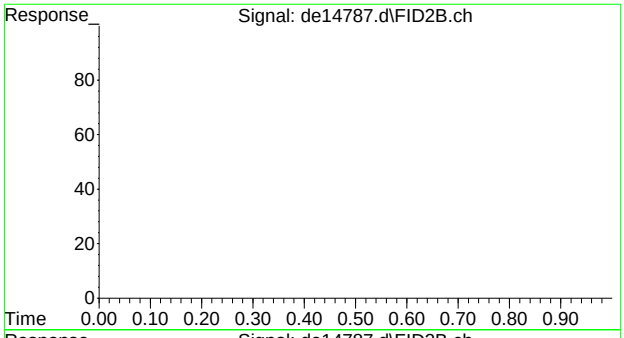
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1520386
Conc: 19.54 µg/ml m

7.2.1

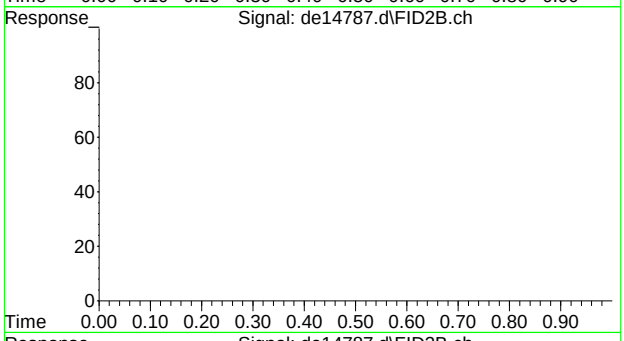
7

SGS ACCUTEST MC46737



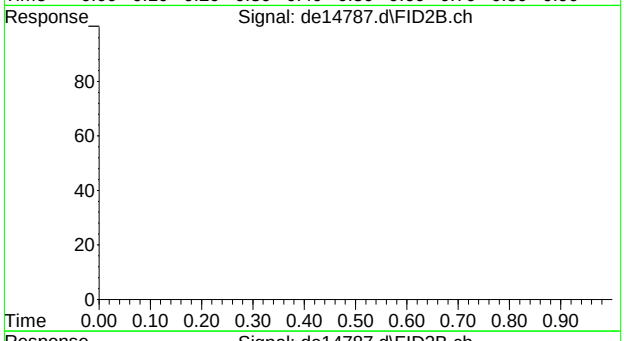
#42 bht

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



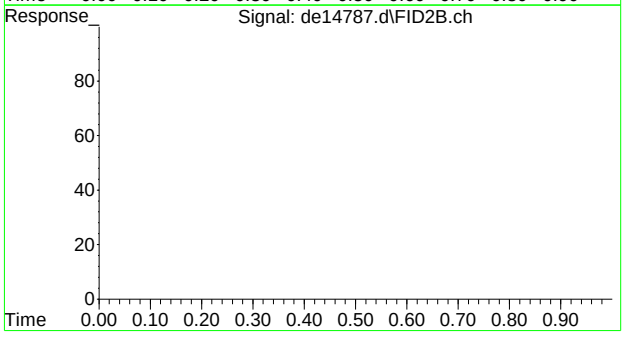
#43 bht

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 MC46737

Manual Integrations
APPROVED
(compounds with "m" flag)
Andri Piluri
07/11/16 12:44

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160708EPH\
Data File : de14785.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 12:19 pm
Operator : thomasa
Sample : op48079-bs
Misc : op48079,gde822,1000,,,2,,w
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:33:34 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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	6.483	2119113	18.511 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 92.55%#
6) s	2-bromonaphthalene	7.203	1327888	18.519 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 92.59%#
11) s	o-terphenyl	9.742	2060202	15.571 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 77.85%#
35) s	1-chlorooctadecane	11.212	742498	11.396 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 56.98%#
	Target Compounds			
1) h	c11-c22 Aromatics (Un...	5.097	44225838	354.497 µg/mlm
2)	naphthalene	5.030	2014993	16.051 µg/ml
3)	2-methylnaphthalene	5.928	2038357	16.159 µg/ml
5)	acenaphthylene	7.037	2145917	16.960 µg/ml
7)	acenaphthene	7.277	2469810	17.732 µg/ml
8)	fluorene	7.920	2260631	17.597 µg/ml
9)	phenanthrene	9.095	2316181	18.542 µg/ml
10)	anthracene	9.152	2477897	18.626 µg/ml
12)	fluoranthene	10.592	2556609	19.932 µg/ml
13)	pyrene	10.845	2626562	19.998 µg/ml
14)	benzo(a)anthracene	12.407	2505337	20.623 µg/ml
15)	chrysene	12.452	2611511	20.458 µg/ml
16)	benzo(B)fluoranthene	13.697	2624552	22.167 µg/ml
17)	benzo(k)fluoranthene	13.723	2449704	19.134 µg/ml
18)	benzo(a)pyrene	14.028	2520227	21.365 µg/ml
19)	indeno(1,2,3-cd)pyrene	15.163	2511527	21.458 µg/mlm
20)	dibenzo(ah)anthracene	15.208	2493650	22.008 µg/mlm
21)	benzo(ghi)perylene	15.383	2491312	21.955 µg/ml
25) h	c-9	2.647	1022652	12.130 µg/mlm
26) h	c-10	3.800	1219294	14.463 µg/mlm
28)	c-12	5.653	1355734	16.081 µg/ml
30)	c-14	7.170	1384214	16.419 µg/ml
31)	c-16	8.498	1450869	17.210 µg/ml
32)	c-18	9.692	1560572	18.511 µg/ml
33)	c-19	10.248	1552618	19.950 µg/ml
34)	c-20	10.778	1534787	19.721 µg/ml
36)	c-22	11.772	1530714	19.669 µg/ml
37)	c-24	12.688	1523383	19.575 µg/ml
38)	c-26	13.540	1494909	19.209 µg/ml
39)	c-28	14.332	1472027	18.915 µg/ml
40) h	c-30	15.082	1476748	18.975 µg/ml
41) h	c-36	16.983	1196899	15.380 µg/mlm

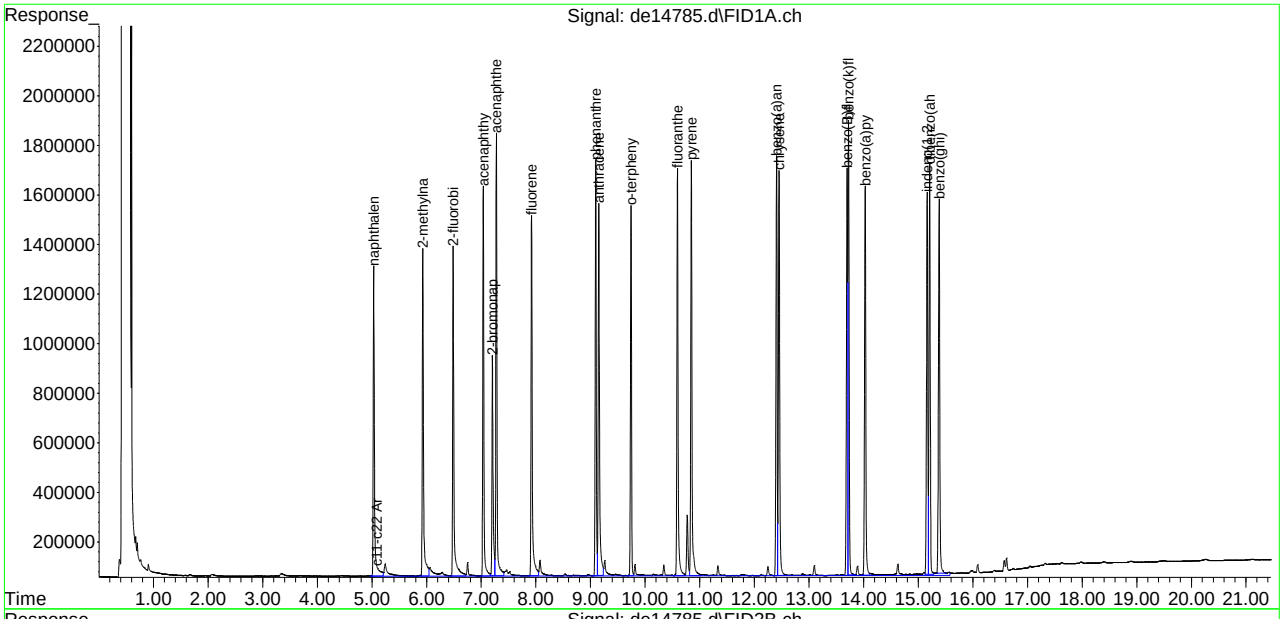
(f)=RT Delta > 1/2 Window (m)=manual int.

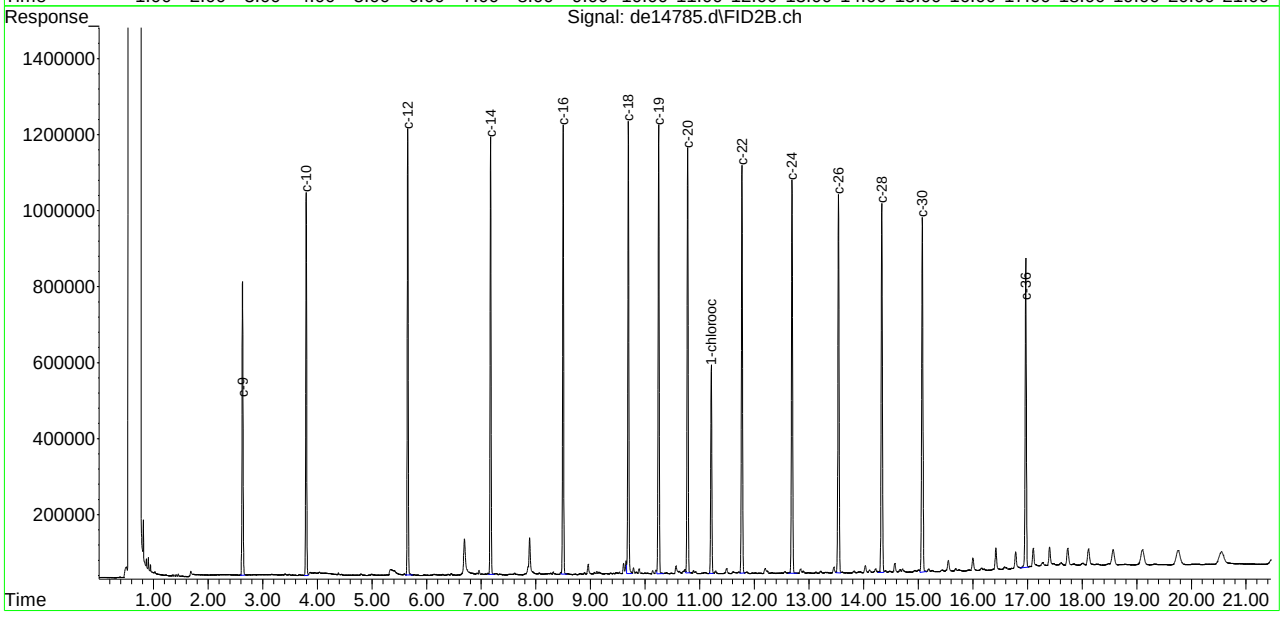
Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160708EPH\
Data File : de14785.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 12:19 pm
Operator : thomasa
Sample : op48079-bs
Misc : op48079,gde822,1000,,,2,,w
ALS Vial : 2 Sample Multiplier: 1

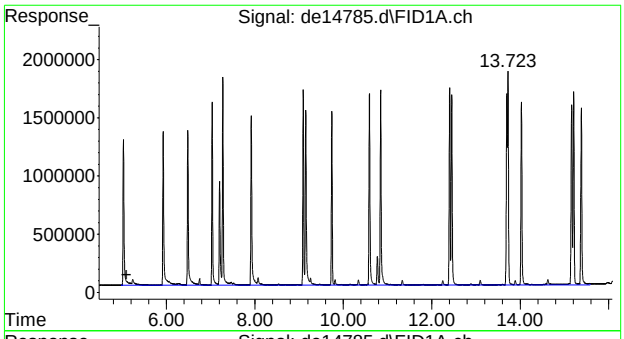
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:33:34 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 2016
Response via : Initial Calibration
Integrator: RTE

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



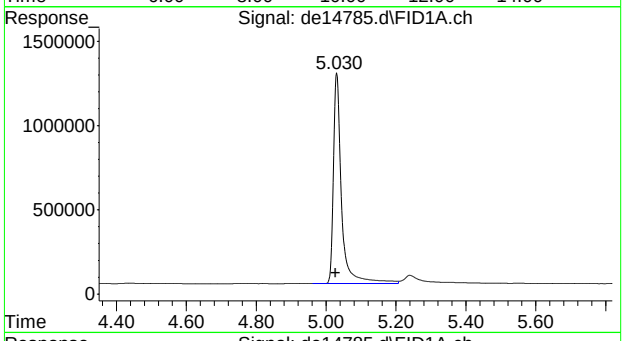


SGS ACCUTEST MC46737



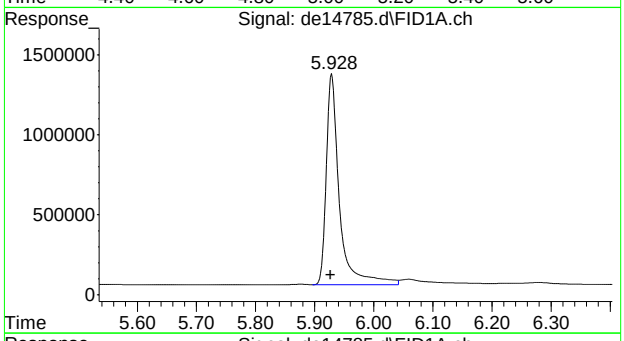
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 44225838
Conc: 354.50 µg/ml m



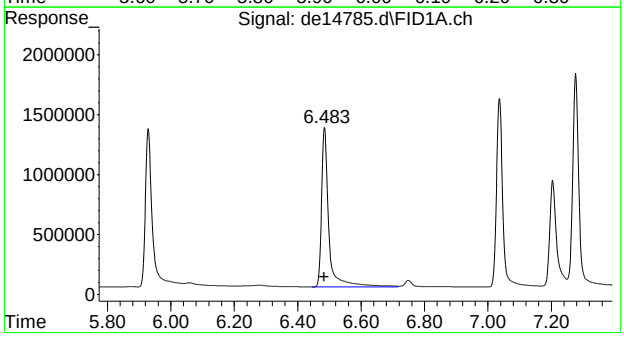
#2 naphthalene

R.T.: 5.030 min
Delta R.T.: 0.003 min
Response: 2014993
Conc: 16.05 µg/ml



#3 2-methylnaphthalene

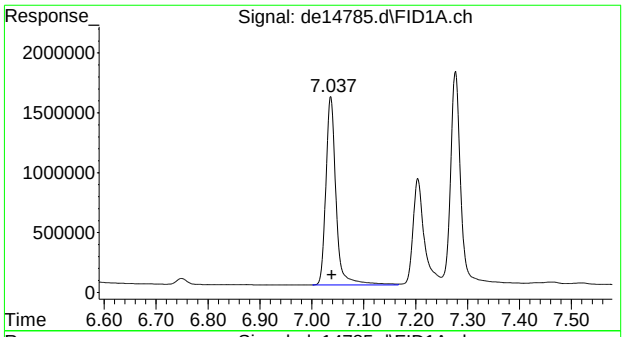
R.T.: 5.928 min
Delta R.T.: 0.002 min
Response: 2038357
Conc: 16.16 µg/ml



#4 2-fluorobiphenyl

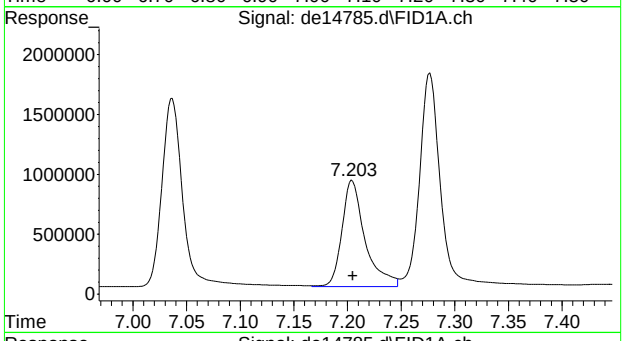
R.T.: 6.483 min
Delta R.T.: 0.000 min
Response: 2119113
Conc: 18.51 µg/ml

SGS ACCUTEST MC46737



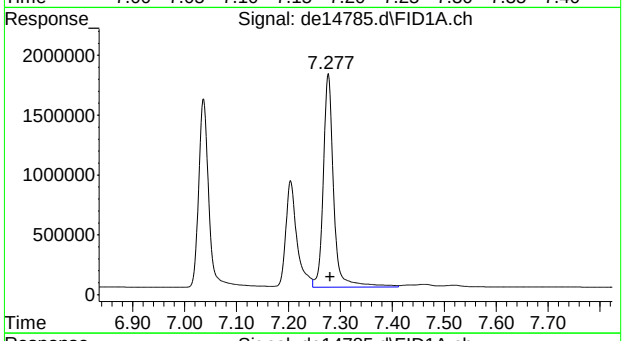
#5 acenaphthylene

R.T.: 7.037 min
Delta R.T.: -0.002 min
Response: 2145917
Conc: 16.96 µg/ml



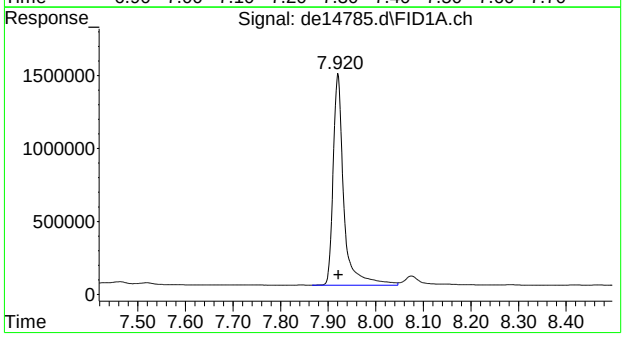
#6 2-bromonaphthalene

R.T.: 7.203 min
Delta R.T.: -0.002 min
Response: 1327888
Conc: 18.52 µg/ml



#7 acenaphthene

R.T.: 7.277 min
Delta R.T.: -0.003 min
Response: 2469810
Conc: 17.73 µg/ml



#8 fluorene

R.T.: 7.920 min
Delta R.T.: -0.002 min
Response: 2260631
Conc: 17.60 µg/ml

7.3.1

7

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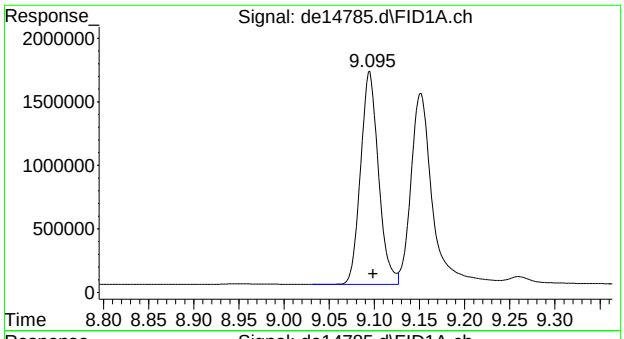
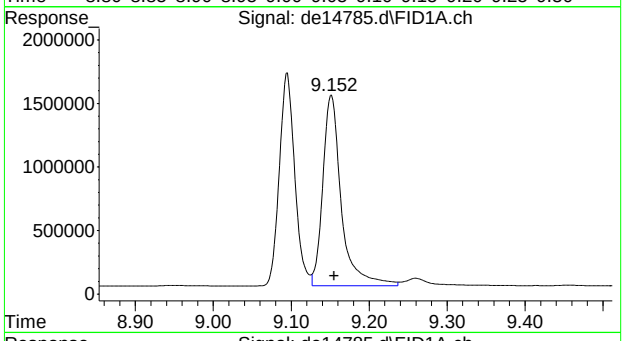


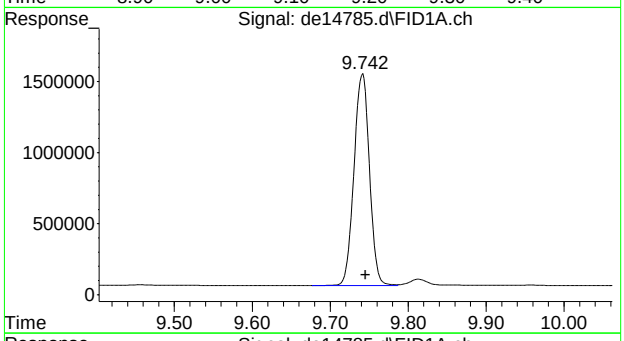
#9 phenanthrene

R.T.: 9.095 min
Delta R.T.: -0.003 min
Response: 2316181
Conc: 18.54 µg/ml



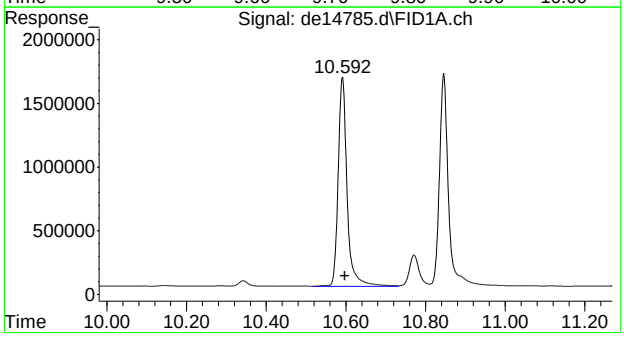
#10 anthracene

R.T.: 9.152 min
Delta R.T.: -0.003 min
Response: 2477897
Conc: 18.63 µg/ml



#11 o-terphenyl

R.T.: 9.742 min
Delta R.T.: -0.003 min
Response: 2060202
Conc: 15.57 µg/ml



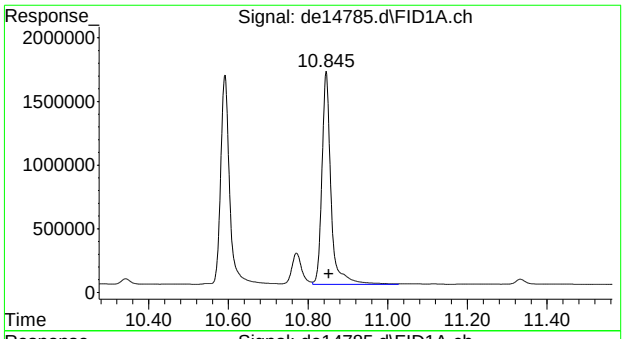
#12 fluoranthene

R.T.: 10.592 min
Delta R.T.: -0.005 min
Response: 2556609
Conc: 19.93 µg/ml

7.3.1

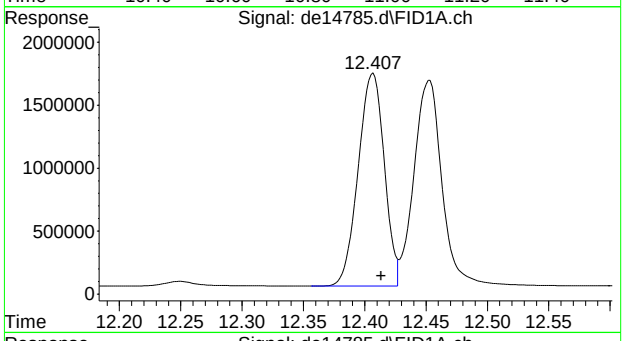
7

SGS ACCUTEST MC46737



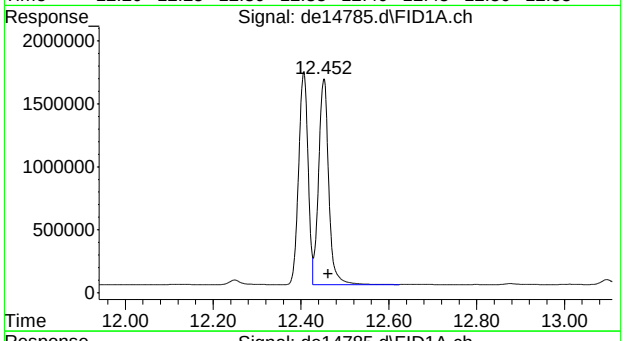
#13 pyrene

R.T.: 10.845 min
Delta R.T.: -0.007 min
Response: 2626562
Conc: 20.00 µg/ml



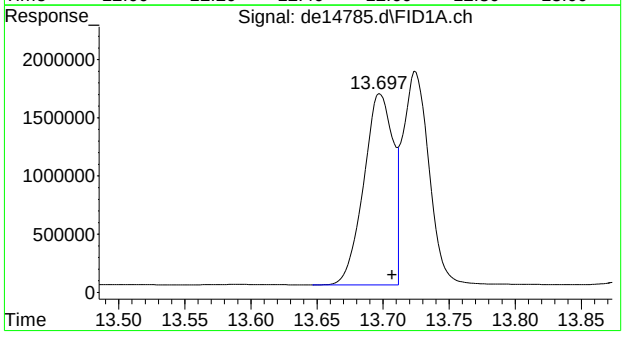
#14 benzo(a)anthracene

R.T.: 12.407 min
Delta R.T.: -0.007 min
Response: 2505337
Conc: 20.62 µg/ml



#15 chrysene

R.T.: 12.452 min
Delta R.T.: -0.010 min
Response: 2611511
Conc: 20.46 µg/ml



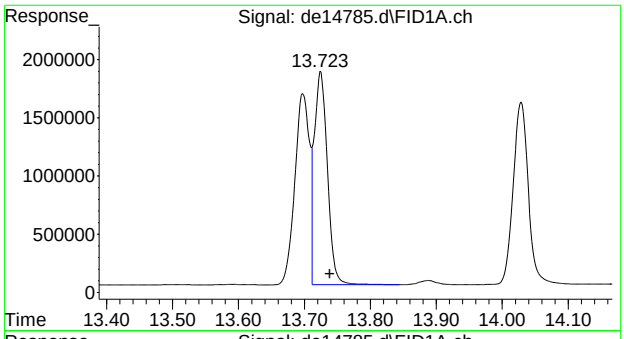
#16 benzo(B)fluoranthene

R.T.: 13.697 min
Delta R.T.: -0.010 min
Response: 2624552
Conc: 22.17 µg/ml

7.3.1

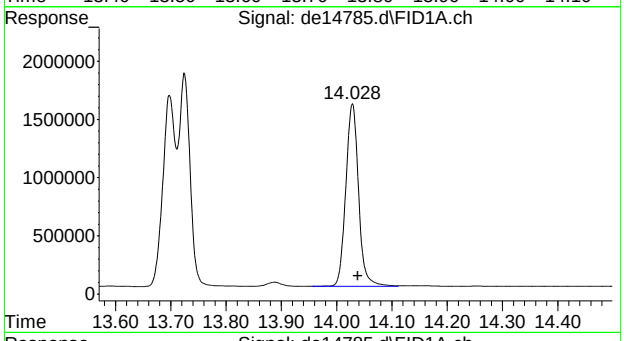
7

SGS ACCUTEST MC46737



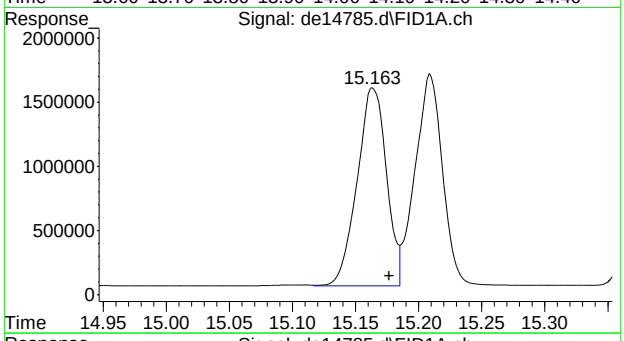
#17 benzo(k)fluoranthene

R.T.: 13.723 min
Delta R.T.: -0.015 min
Response: 2449704
Conc: 19.13 µg/ml



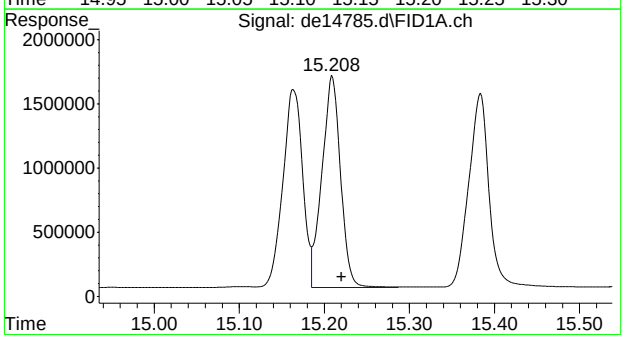
#18 benzo(a)pyrene

R.T.: 14.028 min
Delta R.T.: -0.010 min
Response: 2520227
Conc: 21.37 µg/ml



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

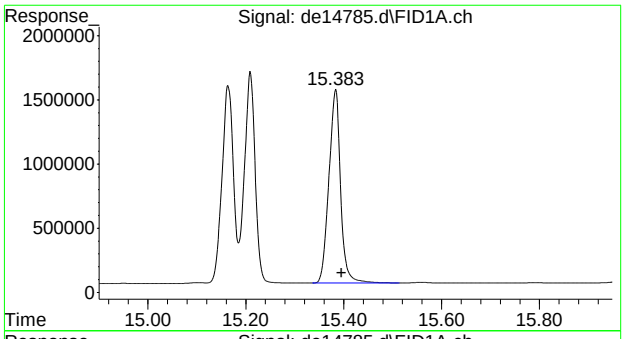
R.T.: 15.163 min
Delta R.T.: -0.013 min
Response: 2511527
Conc: 21.46 µg/ml m



#20 dibenzo(ah)anthracene

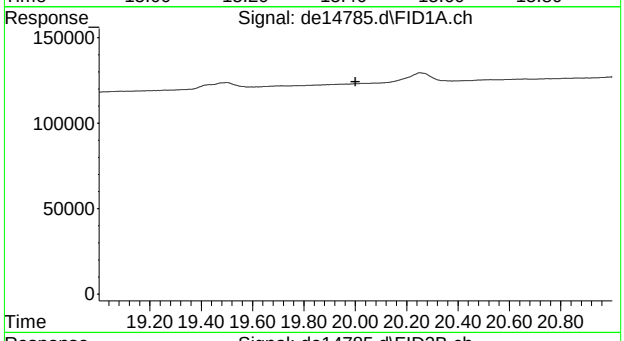
R.T.: 15.208 min
Delta R.T.: -0.012 min
Response: 2493650
Conc: 22.01 µg/ml m

SGS ACCUTEST MC46737



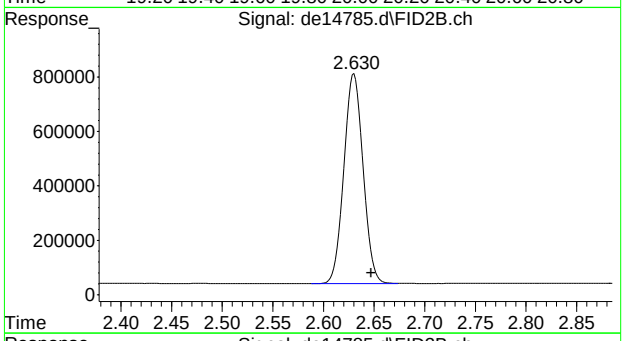
#21 benzo(ghi)perylene

R.T.: 15.383 min
Delta R.T.: -0.012 min
Response: 2491312
Conc: 21.95 µg/ml



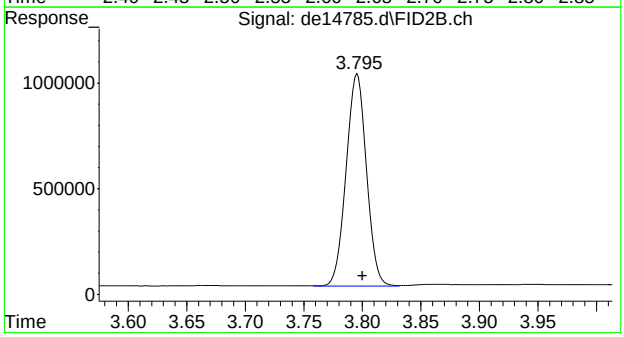
#22 bht

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



#25 c-9

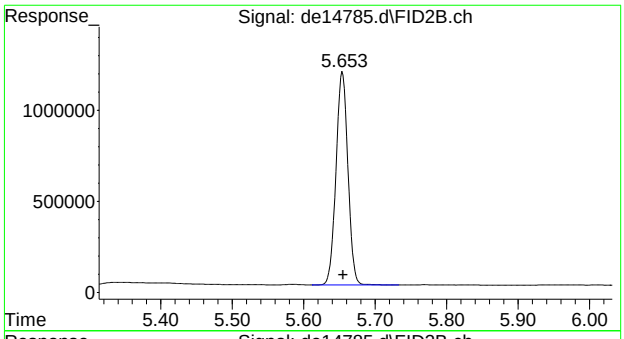
R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 1022652
Conc: 12.13 µg/ml m



#26 c-10

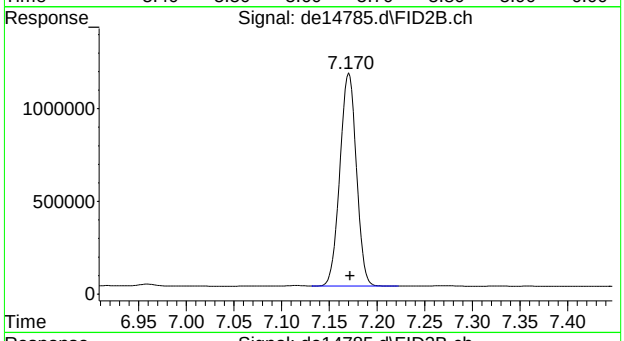
R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 1219294
Conc: 14.46 µg/ml m

SGS ACCUTEST MC46737



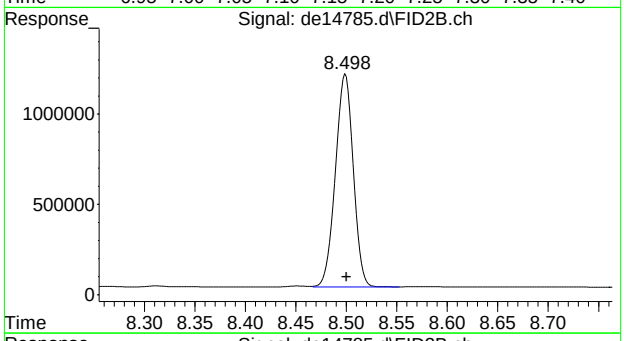
#28 c-12

R.T.: 5.653 min
Delta R.T.: -0.002 min
Response: 1355734
Conc: 16.08 µg/ml



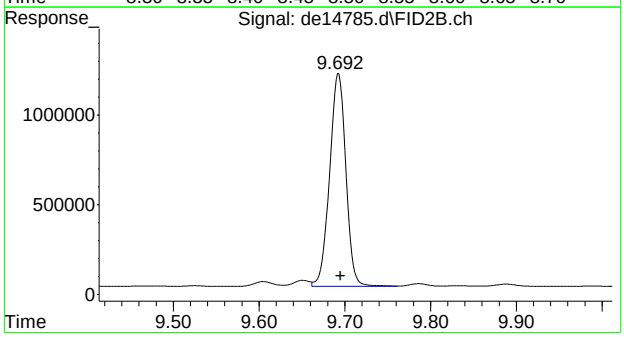
#30 c-14

R.T.: 7.170 min
Delta R.T.: -0.002 min
Response: 1384214
Conc: 16.42 µg/ml



#31 c-16

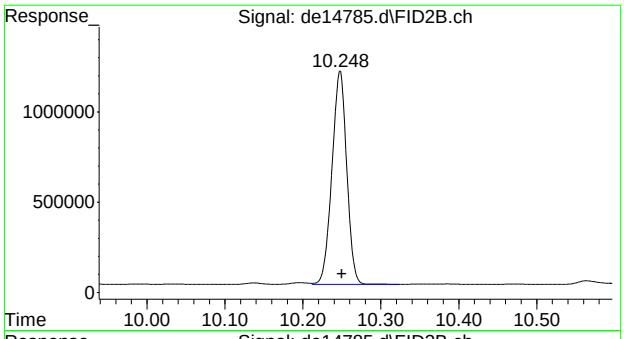
R.T.: 8.498 min
Delta R.T.: -0.002 min
Response: 1450869
Conc: 17.21 µg/ml



#32 c-18

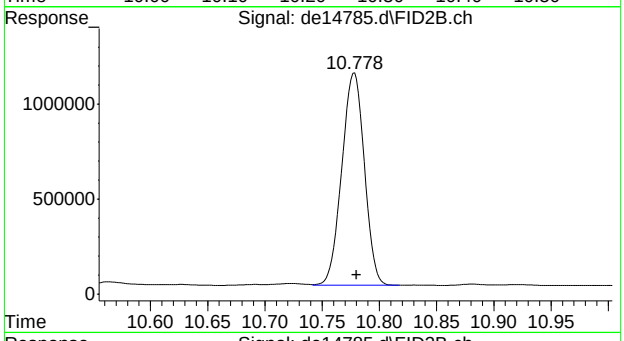
R.T.: 9.692 min
Delta R.T.: -0.003 min
Response: 1560572
Conc: 18.51 µg/ml

SGS ACCUTEST MC46737



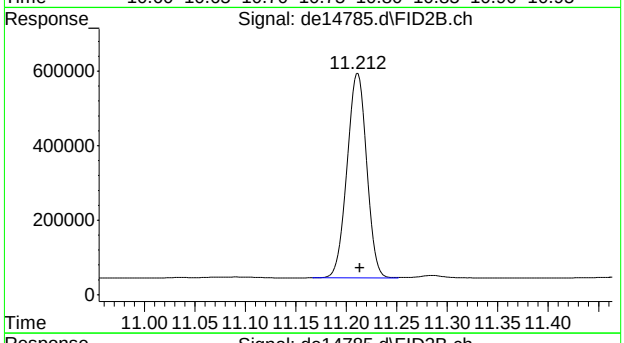
#33 c-19

R.T.: 10.248 min
Delta R.T.: -0.002 min
Response: 1552618
Conc: 19.95 µg/ml



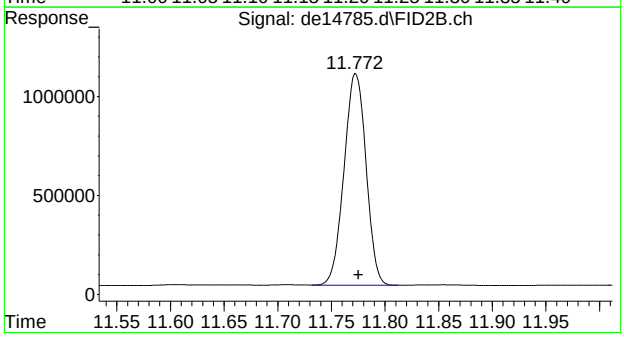
#34 c-20

R.T.: 10.778 min
Delta R.T.: -0.002 min
Response: 1534787
Conc: 19.72 µg/ml



#35 1-chlorooctadecane

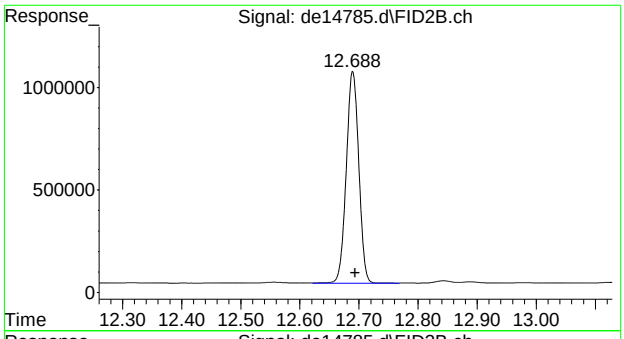
R.T.: 11.212 min
Delta R.T.: -0.002 min
Response: 742498
Conc: 11.40 µg/ml



#36 c-22

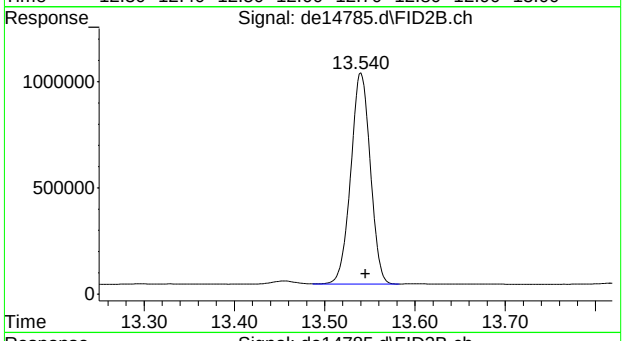
R.T.: 11.772 min
Delta R.T.: -0.003 min
Response: 1530714
Conc: 19.67 µg/ml

SGS ACCUTEST MC46737



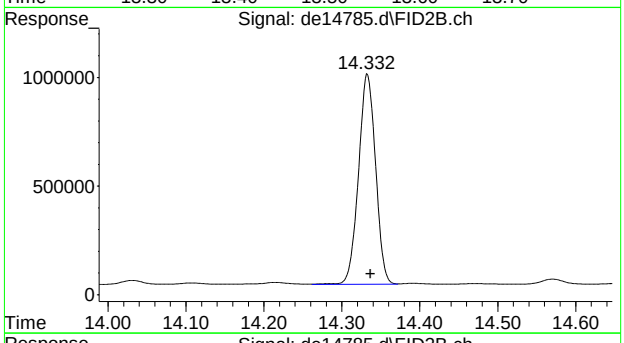
#37 c-24

R.T.: 12.688 min
Delta R.T.: -0.005 min
Response: 1523383
Conc: 19.57 µg/ml



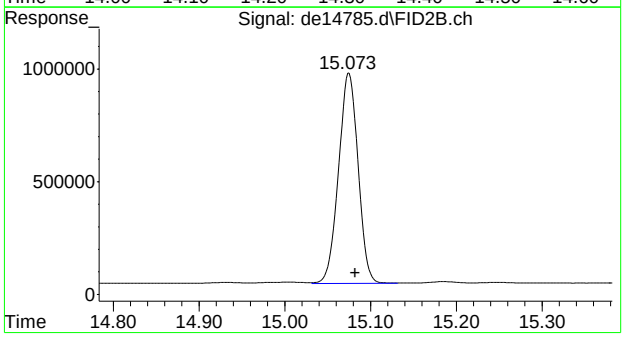
#38 c-26

R.T.: 13.540 min
Delta R.T.: -0.005 min
Response: 1494909
Conc: 19.21 µg/ml



#39 c-28

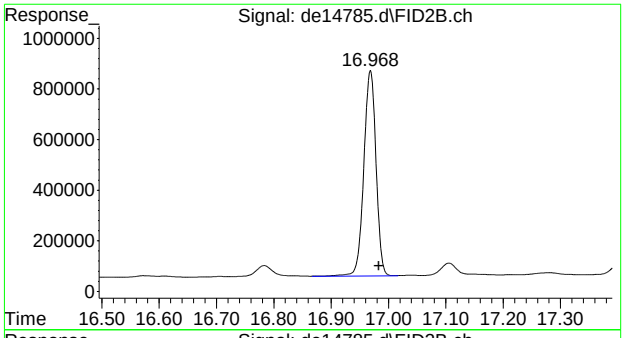
R.T.: 14.332 min
Delta R.T.: -0.005 min
Response: 1472027
Conc: 18.91 µg/ml



#40 c-30

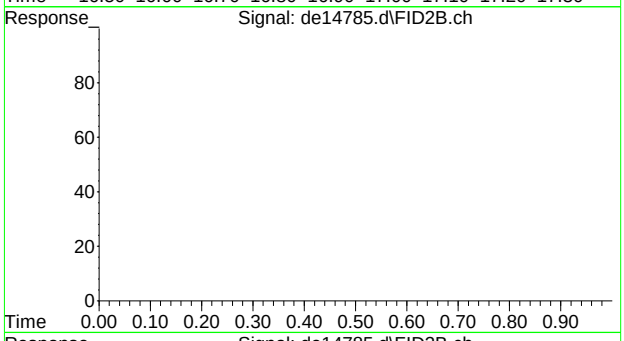
R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 1476748
Conc: 18.98 µg/ml

SGS ACCUTEST MC46737



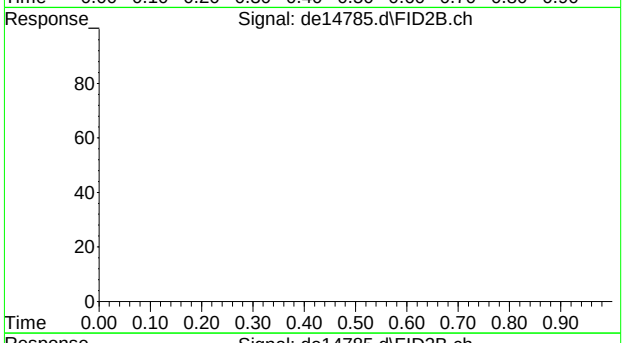
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1196899
Conc: 15.38 µg/ml m



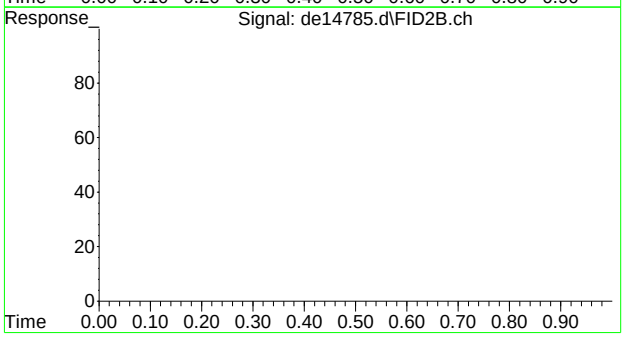
#42 bht

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



#43 bht

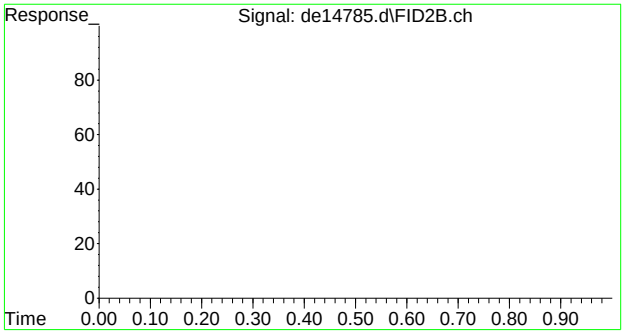
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#44 bht

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

SGS ACCUTEST MC46737



#45 bht

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

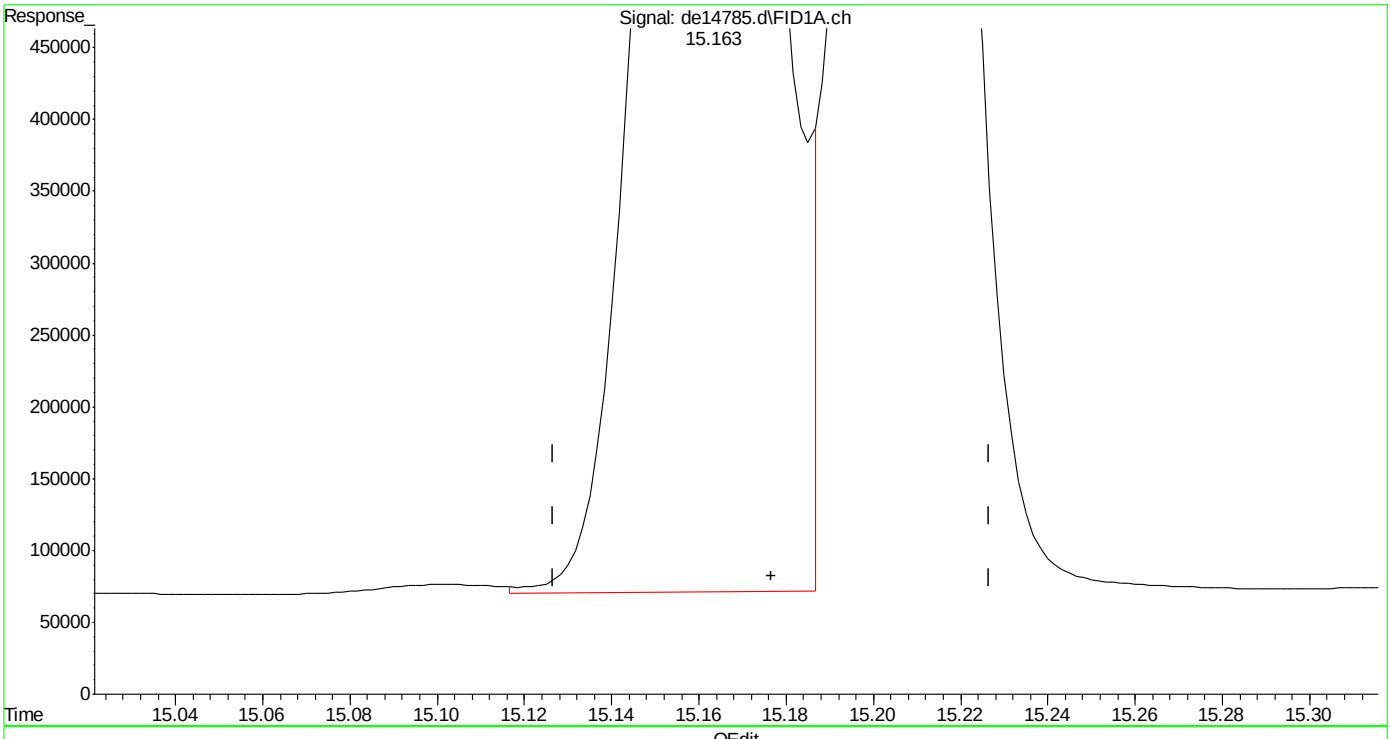
SGS ACCUTEST MC46737

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14785.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 12:19 pm
Operator : thomasa
Sample : op48079-bs
Misc : op48079,gde822,1000,,,2,,w
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:30:41 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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
15.163min 21.672 µg/ml
response 2536611

(+) = Expected Retention Time
EPH160708W.M Fri Jul 08 14:31:39 2016

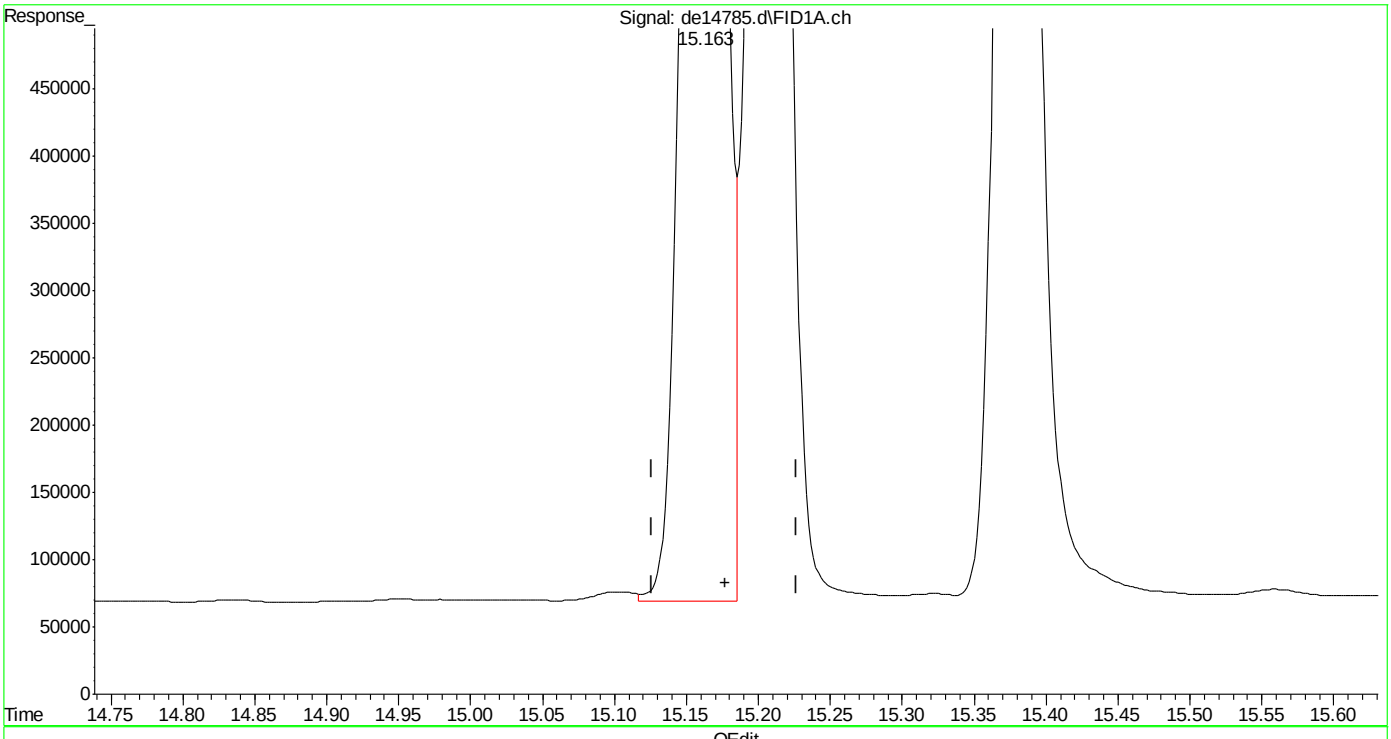
SGS ACCUTEST MC46737

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14785.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 12:19 pm
Operator : thomasa
Sample : op48079-bs
Misc : op48079,gde822,1000,,,2,,w
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:30:41 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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
15.163min 21.458 µg/ml m
response 2511527

(+) = Expected Retention Time
EPH160708W.M Fri Jul 08 14:32:14 2016 Page: 1

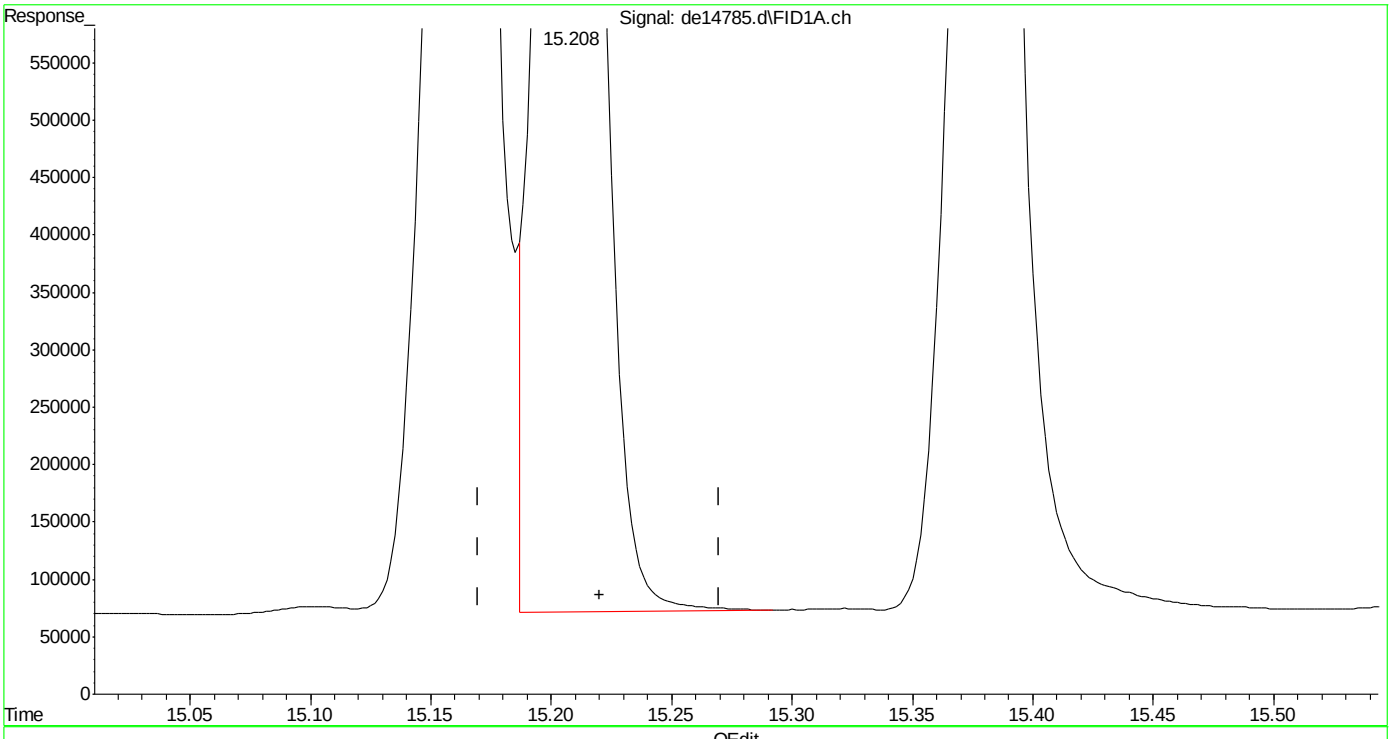
SGS ACCUTEST MC46737

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14785.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 12:19 pm
Operator : thomasa
Sample : op48079-bs
Misc : op48079,gde822,1000,,,2,,w
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:30:41 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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
15.208min 21.548 µg/ml
response 2441566

(+) = Expected Retention Time
EPH160708W.M Fri Jul 08 14:32:19 2016

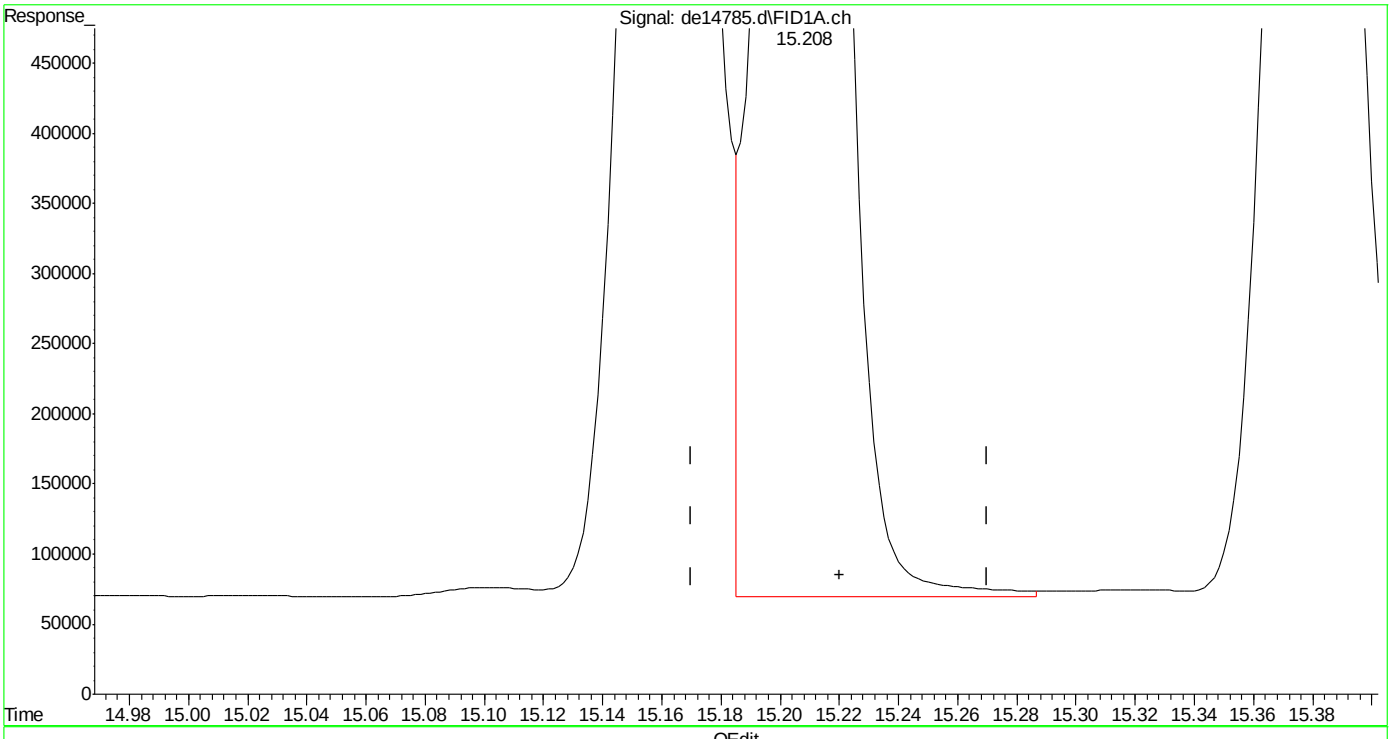
SGS ACCUTEST MC46737

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14785.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 12:19 pm
Operator : thomasa
Sample : op48079-bs
Misc : op48079,gde822,1000,,,2,,w
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:30:41 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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
15.208min 22.008 µg/ml m
response 2493650

(+) = Expected Retention Time
EPH160708W.M Fri Jul 08 14:32:38 2016

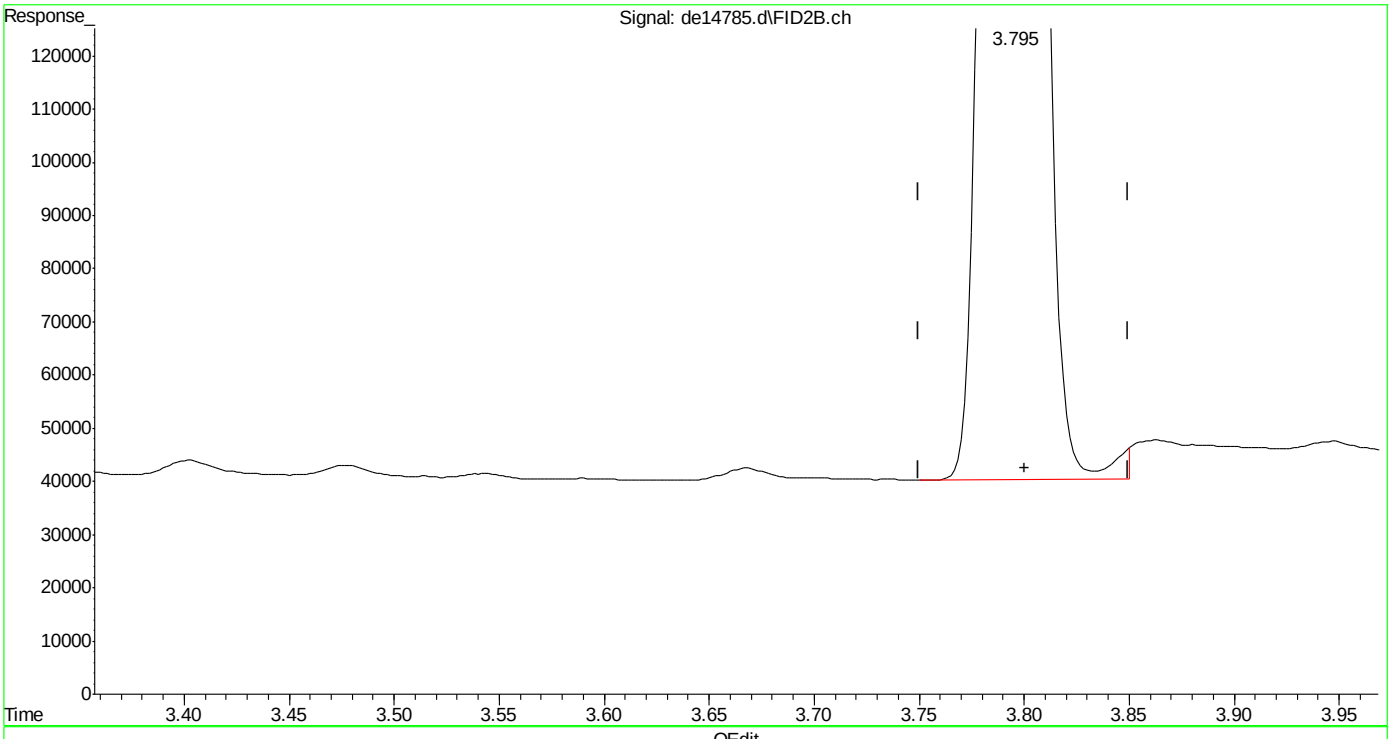
SGS ACCUTEST MC46737

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14785.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 12:19 pm
Operator : thomasa
Sample : op48079-bs
Misc : op48079,gde822,1000,,,2,,w
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:30:41 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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 14.500 µg/ml
response 1222434

(+) = Expected Retention Time
EPH160708W.M Fri Jul 08 14:33:06 2016

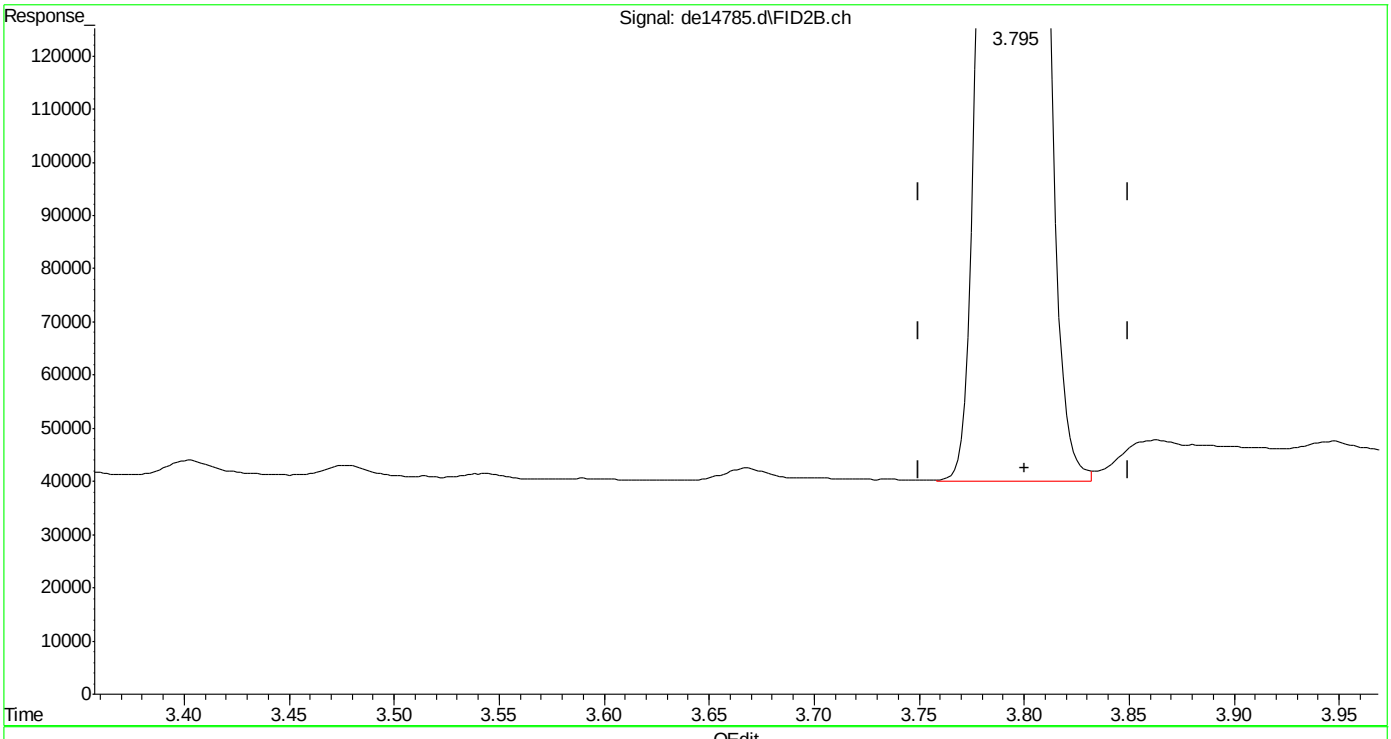
SGS ACCUTEST MC46737

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14785.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 12:19 pm
Operator : thomasa
Sample : op48079-bs
Misc : op48079,gde822,1000,,,2,,w
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:30:41 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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 14.463 µg/ml m
response 1219294

(+) = Expected Retention Time
EPH160708W.M Fri Jul 08 14:33:12 2016

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160708EPH\
Data File : de14786.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 12:47 pm
Operator : thomasa
Sample : op48079-bsd
Misc : op48079,gde822,1000,,,2,,w
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:35:06 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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	1865034	16.292 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 81.46%#
6) s	2-bromonaphthalene	7.205	1177056	16.416 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 82.08%#
11) s	o-terphenyl	9.742	2005596	15.159 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 75.80%#
35) s	1-chlorooctadecane	11.212	888613	13.639 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 68.19%#
	Target Compounds			
1) h	c11-c22 Aromatics (Un...	5.097	40164502	321.943 µg/mlm
2)	naphthalene	5.032	1796069	14.307 µg/ml
3)	2-methylnaphthalene	5.930	1813306	14.375 µg/ml
5)	acenaphthylene	7.038	1910811	15.102 µg/ml
7)	acenaphthene	7.277	2240882	16.088 µg/ml
8)	fluorene	7.920	2009310	15.641 µg/ml
9)	phenanthrene	9.095	2041257	16.341 µg/ml
10)	anthracene	9.152	2263842	17.017 µg/ml
12)	fluoranthene	10.592	2300660	17.937 µg/ml
13)	pyrene	10.847	2337085	17.794 µg/ml
14)	benzo(a)anthracene	12.407	2288819	18.841 µg/ml
15)	chrysene	12.453	2358865	18.479 µg/ml
16)	benzo(B)fluoranthene	13.700	2197226	18.558 µg/ml
17)	benzo(k)fluoranthene	13.727	2424027	18.933 µg/ml
18)	benzo(a)pyrene	14.028	2285020	19.371 µg/ml
19)	indeno(1,2,3-cd)pyrene	15.163	2262935	19.334 µg/ml
20)	dibenzo(ah)anthracene	15.210	2278930	20.113 µg/ml
21)	benzo(ghi)perylene	15.383	2272562	20.027 µg/ml
25) h	c-9	2.647	1173236	13.916 µg/mlm
26) h	c-10	3.800	1368207	16.229 µg/mlm
28)	c-12	5.653	1467022	17.401 µg/ml
30)	c-14	7.170	1515988	17.982 µg/ml
31)	c-16	8.498	1572648	18.654 µg/ml
32)	c-18	9.692	1681543	19.946 µg/ml
33)	c-19	10.247	1670991	21.471 µg/ml
34)	c-20	10.778	1684882	21.650 µg/ml
36)	c-22	11.773	1668191	21.435 µg/ml
37)	c-24	12.690	1647581	21.171 µg/ml
38)	c-26	13.542	1613887	20.738 µg/ml
39)	c-28	14.333	1577048	20.264 µg/ml
40) h	c-30	15.082	1570913	20.185 µg/ml
41) h	c-36	16.983	1186063	15.240 µg/mlm

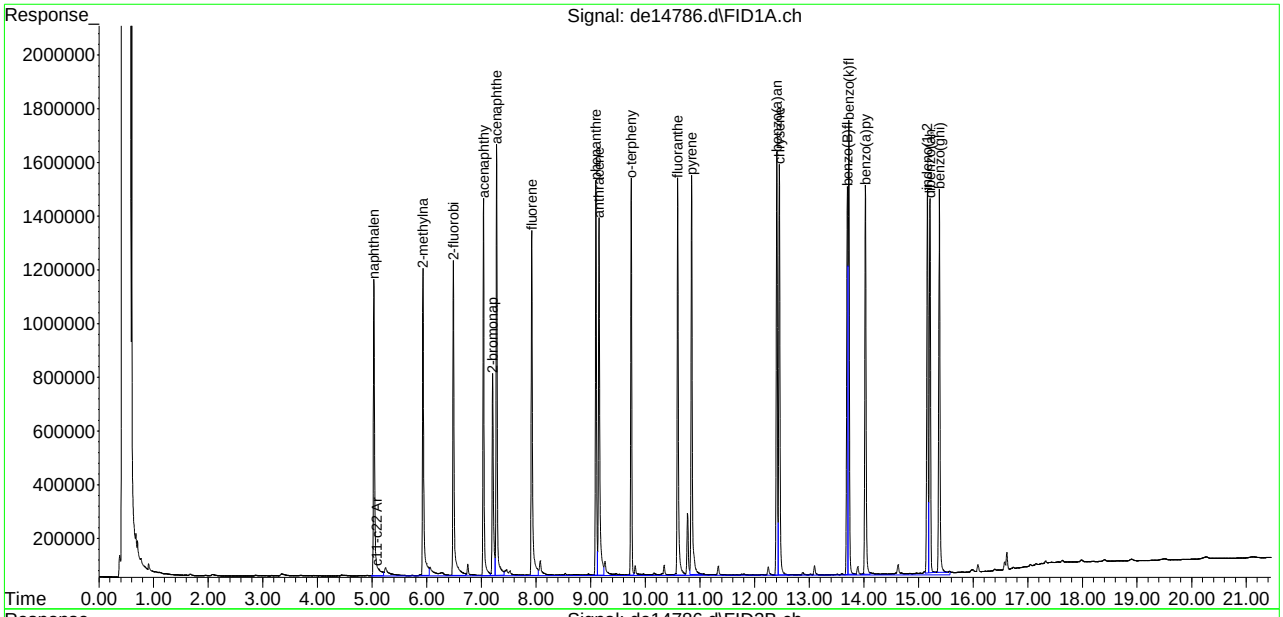
(f)=RT Delta > 1/2 Window (m)=manual int.

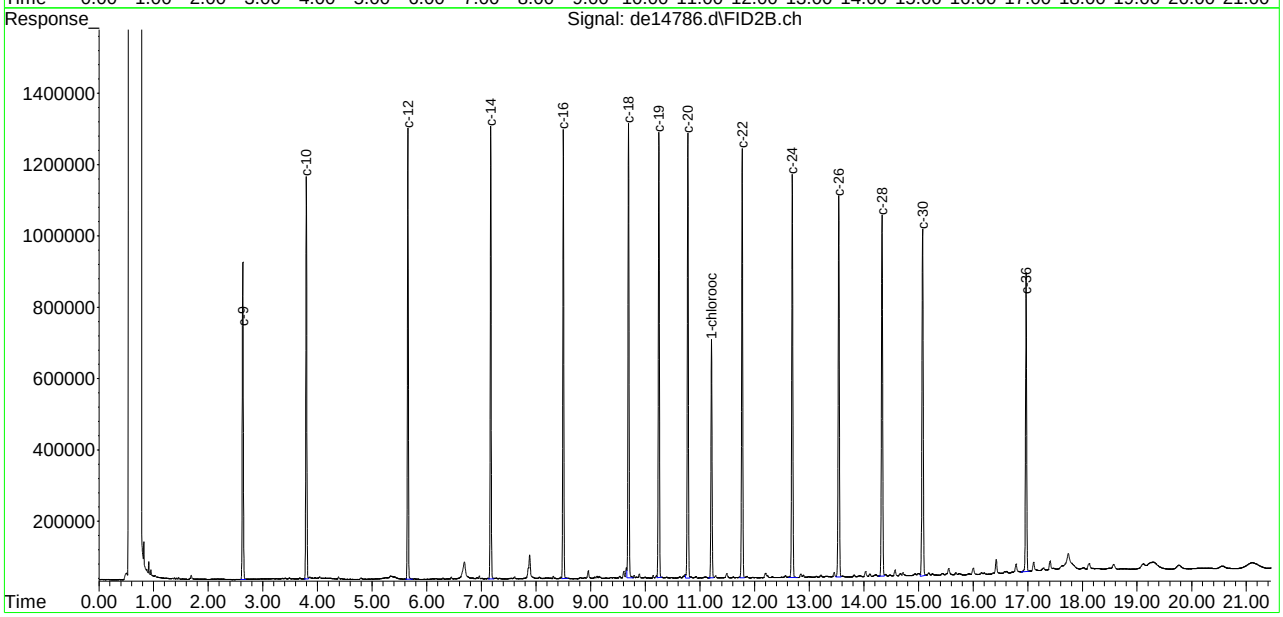
Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160708EPH\
Data File : de14786.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 12:47 pm
Operator : thomasa
Sample : op48079-bsd
Misc : op48079,gde822,1000,,,2,,w
ALS Vial : 4 Sample Multiplier: 1

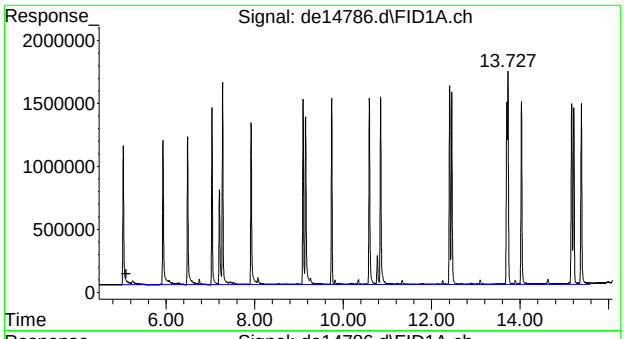
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:35:06 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 2016
Response via : Initial Calibration
Integrator: RTE

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



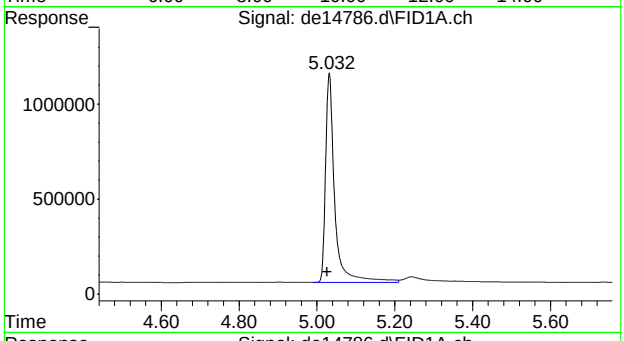


EPH160708W.M Mon Jul 11 12:50:13 2016 Page: 2



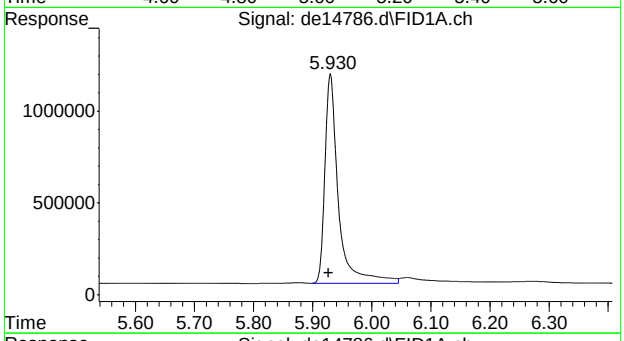
#1 c11-c22 Aromatics (Unadj.)

R.T.: 5.097 min
Delta R.T.: 0.000 min
Response: 40164502
Conc: 321.94 µg/ml m



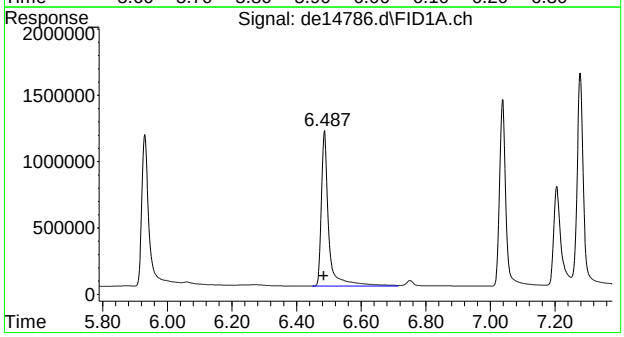
#2 naphthalene

R.T.: 5.032 min
Delta R.T.: 0.005 min
Response: 1796069
Conc: 14.31 µg/ml



#3 2-methylnaphthalene

R.T.: 5.930 min
Delta R.T.: 0.003 min
Response: 1813306
Conc: 14.37 µg/ml



#4 2-fluorobiphenyl

R.T.: 6.487 min
Delta R.T.: 0.003 min
Response: 1865034
Conc: 16.29 µg/ml

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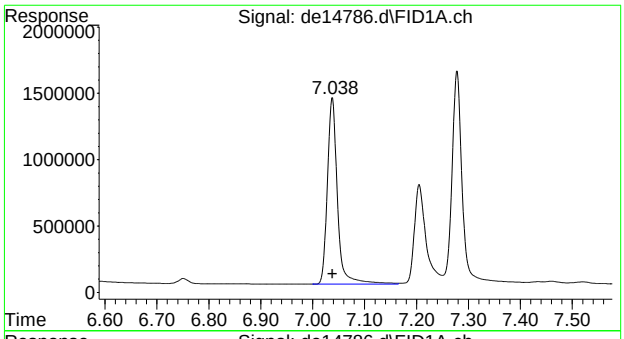
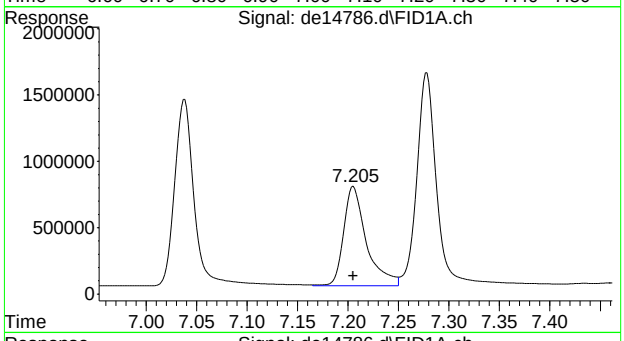


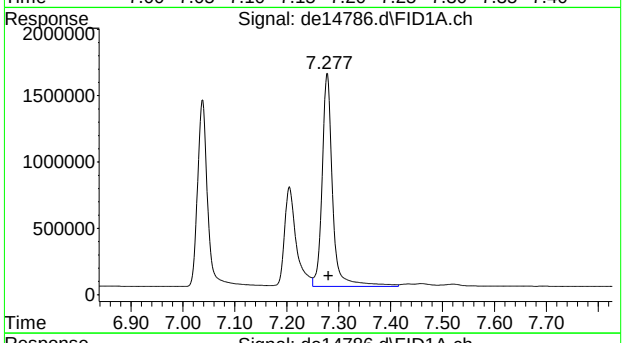
#5 acenaphthylene

R.T.: 7.038 min
Delta R.T.: 0.000 min
Response: 1910811
Conc: 15.10 µg/ml



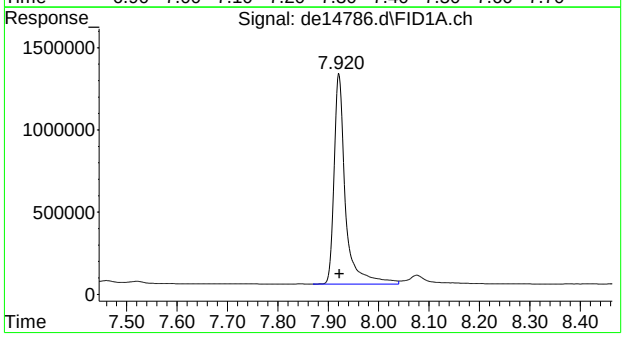
#6 2-bromonaphthalene

R.T.: 7.205 min
Delta R.T.: 0.000 min
Response: 1177056
Conc: 16.42 µg/ml



#7 acenaphthene

R.T.: 7.277 min
Delta R.T.: -0.003 min
Response: 2240882
Conc: 16.09 µg/ml



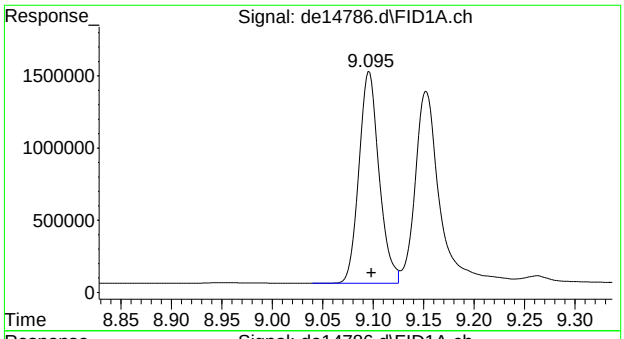
#8 fluorene

R.T.: 7.920 min
Delta R.T.: -0.002 min
Response: 2009310
Conc: 15.64 µg/ml

7.3.2

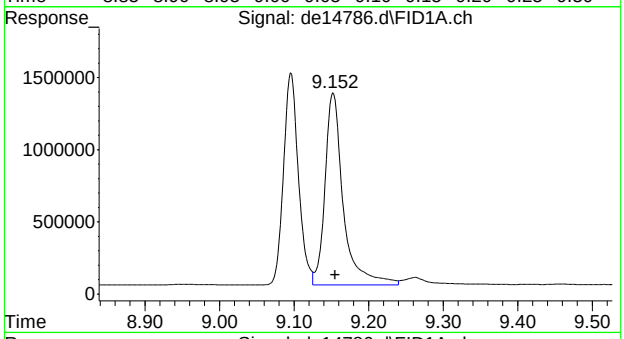
7

SGS ACCUTEST MC46737



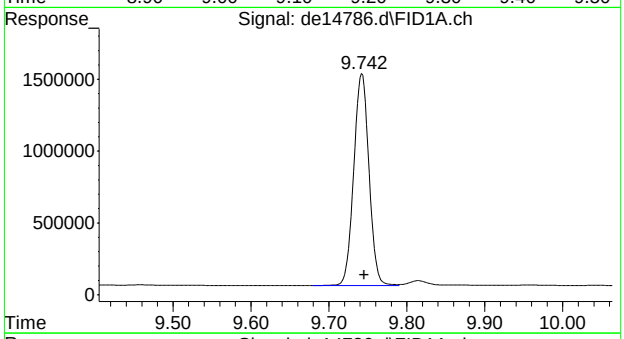
#9 phenanthrene

R.T.: 9.095 min
Delta R.T.: -0.003 min
Response: 2041257
Conc: 16.34 µg/ml



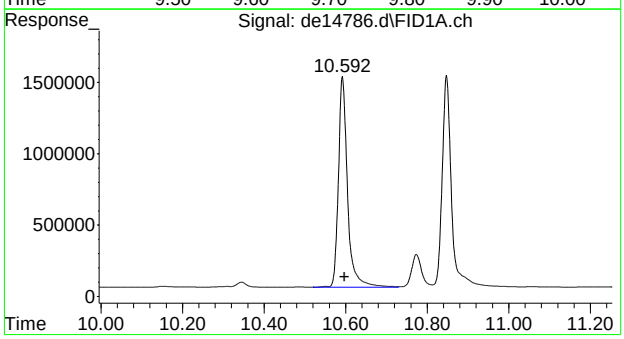
#10 anthracene

R.T.: 9.152 min
Delta R.T.: -0.003 min
Response: 2263842
Conc: 17.02 µg/ml



#11 o-terphenyl

R.T.: 9.742 min
Delta R.T.: -0.003 min
Response: 2005596
Conc: 15.16 µg/ml



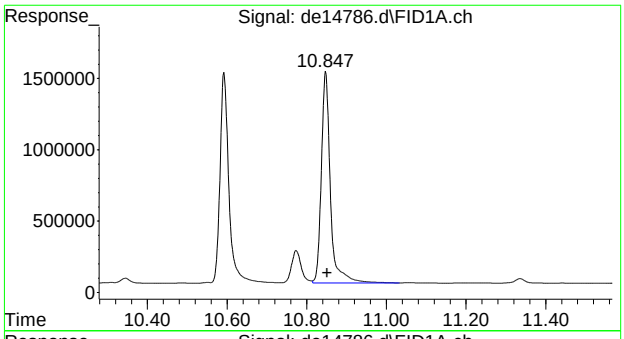
#12 fluoranthene

R.T.: 10.592 min
Delta R.T.: -0.005 min
Response: 2300660
Conc: 17.94 µg/ml

7.3.2

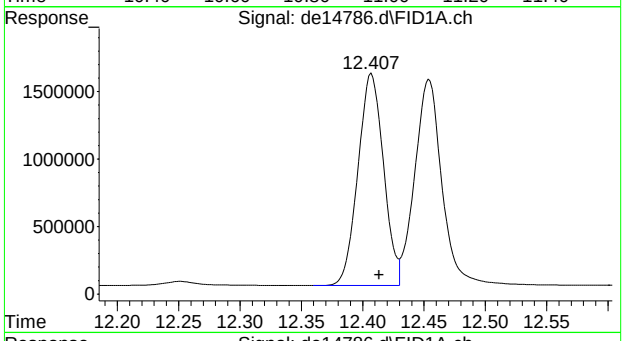
7

SGS ACCUTEST MC46737



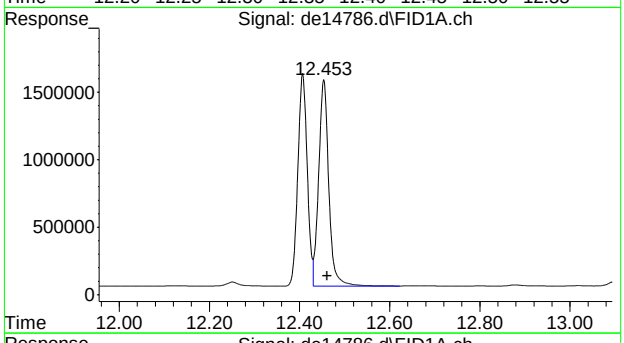
#13 pyrene

R.T.: 10.847 min
Delta R.T.: -0.005 min
Response: 2337085
Conc: 17.79 µg/ml



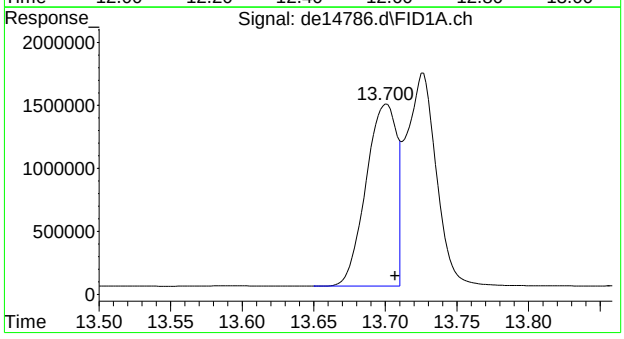
#14 benzo(a)anthracene

R.T.: 12.407 min
Delta R.T.: -0.007 min
Response: 2288819
Conc: 18.84 µg/ml



#15 chrysene

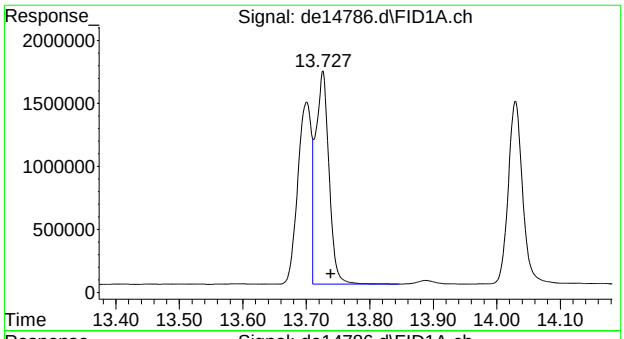
R.T.: 12.453 min
Delta R.T.: -0.008 min
Response: 2358865
Conc: 18.48 µg/ml



#16 benzo(B)fluoranthene

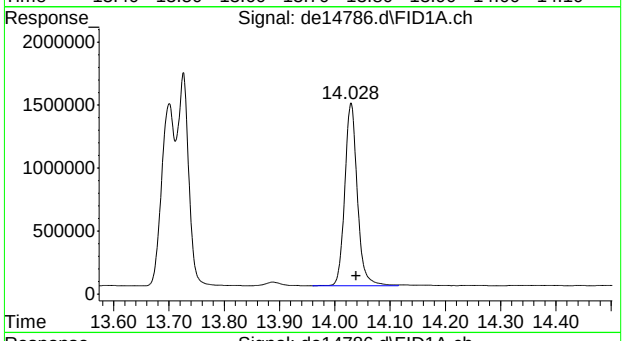
R.T.: 13.700 min
Delta R.T.: -0.007 min
Response: 2197226
Conc: 18.56 µg/ml

SGS ACCUTEST MC46737



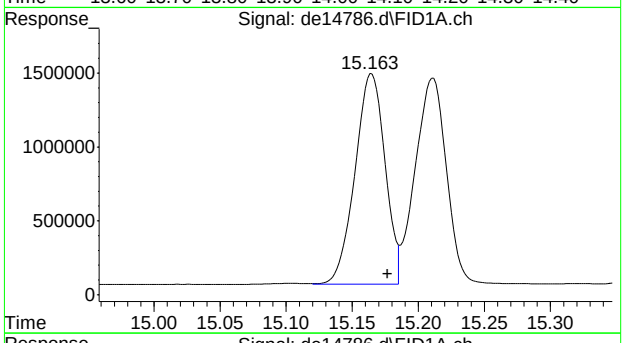
#17 benzo(k)fluoranthene

R.T.: 13.727 min
Delta R.T.: -0.012 min
Response: 2424027
Conc: 18.93 µg/ml



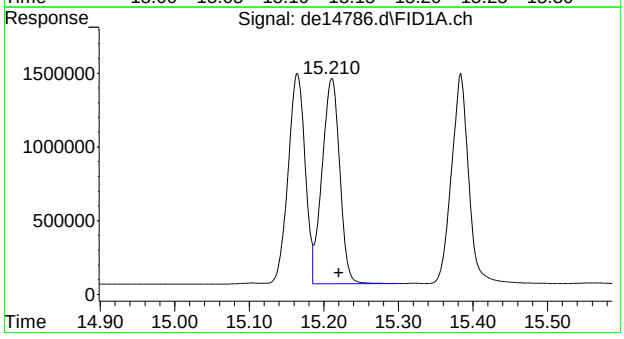
#18 benzo(a)pyrene

R.T.: 14.028 min
Delta R.T.: -0.010 min
Response: 2285020
Conc: 19.37 µg/ml



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

R.T.: 15.163 min
Delta R.T.: -0.013 min
Response: 2262935
Conc: 19.33 µg/ml



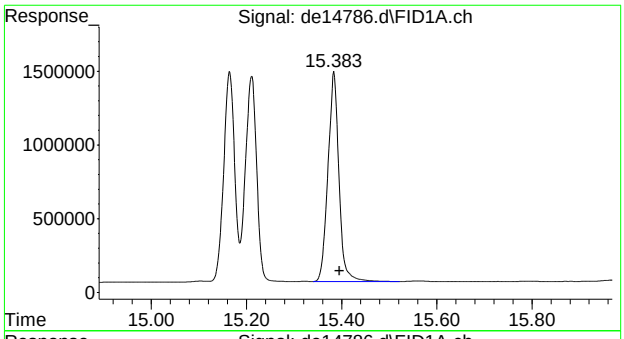
#20 dibenzo(ah)anthracene

R.T.: 15.210 min
Delta R.T.: -0.010 min
Response: 2278930
Conc: 20.11 µg/ml

7.3.2

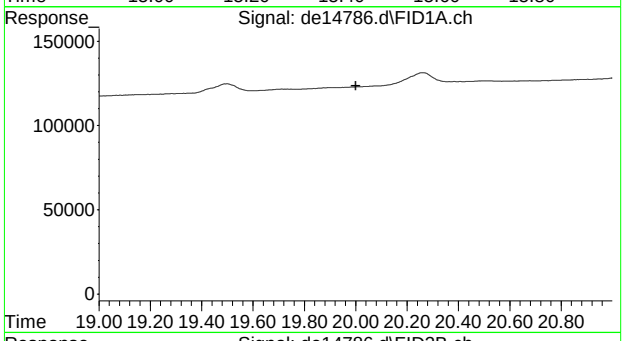
7

SGS ACCUTEST MC46737



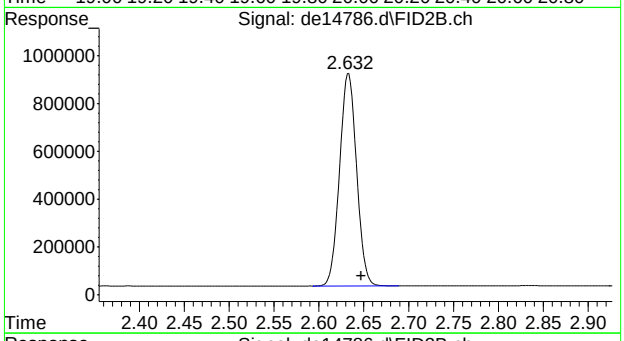
#21 benzo(ghi)perylene

R.T.: 15.383 min
Delta R.T.: -0.012 min
Response: 2272562
Conc: 20.03 µg/ml



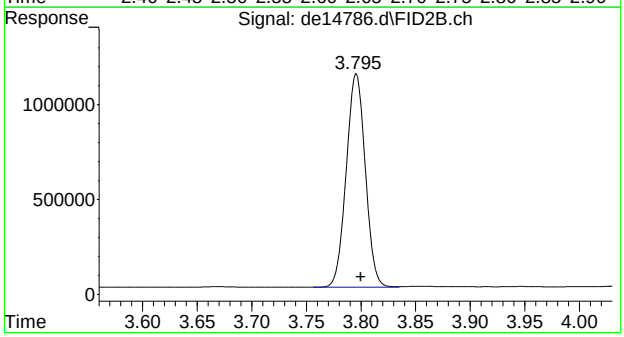
#22 bht

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: 1173236
Conc: 13.92 µg/ml m



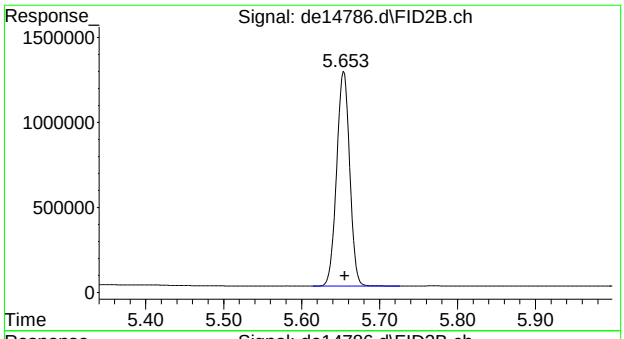
#26 c-10

R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 1368207
Conc: 16.23 µg/ml m

7.3.2

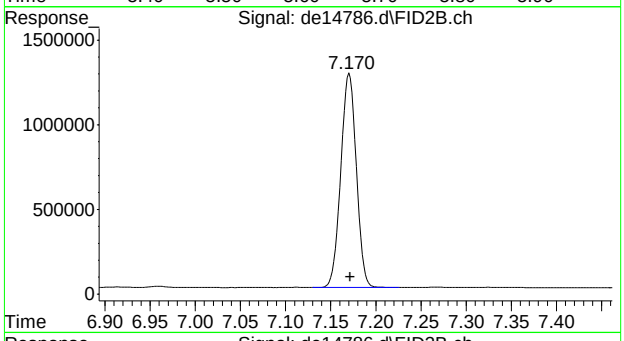
7

SGS ACCUTEST MC46737



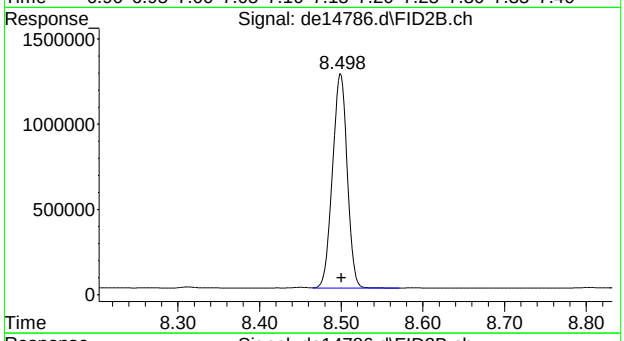
#28 c-12

R.T.: 5.653 min
Delta R.T.: -0.002 min
Response: 1467022
Conc: 17.40 µg/ml



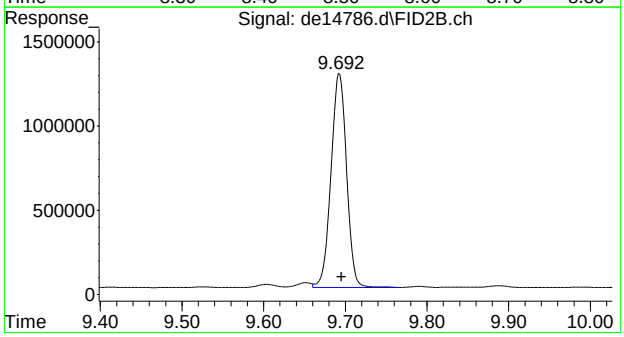
#30 c-14

R.T.: 7.170 min
Delta R.T.: -0.002 min
Response: 1515988
Conc: 17.98 µg/ml



#31 c-16

R.T.: 8.498 min
Delta R.T.: -0.002 min
Response: 1572648
Conc: 18.65 µg/ml



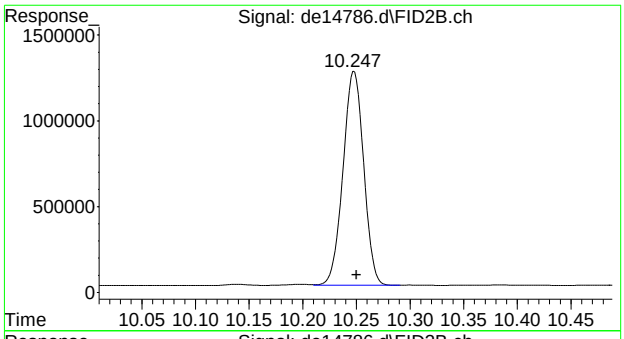
#32 c-18

R.T.: 9.692 min
Delta R.T.: -0.003 min
Response: 1681543
Conc: 19.95 µg/ml

7.3.2

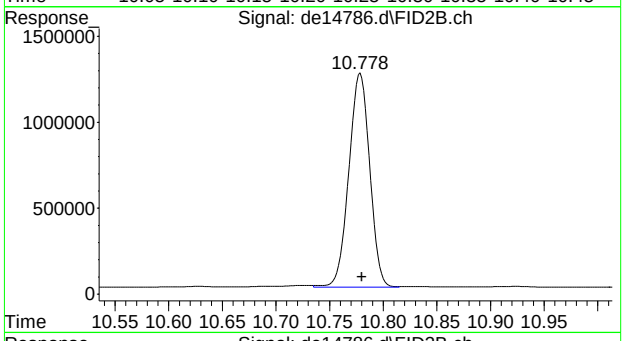
7

SGS ACCUTEST MC46737



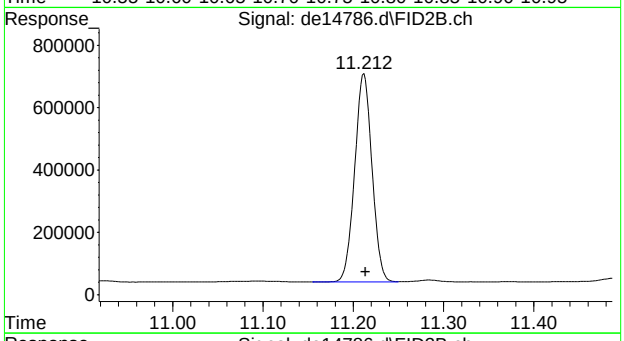
#33 c-19

R.T.: 10.247 min
Delta R.T.: -0.003 min
Response: 1670991
Conc: 21.47 µg/ml



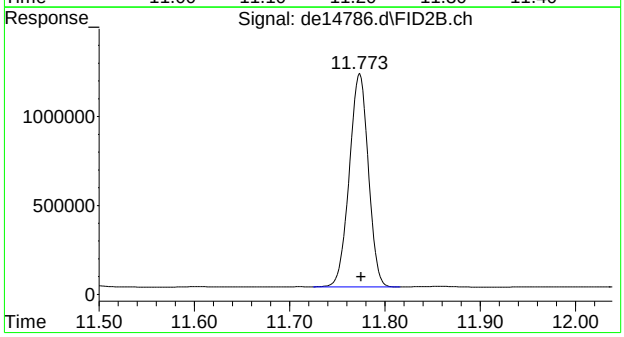
#34 c-20

R.T.: 10.778 min
Delta R.T.: -0.002 min
Response: 1684882
Conc: 21.65 µg/ml



#35 1-chlorooctadecane

R.T.: 11.212 min
Delta R.T.: -0.002 min
Response: 888613
Conc: 13.64 µg/ml



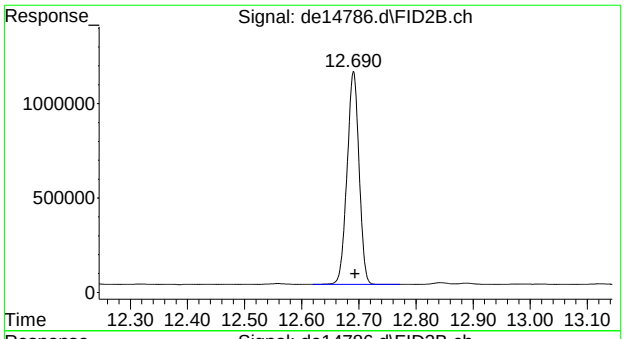
#36 c-22

R.T.: 11.773 min
Delta R.T.: -0.002 min
Response: 1668191
Conc: 21.44 µg/ml

7.3.2

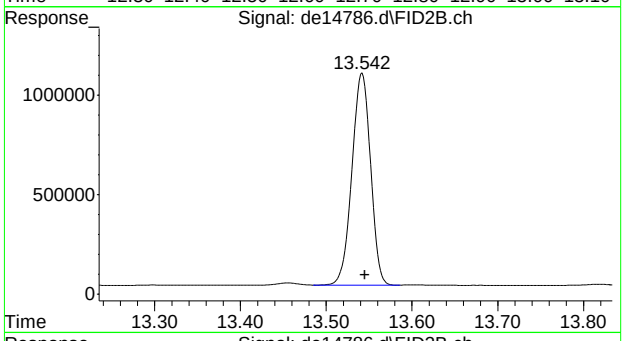
7

SGS ACCUTEST MC46737



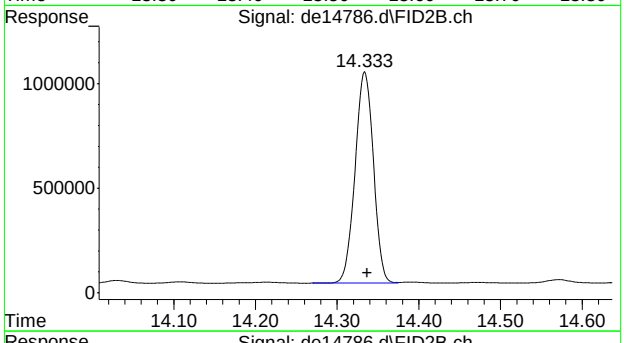
#37 c-24

R.T.: 12.690 min
Delta R.T.: -0.003 min
Response: 1647581
Conc: 21.17 µg/ml



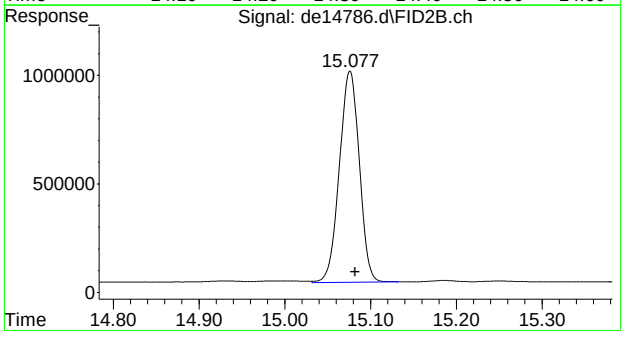
#38 c-26

R.T.: 13.542 min
Delta R.T.: -0.003 min
Response: 1613887
Conc: 20.74 µg/ml



#39 c-28

R.T.: 14.333 min
Delta R.T.: -0.003 min
Response: 1577048
Conc: 20.26 µg/ml



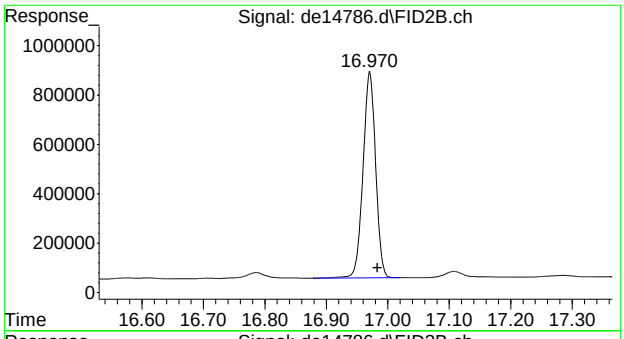
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 1570913
Conc: 20.19 µg/ml

7.3.2

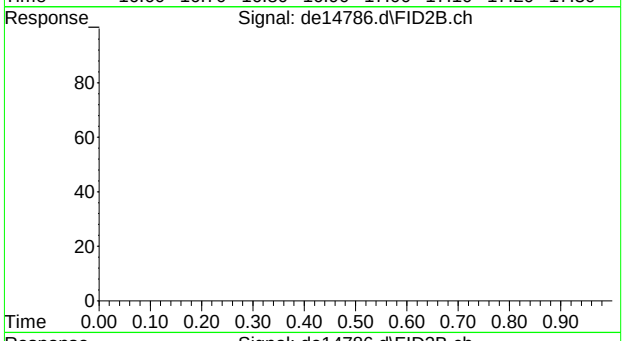
7

SGS ACCUTEST MC46737



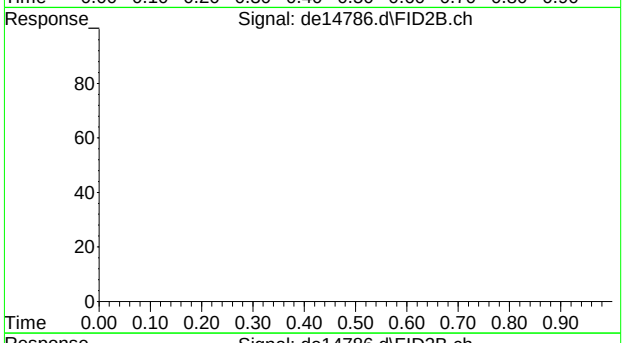
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1186063
Conc: 15.24 µg/ml m



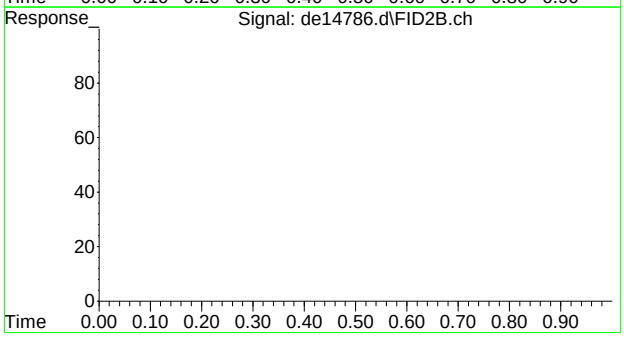
#42 bht

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.



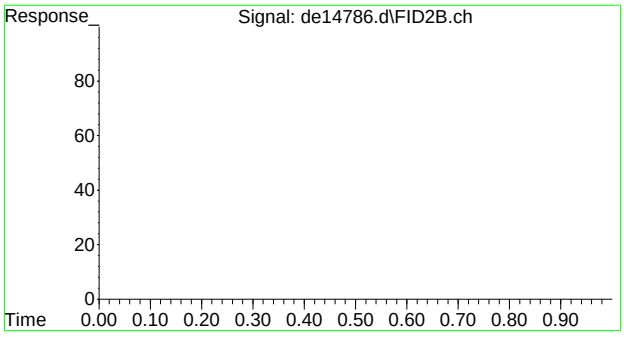
#44 bht

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

7.3.2

7

SGS ACCUTEST MC46737



#45 bht

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

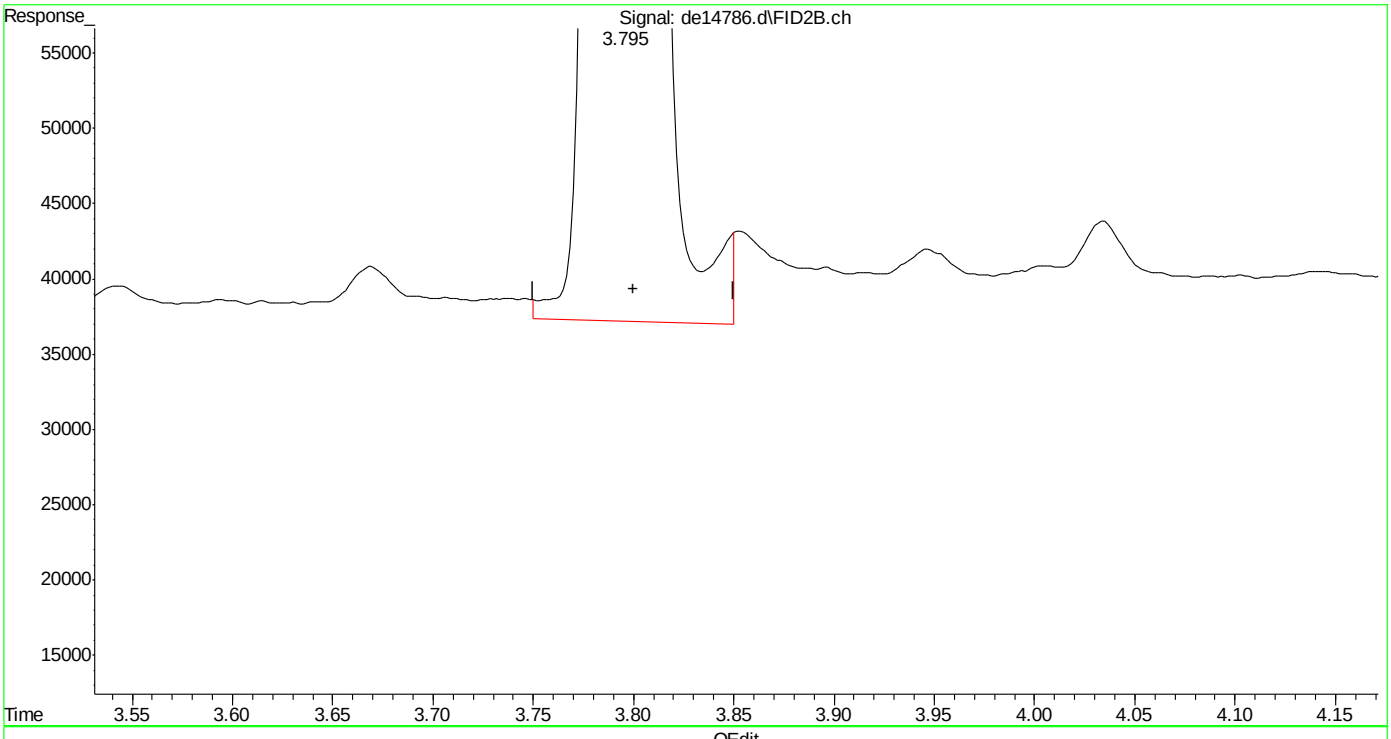
SGS ACCUTEST MC46737

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14786.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 12:47 pm
Operator : thomasa
Sample : op48079-bsd
Misc : op48079,gde822,1000,,,2,,w
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:33:51 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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 16.363 µg/ml
response 1379533

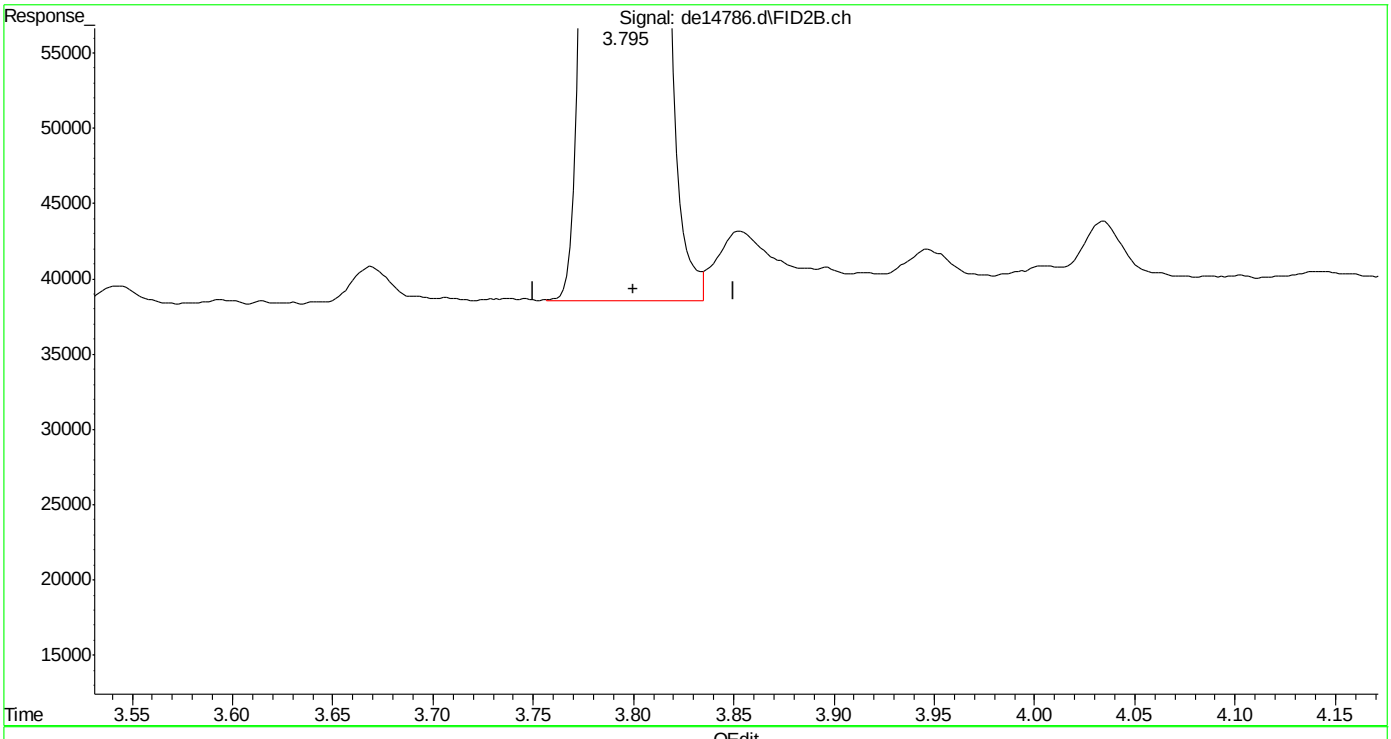
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14786.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 12:47 pm
Operator : thomasa
Sample : op48079-bsd
Misc : op48079,gde822,1000,,,2,,w
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 14:33:51 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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 16.229 µg/ml m
response 1368207

(+) = Expected Retention Time

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.

7.4.1

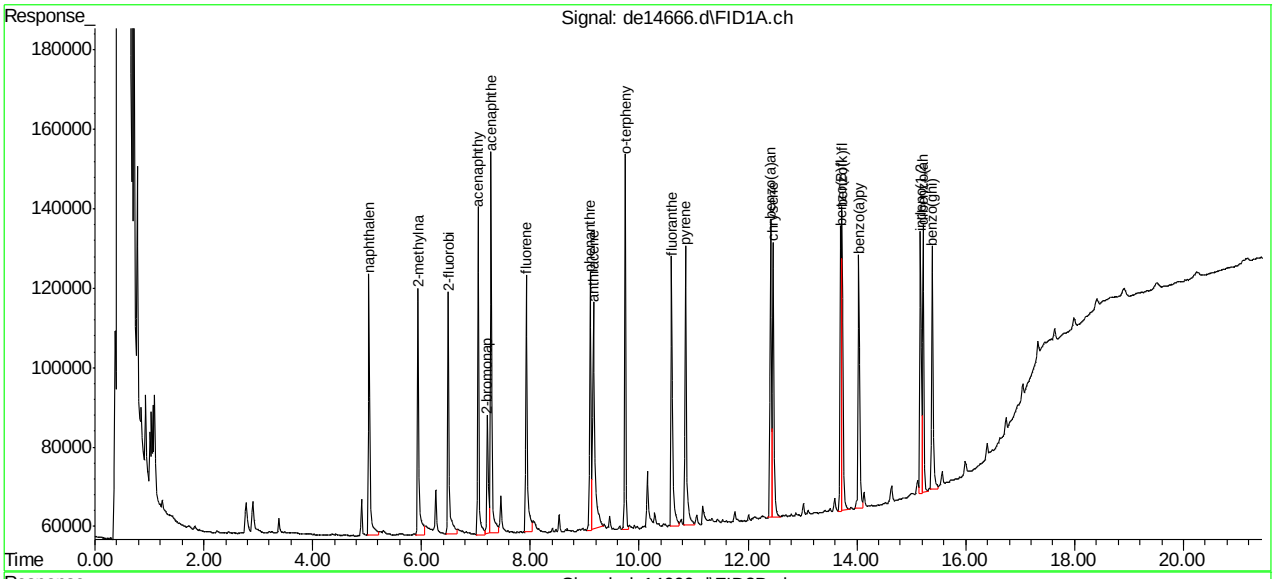
7

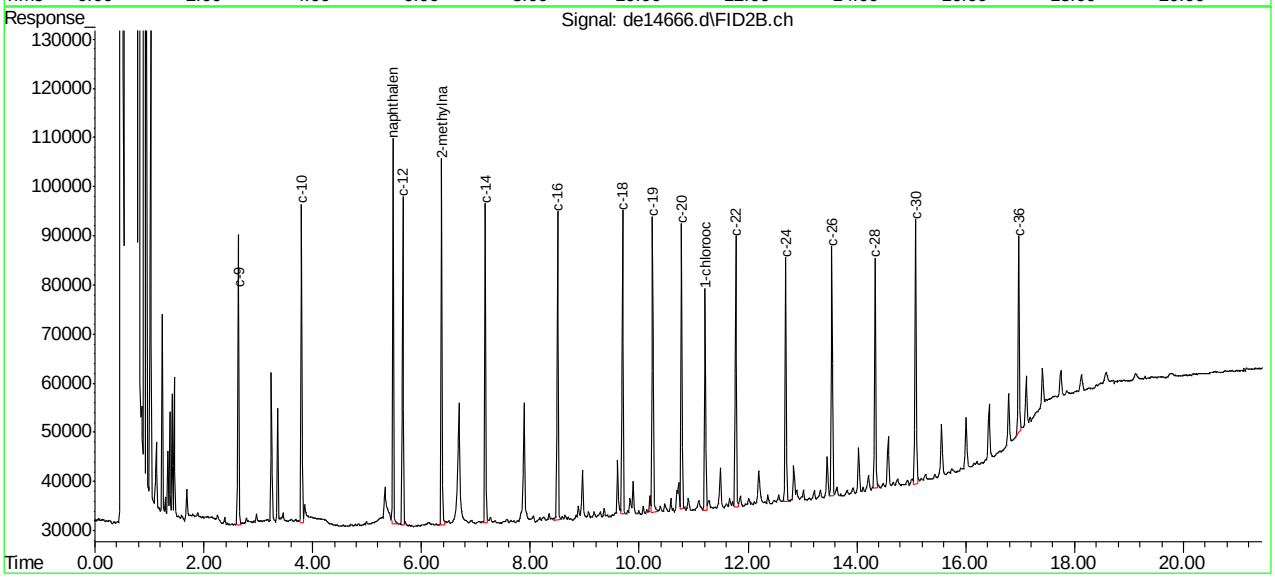
Quantitation Report (QT Reviewed)

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

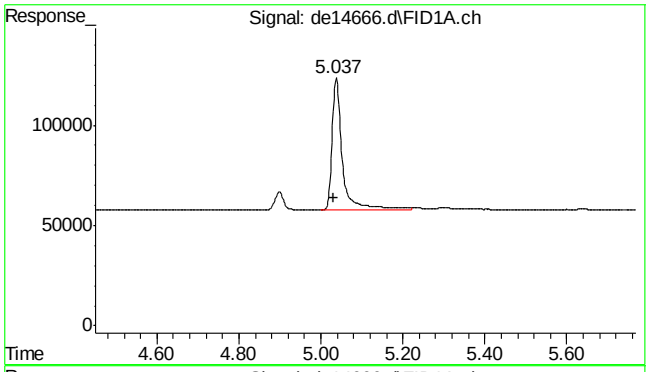
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:50:07 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:48:06 2016
Response via : Initial Calibration
Integrator: RTE

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



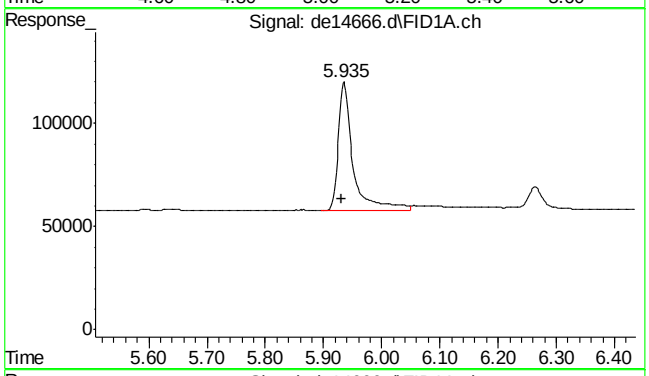


SGS ACCUTEST MC46737



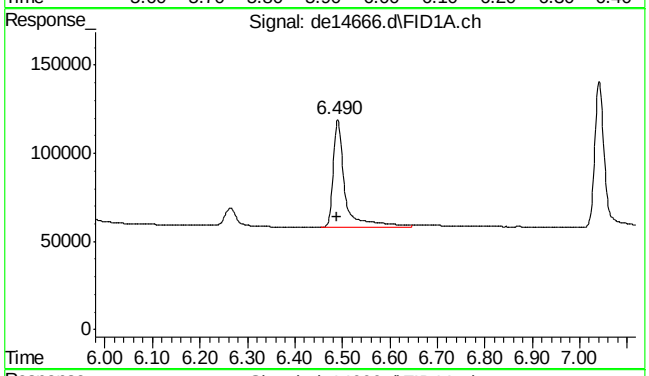
#2 naphthalene

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



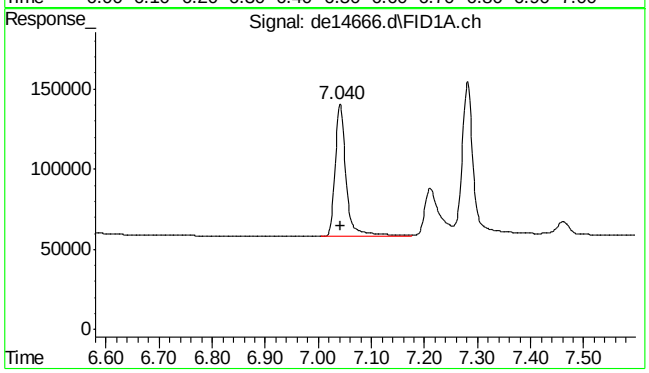
#3 2-methylnaphthalene

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

7.4.1

7

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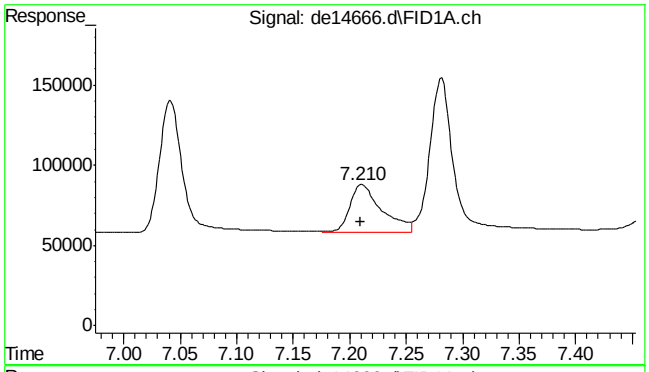
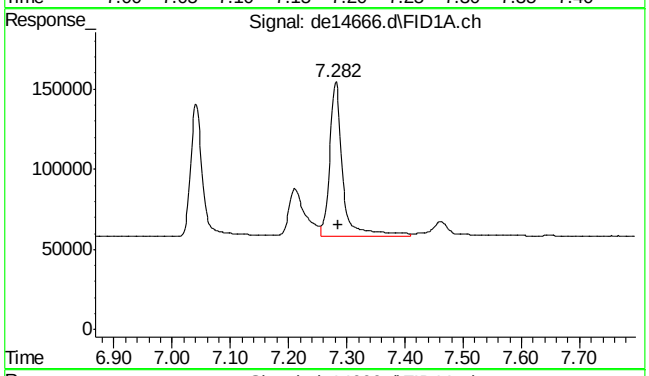


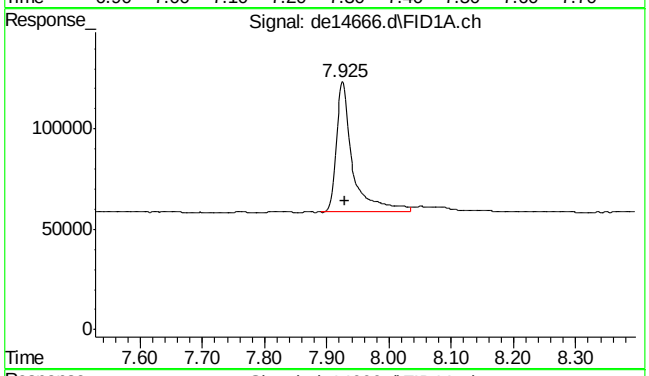
#6 2-bromonaphthalene

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



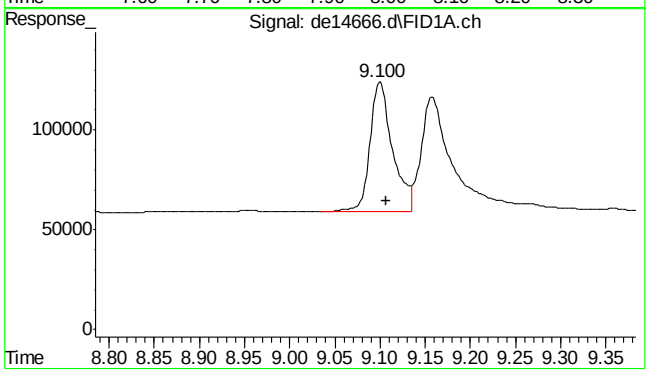
#7 acenaphthene

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



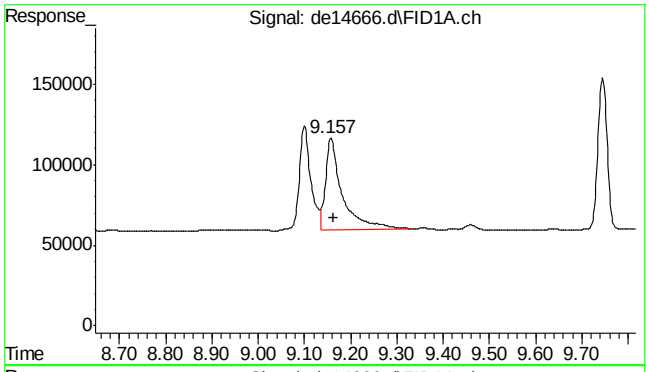
#9 phenanthrene

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

7.4.1

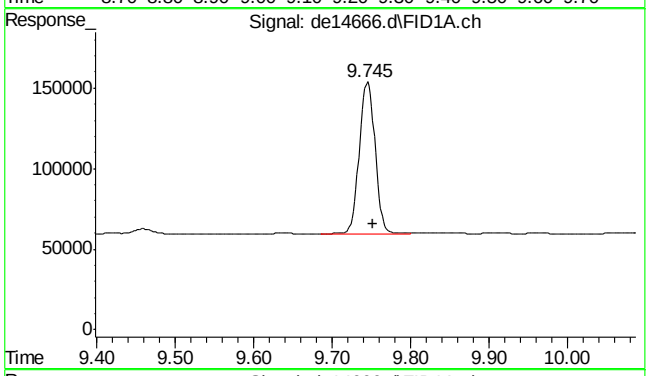
7

SGS ACCUTEST MC46737



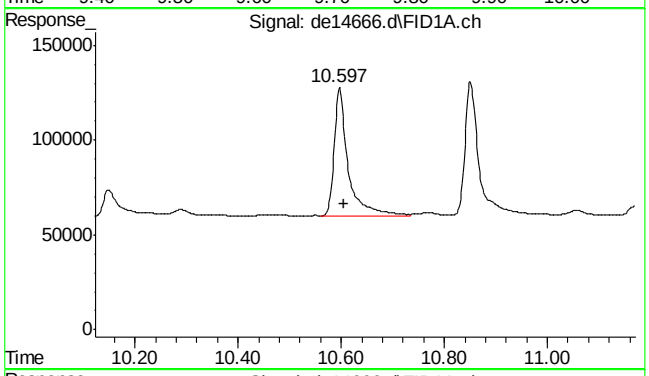
#10 anthracene

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



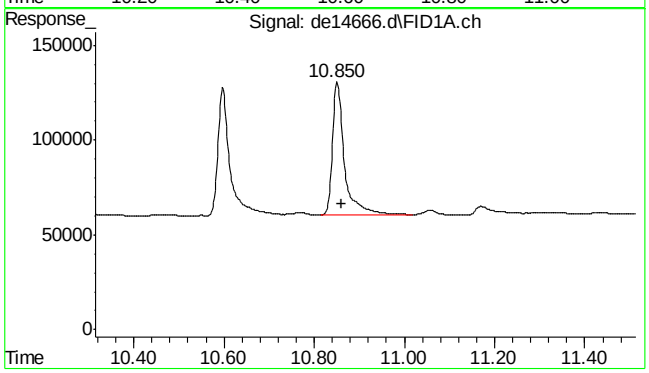
#11 o-terphenyl

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

7.4.1

7

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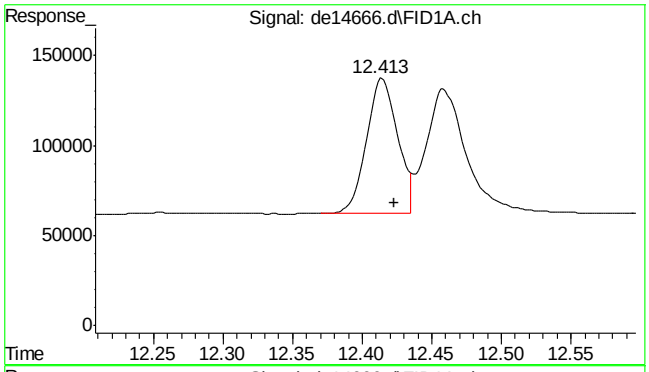
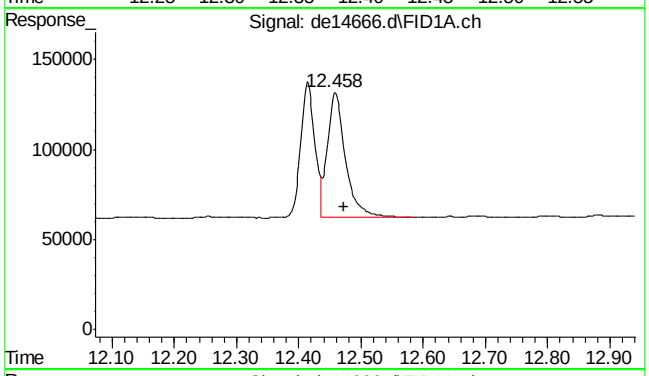


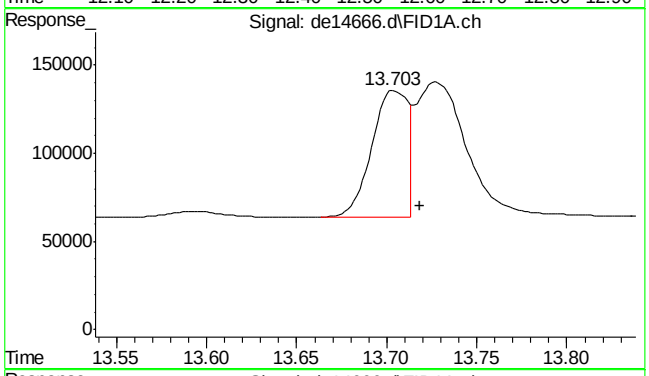
#14 benzo(a)anthracene

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



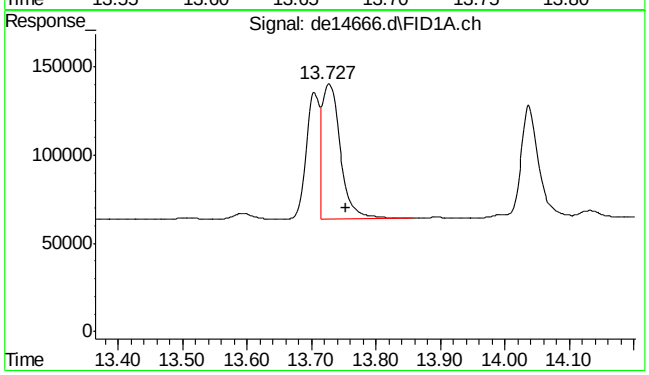
#15 chrysene

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



#16 benzo(B)fluoranthene

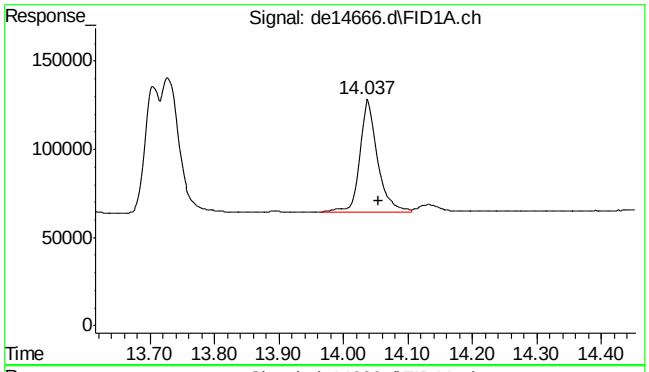
R.T.: 13.703 min
Delta R.T.: -0.015 min
Response: 102498
Conc: 1.00 µg/ml m



#17 benzo(k)fluoranthene

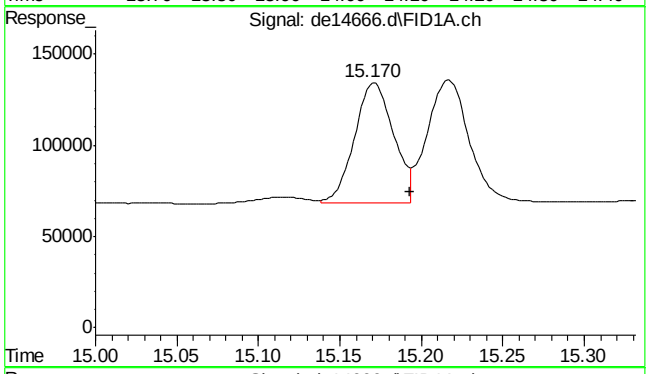
R.T.: 13.727 min
Delta R.T.: -0.027 min
Response: 143585
Conc: 1.46 µg/ml

SGS ACCUTEST MC46737



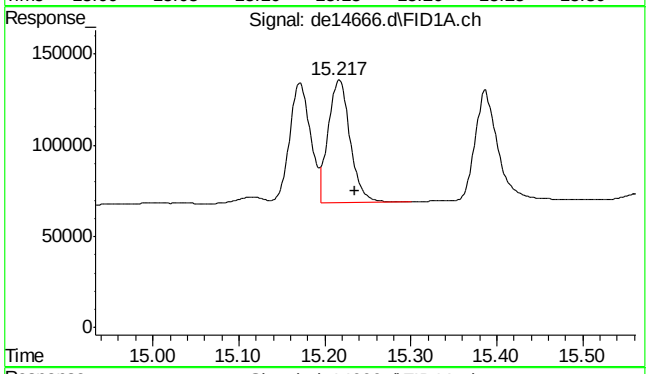
#18 benzo(a)pyrene

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



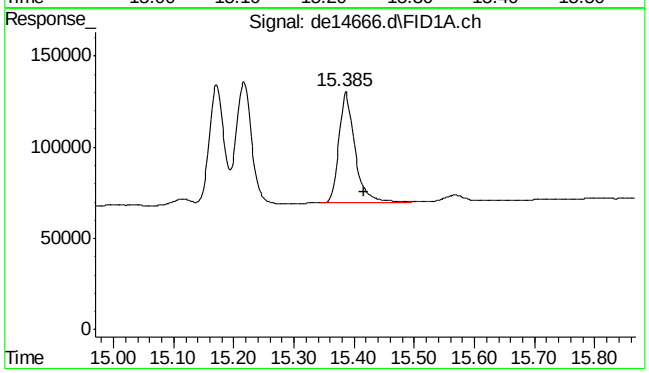
#19 indeno(1,2,3-cd)pyrene

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



#20 dibenzo(ah)anthracene

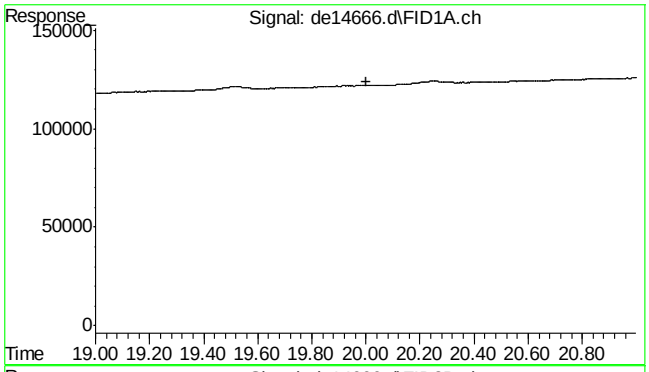
R.T.: 15.217 min
Delta R.T.: -0.018 min
Response: 118078
Conc: 1.25 µg/ml



#21 benzo(ghi)perylene

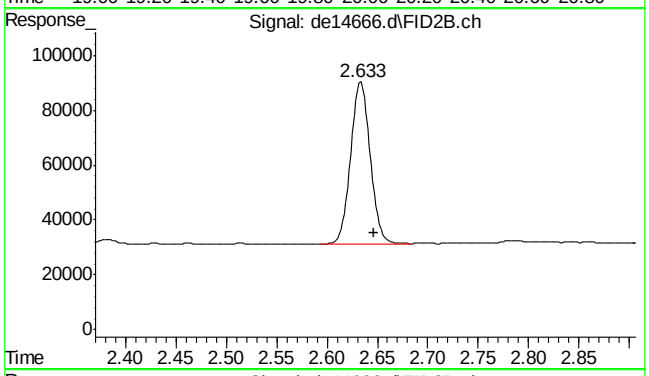
R.T.: 15.385 min
Delta R.T.: -0.032 min
Response: 114951
Conc: 1.21 µg/ml

SGS ACCUTEST MC46737



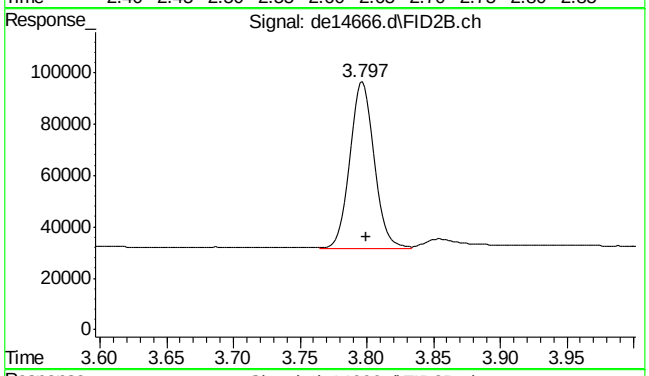
#22 bht

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



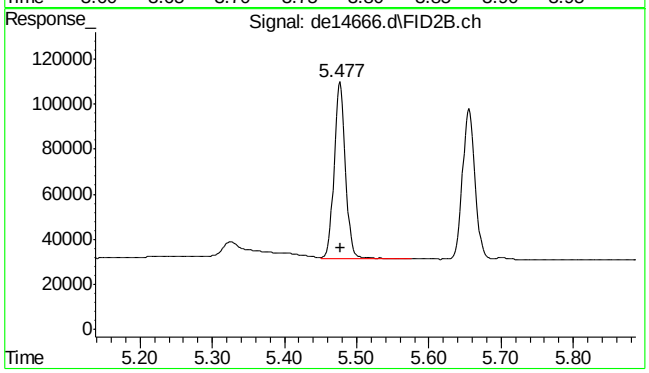
#25 c-9

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



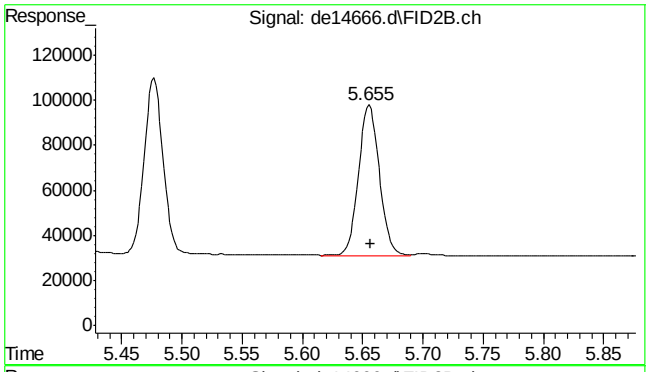
#27 naphthalene #2

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

7.4.1

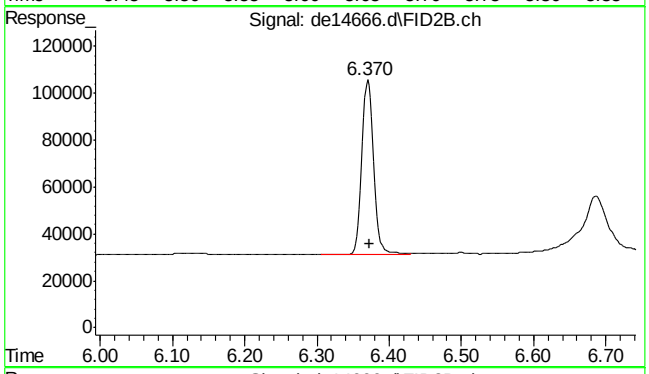
7

SGS ACCUTEST MC46737



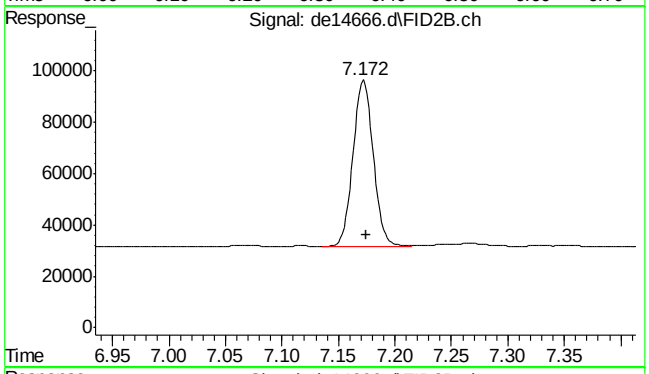
#28 c-12

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



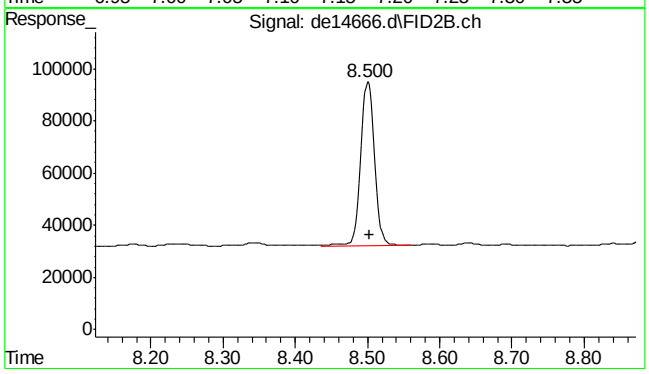
#29 2-methylnaphthalene #2

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



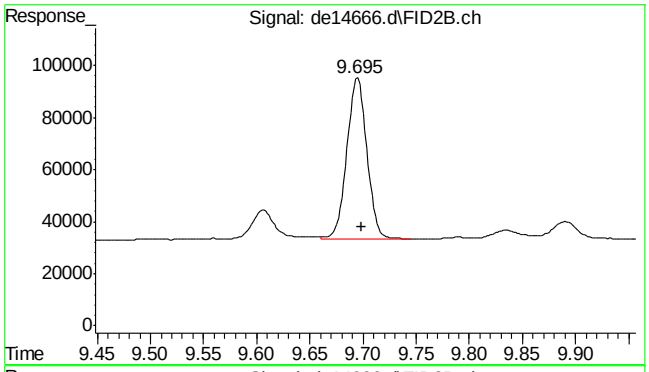
#30 c-14

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



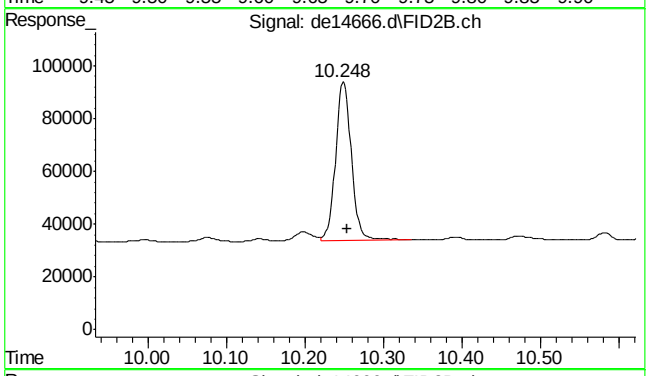
#31 c-16

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



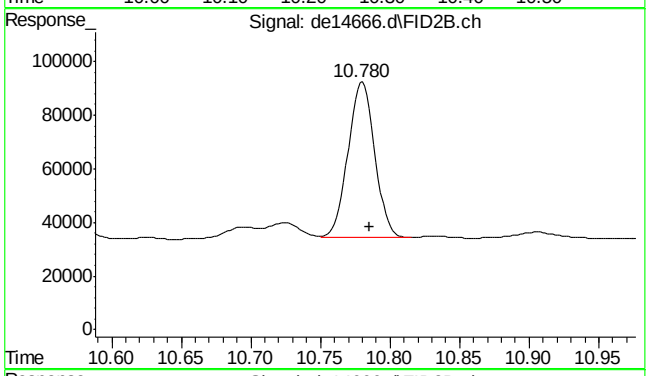
#32 c-18

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



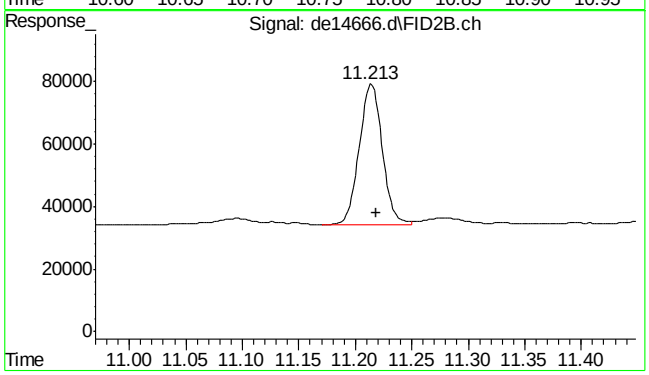
#33 c-19

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

7.4.1

7

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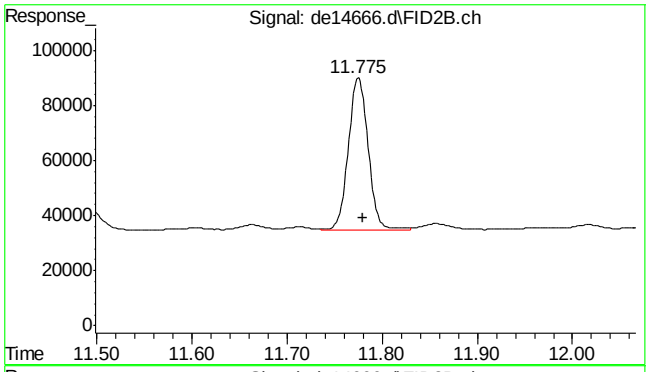
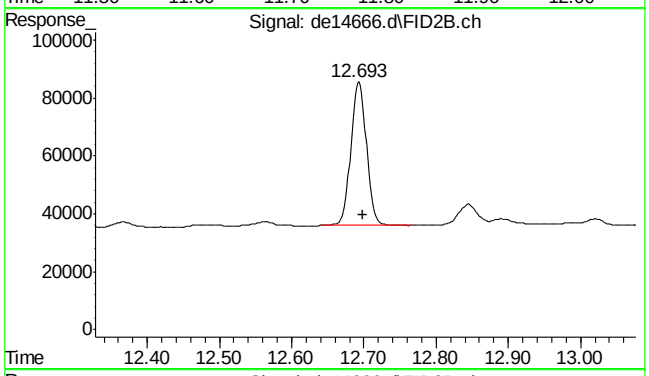


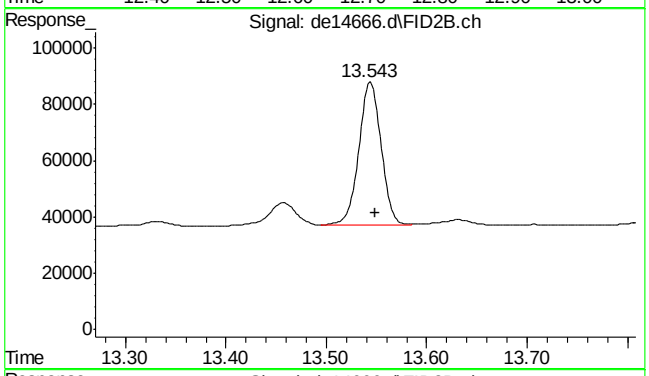
#36 c-22

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



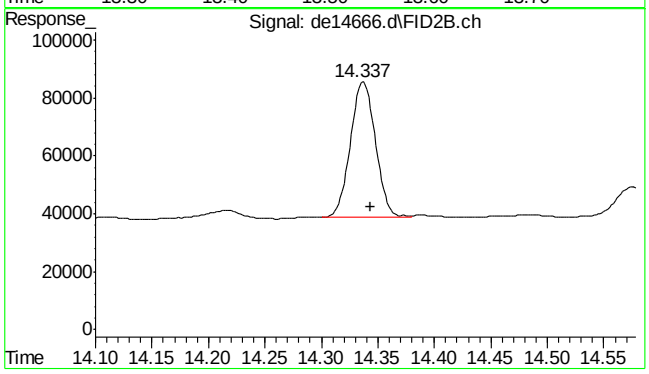
#37 c-24

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

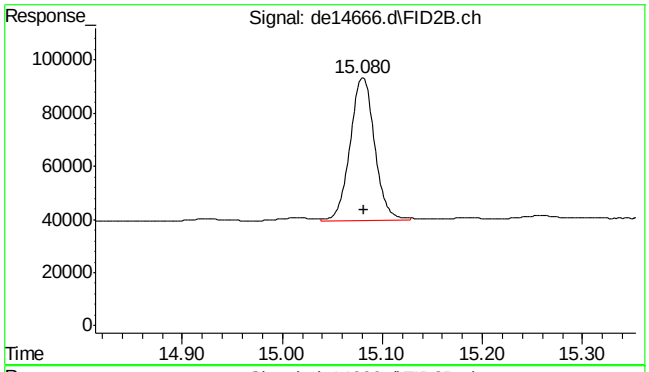


#39 c-28

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

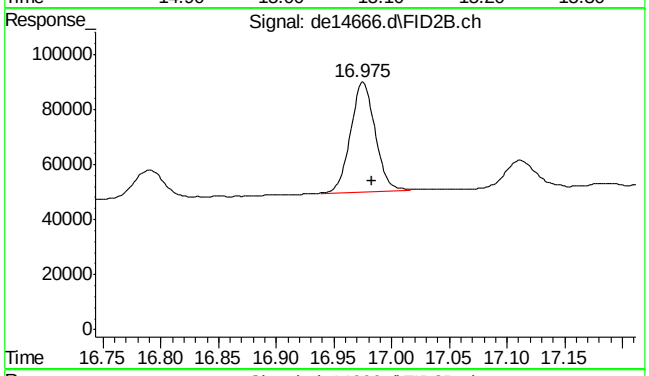
7.4.1

7



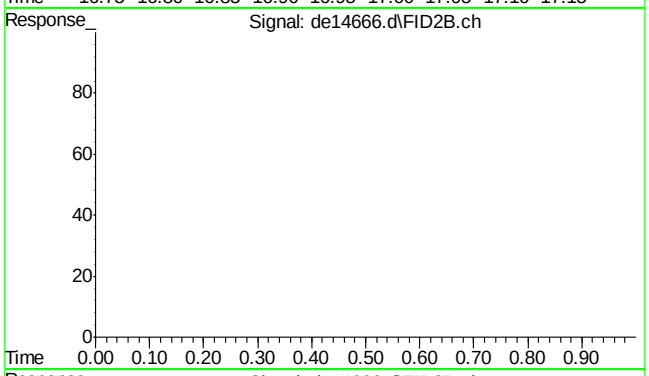
#40 c-30

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



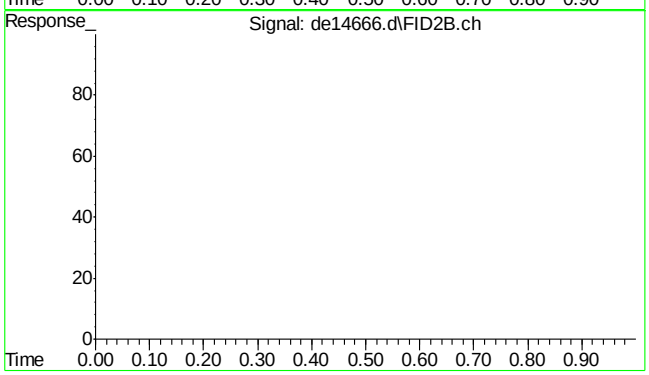
#41 c-36

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.

7.4.1

7

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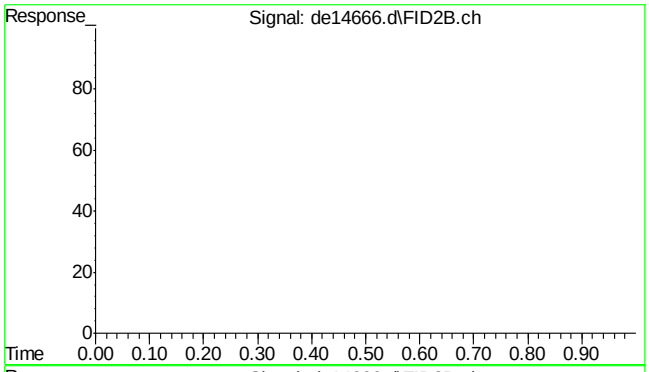
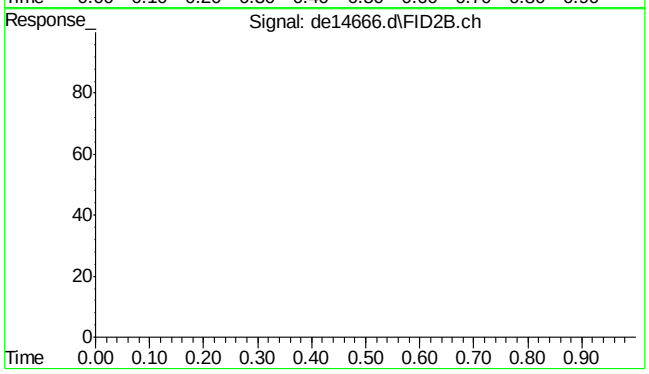


#44 bht

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



#45 bht

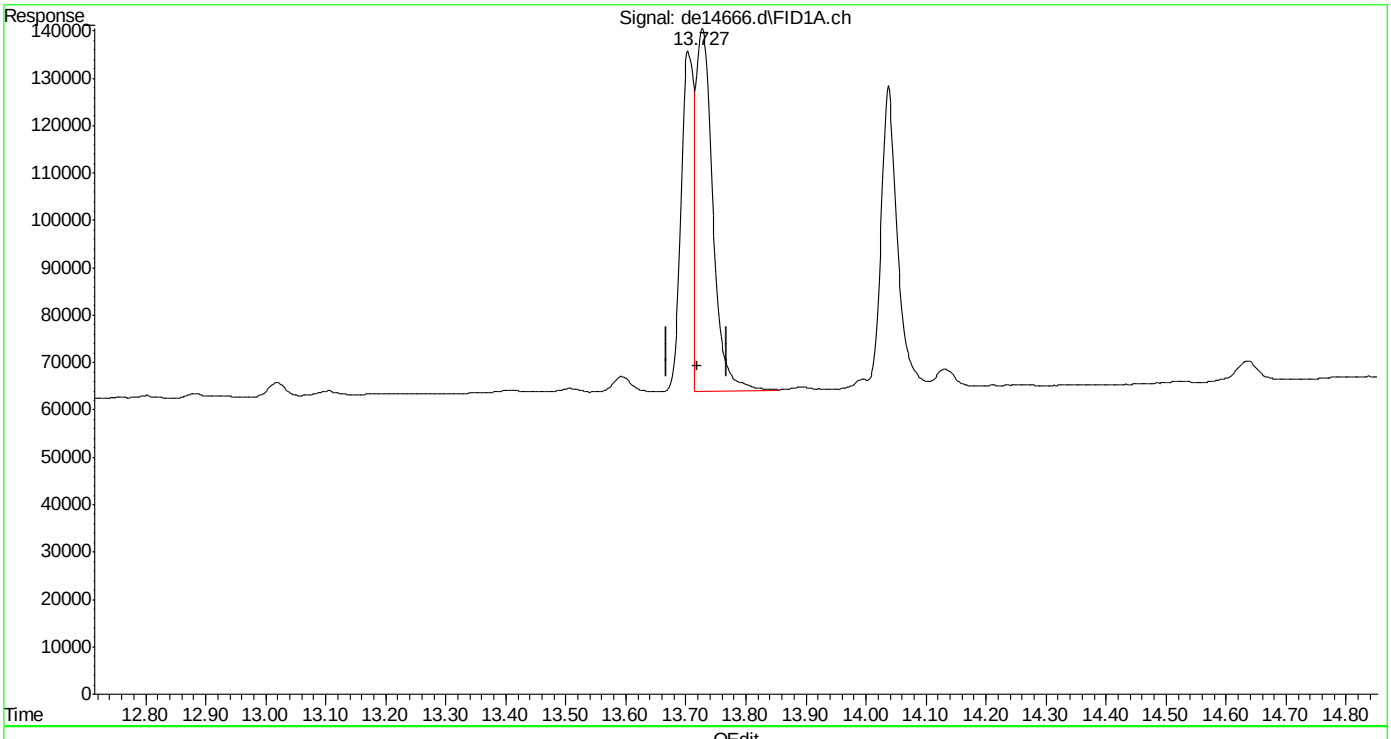
```
      R.T.:    0.000 min
Exp R.T.  :   23.000 min
  Response:         0
      Conc:   N.D.
```

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

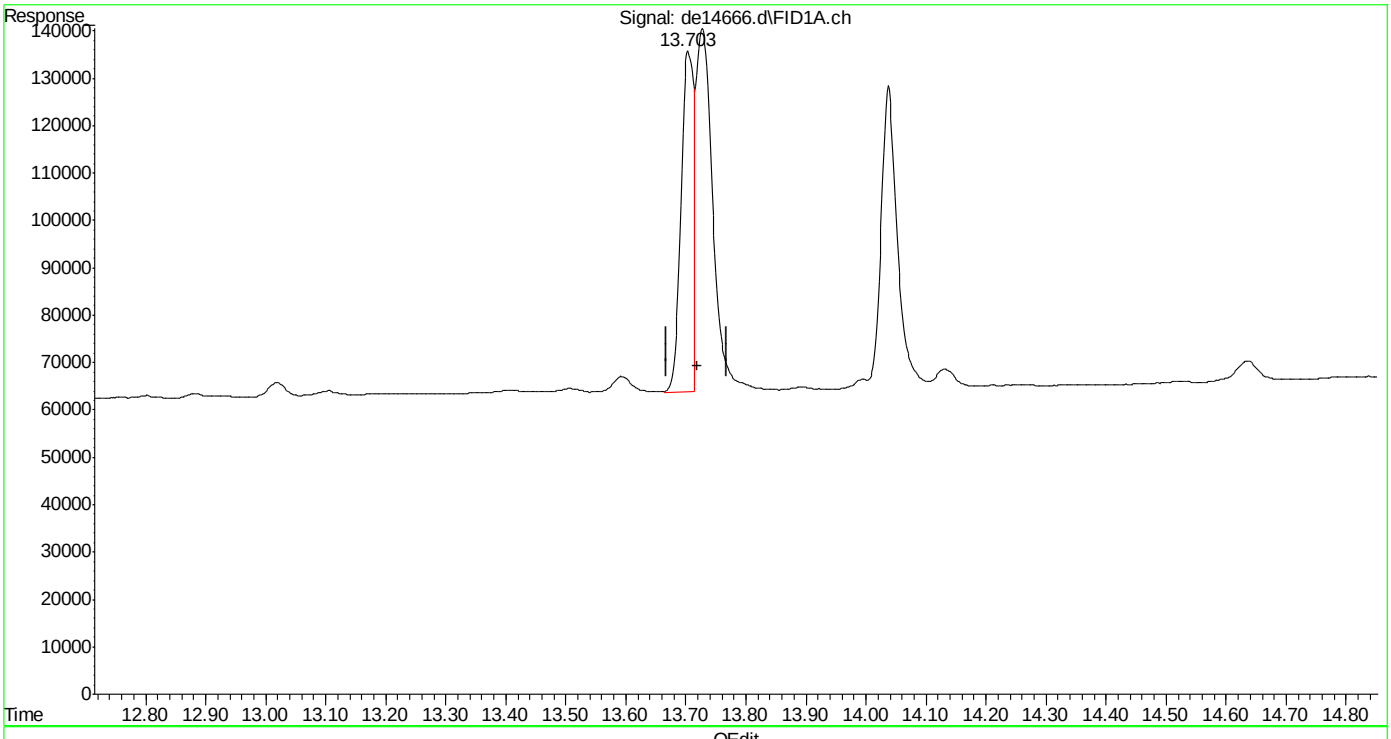
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:48:50 2016

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

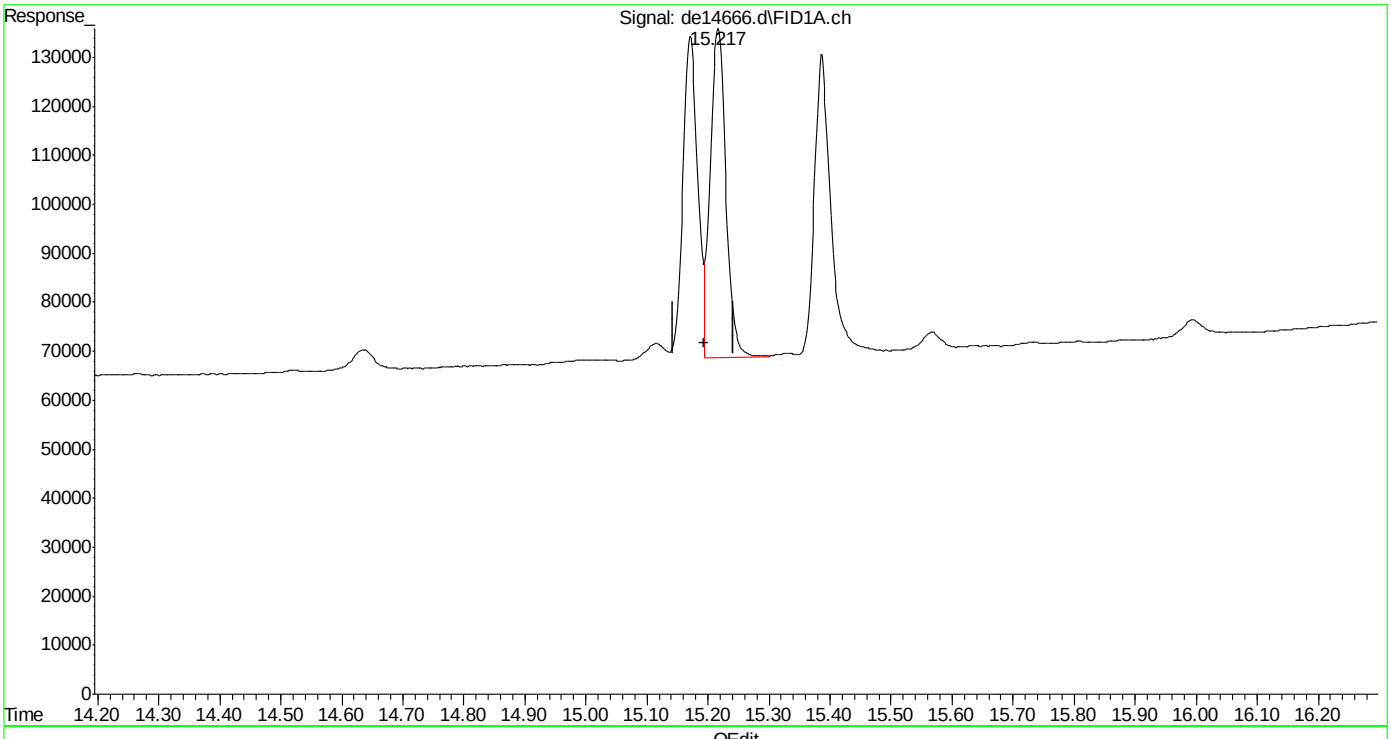
SGS ACCUTEST MC46737

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

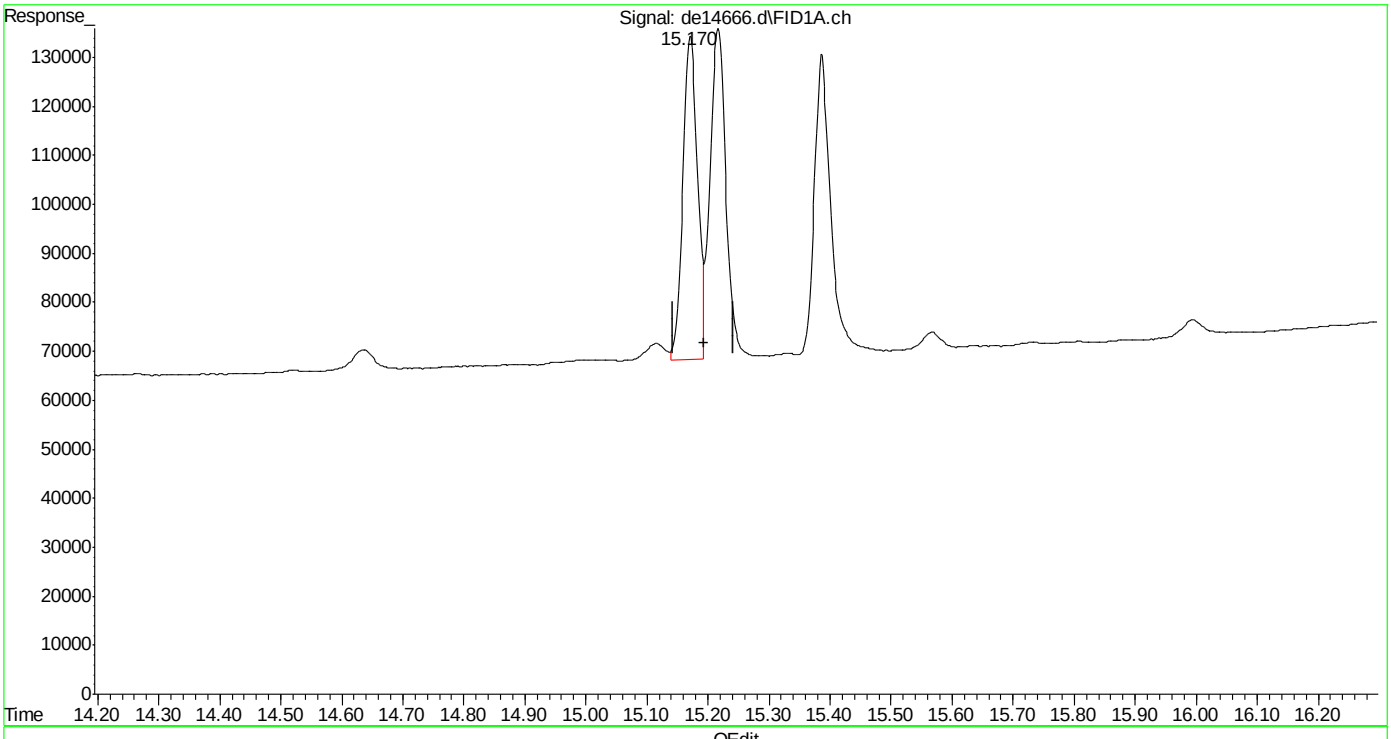
SGS ACCUTEST MC46737

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

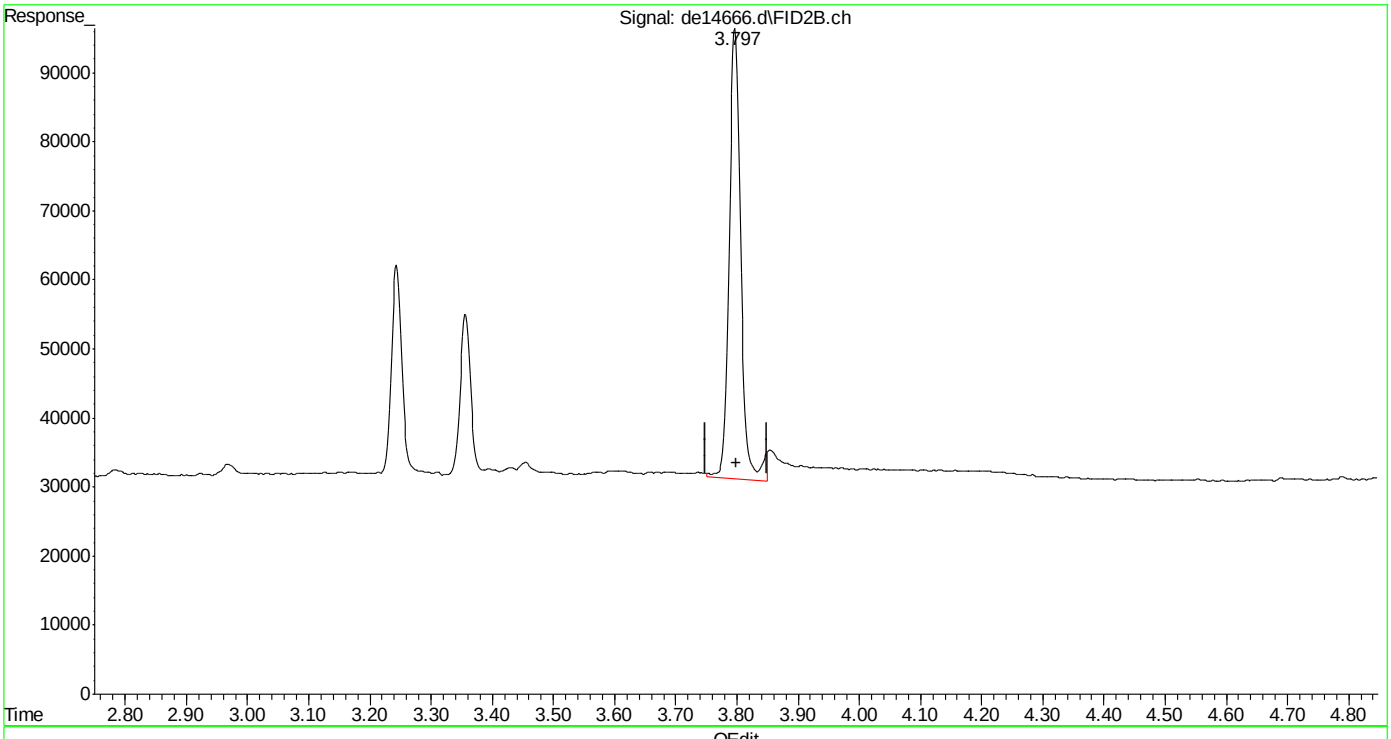
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:49:23 2016

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

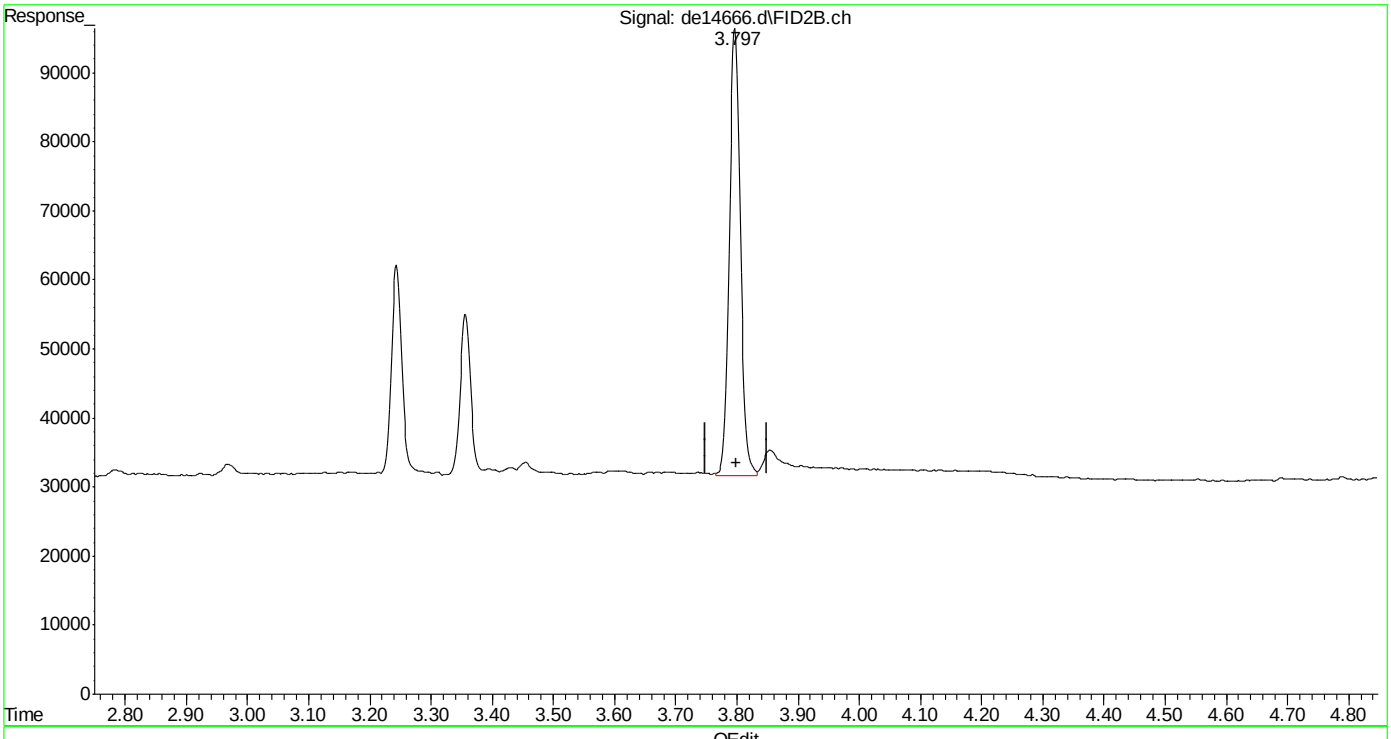
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:49:34 2016

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 :



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

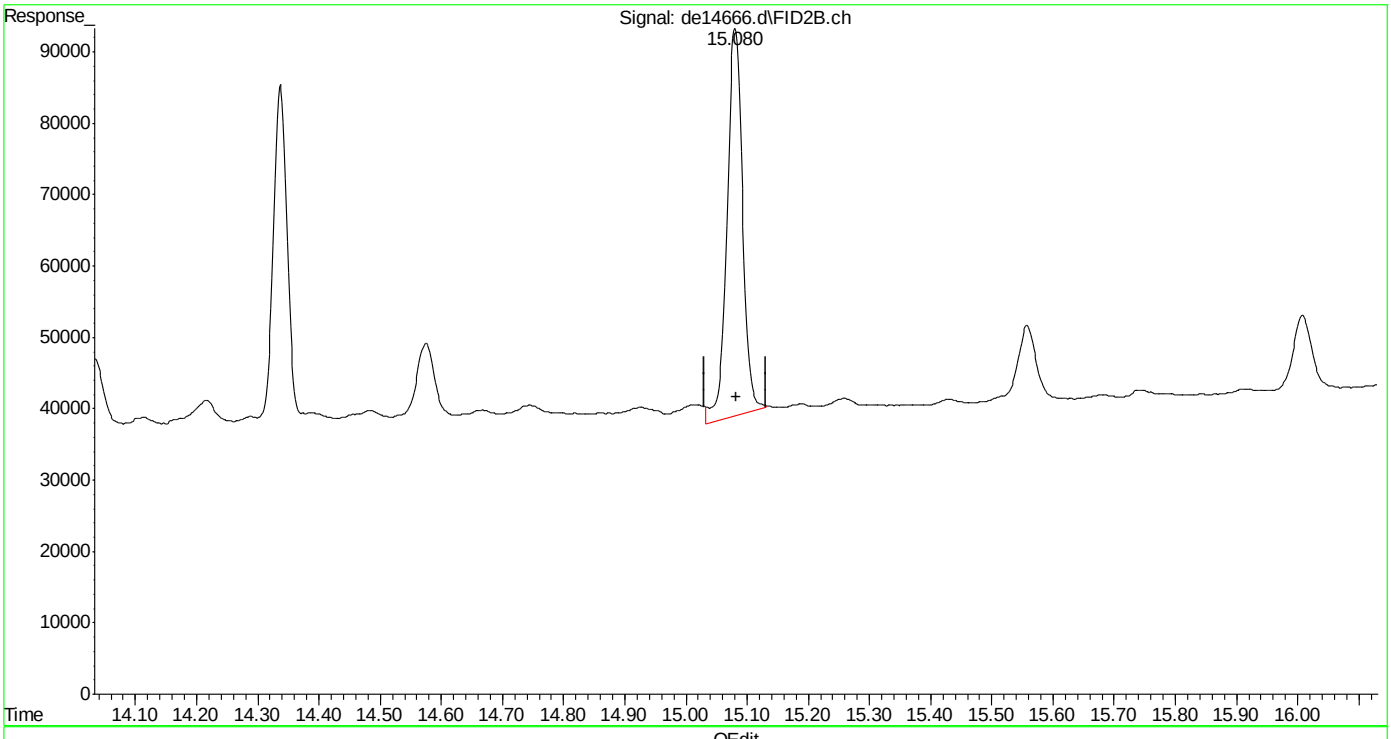
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:49:39 2016

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 :



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

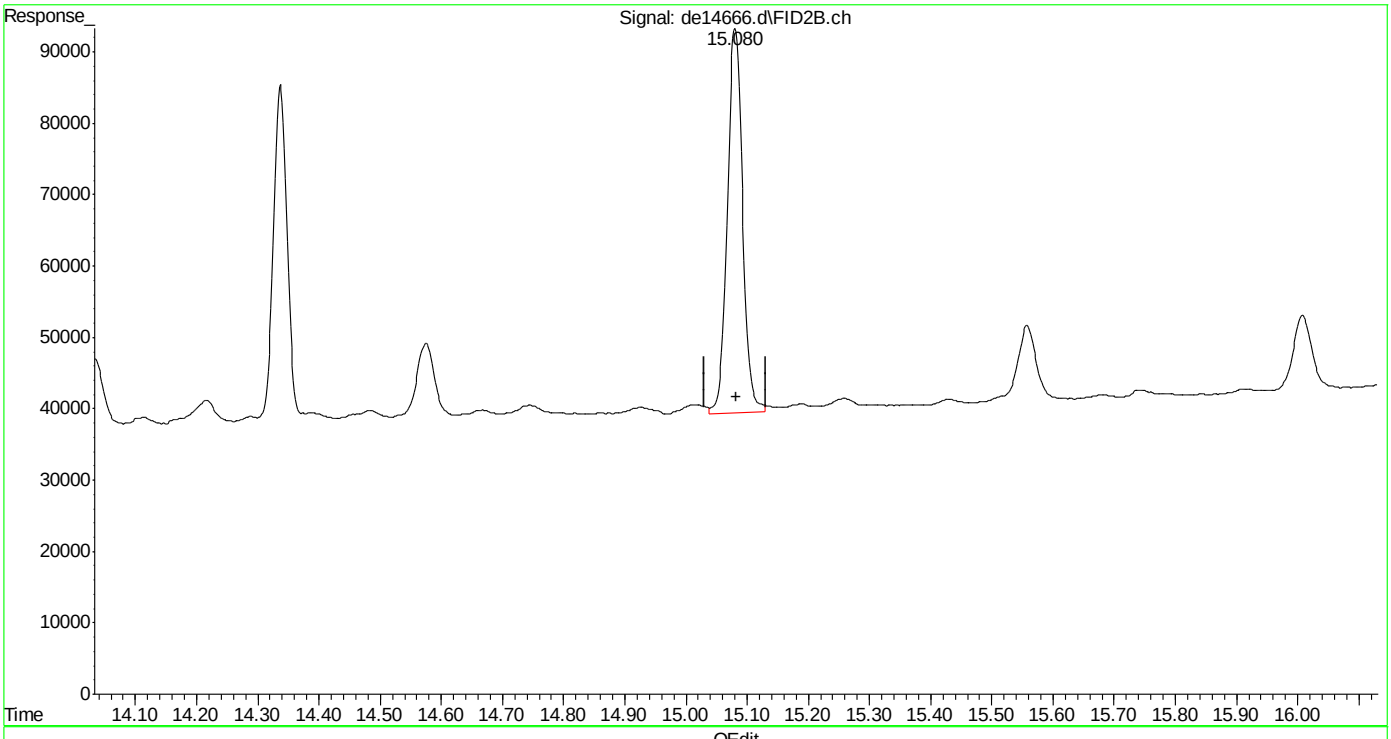
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:49:48 2016

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 :



(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.

7.4.2

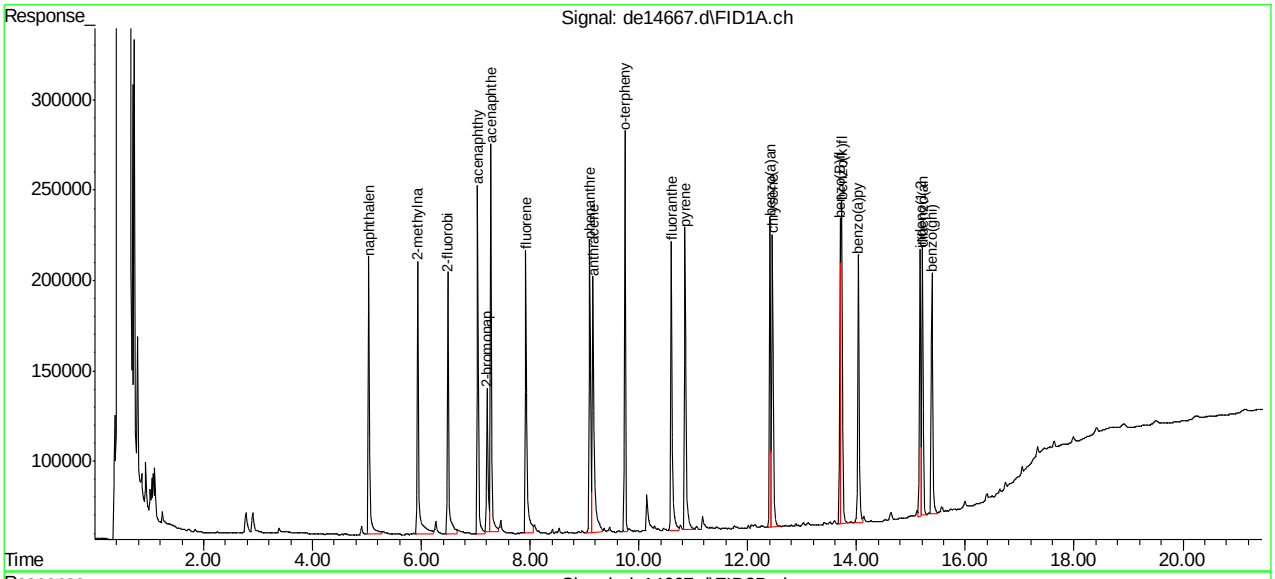
7

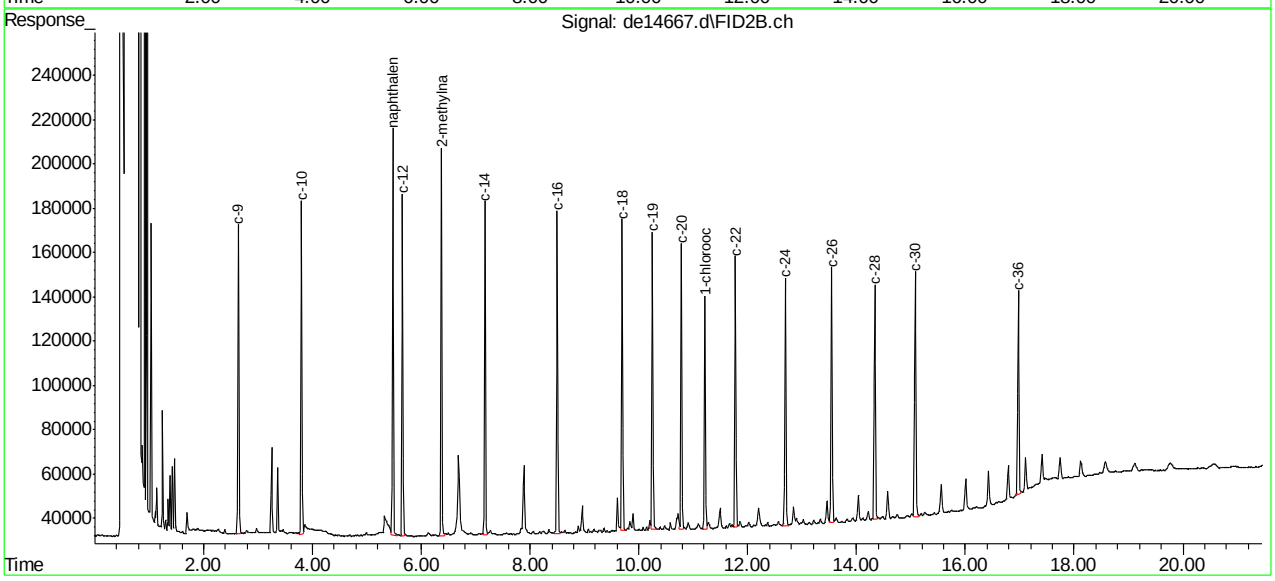
Quantitation Report (QT Reviewed)

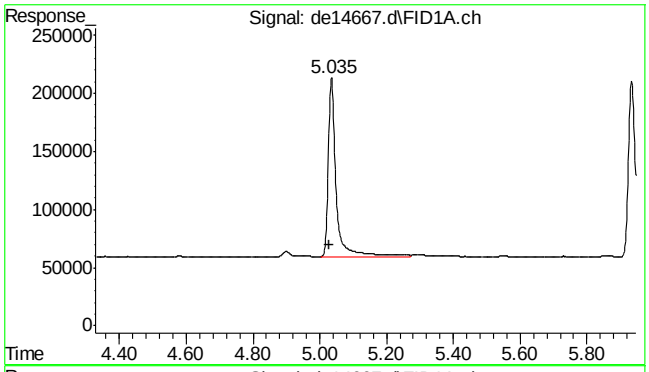
Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14667.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 6:44 pm
Operator : thomasa
Sample : ic815-2 (Sig #1); cc815-2 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 104 Sample Multiplier: 1

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 :

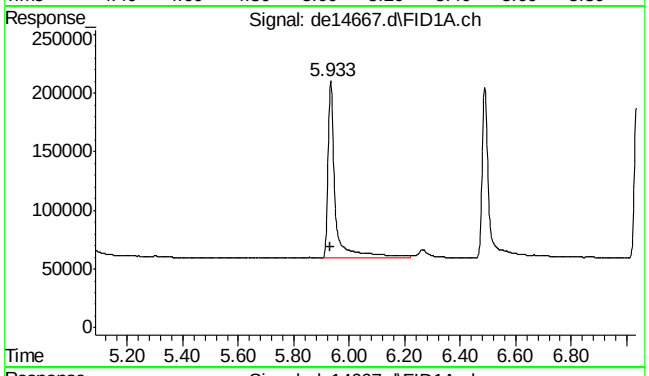






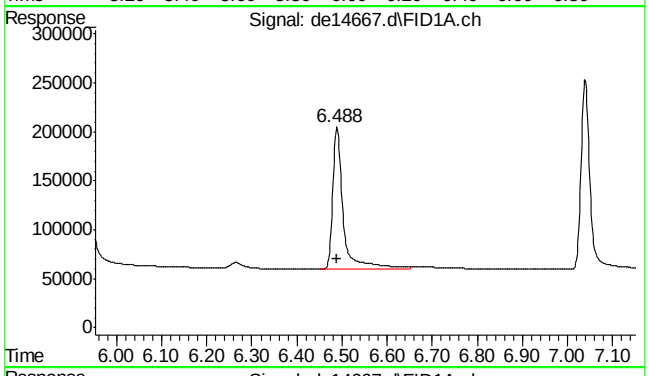
#2 naphthalene

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



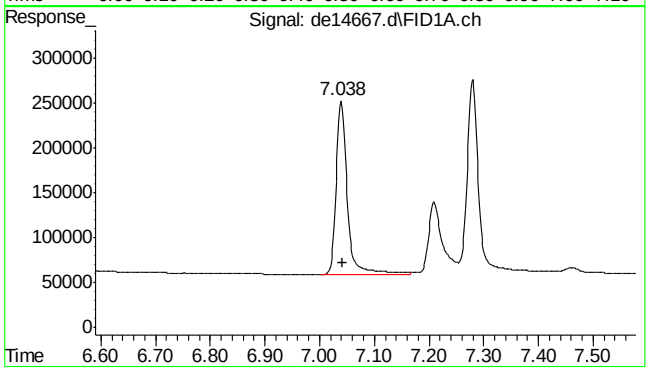
#3 2-methylnaphthalene

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



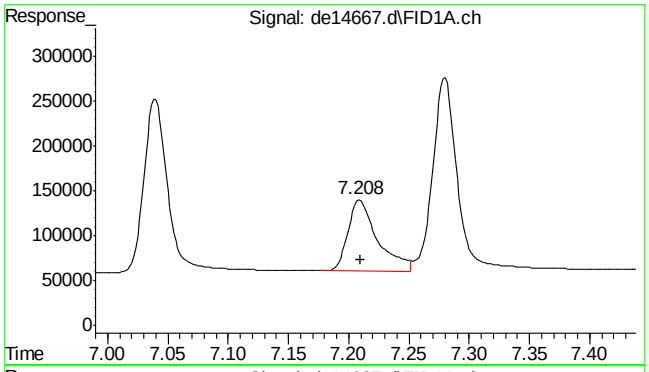
#4 2-fluorobiphenyl

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



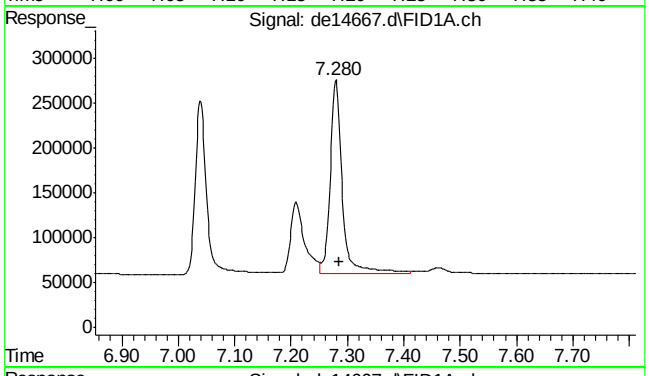
#5 acenaphthylene

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



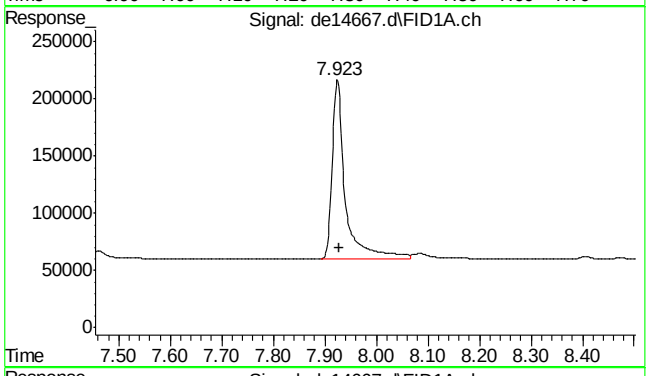
#6 2-bromonaphthalene

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



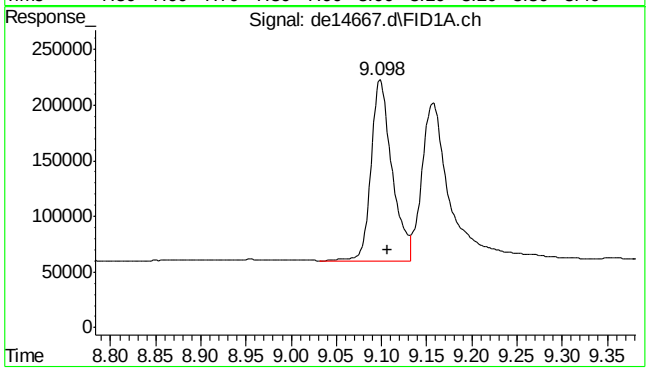
#7 acenaphthene

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

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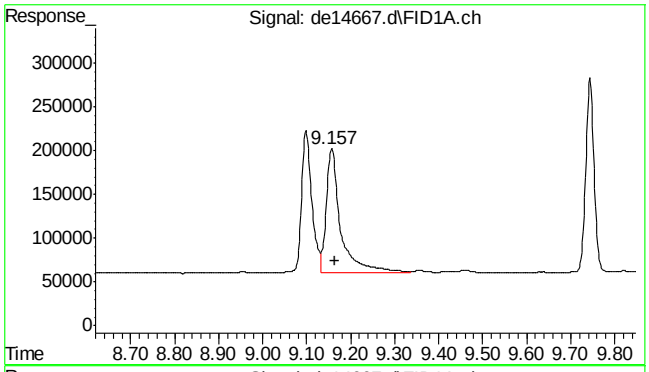
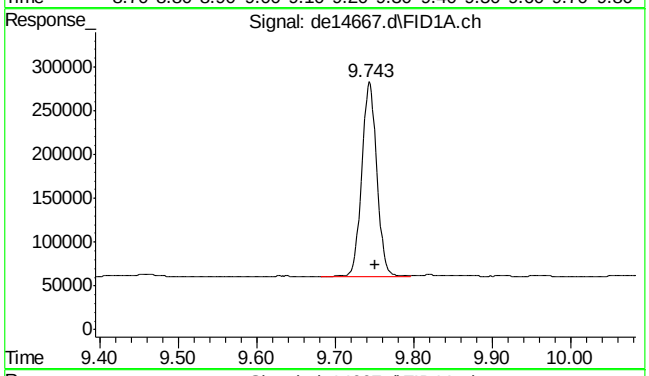


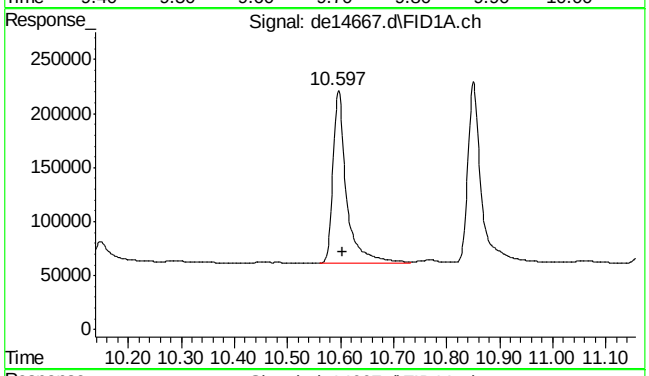
#10 anthracene

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



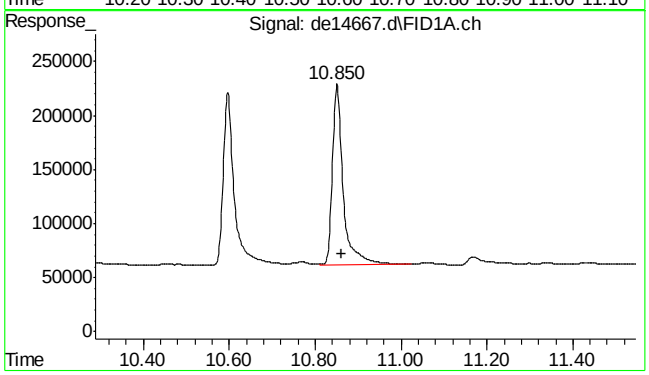
#11 o-terphenyl

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



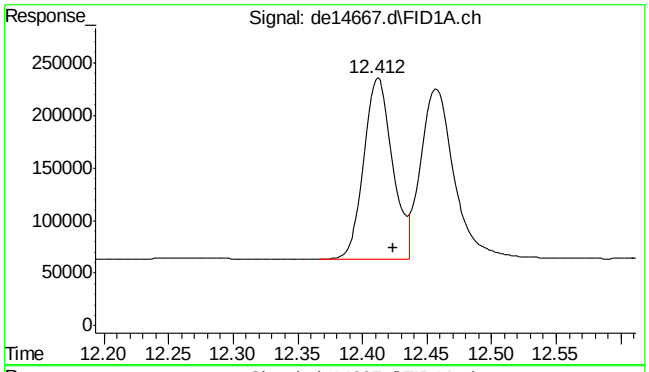
#13 pyrene

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

7.4.2

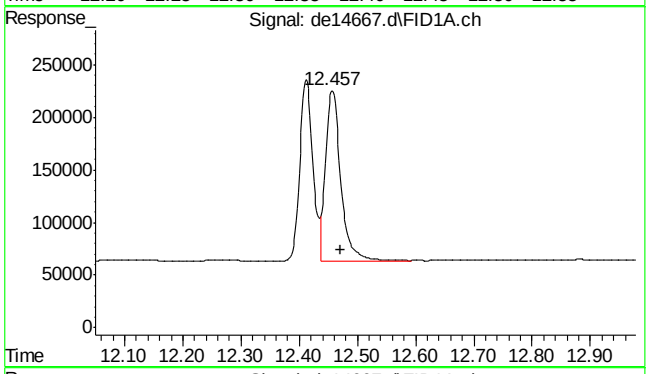
7

SGS ACCUTEST MC46737



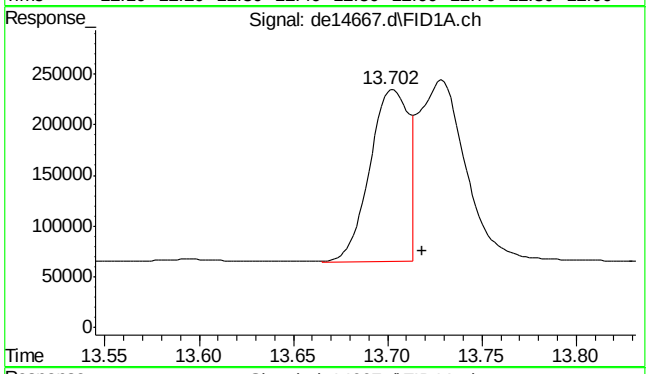
#14 benzo(a)anthracene

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



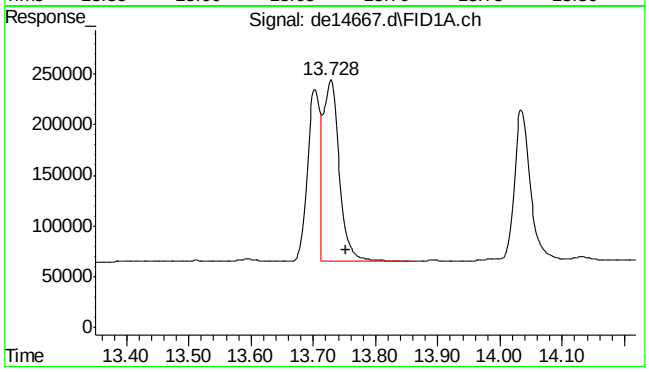
#15 chrysene

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



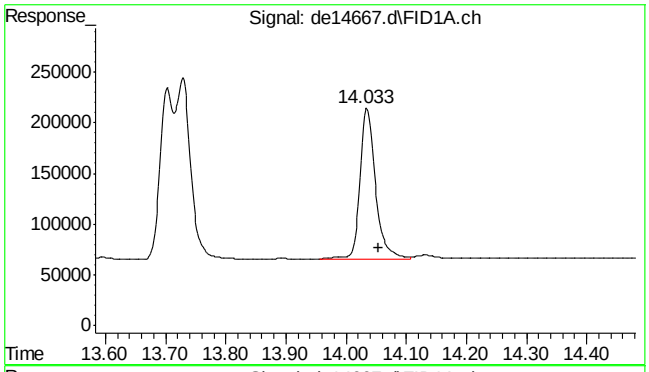
#17 benzo(k)fluoranthene

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

7.4.2

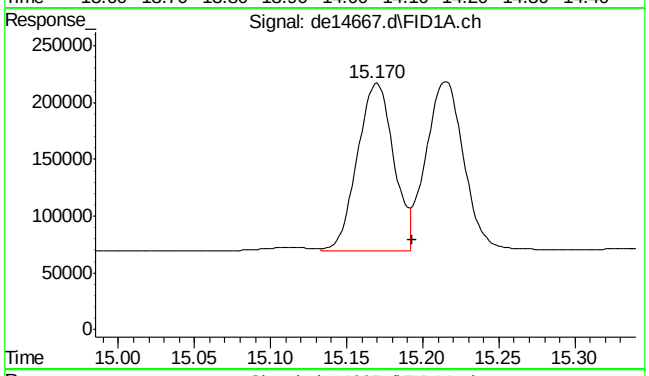
7

SGS ACCUTEST MC46737



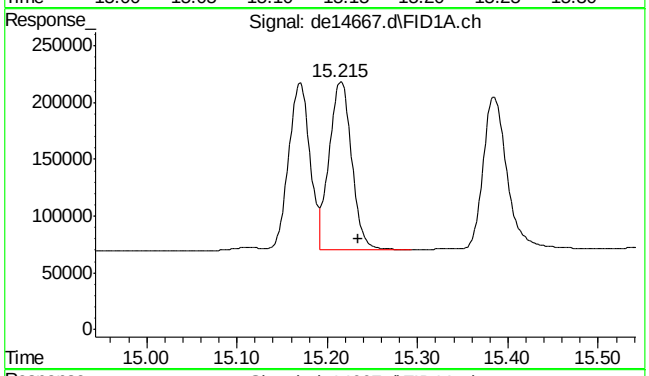
#18 benzo(a)pyrene

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



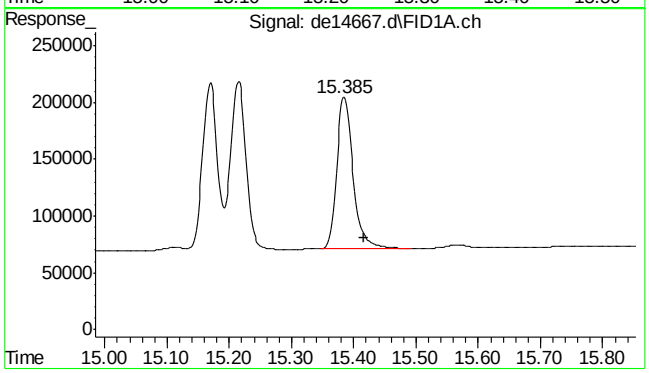
#19 indeno(1,2,3-cd)pyrene

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



#20 dibenzo(ah)anthracene

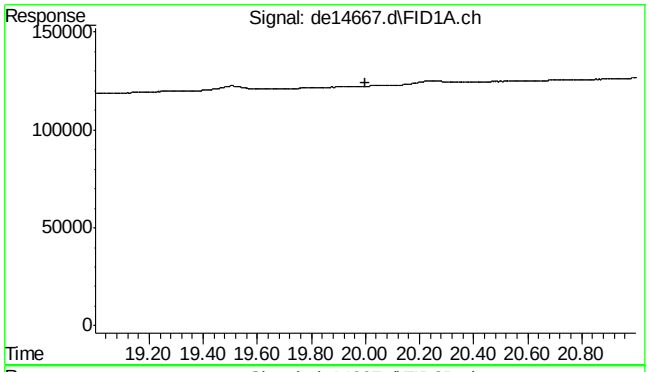
R.T.: 15.215 min
Delta R.T.: -0.020 min
Response: 255274
Conc: 2.60 µg/ml



#21 benzo(ghi)perylene

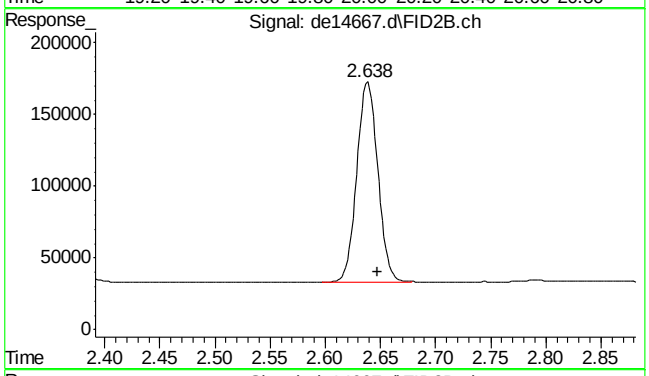
R.T.: 15.385 min
Delta R.T.: -0.032 min
Response: 246509
Conc: 2.51 µg/ml

SGS ACCUTEST MC46737



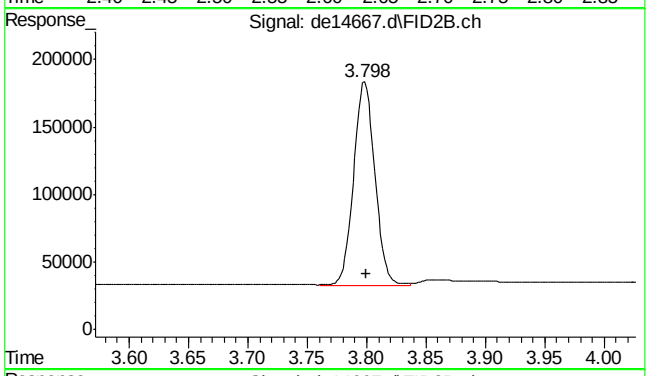
#22 bht

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



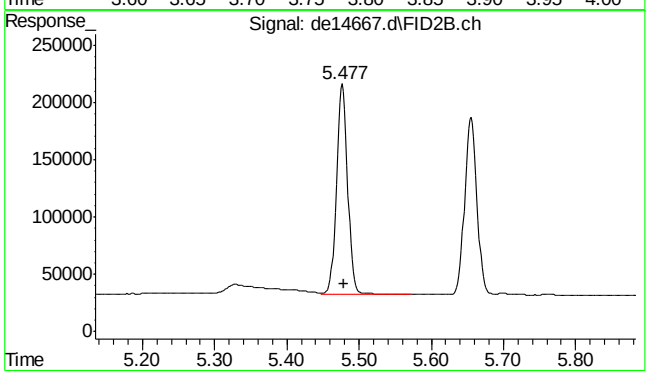
#25 c-9

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



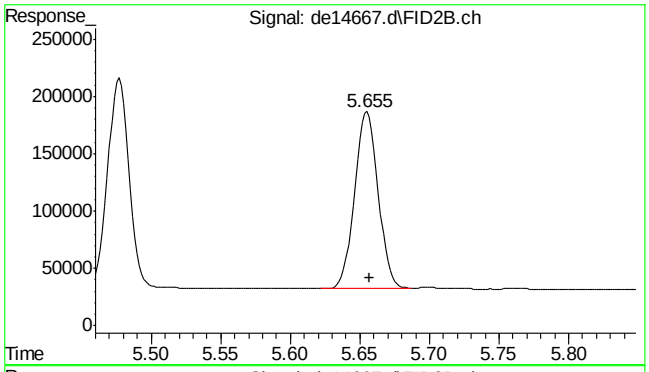
#27 naphthalene #2

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

7.4.2

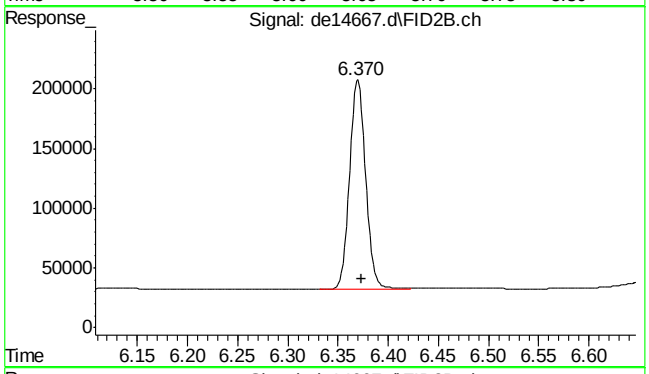
7

SGS ACCUTEST MC46737



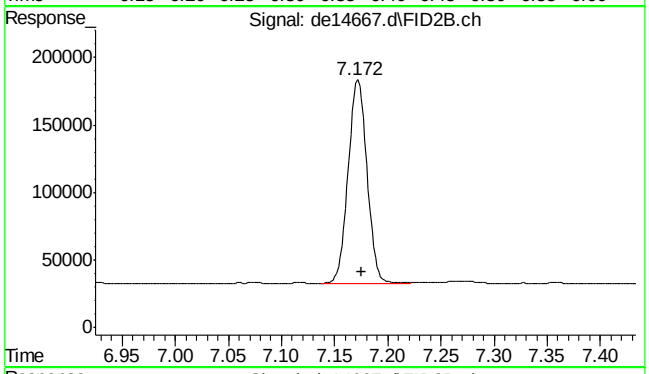
#28 c-12

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



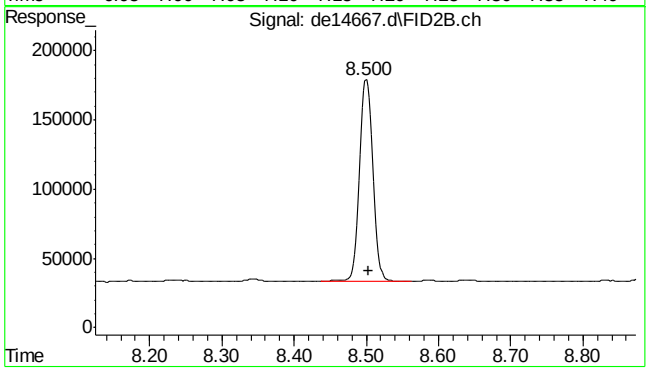
#29 2-methylnaphthalene #2

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



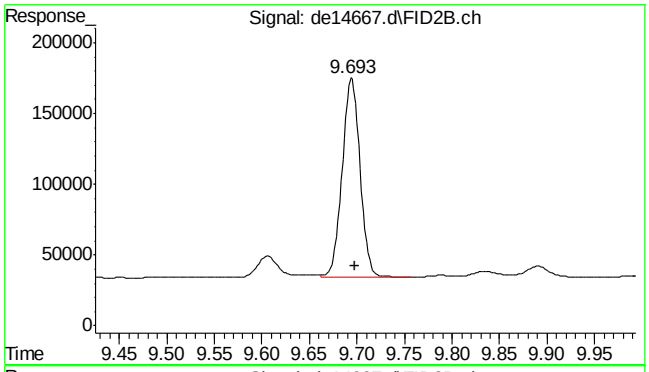
#30 c-14

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



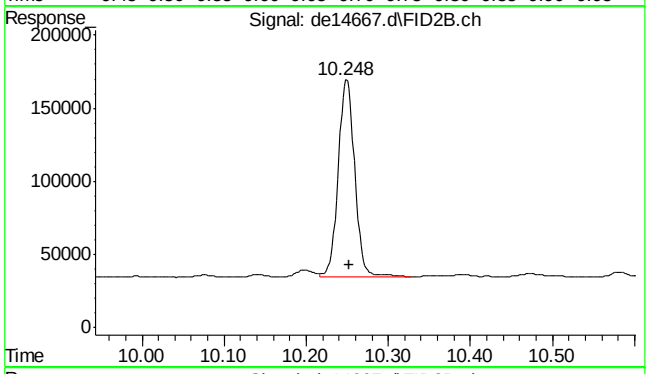
#31 c-16

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



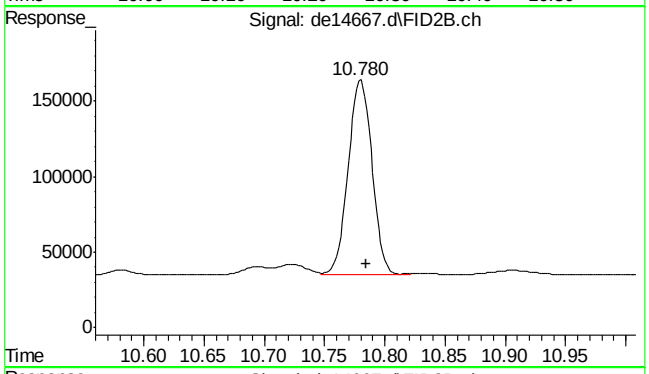
#32 c-18

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



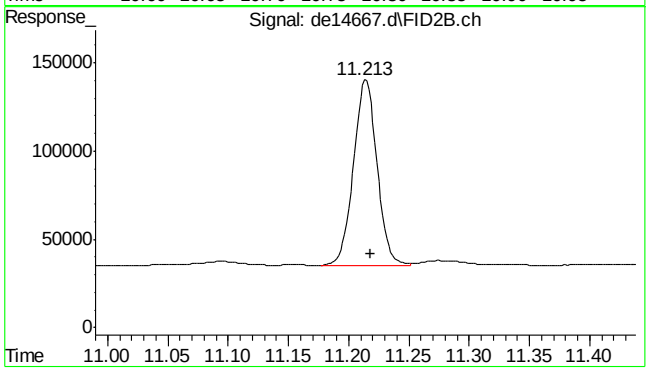
#33 c-19

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

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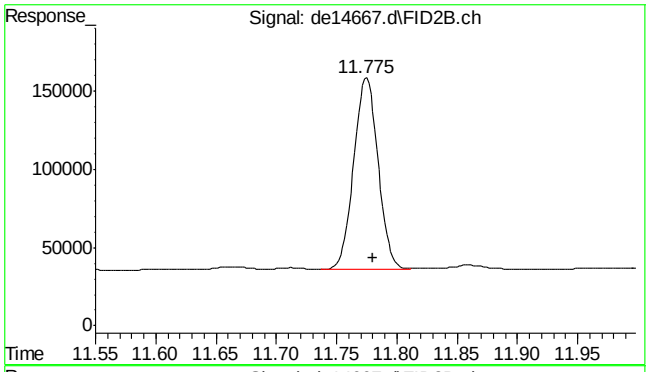
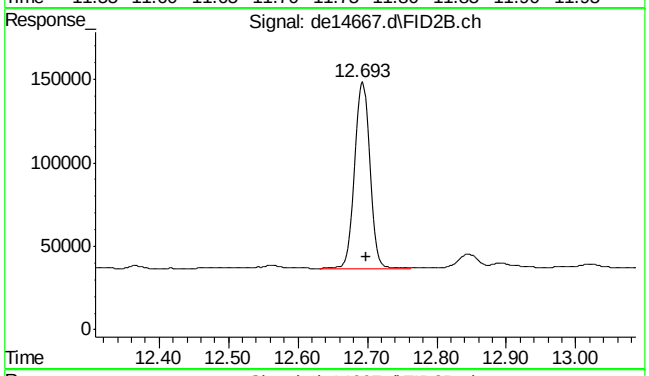


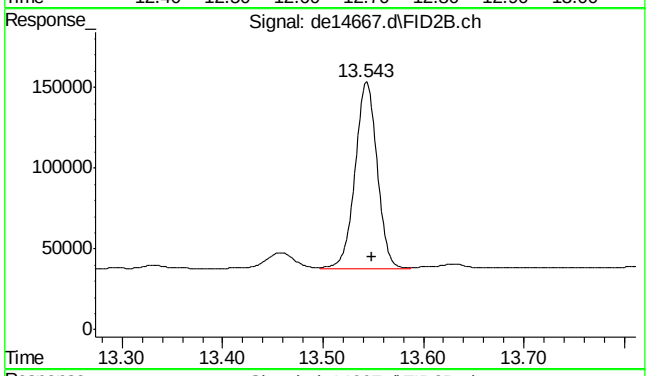
#36 c-22

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



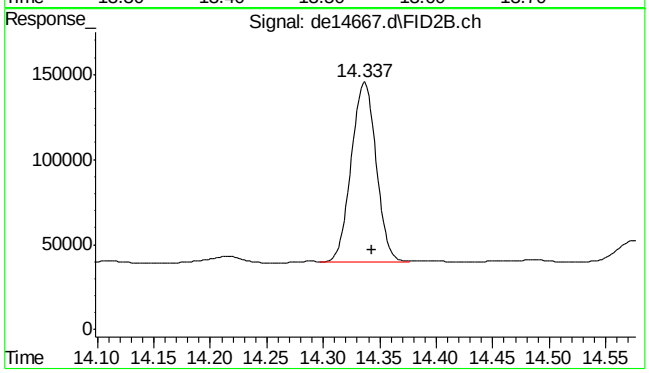
#37 c-24

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



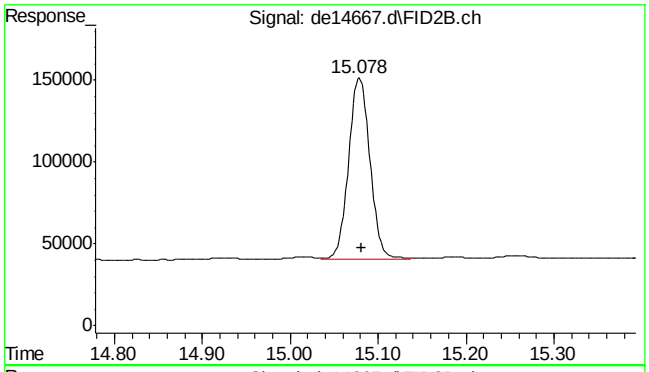
#38 c-26

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



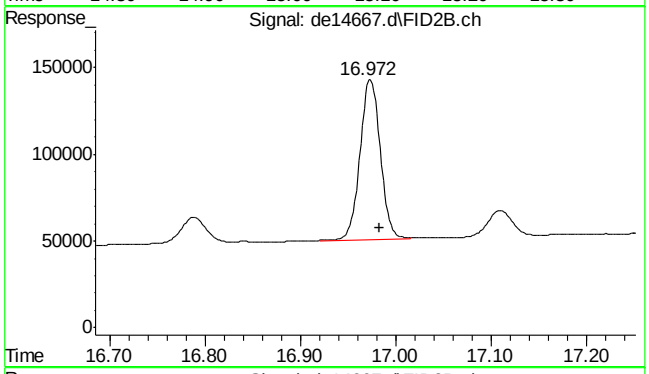
#39 c-28

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



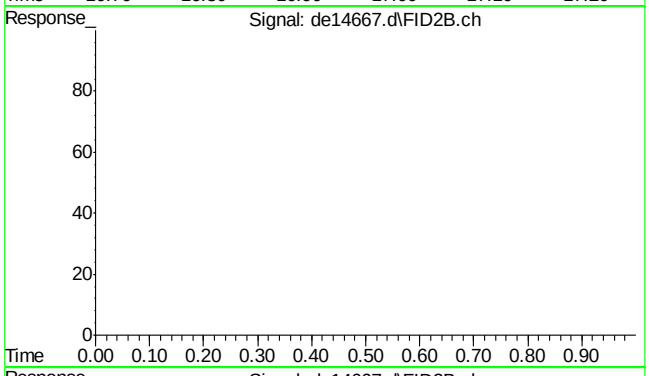
#40 c-30

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



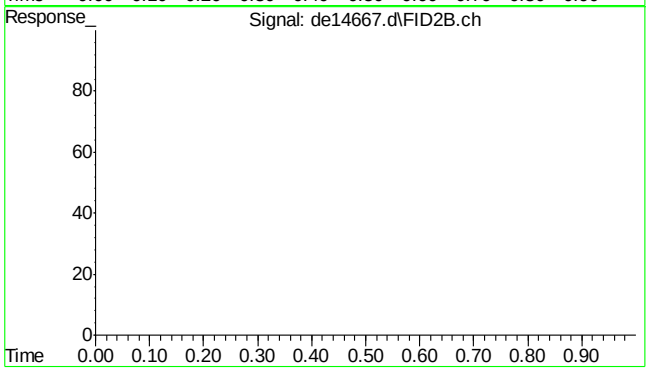
#41 c-36

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.

7.4.2

7

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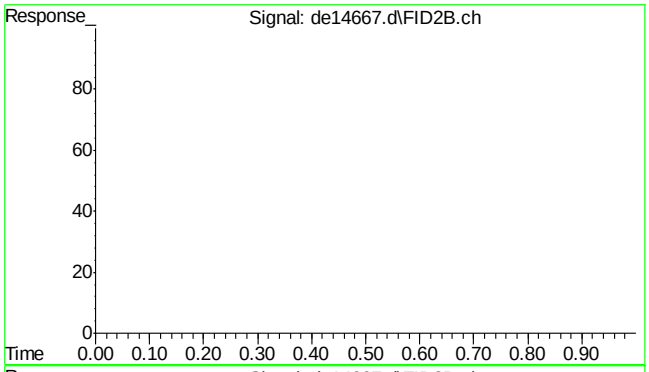
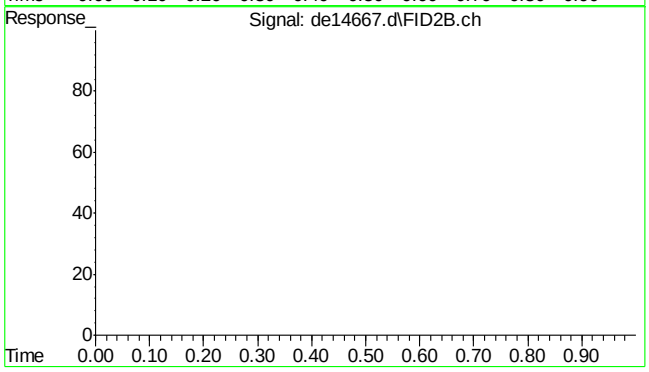


#44 bht

```
      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.
```

7.4.2

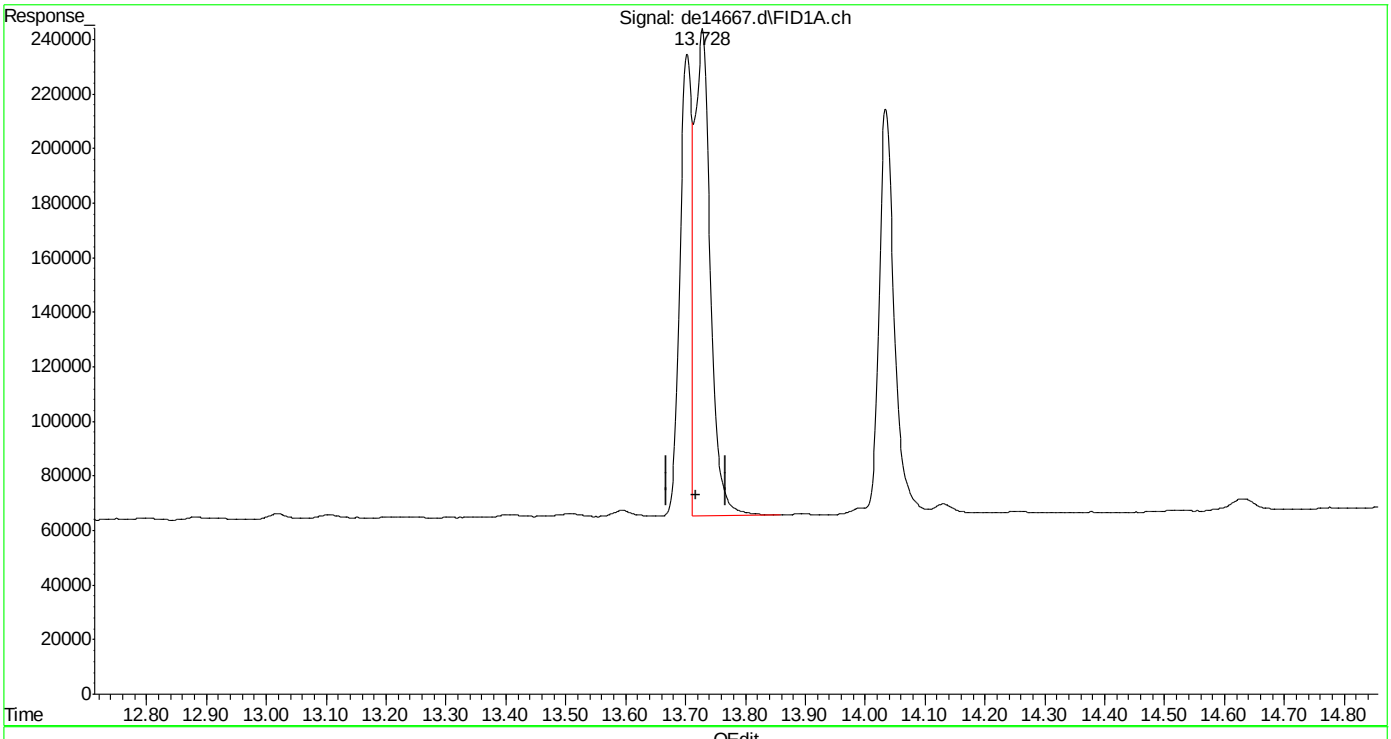
7

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

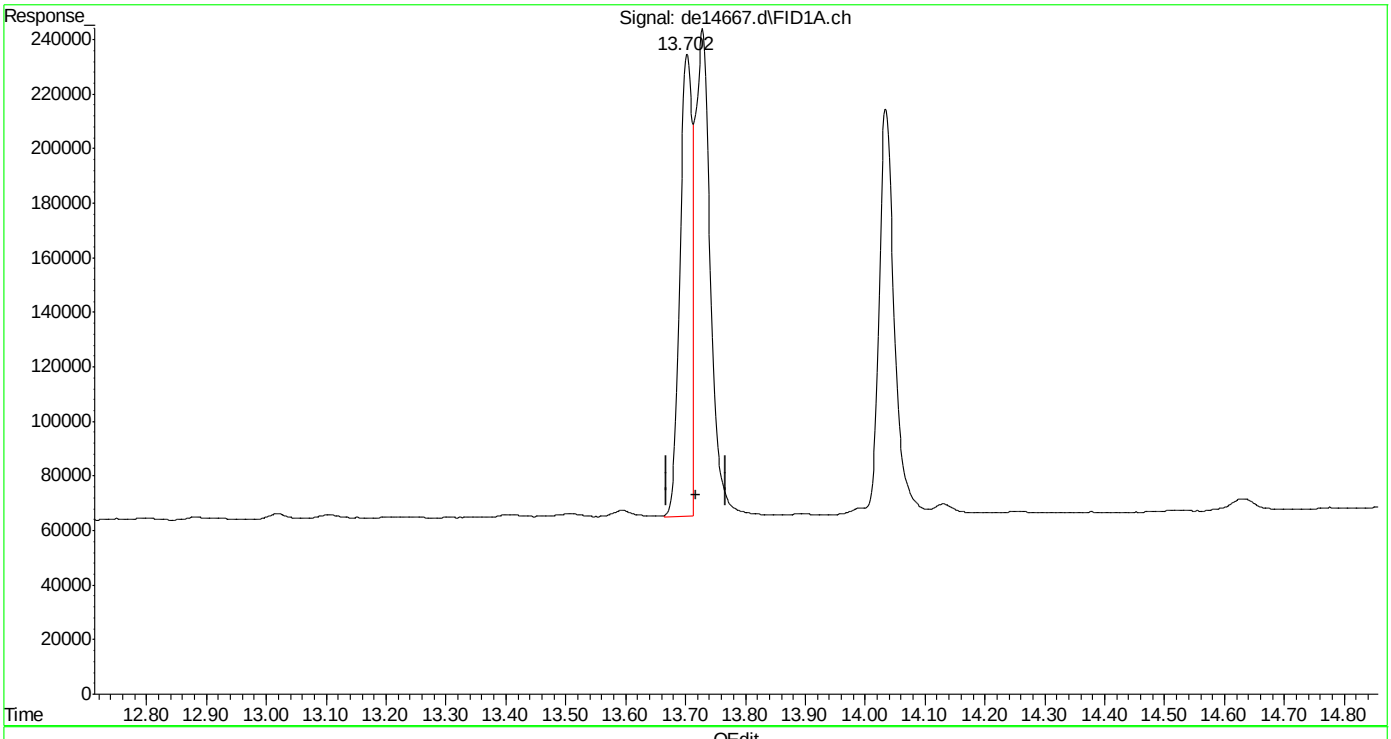
SGS ACCUTEST MC46737

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

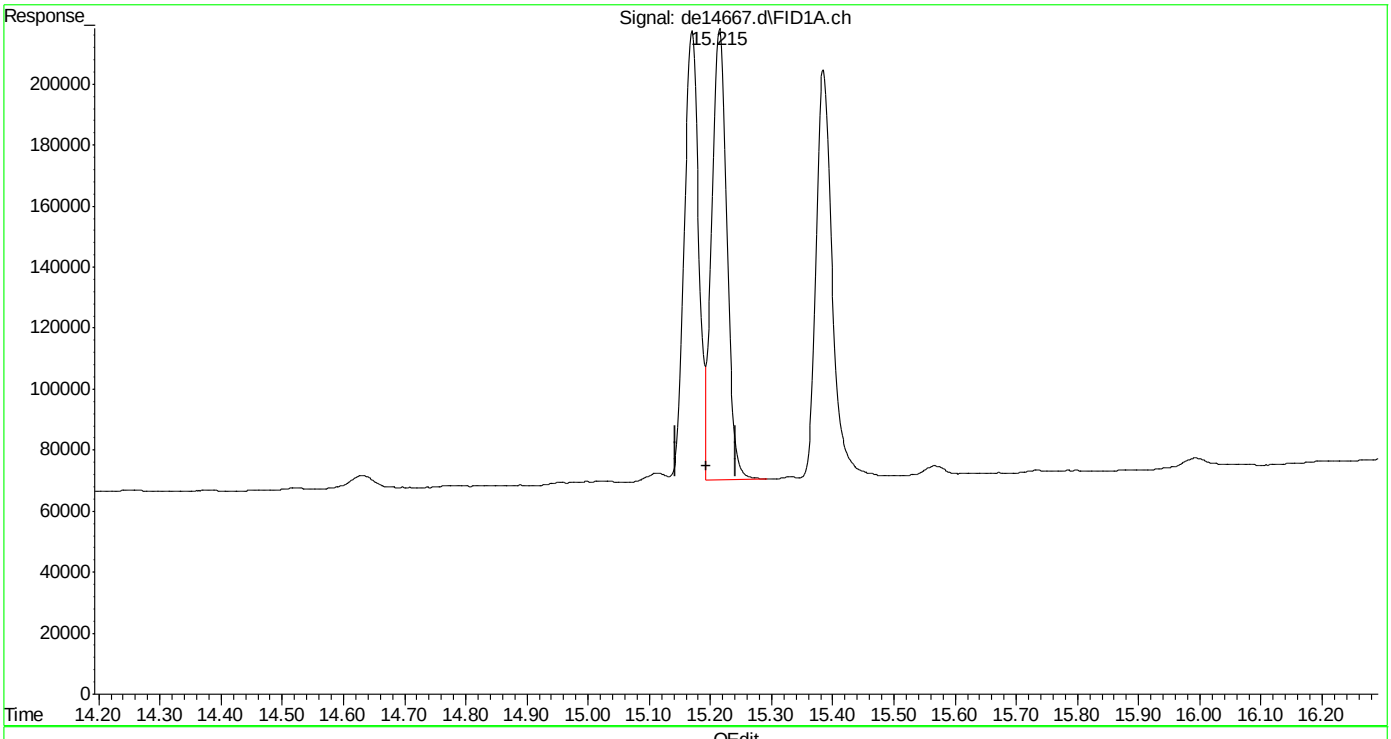
SGS ACCUTEST MC46737

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

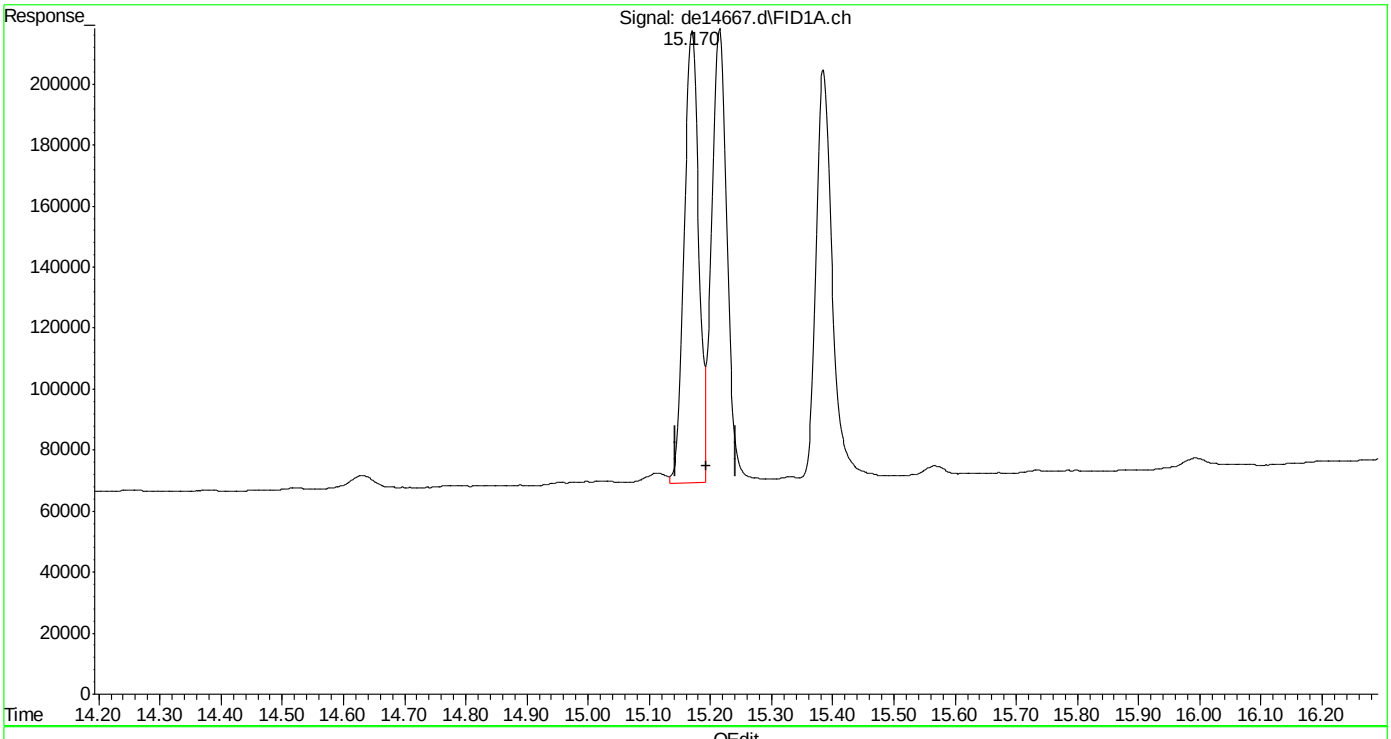
SGS ACCUTEST MC46737

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

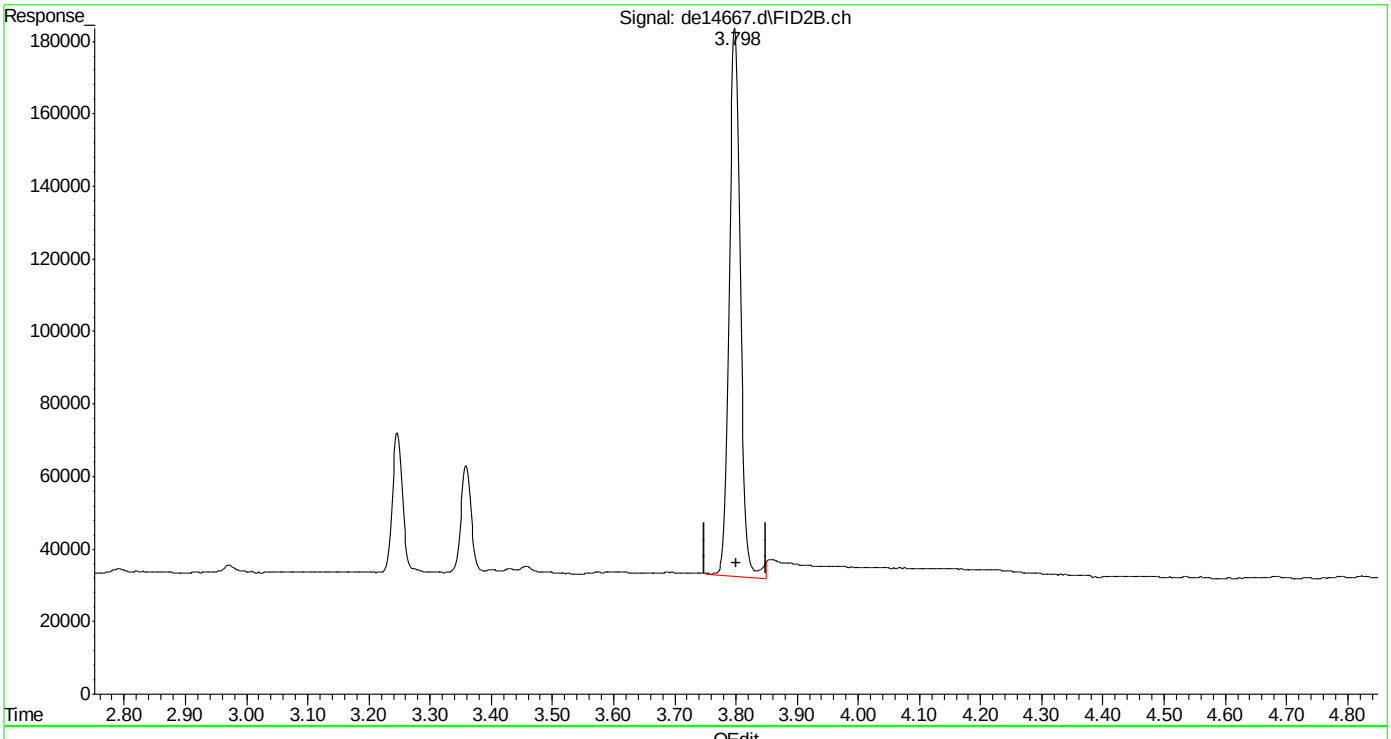
SGS ACCUTEST MC46737

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
EPH160622W.M Thu Jun 23 07:51:15 2016

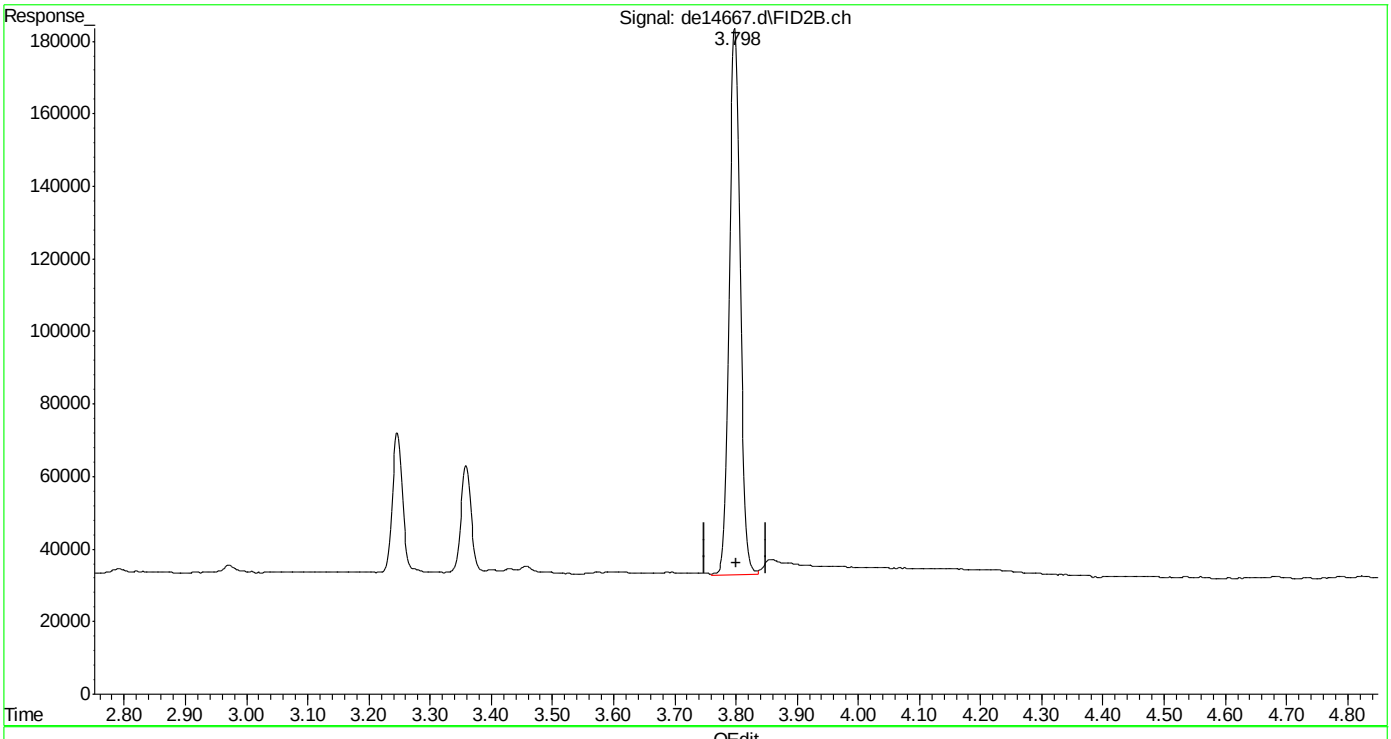
SGS ACCUTEST MC46737

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
EPH160622W.M Thu Jun 23 07:51:20 2016

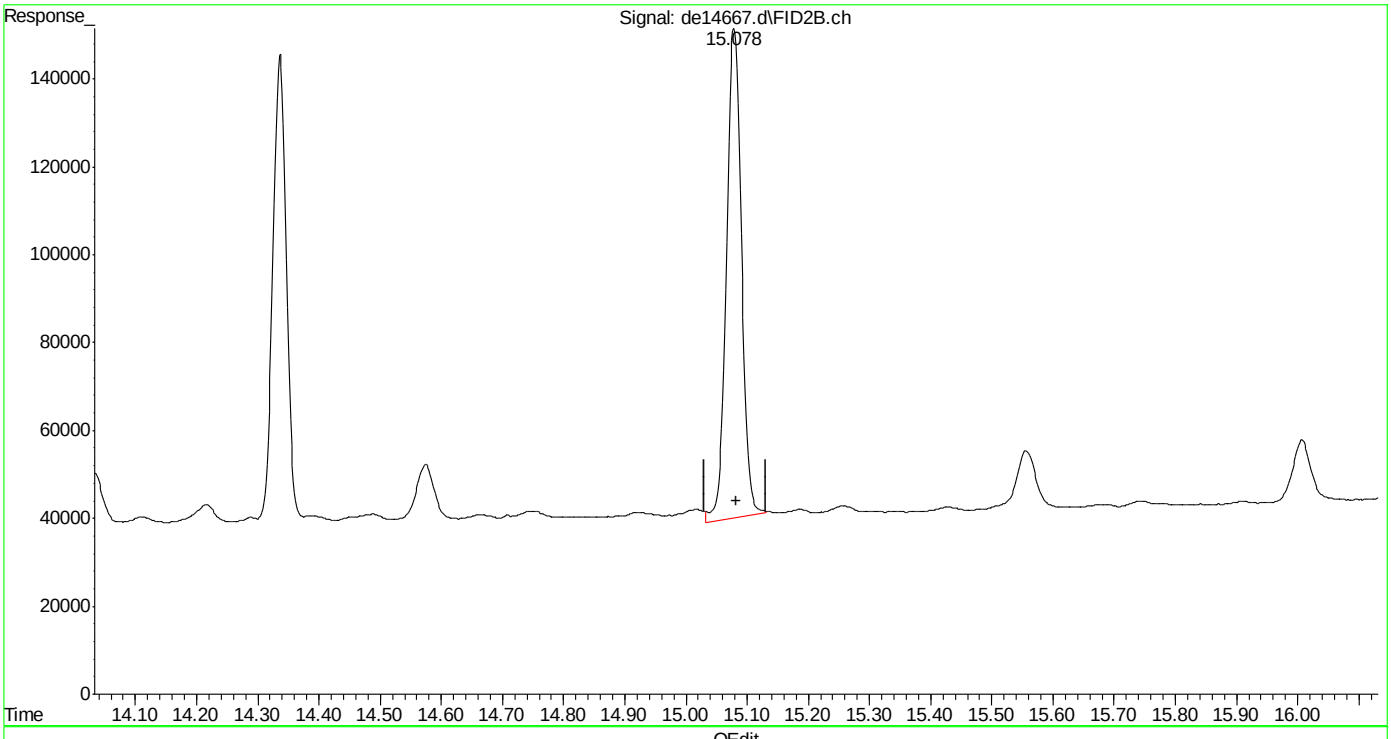
SGS ACCUTEST MC46737

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

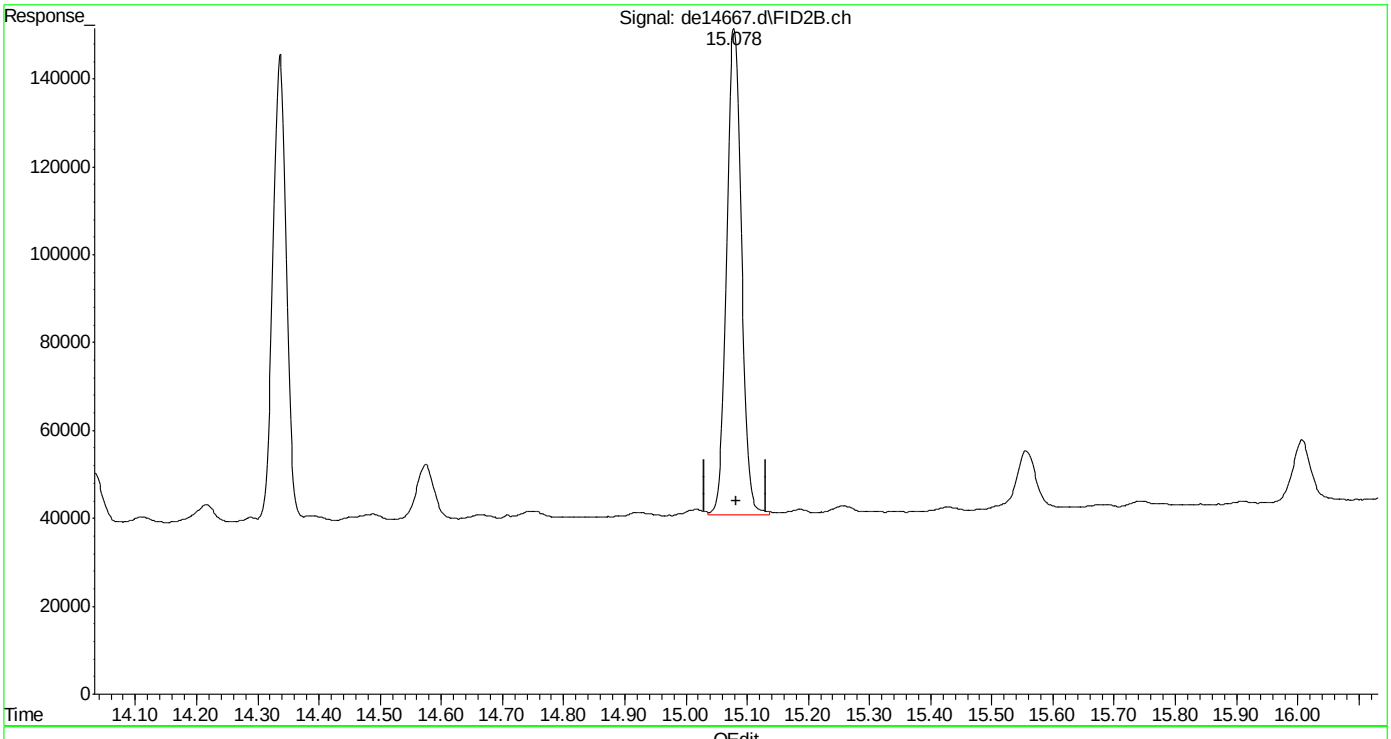
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:51:27 2016

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 MC46737

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.

7.4.3

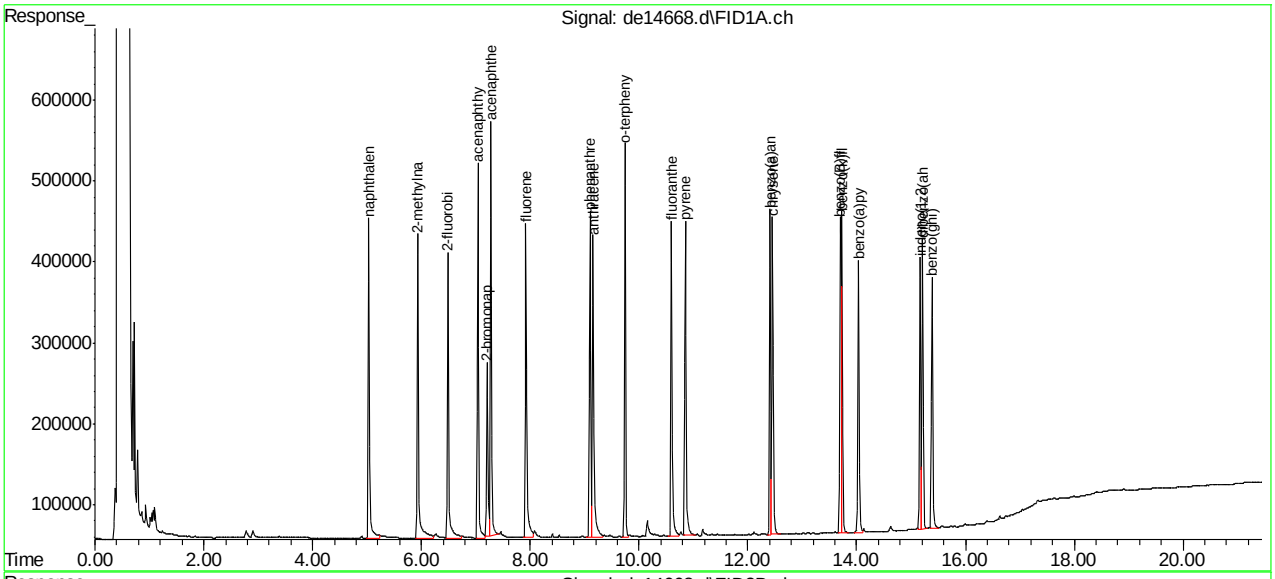
7

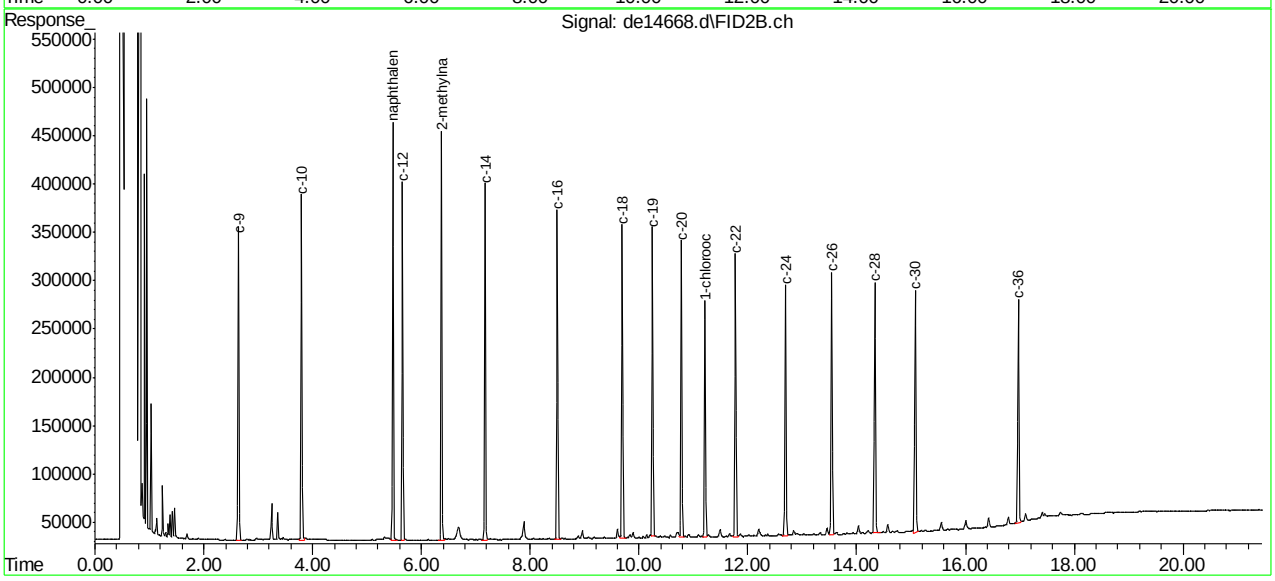
Quantitation Report (QT Reviewed)

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

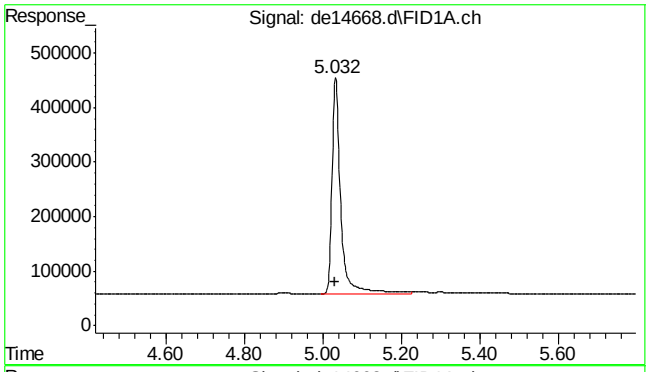
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 07:53:48 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 07:51:49 2016
Response via : Initial Calibration
Integrator: RTE

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



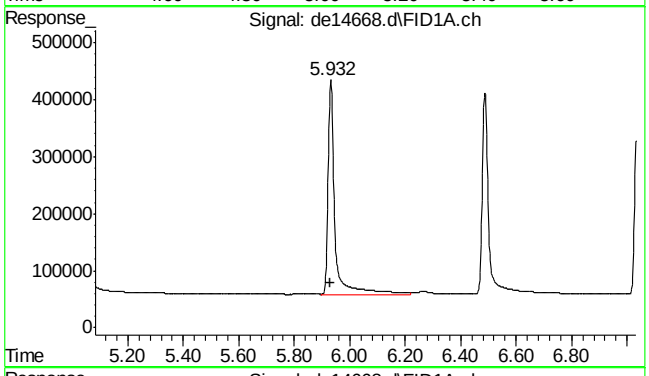


SGS ACCUTEST MC46737



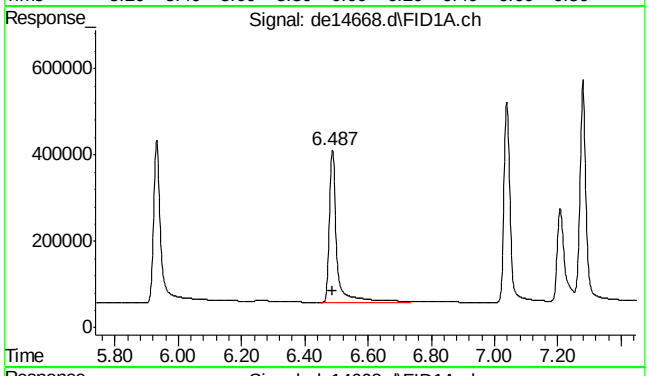
#2 naphthalene

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



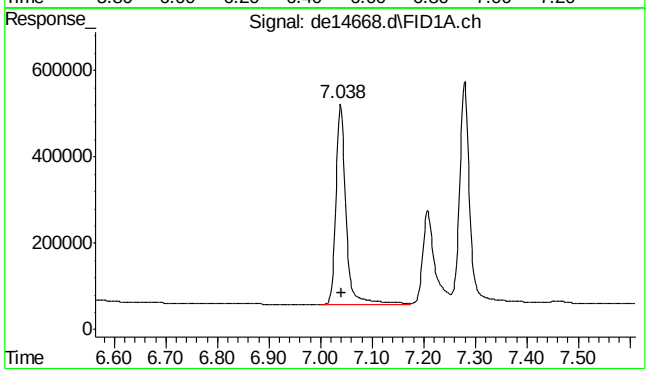
#3 2-methylnaphthalene

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

7.4.3

7

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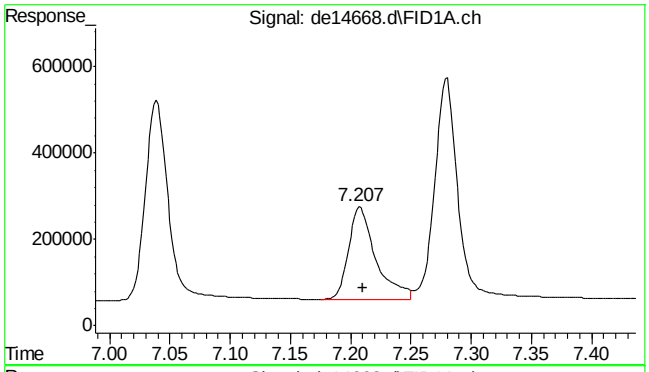
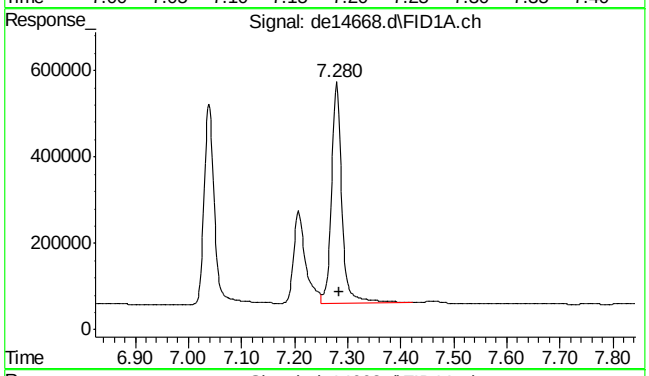


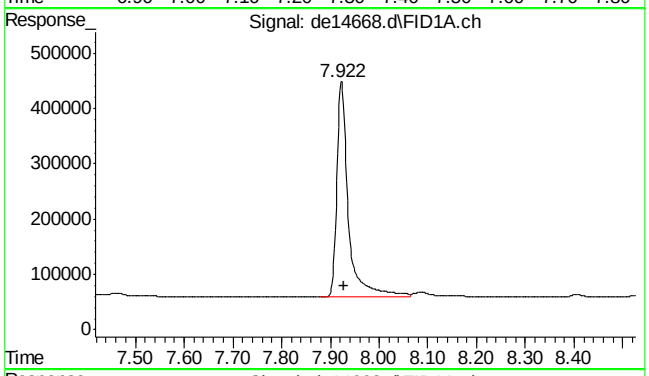
#6 2-bromonaphthalene

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



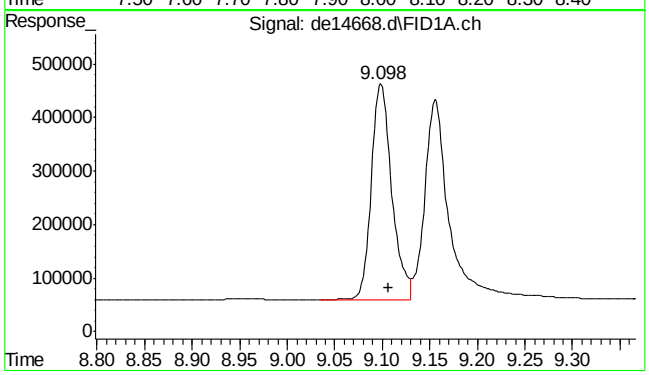
#7 acenaphthene

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



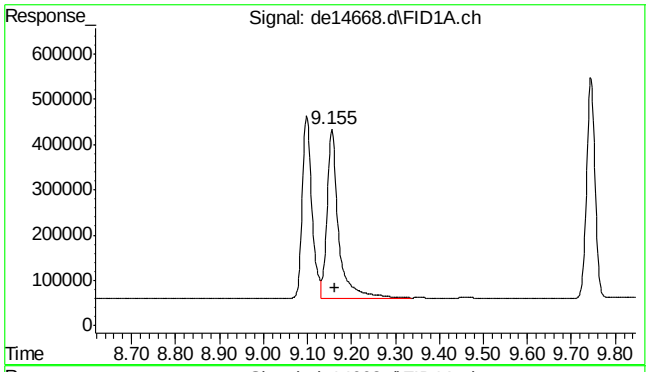
#9 phenanthrene

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

7.4.3

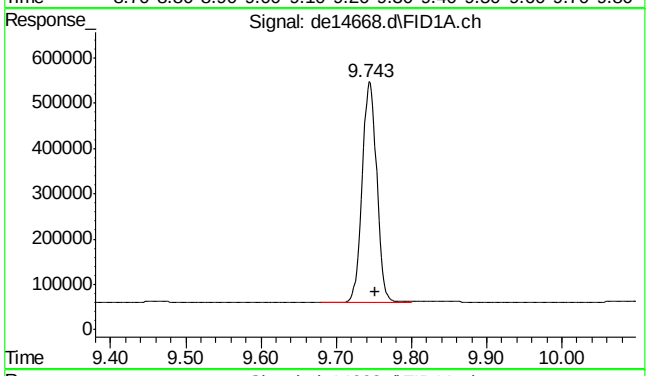
7

SGS ACCUTEST MC46737



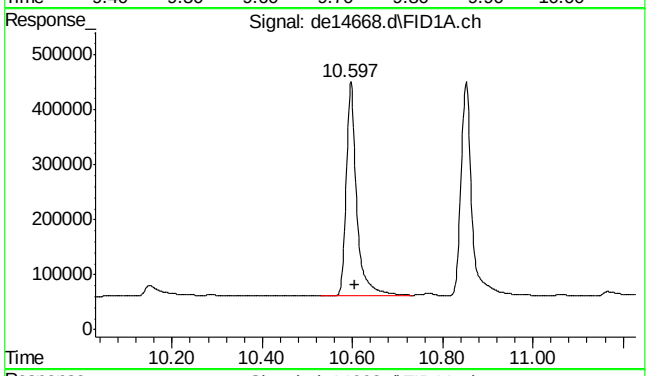
#10 anthracene

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



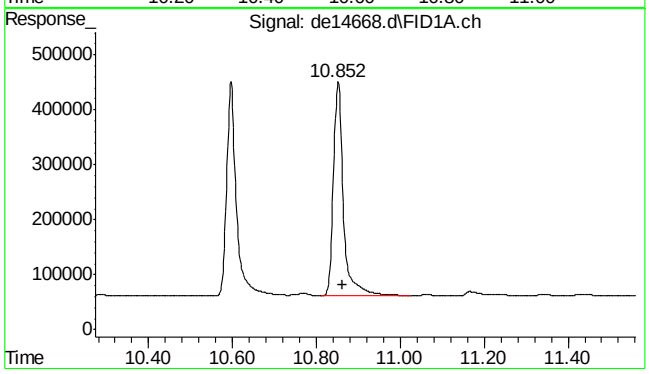
#11 o-terphenyl

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



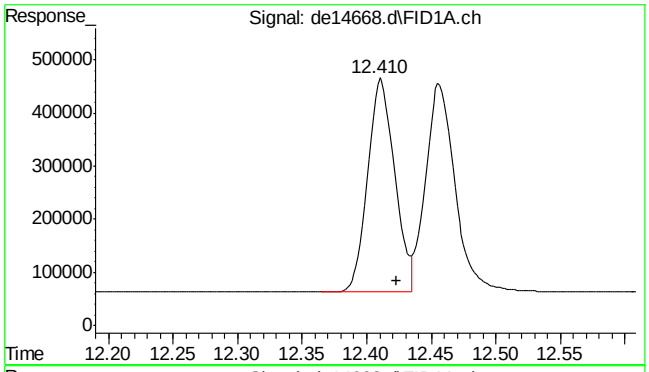
#13 pyrene

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

7.4.3

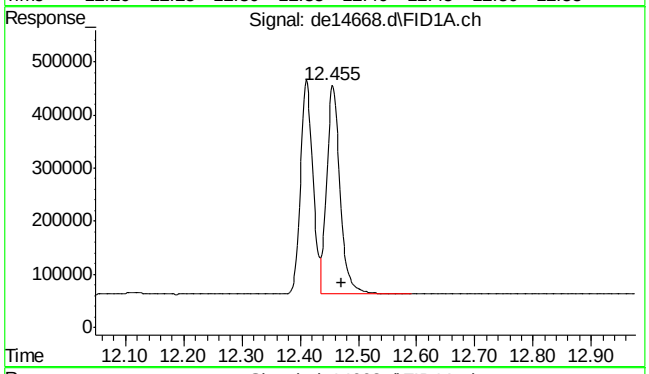
7

SGS ACCUTEST MC46737



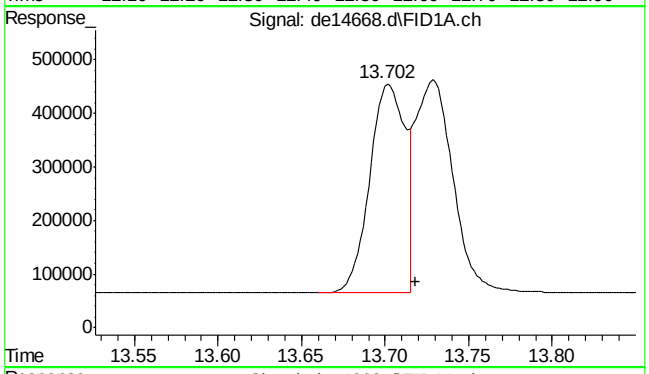
#14 benzo(a)anthracene

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



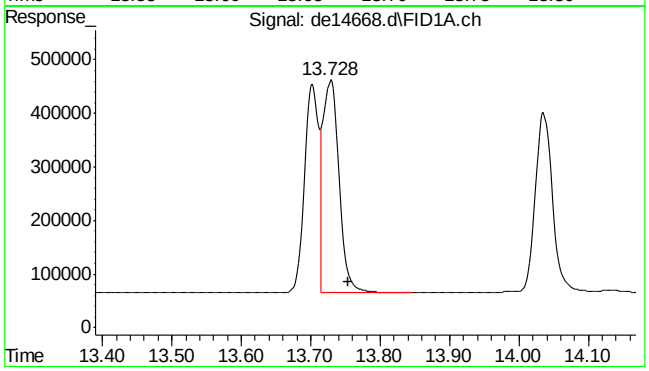
#15 chrysene

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



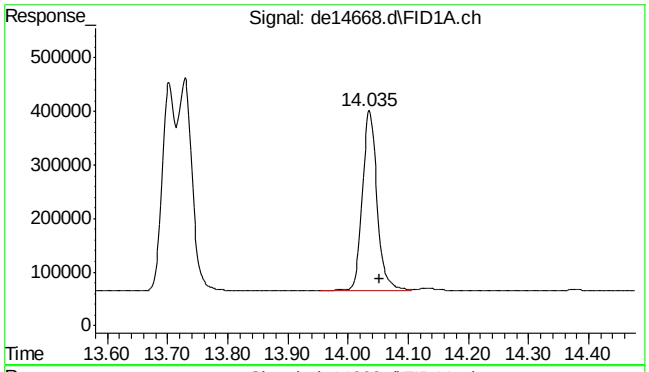
#17 benzo(k)fluoranthene

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

7.4.3

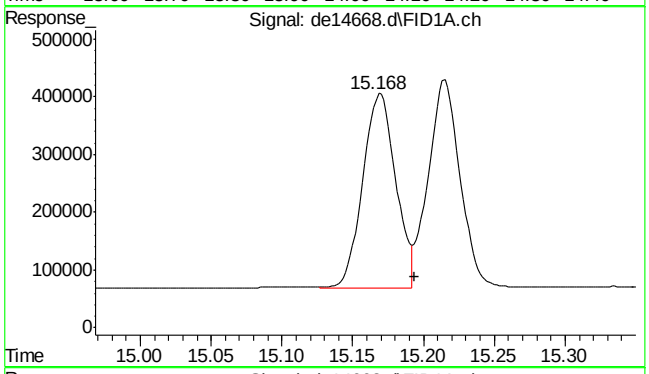
7

SGS ACCUTEST MC46737



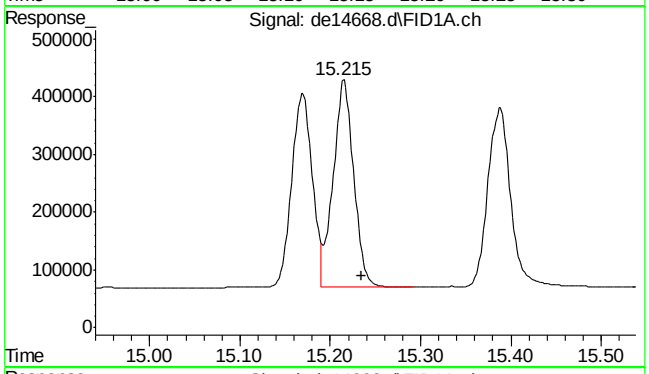
#18 benzo(a)pyrene

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



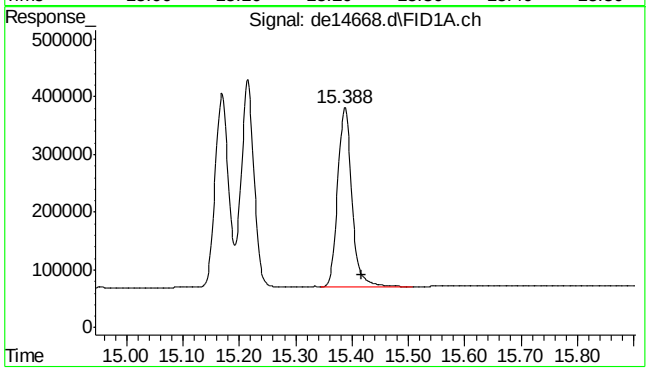
#19 indeno(1,2,3-cd)pyrene

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



#20 dibenzo(ah)anthracene

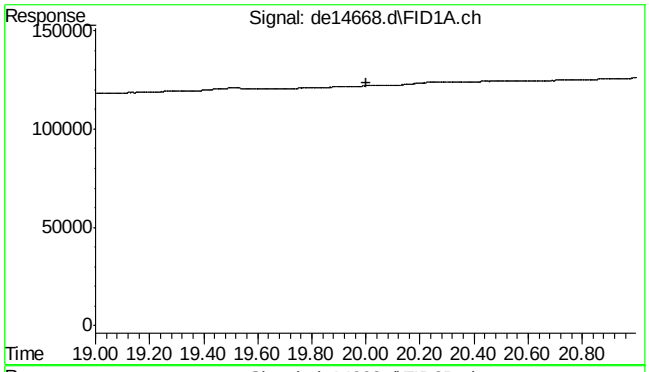
R.T.: 15.215 min
Delta R.T.: -0.020 min
Response: 564801
Conc: 5.48 µg/ml



#21 benzo(ghi)perylene

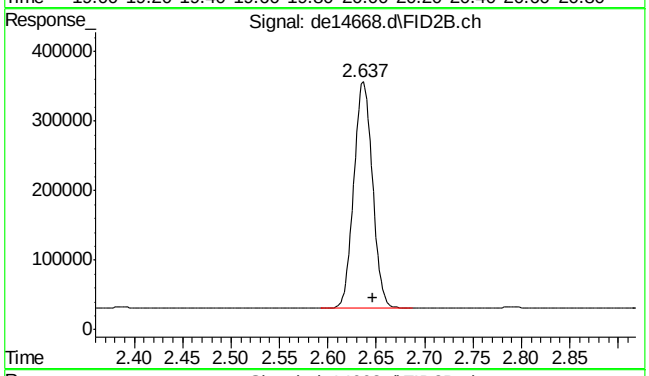
R.T.: 15.388 min
Delta R.T.: -0.028 min
Response: 541223
Conc: 5.27 µg/ml

SGS ACCUTEST MC46737



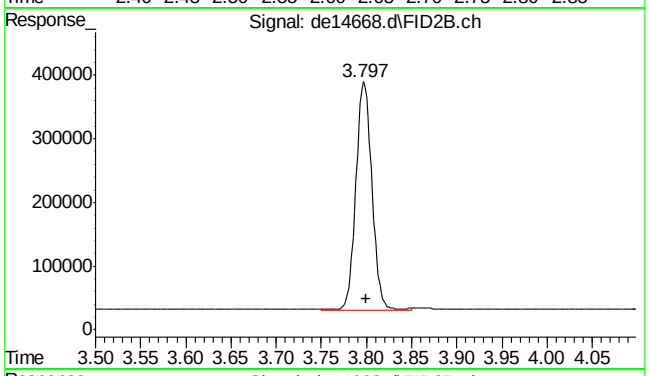
#22 bht

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



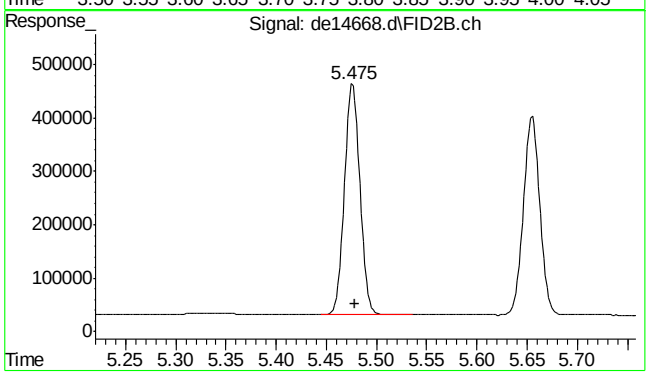
#25 c-9

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



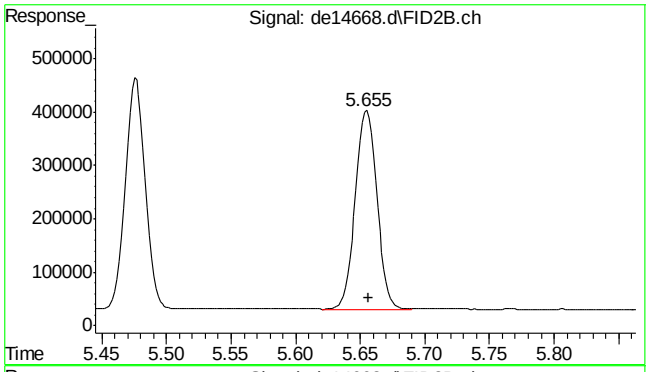
#27 naphthalene #2

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

7.4.3

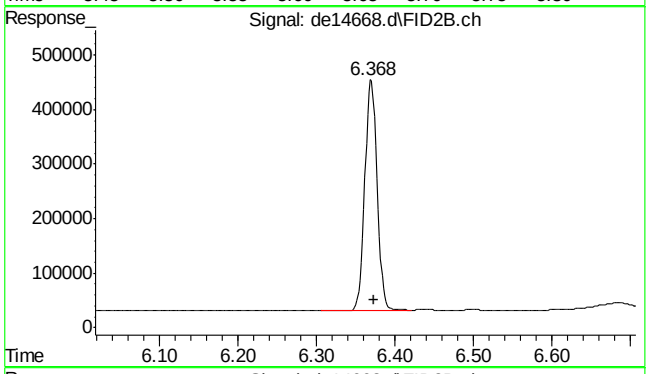
7

SGS ACCUTEST MC46737



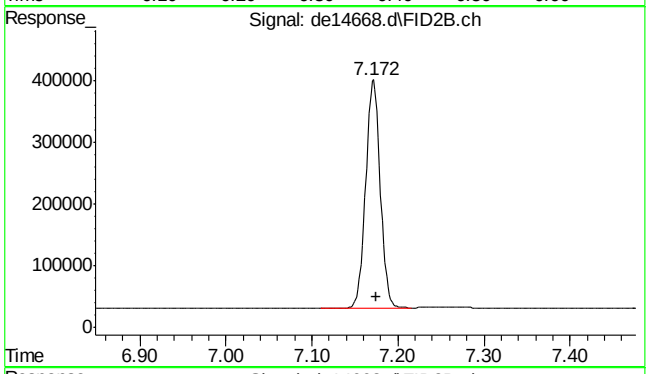
#28 c-12

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



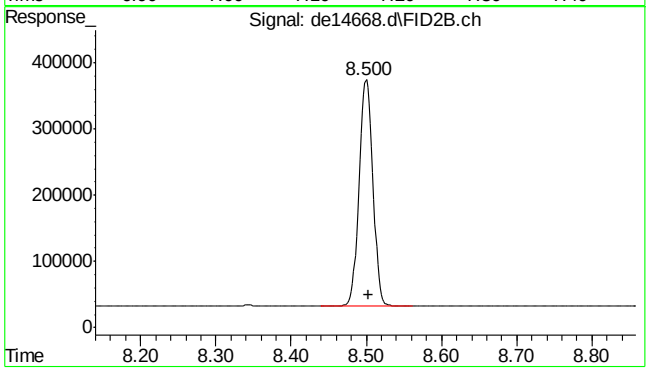
#29 2-methylnaphthalene #2

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



#30 c-14

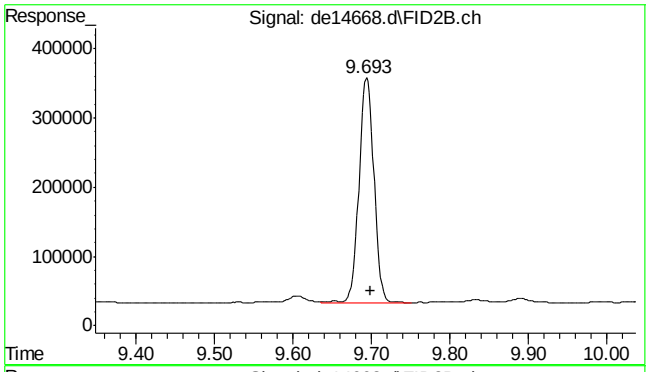
R.T.: 7.172 min
Delta R.T.: -0.003 min
Response: 433815
Conc: 5.23 µg/ml



#31 c-16

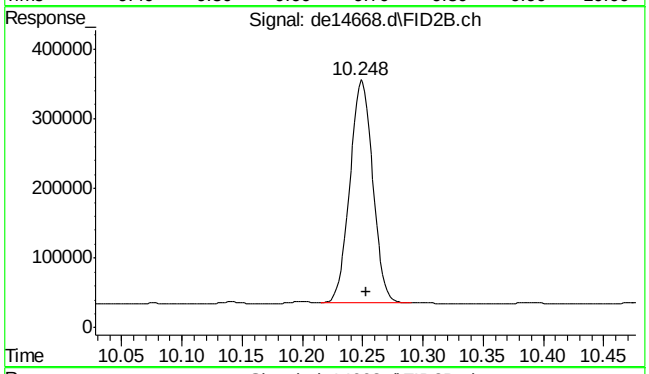
R.T.: 8.500 min
Delta R.T.: -0.003 min
Response: 435918
Conc: 5.20 µg/ml

SGS ACCUTEST MC46737



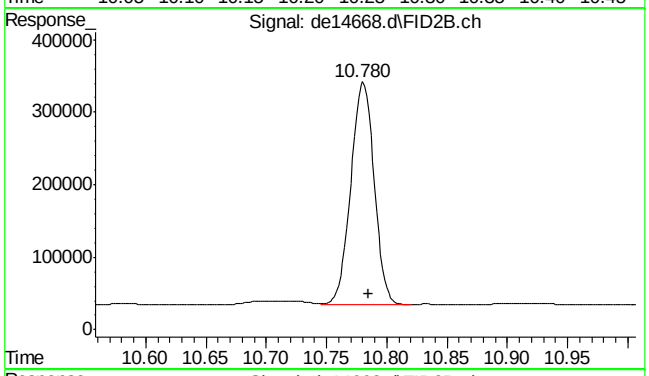
#32 c-18

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



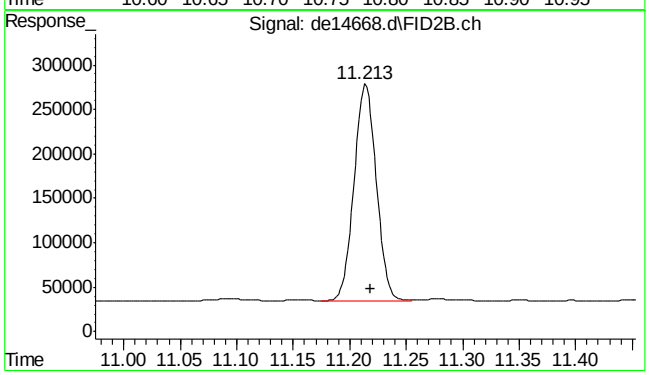
#33 c-19

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



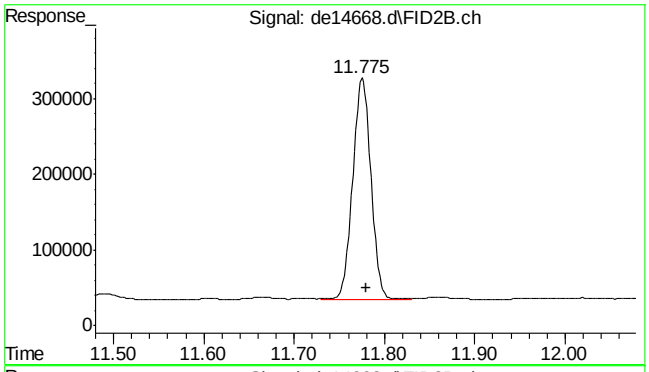
#35 1-chlorooctadecane

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

7.4.3

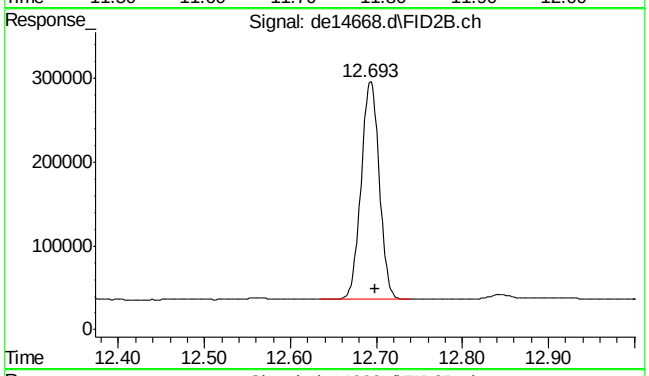
7

SGS ACCUTEST MC46737



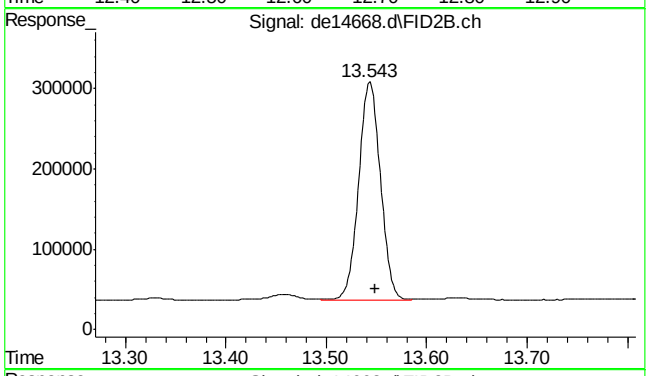
#36 c-22

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



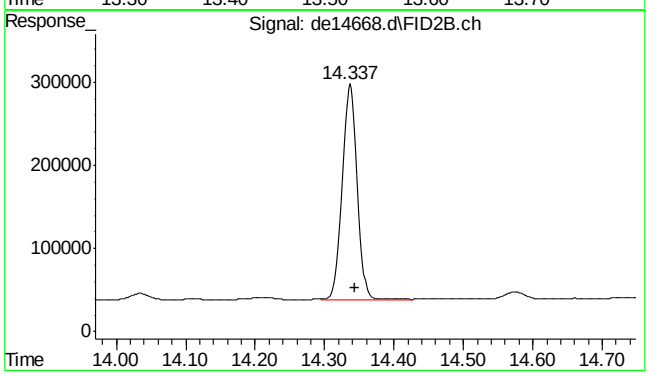
#37 c-24

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



#38 c-26

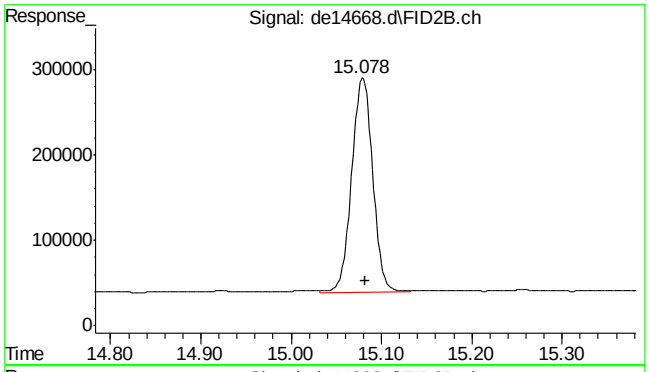
R.T.: 13.543 min
Delta R.T.: -0.005 min
Response: 406080
Conc: 5.21 µg/ml



#39 c-28

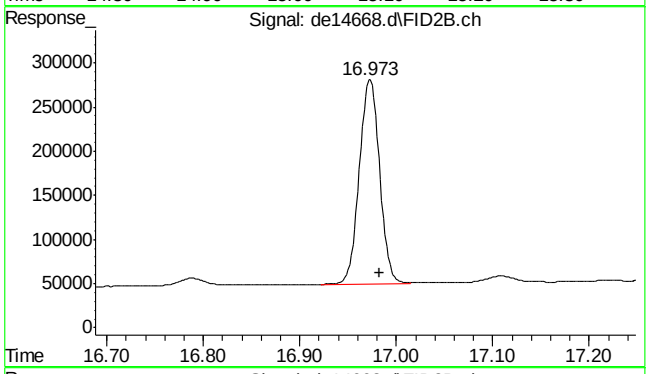
R.T.: 14.337 min
Delta R.T.: -0.007 min
Response: 391589
Conc: 5.28 µg/ml

SGS ACCUTEST MC46737



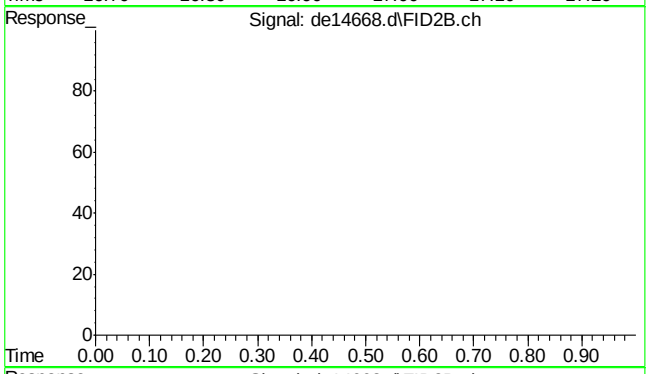
#40 c-30

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



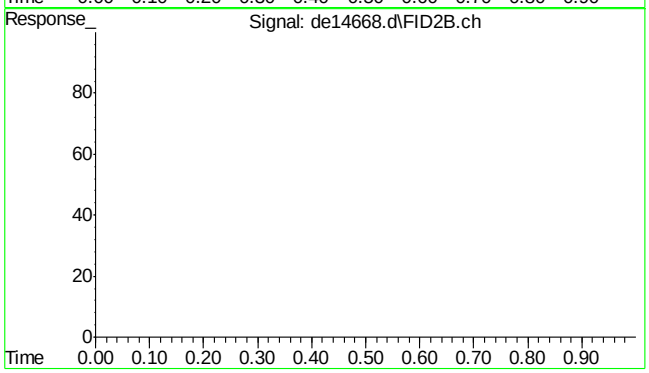
#41 c-36

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.



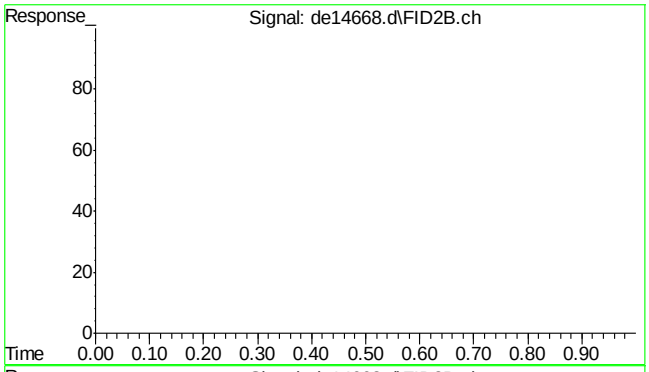
#43 bht

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

7.4.3

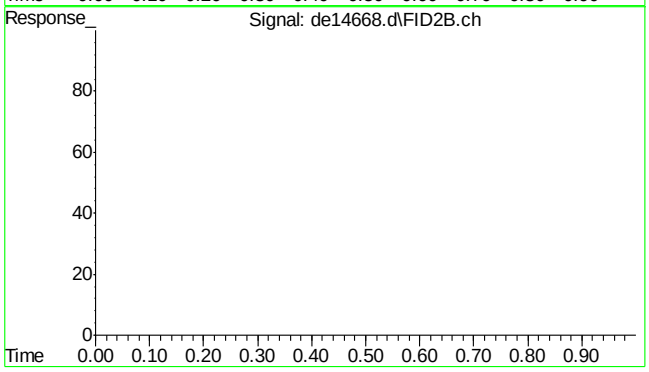
7

SGS ACCUTEST MC46737



#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.
```

7.4.3

7

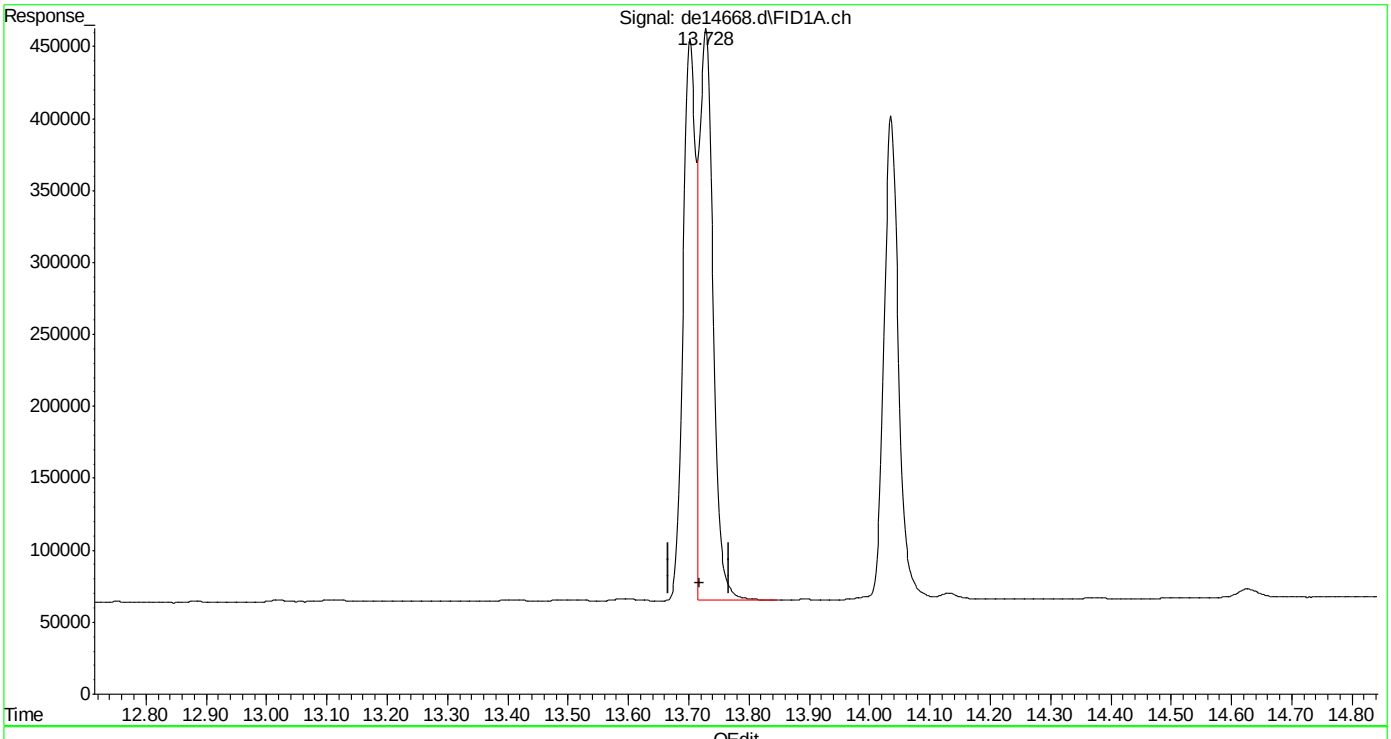
SGS ACCUTEST MC46737

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

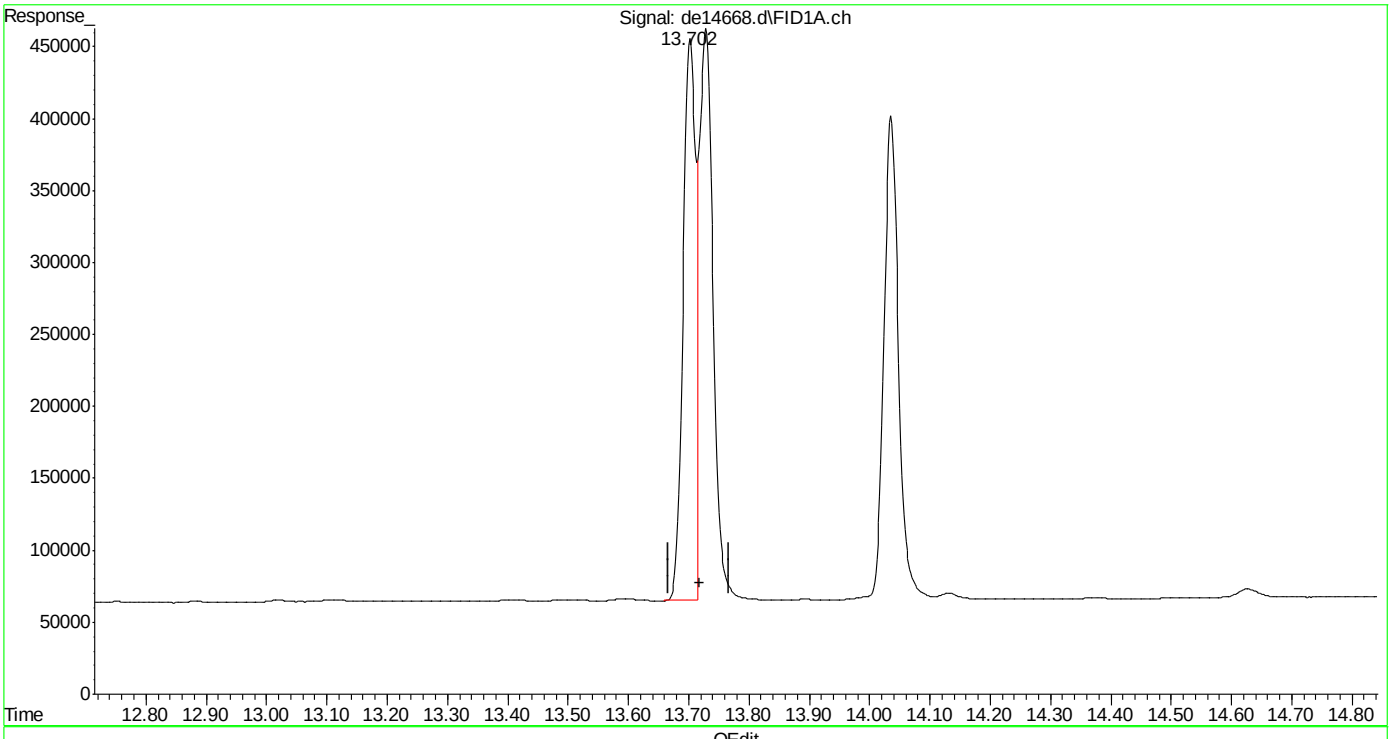
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:52:59 2016

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

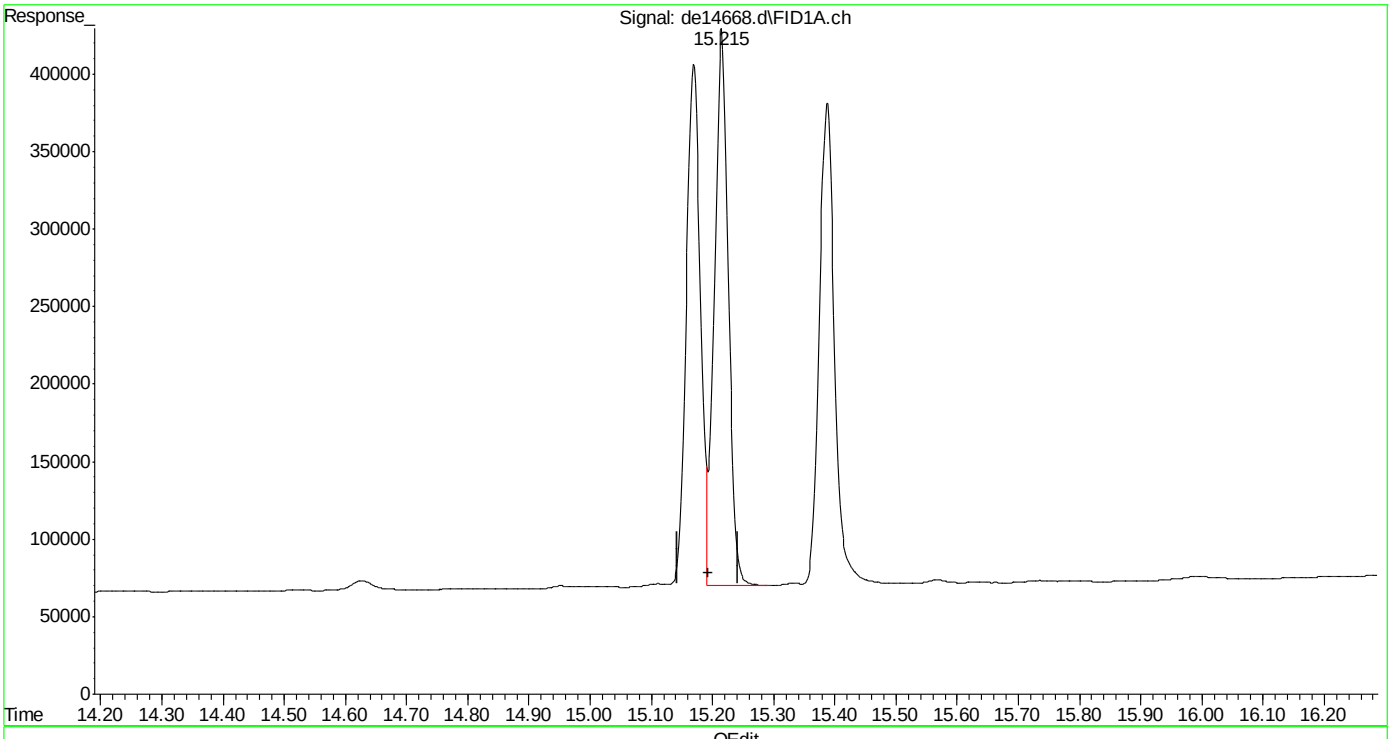
SGS ACCUTEST MC46737

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

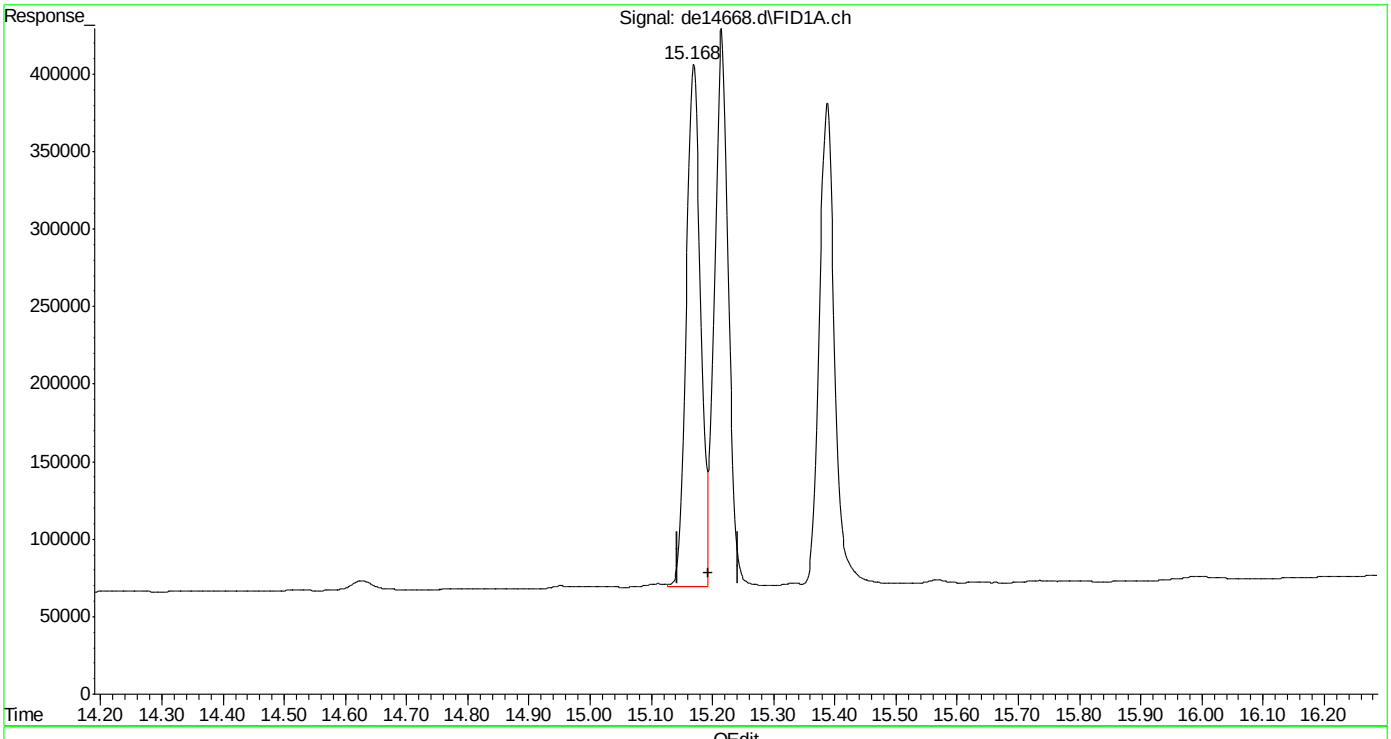
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 07:53:17 2016

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 MC46737

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.

7.4.4

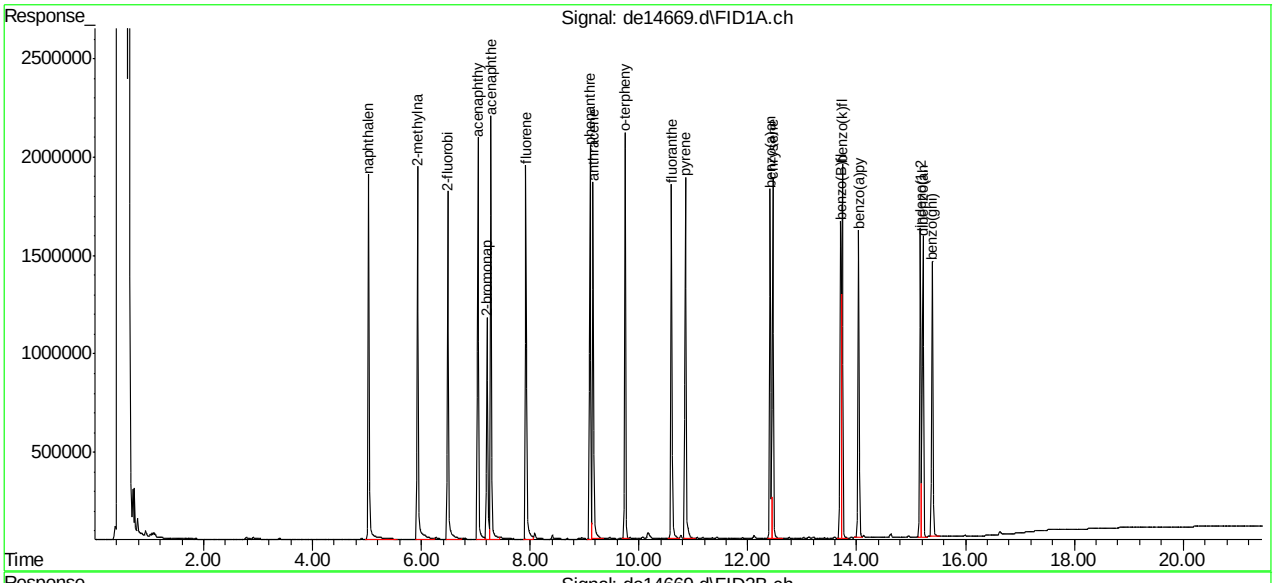
7

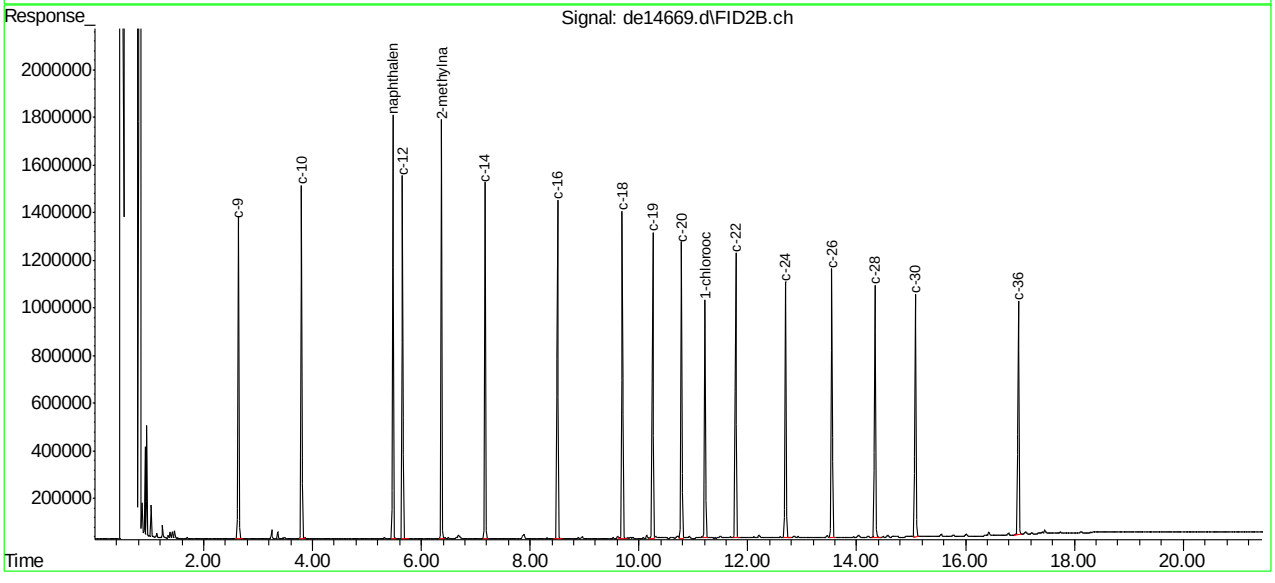
Quantitation Report (QT Reviewed)

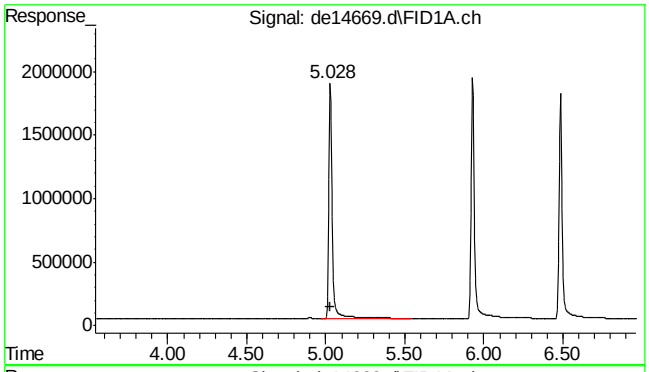
Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14669.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 7:40 pm
Operator : thomasa
Sample : ic815-20 (Sig #1); cc815-20 (Sig #2)
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 108 Sample Multiplier: 1

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 :

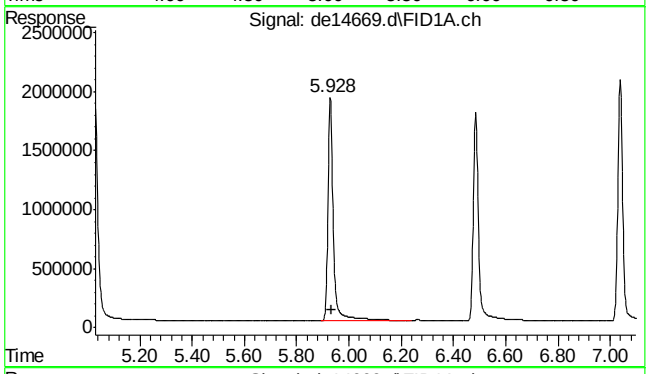






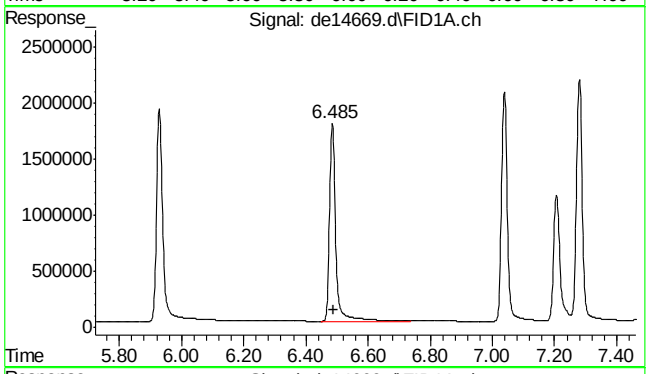
#2 naphthalene

R.T.: 5.028 min
Delta R.T.: -0.002 min
Response: 2761210
Conc: 23.92 µg/ml



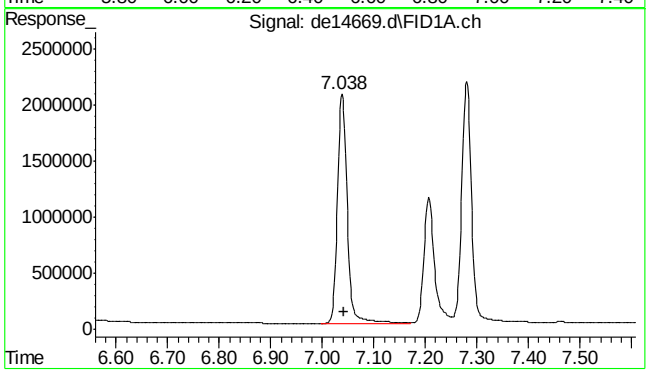
#3 2-methylnaphthalene

R.T.: 5.928 min
Delta R.T.: -0.003 min
Response: 2757665
Conc: 23.80 µg/ml



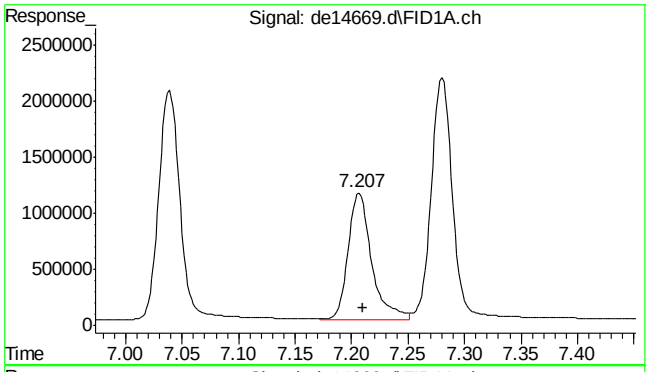
#4 2-fluorobiphenyl

R.T.: 6.485 min
Delta R.T.: -0.003 min
Response: 2470175
Conc: 23.54 µg/ml



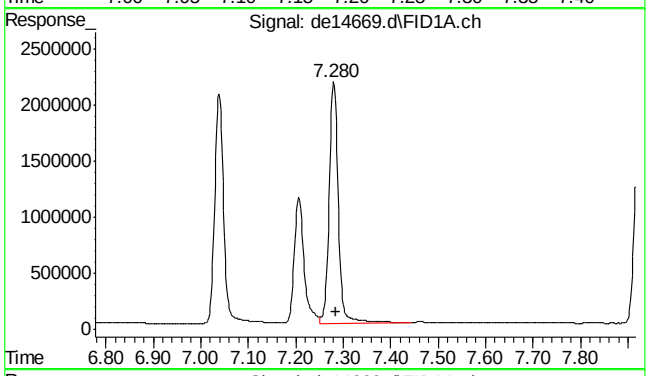
#5 acenaphthylene

R.T.: 7.038 min
Delta R.T.: -0.003 min
Response: 2699454
Conc: 23.27 µg/ml



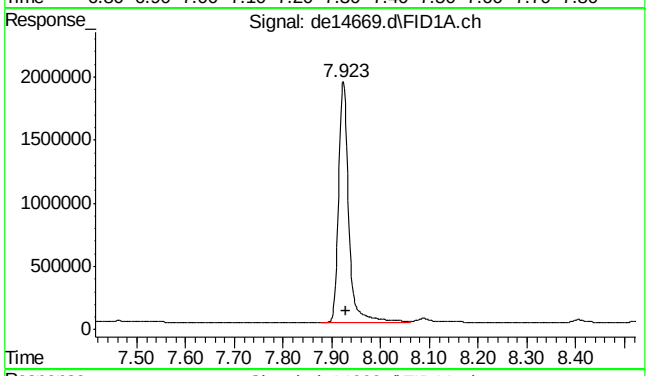
#6 2-bromonaphthalene

R.T.: 7.207 min
Delta R.T.: -0.003 min
Response: 1622495
Conc: 24.70 µg/ml



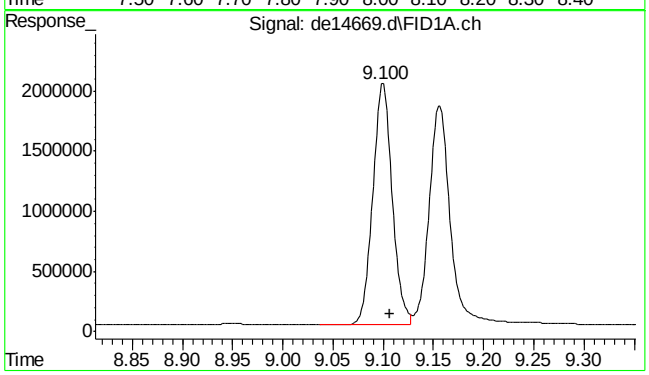
#7 acenaphthene

R.T.: 7.280 min
Delta R.T.: -0.005 min
Response: 2910644
Conc: 22.92 µg/ml



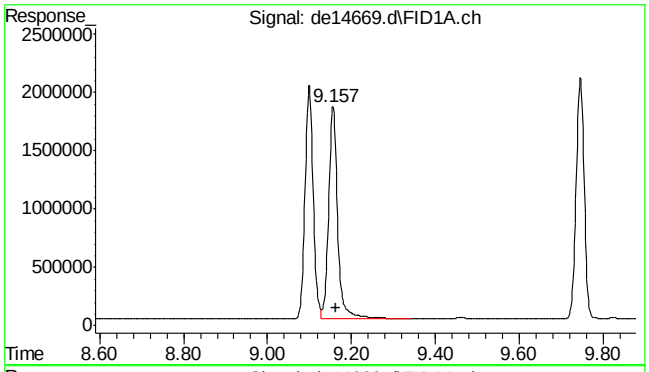
#8 fluorene

R.T.: 7.923 min
Delta R.T.: -0.005 min
Response: 2748574
Conc: 23.43 µg/ml



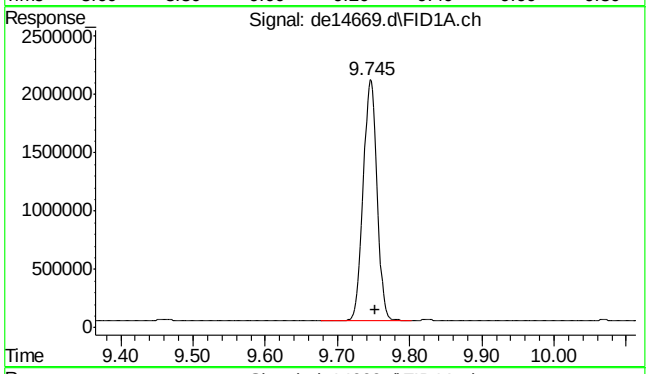
#9 phenanthrene

R.T.: 9.100 min
Delta R.T.: -0.007 min
Response: 2679317
Conc: 23.48 µg/ml



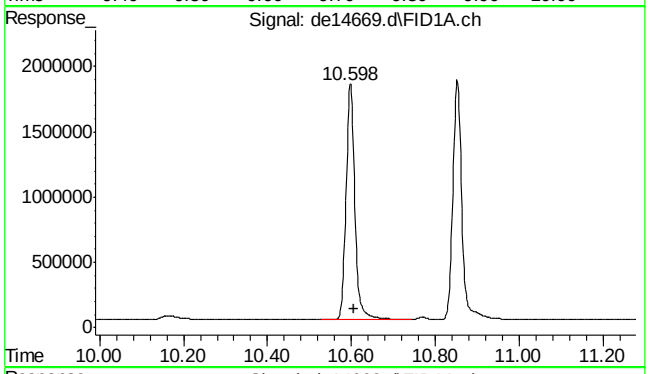
#10 anthracene

R.T.: 9.157 min
Delta R.T.: -0.007 min
Response: 2716250
Conc: 22.31 µg/ml



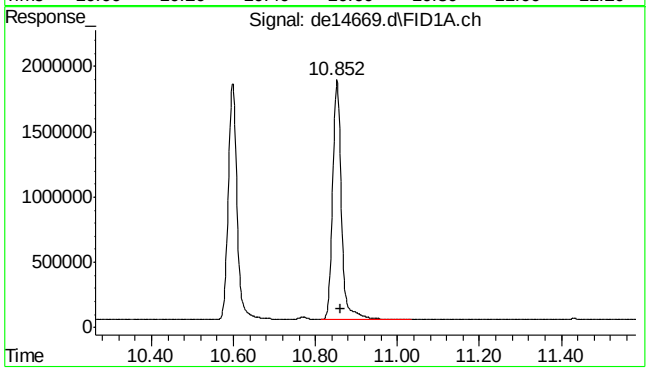
#11 o-terphenyl

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

7.4.4

7

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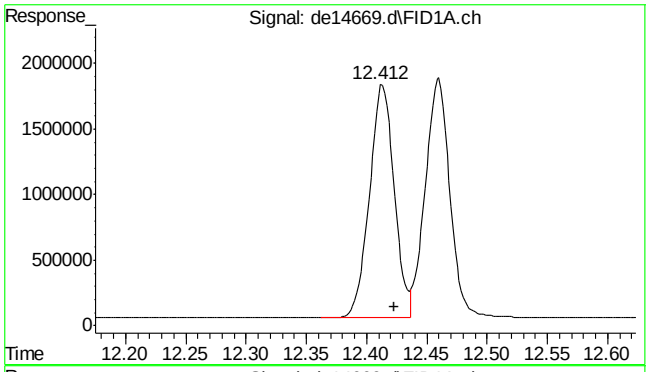
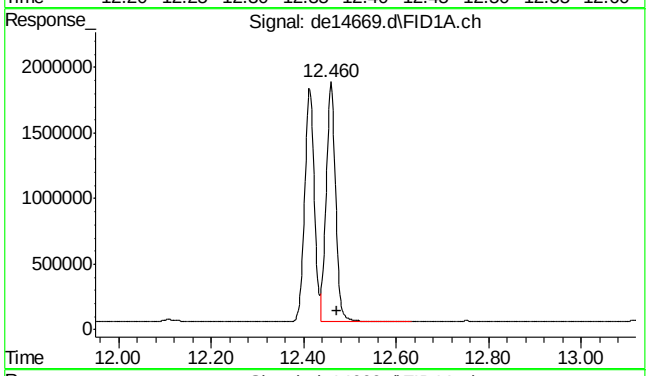


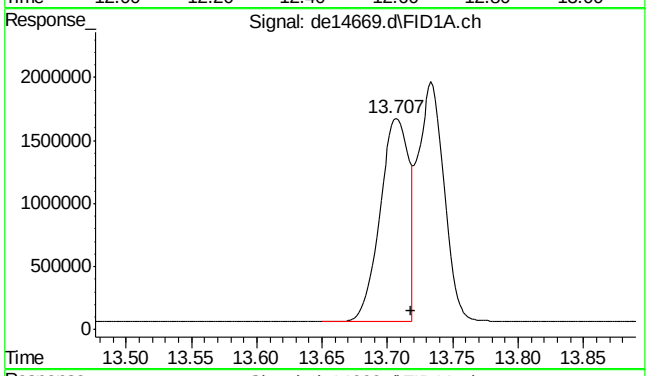
#14 benzo(a)anthracene

R.T.: 12.412 min
Delta R.T.: -0.012 min
Response: 2555074
Conc: 22.96 µg/ml



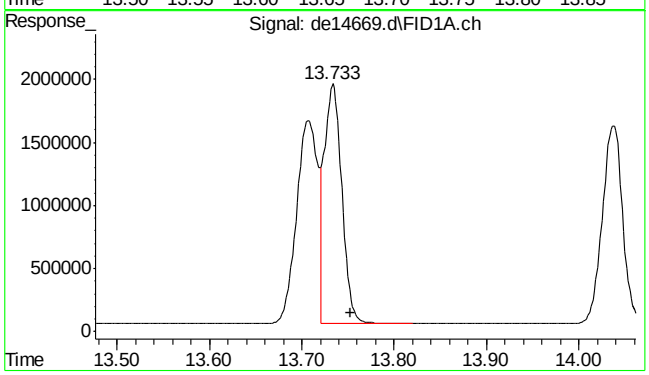
#15 chrysene

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



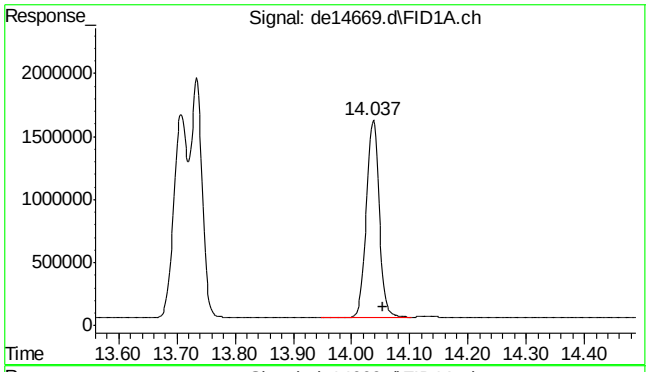
#17 benzo(k)fluoranthene

R.T.: 13.733 min
Delta R.T.: -0.020 min
Response: 2513496
Conc: 21.26 µg/ml m

7.4.4

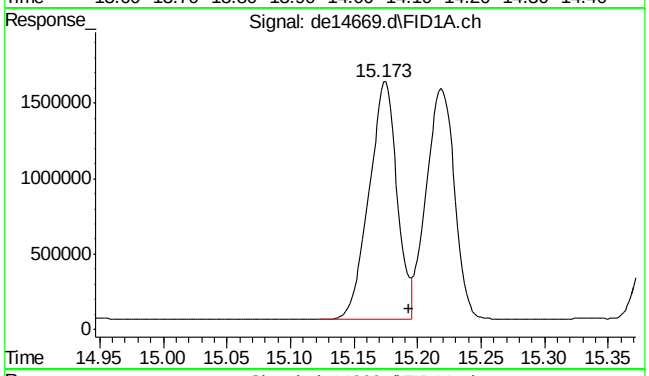
7

SGS ACCUTEST MC46737



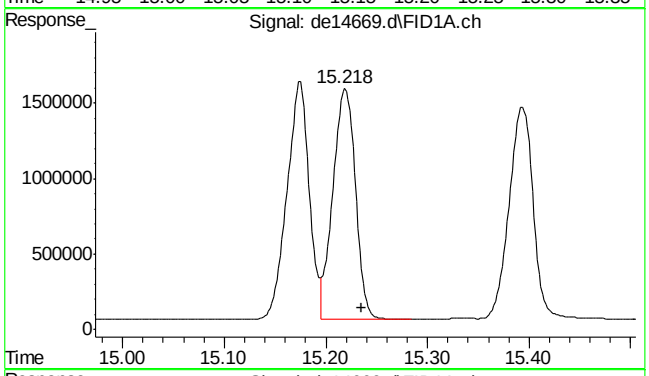
#18 benzo(a)pyrene

R.T.: 14.037 min
Delta R.T.: -0.017 min
Response: 2419189
Conc: 22.25 µg/ml



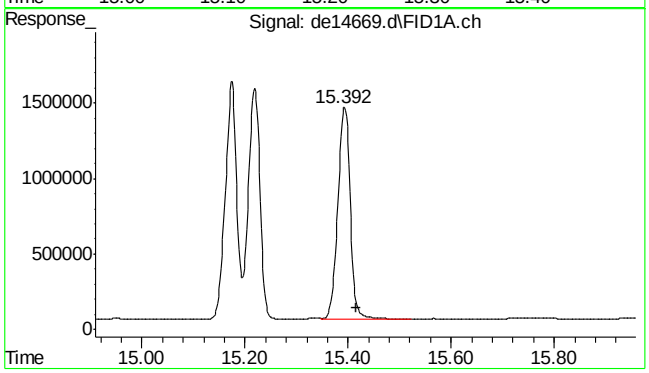
#19 indeno(1,2,3-cd)pyrene

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



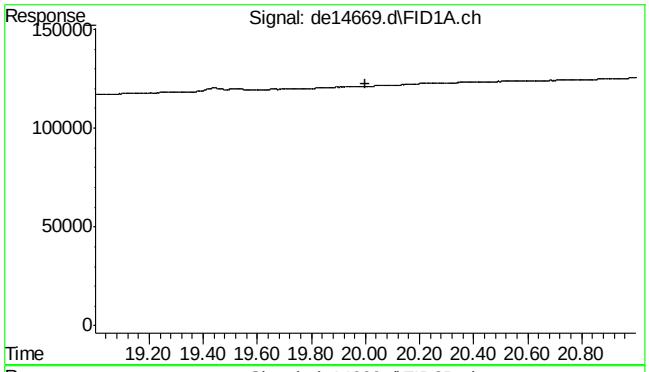
#21 benzo(ghi)perylene

R.T.: 15.392 min
Delta R.T.: -0.025 min
Response: 2338304
Conc: 22.30 µg/ml

7.4.4

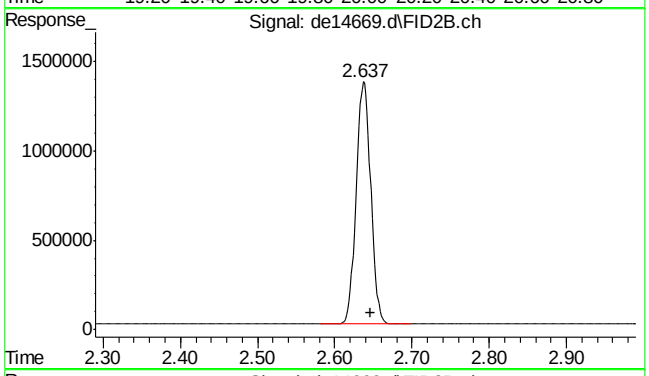
7

SGS ACCUTEST MC46737



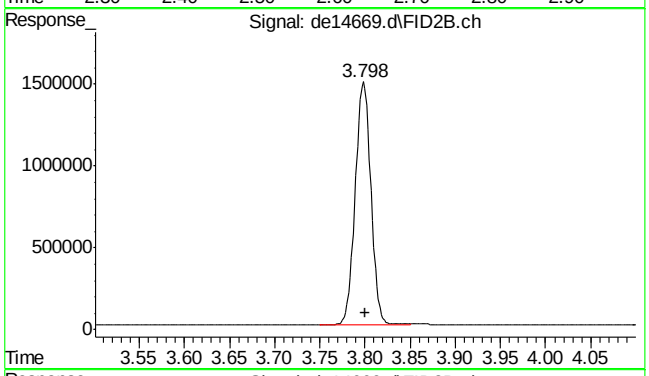
#22 bht

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



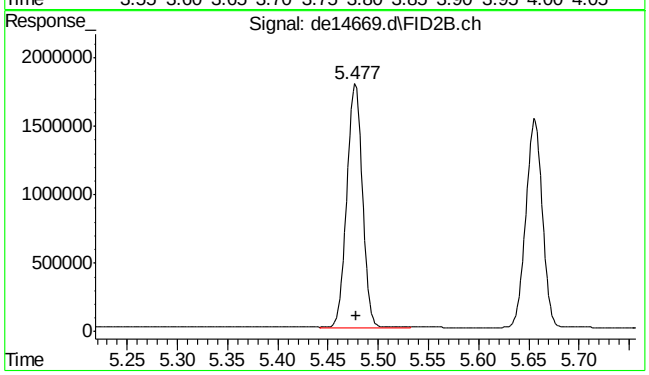
#25 c-9

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



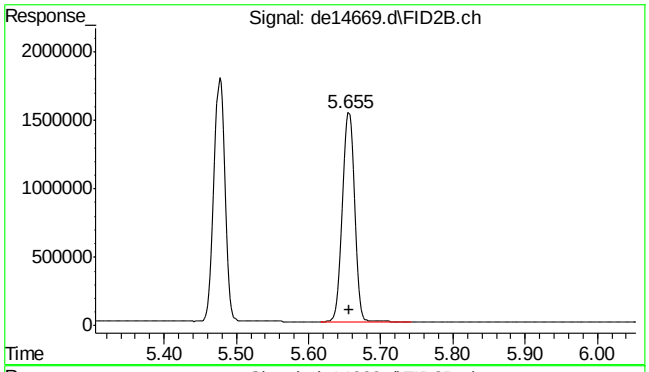
#27 naphthalene #2

R.T.: 5.477 min
Delta R.T.: -0.002 min
Response: 1908539
Conc: 22.16 µg/ml

7.4.4

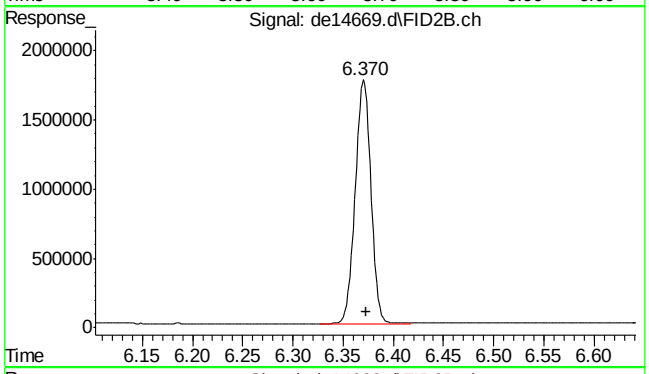
7

SGS ACCUTEST MC46737



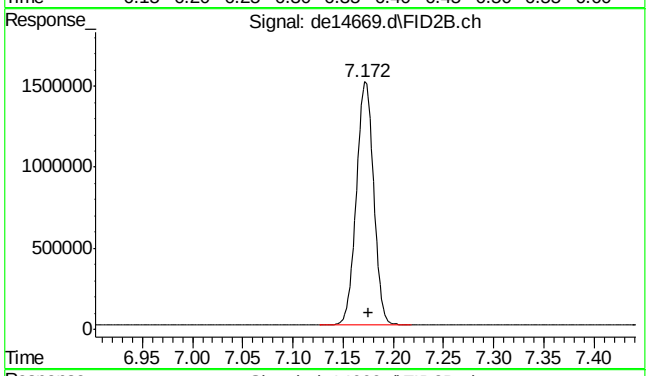
#28 c-12

R.T.: 5.655 min
Delta R.T.: -0.002 min
Response: 1778842
Conc: 21.30 µg/ml



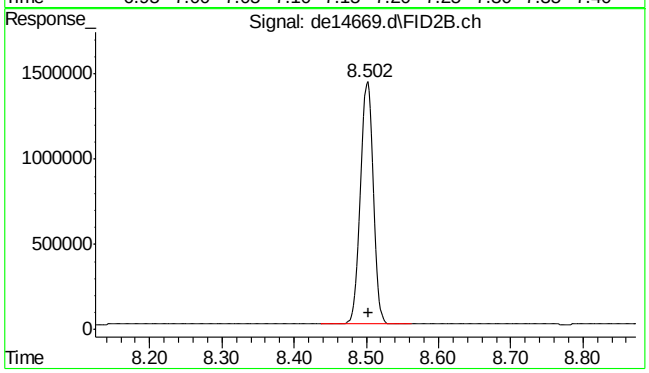
#29 2-methylnaphthalene #2

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

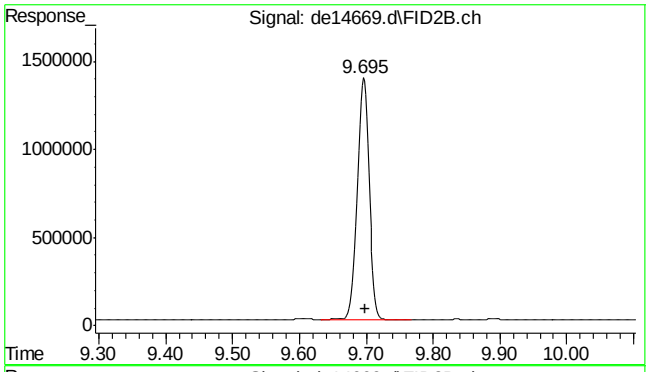


#31 c-16

R.T.: 8.502 min
Delta R.T.: -0.002 min
Response: 1757632
Conc: 20.80 µg/ml

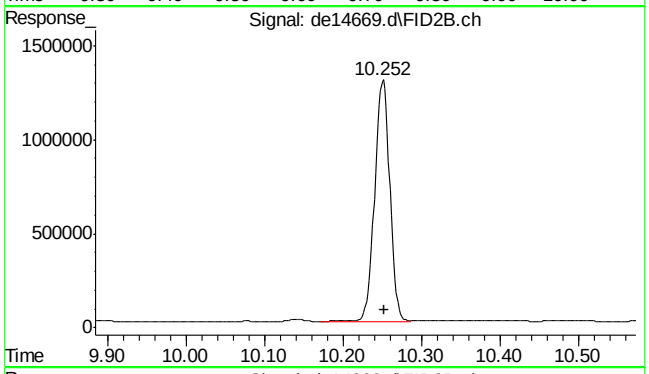
7.4.4

7



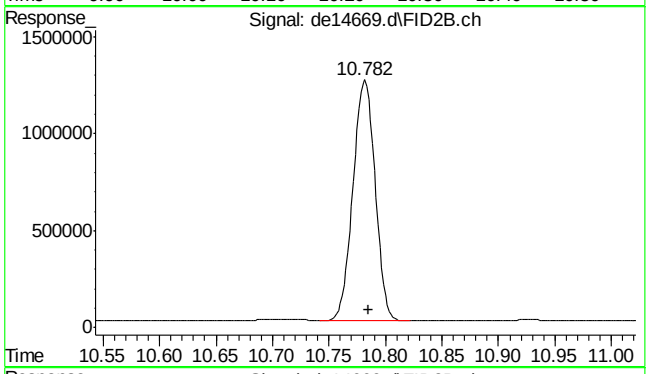
#32 c-18

R.T.: 9.695 min
Delta R.T.: -0.003 min
Response: 1741774
Conc: 21.02 µg/ml



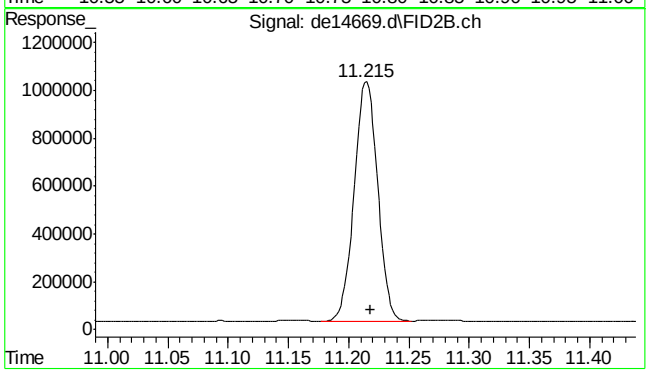
#33 c-19

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

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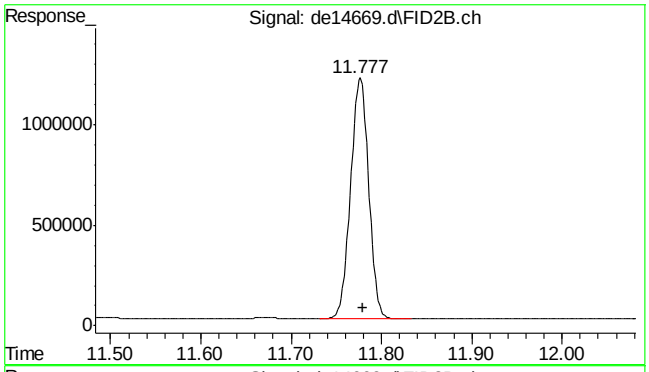
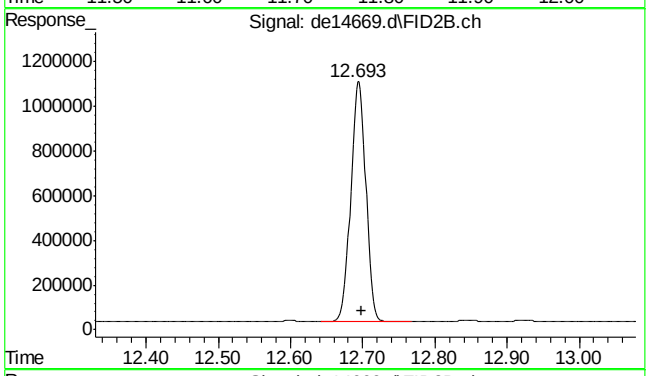


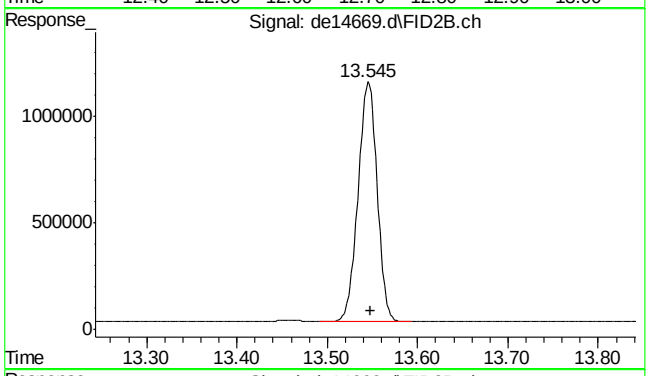
#36 c-22

R.T.: 11.777 min
Delta R.T.: -0.003 min
Response: 1677797
Conc: 21.22 µg/ml



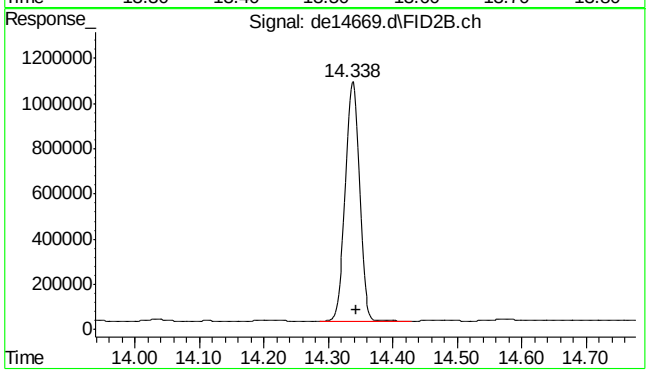
#37 c-24

R.T.: 12.693 min
Delta R.T.: -0.005 min
Response: 1563000
Conc: 20.73 µg/ml



#38 c-26

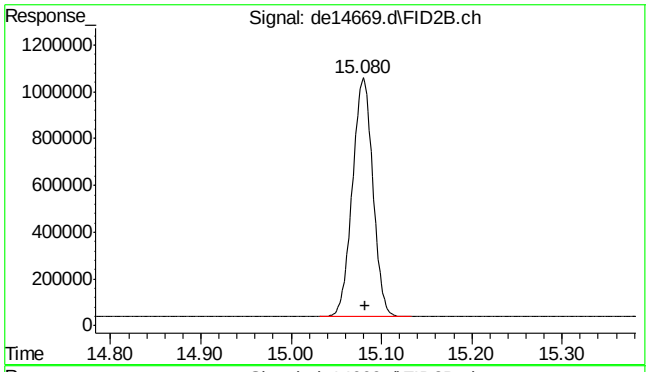
R.T.: 13.545 min
Delta R.T.: -0.003 min
Response: 1663159
Conc: 21.17 µg/ml



#39 c-28

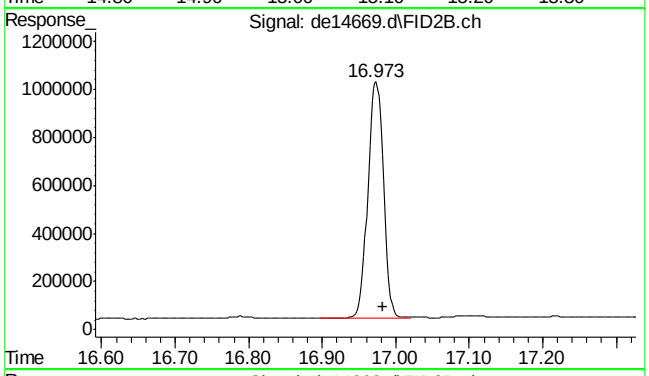
R.T.: 14.338 min
Delta R.T.: -0.005 min
Response: 1607781
Conc: 21.43 µg/ml

SGS ACCUTEST MC46737



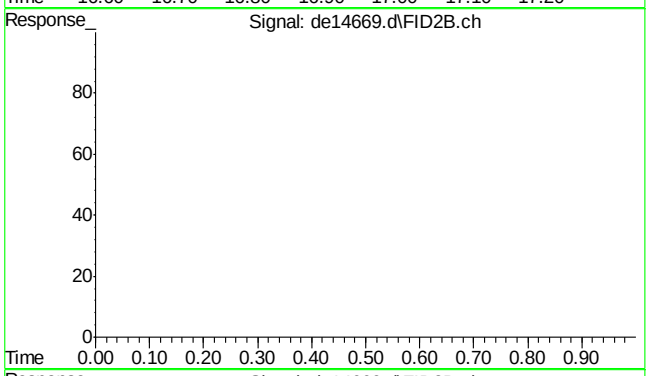
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 1615388
Conc: 19.57 µg/ml



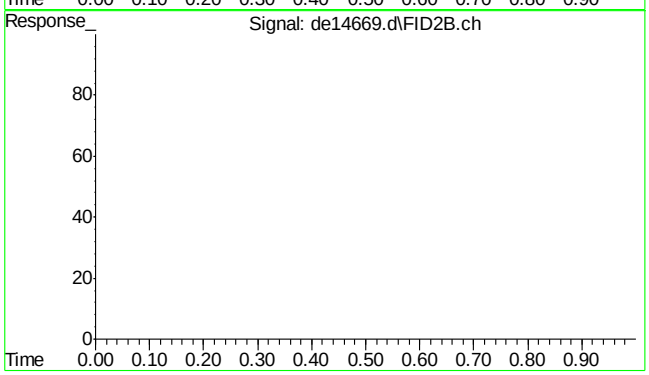
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 1450363
Conc: 21.77 µg/ml m



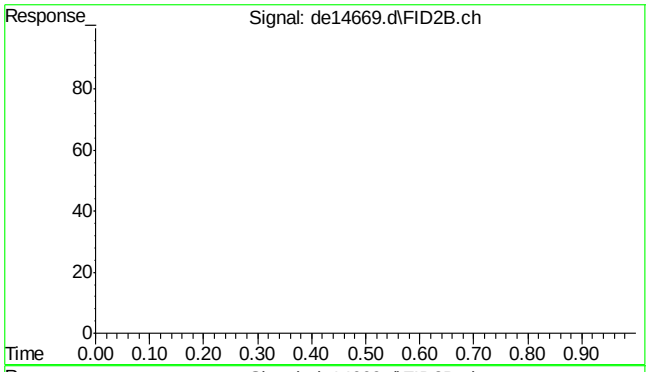
#42 bht

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



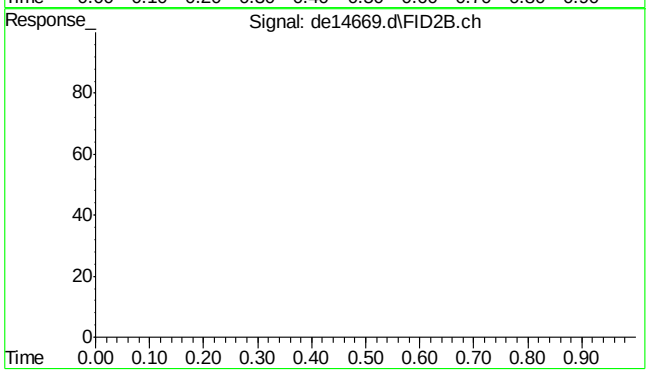
#43 bht

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.
```

7.4.4

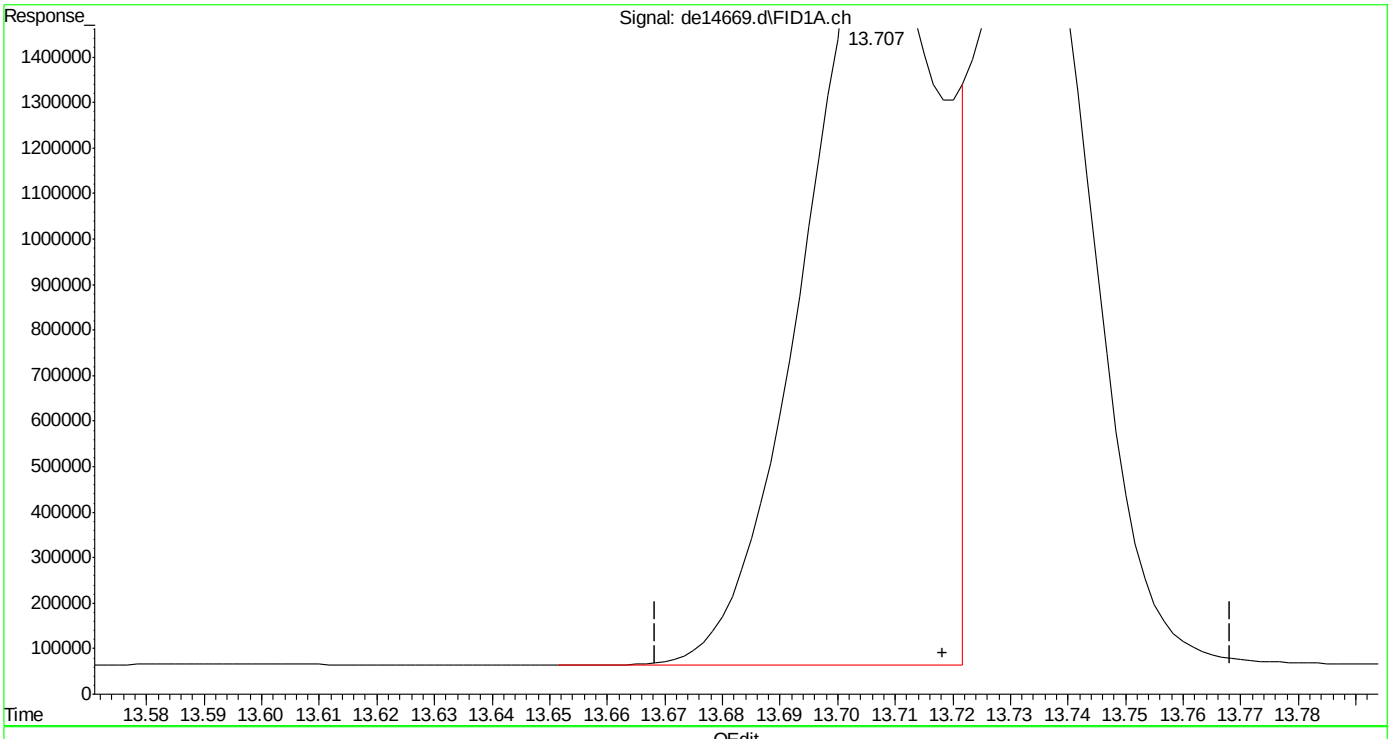
7

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

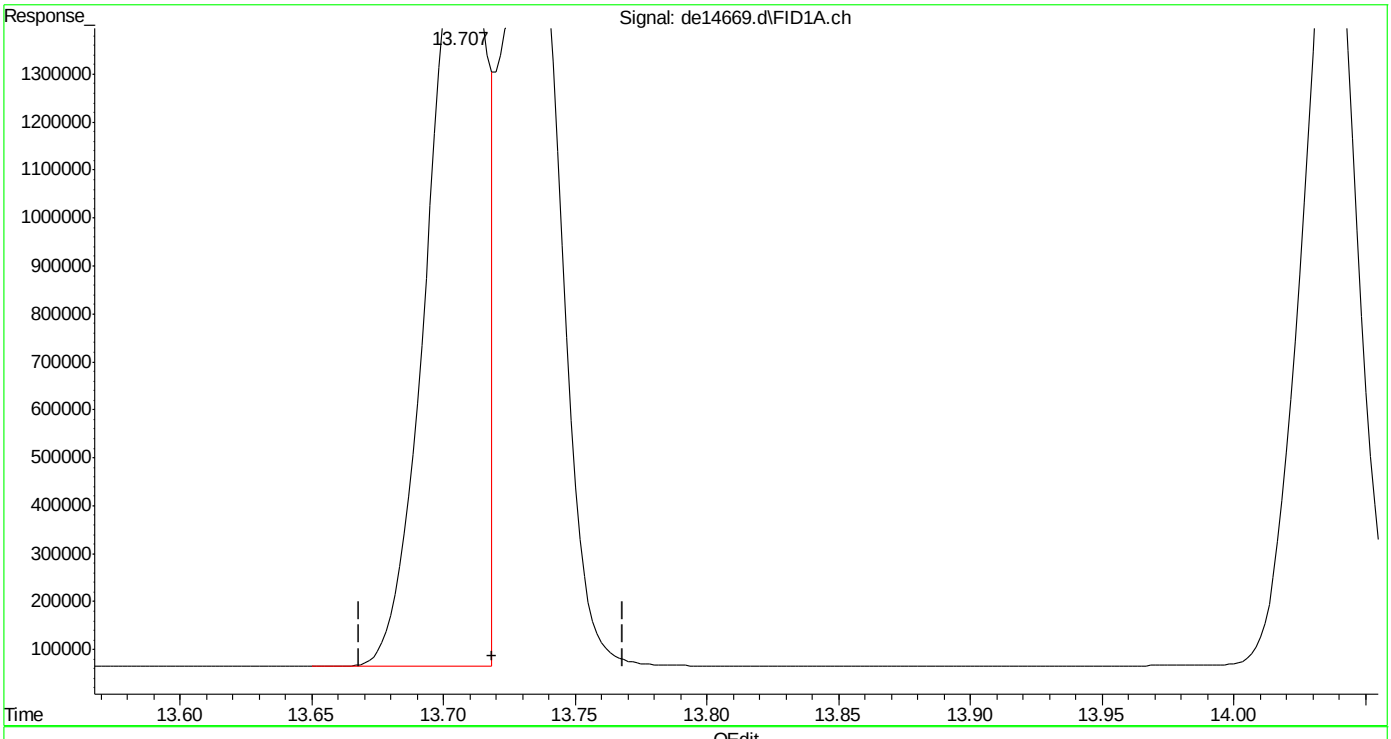
SGS ACCUTEST MC46737

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

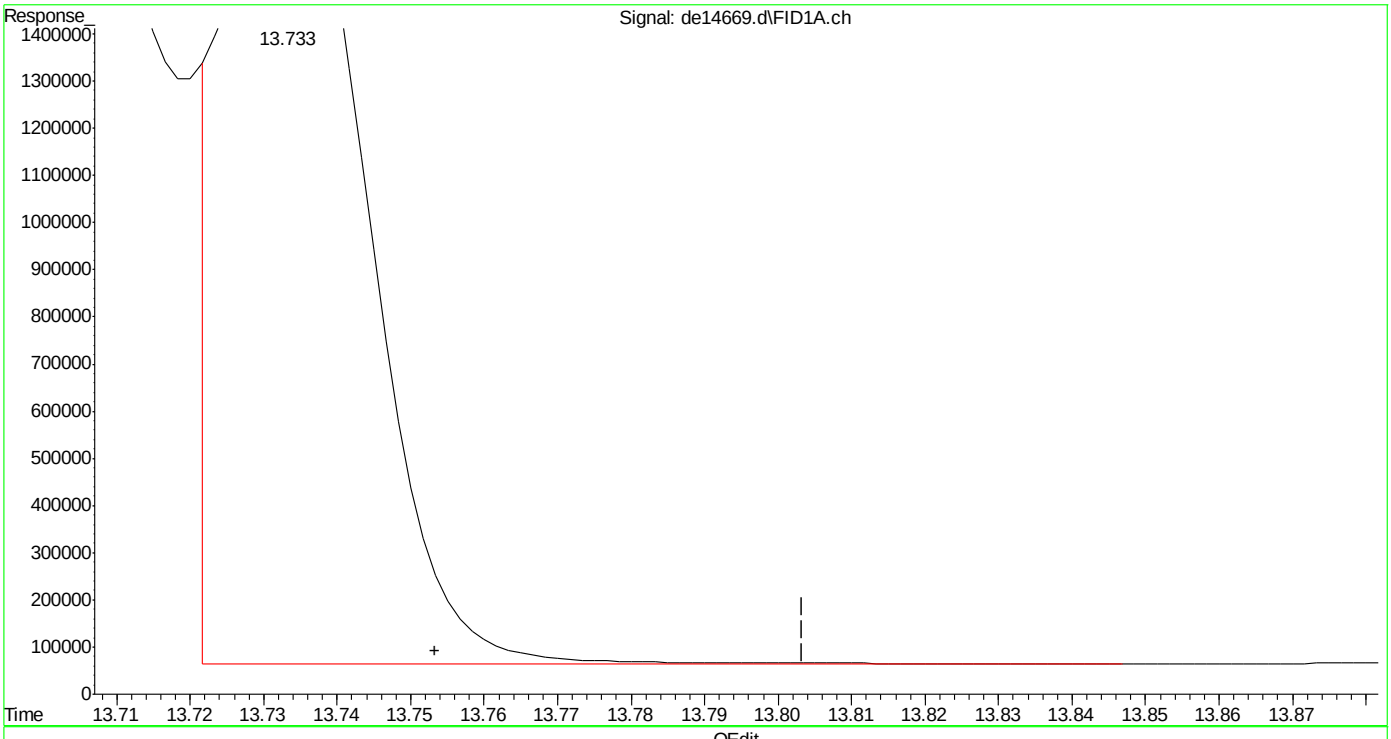
SGS ACCUTEST MC46737

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

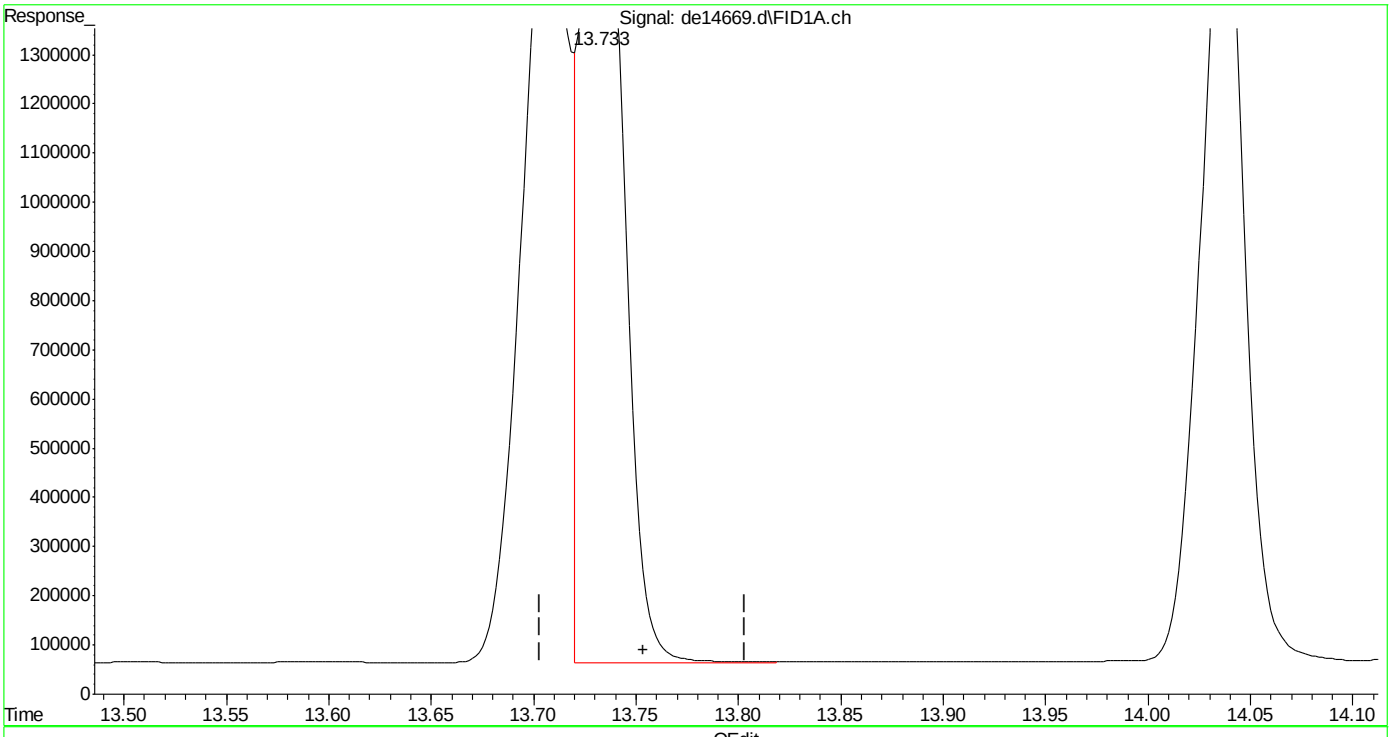
SGS ACCUTEST MC46737

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

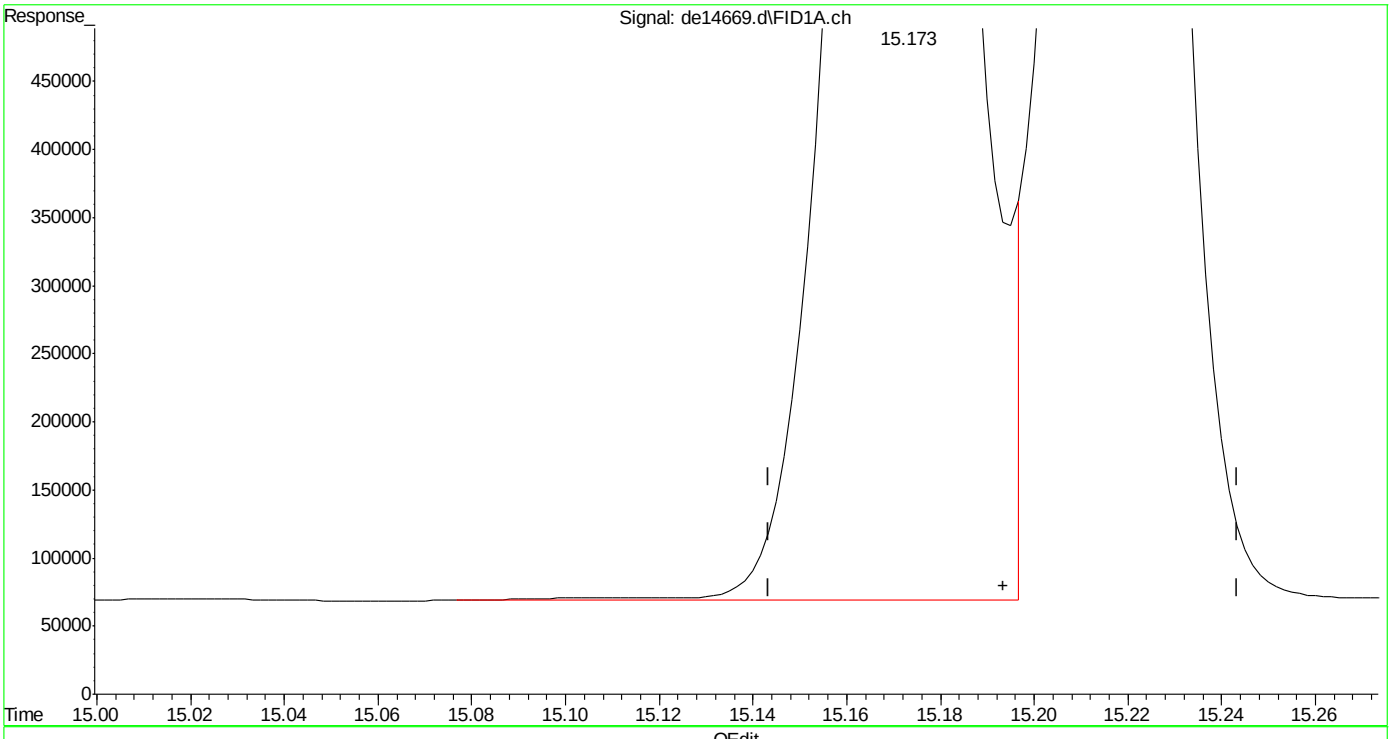
SGS ACCUTEST MC46737

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

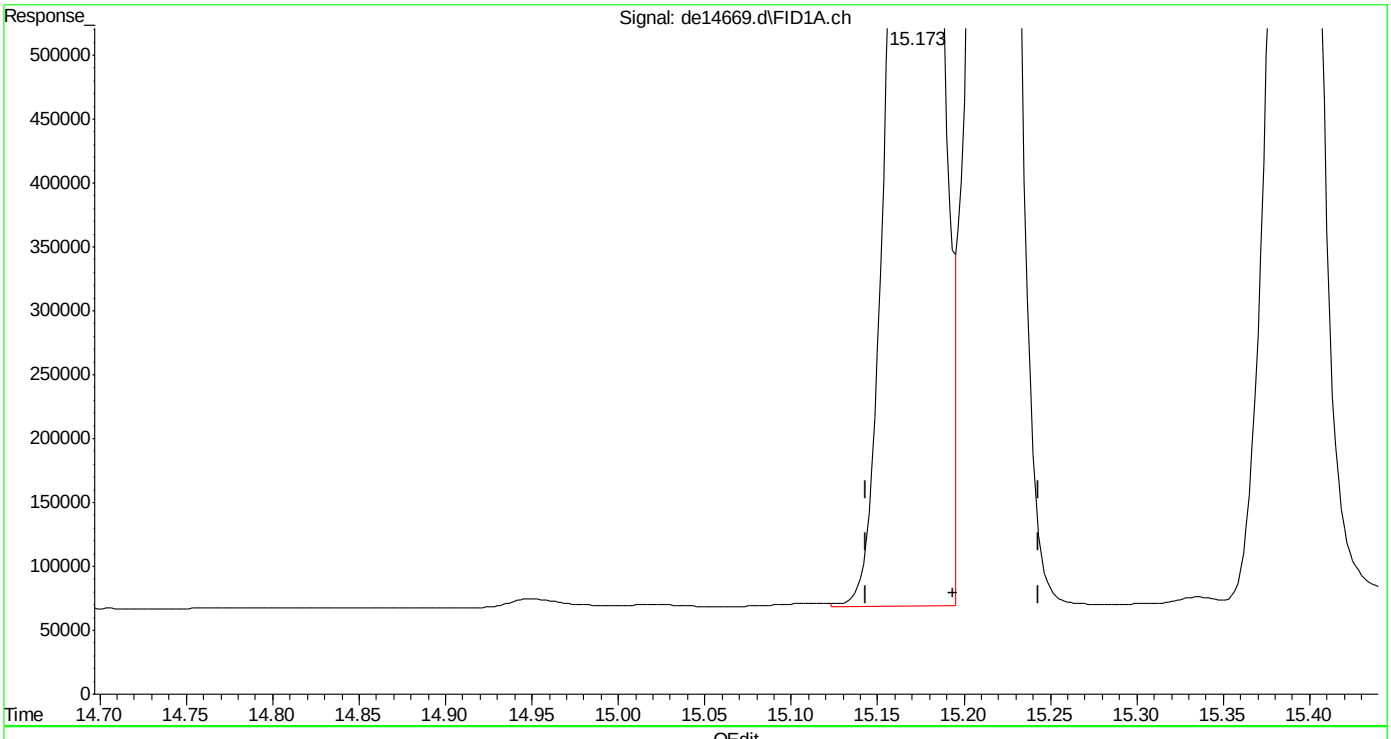
SGS ACCUTEST MC46737

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

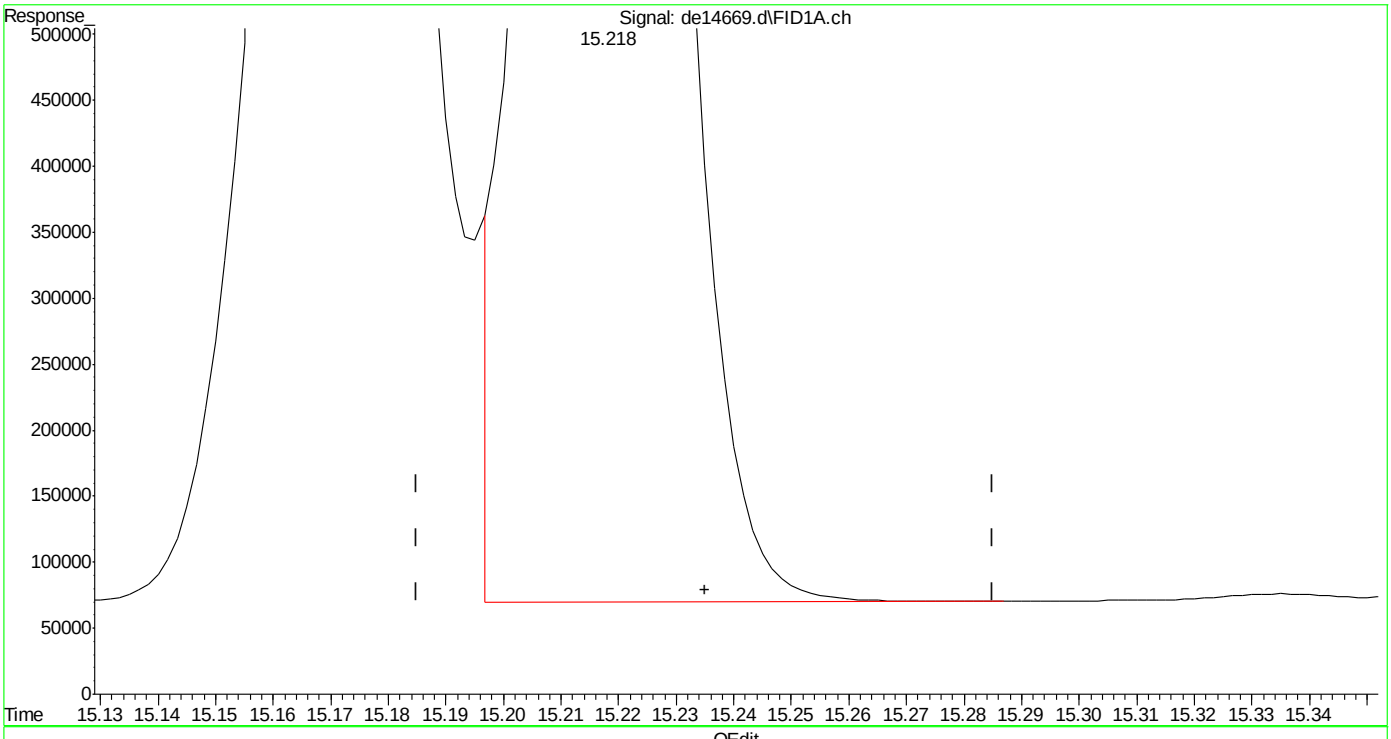
(+) = Expected Retention Time

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

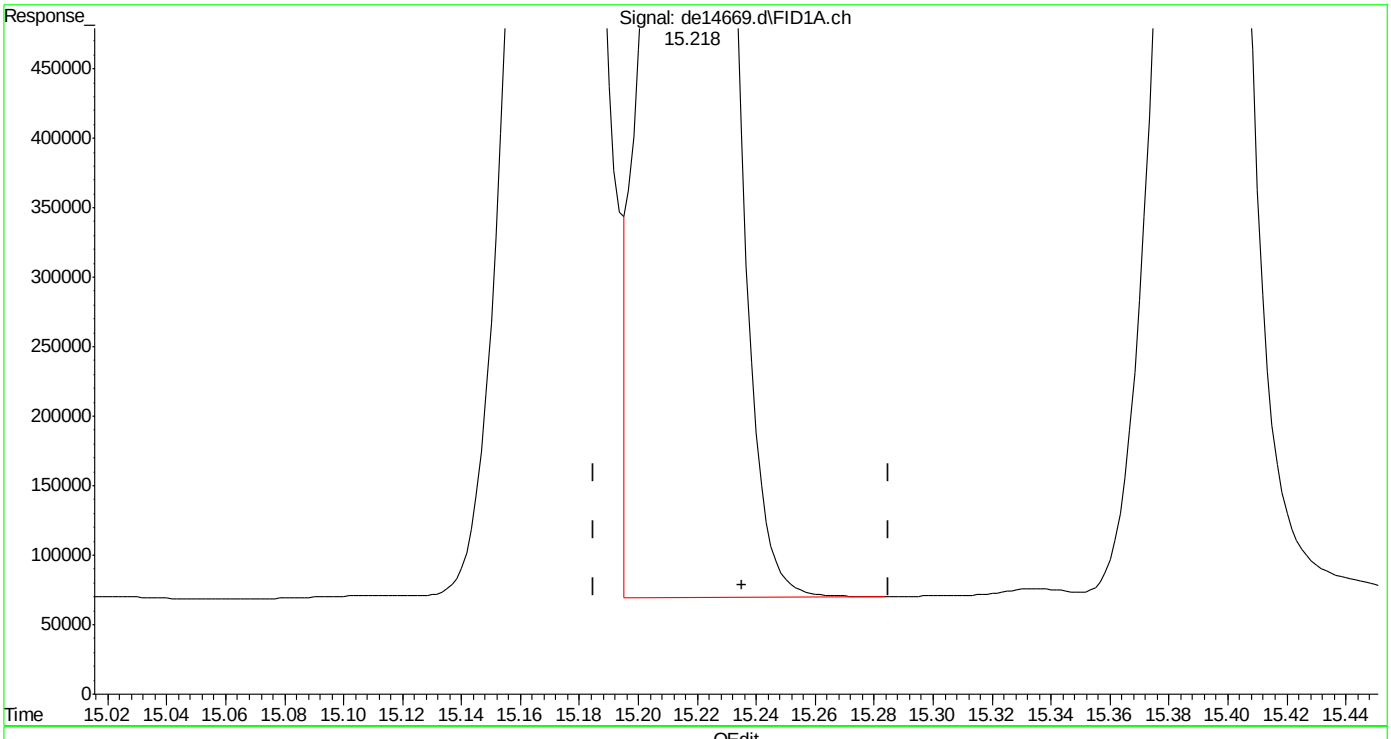
SGS ACCUTEST MC46737

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 MC46737

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

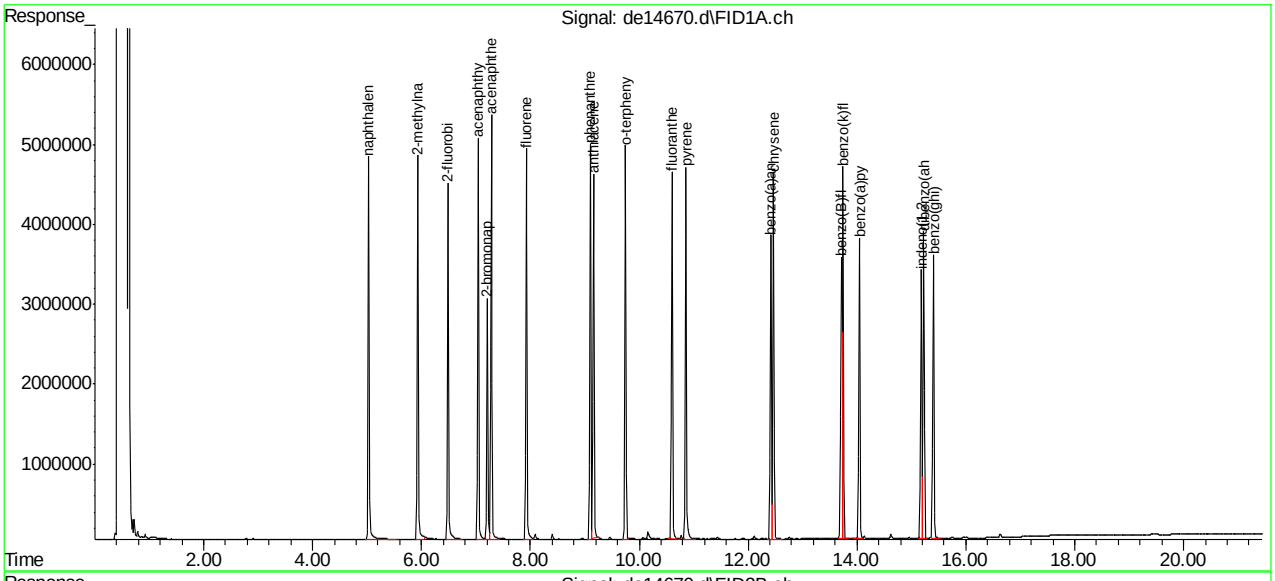
(f)=RT Delta > 1/2 Window (m)=manual int.

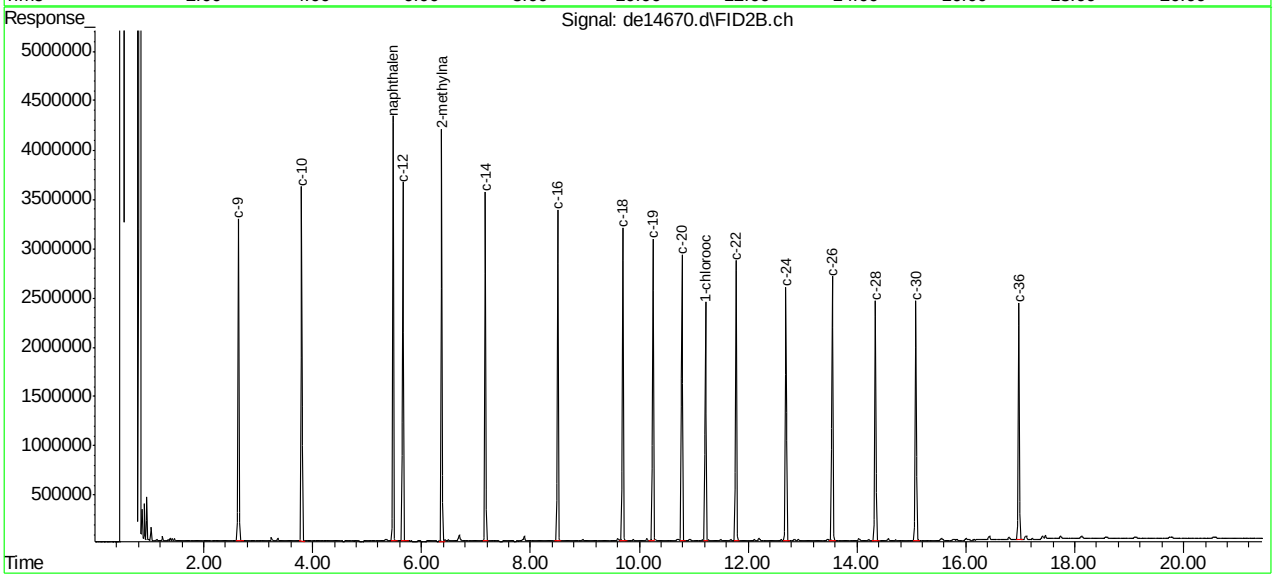
Quantitation Report (QT Reviewed)

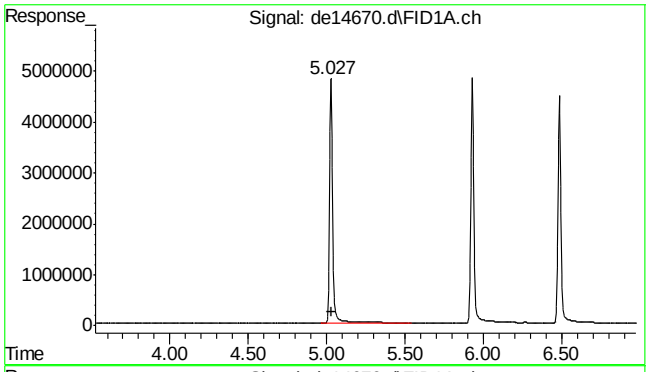
Data Path : C:\msdchem\1\DATA\DE160622EPH\
Data File : de14670.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 22 Jun 2016 8:08 pm
Operator : thomasa
Sample : icc815-50
Misc : op47862,gde815,1000,,,2,,w
ALS Vial : 110 Sample Multiplier: 1

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 :

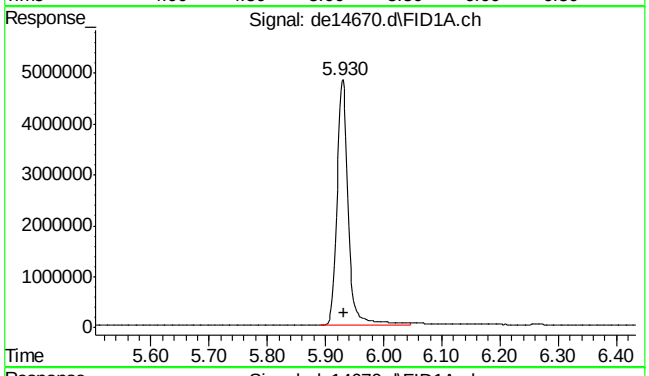






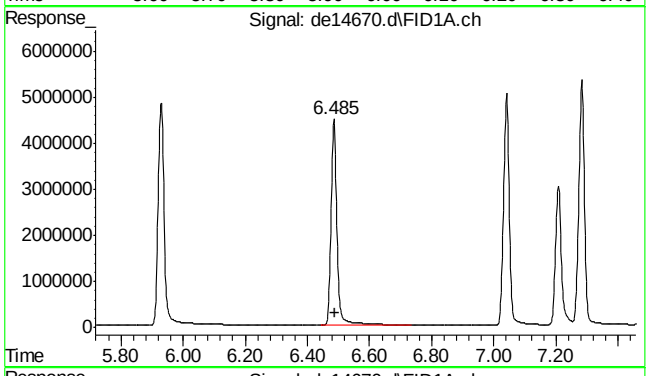
#2 naphthalene

R.T.: 5.027 min
Delta R.T.: -0.003 min
Response: 6623759
Conc: 64.22 µg/ml



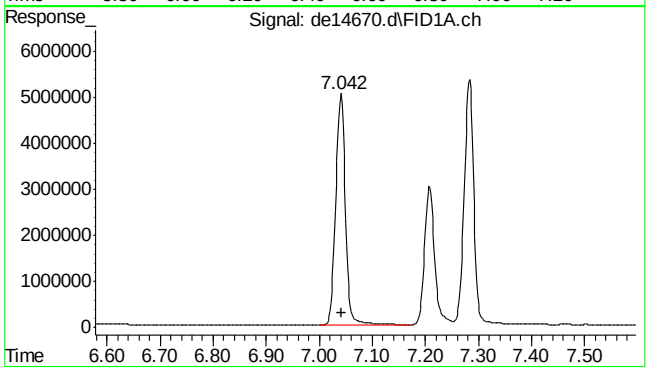
#3 2-methylnaphthalene

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

7.4.5

7

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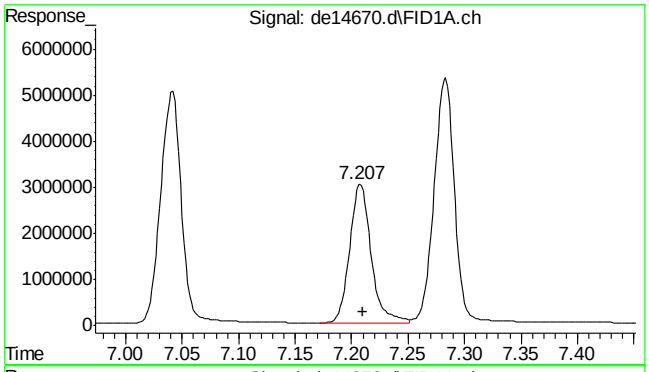
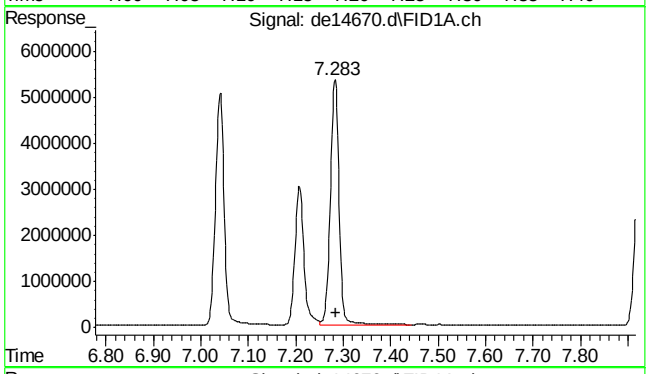


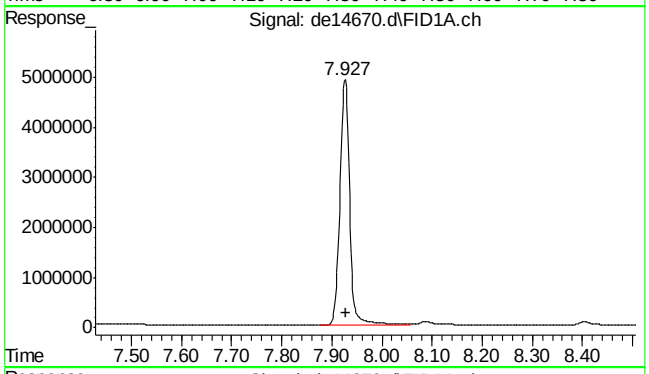
#6 2-bromonaphthalene

R.T.: 7.207 min
Delta R.T.: -0.003 min
Response: 3983702
Conc: 63.48 µg/ml



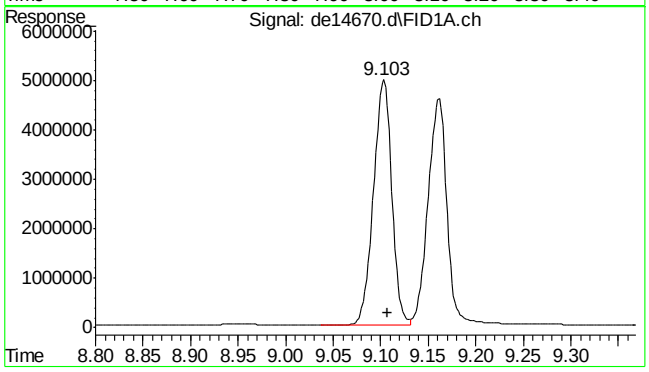
#7 acenaphthene

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

7.4.5

7

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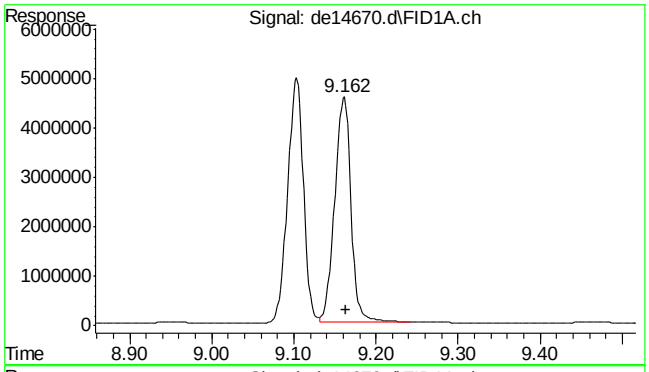
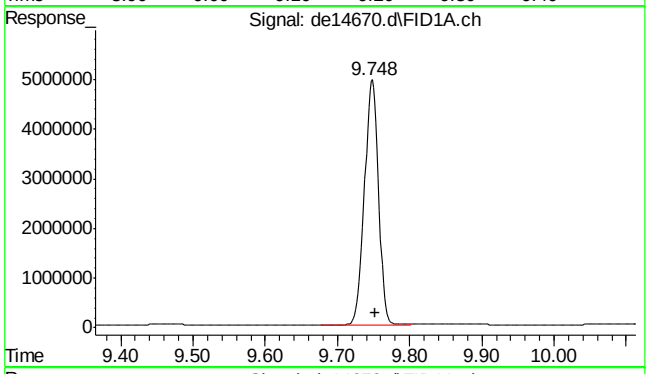


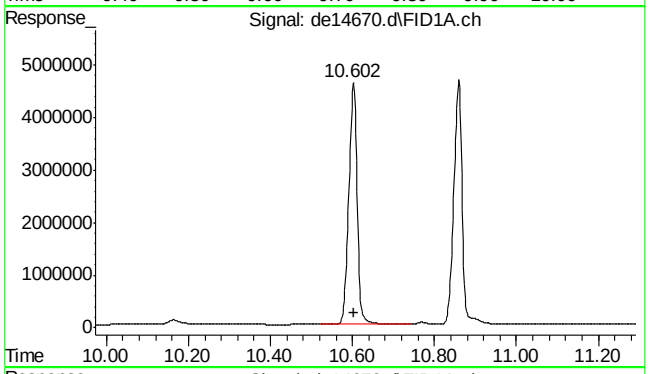
#10 anthracene

R.T.: 9.162 min
Delta R.T.: -0.002 min
Response: 6241594
Conc: 64.34 µg/ml



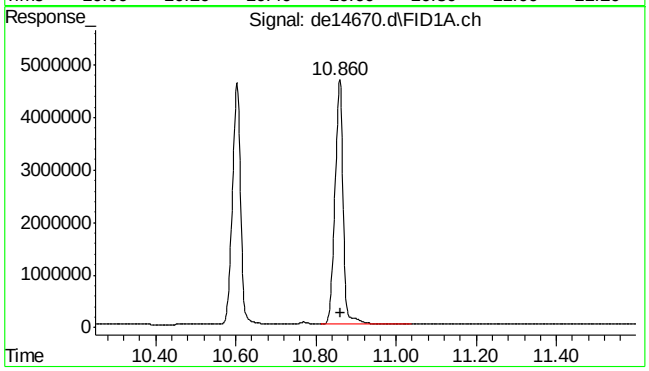
#11 o-terphenyl

R.T.: 9.748 min
Delta R.T.: -0.003 min
Response: 6671623
Conc: 65.14 µg/ml



#12 fluoranthene

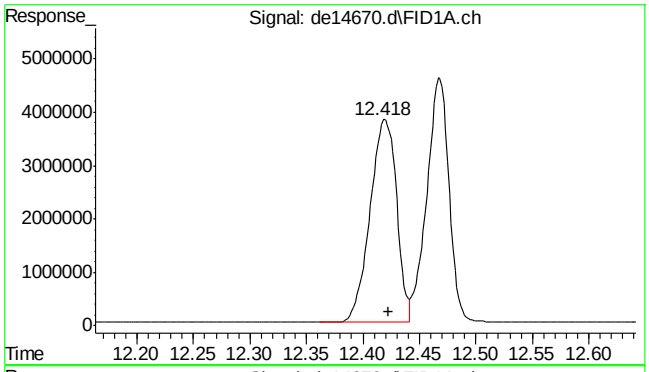
R.T.: 10.602 min
Delta R.T.: -0.003 min
Response: 6526164
Conc: 65.30 µg/ml



#13 pyrene

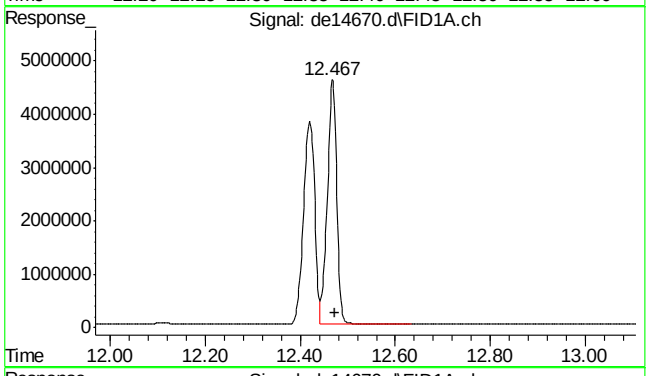
R.T.: 10.860 min
Delta R.T.: -0.002 min
Response: 6691657
Conc: 65.95 µg/ml

SGS ACCUTEST MC46737



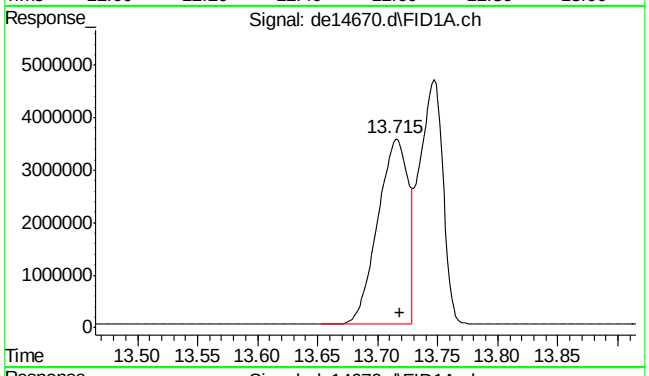
#14 benzo(a)anthracene

R.T.: 12.418 min
Delta R.T.: -0.005 min
Response: 6286876
Conc: 65.03 µg/ml



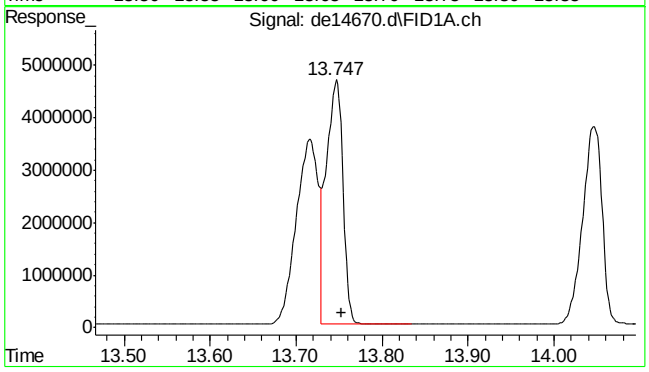
#15 chrysene

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



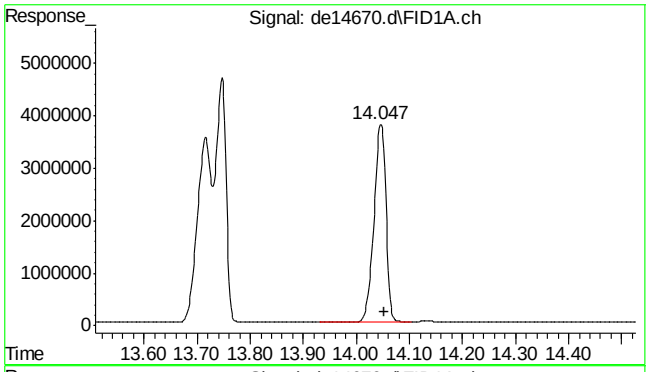
#17 benzo(k)fluoranthene

R.T.: 13.747 min
Delta R.T.: -0.007 min
Response: 6302924
Conc: 66.70 µg/ml m

7.4.5

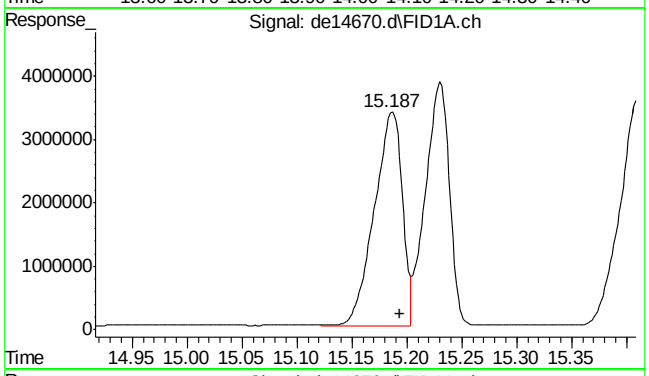
7

SGS ACCUTEST MC46737



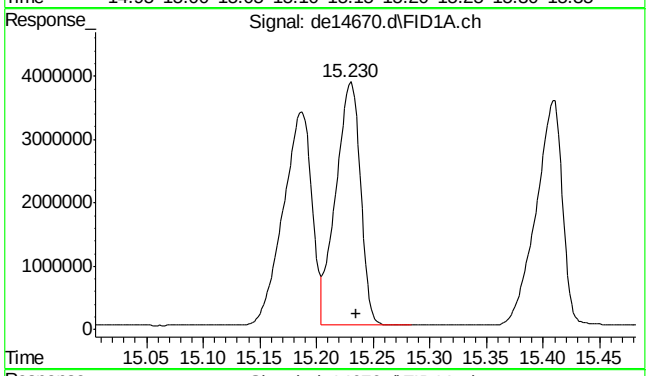
#18 benzo(a)pyrene

R.T.: 14.047 min
Delta R.T.: -0.007 min
Response: 5968168
Conc: 64.57 µg/ml



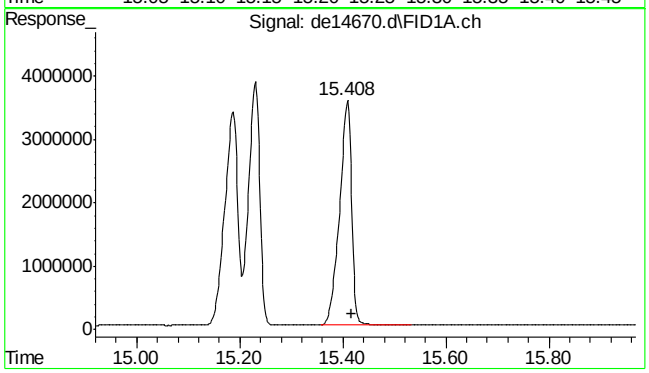
#19 indeno(1,2,3-cd)pyrene

R.T.: 15.187 min
Delta R.T.: -0.007 min
Response: 5972476
Conc: 63.10 µg/ml m



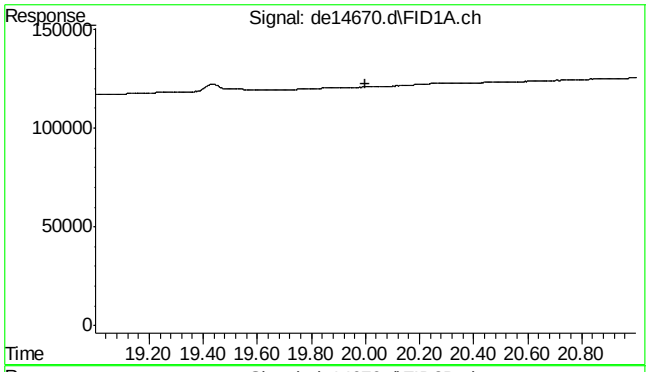
#20 dibenzo(ah)anthracene

R.T.: 15.230 min
Delta R.T.: -0.005 min
Response: 5802054
Conc: 63.48 µg/ml m



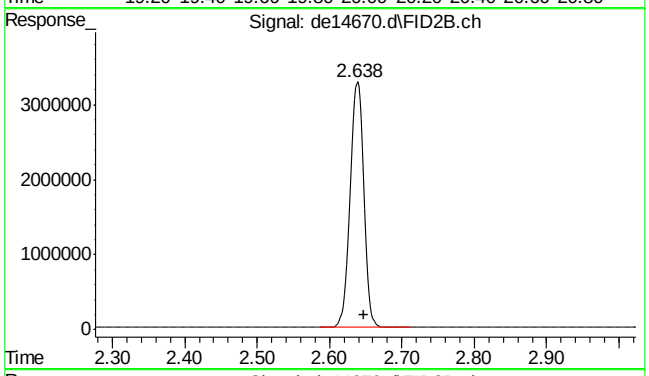
#21 benzo(ghi)perylene

R.T.: 15.408 min
Delta R.T.: -0.008 min
Response: 5770697
Conc: 62.64 µg/ml



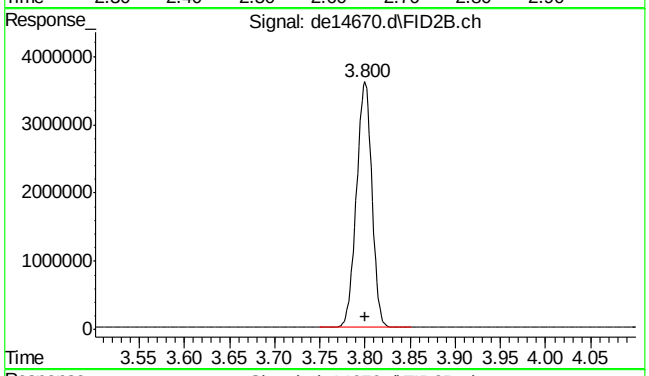
#22 bht

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



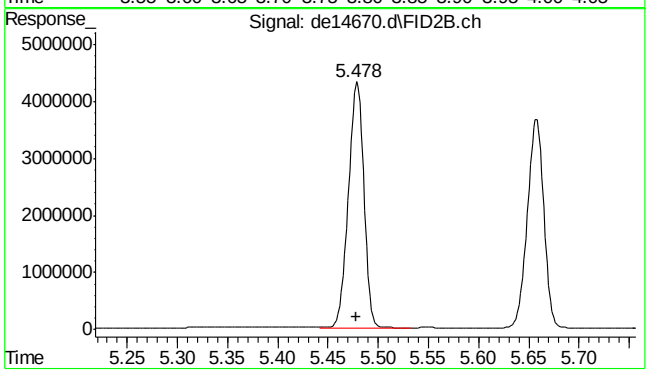
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 4268198
Conc: 57.78 µg/ml m



#26 c-10

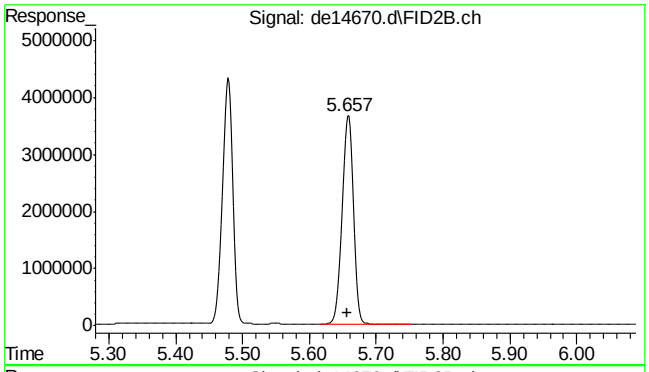
R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 4303580
Conc: 58.26 µg/ml



#27 naphthalene #2

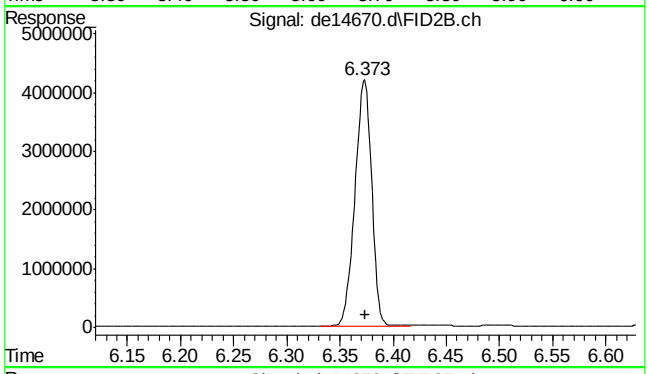
R.T.: 5.478 min
Delta R.T.: 0.000 min
Response: 4591998
Conc: 57.49 µg/ml

SGS ACCUTEST MC46737



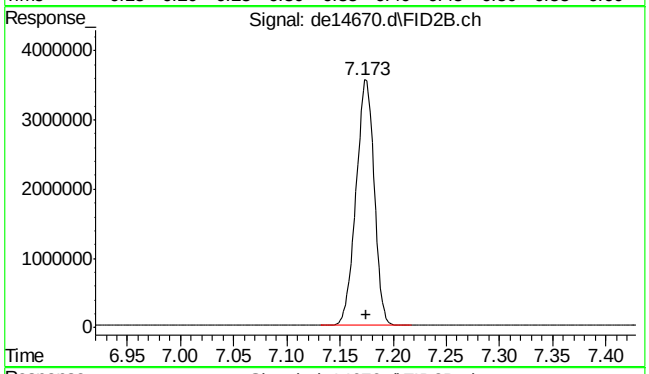
#28 c-12

R.T.: 5.657 min
Delta R.T.: 0.000 min
Response: 4254199
Conc: 57.59 µg/ml



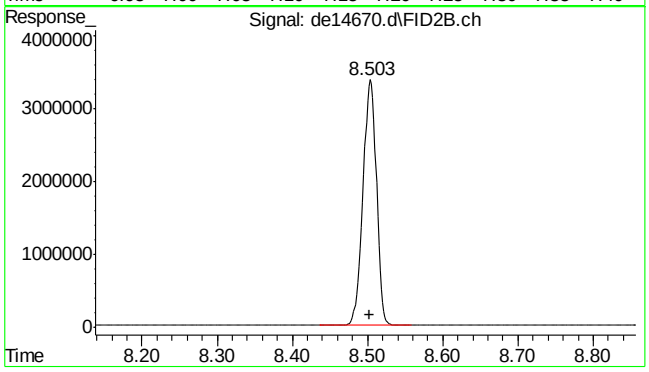
#29 2-methylnaphthalene #2

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

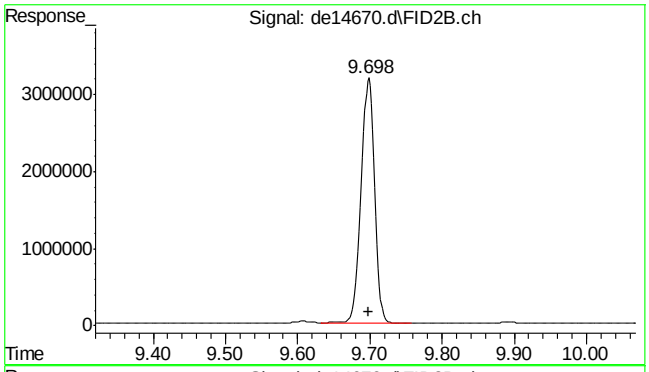


#31 c-16

R.T.: 8.503 min
Delta R.T.: 0.000 min
Response: 4179046
Conc: 56.57 µg/ml

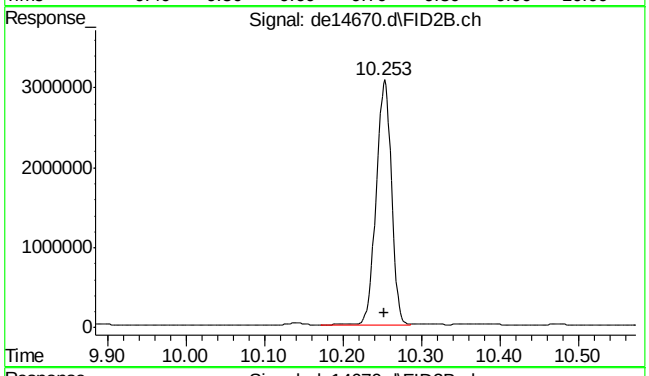
7.4.5

7



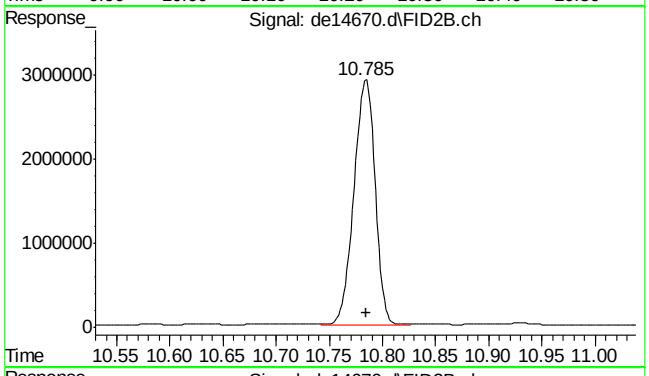
#32 c-18

R.T.: 9.698 min
Delta R.T.: 0.000 min
Response: 4132964
Conc: 55.95 µg/ml



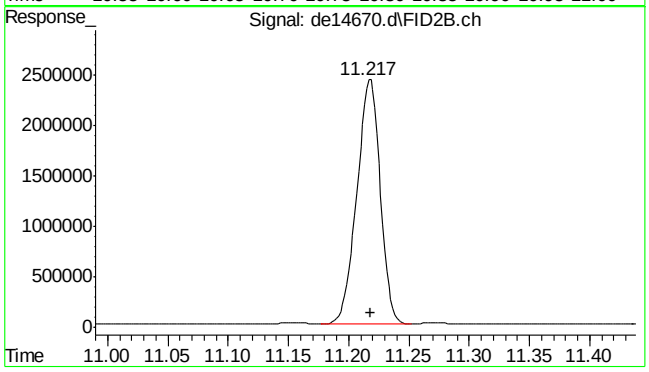
#33 c-19

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



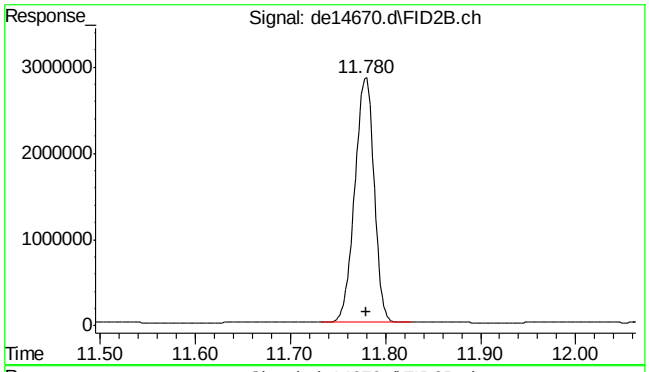
#35 1-chlorooctadecane

R.T.: 11.217 min
Delta R.T.: -0.002 min
Response: 3273211
Conc: 57.86 µg/ml

7.4.5

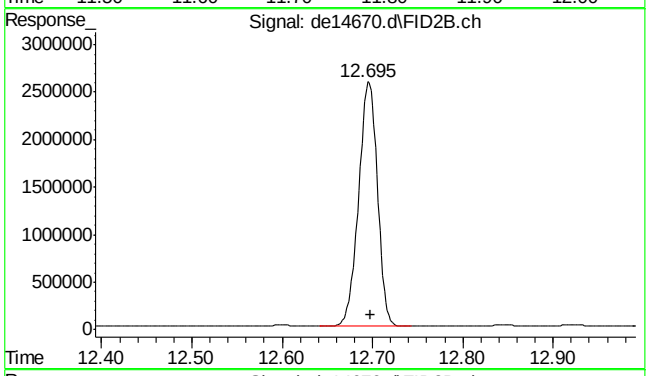
7

SGS ACCUTEST MC46737



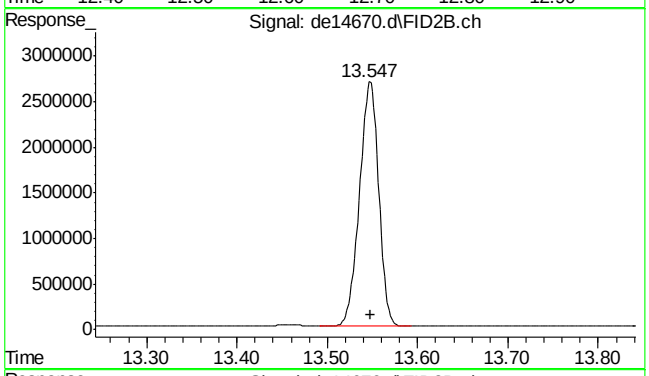
#36 c-22

R.T.: 11.780 min
Delta R.T.: 0.000 min
Response: 4011818
Conc: 60.05 µg/ml



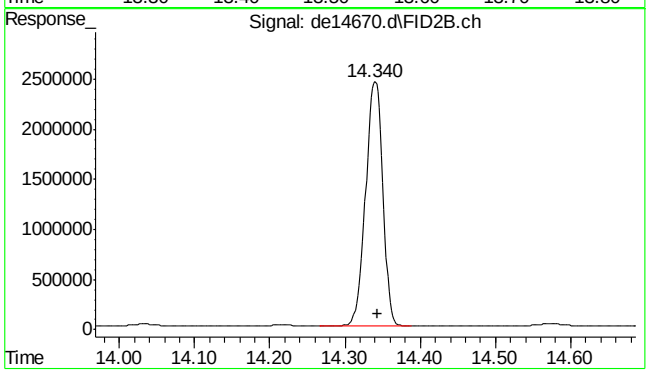
#37 c-24

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

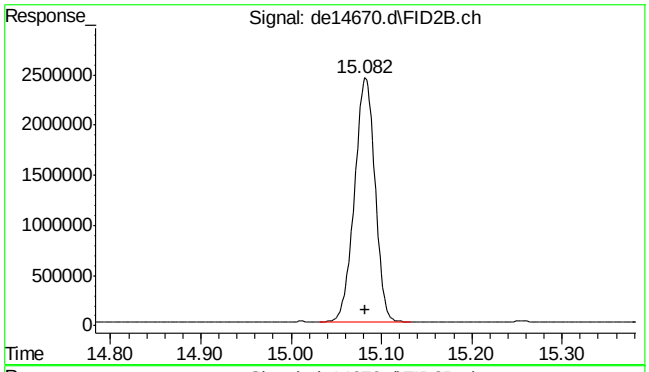


#39 c-28

R.T.: 14.340 min
Delta R.T.: -0.003 min
Response: 3856562
Conc: 57.73 µg/ml

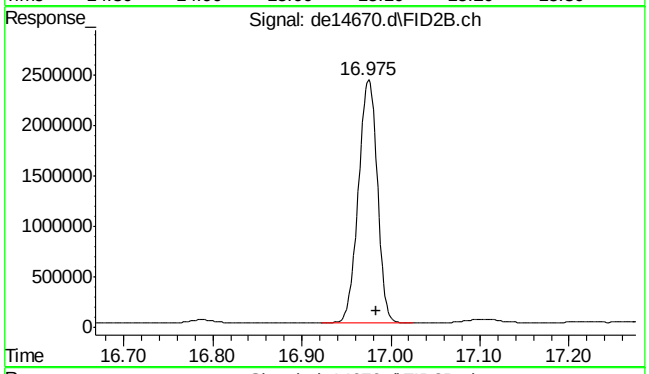
7.4.5

7



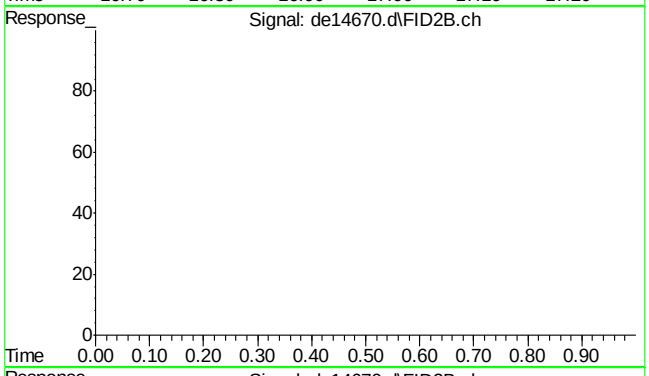
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 3850472
Conc: 57.64 µg/ml



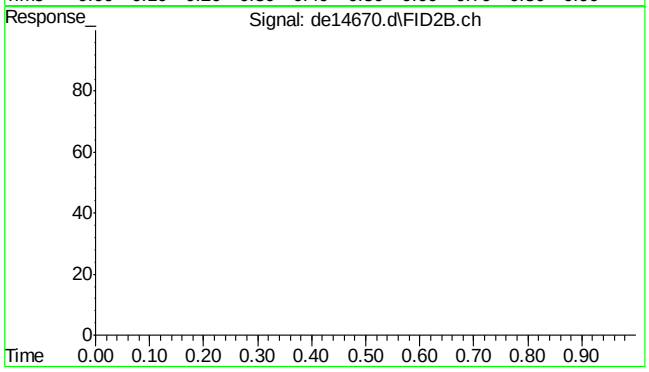
#41 c-36

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.



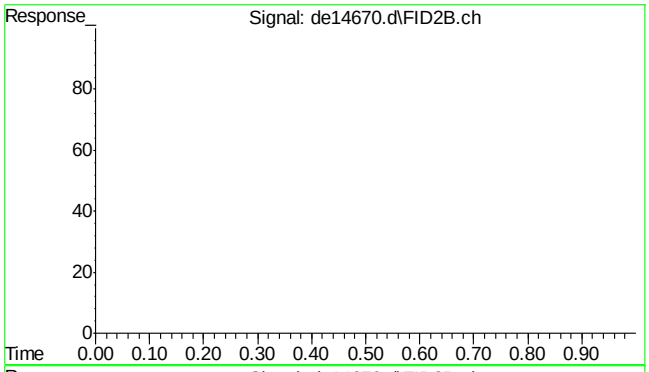
#43 bht

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

7.4.5

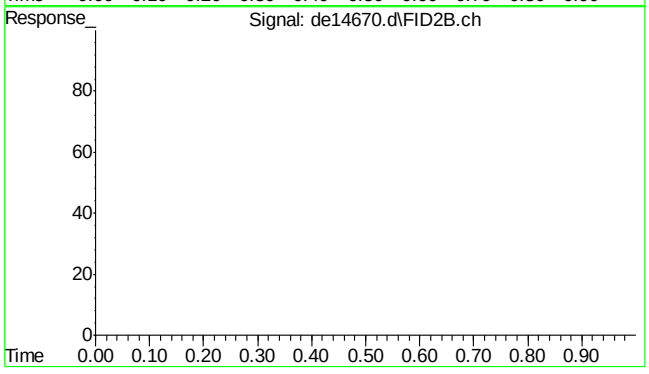
7

SGS ACCUTEST MC46737



#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.
```

7.4.5

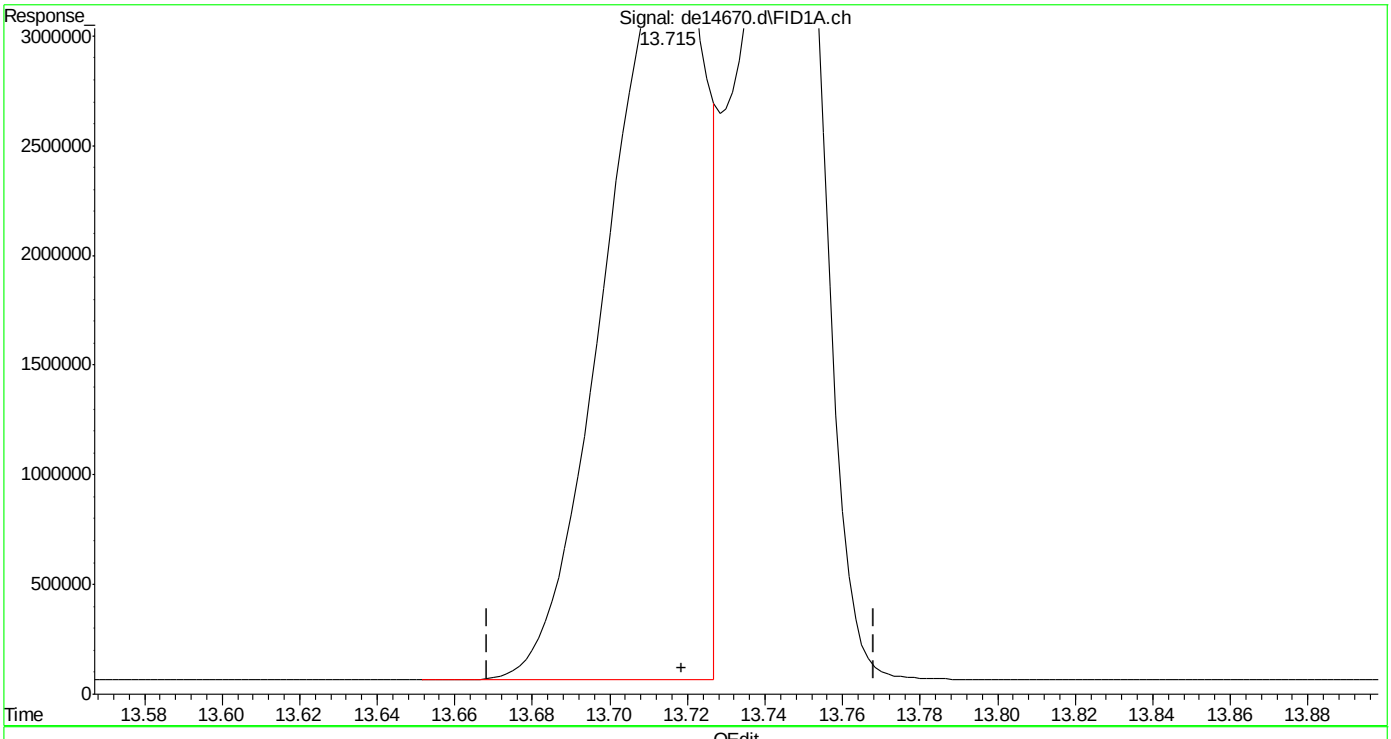
7

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

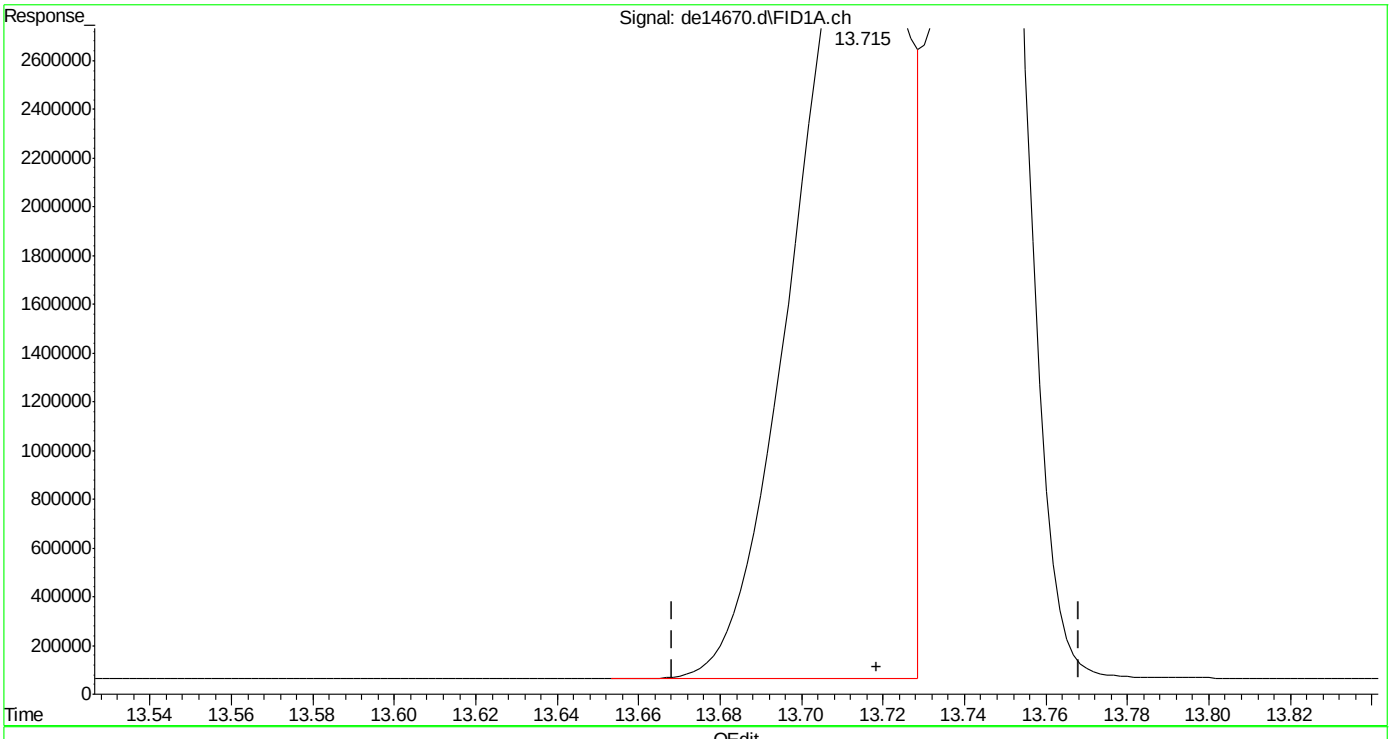
SGS ACCUTEST MC46737

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

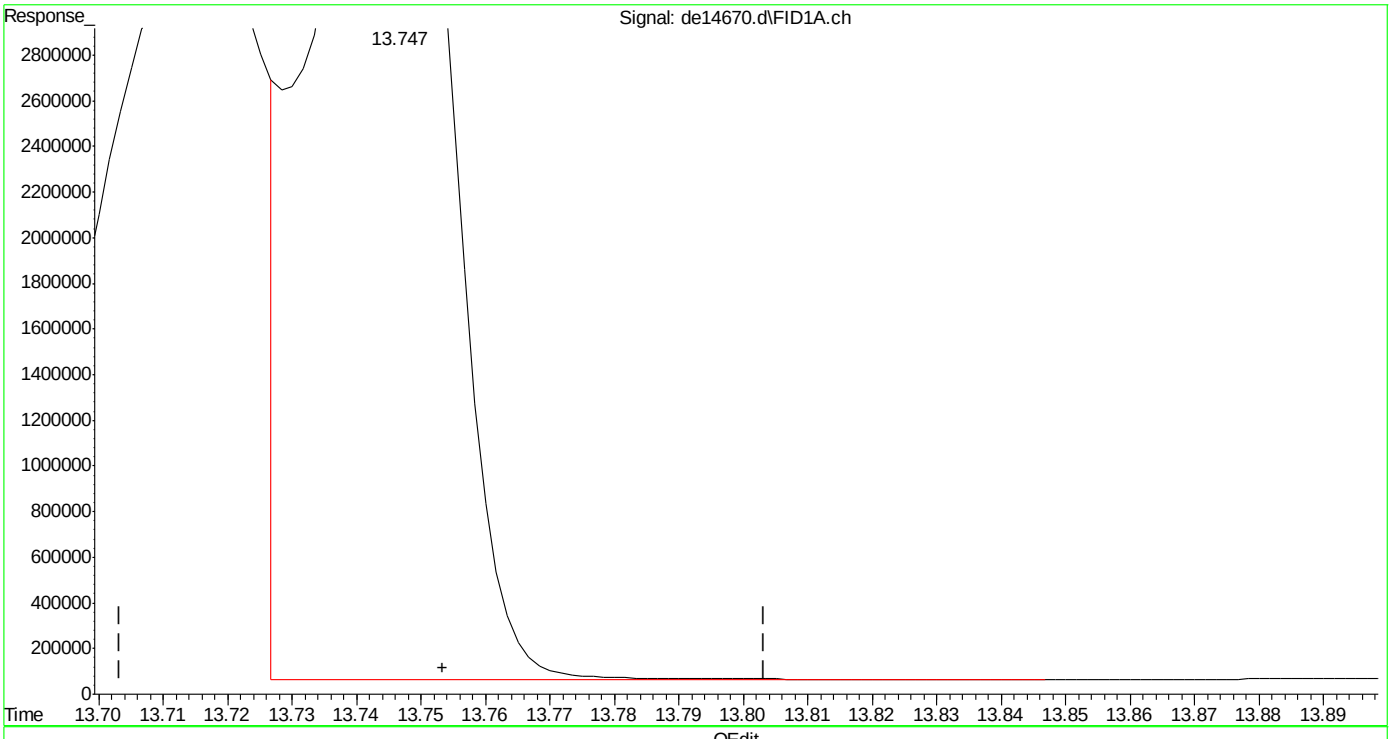
(+) = Expected Retention Time

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

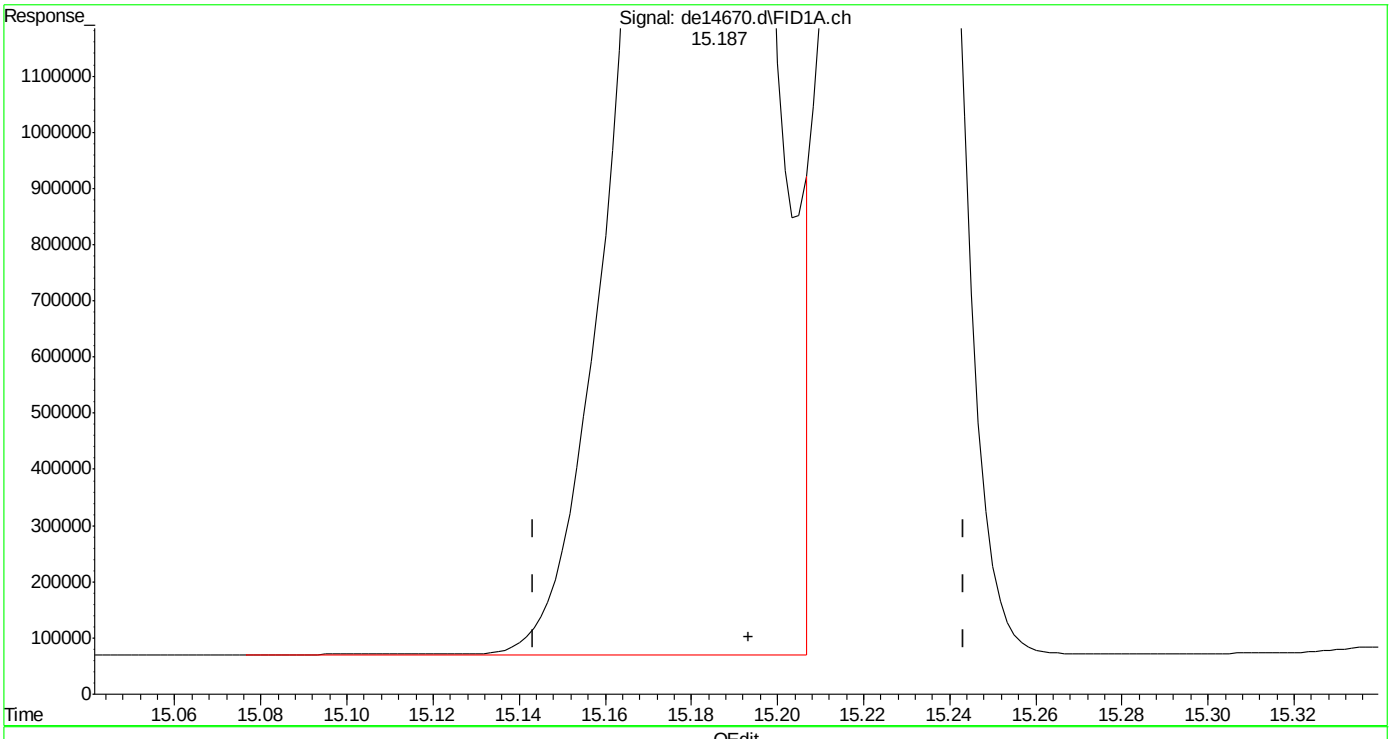
SGS ACCUTEST MC46737

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

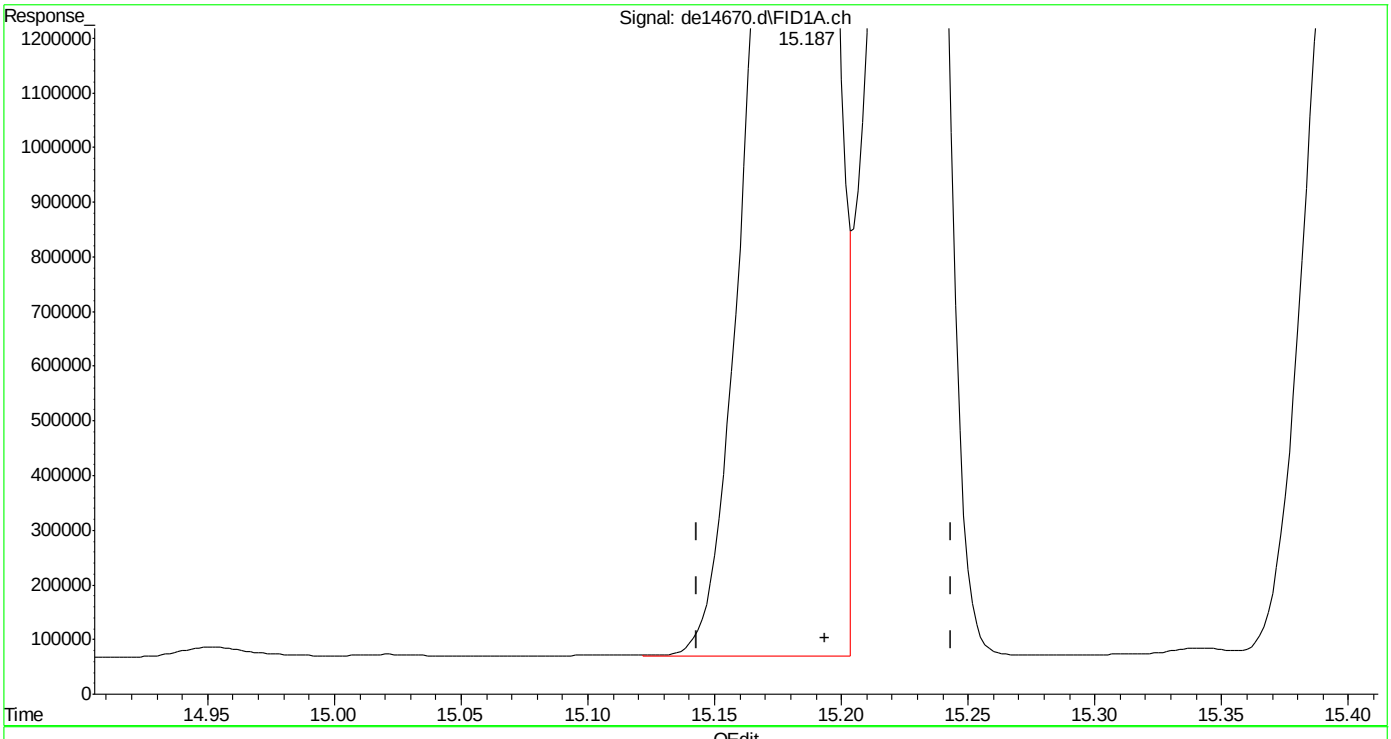
SGS ACCUTEST MC46737

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

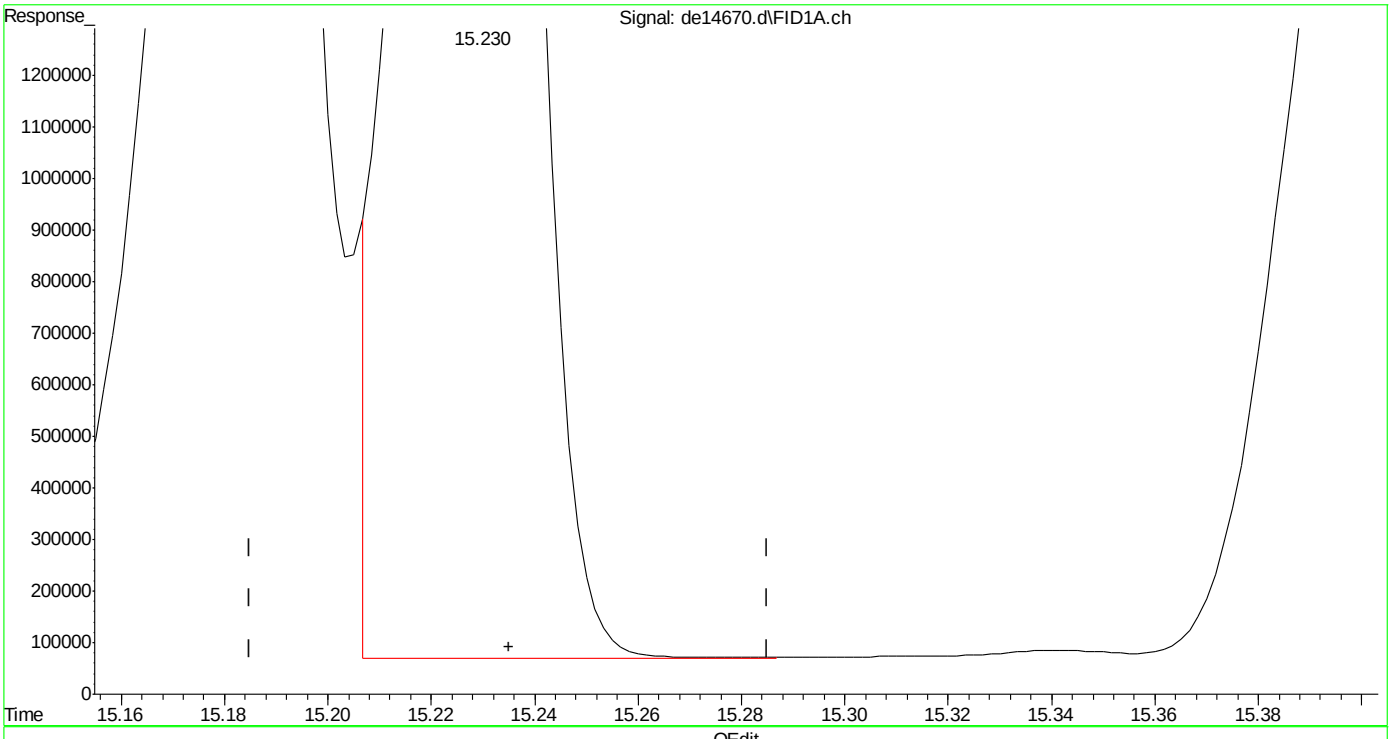
SGS ACCUTEST MC46737

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

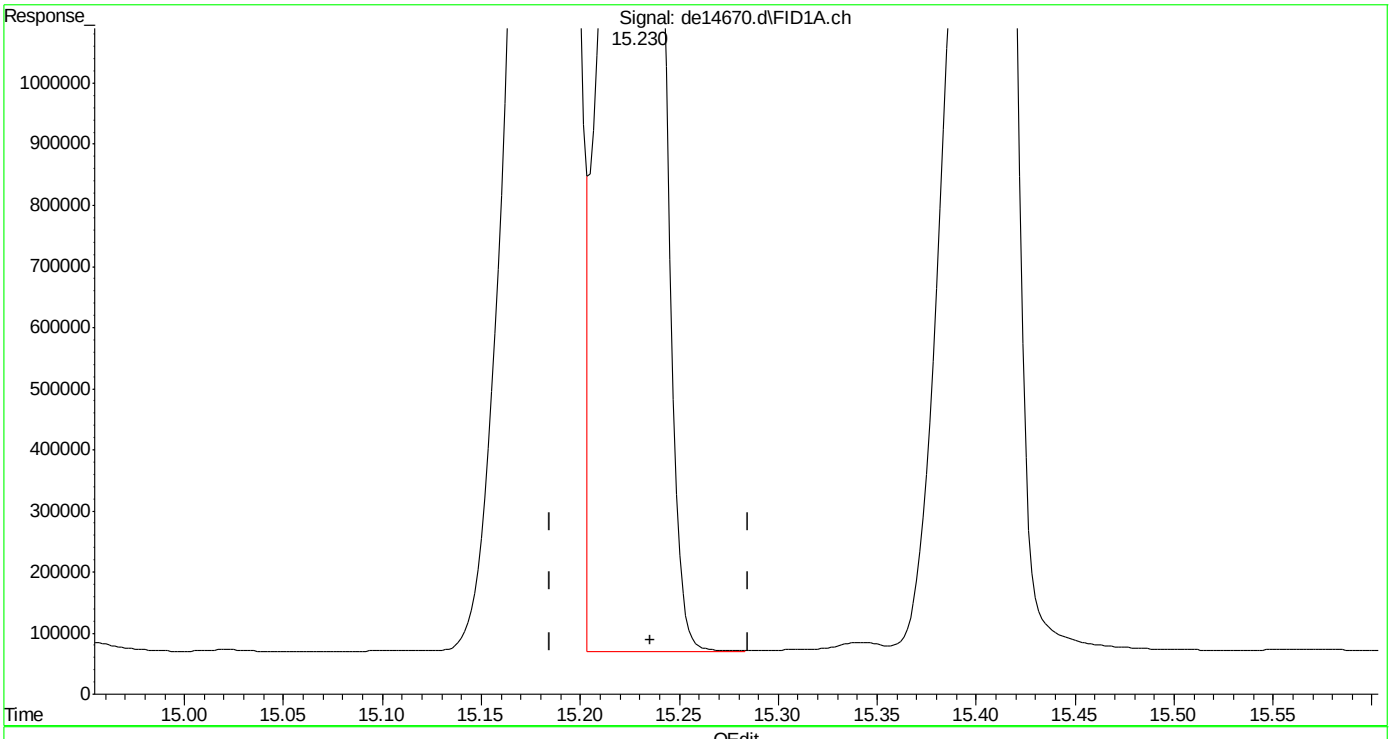
SGS ACCUTEST MC46737

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 MC46737

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

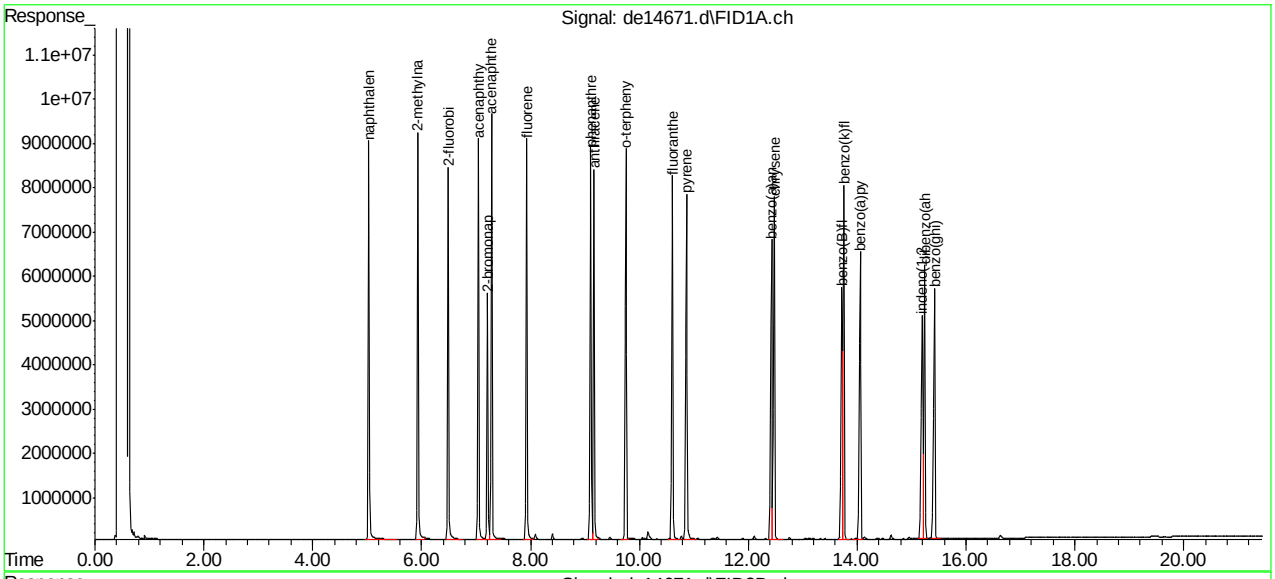
(f)=RT Delta > 1/2 Window (m)=manual int.

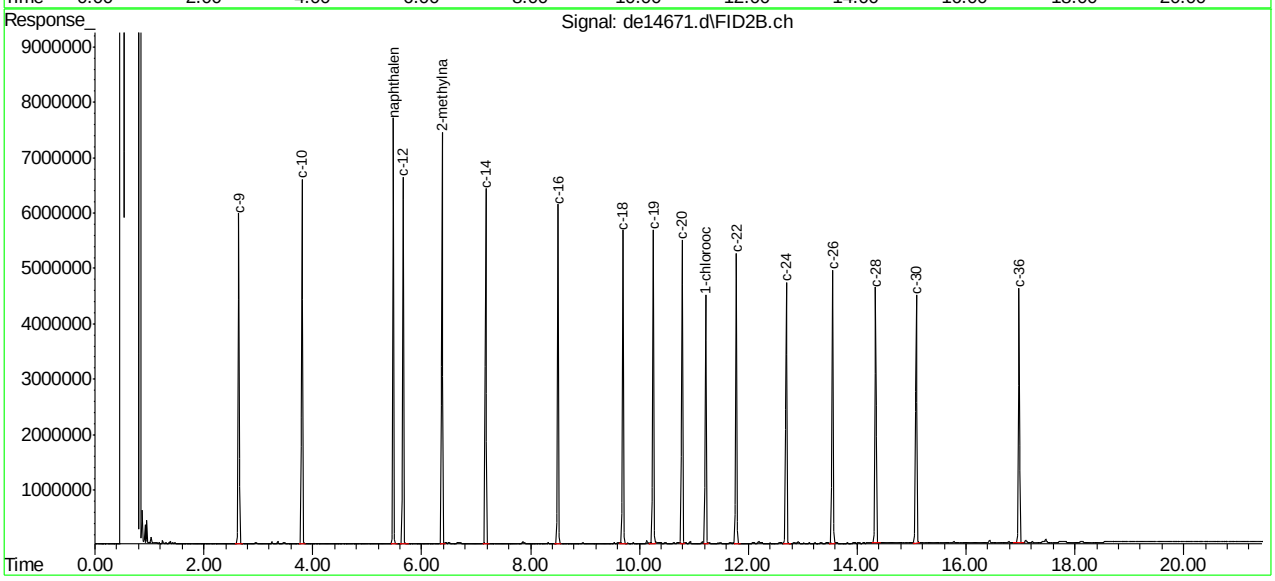
Quantitation Report (QT Reviewed)

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 :





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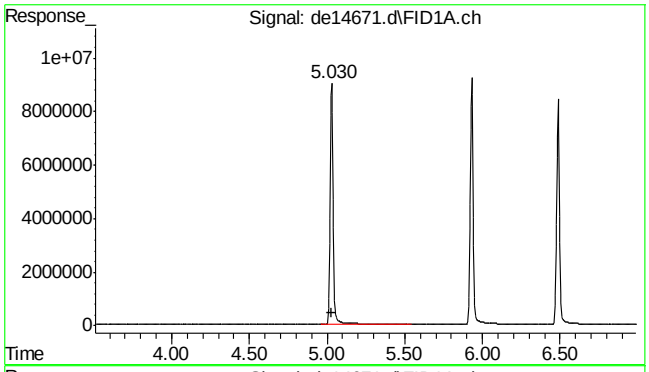
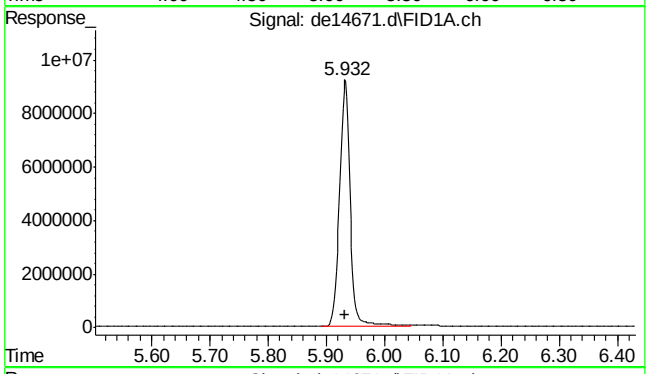


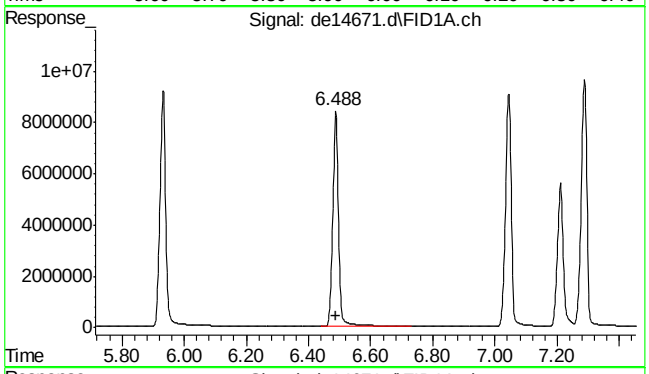
#2 naphthalene

R.T.: 5.030 min
Delta R.T.: 0.000 min
Response: 11983627
Conc: 100.11 µg/ml



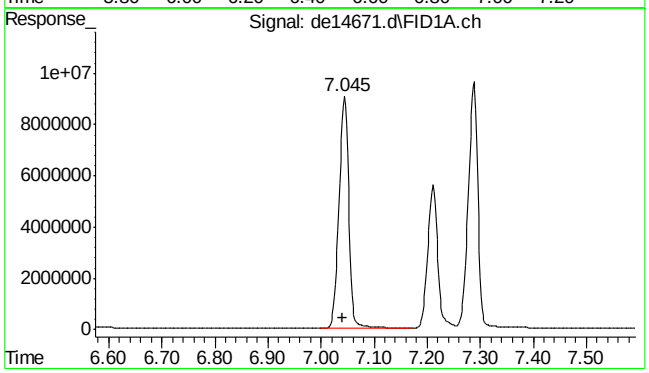
#3 2-methylnaphthalene

R.T.: 5.932 min
Delta R.T.: 0.000 min
Response: 11763665
Conc: 97.77 µg/ml



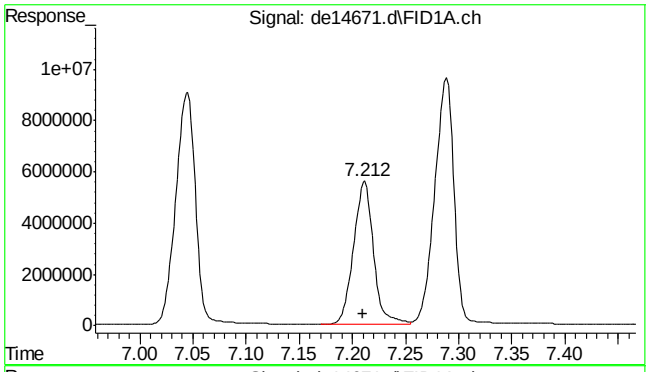
#4 2-fluorobiphenyl

R.T.: 6.488 min
Delta R.T.: 0.000 min
Response: 10731985
Conc: 98.61 µg/ml



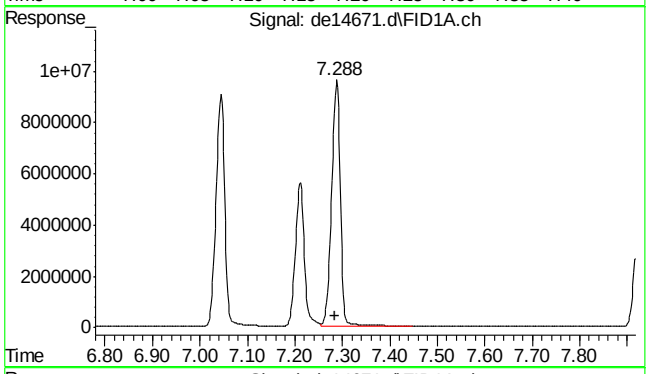
#5 acenaphthylene

R.T.: 7.045 min
Delta R.T.: 0.003 min
Response: 11745266
Conc: 97.68 µg/ml



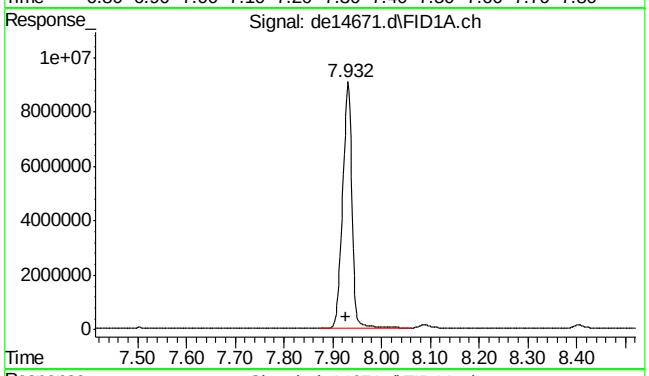
#6 2-bromonaphthalene

R.T.: 7.212 min
Delta R.T.: 0.002 min
Response: 7308924
Conc: 107.71 µg/ml



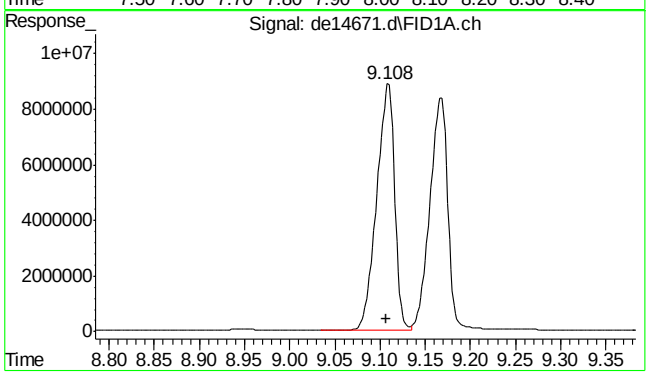
#7 acenaphthene

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

7.4.6

7

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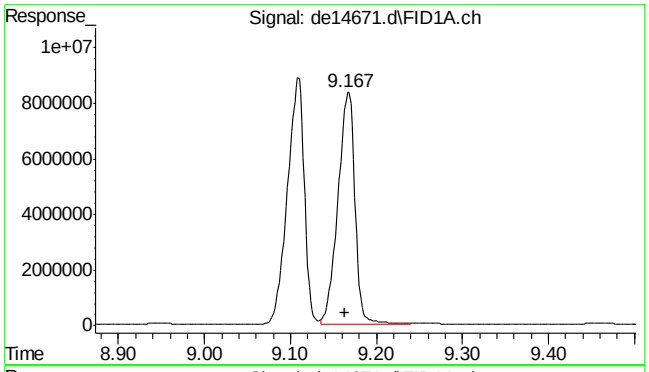
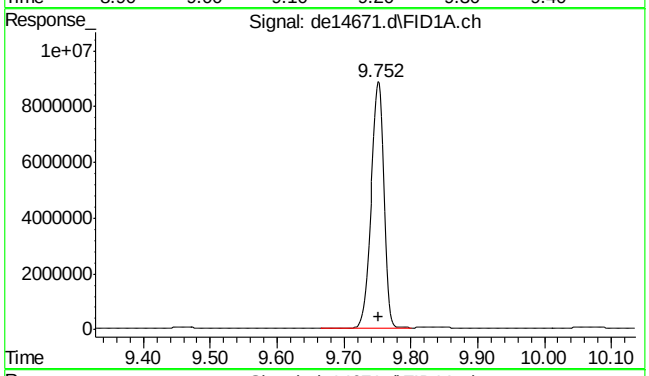


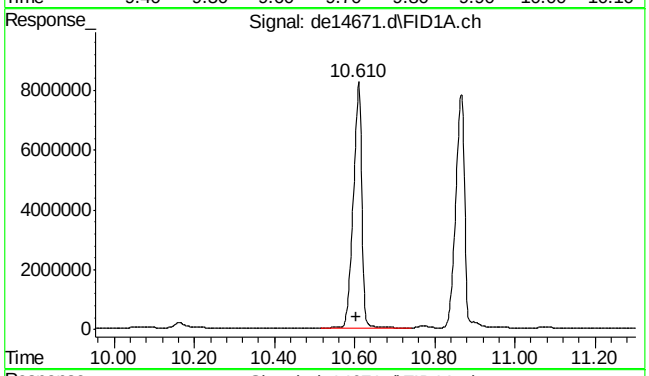
#10 anthracene

R.T.: 9.167 min
Delta R.T.: 0.003 min
Response: 11487748
Conc: 90.76 µg/ml



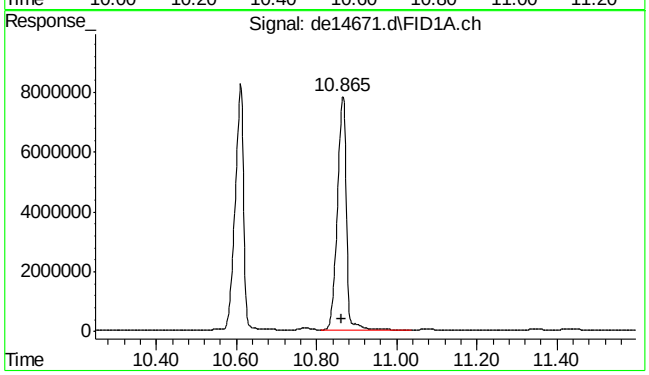
#11 o-terphenyl

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

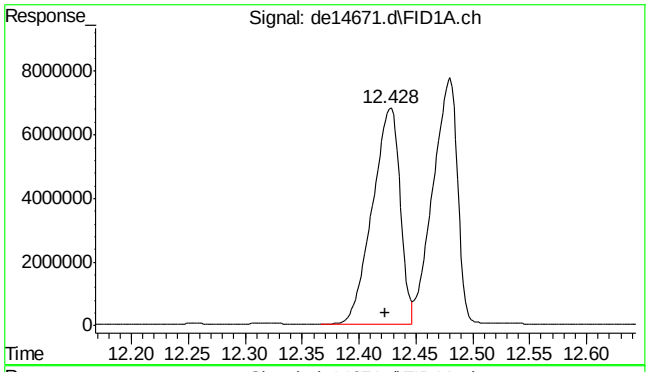


#13 pyrene

R.T.: 10.865 min
Delta R.T.: 0.003 min
Response: 12197688
Conc: 98.01 µg/ml

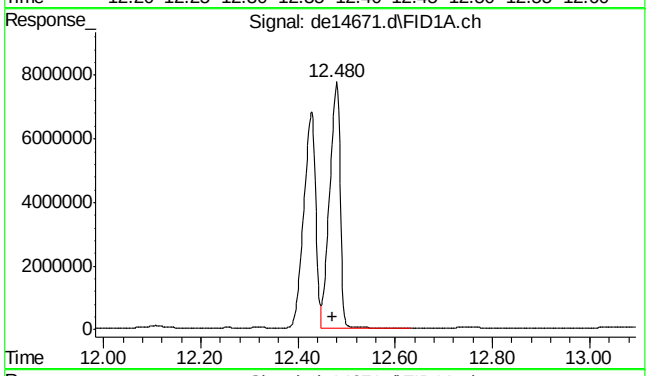
7.4.6

7



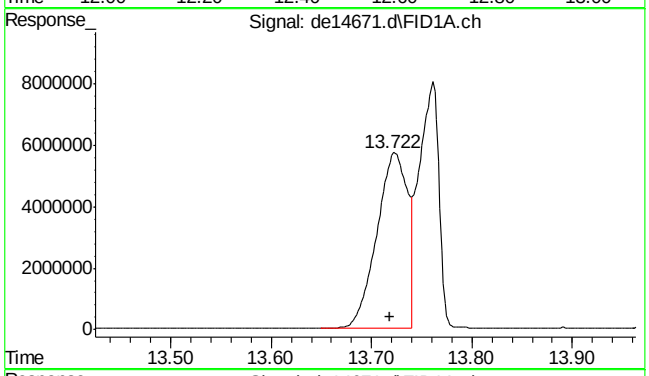
#14 benzo(a)anthracene

R.T.: 12.428 min
Delta R.T.: 0.005 min
Response: 11507490
Conc: 99.89 µg/ml m



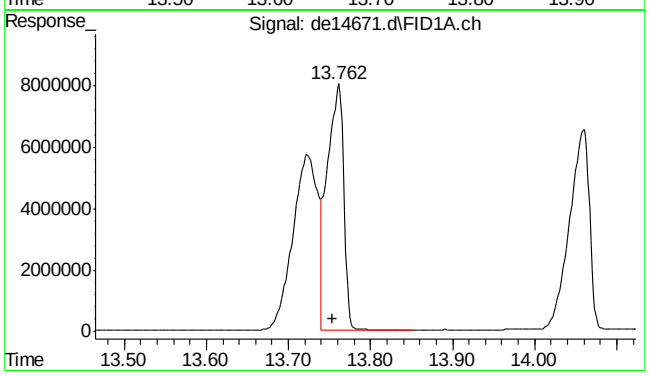
#15 chrysene

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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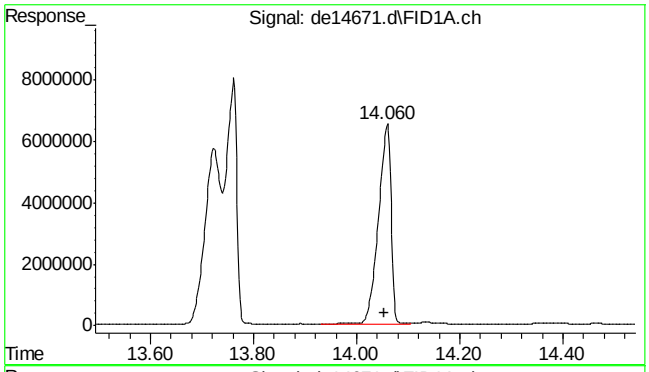
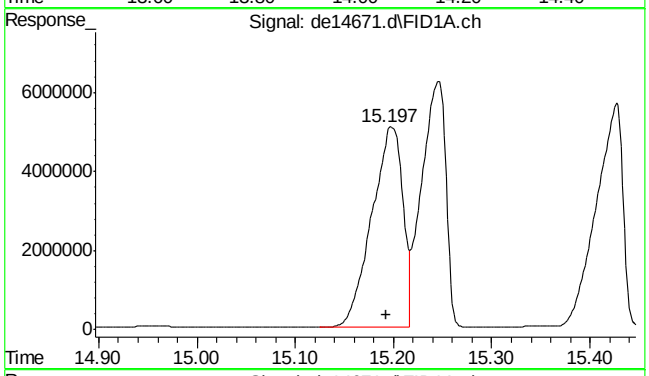


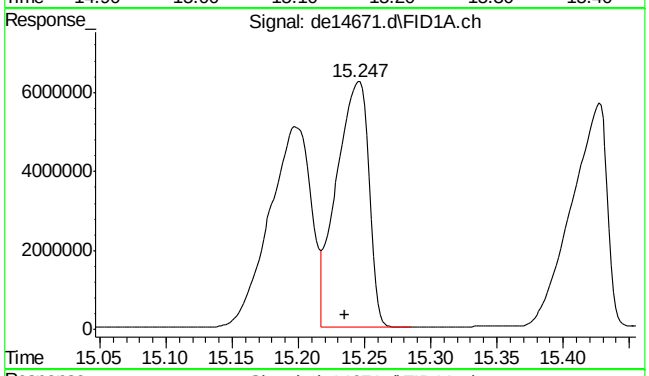
#18 benzo(a)pyrene

R.T.: 14.060 min
Delta R.T.: 0.007 min
Response: 10999807
Conc: 98.01 µg/ml



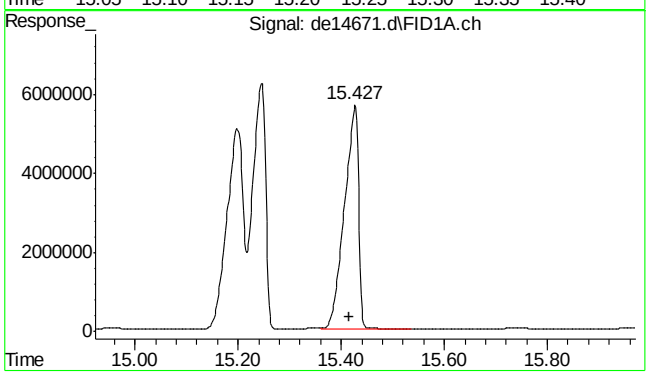
#19 indeno(1,2,3-cd)pyrene

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

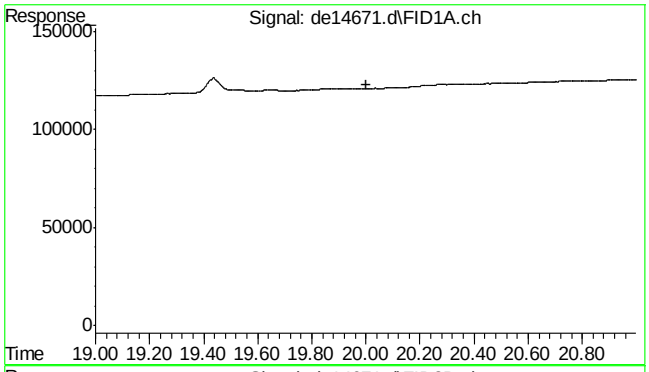


#21 benzo(ghi)perylene

R.T.: 15.427 min
Delta R.T.: 0.010 min
Response: 10703286
Conc: 99.22 µg/ml

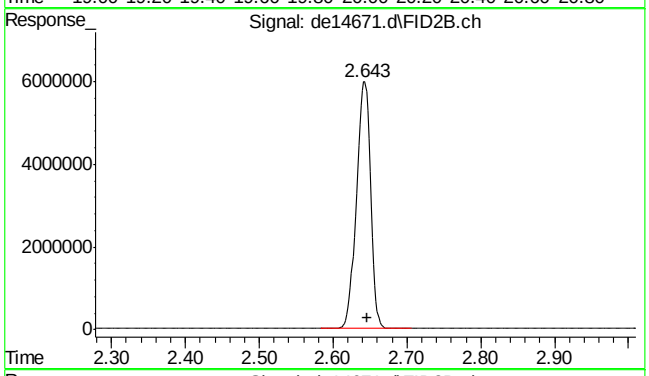
7.4.6

7



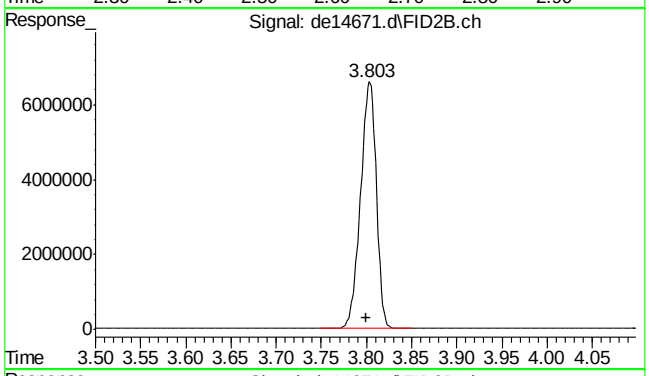
#22 bht

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



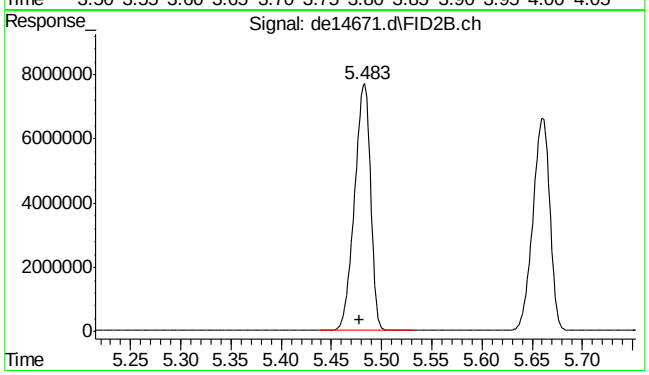
#25 c-9

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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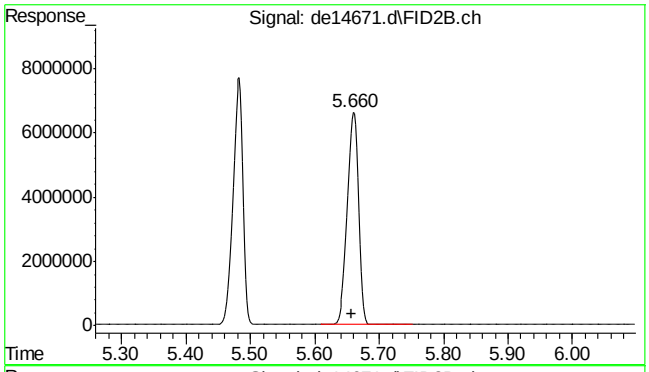
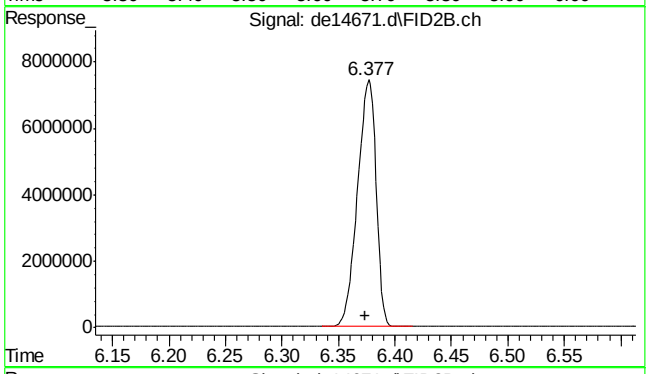


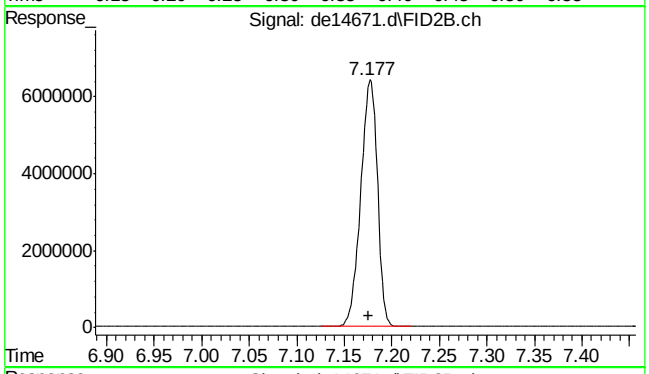
#28 c-12

R.T.: 5.660 min
Delta R.T.: 0.003 min
Response: 7886242
Conc: 93.41 µg/ml



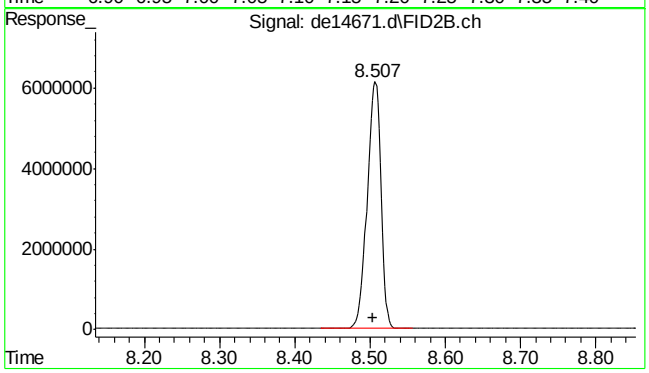
#29 2-methylnaphthalene #2

R.T.: 6.377 min
Delta R.T.: 0.003 min
Response: 8454340
Conc: 97.49 µg/ml



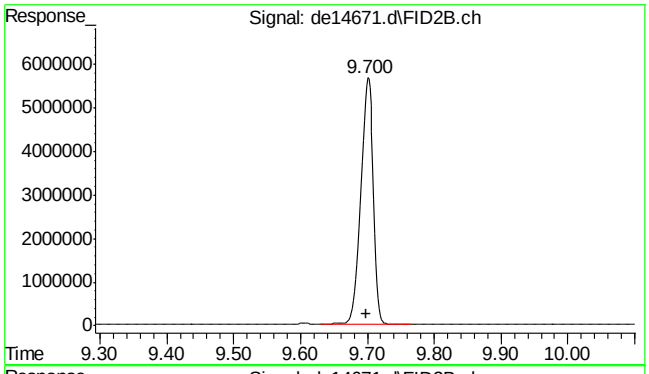
#30 c-14

R.T.: 7.177 min
Delta R.T.: 0.002 min
Response: 7814489
Conc: 92.39 µg/ml



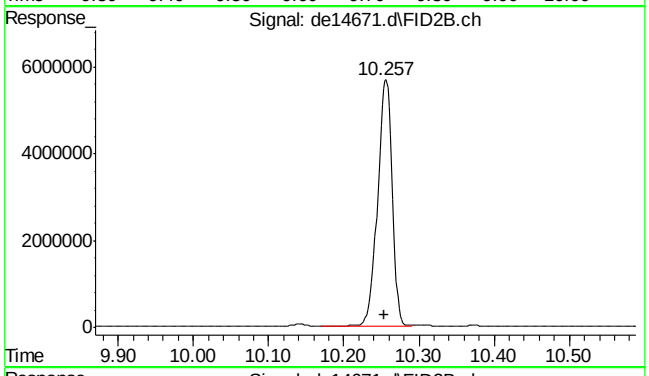
#31 c-16

R.T.: 8.507 min
Delta R.T.: 0.003 min
Response: 7764221
Conc: 91.26 µg/ml



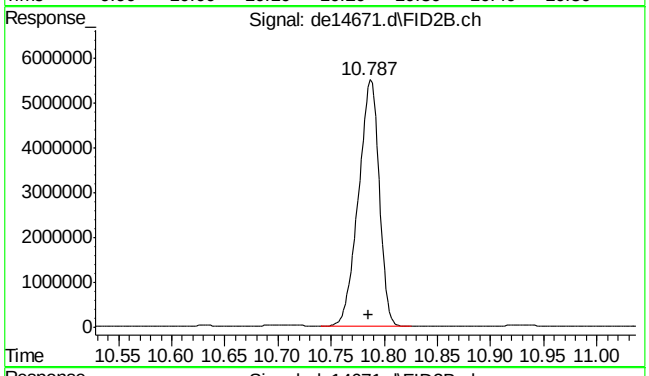
#32 c-18

R.T.: 9.700 min
Delta R.T.: 0.002 min
Response: 7676676
Conc: 91.86 µg/ml



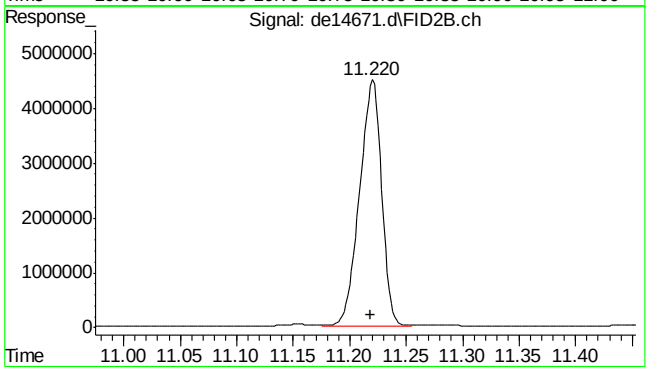
#33 c-19

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

7.4.6

7

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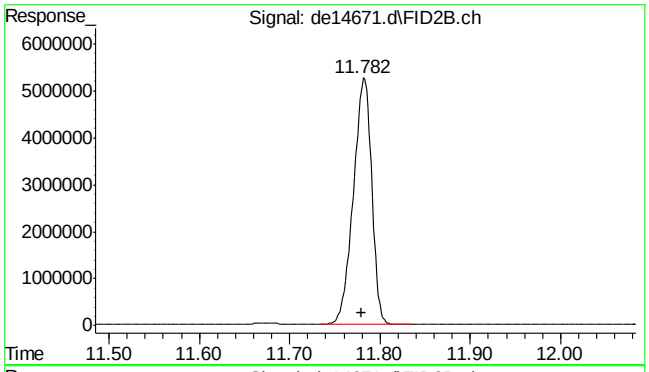
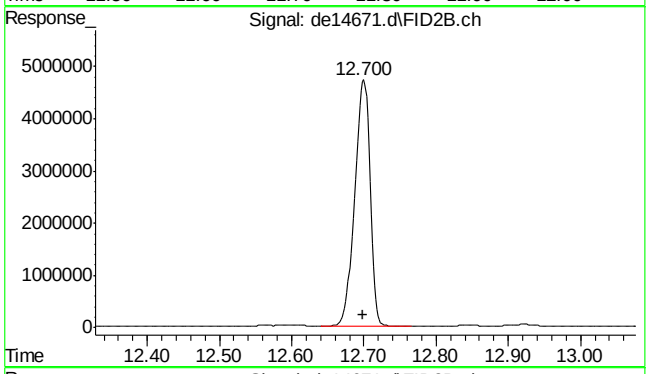


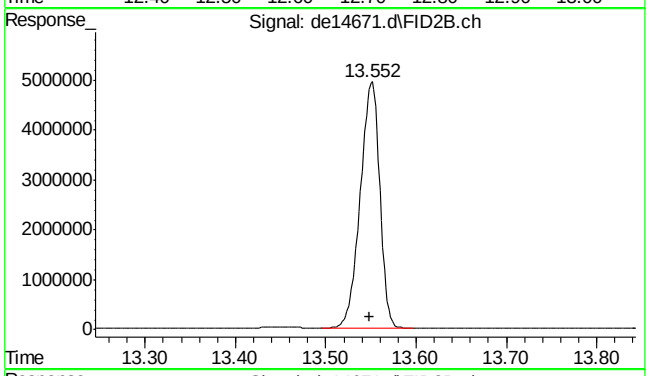
#36 c-22

R.T.: 11.782 min
Delta R.T.: 0.002 min
Response: 7420088
Conc: 92.90 µg/ml



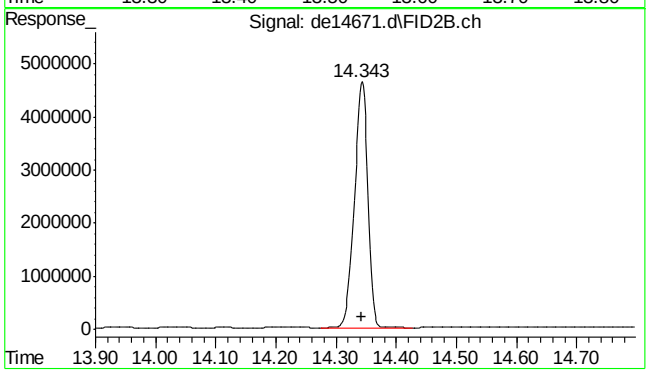
#37 c-24

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



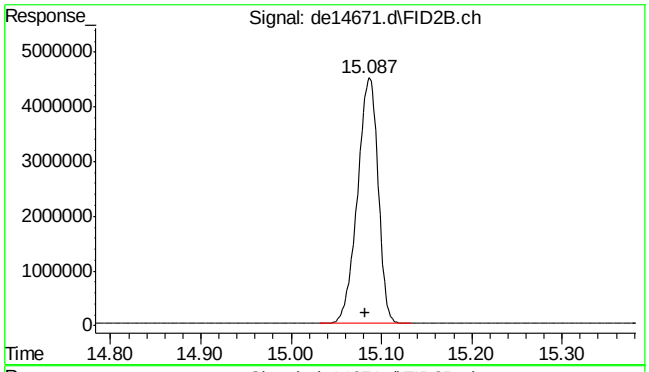
#39 c-28

R.T.: 14.343 min
Delta R.T.: 0.000 min
Response: 7155151
Conc: 94.26 µg/ml

7.4.6

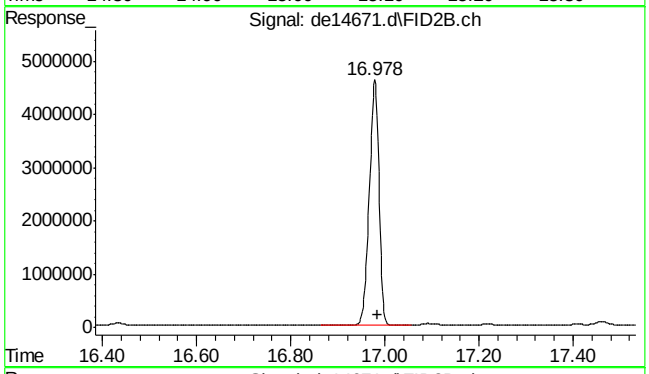
7

SGS ACCUTEST MC46737



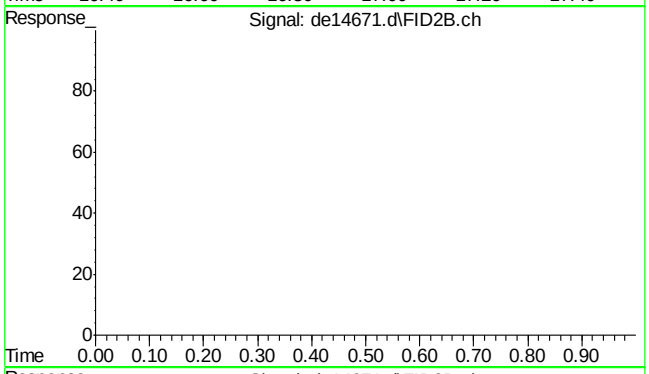
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 7181147
Conc: 87.30 µg/ml



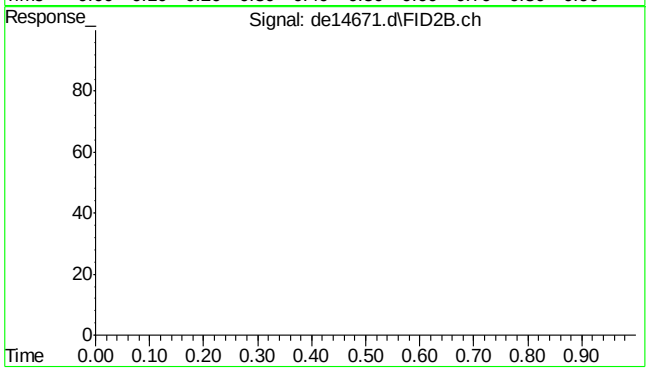
#41 c-36

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.

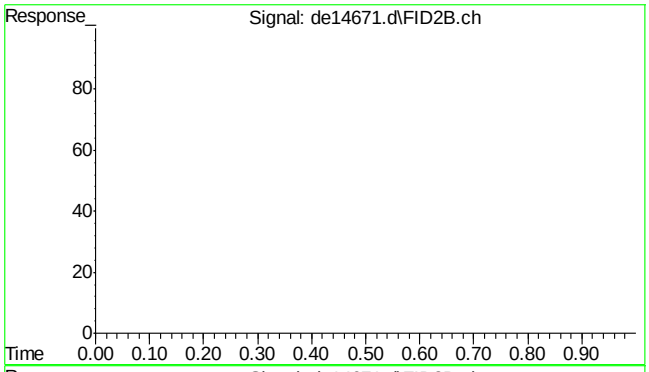


#43 bht

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

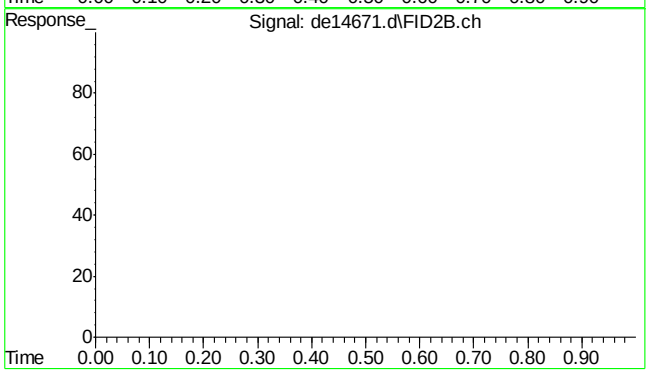
7.4.6

7



#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.

7.4.6

7

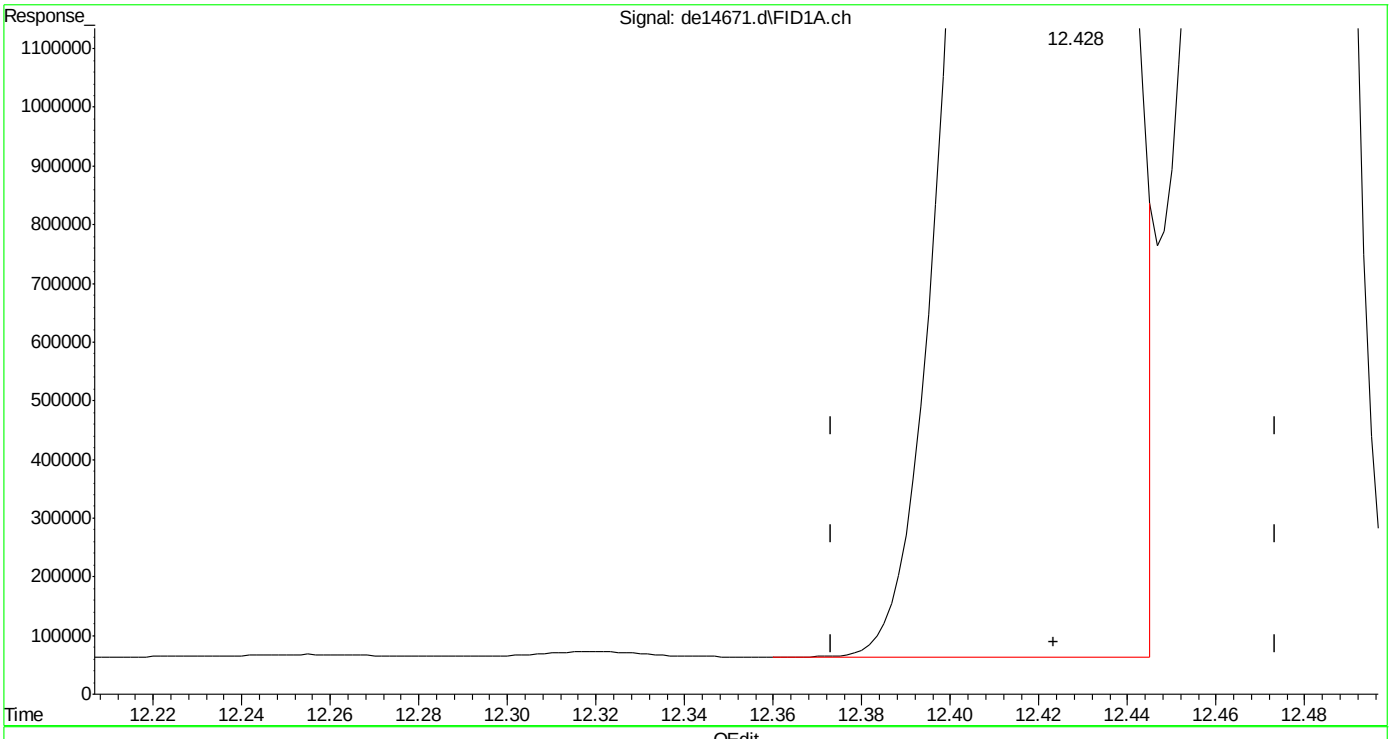
SGS ACCUTEST MC46737

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 Page: 1

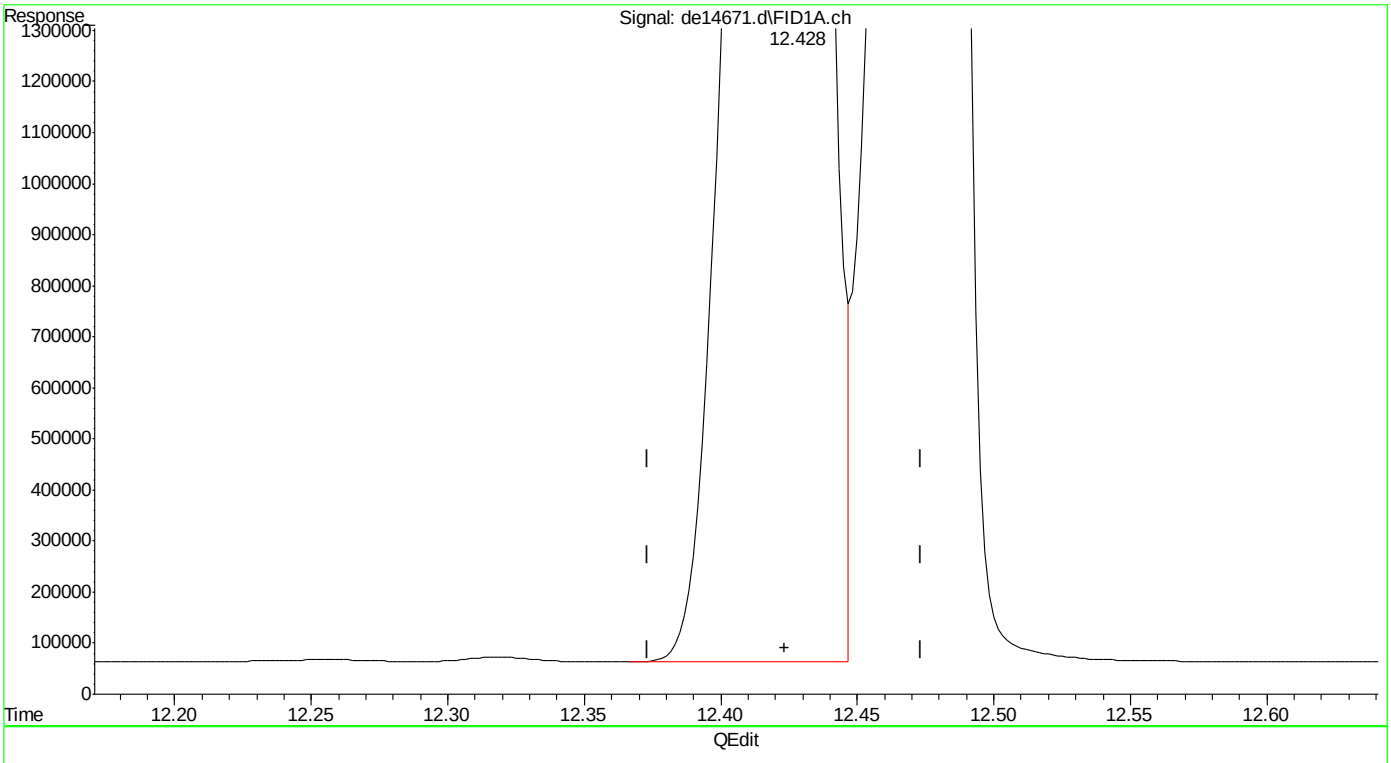
SGS ACCUTEST MC46737

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

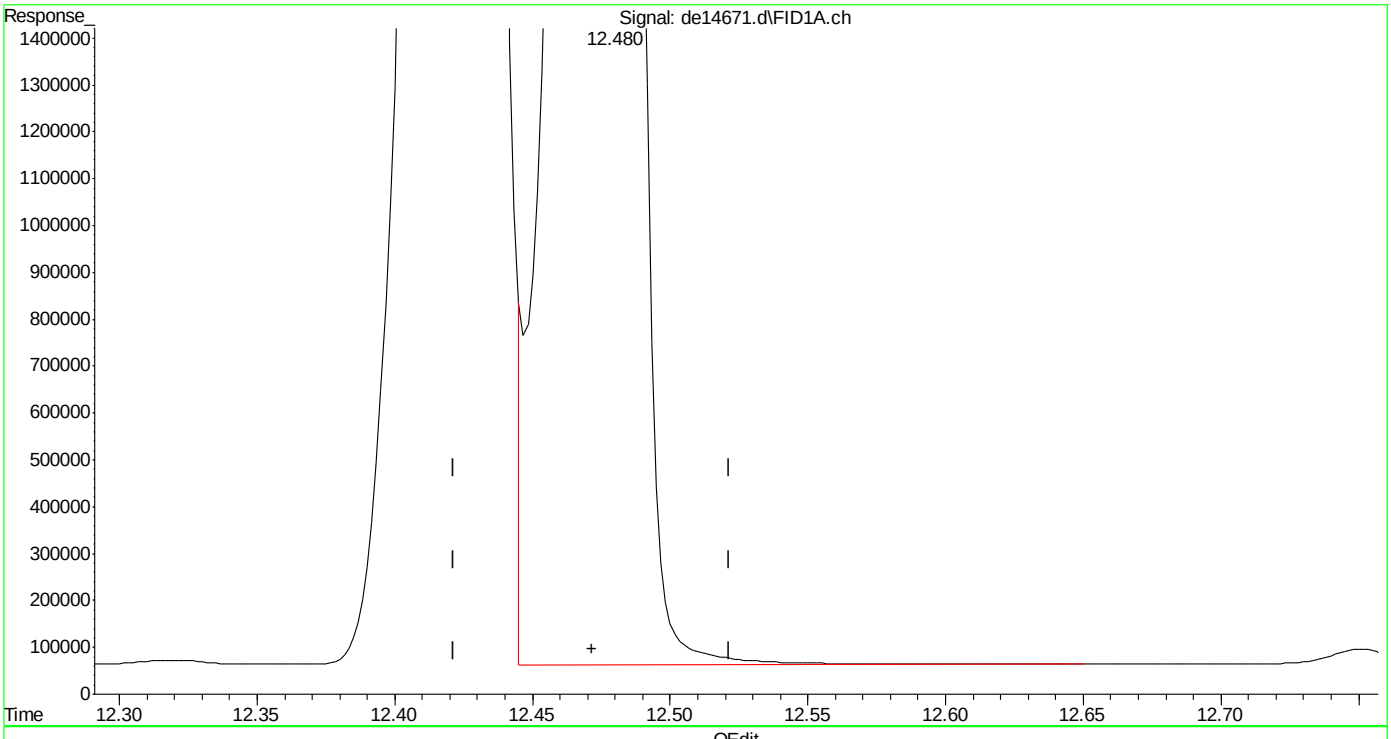
Page: 1

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

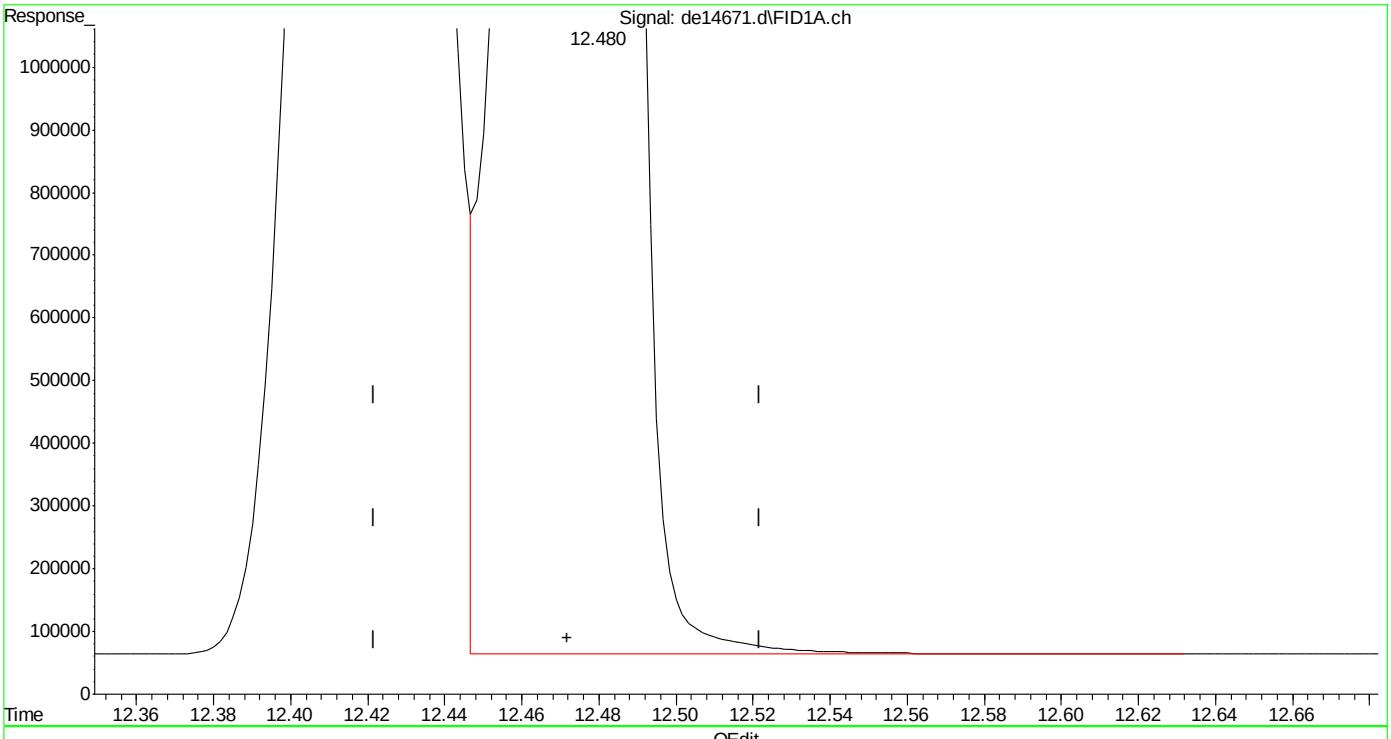
(+) = Expected Retention Time

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

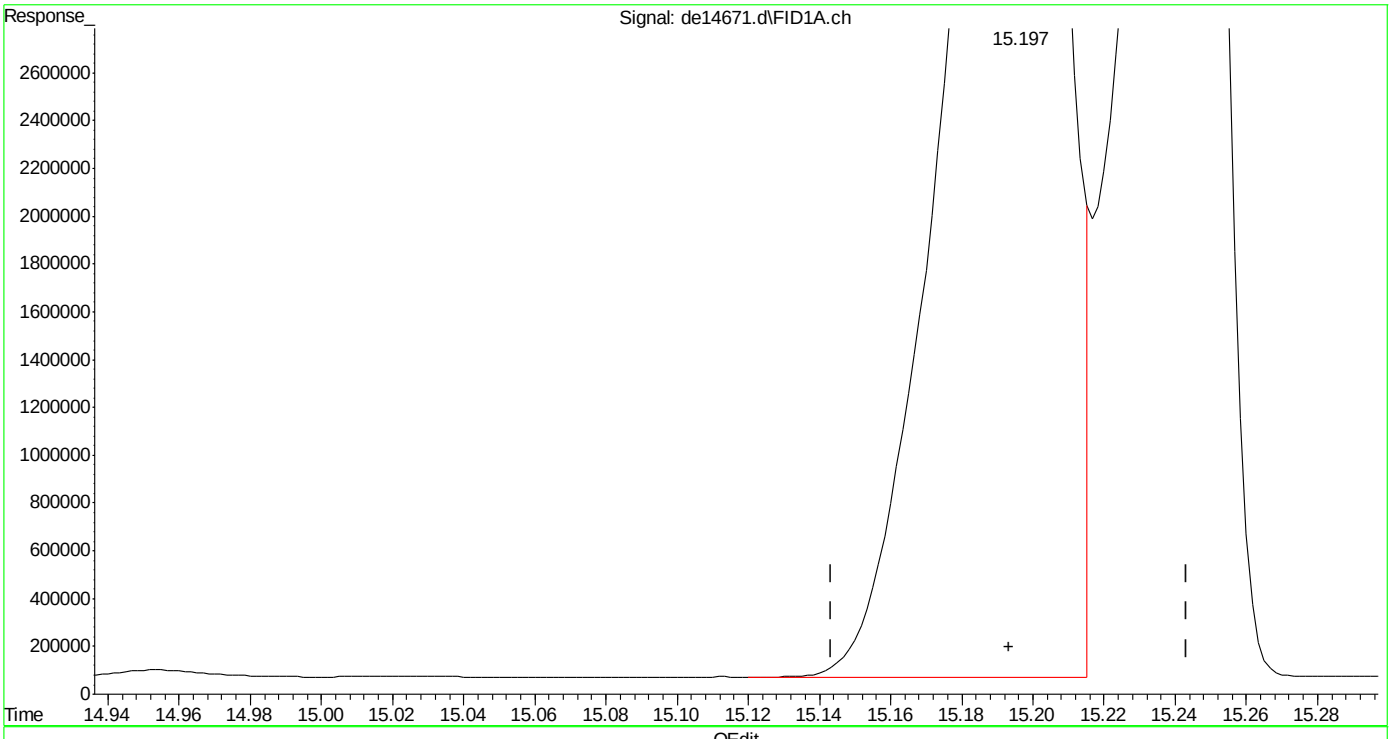
(+) = Expected Retention Time

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

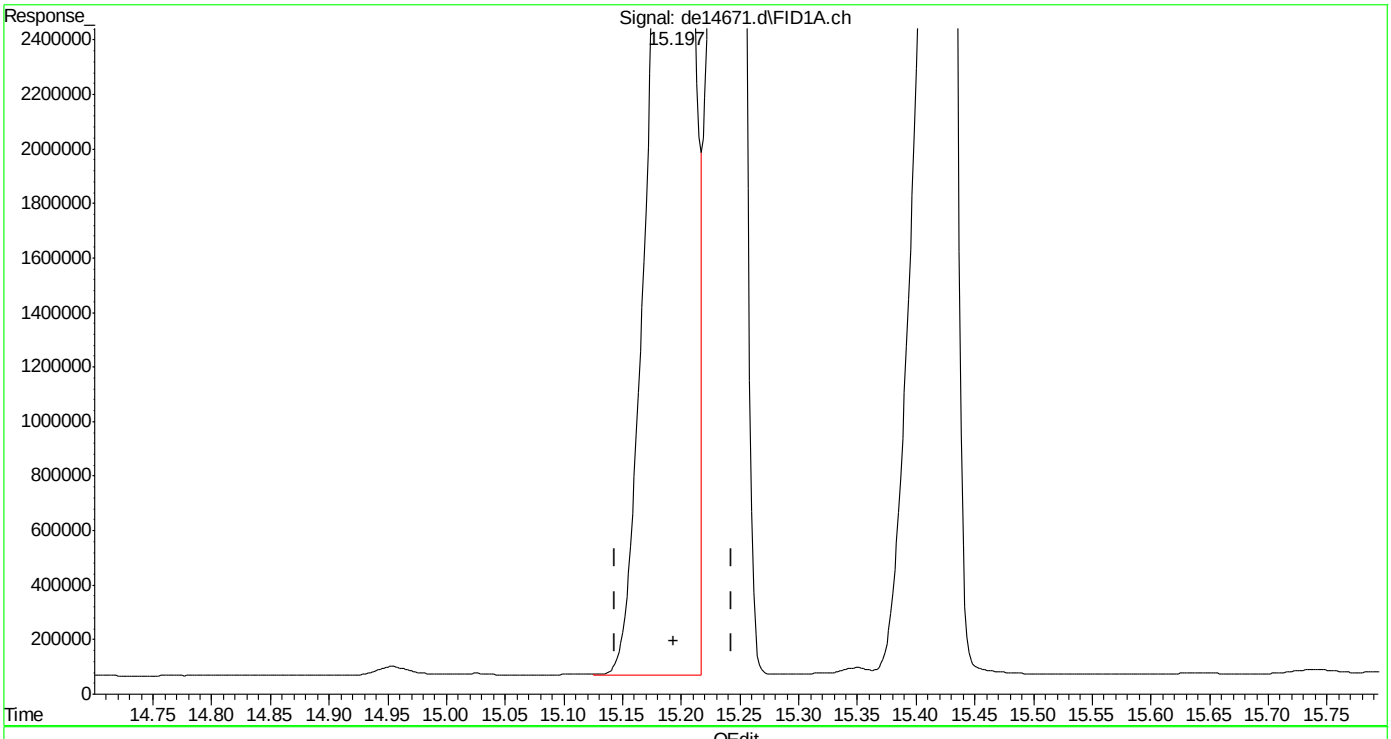
SGS ACCUTEST MC46737

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

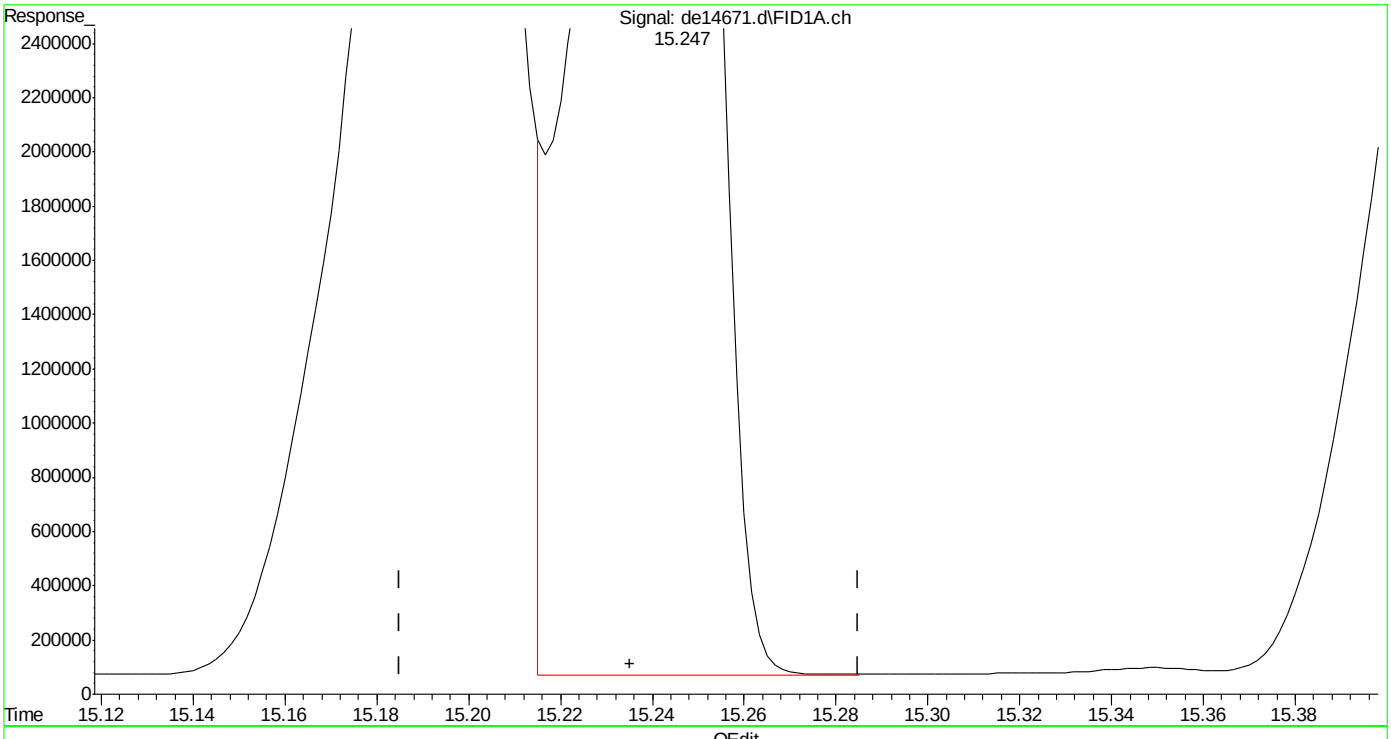
SGS ACCUTEST MC46737

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

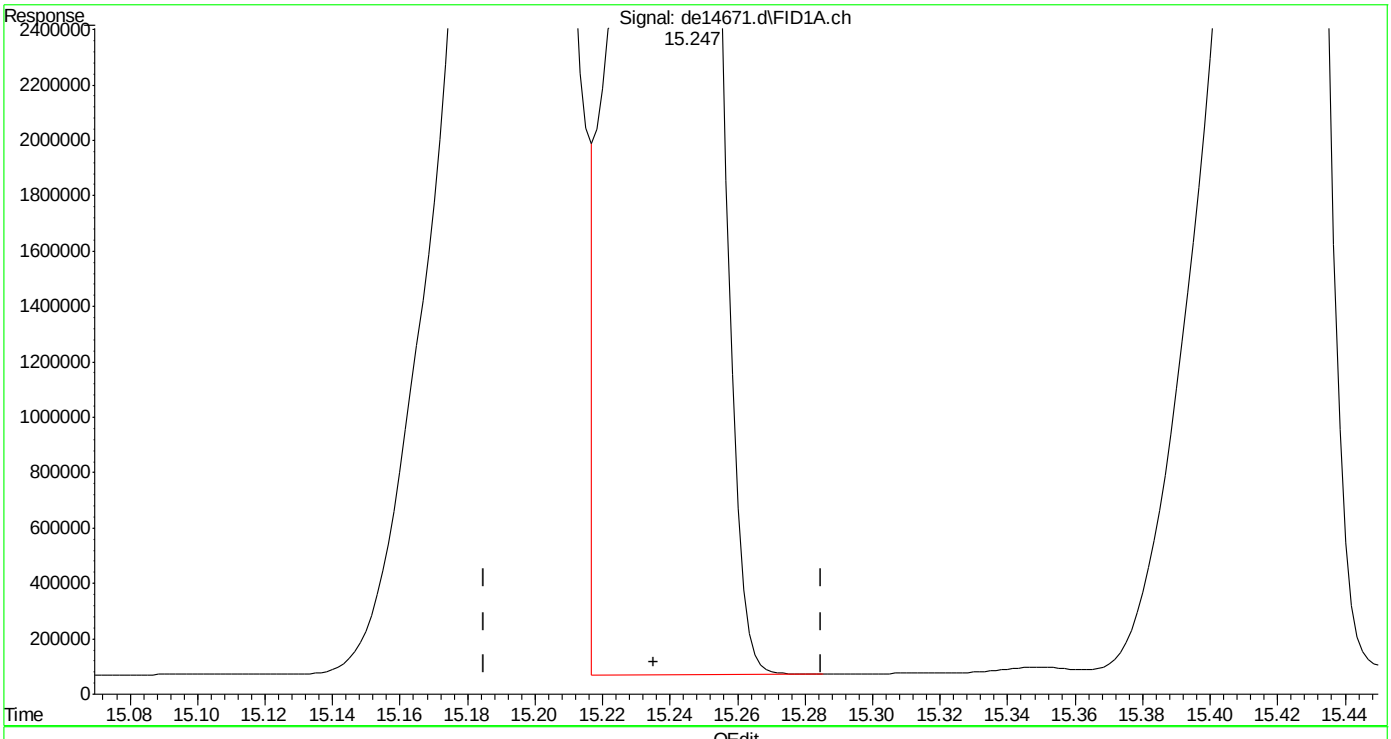
SGS ACCUTEST MC46737

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 MC46737

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 MC46737

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

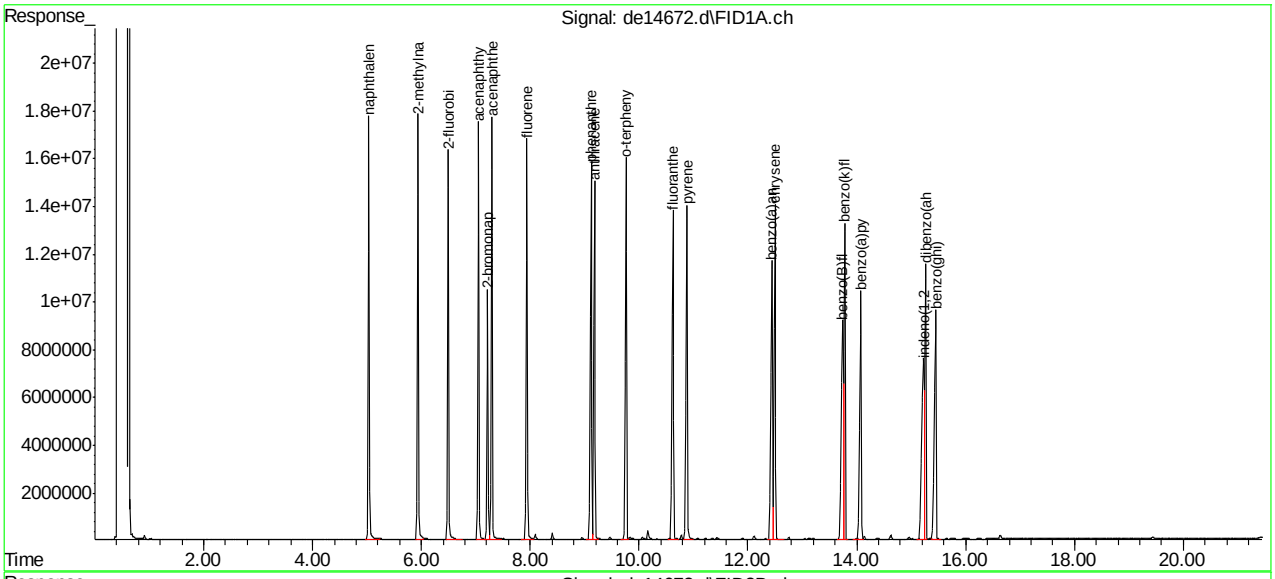
(f)=RT Delta > 1/2 Window (m)=manual int.

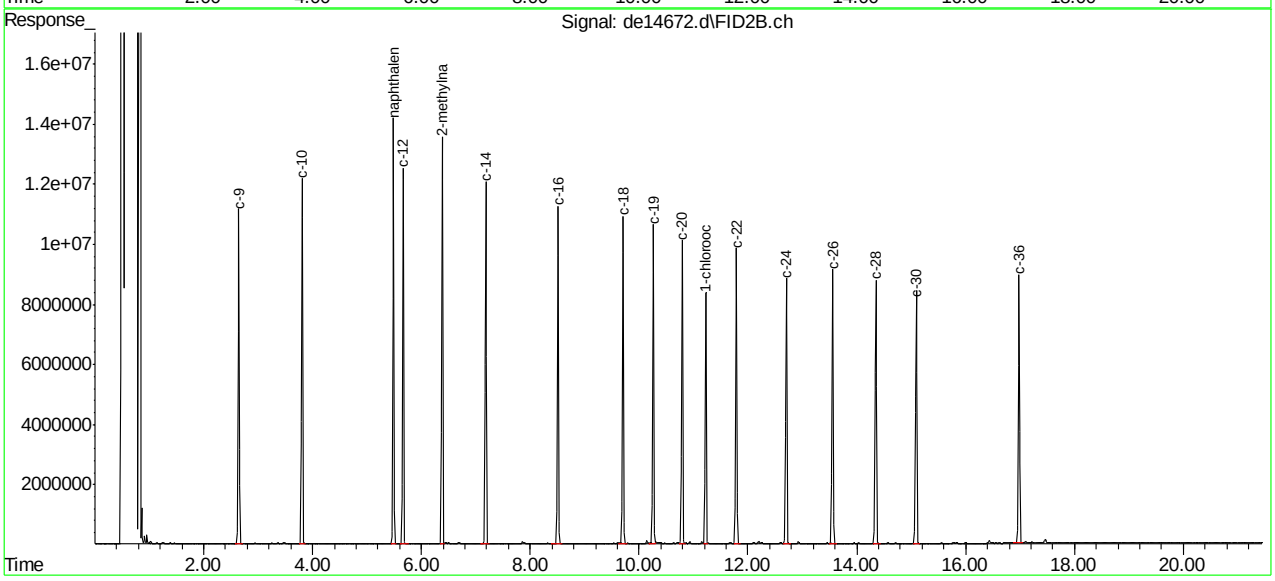
Quantitation Report (QT Reviewed)

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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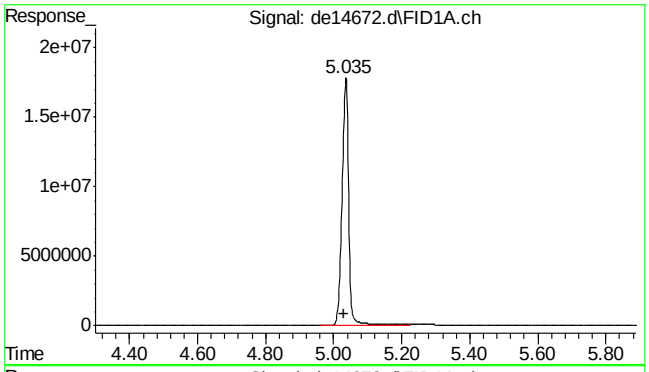
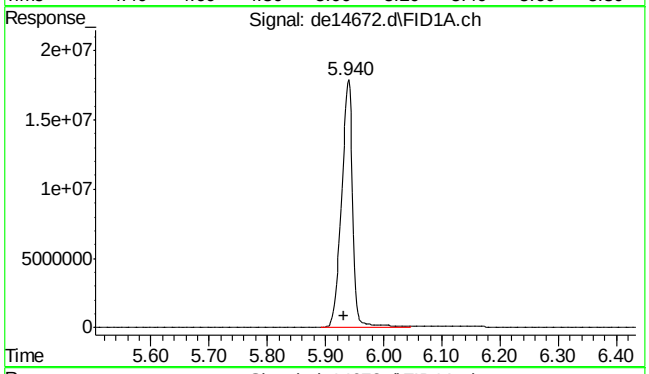


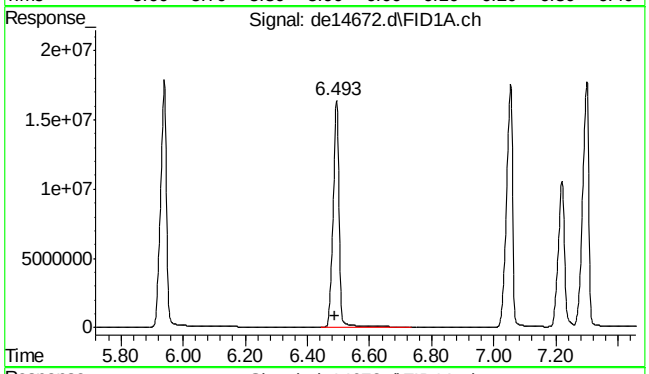
#2 naphthalene

R.T.: 5.035 min
Delta R.T.: 0.005 min
Response: 23929928
Conc: 195.61 µg/ml



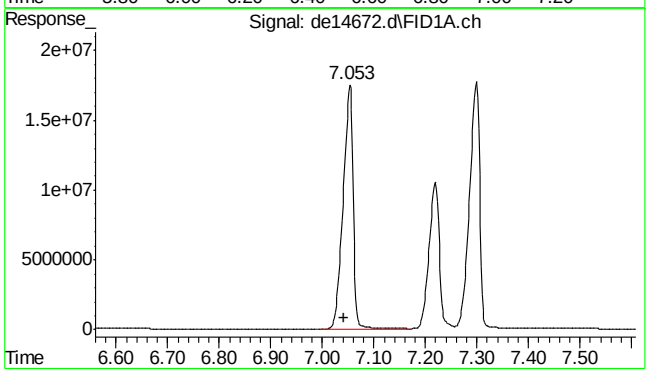
#3 2-methylnaphthalene

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

7.4.7

7

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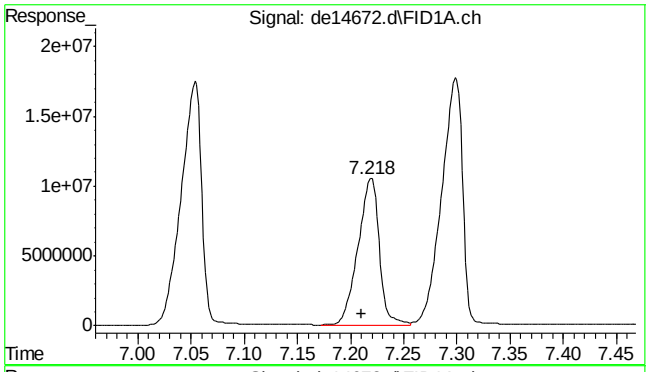
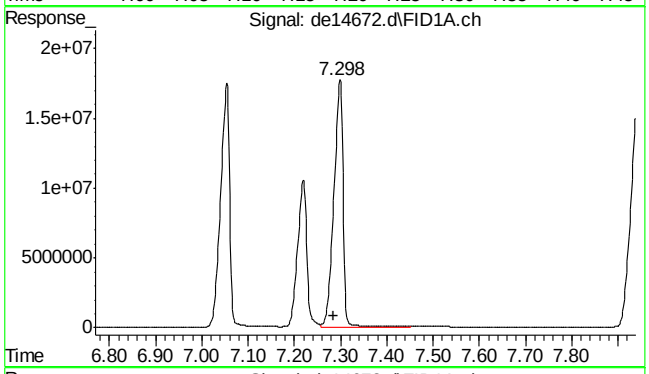


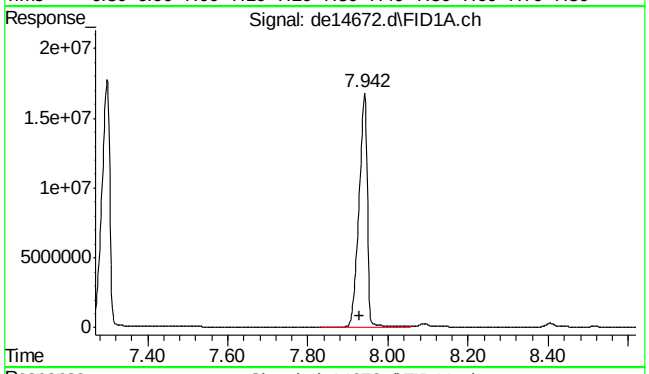
#6 2-bromonaphthalene

R.T.: 7.218 min
Delta R.T.: 0.008 min
Response: 14717575
Conc: 211.59 µg/ml



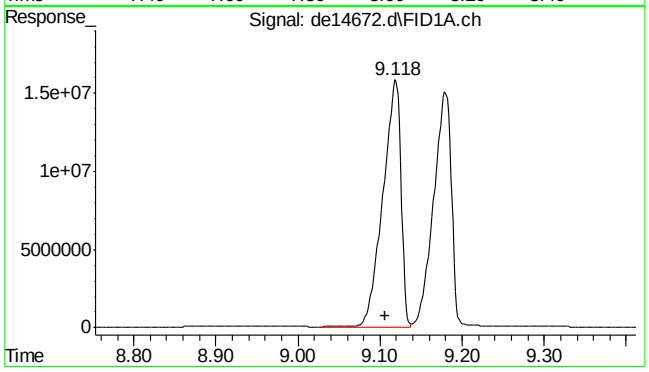
#7 acenaphthene

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



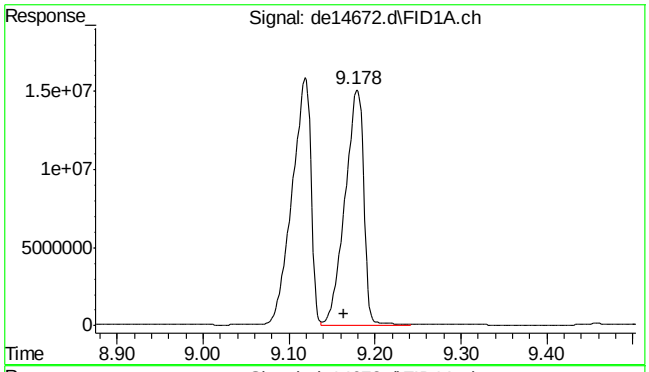
#9 phenanthrene

R.T.: 9.118 min
Delta R.T.: 0.012 min
Response: 24106717
Conc: 198.91 µg/ml

7.4.7

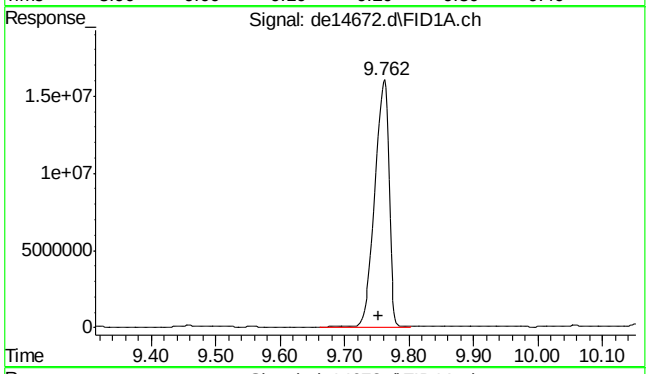
7

SGS ACCUTEST MC46737



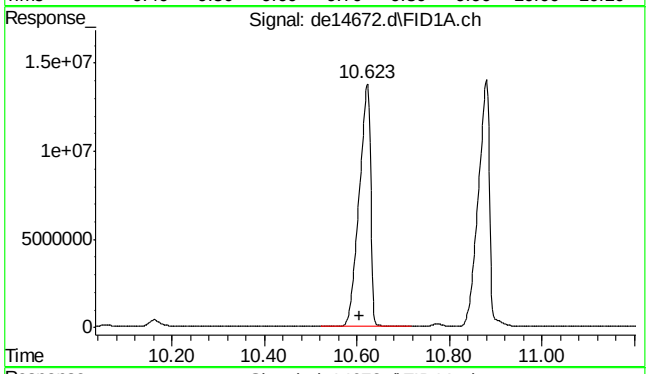
#10 anthracene

R.T.: 9.178 min
Delta R.T.: 0.015 min
Response: 22785902
Conc: 175.85 µg/ml



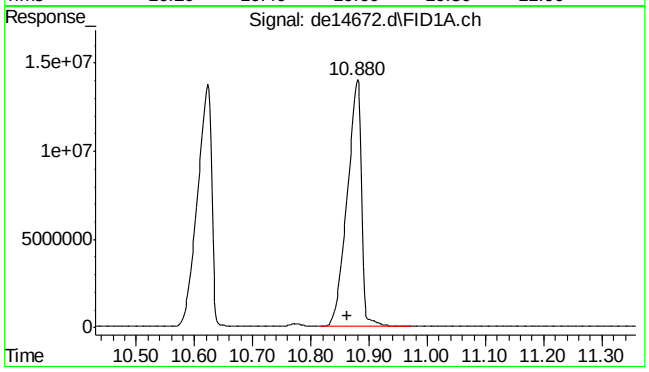
#11 o-terphenyl

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

7.4.7

7

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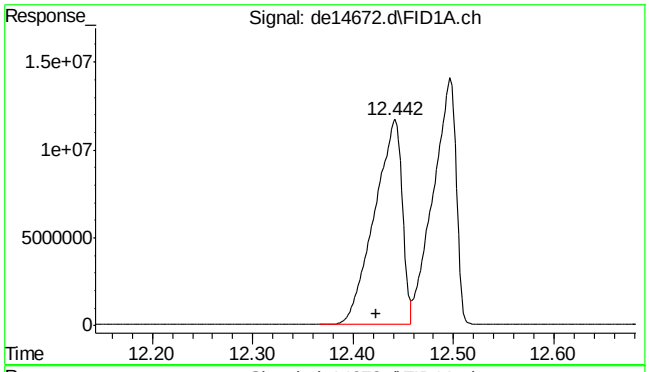
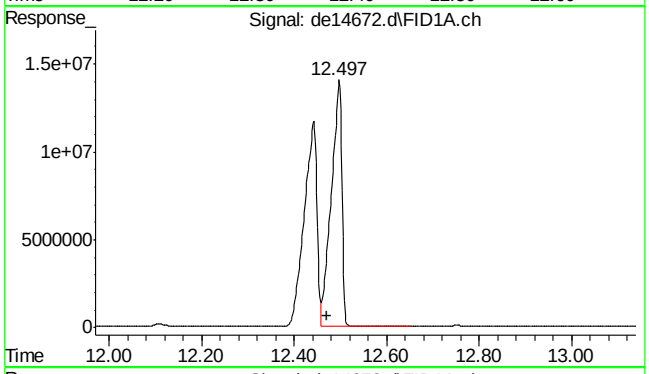


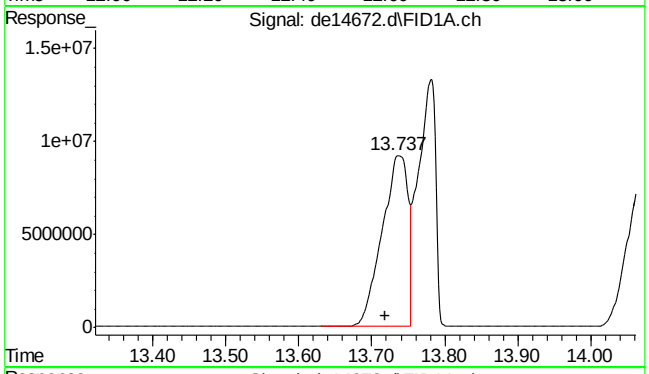
#14 benzo(a)anthracene

R.T.: 12.442 min
Delta R.T.: 0.018 min
Response: 22291957
Conc: 188.39 µg/ml



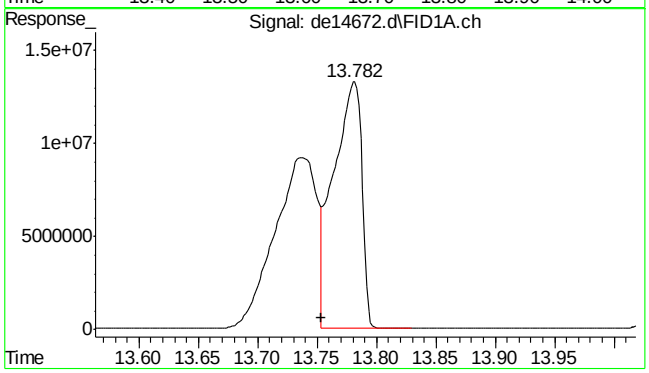
#15 chrysene

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



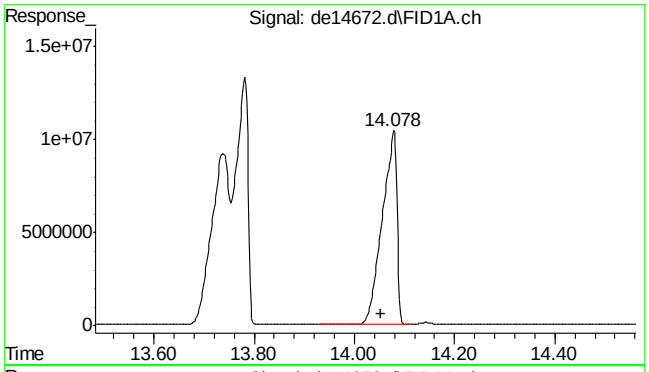
#17 benzo(k)fluoranthene

R.T.: 13.782 min
Delta R.T.: 0.028 min
Response: 21742175
Conc: 174.58 µg/ml m

7.4.7

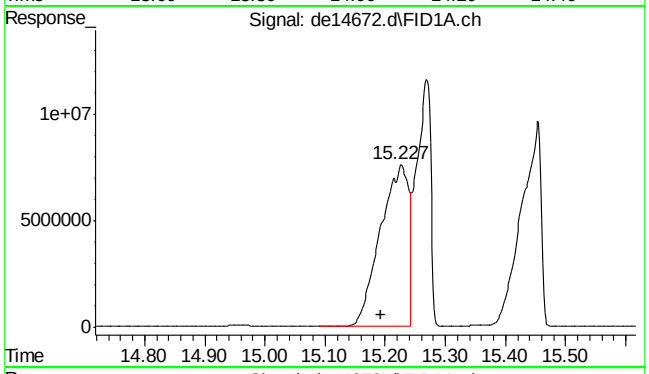
7

SGS ACCUTEST MC46737



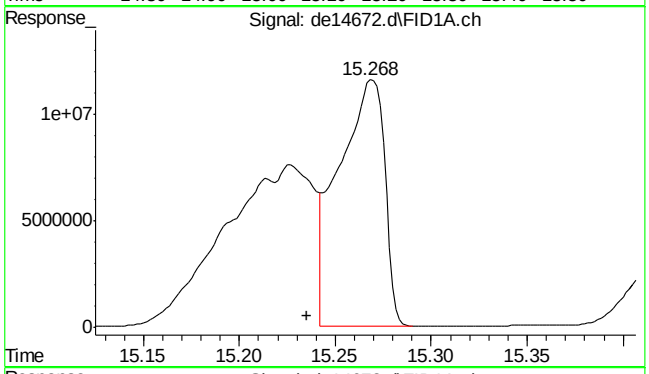
#18 benzo(a)pyrene

R.T.: 14.078 min
Delta R.T.: 0.025 min
Response: 21269399
Conc: 184.73 µg/ml



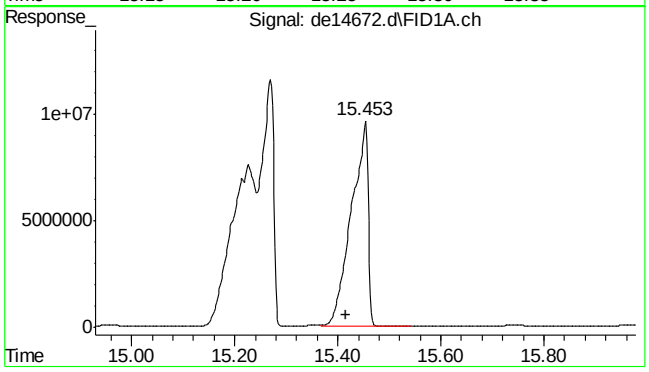
#19 indeno(1,2,3-cd)pyrene

R.T.: 15.227 min
Delta R.T.: 0.033 min
Response: 24533309
Conc: 217.38 µg/ml



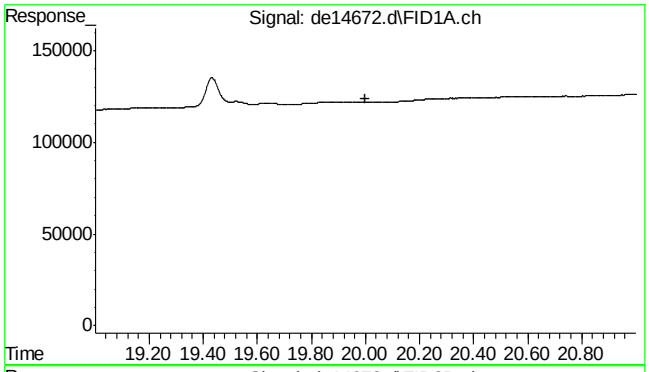
#20 dibenzo(ah)anthracene

R.T.: 15.268 min
Delta R.T.: 0.033 min
Response: 19101555
Conc: 171.27 µg/ml m



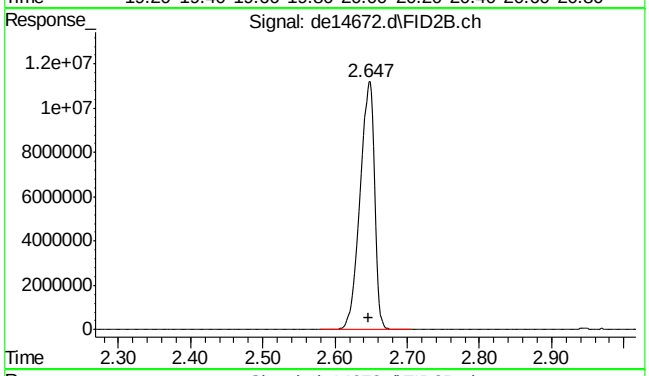
#21 benzo(ghi)perylene

R.T.: 15.453 min
Delta R.T.: 0.037 min
Response: 21702878
Conc: 196.42 µg/ml



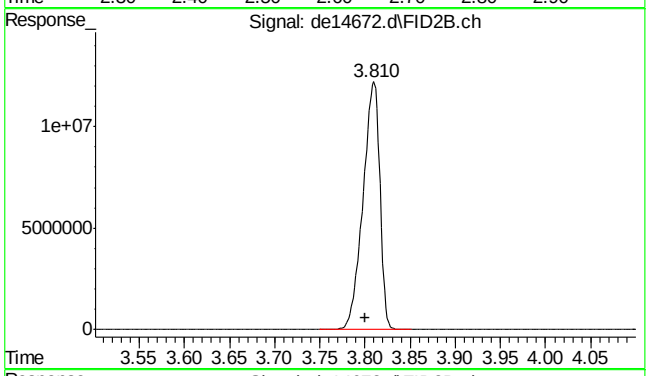
#22 bht

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



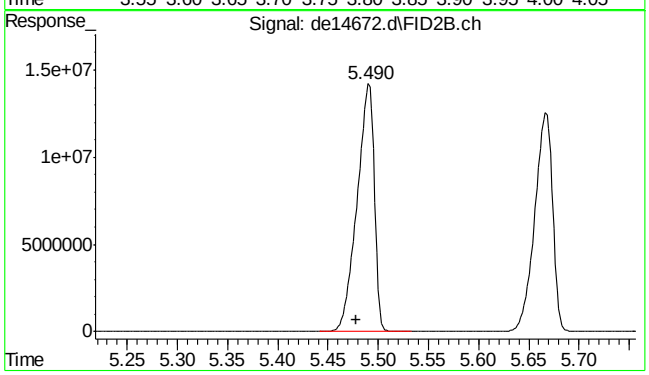
#25 c-9

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

7.4.7

7

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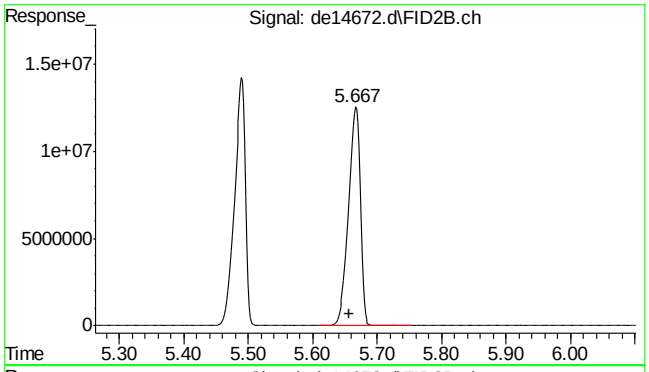
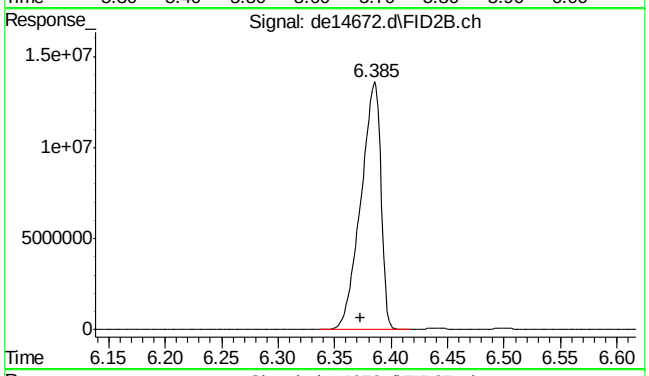


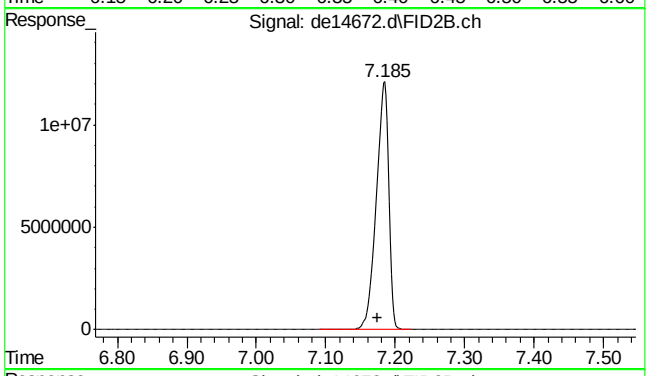
#28 c-12

R.T.: 5.667 min
Delta R.T.: 0.010 min
Response: 15551710
Conc: 185.95 µg/ml



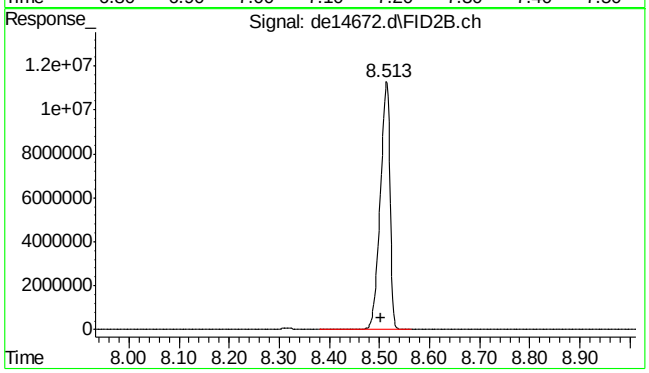
#29 2-methylnaphthalene #2

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



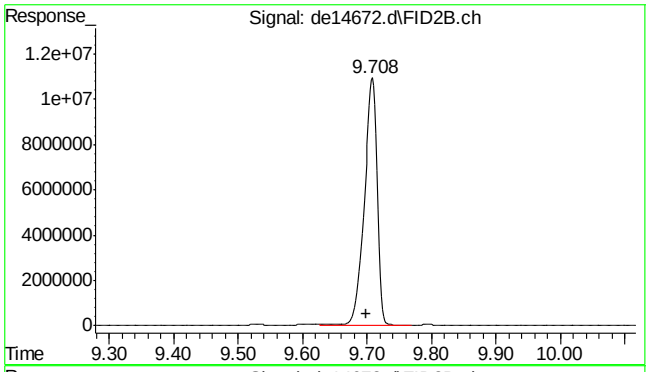
#31 c-16

R.T.: 8.513 min
Delta R.T.: 0.010 min
Response: 15150013
Conc: 180.33 µg/ml

7.4.7

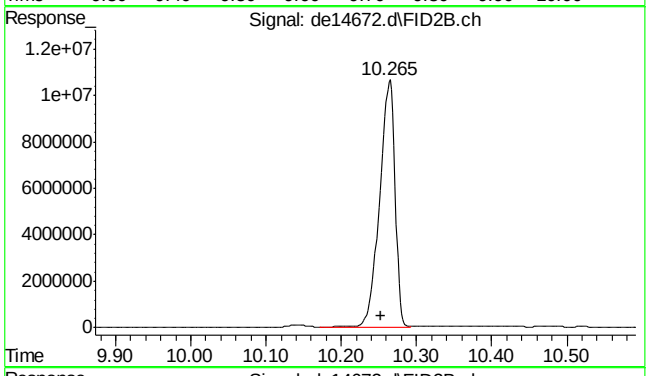
7

SGS ACCUTEST MC46737



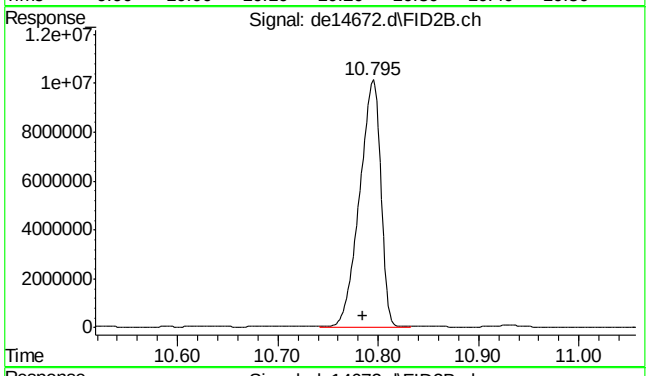
#32 c-18

R.T.: 9.708 min
Delta R.T.: 0.010 min
Response: 15122313
Conc: 183.09 µg/ml



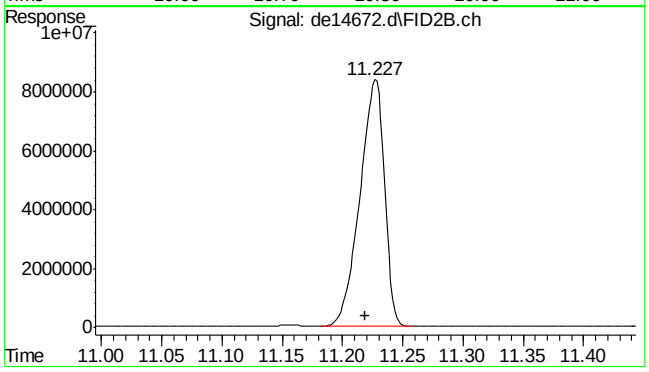
#33 c-19

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



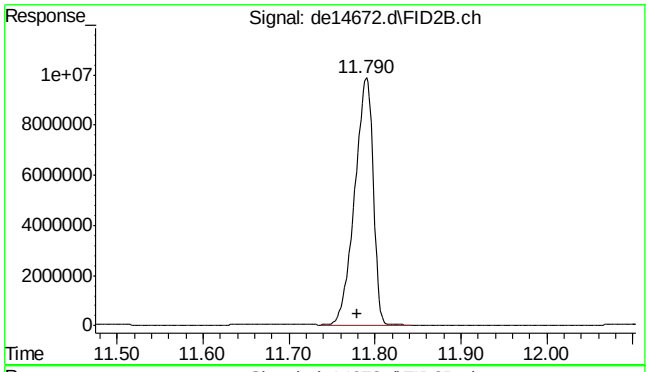
#35 1-chlorooctadecane

R.T.: 11.227 min
Delta R.T.: 0.008 min
Response: 11946306
Conc: 187.63 µg/ml

7.4.7

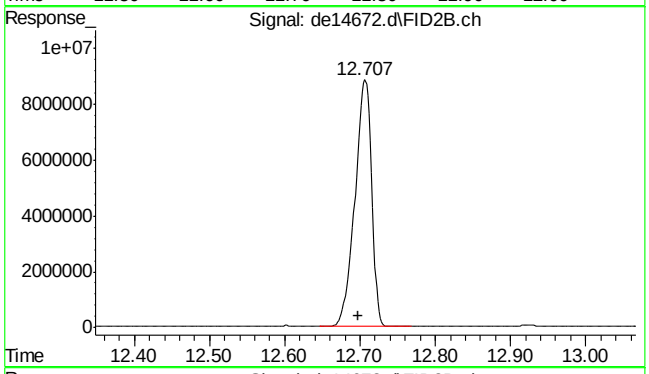
7

SGS ACCUTEST MC46737



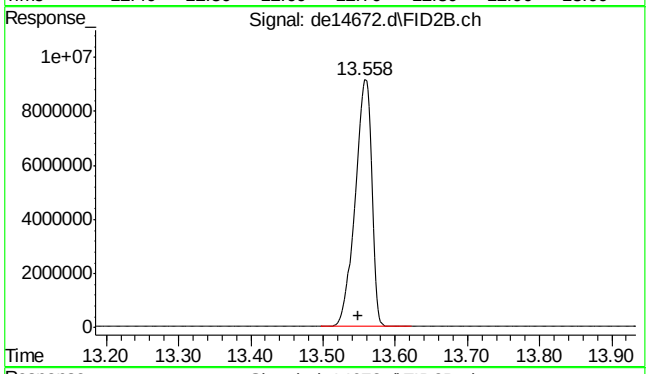
#36 c-22

R.T.: 11.790 min
Delta R.T.: 0.010 min
Response: 14630809
Conc: 185.05 µg/ml



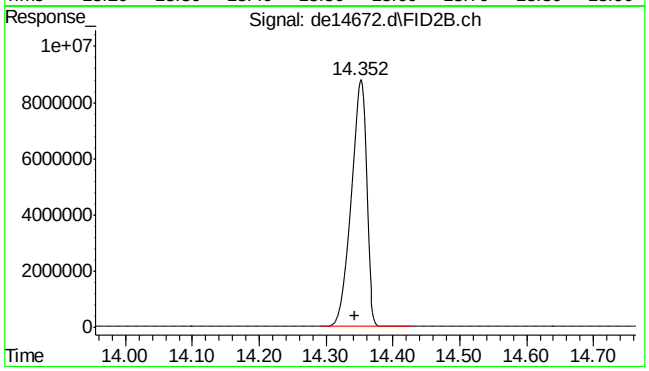
#37 c-24

R.T.: 12.707 min
Delta R.T.: 0.008 min
Response: 13632931
Conc: 181.95 µg/ml



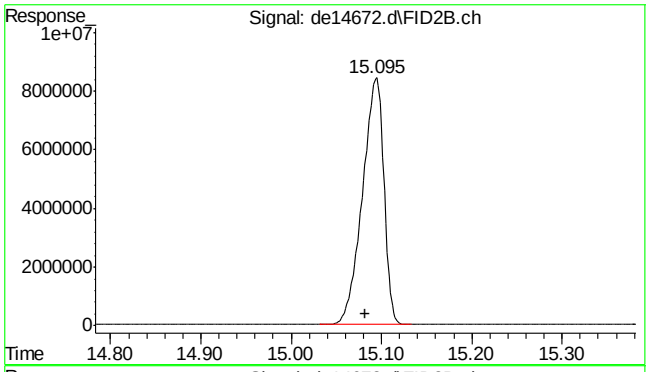
#38 c-26

R.T.: 13.558 min
Delta R.T.: 0.010 min
Response: 14575529
Conc: 185.42 µg/ml



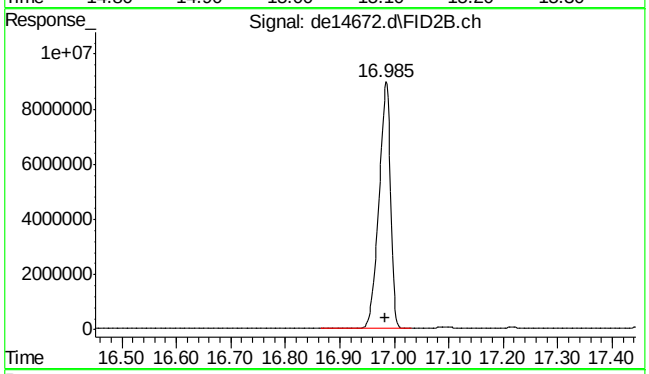
#39 c-28

R.T.: 14.352 min
Delta R.T.: 0.008 min
Response: 14116516
Conc: 187.51 µg/ml



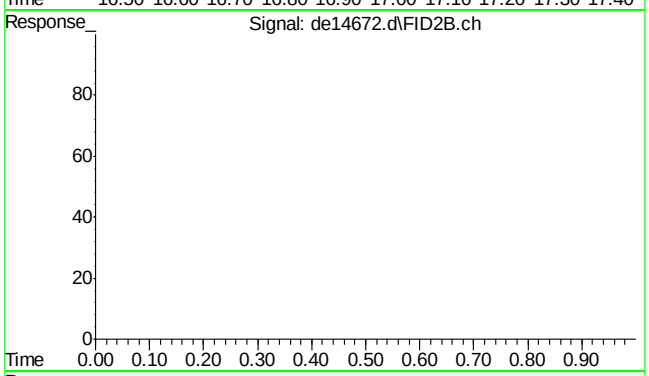
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 13936754
Conc: 172.56 µg/ml



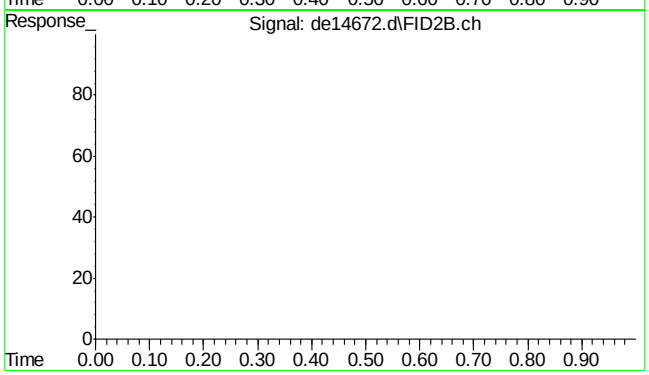
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 13213232
Conc: 196.25 µg/ml m



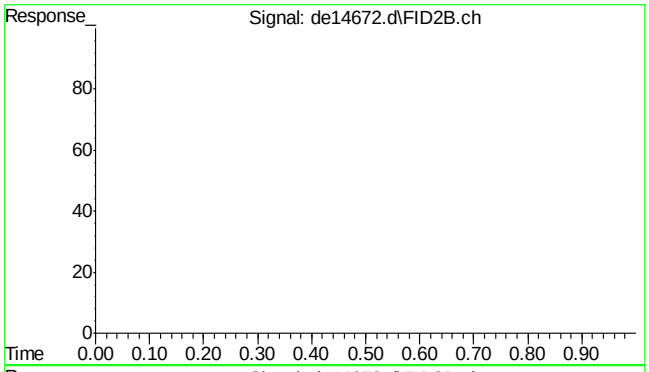
#42 bht

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



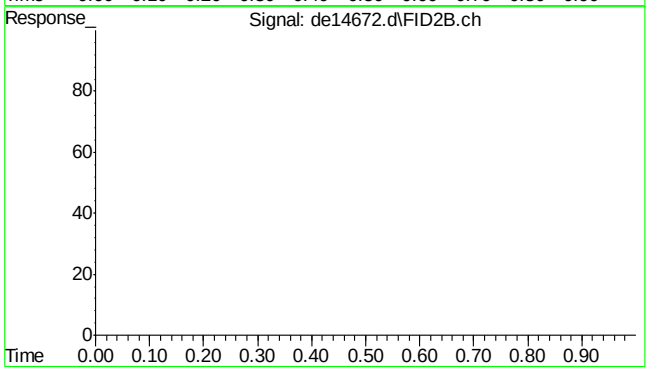
#43 bht

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



#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.
```

7.4.7

7

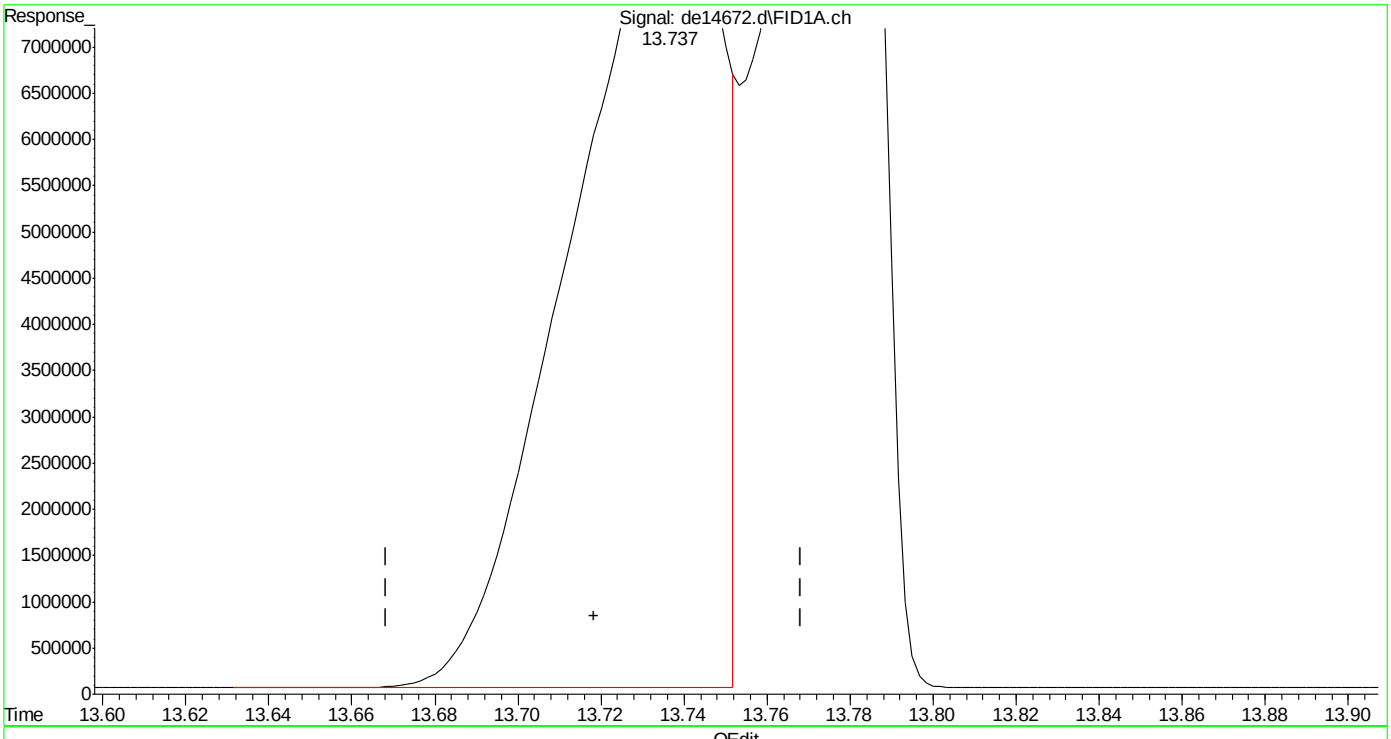
SGS ACCUTEST MC46737

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

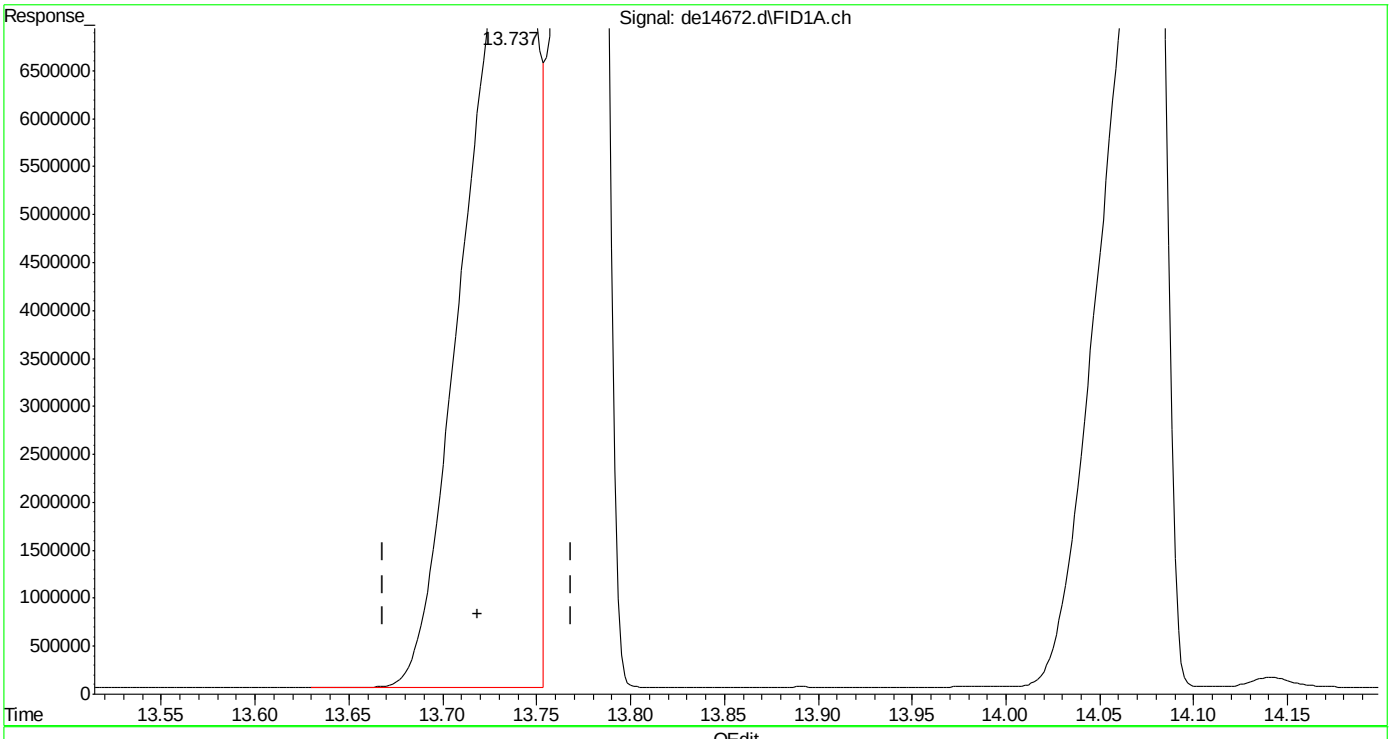
SGS ACCUTEST MC46737

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

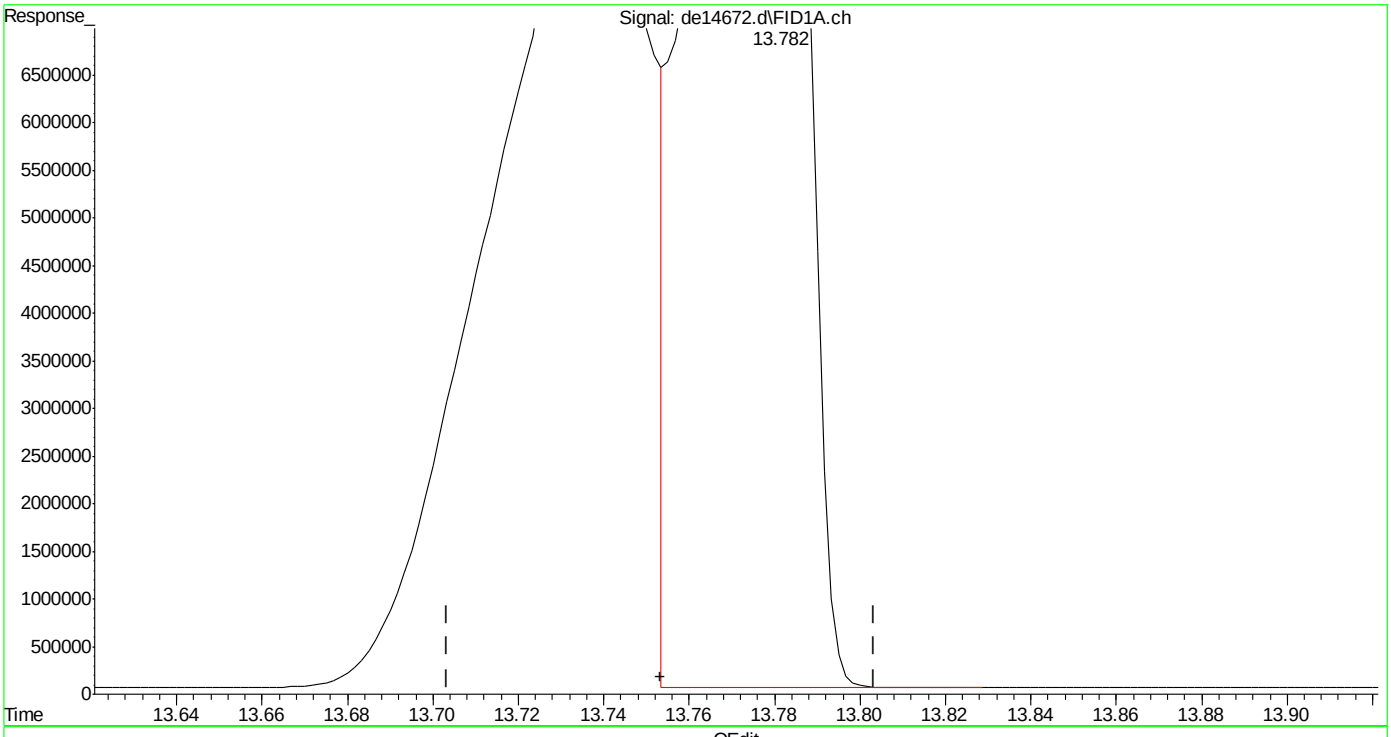
SGS ACCUTEST MC46737

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

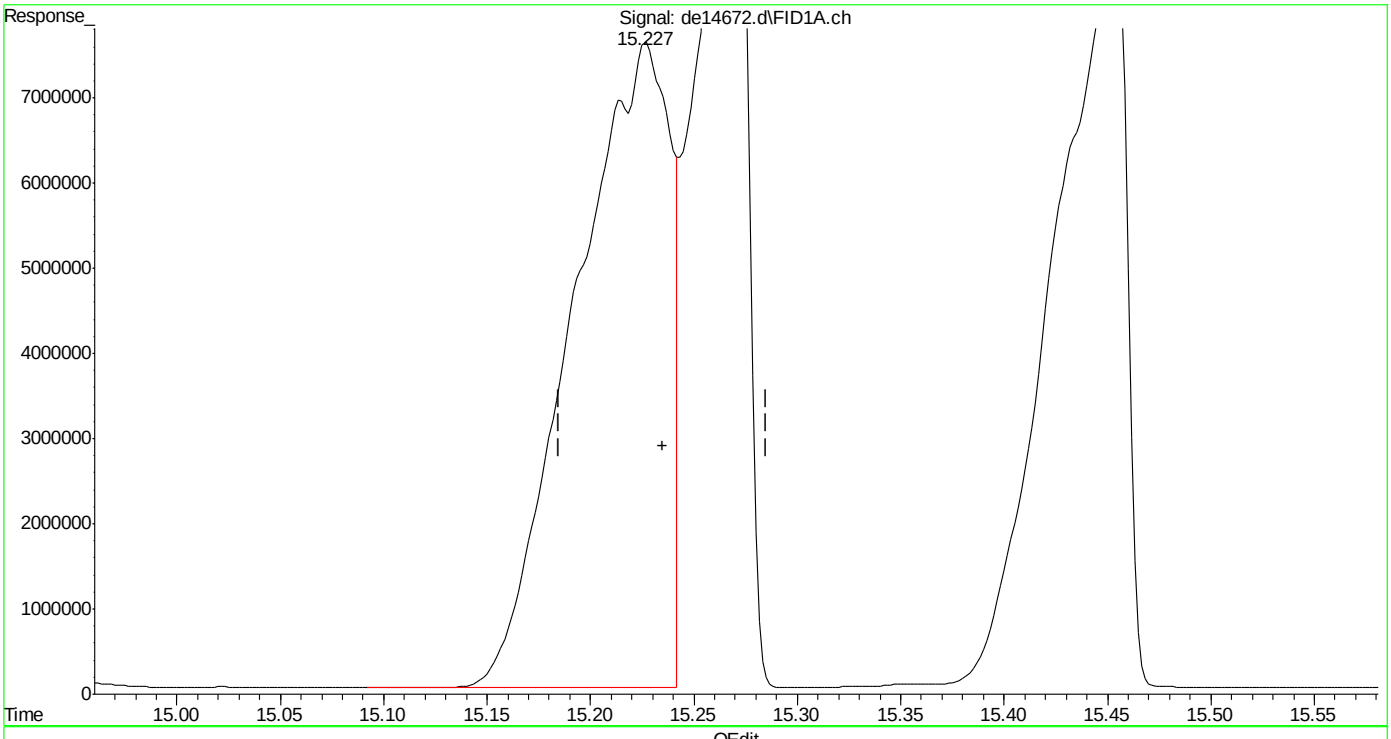
SGS ACCUTEST MC46737

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
EPH160622W.M Thu Jun 23 08:00:29 2016

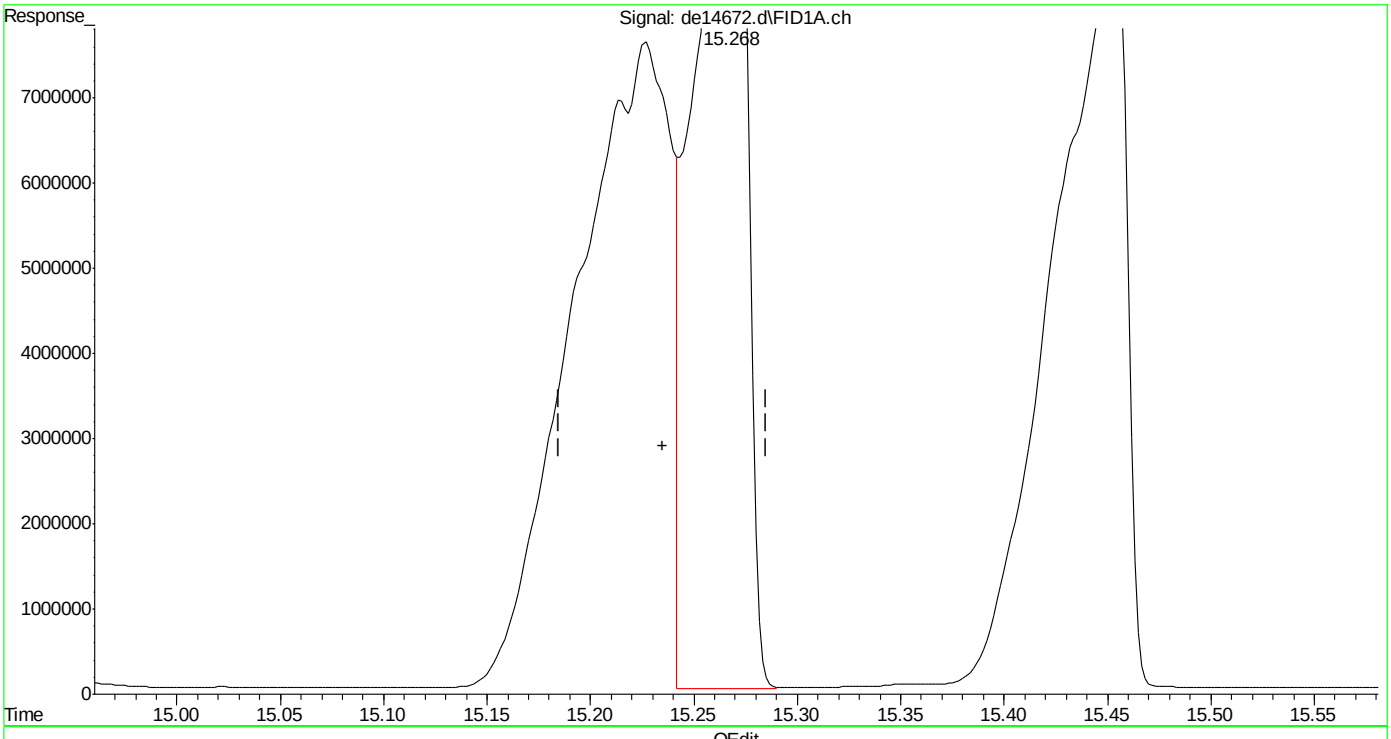
SGS ACCUTEST MC46737

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

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

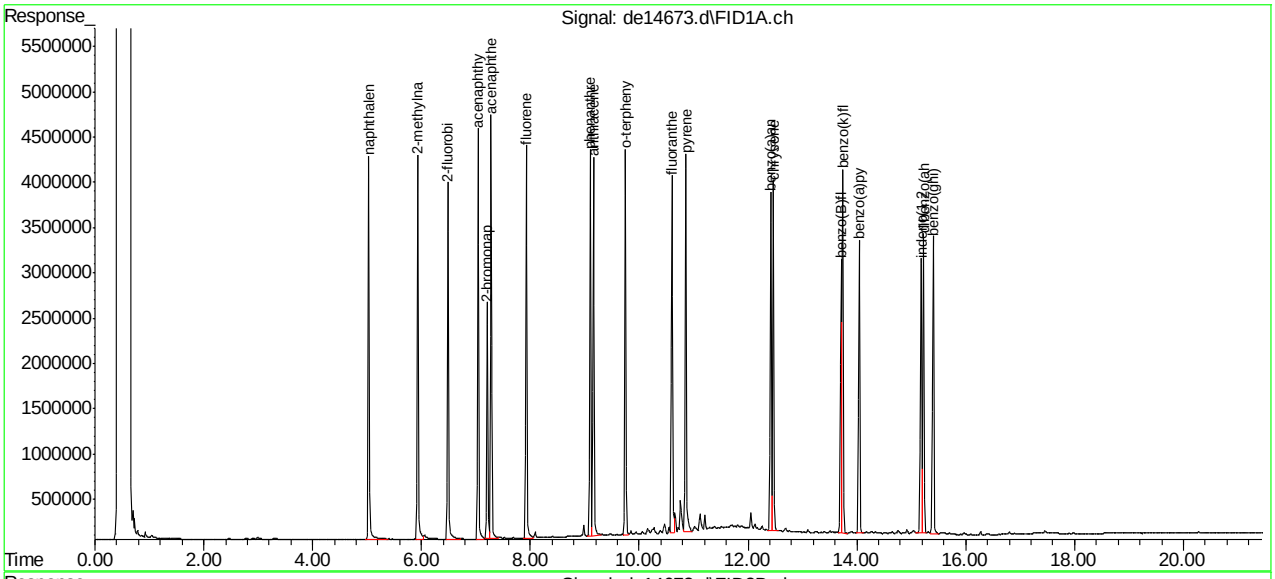
(f)=RT Delta > 1/2 Window (m)=manual int.

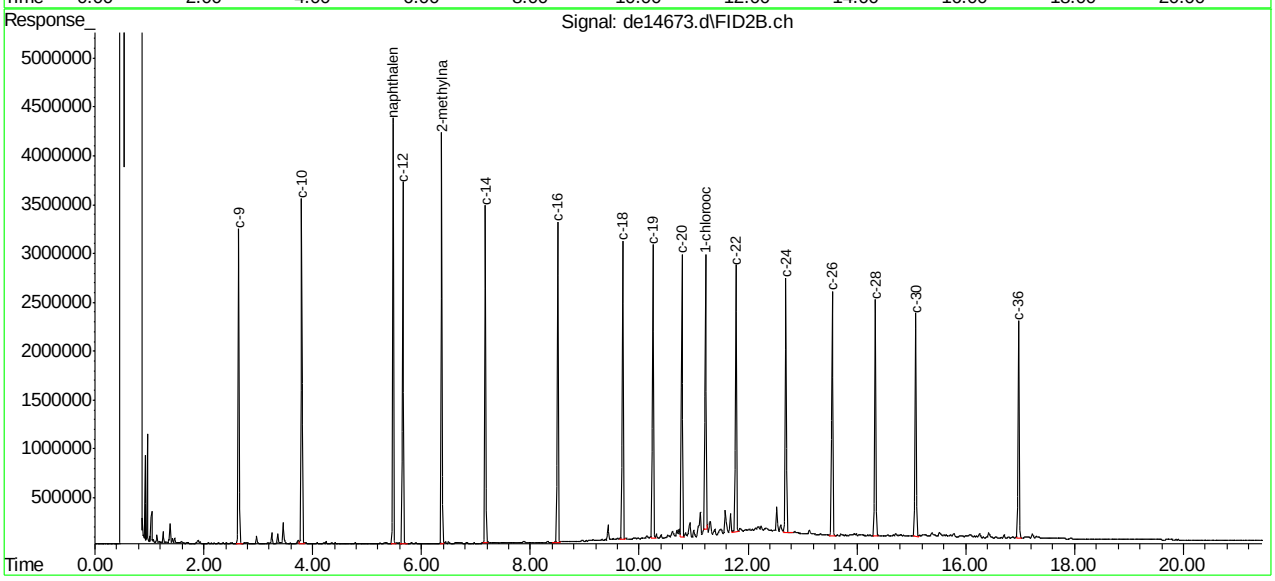
Quantitation Report (QT Reviewed)

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

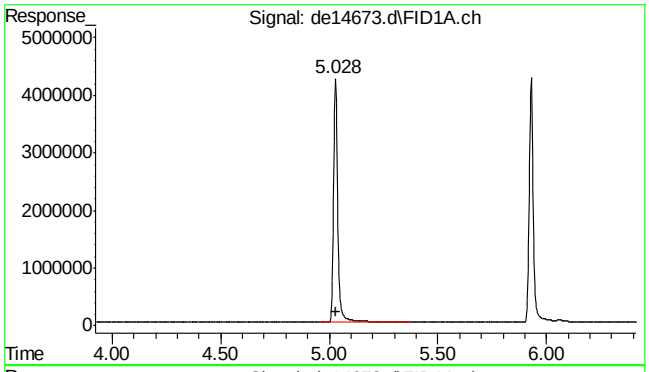
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jun 23 08:13:26 2016
Quant Method : C:\msdchem\1\METHODS\EPH160622W.M
Quant Title : BMAEPH-working method
QLast Update : Thu Jun 23 08:10:23 2016
Response via : Initial Calibration
Integrator: RTE

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



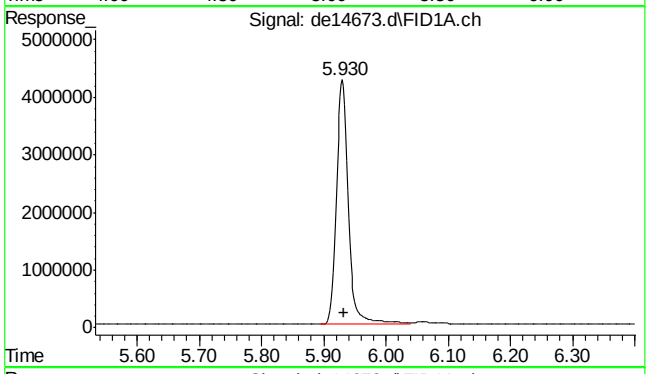


SGS ACCUTEST MC46737



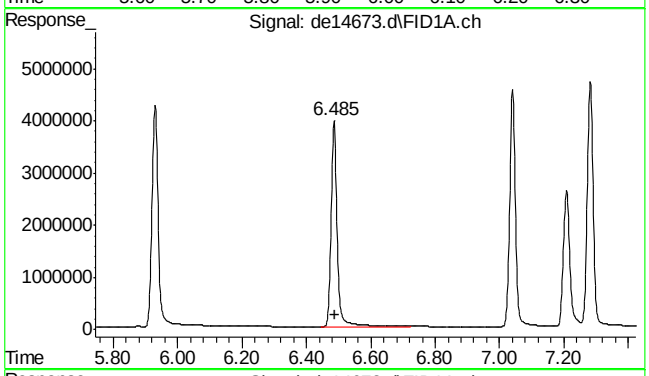
#2 naphthalene

R.T.: 5.028 min
Delta R.T.: -0.002 min
Response: 5919992
Conc: 47.16 µg/ml



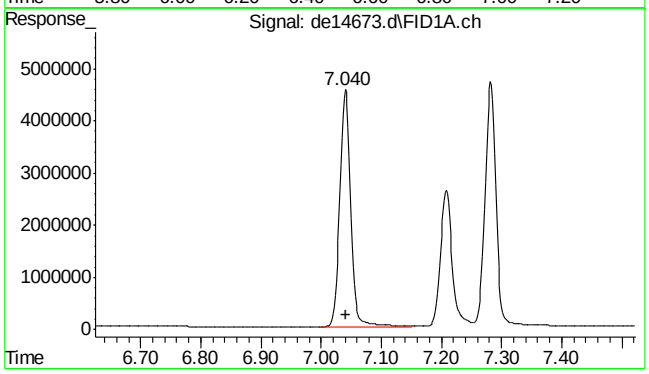
#3 2-methylnaphthalene

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

7.4.8

7

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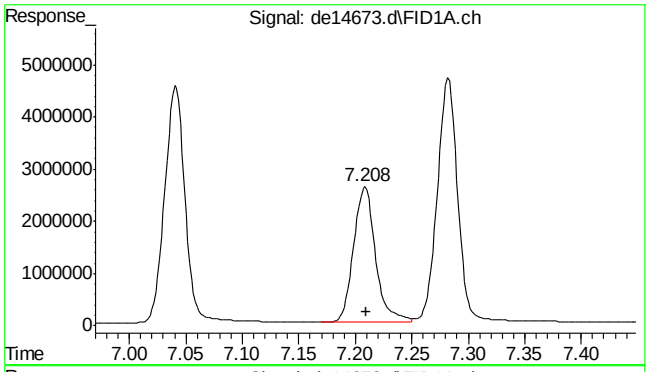
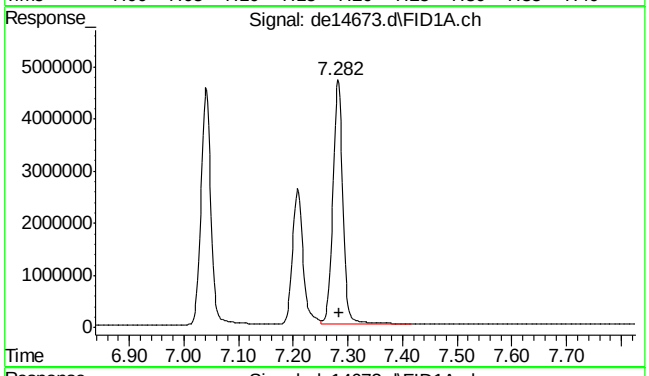


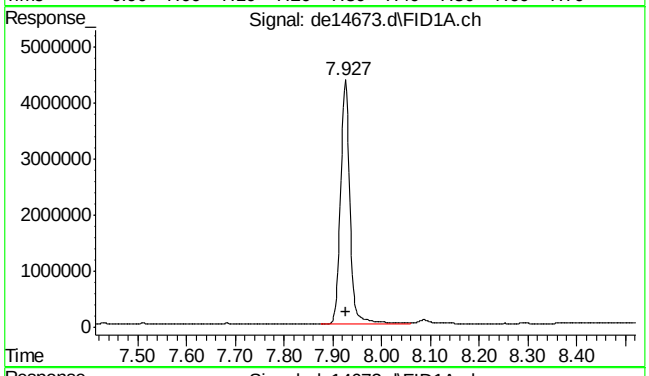
#6 2-bromonaphthalene

R.T.: 7.208 min
Delta R.T.: -0.002 min
Response: 3494534
Conc: 48.74 µg/ml



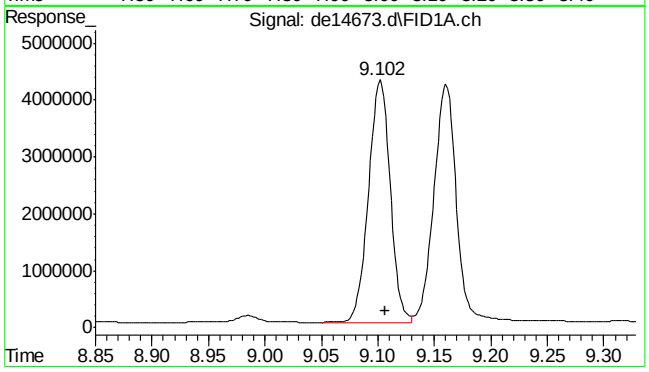
#7 acenaphthene

R.T.: 7.282 min
Delta R.T.: -0.003 min
Response: 5957493
Conc: 42.77 µg/ml



#8 fluorene

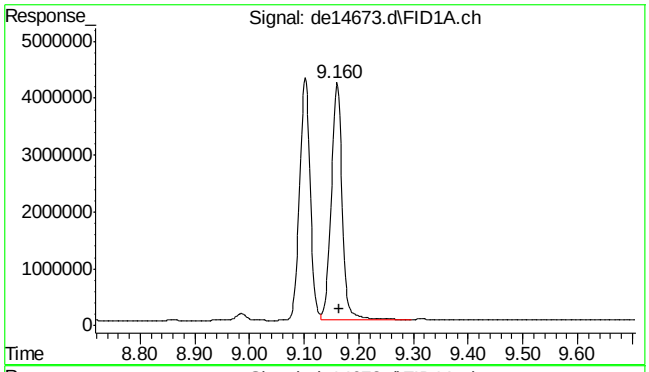
R.T.: 7.927 min
Delta R.T.: -0.002 min
Response: 5819321
Conc: 45.30 µg/ml



#9 phenanthrene

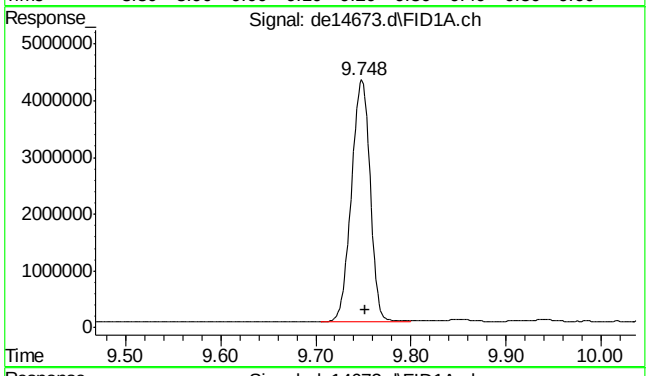
R.T.: 9.102 min
Delta R.T.: -0.005 min
Response: 5709676
Conc: 45.71 µg/ml

SGS ACCUTEST MC46737



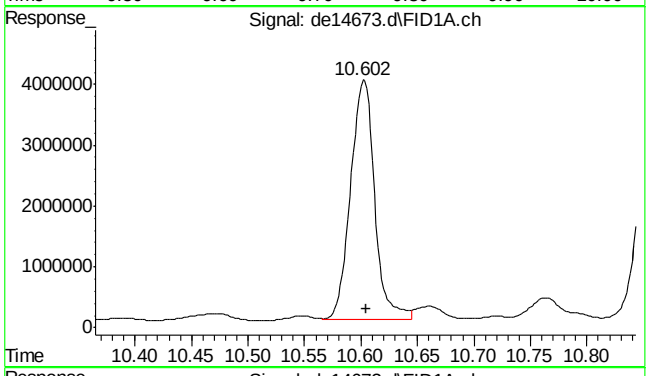
#10 anthracene

R.T.: 9.160 min
Delta R.T.: -0.003 min
Response: 5877713
Conc: 44.18 µg/ml



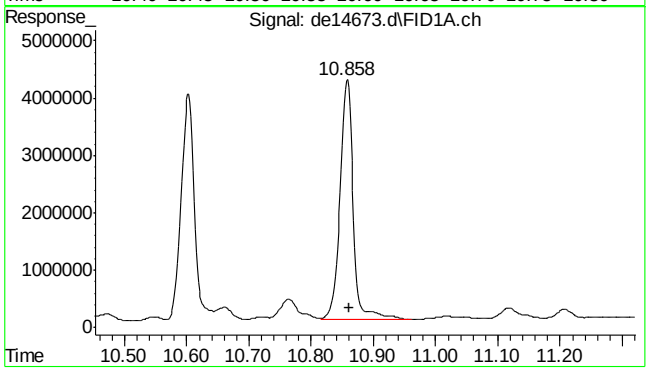
#11 o-terphenyl

R.T.: 9.748 min
Delta R.T.: -0.003 min
Response: 5818429
Conc: 43.98 µg/ml



#12 fluoranthene

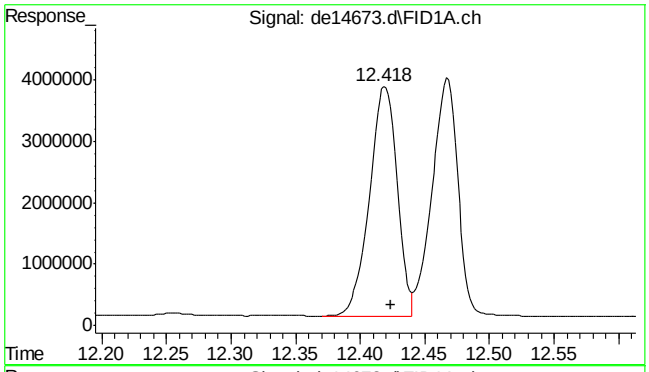
R.T.: 10.602 min
Delta R.T.: -0.003 min
Response: 5843258
Conc: 45.56 µg/ml



#13 pyrene

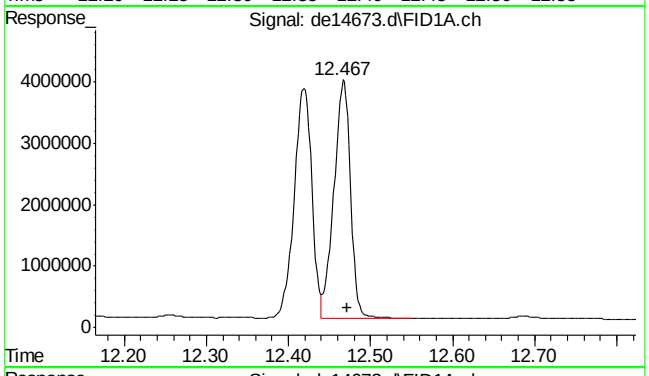
R.T.: 10.858 min
Delta R.T.: -0.003 min
Response: 6133432
Conc: 46.70 µg/ml

SGS ACCUTEST MC46737



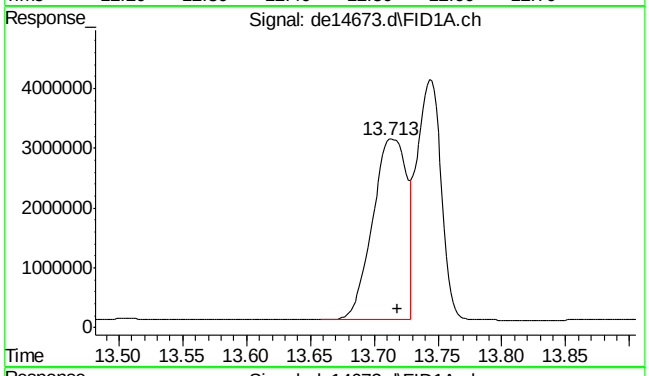
#14 benzo(a)anthracene

R.T.: 12.418 min
Delta R.T.: -0.005 min
Response: 5593098
Conc: 46.04 µg/ml



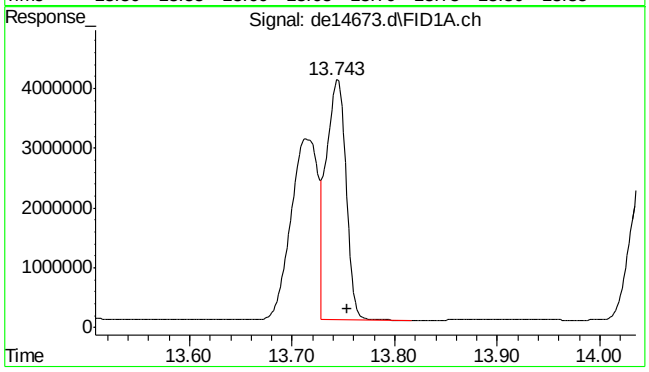
#15 chrysene

R.T.: 12.467 min
Delta R.T.: -0.005 min
Response: 5419101
Conc: 42.45 µg/ml



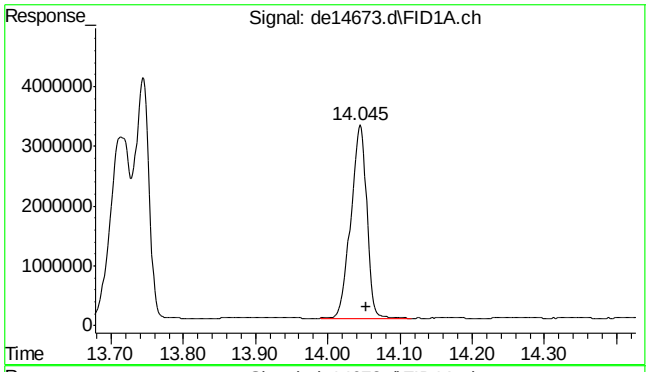
#16 benzo(B)fluoranthene

R.T.: 13.713 min
Delta R.T.: -0.005 min
Response: 5686083
Conc: 48.03 µg/ml m



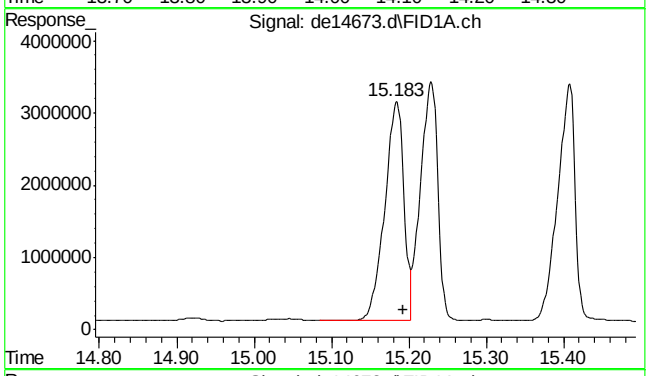
#17 benzo(k)fluoranthene

R.T.: 13.743 min
Delta R.T.: -0.010 min
Response: 5296656
Conc: 41.37 µg/ml m



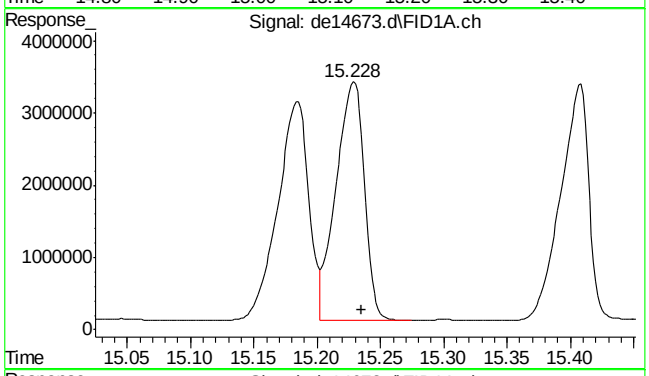
#18 benzo(a)pyrene

R.T.: 14.045 min
Delta R.T.: -0.008 min
Response: 4932114
Conc: 41.81 µg/ml



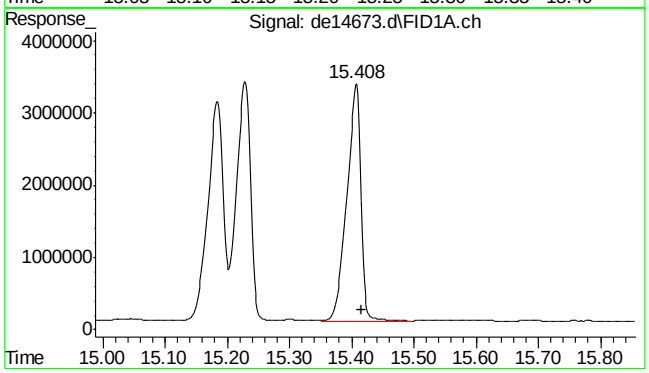
#19 indeno(1,2,3-cd)pyrene

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

7.4.8

7

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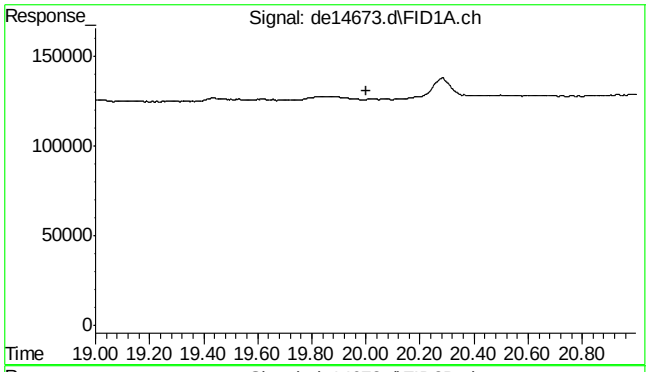
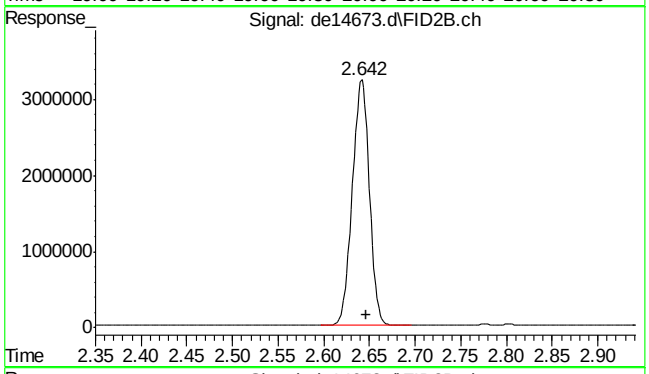


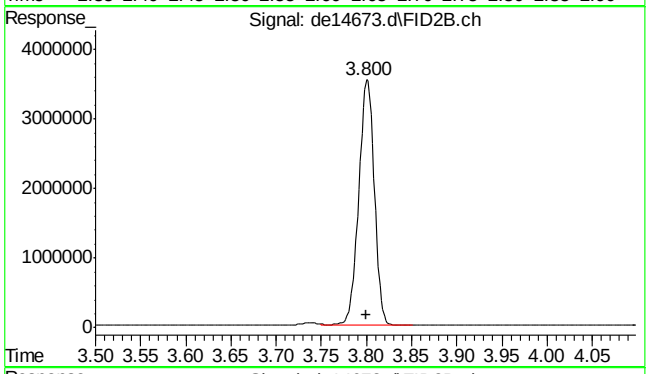
#22 bht

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



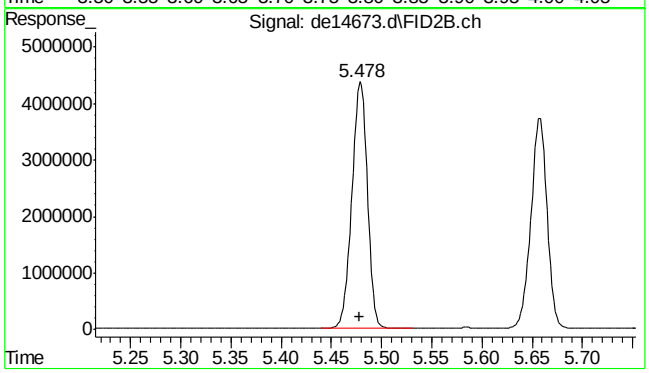
#25 c-9

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



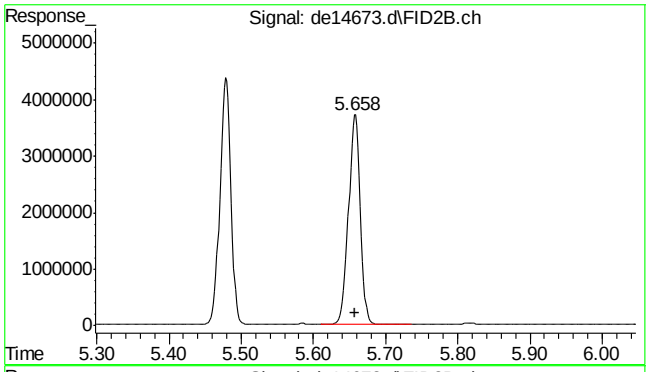
#27 naphthalene #2

R.T.: 5.478 min
Delta R.T.: 0.000 min
Response: 4634254
Conc: 50.98 µg/ml

7.4.8

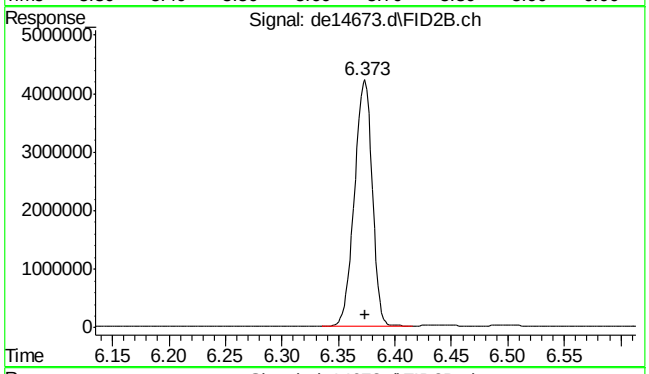
7

SGS ACCUTEST MC46737



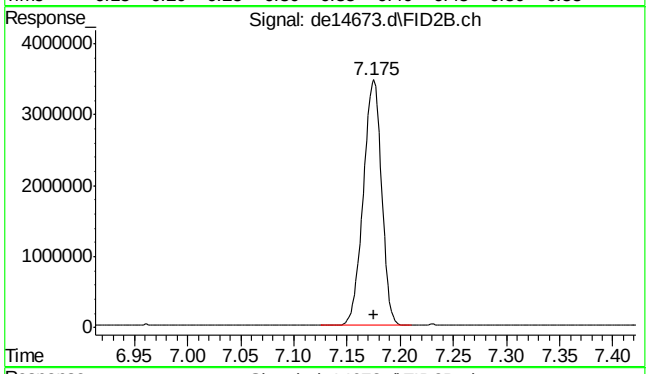
#28 c-12

R.T.: 5.658 min
Delta R.T.: 0.001 min
Response: 4207991
Conc: 49.91 µg/ml



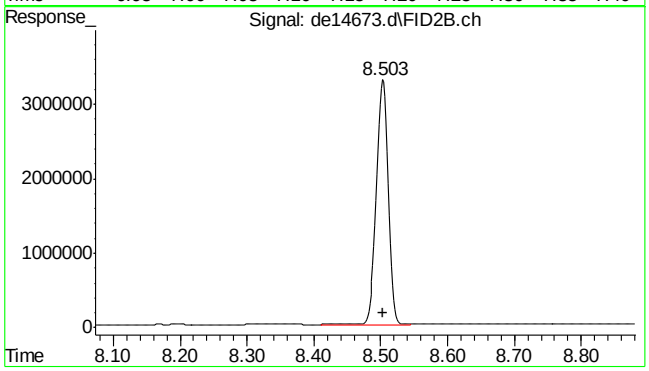
#29 2-methylnaphthalene #2

R.T.: 6.373 min
Delta R.T.: 0.000 min
Response: 4557390
Conc: 50.67 µg/ml



#30 c-14

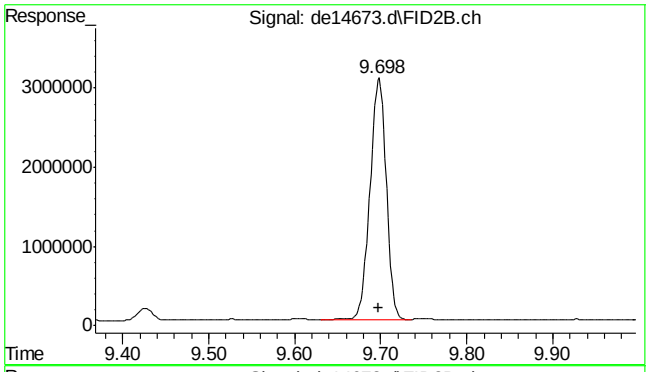
R.T.: 7.175 min
Delta R.T.: 0.000 min
Response: 4164771
Conc: 49.40 µg/ml



#31 c-16

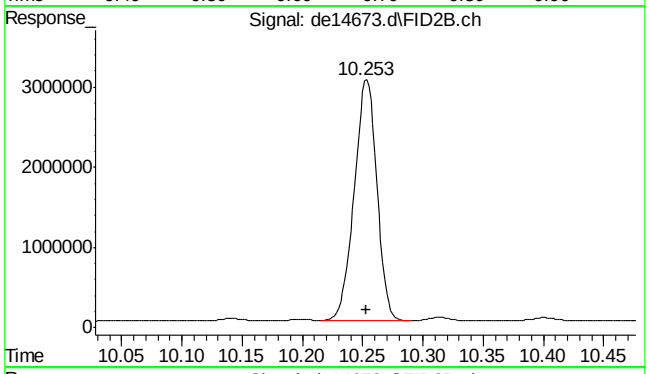
R.T.: 8.503 min
Delta R.T.: 0.000 min
Response: 4102769
Conc: 48.67 µg/ml

SGS ACCUTEST MC46737



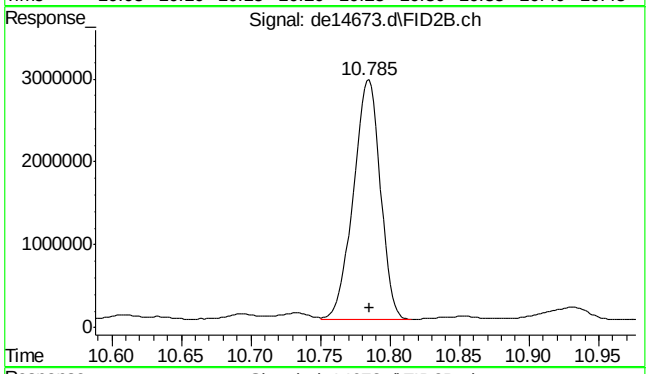
#32 c-18

R.T.: 9.698 min
Delta R.T.: 0.000 min
Response: 4021156
Conc: 47.70 µg/ml



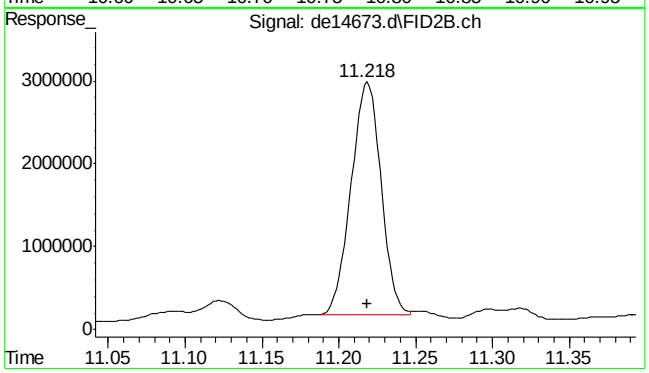
#33 c-19

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



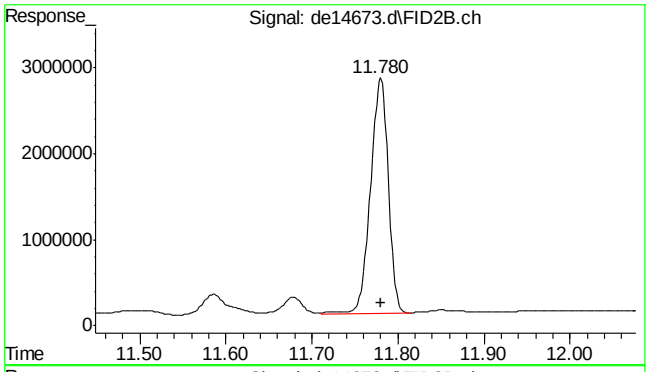
#35 1-chlorooctadecane

R.T.: 11.218 min
Delta R.T.: 0.000 min
Response: 3828846
Conc: 58.77 µg/ml m

7.4.8

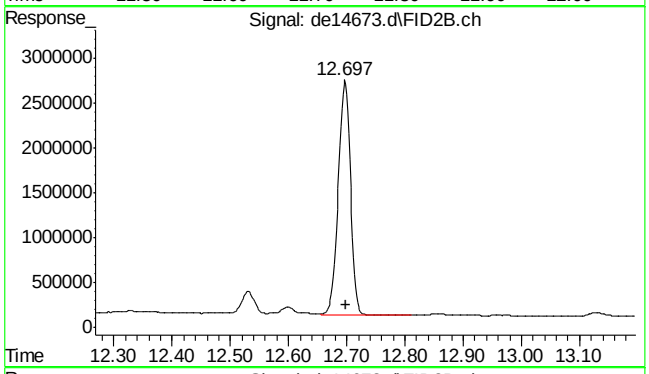
7

SGS ACCUTEST MC46737



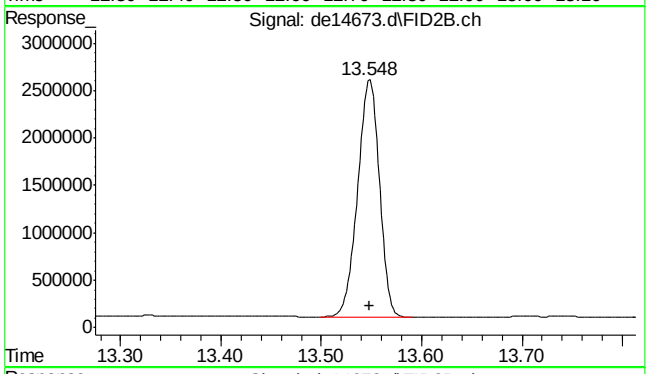
#36 c-22

R.T.: 11.780 min
Delta R.T.: 0.000 min
Response: 3927561
Conc: 50.47 µg/ml



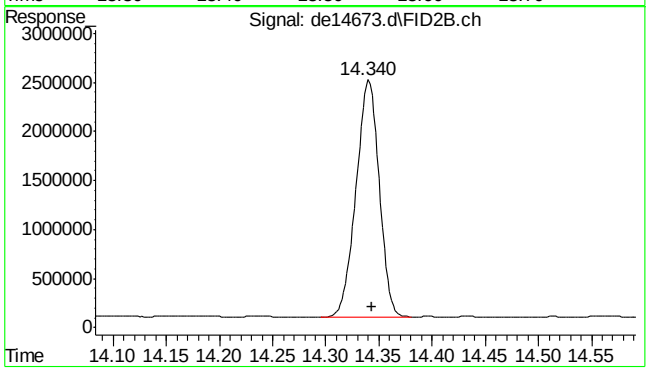
#37 c-24

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



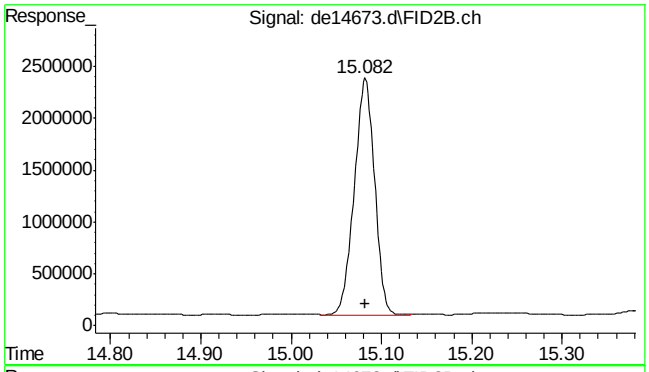
#39 c-28

R.T.: 14.340 min
Delta R.T.: -0.003 min
Response: 3684091
Conc: 47.34 µg/ml

7.4.8

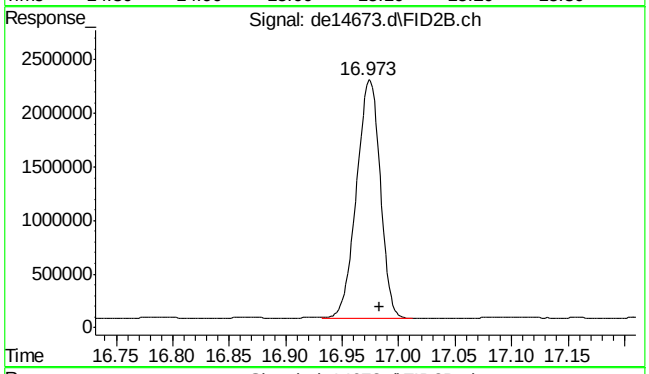
7

SGS ACCUTEST MC46737



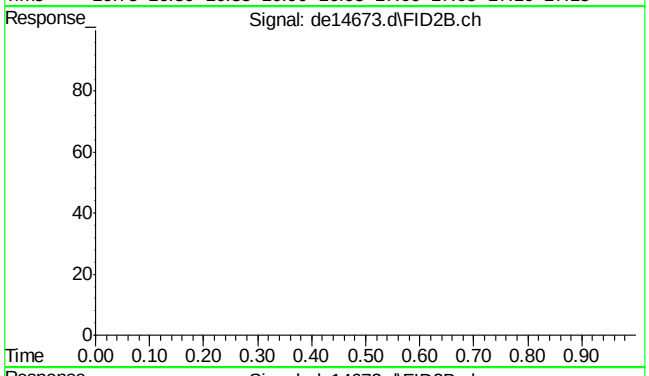
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 3605357
Conc: 46.33 µg/ml



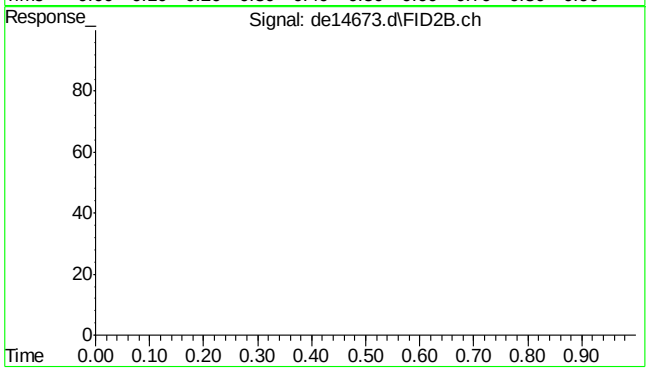
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 3238093
Conc: 41.61 µg/ml m



#42 bht

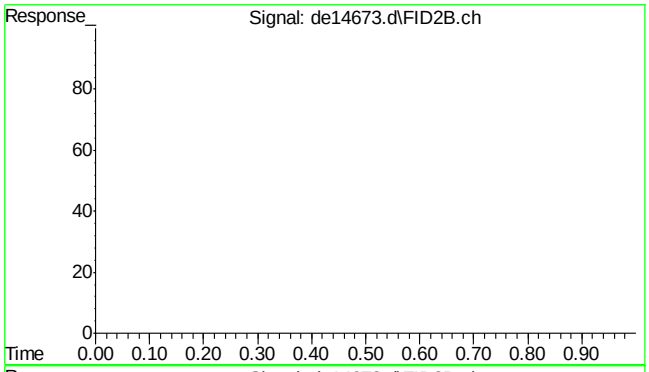
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.



#43 bht

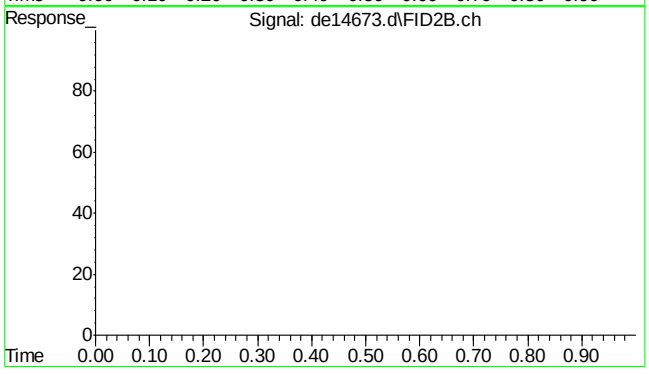
R.T.: 0.000 min
Exp R.T. : 23.000 min
Response: 0
Conc: N.D.

SGS ACCUTEST MC46737



#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.
```

7.4.8

7

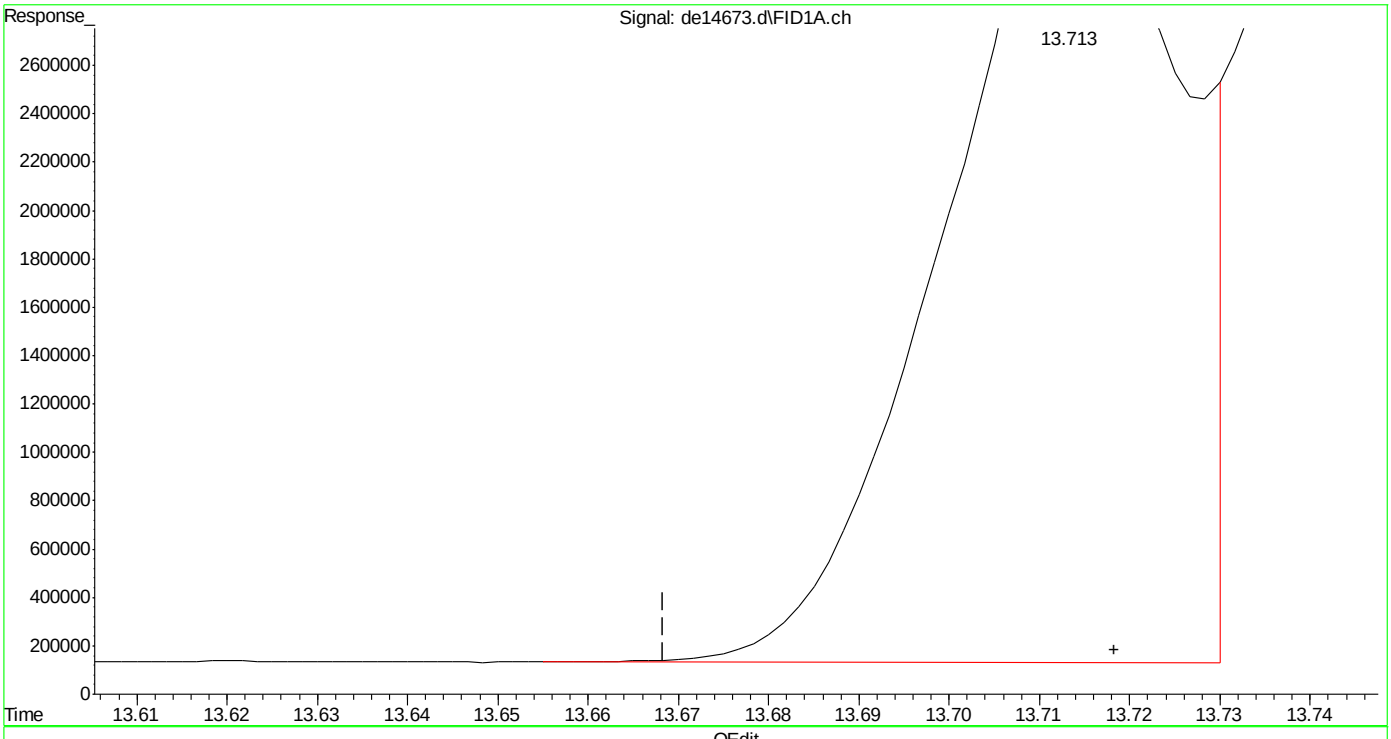
SGS ACCUTEST MC46737

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

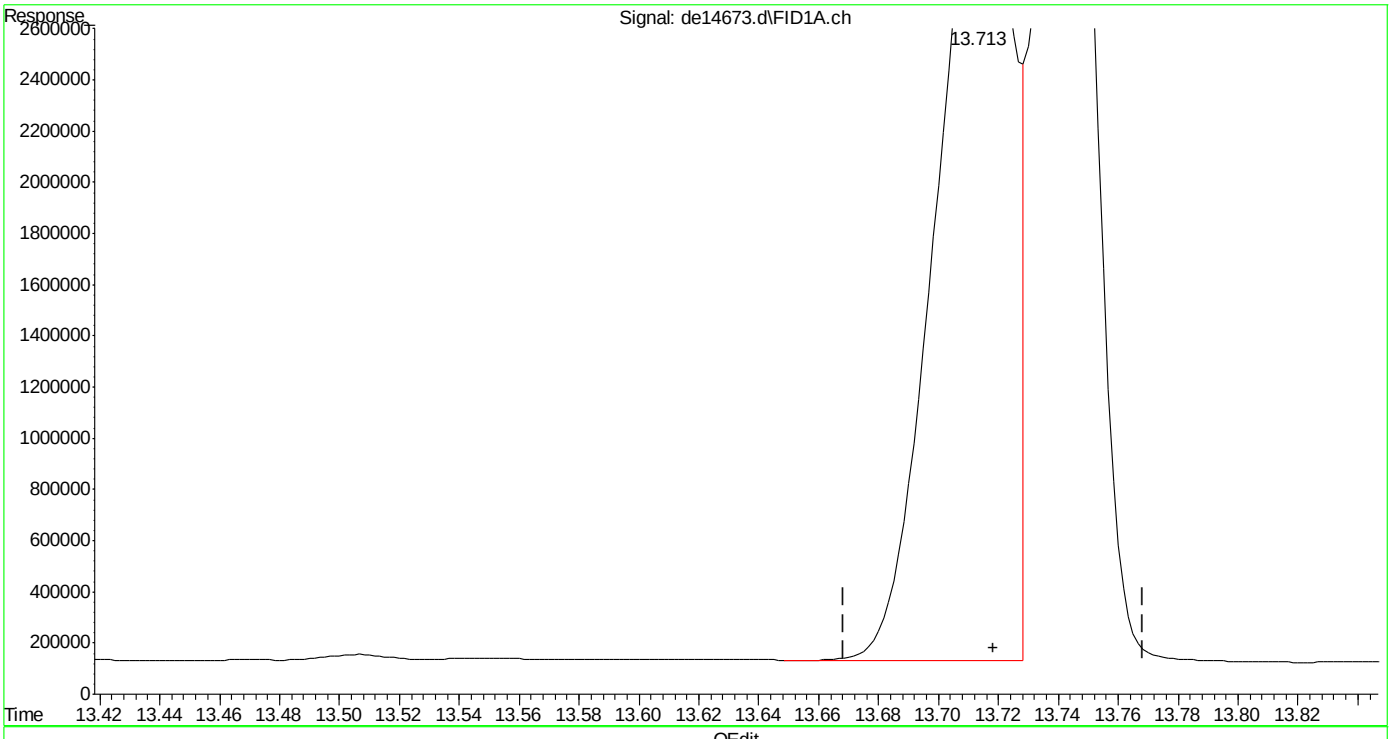
EPH160622W.M Thu Jun 23 08:03:58 2016

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

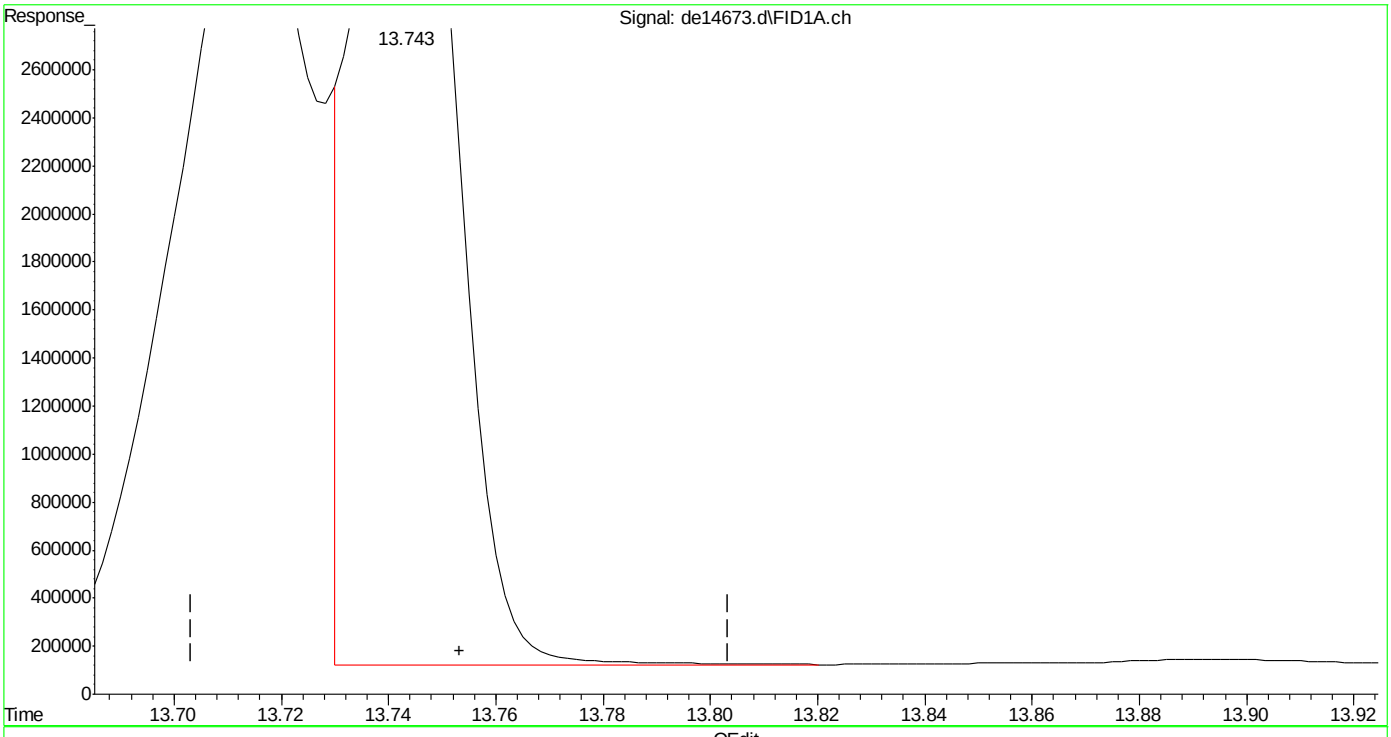
EPH160622W.M Thu Jun 23 08:04:11 2016

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 08:03:43 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

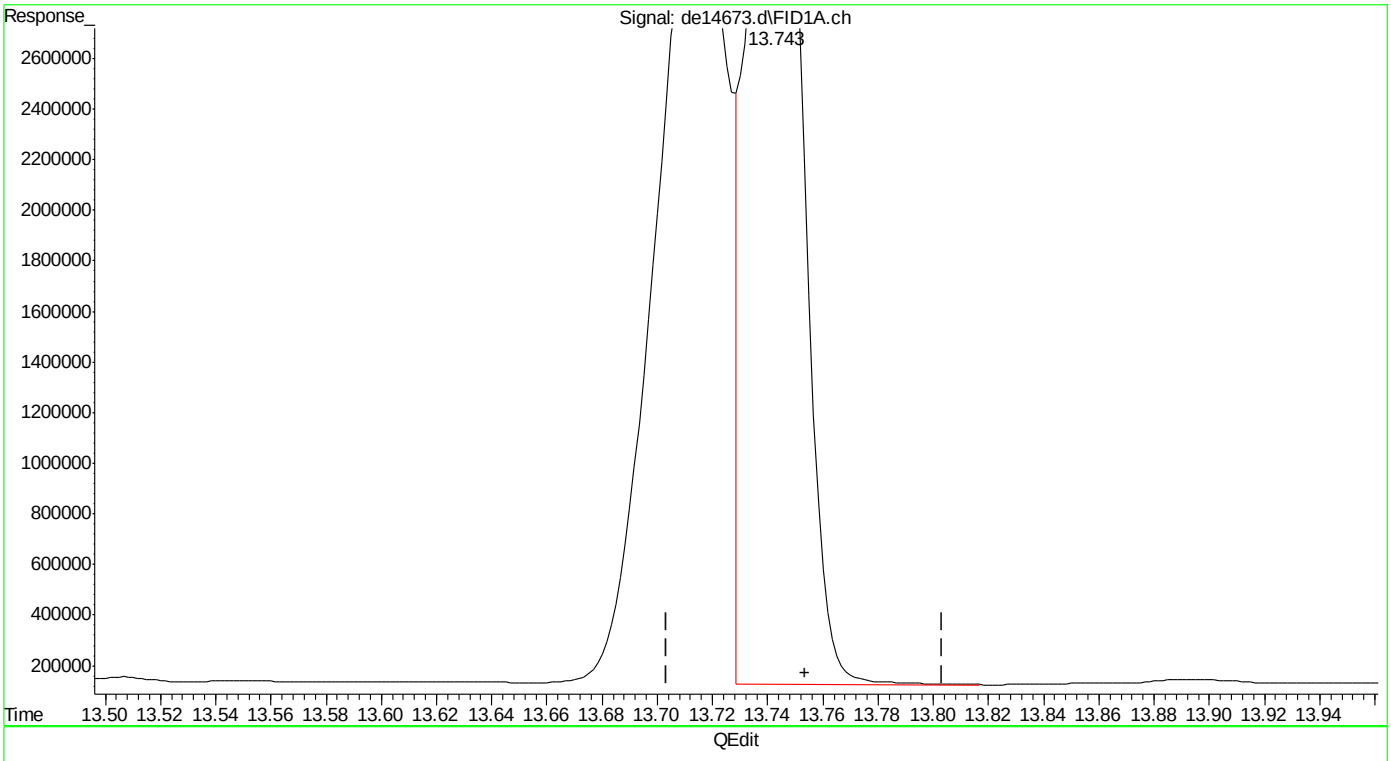
(+) = Expected Retention Time

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

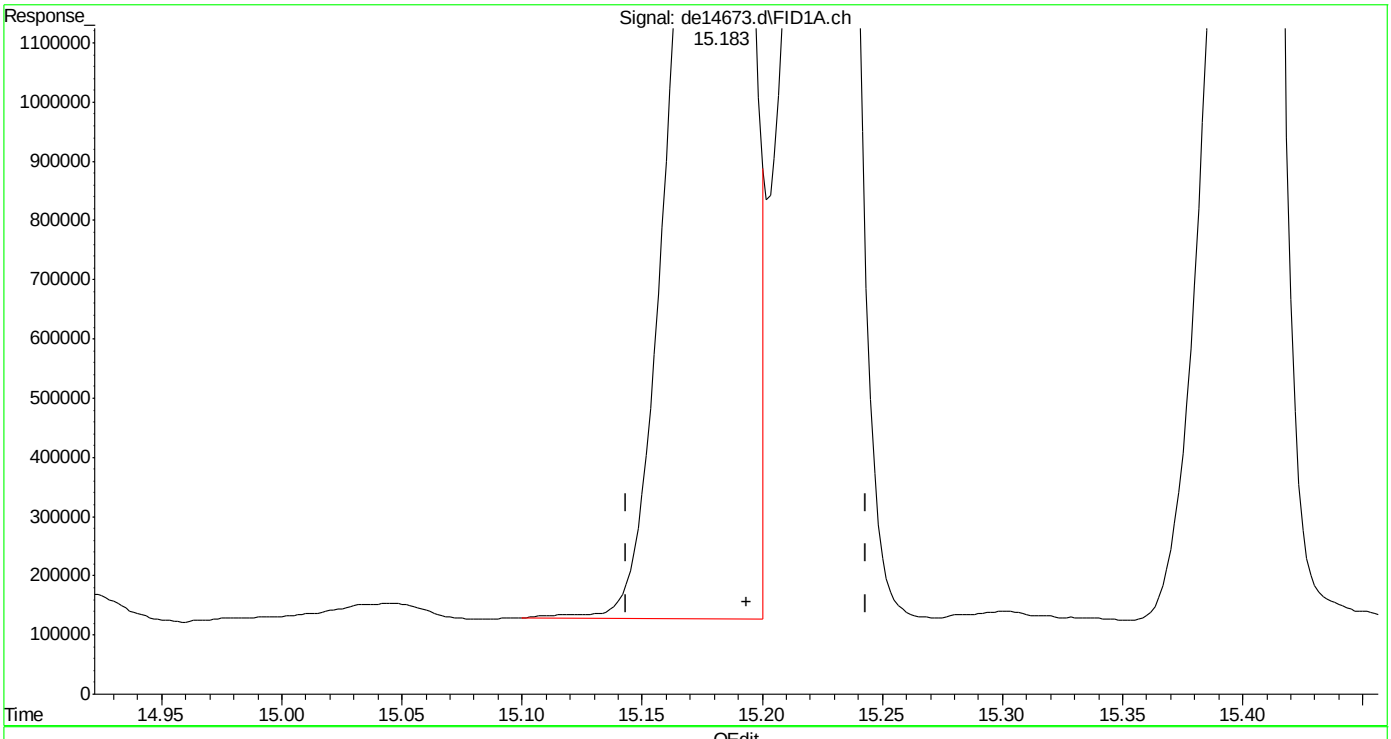
(+) = Expected Retention Time

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

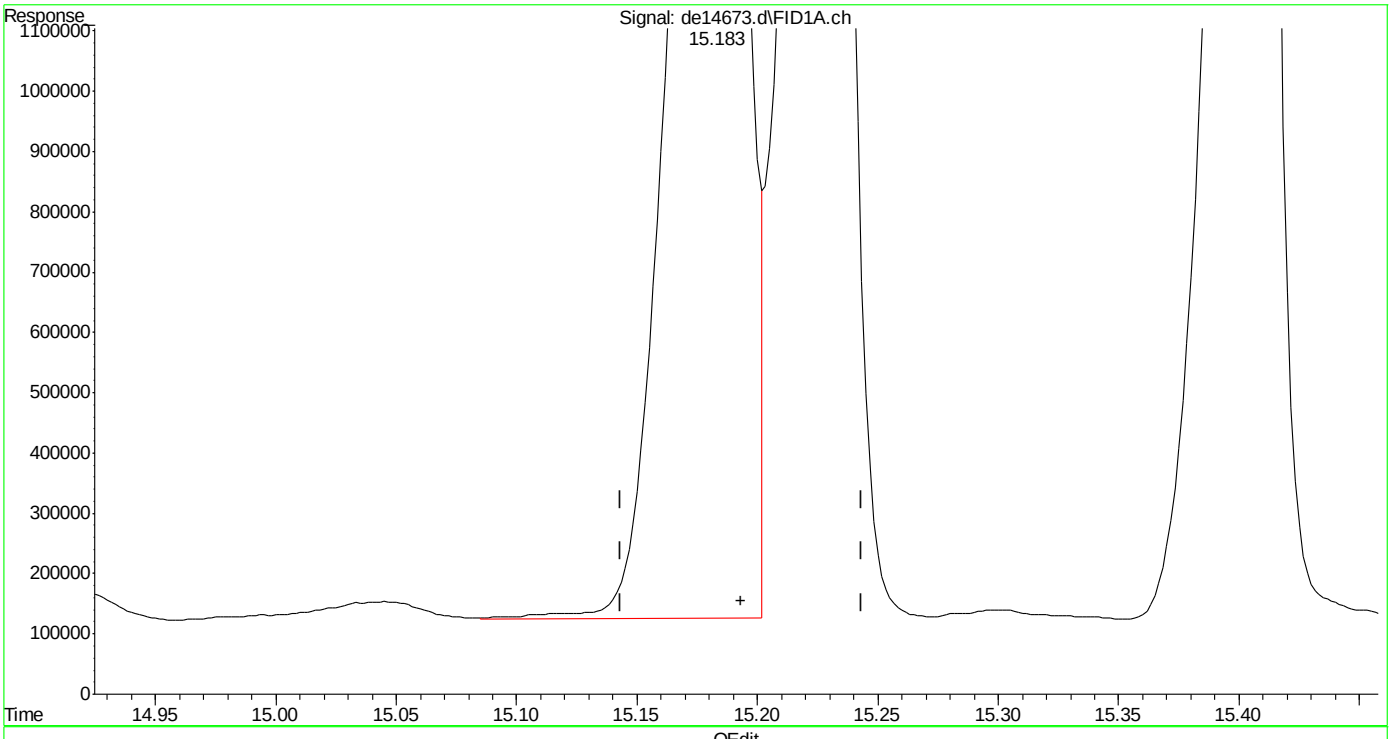
SGS ACCUTEST MC46737

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

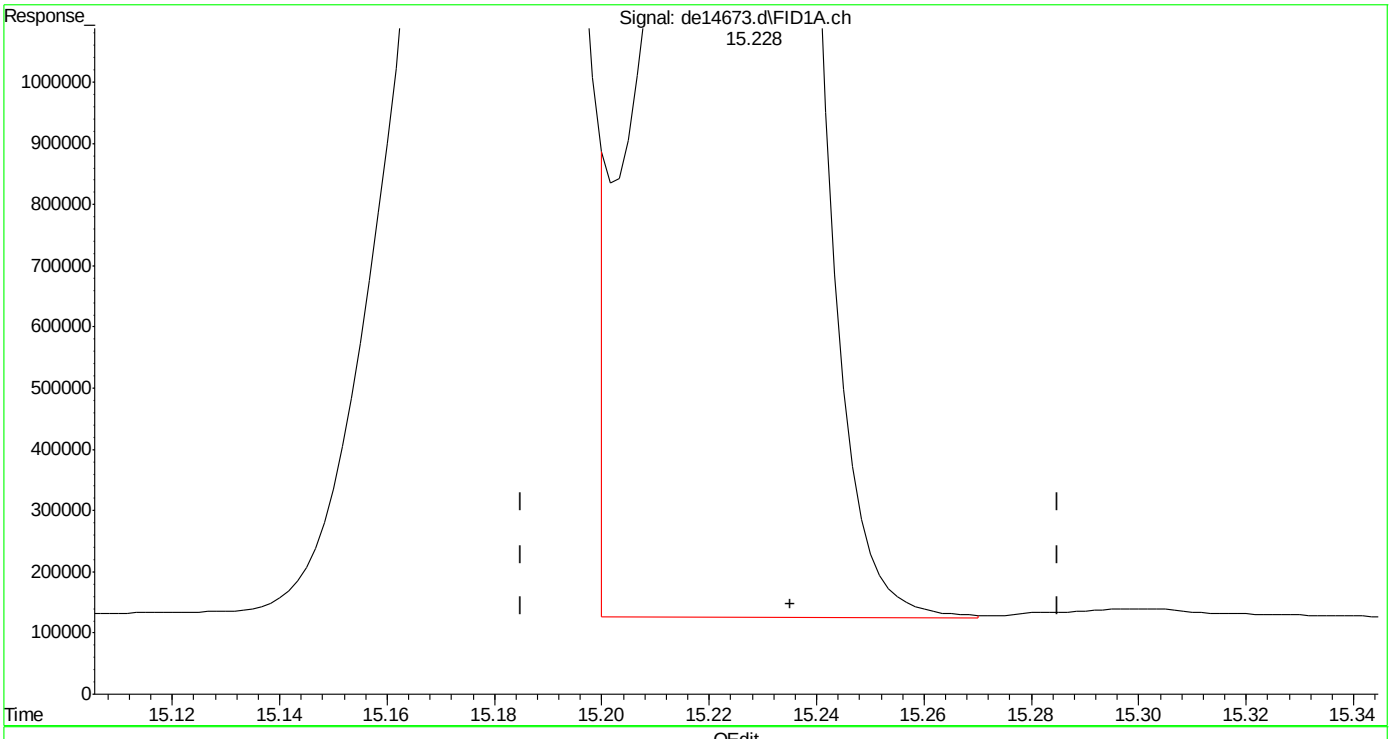
SGS ACCUTEST MC46737

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

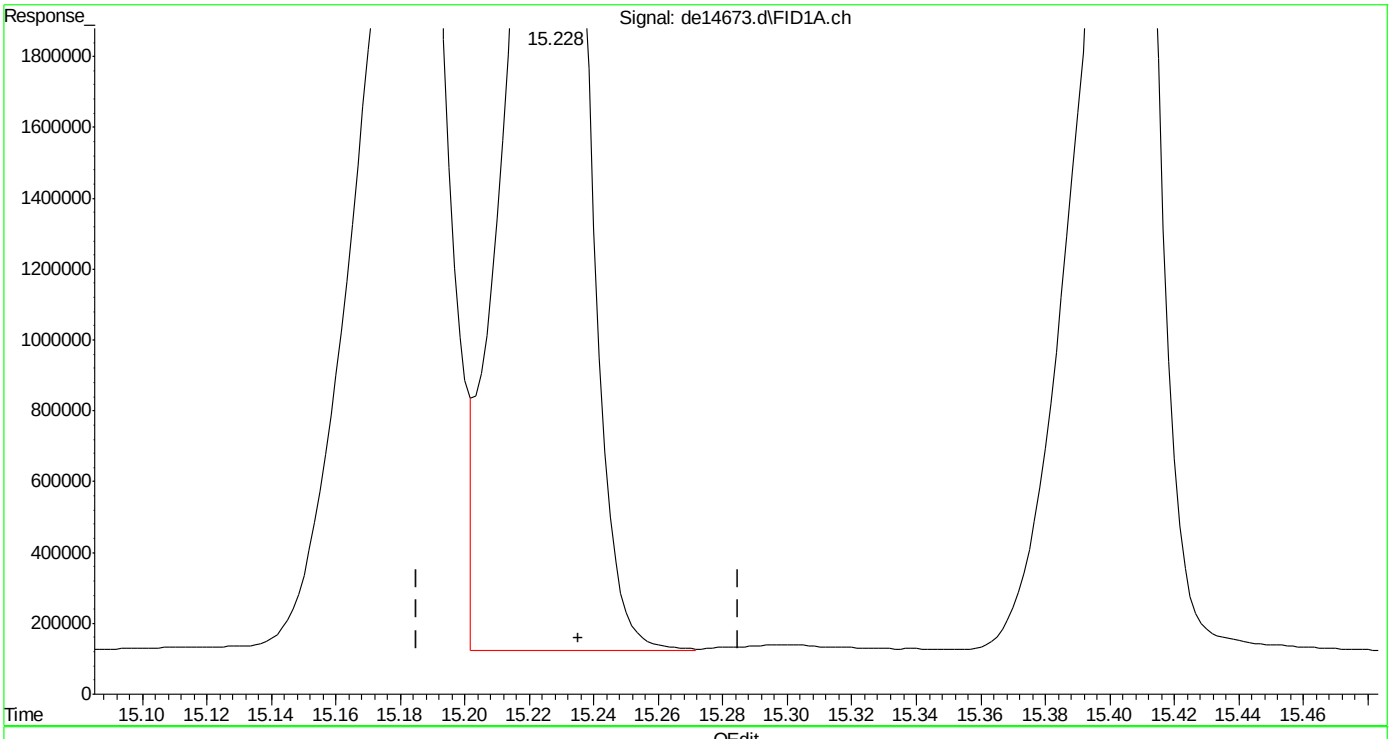
SGS ACCUTEST MC46737

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

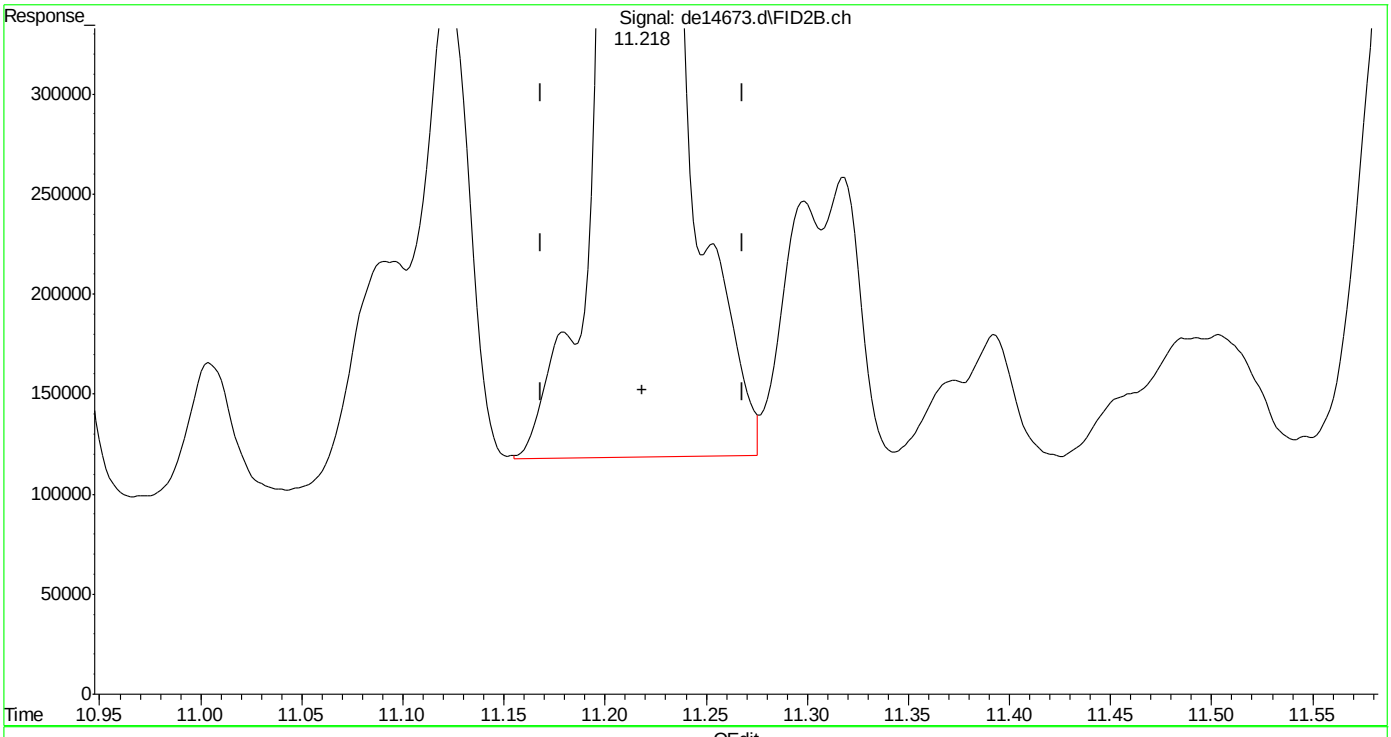
(+) = Expected Retention Time

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
EPH160622W.M Thu Jun 23 08:05:10 2016

Page: 1

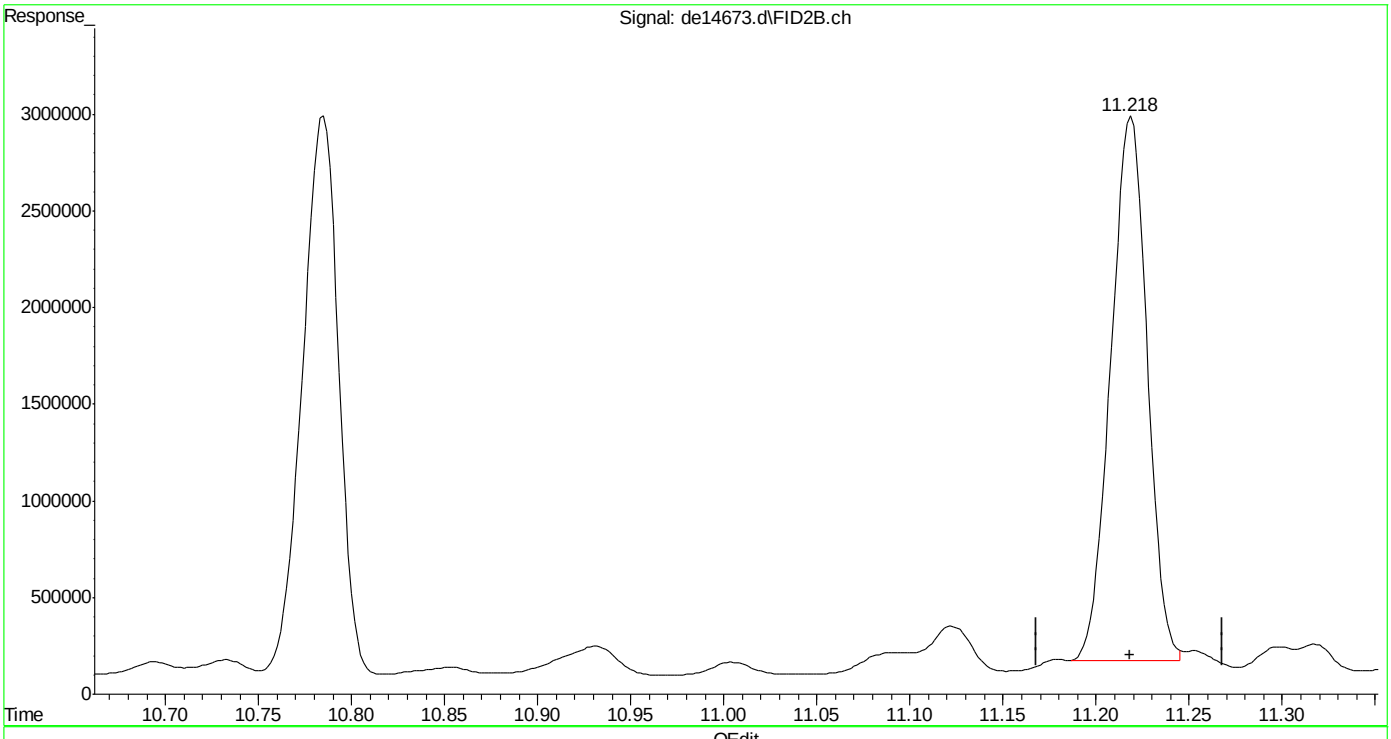
SGS ACCUTEST MC46737

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

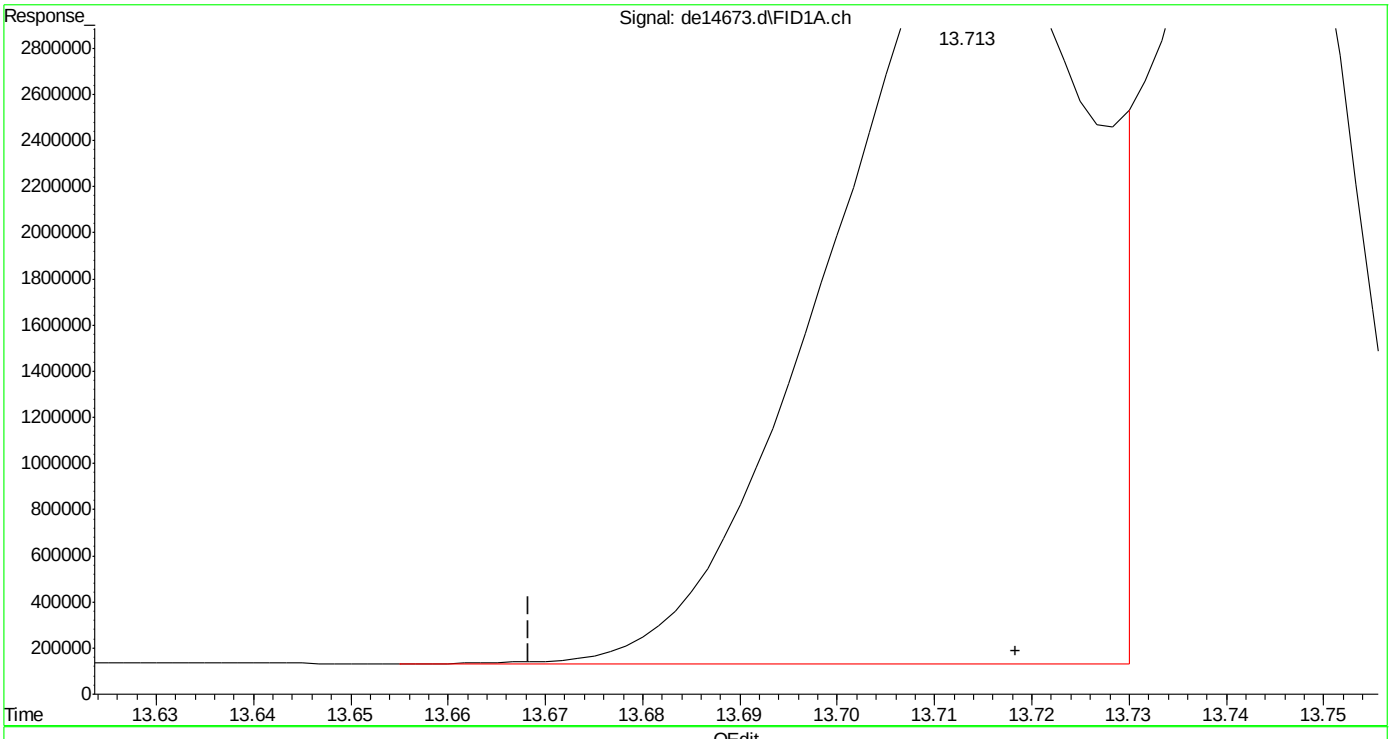
SGS ACCUTEST MC46737

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

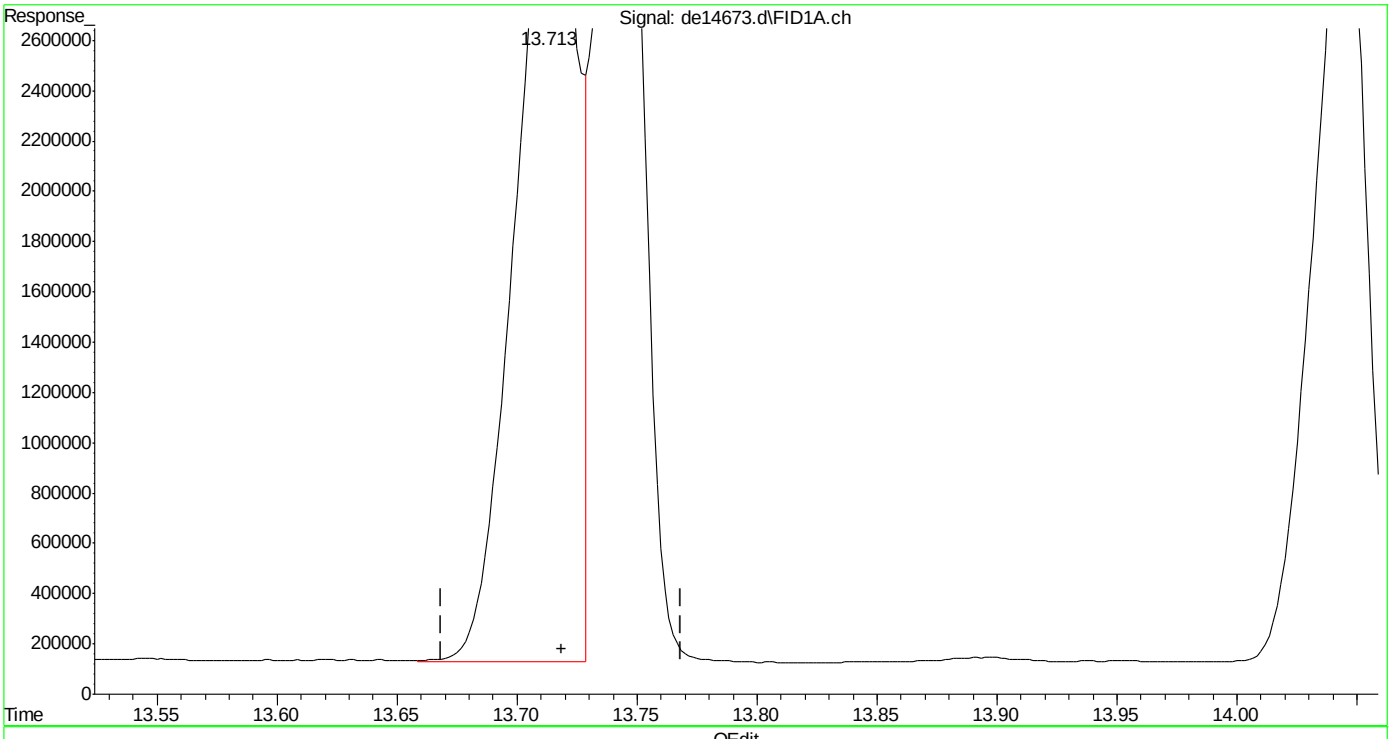
SGS ACCUTEST MC46737

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

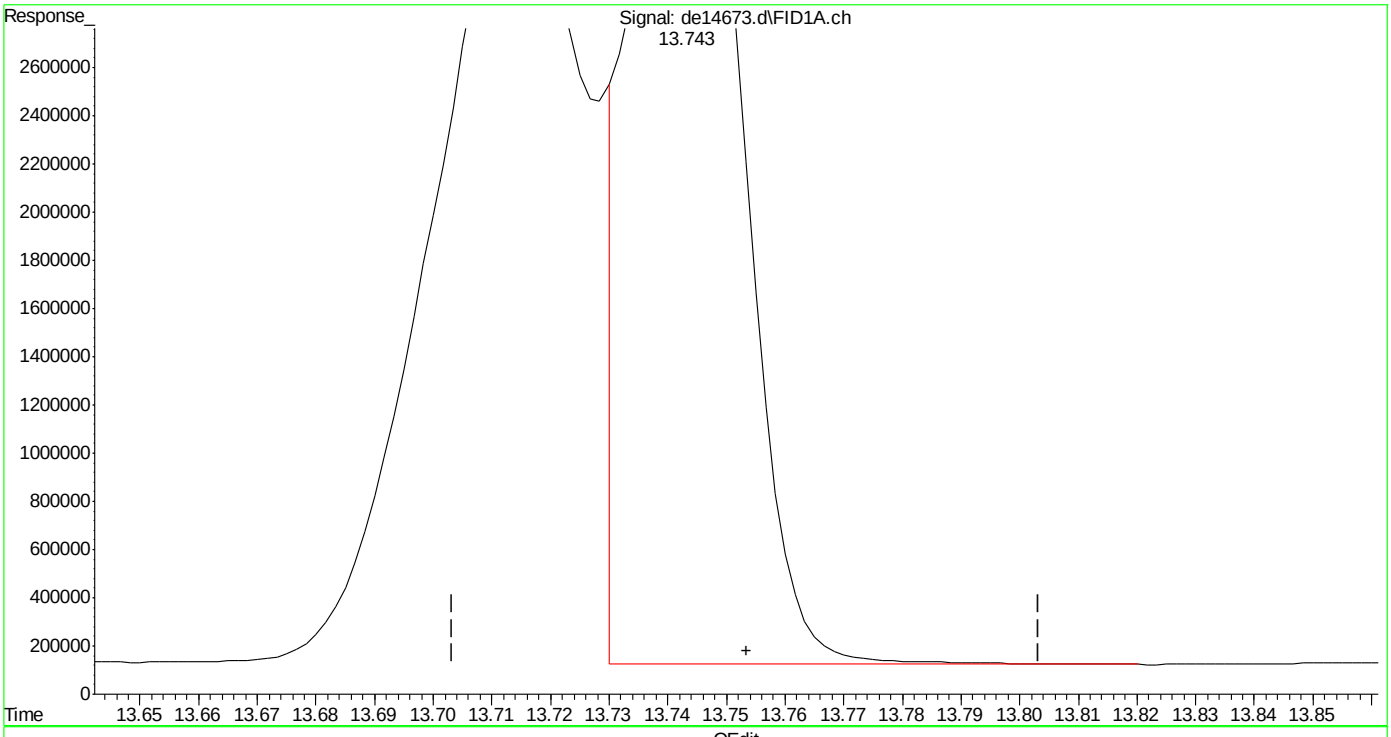
SGS ACCUTEST MC46737

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

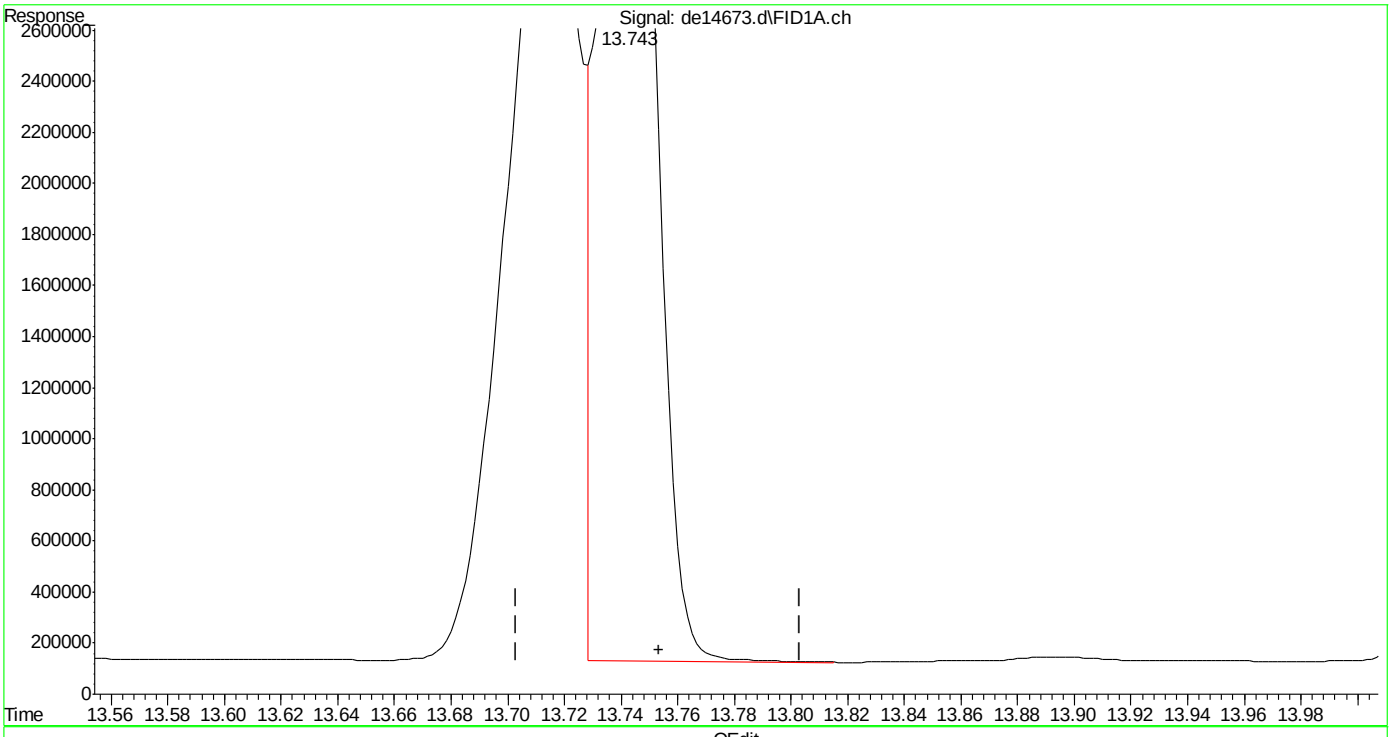
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 08:10:59 2016

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

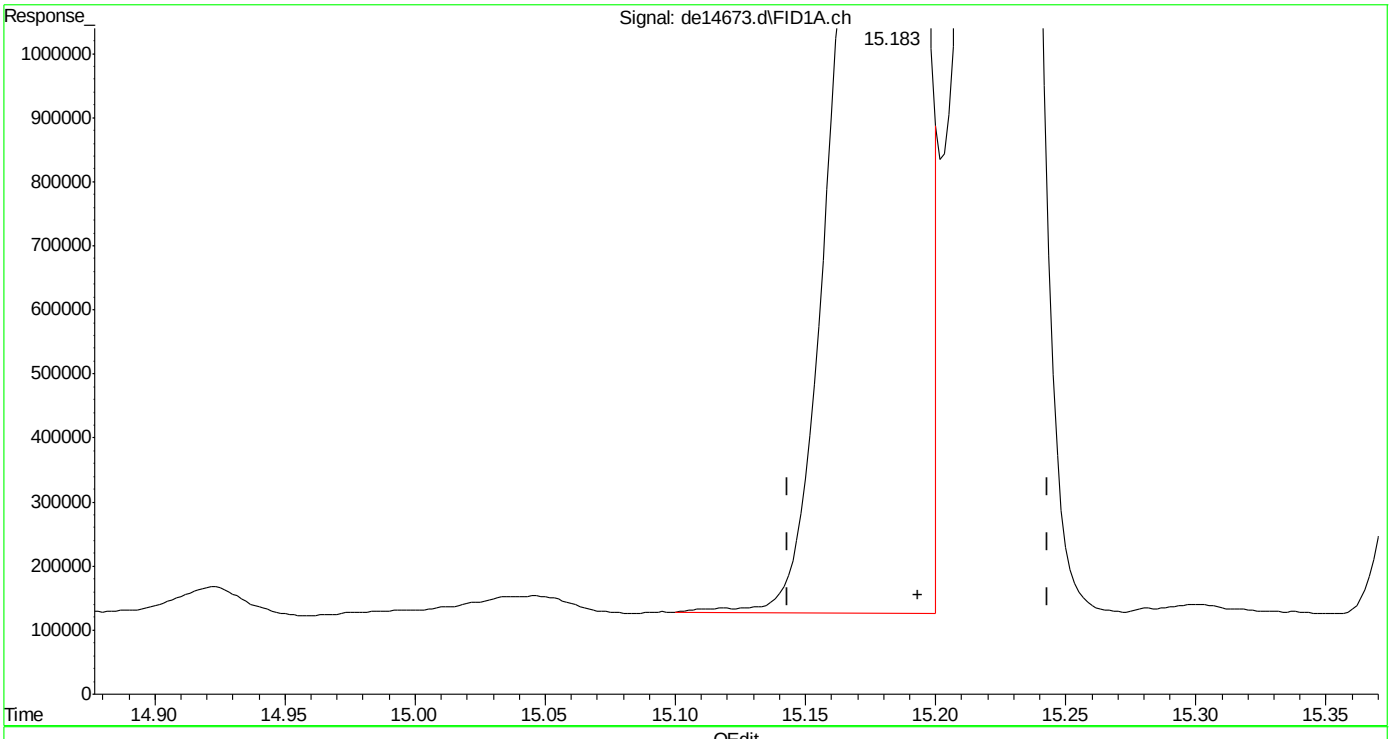
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 08:11:09 2016

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

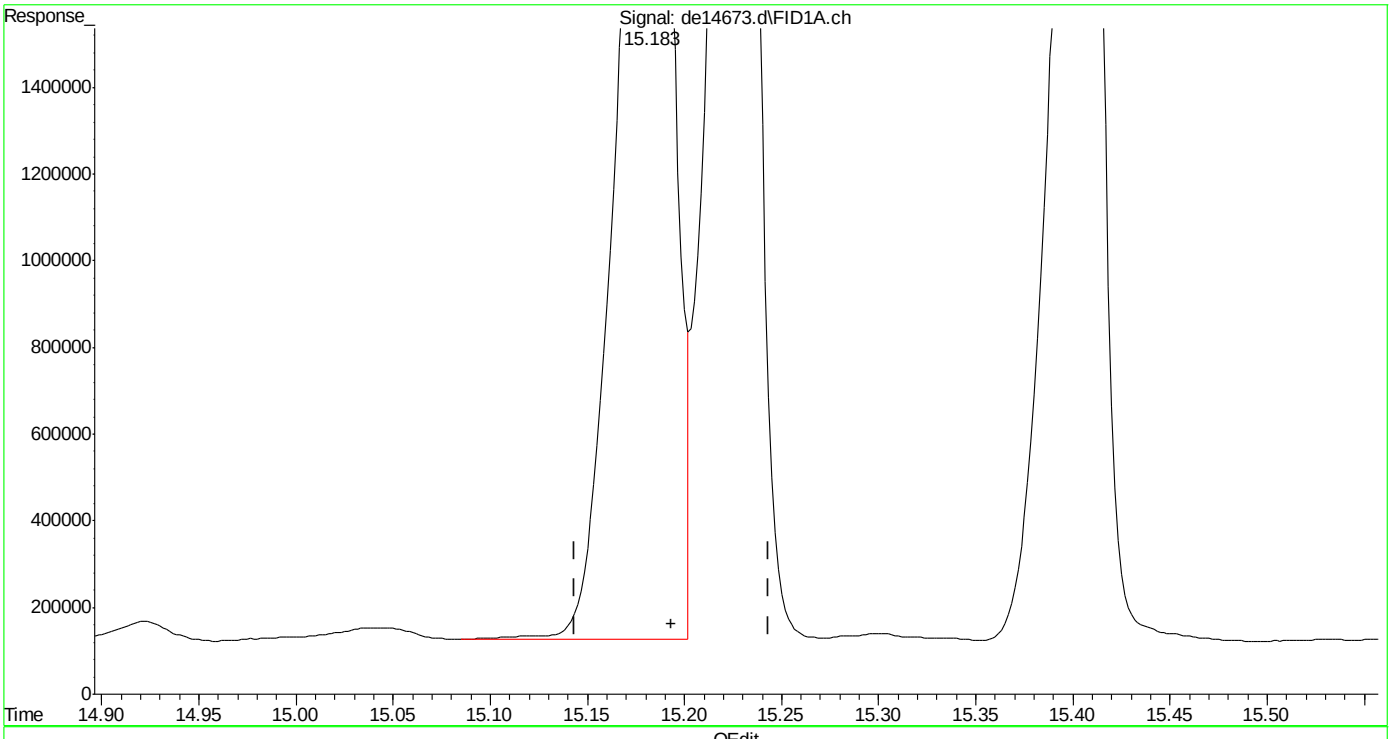
EPH160622W.M Thu Jun 23 08:11:14 2016

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

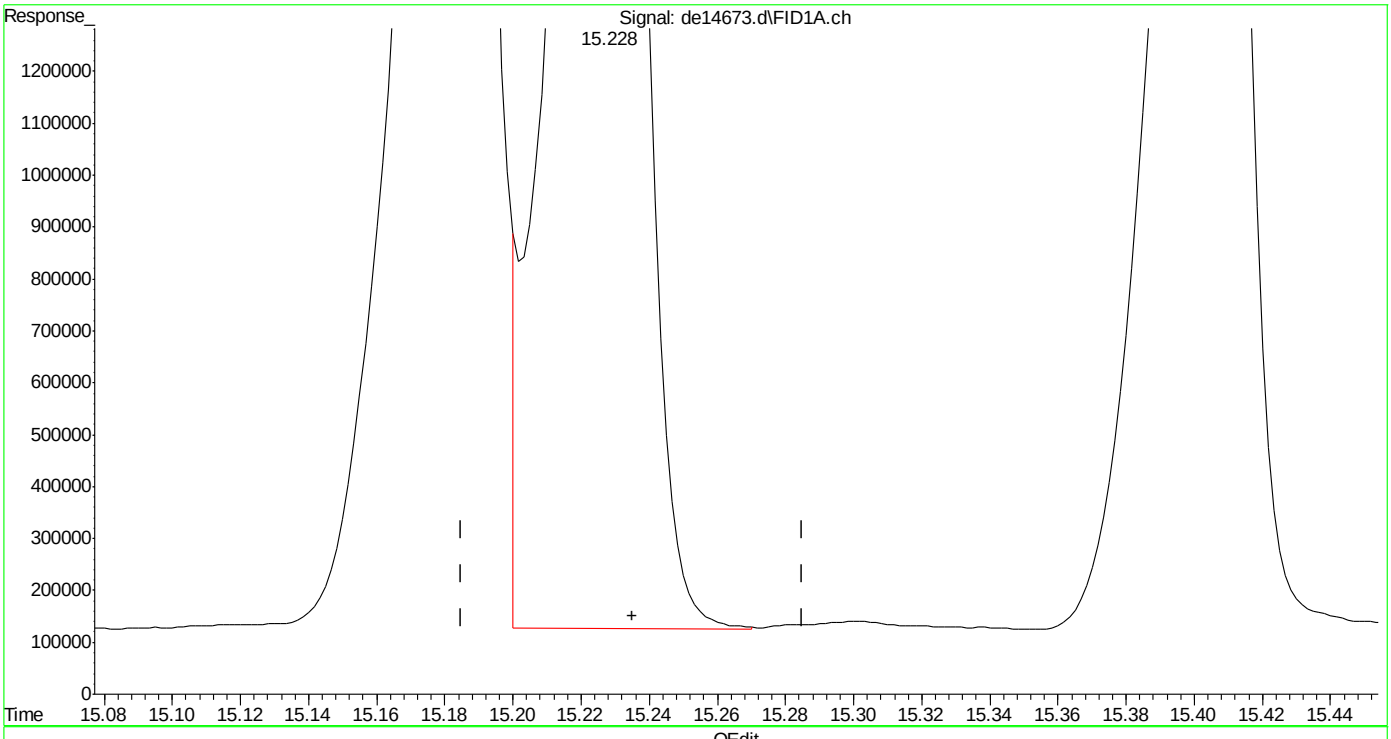
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 08:11:21 2016

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

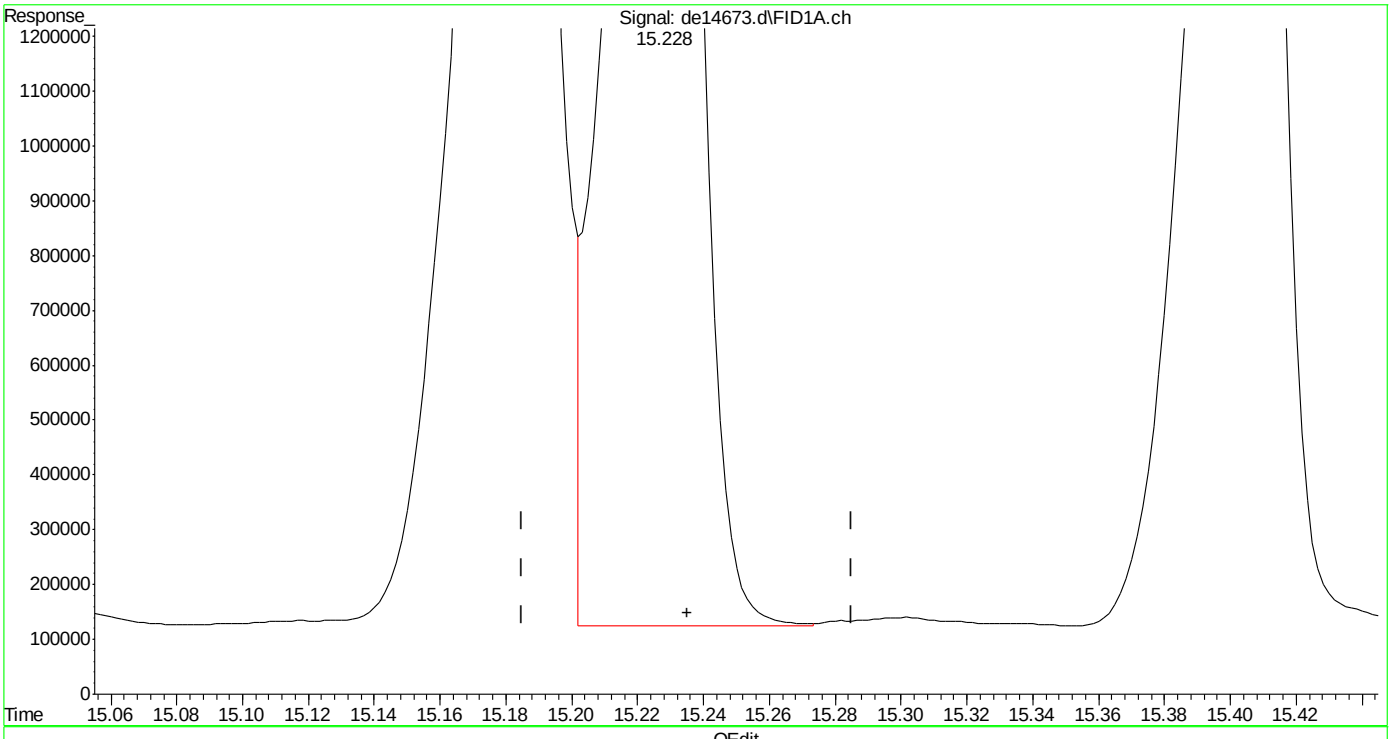
EPH160622W.M Thu Jun 23 08:11:26 2016

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

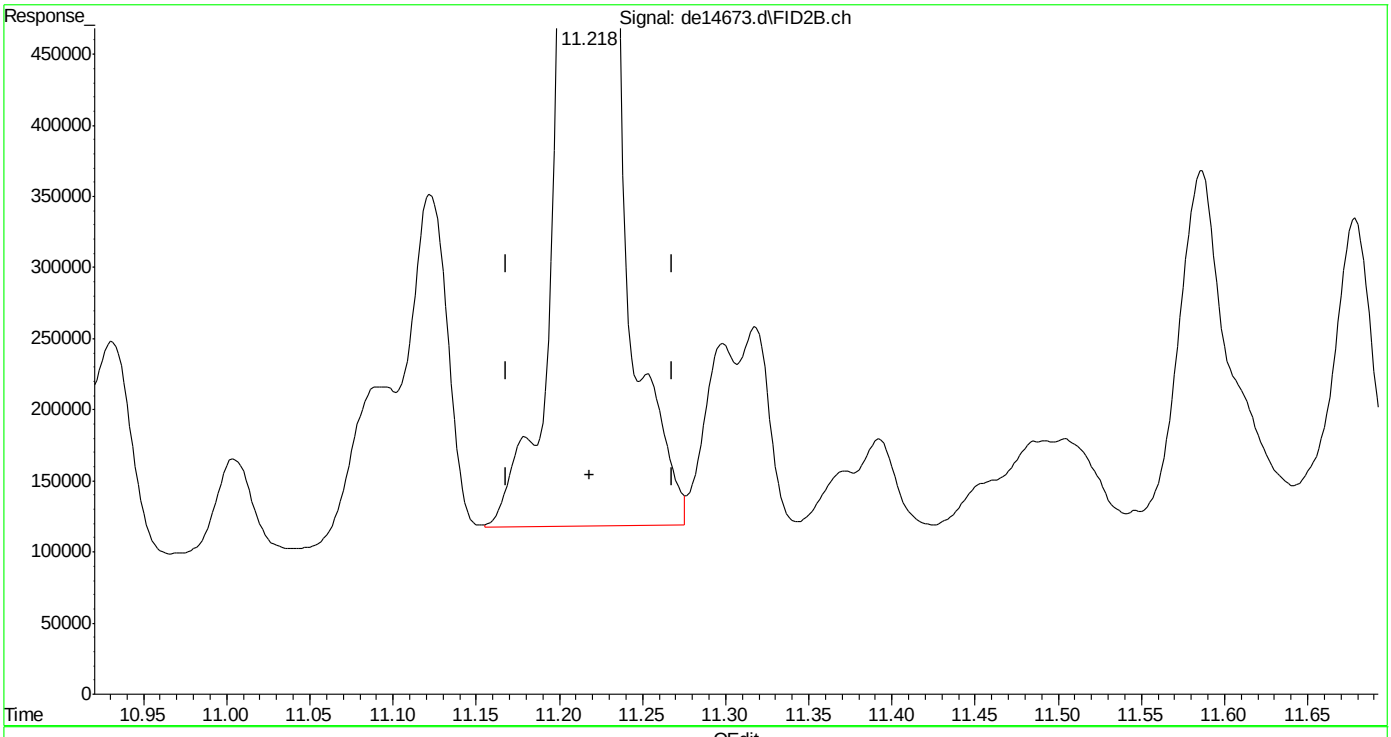
(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 08:11:46 2016

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 :



(35) 1-chlorooctadecane (s)
11.218min 64.775 µg/ml
response 4220313

(+) = Expected Retention Time
EPH160622W.M Thu Jun 23 08:12:00 2016

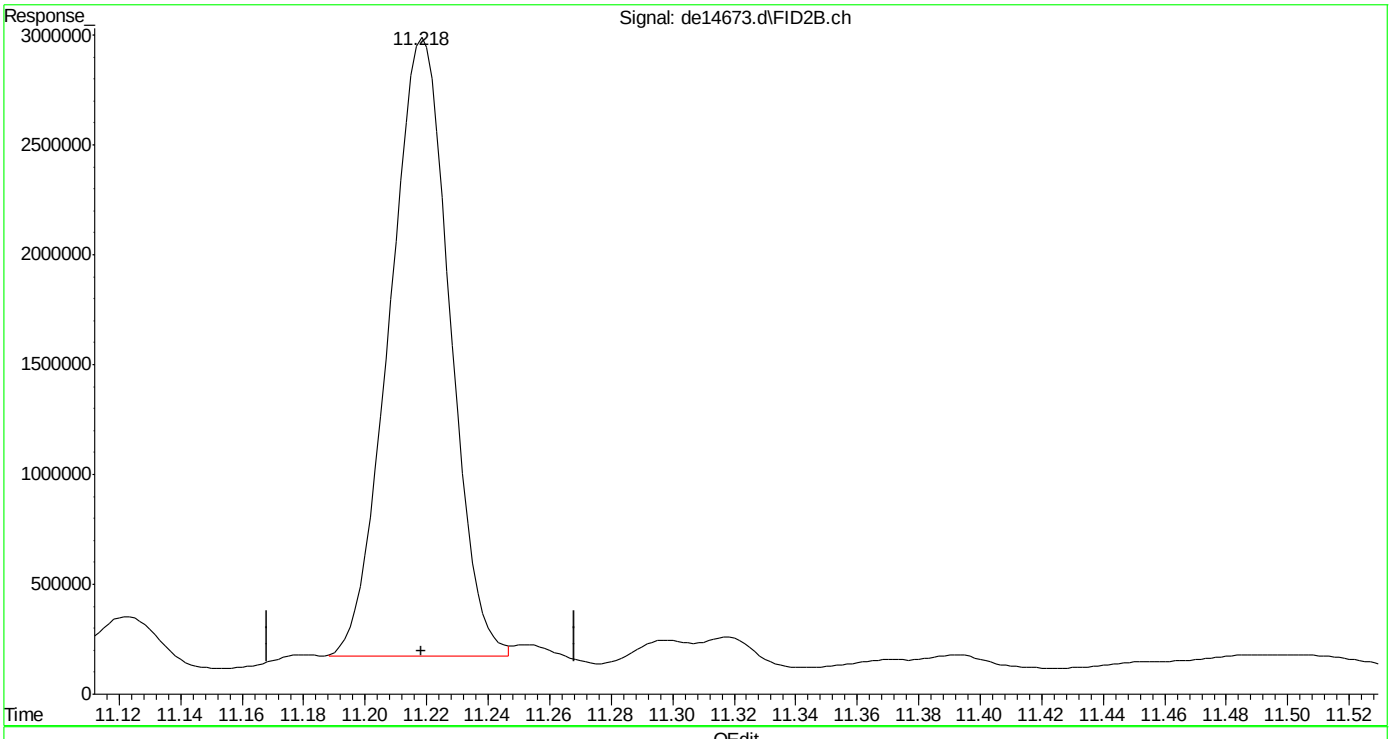
Page: 1

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 MC46737

Manual Integrations
APPROVED
(compounds with "m" flag)
Andri Piluri
07/11/16 12:44

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 11:36 am
Operator : thomasa
Sample : cc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:11:14 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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	6.483	6337974	55.365 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 276.82%#
6) s	2-bromonaphthalene	7.205	4155639	57.956 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 289.78%#
11) s	o-terphenyl	9.745	6718351	50.778 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 253.89%#
35) s	1-chlorooctadecane	11.213	3127795	48.007 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 240.04%#
	Target Compounds			
2)	naphthalene	5.027	7170228	57.117 µg/ml
3)	2-methylnaphthalene	5.927	6928624	54.926 µg/mlm
5)	acenaphthylene	7.038	6845179	54.101 µg/ml
7)	acenaphthene	7.280	7216282	51.809 µg/ml
8)	fluorene	7.922	6846275	53.292 µg/ml
9)	phenanthrene	9.098	6671061	53.404 µg/ml
10)	anthracene	9.155	6497288	48.839 µg/ml
12)	fluoranthene	10.597	6494225	50.632 µg/ml
13)	pyrene	10.852	6644932	50.593 µg/ml
14)	benzo(a)anthracene	12.413	6118112	50.362 µg/mlm
15)	chrysene	12.462	6240980	48.891 µg/mlm
16)	benzo(B)fluoranthene	13.707	6249002	52.780 µg/mlm
17)	benzo(k)fluoranthene	13.738	6156869	48.089 µg/mlm
18)	benzo(a)pyrene	14.038	5906667	50.074 µg/ml
19)	indeno(1,2,3-cd)pyrene	15.177	6088679	52.019 µg/mlm
20)	dibenzo(ah)anthracene	15.220	5819765	51.363 µg/mlm
21)	benzo(ghi)perylene	15.395	5873044	51.756 µg/ml
25) h	c-9	2.647	4326835	51.323 µg/mlm
26) h	c-10	3.800	4375105	51.896 µg/ml
27)	naphthalene #2	5.477	4648334	51.130 µg/ml
28)	c-12	5.655	4295462	50.951 µg/ml
29)	2-methylnaphthalene #2	6.372	4594784	51.089 µg/ml
30)	c-14	7.172	4235648	50.242 µg/ml
31)	c-16	8.500	4185608	49.648 µg/ml
32)	c-18	9.695	4262343	50.558 µg/ml
33)	c-19	10.250	4132720	53.103 µg/ml
34)	c-20	10.780	4053843	52.090 µg/ml
36)	c-22	11.775	4029002	51.771 µg/ml
37)	c-24	12.693	3767604	48.412 µg/ml
38)	c-26	13.545	4022311	51.685 µg/ml
39)	c-28	14.337	3902508	50.145 µg/ml
40) h	c-30	15.082	3905128	50.179 µg/ml
41) h	c-36	16.983	3425296	44.013 µg/mlm

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

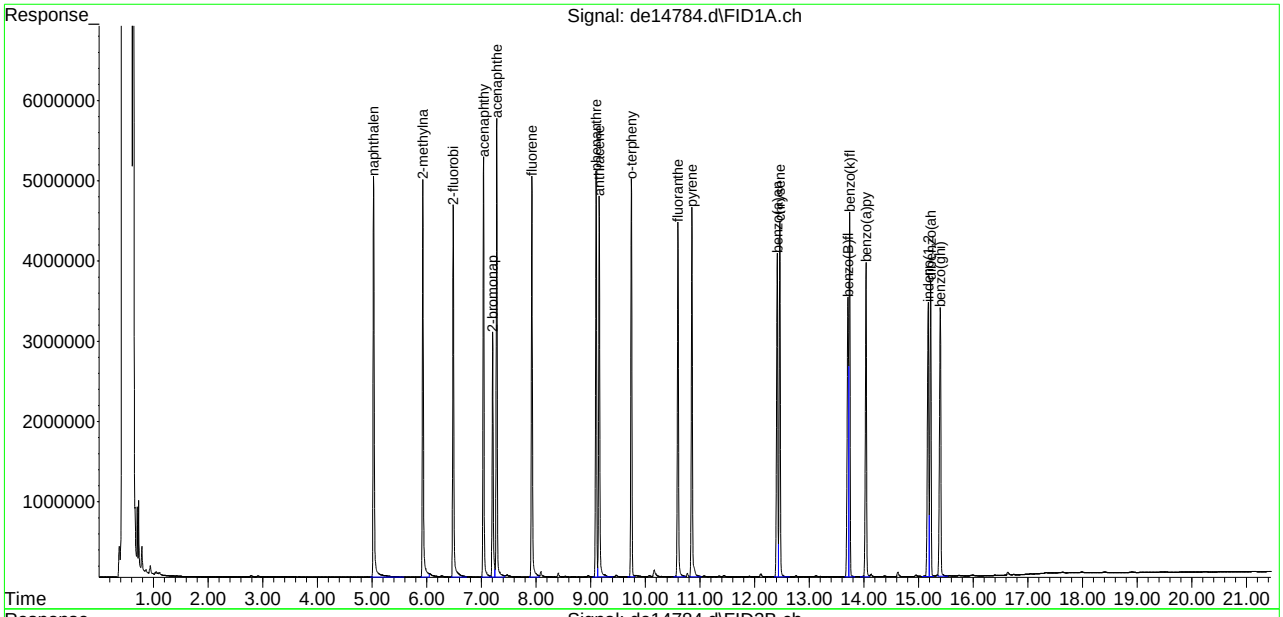
SGS ACCUTEST MC46737

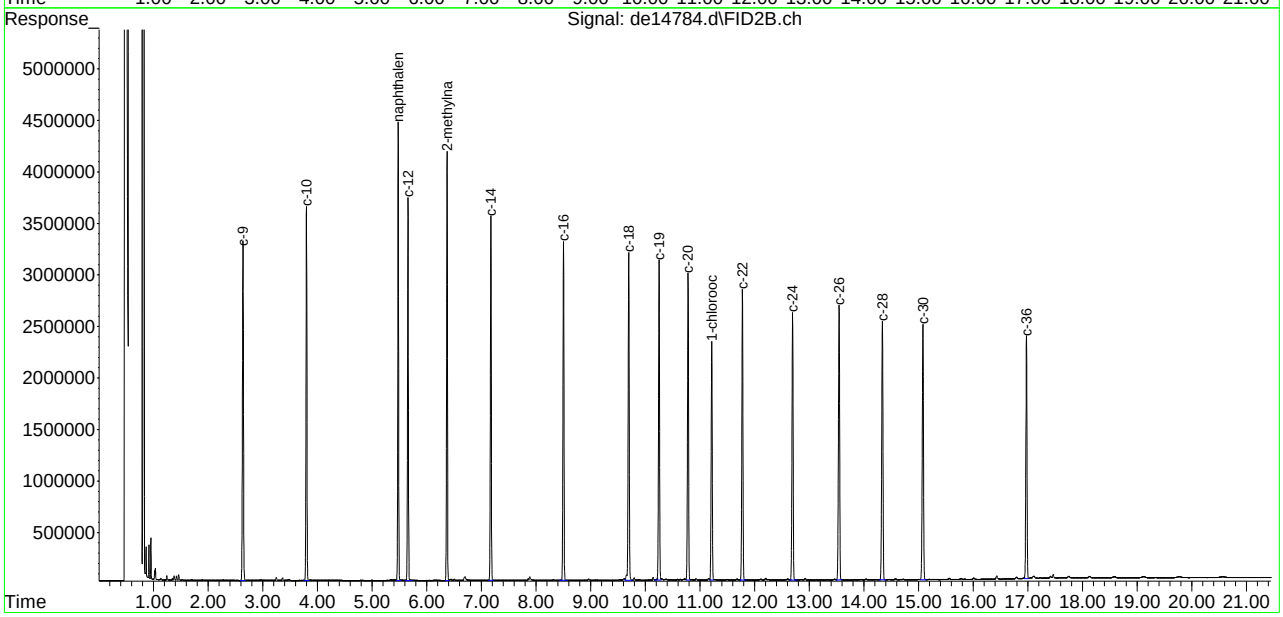
Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 11:36 am
Operator : thomasa
Sample : cc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

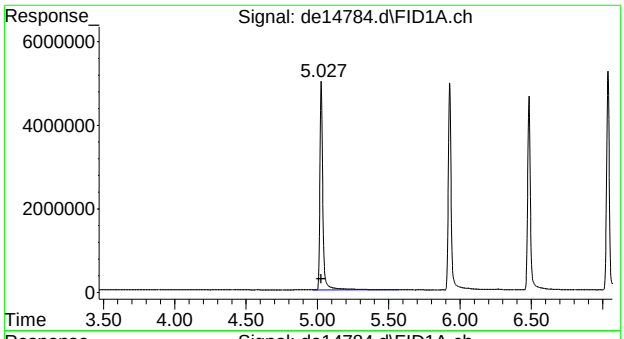
Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:11:14 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 2016
Response via : Initial Calibration
Integrator: RTE

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



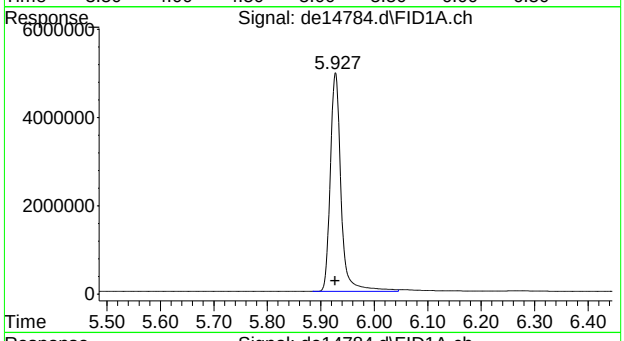


SGS ACCUTEST MC46737



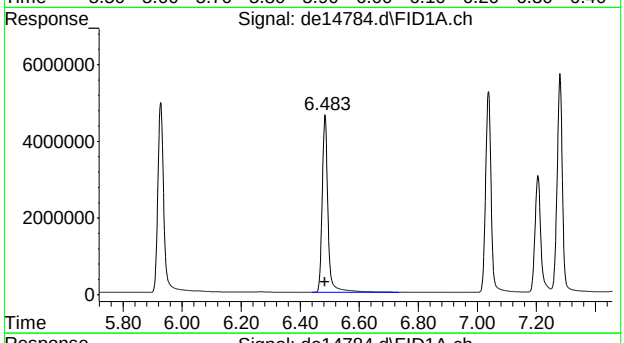
#2 naphthalene

R.T.: 5.027 min
Delta R.T.: 0.000 min
Response: 7170228
Conc: 57.12 µg/ml



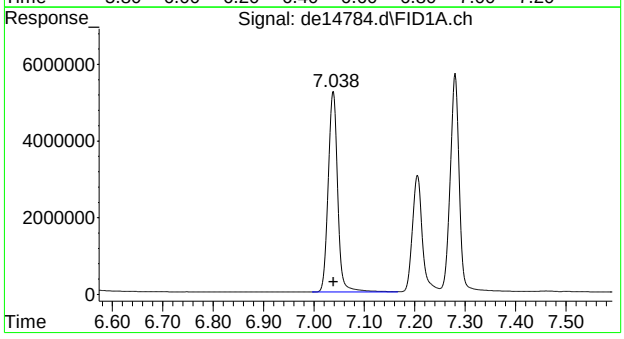
#3 2-methylnaphthalene

R.T.: 5.927 min
Delta R.T.: 0.000 min
Response: 6928624
Conc: 54.93 µg/ml m



#4 2-fluorobiphenyl

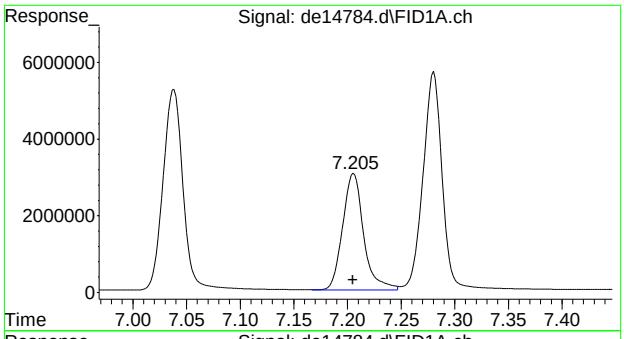
R.T.: 6.483 min
Delta R.T.: 0.000 min
Response: 6337974
Conc: 55.36 µg/ml



#5 acenaphthylene

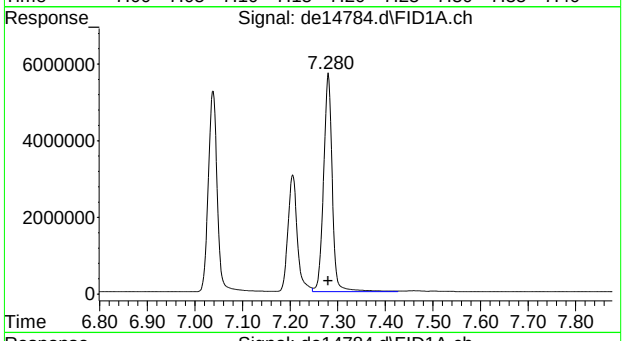
R.T.: 7.038 min
Delta R.T.: 0.000 min
Response: 6845179
Conc: 54.10 µg/ml

SGS ACCUTEST MC46737



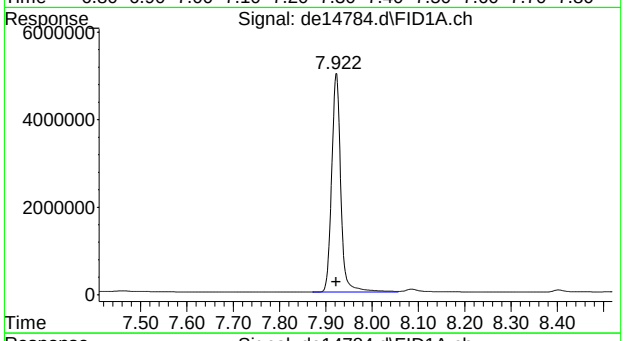
#6 2-bromonaphthalene

R.T.: 7.205 min
Delta R.T.: 0.000 min
Response: 4155639
Conc: 57.96 µg/ml



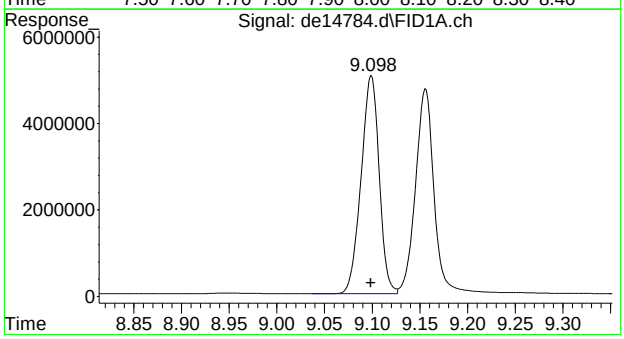
#7 acenaphthene

R.T.: 7.280 min
Delta R.T.: 0.000 min
Response: 7216282
Conc: 51.81 µg/ml



#8 fluorene

R.T.: 7.922 min
Delta R.T.: 0.000 min
Response: 6846275
Conc: 53.29 µg/ml



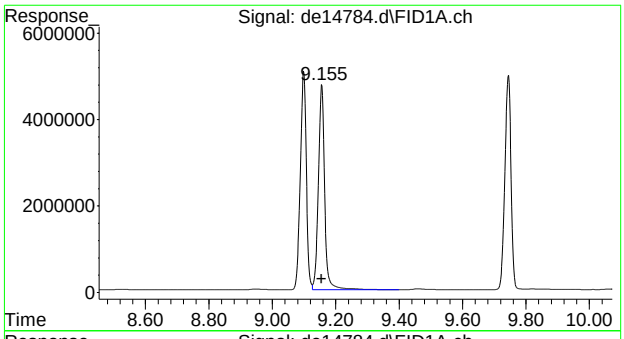
#9 phenanthrene

R.T.: 9.098 min
Delta R.T.: 0.000 min
Response: 6671061
Conc: 53.40 µg/ml

7.4.9

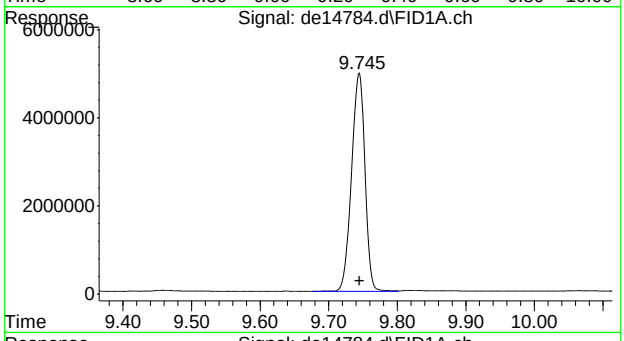
7

SGS ACCUTEST MC46737



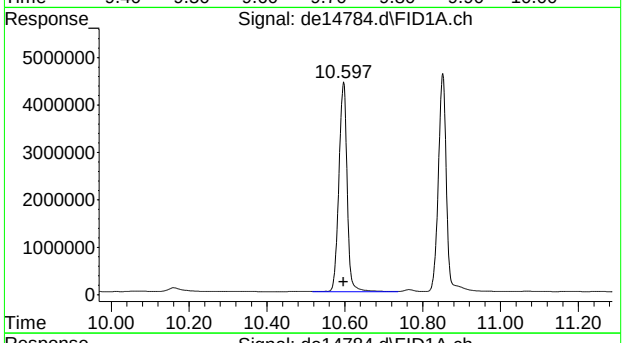
#10 anthracene

R.T.: 9.155 min
Delta R.T.: 0.000 min
Response: 6497288
Conc: 48.84 µg/ml



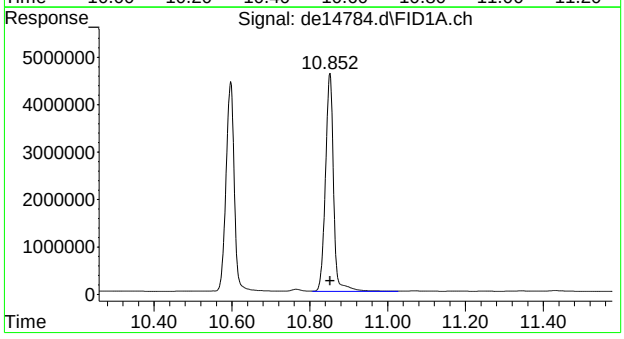
#11 o-terphenyl

R.T.: 9.745 min
Delta R.T.: 0.000 min
Response: 6718351
Conc: 50.78 µg/ml



#12 fluoranthene

R.T.: 10.597 min
Delta R.T.: 0.000 min
Response: 6494225
Conc: 50.63 µg/ml



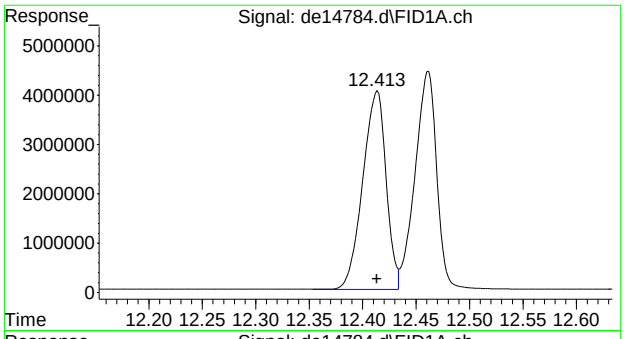
#13 pyrene

R.T.: 10.852 min
Delta R.T.: 0.000 min
Response: 6644932
Conc: 50.59 µg/ml

7.4.9

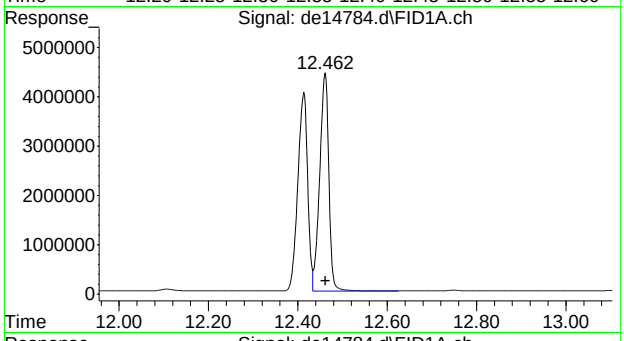
7

SGS ACCUTEST MC46737



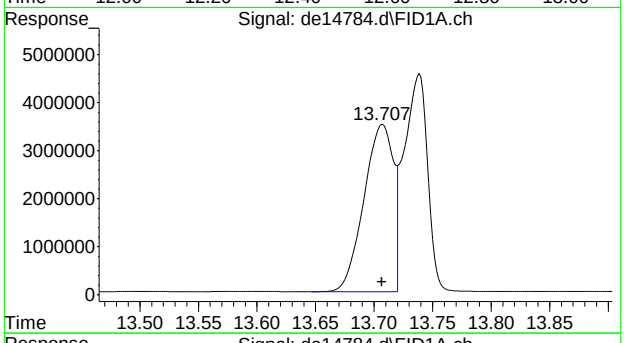
#14 benzo(a)anthracene

R.T.: 12.413 min
Delta R.T.: 0.000 min
Response: 6118112
Conc: 50.36 µg/ml m



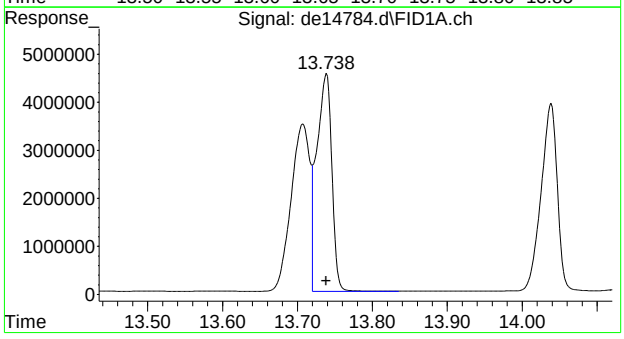
#15 chrysene

R.T.: 12.462 min
Delta R.T.: 0.000 min
Response: 6240980
Conc: 48.89 µg/ml m



#16 benzo(B)fluoranthene

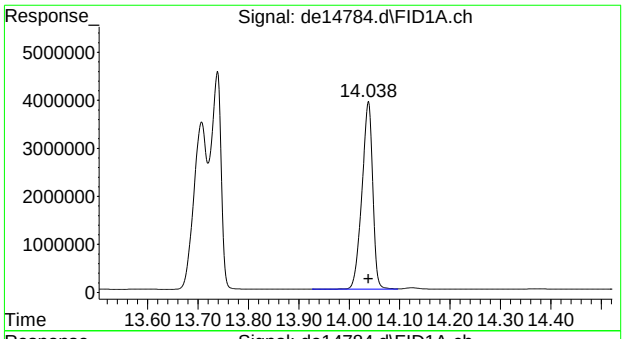
R.T.: 13.707 min
Delta R.T.: 0.000 min
Response: 6249002
Conc: 52.78 µg/ml m



#17 benzo(k)fluoranthene

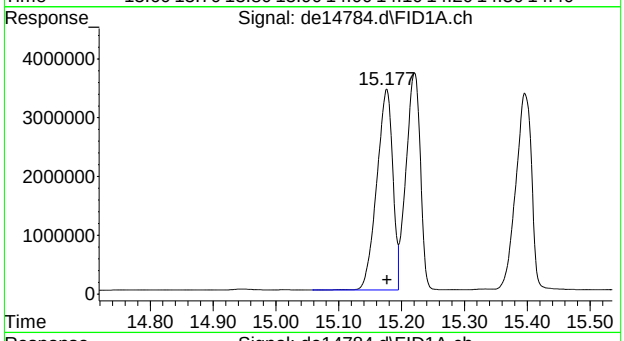
R.T.: 13.738 min
Delta R.T.: 0.000 min
Response: 6156869
Conc: 48.09 µg/ml m

SGS ACCUTEST MC46737



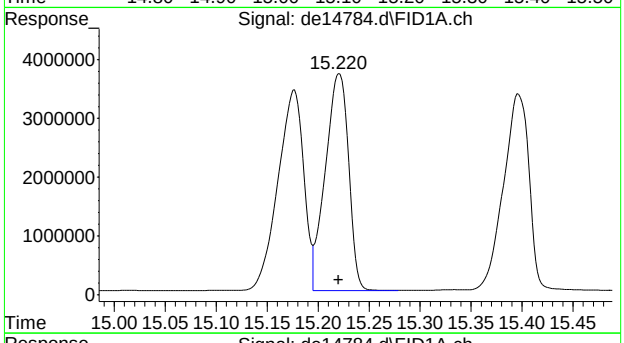
#18 benzo(a)pyrene

R.T.: 14.038 min
Delta R.T.: 0.000 min
Response: 5906667
Conc: 50.07 µg/ml



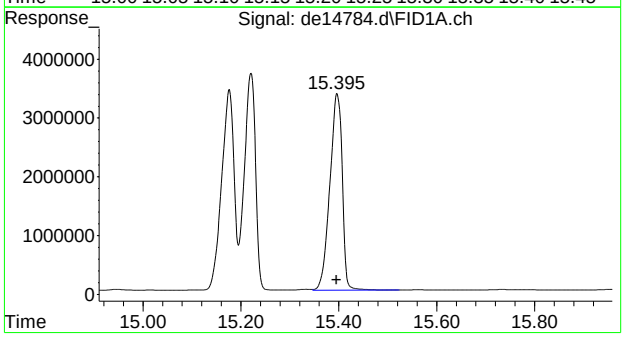
#19 indeno(1,2,3-cd)pyrene

R.T.: 15.177 min
Delta R.T.: 0.000 min
Response: 6088679
Conc: 52.02 µg/ml m



#20 dibenzo(ah)anthracene

R.T.: 15.220 min
Delta R.T.: 0.000 min
Response: 5819765
Conc: 51.36 µg/ml m



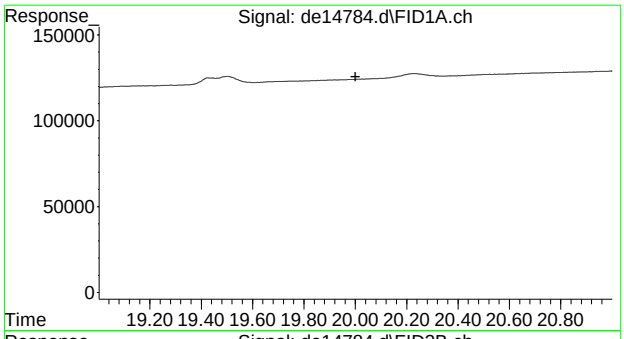
#21 benzo(ghi)perylene

R.T.: 15.395 min
Delta R.T.: 0.000 min
Response: 5873044
Conc: 51.76 µg/ml

7.4.9

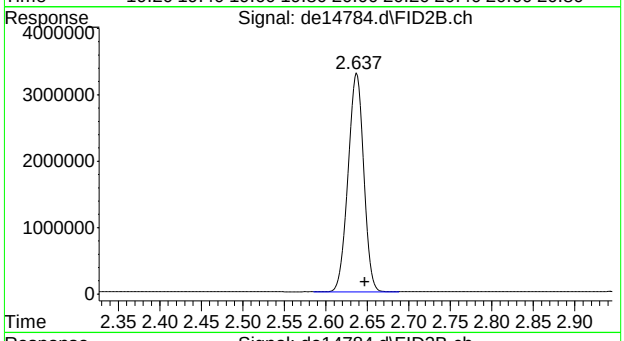
7

SGS ACCUTEST MC46737



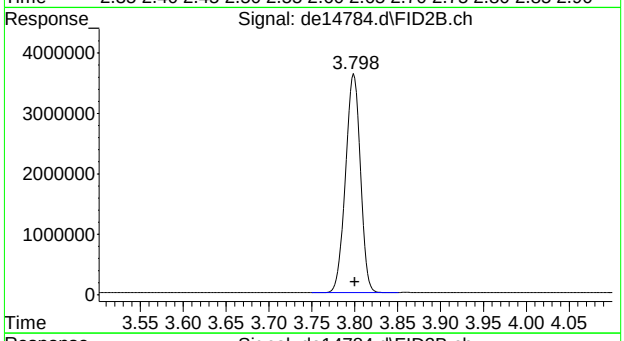
#22 bht

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



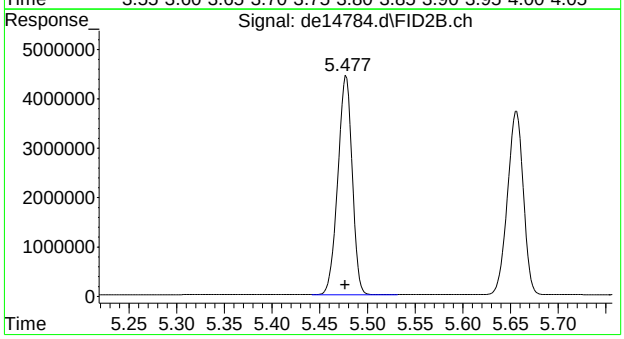
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 4326835
Conc: 51.32 µg/ml m



#26 c-10

R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 4375105
Conc: 51.90 µg/ml



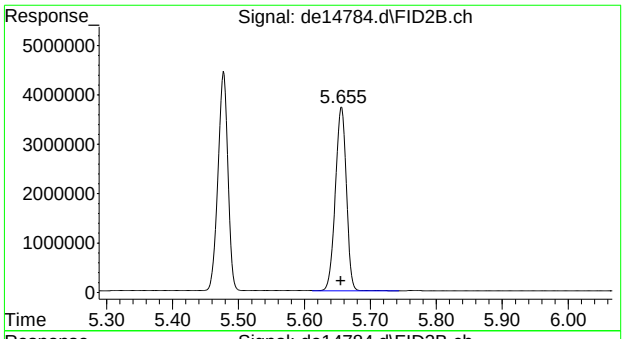
#27 naphthalene #2

R.T.: 5.477 min
Delta R.T.: 0.000 min
Response: 4648334
Conc: 51.13 µg/ml

7.4.9

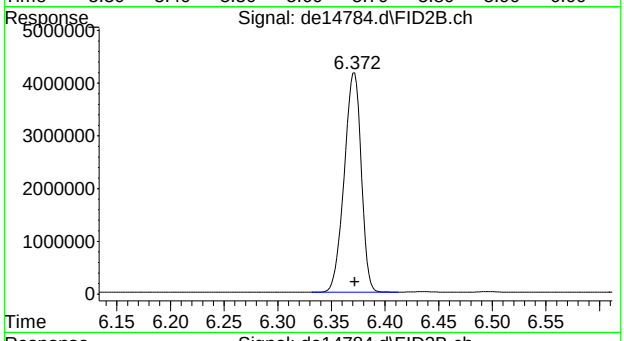
7

SGS ACCUTEST MC46737



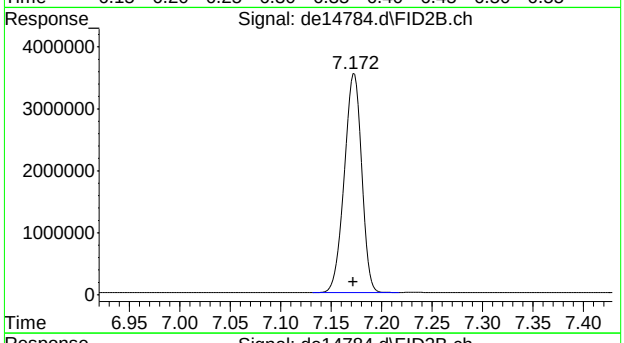
#28 c-12

R.T.: 5.655 min
Delta R.T.: 0.000 min
Response: 4295462
Conc: 50.95 µg/ml



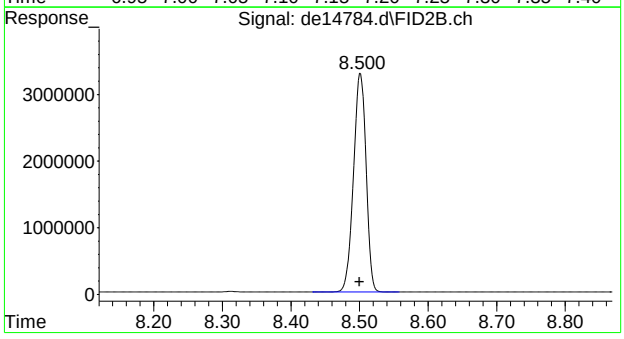
#29 2-methylnaphthalene #2

R.T.: 6.372 min
Delta R.T.: 0.000 min
Response: 4594784
Conc: 51.09 µg/ml



#30 c-14

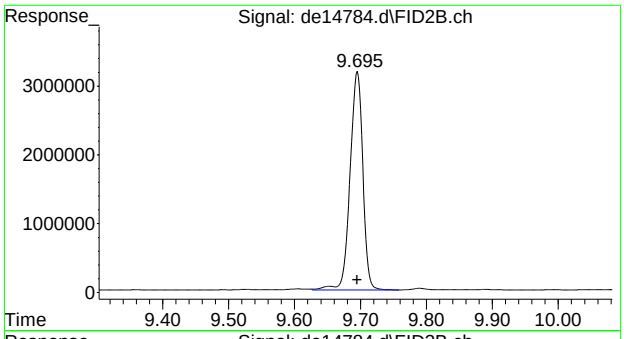
R.T.: 7.172 min
Delta R.T.: 0.000 min
Response: 4235648
Conc: 50.24 µg/ml



#31 c-16

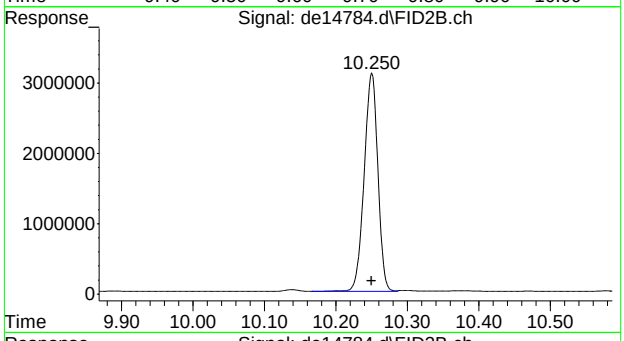
R.T.: 8.500 min
Delta R.T.: 0.000 min
Response: 4185608
Conc: 49.65 µg/ml

SGS ACCUTEST MC46737



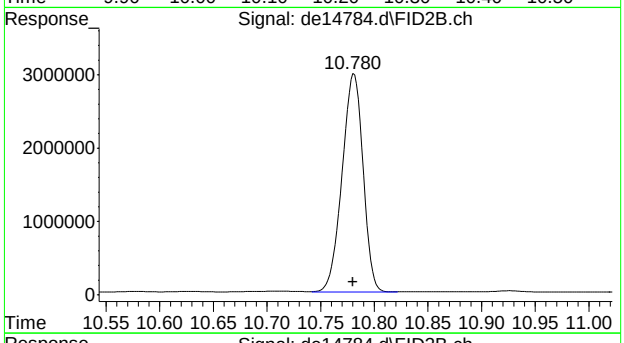
#32 c-18

R.T.: 9.695 min
Delta R.T.: 0.000 min
Response: 4262343
Conc: 50.56 µg/ml



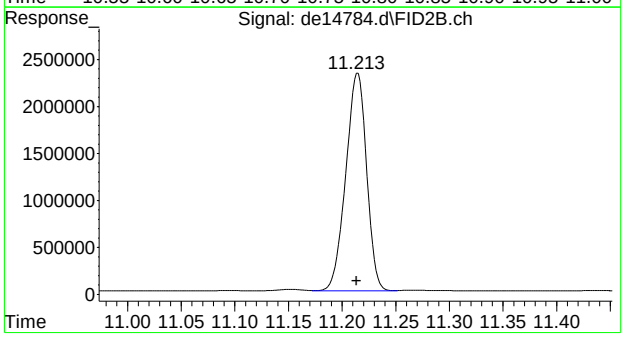
#33 c-19

R.T.: 10.250 min
Delta R.T.: 0.000 min
Response: 4132720
Conc: 53.10 µg/ml



#34 c-20

R.T.: 10.780 min
Delta R.T.: 0.000 min
Response: 4053843
Conc: 52.09 µg/ml



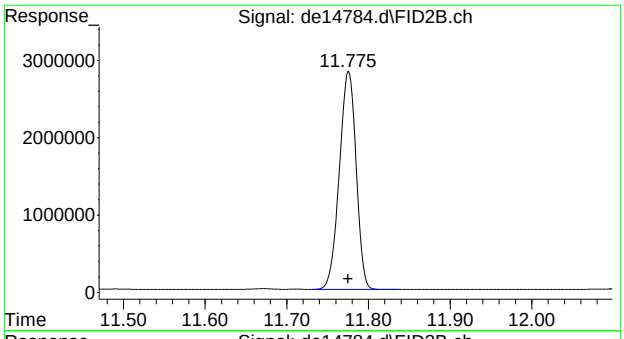
#35 1-chlorooctadecane

R.T.: 11.213 min
Delta R.T.: 0.000 min
Response: 3127795
Conc: 48.01 µg/ml

7.4.9

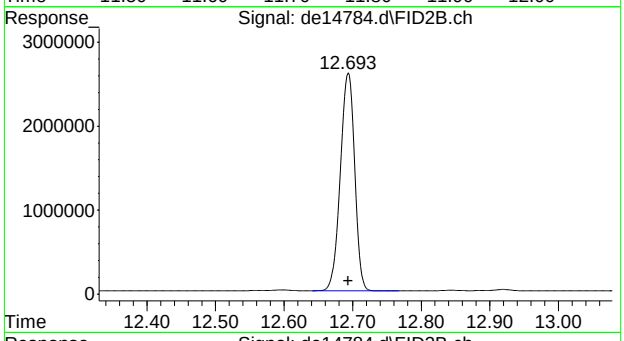
7

SGS ACCUTEST MC46737



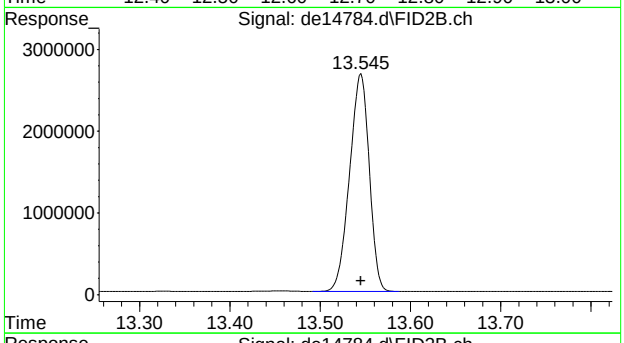
#36 c-22

R.T.: 11.775 min
Delta R.T.: 0.000 min
Response: 4029002
Conc: 51.77 µg/ml



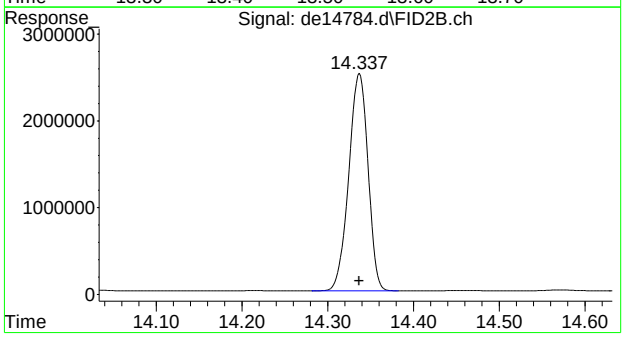
#37 c-24

R.T.: 12.693 min
Delta R.T.: 0.000 min
Response: 3767604
Conc: 48.41 µg/ml



#38 c-26

R.T.: 13.545 min
Delta R.T.: 0.000 min
Response: 4022311
Conc: 51.68 µg/ml



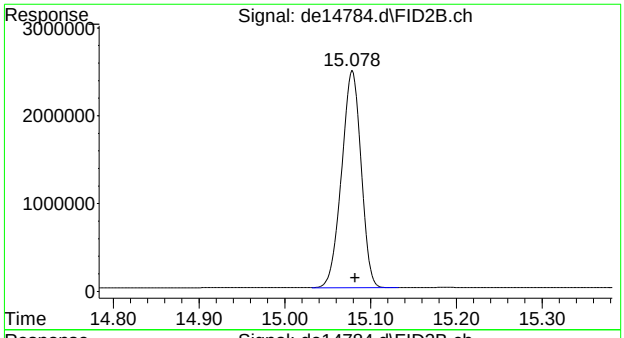
#39 c-28

R.T.: 14.337 min
Delta R.T.: 0.000 min
Response: 3902508
Conc: 50.15 µg/ml

7.4.9

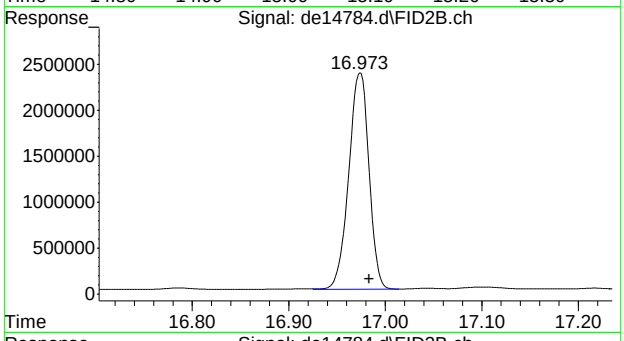
7

SGS ACCUTEST MC46737



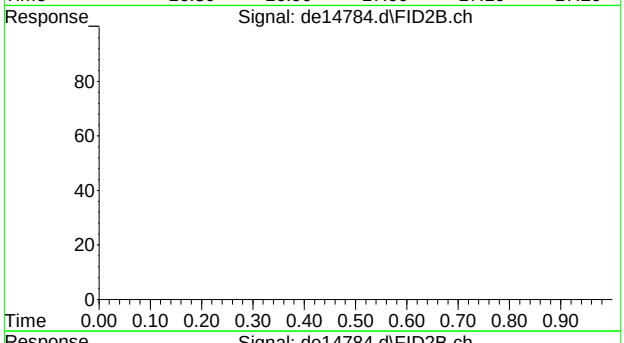
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 3905128
Conc: 50.18 µg/ml



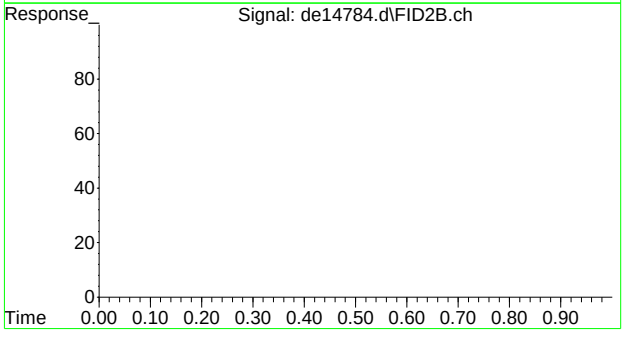
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 3425296
Conc: 44.01 µg/ml m



#42 bht

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



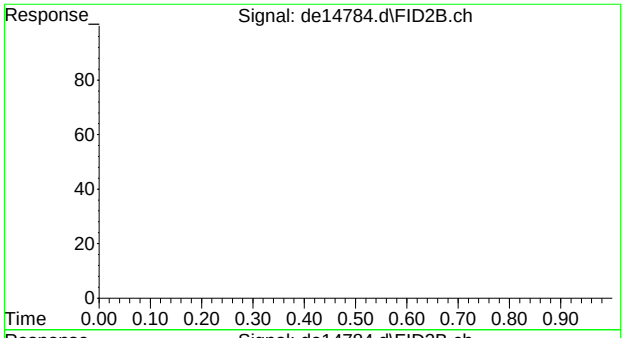
#43 bht

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

7.4.9

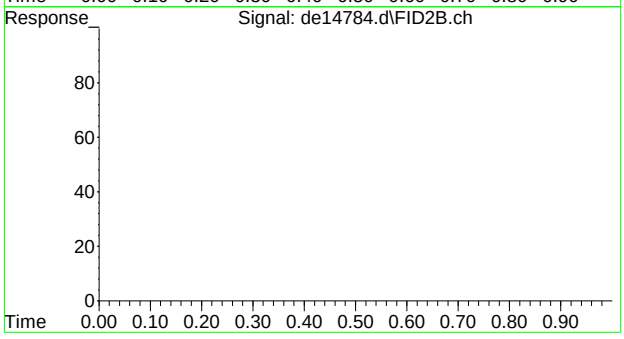
7

SGS ACCUTEST MC46737



#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.

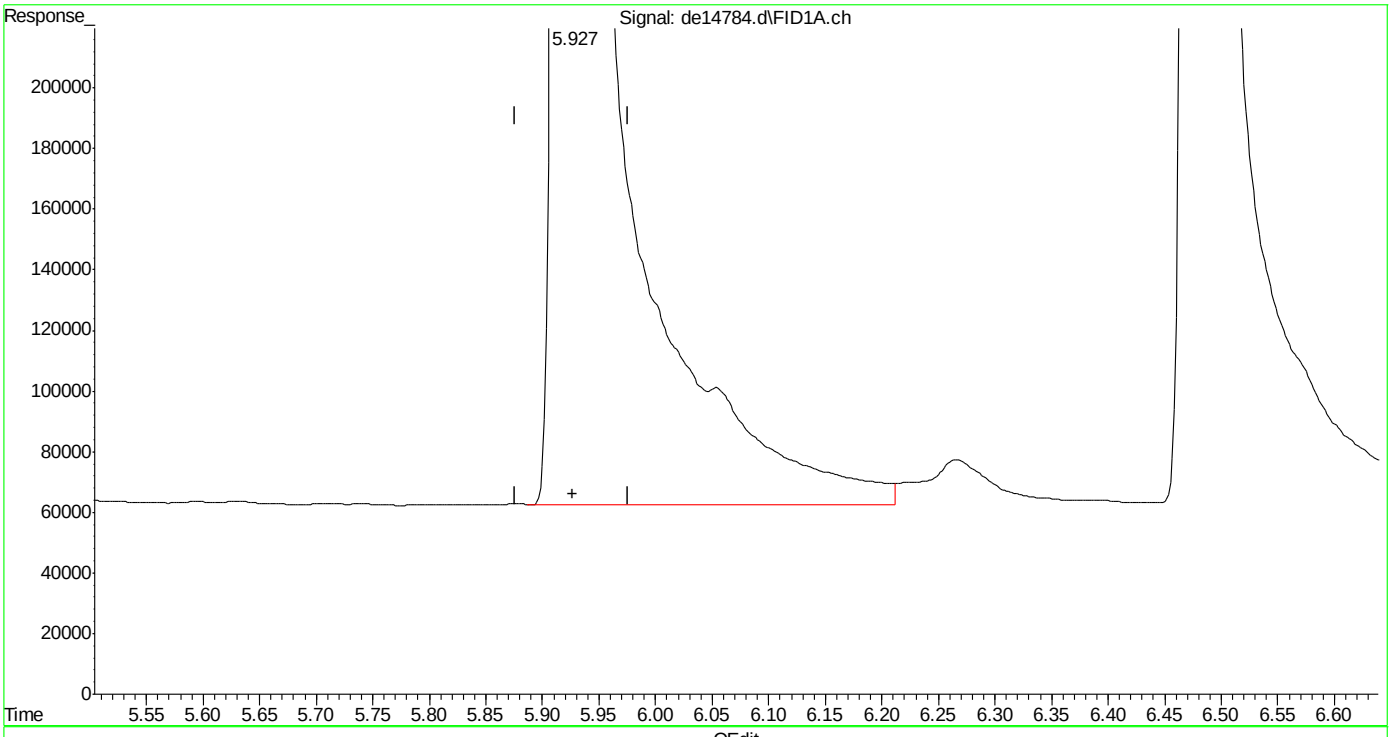
SGS ACCUTEST MC46737

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 11:36 am
Operator : thomasa
Sample : cc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:08:11 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 2016
Response via : Initial Calibration
Integrator: RTE

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



(3) 2-methylnaphthalene
5.927min 56.254 µg/ml
response 7096086

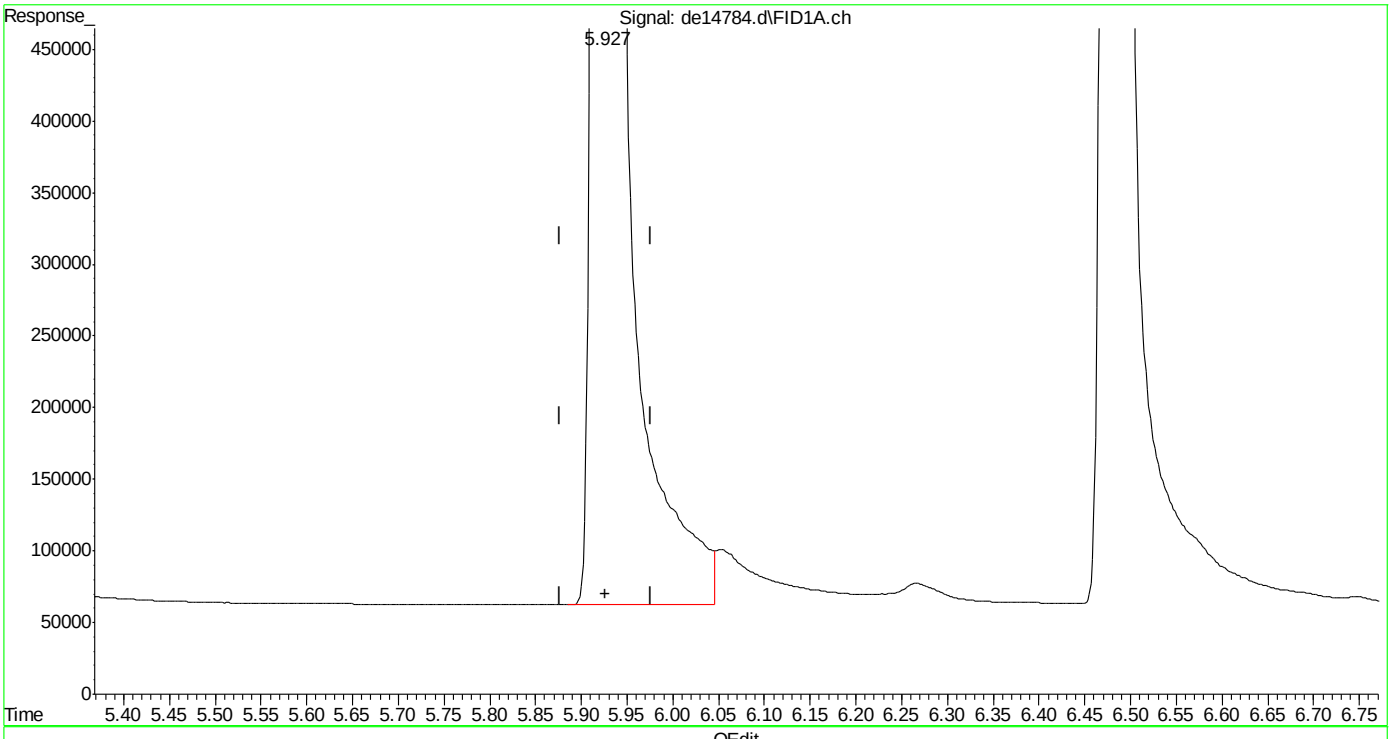
(+) = Expected Retention Time
EPH160708W.M Fri Jul 08 12:08:31 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 11:36 am
Operator : thomasa
Sample : cc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:08:11 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 2016
Response via : Initial Calibration
Integrator: RTE

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



(3) 2-methylnaphthalene
5.927min 54.926 µg/ml m
response 6928624

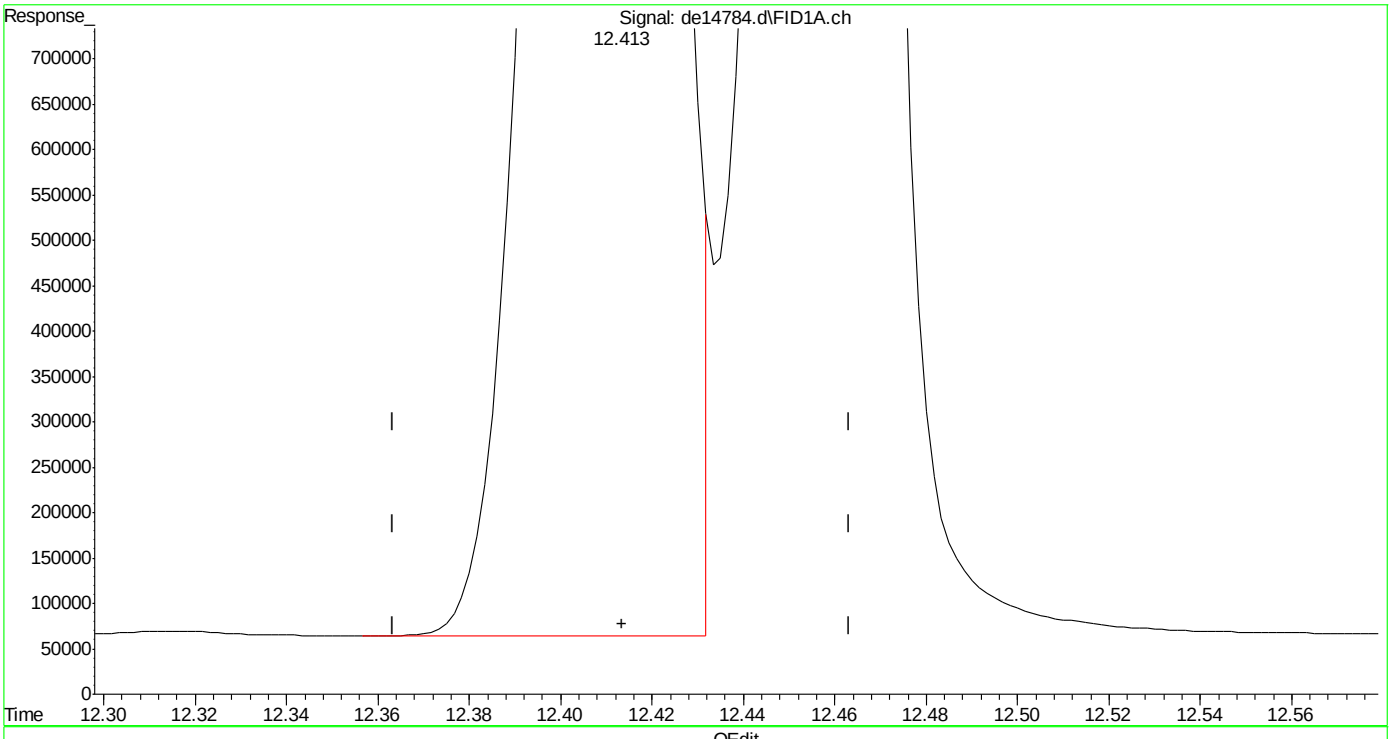
(+) = Expected Retention Time
EPH160708W.M Fri Jul 08 12:08:40 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 11:36 am
Operator : thomasa
Sample : cc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:08:11 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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
12.413min 50.013 µg/ml
response 6075710

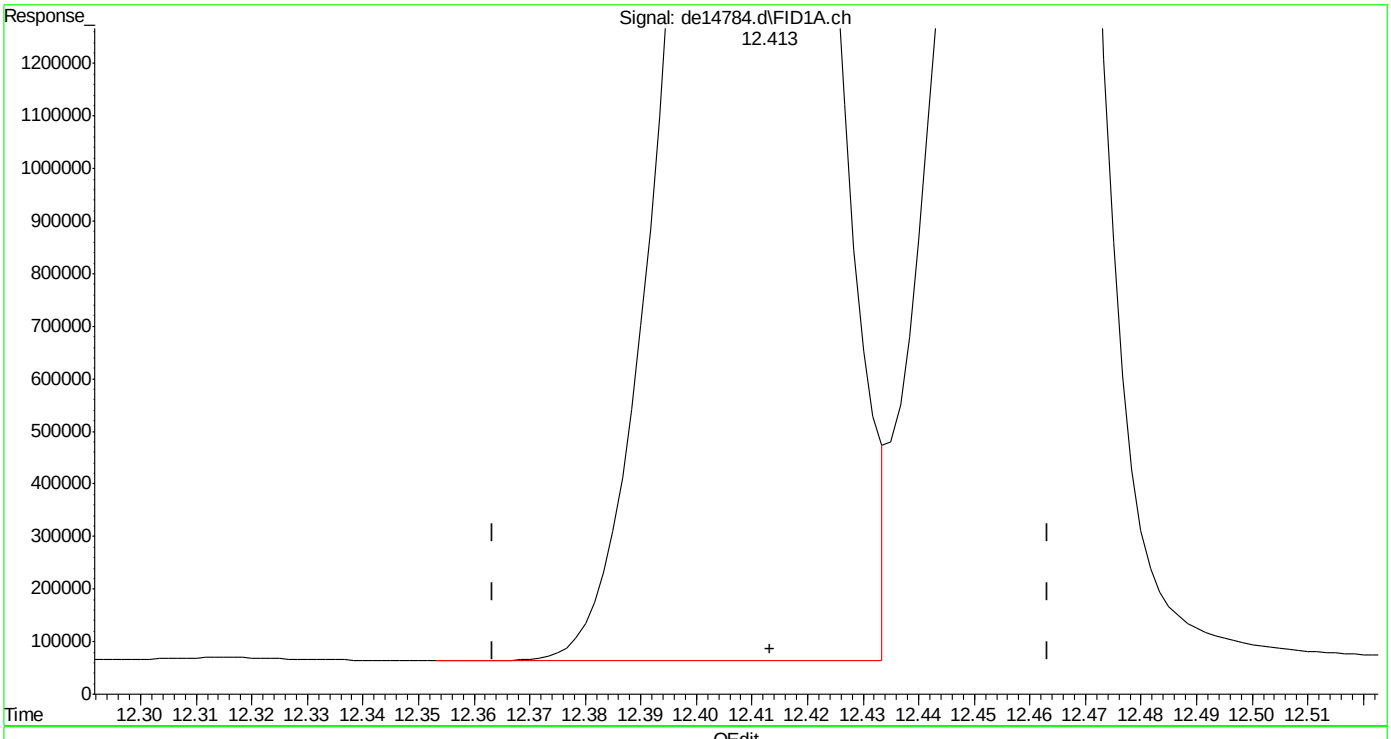
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 11:36 am
Operator : thomasa
Sample : cc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:08:11 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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
12.413min 50.362 µg/ml m
response 6118112

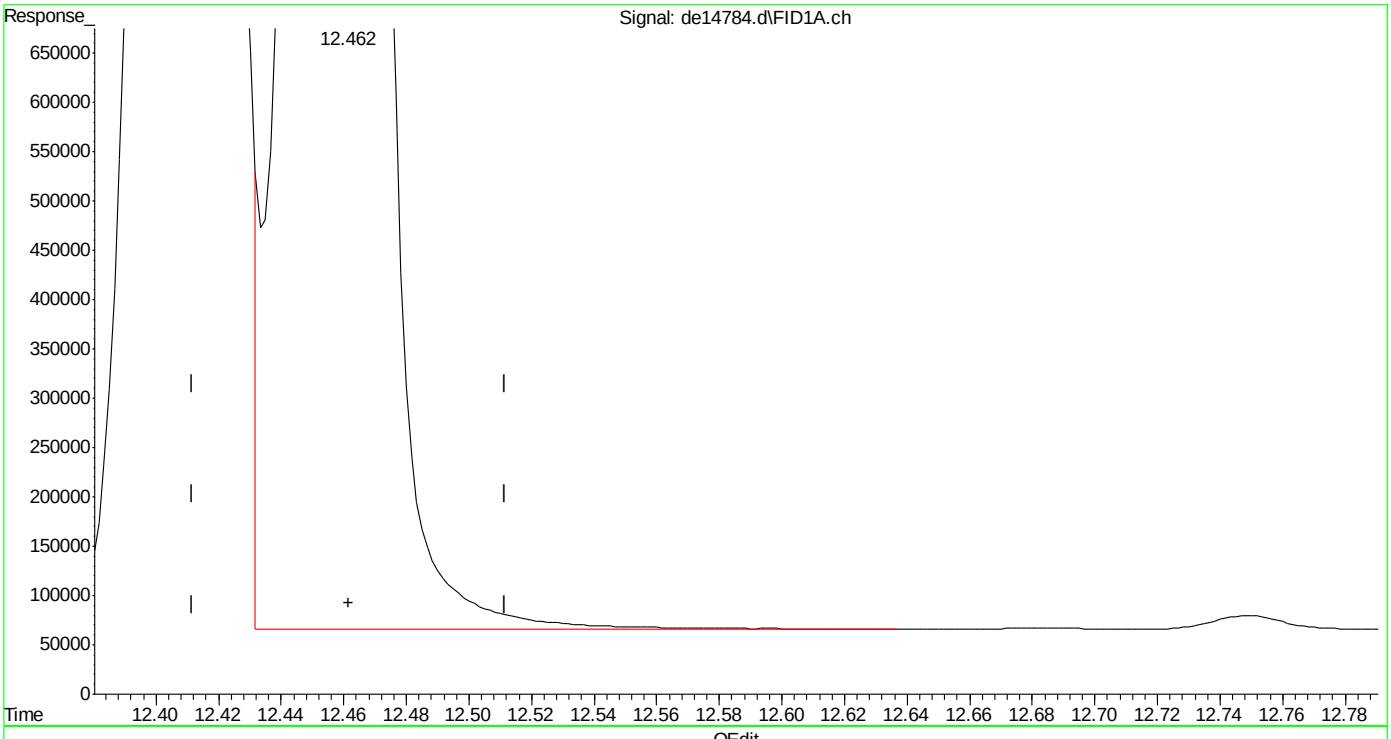
(+) = Expected Retention Time
EPH160708W.M Fri Jul 08 12:09:15 2016 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 11:36 am
Operator : thomasa
Sample : cc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:08:11 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 2016
Response via : Initial Calibration
Integrator: RTE

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



(15) chrysene
12.462min 49.098 µg/ml
response 6267291

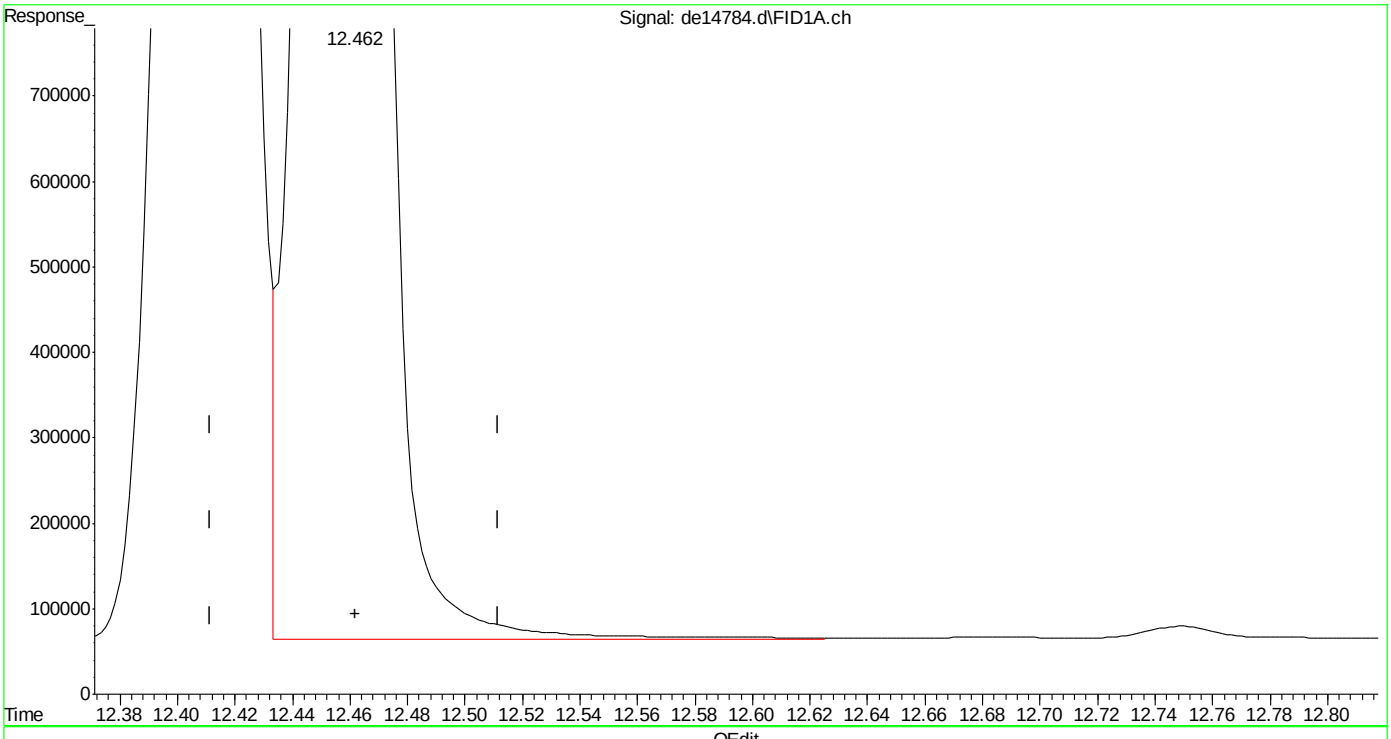
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 11:36 am
Operator : thomasa
Sample : cc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:08:11 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 2016
Response via : Initial Calibration
Integrator: RTE

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



(15) chrysene
12.462min 48.891 µg/ml m
response 6240980

(+) = Expected Retention Time
EPH160708W.M Fri Jul 08 12:09:34 2016

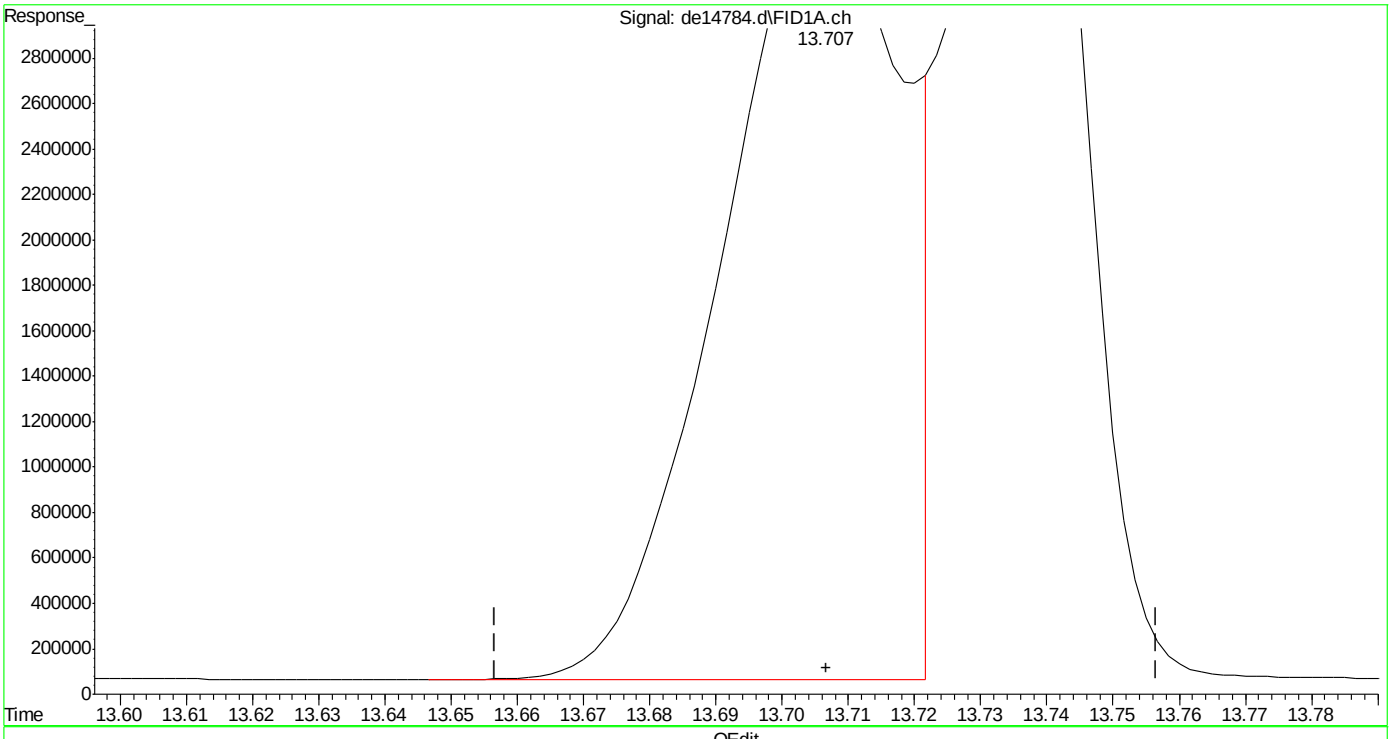
SGS ACCUTEST MC46737

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 11:36 am
Operator : thomasa
Sample : cc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:08:11 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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 55.010 µg/ml
response 6513001

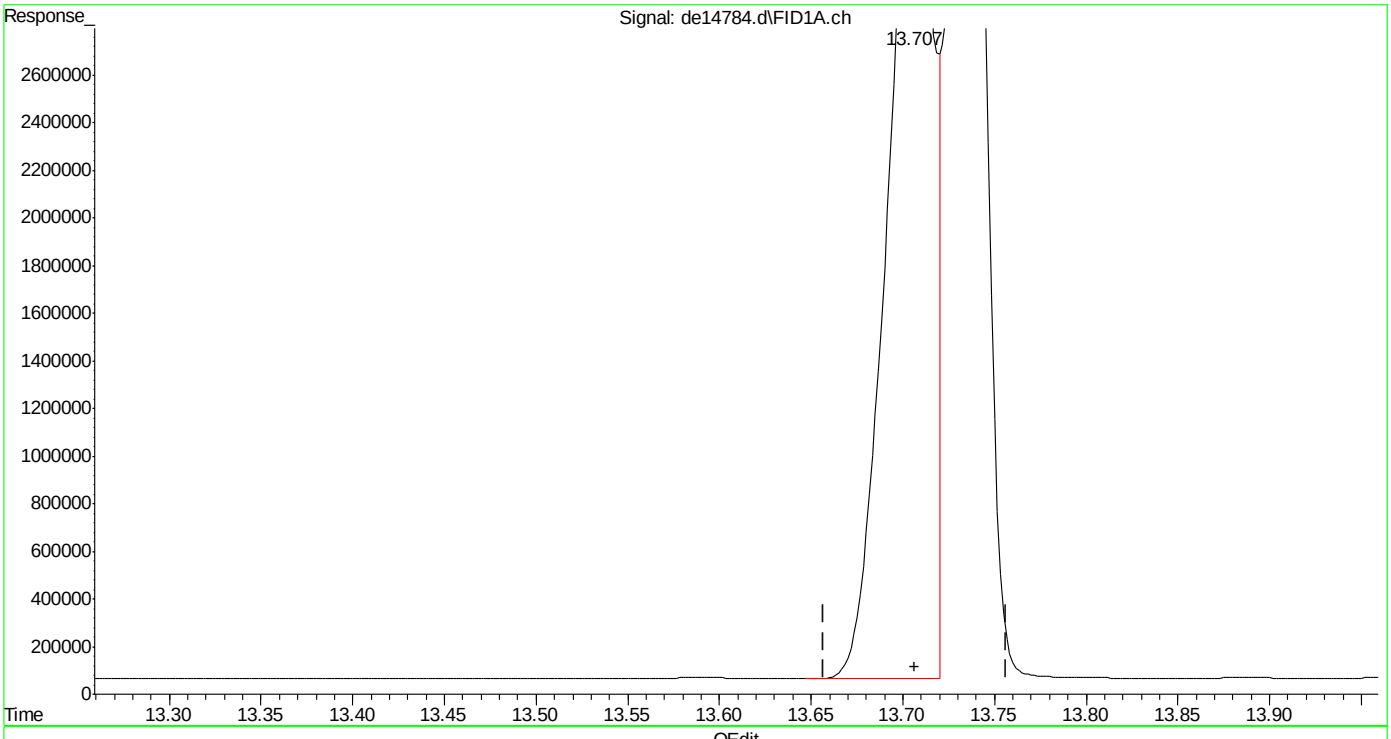
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 11:36 am
Operator : thomasa
Sample : cc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:08:11 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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 52.780 µg/ml m
response 6249002

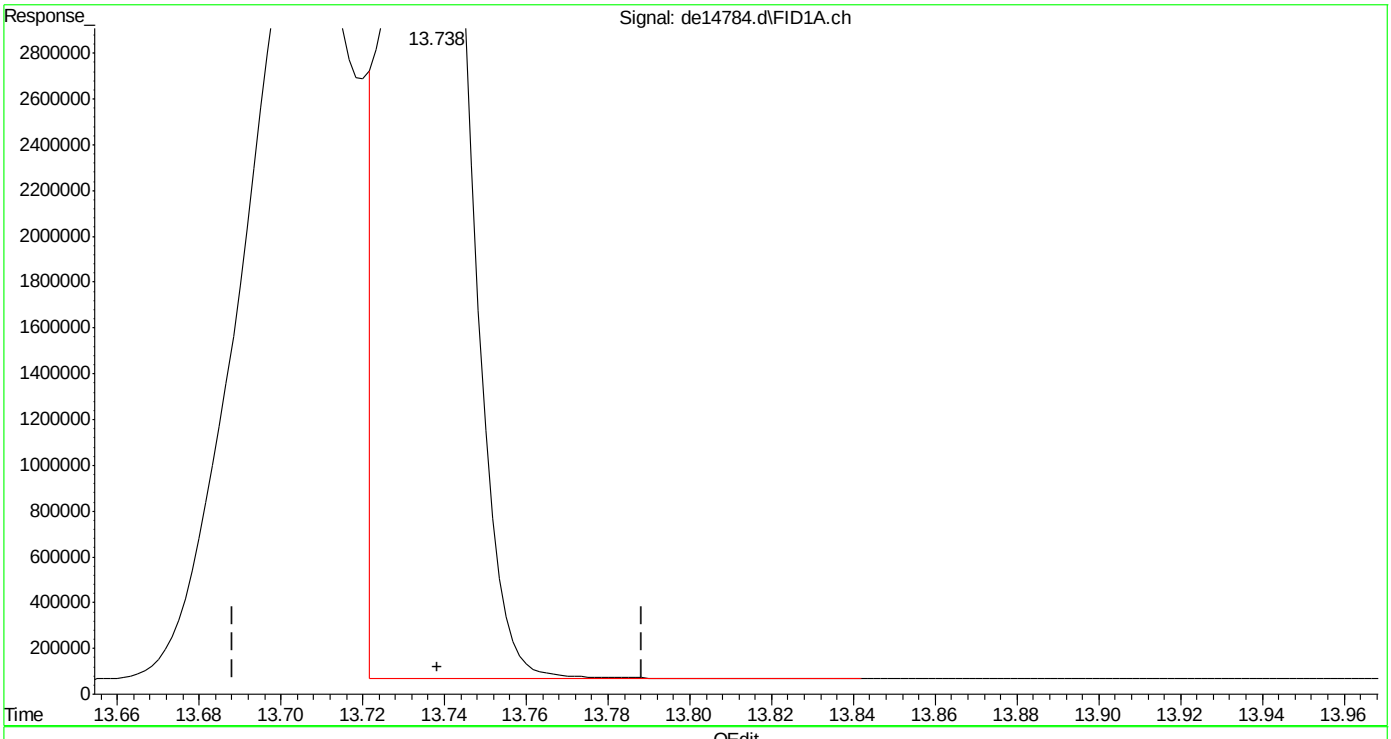
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 11:36 am
Operator : thomasa
Sample : cc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:08:11 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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
13.738min 45.921 µg/ml
response 5879338

(+) = Expected Retention Time

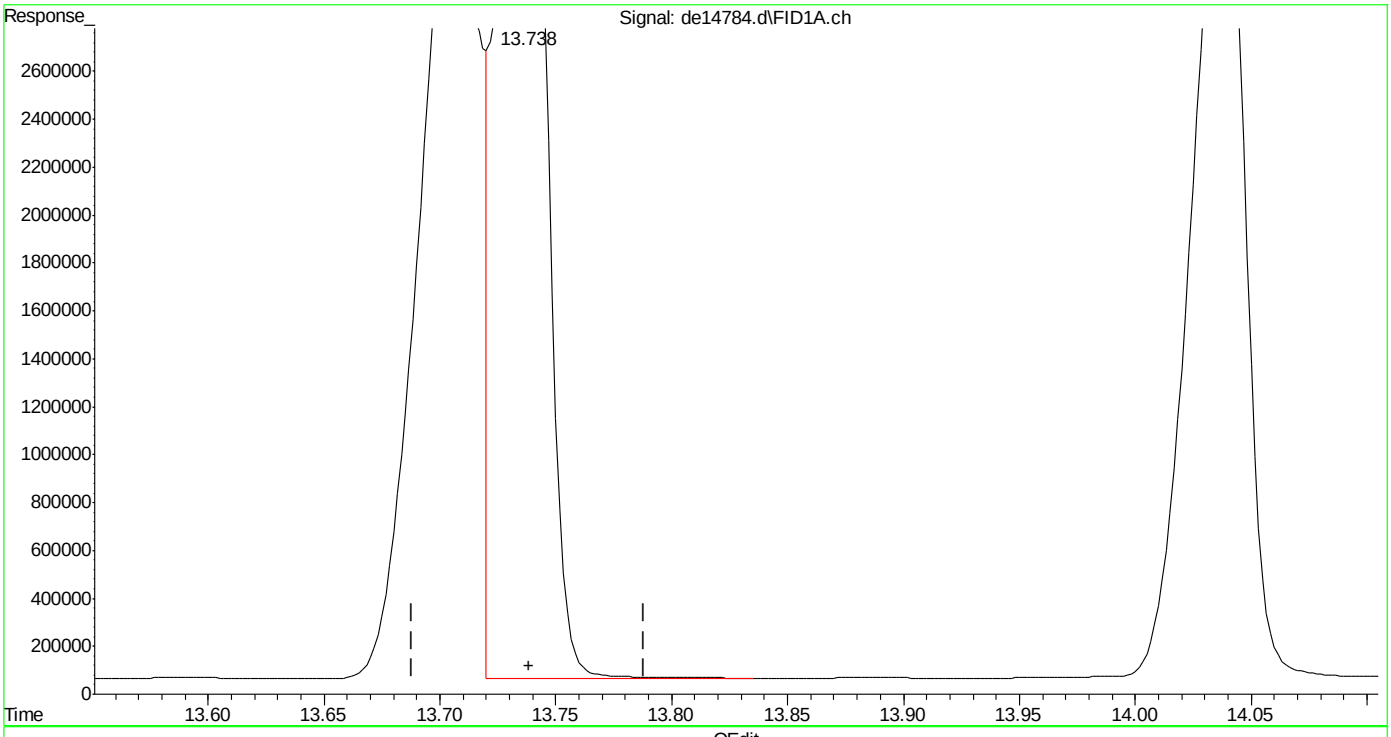
SGS ACCUTEST MC46737

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 11:36 am
Operator : thomasa
Sample : cc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:08:11 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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
13.738min 48.089 µg/ml m
response 6156869

(+) = Expected Retention Time
EPH160708W.M Fri Jul 08 12:10:09 2016

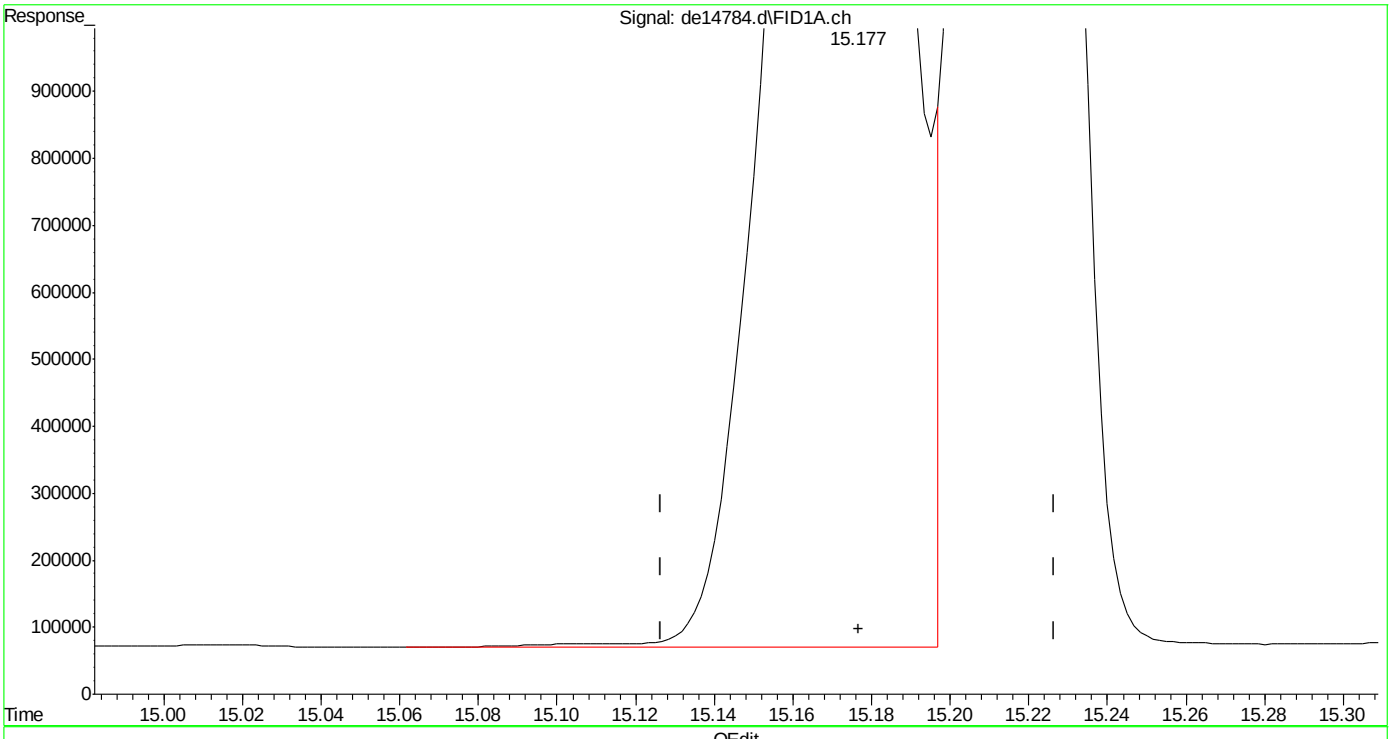
SGS ACCUTEST MC46737

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 11:36 am
Operator : thomasa
Sample : cc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:08:11 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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
15.177min 52.679 µg/ml
response 6165912

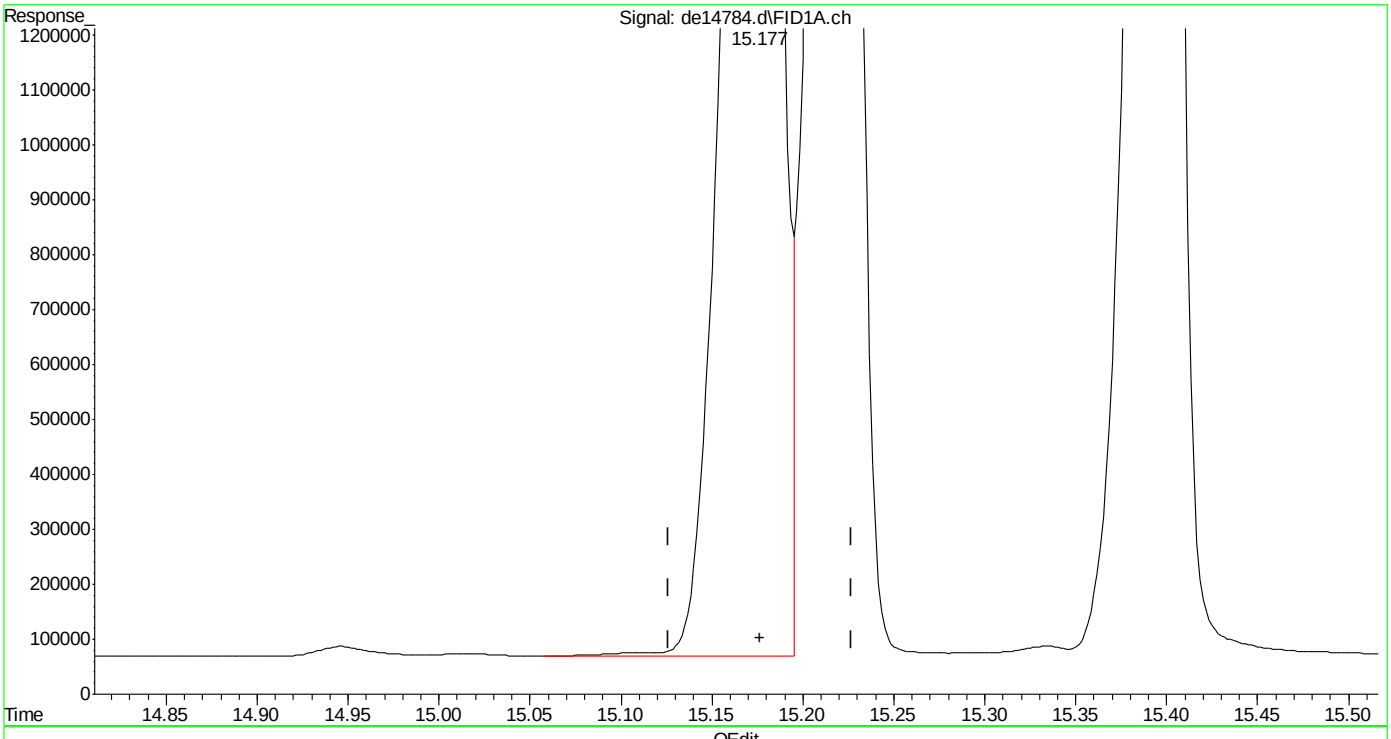
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 11:36 am
Operator : thomasa
Sample : cc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:08:11 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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
15.177min 52.019 µg/ml m
response 6088679

(+) = Expected Retention Time

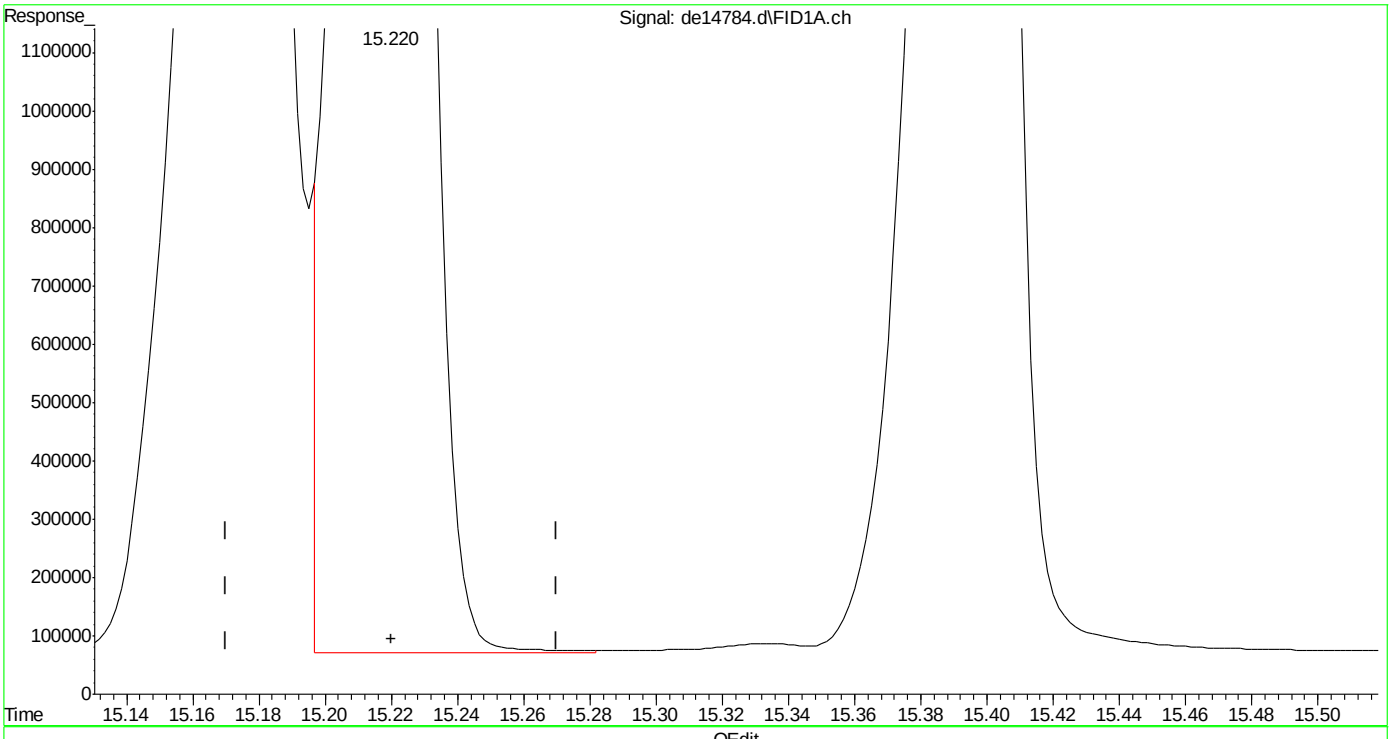
SGS ACCUTEST MC46737

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 11:36 am
Operator : thomasa
Sample : cc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:08:11 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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
15.220min 50.558 µg/ml
response 5728545

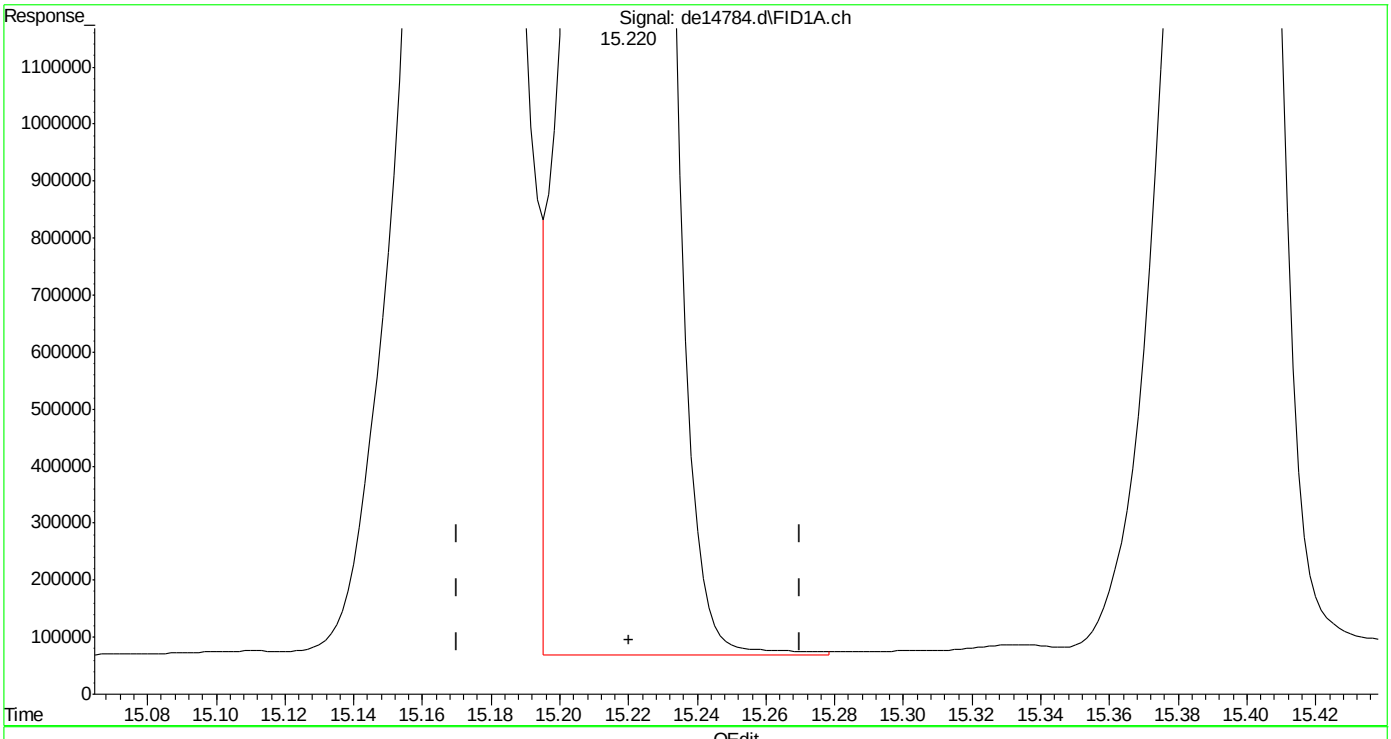
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\DE160708EPH\
Data File : de14784.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 11:36 am
Operator : thomasa
Sample : cc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 08 12:08:11 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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
15.220min 51.363 µg/ml m
response 5819765

(+) = Expected Retention Time
EPH160708W.M Fri Jul 08 12:10:45 2016

Quantitation Report (QT Reviewed)

Data Path : G:\1\DATA\DE160708EPH\
Data File : de14793.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 4:00 pm
Operator : thomasa
Sample : ecc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 11 07:49:31 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 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	6029325	52.669 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 263.34%#
6) s	2-bromonaphthalene	7.208	3972270	55.399 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 277.00%#
11) s	o-terphenyl	9.747	6477485	48.958 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 244.79%#
35) s	1-chlorooctadecane	11.215	3364255	51.636 µg/ml
Spiked Amount	20.000 Range	8 - 28	Recovery	= 258.18%#
	Target Compounds			
2)	naphthalene	5.030	6817387	54.306 µg/ml
3)	2-methylnaphthalene	5.932	6754372	53.545 µg/ml
5)	acenaphthylene	7.042	6512479	51.472 µg/ml
7)	acenaphthene	7.283	6903631	49.564 µg/ml
8)	fluorene	7.927	6571888	51.157 µg/ml
9)	phenanthrene	9.102	6441200	51.564 µg/ml
10)	anthracene	9.158	6275639	47.172 µg/ml
12)	fluoranthene	10.602	6278256	48.948 µg/ml
13)	pyrene	10.855	6419775	48.879 µg/ml
14)	benzo(a)anthracene	12.417	5959840	49.059 µg/ml
15)	chrysene	12.463	6068865	47.543 µg/ml
16)	benzo(B)fluoranthene	13.712	6194425	52.319 µg/mlm
17)	benzo(k)fluoranthene	13.740	5966722	46.604 µg/mlm
18)	benzo(a)pyrene	14.043	5791265	49.095 µg/ml
19)	indeno(1,2,3-cd)pyrene	15.182	5979013	51.082 µg/mlm
20)	dibenzo(ah)anthracene	15.225	5728525	50.557 µg/mlm
21)	benzo(ghi)perylene	15.403	5752938	50.698 µg/ml
25) h	c-9	2.647	4314112	51.172 µg/mlm
26) h	c-10	3.800	4356664	51.677 µg/ml
27)	naphthalene #2	5.477	4634249	50.976 µg/ml
28)	c-12	5.657	4301493	51.023 µg/ml
29)	2-methylnaphthalene #2	6.372	4617558	51.342 µg/ml
30)	c-14	7.173	4284933	50.826 µg/ml
31)	c-16	8.502	4298331	50.985 µg/ml
32)	c-18	9.695	4334331	51.412 µg/ml
33)	c-19	10.250	4284155	55.049 µg/ml
34)	c-20	10.782	4205727	54.041 µg/ml
36)	c-22	11.775	4178985	53.698 µg/ml
37)	c-24	12.693	3885192	49.923 µg/ml
38)	c-26	13.543	4151648	53.347 µg/ml
39)	c-28	14.338	4022500	51.687 µg/ml
40) h	c-30	15.082	4033953	51.834 µg/ml
41) h	c-36	16.983	3694569	47.473 µg/mlm

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

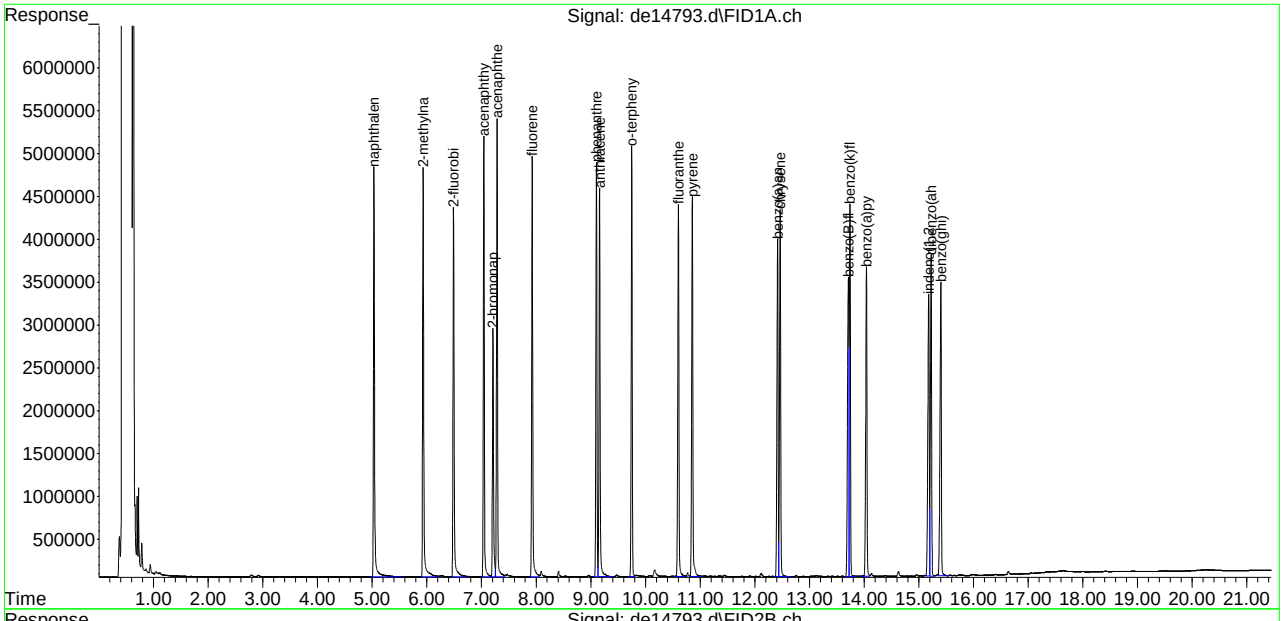
SGS ACCUTEST MC46737

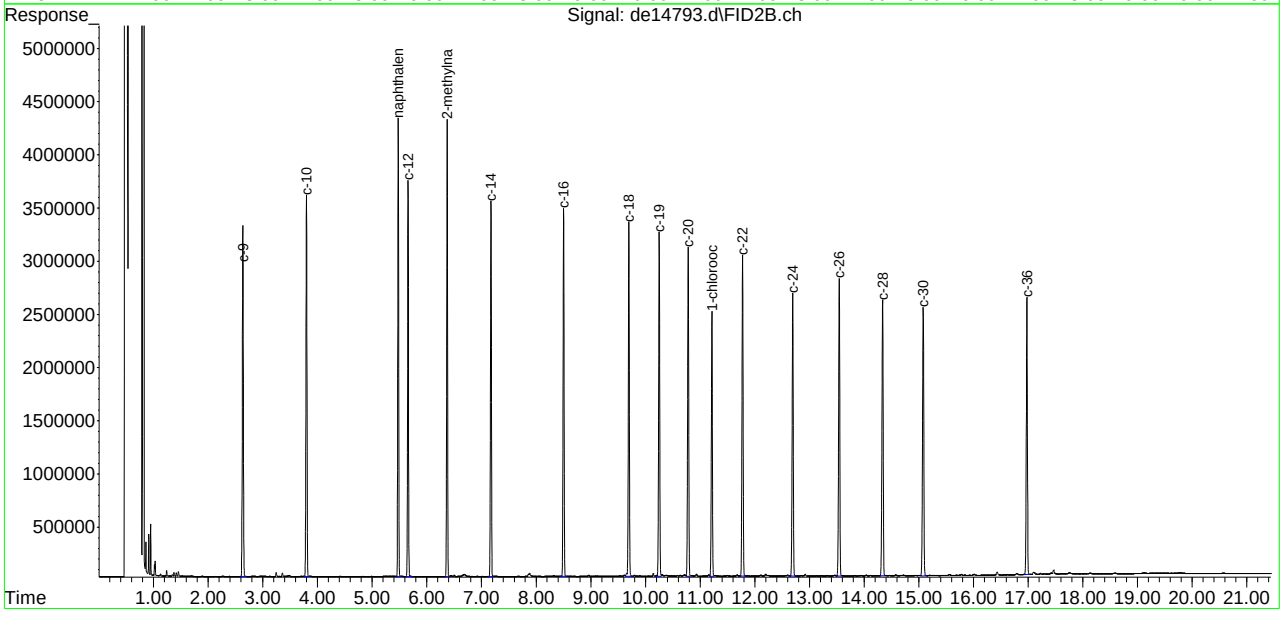
Quantitation Report (QT Reviewed)

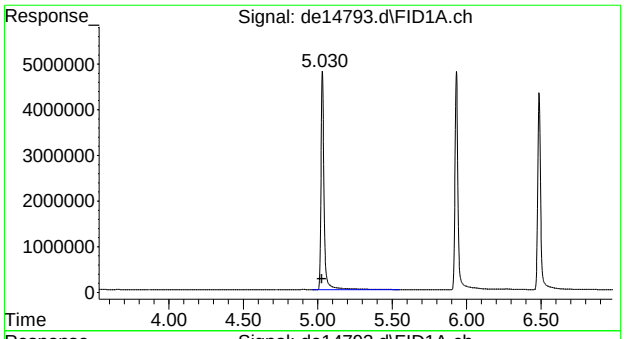
Data Path : G:\1\DATA\DE160708EPH\
Data File : de14793.d
Signal(s) : Signal #1: FID1A.ch Signal #2: FID2B.ch
Acq On : 8 Jul 2016 4:00 pm
Operator : thomasa
Sample : ecc815-50,gde822
Misc : op47862,gde822,1000,,,2,,w
ALS Vial : 142 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Jul 11 07:49:31 2016
Quant Method : C:\msdchem\1\METHODS\EPH160708W.M
Quant Title : BMAEPH-working method
QLast Update : Fri Jul 08 12:08:00 2016
Response via : Initial Calibration
Integrator: RTE

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

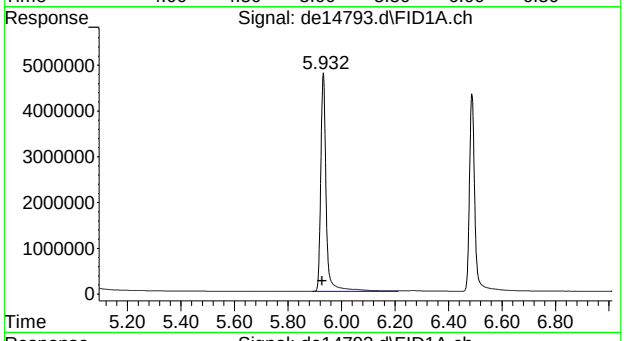






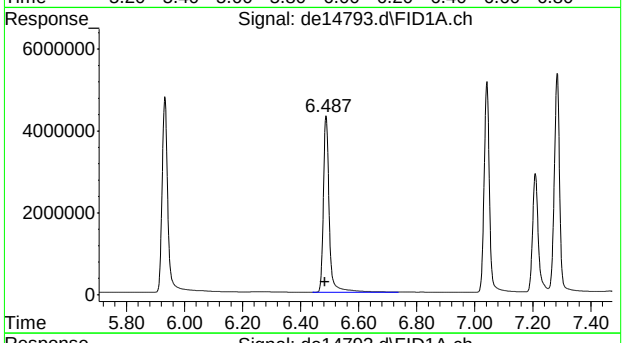
#2 naphthalene

R.T.: 5.030 min
Delta R.T.: 0.003 min
Response: 6817387
Conc: 54.31 µg/ml



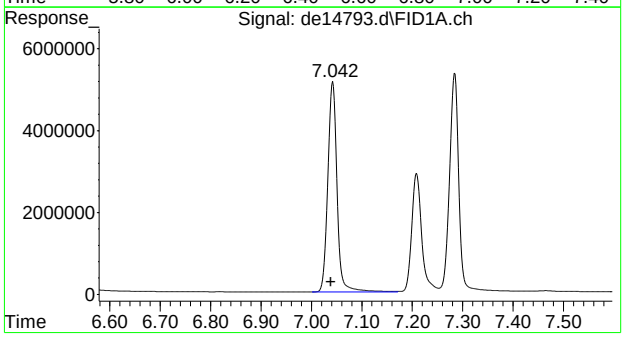
#3 2-methylnaphthalene

R.T.: 5.932 min
Delta R.T.: 0.005 min
Response: 6754372
Conc: 53.54 µg/ml



#4 2-fluorobiphenyl

R.T.: 6.487 min
Delta R.T.: 0.003 min
Response: 6029325
Conc: 52.67 µg/ml



#5 acenaphthylene

R.T.: 7.042 min
Delta R.T.: 0.003 min
Response: 6512479
Conc: 51.47 µg/ml

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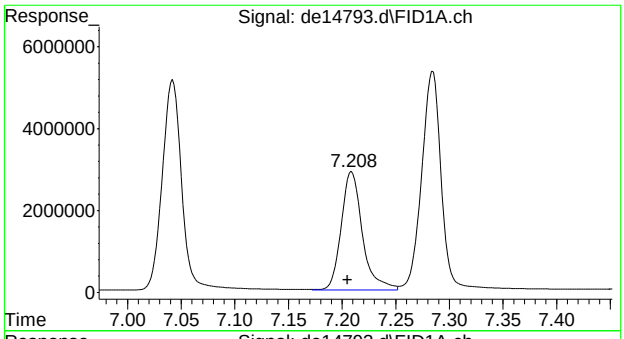
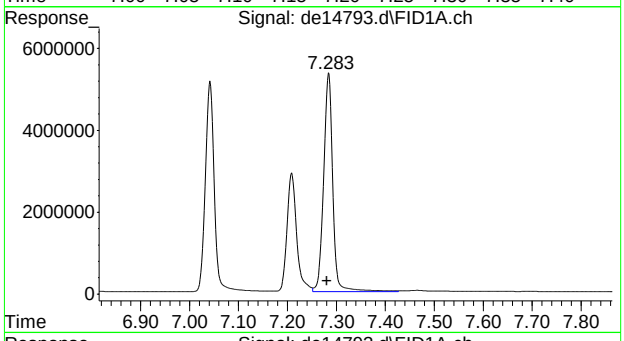


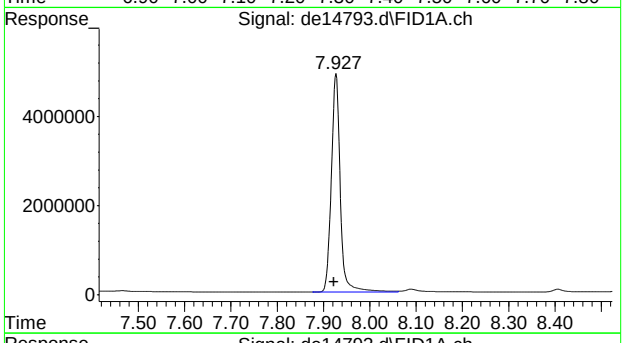
#6 2-bromonaphthalene

R.T.: 7.208 min
Delta R.T.: 0.003 min
Response: 3972270
Conc: 55.40 µg/ml



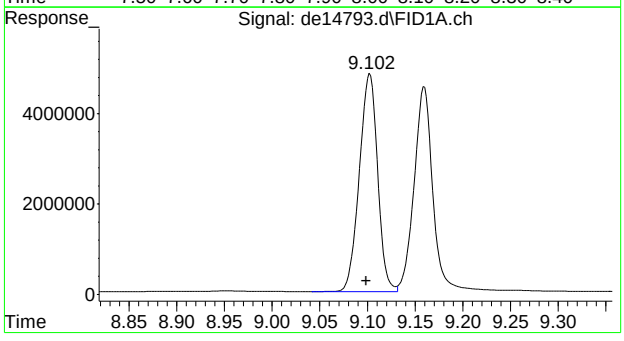
#7 acenaphthene

R.T.: 7.283 min
Delta R.T.: 0.003 min
Response: 6903631
Conc: 49.56 µg/ml



#8 fluorene

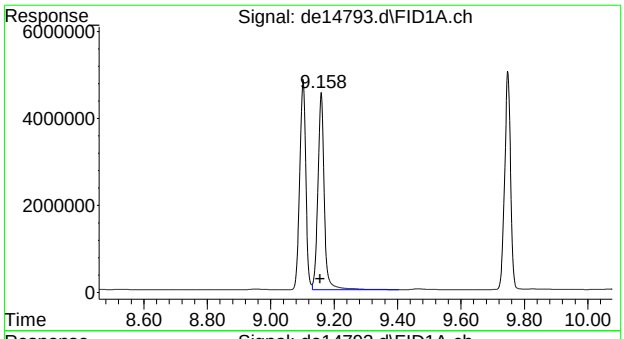
R.T.: 7.927 min
Delta R.T.: 0.005 min
Response: 6571888
Conc: 51.16 µg/ml



#9 phenanthrene

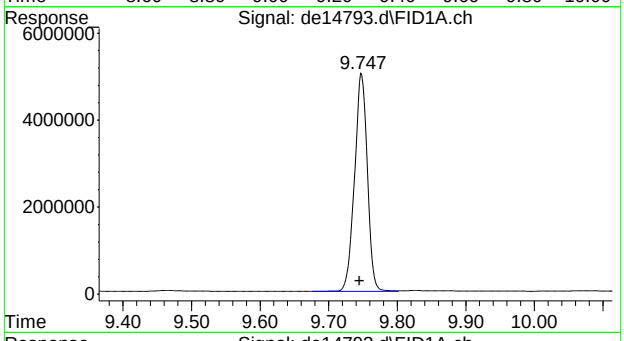
R.T.: 9.102 min
Delta R.T.: 0.003 min
Response: 6441200
Conc: 51.56 µg/ml

SGS ACCUTEST MC46737



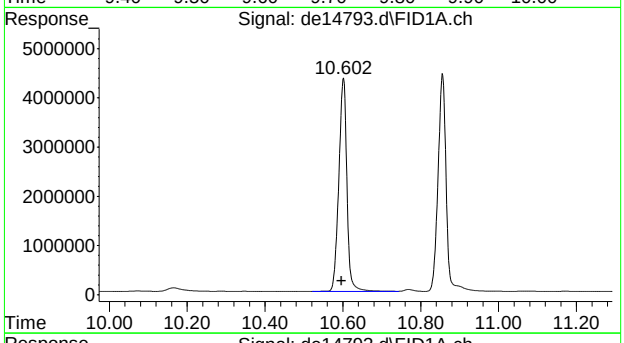
#10 anthracene

R.T.: 9.158 min
Delta R.T.: 0.003 min
Response: 6275639
Conc: 47.17 µg/ml



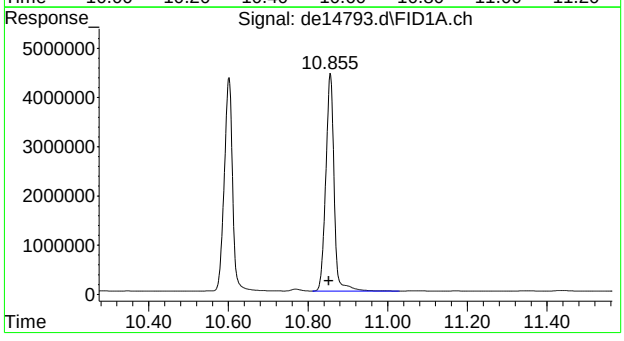
#11 o-terphenyl

R.T.: 9.747 min
Delta R.T.: 0.002 min
Response: 6477485
Conc: 48.96 µg/ml



#12 fluoranthene

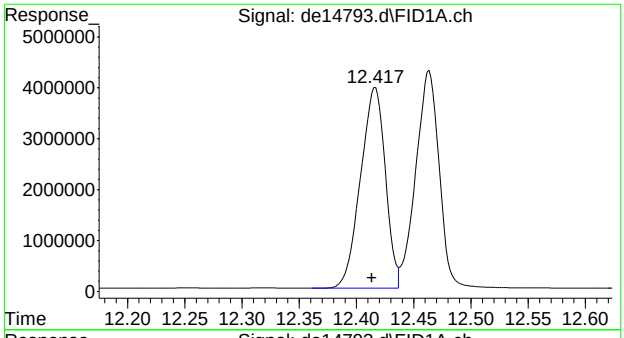
R.T.: 10.602 min
Delta R.T.: 0.005 min
Response: 6278256
Conc: 48.95 µg/ml



#13 pyrene

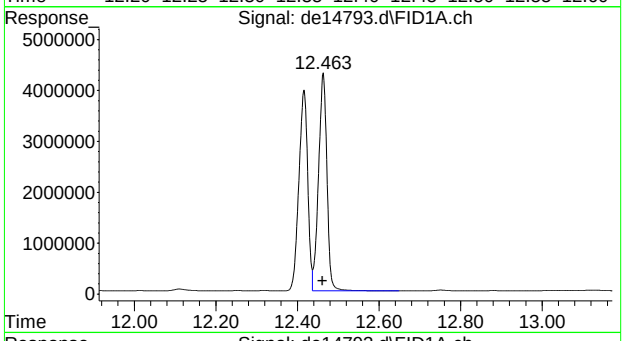
R.T.: 10.855 min
Delta R.T.: 0.003 min
Response: 6419775
Conc: 48.88 µg/ml

SGS ACCUTEST MC46737



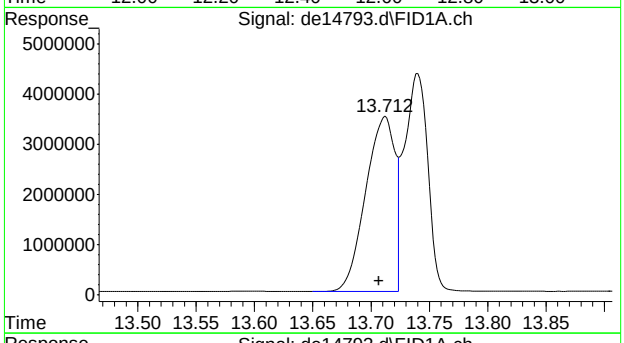
#14 benzo(a)anthracene

R.T.: 12.417 min
Delta R.T.: 0.003 min
Response: 5959840
Conc: 49.06 µg/ml



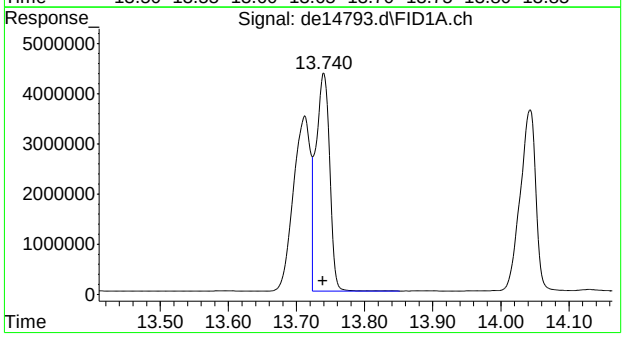
#15 chrysene

R.T.: 12.463 min
Delta R.T.: 0.002 min
Response: 6068865
Conc: 47.54 µg/ml



#16 benzo(B)fluoranthene

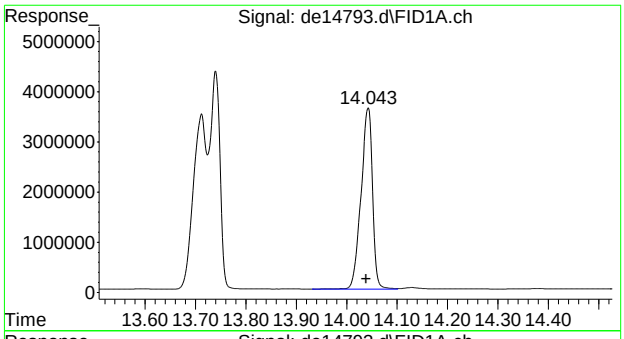
R.T.: 13.712 min
Delta R.T.: 0.005 min
Response: 6194425
Conc: 52.32 µg/ml m



#17 benzo(k)fluoranthene

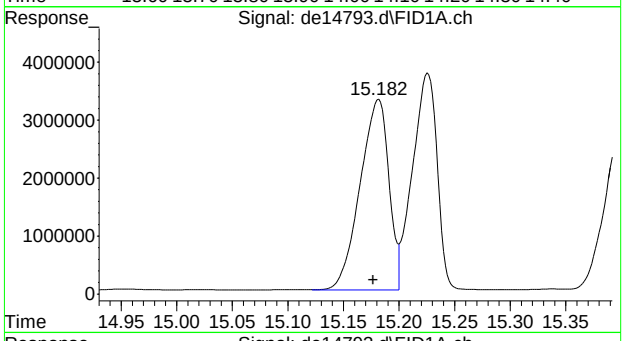
R.T.: 13.740 min
Delta R.T.: 0.002 min
Response: 5966722
Conc: 46.60 µg/ml m

SGS ACCUTEST MC46737



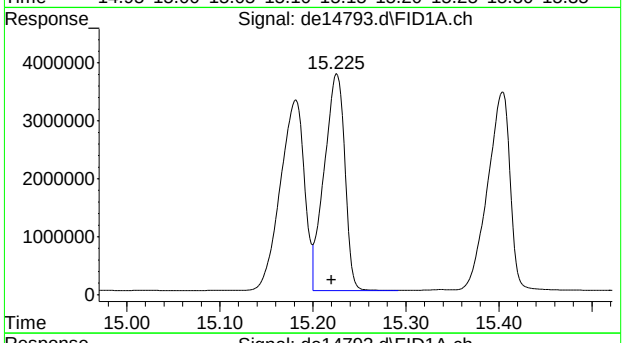
#18 benzo(a)pyrene

R.T.: 14.043 min
Delta R.T.: 0.005 min
Response: 5791265
Conc: 49.10 µg/ml



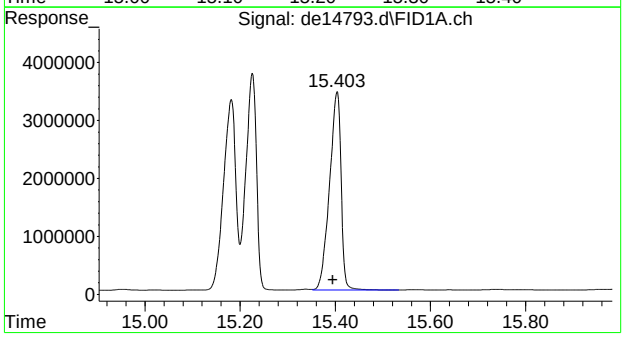
#19 indeno(1,2,3-cd)pyrene

R.T.: 15.182 min
Delta R.T.: 0.005 min
Response: 5979013
Conc: 51.08 µg/ml m



#20 dibenzo(ah)anthracene

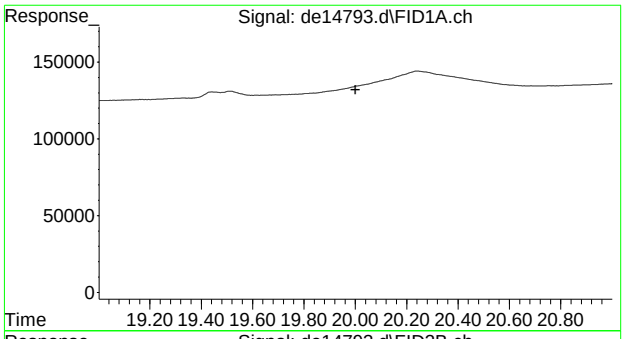
R.T.: 15.225 min
Delta R.T.: 0.005 min
Response: 5728525
Conc: 50.56 µg/ml m



#21 benzo(ghi)perylene

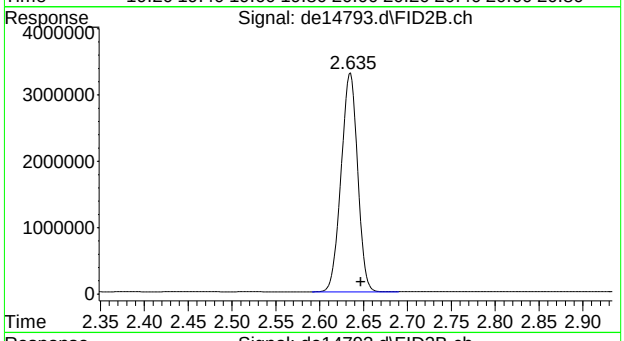
R.T.: 15.403 min
Delta R.T.: 0.008 min
Response: 5752938
Conc: 50.70 µg/ml

SGS ACCUTEST MC46737



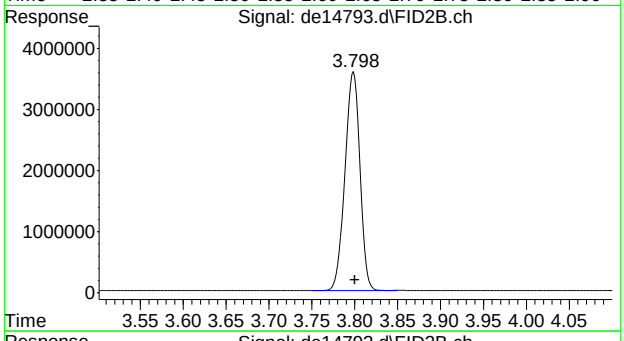
#22 bht

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



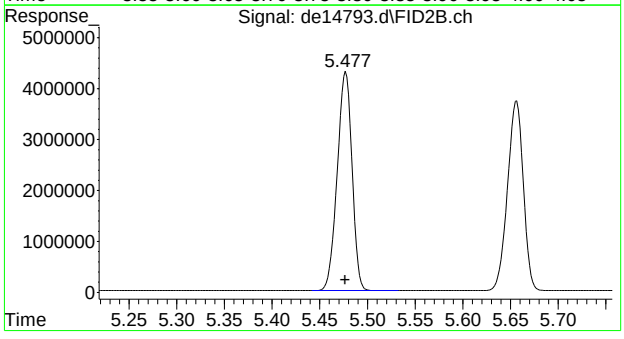
#25 c-9

R.T.: 2.647 min
Delta R.T.: 0.000 min
Response: 4314112
Conc: 51.17 µg/ml m



#26 c-10

R.T.: 3.800 min
Delta R.T.: 0.000 min
Response: 4356664
Conc: 51.68 µg/ml



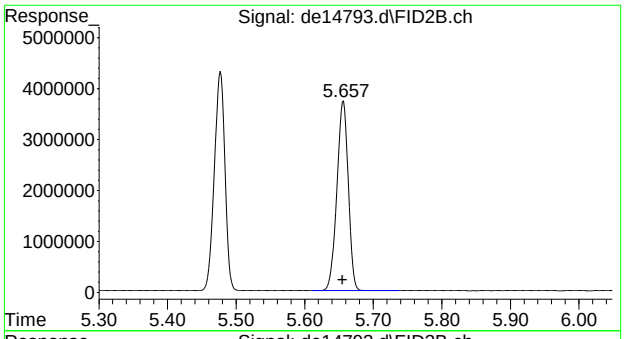
#27 naphthalene #2

R.T.: 5.477 min
Delta R.T.: 0.000 min
Response: 4634249
Conc: 50.98 µg/ml

7.4.10

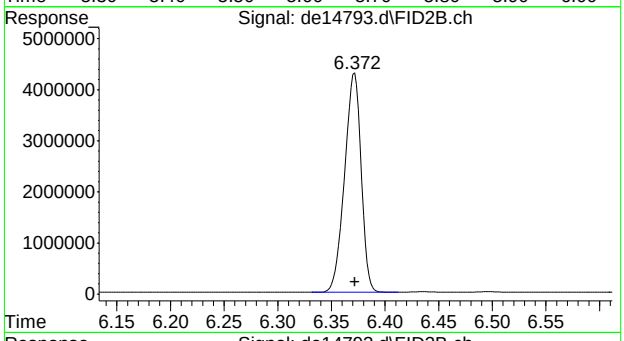
7

SGS ACCUTEST MC46737



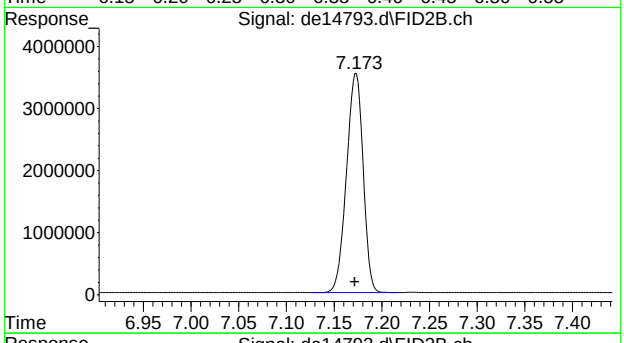
#28 c-12

R.T.: 5.657 min
Delta R.T.: 0.002 min
Response: 4301493
Conc: 51.02 µg/ml



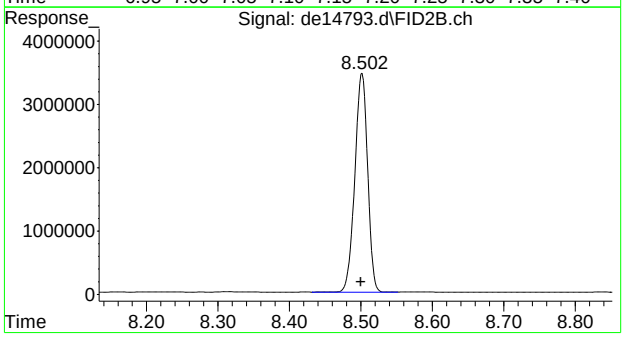
#29 2-methylnaphthalene #2

R.T.: 6.372 min
Delta R.T.: 0.000 min
Response: 4617558
Conc: 51.34 µg/ml



#30 c-14

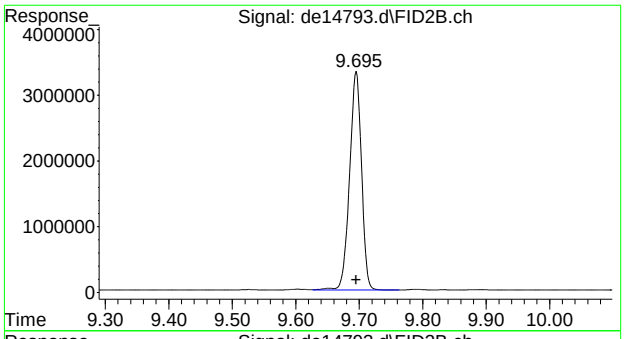
R.T.: 7.173 min
Delta R.T.: 0.002 min
Response: 4284933
Conc: 50.83 µg/ml



#31 c-16

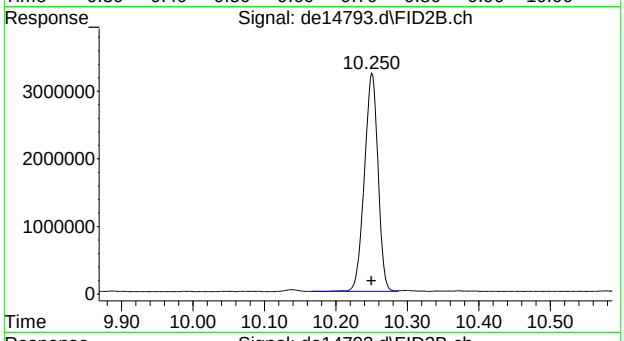
R.T.: 8.502 min
Delta R.T.: 0.002 min
Response: 4298331
Conc: 50.99 µg/ml

SGS ACCUTEST MC46737



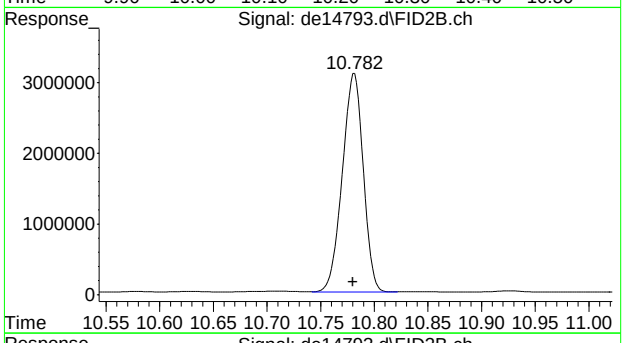
#32 c-18

R.T.: 9.695 min
Delta R.T.: 0.000 min
Response: 4334331
Conc: 51.41 µg/ml



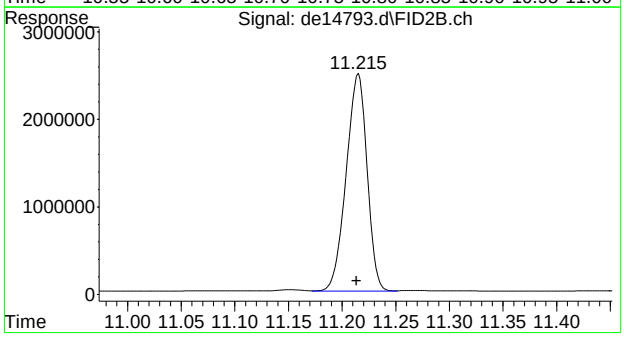
#33 c-19

R.T.: 10.250 min
Delta R.T.: 0.000 min
Response: 4284155
Conc: 55.05 µg/ml



#34 c-20

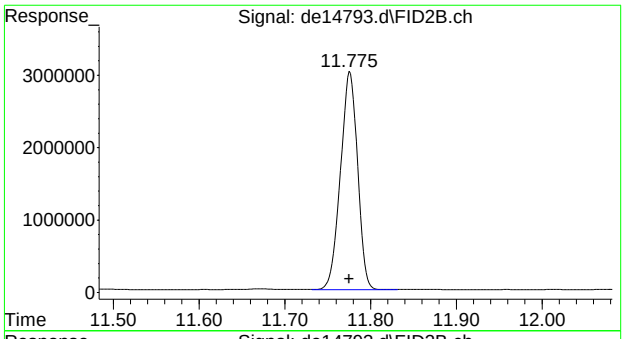
R.T.: 10.782 min
Delta R.T.: 0.002 min
Response: 4205727
Conc: 54.04 µg/ml



#35 1-chlorooctadecane

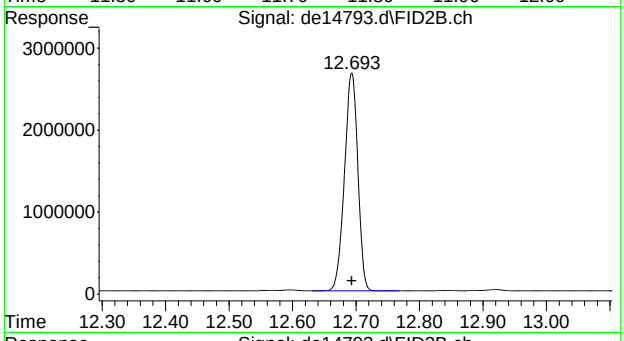
R.T.: 11.215 min
Delta R.T.: 0.002 min
Response: 3364255
Conc: 51.64 µg/ml

SGS ACCUTEST MC46737



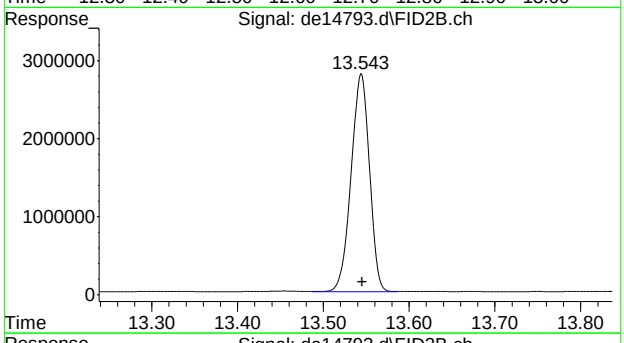
#36 c-22

R.T.: 11.775 min
Delta R.T.: 0.000 min
Response: 4178985
Conc: 53.70 µg/ml



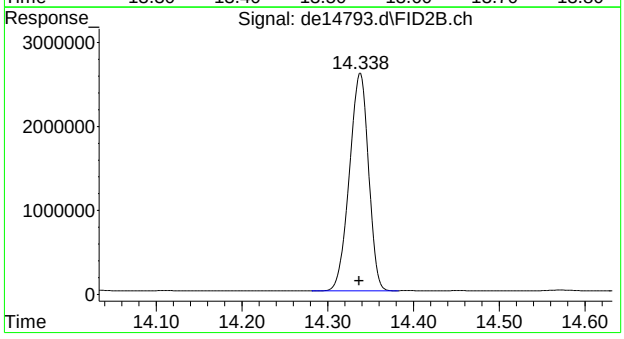
#37 c-24

R.T.: 12.693 min
Delta R.T.: 0.000 min
Response: 3885192
Conc: 49.92 µg/ml



#38 c-26

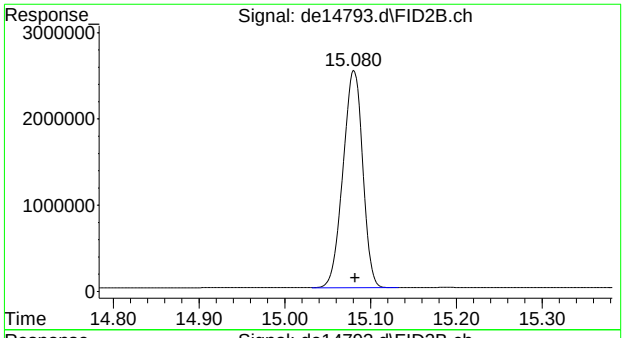
R.T.: 13.543 min
Delta R.T.: -0.002 min
Response: 4151648
Conc: 53.35 µg/ml



#39 c-28

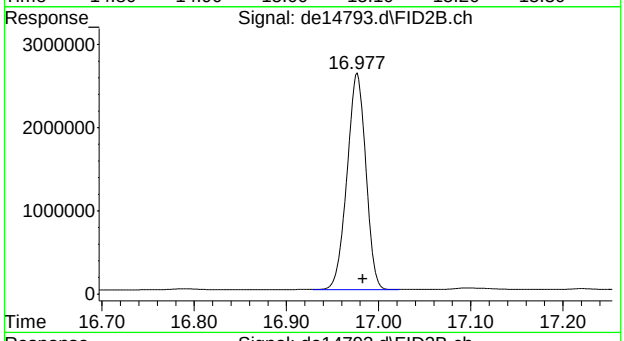
R.T.: 14.338 min
Delta R.T.: 0.002 min
Response: 4022500
Conc: 51.69 µg/ml

SGS ACCUTEST MC46737



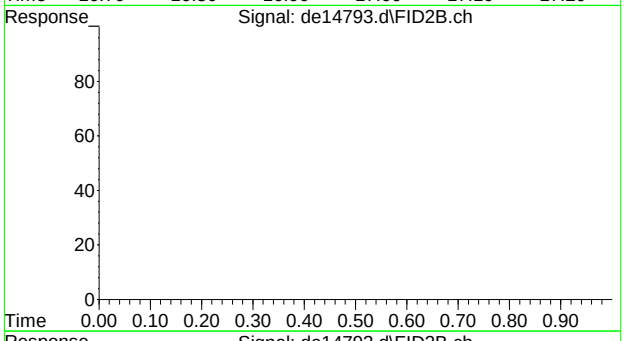
#40 c-30

R.T.: 15.082 min
Delta R.T.: 0.000 min
Response: 4033953
Conc: 51.83 µg/ml



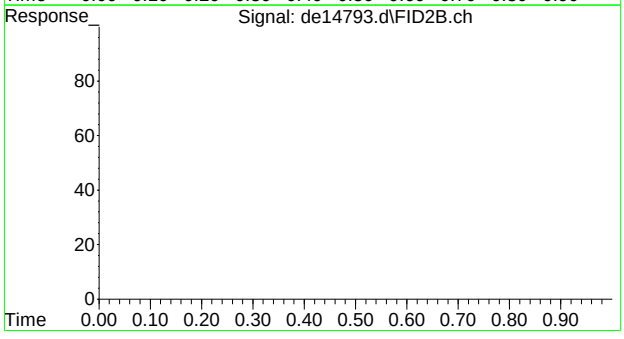
#41 c-36

R.T.: 16.983 min
Delta R.T.: 0.000 min
Response: 3694569
Conc: 47.47 µg/ml m



#42 bht

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



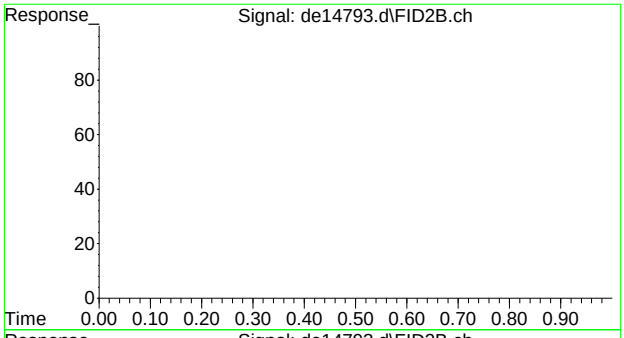
#43 bht

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

7.4.10

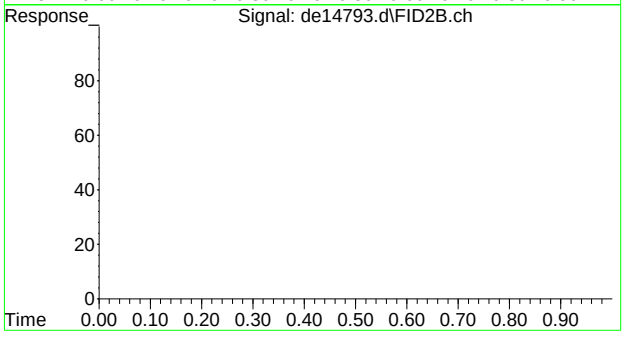
7

SGS ACCUTEST MC46737



#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 MC46737

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~~	~~Ao CCV~~	
GS18250	Ai CCV	50ug/ml
L 251	Ao 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 / Ao = GS18053 (STOCK STDS)
115/116	73	ICV815-50					ICV = GOOD - Ai = GS18059 / Ao = 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 MC46737

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 MC46737

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	

SGS ACCUTEST MC46737

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
1-chlorooctadecane	49.93	3253399
naphthalene #2	51.46	4678638
2-methylnaphthalene	51.43	4625207

	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

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: 7.8.16

Analyst Signature:

Standard Data

Lot #	Description	Conc
1518250	Alt CCV	50ng/ml
251	Ana CCV	50ng/ml

Column Information: Front: Pest RTX-5 Alternate:
Rear : Pest2 RTX-5 Alternate:
Sequence File: 160708.S
Quantitation Methods: EPH160708LW.M

Instrument Run Batches: GDE 822

Data Acquisition Methods: EPH DUAL W Inj. Vol: 1 ml
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	DE14784	CC 815-50	N/A	MA EPH	N/A	N/A	OK
1/2	85	OP48079-BS	OP48079		W		
3/4	86	-BSD					
5/6	87	-MB					
7/8	88	MC46737-1					
9/10	89	-2					
11/12	90	-3					
13/14	91	-4					
15/16	92	-5					
141/142	DE14793	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:

BMAEPH - Aliphatic Continuing Calibration Report

Data File Name	de14793.d
Operator	thomasa
Instrument Name	GCDE
Sample Name	ecc815-50,gde822

Name	Amount	Response		Continuing Avg. RF	Initial Avg. RF	%Diff	
c-9	51.17	4314112					
c-10	51.68	4356664					
c-12	51.02	4301493	**C9-C18**	86300	84306	**2.34**	**In Criteria**
c-14	50.83	4284933					
c-16	50.99	4298331					
c-18	51.41	4334331					
c-19	55.05	4284155	**C19-C36**	81142	77824	**4.17**	**In Criteria**
c-20	54.04	4205727					
c-22	53.70	4178985					
c-24	49.92	3885192		c28/c20 Percentage:		95.64	
c-26	53.35	4151648					
c-28	51.69	4022500					
c-30	51.83	4033953					
c-36	47.47	3694569					

1-chlorooctadecane	51.64	3364255
naphthalene #2	50.98	4634249
2-methylnaphthalene	51.34	4617558

BMAEPH - Aliphatic Continuing Calibration Report

Data File Name	de14784.d
Operator	thomasa
Instrument Name	GCDE
Sample Name	cc815-50,gde822

Name	Amount	Response		Continuing Avg. RF	Initial Avg. RF	%Diff	
c-9	51.32	4326835					
c-10	51.90	4375105					
c-12	50.95	4295462	**C9-C18**	85603	84306	**1.53**	**In Criteria**
c-14	50.24	4235648					
c-16	49.65	4185608					
c-18	50.56	4262343					
c-19	53.10	4132720	**C19-C36**	78096	77824	**0.35**	**In Criteria**
c-20	52.09	4053843					
c-22	51.77	4029002					
c-24	48.41	3767604		c28/c20 Percentage:		96.27	
c-26	51.68	4022311					
c-28	50.15	3902508					
c-30	50.18	3905128					
c-36	44.01	3425296					

1-chlorooctadecane	48.01	3127795
naphthalene #2	51.13	4648334
2-methylnaphthalene	51.09	4594784

BMAEPH - BS/BSD Report

Operator thomasa
Instrument Name GCDE
Sample Name op48079-bs

Aromatic Recovery

Name		Amount	Spiked	Recovery	Outside Limits?
naphthalene		16.05	50	64.20	
2-methylnaphthalene		16.16	50	64.64	
2-fluorobiphenyl	s	18.51	40	92.56	
acenaphthylene		16.96	50	67.84	
2-bromonaphthalene	s	18.52	40	92.60	
acenaphthene		17.73	50	70.93	
fluorene		17.60	50	70.39	
phenanthrene		18.54	50	74.17	
anthracene		18.63	50	74.50	
o-terphenyl	s	15.57	40	77.86	
fluoranthene		19.93	50	79.73	
pyrene		20.00	50	79.99	
benzo(a)anthracene		20.62	50	82.49	
chrysene		20.46	50	81.83	
benzo(B)fluoranthene		22.17	50	88.67	
benzo(k)fluoranthene		19.13	50	76.54	
benzo(a)pyrene		21.37	50	85.46	
indeno(1,2,3-cd)pyrene		21.46	50	85.83	
dibenzo(ah)anthracene		22.01	50	88.03	
benzo(ghi)perylene		21.95	50	87.82	

Aliphatic Recovery Name		Amount	Spiked	Recovery	Outside Limits?
c-9		12.13	50	48.52	
c-10		14.46	50	57.85	
c-12		16.08	50	64.32	
c-14		16.42	50	65.68	
c-16		17.21	50	68.84	
c-18		18.51	50	74.04	
c-19		19.95	50	79.80	
c-20		19.72	50	78.88	
1-chlorooctadecane	s	11.40	40	56.98	
c-22		19.67	50	78.68	
c-24		19.57	50	78.30	
c-26		19.21	50	76.84	
c-28		18.91	50	75.66	
c-30		18.98	50	75.90	
c-36		15.38	50	61.52	

Recovery C9-C18
63.21

Recovery C19-C36
75.70

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 op48079-bsd

Aromatic Recovery

Name		Amount	Spiked	Recovery	Outside Limits?
naphthalene		14.31	50	57.23	
2-methylnaphthalene		14.37	50	57.50	
2-fluorobiphenyl	s	16.29	40	81.46	
acenaphthylene		15.10	50	60.41	
2-bromonaphthalene	s	16.42	40	82.08	
acenaphthene		16.09	50	64.35	
fluorene		15.64	50	62.56	
phenanthrene		16.34	50	65.36	
anthracene		17.02	50	68.07	
o-terphenyl	s	15.16	40	75.79	
fluoranthene		17.94	50	71.75	
pyrene		17.79	50	71.18	
benzo(a)anthracene		18.84	50	75.36	
chrysene		18.48	50	73.92	
benzo(B)fluoranthene		18.56	50	74.23	
benzo(k)fluoranthene		18.93	50	75.73	
benzo(a)pyrene		19.37	50	77.49	
indeno(1,2,3-cd)pyrene		19.33	50	77.33	
dibenzo(ah)anthracene		20.11	50	80.45	
benzo(ghi)perylene		20.03	50	80.11	

Aliphatic Recovery Name		Amount	Spiked	Recovery	Outside Limits?
c-9		13.92	50	55.67	
c-10		16.23	50	64.92	
c-12		17.40	50	69.61	
c-14		17.98	50	71.93	
c-16		18.65	50	74.62	
c-18		19.95	50	79.78	
c-19		21.47	50	85.89	
c-20		21.65	50	86.60	
1-chlorooctadecane	s	13.64	40	68.19	
c-22		21.44	50	85.74	
c-24		21.17	50	84.68	
c-26		20.74	50	82.95	
c-28		20.26	50	81.06	
c-30		20.19	50	80.74	
c-36		15.24	50	60.96	

Recovery C9-C18
69.42

Recovery C19-C36
81.08

naphthalene #2	0.00	**Naphthalene Breakthrough**	**2-Methylnaphthalene Breakthrough**
2-methylnaphthalene #2	0.00	0.00	0.00

SGS ACCUTEST

Extraction Log - Aqueous

Extraction Method:		Analysis method and test code: BMA EPH	
Sep Funnel SW3510C ✓	MSE EPA3511	EPA 608	SW846 8315/8330/8011
Waste Dilution SW3580A		EPA 504	EPA 625

BATCH # OP48079	INITIALS	DATE	TIME
Extracted by:	IC/GD	7/6/16	20:30
Spike Witness:	GD	↓	↓
Concentrated by:	AJ	7/8/16	10:50
Fractionated by:	AJ	Volume (ml):	12.5 ml
Received by:	MD	7.8.16	11:00

Tray # V.30

Spike ID	Lot #	Conc. (ug/ml)	Vol. (ul)
EPH	7731	200	250

Surrogate	Lot #	Conc. (ug/ml)	Vol. (ul)
EPA	7483	2000	20
EPH Ft	7782	40	1 ml

Sample #	Sample Bottle	Acid pH	Base pH	Sample Initial Volume (mL)	Final Extract Final Volume (mL)	Comments
OP48079-MB	N/A	2	N/A	1000	2.0	
BS	↓	↓	↓	↓	↓	
BSD	↓	↓	↓	↓	↓	
MS						
MSD						
1 MC46737-1	1	2	N/A	835	2.0	
2 -2	1	↓	↓	860	↓	
3 -3	2	↓	↓	850	↓	
4 -4	2	↓	↓	880	↓	
5 -5	2	↓	↓	900	↓	
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						AJ 7/8/16
16						
17						
18						
19						
20						

Comments:

Equipment/ Range	ID	Temp (°C)	Press/Flow
Buchi (55-71 °C)	—	—	—
Waterbath Temp °C	032	75/90	—
NEVAP (32-38 °C)	005	38	—
Chiller	—	—	—
Balance	—	N/A	N/A

SOLVENT	LOT #	BRAND
HEXANE Only	163016	Fisher
ETHER	—	Fisher
ACETONITRILE	—	Fisher
ACETONE	—	Fisher
DCM	163038	Fisher

REAGENT	LOT #	BRAND
SPE MFG	3062895	Restek
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	HYDROW

Filtered by: Init./Date:

HCl 141150 20 / FISHER

Supervisor Approval:

Clean up Methods: Check
Copper: 3660B
Silica: 3630
Florisil: 3620
Acid: 3665

SGS ACCUTEST - MARLBOROUGH
Form: OP018-03
Rev Date: 4/26/16

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