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Automated Report

Technical Report for

Tetra Tech

R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

103X903520F0071220706

SGS Job Number: JD49400R

Sampling Date: 08/02/22

Report to:

**Tetra Tech
1560 Broadway Street Suite 1400
Denver, CO 80202**

madison.ericson@tetrattech.com; R8START.LabReports@tetrattechinc.onmicrosoft.com

ATTN: Madison Ericson

Total number of pages in report: 197



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.

**David Chastain
General Manager**

Client Service contact: Jadon Schiller 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA(68-00408), RI, SC, TX, UT, VA, WV

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

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Sample Summary

Tetra Tech

Job No: JD49400R

R8 START: Valley Drive Abandoned Slurry, Kalispell, MT
Project No: 103X903520F0071220706

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
---------------	----------------	---------	----------	------------------	------------------

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

JD49400-1R	08/02/22	15:50 ME	08/04/22	SO	Sludge	VDS-WS-01
------------	----------	----------	----------	----	--------	-----------

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Tetra Tech

Job No JD49400R

Site: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

Report Date 9/14/2022 9:50:52 AM

On 08/04/2022, 1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.7 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD49400R was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

GC/LC Semi-volatiles By Method MADEP EPH REV 2.1

Matrix: SO

Batch ID: OP41654

- Sample(s) JD51058-1MS, JD51058-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for C11-C22 Aromatics (Unadj.), C9-C18 Aliphatics are outside control limits.
- Matrix Spike Duplicate Recovery(s) for C9-C18 Aliphatics are outside control limits.
- JD49400-1R: Sample extracted outside the holding time. Sample fractioned at dilution due to the viscosity of the extract matrix.
- JD49400-1R for o-Terphenyl, 2-Fluorobiphenyl: Outside control limits due to matrix interference.
- OP41654-BS1 for 1-Chlorooctadecane: Outside of in house control limits.
- RPD of OP41654-BSD for 2-Methylnaphthalene: Analytical precision exceeds in-house control limits.
- RPD of OP41654-BSD for Benzo(a)pyrene: Analytical precision exceeds in-house control limits.
- RPD of OP41654-BSD for Pyrene: Analytical precision exceeds in-house control limits.
- RPD of OP41654-BSD for Anthracene: Analytical precision exceeds in-house control limits.
- RPD of OP41654-BSD for Benzo(b)fluoranthene: Analytical precision exceeds in-house control limits.
- RPD of OP41654-BSD for Benzo(g,h,i)perylene: Analytical precision exceeds in-house control limits.
- RPD of OP41654-BSD for Chrysene: Analytical precision exceeds in-house control limits.
- RPD of OP41654-BSD for Fluoranthene: Analytical precision exceeds in-house control limits.
- RPD of OP41654-BSD for Fluorene: Analytical precision exceeds in-house control limits.
- RPD of OP41654-BSD for Indeno(1,2,3-cd)pyrene: Analytical precision exceeds in-house control limits.
- RPD of OP41654-BSD for Naphthalene: Analytical precision exceeds in-house control limits.
- RPD of OP41654-BSD for Phenanthrene: Analytical precision exceeds in-house control limits.
- RPD of OP41654-BSD for Benzo(a)anthracene: Analytical precision exceeds in-house control limits.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Wednesday, September 14, 2022

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Summary of Hits

Page 1 of 1

Job Number: JD49400R

Account: Tetra Tech

Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

Collected: 08/02/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

JD49400-1R VDS-WS-01

Acenaphthene ^a	4400	3600	2300	ug/kg	MADEP EPH REV 2.1
Acenaphthylene ^a	4120	3600	1700	ug/kg	MADEP EPH REV 2.1
Fluoranthene ^a	10300	3600	2600	ug/kg	MADEP EPH REV 2.1
2-Methylnaphthalene ^a	7730	3600	1200	ug/kg	MADEP EPH REV 2.1
Phenanthrene ^a	11500	3600	1100	ug/kg	MADEP EPH REV 2.1
C11-C22 Aromatics (Unadj.) ^a	6700000	180000	15000	ug/kg	MADEP EPH REV 2.1
C9-C18 Aliphatics ^a	5850000	180000	5000	ug/kg	MADEP EPH REV 2.1
C11-C22 Aromatics ^a	6660000	180000	15000	ug/kg	MADEP EPH REV 2.1
C19-C36 Aliphatics ^a	9690000	180000	12000	ug/kg	MADEP EPH REV 2.1

(a) Sample extracted outside the holding time. Sample fractioned at dilution due to the viscosity of the extract matrix.



Dayton, NJ

Section 4

4

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	VDS-WS-01	Date Sampled:	08/02/22
Lab Sample ID:	JD49400-1R	Date Received:	08/04/22
Matrix:	SO - Sludge	Percent Solids:	93.5
Method:	MADEP EPH REV 2.1 SW846 3546		
Project:	R8 START: Valley Drive Abandoned Slurry, Kalispell, MT		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	6Y48486.D	10	09/11/22 15:15	TL	09/07/22 10:10	OP41654	G6Y2226
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.0 g	5.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	4400	3600	2300	ug/kg	
208-96-8	Acenaphthylene	4120	3600	1700	ug/kg	
120-12-7	Anthracene	ND	3600	1500	ug/kg	
56-55-3	Benzo(a)anthracene	ND	3600	1500	ug/kg	
50-32-8	Benzo(a)pyrene	ND	3600	1100	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	3600	780	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	3600	910	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	3600	2400	ug/kg	
218-01-9	Chrysene	ND	3600	1200	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	3600	860	ug/kg	
206-44-0	Fluoranthene	10300	3600	2600	ug/kg	
86-73-7	Fluorene	ND	3600	1100	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	3600	1100	ug/kg	
91-57-6	2-Methylnaphthalene	7730	3600	1200	ug/kg	
91-20-3	Naphthalene	ND	3600	1500	ug/kg	
85-01-8	Phenanthrene	11500	3600	1100	ug/kg	
129-00-0	Pyrene	ND	3600	940	ug/kg	
	C11-C22 Aromatics (Unadj.)	6700000	180000	15000	ug/kg	
	C9-C18 Aliphatics	5850000	180000	5000	ug/kg	
	C11-C22 Aromatics	6660000	180000	15000	ug/kg	
	C19-C36 Aliphatics	9690000	180000	12000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	53%		40-140%
84-15-1	o-Terphenyl	935% ^b		40-140%
321-60-8	2-Fluorobiphenyl	187% ^b		40-140%

(a) Sample extracted outside the holding time. Sample fractioned at dilution due to the viscosity of the extract matrix.

(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Misc. Forms

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Custody Documents and Other Forms

Includes the following where applicable:

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



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SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
EL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

EHSA-QAC-0023-04-FORM-Standard COC

5.1

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SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

EHSA-QAC-0023-04-FORM-Standard COC

Client / Reporting Information										Project Information										Requested Analysis										Matrix Codes										
Company Name: Tetra Tech										Project Name: Valley Drive Abandoned Slurry										<div style="display: flex; justify-content: space-between;"> <div>TPH - DRO, GRO, ORO (8015C)</div> <div>TAL Metals incl. Mercury (6010/6020 & 7471B)</div> <div>PCB (8082A)</div> <div>Total Halides (9423)</div> </div>										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										
Street Address: 1560 Broadway, Suite 1400										Street: 																														
City State Zip: Denver Colorado 80202										Billing Information (if different from Report to): Company Name: Tetra Tech																														
Project Contact E-mail: maura.mcaleese@tetratech.com										Project #: 103X903520F0071220706																														
Phone #: 303-312-8803										Client Purchase Order #: 										Street Address: 1560 Broadway, Suite 1400																				
Sample(s) Name(s): Madison Ericson (804) 357-6775										Project Manager: Madison Ericson										City State Zip: Denver CO 80202																				
Attention: Maura McAleese (maura.mcaleese@tetratech.com)																																								
Collection										Number of bottles										pH Check (Lab Use Only)																				
SPS Sample # Field ID / Point of Collection 1 VDS-WS-01										MECH/ID1 Vial # Date Time Sampled by Grab (G) Comp (C) Source (Source #) (VIN) Matrix # of bottles 8/2/22 1550 M.E. G N SL 4										HCl NaOH HNO ₃ H ₂ SO ₄ H ₂ O ₂ NO ₂ DI Water MECH ENCODE 4 4 										X X X X										LAB USE ONLY D30
Turn Around Time (Business Days)										Deliverable										Comments / Special Instructions																				
<input checked="" type="checkbox"/> 10 Business Days <input type="checkbox"/> 5 Business Days <input type="checkbox"/> 3 Business Days <input type="checkbox"/> 2 Business Days <input type="checkbox"/> 1 Business Day <input type="checkbox"/> Other All data available via LabLink										Approved By (SGS PM) / Date: Initial Assessment 8/1/22 Label Verification										<input type="checkbox"/> Commercial "A" (Level 1) <input checked="" type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NJ Reduced (Level 3) <input checked="" type="checkbox"/> Full Tier I (Level 4) <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ DKQP										<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> MA MCP Criteria <input type="checkbox"/> CT RCP Criteria <input type="checkbox"/> State Forms <input checked="" type="checkbox"/> EDD Format: SCRIBE-START Region 8										<input type="checkbox"/> DOD-QSMS
* Approval needed for 1-3 Business Day TAT										Commercial "A" = Results only, Commercial "B" = Results + QC Summary Commercial "C" = Results + QC Summary + Partial Raw data										Please also send invoice and EDD to: R8START.LabReports@tetratech.com madison.ericson@tetratech.com PLEASE RETURN COOLER AS SOON AS IT IS EMPTY. RETURN SHIPPING LABEL INCLUDED																				
Sample Custody must be documented below each time samples change possession, including courier delivery.										Relinquished By: 1 M.E. Date / Time: 8/1/22 / 1200 Received By: 1 F.P. Date / Time: 										Relinquished By: 2 F.P. Date / Time: 8/10/22 Received By: 2 J.S. Date / Time: 										Relinquished By: 3 Date / Time: Received By: Date / Time: 										

JD49400R: Chain of Custody

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JD49400R

SGS Sample Receipt Summary

Job Number: JD49400

Client: TETRA TECH

Project: VALLEY DRIVE ABANDONED SLURRY

Date / Time Received: 8/4/2022 10:14:00 AM

Delivery Method:

Airbill #s:

Cooler Temps (Raw Measured) °C: Cooler 1: (2.1);

Cooler Temps (Corrected) °C: Cooler 1: (2.7);

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun | |
| 3. Cooler media: | Ice (Bag) | |
| 4. No. Coolers: | 1 | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N

N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD49400R: Chain of Custody

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Job Change Order: JD49400

Requested Date:	9/1/2022	Received Date:	8/4/2022
Account Name:	Tetra Tech	Due Date:	9/1/2022
Project Description:	R8 START: Valley Drive Abandoned Slurry, Kalis		
C/O Initiated By:	SHALINI.WI	Deliverable:	FULT1
	PM: JBS	TAT (Days):	7

=====

Sample #:	JD49400-1	Change:
Dept:		please relog- BMAEPH
TAT:	7	

VDS-WS-01

=====

Above Changes Per:	Bruce Welch	Date/Time:	9/1/2022
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To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

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Internal Sample Tracking Chronicle

Tetra Tech

Job No: JD49400R

R8 START: Valley Drive Abandoned Slurry, Kalispell, MT
Project No: 103X903520F0071220706

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD49400-1R Collected: 02-AUG-22 15:50 By: ME Received: 04-AUG-22 By: JR VDS-WS-01						
JD49400-1R MADEP EPH REV 2.1 11-SEP-22 15:15 TL 07-SEP-22 KB BMAEPH						

SGS Internal Chain of Custody

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Job Number: JD49400R
 Account: TTCOD Tetra Tech
 Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT
 Received: 08/04/22

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD49400-1.1	Rania Salters	Secured Storage	08/04/22 20:38	Return to Storage
JD49400-1.1	Secured Storage	Benjamin Gaines	08/07/22 11:14	Retrieve from Storage
JD49400-1.1	Benjamin Gaines	Secured Staging Area	08/07/22 11:14	Return to Storage
JD49400-1.1	Secured Staging Area	Sarah Fichot	08/08/22 07:46	Retrieve from Storage
JD49400-1.1	Sarah Fichot	Secured Storage	08/08/22 12:17	Return to Storage
JD49400-1.1	Christian King	Secured Staging Area	08/09/22 21:52	Return to Storage
stage				
JD49400-1.1	Secured Staging Area	Ellen Dondeo	08/10/22 07:05	Retrieve from Storage
JD49400-1.1	Ellen Dondeo	Secured Storage	08/11/22 06:09	Return to Storage
JD49400-1.1	Secured Storage	Dave Hunkele	08/23/22 06:54	Retrieve from Storage
JD49400-1.1	Dave Hunkele	Secured Staging Area	08/23/22 06:54	Return to Storage
JD49400-1.1	Secured Staging Area	Lauren Matthews	08/24/22 10:17	Retrieve from Storage
JD49400-1.1	Lauren Matthews	Secured Storage	08/24/22 18:09	Return to Storage
JD49400-1.1	Emmanuel Hosein	Secured Staging Area	09/06/22 20:02	Return to Storage
STAGE				
JD49400-1.1	Secured Staging Area	Ellen Dondeo	09/07/22 05:34	Retrieve from Storage
JD49400-1.1	Ellen Dondeo	Secured Storage	09/07/22 14:53	Return to Storage
JD49400-1.1.1	Sarah Fichot	Metals Digestion	08/08/22 12:09	Digestate from JD49400-1.1
JD49400-1.1.1	Metals Digestion	Sarah Fichot	08/08/22 12:11	Digestate from JD49400-1.1
JD49400-1.1.1	Sarah Fichot	Metals Digestate Storage	08/08/22 12:11	Return to Storage
JD49400-1.1.2	Ellen Dondeo	Organics Prep	08/10/22 07:28	Extract from JD49400-1.1
JD49400-1.1.2	Organics Prep	Ellen Dondeo	08/11/22 16:07	Extract from JD49400-1.1
JD49400-1.1.2	Ellen Dondeo	Extract Storage	08/11/22 16:07	Return to Storage
JD49400-1.1.2	Extract Storage	Tilak Patel	08/11/22 20:52	Retrieve from Storage
JD49400-1.1.2	Tilak Patel	GCRK	08/11/22 20:52	Load on Instrument
JD49400-1.1.2	GCRK	Rebecca Krug	08/25/22 20:57	Unload from Instrument
JD49400-1.1.2	Rebecca Krug	Extract Freezer	08/25/22 20:58	Return to Storage
JD49400-1.1.3	Ellen Dondeo	Organics Prep	09/07/22 05:58	Extract from JD49400-1.1
JD49400-1.1.3	Organics Prep	Kevin Brefo	09/09/22 19:38	Extract from JD49400-1.1
JD49400-1.1.3	Kevin Brefo	Extract Storage	09/09/22 19:38	Return to Storage
JD49400-1.1.3	Extract Storage	Ariana Kerner	09/11/22 14:42	Retrieve from Storage
JD49400-1.1.3	Ariana Kerner	GC6Y	09/11/22 14:42	Load on Instrument
JD49400-1.2	Rania Salters	Secured Storage	08/04/22 20:38	Return to Storage
JD49400-1.3	Rania Salters	Secured Storage	08/04/22 20:38	Return to Storage
JD49400-1.3	Secured Storage	Dave Hunkele	08/09/22 09:15	Retrieve from Storage
JD49400-1.3	Dave Hunkele	Secured Staging Area	08/09/22 09:15	Return to Storage
JD49400-1.3	Secured Staging Area	Jared O. Onindo	08/09/22 09:25	Retrieve from Storage
JD49400-1.3	Jared O. Onindo	Secured Storage	08/09/22 18:35	Return to Storage
JD49400-1.3	Secured Storage	Jayna Patel	08/10/22 07:50	Retrieve from Storage

SGS Internal Chain of Custody

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Job Number: JD49400R
Account: TTCOD Tetra Tech
Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT
Received: 08/04/22

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD49400-1.3	Jayna Patel	Secured Storage	08/10/22 08:59	Return to Storage
JD49400-1.4	Rania Salters	Secured Storage	08/04/22 20:38	Return to Storage
JD49400-1.4	Secured Storage	Dave Hunkele	08/09/22 06:46	Retrieve from Storage
JD49400-1.4	Dave Hunkele	Secured Staging Area	08/09/22 06:47	Return to Storage
JD49400-1.4	Secured Staging Area	Ellen Dondeo	08/09/22 07:36	Retrieve from Storage
JD49400-1.4	Ellen Dondeo	Secured Storage	08/09/22 16:57	Return to Storage
JD49400-1.4.1	Ellen Dondeo	Organics Prep	08/09/22 08:39	Extract from JD49400-1.4
JD49400-1.4.1	Organics Prep	Claudia Baydar	08/10/22 13:54	Extract from JD49400-1.4
JD49400-1.4.1	Claudia Baydar	Extract Storage	08/10/22 13:54	Return to Storage
JD49400-1.4.1	Extract Storage	Tilak Patel	08/10/22 18:18	Retrieve from Storage
JD49400-1.4.1	Tilak Patel	GC2Z	08/10/22 18:19	Load on Instrument
JD49400-1.5	Secured Storage	Mina Jony	08/10/22 12:59	Retrieve from Storage
JD49400-1.5	Mina Jony	GCLM	08/10/22 12:59	Load on Instrument
JD49400-1.5	GCLM	John Nieradka	08/29/22 08:33	Unload from Instrument
JD49400-1.5	John Nieradka	Secured Storage	08/29/22 08:33	Return to Storage

GC/LC 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**
- **Run Sequence Reports**

Method Blank Summary

Job Number: JD49400R
Account: TTCOD Tetra Tech
Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP41654-MB1	6Y48483.D	1	09/11/22	TL	09/07/22	OP41654	G6Y2226

The QC reported here applies to the following samples: Method: MADEP EPH REV 2.1

JD49400-1R

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	130	88	ug/kg	
208-96-8	Acenaphthylene	ND	130	62	ug/kg	
120-12-7	Anthracene	ND	130	56	ug/kg	
56-55-3	Benzo(a)anthracene	ND	130	55	ug/kg	
50-32-8	Benzo(a)pyrene	ND	130	39	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	130	29	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	130	34	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	130	90	ug/kg	
218-01-9	Chrysene	ND	130	43	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	130	32	ug/kg	
206-44-0	Fluoranthene	ND	130	97	ug/kg	
86-73-7	Fluorene	ND	130	42	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	130	41	ug/kg	
91-57-6	2-Methylnaphthalene	ND	130	45	ug/kg	
91-20-3	Naphthalene	ND	130	57	ug/kg	
85-01-8	Phenanthrene	ND	130	39	ug/kg	
129-00-0	Pyrene	ND	130	35	ug/kg	
	C11-C22 Aromatics (Unadj.)	ND	6700	580	ug/kg	
	C9-C18 Aliphatics	ND	6700	190	ug/kg	
	C11-C22 Aromatics	ND	6700	580	ug/kg	
	C19-C36 Aliphatics	ND	6700	450	ug/kg	

CAS No.	Surrogate Recoveries	Limits
3386-33-2	1-Chlorooctadecane	127% 40-140%
84-15-1	o-Terphenyl	109% 40-140%
321-60-8	2-Fluorobiphenyl	78% 40-140%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 2

Job Number: JD49400R

Account: TTCOD Tetra Tech

Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP41654-BS1	6Y48484.D	1	09/11/22	TL	09/07/22	OP41654	G6Y2226
OP41654-BSD	6Y48485.D	1	09/11/22	TL	09/07/22	OP41654	G6Y2226

The QC reported here applies to the following samples:

Method: MADEP EPH REV 2.1

JD49400-1R

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	3330	2640	79	1960	59	30	40-140/30
208-96-8	Acenaphthylene	3330	2800	84	2090	63	29	40-140/30
120-12-7	Anthracene	3330	2960	89	2150	65	32* a	40-140/30
56-55-3	Benzo(a)anthracene	3330	3170	95	2270	68	33* a	40-140/30
50-32-8	Benzo(a)pyrene	3330	3130	94	2290	69	31* a	40-140/30
205-99-2	Benzo(b)fluoranthene	3330	3380	101	2430	73	33* a	40-140/30
191-24-2	Benzo(g,h,i)perylene	3330	3760	113	2680	80	34* a	40-140/30
207-08-9	Benzo(k)fluoranthene	3330	3420	103	2550	77	29	40-140/30
218-01-9	Chrysene	3330	2970	89	2180	65	31* a	40-140/30
53-70-3	Dibenzo(a,h)anthracene	3330	3460	104	2560	77	30	40-140/30
206-44-0	Fluoranthene	3330	3030	91	2190	66	32* a	40-140/30
86-73-7	Fluorene	3330	2960	89	2170	65	31* a	40-140/30
193-39-5	Indeno(1,2,3-cd)pyrene	3330	3980	119	2760	83	36* a	40-140/30
91-57-6	2-Methylnaphthalene	3330	2830	85	2080	62	31* a	40-140/30
91-20-3	Naphthalene	3330	2880	86	2100	63	31* a	40-140/30
85-01-8	Phenanthrene	3330	3080	92	2220	67	32* a	40-140/30
129-00-0	Pyrene	3330	2980	89	2150	65	32* a	40-140/30
	C11-C22 Aromatics (Unadj.)	56700	56900	100	43500	77	27	50-150/30 ^b
	C9-C18 Aliphatics	20000	23100	116	17800	89	26	40-140/30
	C19-C36 Aliphatics	36700	44100	120	37000	101	18	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
3386-33-2	1-Chlorooctadecane	146%* c	114%	40-140%
84-15-1	o-Terphenyl	122%	83%	40-140%
321-60-8	2-Fluorobiphenyl	76%	72%	40-140%

Sample	Compound	Col #1	Col #2	Breakthrough Limit
OP41654-BS1	2-Methylnaphthalene	2830	ND	0.0% 5.0
OP41654-BS1	Naphthalene	2880	ND	0.0% 5.0
OP41654-BSD	2-Methylnaphthalene	2080	ND	0.0% 5.0
OP41654-BSD	Naphthalene	2100	ND	0.0% 5.0

(a) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 2

Job Number: JD49400R

Account: TTCOD Tetra Tech

Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP41654-BS1	6Y48484.D	1	09/11/22	TL	09/07/22	OP41654	G6Y2226
OP41654-BSD	6Y48485.D	1	09/11/22	TL	09/07/22	OP41654	G6Y2226

The QC reported here applies to the following samples:

Method: MADEP EPH REV 2.1

JD49400-1R

(b) Advisory control limits.

(c) Outside of in house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: JD49400R

Account: TTCOD Tetra Tech

Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP41654-MS	6Y48488.D	1	09/11/22	TL	09/07/22	OP41654	G6Y2226
OP41654-MSD	6Y48489.D	1	09/11/22	TL	09/07/22	OP41654	G6Y2226
JD51058-1	6Y48487.D	1	09/11/22	TL	09/07/22	OP41654	G6Y2226

The QC reported here applies to the following samples:

Method: MADEP EPH REV 2.1

JD49400-1R

CAS No.	Compound	JD51058-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		4110	1980	48	4110	2160	53	9	40-140/50
208-96-8	Acenaphthylene	ND		4110	2030	49	4110	2250	55	10	40-140/50
120-12-7	Anthracene	ND		4110	2280	55	4110	2520	61	10	40-140/50
56-55-3	Benzo(a)anthracene	ND		4110	2240	55	4110	2560	62	13	40-140/50
50-32-8	Benzo(a)pyrene	ND		4110	2150	52	4110	2400	58	11	40-140/50
205-99-2	Benzo(b)fluoranthene	ND		4110	2270	55	4110	2620	64	14	40-140/50
191-24-2	Benzo(g,h,i)perylene	ND		4110	2420	59	4110	2760	67	13	40-140/50
207-08-9	Benzo(k)fluoranthene	ND		4110	2340	57	4110	2630	64	12	40-140/50
218-01-9	Chrysene	ND		4110	2180	53	4110	2450	60	12	40-140/50
53-70-3	Dibenzo(a,h)anthracene	ND		4110	2360	57	4110	2650	64	12	40-140/50
206-44-0	Fluoranthene	ND		4110	2270	55	4110	2570	63	12	40-140/50
86-73-7	Fluorene	ND		4110	2330	57	4110	2490	61	7	40-140/50
193-39-5	Indeno(1,2,3-cd)pyrene	ND		4110	2470	60	4110	2830	69	14	40-140/50
91-57-6	2-Methylnaphthalene	ND		4110	1870	42	4110	2160	49	14	40-140/50
91-20-3	Naphthalene	ND		4110	1900	46	4110	2110	51	10	40-140/50
85-01-8	Phenanthrene	ND		4110	2380	58	4110	2630	64	10	40-140/50
129-00-0	Pyrene	ND		4110	2310	56	4110	2570	63	11	40-140/50
	C11-C22 Aromatics (Unadj.)	13700		69900	48100	49* a	69900	52100	55	8	50-150/30 b
	C9-C18 Aliphatics	15900		24700	23100	29* a	24700	20000	17* a	14	40-140/50
	C19-C36 Aliphatics	11400		45200	35600	54	45200	34200	50	4	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	JD51058-1	Limits
3386-33-2	1-Chlorooctadecane	94%	77%	86%	40-140%
84-15-1	o-Terphenyl	92%	81%	69%	40-140%
321-60-8	2-Fluorobiphenyl	89%	92%	75%	40-140%

(a) Outside of in house control limits.

(b) Advisory control limits.

* = Outside of Control Limits.

Surrogate Recovery Summary

Page 1 of 1

Job Number: JD49400R

Account: TTCOD Tetra Tech

Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

Method: MADEP EPH REV 2.1

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^b	S3 ^b
JD49400-1R	6Y48486.D	53	935* ^c	187* ^c
OP41654-BS1	6Y48484.D	146* ^d	122	76
OP41654-BSD	6Y48485.D	114	83	72
OP41654-MB1	6Y48483.D	127	109	78
OP41654-MS	6Y48488.D	94	92	89
OP41654-MSD	6Y48489.D	77	81	92

Surrogate Compounds	Recovery Limits
------------------------	--------------------

S1 = 1-Chlorooctadecane	40-140%
S2 = o-Terphenyl	40-140%
S3 = 2-Fluorobiphenyl	40-140%

(a) Recovery from GC signal #2

(b) Recovery from GC signal #1

(c) Outside control limits due to matrix interference.

(d) Outside of in house control limits.

6.4.1

6

GC Surrogate Retention Time Summary

Page 1 of 1

Job Number: JD49400R

Account: TTCOD Tetra Tech

Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

Check Std: G6Y2226-CC2180

Injection Date: 09/11/22

Lab File ID: 6Y48481.D

Injection Time: 11:44

Instrument ID: GC6Y

Method: MADEP EPH REV 2.1

	S1 ^a RT	S2 ^b RT	S3 ^b RT	S4 ^b RT
Check Std	14.41	13.23	9.01	10.06

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S2 ^b RT	S3 ^b RT	S4 ^b RT
OP41654-MB1	6Y48483.D	09/11/22	13:15	14.41	13.23	9.02	
OP41654-BS1	6Y48484.D	09/11/22	13:50	14.41	13.24	9.03	
OP41654-BSD	6Y48485.D	09/11/22	14:41	14.41	13.22	9.01	
JD49400-1R	6Y48486.D	09/11/22	15:15	14.41	13.23	9.03	
JD51058-1	6Y48487.D	09/11/22	15:50	14.41	13.23	9.02	
OP41654-MS	6Y48488.D	09/11/22	16:24	14.41	13.23	9.02	
OP41654-MSD	6Y48489.D	09/11/22	16:59	14.41	13.23	9.02	
ZZZZZZ	6Y48490.D	09/11/22	17:34	14.41	13.23	9.02	
ZZZZZZ	6Y48491.D	09/11/22	18:08	14.41	13.23	9.03	
ZZZZZZ	6Y48492.D	09/11/22	18:43	14.41	13.23	9.03	
OP41670-MB1	6Y48493.D	09/11/22	19:17	14.41	13.23	9.02	10.07
OP41670-BS1	6Y48494.D	09/11/22	19:52	14.41	13.23	9.02	10.07
OP41670-BSD	6Y48495.D	09/11/22	20:26	14.41	13.23	9.02	10.07
JD51124-2	6Y48496.D	09/11/22	21:01	14.41	13.23	9.02	10.06
OP41670-DUP	6Y48497.D	09/11/22	21:35	14.41	13.23	9.02	10.07
OP41670-MS	6Y48498.D	09/11/22	22:10	14.41	13.23	9.02	10.07
OP41670-MSD	6Y48499.D	09/11/22	22:44	14.41	13.23	9.02	10.07

Surrogate Compounds

S1 = 1-Chlorooctadecane

S2 = o-Terphenyl

S3 = 2-Fluorobiphenyl

S4 = 2-Bromonaphthalene

(a) Retention time from GC signal #2

(b) Retention time from GC signal #1

Initial Calibration Summary

Page 1 of 2

Job Number: JD49400R

Sample: G6Y2180-ICC2180

Account: TTCOD Tetra Tech

Lab FileID: 6Y47308.D

Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

Response Factor Report GC6Y6Z

Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M (ChemStation Integrator)
 Title : NJDEP Extractable Petroleum Hydrocarbons
 Last Update : Mon May 16 17:46:36 2022
 Response via : Initial Calibration

Calibration Files

100 =6y47309.D 50 =6y47308.D 20 =6y47307.D 10 =6y47306.D
 2 =6y47304.D 5 =6y47305.D 1 =6y47303.D =

Compound	100	50	20	10	2	5	1	Avg	%RSD
1) 1,2,3-Trimet	6.357	4.929	4.868	4.784	5.758	5.084	6.458	5.462	E5 13.20
2) Naphthalene	6.760	5.308	5.269	5.217	5.944	5.385	6.490	5.768	E5 11.07
3) C10-C12 Arom	6.559	5.118	5.068	5.001	5.851	5.235	6.474	5.615	E5 12.06
4) 2-Methylnaph	6.758	5.348	5.284	5.274	6.051	5.539	6.887	5.877	E5 11.90
5) Acenaphthyle	6.639	5.371	5.324	5.307	6.176	5.365	6.705	5.841	E5 11.04
6) Acenaphthene	7.234	5.903	6.024	6.155	7.443	6.417	8.703	6.840	E5 14.84
7) C12-C16 Arom	6.877	5.541	5.544	5.579	6.557	5.774	7.432	6.186	E5 12.40
8) Fluorene	6.861	5.665	5.563	5.566	6.417	5.551	6.917	6.077	E5 10.43
9) Phenanthrene	6.733	5.703	5.631	5.607	6.275	5.502	6.663	6.016	E5 8.79
10) Anthracene	6.761	5.744	5.730	5.699	6.446	5.774	7.700	6.265	E5 12.11
11) Fluoranthene	6.502	5.764	5.761	5.828	6.829	5.676	7.041	6.200	E5 9.29
12) Pyrene	6.658	5.934	5.942	5.958	7.028	5.923	7.122	6.367	E5 8.66
13) C16-C21 Arom	6.703	5.762	5.726	5.732	6.599	5.685	7.088	6.185	E5 9.57
14) Benzo(a)Anth	6.086	5.710	5.633	5.600	6.106	5.117	6.072	5.760	E5 6.26
15) Chrysene	6.129	5.801	5.788	5.942	6.960	5.607	7.540	6.252	E5 11.51
16) Benzo(b)Fluo	5.625	5.411	5.368	5.334	5.715	4.739	5.785	5.425	E5 6.45
17) Benzo(k)Fluo	5.413	5.239	5.273	5.363	6.372	4.780	6.763	5.600	E5 12.52
18) Benzo(a)Pyre	5.389	5.179	5.179	5.159	5.786	4.763	5.938	5.342	E5 7.55
19) Indeno(1,2,3	5.623	4.861	4.695	4.492	4.482	4.053	4.339	4.649	E5 10.75
20) Dibenzo(ah)A	4.928	4.974	5.107	5.159	6.368	5.472	6.728	5.534	E5 13.05
21) Benzo(ghi)Pe	5.084	4.698	4.712	4.667	5.725	4.441	5.351	4.954	E5 9.17
22) C21-C36 Arom	5.535	5.234	5.219	5.214	5.939	4.871	6.064	5.440	E5 7.92
23) C11-C22 Arom	6.187	5.448	5.428	5.431	6.242	5.300	6.632	5.810	E5 9.12
24) 2-Fluorobiph	5.952	4.761	4.699	4.662	5.437	4.967	5.918	5.200	E5 10.89
25) 2-Bromonapht	4.109	3.315	3.194	3.129	3.916	3.223		3.481	E5 12.08
26) o-Terphenyl	6.784	5.822	5.813	5.887	6.978	5.874	7.405	6.366	E5 10.54

Signal #2

28) C9	5.710	5.178	6.051	6.017	5.850	5.297	6.136	5.748	E5 6.57
29) C10	5.898	5.364	6.261	6.240	6.149	5.540	6.838	6.042	E5 8.18
30) C12	6.136	5.607	6.487	6.440	6.519	5.819	6.909	6.274	E5 7.15
31) C9-C12 Aliph	5.915	5.383	6.266	6.232	6.173	5.552	6.628	6.021	E5 7.22
32) C14	6.296	5.863	6.566	6.514	6.424	5.896	6.635	6.313	E5 5.00
33) C16	6.418	6.102	6.626	6.533	6.494	6.157	6.598	6.418	E5 3.26
34) C12-C16 Alip	6.357	5.983	6.596	6.524	6.459	6.026	6.616	6.366	E5 4.11
35) C18	6.518	6.305	6.656	6.512	6.616	6.400	6.465	6.496	E5 1.86
36) C19	6.626	6.484	6.744	6.584	6.691	6.590	6.438	6.594	E5 1.63
37) C20	6.547	6.462	6.640	6.463	6.665	6.574	6.244	6.514	E5 2.19
38) C21	6.533	6.517	6.603	6.421	6.641	6.661	6.194	6.510	E5 2.48
39) C16-C21 Alip	6.533	6.428	6.633	6.465	6.641	6.545	6.301	6.506	E5 1.84
40) C22	6.508	6.567	6.566	6.389	6.685	6.724	6.277	6.531	E5 2.41
41) C24	6.435	6.653	6.455	6.268	6.643	6.804	6.113	6.482	E5 3.69
42) C26	6.260	6.658	6.259	6.045	6.501	6.792	5.849	6.338	E5 5.28
43) C28	6.088	6.684	6.079	5.868	6.273	6.763	5.616	6.196	E5 6.70
44) C30	5.914	6.731	5.922	5.717	6.130	6.781	5.631	6.118	E5 7.59
45) C32	5.687	6.720	5.717	5.501	5.925	6.717	5.483	5.964	E5 8.99

Initial Calibration Summary

Page 2 of 2

Job Number: JD49400R

Sample:

G6Y2180-ICC2180

Account: TTCOD Tetra Tech

Lab FileID:

6Y47308.D

Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

46)	C34	5.309	6.478	5.353	5.152	5.506	6.402	5.198	5.628	E5	10.06
47)	C36	5.147	6.361	5.179	4.986	5.237	6.195	5.059	5.452	E5	10.49
48)	C38	4.943	5.981	4.894	4.773	5.022	5.766	5.155	5.219	E5	8.93
49)	C40	5.061	5.796	4.941	4.837	4.994	5.566	5.098	5.185	E5	6.86
50)	C21-C40 Alip	5.735	6.463	5.737	5.554	5.892	6.451	5.548	5.911	E5	6.61
51)	C9-C18 Aliph	6.163	5.737	6.441	6.376	6.342	5.851	6.597	6.215	E5	5.10
52)	C19-C36 Alip	6.191	6.575	6.230	6.040	6.353	6.653	5.904	6.278	E5	4.32
53)	Naphthalene	6.287	5.693	6.478	6.277	5.494	5.316	5.699	5.892	E5	7.64
54)	2-Methylnaph	6.513	5.918	6.666	6.397	6.245	5.523	6.426	6.241	E5	6.32
55)	1-Chloroocta	5.613	5.573	5.678	5.520	5.700	5.677	5.380	5.592	E5	2.03

(#) = Out of Range ### Number of calibration levels exceeded format ###

EPH6Y2180.M

Mon May 16 17:49:44 2022

RPT1

Initial Calibration Verification

Page 1 of 2

Job Number: JD49400R

Sample: G6Y2180-ICV2180

Account: TTCOD Tetra Tech

Lab FileID: 6Y47310.D

Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\6Y2180\6y47310.D\FID1B.ch Vial: 18
 Signal #2 : C:\msdchem\1\DATA\6Y2180\6y47310.D\FID2A.ch
 Acq On : 16 May 2022 4:31 pm Operator: thomasl
 Sample : icv2180-50 Inst : GC6Y6Z
 Misc : OP39453,G6y2180,15.0,,,2,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M (ChemStation Integrator)
 Title : NJDEP Extractable Petroleum Hydrocarbons
 Last Update : Mon May 16 17:46:36 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.500 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 T	1,2,3-Trimethylbenzene	546.249	483.251 E3	11.5	98	0.00	5.43-	5.49
2 T	Naphthalene	576.771	521.134 E3	9.6	98	0.00	7.34-	7.40
3 H	C10-C12 Aromatics	561.510	502.193 E3	10.6	98	0.00	5.34-	7.48
4 T	2-Methylnaphthalene	587.740	536.791 E3	8.7	100	0.00	8.49-	8.55
5 T	Acenaphthylene	584.103	487.983 E3	16.5	91	0.00	9.94-	10.00
6 T	Acenaphthene	684.004	537.815 E3	21.4	91	0.00	10.24-	10.30
7 H	C12-C16 Aromatics	618.616	520.863 E3	15.8	94	0.00	7.48-	10.38
8 T	Fluorene	607.705	542.500 E3	10.7	96	0.00	11.10-	11.16
9 T	Phenanthrene	601.610	547.817 E3	8.9	96	0.00	12.66-	12.73
10 T	Anthracene	626.480	547.627 E3	12.6	95	0.00	12.75-	12.81
11 T	Fluoranthene	619.998	550.225 E3	11.3	95	0.00	14.67-	14.73
12 T	Pyrene	636.652	544.770 E3	14.4	92	0.00	15.05-	15.11
13 H	C16-C21 Aromatics	618.489	546.588 E3	11.6	95	0.00	10.38-	15.20
14 T	Benzo(a)Anthracene	576.048	513.205 E3	10.9	90	0.00	17.27-	17.33
15 T	Chrysene	625.237	525.812 E3	15.9	91	0.00	17.33-	17.39
16 T	Benzo(b)Fluoranthene	542.519	489.429 E3	9.8	90	0.00	19.19-	19.25
17 T	Benzo(k)Fluoranthene	560.041	494.571 E3	11.7	94	0.00	19.23-	19.29
18 T	Benzo(a)Pyrene	534.192	473.876 E3	11.3	92	0.00	19.71-	19.77
19 T	Indeno(1,2,3-cd)Pyrene	464.915	442.001 E3	4.9	91	0.00	21.41-	21.47
20 T	Dibenzo(ah)Anthracene	553.358	447.635 E3	19.1	90	0.00	21.45-	21.51
21 T	Benzo(ghi)Perylene	495.381	444.336 E3	10.3	95	0.00	21.76-	21.82
22 H	C21-C36 Aromatics	543.961	478.858 E3	12.0	92	0.00	15.20-	22.80
23 H	C11-C22 Aromatics (Una	580.985	508.678 E3	12.4	94	0.00	7.24-	21.90

***** Signal #2 *****

28 T	C9	574.826	592.383 E3	-3.1	114	0.02	3.63-	3.69
29 T	C10	604.164	605.692 E3	-0.3	113	0.00	4.93-	4.99
30 T	C12	627.391	617.371 E3	1.6	110	0.00	7.23-	7.29
31 H	C9-C12 Aliphatics	602.127	605.149 E3	-0.5	112	0.00	3.52-	7.36
32 T	C14	631.346	620.098 E3	1.8	106	0.00	9.19-	9.25
33 T	C16	641.825	593.589 E3	7.5	97	0.00	10.92-	10.98
34 H	C12-C16 Aliphatics	636.585	606.843 E3	4.7	102	0.00	7.36-	11.06
35 T	C18	649.590	582.241 E3	10.4	92	0.00	12.48-	12.54
36 T	C19	-----NA-----						
37 T	C20	651.359	562.370 E3	13.7	87	0.00	13.90-	13.96
38 T	C21	650.987	552.277 E3	15.2	85	0.00	14.58-	14.64
39 H	C16-C21 Aliphatics	650.646	565.629 E3	13.1	88	0.00	11.06-	14.74
40 T	C22	653.087	544.630 E3	16.6	83	0.00	15.25-	15.33
41 T	C24	648.157	526.639 E3	18.7	79	0.00	16.56-	16.63
42 T	C26	633.768	506.817 E3	20.0	76	0.00	17.81-	17.87

Initial Calibration Verification

Job Number: JD49400R Sample: G6Y2180-ICV2180
Account: TTCOD Tetra Tech Lab FileID: 6Y47310.D
Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

43	T	C28	619.586	494.847	E3	20.1	74	0.00	18.96-19.06
44	T	C30	611.788	482.590	E3	21.1	72	0.00	20.08-20.15
45	T	C32	596.415	467.279	E3	21.7	70	0.00	21.12-21.19
46	T	C34	562.830	463.763	E3	17.6	72	0.00	22.10-22.17
47	T	C36	545.211	452.654	E3	17.0	71	0.00	23.07-23.13
48	T	C38	521.915	453.374	E3	13.1	76	0.00	24.26-24.36
49	T	C40	518.485	460.922	E3	11.1	80	0.00	25.91-26.01
50	H	C21-C40 Aliphatics	591.124	485.352	E3	17.9	75	0.00	14.74-26.10
51	H	C9-C18 Aliphatics	621.524	601.896	E3	3.2	107	0.00	3.52-13.12
52	H	C19-C36 Aliphatics	627.791	510.078	E3	18.8	82	0.00	13.12-23.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6y47308.D EPH6Y2180.M Mon May 16 17:47:48 2022 RPT1

Initial Calibration Verification

Page 1 of 2

Job Number: JD49400R

Sample: G6Y2180-ICV2180

Account: TTCOD Tetra Tech

Lab FileID: 6Y47311.D

Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\6Y2180\6y47311.D\FID1B.ch Vial: 19
 Signal #2 : C:\msdchem\1\DATA\6Y2180\6y47311.D\FID2A.ch
 Acq On : 16 May 2022 5:06 pm Operator: thomasl
 Sample : icv2180-50 Inst : GC6Y6Z
 Misc : OP39453,G6y2180,15.0,,,2,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M (ChemStation Integrator)
 Title : NJDEP Extractable Petroleum Hydrocarbons
 Last Update : Mon May 16 17:46:36 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.500 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 T	1,2,3-Trimethylbenzene			NA				
2 T	Naphthalene			NA				
3 H	C10-C12 Aromatics			NA				
4 T	2-Methylnaphthalene			NA				
5 T	Acenaphthylene			NA				
6 T	Acenaphthene			NA				
7 H	C12-C16 Aromatics			NA				
8 T	Fluorene			NA				
9 T	Phenanthrene			NA				
10 T	Anthracene			NA				
11 T	Fluoranthene			NA				
12 T	Pyrene			NA				
13 H	C16-C21 Aromatics			NA				
14 T	Benzo(a)Anthracene			NA				
15 T	Chrysene			NA				
16 T	Benzo(b)Fluoranthene			NA				
17 T	Benzo(k)Fluoranthene			NA				
18 T	Benzo(a)Pyrene			NA				
19 T	Indeno(1,2,3-cd)Pyrene			NA				
20 T	Dibenzo(ah)Anthracene			NA				
21 T	Benzo(ghi)Perylene			NA				
22 H	C21-C36 Aromatics			NA				
23 H	C11-C22 Aromatics (Unadj.			NA				
24 S	2-Fluorobiphenyl (S)			NA				
25 S	2-Bromonaphthalene (S)			NA				
26 S	o-Terphenyl (S)			NA				
***** Signal #2 *****								
28 T	C9			NA				
29 T	C10			NA				
30 T	C12			NA				
31 H	C9-C12 Aliphatics			NA				
32 T	C14			NA				
33 T	C16			NA				
34 H	C12-C16 Aliphatics			NA				
35 T	C18			NA				
36 T	C19	659.374	630.789 E3	4.3	97	0.00	13.20-13.26	
37 T	C20			NA				
38 T	C21			NA				
39 H	C16-C21 Aliphatics			NA				

Initial Calibration Verification

Job Number: JD49400R Sample: G6Y2180-ICV2180
Account: TTCOD Tetra Tech Lab FileID: 6Y47311.D
Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

40	T	C22	-----NA-----
41	T	C24	-----NA-----
42	T	C26	-----NA-----
43	T	C28	-----NA-----
44	T	C30	-----NA-----
45	T	C32	-----NA-----
46	T	C34	-----NA-----
47	T	C36	-----NA-----
48	T	C38	-----NA-----
49	T	C40	-----NA-----
50	H	C21-C40 Aliphatics	-----NA-----
51	H	C9-C18 Aliphatics	-----NA-----
52	H	C19-C36 Aliphatics	-----NA-----
53	S	Naphthalene (S)	-----NA-----
54	S	2-Methylnaphthalene (S)	-----NA-----
55	S	1-Chlorooctadecane (S)	-----NA-----

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6y47308.D EPH6Y2180.M Mon May 16 17:51:52 2022 RPT1

6.6.3
6

Continuing Calibration Summary

Page 1 of 2

Job Number: JD49400R

Sample: G6Y2226-CC2180

Account: TTCOD Tetra Tech

Lab FileID: 6Y48481.D

Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\6y48481.d\FID1B.ch Vial: 2
 Signal #2 : C:\msdchem\1\data\6y48481.d\FID2A.ch
 Acq On : 11 Sep 2022 11:44 am Operator: thomasl
 Sample : cc2180-20 Inst : GC6Y6Z
 Misc : OP41613,G6y2226,15.0,,,2,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\eph6y2180.m (ChemStation Integrator)
 Title : NJDEP Extractable Petroleum Hydrocarbons
 Last Update : Wed Aug 03 11:05:09 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.500 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 T	1,2,3-Trimethylbenzene	546.249	509.282 E3	6.8	105	-0.03	5.28-	5.34
2 T	Naphthalene	576.771	551.242 E3	4.4	105	-0.03	7.20-	7.26
3 H	C10-C12 Aromatics	561.510	530.262 E3	5.6	105	0.00	5.18-	7.42
4 T	2-Methylnaphthalene	587.740	554.761 E3	5.6	105	-0.03	8.34-	8.40
5 T	Acenaphthylene	584.103	574.637 E3	1.6	108	-0.02	9.79-	9.85
6 T	Acenaphthene	684.004	673.282 E3	1.6	112	-0.02	10.09-	10.15
7 H	C12-C16 Aromatics	618.616	600.893 E3	2.9	112	0.00	7.42-	10.34
8 T	Fluorene	607.705	601.973 E3	0.9	108	-0.02	10.95-	11.01
9 T	Phenanthrene	601.610	608.024 E3	-1.1	108	-0.02	12.51-	12.58
10 T	Anthracene	626.480	619.119 E3	1.2	108	-0.02	12.60-	12.66
11 T	Fluoranthene	619.998	629.322 E3	-1.5	109	-0.02	14.51-	14.57
12 T	Pyrene	636.652	651.889 E3	-2.4	110	-0.02	14.89-	14.95
13 H	C16-C21 Aromatics	618.489	622.065 E3	-0.6	109	0.00	10.33-	15.21
14 T	Benzo(a)Anthracene	576.048	572.557 E3	0.6	102	-0.02	17.09-	17.15
15 T	Chrysene	625.237	618.963 E3	1.0	107	-0.01	17.15-	17.21
16 T	Benzo(b)Fluoranthene	542.519	531.542 E3	2.0	99	-0.02	18.98-	19.04
17 T	Benzo(k)Fluoranthene	560.041	551.550 E3	1.5	105	-0.01	19.03-	19.09
18 T	Benzo(a)Pyrene	534.192	517.982 E3	3.0	100	-0.01	19.50-	19.56
19 T	Indeno(1,2,3-cd)Pyrene	464.915	445.442 E3	4.2	95	0.00	21.19-	21.25
20 T	Dibenzo(ah)Anthracene	553.358	522.565 E3	5.6	102	-0.01	21.23-	21.29
21 T	Benzo(ghi)Perylene	495.381	464.898 E3	6.2	99	0.00	21.54-	21.60
22 H	C21-C36 Aromatics	543.961	528.188 E3	2.9	99	0.00	15.21-	22.13
23 H	C11-C22 Aromatics (Una	580.985	569.985 E3	1.9	105	0.00	7.04-	22.00
24 S	2-Fluorobiphenyl (S)	519.958	500.668 E3	3.7	107	-0.02	8.98-	9.04
25 S	2-Bromonaphthalene (S)	348.099	305.783 E3	12.2	96	-0.02	10.03-	10.09
26 S	o-Terphenyl (S)	636.608	634.513 E3	0.3	109	-0.02	13.20-	13.26

***** Signal #2 *****

28 T	C9	574.826	545.728 E3	5.1	90	-0.03	3.50-	3.56
29 T	C10	604.164	561.164 E3	7.1	90	-0.02	4.80-	4.86
30 T	C12	627.391	576.636 E3	8.1	89	-0.01	7.11-	7.17
31 H	C9-C12 Aliphatics	602.127	561.176 E3	6.8	90	0.00	3.35-	7.39
32 T	C14	631.346	572.980 E3	9.2	87	-0.01	9.07-	9.13
33 T	C16	641.825	570.265 E3	11.1	86	-0.02	10.80-	10.86
34 H	C12-C16 Aliphatics	636.585	571.623 E3	10.2	86	0.00	7.38-	11.06
35 T	C18	649.590	571.443 E3	12.0	86	-0.02	12.36-	12.42
36 T	C19	659.374	578.291 E3	12.3	86	-0.02	13.08-	13.14
37 T	C20	651.359	568.145 E3	12.8	86	-0.02	13.78-	13.84
38 T	C21	650.987	569.241 E3	12.6	86	-0.02	14.46-	14.52
39 H	C16-C21 Aliphatics	650.646	569.610 E3	12.5	86	0.00	11.06-	14.66

Continuing Calibration Summary

Page 2 of 2

Job Number: JD49400R

Sample: G6Y2226-CC2180

Account: TTCOD Tetra Tech

Lab FileID: 6Y48481.D

Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

40	T	C22	653.087	566.351	E3	13.3	86	-0.02	15.12-15.20
41	T	C24	648.157	562.479	E3	13.2	87	-0.02	16.43-16.50
42	T	C26	633.768	557.281	E3	12.1	89	-0.02	17.67-17.73
43	T	C28	619.586	552.950	E3	10.8	91	-0.02	18.82-18.92
44	T	C30	611.788	554.747	E3	9.3	94	-0.02	19.94-20.01
45	T	C32	596.415	551.431	E3	7.5	96	-0.02	20.97-21.04
46	T	C34	562.830	533.558	E3	5.2	100	-0.02	21.94-22.01
47	T	C36	545.211	535.376	E3	1.8	103	-0.02	22.88-22.94
48	T	C38	521.915	508.241	E3	2.6	104	-0.04	24.00-24.10
49	T	C40	518.485	489.608	E3	5.6	99	-0.05	25.54-25.64
50	H	C21-C40 Aliphatics	591.124	541.202	E3	8.4	96	0.00	14.67-26.69
51	H	C9-C18 Aliphatics	621.524	566.369	E3	8.9	95	0.00	3.35-12.55
52	H	C19-C36 Aliphatics	627.791	559.453	E3	10.9	91	0.00	12.55-23.25
53	S	Naphthalene (S)	589.194	531.003	E3	9.9	82	-0.01	6.99- 7.03
54	S	2-Methylnaphthalene (S)	624.123	586.640	E3	6.0	88	-0.01	8.13- 8.19
55	S	1-Chlorooctadecane (S)	559.167	476.886	E3	14.7	84	-0.01	14.38-14.44

(#) = Out of Range

6y48109.d eph6y2180.m

SPCC's out = 0 CCC's out = 0

Tue Sep 13 19:20:58 2022

Continuing Calibration Summary

Page 1 of 2

Job Number: JD49400R

Sample: G6Y2226-CC2180

Account: TTCOD Tetra Tech

Lab FileID: 6Y48502.D

Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\6y48502.d\FID1B.ch Vial: 3
 Signal #2 : C:\msdchem\1\data\6y48502.d\FID2A.ch
 Acq On : 12 Sep 2022 12:28 am Operator: arianak
 Sample : cc2180-50 Inst : GC6Y6Z
 Misc : OP41654,G6y2226,15.0,,,2,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\eph6y2180.m (ChemStation Integrator)
 Title : NJDEP Extractable Petroleum Hydrocarbons
 Last Update : Wed Aug 03 11:05:09 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.500 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 T	1,2,3-Trimethylbenzene	546.249	502.287 E3	8.0	102	-0.01	5.29-	5.35
2 T	Naphthalene	576.771	520.476 E3	9.8	98	-0.01	7.21-	7.27
3 H	C10-C12 Aromatics	561.510	511.381 E3	8.9	102	0.00	5.18-	7.42
4 T	2-Methylnaphthalene	587.740	514.164 E3	12.5	96	-0.01	8.35-	8.41
5 T	Acenaphthylene	584.103	504.098 E3	13.7	94	-0.01	9.80-	9.86
6 T	Acenaphthene	684.004	562.708 E3	17.7	95	-0.01	10.10-	10.16
7 H	C12-C16 Aromatics	618.616	526.990 E3	14.8	95	0.00	7.42-	10.34
8 T	Fluorene	607.705	520.501 E3	14.3	92	-0.01	10.96-	11.02
9 T	Phenanthrene	601.610	517.631 E3	14.0	91	-0.01	12.52-	12.59
10 T	Anthracene	626.480	514.647 E3	17.9	90	-0.01	12.61-	12.67
11 T	Fluoranthene	619.998	525.887 E3	15.2	91	0.00	14.52-	14.58
12 T	Pyrene	636.652	544.666 E3	14.4	92	0.00	14.90-	14.96
13 H	C16-C21 Aromatics	618.489	524.666 E3	15.2	91	0.00	10.33-	15.21
14 T	Benzo(a)Anthracene	576.048	528.298 E3	8.3	93	0.00	17.10-	17.16
15 T	Chrysene	625.237	545.181 E3	12.8	94	0.00	17.16-	17.22
16 T	Benzo(b)Fluoranthene	542.519	526.278 E3	3.0	97	0.00	18.99-	19.05
17 T	Benzo(k)Fluoranthene	560.041	515.308 E3	8.0	98	0.00	19.04-	19.10
18 T	Benzo(a)Pyrene	534.192	512.499 E3	4.1	99	0.00	19.51-	19.57
19 T	Indeno(1,2,3-cd)Pyrene	464.915	516.344 E3	-11.1	106	0.00	21.20-	21.26
20 T	Dibenzo(ah)Anthracene	553.358	526.690 E3	4.8	106	0.00	21.24-	21.30
21 T	Benzo(ghi)Perylene	495.381	504.190 E3	-1.8	107	0.00	21.55-	21.61
22 H	C21-C36 Aromatics	543.961	521.848 E3	4.1	99	0.00	15.21-	22.13
23 H	C11-C22 Aromatics (Una	580.985	523.504 E3	9.9	92	0.00	7.04-	22.00
24 S	2-Fluorobiphenyl (S)	519.958	450.629 E3	13.3	95	-0.01	8.99-	9.05
25 S	2-Bromonaphthalene (S)	348.099	297.718 E3	14.5	90	-0.01	10.04-	10.10
26 S	o-Terphenyl (S)	636.608	523.971 E3	17.7	90	-0.01	13.20-	13.26

***** Signal #2 *****

28 T	C9	574.826	573.033 E3	0.3	111	0.00	3.51-	3.57
29 T	C10	604.164	591.900 E3	2.0	110	0.00	4.81-	4.87
30 T	C12	627.391	600.870 E3	4.2	107	0.00	7.12-	7.18
31 H	C9-C12 Aliphatics	602.127	588.601 E3	2.2	110	0.00	3.35-	7.39
32 T	C14	631.346	596.037 E3	5.6	102	0.00	9.08-	9.14
33 T	C16	641.825	594.259 E3	7.4	97	0.00	10.81-	10.87
34 H	C12-C16 Aliphatics	636.585	595.148 E3	6.5	102	0.00	7.38-	11.06
35 T	C18	649.590	595.062 E3	8.4	94	0.00	12.37-	12.43
36 T	C19	659.374	603.068 E3	8.5	93	0.00	13.09-	13.15
37 T	C20	651.359	594.237 E3	8.8	92	0.00	13.79-	13.85
38 T	C21	650.987	593.537 E3	8.8	91	0.00	14.47-	14.53
39 H	C16-C21 Aliphatics	650.646	594.279 E3	8.7	91	0.00	11.06-	14.66

Continuing Calibration Summary

Page 2 of 2

Job Number: JD49400R

Sample: G6Y2226-CC2180

Account: TTCOD Tetra Tech

Lab FileID: 6Y48502.D

Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

40	T	C22	653.087	591.231	E3	9.5	90	0.00	15.13-15.21
41	T	C24	648.157	588.838	E3	9.2	89	0.00	16.44-16.51
42	T	C26	633.768	581.850	E3	8.2	87	0.00	17.68-17.74
43	T	C28	619.586	577.285	E3	6.8	86	0.00	18.84-18.93
44	T	C30	611.788	577.924	E3	5.5	86	-0.01	19.95-20.02
45	T	C32	596.415	575.161	E3	3.6	86	0.00	20.98-21.05
46	T	C34	562.830	556.477	E3	1.1	86	-0.01	21.96-22.03
47	T	C36	545.211	553.831	E3	-1.6	87	0.00	22.90-22.96
48	T	C38	521.915	534.630	E3	-2.4	89	-0.01	24.03-24.13
49	T	C40	518.485	536.919	E3	-3.6	93	-0.02	25.57-25.67
50	H	C21-C40 Aliphatics	591.124	567.415	E3	4.0	86	0.00	14.67-26.69
51	H	C9-C18 Aliphatics	621.524	591.860	E3	4.8	87	0.00	3.35-12.55
52	H	C19-C36 Aliphatics	627.791	583.533	E3	7.0	87	0.00	12.55-23.25
53	S	Naphthalene (S)	589.194	592.714	E3	-0.6	104	0.00	6.99- 7.03
54	S	2-Methylnaphthalene (S)	624.123	604.259	E3	3.2	102	0.00	8.13- 8.19
55	S	1-Chlorooctadecane (S)	559.167	505.084	E3	9.7	91	0.00	14.38-14.44

(#) = Out of Range

6y47542.d eph6y2180.m

SPCC's out = 0 CCC's out = 0

Tue Sep 13 19:33:50 2022

Run Sequence Report

Page 1 of 1

Job Number: JD49400R

Account: TTCOD Tetra Tech

Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

Run ID: G6Y2180	Method: NJDEP EPH	Instrument ID: GC6Y
-----------------	-------------------	---------------------

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6Y2180-IC2180	6Y47303.D	05/16/22 12:25	n/a	Initial cal 1
G6Y2180-IC2180	6Y47304.D	05/16/22 13:00	n/a	Initial cal 2
G6Y2180-IC2180	6Y47305.D	05/16/22 13:35	n/a	Initial cal 5
G6Y2180-IC2180	6Y47306.D	05/16/22 14:09	n/a	Initial cal 10
G6Y2180-IC2180	6Y47307.D	05/16/22 14:44	n/a	Initial cal 20
G6Y2180-ICC2180	6Y47308.D	05/16/22 15:22	n/a	Initial cal 50
G6Y2180-IC2180	6Y47309.D	05/16/22 15:56	n/a	Initial cal 100
G6Y2180-ICV2180	6Y47310.D	05/16/22 16:31	n/a	Initial cal verification 50
G6Y2180-ICV2180	6Y47311.D	05/16/22 17:06	n/a	Initial cal verification 50

6.7.1

6

Run Sequence Report

Page 1 of 1

Job Number: JD49400R

Account: TTCOD Tetra Tech

Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

Run ID: G6Y2226

Method: MADEP EPH REV 2.1 Instrument ID: GC6Y

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6Y2226-CC2180	6Y48481.D	09/11/22 11:44	n/a	Continuing cal 20
OP41654-MB1	6Y48483.D	09/11/22 13:15	OP41654	Method Blank
OP41654-BS1	6Y48484.D	09/11/22 13:50	OP41654	Blank Spike
OP41654-BSD	6Y48485.D	09/11/22 14:41	OP41654	Blank Spike Duplicate
JD49400-1R	6Y48486.D	09/11/22 15:15	OP41654	VDS-WS-01
JD51058-1	6Y48487.D	09/11/22 15:50	OP41654	(used for QC only; not part of job JD49400R)
OP41654-MS	6Y48488.D	09/11/22 16:24	OP41654	Matrix Spike
OP41654-MSD	6Y48489.D	09/11/22 16:59	OP41654	Matrix Spike Duplicate
ZZZZZZ	6Y48490.D	09/11/22 17:34	OP41654	(unrelated sample)
ZZZZZZ	6Y48491.D	09/11/22 18:08	OP41654	(unrelated sample)
ZZZZZZ	6Y48492.D	09/11/22 18:43	OP41654	(unrelated sample)
OP41670-MB1	6Y48493.D	09/11/22 19:17	OP41670	Method Blank
OP41670-BS1	6Y48494.D	09/11/22 19:52	OP41670	Blank Spike
OP41670-BSD	6Y48495.D	09/11/22 20:26	OP41670	Blank Spike Duplicate
JD51124-2	6Y48496.D	09/11/22 21:01	OP41670	(used for QC only; not part of job JD49400R)
OP41670-DUP	6Y48497.D	09/11/22 21:35	OP41670	Duplicate
OP41670-MS	6Y48498.D	09/11/22 22:10	OP41670	Matrix Spike
OP41670-MSD	6Y48499.D	09/11/22 22:44	OP41670	Matrix Spike Duplicate
G6Y2226-CC2180	6Y48502.D	09/12/22 00:28	n/a	Continuing cal 50

6.7.2

6



GC/LC Semi-volatiles

Raw Data

Data Path : C:\msdchem\1\data\
 Data File : 6y48486.d
 Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
 Acq On : 11 Sep 2022 3:15 pm
 Operator : arianak
 Sample : jd49400-1r
 Misc : OP41654,G6y2226,15.0,,,5,10
 ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 13 19:27:00 2022
 Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
 Quant Title : NJDEP Extractable Petroleum Hydrocarbons
 QLast Update : Tue Sep 13 05:40:15 2022
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1ul/col
 Signal #1 Phase : HP5 Signal #2 Phase: HP5
 Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
24) S 2-Fluorobiphenyl (S)	9.030f	1944611	3.740 ug/L m
26) S o-Terphenyl (S)	13.227	4760636	7.478 ug/L m
55) S 1-Chlorooctadecane (S)	14.408	236860	0.424 ug/L m
Target Compounds			
2) T Naphthalene	7.220	195005	0.338 ug/L
4) T 2-Methylnaphthalene	8.398f	1274886	2.169 ug/L m
5) T Acenaphthylene	9.814	675599	1.157 ug/l m
6) T Acenaphthene	10.128	844196	1.234 ug/l m
9) T Phenanthrene	12.564f	1944168	3.232 ug/l m
11) T Fluoranthene	14.555	1789780	2.887 ug/l m
23) H C11-C22 Aromatics (Un...	14.426	1091150222	1878.102 ug/L
51) H C9-C18 Aliphatics	8.245	1019043943	1639.590 ug/L
52) H C19-C36 Aliphatics	18.076	1706268706	2717.892 ug/L

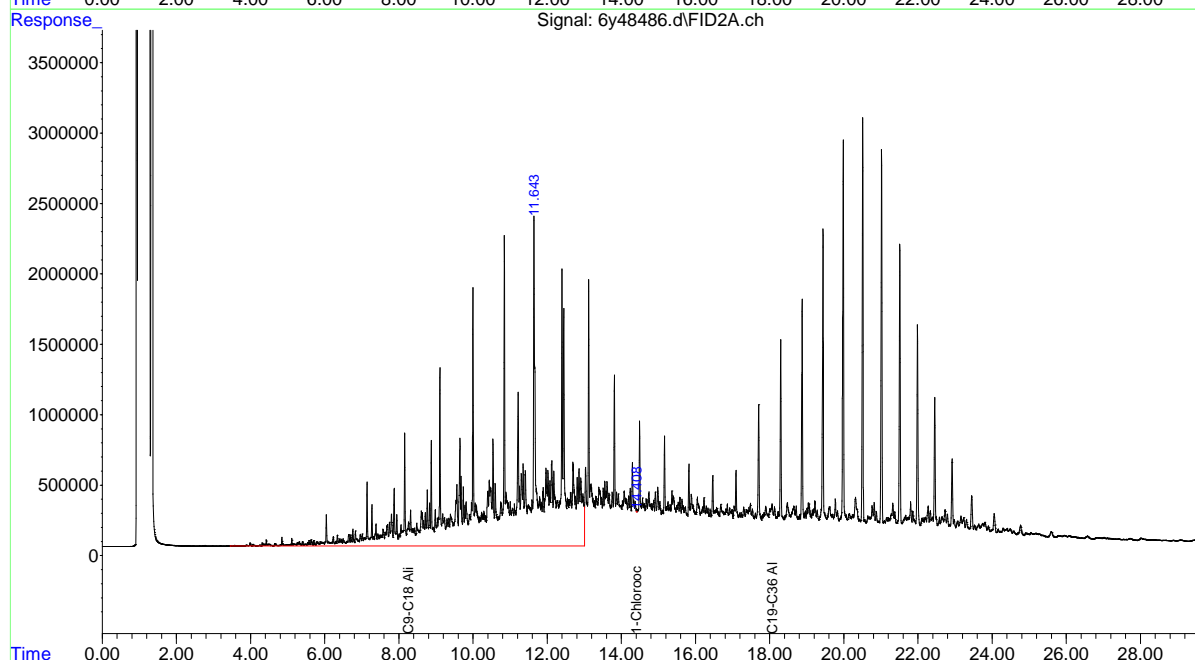
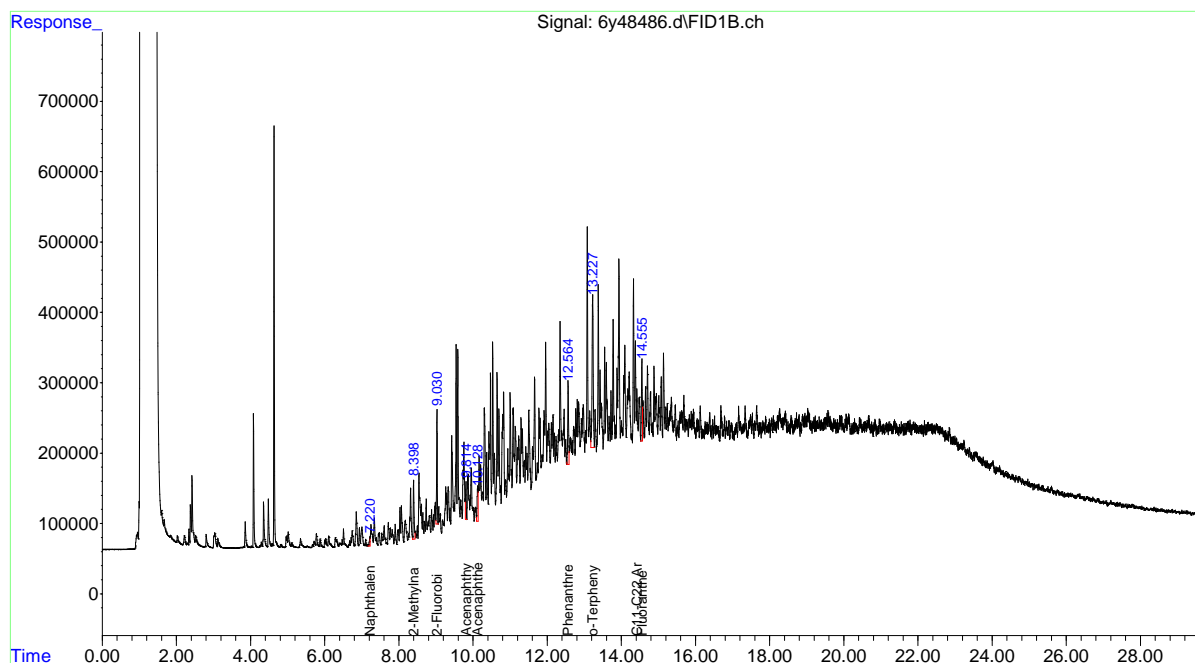
(f)=RT Delta > 1/2 Window

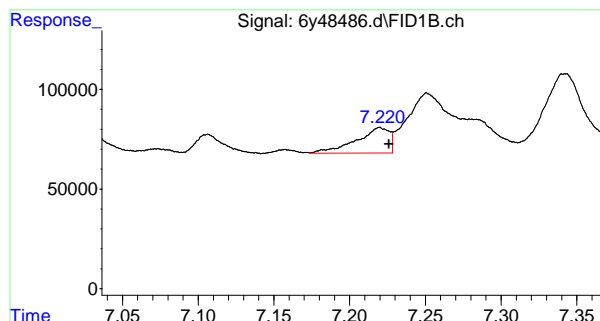
(m)=manual int.

Data Path : C:\msdchem\1\data\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 19:27:00 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

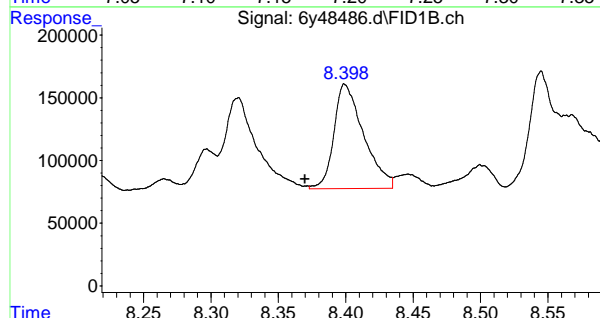
Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um





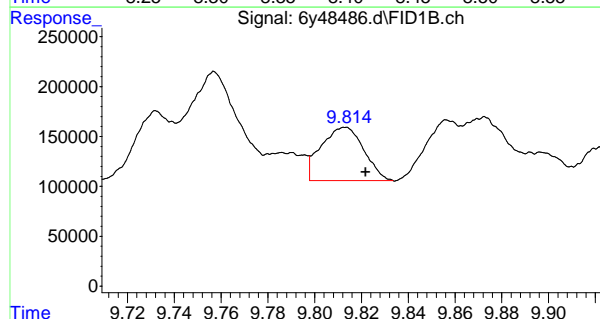
#2 Naphthalene

R.T.: 7.220 min
Delta R.T.: -0.006 min
Response: 195005
Conc: 0.34 ug/L



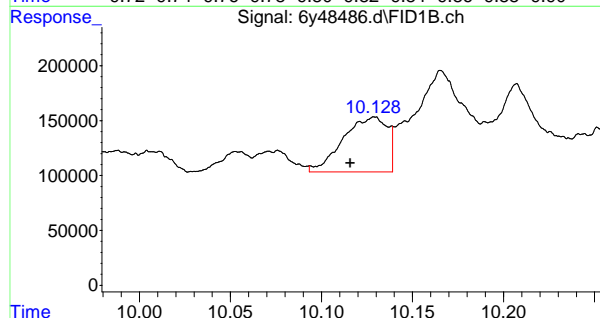
#4 2-Methylnaphthalene

R.T.: 8.398 min
Delta R.T.: 0.029 min
Response: 1274886
Conc: 2.17 ug/L m



#5 Acenaphthylene

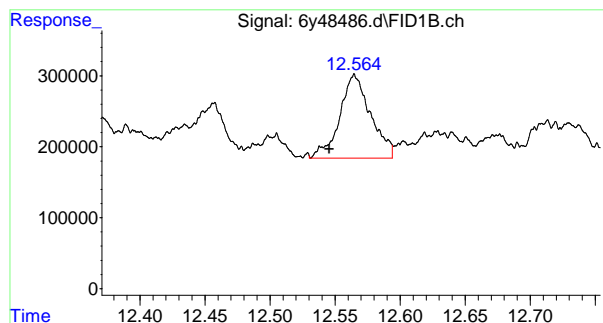
R.T.: 9.814 min
Delta R.T.: -0.008 min
Response: 675599
Conc: 1.16 ug/l m



#6 Acenaphthene

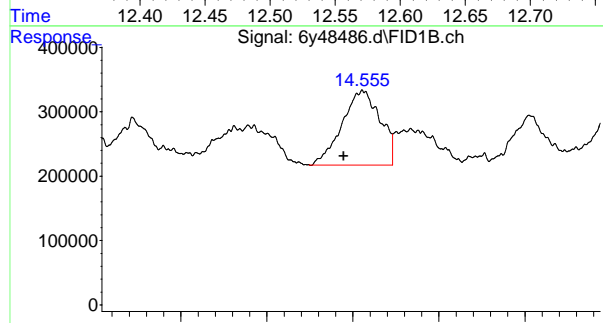
R.T.: 10.128 min
Delta R.T.: 0.013 min
Response: 844196
Conc: 1.23 ug/l m

7.1.1
7



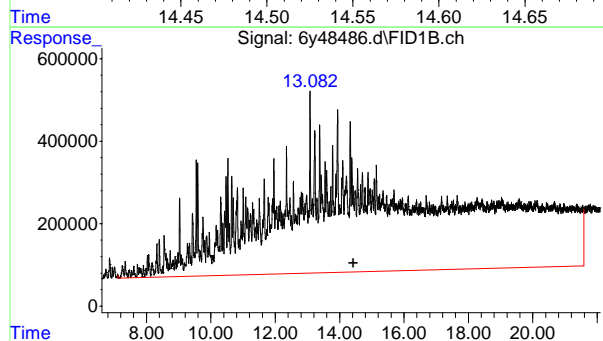
#9 Phenanthrene

R.T.: 12.564 min
Delta R.T.: 0.019 min
Response: 1944168
Conc: 3.23 ug/l m



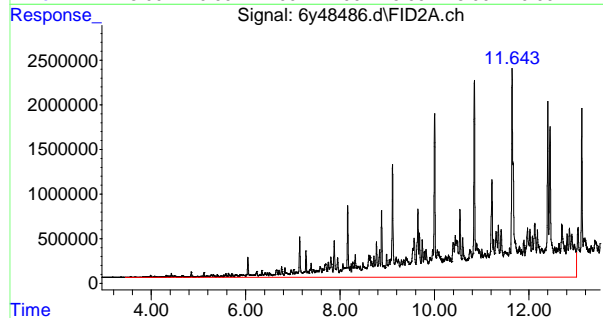
#11 Fluoranthene

R.T.: 14.555 min
Delta R.T.: 0.011 min
Response: 1789780
Conc: 2.89 ug/l m



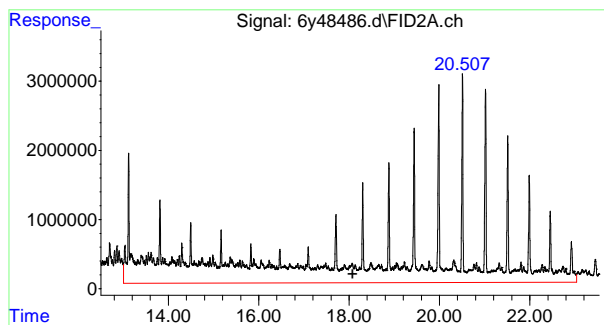
#23 C11-C22 Aromatics (Unadj.)

R.T.: 14.426 min
Delta R.T.: 0.000 min
Response: 1091150222
Conc: 1878.10 ug/L



#51 C9-C18 Aliphatics

R.T.: 8.245 min
Delta R.T.: 0.000 min
Response: 1019043943
Conc: 1639.59 ug/L



#52 C19-C36 Aliphatics

R.T.: 18.076 min
Delta R.T.: 0.000 min
Response: 1706268706
Conc: 2717.89 ug/L

Manual Integration Approval Summary

Sample Number: JD49400-1R

Lab FileID: 6Y48486.D

Injection Time: 09/11/22 15:15

Method: MADEP EPH REV 2.1

Analyst approved: 09/13/22 19:46 Gwendolyn Burns

Supervisor approved: 09/13/22 19:50 Gwendolyn Burns

Parameter	CAS	Sig#	R.T. (min.)	Reason
2-Methylnaphthalene	91-57-6	1	8.40	Poorly defined baseline
2-Fluorobiphenyl	321-60-8	1	9.03	Poorly defined baseline
Acenaphthylene	208-96-8	1	9.81	Poorly defined baseline
Acenaphthene	83-32-9	1	10.13	Poorly defined baseline
Phenanthrene	85-01-8	1	12.56	Poorly defined baseline
o-Terphenyl	84-15-1	1	13.23	Poorly defined baseline
1-Chlorooctadecane	3386-33-2	2	14.41	Poorly defined baseline
Fluoranthene	206-44-0	1	14.56	Poorly defined baseline

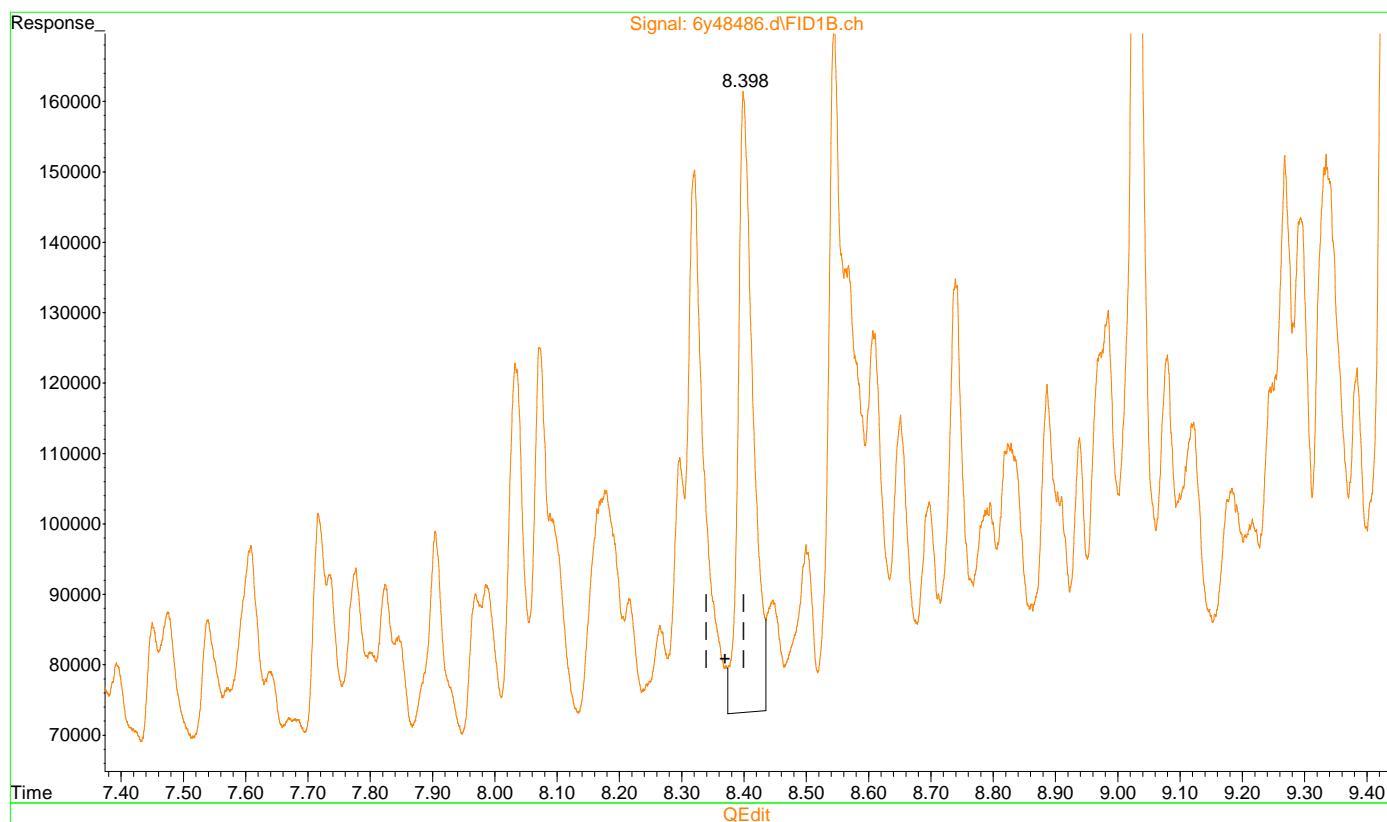
7.1.1.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:47:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



(4) 2-Methylnaphthalene (T)

8.399min 2.451 ug/L

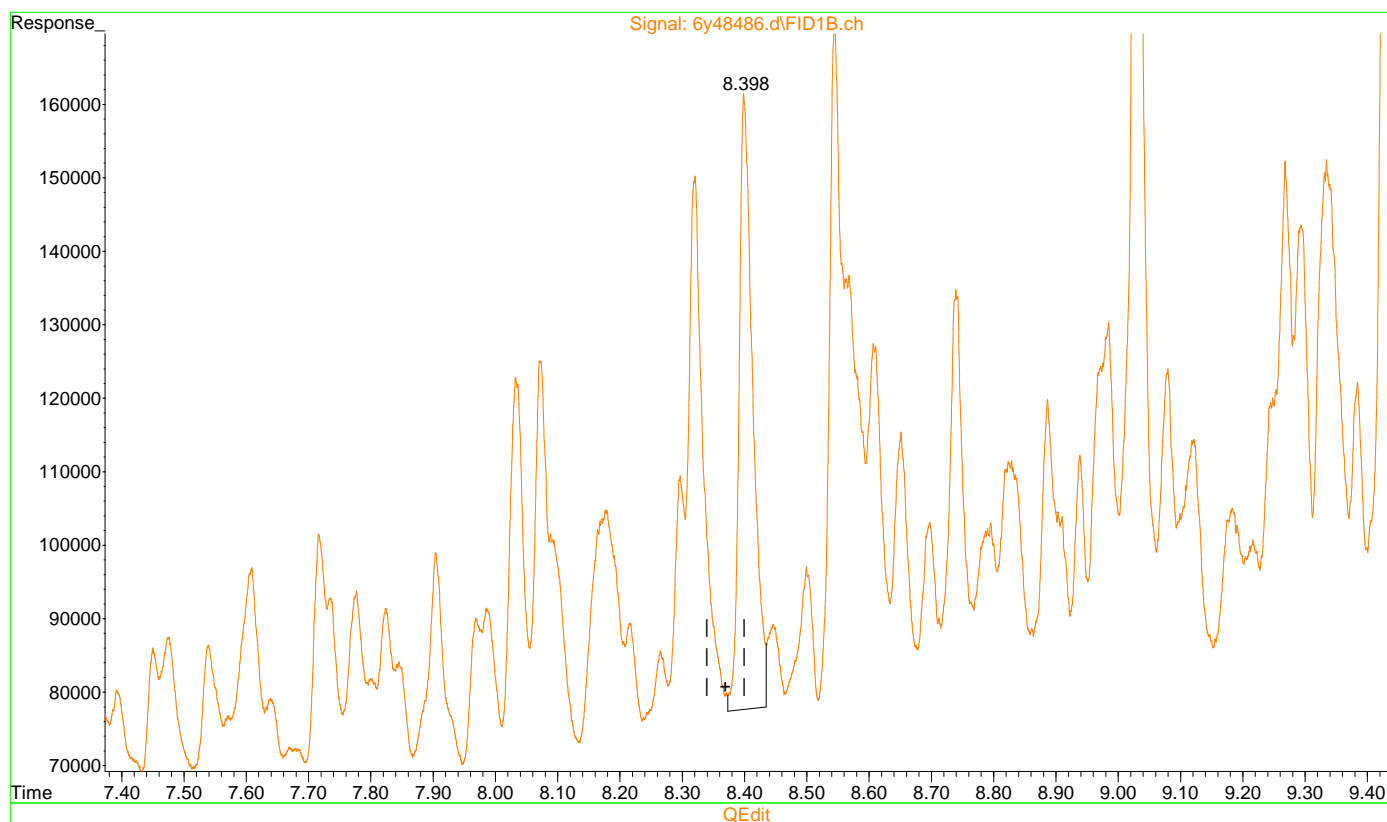
response 1440482

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:47:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



(4) 2-Methylnaphthalene (T)

8.398min 2.169 ug/L m

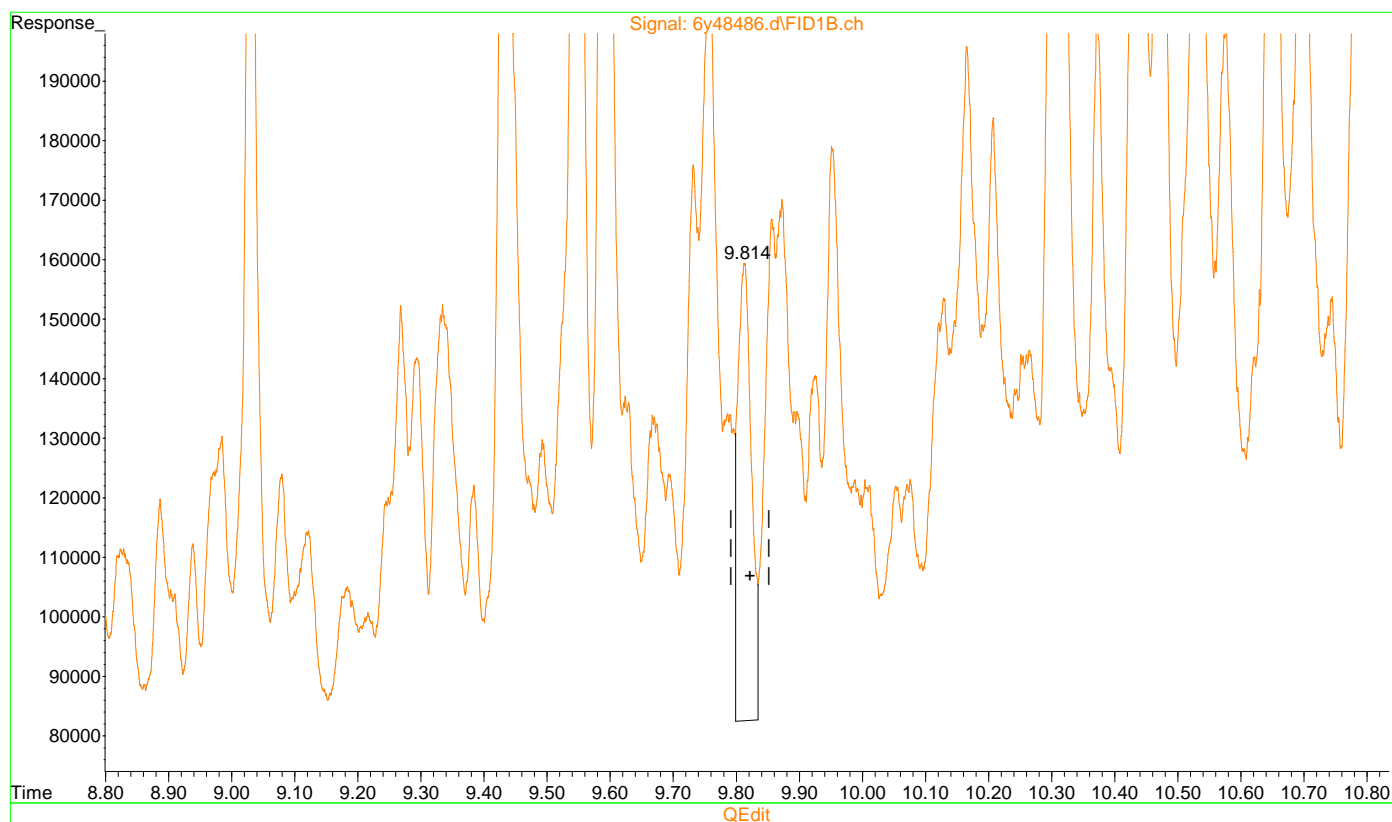
response 1274886

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:47:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase : HP5
Signal #2 Info : 30mx.32mm.x25um



(5) Acenaphthylene (T)

9.813min 1.991 ug/l

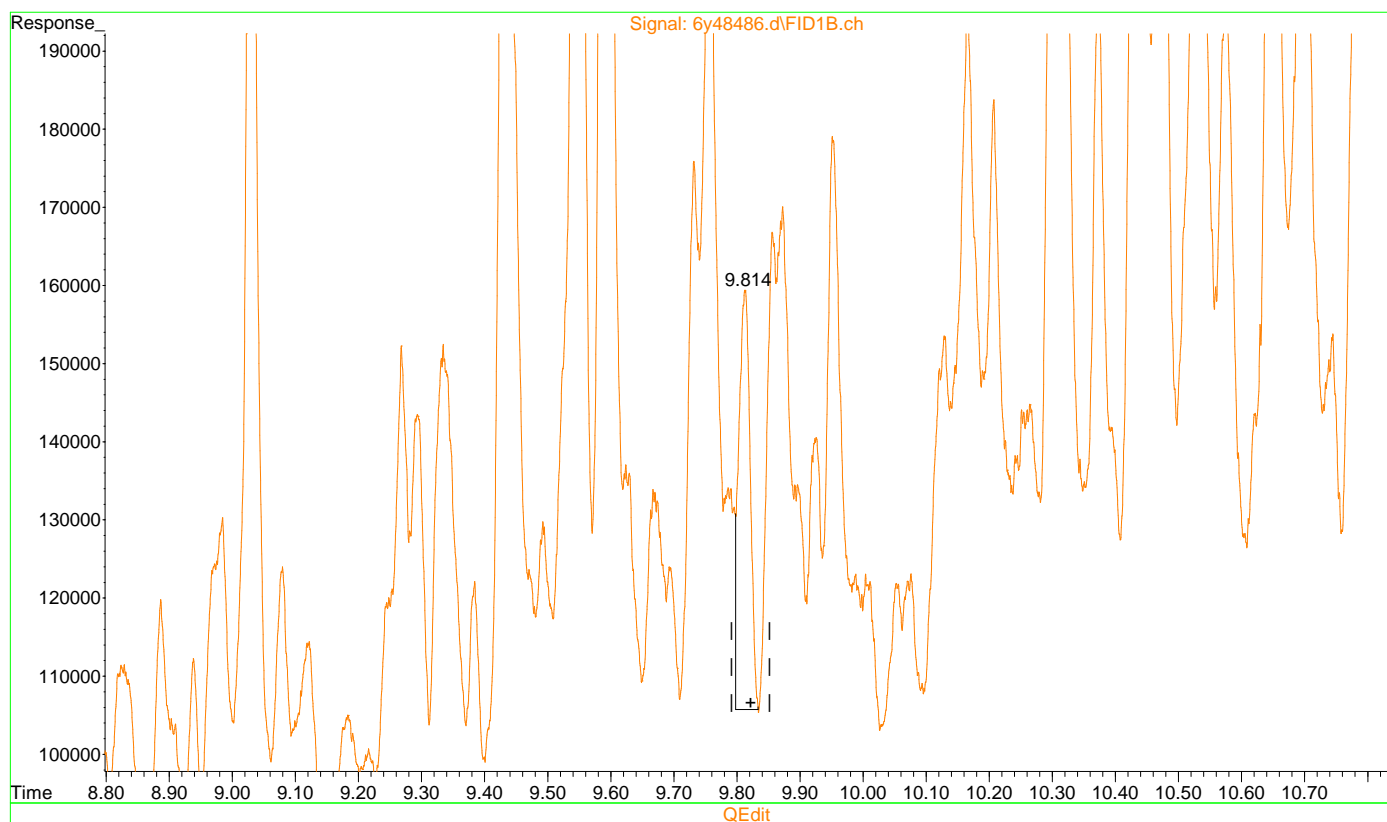
response 1162888

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:47:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



(5) Acenaphthylene (T)

9.814min 1.157 ug/l m

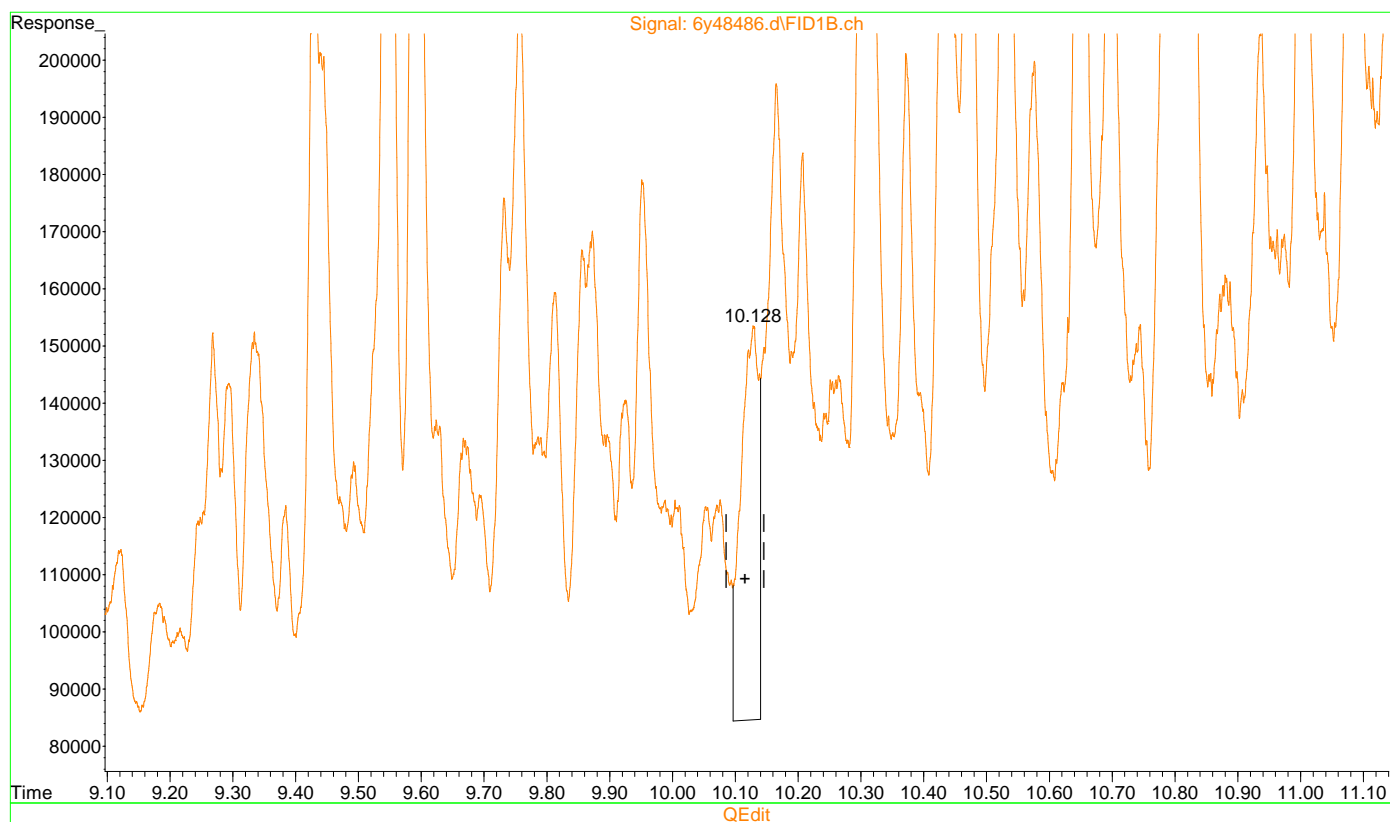
response 675599

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:47:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



(6) Acenaphthene (T)

10.129min 1.995 ug/l

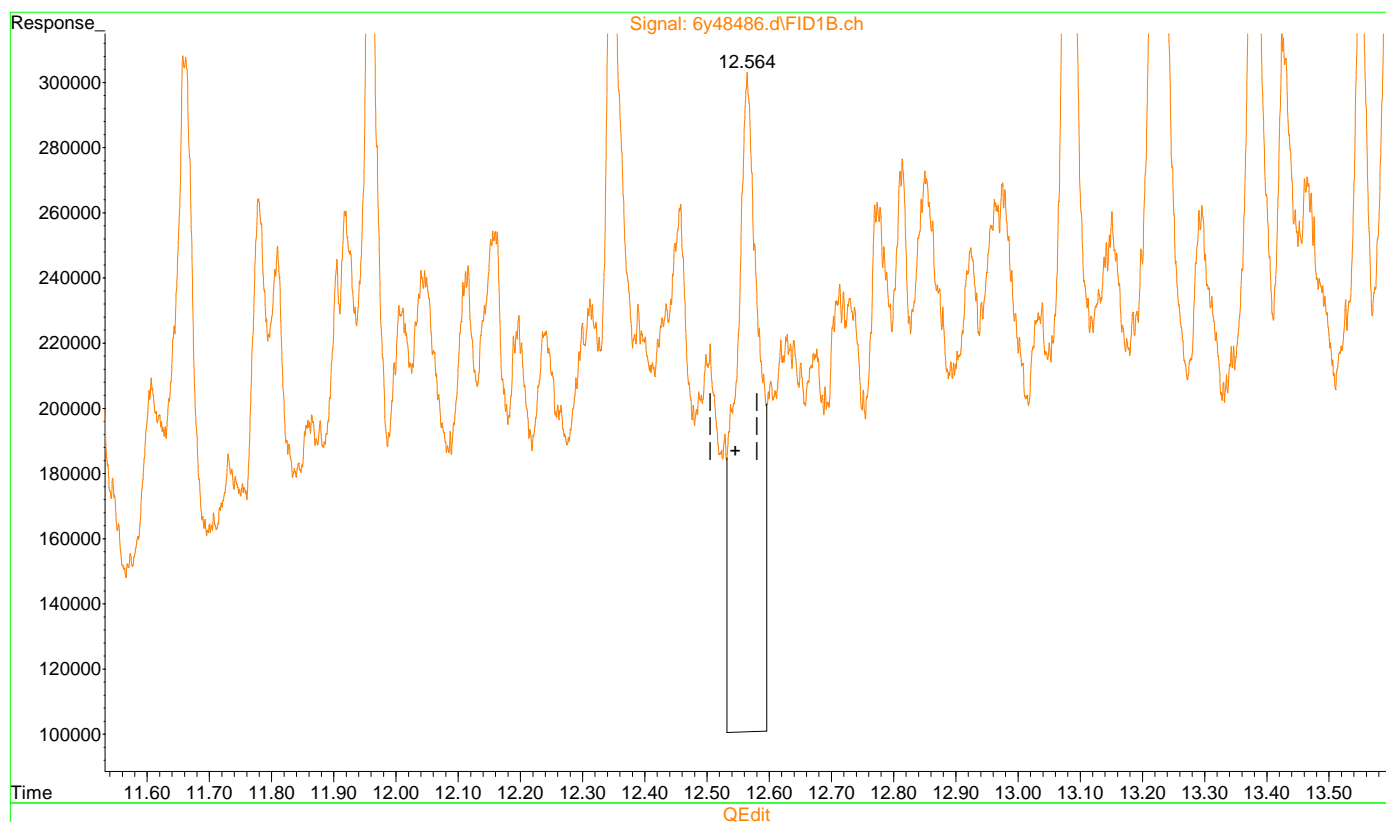
response 1364526

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:47:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



(9) Phenanthrene (T)

12.565min 8.612 ug/l

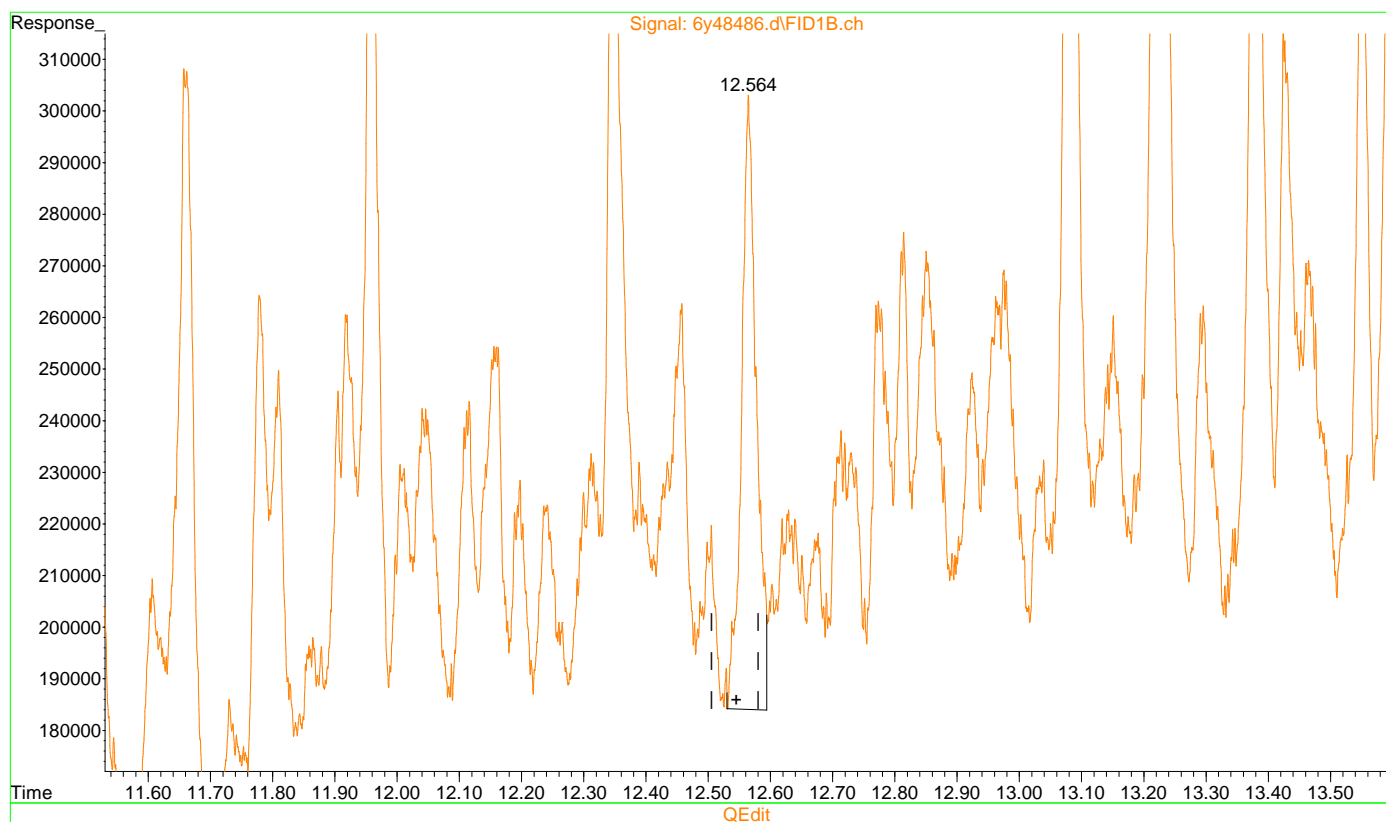
response 5181223

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:47:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



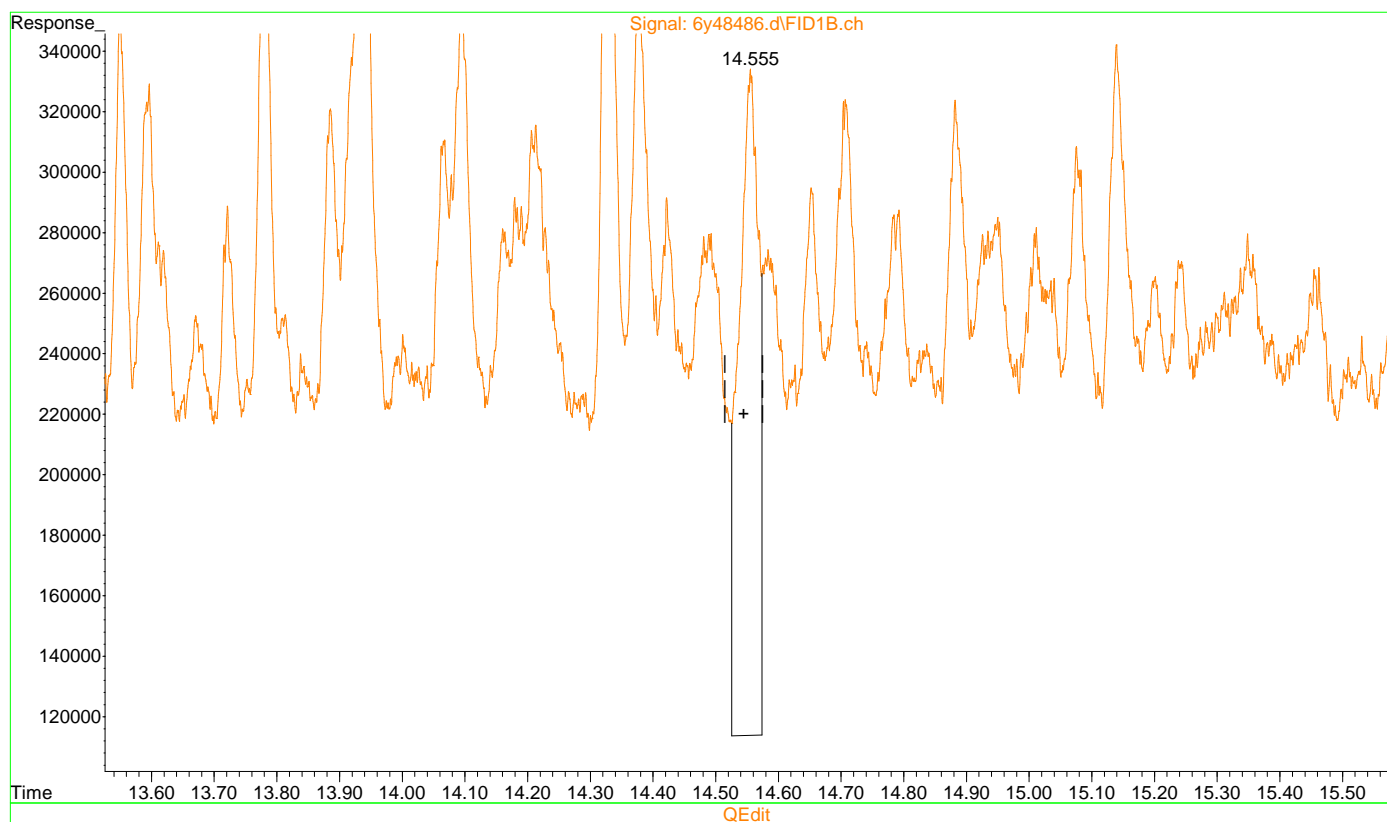
(9) Phenanthrene (T)
12.564min 3.232 ug/l m
response 1944168

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:47:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



(11) Fluoranthene (T)

14.556min 7.747 ug/l

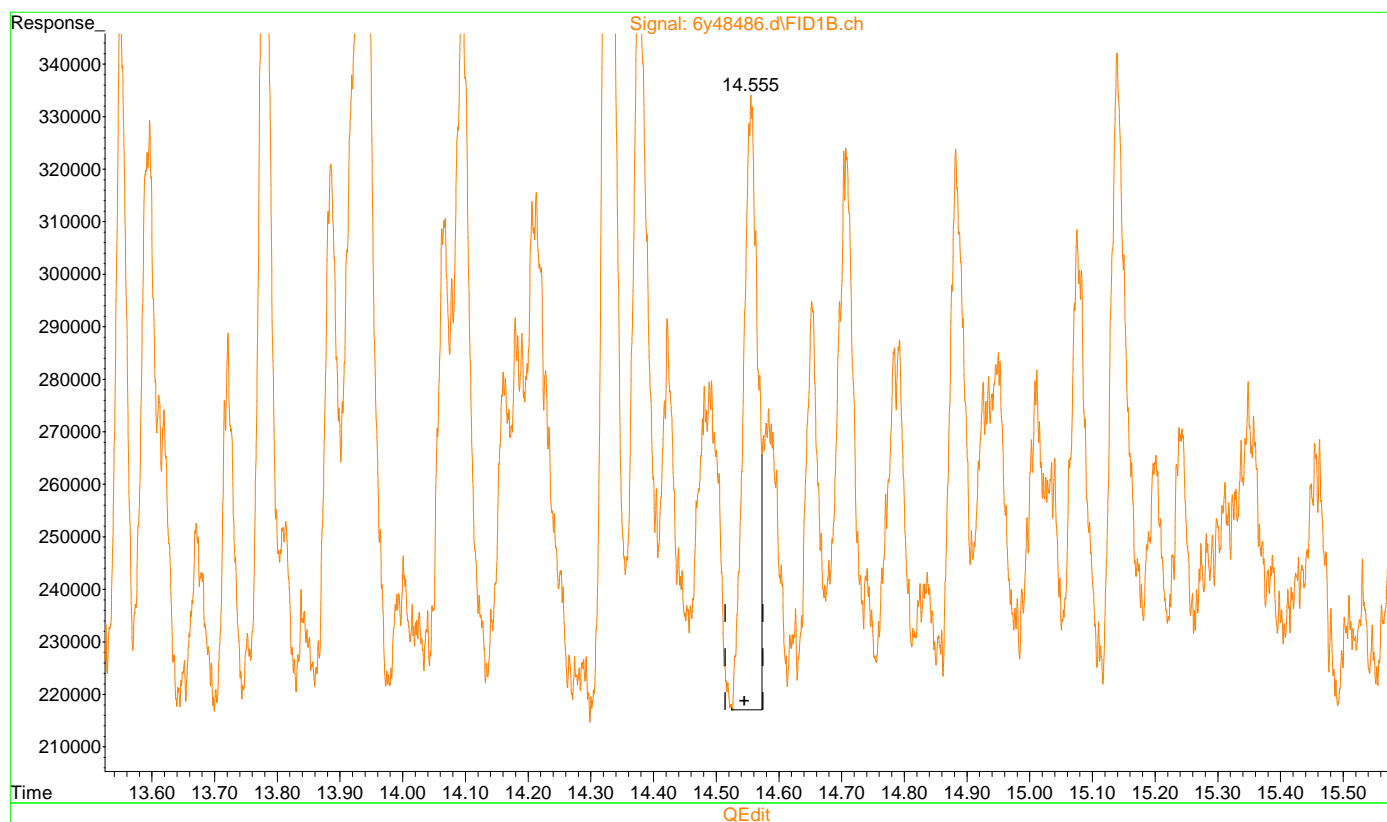
response 4802848

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:47:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



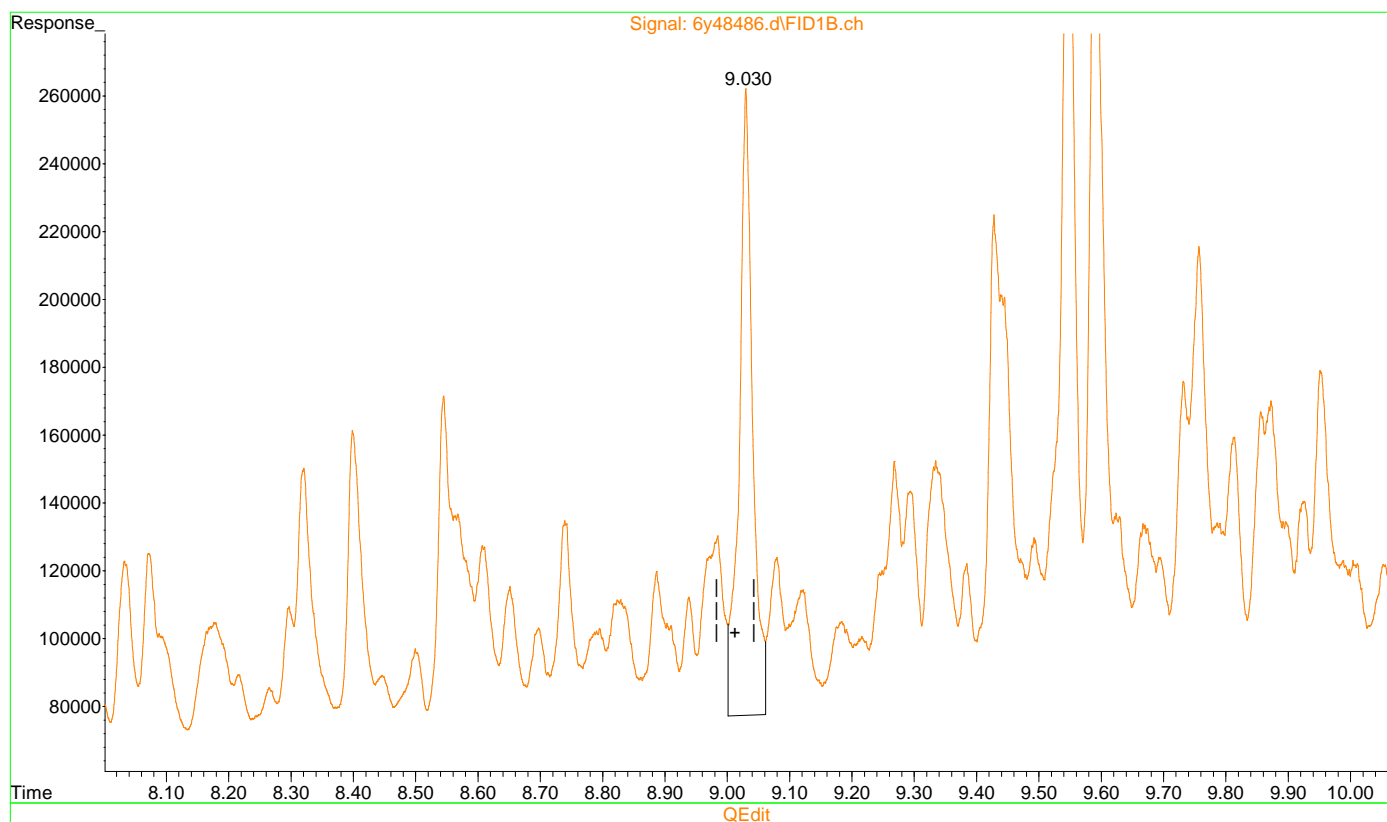
(11) Fluoranthene (T)
14.555min 2.887 ug/l m
response 1789780

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:47:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase : HP5
Signal #2 Info : 30mx.32mm.x25um



(24) 2-Fluorobiphenyl (S) (S)

9.030min 5.267 ug/L

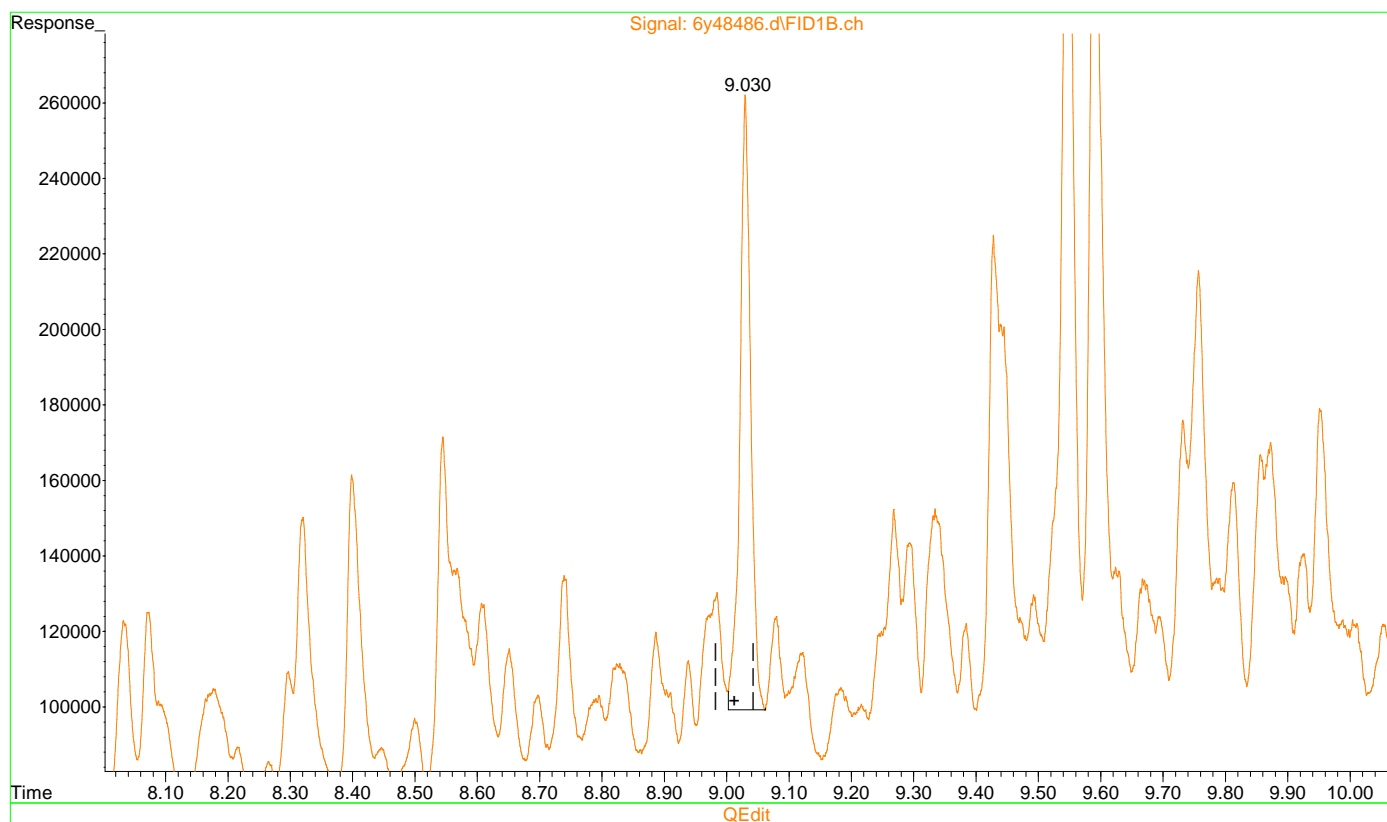
response 2738479

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:47:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase : HP5
Signal #2 Info : 30mx.32mm.x25um



(24) 2-Fluorobiphenyl (S) (S)

9.030min 3.740 ug/L m

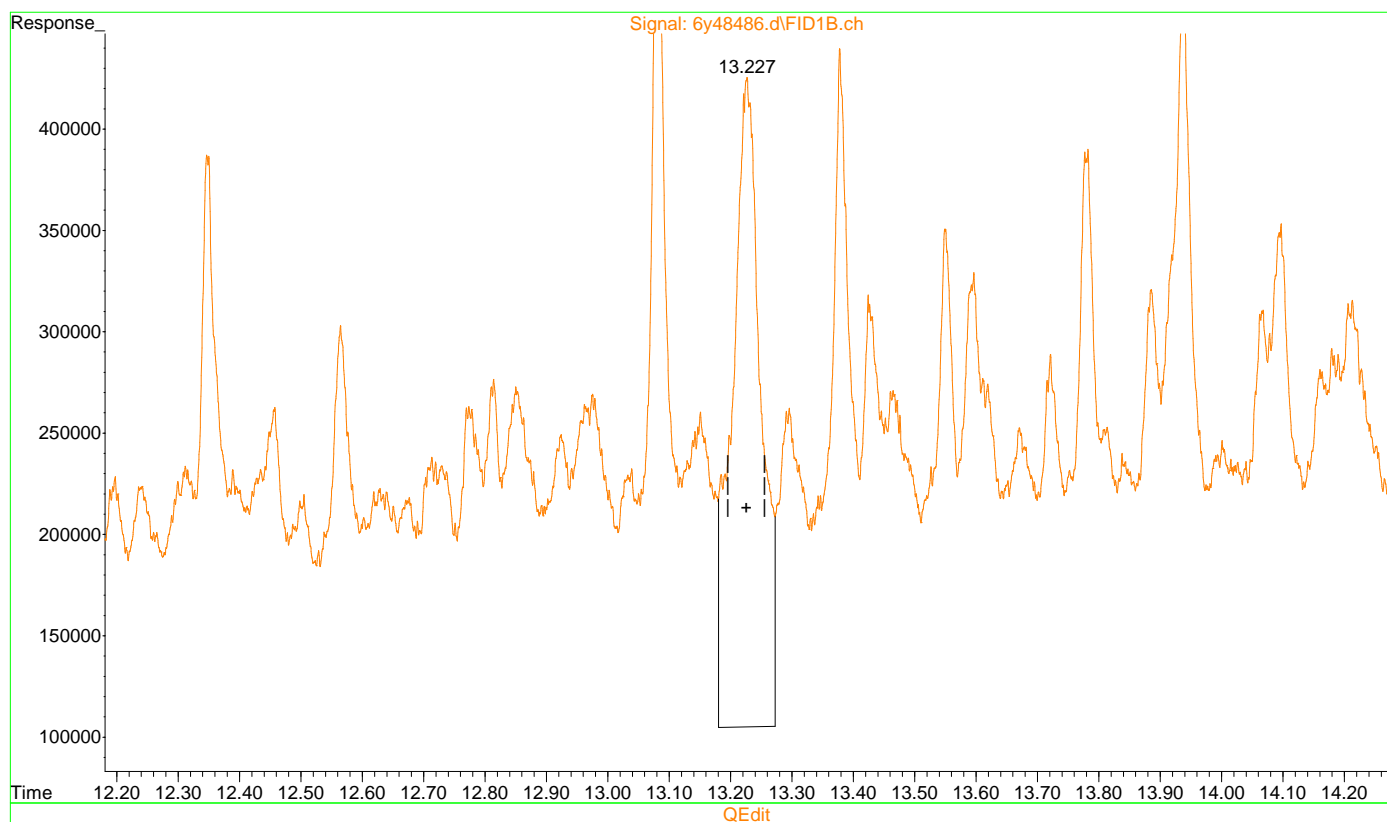
response 1944611

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:47:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



(26) o-Terphenyl (S) (S)

13.227min 16.431 ug/L

response 10459791

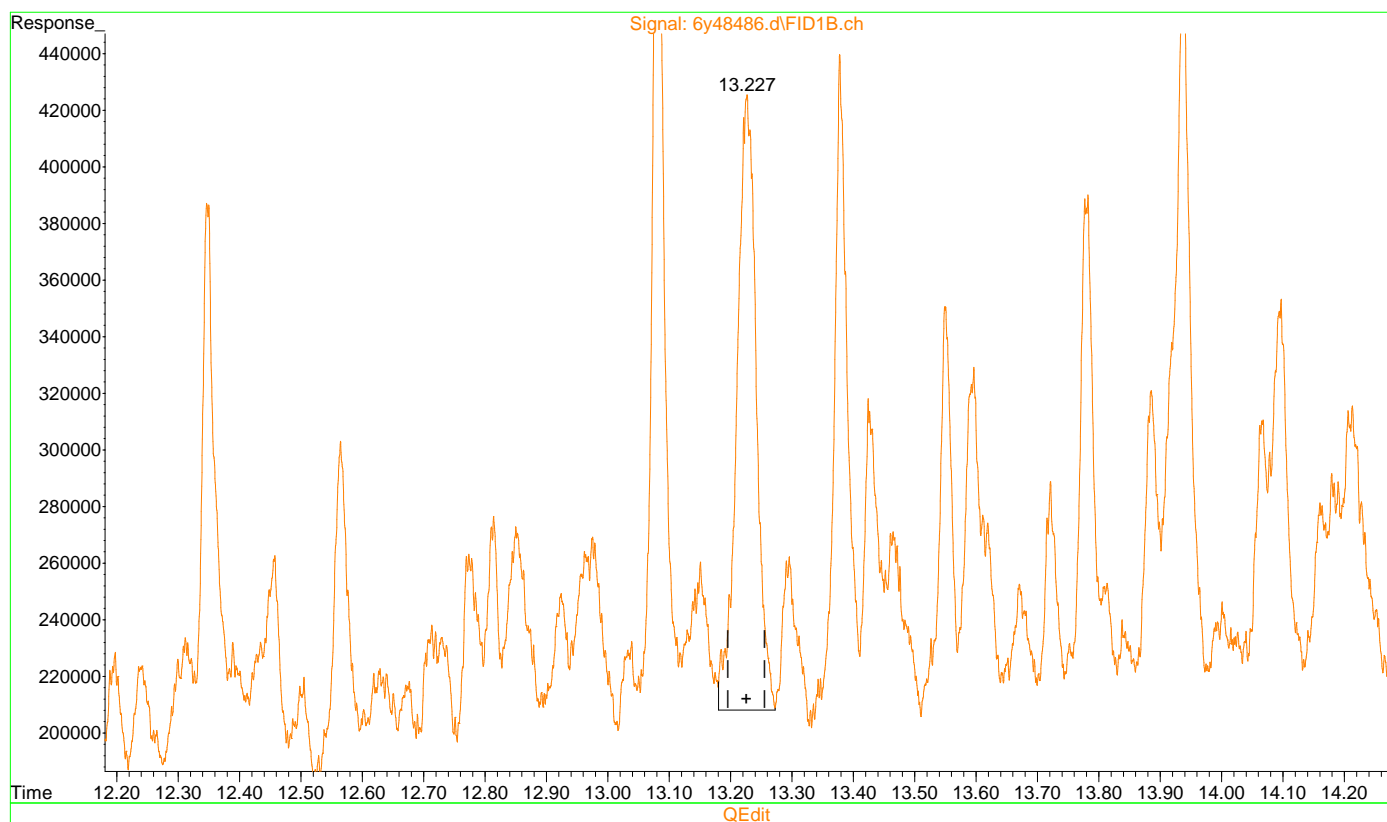
(+) = Expected Retention Time
eph6y2180.m Tue Sep 13 06:02:01 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:47:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase : HP5
Signal #2 Info : 30mx.32mm.x25um



(26) o-Terphenyl (S) (S)

13.227min 7.478 ug/L m

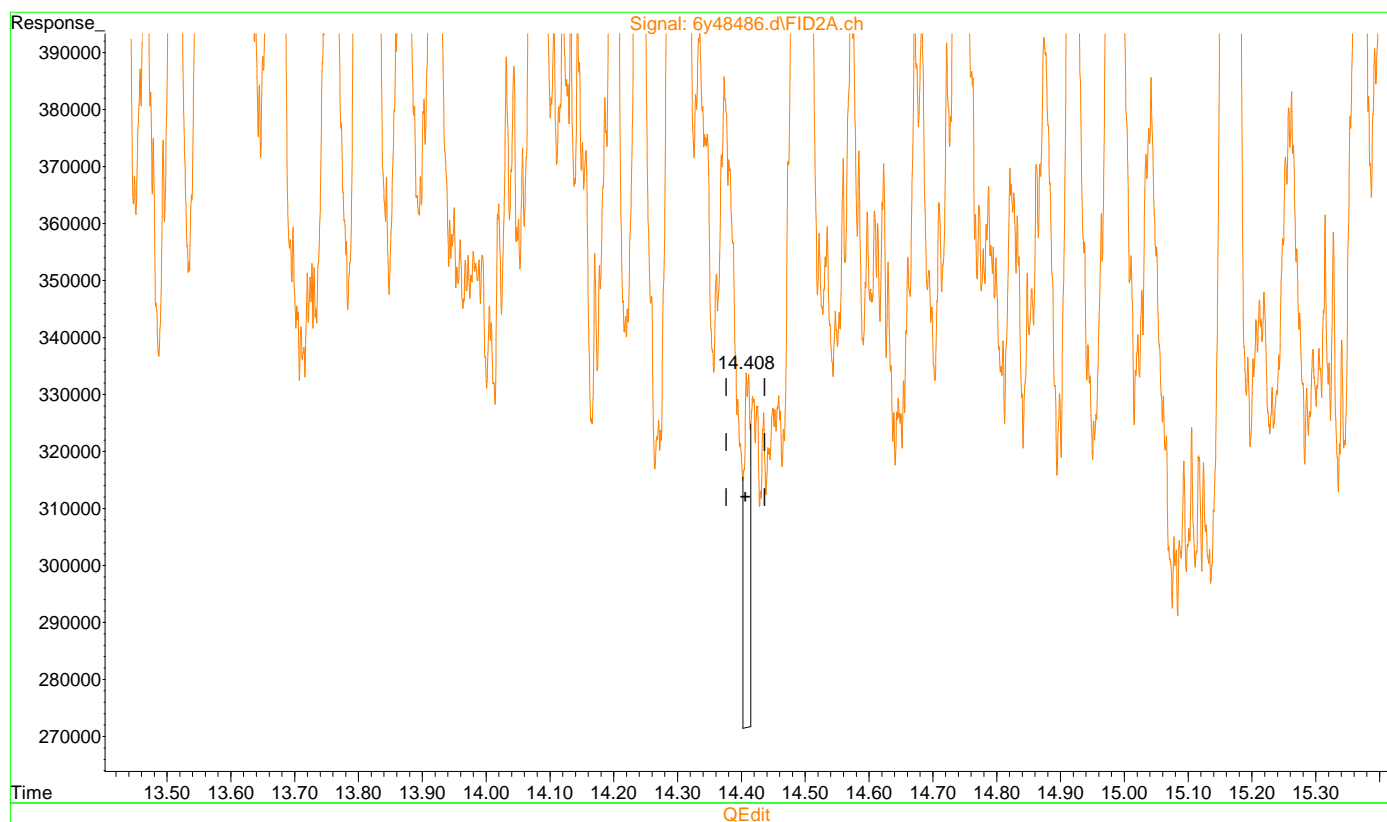
response 4760636

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:47:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase : HP5
Signal #2 Info : 30mx.32mm.x25um



(55) 1-Chlorooctadecane (S) (S)

14.411min 0.701 ug/L

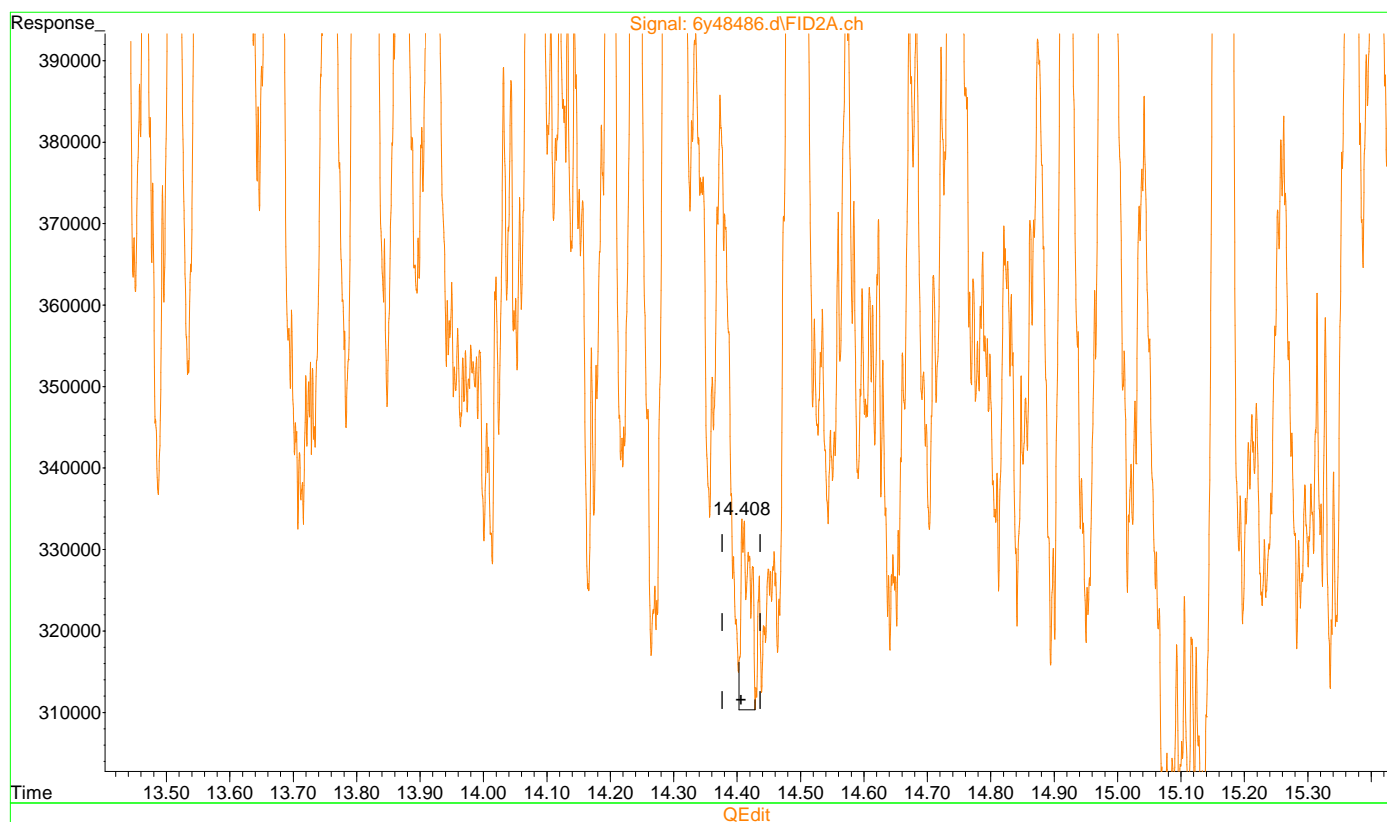
response 391815

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:47:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



(55) 1-Chlorooctadecane (S) (S)

14.408min 0.424 ug/L m

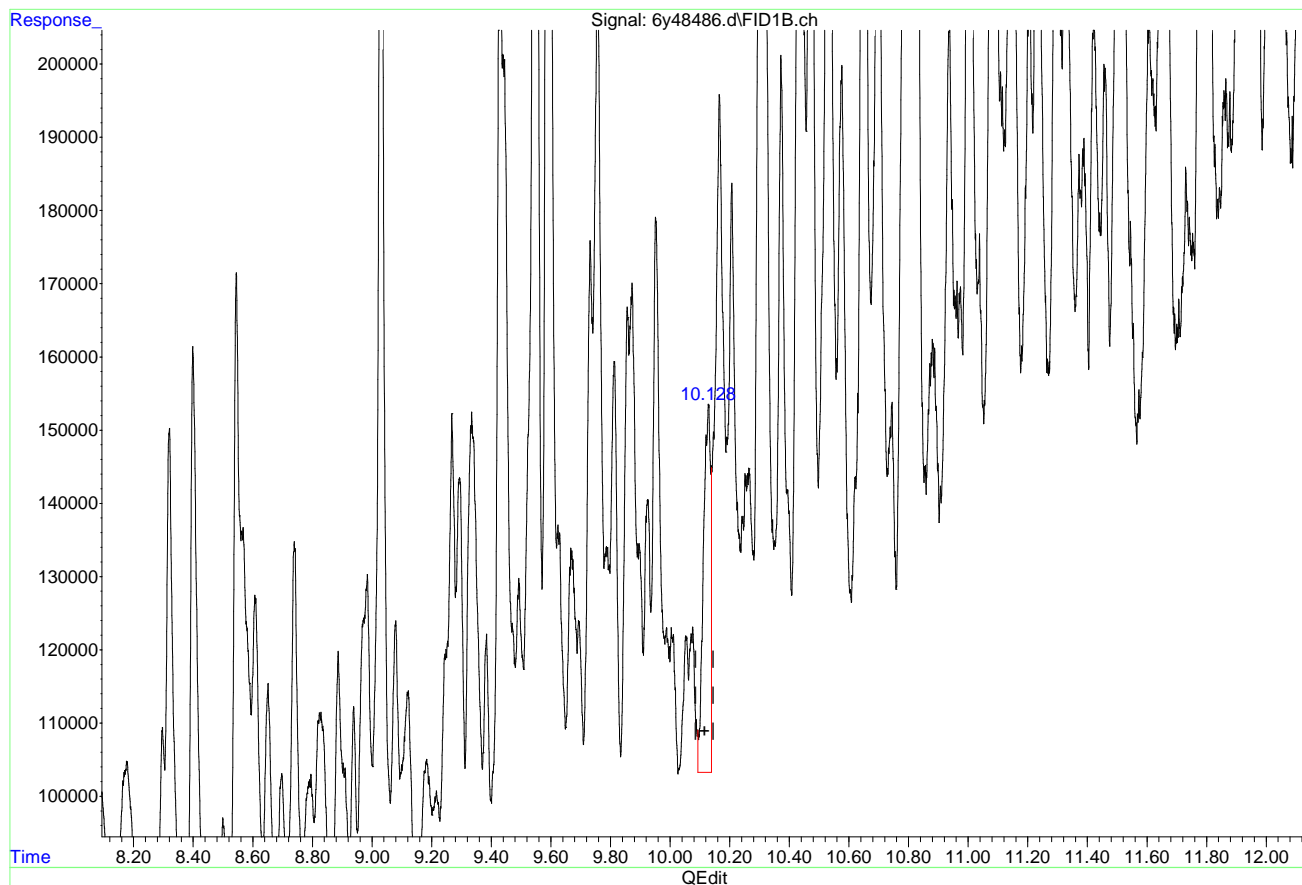
response 236860

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\
Data File : 6y48486.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 3:15 pm
Operator : arianak
Sample : jd49400-1r
Misc : OP41654,G6y2226,15.0,,,5,10
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 06:04:06 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



(6) Acenaphthene (T)

10.128min 1.234 ug/l m

response 844196

(+) = Expected Retention Time
eph6y2180.m Tue Sep 13 19:27:04 2022

Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48483.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 1:15 pm
Operator : thomasl
Sample : op41654-mb1
Misc : OP41654,6y2226,15.0,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:56:53 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
24) S 2-Fluorobiphenyl (S)	9.023	20376582	39.189 ug/L
26) S o-Terphenyl (S)	13.233	13827515	21.721 ug/L
55) S 1-Chlorooctadecane (S)	14.407	14223899	25.438 ug/L

Target Compounds

(f)=RT Delta > 1/2 Window

(m)=manual int.

7.2.1

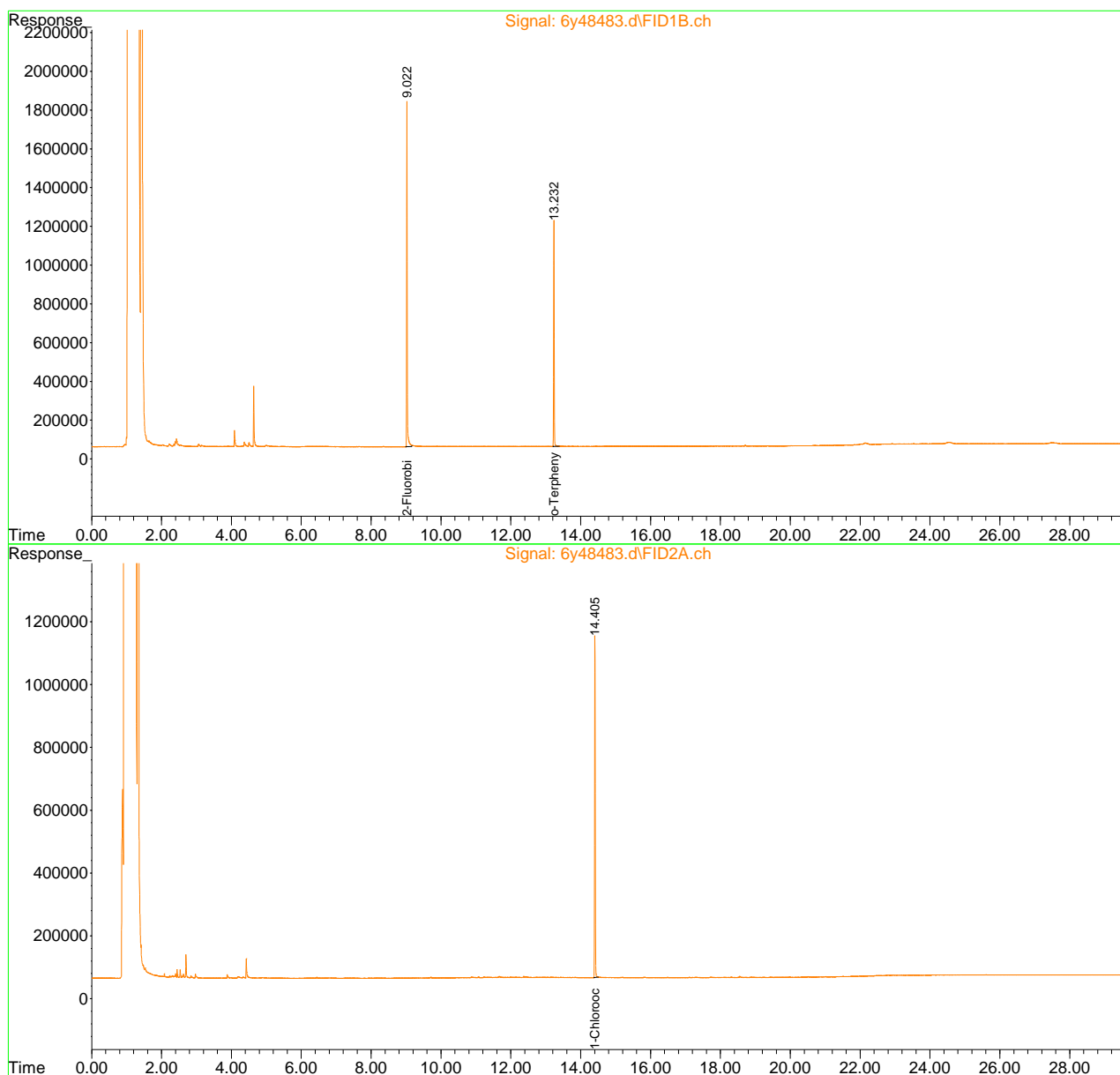
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48483.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 1:15 pm
Operator : thomasl
Sample : op41654-mb1
Misc : OP41654,G6y2226,15.0,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:56:53 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrup\6y2226\
 Data File : 6y48484.d
 Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
 Acq On : 11 Sep 2022 1:50 pm
 Operator : thomasl
 Sample : op41654-bs1
 Misc : OP41654,G6y2226,15.0,,,2,1
 ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 13 05:58:05 2022
 Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
 Quant Title : NJDEP Extractable Petroleum Hydrocarbons
 QLast Update : Tue Sep 13 05:40:15 2022
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1ul/col
 Signal #1 Phase : HP5
 Signal #1 Info : 30mx.25mm.x.25um
 Signal #2 Phase: HP5
 Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc	Units

System Monitoring Compounds					
24) S	2-Fluorobiphenyl (S)	9.025	19661465	37.814	ug/L
26) S	o-Terphenyl (S)	13.235	15480625	24.317	ug/L
55) S	1-Chlorooctadecane (S)	14.411	16365941	29.268	ug/L
Target Compounds					
1) T	1,2,3-Trimethylbenzene	5.325	11556225	21.156	ug/l
2) T	Naphthalene	7.241	12475565	21.630	ug/L
4) T	2-Methylnaphthalene	8.383	12494636	21.259	ug/L
5) T	Acenaphthylene	9.833	12286982	21.036	ug/l
6) T	Acenaphthene	10.128	13559595	19.824	ug/l
8) T	Fluorene	10.988	13489910	22.198	ug/l
9) T	Phenanthrene	12.554	13919432	23.137	ug/l
10) T	Anthracene	12.641	13914718	22.211	ug/l
11) T	Fluoranthene	14.551	14109960	22.758	ug/l
12) T	Pyrene	14.926	14239423	22.366	ug/l
14) T	Benzo(a)Anthracene	17.125	13679751	23.748	ug/l
15) T	Chrysene	17.185	13918734	22.262	ug/l
16) T	Benzo(b)Fluoranthene	19.024	13762079	25.367	ug/l
17) T	Benzo(k)Fluoranthene	19.068	14344296	25.613	ug/l
18) T	Benzo(a)Pyrene	19.540	12530227	23.456	ug/l
19) T	Indeno(1,2,3-cd)Pyrene	21.228	13882360	29.860	ug/l
20) T	Dibenzo(ah)Anthracene	21.264	14380393	25.988	ug/l
21) T	Benzo(ghi)Perylene	21.573	13957722	28.176	ug/l
23) H	C11-C22 Aromatics (Un...	14.426	247928965	426.739	ug/L
28) T	C9	3.541f	12158455	21.152	ug/L
29) T	C10	4.842	13880788	22.975	ug/L
30) T	C12	7.145	15294873	24.379	ug/L
32) T	C14	9.108	16553802	26.220	ug/L
33) T	C16	10.839	18014997	28.068	ug/L
35) T	C18	12.395	18834861	28.995	ug/L
36) T	C19	13.118	18910406	28.679	ug/L
37) T	C20	13.813	18288370	28.077	ug/L
38) T	C21	14.493	18110233	27.820	ug/L
40) T	C22	15.165	18237014	27.924	ug/L
41) T	C24	16.467	18172340	28.037	ug/L
42) T	C26	17.706	18090343	28.544	ug/L
43) T	C28	18.875	17880906	28.859	ug/L
44) T	C30	19.975	17655427	28.859	ug/L
45) T	C32	21.007	17636142	29.570	ug/L
46) T	C34	21.981	17421391	30.953	ug/L
47) T	C36	22.917	16433758	30.142	ug/L
48) T	C38	24.059	16117304	30.881	ug/L
49) T	C40	25.600	15653800	30.191	ug/L
51) H	C9-C18 Aliphatics	8.245	107710066	173.300	ug/L
52) H	C19-C36 Aliphatics	18.076	207599410	330.682	ug/L

(f)=RT Delta > 1/2 Window

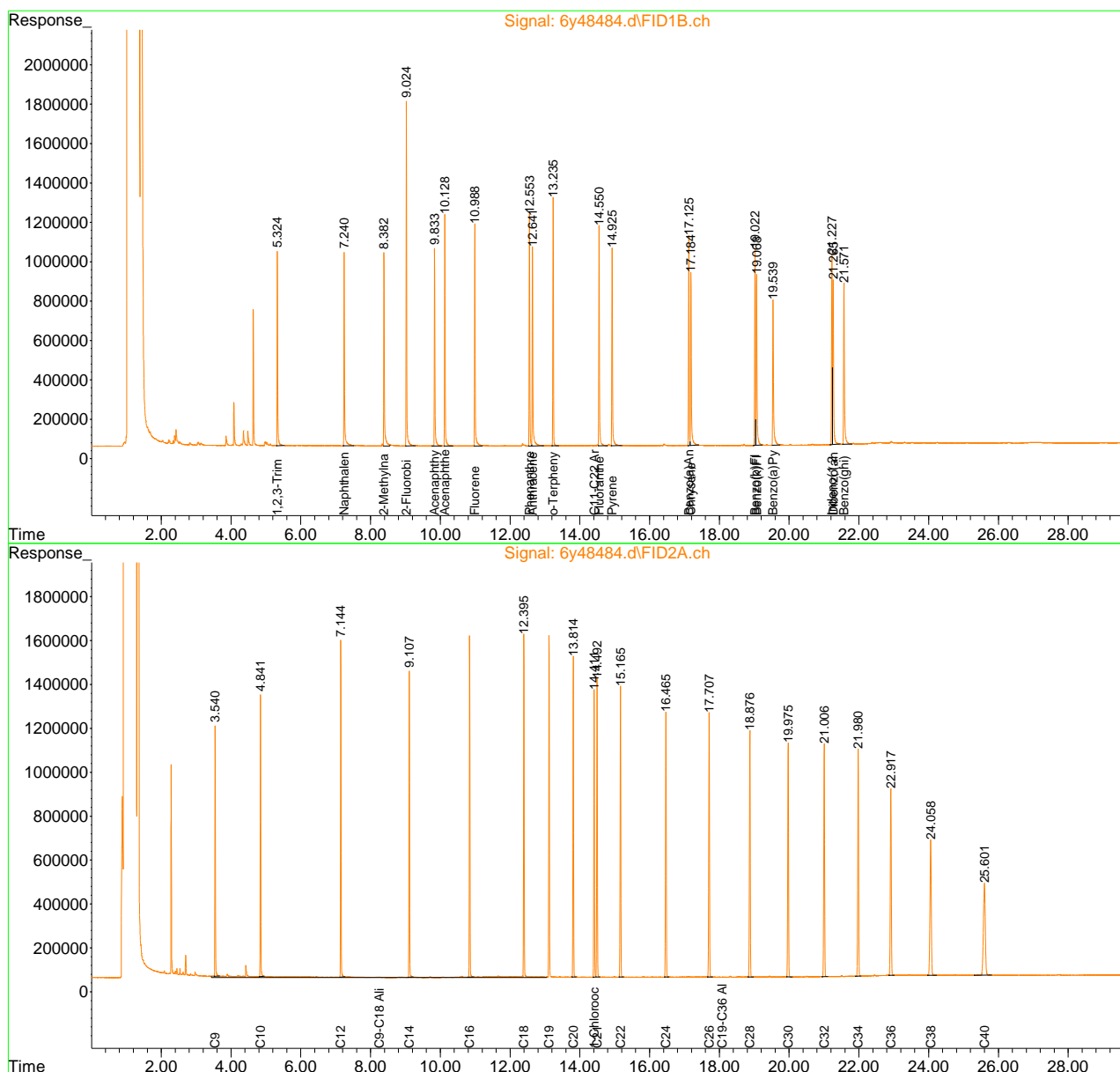
(m)=manual int.

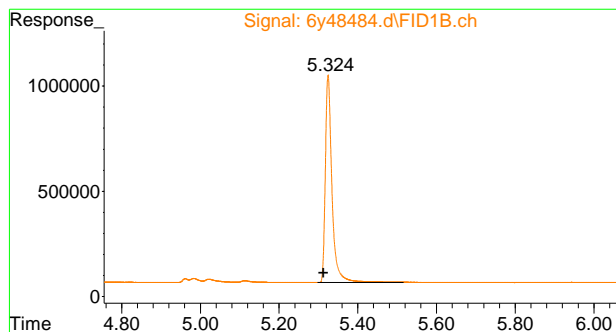
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48484.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 1:50 pm
Operator : thomasl
Sample : op41654-bs1
Misc : OP41654,G6y2226,15.0,,,2,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:58:05 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

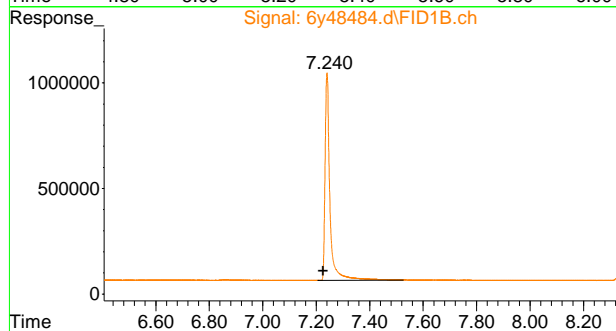
Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um





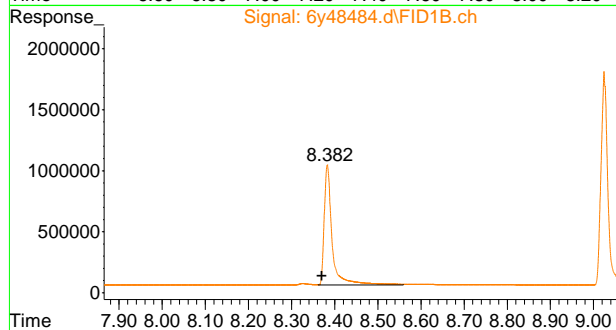
#1 1,2,3-Trimethylbenzene

R.T.: 5.325 min
Delta R.T.: 0.013 min
Response: 11556225
Conc: 21.16 ug/l



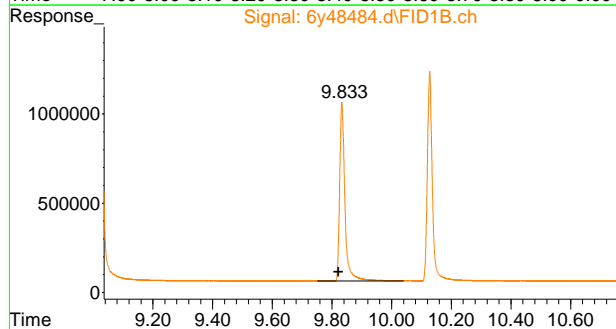
#2 Naphthalene

R.T.: 7.241 min
Delta R.T.: 0.015 min
Response: 12475565
Conc: 21.63 ug/L



#4 2-Methylnaphthalene

R.T.: 8.383 min
Delta R.T.: 0.013 min
Response: 12494636
Conc: 21.26 ug/L

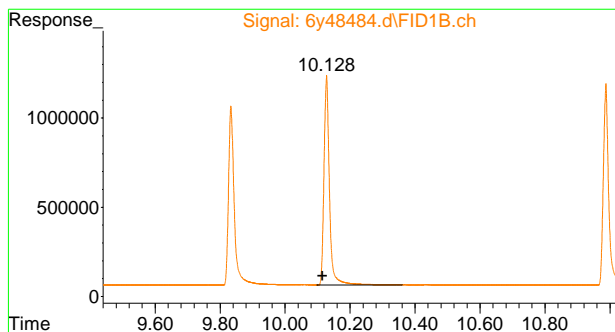


#5 Acenaphthylene

R.T.: 9.833 min
Delta R.T.: 0.012 min
Response: 12286982
Conc: 21.04 ug/l

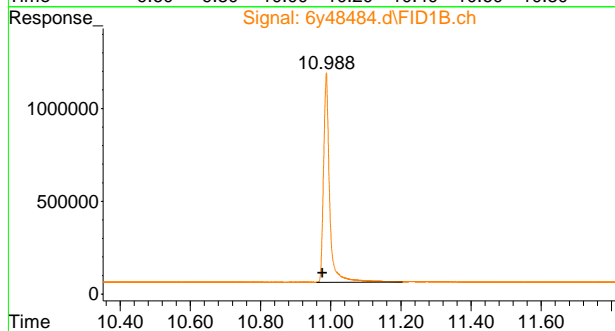
7.3.1

7



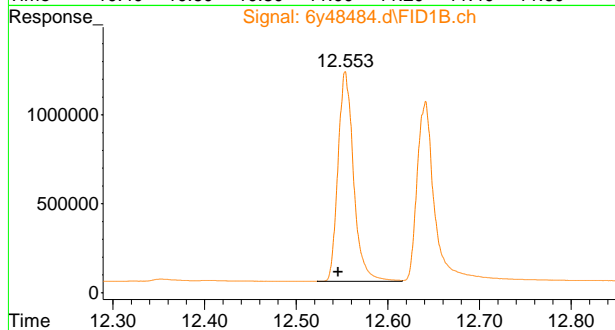
#6 Acenaphthene

R.T.: 10.128 min
Delta R.T.: 0.012 min
Response: 13559595
Conc: 19.82 ug/l



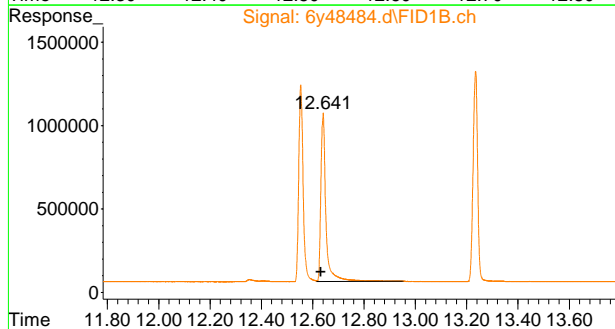
#8 Fluorene

R.T.: 10.988 min
Delta R.T.: 0.011 min
Response: 13489910
Conc: 22.20 ug/l



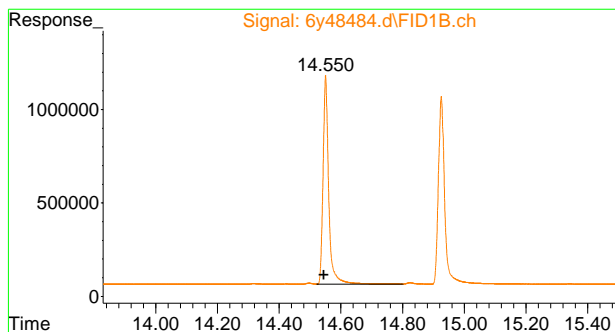
#9 Phenanthrene

R.T.: 12.554 min
Delta R.T.: 0.008 min
Response: 13919432
Conc: 23.14 ug/l



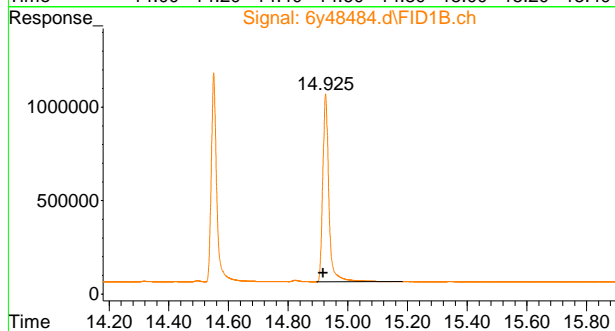
#10 Anthracene

R.T.: 12.641 min
Delta R.T.: 0.009 min
Response: 13914718
Conc: 22.21 ug/l



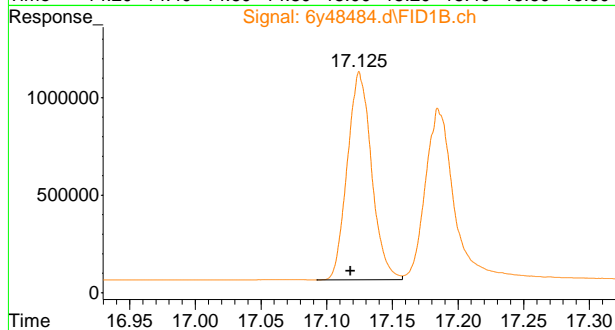
#11 Fluoranthene

R.T.: 14.551 min
Delta R.T.: 0.006 min
Response: 14109960
Conc: 22.76 ug/l



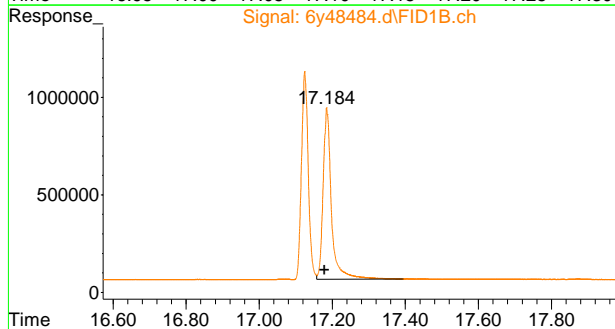
#12 Pyrene

R.T.: 14.926 min
Delta R.T.: 0.008 min
Response: 14239423
Conc: 22.37 ug/l



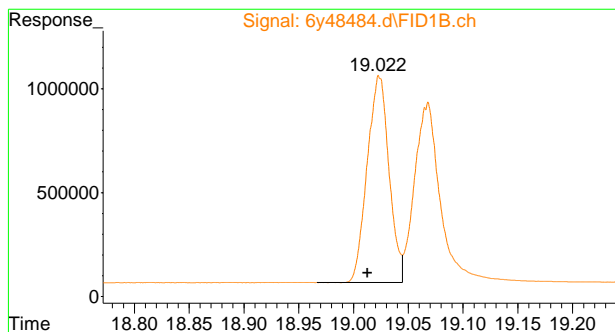
#14 Benzo(a)Anthracene

R.T.: 17.125 min
Delta R.T.: 0.007 min
Response: 13679751
Conc: 23.75 ug/l



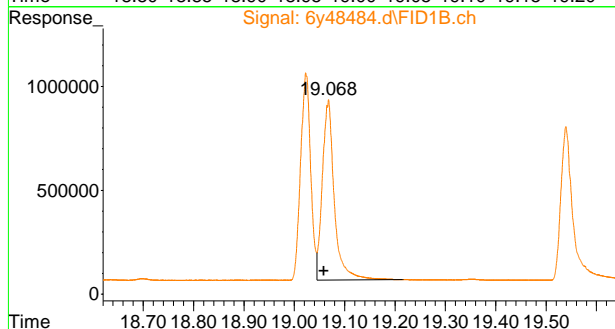
#15 Chrysene

R.T.: 17.185 min
Delta R.T.: 0.006 min
Response: 13918734
Conc: 22.26 ug/l



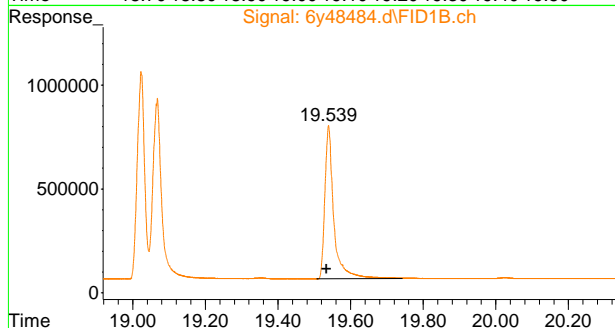
#16 Benzo(b)Fluoranthene

R.T.: 19.024 min
Delta R.T.: 0.011 min
Response: 13762079
Conc: 25.37 ug/l



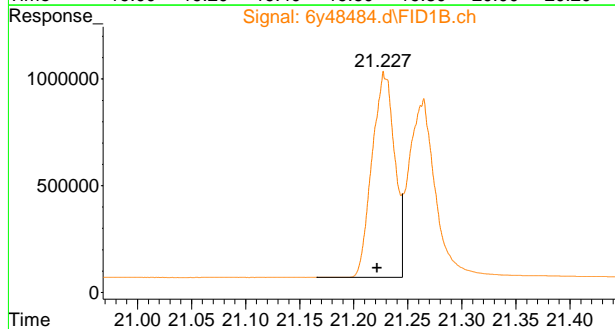
#17 Benzo(k)Fluoranthene

R.T.: 19.068 min
Delta R.T.: 0.009 min
Response: 14344296
Conc: 25.61 ug/l



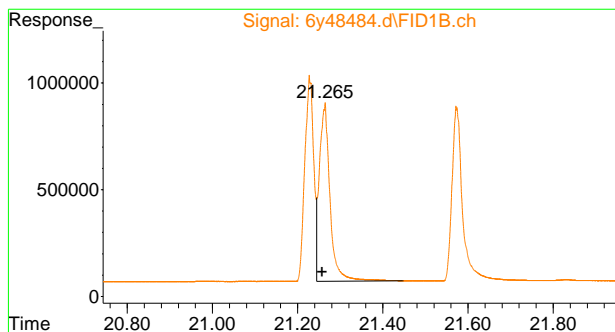
#18 Benzo(a)Pyrene

R.T.: 19.540 min
Delta R.T.: 0.006 min
Response: 12530227
Conc: 23.46 ug/l



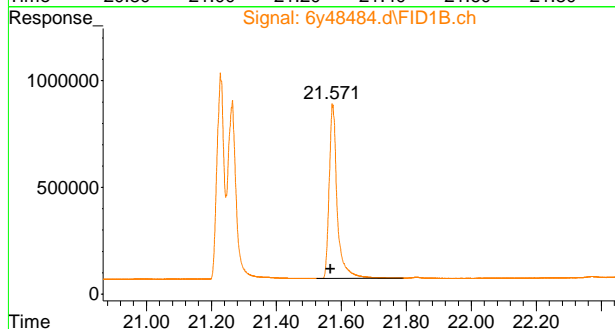
#19 Indeno(1,2,3-cd)Pyrene

R.T.: 21.228 min
Delta R.T.: 0.007 min
Response: 13882360
Conc: 29.86 ug/l



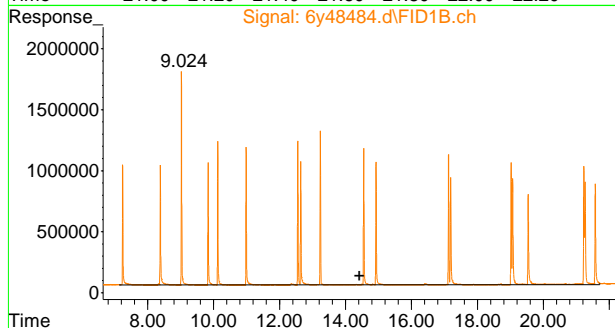
#20 Dibenzo(ah)Anthracene

R.T.: 21.264 min
Delta R.T.: 0.007 min
Response: 14380393
Conc: 25.99 ug/l



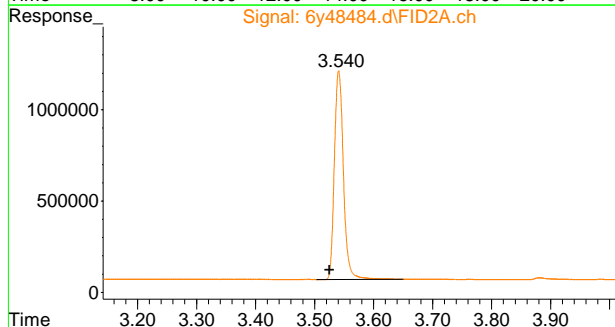
#21 Benzo(ghi)Perylene

R.T.: 21.573 min
Delta R.T.: 0.007 min
Response: 13957722
Conc: 28.18 ug/l



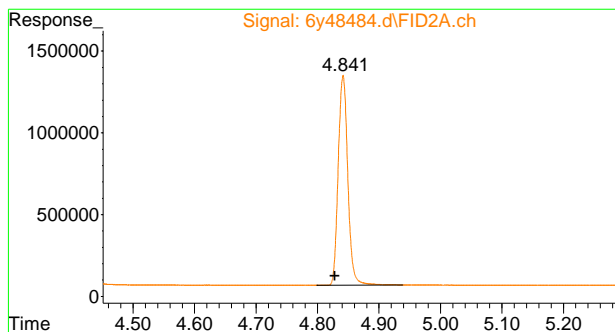
#23 C11-C22 Aromatics (Unadj.)

R.T.: 14.426 min
Delta R.T.: 0.000 min
Response: 247928965
Conc: 426.74 ug/L



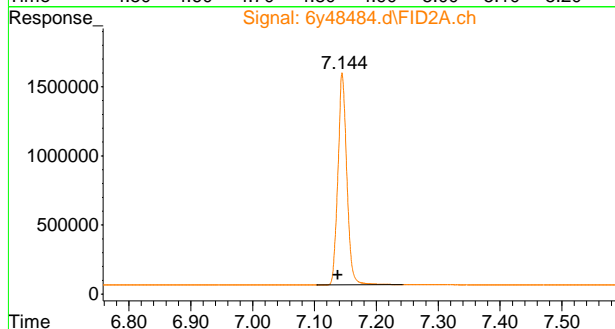
#28 C9

R.T.: 3.541 min
Delta R.T.: 0.016 min
Response: 12158455
Conc: 21.15 ug/L



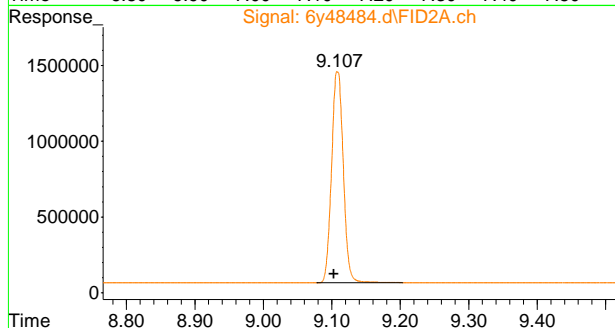
#29 C10

R.T.: 4.842 min
Delta R.T.: 0.013 min
Response: 13880788
Conc: 22.98 ug/L



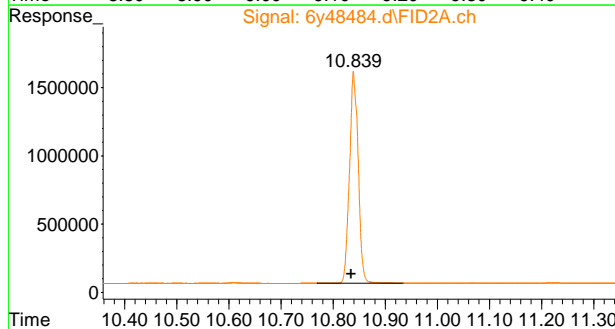
#30 C12

R.T.: 7.145 min
Delta R.T.: 0.007 min
Response: 15294873
Conc: 24.38 ug/L



#32 C14

R.T.: 9.108 min
Delta R.T.: 0.006 min
Response: 16553802
Conc: 26.22 ug/L

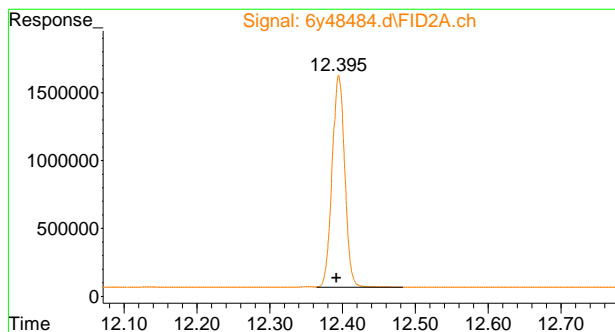


#33 C16

R.T.: 10.839 min
Delta R.T.: 0.005 min
Response: 18014997
Conc: 28.07 ug/L

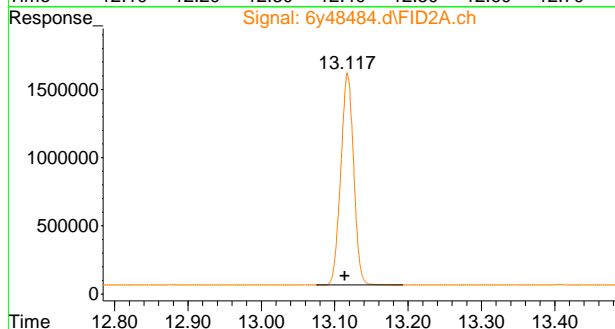
7.3.1

7



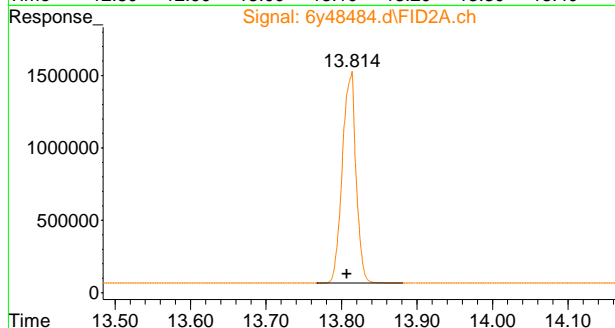
#35 C18

R.T.: 12.395 min
Delta R.T.: 0.003 min
Response: 18834861
Conc: 28.99 ug/L



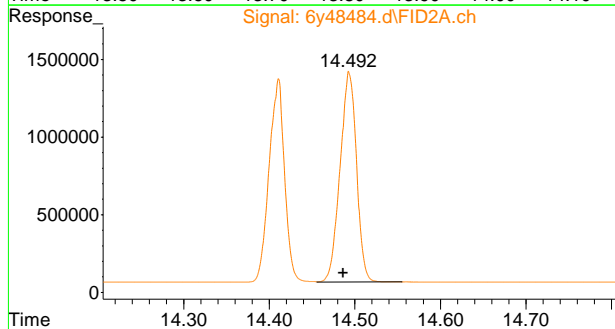
#36 C19

R.T.: 13.118 min
Delta R.T.: 0.004 min
Response: 18910406
Conc: 28.68 ug/L



#37 C20

R.T.: 13.813 min
Delta R.T.: 0.006 min
Response: 18288370
Conc: 28.08 ug/L

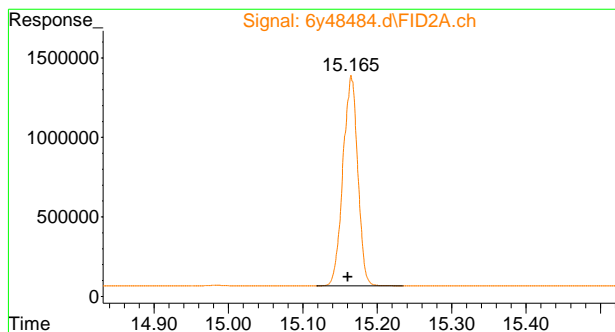


#38 C21

R.T.: 14.493 min
Delta R.T.: 0.007 min
Response: 18110233
Conc: 27.82 ug/L

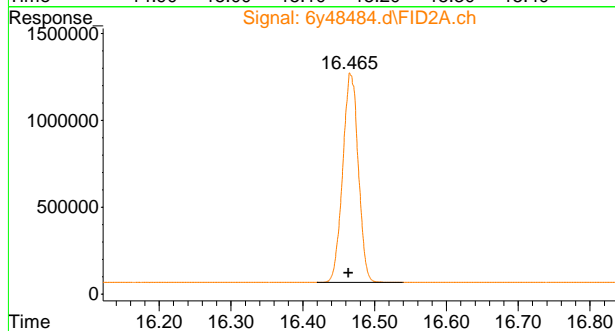
7.3.1

7



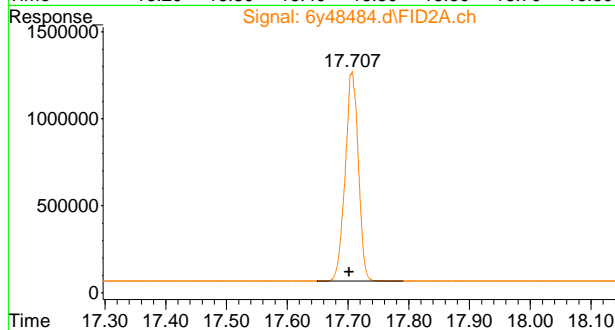
#40 C22

R.T.: 15.165 min
Delta R.T.: 0.005 min
Response: 18237014
Conc: 27.92 ug/L



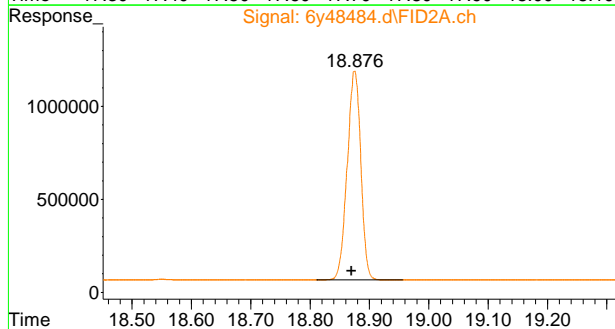
#41 C24

R.T.: 16.467 min
Delta R.T.: 0.003 min
Response: 18172340
Conc: 28.04 ug/L



#42 C26

R.T.: 17.706 min
Delta R.T.: 0.004 min
Response: 18090343
Conc: 28.54 ug/L

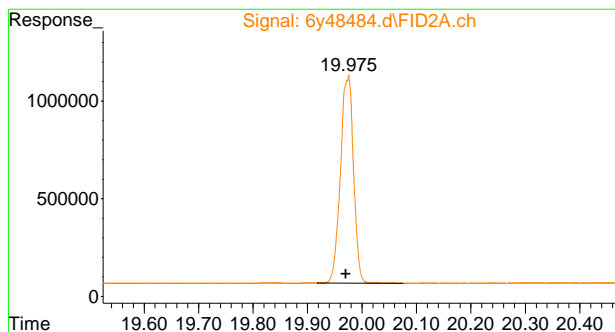


#43 C28

R.T.: 18.875 min
Delta R.T.: 0.006 min
Response: 17880906
Conc: 28.86 ug/L

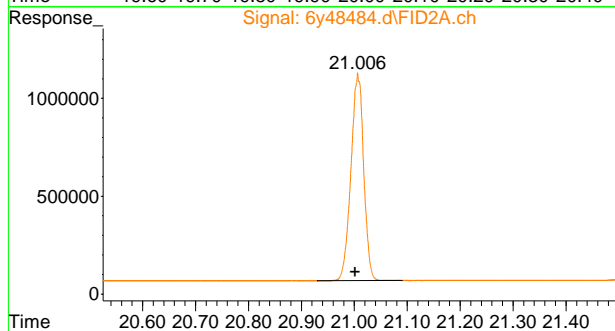
7.3.1

7



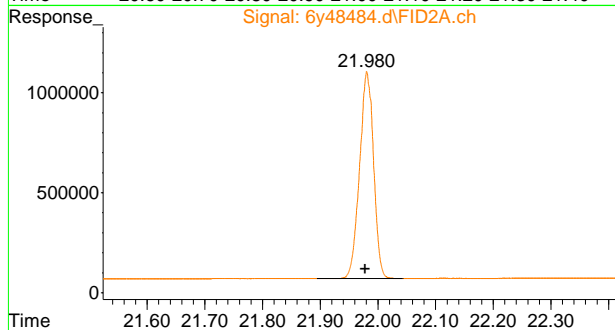
#44 C30

R.T.: 19.975 min
Delta R.T.: 0.005 min
Response: 17655427
Conc: 28.86 ug/L



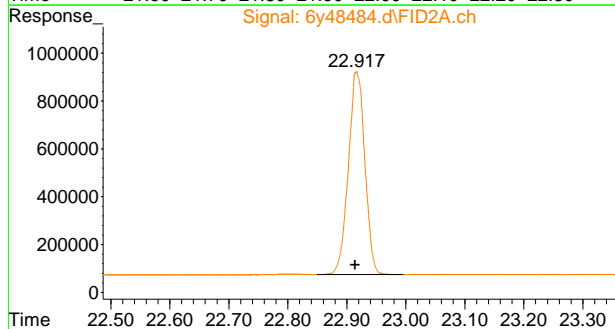
#45 C32

R.T.: 21.007 min
Delta R.T.: 0.005 min
Response: 17636142
Conc: 29.57 ug/L



#46 C34

R.T.: 21.981 min
Delta R.T.: 0.003 min
Response: 17421391
Conc: 30.95 ug/L

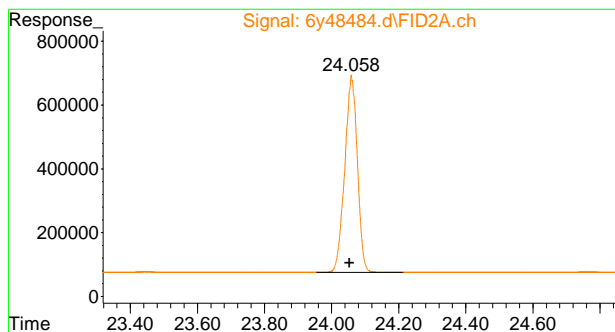


#47 C36

R.T.: 22.917 min
Delta R.T.: 0.003 min
Response: 16433758
Conc: 30.14 ug/L

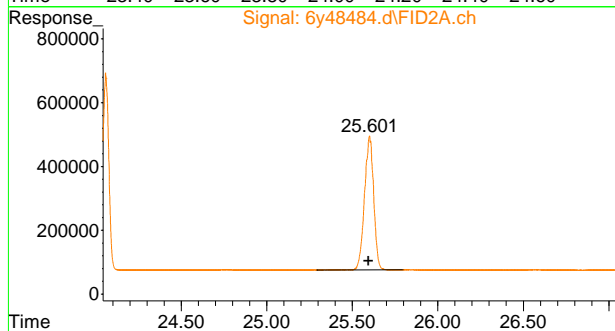
7.3.1

7



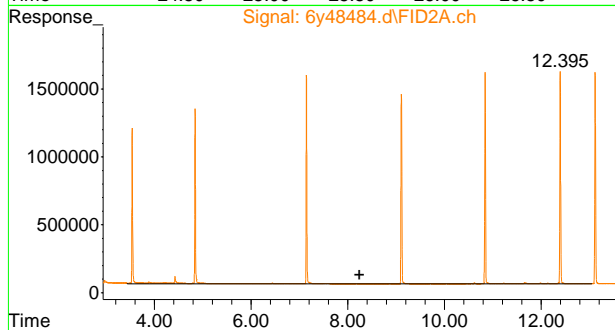
#48 C38

R.T.: 24.059 min
Delta R.T.: 0.006 min
Response: 16117304
Conc: 30.88 ug/L



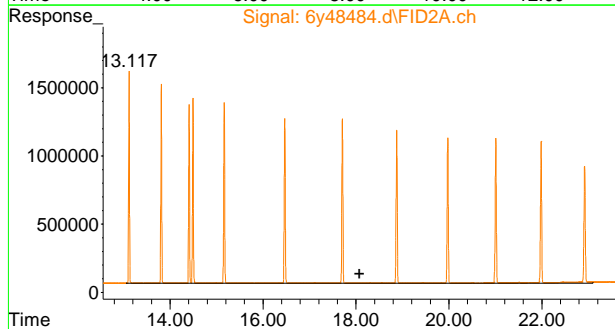
#49 C40

R.T.: 25.600 min
Delta R.T.: 0.006 min
Response: 15653800
Conc: 30.19 ug/L



#51 C9-C18 Aliphatics

R.T.: 8.245 min
Delta R.T.: 0.000 min
Response: 107710066
Conc: 173.30 ug/L



#52 C19-C36 Aliphatics

R.T.: 18.076 min
Delta R.T.: 0.000 min
Response: 207599410
Conc: 330.68 ug/L

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrup\6y2226\
 Data File : 6y48485.d
 Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
 Acq On : 11 Sep 2022 2:41 pm
 Operator : arianak
 Sample : op41654-bsd
 Misc : OP41654,G6y2226,15.0,,,2,1
 ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 13 05:58:37 2022
 Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
 Quant Title : NJDEP Extractable Petroleum Hydrocarbons
 QLast Update : Tue Sep 13 05:40:15 2022
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1ul/col
 Signal #1 Phase : HP5
 Signal #1 Info : 30mx.25mm.x.25um
 Signal #2 Phase: HP5
 Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc	Units

System Monitoring Compounds					
24) S	2-Fluorobiphenyl (S)	9.010	18757793	36.076	ug/L
26) S	o-Terphenyl (S)	13.224	10615824	16.676	ug/L
55) S	1-Chlorooctadecane (S)	14.405	12707288	22.725	ug/L
Target Compounds					
1) T	1,2,3-Trimethylbenzene	5.311	8513017	15.585	ug/l
2) T	Naphthalene	7.225	9077931	15.739	ug/L
4) T	2-Methylnaphthalene	8.368	9165744	15.595	ug/L
5) T	Acenaphthylene	9.821	9146173	15.658	ug/l
6) T	Acenaphthene	10.115	10064114	14.714	ug/l
8) T	Fluorene	10.975	9867796	16.238	ug/l
9) T	Phenanthrene	12.544	10031179	16.674	ug/l
10) T	Anthracene	12.630	10079478	16.089	ug/l
11) T	Fluoranthene	14.543	10184124	16.426	ug/l
12) T	Pyrene	14.917	10257185	16.111	ug/l
14) T	Benzo(a)Anthracene	17.116	9818872	17.045	ug/l
15) T	Chrysene	17.177	10245919	16.387	ug/l
16) T	Benzo(b)Fluoranthene	19.014	9887611	18.225	ug/l
17) T	Benzo(k)Fluoranthene	19.058	10718771	19.139	ug/l
18) T	Benzo(a)Pyrene	19.532	9160592	17.149	ug/l
19) T	Indeno(1,2,3-cd)Pyrene	21.221	9624205	20.701	ug/l
20) T	Dibenzo(ah)Anthracene	21.255	10620577	19.193	ug/l
21) T	Benzo(ghi)Perylene	21.568	9974643	20.135	ug/l
23) H	C11-C22 Aromatics (Un...	14.426	189454673	326.092	ug/L
28) T	C9	3.525	9547762	16.610	ug/L
29) T	C10	4.828	10918135	18.071	ug/L
30) T	C12	7.136	11967050	19.074	ug/L
32) T	C14	9.102	13020859	20.624	ug/L
33) T	C16	10.835	14308330	22.293	ug/L
35) T	C18	12.393	15264167	23.498	ug/L
36) T	C19	13.116	15453177	23.436	ug/L
37) T	C20	13.808	15001216	23.031	ug/L
38) T	C21	14.491	14929806	22.934	ug/L
40) T	C22	15.164	15100970	23.122	ug/L
41) T	C24	16.465	15046892	23.215	ug/L
42) T	C26	17.705	15000521	23.669	ug/L
43) T	C28	18.871	14819828	23.919	ug/L
44) T	C30	19.971	14604018	23.871	ug/L
45) T	C32	21.007	14495419	24.304	ug/L
46) T	C34	21.980	14167015	25.171	ug/L
47) T	C36	22.917	13208035	24.226	ug/L
48) T	C38	24.059	12859559	24.639	ug/L
49) T	C40	25.597	12376653	23.871	ug/L
51) H	C9-C18 Aliphatics	8.245	83163872	133.806	ug/L
52) H	C19-C36 Aliphatics	18.076	174061323	277.260	ug/L

(f)=RT Delta > 1/2 Window

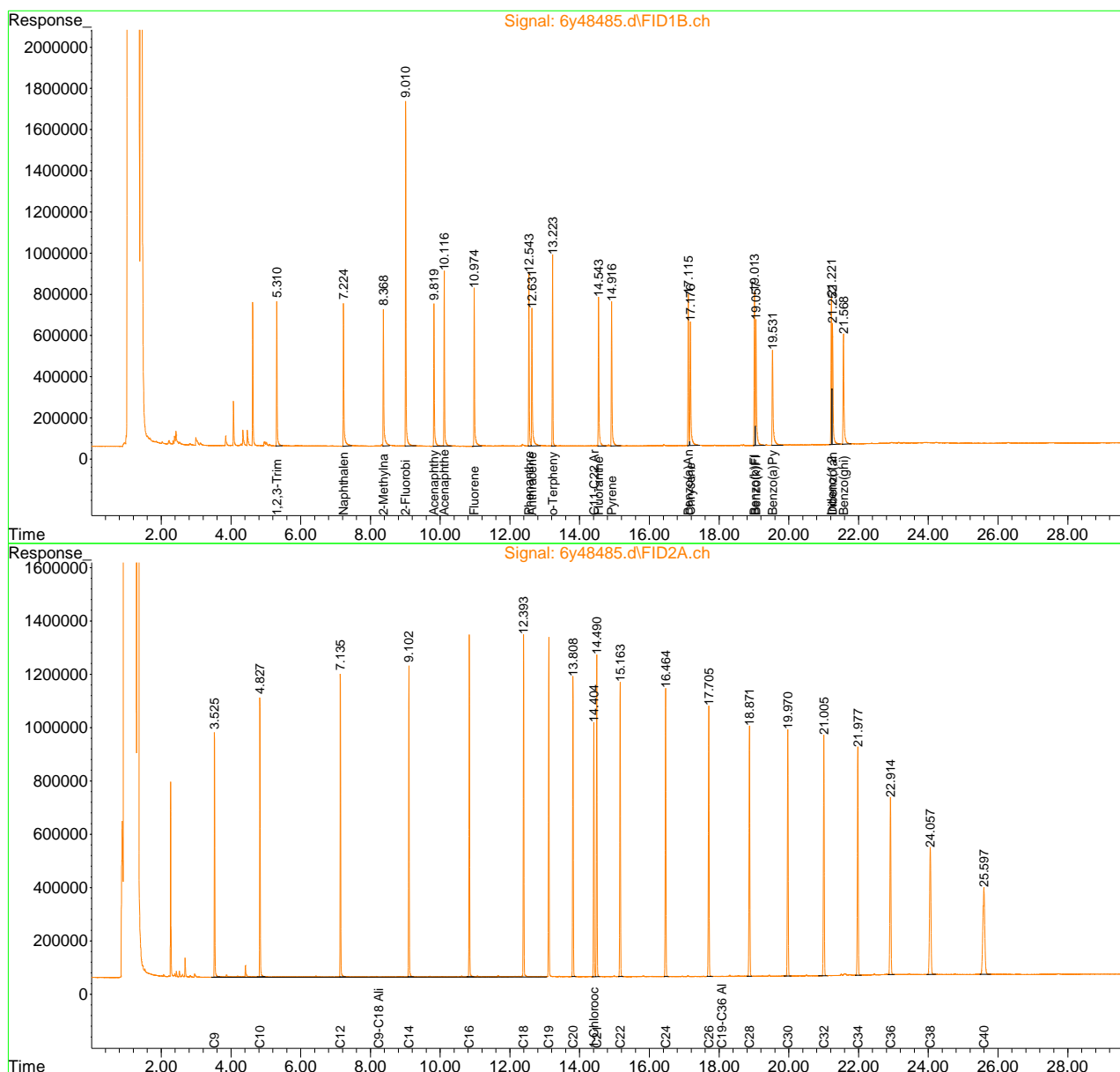
(m)=manual int.

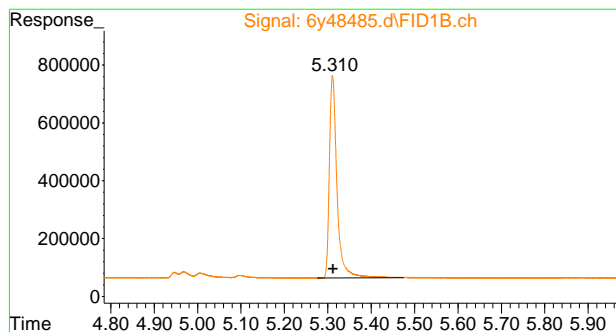
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48485.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 2:41 pm
Operator : arianak
Sample : op41654-bsd
Misc : OP41654,6y2226,15.0,,,2,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 05:58:37 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

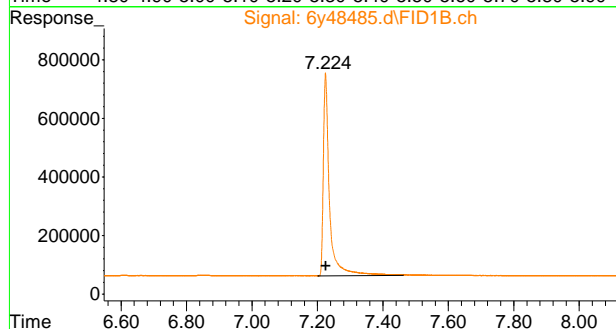
Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase : HP5
Signal #2 Info : 30mx.32mm.x25um





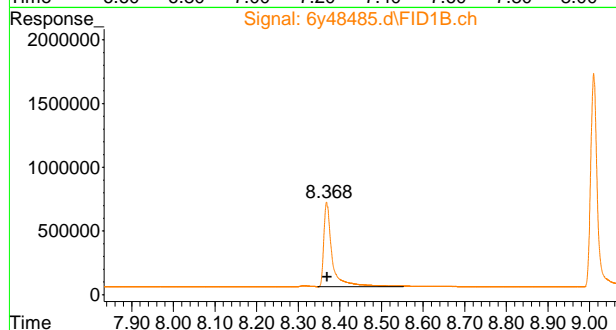
#1 1,2,3-Trimethylbenzene

R.T.: 5.311 min
Delta R.T.: 0.000 min
Response: 8513017
Conc: 15.58 ug/l



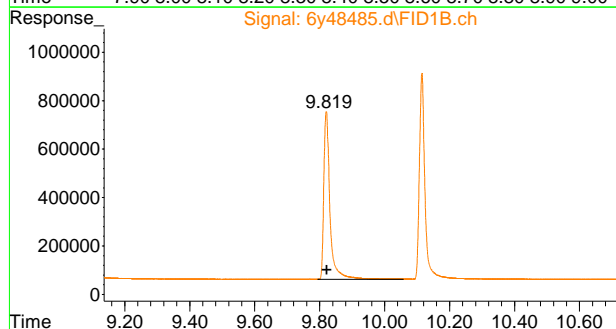
#2 Naphthalene

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 9077931
Conc: 15.74 ug/L



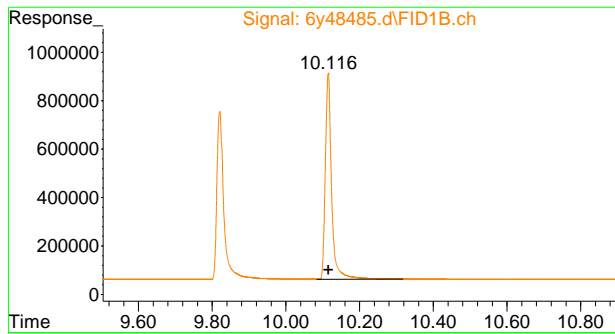
#4 2-Methylnaphthalene

R.T.: 8.368 min
Delta R.T.: -0.001 min
Response: 9165744
Conc: 15.59 ug/L



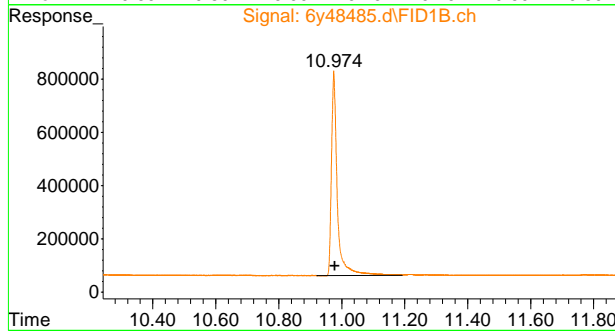
#5 Acenaphthylene

R.T.: 9.821 min
Delta R.T.: -0.001 min
Response: 9146173
Conc: 15.66 ug/l



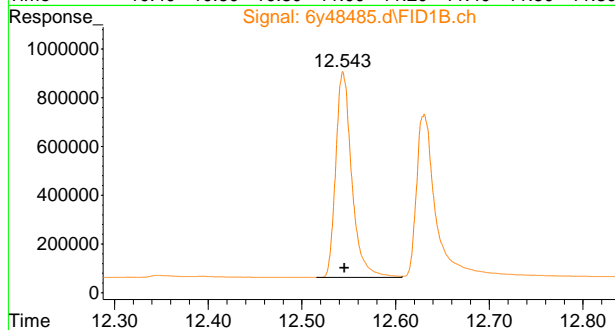
#6 Acenaphthene

R.T.: 10.115 min
Delta R.T.: 0.000 min
Response: 10064114
Conc: 14.71 ug/l



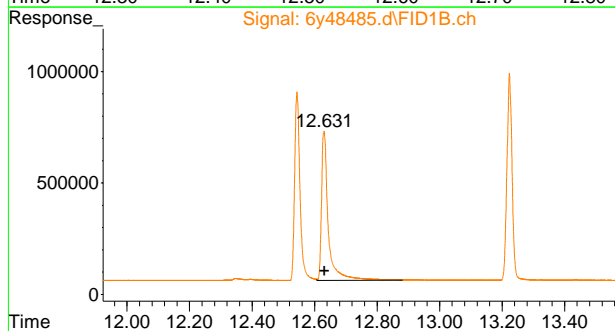
#8 Fluorene

R.T.: 10.975 min
Delta R.T.: -0.002 min
Response: 9867796
Conc: 16.24 ug/l



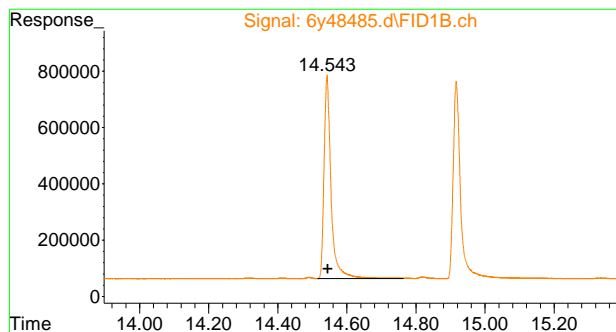
#9 Phenanthrene

R.T.: 12.544 min
Delta R.T.: -0.001 min
Response: 10031179
Conc: 16.67 ug/l



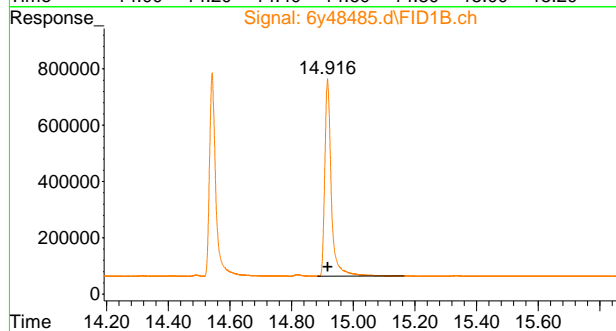
#10 Anthracene

R.T.: 12.630 min
Delta R.T.: -0.001 min
Response: 10079478
Conc: 16.09 ug/l



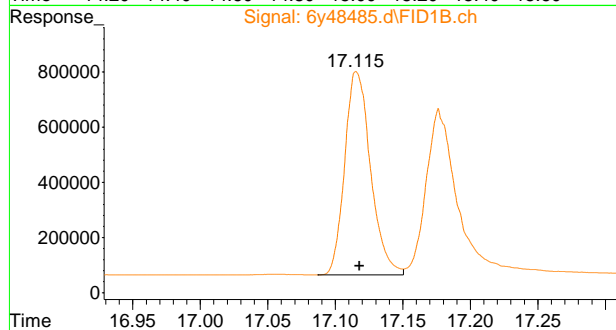
#11 Fluoranthene

R.T.: 14.543 min
Delta R.T.: -0.002 min
Response: 10184124
Conc: 16.43 ug/l



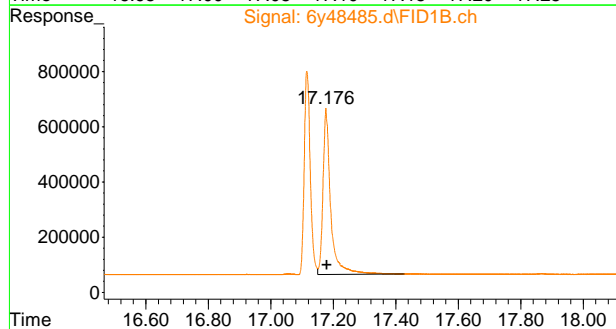
#12 Pyrene

R.T.: 14.917 min
Delta R.T.: 0.000 min
Response: 10257185
Conc: 16.11 ug/l



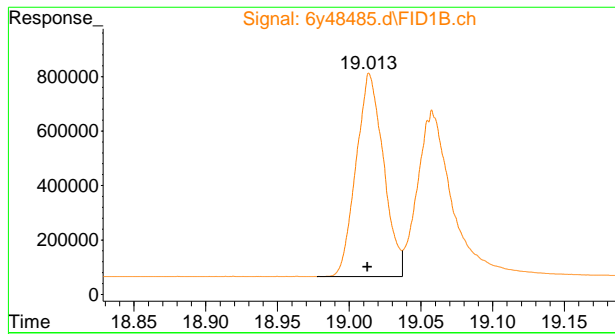
#14 Benzo(a)Anthracene

R.T.: 17.116 min
Delta R.T.: -0.002 min
Response: 9818872
Conc: 17.05 ug/l



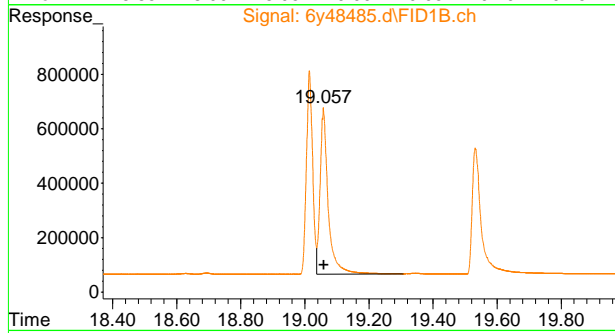
#15 Chrysene

R.T.: 17.177 min
Delta R.T.: -0.003 min
Response: 10245919
Conc: 16.39 ug/l



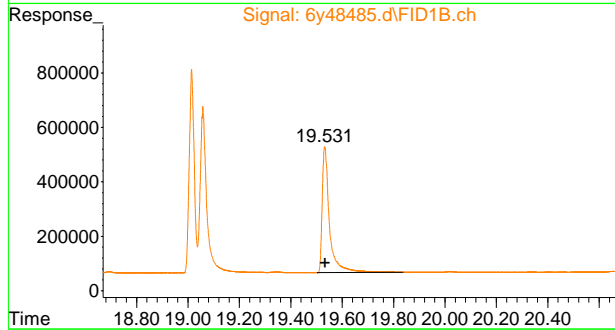
#16 Benzo(b)Fluoranthene

R.T.: 19.014 min
Delta R.T.: 0.002 min
Response: 9887611
Conc: 18.23 ug/l



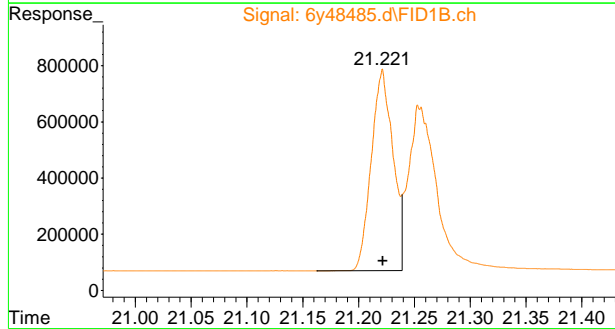
#17 Benzo(k)Fluoranthene

R.T.: 19.058 min
Delta R.T.: 0.000 min
Response: 10718771
Conc: 19.14 ug/l



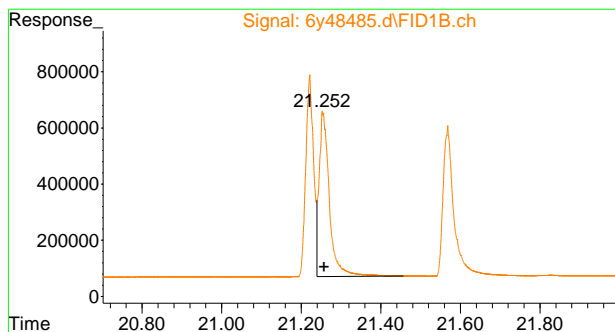
#18 Benzo(a)Pyrene

R.T.: 19.532 min
Delta R.T.: -0.001 min
Response: 9160592
Conc: 17.15 ug/l



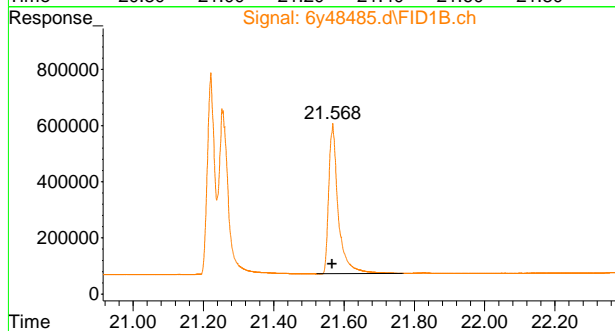
#19 Indeno(1,2,3-cd)Pyrene

R.T.: 21.221 min
Delta R.T.: 0.000 min
Response: 9624205
Conc: 20.70 ug/l



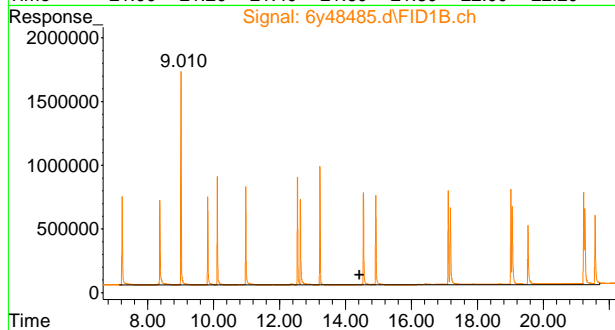
#20 Dibenzo(ah)Anthracene

R.T.: 21.255 min
Delta R.T.: -0.003 min
Response: 10620577
Conc: 19.19 ug/l



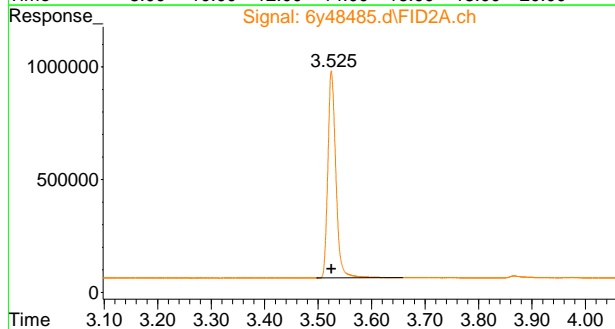
#21 Benzo(ghi)Perylene

R.T.: 21.568 min
Delta R.T.: 0.002 min
Response: 9974643
Conc: 20.14 ug/l



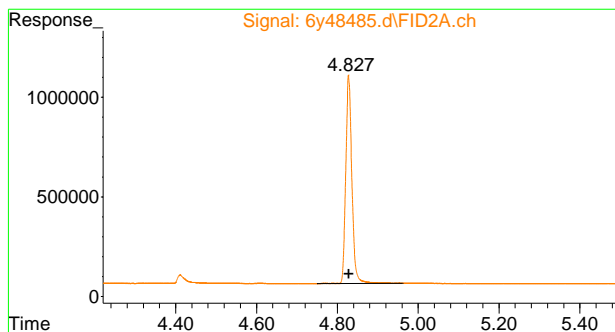
#23 C11-C22 Aromatics (Unadj.)

R.T.: 14.426 min
Delta R.T.: 0.000 min
Response: 189454673
Conc: 326.09 ug/L



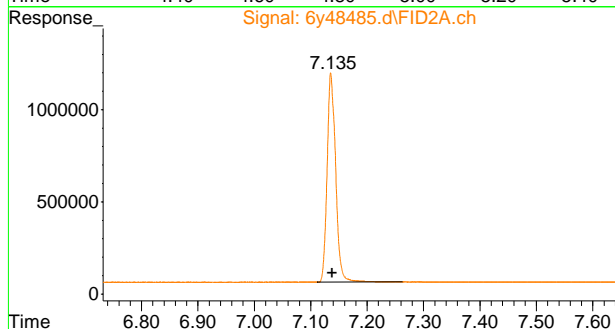
#28 C9

R.T.: 3.525 min
Delta R.T.: 0.000 min
Response: 9547762
Conc: 16.61 ug/L



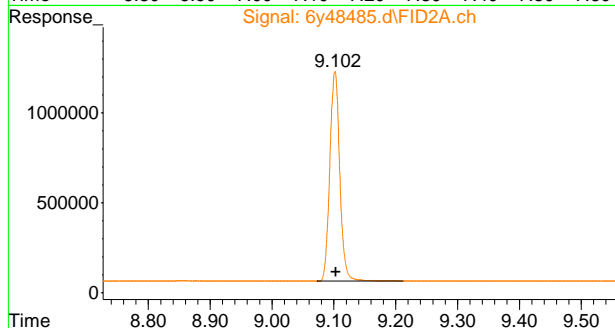
#29 C10

R.T.: 4.828 min
Delta R.T.: 0.000 min
Response: 10918135
Conc: 18.07 ug/L



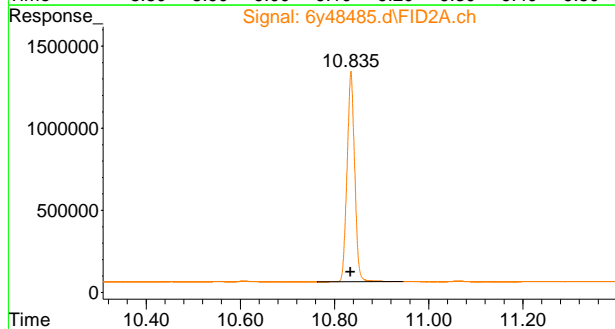
#30 C12

R.T.: 7.136 min
Delta R.T.: -0.002 min
Response: 11967050
Conc: 19.07 ug/L



#32 C14

R.T.: 9.102 min
Delta R.T.: 0.000 min
Response: 13020859
Conc: 20.62 ug/L

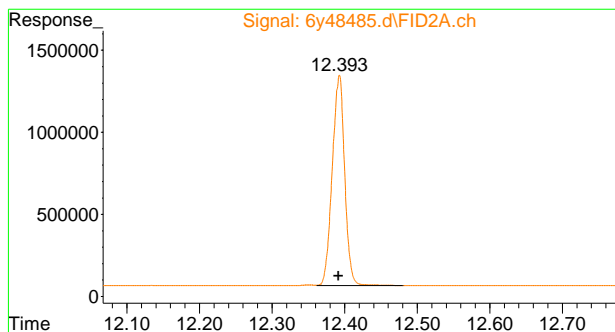


#33 C16

R.T.: 10.835 min
Delta R.T.: 0.000 min
Response: 14308330
Conc: 22.29 ug/L

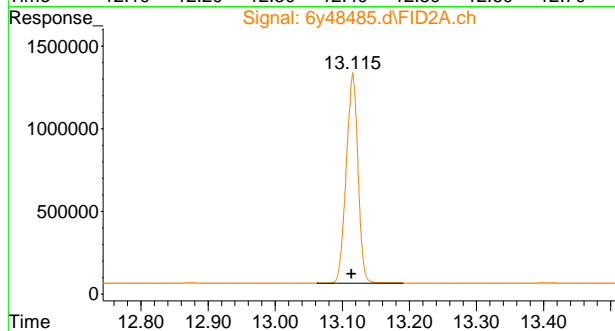
7.32

7



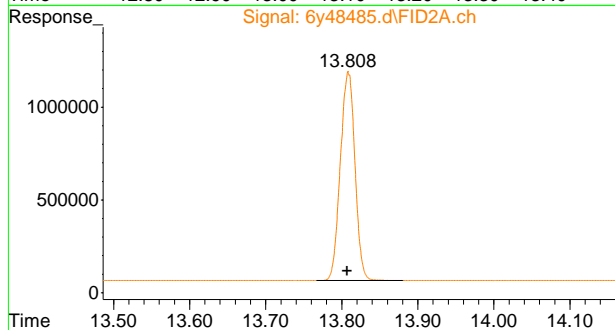
#35 C18

R.T.: 12.393 min
Delta R.T.: 0.002 min
Response: 15264167
Conc: 23.50 ug/L



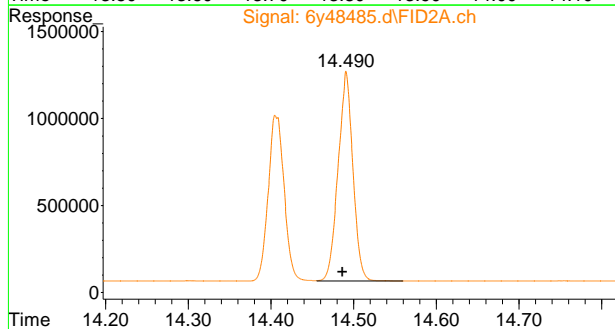
#36 C19

R.T.: 13.116 min
Delta R.T.: 0.002 min
Response: 15453177
Conc: 23.44 ug/L



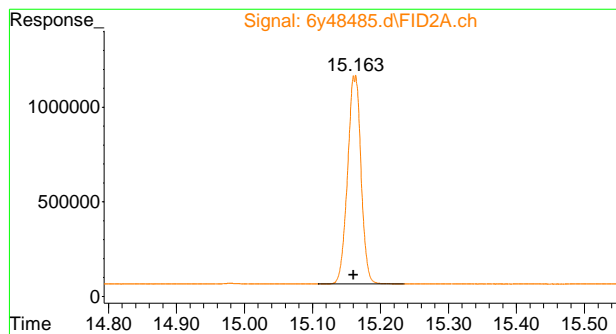
#37 C20

R.T.: 13.808 min
Delta R.T.: 0.002 min
Response: 15001216
Conc: 23.03 ug/L



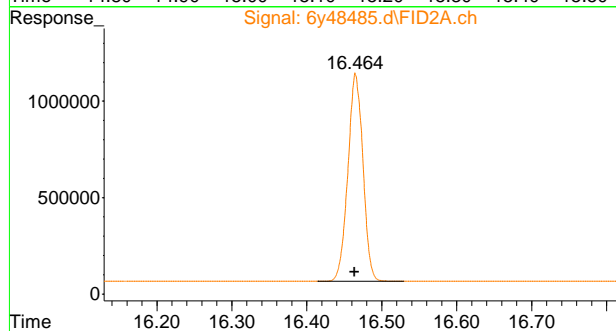
#38 C21

R.T.: 14.491 min
Delta R.T.: 0.005 min
Response: 14929806
Conc: 22.93 ug/L



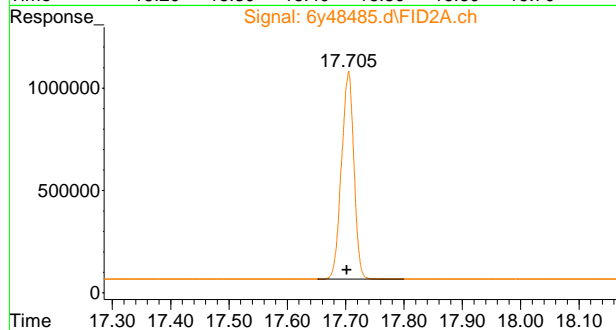
#40 C22

R.T.: 15.164 min
Delta R.T.: 0.004 min
Response: 15100970
Conc: 23.12 ug/L



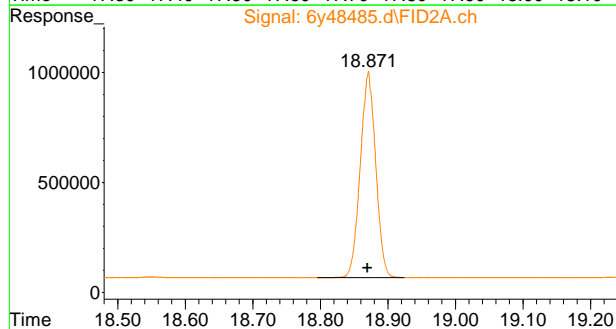
#41 C24

R.T.: 16.465 min
Delta R.T.: 0.001 min
Response: 15046892
Conc: 23.21 ug/L



#42 C26

R.T.: 17.705 min
Delta R.T.: 0.004 min
Response: 15000521
Conc: 23.67 ug/L

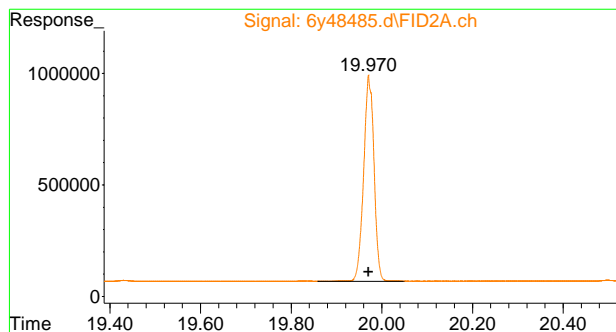


#43 C28

R.T.: 18.871 min
Delta R.T.: 0.002 min
Response: 14819828
Conc: 23.92 ug/L

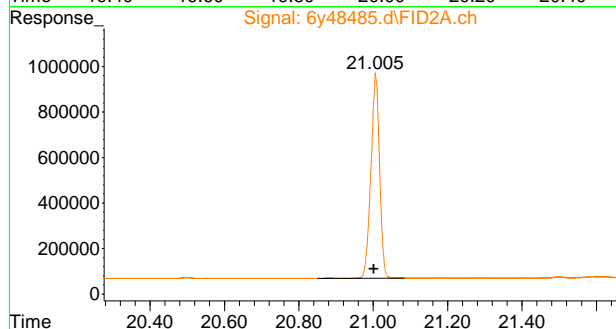
7.32

7



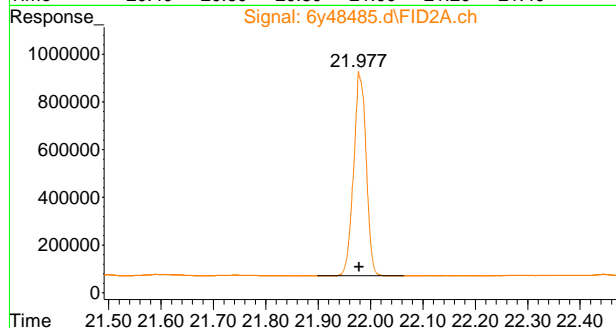
#44 C30

R.T.: 19.971 min
Delta R.T.: 0.000 min
Response: 14604018
Conc: 23.87 ug/L



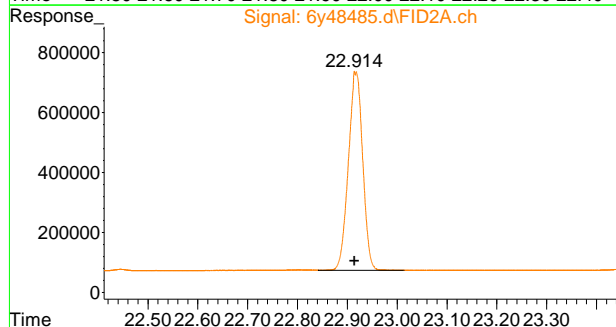
#45 C32

R.T.: 21.007 min
Delta R.T.: 0.005 min
Response: 14495419
Conc: 24.30 ug/L



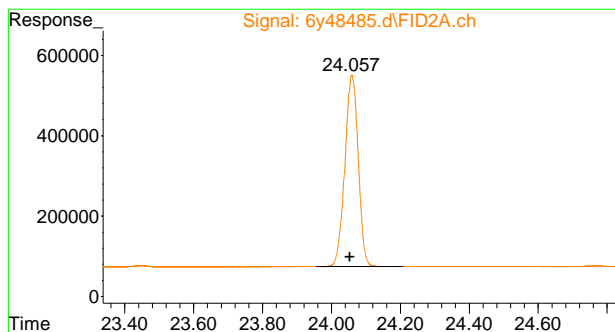
#46 C34

R.T.: 21.980 min
Delta R.T.: 0.002 min
Response: 14167015
Conc: 25.17 ug/L



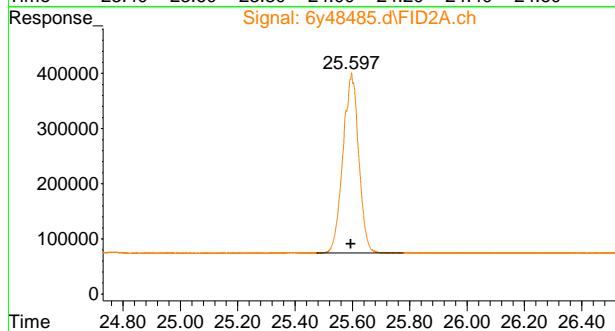
#47 C36

R.T.: 22.917 min
Delta R.T.: 0.003 min
Response: 13208035
Conc: 24.23 ug/L



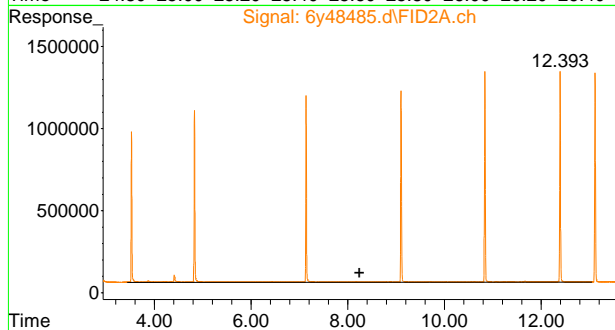
#48 C38

R.T.: 24.059 min
Delta R.T.: 0.007 min
Response: 12859559
Conc: 24.64 ug/L



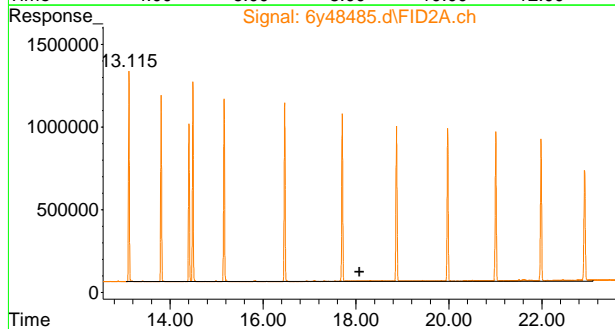
#49 C40

R.T.: 25.597 min
Delta R.T.: 0.003 min
Response: 12376653
Conc: 23.87 ug/L



#51 C9-C18 Aliphatics

R.T.: 8.245 min
Delta R.T.: 0.000 min
Response: 83163872
Conc: 133.81 ug/L



#52 C19-C36 Aliphatics

R.T.: 18.076 min
Delta R.T.: 0.000 min
Response: 174061323
Conc: 277.26 ug/L

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48488.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 4:24 pm
Operator : arianak
Sample : op41654-ms
Misc : OP41654,6y2226,15.8,,,2,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 06:10:53 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units

System Monitoring Compounds				
24) S	2-Fluorobiphenyl (S)	9.024	23123654	44.472 ug/L
26) S	o-Terphenyl (S)	13.233	11729512	18.425 ug/L
55) S	1-Chlorooctadecane (S)	14.409	10464742	18.715 ug/L
Target Compounds				
1) T	1,2,3-Trimethylbenzene	5.325	5887643	10.778 ug/l
2) T	Naphthalene	7.240	6655246	11.539 ug/L
4) T	2-Methylnaphthalene	8.383	6699979	11.400 ug/L
5) T	Acenaphthylene	9.833	7216091	12.354 ug/l
6) T	Acenaphthene	10.127	8226609	12.027 ug/l
8) T	Fluorene	10.986	8600799	14.153 ug/l
9) T	Phenanthrene	12.553	8700190	14.462 ug/l
10) T	Anthracene	12.639	8701918	13.890 ug/l
11) T	Fluoranthene	14.551	8571622	13.825 ug/l
12) T	Pyrene	14.925	8936707	14.037 ug/l
14) T	Benzo(a)Anthracene	17.124	7860670	13.646 ug/l
15) T	Chrysene	17.185	8274070	13.234 ug/l
16) T	Benzo(b)Fluoranthene	19.022	7506146	13.836 ug/l
17) T	Benzo(k)Fluoranthene	19.068	7986208	14.260 ug/l
18) T	Benzo(a)Pyrene	19.541	6986009	13.078 ug/l
19) T	Indeno(1,2,3-cd)Pyrene	21.228	6998748	15.054 ug/l
20) T	Dibenzo(ah)Anthracene	21.262	7949358	14.366 ug/l
21) T	Benzo(ghi)Perylene	21.574	7297877	14.732 ug/l
23) H	C11-C22 Aromatics (Un...	14.426	169991767	292.592 ug/L
51) H	C9-C18 Aliphatics	8.245	87245891	140.374 ug/L
52) H	C19-C36 Aliphatics	18.076	135816323	216.340 ug/L

(f)=RT Delta > 1/2 Window

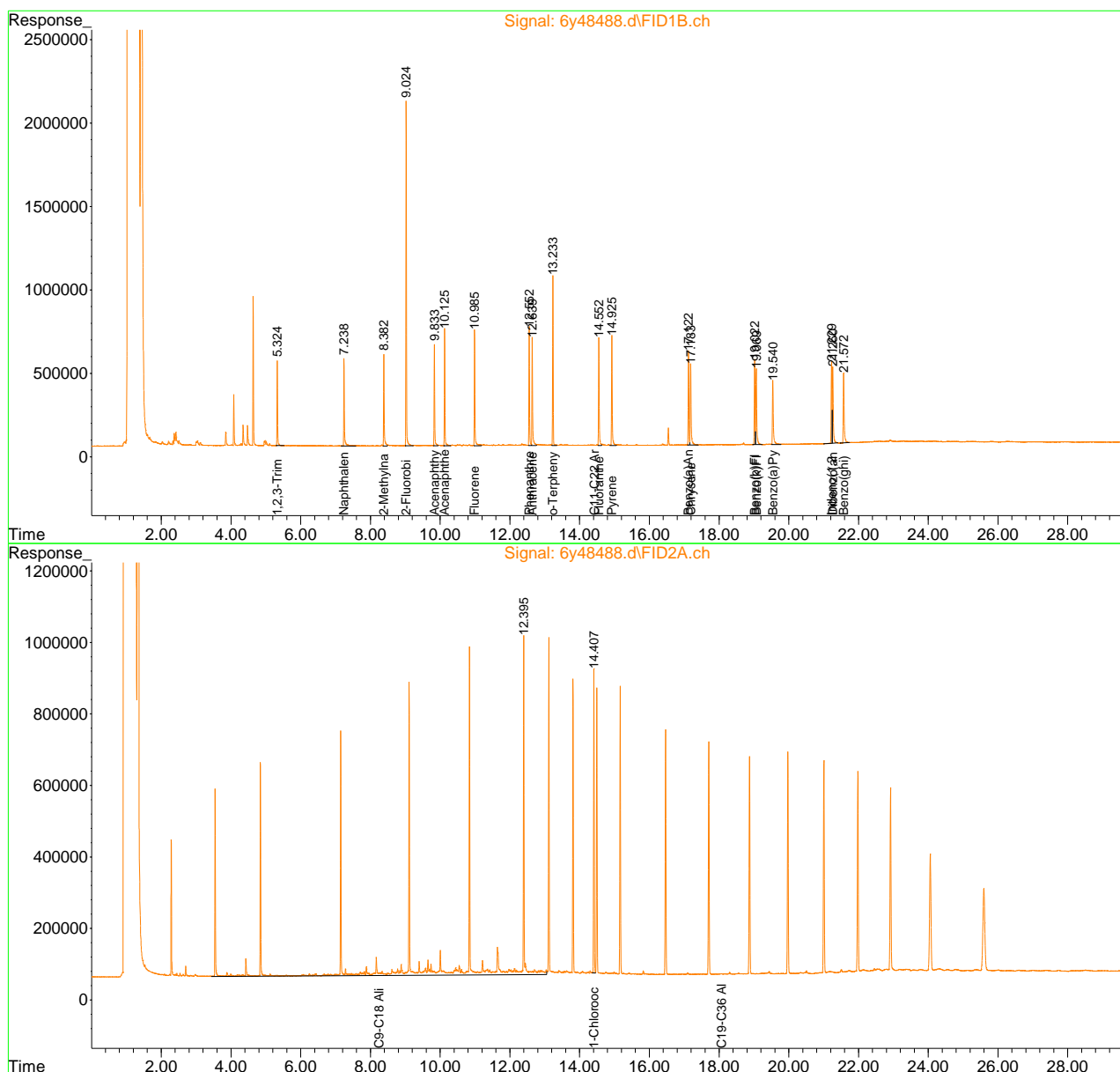
(m)=manual int.

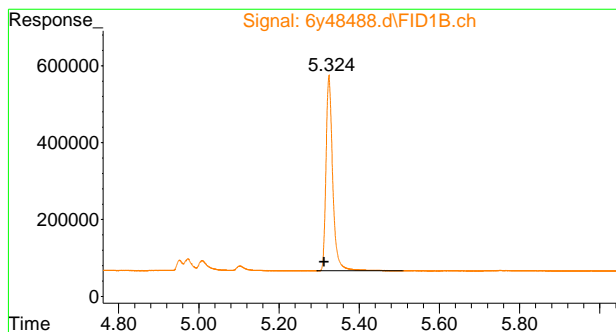
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48488.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 4:24 pm
Operator : arianak
Sample : op41654-ms
Misc : OP41654,G6y2226,15.8,,,2,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 06:10:53 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

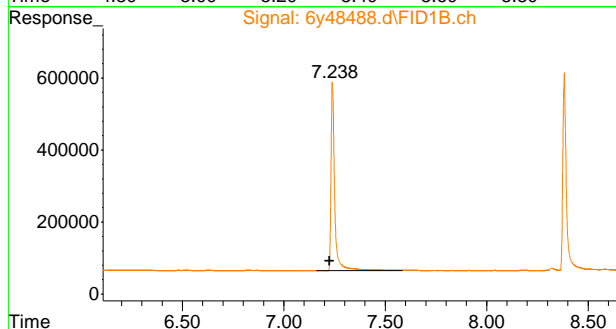
Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um





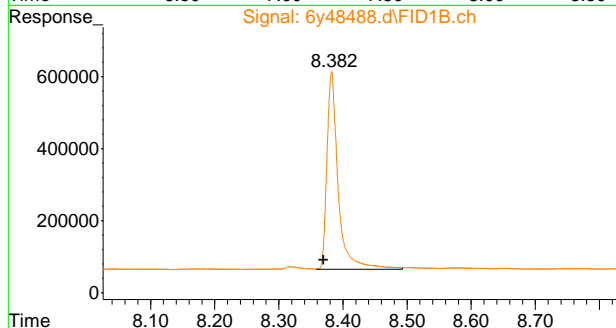
#1 1,2,3-Trimethylbenzene

R.T.: 5.325 min
Delta R.T.: 0.013 min
Response: 5887643
Conc: 10.78 ug/l



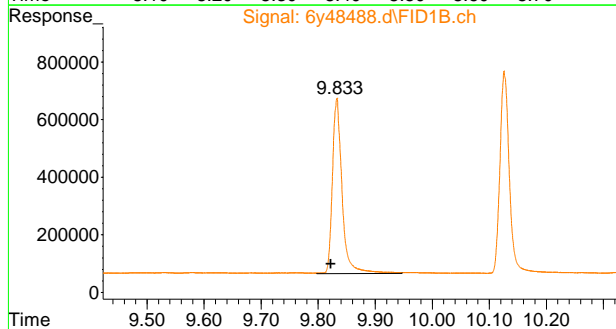
#2 Naphthalene

R.T.: 7.240 min
Delta R.T.: 0.014 min
Response: 6655246
Conc: 11.54 ug/L



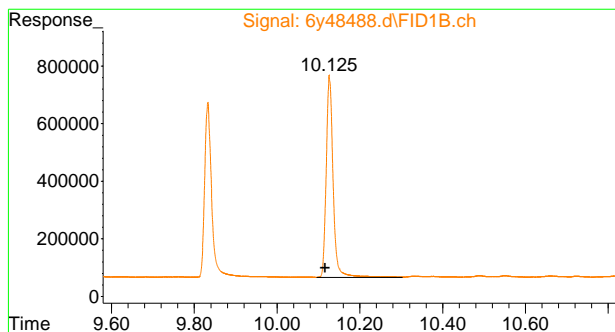
#4 2-Methylnaphthalene

R.T.: 8.383 min
Delta R.T.: 0.013 min
Response: 6699979
Conc: 11.40 ug/L



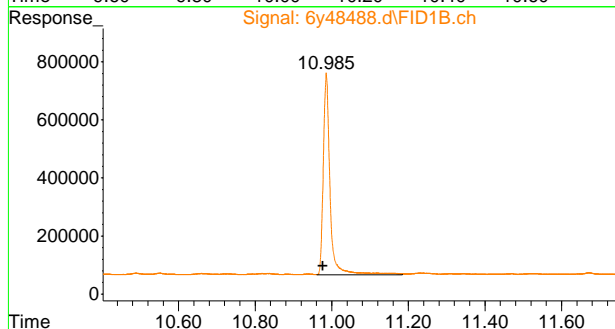
#5 Acenaphthylene

R.T.: 9.833 min
Delta R.T.: 0.011 min
Response: 7216091
Conc: 12.35 ug/l



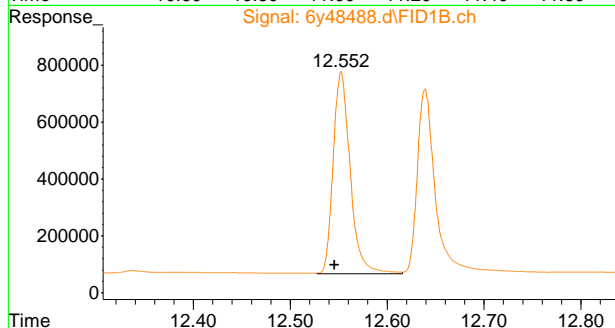
#6 Acenaphthene

R.T.: 10.127 min
Delta R.T.: 0.011 min
Response: 8226609
Conc: 12.03 ug/l



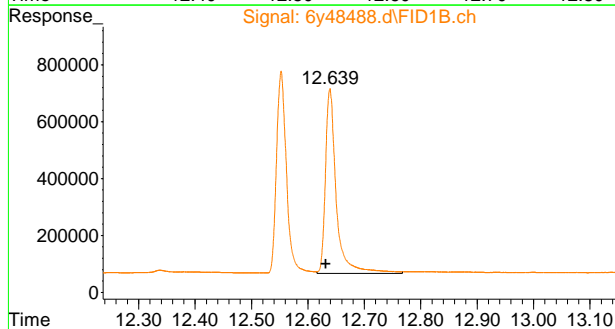
#8 Fluorene

R.T.: 10.986 min
Delta R.T.: 0.009 min
Response: 8600799
Conc: 14.15 ug/l



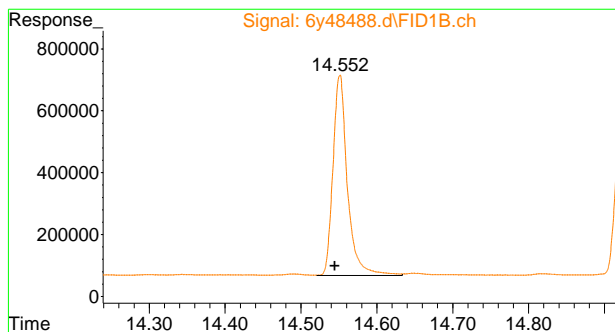
#9 Phenanthrene

R.T.: 12.553 min
Delta R.T.: 0.007 min
Response: 8700190
Conc: 14.46 ug/l



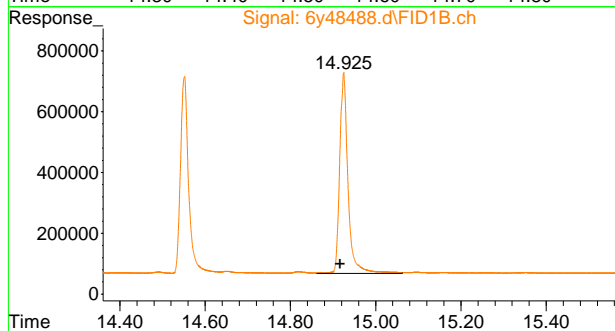
#10 Anthracene

R.T.: 12.639 min
Delta R.T.: 0.008 min
Response: 8701918
Conc: 13.89 ug/l



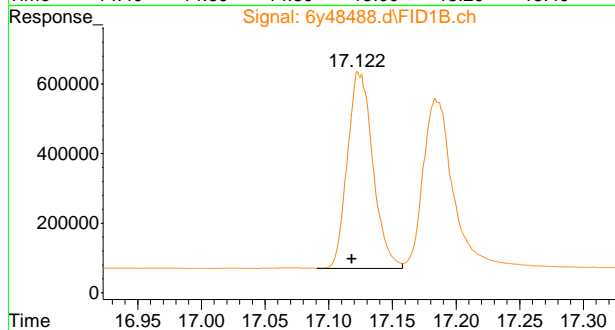
#11 Fluoranthene

R.T.: 14.551 min
Delta R.T.: 0.007 min
Response: 8571622
Conc: 13.83 ug/l



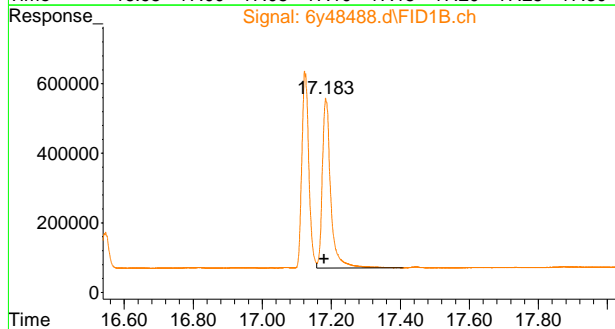
#12 Pyrene

R.T.: 14.925 min
Delta R.T.: 0.008 min
Response: 8936707
Conc: 14.04 ug/l



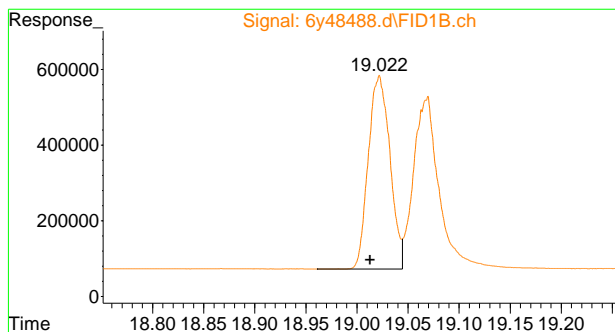
#14 Benzo(a)Anthracene

R.T.: 17.124 min
Delta R.T.: 0.007 min
Response: 7860670
Conc: 13.65 ug/l



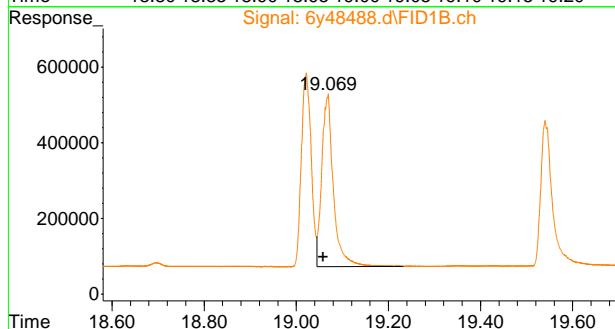
#15 Chrysene

R.T.: 17.185 min
Delta R.T.: 0.006 min
Response: 8274070
Conc: 13.23 ug/l



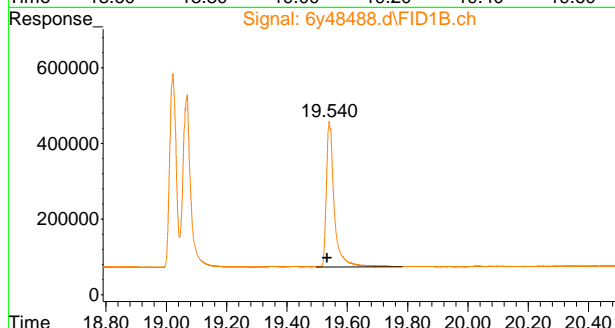
#16 Benzo(b)Fluoranthene

R.T.: 19.022 min
Delta R.T.: 0.009 min
Response: 7506146
Conc: 13.84 ug/l



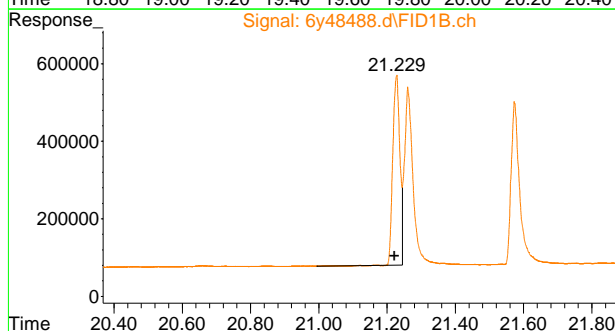
#17 Benzo(k)Fluoranthene

R.T.: 19.068 min
Delta R.T.: 0.009 min
Response: 7986208
Conc: 14.26 ug/l



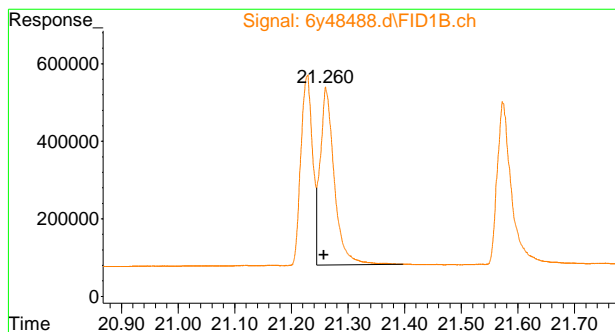
#18 Benzo(a)Pyrene

R.T.: 19.541 min
Delta R.T.: 0.008 min
Response: 6986009
Conc: 13.08 ug/l



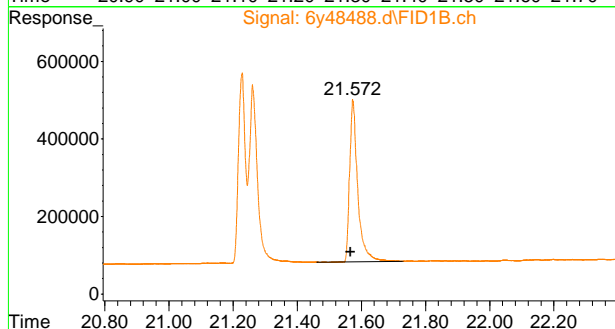
#19 Indeno(1,2,3-cd)Pyrene

R.T.: 21.228 min
Delta R.T.: 0.006 min
Response: 6998748
Conc: 15.05 ug/l



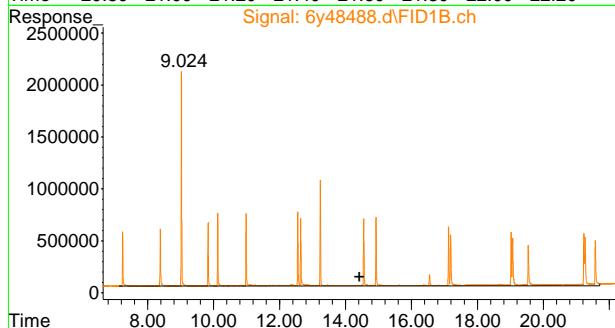
#20 Dibenzo(ah)Anthracene

R.T.: 21.262 min
Delta R.T.: 0.005 min
Response: 7949358
Conc: 14.37 ug/l



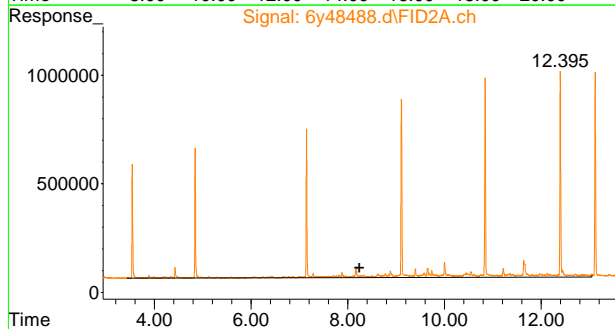
#21 Benzo(ghi)Perylene

R.T.: 21.574 min
Delta R.T.: 0.008 min
Response: 7297877
Conc: 14.73 ug/l



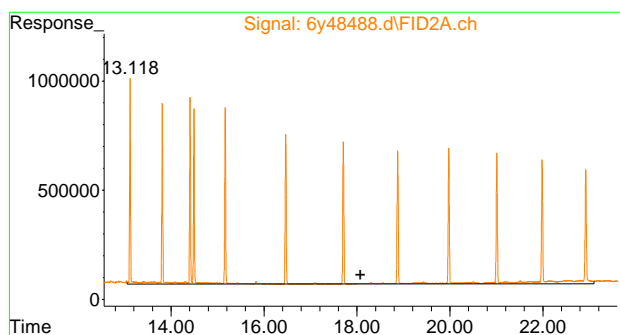
#23 C11-C22 Aromatics (Unadj.)

R.T.: 14.426 min
Delta R.T.: 0.000 min
Response: 169991767
Conc: 292.59 ug/L



#51 C9-C18 Aliphatics

R.T.: 8.245 min
Delta R.T.: 0.000 min
Response: 87245891
Conc: 140.37 ug/L



#52 C19-C36 Aliphatics

R.T.: 18.076 min

Delta R.T.: 0.000 min

Response: 135816323

Conc: 216.34 ug/L

7.4.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\6y2226\
 Data File : 6y48489.d
 Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
 Acq On : 11 Sep 2022 4:59 pm
 Operator : arianak
 Sample : op41654-msd
 Misc : OP41654,G6y2226,15.8,,,2,1
 ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 13 06:11:39 2022
 Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
 Quant Title : NJDEP Extractable Petroleum Hydrocarbons
 QLast Update : Tue Sep 13 05:40:15 2022
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1ul/col
 Signal #1 Phase : HP5
 Signal #1 Info : 30mx.25mm.x.25um
 Signal #2 Phase: HP5
 Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units

System Monitoring Compounds				
24) S	2-Fluorobiphenyl (S)	9.025	23797207	45.768 ug/L
26) S	o-Terphenyl (S)	13.233	10367239	16.285 ug/L
55) S	1-Chlorooctadecane (S)	14.410	8588584	15.360 ug/L
Target Compounds				
1) T	1,2,3-Trimethylbenzene	5.325	6858752	12.556 ug/l
2) T	Naphthalene	7.241	7399634	12.829 ug/L
4) T	2-Methylnaphthalene	8.383	7715993	13.128 ug/L
5) T	Acenaphthylene	9.833	7995582	13.689 ug/l
6) T	Acenaphthene	10.128	8975628	13.122 ug/l
8) T	Fluorene	10.987	9194825	15.130 ug/l
9) T	Phenanthrene	12.554	9623372	15.996 ug/l
10) T	Anthracene	12.640	9597304	15.319 ug/l
11) T	Fluoranthene	14.551	9705430	15.654 ug/l
12) T	Pyrene	14.925	9953061	15.633 ug/l
14) T	Benzo(a)Anthracene	17.124	8976429	15.583 ug/l
15) T	Chrysene	17.186	9323026	14.911 ug/l
16) T	Benzo(b)Fluoranthene	19.020	8636416	15.919 ug/l
17) T	Benzo(k)Fluoranthene	19.064	8949614	15.980 ug/l
18) T	Benzo(a)Pyrene	19.540	7806356	14.613 ug/l
19) T	Indeno(1,2,3-cd)Pyrene	21.229	8000892	17.209 ug/l
20) T	Dibenzo(ah)Anthracene	21.263	8908114	16.098 ug/l
21) T	Benzo(ghi)Perylene	21.576	8327621	16.811 ug/l
23) H	C11-C22 Aromatics (Un...	14.426	184289640	317.202 ug/L
51) H	C9-C18 Aliphatics	8.245	75779512	121.925 ug/L
52) H	C19-C36 Aliphatics	18.076	130744203	208.261 ug/L

(f)=RT Delta > 1/2 Window

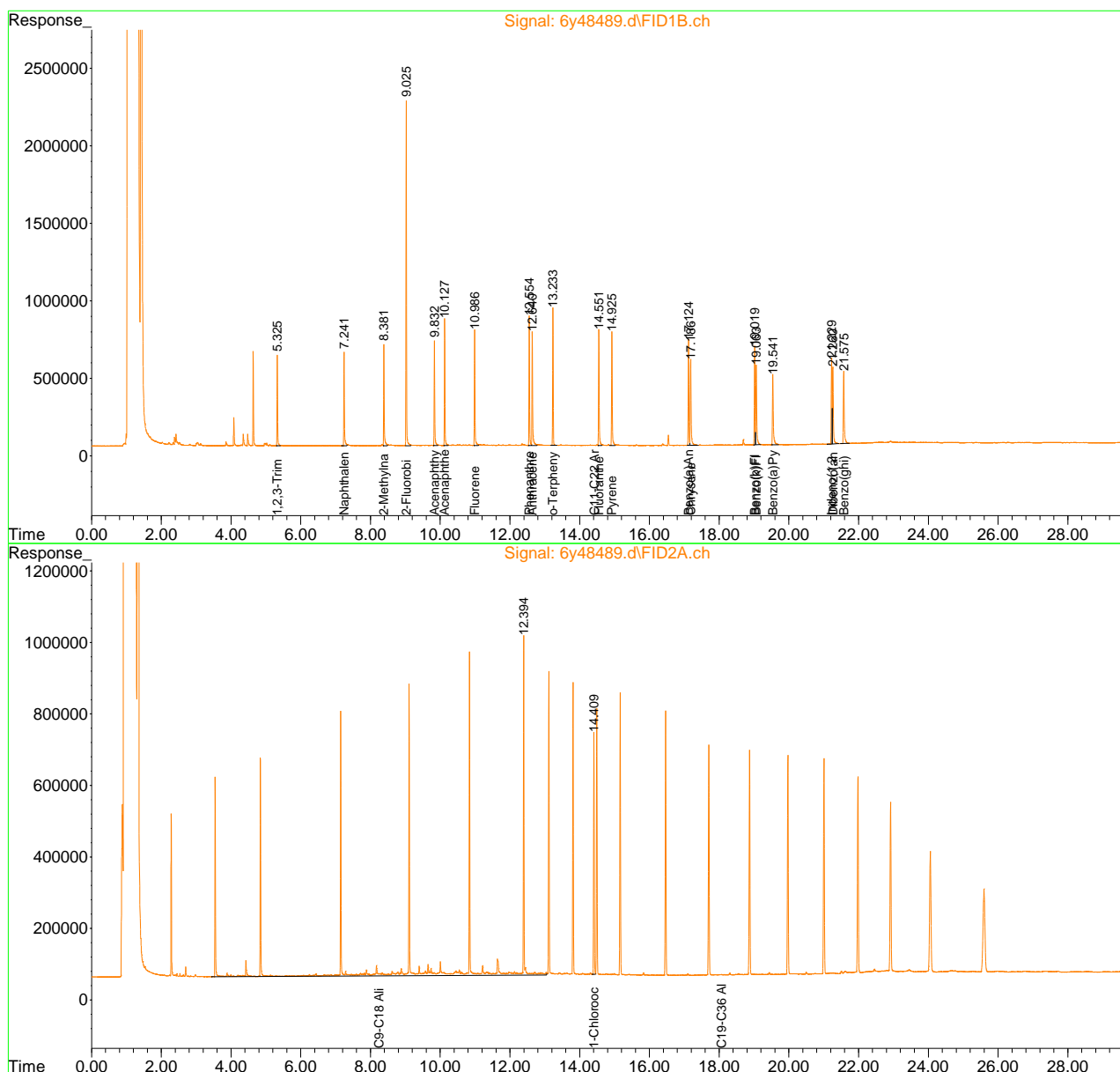
(m)=manual int.

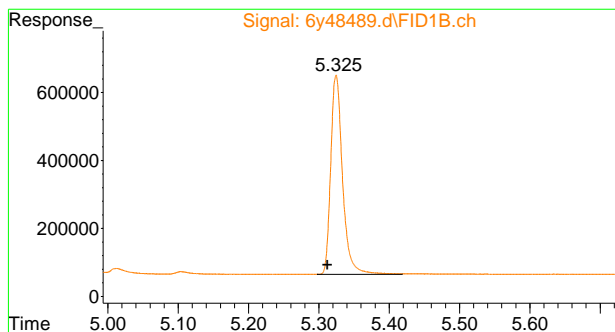
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\6y2226\
Data File : 6y48489.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 4:59 pm
Operator : arianak
Sample : op41654-msd
Misc : OP41654,G6y2226,15.8,,,2,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 06:11:39 2022
Quant Method : C:\MSDCHEM\1\METHODS\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Tue Sep 13 05:40:15 2022
Response via : Initial Calibration
Integrator: ChemStation

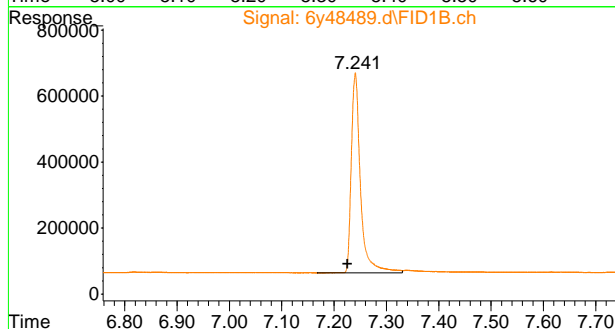
Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um





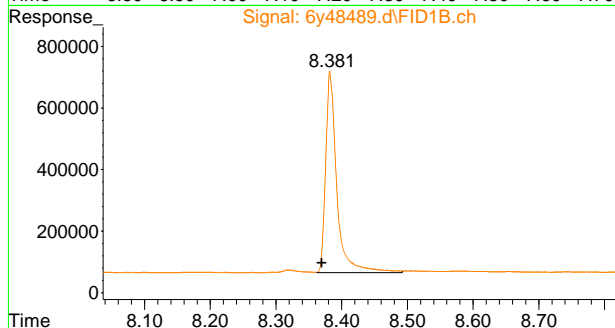
#1 1,2,3-Trimethylbenzene

R.T.: 5.325 min
Delta R.T.: 0.013 min
Response: 6858752
Conc: 12.56 ug/l



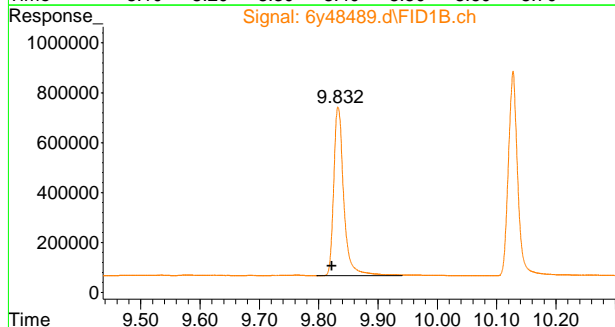
#2 Naphthalene

R.T.: 7.241 min
Delta R.T.: 0.015 min
Response: 7399634
Conc: 12.83 ug/L



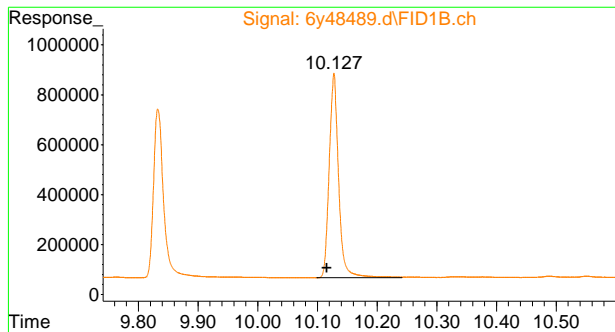
#4 2-Methylnaphthalene

R.T.: 8.383 min
Delta R.T.: 0.013 min
Response: 7715993
Conc: 13.13 ug/L



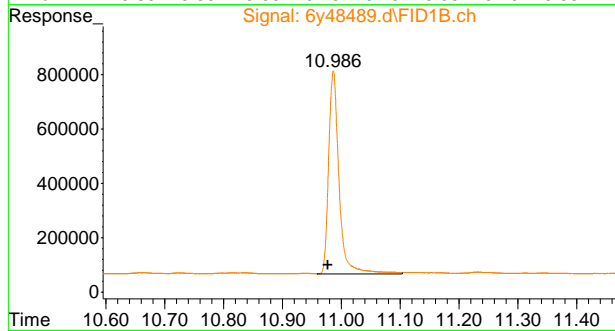
#5 Acenaphthylene

R.T.: 9.833 min
Delta R.T.: 0.011 min
Response: 7995582
Conc: 13.69 ug/l



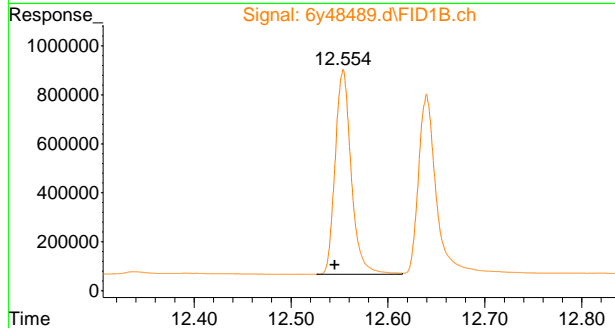
#6 Acenaphthene

R.T.: 10.128 min
Delta R.T.: 0.012 min
Response: 8975628
Conc: 13.12 ug/l



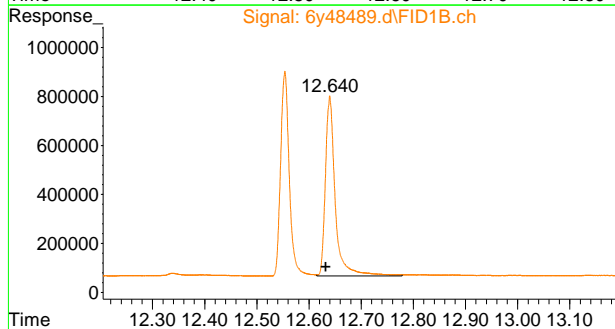
#8 Fluorene

R.T.: 10.987 min
Delta R.T.: 0.010 min
Response: 9194825
Conc: 15.13 ug/l



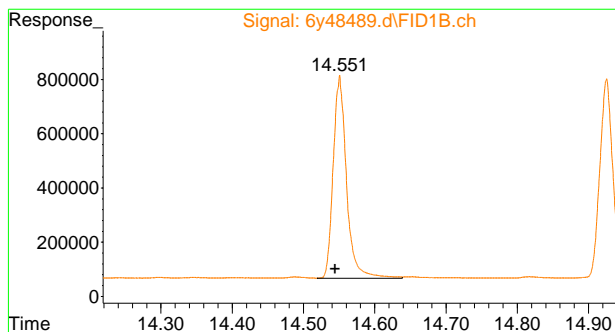
#9 Phenanthrene

R.T.: 12.554 min
Delta R.T.: 0.008 min
Response: 9623372
Conc: 16.00 ug/l



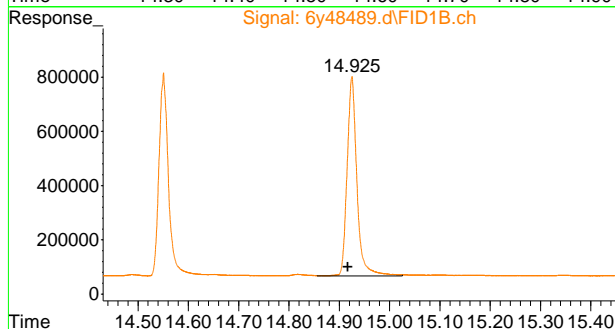
#10 Anthracene

R.T.: 12.640 min
Delta R.T.: 0.008 min
Response: 9597304
Conc: 15.32 ug/l



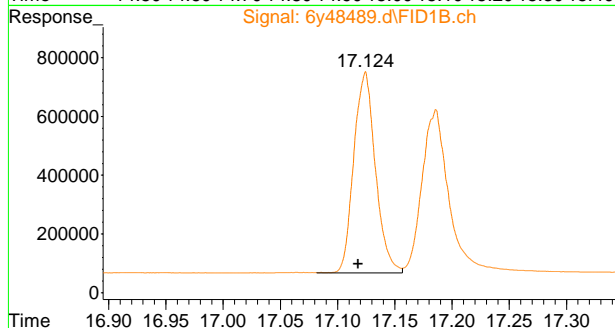
#11 Fluoranthene

R.T.: 14.551 min
Delta R.T.: 0.006 min
Response: 9705430
Conc: 15.65 ug/l



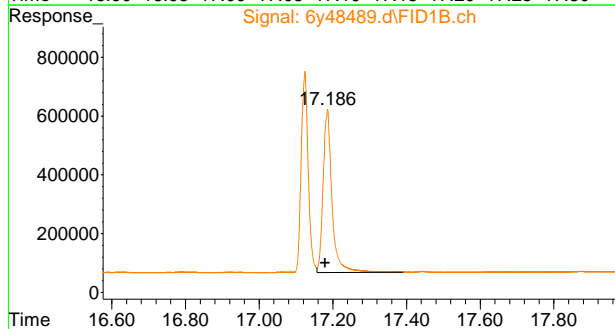
#12 Pyrene

R.T.: 14.925 min
Delta R.T.: 0.008 min
Response: 9953061
Conc: 15.63 ug/l



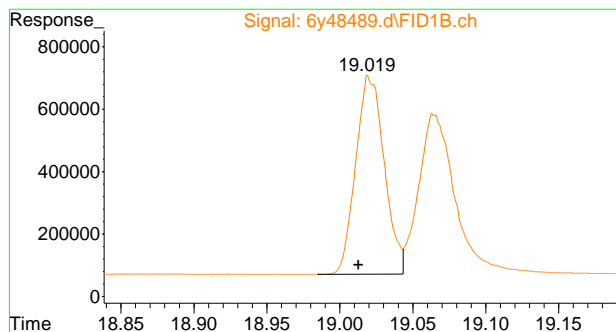
#14 Benzo(a)Anthracene

R.T.: 17.124 min
Delta R.T.: 0.006 min
Response: 8976429
Conc: 15.58 ug/l



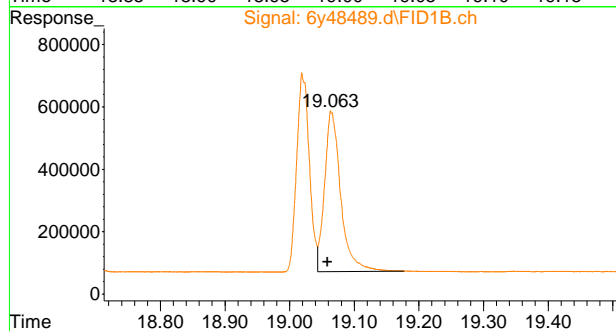
#15 Chrysene

R.T.: 17.186 min
Delta R.T.: 0.007 min
Response: 9323026
Conc: 14.91 ug/l



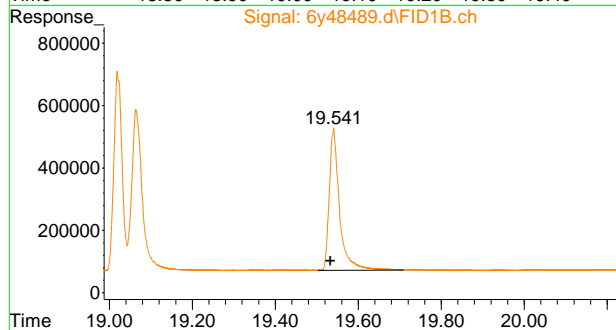
#16 Benzo(b)Fluoranthene

R.T.: 19.020 min
Delta R.T.: 0.007 min
Response: 8636416
Conc: 15.92 ug/l



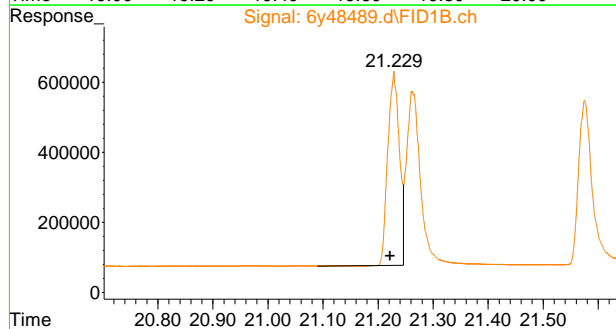
#17 Benzo(k)Fluoranthene

R.T.: 19.064 min
Delta R.T.: 0.006 min
Response: 8949614
Conc: 15.98 ug/l



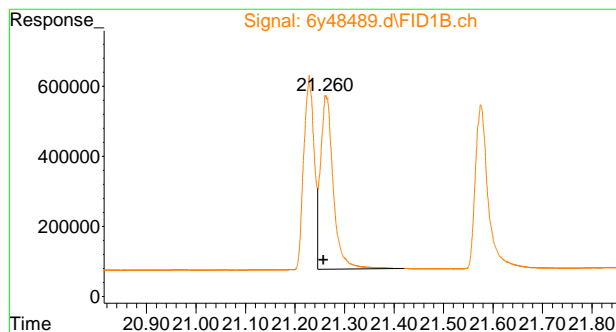
#18 Benzo(a)Pyrene

R.T.: 19.540 min
Delta R.T.: 0.007 min
Response: 7806356
Conc: 14.61 ug/l



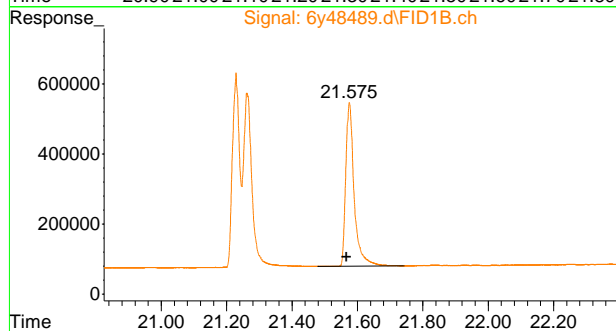
#19 Indeno(1,2,3-cd)Pyrene

R.T.: 21.229 min
Delta R.T.: 0.007 min
Response: 8000892
Conc: 17.21 ug/l



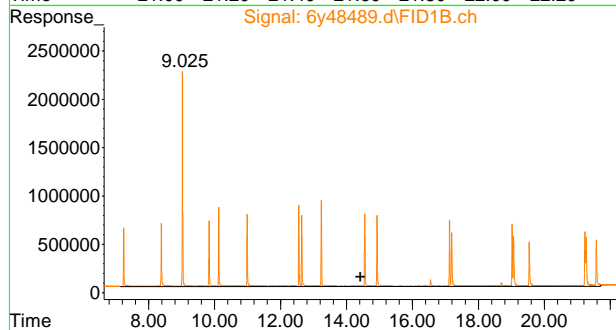
#20 Dibenzo(ah)Anthracene

R.T.: 21.263 min
Delta R.T.: 0.006 min
Response: 8908114
Conc: 16.10 ug/l



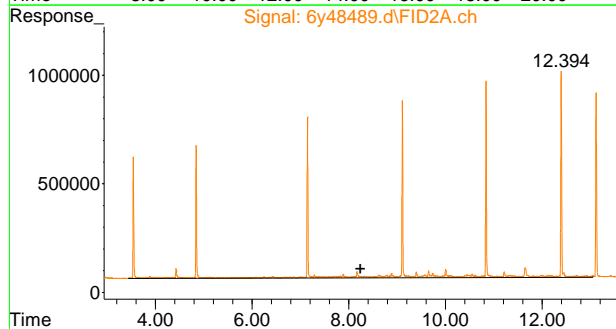
#21 Benzo(ghi)Perylene

R.T.: 21.576 min
Delta R.T.: 0.009 min
Response: 8327621
Conc: 16.81 ug/l



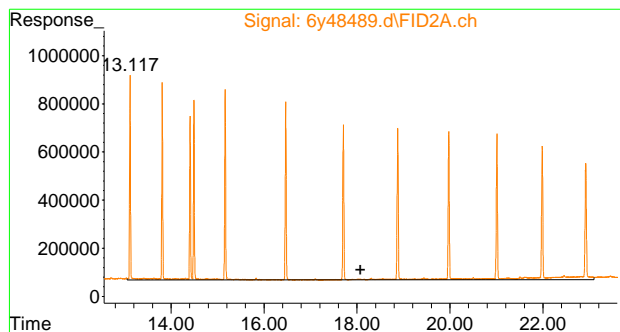
#23 C11-C22 Aromatics (Unadj.)

R.T.: 14.426 min
Delta R.T.: 0.000 min
Response: 184289640
Conc: 317.20 ug/L



#51 C9-C18 Aliphatics

R.T.: 8.245 min
Delta R.T.: 0.000 min
Response: 75779512
Conc: 121.93 ug/L



#52 C19-C36 Aliphatics

R.T.: 18.076 min

Delta R.T.: 0.000 min

Response: 130744203

Conc: 208.26 ug/L

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47303.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 12:25 pm
Operator : thomas1
Sample : ic2180-1
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:39:25 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units

System Monitoring Compounds				
24) S	2-Fluorobiphenyl (S)	9.165	591799	0.986 ug/L
25) S	2-Bromonaphthalene (S)	10.217	510508	1.328 ug/L
26) S	o-Terphenyl (S)	13.375	740469	1.009 ug/L
53) S	Naphthalene (S)	7.156	284949	0.467 ug/L m
54) S	2-Methylnaphthalene (S)	8.306	321287	0.486 ug/L m
55) S	1-Chlorooctadecane (S)	14.529	538040	0.883 ug/L
Target Compounds				
1) T	1,2,3-Trimethylbenzene	5.464	645798	1.054 ug/l
2) T	Naphthalene	7.383	649003	0.983 ug/L
4) T	2-Methylnaphthalene	8.526	688683	1.057 ug/L
5) T	Acenaphthylene	9.978	670476	0.972 ug/l
6) T	Acenaphthene	10.268	870313	1.121 ug/l
8) T	Fluorene	11.134	691690	0.984 ug/l
9) T	Phenanthrene	12.706	666274	0.951 ug/l
10) T	Anthracene	12.796	769960	1.091 ug/l
11) T	Fluoranthene	14.711	704088	1.000 ug/l
12) T	Pyrene	15.087	712217	0.985 ug/l
14) T	Benzo(a)Anthracene	17.297	607176	0.952 ug/l
15) T	Chrysene	17.358	754032	1.087 ug/l
16) T	Benzo(b)Fluoranthene	19.216	578524	0.923 ug/l
17) T	Benzo(k)Fluoranthene	19.265	676258	1.040 ug/l
18) T	Benzo(a)Pyrene	19.752	593796	0.975 ug/l
19) T	Indeno(1,2,3-cd)Pyrene	21.456	433893	0.792 ug/l
20) T	Dibenzo(ah)Anthracene	21.488	672777	1.100 ug/l
21) T	Benzo(ghi)Perylene	21.807	535083	0.965 ug/l
28) T	C9	3.664	613574	0.973 ug/L
29) T	C10	4.960	683833	1.047 ug/L
30) T	C12	7.257	690888	0.987 ug/L
32) T	C14	9.221	663478	0.944 ug/L
33) T	C16	10.952	659821	0.926 ug/L
35) T	C18	12.507	646467	0.900 ug/L
36) T	C19	13.230	643831	0.883 ug/L
37) T	C20	13.925	624381	0.874 ug/L
38) T	C21	14.609	619394	0.871 ug/L
40) T	C22	15.283	627743	0.882 ug/L
41) T	C24	16.589	611340	0.883 ug/L
42) T	C26	17.831	584919	0.858 ug/L
43) T	C28	19.006	561639	0.879 ug/L
44) T	C30	20.113	563091	0.911 ug/L m

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47303.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 12:25 pm
Operator : thomasl
Sample : ic2180-1
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:39:25 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units
45) T	C32	21.158	548277	0.924 ug/L
46) T	C34	22.136	519801	0.934 ug/L
47) T	C36	23.103	505934	0.931 ug/L
48) T	C38	24.317	515529	0.974 ug/L
49) T	C40	25.954	509833	0.952 ug/L

(f)=RT Delta > 1/2 Window

(m)=manual int.

7.5.1

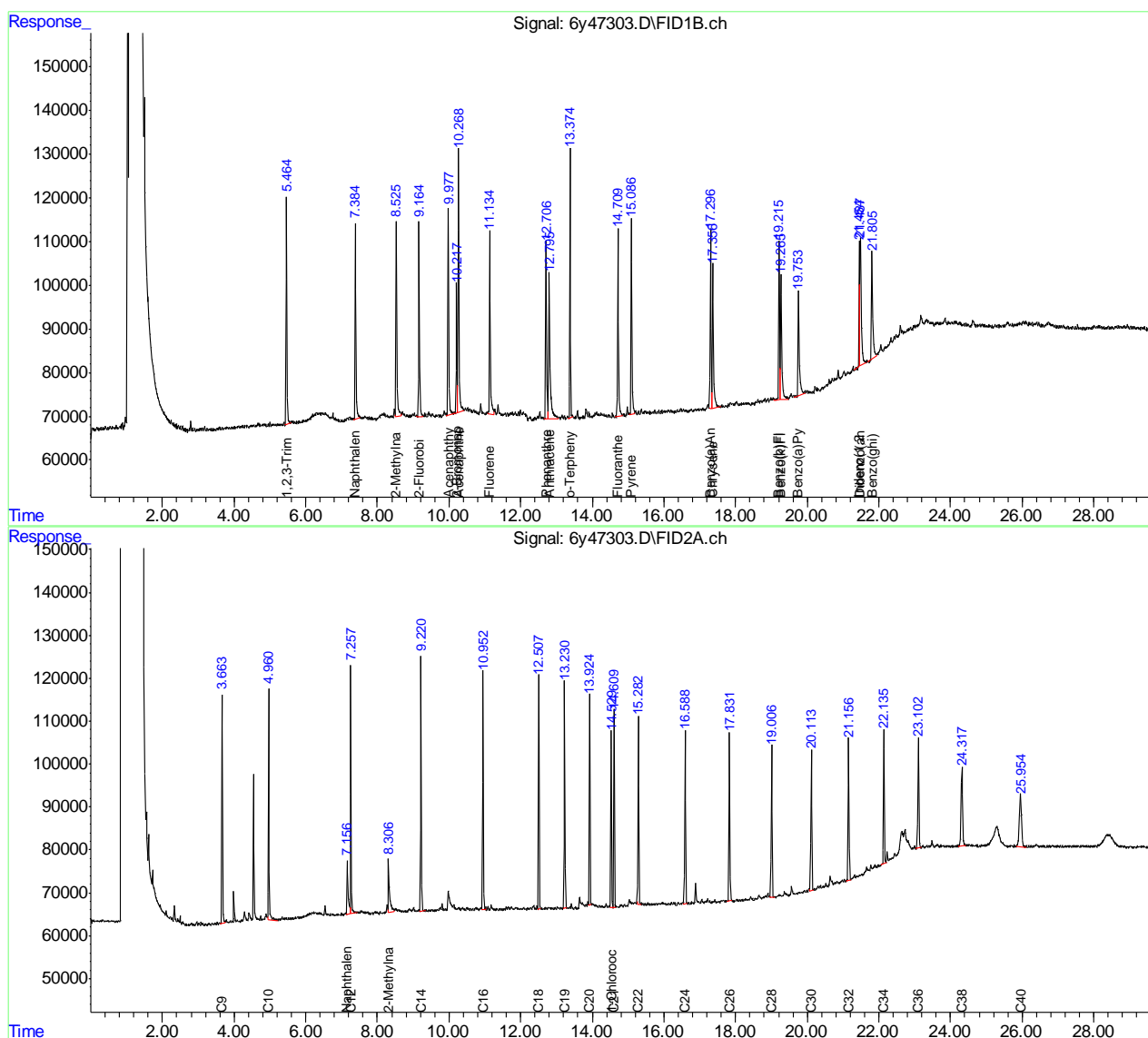
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47303.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 12:25 pm
Operator : thomas1
Sample : ic2180-1
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:39:25 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



Manual Integration Approval Summary

Sample Number: G6Y2180-IC2180

Method: NJDEP EPH

Lab FileID: 6Y47303.D

Analyst approved: 05/16/22 17:58 Thomas Lally

Injection Time: 05/16/22 12:25

Supervisor approved: 05/17/22 11:17 Gwendolyn Burns

Parameter	CAS	Sig#	R.T. (min.)	Reason
Naphthalene	91-20-3	2	7.16	Poor instrument integration
2-Methylnaphthalene	91-57-6	2	8.31	Poor instrument integration
C30		2	20.11	Poor instrument integration

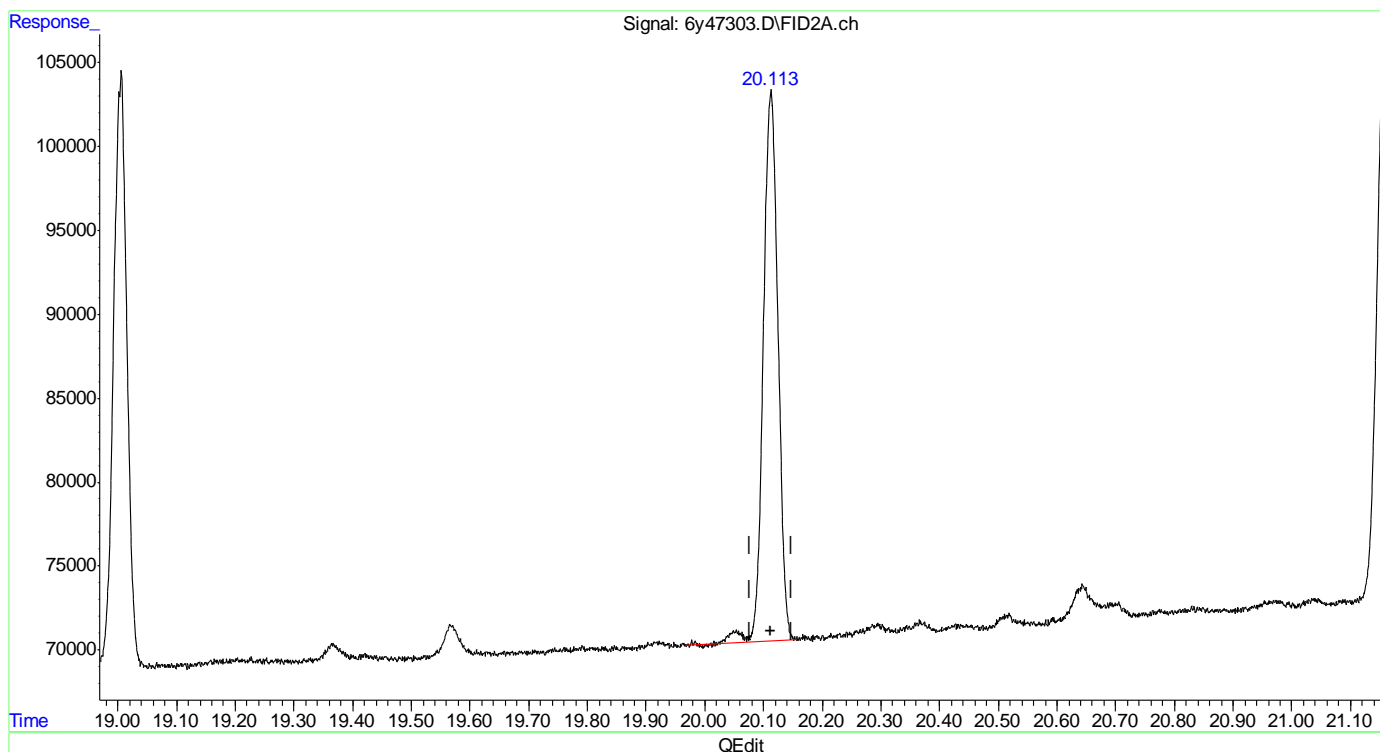
7.5.1.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47303.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 12:25 pm
Operator : thomas1
Sample : ic2180-1
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:37:25 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



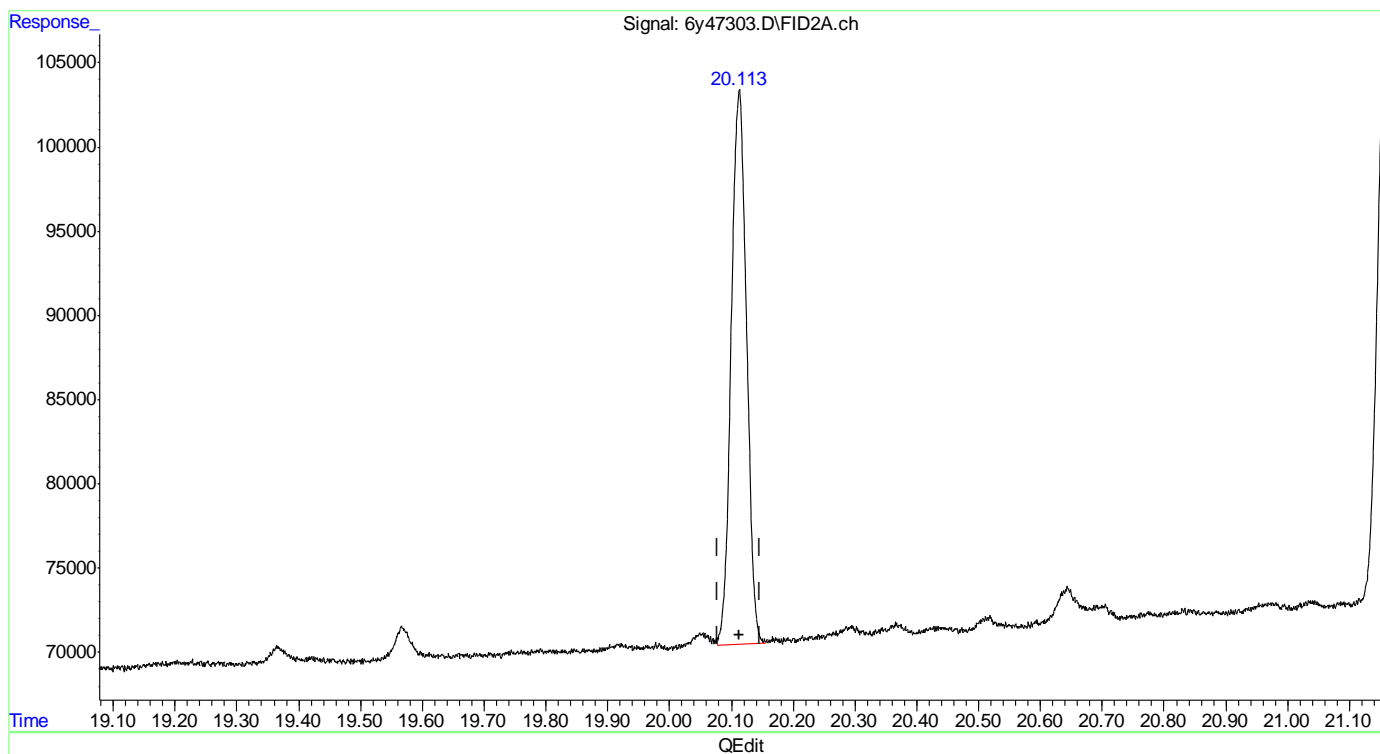
(44) C30 (T)
20.113min 0.928 ug/L
response 573481

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47303.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 12:25 pm
Operator : thomas1
Sample : ic2180-1
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:37:25 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



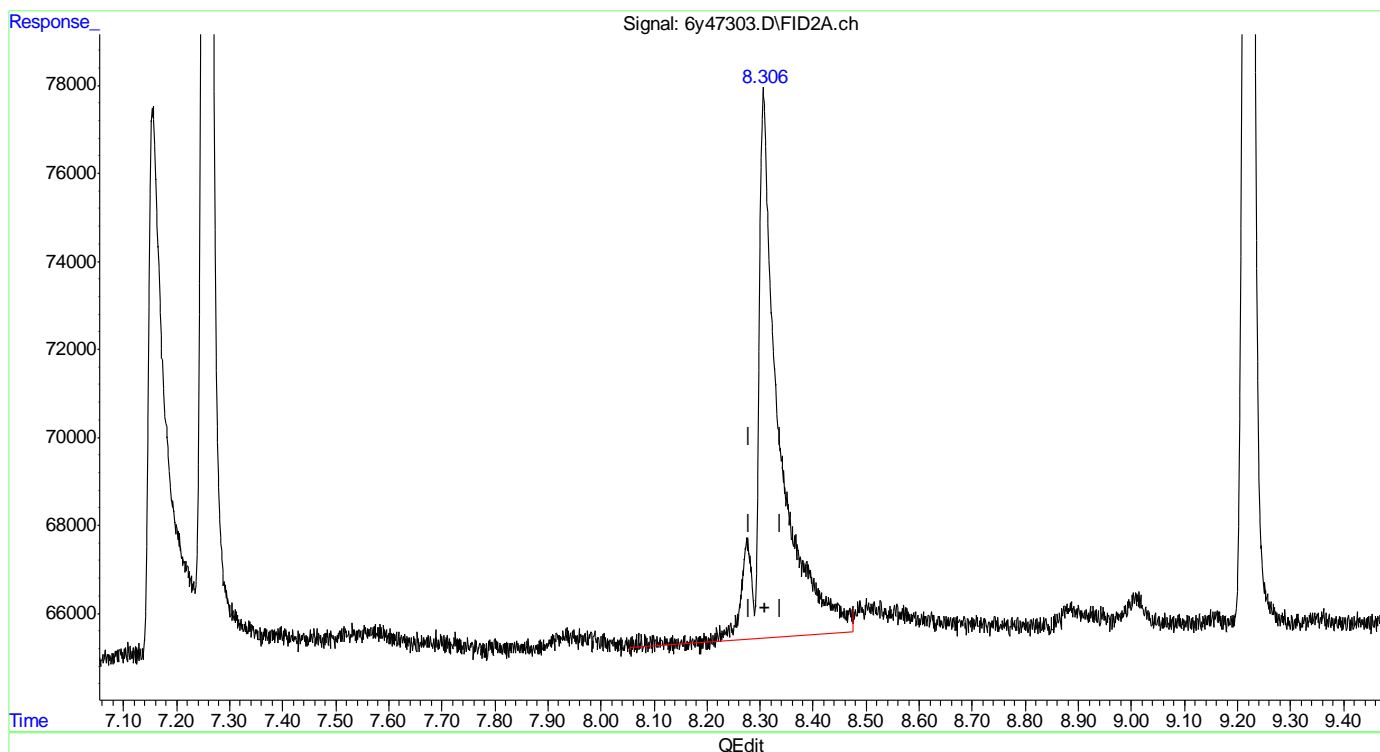
(44) C30 (T)
20.113min 0.911 ug/L m
response 563091

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47303.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 12:25 pm
Operator : thomas1
Sample : ic2180-1
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:37:25 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



(54) 2-Methylnaphthalene (S) (S)

8.309min 0.534 ug/L

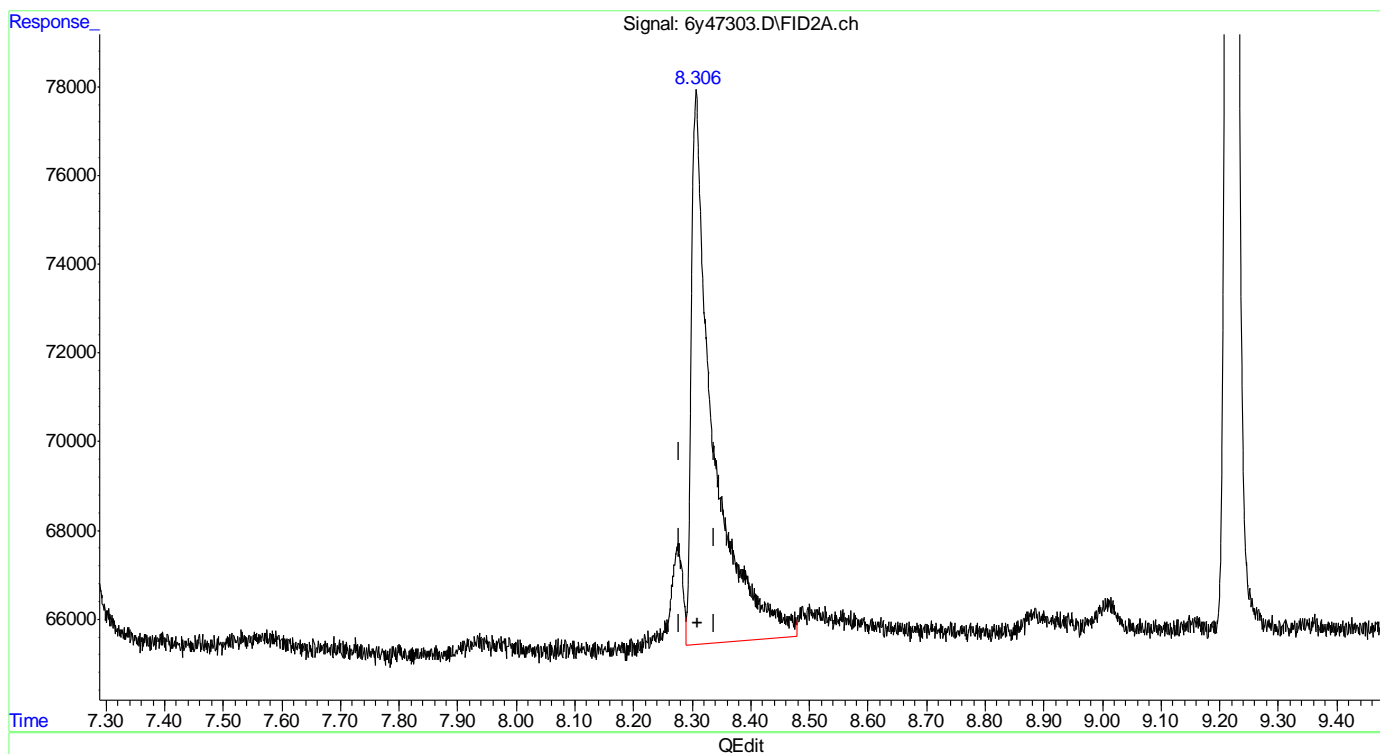
response 353557

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47303.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 12:25 pm
Operator : thomas1
Sample : ic2180-1
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:37:25 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



(54) 2-Methylnaphthalene (S) (S)

8.306min 0.486 ug/L m

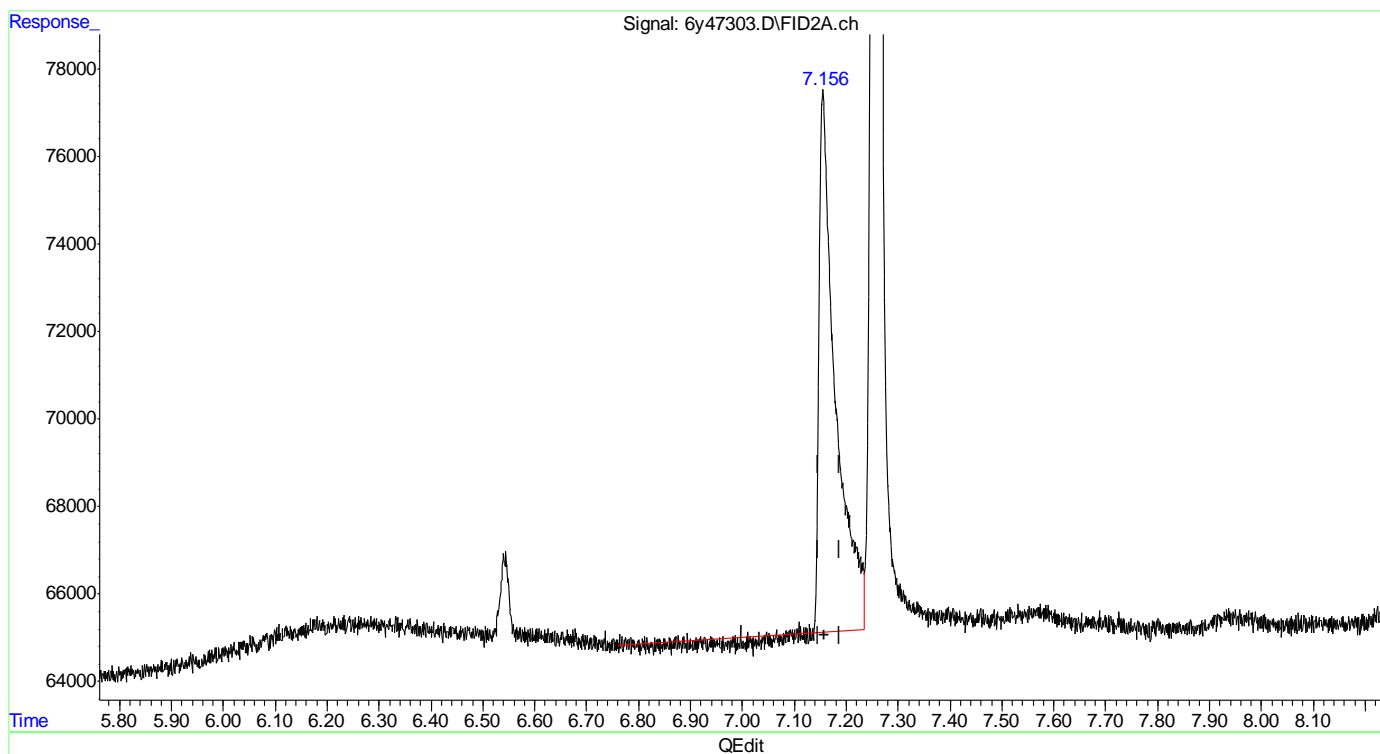
response 321287

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47303.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 12:25 pm
Operator : thomas1
Sample : ic2180-1
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:37:25 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



(53) Naphthalene (S) (S)

7.158min 0.415 ug/L

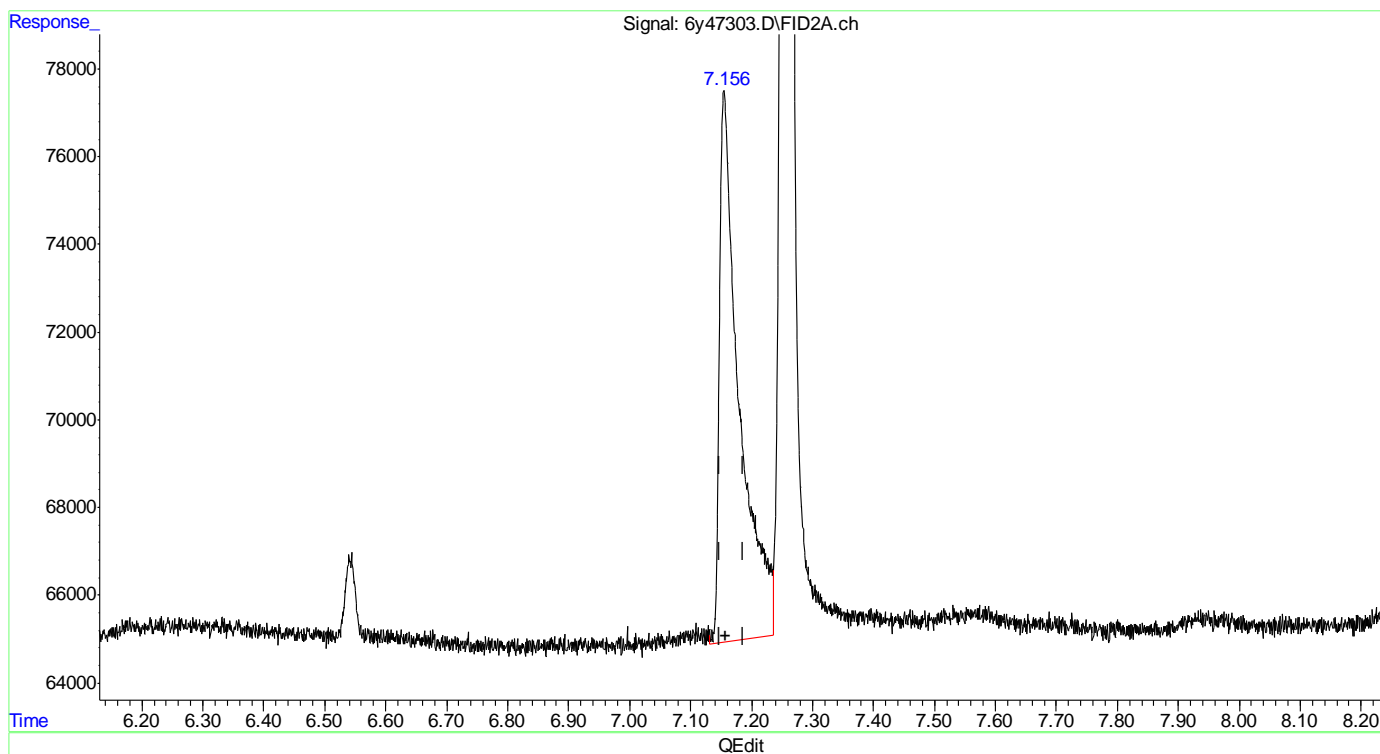
response 253148

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47303.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 12:25 pm
Operator : thomas1
Sample : ic2180-1
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:37:25 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



(53) Naphthalene (S) (S)

7.156min 0.467 ug/L m

response 284949

C:\msdchem\1\DATA\6Y2180\6y47303.D

Hydrocarbon Range Total Response

Data File Name 6y47303.D
 Date Acquired 5/16/2022 12:25
 Sample Name ic2180-1

	<u>Name</u>	<u>Target Response</u>
1)	1,2,3-Trimethylbenzene	645798
2)	Naphthalene	649003
3)	C10-C12 Aromatics	1294801
4)	2-Methylnaphthalene	688683
5)	Acenaphthylene	670476
6)	Acenaphthene	870313
7)	C12-C16 Aromatics	2229471
8)	Fluorene	691690
9)	Phenanthrene	666274
10)	Anthracene	769960
11)	Fluoranthene	704088
12)	Pyrene	712217
13)	C16-C21 Aromatics	3544229
14)	Benzo(a)Anthracene	607176
15)	Chrysene	754032
16)	Benzo(b)Fluoranthene	578524
17)	Benzo(k)Fluoranthene	676258
18)	Benzo(a)Pyrene	593796
19)	Indeno(1,2,3-cd)Pyrene	433893
20)	Dibenzo(ah)Anthracene	672777
21)	Benzo(ghi)Perylene	535083
22)	C21-C36 Aromatics	4851539
23)	C11-C22 Aromatics (Unadj.)	11274242)
27)	SIGNAL #2	0
28)	C9	613574
29)	C10	683833
30)	C12	690888
31)	C9-C12 Aliphatics	1988295
32)	C14	663478
33)	C16	659821
34)	C12-C16 Aliphatics	1323299
35)	C18	646467
36)	C19	643831
37)	C20	624381
38)	C21	619394
39)	C16-C21 Aliphatics	1890242
40)	C22	627743
41)	C24	611340
42)	C26	584919
43)	C28	561639
44)	C30	563091
45)	C32	548277
46)	C34	519801
47)	C36	505934

5/16/2022 5:08 PM

C:\msdchem\custrpt\ETPHIC.CRT

Page 1 of 2

7.5.2

7

C:\msdchem\1\DATA\6Y2180\6y47303.D		
48)	C38	515528.938
49)	C40	509833.289
50)	C21-C40 Aliphatics	5548105.521
51)	C9-C18 Aliphatics	3958061.438
52)	C19-C36 Aliphatics	4722876.957

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
 Data File : 6y47304.D
 Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
 Acq On : 16 May 2022 1:00 pm
 Operator : thomas1
 Sample : ic2180-2
 Misc : OP39453,G6y2180,15.0,,,2,1
 ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: May 16 16:41:17 2022
 Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
 Quant Title : NJDEP Extractable Petroleum Hydrocarbons
 QLast Update : Mon May 16 16:37:20 2022
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1ul/col
 Signal #1 Phase : HP5 Signal #2 Phase: HP5
 Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units

System Monitoring Compounds				
24) S	2-Fluorobiphenyl (S)	9.162	1087460	1.812 ug/L
25) S	2-Bromonaphthalene (S)	10.211	783164	2.038 ug/L
26) S	o-Terphenyl (S)	13.375	1395606	1.901 ug/L
53) S	Naphthalene (S)	7.146f	549420	0.900 ug/L m
54) S	2-Methylnaphthalene (S)	8.296	624506	0.944 ug/L m
55) S	1-Chlorooctadecane (S)	14.528	1139974	1.872 ug/L
Target Compounds				
1) T	1,2,3-Trimethylbenzene	5.461	1151615	1.879 ug/L
2) T	Naphthalene	7.380	1188825	1.801 ug/L
4) T	2-Methylnaphthalene	8.523	1210147	1.857 ug/L
5) T	Acenaphthylene	9.975	1235276	1.792 ug/L
6) T	Acenaphthene	10.267	1488563	1.918 ug/L
8) T	Fluorene	11.129	1283388	1.826 ug/L
9) T	Phenanthrene	12.701	1254971	1.792 ug/L
10) T	Anthracene	12.788	1289280	1.826 ug/L
11) T	Fluoranthene	14.706	1365716	1.939 ug/L
12) T	Pyrene	15.082	1405659	1.944 ug/L
14) T	Benzo(a)Anthracene	17.291	1221108	1.915 ug/L
15) T	Chrysene	17.353	1392073	2.007 ug/L
16) T	Benzo(b)Fluoranthene	19.211	1142917	1.823 ug/L
17) T	Benzo(k)Fluoranthene	19.257	1274411	1.960 ug/L
18) T	Benzo(a)Pyrene	19.741	1157259	1.900 ug/L
19) T	Indeno(1,2,3-cd)Pyrene	21.447	896355	1.637 ug/L
20) T	Dibenzo(ah)Anthracene	21.481	1273575	2.082 ug/L
21) T	Benzo(ghi)Perylene	21.795	1144904	2.065 ug/L
28) T	C9	3.659	1169901	1.855 ug/L
29) T	C10	4.958	1229838	1.883 ug/L
30) T	C12	7.256	1303865	1.863 ug/L
32) T	C14	9.220	1284824	1.829 ug/L
33) T	C16	10.952	1298713	1.822 ug/L
35) T	C18	12.509	1323151	1.842 ug/L
36) T	C19	13.230	1338162	1.836 ug/L
37) T	C20	13.927	1333069	1.866 ug/L
38) T	C21	14.609	1328199	1.867 ug/L
40) T	C22	15.286	1337003	1.879 ug/L
41) T	C24	16.590	1328520	1.919 ug/L
42) T	C26	17.829	1300105	1.907 ug/L
43) T	C28	19.005	1254655	1.964 ug/L
44) T	C30	20.114	1226026	1.984 ug/L

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47304.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 1:00 pm
Operator : thomasl
Sample : ic2180-2
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:41:17 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units
45) T	C32	21.155	1184929	1.997 ug/L
46) T	C34	22.136	1101272	1.980 ug/L
47) T	C36	23.105	1047396	1.927 ug/L m
48) T	C38	24.314	1004327	1.897 ug/L
49) T	C40	25.956	998865	1.866 ug/L

(f)=RT Delta > 1/2 Window

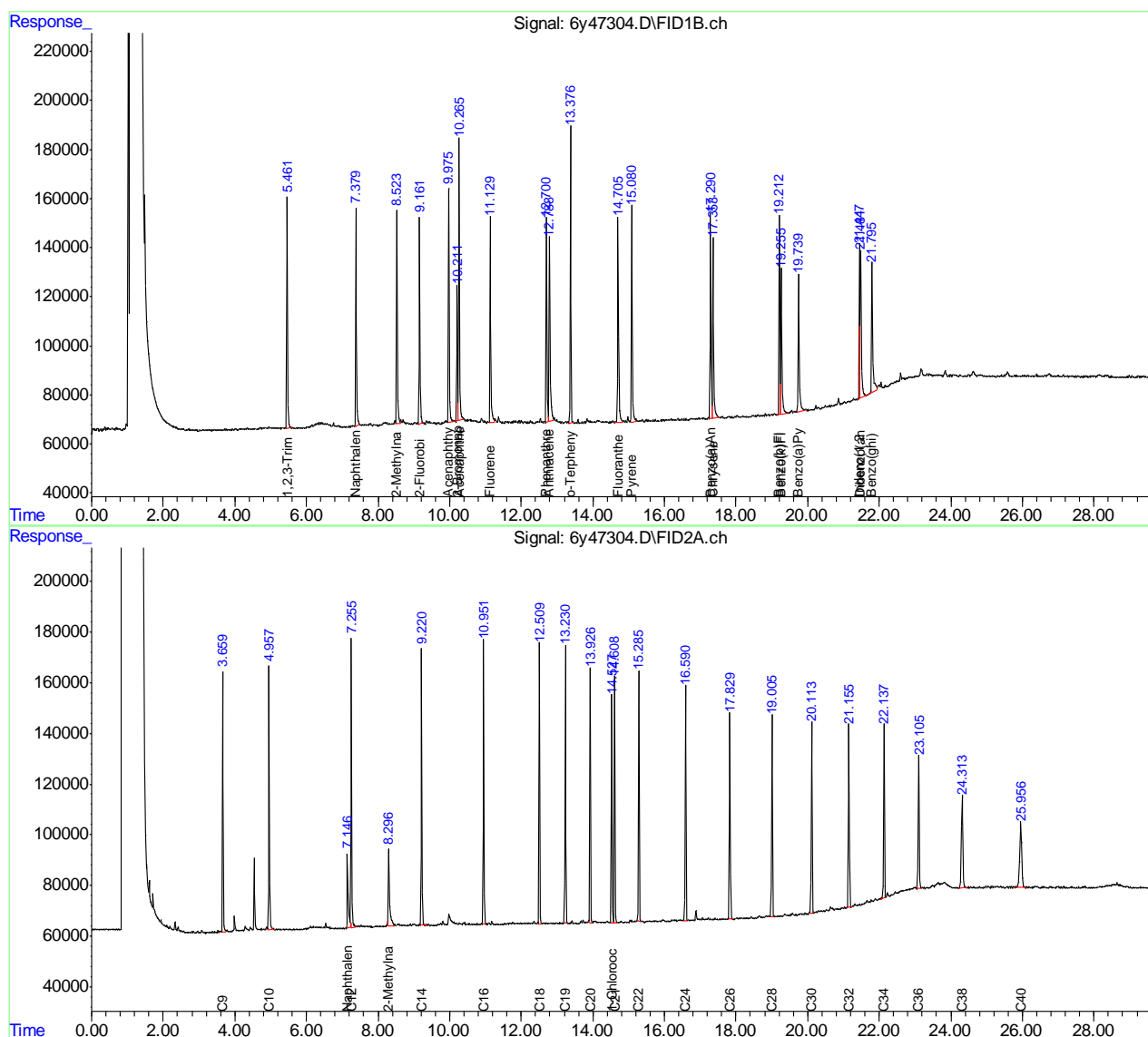
(m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47304.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 1:00 pm
Operator : thomas1
Sample : ic2180-2
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:41:17 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



Manual Integration Approval Summary

Sample Number: G6Y2180-IC2180

Lab FileID: 6Y47304.D

Injection Time: 05/16/22 13:00

Method: NJDEP EPH

Analyst approved: 05/16/22 17:58 Thomas Lally

Supervisor approved: 05/17/22 11:17 Gwendolyn Burns

Parameter	CAS	Sig#	R.T. (min.)	Reason
Naphthalene	91-20-3	2	7.15	Poor instrument integration
2-Methylnaphthalene	91-57-6	2	8.30	Poor instrument integration
C36		2	23.11	Poor instrument integration

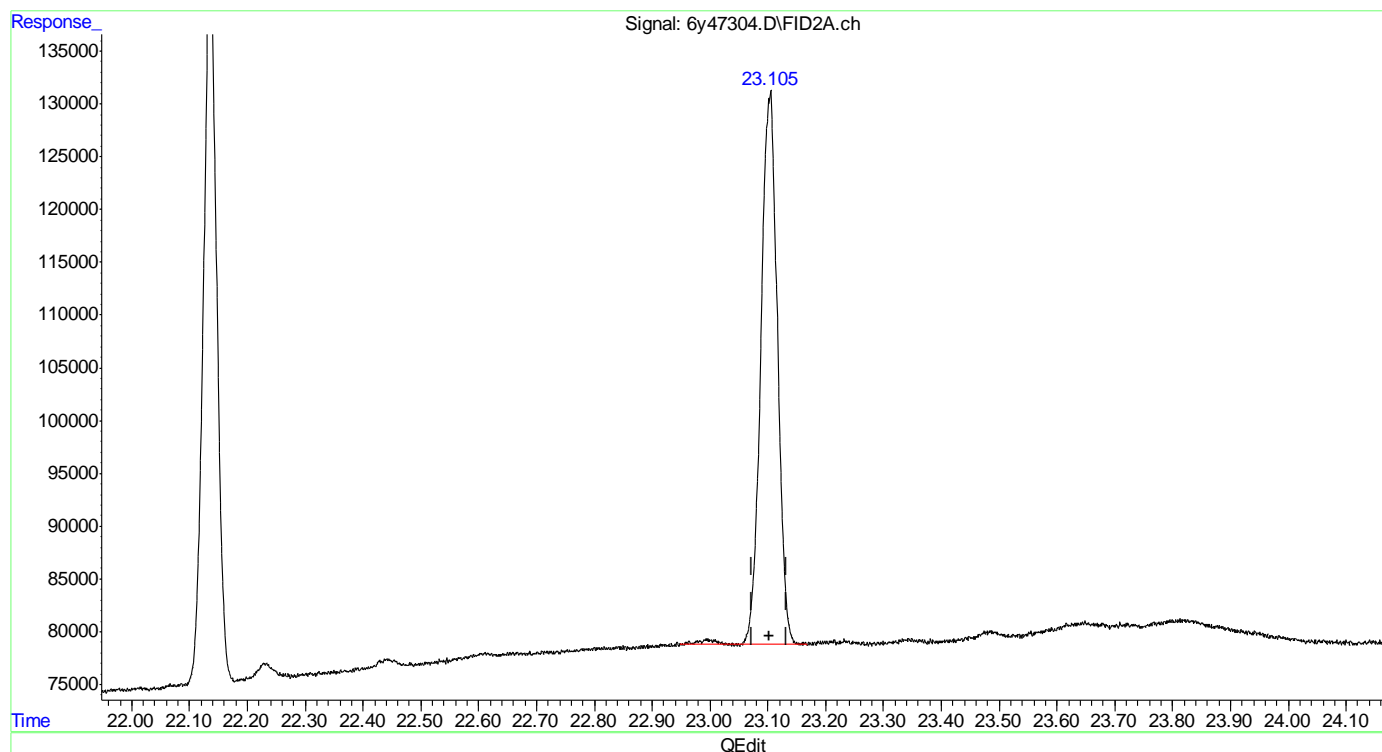
7.5.3.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47304.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 1:00 pm
Operator : thomas1
Sample : ic2180-2
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:39:45 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



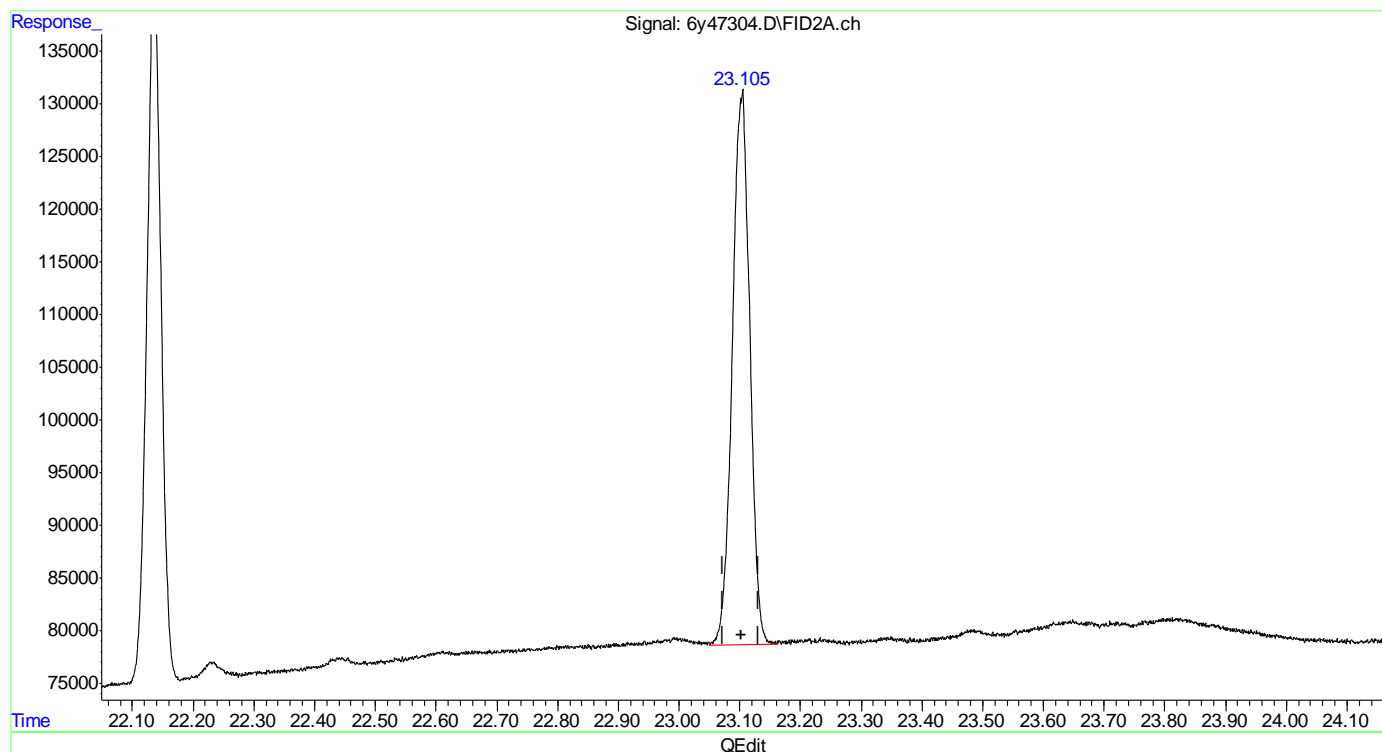
(47) C36 (T)
23.103min 1.933 ug/L
response 1050470

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47304.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 1:00 pm
Operator : thomas1
Sample : ic2180-2
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:39:45 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



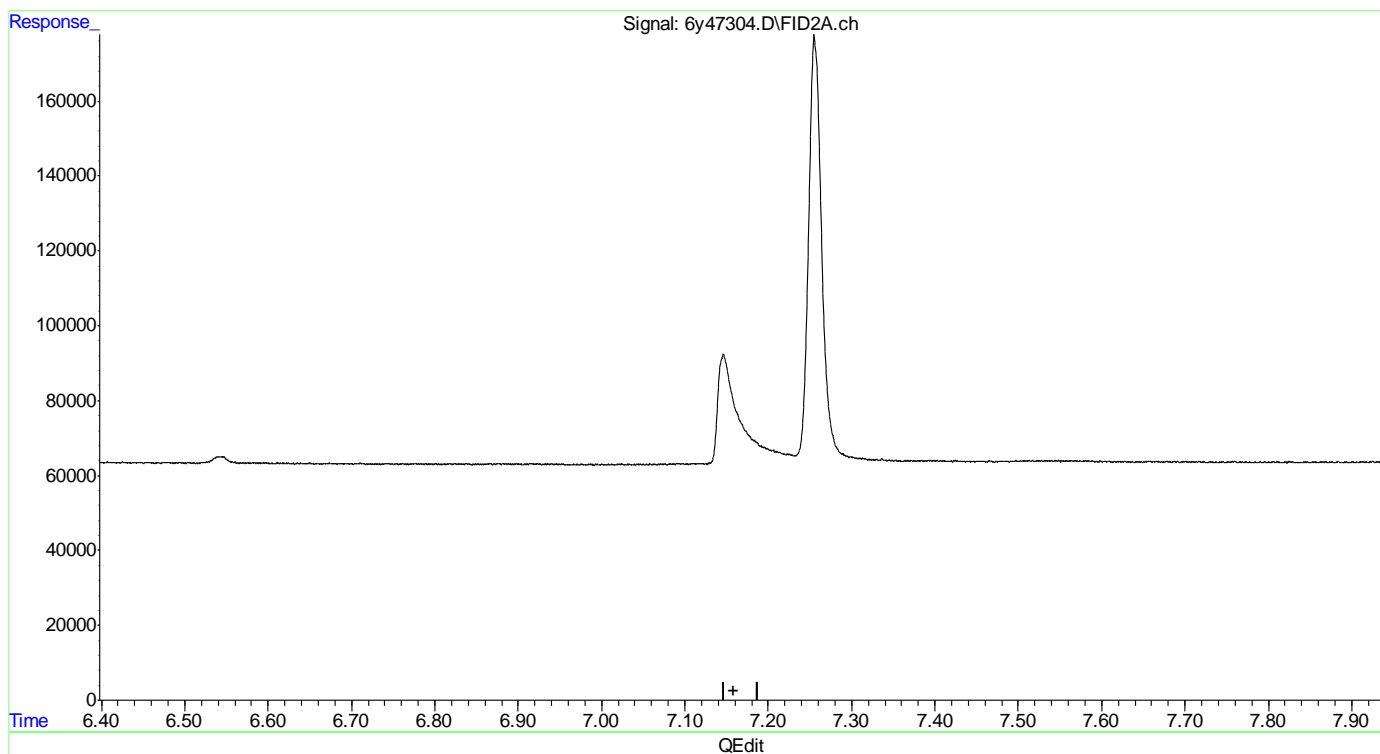
(47) C36 (T)
23.105min 1.927 ug/L m
response 1047396

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47304.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 1:00 pm
Operator : thomas1
Sample : ic2180-2
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:39:45 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



(53) Naphthalene (S) (S)

7.158min 0.000 ug/L

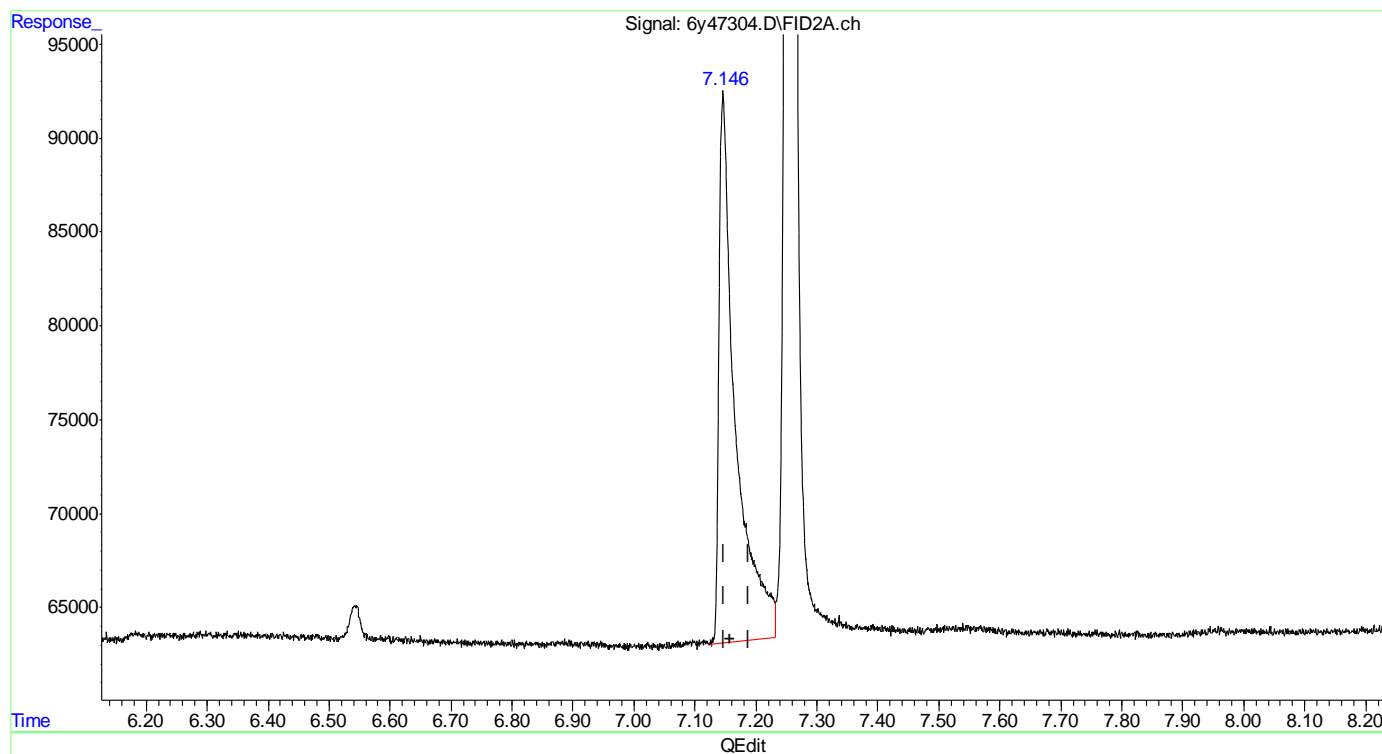
response 0

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47304.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 1:00 pm
Operator : thomas1
Sample : ic2180-2
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:39:45 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



(53) Naphthalene (S) (S)

7.146min 0.900 ug/L m

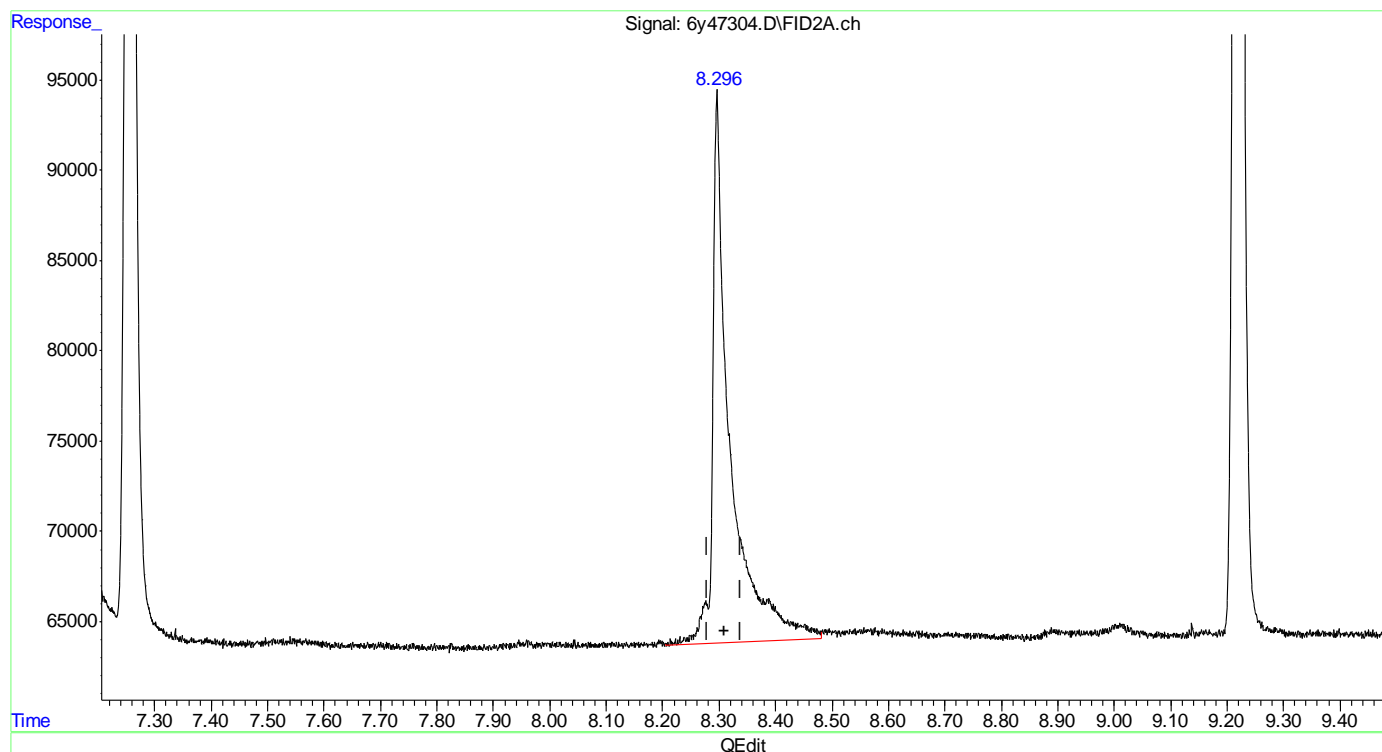
response 549420

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47304.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 1:00 pm
Operator : thomas1
Sample : ic2180-2
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:39:45 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



(54) 2-Methylnaphthalene (S) (S)

8.297min 0.990 ug/L

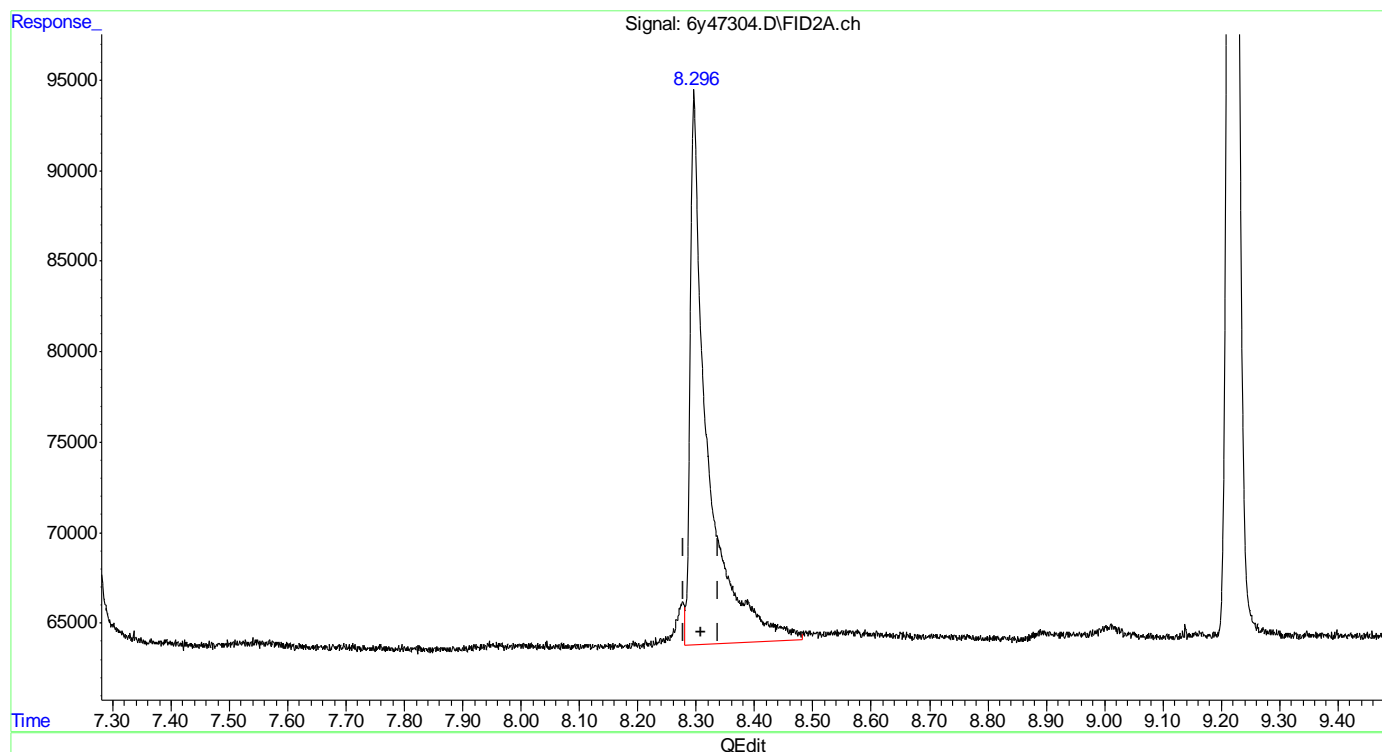
response 655411

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47304.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 1:00 pm
Operator : thomas1
Sample : ic2180-2
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:39:45 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:37:20 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



(54) 2-Methylnaphthalene (S) (S)

8.296min 0.944 ug/L m

response 624506

C:\msdchem\1\DATA\6Y2180\6y47304.D

Hydrocarbon Range Total Response

Data File Name **6y47304.D**
 Date Acquired **5/16/2022 13:00**
 Sample Name **ic2180-2**

	<u>Name</u>	<u>Target Response</u>
1)	1,2,3-Trimethylbenzene	1151615
2)	Naphthalene	1188825
3)	C10-C12 Aromatics	2340440
4)	2-Methylnaphthalene	1210147
5)	Acenaphthylene	1235276
6)	Acenaphthene	1488563
7)	C12-C16 Aromatics	3933985
8)	Fluorene	1283388
9)	Phenanthrene	1254971
10)	Anthracene	1289281
11)	Fluoranthene	1365716
12)	Pyrene	1405659
13)	C16-C21 Aromatics	6599014
14)	Benzo(a)Anthracene	1221108
15)	Chrysene	1392073
16)	Benzo(b)Fluoranthene	1142917
17)	Benzo(k)Fluoranthene	1274411
18)	Benzo(a)Pyrene	1157259
19)	Indeno(1,2,3-cd)Pyrene	896355
20)	Dibenzo(ah)Anthracene	1273575
21)	Benzo(ghi)Perylene	1144904
22)	C21-C36 Aromatics	9502602
23)	C11-C22 Aromatics (Unadj.)	21224426)
27)	SIGNAL #2	0
28)	C9	1169901
29)	C10	1229838
30)	C12	1303865
31)	C9-C12 Aliphatics	3703604
32)	C14	1284824
33)	C16	1298713
34)	C12-C16 Aliphatics	2583537
35)	C18	1323151
36)	C19	1338162
37)	C20	1333069
38)	C21	1328199
39)	C16-C21 Aliphatics	3984418
40)	C22	1337003
41)	C24	1328520
42)	C26	1300105
43)	C28	1254655
44)	C30	1226026
45)	C32	1184929
46)	C34	1101272
47)	C36	1047396

5/16/2022 5:08 PM

C:\msdchem\custrpt\ETPHIC.CRT

Page 1 of 2

7.5.4

7

C:\msdchem\1\DATA\6Y2180\6y47304.D

48)	C38	1004327.438
49)	C40	998864.75
50)	C21-C40 Aliphatics	11783097.73
51)	C9-C18 Aliphatics	7610292.223
52)	C19-C36 Aliphatics	10164935.35

7.5.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
 Data File : 6y47305.D
 Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
 Acq On : 16 May 2022 1:35 pm
 Operator : thomas1
 Sample : ic2180-5
 Misc : OP39453,G6y2180,15.0,,,2,1
 ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: May 16 16:42:59 2022
 Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
 Quant Title : NJDEP Extractable Petroleum Hydrocarbons
 QLast Update : Mon May 16 16:41:32 2022
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1ul/col
 Signal #1 Phase : HP5 Signal #2 Phase: HP5
 Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units

System Monitoring Compounds				
24) S	2-Fluorobiphenyl (S)	9.159	2483524	4.139 ug/L
25) S	2-Bromonaphthalene (S)	10.206	1611727	4.194 ug/L
26) S	o-Terphenyl (S)	13.375	2936884	4.001 ug/L
53) S	Naphthalene (S)	7.137	1328913	2.177 ug/L
54) S	2-Methylnaphthalene (S)	8.286	1380824	2.087 ug/L
55) S	1-Chlorooctadecane (S)	14.530	2838347	4.660 ug/L
Target Compounds				
1) T	1,2,3-Trimethylbenzene	5.460	2542013	4.148 ug/L
2) T	Naphthalene	7.375	2692687	4.080 ug/L
4) T	2-Methylnaphthalene	8.518	2769735	4.251 ug/L
5) T	Acenaphthylene	9.972	2682307	3.891 ug/L
6) T	Acenaphthene	10.265	3208712	4.135 ug/L
8) T	Fluorene	11.126	2775323	3.948 ug/L
9) T	Phenanthrene	12.697	2750817	3.928 ug/L
10) T	Anthracene	12.783	2887153	4.090 ug/L
11) T	Fluoranthene	14.703	2837772	4.029 ug/L
12) T	Pyrene	15.078	2961470	4.096 ug/L
14) T	Benzo(a)Anthracene	17.290	2558543	4.011 ug/L
15) T	Chrysene	17.351	2803312	4.042 ug/L
16) T	Benzo(b)Fluoranthene	19.209	2369529	3.780 ug/L
17) T	Benzo(k)Fluoranthene	19.257	2389930	3.676 ug/L
18) T	Benzo(a)Pyrene	19.739	2381597	3.909 ug/L
19) T	Indeno(1,2,3-cd)Pyrene	21.438	2026340	3.700 ug/L
20) T	Dibenzo(ah)Anthracene	21.475	2735799	4.472 ug/L
21) T	Benzo(ghi)Perylene	21.784	2220598	4.006 ug/L m
28) T	C9	3.654	2648533	4.199 ug/L
29) T	C10	4.955	2770167	4.240 ug/L
30) T	C12	7.255	2909350	4.156 ug/L
32) T	C14	9.219	2947849	4.196 ug/L
33) T	C16	10.951	3078391	4.319 ug/L
35) T	C18	12.507	3199976	4.454 ug/L
36) T	C19	13.230	3294998	4.520 ug/L
37) T	C20	13.927	3287010	4.601 ug/L
38) T	C21	14.613	3330329	4.681 ug/L
40) T	C22	15.285	3361762	4.724 ug/L
41) T	C24	16.594	3401970	4.914 ug/L
42) T	C26	17.832	3396111	4.981 ug/L
43) T	C28	19.009	3381275	5.293 ug/L
44) T	C30	20.116	3390393	5.485 ug/L

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47305.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 1:35 pm
Operator : thomasl
Sample : ic2180-5
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:42:59 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:41:32 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units
45) T	C32	21.156	3358290	5.659 ug/L
46) T	C34	22.137	3200851	5.754 ug/L
47) T	C36	23.100	3097471	5.700 ug/L
48) T	C38	24.313	2883058	5.447 ug/L
49) T	C40	25.953	2783136	5.199 ug/L

(f)=RT Delta > 1/2 Window

(m)=manual int.

7.5.5

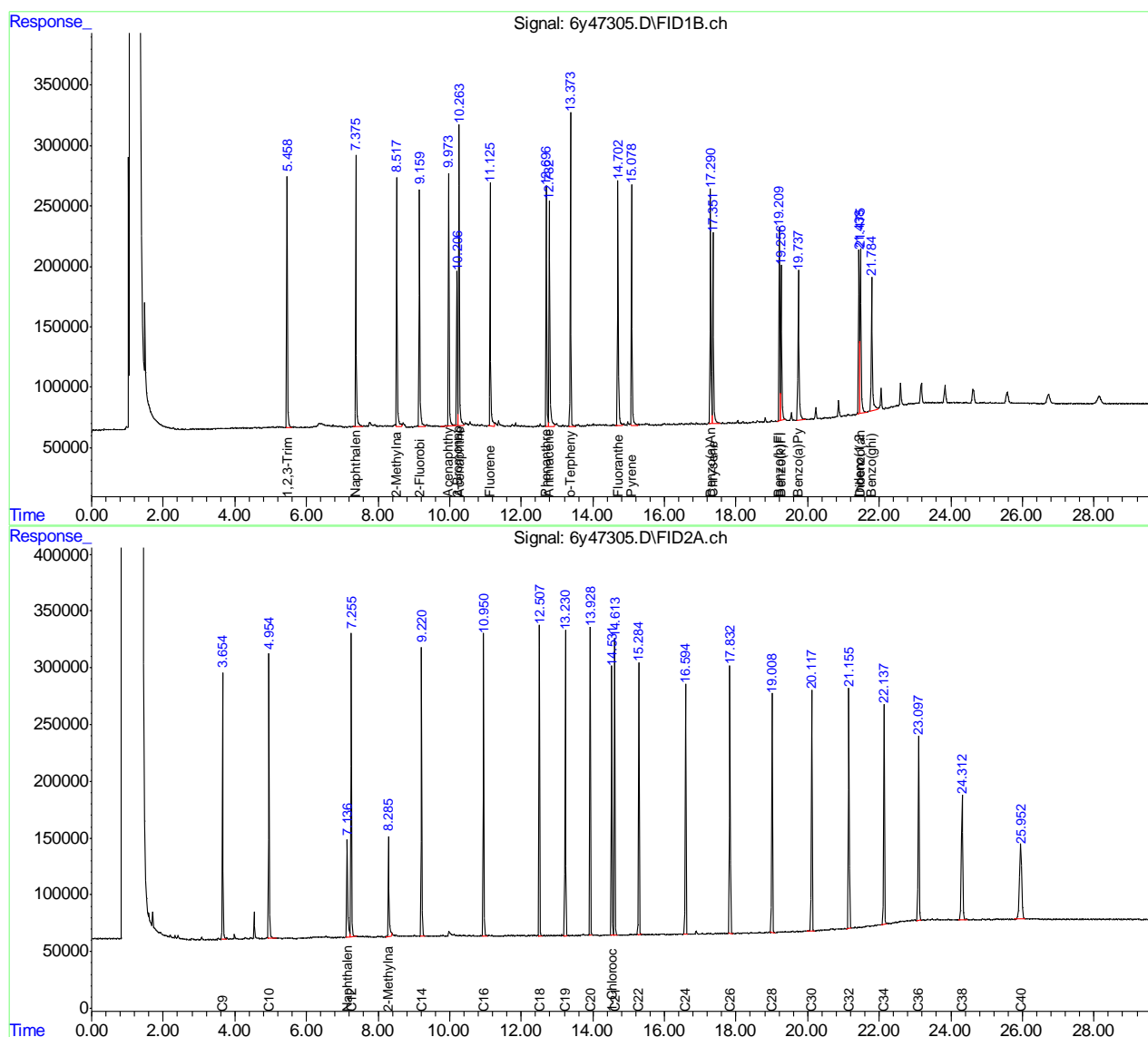
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47305.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 1:35 pm
Operator : thomas1
Sample : ic2180-5
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:42:59 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:41:32 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



Manual Integration Approval Summary

Sample Number: G6Y2180-IC2180

Lab FileID: 6Y47305.D

Injection Time: 05/16/22 13:35

Method: NJDEP EPH

Analyst approved: 05/16/22 17:58 Thomas Lally

Supervisor approved: 05/17/22 11:17 Gwendolyn Burns

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(g,h,i)perylene	191-24-2	1	21.78	Poor instrument integration

7.5.5.1

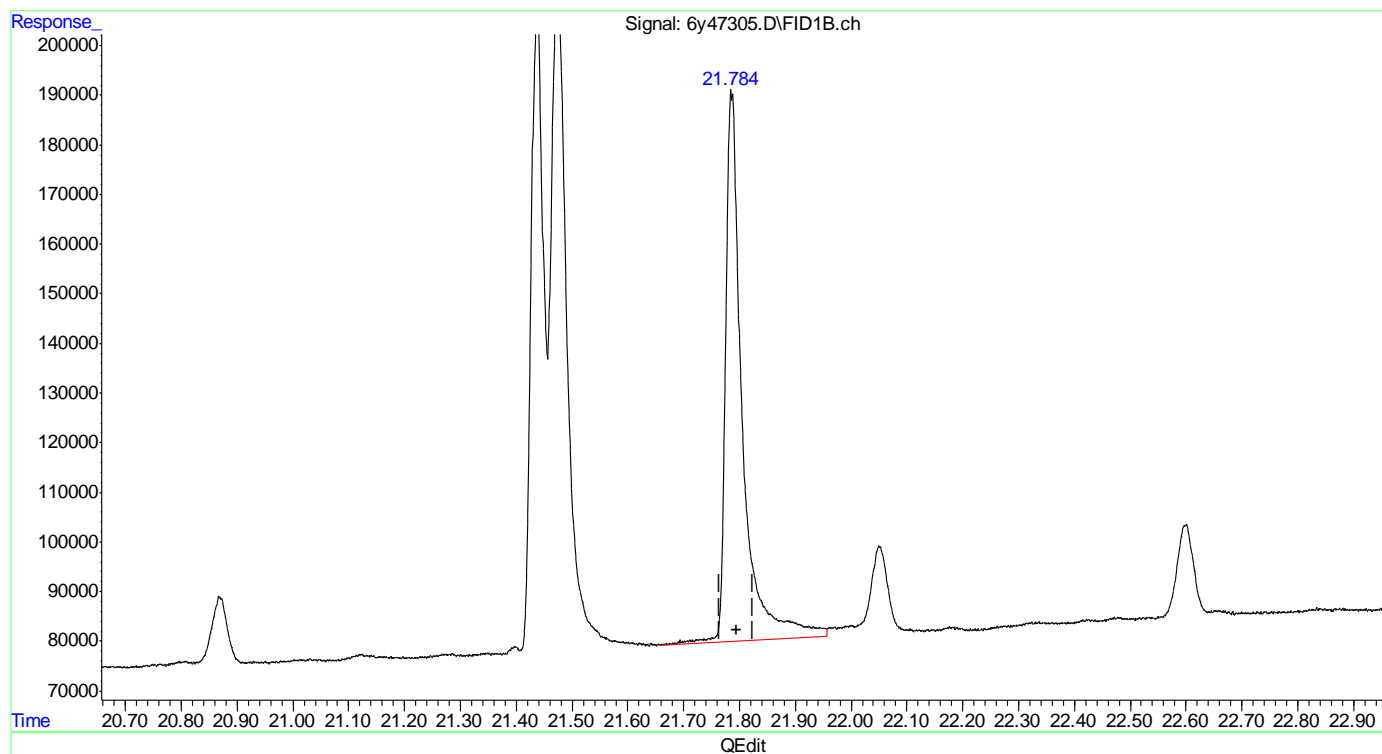
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47305.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 1:35 pm
Operator : thomas1
Sample : ic2180-5
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:41:44 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:41:32 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



(21) Benzo(ghi)Perylene (T)

21.786min 4.197 ug/l

response 2326809

(+) = Expected Retention Time

EPH6Y2180.M Mon May 16 16:42:24 2022 RPT1

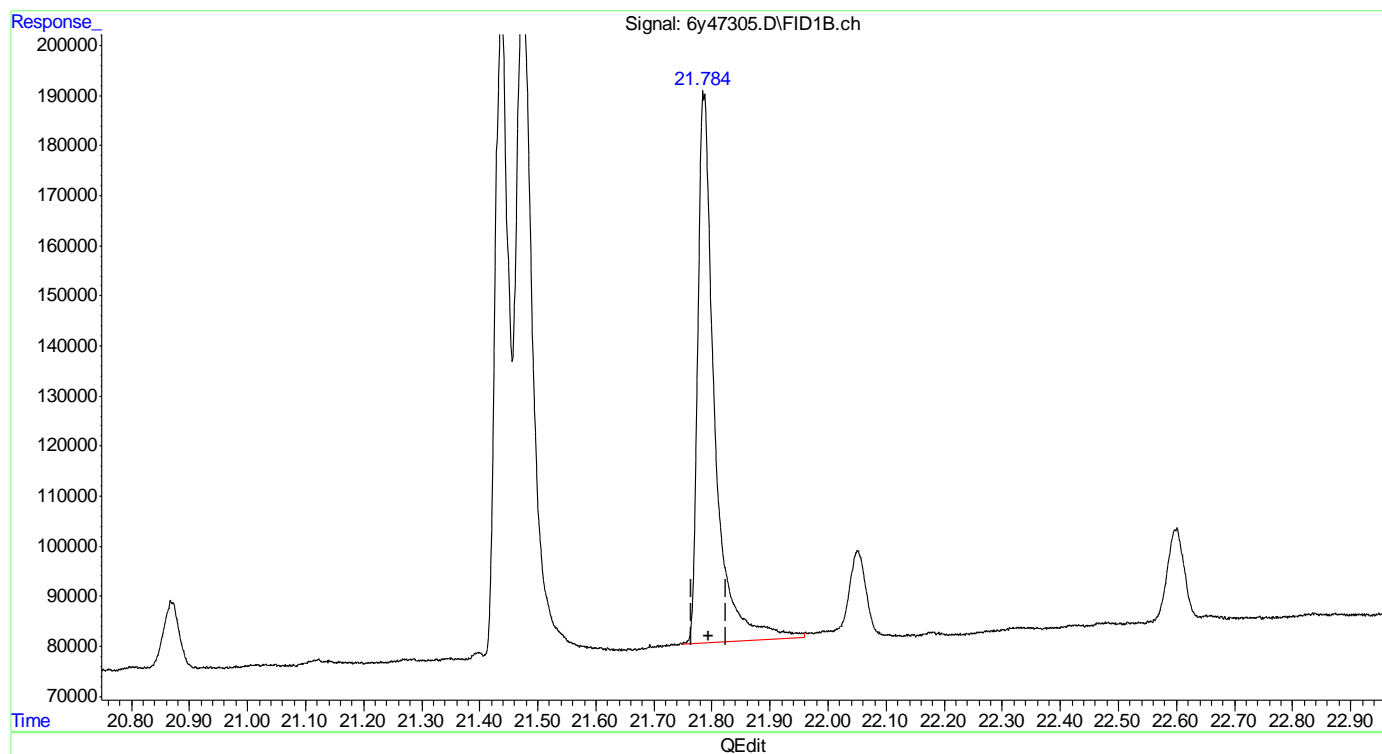
Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47305.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 1:35 pm
Operator : thomas1
Sample : ic2180-5
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:41:44 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:41:32 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



(21) Benzo(ghi)Perylene (T)

21.784min 4.006 ug/l m

response 2220598

(+) = Expected Retention Time

EPH6Y2180.M Mon May 16 16:42:36 2022 RPT1

Page: 1

C:\msdchem\1\DATA\6Y2180\6y47305.D

Hydrocarbon Range Total Response

Data File Name **6y47305.D**
 Date Acquired **5/16/2022 13:35**
 Sample Name **ic2180-5**

	<u>Name</u>	<u>Target Response</u>
1)	1,2,3-Trimethylbenzene	2542013
2)	Naphthalene	2692687
3)	C10-C12 Aromatics	5234700
4)	2-Methylnaphthalene	2769735
5)	Acenaphthylene	2682307
6)	Acenaphthene	3208712
7)	C12-C16 Aromatics	8660754
8)	Fluorene	2775323
9)	Phenanthrene	2750817
10)	Anthracene	2887153
11)	Fluoranthene	2837772
12)	Pyrene	2961470
13)	C16-C21 Aromatics	14212535
14)	Benzo(a)Anthracene	2558543
15)	Chrysene	2803312
16)	Benzo(b)Fluoranthene	2369529
17)	Benzo(k)Fluoranthene	2389930
18)	Benzo(a)Pyrene	2381597
19)	Indeno(1,2,3-cd)Pyrene	2026340
20)	Dibenzo(ah)Anthracene	2735799
21)	Benzo(ghi)Perylene	2220598
22)	C21-C36 Aromatics	19485648
23)	C11-C22 Aromatics (Unadj.)	45051624)
27)	SIGNAL #2	0
28)	C9	2648533
29)	C10	2770167
30)	C12	2909350
31)	C9-C12 Aliphatics	8328051
32)	C14	2947849
33)	C16	3078391
34)	C12-C16 Aliphatics	6026240
35)	C18	3199976
36)	C19	3294998
37)	C20	3287010
38)	C21	3330329
39)	C16-C21 Aliphatics	9817316
40)	C22	3361762
41)	C24	3401970
42)	C26	3396111
43)	C28	3381275
44)	C30	3390393
45)	C32	3358290
46)	C34	3200851
47)	C36	3097471

5/16/2022 5:09 PM

C:\msdchem\custrpt\ETPHIC.CRT

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7.5.6

7

C:\msdchem\1\DATA\6Y2180\6y47305.D

48)	C38	2883058.141
49)	C40	2783136.031
50)	C21-C40 Aliphatics	32254319.34
51)	C9-C18 Aliphatics	17554267.14
52)	C19-C36 Aliphatics	26610992.32

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
 Data File : 6y47306.D
 Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
 Acq On : 16 May 2022 2:09 pm
 Operator : thomas1
 Sample : ic2180-10
 Misc : OP39453,G6y2180,15.0,,,2,1
 ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: May 16 16:45:17 2022
 Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
 Quant Title : NJDEP Extractable Petroleum Hydrocarbons
 QLast Update : Mon May 16 16:41:32 2022
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1ul/col
 Signal #1 Phase : HP5 Signal #2 Phase: HP5
 Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units

System Monitoring Compounds				
24) S	2-Fluorobiphenyl (S)	9.158	4662217	7.770 ug/L
25) S	2-Bromonaphthalene (S)	10.203	3128633	8.142 ug/L
26) S	o-Terphenyl (S)	13.373	5887170	8.021 ug/L
53) S	Naphthalene (S)	7.131f	3138268	5.141 ug/L m
54) S	2-Methylnaphthalene (S)	8.281f	3198748	4.834 ug/L
55) S	1-Chlorooctadecane (S)	14.528	5520400	9.064 ug/L
Target Compounds				
1) T	1,2,3-Trimethylbenzene	5.459	4784417	7.808 ug/L
2) T	Naphthalene	7.374	5217002	7.904 ug/L
4) T	2-Methylnaphthalene	8.517	5274101	8.095 ug/L
5) T	Acenaphthylene	9.971	5307195	7.698 ug/L
6) T	Acenaphthene	10.264	6155496	7.932 ug/L
8) T	Fluorene	11.125	5565518	7.918 ug/L
9) T	Phenanthrene	12.694	5606710	8.005 ug/L
10) T	Anthracene	12.781	5698837	8.073 ug/L
11) T	Fluoranthene	14.699	5828225	8.275 ug/L
12) T	Pyrene	15.075	5958275	8.242 ug/L
14) T	Benzo(a)Anthracene	17.285	5599589	8.779 ug/L
15) T	Chrysene	17.347	5941693	8.567 ug/L
16) T	Benzo(b)Fluoranthene	19.204	5334041	8.509 ug/L
17) T	Benzo(k)Fluoranthene	19.250	5362923	8.248 ug/L
18) T	Benzo(a)Pyrene	19.729	5159152	8.469 ug/L
19) T	Indeno(1,2,3-cd)Pyrene	21.431f	4492300	8.204 ug/L
20) T	Dibenzo(ah)Anthracene	21.468	5159000	8.432 ug/L
21) T	Benzo(ghi)Perylene	21.780	4666585	8.418 ug/L
28) T	C9	3.657	6016561	9.539 ug/L
29) T	C10	4.954	6239951	9.552 ug/L
30) T	C12	7.254	6440289	9.201 ug/L
32) T	C14	9.218	6514132	9.273 ug/L
33) T	C16	10.952	6533026	9.167 ug/L
35) T	C18	12.509	6511526	9.064 ug/L
36) T	C19	13.230	6583528	9.030 ug/L
37) T	C20	13.926	6462923	9.046 ug/L
38) T	C21	14.612	6420733	9.025 ug/L
40) T	C22	15.285	6389007	8.978 ug/L
41) T	C24	16.589	6267834	9.055 ug/L
42) T	C26	17.833	6045180	8.867 ug/L
43) T	C28	19.005	5868002	9.185 ug/L
44) T	C30	20.111	5716731	9.249 ug/L

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47306.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 2:09 pm
Operator : thomasl
Sample : ic2180-10
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:45:17 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:41:32 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units
45) T	C32	21.153	5500913	9.270 ug/L
46) T	C34	22.135	5152061	9.261 ug/L
47) T	C36	23.103	4986417	9.176 ug/L
48) T	C38	24.309	4773392	9.018 ug/L
49) T	C40	25.949	4836714	9.035 ug/L

(f)=RT Delta > 1/2 Window

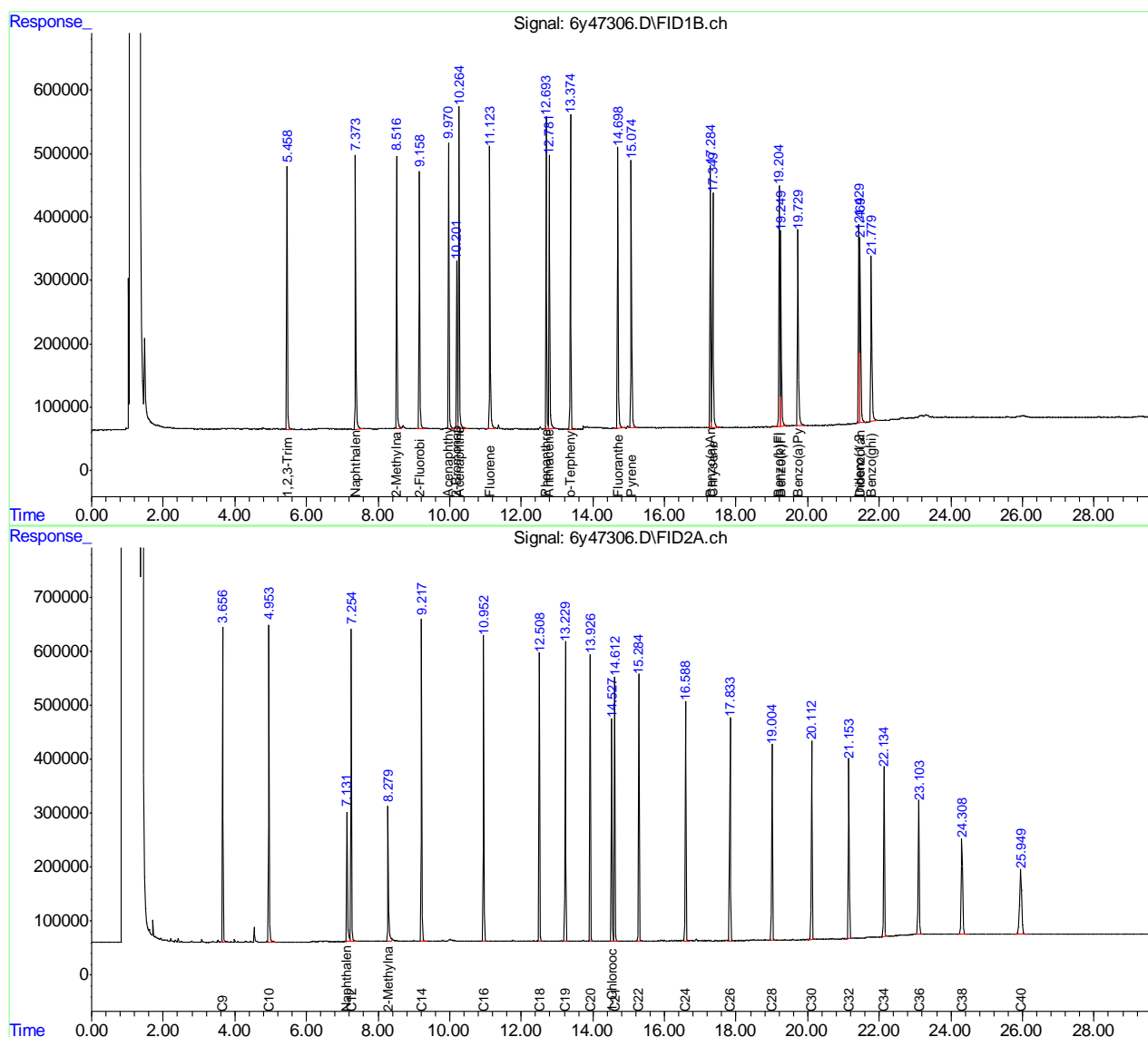
(m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47306.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 2:09 pm
Operator : thomas1
Sample : ic2180-10
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:45:17 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:41:32 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



Manual Integration Approval Summary

Sample Number: G6Y2180-IC2180

Method: NJDEP EPH

Lab FileID: 6Y47306.D

Analyst approved: 05/16/22 17:58 Thomas Lally

Injection Time: 05/16/22 14:09

Supervisor approved: 05/17/22 11:17 Gwendolyn Burns

Parameter	CAS	Sig#	R.T. (min.)	Reason
Naphthalene	91-20-3	2	7.13	Poor instrument integration

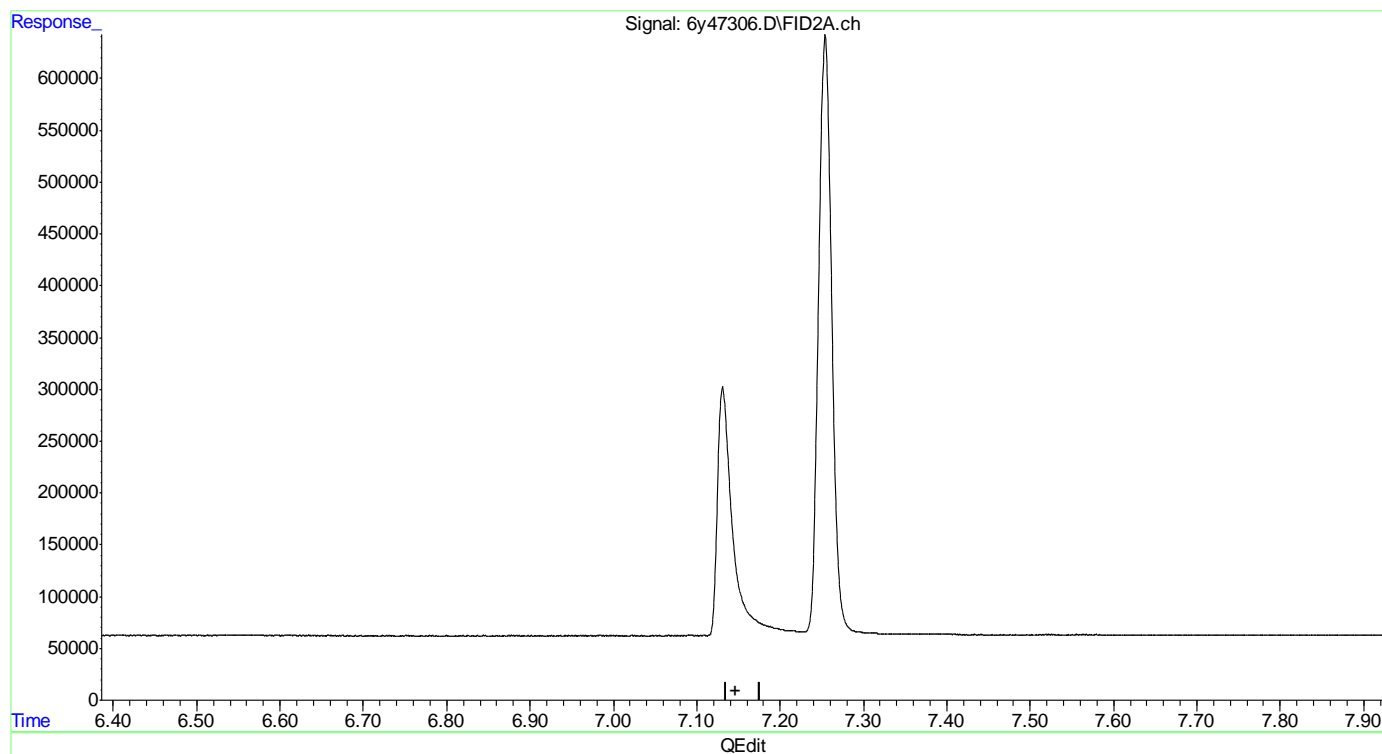
7.5.7.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47306.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 2:09 pm
Operator : thomas1
Sample : ic2180-10
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:44:17 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:41:32 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



(53) Naphthalene (S) (S)

7.146min 0.000 ug/L

response 0

(+) = Expected Retention Time

EPH6Y2180.M Mon May 16 16:44:52 2022 RPT1

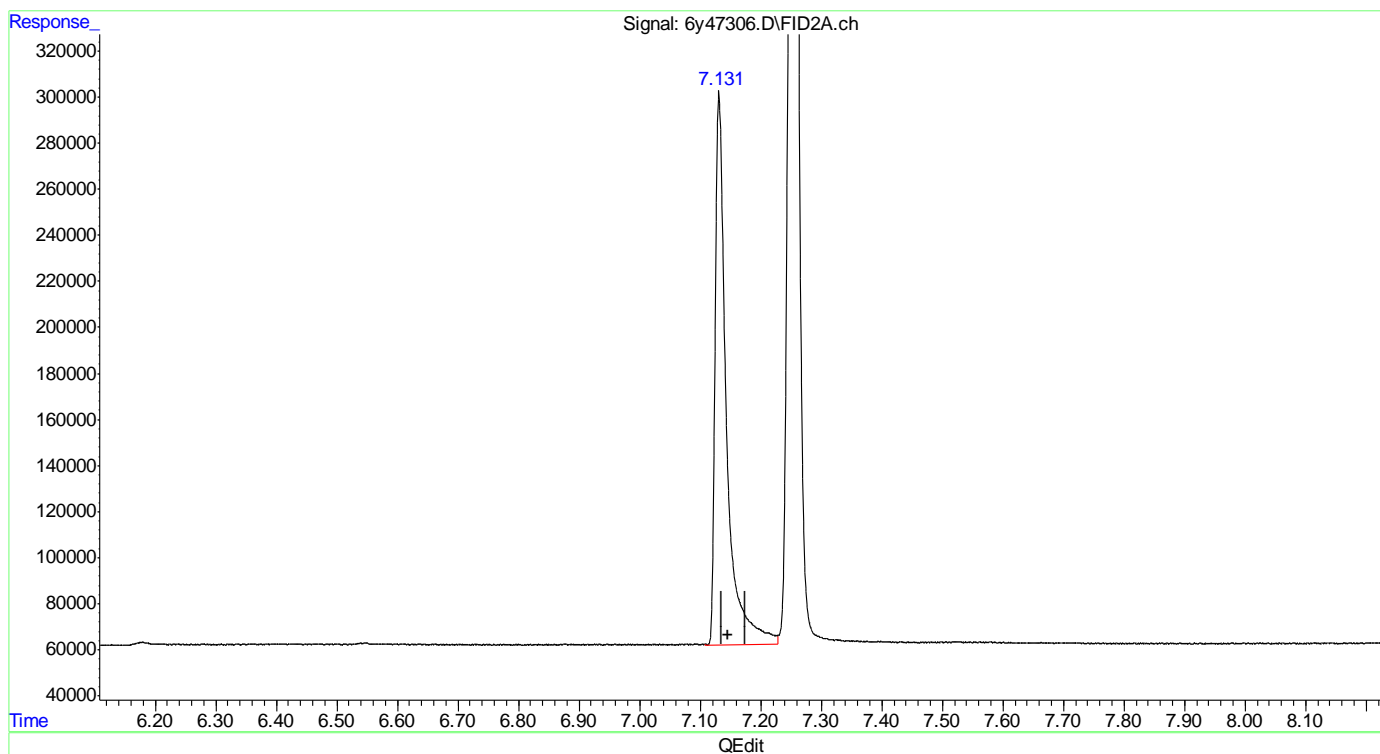
Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47306.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 2:09 pm
Operator : thomas1
Sample : ic2180-10
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:44:17 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:41:32 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



(53) Naphthalene (S) (S)

7.131min 5.141 ug/L m

response 3138268

(+) = Expected Retention Time

EPH6Y2180.M Mon May 16 16:45:08 2022 RPT1

Page: 1

C:\msdchem\1\DATA\6Y2180\6y47306.D

Hydrocarbon Range Total Response

Data File Name **6y47306.D**
 Date Acquired **5/16/2022 14:09**
 Sample Name **ic2180-10**

	<u>Name</u>	<u>Target Response</u>
1)	1,2,3-Trimethylbenzene	4784417
2)	Naphthalene	5217002
3)	C10-C12 Aromatics	10001419
4)	2-Methylnaphthalene	5274101
5)	Acenaphthylene	5307195
6)	Acenaphthene	6155496
7)	C12-C16 Aromatics	16736793
8)	Fluorene	5565518
9)	Phenanthrene	5606710
10)	Anthracene	5698837
11)	Fluoranthene	5828225
12)	Pyrene	5958275
13)	C16-C21 Aromatics	28657565
14)	Benzo(a)Anthracene	5599589
15)	Chrysene	5941693
16)	Benzo(b)Fluoranthene	5334041
17)	Benzo(k)Fluoranthene	5362923
18)	Benzo(a)Pyrene	5159152
19)	Indeno(1,2,3-cd)Pyrene	4492300
20)	Dibenzo(ah)Anthracene	5159000
21)	Benzo(ghi)Perylene	4666585
22)	C21-C36 Aromatics	41715282
23)	C11-C22 Aromatics (Unadj.)	92326643)
27)	SIGNAL #2	0
28)	C9	6016561
29)	C10	6239951
30)	C12	6440289
31)	C9-C12 Aliphatics	18696801
32)	C14	6514132
33)	C16	6533026
34)	C12-C16 Aliphatics	13047158
35)	C18	6511526
36)	C19	6583528
37)	C20	6462923
38)	C21	6420733
39)	C16-C21 Aliphatics	19395183
40)	C22	6389007
41)	C24	6267834
42)	C26	6045180
43)	C28	5868002
44)	C30	5716731
45)	C32	5500913
46)	C34	5152061
47)	C36	4986417

5/16/2022 5:09 PM

C:\msdchem\custrpt\ETPHIC.CRT

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C:\msdchem\1\DATA\6Y2180\6y47306.D

48)	C38	4773392.188
49)	C40	4836714.305
50)	C21-C40 Aliphatics	55536250.95
51)	C9-C18 Aliphatics	38255484.77
52)	C19-C36 Aliphatics	48319621.89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
 Data File : 6y47307.D
 Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
 Acq On : 16 May 2022 2:44 pm
 Operator : thomas1
 Sample : ic2180-20
 Misc : OP39453,G6y2180,15.0,,,2,1
 ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: May 16 16:46:25 2022
 Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
 Quant Title : NJDEP Extractable Petroleum Hydrocarbons
 QLast Update : Mon May 16 16:45:39 2022
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1ul/col
 Signal #1 Phase : HP5 Signal #2 Phase: HP5
 Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units

System Monitoring Compounds				
24) S	2-Fluorobiphenyl (S)	9.157	9398728	15.665 ug/L
25) S	2-Bromonaphthalene (S)	10.203	6388497	16.625 ug/L
26) S	o-Terphenyl (S)	13.376	11625763	15.839 ug/L
53) S	Naphthalene (S)	7.128	6477691	10.612 ug/L
54) S	2-Methylnaphthalene (S)	8.277	6666379	10.074 ug/L
55) S	1-Chlorooctadecane (S)	14.529	11356966	18.648 ug/L
Target Compounds				
1) T	1,2,3-Trimethylbenzene	5.457	9735129	15.887 ug/L
2) T	Naphthalene	7.372	10537340	15.965 ug/L
4) T	2-Methylnaphthalene	8.515	10568859	16.221 ug/L
5) T	Acenaphthylene	9.970	10648509	15.445 ug/L
6) T	Acenaphthene	10.264	12048668	15.525 ug/L
8) T	Fluorene	11.125	11125606	15.828 ug/L
9) T	Phenanthrene	12.695	11262925	16.081 ug/L
10) T	Anthracene	12.781	11459834	16.235 ug/L
11) T	Fluoranthene	14.701	11521880	16.359 ug/L
12) T	Pyrene	15.079	11884767	16.440 ug/L
14) T	Benzo(a)Anthracene	17.288	11266194	17.664 ug/L
15) T	Chrysene	17.351	11575977	16.692 ug/L
16) T	Benzo(b)Fluoranthene	19.207	10735352	17.125 ug/L
17) T	Benzo(k)Fluoranthene	19.251	10546704	16.221 ug/L
18) T	Benzo(a)Pyrene	19.730	10358122	17.003 ug/L
19) T	Indeno(1,2,3-cd)Pyrene	21.432	9390306	17.148 ug/L
20) T	Dibenzo(ah)Anthracene	21.469	10213771	16.694 ug/L
21) T	Benzo(ghi)Perylene	21.781	9423309	16.999 ug/L
28) T	C9	3.656	12102277	19.188 ug/L
29) T	C10	4.955	12522641	19.169 ug/L
30) T	C12	7.254	12974028	18.535 ug/L
32) T	C14	9.219	13132301	18.693 ug/L
33) T	C16	10.952	13251548	18.594 ug/L
35) T	C18	12.509	13312070	18.530 ug/L
36) T	C19	13.231	13487270	18.500 ug/L
37) T	C20	13.926	13280686	18.590 ug/L
38) T	C21	14.613	13205369	18.562 ug/L
40) T	C22	15.287	13131040	18.452 ug/L
41) T	C24	16.595	12909558	18.649 ug/L
42) T	C26	17.833	12518148	18.361 ug/L
43) T	C28	19.012	12157922	19.030 ug/L
44) T	C30	20.117	11843758	19.161 ug/L

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47307.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 2:44 pm
Operator : thomasl
Sample : ic2180-20
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:46:25 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:45:39 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units
45) T	C32	21.159	11434625	19.269 ug/L
46) T	C34	22.137	10706432	19.246 ug/L
47) T	C36	23.102	10358249	19.061 ug/L
48) T	C38	24.314	9788195	18.491 ug/L
49) T	C40	25.952	9882092	18.460 ug/L

(f)=RT Delta > 1/2 Window

(m)=manual int.

7.5.9

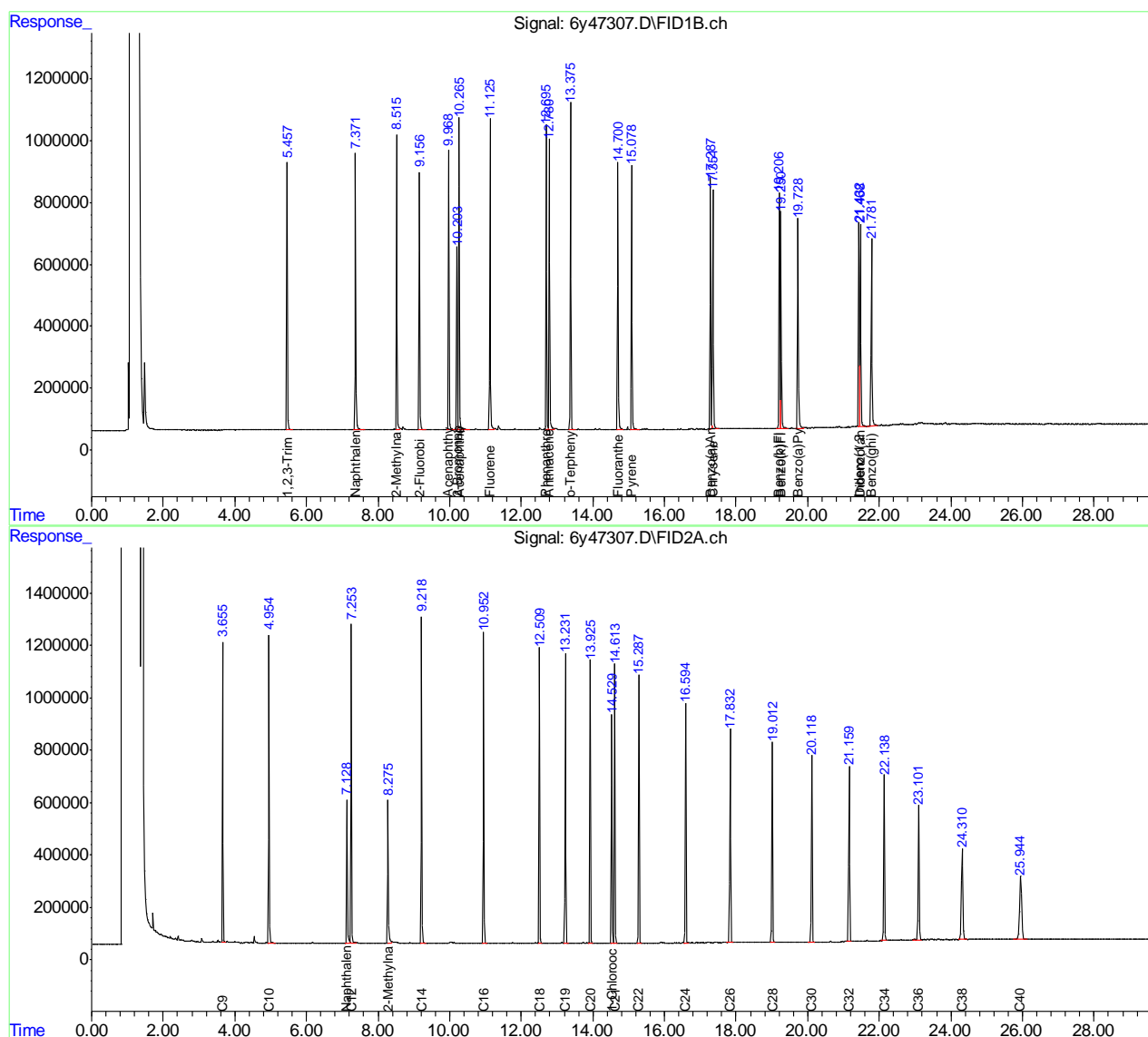
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47307.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 2:44 pm
Operator : thomas1
Sample : ic2180-20
Misc : OP39453,G6Y2180,15.0,,,2,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:46:25 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:45:39 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



C:\msdchem\1\DATA\6Y2180\6y47307.D

Hydrocarbon Range Total Response

Data File Name **6y47307.D**
 Date Acquired **5/16/2022 14:44**
 Sample Name **ic2180-20**

	<u>Name</u>	<u>Target Response</u>
1)	1,2,3-Trimethylbenzene	9735129
2)	Naphthalene	10537340
3)	C10-C12 Aromatics	20272469
4)	2-Methylnaphthalene	10568859
5)	Acenaphthylene	10648509
6)	Acenaphthene	12048668
7)	C12-C16 Aromatics	33266037
8)	Fluorene	11125606
9)	Phenanthrene	11262925
10)	Anthracene	11459834
11)	Fluoranthene	11521880
12)	Pyrene	11884767
13)	C16-C21 Aromatics	57255013
14)	Benzo(a)Anthracene	11266194
15)	Chrysene	11575977
16)	Benzo(b)Fluoranthene	10735352
17)	Benzo(k)Fluoranthene	10546704
18)	Benzo(a)Pyrene	10358122
19)	Indeno(1,2,3-cd)Pyrene	9390306
20)	Dibenzo(ah)Anthracene	10213771
21)	Benzo(ghi)Perylene	9423309
22)	C21-C36 Aromatics	83509736
23)	C11-C22 Aromatics (Unadj.)	184568125)
27)	SIGNAL #2	0
28)	C9	12102277
29)	C10	12522641
30)	C12	12974028
31)	C9-C12 Aliphatics	37598947
32)	C14	13132301
33)	C16	13251548
34)	C12-C16 Aliphatics	26383849
35)	C18	13312070
36)	C19	13487270
37)	C20	13280686
38)	C21	13205369
39)	C16-C21 Aliphatics	39798125
40)	C22	13131040
41)	C24	12909558
42)	C26	12518148
43)	C28	12157922
44)	C30	11843758
45)	C32	11434625
46)	C34	10706432
47)	C36	10358249

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48)	C38	9788195.391
49)	C40	9882092.125
50)	C21-C40 Aliphatics	114730020
51)	C9-C18 Aliphatics	77294865.24
52)	C19-C36 Aliphatics	99686631.63

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
 Data File : 6y47308.D
 Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
 Acq On : 16 May 2022 3:22 pm
 Operator : thomas1
 Sample : icc2180-50
 Misc : OP39453,G6y2180,15.0,,,2,1
 ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: May 16 16:47:30 2022
 Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
 Quant Title : NJDEP Extractable Petroleum Hydrocarbons
 QLast Update : Mon May 16 16:46:46 2022
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1ul/col
 Signal #1 Phase : HP5 Signal #2 Phase: HP5
 Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units

System Monitoring Compounds				
24) S	2-Fluorobiphenyl (S)	9.152	23807307	39.679 ug/L
25) S	2-Bromonaphthalene (S)	10.198	16574447	43.131 ug/L
26) S	o-Terphenyl (S)	13.374	29111658	39.662 ug/L
53) S	Naphthalene (S)	7.123	14232617	23.317 ug/L
54) S	2-Methylnaphthalene (S)	8.272	14794521	22.358 ug/L
55) S	1-Chlorooctadecane (S)	14.531	27865705	45.754 ug/L
Target Compounds				
1) T	1,2,3-Trimethylbenzene	5.451	24643091	40.215 ug/L
2) T	Naphthalene	7.366	26541268	40.212 ug/L
4) T	2-Methylnaphthalene	8.511	26740779	41.042 ug/L
5) T	Acenaphthylene	9.966	26856300	38.953 ug/L
6) T	Acenaphthene	10.264	29516697	38.033 ug/L
8) T	Fluorene	11.122	28326484	40.299 ug/L
9) T	Phenanthrene	12.694	28512542	40.711 ug/L
10) T	Anthracene	12.780	28719125	40.686 ug/L
11) T	Fluoranthene	14.700	28818609	40.917 ug/L
12) T	Pyrene	15.079	29667715	41.038 ug/L
14) T	Benzo(a)Anthracene	17.294	28549665	44.761 ug/L
15) T	Chrysene	17.358	29004880	41.823 ug/L
16) T	Benzo(b)Fluoranthene	19.217	27055514	43.159 ug/L
17) T	Benzo(k)Fluoranthene	19.263	26192968	40.286 ug/L
18) T	Benzo(a)Pyrene	19.740	25893406	42.503 ug/L
19) T	Indeno(1,2,3-cd)Pyrene	21.442	24302898	44.381 ug/L
20) T	Dibenzo(ah)Anthracene	21.479	24870258	40.650 ug/L
21) T	Benzo(ghi)Perylene	21.793	23488038	42.370 ug/L
28) T	C9	3.643	25888807	41.047 ug/L
29) T	C10	4.948	26819630	41.054 ug/L
30) T	C12	7.253	28034755	40.051 ug/L
32) T	C14	9.219	29314111	41.727 ug/L
33) T	C16	10.952	30512407	42.814 ug/L
35) T	C18	12.510	31525826	43.883 ug/L
36) T	C19	13.234	32421557	44.472 ug/L
37) T	C20	13.930	32310263	45.226 ug/L
38) T	C21	14.617	32586155	45.805 ug/L
40) T	C22	15.289	32835703	46.142 ug/L
41) T	C24	16.595	33265691	48.056 ug/L
42) T	C26	17.838	33287590	48.826 ug/L
43) T	C28	19.014	33419081	52.309 ug/L
44) T	C30	20.122	33653598	54.446 ug/L

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47308.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 3:22 pm
Operator : thomasl
Sample : icc2180-50
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:47:30 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:46:46 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units
45) T	C32	21.162	33600508	56.621 ug/L
46) T	C34	22.143	32389254	58.222 ug/L
47) T	C36	23.109	31805629	58.527 ug/L
48) T	C38	24.321	29902635	56.490 ug/L
49) T	C40	25.963	28980727	54.137 ug/L

(f)=RT Delta > 1/2 Window

(m)=manual int.

7.5.11

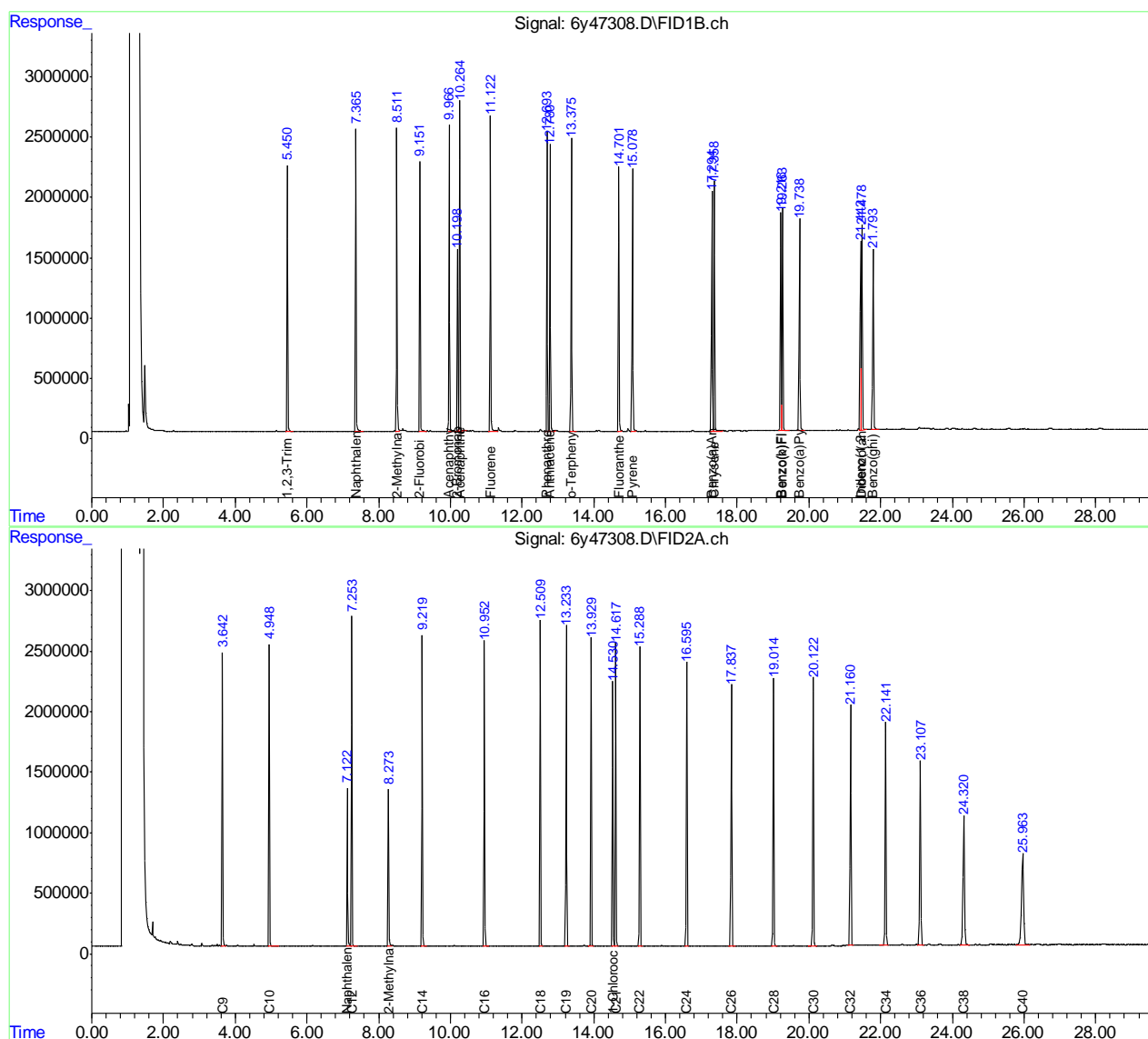
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47308.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 3:22 pm
Operator : thomas1
Sample : icc2180-50
Misc : OP39453,G6Y2180,15.0,,,2,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:47:30 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:46:46 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



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Hydrocarbon Range Total Response

Data File Name **6y47308.D**
 Date Acquired **5/16/2022 15:22**
 Sample Name **icc2180-50**

	<u>Name</u>	<u>Target Response</u>
1)	1,2,3-Trimethylbenzene	24643091
2)	Naphthalene	26541268
3)	C10-C12 Aromatics	51184360
4)	2-Methylnaphthalene	26740779
5)	Acenaphthylene	26856300
6)	Acenaphthene	29516697
7)	C12-C16 Aromatics	83113776
8)	Fluorene	28326484
9)	Phenanthrene	28512542
10)	Anthracene	28719125
11)	Fluoranthene	28818609
12)	Pyrene	29667715
13)	C16-C21 Aromatics	144044475
14)	Benzo(a)Anthracene	28549665
15)	Chrysene	29004880
16)	Benzo(b)Fluoranthene	27055514
17)	Benzo(k)Fluoranthene	26192968
18)	Benzo(a)Pyrene	25893406
19)	Indeno(1,2,3-cd)Pyrene	24302898
20)	Dibenzo(ah)Anthracene	24870258
21)	Benzo(ghi)Perylene	23488038
22)	C21-C36 Aromatics	209357626
23)	C11-C22 Aromatics (Unadj.)	463057145
27)	SIGNAL #2	0
28)	C9	25888807
29)	C10	26819630
30)	C12	28034755
31)	C9-C12 Aliphatics	80743192
32)	C14	29314111
33)	C16	30512407
34)	C12-C16 Aliphatics	59826517
35)	C18	31525826
36)	C19	32421557
37)	C20	32310263
38)	C21	32586155
39)	C16-C21 Aliphatics	96422244
40)	C22	32835703
41)	C24	33265691
42)	C26	33287590
43)	C28	33419081
44)	C30	33653598
45)	C32	33600508
46)	C34	32389254
47)	C36	31805629

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48)	C38	29902635.18
49)	C40	28980726.58
50)	C21-C40 Aliphatics	323140415
51)	C9-C18 Aliphatics	172095536.1
52)	C19-C36 Aliphatics	262999110.5

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
 Data File : 6y47309.D
 Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
 Acq On : 16 May 2022 3:56 pm
 Operator : thomas1
 Sample : ic2180-100
 Misc : OP39453,G6y2180,15.0,,,2,1
 ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: May 16 16:49:02 2022
 Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
 Quant Title : NJDEP Extractable Petroleum Hydrocarbons
 QLast Update : Mon May 16 16:47:42 2022
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1ul/col
 Signal #1 Phase : HP5 Signal #2 Phase: HP5
 Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc	Units

System Monitoring Compounds					
24) S	2-Fluorobiphenyl (S)	9.163	59516908	99.196	ug/L
25) S	2-Bromonaphthalene (S)	10.209	41089219	106.925	ug/L
26) S	o-Terphenyl (S)	13.386	67836554	92.422	ug/L
53) S	Naphthalene (S)	7.129	31437470	51.504	ug/L
54) S	2-Methylnaphthalene (S)	8.279	32564089	49.211	ug/L
55) S	1-Chlorooctadecane (S)	14.538	56127356	92.159	ug/L
Target Compounds					
1) T	1,2,3-Trimethylbenzene	5.463	63567215	103.735	ug/L
2) T	Naphthalene	7.378	67604825	102.426	ug/L
4) T	2-Methylnaphthalene	8.523	67581098	103.723	ug/L
5) T	Acenaphthylene	9.979	66387415	96.291	ug/L
6) T	Acenaphthene	10.279f	72337706	93.210	ug/L
8) T	Fluorene	11.136	68612817	97.612	ug/L
9) T	Phenanthrene	12.706	67328207	96.132	ug/L
10) T	Anthracene	12.795f	67607391	95.778	ug/L
11) T	Fluoranthene	14.716f	65019435	92.315	ug/L
12) T	Pyrene	15.097f	66580270	92.097	ug/L
14) T	Benzo(a)Anthracene	17.308	60863685	95.425	ug/L
15) T	Chrysene	17.377f	61286000	88.369	ug/L
16) T	Benzo(b)Fluoranthene	19.231	56246427	89.725	ug/L
17) T	Benzo(k)Fluoranthene	19.283f	54134921	83.262	ug/L
18) T	Benzo(a)Pyrene	19.757f	53890658	88.460	ug/L
19) T	Indeno(1,2,3-cd)Pyrene	21.456	56226314	102.679	ug/L
20) T	Dibenzo(ah)Anthracene	21.496f	49278417	80.544	ug/L
21) T	Benzo(ghi)Perylene	21.813f	50842475	91.715	ug/L
28) T	C9	3.658f	57100344	90.532	ug/L
29) T	C10	4.961	58984564	90.290	ug/L
30) T	C12	7.262	61362129	87.663	ug/L
32) T	C14	9.226	62964917	89.627	ug/L
33) T	C16	10.960	64179078	90.054	ug/L
35) T	C18	12.518	65182324	90.731	ug/L
36) T	C19	13.241	66255785	90.881	ug/L
37) T	C20	13.936	65466492	91.636	ug/L
38) T	C21	14.624	65328827	91.830	ug/L
40) T	C22	15.297	65084269	91.458	ug/L
41) T	C24	16.603	64352943	92.964	ug/L
42) T	C26	17.846	62600240	91.821	ug/L
43) T	C28	19.021	60880226	95.292	ug/L
44) T	C30	20.128	59139900	95.679	ug/L

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47309.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 3:56 pm
Operator : thomasl
Sample : ic2180-100
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:49:02 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:47:42 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units
45) T	C32	21.166	56867232	95.827 ug/L
46) T	C34	22.146	53088923	95.431 ug/L
47) T	C36	23.109	51468544	94.710 ug/L
48) T	C38	24.325	49429967	93.380 ug/L
49) T	C40	25.970	50610919	94.544 ug/L

(f)=RT Delta > 1/2 Window

(m)=manual int.

7.5.13

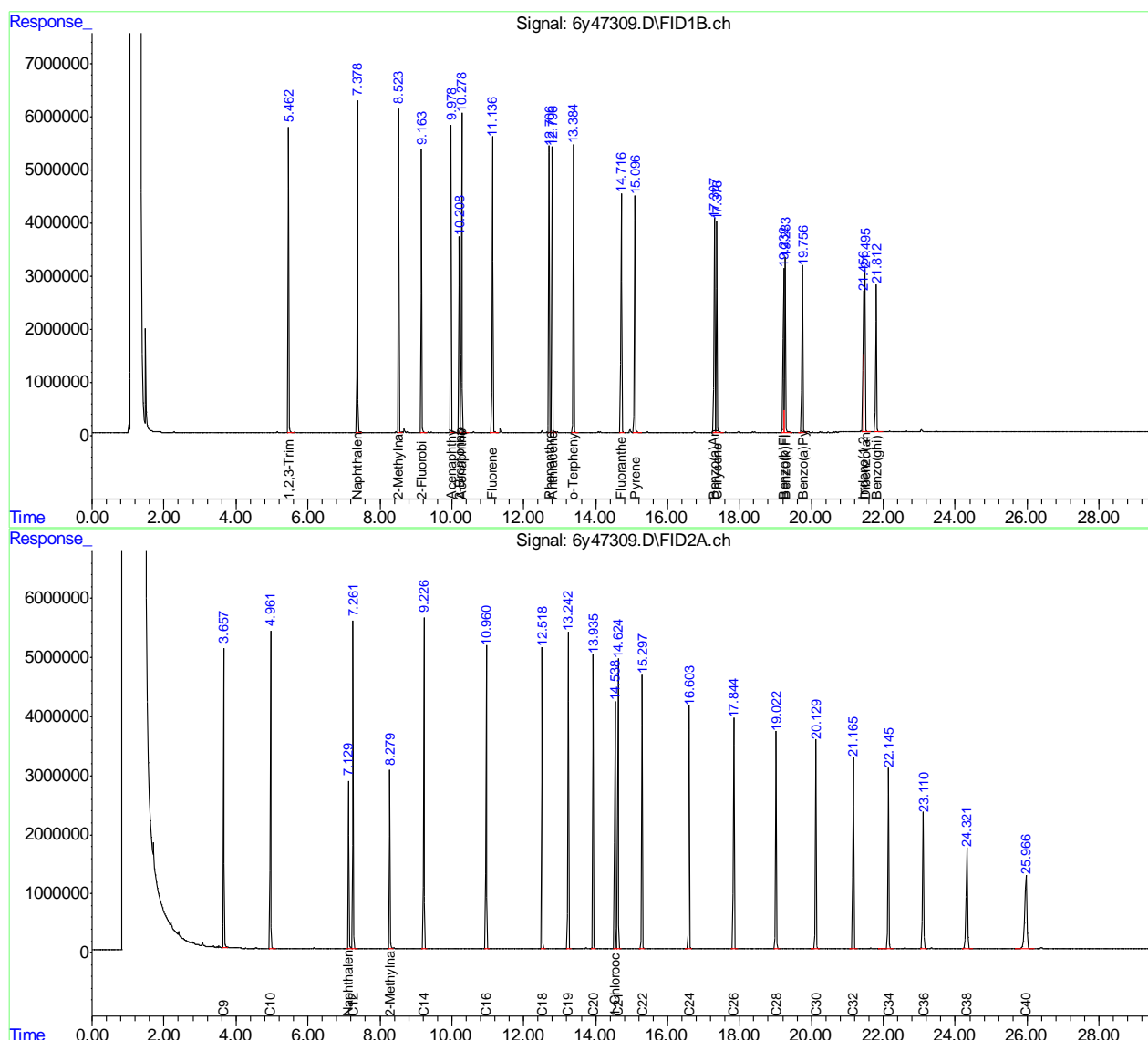
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47309.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 3:56 pm
Operator : thomas1
Sample : ic2180-100
Misc : OP39453,G6Y2180,15.0,,,2,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 16:49:02 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:47:42 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



C:\msdchem\1\DATA\6Y2180\6y47309.D

Hydrocarbon Range Total Response

Data File Name **6y47309.D**
 Date Acquired **5/16/2022 15:56**
 Sample Name **ic2180-100**

	<u>Name</u>	<u>Target Response</u>
1)	1,2,3-Trimethylbenzene	63567215
2)	Naphthalene	67604825
3)	C10-C12 Aromatics	131172040
4)	2-Methylnaphthalene	67581098
5)	Acenaphthylene	66387415
6)	Acenaphthene	72337706
7)	C12-C16 Aromatics	206306219
8)	Fluorene	68612817
9)	Phenanthrene	67328207
10)	Anthracene	67607391
11)	Fluoranthene	65019435
12)	Pyrene	66580270
13)	C16-C21 Aromatics	335148120
14)	Benzo(a)Anthracene	60863685
15)	Chrysene	61286000
16)	Benzo(b)Fluoranthene	56246427
17)	Benzo(k)Fluoranthene	54134921
18)	Benzo(a)Pyrene	53890658
19)	Indeno(1,2,3-cd)Pyrene	56226314
20)	Dibenzo(ah)Anthracene	49278417
21)	Benzo(ghi)Perylene	50842475
22)	C21-C36 Aromatics	442768897
23)	C11-C22 Aromatics (Unadj.)	1051828061)
27)	SIGNAL #2	0
28)	C9	57100344
29)	C10	58984564
30)	C12	61362129
31)	C9-C12 Aliphatics	177447037
32)	C14	62964917
33)	C16	64179078
34)	C12-C16 Aliphatics	127143995
35)	C18	65182324
36)	C19	66255785
37)	C20	65466492
38)	C21	65328827
39)	C16-C21 Aliphatics	195977643
40)	C22	65084269
41)	C24	64352943
42)	C26	62600240
43)	C28	60880226
44)	C30	59139900
45)	C32	56867232
46)	C34	53088923
47)	C36	51468544

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48)	C38	49429967.45
49)	C40	50610919.06
50)	C21-C40 Aliphatics	573523163
51)	C9-C18 Aliphatics	369773355.5
52)	C19-C36 Aliphatics	495248398.6

7.5.14

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
 Data File : 6y47310.D
 Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
 Acq On : 16 May 2022 4:31 pm
 Operator : thomas1
 Sample : icv2180-50
 Misc : OP39453,G6y2180,15.0,,,2,1
 ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: May 16 17:57:47 2022
 Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
 Quant Title : NJDEP Extractable Petroleum Hydrocarbons
 QLast Update : Mon May 16 16:51:21 2022
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1ul/col
 Signal #1 Phase : HP5 Signal #2 Phase: HP5
 Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units

System Monitoring Compounds				
53) S	Naphthalene (S)	7.127	32807158	55.681 ug/L
54) S	2-Methylnaphthalene (S)	8.278	33416272	53.541 ug/L
Target Compounds				
1) T	1,2,3-Trimethylbenzene	5.458	24162549	44.234 ug/L
2) T	Naphthalene	7.373	26056715	45.177 ug/L
4) T	2-Methylnaphthalene	8.517	26839552	45.666 ug/L
5) T	Acenaphthylene	9.972	24399132	41.772 ug/L
6) T	Acenaphthene	10.268	26890753	39.314 ug/L
8) T	Fluorene	11.127	27125007	44.635 ug/L
9) T	Phenanthrene	12.697	27390852	45.529 ug/L
10) T	Anthracene	12.784	27381346	43.707 ug/L
11) T	Fluoranthene	14.704	27511226	44.373 ug/L
12) T	Pyrene	15.083	27238482	42.784 ug/L
14) T	Benzo(a)Anthracene	17.298	25660238	44.545 ug/L
15) T	Chrysene	17.360	26290623	42.049 ug/L
16) T	Benzo(b)Fluoranthene	19.218	24471429	45.107 ug/L
17) T	Benzo(k)Fluoranthene	19.264	24728545	44.155 ug/L
18) T	Benzo(a)Pyrene	19.740	23693802	44.355 ug/L
19) T	Indeno(1,2,3-cd)Pyrene	21.439	22100026	47.536 ug/L
20) T	Dibenzo(ah)Anthracene	21.478	22381735	40.447 ug/L
21) T	Benzo(ghi)Perylene	21.793	22216775	44.848 ug/L
28) T	C9	3.660f	29619142	51.527 ug/L
29) T	C10	4.956	30284603	50.126 ug/L
30) T	C12	7.256	30868545	49.201 ug/L
32) T	C14	9.220	31004911	49.109 ug/L
33) T	C16	10.952	29679427	46.242 ug/L
35) T	C18	12.509	29112035	44.816 ug/L
37) T	C20	13.928	28118490	43.169 ug/L
38) T	C21	14.614	27613825	42.418 ug/L
40) T	C22	15.288	27231493	41.697 ug/L
41) T	C24	16.593	26331938	40.626 ug/L
42) T	C26	17.836	25340851	39.984 ug/L
43) T	C28	19.009	24742369	39.934 ug/L
44) T	C30	20.119	24129524	39.441 ug/L
45) T	C32	21.158	23363961	39.174 ug/L
46) T	C34	22.138	23188131	41.199 ug/L
47) T	C36	23.104	22632701	41.512 ug/L
48) T	C38	24.313	22668685	43.434 ug/L
49) T	C40	25.955	23046103	44.449 ug/L

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47310.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 4:31 pm
Operator : thomasl
Sample : icv2180-50
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 17:57:47 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:51:21 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

Compound	R.T.	Response	Conc Units
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(f)=RT Delta > 1/2 Window

(m)=manual int.

7.5.15

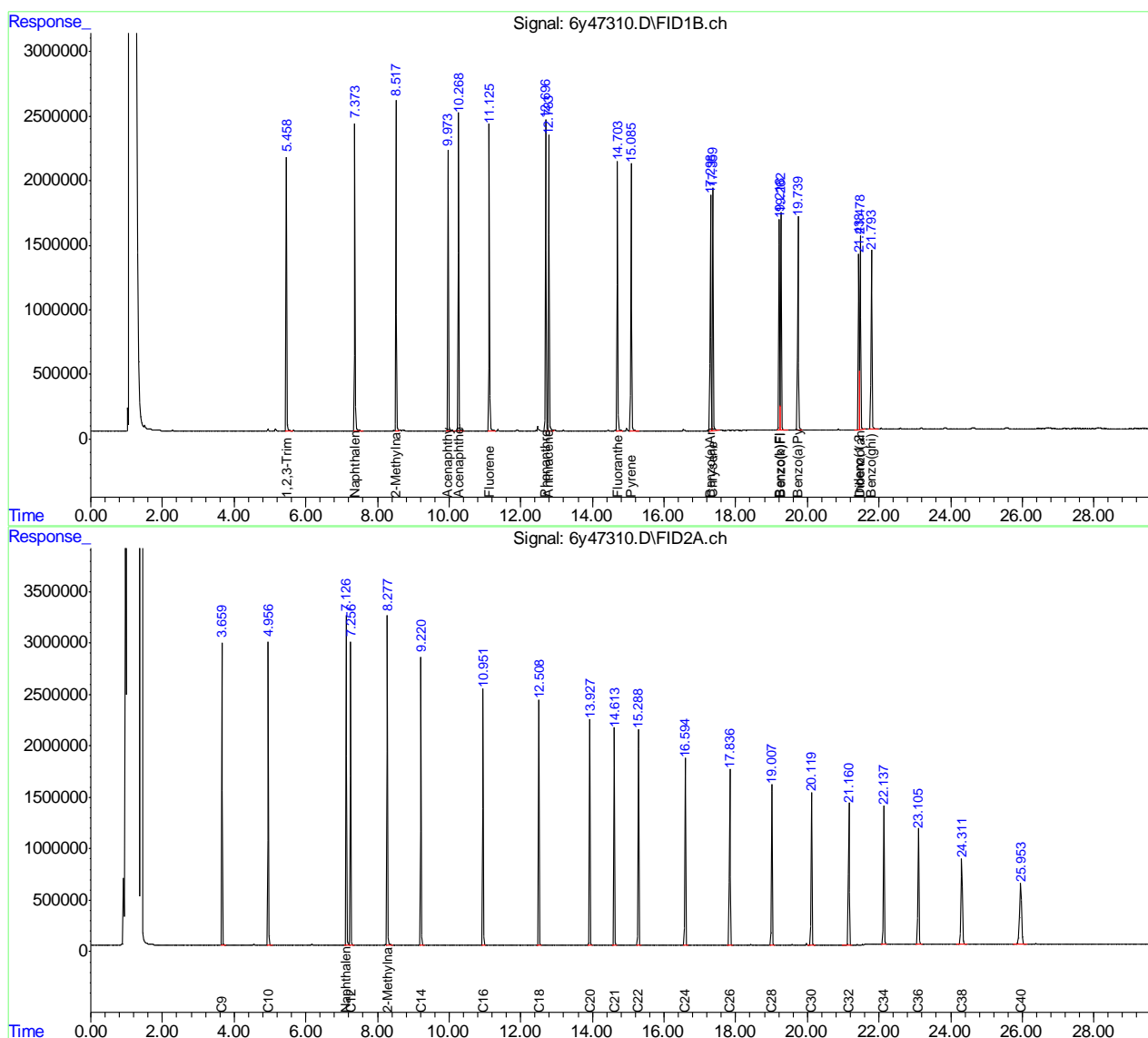
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47310.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 4:31 pm
Operator : thomas1
Sample : icv2180-50
Misc : OP39453,G6Y2180,15.0,,,2,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 17:57:47 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:51:21 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



C:\msdchem\1\DATA\6Y2180\6y47310.D

Hydrocarbon Range Total Response

Data File Name **6y47310.D**
 Date Acquired **5/16/2022 16:31**
 Sample Name **icv2180-50**

	<u>Name</u>	<u>Target Response</u>	<u>AvgRF</u>	<u>CCRF</u>	<u>%D</u>
1)	1,2,3-Trimethylbenzene	24162549			
2)	Naphthalene	26056715			
3)	C10-C12 Aromatics	50219264	5.62E+05	502192.6377	10.6
4)	2-Methylnaphthalene	26839552			
5)	Acenaphthylene	24399132			
6)	Acenaphthene	26890753			
7)	C12-C16 Aromatics	78129436	618615.8648	520862.9096	15.8
8)	Fluorene	27125007			
9)	Phenanthrene	27390852			
10)	Anthracene	27381346			
11)	Fluoranthene	27511226			
12)	Pyrene	27238482			
13)	C16-C21 Aromatics	136646912	618489.1671	546587.6486	11.6
14)	Benzo(a)Anthracene	25660238			
15)	Chrysene	26290623			
16)	Benzo(b)Fluoranthene	24471429			
17)	Benzo(k)Fluoranthene	24728545			
18)	Benzo(a)Pyrene	23693802			
19)	Indeno(1,2,3-cd)Pyrene	22100026			
20)	Dibenzo(ah)Anthracene	22381735			
21)	Benzo(ghi)Perylene	22216775			
22)	C21-C36 Aromatics	191543173	543961.1802	478857.9315	12.0
27)	SIGNAL #2				
28)	C9	29619142			
29)	C10	30284603			
30)	C12	30868545			
31)	C9-C12 Aliphatics	90772290	602127.0886	605148.5994	-0.5
32)	C14	31004911			
33)	C16	29679427			
34)	C12-C16 Aliphatics	60684338	636585.2886	606843.3812	4.7
35)	C18	29112035			
37)	C20	28118490			
38)	C21	27613825			
39)	C16-C21 Aliphatics	84844350	650645.7171	565628.9984	13.1
40)	C22	27231493			
41)	C24	26331938			
42)	C26	25340851			
43)	C28	24742369			
44)	C30	24129524			
45)	C32	23363961			
46)	C34	23188131			
47)	C36	22632701			
48)	C38	22668685			
49)	C40	23046103.22			
50)	C21-C40 Aliphatics	242675756	591124.0611	485351.512	17.9
	For MAEPH				
23)	C11-C22 Aromatics (Unadj.)	432376236	580985.49	508678	12.4
36)	C19	0			
51)	C9-C18 Aliphatics	180568662.8	621523.7379	601895.5428	3.2
52)	C19-C36 Aliphatics	178527366.1	627791.1261	510078.1887	18.8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47311.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 5:06 pm
Operator : thomasl
Sample : icv2180-50
Misc : OP39453,G6y2180,15.0,,,2,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 17:50:39 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:51:21 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
Target Compounds			
36) T C19	13.234	31539452	47.832 ug/L

(f)=RT Delta > 1/2 Window

(m)=manual int.

7.5.17

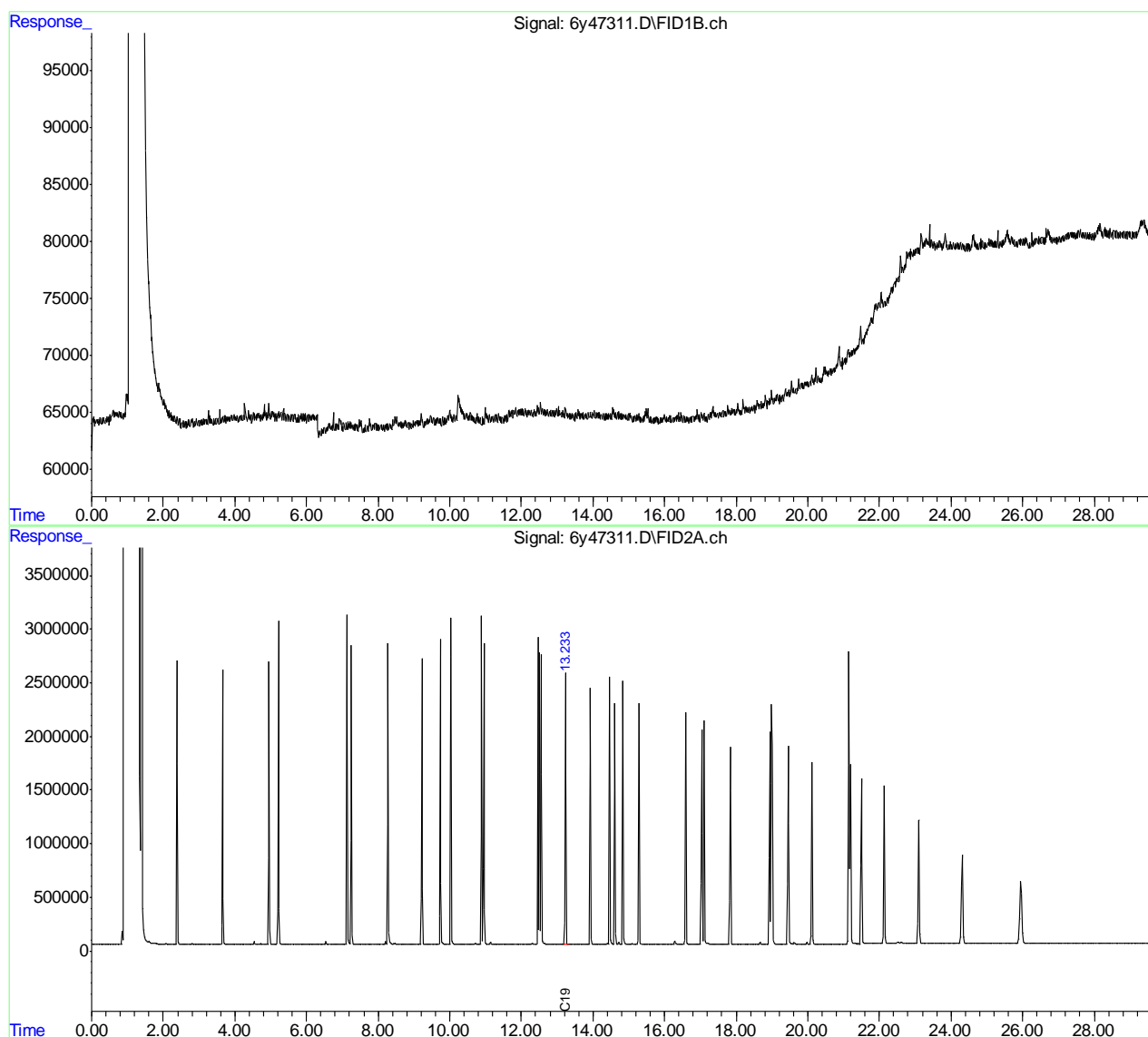
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\6Y2180\
Data File : 6y47311.D
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 16 May 2022 5:06 pm
Operator : thomas1
Sample : icv2180-50
Misc : OP39453,G6Y2180,15.0,,,2,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 17:50:39 2022
Quant Method : C:\MSDCHEM\1\METHODS\EPH6Y2180.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon May 16 16:51:21 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



Data Path : C:\msdchem\1\data\
 Data File : 6y48481.d
 Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
 Acq On : 11 Sep 2022 11:44 am
 Operator : thomas1
 Sample : cc2180-20
 Misc : OP41613,G6y2226,15.0,,,2,1
 ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 13 19:25:35 2022
 Quant Method : C:\msdchem\1\methods\eph6y2180.m
 Quant Title : NJDEP Extractable Petroleum Hydrocarbons
 QLast Update : Wed Aug 03 11:05:09 2022
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1ul/col
 Signal #1 Phase : HP5 Signal #2 Phase: HP5
 Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
24) S 2-Fluorobiphenyl (S)	9.013f	10013357	19.258 ug/L
25) S 2-Bromonaphthalene (S)	10.056f	6115652	17.569 ug/L
26) S o-Terphenyl (S)	13.226f	12690265	19.934 ug/L
53) S Naphthalene (S)	7.006f	5310026	9.012 ug/L m
54) S 2-Methylnaphthalene (S)	8.157	5866398	9.399 ug/L m
55) S 1-Chlorooctadecane (S)	14.406	9537729	17.057 ug/L
Target Compounds			
1) T 1,2,3-Trimethylbenzene	5.312f	10185635	18.647 ug/L
2) T Naphthalene	7.226f	11024840	19.115 ug/L
4) T 2-Methylnaphthalene	8.370f	11095211	18.878 ug/L
5) T Acenaphthylene	9.822f	11492740	19.676 ug/L
6) T Acenaphthene	10.116f	13465637	19.686 ug/L
8) T Fluorene	10.977f	12039451	19.811 ug/L
9) T Phenanthrene	12.545f	12160475	20.213 ug/L
10) T Anthracene	12.632f	12382389	19.765 ug/L
11) T Fluoranthene	14.545f	12586439	20.301 ug/L
12) T Pyrene	14.917f	13037771	20.479 ug/L
14) T Benzo(a)Anthracene	17.118f	11451149	19.879 ug/L
15) T Chrysene	17.179	12379252	19.799 ug/L
16) T Benzo(b)Fluoranthene	19.014f	10630838	19.595 ug/L
17) T Benzo(k)Fluoranthene	19.058	11030998	19.697 ug/L
18) T Benzo(a)Pyrene	19.533	10359648	19.393 ug/L
19) T Indeno(1,2,3-cd)Pyrene	21.222	8908847	19.162 ug/L
20) T Dibenzo(ah)Anthracene	21.257	10451305	18.887 ug/L
21) T Benzo(ghi)Perylene	21.566	9297969	18.769 ug/L
28) T C9	3.525f	10914553	18.988 ug/L
29) T C10	4.828f	11223274	18.577 ug/L
30) T C12	7.138	11532723	18.382 ug/L
32) T C14	9.103	11459607	18.151 ug/L
33) T C16	10.834f	11405304	17.770 ug/L
35) T C18	12.392f	11428857	17.594 ug/L
36) T C19	13.114f	11565819	17.541 ug/L
37) T C20	13.807f	11362908	17.445 ug/L
38) T C21	14.486f	11384818	17.489 ug/L
40) T C22	15.160	11327011	17.344 ug/L
41) T C24	16.463	11249579	17.356 ug/L
42) T C26	17.702f	11145626	17.586 ug/L
43) T C28	18.870	11059005	17.849 ug/L
44) T C30	19.970f	11094936	18.135 ug/L
45) T C32	21.002f	11028611	18.492 ug/L
46) T C34	21.978f	10671151	18.960 ug/L
47) T C36	22.914f	10707516	19.639 ug/L
48) T C38	24.053f	10164820	19.476 ug/L
49) T C40	25.594f	9792163	18.886 ug/L

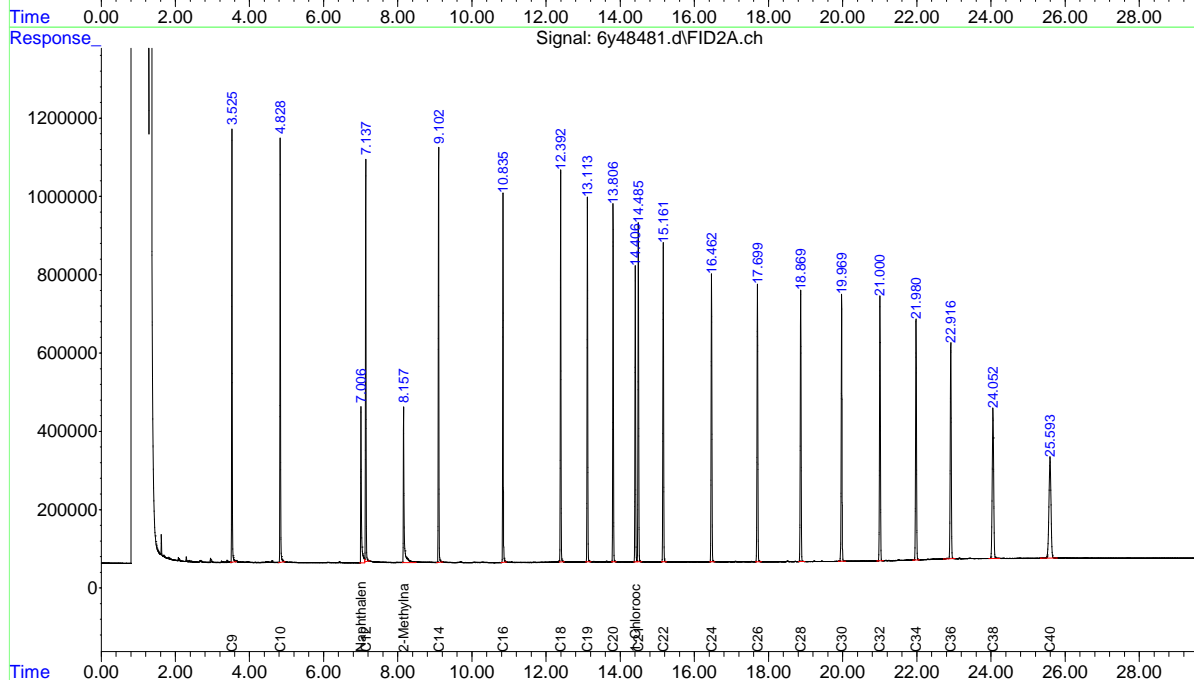
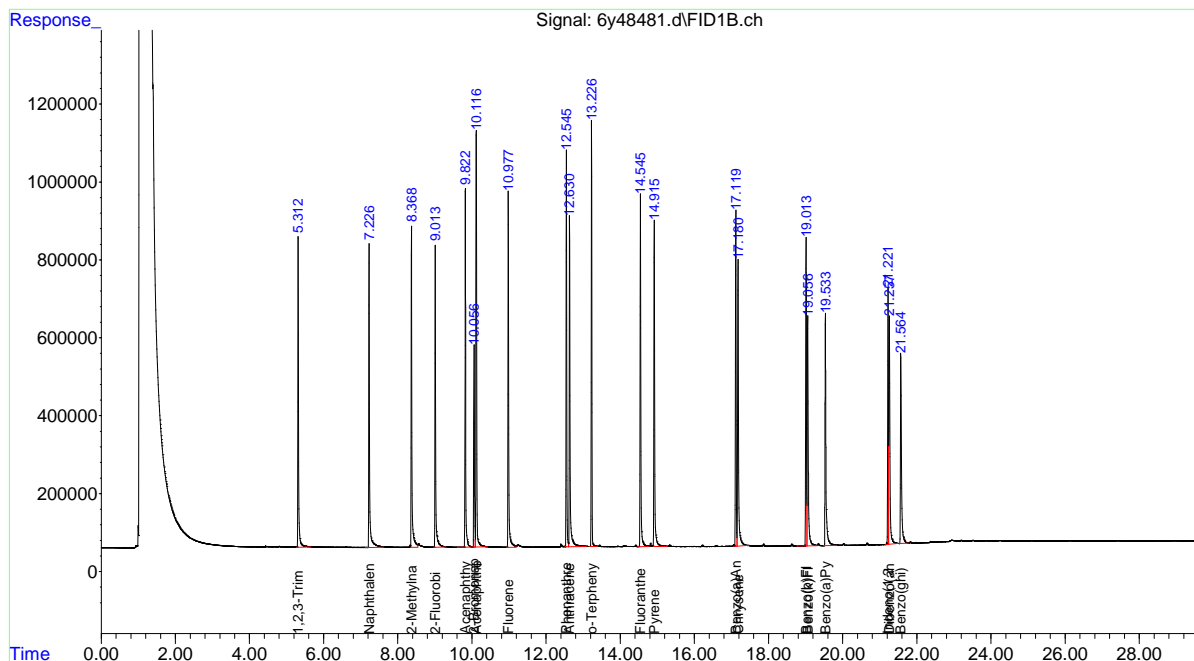
(f)=RT Delta > 1/2 Window

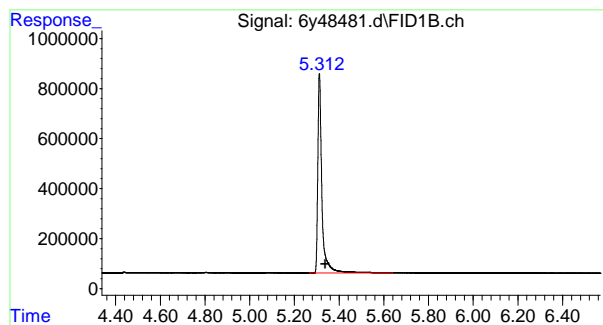
(m)=manual int.

Data Path : C:\msdchem\1\data\
Data File : 6y48481.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 11:44 am
Operator : thomas1
Sample : cc2180-20
Misc : OP41613,G6y2226,15.0,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 19:25:35 2022
Quant Method : C:\msdchem\1\methods\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Aug 03 11:05:09 2022
Response via : Initial Calibration
Integrator: ChemStation

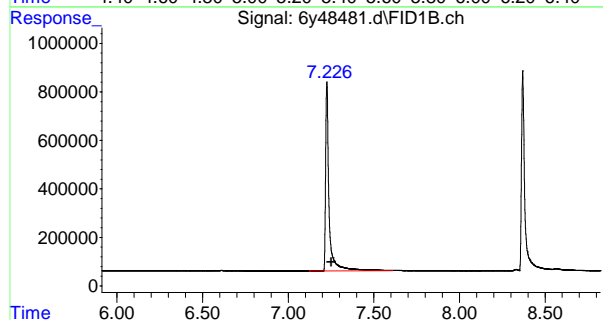
Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um





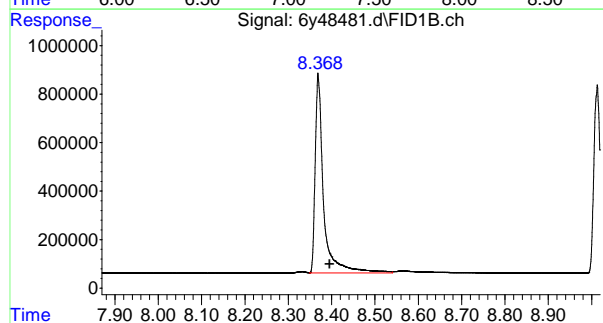
#1 1,2,3-Trimethylbenzene

R.T.: 5.312 min
Delta R.T.: -0.027 min
Response: 10185635
Conc: 18.65 ug/l



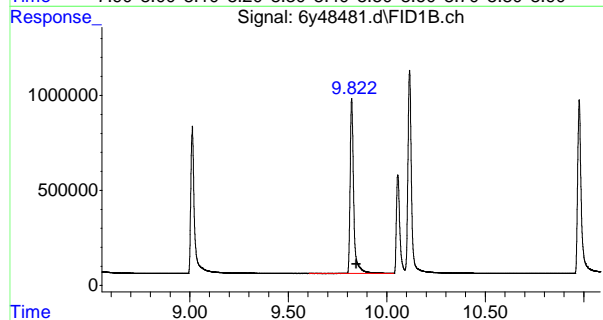
#2 Naphthalene

R.T.: 7.226 min
Delta R.T.: -0.026 min
Response: 11024840
Conc: 19.11 ug/L



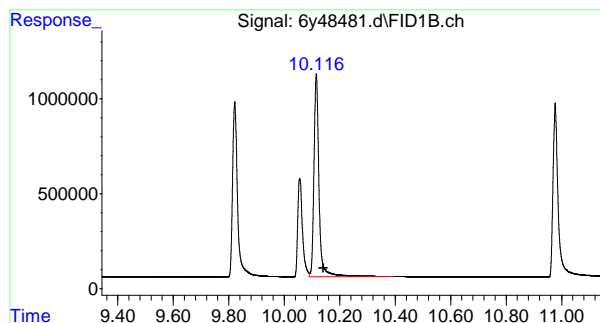
#4 2-Methylnaphthalene

R.T.: 8.370 min
Delta R.T.: -0.025 min
Response: 11095211
Conc: 18.88 ug/L



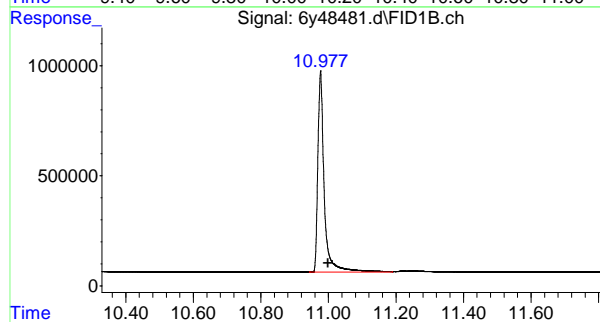
#5 Acenaphthylene

R.T.: 9.822 min
Delta R.T.: -0.023 min
Response: 11492740
Conc: 19.68 ug/l



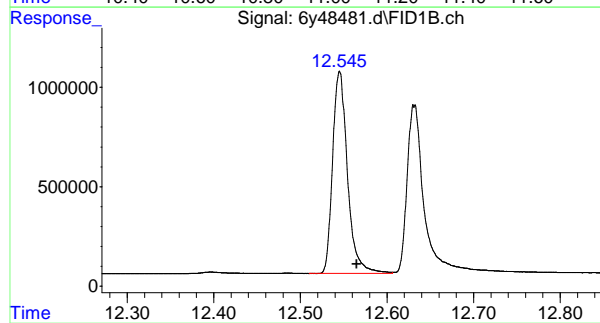
#6 Acenaphthene

R.T.: 10.116 min
Delta R.T.: -0.024 min
Response: 13465637
Conc: 19.69 ug/l



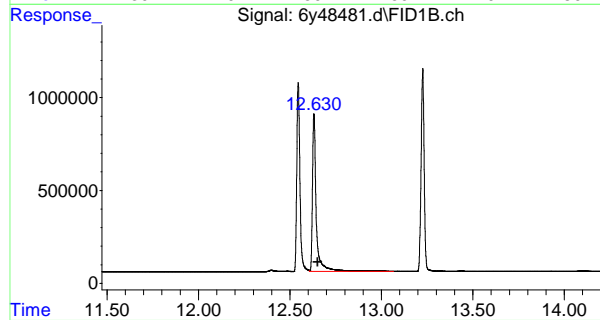
#8 Fluorene

R.T.: 10.977 min
Delta R.T.: -0.021 min
Response: 12039451
Conc: 19.81 ug/l



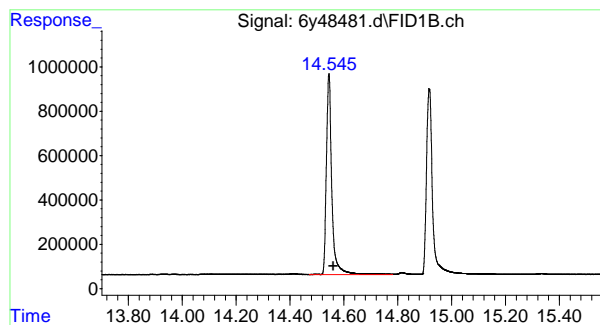
#9 Phenanthrene

R.T.: 12.545 min
Delta R.T.: -0.020 min
Response: 12160475
Conc: 20.21 ug/l



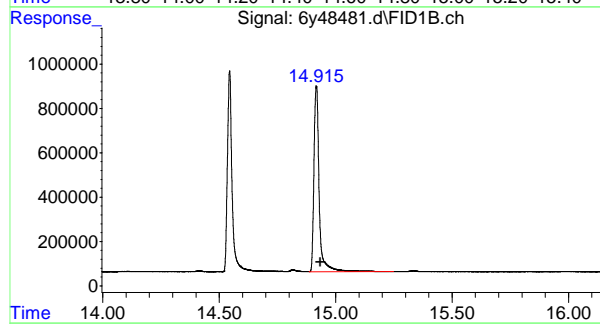
#10 Anthracene

R.T.: 12.632 min
Delta R.T.: -0.019 min
Response: 12382389
Conc: 19.77 ug/l



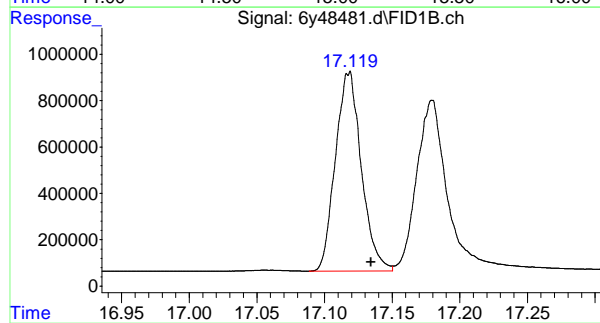
#11 Fluoranthene

R.T.: 14.545 min
Delta R.T.: -0.016 min
Response: 12586439
Conc: 20.30 ug/l



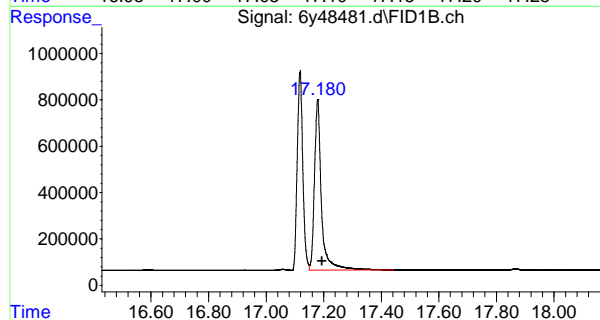
#12 Pyrene

R.T.: 14.917 min
Delta R.T.: -0.016 min
Response: 13037771
Conc: 20.48 ug/l



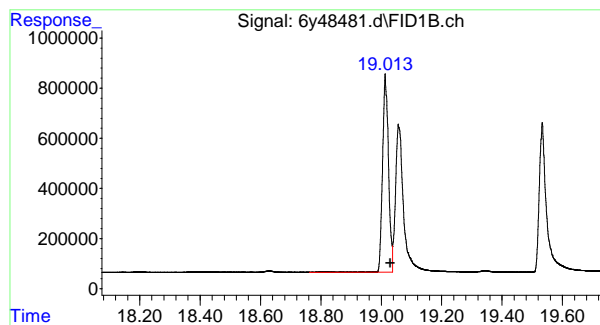
#14 Benzo(a)Anthracene

R.T.: 17.118 min
Delta R.T.: -0.016 min
Response: 11451149
Conc: 19.88 ug/l



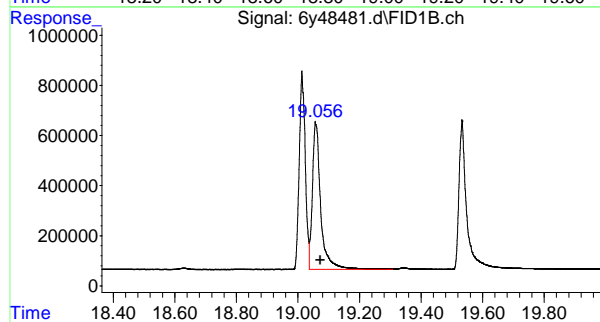
#15 Chrysene

R.T.: 17.179 min
Delta R.T.: -0.014 min
Response: 12379252
Conc: 19.80 ug/l



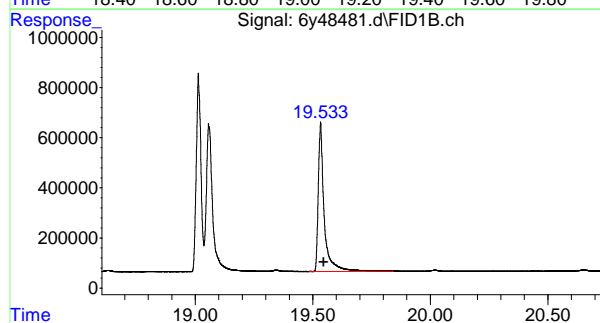
#16 Benzo(b)Fluoranthene

R.T.: 19.014 min
Delta R.T.: -0.016 min
Response: 10630838
Conc: 19.60 ug/l



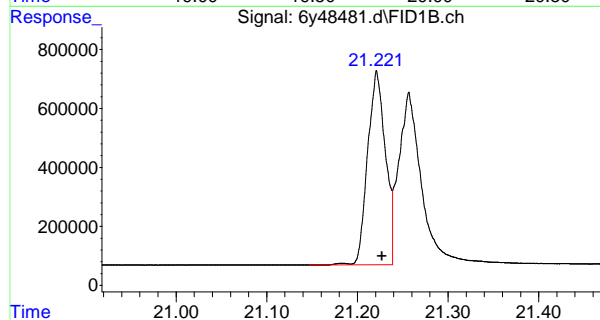
#17 Benzo(k)Fluoranthene

R.T.: 19.058 min
Delta R.T.: -0.014 min
Response: 11030998
Conc: 19.70 ug/l



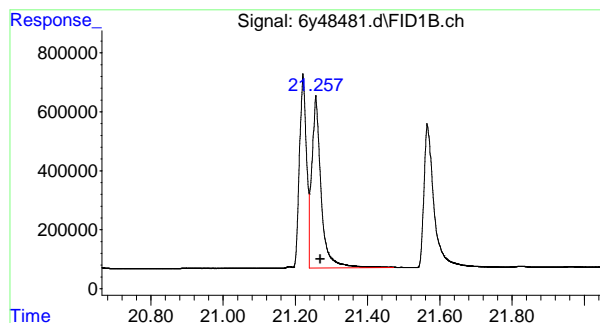
#18 Benzo(a)Pyrene

R.T.: 19.533 min
Delta R.T.: -0.012 min
Response: 10359648
Conc: 19.39 ug/l



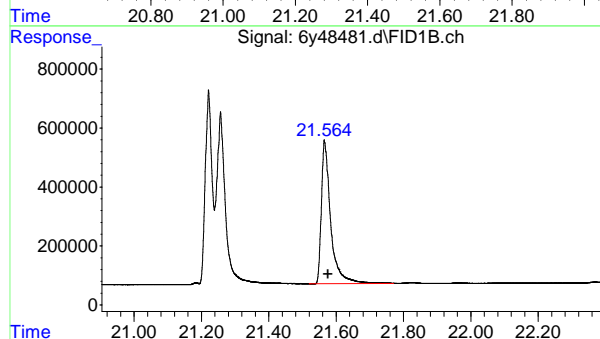
#19 Indeno(1,2,3-cd)Pyrene

R.T.: 21.222 min
Delta R.T.: -0.005 min
Response: 8908847
Conc: 19.16 ug/l



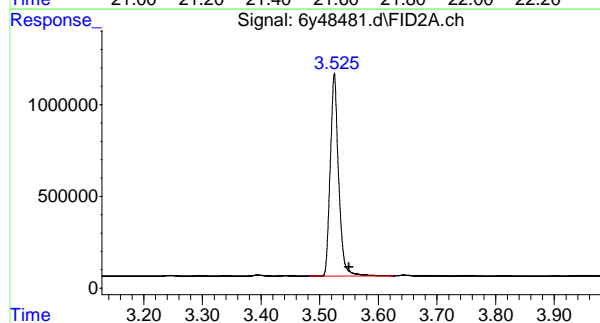
#20 Dibenzo(ah)Anthracene

R.T.: 21.257 min
Delta R.T.: -0.012 min
Response: 10451305
Conc: 18.89 ug/l



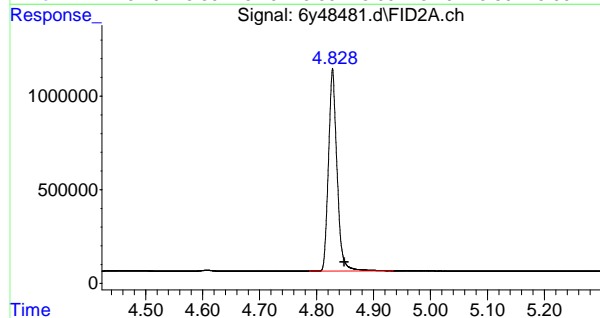
#21 Benzo(ghi)Perylene

R.T.: 21.566 min
Delta R.T.: -0.010 min
Response: 9297969
Conc: 18.77 ug/l



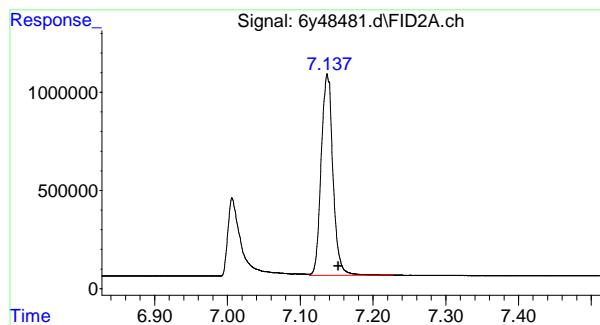
#28 C9

R.T.: 3.525 min
Delta R.T.: -0.025 min
Response: 10914553
Conc: 18.99 ug/L



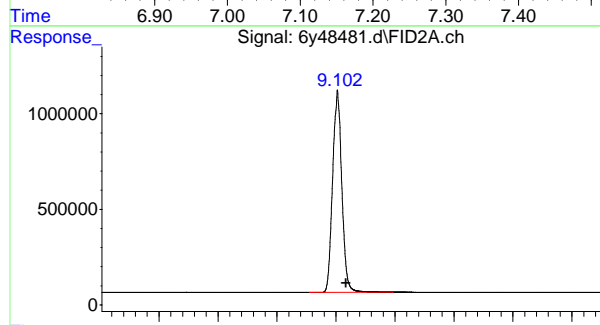
#29 C10

R.T.: 4.828 min
Delta R.T.: -0.020 min
Response: 11223274
Conc: 18.58 ug/L



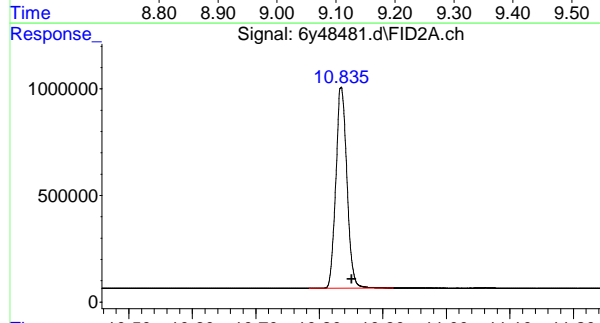
#30 C12

R.T.: 7.138 min
Delta R.T.: -0.015 min
Response: 11532723
Conc: 18.38 ug/L



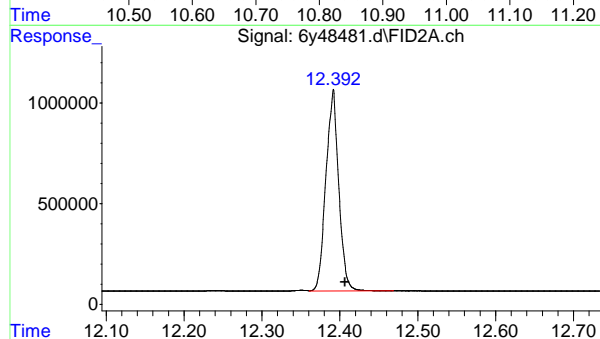
#32 C14

R.T.: 9.103 min
Delta R.T.: -0.014 min
Response: 11459607
Conc: 18.15 ug/L



#33 C16

R.T.: 10.834 min
Delta R.T.: -0.016 min
Response: 11405304
Conc: 17.77 ug/L

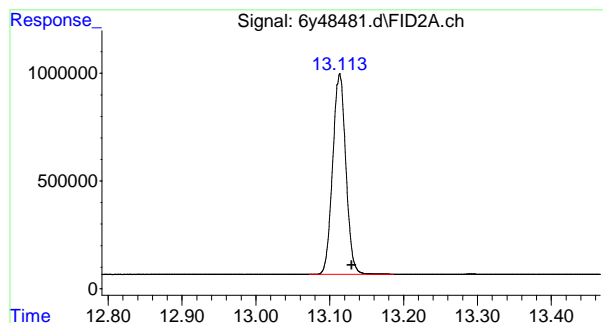


#35 C18

R.T.: 12.392 min
Delta R.T.: -0.015 min
Response: 11428857
Conc: 17.59 ug/L

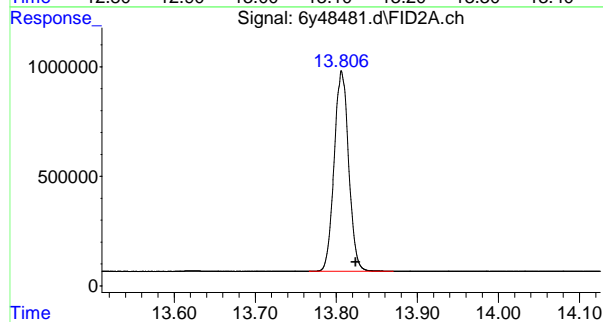
7.5.18

7



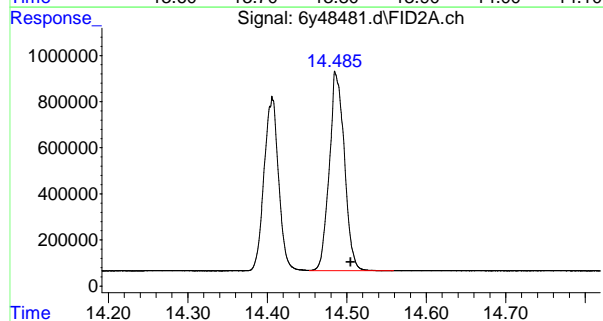
#36 C19

R.T.: 13.114 min
Delta R.T.: -0.016 min
Response: 11565819
Conc: 17.54 ug/L



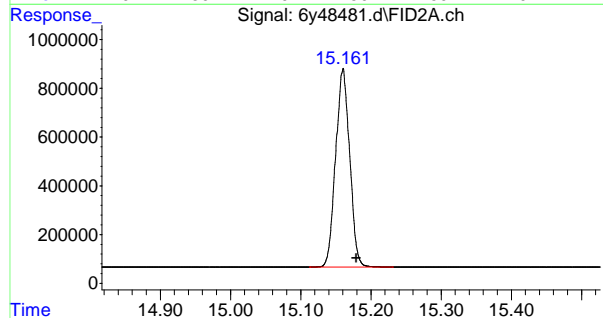
#37 C20

R.T.: 13.807 min
Delta R.T.: -0.017 min
Response: 11362908
Conc: 17.44 ug/L



#38 C21

R.T.: 14.486 min
Delta R.T.: -0.019 min
Response: 11384818
Conc: 17.49 ug/L

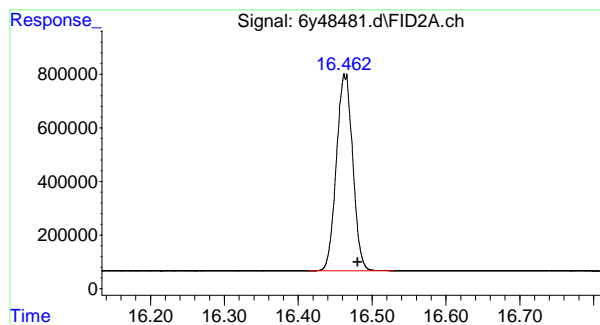


#40 C22

R.T.: 15.160 min
Delta R.T.: -0.019 min
Response: 11327011
Conc: 17.34 ug/L

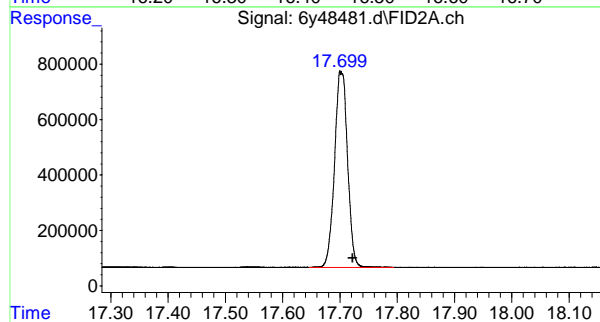
7.5.18

7



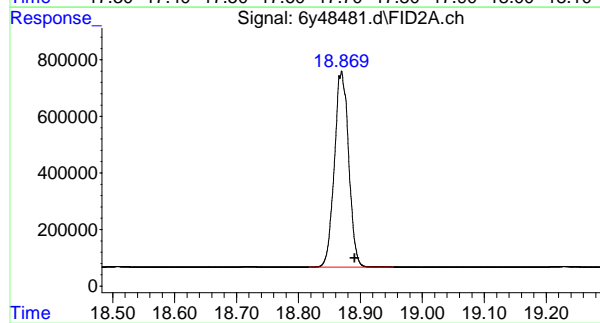
#41 C24

R.T.: 16.463 min
Delta R.T.: -0.017 min
Response: 11249579
Conc: 17.36 ug/L



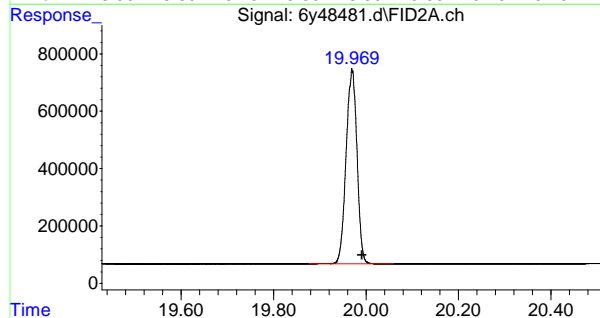
#42 C26

R.T.: 17.702 min
Delta R.T.: -0.020 min
Response: 11145626
Conc: 17.59 ug/L



#43 C28

R.T.: 18.870 min
Delta R.T.: -0.021 min
Response: 11059005
Conc: 17.85 ug/L

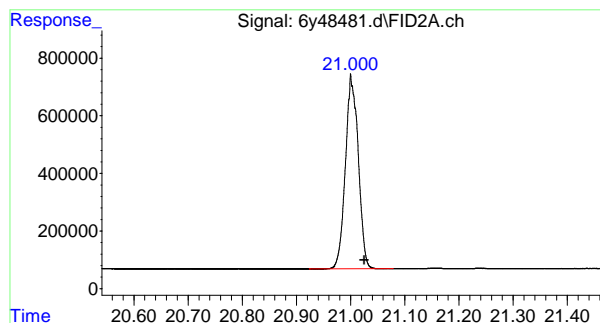


#44 C30

R.T.: 19.970 min
Delta R.T.: -0.021 min
Response: 11094936
Conc: 18.14 ug/L

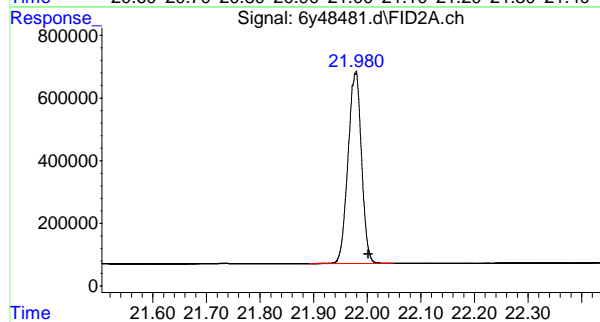
7.5.18

7



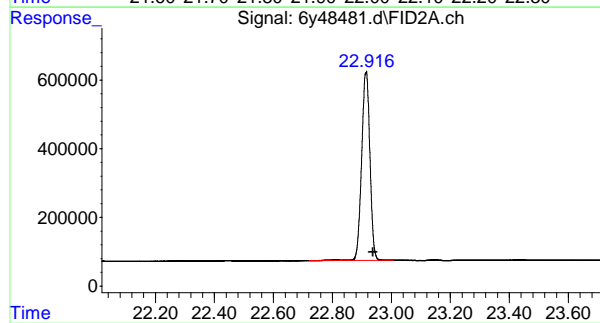
#45 C32

R.T.: 21.002 min
Delta R.T.: -0.023 min
Response: 11028611
Conc: 18.49 ug/L



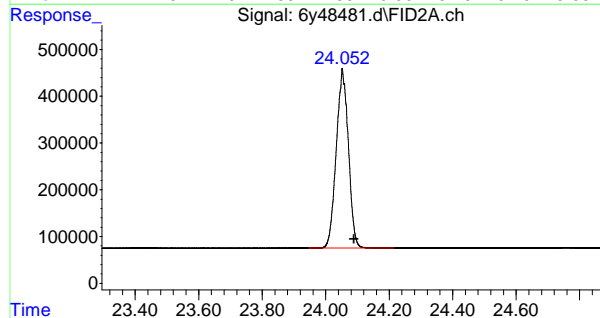
#46 C34

R.T.: 21.978 min
Delta R.T.: -0.024 min
Response: 10671151
Conc: 18.96 ug/L



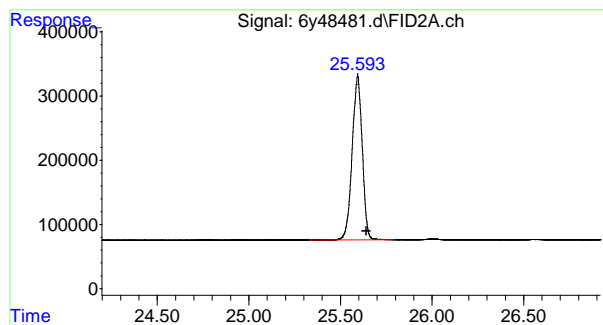
#47 C36

R.T.: 22.914 min
Delta R.T.: -0.023 min
Response: 10707516
Conc: 19.64 ug/L



#48 C38

R.T.: 24.053 min
Delta R.T.: -0.036 min
Response: 10164820
Conc: 19.48 ug/L



#49 C40

R.T.: 25.594 min
Delta R.T.: -0.047 min
Response: 9792163
Conc: 18.89 ug/L

7.5.18

7

Manual Integration Approval Summary

Sample Number: G6Y2226-CC2180

Method: NJDEP EPH

Lab FileID: 6Y48481.D

Analyst approved: 09/13/22 19:45 Gwendolyn Burns

Injection Time: 09/11/22 11:44

Supervisor approved: 09/13/22 19:50 Gwendolyn Burns

Parameter	CAS	Sig#	R.T. (min.)	Reason
Naphthalene	91-20-3	2	7.01	Poorly defined baseline
2-Methylnaphthalene	91-57-6	2	8.16	Poorly defined baseline

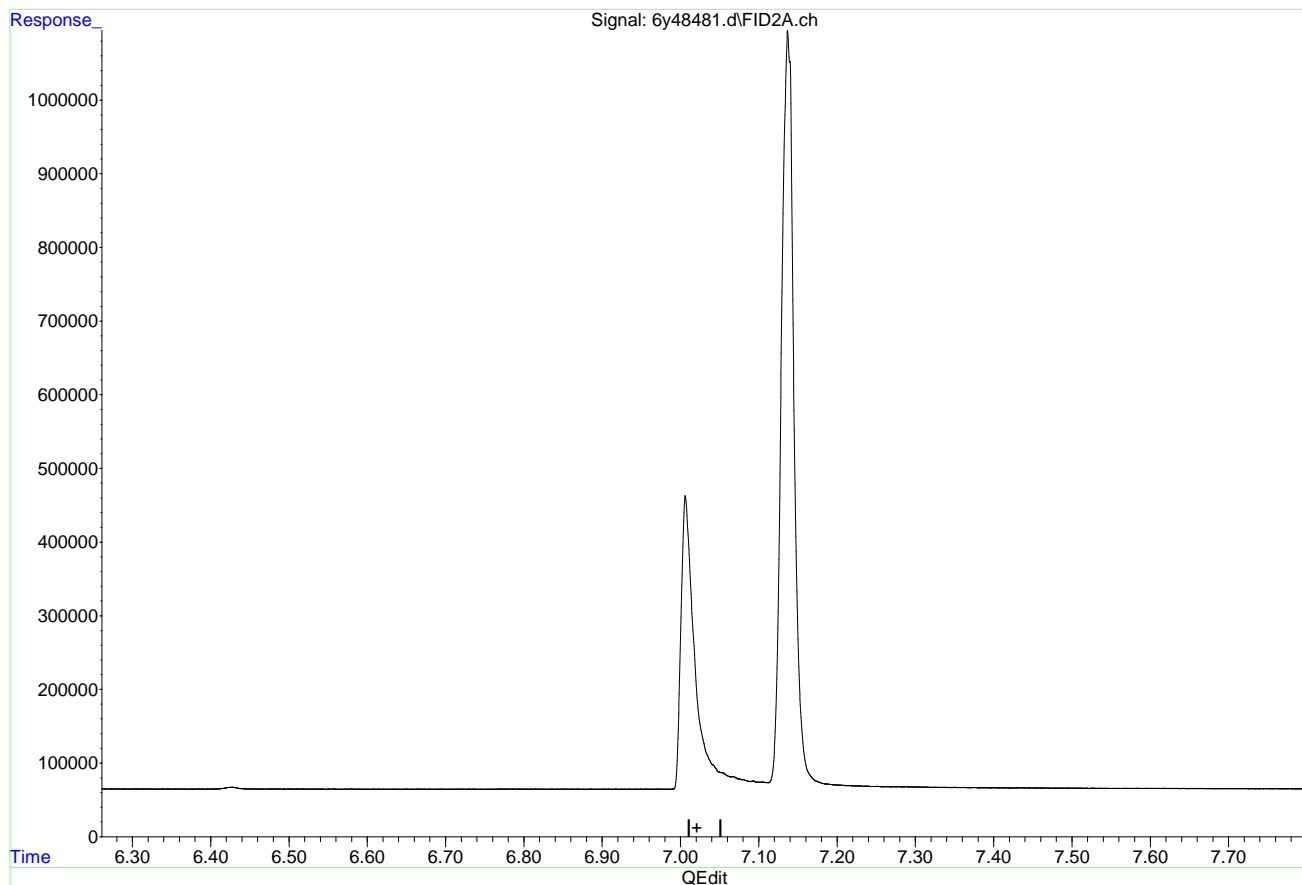
7.5.18.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\
Data File : 6y48481.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 11:44 am
Operator : thomas1
Sample : cc2180-20
Misc : OP41613,G6y2226,15.0,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 19:19:51 2022
Quant Method : C:\msdchem\1\methods\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Aug 03 11:05:09 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



(53) Naphthalene (S) (S)

7.021min 0.000 ug/L

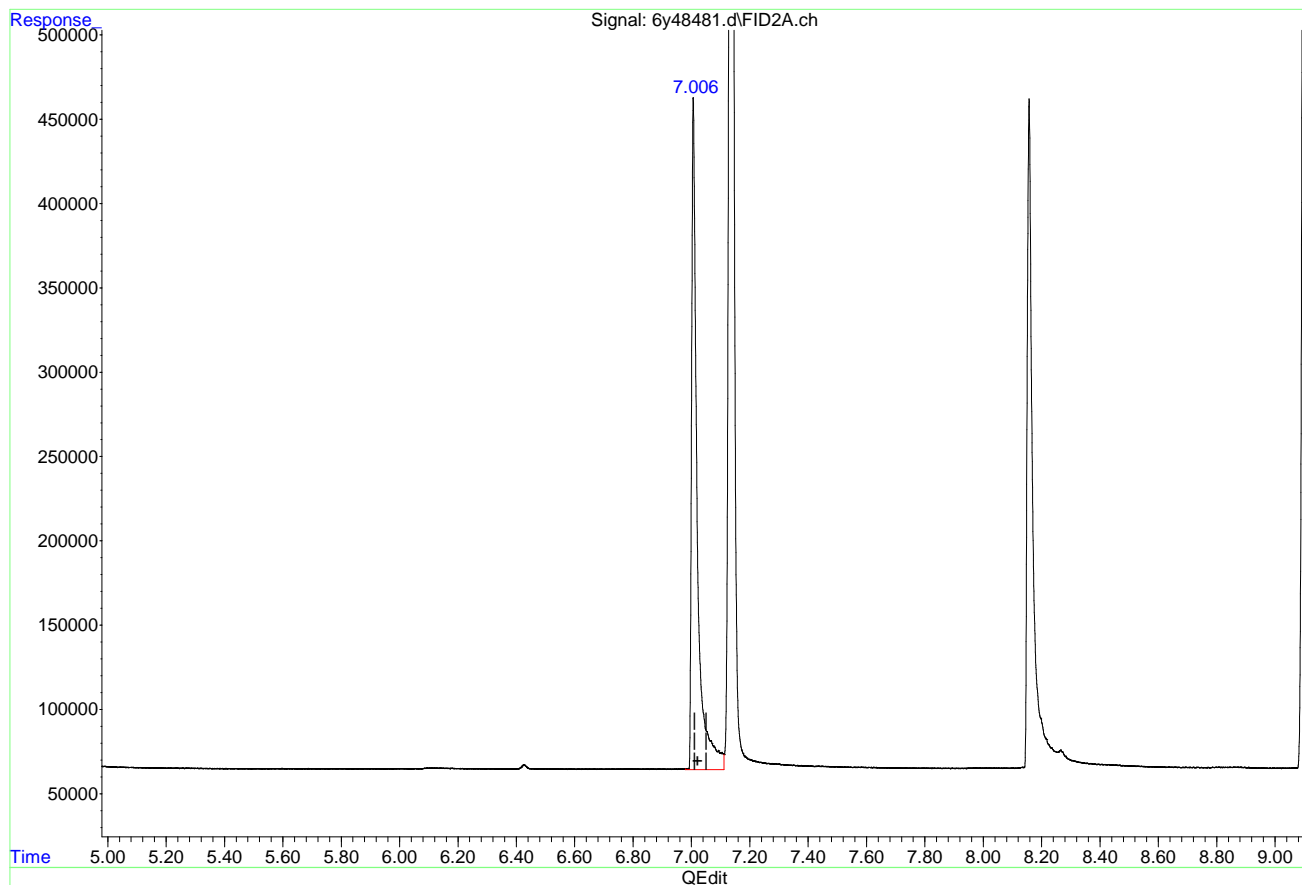
response 0

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\
Data File : 6y48481.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 11:44 am
Operator : thomas1
Sample : cc2180-20
Misc : OP41613,G6y2226,15.0,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 19:19:51 2022
Quant Method : C:\msdchem\1\methods\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Aug 03 11:05:09 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



(53) Naphthalene (S) (S)

7.006min 9.012 ug/L m

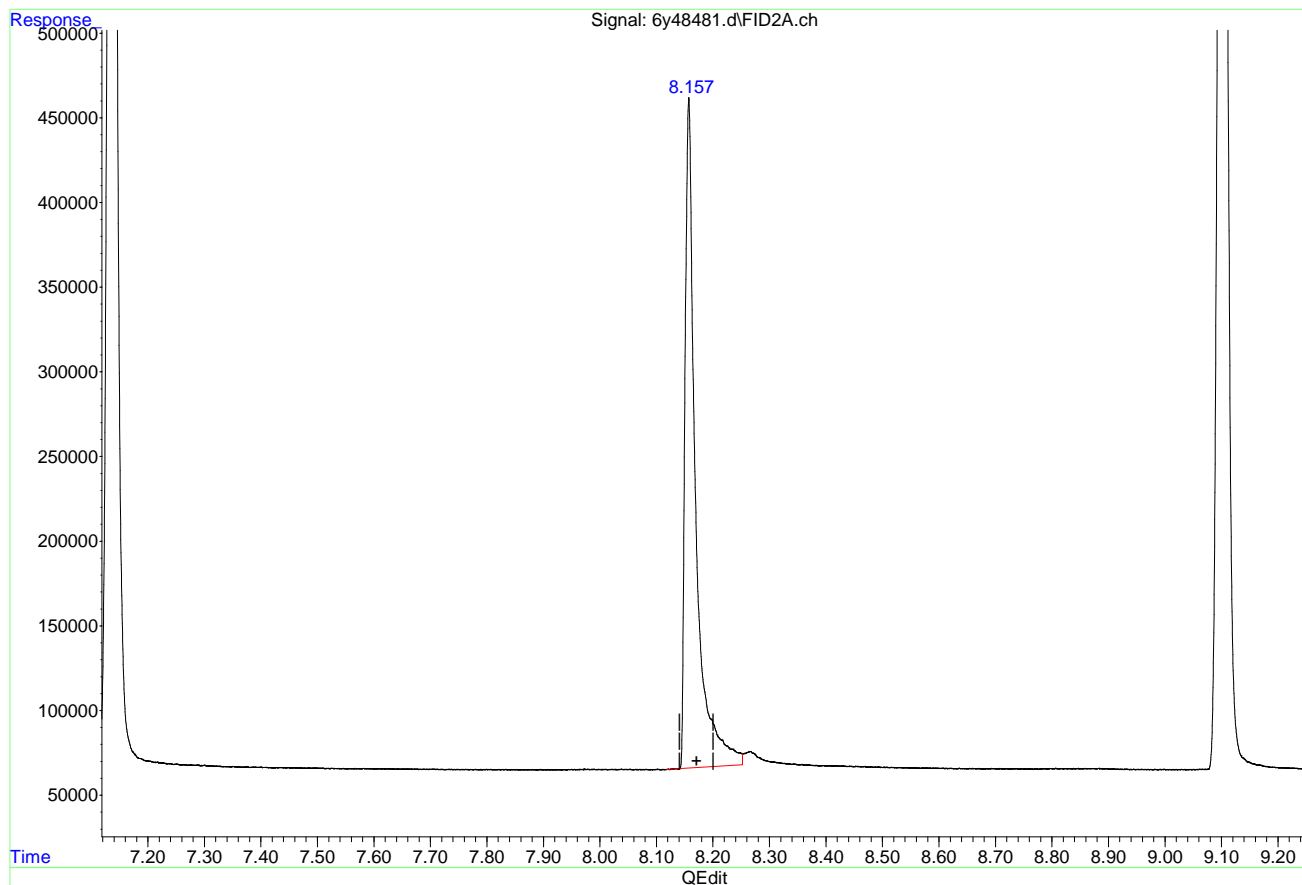
response 5310026

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\
Data File : 6y48481.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 11:44 am
Operator : thomas1
Sample : cc2180-20
Misc : OP41613,G6y2226,15.0,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 19:19:51 2022
Quant Method : C:\msdchem\1\methods\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Aug 03 11:05:09 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5 Signal #2 Phase: HP5
Signal #1 Info : 30mx.25mm.x.25um Signal #2 Info : 30mx.32mm.x25um



(54) 2-Methylnaphthalene (S) (S)

8.158min 8.335 ug/L

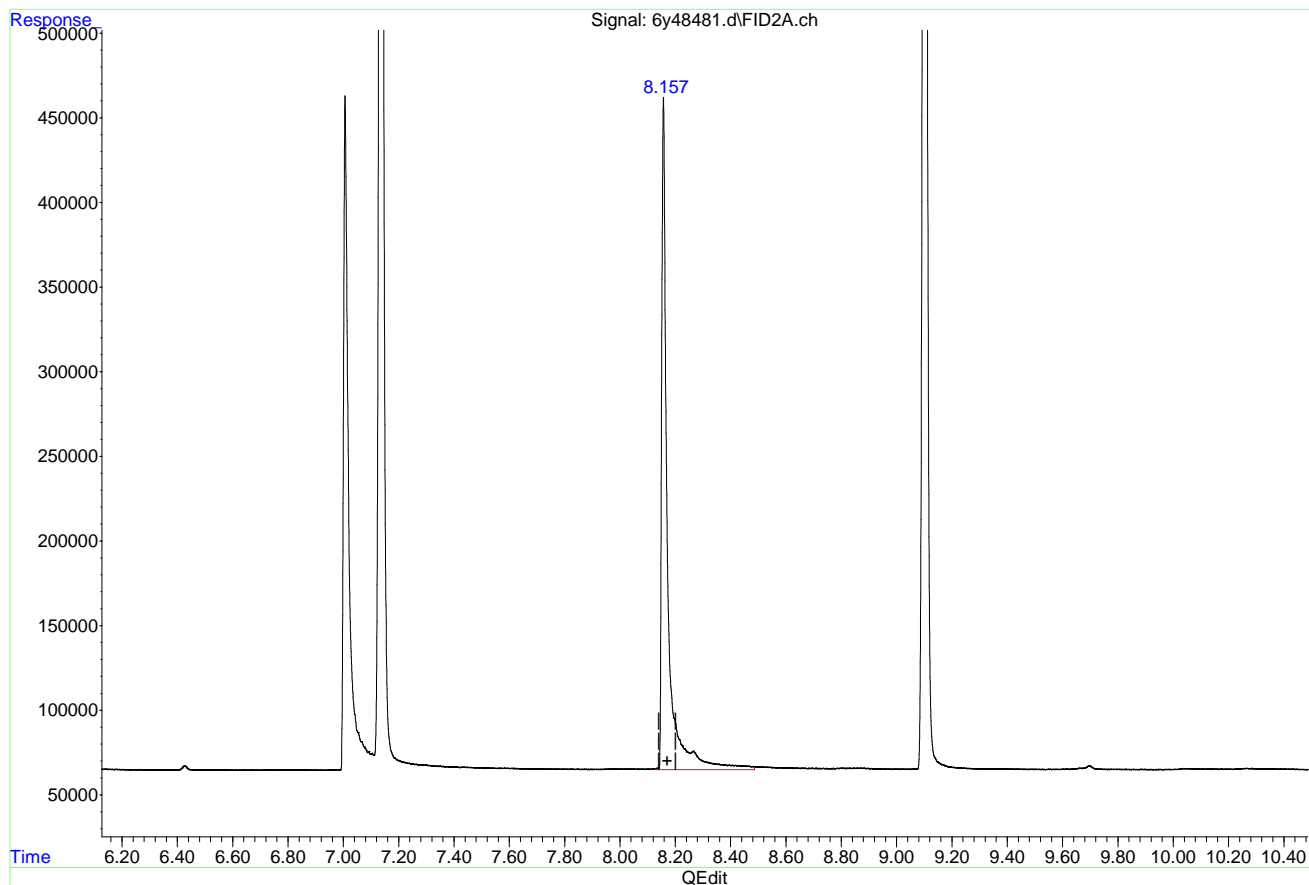
response 5202149

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\
Data File : 6y48481.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 11 Sep 2022 11:44 am
Operator : thomasl
Sample : cc2180-20
Misc : OP41613,G6y2226,15.0,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 19:19:51 2022
Quant Method : C:\msdchem\1\methods\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Aug 03 11:05:09 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um



(54) 2-Methylnaphthalene (S) (S)

8.157min 9.399 ug/L m

response 5866398

(+) = Expected Retention Time
eph6y2180.m Tue Sep 13 19:20:28 2022

C:\msdchem\1\data\6y48481.d

Hydrocarbon Range Total Response

Data File Name **6y48481.d**
 Date Acquired **9/11/2022 11:44**
 Sample Name **cc2180-20**

	<u>Name</u>	<u>Target Response</u>	<u>AvgRF</u>	<u>CCRF</u>	<u>%D</u>
1)	1,2,3-Trimethylbenzene	10185635			
2)	Naphthalene	11024840			
3)	C10-C12 Aromatics	21210475	5.62E+05	530261.8691	5.6
4)	2-Methylnaphthalene	11095211			
5)	Acenaphthylene	11492740			
6)	Acenaphthene	13465637			
7)	C12-C16 Aromatics	36053588	618615.8648	600893.1373	2.9
8)	Fluorene	12039451			
9)	Phenanthrene	12160475			
10)	Anthracene	12382389			
11)	Fluoranthene	12586439			
12)	Pyrene	13037771			
13)	C16-C21 Aromatics	62206525	618489.1671	622065.2495	-0.6
14)	Benzo(a)Anthracene	11451149			
15)	Chrysene	12379252			
16)	Benzo(b)Fluoranthene	10630838			
17)	Benzo(k)Fluoranthene	11030998			
18)	Benzo(a)Pyrene	10359648			
19)	Indeno(1,2,3-cd)Pyrene	8908847			
20)	Dibenzo(ah)Anthracene	10451305			
21)	Benzo(ghi)Perylene	9297969			
22)	C21-C36 Aromatics	84510005	543961.1802	528187.53	2.9
27)	SIGNAL #2				
28)	C9	10914553			
29)	C10	11223274			
30)	C12	11532723			
31)	C9-C12 Aliphatics	33670550	602127.0886	561175.8412	6.8
32)	C14	11459607			
33)	C16	11405304			
34)	C12-C16 Aliphatics	22864912	636585.2886	571622.7875	10.2
35)	C18	11428857			
37)	C20	11362908			
38)	C21	11384818			
39)	C16-C21 Aliphatics	34176583	650645.7171	569609.7136	12.5
40)	C22	11327011			
41)	C24	11249579			
42)	C26	11145626			
43)	C28	11059005			
44)	C30	11094936			
45)	C32	11028611			
46)	C34	10671151			
47)	C36	10707516			
48)	C38	10164820			
49)	C40	9792162.578			
50)	C21-C40 Aliphatics	108240417.9	591124.0611	541202.0897	8.4
For MAEPH					
23)	C11-C22 Aromatics (Unadj.)	193794958)	580985)	569985)	1.9
36)	C19	11565819.4			
51)	C9-C18 Aliphatics	67964318.75	621523.7379	566369.3229	8.9
52)	C19-C36 Aliphatics	89512401.17	627791.1261	559452.5073	10.9

7.5.19

7

Data Path : C:\msdchem\1\data\
 Data File : 6y48502.d
 Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
 Acq On : 12 Sep 2022 12:28 am
 Operator : arianak
 Sample : cc2180-50
 Misc : OP41654,G6y2226,15.0,,,2,1
 ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 13 19:38:29 2022
 Quant Method : C:\msdchem\1\methods\eph6y2180.m
 Quant Title : NJDEP Extractable Petroleum Hydrocarbons
 QLast Update : Wed Aug 03 11:05:09 2022
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1ul/col
 Signal #1 Phase : HP5
 Signal #1 Info : 30mx.25mm.x.25um
 Signal #2 Phase: HP5
 Signal #2 Info : 30mx.32mm.x25um

	Compound	R.T.	Response	Conc Units

System Monitoring Compounds				
24) S	2-Fluorobiphenyl (S)	9.024	22531431	43.333 ug/L
25) S	2-Bromonaphthalene (S)	10.066	14885883	42.763 ug/L
26) S	o-Terphenyl (S)	13.235	26198553	41.153 ug/L
53) S	Naphthalene (S)	7.012	14817845	25.149 ug/L
54) S	2-Methylnaphthalene (S)	8.162	15106468	24.204 ug/L
55) S	1-Chlorooctadecane (S)	14.414	25254221	45.164 ug/L
Target Compounds				
1) T	1,2,3-Trimethylbenzene	5.324	25114359	45.976 ug/L
2) T	Naphthalene	7.239	26023791	45.120 ug/L
4) T	2-Methylnaphthalene	8.382	25708185	43.741 ug/L
5) T	Acenaphthylene	9.833	25204905	43.151 ug/L
6) T	Acenaphthene	10.129	28135393	41.133 ug/L
8) T	Fluorene	10.987	26025055	42.825 ug/L
9) T	Phenanthrene	12.554	25881572	43.020 ug/L
10) T	Anthracene	12.640	25732334	41.074 ug/L
11) T	Fluoranthene	14.553	26294332	42.410 ug/L
12) T	Pyrene	14.927	27233318	42.776 ug/L
14) T	Benzo(a)Anthracene	17.128	26414890	45.855 ug/L
15) T	Chrysene	17.190	27259037	43.598 ug/L
16) T	Benzo(b)Fluoranthene	19.024	26313919	48.503 ug/L
17) T	Benzo(k)Fluoranthene	19.071	25765399	46.006 ug/L
18) T	Benzo(a)Pyrene	19.541	25624931	47.970 ug/L
19) T	Indeno(1,2,3-cd)Pyrene	21.232	25817211	55.531 ug/L
20) T	Dibenzo(ah)Anthracene	21.266	26334500	47.590 ug/L
21) T	Benzo(ghi)Perylene	21.582	25209505	50.889 ug/L
28) T	C9	3.543	28651647	49.844 ug/L
29) T	C10	4.844	29595018	48.985 ug/L
30) T	C12	7.149	30043501	47.886 ug/L
32) T	C14	9.111	29801866	47.204 ug/L
33) T	C16	10.843	29712966	46.295 ug/L
35) T	C18	12.400	29753121	45.803 ug/L
36) T	C19	13.123	30153392	45.730 ug/L
37) T	C20	13.816	29711853	45.615 ug/L
38) T	C21	14.499	29676842	45.587 ug/L
40) T	C22	15.171	29561537	45.264 ug/L
41) T	C24	16.474	29441910	45.424 ug/L
42) T	C26	17.714	29092488	45.904 ug/L
43) T	C28	18.883	28864230	46.586 ug/L
44) T	C30	19.981	28896200	47.232 ug/L
45) T	C32	21.016	28758069	48.218 ug/L
46) T	C34	21.992	27823857	49.436 ug/L
47) T	C36	22.929	27691550	50.790 ug/L
48) T	C38	24.076	26731500	51.218 ug/L
49) T	C40	25.620	26845957	51.778 ug/L

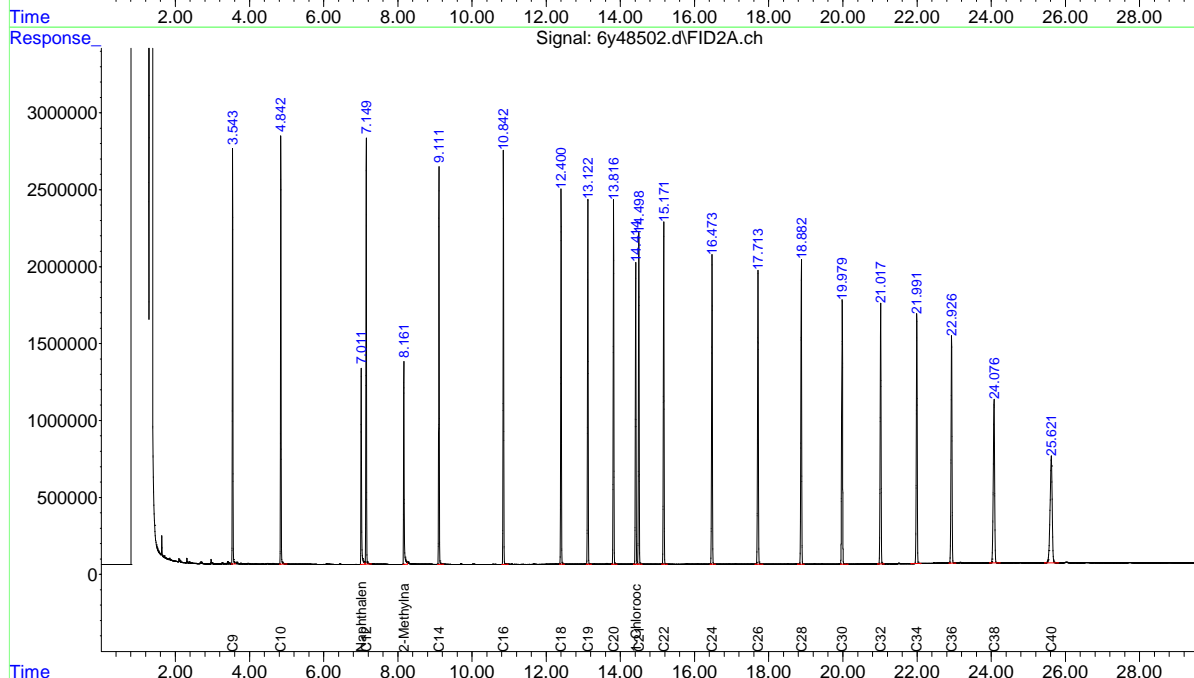
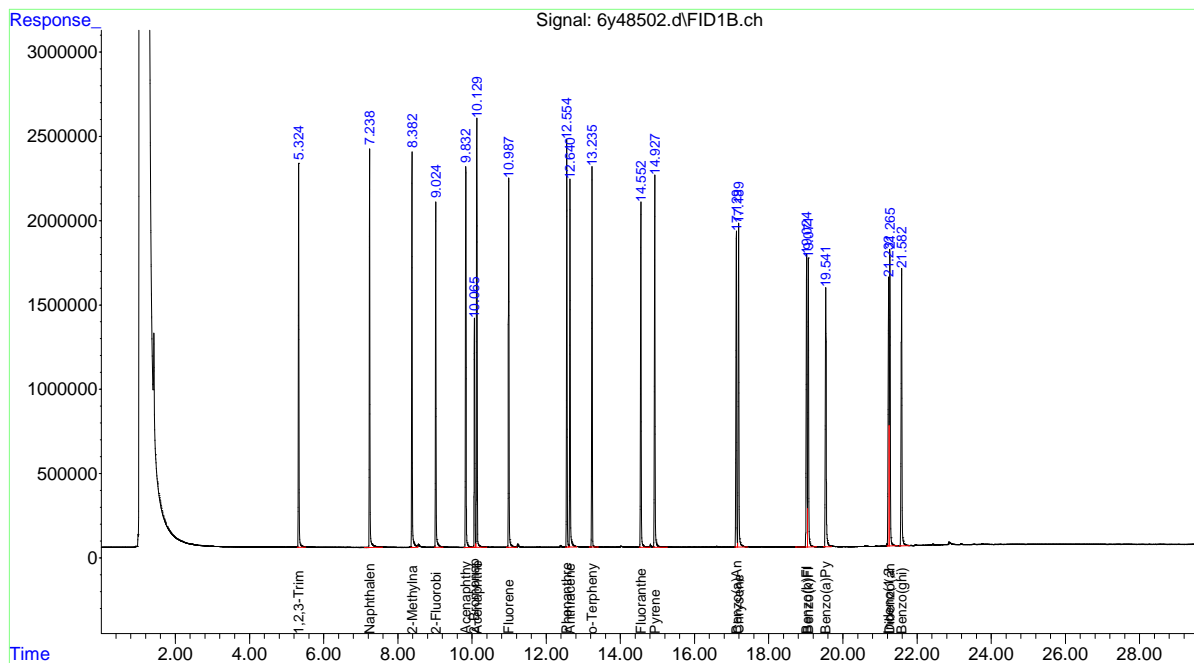
(f)=RT Delta > 1/2 Window

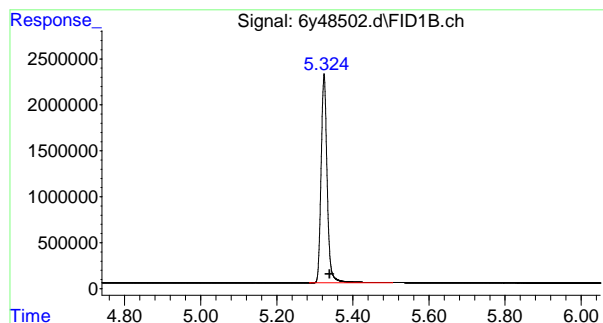
(m)=manual int.

Data Path : C:\msdchem\1\data\
Data File : 6y48502.d
Signal(s) : Signal #1: FID1B.ch Signal #2: FID2A.ch
Acq On : 12 Sep 2022 12:28 am
Operator : arianak
Sample : cc2180-50
Misc : OP41654,G6y2226,15.0,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 13 19:38:29 2022
Quant Method : C:\msdchem\1\methods\eph6y2180.m
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Aug 03 11:05:09 2022
Response via : Initial Calibration
Integrator: ChemStation

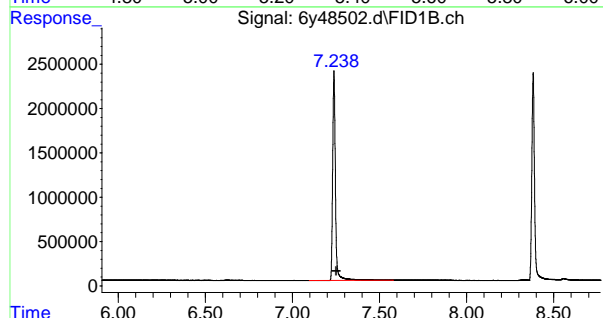
Volume Inj. : 1ul/col
Signal #1 Phase : HP5
Signal #1 Info : 30mx.25mm.x.25um
Signal #2 Phase: HP5
Signal #2 Info : 30mx.32mm.x25um





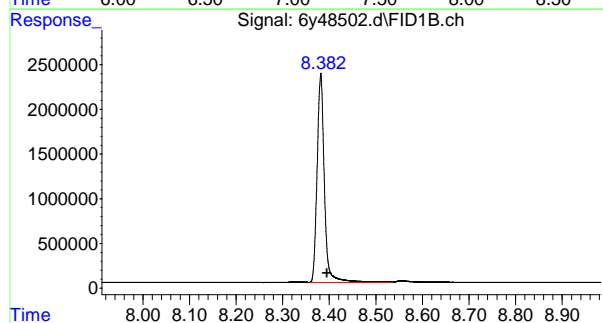
#1 1,2,3-Trimethylbenzene

R.T.: 5.324 min
Delta R.T.: -0.015 min
Response: 25114359
Conc: 45.98 ug/l



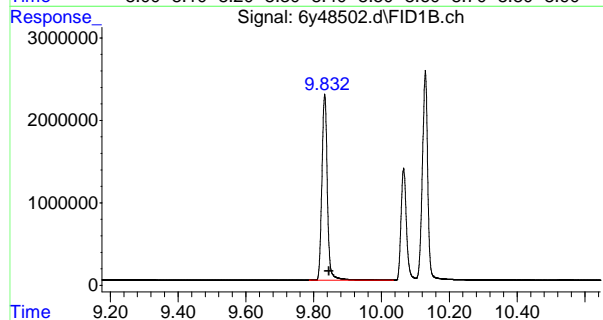
#2 Naphthalene

R.T.: 7.239 min
Delta R.T.: -0.013 min
Response: 26023791
Conc: 45.12 ug/L



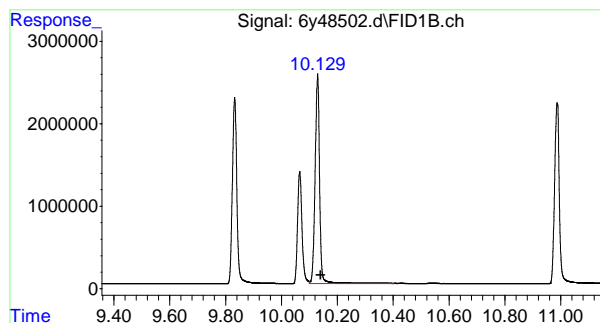
#4 2-Methylnaphthalene

R.T.: 8.382 min
Delta R.T.: -0.013 min
Response: 25708185
Conc: 43.74 ug/L



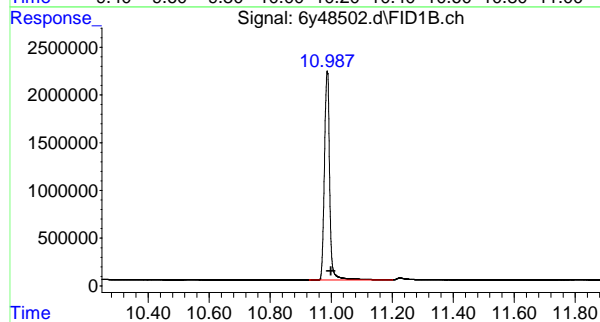
#5 Acenaphthylene

R.T.: 9.833 min
Delta R.T.: -0.013 min
Response: 25204905
Conc: 43.15 ug/l



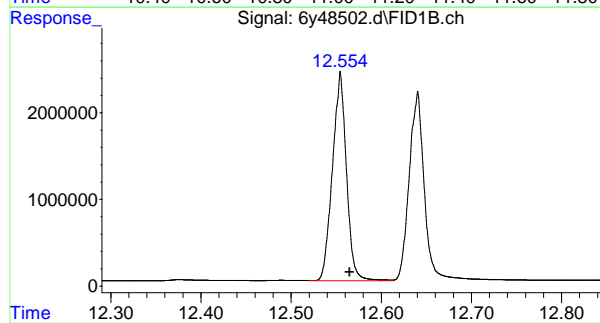
#6 Acenaphthene

R.T.: 10.129 min
Delta R.T.: -0.011 min
Response: 28135393
Conc: 41.13 ug/l



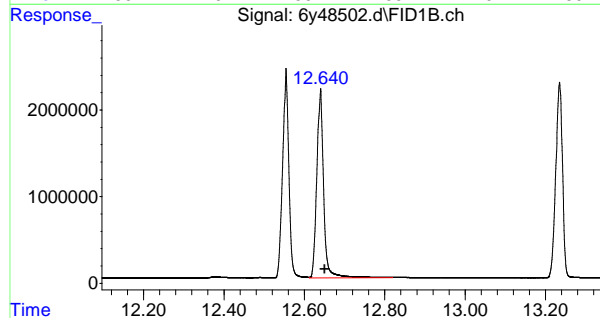
#8 Fluorene

R.T.: 10.987 min
Delta R.T.: -0.011 min
Response: 26025055
Conc: 42.83 ug/l



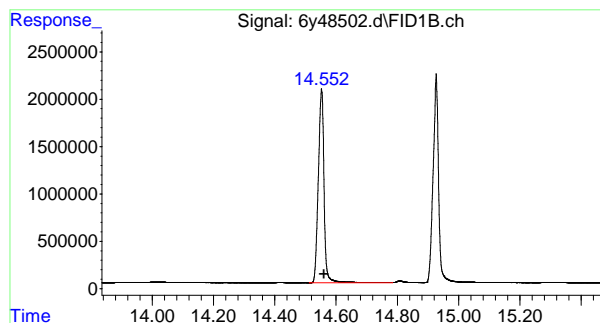
#9 Phenanthrene

R.T.: 12.554 min
Delta R.T.: -0.010 min
Response: 25881572
Conc: 43.02 ug/l



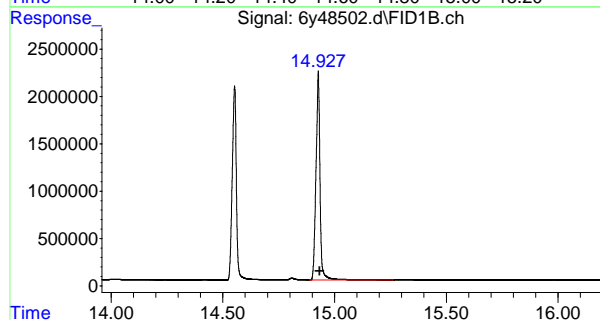
#10 Anthracene

R.T.: 12.640 min
Delta R.T.: -0.010 min
Response: 25732334
Conc: 41.07 ug/l



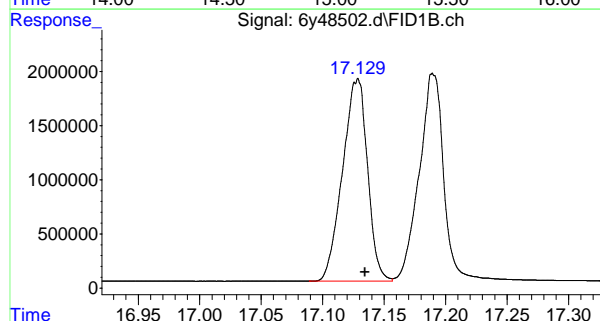
#11 Fluoranthene

R.T.: 14.553 min
Delta R.T.: -0.008 min
Response: 26294332
Conc: 42.41 ug/l



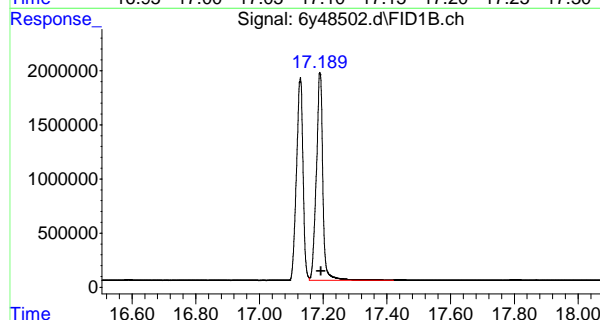
#12 Pyrene

R.T.: 14.927 min
Delta R.T.: -0.007 min
Response: 27233318
Conc: 42.78 ug/l



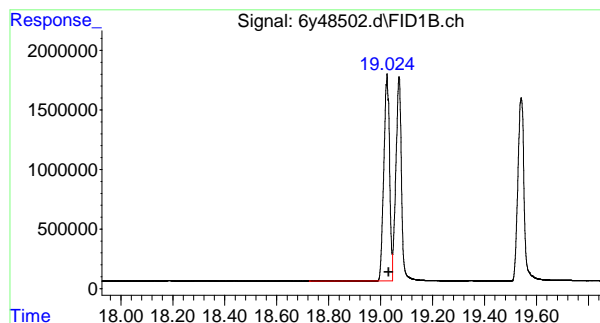
#14 Benzo(a)Anthracene

R.T.: 17.128 min
Delta R.T.: -0.006 min
Response: 26414890
Conc: 45.86 ug/l



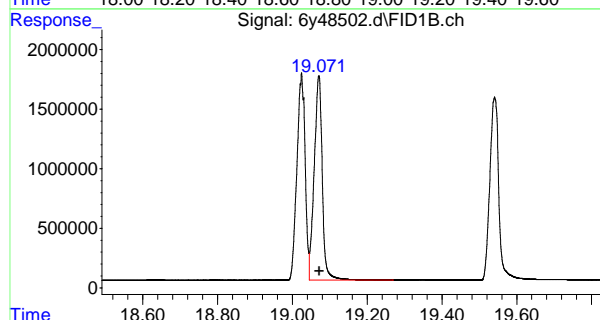
#15 Chrysene

R.T.: 17.190 min
Delta R.T.: -0.003 min
Response: 27259037
Conc: 43.60 ug/l



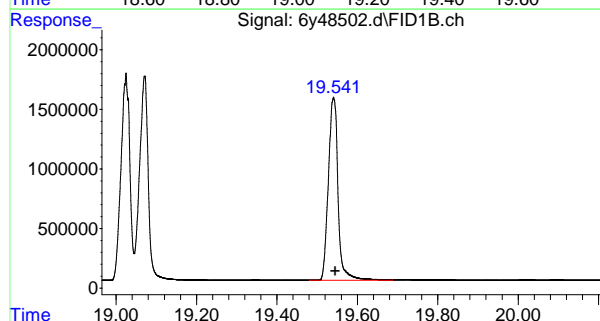
#16 Benzo(b)Fluoranthene

R.T.: 19.024 min
Delta R.T.: -0.006 min
Response: 26313919
Conc: 48.50 ug/l



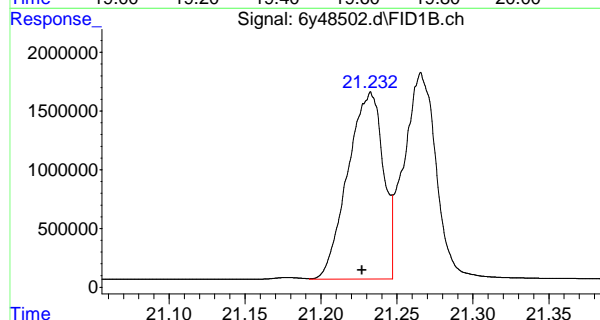
#17 Benzo(k)Fluoranthene

R.T.: 19.071 min
Delta R.T.: -0.001 min
Response: 25765399
Conc: 46.01 ug/l



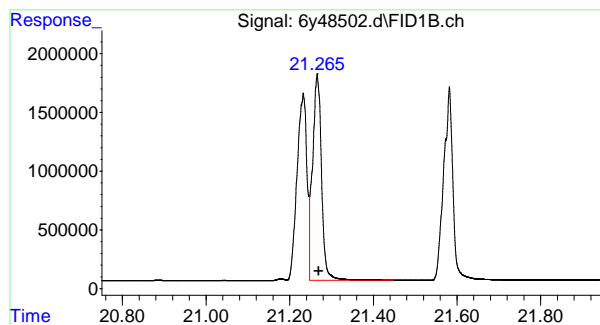
#18 Benzo(a)Pyrene

R.T.: 19.541 min
Delta R.T.: -0.004 min
Response: 25624931
Conc: 47.97 ug/l



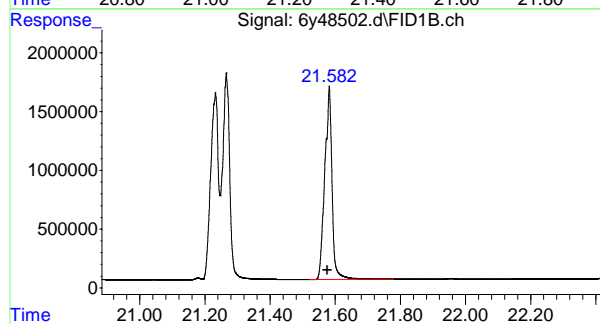
#19 Indeno(1,2,3-cd)Pyrene

R.T.: 21.232 min
Delta R.T.: 0.005 min
Response: 25817211
Conc: 55.53 ug/l



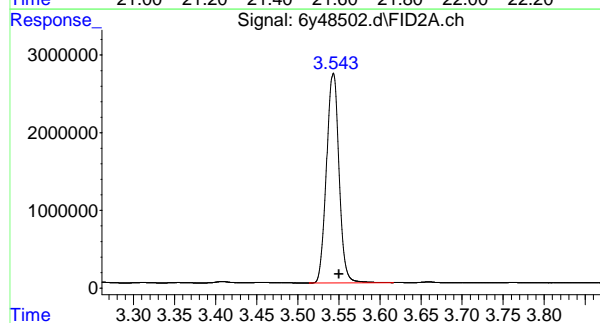
#20 Dibenzo(ah)Anthracene

R.T.: 21.266 min
Delta R.T.: -0.003 min
Response: 26334500
Conc: 47.59 ug/l



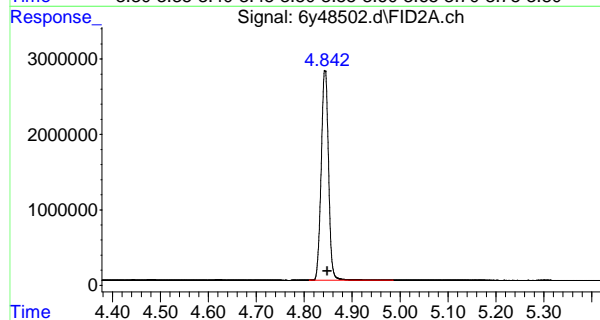
#21 Benzo(ghi)Perylene

R.T.: 21.582 min
Delta R.T.: 0.006 min
Response: 25209505
Conc: 50.89 ug/l



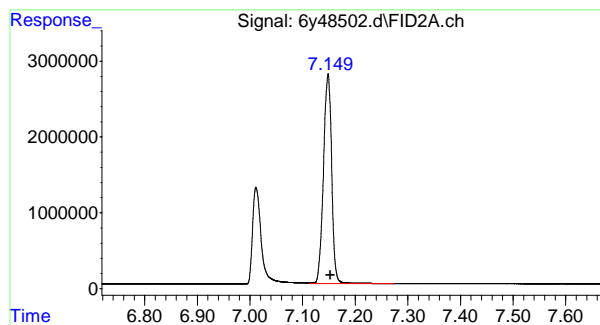
#28 C9

R.T.: 3.543 min
Delta R.T.: -0.007 min
Response: 28651647
Conc: 49.84 ug/L



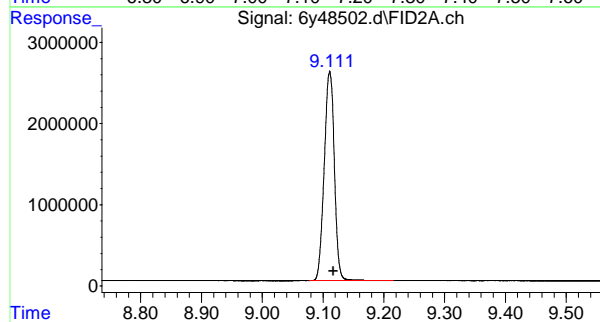
#29 C10

R.T.: 4.844 min
Delta R.T.: -0.005 min
Response: 29595018
Conc: 48.99 ug/L



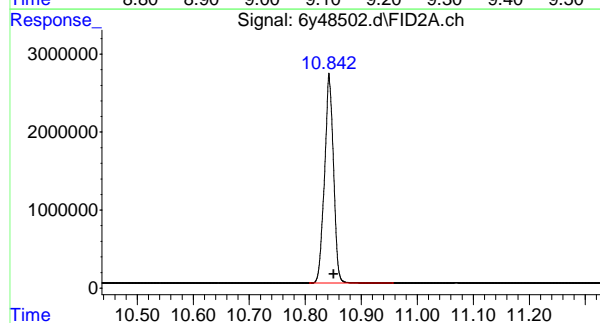
#30 C12

R.T.: 7.149 min
Delta R.T.: -0.004 min
Response: 30043501
Conc: 47.89 ug/L



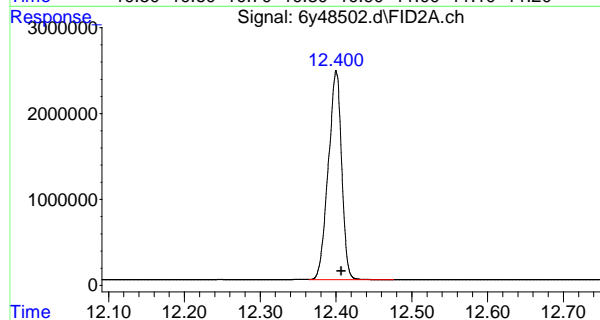
#32 C14

R.T.: 9.111 min
Delta R.T.: -0.006 min
Response: 29801866
Conc: 47.20 ug/L



#33 C16

R.T.: 10.843 min
Delta R.T.: -0.008 min
Response: 29712966
Conc: 46.29 ug/L

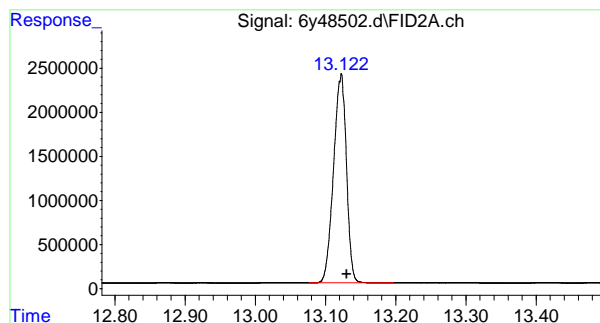


#35 C18

R.T.: 12.400 min
Delta R.T.: -0.006 min
Response: 29753121
Conc: 45.80 ug/L

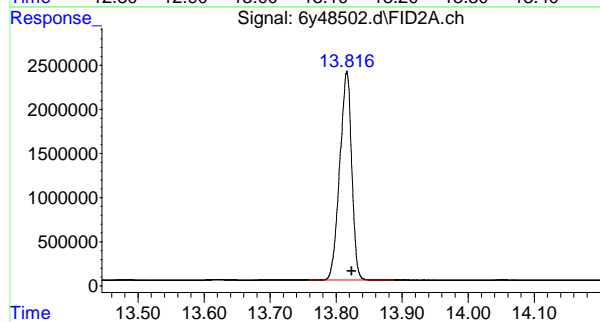
7.5.20

7



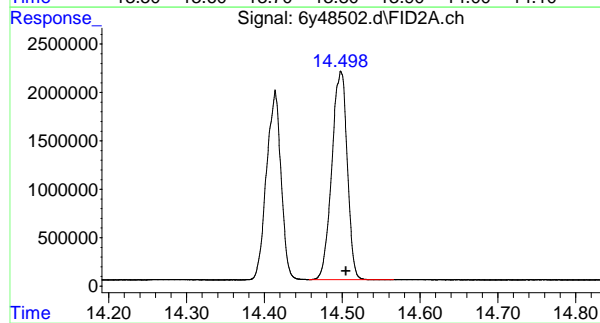
#36 C19

R.T.: 13.123 min
Delta R.T.: -0.007 min
Response: 30153392
Conc: 45.73 ug/L



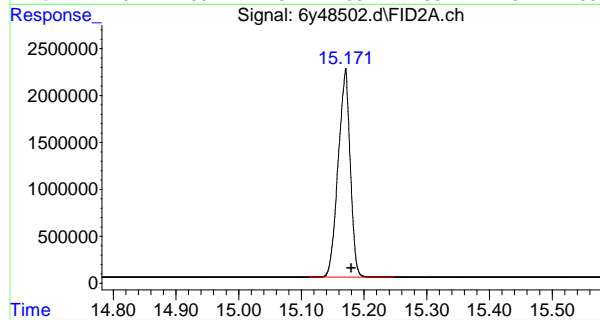
#37 C20

R.T.: 13.816 min
Delta R.T.: -0.007 min
Response: 29711853
Conc: 45.62 ug/L



#38 C21

R.T.: 14.499 min
Delta R.T.: -0.006 min
Response: 29676842
Conc: 45.59 ug/L

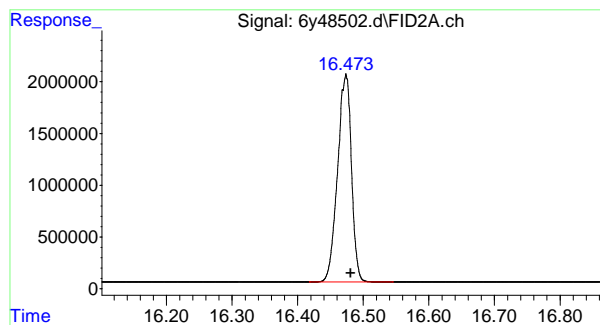


#40 C22

R.T.: 15.171 min
Delta R.T.: -0.008 min
Response: 29561537
Conc: 45.26 ug/L

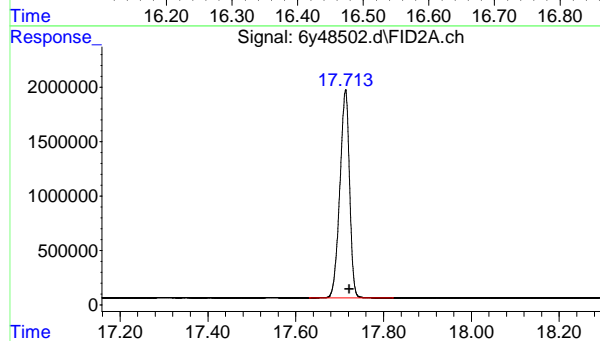
7.5.20

7



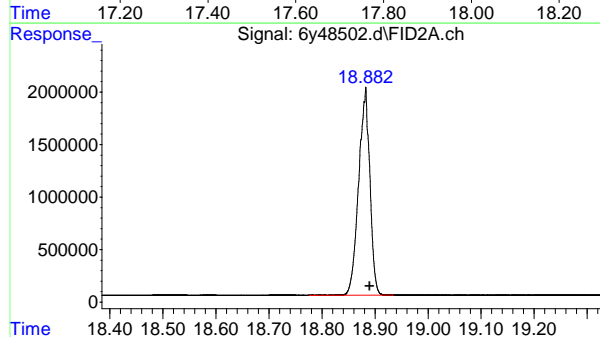
#41 C24

R.T.: 16.474 min
Delta R.T.: -0.007 min
Response: 29441910
Conc: 45.42 ug/L



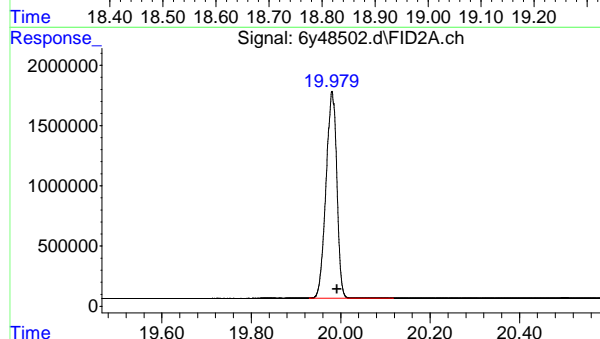
#42 C26

R.T.: 17.714 min
Delta R.T.: -0.008 min
Response: 29092488
Conc: 45.90 ug/L



#43 C28

R.T.: 18.883 min
Delta R.T.: -0.008 min
Response: 28864230
Conc: 46.59 ug/L

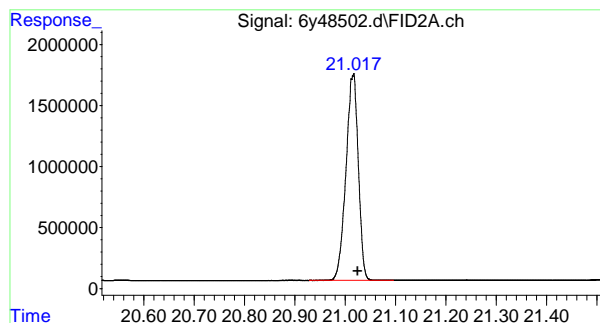


#44 C30

R.T.: 19.981 min
Delta R.T.: -0.011 min
Response: 28896200
Conc: 47.23 ug/L

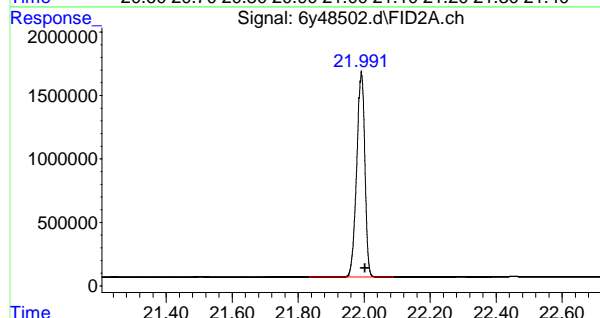
7.5.20

7



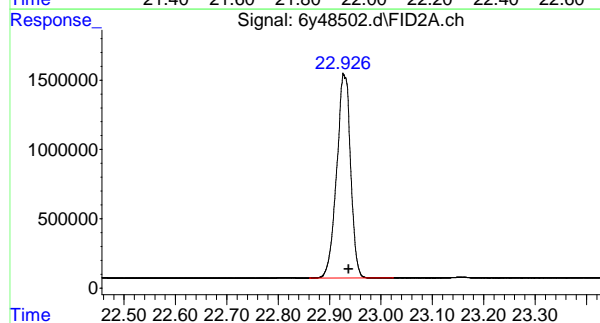
#45 C32

R.T.: 21.016 min
Delta R.T.: -0.009 min
Response: 28758069
Conc: 48.22 ug/L



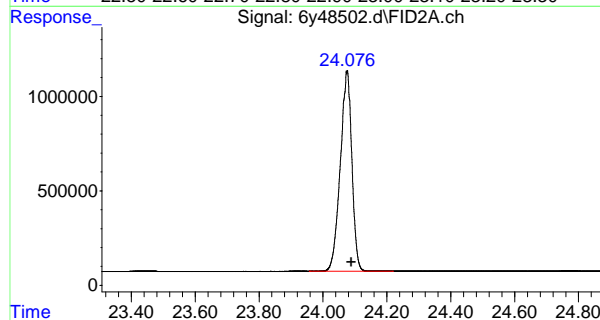
#46 C34

R.T.: 21.992 min
Delta R.T.: -0.011 min
Response: 27823857
Conc: 49.44 ug/L



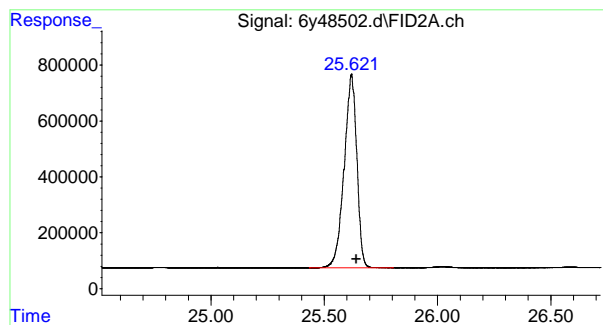
#47 C36

R.T.: 22.929 min
Delta R.T.: -0.009 min
Response: 27691550
Conc: 50.79 ug/L



#48 C38

R.T.: 24.076 min
Delta R.T.: -0.013 min
Response: 26731500
Conc: 51.22 ug/L



#49 C40

R.T.: 25.620 min
Delta R.T.: -0.021 min
Response: 26845957
Conc: 51.78 ug/L

7.5.20

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C:\msdchem\1\data\6y48502.d

Hydrocarbon Range Total Response

Data File Name **6y48502.d**
 Date Acquired **9/12/2022 0:28**
 Sample Name **cc2180-50**

	<u>Name</u>	<u>Target Response</u>	<u>AvgRF</u>	<u>CCRF</u>	<u>%D</u>
1)	1,2,3-Trimethylbenzene	25114359			
2)	Naphthalene	26023791			
3)	C10-C12 Aromatics	51138150	5.62E+05	511381.4996	8.9
4)	2-Methylnaphthalene	25708185			
5)	Acenaphthylene	25204905			
6)	Acenaphthene	28135393			
7)	C12-C16 Aromatics	79048482	618615.8648	526989.8816	14.8
8)	Fluorene	26025055			
9)	Phenanthrene	25881572			
10)	Anthracene	25732334			
11)	Fluoranthene	26294332			
12)	Pyrene	27233318			
13)	C16-C21 Aromatics	131166612	618489.1671	524666.4471	15.2
14)	Benzo(a)Anthracene	26414890			
15)	Chrysene	27259037			
16)	Benzo(b)Fluoranthene	26313919			
17)	Benzo(k)Fluoranthene	25765399			
18)	Benzo(a)Pyrene	25624931			
19)	Indeno(1,2,3-cd)Pyrene	25817211			
20)	Dibenzo(ah)Anthracene	26334500			
21)	Benzo(ghi)Perylene	25209505			
22)	C21-C36 Aromatics	208739392	543961.1802	521848.4801	4.1
27)	SIGNAL #2				
28)	C9	28651647			
29)	C10	29595018			
30)	C12	30043501			
31)	C9-C12 Aliphatics	88290167	602127.0886	588601.1104	2.2
32)	C14	29801866			
33)	C16	29712966			
34)	C12-C16 Aliphatics	59514833	636585.2886	595148.3274	6.5
35)	C18	29753121			
37)	C20	29711853			
38)	C21	29676842			
39)	C16-C21 Aliphatics	89141816	650645.7171	594278.7713	8.7
40)	C22	29561537			
41)	C24	29441910			
42)	C26	29092488			
43)	C28	28864230			
44)	C30	28896200			
45)	C32	28758069			
46)	C34	27823857			
47)	C36	27691550			
48)	C38	26731500.09			
49)	C40	26845957.37			
50)	C21-C40 Aliphatics	283707297.3	591124.0611	567414.5946	4.0
For MAEPH					
23)	C11-C22 Aromatics (Unadj.)	444978277)	580985)	523504)	9.9
36)	C19	30153391.63			
51)	C9-C18 Aliphatics	177558120.1	621523.7379	591860.4003	4.8
52)	C19-C36 Aliphatics	233413159.2	627791.1261	583532.8981	7.0

7.5.21

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SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6y2180
Name: Thomas Lally

Date: 5/16/22

Print Analyst Name: Thomas Lally
Analyst Signature: TL

Analyst Signature: TL

Standard Data		
Lot #	Description	Conc.
21-2835-133	Aliphatic Stock	200 ppm
-123	Aliphatic 2nd	200 ppm
216207	hexane (Fisher)	—

Standard Data		
Lot #	Description	Conc.
521-2835	134 Aromatic Stock	200 ppm
	124 Aromatic 2nd	200 ppm
220207	dcM (Fisher)	—

Columns: Rxi5silms / Rxi5silms

Method EPH

Initial Cal. Method EPH 6y ²¹⁸⁰₂₁₅₆ ^{TL}_{5/16}

Injection Volume: 1.0 μ L
Date Archived: _____

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature]

Injection Volume: 1.0 µL

Date Archived: 2/20/07

2/20/07 dem (Fisher)

Supervisor Signature:

Date: 5/18/22

Supervisor Signature: <u>92</u>										Date: <u>5/18/22</u>
R	Data File	Sample ID	Ext. Batch	Test	MALS T X	Dilution	IS	SU	Status (Data)	Comments
	6y 47302	IB			5/1				OK	
	303	CC2180-								
	303	IC2180-1			61/11	200x			OK	TL 5/16
	304	-2			62/12	100x			OK	
	305	-5			63/13	40x			OK	
	306	-10			64/14	20x			OK	
	307	-20			65/15	10x			OK	
	308	ICC2180-50			66/16	4x			OK	
	309	IC2180-100			67/17	2x			OK	
	310	ICV2180-50	2nd		68/18	4x			OK	
	311	-50	3rd		69/19	2x			OK	
									OK	EPH spike OP 21-2742-70 @ 100 ppm

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used). SU = Sample volume/weight refer to extraction log

TL

MTX = Matrix. Designate W for water, S for soil, O for oil. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated and signed.

Form: **OR016-09**

Form: OR016-09
Rev. Date: 5/25/17

5/18

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SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6Y2226Date: 9/11/22Print Analyst Name: Thomas LallyAnalyst Signature: TL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
22-242816A	Aliphatic Std	20 ppm
168	↓	50 ppm
17A	Aromatic Std	20 ppm
178	↓	50 ppm
03	IB	50 ppm
223504	hexane (Fisher)	—
223593	dcm (Fisher)	—

Columns: Rxissilms/RxissilmsMethod EPHInitial Cal. Method EPH6v2180Injection Volume: 1.0uLDate Archived: 9/13/22

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: TLDate: 9/13/22

R	Data File	Sample ID	Ext. Batch	Test	MTX	Dilution	IS	SU	Status (Data)	Comments
	6y48480	CC2180-20			52/2			/	Not using	ccv concentrated
	481	-20			52/2			/	OK	
	482	IB			51/1			/	OK	
	483	OP41654-MBI	41654	MAEPH S	64/14			/	OK	
	484	-BSI			65/15			/	OK	
	485	-BSD			66/16			/	OK	
	486	JD49400-1R			67/17			/	OK	Fractional @ 10x
	487	JD51058-1			68/18			/	OK	
	488	OP41654-MS			69/19			/	OK	
	489	-MSD			70/20			/	OK	
	490	JD51058-2			71/21			/	OK	Fractional @ 5x
	491	-3			72/22			/	OK	Fractional @ 10x
	492	OP41670-4			73/23			/	OK	↓
	493	OP41670-MBI	41670	NTEPH S	74/24			/	OK	
	494	-BSI			75/25			/	OK	
	495	-BSD			76/26			/	OK	
	496	JD51124-2			77/27			/	OK	
	497	OP41670-DUP			78/28			/	OK	
	498	-MS			79/29			/	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All spikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-09

Rev. Date: 5/25/17

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Batch ID: 61642226

Print Analyst Name: Arianna Kerner

Analyst Signature: AKC

Date:

9/11/22

Standard Data

[illegible]

Lot #	Description	Conc.
	See pg. 125	

Columns: Rx15 silms/Rx15 silms

Method EPM

Initial Cal. Method EPH6y 2180

Injection Volume: 1.000

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature:

Date:

9/13/22

[illegible]

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-09

Rev. Date: 5/25/17

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LOGBOOK ID:

Date started: 9/7/22
Date finished: 9/9/22

EPH Extraction Log - Solids

Extract Method (CHECK OFF "✓" / DO NOT CIRCLE):
Microwave SW3546 ✓ Sonication SW359C

Waste Dilution SW3580A

Special Client Spike Instructions

QC ID# for Special Spike	Am't to Spike	Spike ID	Lot #	Conc	Am't Spiked

Witness Sign
Supervisor Approval

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

HT: 9/13
DE: 9/18

SGS
Form OP014-11
Rev Date: 4/18/22

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BATCH # GCOP41654		RACK# R-57	
Weighed by: ED			
Extracted by: EB			
Concentrated by: YA, CB			
Final Vol. Top-up:			
Valid by: YA, TG			
Supervisor Review: TG 9/9/22			
Equipment/Range	ID	Observed Temp (°C)	Corrected Temp (°C)
Buck (65-71°C)	1	65	-
Buck Chiller	81	10.0	-
Waterbath (70-80°C)			
Waterbath Chiller (65-71°C)			
NE VAP (32-38°C, LPM)	3	35.1	+1
Balance	B-43	N/A	N/A
SURROGATE	LOT #	CONC (ppm)	AMT (mL)
EPH	20747-55	100	0.110
WITNESS SIGN: EB	SPRINK SIGN: TG		
Fraction	AMT (mL)	CONC (ppm)	AMT (mL)
MATRIX SPINE	LOT #	CONC (ppm)	AMT (mL)
DRO			
EPH	22247-98	100	0.510
WITNESS SIGN: EB	SPRINK SIGN: TG		
SOLVENT	LOT #	BRAND	AMT (mL)
ACETONE	22504	Fisher	30.0
METH CHLOR			
HEXANE	ED241-05	Honeywell	N/A
REAGENT	LOT #	BAKE BATCH #	BRAND
HYDROCHLORIC	165004	9/3/22	Agilent
SODIUM SULFATE	216844	9/5/22	Fisher
FILTER PAPER	1753845		Fisher
EPH CARTRIDGE			
MATRIX	LOT #	BAKE BATCH #	BRAND
SAND	1612007014A	7/18/22	Fisher
VIALS	2266607		Agilent

Sample #	Analysis Type	Sample Description	Sample Vol (mL)	Final Ext Vol (mL)	Initial Color	Final Color	Refraction
1	MAEPH	SAND	15.0	20	Clear	Clear	
2	BS 1	SAND	15.0	20	Yellow	Clear	
3	BSD	SAND	15.0	20	Yellow	Clear	
4	MS	SAND	15.3	20	Yellow	Clear	
5	MSD	SAND	15.3	20	Yellow	Clear	
6	BS						
7	DUP						
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Comments: QC Samples (MS, MSD, LINK and/or DUP, Link) Confirmed by:
 X Bad Smell + Oily - Volume increased to 5 mL, was not concentrate.
 A Fraction @ 1:10 dilution
 O Fraction @ 1:5 dilution

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: JD49400R
Account: TTCOD Tetra Tech
Project: R8 START: Valley Drive Abandoned Slurry, Kalispell, MT

Sample: JD49400-1	Analyzed: 14-AUG-22 by BG	Method: SM2540 G 18TH ED MOD
ClientID: VDS-WS-01		
Wet Weight (Total)	28.83	g
Tare Weight	23.47	g
Dry Weight (Total)	28.48	g
Solids, Percent	93.5	%

8.1

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