R10_RCRA_Records

From: Palumbo, Janice
Sent: Friday, August 20, 2021 11:03 AM
To: R10_RCRA_Records
Subject: RCRA Records Submittal WA 3019 6D FW: JH Baxter site in Arlington, WA
Attachments: Appendix B (CD Only).pdf

Jan Palumbo (MS 15-H04)
Environmental Scientist
U.S. EPA Region 10
1200 6th Avenue, Suite 155
Seattle, WA 98101
Palumbo.Jan@epa.gov
(206) 553-6702 (Phone)
(206) 553-8509 (Fax)

From: Palumbo, Janice
Sent: Wednesday, March 27, 2019 10:07 AM
To: 'Ron Bek' <rbek@phase1esaconsulting.com>
Subject: RE: JH Baxter site in Arlington, WA

Jan Palumbo (OAW-150)
Environmental Scientist
U.S. EPA Region 10
1200 6th Avenue, Suite 155
Seattle, WA 98101-3140
(206) 553-6702 (Phone)
(206) 553-8509 (Fax)

From: Ron Bek <rbek@phase1esaconsulting.com>
Sent: Tuesday, March 26, 2019 12:13 PM
To: Palumbo, Janice <Palumbo.Jan@epa.gov>
Subject: JH Baxter site in Arlington, WA

Hi Janice. I found your contact information on the EI Determination dated December 14, 2004 for the JH Baxter site. The Site ID is 1000747. The EPA ID is WAD053823019.

I am doing a Phase I Environmental Site Assessment for the mobile home park located adjacent and downgradient from the JH Baxter site. I'm trying to find out if there is recent groundwater monitoring data for the site to determine if contamination from JH Baxter has migrated to the mobile home park.

- Is the EI Determination dated December 14, 2004 the most recent for JH Baxter?
- Can you email me the most recent groundwater monitoring report for JH Baxter?

Ron Bek, LG

Telephone: 360-303-2819
Email: rbek@phase1esaconsulting.com

Confidentiality: This message is confidential and intended only for use of the individual to whom it is addressed. If you are not the person for whom this message is intended, please delete it and notify me as soon as possible. Please do not copy or send this message to anyone else.

Appendix B

(provided on CD only)

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

April 10, 2018

Analytical Report for Service Request No: K1802579

Scott Thielke
JH Baxter & Company
85 N. Baxter Road
P.O. Box 10797
Eugene, OR 97440

RE: Arlington Landfill Wells / SI & LF Program

Dear Scott,

Enclosed are the results of the sample(s) submitted to our laboratory March 20, 2018
For your reference, these analyses have been assigned our service request number **K1802579.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3350. You may also contact me via email at Kelley.Lovejoy@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

for Kelley Lovejoy
Project Manager

ALS Environmental
ALS Group USA, Corp
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www.alsglobal.com

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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: JH Baxter & Company
Project: Arlington Landfill Wells
Sample Matrix: Water

Service Request: K1802579
Date Received: 03/20/2018

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt:

Thirty one water samples were received for analysis at ALS Environmental on 03/20/2018. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

Semivolatiles by GC/MS:

Insufficient sample volume was received to perform a Matrix Spike/Matrix Spike Duplicate (MS/MSD) with this sample batch. A Laboratory Control Sample/Duplicate Laboratory Control Sample (LCS/DLCS) was analyzed and reported in lieu of the MS/MSD for these samples.

Method 8270D, 03/29/18:The detection limit was elevated for Acenaphthene in samples MW-16, MW-17, MW-35, and MW-44. The chromatogram indicated the presence of non-target background components. The matrix interference prevented adequate resolution of the target compound at the normal limit. The result was flagged to indicate the matrix interference.

Semivoa GC:

Method 8151A Modified, :The control criteria for matrix spike recovery of Pentachlorophenol for sample Batch QC were not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

Approved by Mae D. Davis Date 04/09/2018

Chain of Custody

ALS Environmental—Kelso Laboratory
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ALS

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SR# K1802579

0H | 7D | 28D | 180D | 7D | PAGE ____ OF ____

Project Name: JH Baxter - Arlington Project Number: _____

Project Manager: _____ Company: JH Baxter _____

Company/Address: 85 N Baxter Rd Phone: 541-689-3801

City, State, Zip: Eugene, OR 97402 FAX: 541-689-0769

Sampler's Signature: _____

Sample I.D.	Date	Time	LAB ID	Matrix	Number of Containers	SM 4500-H+ B / Ph	8270 D / PAH SIM	120.1 / Cond Spec	300.0 Chloride	300.0 / SO4	350.1 / Ammonia T	353.2 / NO2 NO3 T	SM 5220 C / COD T	SM 5310 / TOC T	SM 5550 B / Tan Lign	6010 C / Metals D	6020A / AS D	8151 A Modified / PCP only	REMARKS
					Analysis Requested														
HCMW-7	3/16/18	1003	1	water	1													X	PMP program
MW-15	3/17/18	1530	2	water	2		X											X	SI Program
MW-16	"	1255	3	water	2		X											X	SI Program
MW-17	"	1154	4	water	2		X											X	SI Program
MW-18	3/17/18	0921	5	water	2		X											X	SI Program
MW-2	3/16/18	0841	6	water	2		X											X	SI Program
MW-22	3/17/18	0924	7	water	1													X	PMP program
MW-23	"	0858	8	water	1													X	PMP program
MW-24	"	1104	9	water	1													X	PMP program
MW-25		0941	10	water	1													X	PMP program
MW-26	3/17/18	0955	11	water	1													X	PMP program

TURNAROUND REQUIREMENTS

____ 24 hr ____ 48 hr ____ 5 day

__X__ Standard (21 days)

____ Provide FAX Preliminary Results

Requested Report Date: _____

REPORT REQUIREMENTS

____ I. Routine Report: Results, Method Blank, Surrogate, as required

____ II. Report Dup., MS, MSD as required

____ III. Data Validation Report (includes raw data)

__X__ IV. CLP Deliverable Report

____ V. EDD

Comments/Special Instructions:

PAH samples have 2 - 500ml amber bottles

Questions? - Please Call Steven Kuhlmeier @ GSI Water Solutions 971-200-8529

Invoice Information

P.O. # _____

Bill to: JH Baxter & Co
San Mateo CA,94402

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Printed Name: Matt Hansen	Printed Name: Brickman	Printed Name:	Printed Name:
Firm: JH Baxter	Firm: ALS	Firm:	Firm:
Date/Time: 3/19/18 1405	Date/Time: 3/20/18 0940	Date/Time:	Date/Time:

1317 South 13th, Kelso, WA 98626 (360) 577-7222 FAX (360) 636-1068

SR# K1802579

PAGE ____ OF ____

0H	7D	28D	180D	7D

Project Name: JH Baxter - Arlington Project Number: ____

Project Manager: ____ Company: JH Baxter

Company/Address: 85 N Baxter Rd Phone: 541-689-3801

City, State, Zip: Eugene, OR 97402 FAX: 541-689-0769

Sampler's Signature: ____

Analysis Requested

Sample I.D.	Date	Time	LAB ID	Matrix	Number of Containers	SM 4500-H+ B / Ph	8270 D / PAH SIM	120.1 / Cond Spec	300.0 Chloride	300.0 / SO4	350.1 / Ammonia T	353.2 / NO2 NO3 T	SM 5220 C / COD T	SM 5310 / TOC T	SM 5550 B / Tan Lign	6010 C / Metals D	6020A / AS D	8151 A Modified / PCP only	REMARKS
MW - 27	3/17/18	1021	12	water	1													X	PMP program
MW - 28		0836	13	water	1													X	PMP program
MW - 29		1054	14	water	1													X	PMP program
MW - 30		1131	15	water	2		X											X	SI program
MW - 31		1307	16	water	1													X	PMP program
MW - 32		0922	17	water	1													X	PMP program
MW - 33		1005	18	water	1													X	PMP program
MW - 34		1111	19	water	1													X	PMP program
MW - 35		1041	20	water	2		X											X	PMP program
MW - 36		1155	21	water	2		X											X	SI program
MW - 37	3/17/18	1218	22	water	2		X											X	SI program

TURNAROUND REQUIREMENTS

____ 24 hr ____ 48 hr ____ 5 day

X Standard (21 days)

____ Provide FAX Preliminary Results

Requested Report Date: ____

Invoice Information

P.O. # ____

Bill to: JH Baxter & Co
San Mateo CA,94402

REPORT REQUIREMENTS

____ I. Routine Report: Results, Method Blank, Surrogate, as required

____ II. Report Dup., MS, MSD as required

____ III. Data Validation Report (includes raw data)

X IV. CLP Deliverable Report

____ V. EDD

Comments/Special Instructions:

PAH samples have 2 - 500ml amber bottles

Questions? - Please Call Steven Kuhlmeier @ GSI Water Solutions 971-200-8529

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: MH	Signature: [signature]	Signature:	Signature:
Printed Name: MATT HOUSER	Printed Name: BRICKMAN	Printed Name:	Printed Name:
Firm: JH Baxter	Firm: AW	Firm:	Firm:
Date/Time: 3/19/18 1400	Date/Time: 3/20/18 0940	Date/Time:	Date/Time:

ALS

1317 South 13th, Kelso, WA 98626 (360) 577-7222 FAX (360) 636-1068

SR# K1802579

PAGE _____ OF _____

0H	7D	28D	1800	7D

Project Name: JH Baxter - Arlington **Project Number:** _____

Project Manager: _____ **Company:** JH Baxter

Company/Address: 85 N Baxter Rd **Phone:** 541-689-3801

City, State, Zip: Eugene, OR 97402 **FAX:** 541-689-0769

Sampler's Signature: _____

Sample I.D.	Date	Time	LAB ID	Matrix	Number of Containers	Analysis Requested: SM 4500-H+ B / Ph	8270 D / PAH SIM	120.1 / Cond Spec	300.0 Chloride	300.0 / SO4	350.1 / Ammonia T	353.2 / NO2 NO3 T	SM 5220 C / COD T	SM 5310 / TOC T	SM 5550 B / Tan Lign	6010 C / Metals D	6020A / AS D	8151 A Modified / PCP only	REMARKS
MW - 38	3/17/16	1131	23	water	1													X	SI program
MW - 39	3/16/16	1634	24	water	1													X	SI program
MW - 40	3/17/16	1328	25	water	1													X	SI program
MW - 41	3/16/16	0826	26	water	1													X	SI program
MW - 42	1	0856	27	water	1													X	SI program
MW - 43	3/16/16	0946	28	water	1													X	SI program
MW - 44	3/17/16	1051	29	water	1													X	SI program
FIELD BLANK RINSATE	3/17/16	0900	30	water	2		X											X	PMP program
MW - 3	3/17/16	1031	31	water	2		X											X	SI program
MW-4				WATER	2		X		(NO										

TURNAROUND REQUIREMENTS

____ 24 hr ____ 48 hr ____ 5 day

X Standard (21 days)

____ Provide FAX Preliminary Results

Requested Report Date: _____

REPORT REQUIREMENTS

____ I. Routine Report: Results, Method Blank, Surrogate, as required

____ II. Report Dup., MS, MSD as required

____ III. Data Validation Report (includes raw data)

X IV. CLP Deliverable Report

____ V. EDD

Comments/Special Instructions:

PAH samples have 2 - 500ml amber bottles

Lab note: No pH or conductivity on field blank.

Questions? - Please Call Steven Kuhlmeier @ GSI Water Solutions 971-200-8529

Invoice Information

P.O. # _____

Bill to: JH Baxter & Co
San Mateo CA,94402

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Printed Name: MATT HOUSE	Printed Name: BECKMAN	Printed Name:	Printed Name:
Firm: JH Baxter	Firm: ALS	Firm:	Firm:
Date/Time: 3/19/16 1400	Date/Time: 3/20/16 0940	Date/Time:	Date/Time:

PC KL

Cooler Receipt and Preservation Form

Client JH Baxter Service Request *K18* 02579

Received: 3/20/18 Opened: 3/20/18 By: BR Unloaded: 3/20/18 By: BR

1. Samples were received via? *USPS* (*Fed Ex*) *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? front
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID NA	Tracking Number NA	Filed
2.4	2.3	4.1	4.0	-0.1	298		772724389242	
-0.2	-0.3	—	—	-0.1	378		772724389853	

4. Packing material: (*Inserts*) *Baggies* (*Bubble Wrap*) (*Gel Packs*) (*Wet Ice*) *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* NA (Y) N
   If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA Y (N)
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA (Y) N
12. Was C12/Res negative? NA (Y) N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: 6 samples labeled Field Blank - Rinsate. Have 2 samples labeled EB.

Received a PAH bottle for MW-44 - not on COC.

Pentachlorophenol

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program

Cover Page - Organic Analysis Data Package
Pentachlorophenol

Sample Name	Lab Code	Date Collected	Date Received
HCMW-7	K1802579-001	03/18/2018	03/20/2018
MW-15	K1802579-002	03/17/2018	03/20/2018
MW-16	K1802579-003	03/17/2018	03/20/2018
MW-17	K1802579-004	03/17/2018	03/20/2018
MW-18	K1802579-005	03/17/2018	03/20/2018
MW-2	K1802579-006	03/18/2018	03/20/2018
MW-22	K1802579-007	03/17/2018	03/20/2018
MW-23	K1802579-008	03/17/2018	03/20/2018
MW-24	K1802579-009	03/17/2018	03/20/2018
MW-25	K1802579-010	03/17/2018	03/20/2018
MW-26	K1802579-011	03/17/2018	03/20/2018
MW-27	K1802579-012	03/17/2018	03/20/2018
MW-28	K1802579-013	03/17/2018	03/20/2018
MW-29	K1802579-014	03/17/2018	03/20/2018
MW-30	K1802579-015	03/17/2018	03/20/2018
MW-31	K1802579-016	03/17/2018	03/20/2018
MW-32	K1802579-017	03/17/2018	03/20/2018
MW-33	K1802579-018	03/17/2018	03/20/2018
MW-34	K1802579-019	03/17/2018	03/20/2018
MW-35	K1802579-020	03/17/2018	03/20/2018
MW-36	K1802579-021	03/17/2018	03/20/2018
MW-37	K1802579-022	03/17/2018	03/20/2018
MW-38	K1802579-023	03/17/2018	03/20/2018
MW-39	K1802579-024	03/18/2018	03/20/2018
MW-40	K1802579-025	03/17/2018	03/20/2018
MW-41	K1802579-026	03/18/2018	03/20/2018
MW-42	K1802579-027	03/18/2018	03/20/2018
MW-43	K1802579-028	03/18/2018	03/20/2018
MW-44	K1802579-029	03/17/2018	03/20/2018
FIELD BLANK RINSATE	K1802579-030	03/17/2018	03/20/2018
MW-3	K1802579-031	03/17/2018	03/20/2018
MW-35MS	KWG1801592-1	03/17/2018	03/20/2018
MW-35DMS	KWG1801592-2	03/17/2018	03/20/2018
MW-2MS	KWG1801631-1	03/18/2018	03/20/2018
MW-2DMS	KWG1801631-2	03/18/2018	03/20/2018

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/18/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	HCMW-7	**Units:**	ug/L
Lab Code:	K1802579-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**0.79**		0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	88	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-15	**Units:**	ug/L
Lab Code:	K1802579-002	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**0.12**	J	0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	88	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-16	**Units:**	ug/L
Lab Code:	K1802579-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	85	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-17	**Units:**	ug/L
Lab Code:	K1802579-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	89	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-18	**Units:**	ug/L
Lab Code:	K1802579-005	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	89	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/18/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-2	**Units:**	ug/L
Lab Code:	K1802579-006	**Basis:**	NA
Extraction Method:	Method Mod	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**0.087**	J	0.50	0.071	1	03/22/18	03/27/18	KWG1801631	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	83	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-22	**Units:**	ug/L
Lab Code:	K1802579-007	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**49**		0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	95	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-23	**Units:**	ug/L
Lab Code:	K1802579-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**45**		0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	93	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-24	**Units:**	ug/L
Lab Code:	K1802579-009	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**21**		0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	91	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-25	**Units:**	ug/L
Lab Code:	K1802579-010	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**150**		0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	96	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-26	**Units:**	ug/L
Lab Code:	K1802579-011	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**0.25**	J	0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	98	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-27	**Units:**	ug/L
Lab Code:	K1802579-012	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**0.28**	J	0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	95	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-28	**Units:**	ug/L
Lab Code:	K1802579-013	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**0.33**	J	0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	97	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-29	**Units:**	ug/L
Lab Code:	K1802579-014	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**0.097**	J	0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	88	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-30	**Units:**	ug/L
Lab Code:	K1802579-015	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	90	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-31	**Units:**	ug/L
Lab Code:	K1802579-016	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**0.99**		0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	92	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-32	**Units:**	ug/L
Lab Code:	K1802579-017	**Basis:**	NA
Extraction Method:	Method Mod	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.071	1	03/22/18	03/27/18	KWG1801631	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	77	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-33	**Units:**	ug/L
Lab Code:	K1802579-018	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	87	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-34	**Units:**	ug/L
Lab Code:	K1802579-019	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	97	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-35	**Units:**	ug/L
Lab Code:	K1802579-020	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.071	1	03/21/18	03/22/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	95	55-130	03/22/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-36	**Units:**	ug/L
Lab Code:	K1802579-021	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**33**		0.50	0.071	1	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	77	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-37	**Units:**	ug/L
Lab Code:	K1802579-022	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**13**		0.50	0.071	1	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	77	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-38	**Units:**	ug/L
Lab Code:	K1802579-023	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**0.30**	J	0.50	0.071	1	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	75	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/18/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-39	**Units:**	ug/L
Lab Code:	K1802579-024	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.071	1	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	70	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-40	**Units:**	ug/L
Lab Code:	K1802579-025	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**3.5**		0.50	0.071	1	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	78	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/18/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-41	**Units:**	ug/L
Lab Code:	K1802579-026	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.071	1	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	77	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/18/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-42	**Units:**	ug/L
Lab Code:	K1802579-027	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**0.25**	J	0.50	0.071	1	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	76	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/18/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-43	**Units:**	ug/L
Lab Code:	K1802579-028	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**0.21**	J	0.50	0.071	1	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	72	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-44	**Units:**	ug/L
Lab Code:	K1802579-029	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**0.082**	J	0.50	0.071	1	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	69	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	FIELD BLANK RINSATE	**Units:**	ug/L
Lab Code:	K1802579-030	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.071	1	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	77	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	MW-3	**Units:**	ug/L
Lab Code:	K1802579-031	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**6.9**		0.50	0.071	1	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	81	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Pentachlorophenol

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1801592-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.071	1	03/21/18	03/23/18	KWG1801592	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	101	55-130	03/23/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Pentachlorophenol

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1801629-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.071	1	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	77	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Pentachlorophenol

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1801631-4	**Basis:**	NA
Extraction Method:	Method Mod	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.071	1	03/22/18	03/27/18	KWG1801631	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	77	55-130	03/27/18	Acceptable

Comments:

QA/QC Report

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program
Sample Matrix: Water

Surrogate Recovery Summary
Pentachlorophenol

Extraction Method: METHOD **Units:** Percent
Analysis Method: 8151M **Level:** Low

Sample Name	Lab Code	Sur1
HCMW-7	K1802579-001	88
MW-15	K1802579-002	88
MW-16	K1802579-003	85
MW-17	K1802579-004	89
MW-18	K1802579-005	89
MW-2	K1802579-006	83
MW-22	K1802579-007	95
MW-23	K1802579-008	93
MW-24	K1802579-009	91
MW-25	K1802579-010	96
MW-26	K1802579-011	98
MW-27	K1802579-012	95
MW-28	K1802579-013	97
MW-29	K1802579-014	88
MW-30	K1802579-015	90
MW-31	K1802579-016	92
MW-32	K1802579-017	77
MW-33	K1802579-018	87
MW-34	K1802579-019	97
MW-35	K1802579-020	95
MW-36	K1802579-021	77
MW-37	K1802579-022	77
MW-38	K1802579-023	75
MW-39	K1802579-024	70
MW-40	K1802579-025	78
MW-41	K1802579-026	77
MW-42	K1802579-027	76
MW-43	K1802579-028	72
MW-44	K1802579-029	69
FIELD BLANK RINSATE	K1802579-030	77
MW-3	K1802579-031	81
Batch QC	K1802580-004	79
Method Blank	KWG1801592-4	101
Method Blank	KWG1801629-4	77
Method Blank	KWG1801631-4	77

Surrogate Recovery Control Limits (%)

Sur1 = 4-Bromo-2,6-dichlorophenol 55-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

QA/QC Report

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program
Sample Matrix: Water

Surrogate Recovery Summary
Pentachlorophenol

Extraction Method: METHOD **Units:** Percent
Analysis Method: 8151M **Level:** Low

Sample Name	Lab Code	Sur1
MW-35MS	KWG1801592-1	92
MW-35DMS	KWG1801592-2	101
Batch QCMS	KWG1801629-1	77
Batch QCDMS	KWG1801629-2	75
MW-2MS	KWG1801631-1	84
MW-2DMS	KWG1801631-2	73
Lab Control Sample	KWG1801592-3	95
Lab Control Sample	KWG1801629-3	76
Lab Control Sample	KWG1801631-3	77

Surrogate Recovery Control Limits (%)

Sur1 = 4-Bromo-2,6-dichlorophenol 55-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Extracted:**	03/21/2018
Sample Matrix:	Water	**Date Analyzed:**	03/23/2018

Matrix Spike/Duplicate Matrix Spike Summary
Pentachlorophenol

Sample Name:	MW-35	**Units:**	ug/L
Lab Code:	K1802579-020	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M	**Extraction Lot:**	KWG1801592

		MW-35MS KWG1801592-1 Matrix Spike			MW-35DMS KWG1801592-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Pentachlorophenol	ND	6.99	10.0	70	7.51	10.0	75	22-136	7	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Extracted:**	03/21/2018
Sample Matrix:	Water	**Date Analyzed:**	03/27/2018

Matrix Spike/Duplicate Matrix Spike Summary
Pentachlorophenol

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K1802580-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M	**Extraction Lot:**	KWG1801629

		Batch QCMS KWG1801629-1 Matrix Spike			Batch QCDMS KWG1801629-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Pentachlorophenol	280	272E	10.0	-49 #	287E	10.0	104 #	22-136	5	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Extracted:**	03/22/2018
Sample Matrix:	Water	**Date Analyzed:**	03/27/2018

Matrix Spike/Duplicate Matrix Spike Summary
Pentachlorophenol

Sample Name:	MW-2	**Units:**	ug/L
Lab Code:	K1802579-006	**Basis:**	NA
Extraction Method:	Method Mod	**Level:**	Low
Analysis Method:	8151M	**Extraction Lot:**	KWG1801631

		MW-2MS KWG1801631-1 Matrix Spike			MW-2DMS KWG1801631-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Pentachlorophenol	0.087	6.74	10.0	67	5.92	10.0	58	22-136	13	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Extracted:**	03/21/2018
Sample Matrix:	Water	**Date Analyzed:**	03/23/2018

Lab Control Spike Summary
Pentachlorophenol

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	8151M	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1801592

	Lab Control Sample KWG1801592-3 Lab Control Spike			
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**
Pentachlorophenol	6.96	10.0	70	42-110

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Extracted:**	03/21/2018
Sample Matrix:	Water	**Date Analyzed:**	03/27/2018

Lab Control Spike Summary
Pentachlorophenol

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	8151M	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1801629

	Lab Control Sample KWG1801629-3 Lab Control Spike			
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**
Pentachlorophenol	6.46	10.0	65	42-110

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Extracted:**	03/22/2018
Sample Matrix:	Water	**Date Analyzed:**	03/27/2018

Lab Control Spike Summary
Pentachlorophenol

Extraction Method:	Method Mod	**Units:**	ug/L
Analysis Method:	8151M	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1801631

	Lab Control Sample KWG1801631-3 Lab Control Spike			
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**
Pentachlorophenol	6.16	10.0	62	42-110

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Extracted:**	03/21/2018
Sample Matrix:	Water	**Date Analyzed:**	03/23/2018
		Time Analyzed:	01:21

Method Blank Summary
Pentachlorophenol

Sample Name:	Method Blank	**Instrument ID:**	GC28
Lab Code:	KWG1801592-4	**File ID:**	J:\GC28\DATA\032218B\0322F032.D
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M	**Extraction Lot:**	KWG1801592

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
HCMW-7	K1802579-001	J:\GC28\DATA\032218B\0322F005.D	03/22/18	17:28
MW-15	K1802579-002	J:\GC28\DATA\032218B\0322F006.D	03/22/18	17:46
MW-16	K1802579-003	J:\GC28\DATA\032218B\0322F007.D	03/22/18	18:03
MW-17	K1802579-004	J:\GC28\DATA\032218B\0322F008.D	03/22/18	18:21
MW-18	K1802579-005	J:\GC28\DATA\032218B\0322F009.D	03/22/18	18:38
MW-22	K1802579-007	J:\GC28\DATA\032218B\0322F011.D	03/22/18	19:13
MW-23	K1802579-008	J:\GC28\DATA\032218B\0322F012.D	03/22/18	19:31
MW-24	K1802579-009	J:\GC28\DATA\032218B\0322F013.D	03/22/18	19:48
MW-25	K1802579-010	J:\GC28\DATA\032218B\0322F014.D	03/22/18	20:06
MW-26	K1802579-011	J:\GC28\DATA\032218B\0322F017.D	03/22/18	20:58
MW-27	K1802579-012	J:\GC28\DATA\032218B\0322F018.D	03/22/18	21:16
MW-28	K1802579-013	J:\GC28\DATA\032218B\0322F019.D	03/22/18	21:33
MW-29	K1802579-014	J:\GC28\DATA\032218B\0322F020.D	03/22/18	21:51
MW-30	K1802579-015	J:\GC28\DATA\032218B\0322F021.D	03/22/18	22:08
MW-31	K1802579-016	J:\GC28\DATA\032218B\0322F022.D	03/22/18	22:26
MW-33	K1802579-018	J:\GC28\DATA\032218B\0322F024.D	03/22/18	23:01
MW-34	K1802579-019	J:\GC28\DATA\032218B\0322F025.D	03/22/18	23:18
MW-35	K1802579-020	J:\GC28\DATA\032218B\0322F026.D	03/22/18	23:36
MW-35MS	KWG1801592-1	J:\GC28\DATA\032218B\0322F029.D	03/23/18	00:28
MW-35DMS	KWG1801592-2	J:\GC28\DATA\032218B\0322F030.D	03/23/18	00:46
Lab Control Sample	KWG1801592-3	J:\GC28\DATA\032218B\0322F031.D	03/23/18	01:03

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Extracted:**	03/21/2018
Sample Matrix:	Water	**Date Analyzed:**	03/27/2018
		Time Analyzed:	13:01

Method Blank Summary
Pentachlorophenol

Sample Name:	Method Blank	**Instrument ID:**	GC28
Lab Code:	KWG1801629-4	**File ID:**	J:\GC28\DATA\032718\0327F012.D
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M	**Extraction Lot:**	KWG1801629

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Batch QC	K1802580-004	J:\GC28\DATA\032718\0327F008.D	03/27/18	11:51
Batch QCMS	KWG1801629-1	J:\GC28\DATA\032718\0327F009.D	03/27/18	12:09
Batch QCDMS	KWG1801629-2	J:\GC28\DATA\032718\0327F010.D	03/27/18	12:26
Lab Control Sample	KWG1801629-3	J:\GC28\DATA\032718\0327F011.D	03/27/18	12:44
MW-36	K1802579-021	J:\GC28\DATA\032718\0327F015.D	03/27/18	13:53
MW-37	K1802579-022	J:\GC28\DATA\032718\0327F016.D	03/27/18	14:11
MW-38	K1802579-023	J:\GC28\DATA\032718\0327F017.D	03/27/18	14:28
MW-39	K1802579-024	J:\GC28\DATA\032718\0327F018.D	03/27/18	14:46
MW-40	K1802579-025	J:\GC28\DATA\032718\0327F019.D	03/27/18	15:03
MW-41	K1802579-026	J:\GC28\DATA\032718\0327F020.D	03/27/18	15:21
MW-42	K1802579-027	J:\GC28\DATA\032718\0327F021.D	03/27/18	15:38
MW-43	K1802579-028	J:\GC28\DATA\032718\0327F022.D	03/27/18	15:56
MW-44	K1802579-029	J:\GC28\DATA\032718\0327F023.D	03/27/18	16:13
FIELD BLANK RINSATE	K1802579-030	J:\GC28\DATA\032718\0327F024.D	03/27/18	16:31
MW-3	K1802579-031	J:\GC28\DATA\032718\0327F027.D	03/27/18	17:23
Batch QC	K1802580-004	J:\GC28\DATA\032718\0327F048.D	03/27/18	23:33

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Extracted:**	03/22/2018
Sample Matrix:	Water	**Date Analyzed:**	03/27/2018
		Time Analyzed:	23:15

Method Blank Summary
Pentachlorophenol

Sample Name:	Method Blank	**Instrument ID:**	GC28
Lab Code:	KWG1801631-4	**File ID:**	J:\GC28\DATA\032718\0327F047.D
Extraction Method:	Method Mod	**Level:**	Low
Analysis Method:	8151M	**Extraction Lot:**	KWG1801631

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
MW-32	K1802579-017	J:\GC28\DATA\032718\0327F042.D	03/27/18	21:47
MW-2	K1802579-006	J:\GC28\DATA\032718\0327F043.D	03/27/18	22:04
MW-2MS	KWG1801631-1	J:\GC28\DATA\032718\0327F044.D	03/27/18	22:22
MW-2DMS	KWG1801631-2	J:\GC28\DATA\032718\0327F045.D	03/27/18	22:40
Lab Control Sample	KWG1801631-3	J:\GC28\DATA\032718\0327F046.D	03/27/18	22:57

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Extracted:**	03/21/2018
Sample Matrix:	Water	**Date Analyzed:**	03/23/2018
		Time Analyzed:	01:03

Lab Control Sample Summary
Pentachlorophenol

Sample Name:	Lab Control Sample	**Instrument ID:**	GC28
Lab Code:	KWG1801592-3	**File ID:**	J:\GC28\DATA\032218B\0322F031.D
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M	**Extraction Lot:**	KWG1801592

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
HCMW-7	K1802579-001	J:\GC28\DATA\032218B\0322F005.D	03/22/18	17:28
MW-15	K1802579-002	J:\GC28\DATA\032218B\0322F006.D	03/22/18	17:46
MW-16	K1802579-003	J:\GC28\DATA\032218B\0322F007.D	03/22/18	18:03
MW-17	K1802579-004	J:\GC28\DATA\032218B\0322F008.D	03/22/18	18:21
MW-18	K1802579-005	J:\GC28\DATA\032218B\0322F009.D	03/22/18	18:38
MW-22	K1802579-007	J:\GC28\DATA\032218B\0322F011.D	03/22/18	19:13
MW-23	K1802579-008	J:\GC28\DATA\032218B\0322F012.D	03/22/18	19:31
MW-24	K1802579-009	J:\GC28\DATA\032218B\0322F013.D	03/22/18	19:48
MW-25	K1802579-010	J:\GC28\DATA\032218B\0322F014.D	03/22/18	20:06
MW-26	K1802579-011	J:\GC28\DATA\032218B\0322F017.D	03/22/18	20:58
MW-27	K1802579-012	J:\GC28\DATA\032218B\0322F018.D	03/22/18	21:16
MW-28	K1802579-013	J:\GC28\DATA\032218B\0322F019.D	03/22/18	21:33
MW-29	K1802579-014	J:\GC28\DATA\032218B\0322F020.D	03/22/18	21:51
MW-30	K1802579-015	J:\GC28\DATA\032218B\0322F021.D	03/22/18	22:08
MW-31	K1802579-016	J:\GC28\DATA\032218B\0322F022.D	03/22/18	22:26
MW-33	K1802579-018	J:\GC28\DATA\032218B\0322F024.D	03/22/18	23:01
MW-34	K1802579-019	J:\GC28\DATA\032218B\0322F025.D	03/22/18	23:18
MW-35	K1802579-020	J:\GC28\DATA\032218B\0322F026.D	03/22/18	23:36
MW-35MS	KWG1801592-1	J:\GC28\DATA\032218B\0322F029.D	03/23/18	00:28
MW-35DMS	KWG1801592-2	J:\GC28\DATA\032218B\0322F030.D	03/23/18	00:46
Method Blank	KWG1801592-4	J:\GC28\DATA\032218B\0322F032.D	03/23/18	01:21

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Extracted:**	03/21/2018
Sample Matrix:	Water	**Date Analyzed:**	03/27/2018
		Time Analyzed:	12:44

Lab Control Sample Summary
Pentachlorophenol

Sample Name:	Lab Control Sample	**Instrument ID:**	GC28
Lab Code:	KWG1801629-3	**File ID:**	J:\GC28\DATA\032718\0327F011.D
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M	**Extraction Lot:**	KWG1801629

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Batch QC	K1802580-004	J:\GC28\DATA\032718\0327F008.D	03/27/18	11:51
Batch QCMS	KWG1801629-1	J:\GC28\DATA\032718\0327F009.D	03/27/18	12:09
Batch QCDMS	KWG1801629-2	J:\GC28\DATA\032718\0327F010.D	03/27/18	12:26
Method Blank	KWG1801629-4	J:\GC28\DATA\032718\0327F012.D	03/27/18	13:01
MW-36	K1802579-021	J:\GC28\DATA\032718\0327F015.D	03/27/18	13:53
MW-37	K1802579-022	J:\GC28\DATA\032718\0327F016.D	03/27/18	14:11
MW-38	K1802579-023	J:\GC28\DATA\032718\0327F017.D	03/27/18	14:28
MW-39	K1802579-024	J:\GC28\DATA\032718\0327F018.D	03/27/18	14:46
MW-40	K1802579-025	J:\GC28\DATA\032718\0327F019.D	03/27/18	15:03
MW-41	K1802579-026	J:\GC28\DATA\032718\0327F020.D	03/27/18	15:21
MW-42	K1802579-027	J:\GC28\DATA\032718\0327F021.D	03/27/18	15:38
MW-43	K1802579-028	J:\GC28\DATA\032718\0327F022.D	03/27/18	15:56
MW-44	K1802579-029	J:\GC28\DATA\032718\0327F023.D	03/27/18	16:13
FIELD BLANK RINSATE	K1802579-030	J:\GC28\DATA\032718\0327F024.D	03/27/18	16:31
MW-3	K1802579-031	J:\GC28\DATA\032718\0327F027.D	03/27/18	17:23
Batch QC	K1802580-004	J:\GC28\DATA\032718\0327F048.D	03/27/18	23:33

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Extracted:**	03/22/2018
Sample Matrix:	Water	**Date Analyzed:**	03/27/2018
		Time Analyzed:	22:57

Lab Control Sample Summary
Pentachlorophenol

Sample Name:	Lab Control Sample	**Instrument ID:**	GC28
Lab Code:	KWG1801631-3	**File ID:**	J:\GC28\DATA\032718\0327F046.D
Extraction Method:	Method Mod	**Level:**	Low
Analysis Method:	8151M	**Extraction Lot:**	KWG1801631

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
MW-32	K1802579-017	J:\GC28\DATA\032718\0327F042.D	03/27/18	21:47
MW-2	K1802579-006	J:\GC28\DATA\032718\0327F043.D	03/27/18	22:04
MW-2MS	KWG1801631-1	J:\GC28\DATA\032718\0327F044.D	03/27/18	22:22
MW-2DMS	KWG1801631-2	J:\GC28\DATA\032718\0327F045.D	03/27/18	22:40
Method Blank	KWG1801631-4	J:\GC28\DATA\032718\0327F047.D	03/27/18	23:15

QA/QC Results

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program **Calibration Date:** 11/27/2017

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL15625 **Column:** Rtx-1701
Instrument ID: GC28

Level ID	File ID	Level ID	File ID
A	J:\GC28\DATA\112717-CAL\1127F127.D	F	J:\GC28\DATA\112717-CAL\1127F132.D
B	J:\GC28\DATA\112717-CAL\1127F128.D	G	J:\GC28\DATA\112717-CAL\1127F133.D
C	J:\GC28\DATA\112717-CAL\1127F129.D	H	J:\GC28\DATA\112717-CAL\1127F134.D
D	J:\GC28\DATA\112717-CAL\1127F130.D	I	J:\GC28\DATA\112717-CAL\1127F135.D
E	J:\GC28\DATA\112717-CAL\1127F131.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Pentachlorophenol	A	0.95	8.49E+5	B	2.4	7.89E+5	C	4.8	7.38E+5	D	9.5	6.63E+5	E	24	6.25E+5
	F	95	6.19E+5	G	240	5.61E+5	H	480	5.44E+5	I	950	5.10E+5			
4-Bromo-2,6-dichlorophenol	A	1.0	5.54E+5	B	2.5	5.27E+5	C	5.0	5.06E+5	D	10	4.61E+5	E	25	4.46E+5
	F	100	4.60E+5	G	250	4.25E+5									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program **Calibration Date:** 11/27/2017

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL15625 **Column:** Rtx-1701
Instrument ID: GC28

Analyte Name	Compound Type	Calibration Evaluation: Fit Type	Eval.	Eval. Result	Q	Control Criteria
Pentachlorophenol	MS	AverageRF	% RSD	17.6		≤ 20
4-Bromo-2,6-dichlorophenol	SURR	AverageRF	% RSD	9.7		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Calibration Date: 11/27/2017
Date Analyzed: 11/29/2017

Second Source Calibration Verification
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration ID: CAL15625
Units: ug/L

File ID: J:\GC28\DATA\112717-CAL\1129F005.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	43	655000	595000	-9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

QA/QC Results

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program **Calibration Date:** 11/27/2017

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL15625 **Column:** Rtx-35
Instrument ID: GC28

Level ID	File ID	Level ID	File ID
A	J:\GC28\DATA\112717-CAL\1127F127.D\1127F127c.d	F	J:\GC28\DATA\112717-CAL\1127F132.D\1127F132c.d
B	J:\GC28\DATA\112717-CAL\1127F128.D\1127F128c.d	G	J:\GC28\DATA\112717-CAL\1127F133.D\1127F133c.d
C	J:\GC28\DATA\112717-CAL\1127F129.D\1127F129c.d	H	J:\GC28\DATA\112717-CAL\1127F134.D\1127F134c.d
D	J:\GC28\DATA\112717-CAL\1127F130.D\1127F130c.d	I	J:\GC28\DATA\112717-CAL\1127F135.D\1127F135c.d
E	J:\GC28\DATA\112717-CAL\1127F131.D\1127F131c.d		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Pentachlorophenol	A	0.95	8.53E+5	B	2.4	7.40E+5	C	4.8	6.72E+5	D	9.5	6.18E+5	E	24	5.71E+5
	F	95	5.67E+5	G	240	5.45E+5	H	480	5.61E+5	I	950	5.52E+5			
4-Bromo-2,6-dichlorophenol	A	1.0	3.30E+5	B	2.5	3.51E+5	C	5.0	3.53E+5	D	10	3.45E+5	E	25	3.62E+5
	F	100	4.02E+5	G	250	3.80E+5									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program **Calibration Date:** 11/27/2017

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL15625 **Column:** Rtx-35
Instrument ID: GC28

Analyte Name	Compound Type	Calibration Evaluation: Fit Type	Eval.	Eval. Result	Q	Control Criteria
Pentachlorophenol	MS	AverageRF	% RSD	16.7		≤ 20
4-Bromo-2,6-dichlorophenol	SURR	AverageRF	% RSD	6.6		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Calibration Date: 11/27/2017
Date Analyzed: 11/29/2017

Second Source Calibration Verification
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration ID: CAL15625
Units: ug/L

File ID: J:\GC28\DATA\112717-CAL\1129F005.D\1129F005c.d

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	41	631000	543000	-14	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/22/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801591
Units: ug/L

File ID: J:\GC28\DATA\032218B\0322F003.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	45	655000	623000	-5	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	49	483000	474000	-2	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/22/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801591
Units: ug/L

File ID: J:\GC28\DATA\032218B\0322F003.D\0322F003C.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	42	631000	557000	-12	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	55	361000	398000	10	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/22/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801591
Units: ug/L

File ID: J:\GC28\DATA\032218B\0322F015.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	49	655000	681000	4	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	54	483000	517000	7	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/22/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801591
Units: ug/L

File ID: J:\GC28\DATA\032218B\0322F015.D\0322F015C.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	43	631000	577000	-9	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	57	361000	410000	14	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/22/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801591
Units: ug/L

File ID: J:\GC28\DATA\032218B\0322F027.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	50	655000	683000	4	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	54	483000	517000	7	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/22/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801591
Units: ug/L

File ID: J:\GC28\DATA\032218B\0322F027.D\0322F027C.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	44	631000	588000	-7	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	58	361000	415000	15	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/23/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801591
Units: ug/L

File ID: J:\GC28\DATA\032218B\0322F033.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	50	655000	689000	5	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	53	483000	511000	6	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/23/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801591
Units: ug/L

File ID: J:\GC28\DATA\032218B\0322F033.D\0322F033C.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	45	631000	594000	-6	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	57	361000	414000	15	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/27/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801645
Units: ug/L

File ID: J:\GC28\DATA\032718\0327F003.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	655000	639000	-3	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	49	483000	477000	-1	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Analyzed:**	03/27/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type:	External Standard	**Calibration Date:**	11/27/2017
Analysis Method:	8151M	**Calibration ID:**	CAL15625
		Analysis Lot:	KWG1801645
		Units:	ug/L
File ID:	J:\GC28\DATA\032718\0327F003.D\0327F003C.D	**Column ID:**	Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	45	631000	604000	-4	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	58	361000	415000	15	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/27/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801645
Units: ug/L

File ID: J:\GC28\DATA\032718\0327F013.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	655000	637000	-3	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	49	483000	468000	-3	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/27/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801645
Units: ug/L

File ID: J:\GC28\DATA\032718\0327F013.D\0327F013C.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	43	631000	565000	-10	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	54	361000	390000	8	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/27/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801645
Units: ug/L

File ID: J:\GC28\DATA\032718\0327F025.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	655000	635000	-3	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	48	483000	466000	-3	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/27/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801645
Units: ug/L

File ID: J:\GC28\DATA\032718\0327F025.D\0327F025C.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	41	631000	548000	-13	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	53	361000	385000	7	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/27/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801645
Units: ug/L

File ID: J:\GC28\DATA\032718\0327F039.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	47	655000	646000	-1	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	49	483000	477000	-1	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/27/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801645
Units: ug/L

File ID: J:\GC28\DATA\032718\0327F039.D\0327F039C.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	42	631000	560000	-11	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	55	361000	395000	9	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/27/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801645
Units: ug/L

File ID: J:\GC28\DATA\032718\0327F049.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	48	655000	661000	1	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	51	483000	494000	2	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/27/2018

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801645
Units: ug/L

File ID: J:\GC28\DATA\032718\0327F049.D\0327F049C.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	44	631000	587000	-7	NA	± 20	AverageRF
4-Bromo-2,6-dichlorophenol	50	57	361000	409000	13	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program

Analysis Run Log
Pentachlorophenol

Analysis Method: 8151M **Analysis Lot:** KWG1801591
Instrument ID: GC28
Column: Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0322F003.D	Continuing Calibration Verification	KWG1801591-1	3/22/2018	16:53		3/22/2018	17:02
0322F004.D	Instrument Blank	KWG1801591-2	3/22/2018	17:11		3/22/2018	17:20
0322F005.D	HCMW-7	K1802579-001	3/22/2018	17:28		3/22/2018	17:37
0322F006.D	MW-15	K1802579-002	3/22/2018	17:46		3/22/2018	17:55
0322F007.D	MW-16	K1802579-003	3/22/2018	18:03		3/22/2018	18:12
0322F008.D	MW-17	K1802579-004	3/22/2018	18:21		3/22/2018	18:30
0322F009.D	MW-18	K1802579-005	3/22/2018	18:38		3/22/2018	18:47
0322F011.D	MW-22	K1802579-007	3/22/2018	19:13		3/22/2018	19:22
0322F012.D	MW-23	K1802579-008	3/22/2018	19:31		3/22/2018	19:40
0322F013.D	MW-24	K1802579-009	3/22/2018	19:48		3/22/2018	19:57
0322F014.D	MW-25	K1802579-010	3/22/2018	20:06		3/22/2018	20:15
0322F015.D	Continuing Calibration Verification	KWG1801591-3	3/22/2018	20:23		3/22/2018	20:32
0322F016.D	Instrument Blank	KWG1801591-4	3/22/2018	20:41		3/22/2018	20:50
0322F017.D	MW-26	K1802579-011	3/22/2018	20:58		3/22/2018	21:07
0322F018.D	MW-27	K1802579-012	3/22/2018	21:16		3/22/2018	21:25
0322F019.D	MW-28	K1802579-013	3/22/2018	21:33		3/22/2018	21:42
0322F020.D	MW-29	K1802579-014	3/22/2018	21:51		3/22/2018	22:00
0322F021.D	MW-30	K1802579-015	3/22/2018	22:08		3/22/2018	22:17
0322F022.D	MW-31	K1802579-016	3/22/2018	22:26		3/22/2018	22:35
0322F024.D	MW-33	K1802579-018	3/22/2018	23:01		3/22/2018	23:10
0322F025.D	MW-34	K1802579-019	3/22/2018	23:18		3/22/2018	23:27
0322F026.D	MW-35	K1802579-020	3/22/2018	23:36		3/22/2018	23:45
0322F027.D	Continuing Calibration Verification	KWG1801591-5	3/22/2018	23:53		3/23/2018	00:02
0322F028.D	Instrument Blank	KWG1801591-6	3/23/2018	00:11		3/23/2018	00:20
0322F029.D	MW-35MS	KWG1801592-1	3/23/2018	00:28		3/23/2018	00:37
0322F030.D	MW-35DMS	KWG1801592-2	3/23/2018	00:46		3/23/2018	00:55
0322F031.D	Lab Control Sample	KWG1801592-3	3/23/2018	01:03		3/23/2018	01:12
0322F032.D	Method Blank	KWG1801592-4	3/23/2018	01:21		3/23/2018	01:30
0322F033.D	Continuing Calibration Verification	KWG1801591-7	3/23/2018	01:38		3/23/2018	01:47
0322F034.D	Instrument Blank	KWG1801591-8	3/23/2018	01:56		3/23/2018	02:05

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program

Analysis Run Log
Pentachlorophenol

Analysis Method: 8151M **Analysis Lot:** KWG1801645
Instrument ID: GC28
Column: Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0327F003.D	Continuing Calibration Verification	KWG1801645-1	3/27/2018	09:43		3/27/2018	09:52
0327F004.D	Instrument Blank	KWG1801645-2	3/27/2018	10:00		3/27/2018	10:09
0327F005.D	ZZZZZZ	ZZZZZZ	3/27/2018	10:58		3/27/2018	11:07
0327F006.D	ZZZZZZ	ZZZZZZ	3/27/2018	11:17		3/27/2018	11:26
0327F007.D	ZZZZZZ	ZZZZZZ	3/27/2018	11:34		3/27/2018	11:43
0327F008.D	Batch QC	K1802580-004	3/27/2018	11:51		3/27/2018	12:00
0327F009.D	Batch QCMS	KWG1801629-1	3/27/2018	12:09		3/27/2018	12:18
0327F010.D	Batch QCDMS	KWG1801629-2	3/27/2018	12:26		3/27/2018	12:35
0327F011.D	Lab Control Sample	KWG1801629-3	3/27/2018	12:44		3/27/2018	12:53
0327F012.D	Method Blank	KWG1801629-4	3/27/2018	13:01		3/27/2018	13:10
0327F013.D	Continuing Calibration Verification	KWG1801645-3	3/27/2018	13:19		3/27/2018	13:28
0327F014.D	Instrument Blank	KWG1801645-4	3/27/2018	13:36		3/27/2018	13:45
0327F015.D	MW-36	K1802579-021	3/27/2018	13:53		3/27/2018	14:02
0327F016.D	MW-37	K1802579-022	3/27/2018	14:11		3/27/2018	14:20
0327F017.D	MW-38	K1802579-023	3/27/2018	14:28		3/27/2018	14:37
0327F018.D	MW-39	K1802579-024	3/27/2018	14:46		3/27/2018	14:55
0327F019.D	MW-40	K1802579-025	3/27/2018	15:03		3/27/2018	15:12
0327F020.D	MW-41	K1802579-026	3/27/2018	15:21		3/27/2018	15:30
0327F021.D	MW-42	K1802579-027	3/27/2018	15:38		3/27/2018	15:47
0327F022.D	MW-43	K1802579-028	3/27/2018	15:56		3/27/2018	16:05
0327F023.D	MW-44	K1802579-029	3/27/2018	16:13		3/27/2018	16:22
0327F024.D	FIELD BLANK RINSATE	K1802579-030	3/27/2018	16:31		3/27/2018	16:40
0327F025.D	Continuing Calibration Verification	KWG1801645-5	3/27/2018	16:48		3/27/2018	16:57
0327F026.D	Instrument Blank	KWG1801645-6	3/27/2018	17:06		3/27/2018	17:15
0327F027.D	MW-3	K1802579-031	3/27/2018	17:23		3/27/2018	17:32
0327F028.D	ZZZZZZ	ZZZZZZ	3/27/2018	17:41		3/27/2018	17:50
0327F029.D	ZZZZZZ	ZZZZZZ	3/27/2018	17:58		3/27/2018	18:07
0327F030.D	ZZZZZZ	ZZZZZZ	3/27/2018	18:16		3/27/2018	18:25
0327F031.D	ZZZZZZ	ZZZZZZ	3/27/2018	18:33		3/27/2018	18:42
0327F032.D	ZZZZZZ	ZZZZZZ	3/27/2018	18:51		3/27/2018	19:00
0327F033.D	ZZZZZZ	ZZZZZZ	3/27/2018	19:09		3/27/2018	19:18
0327F034.D	ZZZZZZ	ZZZZZZ	3/27/2018	19:26		3/27/2018	19:35
0327F035.D	ZZZZZZ	ZZZZZZ	3/27/2018	19:44		3/27/2018	19:53
0327F036.D	ZZZZZZ	ZZZZZZ	3/27/2018	20:02		3/27/2018	20:11
0327F037.D	ZZZZZZ	ZZZZZZ	3/27/2018	20:19		3/27/2018	20:28

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program

Analysis Run Log
Pentachlorophenol

Analysis Method: 8151M **Analysis Lot:** KWG1801645
Instrument ID: GC28
Column: Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0327F038.D	ZZZZZZ	ZZZZZZ	3/27/2018	20:37		3/27/2018	20:46
0327F039.D	Continuing Calibration Verification	KWG1801645-7	3/27/2018	20:54		3/27/2018	21:03
0327F040.D	Instrument Blank	KWG1801645-8	3/27/2018	21:12		3/27/2018	21:21
0327F041.D	ZZZZZZ	ZZZZZZ	3/27/2018	21:29		3/27/2018	21:38
0327F042.D	MW-32	K1802579-017	3/27/2018	21:47		3/27/2018	21:56
0327F043.D	MW-2	K1802579-006	3/27/2018	22:04		3/27/2018	22:13
0327F044.D	MW-2MS	KWG1801631-1	3/27/2018	22:22		3/27/2018	22:31
0327F045.D	MW-2DMS	KWG1801631-2	3/27/2018	22:40		3/27/2018	22:49
0327F046.D	Lab Control Sample	KWG1801631-3	3/27/2018	22:57		3/27/2018	23:06
0327F047.D	Method Blank	KWG1801631-4	3/27/2018	23:15		3/27/2018	23:24
0327F048.D	Batch QC	K1802580-004	3/27/2018	23:33		3/27/2018	23:42
0327F049.D	Continuing Calibration Verification	KWG1801645-9	3/27/2018	23:50		3/27/2018	23:59
0327F050.D	Instrument Blank	KWG1801645-10	3/28/2018	00:08		3/28/2018	00:17

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program
Sample Matrix: Water

Service Request: K1802579
Date Extracted: 03/21/2018

Extraction Prep Log
Pentachlorophenol

Extraction Method: METHOD
Analysis Method: 8151M

Extraction Lot: KWG1801592
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
HCMW-7	K1802579-001	03/18/18	03/20/18	5mL	1mL	NA	
MW-15	K1802579-002	03/17/18	03/20/18	5mL	1mL	NA	
MW-16	K1802579-003	03/17/18	03/20/18	5mL	1mL	NA	
MW-17	K1802579-004	03/17/18	03/20/18	5mL	1mL	NA	
MW-18	K1802579-005	03/17/18	03/20/18	5mL	1mL	NA	
MW-22	K1802579-007	03/17/18	03/20/18	5mL	1mL	NA	
MW-23	K1802579-008	03/17/18	03/20/18	5mL	1mL	NA	
MW-24	K1802579-009	03/17/18	03/20/18	5mL	1mL	NA	
MW-25	K1802579-010	03/17/18	03/20/18	5mL	1mL	NA	
MW-26	K1802579-011	03/17/18	03/20/18	5mL	1mL	NA	
MW-27	K1802579-012	03/17/18	03/20/18	5mL	1mL	NA	
MW-28	K1802579-013	03/17/18	03/20/18	5mL	1mL	NA	
MW-29	K1802579-014	03/17/18	03/20/18	5mL	1mL	NA	
MW-30	K1802579-015	03/17/18	03/20/18	5mL	1mL	NA	
MW-31	K1802579-016	03/17/18	03/20/18	5mL	1mL	NA	
MW-33	K1802579-018	03/17/18	03/20/18	5mL	1mL	NA	
MW-34	K1802579-019	03/17/18	03/20/18	5mL	1mL	NA	
MW-35	K1802579-020	03/17/18	03/20/18	5mL	1mL	NA	
Method Blank	KWG1801592-4	NA	NA	5mL	1mL	NA	
MW-35MS	KWG1801592-1	03/17/18	03/20/18	5mL	1mL	NA	
MW-35DMS	KWG1801592-2	03/17/18	03/20/18	5mL	1mL	NA	
Lab Control Sample	KWG1801592-3	NA	NA	5mL	1mL	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program
Sample Matrix: Water

Service Request: K1802579
Date Extracted: 03/21/2018

Extraction Prep Log
Pentachlorophenol

Extraction Method: METHOD
Analysis Method: 8151M

Extraction Lot: KWG1801629
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-36	K1802579-021	03/17/18	03/20/18	5mL	1mL	NA	
MW-37	K1802579-022	03/17/18	03/20/18	5mL	1mL	NA	
MW-38	K1802579-023	03/17/18	03/20/18	5mL	1mL	NA	
MW-39	K1802579-024	03/18/18	03/20/18	5mL	1mL	NA	
MW-40	K1802579-025	03/17/18	03/20/18	5mL	1mL	NA	
MW-41	K1802579-026	03/18/18	03/20/18	5mL	1mL	NA	
MW-42	K1802579-027	03/18/18	03/20/18	5mL	1mL	NA	
MW-43	K1802579-028	03/18/18	03/20/18	5mL	1mL	NA	
MW-44	K1802579-029	03/17/18	03/20/18	5mL	1mL	NA	
FIELD BLANK RINSATE	K1802579-030	03/17/18	03/20/18	5mL	1mL	NA	
MW-3	K1802579-031	03/17/18	03/20/18	5mL	1mL	NA	
Method Blank	KWG1801629-4	NA	NA	5mL	1mL	NA	
Batch QCDL	K1802580-004	NA	NA	5mL	1mL	NA	
Batch QC	K1802580-004	NA	NA	5mL	1mL	NA	
Batch QCMS	KWG1801629-1	NA	NA	5mL	1mL	NA	
Batch QCDMS	KWG1801629-2	NA	NA	5mL	1mL	NA	
Lab Control Sample	KWG1801629-3	NA	NA	5mL	1mL	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program
Sample Matrix: Water

Service Request: K1802579
Date Extracted: 03/22/2018

Extraction Prep Log
Pentachlorophenol

Extraction Method: Method Mod
Analysis Method: 8151M

Extraction Lot: KWG1801631
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-2	K1802579-006	03/18/18	03/20/18	5mL	1mL	NA	
MW-32	K1802579-017	03/17/18	03/20/18	5mL	1mL	NA	
Method Blank	KWG1801631-4	NA	NA	5mL	1mL	NA	
MW-2MS	KWG1801631-1	03/18/18	03/20/18	5mL	1mL	NA	
MW-2DMS	KWG1801631-2	03/18/18	03/20/18	5mL	1mL	NA	
Lab Control Sample	KWG1801631-3	NA	NA	5mL	1mL	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/18/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	HCMW-7	**Units:**	ug/L
Lab Code:	K1802579-001	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	0.79	0.82	3.7		1	03/22/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-15	**Units:**	ug/L
Lab Code:	K1802579-002	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	0.12	0.15	22.2	J	1	03/22/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/18/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/22/2018

Pentachlorophenol

Sample Name:	MW-2	**Units:**	ug/L
Lab Code:	K1802579-006	**Basis:**	NA
		Level:	Low
Extraction Method:	Method Mod		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	0.087	0.11	23.4	J	1	03/27/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-22	**Units:**	ug/L
Lab Code:	K1802579-007	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	49	49	0.0		1	03/22/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-23	**Units:**	ug/L
Lab Code:	K1802579-008	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	45	45	0.0		1	03/22/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-24	**Units:**	ug/L
Lab Code:	K1802579-009	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	21	21	0.0		1	03/22/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-25	**Units:**	ug/L
Lab Code:	K1802579-010	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	150	160	6.5		1	03/22/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-26	**Units:**	ug/L
Lab Code:	K1802579-011	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	0.25	0.29	14.8	J	1	03/22/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-27	**Units:**	ug/L
Lab Code:	K1802579-012	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	0.28	0.36	25.0	J	1	03/22/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-28	**Units:**	ug/L
Lab Code:	K1802579-013	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	0.33	0.38	14.1	J	1	03/22/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-29	**Units:**	ug/L
Lab Code:	K1802579-014	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	0.097	0.10	3.0	J	1	03/22/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-31	**Units:**	ug/L
Lab Code:	K1802579-016	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	0.99	1.0	1.0		1	03/22/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-36	**Units:**	ug/L
Lab Code:	K1802579-021	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	33	34	3.0		1	03/27/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-37	**Units:**	ug/L
Lab Code:	K1802579-022	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	13	14	7.4		1	03/27/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-38	**Units:**	ug/L
Lab Code:	K1802579-023	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	0.30	0.39	26.1	J	1	03/27/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-40	**Units:**	ug/L
Lab Code:	K1802579-025	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	3.5	4.0	13.3		1	03/27/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/18/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-42	**Units:**	ug/L
Lab Code:	K1802579-027	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	0.25	0.27	7.7	J	1	03/27/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/18/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-43	**Units:**	ug/L
Lab Code:	K1802579-028	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	0.21	0.22	4.7	J	1	03/27/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-44	**Units:**	ug/L
Lab Code:	K1802579-029	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	0.082	0.091	10.4	J	1	03/27/18

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Pentachlorophenol

Sample Name:	MW-3	**Units:**	ug/L
Lab Code:	K1802579-031	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.071	6.9	7.6	9.7		1	03/27/18

Polynuclear Aromatic Hydrocarbons

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
MW-15	K1802579-002	03/17/2018	03/20/2018
MW-16	K1802579-003	03/17/2018	03/20/2018
MW-17	K1802579-004	03/17/2018	03/20/2018
MW-18	K1802579-005	03/17/2018	03/20/2018
MW-2	K1802579-006	03/18/2018	03/20/2018
MW-30	K1802579-015	03/17/2018	03/20/2018
MW-35	K1802579-020	03/17/2018	03/20/2018
MW-36	K1802579-021	03/17/2018	03/20/2018
MW-37	K1802579-022	03/17/2018	03/20/2018
MW-44	K1802579-029	03/17/2018	03/20/2018
FIELD BLANK RINSATE	K1802579-030	03/17/2018	03/20/2018
MW-3	K1802579-031	03/17/2018	03/20/2018

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-15	**Units:**	ug/L
Lab Code:	K1802579-002	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0025**	J	0.021	0.0015	1	03/22/18	03/29/18	KWG1801565	
2-Methylnaphthalene	ND	U	0.021	0.0014	1	03/22/18	03/29/18	KWG1801565	
Acenaphthylene	ND	U	0.021	0.0012	1	03/22/18	03/29/18	KWG1801565	
Acenaphthene	ND	U	0.021	0.0013	1	03/22/18	03/29/18	KWG1801565	
Fluorene	ND	U	0.021	0.0012	1	03/22/18	03/29/18	KWG1801565	
Phenanthrene	ND	U	0.021	0.0012	1	03/22/18	03/29/18	KWG1801565	
Anthracene	ND	U	0.021	0.00084	1	03/22/18	03/29/18	KWG1801565	
Fluoranthene	ND	U	0.021	0.00084	1	03/22/18	03/29/18	KWG1801565	
Pyrene	ND	U	0.021	0.0011	1	03/22/18	03/29/18	KWG1801565	
Benz(a)anthracene	**0.0025**	J	0.021	0.0010	1	03/22/18	03/29/18	KWG1801565	
Chrysene	ND	U	0.021	0.00078	1	03/22/18	03/29/18	KWG1801565	
Benzo(b)fluoranthene†	ND	U	0.021	0.00085	1	03/22/18	03/29/18	KWG1801565	
Benzo(k)fluoranthene	ND	U	0.021	0.00097	1	03/22/18	03/29/18	KWG1801565	
Benzo(a)pyrene	ND	U	0.021	0.0012	1	03/22/18	03/29/18	KWG1801565	
Indeno(1,2,3-cd)pyrene	ND	U	0.021	0.00092	1	03/22/18	03/29/18	KWG1801565	
Dibenz(a,h)anthracene	ND	U	0.021	0.0014	1	03/22/18	03/29/18	KWG1801565	
Benzo(g,h,i)perylene	ND	U	0.021	0.00088	1	03/22/18	03/29/18	KWG1801565	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	96	42-131	03/29/18	Acceptable
Fluoranthene-d10	103	42-133	03/29/18	Acceptable
Terphenyl-d14	94	32-129	03/29/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-16	**Units:**	ug/L
Lab Code:	K1802579-003	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0015**	J	0.020	0.0014	1	03/22/18	03/29/18	KWG1801565	
2-Methylnaphthalene	ND	U	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Acenaphthylene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Acenaphthene	ND	Ui	0.020	0.018	1	03/22/18	03/29/18	KWG1801565	
Fluorene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Phenanthrene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Anthracene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Fluoranthene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Pyrene	ND	U	0.020	0.0010	1	03/22/18	03/29/18	KWG1801565	
Benz(a)anthracene	**0.0021**	J	0.020	0.00097	1	03/22/18	03/29/18	KWG1801565	
Chrysene	ND	U	0.020	0.00076	1	03/22/18	03/29/18	KWG1801565	
Benzo(b)fluoranthene†	ND	U	0.020	0.00083	1	03/22/18	03/29/18	KWG1801565	
Benzo(k)fluoranthene	ND	U	0.020	0.00094	1	03/22/18	03/29/18	KWG1801565	
Benzo(a)pyrene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.00089	1	03/22/18	03/29/18	KWG1801565	
Dibenz(a,h)anthracene	ND	U	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Benzo(g,h,i)perylene	ND	U	0.020	0.00086	1	03/22/18	03/29/18	KWG1801565	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	87	42-131	03/29/18	Acceptable
Fluoranthene-d10	98	42-133	03/29/18	Acceptable
Terphenyl-d14	87	32-129	03/29/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-17	**Units:**	ug/L
Lab Code:	K1802579-004	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0017**	J	0.020	0.0014	1	03/22/18	03/29/18	KWG1801565	
2-Methylnaphthalene	ND	U	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Acenaphthylene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Acenaphthene	ND	Ui	0.020	0.0061	1	03/22/18	03/29/18	KWG1801565	
Fluorene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Phenanthrene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Anthracene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Fluoranthene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Pyrene	ND	U	0.020	0.0010	1	03/22/18	03/29/18	KWG1801565	
Benz(a)anthracene	**0.0025**	J	0.020	0.00097	1	03/22/18	03/29/18	KWG1801565	
Chrysene	ND	U	0.020	0.00076	1	03/22/18	03/29/18	KWG1801565	
Benzo(b)fluoranthene†	ND	U	0.020	0.00083	1	03/22/18	03/29/18	KWG1801565	
Benzo(k)fluoranthene	ND	U	0.020	0.00094	1	03/22/18	03/29/18	KWG1801565	
Benzo(a)pyrene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.00089	1	03/22/18	03/29/18	KWG1801565	
Dibenz(a,h)anthracene	ND	U	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Benzo(g,h,i)perylene	ND	U	0.020	0.00086	1	03/22/18	03/29/18	KWG1801565	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	90	42-131	03/29/18	Acceptable
Fluoranthene-d10	98	42-133	03/29/18	Acceptable
Terphenyl-d14	81	32-129	03/29/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-18	**Units:**	ug/L
Lab Code:	K1802579-005	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0059**	J	0.020	0.0014	1	03/22/18	03/29/18	KWG1801565	
2-Methylnaphthalene	**0.0052**	J	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Acenaphthylene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Acenaphthene	**0.0015**	J	0.020	0.0012	1	03/22/18	03/29/18	KWG1801565	
Fluorene	**0.0018**	J	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Phenanthrene	**0.0044**	J	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Anthracene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Fluoranthene	**0.0011**	J	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Pyrene	**0.0015**	J	0.020	0.0010	1	03/22/18	03/29/18	KWG1801565	
Benz(a)anthracene	**0.0021**	J	0.020	0.00097	1	03/22/18	03/29/18	KWG1801565	
Chrysene	ND	U	0.020	0.00076	1	03/22/18	03/29/18	KWG1801565	
Benzo(b)fluoranthene†	ND	U	0.020	0.00083	1	03/22/18	03/29/18	KWG1801565	
Benzo(k)fluoranthene	ND	U	0.020	0.00094	1	03/22/18	03/29/18	KWG1801565	
Benzo(a)pyrene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.00089	1	03/22/18	03/29/18	KWG1801565	
Dibenz(a,h)anthracene	ND	U	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Benzo(g,h,i)perylene	ND	U	0.020	0.00086	1	03/22/18	03/29/18	KWG1801565	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	93	42-131	03/29/18	Acceptable
Fluoranthene-d10	100	42-133	03/29/18	Acceptable
Terphenyl-d14	78	32-129	03/29/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/18/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-2	**Units:**	ug/L
Lab Code:	K1802579-006	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0024**	J	0.020	0.0014	1	03/22/18	03/29/18	KWG1801565	
2-Methylnaphthalene	ND	U	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Acenaphthylene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Acenaphthene	ND	U	0.020	0.0012	1	03/22/18	03/29/18	KWG1801565	
Fluorene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Phenanthrene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Anthracene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Fluoranthene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Pyrene	ND	U	0.020	0.0010	1	03/22/18	03/29/18	KWG1801565	
Benz(a)anthracene	**0.0026**	J	0.020	0.00097	1	03/22/18	03/29/18	KWG1801565	
Chrysene	ND	U	0.020	0.00076	1	03/22/18	03/29/18	KWG1801565	
Benzo(b)fluoranthene†	ND	U	0.020	0.00083	1	03/22/18	03/29/18	KWG1801565	
Benzo(k)fluoranthene	ND	U	0.020	0.00094	1	03/22/18	03/29/18	KWG1801565	
Benzo(a)pyrene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.00089	1	03/22/18	03/29/18	KWG1801565	
Dibenz(a,h)anthracene	ND	U	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Benzo(g,h,i)perylene	ND	U	0.020	0.00086	1	03/22/18	03/29/18	KWG1801565	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	97	42-131	03/29/18	Acceptable
Fluoranthene-d10	104	42-133	03/29/18	Acceptable
Terphenyl-d14	90	32-129	03/29/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-30	**Units:**	ug/L
Lab Code:	K1802579-015	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0049**	J	0.020	0.0014	1	03/22/18	03/29/18	KWG1801565	
2-Methylnaphthalene	**0.0039**	J	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Acenaphthylene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Acenaphthene	ND	U	0.020	0.0012	1	03/22/18	03/29/18	KWG1801565	
Fluorene	**0.0014**	J	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Phenanthrene	**0.0045**	J	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Anthracene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Fluoranthene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Pyrene	**0.0013**	J	0.020	0.0010	1	03/22/18	03/29/18	KWG1801565	
Benz(a)anthracene	**0.0020**	J	0.020	0.00097	1	03/22/18	03/29/18	KWG1801565	
Chrysene	ND	U	0.020	0.00076	1	03/22/18	03/29/18	KWG1801565	
Benzo(b)fluoranthene†	ND	U	0.020	0.00083	1	03/22/18	03/29/18	KWG1801565	
Benzo(k)fluoranthene	ND	U	0.020	0.00094	1	03/22/18	03/29/18	KWG1801565	
Benzo(a)pyrene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.00089	1	03/22/18	03/29/18	KWG1801565	
Dibenz(a,h)anthracene	ND	U	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Benzo(g,h,i)perylene	ND	U	0.020	0.00086	1	03/22/18	03/29/18	KWG1801565	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	94	42-131	03/29/18	Acceptable
Fluoranthene-d10	101	42-133	03/29/18	Acceptable
Terphenyl-d14	75	32-129	03/29/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-35	**Units:**	ug/L
Lab Code:	K1802579-020	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.020	0.0014	1	03/22/18	03/29/18	KWG1801565	
2-Methylnaphthalene	ND	U	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Acenaphthylene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Acenaphthene	ND	Ui	0.020	0.0055	1	03/22/18	03/29/18	KWG1801565	
Fluorene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Phenanthrene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Anthracene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Fluoranthene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Pyrene	ND	U	0.020	0.0010	1	03/22/18	03/29/18	KWG1801565	
Benz(a)anthracene	**0.0029**	J	0.020	0.00097	1	03/22/18	03/29/18	KWG1801565	
Chrysene	ND	U	0.020	0.00076	1	03/22/18	03/29/18	KWG1801565	
Benzo(b)fluoranthene†	ND	U	0.020	0.00083	1	03/22/18	03/29/18	KWG1801565	
Benzo(k)fluoranthene	ND	U	0.020	0.00094	1	03/22/18	03/29/18	KWG1801565	
Benzo(a)pyrene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.00089	1	03/22/18	03/29/18	KWG1801565	
Dibenz(a,h)anthracene	ND	U	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Benzo(g,h,i)perylene	ND	U	0.020	0.00086	1	03/22/18	03/29/18	KWG1801565	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	100	42-131	03/29/18	Acceptable
Fluoranthene-d10	109	42-133	03/29/18	Acceptable
Terphenyl-d14	95	32-129	03/29/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-36	**Units:**	ug/L
Lab Code:	K1802579-021	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0035**	J	0.020	0.0014	1	03/22/18	03/29/18	KWG1801565	
2-Methylnaphthalene	**0.0024**	J	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Acenaphthylene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Acenaphthene	ND	U	0.020	0.0012	1	03/22/18	03/29/18	KWG1801565	
Fluorene	**0.0020**	J	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Phenanthrene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Anthracene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Fluoranthene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Pyrene	ND	U	0.020	0.0010	1	03/22/18	03/29/18	KWG1801565	
Benz(a)anthracene	**0.0024**	J	0.020	0.00097	1	03/22/18	03/29/18	KWG1801565	
Chrysene	ND	U	0.020	0.00076	1	03/22/18	03/29/18	KWG1801565	
Benzo(b)fluoranthene†	ND	U	0.020	0.00083	1	03/22/18	03/29/18	KWG1801565	
Benzo(k)fluoranthene	ND	U	0.020	0.00094	1	03/22/18	03/29/18	KWG1801565	
Benzo(a)pyrene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.00089	1	03/22/18	03/29/18	KWG1801565	
Dibenz(a,h)anthracene	ND	U	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Benzo(g,h,i)perylene	ND	U	0.020	0.00086	1	03/22/18	03/29/18	KWG1801565	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	92	42-131	03/29/18	Acceptable
Fluoranthene-d10	98	42-133	03/29/18	Acceptable
Terphenyl-d14	86	32-129	03/29/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-37	**Units:**	ug/L
Lab Code:	K1802579-022	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0021**	J	0.020	0.0014	1	03/22/18	03/29/18	KWG1801565	
2-Methylnaphthalene	**0.0018**	J	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Acenaphthylene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Acenaphthene	**0.0021**	J	0.020	0.0012	1	03/22/18	03/29/18	KWG1801565	
Fluorene	**0.0019**	J	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Phenanthrene	**0.0080**	J	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Anthracene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Fluoranthene	**0.0018**	J	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Pyrene	**0.0032**	J	0.020	0.0010	1	03/22/18	03/29/18	KWG1801565	
Benz(a)anthracene	**0.0025**	J	0.020	0.00097	1	03/22/18	03/29/18	KWG1801565	
Chrysene	ND	U	0.020	0.00076	1	03/22/18	03/29/18	KWG1801565	
Benzo(b)fluoranthene†	ND	U	0.020	0.00083	1	03/22/18	03/29/18	KWG1801565	
Benzo(k)fluoranthene	ND	U	0.020	0.00094	1	03/22/18	03/29/18	KWG1801565	
Benzo(a)pyrene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.00089	1	03/22/18	03/29/18	KWG1801565	
Dibenz(a,h)anthracene	ND	U	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Benzo(g,h,i)perylene	ND	U	0.020	0.00086	1	03/22/18	03/29/18	KWG1801565	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	93	42-131	03/29/18	Acceptable
Fluoranthene-d10	99	42-133	03/29/18	Acceptable
Terphenyl-d14	82	32-129	03/29/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-44	**Units:**	ug/L
Lab Code:	K1802579-029	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.021	0.0015	1	03/22/18	03/29/18	KWG1801565	
2-Methylnaphthalene	ND	U	0.021	0.0014	1	03/22/18	03/29/18	KWG1801565	
Acenaphthylene	ND	U	0.021	0.0012	1	03/22/18	03/29/18	KWG1801565	
Acenaphthene	ND	Ui	0.021	0.0047	1	03/22/18	03/29/18	KWG1801565	
Fluorene	ND	U	0.021	0.0012	1	03/22/18	03/29/18	KWG1801565	
Phenanthrene	ND	U	0.021	0.0012	1	03/22/18	03/29/18	KWG1801565	
Anthracene	ND	U	0.021	0.00083	1	03/22/18	03/29/18	KWG1801565	
Fluoranthene	ND	U	0.021	0.00083	1	03/22/18	03/29/18	KWG1801565	
Pyrene	ND	U	0.021	0.0011	1	03/22/18	03/29/18	KWG1801565	
Benz(a)anthracene	**0.0026**	J	0.021	0.00099	1	03/22/18	03/29/18	KWG1801565	
Chrysene	ND	U	0.021	0.00077	1	03/22/18	03/29/18	KWG1801565	
Benzo(b)fluoranthene†	ND	U	0.021	0.00084	1	03/22/18	03/29/18	KWG1801565	
Benzo(k)fluoranthene	ND	U	0.021	0.00096	1	03/22/18	03/29/18	KWG1801565	
Benzo(a)pyrene	ND	U	0.021	0.0012	1	03/22/18	03/29/18	KWG1801565	
Indeno(1,2,3-cd)pyrene	ND	U	0.021	0.00091	1	03/22/18	03/29/18	KWG1801565	
Dibenz(a,h)anthracene	ND	U	0.021	0.0014	1	03/22/18	03/29/18	KWG1801565	
Benzo(g,h,i)perylene	ND	U	0.021	0.00087	1	03/22/18	03/29/18	KWG1801565	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	95	42-131	03/29/18	Acceptable
Fluoranthene-d10	104	42-133	03/29/18	Acceptable
Terphenyl-d14	96	32-129	03/29/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	FIELD BLANK RINSATE	**Units:**	ug/L
Lab Code:	K1802579-030	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.017**	J	0.021	0.0015	1	03/22/18	03/29/18	KWG1801565	
2-Methylnaphthalene	**0.0044**	J	0.021	0.0014	1	03/22/18	03/29/18	KWG1801565	
Acenaphthylene	ND	U	0.021	0.0012	1	03/22/18	03/29/18	KWG1801565	
Acenaphthene	ND	U	0.021	0.0013	1	03/22/18	03/29/18	KWG1801565	
Fluorene	ND	U	0.021	0.0012	1	03/22/18	03/29/18	KWG1801565	
Phenanthrene	ND	U	0.021	0.0012	1	03/22/18	03/29/18	KWG1801565	
Anthracene	ND	U	0.021	0.00083	1	03/22/18	03/29/18	KWG1801565	
Fluoranthene	ND	U	0.021	0.00083	1	03/22/18	03/29/18	KWG1801565	
Pyrene	ND	U	0.021	0.0011	1	03/22/18	03/29/18	KWG1801565	
Benz(a)anthracene	**0.0024**	J	0.021	0.00099	1	03/22/18	03/29/18	KWG1801565	
Chrysene	ND	U	0.021	0.00077	1	03/22/18	03/29/18	KWG1801565	
Benzo(b)fluoranthene†	ND	U	0.021	0.00084	1	03/22/18	03/29/18	KWG1801565	
Benzo(k)fluoranthene	ND	U	0.021	0.00096	1	03/22/18	03/29/18	KWG1801565	
Benzo(a)pyrene	ND	U	0.021	0.0012	1	03/22/18	03/29/18	KWG1801565	
Indeno(1,2,3-cd)pyrene	ND	U	0.021	0.00091	1	03/22/18	03/29/18	KWG1801565	
Dibenz(a,h)anthracene	ND	U	0.021	0.0014	1	03/22/18	03/29/18	KWG1801565	
Benzo(g,h,i)perylene	ND	U	0.021	0.00087	1	03/22/18	03/29/18	KWG1801565	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	85	42-131	03/29/18	Acceptable
Fluoranthene-d10	95	42-133	03/29/18	Acceptable
Terphenyl-d14	97	32-129	03/29/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-3	**Units:**	ug/L
Lab Code:	K1802579-031	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0027**	J	0.021	0.0015	1	03/22/18	03/30/18	KWG1801565	
2-Methylnaphthalene	ND	U	0.021	0.0014	1	03/22/18	03/30/18	KWG1801565	
Acenaphthylene	ND	U	0.021	0.0012	1	03/22/18	03/30/18	KWG1801565	
Acenaphthene	ND	U	0.021	0.0013	1	03/22/18	03/30/18	KWG1801565	
Fluorene	ND	U	0.021	0.0012	1	03/22/18	03/30/18	KWG1801565	
Phenanthrene	ND	U	0.021	0.0012	1	03/22/18	03/30/18	KWG1801565	
Anthracene	ND	U	0.021	0.00083	1	03/22/18	03/30/18	KWG1801565	
Fluoranthene	ND	U	0.021	0.00083	1	03/22/18	03/30/18	KWG1801565	
Pyrene	ND	U	0.021	0.0011	1	03/22/18	03/30/18	KWG1801565	
Benz(a)anthracene	**0.0024**	J	0.021	0.00099	1	03/22/18	03/30/18	KWG1801565	
Chrysene	ND	U	0.021	0.00077	1	03/22/18	03/30/18	KWG1801565	
Benzo(b)fluoranthene†	ND	U	0.021	0.00084	1	03/22/18	03/30/18	KWG1801565	
Benzo(k)fluoranthene	ND	U	0.021	0.00096	1	03/22/18	03/30/18	KWG1801565	
Benzo(a)pyrene	ND	U	0.021	0.0012	1	03/22/18	03/30/18	KWG1801565	
Indeno(1,2,3-cd)pyrene	ND	U	0.021	0.00091	1	03/22/18	03/30/18	KWG1801565	
Dibenz(a,h)anthracene	ND	U	0.021	0.0014	1	03/22/18	03/30/18	KWG1801565	
Benzo(g,h,i)perylene	ND	U	0.021	0.00087	1	03/22/18	03/30/18	KWG1801565	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	90	42-131	03/30/18	Acceptable
Fluoranthene-d10	97	42-133	03/30/18	Acceptable
Terphenyl-d14	90	32-129	03/30/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1801565-3	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0020**	J	0.020	0.0014	1	03/22/18	03/29/18	KWG1801565	
2-Methylnaphthalene	ND	U	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Acenaphthylene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Acenaphthene	ND	U	0.020	0.0012	1	03/22/18	03/29/18	KWG1801565	
Fluorene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Phenanthrene	**0.0013**	J	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Anthracene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Fluoranthene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Pyrene	ND	U	0.020	0.0010	1	03/22/18	03/29/18	KWG1801565	
Benz(a)anthracene	**0.0023**	J	0.020	0.00097	1	03/22/18	03/29/18	KWG1801565	
Chrysene	ND	U	0.020	0.00076	1	03/22/18	03/29/18	KWG1801565	
Benzo(b)fluoranthene†	ND	U	0.020	0.00083	1	03/22/18	03/29/18	KWG1801565	
Benzo(k)fluoranthene	ND	U	0.020	0.00094	1	03/22/18	03/29/18	KWG1801565	
Benzo(a)pyrene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.00089	1	03/22/18	03/29/18	KWG1801565	
Dibenz(a,h)anthracene	ND	U	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Benzo(g,h,i)perylene	ND	U	0.020	0.00086	1	03/22/18	03/29/18	KWG1801565	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	89	42-131	03/29/18	Acceptable
Fluoranthene-d10	94	42-133	03/29/18	Acceptable
Terphenyl-d14	91	32-129	03/29/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program
Sample Matrix: Water

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3511 **Units:** Percent
Analysis Method: 8270D SIM **Level:** Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
MW-15	K1802579-002	96	103	94
MW-16	K1802579-003	87	98	87
MW-17	K1802579-004	90	98	81
MW-18	K1802579-005	93	100	78
MW-2	K1802579-006	97	104	90
MW-30	K1802579-015	94	101	75
MW-35	K1802579-020	100	109	95
MW-36	K1802579-021	92	98	86
MW-37	K1802579-022	93	99	82
MW-44	K1802579-029	95	104	96
FIELD BLANK RINSATE	K1802579-030	85	95	97
MW-3	K1802579-031	90	97	90
Method Blank	KWG1801565-3	89	94	91
Lab Control Sample	KWG1801565-1	94	102	91
Duplicate Lab Control Sample	KWG1801565-2	89	98	96

Surrogate Recovery Control Limits (%)

Sur1	=	Fluorene-d10	42-131
Sur2	=	Fluoranthene-d10	42-133
Sur3	=	Terphenyl-d14	32-129

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

QA/QC Report

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/29/2018
Time Analyzed: 05:20

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\032918\0329F002.D
Instrument ID: MS14
Analysis Method: 8270D SIM

Lab Code: KWG1801713-2
Analysis Lot: KWG1801713

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	34,773	4.69	18,536	6.27	41,329	7.50
	Upper Limit ==>	69,546	5.19	37,072	6.77	82,658	8.00
	Lower Limit ==>	17,387	4.19	9,268	5.77	20,665	7.00
	ICAL Result ==>	45,603	4.78	23,247	6.33	49,507	7.56
Associated Analyses							
Method Blank	KWG1801565-3	44,126	4.71	22,704	6.26	48,524	7.50
Lab Control Sample	KWG1801565-1	43,490	4.71	20,413	6.26	44,800	7.50
Duplicate Lab Control Sample	KWG1801565-2	43,889	4.71	20,767	6.26	45,542	7.50
MW-15	K1802579-002	42,984	4.71	22,215	6.27	46,504	7.50
MW-16	K1802579-003	44,145	4.71	23,340	6.27	47,892	7.50
MW-17	K1802579-004	43,071	4.71	22,540	6.26	47,098	7.50
MW-18	K1802579-005	43,656	4.71	22,325	6.26	47,147	7.50
MW-2	K1802579-006	41,343	4.71	21,575	6.26	45,554	7.50
MW-30	K1802579-015	41,072	4.71	21,495	6.27	45,249	7.50
MW-35	K1802579-020	38,112	4.71	20,087	6.27	42,101	7.50
MW-36	K1802579-021	40,502	4.71	21,174	6.27	44,211	7.50
MW-37	K1802579-022	40,013	4.71	20,672	6.27	44,015	7.50
MW-44	K1802579-029	39,853	4.71	20,888	6.27	43,678	7.50
FIELD BLANK RINSATE	K1802579-030	39,554	4.71	21,913	6.27	43,831	7.50

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Report

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/29/2018
Time Analyzed: 05:20

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\032918\0329F002.D
Instrument ID: MS14
Analysis Method: 8270D SIM

Lab Code: KWG1801713-2
Analysis Lot: KWG1801713

		Chrysene-d12		Perylene-d12	
		Area	**RT**	**Area**	**RT**
	Results ==>	49,310	10.01	53,785	13.04
	Upper Limit ==>	98,620	10.51	107,570	13.54
	Lower Limit ==>	24,655	9.51	26,893	12.54
	ICAL Result ==>	64,481	10.08	65,038	13.14
Associated Analyses					
Method Blank	KWG1801565-3	55,646	10.01	61,173	13.03
Lab Control Sample	KWG1801565-1	52,492	10.01	58,250	13.04
Duplicate Lab Control Sample	KWG1801565-2	53,138	10.01	59,229	13.04
MW-15	K1802579-002	53,020	10.01	58,512	13.03
MW-16	K1802579-003	54,816	10.01	60,678	13.03
MW-17	K1802579-004	54,105	10.01	59,643	13.03
MW-18	K1802579-005	54,742	10.01	59,892	13.03
MW-2	K1802579-006	51,897	10.01	57,438	13.03
MW-30	K1802579-015	51,989	10.01	57,443	13.03
MW-35	K1802579-020	48,355	10.01	56,233	13.03
MW-36	K1802579-021	51,625	10.01	57,028	13.03
MW-37	K1802579-022	51,006	10.01	58,064	13.03
MW-44	K1802579-029	50,483	10.01	57,813	13.03
FIELD BLANK RINSATE	K1802579-030	49,363	10.01	54,392	13.03

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Report

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/30/2018
Time Analyzed: 06:21

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\033018\0330F002.D
Instrument ID: MS14
Analysis Method: 8270D SIM

Lab Code: KWG1801739-2
Analysis Lot: KWG1801739

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	27,357	4.70	14,847	6.27	33,026	7.50
	Upper Limit ==>	54,714	5.20	29,694	6.77	66,052	8.00
	Lower Limit ==>	13,679	4.20	7,424	5.77	16,513	7.00
	ICAL Result ==>	45,603	4.78	23,247	6.33	49,507	7.56
Associated Analyses							
MW-3	K1802579-031	39,449	4.71	20,677	6.27	43,722	7.50

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Analyzed:**	03/30/2018
		Time Analyzed:	06:21

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS14\DATA\033018\0330F002.D	**Lab Code:**	KWG1801739-2
Instrument ID:	MS14	**Analysis Lot:**	KWG1801739
Analysis Method:	8270D SIM		

		Chrysene-d12		Perylene-d12	
		Area	**RT**	**Area**	**RT**
	Results ==>	42,596	10.01	46,349	13.04
	Upper Limit ==>	85,192	10.51	92,698	13.54
	Lower Limit ==>	21,298	9.51	23,175	12.54
	ICAL Result ==>	64,481	10.08	65,038	13.14
Associated Analyses					
MW-3	K1802579-031	50,242	10.01	55,222	13.03

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Extracted:**	03/22/2018
Sample Matrix:	Water	**Date Analyzed:**	03/29/2018

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3511	**Units:**	ug/L
Analysis Method:	8270D SIM	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1801565

	Lab Control Sample KWG1801565-1 Lab Control Spike			Duplicate Lab Control Sample KWG1801565-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	2.41	2.78	87	2.39	2.78	86	52-115	1	30
2-Methylnaphthalene	2.33	2.78	84	2.30	2.78	83	48-120	2	30
Acenaphthylene	2.58	2.78	93	2.55	2.78	92	58-124	2	30
Acenaphthene	2.62	2.78	94	2.56	2.78	92	63-121	2	30
Fluorene	2.62	2.78	94	2.56	2.78	92	68-121	3	30
Phenanthrene	2.56	2.78	92	2.48	2.78	89	64-126	3	30
Anthracene	2.62	2.78	94	2.54	2.78	92	68-127	3	30
Fluoranthene	2.51	2.78	90	2.47	2.78	89	70-127	1	30
Pyrene	2.82	2.78	101	2.79	2.78	101	72-127	1	30
Benz(a)anthracene	2.88	2.78	104	2.84	2.78	102	74-124	1	30
Chrysene	2.84	2.78	102	2.82	2.78	102	74-132	1	30
Benzo(b)fluoranthene	2.66	2.78	96	2.65	2.78	95	73-136	0	30
Benzo(k)fluoranthene	2.66	2.78	96	2.58	2.78	93	74-134	3	30
Benzo(a)pyrene	2.69	2.78	97	2.66	2.78	96	75-131	1	30
Indeno(1,2,3-cd)pyrene	2.66	2.78	96	2.60	2.78	94	63-136	2	30
Dibenz(a,h)anthracene	2.44	2.78	88	2.40	2.78	86	59-135	2	30
Benzo(g,h,i)perylene	2.65	2.78	95	2.61	2.78	94	63-127	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Extracted:**	03/22/2018
Sample Matrix:	Water	**Date Analyzed:**	03/29/2018
		Time Analyzed:	11:11

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Instrument ID:**	MS14
Lab Code:	KWG1801565-3	**File ID:**	J:\MS14\DATA\032918\0329F017.D
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM	**Extraction Lot:**	KWG1801565

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1801565-1	J:\MS14\DATA\032918\0329F018.D	03/29/18	11:35
Duplicate Lab Control Sample	KWG1801565-2	J:\MS14\DATA\032918\0329F019.D	03/29/18	11:59
MW-15	K1802579-002	J:\MS14\DATA\032918\0329F020.D	03/29/18	12:23
MW-16	K1802579-003	J:\MS14\DATA\032918\0329F021.D	03/29/18	12:47
MW-17	K1802579-004	J:\MS14\DATA\032918\0329F022.D	03/29/18	13:11
MW-18	K1802579-005	J:\MS14\DATA\032918\0329F023.D	03/29/18	13:35
MW-2	K1802579-006	J:\MS14\DATA\032918\0329F024.D	03/29/18	13:59
MW-30	K1802579-015	J:\MS14\DATA\032918\0329F025.D	03/29/18	14:23
MW-35	K1802579-020	J:\MS14\DATA\032918\0329F026.D	03/29/18	14:47
MW-36	K1802579-021	J:\MS14\DATA\032918\0329F027.D	03/29/18	15:11
MW-37	K1802579-022	J:\MS14\DATA\032918\0329F028.D	03/29/18	15:35
MW-44	K1802579-029	J:\MS14\DATA\032918\0329F029.D	03/29/18	15:58
FIELD BLANK RINSATE	K1802579-030	J:\MS14\DATA\032918\0329F030.D	03/29/18	16:22
MW-3	K1802579-031	J:\MS14\DATA\033018\0330F004.D	03/30/18	07:30

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802579
Project:	Arlington Landfill Wells/SI & LF Program	**Date Extracted:**	03/22/2018
Sample Matrix:	Water	**Date Analyzed:**	03/29/2018
		Time Analyzed:	11:35

Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Instrument ID:**	MS14
Lab Code:	KWG1801565-1	**File ID:**	J:\MS14\DATA\032918\0329F018.D
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM	**Extraction Lot:**	KWG1801565

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG1801565-3	J:\MS14\DATA\032918\0329F017.D	03/29/18	11:11
MW-15	K1802579-002	J:\MS14\DATA\032918\0329F020.D	03/29/18	12:23
MW-16	K1802579-003	J:\MS14\DATA\032918\0329F021.D	03/29/18	12:47
MW-17	K1802579-004	J:\MS14\DATA\032918\0329F022.D	03/29/18	13:11
MW-18	K1802579-005	J:\MS14\DATA\032918\0329F023.D	03/29/18	13:35
MW-2	K1802579-006	J:\MS14\DATA\032918\0329F024.D	03/29/18	13:59
MW-30	K1802579-015	J:\MS14\DATA\032918\0329F025.D	03/29/18	14:23
MW-35	K1802579-020	J:\MS14\DATA\032918\0329F026.D	03/29/18	14:47
MW-36	K1802579-021	J:\MS14\DATA\032918\0329F027.D	03/29/18	15:11
MW-37	K1802579-022	J:\MS14\DATA\032918\0329F028.D	03/29/18	15:35
MW-44	K1802579-029	J:\MS14\DATA\032918\0329F029.D	03/29/18	15:58
FIELD BLANK RINSATE	K1802579-030	J:\MS14\DATA\032918\0329F030.D	03/29/18	16:22
MW-3	K1802579-031	J:\MS14\DATA\033018\0330F004.D	03/30/18	07:30

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/29/2018
Time Analyzed: 04:49

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\032918\0329F001.D
Instrument ID: MS14
Column:

Analysis Method: 8270D SIM
Analysis Lot: KWG1801713

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	51.3	94501	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	47.2	86984	PASS
70	69	0	2	0.7	619	PASS
127	198	10	80	50.0	92216	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	51.4	184296	PASS
199	198	5	9	6.4	11775	PASS
275	198	10	60	35.9	66197	PASS
365	442	1	50	3.9	13824	PASS
441	443	0	100	81.2	54056	PASS
442	442	100	100	100.0	358357	PASS
443	442	15	24	18.6	66533	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1801713-2	J:\MS14\DATA\032918\0329F002.D	03/29/2018	05:20	
Method Blank	KWG1801565-3	J:\MS14\DATA\032918\0329F017.D	03/29/2018	11:11	
Lab Control Sample	KWG1801565-1	J:\MS14\DATA\032918\0329F018.D	03/29/2018	11:35	
Duplicate Lab Control Sample	KWG1801565-2	J:\MS14\DATA\032918\0329F019.D	03/29/2018	11:59	
MW-15	K1802579-002	J:\MS14\DATA\032918\0329F020.D	03/29/2018	12:23	
MW-16	K1802579-003	J:\MS14\DATA\032918\0329F021.D	03/29/2018	12:47	
MW-17	K1802579-004	J:\MS14\DATA\032918\0329F022.D	03/29/2018	13:11	
MW-18	K1802579-005	J:\MS14\DATA\032918\0329F023.D	03/29/2018	13:35	
MW-2	K1802579-006	J:\MS14\DATA\032918\0329F024.D	03/29/2018	13:59	
MW-30	K1802579-015	J:\MS14\DATA\032918\0329F025.D	03/29/2018	14:23	
MW-35	K1802579-020	J:\MS14\DATA\032918\0329F026.D	03/29/2018	14:47	
MW-36	K1802579-021	J:\MS14\DATA\032918\0329F027.D	03/29/2018	15:11	
MW-37	K1802579-022	J:\MS14\DATA\032918\0329F028.D	03/29/2018	15:35	
MW-44	K1802579-029	J:\MS14\DATA\032918\0329F029.D	03/29/2018	15:58	
FIELD BLANK RINSATE	K1802579-030	J:\MS14\DATA\032918\0329F030.D	03/29/2018	16:22	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/30/2018
Time Analyzed: 05:57

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\033018\0330F001.D
Instrument ID: MS14
Column:

Analysis Method: 8270D SIM
Analysis Lot: KWG1801739

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
442	442	100	100	100.0	316394	PASS
443	442	15	24	19.2	60594	PASS
51	198	10	80	57.2	99130	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	49.3	85344	PASS
70	69	0	2	0.9	795	PASS
127	198	10	80	51.2	88592	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	54.7	173162	PASS
199	198	5	9	6.9	11883	PASS
275	198	10	60	36.4	63096	PASS
365	442	1	50	4.1	13086	PASS
441	443	0	100	77.5	46957	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1801739-2	J:\MS14\DATA\033018\0330F002.D	03/30/2018	06:21	
MW-3	K1802579-031	J:\MS14\DATA\033018\0330F004.D	03/30/2018	07:30	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program **Calibration Date:** 10/13/2017

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL15579 **Column:** MS
Instrument ID: MS14

Level ID	File ID	Level ID	File ID
A	J:\MS14\DATA\101317\1013F003.D	F	J:\MS14\DATA\101317\1013F008.D
B	J:\MS14\DATA\101317\1013F004.D	G	J:\MS14\DATA\101317\1013F009.D
C	J:\MS14\DATA\101317\1013F005.D	H	J:\MS14\DATA\101317\1013F010.D
D	J:\MS14\DATA\101317\1013F006.D	I	J:\MS14\DATA\101317\1013F011.D
E	J:\MS14\DATA\101317\1013F007.D		

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	4.0	1.18	B	8.0	1.19	C	20	1.14	D	100	1.10	E	200	1.11
	F	400	1.15	G	1000	1.13	H	1600	1.13	I	2000	1.12			
2-Methylnaphthalene	A	4.0	0.984	B	8.0	0.814	C	20	0.820	D	100	0.773	E	200	0.768
	F	400	0.768	G	1000	0.737	H	1600	0.739	I	2000	0.736			
Acenaphthylene	A	4.0	2.48	B	8.0	2.37	C	20	2.40	D	100	2.32	E	200	2.36
	F	400	2.47	G	1000	2.51	H	1600	2.56	I	2000	2.57			
Acenaphthene	A	4.0	1.34	B	8.0	1.36	C	20	1.34	D	100	1.31	E	200	1.33
	F	400	1.38	G	1000	1.41	H	1600	1.45	I	2000	1.46			
Fluorene	A	4.0	1.73	B	8.0	1.67	C	20	1.65	D	100	1.63	E	200	1.65
	F	400	1.70	G	1000	1.71	H	1600	1.75	I	2000	1.77			
Phenanthrene	A	4.0	1.33	B	8.0	1.25	C	20	1.21	D	100	1.17	E	200	1.18
	F	400	1.22	G	1000	1.24	H	1600	1.27	I	2000	1.29			
Anthracene	A	4.0	1.23	B	8.0	1.19	C	20	1.20	D	100	1.17	E	200	1.20
	F	400	1.23	G	1000	1.25	H	1600	1.27	I	2000	1.28			
Fluoranthene	A	4.0	1.48	B	8.0	1.41	C	20	1.44	D	100	1.41	E	200	1.41
	F	400	1.48	G	1000	1.53	H	1600	1.54	I	2000	1.55			
Pyrene	A	4.0	1.21	B	8.0	1.17	C	20	1.17	D	100	1.14	E	200	1.15
	F	400	1.20	G	1000	1.24	H	1600	1.28	I	2000	1.29			
Benz(a)anthracene	A	4.0	1.30	B	8.0	1.21	C	20	1.17	D	100	1.12	E	200	1.14
	F	400	1.20	G	1000	1.23	H	1600	1.25	I	2000	1.25			
Chrysene	A	4.0	1.13	B	8.0	1.14	C	20	1.10	D	100	1.08	E	200	1.09
	F	400	1.12	G	1000	1.14	H	1600	1.17	I	2000	1.17			
Benzo(b)fluoranthene	A	4.0	1.37	B	8.0	1.19	C	20	1.21	D	100	1.18	E	200	1.23
	F	400	1.28	G	1000	1.30	H	1600	1.31	I	2000	1.30			
Benzo(k)fluoranthene	A	4.0	1.29	B	8.0	1.22	C	20	1.19	D	100	1.19	E	200	1.22
	F	400	1.28	G	1000	1.25	H	1600	1.27	I	2000	1.26			
Benzo(a)pyrene	A	4.0	1.11	B	8.0	1.07	C	20	1.08	D	100	1.05	E	200	1.07
	F	400	1.12	G	1000	1.13	H	1600	1.15	I	2000	1.14			
Indeno(1,2,3-cd)pyrene	A	4.0	1.07	B	8.0	0.946	C	20	0.945	D	100	0.956	E	200	0.969
	F	400	1.02	G	1000	1.00	H	1600	1.01	I	2000	1.00			

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program **Calibration Date:** 10/13/2017

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL15579 **Column:** MS
Instrument ID: MS14

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dibenz(a,h)anthracene	A	4.0	1.14	B	8.0	1.13	C	20	0.979	D	100	0.947	E	200	0.961
	F	400	0.975	G	1000	0.975	H	1600	0.993	I	2000	0.983			
Benzo(g,h,i)perylene	A	4.0	1.28	B	8.0	1.15	C	20	1.07	D	100	1.07	E	200	1.08
	F	400	1.11	G	1000	1.07	H	1600	1.06	I	2000	1.04			
Fluorene-d10	A	4.0	1.65	B	8.0	1.44	C	20	1.31	D	100	1.26	E	200	1.27
	F	400	1.31	G	1000	1.33	H	1600	1.37	I	2000	1.38			
Fluoranthene-d10	A	4.0	1.21	B	8.0	1.18	C	20	1.19	D	100	1.19	E	200	1.20
	F	400	1.27	G	1000	1.34	H	1600	1.37	I	2000	1.36			
Terphenyl-d14	A	4.0	0.889	B	8.0	0.855	C	20	0.825	D	100	0.800	E	200	0.814
	F	400	0.833	G	1000	0.845	H	1600	0.864	I	2000	0.864			

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program **Calibration Date:** 10/13/2017

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL15579 **Column:** MS
Instrument ID: MS14

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	2.6		≤ 20	1.14		0.70
2-Methylnaphthalene	MS	AverageRF	% RSD	9.8		≤ 20	0.793		0.40
Acenaphthylene	MS	AverageRF	% RSD	3.6		≤ 20	2.45		0.90
Acenaphthene	MS	AverageRF	% RSD	3.8		≤ 20	1.38		0.90
Fluorene	MS	AverageRF	% RSD	2.8		≤ 20	1.70		0.90
Phenanthrene	MS	AverageRF	% RSD	4.1		≤ 20	1.24		0.70
Anthracene	MS	AverageRF	% RSD	3.0		≤ 20	1.22		0.70
Fluoranthene	MS	AverageRF	% RSD	4.0		≤ 20	1.47		0.60
Pyrene	MS	AverageRF	% RSD	4.6		≤ 20	1.21		0.60
Benz(a)anthracene	MS	AverageRF	% RSD	4.8		≤ 20	1.21		0.80
Chrysene	MS	AverageRF	% RSD	2.9		≤ 20	1.13		0.70
Benzo(b)fluoranthene	MS	AverageRF	% RSD	4.9		≤ 20	1.26		0.70
Benzo(k)fluoranthene	MS	AverageRF	% RSD	3.1		≤ 20	1.24		0.70
Benzo(a)pyrene	MS	AverageRF	% RSD	3.3		≤ 20	1.10		0.70
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	4.1		≤ 20	0.992		0.50
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	7.2		≤ 20	1.01		0.40
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	6.5		≤ 20	1.10		0.50
Fluorene-d10	SURR	AverageRF	% RSD	8.8		≤ 20	1.37		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	6.5		≤ 20	1.26		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	3.3		≤ 20	0.843		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Calibration Date: 10/13/2017
Date Analyzed: 10/13/2017

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270D SIM

Calibration ID: CAL15579
Units: ng/ml

File ID: J:\MS14\DATA\101317\1013F013.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	400	380	1.14	1.08	-6	NA	± 30 %	AverageRF
2-Methylnaphthalene	400	360	0.793	0.716	-10	NA	± 30 %	AverageRF
Acenaphthylene	400	380	2.45	2.30	-6	NA	± 30 %	AverageRF
Acenaphthene	400	380	1.38	1.32	-4	NA	± 30 %	AverageRF
Fluorene	400	380	1.70	1.60	-6	NA	± 30 %	AverageRF
Phenanthrene	400	370	1.24	1.14	-8	NA	± 30 %	AverageRF
Anthracene	400	380	1.22	1.15	-6	NA	± 30 %	AverageRF
Fluoranthene	400	390	1.47	1.44	-2	NA	± 30 %	AverageRF
Pyrene	400	380	1.21	1.14	-6	NA	± 30 %	AverageRF
Benz(a)anthracene	400	380	1.21	1.15	-5	NA	± 30 %	AverageRF
Chrysene	400	380	1.13	1.08	-4	NA	± 30 %	AverageRF
Benzo(b)fluoranthene	400	390	1.26	1.22	-3	NA	± 30 %	AverageRF
Benzo(k)fluoranthene	400	390	1.24	1.20	-3	NA	± 30 %	AverageRF
Benzo(a)pyrene	400	380	1.10	1.05	-5	NA	± 30 %	AverageRF
Indeno(1,2,3-cd)pyrene	400	370	0.992	0.913	-8	NA	± 30 %	AverageRF
Dibenz(a,h)anthracene	400	370	1.01	0.924	-8	NA	± 30 %	AverageRF
Benzo(g,h,i)perylene	400	370	1.10	1.02	-7	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/29/2018

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270D SIM

Calibration Date: 10/13/2017
Calibration ID: CAL15579
Analysis Lot: KWG1801713
Units: ng/ml

File ID: J:\MS14\DATA\032918\0329F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	400	380	0.70	1.14	1.09	-5	NA	± 20	AverageRF
2-Methylnaphthalene	400	400	0.40	0.793	0.784	-1	NA	± 20	AverageRF
Acenaphthylene	400	390	0.90	2.45	2.39	-2	NA	± 20	AverageRF
Acenaphthene	400	400	0.90	1.38	1.38	0	NA	± 20	AverageRF
Fluorene	400	410	0.90	1.70	1.75	3	NA	± 20	AverageRF
Phenanthrene	400	400	0.70	1.24	1.24	0	NA	± 20	AverageRF
Anthracene	400	380	0.70	1.22	1.15	-6	NA	± 20	AverageRF
Fluoranthene	400	410	0.60	1.47	1.50	2	NA	± 20	AverageRF
Pyrene	400	450	0.60	1.21	1.35	12	NA	± 20	AverageRF
Benz(a)anthracene	400	440	0.80	1.21	1.33	10	NA	± 20	AverageRF
Chrysene	400	450	0.70	1.13	1.26	12	NA	± 20	AverageRF
Benzo(b)fluoranthene	400	430	0.70	1.26	1.35	7	NA	± 20	AverageRF
Benzo(k)fluoranthene	400	430	0.70	1.24	1.33	7	NA	± 20	AverageRF
Benzo(a)pyrene	400	420	0.70	1.10	1.17	6	NA	± 20	AverageRF
Indeno(1,2,3-cd)pyrene	400	450	0.50	0.992	1.11	12	NA	± 20	AverageRF
Dibenz(a,h)anthracene	400	420	0.40	1.01	1.05	4	NA	± 20	AverageRF
Benzo(g,h,i)perylene	400	450	0.50	1.10	1.24	13	NA	± 20	AverageRF
Fluorene-d10	400	400	0.01	1.37	1.36	0	NA	± 20	AverageRF
Fluoranthene-d10	400	410	0.01	1.26	1.28	2	NA	± 20	AverageRF
Terphenyl-d14	400	400	0.01	0.843	0.850	1	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program

Service Request: K1802579
Date Analyzed: 03/30/2018

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270D SIM

Calibration Date: 10/13/2017
Calibration ID: CAL15579
Analysis Lot: KWG1801739
Units: ng/ml

File ID: J:\MS14\DATA\033018\0330F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	400	390	0.70	1.14	1.12	-2	NA	± 20	AverageRF
2-Methylnaphthalene	400	410	0.40	0.793	0.813	2	NA	± 20	AverageRF
Acenaphthylene	400	390	0.90	2.45	2.40	-2	NA	± 20	AverageRF
Acenaphthene	400	400	0.90	1.38	1.38	0	NA	± 20	AverageRF
Fluorene	400	410	0.90	1.70	1.74	3	NA	± 20	AverageRF
Phenanthrene	400	400	0.70	1.24	1.24	0	NA	± 20	AverageRF
Anthracene	400	380	0.70	1.22	1.16	-5	NA	± 20	AverageRF
Fluoranthene	400	430	0.60	1.47	1.59	8	NA	± 20	AverageRF
Pyrene	400	440	0.60	1.21	1.32	9	NA	± 20	AverageRF
Benz(a)anthracene	400	440	0.80	1.21	1.31	9	NA	± 20	AverageRF
Chrysene	400	450	0.70	1.13	1.26	12	NA	± 20	AverageRF
Benzo(b)fluoranthene	400	420	0.70	1.26	1.32	5	NA	± 20	AverageRF
Benzo(k)fluoranthene	400	430	0.70	1.24	1.32	6	NA	± 20	AverageRF
Benzo(a)pyrene	400	410	0.70	1.10	1.14	4	NA	± 20	AverageRF
Indeno(1,2,3-cd)pyrene	400	440	0.50	0.992	1.09	10	NA	± 20	AverageRF
Dibenz(a,h)anthracene	400	420	0.40	1.01	1.06	5	NA	± 20	AverageRF
Benzo(g,h,i)perylene	400	450	0.50	1.10	1.24	12	NA	± 20	AverageRF
Fluorene-d10	400	390	0.01	1.37	1.33	-3	NA	± 20	AverageRF
Fluoranthene-d10	400	430	0.01	1.26	1.35	7	NA	± 20	AverageRF
Terphenyl-d14	400	400	0.01	0.843	0.847	0	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270D SIM **Analysis Lot:** KWG1801713
Instrument ID: MS14

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0329F001.D	GC/MS Tuning - Decafluorotriphenylphosph	KWG1801713-1	3/29/2018	04:49		3/29/2018	05:09
0329F002.D	Continuing Calibration Verification	KWG1801713-2	3/29/2018	05:20		3/29/2018	05:39
0329F003.D	ZZZZZZ	ZZZZZZ	3/29/2018	05:43		3/29/2018	06:02
0329F004.D	ZZZZZZ	ZZZZZZ	3/29/2018	06:06		3/29/2018	06:25
0329F005.D	ZZZZZZ	ZZZZZZ	3/29/2018	06:29		3/29/2018	06:48
0329F006.D	ZZZZZZ	ZZZZZZ	3/29/2018	06:53		3/29/2018	07:12
0329F007.D	ZZZZZZ	ZZZZZZ	3/29/2018	07:16		3/29/2018	07:35
0329F008.D	ZZZZZZ	ZZZZZZ	3/29/2018	07:39		3/29/2018	07:58
0329F009.D	ZZZZZZ	ZZZZZZ	3/29/2018	08:03		3/29/2018	08:22
0329F010.D	ZZZZZZ	ZZZZZZ	3/29/2018	08:26		3/29/2018	08:45
0329F011.D	ZZZZZZ	ZZZZZZ	3/29/2018	08:50		3/29/2018	09:09
0329F012.D	ZZZZZZ	ZZZZZZ	3/29/2018	09:13		3/29/2018	09:32
0329F013.D	ZZZZZZ	ZZZZZZ	3/29/2018	09:36		3/29/2018	09:55
0329F014.D	ZZZZZZ	ZZZZZZ	3/29/2018	10:00		3/29/2018	10:19
0329F015.D	ZZZZZZ	ZZZZZZ	3/29/2018	10:24		3/29/2018	10:43
0329F016.D	ZZZZZZ	ZZZZZZ	3/29/2018	10:47		3/29/2018	11:06
0329F017.D	Method Blank	KWG1801565-3	3/29/2018	11:11		3/29/2018	11:30
0329F018.D	Lab Control Sample	KWG1801565-1	3/29/2018	11:35		3/29/2018	11:54
0329F019.D	Duplicate Lab Control Sample	KWG1801565-2	3/29/2018	11:59		3/29/2018	12:18
0329F020.D	MW-15	K1802579-002	3/29/2018	12:23		3/29/2018	12:42
0329F021.D	MW-16	K1802579-003	3/29/2018	12:47		3/29/2018	13:06
0329F022.D	MW-17	K1802579-004	3/29/2018	13:11		3/29/2018	13:30
0329F023.D	MW-18	K1802579-005	3/29/2018	13:35		3/29/2018	13:54
0329F024.D	MW-2	K1802579-006	3/29/2018	13:59		3/29/2018	14:18
0329F025.D	MW-30	K1802579-015	3/29/2018	14:23		3/29/2018	14:42
0329F026.D	MW-35	K1802579-020	3/29/2018	14:47		3/29/2018	15:06
0329F027.D	MW-36	K1802579-021	3/29/2018	15:11		3/29/2018	15:30
0329F028.D	MW-37	K1802579-022	3/29/2018	15:35		3/29/2018	15:54
0329F029.D	MW-44	K1802579-029	3/29/2018	15:58		3/29/2018	16:17
0329F030.D	FIELD BLANK RINSATE	K1802579-030	3/29/2018	16:22		3/29/2018	16:41

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: JH Baxter & Company **Service Request:** K1802579
Project: Arlington Landfill Wells/SI & LF Program

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270D SIM **Analysis Lot:** KWG1801739
Instrument ID: MS14

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0330F001.D	GC/MS Tuning - Decafluorotriphenylphosph	KWG1801739-1	3/30/2018	05:57		3/30/2018	06:17
0330F002.D	Continuing Calibration Verification	KWG1801739-2	3/30/2018	06:21		3/30/2018	06:40
0330F003.D	ZZZZZZ	ZZZZZZ	3/30/2018	07:07		3/30/2018	07:26
0330F004.D	MW-3	K1802579-031	3/30/2018	07:30		3/30/2018	07:49
0330F005.D	ZZZZZZ	ZZZZZZ	3/30/2018	07:53		3/30/2018	08:12
0330F006.D	ZZZZZZ	ZZZZZZ	3/30/2018	08:16		3/30/2018	08:35
0330F007.D	ZZZZZZ	ZZZZZZ	3/30/2018	08:40		3/30/2018	08:59
0330F008.D	ZZZZZZ	ZZZZZZ	3/30/2018	09:03		3/30/2018	09:22
0330F009.D	ZZZZZZ	ZZZZZZ	3/30/2018	09:26		3/30/2018	09:45
0330F010.D	ZZZZZZ	ZZZZZZ	3/30/2018	09:49		3/30/2018	10:08
0330F011.D	ZZZZZZ	ZZZZZZ	3/30/2018	10:13		3/30/2018	10:32
0330F012.D	ZZZZZZ	ZZZZZZ	3/30/2018	10:36		3/30/2018	10:55
0330F013.D	ZZZZZZ	ZZZZZZ	3/30/2018	10:59		3/30/2018	11:18
0330F014.D	ZZZZZZ	ZZZZZZ	3/30/2018	11:23		3/30/2018	11:42
0330F015.D	ZZZZZZ	ZZZZZZ	3/30/2018	11:46		3/30/2018	12:05

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client: JH Baxter & Company
Project: Arlington Landfill Wells/SI & LF Program
Sample Matrix: Water

Service Request: K1802579
Date Extracted: 03/22/2018

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3511
Analysis Method: 8270D SIM

Extraction Lot: KWG1801565
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-15	K1802579-002	03/17/18	03/20/18	440ml	2ml	NA	
MW-16	K1802579-003	03/17/18	03/20/18	455ml	2ml	NA	
MW-17	K1802579-004	03/17/18	03/20/18	455ml	2ml	NA	
MW-18	K1802579-005	03/17/18	03/20/18	455ml	2ml	NA	
MW-2	K1802579-006	03/18/18	03/20/18	450ml	2ml	NA	
MW-30	K1802579-015	03/17/18	03/20/18	455ml	2ml	NA	
MW-35	K1802579-020	03/17/18	03/20/18	455ml	2ml	NA	
MW-36	K1802579-021	03/17/18	03/20/18	450ml	2ml	NA	
MW-37	K1802579-022	03/17/18	03/20/18	450ml	2ml	NA	
MW-44	K1802579-029	03/17/18	03/20/18	445ml	2ml	NA	
FIELD BLANK RINSATE	K1802579-030	03/17/18	03/20/18	445ml	2ml	NA	
MW-3	K1802579-031	03/17/18	03/20/18	445ml	2ml	NA	
Method Blank	KWG1801565-3	NA	NA	455ml	2ml	NA	
Lab Control Sample	KWG1801565-1	NA	NA	450ml	2ml	NA	
Duplicate Lab Control Sample	KWG1801565-2	NA	NA	450ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Pentachlorophenol

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Exception Report

Data File: J:\GC28\DATA\032218B\0322F005.D
Lab ID: K1802579-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 17:28
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F005.D\0322F005C.D
Lab ID: K1802579-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 17:28
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F005.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F005.D\0322F005c.d			**Vial:**	3
Acqu Date:	03/22/2018 17:28	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-001				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/18/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668515	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2				Rpt	
4-Bromo-2,6-dichlorophenol	4.01	4.58	19259112	15779254	39.90	43.77				88	OK
				%Recovery =	80	OK	88	OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15	5.55	2697052	2497904	4.12	3.96	0.82	0.79	**0.79**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

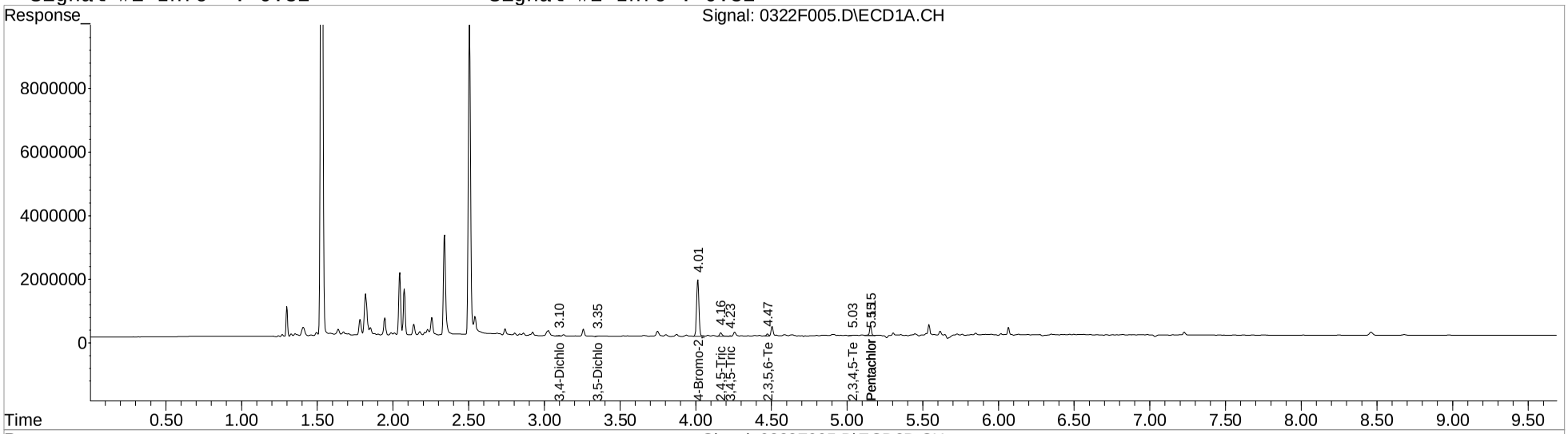
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

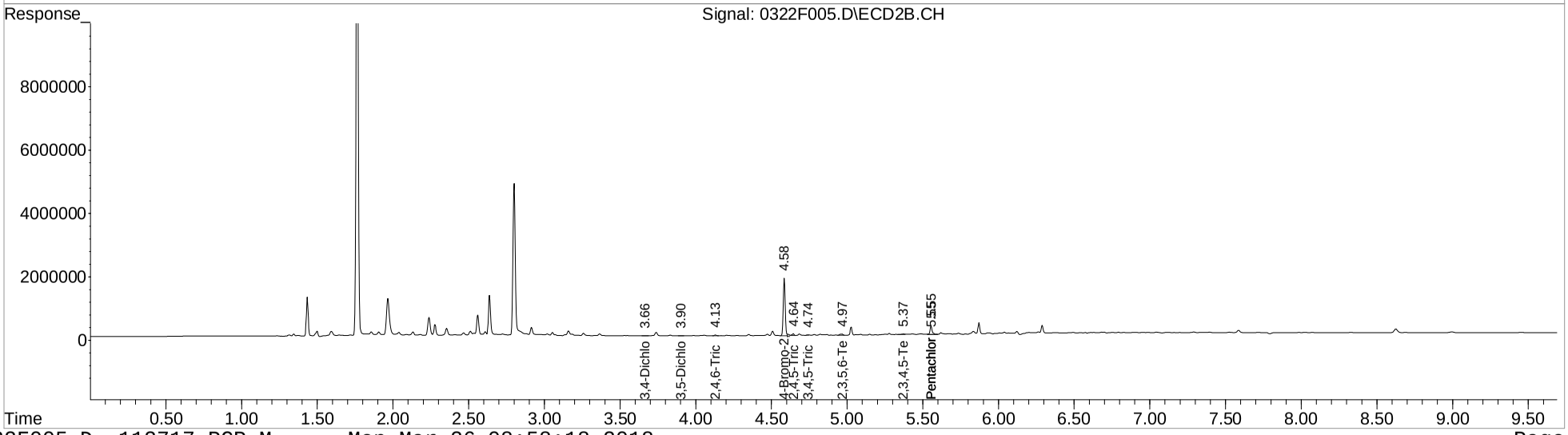
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\032218B\0322F005.D\ECD2B.CH
Acq On : 22 Mar 2018 5:28 pm Operator: SMS
Sample : K1802579-001 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\032218B\0322F005.D\ECD2B.CH
Acq On : 22 Mar 2018 5:28 pm Operator: SMS
Sample : K1802579-001 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:31 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.01	4.58	19259112	15779254	39.896	43.769	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.66	151924	53798	8.747	1.823	#
2)		3,5-Dichlorophen	3.35	3.90	70064	22836	5.751	1.847	#
3)		2,4,6-Trichlorop	3.45	4.13	69952	220186	N.D.	0.685	
5)		2,4,5-Trichlorop	4.16	4.64	1244428	467156	6.730	2.904	#
6)		3,4,5-Trichlorop	4.23	4.74	120432	49706	0.716	0.335	#
7)	M	2,3,5,6-Tetrachl	4.47	4.97	568826	494072	1.036	1.039	
8)	M	2,3,4,5-Tetrachl	5.03	5.37	72650	309684	0.179	0.177	
9)	M	Pentachloropheno	5.15	5.55	2697052	2497904	4.115	3.958	
10)		Pentachloroaniso	5.15	5.55	2697052	2497904	4.332	4.164	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Exception Report

Data File: J:\GC28\DATA\032218B\0322F006.D
Lab ID: K1802579-002
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 17:46
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F006.D\0322F006C.D
Lab ID: K1802579-002
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 17:46
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F006.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F006.D\0322F006c.d			**Vial:**	4
Acqu Date:	03/22/2018 17:46	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-002				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668516	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1		RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.02	+0.01	4.58	19694232	15922328	40.80	44.17			88	OK
				%Recovery =		82 OK	88 OK	**Limits =**	55-130		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16	+0.01	5.56	+0.01	493604	378376	0.7530	0.6000	0.15J	0.12J	**0.12**J

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

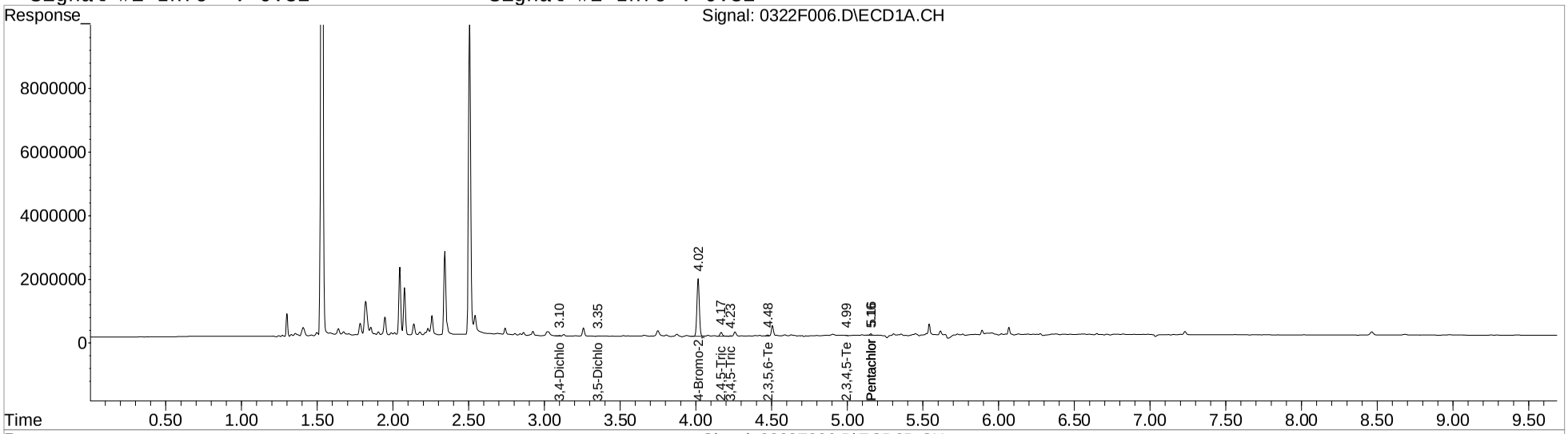
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

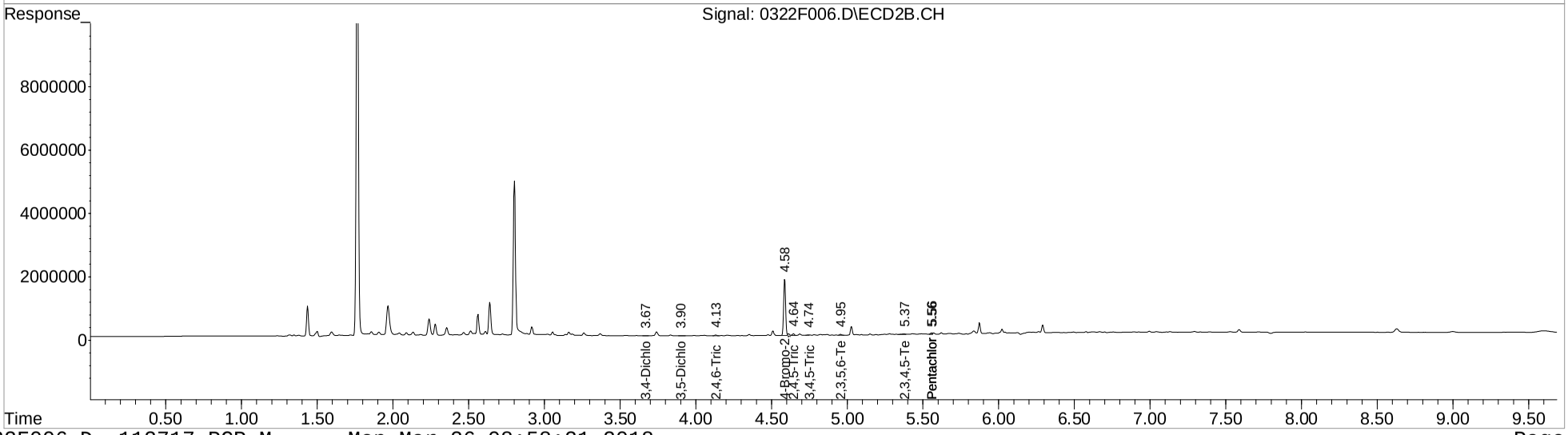
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F006.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC28\DATA\032218B\0322F006.D\ECD2B.CH
Acq On : 22 Mar 2018 5:46 pm Operator: SMS
Sample : K1802579-002 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F006.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC28\DATA\032218B\0322F006.D\ECD2B.CH
Acq On : 22 Mar 2018 5:46 pm Operator: SMS
Sample : K1802579-002 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:32 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.58	19694232	15922328	40.798	44.166	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	168818	64868	9.720	2.486	#
2)		3,5-Dichlorophen	3.35	3.90	64038	30894	5.256	2.499	#
3)		2,4,6-Trichlorop	3.45	4.13	36674	236746	N.D.	0.736	
5)		2,4,5-Trichlorop	4.17	4.64	1351602	487422	7.372	3.030	#
6)		3,4,5-Trichlorop	4.23	4.74	124818	105034	0.742	0.709	
7)	M	2,3,5,6-Tetrachl	4.48	4.95	237804	302326	0.433	0.636	#
8)	M	2,3,4,5-Tetrachl	4.99	5.37	93104	422630	0.230	0.537	#
9)	M	Pentachloropheno	5.16	5.56	493604	378376	0.753	0.600	
10)		Pentachloroaniso	5.16	5.56	493604	378376	0.793	0.631	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Exception Report

Data File: J:\GC28\DATA\032218B\0322F007.D
Lab ID: K1802579-003
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 18:03
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F007.D\0322F007C.D
Lab ID: K1802579-003
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 18:03
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F007.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F007.D\0322F007c.d			**Vial:**	5
Acqu Date:	03/22/2018 18:03	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-003				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668517	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02 +0.01	4.59 +0.01	19064638	15291156	39.49	42.42			85 OK
				%Recovery =	79 OK	85 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15	5.57 +0.02	61536	462266	0.0940	0.7330	0.071U	0.15J	0.071U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

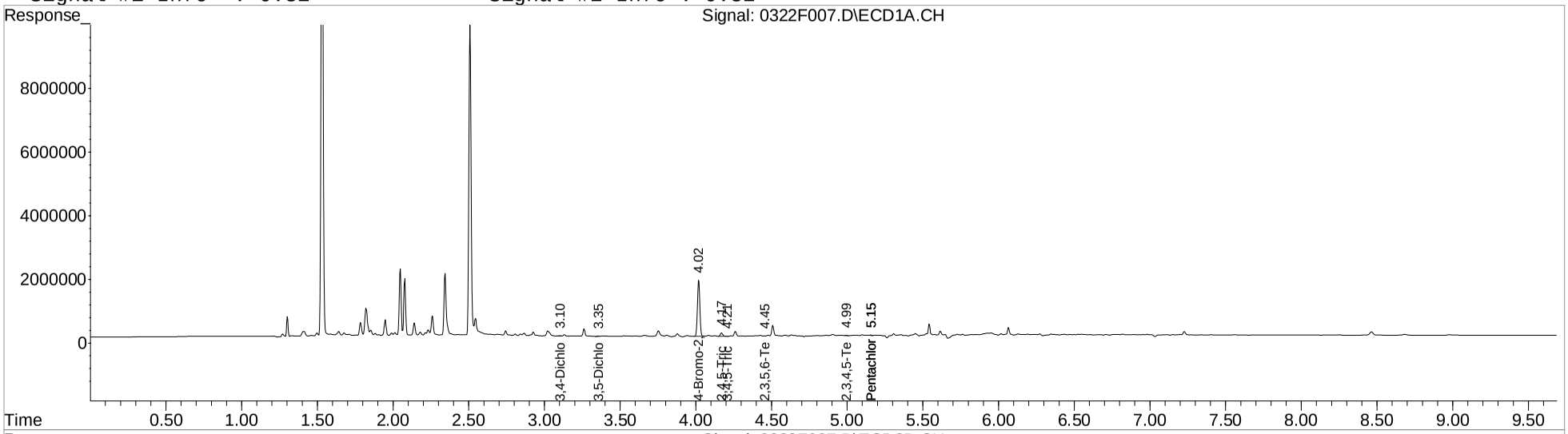
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

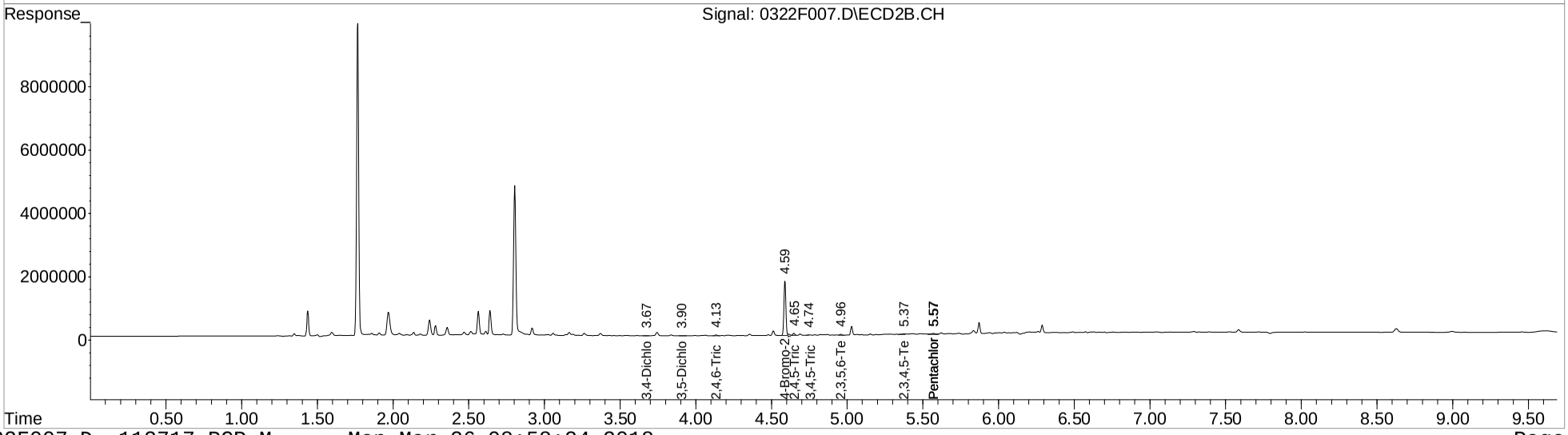
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F007.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC28\DATA\032218B\0322F007.D\ECD2B.CH
Acq On : 22 Mar 2018 6:03 pm Operator: SMS
Sample : K1802579-003 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F007.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC28\DATA\032218B\0322F007.D\ECD2B.CH
Acq On : 22 Mar 2018 6:03 pm Operator: SMS
Sample : K1802579-003 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:32 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	19064638	15291156	39.494	42.415	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	163660	60416	9.423	2.219	#
2)		3,5-Dichlorophen	3.35	3.90	72526	26470	5.953	2.141	#
3)		2,4,6-Trichlorop	3.45	4.13	78254	235896	N.D.	0.734	
5)		2,4,5-Trichlorop	4.17	4.65	1087240	634652	5.789	3.946	#
6)		3,4,5-Trichlorop	4.21	4.74f	15276	23490	0.091	0.159	#
7)	M	2,3,5,6-Tetrachl	4.45	4.96	26618	267394	0.048	0.563	#
8)	M	2,3,4,5-Tetrachl	4.99	5.37	62834	390476	0.155	0.435	#
9)	M	Pentachloropheno	5.15	5.57	61536	462266	0.094	0.733	#
10)		Pentachloroaniso	5.15	5.57	61536	462266	0.099	0.771	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Exception Report

Data File: J:\GC28\DATA\032218B\0322F008.D
Lab ID: K1802579-004
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 18:21
Date Quantitated: 03/26/2018 09:00
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F008.D\0322F008C.D
Lab ID: K1802579-004
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 18:21
Date Quantitated: 03/26/2018 09:00
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F008.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F008.D\0322F008c.d			**Vial:**	6
Acqu Date:	03/22/2018 18:21	**Quant Date:**	03/26/2018 09:00	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-004				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668518	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02 +0.01	4.59 +0.01	20036666	16034364	41.51	44.48			89 OK
				%Recovery =	83 OK	89 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15	5.57 +0.02	49186	361716	0.0750	0.5730	0.071U	0.11J	0.071U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

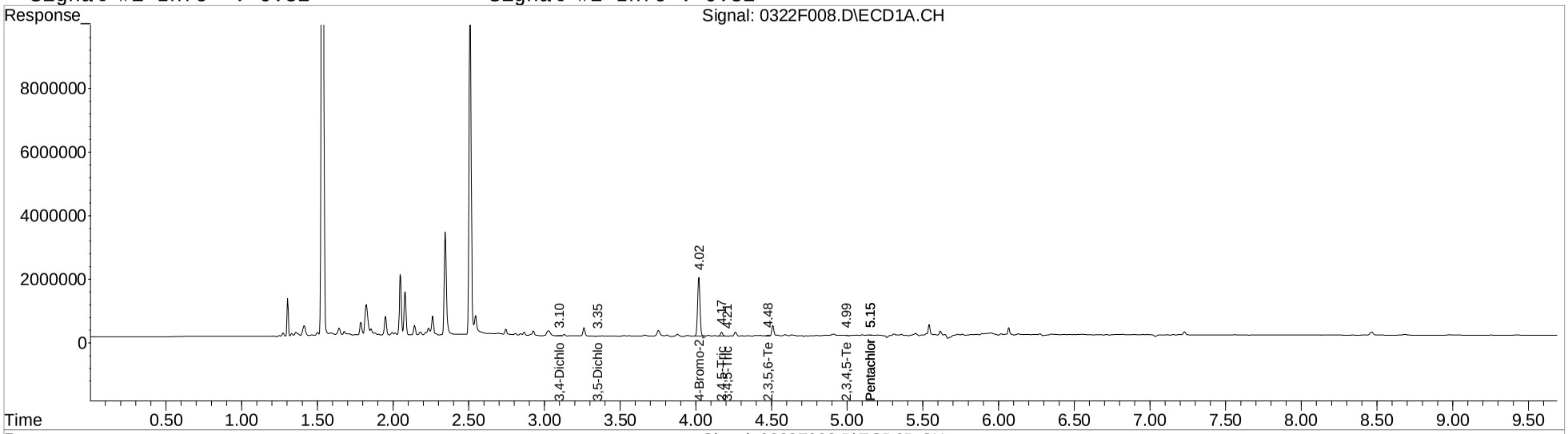
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

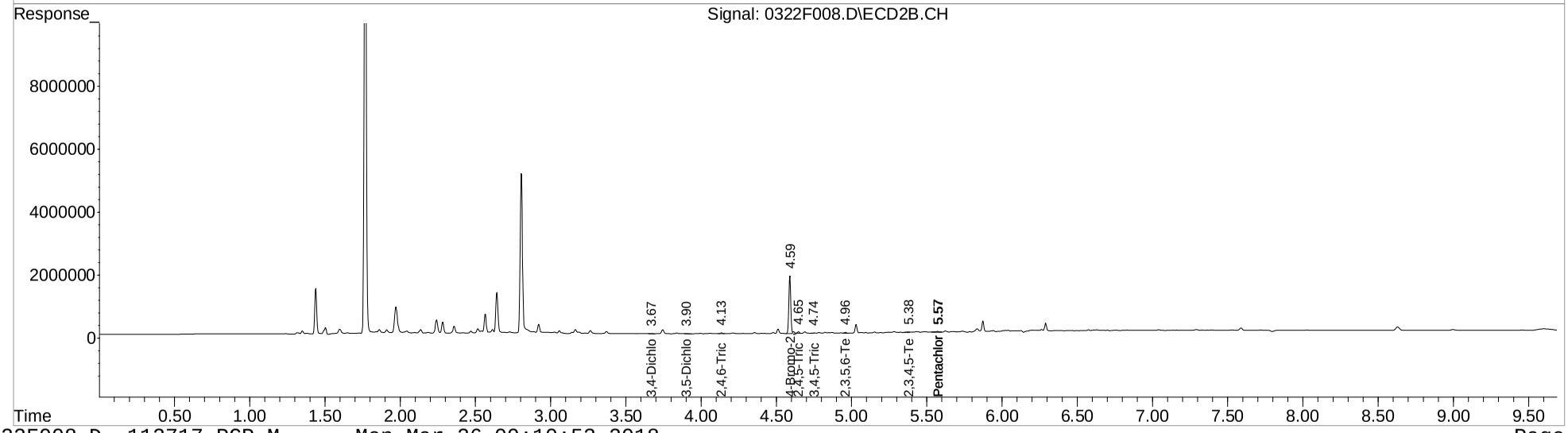
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F008.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC28\DATA\032218B\0322F008.D\ECD2B.CH
Acq On : 22 Mar 2018 6:21 pm Operator: SMS
Sample : K1802579-004 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 26 9:00 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : J:\GC28\DATA\032218B\0322F008.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC28\DATA\032218B\0322F008.D\ECD2B.CH
Acq On : 22 Mar 2018 6:21 pm Operator: SMS
Sample : K1802579-004 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 26 09:00:14 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	20036666	16034364	41.507	44.476	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	138764	55804	7.989	1.943	#
2)		3,5-Dichlorophen	3.35	3.90	76068	31052	6.244	2.511	#
3)		2,4,6-Trichlorop	3.46	4.13	70194	258330	N.D.	0.804	
5)		2,4,5-Trichlorop	4.17	4.65	1280952	451572	6.948	2.808	#
6)		3,4,5-Trichlorop	4.21	4.74f	9680	91542	0.058	0.618	#
7)	M	2,3,5,6-Tetrachl	4.48	4.96	279842	284056	0.510	0.598	
8)	M	2,3,4,5-Tetrachl	4.99	5.38	78196	367652	0.193	0.362	#
9)	M	Pentachloropheno	5.15	5.57	49186	361716	0.075	0.573	#
10)		Pentachloroaniso	5.15	5.57	49186	361716	0.079	0.603	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Exception Report

Data File: J:\GC28\DATA\032218B\0322F009.D
Lab ID: K1802579-005
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 18:38
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F009.D\0322F009C.D
Lab ID: K1802579-005
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 18:38
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F009.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F009.D\0322F009c.d			**Vial:**	7
Acqu Date:	03/22/2018 18:38	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-005				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668519	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.02	+0.01	4.59	+0.01	19985716	16048222	41.40	44.52			89	OK
						%Recovery =	83 OK	89 OK	**Limits =**	55-130		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16	+0.01	5.56	+0.01	376620	50178	0.5750	0.0800	0.12J	0.071U	0.071U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

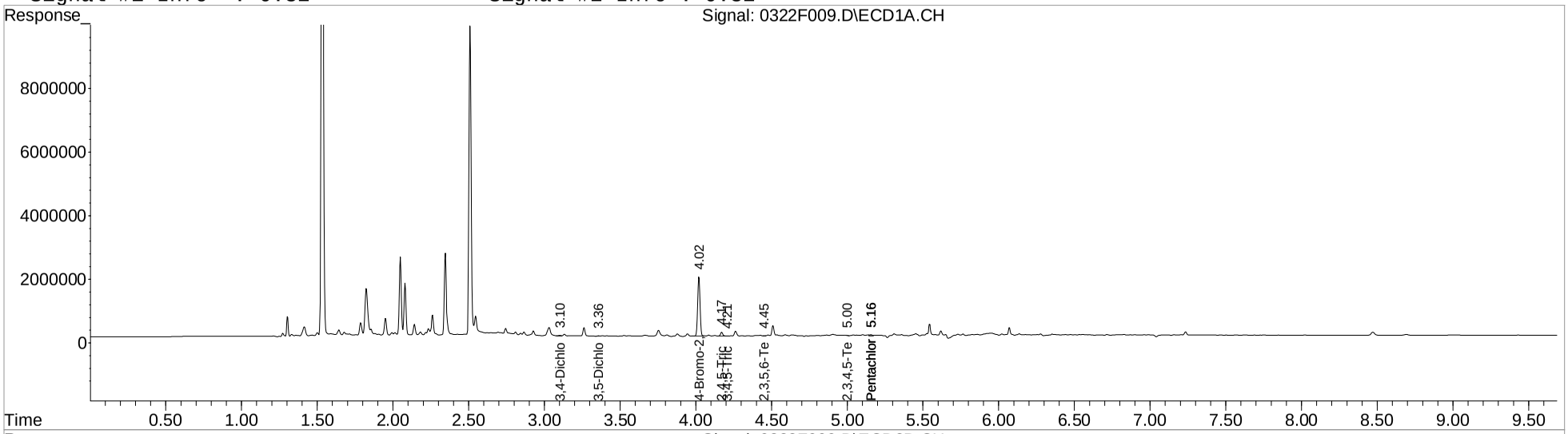
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

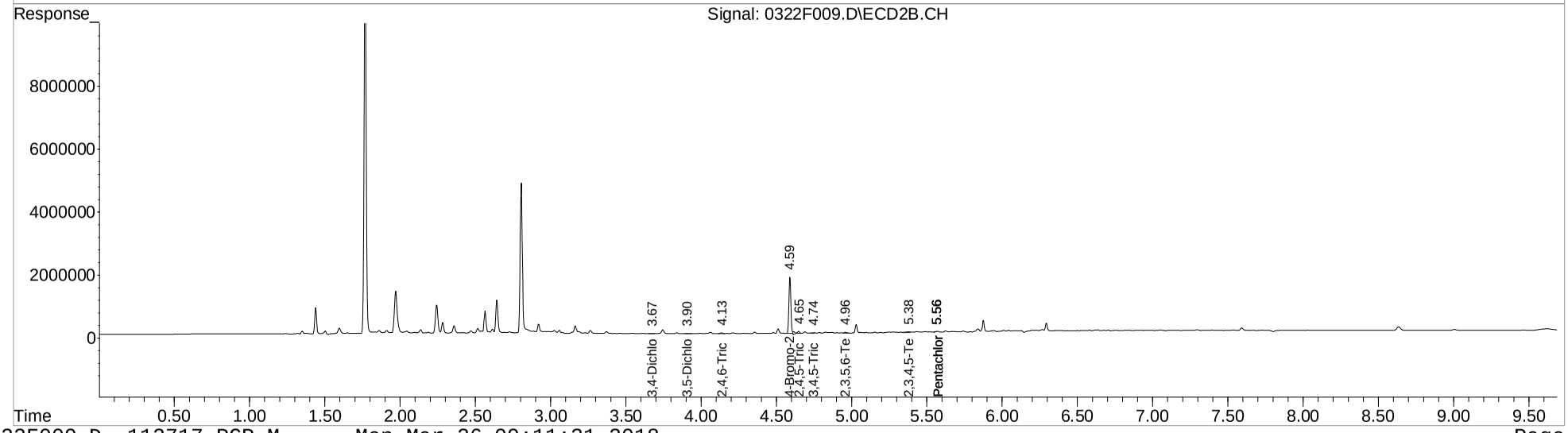
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F009.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC28\DATA\032218B\0322F009.D\ECD2B.CH
Acq On : 22 Mar 2018 6:38 pm Operator: SMS
Sample : K1802579-005 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F009.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC28\DATA\032218B\0322F009.D\ECD2B.CH
Acq On : 22 Mar 2018 6:38 pm Operator: SMS
Sample : K1802579-005 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:34 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	19985716	16048222	41.402	44.515	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	317886	56458	18.302	1.982	#
2)		3,5-Dichlorophen	3.36	3.90	97606	33440	8.012	2.705	#
3)		2,4,6-Trichlorop	3.45	4.13	81822	245310	N.D.	0.763	
5)		2,4,5-Trichlorop	4.17	4.65	1235762	549880	6.678	3.419	#
6)		3,4,5-Trichlorop	4.21	4.74	15576	133360	0.093	0.900	#
7)	M	2,3,5,6-Tetrachl	4.45	4.96	29922	288812	0.054	0.608	#
8)	M	2,3,4,5-Tetrachl	5.00	5.38	71086	368928	0.175	0.366	#
9)	M	Pentachloropheno	5.16	5.56	376620	50178	0.575	0.080	#
10)		Pentachloroaniso	5.16	5.56	376620	50178	0.605	0.084	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F043.D
Lab ID: K1802579-006
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 22:04
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F043.D\0327F043C.D
Lab ID: K1802579-006
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 22:04
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F043.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F043.D\0327F043c.d			**Vial:**	35
Acqu Date:	03/27/2018 22:04	**Quant Date:**	03/28/2018 08:46	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-006				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/18/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801631	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	Method Mod		
Prep Ref:	1668881	**Prep Date:**	03/22/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:		**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	18513605	14969194	38.35	41.52			83 OK
				%Recovery =	77 OK	83 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.14 -0.01	5.57 +0.02	372366	273282	0.5680	0.4330	0.11J	0.087J	**0.087**J

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F043.D Vial: 35
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 10:04 pm Operator: JD
Sample : K1802579-006 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:08 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
4) S	4-Bromo-2...	4.018	4.587	18513605	14969194	38.352	41.522	
	Target Compounds							
1)	3,4-Dichl...	3.101	3.667	118586	24738	6.828	0.087	#
2)	3,5-Dichl...	3.351	3.904	11504	6940	0.944	0.561	#
3)	2,4,6-Tri...	3.474	4.130	52447	232033	N.D.	0.722	
5)	2,4,5-Tri...	4.207	4.644	7011	346752	895.451	2.156	#
6)	3,4,5-Tri...	4.207	4.707	7011	45862	0.042	0.310	#
7) M	2,3,5,6-T...	4.471	4.954	31796	228620	0.058	0.481	#
8) M	2,3,4,5-T...	5.011	5.407f	188256	557269	0.465	0.967	#
9) M	Pentachlo...	5.144	5.570	372366	273282	0.568	0.433	
10)	Pentachlo...	5.144	5.570	372366	273282	0.598	0.456	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

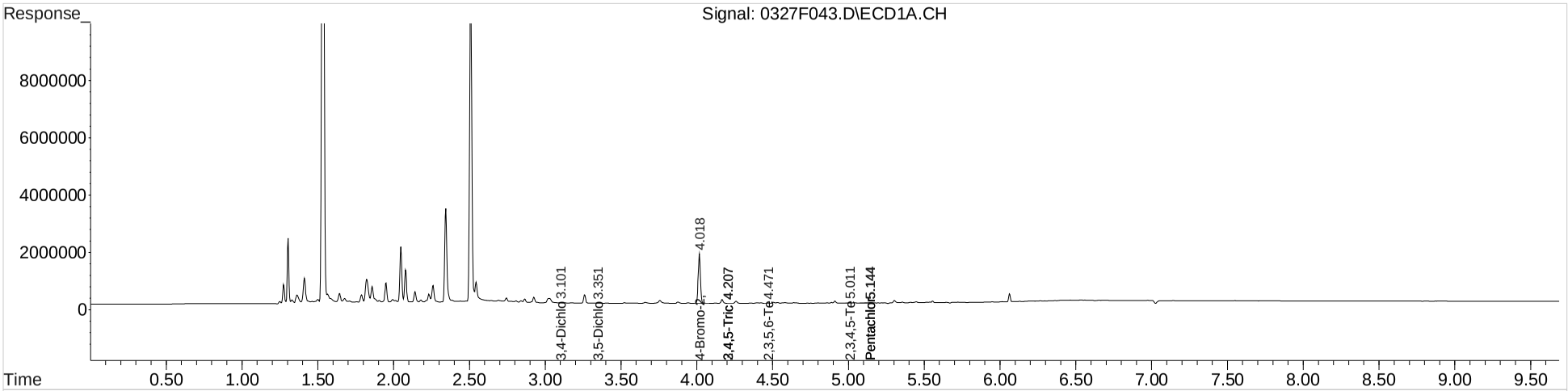
1st JED 03/29/18
2nd JEP 04/04/18

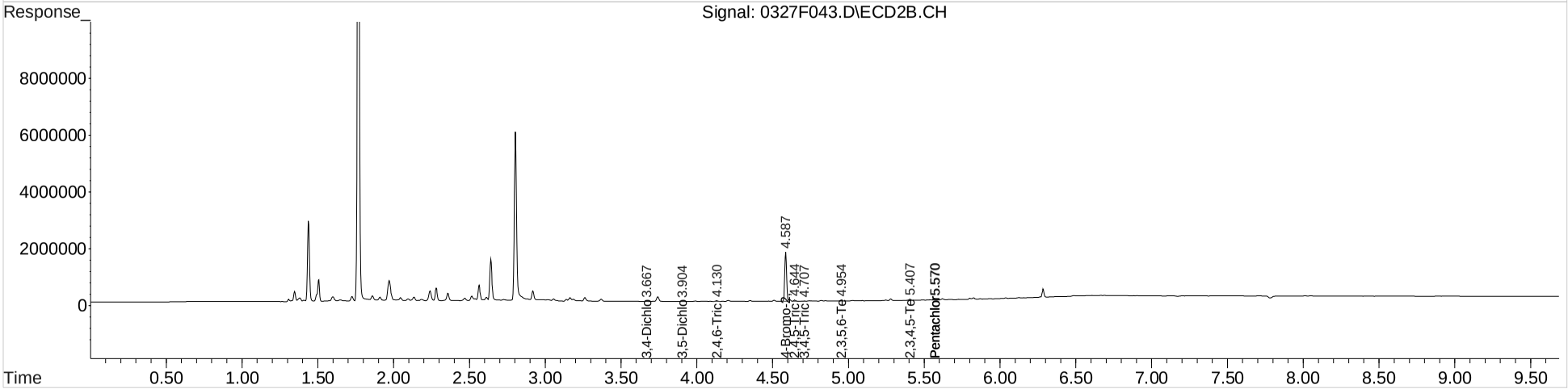
Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\032718\0327F043.D Vial: 35
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 10:04 pm Operator: JD
Sample : K1802579-006 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:08 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Exception Report

Data File: J:\GC28\DATA\032218B\0322F011.D
Lab ID: K1802579-007
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 19:13
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F011.D\0322F011C.D
Lab ID: K1802579-007
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 19:13
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F011.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F011.D\0322F011c.d			**Vial:**	9
Acqu Date:	03/22/2018 19:13	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-007				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668520	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.02	+0.01	4.59	+0.01	21405782	17143880	44.34	47.55			95	OK
						%Recovery =	89 OK	95 OK	**Limits =**	55-130		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16	+0.01	5.56	+0.01	160692714	154496364	245.20	244.83	49	49	**49**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

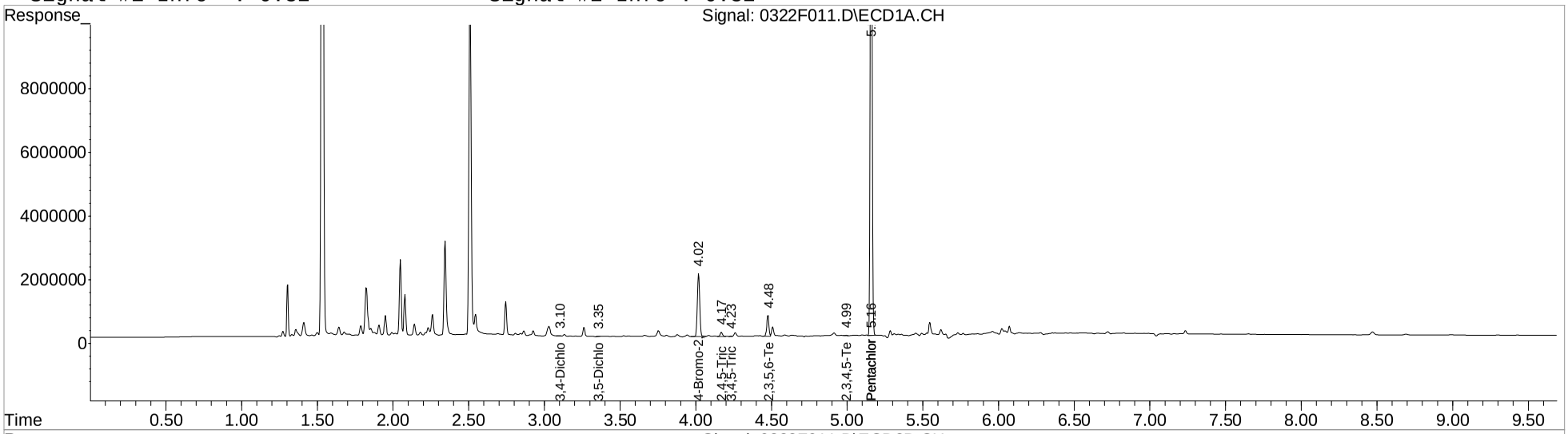
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

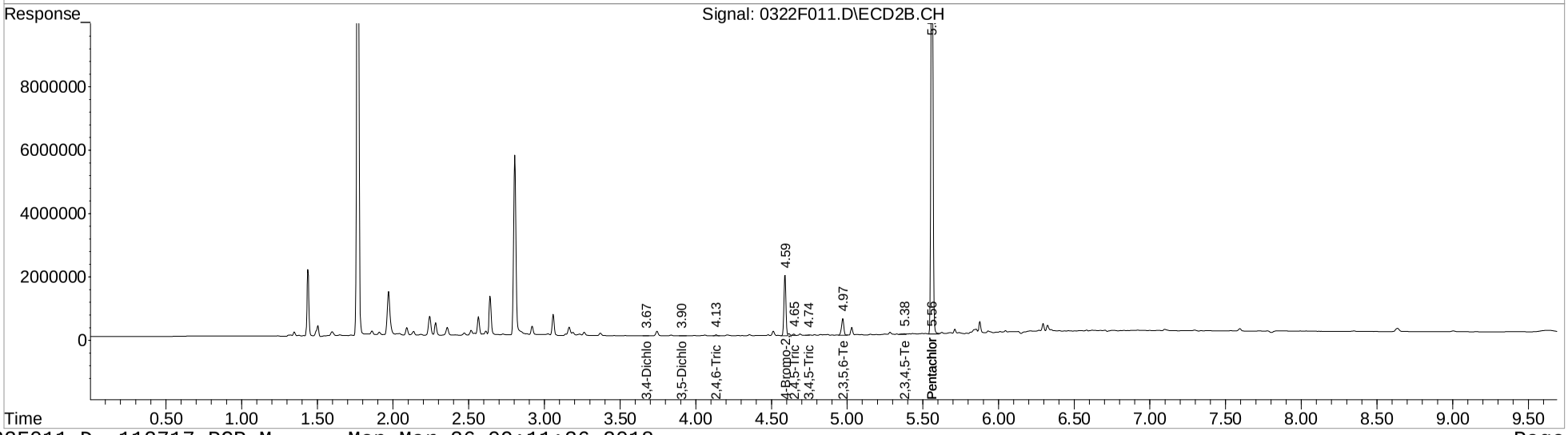
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F011.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC28\DATA\032218B\0322F011.D\ECD2B.CH
Acq On : 22 Mar 2018 7:13 pm Operator: SMS
Sample : K1802579-007 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F011.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC28\DATA\032218B\0322F011.D\ECD2B.CH
Acq On : 22 Mar 2018 7:13 pm Operator: SMS
Sample : K1802579-007 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:36 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	21405782	17143880	44.343	47.554	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	127060	41338	7.315	1.078	#
2)		3,5-Dichlorophen	3.35	3.90	88252	33862	7.244	2.739	#
3)		2,4,6-Trichlorop	3.45	4.13	85800	286082	N.D.	0.890	
5)		2,4,5-Trichlorop	4.17	4.65	1324930	437026	7.212	2.717	#
6)		3,4,5-Trichlorop	4.23	4.74f	133934	115456	0.797	0.779	
7)	M	2,3,5,6-Tetrachl	4.48	4.97	6655272	5332678	12.119	11.219	
8)	M	2,3,4,5-Tetrachl	4.99	5.38	96508	385628	0.238	0.419	#
9)	M	Pentachloropheno	5.16	5.56	160.7E6	154.5E6	245.203	244.827	
10)		Pentachloroaniso	5.16	5.56	160.7E6	154.5E6	258.096	257.534	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Exception Report

Data File: J:\GC28\DATA\032218B\0322F012.D
Lab ID: K1802579-008
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 19:31
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F012.D\0322F012C.D
Lab ID: K1802579-008
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 19:31
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F012.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F012.D\0322F012c.d			**Vial:**	10
Acqu Date:	03/22/2018 19:31	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-008				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668521	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.02 +0.01	4.59 +0.01	20740730	16686712	42.97	46.29			93	OK
			%Recovery =		86 OK	93 OK	**Limits =**	55-130		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16 +0.01	5.56 +0.01	148821842	142989480	227.09	226.59	45	45	**45**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

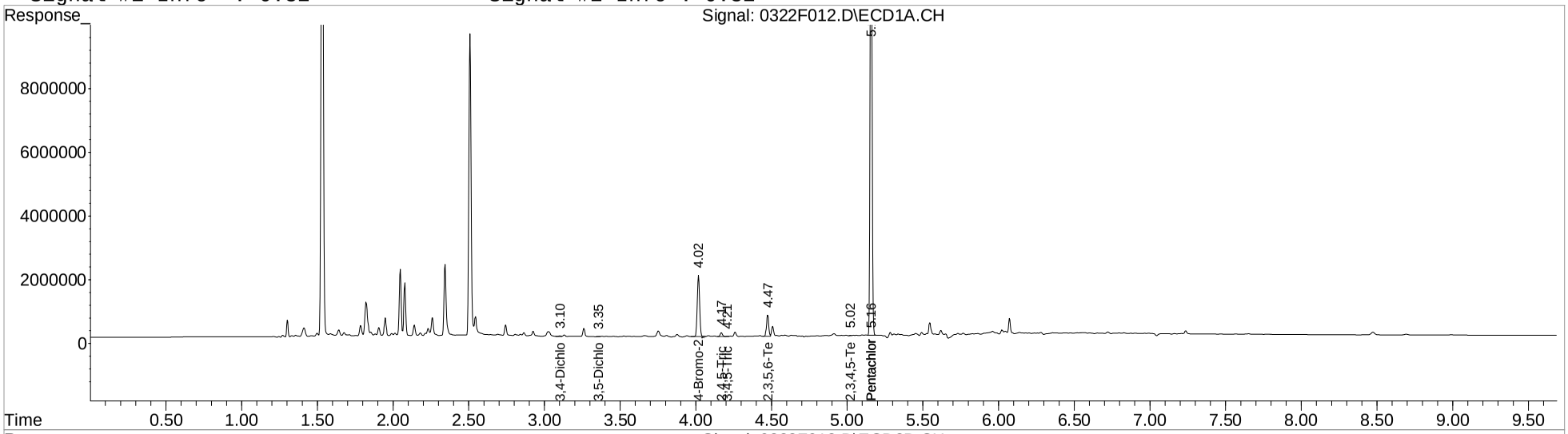
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

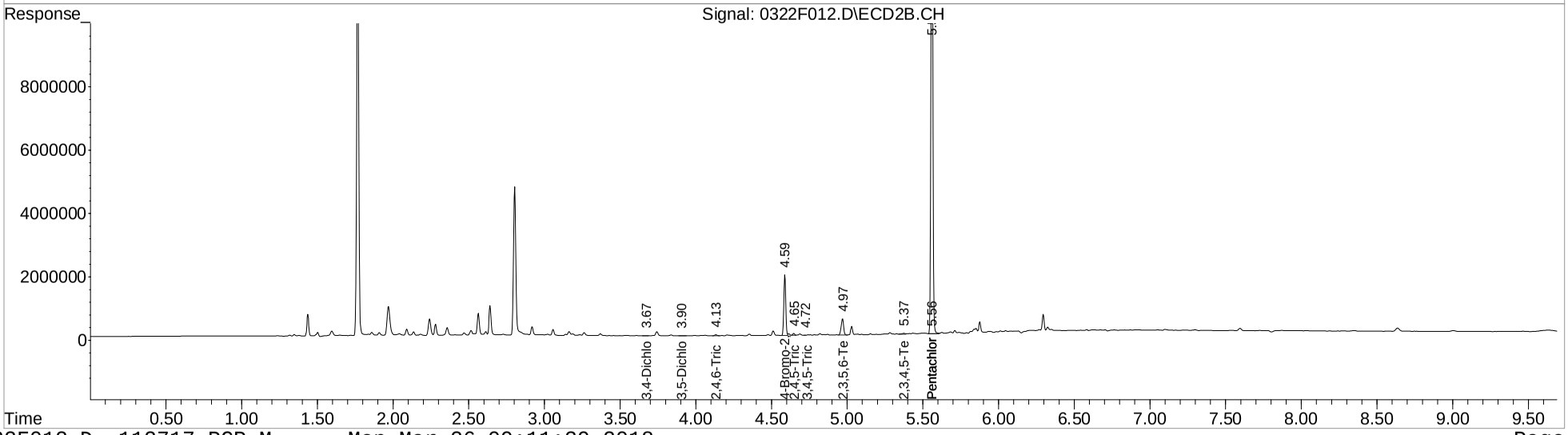
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F012.D\ECD1A.CH Vial: 10
Signal #2 : J:\GC28\DATA\032218B\0322F012.D\ECD2B.CH
Acq On : 22 Mar 2018 7:31 pm Operator: SMS
Sample : K1802579-008 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : J:\GC28\DATA\032218B\0322F012.D\ECD1A.CH Vial: 10
Signal #2 : J:\GC28\DATA\032218B\0322F012.D\ECD2B.CH
Acq On : 22 Mar 2018 7:31 pm Operator: SMS
Sample : K1802579-008 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:37 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	20740730	16686712	42.966	46.286	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	242032	41380	13.935	1.081	#
2)		3,5-Dichlorophen	3.35	3.90	86018	30312	7.061	2.452	#
3)		2,4,6-Trichlorop	3.46	4.13	289960	319082	N.D.	0.993	
5)		2,4,5-Trichlorop	4.17	4.65	1222112	500070	6.596	3.109	#
6)		3,4,5-Trichlorop	4.21	4.72	66784	8218	0.397	0.055	#
7)	M	2,3,5,6-Tetrachl	4.47	4.97	7014756	5588658	12.773	11.757	
8)	M	2,3,4,5-Tetrachl	5.02	5.37	60404	401150	0.149	0.469	#
9)	M	Pentachloropheno	5.16	5.56	148.8E6	143.0E6	227.089	226.593	
10)		Pentachloroaniso	5.16	5.56	148.8E6	143.0E6	239.030	238.353	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Exception Report

Data File: J:\GC28\DATA\032218B\0322F013.D
Lab ID: K1802579-009
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 19:48
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F013.D\0322F013C.D
Lab ID: K1802579-009
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 19:48
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F013.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F013.D\0322F013c.d			**Vial:**	11
Acqu Date:	03/22/2018 19:48	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-009				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668522	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.02	+0.01	4.59	+0.01	20364410	16448936	42.19	45.63			91	OK
						%Recovery =	84 OK	91 OK	**Limits =**	55-130		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16	+0.01	5.56	+0.01	69334774	64867156	105.80	102.79	21	21	**21**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

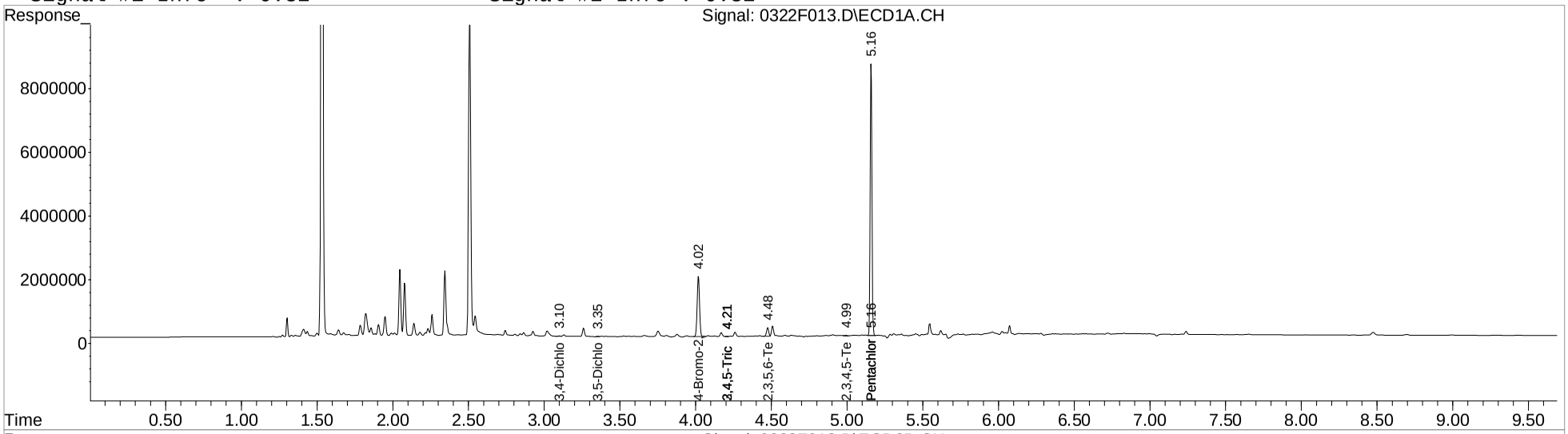
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

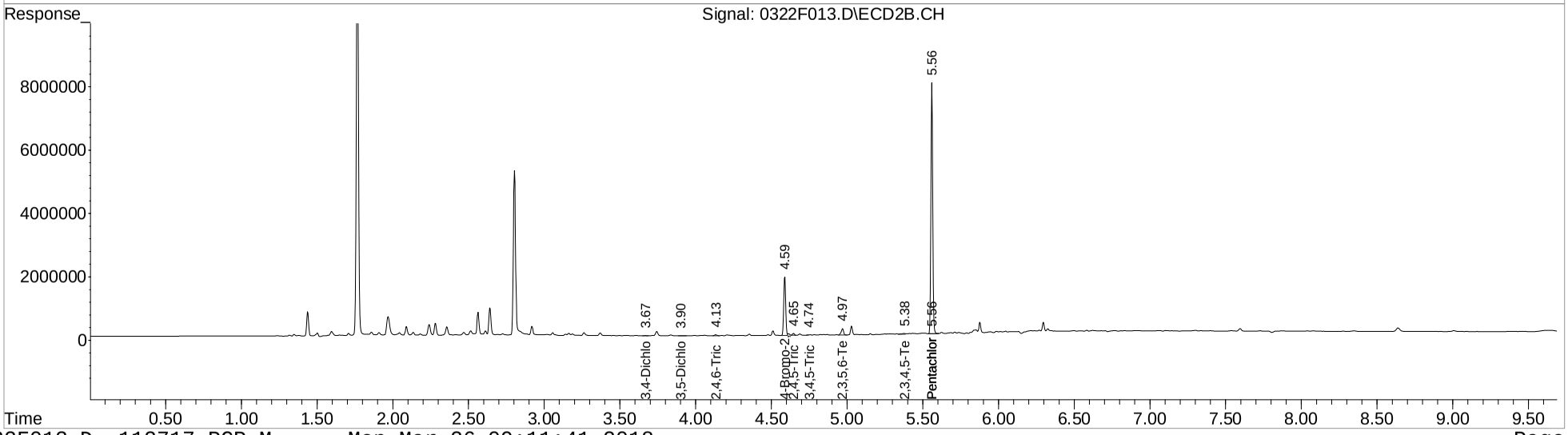
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F013.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC28\DATA\032218B\0322F013.D\ECD2B.CH
Acq On : 22 Mar 2018 7:48 pm Operator: SMS
Sample : K1802579-009 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : J:\GC28\DATA\032218B\0322F013.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC28\DATA\032218B\0322F013.D\ECD2B.CH
Acq On : 22 Mar 2018 7:48 pm Operator: SMS
Sample : K1802579-009 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:37 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	20364410	16448936	42.186	45.626	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	156136	52012	8.989	1.716	#
2)		3,5-Dichlorophen	3.35	3.90	91386	29568	7.501	2.391	#
3)		2,4,6-Trichlorop	3.46	4.13	86466	292180	N.D.	0.909	
5)		2,4,5-Trichlorop	4.21	4.65	17102	544074	895.392	3.383	#
6)		3,4,5-Trichlorop	4.21	4.74	17102	24866	0.102	0.168	#
7)	M	2,3,5,6-Tetrachl	4.48	4.97	2778840	2095686	5.060	4.409	
8)	M	2,3,4,5-Tetrachl	4.99	5.38	273662	398248	0.675	0.460	#
9)	M	Pentachloropheno	5.16	5.56	69334774	64867156	105.799	102.794	
10)		Pentachloroaniso	5.16	5.56	69334774	64867156	111.362	108.129	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Exception Report

Data File: J:\GC28\DATA\032218B\0322F014.D
Lab ID: K1802579-010
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 20:06
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F014.D\0322F014C.D
Lab ID: K1802579-010
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 20:06
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F014.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F014.D\0322F014c.d			**Vial:**	12
Acqu Date:	03/22/2018 20:06	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-010				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668523	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.02	+0.01	4.59	+0.01	21024928	17279014	43.55	47.93			96	OK
						%Recovery =	87 OK	96 OK	**Limits =**	55-130		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16	+0.01	5.56	+0.01	501711010	496275818	765.57	786.44	150	160	**150**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

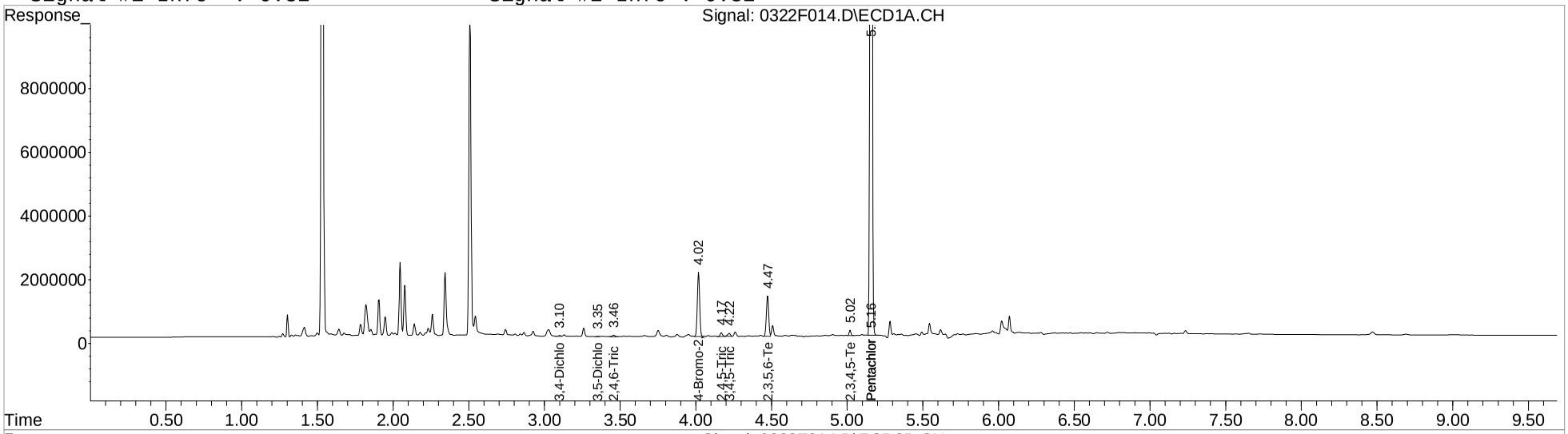
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

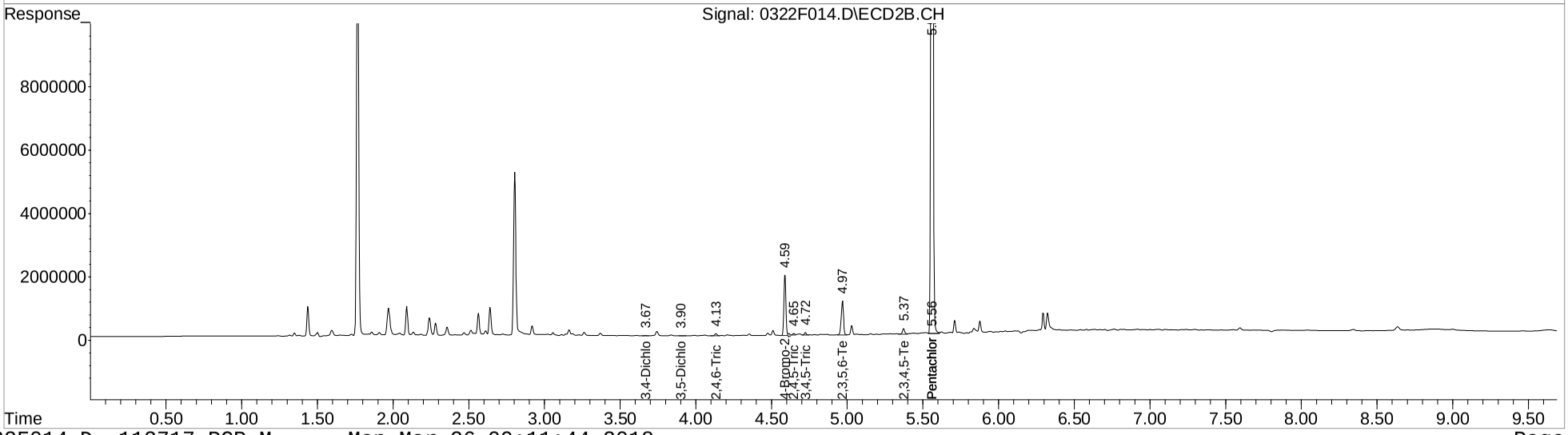
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F014.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC28\DATA\032218B\0322F014.D\ECD2B.CH
Acq On : 22 Mar 2018 8:06 pm Operator: SMS
Sample : K1802579-010 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : J:\GC28\DATA\032218B\0322F014.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC28\DATA\032218B\0322F014.D\ECD2B.CH
Acq On : 22 Mar 2018 8:06 pm Operator: SMS
Sample : K1802579-010 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:38 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	21024928	17279014	43.554	47.929	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	204738	56162	11.788	1.964	#
2)		3,5-Dichlorophen	3.35	3.90	75940	35386	6.233	2.862	#
3)		2,4,6-Trichlorop	3.46	4.13	622278	660186	1.155	2.054	#
5)		2,4,5-Trichlorop	4.17	4.65	1384060	507610	7.567	3.156	#
6)		3,4,5-Trichlorop	4.22	4.72	1199468	736850	7.133	4.973	#
7)	M	2,3,5,6-Tetrachl	4.47	4.97	13411262	11621744	24.421	24.449	
8)	M	2,3,4,5-Tetrachl	5.02	5.37	1410896	1812026	3.482	4.969	#
9)	M	Pentachloropheno	5.16	5.56	501.7E6	496.3E6	765.566	786.438	
10)		Pentachloroaniso	5.16	5.56	501.7E6	496.3E6	805.822	827.256	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Exception Report

Data File: J:\GC28\DATA\032218B\0322F017.D
Lab ID: K1802579-011
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 20:58
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F017.D\0322F017C.D
Lab ID: K1802579-011
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 20:58
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F017.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F017.D\0322F017c.d			**Vial:**	13
Acqu Date:	03/22/2018 20:58	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-011				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668524	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.02	4.59	21591890	17723622	44.73	49.16			98	OK
			%Recovery =		89	OK 98	OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16	5.56	818546	904768	1.25	1.43	0.25J	0.29J	**0.25**J

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

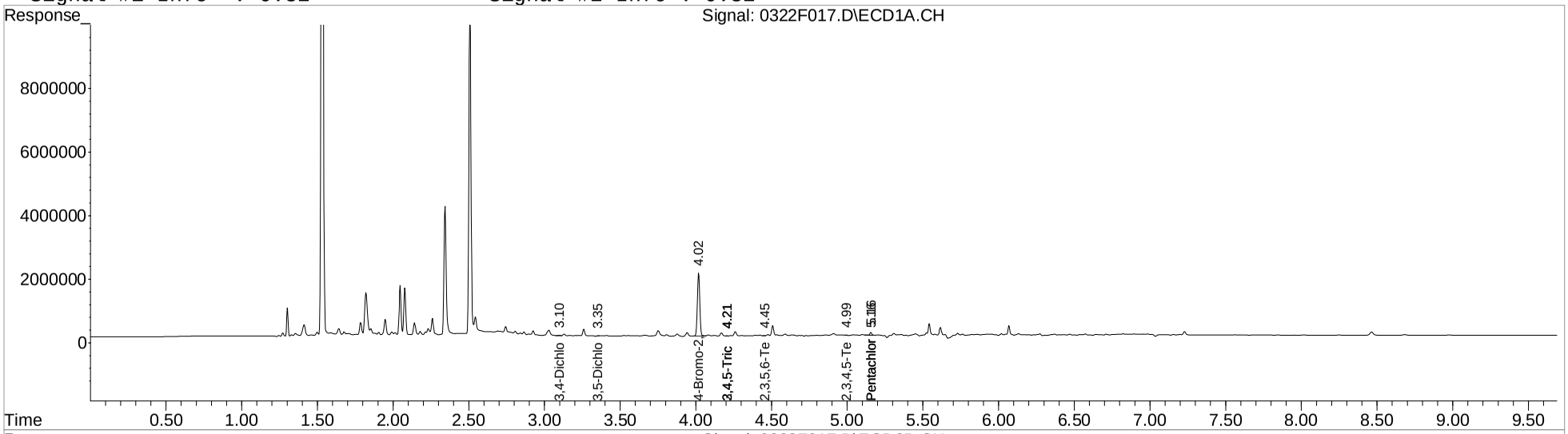
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

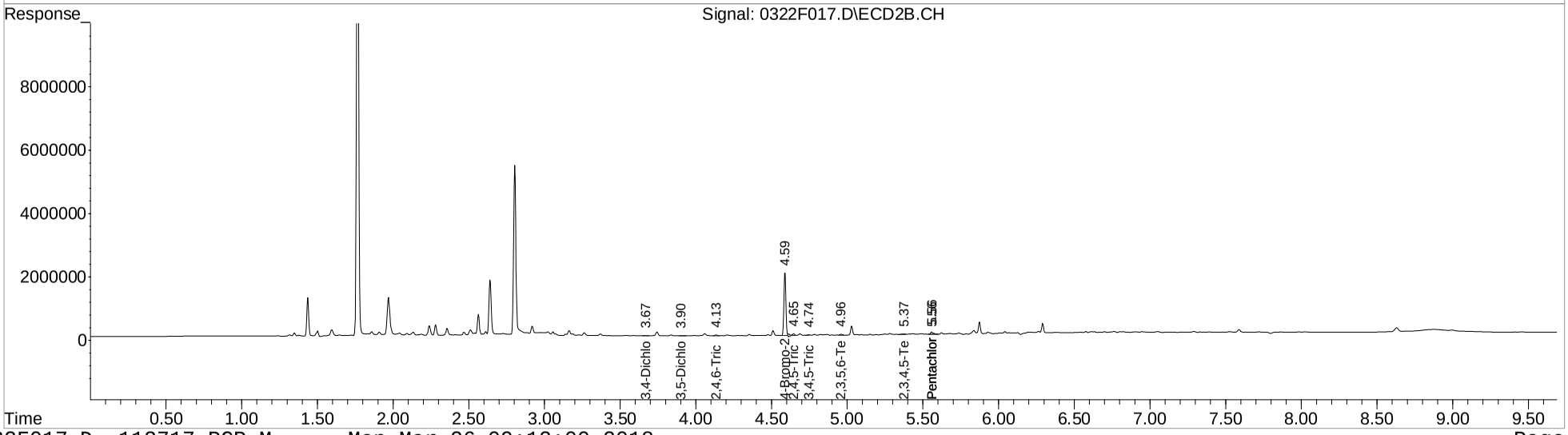
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F017.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC28\DATA\032218B\0322F017.D\ECD2B.CH
Acq On : 22 Mar 2018 8:58 pm Operator: SMS
Sample : K1802579-011 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F017.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC28\DATA\032218B\0322F017.D\ECD2B.CH
Acq On : 22 Mar 2018 8:58 pm Operator: SMS
Sample : K1802579-011 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:41 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	21591890	17723622	44.729	49.162	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	191260	95948	11.012	4.352	#
2)		3,5-Dichlorophen	3.35	3.90	80852	34034	6.637	2.753	#
3)		2,4,6-Trichlorop	3.45	4.13	80288	227474	N.D.	0.708	
5)		2,4,5-Trichlorop	4.21	4.65	17192	501608	895.391	3.119	#
6)		3,4,5-Trichlorop	4.21	4.74	17192	161218	0.102	1.088	#
7)	M	2,3,5,6-Tetrachl	4.45	4.96	22946	331966	0.042	0.698	#
8)	M	2,3,4,5-Tetrachl	4.99	5.37	46378	384720	0.114	0.417	#
9)	M	Pentachloropheno	5.16	5.56	818546	904768	1.249	1.434	
10)		Pentachloroaniso	5.16	5.56	818546	904768	1.315	1.508	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Exception Report

Data File: J:\GC28\DATA\032218B\0322F018.D
Lab ID: K1802579-012
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 21:16
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F018.D\0322F018C.D
Lab ID: K1802579-012
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 21:16
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F018.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F018.D\0322F018c.d			**Vial:**	14
Acqu Date:	03/22/2018 21:16	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-012				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668525	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	20812514	17148802	43.11	47.57			95 OK
				%Recovery =	86 OK	95 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16	5.56	931746	1147812	1.42	1.82	0.28J	0.36J	**0.28**J

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

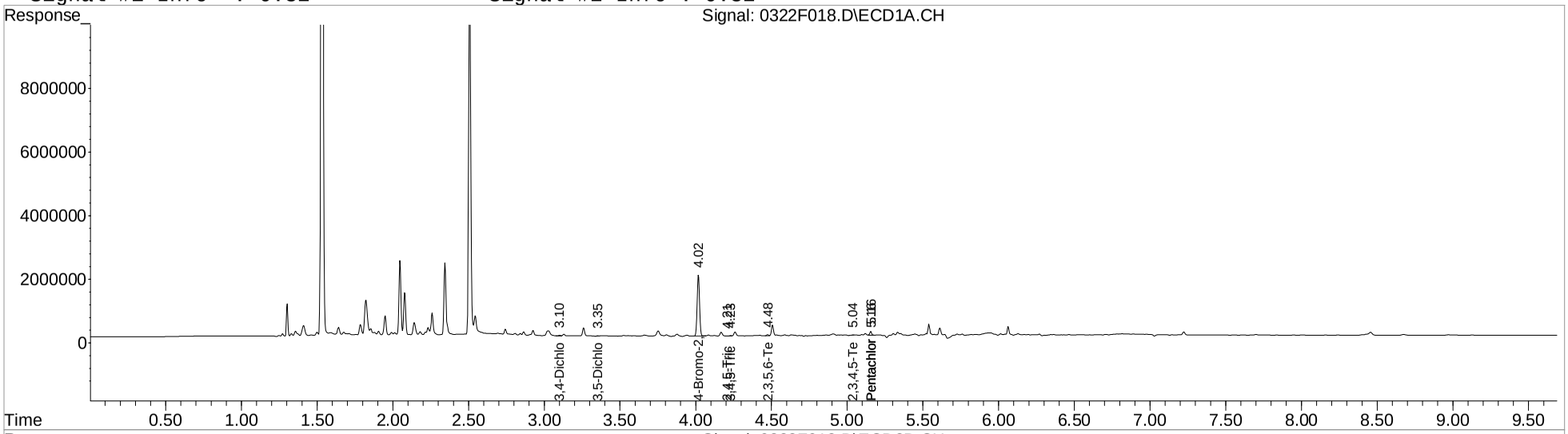
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

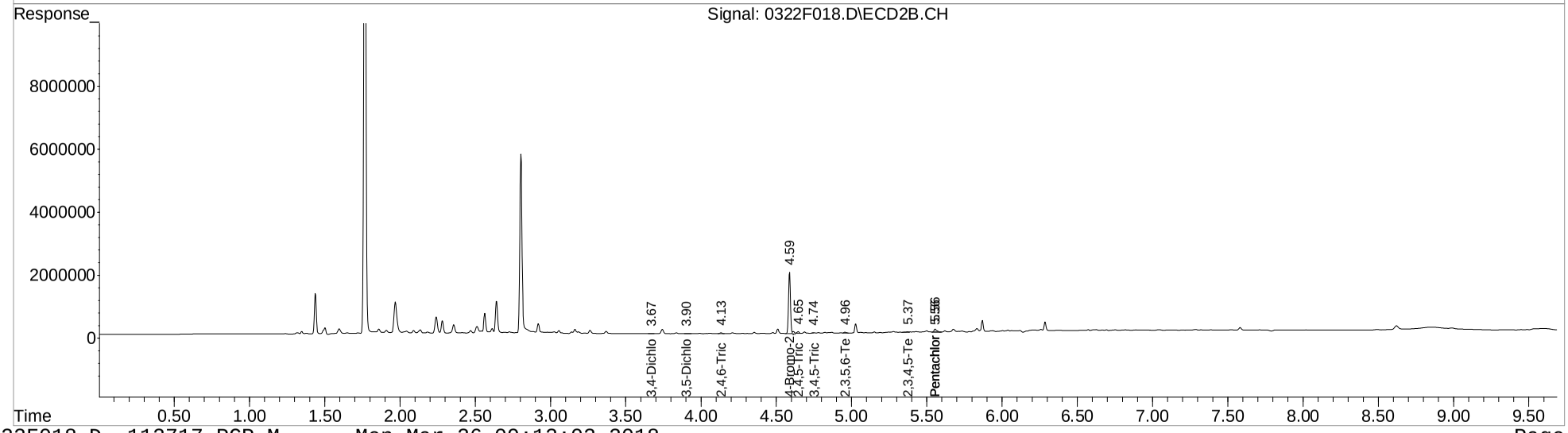
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F018.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC28\DATA\032218B\0322F018.D\ECD2B.CH
Acq On : 22 Mar 2018 9:16 pm Operator: SMS
Sample : K1802579-012 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F018.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC28\DATA\032218B\0322F018.D\ECD2B.CH
Acq On : 22 Mar 2018 9:16 pm Operator: SMS
Sample : K1802579-012 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:42 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	20812514	17148802	43.114	47.568	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	264916	43468	15.252	1.205	#
2)		3,5-Dichlorophen	3.35	3.90	79296	32486	6.509	2.627	#
3)		2,4,6-Trichlorop	3.45	4.13	96410	280146	N.D.	0.871	
5)		2,4,5-Trichlorop	4.21	4.65	12794	499634	895.417	3.106	#
6)		3,4,5-Trichlorop	4.23	4.74	123790	38980	0.736	0.263	#
7)	M	2,3,5,6-Tetrachl	4.48	4.96	289624	324414	0.527	0.682	#
8)	M	2,3,4,5-Tetrachl	5.04	5.37	80764	385188	0.199	0.418	#
9)	M	Pentachloropheno	5.16	5.56	931746	1147812	1.422	1.819	#
10)		Pentachloroaniso	5.16	5.56	931746	1147812	1.497	1.913	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Exception Report

Data File: J:\GC28\DATA\032218B\0322F019.D
Lab ID: K1802579-013
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 21:33
Date Quantitated: 03/23/2018 14:43
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F019.D\0322F019C.D
Lab ID: K1802579-013
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 21:33
Date Quantitated: 03/23/2018 14:43
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F019.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F019.D\0322F019c.d			**Vial:**	15
Acqu Date:	03/22/2018 21:33	**Quant Date:**	03/23/2018 14:43	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-013				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668526	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	21105618	17437306	43.72	48.37			97 OK
				%Recovery =	87 OK	97 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16	5.56	1240954	1040588**m**	1.89	1.65	0.38J	0.33J	**0.33**J

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

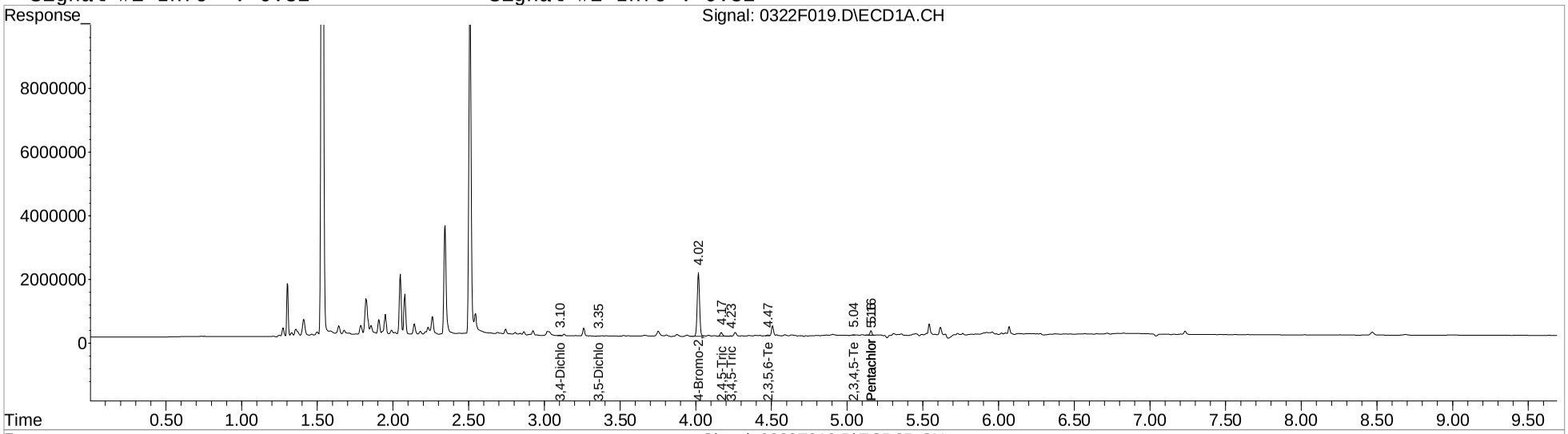
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

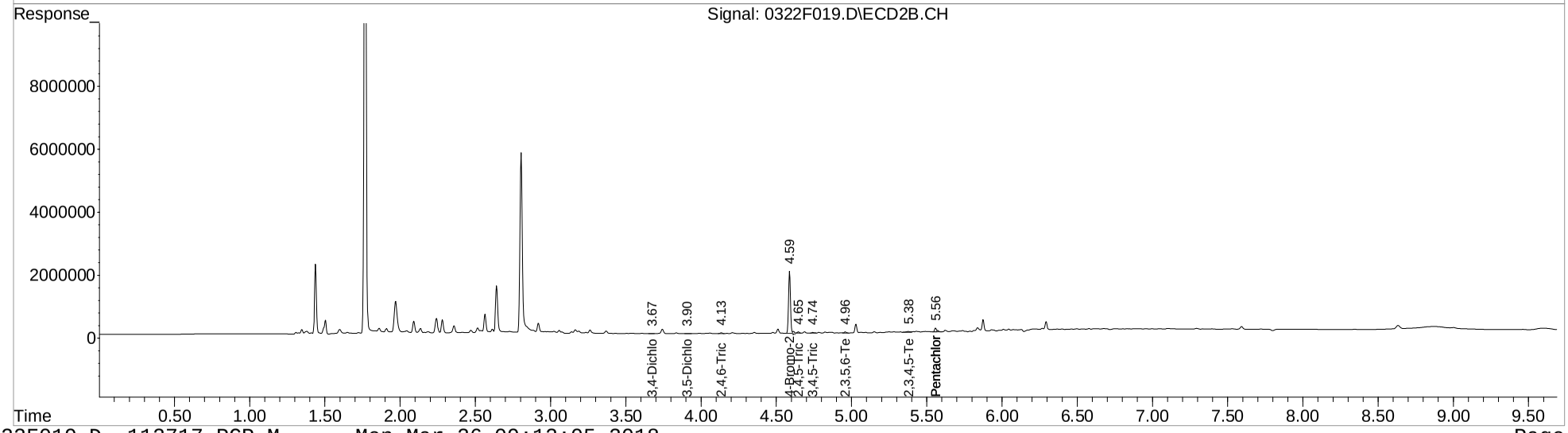
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F019.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC28\DATA\032218B\0322F019.D\ECD2B.CH
Acq On : 22 Mar 2018 9:33 pm Operator: SMS
Sample : K1802579-013 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 14:43 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F019.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC28\DATA\032218B\0322F019.D\ECD2B.CH
Acq On : 22 Mar 2018 9:33 pm Operator: SMS
Sample : K1802579-013 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:43 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

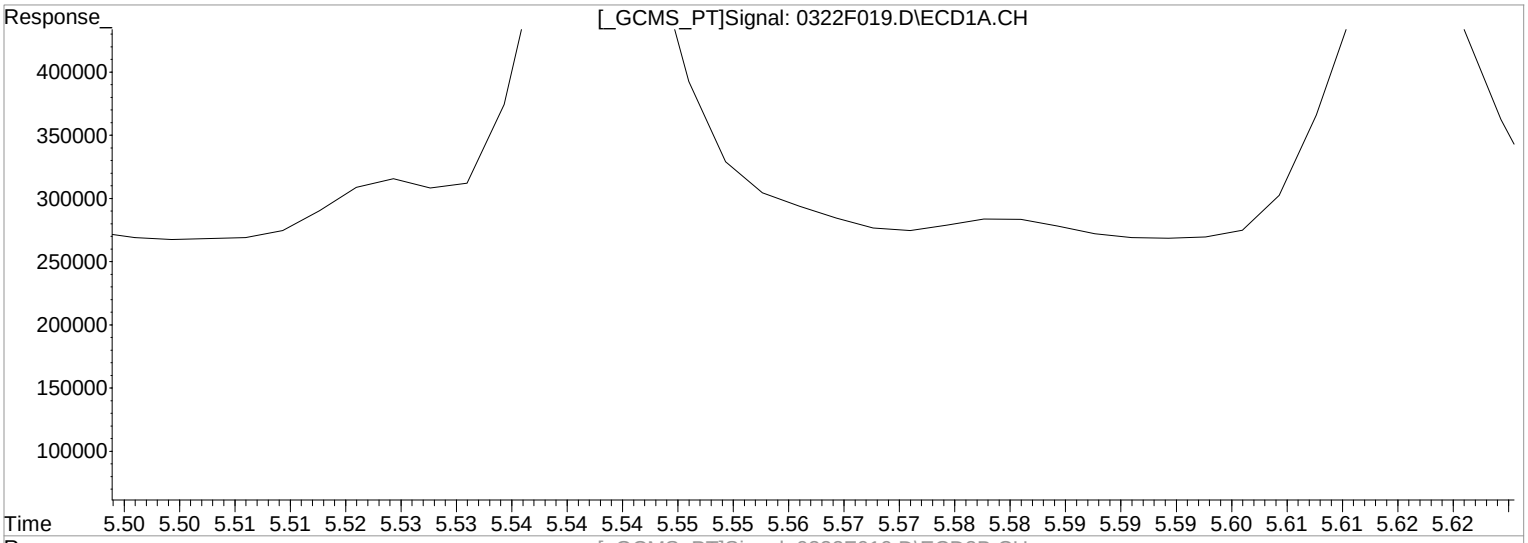
		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	21105618	17437306	43.722	48.368
		Target Compounds						
1)		3,4-Dichlorophen	3.10	3.67	172330	71878	9.922	2.906 #
2)		3,5-Dichlorophen	3.35	3.90	62992	36994	5.171	2.992 #
3)		2,4,6-Trichlorop	3.45	4.13	13268	266548	N.D.	0.829
5)		2,4,5-Trichlorop	4.17	4.65	1329926	412360	7.242	2.564 #
6)		3,4,5-Trichlorop	4.23	4.74	129182	299008	0.768	2.018 #
7)	M	2,3,5,6-Tetrachl	4.47	4.96	237954	371692	0.433	0.782 #
8)	M	2,3,4,5-Tetrachl	5.04	5.38	103960	589372	0.257	1.069 #
9)	M	Pentachloropheno	5.16	5.56	1240954	1040588	1.894	1.649m
10)		Pentachloroaniso	5.16	5.56	1240954	1345010	1.993	2.242

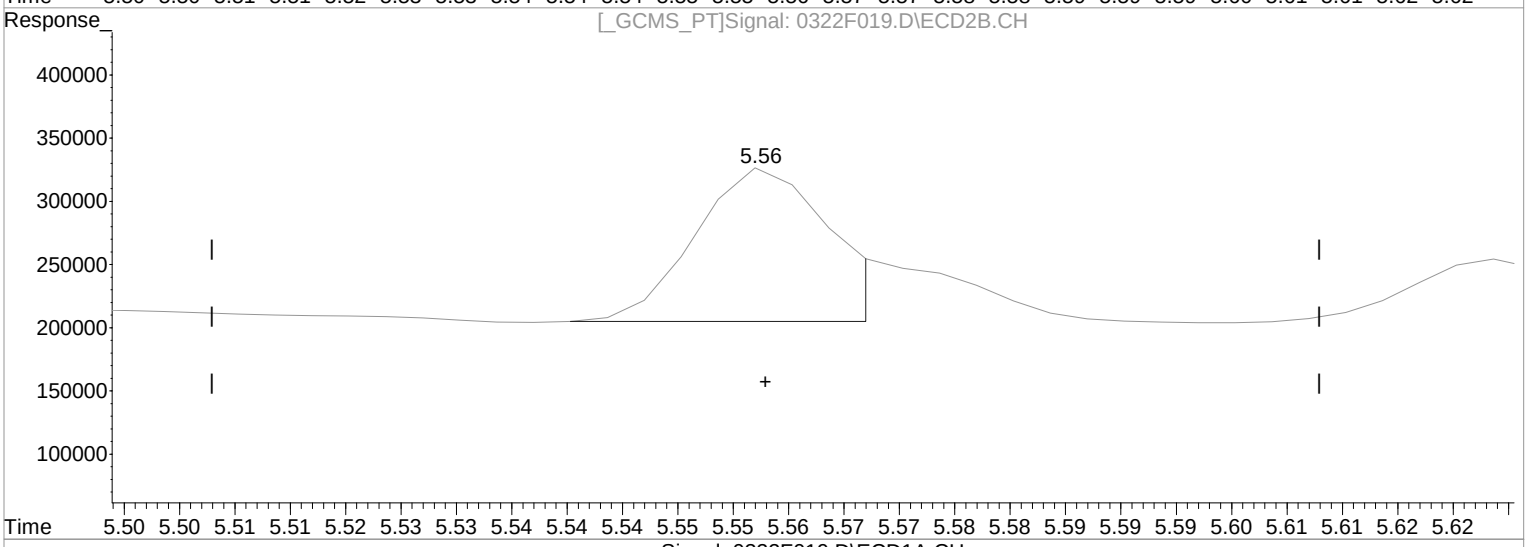
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F019.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC28\DATA\032218B\0322F019.D\ECD2B.CH
Acq On : 22 Mar 2018 9:33 pm Operator: SMS
Sample : K1802579-013 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration





Signal: 0322F019.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 1.894ug/L

response 1240954

Manual Integration:

After

Baseline/Shoulder Forgot Before

03/23/18

(9) Pentachlorophenol #2 (M)

5.56min 1.649ug/L m

response 1040588

(+) = Expected Retention Time

Exception Report

Data File: J:\GC28\DATA\032218B\0322F020.D
Lab ID: K1802579-014
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 21:51
Date Quantitated: 03/23/2018 14:49
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F020.D\0322F020C.D
Lab ID: K1802579-014
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 21:51
Date Quantitated: 03/23/2018 14:49
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F020.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F020.D\0322F020c.d			**Vial:**	16
Acqu Date:	03/22/2018 21:51	**Quant Date:**	03/23/2018 14:49	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-014				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668527	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.02	4.59	19187926	15807068	39.75	43.85			88	OK
			%Recovery =		79 OK	88 OK	**Limits =**	55-130		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15 -0.01	5.55 -0.01	343078**m**	304830	0.5240	0.4830	0.10J	0.097J	**0.097**J

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

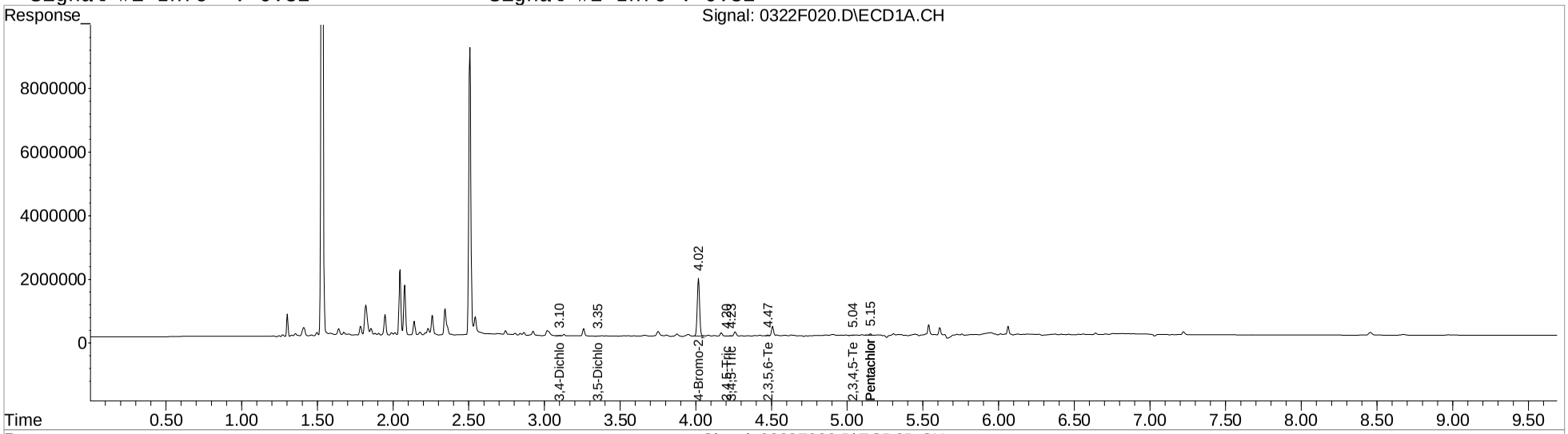
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

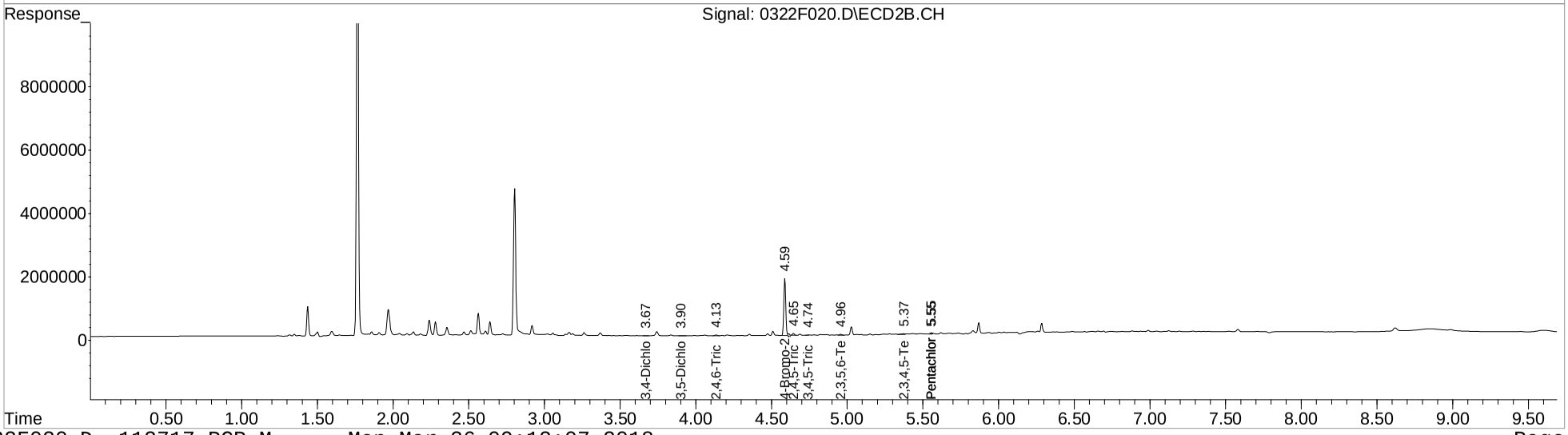
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F020.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC28\DATA\032218B\0322F020.D\ECD2B.CH
Acq On : 22 Mar 2018 9:51 pm Operator: SMS
Sample : K1802579-014 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 14:49 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F020.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC28\DATA\032218B\0322F020.D\ECD2B.CH
Acq On : 22 Mar 2018 9:51 pm Operator: SMS
Sample : K1802579-014 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:44 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

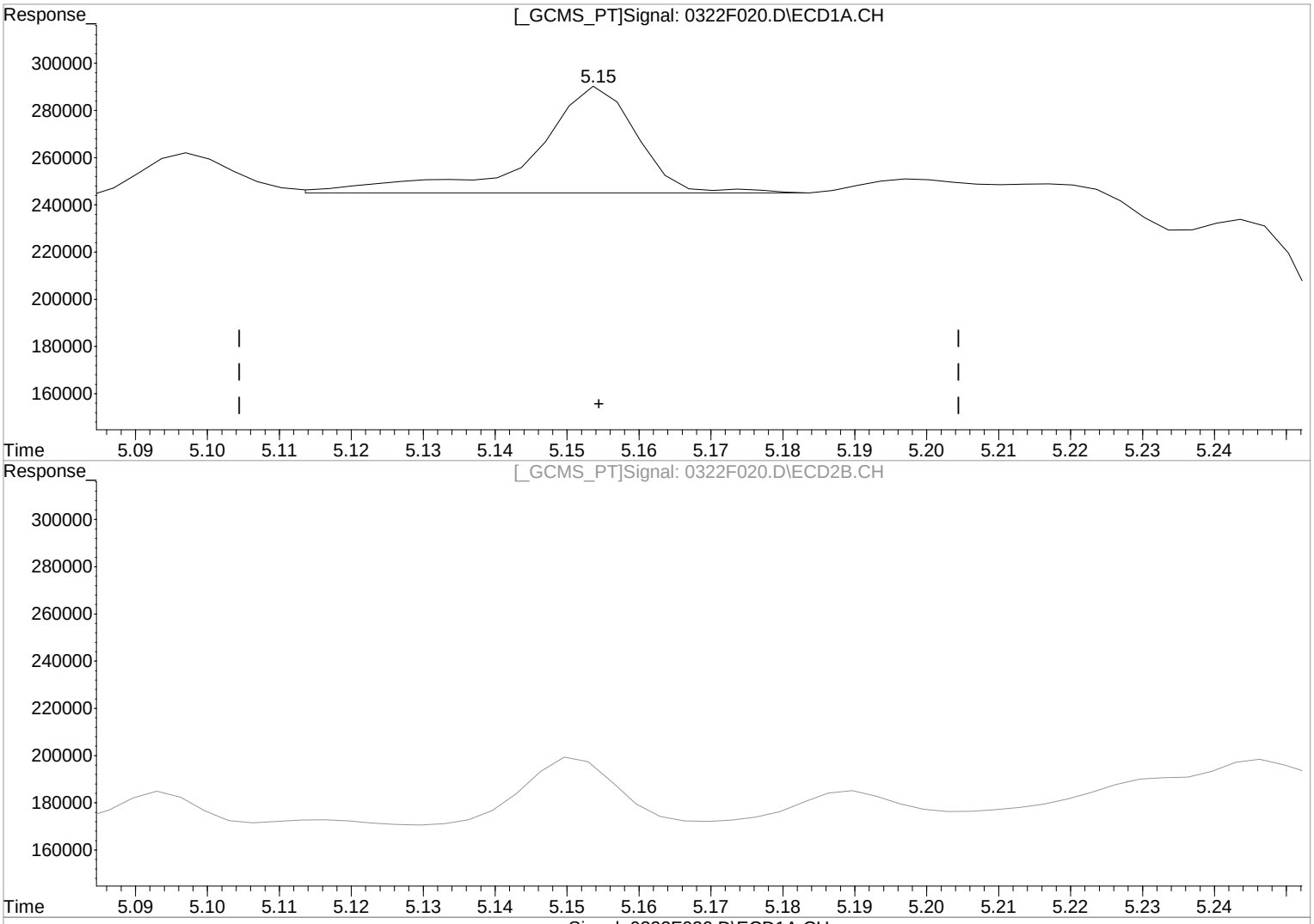
Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	19187926	15807068	39.749	43.846	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	169918	45642	9.783	1.335	#
2)		3,5-Dichlorophen	3.35	3.90	67100	31582	5.508	2.554	#
3)		2,4,6-Trichlorop	3.45	4.13	66054	251574	N.D.	0.783	
5)		2,4,5-Trichlorop	4.20	4.65	9158	539306	895.439	3.353	#
6)		3,4,5-Trichlorop	4.23	4.74	113008	105956	0.672	0.715	
7)	M	2,3,5,6-Tetrachl	4.47	4.96	223902	293988	0.408	0.618	#
8)	M	2,3,4,5-Tetrachl	5.04	5.37	64296	356390	0.159	0.326	#
9)	M	Pentachloropheno	5.15	5.55	343078	304830	0.524m	0.483	
10)		Pentachloroaniso	5.15	5.55	447958	304830	0.719	0.508	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : J:\GC28\DATA\032218B\0322F020.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC28\DATA\032218B\0322F020.D\ECD2B.CH
Acq On : 22 Mar 2018 9:51 pm Operator: SMS
Sample : K1802579-014 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration



Signal: 0322F020.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.15min 0.684ug/L

response 447958

Manual Integration:

Before

03/23/18

(9) Pentachlorophenol #2 (M)

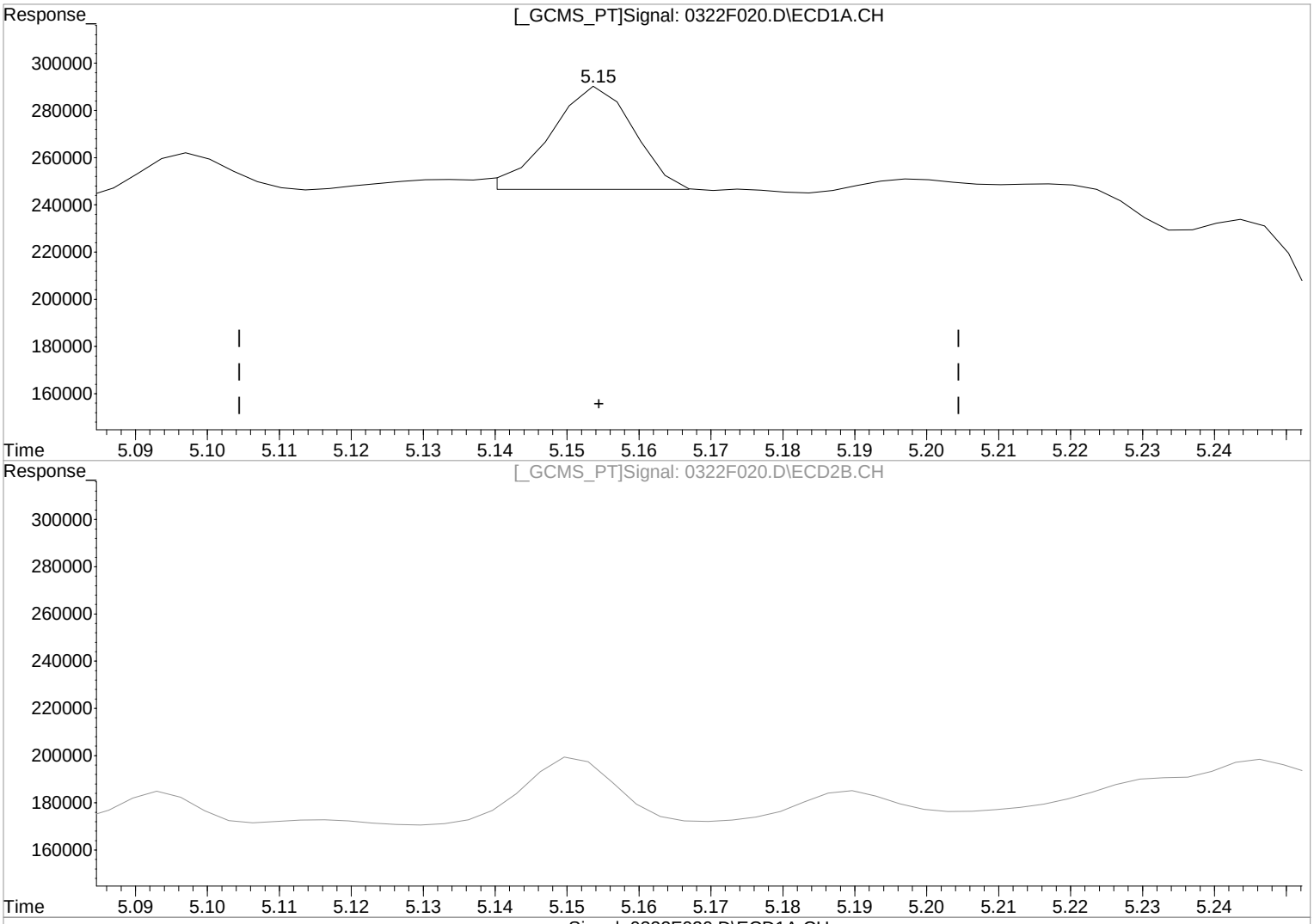
5.55min 0.483ug/L

response 304830

(+) = Expected Retention Time

Signal #1 : J:\GC28\DATA\032218B\0322F020.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC28\DATA\032218B\0322F020.D\ECD2B.CH
Acq On : 22 Mar 2018 9:51 pm Operator: SMS
Sample : K1802579-014 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration



Signal: 0322F020.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.15min 0.524ug/L m

response 343078

Manual Integration:

After

Baseline/Shoulder

03/23/18

(9) Pentachlorophenol #2 (M)

5.55min 0.483ug/L

response 304830

(+) = Expected Retention Time

Exception Report

Data File: J:\GC28\DATA\032218B\0322F021.D
Lab ID: K1802579-015
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 22:08
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F021.D\0322F021C.D
Lab ID: K1802579-015
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 22:08
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F021.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F021.D\0322F021c.d			**Vial:**	17
Acqu Date:	03/22/2018 22:08	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-015				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668528	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2				Rpt	
4-Bromo-2,6-dichlorophenol	4.02	4.59	19644632	16208186	40.70	44.96				90	OK
			%Recovery =		81	OK	90	OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15 -0.01	5.55 -0.01	239098	211804	0.3650	0.3360	0.073J	0.071U	0.071U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

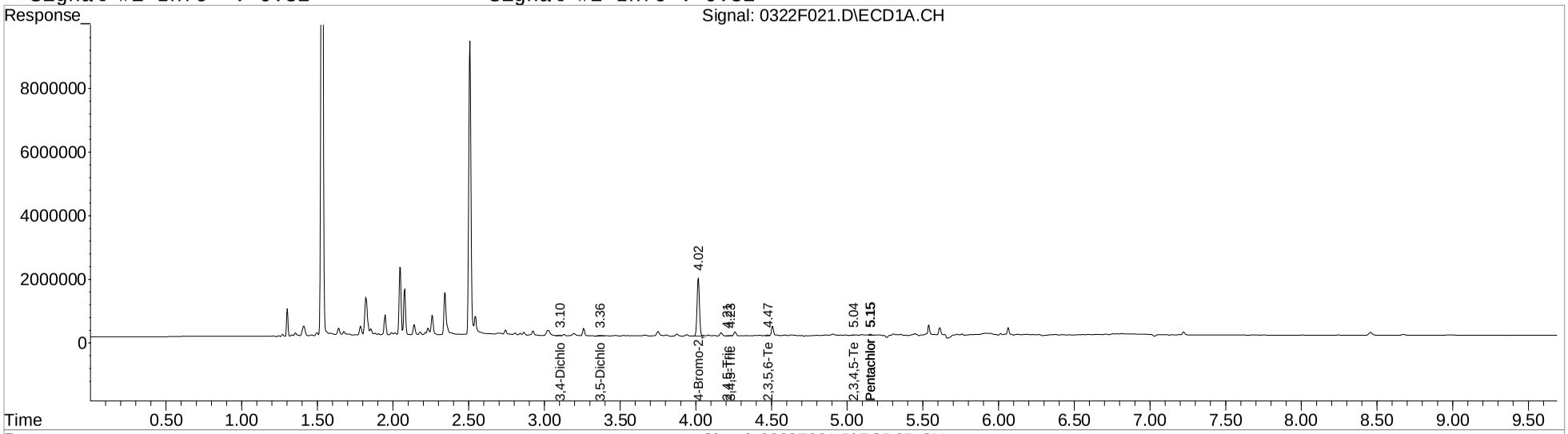
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

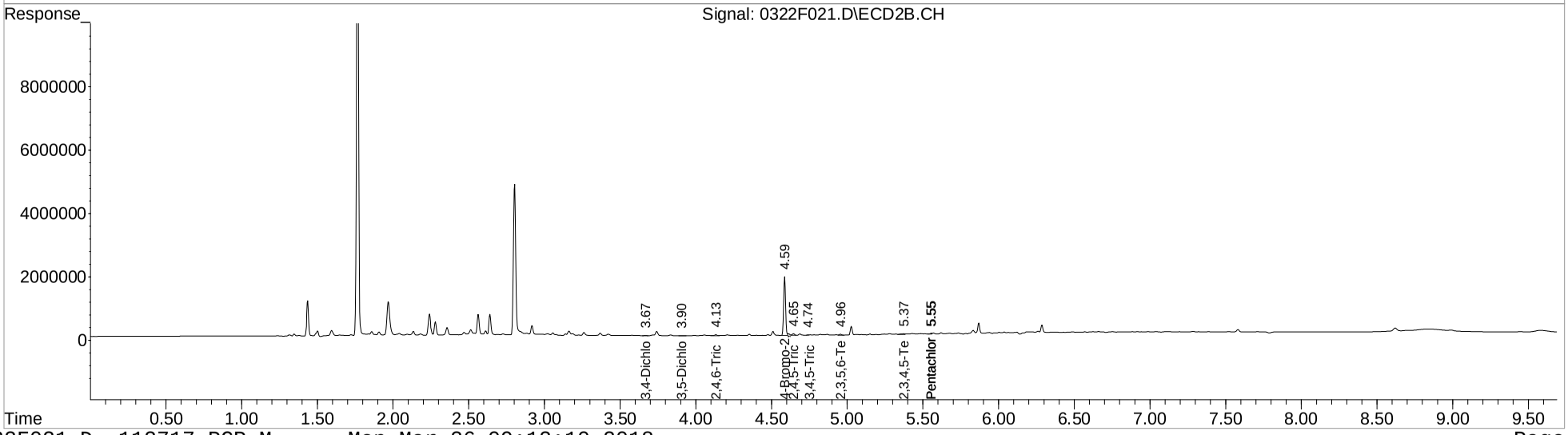
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F021.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC28\DATA\032218B\0322F021.D\ECD2B.CH
Acq On : 22 Mar 2018 10:08 pm Operator: SMS
Sample : K1802579-015 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : J:\GC28\DATA\032218B\0322F021.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC28\DATA\032218B\0322F021.D\ECD2B.CH
Acq On : 22 Mar 2018 10:08 pm Operator: SMS
Sample : K1802579-015 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:44 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	19644632	16208186	40.695	44.959	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	183024	54060	10.537	1.839	#
2)		3,5-Dichlorophen	3.36	3.90	387362	29198	31.796	2.361	#
3)		2,4,6-Trichlorop	3.47	4.13	219994	268076	N.D.	0.834	
5)		2,4,5-Trichlorop	4.21	4.65	26388	500366	895.337	3.111	#
6)		3,4,5-Trichlorop	4.23	4.74	79970	37558	0.476	0.253	#
7)	M	2,3,5,6-Tetrachl	4.47	4.96	195250	287668	0.356	0.605	#
8)	M	2,3,4,5-Tetrachl	5.04	5.37	53142	382642	0.131	0.410	#
9)	M	Pentachloropheno	5.15	5.55	239098	211804	0.365	0.336	
10)		Pentachloroaniso	5.15	5.55	239098	211804	0.384	0.353	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Exception Report

Data File: J:\GC28\DATA\032218B\0322F022.D
Lab ID: K1802579-016
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 22:26
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F022.D\0322F022C.D
Lab ID: K1802579-016
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 22:26
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F022.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F022.D\0322F022c.d			**Vial:**	18
Acqu Date:	03/22/2018 22:26	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-016				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668529	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.02	4.59	19972670	16659618	41.38	46.21			92	OK
			%Recovery =		83 OK	92 OK	**Limits =**	55-130		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15 -0.01	5.55 -0.01	3242232	3229780	4.95	5.12	0.99	1.0	**0.99**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

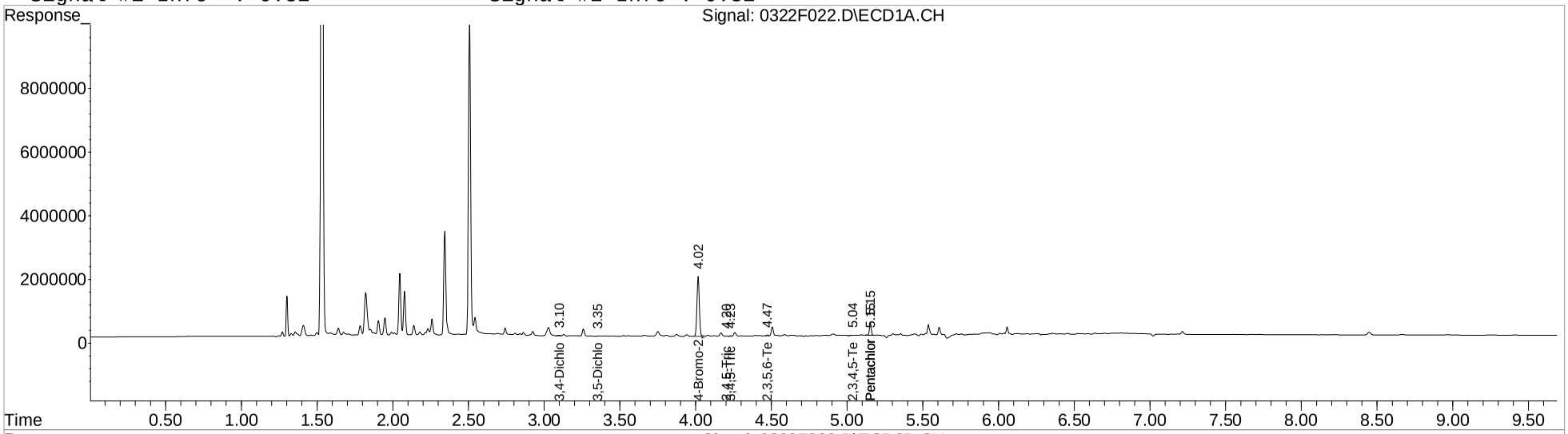
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

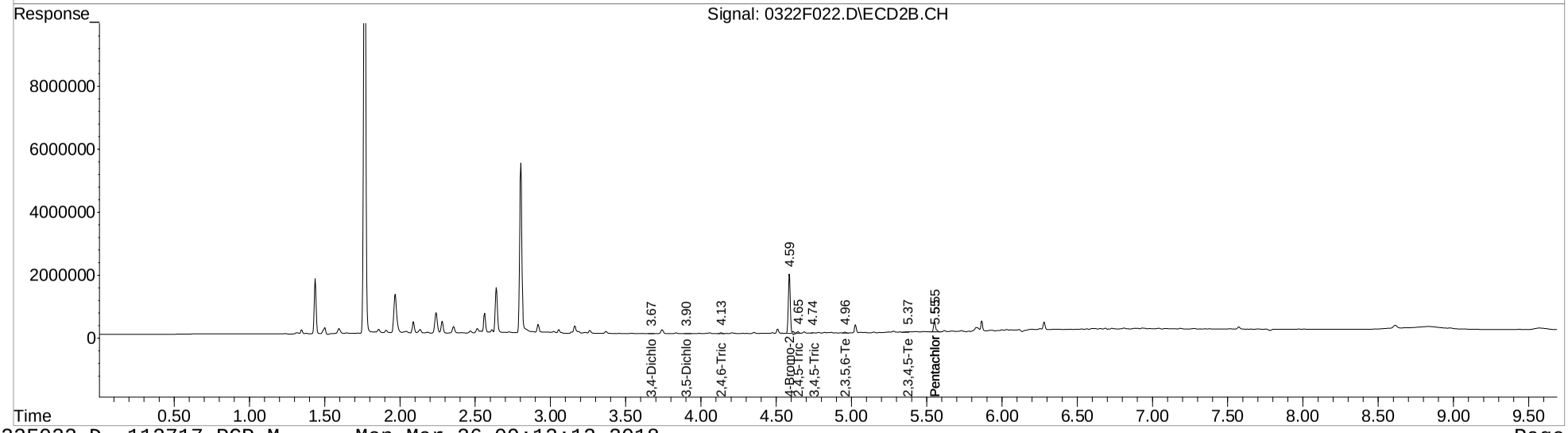
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F022.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC28\DATA\032218B\0322F022.D\ECD2B.CH
Acq On : 22 Mar 2018 10:26 pm Operator: SMS
Sample : K1802579-016 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F022.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC28\DATA\032218B\0322F022.D\ECD2B.CH
Acq On : 22 Mar 2018 10:26 pm Operator: SMS
Sample : K1802579-016 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:45 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	19972670	16659618	41.375	46.211	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	171856	42688	9.895	1.159	#
2)		3,5-Dichlorophen	3.35	3.90	98702	27622	8.102	2.234	#
3)		2,4,6-Trichlorop	3.45	4.13	85902	246902	N.D.	0.768	
5)		2,4,5-Trichlorop	4.20	4.65	12128	461824	895.421	2.871	#
6)		3,4,5-Trichlorop	4.23	4.74	122620	29692	0.729	0.200	#
7)	M	2,3,5,6-Tetrachl	4.47	4.96	219266	303390	0.399	0.638	#
8)	M	2,3,4,5-Tetrachl	5.04	5.37	90074	355856	0.222	0.324	#
9)	M	Pentachloropheno	5.15	5.55	3242232	3229780	4.947	5.118	
10)		Pentachloroaniso	5.15	5.55	3242232	3229780	5.208	5.384	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F042.D
Lab ID: K1802579-017
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 21:47
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F042.D\0327F042C.D
Lab ID: K1802579-017
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 21:47
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F042.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F042.D\0327F042c.d			**Vial:**	34
Acqu Date:	03/27/2018 21:47	**Quant Date:**	03/28/2018 08:46	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-017				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801631	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	Method Mod		
Prep Ref:	1668882	**Prep Date:**	03/22/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:		**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	17140122	13914958	35.51	38.60			77 OK
				%Recovery =	71 OK	77 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15	5.57 +0.02	26620	233846	0.0410	0.3710	0.071U	0.074J	0.071U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F042.D Vial: 34
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 9:47 pm Operator: JD
Sample : K1802579-017 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:05 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.016	4.586	17140122	13914958	35.507	38.598	
		Target Compounds							
1)		3,4-Dichl...	3.100	3.666	87262	22246	5.024	909.604	#
2)		3,5-Dichl...	3.353	3.902	6474	9436	0.531	0.763	#
3)		2,4,6-Tri...	3.476f	4.129	45272	231058	N.D.	0.719	
5)		2,4,5-Tri...	4.206	4.646	5179	349982	895.462	2.176	#
6)		3,4,5-Tri...	4.206	4.702	5179	6614	0.031	0.045	#
7)	M	2,3,5,6-T...	4.480	4.956	5422	220026	0.010	0.463	#
8)	M	2,3,4,5-T...	5.010	5.356	222358	6952	0.549	N.D.	#
9)	M	Pentachlo...	5.153	5.572	26620	233846	0.041	0.371	#
10)		Pentachlo...	5.153	5.572	26620	233846	0.043	0.390	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

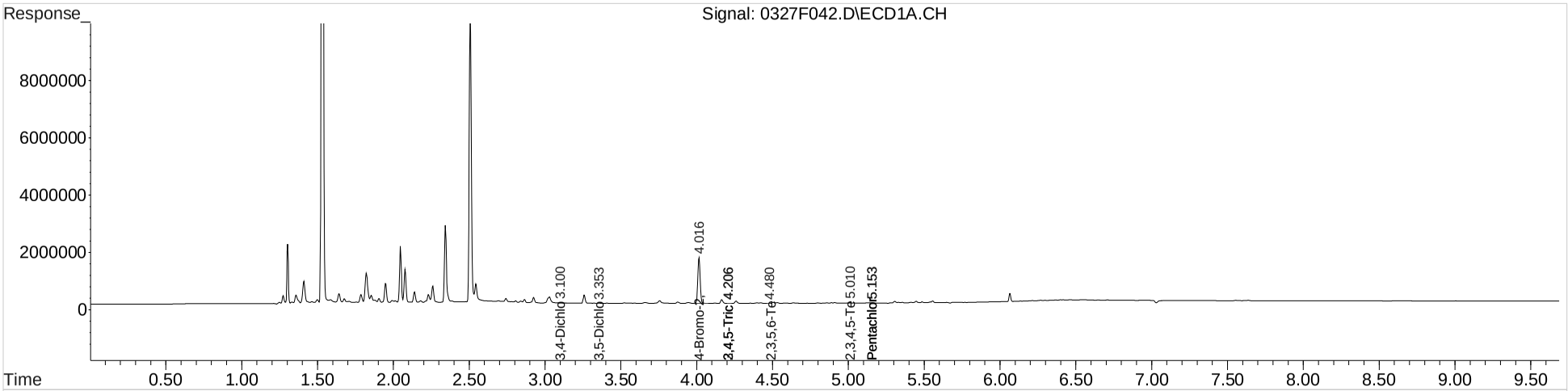
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F042.D Vial: 34
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 9:47 pm Operator: JD
Sample : K1802579-017 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:05 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



Exception Report

Data File: J:\GC28\DATA\032218B\0322F024.D
Lab ID: K1802579-018
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 23:01
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F024.D\0322F024C.D
Lab ID: K1802579-018
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 23:01
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F024.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F024.D\0322F024c.d			**Vial:**	20
Acqu Date:	03/22/2018 23:01	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-018				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668530	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1		RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	-0.01	4.59	19138116	15721950	39.65	43.61			87 OK
				%Recovery =		79 OK	87 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15	-0.01	5.56	288264	191902	0.4400	0.3040	0.088J	0.071U	0.071U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

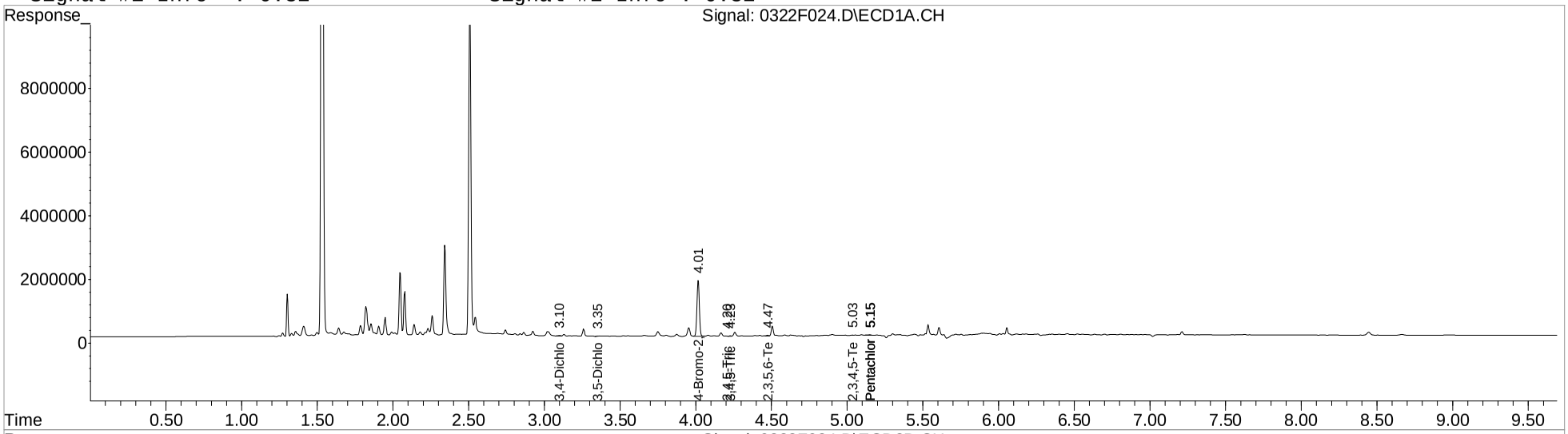
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

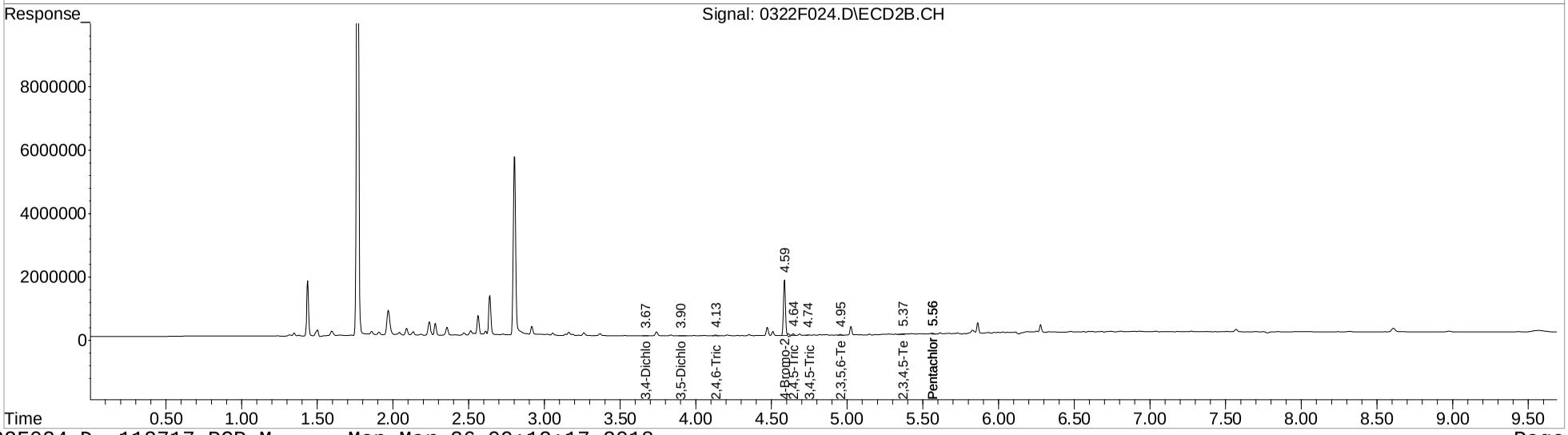
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F024.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\032218B\0322F024.D\ECD2B.CH
Acq On : 22 Mar 2018 11:01 pm Operator: SMS
Sample : K1802579-018 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F024.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\032218B\0322F024.D\ECD2B.CH
Acq On : 22 Mar 2018 11:01 pm Operator: SMS
Sample : K1802579-018 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:47 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.01	4.59	19138116	15721950	39.646	43.610	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	151442	49092	8.719	1.541	#
2)		3,5-Dichlorophen	3.35	3.90	86304	31504	7.084	2.548	#
3)		2,4,6-Trichlorop	3.45	4.13	88518	247100	N.D.	0.769	
5)		2,4,5-Trichlorop	4.20	4.64	12272	464634	895.420	2.889	#
6)		3,4,5-Trichlorop	4.23	4.74	118588	75376	0.705	0.509	#
7)	M	2,3,5,6-Tetrachl	4.47	4.95	221392	252566	0.403	0.531	#
8)	M	2,3,4,5-Tetrachl	5.03	5.37	37492	382222	0.093	0.409	#
9)	M	Pentachloropheno	5.15	5.56	288264	191902	0.440	0.304	#
10)		Pentachloroaniso	5.15	5.56	288264	191902	0.463	0.320	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Exception Report

Data File: J:\GC28\DATA\032218B\0322F025.D
Lab ID: K1802579-019
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 23:18
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F025.D\0322F025C.D
Lab ID: K1802579-019
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 23:18
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F025.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F025.D\0322F025c.d			**Vial:**	21
Acqu Date:	03/22/2018 23:18	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-019				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668531	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	21138220	17508498	43.79	48.57			97 OK
			%Recovery =		88 OK	97 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15 -0.01	5.57 +0.01	219902	217748	0.3360	0.3450	0.071U	0.071U	0.071U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

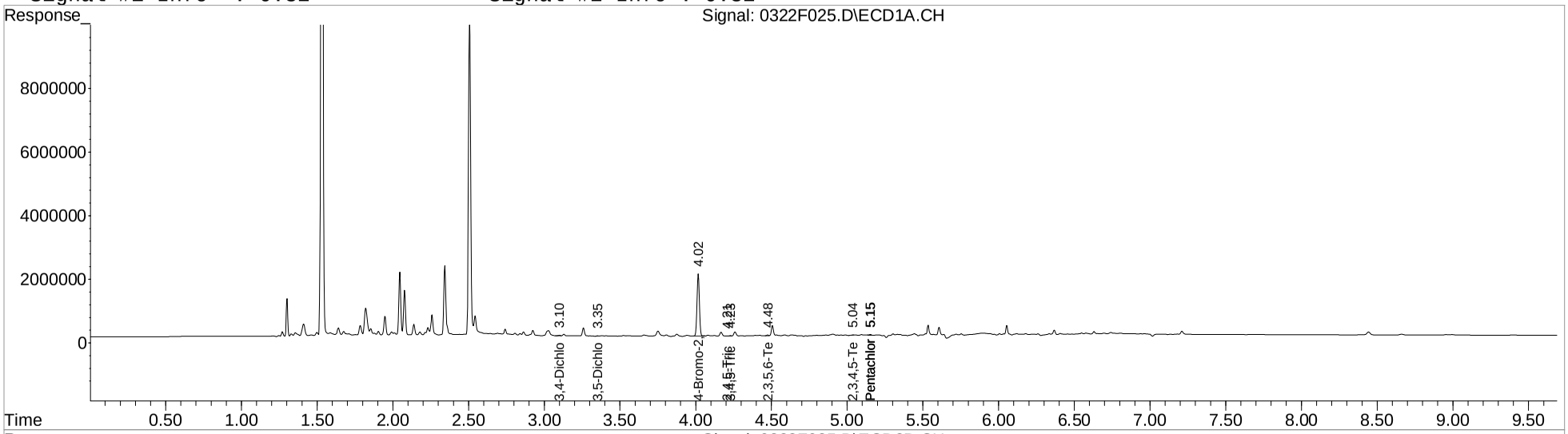
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

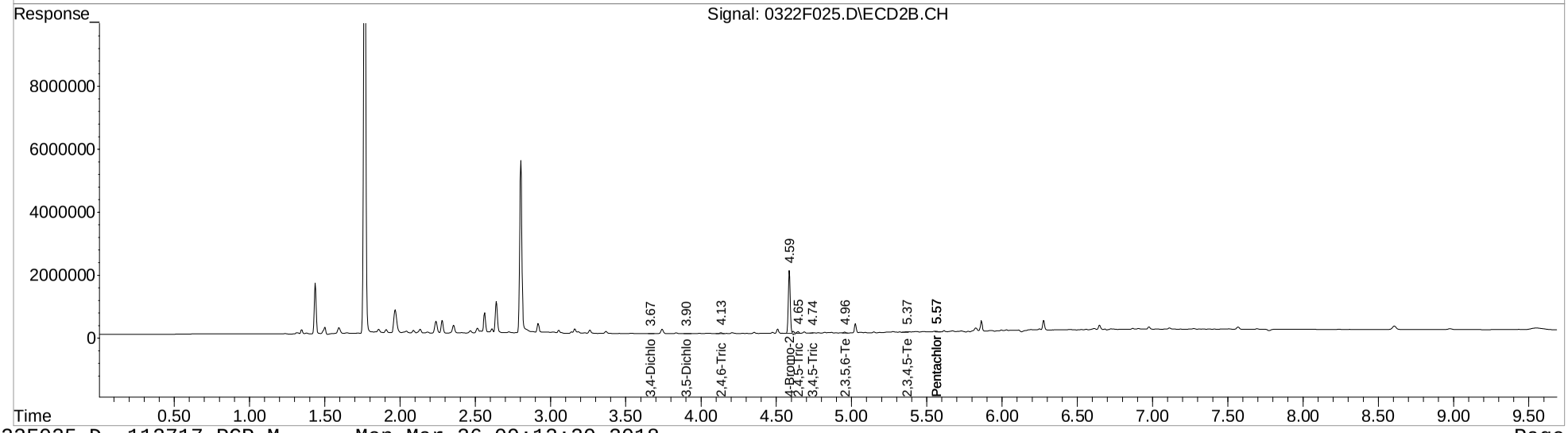
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F025.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\032218B\0322F025.D\ECD2B.CH
Acq On : 22 Mar 2018 11:18 pm Operator: SMS
Sample : K1802579-019 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F025.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\032218B\0322F025.D\ECD2B.CH
Acq On : 22 Mar 2018 11:18 pm Operator: SMS
Sample : K1802579-019 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:48 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	21138220	17508498	43.789	48.565	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	181334	46550	10.440	1.389	#
2)		3,5-Dichlorophen	3.35	3.90	76858	34506	6.309	2.791	#
3)		2,4,6-Trichlorop	3.45	4.13	84980	301794	N.D.	0.939	
5)		2,4,5-Trichlorop	4.21	4.65	16368	473508	895.396	2.944	#
6)		3,4,5-Trichlorop	4.23	4.74	120666	106208	0.718	0.717	
7)	M	2,3,5,6-Tetrachl	4.48	4.96	213954	312690	0.390	0.658	#
8)	M	2,3,4,5-Tetrachl	5.04	5.37	69494	350342	0.171	0.307	#
9)	M	Pentachloropheno	5.15	5.57	219902	217748	0.336	0.345	
10)		Pentachloroaniso	5.15	5.57	219902	217748	0.353	0.363	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Exception Report

Data File: J:\GC28\DATA\032218B\0322F026.D
Lab ID: K1802579-020
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 23:36
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F026.D\0322F026C.D
Lab ID: K1802579-020
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2018 23:36
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F026.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F026.D\0322F026c.d			**Vial:**	22
Acqu Date:	03/22/2018 23:36	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-020				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668532	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1		RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.01	-0.01	4.59	20821804	17065570	43.13	47.34			95	OK
				%Recovery =		86 OK	95 OK	**Limits =**	55-130		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15	-0.01	5.56	304716	207536	0.4650	0.3290	0.093J	0.071U	0.071U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

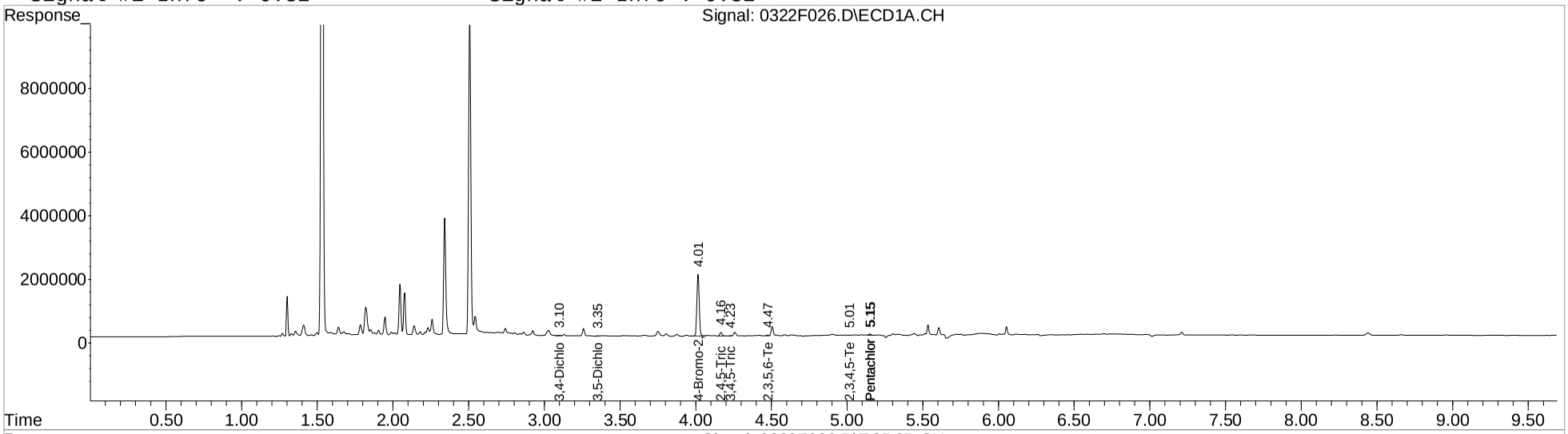
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

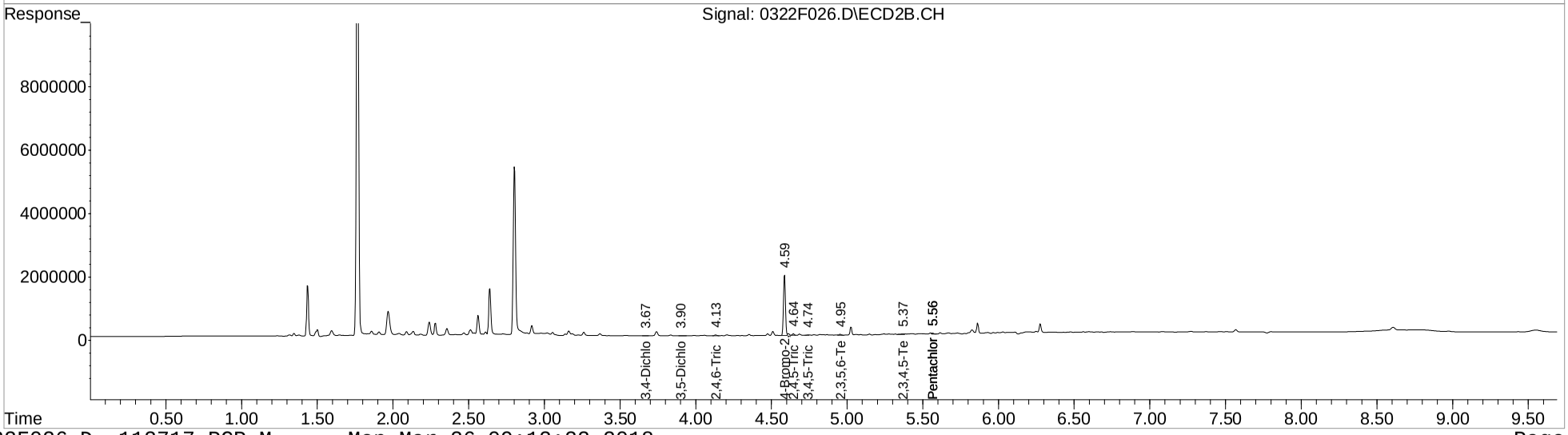
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F026.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\032218B\0322F026.D\ECD2B.CH
Acq On : 22 Mar 2018 11:36 pm Operator: SMS
Sample : K1802579-020 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : J:\GC28\DATA\032218B\0322F026.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\032218B\0322F026.D\ECD2B.CH
Acq On : 22 Mar 2018 11:36 pm Operator: SMS
Sample : K1802579-020 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:48 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.01	4.59	20821804	17065570	43.134	47.337	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	153814	48360	8.856	1.498	#
2)		3,5-Dichlorophen	3.35	3.90	67198	31980	5.516	2.586	#
3)		2,4,6-Trichlorop	3.45	4.13	20010	247272	N.D.	0.769	
5)		2,4,5-Trichlorop	4.16	4.64	1147000	456248	6.146	2.837	#
6)		3,4,5-Trichlorop	4.23	4.74	113220	119758	0.673	0.808	
7)	M	2,3,5,6-Tetrachl	4.47	4.95	193728	305444	0.353	0.643	#
8)	M	2,3,4,5-Tetrachl	5.01	5.37	15314	392784	0.038	0.442	#
9)	M	Pentachloropheno	5.15	5.56	304716	207536	0.465	0.329	#
10)		Pentachloroaniso	5.15	5.56	304716	207536	0.489	0.346	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F015.D
Lab ID: K1802579-021
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 13:53
Date Quantitated: 03/28/2018 08:44
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F015.D\0327F015C.D
Lab ID: K1802579-021
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 13:53
Date Quantitated: 03/28/2018 08:44
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JLP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F015.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F015.D\0327F015c.d			**Vial:**	11
Acqu Date:	03/27/2018 13:53	**Quant Date:**	03/28/2018 08:44	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-021				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668854	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.01	-0.01	4.59	+0.01	16822096	13805197	34.85	38.29			77	OK
						%Recovery =	70 OK	77 OK	**Limits =**	55-130		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15	-0.01	5.56	109965913	102884073	167.80	163.04	34	33	**33**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F015.D Vial: 11
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 1:53 pm Operator: JD
Sample : K1802579-021 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:44:42 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
4) S	4-Bromo-2...	4.014	4.587	16822096	13805197	34.848	38.293	
	Target Compounds							
1)	3,4-Dichl...	3.097	3.663	64481	19214	3.712	909.785	#
2)	3,5-Dichl...	3.351	3.900	44332	10742	3.639	0.869	#
3)	2,4,6-Tri...	3.454	4.130	107356	345074	N.D.	1.073	
5)	2,4,5-Tri...	4.211	4.643	37099	103470	895.274	0.643	#
6)	3,4,5-Tri...	4.211	4.723	37099	5900	0.221	0.040	#
7) M	2,3,5,6-T...	4.471	4.967	4586871	3908622	8.352	8.223	
8) M	2,3,4,5-T...	5.011	5.387	203898	23481	0.503	N.D.	#
9) M	Pentachlo...	5.154	5.557	110.0E6	102.9E6	167.798	163.038	
10)	Pentachlo...	5.154	5.557	110.0E6	102.9E6	176.621	171.500	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

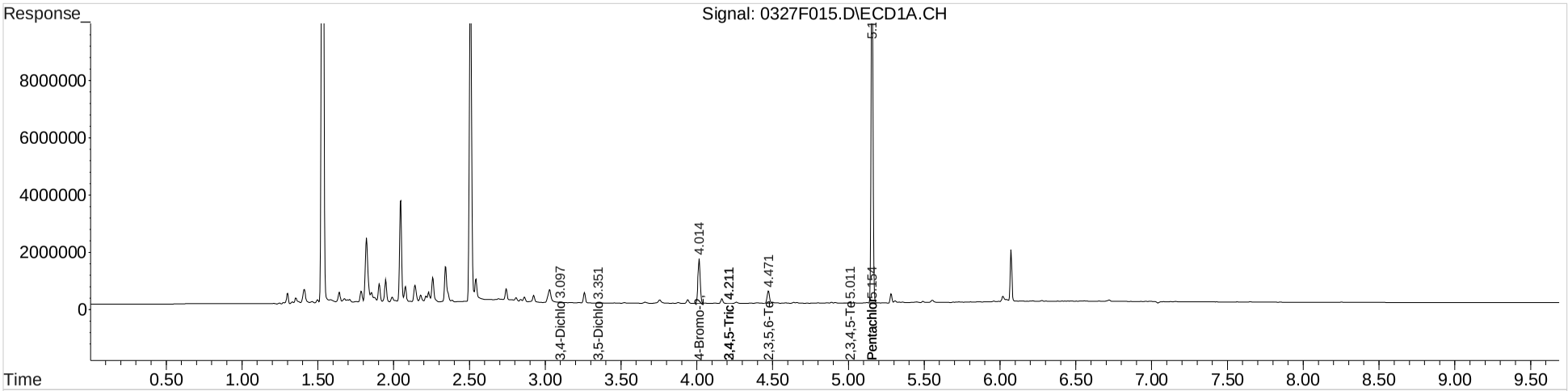
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F015.D Vial: 11
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 1:53 pm Operator: JD
Sample : K1802579-021 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:44:42 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F016.D
Lab ID: K1802579-022
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 14:11
Date Quantitated: 03/28/2018 08:44
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F016.D\0327F016C.D
Lab ID: K1802579-022
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 14:11
Date Quantitated: 03/28/2018 08:44
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F016.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F016.D\0327F016c.d			**Vial:**	12
Acqu Date:	03/27/2018 14:11	**Quant Date:**	03/28/2018 08:44	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-022				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668855	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.01 -0.01	4.59 +0.01	17179360	13900035	35.59	38.56			77	OK
			%Recovery =		71 OK	77 OK	**Limits =**	55-130		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16	5.56	46033624	40586988	70.24	64.32	14	13	**13**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F016.D Vial: 12
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 2:11 pm Operator: JD
Sample : K1802579-022 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:44:46 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.014	4.586	17179360	13900035	35.588	38.556	
		Target Compounds							
1)		3,4-Dichl...	3.097	3.666	66119	37172	3.807	0.829	#
2)		3,5-Dichl...	3.347	3.903	32925	13623	2.703	1.102	#
3)		2,4,6-Tri...	3.474	4.130	44094	340496	N.D.	1.059	
5)		2,4,5-Tri...	4.164	4.643	1989646	121305	11.217	0.754	#
6)		3,4,5-Tri...	4.224	4.703	13397	13986	0.080	0.094	
7)	M	2,3,5,6-T...	4.474	4.970	1945172	1821355	3.542	3.832	
8)	M	2,3,4,5-T...	5.014	5.380	170406	97965	0.421	N.D.	#
9)	M	Pentachlo...	5.157	5.556	46033624	40586988	70.243	64.317	
10)		Pentachlo...	5.157	5.556	46033624	40586988	73.937	67.656	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

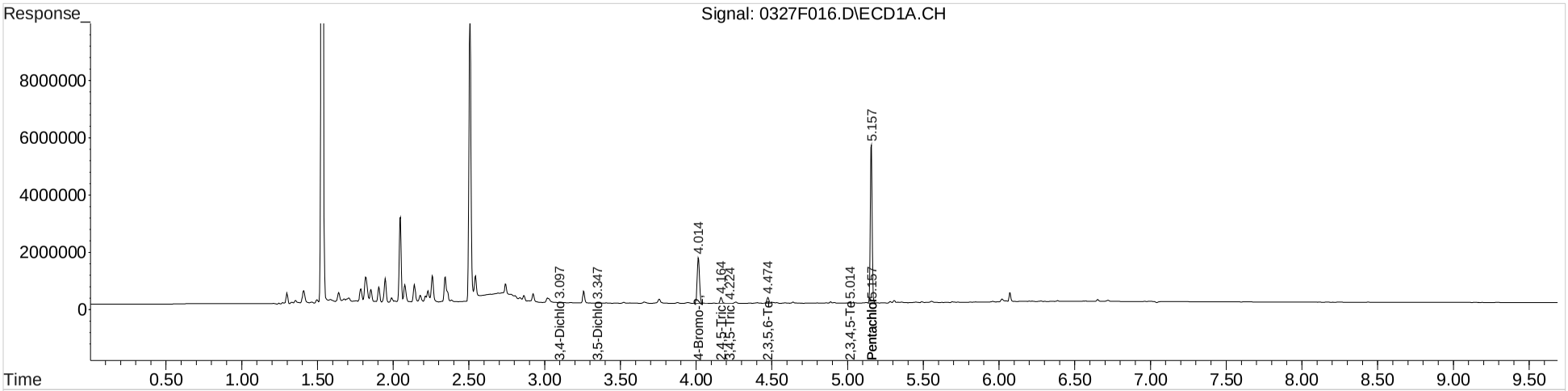
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F016.D Vial: 12
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 2:11 pm Operator: JD
Sample : K1802579-022 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:44:46 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F017.D
Lab ID: K1802579-023
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 14:28
Date Quantitated: 03/28/2018 08:44
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F017.D\0327F017C.D
Lab ID: K1802579-023
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 14:28
Date Quantitated: 03/28/2018 08:44
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F017.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F017.D\0327F017c.d			**Vial:**	13
Acqu Date:	03/27/2018 14:28	**Quant Date:**	03/28/2018 08:44	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-023				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668856	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.58	16478765	13581857	34.14	37.67			75 OK
			%Recovery =		68 OK	75 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16	5.55 -0.01	970402	1235262	1.48	1.96	0.30J	0.39J	**0.30**J

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F017.D Vial: 13
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 2:28 pm Operator: JD
Sample : K1802579-023 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:44:49 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
4) S	4-Bromo-2...	4.016	4.585	16478765	13581857	34.137	37.674	
	Target Compounds							
1)	3,4-Dichl...	3.099	3.665	76610	26553	4.411	0.196	#
2)	3,5-Dichl...	3.349	3.902	41872	15626	3.437	1.264	#
3)	2,4,6-Tri...	3.456	4.128	17844	267599	N.D.	0.832	
5)	2,4,5-Tri...	4.166	4.645	1440732	121768	7.907	0.757	#
6)	3,4,5-Tri...	4.219	4.738	19915	252533	0.118	1.704	#
7) M	2,3,5,6-T...	4.476	4.955	217848	432712	0.397	0.910	#
8) M	2,3,4,5-T...	5.009	5.355	177592	2873	0.438	N.D.	#
9) M	Pentachlo...	5.156	5.555	970402	1235262	1.481	1.957	#
10)	Pentachlo...	5.156	5.555	970402	1235262	1.559	2.059	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

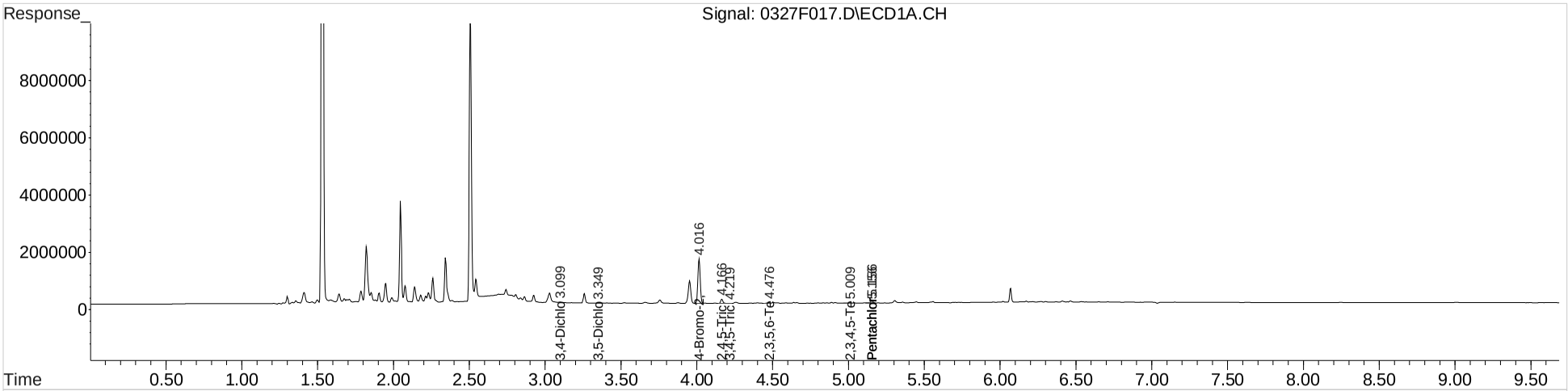
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F017.D Vial: 13
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 2:28 pm Operator: JD
Sample : K1802579-023 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:44:49 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F018.D
Lab ID: K1802579-024
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 14:46
Date Quantitated: 03/28/2018 09:04
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F018.D\0327F018C.D
Lab ID: K1802579-024
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 14:46
Date Quantitated: 03/28/2018 09:04
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F018.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F018.D\0327F018c.d			**Vial:**	14
Acqu Date:	03/27/2018 14:46	**Quant Date:**	03/28/2018 09:04	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-024				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/18/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668857	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.01	-0.01	4.59	+0.01	15478878	12538620	32.07	34.78			70	OK
						%Recovery =	64 OK	70 OK	**Limits =**	55-130		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15	-0.01	5.57	+0.01	37231	144859**m**	0.0570	0.2300	0.071U	0.071U	0.071U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F018.D Vial: 14
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 2:46 pm Operator: JD
Sample : K1802579-024 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:04:10 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.015	4.587	15478878	12538620	32.065	34.780	
		Target Compounds							
1)		3,4-Dichl...	3.098	3.664	78564	30515	4.523	0.432	#
2)		3,5-Dichl...	3.348	3.897	53123	12436	4.361	1.006	#
3)		2,4,6-Tri...	3.408f	4.131	100294	267650	N.D.	0.833	
5)		2,4,5-Tri...	4.208	4.644	16255	115324	895.397	0.717	#
6)		3,4,5-Tri...	4.208	4.707	16255	10535	0.097	0.071	#
7)	M	2,3,5,6-T...	4.475	4.954	95478	214100	0.174	0.450	#
8)	M	2,3,4,5-T...	5.011	5.354	169214	5415	0.418	N.D.	#
9)	M	Pentachlo...	5.155	5.574	37231	144859	0.057	0.230m	#
10)		Pentachlo...	5.155	5.557	37231	30073	0.060	0.050	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

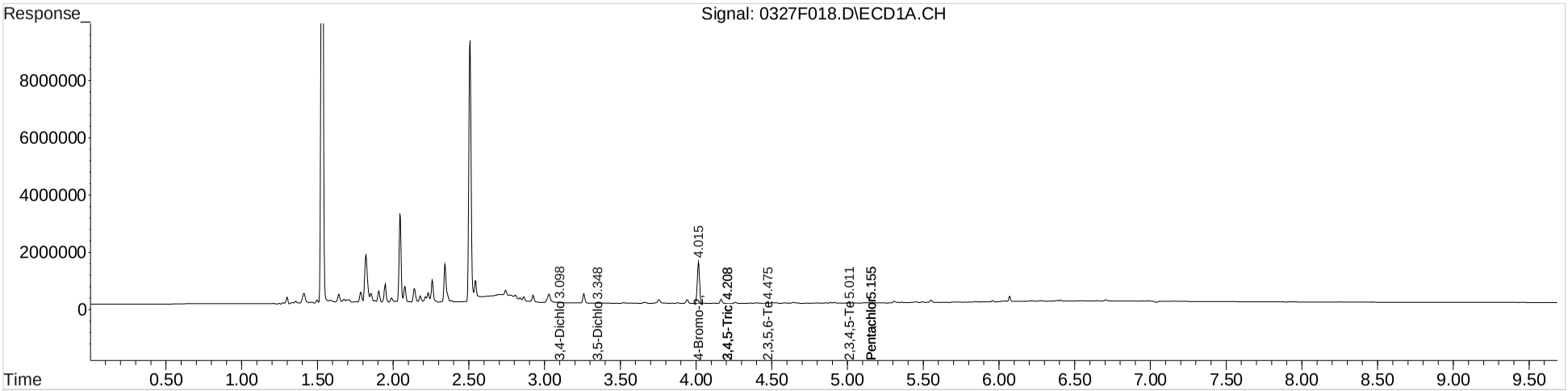
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F018.D Vial: 14
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 2:46 pm Operator: JD
Sample : K1802579-024 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:04:10 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

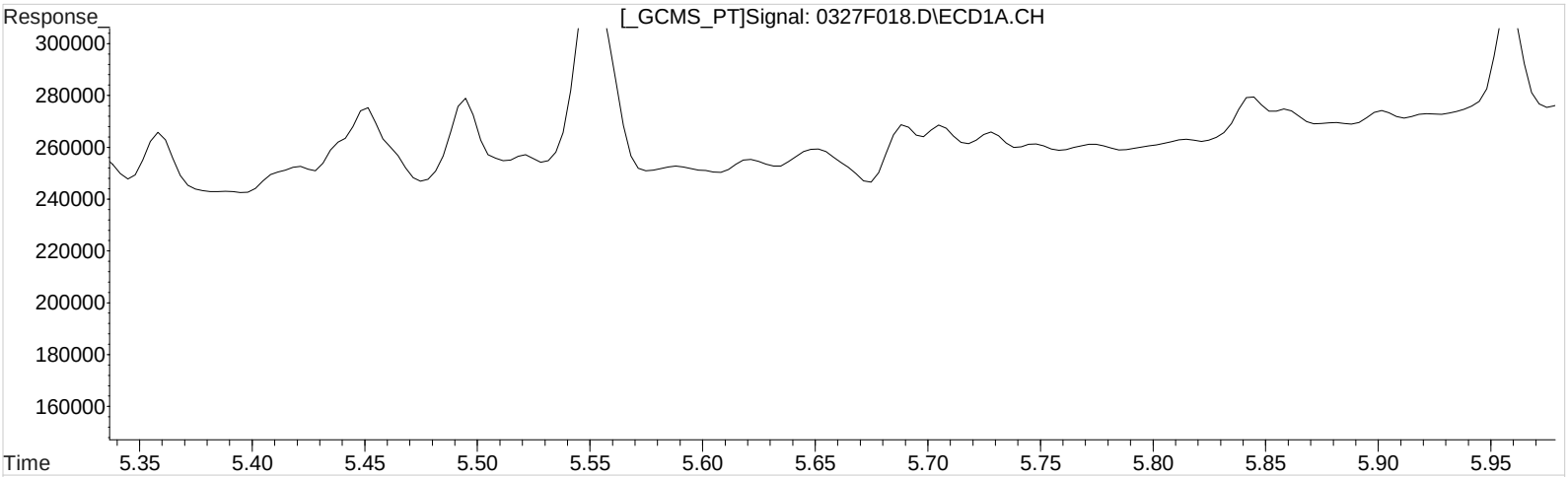


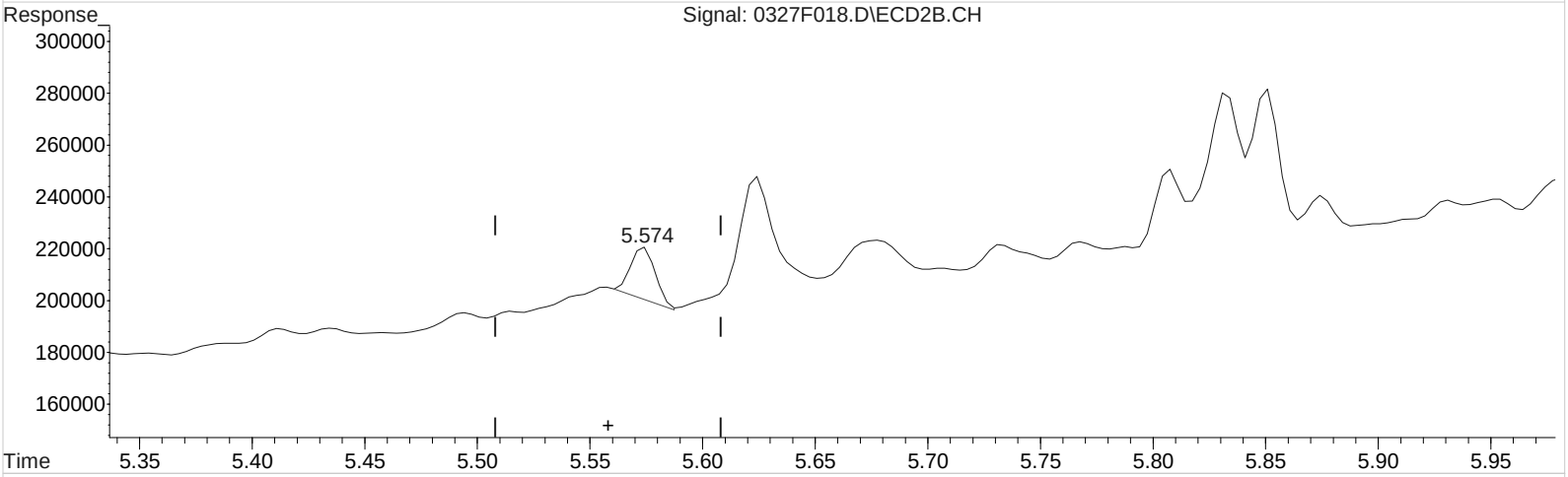
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F018.D Vial: 14
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 2:46 pm Operator: JD
Sample : K1802579-024 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:04:10 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.155min 0.057 ug/L

response 37231

Manual Integration:

After

After/No Before

03/28/18

(9) Pentachlorophenol #2 (M)

5.574min 0.230 ug/L m

response 144859

(+) = Expected Retention Time

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F019.D
Lab ID: K1802579-025
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 15:03
Date Quantitated: 03/28/2018 08:44
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F019.D\0327F019C.D
Lab ID: K1802579-025
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 15:03
Date Quantitated: 03/28/2018 08:44
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F019.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F019.D\0327F019c.d			**Vial:**	15
Acqu Date:	03/27/2018 15:03	**Quant Date:**	03/28/2018 08:44	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-025				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668858	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.58	17007300	14013035	35.23	38.87			78 OK
				%Recovery =	70 OK	78 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15 -0.01	5.55 -0.01	13163700	11135211	20.09	17.65	4.0	3.5	**3.5**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F019.D Vial: 15
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 3:03 pm Operator: JD
Sample : K1802579-025 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:44:55 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.015	4.584	17007300	14013035	35.232	38.870	
		Target Compounds							
1)		3,4-Dichl...	3.098	3.664	80053	19028	4.609	909.796	#
2)		3,5-Dichl...	3.352	0.000	46152	0	3.788	N.D.	#
3)		2,4,6-Tri...	3.455	4.131	7665	269034	N.D.	0.837	
5)		2,4,5-Tri...	4.165	4.644	1525810	123050	8.419	0.765	#
6)		3,4,5-Tri...	4.215	4.741	5032	171272	0.030	1.156	#
7)	M	2,3,5,6-T...	4.475	4.968	1725326	1463088	3.142	3.078	
8)	M	2,3,4,5-T...	5.008	5.404f	165292	237716	0.408	N.D.	#
9)	M	Pentachlo...	5.152	5.551	13163700	11135211	20.087	17.646	
10)		Pentachlo...	5.152	5.551	13163700	11135211	21.143	18.562	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

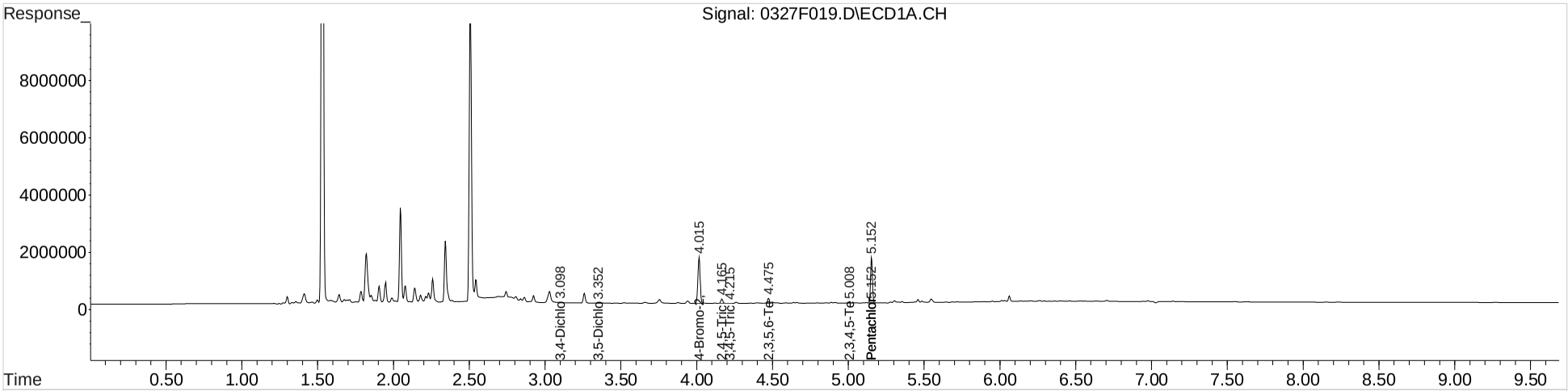
1st JED 03/29/18
2nd JEP 04/04/18

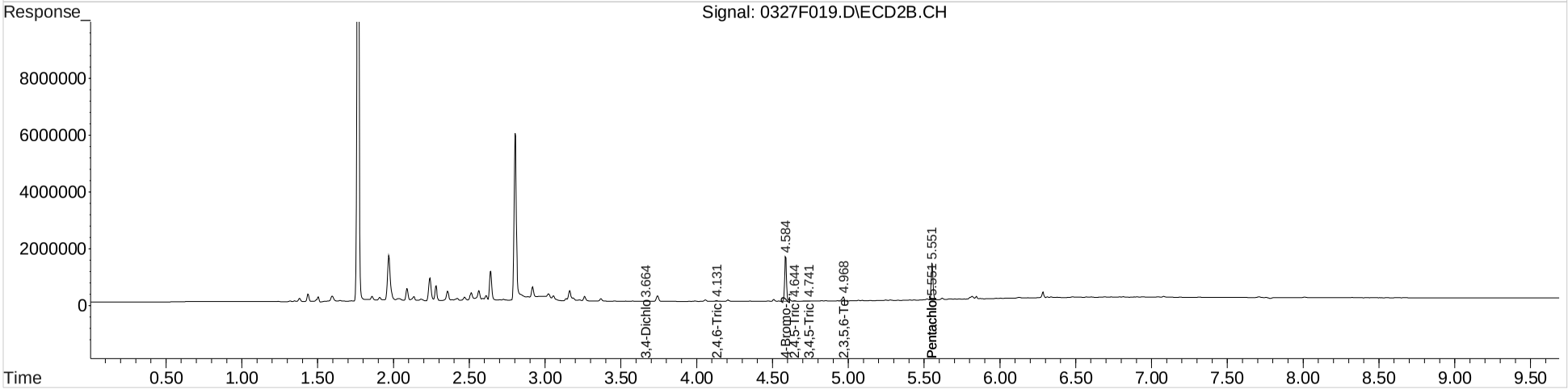
Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\032718\0327F019.D Vial: 15
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 3:03 pm Operator: JD
Sample : K1802579-025 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:44:55 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F020.D
Lab ID: K1802579-026
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 15:21
Date Quantitated: 03/28/2018 09:01
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F020.D\0327F020C.D
Lab ID: K1802579-026
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 15:21
Date Quantitated: 03/28/2018 09:01
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F020.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F020.D\0327F020c.d			**Vial:**	16
Acqu Date:	03/27/2018 15:21	**Quant Date:**	03/28/2018 09:01	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-026				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/18/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668859	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.58	16875794	13838274	34.96	38.39			77 OK
				%Recovery =	70 OK	77 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15 -0.01	5.57 +0.01	63758	143426**m**	0.0970	0.2270	0.071U	0.071U	0.071U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F020.D Vial: 16
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 3:21 pm Operator: JD
Sample : K1802579-026 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:01:47 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
4) S	4-Bromo-2...	4.015	4.585	16875794	13838274	34.959	38.385	
	Target Compounds							
1)	3,4-Dichl...	3.099	3.665	65327	15030	3.761	910.034	#
2)	3,5-Dichl...	3.352	3.901	60020	14314	4.927	1.158	#
3)	2,4,6-Tri...	3.459	4.131	15876	250256	N.D.	0.778	
5)	2,4,5-Tri...	4.165	4.645	1390966	121684	7.608	0.757	#
6)	3,4,5-Tri...	4.259f	4.705	438176	5935	2.606	0.040	#
7) M	2,3,5,6-T...	4.465	4.955	71574	226663	0.130	0.477	#
8) M	2,3,4,5-T...	5.009	5.405f	154266	80564	0.381	N.D.	#
9) M	Pentachlo...	5.152	5.568	63758	143426	0.097	0.227m	#
10)	Pentachlo...	5.152	5.551	63758	36844	0.102	0.061	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

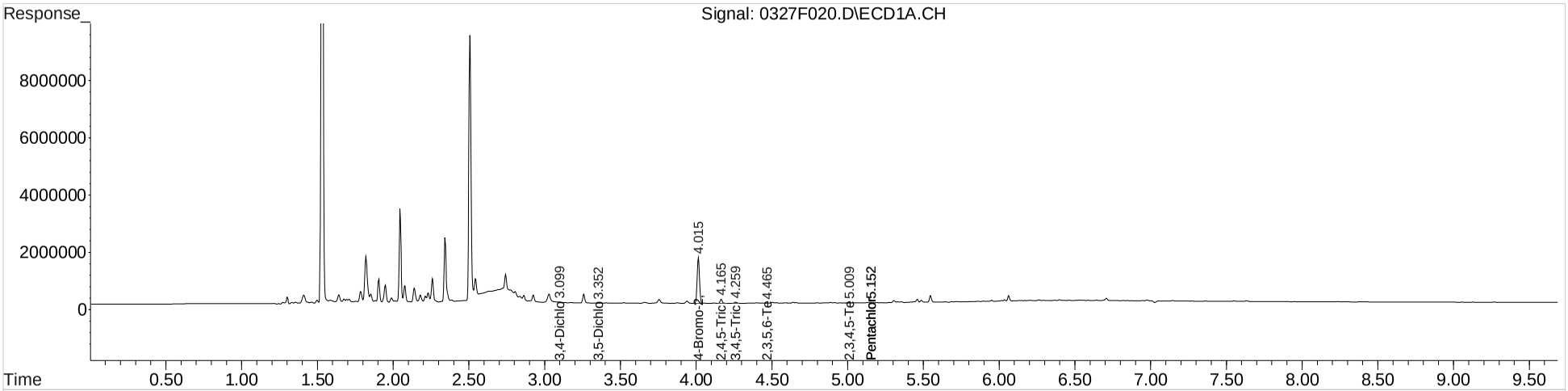
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F020.D Vial: 16
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 3:21 pm Operator: JD
Sample : K1802579-026 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:01:47 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



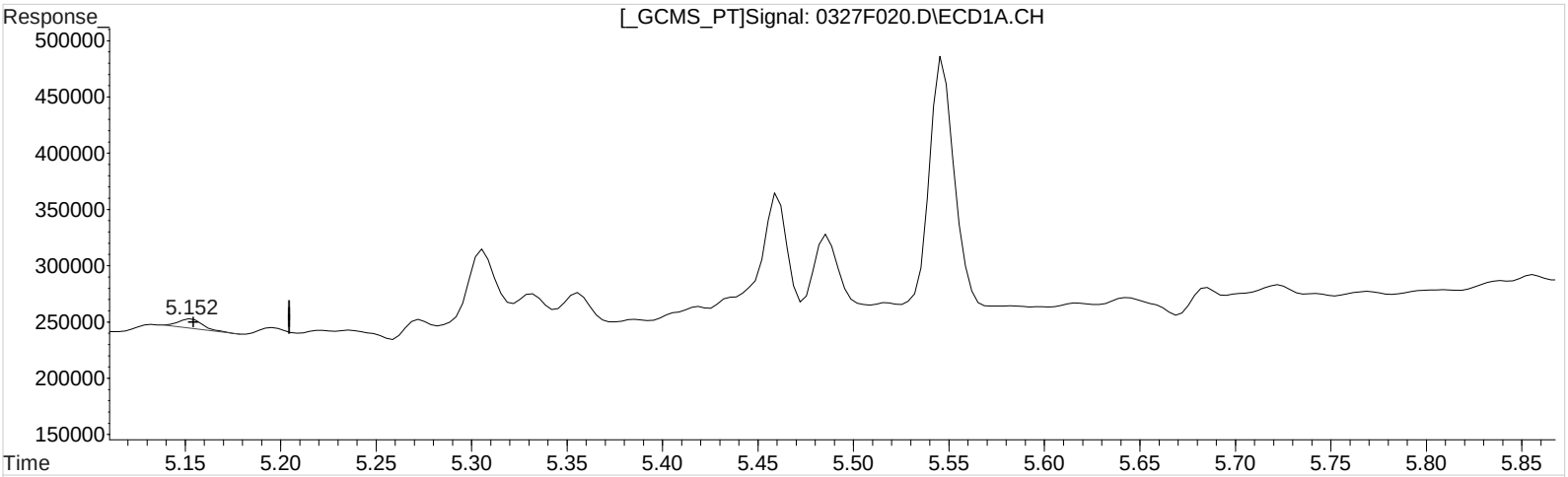
Quantitation Report (Qedit)

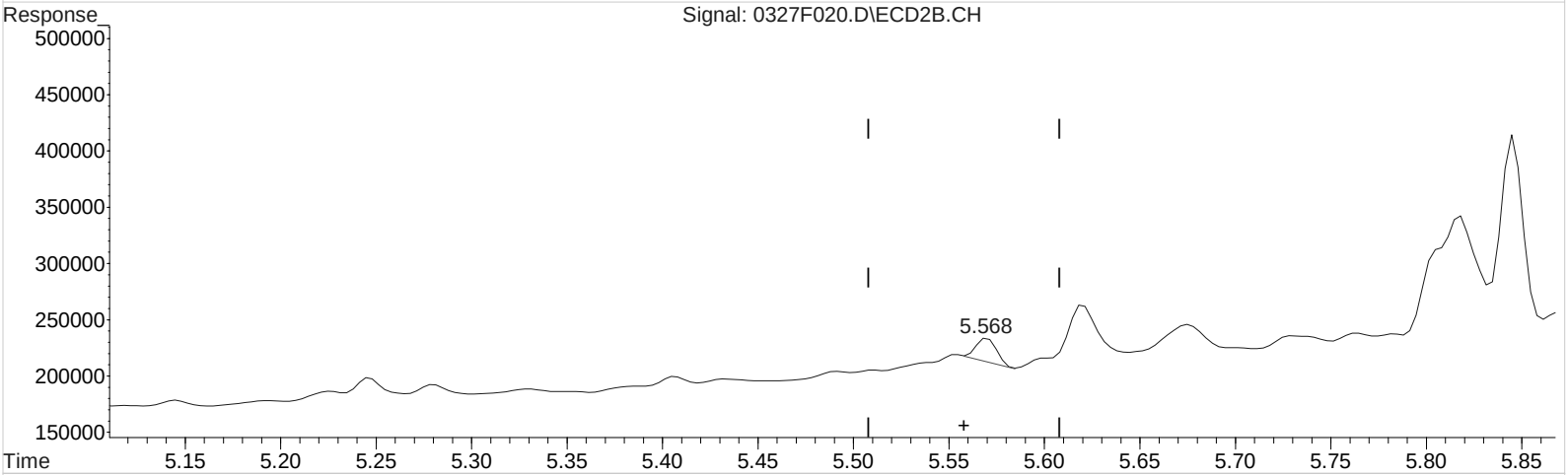
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F020.D Vial: 16
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 3:21 pm Operator: JD
Sample : K1802579-026 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:01:47 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.152min 0.097 ug/L

response 63758

Manual Integration:

After

After/Forgot Before

03/28/18

(9) Pentachlorophenol #2 (M)

5.568min 0.227 ug/L m

response 143426

(+) = Expected Retention Time

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F021.D
Lab ID: K1802579-027
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 15:38
Date Quantitated: 03/28/2018 08:45
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F021.D\0327F021C.D
Lab ID: K1802579-027
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 15:38
Date Quantitated: 03/28/2018 08:45
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F021.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F021.D\0327F021c.d			**Vial:**	17
Acqu Date:	03/27/2018 15:38	**Quant Date:**	03/28/2018 08:45	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-027				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/18/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668860	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	-0.01	4.59	+0.01	16863279	13723784	34.93	38.07			76 OK
						%Recovery =	70 OK	76 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15	-0.01	5.55	-0.01	834840	849078	1.27	1.35	0.25J	0.27J	**0.25**J

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F021.D Vial: 17
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 3:38 pm Operator: JD
Sample : K1802579-027 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:45:01 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
4) S	4-Bromo-2...	4.014	4.587	16863279	13723784	34.933	38.067	
	Target Compounds							
1)	3,4-Dichl...	0.000	3.667	0	28076	N.D.	0.287	#
2)	3,5-Dichl...	3.347	3.903	12711	9474	1.043	0.766	#
3)	2,4,6-Tri...	3.457	4.130	17611	224004	N.D.	0.697	
5)	2,4,5-Tri...	4.164	4.643	1263532	125410	6.844	0.780	#
6)	3,4,5-Tri...	4.261f	4.703	424782	9177	2.526	0.062	#
7) M	2,3,5,6-T...	4.474	4.953	166878	266898	0.304	0.561	#
8) M	2,3,4,5-T...	5.007	5.333f	178628	53006	0.441	N.D.	#
9) M	Pentachlo...	5.154	5.550	834840	849078	1.274	1.346	
10)	Pentachlo...	5.154	5.550	834840	849078	1.341	1.415	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

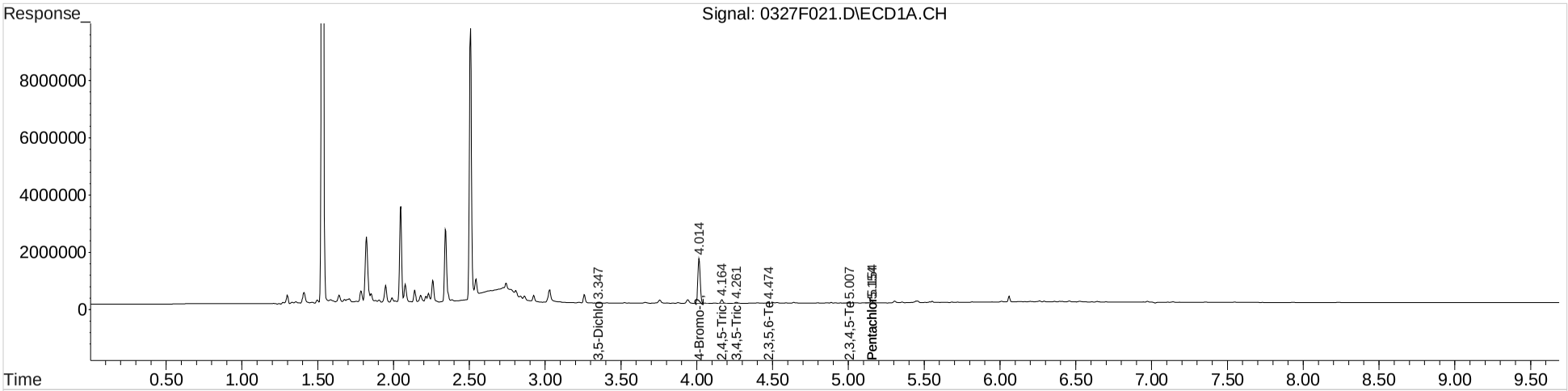
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F021.D Vial: 17
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 3:38 pm Operator: JD
Sample : K1802579-027 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:45:01 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F022.D
Lab ID: K1802579-028
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 15:56
Date Quantitated: 03/28/2018 09:08
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F022.D\0327F022C.D
Lab ID: K1802579-028
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 15:56
Date Quantitated: 03/28/2018 09:08
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F022.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F022.D\0327F022c.d			**Vial:**	18
Acqu Date:	03/27/2018 15:56	**Quant Date:**	03/28/2018 09:08	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-028				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/18/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668861	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.58	15977804	13038117	33.10	36.17			72 OK
				%Recovery =	66 OK	72 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16	5.55 -0.01	734880**m**	672954	1.12	1.07	0.22J	0.21J	**0.21**J

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F022.D Vial: 18
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 3:56 pm Operator: JD
Sample : K1802579-028 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:08:04 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
4) S	4-Bromo-2...	4.015	4.585	15977804	13038117	33.099	36.165	
	Target Compounds							
1)	3,4-Dichl...	0.000	3.665	0	16519	N.D.	909.945	#
2)	3,5-Dichl...	3.352	3.905	50644	14034	4.157	1.135	#
3)	2,4,6-Tri...	3.459	4.131	32057	168900	N.D.	0.525	
5)	2,4,5-Tri...	4.165	4.645	807746	133458	4.121	0.830	#
6)	3,4,5-Tri...	4.222	4.705	13385	7690	0.080	0.052	#
7) M	2,3,5,6-T...	4.475	4.955	153512	263131	0.280	0.554	#
8) M	2,3,4,5-T...	5.015	5.381	380816	227142	0.940	N.D.	#
9) M	Pentachlo...	5.155	5.555	734880	672954	1.121m	1.066	
10)	Pentachlo...	5.155	5.555	964232	672954	1.549	1.122	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

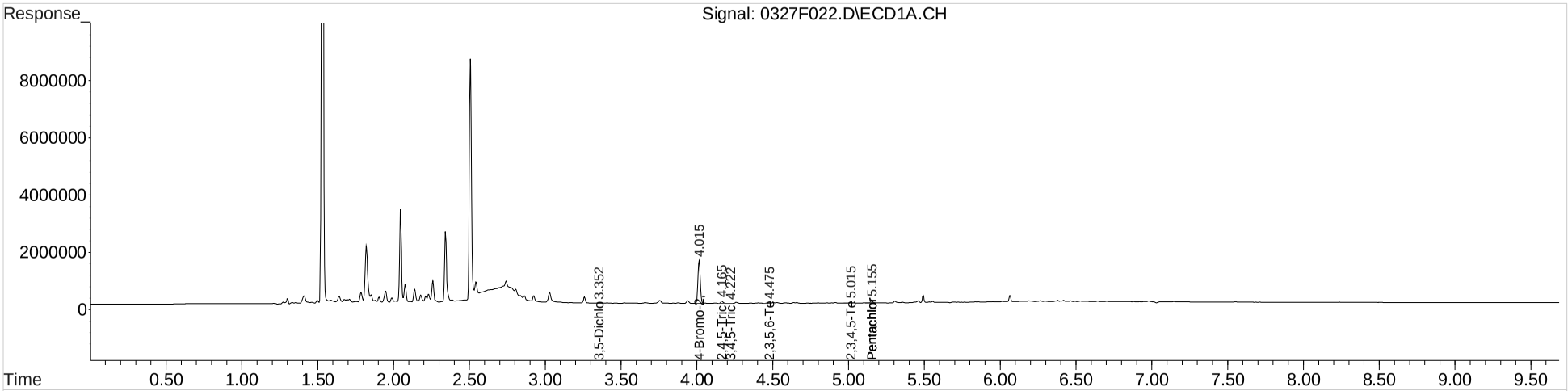
Quantitation Report (QT Reviewed)

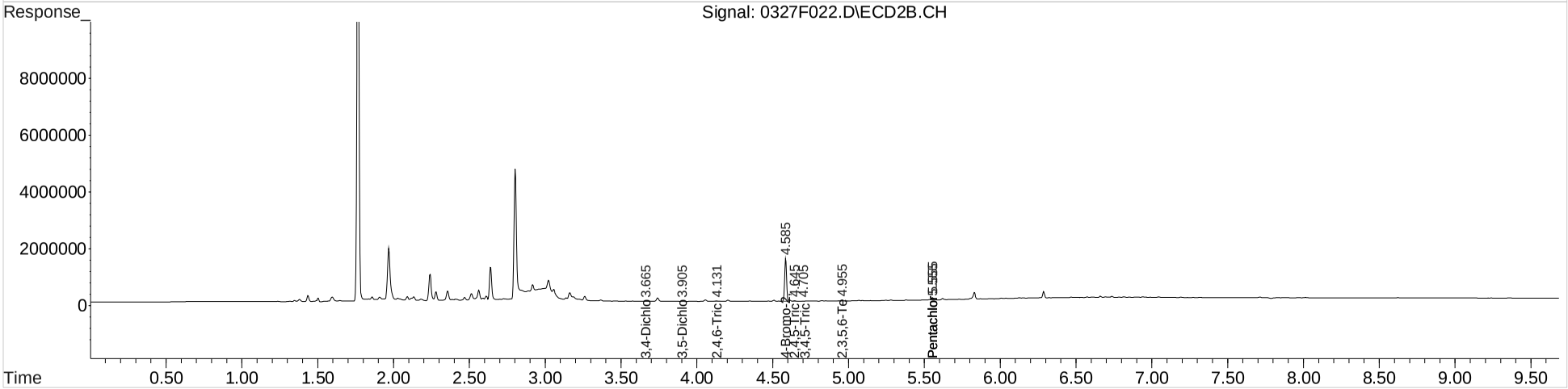
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F022.D Vial: 18
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 3:56 pm Operator: JD
Sample : K1802579-028 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:08:04 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





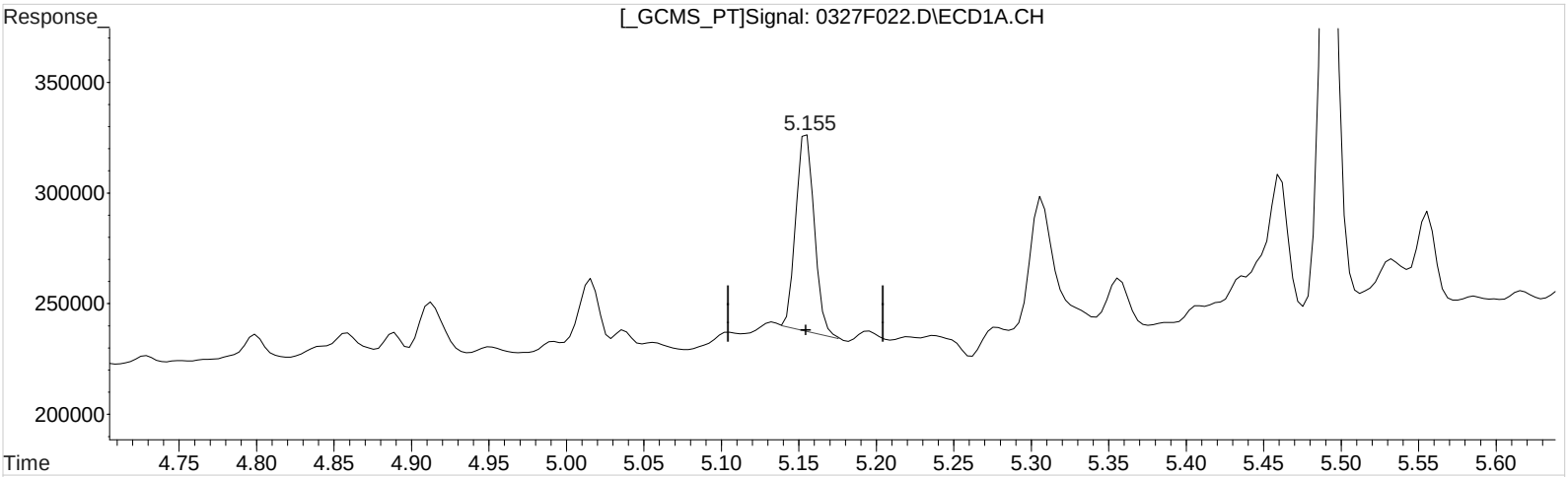
Quantitation Report (Qedit)

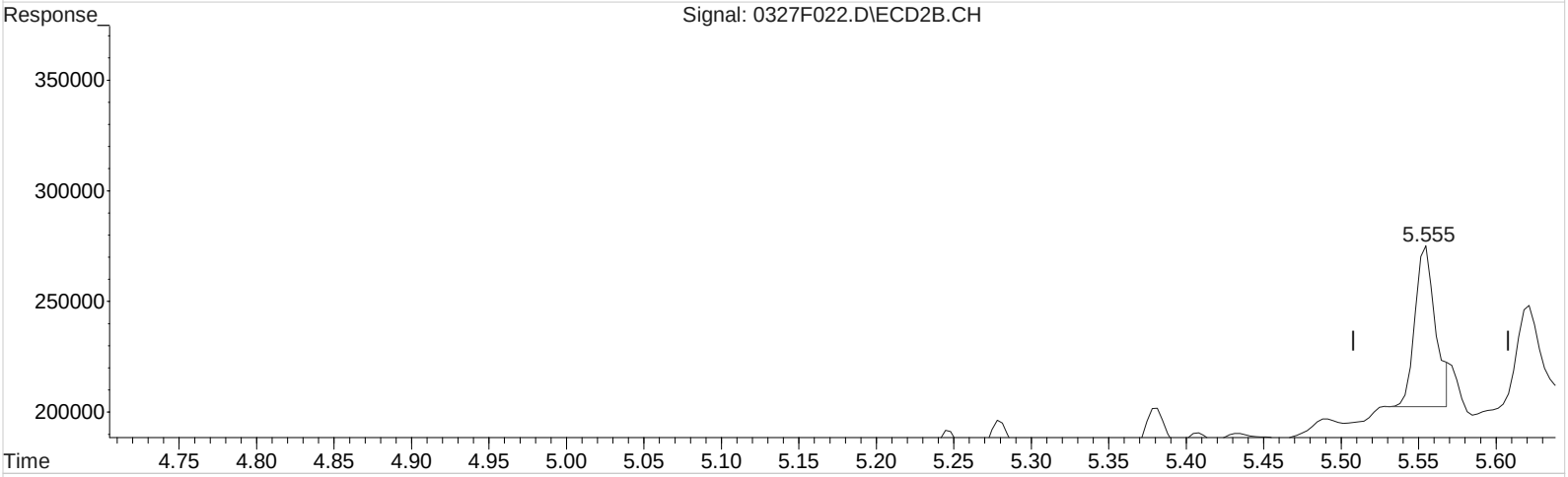
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F022.D Vial: 18
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 3:56 pm Operator: JD
Sample : K1802579-028 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:08:04 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.155min 1.121 ug/L m

response 734880

(9) Pentachlorophenol #2 (M)

5.555min 1.066 ug/L

response 672954

Manual Integration:

After

After/No Before

03/28/18

(+) = Expected Retention Time

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F023.D
Lab ID: K1802579-029
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 16:13
Date Quantitated: 03/28/2018 09:10
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F023.D\0327F023C.D
Lab ID: K1802579-029
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 16:13
Date Quantitated: 03/28/2018 09:10
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F023.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F023.D\0327F023c.d			**Vial:**	19
Acqu Date:	03/27/2018 16:13	**Quant Date:**	03/28/2018 09:10	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-029				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668862	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59 +0.01	15293908	12368670	31.68	34.31			69 OK
				%Recovery =	63 OK	69 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15 -0.01	5.57 +0.01	268460	287240**m**	0.4100	0.4550	0.082J	0.091J	**0.082**J

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F023.D Vial: 19
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 4:13 pm Operator: JD
Sample : K1802579-029 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:10:08 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
4) S	4-Bromo-2...	4.016	4.585	15293908	12368670	31.682	34.308	
	Target Compounds							
1)	3,4-Dichl...	0.000	3.665	0	27897	N.D.	0.276	#
2)	3,5-Dichl...	3.349	3.902	9453	11196	0.776	0.906	
3)	2,4,6-Tri...	3.456	4.128	35713	204590	N.D.	0.636	
5)	2,4,5-Tri...	4.166	4.645	1060312	118834	5.628	0.739	#
6)	3,4,5-Tri...	4.212	4.702	7061	31647	0.042	0.214	#
7) M	2,3,5,6-T...	4.472	4.955	71202	186526	0.130	0.392	#
8) M	2,3,4,5-T...	5.009	5.355	130438	3498	0.322	N.D.	#
9) M	Pentachlo...	5.152	5.568	268460	287240	0.410	0.455	m
10)	Pentachlo...	5.152	5.552	268460	218062	0.431	0.363	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

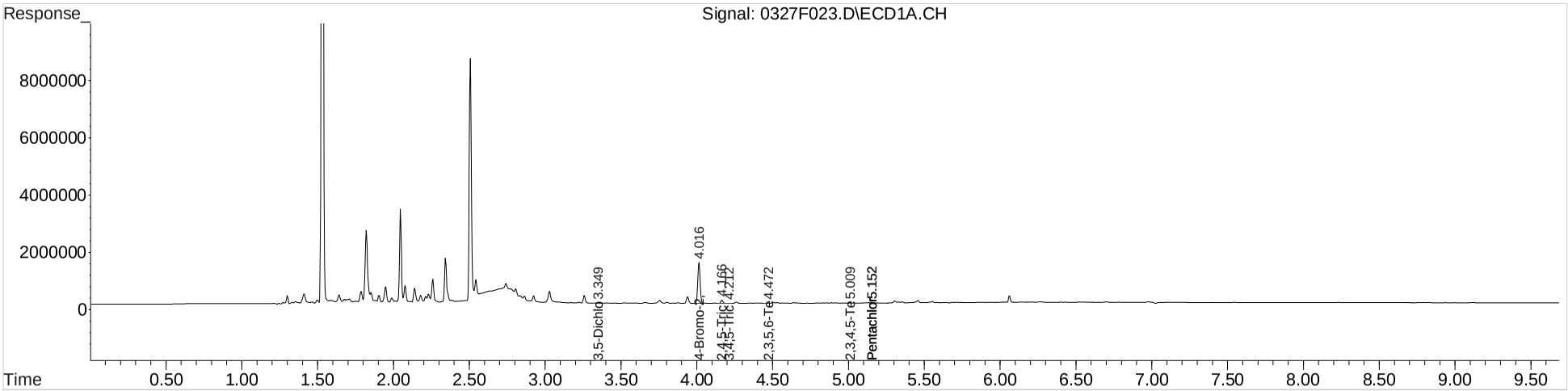
Quantitation Report (QT Reviewed)

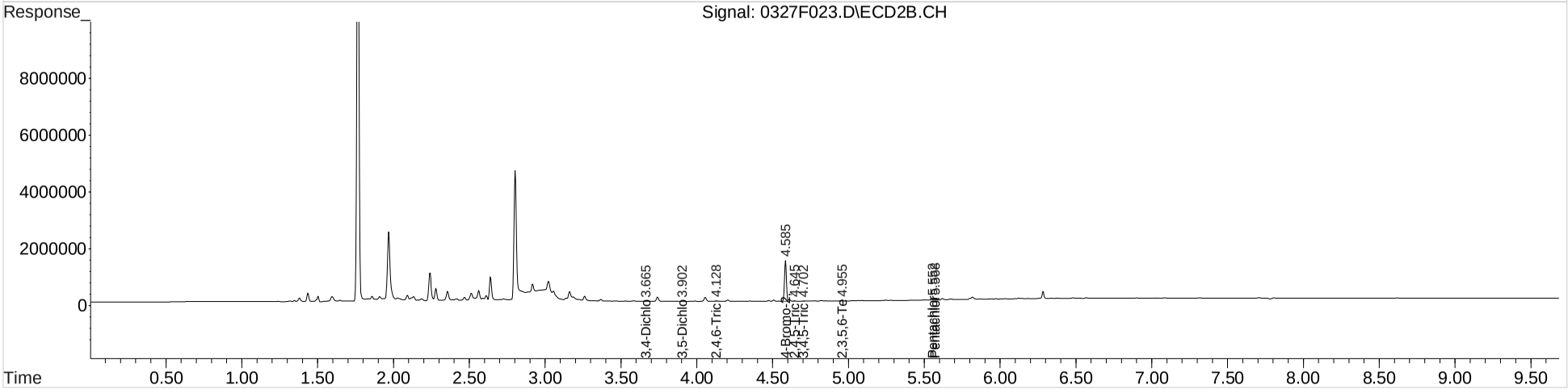
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F023.D Vial: 19
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 4:13 pm Operator: JD
Sample : K1802579-029 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:10:08 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



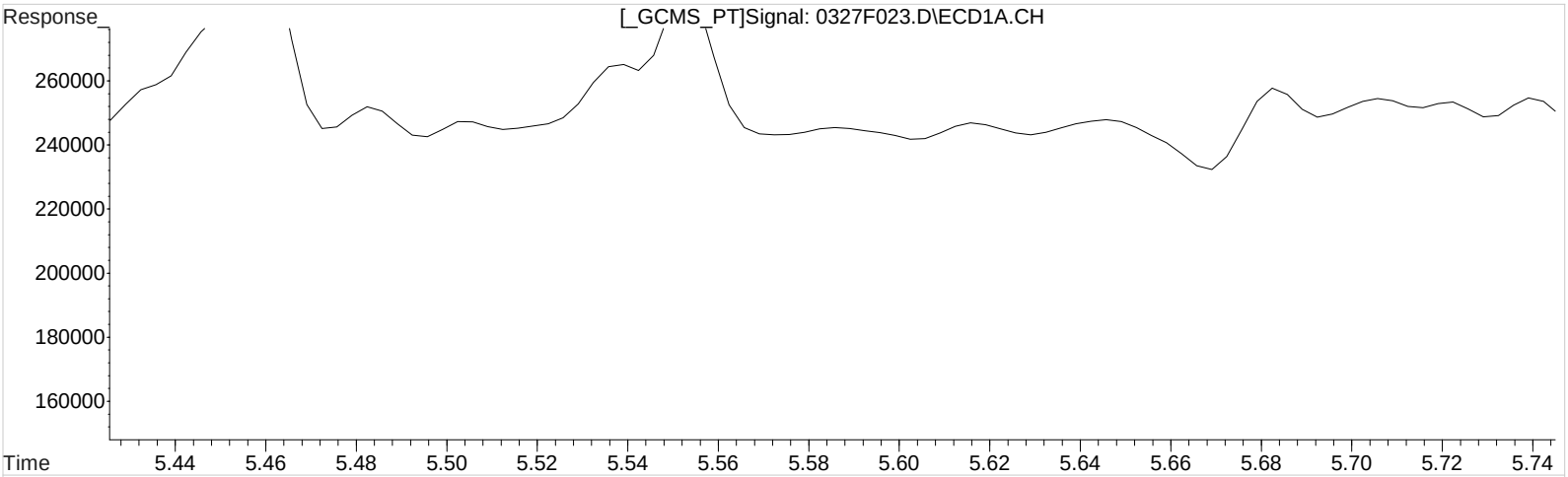


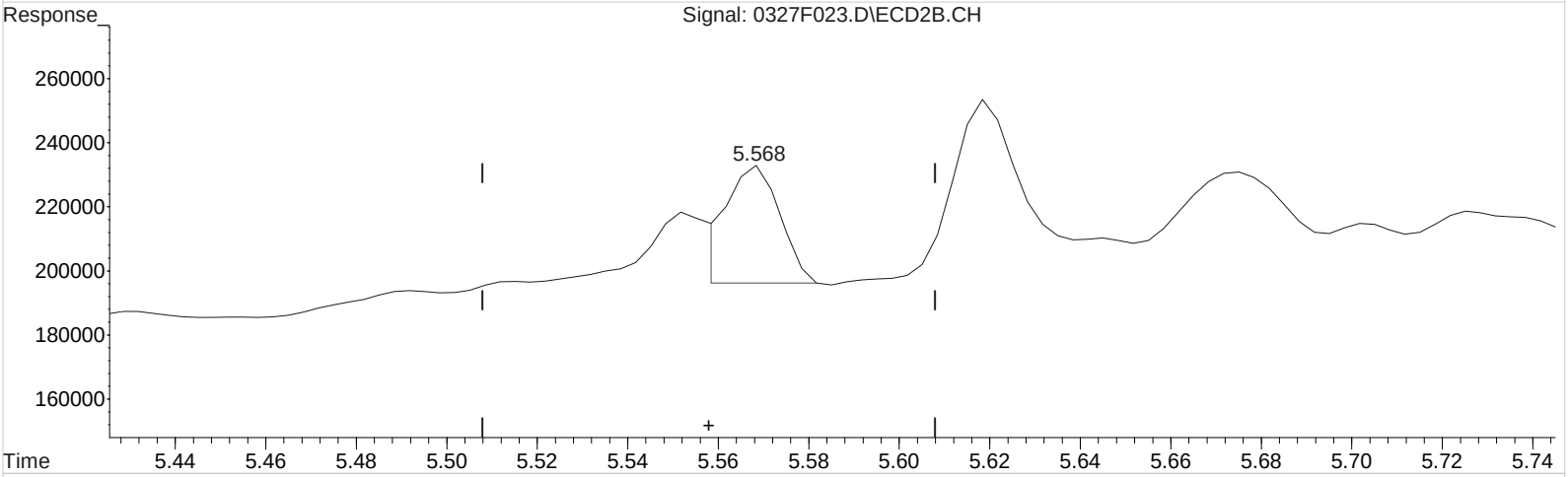
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F023.D Vial: 19
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 4:13 pm Operator: JD
Sample : K1802579-029 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:10:08 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.152min 0.410 ug/L

response 268460

Manual Integration:

After

After/Forgot Before

03/28/18

(9) Pentachlorophenol #2 (M)

5.568min 0.455 ug/L m

response 287240

(+) = Expected Retention Time

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F024.D
Lab ID: K1802579-030
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 16:31
Date Quantitated: 03/28/2018 08:45
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F024.D\0327F024C.D
Lab ID: K1802579-030
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 16:31
Date Quantitated: 03/28/2018 08:45
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F024.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F024.D\0327F024c.d			**Vial:**	20
Acqu Date:	03/27/2018 16:31	**Quant Date:**	03/28/2018 08:45	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-030				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668863	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59 +0.01	17070036	13843442	35.36	38.40			77 OK
				%Recovery =	71 OK	77 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.13 -0.03	5.57 +0.01	167550	142126	0.2560	0.2250	0.071U	0.071U	0.071U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F024.D Vial: 20
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 4:31 pm Operator: JD
Sample : K1802579-030 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:45:10 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.016	4.586	17070036	13843442	35.362	38.399	
		Target Compounds							
1)		3,4-Dichl...	3.100	3.666	57254	44783	3.296	1.284	#
2)		3,5-Dichl...	3.346	3.902	48175	13112	3.954	1.060	#
3)		2,4,6-Tri...	3.470	4.129	24181	301188	N.D.	0.937	
5)		2,4,5-Tri...	4.166	4.646	1716216	120872	9.565	0.751	#
6)		3,4,5-Tri...	4.263f	4.706	527612	11502	3.138	0.078	#
7)	M	2,3,5,6-T...	4.456	4.952	11676	186461	0.021	0.392	#
8)	M	2,3,4,5-T...	5.010	5.359	133430	46584	0.329	N.D.	#
9)	M	Pentachlo...	5.130	5.566	167550	142126	0.256	0.225	
10)		Pentachlo...	5.130	5.566	167550	142126	0.269	0.237	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

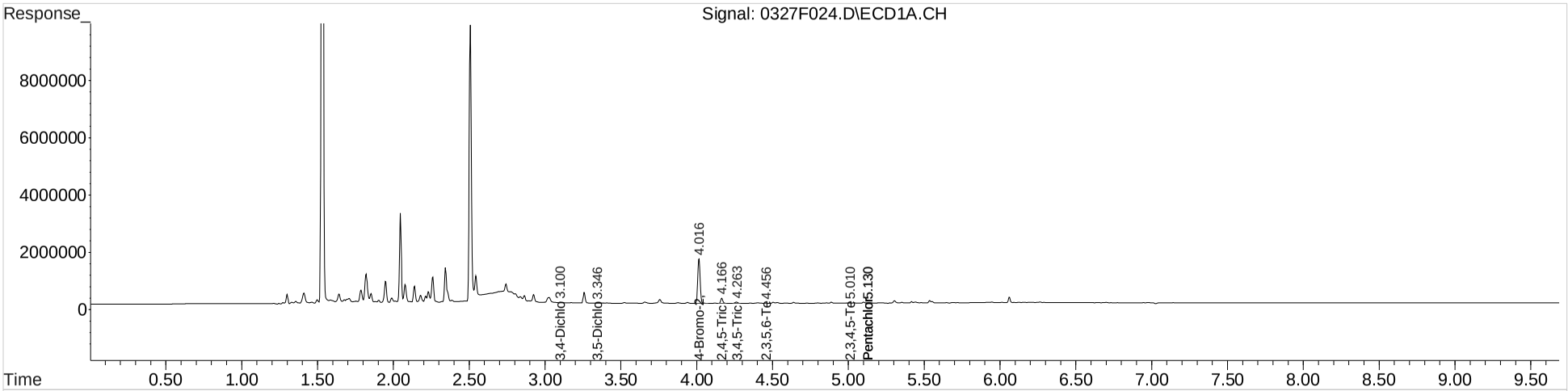
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F024.D Vial: 20
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 4:31 pm Operator: JD
Sample : K1802579-030 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:45:10 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F027.D
Lab ID: K1802579-031
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 17:23
Date Quantitated: 03/28/2018 08:45
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F027.D\0327F027C.D
Lab ID: K1802579-031
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 17:23
Date Quantitated: 03/28/2018 08:45
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F027.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F027.D\0327F027c.d			**Vial:**	21
Acqu Date:	03/27/2018 17:23	**Quant Date:**	03/28/2018 08:45	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	K1802579-031				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	K1802579
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668864	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.01	4.59	17906888	14680410	37.10	40.72			81	OK
				%Recovery =	74 OK	81 OK	**Limits =**	55-130		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15	5.55	24982168	21728886	38.12	34.43	7.6	6.9	**6.9**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F027.D Vial: 21
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 5:23 pm Operator: JD
Sample : K1802579-031 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:45:19 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.014	4.587	17906888	14680410	37.095	40.721	
		Target Compounds							
1)		3,4-Dichl...	3.098	3.667	72660	31017	4.183	0.462	#
2)		3,5-Dichl...	3.351	3.904	18522	14622	1.520	1.183	
3)		2,4,6-Tri...	3.458	4.130	9001	263436	N.D.	0.819	
5)		2,4,5-Tri...	4.164	4.644	1478176	134532	8.132	0.836	#
6)		3,4,5-Tri...	4.218	4.704	16569	23860	0.099	0.161	#
7)	M	2,3,5,6-T...	4.474	4.967	1064151	940780	1.938	1.979	
8)	M	2,3,4,5-T...	5.011	5.354	220634	5666	0.544	N.D.	#
9)	M	Pentachlo...	5.154	5.554	24982168	21728886	38.121	34.433	
10)		Pentachlo...	5.154	5.554	24982168	21728886	40.125	36.220	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

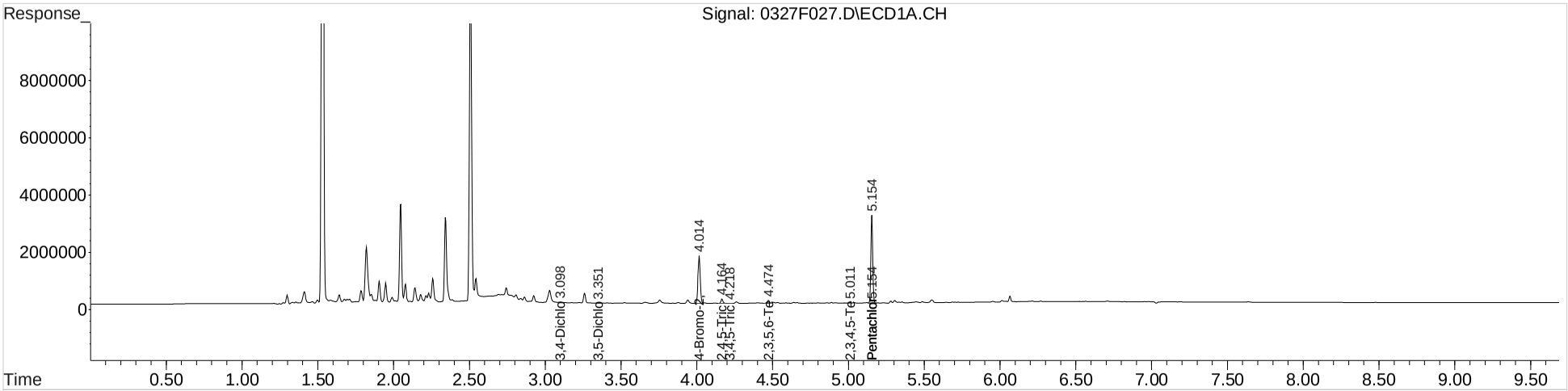
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F027.D Vial: 21
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 5:23 pm Operator: JD
Sample : K1802579-031 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:45:19 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



Exception Report

Data File: J:\GC28\DATA\032218B\0322F032.D
Lab ID: KWG1801592-4
RunType: MB
Matrix: WATER

Date Acquired: 03/23/2018 01:21
Date Quantitated: 03/23/2018 15:12
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	2,4,5-Trichlorophenol	895.42	NA	3.449996948	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F032.D\0322F032C.D
Lab ID: KWG1801592-4
RunType: MB
Matrix: WATER

Date Acquired: 03/23/2018 01:21
Date Quantitated: 03/23/2018 15:12
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F032.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F032.D\0322F032c.d			**Vial:**	26
Acqu Date:	03/23/2018 01:21	**Quant Date:**	03/23/2018 15:12	**Dilution:**	1.0
Run Type:	MB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801592-4				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/26/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668536	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:		**Method ID:**	MJ252
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	21930538	18201554	45.43	50.49			101 OK
				%Recovery =	91 OK	101 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	-0.02	3.67	+0.01	178764	45720	10.29	1.34	2.06	0.35U	0.35U
3,5-Dichlorophenol	3.35	-0.01	3.90		77356	31468	6.35	2.55	1.27J	0.65U	0.65U
2,4,6-Trichlorophenol			4.13		74300	337436	0.0000	1.05	0.042U	0.210J	0.042U
2,4,5-Trichlorophenol	4.20	+0.01	4.65		13230	487276	895.42	3.03	179E	0.606J	1.0Ui
3,4,5-Trichlorophenol	4.23	+0.01	4.74	+0.02	126192	34324	0.7500	0.2320	0.150J	0.15U	0.15U
2,3,5,6-Tetrachlorophenol	4.47		4.96		207156	326358	0.3770	0.6870	0.0754J	0.137J	**0.0754**JP
2,3,4,5-Tetrachlorophenol	4.99	-0.03	5.37	+0.01	125876	387516	0.3110	0.4250	0.0622J	0.0850J	**0.0622**J
Pentachlorophenol	5.15	c	5.56	+0.01 c	106038**m**	13410	0.1620	0.0210	0.071U	0.071U	0.071U
2,3,4,5,6-Pentachloroanisole	5.15	c	5.56	+0.01 c	53150	13410	0.0850	0.0220	0.50U	0.50U	0.50U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

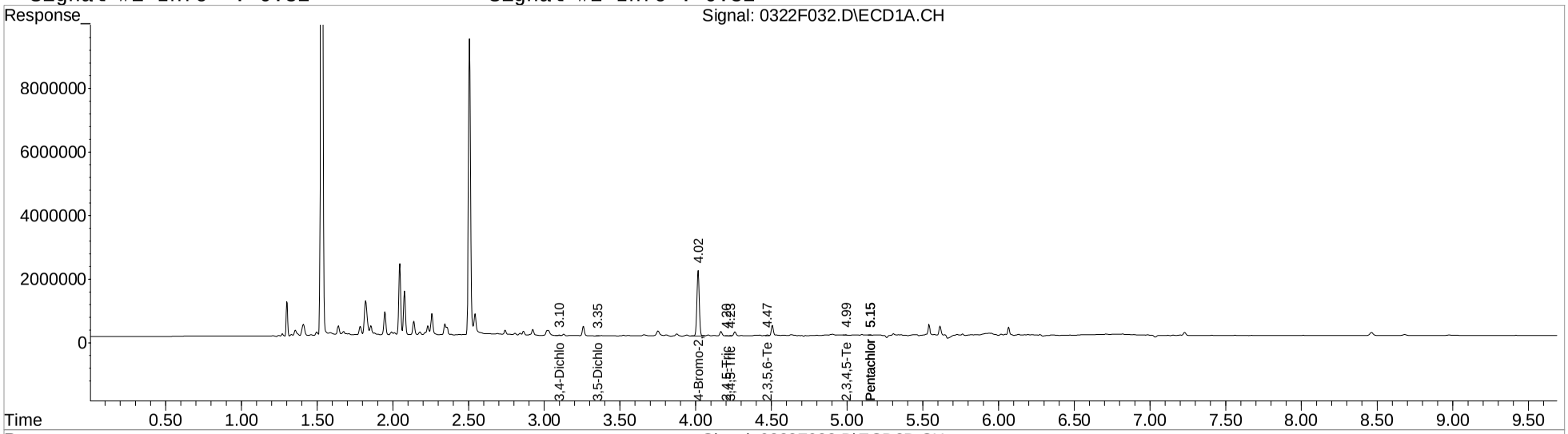
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

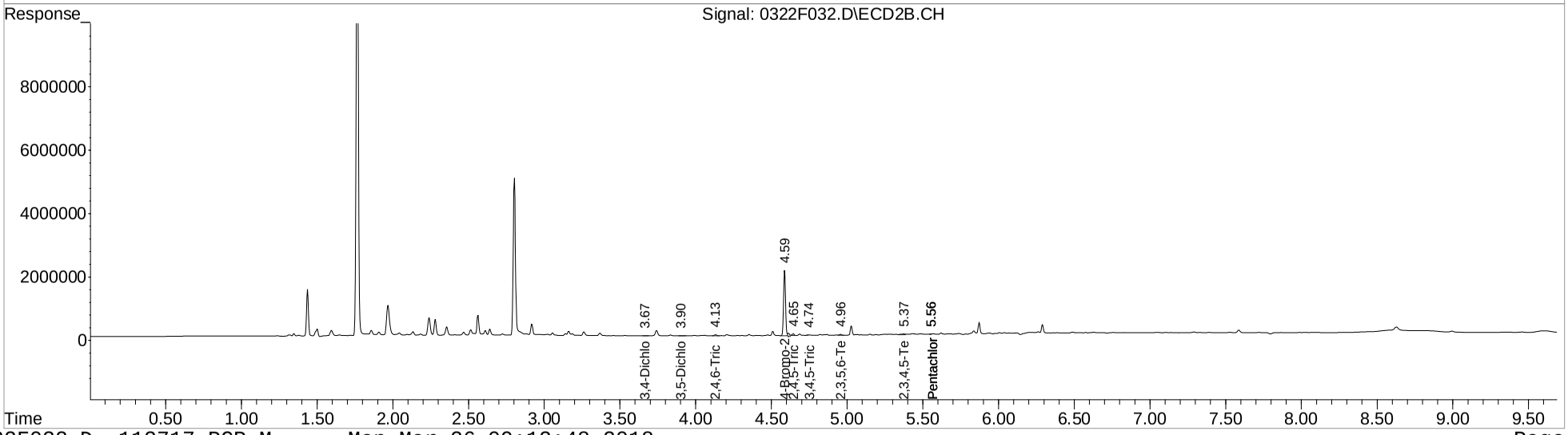
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F032.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC28\DATA\032218B\0322F032.D\ECD2B.CH
Acq On : 23 Mar 2018 1:21 am Operator: SMS
Sample : KQ1803558-04 MB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 15:12 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F032.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC28\DATA\032218B\0322F032.D\ECD2B.CH
Acq On : 23 Mar 2018 1:21 am Operator: SMS
Sample : KQ1803558-04 MB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:53 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

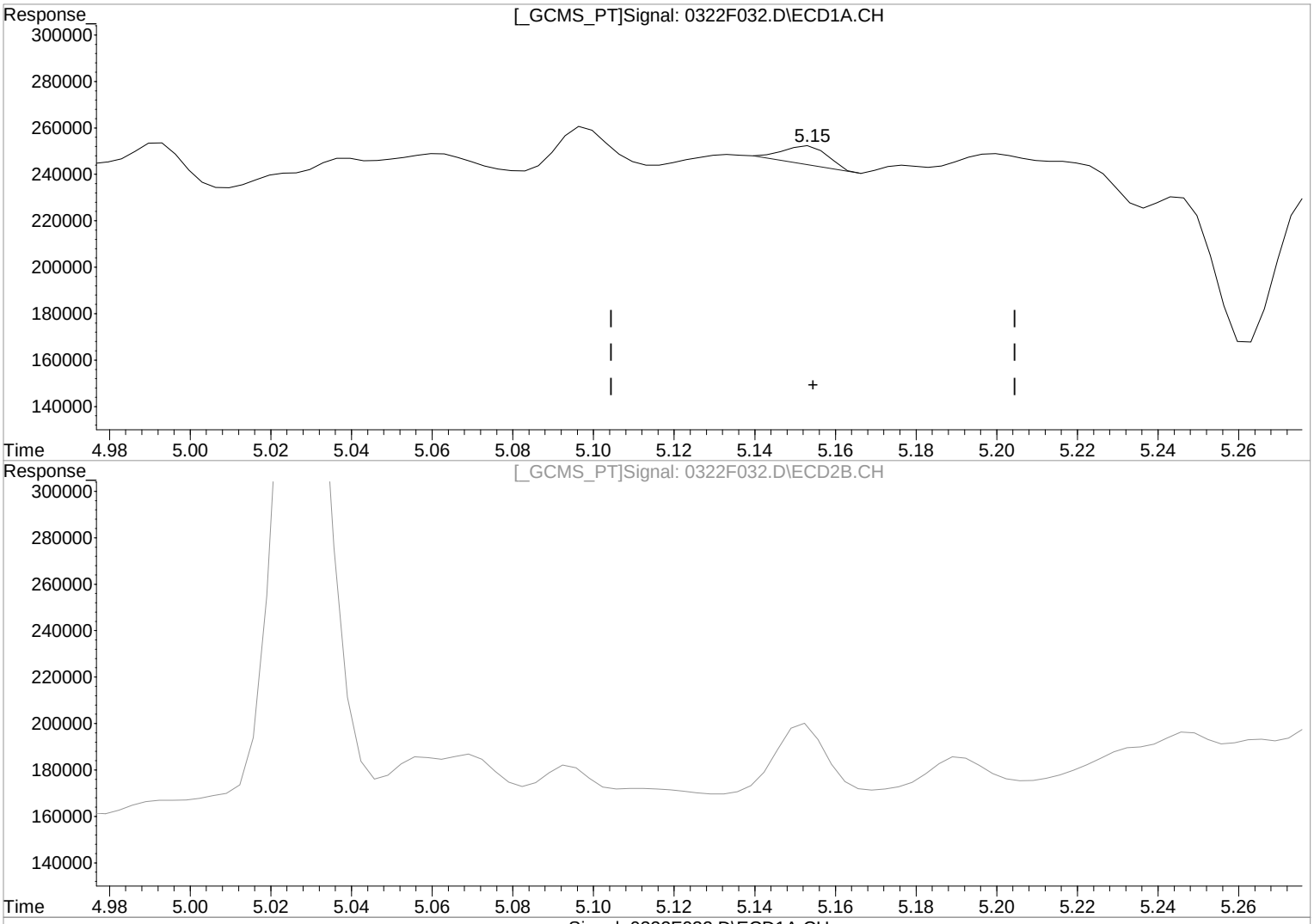
Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	21930538	18201554	45.430	50.488	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	178764	45720	10.292	1.340	#
2)		3,5-Dichlorophen	3.35	3.90	77356	31468	6.350	2.545	#
3)		2,4,6-Trichlorop	3.45	4.13	74300	337436	N.D.	1.050	
5)		2,4,5-Trichlorop	4.20	4.65	13230	487276	895.415	3.029	#
6)		3,4,5-Trichlorop	4.23	4.74	126192	34324	0.750	0.232	#
7)	M	2,3,5,6-Tetrachl	4.47	4.96	207156	326358	0.377	0.687	#
8)	M	2,3,4,5-Tetrachl	4.99	5.37	125876	387516	0.311	0.425	#
9)	M	Pentachloropheno	5.15	5.56	106038	13410	0.162m	0.021	#
10)		Pentachloroaniso	5.15	5.56	53150	13410	0.085	0.022	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : J:\GC28\DATA\032218B\0322F032.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC28\DATA\032218B\0322F032.D\ECD2B.CH
Acq On : 23 Mar 2018 1:21 am Operator: SMS
Sample : KQ1803558-04 MB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration



Signal: 0322F032.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.15min 0.081ug/L

response 53150

Manual Integration:

Before

03/23/18

(9) Pentachlorophenol #2 (M)

5.56min 0.021ug/L

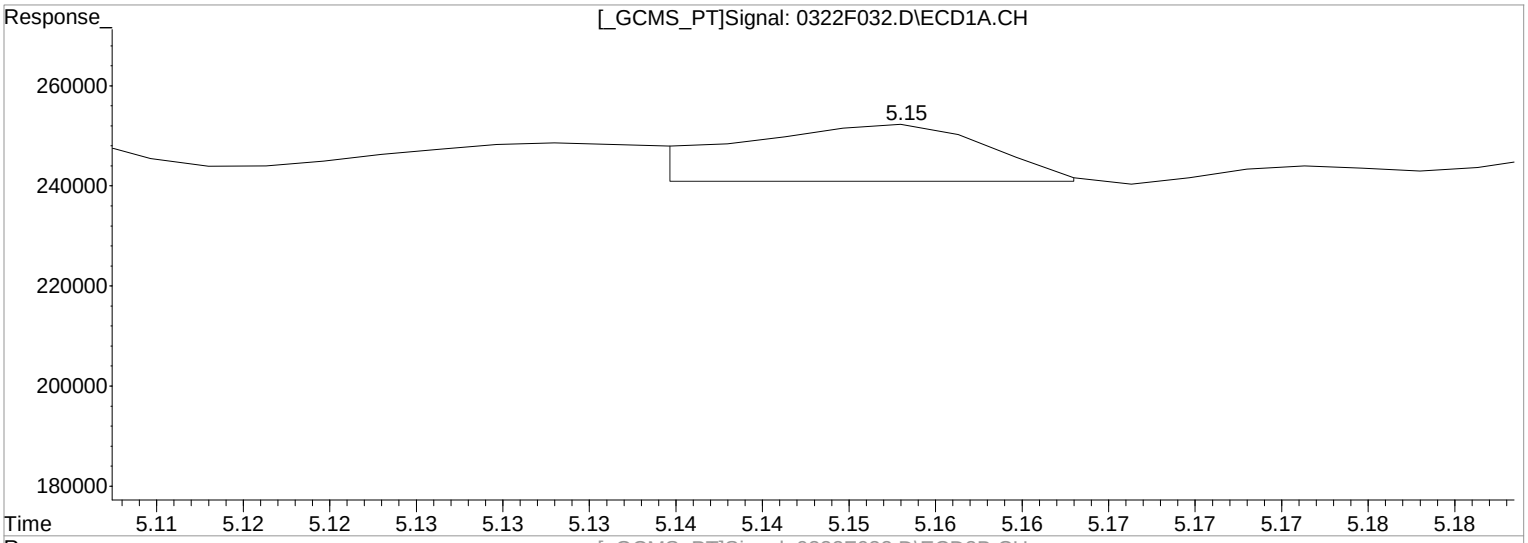
response 13410

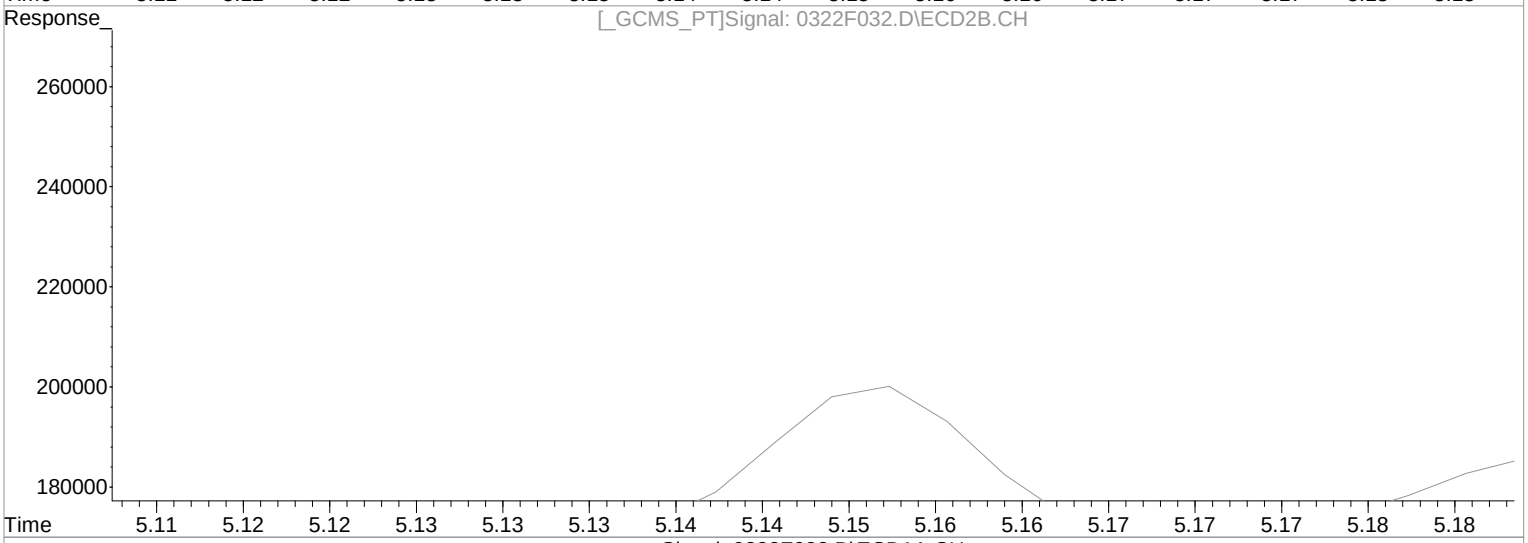
(+) = Expected Retention Time

1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F032.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC28\DATA\032218B\0322F032.D\ECD2B.CH
Acq On : 23 Mar 2018 1:21 am Operator: SMS
Sample : KQ1803558-04 MB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration





Signal: 0322F032.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.15min 0.162ug/L m

response 106038

Manual Integration:

After

Baseline/Shoulder

03/23/18

(9) Pentachlorophenol #2 (M)

5.56min 0.021ug/L

response 13410

(+) = Expected Retention Time

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F012.D
Lab ID: KWG1801629-4
RunType: MB
Matrix: WATER

Date Acquired: 03/27/2018 13:01
Date Quantitated: 03/27/2018 14:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F012.D\0327F012C.D
Lab ID: KWG1801629-4
RunType: MB
Matrix: WATER

Date Acquired: 03/27/2018 13:01
Date Quantitated: 03/27/2018 14:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F012.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F012.D\0327F012c.d			**Vial:**	10
Acqu Date:	03/27/2018 13:01	**Quant Date:**	03/27/2018 14:57	**Dilution:**	1.0
Run Type:	MB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-4				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668871	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:		**Method ID:**	MJ1442
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01		4.59	+0.01	17214760	13899284	35.66	38.55			77 OK
						%Recovery =	71 OK	77 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	-0.01	3.67	+0.02	64462	51792	3.71	1.70	0.742J	0.70U	0.70U
3,5-Dichlorophenol	3.35		3.90		13164	14194	1.08	1.15	1.3U	1.3U	1.3U
2,4,6-Trichlorophenol			4.13		0**d**	254316	0.0000	0.7910	0.084U	0.158J	0.084U
2,4,5-Trichlorophenol			4.64	-0.01	0**d**	110854	0.0000	0.6890	0.32U	0.32U	0.32U
3,4,5-Trichlorophenol	4.21		4.70	-0.01	9948	14130	0.0590	0.0950	0.30U	0.30U	0.30U
2,3,5,6-Tetrachlorophenol	4.45	-0.01	4.96		19710	236038	0.0360	0.4970	0.064U	0.0994J	0.064U
2,3,4,5-Tetrachlorophenol	5.01				172332	0**d**	0.4250	0.0000	0.0850J	0.084U	0.084U
Pentachlorophenol	5.16	+0.01 c	5.55	c	13174	44368	0.0200	0.0700	0.15U	0.15U	0.15U
2,3,4,5,6-Pentachloroanisole	5.16	+0.01 c	5.55	c	13174	44368	0.0210	0.0740	0.50U	0.50U	0.50U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JAD 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F012.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F012.D\0327F012c.d			**Vial:**	10
Acqu Date:	03/27/2018 13:01	**Quant Date:**	03/27/2018 14:57	**Dilution:**	1.0
Run Type:	MB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-4				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668871	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:		**Method ID:**	MJ252
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.59	+0.01	17214760	13899284	35.66	38.55			77 OK
					%Recovery =	71 OK	77 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	-0.01	3.67	+0.02	64462	51792	3.71	1.70	0.742J	0.35U	**0.742**J
3,5-Dichlorophenol	3.35		3.90		13164	14194	1.08	1.15	0.65U	0.65U	0.65U
2,4,6-Trichlorophenol			4.13		0**d**	254316	0.0000	0.7910	0.042U	0.158J	0.042U
2,4,5-Trichlorophenol			4.64	-0.01	0**d**	110854	0.0000	0.6890	0.16U	0.16U	0.16U
3,4,5-Trichlorophenol	4.21		4.70	-0.01	9948	14130	0.0590	0.0950	0.15U	0.15U	0.15U
2,3,5,6-Tetrachlorophenol	4.45	-0.01	4.96		19710	236038	0.0360	0.4970	0.032U	0.0994J	0.032U
2,3,4,5-Tetrachlorophenol	5.01				172332	0**d**	0.4250	0.0000	0.0850J	0.042U	**0.0850**JN
Pentachlorophenol	5.16	+0.01 c	5.55	c	13174	44368	0.0200	0.0700	0.071U	0.071U	0.071U
2,3,4,5,6-Pentachloroanisole	5.16	+0.01 c	5.55	c	13174	44368	0.0210	0.0740	0.50U	0.50U	0.50U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

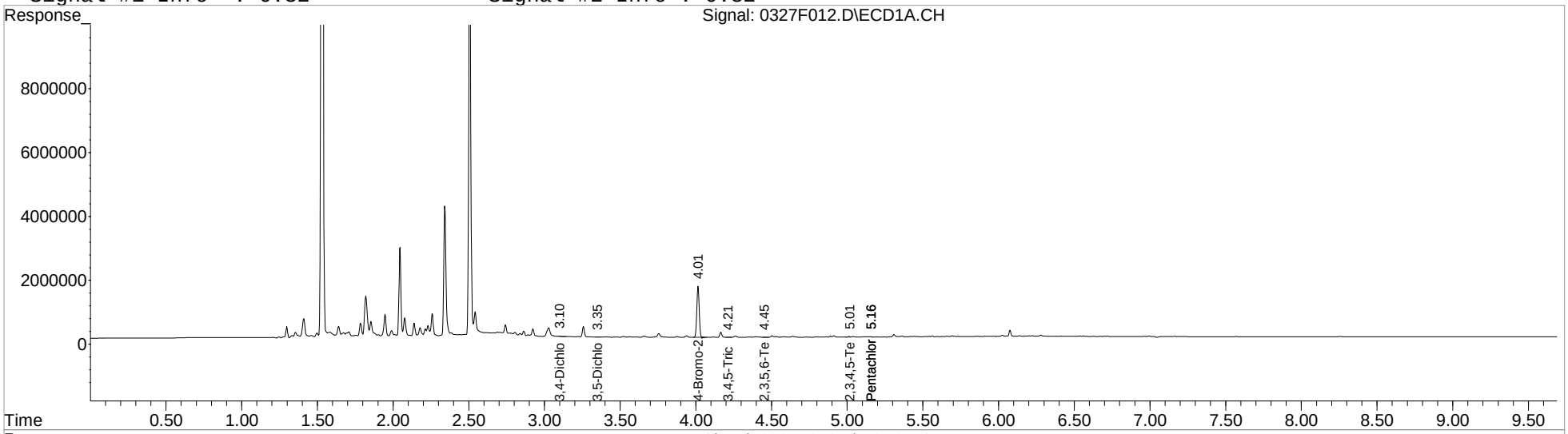
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

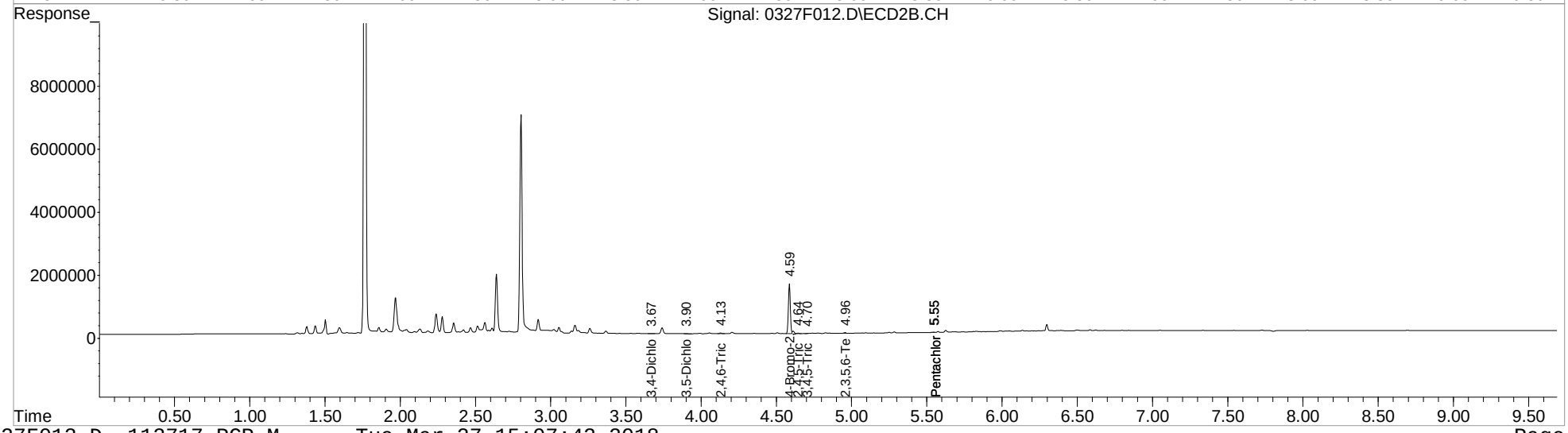
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F012.D\ECD1A.CH Vial: 10
Signal #2 : J:\GC28\DATA\032718\0327F012.D\ECD2B.CH
Acq On : 27 Mar 2018 1:01 pm Operator: JD
Sample : KWG1803560-4 MB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 14:57 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F012.D\ECD1A.CH Vial: 10
Signal #2 : J:\GC28\DATA\032718\0327F012.D\ECD2B.CH
Acq On : 27 Mar 2018 1:01 pm Operator: JD
Sample : KWG1803560-4 MB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:25 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.01	4.59	17214760	13899284	35.661	38.554	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	64462	51792	3.711	1.703	#
2)		3,5-Dichlorophen	3.35	3.90	13164	14194	1.081	1.148	
3)		2,4,6-Trichlorop	0.00	4.13	0	254316	N.D. d	0.791	
5)		2,4,5-Trichlorop	0.00	4.64	0	110854	N.D. d	0.689	
6)		3,4,5-Trichlorop	4.21	4.70	9948	14130	0.059	0.095	#
7)	M	2,3,5,6-Tetrachl	4.45	4.96	19710	236038	0.036	0.497	#
8)	M	2,3,4,5-Tetrachl	5.01	0.00	172332	0	0.425	N.D. d	#
9)	M	Pentachloropheno	5.16	5.55	13174	44368	0.020	0.070	#
10)		Pentachloroaniso	5.16	5.55	13174	44368	0.021	0.074	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F047.D
Lab ID: KWG1801631-4
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 23:15
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F047.D\0327F047C.D
Lab ID: KWG1801631-4
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 23:15
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F047.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F047.D\0327F047c.d			**Vial:**	39
Acqu Date:	03/27/2018 23:15	**Quant Date:**	03/28/2018 08:46	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801631-4				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801631	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	Method Mod		
Prep Ref:	1668887	**Prep Date:**	03/22/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:		**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	17355848	13948609	35.95	38.69			77 OK
				%Recovery =	72 OK	77 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.13 -0.02	5.57 +0.02	107076	120889	0.1630	0.1920	0.071U	0.071U	0.071U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F047.D Vial: 39
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 11:15 pm Operator: JD
Sample : KQ1803654-4 MB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:20 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.018	4.587	17355848	13948609	35.954	38.691	
		Target Compounds							
1)		3,4-Dichl...	3.101	3.667	87726	20934	5.051	909.682	#
2)		3,5-Dichl...	3.348	3.904	11060	9714	0.908	0.786	
3)		2,4,6-Tri...	3.465	4.131	22918	184393	N.D.	0.574	
5)		2,4,5-Tri...	4.168	4.647	1029602	455832	5.444	2.834	#
6)		3,4,5-Tri...	4.258f	4.707	941226	7911	5.598	0.053	#
7)	M	2,3,5,6-T...	4.425f	4.954	182399	218537	0.332	0.460	#
8)	M	2,3,4,5-T...	5.011	5.357	139192	5299	0.343	N.D.	#
9)	M	Pentachlo...	5.131	5.571	107076	120889	0.163	0.192	
10)		Pentachlo...	5.131	5.571	107076	120889	0.172	0.202	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

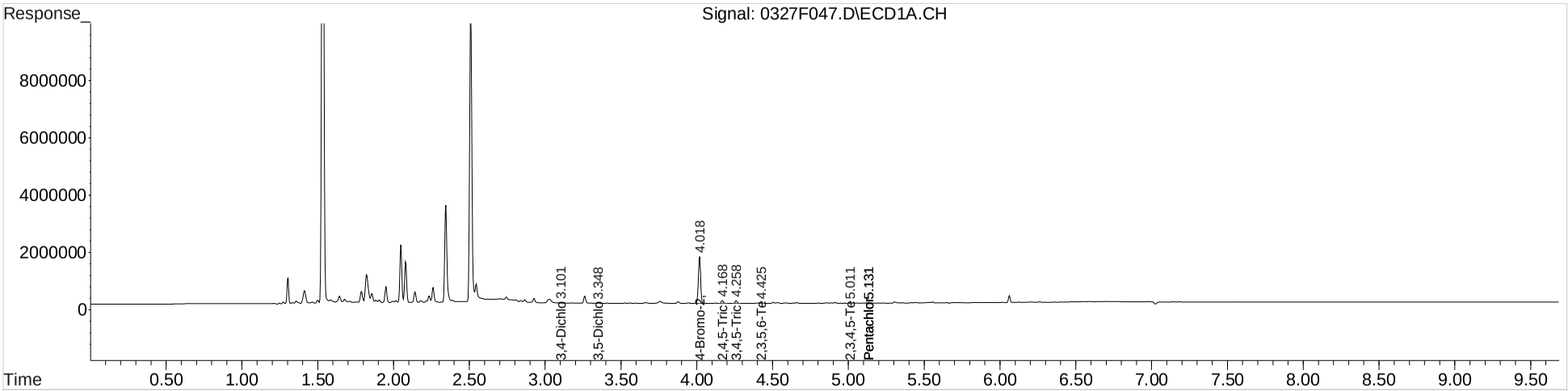
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F047.D Vial: 39
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 11:15 pm Operator: JD
Sample : KQ1803654-4 MB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:20 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F008.D
Lab ID: K1802580-004
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 11:51
Date Quantitated: 03/27/2018 14:12
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ18017

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	Pentachlorophenol	1359.11	NA	).059997558	dil

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F008.D\0327F008C.D
Lab ID: K1802580-004
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 11:51
Date Quantitated: 03/27/2018 14:12
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ18017

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	Pentachlorophenol	1503.94	NA	).059997558	dil

Primary Review: _____

Secondary Review: _____

1st JAD 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F008.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F008.D\0327F008c.d			**Vial:**	6
Acqu Date:	03/27/2018 11:51	**Quant Date:**	03/27/2018 14:12	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ18017	**Soln Conc. Units:**	ug/L
Lab ID:	K1802580-004				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/16/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	K1802580
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668865	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Chlorinated Phenols	**Report List ID:**	LJ18017
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	17004386	14177844	35.23	39.33			79 OK
				%Recovery =	70 OK	79 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
2,4,6-Trichlorophenol			4.12	-0.01	0d	322026	0.0000	1.00	0.14U	0.20J	0.14U
2,4,5-Trichlorophenol	4.21	+0.03	4.67	+0.02	115080	65346	0.0140	0.4060	0.16U	0.16U	0.16U
2,3,5,6-Tetrachlorophenol	4.47	+0.01	4.97	+0.01	33531644	30601024	61.06	64.38	12	13	**12**
2,3,4,5-Tetrachlorophenol	5.01				301004	0d	0.7430	0.0000	0.15J	0.14U	0.14U
Pentachlorophenol	5.16	+0.01	5.56	+0.01	890689930	949052178	1,359	1,504	270E	300E dil	NR

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

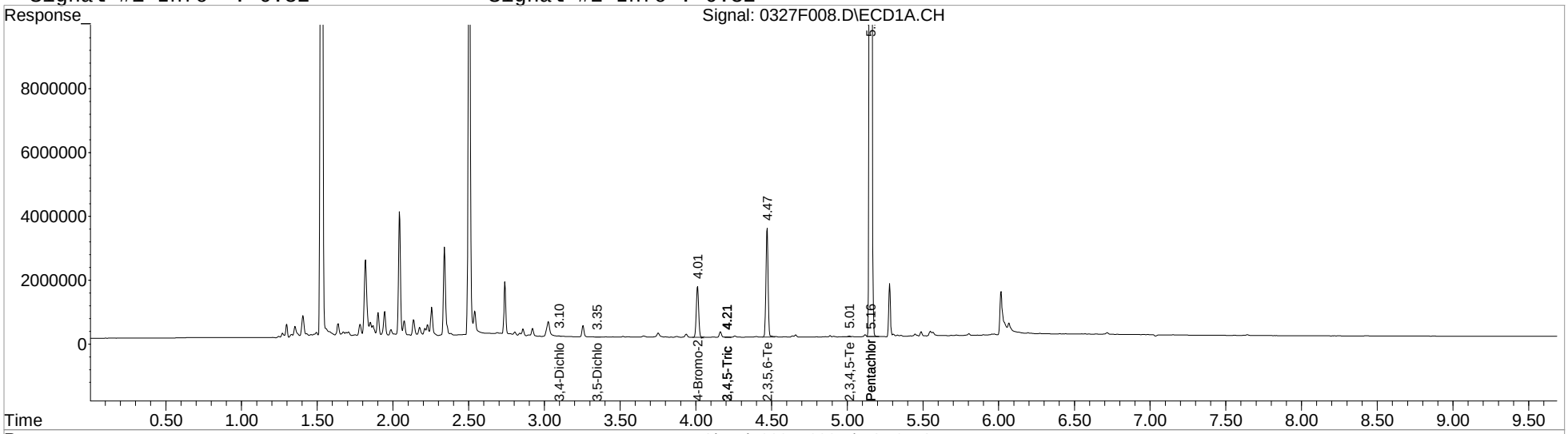
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

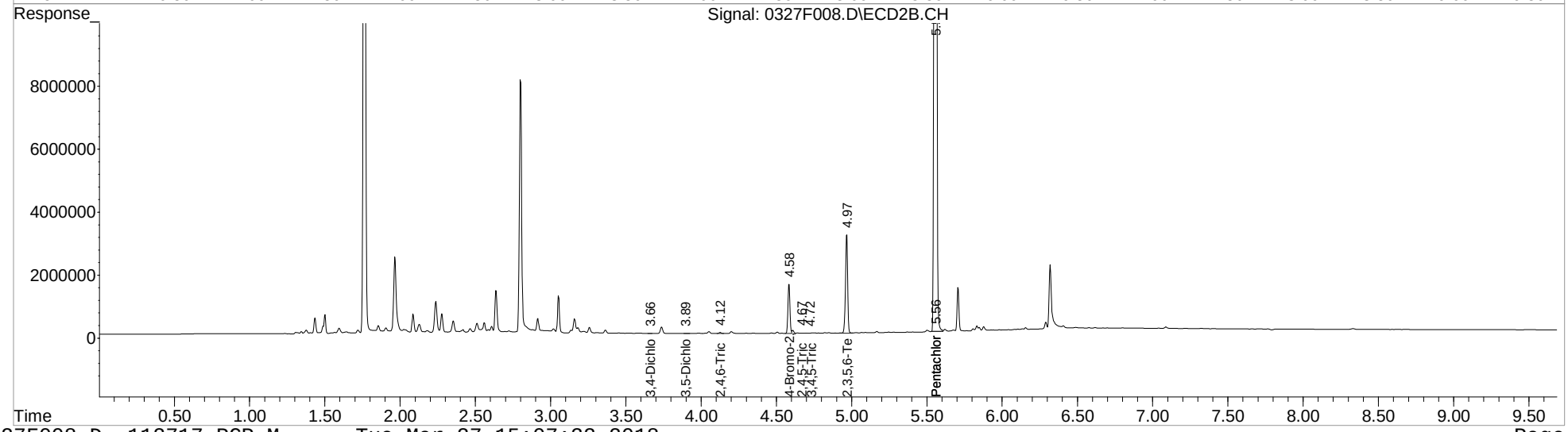
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F008.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC28\DATA\032718\0327F008.D\ECD2B.CH
Acq On : 27 Mar 2018 11:51 am Operator: JD
Sample : K1802580-004 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 14:12 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F008.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC28\DATA\032718\0327F008.D\ECD2B.CH
Acq On : 27 Mar 2018 11:51 am Operator: JD
Sample : K1802580-004 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:22 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.01	4.58	17004386	14177844	35.226	39.327	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.66	49854	24368	2.870	0.065	#
2)		3,5-Dichlorophen	3.35	3.89	14340	11286	1.177	0.913	
3)		2,4,6-Trichlorop	0.00	4.12	0	322026	N.D. d	1.002	
5)		2,4,5-Trichlorop	4.21	4.67	115080	65346	0.014	0.406	#
6)		3,4,5-Trichlorop	4.21	4.72	115080	14742	0.684	0.099	#
7)	M	2,3,5,6-Tetrachl	4.47	4.97	33531644	30601024	61.059	64.376	
8)	M	2,3,4,5-Tetrachl	5.01	0.00	301004	0	0.743	N.D. d	#
9)	M	Pentachloropheno	5.16	5.56	890.7E6	949.1E6	1359.113	1503.944	
10)		Pentachloroaniso	5.16	5.56	890.7E6	949.1E6	1430.579	1582.001	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F048.D
Lab ID: K1802580-004
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 23:33
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ18017

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	2,4,5-Trichlorophenol	895.13	NA	3.449996948	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F048.D\0327F048C.D
Lab ID: K1802580-004
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 23:33
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ18017

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F048.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F048.D\0327F048c.d			**Vial:**	6
Acqu Date:	03/27/2018 23:33	**Quant Date:**	03/28/2018 08:46	**Dilution:**	10.0
Run Type:	SMPL	**ListJoinID:**	LJ18017	**Soln Conc. Units:**	ug/L
Lab ID:	K1802580-004				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/16/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	K1802580
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668865	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Chlorinated Phenols	**Report List ID:**	LJ18017
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	1947876	1207261	4.04	3.35			81 OK
				%Recovery =	81 OK	67 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
2,4,6-Trichlorophenol			4.13		25826	5336	0.0000	0.0170	1.4U	1.4U	1.4U
2,4,5-Trichlorophenol	4.17	-0.02	4.65	-0.01	61552	23345	895.13	0.1450	1800ED	1.6U	1.6U
2,3,5,6-Tetrachlorophenol	4.47		4.97	+0.01	3895448	3032198	7.09	6.38	14D	13D	**13**D
2,3,4,5-Tetrachlorophenol	5.01				28396	44890	0.0700	0.0000	1.4U	1.4U	1.4U
Pentachlorophenol	5.15		5.55		97987266	87340874	149.52	138.41	300D	280D	**280**D

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	10.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F048.D Vial: 6
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 11:33 pm Operator: JD
Sample : K1802580-004@10X Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:23 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.018	4.587	1947876	1207261	4.035	3.349	
		Target Compounds							
1)		3,4-Dichl...	3.098	3.674	10997	19986	0.633	909.739	#
2)		3,5-Dichl...	3.368	3.910	5568	36596	0.457	2.960	#
3)		2,4,6-Tri...	3.444	4.133	25826	5336	N.D.	0.017	
5)		2,4,5-Tri...	4.168	4.647	61552	23345	895.130	0.145	#
6)		3,4,5-Tri...	4.211	4.723	7832	37214	0.047	0.251	#
7)	M	2,3,5,6-T...	4.474	4.967	3895448	3032198	7.093	6.379	
8)	M	2,3,4,5-T...	5.014	5.370	28396	44890	0.070	N.D.	#
9)	M	Pentachlo...	5.154	5.553	97987266	87340874	149.520	138.407	
10)		Pentachlo...	5.154	5.553	97987266	87340874	157.382	145.591	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

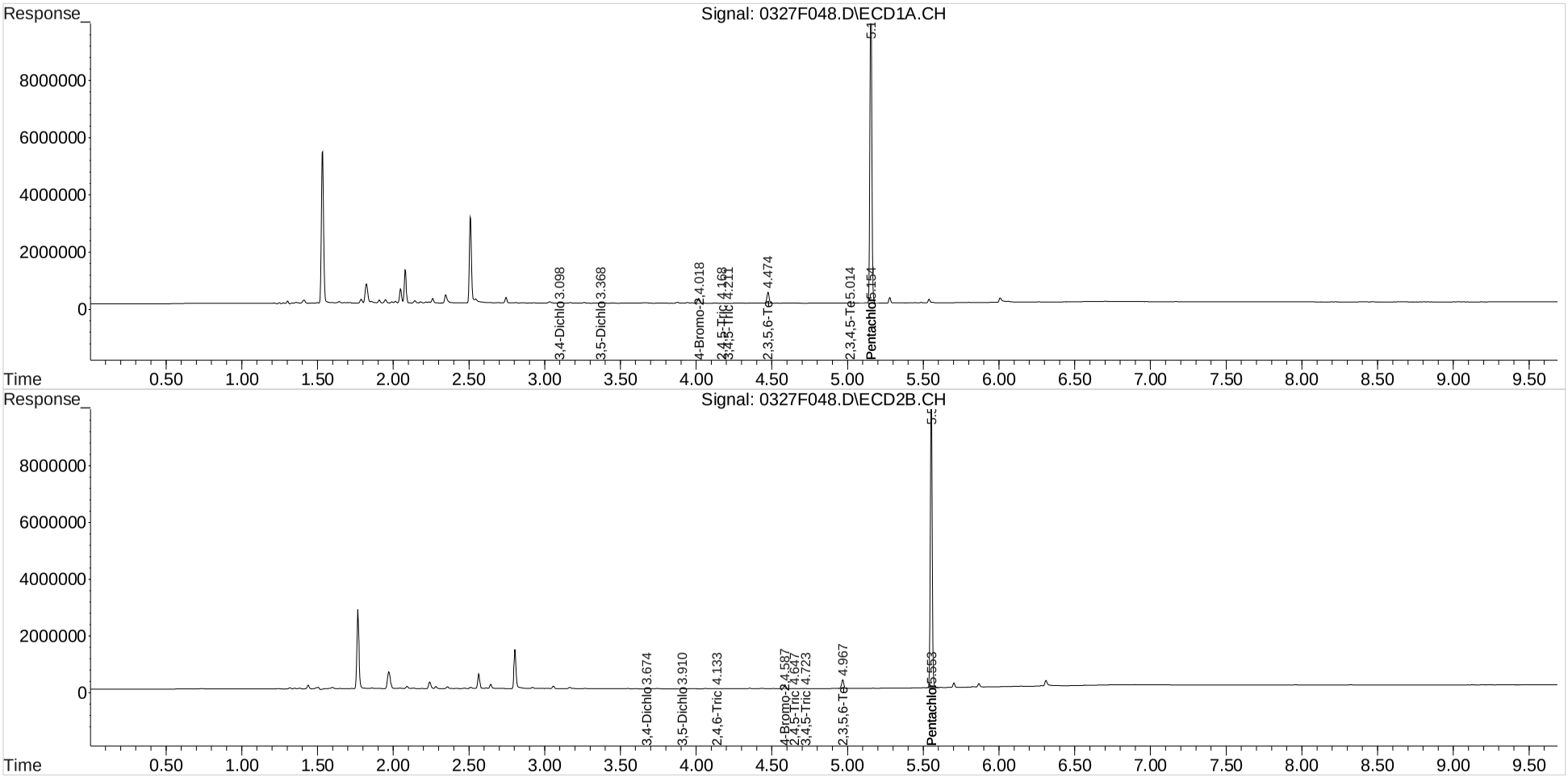
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F048.D Vial: 6
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 11:33 pm Operator: JD
Sample : K1802580-004@10X Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:23 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



Exception Report

Data File: J:\GC28\DATA\032218B\0322F029.D
Lab ID: KWG1801592-1 -- K1802579-020MS
RunType: MS
Matrix: WATER

Date Acquired: 03/23/2018 00:28
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	2,4,6-Trichlorophenol	24.8	NA	20	NR
Continuing Calibration Recovery (Closing)	2,4,6-Trichlorophenol	22.3	NA	20	NR

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F029.D\0322F029C.D
Lab ID: KWG1801592-1 -- K1802579-020MS
RunType: MS
Matrix: WATER

Date Acquired: 03/23/2018 00:28
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F029.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F029.D\0322F029c.d			**Vial:**	23
Acqu Date:	03/23/2018 00:28	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	MS	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801592-1 -- K1802579-020MS				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/26/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668533	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	20085102	16660274	41.61	46.21			92 OK
				%Recovery =	83 OK	92 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.13 $^{+0.01}$	3.66	1005314	436228	57.88	25.32	11.6	5.06	**5.06**P
3,5-Dichlorophenol	3.36	3.90	331394	173476	27.20	14.03	5.44	2.81	**2.81**P
2,4,6-Trichlorophenol	3.45 $^{-0.01}$	4.13	11800718	10784732	41.28^{CCV}	33.55	8.26	6.71	**6.71**
2,4,5-Trichlorophenol	4.19	4.66 $^{+0.01}$	5143306	4990092	30.74	31.02	6.15	6.20	**6.15**
3,4,5-Trichlorophenol	4.22	4.72	4349648	3852482	25.87	26.00	5.17	5.20	**5.17**
2,3,5,6-Tetrachlorophenol	4.47	4.96	19960086	18765956	36.35	39.48	7.27	7.90	**7.27**
2,3,4,5-Tetrachlorophenol	5.02	5.37 $^{+0.01}$	12357640	12010922	30.50	37.50	6.10	7.50	**6.10**
Pentachlorophenol	5.15 c	5.56 $^{+0.01}$c	24212750	22040972	36.95	34.93	7.39	6.99	**6.99**
2,3,4,5,6-Pentachloroanisole	5.15 c	5.56 $^{+0.01}$c	24212750	22040972	38.89	36.74	7.78	7.35	**7.35**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

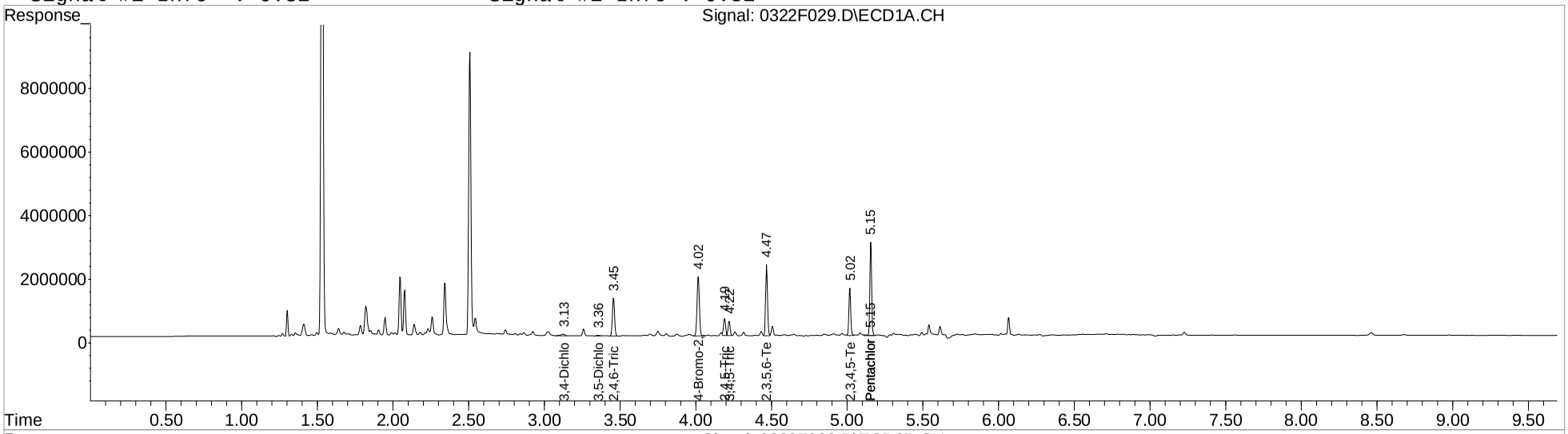
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

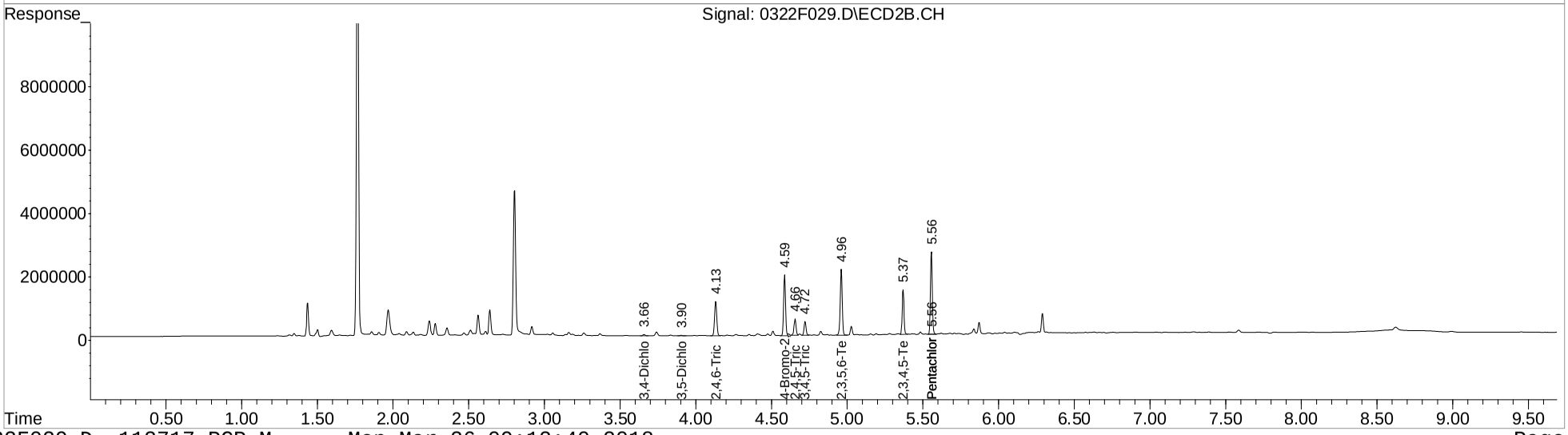
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F029.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\032218B\0322F029.D\ECD2B.CH
Acq On : 23 Mar 2018 12:28 am Operator: SMS
Sample : K1802579-020MS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : J:\GC28\DATA\032218B\0322F029.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\032218B\0322F029.D\ECD2B.CH
Acq On : 23 Mar 2018 12:28 am Operator: SMS
Sample : K1802579-020MS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:51 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	20085102	16660274	41.608	46.213
		Target Compounds						
1)		3,4-Dichlorophen	3.13	3.66	1005314	436228	57.880	25.315 #
2)		3,5-Dichlorophen	3.36	3.90	331394	173476	27.202	14.030 #
3)		2,4,6-Trichlorop	3.45	4.13	11800718	10784732	41.283	33.549
5)		2,4,5-Trichlorop	4.19	4.66	5143306	4990092	30.744	31.024
6)		3,4,5-Trichlorop	4.22	4.72	4349648	3852482	25.868	26.000
7)	M	2,3,5,6-Tetrachl	4.47	4.96	19960086	18765956	36.346	39.479
8)	M	2,3,4,5-Tetrachl	5.02	5.37	12357640	12010922	30.495	37.502
9)	M	Pentachloropheno	5.15	5.56	24212750	22040972	36.946	34.928
10)		Pentachloroaniso	5.15	5.56	24212750	22040972	38.889	36.741

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Exception Report

Data File: J:\GC28\DATA\032218B\0322F030.D
Lab ID: KWG1801592-2 -- K1802579-020DMS
RunType: DMS
Matrix: WATER

Date Acquired: 03/23/2018 00:46
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	2,4,6-Trichlorophenol	24.8	NA	20	NR
Continuing Calibration Recovery (Closing)	2,4,6-Trichlorophenol	22.3	NA	20	NR

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F030.D\0322F030C.D
Lab ID: KWG1801592-2 -- K1802579-020DMS
RunType: DMS
Matrix: WATER

Date Acquired: 03/23/2018 00:46
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F030.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F030.D\0322F030c.d			**Vial:**	24
Acqu Date:	03/23/2018 00:46	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	DMS	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801592-2 -- K1802579-020DMS				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/26/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668534	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	21541018	18188762	44.62	50.45			101 OK
				%Recovery =	89 OK	101 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.13 $^{+0.01}$	3.66	960920	376864	55.32	21.58	11.1	4.32	**4.32**P
3,5-Dichlorophenol	3.36	3.90	182988	137236	15.02	11.10	3.00	2.22	**2.22**
2,4,6-Trichlorophenol	3.46	4.13	12231116	11240924	42.83^{CCV}	34.97	8.57	6.99	**6.99**
2,4,5-Trichlorophenol	4.19	4.66 $^{+0.01}$	5507518	5199812	33.06	32.33	6.61	6.47	**6.47**
3,4,5-Trichlorophenol	4.22	4.72	4155336	3787102	24.71	25.56	4.94	5.11	**4.94**
2,3,5,6-Tetrachlorophenol	4.47	4.96	20814030	19792438	37.90	41.64	7.58	8.33	**7.58**
2,3,4,5-Tetrachlorophenol	5.02	5.37 $^{+0.01}$	12911120	12461662	31.86	38.94	6.37	7.79	**6.37**
Pentachlorophenol	5.16 $^{+0.01}$c	5.56 $^{+0.01}$c	25544848	23697242	38.98	37.55	7.80	7.51	**7.51**
2,3,4,5,6-Pentachloroanisole	5.16 $^{+0.01}$c	5.56 $^{+0.01}$c	25544848	23697242	41.03	39.50	8.21	7.90	**7.90**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

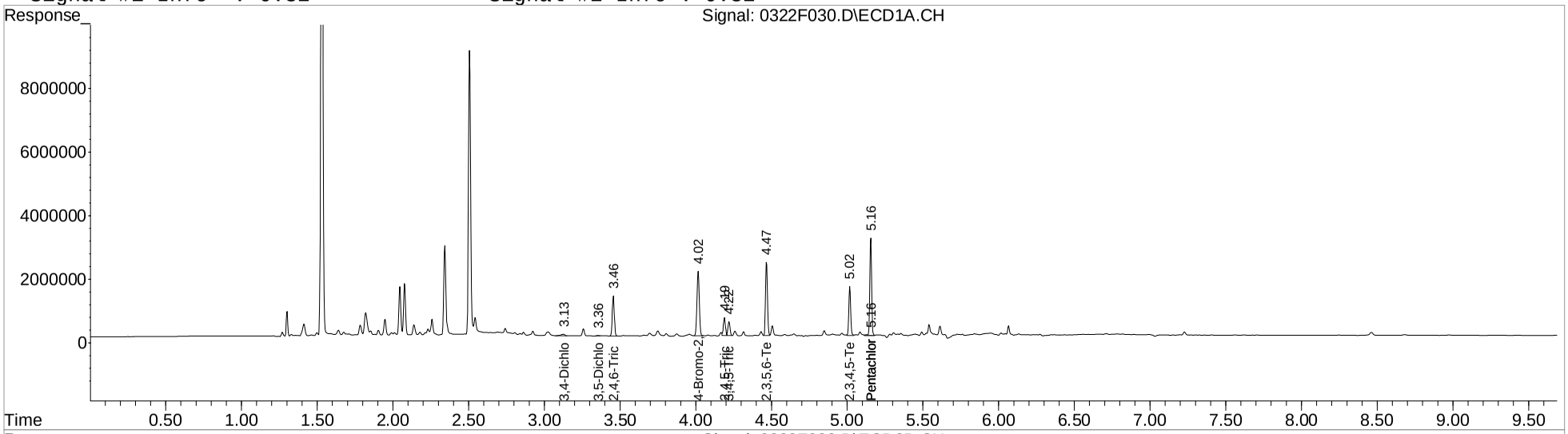
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

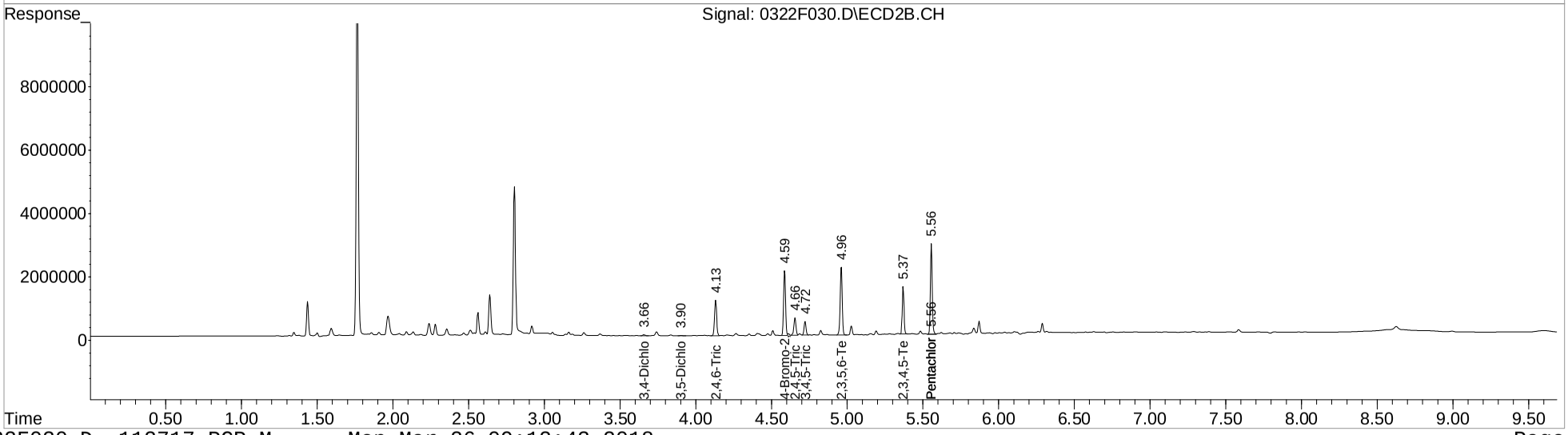
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F030.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\032218B\0322F030.D\ECD2B.CH
Acq On : 23 Mar 2018 12:46 am Operator: SMS
Sample : K1802579-020DMS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : J:\GC28\DATA\032218B\0322F030.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\032218B\0322F030.D\ECD2B.CH
Acq On : 23 Mar 2018 12:46 am Operator: SMS
Sample : K1802579-020DMS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:51 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	21541018	18188762	44.624	50.452	
		Target Compounds							
1)		3,4-Dichlorophen	3.13	3.66	960920	376864	55.324	21.584	#
2)		3,5-Dichlorophen	3.36	3.90	182988	137236	15.020	11.099	#
3)		2,4,6-Trichlorop	3.46	4.13	12231116	11240924	42.828	34.968	
5)		2,4,5-Trichlorop	4.19	4.66	5507518	5199812	33.059	32.328	
6)		3,4,5-Trichlorop	4.22	4.72	4155336	3787102	24.712	25.559	
7)	M	2,3,5,6-Tetrachl	4.47	4.96	20814030	19792438	37.901	41.638	
8)	M	2,3,4,5-Tetrachl	5.02	5.37	12911120	12461662	31.860	38.940	
9)	M	Pentachloropheno	5.16	5.56	25544848	23697242	38.979	37.553	
10)		Pentachloroaniso	5.16	5.56	25544848	23697242	41.029	39.502	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F009.D
Lab ID: KWG1801629-1 -- K1802580-004MS
RunType: MS
Matrix: WATER

Date Acquired: 03/27/2018 12:09
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	Pentachlorophenol	1359.36	NA	).059997558	
	2,3,4,5,6-Pentachloroanisole	1430.84	NA	1000	

MSNA

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F009.D\0327F009C.D
Lab ID: KWG1801629-1 -- K1802580-004MS
RunType: MS
Matrix: WATER

Date Acquired: 03/27/2018 12:09
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	Pentachlorophenol	1498.11	NA	).059997558	
	2,3,4,5,6-Pentachloroanisole	1575.87	NA	1000	

MSNA

Primary Review: _____

Secondary Review: _____

1st JAD 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F009.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F009.D\0327F009c.d			**Vial:**	7
Acqu Date:	03/27/2018 12:09	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-1				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	Method Mod		
Prep Ref:	1668868	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	16574852	13800880	34.34	38.28			77 OK
				%Recovery =	69 OK	77 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16 +0.01	5.56 +0.01	890850748	945370864	1,359	1,498	270E	300E	MSNA **270E**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F009.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F009.D\0327F009c.d			**Vial:**	7
Acqu Date:	03/27/2018 12:09	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	MS	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-1 -- K1802580-004MS				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668868	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ1442
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	16574852	13800880	34.34	38.28			77 OK
				%Recovery =	69 OK	77 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11	3.66 +0.01	760530	425958	43.79	24.67	8.76	4.93	**4.93**P
3,5-Dichlorophenol	3.35	3.90	243872	158684	20.02	12.83	4.00	2.57	**2.57**P
2,4,6-Trichlorophenol	3.45	4.13	10897978	9984878	38.04	31.06	7.61	6.21	**6.21**
2,4,5-Trichlorophenol	4.19 +0.01	4.65	5114942	4864192	30.57	30.24	6.11	6.05	**6.05**
3,4,5-Trichlorophenol	4.22 +0.01	4.72 +0.01	4937248	4395984	29.36	29.67	5.87	5.93	**5.87**
2,3,5,6-Tetrachlorophenol	4.47 +0.01	4.97 +0.01	49474276	46475008	90.09	97.77	18.0	19.6	**18.0**
2,3,4,5-Tetrachlorophenol	5.02 +0.01	5.37	12756598	11462100	31.48	35.75	6.30	7.15	**6.30**
Pentachlorophenol	5.16 +0.01c	5.56 +0.01c	890850748	945370864	1,359	1,498	272E	300E	**272**E
2,3,4,5,6-Pentachloroanisole	5.16 +0.01c	5.56 +0.01c	890850748	945370864	1,431	1,576	286E	315E	**286**E

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F009.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F009.D\0327F009c.d			**Vial:**	7
Acqu Date:	03/27/2018 12:09	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	MS	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-1 -- K1802580-004MS				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668868	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	16574852	13800880	34.34	38.28			77 OK
				%Recovery =	69 OK	77 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11	3.66 +0.01	760530	425958	43.79	24.67	8.76	4.93	**8.76**P
3,5-Dichlorophenol	3.35	3.90	243872	158684	20.02	12.83	4.00	2.57	**4.00**P
2,4,6-Trichlorophenol	3.45	4.13	10897978	9984878	38.04	31.06	7.61	6.21	**7.61**
2,4,5-Trichlorophenol	4.19 +0.01	4.65	5114942	4864192	30.57	30.24	6.11	6.05	**6.11**
3,4,5-Trichlorophenol	4.22 +0.01	4.72 +0.01	4937248	4395984	29.36	29.67	5.87	5.93	**5.87**
2,3,5,6-Tetrachlorophenol	4.47 +0.01	4.97 +0.01	49474276	46475008	90.09	97.77	18.0	19.6	**18.0**
2,3,4,5-Tetrachlorophenol	5.02 +0.01	5.37	12756598	11462100	31.48	35.75	6.30	7.15	**6.30**
Pentachlorophenol	5.16 +0.01c	5.56 +0.01c	890850748	945370864	1,359	1,498	272E	300E	**272**E
2,3,4,5,6-Pentachloroanisole	5.16 +0.01c	5.56 +0.01c	890850748	945370864	1,431	1,576	286E	315E	**286**E

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

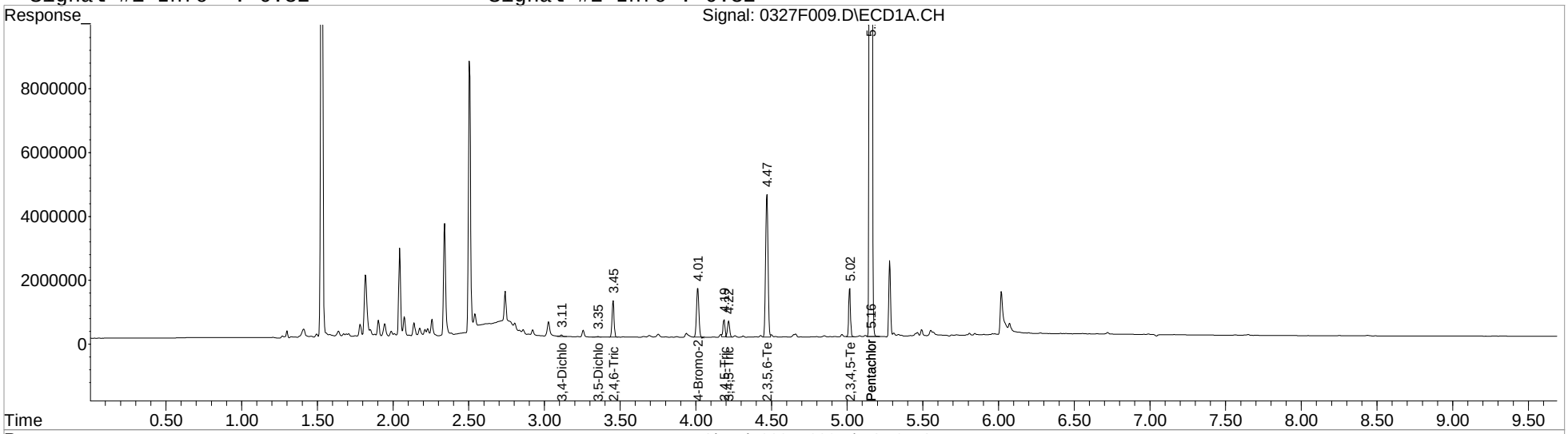
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

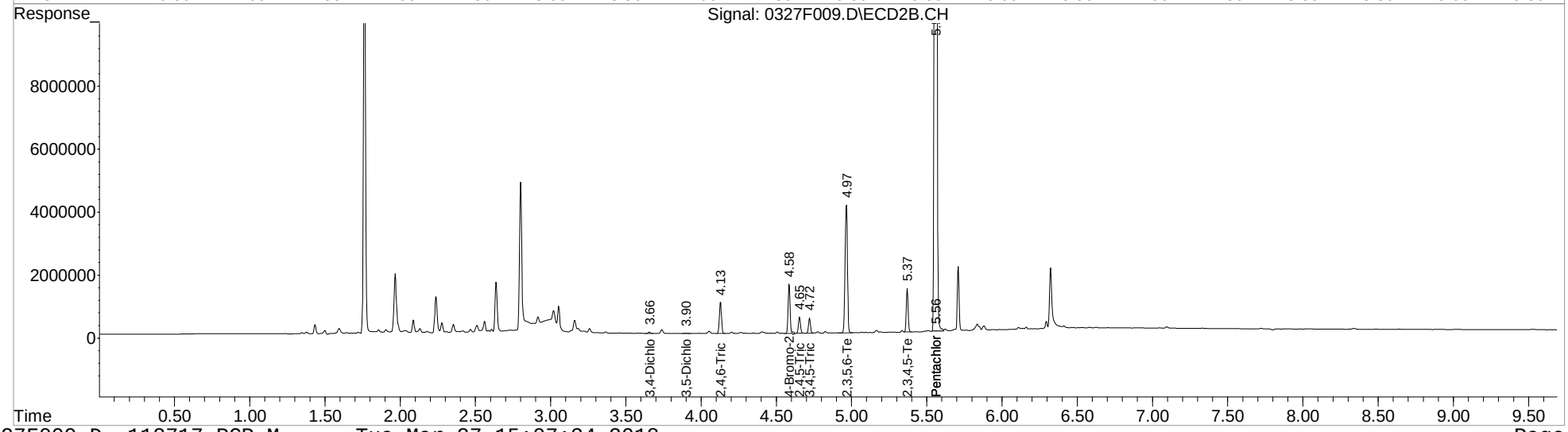
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F009.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC28\DATA\032718\0327F009.D\ECD2B.CH
Acq On : 27 Mar 2018 12:09 pm Operator: JD
Sample : K1802580-004 MS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F009.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC28\DATA\032718\0327F009.D\ECD2B.CH
Acq On : 27 Mar 2018 12:09 pm Operator: JD
Sample : K1802580-004 MS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:22 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.01	4.58	16574852	13800880	34.336	38.281	
		Target Compounds							
1)		3,4-Dichlorophen	3.11	3.66	760530	425958	43.787	24.667	#
2)		3,5-Dichlorophen	3.35	3.90	243872	158684	20.018	12.834	#
3)		2,4,6-Trichlorop	3.45	4.13	10897978	9984878	38.043	31.061	
5)		2,4,5-Trichlorop	4.19	4.65	5114942	4864192	30.565	30.242	
6)		3,4,5-Trichlorop	4.22	4.72	4937248	4395984	29.363	29.668	
7)	M	2,3,5,6-Tetrachl	4.47	4.97	49474276	46475008	90.089	97.771	
8)	M	2,3,4,5-Tetrachl	5.02	5.37	12756598	11462100	31.479	35.751	
9)	M	Pentachloropheno	5.16	5.56	890.9E6	945.4E6	1359.359	1498.110	
10)		Pentachloroaniso	5.16	5.56	890.9E6	945.4E6	1430.837	1575.865	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F010.D
Lab ID: KWG1801629-2 -- K1802580-004DMS
RunType: DMS
Matrix: WATER

Date Acquired: 03/27/2018 12:26
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	Pentachlorophenol	1435.94	NA	).059997558	
	2,3,4,5,6-Pentachloroanisole	1511.44	NA	1000	

MSNA

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F010.D\0327F010C.D
Lab ID: KWG1801629-2 -- K1802580-004DMS
RunType: DMS
Matrix: WATER

Date Acquired: 03/27/2018 12:26
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	Pentachlorophenol	1564.29	NA	).059997558	
	2,3,4,5,6-Pentachloroanisole	1645.48	NA	1000	

MSNA

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F010.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F010.D\0327F010c.d			**Vial:**	8
Acqu Date:	03/27/2018 12:26	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-2				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	Method Mod		
Prep Ref:	1668869	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	16310536	13460102	33.79	37.34			75 OK
				%Recovery =	68 OK	75 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16 +0.01	5.56 +0.01	941036646	987133464	1,436	1,564	290E	310E	MSNA **290**E

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F010.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F010.D\0327F010c.d			**Vial:**	8
Acqu Date:	03/27/2018 12:26	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	DMS	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-2 -- K1802580-004DMS				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668869	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ1442
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	16310536	13460102	33.79	37.34			75 OK
				%Recovery =	68 OK	75 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11	3.66 +0.01	768066	391876	44.22	22.53	8.84	4.51	**4.51**P
3,5-Dichlorophenol	3.35	3.90	255438	143028	20.97	11.57	4.19	2.31	**2.31**P
2,4,6-Trichlorophenol	3.45	4.13	10551530	9502804	36.80	29.56	7.36	5.91	**5.91**
2,4,5-Trichlorophenol	4.19 +0.01	4.65	5082430	4581598	30.36	28.49	6.07	5.70	**5.70**
3,4,5-Trichlorophenol	4.22 +0.01	4.72 +0.01	4605134	4172044	27.39	28.16	5.48	5.63	**5.48**
2,3,5,6-Tetrachlorophenol	4.47 +0.01	4.97 +0.01	51881138	48000592	94.47	100.98	18.9	20.2	**18.9**
2,3,4,5-Tetrachlorophenol	5.01	5.37	12506030	11042944	30.86	34.41	6.17	6.88	**6.17**
Pentachlorophenol	5.16 +0.01c	5.56 +0.01c	941036646	987133464	1,436	1,564	287E	313E	**287**E
2,3,4,5,6-Pentachloroanisole	5.16 +0.01c	5.56 +0.01c	941036646	987133464	1,511	1,645	302E	329E	**302**E

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F010.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F010.D\0327F010c.d			**Vial:**	8
Acqu Date:	03/27/2018 12:26	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	DMS	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-2 -- K1802580-004DMS				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668869	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	16310536	13460102	33.79	37.34			75 OK
				%Recovery =	68 OK	75 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11	3.66 +0.01	768066	391876	44.22	22.53	8.84	4.51	**8.84**P
3,5-Dichlorophenol	3.35	3.90	255438	143028	20.97	11.57	4.19	2.31	**4.19**P
2,4,6-Trichlorophenol	3.45	4.13	10551530	9502804	36.80	29.56	7.36	5.91	**7.36**
2,4,5-Trichlorophenol	4.19 +0.01	4.65	5082430	4581598	30.36	28.49	6.07	5.70	**6.07**
3,4,5-Trichlorophenol	4.22 +0.01	4.72 +0.01	4605134	4172044	27.39	28.16	5.48	5.63	**5.48**
2,3,5,6-Tetrachlorophenol	4.47 +0.01	4.97 +0.01	51881138	48000592	94.47	100.98	18.9	20.2	**18.9**
2,3,4,5-Tetrachlorophenol	5.01	5.37	12506030	11042944	30.86	34.41	6.17	6.88	**6.17**
Pentachlorophenol	5.16 +0.01c	5.56 +0.01c	941036646	987133464	1,436	1,564	287E	313E	**287**E
2,3,4,5,6-Pentachloroanisole	5.16 +0.01c	5.56 +0.01c	941036646	987133464	1,511	1,645	302E	329E	**302**E

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

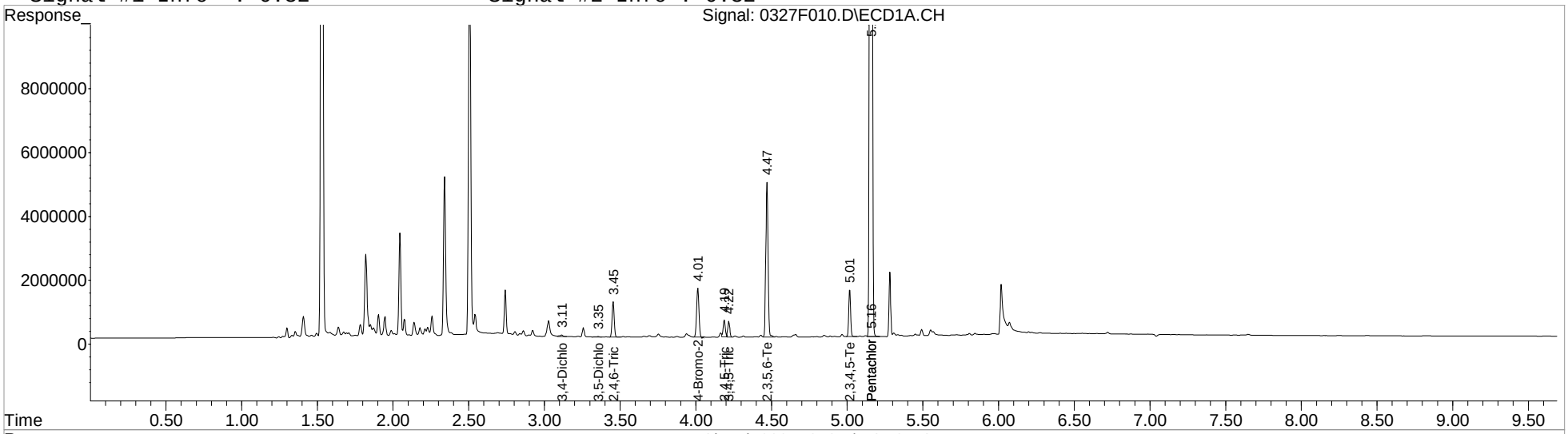
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

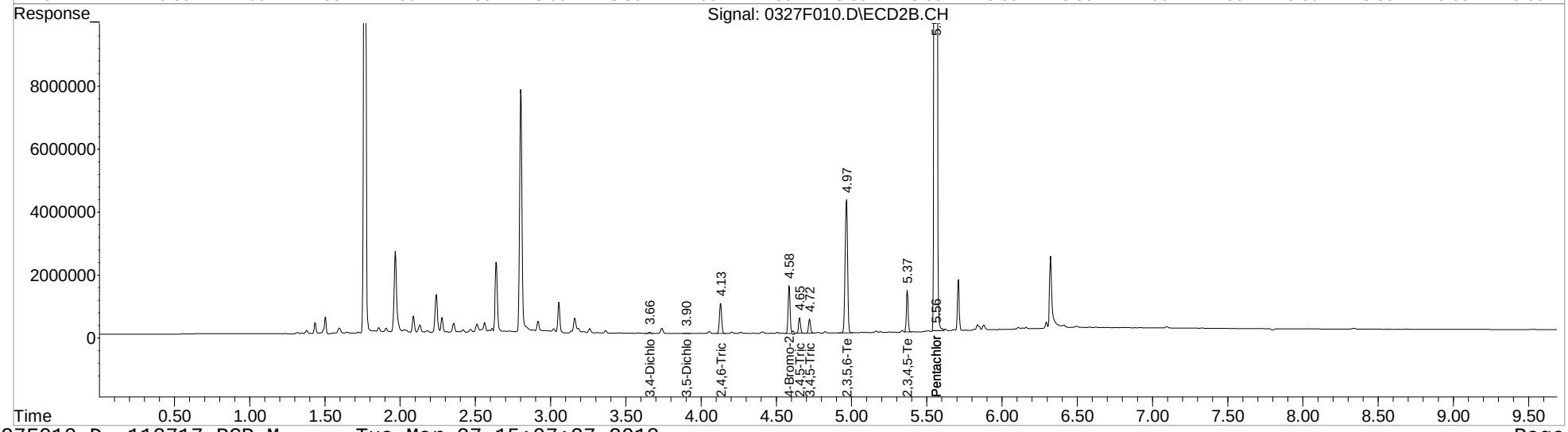
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F010.D\ECD1A.CH Vial: 8
Signal #2 : J:\GC28\DATA\032718\0327F010.D\ECD2B.CH
Acq On : 27 Mar 2018 12:26 pm Operator: JD
Sample : K1802580-004 DMS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F010.D\ECD1A.CH Vial: 8
Signal #2 : J:\GC28\DATA\032718\0327F010.D\ECD2B.CH
Acq On : 27 Mar 2018 12:26 pm Operator: JD
Sample : K1802580-004 DMS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:23 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.01	4.58	16310536	13460102	33.788	37.336	
		Target Compounds							
1)		3,4-Dichlorophen	3.11	3.66	768066	391876	44.221	22.525	#
2)		3,5-Dichlorophen	3.35	3.90	255438	143028	20.967	11.568	#
3)		2,4,6-Trichlorop	3.45	4.13	10551530	9502804	36.799	29.561	
5)		2,4,5-Trichlorop	4.19	4.65	5082430	4581598	30.359	28.485	
6)		3,4,5-Trichlorop	4.22	4.72	4605134	4172044	27.387	28.156	
7)	M	2,3,5,6-Tetrachl	4.47	4.97	51881138	48000592	94.472	100.980	
8)	M	2,3,4,5-Tetrachl	5.01	5.37	12506030	11042944	30.861	34.414	
9)	M	Pentachloropheno	5.16	5.56	941.0E6	987.1E6	1435.938	1564.290	
10)		Pentachloroaniso	5.16	5.56	941.0E6	987.1E6	1511.443	1645.480	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F044.D
Lab ID: KWG1801631-1
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 22:22
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F044.D\0327F044C.D
Lab ID: KWG1801631-1
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 22:22
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F044.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F044.D\0327F044c.d			**Vial:**	36
Acqu Date:	03/27/2018 22:22	**Quant Date:**	03/28/2018 08:46	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801631-1				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801631	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	Method Mod		
Prep Ref:	1668884	**Prep Date:**	03/22/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:		**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.02	4.59	18534648	15078046	38.40	41.82			84	OK
				%Recovery =	77 OK	84 OK	**Limits =**	55-130		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15	5.56 $^{+0.01}$	24520980	21259212	37.42	33.69	7.5	6.7	**6.7**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F044.D Vial: 36
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 10:22 pm Operator: JD
Sample : K1802579-006 MS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:11 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.018	4.587	18534648	15078046	38.396	41.824	
		Target Compounds							
1)		3,4-Dichl...	3.118	3.660	713822	444918	41.098	25.863	#
2)		3,5-Dichl...	3.358	3.904	241894	160726	19.856	12.999	#
3)		2,4,6-Tri...	3.458	4.130	12133898	10923520	42.479	33.980	
5)		2,4,5-Tri...	4.191	4.657	5476072	5325036	32.859	33.107	
6)		3,4,5-Tri...	4.221	4.720	5038315	4513737	29.964	30.463	
7)	M	2,3,5,6-T...	4.468	4.960	19318624	17717656	35.178	37.273	
8)	M	2,3,4,5-T...	5.014	5.370	13876863	11789480	34.244	36.795	
9)	M	Pentachlo...	5.154	5.557	24520980	21259212	37.417	33.689	
10)		Pentachlo...	5.154	5.557	24520980	21259212	39.384	35.438	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

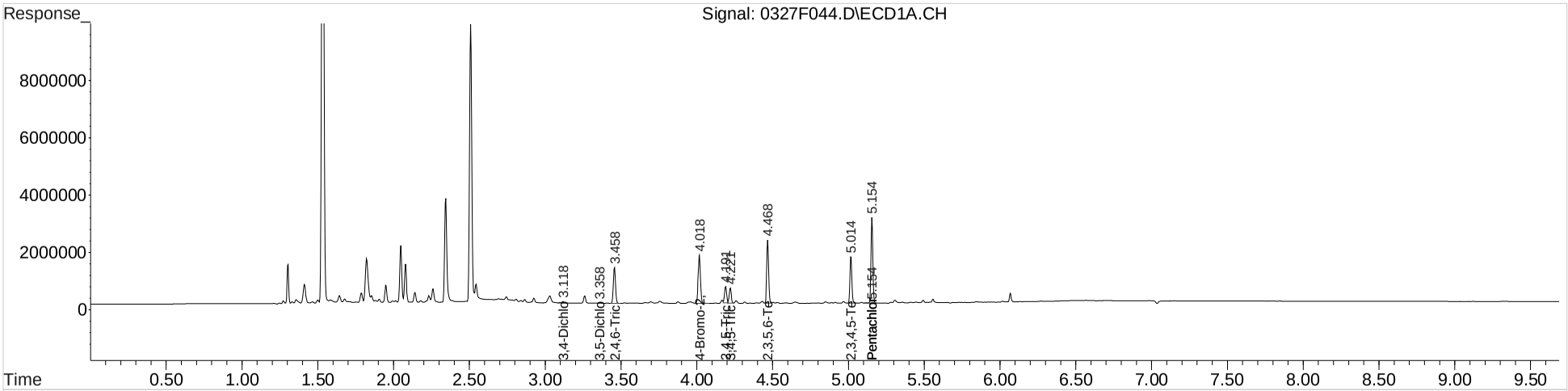
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F044.D Vial: 36
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 10:22 pm Operator: JD
Sample : K1802579-006 MS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:11 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F045.D
Lab ID: KWG1801631-2
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 22:40
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F045.D\0327F045C.D
Lab ID: KWG1801631-2
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 22:40
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F045.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F045.D\0327F045c.d			**Vial:**	37
Acqu Date:	03/27/2018 22:40	**Quant Date:**	03/28/2018 08:46	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801631-2				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801631	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	Method Mod		
Prep Ref:	1668885	**Prep Date:**	03/22/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:		**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.02	4.59	16468175	13096614	34.12	36.33			73	OK
				%Recovery =	68 OK	73 OK	**Limits =**	55-130		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.15	5.55	21494620	18666023	32.80	29.58	6.6	5.9	**5.9**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F045.D Vial: 37
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 10:40 pm Operator: JD
Sample : K1802579-006 DMS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:14 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.018	4.587	16468175	13096614	34.115	36.328	
		Target Compounds							
1)		3,4-Dichl...	3.118	3.660	583414	378864	33.590	21.710	#
2)		3,5-Dichl...	3.358	3.904	233802	139651	19.191	11.295	#
3)		2,4,6-Tri...	3.458	4.130	10336813	9237233	36.028	28.735	
5)		2,4,5-Tri...	4.191	4.657	4862775	4667454	28.971	29.019	
6)		3,4,5-Tri...	4.221	4.720	4368968	3860570	25.983	26.054	
7)	M	2,3,5,6-T...	4.468	4.960	16741858	15322194	30.486	32.234	
8)	M	2,3,4,5-T...	5.018	5.367	12032348	10263097	29.692	31.927	
9)	M	Pentachlo...	5.154	5.554	21494620	18666023	32.799	29.580	
10)		Pentachlo...	5.154	5.554	21494620	18666023	34.524	31.115	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

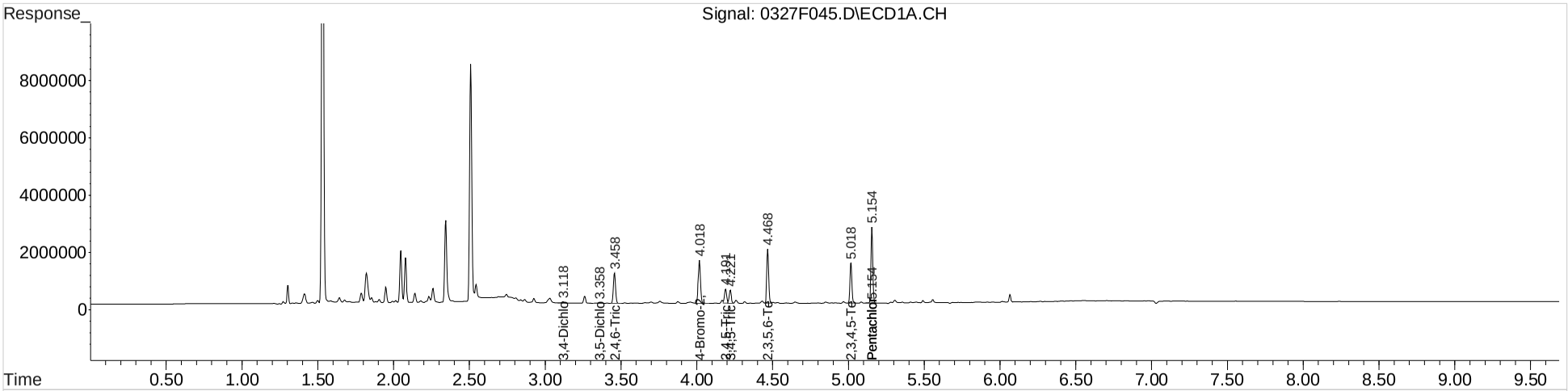
1st JED 03/29/18
2nd JEP 04/04/18

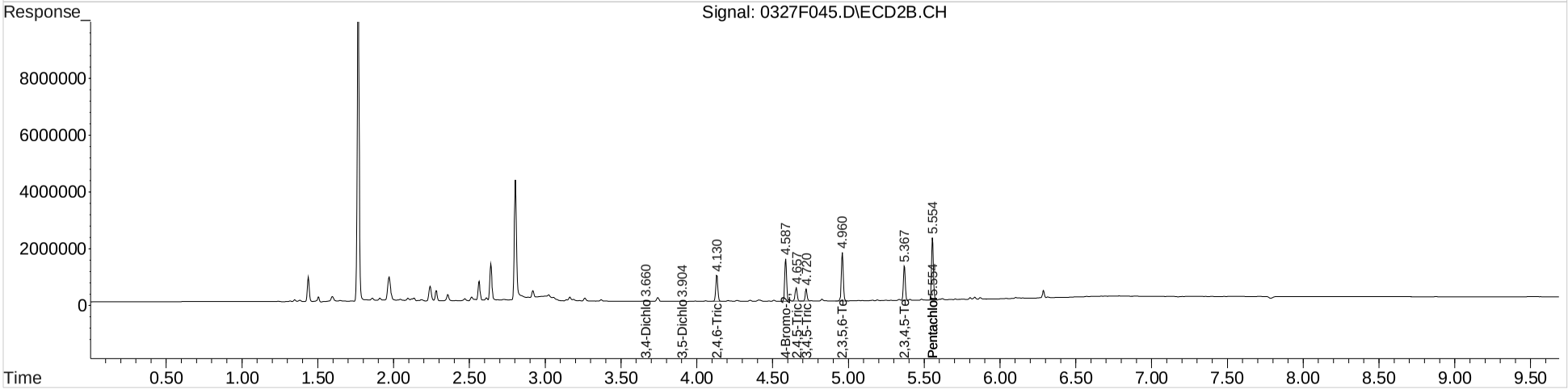
Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\032718\0327F045.D Vial: 37
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 10:40 pm Operator: JD
Sample : K1802579-006 DMS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:14 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Exception Report

Data File: J:\GC28\DATA\032218B\0322F031.D
Lab ID: KWG1801592-3
RunType: LCS
Matrix: WATER

Date Acquired: 03/23/2018 01:03
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	2,4,6-Trichlorophenol	24.8	NA	20	
Continuing Calibration Recovery (Closing)	2,4,6-Trichlorophenol	22.3	NA	20	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F031.D\0322F031C.D
Lab ID: KWG1801592-3
RunType: LCS
Matrix: WATER

Date Acquired: 03/23/2018 01:03
Date Quantitated: 03/23/2018 11:04
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F031.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F031.D\0322F031c.d			**Vial:**	25
Acqu Date:	03/23/2018 01:03	**Quant Date:**	03/23/2018 11:04	**Dilution:**	1.0
Run Type:	LCS	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801592-3				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	**Matrix:** WATER
Prod Code:	8151A Modified	**Collect Date:**	**Receive Date:** 03/26/2018

Analysis Lot:	KWG1801591	**Prep Lot:**	KWG1801592	**Report Group:**
Analysis Method:	8151M	**Prep Method:**	METHOD	
Prep Ref:	1668535	**Prep Date:**	03/21/2018	

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:	J:\GC28\DATA\032218B\0322F032.D	**Method ID:**	MJ252
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	20461716	17188952	42.39	47.68			95 OK
				%Recovery =	85 OK	95 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.13 $^{+0.01}$	3.66	1064746	391312	61.30	22.49	12.3	4.50	**4.50**P
3,5-Dichlorophenol	3.36	3.90	287718	150708	23.62	12.19	4.72	2.44	**2.44**P
2,4,6-Trichlorophenol	3.46	4.13	11937580	10875628	41.78^{CCV}	33.83	8.36	6.77	**6.77**
2,4,5-Trichlorophenol	4.19	4.66 $^{+0.01}$	5263536	4870808	31.51	30.28	6.30	6.06	**6.06**
3,4,5-Trichlorophenol	4.22	4.72	3973284	3682630	23.63	24.85	4.73	4.97	**4.73**
2,3,5,6-Tetrachlorophenol	4.47	4.96	19916194	19010768	36.27	39.99	7.25	8.00	**7.25**
2,3,4,5-Tetrachlorophenol	5.02	5.37 $^{+0.01}$	11978038	12084132	29.56	37.74	5.91	7.55	**5.91**
Pentachlorophenol	5.16 $^{+0.01}$c	5.56 $^{+0.01}$c	23557450	21958828	35.95	34.80	7.19	6.96	**6.96**
2,3,4,5,6-Pentachloroanisole	5.16 $^{+0.01}$c	5.56 $^{+0.01}$c	23557450	21958828	37.84	36.60	7.57	7.32	**7.32**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

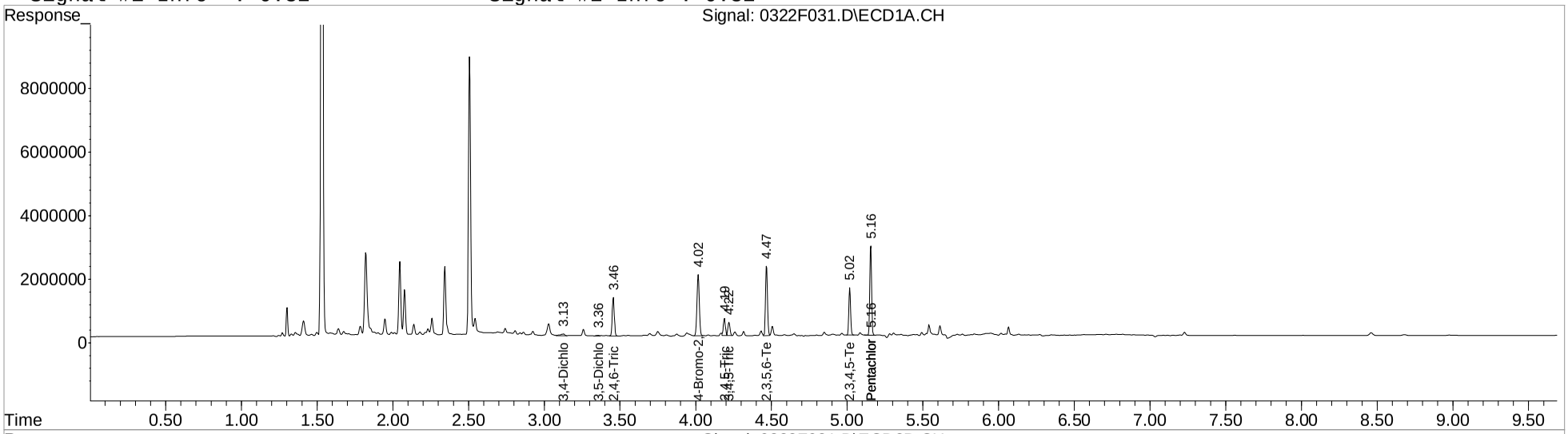
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

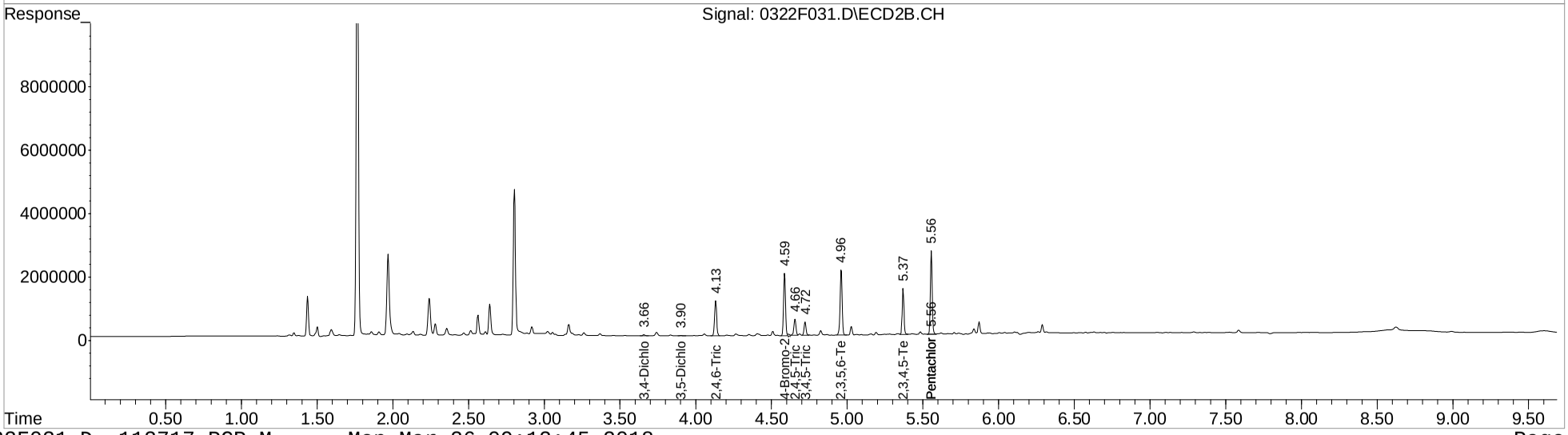
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F031.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\032218B\0322F031.D\ECD2B.CH
Acq On : 23 Mar 2018 1:03 am Operator: SMS
Sample : KQ1803558-03 LCS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : J:\GC28\DATA\032218B\0322F031.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\032218B\0322F031.D\ECD2B.CH
Acq On : 23 Mar 2018 1:03 am Operator: SMS
Sample : KQ1803558-03 LCS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:52 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	20461716	17188952	42.388	47.679	
		Target Compounds							
1)		3,4-Dichlorophen	3.13	3.66	1064746	391312	61.302	22.489	#
2)		3,5-Dichlorophen	3.36	3.90	287718	150708	23.617	12.189	#
3)		2,4,6-Trichlorop	3.46	4.13	11937580	10875628	41.775	33.831	
5)		2,4,5-Trichlorop	4.19	4.66	5263536	4870808	31.507	30.283	
6)		3,4,5-Trichlorop	4.22	4.72	3973284	3682630	23.630	24.854	
7)	M	2,3,5,6-Tetrachl	4.47	4.96	19916194	19010768	36.266	39.994	
8)	M	2,3,4,5-Tetrachl	5.02	5.37	11978038	12084132	29.558	37.735	#
9)	M	Pentachloropheno	5.16	5.56	23557450	21958828	35.947	34.798	
10)		Pentachloroaniso	5.16	5.56	23557450	21958828	37.837	36.604	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F011.D
Lab ID: KWG1801629-3
RunType: LCS
Matrix: WATER

Date Acquired: 03/27/2018 12:44
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F011.D\0327F011C.D
Lab ID: KWG1801629-3
RunType: LCS
Matrix: WATER

Date Acquired: 03/27/2018 12:44
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F011.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F011.D\0327F011c.d			**Vial:**	9
Acqu Date:	03/27/2018 12:44	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	LCS	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-3				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668870	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ1442
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	16585266	13711716	34.36	38.03			76 OK
				%Recovery =	69 OK	76 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12 +0.01	3.66 +0.01	676608	375552	38.96	21.50	7.79	4.30	**4.30**P
3,5-Dichlorophenol	3.36 +0.01	3.90	249824	131266	20.51	10.62	4.10	2.12	**2.12**P
2,4,6-Trichlorophenol	3.46 +0.01	4.13	10810386	9789532	37.73	30.45	7.55	6.09	**6.09**
2,4,5-Trichlorophenol	4.19 +0.01	4.65	5103566	4544630	30.49	28.26	6.10	5.65	**5.65**
3,4,5-Trichlorophenol	4.22 +0.01	4.72 +0.01	4478936	4059390	26.64	27.40	5.33	5.48	**5.33**
2,3,5,6-Tetrachlorophenol	4.46	4.96	17814072	16839462	32.44	35.43	6.49	7.09	**6.49**
2,3,4,5-Tetrachlorophenol	5.02 +0.01	5.37	12785410	11325054	31.55	35.31	6.31	7.06	**6.31**
Pentachlorophenol	5.16 +0.01c	5.56 +0.01c	23355752	20397942	35.64	32.32	7.13	6.46	**6.46**
2,3,4,5,6-Pentachloroanisole	5.16 +0.01c	5.56 +0.01c	23355752	20397942	37.51	34.00	7.50	6.80	**6.80**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JAD 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F011.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F011.D\0327F011c.d			**Vial:**	9
Acqu Date:	03/27/2018 12:44	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	LCS	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-3				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668870	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	16585266	13711716	34.36	38.03			76 OK
				%Recovery =	69 OK	76 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12 +0.01	3.66 +0.01	676608	375552	38.96	21.50	7.79	4.30	**7.79**P
3,5-Dichlorophenol	3.36 +0.01	3.90	249824	131266	20.51	10.62	4.10	2.12	**4.10**P
2,4,6-Trichlorophenol	3.46 +0.01	4.13	10810386	9789532	37.73	30.45	7.55	6.09	**7.55**
2,4,5-Trichlorophenol	4.19 +0.01	4.65	5103566	4544630	30.49	28.26	6.10	5.65	**6.10**
3,4,5-Trichlorophenol	4.22 +0.01	4.72 +0.01	4478936	4059390	26.64	27.40	5.33	5.48	**5.33**
2,3,5,6-Tetrachlorophenol	4.46	4.96	17814072	16839462	32.44	35.43	6.49	7.09	**6.49**
2,3,4,5-Tetrachlorophenol	5.02 +0.01	5.37	12785410	11325054	31.55	35.31	6.31	7.06	**6.31**
Pentachlorophenol	5.16 +0.01c	5.56 +0.01c	23355752	20397942	35.64	32.32	7.13	6.46	**6.46**
2,3,4,5,6-Pentachloroanisole	5.16 +0.01c	5.56 +0.01c	23355752	20397942	37.51	34.00	7.50	6.80	**7.50**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

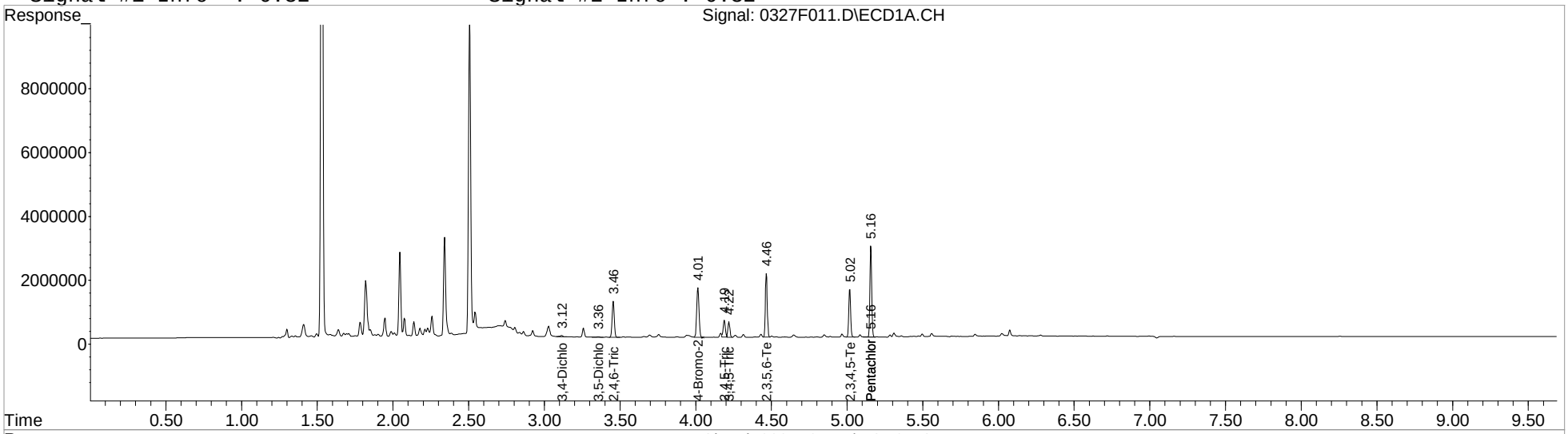
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

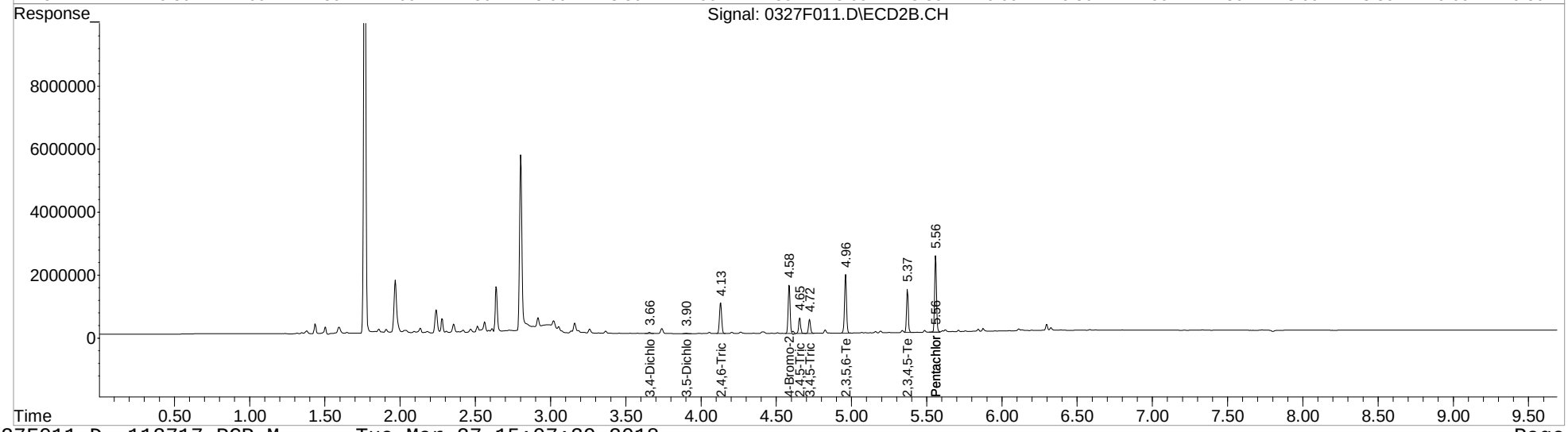
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F011.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC28\DATA\032718\0327F011.D\ECD2B.CH
Acq On : 27 Mar 2018 12:44 pm Operator: JD
Sample : KWG1803560-3 LCS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F011.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC28\DATA\032718\0327F011.D\ECD2B.CH
Acq On : 27 Mar 2018 12:44 pm Operator: JD
Sample : KWG1803560-3 LCS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:24 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.01	4.58	16585266	13711716	34.357	38.034	
		Target Compounds							
1)		3,4-Dichlorophen	3.12	3.66	676608	375552	38.955	21.502	#
2)		3,5-Dichlorophen	3.36	3.90	249824	131266	20.506	10.616	#
3)		2,4,6-Trichlorop	3.46	4.13	10810386	9789532	37.728	30.453	
5)		2,4,5-Trichlorop	4.19	4.65	5103566	4544630	30.493	28.255	
6)		3,4,5-Trichlorop	4.22	4.72	4478936	4059390	26.637	27.396	
7)	M	2,3,5,6-Tetrachl	4.46	4.96	17814072	16839462	32.438	35.426	
8)	M	2,3,4,5-Tetrachl	5.02	5.37	12785410	11325054	31.550	35.314	
9)	M	Pentachloropheno	5.16	5.56	23355752	20397942	35.639	32.324	
10)		Pentachloroaniso	5.16	5.56	23355752	20397942	37.513	34.002	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F046.D
Lab ID: KWG1801631-3
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 22:57
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F046.D\0327F046C.D
Lab ID: KWG1801631-3
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 22:57
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ1610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F046.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F046.D\0327F046c.d			**Vial:**	38
Acqu Date:	03/27/2018 22:57	**Quant Date:**	03/28/2018 08:46	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801631-3				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801631	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	Method Mod		
Prep Ref:	1668886	**Prep Date:**	03/22/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:		**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt	
4-Bromo-2,6-dichlorophenol	4.02	4.59	17068280	13849012	35.36	38.42			77	OK
				%Recovery =	71 OK	77 OK	**Limits =**	55-130		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16 +0.01	5.56 +0.01	22594300	19427676	34.48	30.79	6.9	6.2	**6.2**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F046.D Vial: 38
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 10:57 pm Operator: JD
Sample : KQ1803654-3 LCS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:17 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.016	4.586	17068280	13849012	35.358	38.415	
		Target Compounds							
1)		3,4-Dichl...	3.116	3.659	689282	420005	39.685	24.292	#
2)		3,5-Dichl...	3.360	3.906	223942	150722	18.382	12.190	#
3)		2,4,6-Tri...	3.456	4.132	11154637	9837194	38.964	30.601	
5)		2,4,5-Tri...	4.190	4.656	5428950	4959932	32.559	30.837	
6)		3,4,5-Tri...	4.220	4.722	4711690	4191420	28.021	28.287	
7)	M	2,3,5,6-T...	4.470	4.962	17799098	15988354	32.411	33.635	
8)	M	2,3,4,5-T...	5.016	5.369	12853622	10860364	31.719	33.832	
9)	M	Pentachlo...	5.156	5.556	22594300	19427676	34.477	30.787	
10)		Pentachlo...	5.156	5.556	22594300	19427676	36.290	32.385	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

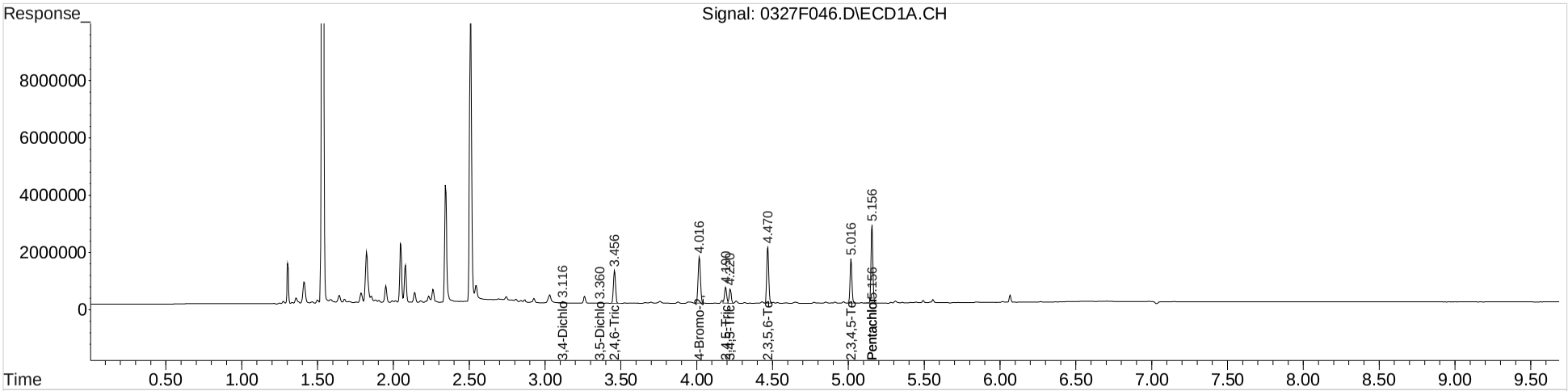
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F046.D Vial: 38
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 10:57 pm Operator: JD
Sample : KQ1803654-3 LCS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:17 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



Exception Report

Data File: J:\GC28\DATA\032218B\0322F003.D
Lab ID: KWG1801591-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/22/2018 16:53
Date Quantitated: 03/23/2018 07:04
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F003.D\0322F003C.D
Lab ID: KWG1801591-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/22/2018 16:53
Date Quantitated: 03/23/2018 07:04
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F003.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F003.D\0322F003c.d			**Vial:**	1
Acqu Date:	03/22/2018 16:53	**Quant Date:**	03/23/2018 07:04	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801591-1				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/26/2018

Analysis Lot:	KWG1801591	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	23704890	19886134	49.11	55.16			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11	3.65	826132	774578	47.56	47.23			
3,5-Dichlorophenol	3.35	3.90	567822	611474	46.61	49.45			
2,4,6-Trichlorophenol	3.45	4.13	15707412	14515936	55.31	45.16			
2,4,5-Trichlorophenol	4.18	4.65	7480360	6603808	45.83	41.06			
3,4,5-Trichlorophenol	4.21	4.72	6817442	6129760	40.54	41.37			
2,3,5,6-Tetrachlorophenol	4.46	4.96	23889488	21790802	43.50	45.84			
2,3,4,5-Tetrachlorophenol	5.01	5.37	16877038	15238902	41.65	47.80			
Pentachlorophenol	5.15 c	5.55 c	29605762	26439146	45.18	41.90			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.55 c	29605762	26439146	47.55	44.07			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

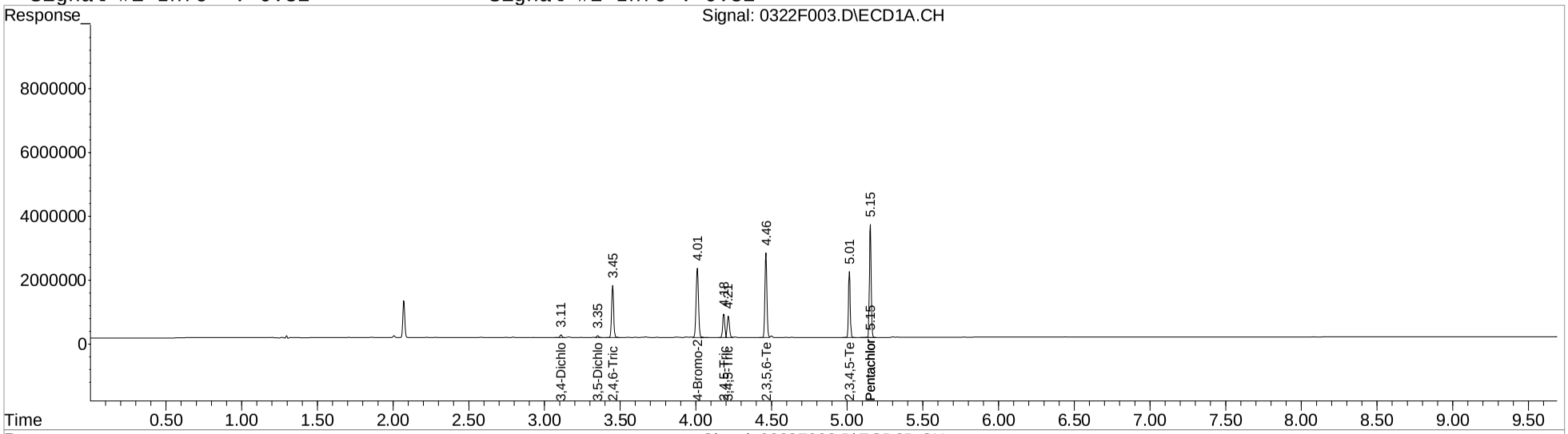
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

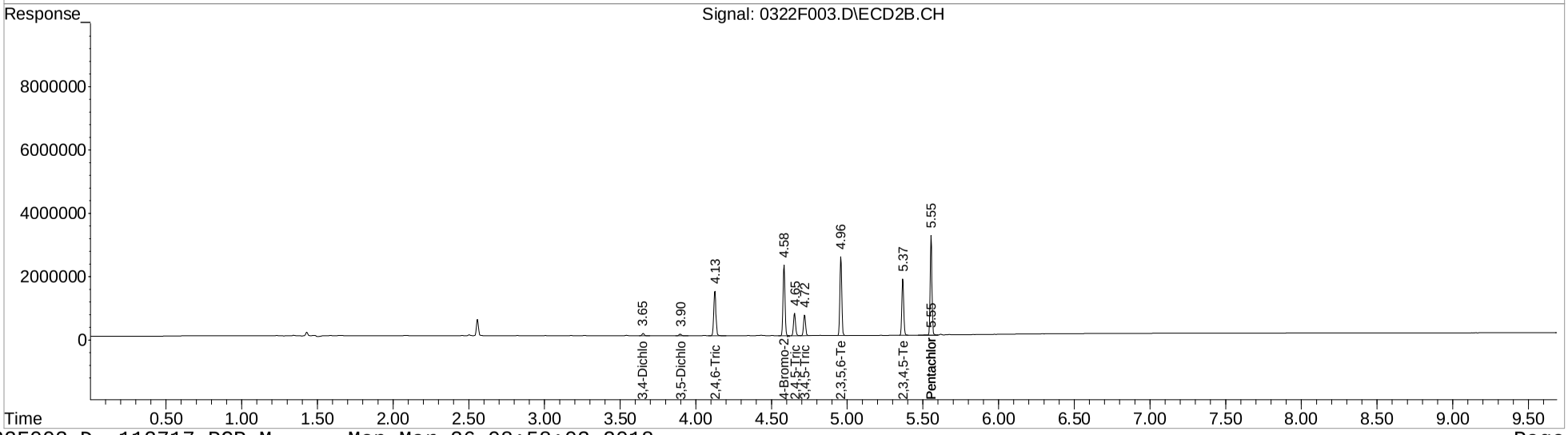
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F003.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032218B\0322F003.D\ECD2B.CH
Acq On : 22 Mar 2018 4:53 pm Operator: SMS
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 7:04 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\032218B\0322F003.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032218B\0322F003.D\ECD2B.CH
Acq On : 22 Mar 2018 4:53 pm Operator: SMS
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 07:04:33 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.01	4.58	23704890	19886134	49.106	55.161
		Target Compounds						
1)		3,4-Dichlorophen	3.11	3.65	826132	774578	47.564	47.226
2)		3,5-Dichlorophen	3.35	3.90	567822	611474	46.609	49.454
3)		2,4,6-Trichlorop	3.45	4.13	15707412	14515936	55.308	45.156
5)		2,4,5-Trichlorop	4.18	4.65	7480360	6603808	45.827	41.057
6)		3,4,5-Trichlorop	4.21	4.72	6817442	6129760	40.544	41.369
7)	M	2,3,5,6-Tetrachl	4.46	4.96	23889488	21790802	43.501	45.842
8)	M	2,3,4,5-Tetrachl	5.01	5.37	16877038	15238902	41.647	47.798
9)	M	Pentachloropheno	5.15	5.55	29605762	26439146	45.176	41.898
10)		Pentachloroaniso	5.15	5.55	29605762	26439146	47.551	44.072

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Exception Report

Data File: J:\GC28\DATA\032218B\0322F015.D
Lab ID: KWG1801591-3
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/22/2018 20:23
Date Quantitated: 03/23/2018 11:23
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F015.D\0322F015C.D
Lab ID: KWG1801591-3
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/22/2018 20:23
Date Quantitated: 03/23/2018 11:23
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F015.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F015.D\0322F015c.d			**Vial:**	1
Acqu Date:	03/22/2018 20:23	**Quant Date:**	03/23/2018 11:23	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801591-3				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/26/2018

Analysis Lot:	KWG1801591	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	25848738	20486334	53.55	56.83			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11		3.66		861482	760216	49.60	46.27			
3,5-Dichlorophenol	3.36		3.90		609218	593250	50.01	47.98			
2,4,6-Trichlorophenol	3.46		4.13		16414752	14560818	57.85	45.30			
2,4,5-Trichlorophenol	4.19		4.66		7904360	6679800	48.63	41.53			
3,4,5-Trichlorophenol	4.22		4.72		7330812	6175946	43.60	41.68			
2,3,5,6-Tetrachlorophenol	4.47		4.96		26231888	22609794	47.77	47.57			
2,3,4,5-Tetrachlorophenol	5.02		5.37		18005634	15509540	44.43	48.66			
Pentachlorophenol	5.16	c	5.56	c	32330346	27413242**m**	49.33	43.44			
2,3,4,5,6-Pentachloroanisole	5.16	c	5.56	c	32330346	28043816	51.93	46.75			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

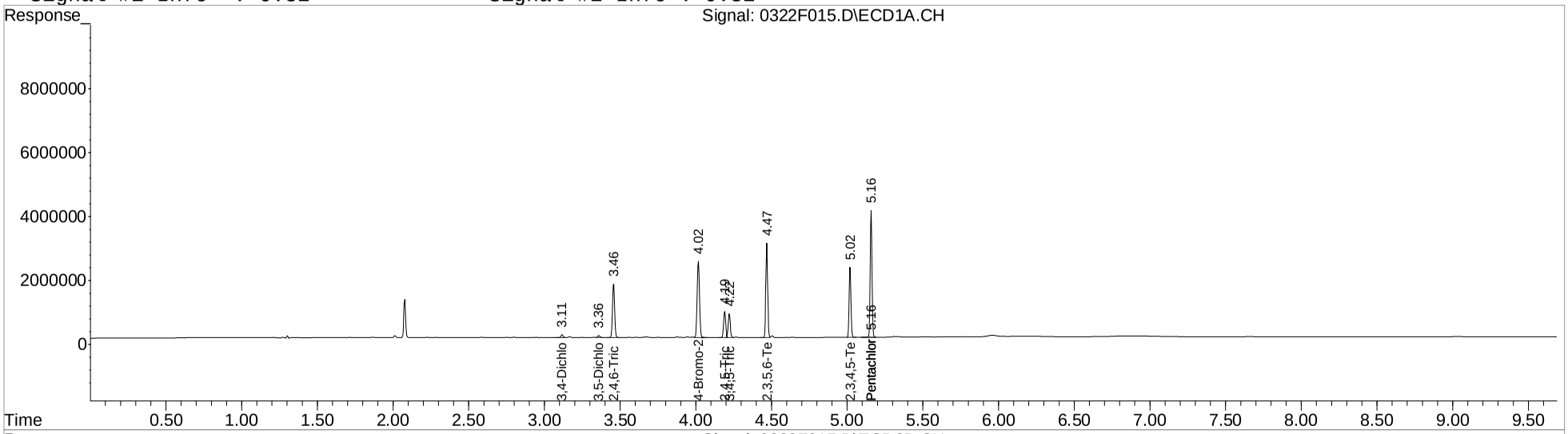
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

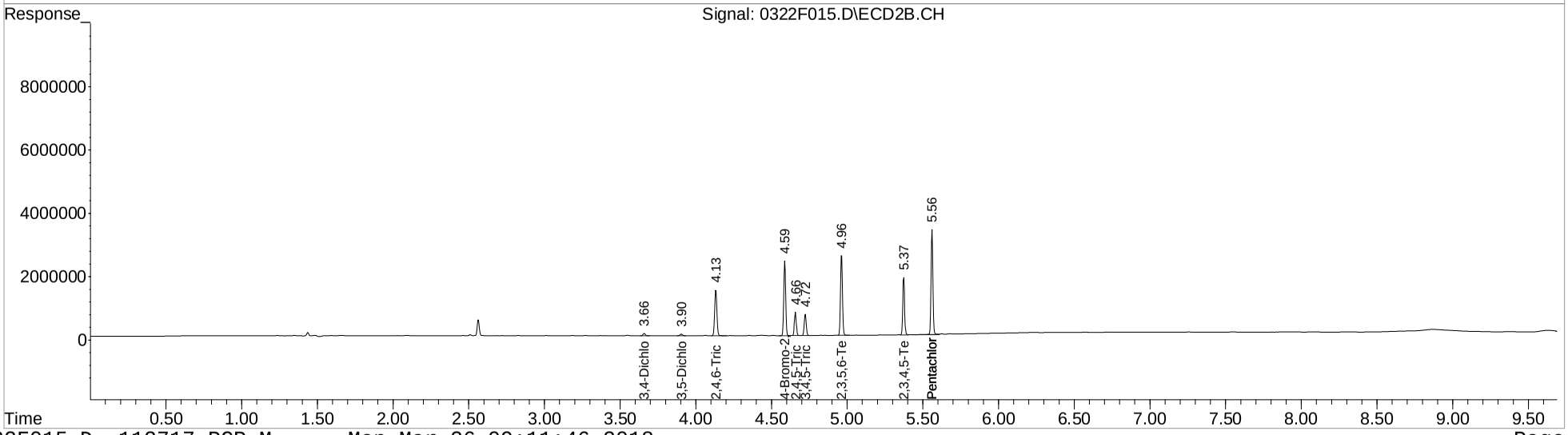
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F015.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032218B\0322F015.D\ECD2B.CH
Acq On : 22 Mar 2018 8:23 pm Operator: SMS
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:23 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : J:\GC28\DATA\032218B\0322F015.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032218B\0322F015.D\ECD2B.CH
Acq On : 22 Mar 2018 8:23 pm Operator: SMS
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:39 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

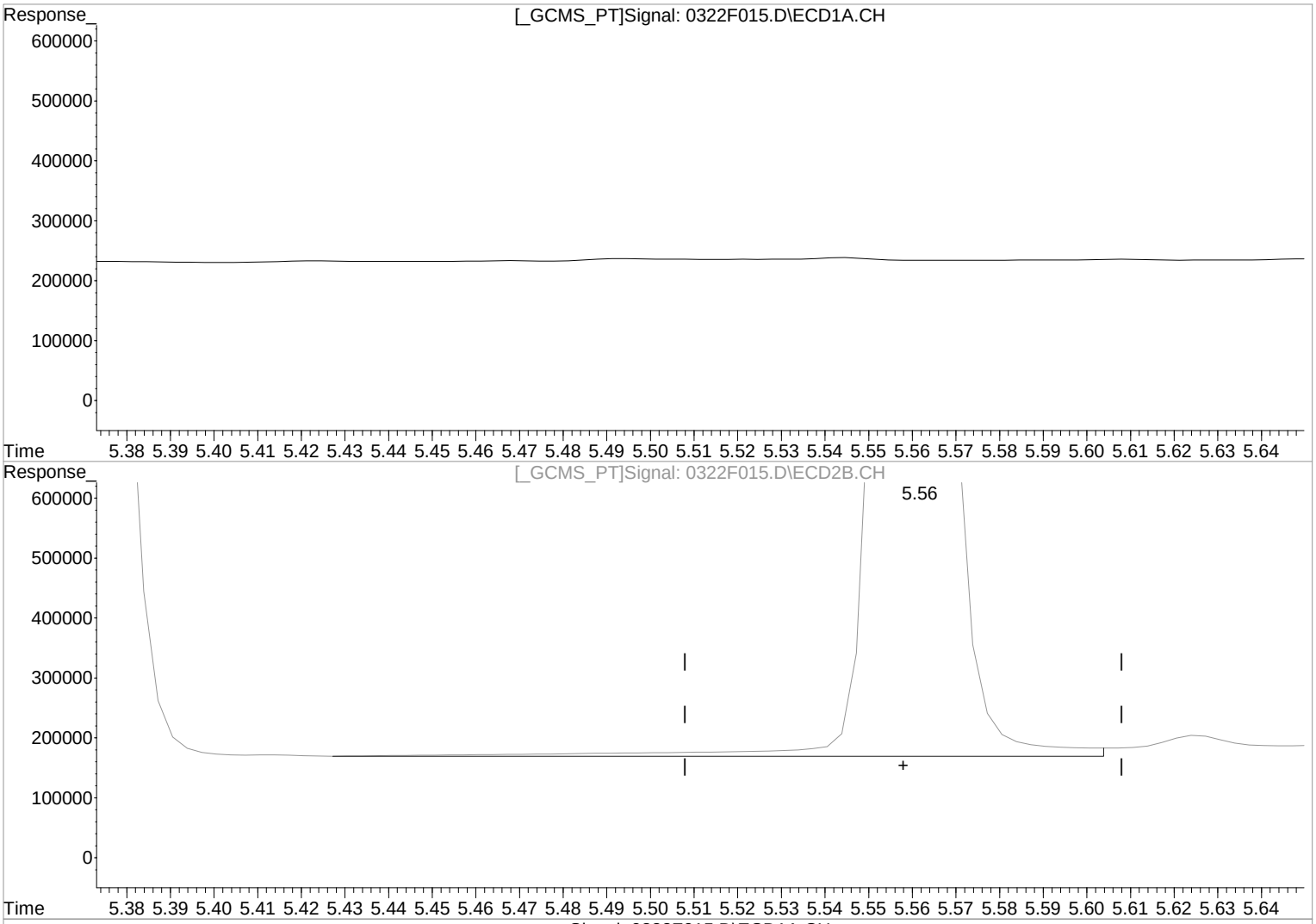
Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	25848738	20486334	53.547	56.825
		Target Compounds						
1)		3,4-Dichlorophen	3.11	3.66	861482	760216	49.599	46.272
2)		3,5-Dichlorophen	3.36	3.90	609218	593250	50.007	47.980
3)		2,4,6-Trichlorop	3.46	4.13	16414752	14560818	57.847	45.295
5)		2,4,5-Trichlorop	4.19	4.66	7904360	6679800	48.625	41.530
6)		3,4,5-Trichlorop	4.22	4.72	7330812	6175946	43.598	41.681
7)	M	2,3,5,6-Tetrachl	4.47	4.96	26231888	22609794	47.767	47.565
8)	M	2,3,4,5-Tetrachl	5.02	5.37	18005634	15509540	44.432	48.662
9)	M	Pentachloropheno	5.16	5.56	32330346	27413242	49.333	43.441m
10)		Pentachloroaniso	5.16	5.56	32330346	28043816	51.927	46.747

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : J:\GC28\DATA\032218B\0322F015.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032218B\0322F015.D\ECD2B.CH
Acq On : 22 Mar 2018 8:23 pm Operator: SMS
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration



Signal: 0322F015.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 49.333ug/L

response 32330346

Manual Integration:

Before

03/23/18

(9) Pentachlorophenol #2 (M)

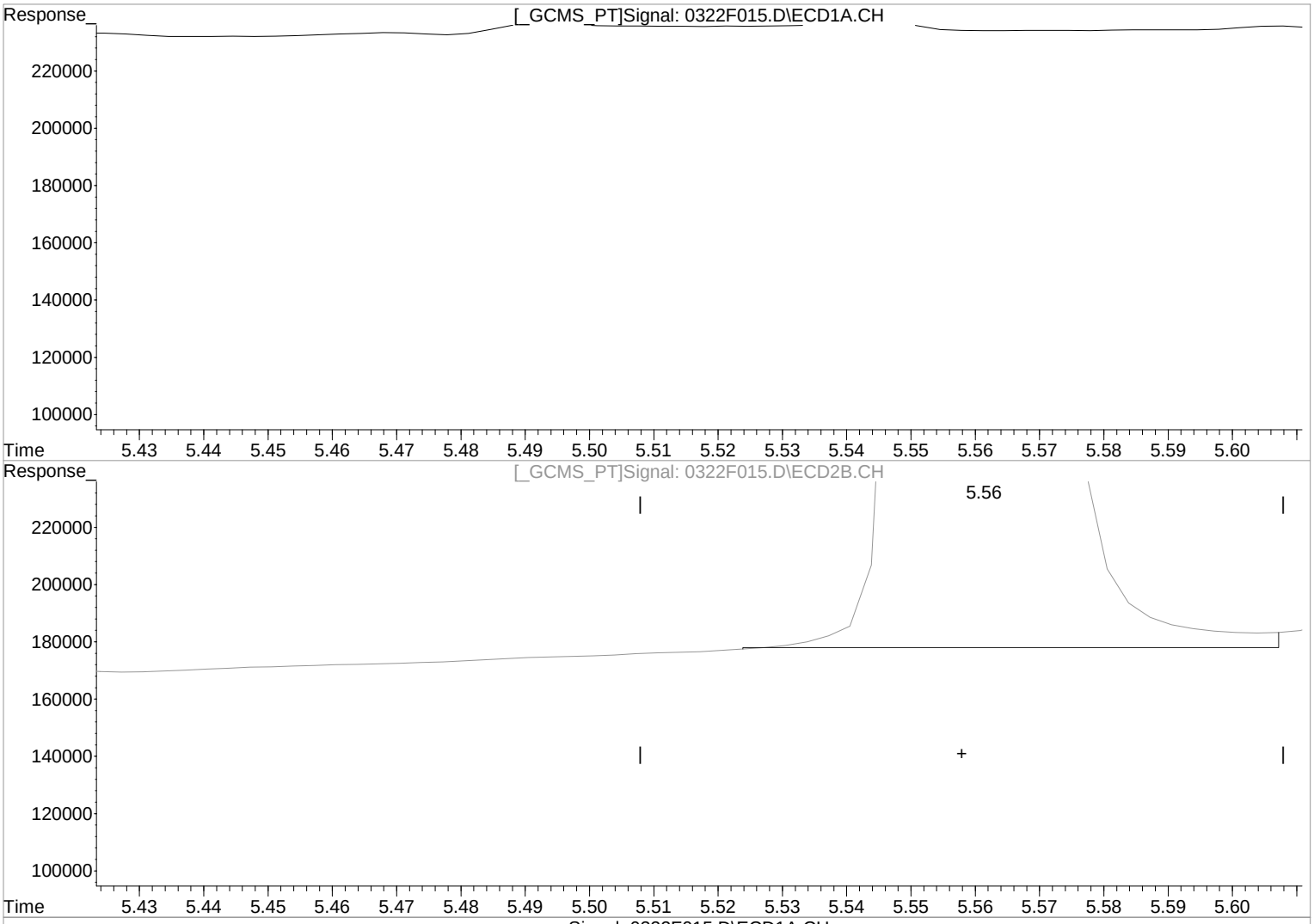
5.56min 44.440ug/L

response 28043816

(+) = Expected Retention Time

Signal #1 : J:\GC28\DATA\032218B\0322F015.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032218B\0322F015.D\ECD2B.CH
Acq On : 22 Mar 2018 8:23 pm Operator: SMS
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration



Signal: 0322F015.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 49.333ug/L

response 32330346

Manual Integration:

After

Baseline/Shoulder

03/23/18

(9) Pentachlorophenol #2 (M)

5.56min 43.441ug/L m

response 27413242

(+) = Expected Retention Time

Exception Report

Data File: J:\GC28\DATA\032218B\0322F027.D
Lab ID: KWG1801591-5
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/22/2018 23:53
Date Quantitated: 03/23/2018 11:37
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F027.D\0322F027C.D
Lab ID: KWG1801591-5
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/22/2018 23:53
Date Quantitated: 03/23/2018 11:37
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F027.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F027.D\0322F027c.d			**Vial:**	1
Acqu Date:	03/22/2018 23:53	**Quant Date:**	03/23/2018 11:37	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801591-5				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/26/2018

Analysis Lot:	KWG1801591	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	25841612	20731078	53.53	57.50			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12	3.66	853208	768442	49.12	46.82			
3,5-Dichlorophenol	3.36	3.90	606014	594866	49.74	48.11			
2,4,6-Trichlorophenol	3.46	4.13	16528364	14656702	58.26	45.59			
2,4,5-Trichlorophenol	4.19	4.65	8011360	6767816	49.33	42.08			
3,4,5-Trichlorophenol	4.22	4.72	7231496	6264536	43.01	42.28			
2,3,5,6-Tetrachlorophenol	4.47	4.96	26312778	22944612	47.91	48.27			
2,3,4,5-Tetrachlorophenol	5.02	5.36	18141152	15717950	44.77	49.33			
Pentachlorophenol	5.15 c	5.55 c	32464220	27950680**m**	49.54	44.29			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.55 c	32464220	28123732	52.14	46.88			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

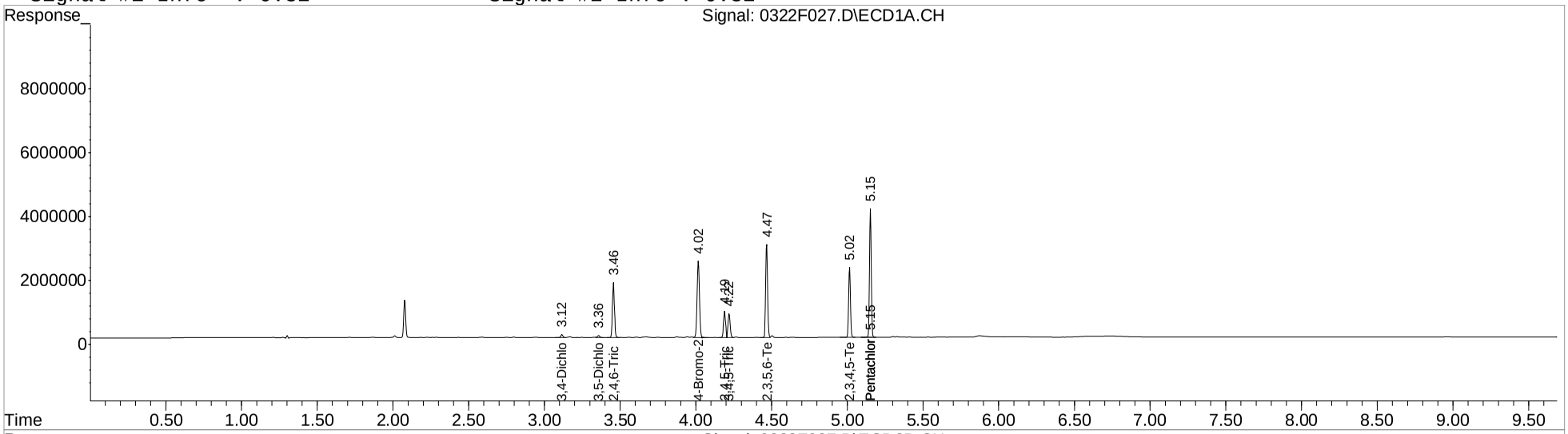
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

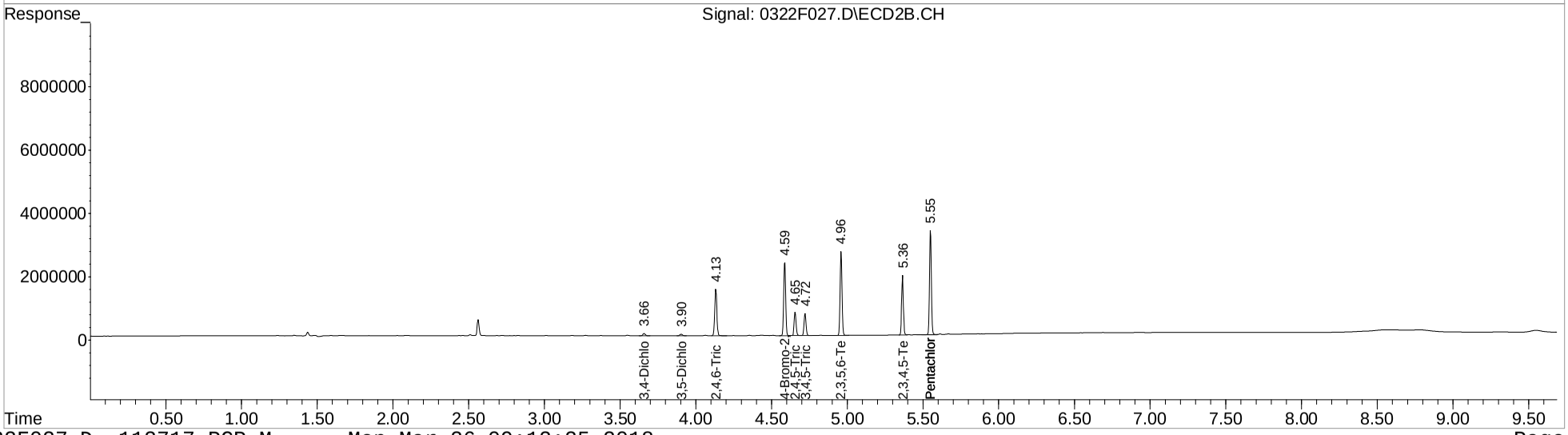
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F027.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032218B\0322F027.D\ECD2B.CH
Acq On : 22 Mar 2018 11:53 pm Operator: SMS
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:37 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F027.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032218B\0322F027.D\ECD2B.CH
Acq On : 22 Mar 2018 11:53 pm Operator: SMS
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:49 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

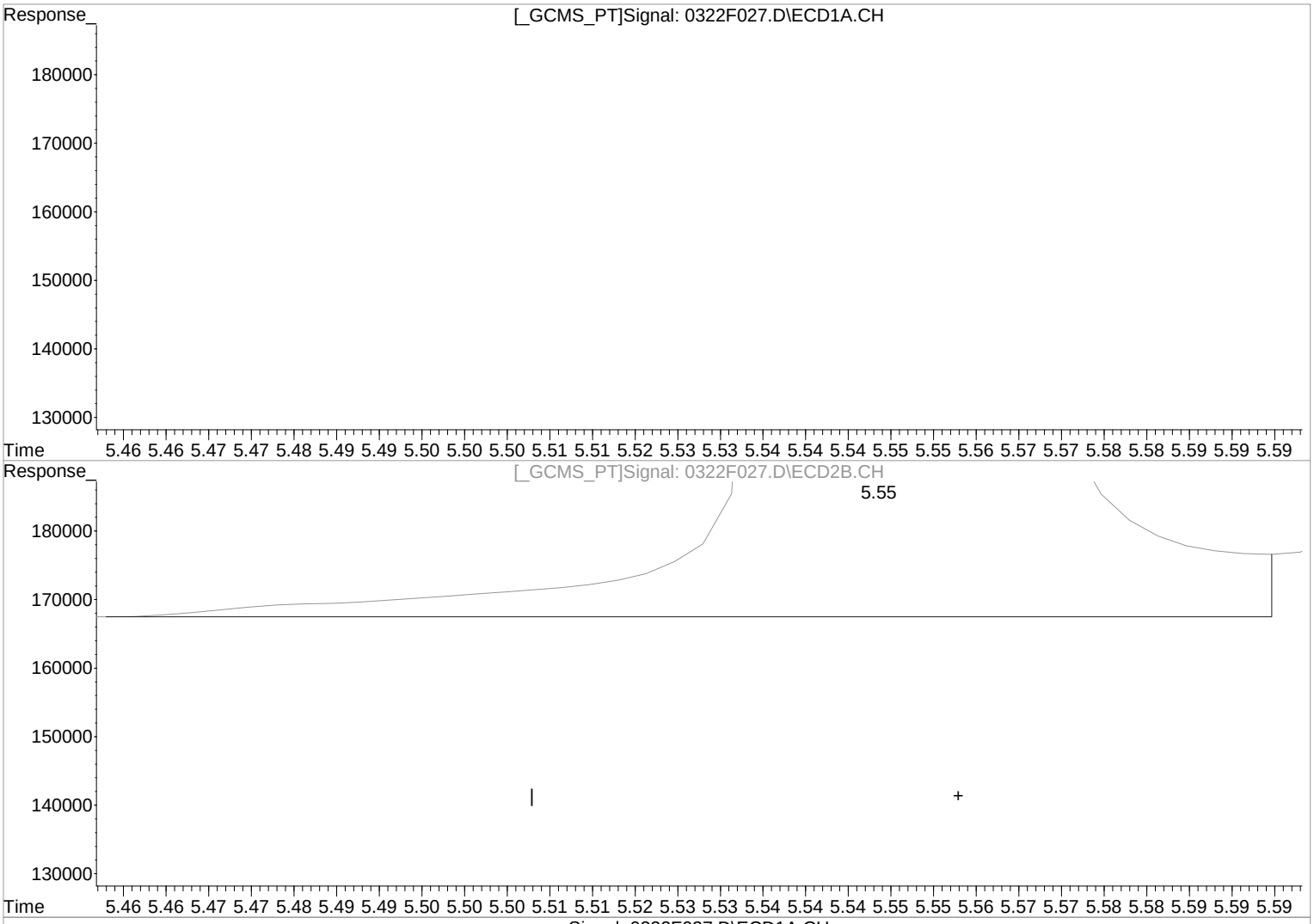
Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	25841612	20731078	53.532	57.504
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.66	853208	768442	49.123	46.818
2)		3,5-Dichlorophen	3.36	3.90	606014	594866	49.744	48.111
3)		2,4,6-Trichlorop	3.46	4.13	16528364	14656702	58.255	45.593
5)		2,4,5-Trichlorop	4.19	4.65	8011360	6767816	49.334	42.077
6)		3,4,5-Trichlorop	4.22	4.72	7231496	6264536	43.007	42.278
7)	M	2,3,5,6-Tetrachl	4.47	4.96	26312778	22944612	47.914	48.269
8)	M	2,3,4,5-Tetrachl	5.02	5.36	18141152	15717950	44.766	49.326
9)	M	Pentachloropheno	5.15	5.55	32464220	27950680	49.538	44.293m
10)		Pentachloroaniso	5.15	5.55	32464220	28123732	52.142	46.880

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : J:\GC28\DATA\032218B\0322F027.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032218B\0322F027.D\ECD2B.CH
Acq On : 22 Mar 2018 11:53 pm Operator: SMS
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration



Signal: 0322F027.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.15min 49.538ug/L

response 32464220

Manual Integration:

Before

03/23/18

(9) Pentachlorophenol #2 (M)

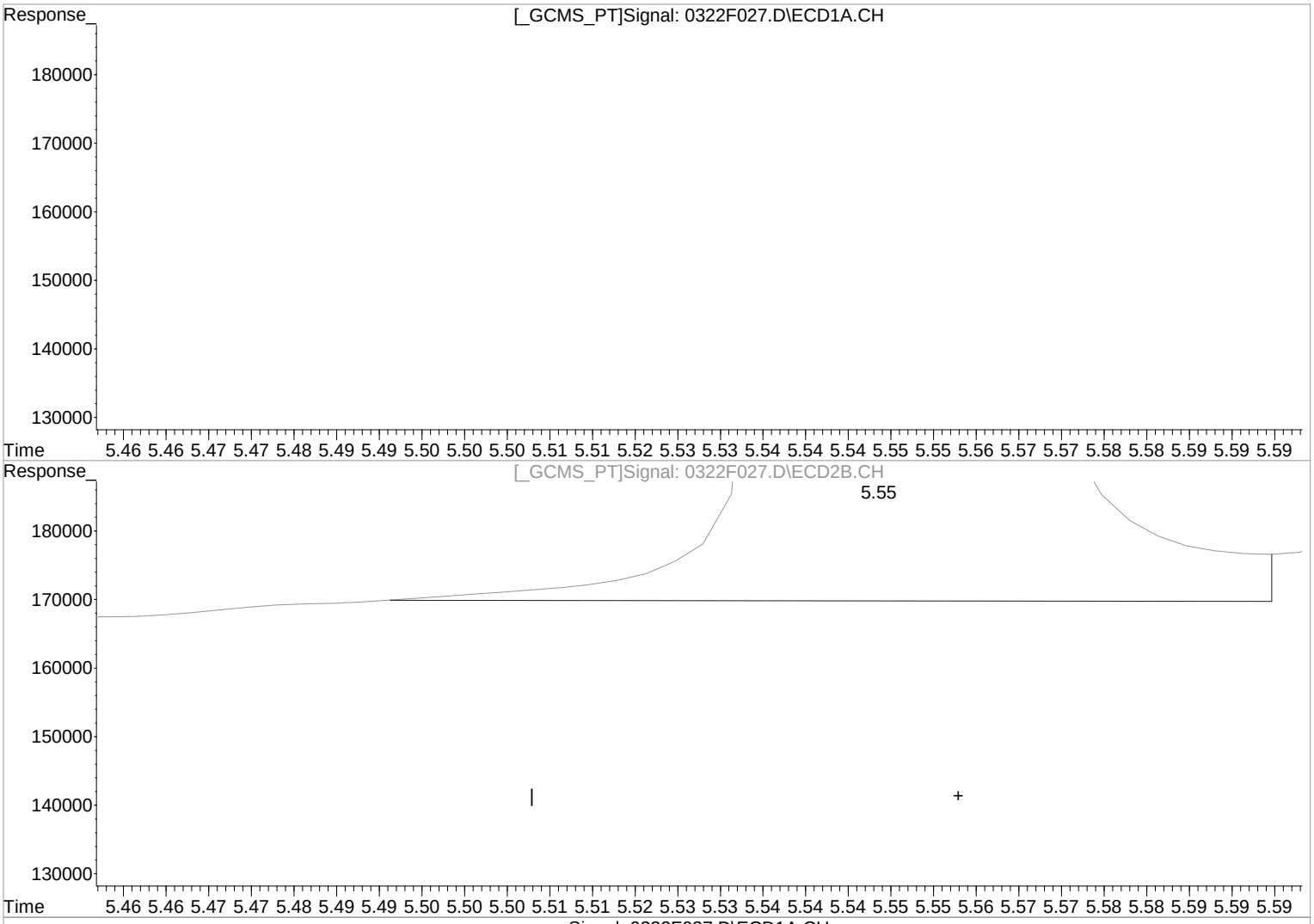
5.55min 44.567ug/L

response 28123732

(+) = Expected Retention Time

Signal #1 : J:\GC28\DATA\032218B\0322F027.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032218B\0322F027.D\ECD2B.CH
Acq On : 22 Mar 2018 11:53 pm Operator: SMS
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration



Signal: 0322F027.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.15min 49.538ug/L

response 32464220

Manual Integration:

After

Baseline/Shoulder

03/23/18

(9) Pentachlorophenol #2 (M)

5.55min 44.293ug/L m

response 27950680

(+) = Expected Retention Time

Exception Report

Data File: J:\GC28\DATA\032218B\0322F033.D
Lab ID: KWG1801591-7
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/23/2018 01:38
Date Quantitated: 03/23/2018 11:36
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F033.D\0322F033C.D
Lab ID: KWG1801591-7
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/23/2018 01:38
Date Quantitated: 03/23/2018 11:36
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F033.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F033.D\0322F033c.d			**Vial:**	1
Acqu Date:	03/23/2018 01:38	**Quant Date:**	03/23/2018 11:36	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801591-7				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/26/2018

Analysis Lot:	KWG1801591	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	25573166	20699562	52.98	57.42			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12		3.66		837342	754216	48.21	45.87			
3,5-Dichlorophenol	3.36		3.90		587256	591552	48.20	47.84			
2,4,6-Trichlorophenol	3.46		4.13		16213242	14511292	57.12	45.14			
2,4,5-Trichlorophenol	4.19		4.66		8034592	6792944	49.49	42.23			
3,4,5-Trichlorophenol	4.22		4.72		7104088	6301058	42.25	42.53			
2,3,5,6-Tetrachlorophenol	4.47		4.96		26237670	23028844	47.78	48.45			
2,3,4,5-Tetrachlorophenol	5.02		5.37		18153460	15940764	44.80	50.04			
Pentachlorophenol	5.16	c	5.56	c	32712666	28230202**m**	49.92	44.74			
2,3,4,5,6-Pentachloroanisole	5.16	c	5.56	c	32712666	28470902	52.54	47.46			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

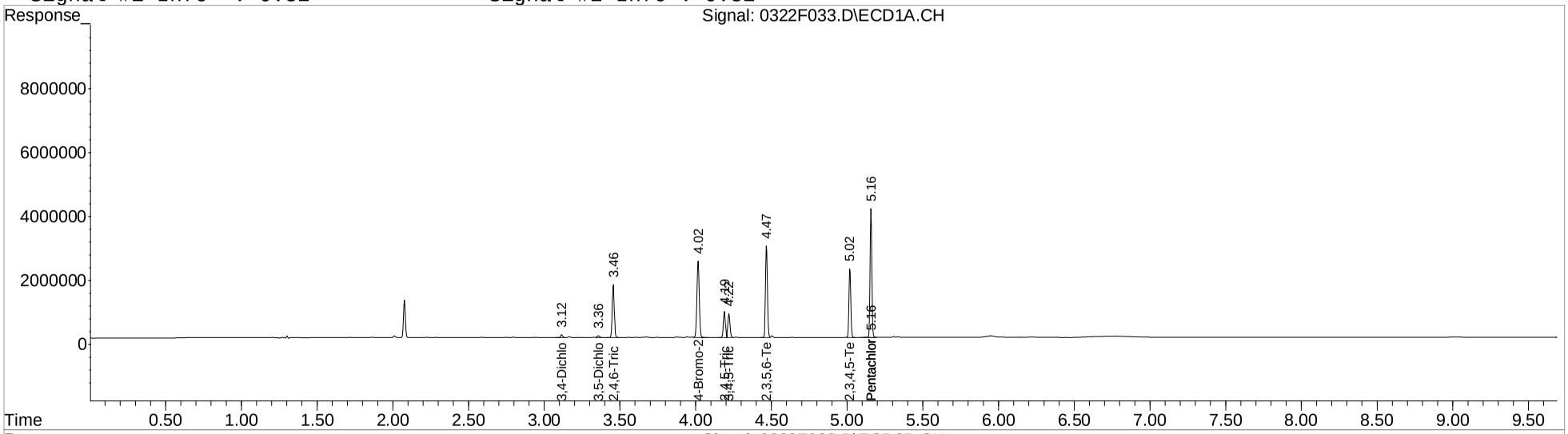
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

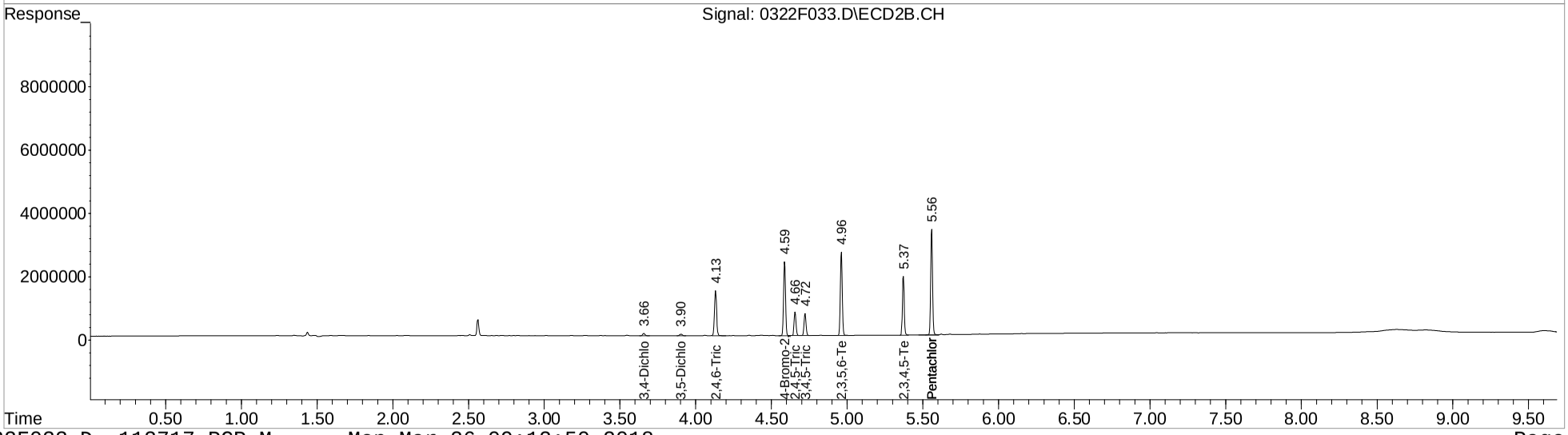
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F033.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032218B\0322F033.D\ECD2B.CH
Acq On : 23 Mar 2018 1:38 am Operator: SMS
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:36 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : J:\GC28\DATA\032218B\0322F033.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032218B\0322F033.D\ECD2B.CH
Acq On : 23 Mar 2018 1:38 am Operator: SMS
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:54 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

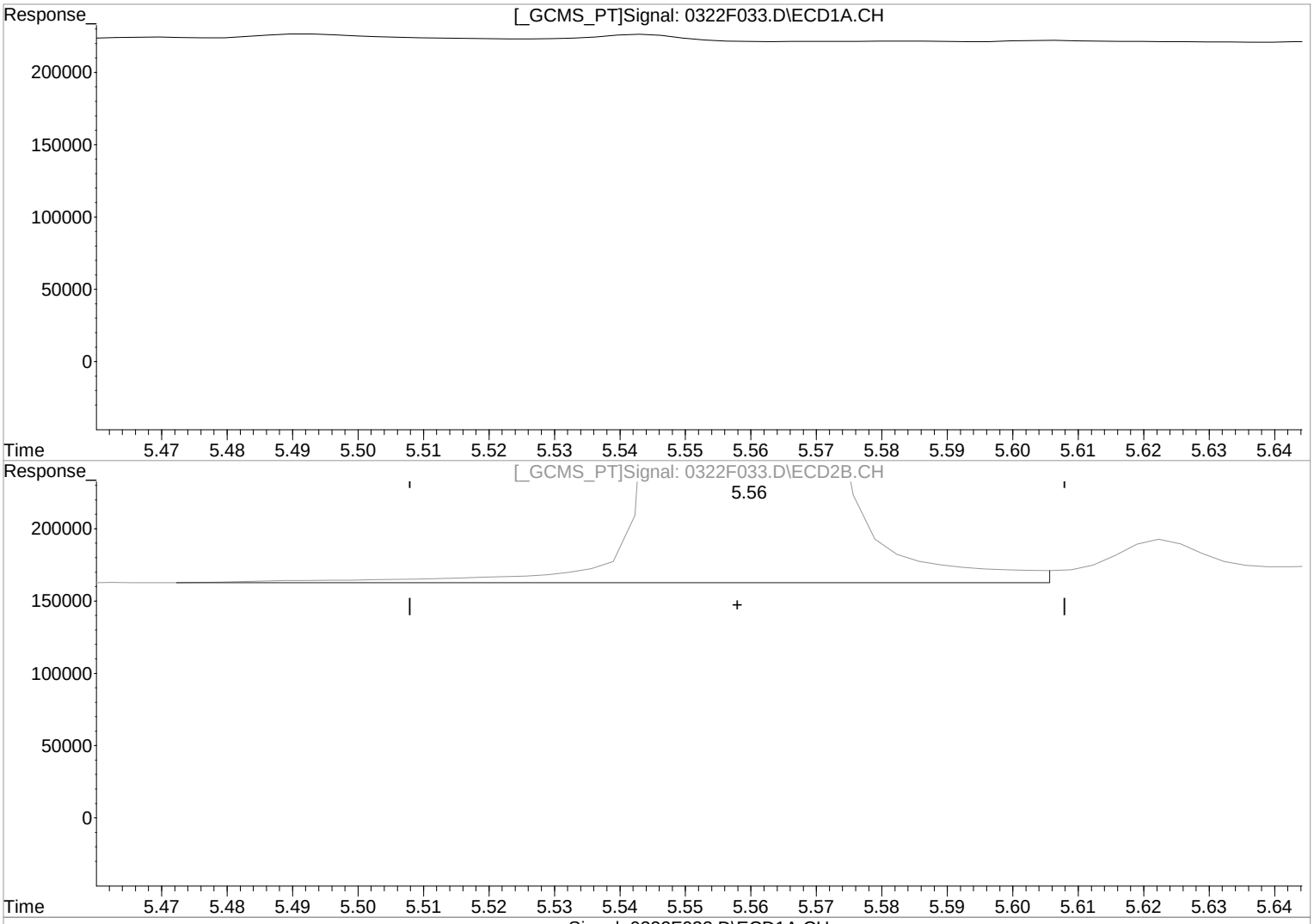
Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	25573166	20699562	52.976	57.417
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.66	837342	754216	48.209	45.874
2)		3,5-Dichlorophen	3.36	3.90	587256	591552	48.204	47.843
3)		2,4,6-Trichlorop	3.46	4.13	16213242	14511292	57.123	45.141
5)		2,4,5-Trichlorop	4.19	4.66	8034592	6792944	49.488	42.233
6)		3,4,5-Trichlorop	4.22	4.72	7104088	6301058	42.249	42.525
7)	M	2,3,5,6-Tetrachl	4.47	4.96	26237670	23028844	47.777	48.447
8)	M	2,3,4,5-Tetrachl	5.02	5.37	18153460	15940764	44.797	50.037
9)	M	Pentachloropheno	5.16	5.56	32712666	28230202	49.917	44.736m
10)		Pentachloroaniso	5.16	5.56	32712666	28470902	52.541	47.459

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : J:\GC28\DATA\032218B\0322F033.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032218B\0322F033.D\ECD2B.CH
Acq On : 23 Mar 2018 1:38 am Operator: SMS
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration



Signal: 0322F033.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 49.917ug/L

response 32712666

Manual Integration:

Before

03/23/18

(9) Pentachlorophenol #2 (M)

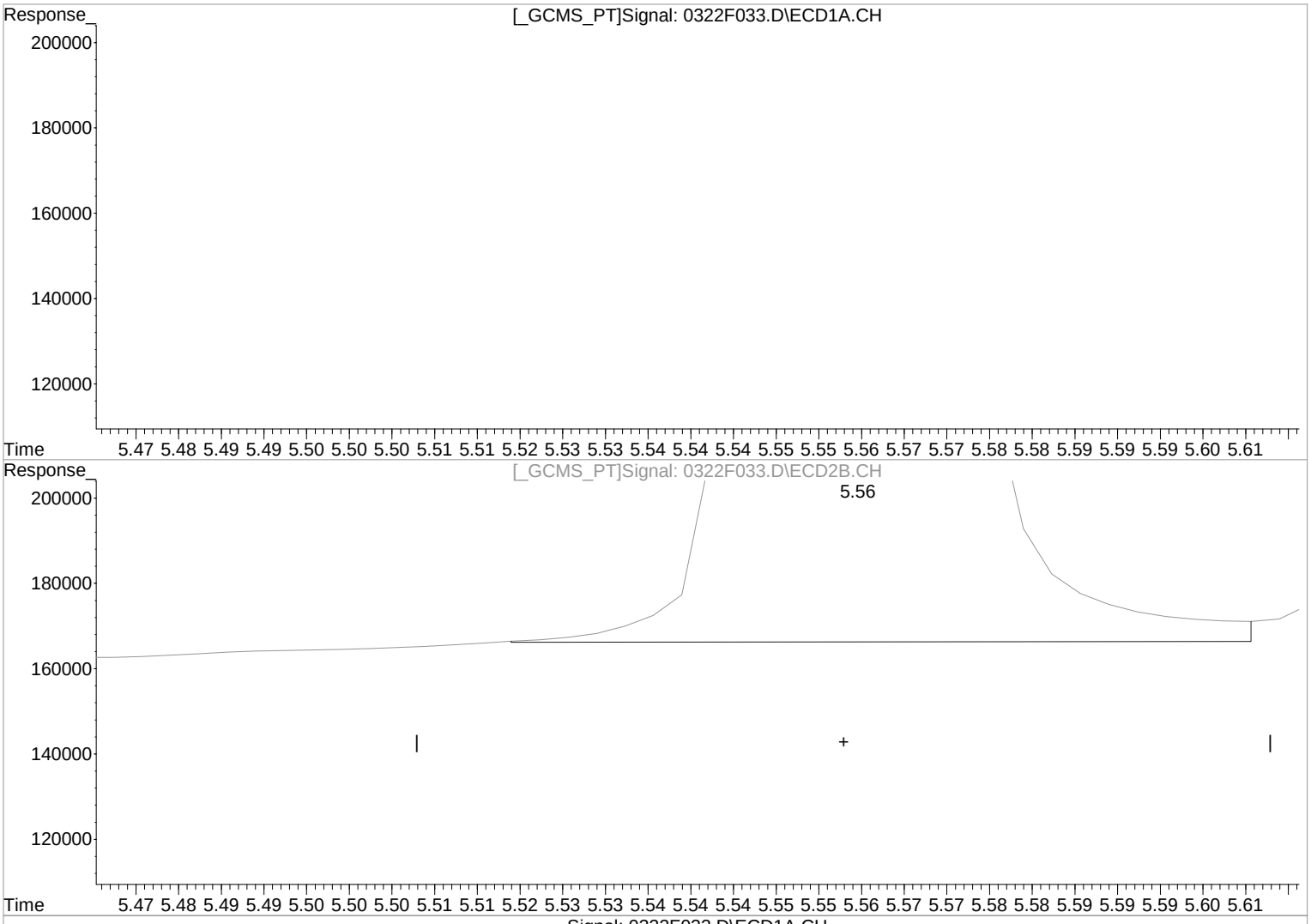
5.56min 45.117ug/L

response 28470902

(+) = Expected Retention Time

Signal #1 : J:\GC28\DATA\032218B\0322F033.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032218B\0322F033.D\ECD2B.CH
Acq On : 23 Mar 2018 1:38 am Operator: SMS
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration



Signal: 0322F033.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 49.917ug/L

response 32712666

Manual Integration:

After

Baseline/Shoulder

03/23/18

(9) Pentachlorophenol #2 (M)

5.56min 44.736ug/L m

response 28230202

(+) = Expected Retention Time

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F003.D
Lab ID: KWG1801645-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 09:43
Date Quantitated: 03/27/2018 10:49
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F003.D\0327F003C.D
Lab ID: KWG1801645-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 09:43
Date Quantitated: 03/27/2018 10:49
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F003.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F003.D\0327F003c.d			**Vial:**	1
Acqu Date:	03/27/2018 09:43	**Quant Date:**	03/27/2018 10:49	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-1				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	23828350	20738470	49.36	57.53			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11	3.65	790582	765182	45.52	46.60			
3,5-Dichlorophenol	3.35	3.90	560962	597696	46.05	48.34			
2,4,6-Trichlorophenol	3.45	4.13	15528248	14773054	54.66	45.96			
2,4,5-Trichlorophenol	4.18	4.65	7478448	6860336	45.82	42.65			
3,4,5-Trichlorophenol	4.21	4.71	6812120	6360928	40.51	42.93			
2,3,5,6-Tetrachlorophenol	4.46	4.96	24322208	23313636	44.29	49.05			
2,3,4,5-Tetrachlorophenol	5.01	5.37	17124760	16051332	42.26	50.39			
Pentachlorophenol	5.15 c	5.55 c	30338014	28673440	46.29	45.44			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.55 c	30338014	28673440	48.73	47.80			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F003.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F003.D\0327F003c.d			**Vial:**	1
Acqu Date:	03/27/2018 09:43	**Quant Date:**	03/27/2018 10:49	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-1				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	23828350	20738470	49.36	57.53			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11		3.65		790582	765182	45.52	46.60			
3,5-Dichlorophenol	3.35		3.90		560962	597696	46.05	48.34			
2,4,6-Trichlorophenol	3.45		4.13		15528248	14773054	54.66	45.96			
2,4,5-Trichlorophenol	4.18		4.65		7478448	6860336	45.82	42.65			
3,4,5-Trichlorophenol	4.21		4.71		6812120	6360928	40.51	42.93			
2,3,5,6-Tetrachlorophenol	4.46		4.96		24322208	23313636	44.29	49.05			
2,3,4,5-Tetrachlorophenol	5.01		5.37		17124760	16051332	42.26	50.39			
Pentachlorophenol	5.15	c	5.55	c	30338014	28673440	46.29	45.44			
2,3,4,5,6-Pentachloroanisole	5.15	c	5.55	c	30338014	28673440	48.73	47.80			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

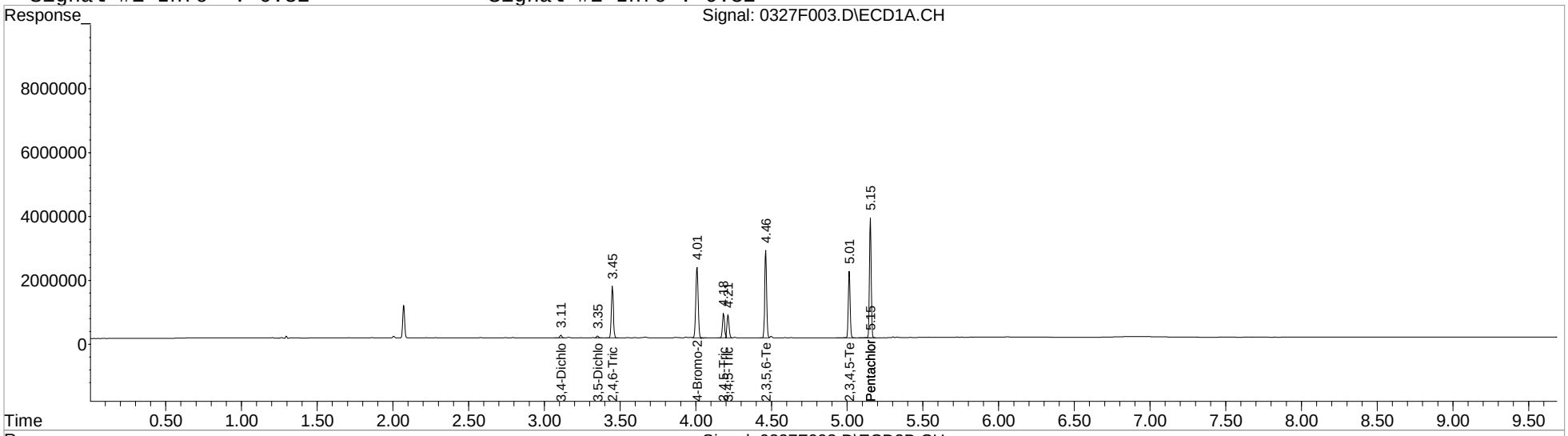
Quantitation Report (QT Reviewed)

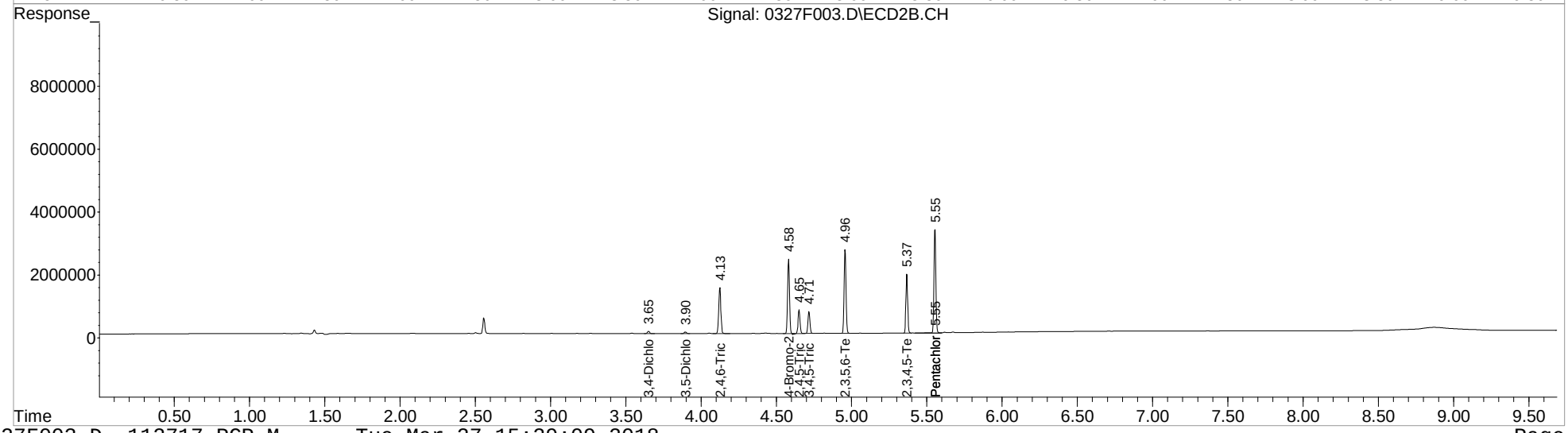
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F003.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032718\0327F003.D\ECD2B.CH
Acq On : 27 Mar 2018 9:43 am Operator: JD
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 10:49 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F003.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032718\0327F003.D\ECD2B.CH
Acq On : 27 Mar 2018 9:43 am Operator: JD
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 10:49:20 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.01	4.58	23828350	20738470	49.362	57.525
		Target Compounds						
1)		3,4-Dichlorophen	3.11	3.65	790582	765182	45.517	46.602
2)		3,5-Dichlorophen	3.35	3.90	560962	597696	46.046	48.340
3)		2,4,6-Trichlorop	3.45	4.13	15528248	14773054	54.664	45.955
5)		2,4,5-Trichlorop	4.18	4.65	7478448	6860336	45.815	42.652
6)		3,4,5-Trichlorop	4.21	4.71	6812120	6360928	40.513	42.929
7)	M	2,3,5,6-Tetrachl	4.46	4.96	24322208	23313636	44.289	49.046
8)	M	2,3,4,5-Tetrachl	5.01	5.37	17124760	16051332	42.258	50.390
9)	M	Pentachloropheno	5.15	5.55	30338014	28673440	46.293	45.438
10)		Pentachloroaniso	5.15	5.55	30338014	28673440	48.727	47.797

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JAD 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F013.D
Lab ID: KWG1801645-3
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 13:19
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JAD 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F013.D\0327F013C.D
Lab ID: KWG1801645-3
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 13:19
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F013.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F013.D\0327F013c.d			**Vial:**	1
Acqu Date:	03/27/2018 13:19	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-3				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.58	23416050	19478526	48.51	54.03			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12	3.65	801880	746718	46.17	45.38			
3,5-Dichlorophenol	3.36	3.90	567888	575102	46.61	46.51			
2,4,6-Trichlorophenol	3.46	4.13	15444558	14011570	54.36	43.59			
2,4,5-Trichlorophenol	4.19	4.65	7477156	6473214	45.81	40.25			
3,4,5-Trichlorophenol	4.22	4.72	6719844	6002988	39.96	40.51			
2,3,5,6-Tetrachlorophenol	4.47	4.96	23817160	21692100	43.37	45.63			
2,3,4,5-Tetrachlorophenol	5.02	5.37	17070250	15145666	42.12	47.50			
Pentachlorophenol	5.16 c	5.56 c	30271840	26851466	46.19	42.55			
2,3,4,5,6-Pentachloroanisole	5.16 c	5.56 c	30271840	26851466	48.62	44.76			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F013.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F013.D\0327F013c.d			**Vial:**	1
Acqu Date:	03/27/2018 13:19	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-3				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:		**Method ID:**	MJ252
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.58	23416050	19478526	48.51	54.03			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12	3.65	801880	746718	46.17	45.38			
3,5-Dichlorophenol	3.36	3.90	567888	575102	46.61	46.51			
2,4,6-Trichlorophenol	3.46	4.13	15444558	14011570	54.36	43.59			
2,4,5-Trichlorophenol	4.19	4.65	7477156	6473214	45.81	40.25			
3,4,5-Trichlorophenol	4.22	4.72	6719844	6002988	39.96	40.51			
2,3,5,6-Tetrachlorophenol	4.47	4.96	23817160	21692100	43.37	45.63			
2,3,4,5-Tetrachlorophenol	5.02	5.37	17070250	15145666	42.12	47.50			
Pentachlorophenol	5.16 c	5.56 c	30271840	26851466	46.19	42.55			
2,3,4,5,6-Pentachloroanisole	5.16 c	5.56 c	30271840	26851466	48.62	44.76			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

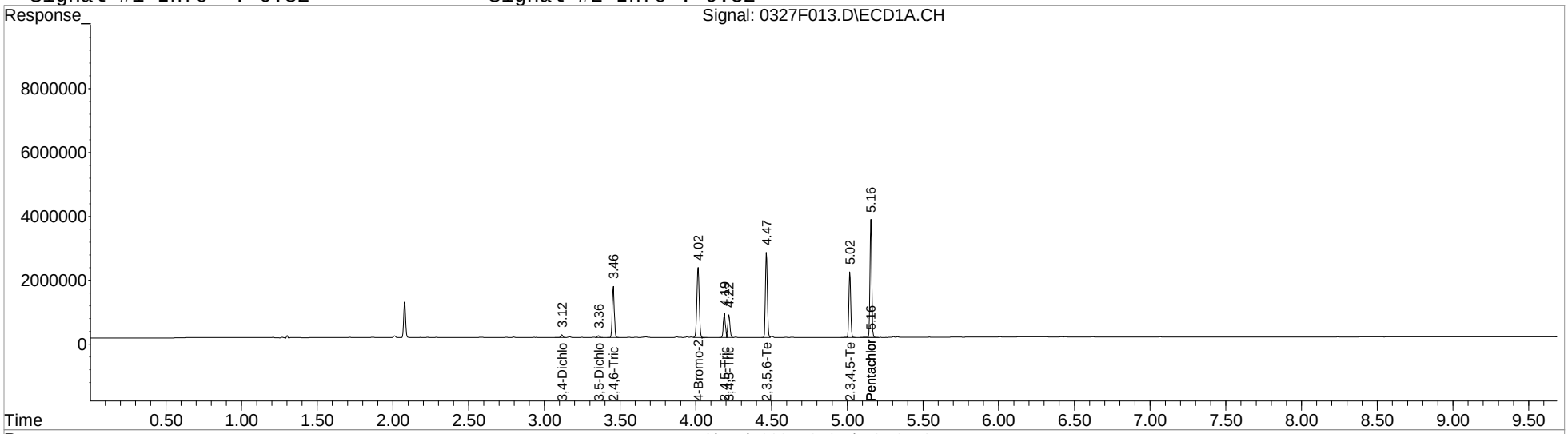
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

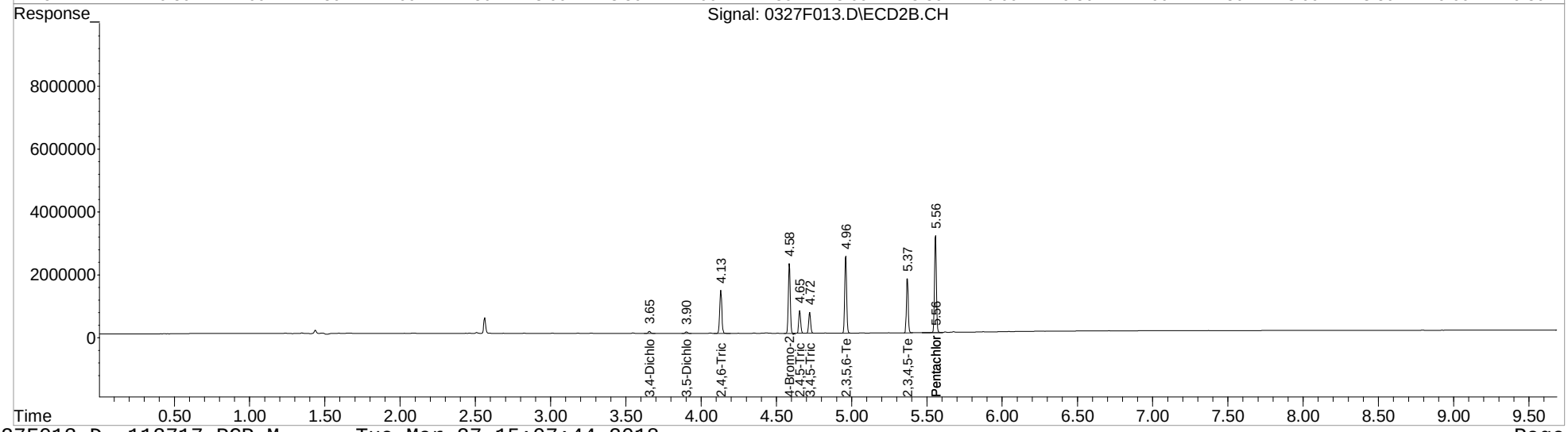
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F013.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032718\0327F013.D\ECD2B.CH
Acq On : 27 Mar 2018 1:19 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (Not Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F013.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032718\0327F013.D\ECD2B.CH
Acq On : 27 Mar 2018 1:19 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:25 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.58	23416050	19478526	48.508	54.030
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.65	801880	746718	46.168	45.377
2)		3,5-Dichlorophen	3.36	3.90	567888	575102	46.614	46.513
3)		2,4,6-Trichlorop	3.46	4.13	15444558	14011570	54.364	43.587
5)		2,4,5-Trichlorop	4.19	4.65	7477156	6473214	45.806	40.245
6)		3,4,5-Trichlorop	4.22	4.72	6719844	6002988	39.964	40.513
7)	M	2,3,5,6-Tetrachl	4.47	4.96	23817160	21692100	43.369	45.634
8)	M	2,3,4,5-Tetrachl	5.02	5.37	17070250	15145666	42.124	47.501
9)	M	Pentachloropheno	5.16	5.56	30271840	26851466	46.192	42.551
10)		Pentachloroaniso	5.16	5.56	30271840	26851466	48.621	44.759

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F025.D
Lab ID: KWG1801645-5
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 16:48
Date Quantitated: 03/28/2018 09:15
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F025.D\0327F025C.D
Lab ID: KWG1801645-5
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 16:48
Date Quantitated: 03/28/2018 09:15
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F025.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F025.D\0327F025c.d			**Vial:**	1
Acqu Date:	03/27/2018 16:48	**Quant Date:**	03/28/2018 09:15	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-5				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.59	23293866	19251978	48.26	53.40			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11	3.66	797947	735572	45.94	44.64			
3,5-Dichlorophenol	3.36	3.90	563436	577010	46.25	46.67			
2,4,6-Trichlorophenol	3.45	4.13	15361167	13853992	54.07	43.10			
2,4,5-Trichlorophenol	4.19	4.65	7391880	6424488	45.25	39.94			
3,4,5-Trichlorophenol	4.22	4.72	6756083	5956676	40.18	40.20			
2,3,5,6-Tetrachlorophenol	4.47	4.96	23657350	21342494	43.08	44.90			
2,3,4,5-Tetrachlorophenol	5.01	5.37	17094912	14995052	42.19	47.02			
Pentachlorophenol	5.15 c	5.55 c	30177046	26031840**m**	46.05	41.25			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.55 c	30177046	26594791	48.47	44.33			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F025.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F025.D\0327F025c.d			**Vial:**	1
Acqu Date:	03/27/2018 16:48	**Quant Date:**	03/28/2018 09:15	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-5				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.59	23293866	19251978	48.26	53.40			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11	3.66	797947	735572	45.94	44.64			
3,5-Dichlorophenol	3.36	3.90	563436	577010	46.25	46.67			
2,4,6-Trichlorophenol	3.45	4.13	15361167	13853992	54.07	43.10			
2,4,5-Trichlorophenol	4.19	4.65	7391880	6424488	45.25	39.94			
3,4,5-Trichlorophenol	4.22	4.72	6756083	5956676	40.18	40.20			
2,3,5,6-Tetrachlorophenol	4.47	4.96	23657350	21342494	43.08	44.90			
2,3,4,5-Tetrachlorophenol	5.01	5.37	17094912	14995052	42.19	47.02			
Pentachlorophenol	5.15 c	5.55 c	30177046	26031840**m**	46.05	41.25			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.55 c	30177046	26594791	48.47	44.33			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F025.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 4:48 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:15:50 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.015	4.587	23293866	19251978	48.255	53.402
		Target Compounds						
1)		3,4-Dichl...	3.115	3.657	797947	735572	45.941	44.640
2)		3,5-Dichl...	3.358	3.904	563436	577010	46.249	46.667
3)		2,4,6-Tri...	3.455	4.131	15361167	13853992	54.065	43.096
5)		2,4,5-Tri...	4.188	4.654	7391880	6424488	45.246	39.942
6)		3,4,5-Tri...	4.218	4.721	6756083	5956676	40.179	40.201
7)	M	2,3,5,6-T...	4.468	4.961	23657350	21342494	43.078	44.899
8)	M	2,3,4,5-T...	5.015	5.367	17094912	14995052	42.185	47.021
9)	M	Pentachlo...	5.155	5.554	30177046	26031840	46.047	41.252m
10)		Pentachlo...	5.155	5.554	30177046	26594791	48.469	44.332

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

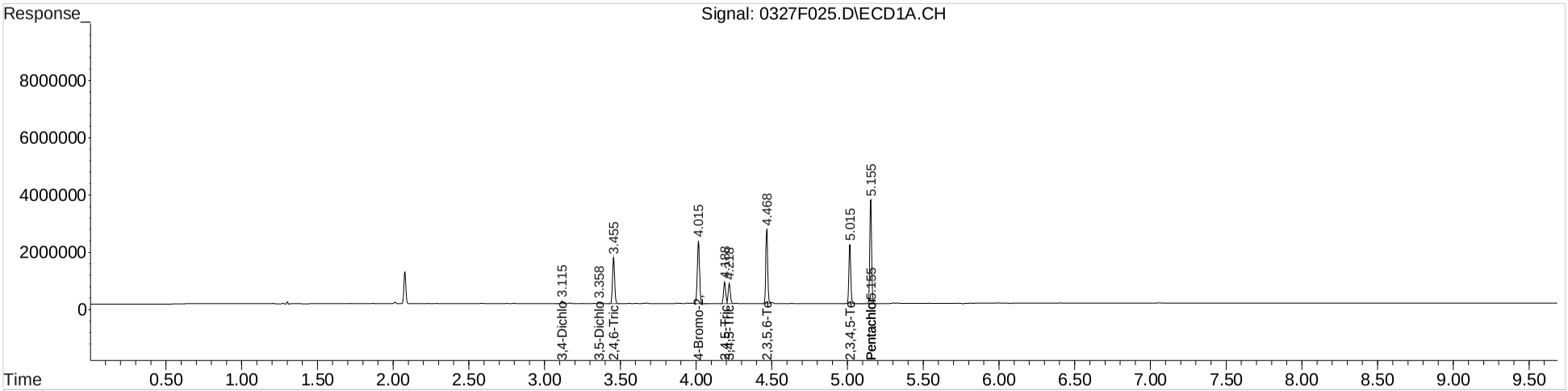
Quantitation Report (QT Reviewed)

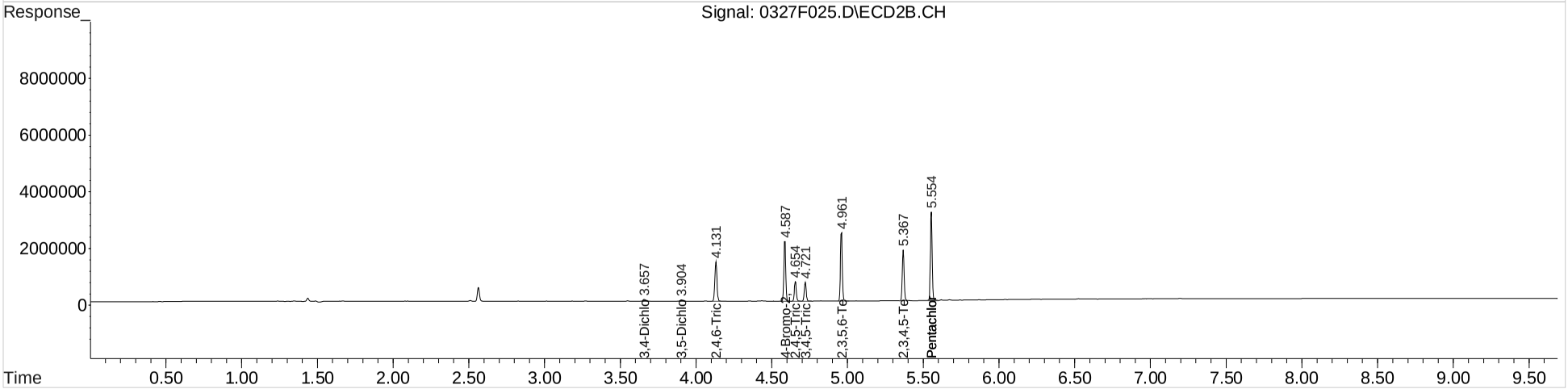
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F025.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 4:48 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:15:50 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





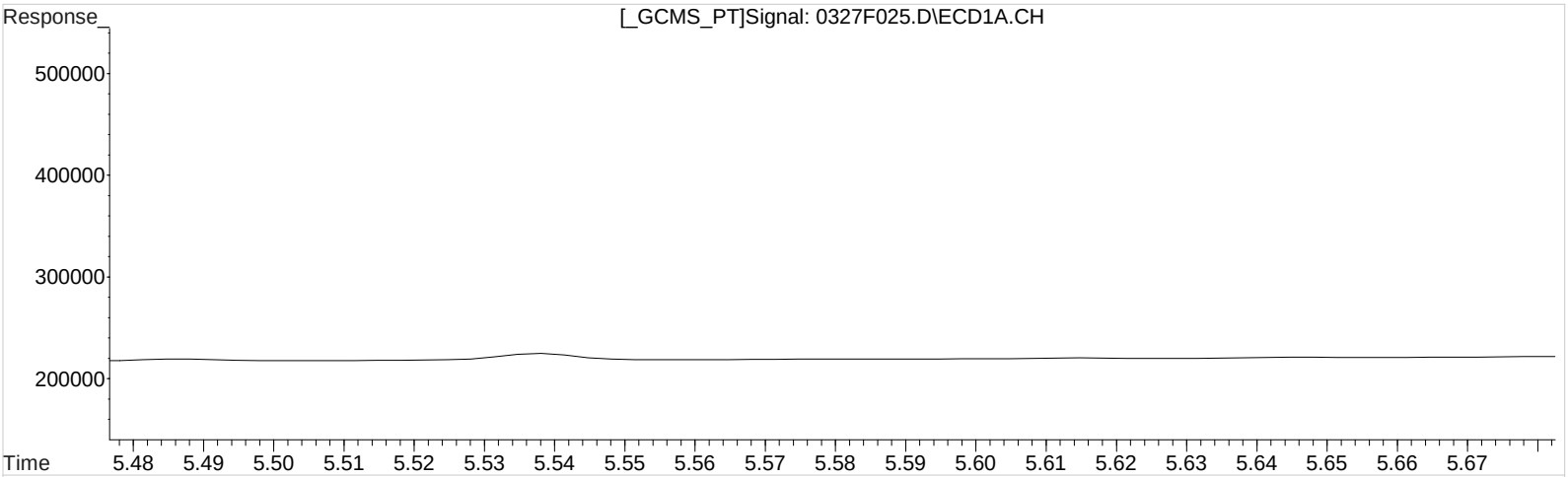
Quantitation Report (Qedit)

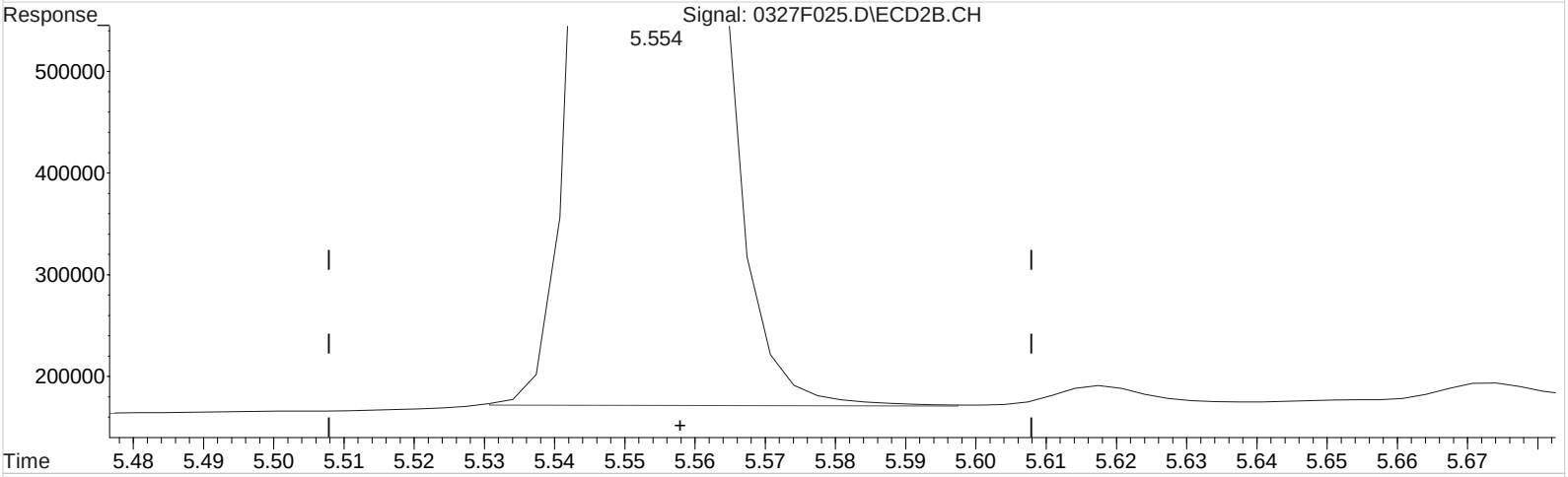
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F025.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 4:48 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:15:50 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.155min 46.047 ug/L

response 30177046

Manual Integration:

After

After/No before

03/28/18

(9) Pentachlorophenol #2 (M)

5.554min 41.252 ug/L m

response 26031840

(+) = Expected Retention Time

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F039.D
Lab ID: KWG1801645-7
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 20:54
Date Quantitated: 03/28/2018 11:19
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F039.D\0327F039C.D
Lab ID: KWG1801645-7
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 20:54
Date Quantitated: 03/28/2018 11:19
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F039.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F039.D\0327F039c.d			**Vial:**	1
Acqu Date:	03/27/2018 20:54	**Quant Date:**	03/28/2018 11:19	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-7				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	23829714	19735270	49.37	54.74			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12	3.66	813946	744524	46.86	45.23			
3,5-Dichlorophenol	3.36	3.90	570390	580631	46.82	46.96			
2,4,6-Trichlorophenol	3.46	4.13	15691252	14189490	55.25	44.14			
2,4,5-Trichlorophenol	4.19	4.66	7405974	6539658	45.34	40.66			
3,4,5-Trichlorophenol	4.22	4.72	6974102	6068028	41.48	40.95			
2,3,5,6-Tetrachlorophenol	4.47	4.96	24230272	21934696	44.12	46.15			
2,3,4,5-Tetrachlorophenol	5.01	5.37	17354568	15303823	42.83	48.01			
Pentachlorophenol	5.15 c	5.55 c	30700108	26608405**m**	46.85	42.17			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.55 c	30700108	27974040	49.31	46.63			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F039.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F039.D\0327F039c.d			**Vial:**	1
Acqu Date:	03/27/2018 20:54	**Quant Date:**	03/28/2018 11:19	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-7				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	23829714	19735270	49.37	54.74			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12	3.66	813946	744524	46.86	45.23			
3,5-Dichlorophenol	3.36	3.90	570390	580631	46.82	46.96			
2,4,6-Trichlorophenol	3.46	4.13	15691252	14189490	55.25	44.14			
2,4,5-Trichlorophenol	4.19	4.66	7405974	6539658	45.34	40.66			
3,4,5-Trichlorophenol	4.22	4.72	6974102	6068028	41.48	40.95			
2,3,5,6-Tetrachlorophenol	4.47	4.96	24230272	21934696	44.12	46.15			
2,3,4,5-Tetrachlorophenol	5.01	5.37	17354568	15303823	42.83	48.01			
Pentachlorophenol	5.15 c	5.55 c	30700108	26608405**m**	46.85	42.17			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.55 c	30700108	27974040	49.31	46.63			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F039.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 8:54 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 11:19:29 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.016	4.586	23829714	19735270	49.365	54.742
		Target Compounds						
1)		3,4-Dichl...	3.116	3.656	813946	744524	46.862	45.232
2)		3,5-Dichl...	3.356	3.902	570390	580631	46.820	46.960
3)		2,4,6-Tri...	3.456	4.129	15691252	14189490	55.250	44.140
5)		2,4,5-Tri...	4.190	4.656	7405974	6539658	45.338	40.658
6)		3,4,5-Tri...	4.220	4.719	6974102	6068028	41.476	40.952
7)	M	2,3,5,6-T...	4.466	4.959	24230272	21934696	44.122	46.145
8)	M	2,3,4,5-T...	5.013	5.366	17354568	15303823	42.825	48.006
9)	M	Pentachlo...	5.153	5.552	30700108	26608405	46.846	42.166m
10)		Pentachlo...	5.153	5.552	30700108	27974040	49.309	46.631

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

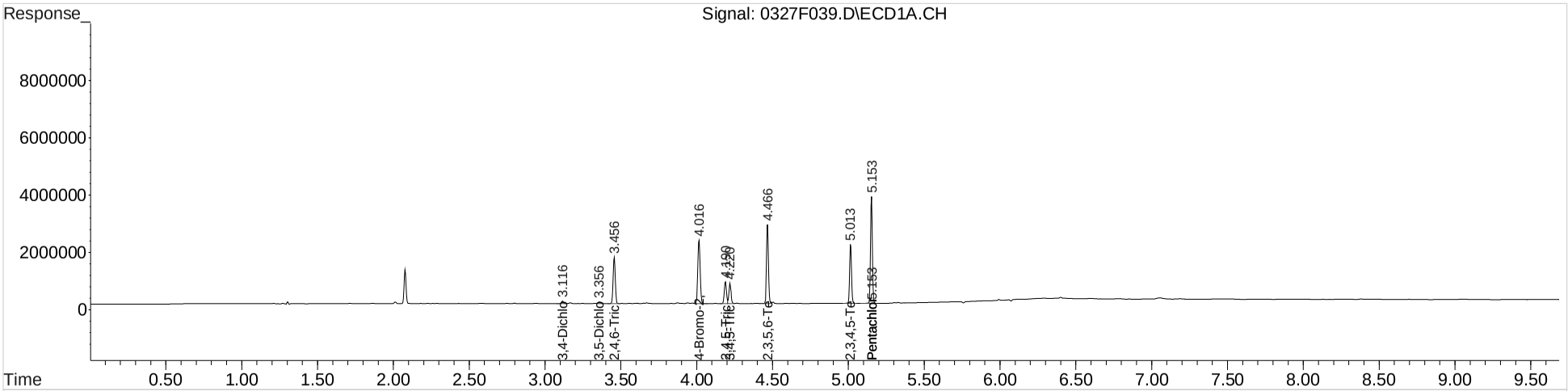
Quantitation Report (QT Reviewed)

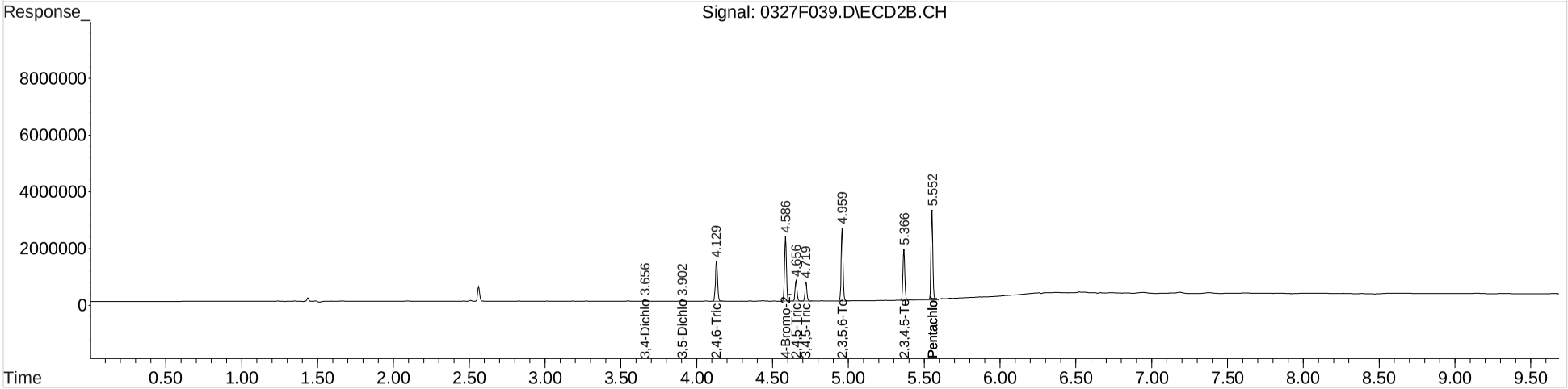
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F039.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 8:54 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 11:19:29 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





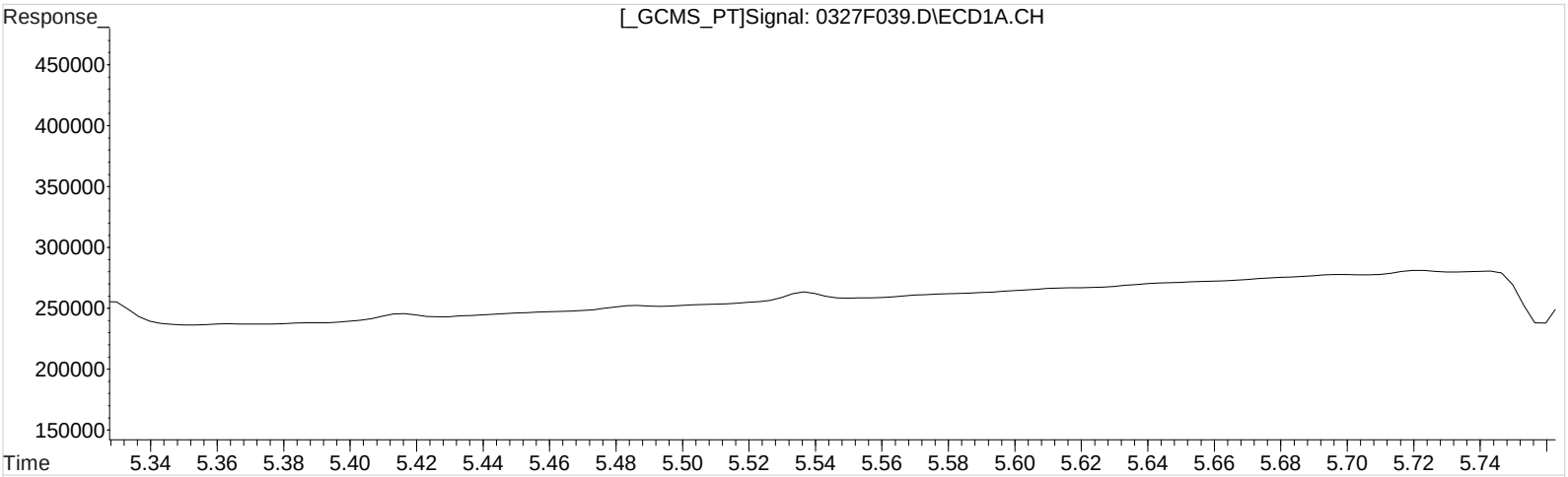
Quantitation Report (Qedit)

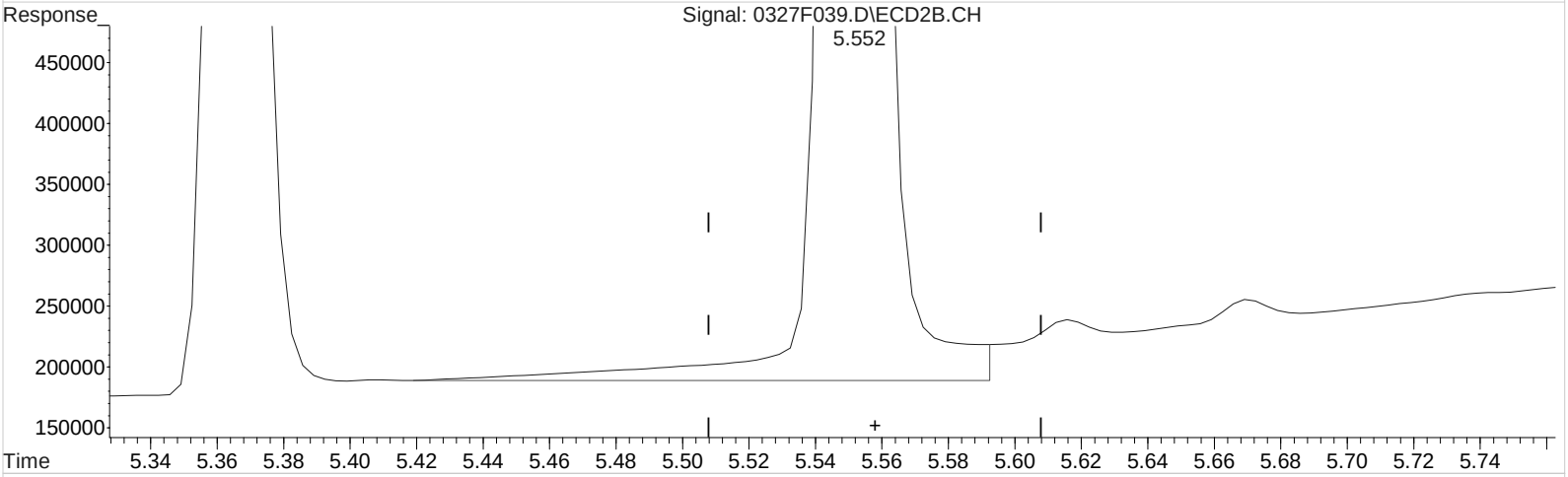
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F039.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 8:54 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:45:56 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.153min 46.846 ug/L

response 30700108

Manual Integration:

Before

03/28/18

(9) Pentachlorophenol #2 (M)

5.552min 44.330 ug/L

response 27974040

(+) = Expected Retention Time

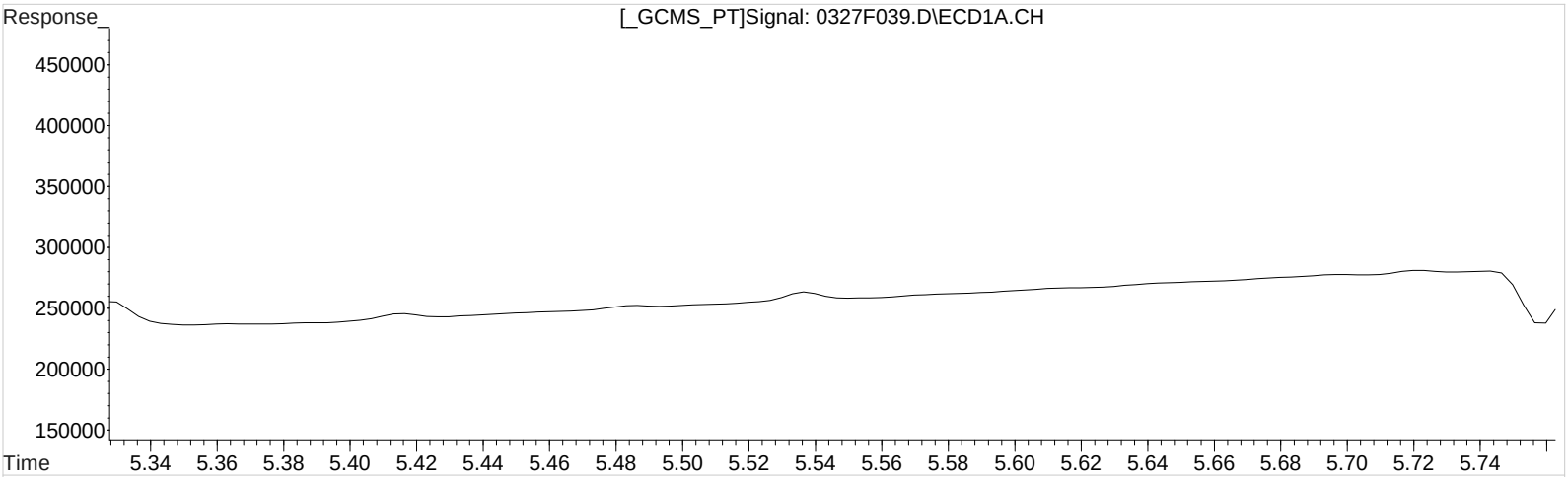
Quantitation Report (Qedit)

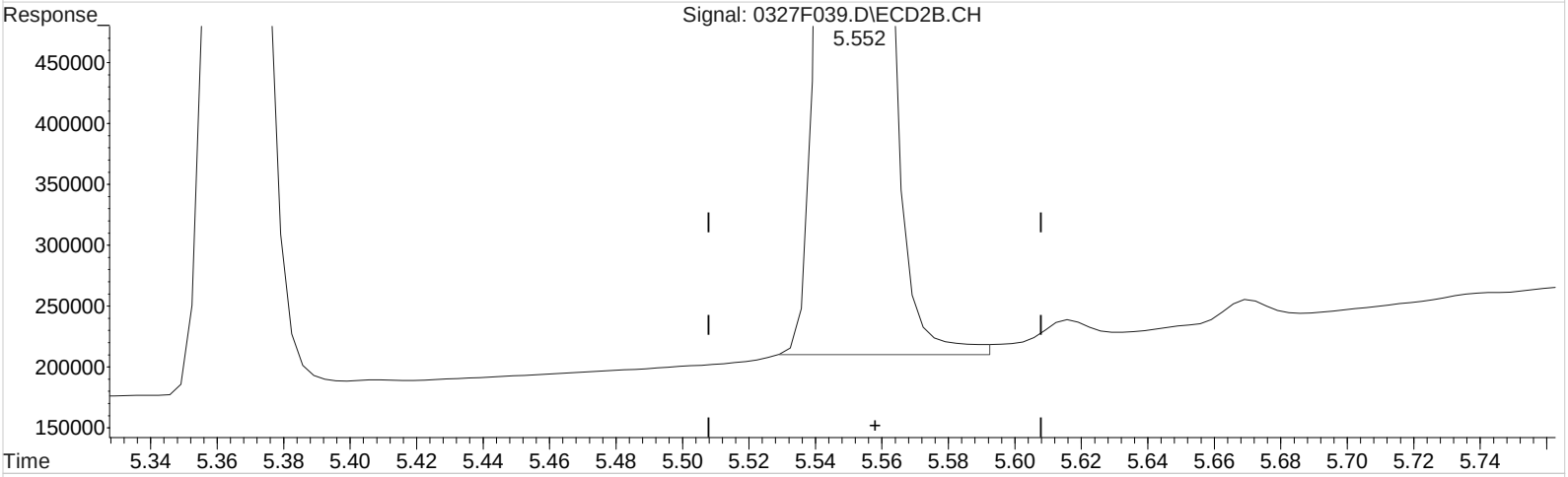
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F039.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 8:54 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:45:56 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.153min 46.846 ug/L

response 30700108

Manual Integration:

After

Baseline/Shoulder

03/28/18

(9) Pentachlorophenol #2 (M)

5.552min 42.166 ug/L m

response 26608405

(+) = Expected Retention Time

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F049.D
Lab ID: KWG1801645-9
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 23:50
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F049.D\0327F049C.D
Lab ID: KWG1801645-9
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 23:50
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F049.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F049.D\0327F049c.d			**Vial:**	1
Acqu Date:	03/27/2018 23:50	**Quant Date:**	03/28/2018 08:46	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-9				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	24685686	20428887	51.14	56.67			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12	3.66	853675	781602	49.15	47.69			
3,5-Dichlorophenol	3.36	3.90	602270	602434	49.44	48.72			
2,4,6-Trichlorophenol	3.46	4.13	16350218	14713326	57.62	45.77			
2,4,5-Trichlorophenol	4.19	4.66	7637508	6720018	46.86	41.78			
3,4,5-Trichlorophenol	4.22	4.72	7214784	6238756	42.91	42.10			
2,3,5,6-Tetrachlorophenol	4.47	4.96	24924013	22609249	45.39	47.56			
2,3,4,5-Tetrachlorophenol	5.01	5.37	17786400	15612392	43.89	48.99			
Pentachlorophenol	5.15 c	5.55 c	31399224	27900024	47.91	44.21			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.55 c	31399224	27900024	50.43	46.51			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F049.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F049.D\0327F049c.d			**Vial:**	1
Acqu Date:	03/27/2018 23:50	**Quant Date:**	03/28/2018 08:46	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-9				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	24685686	20428887	51.14	56.67			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12	3.66	853675	781602	49.15	47.69			
3,5-Dichlorophenol	3.36	3.90	602270	602434	49.44	48.72			
2,4,6-Trichlorophenol	3.46	4.13	16350218	14713326	57.62	45.77			
2,4,5-Trichlorophenol	4.19	4.66	7637508	6720018	46.86	41.78			
3,4,5-Trichlorophenol	4.22	4.72	7214784	6238756	42.91	42.10			
2,3,5,6-Tetrachlorophenol	4.47	4.96	24924013	22609249	45.39	47.56			
2,3,4,5-Tetrachlorophenol	5.01	5.37	17786400	15612392	43.89	48.99			
Pentachlorophenol	5.15 c	5.55 c	31399224	27900024	47.91	44.21			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.55 c	31399224	27900024	50.43	46.51			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F049.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 11:50 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:26 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.017	4.586	24685686	20428887	51.138	56.666
		Target Compounds						
1)		3,4-Dichl...	3.117	3.660	853675	781602	49.150	47.693
2)		3,5-Dichl...	3.360	3.903	602270	602434	49.436	48.723
3)		2,4,6-Tri...	3.457	4.130	16350218	14713326	57.615	45.770
5)		2,4,5-Tri...	4.190	4.656	7637508	6720018	46.862	41.780
6)		3,4,5-Tri...	4.220	4.720	7214784	6238756	42.907	42.104
7)	M	2,3,5,6-T...	4.467	4.960	24924013	22609249	45.385	47.564
8)	M	2,3,4,5-T...	5.014	5.366	17786400	15612392	43.891	48.990
9)	M	Pentachlo...	5.154	5.553	31399224	27900024	47.912	44.213
10)		Pentachlo...	5.154	5.553	31399224	27900024	50.432	46.507

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

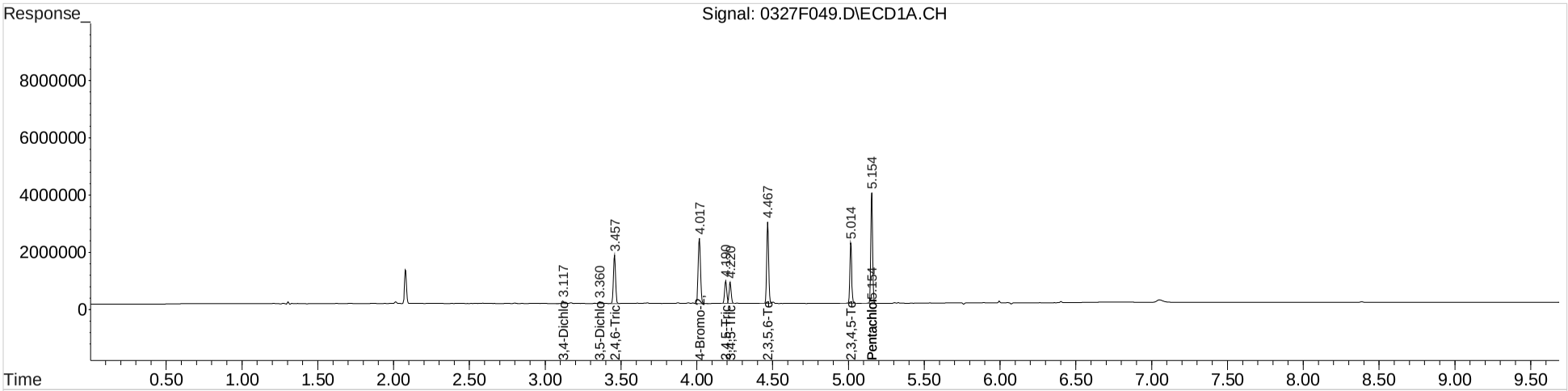
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F049.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 11:50 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:26 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



Exception Report

Data File: J:\GC28\DATA\032218B\0322F004.D
Lab ID: KWG1801591-2
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/22/2018 17:11
Date Quantitated: 03/23/2018 11:42
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F004.D\0322F004C.D
Lab ID: KWG1801591-2
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/22/2018 17:11
Date Quantitated: 03/23/2018 11:42
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F004.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F004.D\0322F004c.d			**Vial:**	2
Acqu Date:	03/22/2018 17:11	**Quant Date:**	03/23/2018 11:42	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801591-2				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/26/2018

Analysis Lot:	KWG1801591	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	3.99		60066	0	0.1240	0.0000			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.09		17522	0	1.01	0.0000			
3,5-Dichlorophenol	3.36	3.90	7448	8454	0.6110	0.6840			
2,4,6-Trichlorophenol		4.14	5242	35636	0.0000	0.1110			
2,4,5-Trichlorophenol		4.64	0	44878	0.0000	0.2790			
3,4,5-Trichlorophenol		4.72	0	42670	0.0000	0.2880			
2,3,5,6-Tetrachlorophenol	4.44	4.92	45812	73856	0.0830	0.1550			
2,3,4,5-Tetrachlorophenol	4.99		5638	7866	0.0140	0.0000			
Pentachlorophenol	5.15	5.55	44032**m**	27212**m**	0.0670	0.0430			
2,3,4,5,6-Pentachloroanisole	5.13	5.54	47838	356608	0.0770	0.5940			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

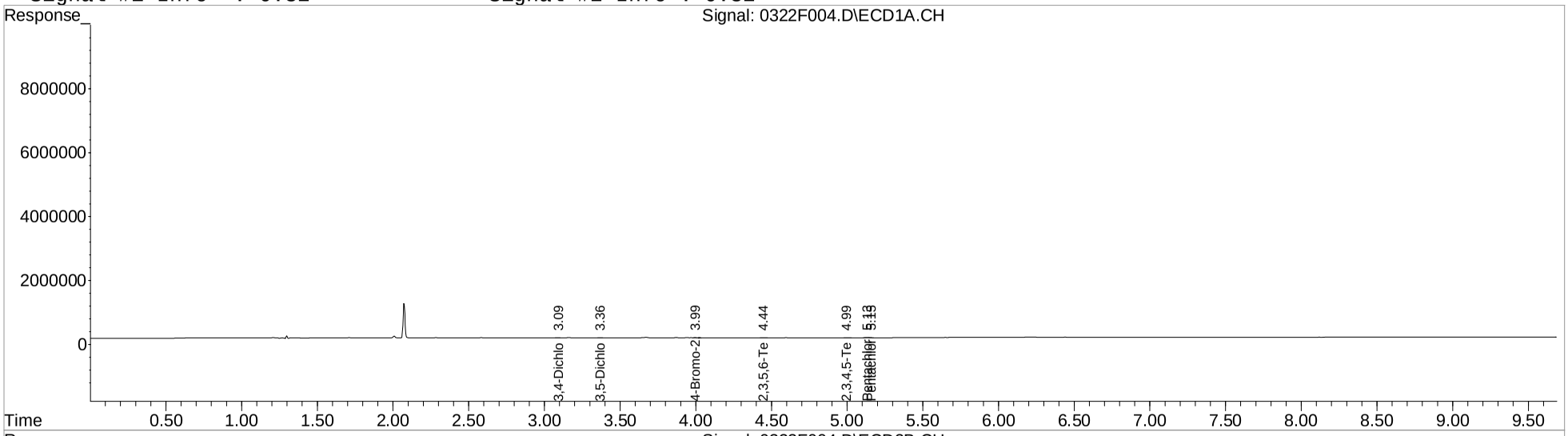
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

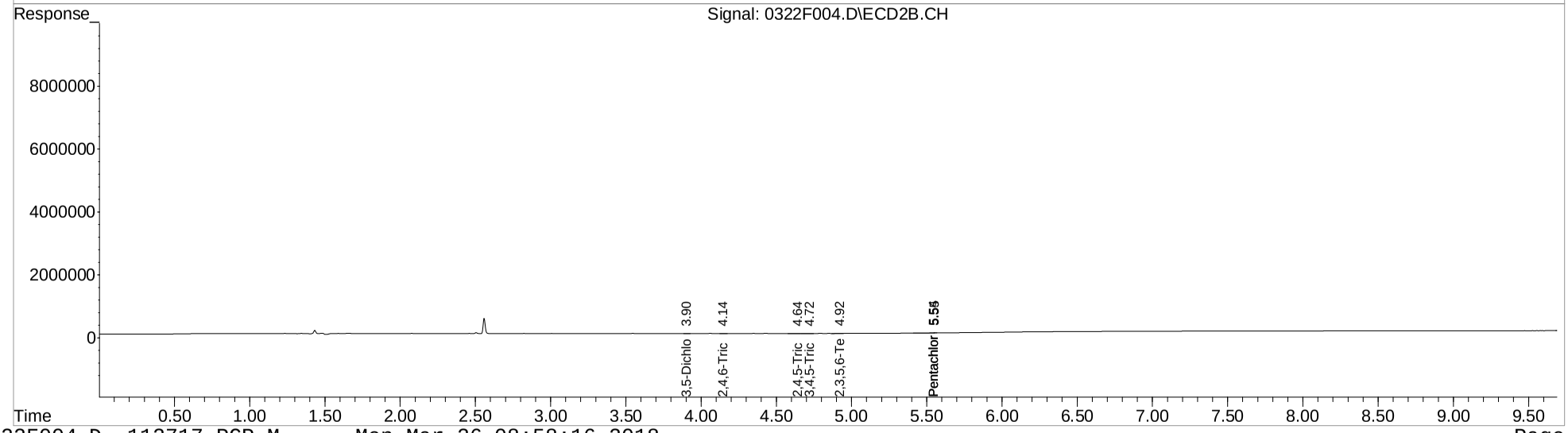
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F004.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F004.D\ECD2B.CH
Acq On : 22 Mar 2018 5:11 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:42 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F004.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F004.D\ECD2B.CH
Acq On : 22 Mar 2018 5:11 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:30 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

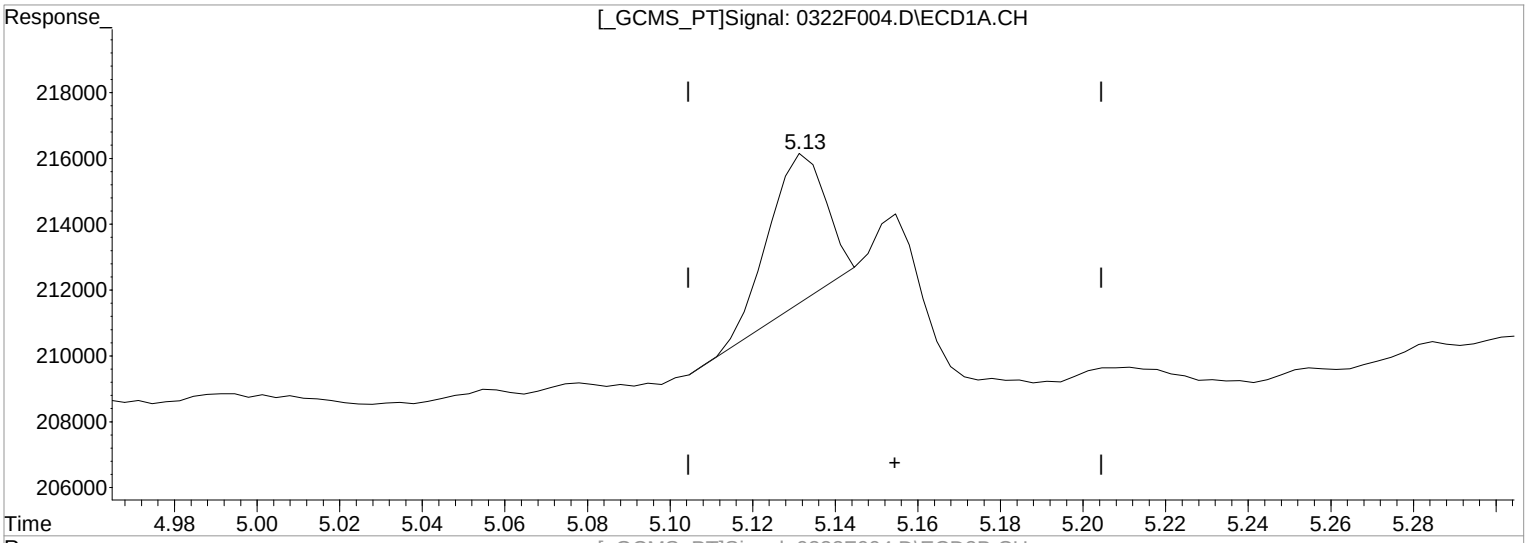
Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

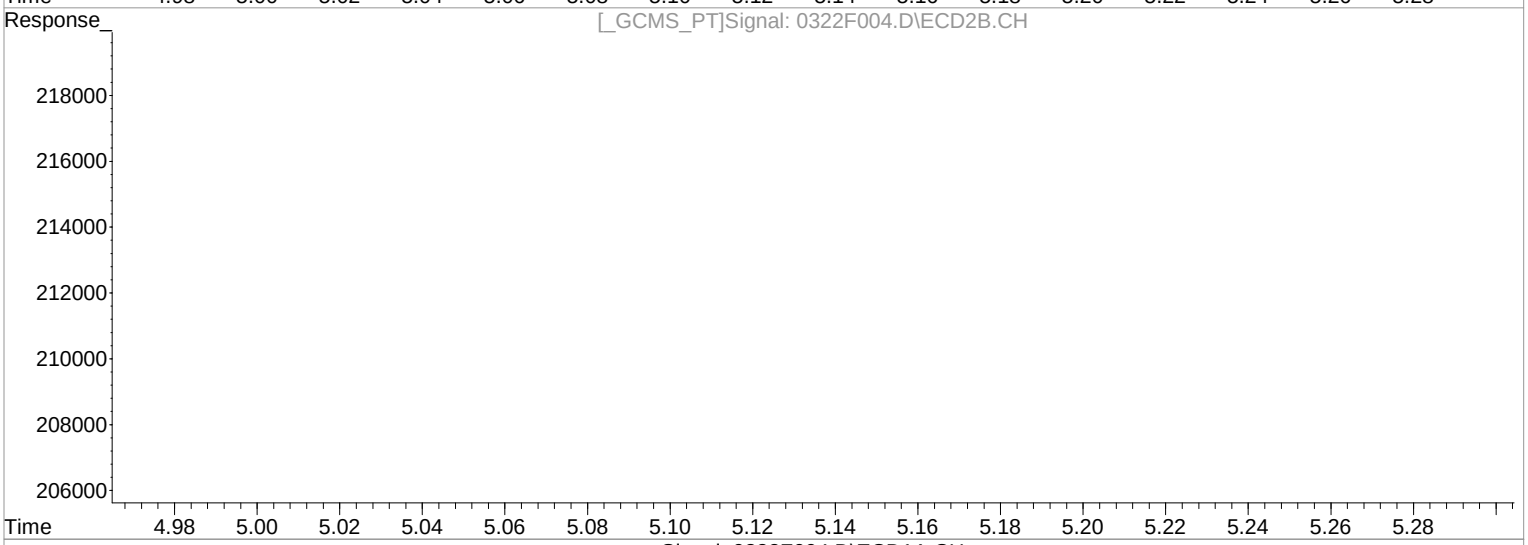
		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	3.99	0.00	60066	0	0.124	N.D. #
		Target Compounds						
1)		3,4-Dichlorophen	3.09	0.00	17522	0	1.009	N.D. #
2)		3,5-Dichlorophen	3.36	3.90	7448	8454	0.611	0.684
3)		2,4,6-Trichlorop	3.44	4.14	5242	35636	N.D.	0.111
5)		2,4,5-Trichlorop	0.00	4.64	0	44878	N.D.	0.279 #
6)		3,4,5-Trichlorop	0.00	4.72	0	42670	N.D.	0.288 #
7)	M	2,3,5,6-Tetrachl	4.44	4.92f	45812	73856	0.083	0.155 #
8)	M	2,3,4,5-Tetrachl	4.99	5.41f	5638	7866	0.014	N.D. #
9)	M	Pentachloropheno	5.15	5.55	44032	27212	0.067m	0.043m#
10)		Pentachloroaniso	5.13	5.54	47838	356608	0.077	0.594 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : J:\GC28\DATA\032218B\0322F004.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F004.D\ECD2B.CH
Acq On : 22 Mar 2018 5:11 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration





Signal: 0322F004.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.13min 0.073ug/L

response 47838

Manual Integration:

Before

03/23/18

(9) Pentachlorophenol #2 (M)

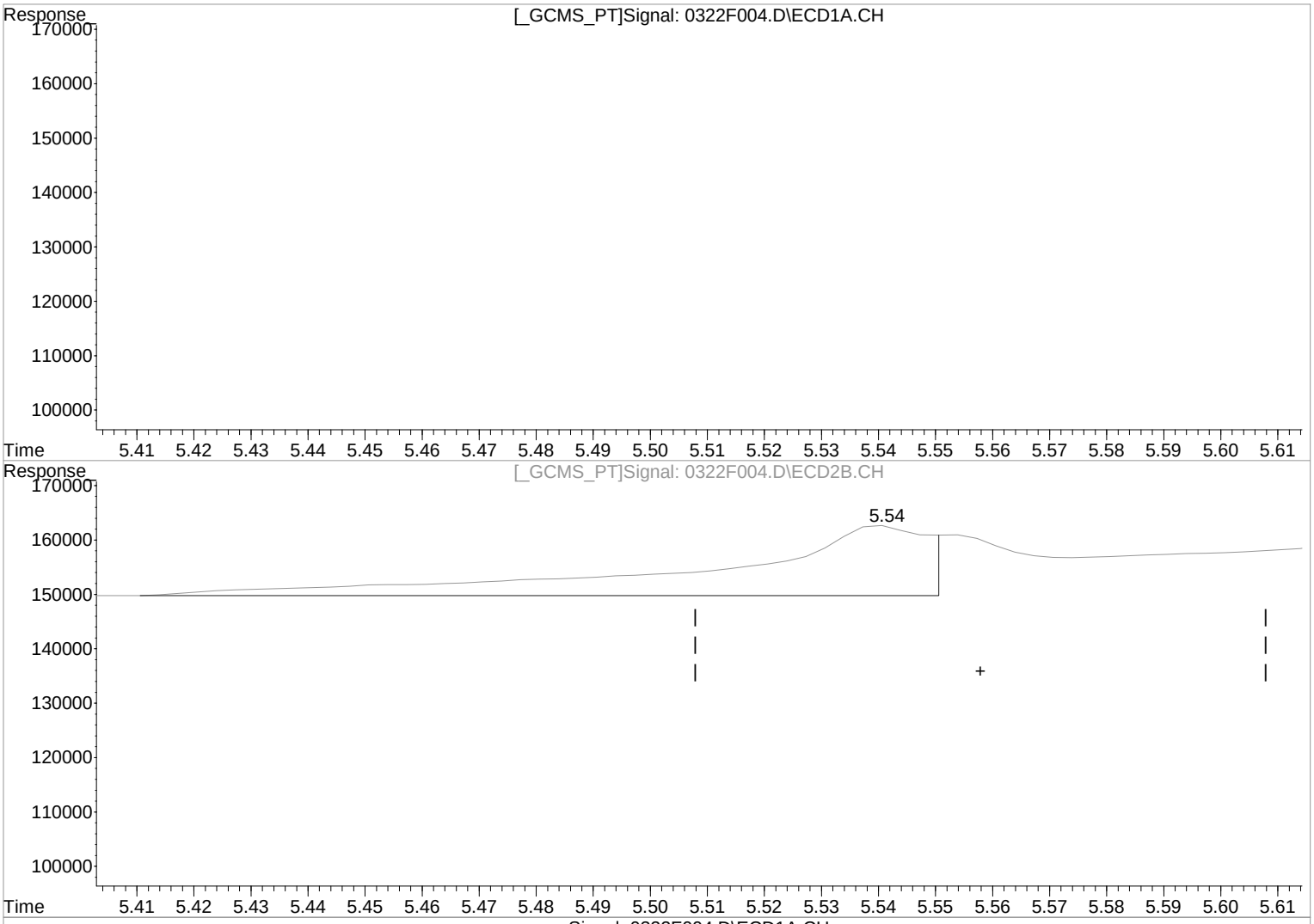
5.54min 0.565ug/L

response 356608

(+) = Expected Retention Time

Signal #1 : J:\GC28\DATA\032218B\0322F004.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F004.D\ECD2B.CH
Acq On : 22 Mar 2018 5:11 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration



Signal: 0322F004.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.15min 0.067ug/L m

response 44032

Manual Integration:

Before

03/23/18

(9) Pentachlorophenol #2 (M)

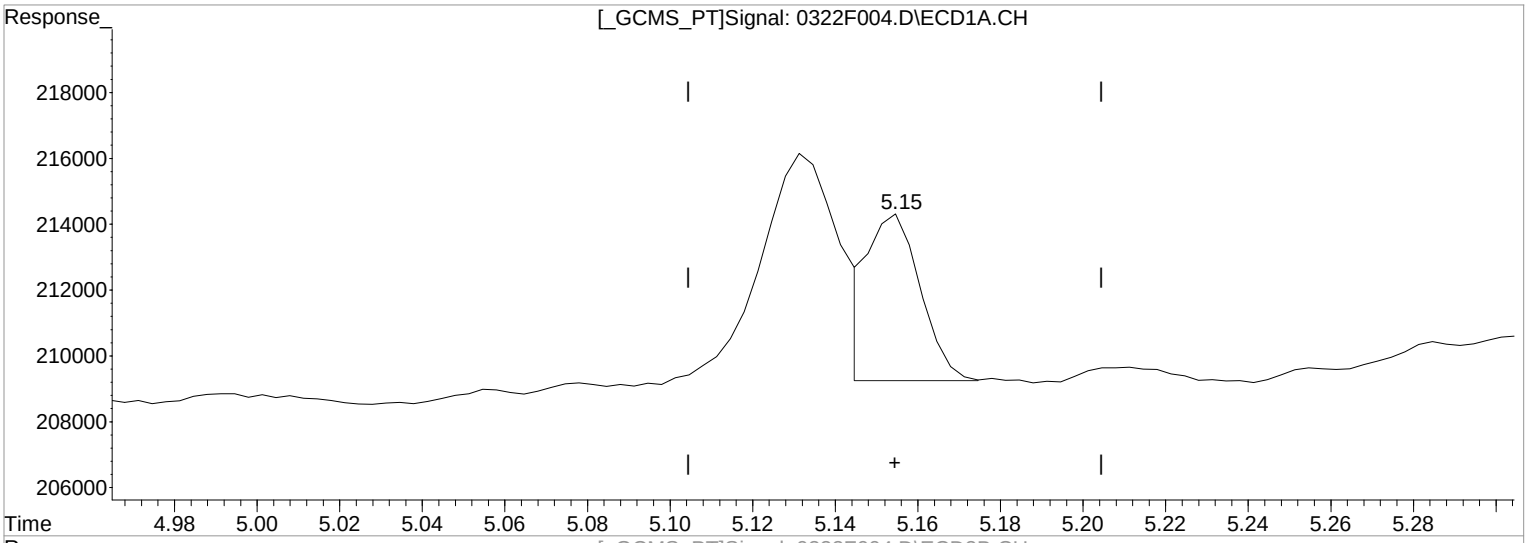
5.54min 0.565ug/L

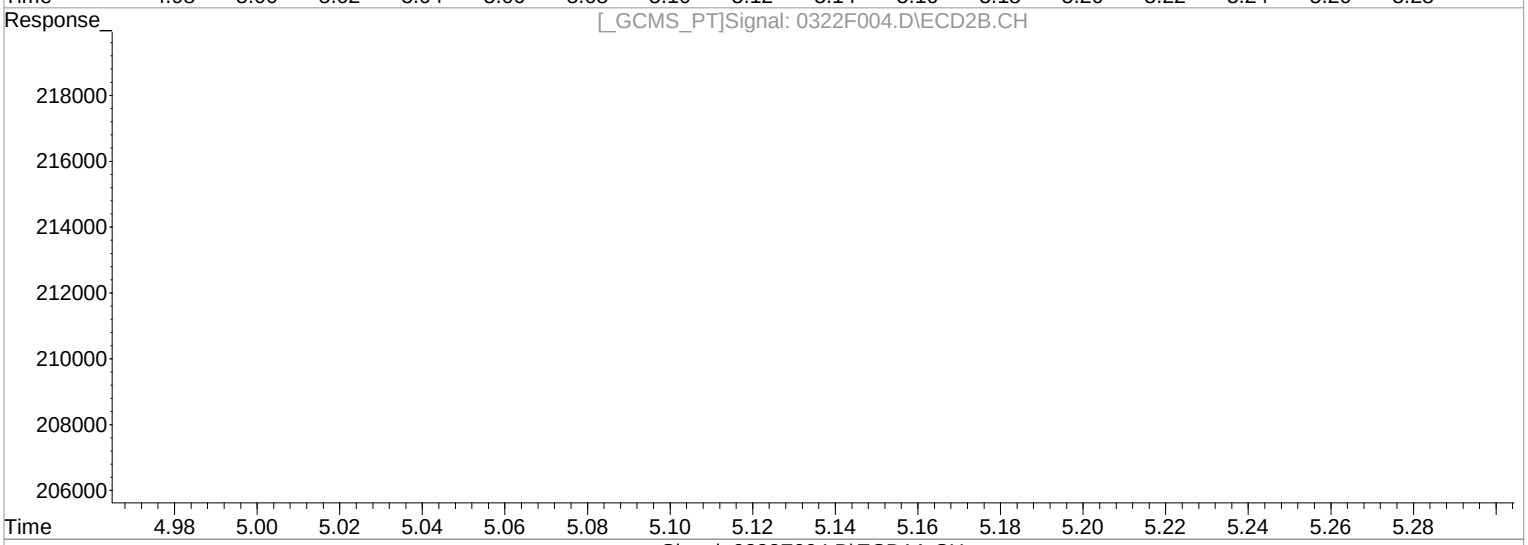
response 356608

(+) = Expected Retention Time

Signal #1 : J:\GC28\DATA\032218B\0322F004.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F004.D\ECD2B.CH
Acq On : 22 Mar 2018 5:11 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration





Signal: 0322F004.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.15min 0.067ug/L m

response 44032

Manual Integration:

After

Baseline/Shoulder

03/23/18

(9) Pentachlorophenol #2 (M)

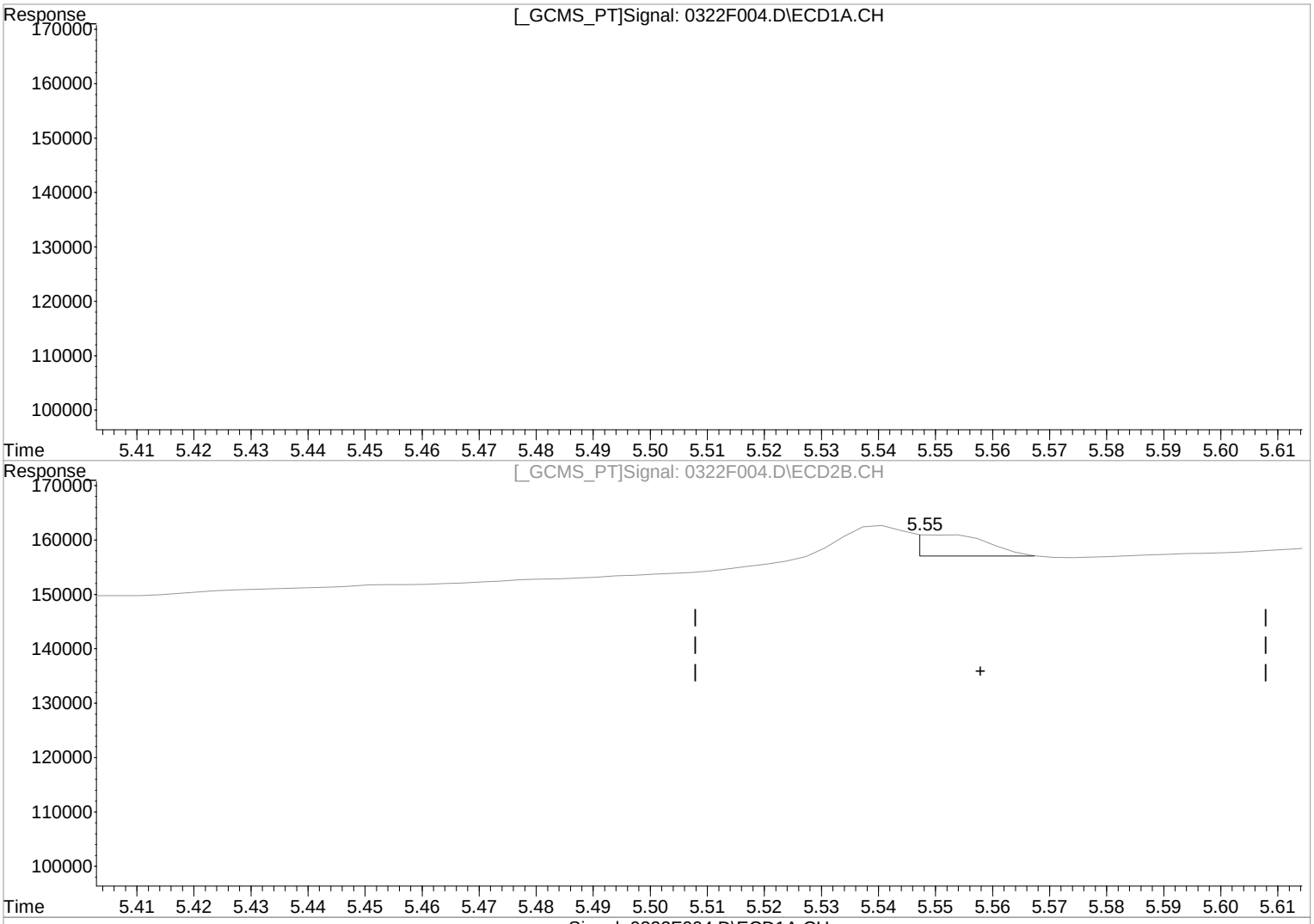
5.54min 0.565ug/L

response 356608

(+) = Expected Retention Time

Signal #1 : J:\GC28\DATA\032218B\0322F004.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F004.D\ECD2B.CH
Acq On : 22 Mar 2018 5:11 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration



Signal: 0322F004.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.15min 0.067ug/L m

response 44032

Manual Integration:

After

Baseline/Shoulder

03/23/18

(9) Pentachlorophenol #2 (M)

5.55min 0.043ug/L m

response 27212

(+) = Expected Retention Time

Exception Report

Data File: J:\GC28\DATA\032218B\0322F016.D
Lab ID: KWG1801591-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/22/2018 20:41
Date Quantitated: 03/23/2018 14:37
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F016.D\0322F016C.D
Lab ID: KWG1801591-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/22/2018 20:41
Date Quantitated: 03/23/2018 14:37
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F016.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F016.D\0322F016c.d			**Vial:**	2
Acqu Date:	03/22/2018 20:41	**Quant Date:**	03/23/2018 14:37	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801591-4				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/26/2018

Analysis Lot:	KWG1801591	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00	4.57	77790	4088	0.1610	0.0110			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10			19362	0	1.12	0.0000			
3,5-Dichlorophenol	3.37	3.91		14898	11882	1.22	0.9610			
2,4,6-Trichlorophenol		4.15		10340	46840	0.0000	0.1460			
2,4,5-Trichlorophenol		4.65		0	36654	0.0000	0.2280			
3,4,5-Trichlorophenol	4.26	4.72		17164	73558	0.1020	0.4960			
2,3,5,6-Tetrachlorophenol	4.44	4.92		59582	76386	0.1080	0.1610			
2,3,4,5-Tetrachlorophenol				0	9530	0.0000	0.0000			
Pentachlorophenol	5.15	5.54	c	45740**m**	154820**m**	0.0700	0.2450			
2,3,4,5,6-Pentachloroanisole	5.13	5.54	c	57714	1005576	0.0930	1.68			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

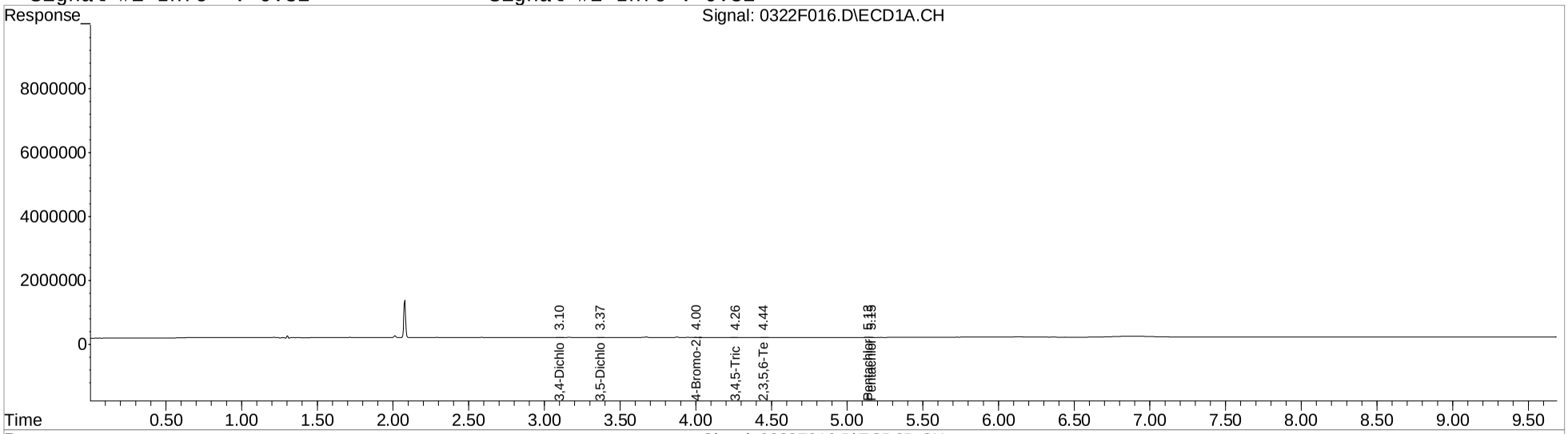
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

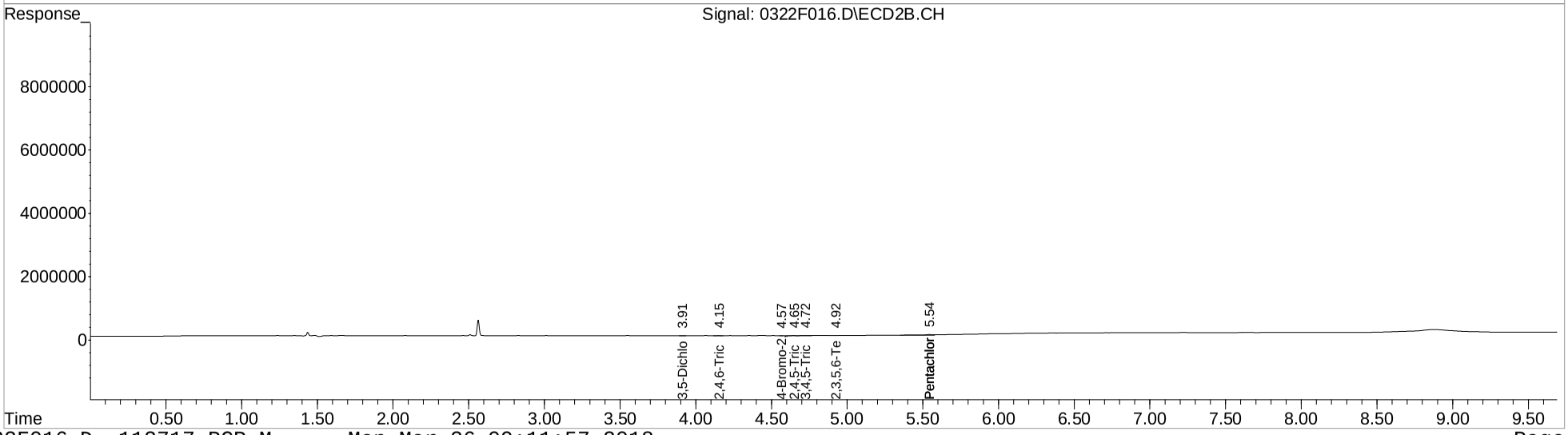
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F016.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F016.D\ECD2B.CH
Acq On : 22 Mar 2018 8:41 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 14:37 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : J:\GC28\DATA\032218B\0322F016.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F016.D\ECD2B.CH
Acq On : 22 Mar 2018 8:41 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:40 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

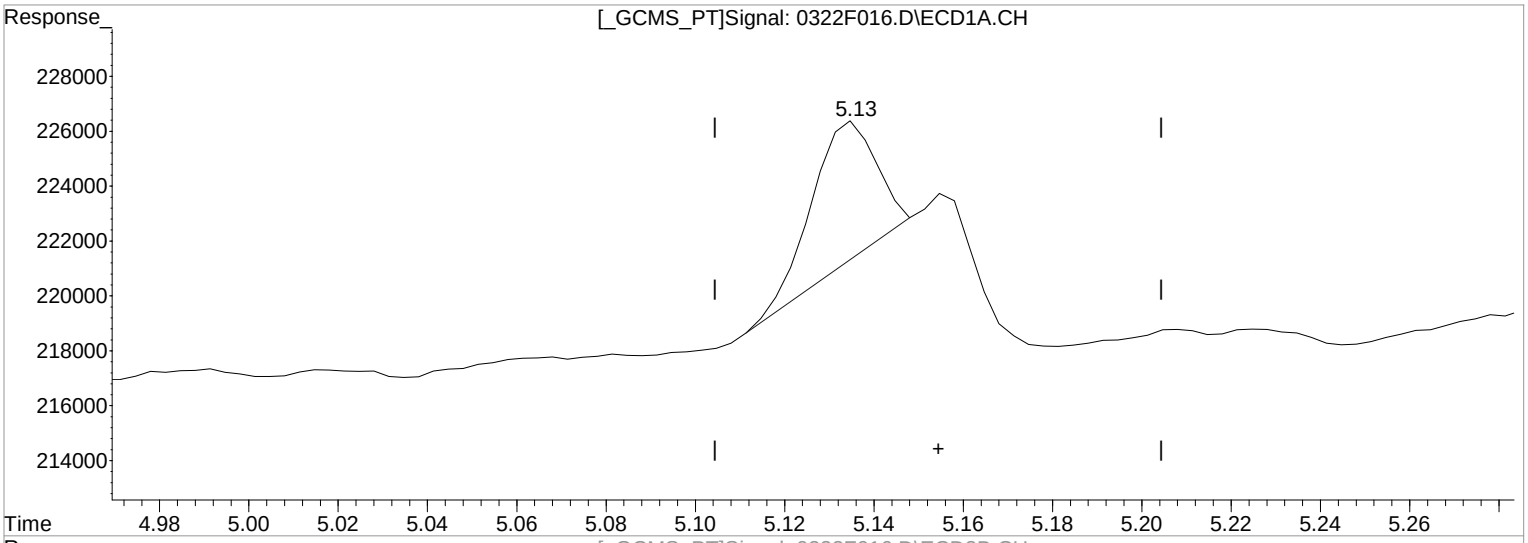
Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

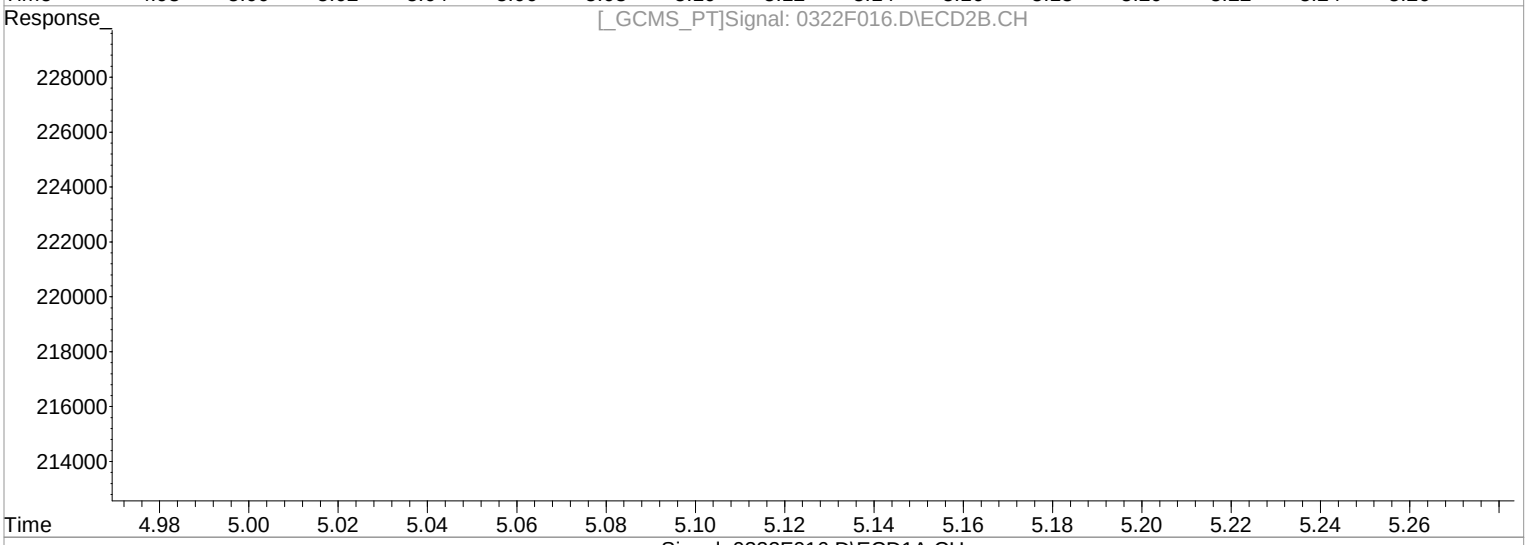
		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.00	4.57	77790	4088	0.161	0.011	#
		Target Compounds							
1)		3,4-Dichlorophen	3.10	0.00	19362	0	1.115	N.D.	#
2)		3,5-Dichlorophen	3.37	3.91	14898	11882	1.223	0.961	
3)		2,4,6-Trichlorop	3.44	4.15	10340	46840	N.D.	0.146	
5)		2,4,5-Trichlorop	0.00	4.65	0	36654	N.D.	0.228	#
6)		3,4,5-Trichlorop	4.26f	4.72	17164	73558	0.102	0.496	#
7)	M	2,3,5,6-Tetrachl	4.44	4.92f	59582	76386	0.108	0.161	#
8)	M	2,3,4,5-Tetrachl	0.00	5.34f	0	9530	N.D.	N.D.	
9)	M	Pentachloropheno	5.15	5.54	45740	154820	0.070m	0.245m	#
10)		Pentachloroaniso	5.13	5.54	57714	1005576	0.093	1.676	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : J:\GC28\DATA\032218B\0322F016.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F016.D\ECD2B.CH
Acq On : 22 Mar 2018 8:41 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration





Signal: 0322F016.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.13min 0.088ug/L

response 57714

Manual Integration:

Before

03/23/18

(9) Pentachlorophenol #2 (M)

5.54min 1.594ug/L

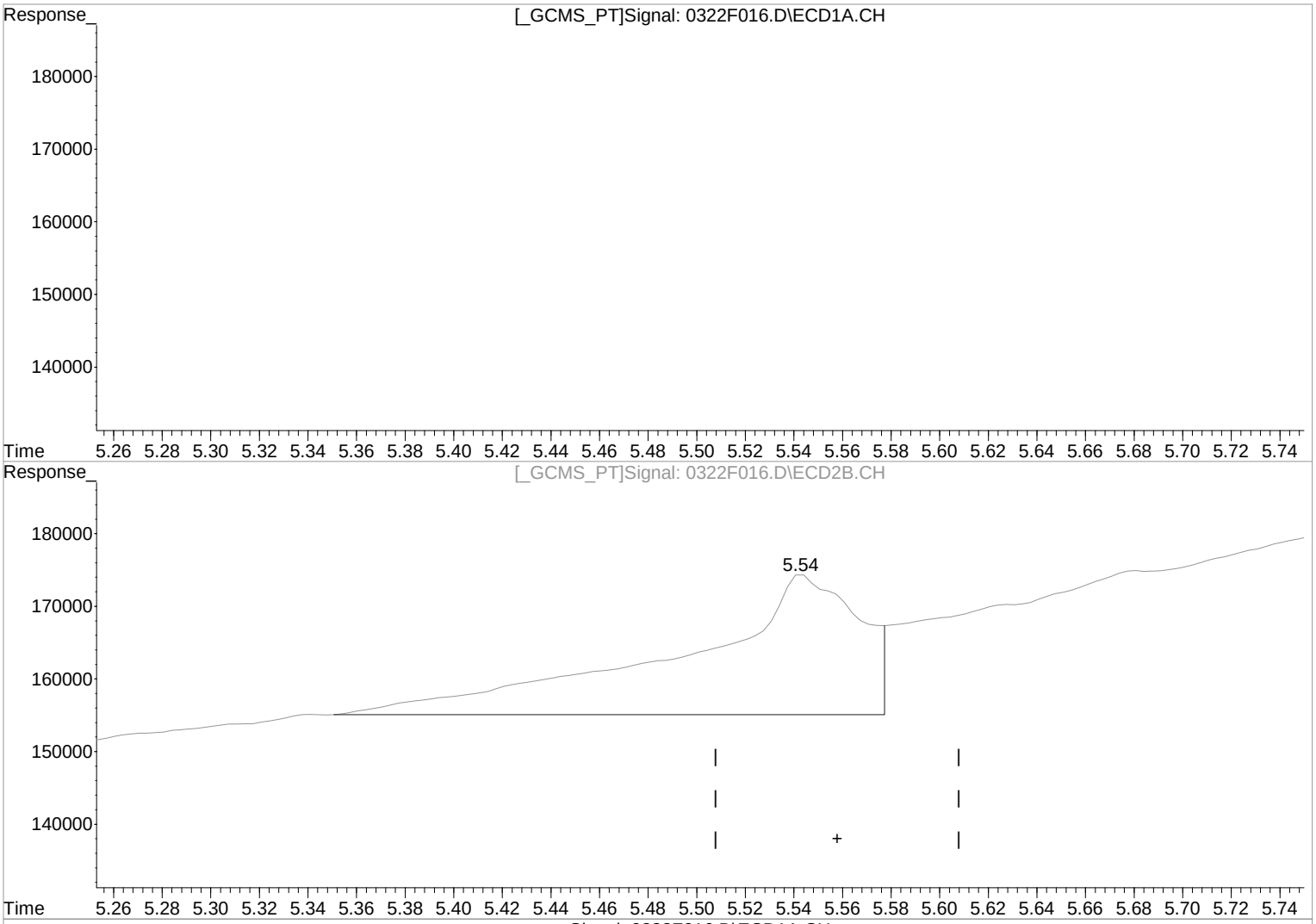
response 1005576

(+) = Expected Retention Time

1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F016.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F016.D\ECD2B.CH
Acq On : 22 Mar 2018 8:41 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration



Signal: 0322F016.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.15min 0.070ug/L m

response 45740

Manual Integration:

Before

03/23/18

(9) Pentachlorophenol #2 (M)

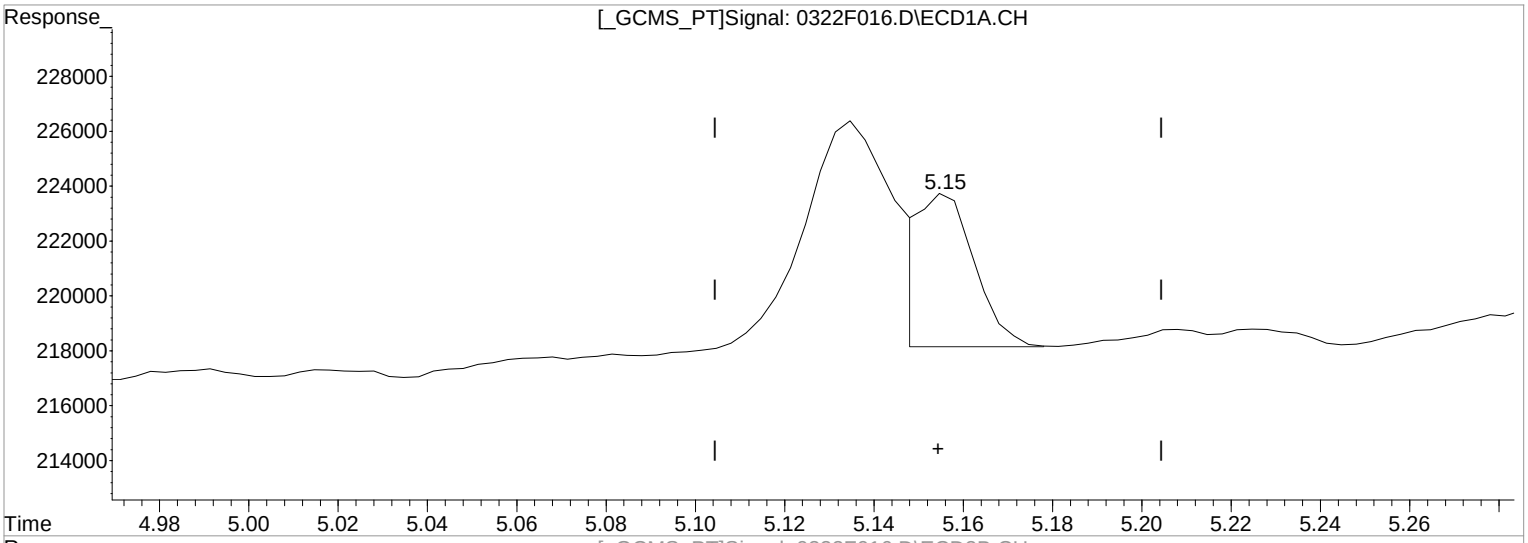
5.54min 1.594ug/L

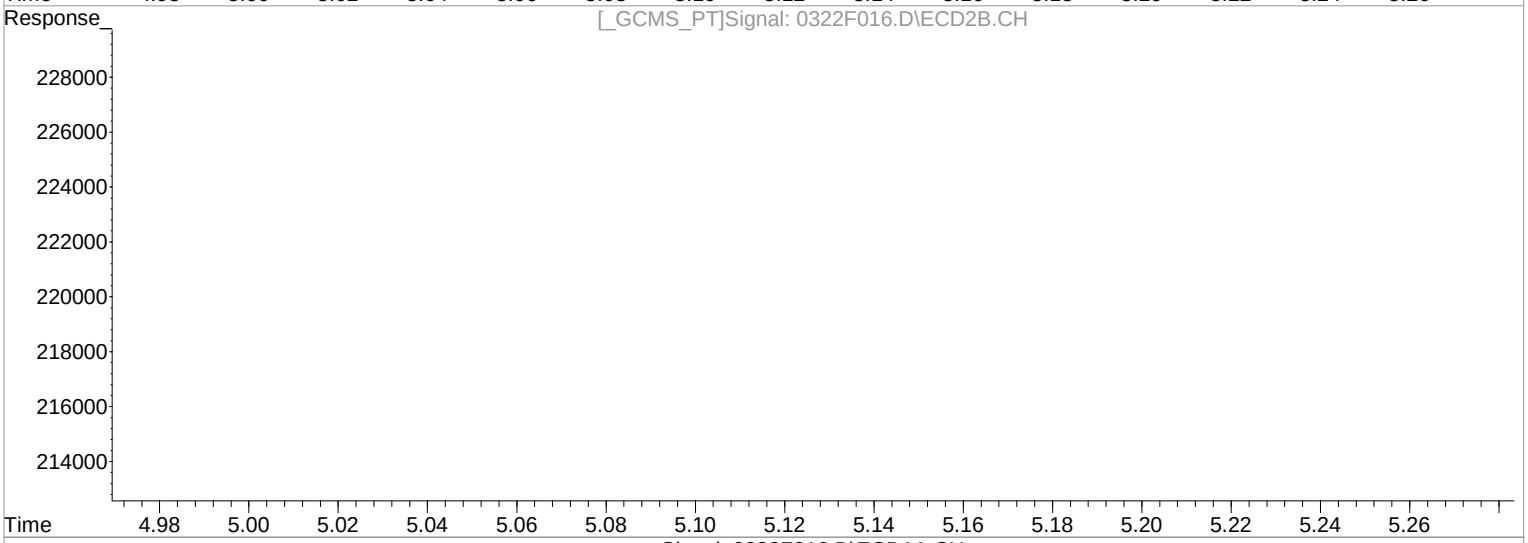
response 1005576

(+) = Expected Retention Time

Signal #1 : J:\GC28\DATA\032218B\0322F016.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F016.D\ECD2B.CH
Acq On : 22 Mar 2018 8:41 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration





Signal: 0322F016.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.15min 0.070ug/L m

response 45740

Manual Integration:

After

Baseline/Shoulder

03/23/18

(9) Pentachlorophenol #2 (M)

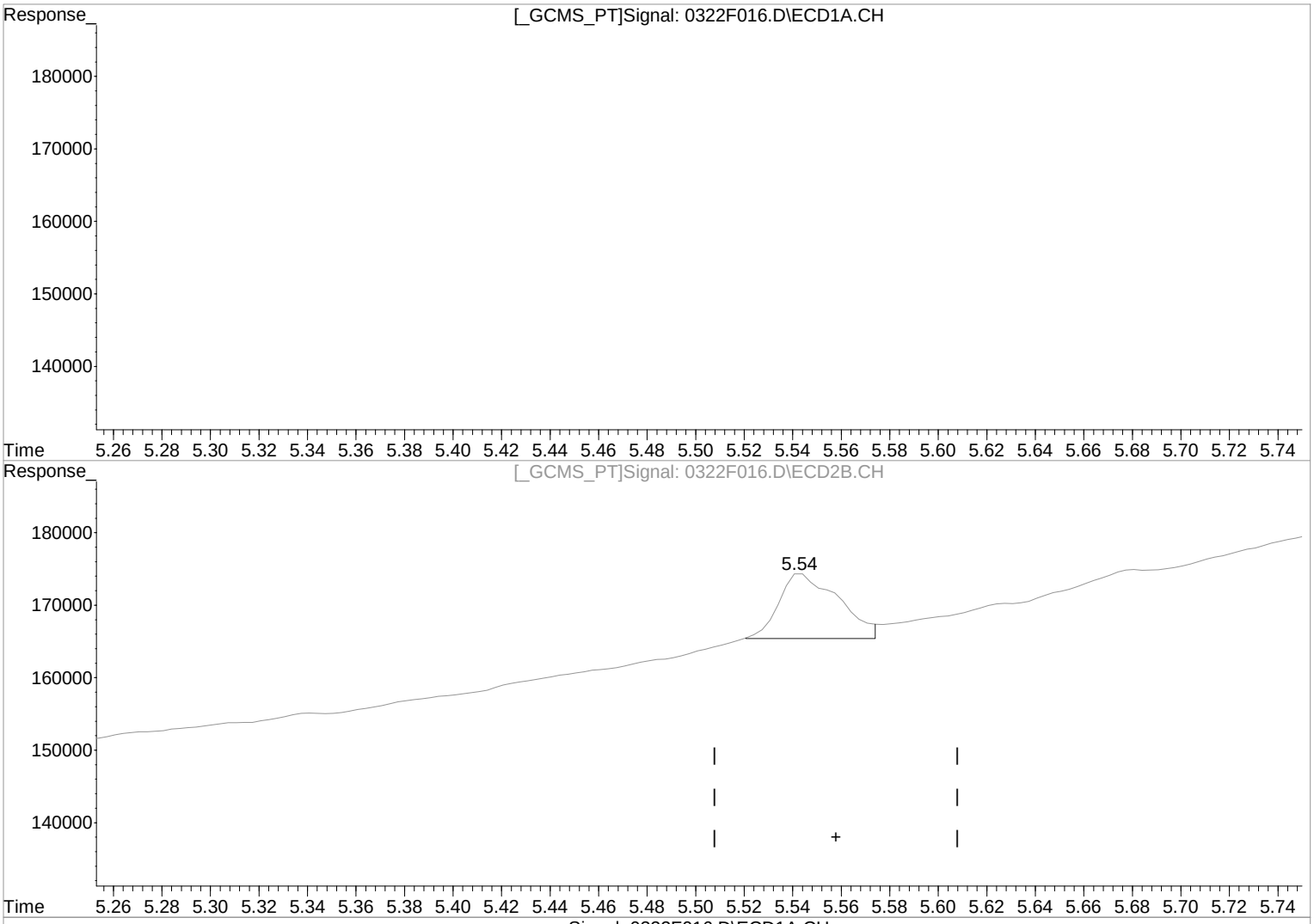
5.54min 1.594ug/L

response 1005576

(+) = Expected Retention Time

Signal #1 : J:\GC28\DATA\032218B\0322F016.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F016.D\ECD2B.CH
Acq On : 22 Mar 2018 8:41 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration



Signal: 0322F016.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.15min 0.070ug/L m

response 45740

Manual Integration:

After

Baseline/Shoulder

03/23/18

(9) Pentachlorophenol #2 (M)

5.54min 0.245ug/L m

response 154820

(+) = Expected Retention Time

Exception Report

Data File: J:\GC28\DATA\032218B\0322F028.D
Lab ID: KWG1801591-6
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/23/2018 00:11
Date Quantitated: 03/23/2018 15:02
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	2,4,5-Trichlorophenol	895.46	NA	3.449996948	NR

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F028.D\0322F028C.D
Lab ID: KWG1801591-6
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/23/2018 00:11
Date Quantitated: 03/23/2018 15:02
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.62	NA	).229995727	NR

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F028.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F028.D\0322F028c.d			**Vial:**	2
Acqu Date:	03/23/2018 00:11	**Quant Date:**	03/23/2018 15:02	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801591-6				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/26/2018

Analysis Lot:	KWG1801591	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2	Rpt
4-Bromo-2,6-dichlorophenol	4.00	4.57	78258	6374	0.1620	0.0180	NA
			%Recovery =		NA	NA	**Limits =** 55-130

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10		3.65		22034	5160	1.27	910.62			
3,5-Dichlorophenol	3.37		3.91		15056	10888	1.24	0.8810			
2,4,6-Trichlorophenol			4.15		9942	54154	0.0000	0.1680			
2,4,5-Trichlorophenol	4.17	c	4.64		6294	29618	895.46	0.1840			
3,4,5-Trichlorophenol	4.17	c	4.72		6294	43756	0.0370	0.2950			
2,3,5,6-Tetrachlorophenol	4.44		4.92		47648	70366	0.0870	0.1480			
2,3,4,5-Tetrachlorophenol					0	11174	0.0000	0.0000			
Pentachlorophenol	5.15		5.54	c	33098**m**	165768**m**	0.0510	0.2630			
2,3,4,5,6-Pentachloroanisole	5.13		5.54	c	59728	877110	0.0960	1.46			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

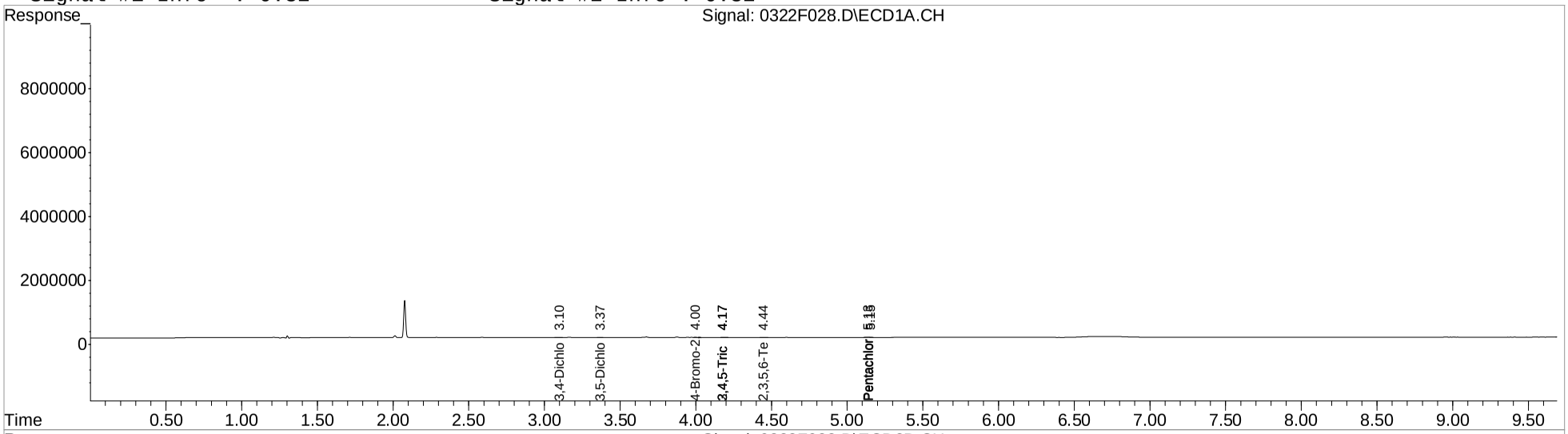
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

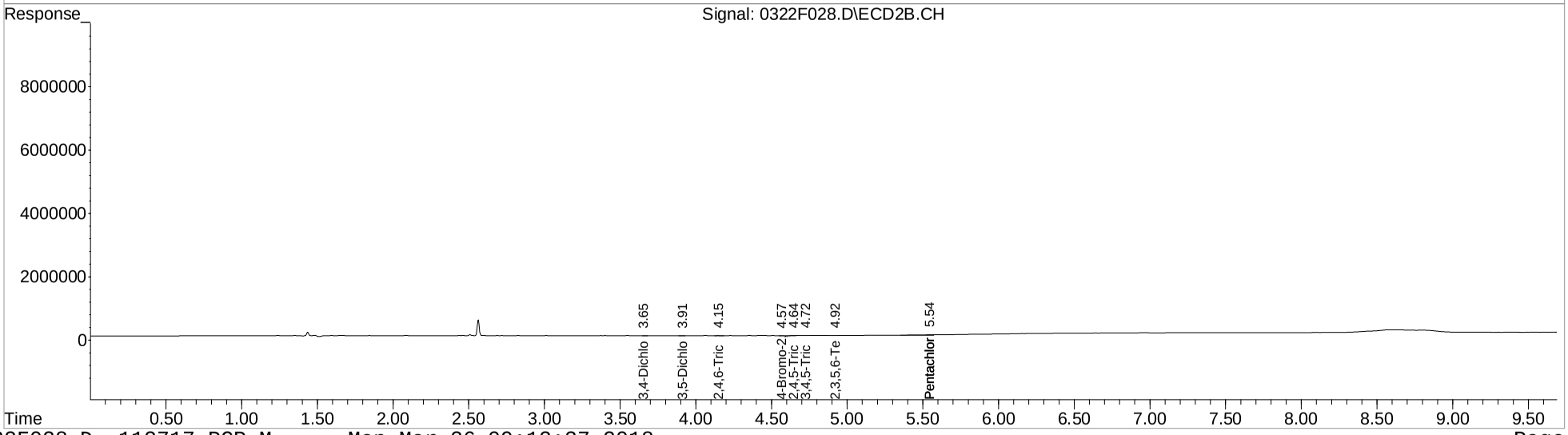
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F028.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F028.D\ECD2B.CH
Acq On : 23 Mar 2018 12:11 am Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 15:02 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F028.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F028.D\ECD2B.CH
Acq On : 23 Mar 2018 12:11 am Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:50 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

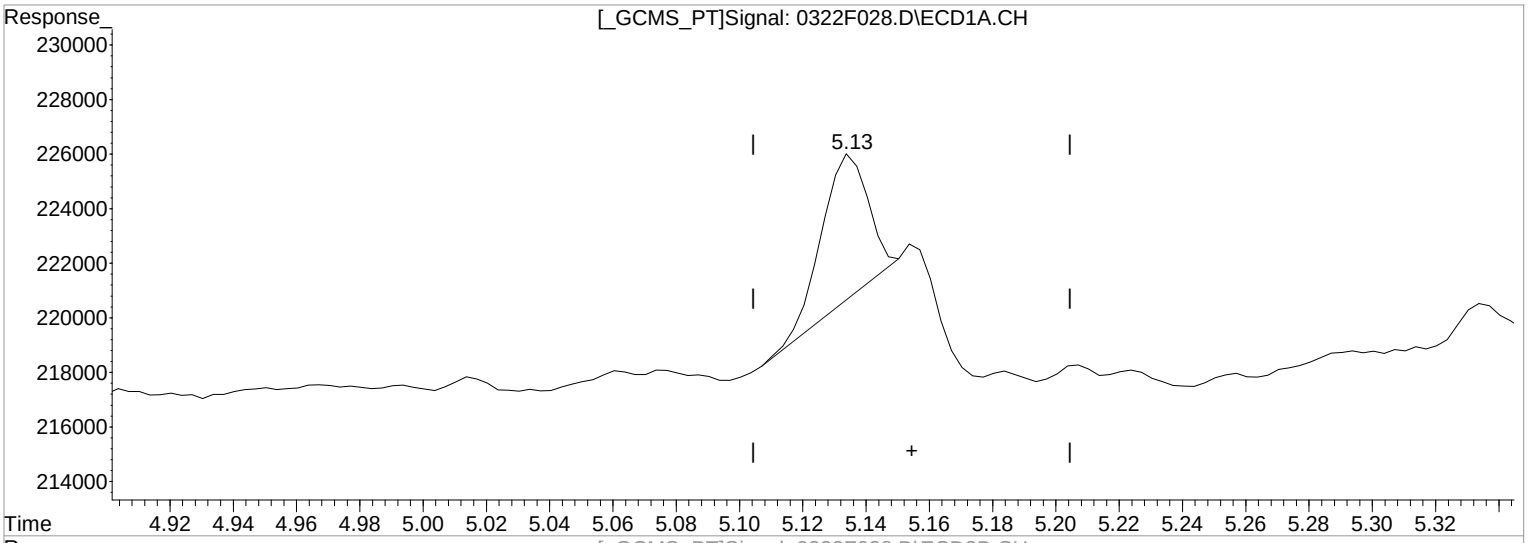
Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

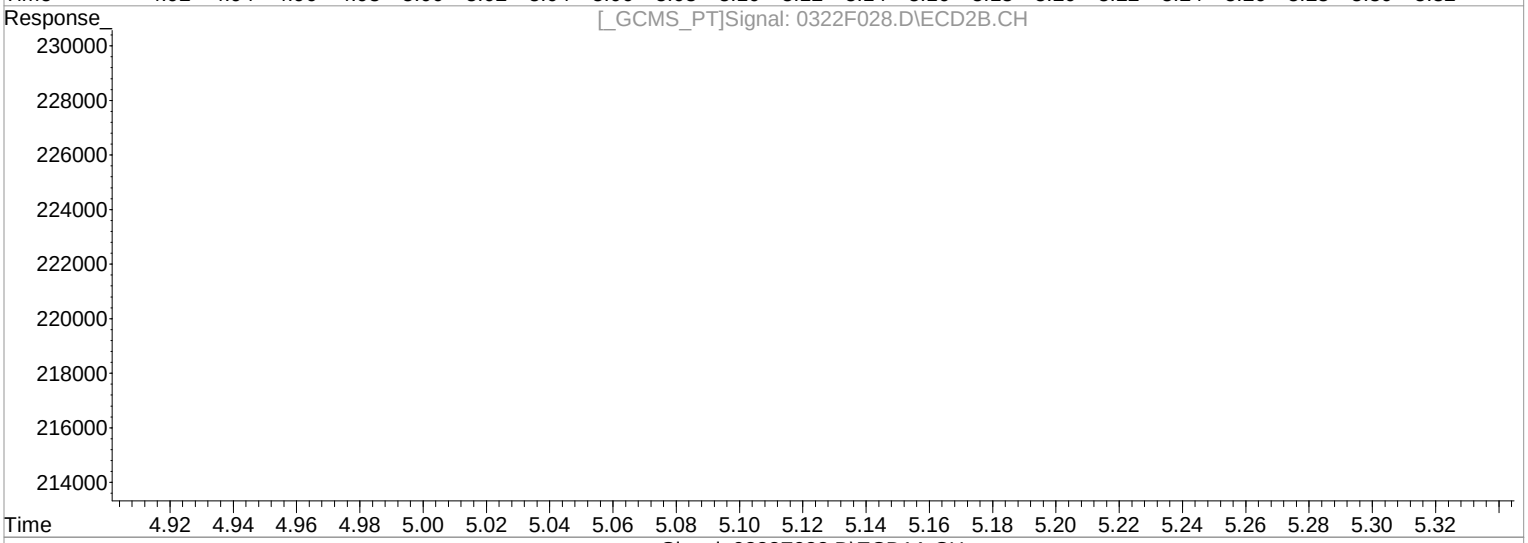
		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.00	4.57	78258	6374	0.162	0.018	#
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.65	22034	5160	1.269	910.621	#
2)		3,5-Dichlorophen	3.37	3.91	15056	10888	1.236	0.881	#
3)		2,4,6-Trichlorop	3.44	4.15	9942	54154	N.D.	0.168	
5)		2,4,5-Trichlorop	4.17	4.64	6294	29618	895.456	0.184	#
6)		3,4,5-Trichlorop	4.17f	4.72	6294	43756	0.037	0.295	#
7)	M	2,3,5,6-Tetrachl	4.44	4.92f	47648	70366	0.087	0.148	#
8)	M	2,3,4,5-Tetrachl	0.00	5.34f	0	11174	N.D.	N.D.	
9)	M	Pentachloropheno	5.15	5.54	33098	165768	0.051m	0.263m	#
10)		Pentachloroaniso	5.13	5.54	59728	877110	0.096	1.462	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : J:\GC28\DATA\032218B\0322F028.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F028.D\ECD2B.CH
Acq On : 23 Mar 2018 12:11 am Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration





Signal: 0322F028.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.13min 0.091ug/L

response 59728

Manual Integration:

Before

03/23/18

(9) Pentachlorophenol #2 (M)

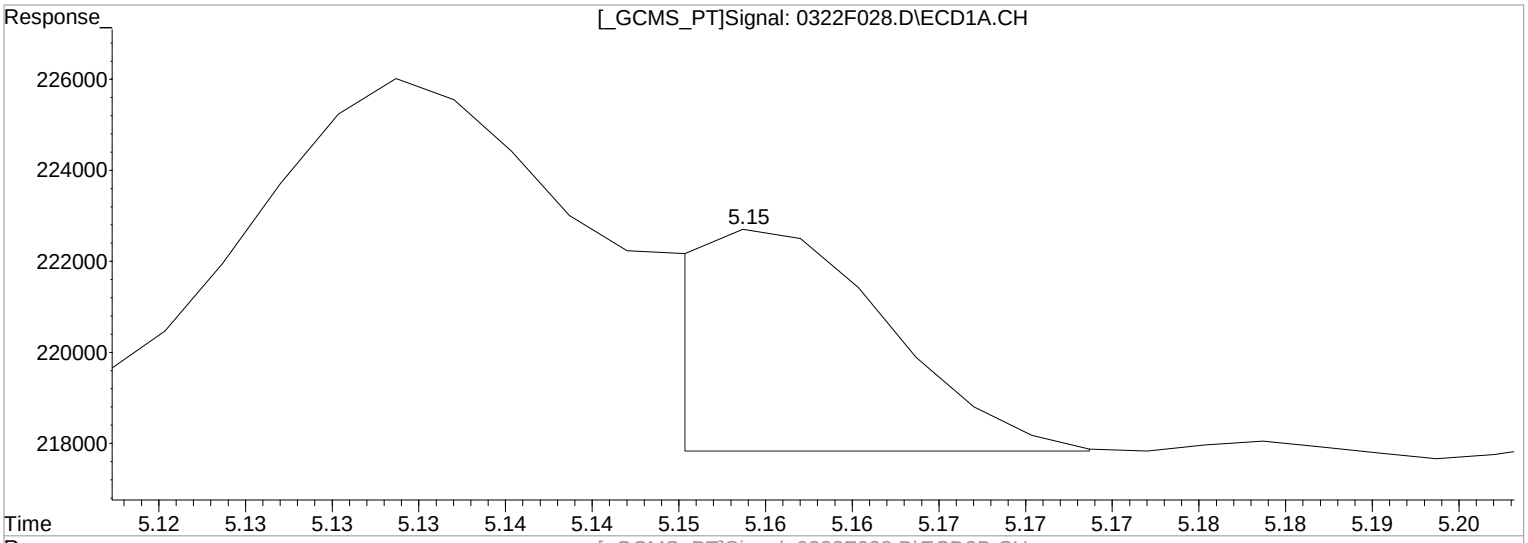
5.54min 1.390ug/L

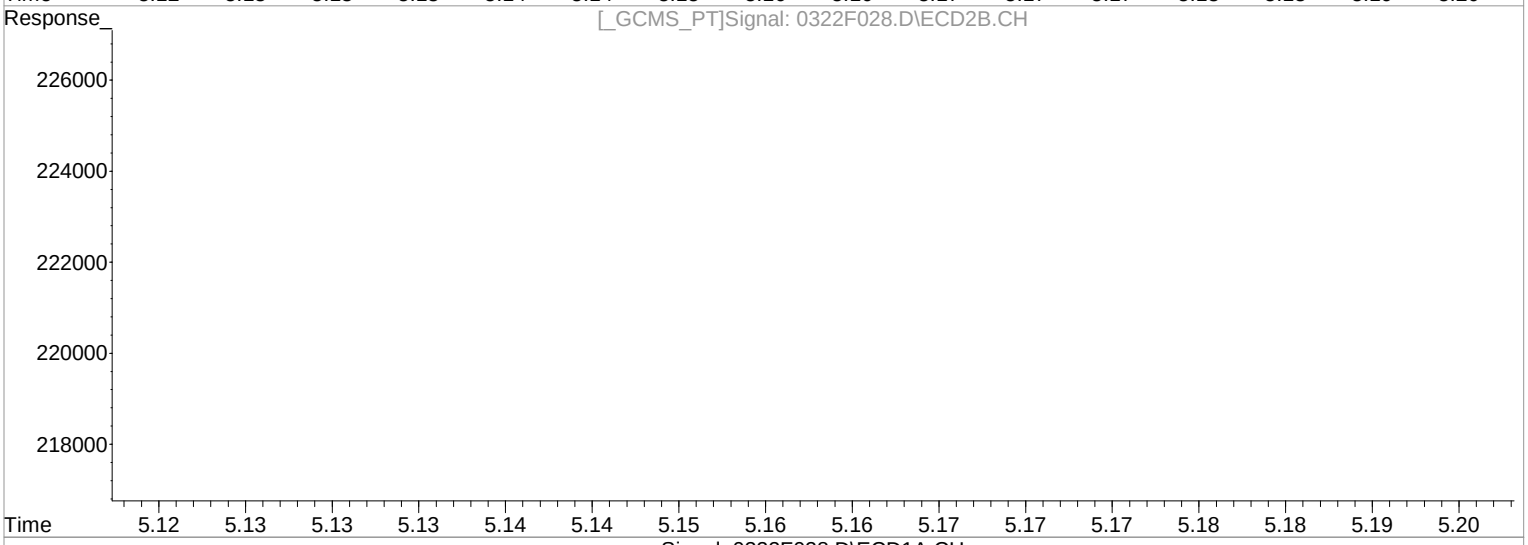
response 877110

(+) = Expected Retention Time

Signal #1 : J:\GC28\DATA\032218B\0322F028.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F028.D\ECD2B.CH
Acq On : 23 Mar 2018 12:11 am Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration





Signal: 0322F028.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.15min 0.051ug/L m

response 33098

Manual Integration:

After

Baseline/Shoulder

03/23/18

(9) Pentachlorophenol #2 (M)

5.54min 1.390ug/L

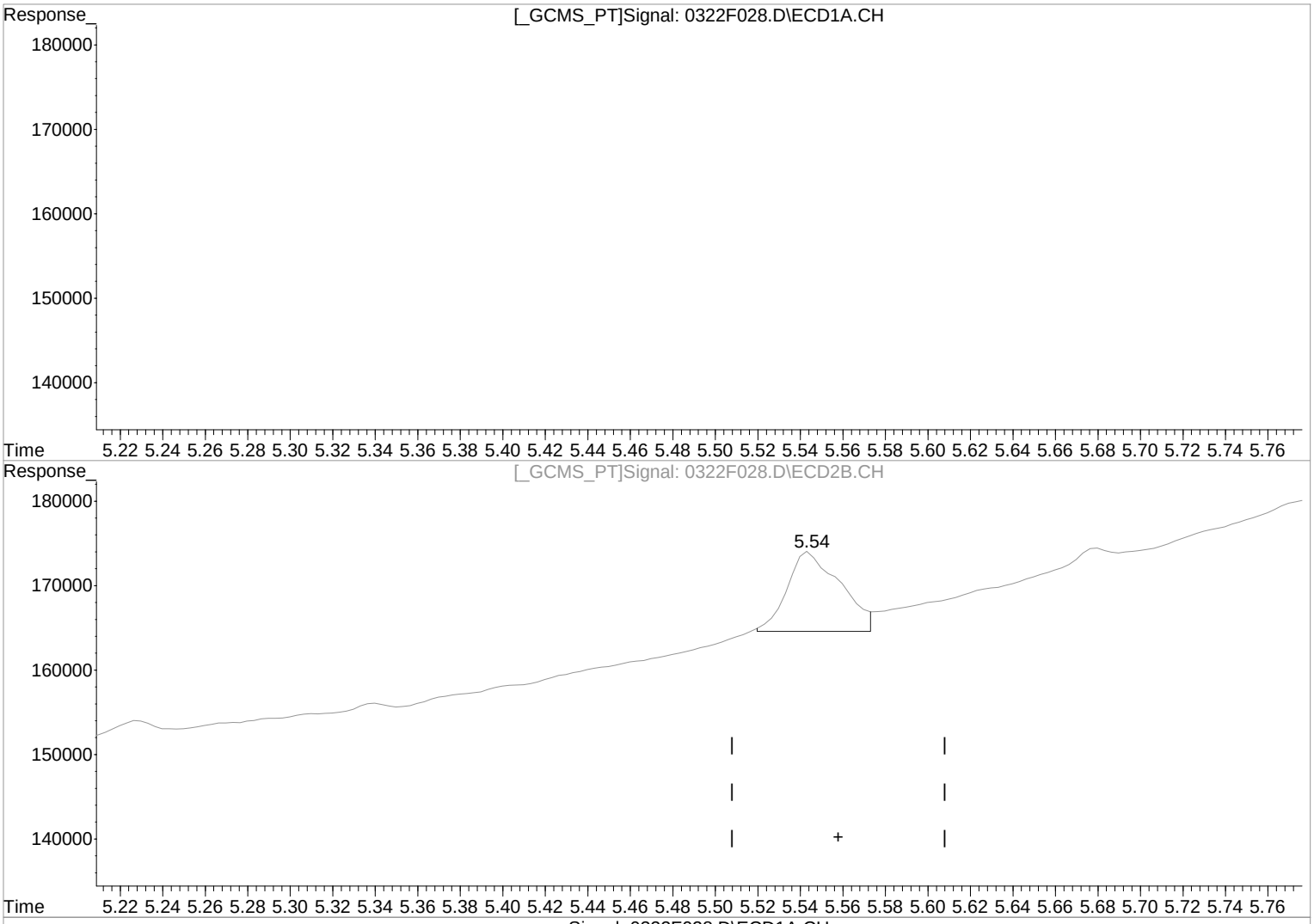
response 877110

(+) = Expected Retention Time

1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F028.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F028.D\ECD2B.CH
Acq On : 23 Mar 2018 12:11 am Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration



Signal: 0322F028.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.15min 0.051ug/L m

response 33098

(9) Pentachlorophenol #2 (M)

5.54min 0.263ug/L m

response 165768

Manual Integration:

After

Forgot Before

Baseline/Shoulder

03/23/18

(+) = Expected Retention Time

Exception Report

Data File: J:\GC28\DATA\032218B\0322F034.D
Lab ID: KWG1801591-8
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/23/2018 01:56
Date Quantitated: 03/23/2018 16:17
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	2,4,5-Trichlorophenol	895.42	NA	3.449996948	

Primary Review: _____

Secondary Review: _____

Exception Report

Data File: J:\GC28\DATA\032218B\0322F034.D\0322F034C.D
Lab ID: KWG1801591-8
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/23/2018 01:56
Date Quantitated: 03/23/2018 16:17
Batch ID: KWG1801591
Analysis Method: 8151M
MethodJoinID: MJ252

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.75	NA	).229995727	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File #1:	J:\GC28\DATA\032218B\0322F034.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032218B\0322F034.D\0322F034c.d			**Vial:**	2
Acqu Date:	03/23/2018 01:56	**Quant Date:**	03/23/2018 16:17	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801591-8				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/26/2018

Analysis Lot:	KWG1801591	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00		75932	0	0.1570	0.0000			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	3.65		17672	3076	1.02	910.75			
3,5-Dichlorophenol	3.37	3.91		12404	14306	1.02	1.16			
2,4,6-Trichlorophenol		4.15		8840	49414	0.0000	0.1540			
2,4,5-Trichlorophenol	4.17	4.65		13272	4236	895.42	0.0260			
3,4,5-Trichlorophenol	4.26	4.72		16244	50320	0.0970	0.3400			
2,3,5,6-Tetrachlorophenol	4.44	4.92		50712	66706	0.0920	0.1400			
2,3,4,5-Tetrachlorophenol				0	30316	0.0000	0.0000			
Pentachlorophenol	5.15	5.54	c	32914**m**	337604	0.0500	0.5350			
2,3,4,5,6-Pentachloroanisole	5.13	5.54	c	118304	337604	0.1900	0.5630			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

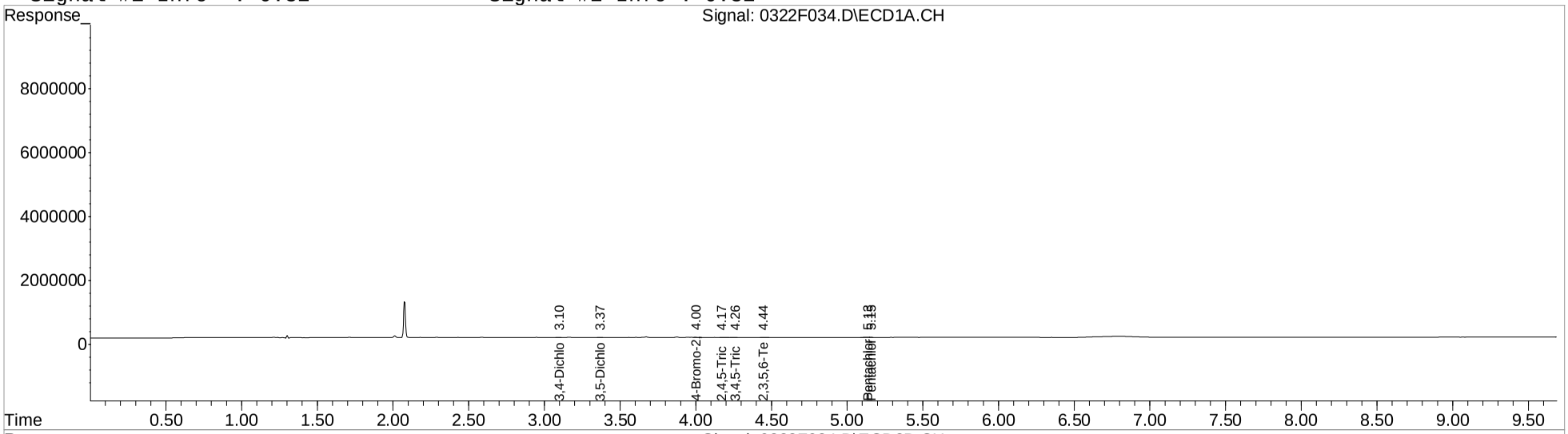
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

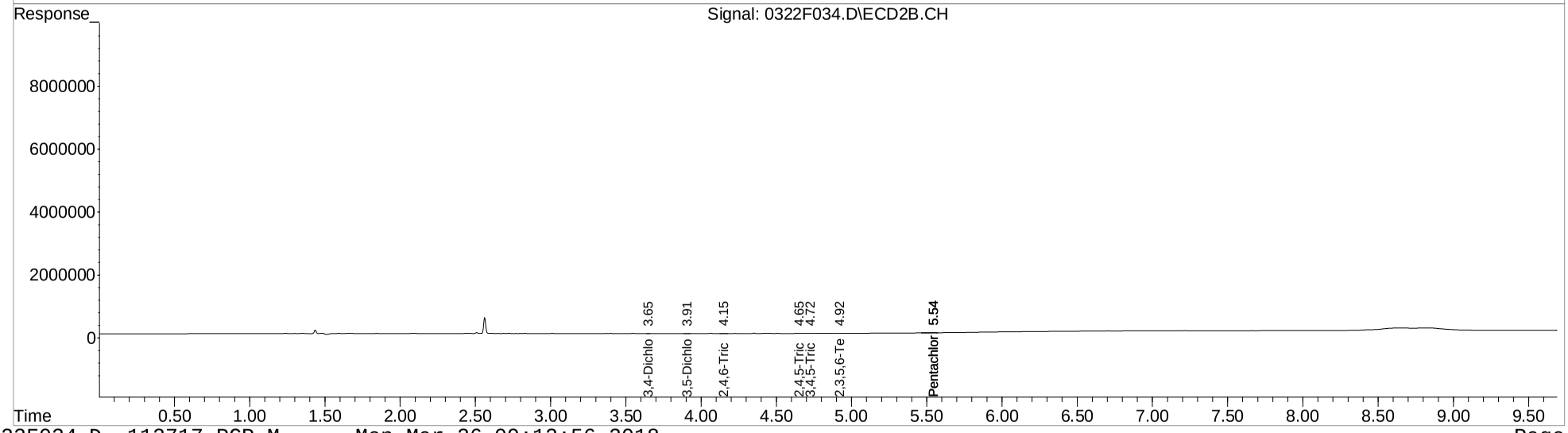
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC28\DATA\032218B\0322F034.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F034.D\ECD2B.CH
Acq On : 23 Mar 2018 1:56 am Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 16:17 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : J:\GC28\DATA\032218B\0322F034.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F034.D\ECD2B.CH
Acq On : 23 Mar 2018 1:56 am Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04:54 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

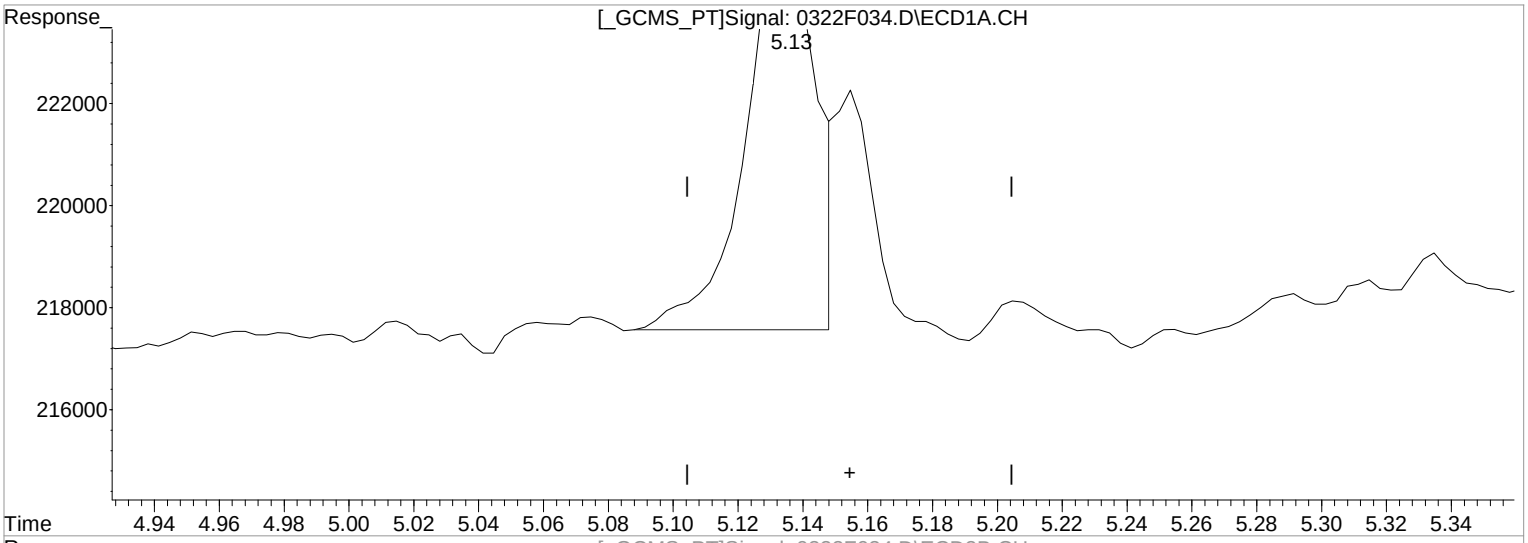
		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.00	0.00	75932	0	0.157	N.D.	#
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.65	17672	3076	1.017	910.745	#
2)		3,5-Dichlorophen	3.37	3.91	12404	14306	1.018	1.157	
3)		2,4,6-Trichlorop	3.44	4.15	8840	49414	N.D.	0.154	
5)		2,4,5-Trichlorop	4.17	4.65	13272	4236	895.415	0.026	#
6)		3,4,5-Trichlorop	4.26f	4.72	16244	50320	0.097	0.340	#
7)	M	2,3,5,6-Tetrachl	4.44	4.92f	50712	66706	0.092	0.140	#
8)	M	2,3,4,5-Tetrachl	0.00	5.34f	0	30316	N.D.	N.D.	
9)	M	Pentachloropheno	5.15	5.54	32914	337604	0.050m	0.535	#
10)		Pentachloroaniso	5.13	5.54	118304	337604	0.190	0.563	#

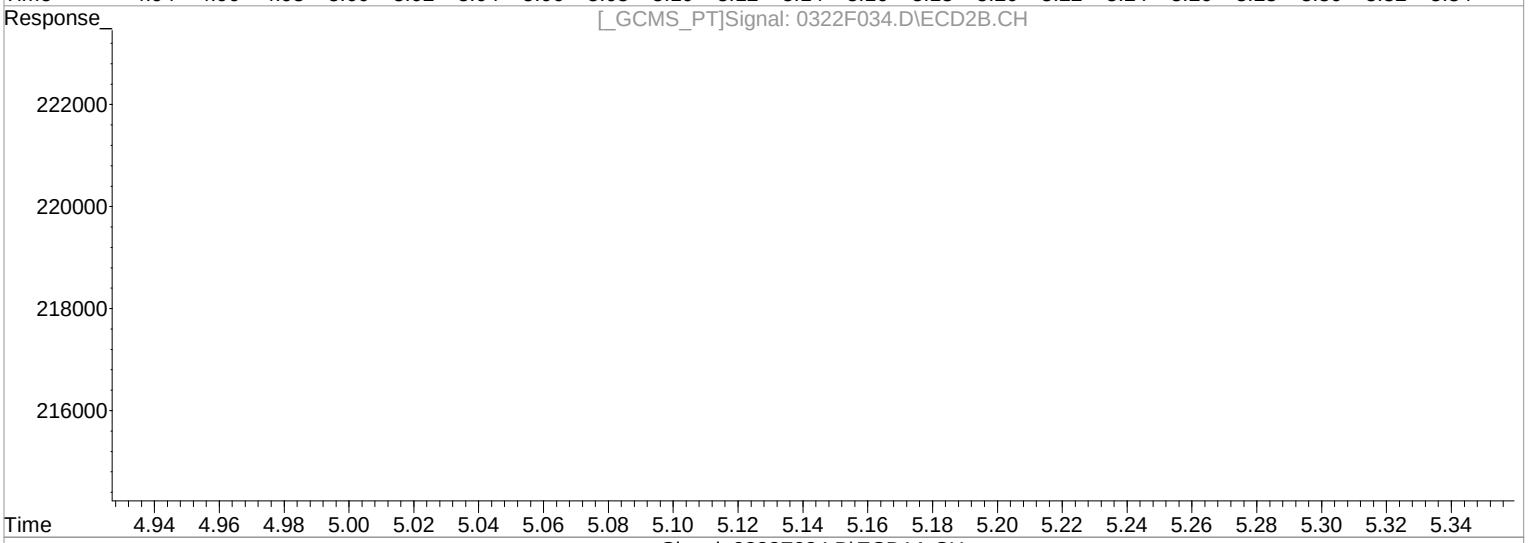
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JAD 03/27/18

Signal #1 : J:\GC28\DATA\032218B\0322F034.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F034.D\ECD2B.CH
Acq On : 23 Mar 2018 1:56 am Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration





Signal: 0322F034.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.13min 0.181ug/L

response 118304

Manual Integration:

Before

03/23/18

(9) Pentachlorophenol #2 (M)

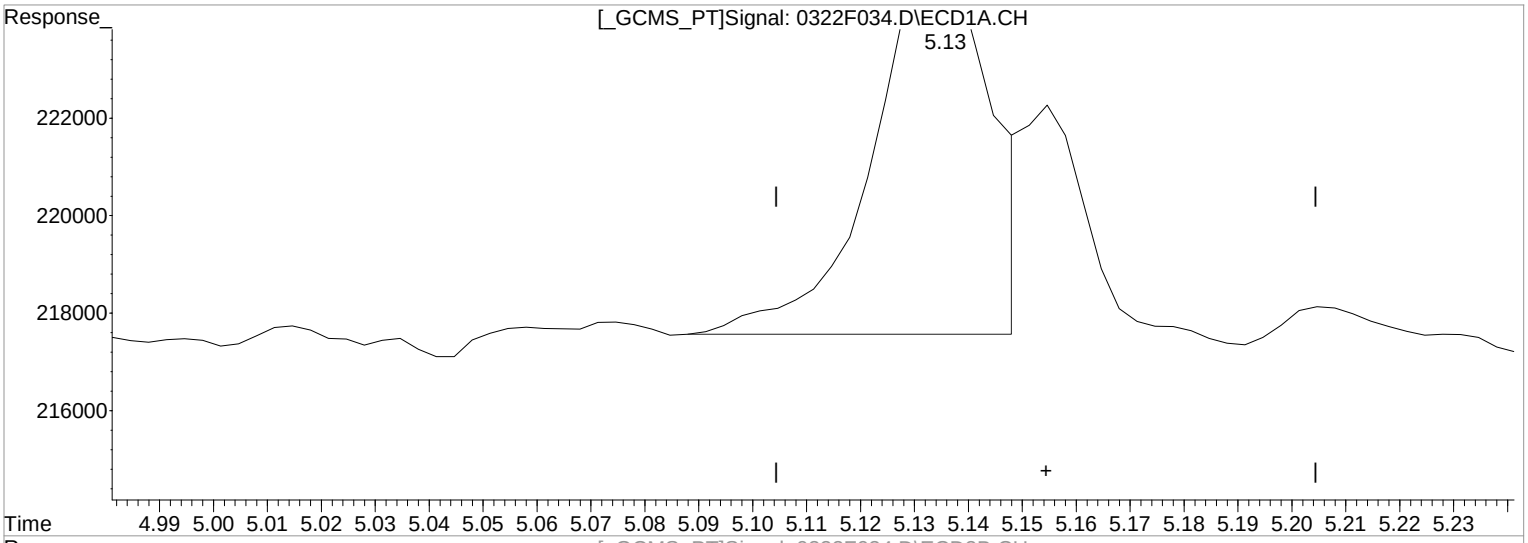
5.54min 0.535ug/L

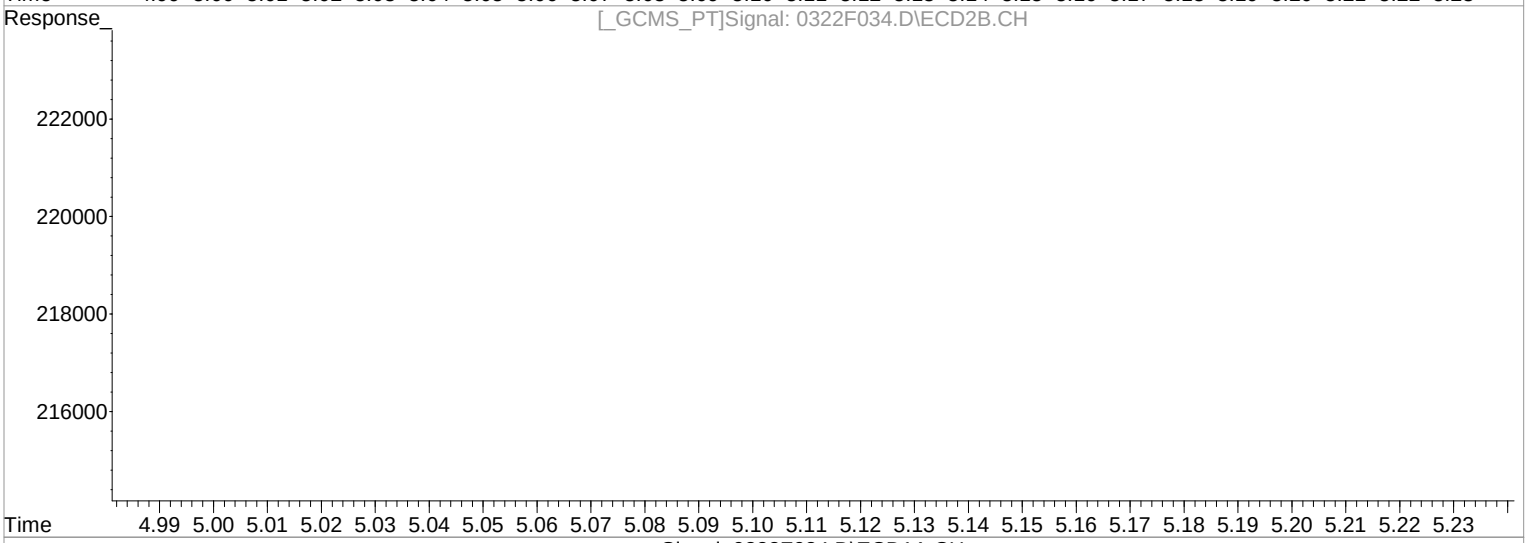
response 337604

(+) = Expected Retention Time

Signal #1 : J:\GC28\DATA\032218B\0322F034.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F034.D\ECD2B.CH
Acq On : 23 Mar 2018 1:56 am Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration





Signal: 0322F034.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.13min 0.181ug/L

response 118304

Manual Integration:

Before

03/23/18

(9) Pentachlorophenol #2 (M)

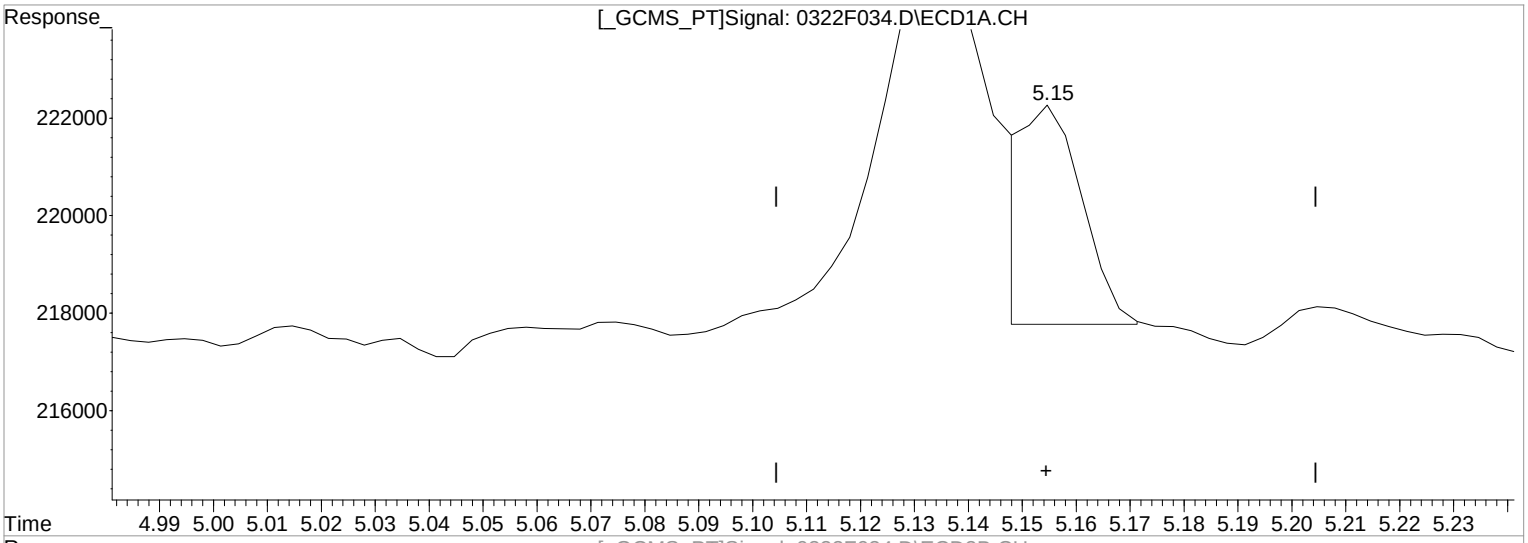
5.54min 0.535ug/L

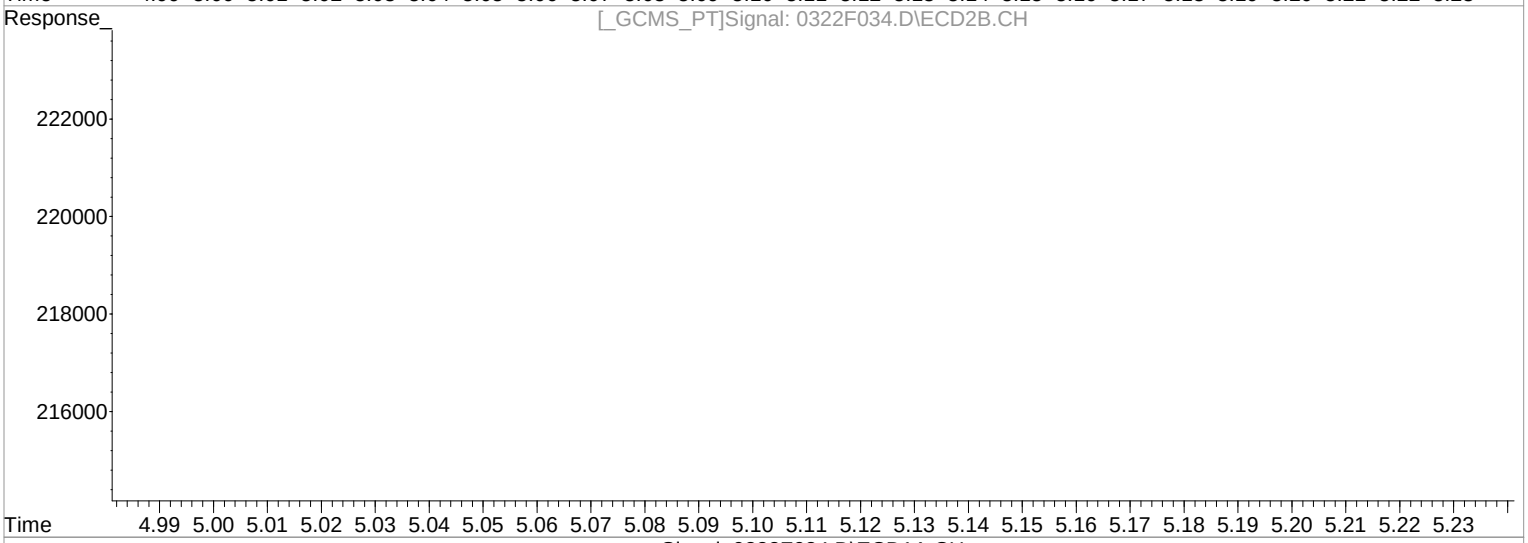
response 337604

(+) = Expected Retention Time

Signal #1 : J:\GC28\DATA\032218B\0322F034.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032218B\0322F034.D\ECD2B.CH
Acq On : 23 Mar 2018 1:56 am Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 23 11:04 2018 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration





Signal: 0322F034.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.15min 0.050ug/L m

response 32914

Manual Integration:

After

Baseline/Shoulder

03/23/18

(9) Pentachlorophenol #2 (M)

5.54min 0.535ug/L

response 337604

(+) = Expected Retention Time

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F050.D
Lab ID: KWG1801645-10
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/28/2018 00:08
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	2,4,5-Trichlorophenol	895.44	NA	3.449996948	quaderr

Primary Review: _____

Secondary Review: _____

Printed: 03/28/2018 13:57:04
u:\Stealth\Crystal.rpt\except2.rpt

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F050.D\0327F050C.D
Lab ID: KWG1801645-10
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/28/2018 00:08
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.61	NA	).229995727	quaderr

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F050.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F050.D\0327F050c.d			**Vial:**	2
Acqu Date:	03/28/2018 00:08	**Quant Date:**	03/28/2018 08:46	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-10				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00	4.57	71894	3994	0.1490	0.0110			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12		3.67		11116	5322	0.6400	910.61			
3,5-Dichlorophenol	3.37		3.91		7042	16374	0.5780	1.32			
2,4,6-Trichlorophenol			4.15		46088	45127	0.0000	0.1400			
2,4,5-Trichlorophenol	4.17		4.65		9856	32728	895.44	0.2030			
3,4,5-Trichlorophenol	4.26		4.72		12828	36246	0.0760	0.2450			
2,3,5,6-Tetrachlorophenol	4.45		4.92		4988	85043	0.0090	0.1790			
2,3,4,5-Tetrachlorophenol	4.99				60932	36722	0.1500	0.0000			
Pentachlorophenol	5.15	c	5.54	c	19749	412634	0.0300	0.6540			
2,3,4,5,6-Pentachloroanisole	5.15	c	5.54	c	19749	412634	0.0320	0.6880			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F050.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F050.D\0327F050c.d			**Vial:**	2
Acqu Date:	03/28/2018 00:08	**Quant Date:**	03/28/2018 08:46	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-10				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00	4.57	71894	3994	0.1490	0.0110			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12	3.67	11116	5322	0.6400	910.61			
3,5-Dichlorophenol	3.37	3.91	7042	16374	0.5780	1.32			
2,4,6-Trichlorophenol		4.15	46088	45127	0.0000	0.1400			
2,4,5-Trichlorophenol	4.17	4.65	9856	32728	895.44	0.2030			
3,4,5-Trichlorophenol	4.26	4.72	12828	36246	0.0760	0.2450			
2,3,5,6-Tetrachlorophenol	4.45	4.92	4988	85043	0.0090	0.1790			
2,3,4,5-Tetrachlorophenol	4.99		60932	36722	0.1500	0.0000			
Pentachlorophenol	5.15 c	5.54 c	19749	412634	0.0300	0.6540			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.54 c	19749	412634	0.0320	0.6880			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F050.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Mar 2018 12:08 am Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:29 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
4) S	4-Bromo-2...	3.996	4.572	71894	3994	0.149	0.011	#
	Target Compounds							
1)	3,4-Dichl...	3.116	3.672	11116	5322	0.640	910.611	#
2)	3,5-Dichl...	3.369	3.905	7042	16374	0.578	1.324	#
3)	2,4,6-Tri...	3.443	4.149	46088	45127	N.D.	0.140	
5)	2,4,5-Tri...	4.166	4.645	9856	32728	895.435	0.203	#
6)	3,4,5-Tri...	4.256f	4.722	12828	36246	0.076	0.245	#
7) M	2,3,5,6-T...	4.449	4.922f	4988	85043	0.009	0.179	#
8) M	2,3,4,5-T...	4.989f	5.339f	60932	36722	0.150	N.D.	#
9) M	Pentachlo...	5.153	5.535	19749	412634	0.030	0.654	#
10)	Pentachlo...	5.153	5.535	19749	412634	0.032	0.688	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

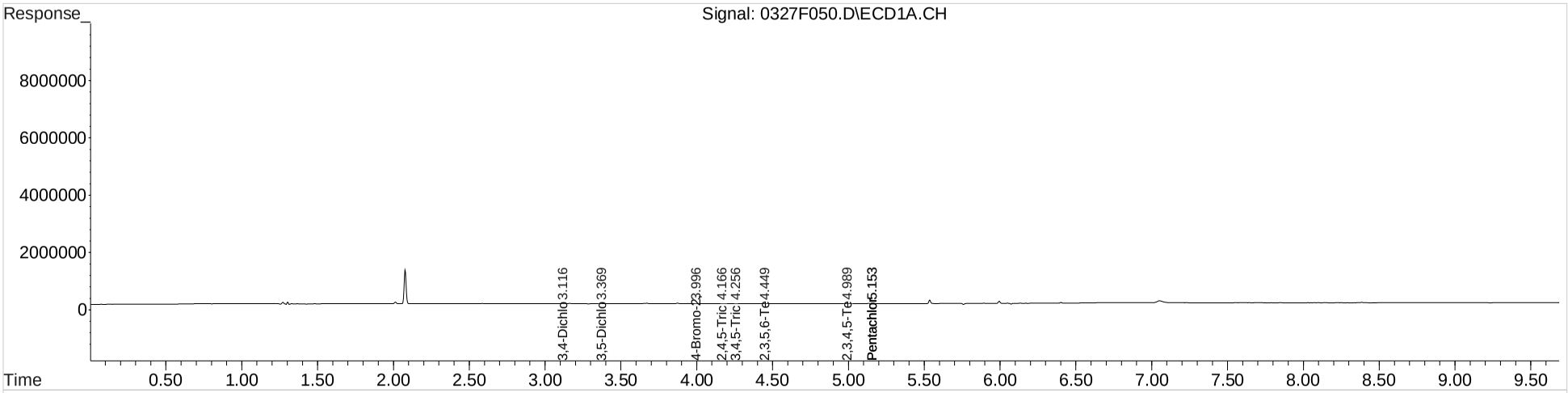
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F050.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Mar 2018 12:08 am Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:29 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F050.D
Lab ID: KWG1801645-10
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/28/2018 00:08
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	2,4,5-Trichlorophenol	895.44	NA	3.449996948	quaderr

Primary Review: _____

Secondary Review: _____

Printed: 03/28/2018 13:57:04
u:\Stealth\Crystal.rpt\except2.rpt

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F050.D\0327F050C.D
Lab ID: KWG1801645-10
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/28/2018 00:08
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.61	NA	).229995727	quaderr

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F050.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F050.D\0327F050c.d			**Vial:**	2
Acqu Date:	03/28/2018 00:08	**Quant Date:**	03/28/2018 08:46	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-10				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00	4.57	71894	3994	0.1490	0.0110			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12	3.67	11116	5322	0.6400	910.61			
3,5-Dichlorophenol	3.37	3.91	7042	16374	0.5780	1.32			
2,4,6-Trichlorophenol		4.15	46088	45127	0.0000	0.1400			
2,4,5-Trichlorophenol	4.17	4.65	9856	32728	895.44	0.2030			
3,4,5-Trichlorophenol	4.26	4.72	12828	36246	0.0760	0.2450			
2,3,5,6-Tetrachlorophenol	4.45	4.92	4988	85043	0.0090	0.1790			
2,3,4,5-Tetrachlorophenol	4.99		60932	36722	0.1500	0.0000			
Pentachlorophenol	5.15 c	5.54 c	19749	412634	0.0300	0.6540			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.54 c	19749	412634	0.0320	0.6880			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F050.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F050.D\0327F050c.d			**Vial:**	2
Acqu Date:	03/28/2018 00:08	**Quant Date:**	03/28/2018 08:46	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-10				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00	4.57	71894	3994	0.1490	0.0110			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12	3.67	11116	5322	0.6400	910.61			
3,5-Dichlorophenol	3.37	3.91	7042	16374	0.5780	1.32			
2,4,6-Trichlorophenol		4.15	46088	45127	0.0000	0.1400			
2,4,5-Trichlorophenol	4.17	4.65	9856	32728	895.44	0.2030			
3,4,5-Trichlorophenol	4.26	4.72	12828	36246	0.0760	0.2450			
2,3,5,6-Tetrachlorophenol	4.45	4.92	4988	85043	0.0090	0.1790			
2,3,4,5-Tetrachlorophenol	4.99		60932	36722	0.1500	0.0000			
Pentachlorophenol	5.15 c	5.54 c	19749	412634	0.0300	0.6540			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.54 c	19749	412634	0.0320	0.6880			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F050.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Mar 2018 12:08 am Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:29 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	3.996	4.572	71894	3994	0.149	0.011	#
		Target Compounds							
1)		3,4-Dichl...	3.116	3.672	11116	5322	0.640	910.611	#
2)		3,5-Dichl...	3.369	3.905	7042	16374	0.578	1.324	#
3)		2,4,6-Tri...	3.443	4.149	46088	45127	N.D.	0.140	
5)		2,4,5-Tri...	4.166	4.645	9856	32728	895.435	0.203	#
6)		3,4,5-Tri...	4.256f	4.722	12828	36246	0.076	0.245	#
7)	M	2,3,5,6-T...	4.449	4.922f	4988	85043	0.009	0.179	#
8)	M	2,3,4,5-T...	4.989f	5.339f	60932	36722	0.150	N.D.	#
9)	M	Pentachlo...	5.153	5.535	19749	412634	0.030	0.654	#
10)		Pentachlo...	5.153	5.535	19749	412634	0.032	0.688	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

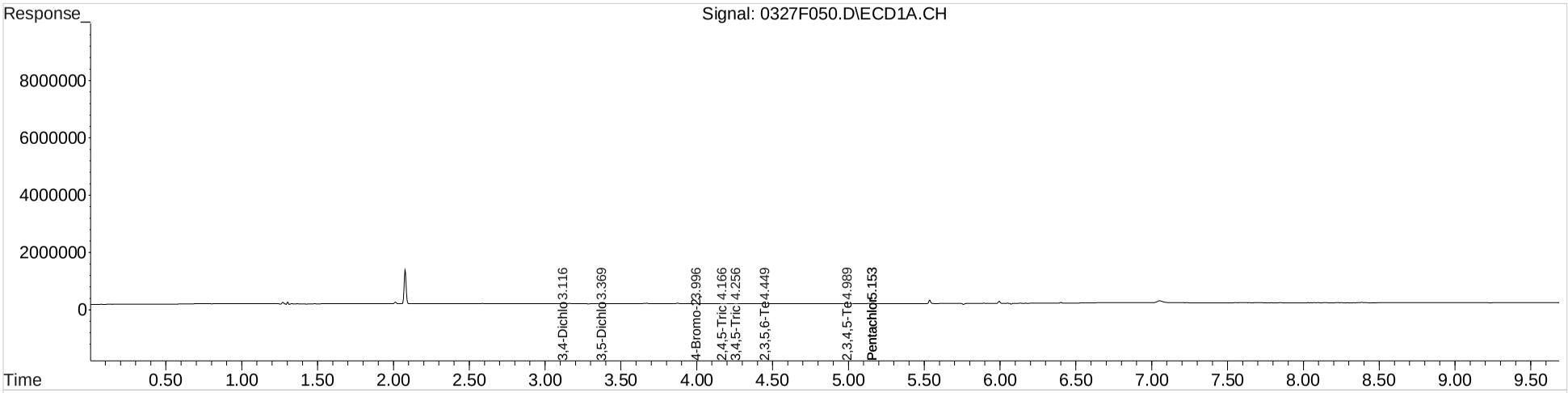
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F050.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Mar 2018 12:08 am Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:29 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JAD 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F004.D
Lab ID: KWG1801645-2
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 10:00
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	2,4,5-Trichlorophenol	895.44	NA	3.449996948	quaderr

Primary Review: _____

Secondary Review: _____

1st JAD 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F004.D\0327F004C.D
Lab ID: KWG1801645-2
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 10:00
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.58	NA	).229995727	quaderr

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F004.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F004.D\0327F004c.d			**Vial:**	2
Acqu Date:	03/27/2018 10:00	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-2				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	3.99		47966	0	0.0990	0.0000			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11		3.66		14548	5874	0.8380	910.58			
3,5-Dichlorophenol	3.32		3.90		29466	14626	2.42	1.18			
2,4,6-Trichlorophenol			4.14		50726	54658	0.0000	0.1700			
2,4,5-Trichlorophenol	4.23	c	4.64		9858	34130	895.44	0.2120			
3,4,5-Trichlorophenol	4.23	c	4.72		9858	67572	0.0590	0.4560			
2,3,5,6-Tetrachlorophenol			4.96		0	3934	0.0000	0.0080			
2,3,4,5-Tetrachlorophenol	4.99				10928	3598	0.0270	0.0000			
Pentachlorophenol	5.13	c	5.54	c	43346	546698	0.0660	0.8660			
2,3,4,5,6-Pentachloroanisole	5.13	c	5.54	c	43346	546698	0.0700	0.9110			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F004.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F004.D\0327F004c.d			**Vial:**	2
Acqu Date:	03/27/2018 10:00	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-2				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	3.99		47966	0	0.0990	0.0000			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11		3.66		14548	5874	0.8380	910.58			
3,5-Dichlorophenol	3.32		3.90		29466	14626	2.42	1.18			
2,4,6-Trichlorophenol			4.14		50726	54658	0.0000	0.1700			
2,4,5-Trichlorophenol	4.23	c	4.64		9858	34130	895.44	0.2120			
3,4,5-Trichlorophenol	4.23	c	4.72		9858	67572	0.0590	0.4560			
2,3,5,6-Tetrachlorophenol			4.96		0	3934	0.0000	0.0080			
2,3,4,5-Tetrachlorophenol	4.99				10928	3598	0.0270	0.0000			
Pentachlorophenol	5.13	c	5.54	c	43346	546698	0.0660	0.8660			
2,3,4,5,6-Pentachloroanisole	5.13	c	5.54	c	43346	546698	0.0700	0.9110			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

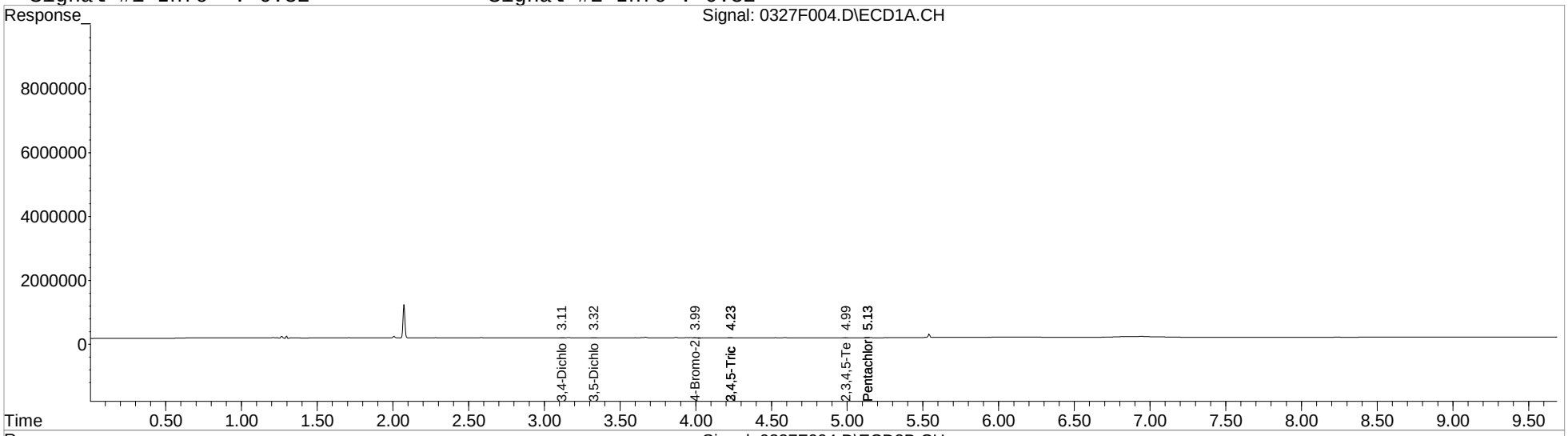
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

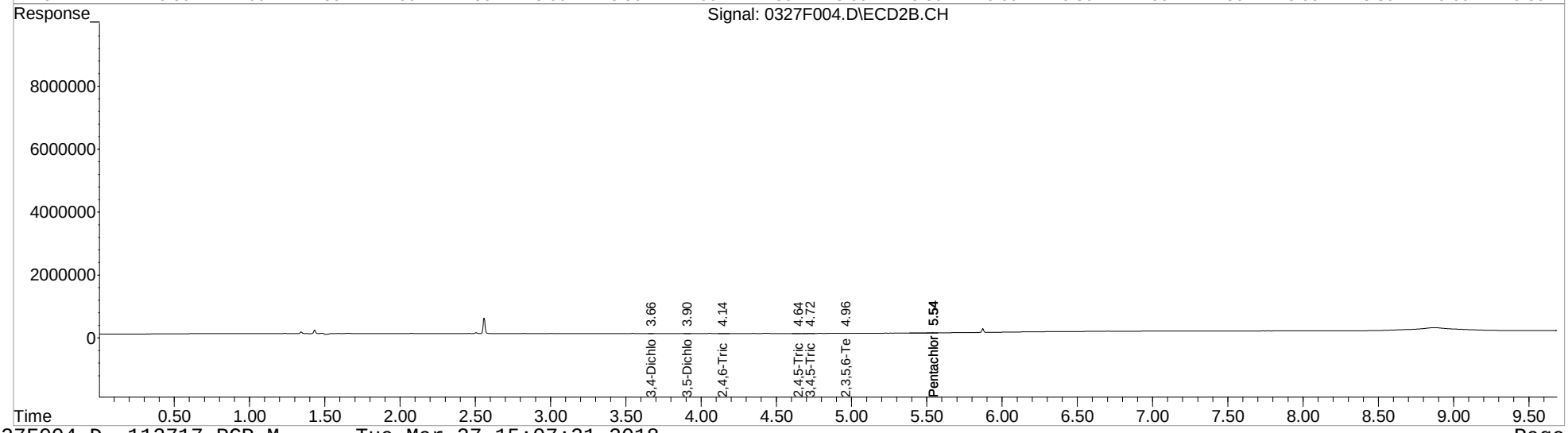
1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F004.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032718\0327F004.D\ECD2B.CH
Acq On : 27 Mar 2018 10:00 am Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F004.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032718\0327F004.D\ECD2B.CH
Acq On : 27 Mar 2018 10:00 am Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:19 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	3.99	0.00	47966	0	0.099	N.D.	#
		Target Compounds							
1)		3,4-Dichlorophen	3.11	3.66	14548	5874	0.838	910.578	#
2)		3,5-Dichlorophen	3.32f	3.90	29466	14626	2.419	1.183	#
3)		2,4,6-Trichlorop	3.44	4.14	50726	54658	N.D.	0.170	
5)		2,4,5-Trichlorop	4.23f	4.64	9858	34130	895.435	0.212	#
6)		3,4,5-Trichlorop	4.23	4.72	9858	67572	0.059	0.456	#
7)	M	2,3,5,6-Tetrachl	0.00	4.96	0	3934	N.D.	0.008	#
8)	M	2,3,4,5-Tetrachl	4.99f	5.37	10928	3598	0.027	N.D.	#
9)	M	Pentachloropheno	5.13	5.54	43346	546698	0.066	0.866	#
10)		Pentachloroaniso	5.13	5.54	43346	546698	0.070	0.911	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F004.D
Lab ID: KWG1801645-2
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 10:00
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	2,4,5-Trichlorophenol	895.44	NA	3.449996948	quaderr

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F004.D\0327F004C.D
Lab ID: KWG1801645-2
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 10:00
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.58	NA	).229995727	quaderr

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F004.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F004.D\0327F004c.d			**Vial:**	2
Acqu Date:	03/27/2018 10:00	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-2				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	3.99		47966	0	0.0990	0.0000			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11		3.66		14548	5874	0.8380	910.58			
3,5-Dichlorophenol	3.32		3.90		29466	14626	2.42	1.18			
2,4,6-Trichlorophenol			4.14		50726	54658	0.0000	0.1700			
2,4,5-Trichlorophenol	4.23	c	4.64		9858	34130	895.44	0.2120			
3,4,5-Trichlorophenol	4.23	c	4.72		9858	67572	0.0590	0.4560			
2,3,5,6-Tetrachlorophenol			4.96		0	3934	0.0000	0.0080			
2,3,4,5-Tetrachlorophenol	4.99				10928	3598	0.0270	0.0000			
Pentachlorophenol	5.13	c	5.54	c	43346	546698	0.0660	0.8660			
2,3,4,5,6-Pentachloroanisole	5.13	c	5.54	c	43346	546698	0.0700	0.9110			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

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#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F004.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F004.D\0327F004c.d			**Vial:**	2
Acqu Date:	03/27/2018 10:00	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-2				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	3.99		47966	0	0.0990	0.0000			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11		3.66		14548	5874	0.8380	910.58			
3,5-Dichlorophenol	3.32		3.90		29466	14626	2.42	1.18			
2,4,6-Trichlorophenol			4.14		50726	54658	0.0000	0.1700			
2,4,5-Trichlorophenol	4.23	c	4.64		9858	34130	895.44	0.2120			
3,4,5-Trichlorophenol	4.23	c	4.72		9858	67572	0.0590	0.4560			
2,3,5,6-Tetrachlorophenol			4.96		0	3934	0.0000	0.0080			
2,3,4,5-Tetrachlorophenol	4.99				10928	3598	0.0270	0.0000			
Pentachlorophenol	5.13	c	5.54	c	43346	546698	0.0660	0.8660			
2,3,4,5,6-Pentachloroanisole	5.13	c	5.54	c	43346	546698	0.0700	0.9110			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

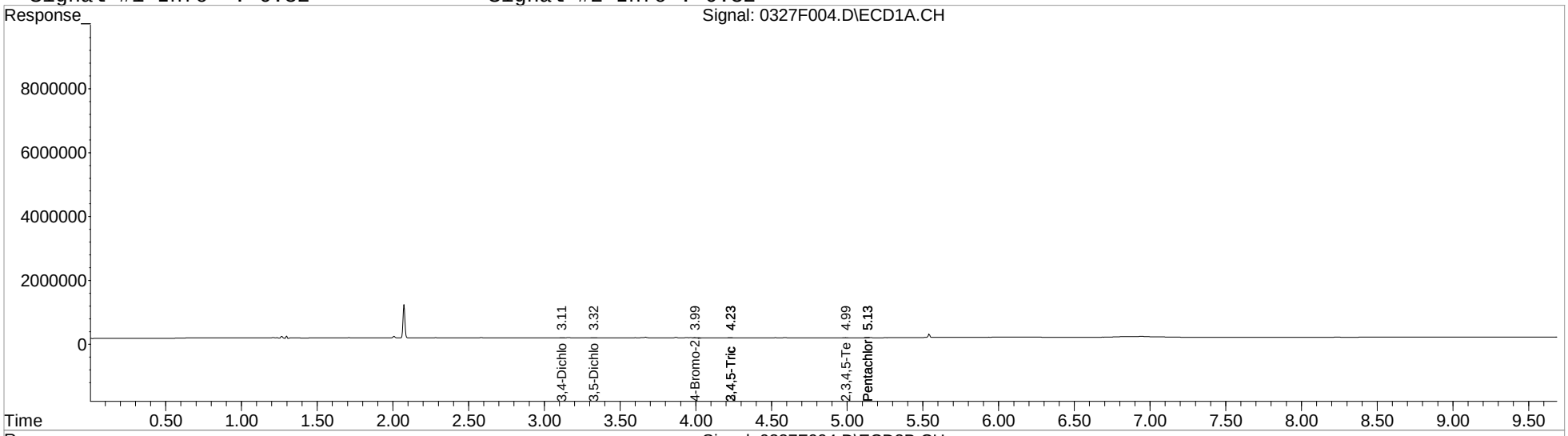
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

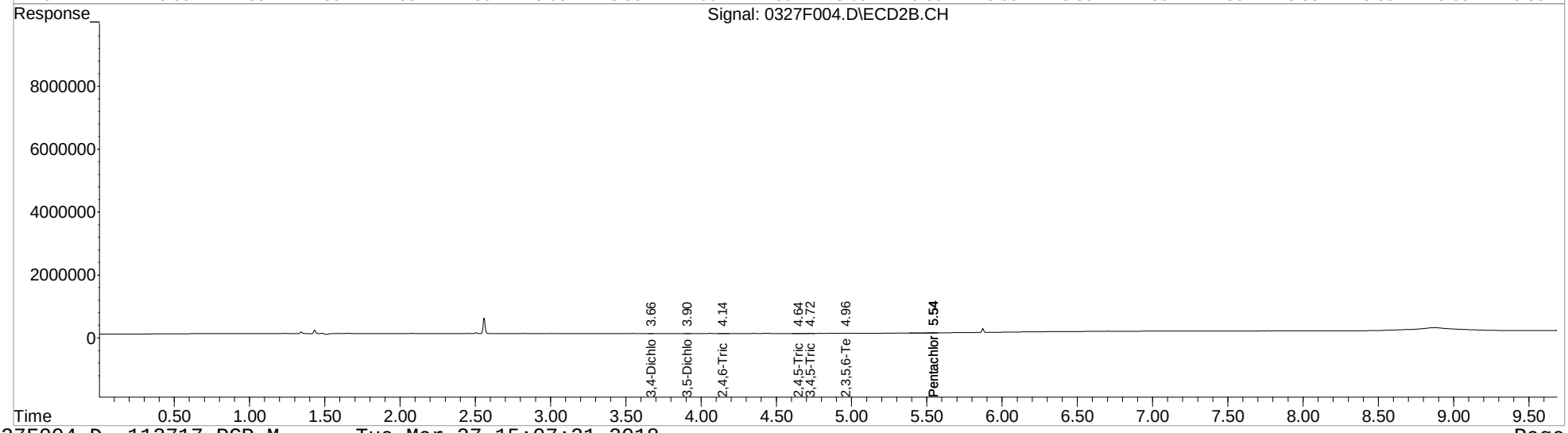
1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F004.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032718\0327F004.D\ECD2B.CH
Acq On : 27 Mar 2018 10:00 am Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F004.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032718\0327F004.D\ECD2B.CH
Acq On : 27 Mar 2018 10:00 am Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:19 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	3.99	0.00	47966	0	0.099	N.D.	#
		Target Compounds							
1)		3,4-Dichlorophen	3.11	3.66	14548	5874	0.838	910.578	#
2)		3,5-Dichlorophen	3.32f	3.90	29466	14626	2.419	1.183	#
3)		2,4,6-Trichlorop	3.44	4.14	50726	54658	N.D.	0.170	
5)		2,4,5-Trichlorop	4.23f	4.64	9858	34130	895.435	0.212	#
6)		3,4,5-Trichlorop	4.23	4.72	9858	67572	0.059	0.456	#
7)	M	2,3,5,6-Tetrachl	0.00	4.96	0	3934	N.D.	0.008	#
8)	M	2,3,4,5-Tetrachl	4.99f	5.37	10928	3598	0.027	N.D.	#
9)	M	Pentachloropheno	5.13	5.54	43346	546698	0.066	0.866	#
10)		Pentachloroaniso	5.13	5.54	43346	546698	0.070	0.911	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JAD 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F014.D
Lab ID: KWG1801645-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 13:36
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F014.D\0327F014C.D
Lab ID: KWG1801645-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 13:36
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.68	NA	).229995727	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F014.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F014.D\0327F014c.d			**Vial:**	2
Acqu Date:	03/27/2018 13:36	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-4				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00		54486	0	0.1130	0.0000			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	3.67	17768	4208	1.02	910.68			
3,5-Dichlorophenol	3.37	3.91	6496	16942	0.5330	1.37			
2,4,6-Trichlorophenol		4.15	47472	40470	0.0000	0.1260			
2,4,5-Trichlorophenol		4.65	0	53054	0.0000	0.3300			
3,4,5-Trichlorophenol	4.26	4.72	7794	51408	0.0460	0.3470			
2,3,5,6-Tetrachlorophenol	4.44	4.92	11906	86544	0.0220	0.1820			
2,3,4,5-Tetrachlorophenol	4.99		26118	6036	0.0640	0.0000			
Pentachlorophenol	5.16 c	5.56 c	30724	52652	0.0470	0.0830			
2,3,4,5,6-Pentachloroanisole	5.16 c	5.56 c	30724	52652	0.0490	0.0880			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F014.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F014.D\0327F014c.d			**Vial:**	2
Acqu Date:	03/27/2018 13:36	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-4				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00		54486	0	0.1130	0.0000			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	3.67	17768	4208	1.02	910.68			
3,5-Dichlorophenol	3.37	3.91	6496	16942	0.5330	1.37			
2,4,6-Trichlorophenol		4.15	47472	40470	0.0000	0.1260			
2,4,5-Trichlorophenol		4.65	0	53054	0.0000	0.3300			
3,4,5-Trichlorophenol	4.26	4.72	7794	51408	0.0460	0.3470			
2,3,5,6-Tetrachlorophenol	4.44	4.92	11906	86544	0.0220	0.1820			
2,3,4,5-Tetrachlorophenol	4.99		26118	6036	0.0640	0.0000			
Pentachlorophenol	5.16 c	5.56 c	30724	52652	0.0470	0.0830			
2,3,4,5,6-Pentachloroanisole	5.16 c	5.56 c	30724	52652	0.0490	0.0880			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

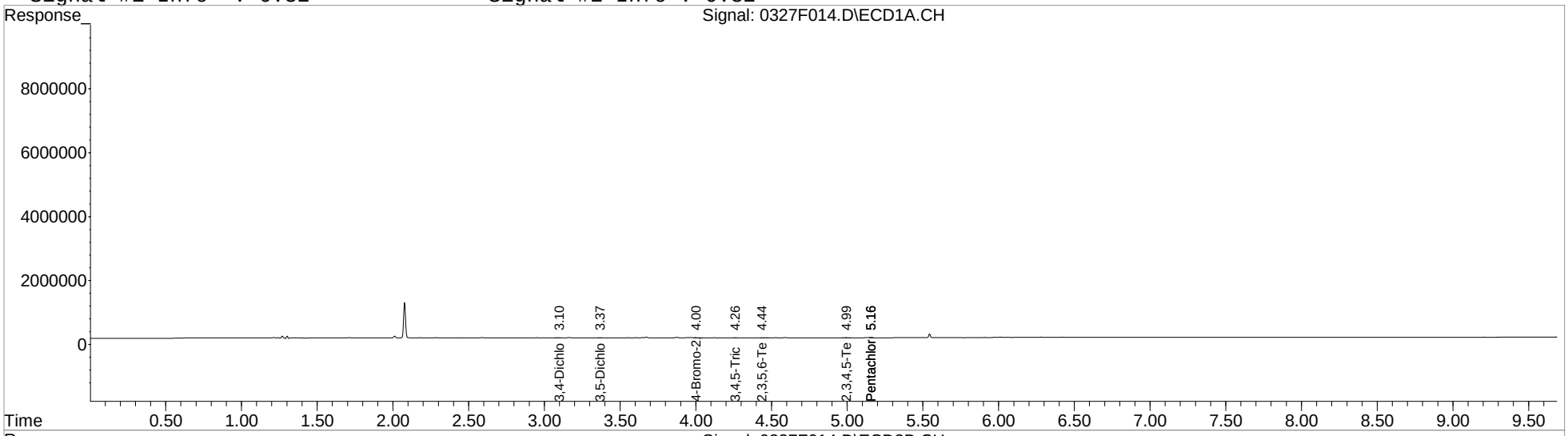
Quantitation Report (Not Reviewed)

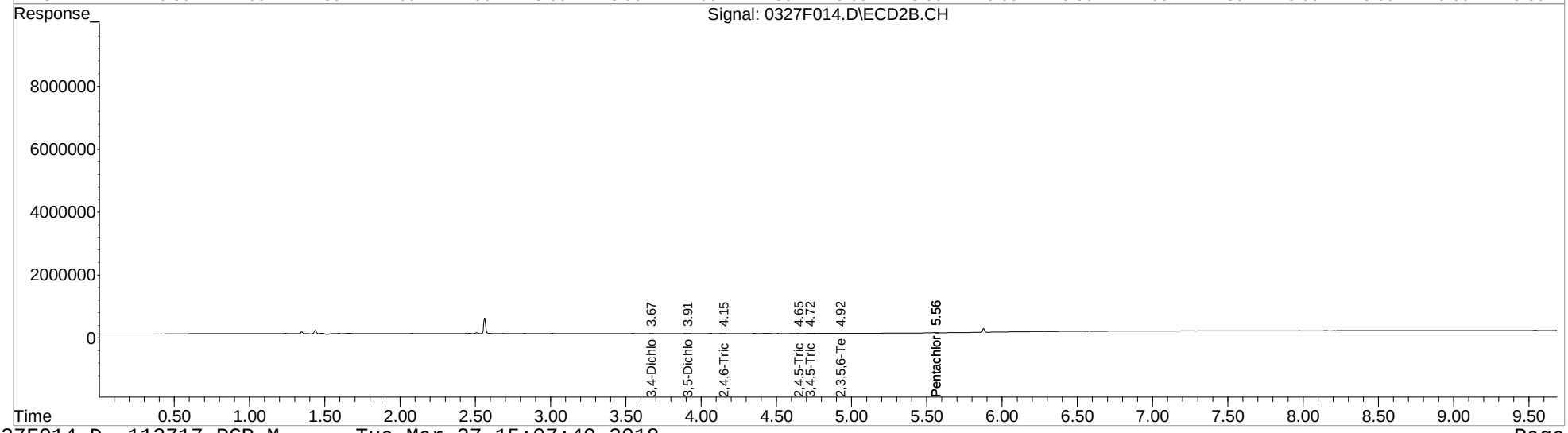
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F014.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032718\0327F014.D\ECD2B.CH
Acq On : 27 Mar 2018 1:36 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (Not Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F014.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032718\0327F014.D\ECD2B.CH
Acq On : 27 Mar 2018 1:36 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:26 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.00	0.00	54486	0	0.113	N.D.	#
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	17768	4208	1.023	910.677	#
2)		3,5-Dichlorophen	3.37	3.91	6496	16942	0.533	1.370	#
3)		2,4,6-Trichlorop	3.45	4.15	47472	40470	N.D.	0.126	
5)		2,4,5-Trichlorop	0.00	4.65	0	53054	N.D.	0.330	#
6)		3,4,5-Trichlorop	4.26f	4.72	7794	51408	0.046	0.347	#
7)	M	2,3,5,6-Tetrachl	4.44f	4.92f	11906	86544	0.022	0.182	#
8)	M	2,3,4,5-Tetrachl	4.99	5.38	26118	6036	0.064	N.D.	#
9)	M	Pentachloropheno	5.16	5.56	30724	52652	0.047	0.083	#
10)		Pentachloroaniso	5.16	5.56	30724	52652	0.049	0.088	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F014.D
Lab ID: KWG1801645-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 13:36
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JAD 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F014.D\0327F014C.D
Lab ID: KWG1801645-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 13:36
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.68	NA	).229995727	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F014.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F014.D\0327F014c.d			**Vial:**	2
Acqu Date:	03/27/2018 13:36	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-4				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00		54486	0	0.1130	0.0000			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	3.67	17768	4208	1.02	910.68			
3,5-Dichlorophenol	3.37	3.91	6496	16942	0.5330	1.37			
2,4,6-Trichlorophenol		4.15	47472	40470	0.0000	0.1260			
2,4,5-Trichlorophenol		4.65	0	53054	0.0000	0.3300			
3,4,5-Trichlorophenol	4.26	4.72	7794	51408	0.0460	0.3470			
2,3,5,6-Tetrachlorophenol	4.44	4.92	11906	86544	0.0220	0.1820			
2,3,4,5-Tetrachlorophenol	4.99		26118	6036	0.0640	0.0000			
Pentachlorophenol	5.16 c	5.56 c	30724	52652	0.0470	0.0830			
2,3,4,5,6-Pentachloroanisole	5.16 c	5.56 c	30724	52652	0.0490	0.0880			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F014.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F014.D\0327F014c.d			**Vial:**	2
Acqu Date:	03/27/2018 13:36	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-4				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00		54486	0	0.1130	0.0000			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	3.67	17768	4208	1.02	910.68			
3,5-Dichlorophenol	3.37	3.91	6496	16942	0.5330	1.37			
2,4,6-Trichlorophenol		4.15	47472	40470	0.0000	0.1260			
2,4,5-Trichlorophenol		4.65	0	53054	0.0000	0.3300			
3,4,5-Trichlorophenol	4.26	4.72	7794	51408	0.0460	0.3470			
2,3,5,6-Tetrachlorophenol	4.44	4.92	11906	86544	0.0220	0.1820			
2,3,4,5-Tetrachlorophenol	4.99		26118	6036	0.0640	0.0000			
Pentachlorophenol	5.16 c	5.56 c	30724	52652	0.0470	0.0830			
2,3,4,5,6-Pentachloroanisole	5.16 c	5.56 c	30724	52652	0.0490	0.0880			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

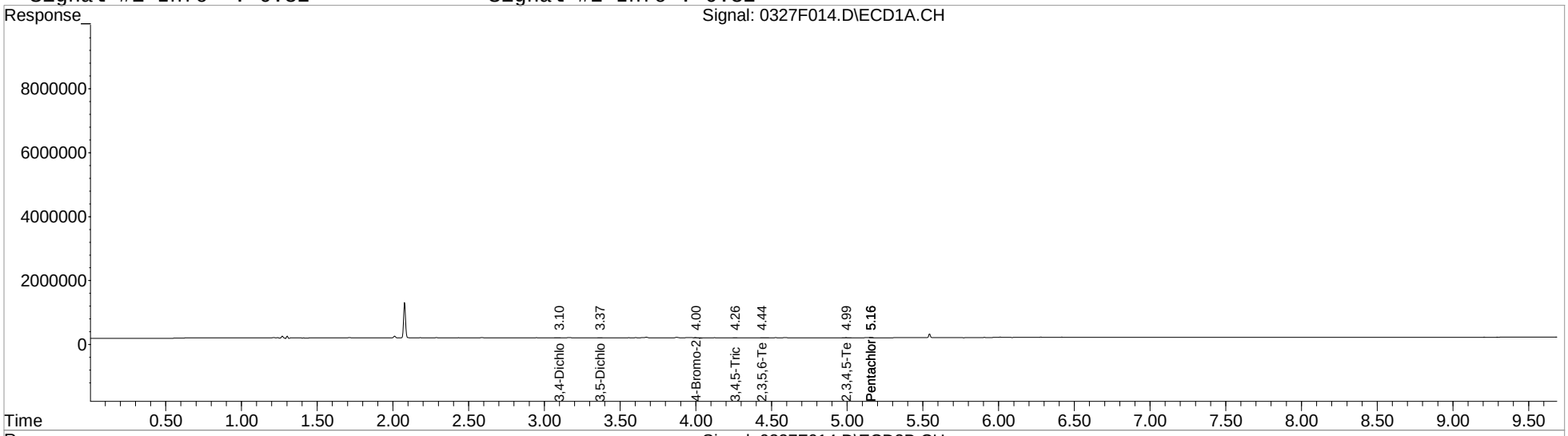
Quantitation Report (Not Reviewed)

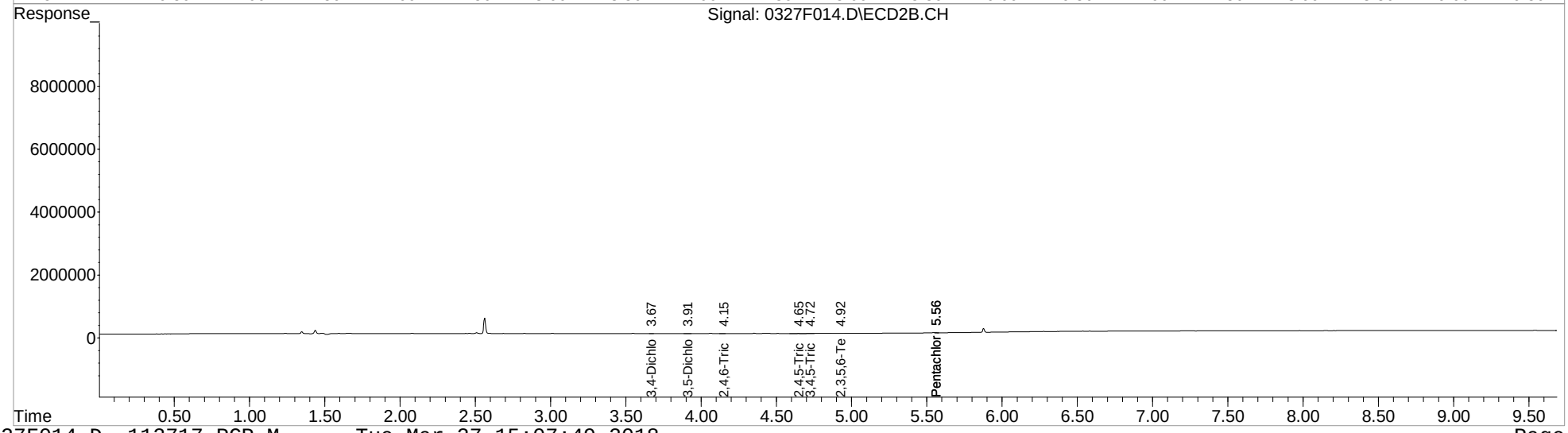
1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F014.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032718\0327F014.D\ECD2B.CH
Acq On : 27 Mar 2018 1:36 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (Not Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F014.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032718\0327F014.D\ECD2B.CH
Acq On : 27 Mar 2018 1:36 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:26 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.00	0.00	54486	0	0.113	N.D.	#
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	17768	4208	1.023	910.677	#
2)		3,5-Dichlorophen	3.37	3.91	6496	16942	0.533	1.370	#
3)		2,4,6-Trichlorop	3.45	4.15	47472	40470	N.D.	0.126	
5)		2,4,5-Trichlorop	0.00	4.65	0	53054	N.D.	0.330	#
6)		3,4,5-Trichlorop	4.26f	4.72	7794	51408	0.046	0.347	#
7)	M	2,3,5,6-Tetrachl	4.44f	4.92f	11906	86544	0.022	0.182	#
8)	M	2,3,4,5-Tetrachl	4.99	5.38	26118	6036	0.064	N.D.	#
9)	M	Pentachloropheno	5.16	5.56	30724	52652	0.047	0.083	#
10)		Pentachloroaniso	5.16	5.56	30724	52652	0.049	0.088	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F026.D
Lab ID: KWG1801645-6
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 17:06
Date Quantitated: 03/28/2018 09:17
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F026.D\0327F026C.D
Lab ID: KWG1801645-6
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 17:06
Date Quantitated: 03/28/2018 09:17
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.59	NA	).229995727	quaderr

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F026.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F026.D\0327F026c.d			**Vial:**	2
Acqu Date:	03/27/2018 17:06	**Quant Date:**	03/28/2018 09:17	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-6				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00	4.60	59808	3618	0.1240	0.0100			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	3.67	15496	5651	0.8920	910.59			
3,5-Dichlorophenol	3.37	3.91	8602	14004	0.7060	1.13			
2,4,6-Trichlorophenol		4.15	53580	53720	0.0000	0.1670			
2,4,5-Trichlorophenol		4.64	0	36240	0.0000	0.2250			
3,4,5-Trichlorophenol	4.26	4.72	9948	32163	0.0590	0.2170			
2,3,5,6-Tetrachlorophenol	4.44	4.92	10905	86042	0.0200	0.1810			
2,3,4,5-Tetrachlorophenol	4.99		30840	7968	0.0760	0.0000			
Pentachlorophenol	5.16 c	5.54 c	17583	152741**m**	0.0270	0.2420			
2,3,4,5,6-Pentachloroanisole	5.16 c	5.54 c	17583	837471	0.0280	1.40			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F026.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F026.D\0327F026c.d			**Vial:**	2
Acqu Date:	03/27/2018 17:06	**Quant Date:**	03/28/2018 09:17	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-6				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00	4.60	59808	3618	0.1240	0.0100			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	3.67	15496	5651	0.8920	910.59			
3,5-Dichlorophenol	3.37	3.91	8602	14004	0.7060	1.13			
2,4,6-Trichlorophenol		4.15	53580	53720	0.0000	0.1670			
2,4,5-Trichlorophenol		4.64	0	36240	0.0000	0.2250			
3,4,5-Trichlorophenol	4.26	4.72	9948	32163	0.0590	0.2170			
2,3,5,6-Tetrachlorophenol	4.44	4.92	10905	86042	0.0200	0.1810			
2,3,4,5-Tetrachlorophenol	4.99		30840	7968	0.0760	0.0000			
Pentachlorophenol	5.16 c	5.54 c	17583	152741**m**	0.0270	0.2420			
2,3,4,5,6-Pentachloroanisole	5.16 c	5.54 c	17583	837471	0.0280	1.40			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F026.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 5:06 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:17:16 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
4) S	4-Bromo-2...	3.999	4.598	59808	3618	0.124	0.010	#
	Target Compounds							
1)	3,4-Dichl...	3.096	3.668	15496	5651	0.892	910.592	#
2)	3,5-Dichl...	3.366	3.908	8602	14004	0.706	1.133	#
3)	2,4,6-Tri...	3.446	4.148	53580	53720	N.D.	0.167	
5)	2,4,5-Tri...	0.000	4.645	0	36240	N.D.	0.225	#
6)	3,4,5-Tri...	4.256f	4.725	9948	32163	0.059	0.217	#
7) M	2,3,5,6-T...	4.442	4.922f	10905	86042	0.020	0.181	#
8) M	2,3,4,5-T...	4.992	5.338f	30840	7968	0.076	N.D.	#
9) M	Pentachlo...	5.156	5.538	17583	152741	0.027	0.242m	#
10)	Pentachlo...	5.156	5.538	17583	837471	0.028	1.396	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

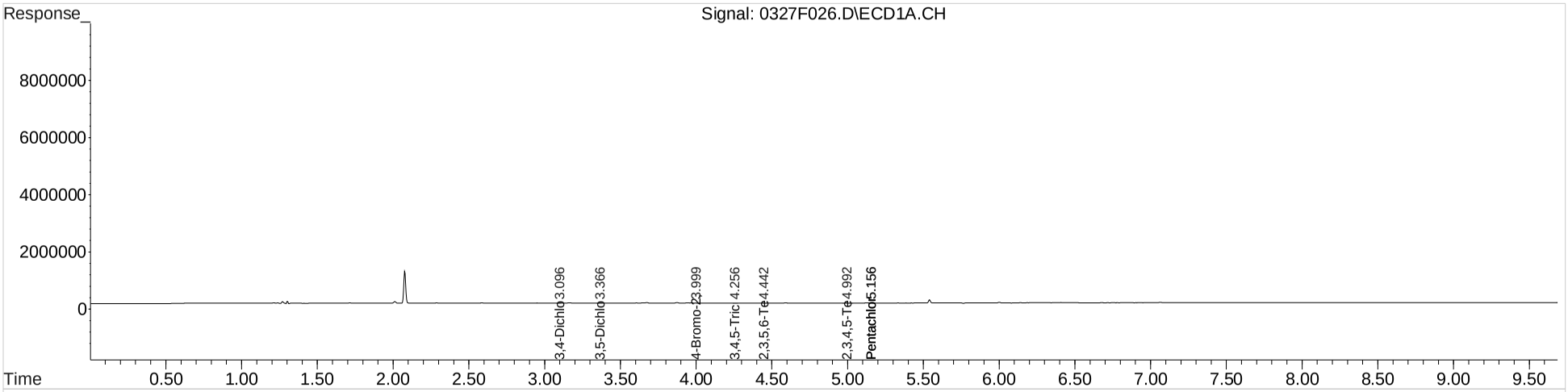
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F026.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 5:06 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:17:16 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

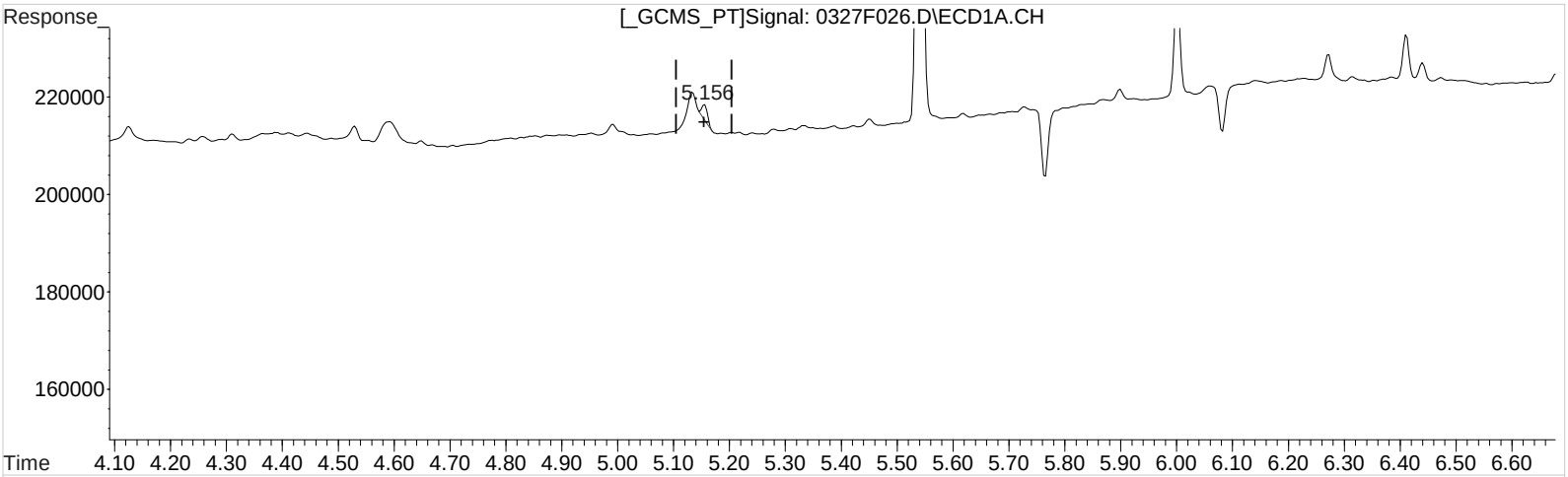


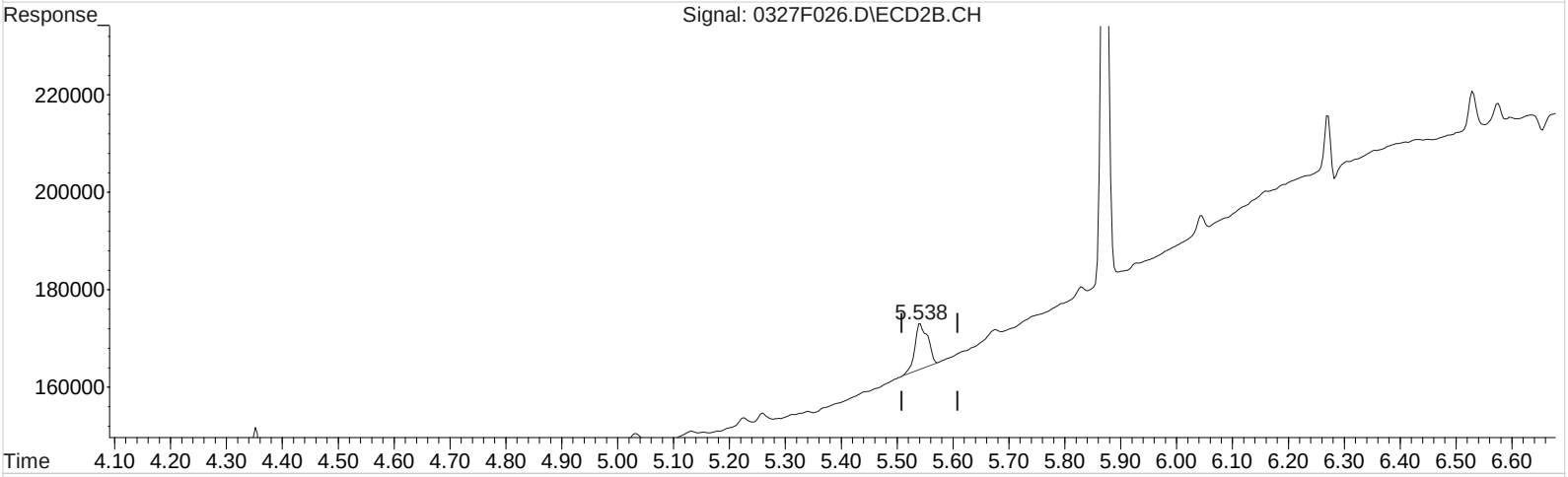
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F026.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 5:06 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:17:16 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.156min 0.027 ug/L

response 17583

Manual Integration:

After

After/No Before

03/28/18

(9) Pentachlorophenol #2 (M)

5.538min 0.242 ug/L m

response 152741

(+) = Expected Retention Time

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F026.D
Lab ID: KWG1801645-6
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 17:06
Date Quantitated: 03/28/2018 09:17
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F026.D\0327F026C.D
Lab ID: KWG1801645-6
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 17:06
Date Quantitated: 03/28/2018 09:17
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.59	NA	).229995727	quaderr

Primary Review: _____

Secondary Review: _____

Printed: 03/28/2018 13:54:21
u:\Stealth\Crystal.rpt\except2.rpt

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F026.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F026.D\0327F026c.d			**Vial:**	2
Acqu Date:	03/27/2018 17:06	**Quant Date:**	03/28/2018 09:17	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-6				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00	4.60	59808	3618	0.1240	0.0100			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	3.67	15496	5651	0.8920	910.59			
3,5-Dichlorophenol	3.37	3.91	8602	14004	0.7060	1.13			
2,4,6-Trichlorophenol		4.15	53580	53720	0.0000	0.1670			
2,4,5-Trichlorophenol		4.64	0	36240	0.0000	0.2250			
3,4,5-Trichlorophenol	4.26	4.72	9948	32163	0.0590	0.2170			
2,3,5,6-Tetrachlorophenol	4.44	4.92	10905	86042	0.0200	0.1810			
2,3,4,5-Tetrachlorophenol	4.99		30840	7968	0.0760	0.0000			
Pentachlorophenol	5.16 c	5.54 c	17583	152741**m**	0.0270	0.2420			
2,3,4,5,6-Pentachloroanisole	5.16 c	5.54 c	17583	837471	0.0280	1.40			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F026.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F026.D\0327F026c.d			**Vial:**	2
Acqu Date:	03/27/2018 17:06	**Quant Date:**	03/28/2018 09:17	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-6				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00	4.60	59808	3618	0.1240	0.0100			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	3.67	15496	5651	0.8920	910.59			
3,5-Dichlorophenol	3.37	3.91	8602	14004	0.7060	1.13			
2,4,6-Trichlorophenol		4.15	53580	53720	0.0000	0.1670			
2,4,5-Trichlorophenol		4.64	0	36240	0.0000	0.2250			
3,4,5-Trichlorophenol	4.26	4.72	9948	32163	0.0590	0.2170			
2,3,5,6-Tetrachlorophenol	4.44	4.92	10905	86042	0.0200	0.1810			
2,3,4,5-Tetrachlorophenol	4.99		30840	7968	0.0760	0.0000			
Pentachlorophenol	5.16 c	5.54 c	17583	152741**m**	0.0270	0.2420			
2,3,4,5,6-Pentachloroanisole	5.16 c	5.54 c	17583	837471	0.0280	1.40			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
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N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F026.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 5:06 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:17:16 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
4) S	4-Bromo-2...	3.999	4.598	59808	3618	0.124	0.010	#
	Target Compounds							
1)	3,4-Dichl...	3.096	3.668	15496	5651	0.892	910.592	#
2)	3,5-Dichl...	3.366	3.908	8602	14004	0.706	1.133	#
3)	2,4,6-Tri...	3.446	4.148	53580	53720	N.D.	0.167	
5)	2,4,5-Tri...	0.000	4.645	0	36240	N.D.	0.225	#
6)	3,4,5-Tri...	4.256f	4.725	9948	32163	0.059	0.217	#
7) M	2,3,5,6-T...	4.442	4.922f	10905	86042	0.020	0.181	#
8) M	2,3,4,5-T...	4.992	5.338f	30840	7968	0.076	N.D.	#
9) M	Pentachlo...	5.156	5.538	17583	152741	0.027	0.242m	#
10)	Pentachlo...	5.156	5.538	17583	837471	0.028	1.396	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

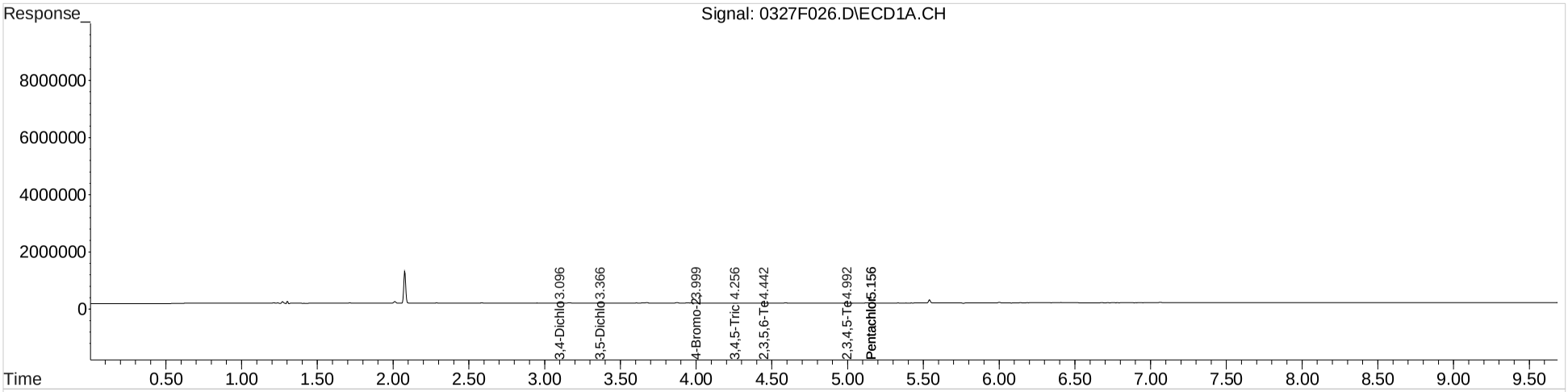
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F026.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 5:06 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:17:16 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



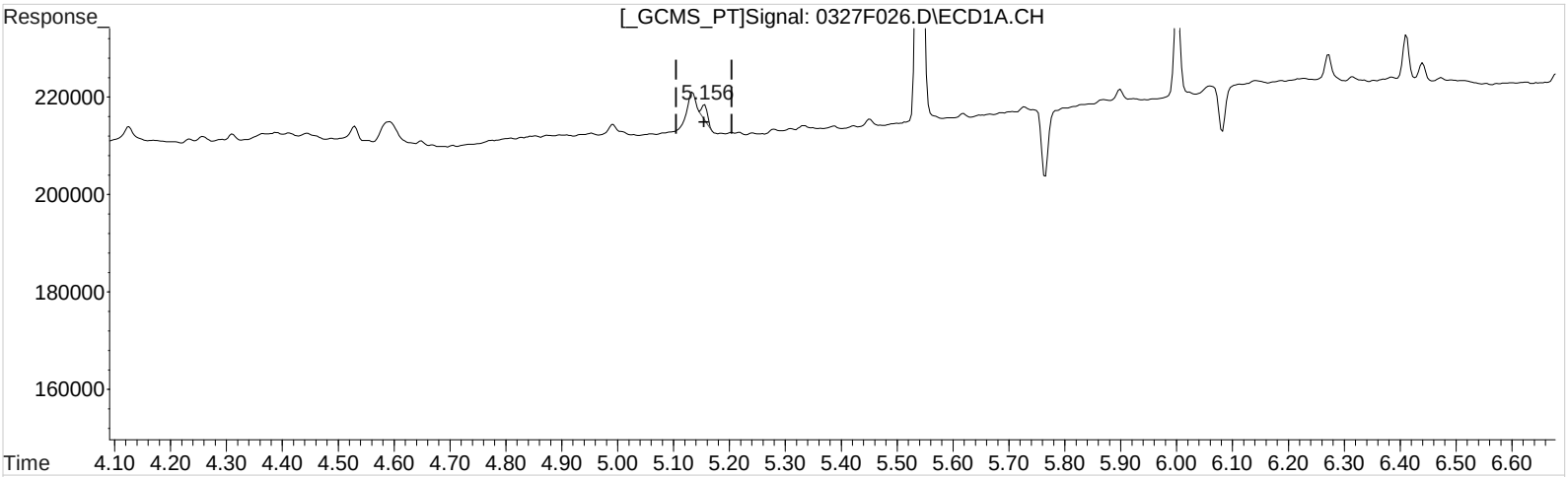
Quantitation Report (Qedit)

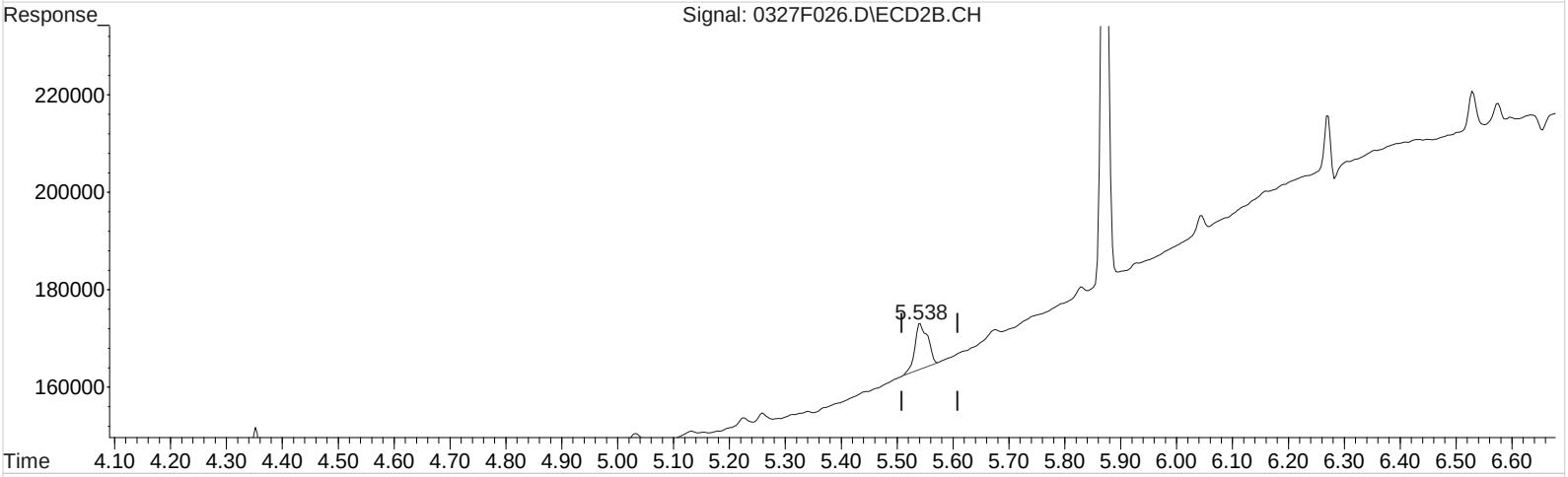
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F026.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 5:06 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:17:16 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.156min 0.027 ug/L

response 17583

Manual Integration:

After

After/No Before

03/28/18

(9) Pentachlorophenol #2 (M)

5.538min 0.242 ug/L m

response 152741

(+) = Expected Retention Time

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F040.D
Lab ID: KWG1801645-8
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 21:12
Date Quantitated: 03/28/2018 08:45
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	2,4,5-Trichlorophenol	895.45	NA	3.449996948	quaderr

Primary Review: _____

Secondary Review: _____

Printed: 03/28/2018 13:55:52
u:\Stealth\Crystal.rpt\except2.rpt

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F040.D\0327F040C.D
Lab ID: KWG1801645-8
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 21:12
Date Quantitated: 03/28/2018 08:45
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.71	NA	).229995727	quaderr

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F040.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F040.D\0327F040c.d			**Vial:**	2
Acqu Date:	03/27/2018 21:12	**Quant Date:**	03/28/2018 08:45	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-8				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1		RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00			65697	0	0.1360	0.0000			NA
				%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12		3.64	5870	3618	0.3380	910.71			
3,5-Dichlorophenol	3.32		3.91	33154	15263	2.72	1.23			
2,4,6-Trichlorophenol			4.15	35798	41266	0.0000	0.1280			
2,4,5-Trichlorophenol	4.23	c	4.64	6762	36063	895.45	0.2240			
3,4,5-Trichlorophenol	4.23	c	4.72	6762	40312	0.0400	0.2720			
2,3,5,6-Tetrachlorophenol			4.92	0	73653	0.0000	0.1550			
2,3,4,5-Tetrachlorophenol	4.99			41428	21200	0.1020	0.0000			
Pentachlorophenol	5.13	c		54054	0	0.0820	0.0000			
2,3,4,5,6-Pentachloroanisole	5.13	c		54054	0	0.0870	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F040.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F040.D\0327F040c.d			**Vial:**	2
Acqu Date:	03/27/2018 21:12	**Quant Date:**	03/28/2018 08:45	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-8				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1		RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00			65697	0	0.1360	0.0000			NA
				%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12		3.64	5870	3618	0.3380	910.71			
3,5-Dichlorophenol	3.32		3.91	33154	15263	2.72	1.23			
2,4,6-Trichlorophenol			4.15	35798	41266	0.0000	0.1280			
2,4,5-Trichlorophenol	4.23	c	4.64	6762	36063	895.45	0.2240			
3,4,5-Trichlorophenol	4.23	c	4.72	6762	40312	0.0400	0.2720			
2,3,5,6-Tetrachlorophenol			4.92	0	73653	0.0000	0.1550			
2,3,4,5-Tetrachlorophenol	4.99			41428	21200	0.1020	0.0000			
Pentachlorophenol	5.13	c		54054	0	0.0820	0.0000			
2,3,4,5,6-Pentachloroanisole	5.13	c		54054	0	0.0870	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F040.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 9:12 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:45:59 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	3.998	0.000	65697	0	0.136	N.D.	#
		Target Compounds							
1)		3,4-Dichl...	3.118	3.640	5870	3618	0.338	910.713	#
2)		3,5-Dichl...	3.324f	3.907	33154	15263	2.721	1.234	#
3)		2,4,6-Tri...	3.441	4.147	35798	41266	N.D.	0.128	
5)		2,4,5-Tri...	4.231f	4.644	6762	36063	895.453	0.224	#
6)		3,4,5-Tri...	4.231	4.724	6762	40312	0.040	0.272	#
7)	M	2,3,5,6-T...	0.000	4.920f	0	73653	N.D.	0.155	#
8)	M	2,3,4,5-T...	4.988f	5.337f	41428	21200	0.102	N.D.	#
9)	M	Pentachlo...	5.131	0.000	54054	0	0.082	N.D.	#
10)		Pentachlo...	5.131	0.000	54054	0	0.087	N.D.	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

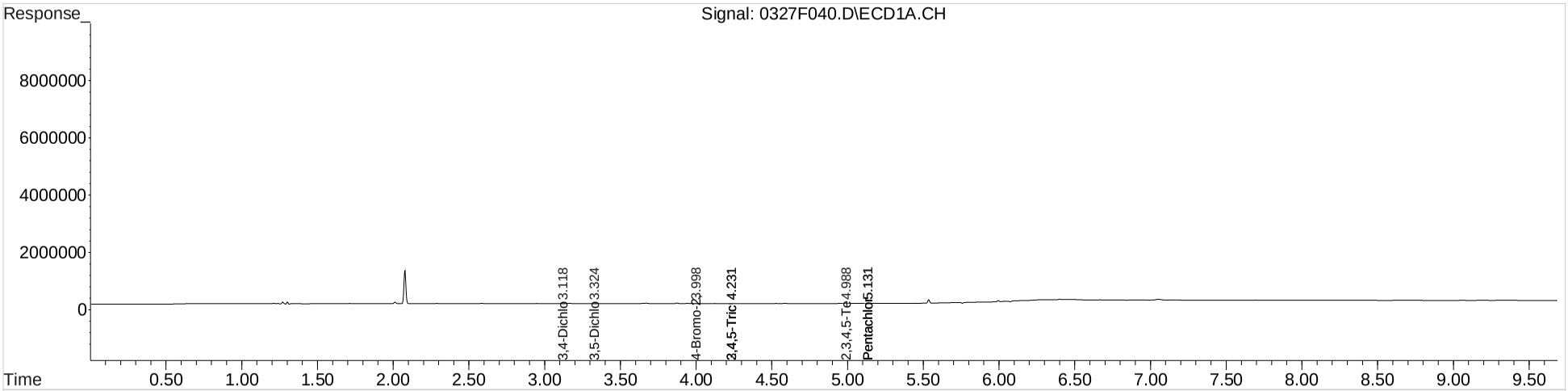
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F040.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 9:12 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:45:59 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F040.D
Lab ID: KWG1801645-8
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 21:12
Date Quantitated: 03/28/2018 08:45
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	2,4,5-Trichlorophenol	895.45	NA	3.449996948	quaderr

Primary Review: _____

Secondary Review: _____

Printed: 03/28/2018 13:55:52
u:\Stealth\Crystal.rpt\except2.rpt

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F040.D\0327F040C.D
Lab ID: KWG1801645-8
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 21:12
Date Quantitated: 03/28/2018 08:45
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.71	NA	).229995727	quaderr

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F040.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F040.D\0327F040c.d			**Vial:**	2
Acqu Date:	03/27/2018 21:12	**Quant Date:**	03/28/2018 08:45	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-8				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1		RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00			65697	0	0.1360	0.0000			NA
				%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12		3.64	5870	3618	0.3380	910.71			
3,5-Dichlorophenol	3.32		3.91	33154	15263	2.72	1.23			
2,4,6-Trichlorophenol			4.15	35798	41266	0.0000	0.1280			
2,4,5-Trichlorophenol	4.23	c	4.64	6762	36063	895.45	0.2240			
3,4,5-Trichlorophenol	4.23	c	4.72	6762	40312	0.0400	0.2720			
2,3,5,6-Tetrachlorophenol			4.92	0	73653	0.0000	0.1550			
2,3,4,5-Tetrachlorophenol	4.99			41428	21200	0.1020	0.0000			
Pentachlorophenol	5.13	c		54054	0	0.0820	0.0000			
2,3,4,5,6-Pentachloroanisole	5.13	c		54054	0	0.0870	0.0000			

U: Undetected at or above MDL
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?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F040.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F040.D\0327F040c.d			**Vial:**	2
Acqu Date:	03/27/2018 21:12	**Quant Date:**	03/28/2018 08:45	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-8				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1		RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00			65697	0	0.1360	0.0000			NA
				%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12		3.64	5870	3618	0.3380	910.71			
3,5-Dichlorophenol	3.32		3.91	33154	15263	2.72	1.23			
2,4,6-Trichlorophenol			4.15	35798	41266	0.0000	0.1280			
2,4,5-Trichlorophenol	4.23	c	4.64	6762	36063	895.45	0.2240			
3,4,5-Trichlorophenol	4.23	c	4.72	6762	40312	0.0400	0.2720			
2,3,5,6-Tetrachlorophenol			4.92	0	73653	0.0000	0.1550			
2,3,4,5-Tetrachlorophenol	4.99			41428	21200	0.1020	0.0000			
Pentachlorophenol	5.13	c		54054	0	0.0820	0.0000			
2,3,4,5,6-Pentachloroanisole	5.13	c		54054	0	0.0870	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

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#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F040.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 9:12 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:45:59 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	3.998	0.000	65697	0	0.136	N.D.	#
		Target Compounds							
1)		3,4-Dichl...	3.118	3.640	5870	3618	0.338	910.713	#
2)		3,5-Dichl...	3.324f	3.907	33154	15263	2.721	1.234	#
3)		2,4,6-Tri...	3.441	4.147	35798	41266	N.D.	0.128	
5)		2,4,5-Tri...	4.231f	4.644	6762	36063	895.453	0.224	#
6)		3,4,5-Tri...	4.231	4.724	6762	40312	0.040	0.272	#
7)	M	2,3,5,6-T...	0.000	4.920f	0	73653	N.D.	0.155	#
8)	M	2,3,4,5-T...	4.988f	5.337f	41428	21200	0.102	N.D.	#
9)	M	Pentachlo...	5.131	0.000	54054	0	0.082	N.D.	#
10)		Pentachlo...	5.131	0.000	54054	0	0.087	N.D.	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

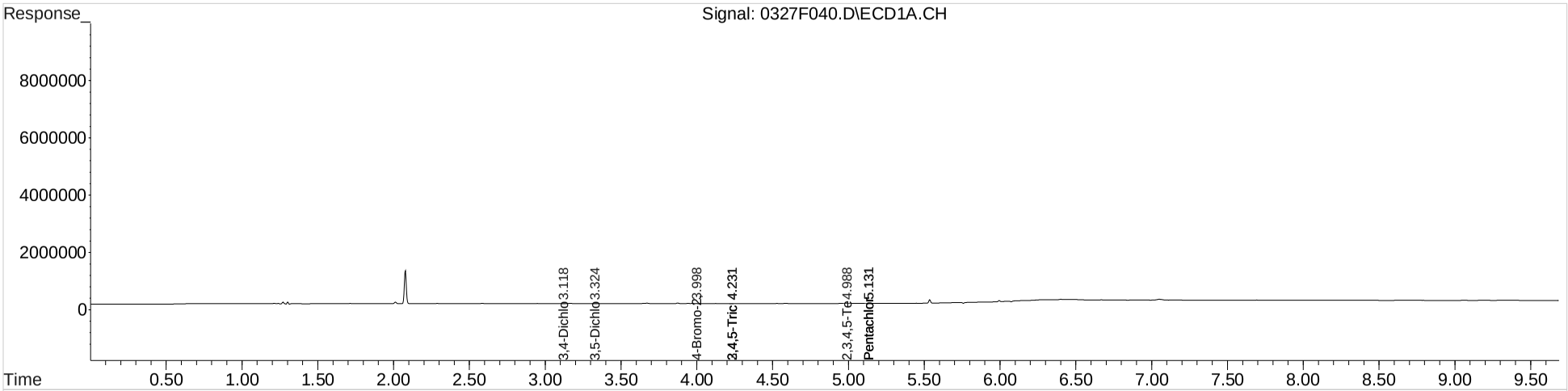
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F040.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 9:12 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:45:59 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



Injection Log

Directory: J:\GC28\DATA\112717-CAL

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	1127f124.d	1.	IB		27 Nov 2017 18:01
2	20	1127f127.d	1.	PENTA01-88I 1 PPB		27 Nov 2017 18:57
3	21	1127f128.d	1.	PENTA01-88H 2.5 PPB		27 Nov 2017 19:16
4	22	1127f129.d	1.	PENTA01-88G 5 PPB		27 Nov 2017 19:35
5	23	1127f130.d	1.	PENTA01-88I 10 PPB		27 Nov 2017 19:53
6	24	1127f131.d	1.	PENTA01-88E 25 PPB		27 Nov 2017 20:12
7	25	1127f132.d	1.	PENTA01-88D 100 PPB		27 Nov 2017 20:31
8	26	1127f133.d	1.	PENTA01-88C 250 PPB		27 Nov 2017 20:50
9	27	1127f134.d	1.	PENTA01-88N 500 PPB		27 Nov 2017 21:08
10	28	1127f135.d	1.	PENTA01-88M 1000 PPB		27 Nov 2017 21:27
11	2	1127f136.d	1.	IB		27 Nov 2017 21:46
12	3	1129f005.d	1.	PENTA01-88K 50PPB ICV	SEMIVOA GC\W11122...	29 Nov 2017 12:44

GDL: 15625

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:48:32 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	553952	330490	1.842	1.270	#
		Target Compounds							
1)		3,4-Dichlorophen	3.12	3.67	16518	29596	1.019	1.580	#
2)		3,5-Dichlorophen	3.37	3.91	20988	18718	1.737	1.425	
3)		2,4,6-Trichlorop	3.46	4.14	448728	374818	1.266	1.042	
5)		2,4,5-Trichlorop	4.20	4.67	232648	183740	1.496	1.118	#
6)		3,4,5-Trichlorop	4.23f	4.73	193422	169644	1.216m	1.169	
7)	M	2,3,5,6-Tetrachl	4.47	4.97	639390	495876	1.275	0.987	
8)	M	2,3,4,5-Tetrachl	5.02	5.37	456782	504796	1.344	1.477	
9)	M	Pentachloropheno	5.16	5.56	806520	809946	1.377	1.358	
10)		Pentachloroaniso	5.16	5.56	806520	809946	1.449	1.429	

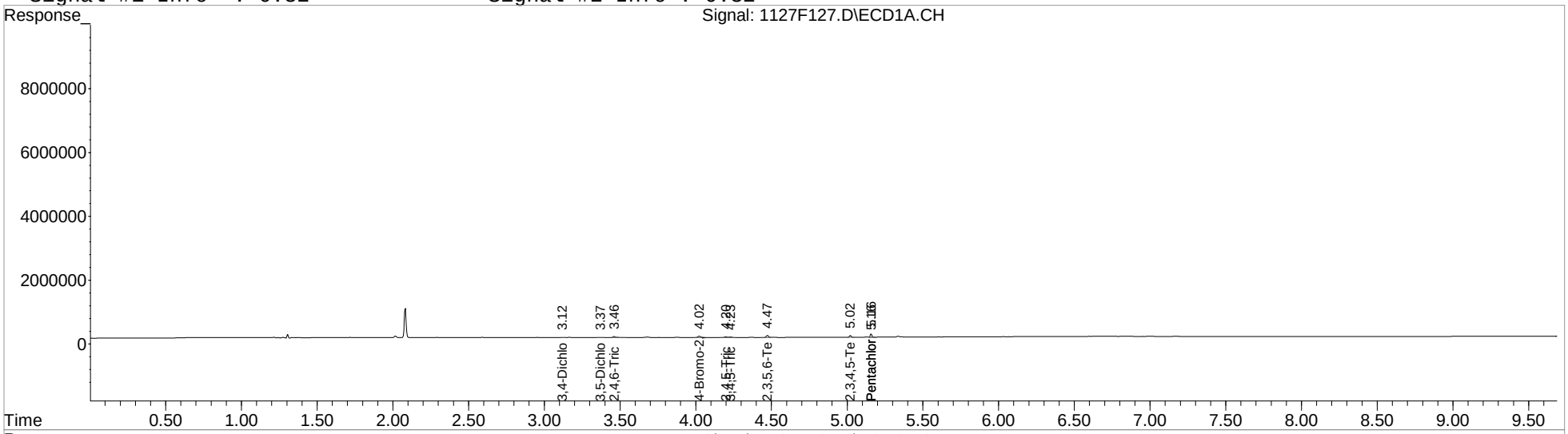
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

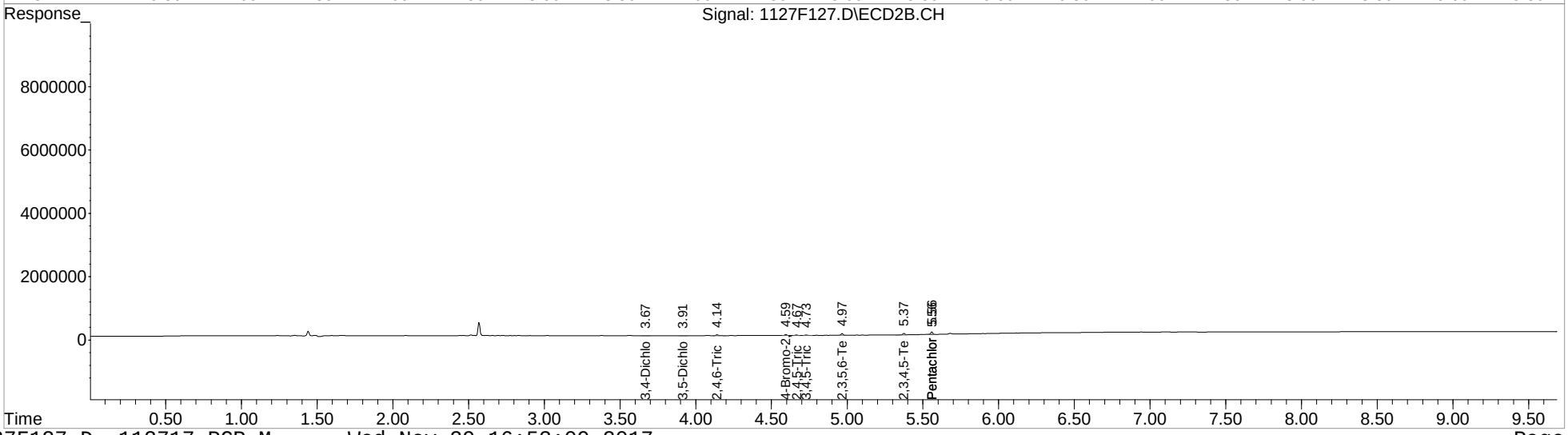
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



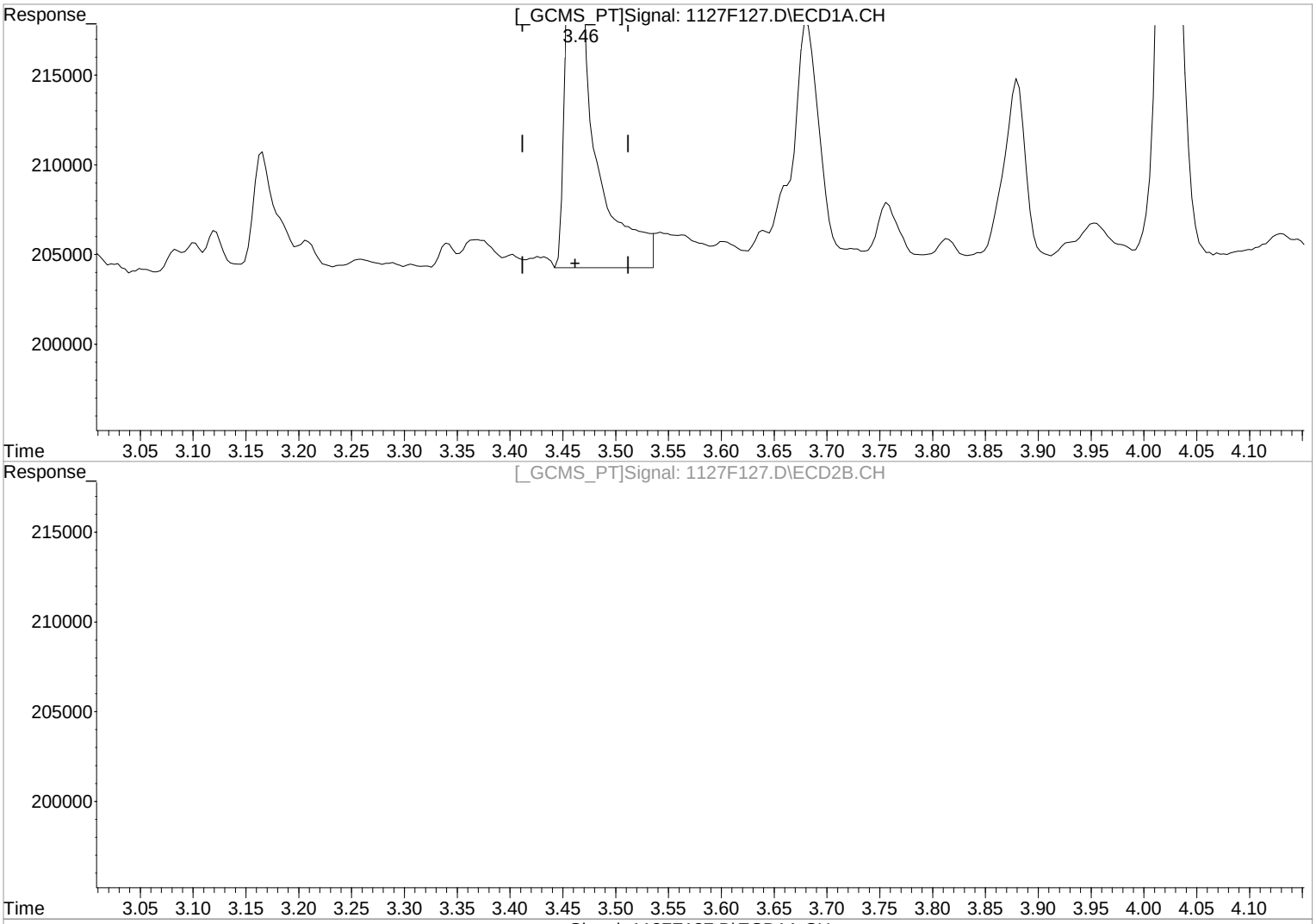


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F127.D\ECD1A.CH

(3) 2,4,6-Trichlorophenol

3.46min 1.266ug/L

response 448728

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(3) 2,4,6-Trichlorophenol #2

4.14min 1.042ug/L

response 374818

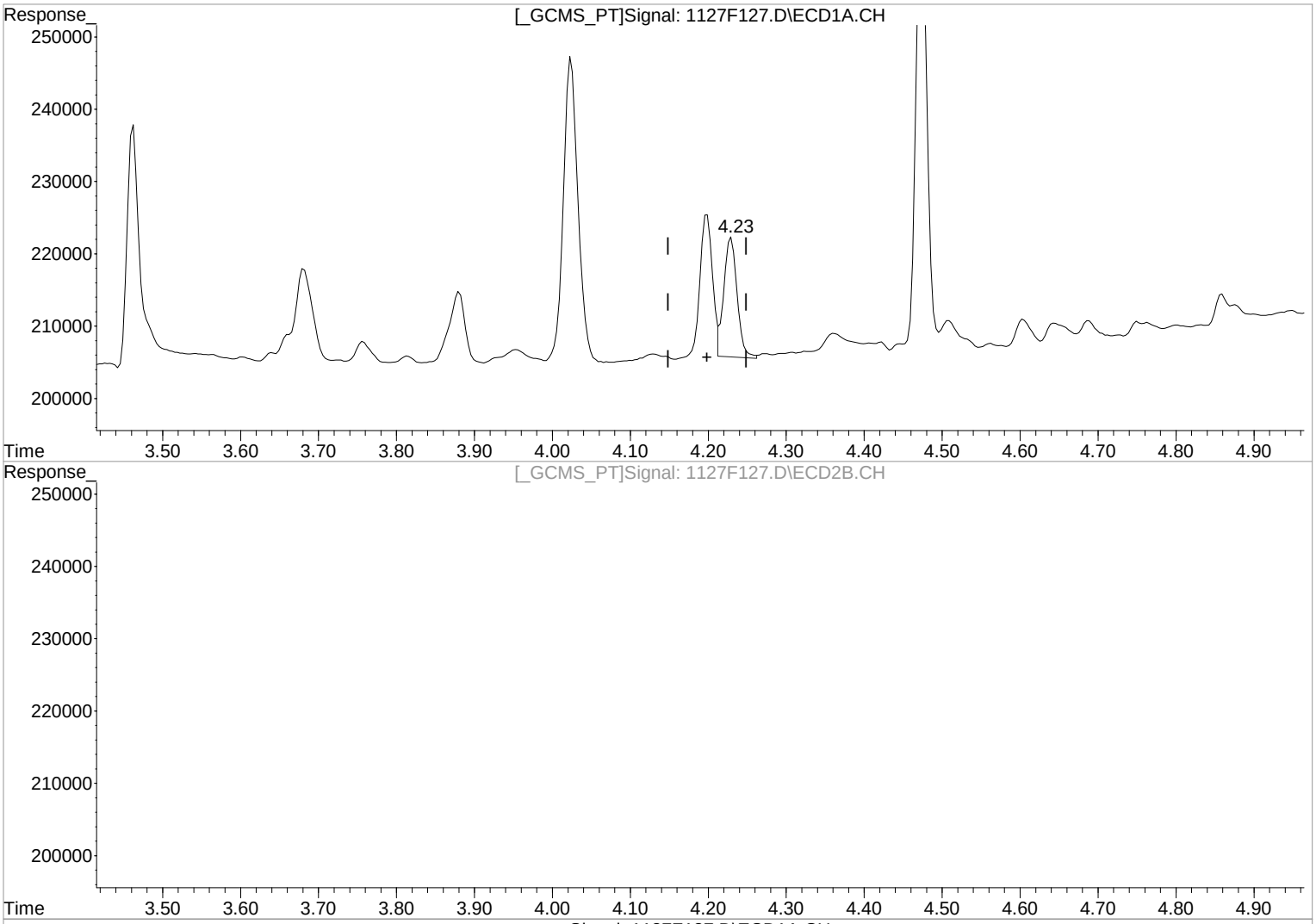
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F127.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 1.216ug/L m

response 193422

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 1.169ug/L

response 169644

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:50:18 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	1317276	876496	4.379	3.368
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	49286	55140	3.040m	2.943
2)		3,5-Dichlorophen	3.36	3.91	38712	36048	3.203m	2.745
3)		2,4,6-Trichlorop	3.46	4.14	974062	824238	2.747	2.292
5)		2,4,5-Trichlorop	4.20	4.66	535528	435750	3.444	2.652
6)		3,4,5-Trichlorop	4.23f	4.73	463666	405392	2.915m	2.794
7)	M	2,3,5,6-Tetrachl	4.47	4.97	1468326	1190526	2.929m	2.369
8)	M	2,3,4,5-Tetrachl	5.02	5.37	1110862	994692	3.268m	2.911
9)	M	Pentachloropheno	5.16	5.56	1873238	1758532	3.199	2.949m
10)		Pentachloroaniso	5.16	5.56	1873238	1755630	3.366	3.097m

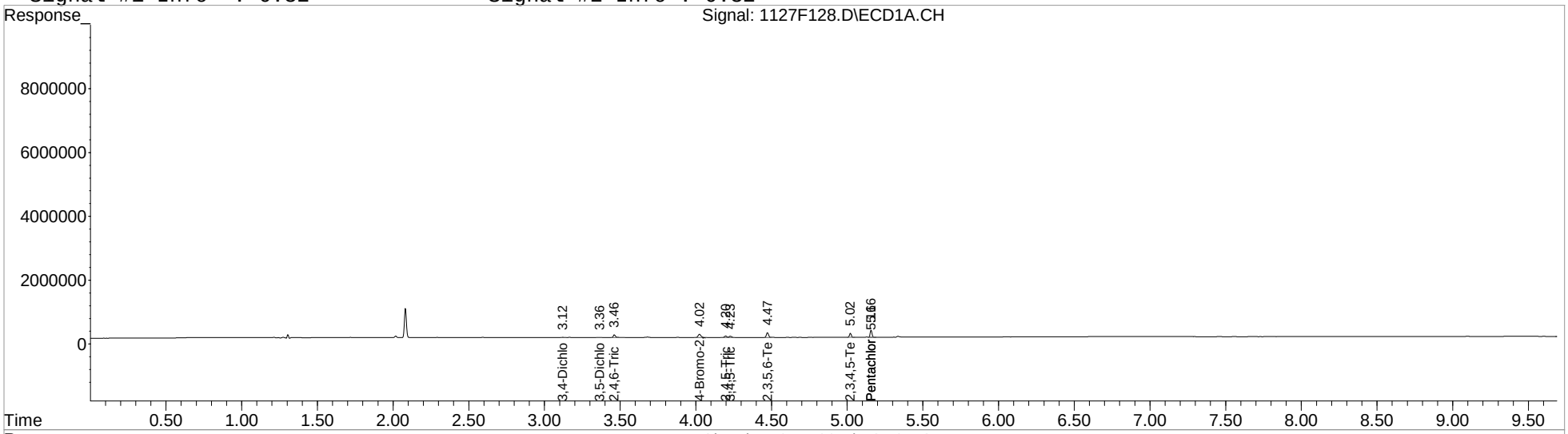
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

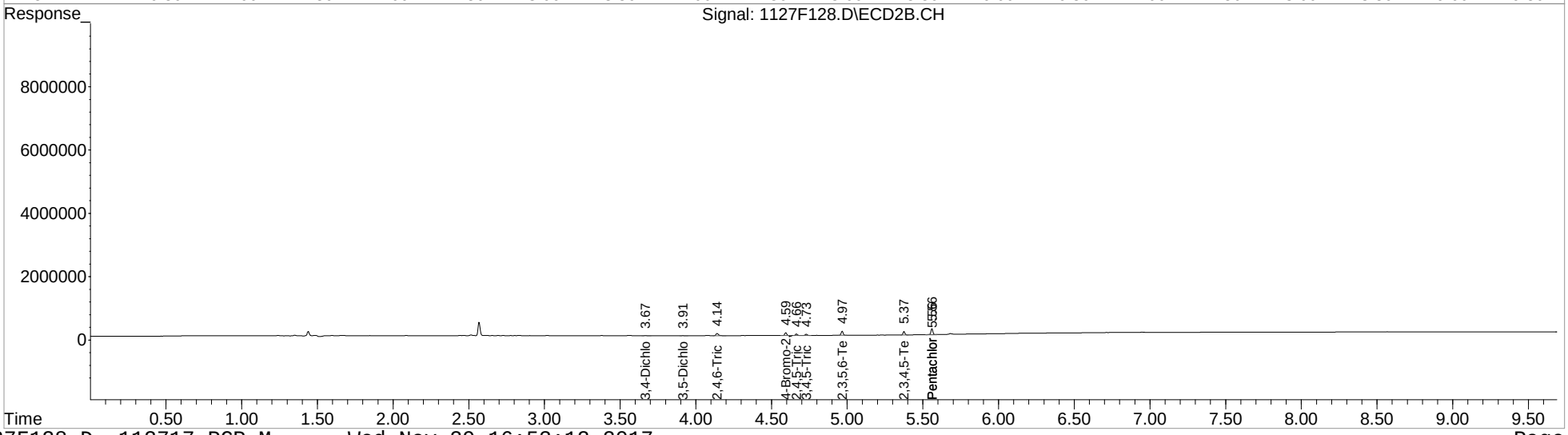
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



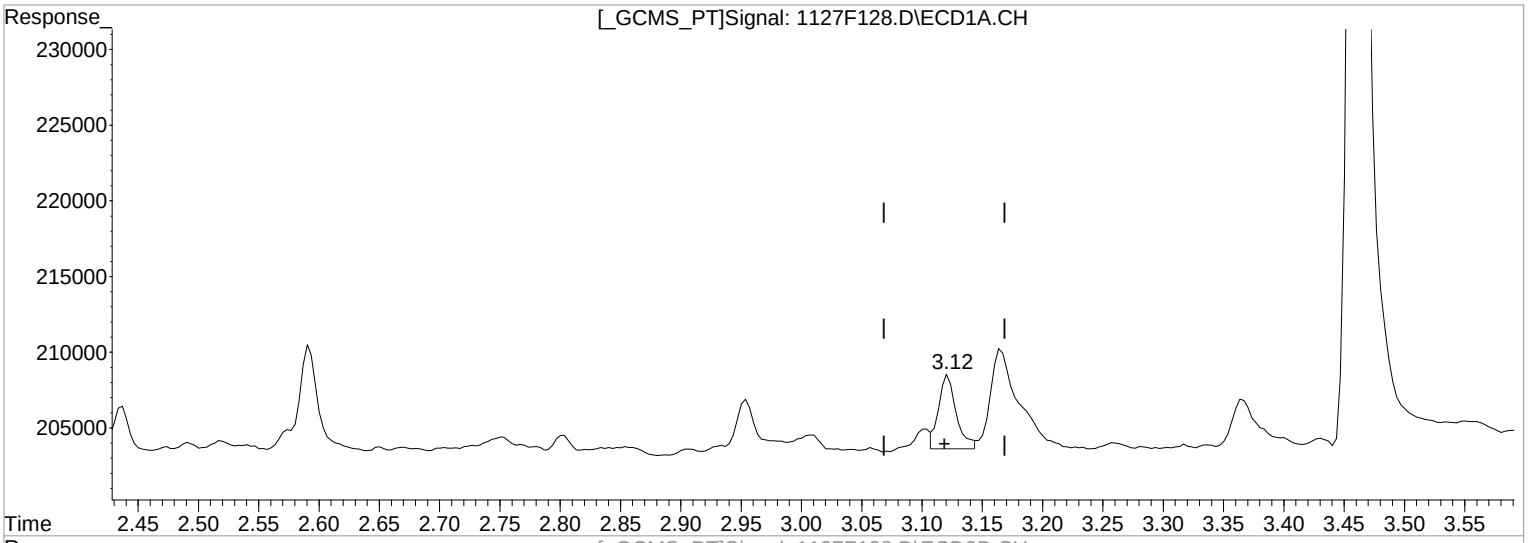


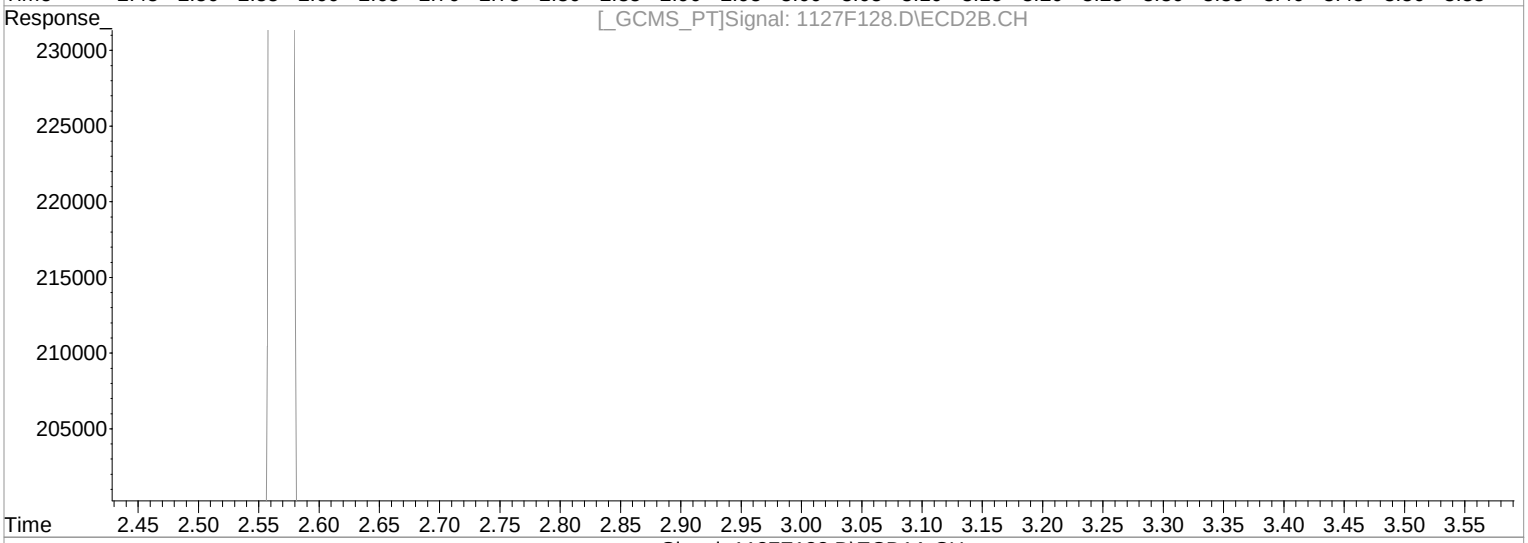
Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration





Signal: 1127F128.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 3.040ug/L m

response 49286

Manual Integration:

After

After, No Before

Baseline Shoulder

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 2.943ug/L

response 55140

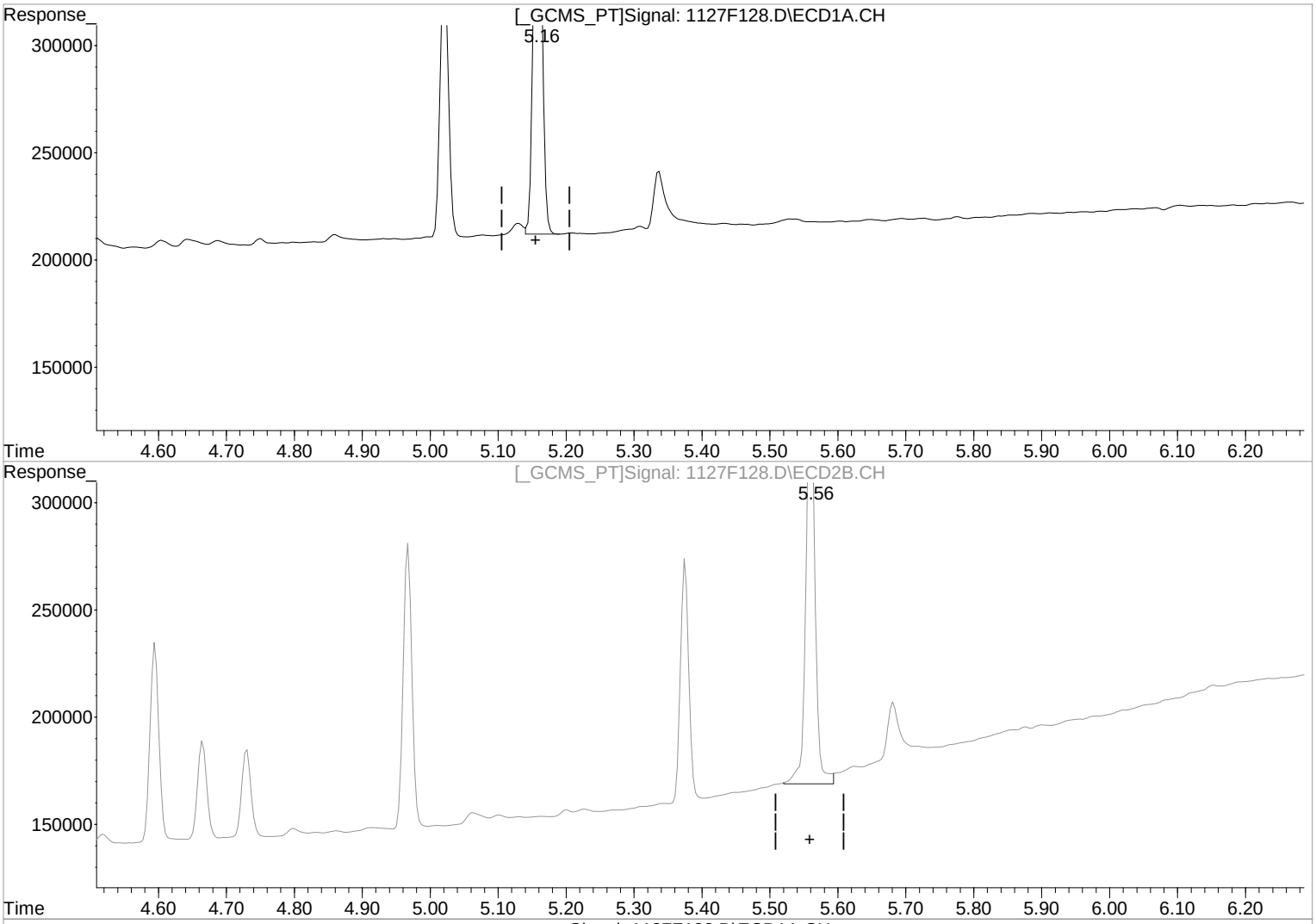
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 3.366ug/L

response 1873238

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(10) Pentachloroanisole #2

5.56min 3.097ug/L m

response 1755630

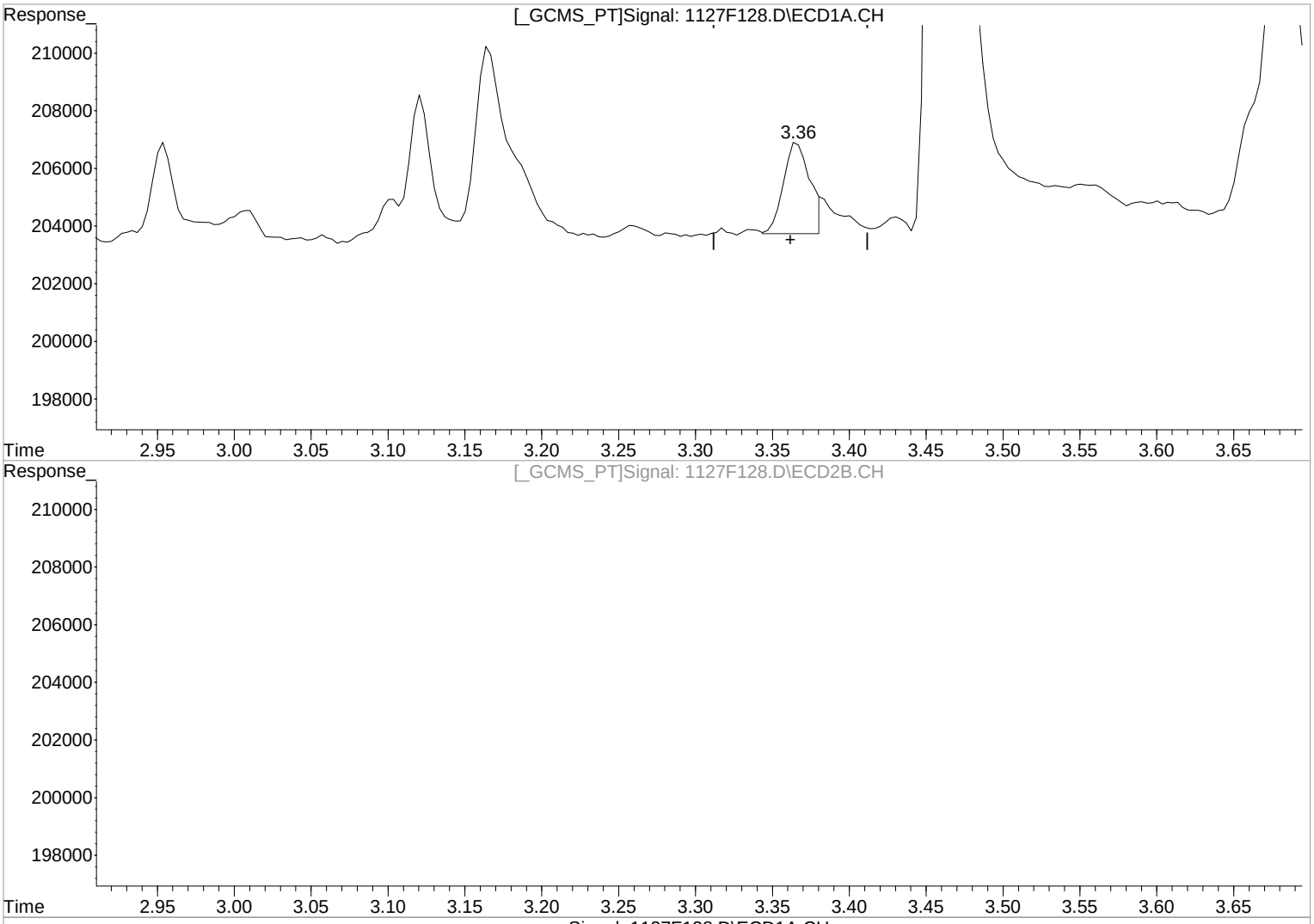
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 3.203ug/L m

response 38712

Manual Integration:

After

After, No Before

Baseline Shoulder

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 2.745ug/L

response 36048

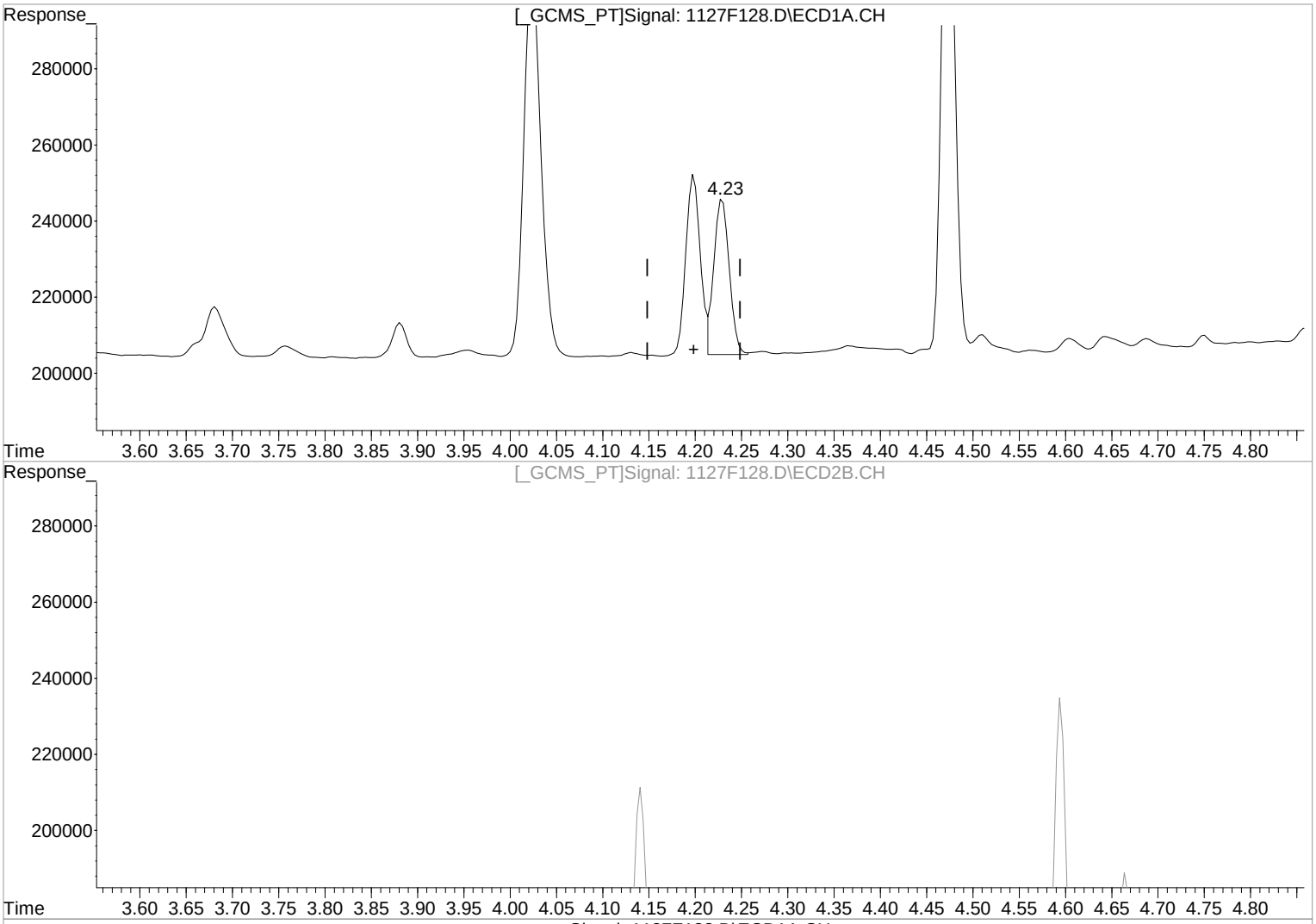
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 2.915ug/L m

response 463666

Manual Integration:

After

After, No Before

Wrong peak

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 2.794ug/L

response 405392

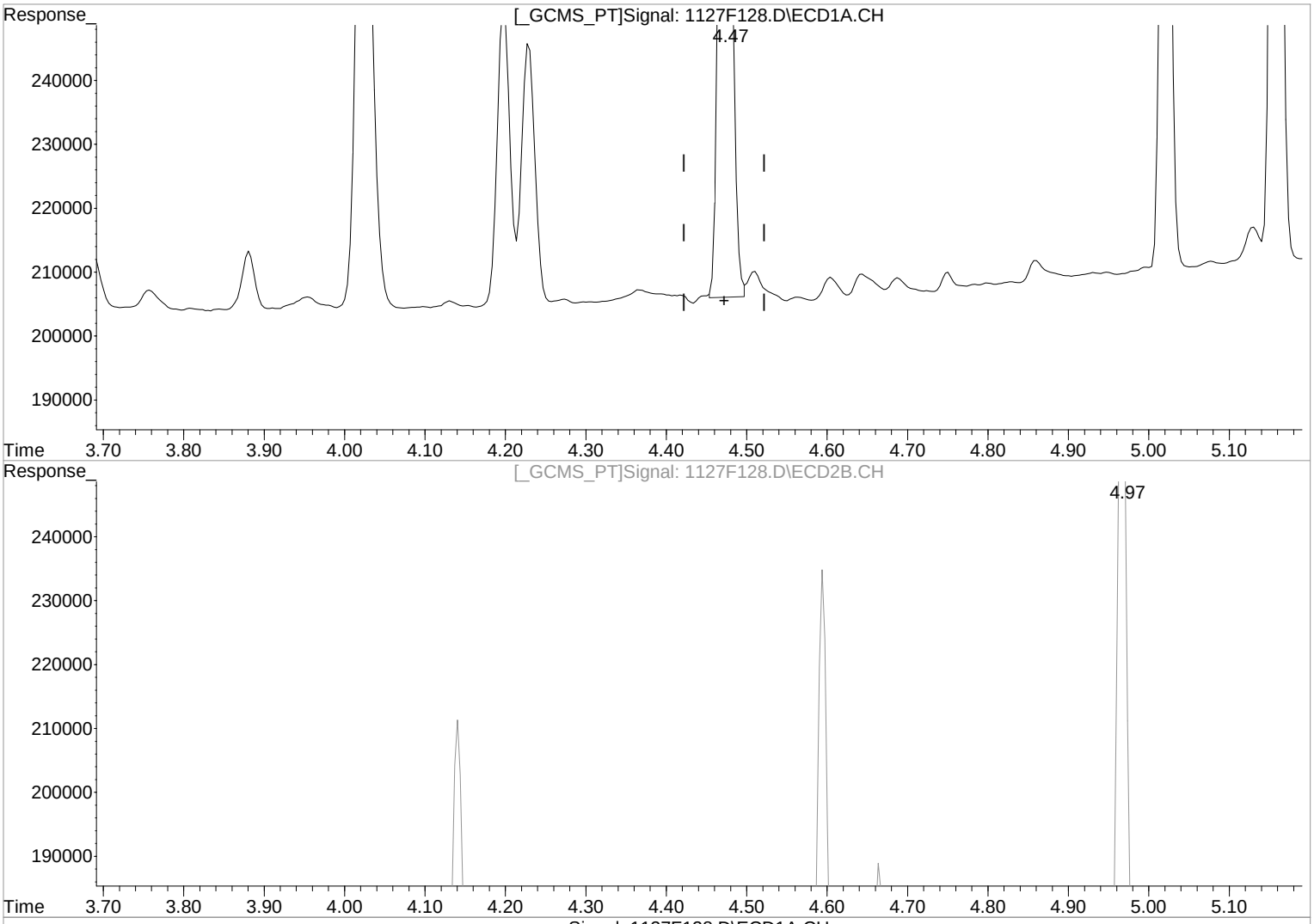
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(7) 2,3,5,6-Tetrachlorophenol (M)

4.47min 2.929ug/L m

response 1468326

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(7) 2,3,5,6-Tetrachlorophenol #2 (M)

4.97min 2.369ug/L

response 1190526

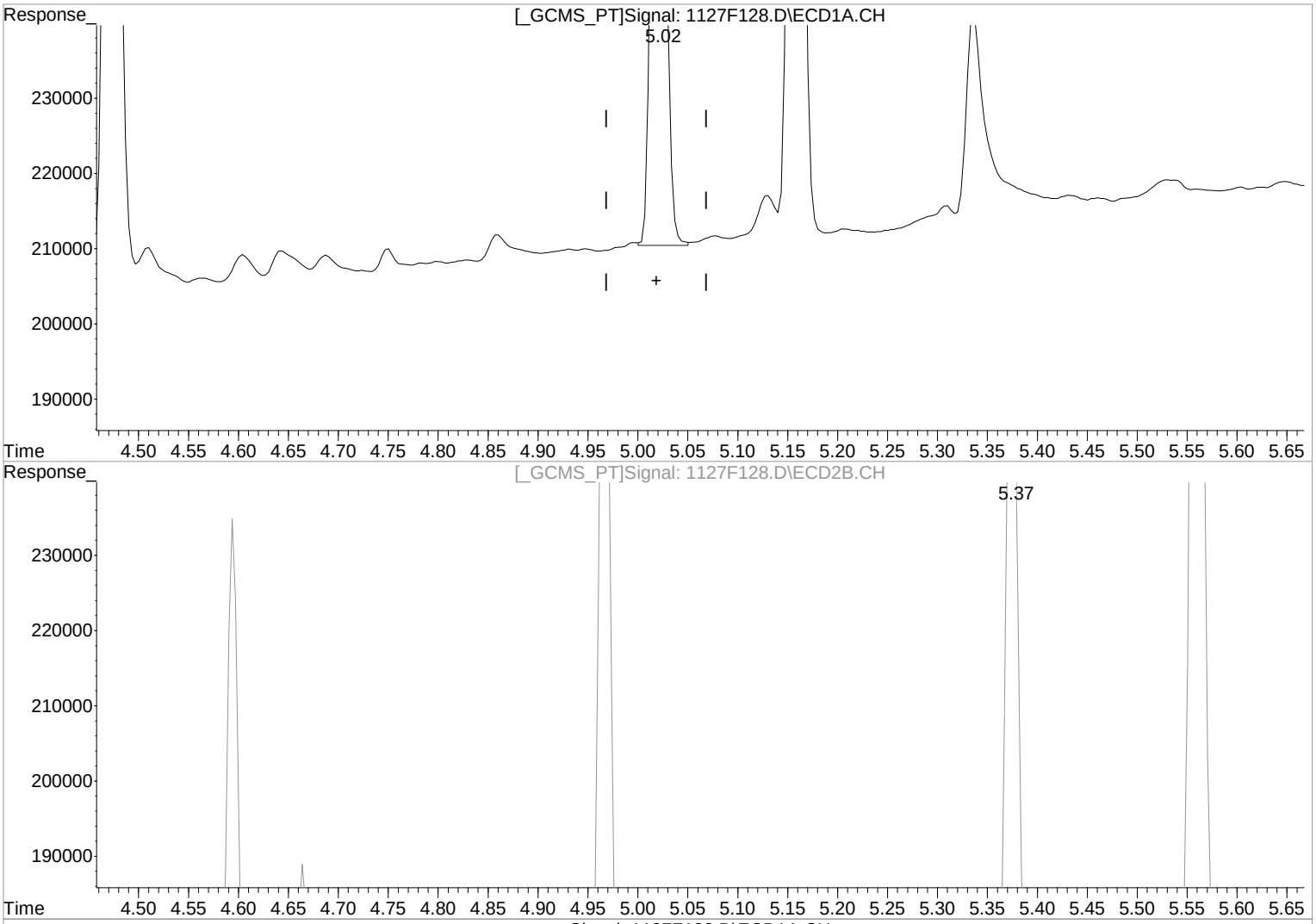
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 3.268ug/L m

response 1110862

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 2.911ug/L

response 994692

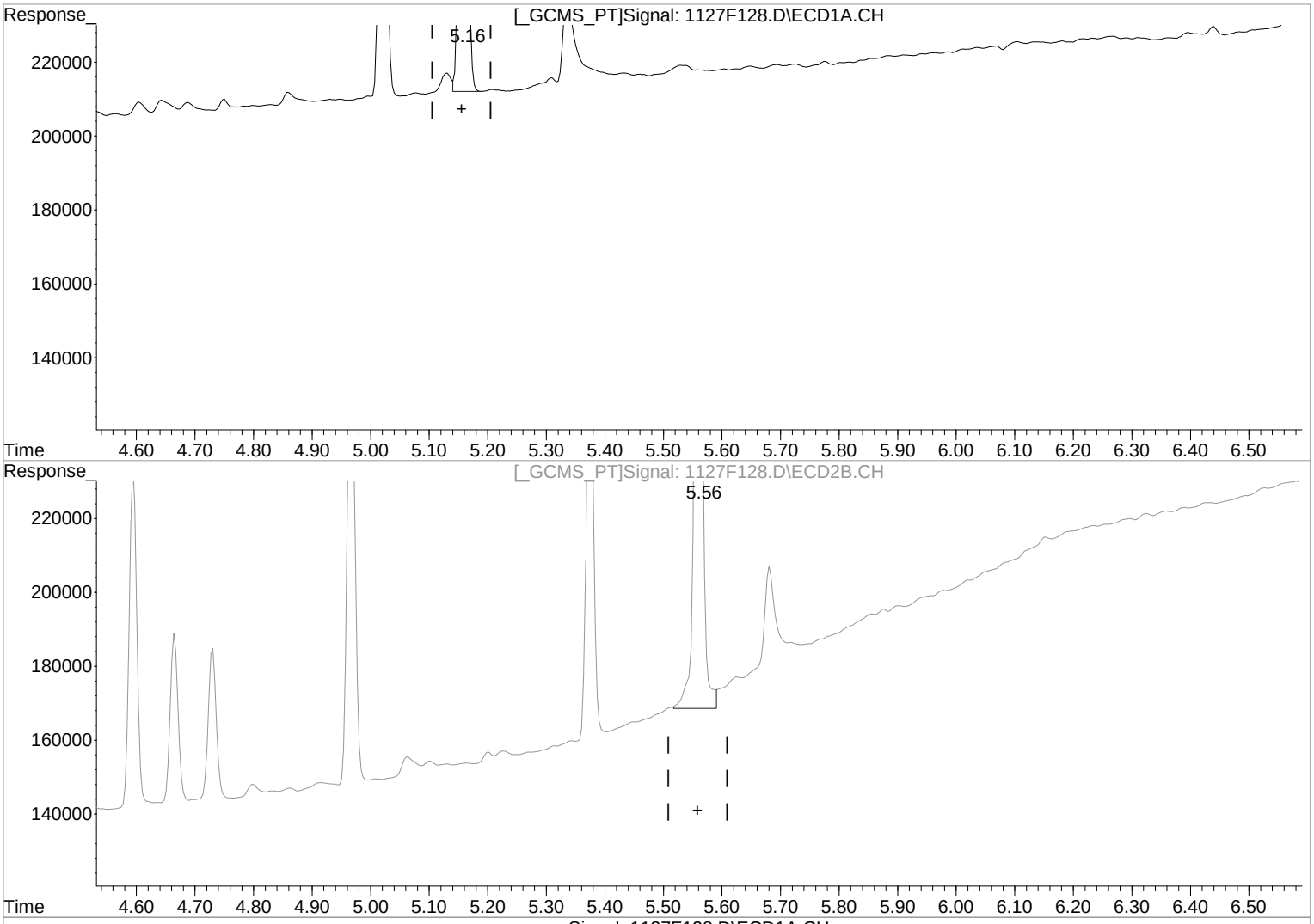
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 3.199ug/L

response 1873238

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 2.949ug/L m

response 1758532

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:54:14 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	2527708	1767222	8.403	6.791
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	86210	99632	5.317m	5.318
2)		3,5-Dichlorophen	3.36	3.91	68638	67856	5.680m	5.167
3)		2,4,6-Trichlorop	3.46	4.14	1814386	1543468	5.117	4.293
5)		2,4,5-Trichlorop	4.20	4.66	996824	834646	6.411	5.080
6)		3,4,5-Trichlorop	4.23f	4.73	897110	748802	5.640m	5.160
7)	M	2,3,5,6-Tetrachl	4.47	4.97	2791280	2329296	5.568m	4.635
8)	M	2,3,4,5-Tetrachl	5.02	5.37	2110338	1864900	6.209m	5.458
9)	M	Pentachloropheno	5.16	5.56	3505892	3190336	5.988	5.351m
10)		Pentachloroaniso	5.16	5.56	3505892	3212868	6.300	5.668m

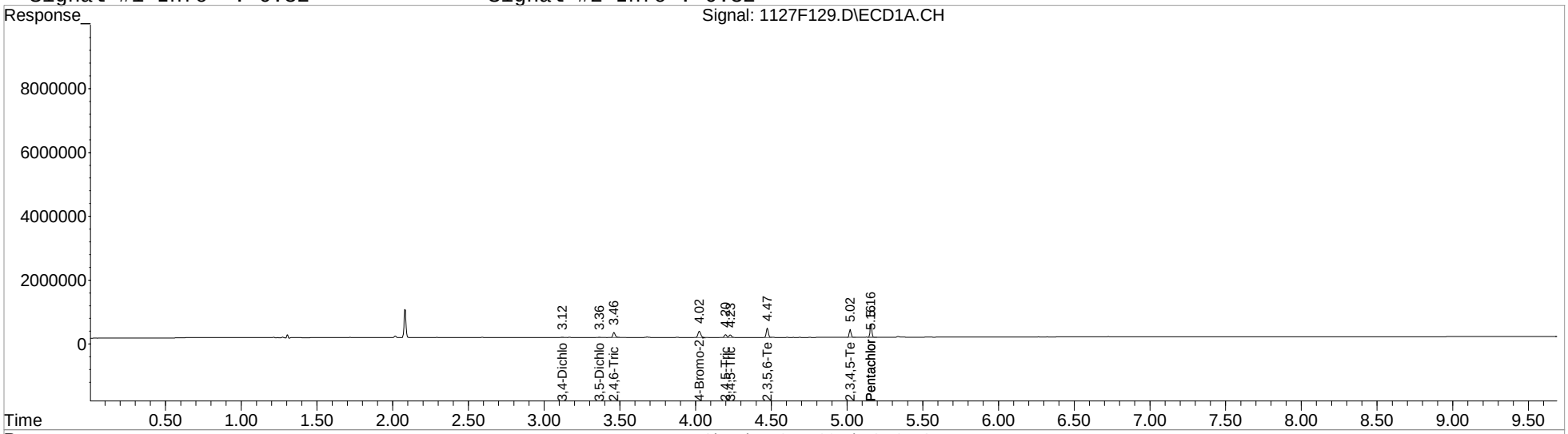
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

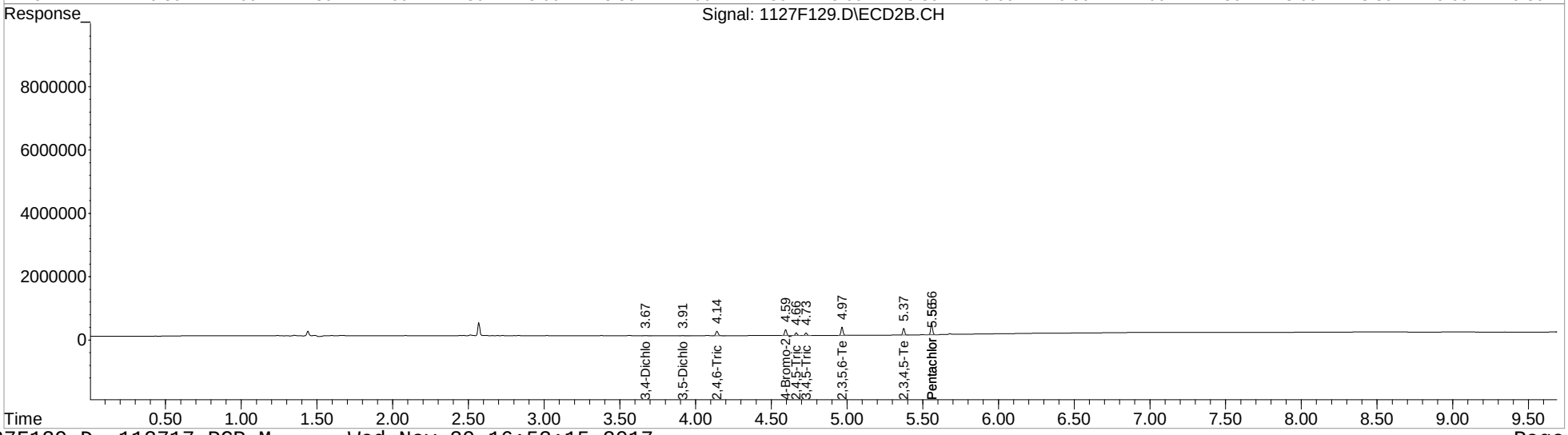
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



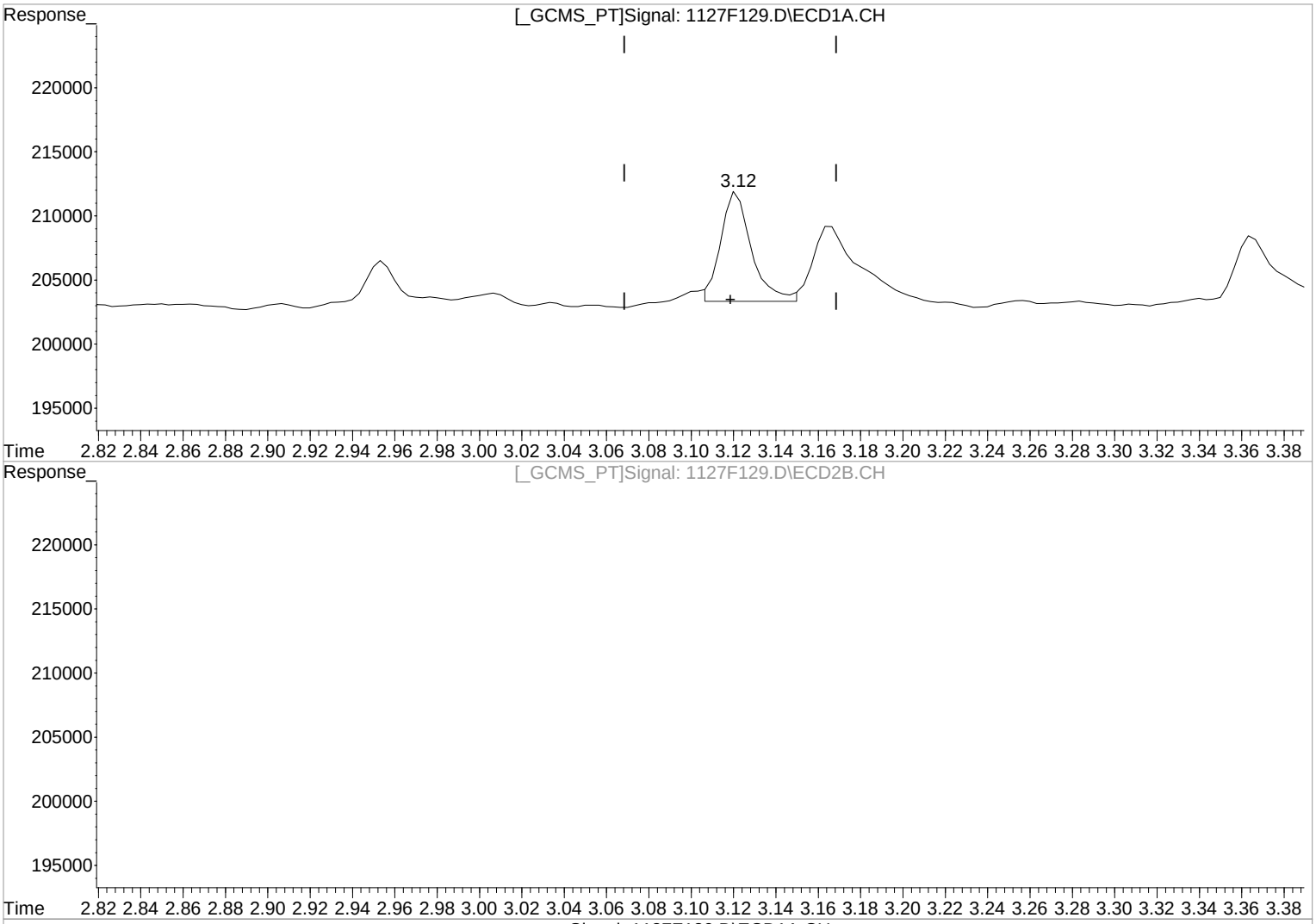


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 5.317ug/L m

response 86210

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 5.318ug/L

response 99632

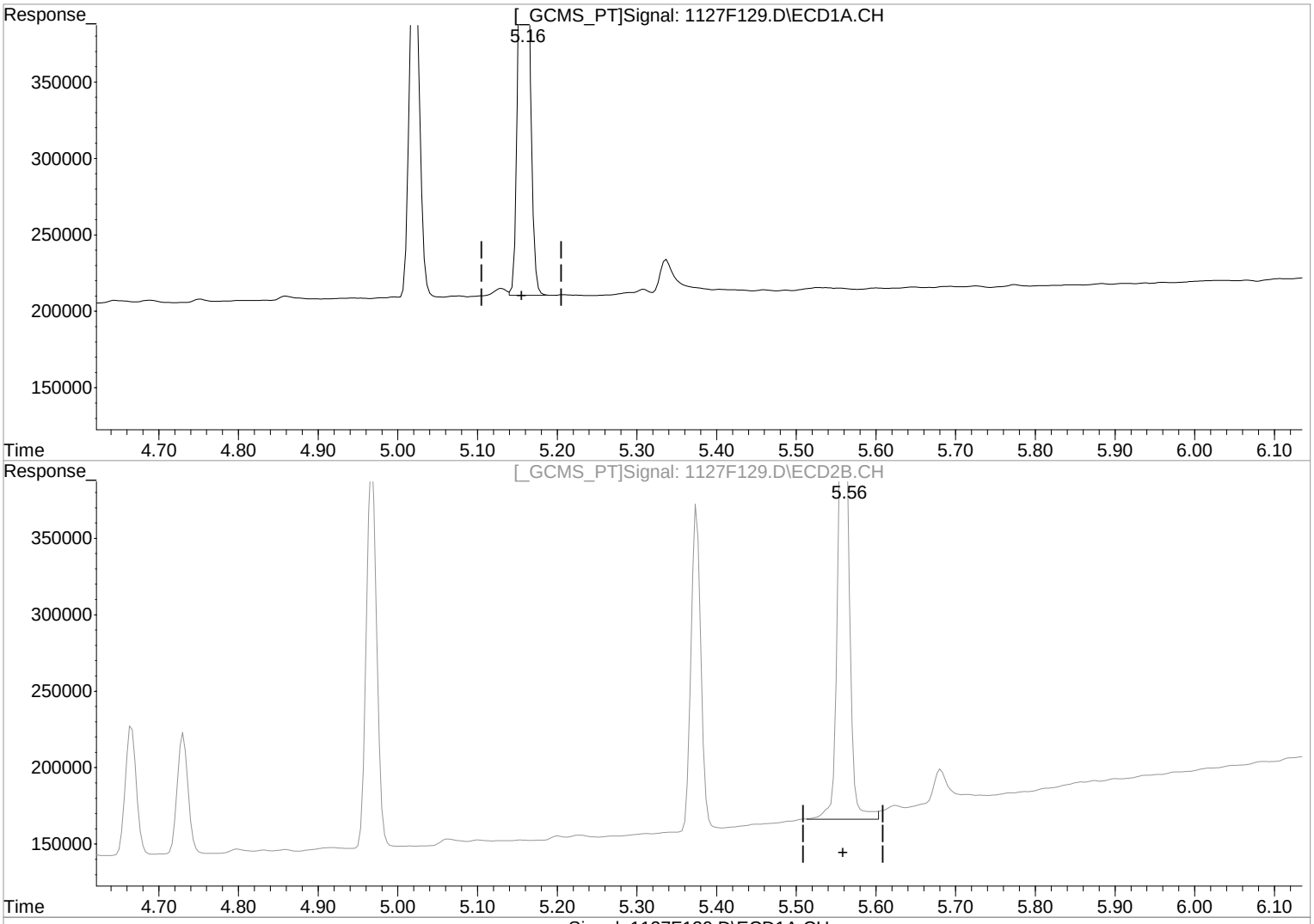
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 6.300ug/L

response 3505892

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(10) Pentachloroanisole #2

5.56min 5.668ug/L m

response 3212868

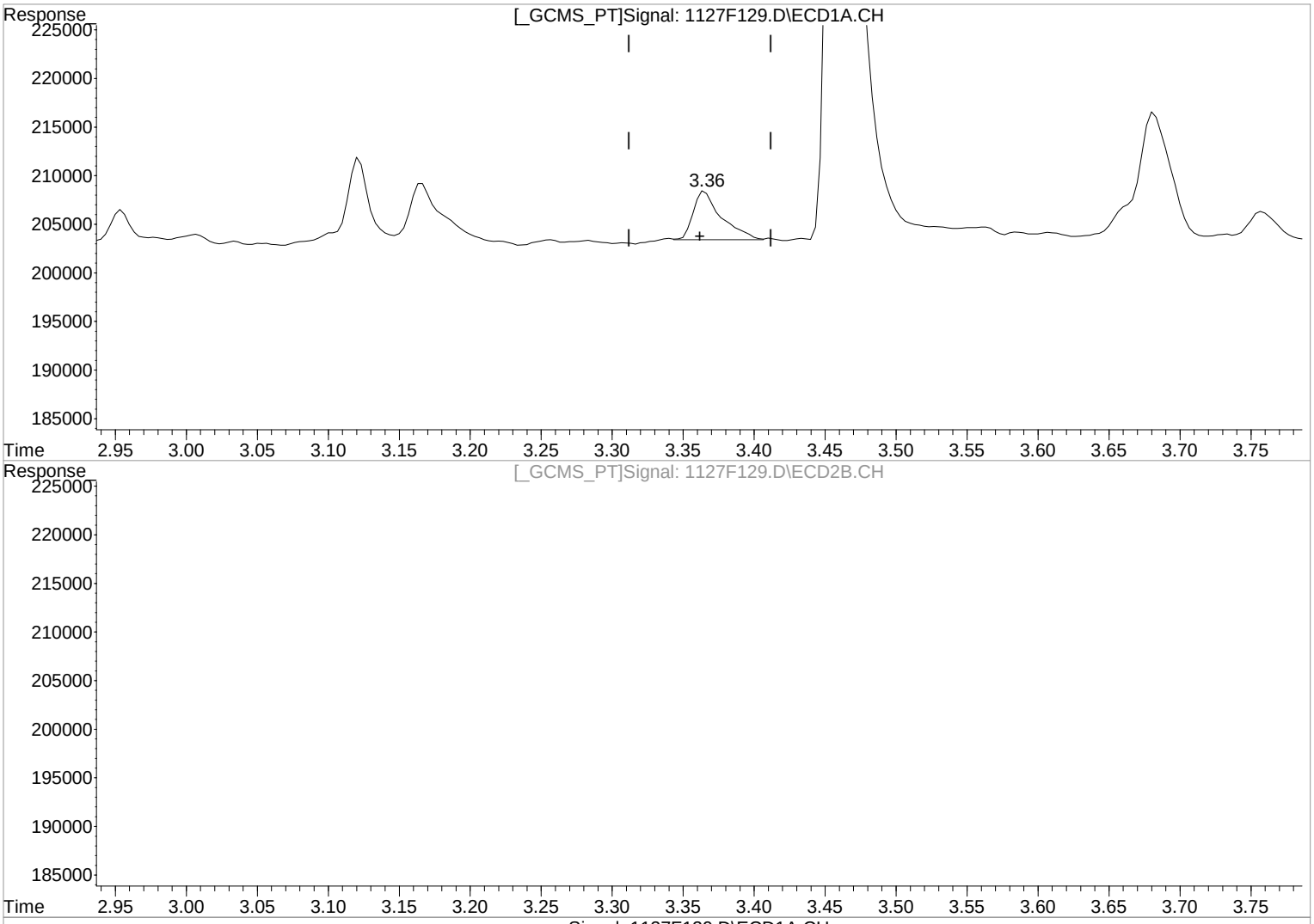
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 5.680ug/L m

response 68638

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 5.167ug/L

response 67856

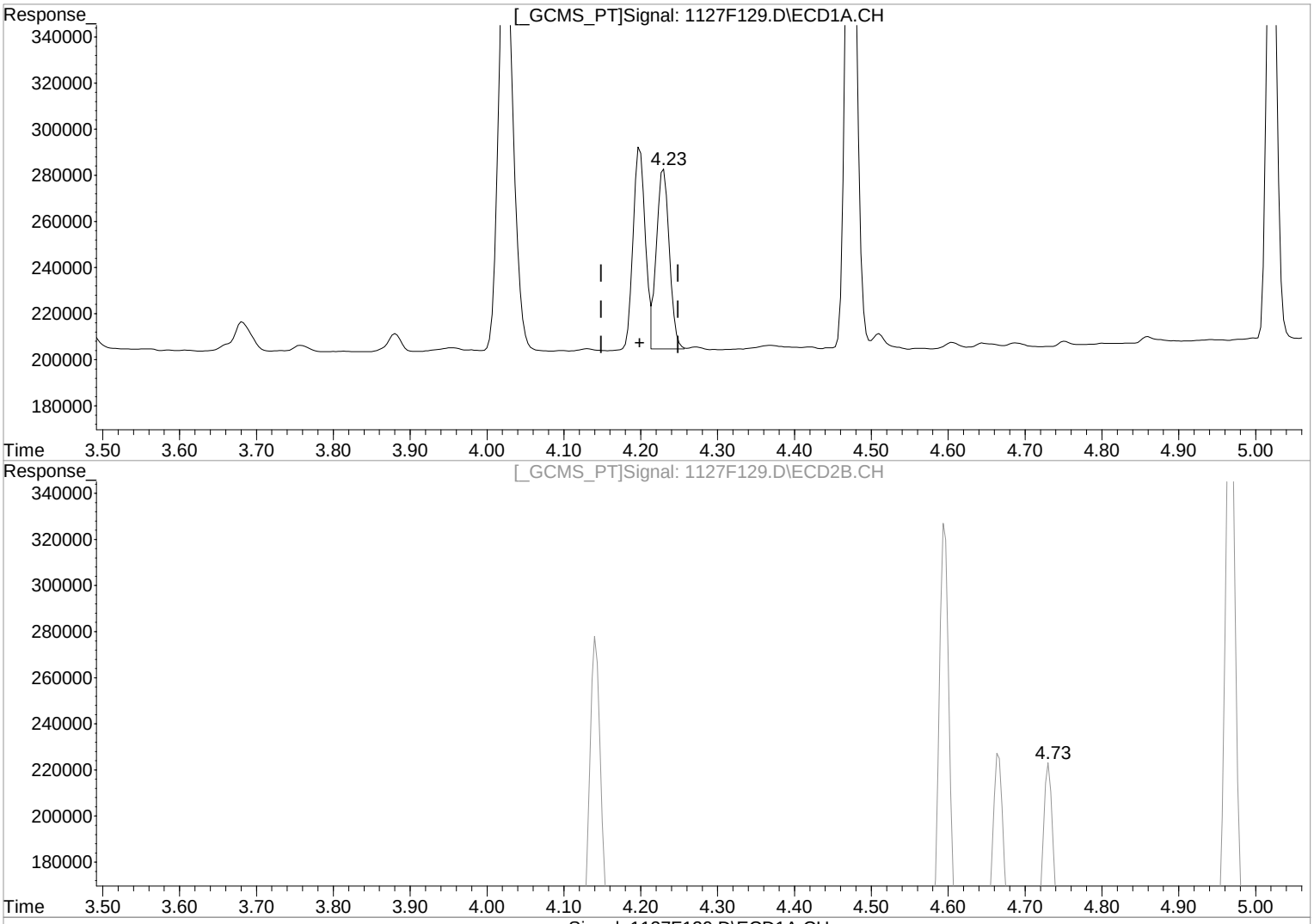
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 5.640ug/L m

response 897110

Manual Integration:

After

Wrong Peak No Before

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 5.160ug/L

response 748802

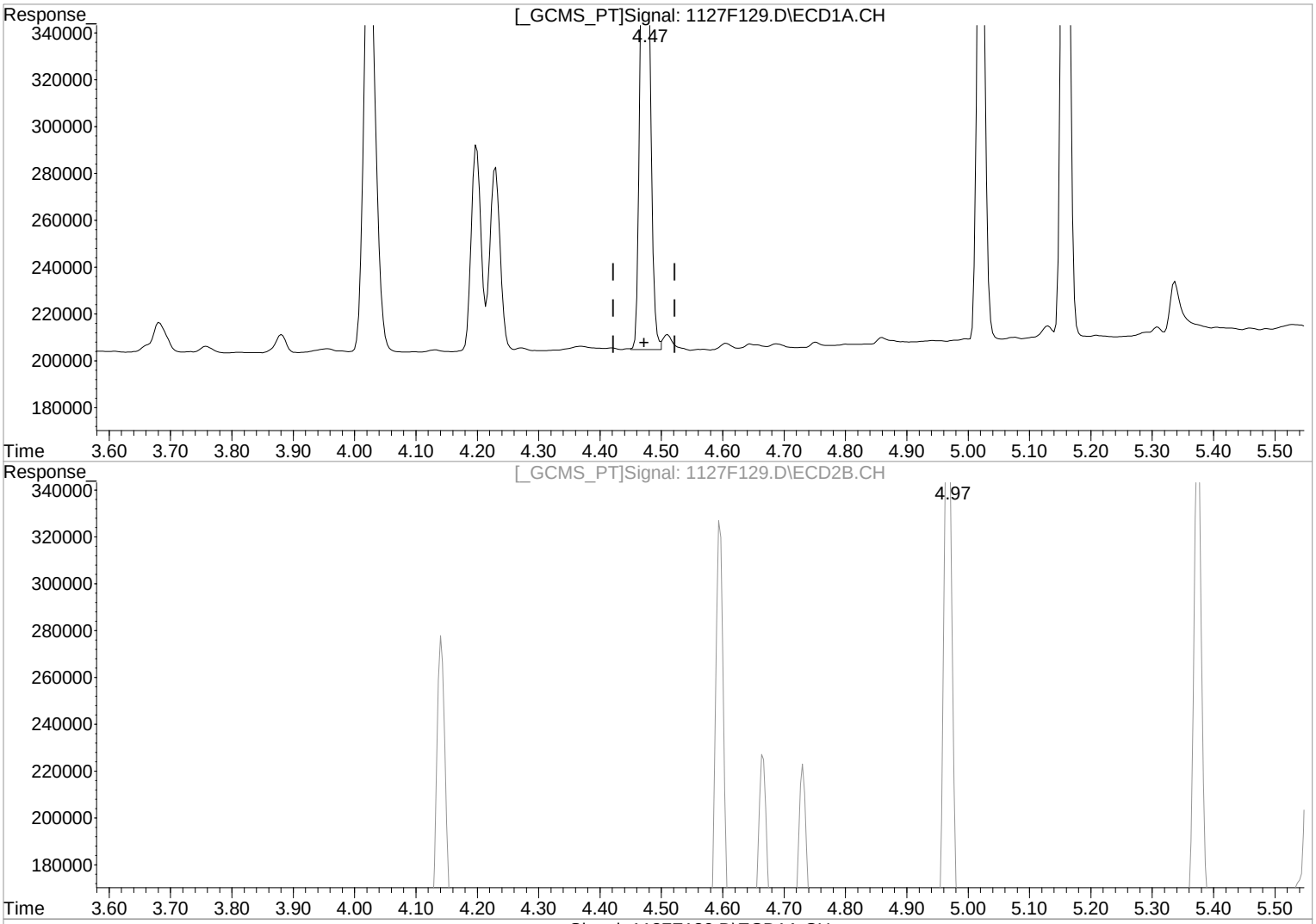
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(7) 2,3,5,6-Tetrachlorophenol (M)

4.47min 5.568ug/L m

response 2791280

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

(7) 2,3,5,6-Tetrachlorophenol #2 (M)

4.97min 4.635ug/L

response 2329296

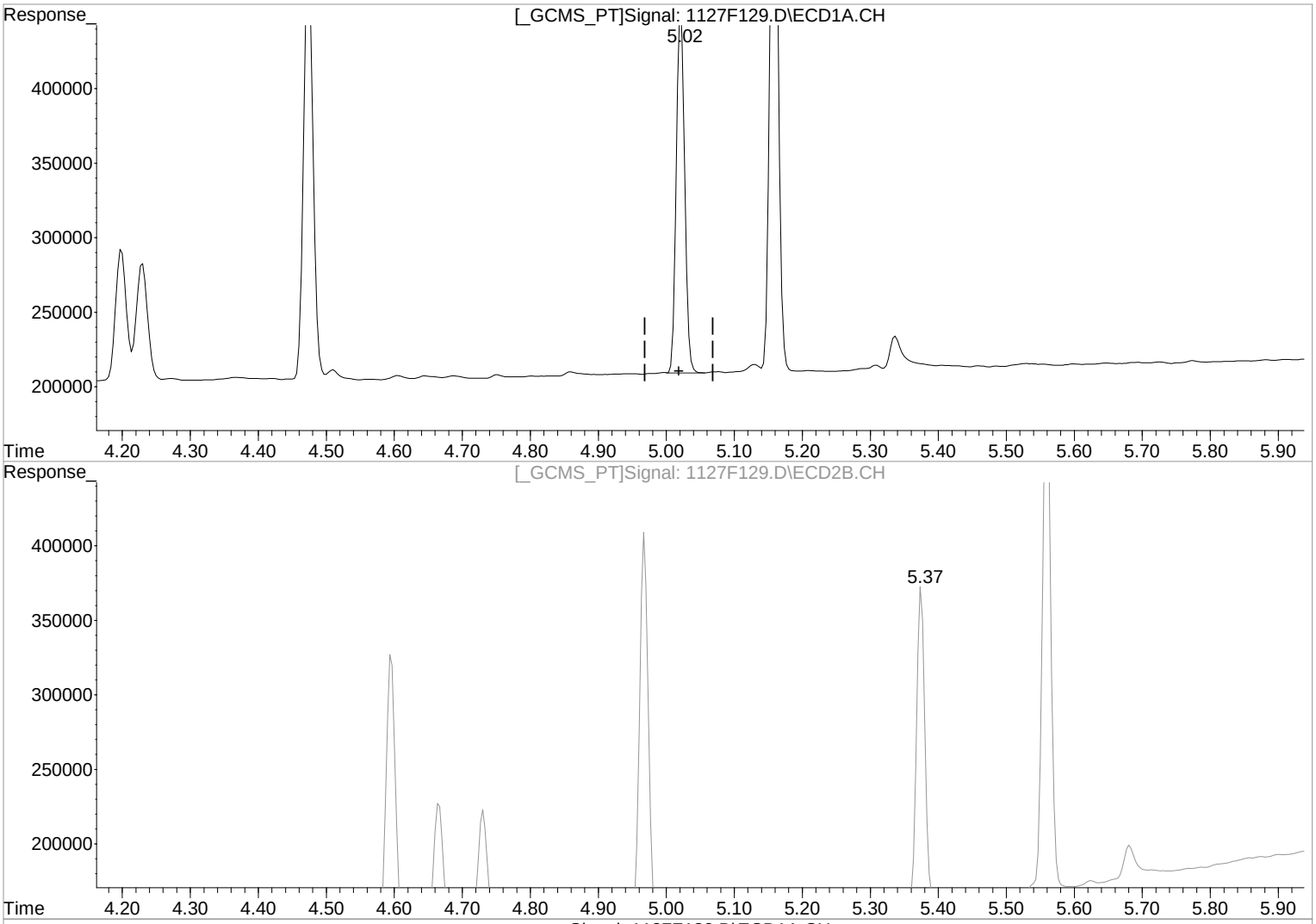
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 6.209ug/L m

response 2110338

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 5.458ug/L

response 1864900

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

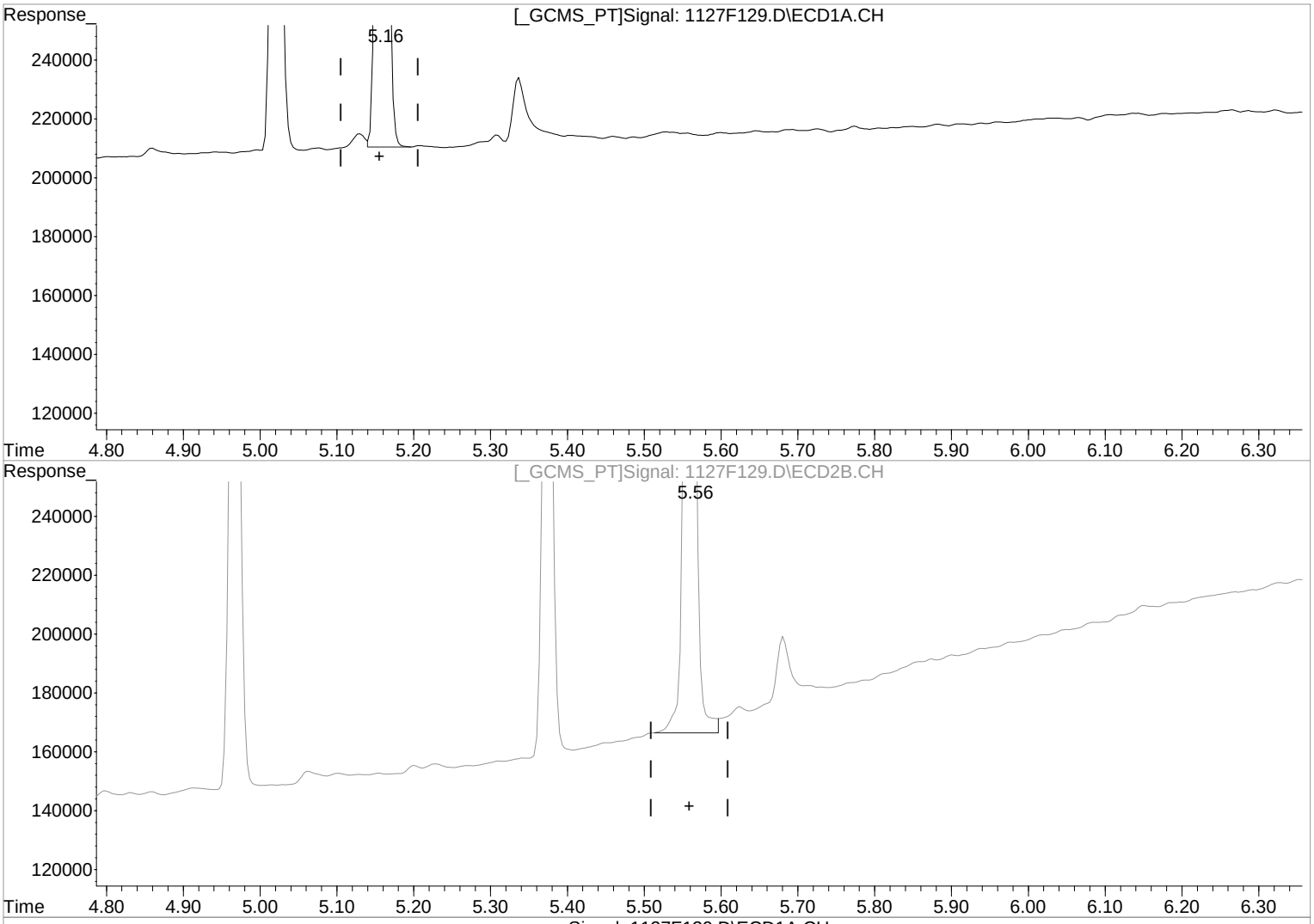
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 5.988ug/L

response 3505892

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 5.351ug/L m

response 3190336

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:57:47 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	4613736	3450884	15.338	13.260
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	163576	175528	10.089m	9.369
2)		3,5-Dichlorophen	3.36	3.91	101688	125108	8.415m	9.526
3)		2,4,6-Trichlorop	3.46	4.14	3229296	2813346	9.108	7.824
5)		2,4,5-Trichlorop	4.20	4.66	1789438	1475642	11.508	8.981
6)		3,4,5-Trichlorop	4.23f	4.73	1550706	1348458	9.750m	9.293
7)	M	2,3,5,6-Tetrachl	4.47	4.96	4983492	4311232	9.941	8.579
8)	M	2,3,4,5-Tetrachl	5.02	5.37	3744556	3299360	11.017m	9.656
9)	M	Pentachloropheno	5.16	5.56	6298030	5874436	10.757	9.853
10)		Pentachloroaniso	5.16	5.56	6298030	5874436	11.317	10.363

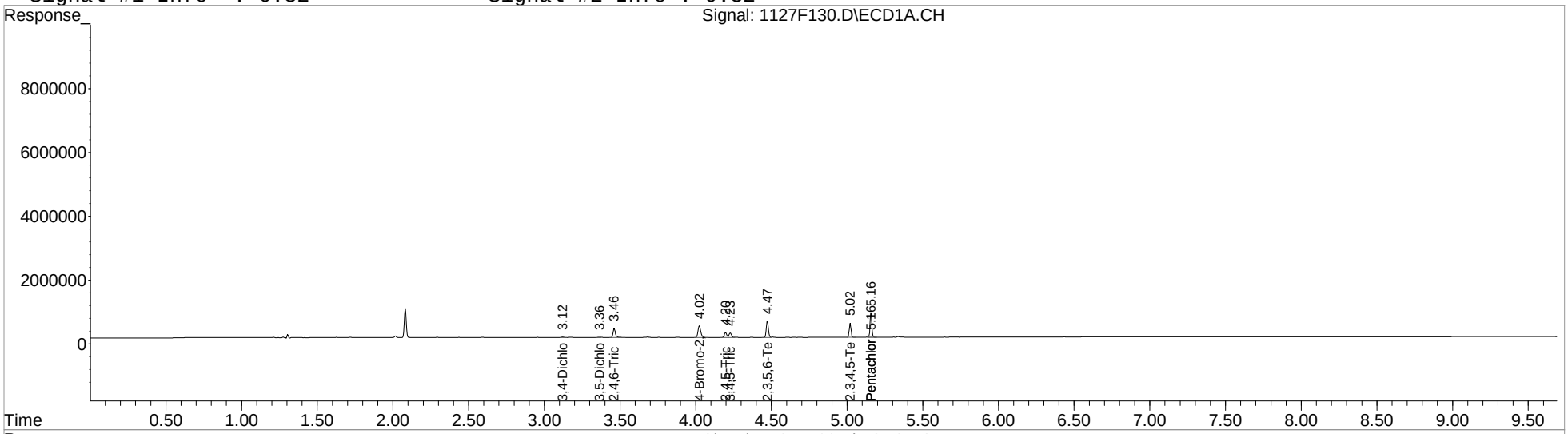
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

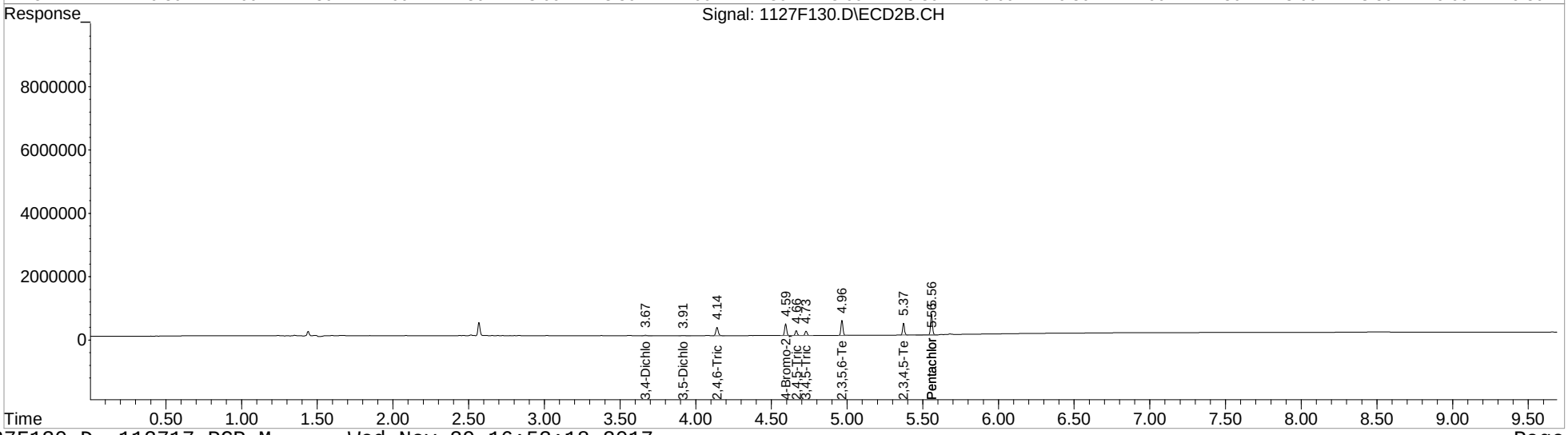
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



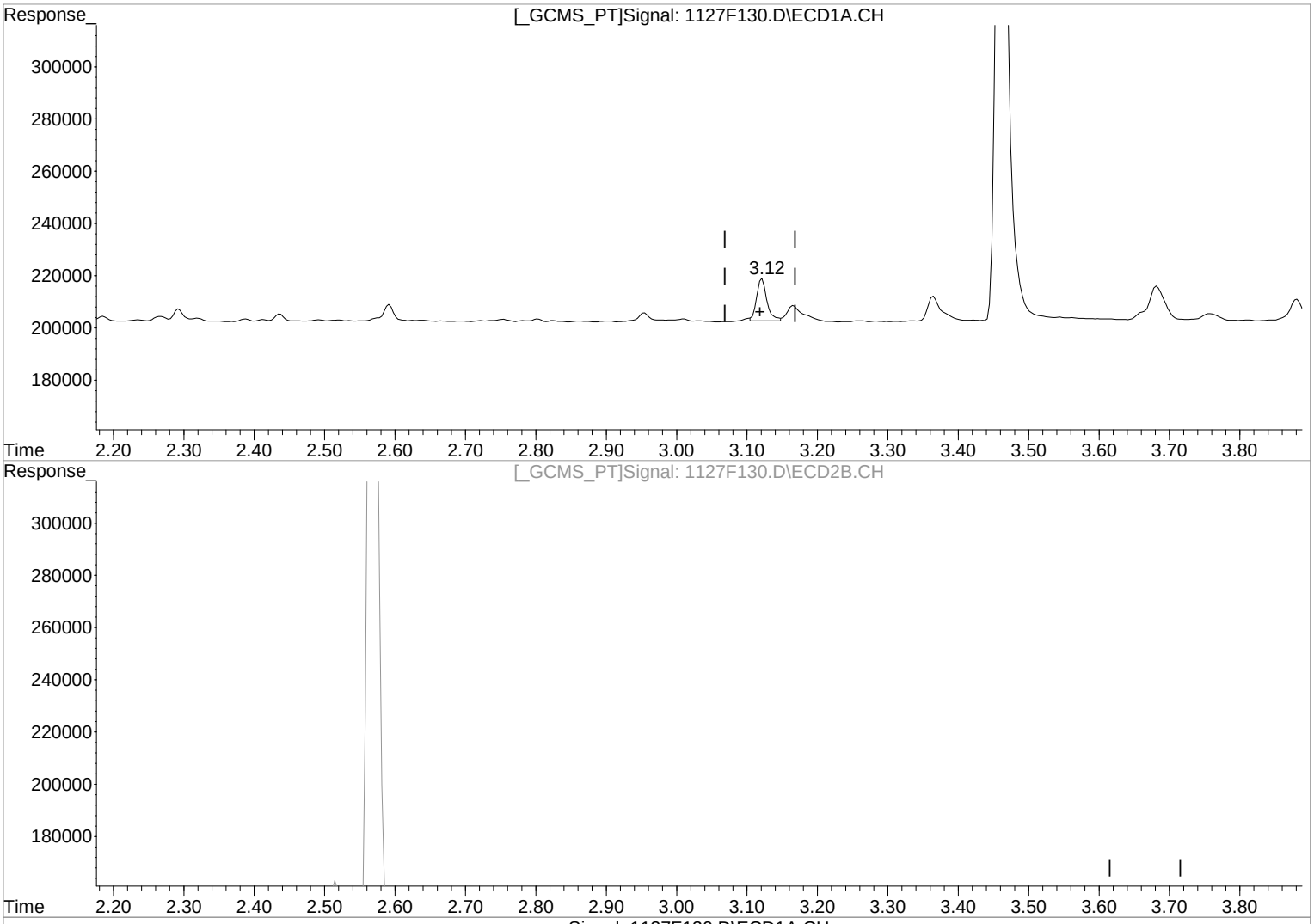


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 10.089ug/L m

response 163576

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 9.369ug/L

response 175528

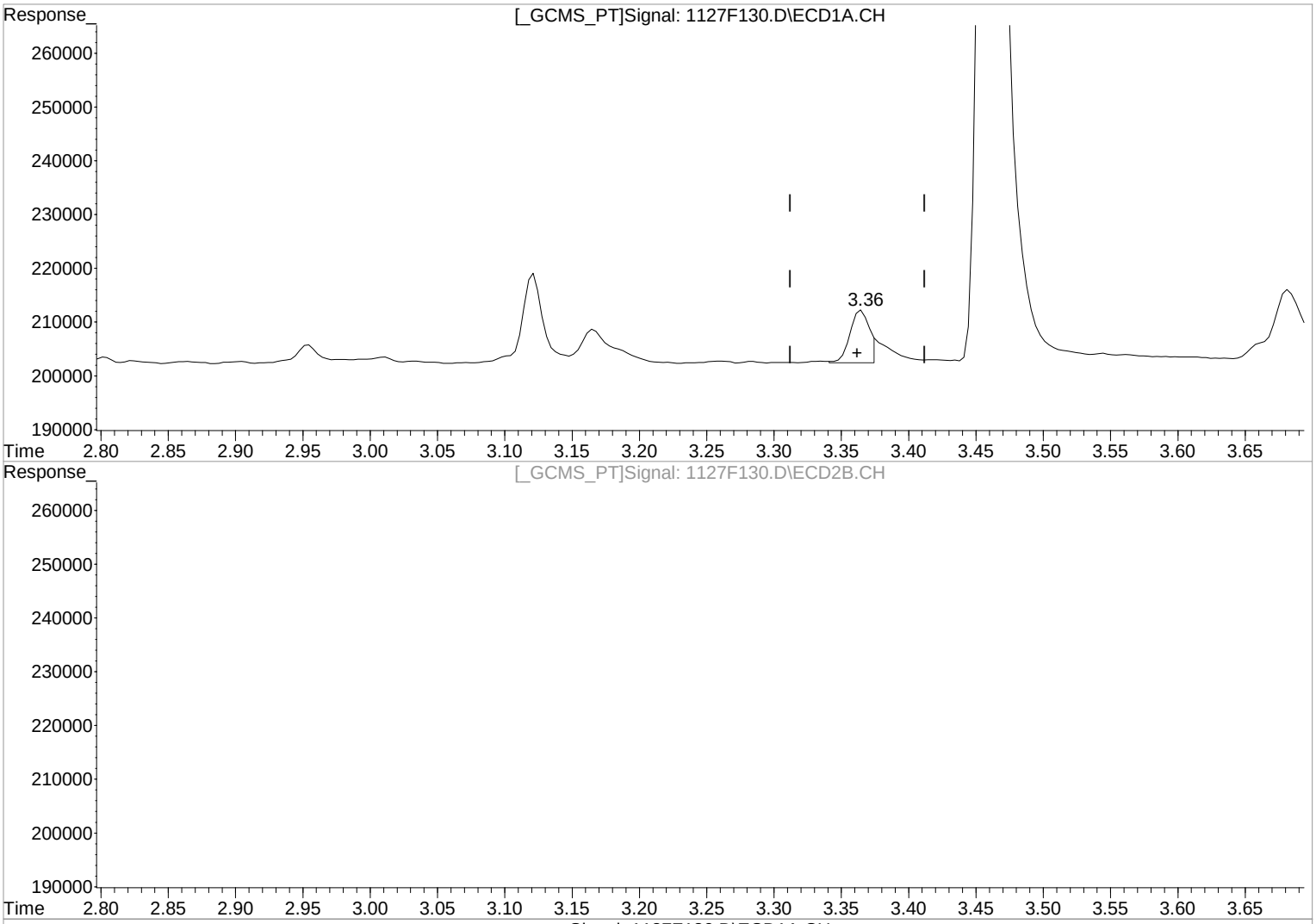
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 8.415ug/L m

response 101688

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 9.526ug/L

response 125108

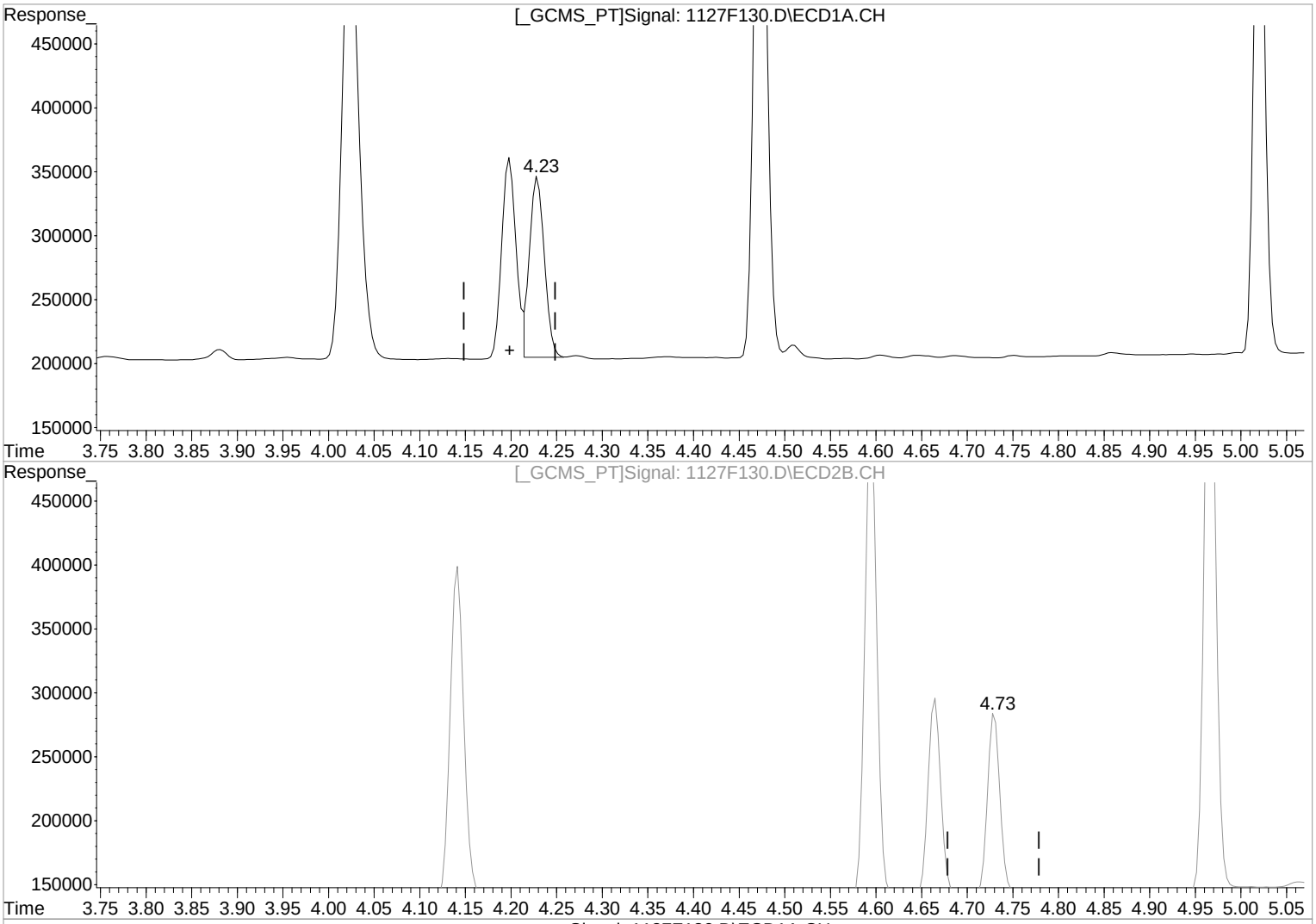
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 9.750ug/L m

response 1550706

Manual Integration:

After

Wrong peak, No Before

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 9.293ug/L

response 1348458

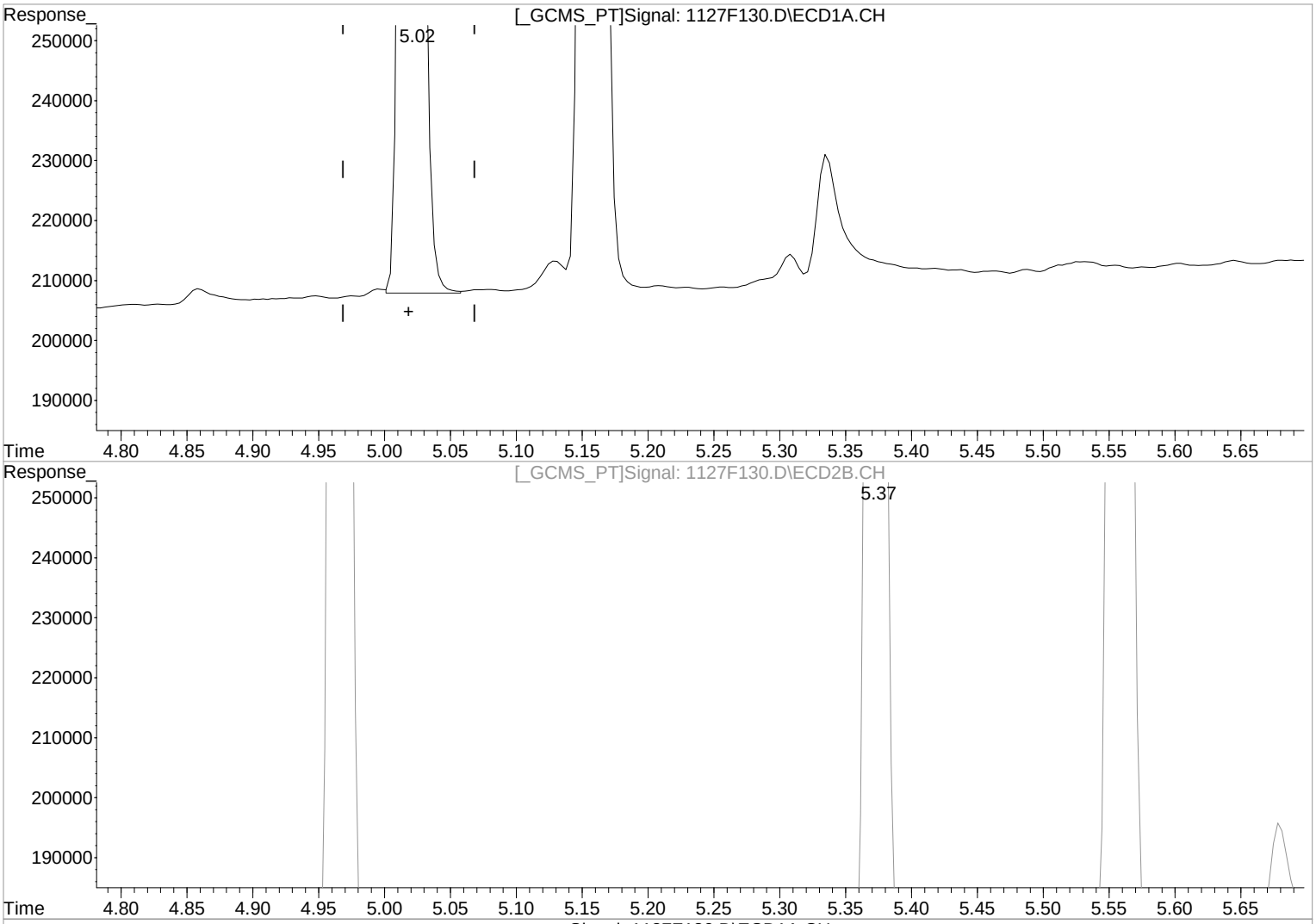
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 11.017ug/L m

response 3744556

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 9.656ug/L

response 3299360

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:00:34 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.60	11143798	9056888	37.047	34.802
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	400014	405654	24.671m	21.652
2)		3,5-Dichlorophen	3.36	3.91	316008	288184	26.150	21.944
3)		2,4,6-Trichlorop	3.46	4.14	7312718	6768082	20.625	18.823
5)		2,4,5-Trichlorop	4.20	4.66	3927156	3388118	25.257	20.621
6)		3,4,5-Trichlorop	4.23f	4.73	3598120	3123178	22.622m	21.523
7)	M	2,3,5,6-Tetrachl	4.47	4.97	11725474	10538308	23.390	20.971
8)	M	2,3,4,5-Tetrachl	5.02	5.37	8743824	7747010	25.726	22.673
9)	M	Pentachloropheno	5.16	5.56	14842634	13563198	25.350	22.748
10)		Pentachloroaniso	5.16	5.56	14842634	13563198	26.670	23.927

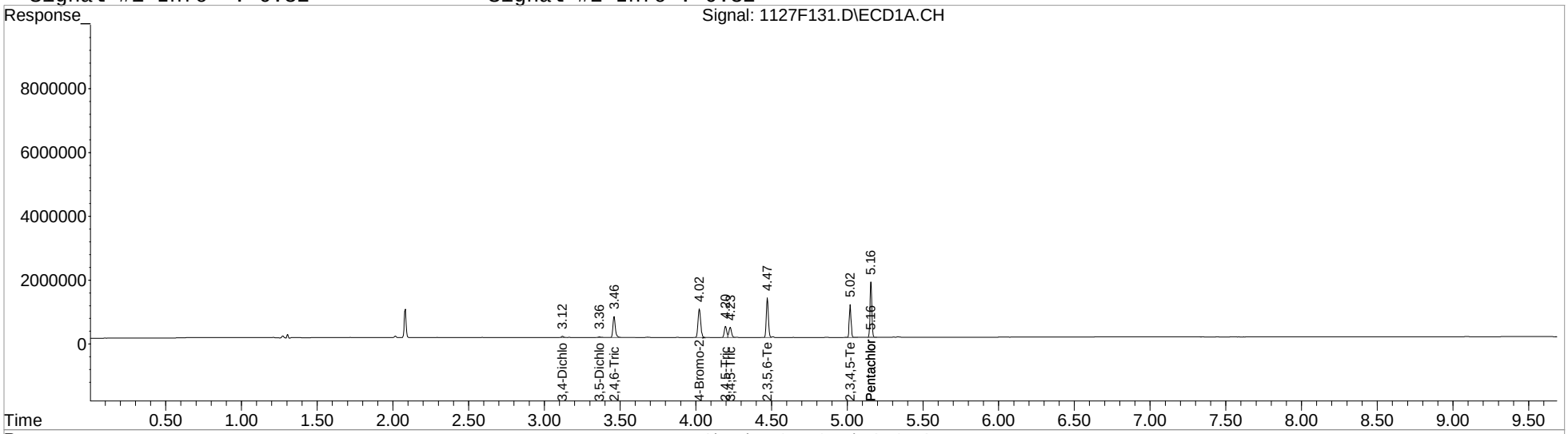
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

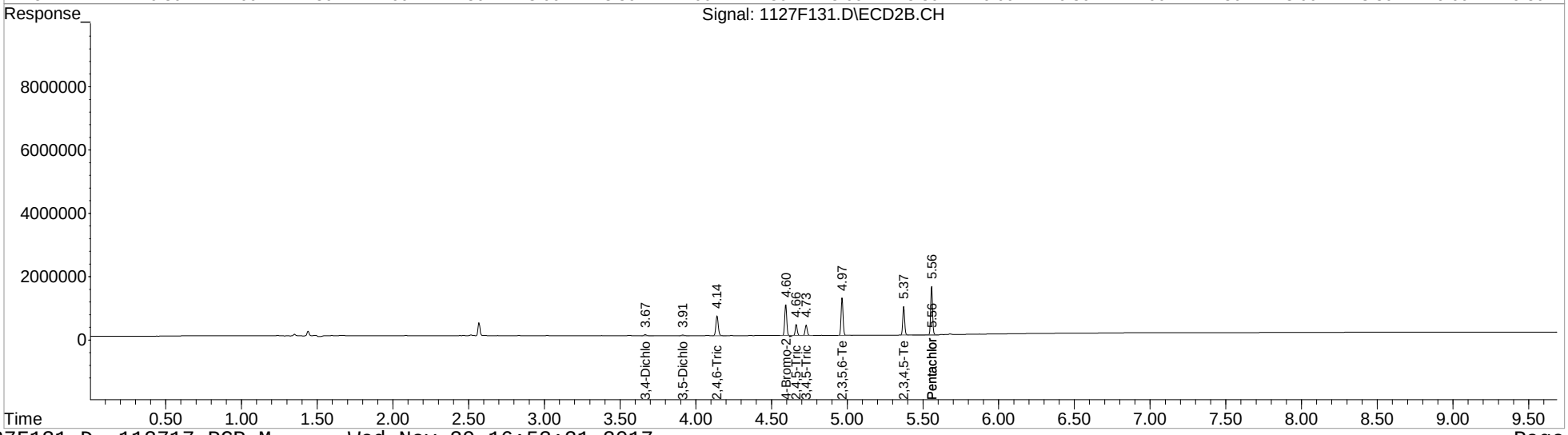
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



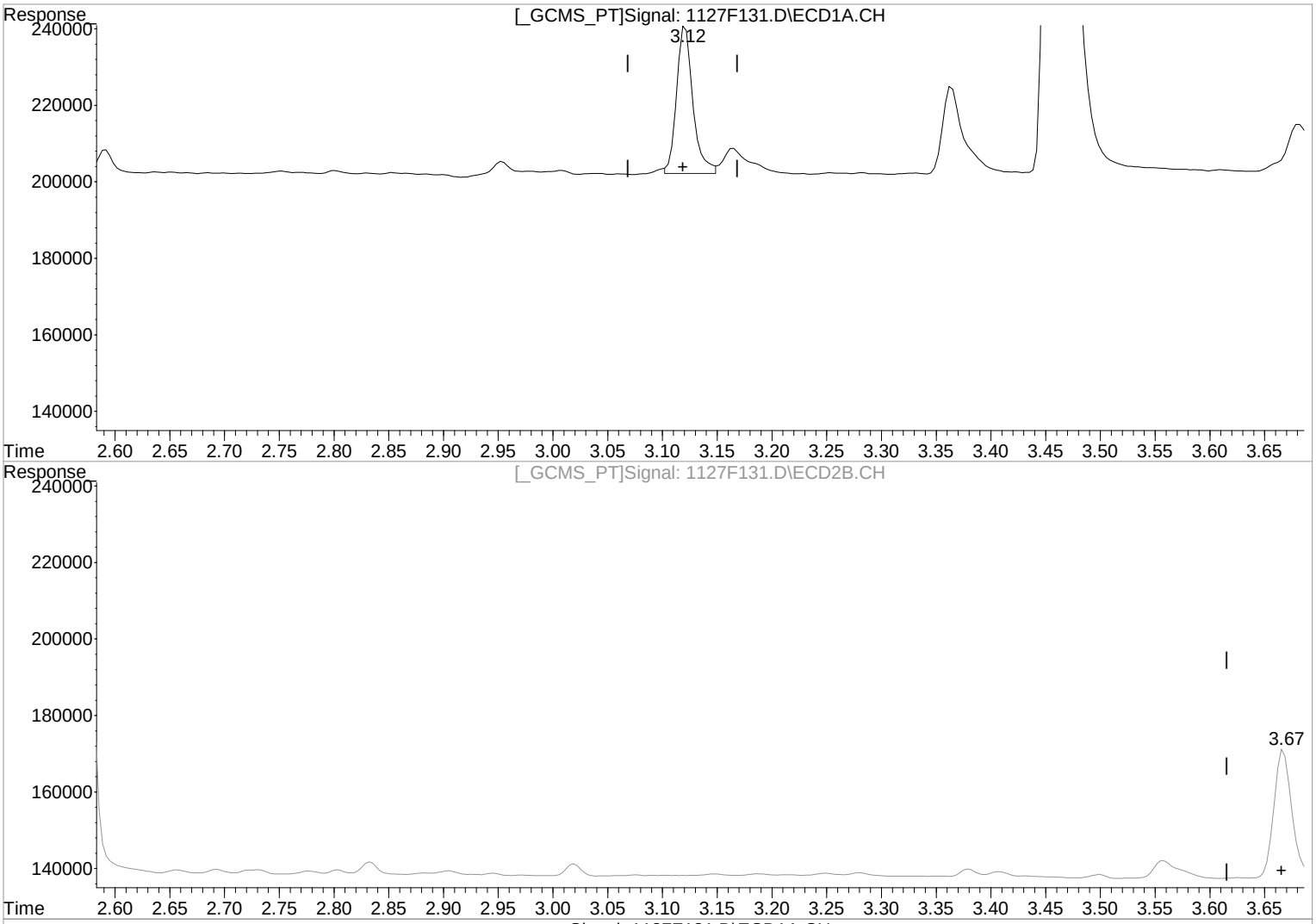


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F131.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 24.671ug/L m

response 400014

(1) 3,4-Dichlorophenol #2

3.67min 21.652ug/L

response 405654

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

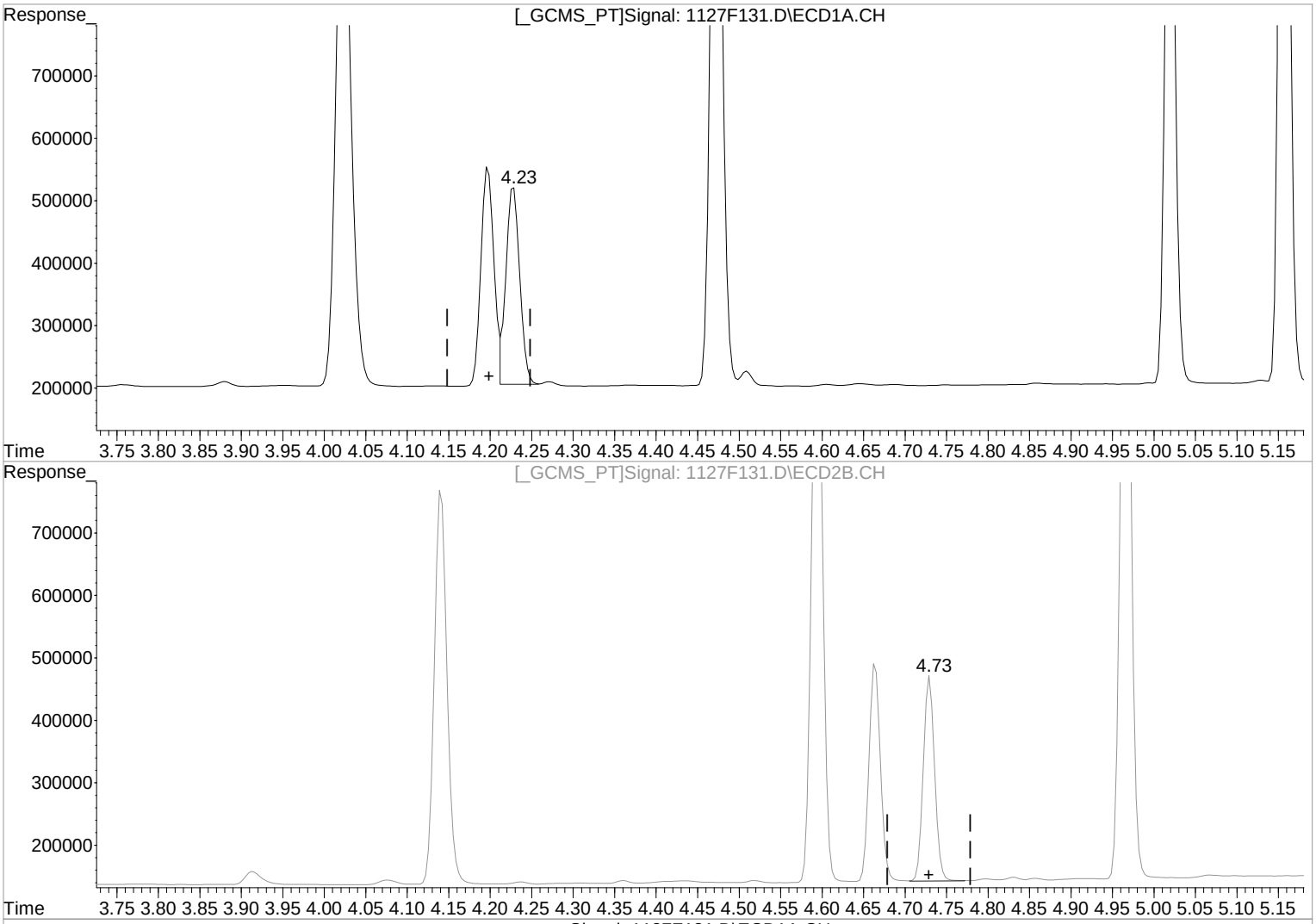
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F131.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 22.622ug/L m

response 3598120

Manual Integration:

After

Wrong peak, No Before

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 21.523ug/L

response 3123178

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:04:32 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	46010514	40158220	152.958	154.311
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	1447870	1405326	89.300	75.009
2)		3,5-Dichlorophen	3.36	3.91	1078920	1058212	89.282	80.579
3)		2,4,6-Trichlorop	3.46	4.14	28084798	27879842	79.211	77.538
5)		2,4,5-Trichlorop	4.20	4.66	14021972	12747090	90.179	77.583
6)		3,4,5-Trichlorop	4.23	4.73	12849696	11876992	80.789	81.849
7)	M	2,3,5,6-Tetrachl	4.47	4.97	45966424	43712650	91.693	86.988
8)	M	2,3,4,5-Tetrachl	5.02	5.37	33226836	30840508	97.760	90.262
9)	M	Pentachloropheno	5.16	5.56	58837190	53885886	100.489	90.377m
10)		Pentachloroaniso	5.16	5.56	58837190	53900478	105.722	95.088m

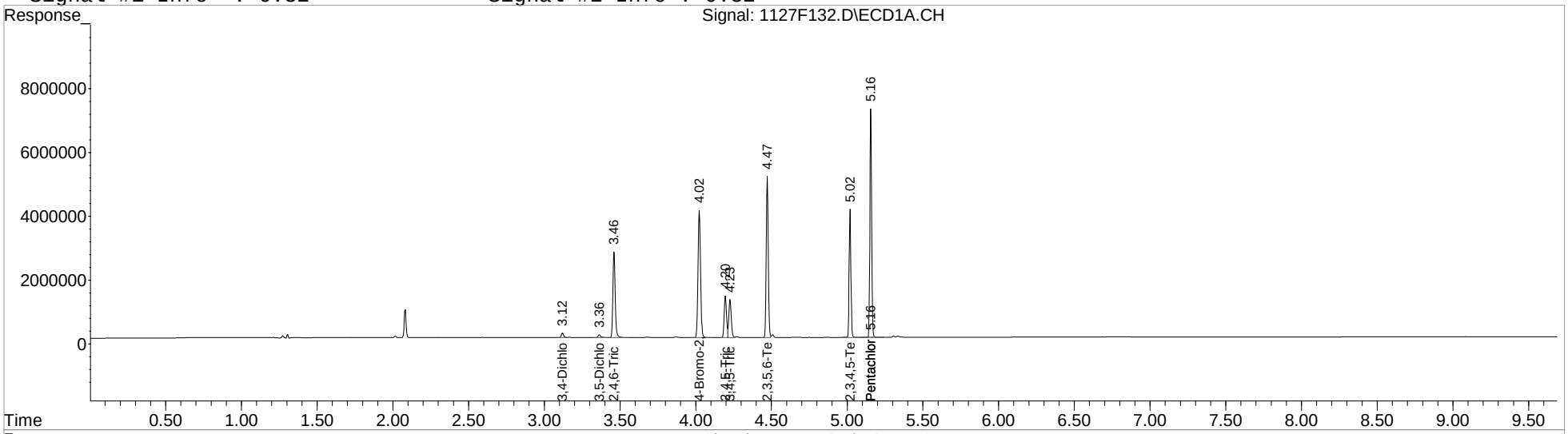
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

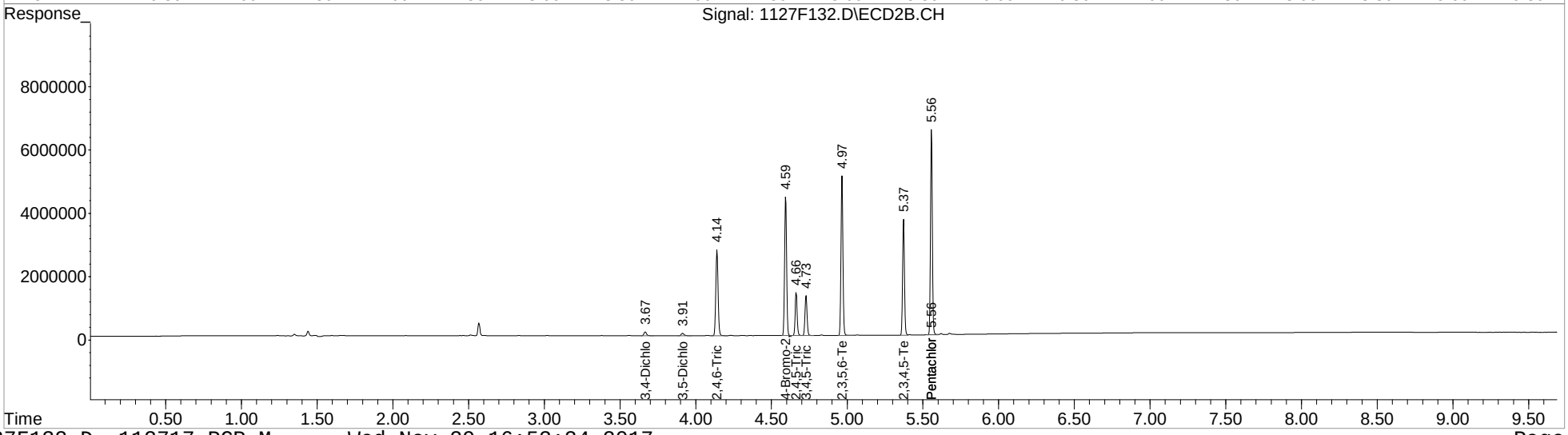
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



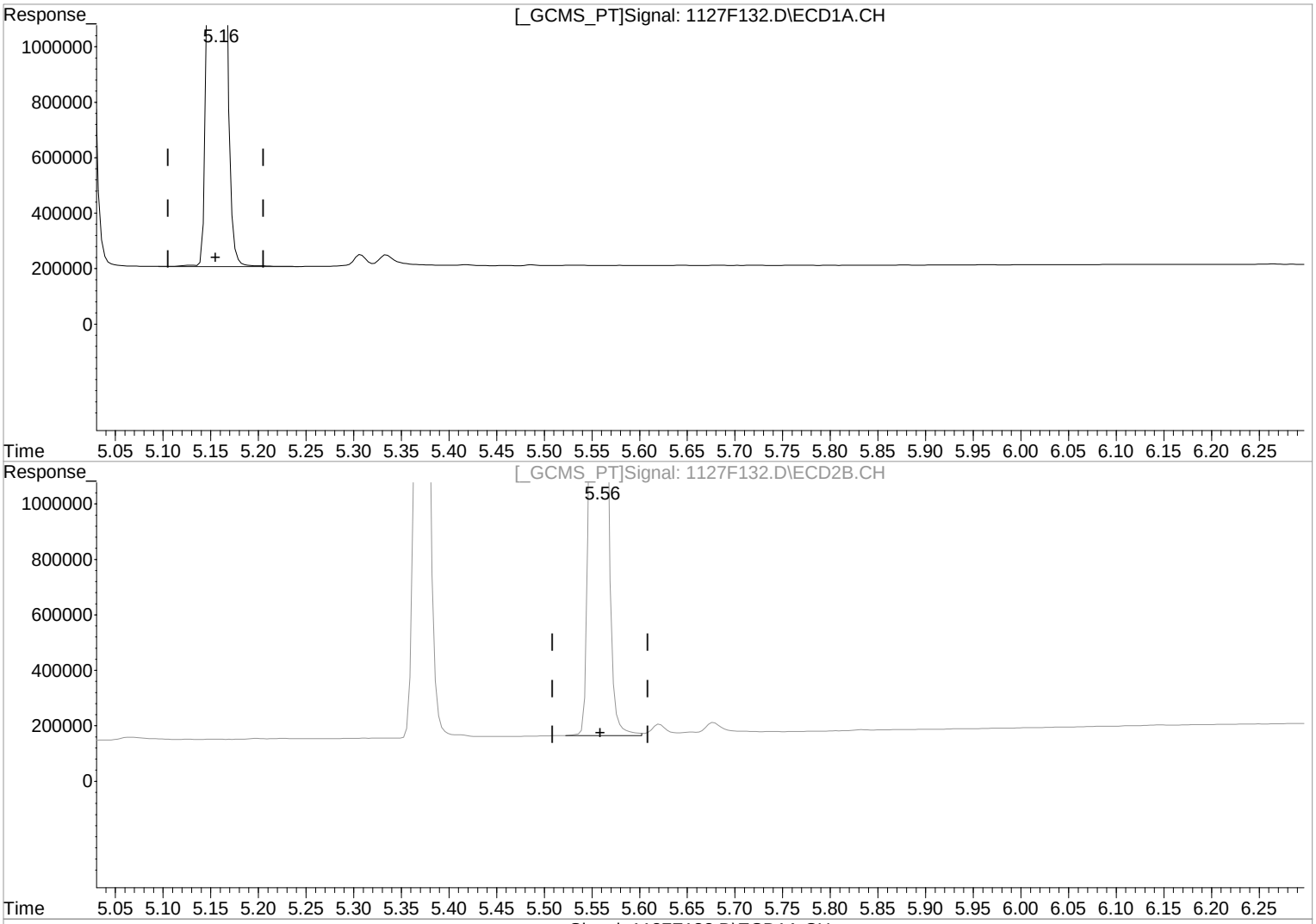


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F132.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 105.722ug/L

response 58837190

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(10) Pentachloroanisole #2

5.56min 95.088ug/L m

response 53900478

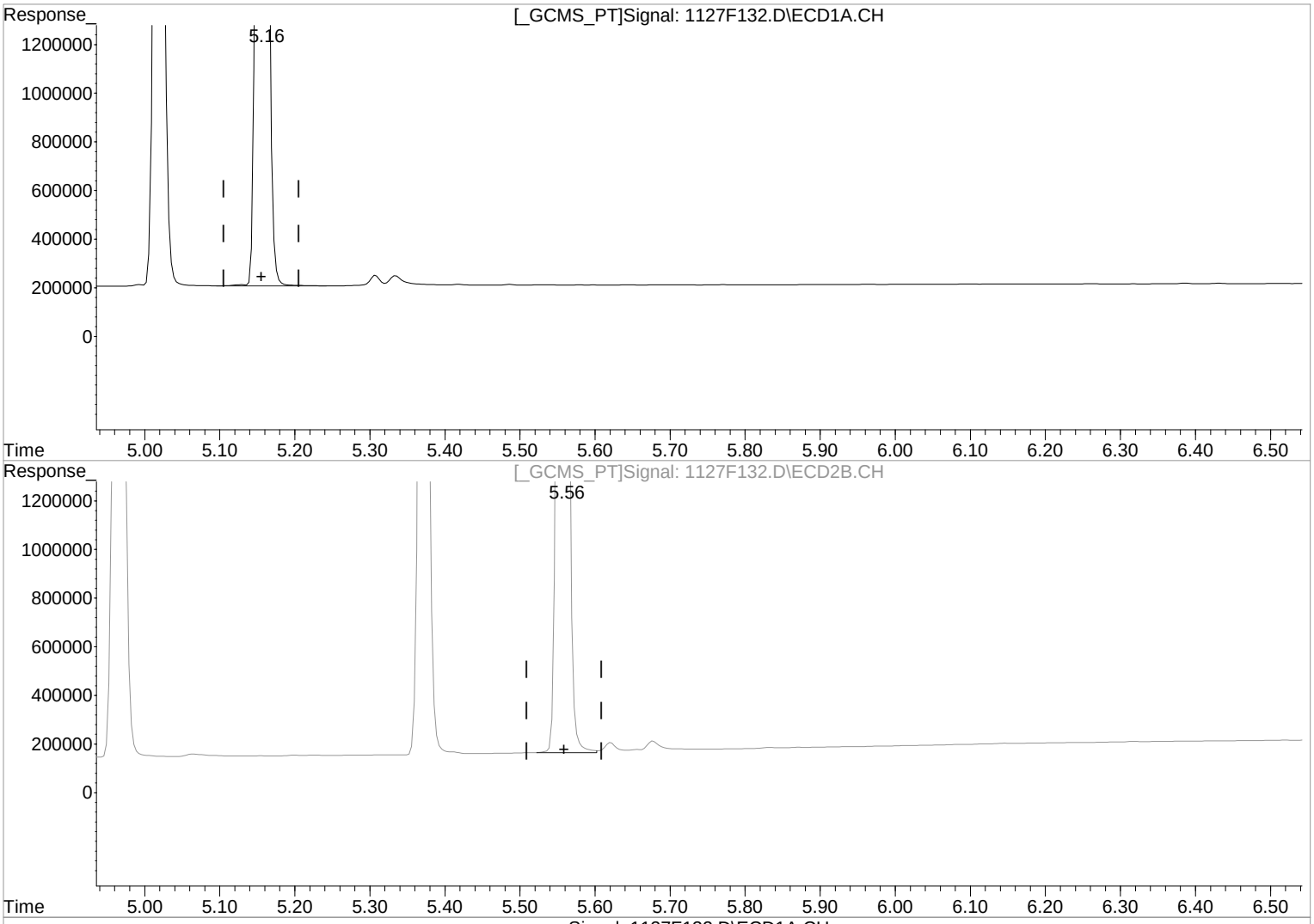
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F132.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 100.489ug/L

response 58837190

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 90.377ug/L m

response 53885886

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD2B.CH
Acq On : 27 Nov 2017 8:50 pm Operator: CV
Sample : PENTA01-88C 250 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:07:29 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	106.4E6	95029258	353.601	365.158
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	2913944	2910812	179.722	155.365
2)		3,5-Dichlorophen	3.36	3.91	2192854	2185628	181.462	166.427
3)		2,4,6-Trichlorop	3.46	4.14	62598844	64308464	176.555	178.851
5)		2,4,5-Trichlorop	4.20	4.66	29452628	28960918	189.418	176.266
6)		3,4,5-Trichlorop	4.23	4.73	28327676	27111646	178.102	186.838
7)	M	2,3,5,6-Tetrachl	4.47	4.97	103.3E6	102.6E6	206.131	204.112
8)	M	2,3,4,5-Tetrachl	5.02	5.37	73882544	72867544	217.377	213.263
9)	M	Pentachloropheno	5.16	5.56	133.3E6	129.4E6	227.744	216.997
10)		Pentachloroaniso	5.16	5.56	133.3E6	129.4E6	239.603	228.245

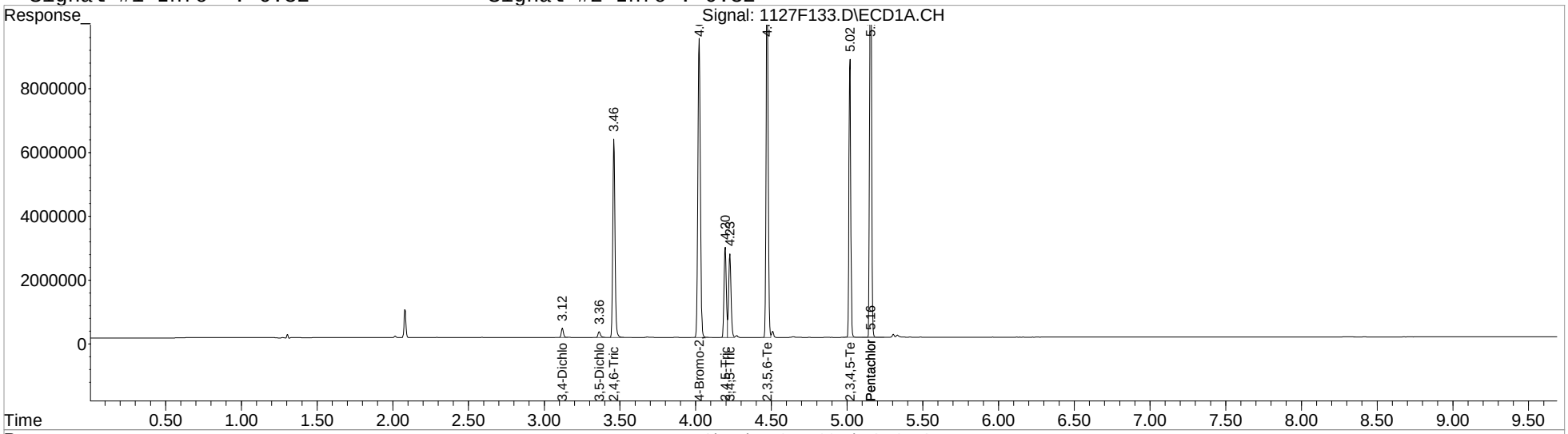
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

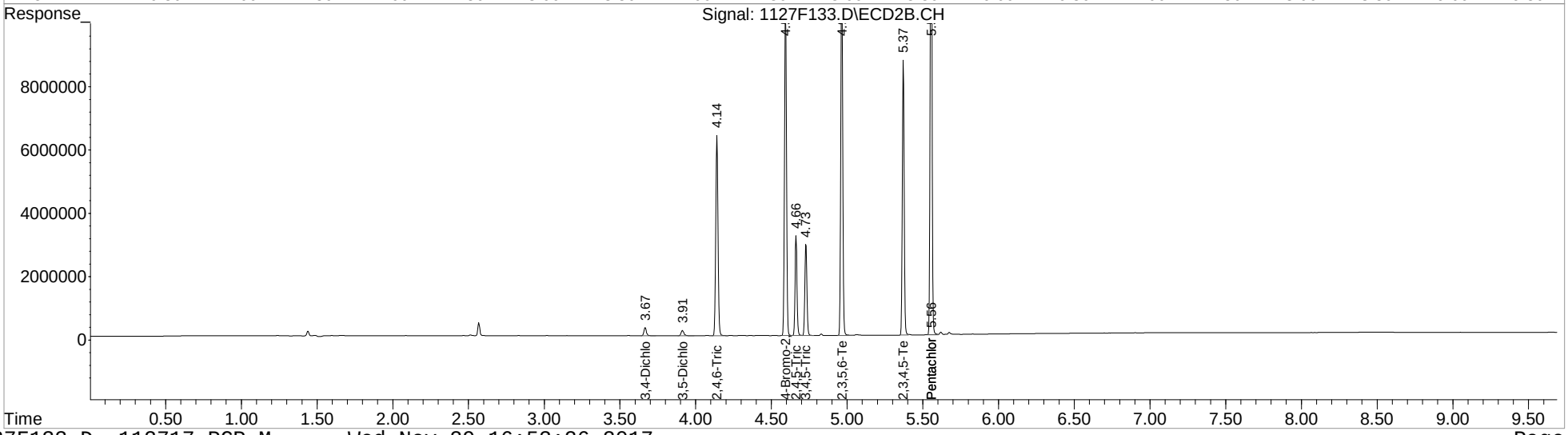
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD2B.CH
Acq On : 27 Nov 2017 8:50 pm Operator: CV
Sample : PENTA01-88C 250 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:07 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD2B.CH
Acq On : 27 Nov 2017 9:08 pm Operator: CV
Sample : PENTA01-88N 500 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:40:27 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	0.00	0.00	0	0	N.D. d	N.D. d
		Target Compounds						
1)		3,4-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
2)		3,5-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
3)		2,4,6-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
5)		2,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
6)		3,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
9)	M	Pentachloropheno	5.15	5.56	258.3E6	266.6E6	441.097	447.195
10)		Pentachloroaniso	5.15	5.56	258.3E6	266.6E6	464.065	470.376

Penta and anisole only

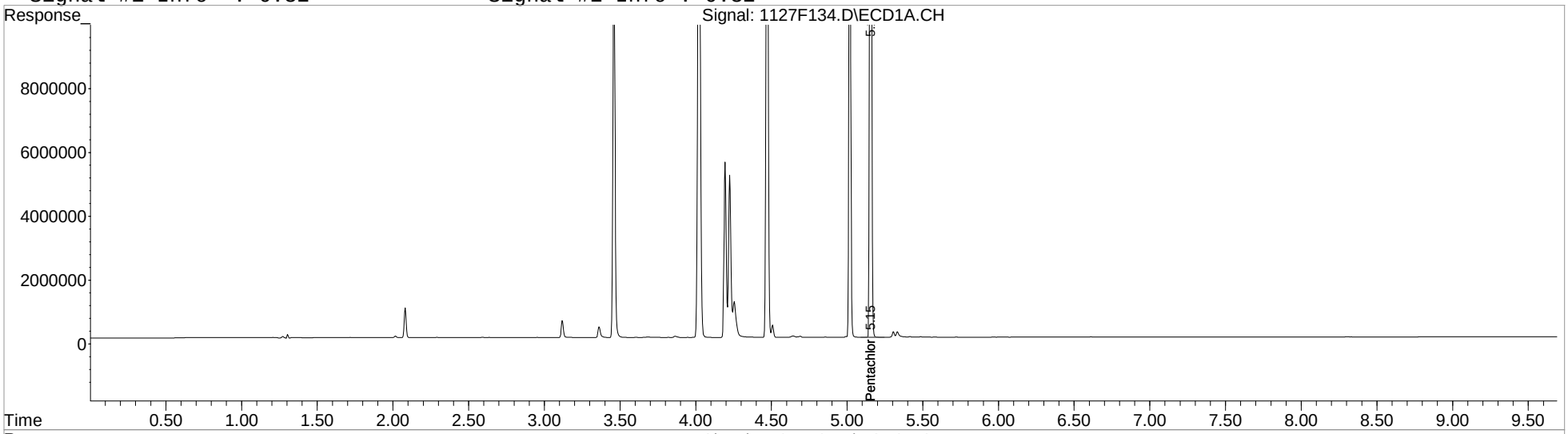
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

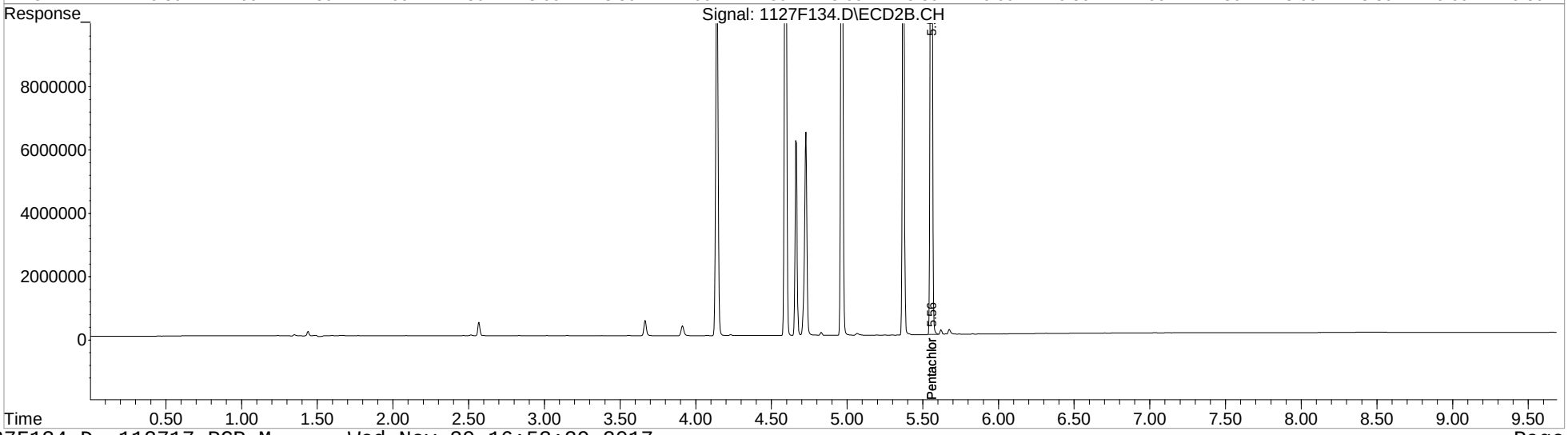
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD2B.CH
Acq On : 27 Nov 2017 9:08 pm Operator: CV
Sample : PENTA01-88N 500 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:40 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD2B.CH
Acq On : 27 Nov 2017 9:27 pm Operator: CV
Sample : PENTA01-88M 1000 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:10:53 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	0.00	0.00	0	0	N.D. d	N.D. d
		Target Compounds						
1)		3,4-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
2)		3,5-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
3)		2,4,6-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
5)		2,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
6)		3,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
9)	M	Pentachloropheno	5.16	5.56	484.7E6	524.6E6	827.802	879.883
10)		Pentachloroaniso	5.16	5.56	484.7E6	524.6E6	870.906	925.495

Penta and anisole only

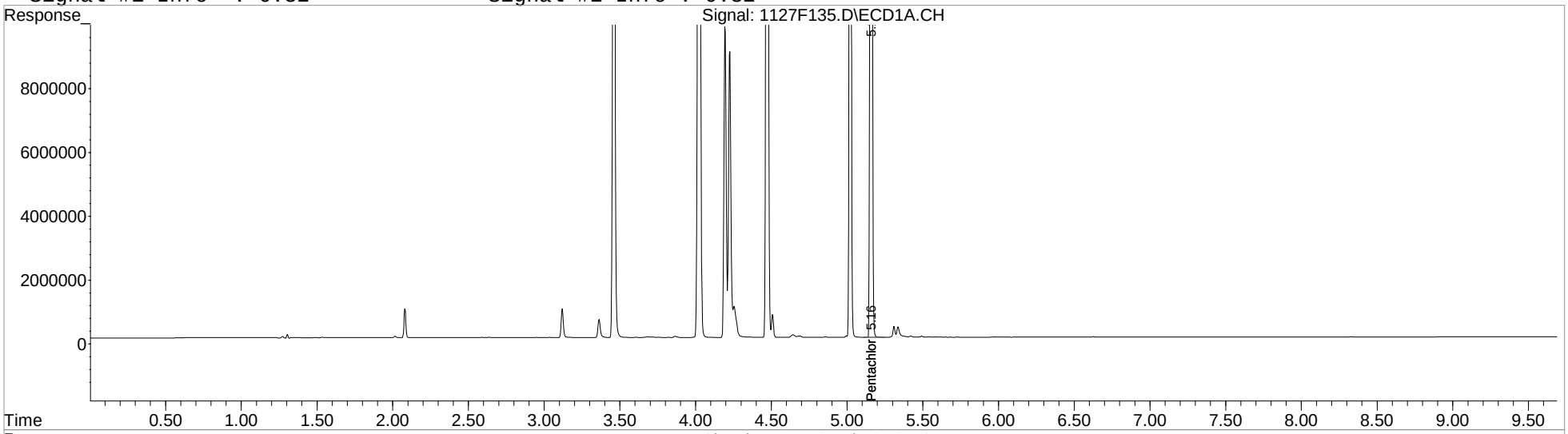
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

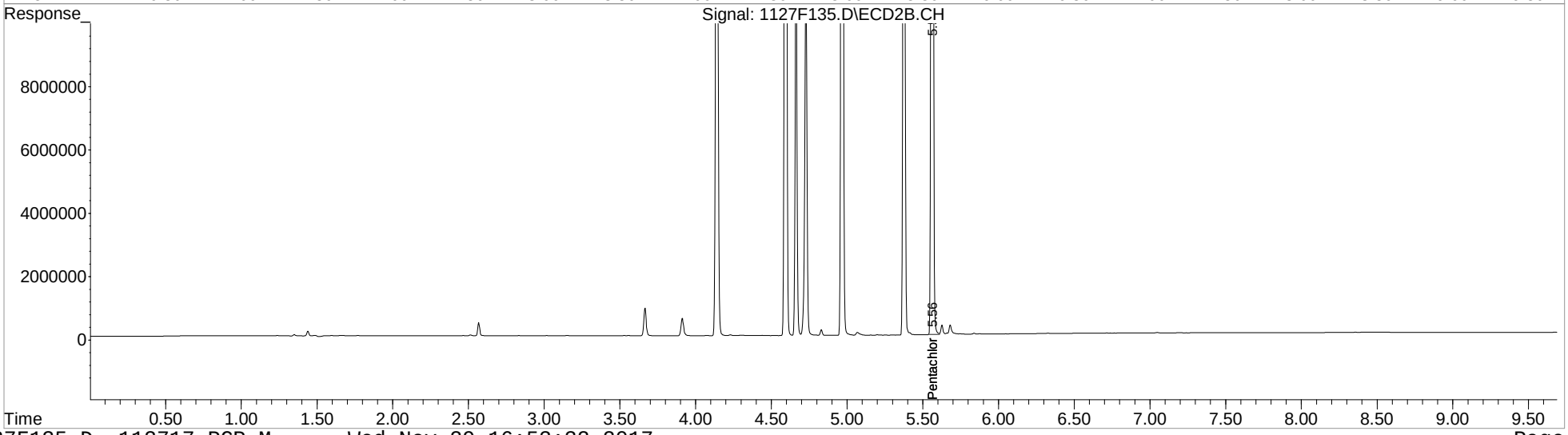
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD2B.CH
Acq On : 27 Nov 2017 9:27 pm Operator: CV
Sample : PENTA01-88M 1000 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:45 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:47:58 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.01	4.57	6162	7584	0.020	0.029 #
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.66	769118	732270	47.437	39.085
2)		3,5-Dichlorophen	3.36	3.91	483034	541656	39.972m	41.245
3)		2,4,6-Trichlorop	3.46	4.14	14150702	12878254	39.911	35.816
5)		2,4,5-Trichlorop	4.19	4.66	7083376	6313060	45.555	38.423
6)		3,4,5-Trichlorop	4.22	4.73	6656538	5862514	41.851	40.401
7)	M	2,3,5,6-Tetrachl	4.47	4.97	22573818	20683576	45.030	41.160
8)	M	2,3,4,5-Tetrachl	5.02	5.37	16083160	14736668	47.320	43.130
9)	M	Pentachloropheno	5.16	5.56	28261942	25806018	49.255	43.863
10)		Pentachloroaniso	5.16	5.56	28261942	25806018	51.824	46.142

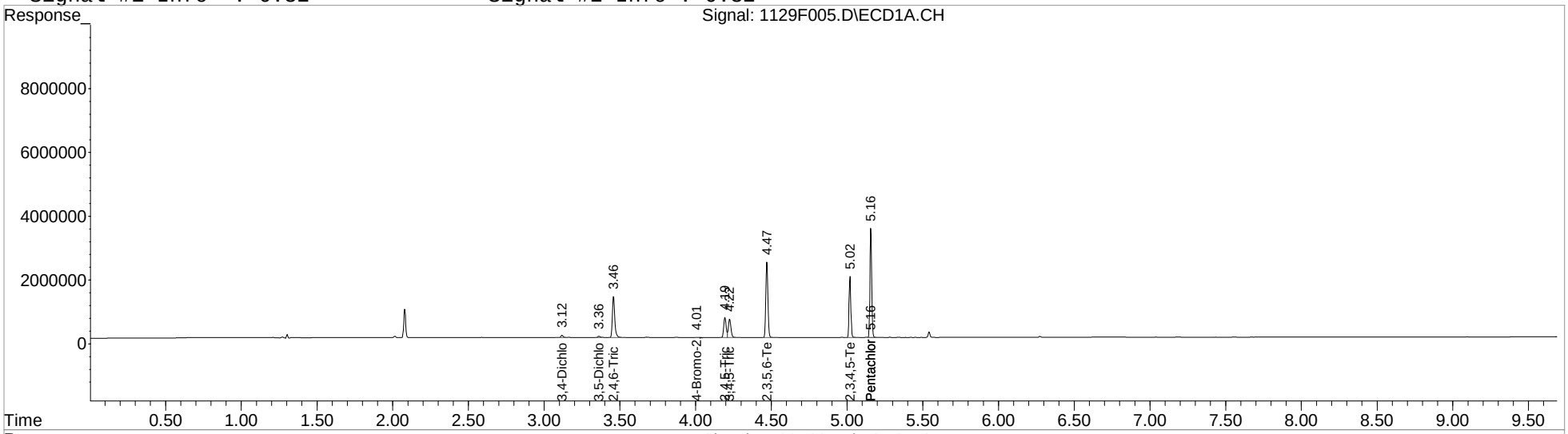
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

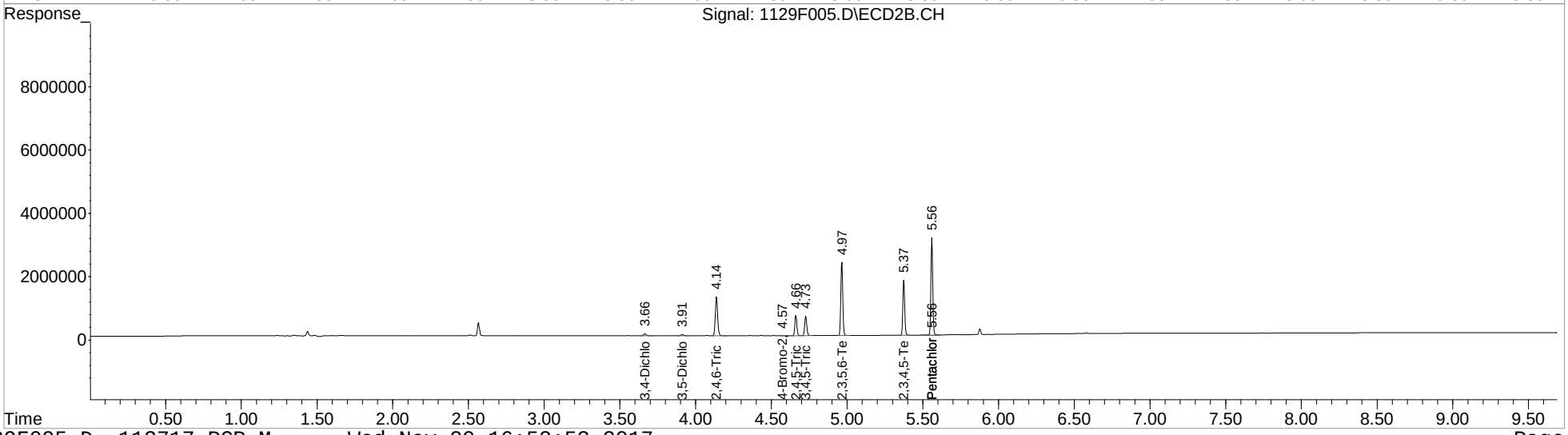
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:48 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



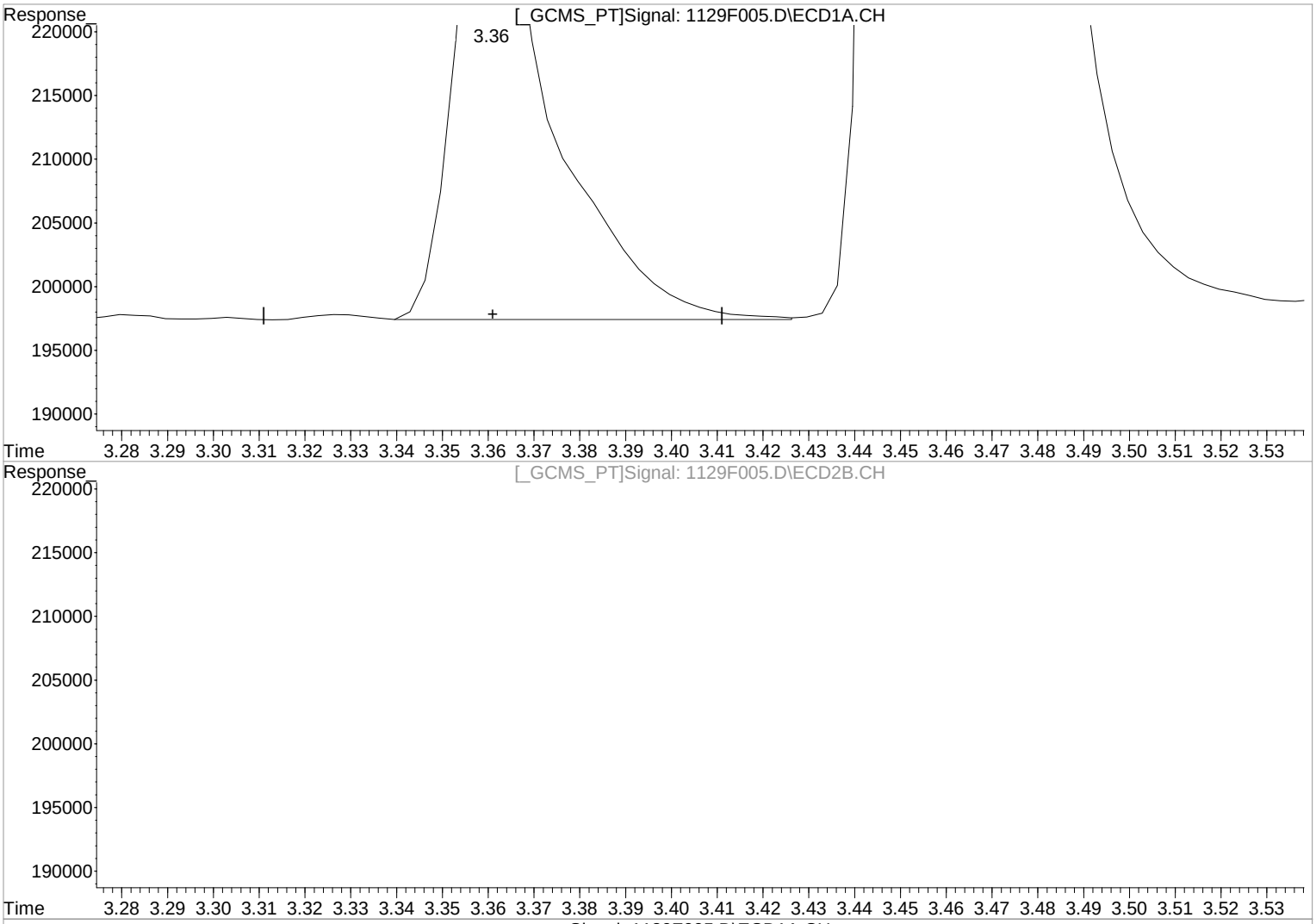


Quantitation Report (Qedit)

1st 11/30/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 30 14:47 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Thu Nov 30 14:18:39 2017
Response via : Multiple Level Calibration



Signal: 1129F005.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 45.764ug/L

response 557528

(2) 3,5-Dichlorophenol #2

3.91min 43.808ug/L

response 541656

Manual Integration:

Before

11/30/17

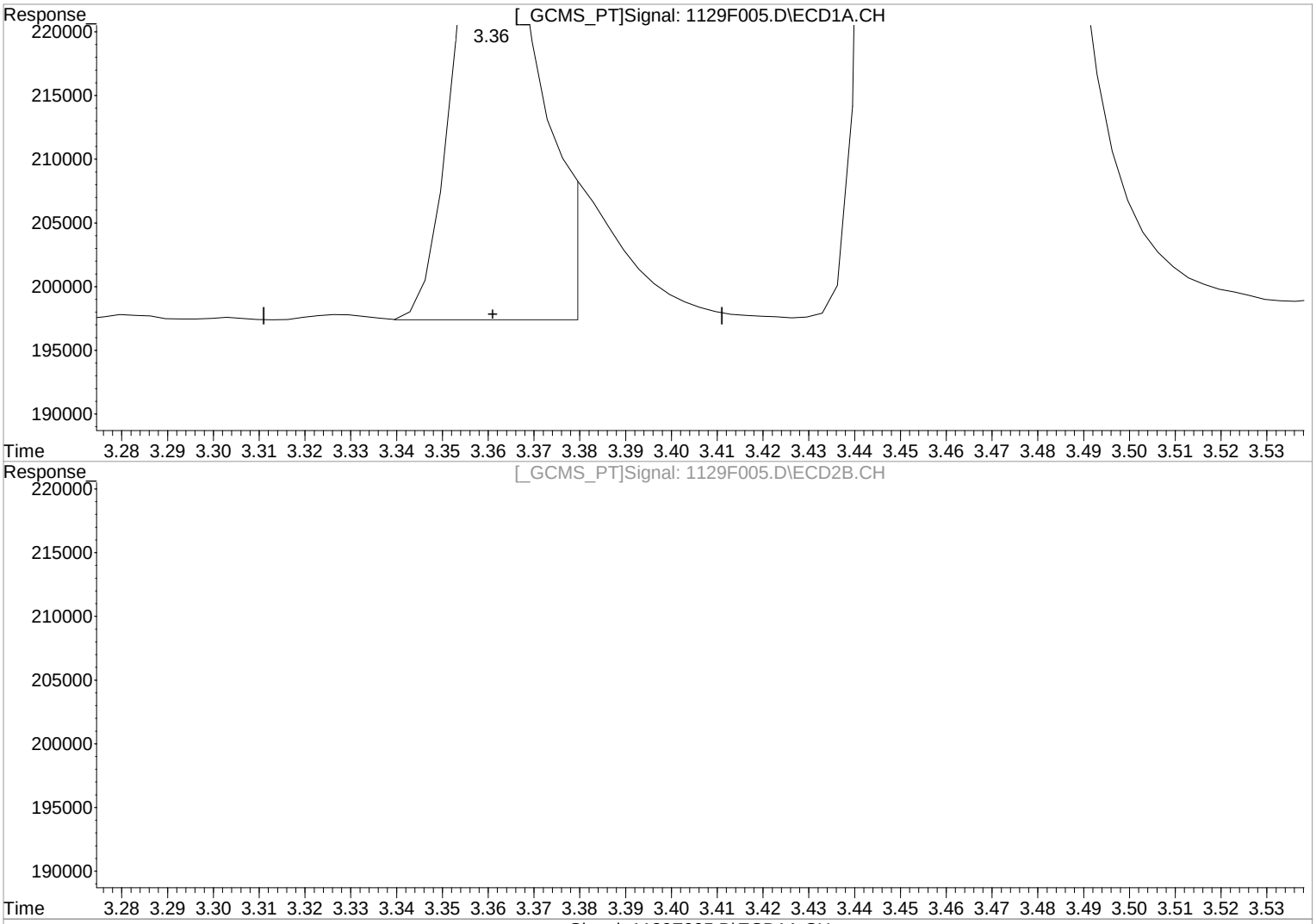
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/30/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 30 14:47 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Thu Nov 30 14:18:39 2017
Response via : Multiple Level Calibration



Signal: 1129F005.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 40.059ug/L m

response 488026

Manual Integration:

After

Baseline/Shoulder

11/30/17

(2) 3,5-Dichlorophenol #2

3.91min 43.808ug/L

response 541656

(+) = Expected Retention Time

Preparation Information

Group ID:	KWG1801629	**Prep Method:**	Method Mod	**Prep Date:**	03/21/18 11:19
Department:	Semivoa GC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.	Solids
K1802548-001	CARBON IN	8151A Modified PCP	WATER	5mL	1mL	
K1802548-002	CARBON MID	8151A Modified PCP	WATER	5mL	1mL	
K1802548-003	PENTA 003	8151A Modified PCP	WATER	5mL	1mL	
K1802579-021	MW-36	8151A Modified PCP	WATER	5mL	1mL	
K1802579-022	MW-37	8151A Modified PCP	WATER	5mL	1mL	
K1802579-023	MW-38	8151A Modified PCP	WATER	5mL	1mL	
K1802579-024	MW-39	8151A Modified PCP	WATER	5mL	1mL	
K1802579-025	MW-40	8151A Modified PCP	WATER	5mL	1mL	
K1802579-026	MW-41	8151A Modified PCP	WATER	5mL	1mL	
K1802579-027	MW-42	8151A Modified PCP	WATER	5mL	1mL	
K1802579-028	MW-43	8151A Modified PCP	WATER	5mL	1mL	
K1802579-029	MW-44	8151A Modified PCP	WATER	5mL	1mL	
K1802579-030	FIELD BLANK RINSATE	8151A Modified PCP	WATER	5mL	1mL	
K1802579-031	MW-3	8151A Modified PCP	WATER	5mL	1mL	
K1802580-004	EW COMPOSITE	8151A Modified PCP	WATER	5mL	1mL	
K1802582-001	BXS-1	8151A Modified PCP	WATER	5mL	1mL	
K1802582-002	BXS-2	8151A Modified PCP	WATER	5mL	1mL	
KWG1801629-1	Matrix Spike	8151A Modified PCP	WATER	5mL	1mL	
KWG1801629-2	Duplicate Matrix Spike	8151A Modified PCP	WATER	5mL	1mL	
KWG1801629-3	Lab Control Sample	8151A Modified PCP	WATER	5mL	1mL	
KWG1801629-4	Method Blank	8151A Modified PCP	WATER	5mL	1mL	

Lab Code	Parent Lab Code	Comments
KWG1801629-1	K1802580-004	KQ1803560-01
KWG1801629-2	K1802580-004	KQ1803560-02
KWG1801629-3		KQ1803560-03
KWG1801629-4		KQ1803560-04

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K1802548-001	1668851					
K1802548-002	1668852					
K1802548-003	1668853					
K1802579-021	1668854					
K1802579-022	1668855					
K1802579-023	1668856					
K1802579-024	1668857					

Comments: Made B.S. for stealth JD 3/27/18

Started By: BWILLARD Assisted By: _____ Training: Yes / No

Completed By: WVANDERH Assisted By: _____ Yes / No

Reviewed By: _____ Date: _____ Storage: _____

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined: Yes / No

Group ID:	KWG1801629	**Prep Method:**	Method Mod	**Prep Date:**	03/21/18 11:19
Department:	Semivoa GC				

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K1802579-025	1668858					
K1802579-026	1668859					
K1802579-027	1668860					
K1802579-028	1668861					
K1802579-029	1668862					
K1802579-030	1668863					
K1802579-031	1668864					
K1802580-004	1668865					
K1802582-001	1668866					
K1802582-002	1668867					
KWG1801629-1	1668868					
KWG1801629-2	1668869					
KWG1801629-3	1668870					
KWG1801629-4	1668871					

Comments:

Started By: BWILLARD Assisted By: Training Yes No

Completed By: WVANDERH Assisted By: Yes No

Reviewed By: Date: Storage:

Chain of Custody

Relinquished By: Date:

Received By: Date: Extracts Examined Yes No

Preparation Information Benchsheet

Prep Run#: 310334
Team: Semivoa GC/BWILLARD
Number of Copies to make: 4

Prep WorkFlow: OrgExtPcpAq7
Prep Method: Method Modified

Status: Prepped
Prep Date/Time: 3/21/18 11:19 AM

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	K1802579-021	MW-36	.02	8151A Modified/PCP		Water	5mL	1.00mL	
2	K1802579-022	MW-37	.02	8151A Modified/PCP		Water	5mL	1.00mL	
3	K1802579-023	MW-38	.02	8151A Modified/PCP		Water	5mL	1.00mL	
4	K1802579-024	MW-39	.02	8151A Modified/PCP		Water	5mL	1.00mL	
5	K1802579-025	MW-40	.02	8151A Modified/PCP		Water	5mL	1.00mL	
6	K1802579-026	MW-41	.02	8151A Modified/PCP		Water	5mL	1.00mL	
7	K1802579-027	MW-42	.02	8151A Modified/PCP		Water	5mL	1.00mL	
8	K1802579-028	MW-43	.02	8151A Modified/PCP		Water	5mL	1.00mL	
9	K1802579-029	MW-44	.02	8151A Modified/PCP		Water	5mL	1.00mL	
10	K1802579-030	FIELD BLANK RINSATE	.02	8151A Modified/PCP		Water	5mL	1.00mL	
11	K1802579-031	MW-3	.02	8151A Modified/PCP		Water	5mL	1.00mL	
12	K1802580-004	EW COMPOSITE	.01	8151A Modified/PCP		Water	5mL	1.00mL	
13	K1802582-001	BXS-1	.03	8151A Modified/PCP		Water	5mL	1.00mL	
14	K1802582-002	BXS-2	.03	8151A Modified/PCP		Water	5mL	1.00mL	
15	K1802548-001	CARBON IN	.01	8151A Modified/PCP		Water	5mL	1.00mL	
16	K1802548-002	CARBON MID	.01	8151A Modified/PCP		Water	5mL	1.00mL	
17	K1802548-003	PENTA 003	.01	8151A Modified/PCP		Water	5mL	1.00mL	
18	KQ1803560-01	K1802580-004 MS	.01	8151A Modified/PCP		Liquid	5mL	1.00mL	
19	KQ1803560-02	K1802580-004 DMS	.01	8151A Modified/PCP		Liquid	5mL	1.00mL	
20	KQ1803560-03	LCS		8151A Modified/PCP		Liquid	5mL	1.00mL	
21	KQ1803560-04	MB		8151A Modified/PCP		Liquid	5mL	1.00mL	

Preparation Steps

Step: Extraction
Started: 3/21/18 11:19
Finished: 3/21/18 11:25
By: BWILLARD
Comments

Step: Final Volume
Started: 3/26/18 13:50
Finished: 3/26/18 13:50
By: WVANDERHOFF
Comments

Comments: _____

Reviewed By: _____ Date: 3/26/18

Preparation Information Benchsheet

Prep Run#: 310334
Team: Semivoa GC/BWILLARD

Prep WorkFlow: OrgExtPcpAq7
Prep Method: Method Modified

Status: Prepped
Prep Date/Time: 3/21/18 11:19 AM

Chain of Custody

Relinquished By:		Date: 3-26-19	Extracts Examined
Received By:		Date: 3.28.18	Yes No

Preparation Information Benchsheet

Prep Run#: 310334
Team: Semivoa GC/BWILLARD
Prep WorkFlow: OrgExtPcpAq7
Prep Method: Method Modified
Status: Final Volume
Prep Date/Time: 3/21/18 11:19 AM

Number of Copies to make: 4

#	Lab Code	Client ID	B#	√	Method /Test	Matrix	Amt. Ext. mL	pH	Int. Vol	Final Vol mL	Surr Amt µl	Spike Amt µl
1	**K1802579-021**	MW-36	.02		8151A Modified / PCP	Water	5	<2	NA	1	100	—
2	**K1802579-022**	MW-37	.02		8151A Modified / PCP	Water	5	<2		1		—
3	**K1802579-023**	MW-38	.02		8151A Modified / PCP	Water	5	<2		1		—
4	**K1802579-024**	MW-39	.02		8151A Modified / PCP	Water	5	<2		1		—
5	**K1802579-025**	MW-40	.02		8151A Modified / PCP	Water	5	<2		1		—
6	**K1802579-026**	MW-41	.02		8151A Modified / PCP	Water	5	<2		1		—
7	**K1802579-027**	MW-42	.02		8151A Modified / PCP	Water	5	<2		1		—
8	**K1802579-028**	MW-43	.02		8151A Modified / PCP	Water	5	<2		1		—
9	**K1802579-029**	MW-44	.02		8151A Modified / PCP	Water	5	<2		1		—
10	**K1802579-030**	FIELD BLANK RINSATE	.02		8151A Modified / PCP	Water	5	<2		1		—
11	**K1802579-031**	MW-3	.02		8151A Modified / PCP	Water	5	<2		1		—
12	**K1802580-004**	EW COMPOSITE	.01		8151A Modified / PCP	Water	5	<2		1		—
13	**K1802582-001**	BXS-1	.03		8151A Modified / PCP	Water	5	<2		1		—
14	**K1802582-002**	BXS-2	.03		8151A Modified / PCP	Water	5	<2		1		—
15	**K1802548-001**	CARBON IN	.01		8151A Modified / PCP	Water	5	<2		1		—
16	**K1802548-002**	CARBON MID	.01		8151A Modified / PCP	Water	5	<2		1		—
17	**K1802548-003**	PENTA 003	.01		8151A Modified / PCP	Water	5	<2		1		—
18	**KQ1803560-01**	K1802580-004 MS	.01		8151A Modified / PCP	Liquid	5	<2		1		100
19	**KQ1803560-02**	K1802580-004 DMS	.01		8151A Modified / PCP	Liquid	5	<2		1		"
20	**KQ1803560-03**	LCS			8151A Modified / PCP	Liquid	5	<2		1		"
21	**KQ1803560-04**	MB			8151A Modified / PCP	Liquid	5	<2	"	1	—	—

Comments:

Surrogate ID: Penta 01-87N 500ppb 100µl xp 5-3-18 epp2B

Spike ID: Penta 01-86M 500ppb 100µl xp 3-29-18 epp2B

Witnessed By:

Analyst:

Assisted By:

Additional Prep Information for Method 8151M
Chlorinated Phenols "PCPs" in Water

Service Request # K1802579, K1802580, K1802582, K1802548 **Work Group #** KQ1803560

1:1 Sulfuric Acid Lot # 6042603 Ethyl Ether Lot # DT184

Extraction Start (time/date/initial): 13:~~08~~ 38 WS 3-21-18 3-21-18 WS

Extraction Stop (time/date/initial): 14:24 3-21-18 WS

Storage Location (overnight): 25R Acidified Sulfate Lot # DZ03-27Z

N-Evap (time/date/initial): 10:27 3-26-18 WS N-Evap Thermometer ID: DWB-012

Temp as measured: 22 ~~0.0~~ WS 3-26-18 °C Correction factor: 0.0 °C Adjusted temp: 22 °C

Derivatization Start (time/date/initial): 11:37 3-26-18 WS

Derivatization Stop (time/date/initial): 12:23 3-26-18 WS

Diazomethane Lot # DZ03-38J Methanol Lot # DN615

Solvent Exchange to Iso-Octane (time/date/initial): 12:23 3-26-18 WS

Iso-Octane Lot # DM 567 N-Evap Thermometer ID: DWB-012

Temp as measured: 22 °C Correction factor: 0.0 °C Adjusted temp: 22 °C

Pipette (1 mL) Lot # 13617645

Vial: red Vial Storage: penta

Additional Comments:

Bench Sheet Review Check List

- ☑ Hold times met (if no, reason: _____)
- ☑ Prep date, time, method, department, product code correct in stealth
- ☑ Spike information and Q.C. correct (insufficient volume or mass recorded if no Q.C.)
- ☑ Weights/Volumes and units correct on raw and final bench sheets
- ☑ Sample IDs have been checked - bottle numbers appended if required
- ☑ Names present for: started by, completed by, relinquished by, and witnessed by. Training circled.
- ☑ Extract storage recorded
- ☑ Additional prep sheet completely filled out (NA or line out blanks)
- ☑ All clean-ups have been noted on additional prep sheet
- ☑ Signed service request with Form V, if applicable, has been attached

R:\Extractions\Active Benchsheets\8151M\8151M_Water_ChlorinatedPhenols.doc Reviewed by: Shane Murray 3/15/17 SOP: SOC-8151M Rev. 11

Preparation Information

Group ID:	KWG1801592	**Prep Method:**	METHOD	**Prep Date:**	03/21/18 11:08
Department:	Semivoa GC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.	Solids
K1802579-001	HCMW-7	8151A Modified PCP	WATER	5mL	1mL	
K1802579-002	MW-15	8151A Modified PCP	WATER	5mL	1mL	
K1802579-003	MW-16	8151A Modified PCP	WATER	5mL	1mL	
K1802579-004	MW-17	8151A Modified PCP	WATER	5mL	1mL	
K1802579-005	MW-18	8151A Modified PCP	WATER	5mL	1mL	
K1802579-007	MW-22	8151A Modified PCP	WATER	5mL	1mL	
K1802579-008	MW-23	8151A Modified PCP	WATER	5mL	1mL	
K1802579-009	MW-24	8151A Modified PCP	WATER	5mL	1mL	
K1802579-010	MW-25	8151A Modified PCP	WATER	5mL	1mL	
K1802579-011	MW-26	8151A Modified PCP	WATER	5mL	1mL	
K1802579-012	MW-27	8151A Modified PCP	WATER	5mL	1mL	
K1802579-013	MW-28	8151A Modified PCP	WATER	5mL	1mL	
K1802579-014	MW-29	8151A Modified PCP	WATER	5mL	1mL	
K1802579-015	MW-30	8151A Modified PCP	WATER	5mL	1mL	
K1802579-016	MW-31	8151A Modified PCP	WATER	5mL	1mL	
K1802579-018	MW-33	8151A Modified PCP	WATER	5mL	1mL	
K1802579-019	MW-34	8151A Modified PCP	WATER	5mL	1mL	
K1802579-020	MW-35	8151A Modified PCP	WATER	5mL	1mL	
KWG1801592-1	Matrix Spike	8151A Modified PCP	WATER	5mL	1mL	
KWG1801592-2	Duplicate Matrix Spike	8151A Modified PCP	WATER	5mL	1mL	
KWG1801592-3	Lab Control Sample	8151A Modified PCP	WATER	5mL	1mL	
KWG1801592-4	Method Blank	8151A Modified PCP	WATER	5mL	1mL	

Lab Code	Parent Lab Code	Comments
KWG1801592-1	K1802579-020	KQ1803558-01
KWG1801592-2	K1802579-020	KQ1803558-02
KWG1801592-3		KQ1803558-03
KWG1801592-4		KQ1803558-04

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K1802579-001	1668515					
K1802579-002	1668516					
K1802579-003	1668517					
K1802579-004	1668518					
K1802579-005	1668519					
K1802579-007	1668520					

Comments: Made B.S for Stealth 3.26.18

Started By: BWILLARD Assisted By: _____ Training: Yes No

Completed By: WVANDERH Assisted By: _____ Yes No

Reviewed By: _____ Date: _____ Storage: _____

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____ Extracts Examined: Yes No

Group ID:	KWG1801592	**Prep Method:**	METHOD	**Prep Date:**	03/21/18 11:08
Department:	Semivoa GC				

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K1802579-008	1668521					
K1802579-009	1668522					
K1802579-010	1668523					
K1802579-011	1668524					
K1802579-012	1668525					
K1802579-013	1668526					
K1802579-014	1668527					
K1802579-015	1668528					
K1802579-016	1668529					
K1802579-018	1668530					
K1802579-019	1668531					
K1802579-020	1668532					
KWG1801592-1	1668533					
KWG1801592-2	1668534					
KWG1801592-3	1668535					
KWG1801592-4	1668536					

Comments:

Started By: BWILLARD Assisted By: Training Yes No

Completed By: WVANDERH Assisted By: Yes No

Reviewed By: Date: Storage:

Chain of Custody

Relinquished By: Date:

Received By: Date: Extracts Examined Yes No

Preparation Information Benchsheet

Prep Run#: 310332
Team: Semivoa GC/BWILLARD
Number of Copies to make: 1

Prep WorkFlow: OrgExtPcpAq7
Prep Method: Method Modified

Status: Prepped
Prep Date/Time: 3/21/18 11:08 AM

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	K1802579-001	HCMW-7	.02	8151A Modified/PCP		Water	5mL	1.00mL	
2	K1802579-002	MW-15	.02	8151A Modified/PCP		Water	5mL	1.00mL	
3	K1802579-003	MW-16	.02	8151A Modified/PCP		Water	5mL	1.00mL	
4	K1802579-004	MW-17	.02	8151A Modified/PCP		Water	5mL	1.00mL	
5	K1802579-005	MW-18	.02	8151A Modified/PCP		Water	5mL	1.00mL	
6	K1802579-007	MW-22	.02	8151A Modified/PCP		Water	5mL	1.00mL	
7	K1802579-008	MW-23	.02	8151A Modified/PCP		Water	5mL	1.00mL	
8	K1802579-009	MW-24	.02	8151A Modified/PCP		Water	5mL	1.00mL	
9	K1802579-010	MW-25	.02	8151A Modified/PCP		Water	5mL	1.00mL	
10	K1802579-011	MW-26	.02	8151A Modified/PCP		Water	5mL	1.00mL	
11	K1802579-012	MW-27	.02	8151A Modified/PCP		Water	5mL	1.00mL	
12	K1802579-013	MW-28	.02	8151A Modified/PCP		Water	5mL	1.00mL	
13	K1802579-014	MW-29	.02	8151A Modified/PCP		Water	5mL	1.00mL	
14	K1802579-015	MW-30	.02	8151A Modified/PCP		Water	5mL	1.00mL	
15	K1802579-016	MW-31	.02	8151A Modified/PCP		Water	5mL	1.00mL	
16	K1802579-018	MW-33	.02	8151A Modified/PCP		Water	5mL	1.00mL	
17	K1802579-019	MW-34	.02	8151A Modified/PCP		Water	5mL	1.00mL	
18	K1802579-020	MW-35	.02	8151A Modified/PCP		Water	5mL	1.00mL	
19	KQ1803558-01	K1802579-020 MS	.02	8151A Modified/PCP		Liquid	5mL	1.00mL	
20	KQ1803558-02	K1802579-020 DMS	.02	8151A Modified/PCP		Liquid	5mL	1.00mL	
21	KQ1803558-03	LCS		8151A Modified/PCP		Liquid	5mL	1.00mL	
22	KQ1803558-04	MB		8151A Modified/PCP		Liquid	5mL	1.00mL	

Preparation Steps

Step: Extraction
Started: 3/21/18 11:08
Finished: 3/21/18 11:17
By: BWILLARD
Comments

Step: Final Volume
Started: 3/22/18 15:45
Finished: 3/22/18 15:45
By: WVANDERHOFF
Comments

Comments: _____

Reviewed By: _____ Date: 3/23/18

Preparation Information Benchsheet

Prep Run#: 310332
Team: Semivoa GC/BWILLARD

Prep WorkFlow: OrgExtPcpAq7
Prep Method: Method Modified

Status: Prepped
Prep Date/Time: 3/21/18 11:08 AM

Chain of Custody

Relinquished By:		Date: 3-22-18	Extracts Examined
Received By:		Date: 3-22-18	Yes No

Preparation Information Benchsheet

Prep Run#: 310332
Team: Semivoa GC/BWILLARD
Number of Copies to make: 1

Prep WorkFlow: OrgExtPcpAq7
Prep Method: Method Modified

Status: Final Volume
Prep Date/Time: 3/21/18 11:08 AM

#	Lab Code	Client ID	B#	√	Method /Test	Matrix	Amt. Ext. mL	pH	Int. Vol µL	Final Vol mL	Surr Amt µL	Spike Amt µL
1	**K1802579-001**	HCMW-7	.02		8151A Modified / PCP	Water	5	<2	µA	1	100	—
2	**K1802579-002**	MW-15	.02		8151A Modified / PCP	Water	5	<2		1		—
3	**K1802579-003**	MW-16	.02		8151A Modified / PCP	Water	5	<2		1		—
4	**K1802579-004**	MW-17	.02		8151A Modified / PCP	Water	5	<2		1		—
5	**K1802579-005**	MW-18	.02		8151A Modified / PCP	Water	5	<2		1		—
6 *	**K1802579-006**	MW-2	.02		8151A Modified / PCP	Water	5	<2		1		—
7	**K1802579-007**	MW-22	.02		8151A Modified / PCP	Water	5	<2		1		—
8	**K1802579-008**	MW-23	.02		8151A Modified / PCP	Water	5	<2		1		—
9	**K1802579-009**	MW-24	.02		8151A Modified / PCP	Water	5	<2		1		—
10	**K1802579-010**	MW-25	.02		8151A Modified / PCP	Water	5	<2		1		—
11	**K1802579-011**	MW-26	.02		8151A Modified / PCP	Water	5	<2		1		—
12	**K1802579-012**	MW-27	.02		8151A Modified / PCP	Water	5	<2		1		—
13	**K1802579-013**	MW-28	.02		8151A Modified / PCP	Water	5	<2		1		—
14	**K1802579-014**	MW-29	.02		8151A Modified / PCP	Water	5	<2		1		—
15	**K1802579-015**	MW-30	.02		8151A Modified / PCP	Water	5	<2		1		—
16	**K1802579-016**	MW-31	.02		8151A Modified / PCP	Water	5	<2		1		—
17 *	**K1802579-017**	MW-32	.02		8151A Modified / PCP	Water	5	<2		1		—
18	**K1802579-018**	MW-33	.02		8151A Modified / PCP	Water	5	<2		1		—
19	**K1802579-019**	MW-34	.02		8151A Modified / PCP	Water	5	<2		1		—
20	**K1802579-020**	MW-35	.02		8151A Modified / PCP	Water	5	<2		1		—
21	**KQ1803558-01**	K1802579-020 MS	.02		8151A Modified / PCP	Liquid	5	<2		1		100
22	**KQ1803558-02**	K1802579-020 DMS	.02		8151A Modified / PCP	Liquid	5	<2		1		100
23	**KQ1803558-03**	LCS			8151A Modified / PCP	Liquid	5	<2		1		—
24	**KQ1803558-04**	MB			8151A Modified / PCP	Liquid	5	<2	—	1	—	—

Comments: *White rinsing Test tube for Sample #6 it was added to Sample #17. Both Sample #6 and #17 is being re-extracted. 3-21-18 BW

Surrogate ID: Penta01-87N 500ppb 100µl xp 5-3-18 epp2B

Spike ID: Penta01-86M 500ppb 100µl xp 3-29-18 epp2B

Witnessed By:

Analyst: BWillard

Assisted By:

Additional Prep Information for Method 8151M
Chlorinated Phenols "PCPs" in Water

Service Request # K1802579 **Work Group #** KQ1803558

1:1 Sulfuric Acid Lot # 60426003 Ethyl Ether Lot # DT184

Extraction Start (time/date/initial): 12:55 3-21-18 BW

Extraction Stop (time/date/initial): 13:48 3-21-18 BW

Storage Location (overnight): 25R Acidified Sulfate Lot # D203-272

N-Evap (time/date/initial): 12:40 3-22-18 WS N-Evap Thermometer ID: DWB-012

Temp as measured: 22 °C Correction factor: 0.0 °C Adjusted temp: 22 °C

Derivatization Start (time/date/initial): 14:08 3-22-18 WS

Derivatization Stop (time/date/initial): 14:33 3-22-18 WS

Diazomethane Lot # DZ03.38 i Methanol Lot # DN615

• Solvent Exchange to Iso-Octane (time/date/initial): 14:33 3-22-18

Iso-Octane Lot # DM 567 N-Evap Thermometer ID: DWB-012

Temp as measured: 22 °C Correction factor: 0.0 °C Adjusted temp: 22 °C

Pipette (1 mL) Lot # 12617645

Vial: red Vial Storage: Rental

Additional Comments:

Bench Sheet Review Check List

- ☑ Hold times met (if no, reason:)
- ☑ Prep date, time, method, department, product code correct in stealth
- ☑ Spike information and Q.C. correct (insufficient volume or mass recorded if no Q.C.)
- ☑ Weights/Volumes and units correct on raw and final bench sheets
- ☑ Sample IDs have been checked - bottle numbers appended if required
- ☑ Names present for: started by, completed by, relinquished by, and witnessed by. Training circled.
- ☑ Extract storage recorded
- ☑ Additional prep sheet completely filled out (NA or line out blanks)
- ☑ All clean-ups have been noted on additional prep sheet
- ☑ Signed service request with Form V, if applicable, has been attached

Preparation Information

Group ID:	KWG1801631	**Prep Method:**	Method Mod	**Prep Date:**	03/22/18 13:03
Department:	Semivoa GC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.	Solids
K1802579-006	MW-2	8151A Modified PCP	WATER	5mL	1mL	
K1802579-017	MW-32	8151A Modified PCP	WATER	5mL	1mL	
K1802644-001	CAMEO	8151A Modified PCP	WATER	5mL	1mL	
KWG1801631-1	Matrix Spike	8151A Modified PCP	WATER	5mL	1mL	
KWG1801631-2	Duplicate Matrix Spike	8151A Modified PCP	WATER	5mL	1mL	
KWG1801631-3	Lab Control Sample	8151A Modified PCP	WATER	5mL	1mL	
KWG1801631-4	Method Blank	8151A Modified PCP	WATER	5mL	1mL	

Lab Code	Parent Lab Code	Comments
KWG1801631-1	K1802579-006	KQ1803654-01
KWG1801631-2	K1802579-006	KQ1803654-02
KWG1801631-3		KQ1803654-03
KWG1801631-4		KQ1803654-04

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K1802579-006	1668881					
K1802579-017	1668882					
K1802644-001	1668883					
KWG1801631-1	1668884					
KWG1801631-2	1668885					
KWG1801631-3	1668886					
KWG1801631-4	1668887					

Comments: Made B.S. for Stealth JD 3/27/18

Started By: WVANDERH Assisted By: _____ Training: Yes / No

Completed By: WVANDERH Assisted By: _____ Yes / No

Reviewed By: _____ Date: _____ Storage: _____

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined: Yes / No

Preparation Information Benchsheet

Prep Run#: 310446
Team: Semivoa GC/WVANDERHOFF
Number of Copies to make: 2

Prep WorkFlow: OrgExtPcpAq7
Prep Method: Method Modified

Status: Prepped
Prep Date/Time: 3/22/18 01:03 PM

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	K1802579-006	MW-2	.02	8151A Modified/PCP		Water	5mL	1.00mL	
2	KQ1803654-01	K1802579-006 MS	.02	8151A Modified/PCP		Liquid	5mL	1.00mL	
3	KQ1803654-02	K1802579-006 DMS	.02	8151A Modified/PCP		Liquid	5mL	1.00mL	
4	K1802579-017	MW-32	.02	8151A Modified/PCP		Water	5mL	1.00mL	
5	K1802644-001	CAMEO	.06	8151A Modified/PCP		Water	5mL	1.00mL	
6	KQ1803654-03	LCS		8151A Modified/PCP		Liquid	5mL	1.00mL	
7	KQ1803654-04	MB		8151A Modified/PCP		Liquid	5mL	1.00mL	

Preparation Steps

Step:	Extraction	Step:	Final Volume
Started:	3/22/18 13:03	Started:	3/23/18 12:12
Finished:	3/22/18 13:05	Finished:	3/23/18 12:12
By:	WVANDERHOFF	By:	WVANDERHOFF
Comments		Comments	

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: 3-23-18

Received By: _____ Date: 3-22-18

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 310446
Team: Semivoa GC/WVANDERHOFF
Number of Copies to make: 2

Prep WorkFlow: OrgExtPcpAq7
Prep Method: Method Modified

Status: Final Volume
Prep Date/Time: 3/22/18 01:03 PM

#	Lab Code	Client ID	B#	√	Method /Test	Matrix	Amt. Ext. mL.	pH	Int. Vol	Final Vol mL.	Surr Amt uL	Spike Amt uL
1	**K1802579-006**	MW-2	.02		8151A Modified / PCP	Water	5	<2	NA	1	100	—
2	**KQ1803654-01**	K1802579-006 MS	.02		8151A Modified / PCP	Liquid	5	<2		1		100
3	**KQ1803654-02**	K1802579-006 DMS	.02		8151A Modified / PCP	Liquid	5	<2		1		100
4	**K1802579-017**	MW-32	.02		8151A Modified / PCP	Water	5	<2		1		—
5	**K1802644-001**	CAMEO	.06		8151A Modified / PCP	Water	5	<2		1		—
6	**KQ1803654-03**	LCS			8151A Modified / PCP	Liquid	5	<2		1		100
7	**KQ1803654-04**	MB			8151A Modified / PCP	Liquid	5	<2		1		—

Comments:

Surrogate ID: pentachlorophenol-37N 500ppb 100µL xp. 5-3-18 spp.#28

Spike ID: pentachlorophenol-36M 500ppb 100µL xp. 3-22-18 spp.#23

Witnessed By:

Analyst:

Assisted By:

Prep Information for Method 8151M

Chlorinated Phenols "PCPs" in Water

Service Request # K1802579, 2644 **Work Group #** KQ1903654

1:1 Sulfuric Acid Lot # 6042603 Ethyl Ether Lot # DT194

Extraction Start (time/date/initial): 13:41 3-22-18 WS

Extraction Stop (time/date/initial): 14:02 3-22-18 WS

Storage Location (overnight): 25R Acidified Sulfate Lot # DZ03-277

N-Evap (time/date/initial): 10:42 3-23-18 WS N-Evap Thermometer ID: DWB-012

Temp as measured: 22 °C Correction factor: 0.0 °C Adjusted temp: 22 °C

Derivatization Start (time/date/initial): ~~14:09 3-22-18~~ WS 3-22-18 11:25 3-23-18 WS

Derivatization Stop (time/date/initial): 12:03 3-23-18 WS

Diazomethane Lot # DZ03-381 Methanol Lot # DN615

Solvent Exchange to Iso-Octane (time/date/initial): 12:03 3-23-18 WS

Iso-Octane Lot # DH567 N-Evap Thermometer ID: DWB-012

Temp as measured: 22 °C Correction factor: 0.0 °C Adjusted temp: 22 °C

Pipette (1 mL) Lot # 13617645

Vial: red Vial Storage: penta

Additional Comments:

Bench Sheet Review Check List

- ☑ Hold times met (if no, reason:)
- ☑ Prep date, time, method, department, product code correct in stealth
- ☑ Spike information and Q.C. correct (insufficient volume or mass recorded if no Q.C.)
- ☑ Weights/Volumes and units correct on raw and final bench sheets
- ☑ Sample IDs have been checked - bottle numbers appended if required
- ☑ Names present for: started by, completed by, relinquished by, and witnessed by. Training circled.
- ☑ Extract storage recorded
- ☑ Additional prep sheet completely filled out (NA or line out blanks)
- ☑ All clean-ups have been noted on additional prep sheet
- ☑ Signed service request with Form V, if applicable, has been attached

Directory: J:\GC28\DATA\032718

Cal: 15625
Run: 585380

ine	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
	99	0327F001.D	1.	PRIMER	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 9:09:4
	99	0327F002.D	1.	PRIMER	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 9:26:2
	1	0327F003.D	1.	PENTA01-88S 50	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 9:43:2
	2	0327F004.D	1.	IB	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 10:00:3
	3	0327F005.D	20.	K1802548-001 20X	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 10:58:5
	4	0327F006.D	1.	K1802548-002	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 11:17:4
	5	0327F007.D	1.	K1802548-003	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 11:34:4
	6	0327F008.D	1.	K1802580-004	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 11:51:5
	7	0327F009.D	1.	K1802580-004 MS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 12:09:2
0	8	0327F010.D	1.	K1802580-004 DMS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 12:26:4
1	9	0327F011.D	1.	KWG1803560-3 LCS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 12:44:0
2	10	0327F012.D	1.	KWG1803560-4 MB	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 1:01:2
3	1	0327F013.D	1.	PENTA01 88S 50	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 1:19:0
4	2	0327F014.D	1.	IB	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 1:36:2
5	11	0327F015.D	1.	K1802579-021	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 1:53:4
6	12	0327F016.D	1.	K1802579-022	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 2:11:1
7	13	0327F017.D	1.	K1802579-023	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 2:28:4
8	14	0327F018.D	1.	K1802579-024	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 2:46:1
9	15	0327F019.D	1.	K1802579-025	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 3:03:4
0	16	0327F020.D	1.	K1802579-026	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 3:21:1
1	17	0327F021.D	1.	K1802579-027	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 3:38:4
2	18	0327F022.D	1.	K1802579-028	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 3:56:0
3	19	0327F023.D	1.	K1802579-029	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 4:13:3
4	20	0327F024.D	1.	K1802579-030	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 4:31:0
5	1	0327F025.D	1.	PENTA01 88S 50	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 4:48:4
6	2	0327F026.D	1.	IB	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 5:06:1
7	21	0327F027.D	1.	K1802579-031	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 5:23:3
8	22	0327F028.D	1.	K1802582-001	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 5:41:0
9	23	0327F029.D	1.	K1802582-002	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 5:58:4

Directory: J:\GC28\DATA\032718

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
30	24	0327F030.D	1.	K1802620-001	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 6:16:1
31	25	0327F031.D	1.	K1802620-001 MS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 6:33:5
32	26	0327F032.D	1.	K1802620-001 DMS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 6:51:2
33	27	0327F033.D	1.	K1802620-002	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 7:09:1
34	28	0327F034.D	1.	K1802620-003	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 7:26:5
35	29	0327F035.D	1.	K1802620-004	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 7:44:3
36	30	0327F036.D	1.	K1802620-005	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 8:02:0
37	31	0327F037.D	1.	K1803636-3 LCS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 8:19:4
38	32	0327F038.D	1.	K1803636-4 MB	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 8:37:1
39	1	0327F039.D	1.	PENTA01 88S 50	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 8:54:4
40	2	0327F040.D	1.	IB	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 9:12:0
41	33	0327F041.D	1.	K1802644-001	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 9:29:3
42	34	0327F042.D	1.	K1802579-017	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 9:47:1
43	35	0327F043.D	1.	K1802579-006	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 10:04:4
44	36	0327F044.D	1.	K1802579-006 MS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 10:22:2
45	37	0327F045.D	1.	K1802579-006 DMS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 10:40:0
46	38	0327F046.D	1.	KQ1803654-3 LCS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 10:57:4
47	39	0327F047.D	1.	KQ1803654-4 MB	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 11:15:2
48	6	0327F048.D	10.	K1802580-004@10X	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 11:33:0
49	1	0327F049.D	1.	PENTA01 88S 50	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 11:50:4
50	2	0327F050.D	1.	IB	SEMIVOA GC\W1112280\1-PEM.H	03/28/22018 12:08:0

Injection Log

Directory: J:\GC28\DATA\112717-CAL

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	1127f124.d	1.	IB		27 Nov 2017 18:01
2	20	1127f127.d	1.	PENTA01-88I 1 PPB		27 Nov 2017 18:57
3	21	1127f128.d	1.	PENTA01-88H 2.5 PPB		27 Nov 2017 19:16
4	22	1127f129.d	1.	PENTA01-88G 5 PPB		27 Nov 2017 19:35
5	23	1127f130.d	1.	PENTA01-88I 10 PPB		27 Nov 2017 19:53
6	24	1127f131.d	1.	PENTA01-88E 25 PPB		27 Nov 2017 20:12
7	25	1127f132.d	1.	PENTA01-88D 100 PPB		27 Nov 2017 20:31
8	26	1127f133.d	1.	PENTA01-88C 250 PPB		27 Nov 2017 20:50
9	27	1127f134.d	1.	PENTA01-88N 500 PPB		27 Nov 2017 21:08
10	28	1127f135.d	1.	PENTA01-88M 1000 PPB		27 Nov 2017 21:27
11	2	1127f136.d	1.	IB		27 Nov 2017 21:46
12	3	1129f005.d	1.	PENTA01-88K 50PPB ICV	SEMIVOA GC\W11122...	29 Nov 2017 12:44

CCL: 15625

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:48:32 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	553952	330490	1.842	1.270	#
		Target Compounds							
1)		3,4-Dichlorophen	3.12	3.67	16518	29596	1.019	1.580	#
2)		3,5-Dichlorophen	3.37	3.91	20988	18718	1.737	1.425	
3)		2,4,6-Trichlorop	3.46	4.14	448728	374818	1.266	1.042	
5)		2,4,5-Trichlorop	4.20	4.67	232648	183740	1.496	1.118	#
6)		3,4,5-Trichlorop	4.23f	4.73	193422	169644	1.216m	1.169	
7)	M	2,3,5,6-Tetrachl	4.47	4.97	639390	495876	1.275	0.987	
8)	M	2,3,4,5-Tetrachl	5.02	5.37	456782	504796	1.344	1.477	
9)	M	Pentachloropheno	5.16	5.56	806520	809946	1.377	1.358	
10)		Pentachloroaniso	5.16	5.56	806520	809946	1.449	1.429	

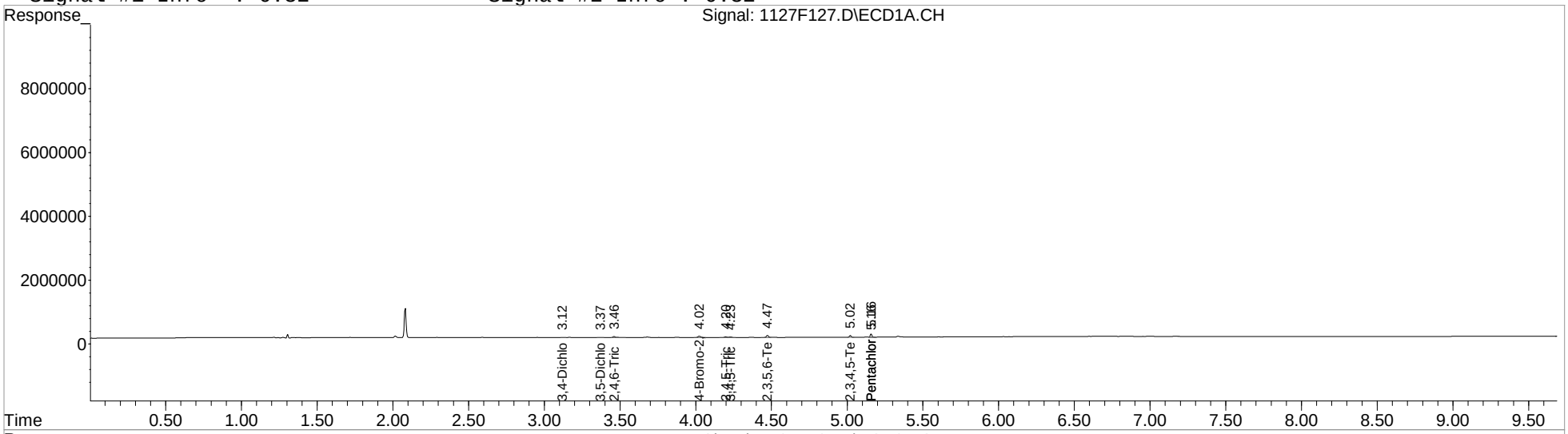
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

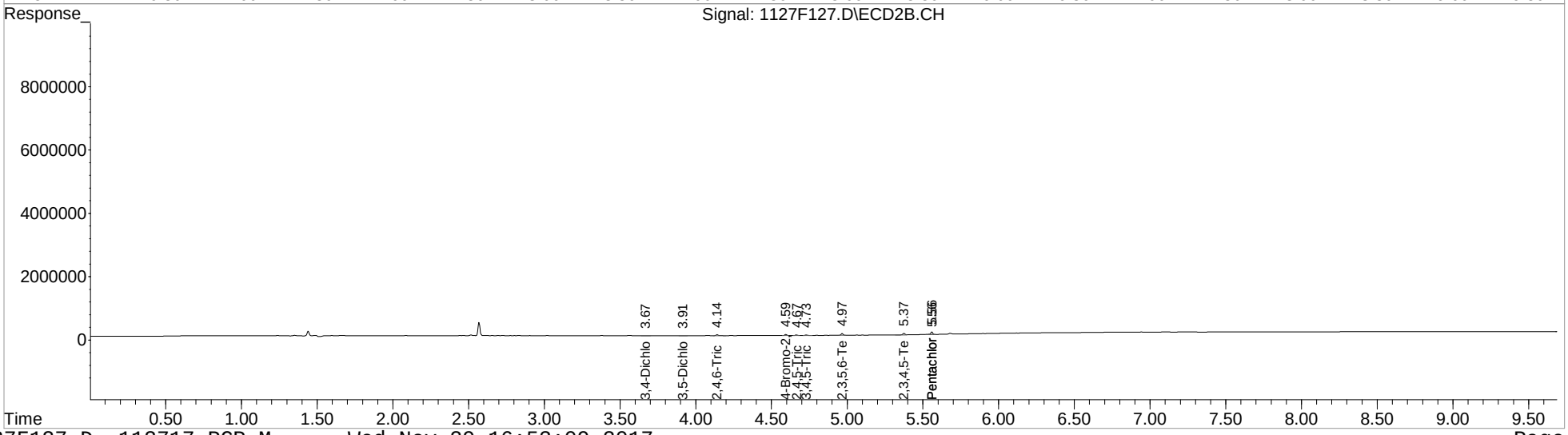
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



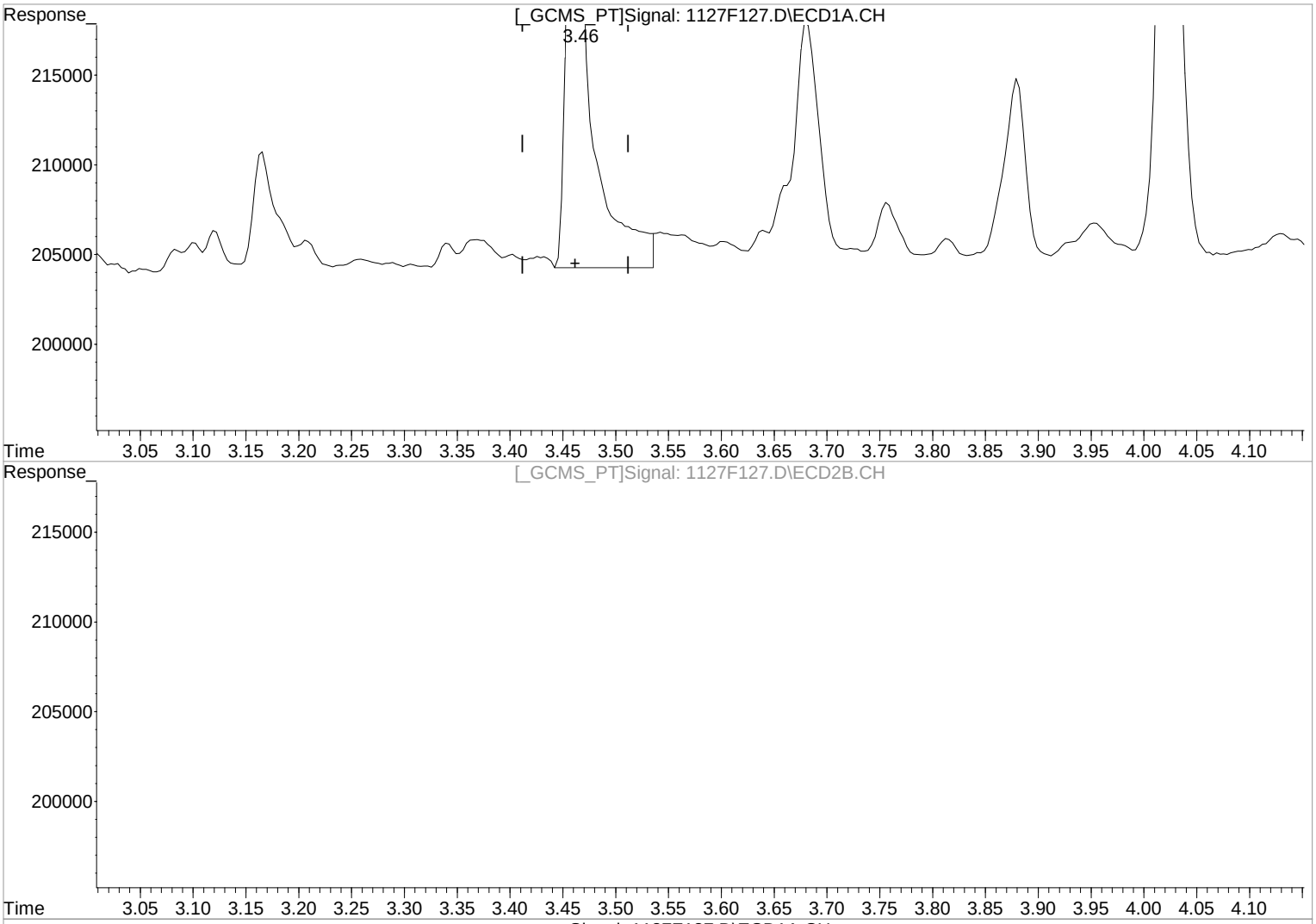


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F127.D\ECD1A.CH

(3) 2,4,6-Trichlorophenol

3.46min 1.266ug/L

response 448728

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(3) 2,4,6-Trichlorophenol #2

4.14min 1.042ug/L

response 374818

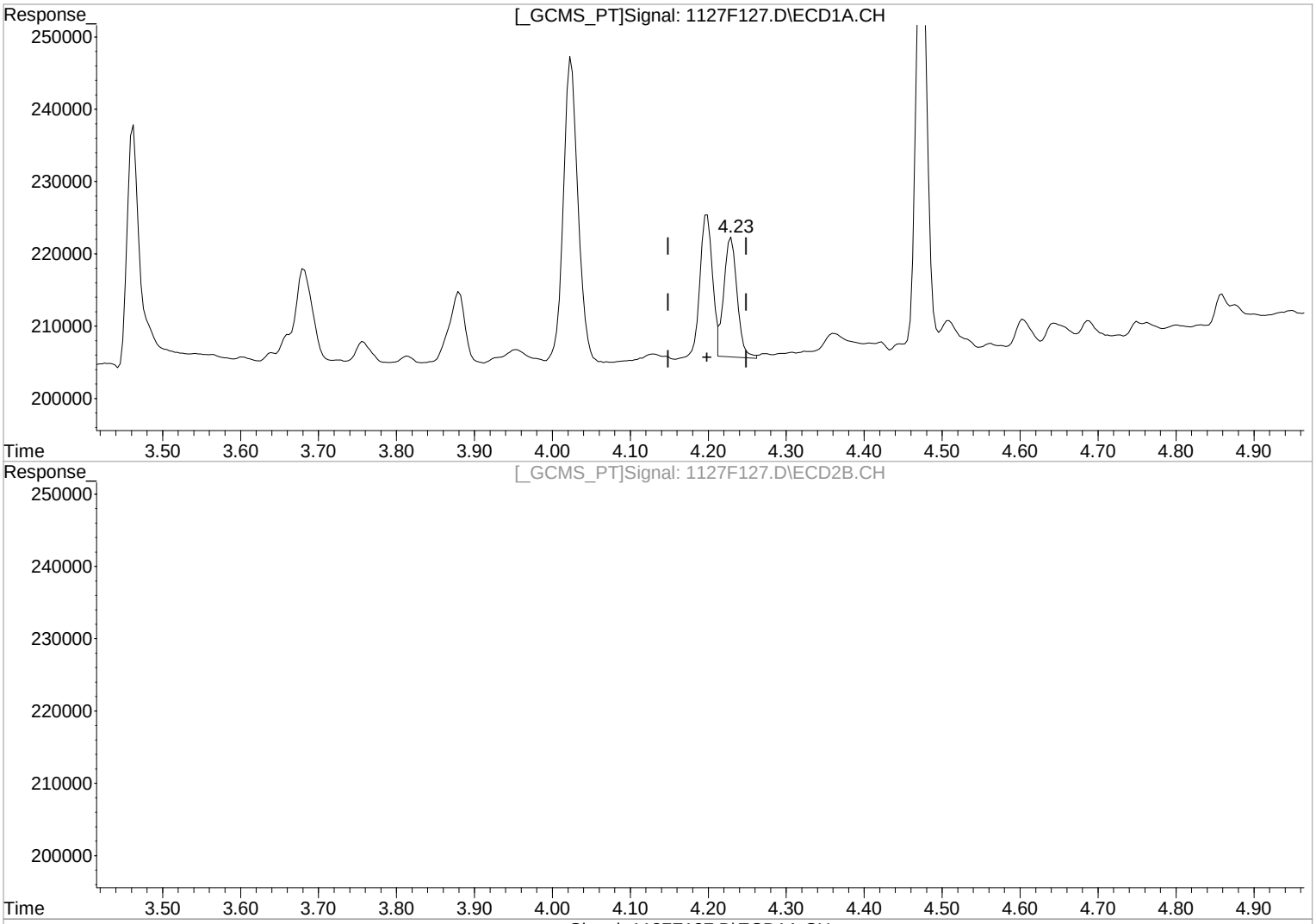
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F127.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 1.216ug/L m

response 193422

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 1.169ug/L

response 169644

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:50:18 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	1317276	876496	4.379	3.368
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	49286	55140	3.040m	2.943
2)		3,5-Dichlorophen	3.36	3.91	38712	36048	3.203m	2.745
3)		2,4,6-Trichlorop	3.46	4.14	974062	824238	2.747	2.292
5)		2,4,5-Trichlorop	4.20	4.66	535528	435750	3.444	2.652
6)		3,4,5-Trichlorop	4.23f	4.73	463666	405392	2.915m	2.794
7)	M	2,3,5,6-Tetrachl	4.47	4.97	1468326	1190526	2.929m	2.369
8)	M	2,3,4,5-Tetrachl	5.02	5.37	1110862	994692	3.268m	2.911
9)	M	Pentachloropheno	5.16	5.56	1873238	1758532	3.199	2.949m
10)		Pentachloroaniso	5.16	5.56	1873238	1755630	3.366	3.097m

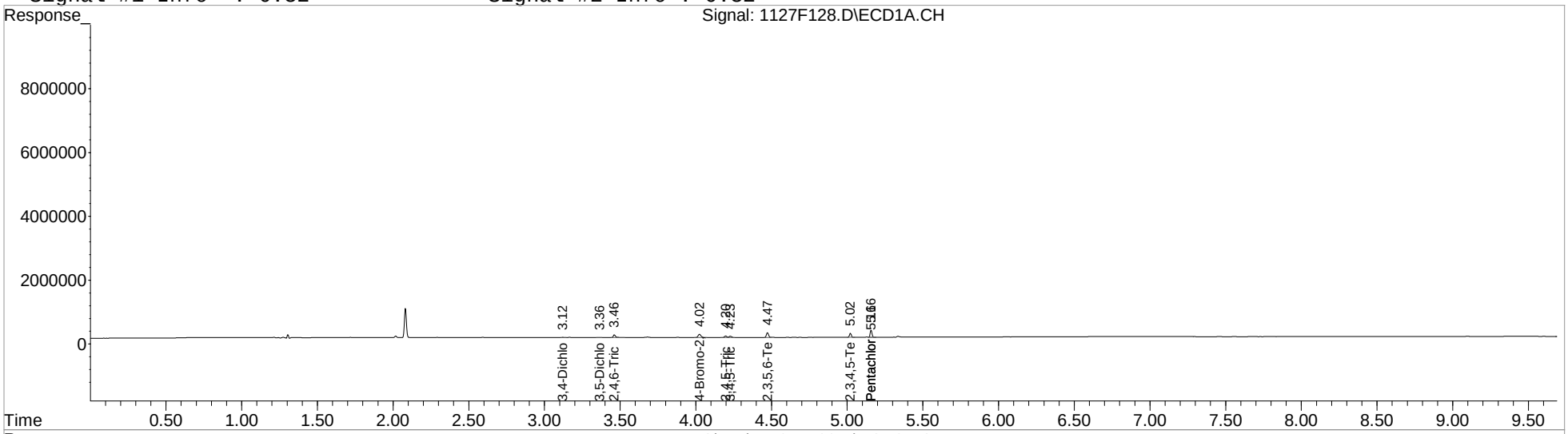
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

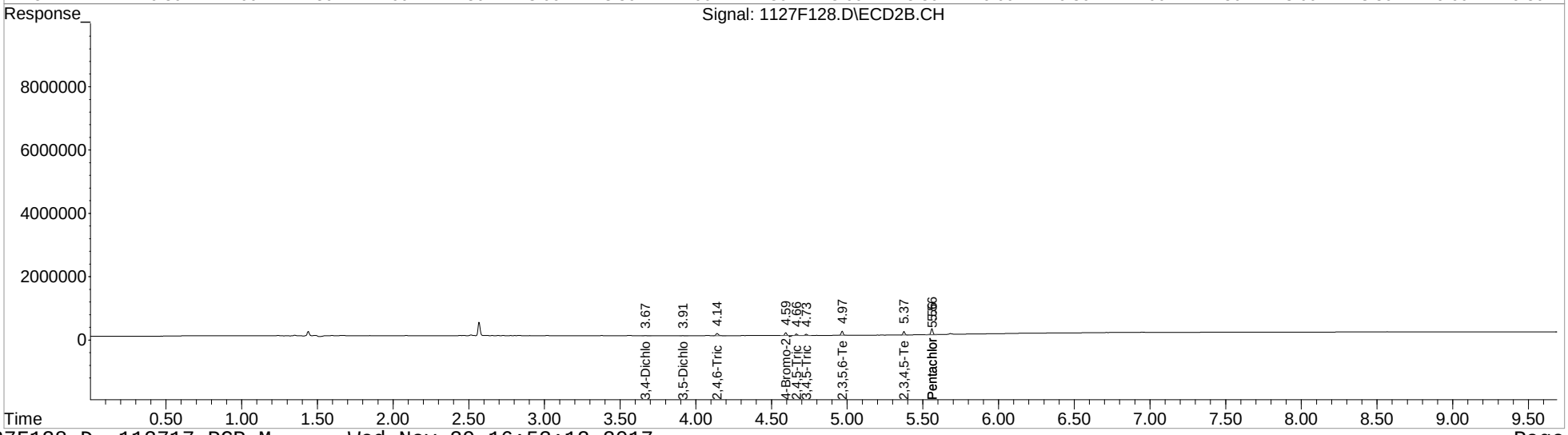
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



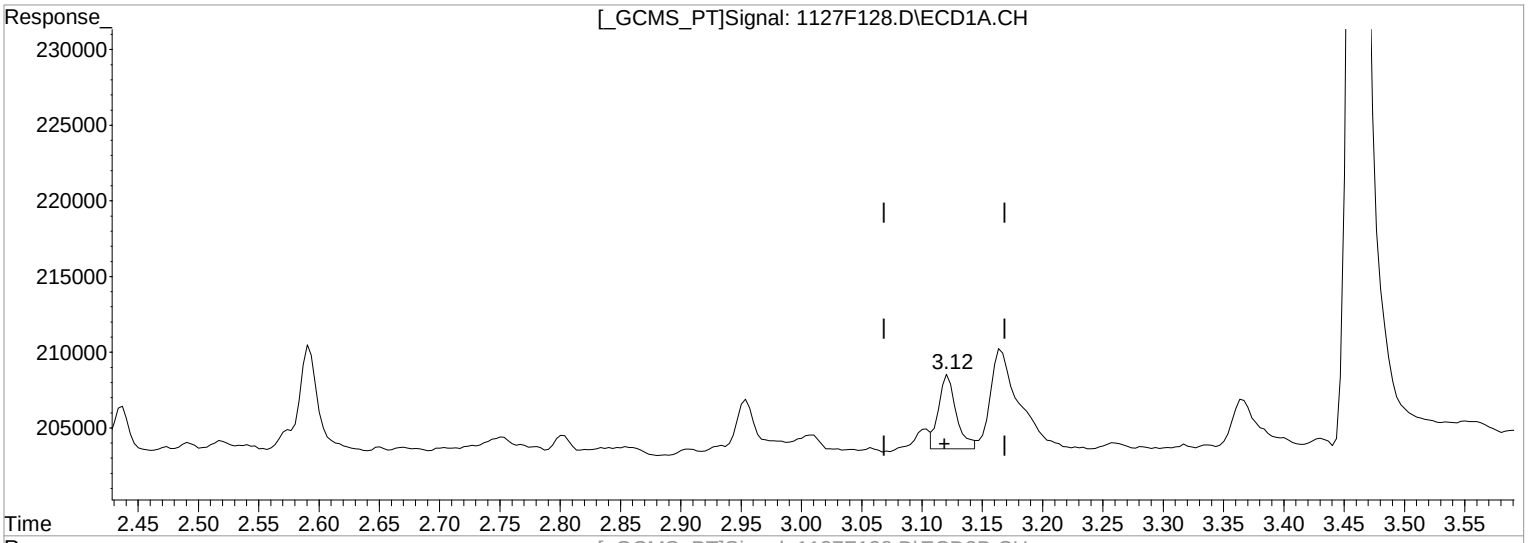


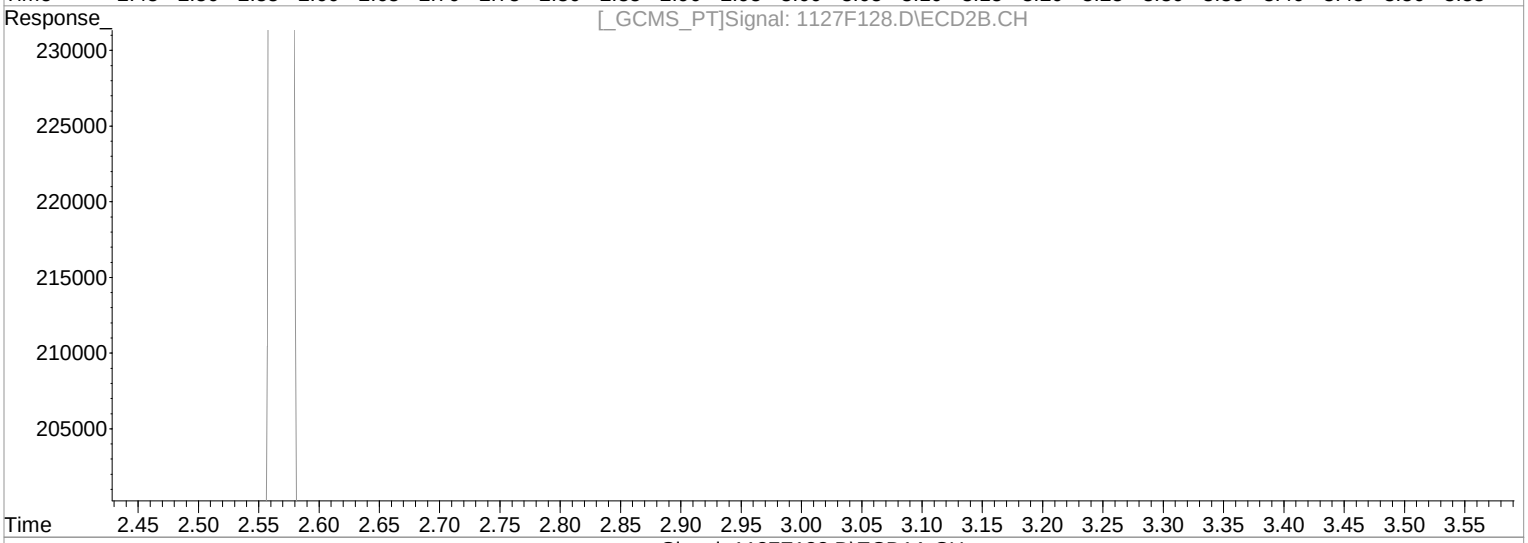
Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration





Signal: 1127F128.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 3.040ug/L m

response 49286

Manual Integration:

After

After, No Before

Baseline Shoulder

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 2.943ug/L

response 55140

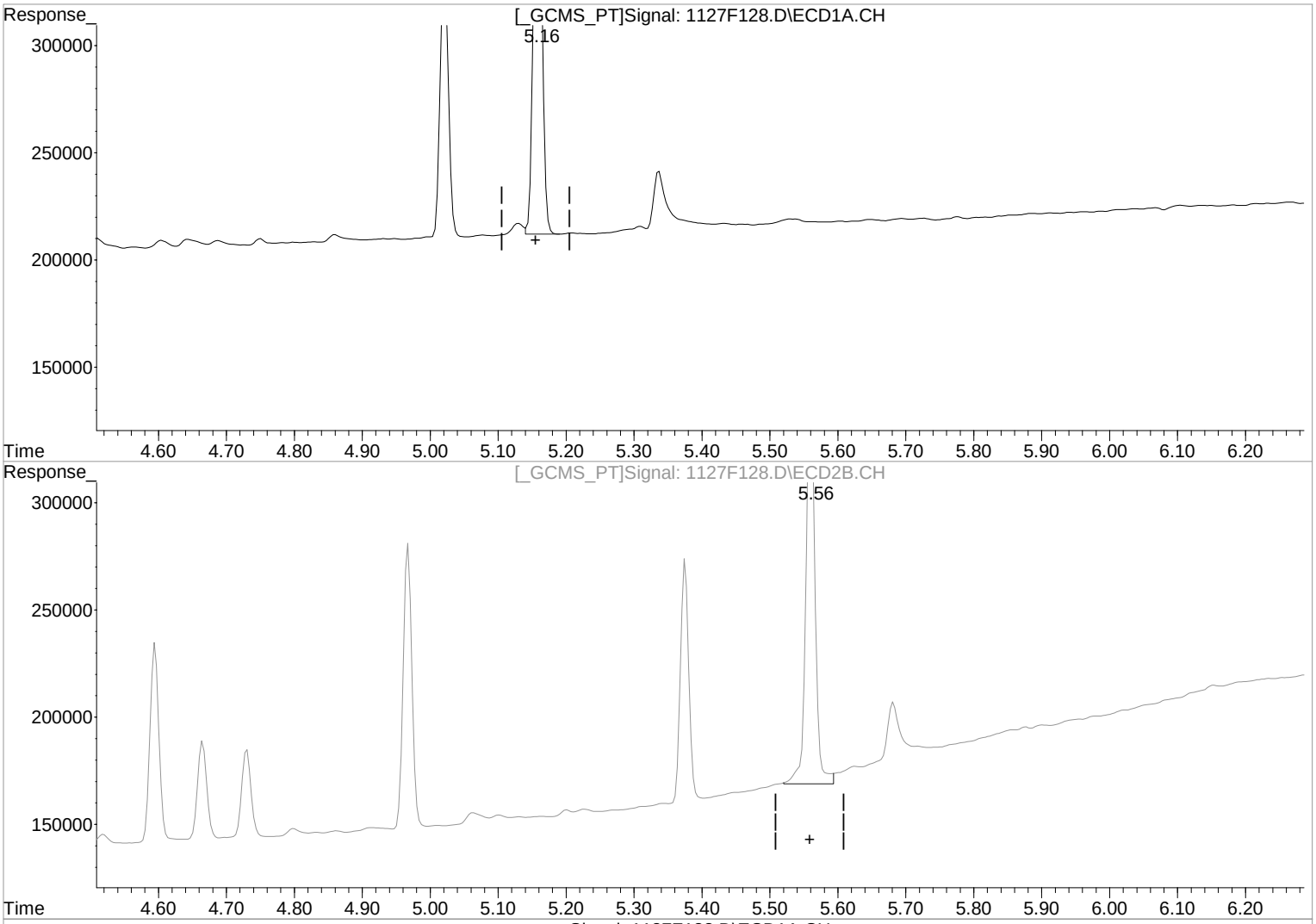
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 3.366ug/L

response 1873238

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(10) Pentachloroanisole #2

5.56min 3.097ug/L m

response 1755630

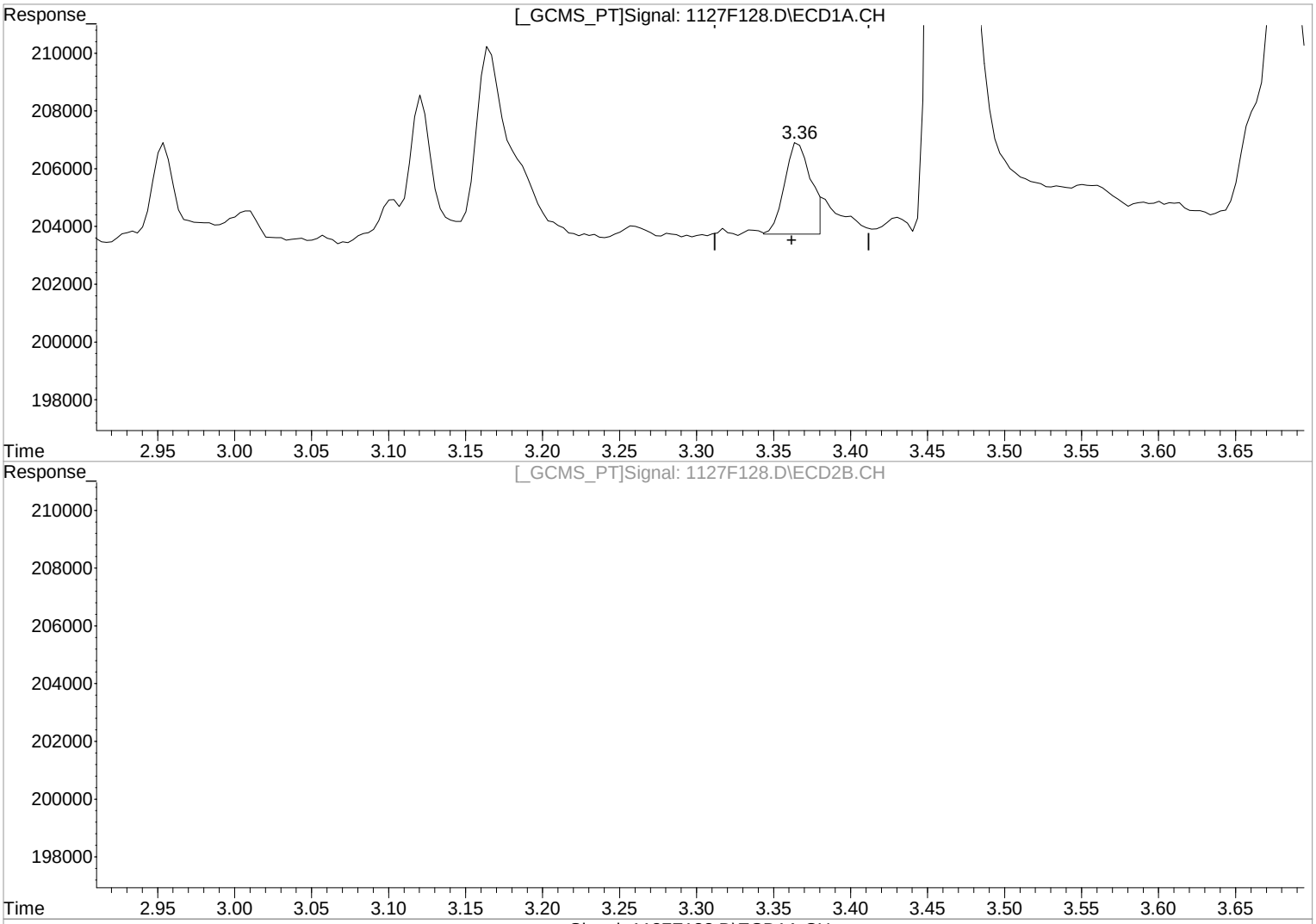
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 3.203ug/L m

response 38712

Manual Integration:

After

After, No Before

Baseline Shoulder

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 2.745ug/L

response 36048

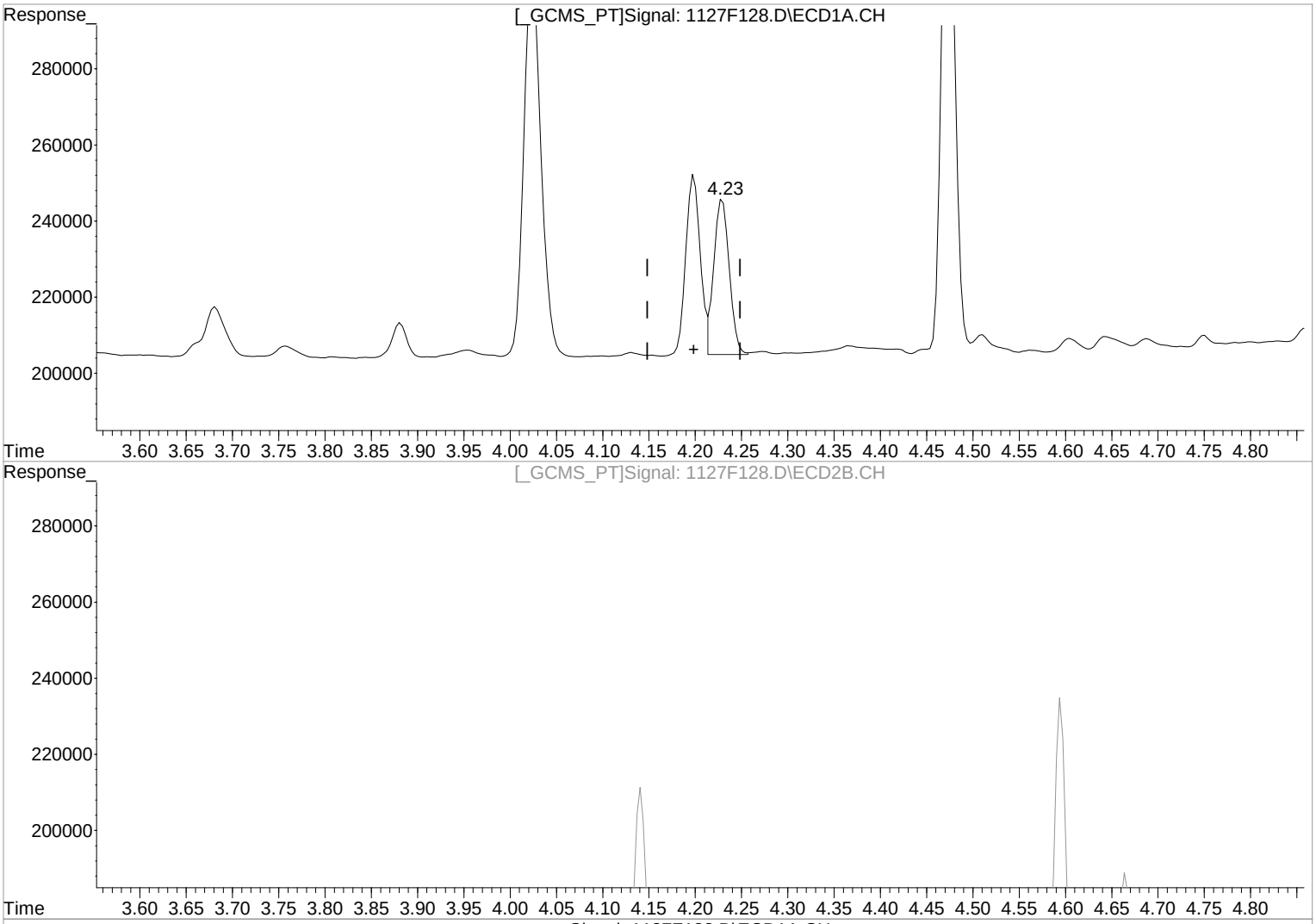
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 2.915ug/L m

response 463666

Manual Integration:

After

After, No Before

Wrong peak

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 2.794ug/L

response 405392

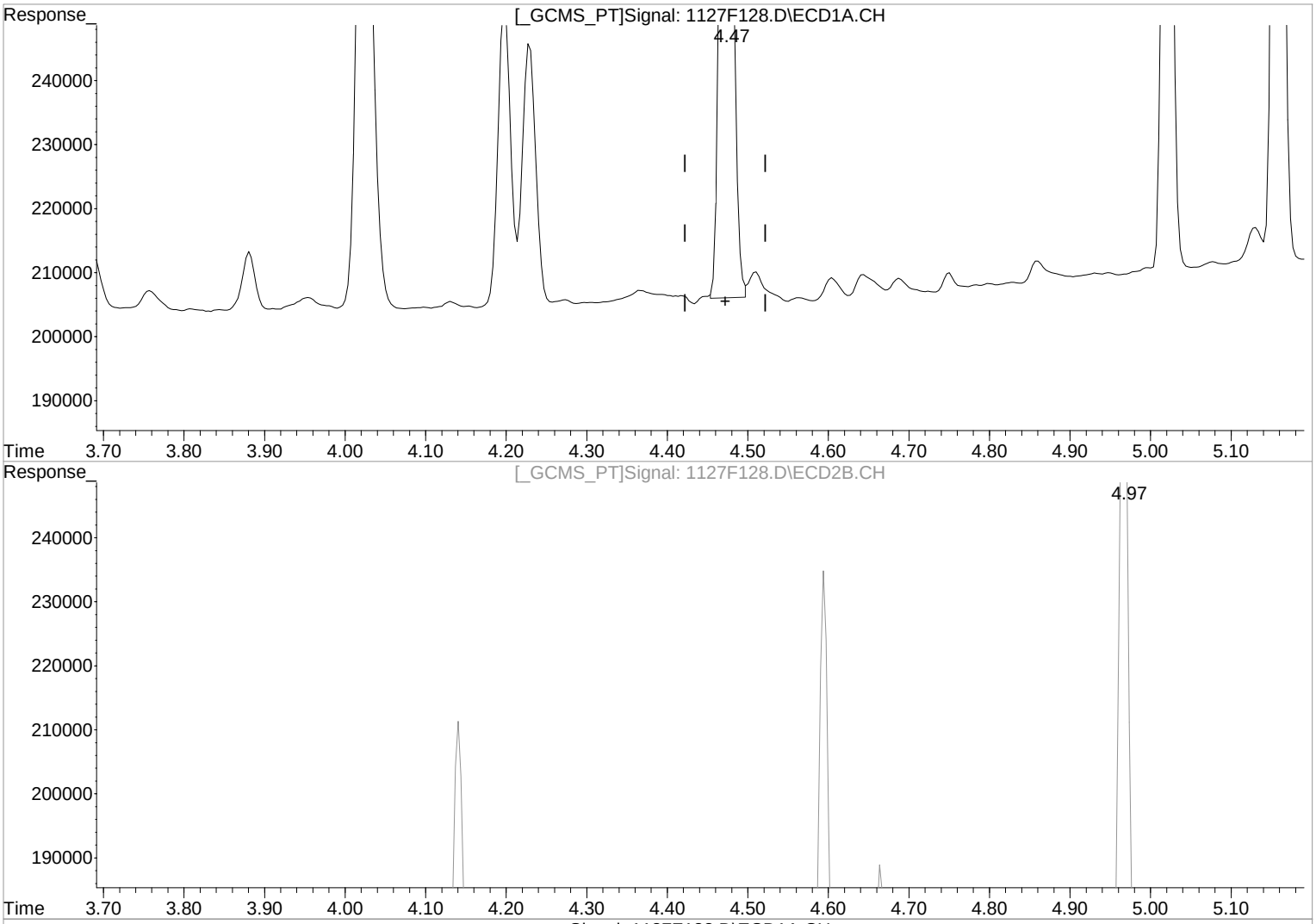
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(7) 2,3,5,6-Tetrachlorophenol (M)

4.47min 2.929ug/L m

response 1468326

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(7) 2,3,5,6-Tetrachlorophenol #2 (M)

4.97min 2.369ug/L

response 1190526

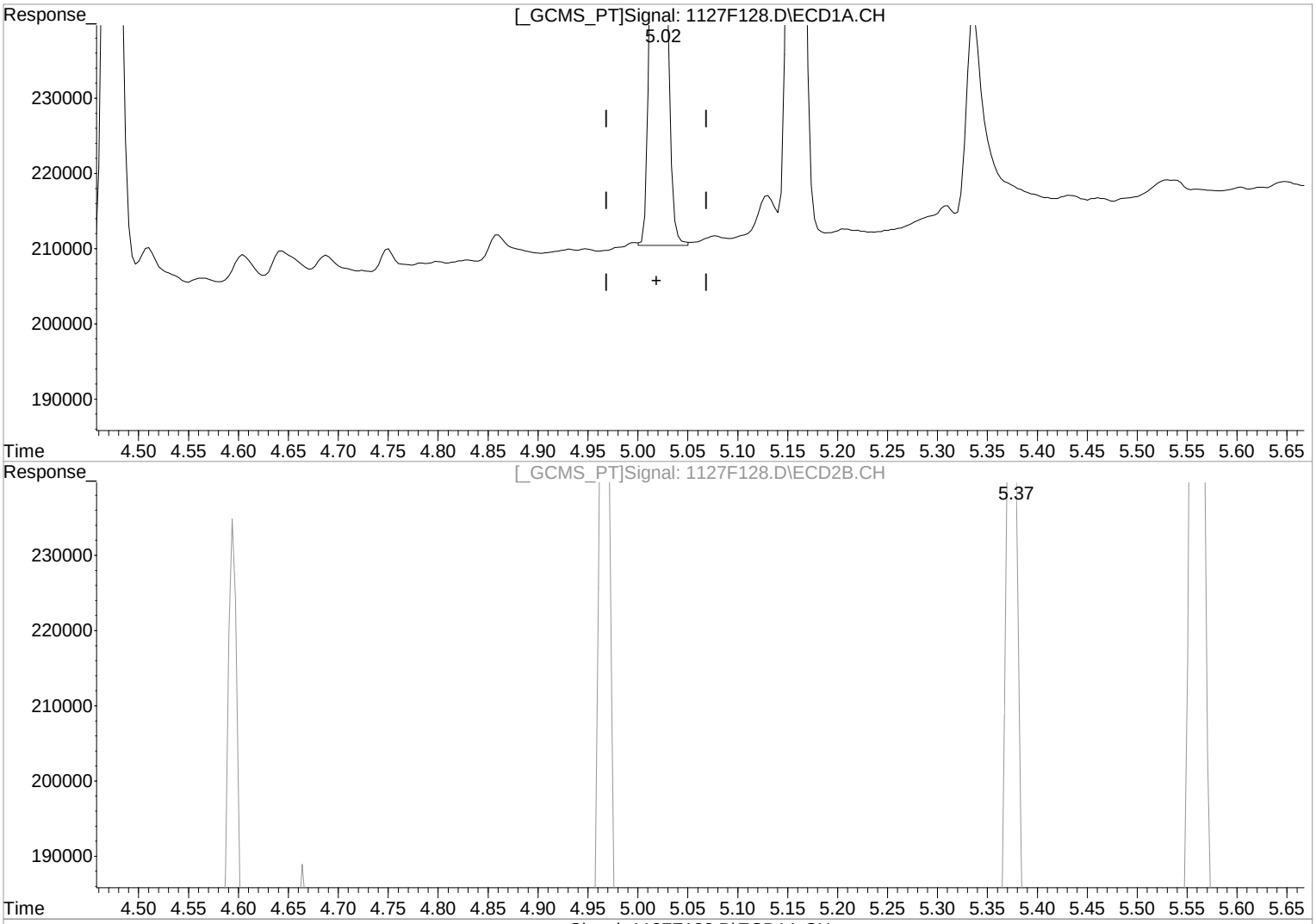
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 3.268ug/L m

response 1110862

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 2.911ug/L

response 994692

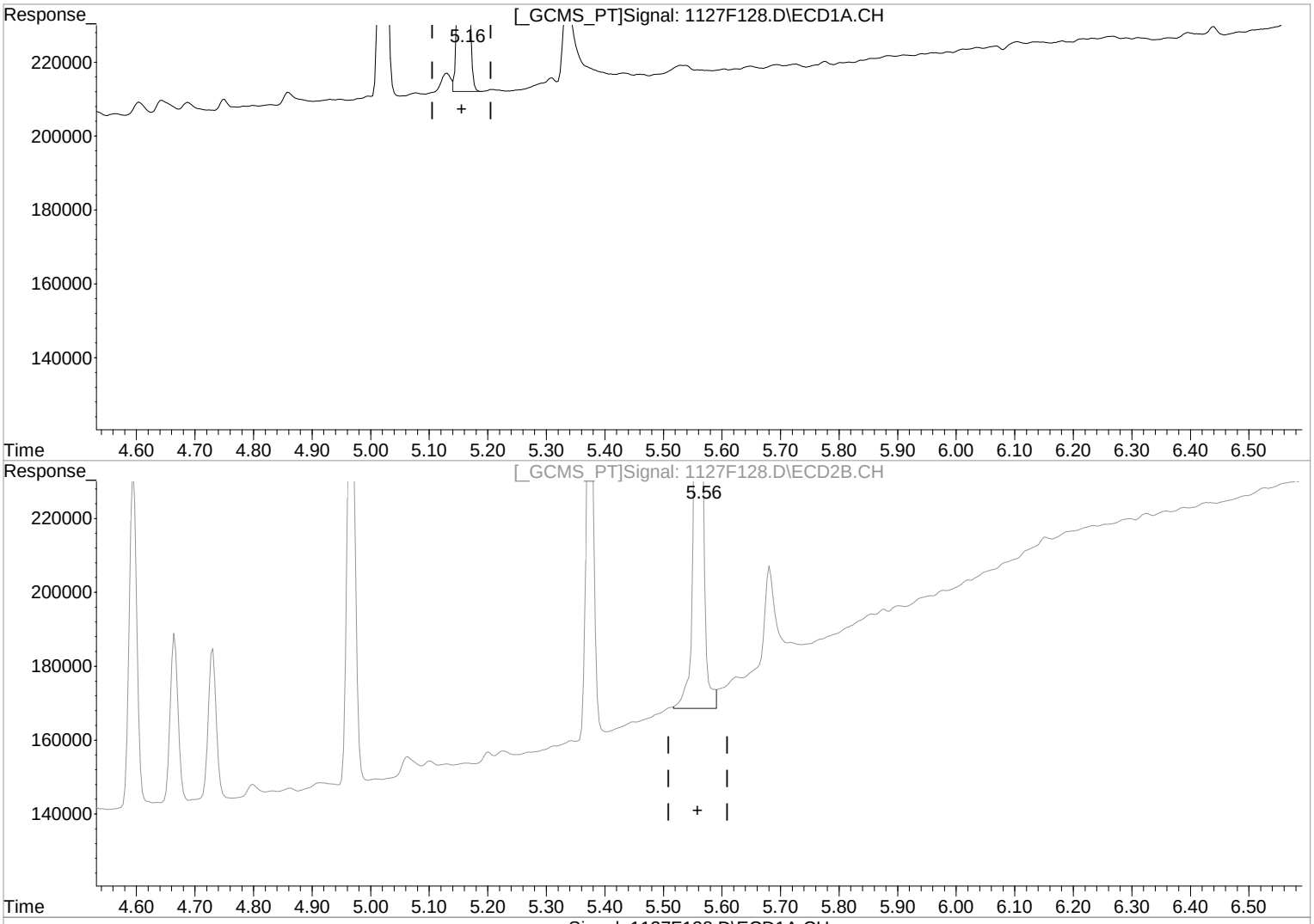
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 3.199ug/L

response 1873238

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 2.949ug/L m

response 1758532

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:54:14 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	2527708	1767222	8.403	6.791
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	86210	99632	5.317m	5.318
2)		3,5-Dichlorophen	3.36	3.91	68638	67856	5.680m	5.167
3)		2,4,6-Trichlorop	3.46	4.14	1814386	1543468	5.117	4.293
5)		2,4,5-Trichlorop	4.20	4.66	996824	834646	6.411	5.080
6)		3,4,5-Trichlorop	4.23f	4.73	897110	748802	5.640m	5.160
7)	M	2,3,5,6-Tetrachl	4.47	4.97	2791280	2329296	5.568m	4.635
8)	M	2,3,4,5-Tetrachl	5.02	5.37	2110338	1864900	6.209m	5.458
9)	M	Pentachloropheno	5.16	5.56	3505892	3190336	5.988	5.351m
10)		Pentachloroaniso	5.16	5.56	3505892	3212868	6.300	5.668m

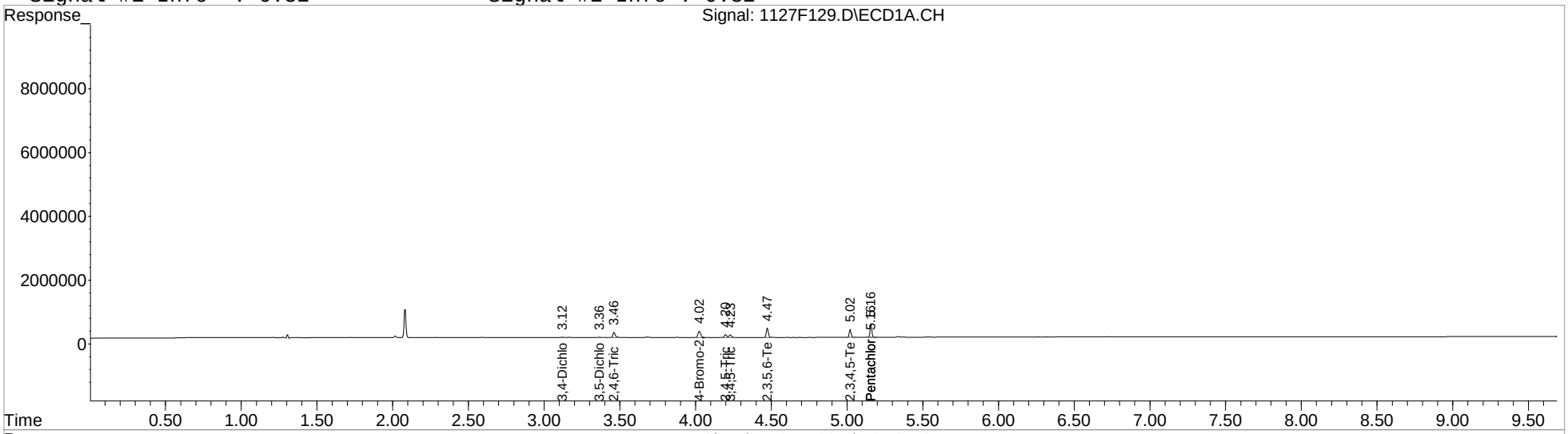
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

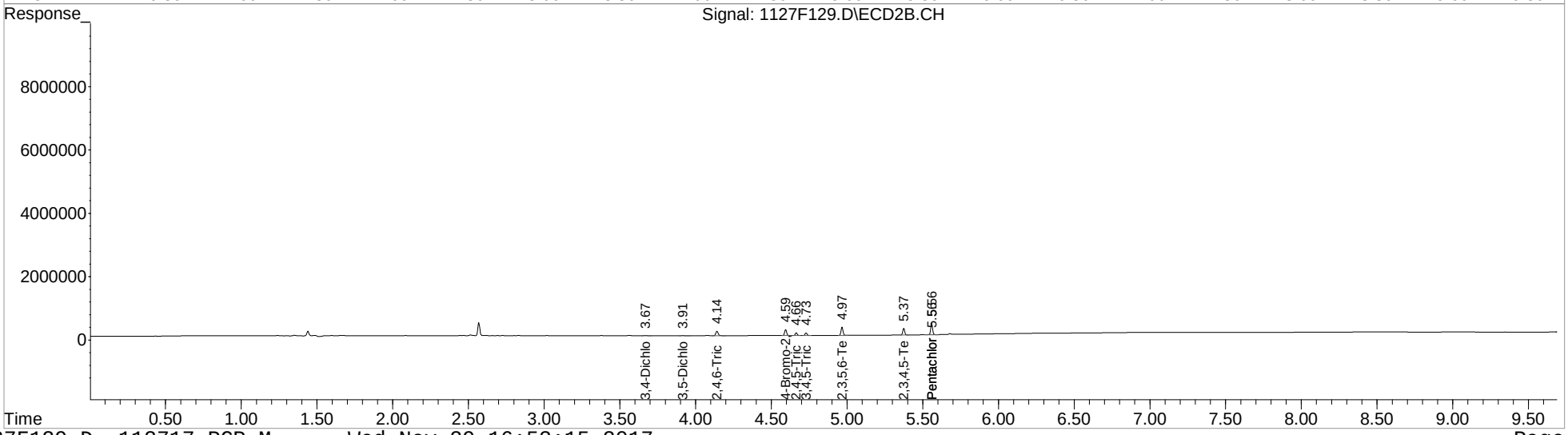
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



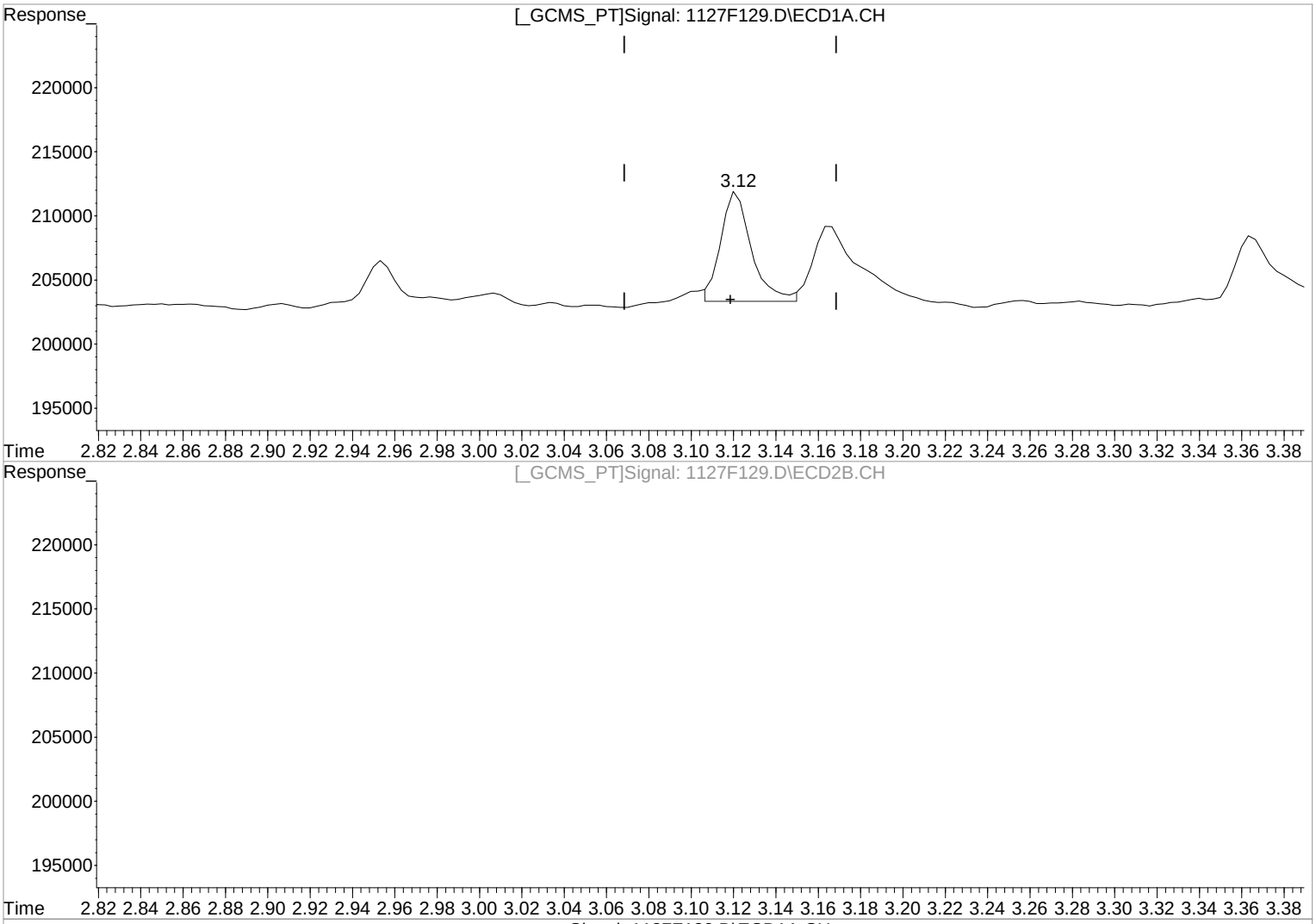


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 5.317ug/L m

response 86210

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 5.318ug/L

response 99632

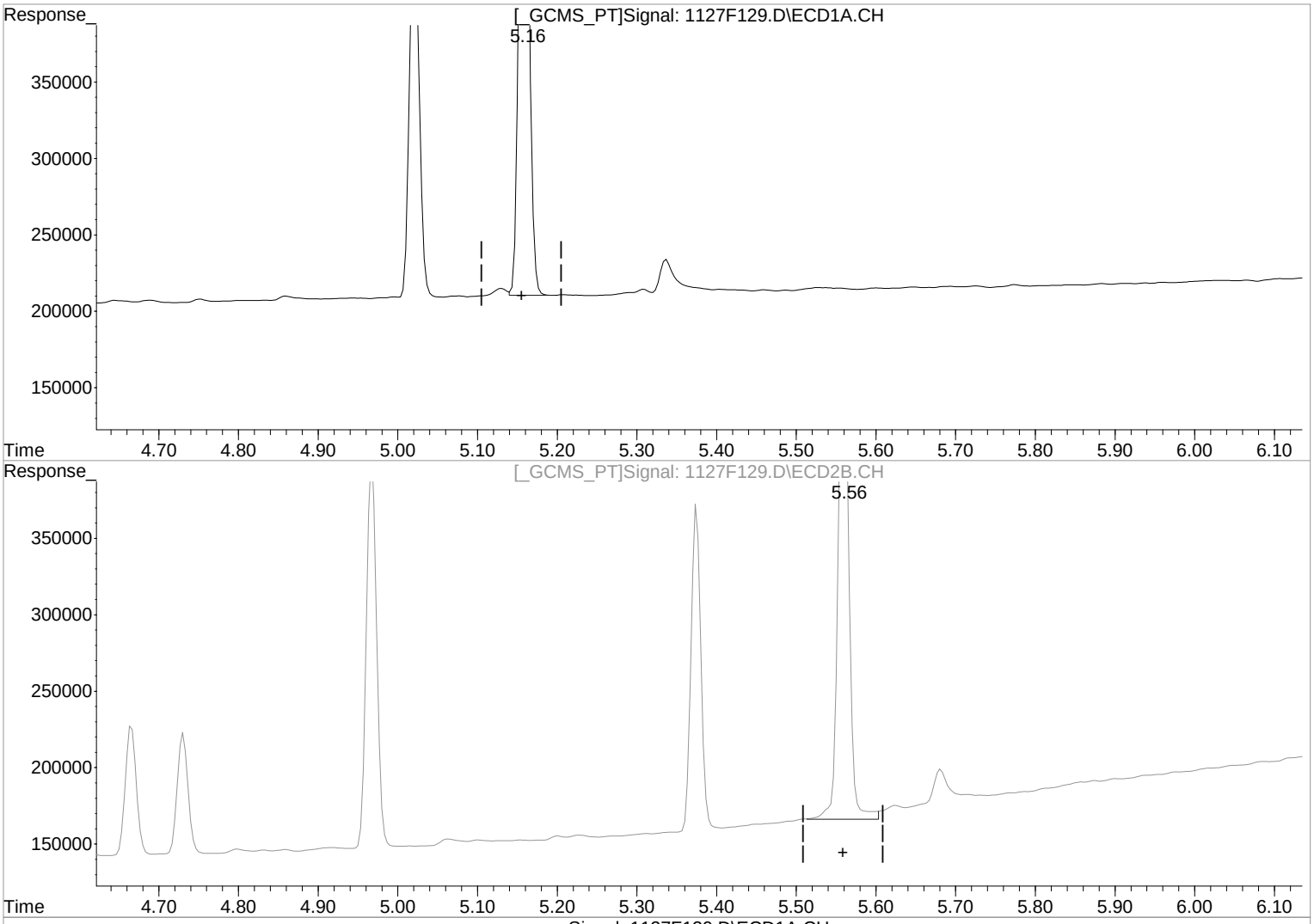
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 6.300ug/L

response 3505892

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(10) Pentachloroanisole #2

5.56min 5.668ug/L m

response 3212868

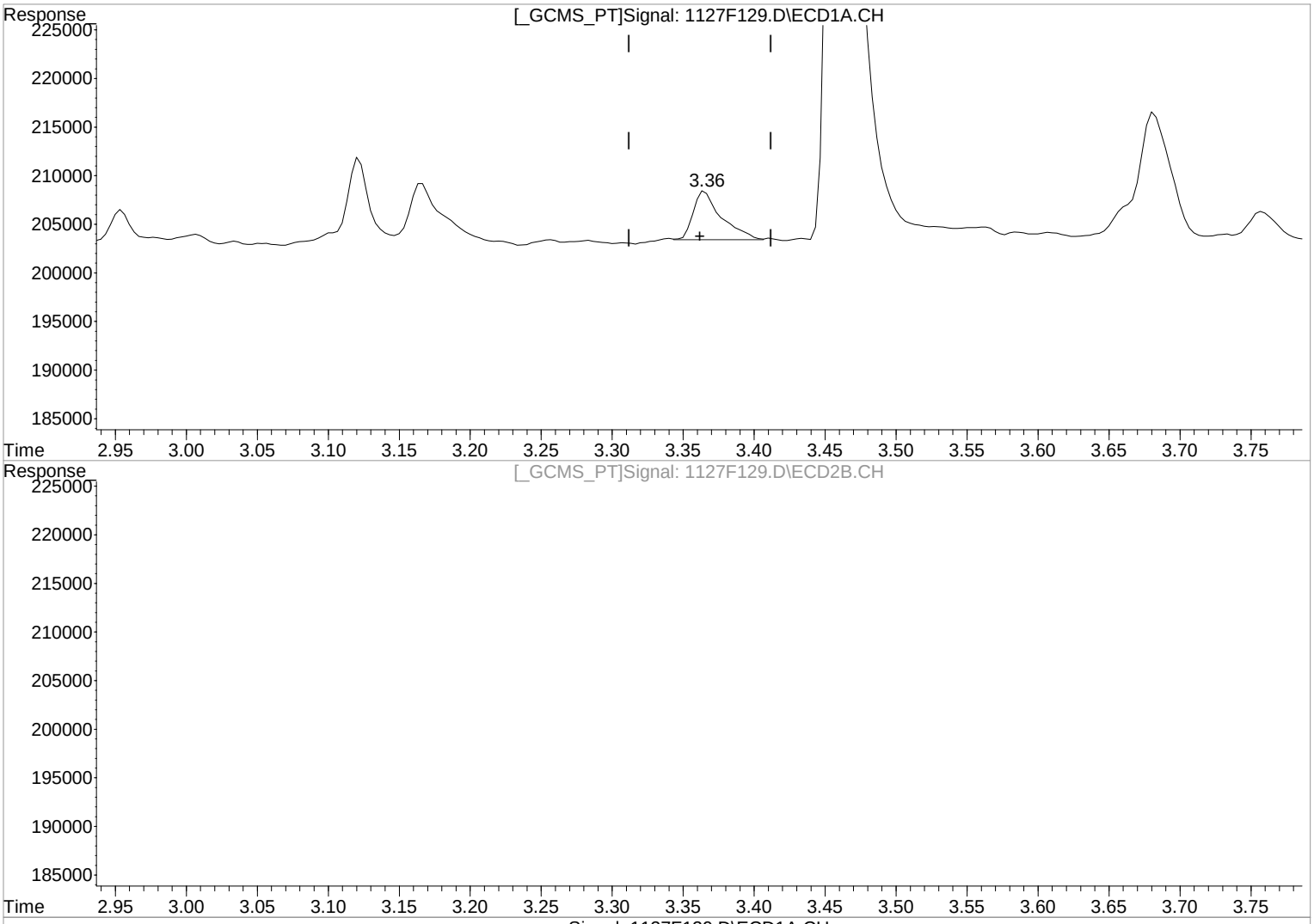
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 5.680ug/L m

response 68638

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 5.167ug/L

response 67856

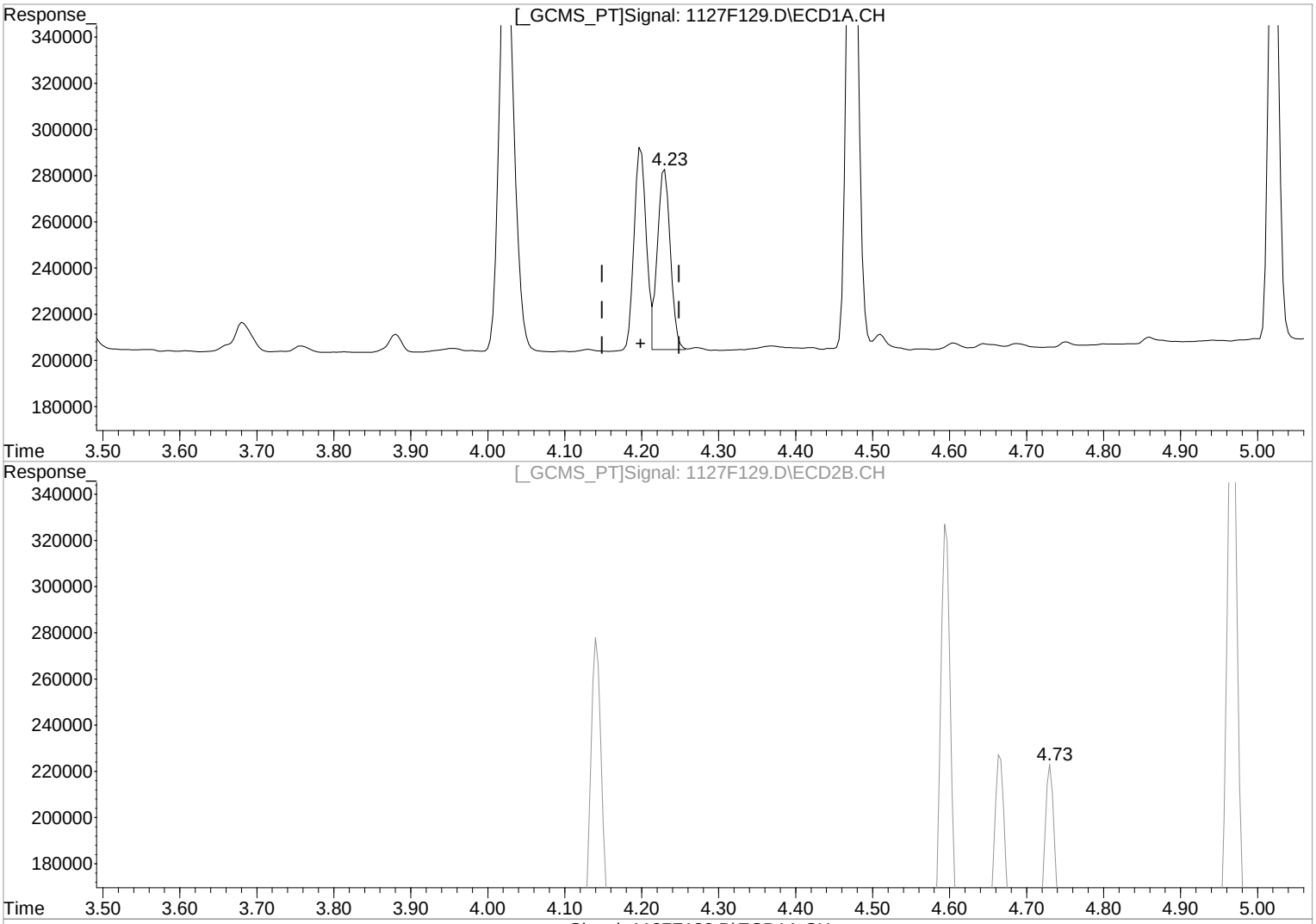
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 5.640ug/L m

response 897110

Manual Integration:

After

Wrong Peak No Before

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 5.160ug/L

response 748802

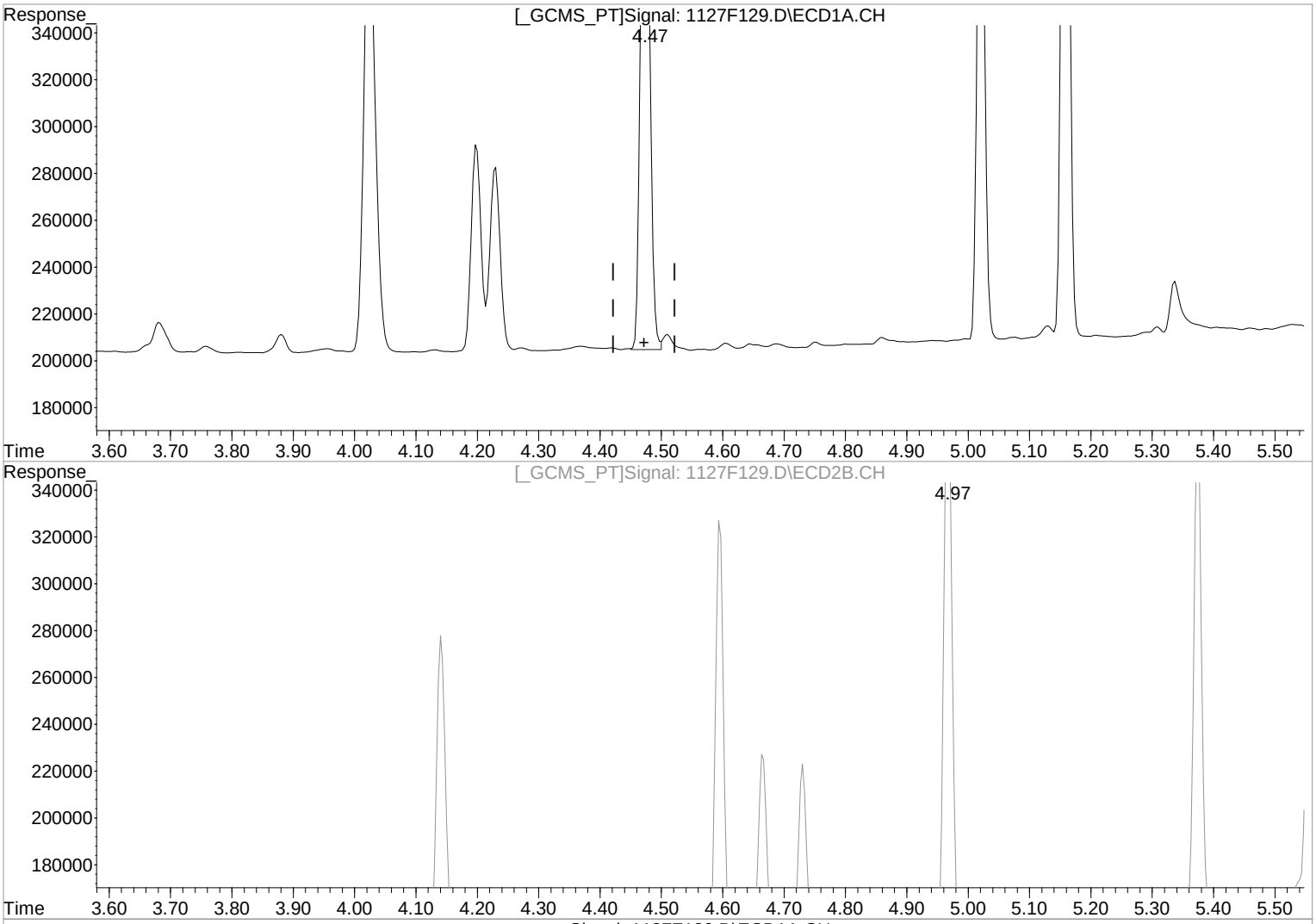
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(7) 2,3,5,6-Tetrachlorophenol (M)

4.47min 5.568ug/L m

response 2791280

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

(7) 2,3,5,6-Tetrachlorophenol #2 (M)

4.97min 4.635ug/L

response 2329296

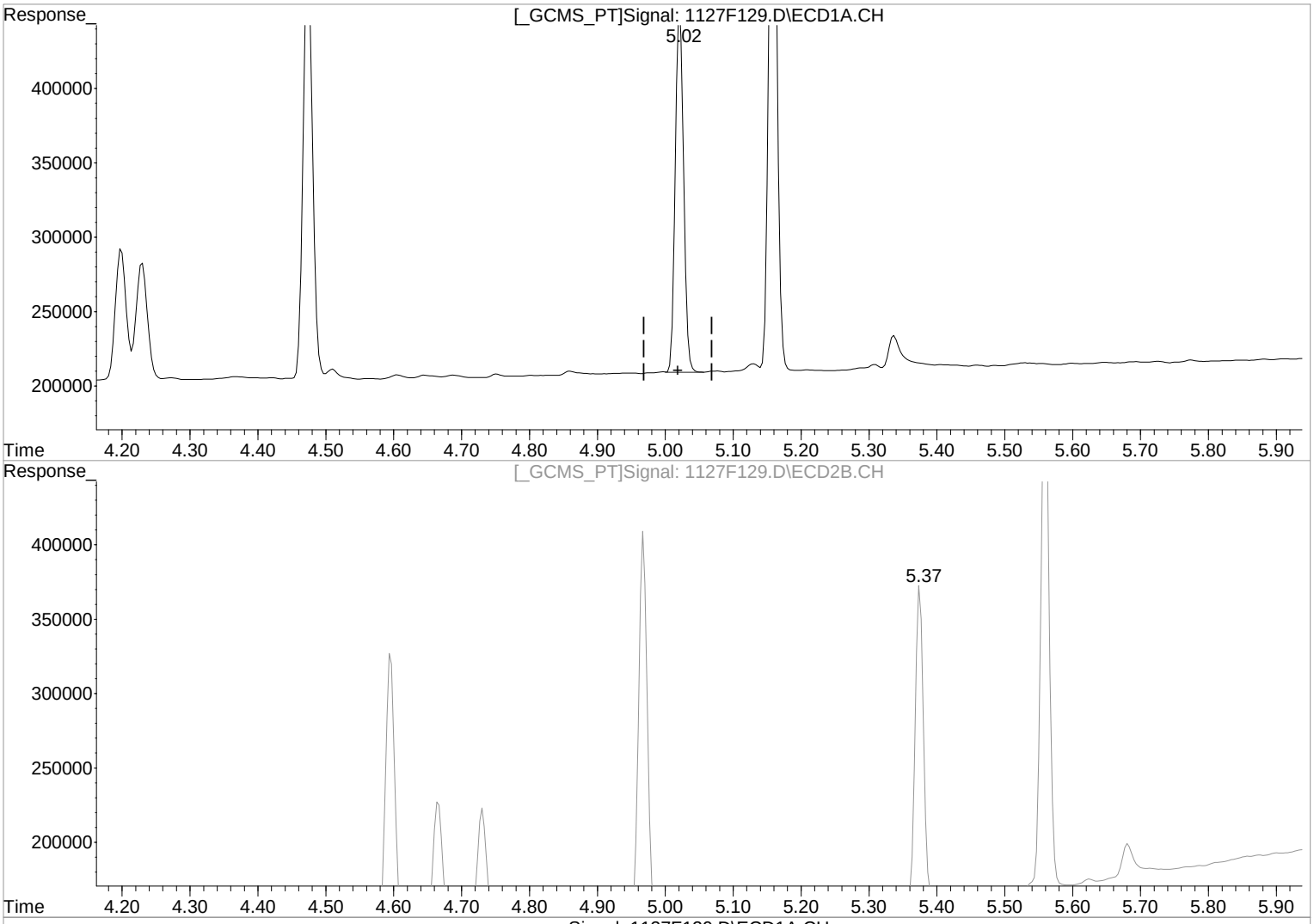
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 6.209ug/L m

response 2110338

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 5.458ug/L

response 1864900

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

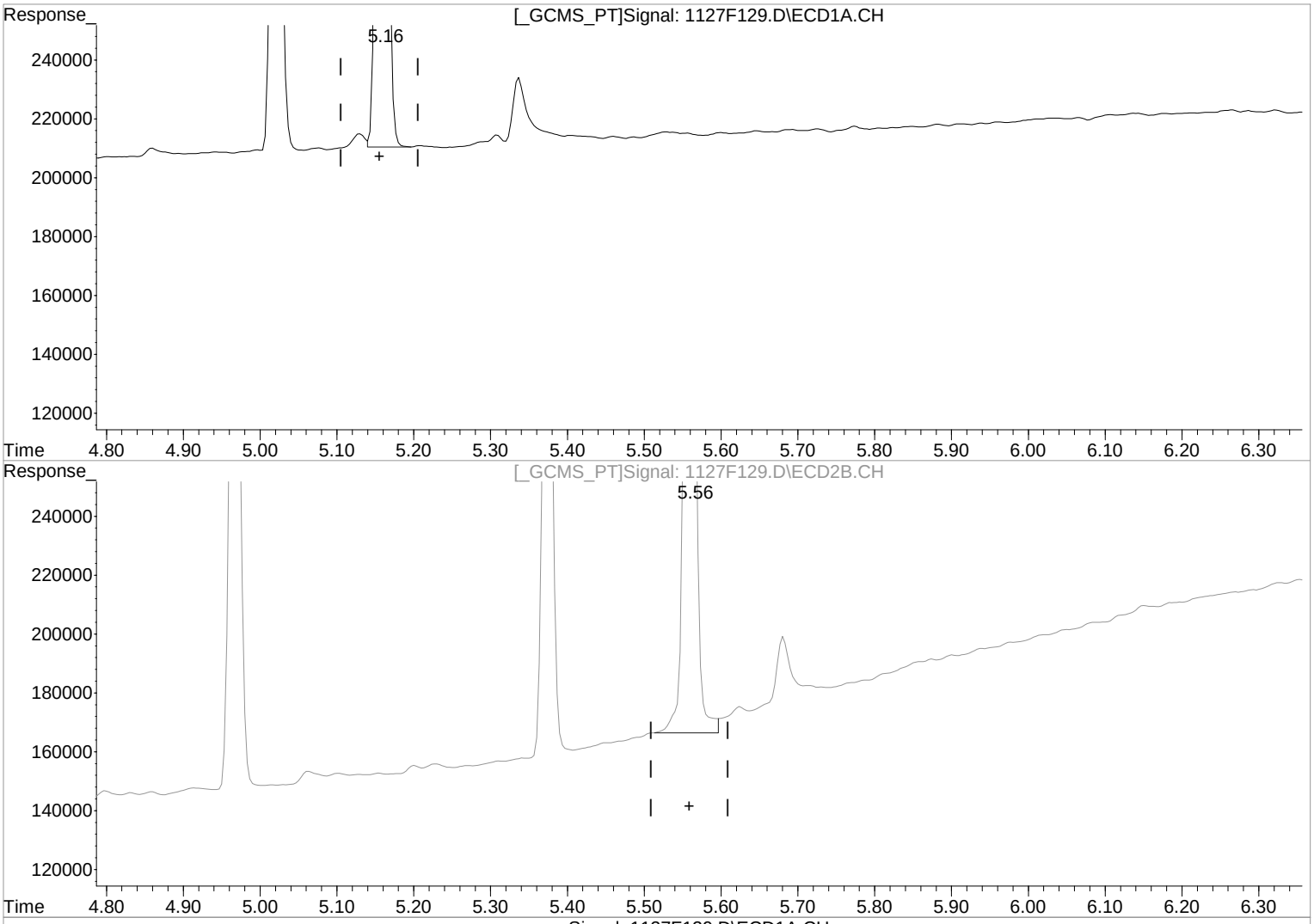
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 5.988ug/L

response 3505892

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 5.351ug/L m

response 3190336

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:57:47 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	4613736	3450884	15.338	13.260
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	163576	175528	10.089m	9.369
2)		3,5-Dichlorophen	3.36	3.91	101688	125108	8.415m	9.526
3)		2,4,6-Trichlorop	3.46	4.14	3229296	2813346	9.108	7.824
5)		2,4,5-Trichlorop	4.20	4.66	1789438	1475642	11.508	8.981
6)		3,4,5-Trichlorop	4.23f	4.73	1550706	1348458	9.750m	9.293
7)	M	2,3,5,6-Tetrachl	4.47	4.96	4983492	4311232	9.941	8.579
8)	M	2,3,4,5-Tetrachl	5.02	5.37	3744556	3299360	11.017m	9.656
9)	M	Pentachloropheno	5.16	5.56	6298030	5874436	10.757	9.853
10)		Pentachloroaniso	5.16	5.56	6298030	5874436	11.317	10.363

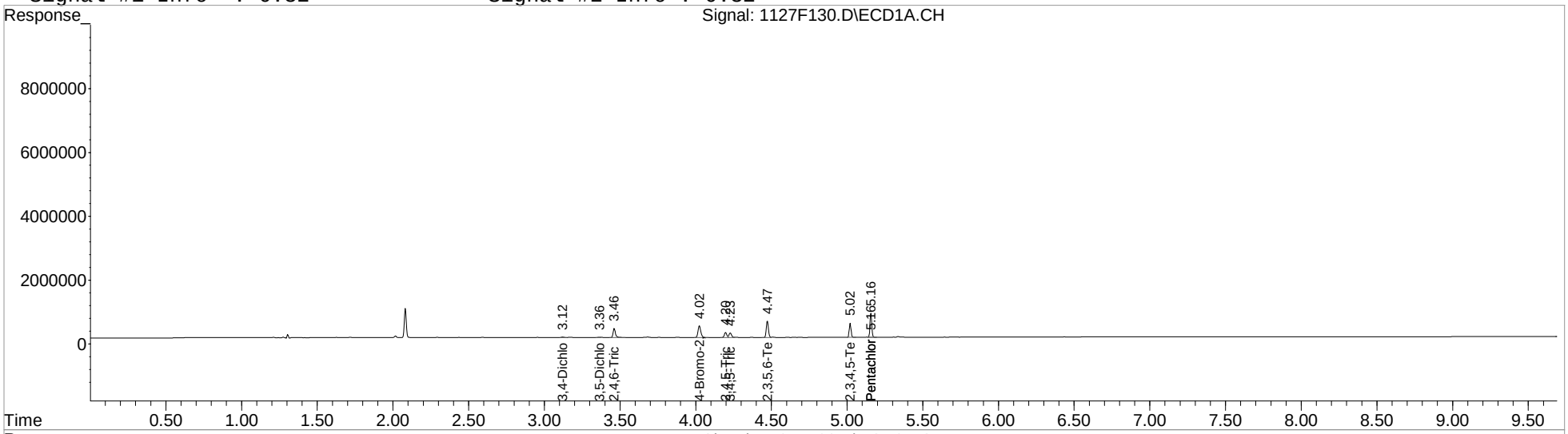
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

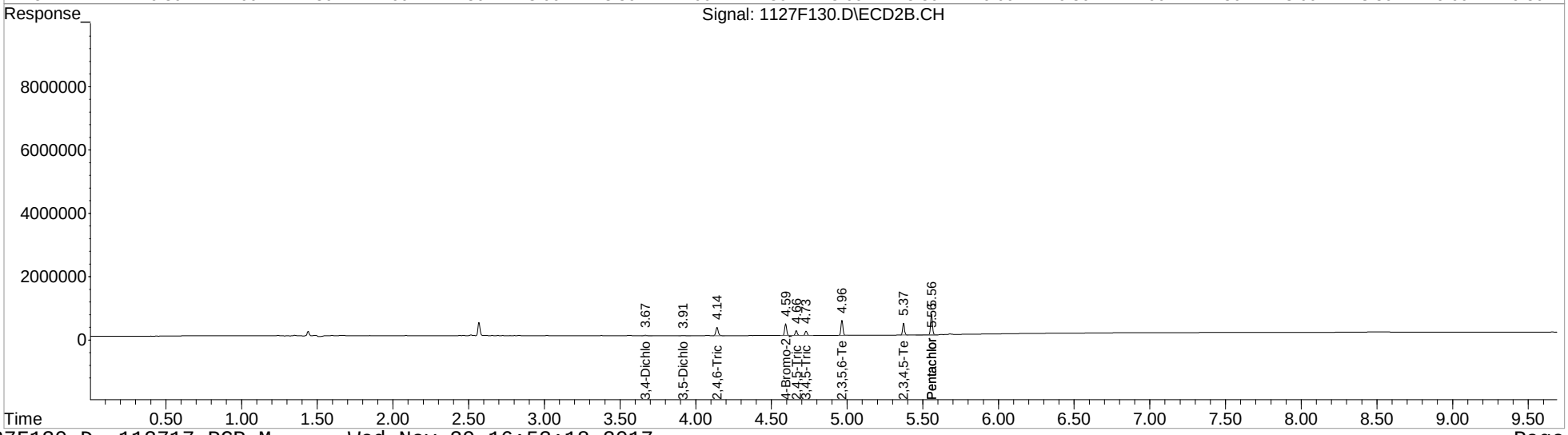
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



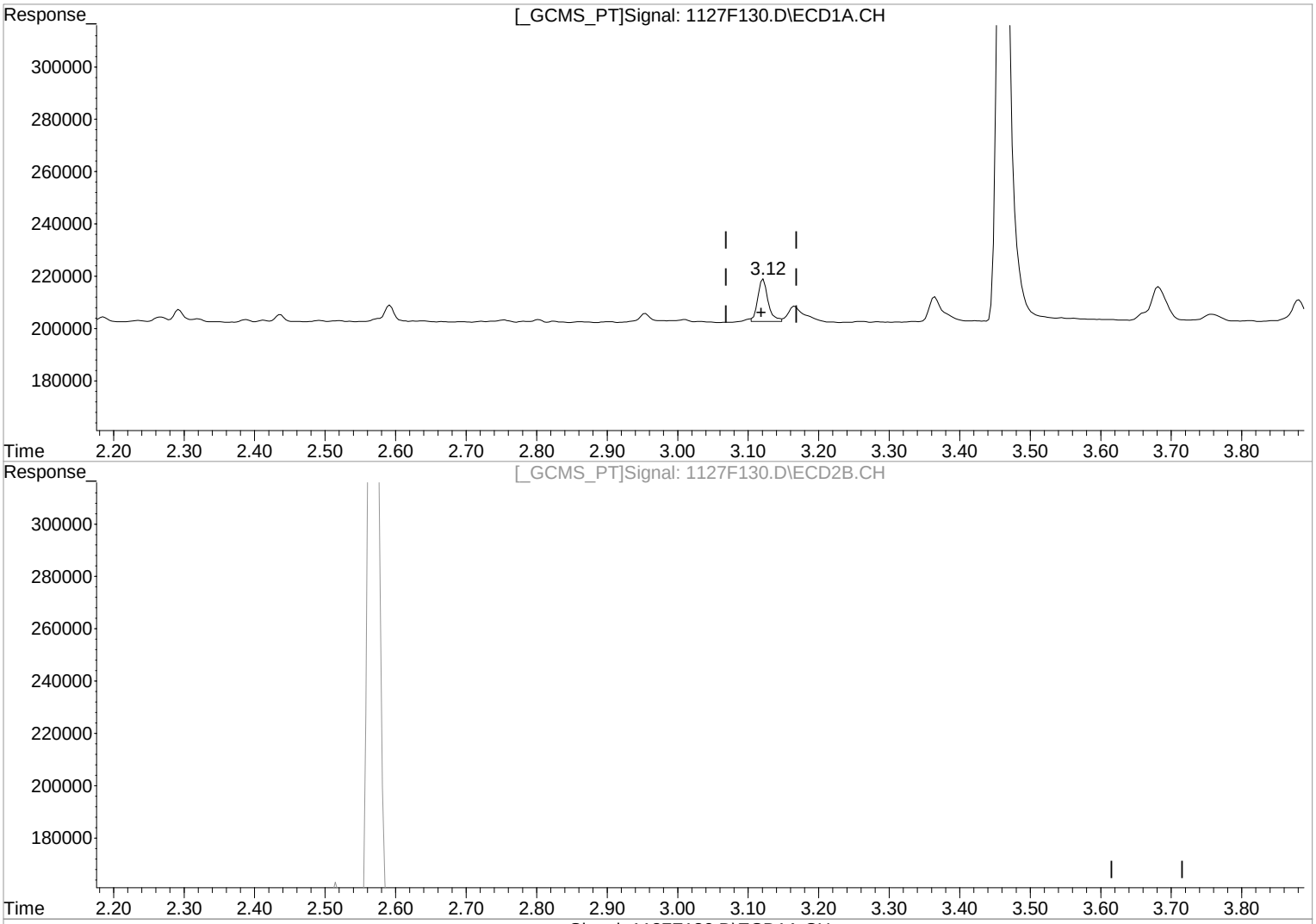


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 10.089ug/L m

response 163576

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 9.369ug/L

response 175528

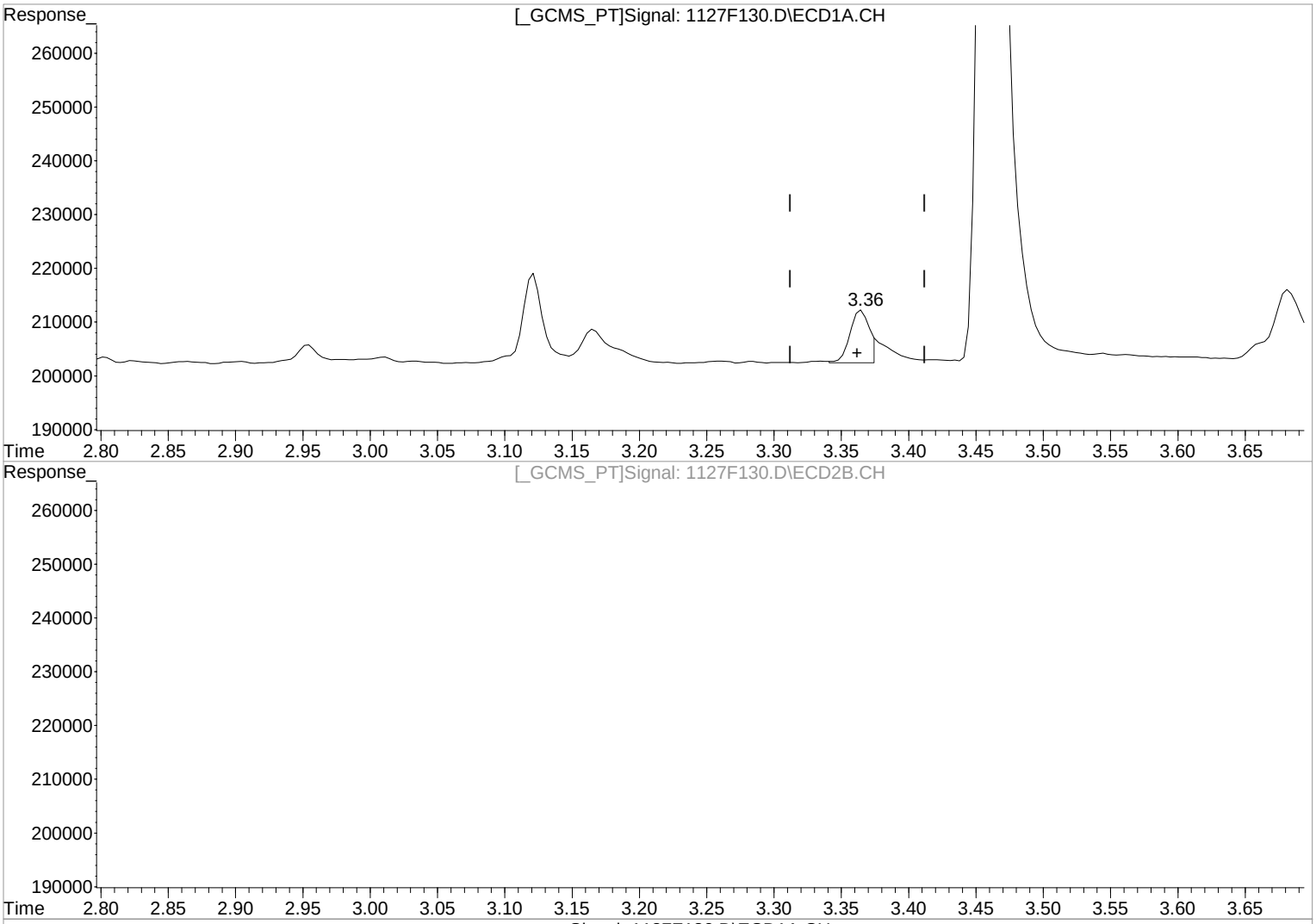
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 8.415ug/L m

response 101688

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 9.526ug/L

response 125108

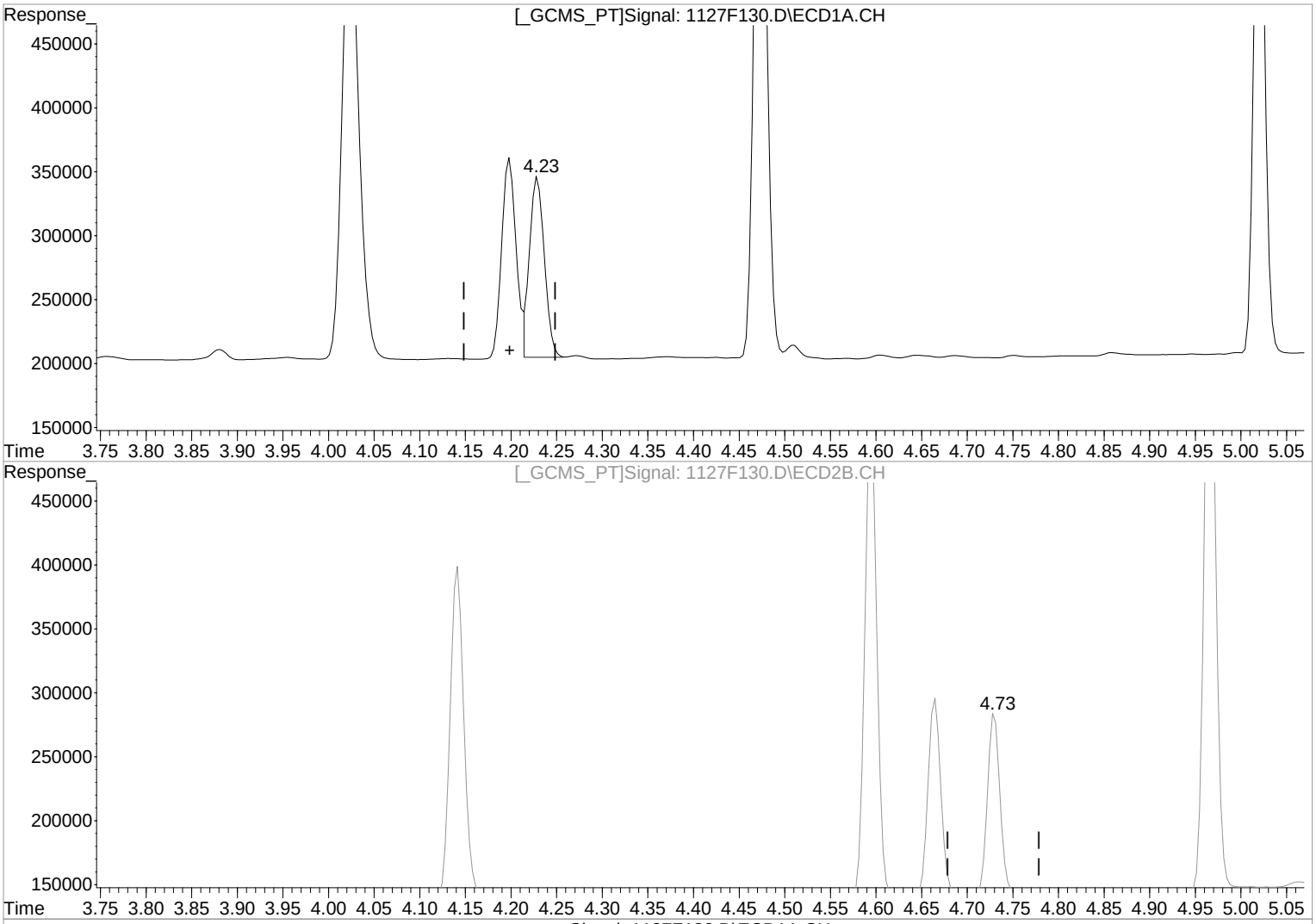
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 9.750ug/L m

response 1550706

Manual Integration:

After

Wrong peak, No Before

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 9.293ug/L

response 1348458

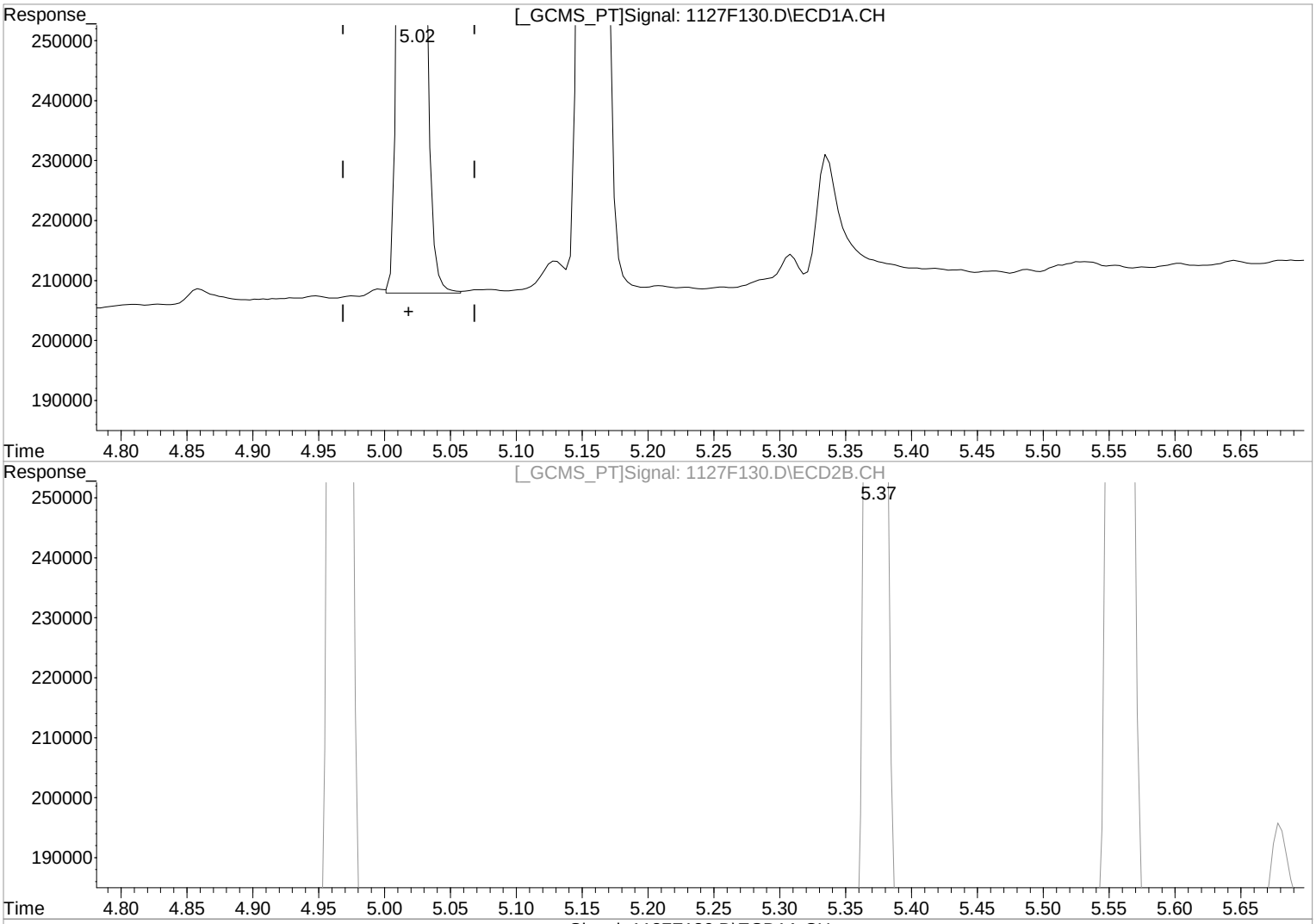
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 11.017ug/L m

response 3744556

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 9.656ug/L

response 3299360

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:00:34 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.60	11143798	9056888	37.047	34.802
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	400014	405654	24.671m	21.652
2)		3,5-Dichlorophen	3.36	3.91	316008	288184	26.150	21.944
3)		2,4,6-Trichlorop	3.46	4.14	7312718	6768082	20.625	18.823
5)		2,4,5-Trichlorop	4.20	4.66	3927156	3388118	25.257	20.621
6)		3,4,5-Trichlorop	4.23f	4.73	3598120	3123178	22.622m	21.523
7)	M	2,3,5,6-Tetrachl	4.47	4.97	11725474	10538308	23.390	20.971
8)	M	2,3,4,5-Tetrachl	5.02	5.37	8743824	7747010	25.726	22.673
9)	M	Pentachloropheno	5.16	5.56	14842634	13563198	25.350	22.748
10)		Pentachloroaniso	5.16	5.56	14842634	13563198	26.670	23.927

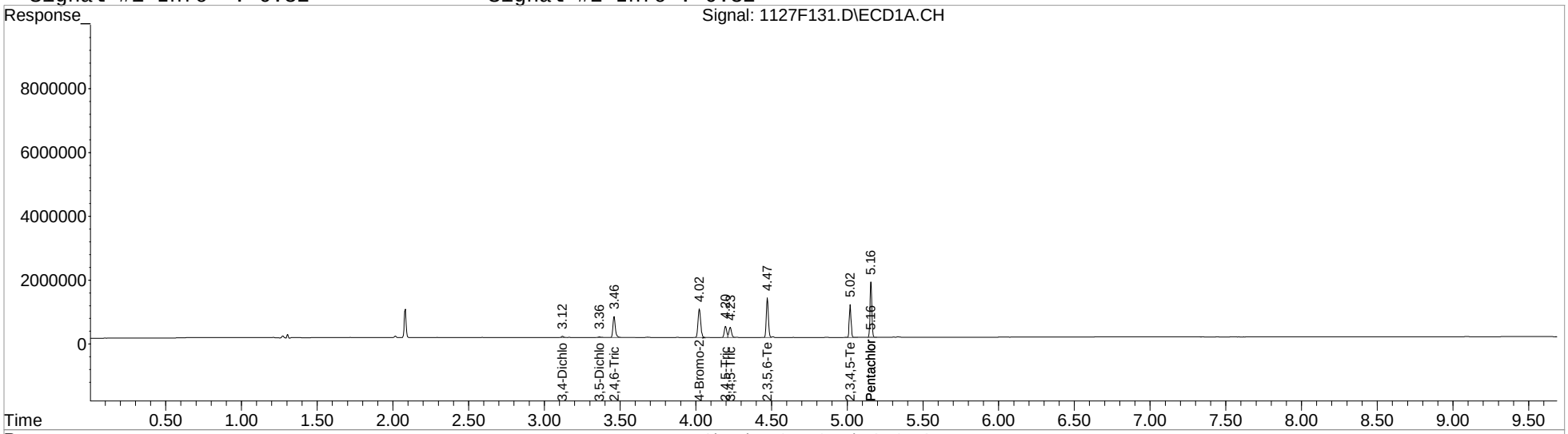
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

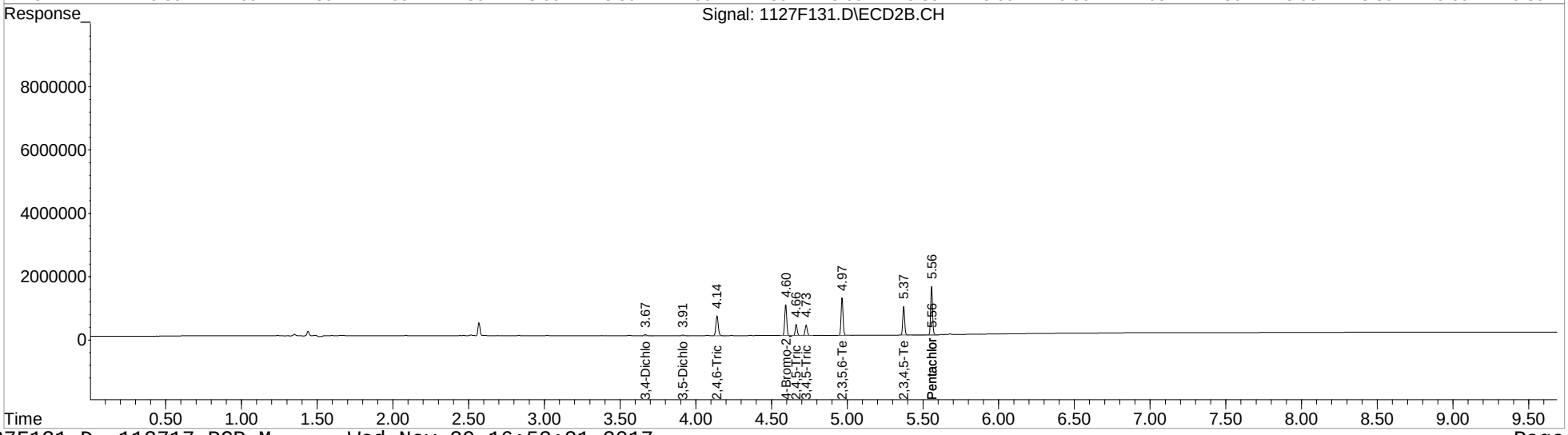
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



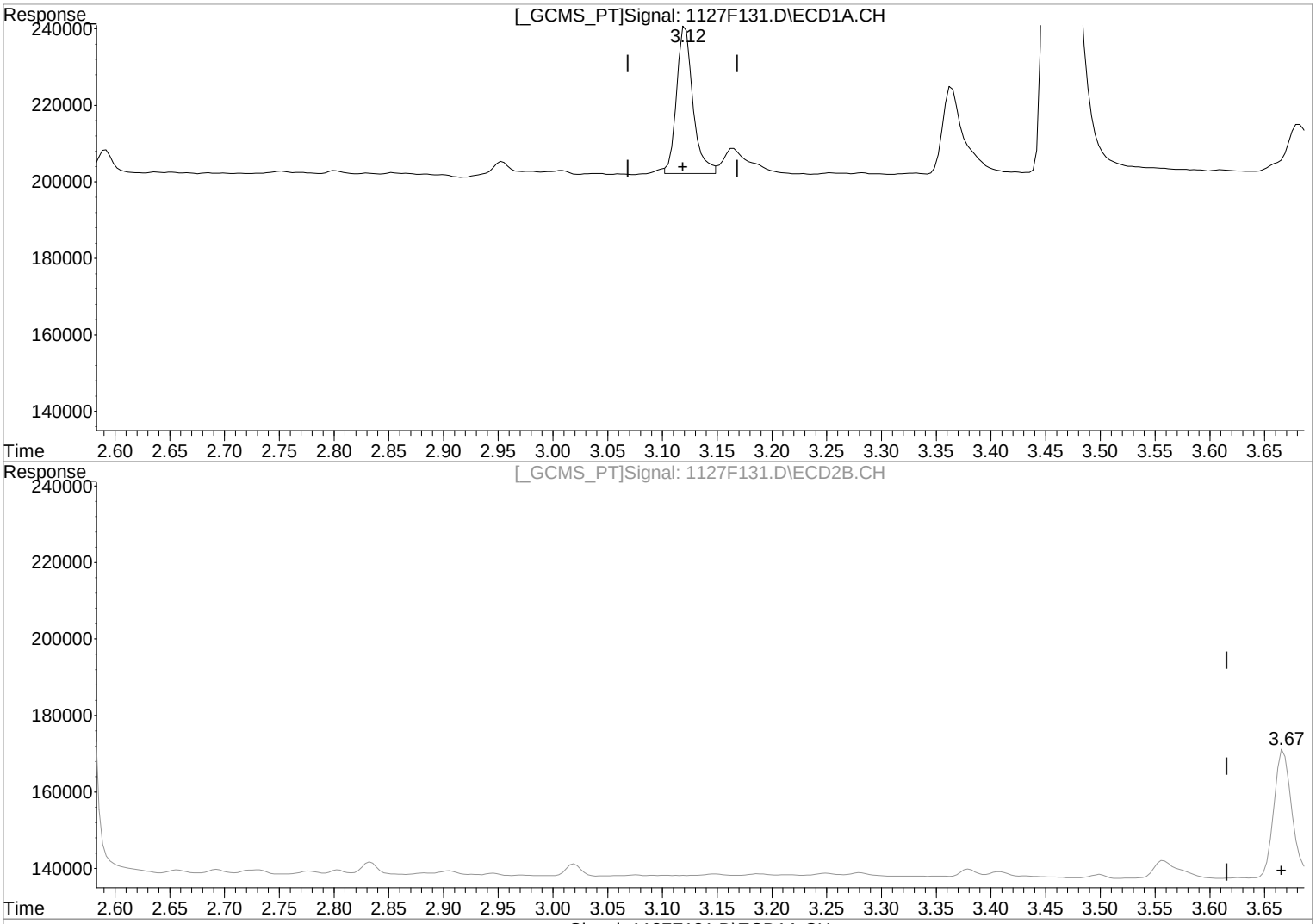


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F131.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 24.671ug/L m

response 400014

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 21.652ug/L

response 405654

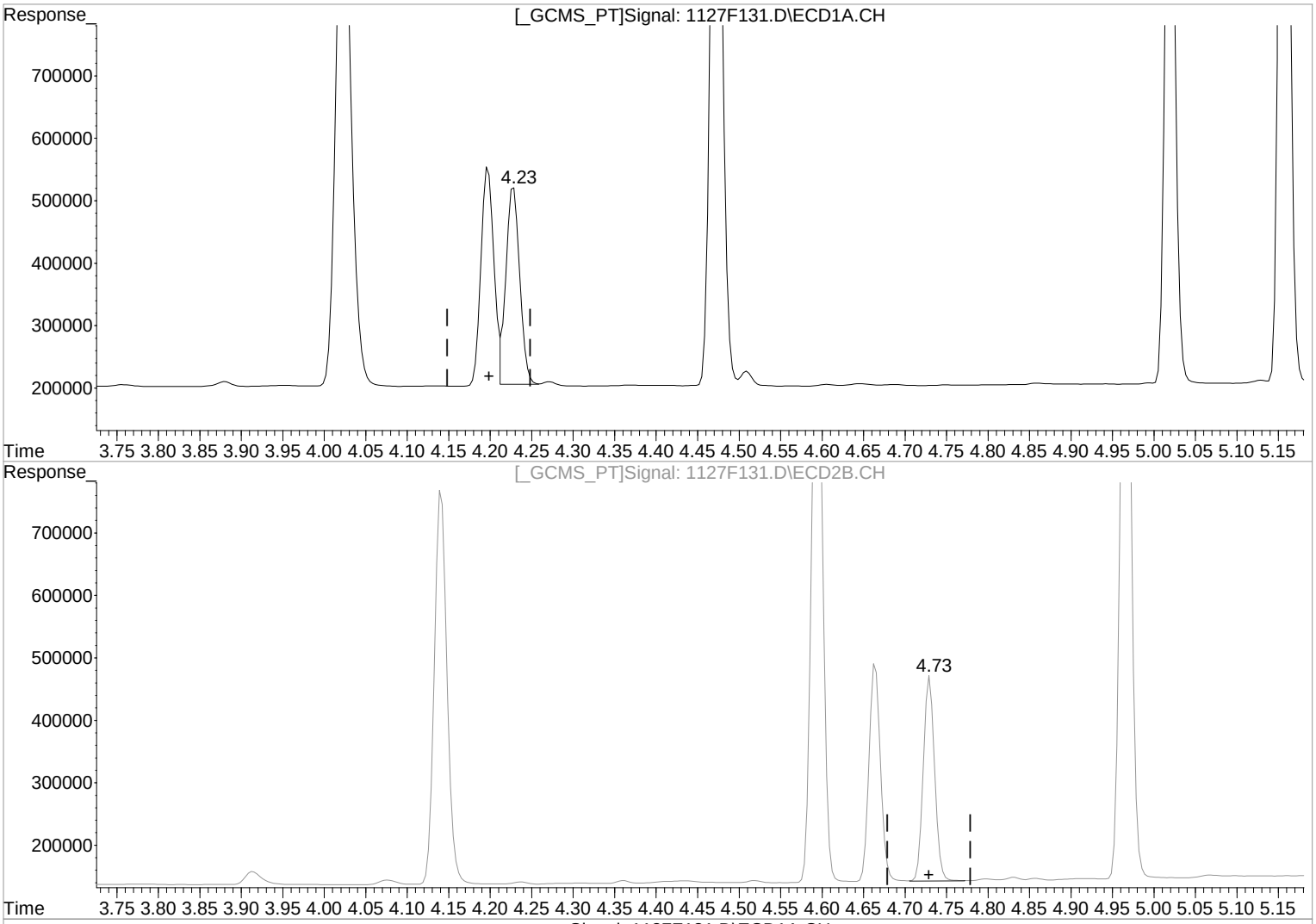
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F131.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 22.622ug/L m

response 3598120

Manual Integration:

After

Wrong peak, No Before

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 21.523ug/L

response 3123178

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:04:32 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	46010514	40158220	152.958	154.311
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	1447870	1405326	89.300	75.009
2)		3,5-Dichlorophen	3.36	3.91	1078920	1058212	89.282	80.579
3)		2,4,6-Trichlorop	3.46	4.14	28084798	27879842	79.211	77.538
5)		2,4,5-Trichlorop	4.20	4.66	14021972	12747090	90.179	77.583
6)		3,4,5-Trichlorop	4.23	4.73	12849696	11876992	80.789	81.849
7)	M	2,3,5,6-Tetrachl	4.47	4.97	45966424	43712650	91.693	86.988
8)	M	2,3,4,5-Tetrachl	5.02	5.37	33226836	30840508	97.760	90.262
9)	M	Pentachloropheno	5.16	5.56	58837190	53885886	100.489	90.377m
10)		Pentachloroaniso	5.16	5.56	58837190	53900478	105.722	95.088m

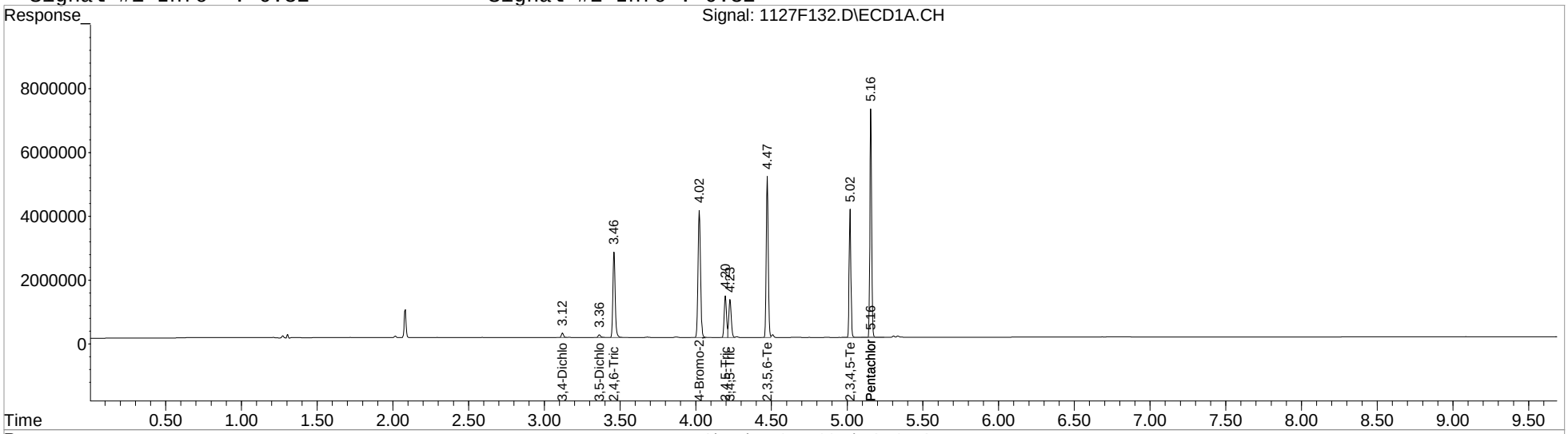
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

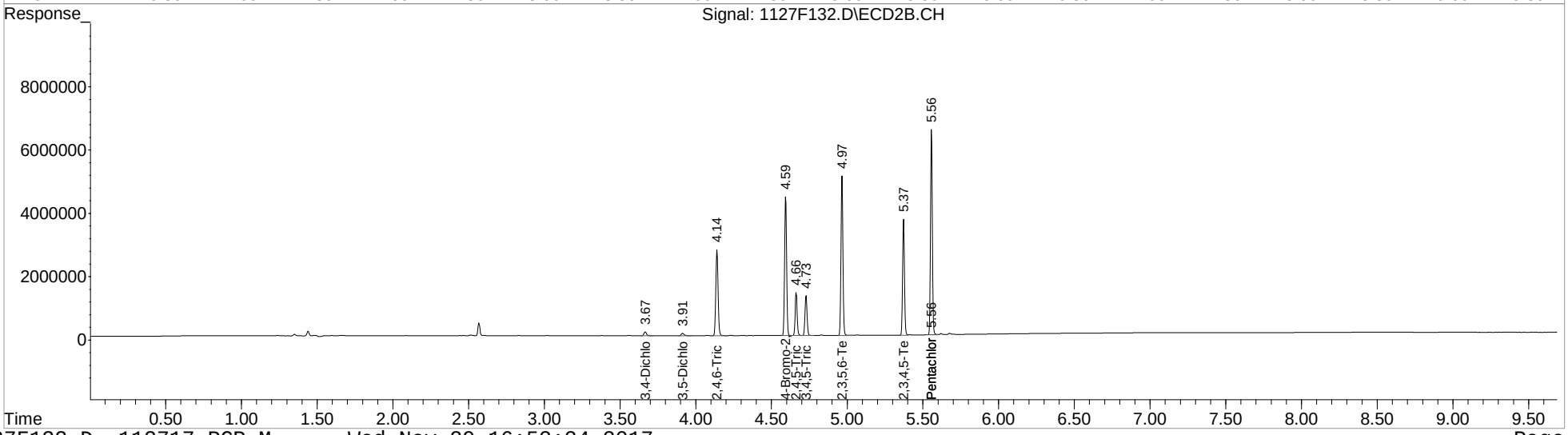
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



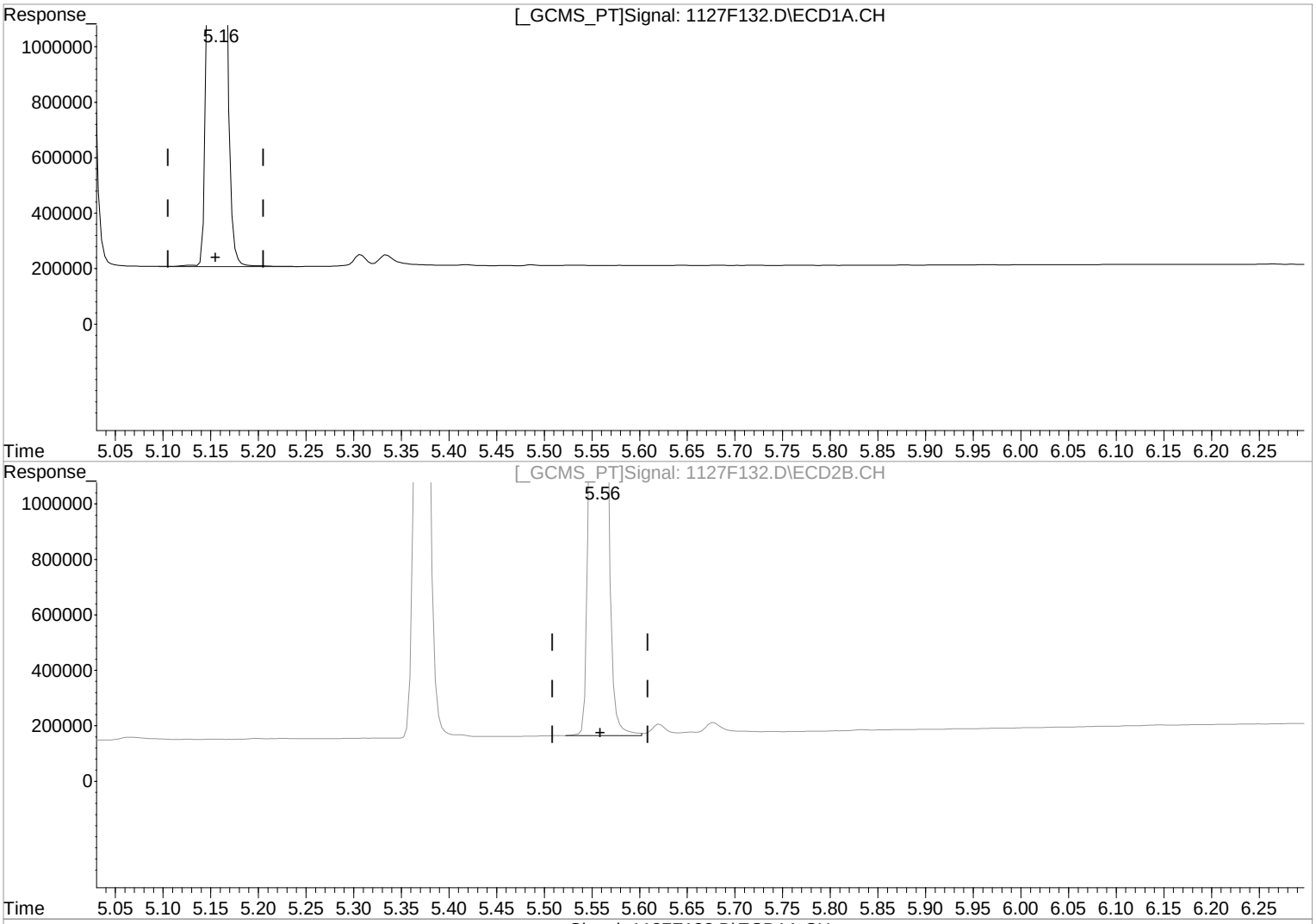


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F132.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 105.722ug/L

response 58837190

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(10) Pentachloroanisole #2

5.56min 95.088ug/L m

response 53900478

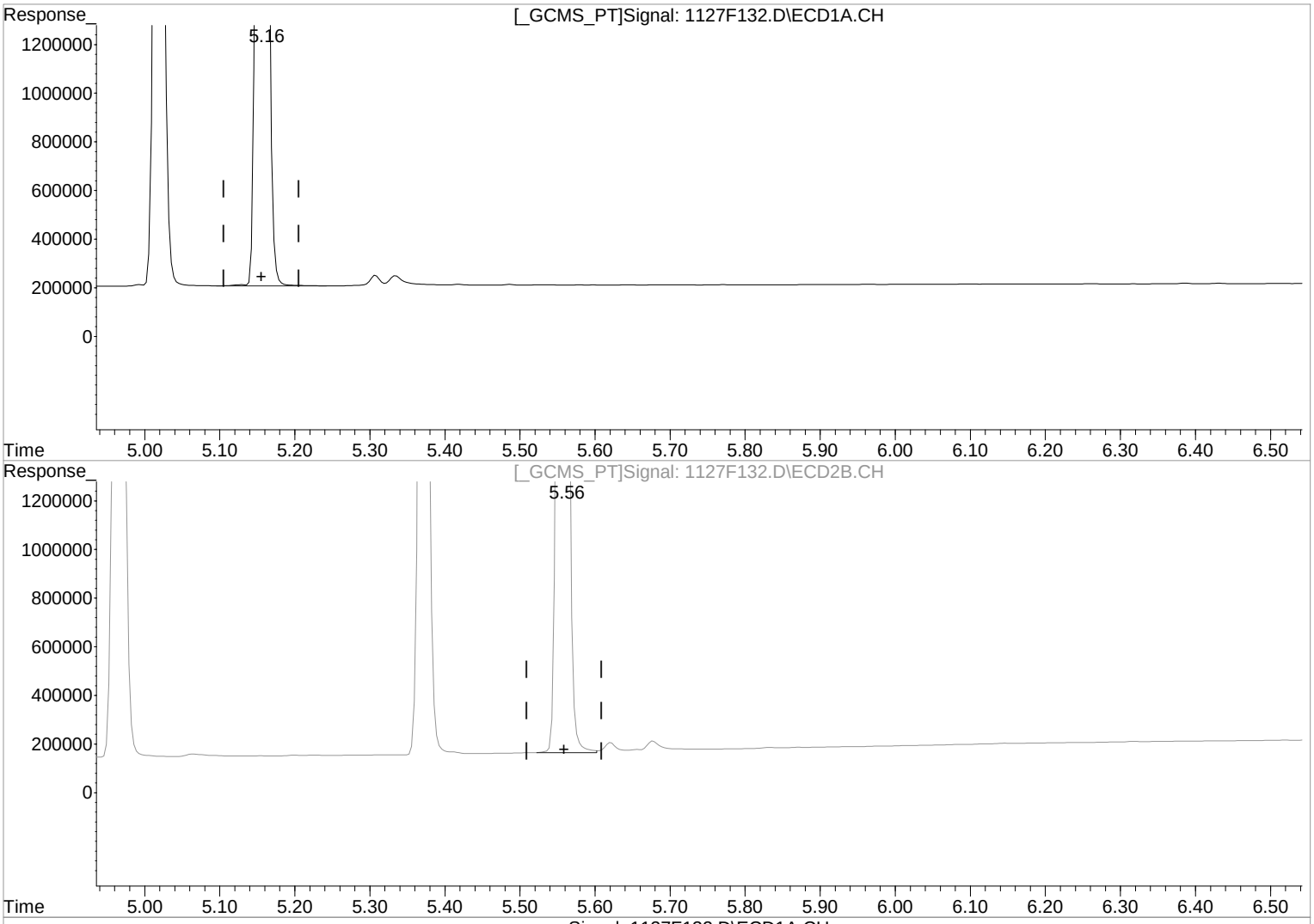
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F132.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 100.489ug/L

response 58837190

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 90.377ug/L m

response 53885886

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD2B.CH
Acq On : 27 Nov 2017 8:50 pm Operator: CV
Sample : PENTA01-88C 250 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:07:29 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	106.4E6	95029258	353.601	365.158
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	2913944	2910812	179.722	155.365
2)		3,5-Dichlorophen	3.36	3.91	2192854	2185628	181.462	166.427
3)		2,4,6-Trichlorop	3.46	4.14	62598844	64308464	176.555	178.851
5)		2,4,5-Trichlorop	4.20	4.66	29452628	28960918	189.418	176.266
6)		3,4,5-Trichlorop	4.23	4.73	28327676	27111646	178.102	186.838
7)	M	2,3,5,6-Tetrachl	4.47	4.97	103.3E6	102.6E6	206.131	204.112
8)	M	2,3,4,5-Tetrachl	5.02	5.37	73882544	72867544	217.377	213.263
9)	M	Pentachloropheno	5.16	5.56	133.3E6	129.4E6	227.744	216.997
10)		Pentachloroaniso	5.16	5.56	133.3E6	129.4E6	239.603	228.245

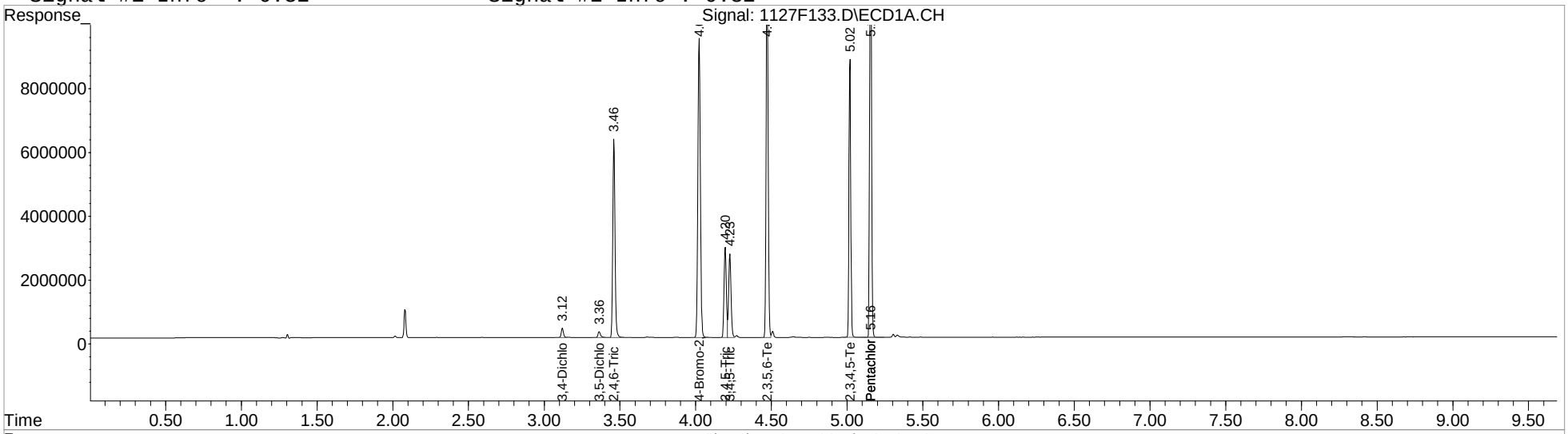
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

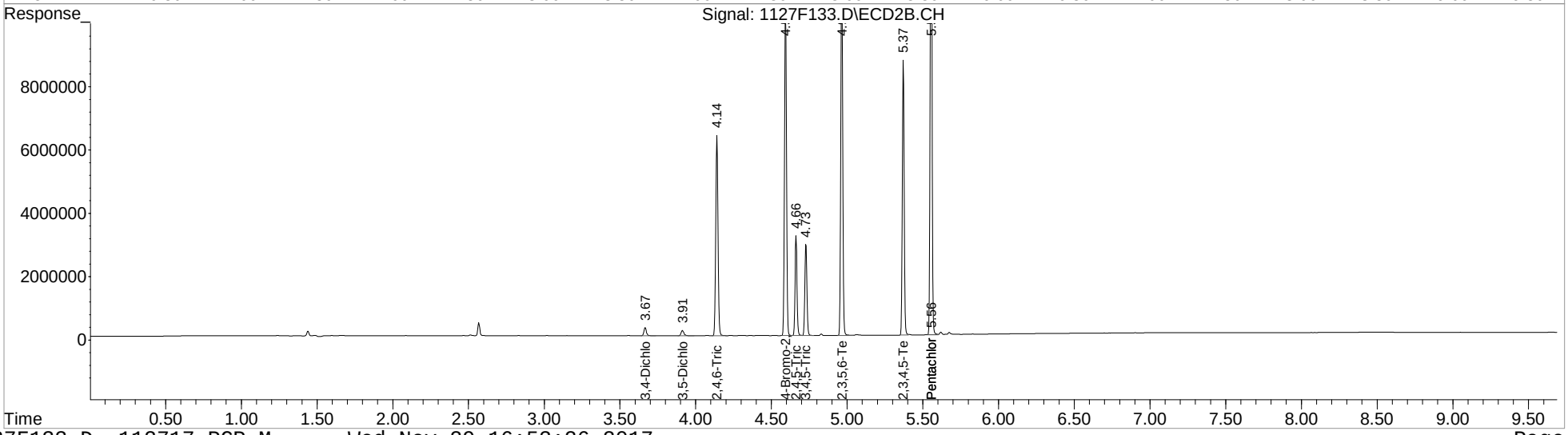
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD2B.CH
Acq On : 27 Nov 2017 8:50 pm Operator: CV
Sample : PENTA01-88C 250 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:07 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD2B.CH
Acq On : 27 Nov 2017 9:08 pm Operator: CV
Sample : PENTA01-88N 500 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:40:27 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	0.00	0.00	0	0	N.D. d	N.D. d
		Target Compounds						
1)		3,4-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
2)		3,5-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
3)		2,4,6-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
5)		2,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
6)		3,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
9)	M	Pentachloropheno	5.15	5.56	258.3E6	266.6E6	441.097	447.195
10)		Pentachloroaniso	5.15	5.56	258.3E6	266.6E6	464.065	470.376

Penta and anisole only

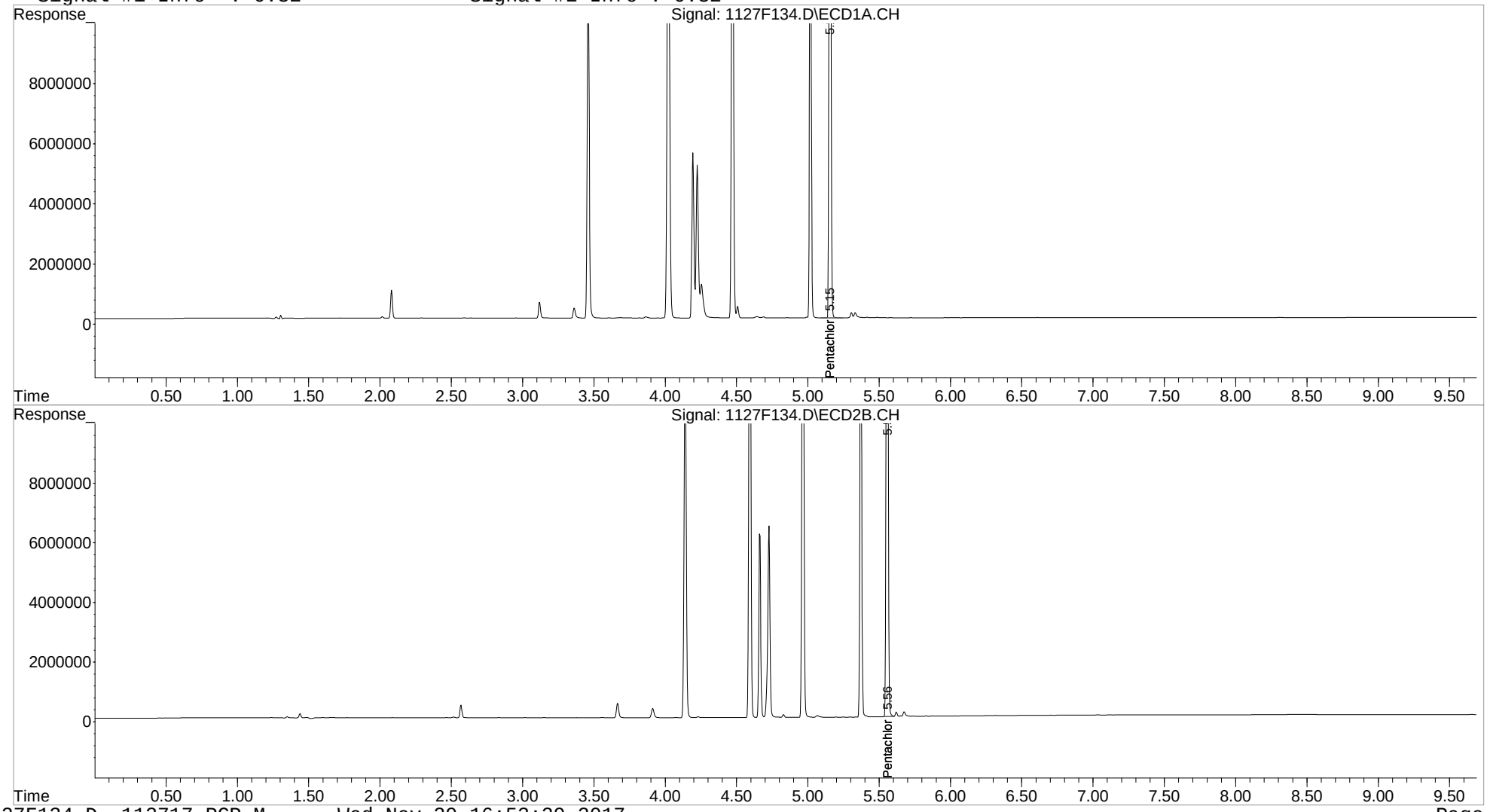
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD2B.CH
Acq On : 27 Nov 2017 9:08 pm Operator: CV
Sample : PENTA01-88N 500 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:40 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD2B.CH
Acq On : 27 Nov 2017 9:27 pm Operator: CV
Sample : PENTA01-88M 1000 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:10:53 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	0.00	0.00	0	0	N.D. d	N.D. d
		Target Compounds						
1)		3,4-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
2)		3,5-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
3)		2,4,6-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
5)		2,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
6)		3,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
9)	M	Pentachloropheno	5.16	5.56	484.7E6	524.6E6	827.802	879.883
10)		Pentachloroaniso	5.16	5.56	484.7E6	524.6E6	870.906	925.495

Penta and anisole only

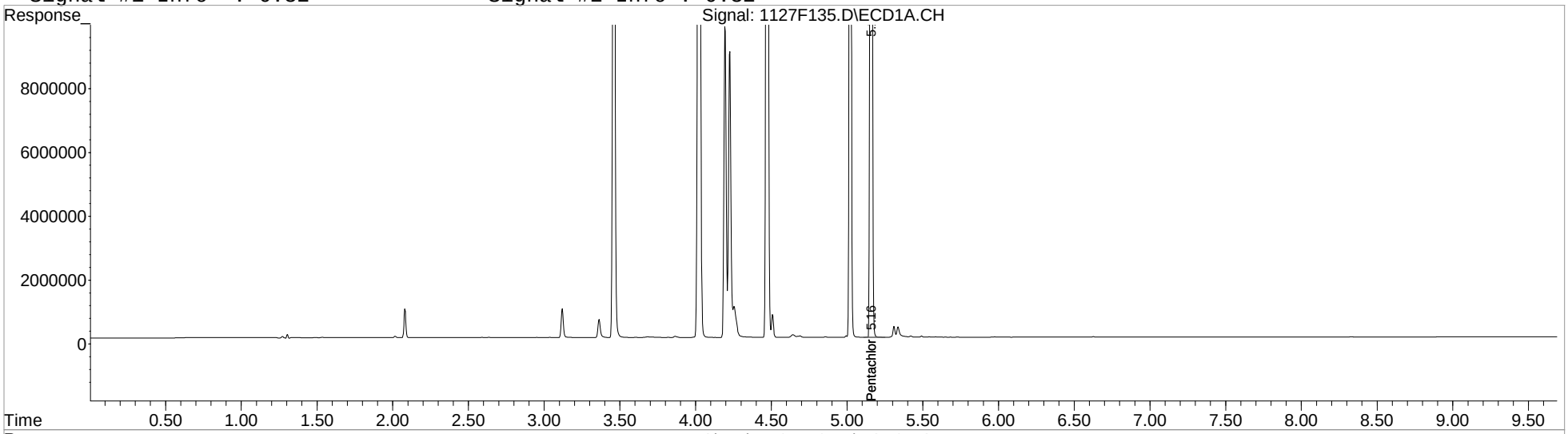
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

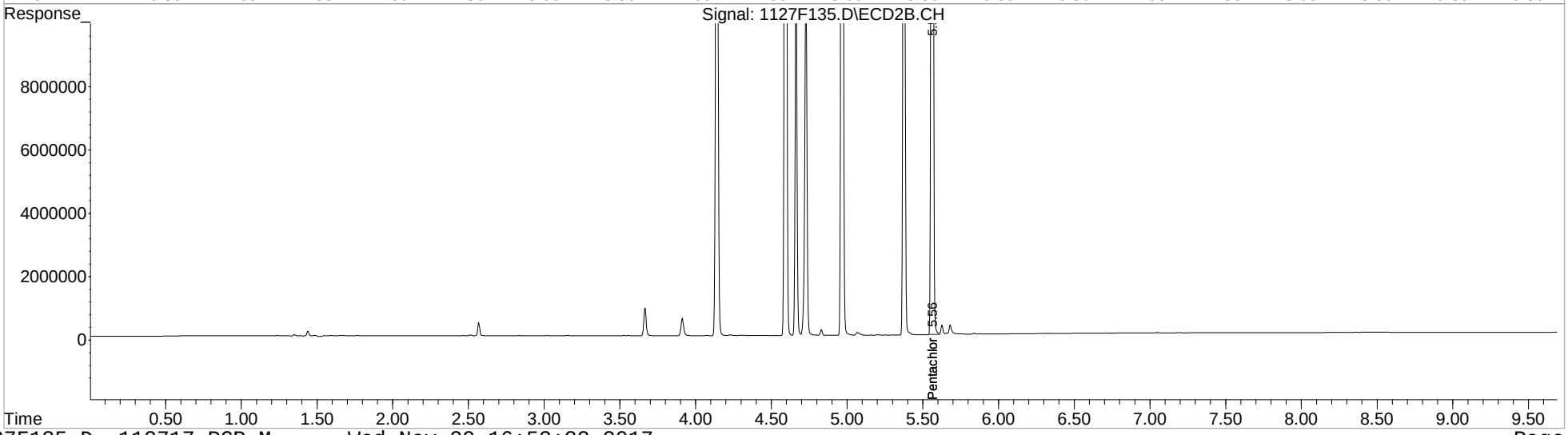
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD2B.CH
Acq On : 27 Nov 2017 9:27 pm Operator: CV
Sample : PENTA01-88M 1000 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:45 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:47:58 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.01	4.57	6162	7584	0.020	0.029 #
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.66	769118	732270	47.437	39.085
2)		3,5-Dichlorophen	3.36	3.91	483034	541656	39.972m	41.245
3)		2,4,6-Trichlorop	3.46	4.14	14150702	12878254	39.911	35.816
5)		2,4,5-Trichlorop	4.19	4.66	7083376	6313060	45.555	38.423
6)		3,4,5-Trichlorop	4.22	4.73	6656538	5862514	41.851	40.401
7)	M	2,3,5,6-Tetrachl	4.47	4.97	22573818	20683576	45.030	41.160
8)	M	2,3,4,5-Tetrachl	5.02	5.37	16083160	14736668	47.320	43.130
9)	M	Pentachloropheno	5.16	5.56	28261942	25806018	49.255	43.863
10)		Pentachloroaniso	5.16	5.56	28261942	25806018	51.824	46.142

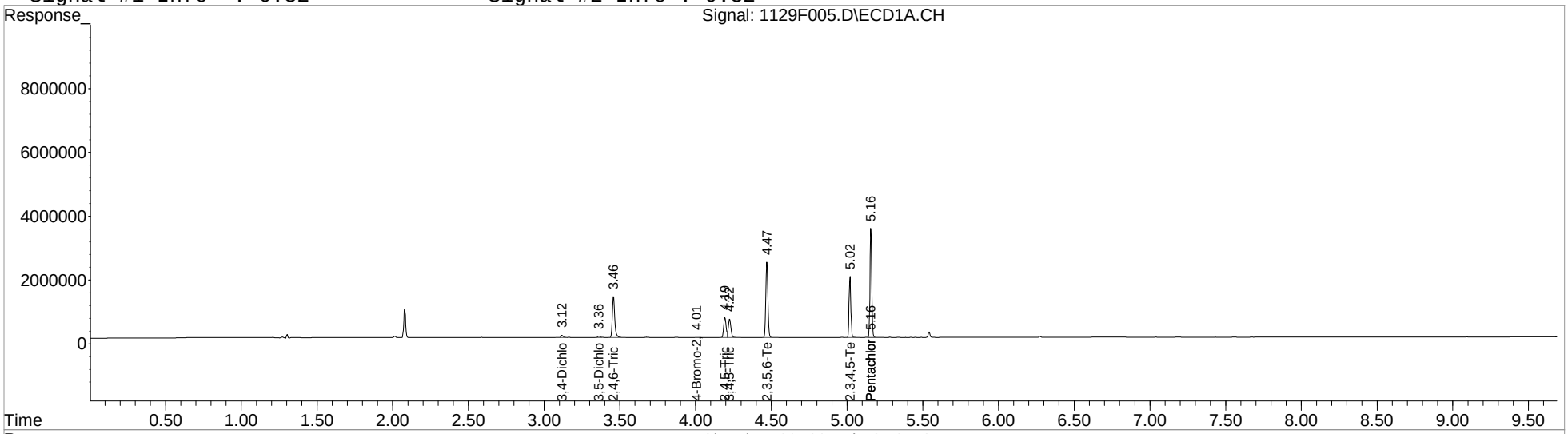
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

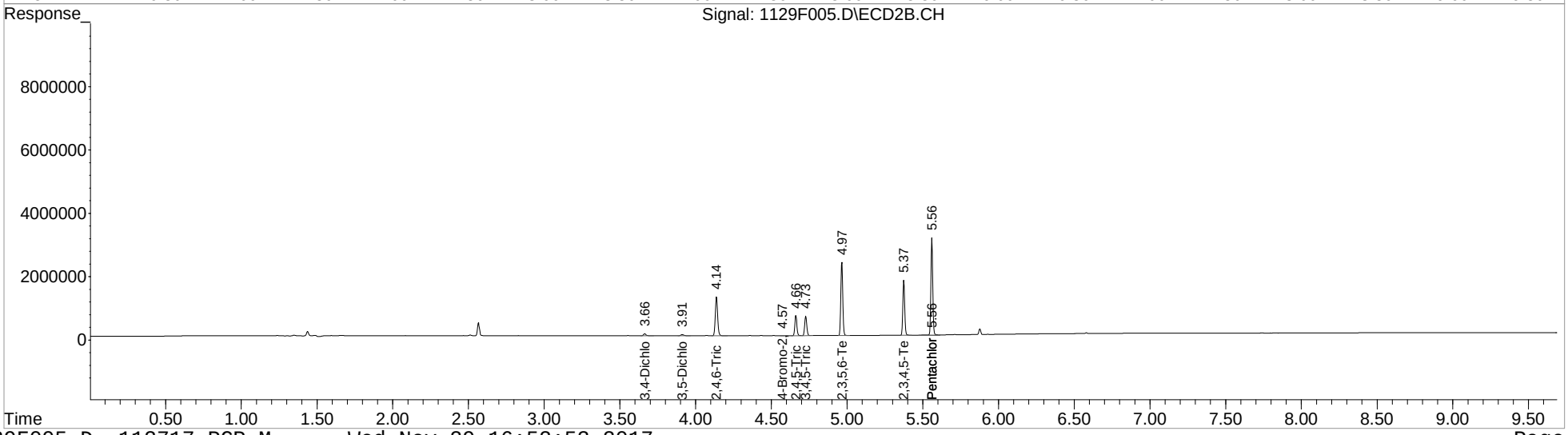
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:48 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



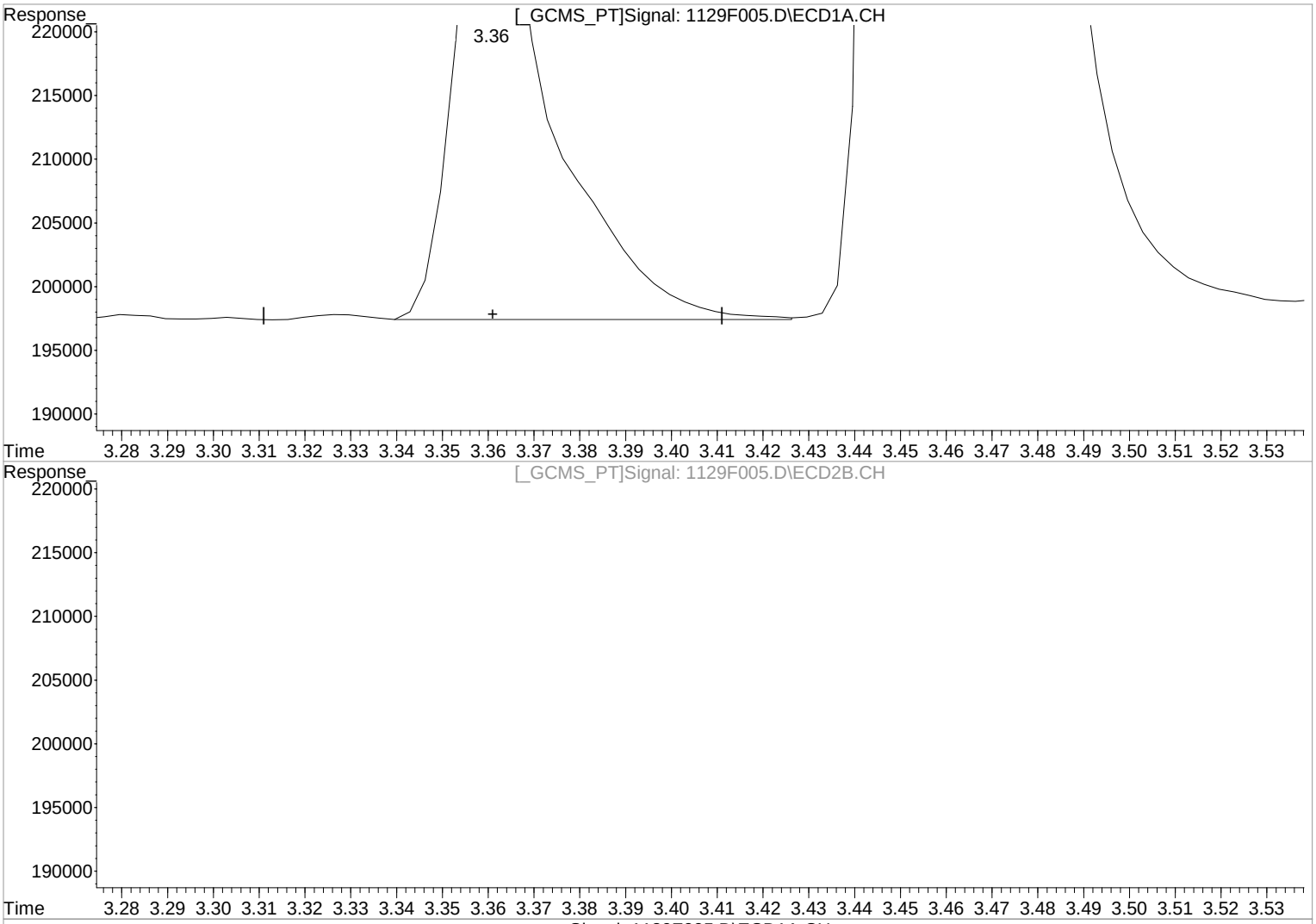


Quantitation Report (Qedit)

1st 11/30/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 30 14:47 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Thu Nov 30 14:18:39 2017
Response via : Multiple Level Calibration



Signal: 1129F005.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 45.764ug/L

response 557528

(2) 3,5-Dichlorophenol #2

3.91min 43.808ug/L

response 541656

Manual Integration:

Before

11/30/17

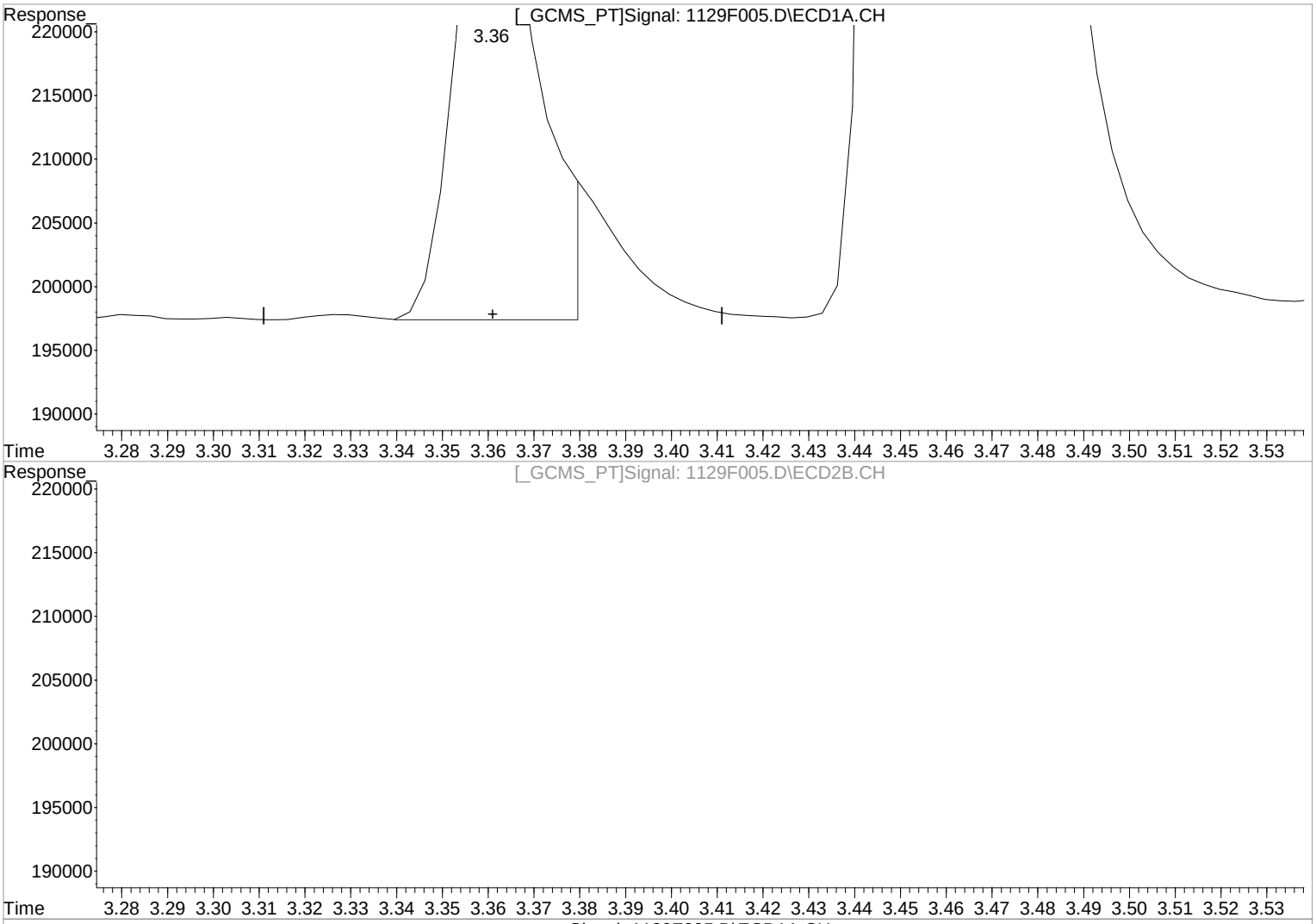
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/30/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 30 14:47 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Thu Nov 30 14:18:39 2017
Response via : Multiple Level Calibration



Signal: 1129F005.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 40.059ug/L m

response 488026

Manual Integration:

After

Baseline/Shoulder

11/30/17

(2) 3,5-Dichlorophenol #2

3.91min 43.808ug/L

response 541656

(+) = Expected Retention Time

Polynuclear Aromatic Hydrocarbons

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Exception Report

Data File: J:\MS14\DATA\032918\0329F020.D
Lab ID: K1802579-002
RunType: SMPL
Matrix: WATER

Date Acquired: 03/29/2018 12:23
Date Quantitated: 03/30/2018 09:48
Batch ID: KWG1801713
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: MAR 30 2018

Secondary Review: APR 02 2018

Printed: 03/30/2018 11:28:45
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\032918\0329F020.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 12:23	**Quant Date:**	03/30/2018 09:48	**Vial:**	20
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-002			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801713	**Prep Lot:**	KWG1801565	**Report Group:**	K1802579
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1668279	**Prep Date:**	03/22/2018		

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M	**Calibration ID:**	CAL15579
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\032918\0329F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\032918\0329F017.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.71	0.02	136	42984**m**	200.00	OK
2	Acenaphthene-d10	6.27	0.00	164	22215	200.00	OK
3	Phenanthrene-d10	7.50	0.00	188	46504	200.00	OK
4	Chrysene-d12	10.01	0.00	240	53020	200.00	OK
5	Perylene-d12	13.03	-0.01	264	58512	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.70	-0.01	0.00	176	145827	959.59	96	42-131	OK	
3	Fluoranthene-d10	8.49	0.00	0.00	212	301861	1,033	103	42-133	OK	
4	Terphenyl-d14	8.83	0.00	0.00	244	209351	936.47	94	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.73	0.02	0.00	128	136	0.5600	0.0025	J	
1	2-Methylnaphthalene				142	0		0.0014	U	
2	Acenaphthylene				152	0		0.0012	U	
2	Acenaphthene				154	0**d**		0.0013	U	
2	Fluorene				166	0**d**		0.0012	U	
3	Phenanthrene				178	0		0.0012	U	
3	Anthracene				178	0		0.00084	U	
3	Fluoranthene				202	0**d**		0.00084	U	
4	Pyrene				202	0		0.0011	U	
4	Benz(a)anthracene	10.00		0.00	228	175	0.5500	0.0025	J	
4	Chrysene				228	0**d**		0.00078	U	
5	Benzo(b)fluoranthene				252	0		0.00085	U	
5	Benzo(k)fluoranthene				252	0		0.00097	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\032918\0329F020.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 12:23	**Quant Date:**	03/30/2018 09:48	**Vial:**	20
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-002			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0		0.0012	U	
5	Indeno(1,2,3-cd)pyrene				276	0**d**		0.00092	U	
5	Dibenz(a,h)anthracene				278	0**d**		0.0014	U	
5	Benzo(g,h,i)perylene				276	0**d**		0.00088	U	

Prep Amount:	440 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\032918\0329F020.D Vial: 20
Acq On : 29 Mar 2018 12:23 pm Operator: LWeiskopf
Sample : K1802579-002 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 08:13:07 2018 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

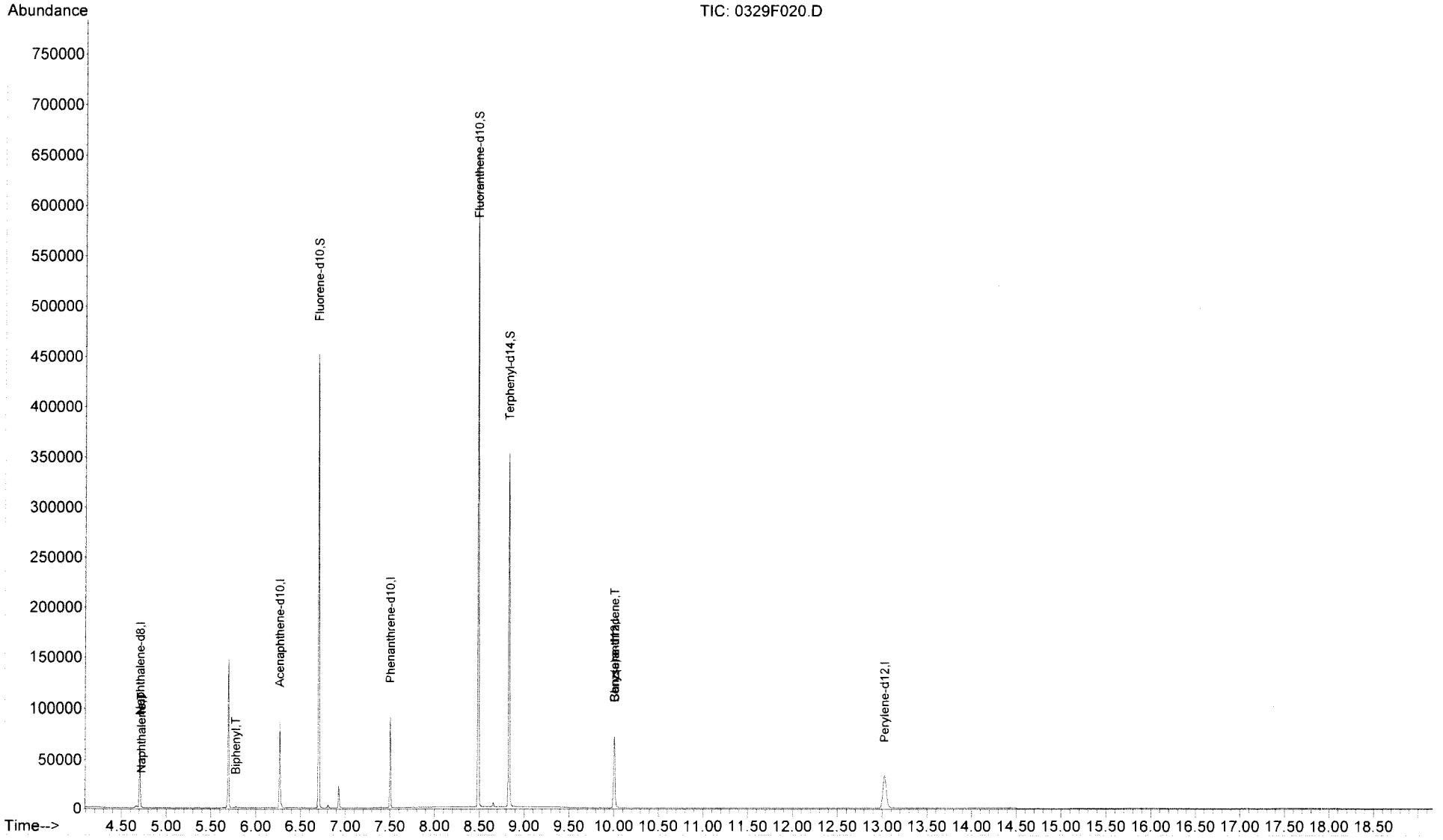
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.71	136	42984m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.27	164	22215	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	46504	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	53020	200.00	ng/ml	0.00
28) Perylene-d12	13.03	264	58512	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/ml	
Spiked Amount 1000.000			Recovery = 0.00%			
13) Fluorene-d10	6.70	176	145827	959.59	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 95.96%			
22) Fluoranthene-d10	8.49	212	301861	1033.06	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 103.31%			
25) Terphenyl-d14	8.83	244	209351	936.47	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 93.65%			
Target Compounds						Qvalue
2) Naphthalene	4.73	128	136	0.56	ng/ml	84
6) Biphenyl	5.78	154	472	2.19	ng/ml	95
26) Benz(a)anthracene	10.00	228	175	0.55	ng/ml	69

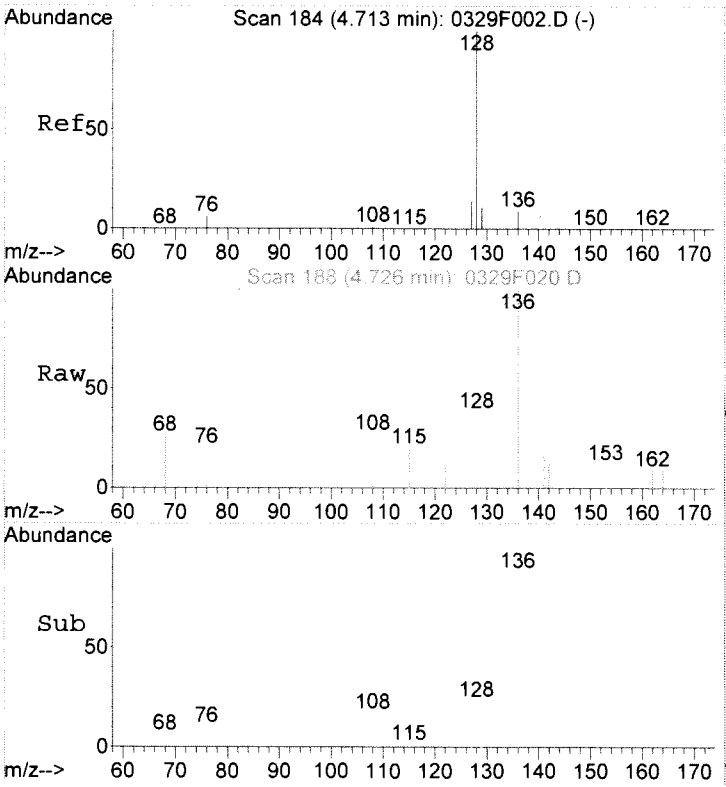
(#) = qualifier out of range (m) = manual integration
0329F020.D 101317PAH.M Fri Mar 30 09:54:07 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\032918\0329F020.D Vial: 20
Acq On : 29 Mar 2018 12:23 pm Operator: LWeiskopf
Sample : K1802579-002 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:48 2018 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration

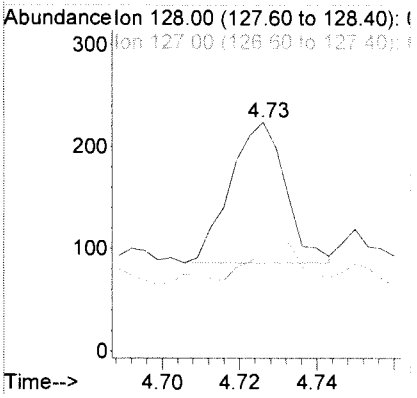


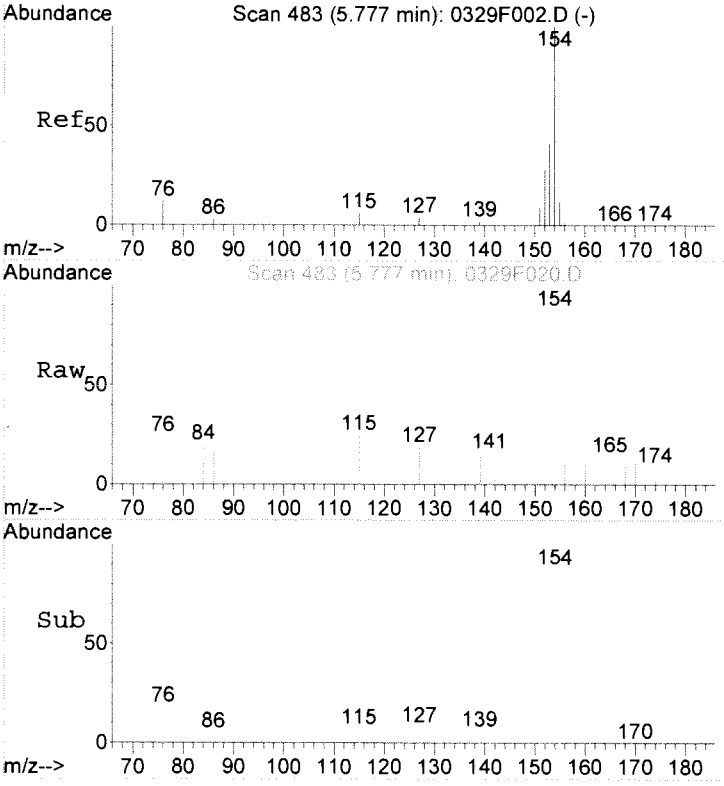


#2
Naphthalene
Concen: 0.56 ng/ml
RT: 4.73 min Scan# 188
Delta R.T. 0.01 min
Lab File: 0329F020.D
Acq: 29 Mar 2018 12:23 pm

Tgt Ion:128 Resp: 136

Ion	Ratio	Lower	Upper
128	100		
127	20.3	0.0	44.1
129	3.6	0.0	30.4

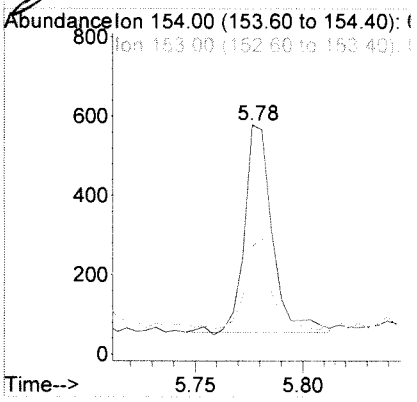


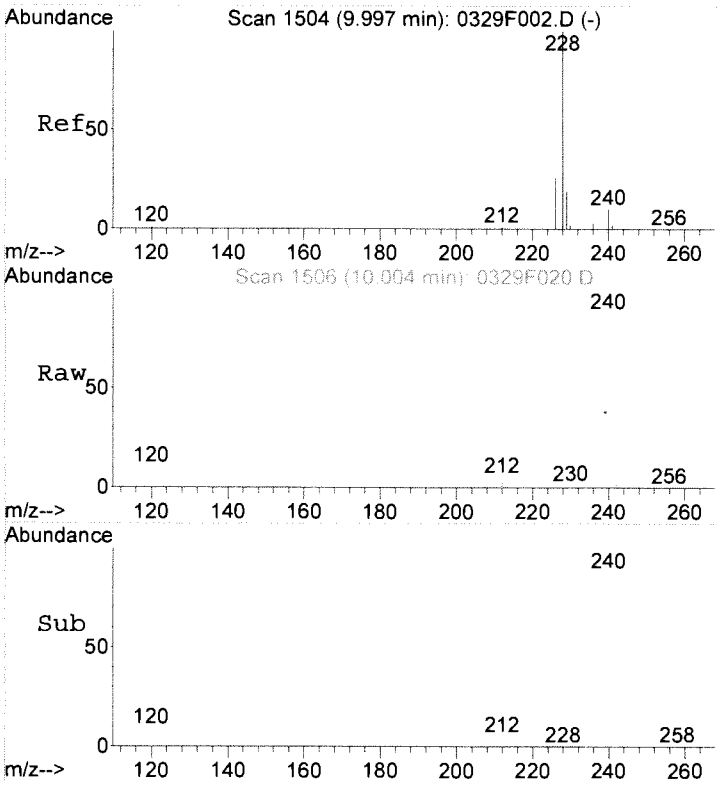


#6
Biphenyl
Concen: 2.19 ng/ml
RT: 5.78 min Scan# 483
Delta R.T. -0.00 min
Lab File: 0329F020.D
Acq: 29 Mar 2018 12:23 pm

Tgt Ion:154 Resp: 472

Ion	Ratio	Lower	Upper
154	100		
153	37.1	11.3	71.3
152	27.0	8.5	48.5

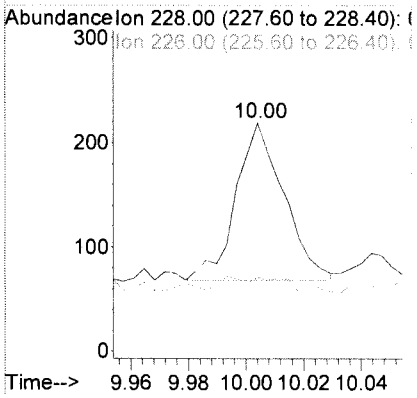




#26
Benz(a)anthracene
Concen: 0.55 ng/ml
RT: 10.00 min Scan# 1506
Delta R.T. 0.01 min
Lab File: 0329F020.D
Acq: 29 Mar 2018 12:23 pm

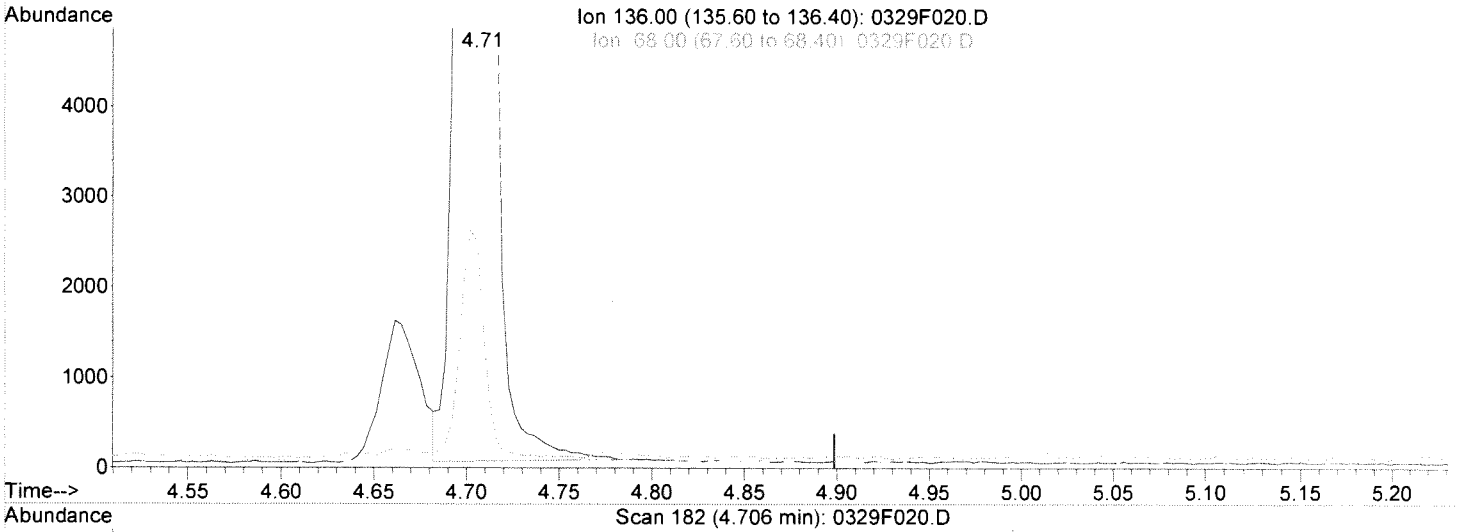
Tgt Ion:228 Resp: 175

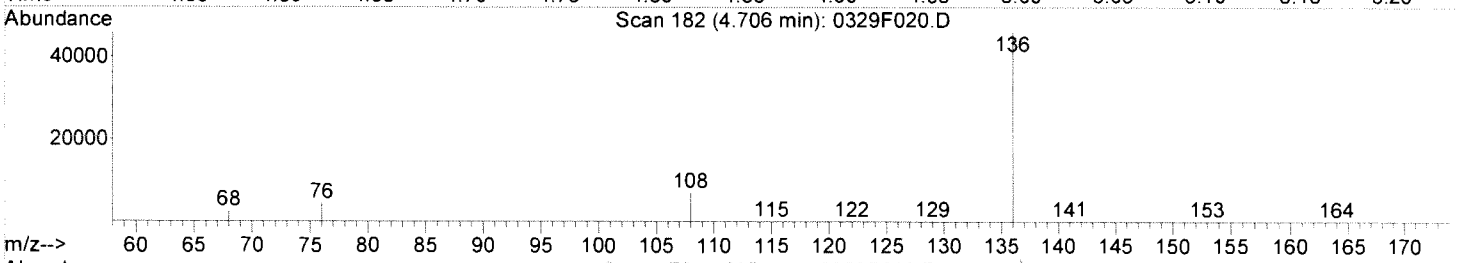
Ion	Ratio	Lower	Upper
228	100		
226	9.3	0.0	56.4
229	31.8	0.0	39.3

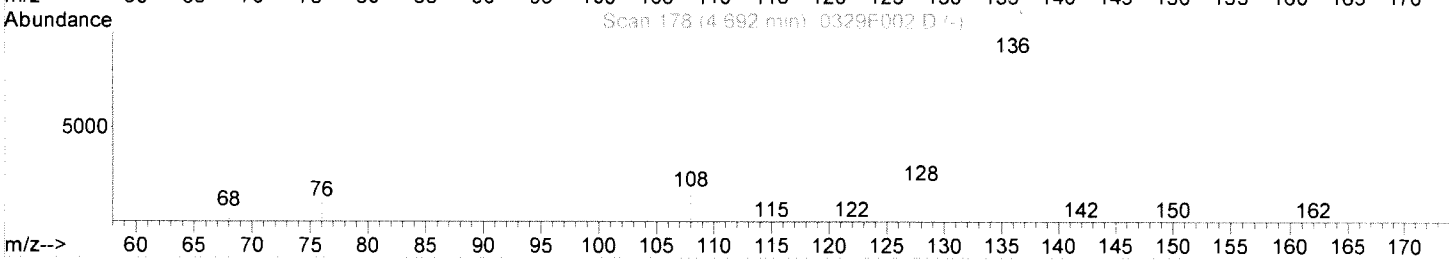


Data File : J:\MS14\DATA\032918\0329F020.D Vial: 20
Acq On : 29 Mar 2018 12:23 pm Operator: LWeiskopf
Sample : K1802579-002 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 8:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F020.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml

response 40446

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.14
108.00	11.60	15.11
0.00	0.00	0.00

Manual Integration:

Before

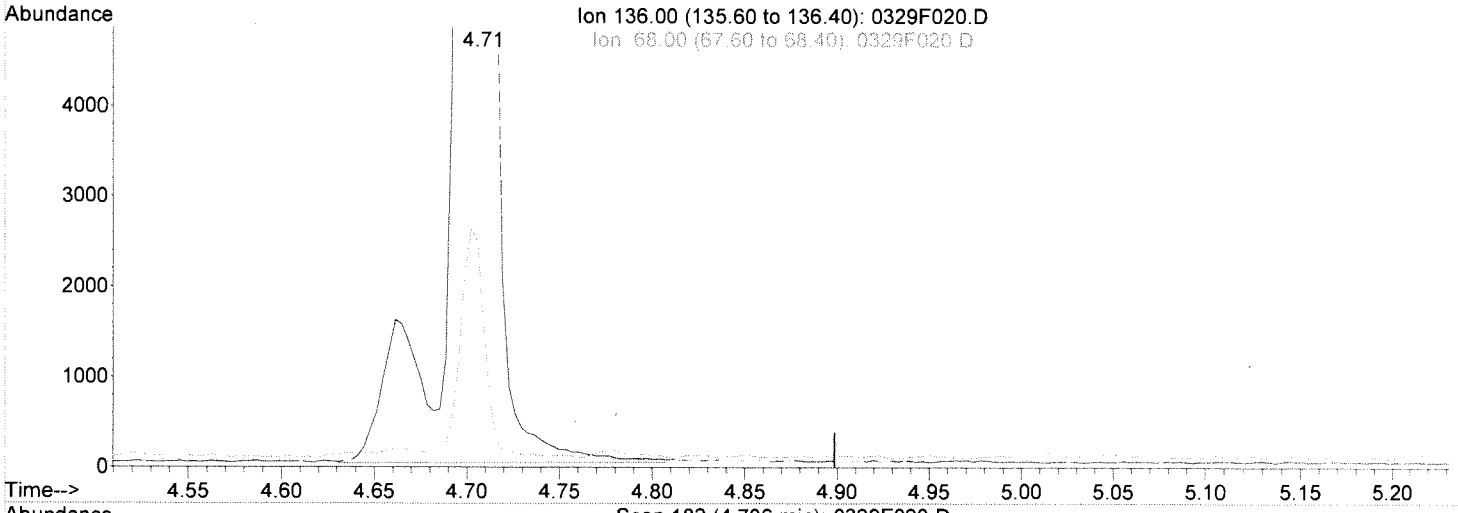
03/30/18

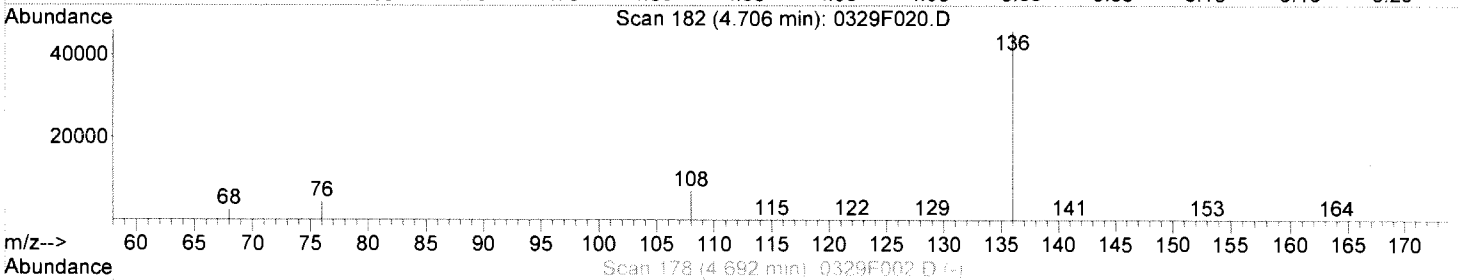
APR 02 2018

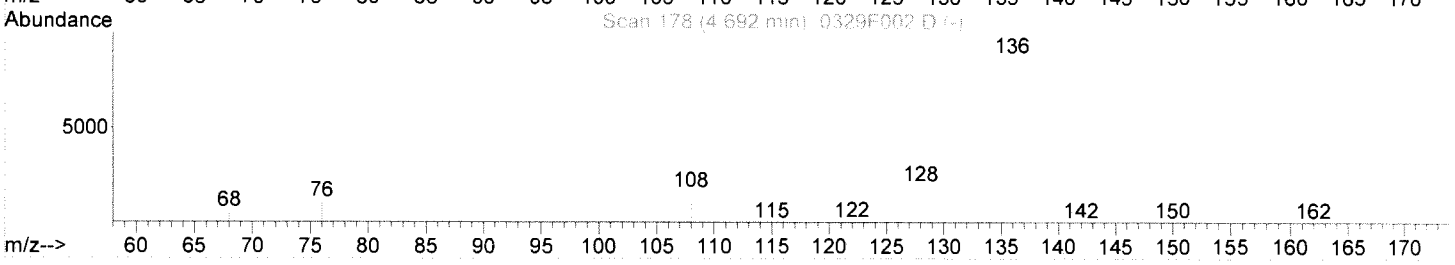
0329F020.D 101317PAH.M Fri Mar 30 09:47:26 2018

Data File : J:\MS14\DATA\032918\0329F020.D Vial: 20
Acq On : 29 Mar 2018 12:23 pm Operator: LWeiskopf
Sample : K1802579-002 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:47 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F020.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml m

response 42984

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.44
108.00	11.60	15.24
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

03/30/18

APR 02 2018

0329F020.D 101317PAH.M Fri Mar 30 09:47:37 2018

Exception Report

Data File: J:\MS14\DATA\032918\0329F021.D
Lab ID: K1802579-003
RunType: SMPL
Matrix: WATER

Date Acquired: 03/29/2018 12:47
Date Quantitated: 03/30/2018 09:50
Batch ID: KWG1801713
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: MAR 30 2018

Secondary Review: APR 02 2018

Printed: 03/30/2018 11:28:48
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\032918\0329F021.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 12:47	**Quant Date:**	03/30/2018 09:50	**Vial:**	21
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-003			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801713	**Prep Lot:**	KWG1801565	**Report Group:**	K1802579
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1668280	**Prep Date:**	03/22/2018		

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M	**Calibration ID:**	CAL15579
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\032918\0329F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\032918\0329F017.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.71	0.02	136	44145m	200.00	OK
2	Acenaphthene-d10	6.27	0.00	164	23340	200.00	OK
3	Phenanthrene-d10	7.50	0.00	188	47892	200.00	OK
4	Chrysene-d12	10.01	0.00	240	54816	200.00	OK
5	Perylene-d12	13.03	-0.01	264	60678	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.70	-0.01	0.00	176	139257	872.19	87	42-131	OK	
3	Fluoranthene-d10	8.49	0.00	0.00	212	294862	979.86	98	42-133	OK	
4	Terphenyl-d14	8.83	0.00	0.00	244	200982	869.58	87	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.72	0.01	0.00	128	89	0.3500	0.0015	J	
1	2-Methylnaphthalene				142	0d		0.0013	U	
2	Acenaphthylene				152	0d		0.0011	U	
2	Acenaphthene	6.29		0.00	154	654m	4.07	0.018	Ui	
2	Fluorene				166	0d		0.0011	U	
3	Phenanthrene				178	0		0.0011	U	
3	Anthracene				178	0		0.00082	U	
3	Fluoranthene				202	0d		0.00082	U	
4	Pyrene				202	0		0.0010	U	
4	Benz(a)anthracene	10.01	0.01	0.00	228	154	0.4700	0.0021	J	
4	Chrysene				228	0d		0.00076	U	
5	Benzo(b)fluoranthene				252	0		0.00083	U	
5	Benzo(k)fluoranthene				252	0		0.00094	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\032918\0329F021.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 12:47	**Quant Date:**	03/30/2018 09:50	**Vial:**	21
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-003			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0		0.0011	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.00089	U	
5	Dibenz(a,h)anthracene				278	0		0.0013	U	
5	Benzo(g,h,i)perylene				276	0		0.00086	U	

Prep Amount:	455 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\032918\0329F021.D Vial: 21
Acq On : 29 Mar 2018 12:47 pm Operator: LWeiskopf
Sample : K1802579-003 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 08:13:07 2018 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

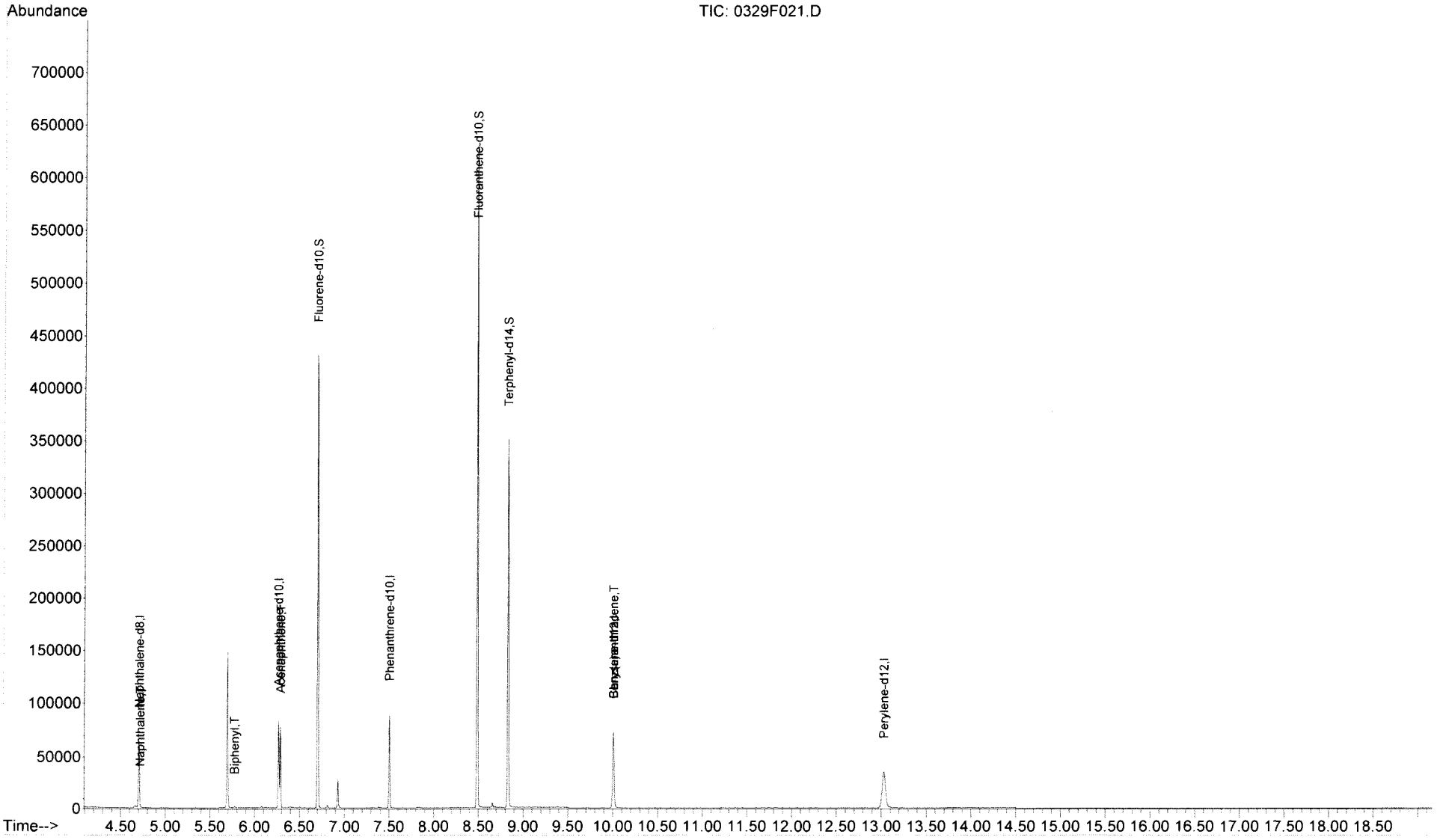
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.71	136	44145m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.27	164	23340	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	47892	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	54816	200.00	ng/ml	0.00
28) Perylene-d12	13.03	264	60678	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0d	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
13) Fluorene-d10	6.70	176	139257	872.19	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	87.22%		
22) Fluoranthene-d10	8.49	212	294862	979.86	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	97.99%		
25) Terphenyl-d14	8.83	244	200982	869.58	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	86.96%		
Target Compounds						Qvalue
2) Naphthalene	4.72	128	89	0.35	ng/ml	69
6) Biphenyl	5.78	154	436m	1.97	ng/ml	
10) Acenaphthene	6.29	154	654m	4.07	ng/ml	
26) Benz(a)anthracene	10.01	228	154	0.47	ng/ml	61

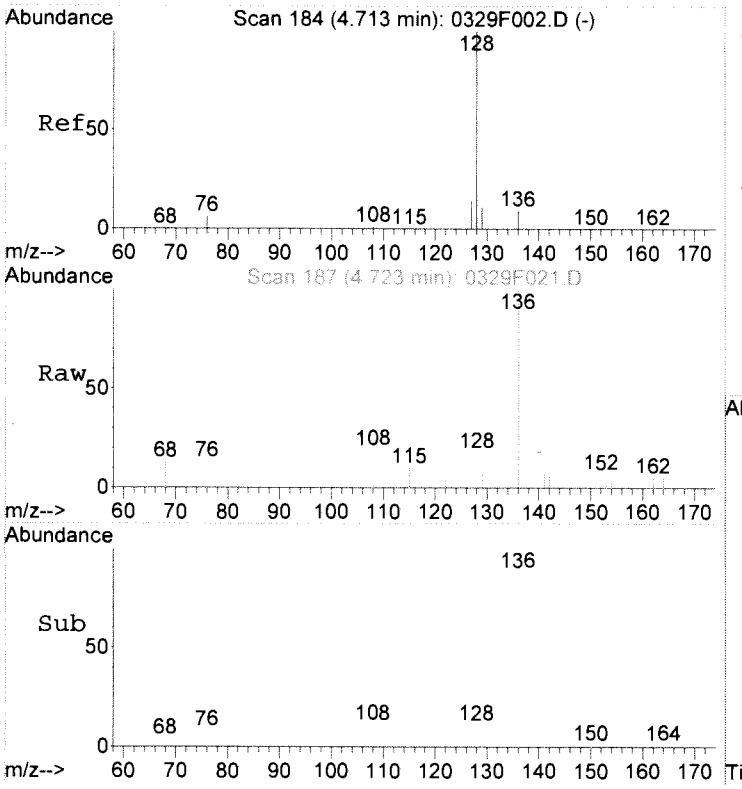
(#) = qualifier out of range (m) = manual integration
0329F021.D 101317PAH.M Fri Mar 30 09:54:10 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\032918\0329F021.D Vial: 21
Acq On : 29 Mar 2018 12:47 pm Operator: LWeiskopf
Sample : K1802579-003 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:50 2018 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration

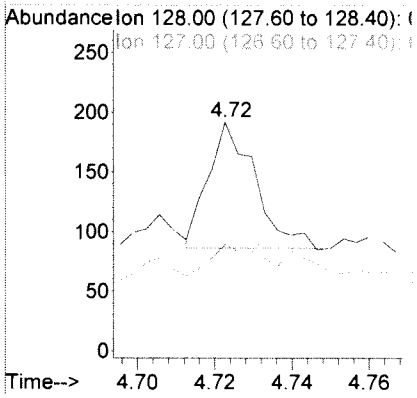


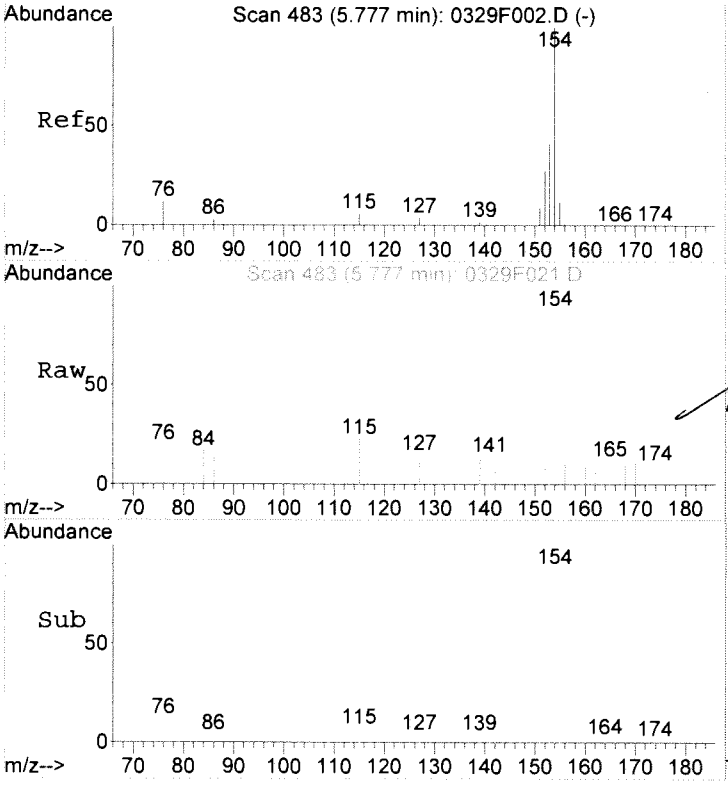


#2
Naphthalene
Concen: 0.35 ng/ml
RT: 4.72 min Scan# 187
Delta R.T. 0.00 min
Lab File: 0329F021.D
Acq: 29 Mar 2018 12:47 pm

Tgt Ion:128 Resp: 89

Ion	Ratio	Lower	Upper
128	100		
127	24.5	0.0	44.1
129	24.5	0.0	30.4

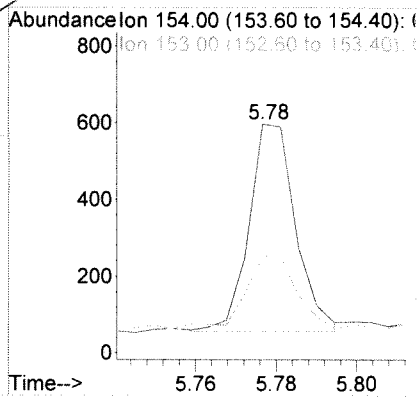


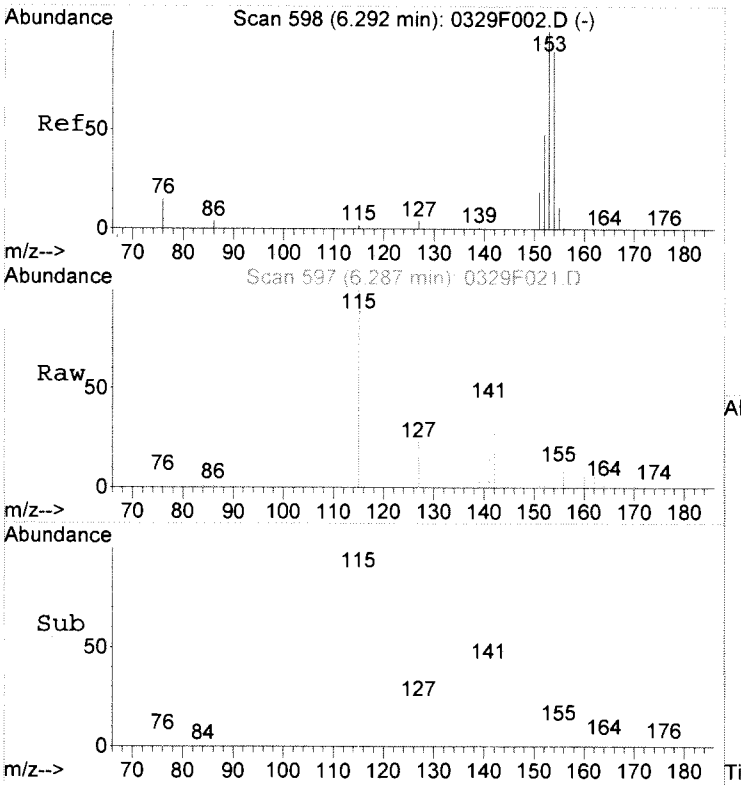


#6
Biphenyl
Concen: 1.97 ng/ml m
RT: 5.78 min Scan# 483
Delta R.T. -0.00 min
Lab File: 0329F021.D
Acq: 29 Mar 2018 12:47 pm

Tgt Ion:154 Resp: 436

Ion	Ratio	Lower	Upper
154	100		
153	42.4	11.3	71.3
152	35.7	8.5	48.5

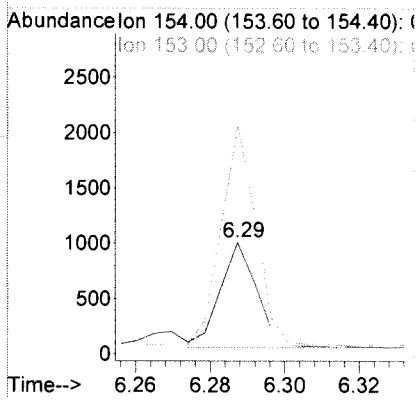


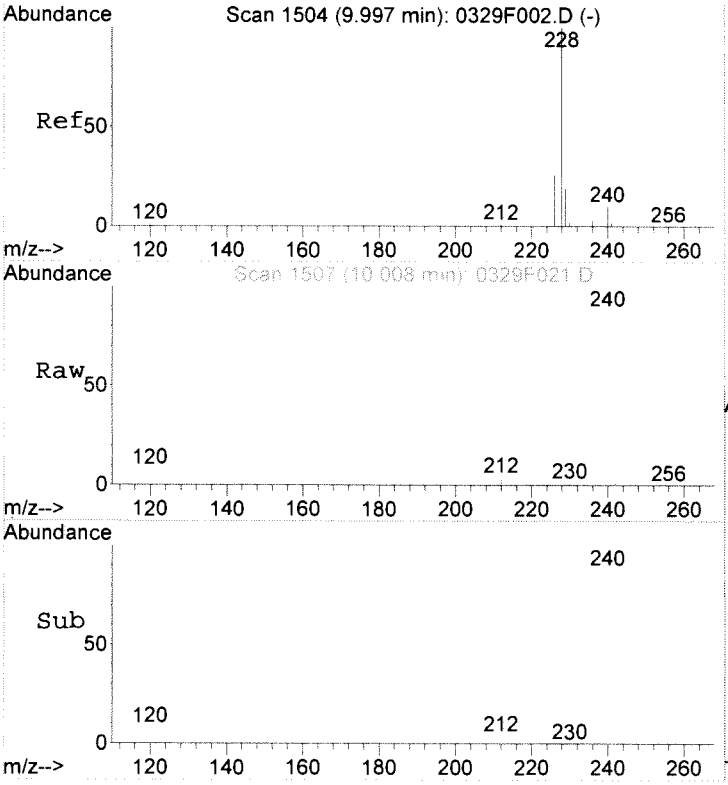


#10
Acenaphthene
Concen: 4.07 ng/ml m
RT: 6.29 min Scan# 597
Delta R.T. -0.01 min
Lab File: 0329F021.D
Acq: 29 Mar 2018 12:47 pm

Tgt Ion:154 Resp: 654

Ion	Ratio	Lower	Upper
154	100		
153	204.3	77.8	137.8#
152	125.2	20.8	80.8#

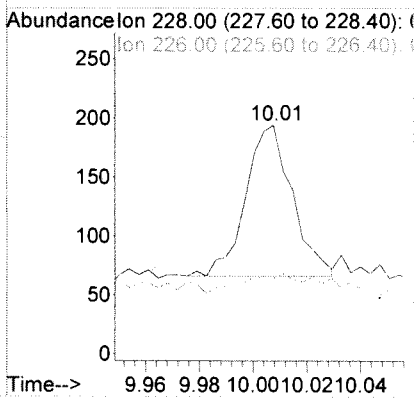




#26
Benz(a)anthracene
Concen: 0.47 ng/ml
RT: 10.01 min Scan# 1507
Delta R.T. 0.01 min
Lab File: 0329F021.D
Acq: 29 Mar 2018 12:47 pm

Tgt Ion:228 Resp: 154

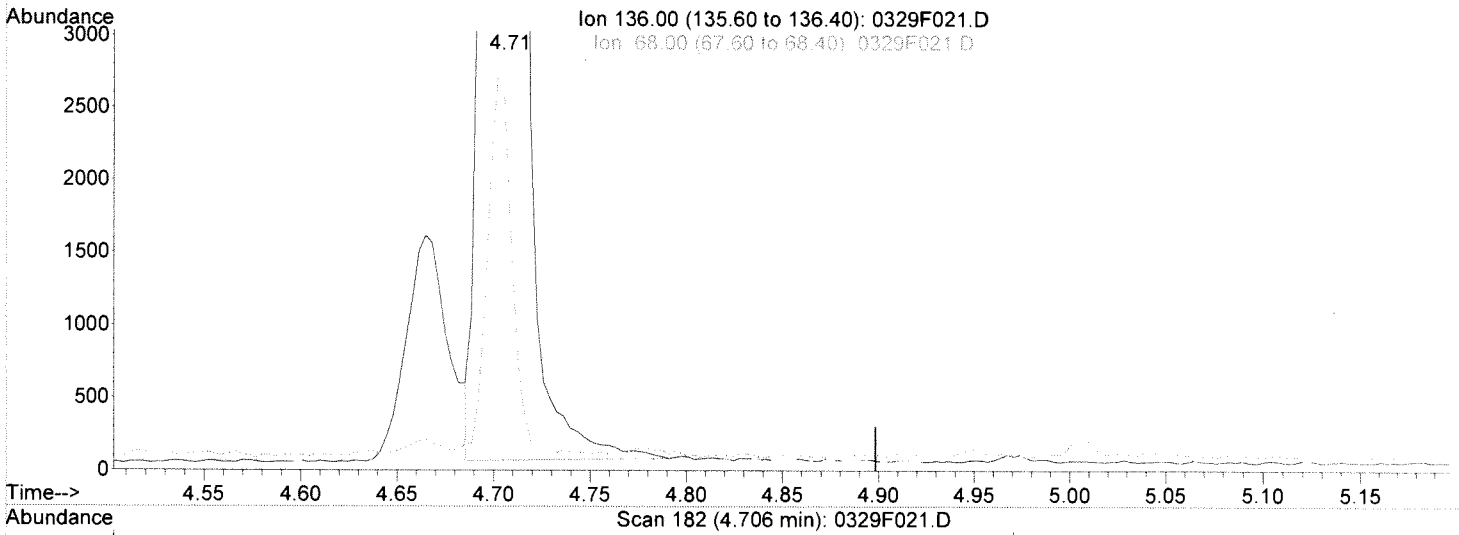
Ion	Ratio	Lower	Upper
228	100		
226	2.3	0.0	56.4
229	32.0	0.0	39.3

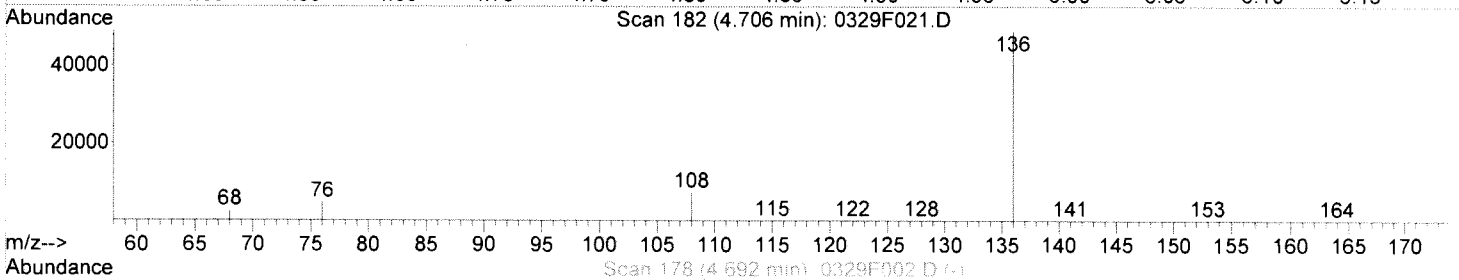


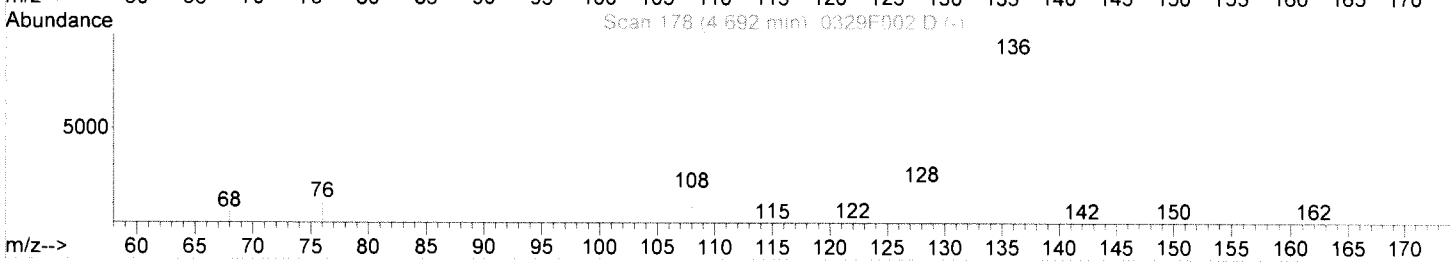
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F021.D Vial: 21
Acq On : 29 Mar 2018 12:47 pm Operator: LWeiskopf
Sample : K1802579-003 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 8:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F021.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml

response 41637

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.03
108.00	11.60	14.96
0.00	0.00	0.00

Manual Integration:

Before

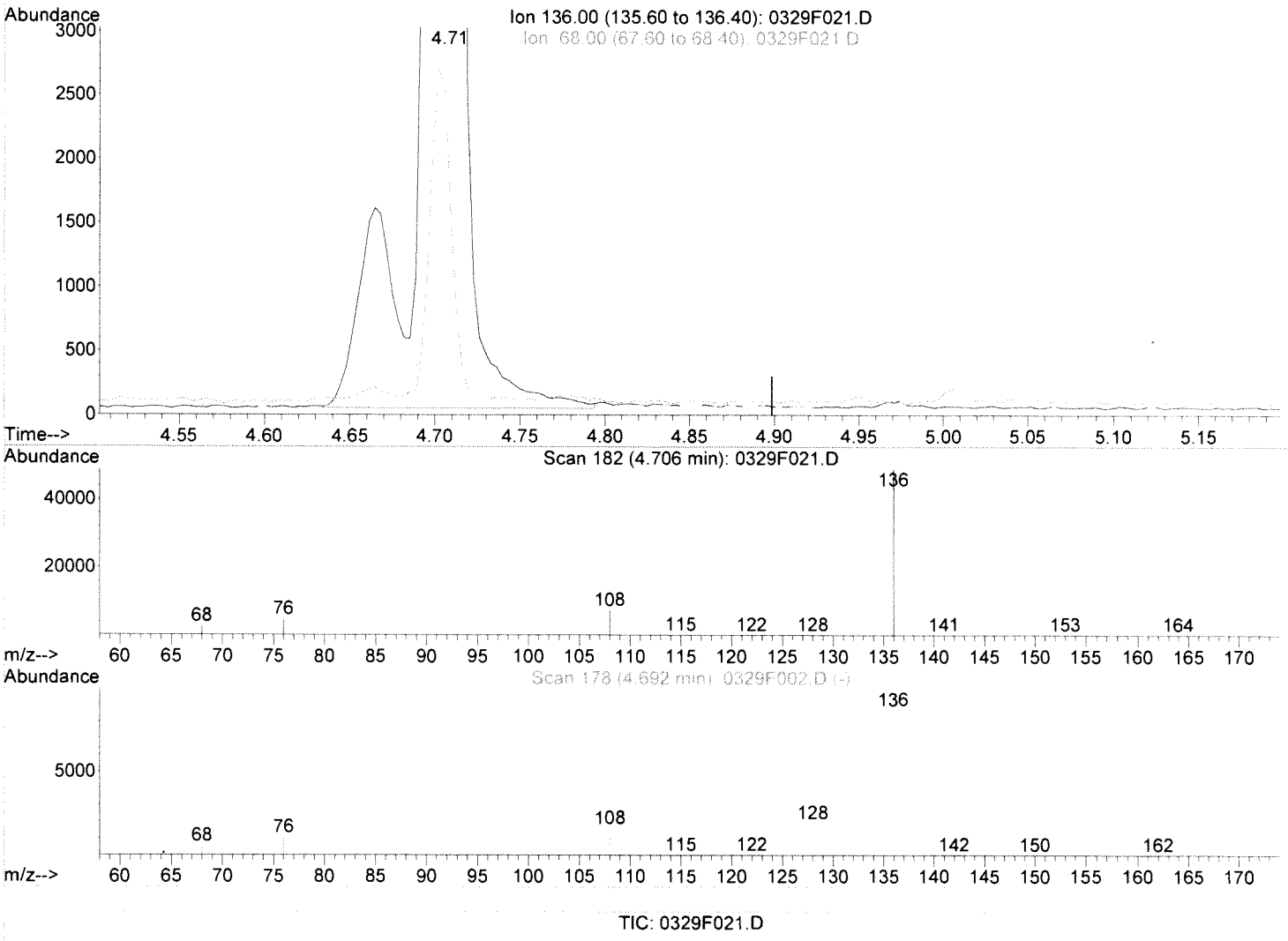
03/30/18

APR 02 2018

0329F021.D 101317PAH.M Fri Mar 30 09:48:42 2018

Data File : J:\MS14\DATA\032918\0329F021.D Vial: 21
Acq On : 29 Mar 2018 12:47 pm Operator: LWeiskopf
Sample : K1802579-003 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:48 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration



TIC: 0329F021.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml m

response 44145

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.25
108.00	11.60	15.07
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

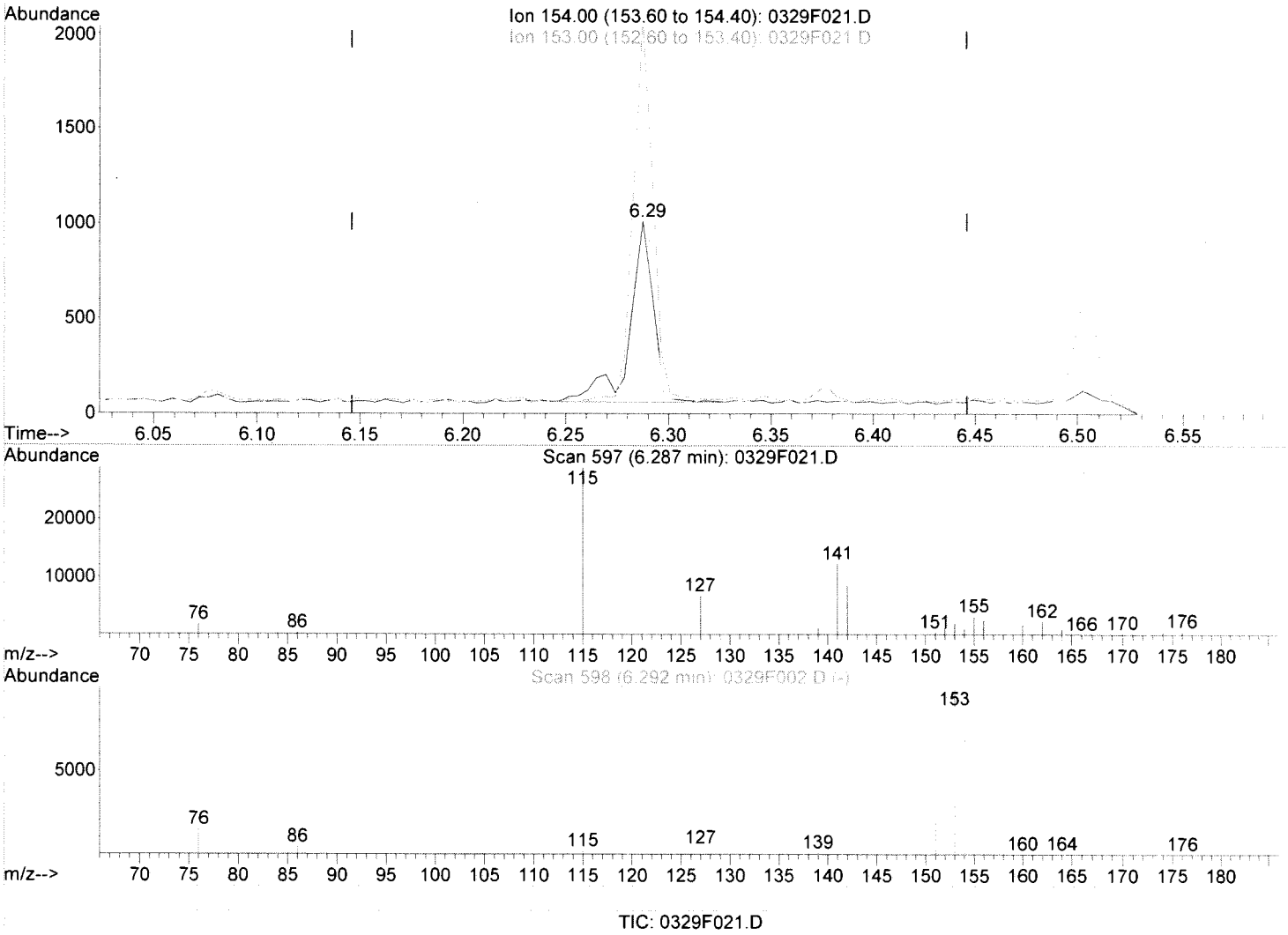
03/30/18

APR 02 2018

0329F021.D 101317PAH.M Fri Mar 30 09:48:50 2018

Data File : J:\MS14\DATA\032918\0329F021.D Vial: 21
Acq On : 29 Mar 2018 12:47 pm Operator: LWeiskopf
Sample : K1802579-003 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:49 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration



TIC: 0329F021.D

(10) Acenaphthene (T)

6.29min 4.81ng/ml

response 772

Ion	Exp%	Act%
154.00	100	100
153.00	107.80	210.07#
152.00	50.80	126.13#
0.00	0.00	0.00

Manual Integration:

Before

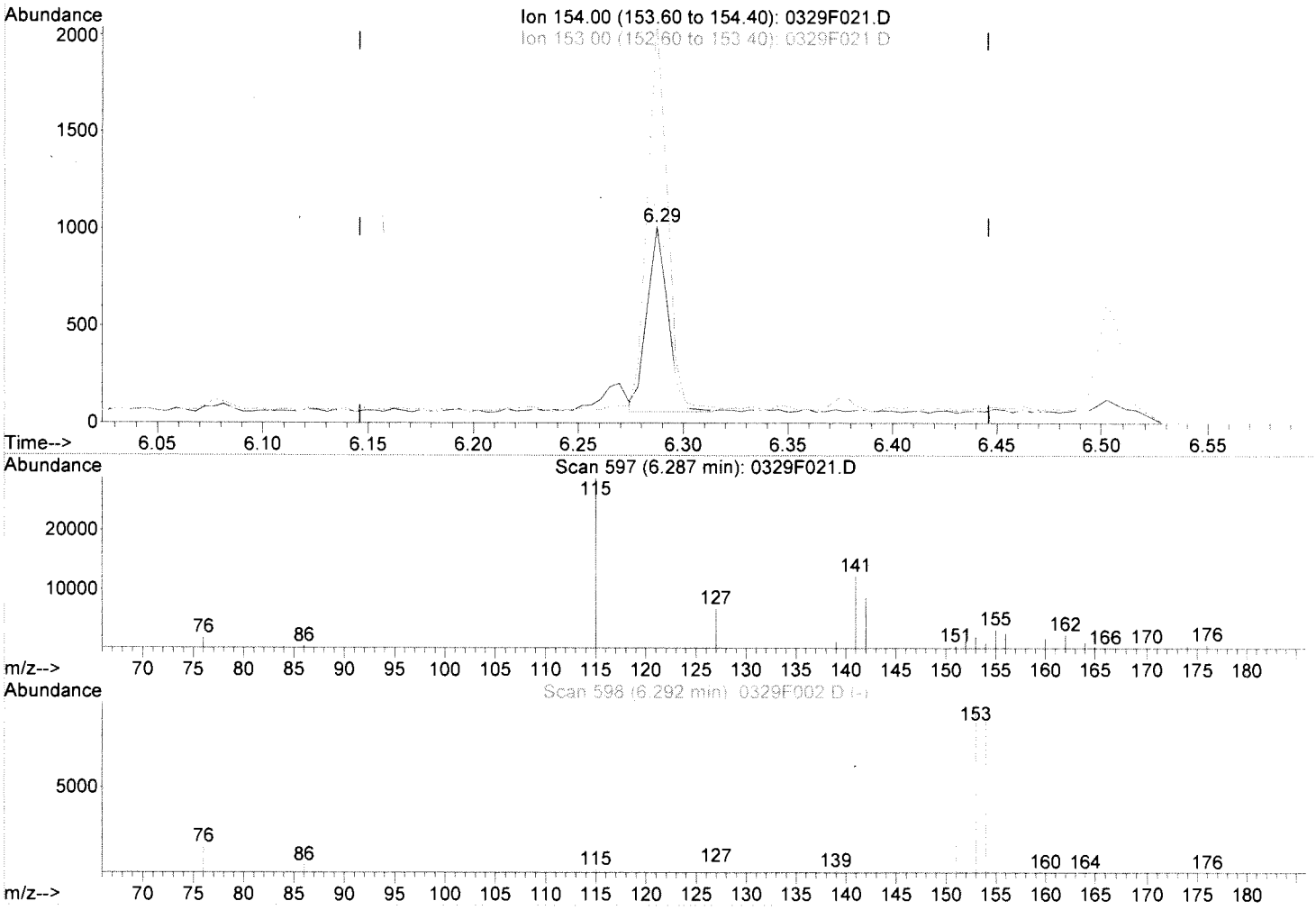
03/30/18

APR 02 2018

0329F021.D 101317PAH.M Fri Mar 30 09:49:40 2018

Data File : J:\MS14\DATA\032918\0329F021.D Vial: 21
Acq On : 29 Mar 2018 12:47 pm Operator: LWeiskopf
Sample : K1802579-003 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:49 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration



TIC: 0329F021.D

(10) Acenaphthene (T)

6.29min 4.07ng/ml m

response 654

Ion	Exp%	Act%
154.00	100	100
153.00	107.80	204.34#
152.00	50.80	125.17#
0.00	0.00	0.00

Manual Integration:

After

IC-Overintegrated

03/30/18

i matrix

APR 02 2018

0329F021.D 101317PAH.M Fri Mar 30 09:49:46 2018

Exception Report

Data File: J:\MS14\DATA\032918\0329F022.D
Lab ID: K1802579-004
RunType: SMPL
Matrix: WATER

Date Acquired: 03/29/2018 13:11
Date Quantitated: 03/30/2018 09:51
Batch ID: KWG1801713
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: MAR 30 2018

Secondary Review: APR 02 2018

Printed: 03/30/2018 11:28:51
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\032918\0329F022.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 13:11	**Quant Date:**	03/30/2018 09:51	**Vial:**	22
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-004			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801713	**Prep Lot:**	KWG1801565	**Report Group:**	K1802579
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1668281	**Prep Date:**	03/22/2018		

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M	**Calibration ID:**	CAL15579
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\032918\0329F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\032918\0329F017.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.71	0.02	136	43071**m**	200.00	OK
2	Acenaphthene-d10	6.26	-0.01	164	22540	200.00	OK
3	Phenanthrene-d10	7.50	0.00	188	47098	200.00	OK
4	Chrysene-d12	10.01	0.00	240	54105	200.00	OK
5	Perylene-d12	13.03	-0.01	264	59643	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.71	0.00	0.00	176	139007	901.52	90	42-131	OK	
3	Fluoranthene-d10	8.49	0.00	0.00	212	290743	982.46	98	42-133	OK	
4	Terphenyl-d14	8.83	0.00	0.00	244	184561	809.02	81	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.72	0.01	0.00	128	96	0.3900	0.0017	J	
1	2-Methylnaphthalene				142	0**d**		0.0013	U	
2	Acenaphthylene				152	0		0.0011	U	
2	Acenaphthene	6.29		0.00	154	212	1.37	0.0061	Ui	
2	Fluorene				166	0**d**		0.0011	U	
3	Phenanthrene				178	0**d**		0.0011	U	
3	Anthracene				178	0		0.00082	U	
3	Fluoranthene				202	0**d**		0.00082	U	
4	Pyrene				202	0		0.0010	U	
4	Benz(a)anthracene	10.01	0.01	0.00	228	186	0.5700	0.0025	J	
4	Chrysene				228	0**d**		0.00076	U	
5	Benzo(b)fluoranthene				252	0**d**		0.00083	U	
5	Benzo(k)fluoranthene				252	0**d**		0.00094	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\032918\0329F022.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 13:11	**Quant Date:**	03/30/2018 09:51	**Vial:**	22
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-004			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0		0.0011	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.00089	U	
5	Dibenz(a,h)anthracene				278	0		0.0013	U	
5	Benzo(g,h,i)perylene				276	0		0.00086	U	

Prep Amount:	455 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\032918\0329F022.D Vial: 22
Acq On : 29 Mar 2018 1:11 pm Operator: LWeiskopf
Sample : K1802579-004 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 08:13:07 2018 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

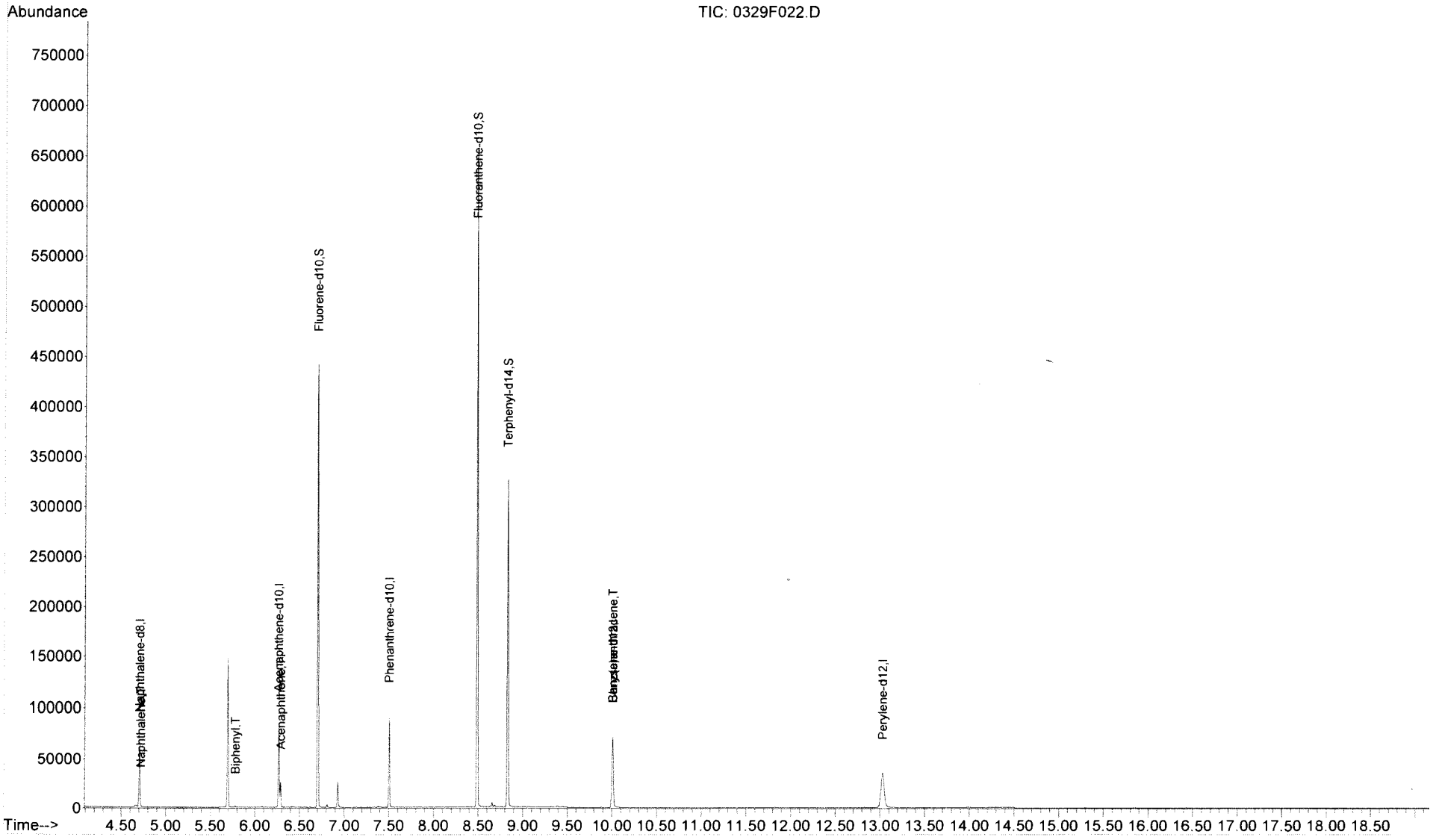
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.71	136	43071m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.26	164	22540	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	47098	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	54105	200.00	ng/ml	0.00
28) Perylene-d12	13.03	264	59643	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0d	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
13) Fluorene-d10	6.71	176	139007	901.52	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	90.15%		
22) Fluoranthene-d10	8.49	212	290743	982.46	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	98.25%		
25) Terphenyl-d14	8.83	244	184561	809.02	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	80.90%		
Target Compounds						Qvalue
2) Naphthalene	4.72	128	96	0.39	ng/ml	96
6) Biphenyl	5.78	154	444	2.05	ng/ml	96
10) Acenaphthene	6.29	154	212	1.37	ng/ml#	6
26) Benz(a)anthracene	10.01	228	186	0.57	ng/ml	83

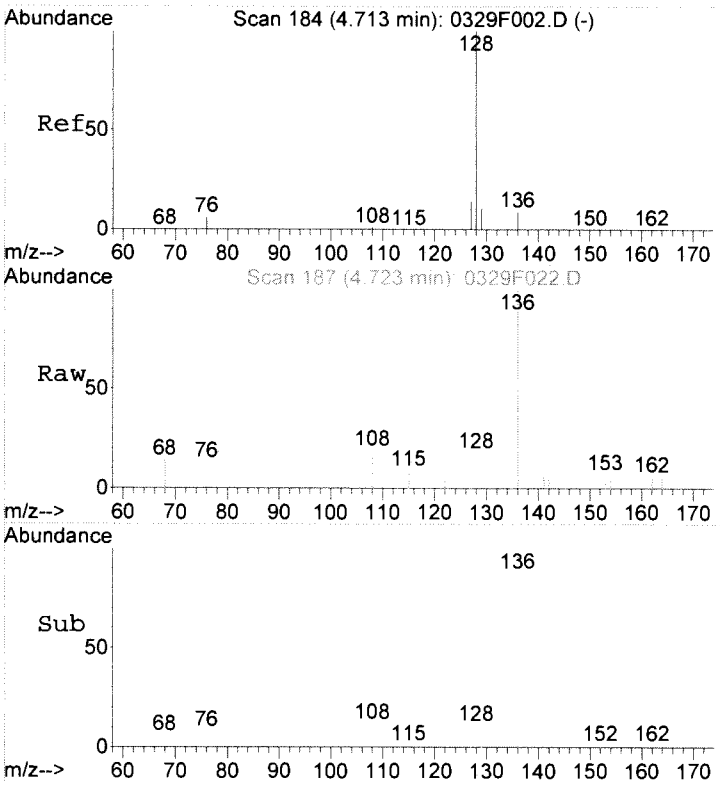
(#) = qualifier out of range (m) = manual integration
0329F022.D 101317PAH.M Fri Mar 30 09:54:13 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\032918\0329F022.D Vial: 22
Acq On : 29 Mar 2018 1:11 pm Operator: LWeiskopf
Sample : K1802579-004 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:51 2018 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration

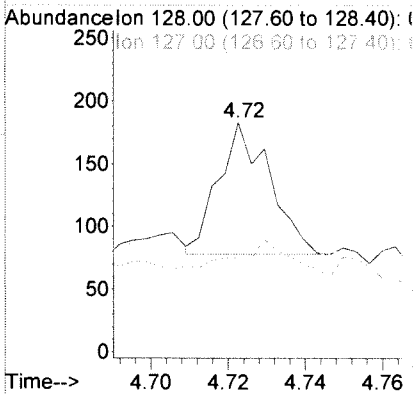


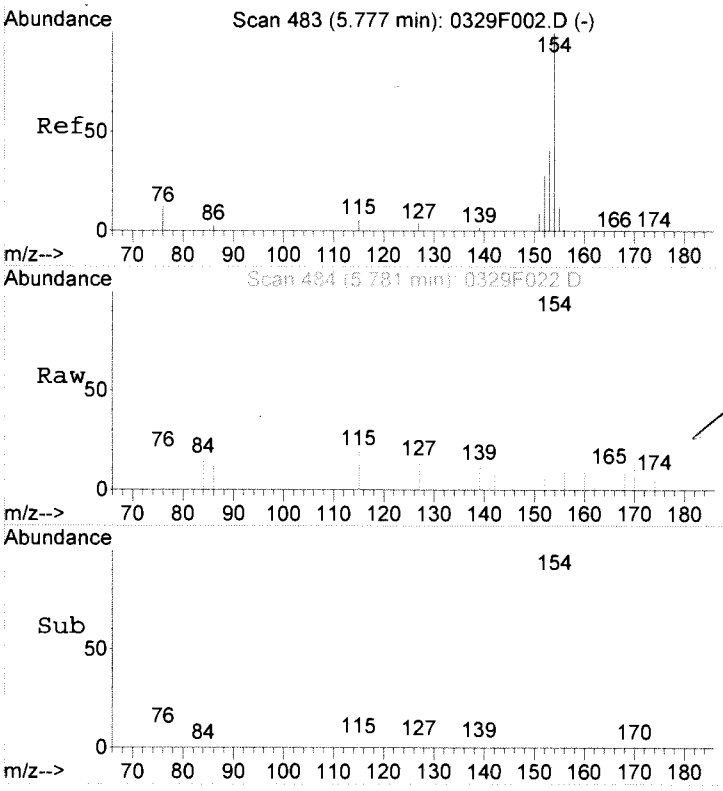


#2
Naphthalene
Concen: 0.39 ng/ml
RT: 4.72 min Scan# 187
Delta R.T. 0.00 min
Lab File: 0329F022.D
Acq: 29 Mar 2018 1:11 pm

Tgt Ion:128 Resp: 96

Ion	Ratio	Lower	Upper
128	100		
127	14.3	0.0	44.1
129	13.3	0.0	30.4

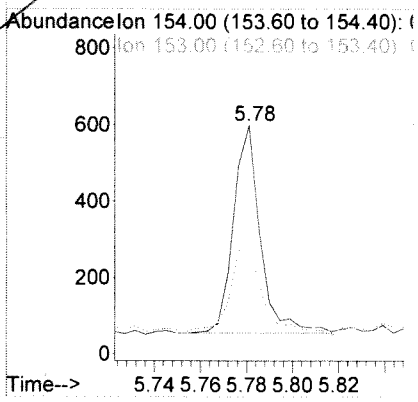


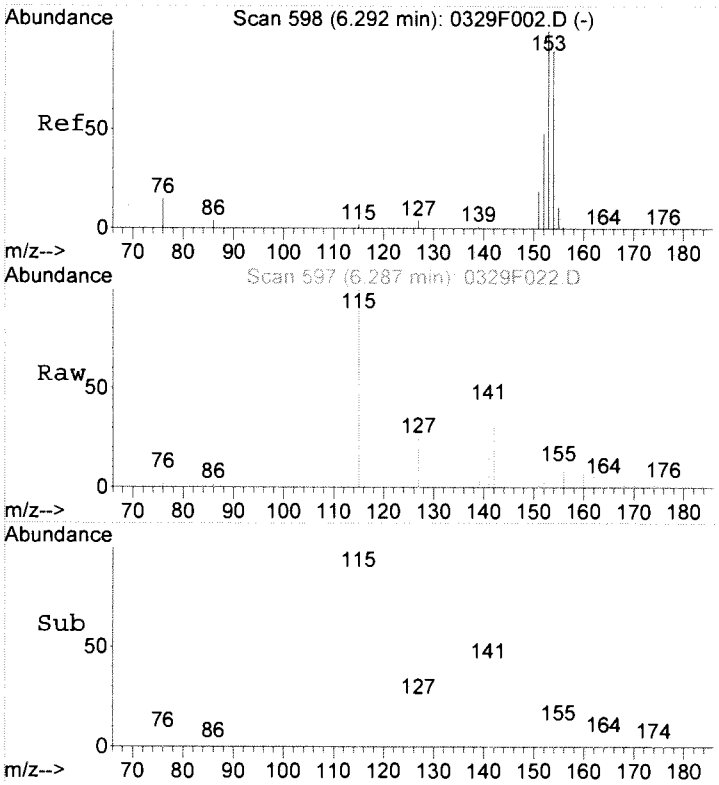


#6
Biphenyl
Concen: 2.05 ng/ml
RT: 5.78 min Scan# 484
Delta R.T. 0.00 min
Lab File: 0329F022.D
Acq: 29 Mar 2018 1:11 pm

Tgt Ion:154 Resp: 444

Ion	Ratio	Lower	Upper
154	100		
153	42.8	11.3	71.3
152	24.8	8.5	48.5



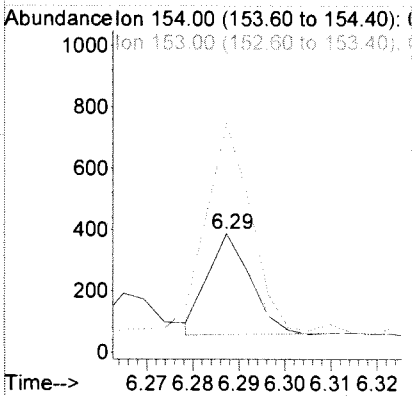


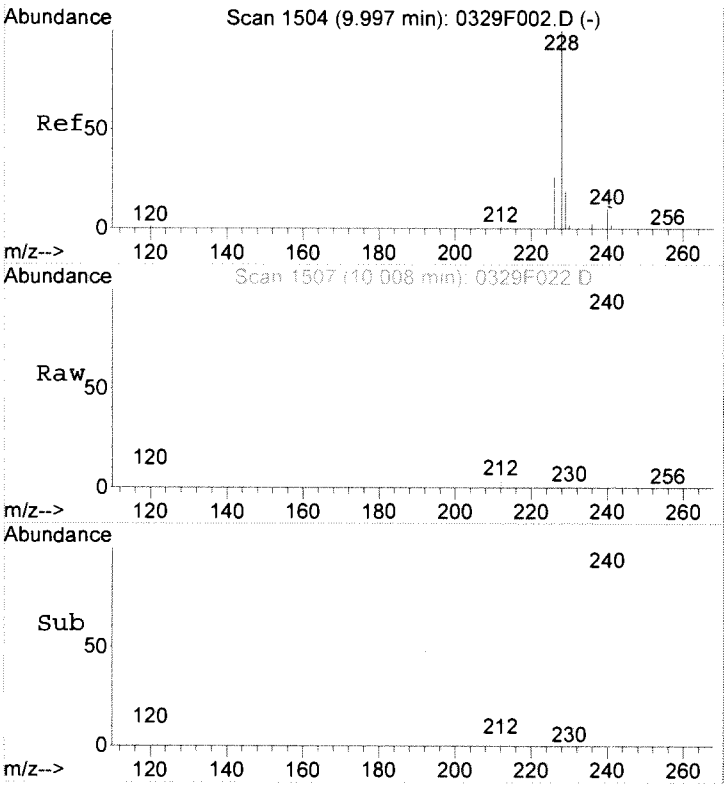
#10
Acenaphthene
Concen: 1.37 ng/ml
RT: 6.29 min Scan# 597
Delta R.T. -0.01 min
Lab File: 0329F022.D
Acq: 29 Mar 2018 1:11 pm

(-matrix

Tgt Ion:154 Resp: 212

Ion	Ratio	Lower	Upper
154	100		
153	202.2	77.8	137.8#
152	122.2	20.8	80.8#

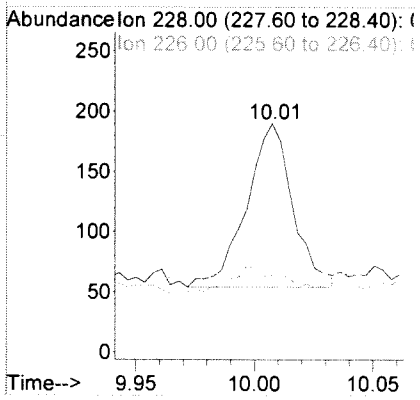




#26
Benz(a)anthracene
Concen: 0.57 ng/ml
RT: 10.01 min Scan# 1507
Delta R.T. 0.01 min
Lab File: 0329F022.D
Acq: 29 Mar 2018 1:11 pm

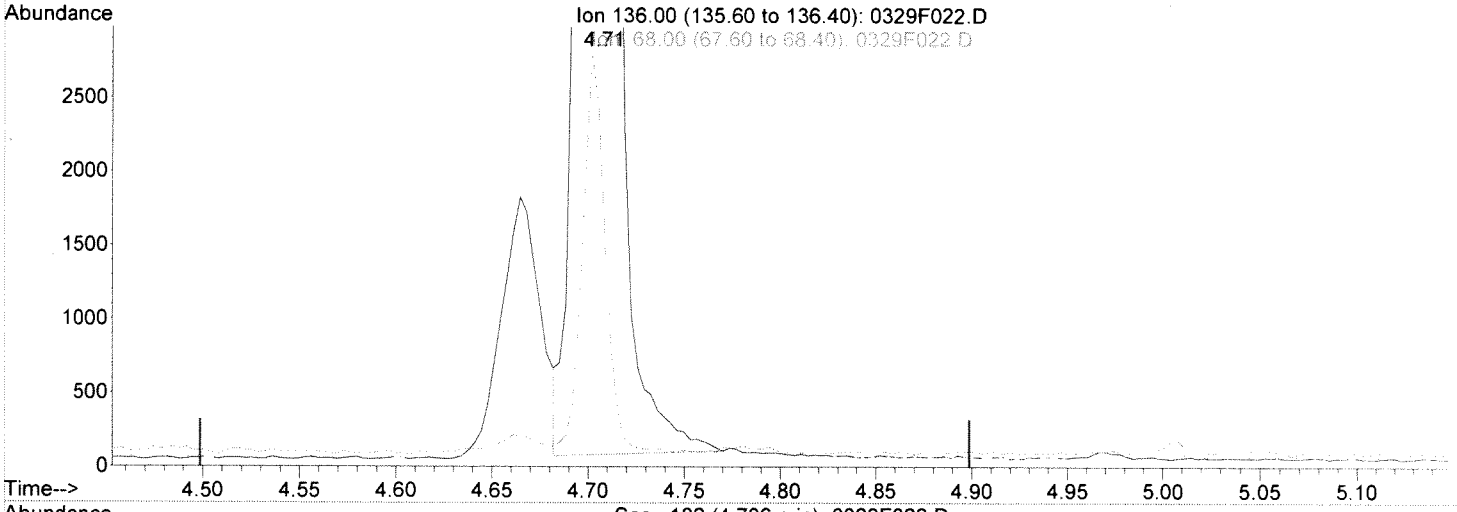
Tgt Ion:228 Resp: 186

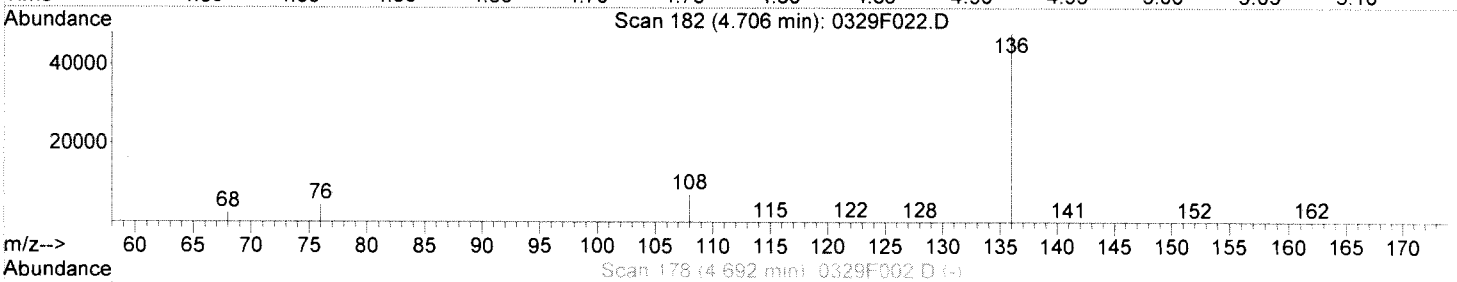
Ion	Ratio	Lower	Upper
228	100		
226	11.8	0.0	56.4
229	19.9	0.0	39.3

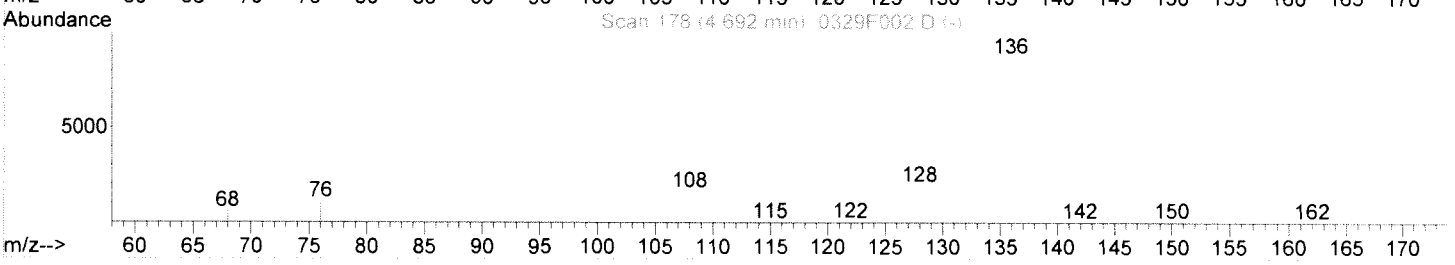


Data File : J:\MS14\DATA\032918\0329F022.D Vial: 22
Acq On : 29 Mar 2018 1:11 pm Operator: LWeiskopf
Sample : K1802579-004 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 8:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F022.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml

response 40246

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	4.84
108.00	11.60	14.67
0.00	0.00	0.00

Manual Integration:

Before

03/30/18

APR 02 2018

0329F022.D 101317PAH.M Fri Mar 30 09:50:28 2018

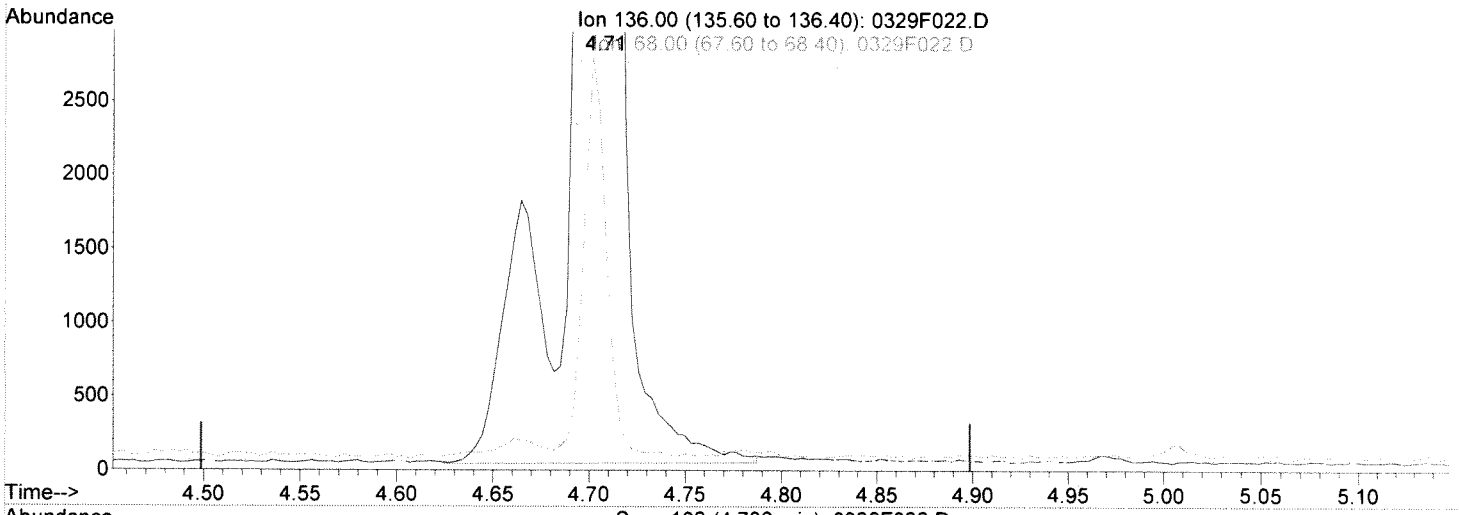
Quantitation Report (Qedit)

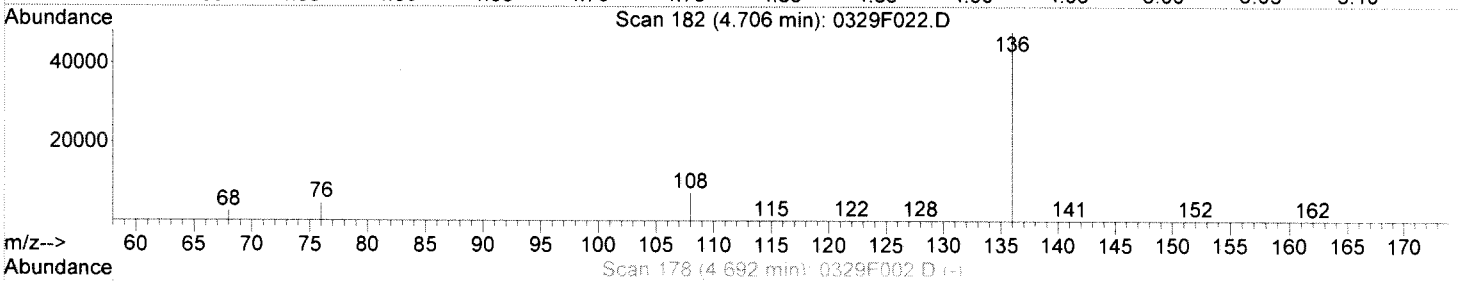
Data File : J:\MS14\DATA\032918\0329F022.D
Acq On : 29 Mar 2018 1:11 pm
Sample : K1802579-004
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:50 2018

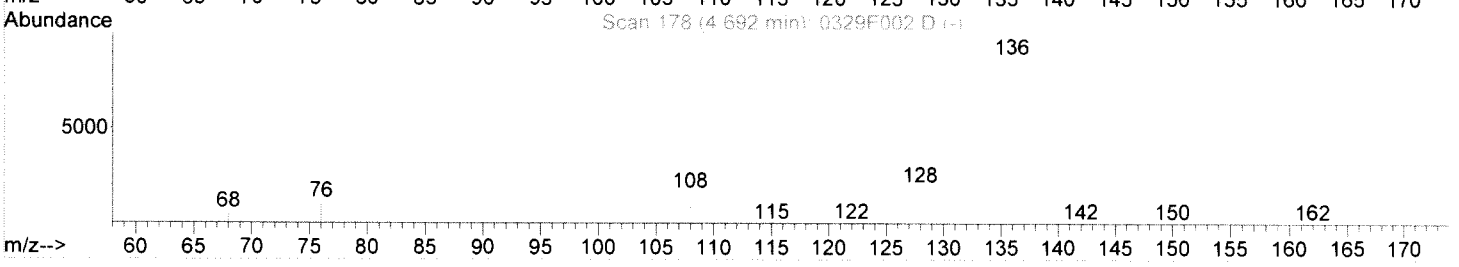
Vial: 22
Operator: LWeiskopf
Inst : MS14
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F022.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml m

response 43071

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.10
108.00	11.60	14.82
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

03/30/18

APR 02 2018

0329F022.D 101317PAH.M Fri Mar 30 09:50:33 2018

Exception Report

Data File: J:\MS14\DATA\032918\0329F023.D
Lab ID: K1802579-005
RunType: SMPL
Matrix: WATER

Date Acquired: 03/29/2018 13:35
Date Quantitated: 03/30/2018 09:53
Batch ID: KWG1801713
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: MAR 30 2018

Secondary Review: APR 02 2018

Printed: 03/30/2018 11:28:54
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\032918\0329F023.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 13:35	**Quant Date:**	03/30/2018 09:53	**Vial:**	23
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-005			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801713	**Prep Lot:**	KWG1801565	**Report Group:**	K1802579
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1668282	**Prep Date:**	03/22/2018		

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M	**Calibration ID:**	CAL15579
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\032918\0329F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\032918\0329F017.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.71	0.02	136	43656**m**	200.00	OK
2	Acenaphthene-d10	6.26	-0.01	164	22325	200.00	OK
3	Phenanthrene-d10	7.50	0.00	188	47147	200.00	OK
4	Chrysene-d12	10.01	0.00	240	54742	200.00	OK
5	Perylene-d12	13.03	-0.01	264	59892	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.71	0.00	0.00	176	142357	932.14	93	42-131	OK	
3	Fluoranthene-d10	8.49	0.00	0.00	212	296686	1,002	100	42-133	OK	
4	Terphenyl-d14	8.83	0.00	0.00	244	180032	779.99	78	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.73	0.02	0.00	128	333	1.34	0.0059	J	
1	2-Methylnaphthalene	5.37	0.01	0.00	142	204**m**	1.18	0.0052	J	
2	Acenaphthylene				152	0**d**		0.0011	U	
2	Acenaphthene	6.29		0.00	154	51	0.3300	0.0015	J	
2	Fluorene	6.73		0.00	166	78	0.4100	0.0018	J	
3	Phenanthrene	7.52		0.00	178	292**m**	1.00	0.0044	J	
3	Anthracene				178	0**d**		0.00082	U	
3	Fluoranthene	8.50	-0.01	0.00	202	82**m**	0.2400	0.0011	J	
4	Pyrene	8.69		0.00	202	112	0.3400	0.0015	J	
4	Benz(a)anthracene	10.01	0.01	0.00	228	158	0.4800	0.0021	J	
4	Chrysene				228	0**d**		0.00076	U	
5	Benzo(b)fluoranthene				252	0**d**		0.00083	U	
5	Benzo(k)fluoranthene				252	0**d**		0.00094	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\032918\0329F023.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 13:35	**Quant Date:**	03/30/2018 09:53	**Vial:**	23
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-005			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0		0.0011	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.00089	U	
5	Dibenz(a,h)anthracene				278	0		0.0013	U	
5	Benzo(g,h,i)perylene				276	0		0.00086	U	

Prep Amount:	455 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Metbod Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\032918\0329F023.D Vial: 23
Acq On : 29 Mar 2018 1:35 pm Operator: LWeiskopf
Sample : K1802579-005 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 08:13:08 2018 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

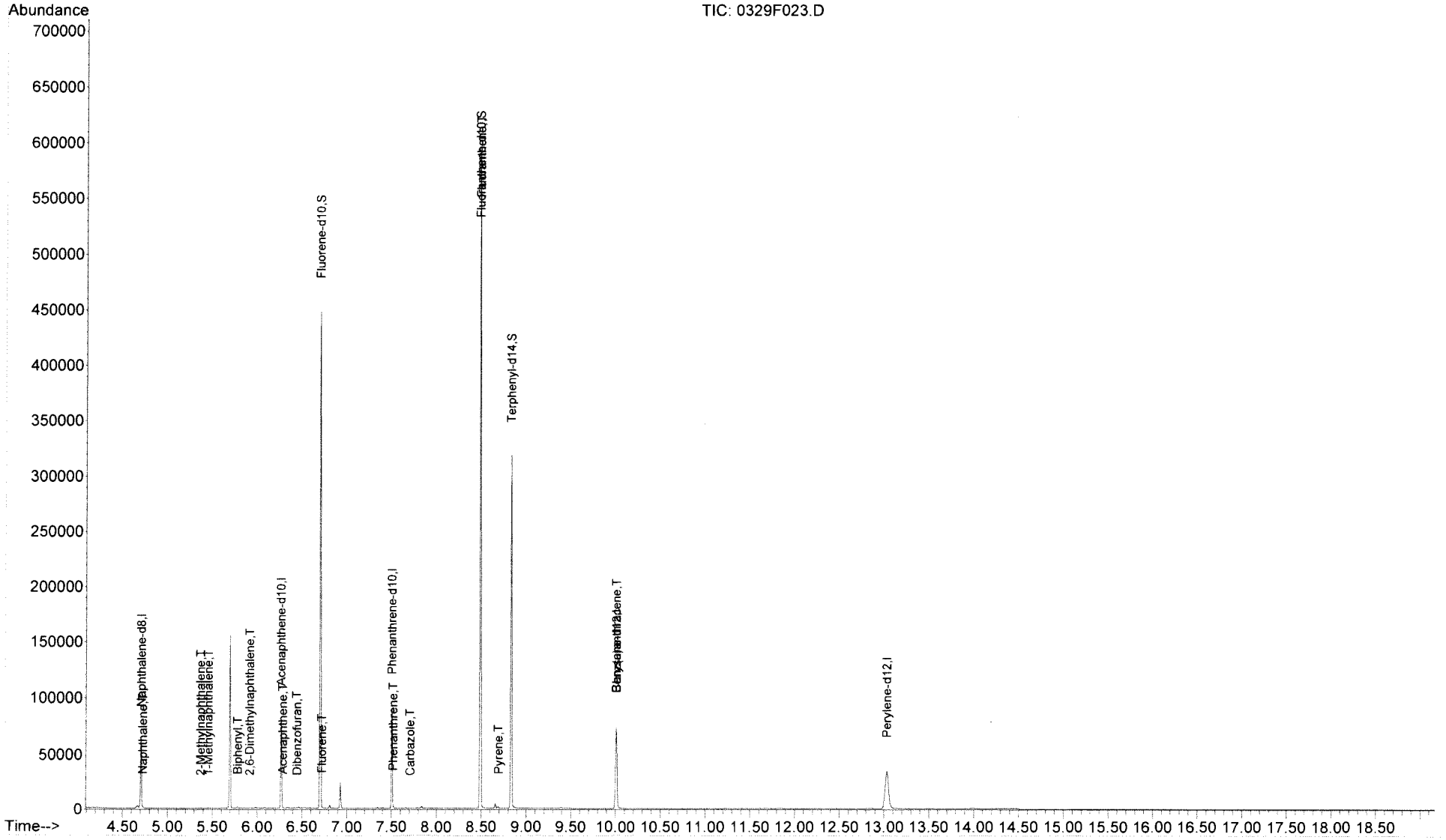
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.71	136	43656m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.26	164	22325	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	47147	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	54742	200.00	ng/ml	0.00
28) Perylene-d12	13.03	264	59892	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0d	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
13) Fluorene-d10	6.71	176	142357	932.14	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	93.21%		
22) Fluoranthene-d10	8.49	212	296686	1001.50	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	100.15%		
25) Terphenyl-d14	8.83	244	180032	779.99	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	78.00%		
Target Compounds						Qvalue
2) Naphthalene	4.73	128	333	1.34	ng/ml	97
4) 2-Methylnaphthalene	5.37	142	204m	1.18	ng/ml	
5) 1-Methylnaphthalene	5.45	142	139	0.91	ng/ml	92
6) Biphenyl	5.78	154	522	2.38	ng/ml	91
7) 2,6-Dimethylnaphthalene	5.92	156	114	0.73	ng/ml	90
10) Acenaphthene	6.29	154	51	0.33	ng/ml	87
11) Dibenzofuran	6.44	168	111	0.46	ng/ml	79
14) Fluorene	6.73	166	78	0.41	ng/ml	84
17) Phenanthrene	7.52	178	292m	1.00	ng/ml	
19) Carbazole	7.70	167	71	0.27	ng/ml	79
21) Fluoranthene	8.50	202	82m	0.24	ng/ml	
24) Pyrene	8.69	202	112	0.34	ng/ml#	1
26) Benz(a)anthracene	10.01	228	158	0.48	ng/ml	64

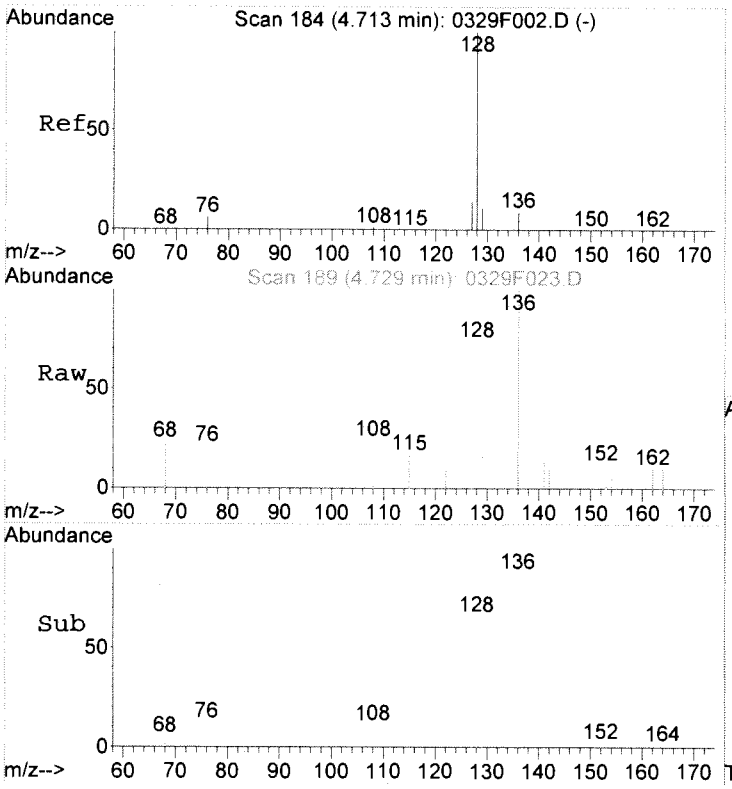
(#) = qualifier out of range (m) = manual integration
0329F023.D 101317PAH.M Fri Mar 30 09:54:15 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\032918\0329F023.D Vial: 23
Acq On : 29 Mar 2018 1:35 pm Operator: LWeiskopf
Sample : K1802579-005 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:53 2018 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration

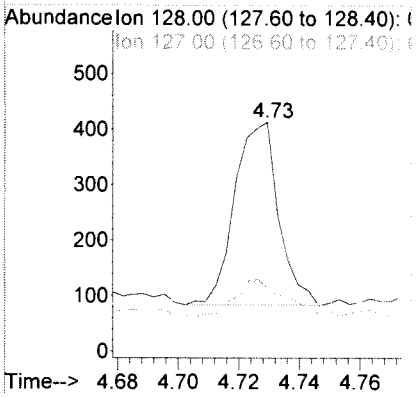


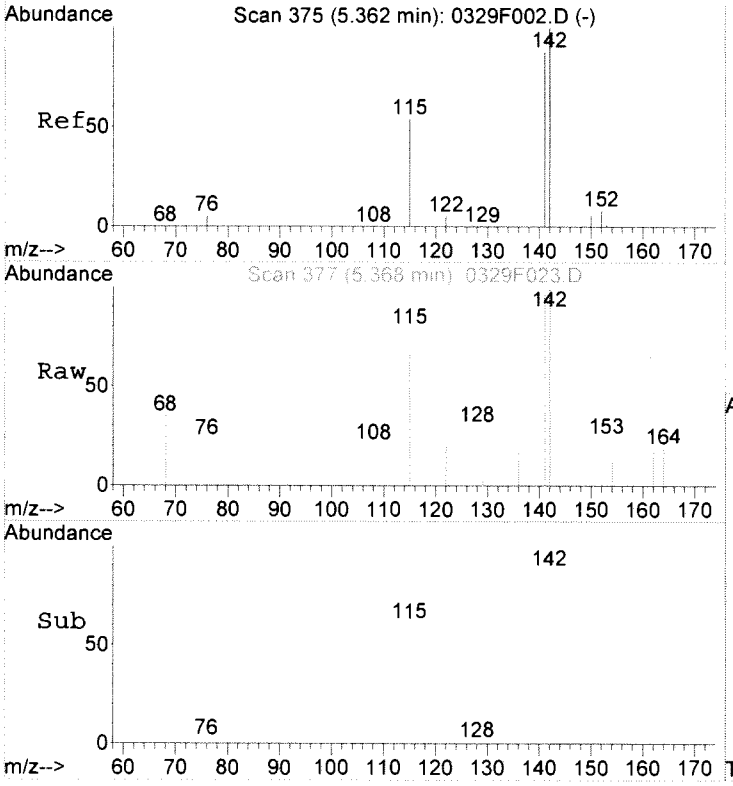


#2
Naphthalene
Concen: 1.34 ng/ml
RT: 4.73 min Scan# 189
Delta R.T. 0.01 min
Lab File: 0329F023.D
Acq: 29 Mar 2018 1:35 pm

Tgt Ion:128 Resp: 333

Ion	Ratio	Lower	Upper
128	100		
127	14.8	0.0	44.1
129	9.1	0.0	30.4

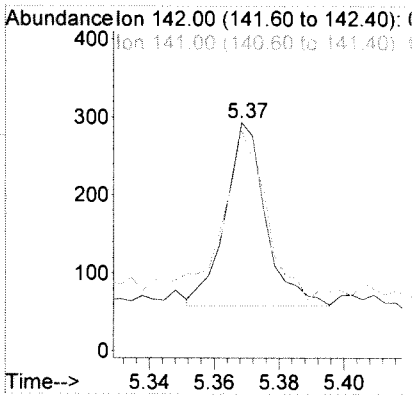


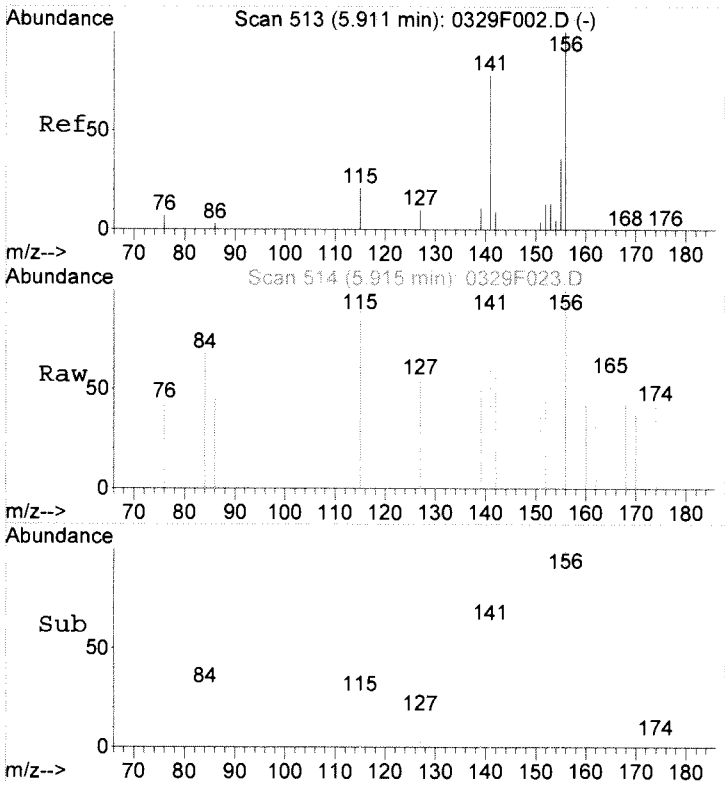


#4
2-Methylnaphthalene
Concen: 1.18 ng/ml m
RT: 5.37 min Scan# 377
Delta R.T. 0.00 min
Lab File: 0329F023.D
Acq: 29 Mar 2018 1:35 pm

Tgt Ion:142 Resp: 204

Ion	Ratio	Lower	Upper
142	100		
141	96.9	51.7	111.7
115	78.8	2.0	42.0#

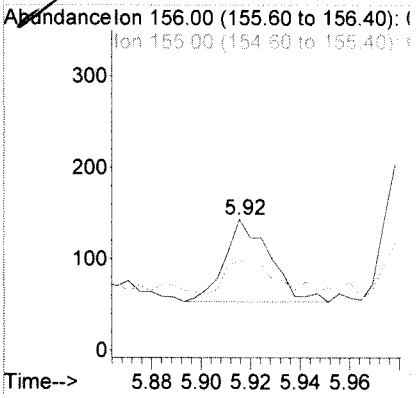


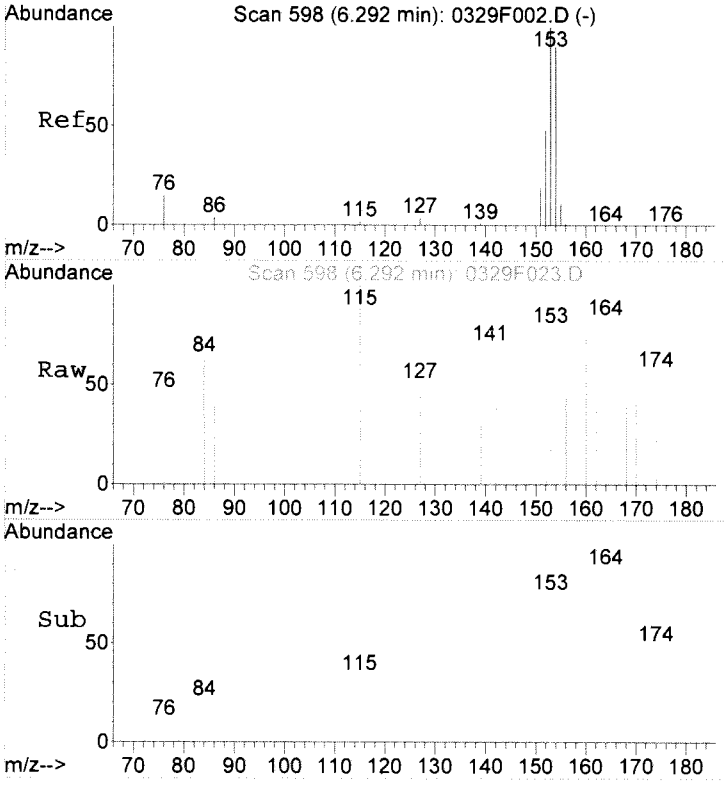


#7
2,6-Dimethylnaphthalene
Concen: 0.73 ng/ml
RT: 5.92 min Scan# 514
Delta R.T. 0.00 min
Lab File: 0329F023.D
Acq: 29 Mar 2018 1:35 pm

Tgt Ion:156 Resp: 114

Ion	Ratio	Lower	Upper
156	100		
155	35.6	8.0	68.0
141	65.6	56.4	96.4

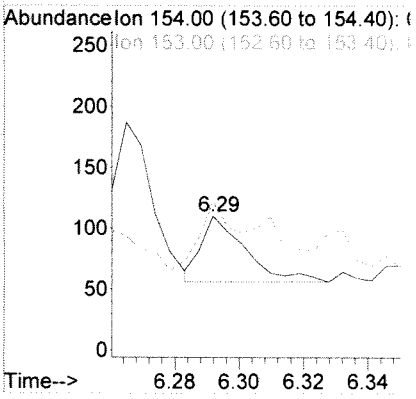


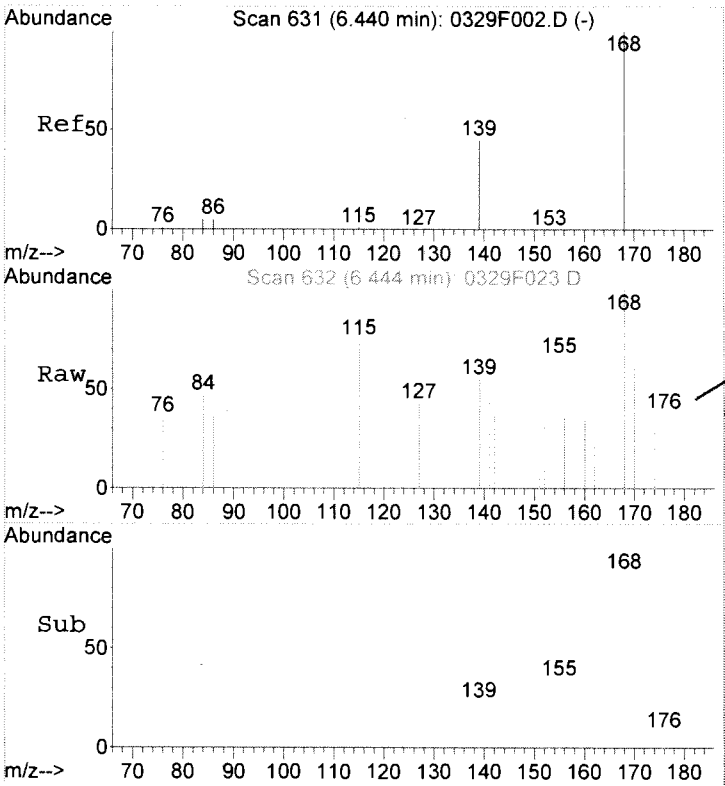


#10
Acenaphthene
Concen: 0.33 ng/ml
RT: 6.29 min Scan# 598
Delta R.T. -0.00 min
Lab File: 0329F023.D
Acq: 29 Mar 2018 1:35 pm

Tgt Ion:154 Resp: 51

Ion	Ratio	Lower	Upper
154	100		
153	90.7	77.8	137.8
152	55.6	20.8	80.8

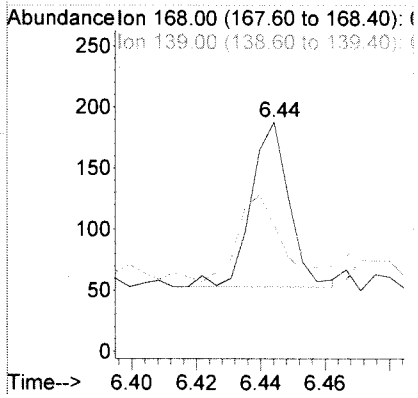


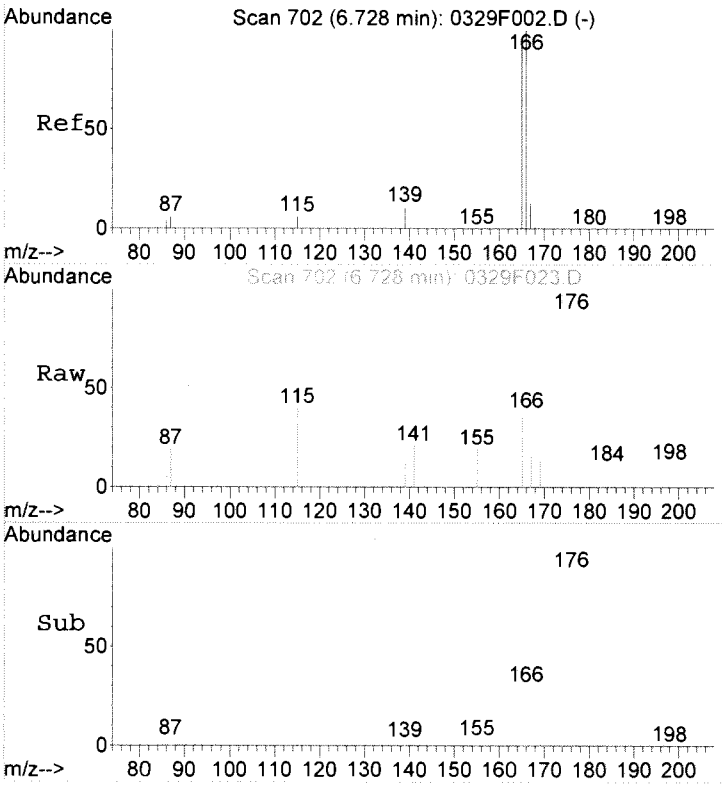


#11
Dibenzofuran
Concen: 0.46 ng/ml
RT: 6.44 min Scan# 632
Delta R.T. 0.00 min
Lab File: 0329F023.D
Acq: 29 Mar 2018 1:35 pm

Tgt Ion:168 Resp: 111

Ion	Ratio	Lower	Upper
168	100		
139	31.1	15.4	75.4
84	0.0	0.0	24.7

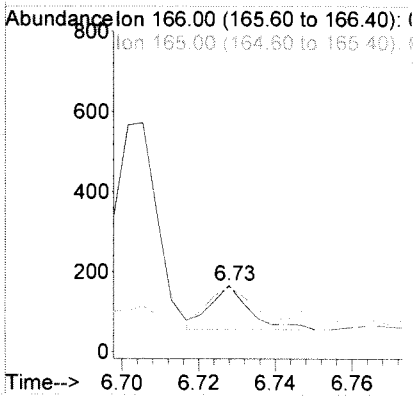


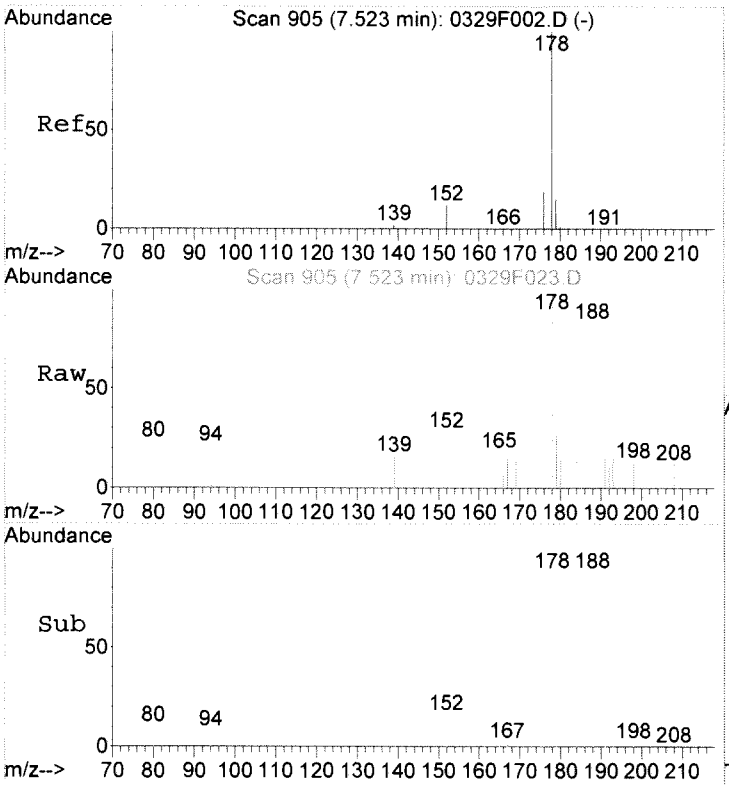


#14
Fluorene
Concen: 0.41 ng/ml
RT: 6.73 min Scan# 702
Delta R.T. 0.00 min
Lab File: 0329F023.D
Acq: 29 Mar 2018 1:35 pm

Tgt Ion:166 Resp: 78

Ion	Ratio	Lower	Upper
166	100		
165	78.4	65.6	125.6
167	9.9	0.0	33.0

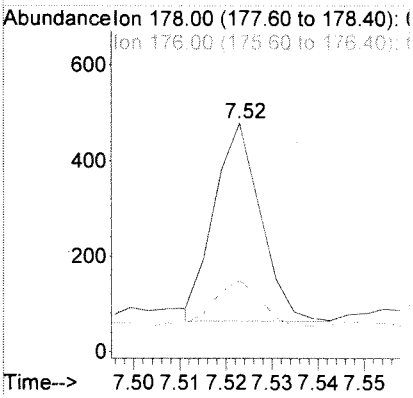


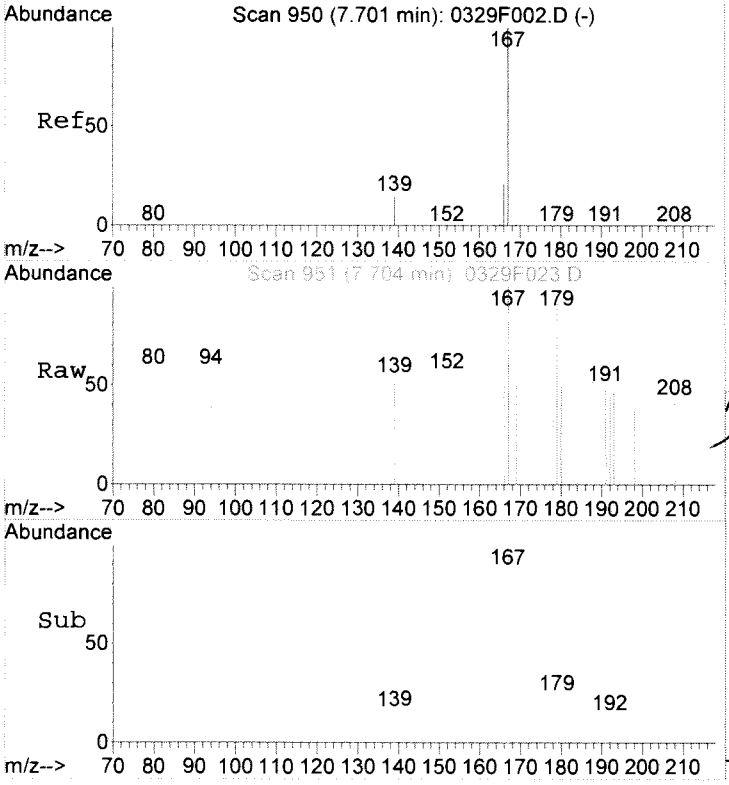


#17
Phenanthrene
Concen: 1.00 ng/ml m
RT: 7.52 min Scan# 905
Delta R.T. 0.00 min
Lab File: 0329F023.D
Acq: 29 Mar 2018 1:35 pm

Tgt Ion:178 Resp: 292

Ion	Ratio	Lower	Upper
178	100		
176	31.1	0.0	49.6
179	25.9	0.0	35.1

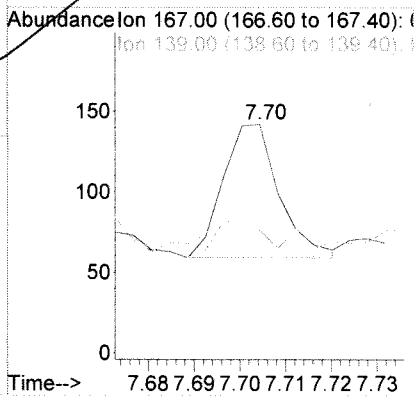


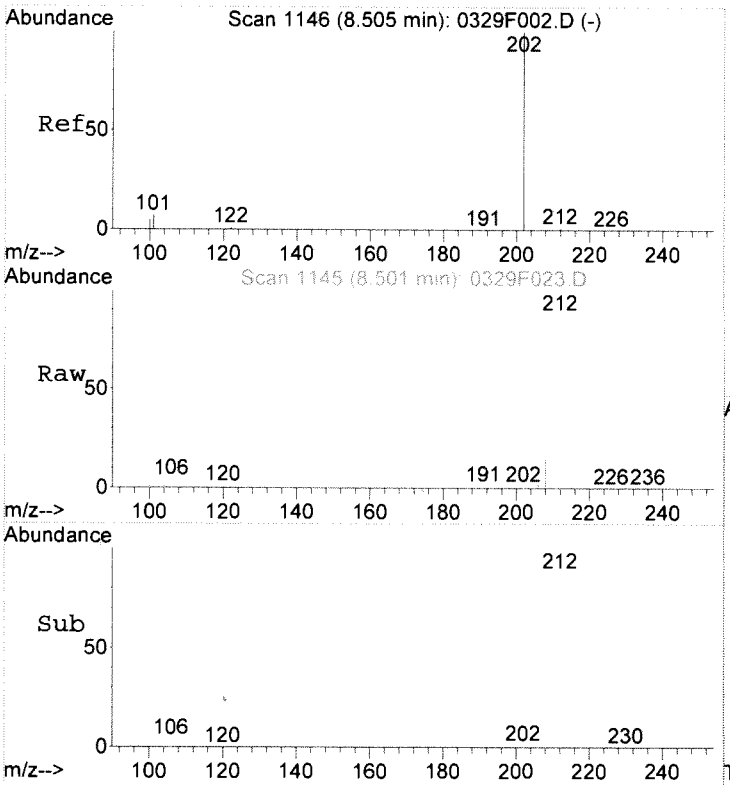


#19
Carbazole
Concen: 0.27 ng/ml
RT: 7.70 min Scan# 951
Delta R.T. 0.00 min
Lab File: 0329F023.D
Acq: 29 Mar 2018 1:35 pm

Tgt Ion:167 Resp: 71

Ion	Ratio	Lower	Upper
167	100		
139	9.6	0.0	45.2
166	33.7	1.6	41.6

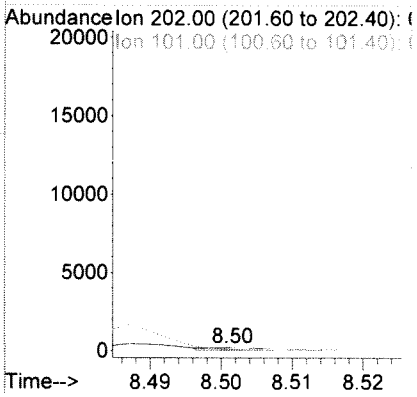


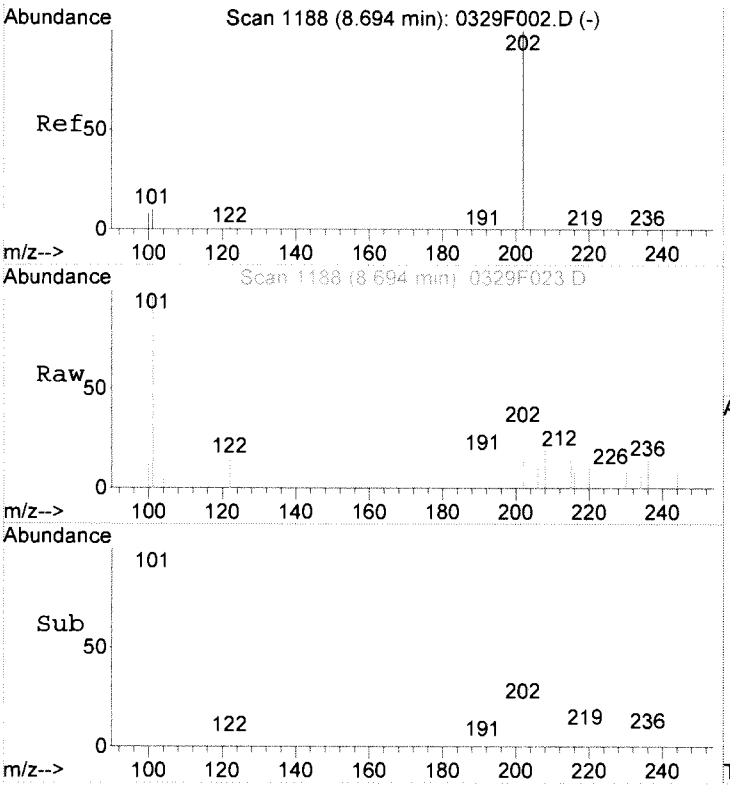


#21
Fluoranthene
Concen: 0.24 ng/ml m
RT: 8.50 min Scan# 1145
Delta R.T. 0.00 min
Lab File: 0329F023.D
Acq: 29 Mar 2018 1:35 pm

Tgt Ion:202 Resp: 82

Ion	Ratio	Lower	Upper
202	100		
101	46.4	0.0	39.1#
100	118.4	0.0	27.0#

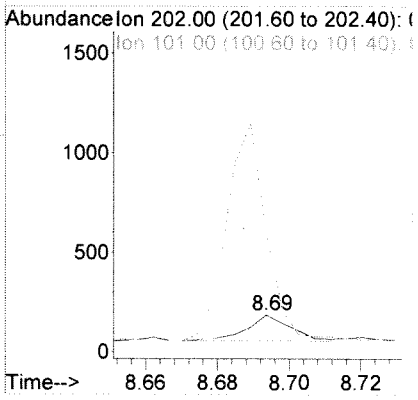


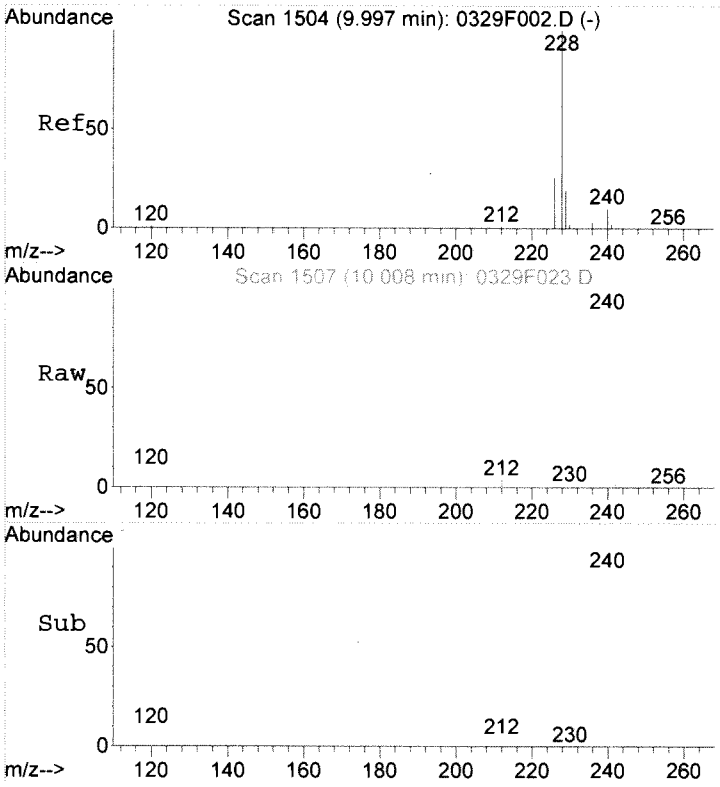


#24
Pyrene
Concen: 0.34 ng/ml
RT: 8.69 min Scan# 1188
Delta R.T. 0.00 min
Lab File: 0329F023.D
Acq: 29 Mar 2018 1:35 pm

Tgt Ion:202 Resp: 112

Ion	Ratio	Lower	Upper
202	100		
101	408.4	0.0	40.5#
100	26.7	0.0	28.3

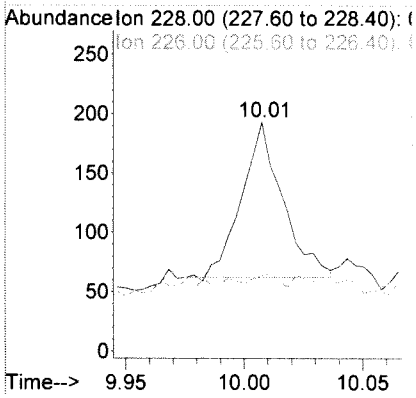




#26
Benz(a)anthracene
Concen: 0.48 ng/ml
RT: 10.01 min Scan# 1507
Delta R.T. 0.01 min
Lab File: 0329F023.D
Acq: 29 Mar 2018 1:35 pm

Tgt Ion:228 Resp: 158

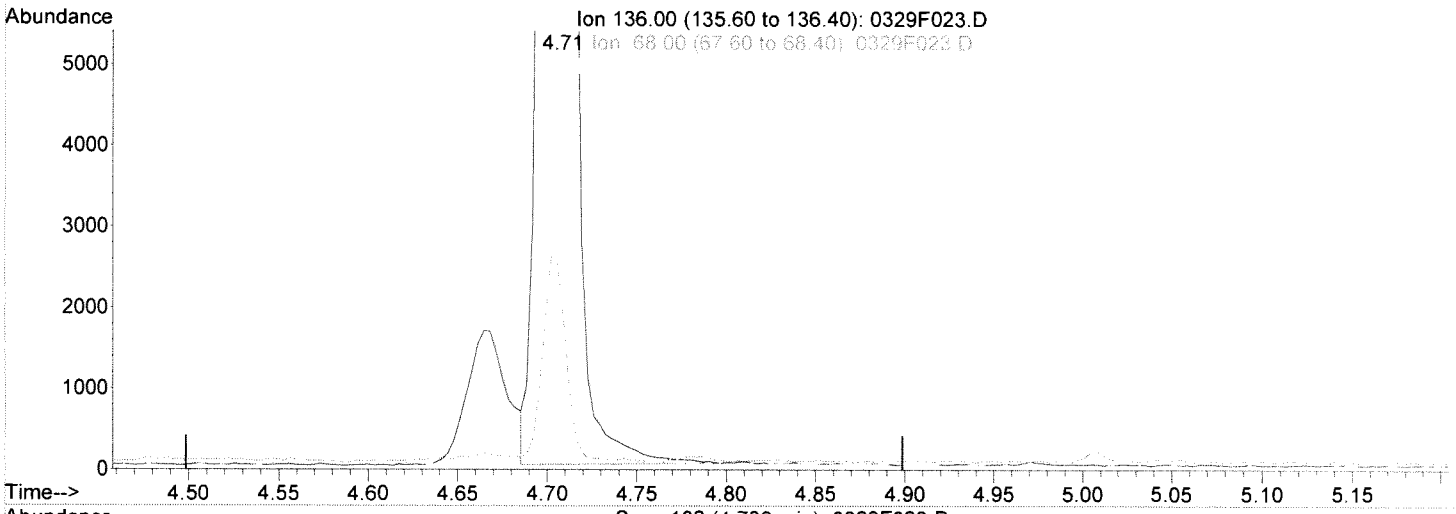
Ion	Ratio	Lower	Upper
228	100		
226	4.6	0.0	56.4
229	31.3	0.0	39.3

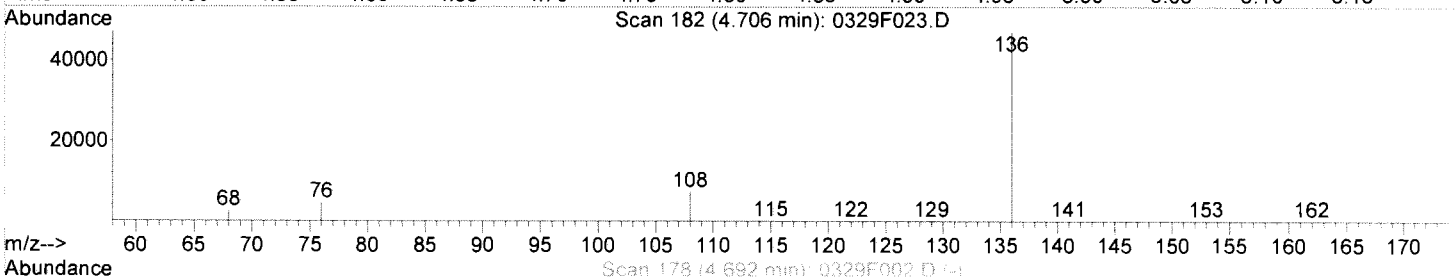


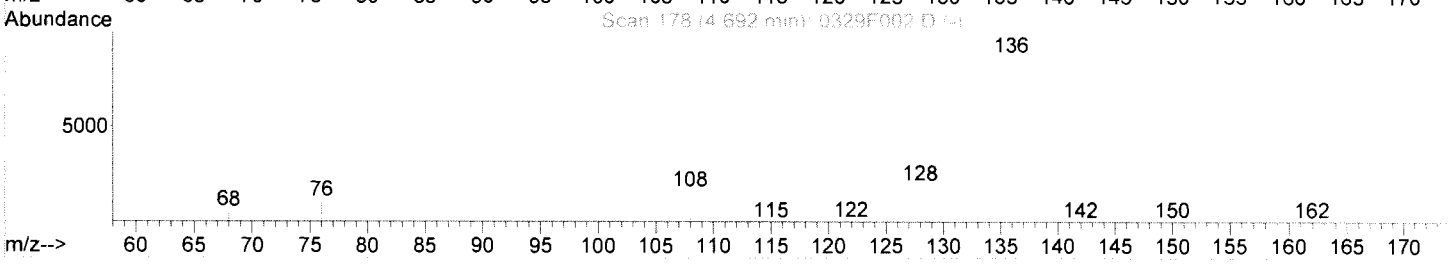
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F023.D Vial: 23
Acq On : 29 Mar 2018 1:35 pm Operator: LWeiskopf
Sample : K1802579-005 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 8:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F023.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml

response 40804

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.14
108.00	11.60	15.42
0.00	0.00	0.00

Manual Integration:

Before

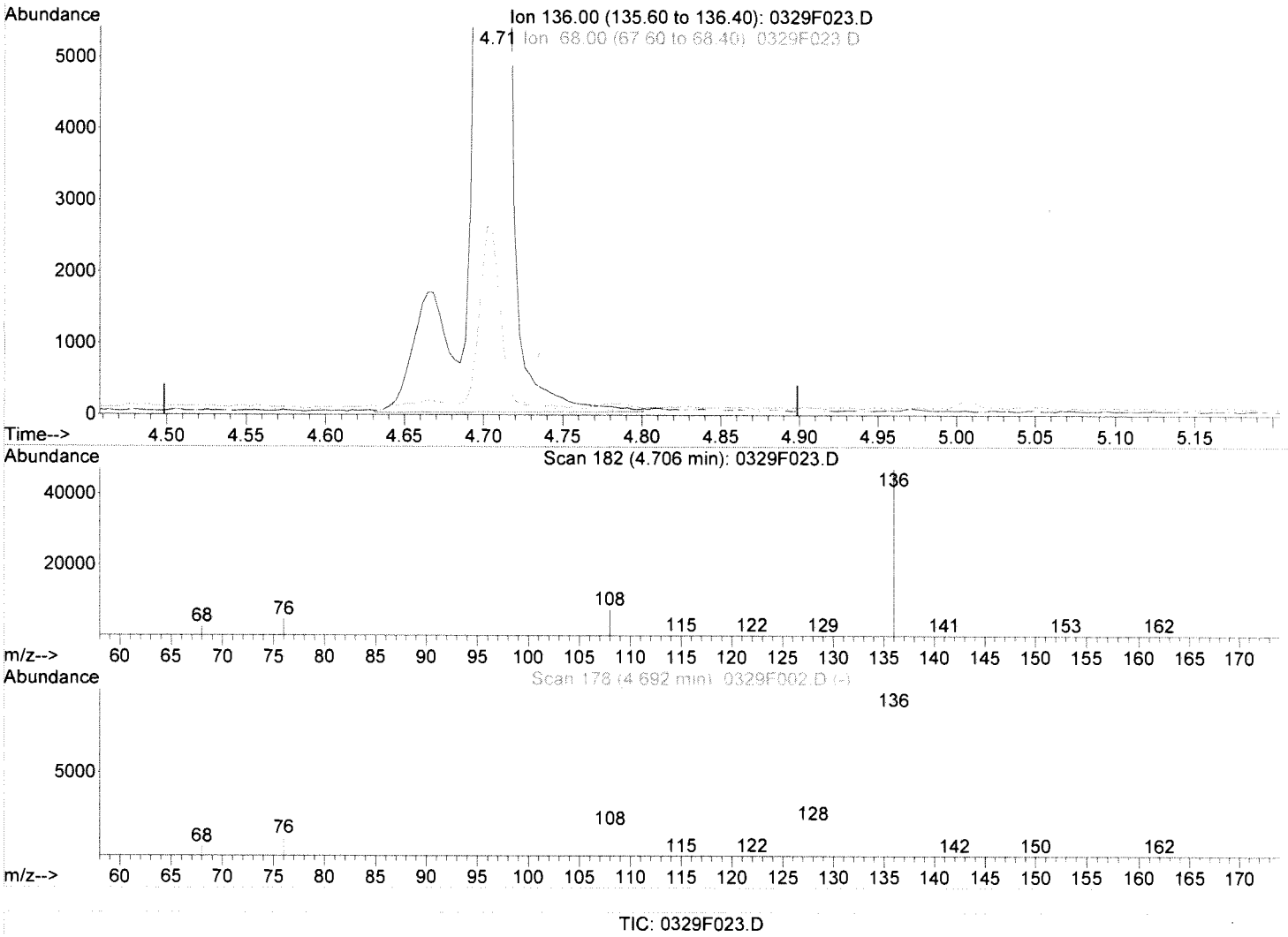
03/30/18

APR 02 2018

0329F023.D 101317PAH.M Fri Mar 30 09:51:54 2018

Data File : J:\MS14\DATA\032918\0329F023.D Vial: 23
Acq On : 29 Mar 2018 1:35 pm Operator: LWeiskopf
Sample : K1802579-005 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:51 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration



TIC: 0329F023.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml m

response 43656

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.37
108.00	11.60	15.53
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

03/30/18

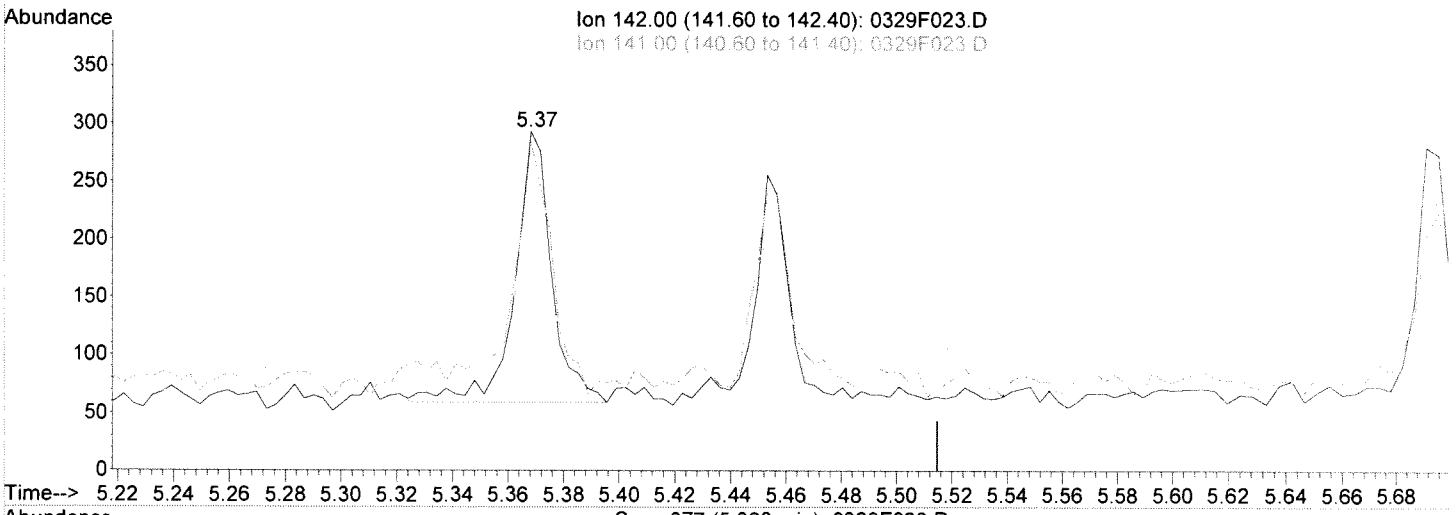
APR 02 2018

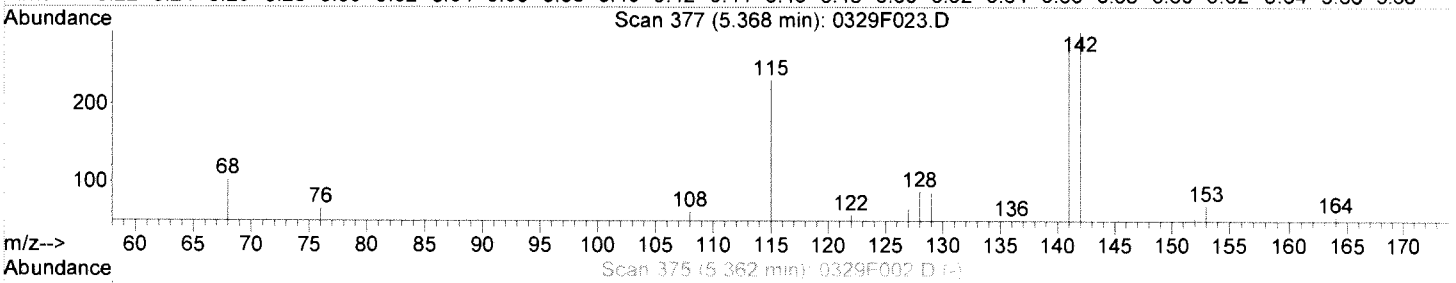
0329F023.D 101317PAH.M Fri Mar 30 09:52:00 2018

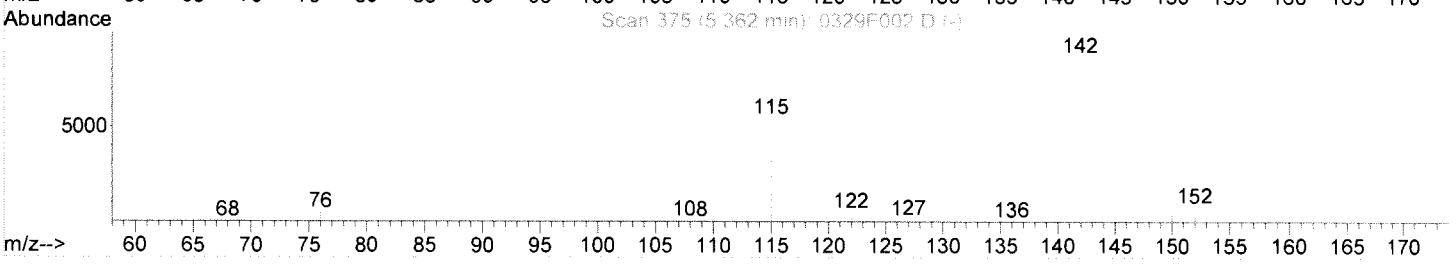
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F023.D Vial: 23
Acq On : 29 Mar 2018 1:35 pm Operator: LWeiskopf
Sample : K1802579-005 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:52 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F023.D

(4) 2-Methylnaphthalene (T)

5.37min 1.25ng/ml

response 216

Ion	Exp%	Act%
142.00	100	100
141.00	81.70	88.89
115.00	22.00	56.41#
0.00	0.00	0.00

Manual Integration:

Before

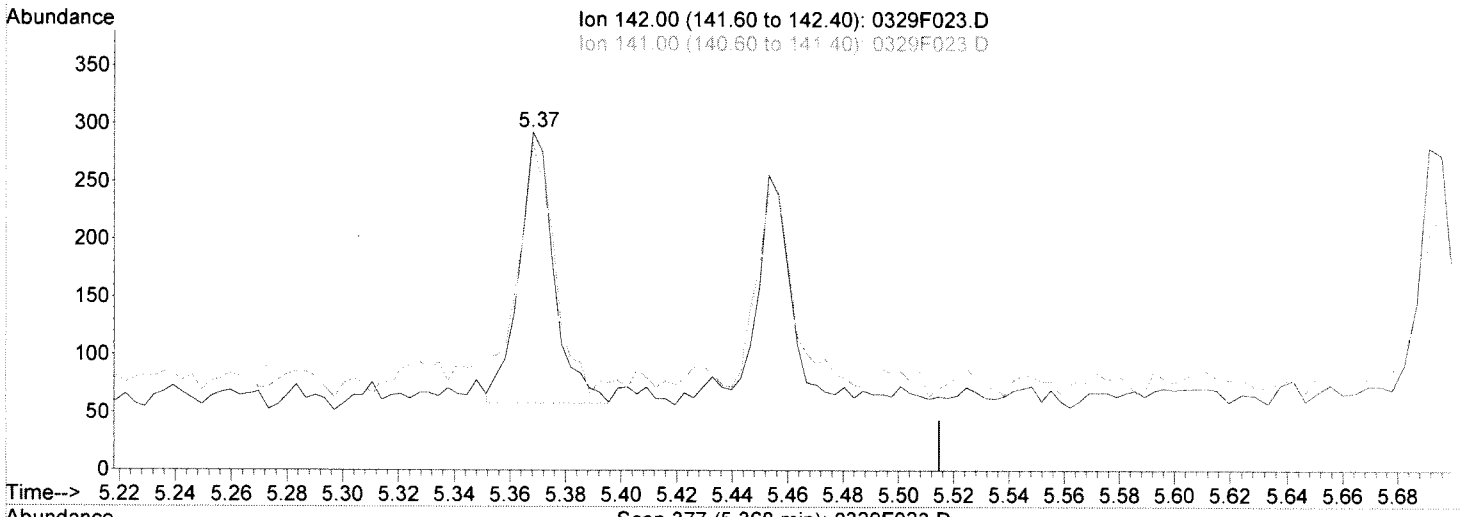
03/30/18

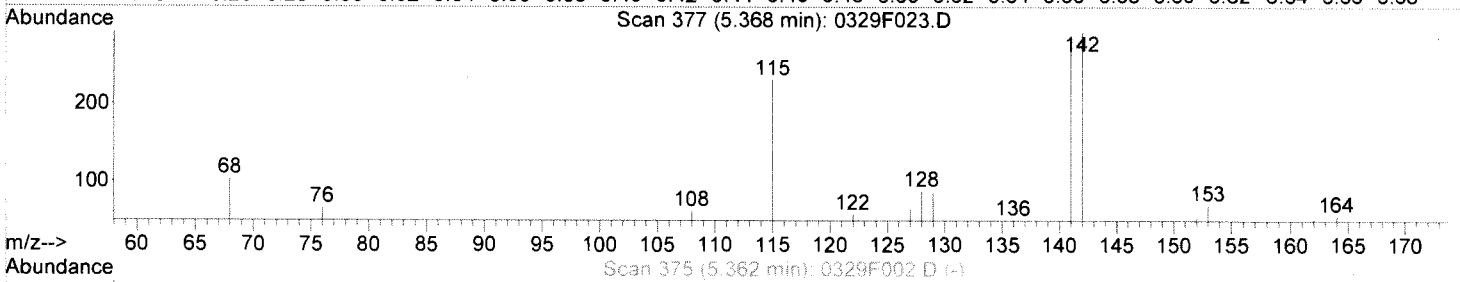
APR 02 2018

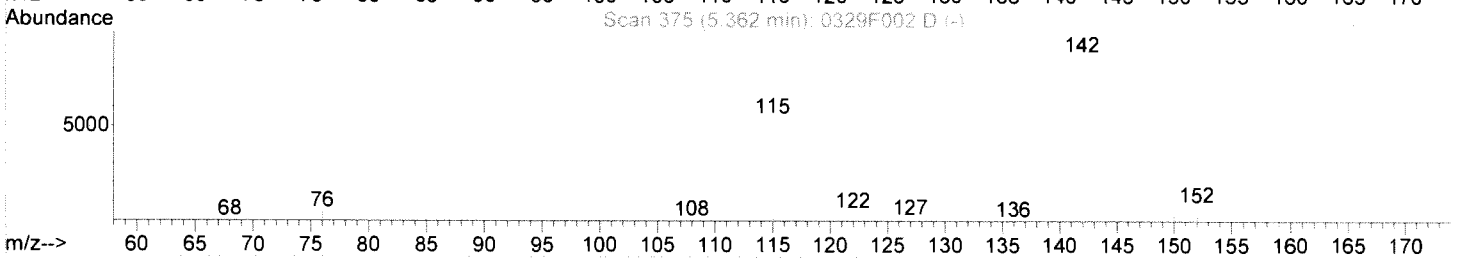
0329F023.D 101317PAH.M Fri Mar 30 09:52:10 2018

Data File : J:\MS14\DATA\032918\0329F023.D Vial: 23
Acq On : 29 Mar 2018 1:35 pm Operator: LWeiskopf
Sample : K1802579-005 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:52 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F023.D

(4) 2-Methylnaphthalene (T)

5.37min 1.18ng/ml m

response 204

Ion	Exp%	Act%
142.00	100	100
141.00	81.70	96.93
115.00	22.00	78.84#
0.00	0.00	0.00

Manual Integration:

After

BLC

03/30/18

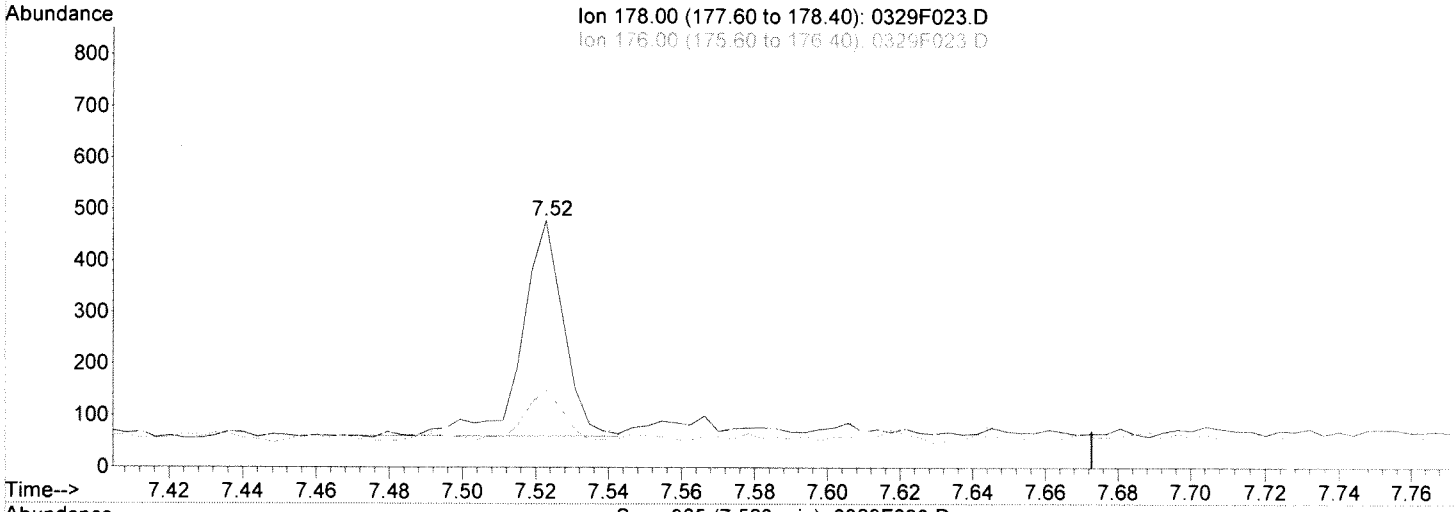
APR 02 2018

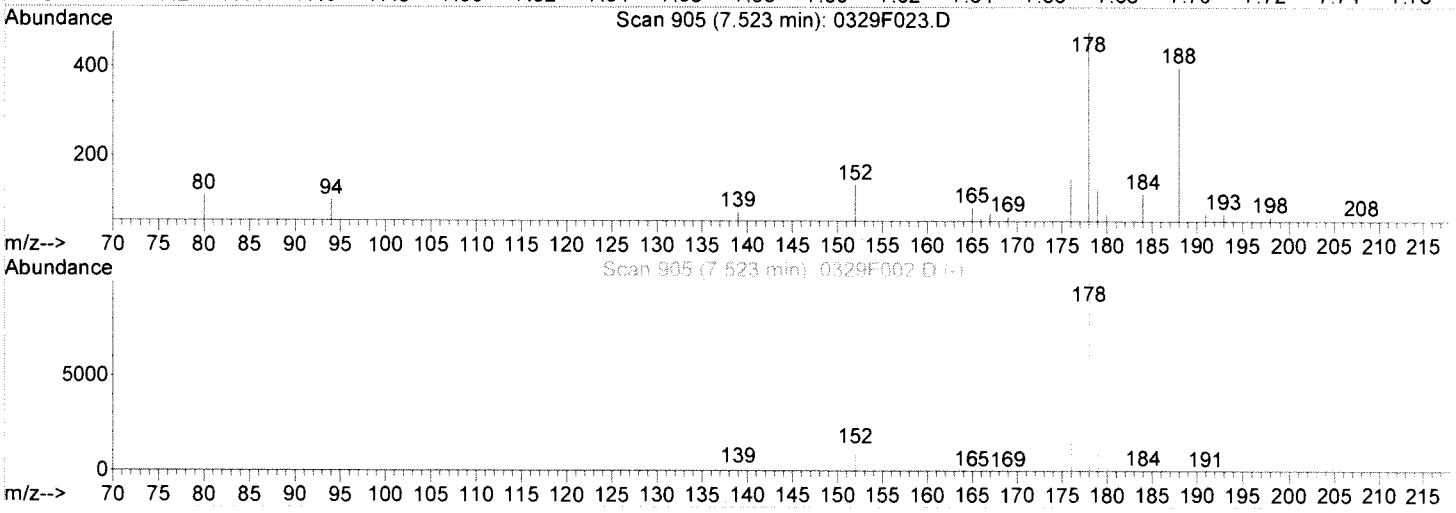
0329F023.D 101317PAH.M Fri Mar 30 09:52:18 2018

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F023.D Vial: 23
Acq On : 29 Mar 2018 1:35 pm Operator: LWeiskopf
Sample : K1802579-005 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:53 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration





TIC: 0329F023.D

(17) Phenanthrene (T)

7.52min 1.14ng/ml

response 334

Ion	Exp%	Act%
178.00	100	100
176.00	19.60	22.67
179.00	15.10	12.41
0.00	0.00	0.00

Manual Integration:

Before

03/30/18

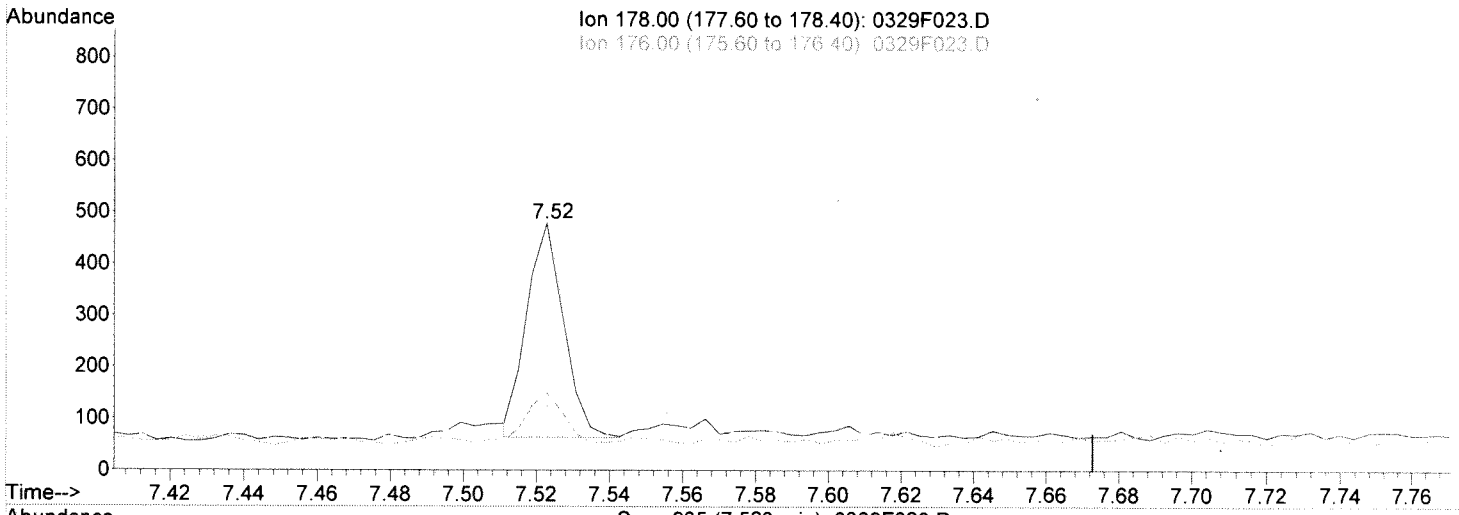
APR 02 2018

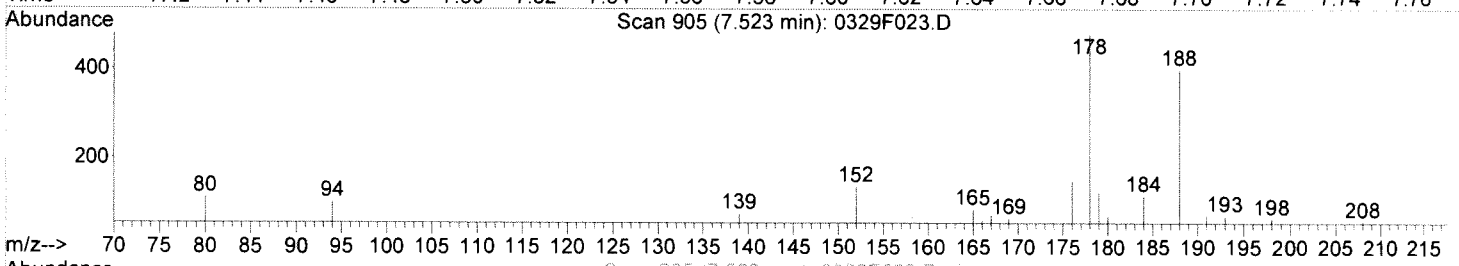
0329F023.D 101317PAH.M Fri Mar 30 09:53:08 2018

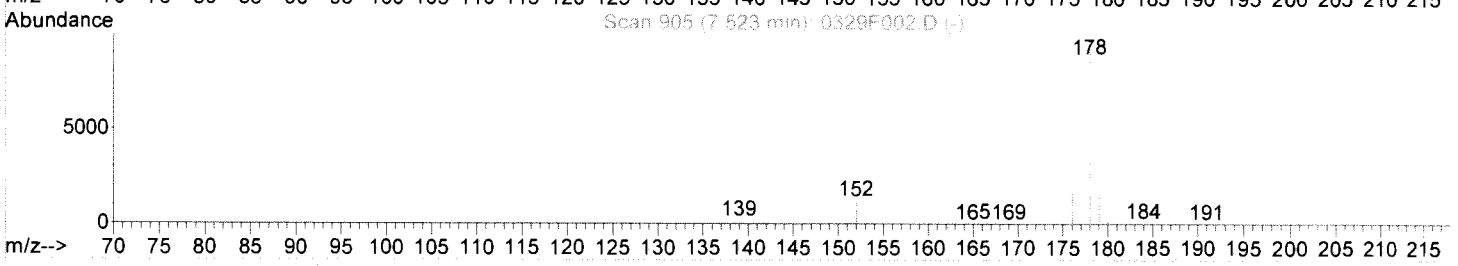
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F023.D Vial: 23
Acq On : 29 Mar 2018 1:35 pm Operator: LWeiskopf
Sample : K1802579-005 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:53 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F023.D

(17) Phenanthrene (T)

7.52min 1.00ng/ml m

response 292

Ion	Exp%	Act%
178.00	100	100
176.00	19.60	31.11
179.00	15.10	25.89
0.00	0.00	0.00

Manual Integration:

After

BLC

03/30/18

APR 02 2018

0329F023.D 101317PAH.M Fri Mar 30 09:53:15 2018

Exception Report

Data File: J:\MS14\DATA\032918\0329F024.D
Lab ID: K1802579-006
RunType: SMPL
Matrix: WATER

Date Acquired: 03/29/2018 13:59
Date Quantitated: 03/30/2018 09:56
Batch ID: KWG1801713
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: MAR 30 2018

Secondary Review: APR 02 2018

Printed: 03/30/2018 11:28:57
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\032918\0329F024.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 13:59	**Quant Date:**	03/30/2018 09:56	**Vial:**	24
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-006			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	03/18/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801713	**Prep Lot:**	KWG1801565	**Report Group:**	K1802579
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1668283	**Prep Date:**	03/22/2018		

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M	**Calibration ID:**	CAL15579
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\032918\0329F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\032918\0329F017.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.71	0.02	136	41343**m**	200.00	OK
2	Acenaphthene-d10	6.26	-0.01	164	21575	200.00	OK
3	Phenanthrene-d10	7.50	0.00	188	45554	200.00	OK
4	Chrysene-d12	10.01	0.00	240	51897	200.00	OK
5	Perylene-d12	13.03	-0.01	264	57438	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.71	0.00	0.00	176	142451	965.18	97	42-131	OK	
3	Fluoranthene-d10	8.49	0.00	0.00	212	298579	1,043	104	42-133	OK	
4	Terphenyl-d14	8.83	0.00	0.00	244	197330	901.80	90	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.73	0.02	0.00	128	126	0.5400	0.0024	J	
1	2-Methylnaphthalene				142	0		0.0013	U	
2	Acenaphthylene				152	0		0.0011	U	
2	Acenaphthene				154	0**d**		0.0012	U	
2	Fluorene				166	0**d**		0.0011	U	
3	Phenanthrene				178	0		0.0011	U	
3	Anthracene				178	0		0.00082	U	
3	Fluoranthene				202	0**d**		0.00082	U	
4	Pyrene				202	0		0.0010	U	
4	Benz(a)anthracene	10.01	0.01	0.00	228	183	0.5800	0.0026	J	
4	Chrysene				228	0**d**		0.00076	U	
5	Benzo(b)fluoranthene				252	0		0.00083	U	
5	Benzo(k)fluoranthene				252	0		0.00094	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\032918\0329F024.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 13:59	**Quant Date:**	03/30/2018 09:56	**Vial:**	24
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-006			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0**d**		0.0011	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.00089	U	
5	Dibenz(a,h)anthracene				278	0		0.0013	U	
5	Benzo(g,h,i)perylene				276	0		0.00086	U	

Prep Amount:	450 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\032918\0329F024.D Vial: 24
Acq On : 29 Mar 2018 1:59 pm Operator: LWeiskopf
Sample : K1802579-006 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 08:13:08 2018 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

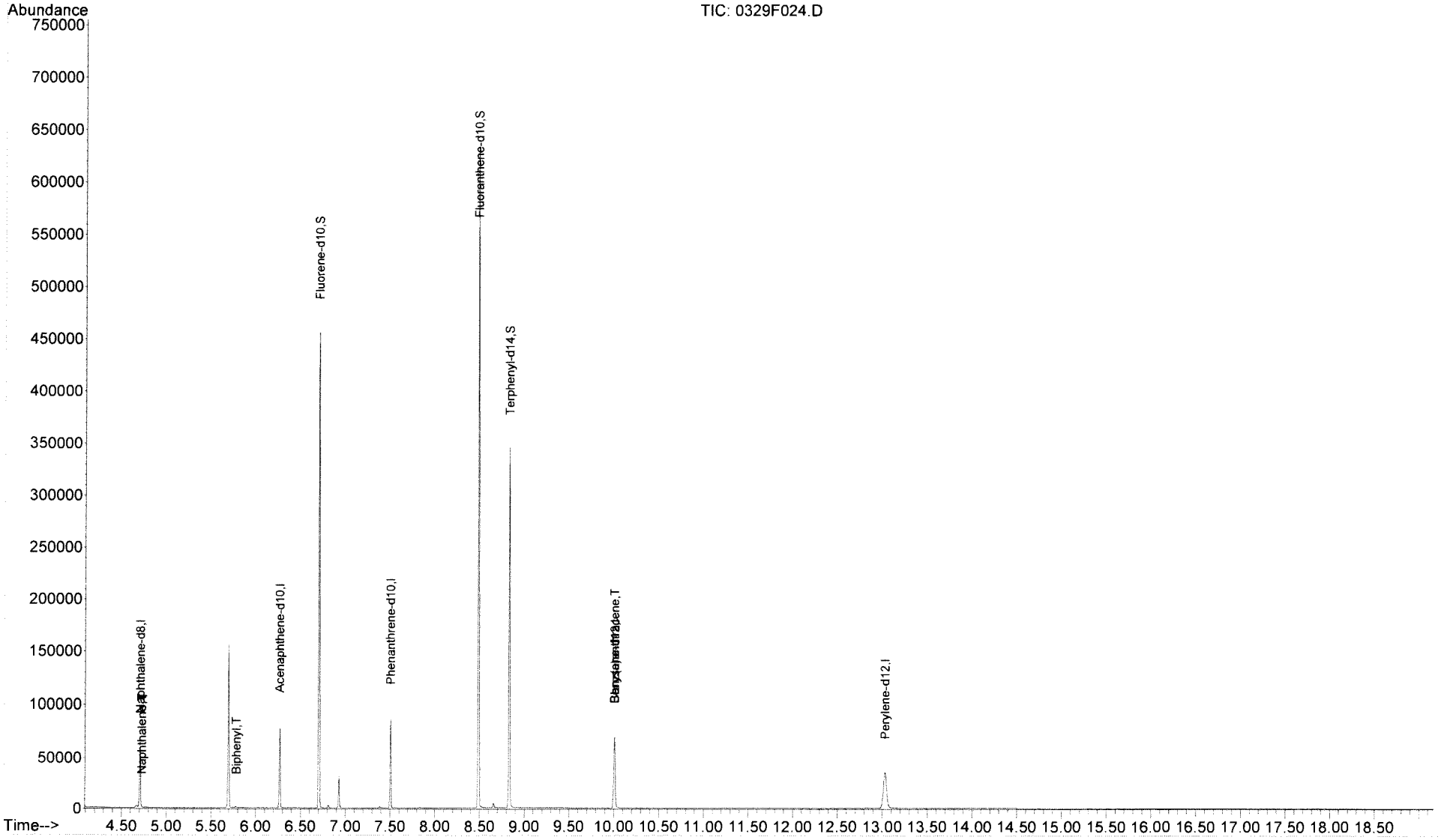
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.71	136	41343m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.26	164	21575	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	45554	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	51897	200.00	ng/ml	0.00
28) Perylene-d12	13.03	264	57438	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
13) Fluorene-d10	6.71	176	142451	965.18	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	96.52%		
22) Fluoranthene-d10	8.49	212	298579	1043.14	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	104.31%		
25) Terphenyl-d14	8.83	244	197330	901.80	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	90.18%		
Target Compounds						Qvalue
2) Naphthalene	4.73	128	126	0.54	ng/ml	71
6) Biphenyl	5.78	154	459	2.21	ng/ml	95
26) Benz(a)anthracene	10.01	228	183	0.58	ng/ml	84

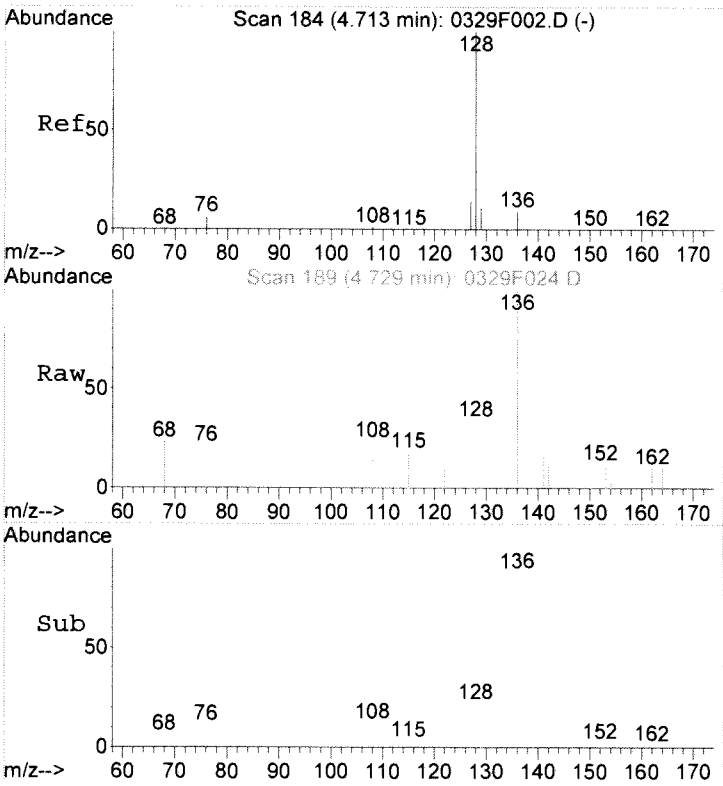
(#) = qualifier out of range (m) = manual integration
0329F024.D 101317PAH.M Fri Mar 30 09:56:36 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\032918\0329F024.D Vial: 24
Acq On : 29 Mar 2018 1:59 pm Operator: LWeiskopf
Sample : K1802579-006 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:56 2018 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration

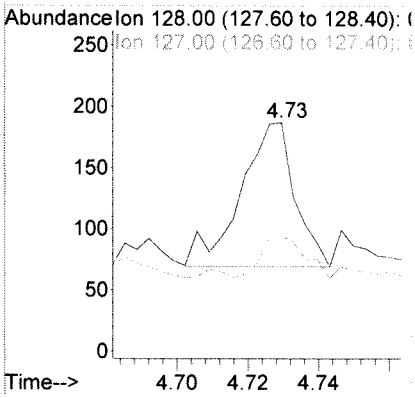


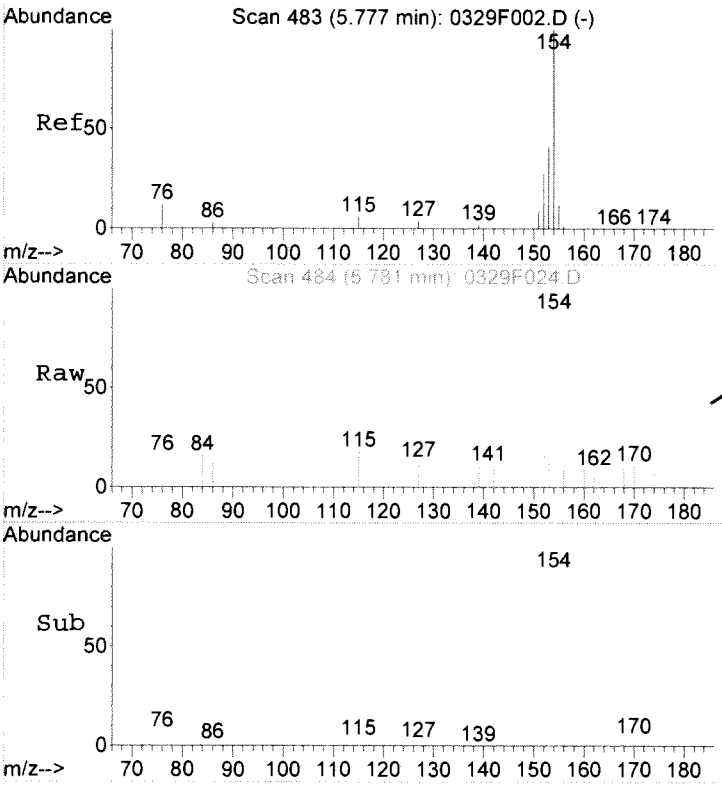


#2
Naphthalene
Concen: 0.54 ng/ml
RT: 4.73 min Scan# 189
Delta R.T. 0.01 min
Lab File: 0329F024.D
Acq: 29 Mar 2018 1:59 pm

Tgt Ion:128 Resp: 126

Ion	Ratio	Lower	Upper
128	100		
127	28.8	0.0	44.1
129	17.8	0.0	30.4

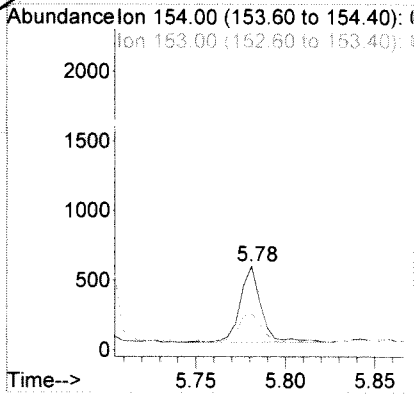


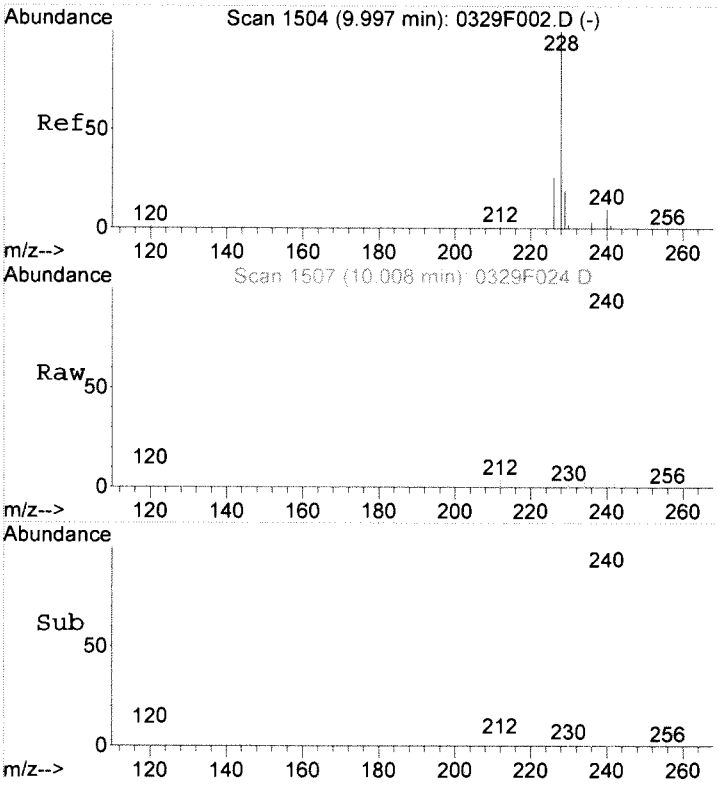


#6
Biphenyl
Concen: 2.21 ng/ml
RT: 5.78 min Scan# 484
Delta R.T. 0.00 min
Lab File: 0329F024.D
Acq: 29 Mar 2018 1:59 pm

Tgt Ion:154 Resp: 459

Ion	Ratio	Lower	Upper
154	100		
153	36.4	11.3	71.3
152	29.0	8.5	48.5

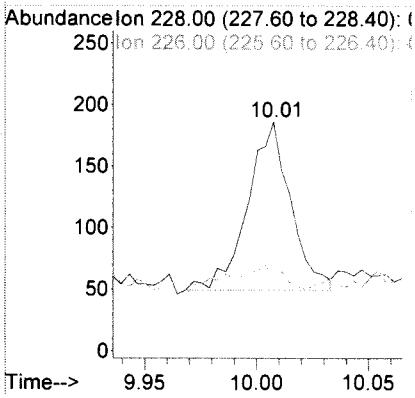




#26
Benz(a)anthracene
Concen: 0.58 ng/ml
RT: 10.01 min Scan# 1507
Delta R.T. 0.01 min
Lab File: 0329F024.D
Acq: 29 Mar 2018 1:59 pm

Tgt Ion:228 Resp: 183

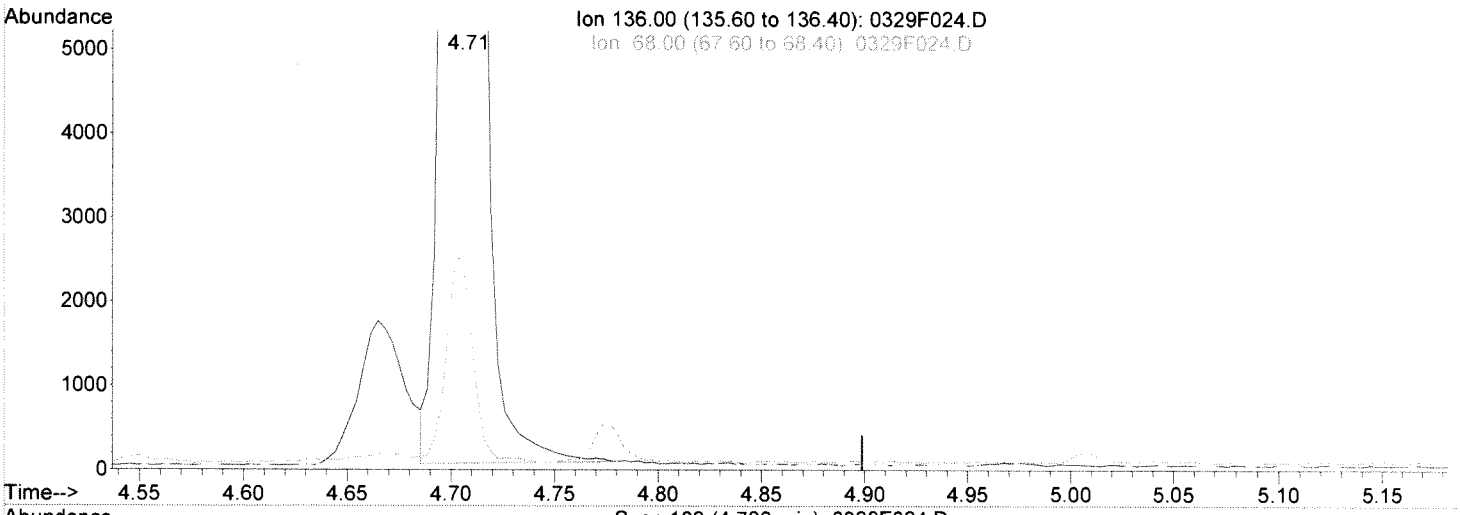
Ion	Ratio	Lower	Upper
228	100		
226	12.4	0.0	56.4
229	19.0	0.0	39.3

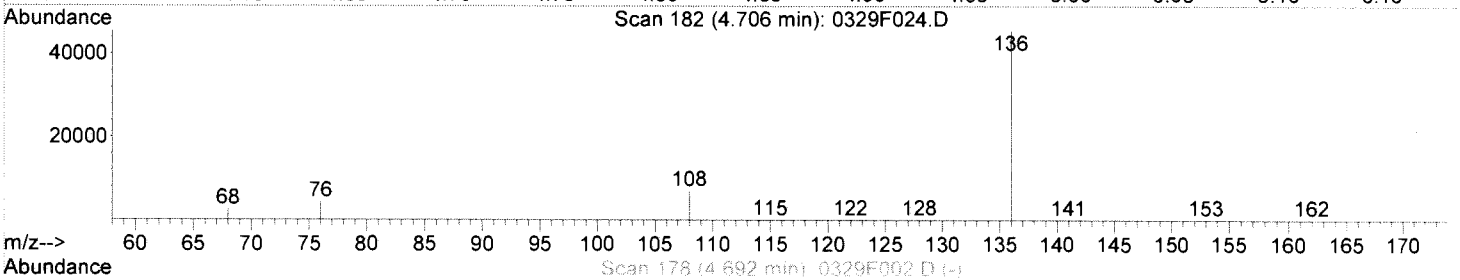


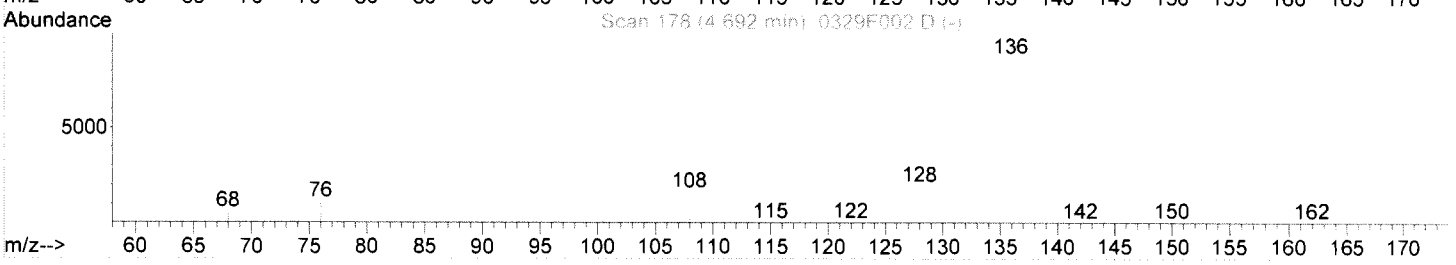
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F024.D Vial: 24
Acq On : 29 Mar 2018 1:59 pm Operator: LWeiskopf
Sample : K1802579-006 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 8:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F024.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml

response 38559

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.12
108.00	11.60	15.30
0.00	0.00	0.00

Manual Integration:

Before

03/30/18

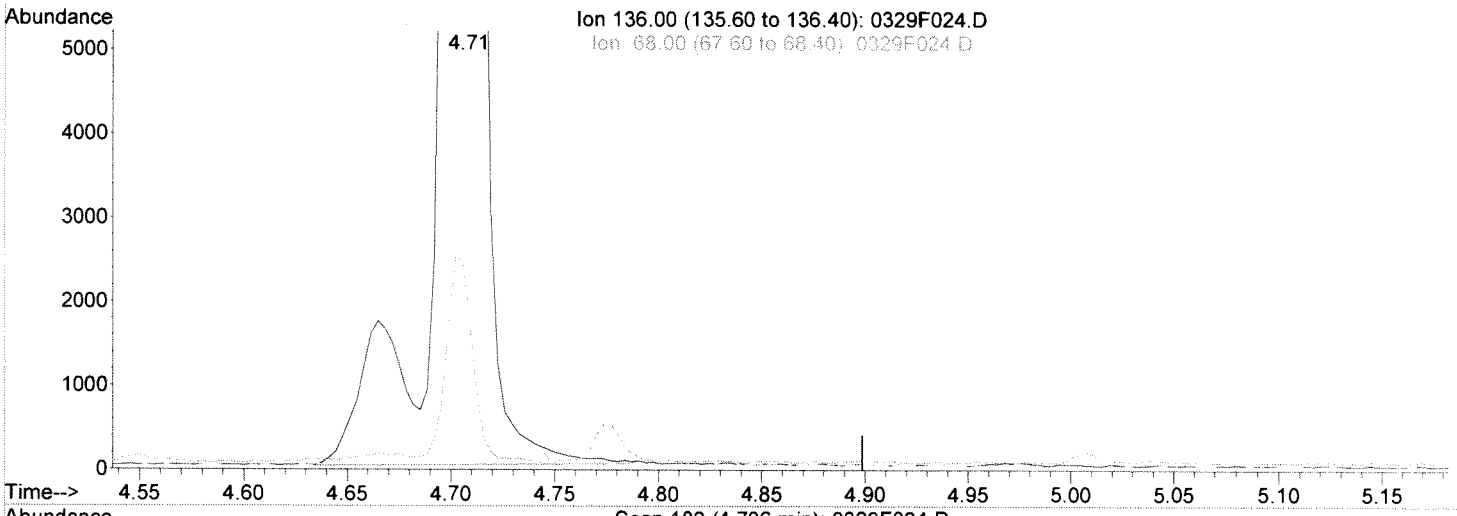
APR 02 2018

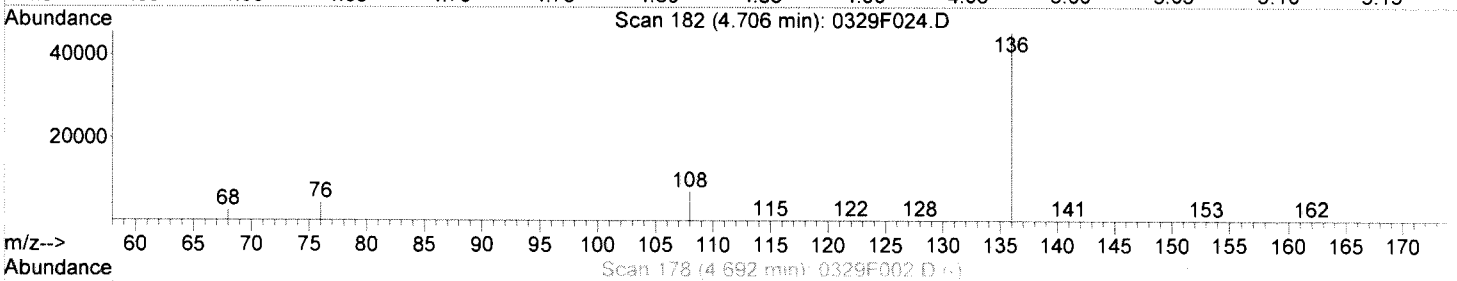
0329F024.D 101317PAH.M Fri Mar 30 09:55:41 2018

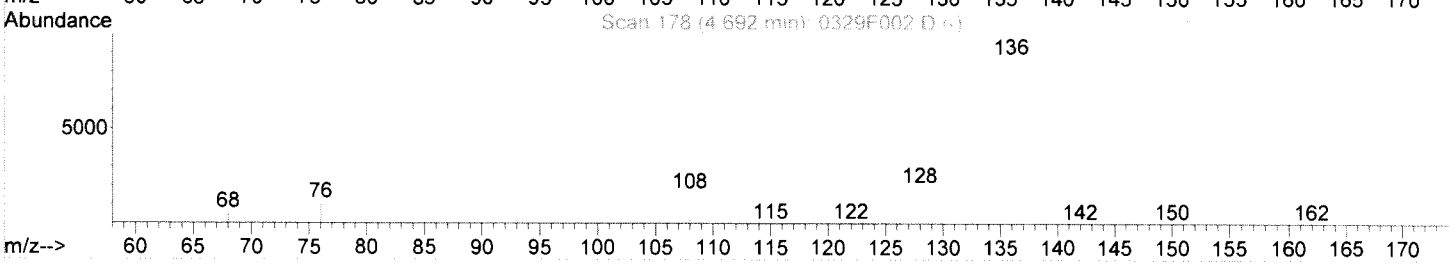
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F024.D Vial: 24
Acq On : 29 Mar 2018 1:59 pm Operator: LWeiskopf
Sample : K1802579-006 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:55 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F024.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml m

response 41343

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.45
108.00	11.60	15.41
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

03/30/18

APR 02 2018

0329F024.D 101317PAH.M Fri Mar 30 09:55:47 2018

Exception Report

Data File: J:\MS14\DATA\032918\0329F025.D
Lab ID: K1802579-015
RunType: SMPL
Matrix: WATER

Date Acquired: 03/29/2018 14:23
Date Quantitated: 03/30/2018 10:02
Batch ID: KWG1801713
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: MAR 30 2018

Secondary Review: APR 02 2018

Printed: 03/30/2018 11:29:00
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\032918\0329F025.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 14:23	**Quant Date:**	03/30/2018 10:02	**Vial:**	25
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-015			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801713	**Prep Lot:**	KWG1801565	**Report Group:**	K1802579
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1668284	**Prep Date:**	03/22/2018		

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M	**Calibration ID:**	CAL15579
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\032918\0329F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\032918\0329F017.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.71	0.02	136	41072**m**	200.00	OK
2	Acenaphthene-d10	6.27	0.00	164	21495	200.00	OK
3	Phenanthrene-d10	7.50	0.00	188	45249	200.00	OK
4	Chrysene-d12	10.01	0.00	240	51989	200.00	OK
5	Perylene-d12	13.03	-0.01	264	57443	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.71	0.00	0.00	176	138789	943.87	94	42-131	OK	
3	Fluoranthene-d10	8.49	0.00	0.00	212	287424	1,011	101	42-133	OK	
4	Terphenyl-d14	8.83	0.00	0.00	244	164197	749.05	75	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.73	0.02	0.00	128	260	1.11	0.0049	J	
1	2-Methylnaphthalene	5.37	0.01	0.00	142	145	0.8900	0.0039	J	
2	Acenaphthylene				152	0		0.0011	U	
2	Acenaphthene				154	0**d**		0.0012	U	
2	Fluorene	6.73		0.00	166	56	0.3100	0.0014	J	
3	Phenanthrene	7.52		0.00	178	285	1.02	0.0045	J	
3	Anthracene				178	0**d**		0.00082	U	
3	Fluoranthene				202	0**d**		0.00082	U	
4	Pyrene	8.69		0.00	202	90	0.2900	0.0013	J	
4	Benz(a)anthracene	10.01	0.01	0.00	228	142	0.4500	0.0020	J	
4	Chrysene				228	0**d**		0.00076	U	
5	Benzo(b)fluoranthene				252	0		0.00083	U	
5	Benzo(k)fluoranthene				252	0		0.00094	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\032918\0329F025.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 14:23	**Quant Date:**	03/30/2018 10:02	**Vial:**	25
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-015			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0		0.0011	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.00089	U	
5	Dibenz(a,h)anthracene				278	0		0.0013	U	
5	Benzo(g,h,i)perylene				276	0		0.00086	U	

Prep Amount:	455 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\032918\0329F025.D Vial: 25
Acq On : 29 Mar 2018 2:23 pm Operator: LWeiskopf
Sample : K1802579-015 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 08:13:09 2018 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

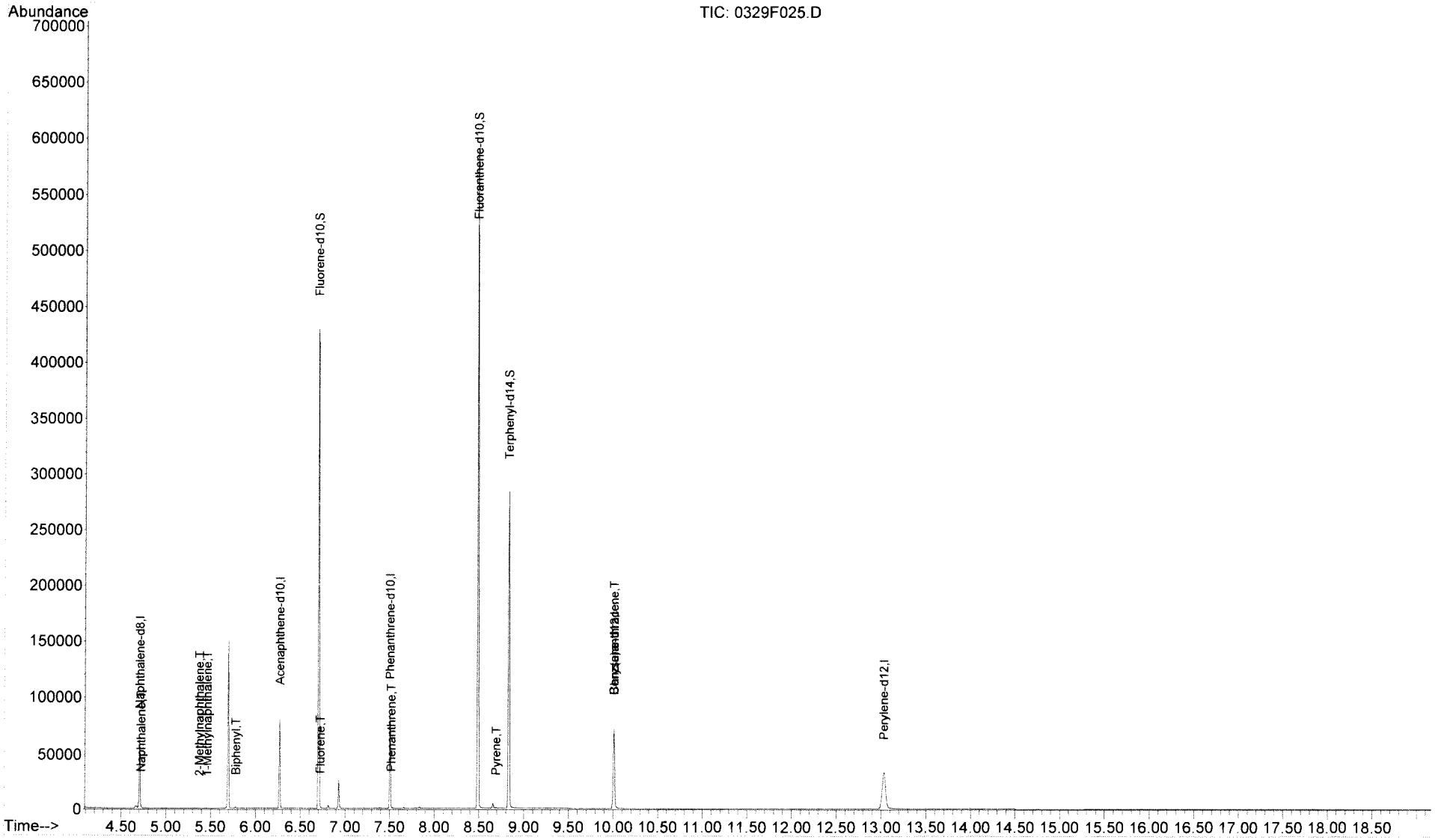
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.71	136	41072m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.27	164	21495	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	45249	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	51989	200.00	ng/ml	0.00
28) Perylene-d12	13.03	264	57443	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
13) Fluorene-d10	6.71	176	138789	943.87	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	94.39%		
22) Fluoranthene-d10	8.49	212	287424	1010.93	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	101.09%		
25) Terphenyl-d14	8.83	244	164197	749.05	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	74.91%		
Target Compounds						Qvalue
2) Naphthalene	4.73	128	260	1.11	ng/ml	96
4) 2-Methylnaphthalene	5.37	142	145	0.89	ng/ml#	82
5) 1-Methylnaphthalene	5.46	142	72	0.50	ng/ml	84
6) Biphenyl	5.78	154	439	2.13	ng/ml	94
14) Fluorene	6.73	166	56	0.31	ng/ml#	90
17) Phenanthrene	7.52	178	285	1.02	ng/ml	95
24) Pyrene	8.69	202	90	0.29	ng/ml#	1
26) Benz(a)anthracene	10.01	228	142	0.45	ng/ml	77

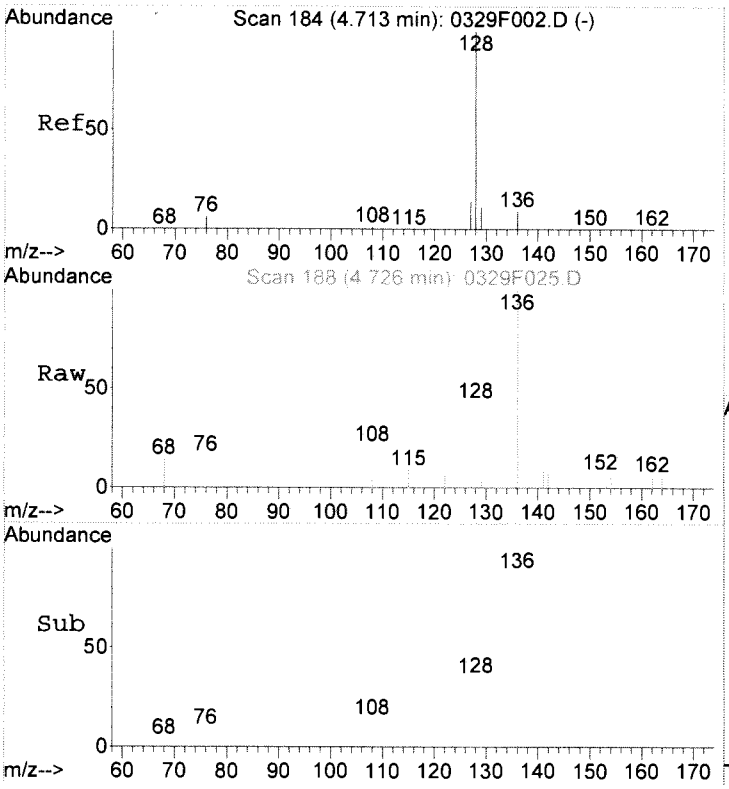
(#) = qualifier out of range (m) = manual integration
0329F025.D 101317PAH.M Fri Mar 30 10:05:21 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\032918\0329F025.D Vial: 25
Acq On : 29 Mar 2018 2:23 pm Operator: LWeiskopf
Sample : K1802579-015 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:02 2018 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration

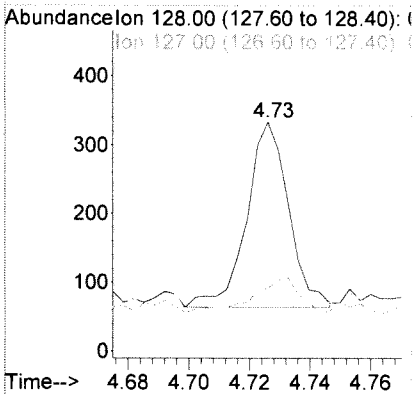


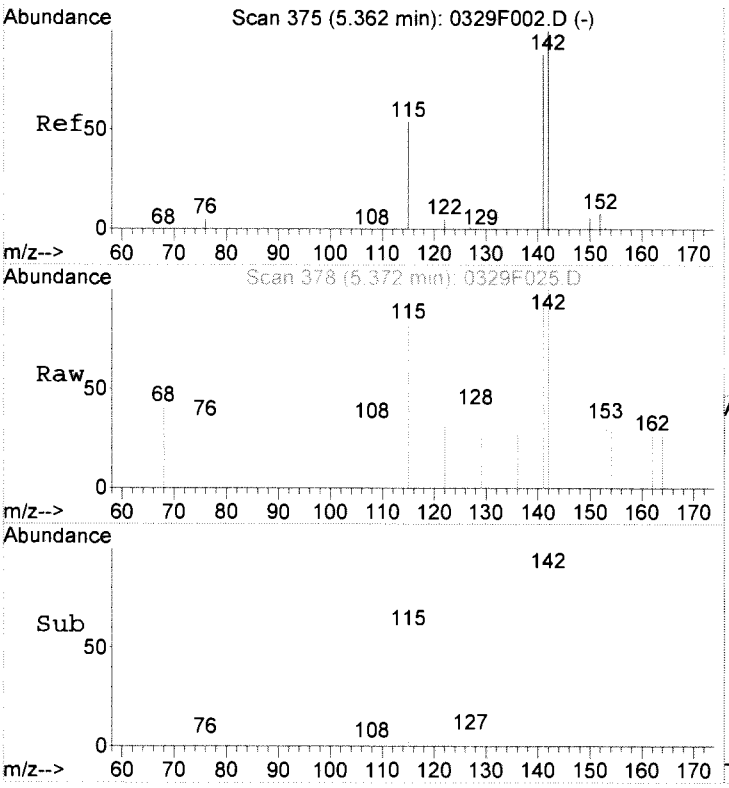


#2
Naphthalene
Concen: 1.11 ng/ml
RT: 4.73 min Scan# 188
Delta R.T. 0.01 min
Lab File: 0329F025.D
Acq: 29 Mar 2018 2:23 pm

Tgt Ion:128 Resp: 260

Ion	Ratio	Lower	Upper
128	100		
127	13.4	0.0	44.1
129	13.0	0.0	30.4

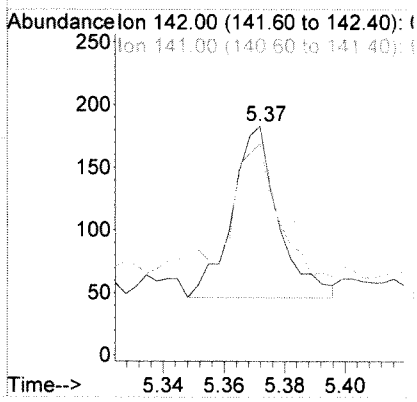


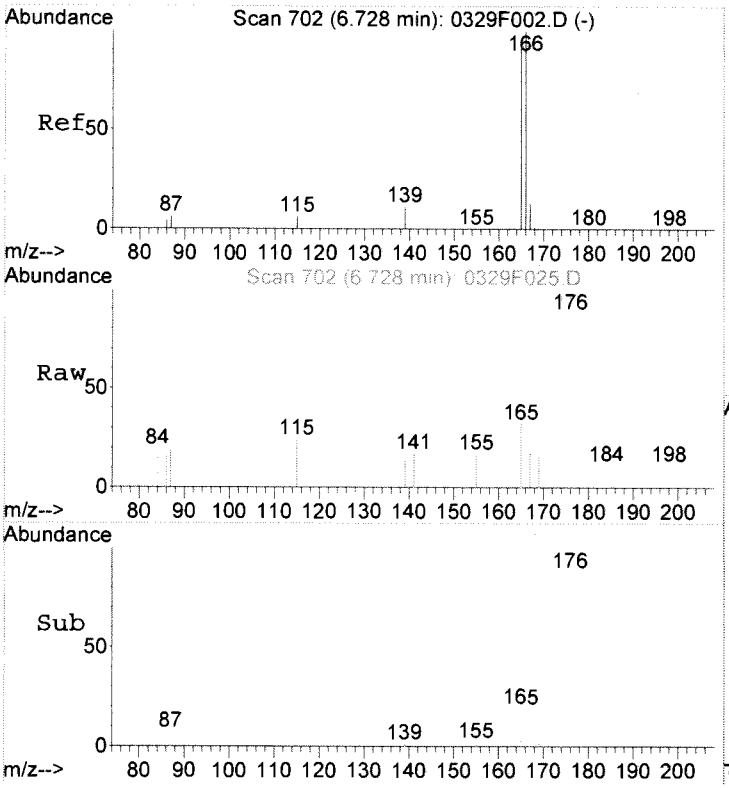


#4
2-Methylnaphthalene
Concen: 0.89 ng/ml
RT: 5.37 min Scan# 378
Delta R.T. 0.01 min
Lab File: 0329F025.D
Acq: 29 Mar 2018 2:23 pm

Tgt Ion:142 Resp: 145

Ion	Ratio	Lower	Upper
142	100		
141	77.4	51.7	111.7
115	54.0	2.0	42.0#

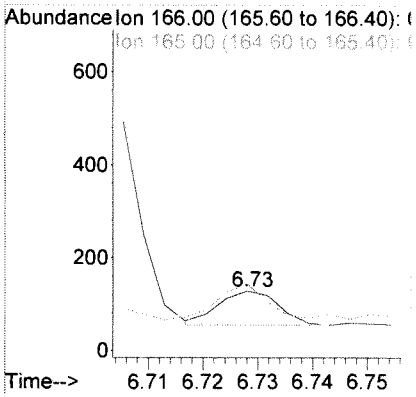


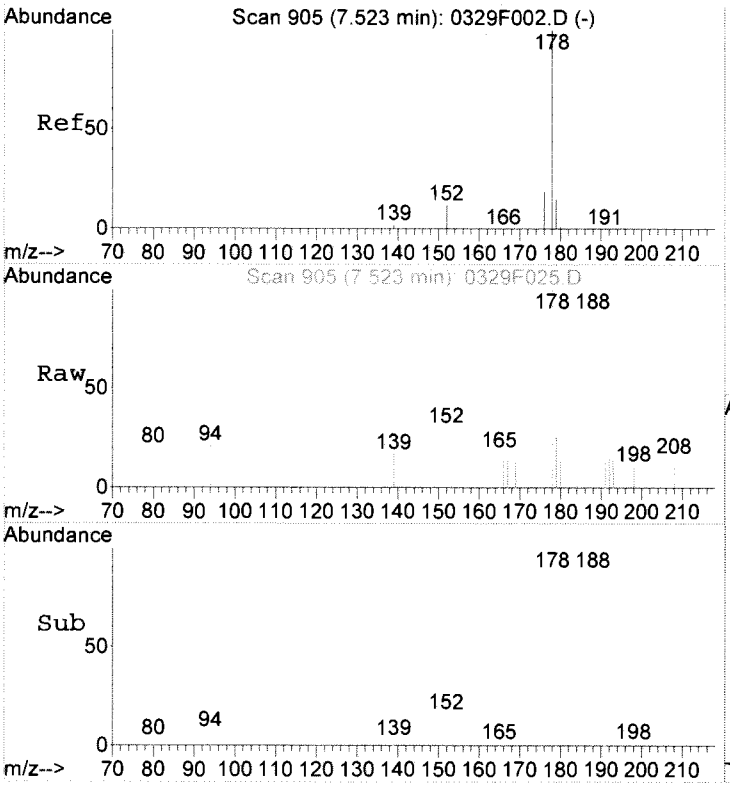


#14
Fluorene
Concen: 0.31 ng/ml
RT: 6.73 min Scan# 702
Delta R.T. 0.00 min
Lab File: 0329F025.D
Acq: 29 Mar 2018 2:23 pm

Tgt Ion:166 Resp: 56

Ion	Ratio	Lower	Upper
166	100		
165	98.6	65.6	125.6
167	37.0	0.0	33.0#

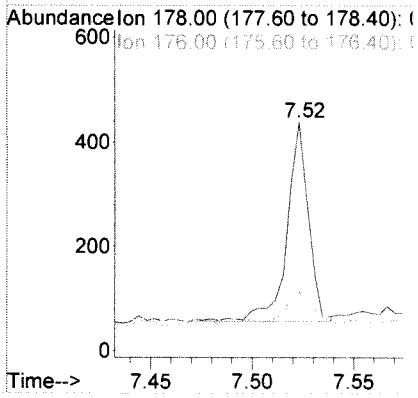


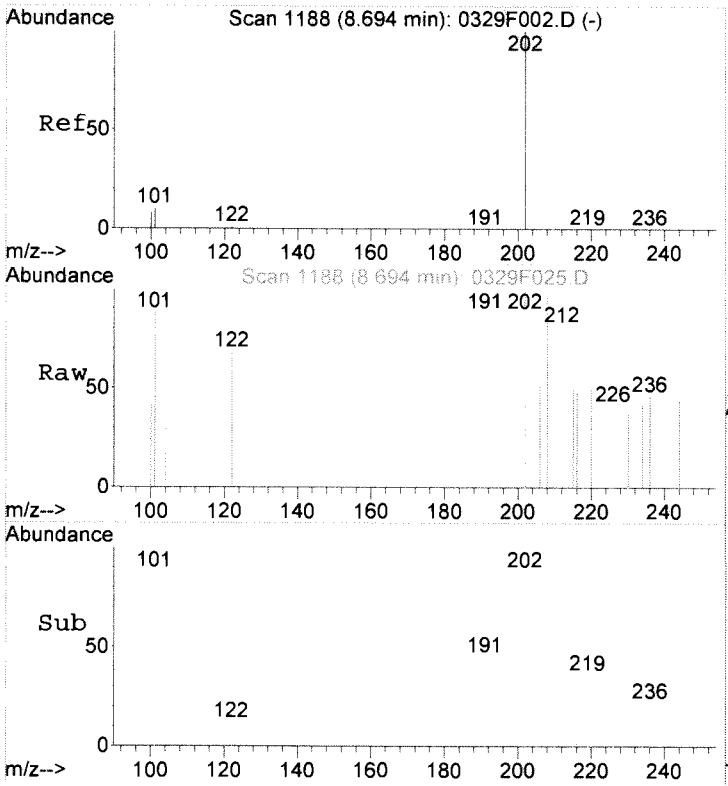


#17
Phenanthrene
Concen: 1.02 ng/ml
RT: 7.52 min Scan# 905
Delta R.T. 0.00 min
Lab File: 0329F025.D
Acq: 29 Mar 2018 2:23 pm

Tgt Ion:178 Resp: 285

Ion	Ratio	Lower	Upper
178	100		
176	15.7	0.0	49.6
179	15.7	0.0	35.1

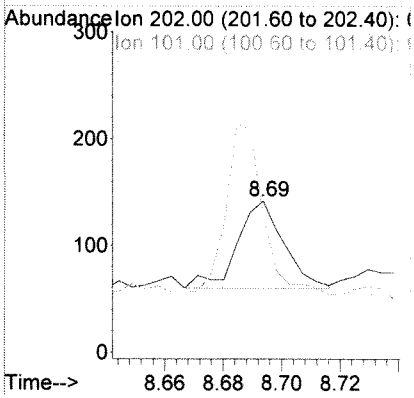


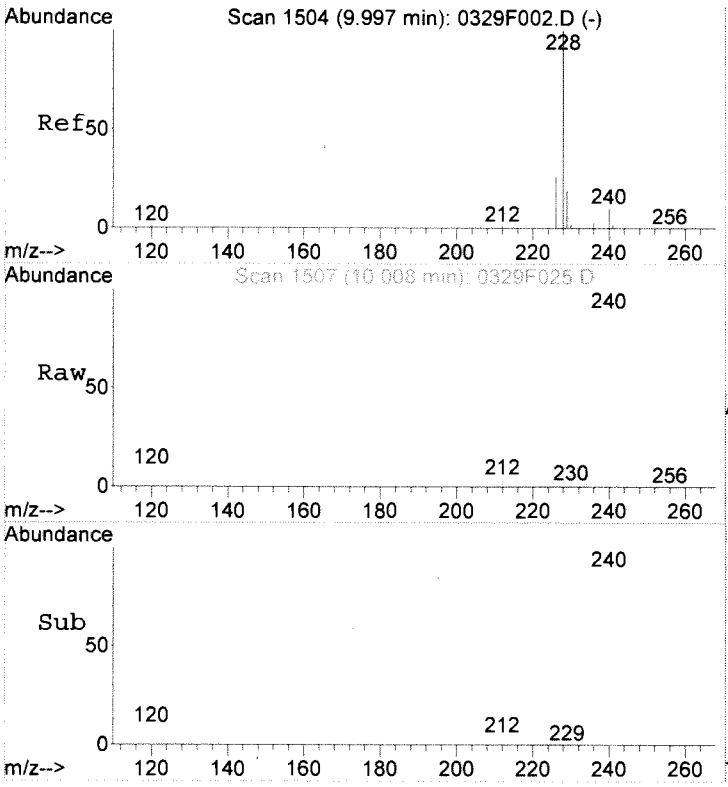


#24
Pyrene
Concen: 0.29 ng/ml
RT: 8.69 min Scan# 1188
Delta R.T. 0.00 min
Lab File: 0329F025.D
Acq: 29 Mar 2018 2:23 pm

Tgt Ion:202 Resp: 90

Ion	Ratio	Lower	Upper
202	100		
101	89.0	0.0	40.5#
100	9.8	0.0	28.3

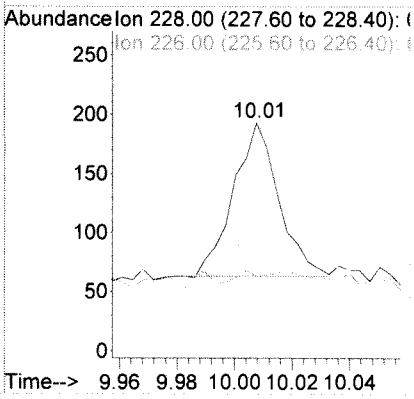




#26
Benz(a)anthracene
Concen: 0.45 ng/ml
RT: 10.01 min Scan# 1507
Delta R.T. 0.01 min
Lab File: 0329F025.D
Acq: 29 Mar 2018 2:23 pm

Tgt Ion:228 Resp: 142

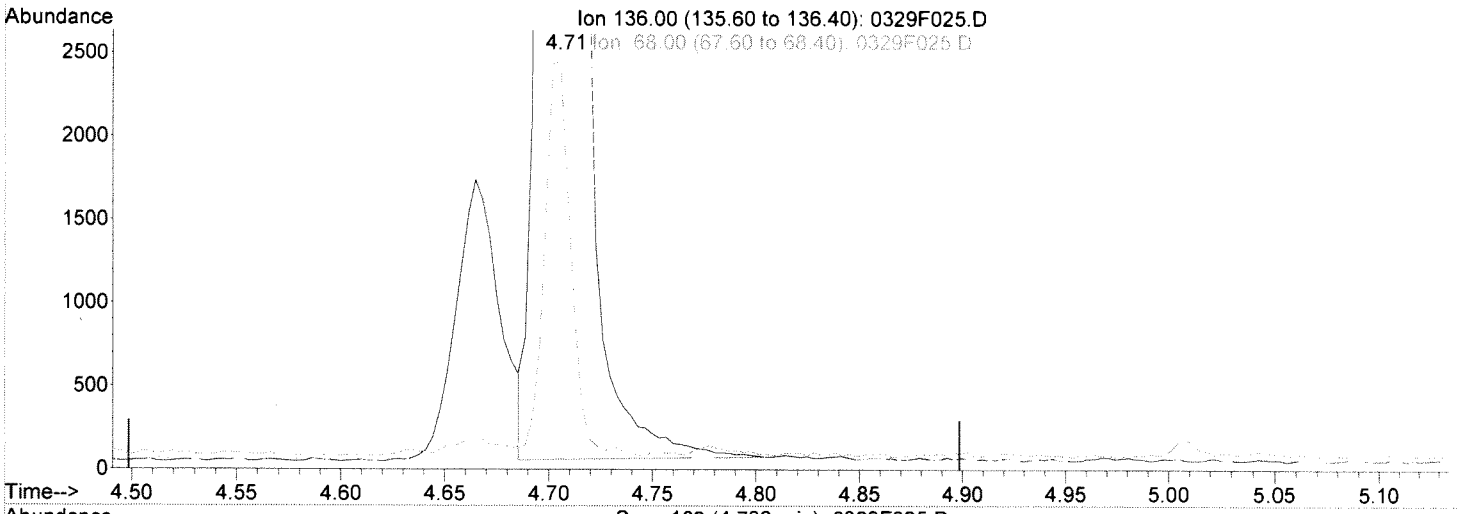
Ion	Ratio	Lower	Upper
228	100		
226	7.7	0.0	56.4
229	21.5	0.0	39.3

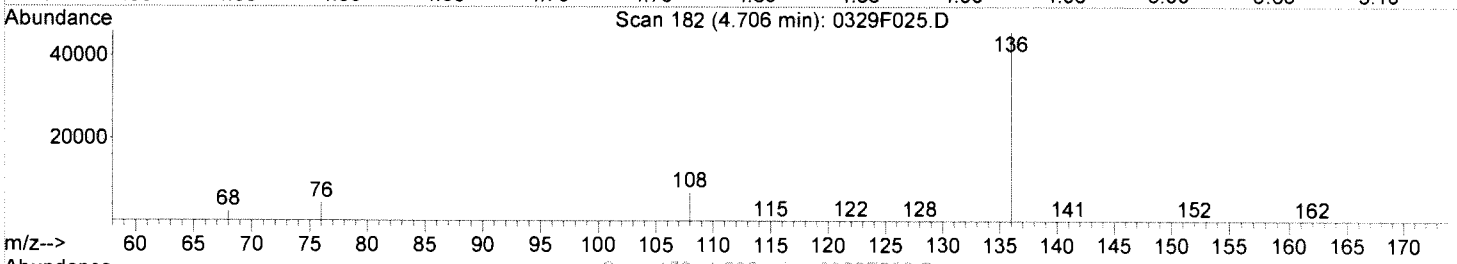


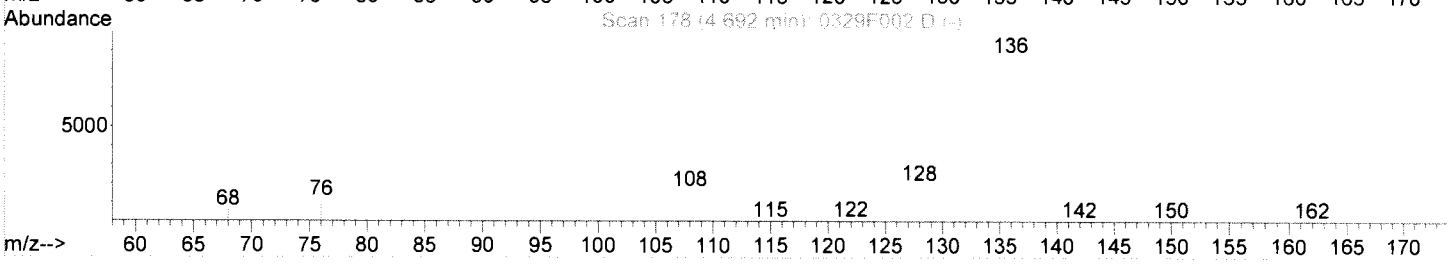
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F025.D Vial: 25
Acq On : 29 Mar 2018 2:23 pm Operator: LWeiskopf
Sample : K1802579-015 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 8:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F025.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml

response 38533

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.14
108.00	11.60	15.31
0.00	0.00	0.00

Manual Integration:

Before

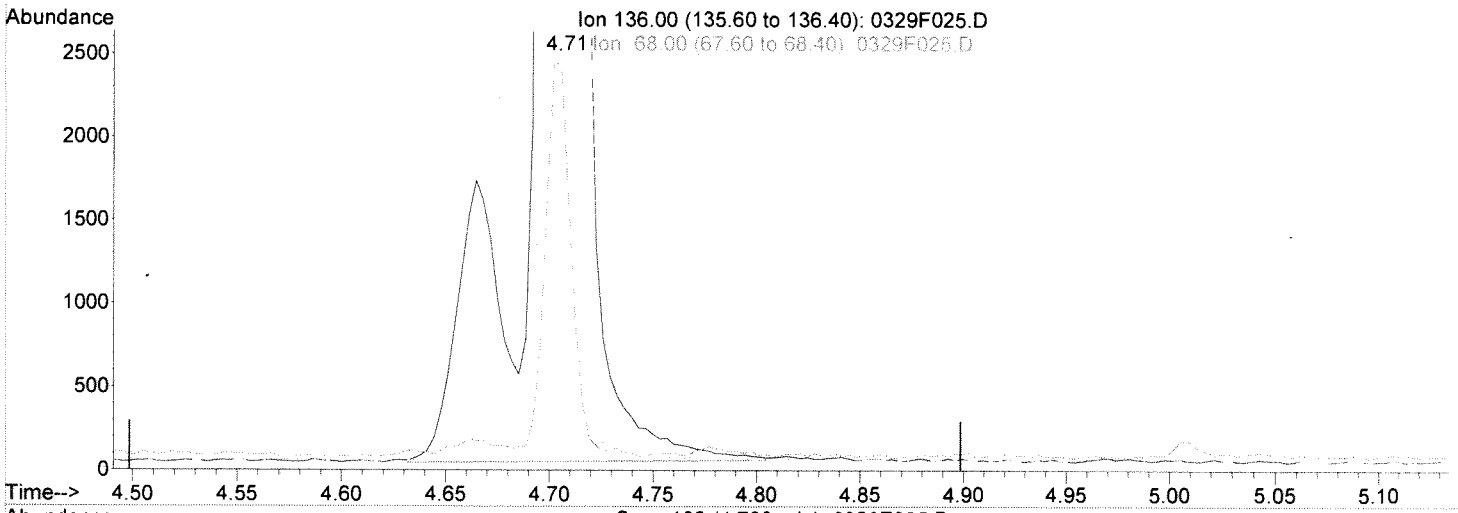
03/30/18

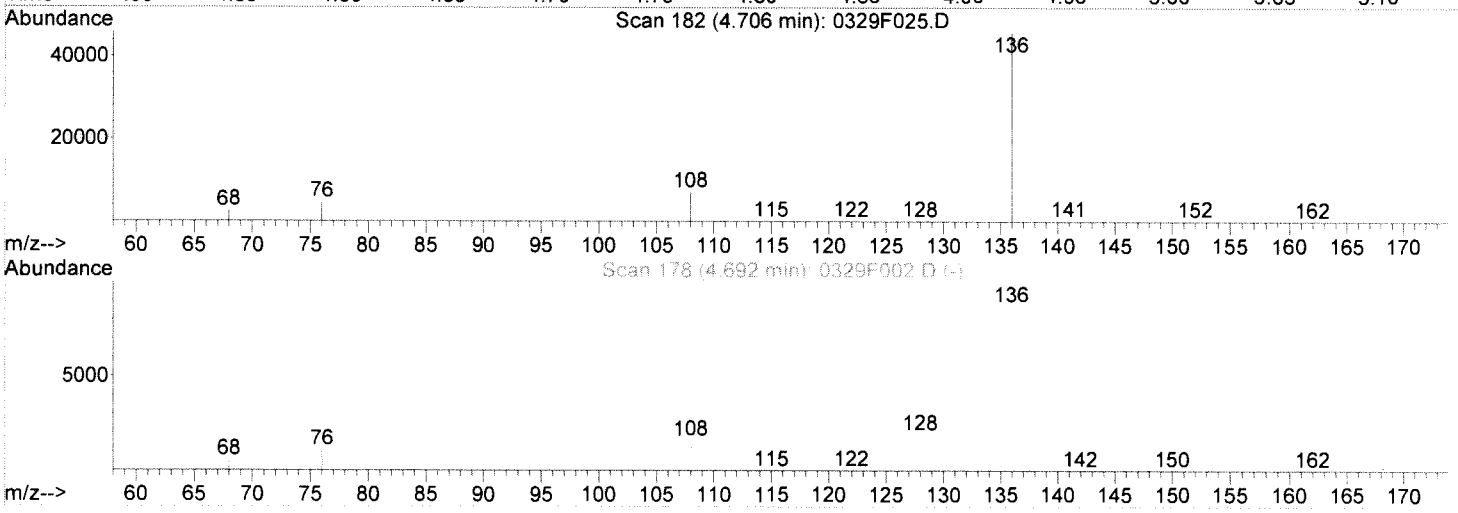
APR 02 2018

0329F025.D 101317PAH.M Fri Mar 30 10:01:29 2018

Data File : J:\MS14\DATA\032918\0329F025.D Vial: 25
Acq On : 29 Mar 2018 2:23 pm Operator: LWeiskopf
Sample : K1802579-015 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:01 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration





TIC: 0329F025.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml m

response 41072

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.34
108.00	11.60	15.42
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

03/30/18

APR 02 2018

0329F025.D 101317PAH.M Fri Mar 30 10:01:34 2018

Exception Report

Data File: J:\MS14\DATA\032918\0329F026.D
Lab ID: K1802579-020
RunType: SMPL
Matrix: WATER

Date Acquired: 03/29/2018 14:47
Date Quantitated: 03/30/2018 10:03
Batch ID: KWG1801713
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: MAR 30 2018

Secondary Review: APR 02 2018

Quantitation Report

Data File:	J:\MS14\DATA\032918\0329F026.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 14:47	**Quant Date:**	03/30/2018 10:03	**Vial:**	26
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-020			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801713	**Prep Lot:**	KWG1801565	**Report Group:**	K1802579
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1668285	**Prep Date:**	03/22/2018		

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M	**Calibration ID:**	CAL15579
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\032918\0329F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\032918\0329F017.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.71	0.02	136	38112m	200.00	OK
2	Acenaphthene-d10	6.27	0.00	164	20087	200.00	OK
3	Phenanthrene-d10	7.50	0.00	188	42101	200.00	OK
4	Chrysene-d12	10.01	0.00	240	48355	200.00	OK
5	Perylene-d12	13.03	-0.01	264	56233	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.71	0.00	0.00	176	137529	1,001	100	42-131	OK	
3	Fluoranthene-d10	8.49	0.00	0.00	212	288290	1,090	109	42-133	OK	
4	Terphenyl-d14	8.83	0.00	0.00	244	193733	950.21	95	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene				128	0d		0.0014	U	
1	2-Methylnaphthalene				142	0		0.0013	U	
2	Acenaphthylene				152	0d		0.0011	U	
2	Acenaphthene	6.29		0.00	154	173m	1.25	0.0055	Ui	
2	Fluorene				166	0d		0.0011	U	
3	Phenanthrene				178	0d		0.0011	U	
3	Anthracene				178	0		0.00082	U	
3	Fluoranthene				202	0d		0.00082	U	
4	Pyrene				202	0		0.0010	U	
4	Benz(a)anthracene	10.01	0.01	0.00	228	190	0.6500	0.0029	J	
4	Chrysene				228	0d		0.00076	U	
5	Benzo(b)fluoranthene				252	0d		0.00083	U	
5	Benzo(k)fluoranthene				252	0		0.00094	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\032918\0329F026.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 14:47	**Quant Date:**	03/30/2018 10:03	**Vial:**	26
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-020			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0		0.0011	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.00089	U	
5	Dibenz(a,h)anthracene				278	0		0.0013	U	
5	Benzo(g,h,i)perylene				276	0		0.00086	U	

Prep Amount:	455 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\032918\0329F026.D Vial: 26
Acq On : 29 Mar 2018 2:47 pm Operator: LWeiskopf
Sample : K1802579-020 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 08:13:09 2018 Quant Results File: 101317PAH.RES

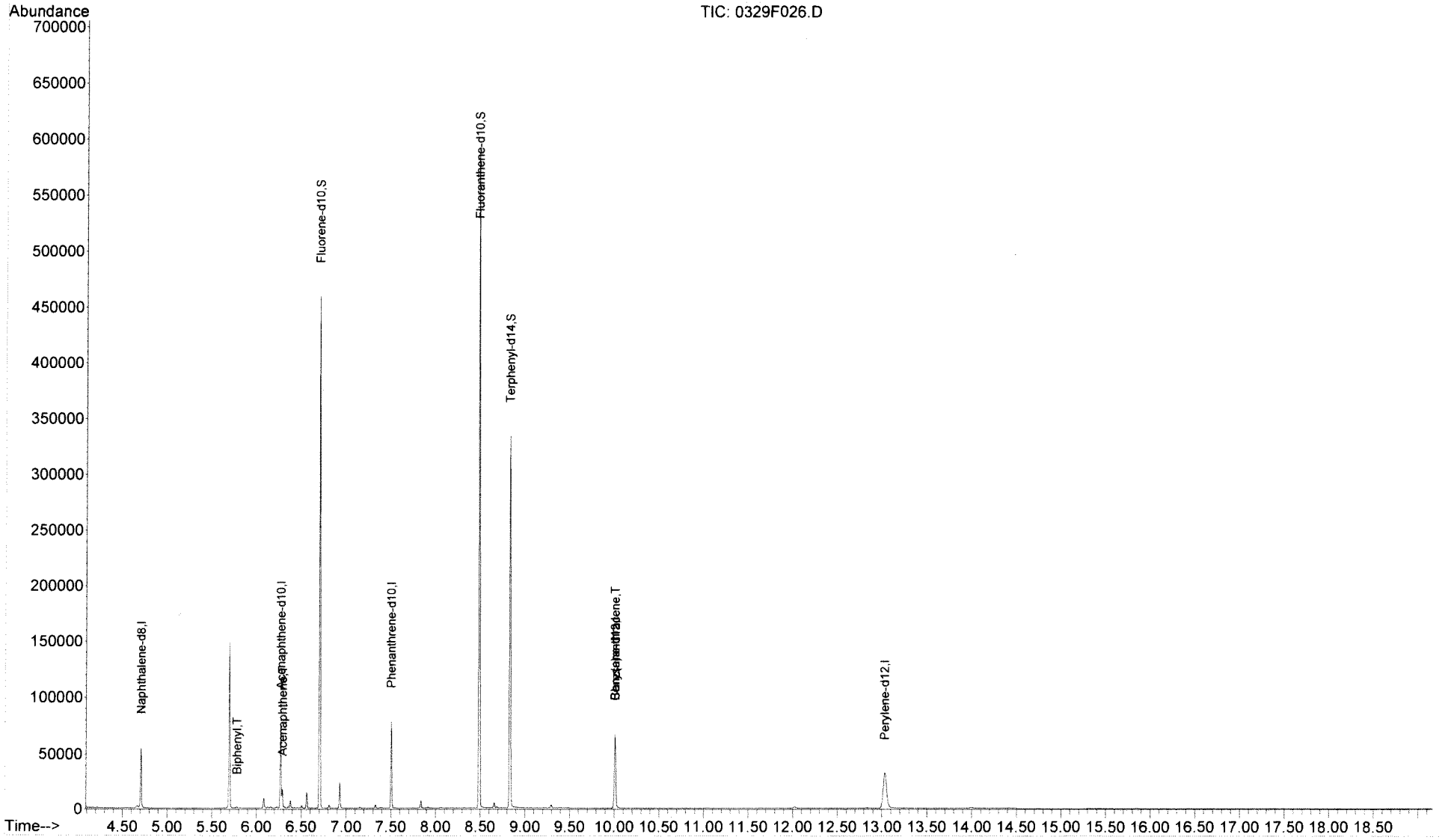
Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

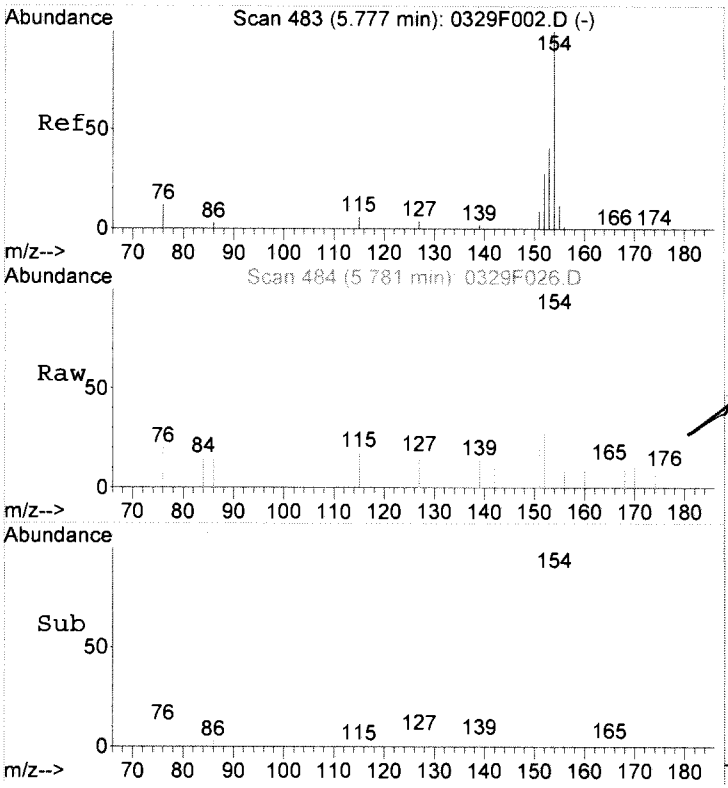
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.71	136	38112m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.27	164	20087	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	42101	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	48355	200.00	ng/ml	0.00
28) Perylene-d12	13.03	264	56233	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/ml	
Spiked Amount 1000.000			Recovery = 0.00%			
13) Fluorene-d10	6.71	176	137529	1000.86	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 100.09%			
22) Fluoranthene-d10	8.49	212	288290	1089.80	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 108.98%			
25) Terphenyl-d14	8.83	244	193733	950.21	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 95.02%			
Target Compounds						Qvalue
6) Biphenyl	5.78	154	395m	2.06	ng/ml	
10) Acenaphthene	6.29	154	173m	1.25	ng/ml	
26) Benz(a)anthracene	10.01	228	190	0.65	ng/ml	71

(#) = qualifier out of range (m) = manual integration
0329F026.D 101317PAH.M Fri Mar 30 10:05:24 2018 Page 1

Data File : J:\MS14\DATA\032918\0329F026.D Vial: 26
Acq On : 29 Mar 2018 2:47 pm Operator: LWeiskopf
Sample : K1802579-020 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:03 2018 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration

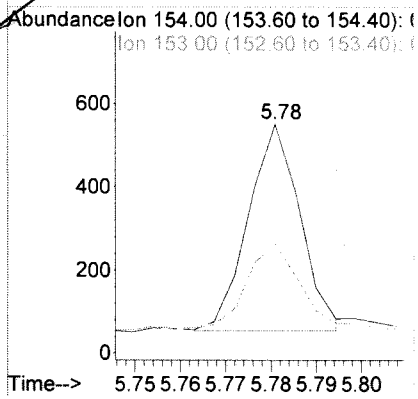


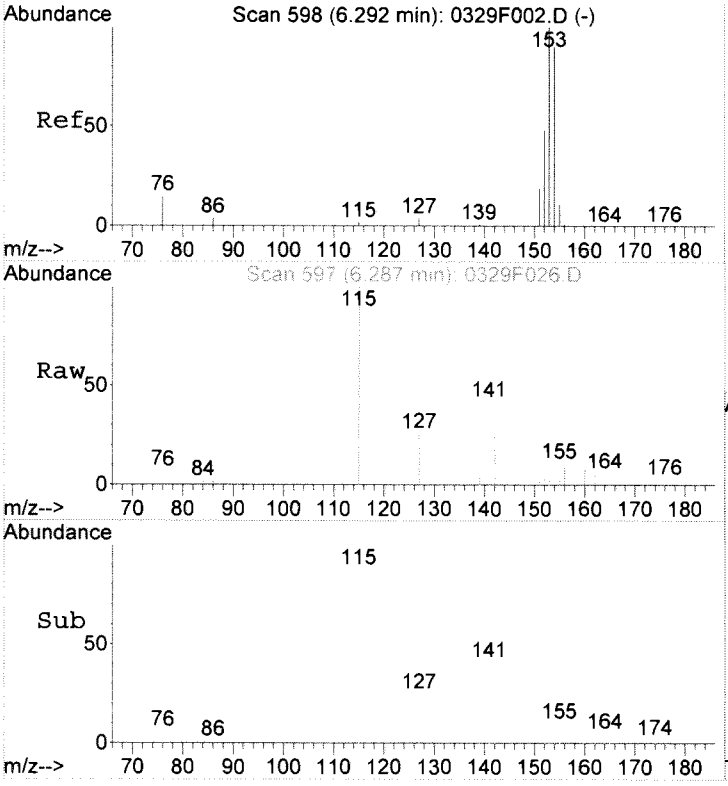


#6
Biphenyl
Concen: 2.06 ng/ml m
RT: 5.78 min Scan# 484
Delta R.T. 0.00 min
Lab File: 0329F026.D
Acq: 29 Mar 2018 2:47 pm

Tgt Ion:154 Resp: 395

Ion	Ratio	Lower	Upper
154	100		
153	47.5	11.3	71.3
152	35.0	8.5	48.5

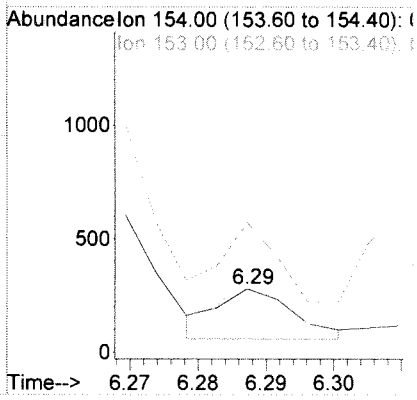


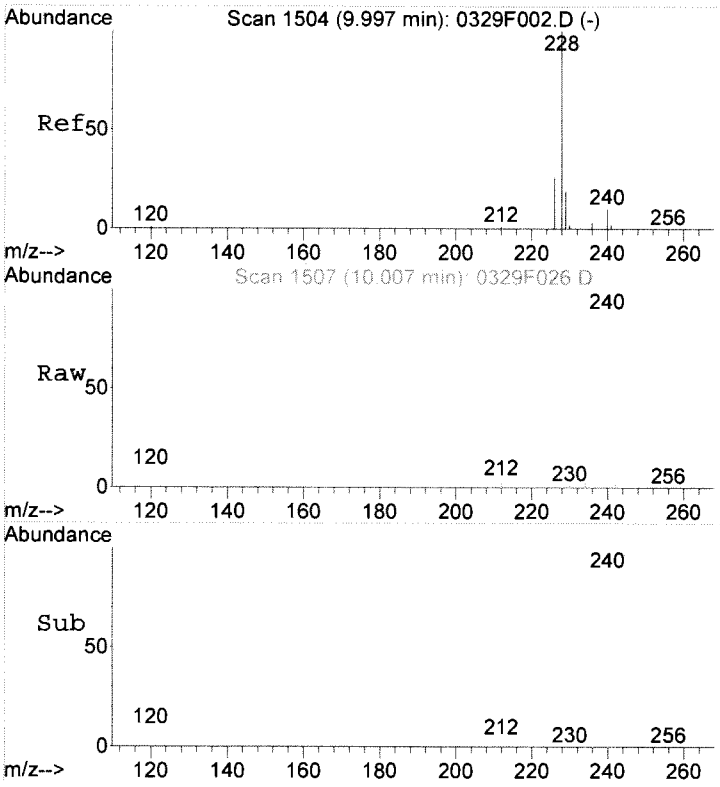


#10
Acenaphthene
Concen: 1.25 ng/ml m
RT: 6.29 min Scan# 597
Delta R.T. -0.01 min
Lab File: 0329F026.D
Acq: 29 Mar 2018 2:47 pm

Tgt Ion:154 Resp: 173

Ion	Ratio	Lower	Upper
154	100		
153	203.9	77.8	137.8#
152	122.5	20.8	80.8#

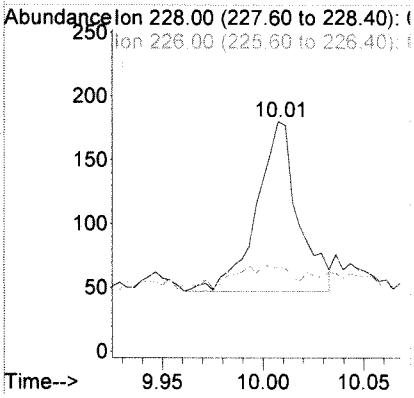




#26
Benz(a)anthracene
Concen: 0.65 ng/ml
RT: 10.01 min Scan# 1507
Delta R.T. 0.01 min
Lab File: 0329F026.D
Acq: 29 Mar 2018 2:47 pm

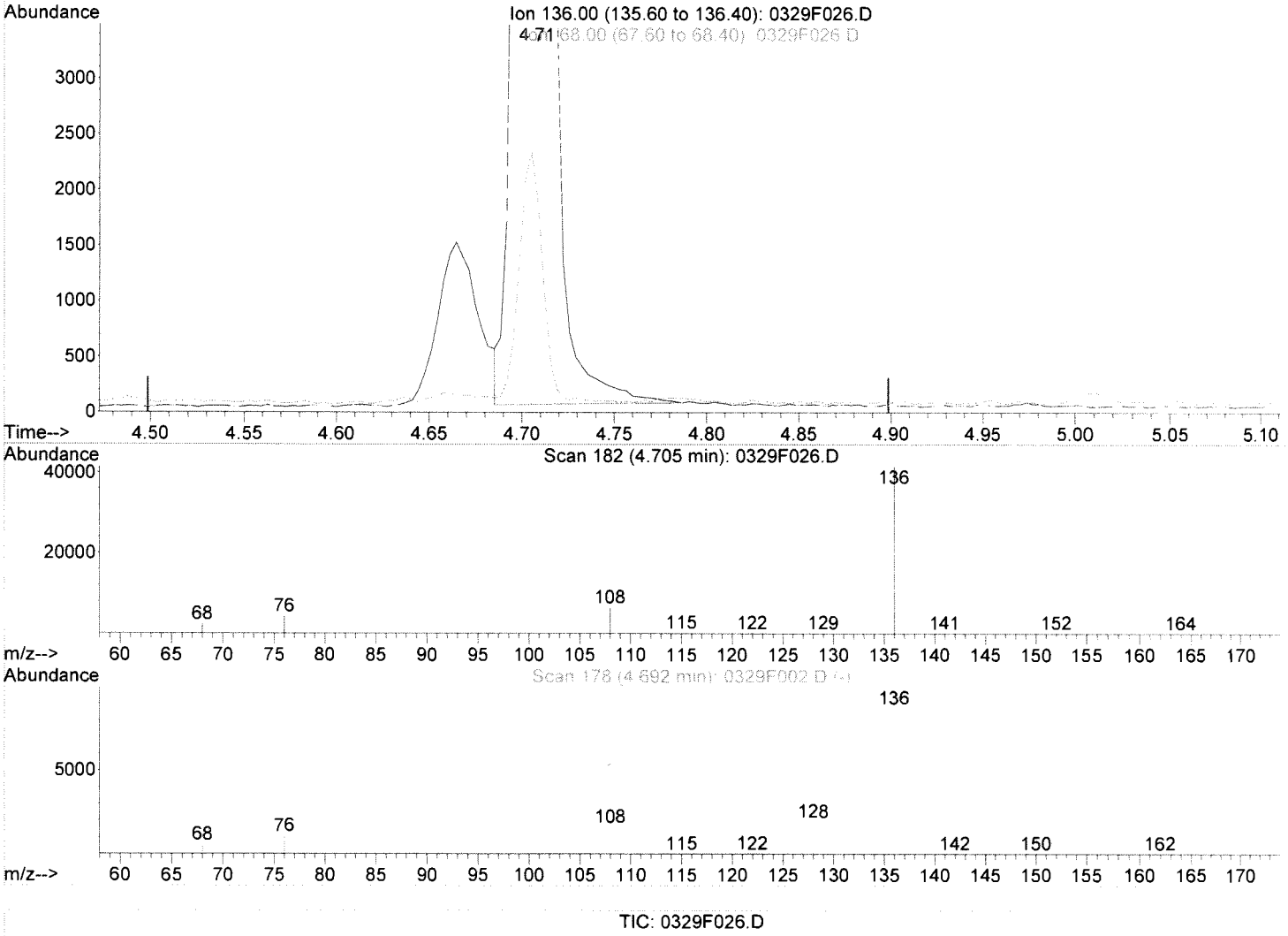
Tgt Ion:228 Resp: 190

Ion	Ratio	Lower	Upper
228	100		
226	10.5	0.0	56.4
229	30.8	0.0	39.3



Data File : J:\MS14\DATA\032918\0329F026.D Vial: 26
Acq On : 29 Mar 2018 2:47 pm Operator: LWeiskopf
Sample : K1802579-020 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 8:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration



TIC: 0329F026.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml

response 35659

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.32
108.00	11.60	15.47
0.00	0.00	0.00

Manual Integration:

Before

03/30/18

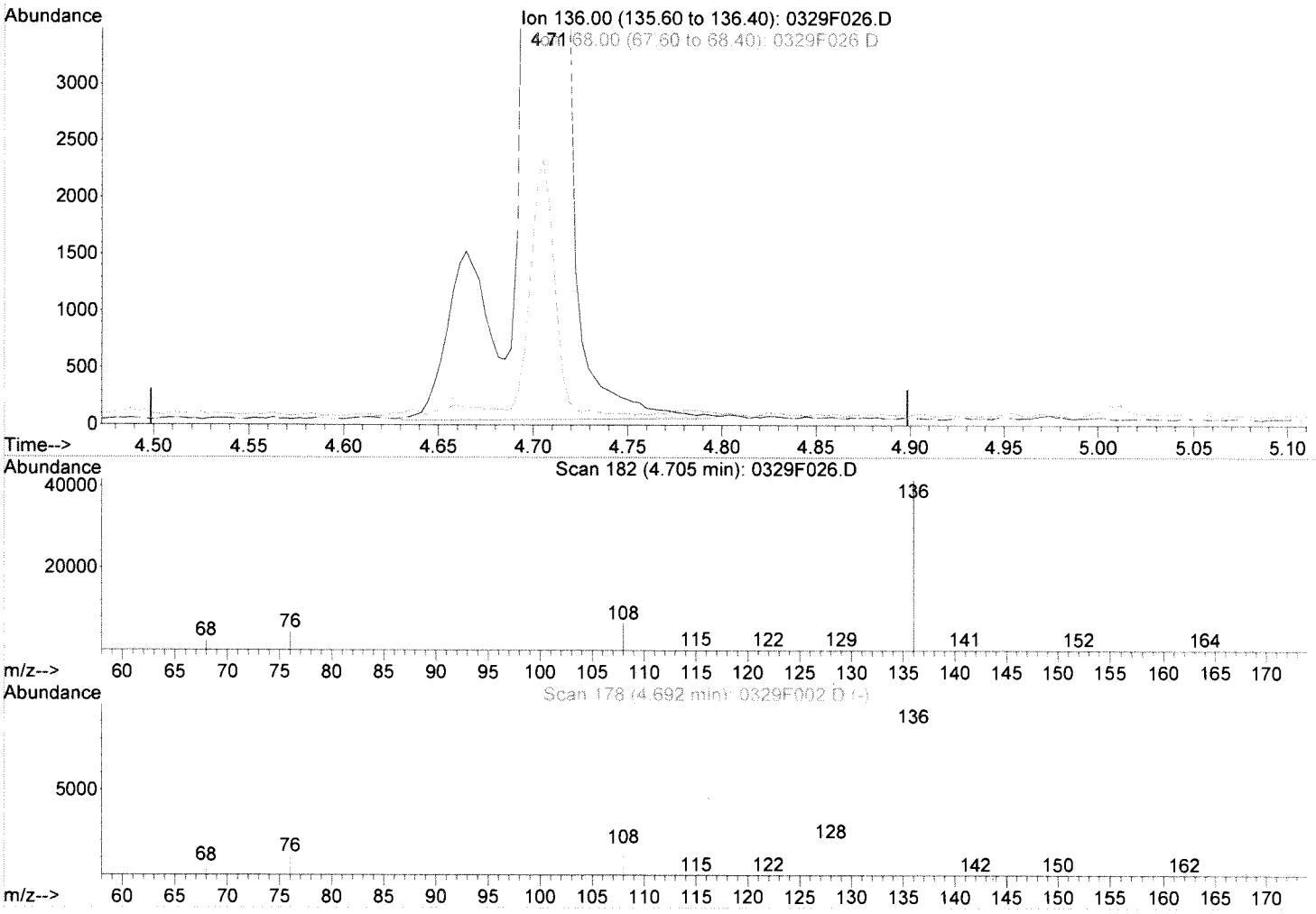
APR 02 2018

0329F026.D 101317PAH.M Fri Mar 30 10:02:37 2018

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F026.D Vial: 26
Acq On : 29 Mar 2018 2:47 pm Operator: LWeiskopf
Sample : K1802579-020 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:02 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration



TIC: 0329F026.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml m

response 38112

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.62
108.00	11.60	15.60
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

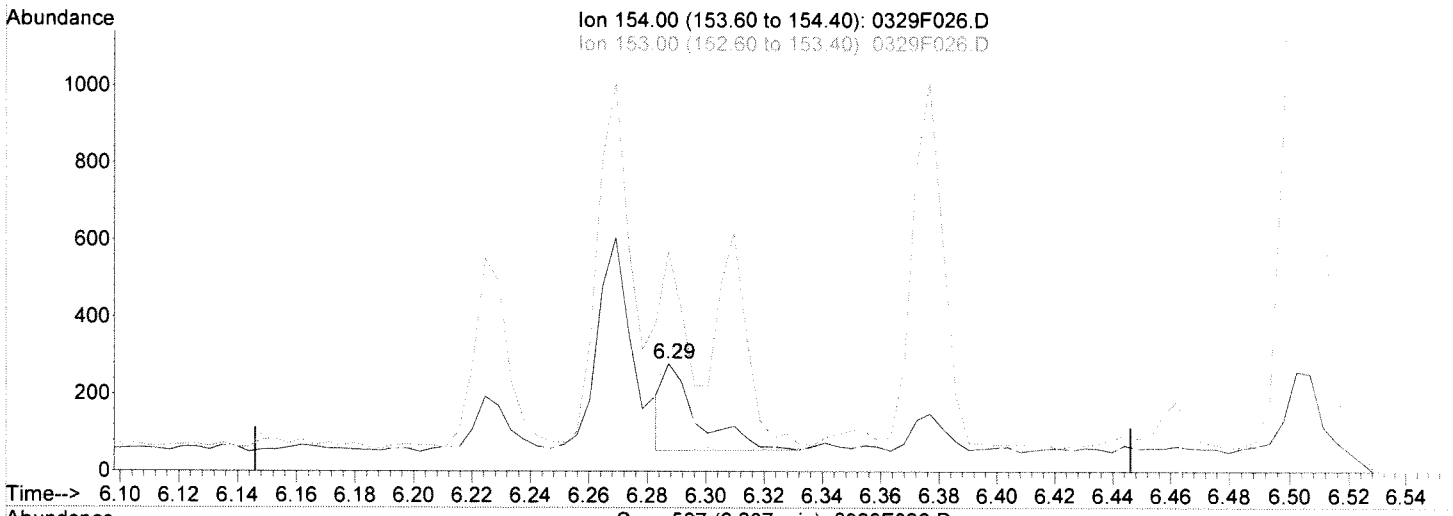
03/30/18

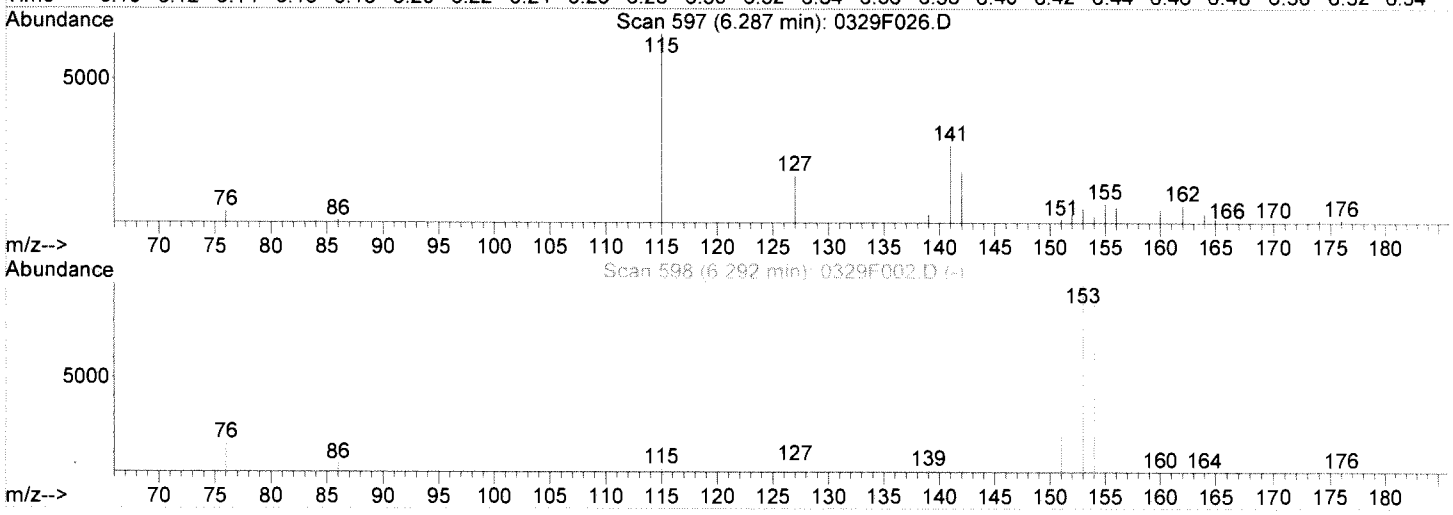
APR 02 2018

0329F026.D 101317PAH.M Fri Mar 30 10:02:42 2018

Data File : J:\MS14\DATA\032918\0329F026.D Vial: 26
Acq On : 29 Mar 2018 2:47 pm Operator: LWeiskopf
Sample : K1802579-020 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:03 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration





TIC: 0329F026.D

(10) Acenaphthene (T)

6.29min 1.34ng/ml

response 185

Ion	Exp%	Act%
154.00	100	100
153.00	107.80	223.21#
152.00	50.80	127.23#
0.00	0.00	0.00

Manual Integration:

Before

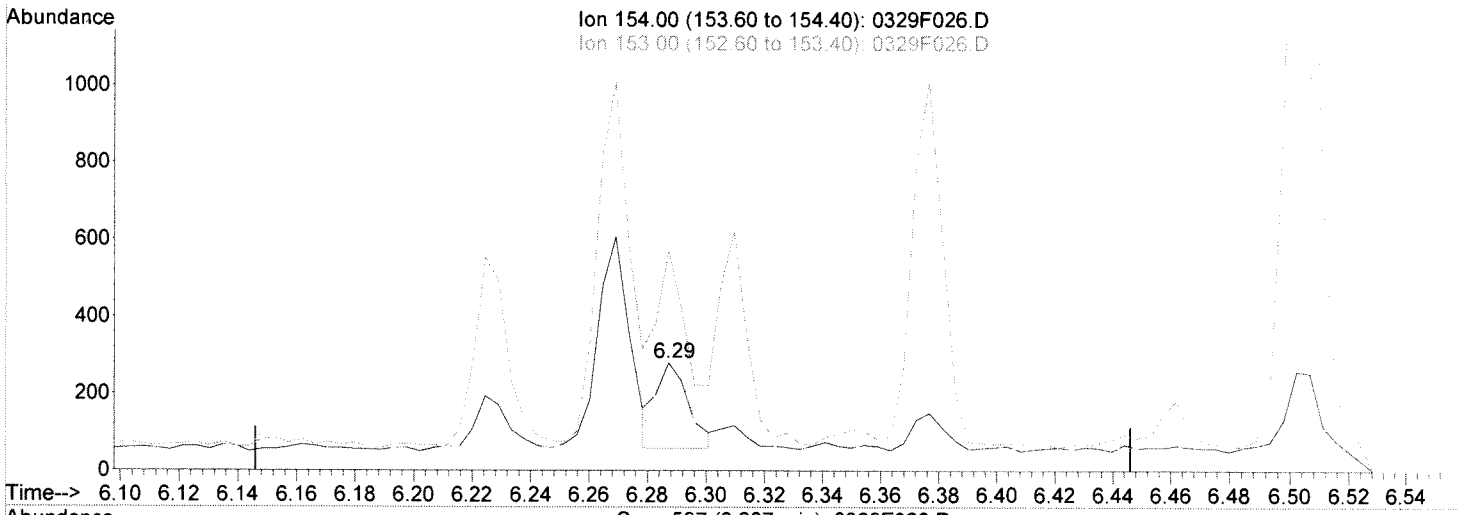
03/30/18

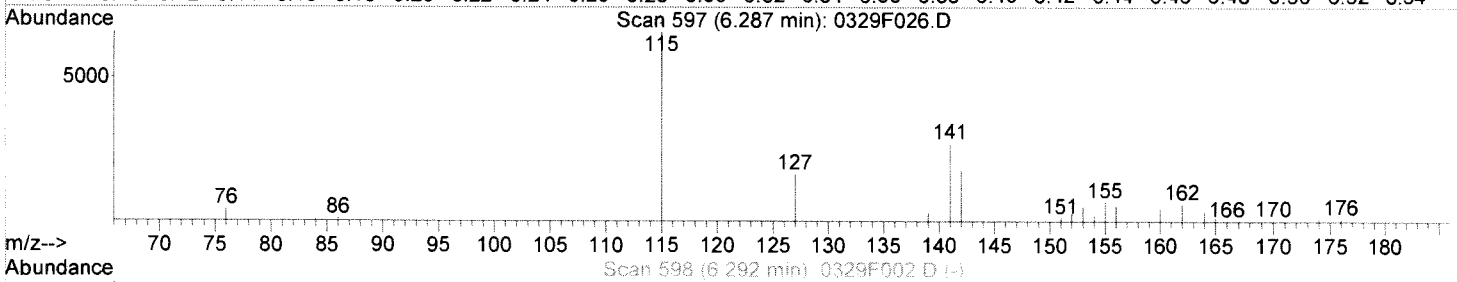
APR 02 2018

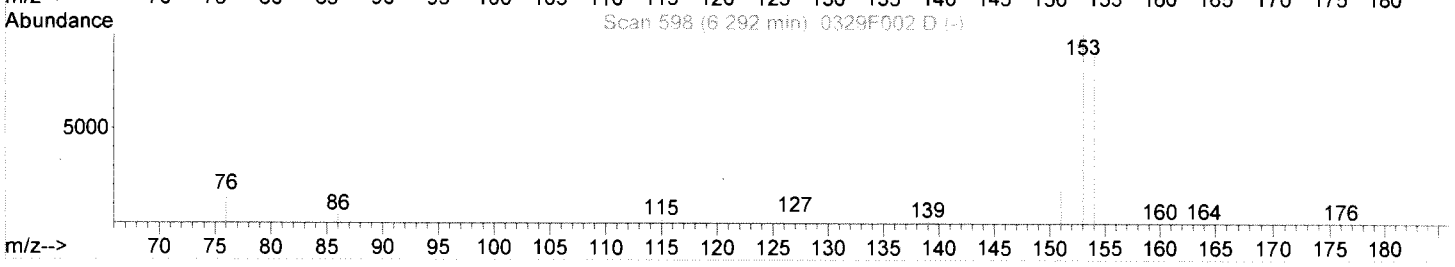
0329F026.D 101317PAH.M Fri Mar 30 10:03:10 2018

Data File : J:\MS14\DATA\032918\0329F026.D Vial: 26
Acq On : 29 Mar 2018 2:47 pm Operator: LWeiskopf
Sample : K1802579-020 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:03 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F026.D

(10) Acenaphthene (T)

6.29min 1.25ng/ml m

response 173

Ion	Exp%	Act%
154.00	100	100
153.00	107.80	203.93#
152.00	50.80	122.50#
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

03/30/18

i- matrix

APR 02 2018

0329F026.D 101317PAH.M Fri Mar 30 10:03:17 2018

Exception Report

Data File: J:\MS14\DATA\032918\0329F027.D
Lab ID: K1802579-021
RunType: SMPL
Matrix: WATER

Date Acquired: 03/29/2018 15:11
Date Quantitated: 03/30/2018 10:05
Batch ID: KWG1801713
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: MAR 30 2018

Secondary Review: APR 02 2018

Quantitation Report

Data File:	J:\MS14\DATA\032918\0329F027.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 15:11	**Quant Date:**	03/30/2018 10:05	**Vial:**	27
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-021			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801713	**Prep Lot:**	KWG1801565	**Report Group:**	K1802579
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1668286	**Prep Date:**	03/22/2018		

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M	**Calibration ID:**	CAL15579
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\032918\0329F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\032918\0329F017.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.71	0.02	136	40502m	200.00	OK
2	Acenaphthene-d10	6.27	0.00	164	21174	200.00	OK
3	Phenanthrene-d10	7.50	0.00	188	44211	200.00	OK
4	Chrysene-d12	10.01	0.00	240	51625	200.00	OK
5	Perylene-d12	13.03	-0.01	264	57028	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.71	0.00	0.00	176	133264	920.03	92	42-131	OK	
3	Fluoranthene-d10	8.49	0.00	0.00	212	272627	981.40	98	42-133	OK	
4	Terphenyl-d14	8.83	0.00	0.00	244	187336	860.64	86	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.73	0.02	0.00	128	181	0.7800	0.0035	J	
1	2-Methylnaphthalene	5.37	0.01	0.00	142	87	0.5400	0.0024	J	
2	Acenaphthylene				152	0		0.0011	U	
2	Acenaphthene				154	0d		0.0012	U	
2	Fluorene	6.73		0.00	166	82	0.4600	0.0020	J	
3	Phenanthrene				178	0d		0.0011	U	
3	Anthracene				178	0d		0.00082	U	
3	Fluoranthene				202	0d		0.00082	U	
4	Pyrene				202	0d		0.0010	U	
4	Benz(a)anthracene	10.00		0.00	228	169	0.5400	0.0024	J	
4	Chrysene				228	0d		0.00076	U	
5	Benzo(b)fluoranthene				252	0		0.00083	U	
5	Benzo(k)fluoranthene				252	0		0.00094	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\032918\0329F027.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 15:11	**Quant Date:**	03/30/2018 10:05	**Vial:**	27
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-021			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0		0.0011	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.00089	U	
5	Dibenz(a,h)anthracene				278	0		0.0013	U	
5	Benzo(g,h,i)perylene				276	0		0.00086	U	

Prep Amount:	450 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\032918\0329F027.D Vial: 27
Acq On : 29 Mar 2018 3:11 pm Operator: LWeiskopf
Sample : K1802579-021 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 08:13:10 2018 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

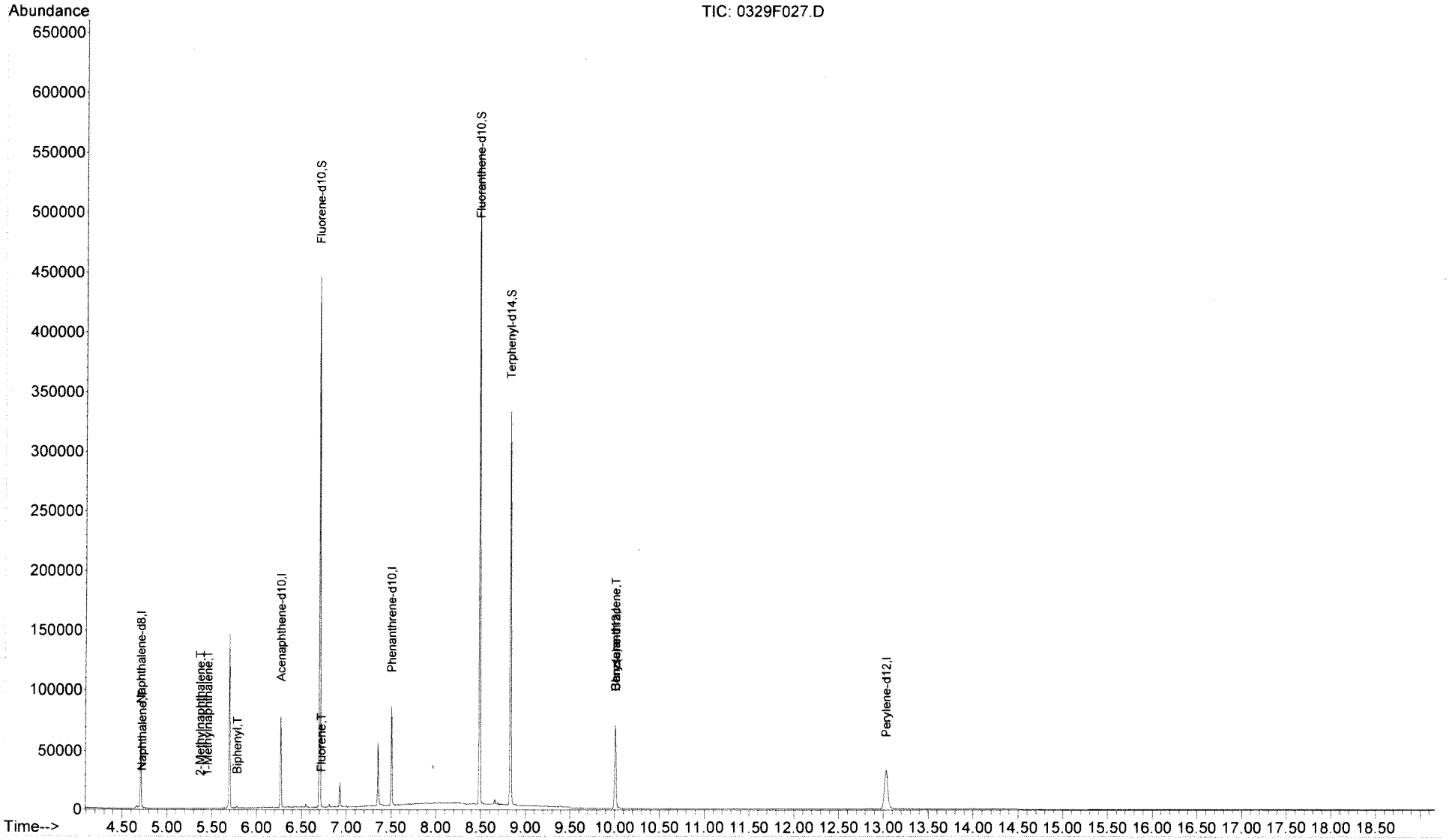
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.71	136	40502m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.27	164	21174	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	44211	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	51625	200.00	ng/ml	0.00
28) Perylene-d12	13.03	264	57028	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
13) Fluorene-d10	6.71	176	133264	920.03	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	92.00%		
22) Fluoranthene-d10	8.49	212	272627	981.40	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	98.14%		
25) Terphenyl-d14	8.83	244	187336	860.64	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	86.06%		
Target Compounds						Qvalue
2) Naphthalene	4.73	128	181	0.78	ng/ml	87
4) 2-Methylnaphthalene	5.37	142	87	0.54	ng/ml#	62
5) 1-Methylnaphthalene	5.45	142	74	0.52	ng/ml#	67
6) Biphenyl	5.78	154	555	2.73	ng/ml	97
14) Fluorene	6.73	166	82	0.46	ng/ml	83
26) Benz(a)anthracene	10.00	228	169	0.54	ng/ml	71

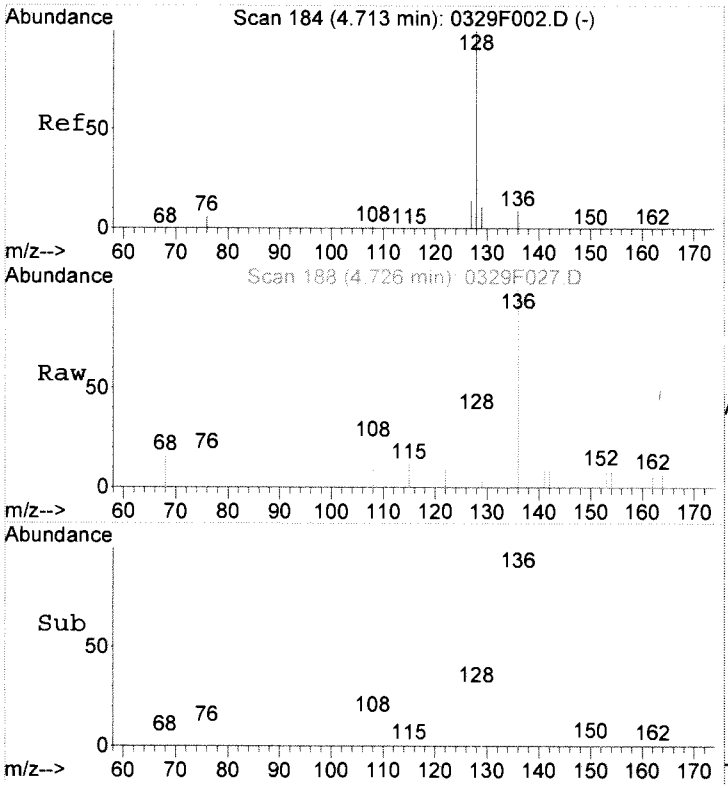
(#) = qualifier out of range (m) = manual integration
0329F027.D 101317PAH.M Fri Mar 30 10:05:26 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\032918\0329F027.D Vial: 27
Acq On : 29 Mar 2018 3:11 pm Operator: LWeiskopf
Sample : K1802579-021 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:05 2018 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration

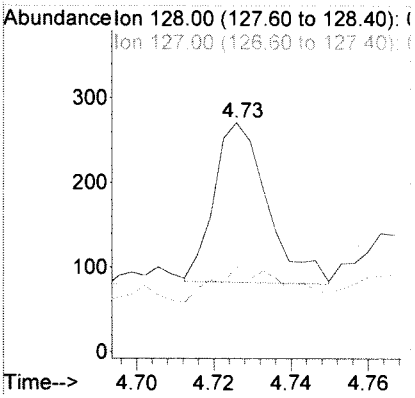


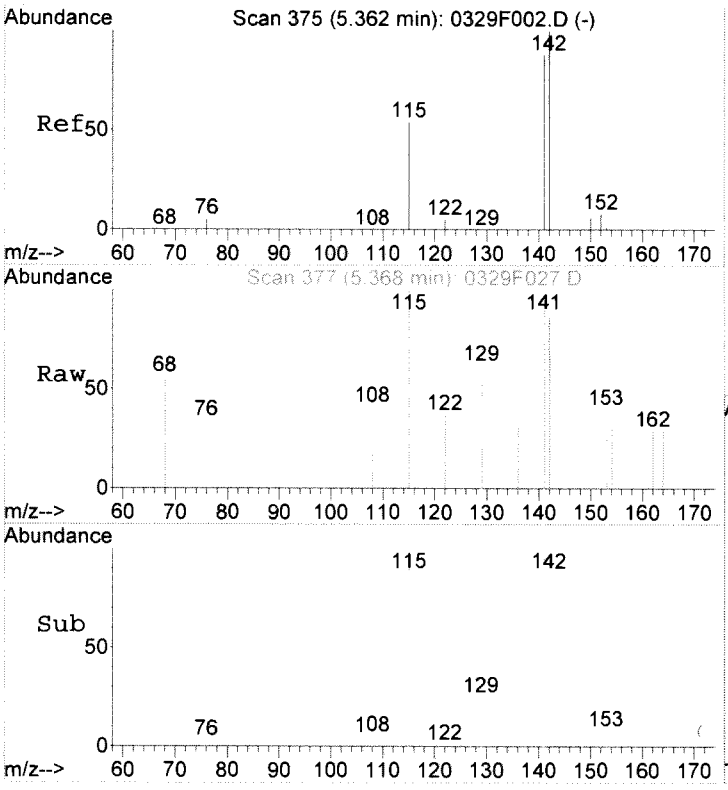


#2
Naphthalene
Concen: 0.78 ng/ml
RT: 4.73 min Scan# 188
Delta R.T. 0.01 min
Lab File: 0329F027.D
Acq: 29 Mar 2018 3:11 pm

Tgt Ion:128 Resp: 181 ✓

Ion	Ratio	Lower	Upper
128	100		
127	22.9	0.0	44.1
129	9.6	0.0	30.4

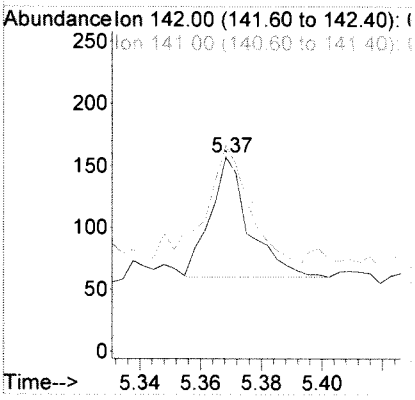


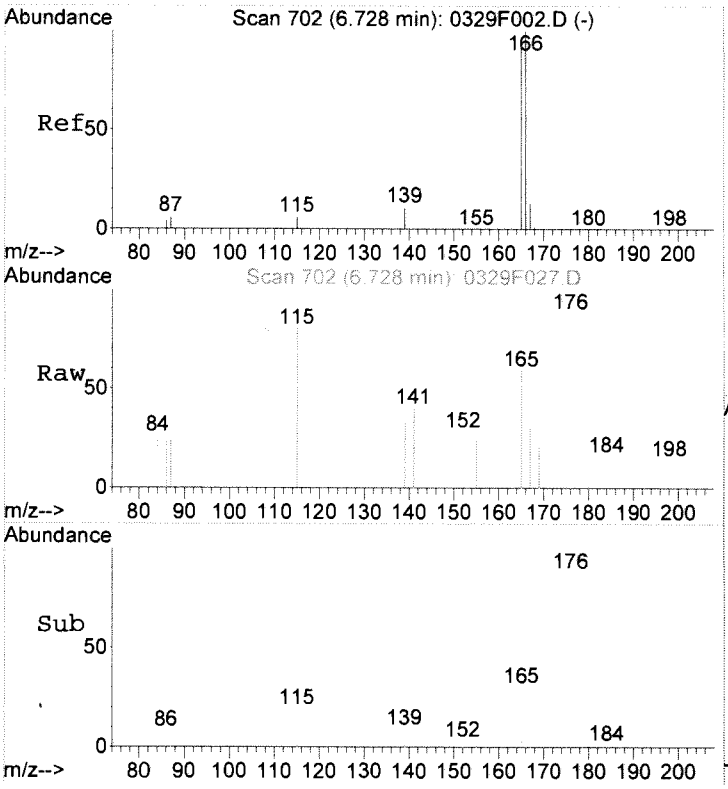


#4
2-Methylnaphthalene
Concen: 0.54 ng/ml
RT: 5.37 min Scan# 377
Delta R.T. 0.00 min
Lab File: 0329F027.D
Acq: 29 Mar 2018 3:11 pm

Tgt Ion:142 Resp: 87 ✓

Ion	Ratio	Lower	Upper
142	100		
141	94.8	51.7	111.7
115	81.4	2.0	42.0#

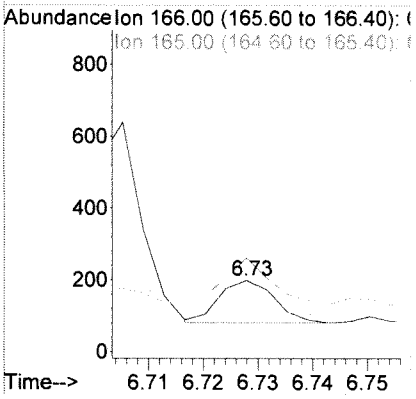


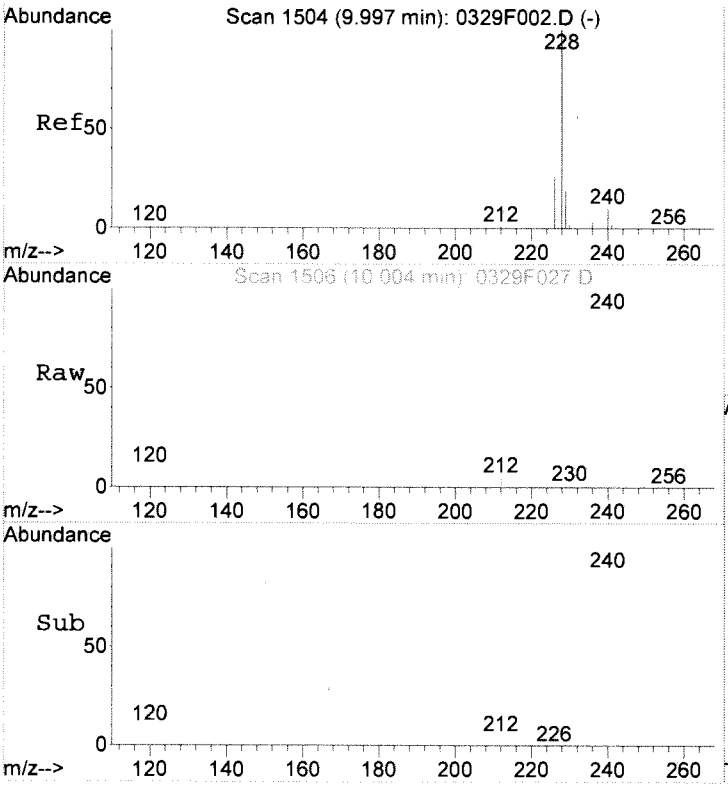


#14
Fluorene
Concen: 0.46 ng/ml
RT: 6.73 min Scan# 702
Delta R.T. 0.00 min
Lab File: 0329F027.D
Acq: 29 Mar 2018 3:11 pm

Tgt Ion:166 Resp: 82

Ion	Ratio	Lower	Upper
166	100		
165	110.3	65.6	125.6
167	24.8	0.0	33.0

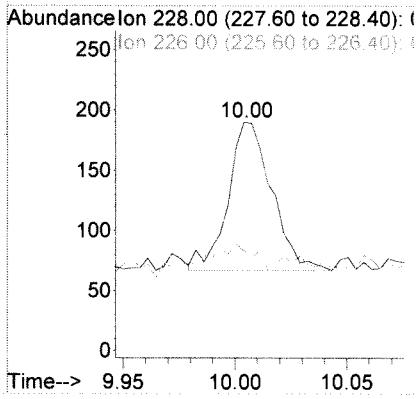




#26
Benz(a)anthracene
Concen: 0.54 ng/ml
RT: 10.00 min Scan# 1506
Delta R.T. 0.01 min
Lab File: 0329F027.D
Acq: 29 Mar 2018 3:11 pm

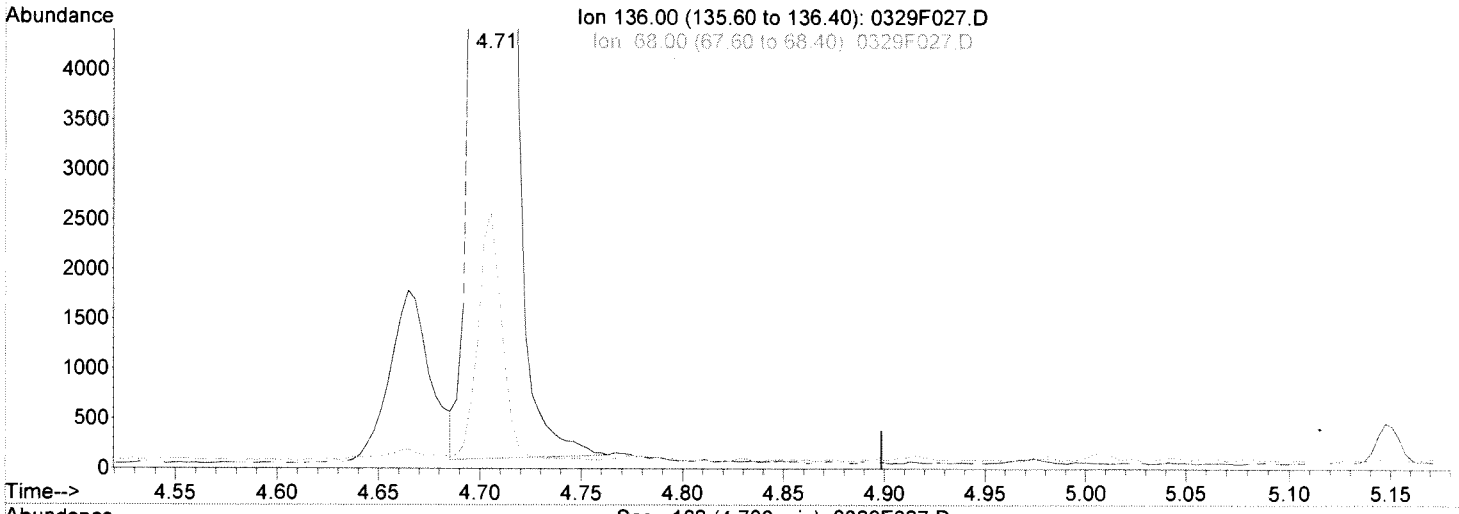
Tgt Ion:228 Resp: 169

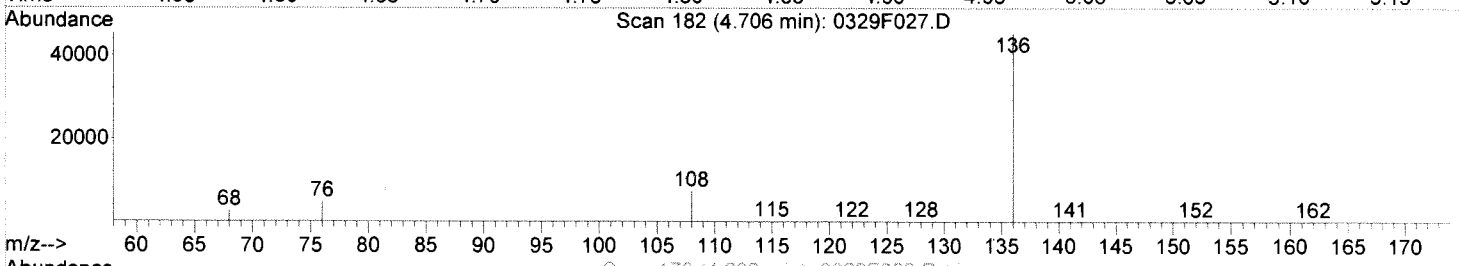
Ion	Ratio	Lower	Upper
228	100		
226	12.2	0.0	56.4
229	33.3	0.0	39.3

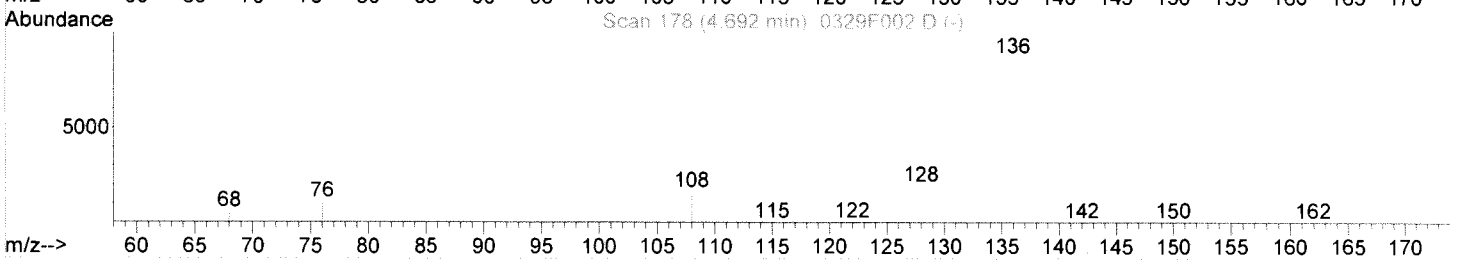


Data File : J:\MS14\DATA\032918\0329F027.D Vial: 27
Acq On : 29 Mar 2018 3:11 pm Operator: LWeiskopf
Sample : K1802579-021 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 8:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F027.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml

response 37579

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.48
108.00	11.60	16.05
0.00	0.00	0.00

Manual Integration:

Before

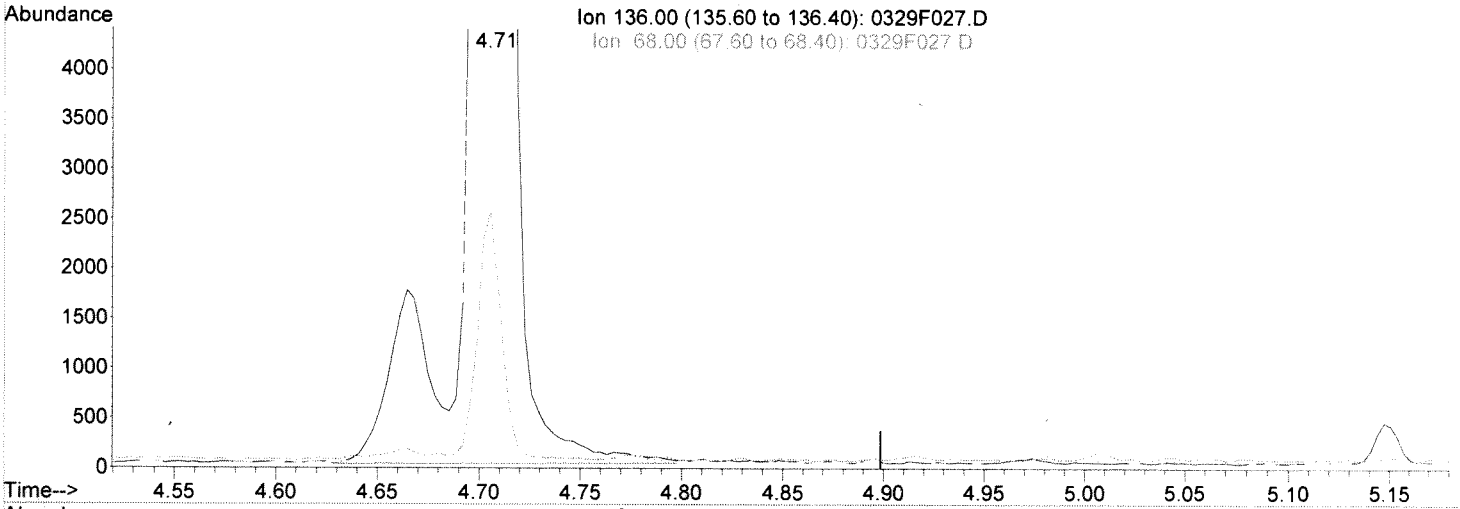
03/30/18

APR 02 2018

0329F027.D 101317PAH.M Fri Mar 30 10:04:09 2018

Data File : J:\MS14\DATA\032918\0329F027.D Vial: 27
Acq On : 29 Mar 2018 3:11 pm Operator: LWeiskopf
Sample : K1802579-021 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:04 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration



TIC: 0329F027.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml m

response 40502

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.68
108.00	11.60	16.21
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

03/30/18

APR 02 2018

0329F027.D 101317PAH.M Fri Mar 30 10:04:15 2018

Exception Report

Data File: J:\MS14\DATA\032918\0329F028.D
Lab ID: K1802579-022
RunType: SMPL
Matrix: WATER

Date Acquired: 03/29/2018 15:35
Date Quantitated: 03/30/2018 10:13
Batch ID: KWG1801713
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: MAR 30 2018

Secondary Review: APR 02 2018

Printed: 03/30/2018 11:29:09
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\032918\0329F028.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 15:35	**Quant Date:**	03/30/2018 10:13	**Vial:**	28
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-022			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801713	**Prep Lot:**	KWG1801565	**Report Group:**	K1802579
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1668287	**Prep Date:**	03/22/2018		

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M	**Calibration ID:**	CAL15579
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\032918\0329F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\032918\0329F017.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.71	0.02	136	40013m	200.00	OK
2	Acenaphthene-d10	6.27	0.00	164	20672	200.00	OK
3	Phenanthrene-d10	7.50	0.00	188	44015	200.00	OK
4	Chrysene-d12	10.01	0.00	240	51006	200.00	OK
5	Perylene-d12	13.03	-0.01	264	58064	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.71	0.00	0.00	176	131695	931.28	93	42-131	OK	
3	Fluoranthene-d10	8.49	0.00	0.00	212	272606	985.70	99	42-133	OK	
4	Terphenyl-d14	8.83	0.00	0.00	244	175671	816.84	82	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.73	0.02	0.00	128	109	0.4800	0.0021	J	
1	2-Methylnaphthalene	5.37	0.01	0.00	142	65	0.4100	0.0018	J	
2	Acenaphthylene				152	0		0.0011	U	
2	Acenaphthene	6.30	0.01	0.00	154	68m	0.4800	0.0021	J	
2	Fluorene	6.73		0.00	166	73	0.4200	0.0019	J	
3	Phenanthrene	7.52		0.00	178	491	1.80	0.0080	J	
3	Anthracene				178	0d		0.00082	U	
3	Fluoranthene	8.50	-0.01	0.00	202	131m	0.4000	0.0018	J	
4	Pyrene	8.69		0.00	202	222	0.7200	0.0032	J	
4	Benz(a)anthracene	10.01	0.01	0.00	228	175	0.5700	0.0025	J	
4	Chrysene				228	0d		0.00076	U	
5	Benzo(b)fluoranthene				252	0		0.00083	U	
5	Benzo(k)fluoranthene				252	0		0.00094	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\032918\0329F028.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 15:35	**Quant Date:**	03/30/2018 10:13	**Vial:**	28
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-022			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0		0.0011	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.00089	U	
5	Dibenz(a,h)anthracene				278	0		0.0013	U	
5	Benzo(g,h,i)perylene				276	0		0.00086	U	

Prep Amount:	450 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\032918\0329F028.D Vial: 28
Acq On : 29 Mar 2018 3:35 pm Operator: LWeiskopf
Sample : K1802579-022 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 08:13:10 2018 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

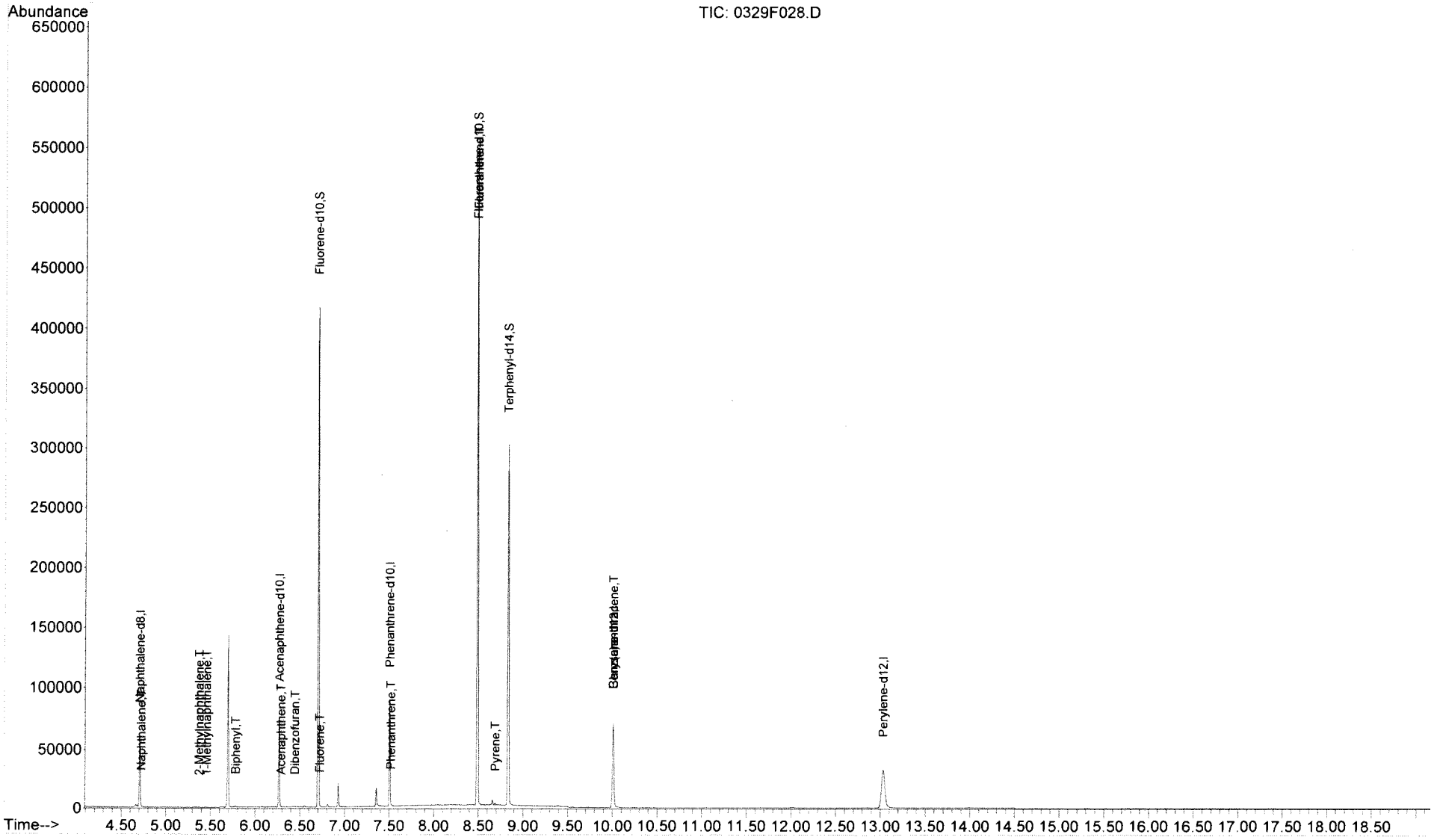
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.71	136	40013m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.27	164	20672	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	44015	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	51006	200.00	ng/ml	0.00
28) Perylene-d12	13.03	264	58064	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
13) Fluorene-d10	6.71	176	131695	931.28	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	93.13%		
22) Fluoranthene-d10	8.49	212	272606	985.70	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	98.57%		
25) Terphenyl-d14	8.83	244	175671	816.84	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	81.68%		
Target Compounds						Qvalue
2) Naphthalene	4.73	128	109	0.48	ng/ml	86
4) 2-Methylnaphthalene	5.37	142	65	0.41	ng/ml#	67
5) 1-Methylnaphthalene	5.45	142	57m	0.41	ng/ml	
6) Biphenyl	5.78	154	419	2.09	ng/ml	94
10) Acenaphthene	6.30	154	68m	0.48	ng/ml	
11) Dibenzofuran	6.44	168	133	0.60	ng/ml	82
14) Fluorene	6.73	166	73	0.42	ng/ml	81
17) Phenanthrene	7.52	178	491	1.80	ng/ml	95
21) Fluoranthene	8.50	202	131m	0.40	ng/ml	
24) Pyrene	8.69	202	222	0.72	ng/ml#	1
26) Benz(a)anthracene	10.01	228	175	0.57	ng/ml	62

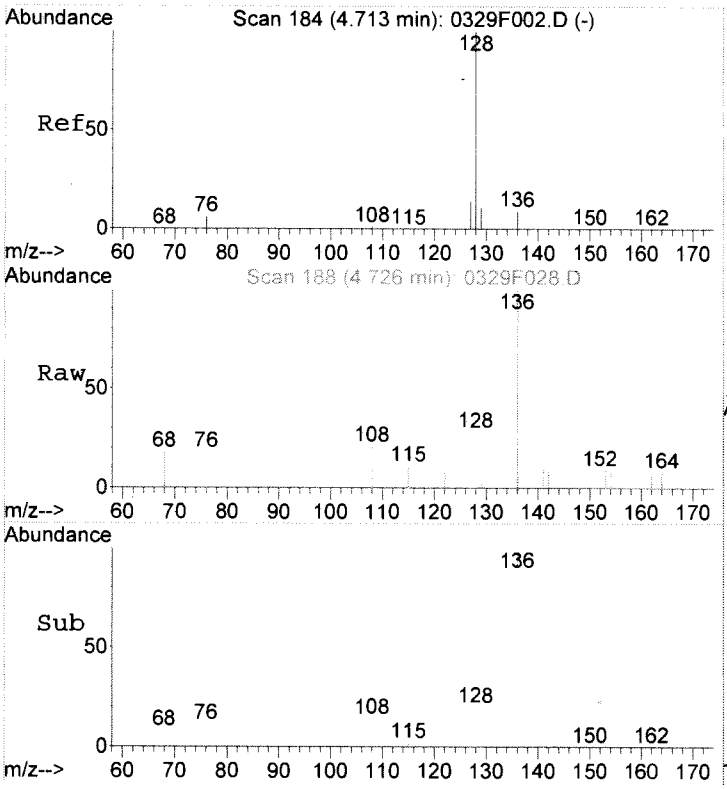
(#) = qualifier out of range (m) = manual integration
0329F028.D 101317PAH.M Fri Mar 30 10:17:23 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\032918\0329F028.D Vial: 28
Acq On : 29 Mar 2018 3:35 pm Operator: LWeiskopf
Sample : K1802579-022 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:13 2018 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration

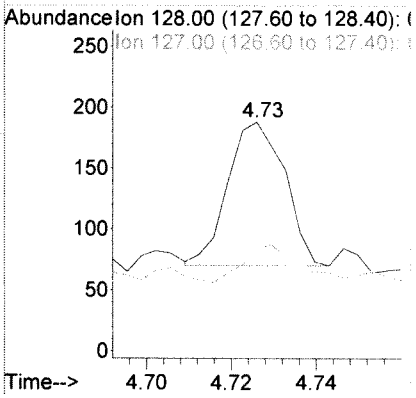


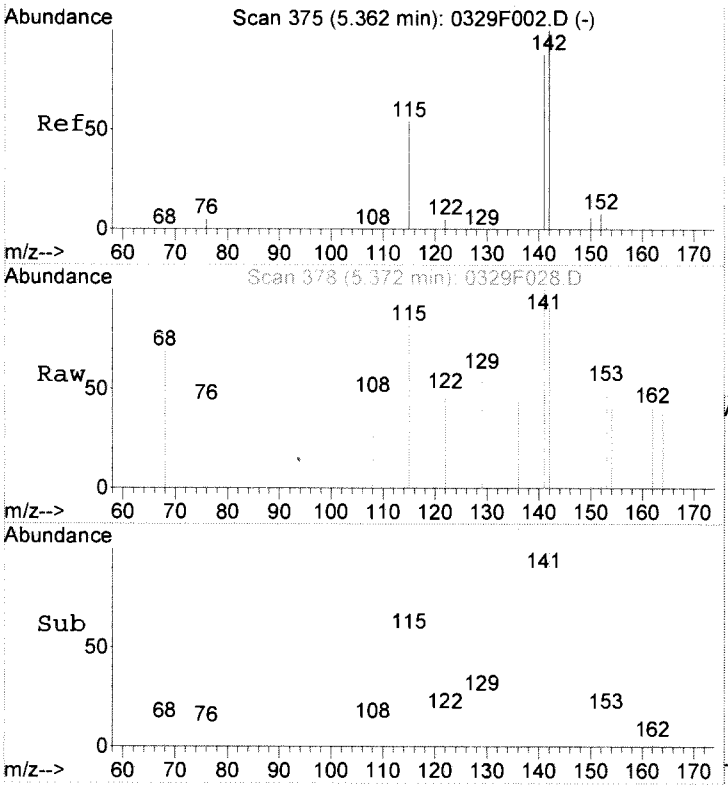


#2
Naphthalene
Concen: 0.48 ng/ml
RT: 4.73 min Scan# 188
Delta R.T. 0.01 min
Lab File: 0329F028.D
Acq: 29 Mar 2018 3:35 pm

Tgt Ion:128 Resp: 109

Ion	Ratio	Lower	Upper
128	100		
127	19.5	0.0	44.1
129	5.1	0.0	30.4

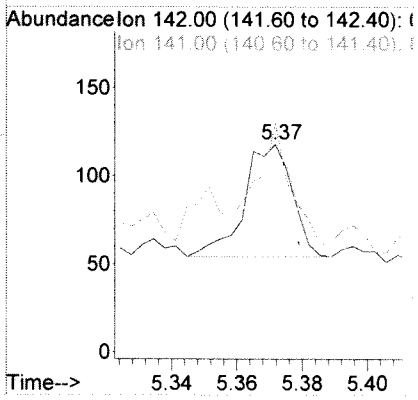


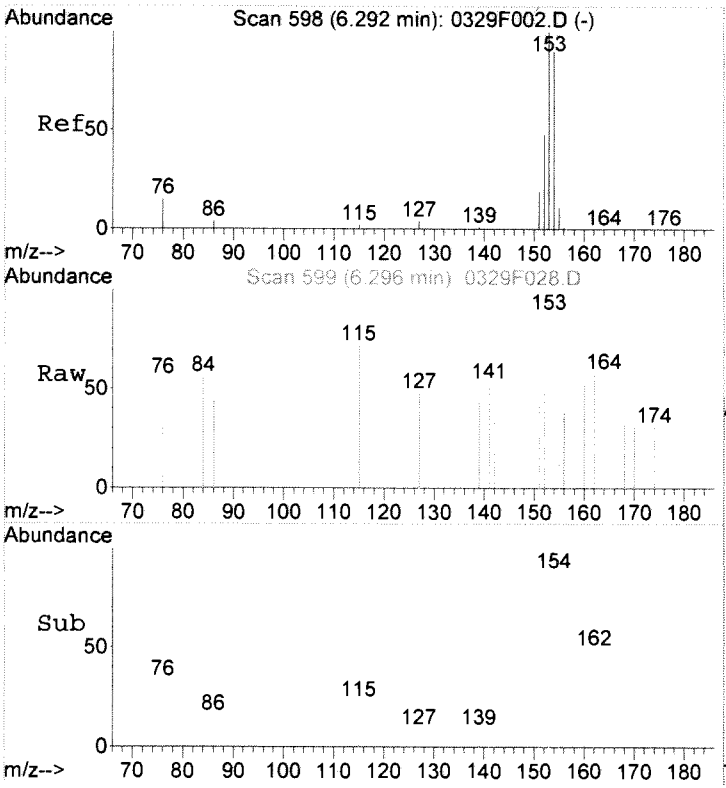


#4
2-Methylnaphthalene
Concen: 0.41 ng/ml
RT: 5.37 min Scan# 378
Delta R.T. 0.01 min
Lab File: 0329F028.D
Acq: 29 Mar 2018 3:35 pm

Tgt Ion:142 Resp: 65

Ion	Ratio	Lower	Upper
142	100		
141	106.3	51.7	111.7
115	48.4	2.0	42.0#

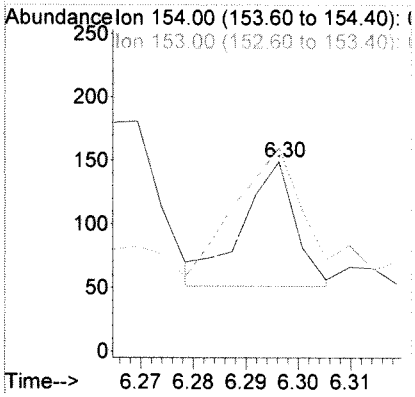


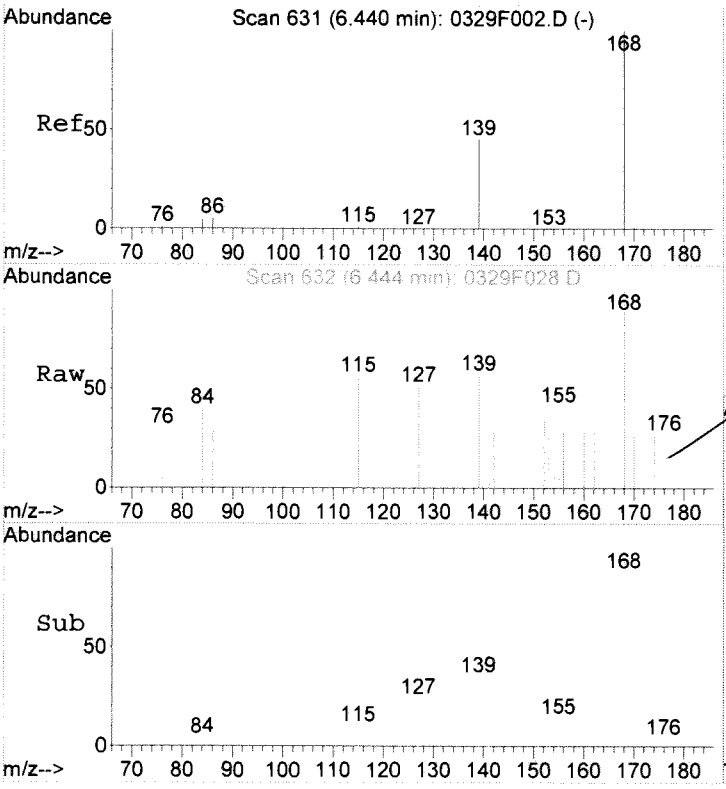


#10
Acenaphthene
Concen: 0.48 ng/ml m
RT: 6.30 min Scan# 599
Delta R.T. 0.00 min
Lab File: 0329F028.D
Acq: 29 Mar 2018 3:35 pm

Tgt Ion:154 Resp: 68

Ion	Ratio	Lower	Upper
154	100		
153	107.4	77.8	137.8
152	71.8	20.8	80.8

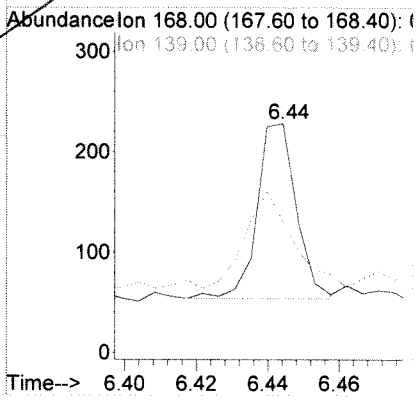


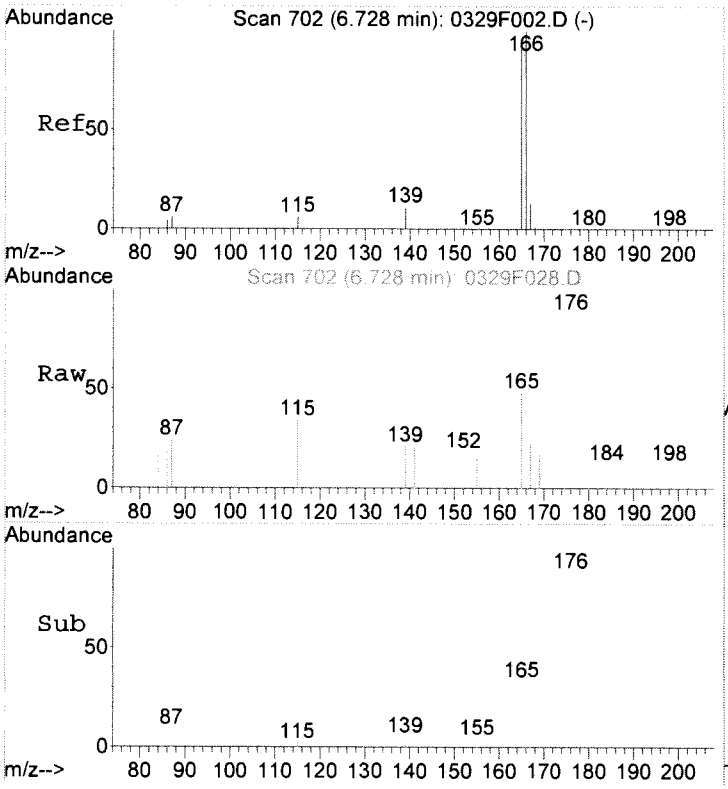


#11
Dibenzofuran
Concen: 0.60 ng/ml
RT: 6.44 min Scan# 632
Delta R.T. 0.00 min
Lab File: 0329F028.D
Acq: 29 Mar 2018 3:35 pm

Tgt Ion:168 Resp: 133

Ion	Ratio	Lower	Upper
168	100		
139	33.3	15.4	75.4
84	9.8	0.0	24.7

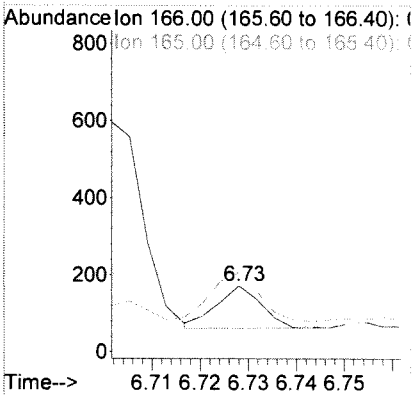


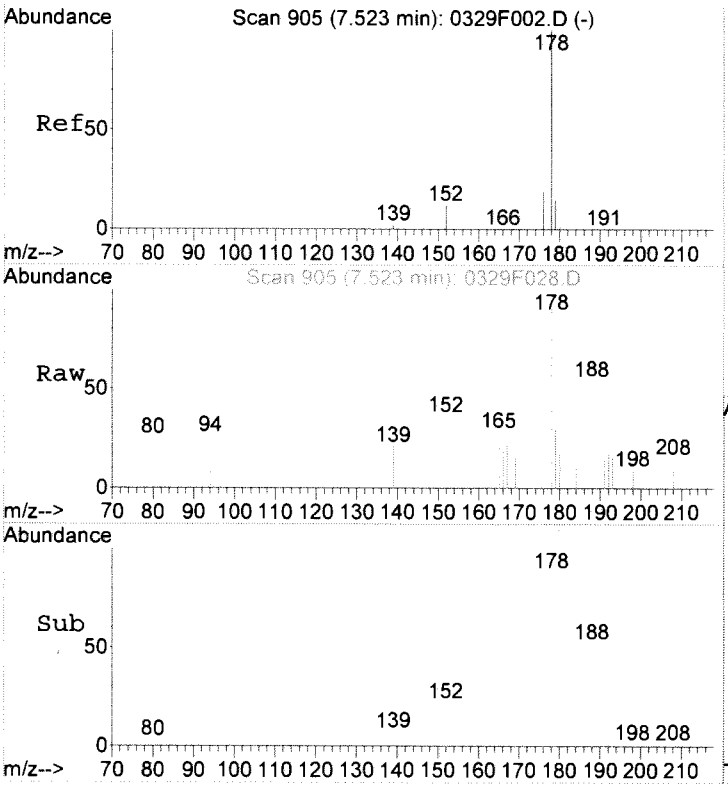


#14
Fluorene
Concen: 0.42 ng/ml
RT: 6.73 min Scan# 702
Delta R.T. 0.00 min
Lab File: 0329F028.D
Acq: 29 Mar 2018 3:35 pm

Tgt Ion:166 Resp: 73 ✓

Ion	Ratio	Lower	Upper
166	100		
165	112.7	65.6	125.6
167	25.5	0.0	33.0

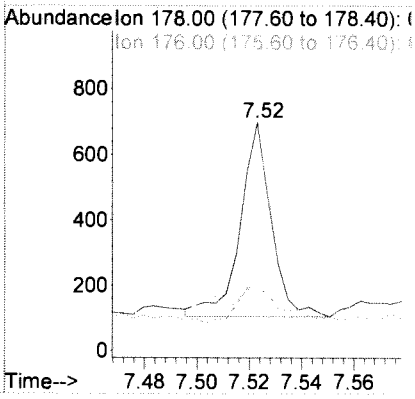


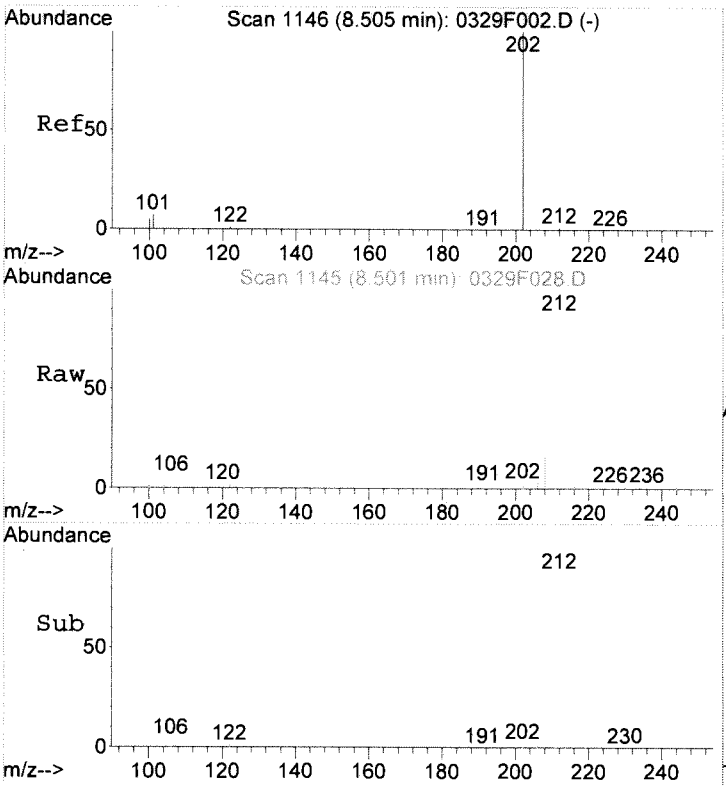


#17
Phenanthrene
Concen: 1.80 ng/ml
RT: 7.52 min Scan# 905
Delta R.T. 0.00 min
Lab File: 0329F028.D
Acq: 29 Mar 2018 3:35 pm

Tgt Ion:178 Resp: 491 ✓

Ion	Ratio	Lower	Upper
178	100		
176	16.5	0.0	49.6
179	13.8	0.0	35.1

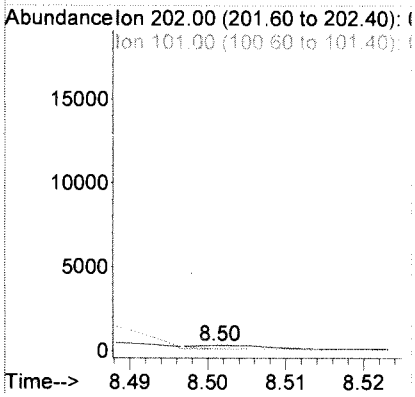


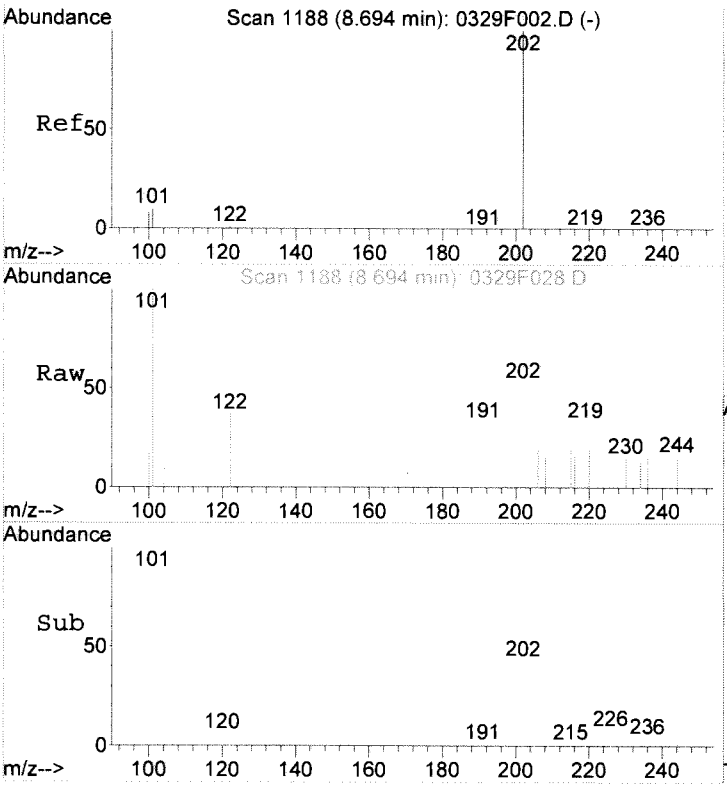


#21
Fluoranthene
Concen: 0.40 ng/ml m
RT: 8.50 min Scan# 1145
Delta R.T. 0.00 min
Lab File: 0329F028.D
Acq: 29 Mar 2018 3:35 pm

Tgt Ion:202 Resp: 131 ✓

Ion	Ratio	Lower	Upper
202	100		
101	38.6	0.0	39.1
100	82.2	0.0	27.0#

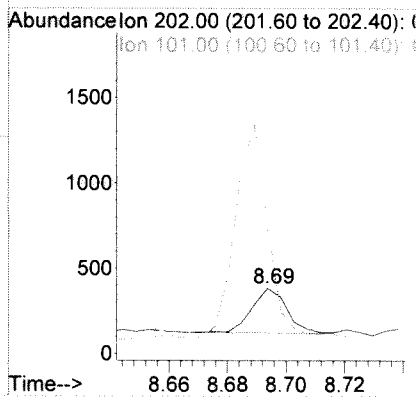


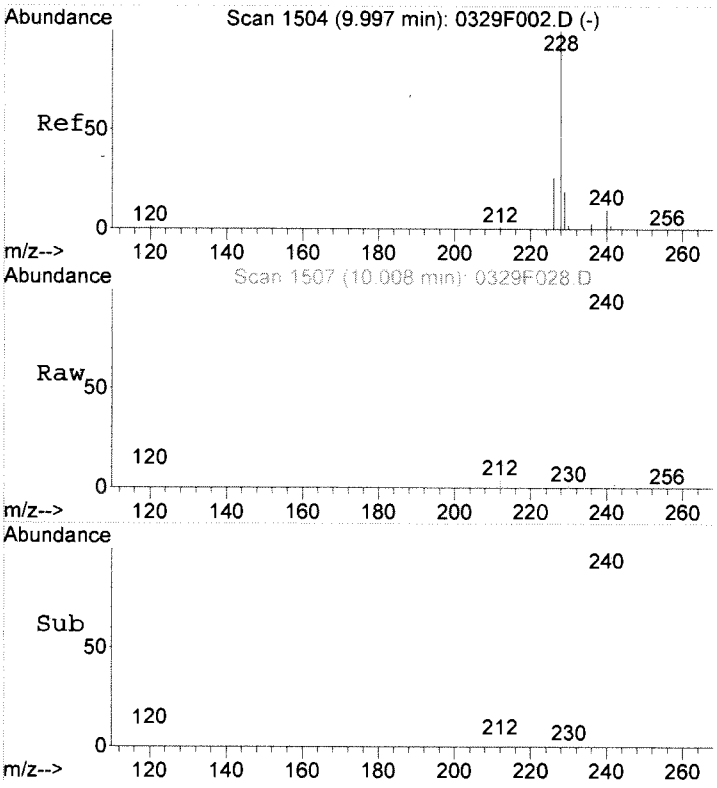


#24
Pyrene
Concen: 0.72 ng/ml
RT: 8.69 min Scan# 1188
Delta R.T. 0.00 min
Lab File: 0329F028.D
Acq: 29 Mar 2018 3:35 pm

Tgt Ion:202 Resp: 222 ✓

Ion	Ratio	Lower	Upper
202	100		
101	240.1	0.0	40.5#
100	21.4	0.0	28.3

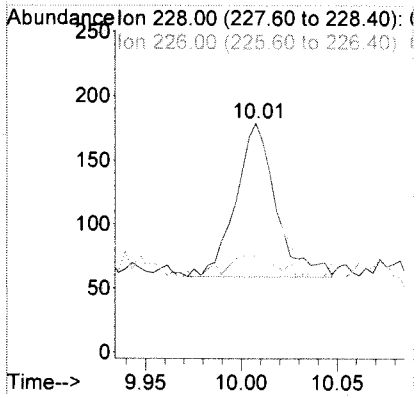




#26
Benz(a)anthracene
Concen: 0.57 ng/ml
RT: 10.01 min Scan# 1507
Delta R.T. 0.01 min
Lab File: 0329F028.D
Acq: 29 Mar 2018 3:35 pm

Tgt Ion:228 Resp: 175 ✓

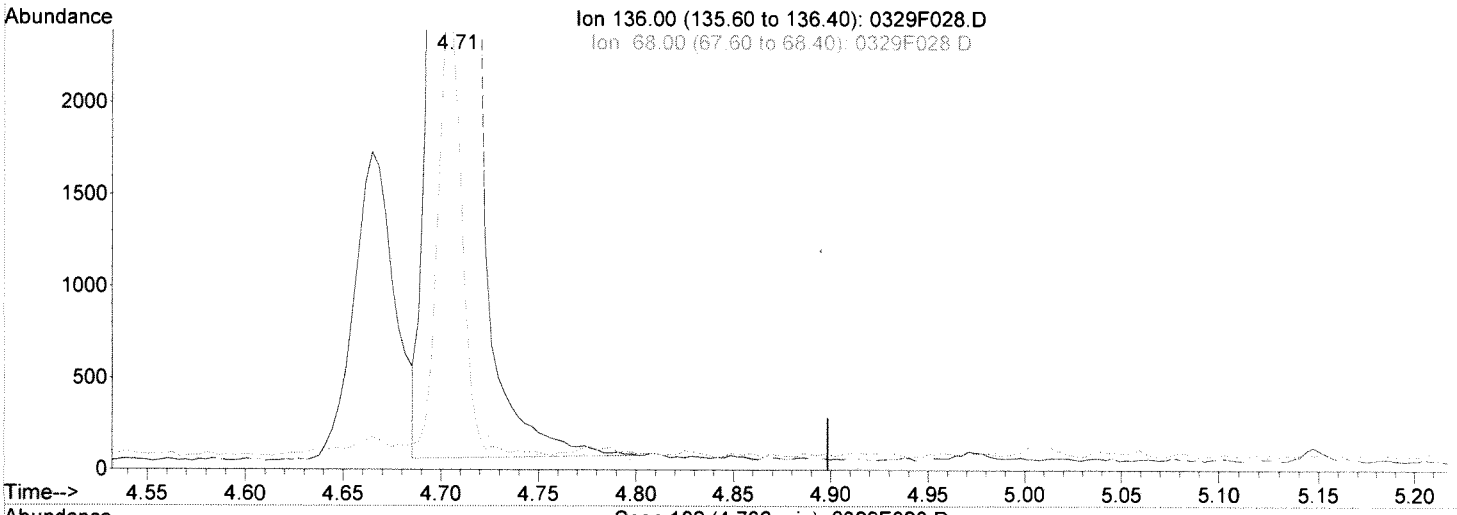
Ion	Ratio	Lower	Upper
228	100		
226	9.2	0.0	56.4
229	39.2	0.0	39.3

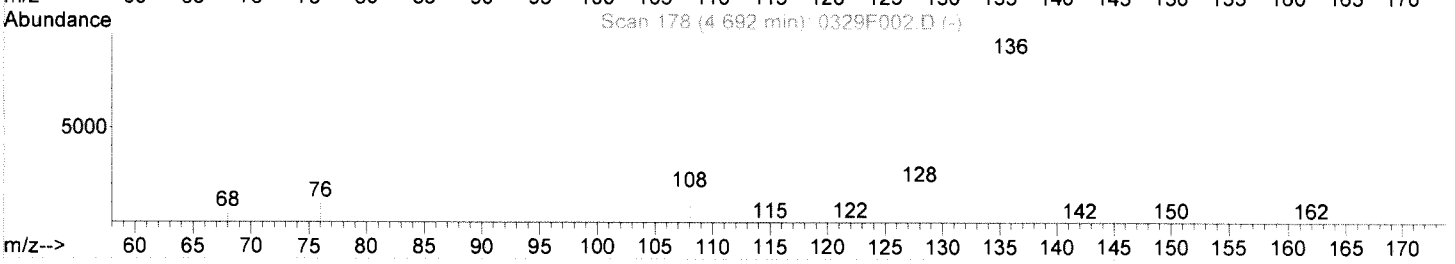


Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F028.D Vial: 28
Acq On : 29 Mar 2018 3:35 pm Operator: LWeiskopf
Sample : K1802579-022 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 8:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration





TIC: 0329F028.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml

response 37431

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.34
108.00	11.60	15.81
0.00	0.00	0.00

Manual Integration:

Before

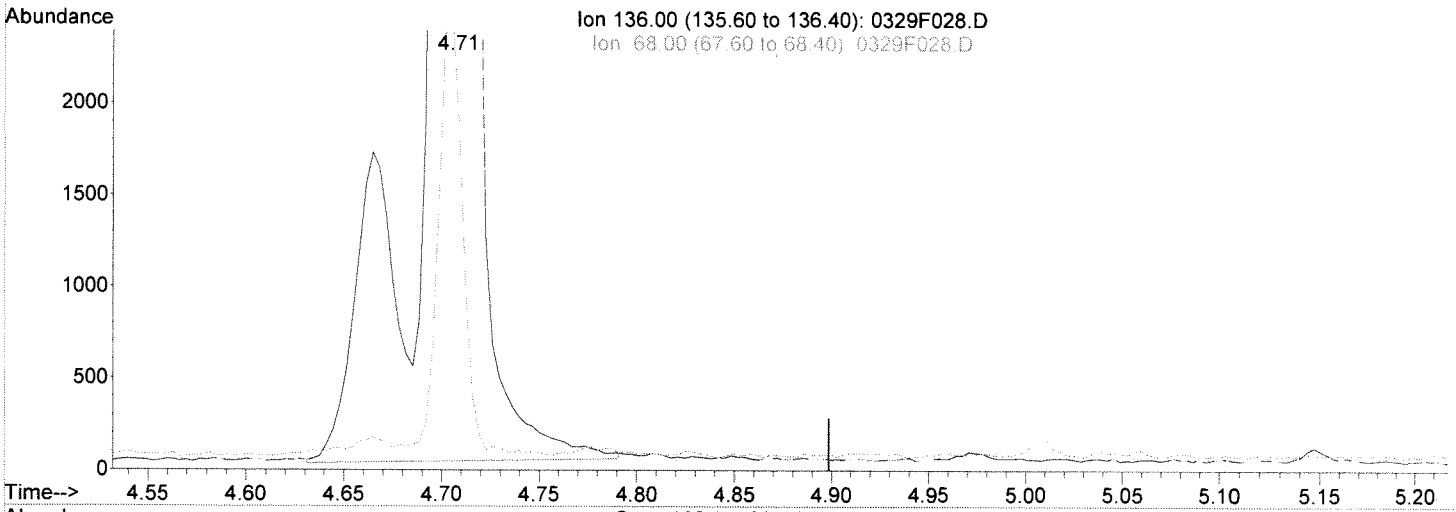
03/30/18

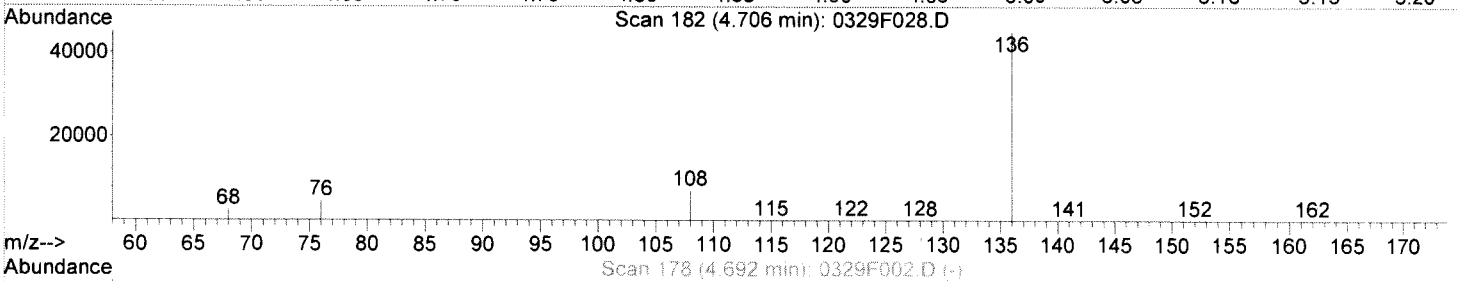
APR 02 2018

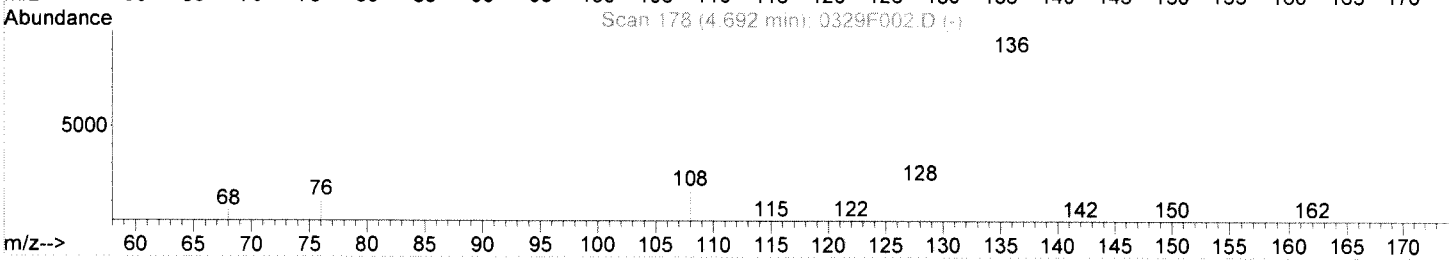
0329F028.D 101317PAH.M Fri Mar 30 10:12:32 2018

Data File : J:\MS14\DATA\032918\0329F028.D Vial: 28
Acq On : 29 Mar 2018 3:35 pm Operator: LWeiskopf
Sample : K1802579-022 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:12 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F028.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml m

response 40013

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.52
108.00	11.60	15.92
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

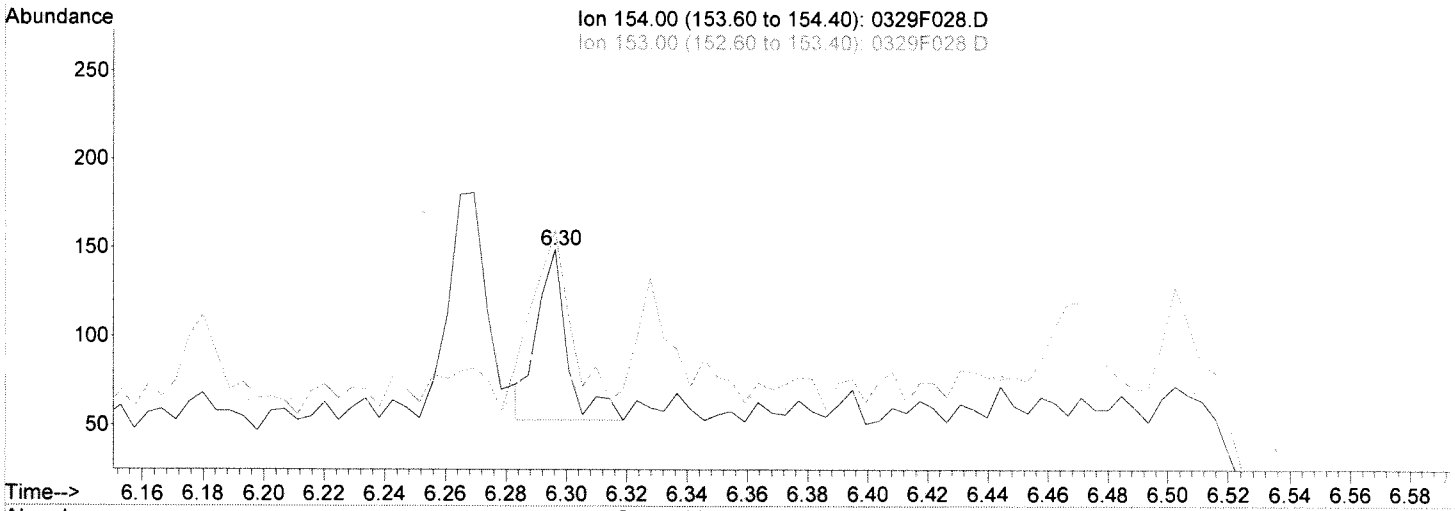
03/30/18

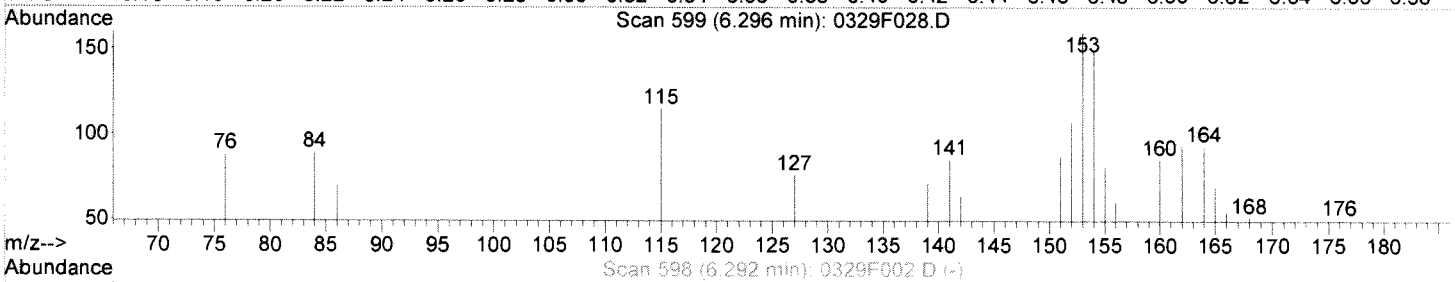
APR 02 2018

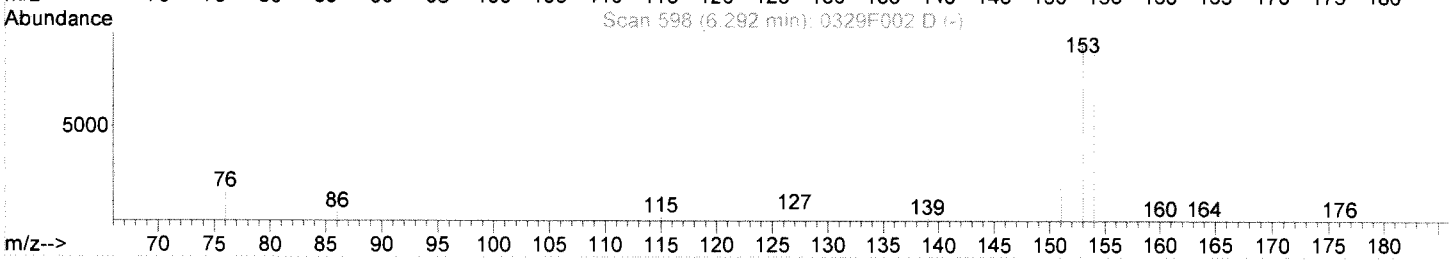
0329F028.D 101317PAH.M Fri Mar 30 10:12:38 2018

Data File : J:\MS14\DATA\032918\0329F028.D Vial: 28
Acq On : 29 Mar 2018 3:35 pm Operator: LWeiskopf
Sample : K1802579-022 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:12 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F028.D

(10) Acenaphthene (T)

6.30min 0.46ng/ml

response 66

Ion	Exp%	Act%
154.00	100	100
153.00	107.80	93.75
152.00	50.80	48.96
0.00	0.00	0.00

Manual Integration:

Before

03/30/18

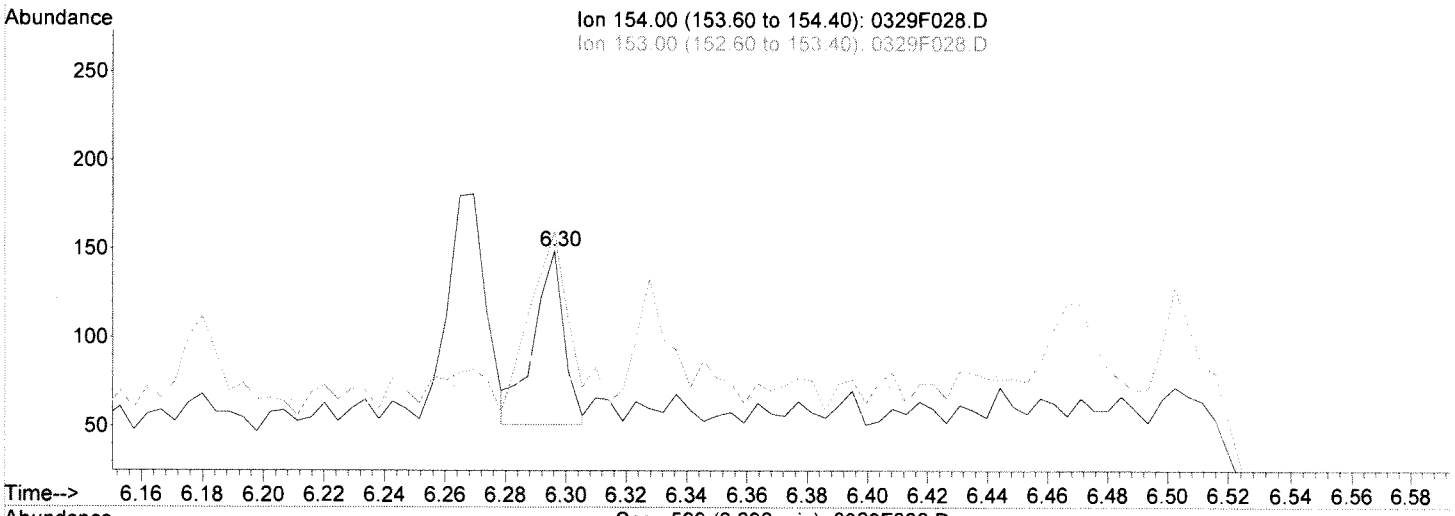
APR 02 2018

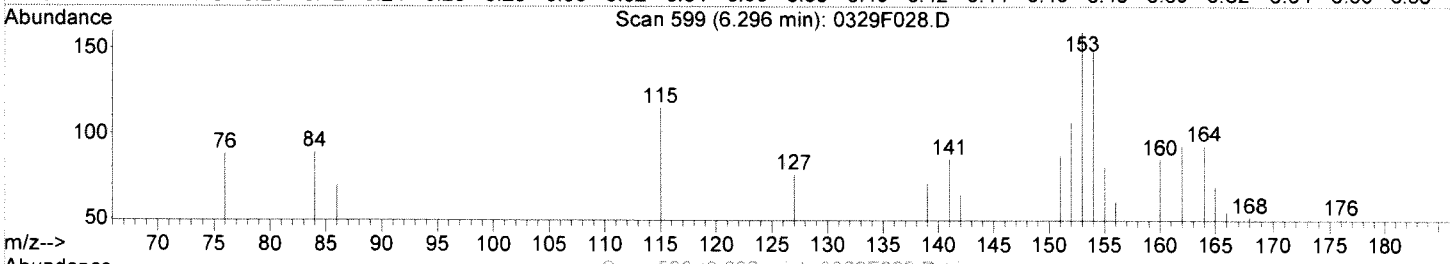
0329F028.D 101317PAH.M Fri Mar 30 10:12:59 2018

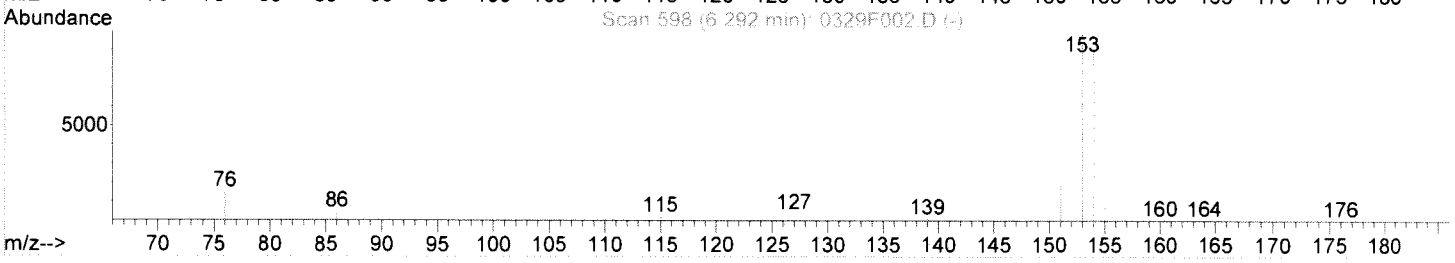
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F028.D Vial: 28
Acq On : 29 Mar 2018 3:35 pm Operator: LWeiskopf
Sample : K1802579-022 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F028.D

(10) Acenaphthene (T)

6.30min 0.48ng/ml m

response 68

Ion	Exp%	Act%
154.00	100	100
153.00	107.80	107.38
152.00	50.80	71.81
0.00	0.00	0.00

Manual Integration:

After

BLC

03/30/18

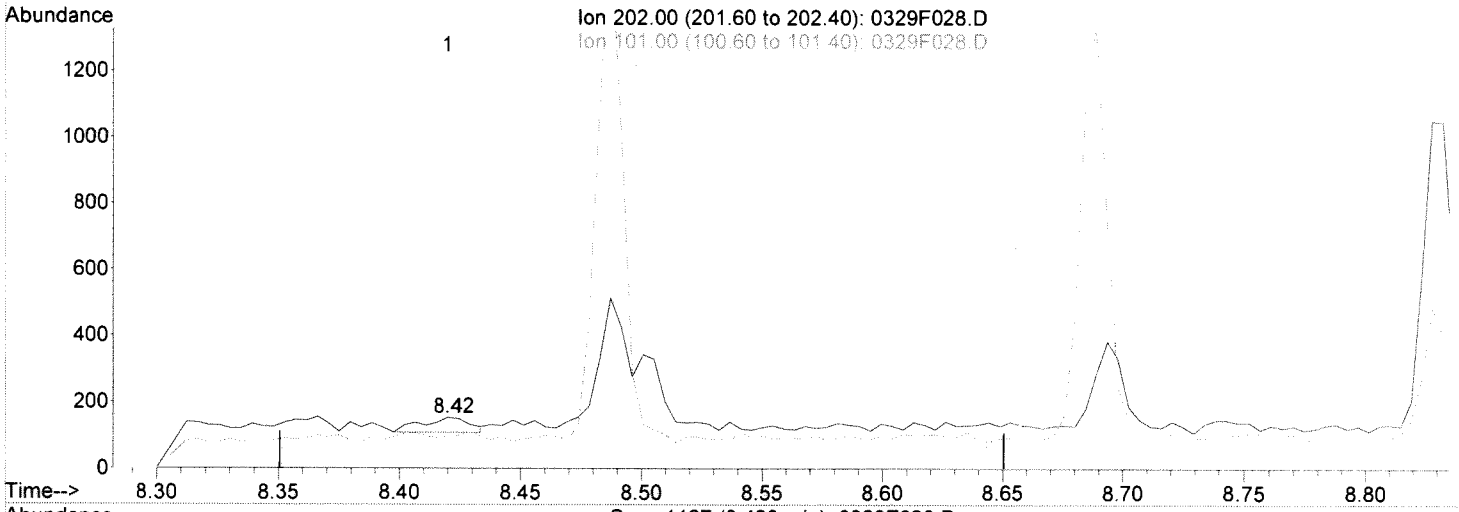
APR 02 2018

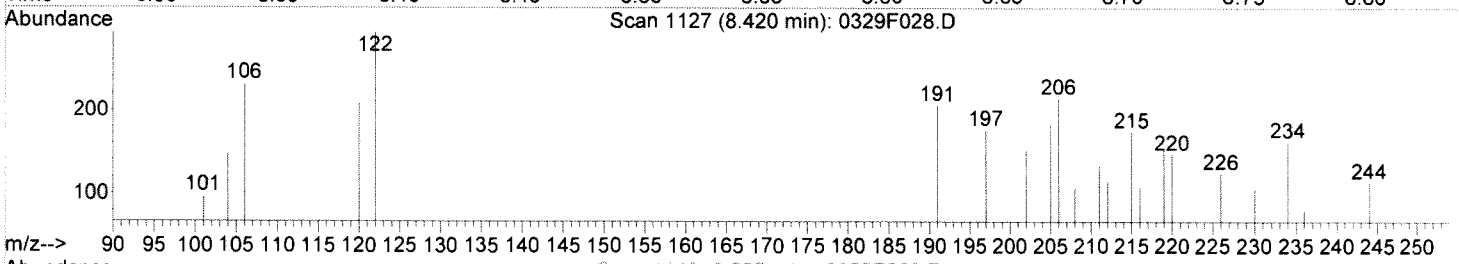
0329F028.D 101317PAH.M Fri Mar 30 10:13:06 2018

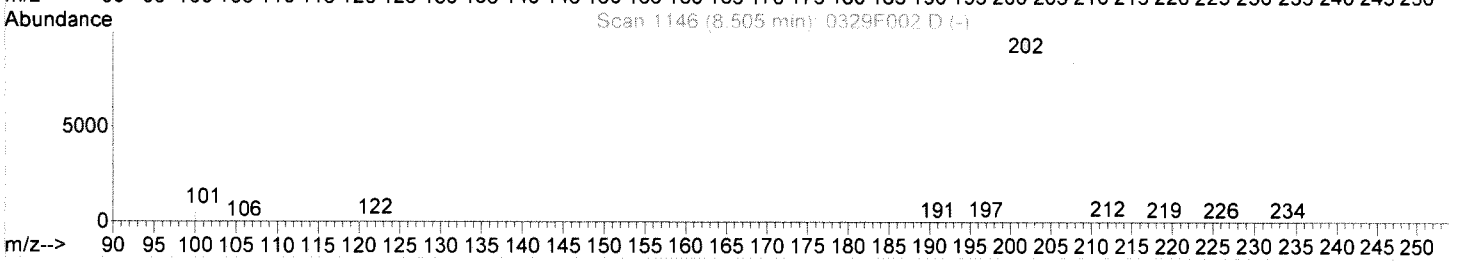
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F028.D Vial: 28
Acq On : 29 Mar 2018 3:35 pm Operator: LWeiskopf
Sample : K1802579-022 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F028.D

(21) Fluoranthene (T)

8.42min 0.19ng/ml

response 62

Ion	Exp%	Act%
202.00	100	100
101.00	9.10	4.55
100.00	7.00	13.64
0.00	0.00	0.00

Manual Integration:

Before

03/30/18

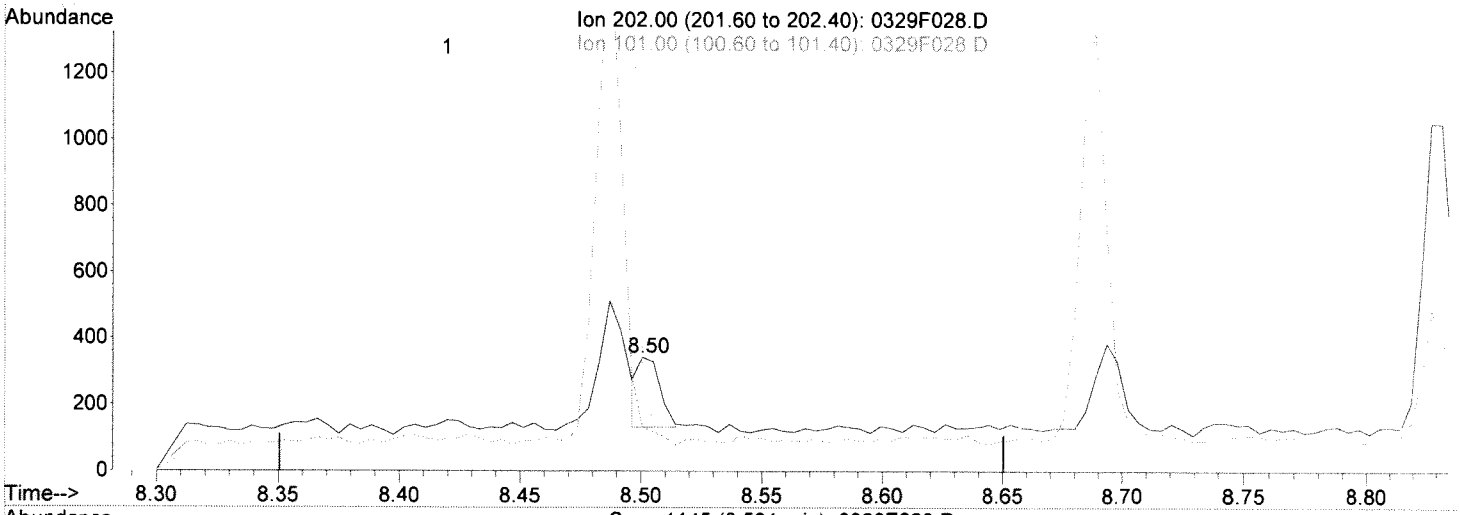
APR 02 2018

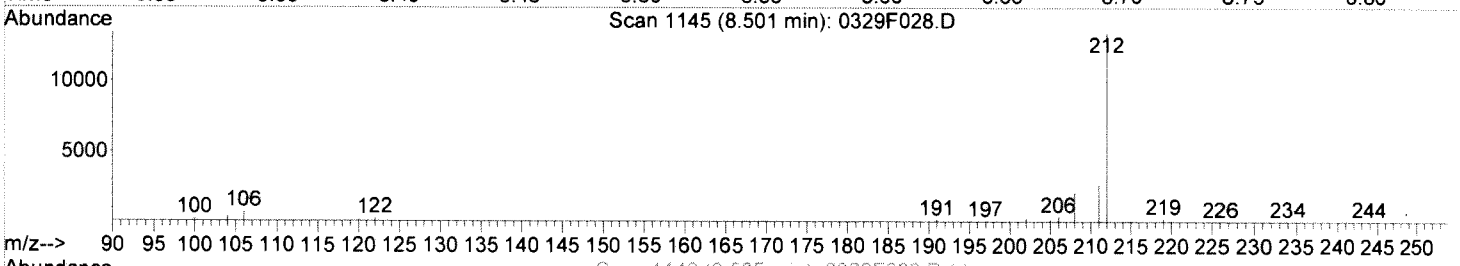
0329F028.D 101317PAH.M Fri Mar 30 10:13:33 2018

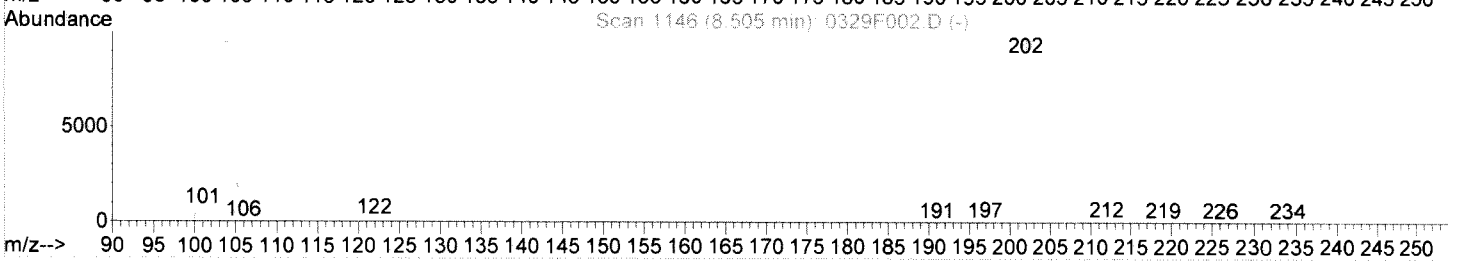
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F028.D Vial: 28
Acq On : 29 Mar 2018 3:35 pm Operator: LWeiskopf
Sample : K1802579-022 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F028.D

(21) Fluoranthene (T)

8.50min 0.40ng/ml m

response 131

Ion	Exp%	Act%
202.00	100	100
101.00	9.10	38.60
100.00	7.00	82.16#
0.00	0.00	0.00

Manual Integration:

After

WP

03/30/18

APR 02 2018

0329F028.D 101317PAH.M Fri Mar 30 10:13:39 2018

Exception Report

Data File: J:\MS14\DATA\032918\0329F029.D
Lab ID: K1802579-029
RunType: SMPL
Matrix: WATER

Date Acquired: 03/29/2018 15:58
Date Quantitated: 03/30/2018 10:15
Batch ID: KWG1801713
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: MAR 30 2018

Secondary Review: APR 02 2018

Printed: 03/30/2018 11:29:12
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\032918\0329F029.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 15:58	**Quant Date:**	03/30/2018 10:15	**Vial:**	29
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-029			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801713	**Prep Lot:**	KWG1801565	**Report Group:**	K1802579
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1668288	**Prep Date:**	03/22/2018		

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M	**Calibration ID:**	CAL15579
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\032918\0329F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\032918\0329F017.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.71	0.02	136	39853m	200.00	OK
2	Acenaphthene-d10	6.27	0.00	164	20888	200.00	OK
3	Phenanthrene-d10	7.50	0.00	188	43678	200.00	OK
4	Chrysene-d12	10.01	0.00	240	50483	200.00	OK
5	Perylene-d12	13.03	-0.01	264	57813	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.71	0.00	0.00	176	135131	945.69	95	42-131	OK	
3	Fluoranthene-d10	8.49	0.00	0.00	212	284201	1.036	104	42-133	OK	
4	Terphenyl-d14	8.83	0.00	0.00	244	205125	963.68	96	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene				128	0d		0.0015	U	
1	2-Methylnaphthalene				142	0		0.0014	U	
2	Acenaphthylene				152	0d		0.0012	U	
2	Acenaphthene	6.29		0.00	154	150m	1.04	0.0047	Ui	
2	Fluorene				166	0d		0.0012	U	
3	Phenanthrene				178	0		0.0012	U	
3	Anthracene				178	0		0.00083	U	
3	Fluoranthene				202	0d		0.00083	U	
4	Pyrene				202	0d		0.0011	U	
4	Benz(a)anthracene	10.01	0.01	0.00	228	176m	0.5800	0.0026	J	
4	Chrysene				228	0d		0.00077	U	
5	Benzo(b)fluoranthene				252	0		0.00084	U	
5	Benzo(k)fluoranthene				252	0		0.00096	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\032918\0329F029.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 15:58	**Quant Date:**	03/30/2018 10:15	**Vial:**	29
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-029			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0		0.0012	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.00091	U	
5	Dibenz(a,h)anthracene				278	0		0.0014	U	
5	Benzo(g,h,i)perylene				276	0		0.00087	U	

Prep Amount:	445 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\032918\0329F029.D Vial: 29
Acq On : 29 Mar 2018 3:58 pm Operator: LWeiskopf
Sample : K1802579-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 08:13:10 2018 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

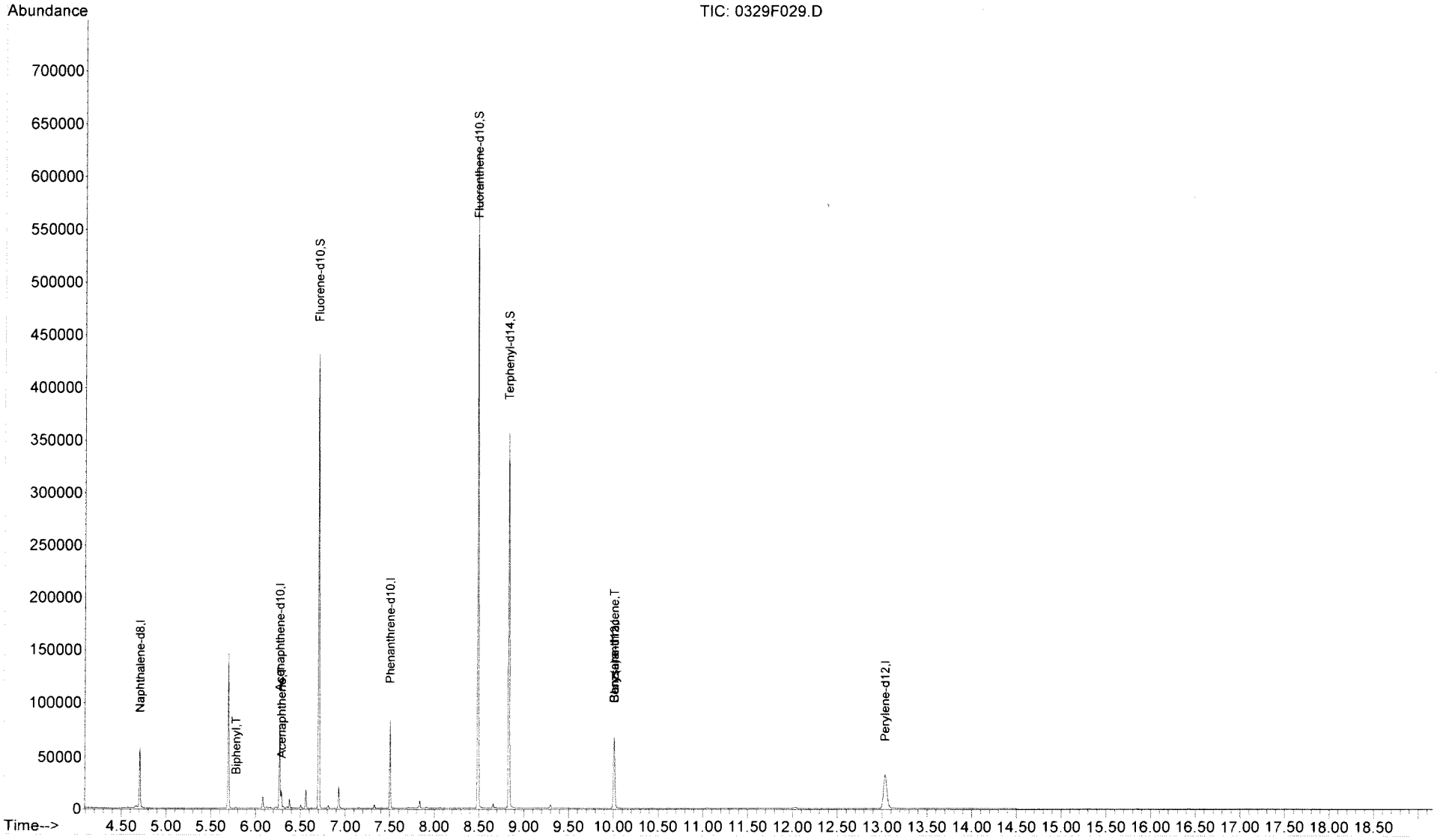
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.71	136	39853m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.27	164	20888	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	43678	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	50483	200.00	ng/ml	0.00
28) Perylene-d12	13.03	264	57813	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0d	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
13) Fluorene-d10	6.71	176	135131	945.69	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	94.57%		
22) Fluoranthene-d10	8.49	212	284201	1035.55	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	103.55%		
25) Terphenyl-d14	8.83	244	205125	963.68	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	96.37%		
Target Compounds						Qvalue
6) Biphenyl	5.78	154	416	2.08	ng/ml	97
10) Acenaphthene	6.29	154	150m	1.04	ng/ml	
26) Benz(a)anthracene	10.01	228	176m	0.58	ng/ml	

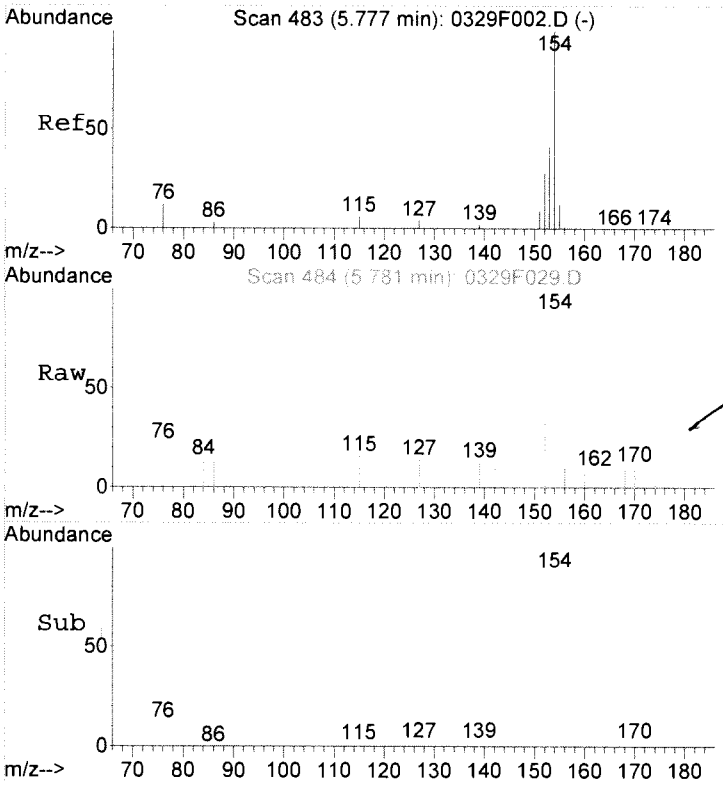
(#) = qualifier out of range (m) = manual integration
0329F029.D 101317PAH.M Fri Mar 30 10:17:27 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\032918\0329F029.D Vial: 29
Acq On : 29 Mar 2018 3:58 pm Operator: LWeiskopf
Sample : K1802579-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:15 2018 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration



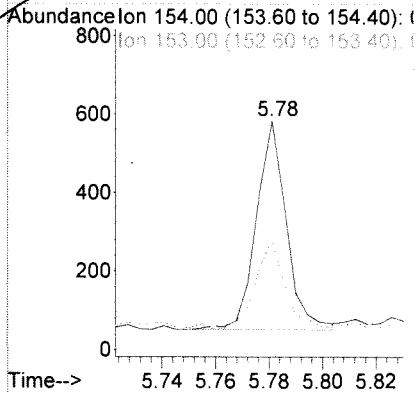


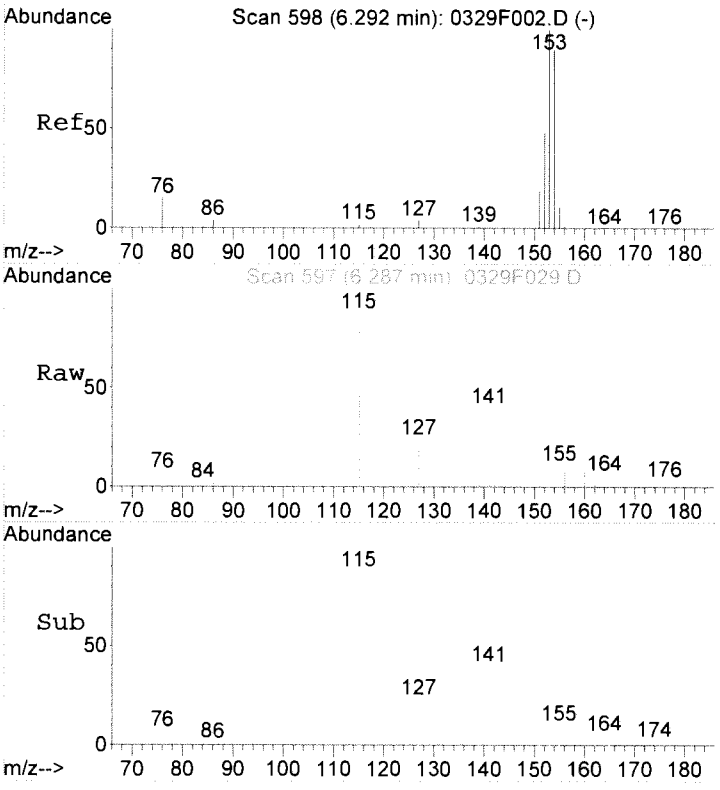
#6
Biphenyl
Concen: 2.08 ng/ml
RT: 5.78 min Scan# 484
Delta R.T. 0.00 min
Lab File: 0329F029.D
Acq: 29 Mar 2018 3:58 pm

Tgt Ion:154 Resp: 416

Ion	Ratio	Lower	Upper
154	100		
153	41.8	11.3	71.3
152	31.5	8.5	48.5

NT



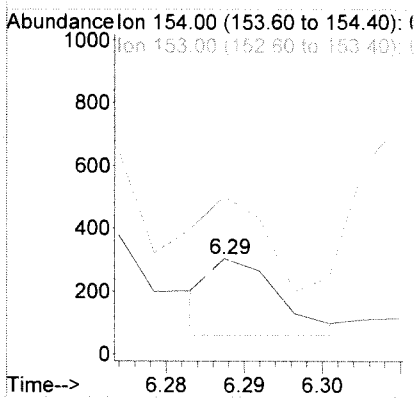


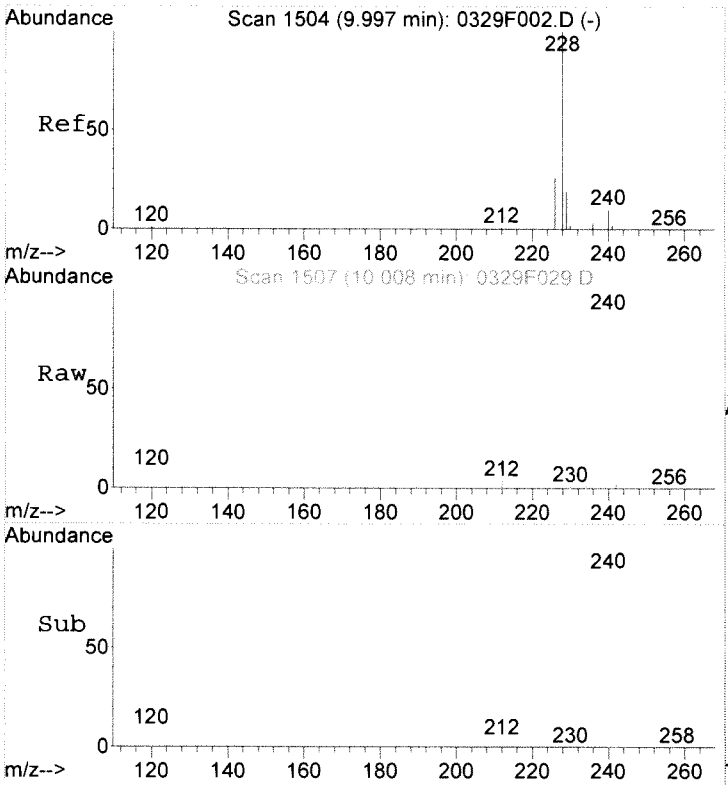
#10
Acenaphthene
Concen: 1.04 ng/ml m
RT: 6.29 min Scan# 597
Delta R.T. -0.01 min
Lab File: 0329F029.D
Acq: 29 Mar 2018 3:58 pm

i-matrix

Tgt Ion:154 Resp: 150

Ion	Ratio	Lower	Upper
154	100		
153	165.5	77.8	137.8#
152	102.6	20.8	80.8#

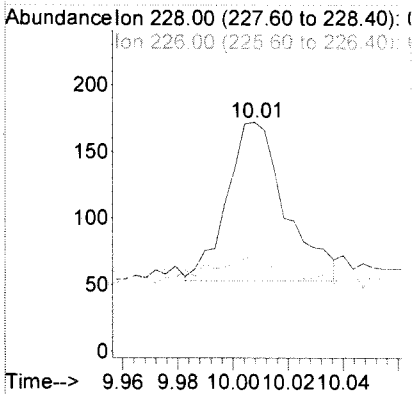




#26
Benz(a)anthracene
Concen: 0.58 ng/ml m
RT: 10.01 min Scan# 1507
Delta R.T. 0.01 min
Lab File: 0329F029.D
Acq: 29 Mar 2018 3:58 pm

Tgt Ion:228 Resp: 176

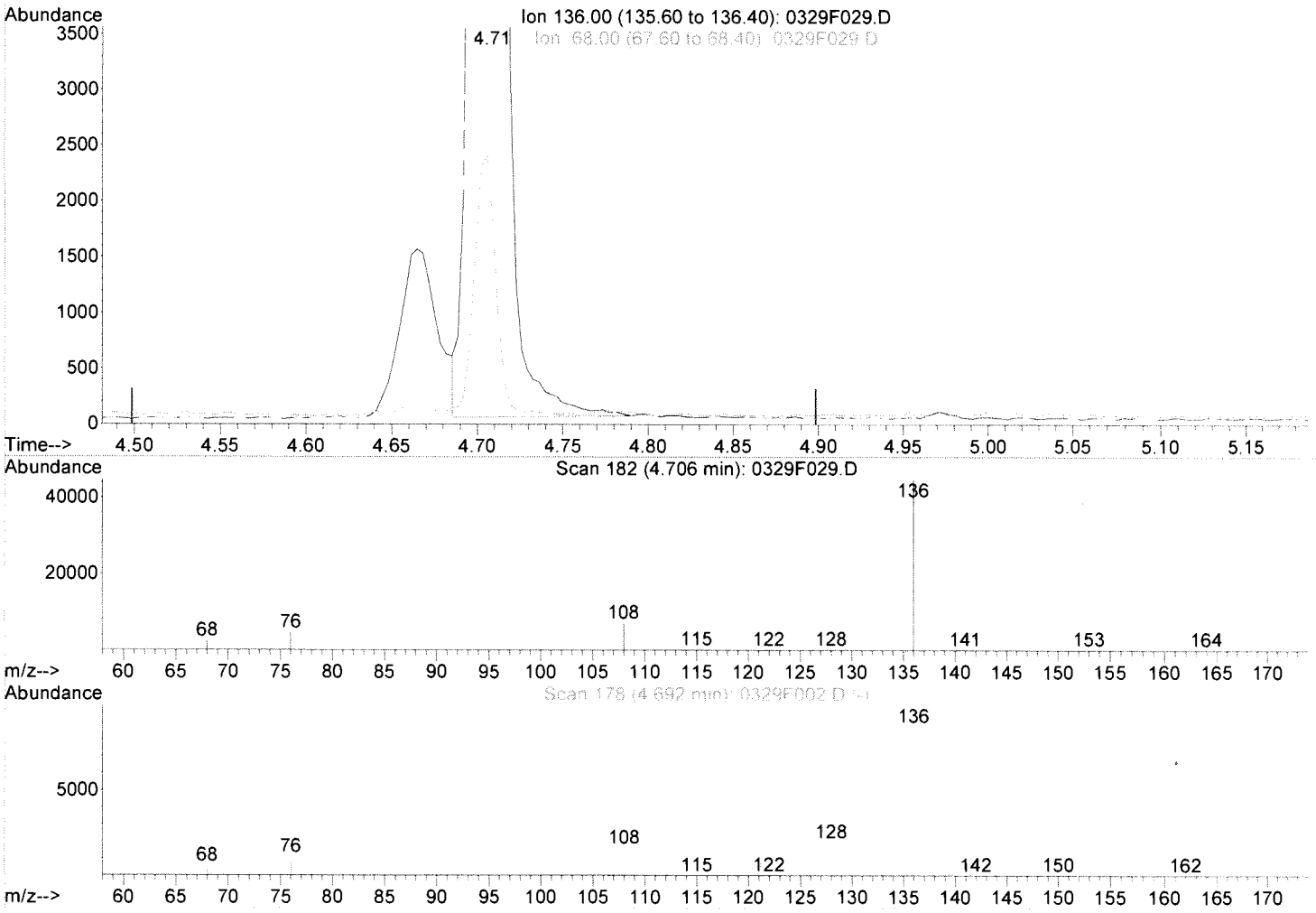
Ion	Ratio	Lower	Upper
228	100		
226	41.3	0.0	56.4
229	54.7	0.0	39.3#



Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F029.D Vial: 29
Acq On : 29 Mar 2018 3:58 pm Operator: LWeiskopf
Sample : K1802579-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 8:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration



TIC: 0329F029.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml

response 37229

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.15
108.00	11.60	15.69
0.00	0.00	0.00

Manual Integration:

Before

03/30/18

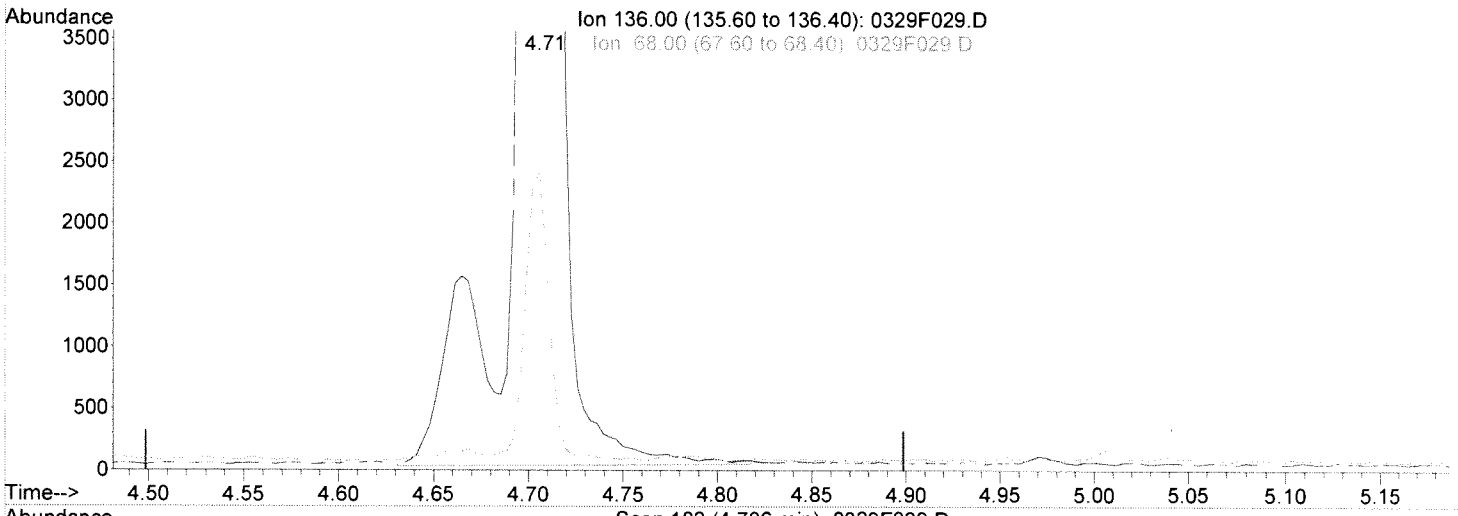
APR 02 2018

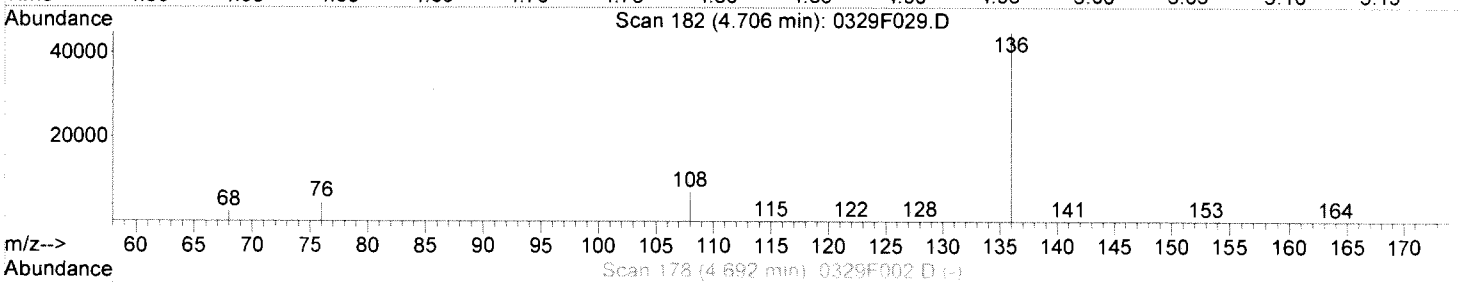
0329F029.D 101317PAH.M Fri Mar 30 10:14:03 2018

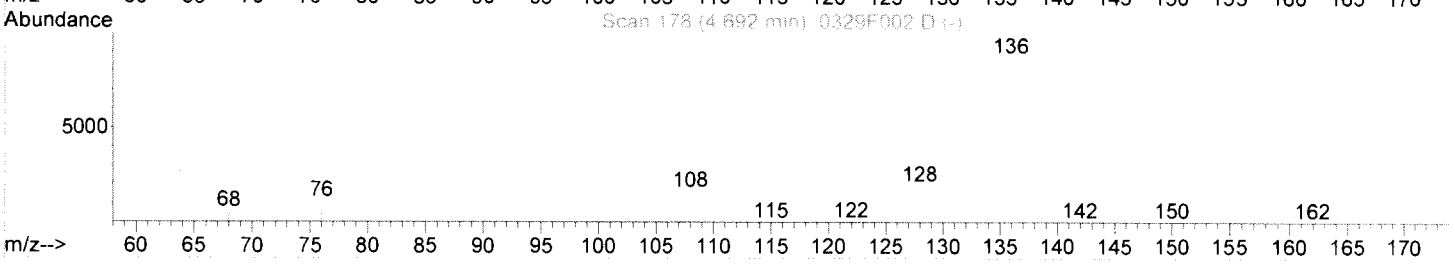
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F029.D Vial: 29
Acq On : 29 Mar 2018 3:58 pm Operator: LWeiskopf
Sample : K1802579-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:14 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F029.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml m

response 39853

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.38
108.00	11.60	15.80
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

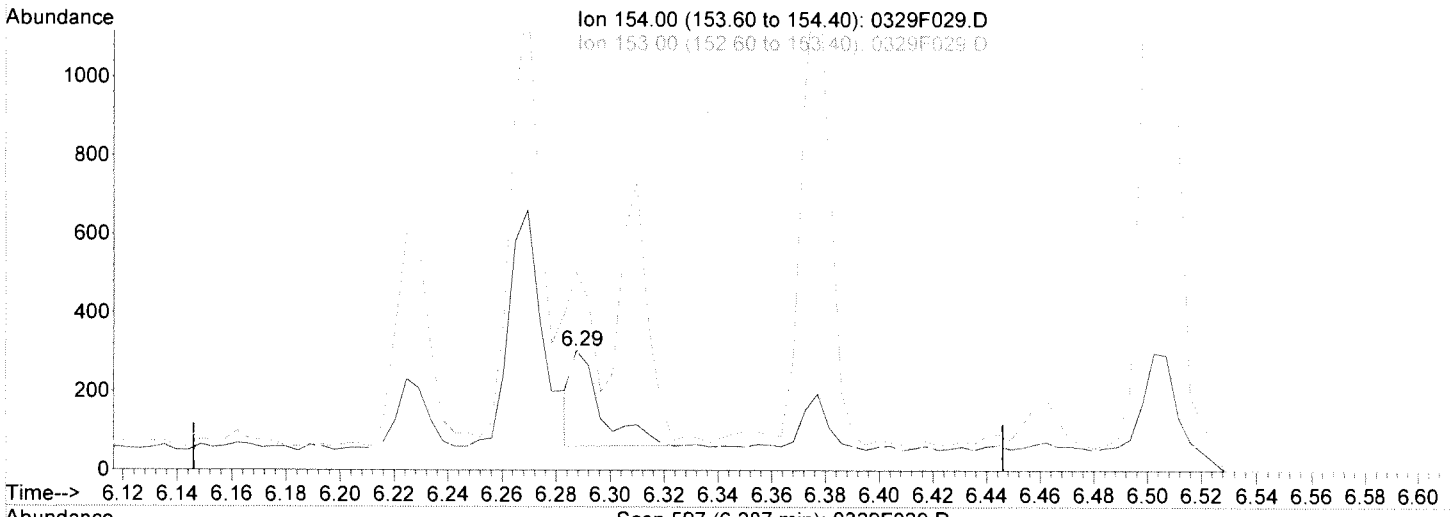
03/30/18

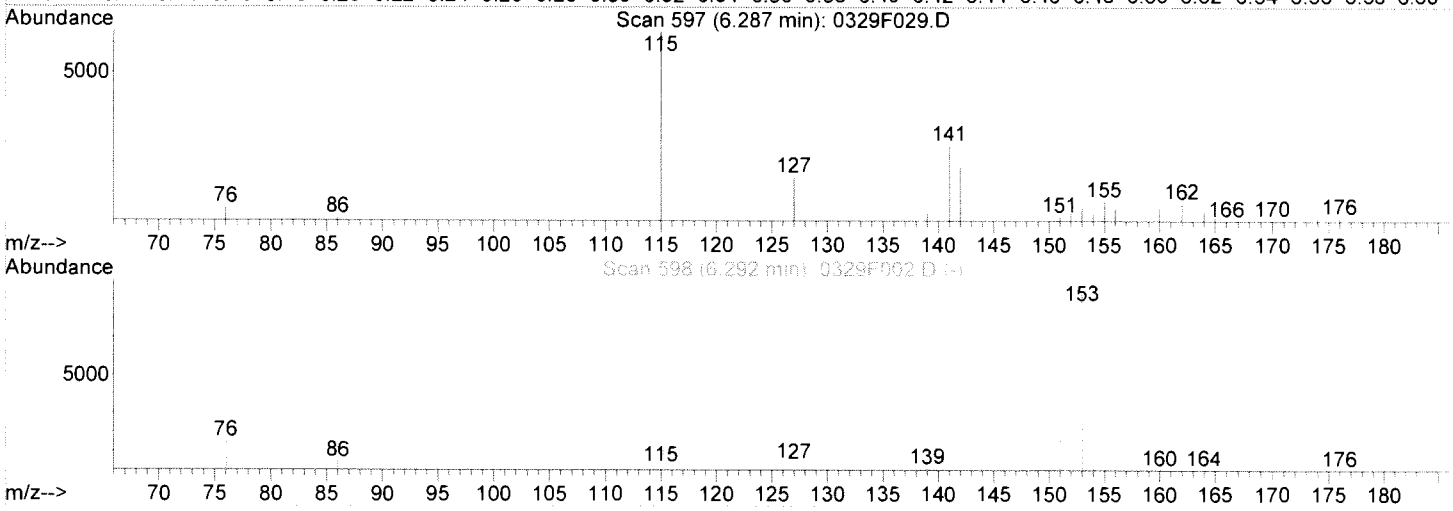
APR 02 2018

0329F029.D 101317PAH.M Fri Mar 30 10:14:08 2018

Data File : J:\MS14\DATA\032918\0329F029.D Vial: 29
Acq On : 29 Mar 2018 3:58 pm Operator: LWeiskopf
Sample : K1802579-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:14 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration





TIC: 0329F029.D

(10) Acenaphthene (T)

6.29min 1.30ng/ml

response 187

Ion	Exp%	Act%
154.00	100	100
153.00	107.80	173.03#
152.00	50.80	103.73#
0.00	0.00	0.00

Manual Integration:

Before

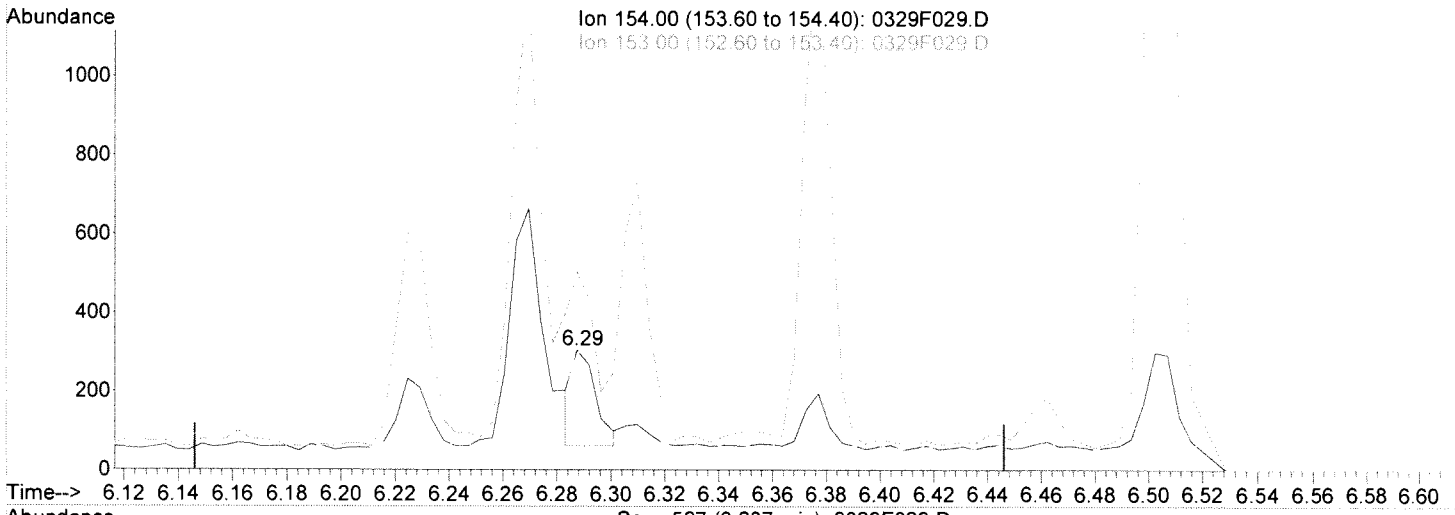
03/30/18

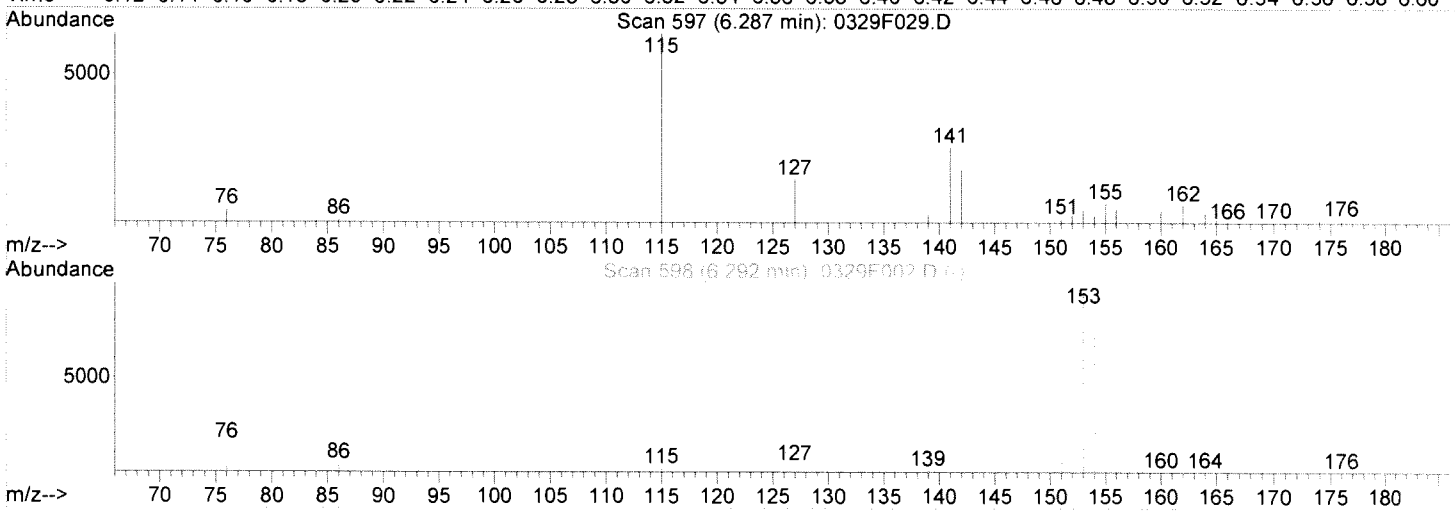
APR 02 2018

0329F029.D 101317PAH.M Fri Mar 30 10:14:39 2018

Data File : J:\MS14\DATA\032918\0329F029.D Vial: 29
Acq On : 29 Mar 2018 3:58 pm Operator: LWeiskopf
Sample : K1802579-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:14 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration





TIC: 0329F029.D

(10) Acenaphthene (T)

6.29min 1.04ng/ml m

response 150

Ion	Exp%	Act%
154.00	100	100
153.00	107.80	165.46#
152.00	50.80	102.63#
0.00	0.00	0.00

Manual Integration:

After

IC-Overintegrated

03/30/18

i-matrix

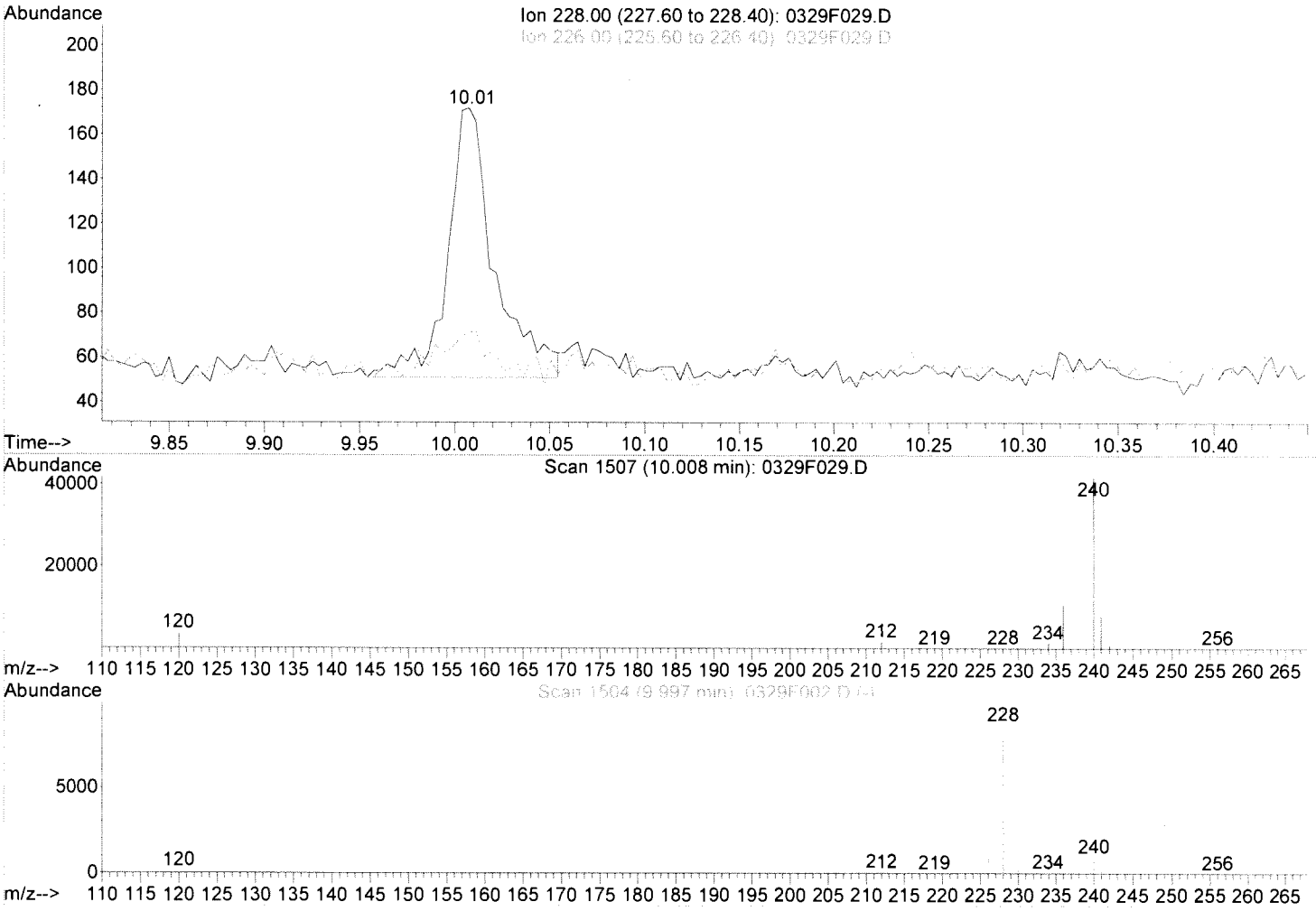
APR 02 2018

0329F029.D 101317PAH.M Fri Mar 30 10:14:47 2018

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F029.D Vial: 29
Acq On : 29 Mar 2018 3:58 pm Operator: LWeiskopf
Sample : K1802579-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:15 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration



TIC: 0329F029.D

(26) Benz(a)anthracene (T)

10.01min 0.68ng/ml

response 208

Ion	Exp%	Act%
228.00	100	100
226.00	26.40	16.53
229.00	19.30	33.06
0.00	0.00	0.00

Manual Integration:

Before

03/30/18

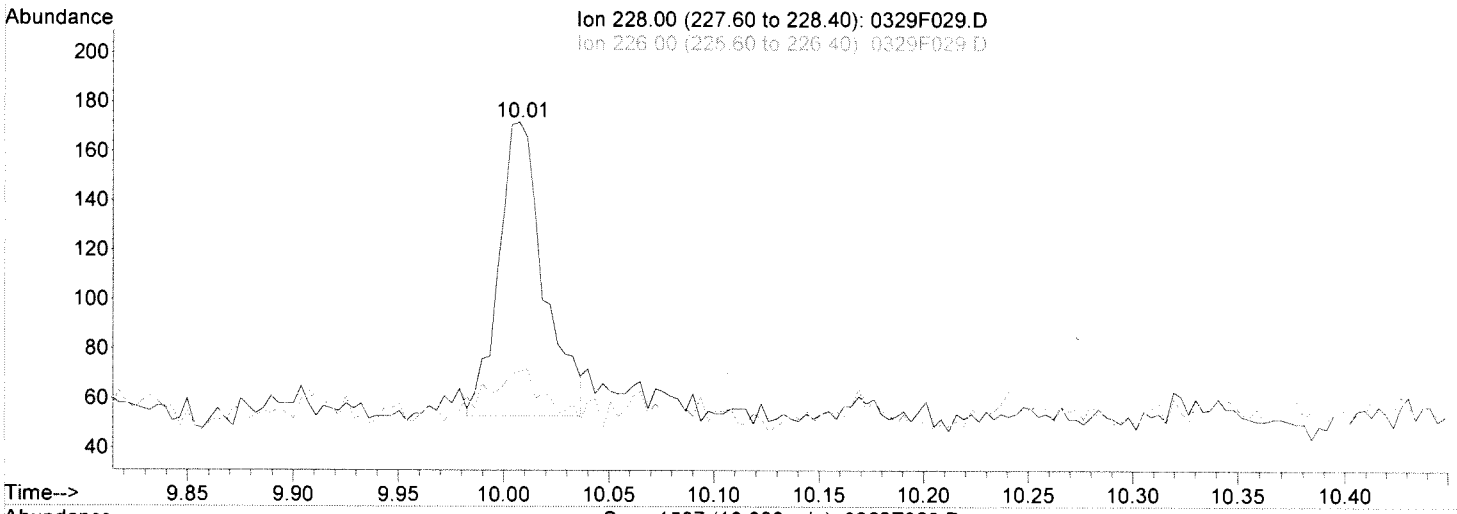
APR 02 2018

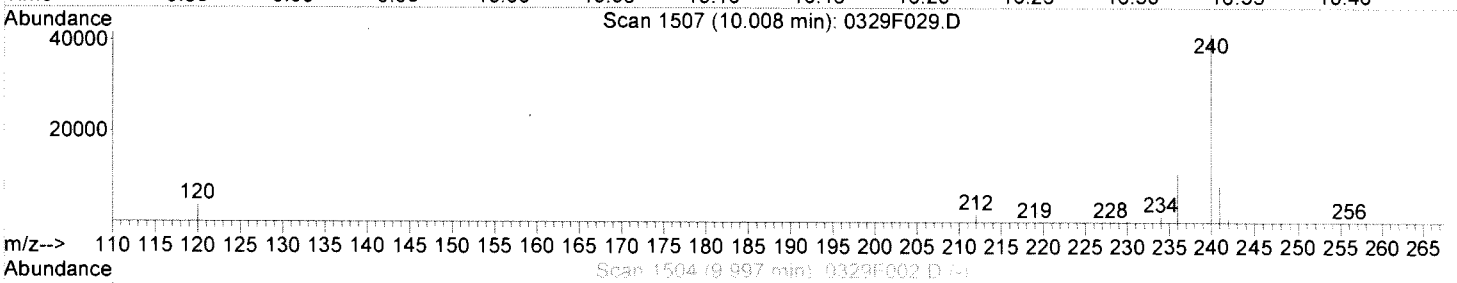
0329F029.D 101317PAH.M Fri Mar 30 10:15:06 2018

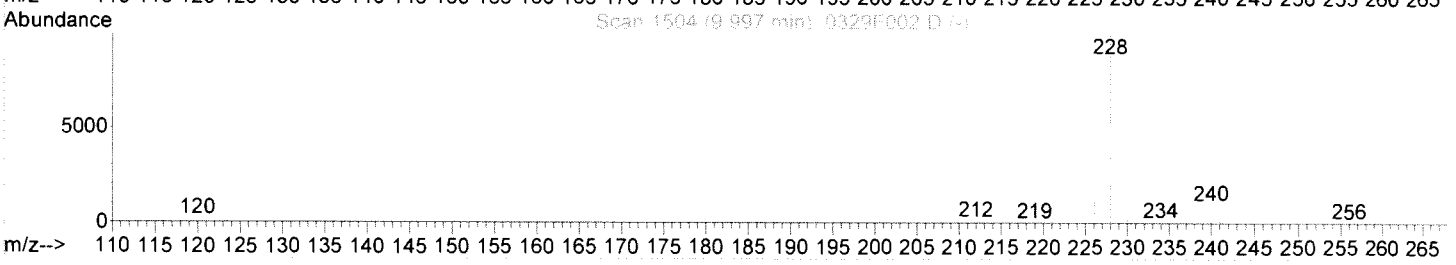
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F029.D Vial: 29
Acq On : 29 Mar 2018 3:58 pm Operator: LWeiskopf
Sample : K1802579-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:15 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F029.D

(26) Benz(a)anthracene (T)

10.01min 0.58ng/ml m

response 176

Ion	Exp%	Act%
228.00	100	100
226.00	26.40	41.28
229.00	19.30	54.65#
0.00	0.00	0.00

Manual Integration:

After

IC-Overintegrated

03/30/18

APR 02 2018

0329F029.D 101317PAH.M Fri Mar 30 10:15:13 2018

Exception Report

Data File: J:\MS14\DATA\032918\0329F030.D
Lab ID: K1802579-030
RunType: SMPL
Matrix: WATER

Date Acquired: 03/29/2018 16:22
Date Quantitated: 03/30/2018 10:17
Batch ID: KWG1801713
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: MAR 30 2018

Secondary Review: APR 02 2018

Quantitation Report

Data File:	J:\MS14\DATA\032918\0329F030.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 16:22	**Quant Date:**	03/30/2018 10:17	**Vial:**	30
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-030			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801713	**Prep Lot:**	KWG1801565	**Report Group:**	K1802579
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1668289	**Prep Date:**	03/22/2018		

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M	**Calibration ID:**	CAL15579
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\032918\0329F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\032918\0329F017.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.71	0.02	136	39554**m**	200.00	OK
2	Acenaphthene-d10	6.27	0.00	164	21913	200.00	OK
3	Phenanthrene-d10	7.50	0.00	188	43831	200.00	OK
4	Chrysene-d12	10.01	0.00	240	49363	200.00	OK
5	Perylene-d12	13.03	-0.01	264	54392	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.71	0.00	0.00	176	127047	847.53	85	42-131	OK	
3	Fluoranthene-d10	8.49	0.00	0.00	212	261812	950.64	95	42-133	OK	
4	Terphenyl-d14	8.83	0.00	0.00	244	201177	966.57	97	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.73	0.02	0.00	128	846	3.75	0.017	J	
1	2-Methylnaphthalene	5.37	0.01	0.00	142	153**m**	0.9800	0.0044	J	
2	Acenaphthylene				152	0**d**		0.0012	U	
2	Acenaphthene				154	0**d**		0.0013	U	
2	Fluorene				166	0**d**		0.0012	U	
3	Phenanthrene	7.52		0.00	178	68	0.2500	0.0012	U	
3	Anthracene				178	0**d**		0.00083	U	
3	Fluoranthene				202	0**d**		0.00083	U	
4	Pyrene				202	0		0.0011	U	
4	Benz(a)anthracene	10.01	0.01	0.00	228	160	0.5400	0.0024	J	
4	Chrysene				228	0**d**		0.00077	U	
5	Benzo(b)fluoranthene				252	0		0.00084	U	
5	Benzo(k)fluoranthene				252	0		0.00096	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\032918\0329F030.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 16:22	**Quant Date:**	03/30/2018 10:17	**Vial:**	30
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-030			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0d		0.0012	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.00091	U	
5	Dibenz(a,h)anthracene				278	0		0.0014	U	
5	Benzo(g,h,i)perylene				276	0		0.00087	U	

Prep Amount:	445 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\032918\0329F030.D Vial: 30
Acq On : 29 Mar 2018 4:22 pm Operator: LWeiskopf
Sample : K1802579-030 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 08:13:11 2018 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

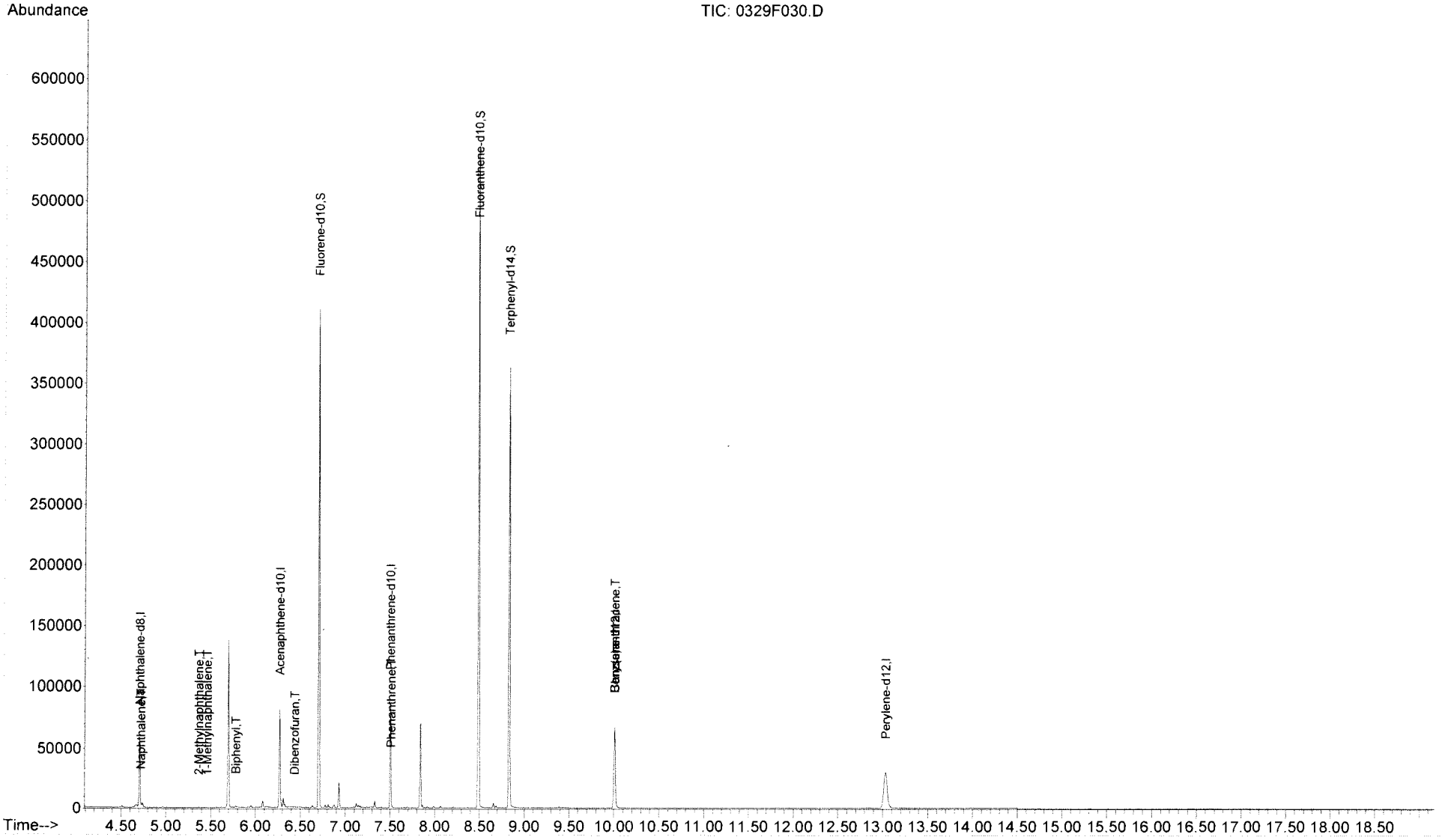
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.71	136	39554m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.27	164	21913	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	43831	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	49363	200.00	ng/ml	0.00
28) Perylene-d12	13.03	264	54392	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0d	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
13) Fluorene-d10	6.71	176	127047	847.53	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	84.75%		
22) Fluoranthene-d10	8.49	212	261812	950.64	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	95.06%		
25) Terphenyl-d14	8.83	244	201177	966.57	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	96.66%		
Target Compounds						Qvalue
2) Naphthalene	4.73	128	846	3.75	ng/ml	97
4) 2-Methylnaphthalene	5.37	142	153m	0.98	ng/ml	
5) 1-Methylnaphthalene	5.46	142	81m	0.58	ng/ml	
6) Biphenyl	5.78	154	452	2.28	ng/ml	95
11) Dibenzofuran	6.44	168	88	0.37	ng/ml	80
17) Phenanthrene	7.52	178	68	0.25	ng/ml	97
26) Benz(a)anthracene	10.01	228	160	0.54	ng/ml	72

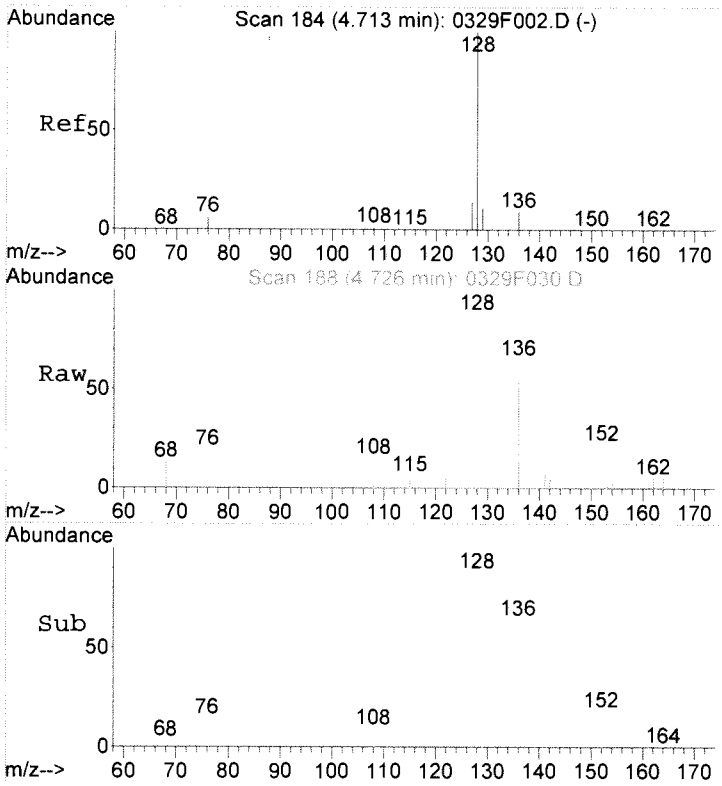
(#) = qualifier out of range (m) = manual integration
0329F030.D 101317PAH.M Fri Mar 30 10:17:30 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\032918\0329F030.D Vial: 30
Acq On : 29 Mar 2018 4:22 pm Operator: LWeiskopf
Sample : K1802579-030 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:17 2018 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration

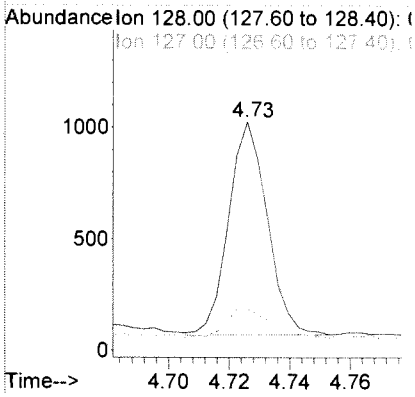


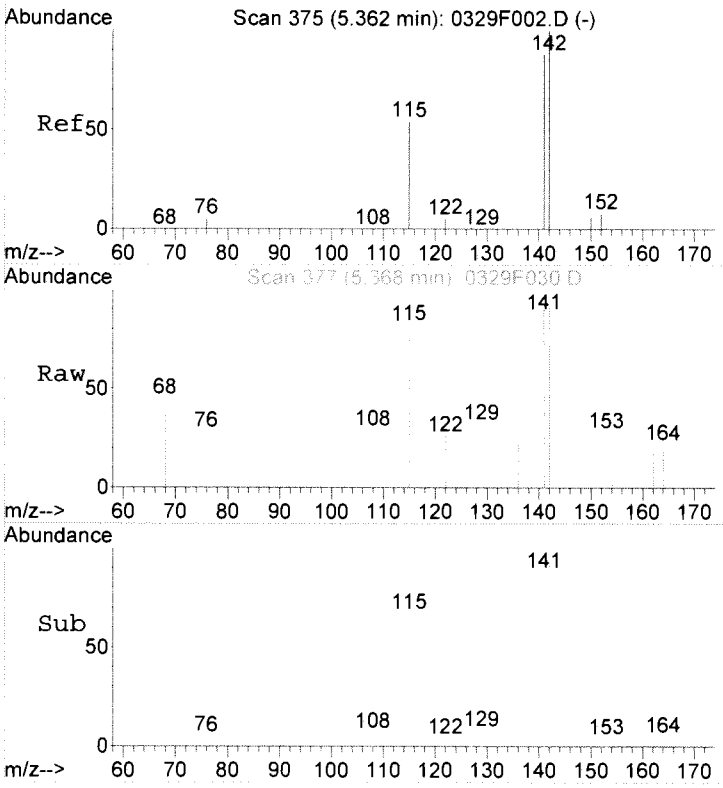


#2
Naphthalene
Concen: 3.75 ng/ml
RT: 4.73 min Scan# 188
Delta R.T. 0.01 min
Lab File: 0329F030.D
Acq: 29 Mar 2018 4:22 pm

Tgt Ion:128 Resp: 846

Ion	Ratio	Lower	Upper
128	100		
127	13.5	0.0	44.1
129	12.4	0.0	30.4

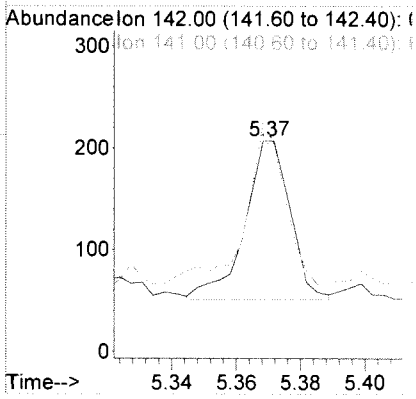


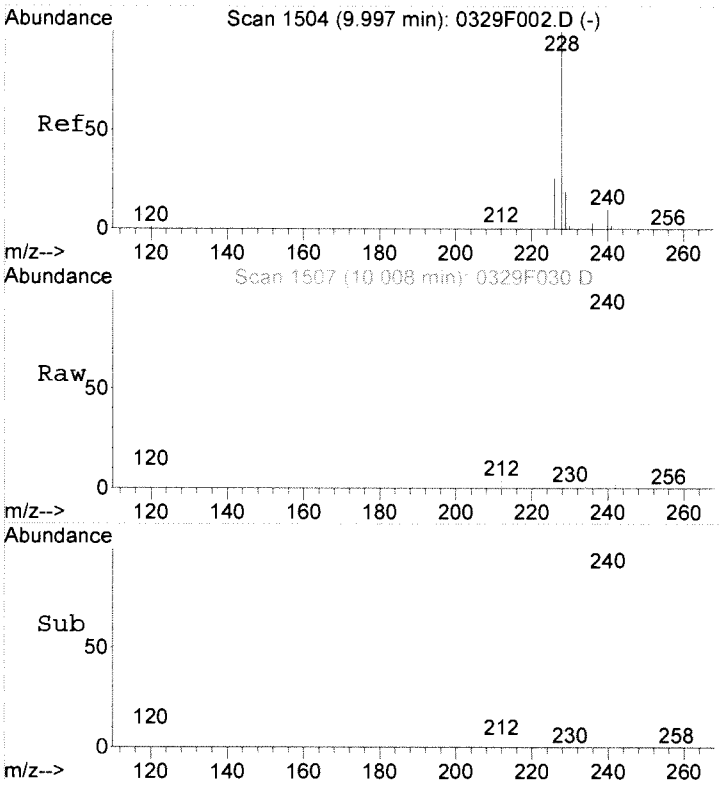


#4
2-Methylnaphthalene
Concen: 0.98 ng/ml m
RT: 5.37 min Scan# 377
Delta R.T. 0.00 min
Lab File: 0329F030.D
Acq: 29 Mar 2018 4:22 pm

Tgt Ion:142 Resp: 153

Ion	Ratio	Lower	Upper
142	100		
141	108.7	51.7	111.7
115	88.9	2.0	42.0#

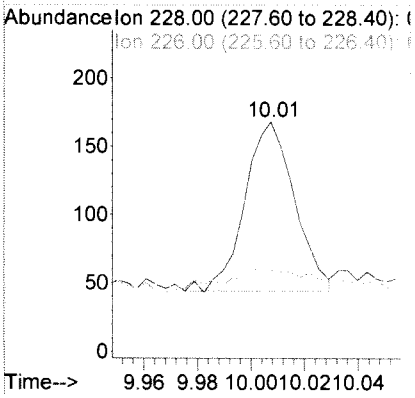




#26
Benz(a)anthracene
Concen: 0.54 ng/ml
RT: 10.01 min Scan# 1507
Delta R.T. 0.01 min
Lab File: 0329F030.D
Acq: 29 Mar 2018 4:22 pm

Tgt Ion:228 Resp: 160

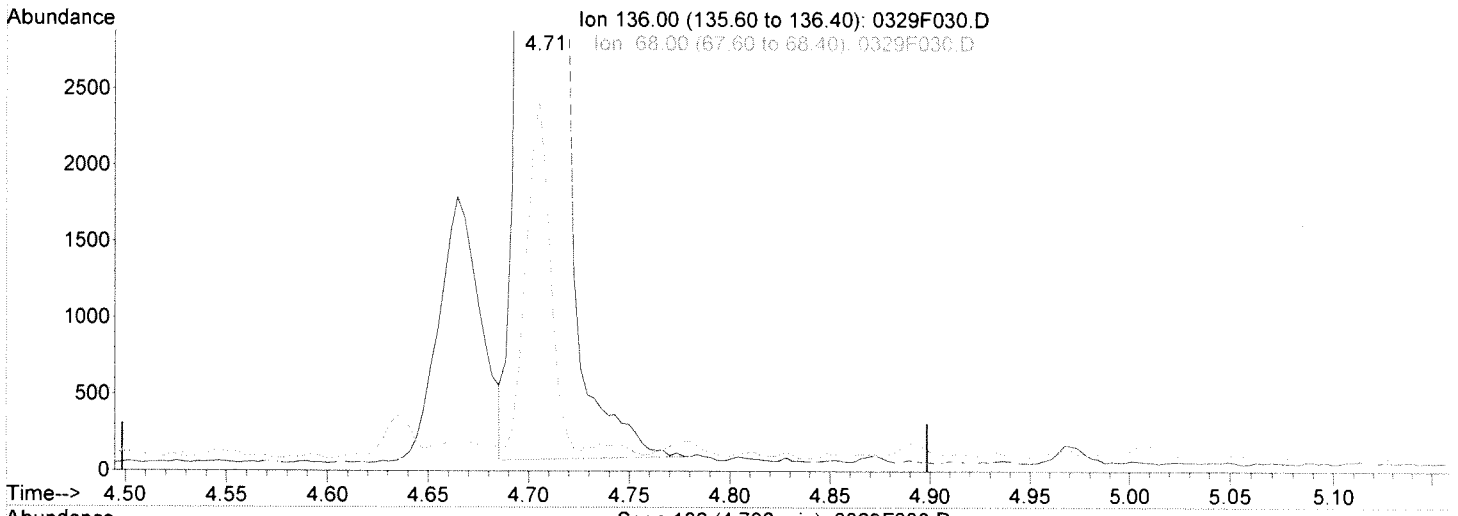
Ion	Ratio	Lower	Upper
228	100		
226	10.5	0.0	56.4
229	30.6	0.0	39.3

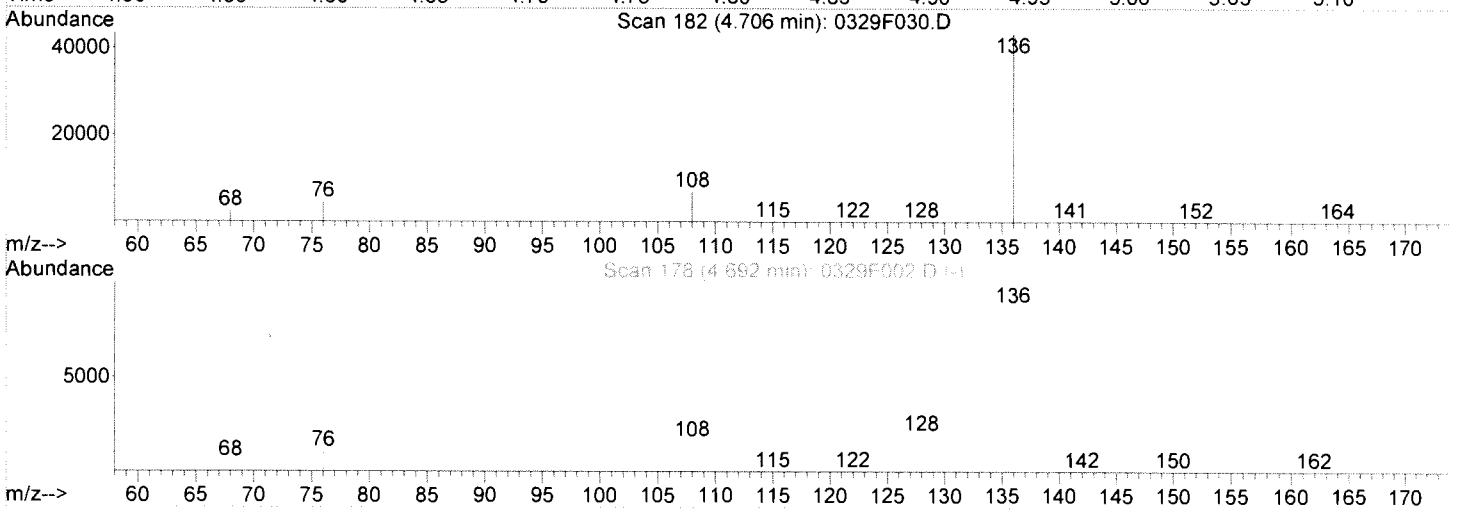


Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F030.D Vial: 30
Acq On : 29 Mar 2018 4:22 pm Operator: LWeiskopf
Sample : K1802579-030 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 8:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration





TIC: 0329F030.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml

response 36746

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.28
108.00	11.60	15.77
0.00	0.00	0.00

Manual Integration:

Before

03/30/18

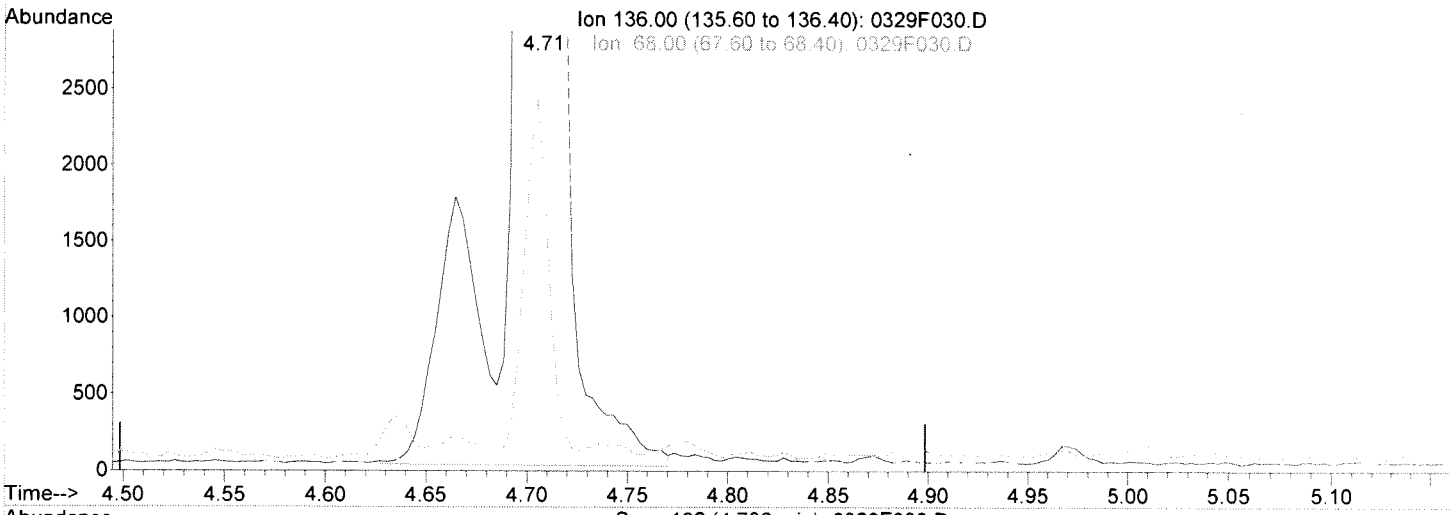
APR 02 2018

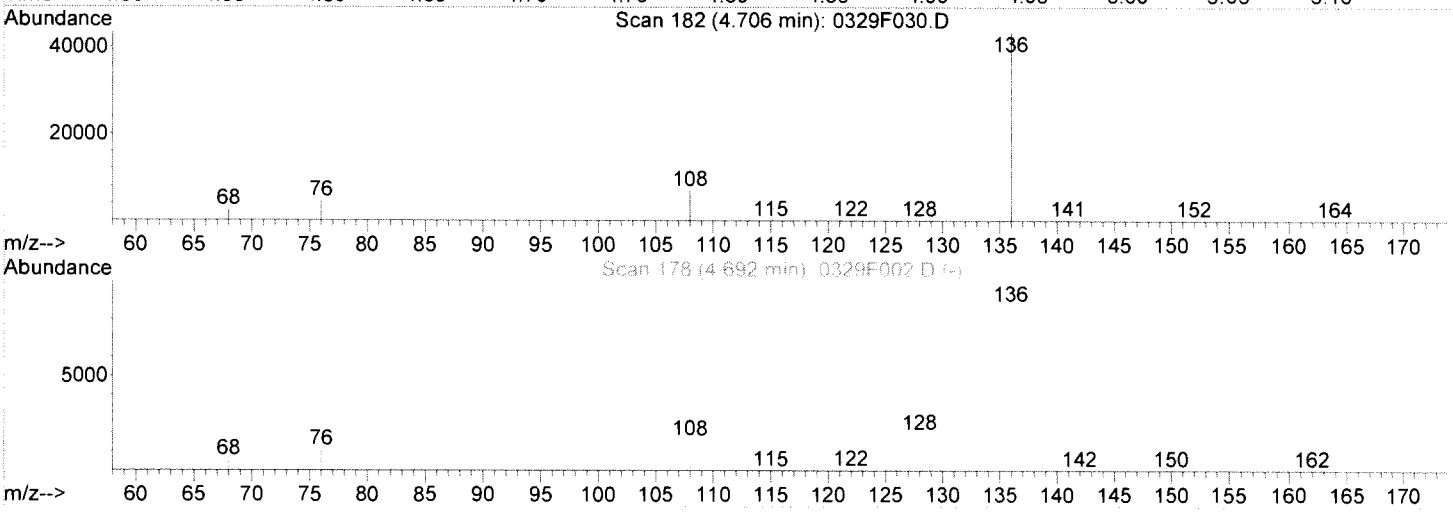
0329F030.D 101317PAH.M Fri Mar 30 10:15:32 2018

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\032918\0329F030.D Vial: 30
Acq On : 29 Mar 2018 4:22 pm Operator: LWeiskopf
Sample : K1802579-030 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:15 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration





TIC: 0329F030.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml m

response 39554

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.61
108.00	11.60	15.89
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

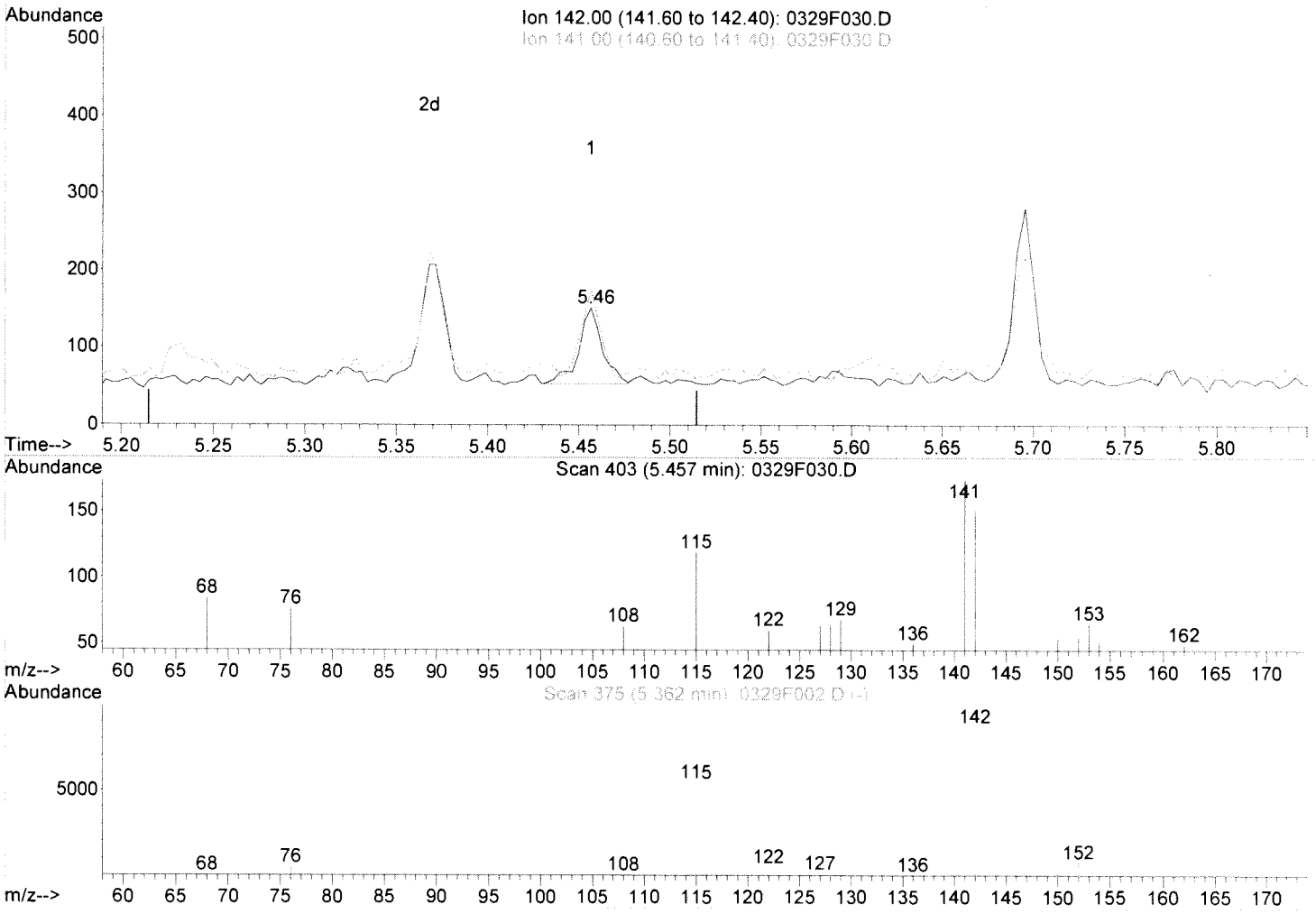
03/30/18

APR 02 2018

0329F030.D 101317PAH.M Fri Mar 30 10:15:38 2018

Data File : J:\MS14\DATA\032918\0329F030.D Vial: 30
Acq On : 29 Mar 2018 4:22 pm Operator: LWeiskopf
Sample : K1802579-030 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:15 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration



TIC: 0329F030.D

(4) 2-Methylnaphthalene (T)

5.46min 0.57ng/ml

response 89

Ion	Exp%	Act%
142.00	100	100
141.00	81.70	109.18
115.00	22.00	27.55
0.00	0.00	0.00

Manual Integration:

Before

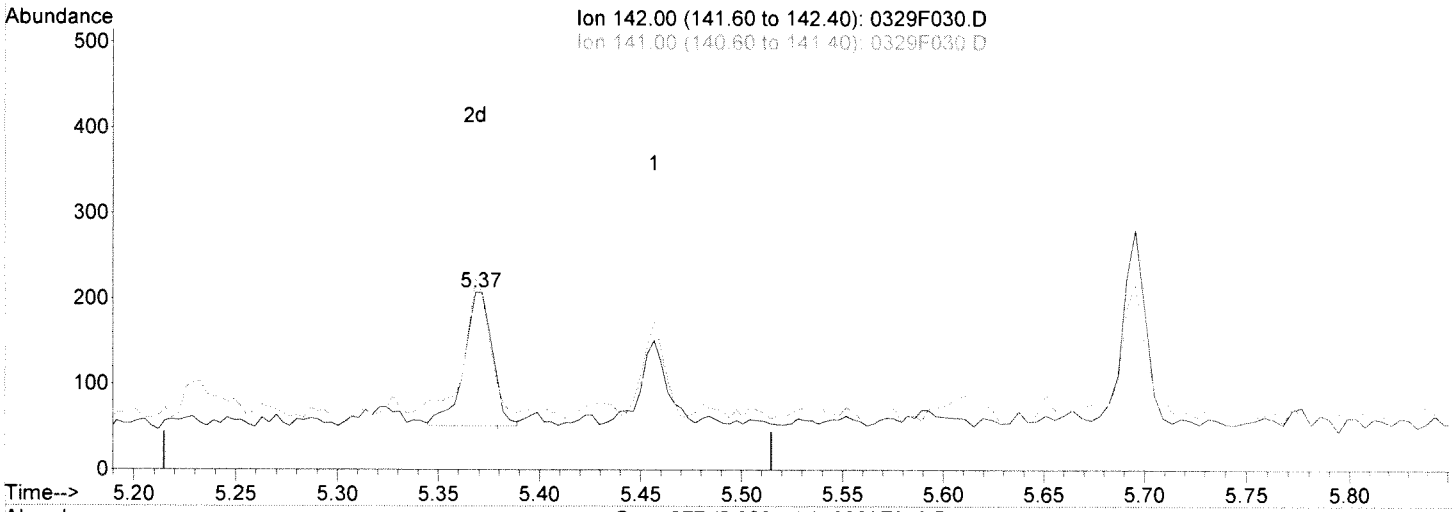
03/30/18

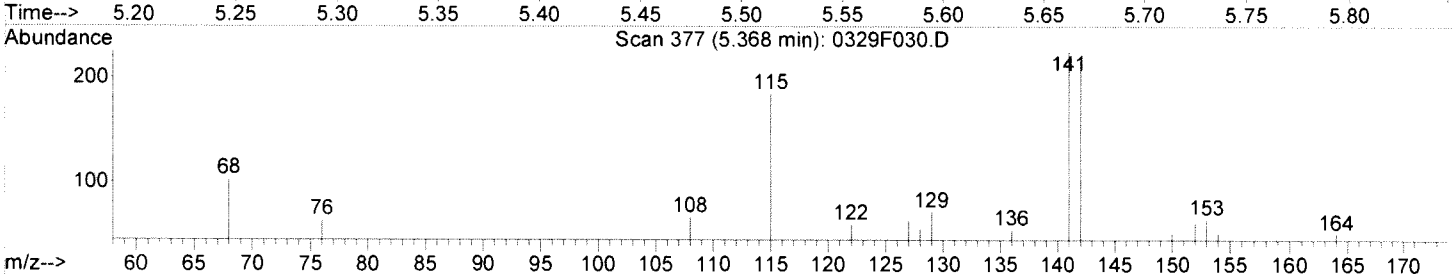
APR 02 2018

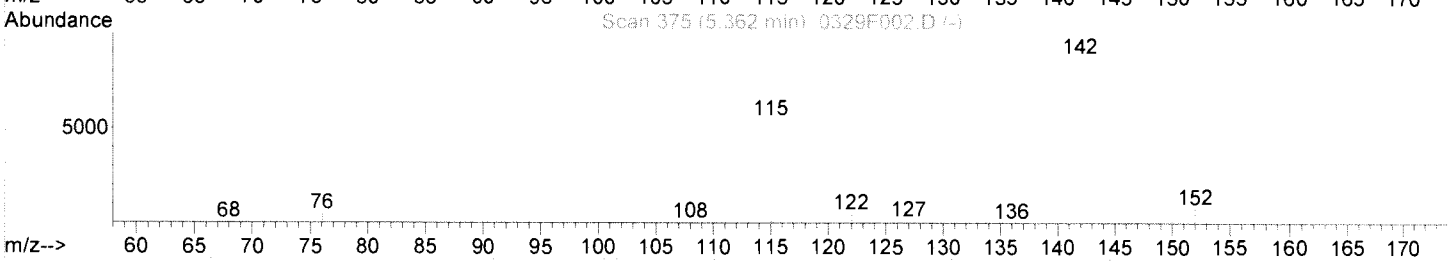
0329F030.D 101317PAH.M Fri Mar 30 10:15:49 2018

Data File : J:\MS14\DATA\032918\0329F030.D Vial: 30
Acq On : 29 Mar 2018 4:22 pm Operator: LWeiskopf
Sample : K1802579-030 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 10:15 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F030.D

(4) 2-Methylnaphthalene (T)

5.37min 0.98ng/ml m

response 153

Ion	Exp%	Act%
142.00	100	100
141.00	81.70	108.70
115.00	22.00	88.89#
0.00	0.00	0.00

Manual Integration:

After

WP

03/30/18

APR 02 2018

0329F030.D 101317PAH.M Fri Mar 30 10:15:56 2018

Exception Report

Data File: J:\MS14\DATA\033018\0330F004.D
Lab ID: K1802579-031
RunType: SMPL
Matrix: WATER

Date Acquired: 03/30/2018 07:30
Date Quantitated: 04/02/2018 08:58
Batch ID: KWG1801739
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: APR 0 2 2018

Secondary Review: APR 0 2 2018

Printed: 04/02/2018 10:37:06
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\033018\0330F004.D			**Instrument:**	MS14
Acqu Date:	03/30/2018 07:30	**Quant Date:**	04/02/2018 08:58	**Vial:**	4
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-031			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	03/17/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801739	**Prep Lot:**	KWG1801565	**Report Group:**	K1802579
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1668290	**Prep Date:**	03/22/2018		

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M	**Calibration ID:**	CAL15579
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\033018\0330F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\032918\0329F017.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.71	0.01	136	39449m	200.00	OK
2	Acenaphthene-d10	6.27	0.00	164	20677	200.00	OK
3	Phenanthrene-d10	7.50	0.00	188	43722	200.00	OK
4	Chrysene-d12	10.01	0.00	240	50242	200.00	OK
5	Perylene-d12	13.03	-0.01	264	55222	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.71	0.00	0.00	176	127424	900.86	90	42-131	OK	
3	Fluoranthene-d10	8.49	0.00	0.00	212	265263	965.57	97	42-133	OK	
4	Terphenyl-d14	8.83	0.00	0.00	244	190933	901.31	90	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.73	0.01	0.00	128	137	0.6100	0.0027	J	
1	2-Methylnaphthalene				142	0d		0.0014	U	
2	Acenaphthylene				152	0		0.0012	U	
2	Acenaphthene				154	0d		0.0013	U	
2	Fluorene				166	0d		0.0012	U	
3	Phenanthrene				178	0d		0.0012	U	
3	Anthracene				178	0d		0.00083	U	
3	Fluoranthene				202	0d		0.00083	U	
4	Pyrene				202	0d		0.0011	U	
4	Benz(a)anthracene	10.01	0.01	0.00	228	165m	0.5400	0.0024	J	
4	Chrysene				228	0d		0.00077	U	
5	Benzo(b)fluoranthene				252	0		0.00084	U	
5	Benzo(k)fluoranthene				252	0		0.00096	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\033018\0330F004.D			**Instrument:**	MS14
Acqu Date:	03/30/2018 07:30	**Quant Date:**	04/02/2018 08:58	**Vial:**	4
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1802579-031			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0		0.0012	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.00091	U	
5	Dibenz(a,h)anthracene				278	0		0.0014	U	
5	Benzo(g,h,i)perylene				276	0		0.00087	U	

Prep Amount:	445 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\033018\0330F004.D Vial: 4
Acq On : 30 Mar 2018 7:30 am Operator: LWeiskopf
Sample : K1802579-031 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 02 08:53:03 2018 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Mon Apr 02 08:52:37 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

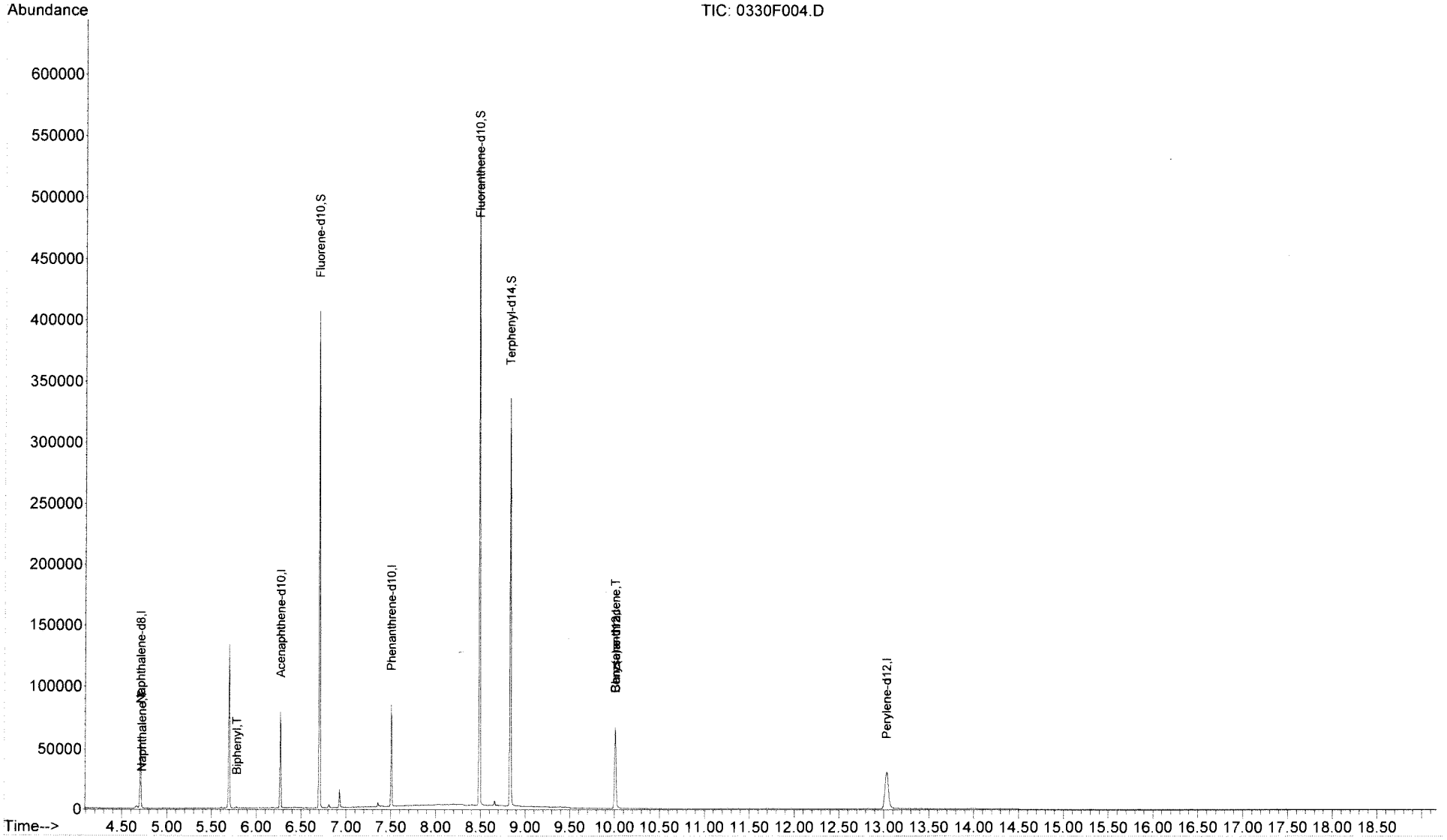
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.71	136	39449m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.27	164	20677	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	43722	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	50242	200.00	ng/ml	0.00
28) Perylene-d12	13.03	264	55222	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0d	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
13) Fluorene-d10	6.71	176	127424	900.86	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	90.09%		
22) Fluoranthene-d10	8.49	212	265263	965.57	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	96.56%		
25) Terphenyl-d14	8.83	244	190933	901.31	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	90.13%		
Target Compounds						Qvalue
2) Naphthalene	4.73	128	137	0.61	ng/ml	86
6) Biphenyl	5.78	154	399	2.02	ng/ml	98
26) Benz(a)anthracene	10.01	228	165m	0.54	ng/ml	

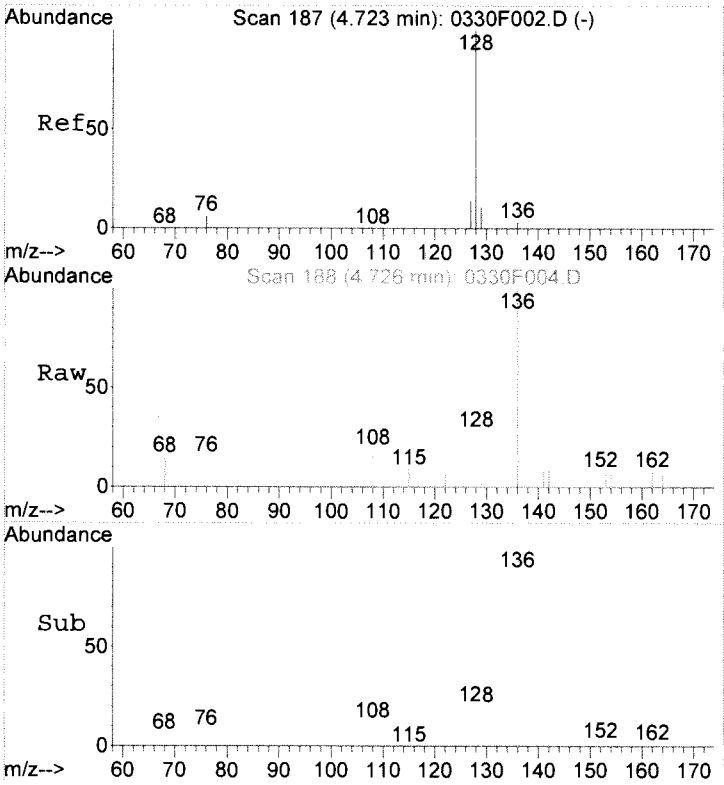
(#) = qualifier out of range (m) = manual integration
0330F004.D 101317PAH.M Mon Apr 02 09:02:08 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\033018\0330F004.D Vial: 4
Acq On : 30 Mar 2018 7:30 am Operator: LWeiskopf
Sample : K1802579-031 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 2 8:58 2018 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Mon Apr 02 08:52:37 2018
Response via : Initial Calibration

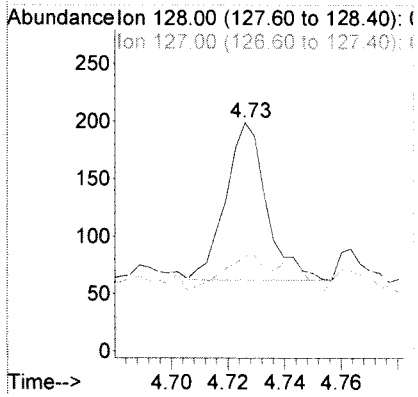


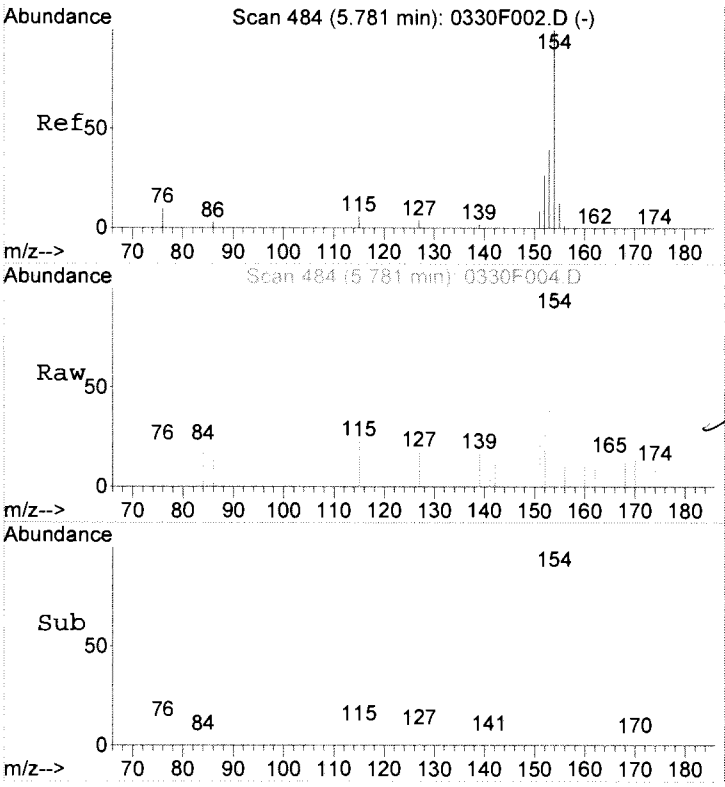


#2
Naphthalene
Concen: 0.61 ng/ml
RT: 4.73 min Scan# 188
Delta R.T. 0.01 min
Lab File: 0330F004.D
Acq: 30 Mar 2018 7:30 am

Tgt Ion:128 Resp: 137

Ion	Ratio	Lower	Upper
128	100		
127	22.6	0.0	44.1
129	8.8	0.0	30.4



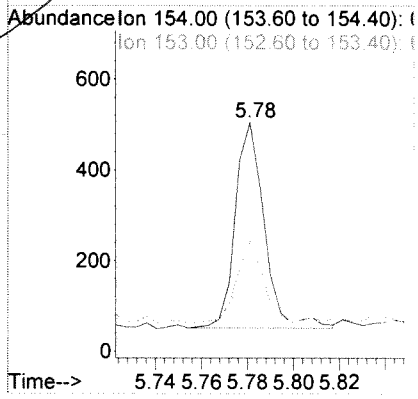


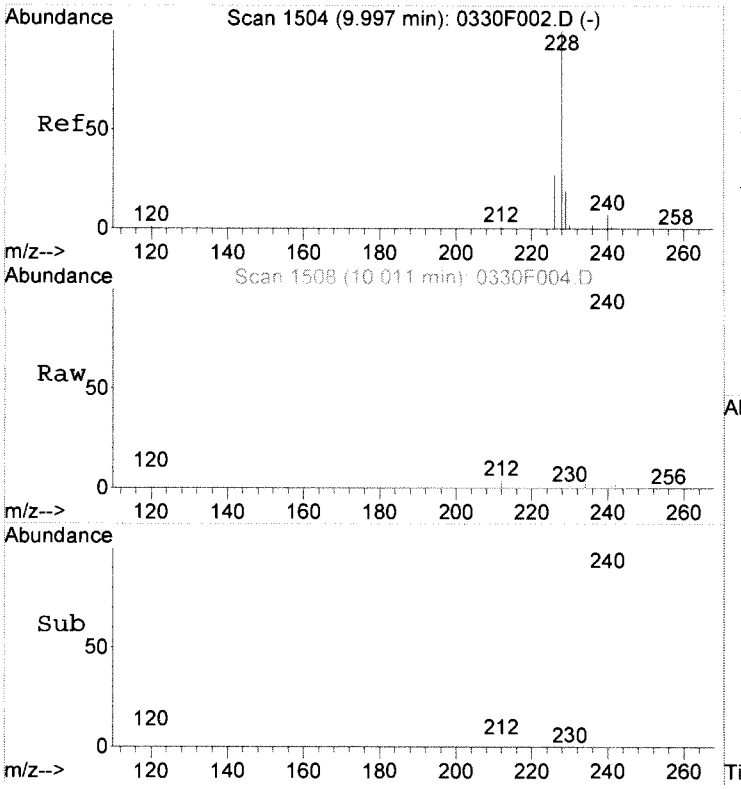
#6
Biphenyl
Concen: 2.02 ng/ml
RT: 5.78 min Scan# 484
Delta R.T. 0.00 min
Lab File: 0330F004.D
Acq: 30 Mar 2018 7:30 am

NT

Tgt Ion:154 Resp: 399

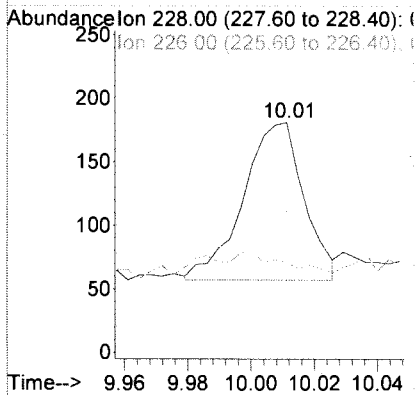
Ion	Ratio	Lower	Upper
154	100		
153	40.1	11.3	71.3
152	29.1	8.5	48.5





#26
Benz(a)anthracene
Concen: 0.54 ng/ml m
RT: 10.01 min Scan# 1508
Delta R.T. 0.02 min
Lab File: 0330F004.D
Acq: 30 Mar 2018 7:30 am

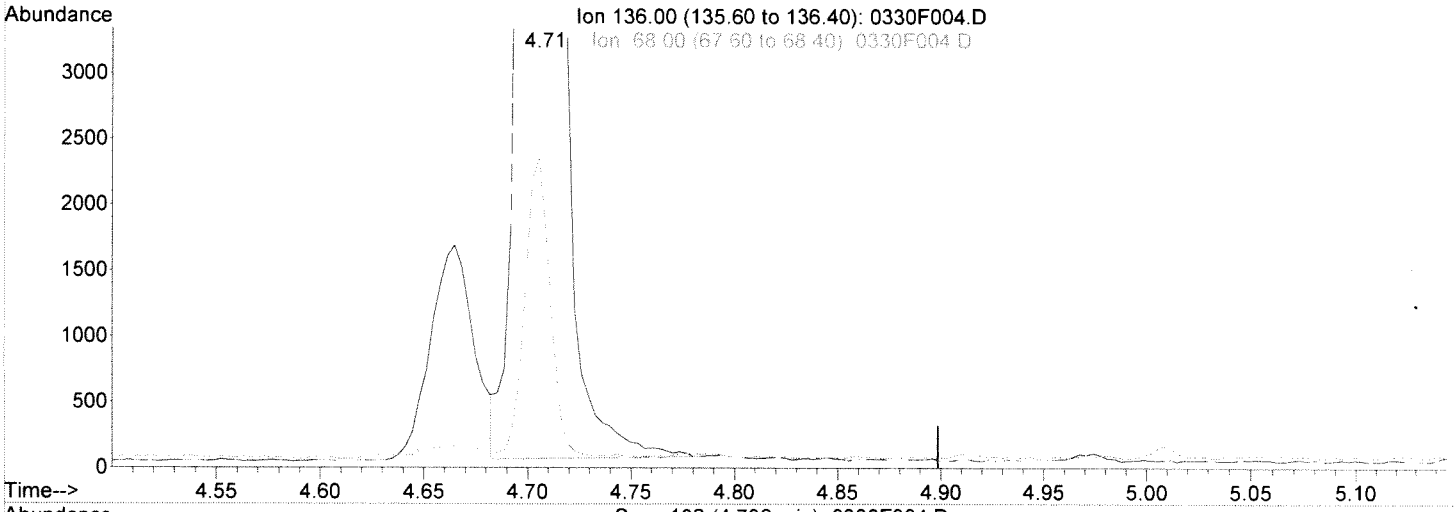
Tgt Ion:228	Resp:	165	
Ion	Ratio	Lower	Upper
228	100		
226	39.2	0.0	56.4
229	61.3	0.0	39.3#

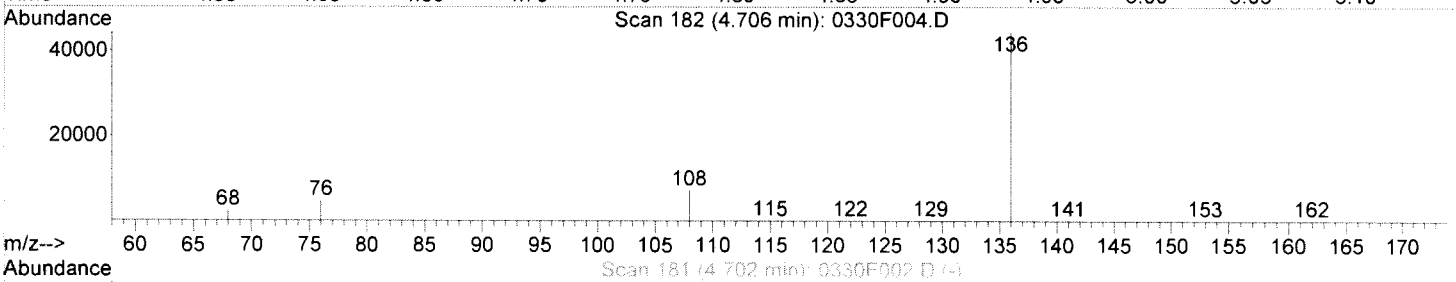


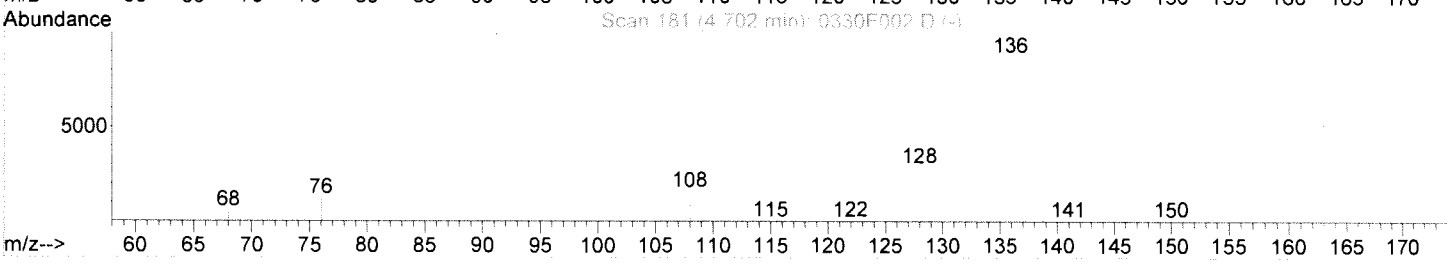
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\033018\0330F004.D Vial: 4
Acq On : 30 Mar 2018 7:30 am Operator: LWeiskopf
Sample : K1802579-031 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 2 8:53 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Mon Apr 02 08:52:37 2018
Response via : Multiple Level Calibration







TIC: 0330F004.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml

response 36807

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.06
108.00	11.60	16.16
0.00	0.00	0.00

Manual Integration:

Before

04/02/18

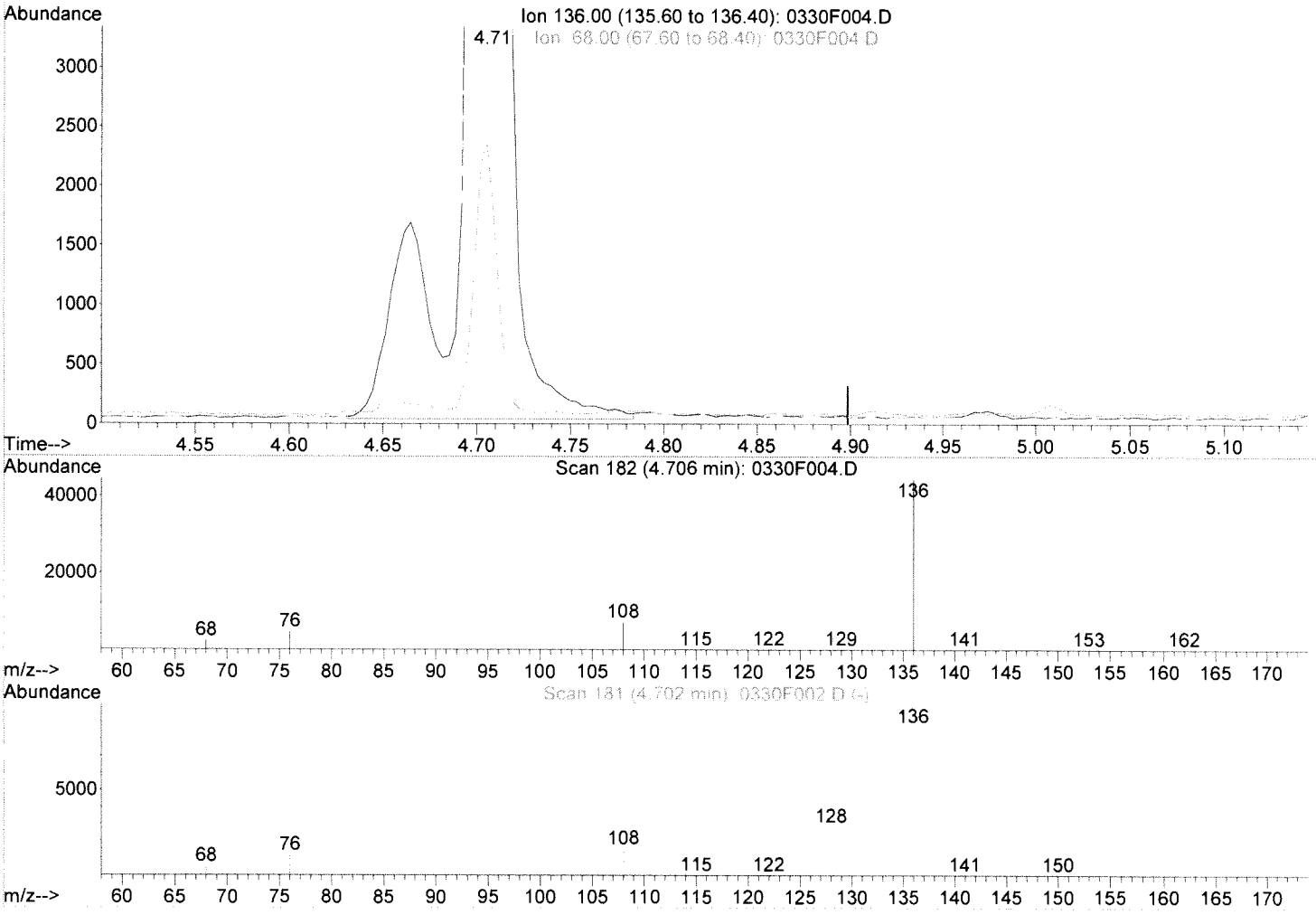
APR 02 2018

0330F004.D 101317PAH.M Mon Apr 02 08:58:03 2018

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\033018\0330F004.D Vial: 4
Acq On : 30 Mar 2018 7:30 am Operator: LWeiskopf
Sample : K1802579-031 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 2 8:58 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Mon Apr 02 08:52:37 2018
Response via : Multiple Level Calibration



TIC: 0330F004.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml m

response 39449

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.28
108.00	11.60	16.28
0.00	0.00	0.00

Manual Integration:

After

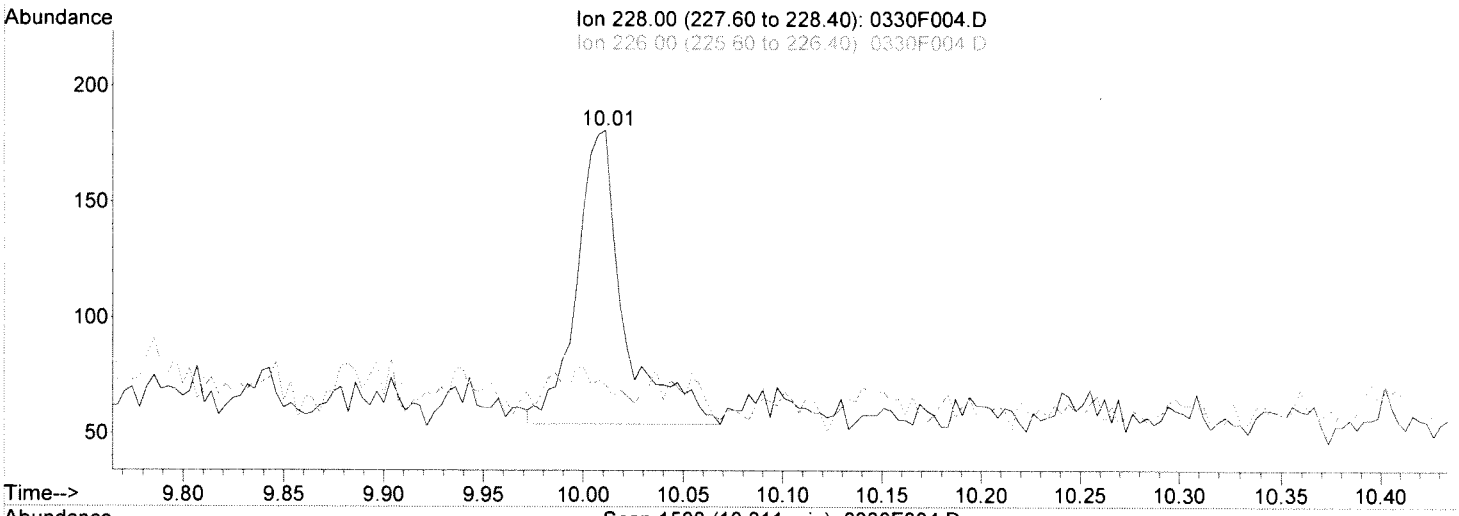
IC-Incomplete

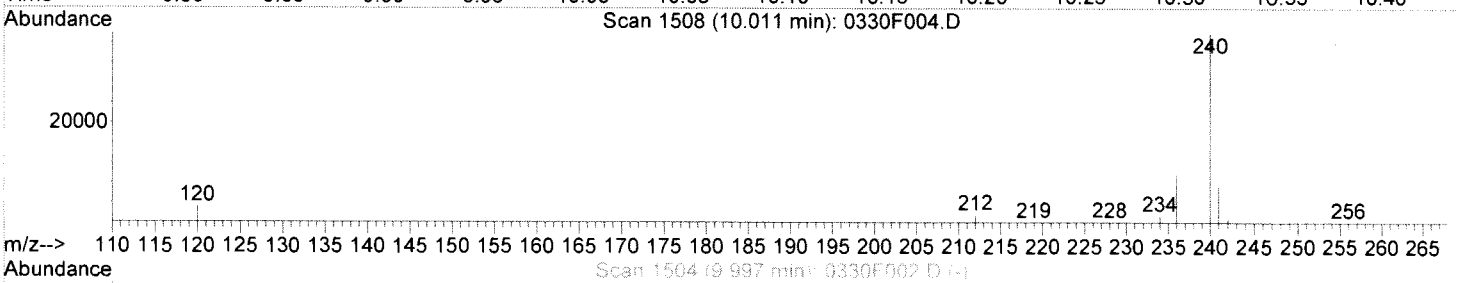
04/02/18

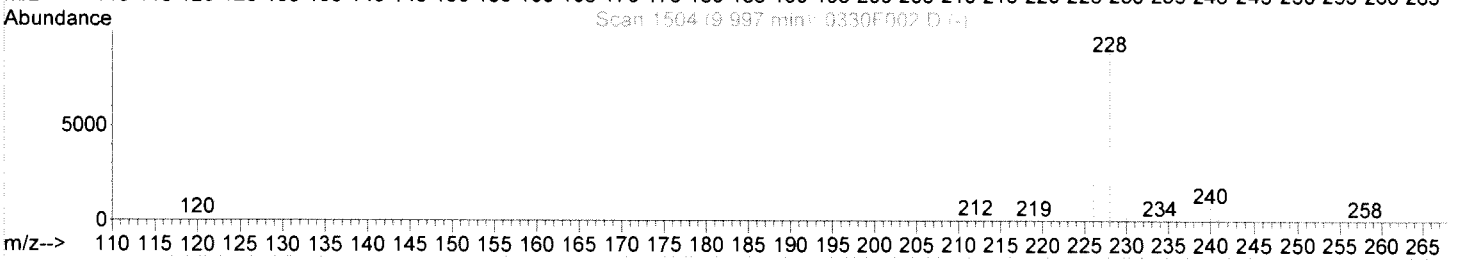
0330F004.D 101317PAH.M Mon Apr 02 08:58:09 2018

Data File : J:\MS14\DATA\033018\0330F004.D Vial: 4
Acq On : 30 Mar 2018 7:30 am Operator: LWeiskopf
Sample : K1802579-031 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 2 8:58 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Mon Apr 02 08:52:37 2018
Response via : Multiple Level Calibration







TIC: 0330F004.D

(26) Benz(a)anthracene (T)

10.01min 0.70ng/ml

response 211

Ion	Exp%	Act%
228.00	100	100
226.00	26.40	11.81
229.00	19.30	40.16#
0.00	0.00	0.00

Manual Integration:

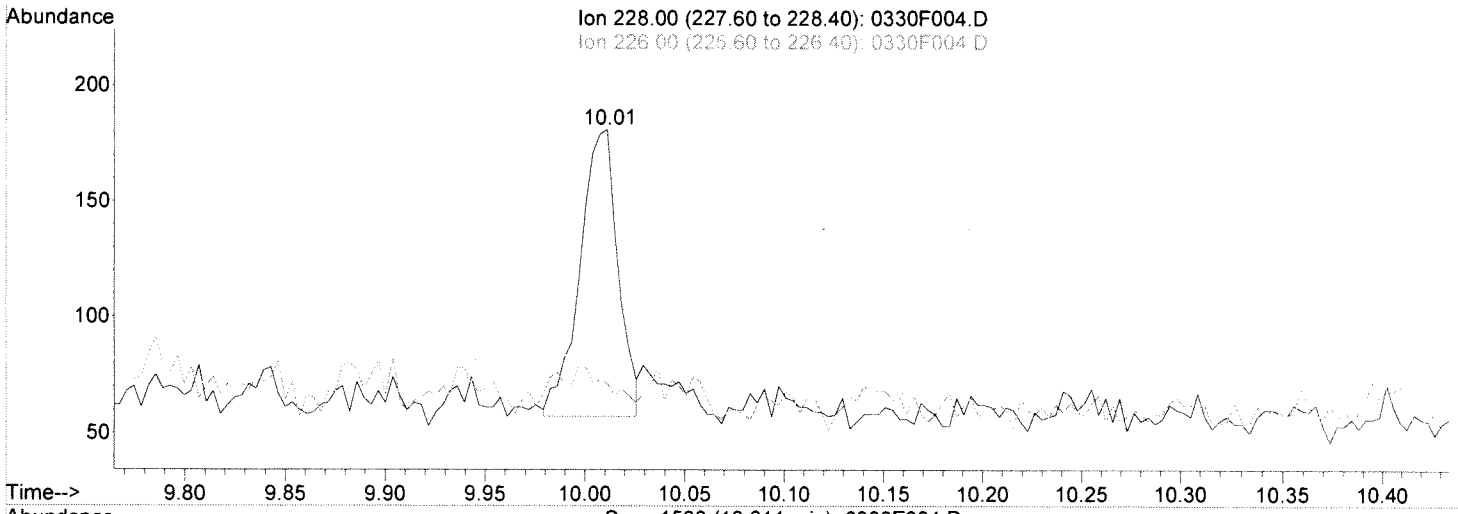
Before

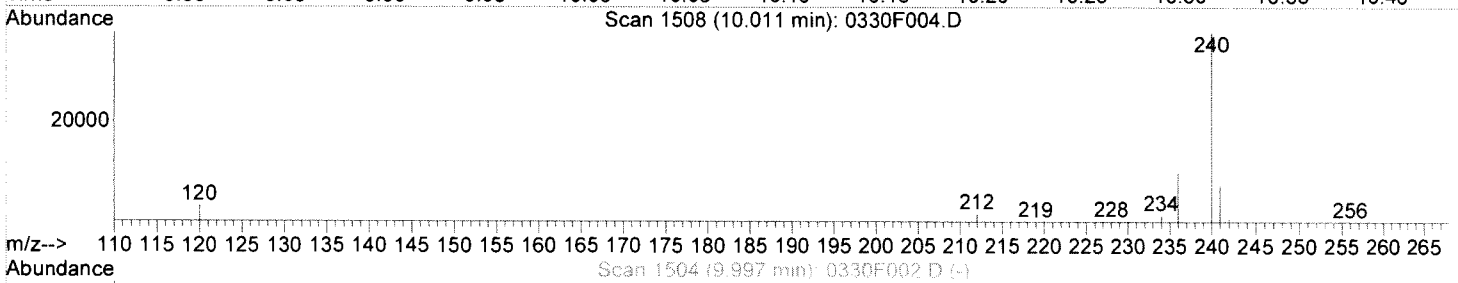
04/02/18

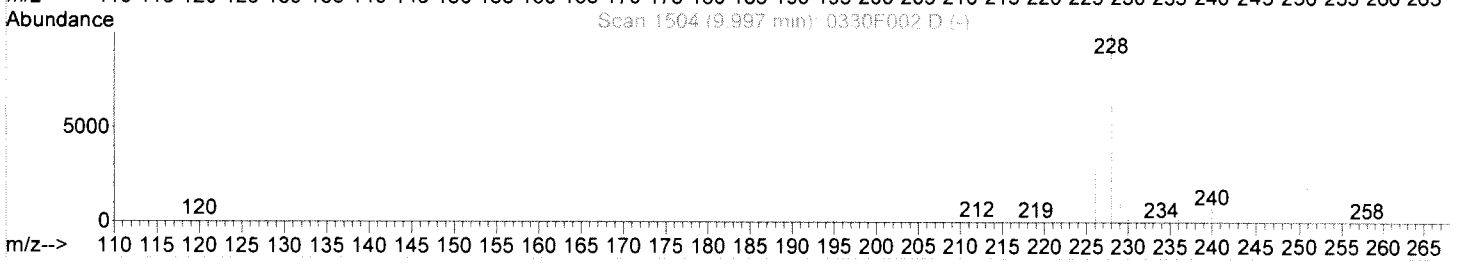
0330F004.D 101317PAH.M Mon Apr 02 08:58:52 2018

Data File : J:\MS14\DATA\033018\0330F004.D Vial: 4
Acq On : 30 Mar 2018 7:30 am Operator: LWeiskopf
Sample : K1802579-031 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 2 8:58 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Mon Apr 02 08:52:37 2018
Response via : Multiple Level Calibration







TIC: 0330F004.D

(26) Benz(a)anthracene (T)

10.01min 0.54ng/ml m

response 165

Ion	Exp%	Act%
228.00	100	100
226.00	26.40	39.23
229.00	19.30	61.33#
0.00	0.00	0.00

Manual Integration:

After

IC-Overintegrated

04/02/18

0330F004.D 101317PAH.M Mon Apr 02 08:59:00 2018

Exception Report

Data File: J:\MS14\DATA\032918\0329F017.D
Lab ID: KWG1801565-3
RunType: MB
Matrix: WATER

Date Acquired: 03/29/2018 11:11
Date Quantitated: 03/30/2018 09:41
Batch ID: KWG1801713
Analysis Method: 8270D SIM
MethodJoinID: MJ1638

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

K2579
K2582

Primary Review: MAR 30 2018
Secondary Review: APR 02 2018

Quantitation Report

Data File:	J:\MS14\DATA\032918\0329F017.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 11:11	**Quant Date:**	03/30/2018 09:41	**Vial:**	17
Run Type:	MB	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1801565-3			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801713	**Prep Lot:**	KWG1801565	**Report Group:**	
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1668293	**Prep Date:**	03/22/2018		

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M	**Calibration ID:**	CAL15579
Title:			
Tune Ref:	J:\MS14\DATA\032918\0329F001.D	**Method ID:**	MJ1638
MB Ref:		**Quant based on Method**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.71	0.02	136	44126m	200.00	OK
2	Acenaphthene-d10	6.26	-0.01	164	22704	200.00	OK
3	Phenanthrene-d10	7.50	0.00	188	48524	200.00	OK
4	Chrysene-d12	10.01	0.00	240	55646	200.00	OK
5	Perylene-d12	13.03	-0.01	264	61173	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.70	-0.01	0.00	176	138042	888.80	89	42-131	OK	
3	Fluoranthene-d10	8.49	0.00	0.00	212	286770	940.56	94	42-133	OK	
4	Terphenyl-d14	8.83	0.00	0.00	244	213851	911.46	91	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.72	0.01	0.00	128	113	0.4500	0.00198	J	
1	2-Methylnaphthalene				142	0		0.0013	U	
1	1-Methylnaphthalene				142	0		0.0013	U	
1	Biphenyl	5.78		-0.01	154	460	2.08	0.00914	J	
1	2,6-Dimethylnaphthalene				156	0		0.0016	U	
2	Acenaphthylene				152	0		0.0011	U	
2	Acenaphthene				154	0d		0.0012	U	
2	Dibenzofuran				168	0d		0.00096	U	
2	2,3,5-Trimethylnaphthalene				170	0d		0.00078	U	
2	Fluorene				166	0d		0.0011	U	
3	Dibenzothiophene				184	0d		0.00081	U	
3	Phenanthrene	7.52		0.00	178	86	0.2900	0.00127	J	
3	Anthracene				178	0d		0.00082	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\032918\0329F017.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 11:11	**Quant Date:**	03/30/2018 09:41	**Vial:**	17
Run Type:	MB	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1801565-3			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
3	Carbazole				167	0		0.0011	U	
3	1-Methylphenanthrene				192	0		0.00084	U	
3	Fluoranthene				202	0**d**		0.00082	U	
4	Pyrene				202	0**d**		0.0010	U	
4	Benz(a)anthracene	10.01	0.01	0.00	228	175	0.5200	0.00229	J	
4	Chrysene				228	0**d**		0.00076	U	
5	Benzo(b)fluoranthene				252	0		0.00083	U	
5	Benzo(k)fluoranthene				252	0		0.00094	U	
5	Benzo(e)pyrene				252	0**d**		0.0015	U	
5	Benzo(a)pyrene				252	0**d**		0.0011	U	
5	Perylene				252	0**d**		0.00081	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.00089	U	
5	Dibenz(a,h)anthracene				278	0		0.0013	U	
5	Benzo(g,h,i)perylene				276	0**d**		0.00086	U	

Prep Amount:	455 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\032918\0329F017.D Vial: 17
Acq On : 29 Mar 2018 11:11 am Operator: LWeiskopf
Sample : KWG1801565-3 MB Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 08:13:05 2018 Quant Results File: 101317PAH.RES

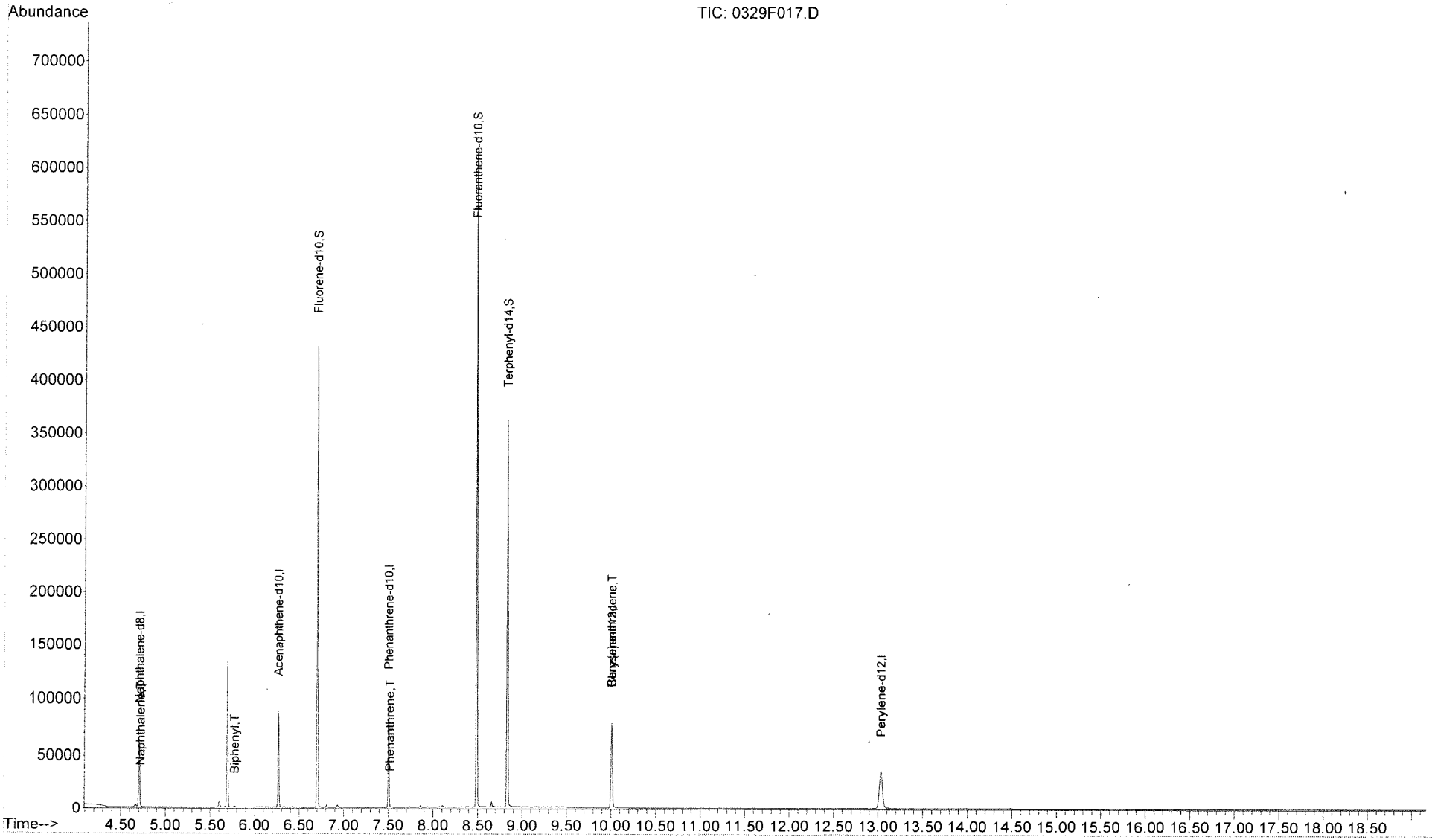
Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

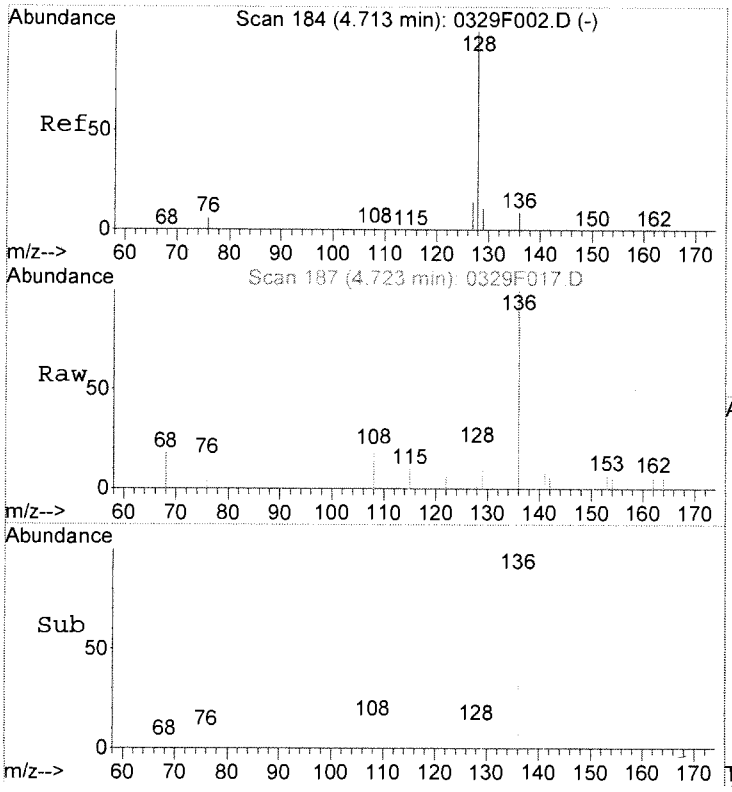
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.71	136	44126m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.26	164	22704	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	48524	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	55646	200.00	ng/ml	0.00
28) Perylene-d12	13.03	264	61173	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/ml	
Spiked Amount 1000.000			Recovery = 0.00%			
13) Fluorene-d10	6.70	176	138042	888.80	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 88.88%			
22) Fluoranthene-d10	8.49	212	286770	940.56	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 94.06%			
25) Terphenyl-d14	8.83	244	213851	911.46	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 91.15%			
Target Compounds						Qvalue
2) Naphthalene	4.72	128	113	0.45	ng/ml	91
6) Biphenyl	5.78	154	460	2.08	ng/ml	96
17) Phenanthrene	7.52	178	86	0.29	ng/ml	83
26) Benz(a)anthracene	10.01	228	175	0.52	ng/ml	65

(#) = qualifier out of range (m) = manual integration
0329F017.D 101317PAH.M Fri Mar 30 09:42:41 2018 Page 1

Data File : J:\MS14\DATA\032918\0329F017.D Vial: 17
Acq On : 29 Mar 2018 11:11 am Operator: LWeiskopf
Sample : KWG1801565-3 MB Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:41 2018 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration

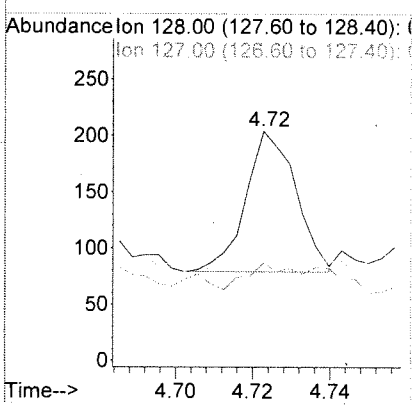


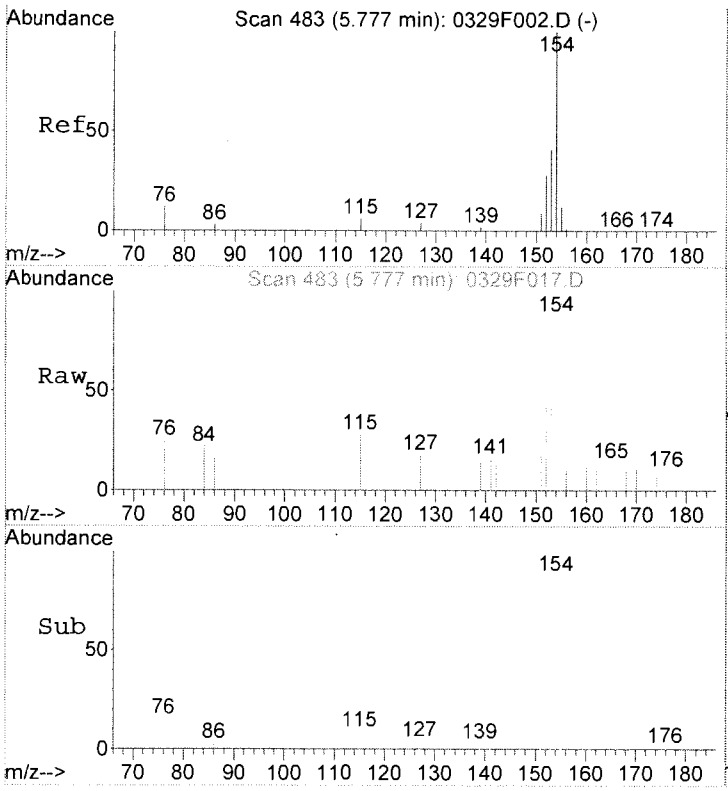


#2
Naphthalene
Concen: 0.45 ng/ml
RT: 4.72 min Scan# 187
Delta R.T. 0.00 min
Lab File: 0329F017.D
Acq: 29 Mar 2018 11:11 am

Tgt Ion:128 Resp: 113

Ion	Ratio	Lower	Upper
128	100		
127	12.0	0.0	44.1
129	16.0	0.0	30.4

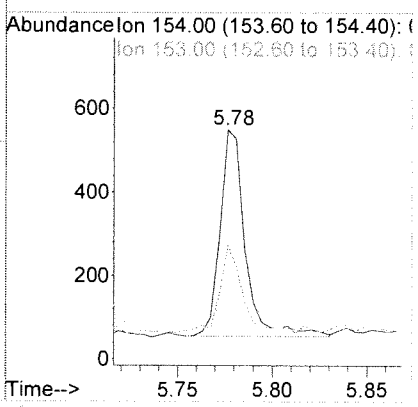


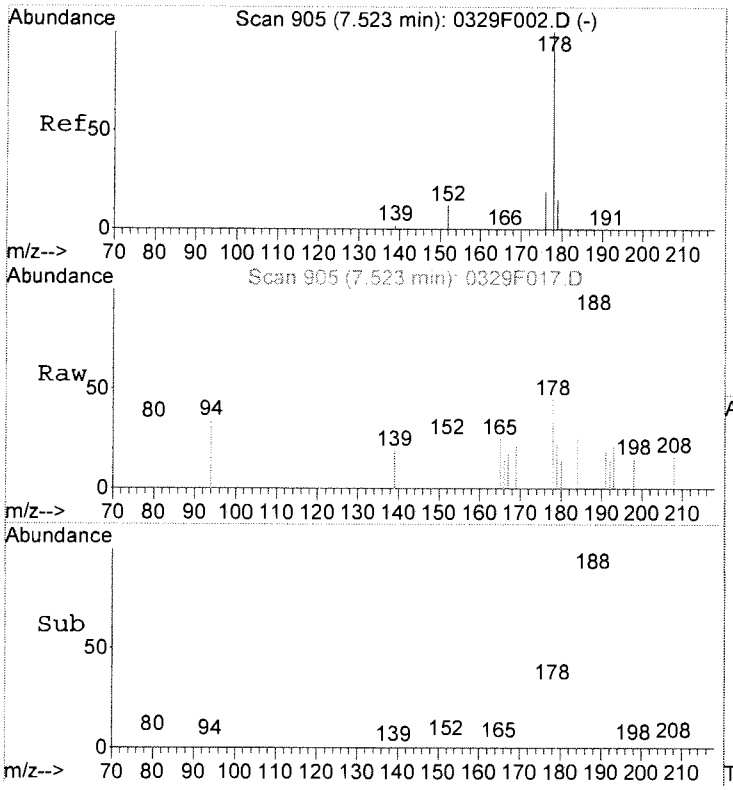


#6
Biphenyl
Concen: 2.08 ng/ml
RT: 5.78 min Scan# 483
Delta R.T. -0.00 min
Lab File: 0329F017.D
Acq: 29 Mar 2018 11:11 am

Tgt Ion:154 Resp: 460

Ion	Ratio	Lower	Upper
154	100		
153	41.4	11.3	71.3
152	33.3	8.5	48.5

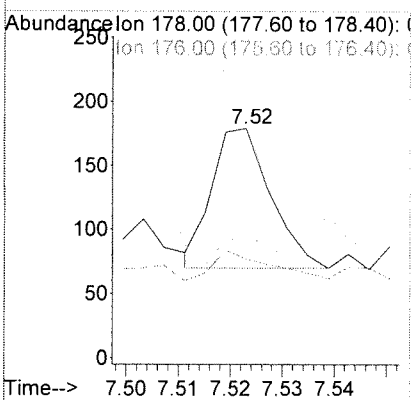


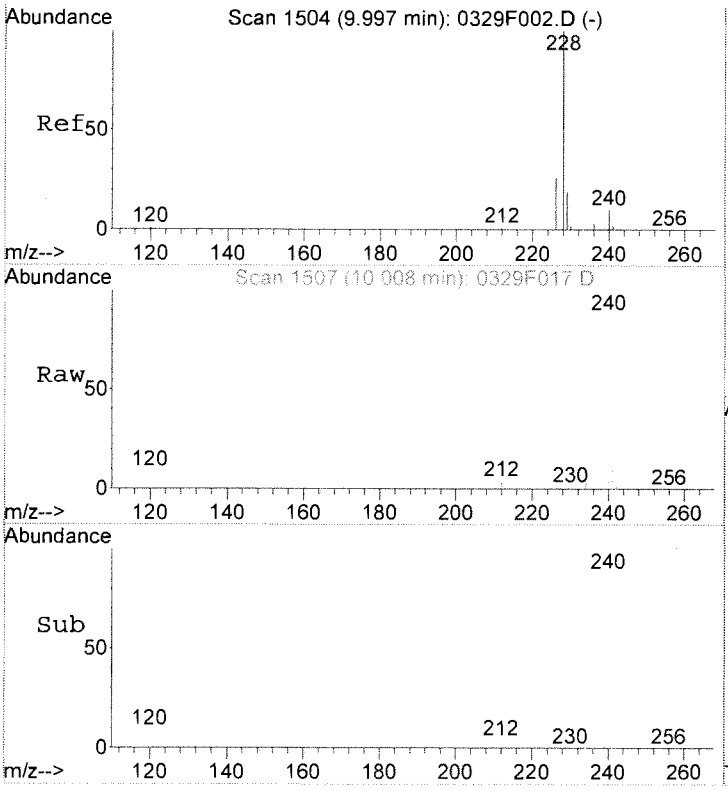


#17
Phenanthrene
Concen: 0.29 ng/ml
RT: 7.52 min Scan# 905
Delta R.T. 0.00 min
Lab File: 0329F017.D
Acq: 29 Mar 2018 11:11 am

Tgt Ion:178 Resp: 86

Ion	Ratio	Lower	Upper
178	100		
176	15.6	0.0	49.6
179	3.7	0.0	35.1

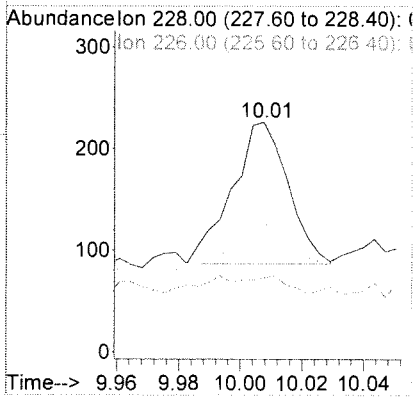




#26
Benz(a)anthracene
Concen: 0.52 ng/ml
RT: 10.01 min Scan# 1507
Delta R.T. 0.01 min
Lab File: 0329F017.D
Acq: 29 Mar 2018 11:11 am

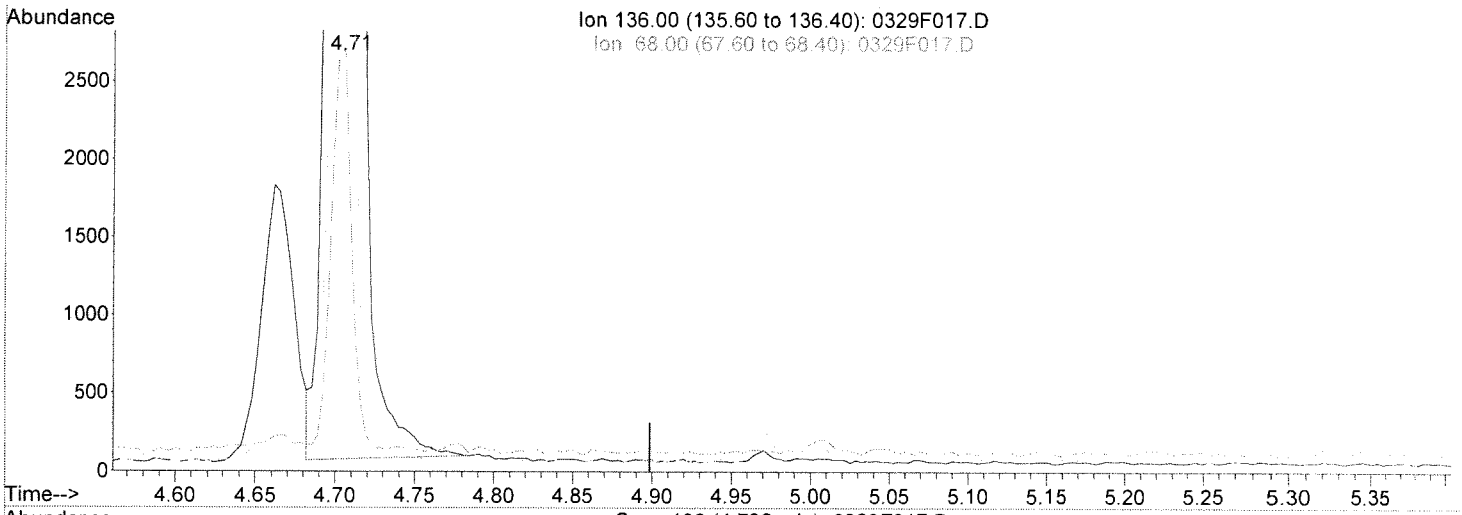
Tgt Ion:228 Resp: 175

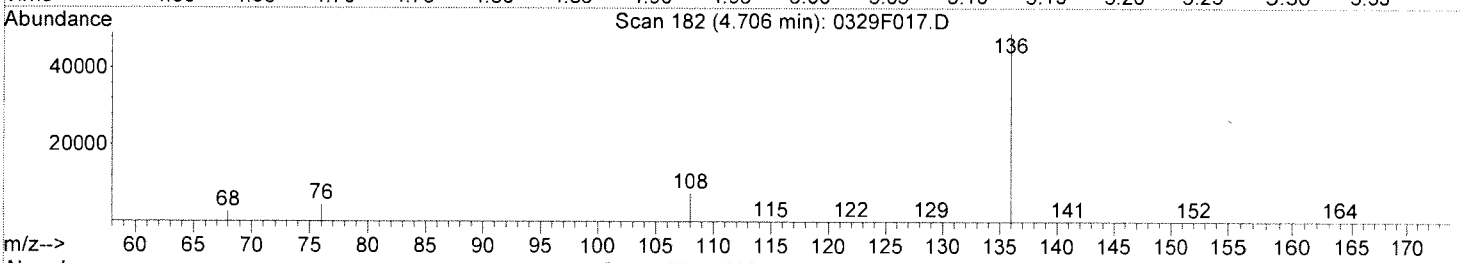
Ion	Ratio	Lower	Upper
228	100		
226	6.5	0.0	56.4
229	32.4	0.0	39.3

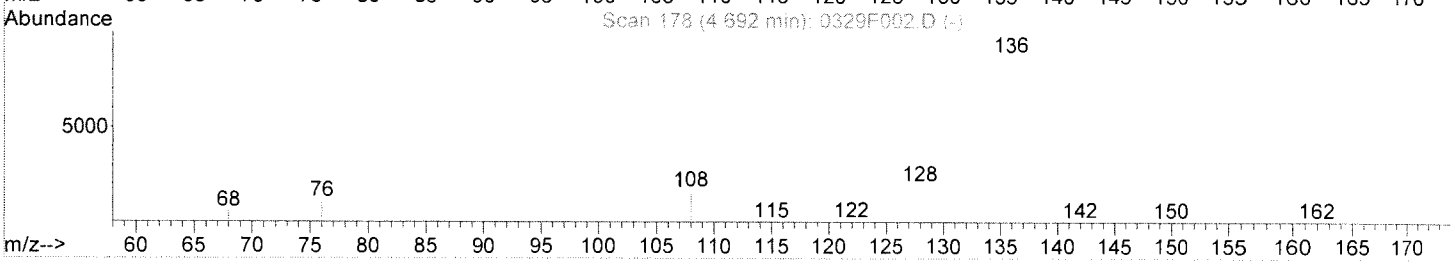


Data File : J:\MS14\DATA\032918\0329F017.D Vial: 17
Acq On : 29 Mar 2018 11:11 am Operator: LWeiskopf
Sample : KWG1801565-3 MB Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 8:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F017.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml

response 41261

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.22
108.00	11.60	14.90
0.00	0.00	0.00

Manual Integration:

Before

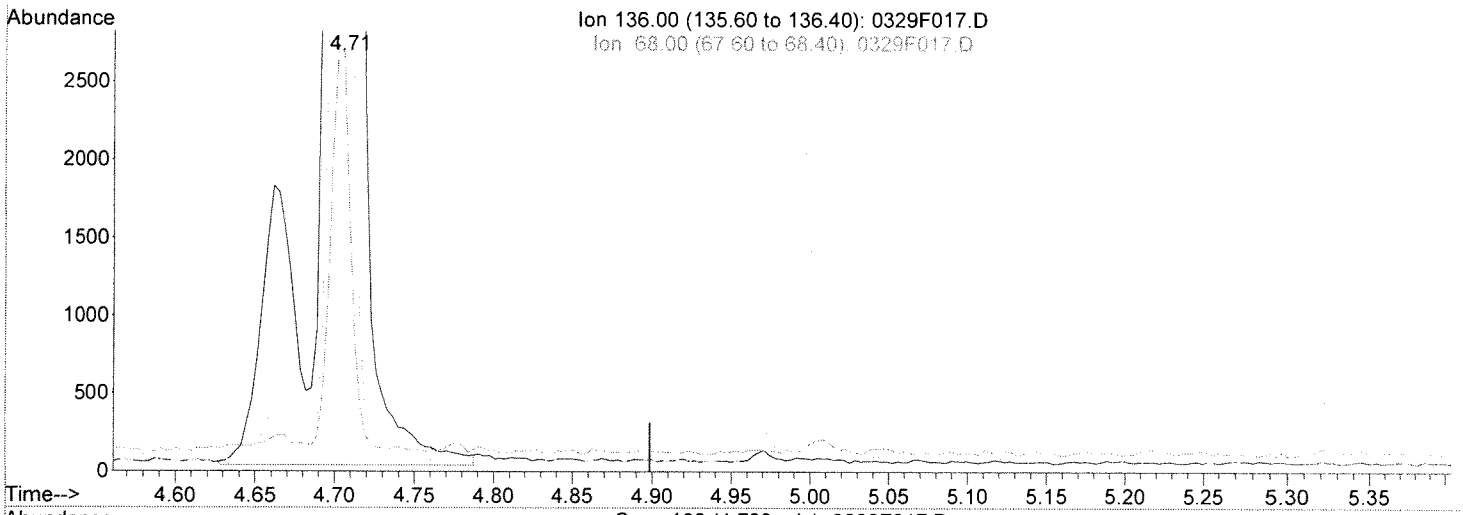
03/30/18

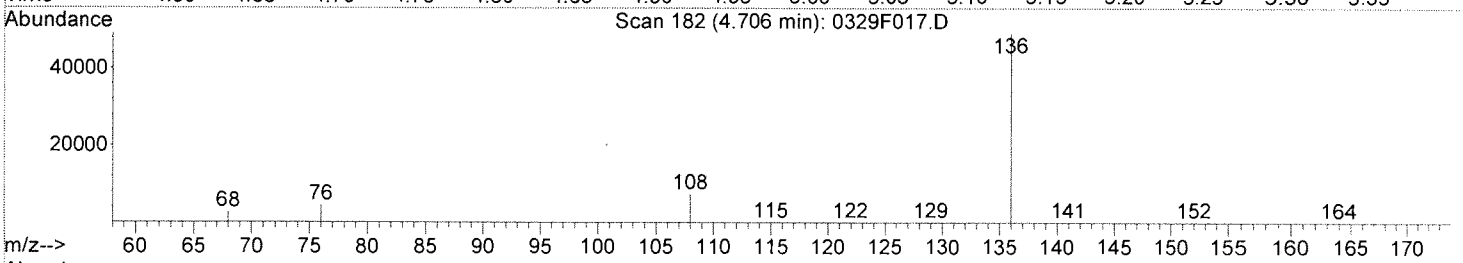
APR 02 2018

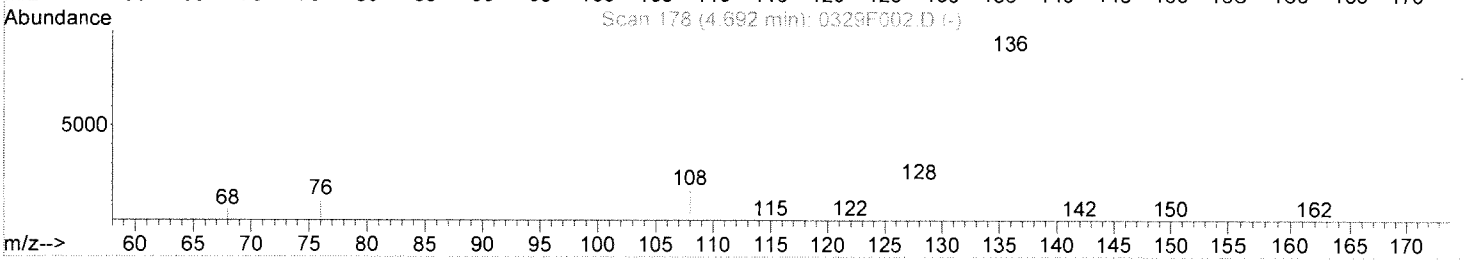
0329F017.D 101317PAH.M Fri Mar 30 09:40:09 2018

Data File : J:\MS14\DATA\032918\0329F017.D Vial: 17
Acq On : 29 Mar 2018 11:11 am Operator: LWeiskopf
Sample : KWG1801565-3 MB Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:40 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration







TIC: 0329F017.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml m

response 44126

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.46
108.00	11.60	15.03
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

03/30/18

APR 02 2018

0329F017.D 101317PAH.M Fri Mar 30 09:40:15 2018

Exception Report

Data File: J:\MS14\DATA\032918\0329F018.D
Lab ID: KWG1801565-1
RunType: LCS
Matrix: WATER

Date Acquired: 03/29/2018 11:35
Date Quantitated: 03/30/2018 09:41
Batch ID: KWG1801713
Analysis Method: 8270D SIM
MethodJoinID: MJ1638

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

K2579
K2582

Primary Review: MAR 30 2018
Secondary Review: APR 02 2018

Printed: 03/30/2018 11:28:39
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\032918\0329F018.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 11:35	**Quant Date:**	03/30/2018 09:41	**Vial:**	18
Run Type:	LCS	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1801565-1			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801713	**Prep Lot:**	KWG1801565	**Report Group:**	
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1668291	**Prep Date:**	03/22/2018		

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M	**Calibration ID:**	CAL15579
Title:			
Tune Ref:	J:\MS14\DATA\032918\0329F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\032918\0329F017.D	**Quant based on Method**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.71	0.02	136	43490**m**	200.00	OK
2	Acenaphthene-d10	6.26	-0.01	164	20413	200.00	OK
3	Phenanthrene-d10	7.50	0.00	188	44800	200.00	OK
4	Chrysene-d12	10.01	0.00	240	52492	200.00	OK
5	Perylene-d12	13.04	0.00	264	58250	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.71	0.00	0.00	176	131196	939.52	94	42-131	OK	
3	Fluoranthene-d10	8.49	0.00	0.00	212	286462	1,018	102	42-133	OK	
4	Terphenyl-d14	8.83	0.00	0.00	244	200531	906.04	91	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.73	0.02	0.00	128	134489**m**	542.89	2.41		
1	2-Methylnaphthalene	5.37	0.01	0.00	142	90528	524.90	2.33		
1	1-Methylnaphthalene	5.45		0.00	142	82736	542.73	2.41		
1	Biphenyl	5.78		-0.01	154	111616	511.31	2.27		
1	2,6-Dimethylnaphthalene	5.92	0.01	0.00	156	79764	514.17	2.29		
2	Acenaphthylene	6.14		0.00	152	145275	581.60	2.58		
2	Acenaphthene	6.29		0.00	154	82783	589.37	2.62		
2	Dibenzofuran	6.44		0.00	168	140637	637.24	2.83		
2	2,3,5-Trimethylnaphthalene	6.62		0.00	170	80920	569.60	2.53		
2	Fluorene	6.73		0.00	166	102223	590.50	2.62		
3	Dibenzothiophene	7.42		0.00	184	163565	575.82	2.56		
3	Phenanthrene	7.52		0.00	178	159802	575.23	2.56		
3	Anthracene	7.57		0.00	178	161315	588.77	2.62		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\032918\0329F018.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 11:35	**Quant Date:**	03/30/2018 09:41	**Vial:**	18
Run Type:	LCS	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1801565-1			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
3	Carbazole	7.70		0.00	167	76798	309.27	1.37		
3	1-Methylphenanthrene	8.03		0.00	192	125343	593.41	2.64		
3	Fluoranthene	8.51		0.00	202	185910	563.68	2.51		
4	Pyrene	8.69		0.00	202	200892	634.06	2.82		
4	Benz(a)anthracene	9.99	-0.01	0.00	228	205078	647.87	2.88		
4	Chrysene	10.05		0.00	228	189198	639.23	2.84		
5	Benzo(b)fluoranthene	12.02		0.00	252	219780	597.65	2.66		
5	Benzo(k)fluoranthene	12.09		0.00	252	216115	598.33	2.66		
5	Benzo(e)pyrene	12.73		0.00	252	207195	590.67	2.63		
5	Benzo(a)pyrene	12.87	-0.01	0.00	252	194900	606.33	2.69		
5	Perylene	13.12		0.00	252	194929	615.58	2.74		
5	Indeno(1,2,3-cd)pyrene	15.33		0.00	276	172661	597.91	2.66		
5	Dibenz(a,h)anthracene	15.38		0.00	278	161683	549.90	2.44		
5	Benzo(g,h,i)perylene	15.71		0.00	276	191492	596.01	2.65		

Prep Amount:	450 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\032918\0329F018.D Vial: 18
Acq On : 29 Mar 2018 11:35 am Operator: LWeiskopf
Sample : KWG1801565-1 LCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 08:13:06 2018 Quant Results File: 101317PAH.RES

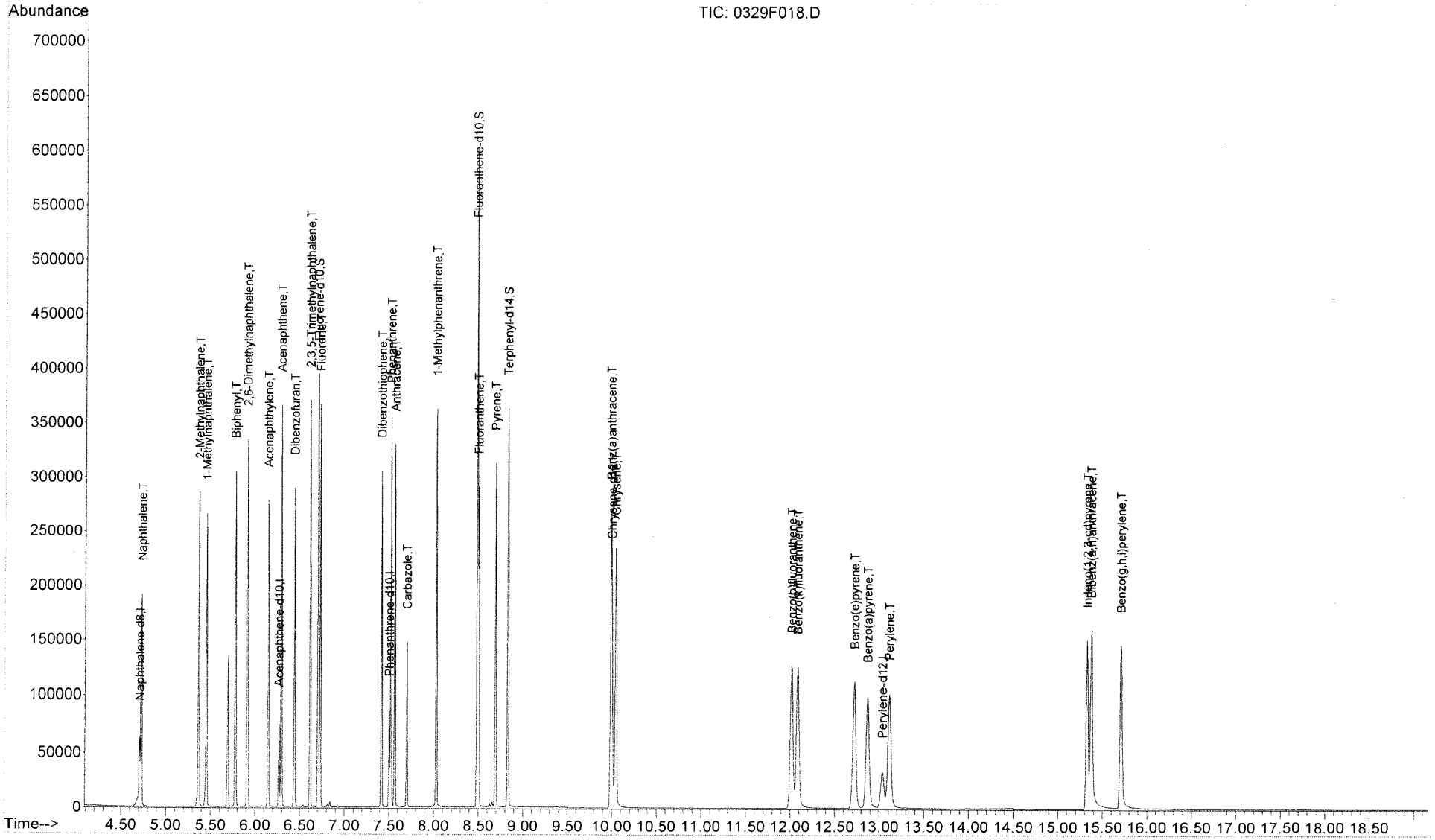
Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.71	136	43490m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.26	164	20413	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	44800	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	52492	200.00	ng/ml	0.00
28) Perylene-d12	13.04	264	58250	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0d	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
13) Fluorene-d10	6.71	176	131196	939.52	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	93.95%		
22) Fluoranthene-d10	8.49	212	286462	1017.65	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	101.77%		
25) Terphenyl-d14	8.83	244	200531	906.04	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	90.60%		
Target Compounds						Qvalue
2) Naphthalene	4.73	128	134489m	542.89	ng/ml	
4) 2-Methylnaphthalene	5.37	142	90528	524.90	ng/ml#	83
5) 1-Methylnaphthalene	5.45	142	82736	542.73	ng/ml	90
6) Biphenyl	5.78	154	111616	511.31	ng/ml	97
7) 2,6-Dimethylnaphthalene	5.92	156	79764	514.17	ng/ml	93
9) Acenaphthylene	6.14	152	145275	581.60	ng/ml	99
10) Acenaphthene	6.29	154	82783	589.37	ng/ml	98
11) Dibenzofuran	6.44	168	140637	637.24	ng/ml	98
12) 2,3,5-Trimethylnaphthalene	6.62	170	80920	569.60	ng/ml	92
14) Fluorene	6.73	166	102223	590.50	ng/ml	99
16) Dibenzothiophene	7.42	184	163565	575.82	ng/ml	90
17) Phenanthrene	7.52	178	159802	575.23	ng/ml	100
18) Anthracene	7.57	178	161315	588.77	ng/ml	99
19) Carbazole	7.70	167	76798	309.27	ng/ml	98
20) 1-Methylphenanthrene	8.03	192	125343	593.41	ng/ml	100
21) Fluoranthene	8.51	202	185910	563.68	ng/ml	94
24) Pyrene	8.69	202	200892	634.06	ng/ml	97
26) Benz(a)anthracene	9.99	228	205078	647.87	ng/ml	99
27) Chrysene	10.05	228	189198	639.23	ng/ml	99
29) Benzo(b)fluoranthene	12.02	252	219780	597.65	ng/ml	97
30) Benzo(k)fluoranthene	12.09	252	216115	598.33	ng/ml	97
31) Benzo(e)pyrene	12.73	252	207195	590.67	ng/ml	96
32) Benzo(a)pyrene	12.87	252	194900	606.33	ng/ml	96
33) Perylene	13.12	252	194929	615.58	ng/ml	95
34) Indeno(1,2,3-cd)pyrene	15.33	276	172661	597.91	ng/ml	95
35) Dibenz(a,h)anthracene	15.38	278	161683	549.90	ng/ml	96
36) Benzo(g,h,i)perylene	15.71	276	191492	596.01	ng/ml	95

(#) = qualifier out of range (m) = manual integration
0329F018.D 101317PAH.M Fri Mar 30 09:42:49 2018 Page 1

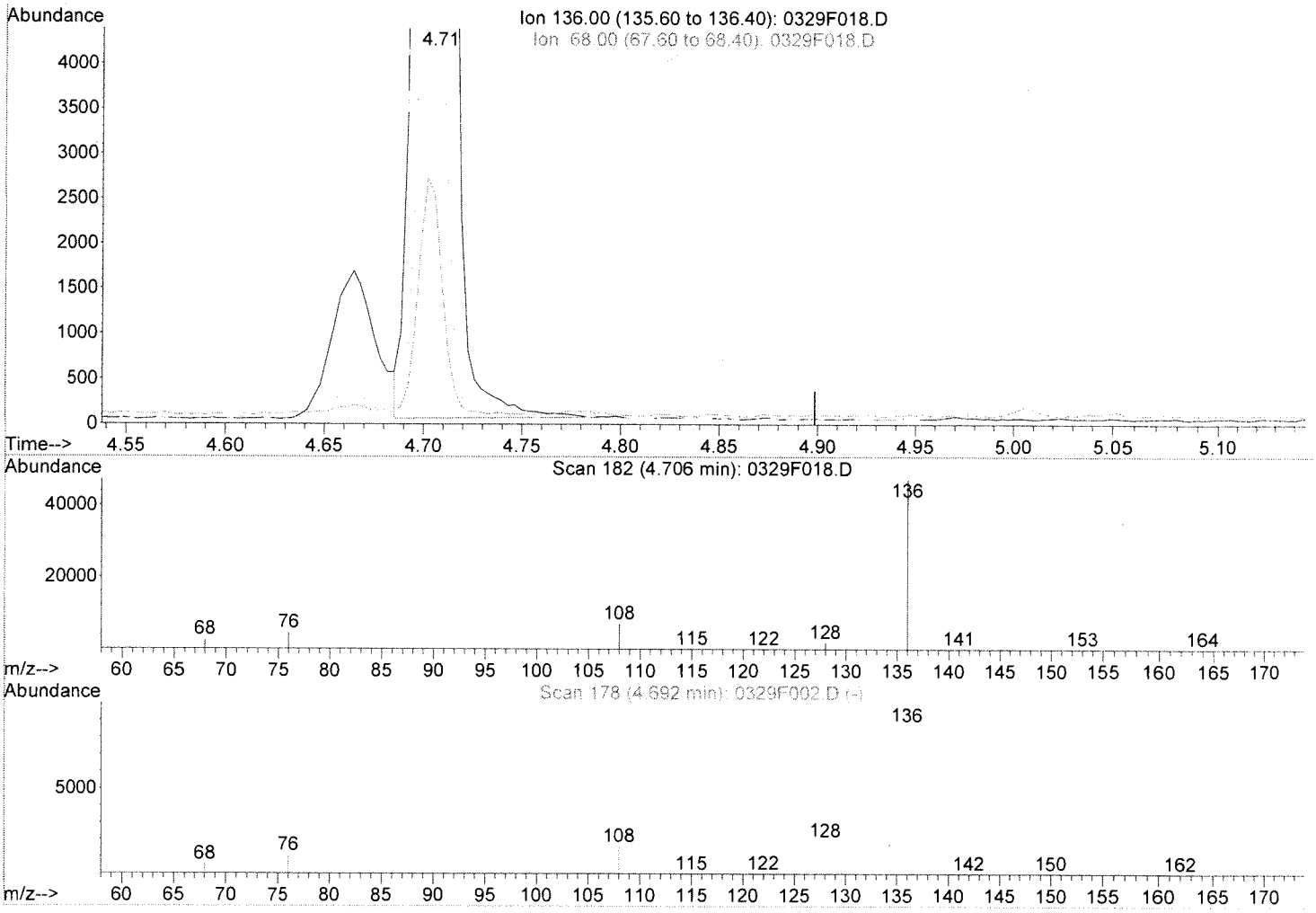
Data File : J:\MS14\DATA\032918\0329F018.D Vial: 18
Acq On : 29 Mar 2018 11:35 am Operator: LWeiskopf
Sample : KWG1801565-1 LCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:41 2018 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration



Data File : J:\MS14\DATA\032918\0329F018.D Vial: 18
Acq On : 29 Mar 2018 11:35 am Operator: LWeiskopf
Sample : KWG1801565-1 LCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 8:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration



TIC: 0329F018.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml

response 40744

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.12
108.00	11.60	14.80
0.00	0.00	0.00

Manual Integration:

Before

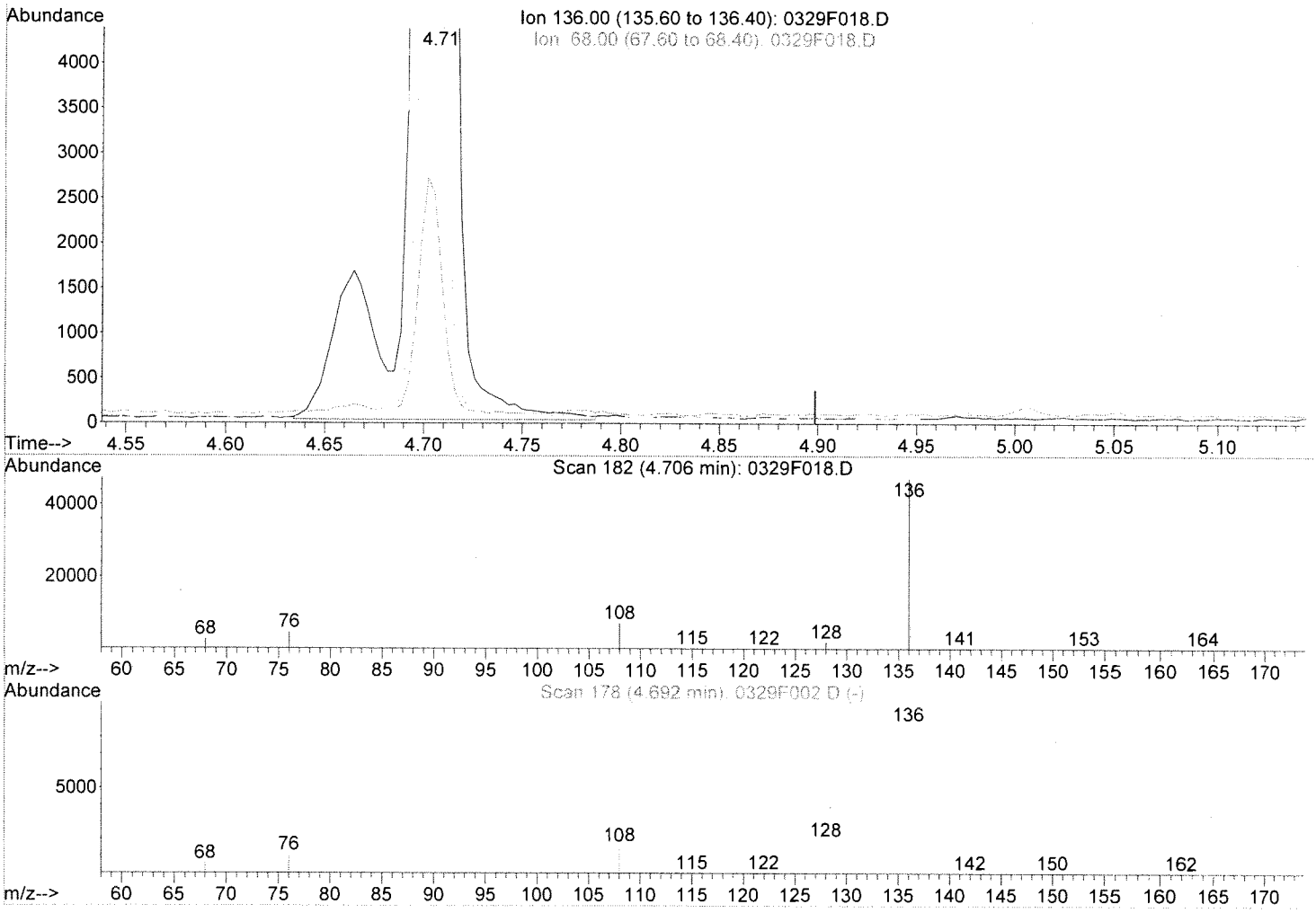
03/30/18

APR 02 2018

0329F018.D 101317PAH.M Fri Mar 30 09:41:07 2018

Data File : J:\MS14\DATA\032918\0329F018.D Vial: 18
Acq On : 29 Mar 2018 11:35 am Operator: LWeiskopf
Sample : KWG1801565-1 LCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:41 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration



TIC: 0329F018.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml m

response 43490

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.35
108.00	11.60	14.91
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

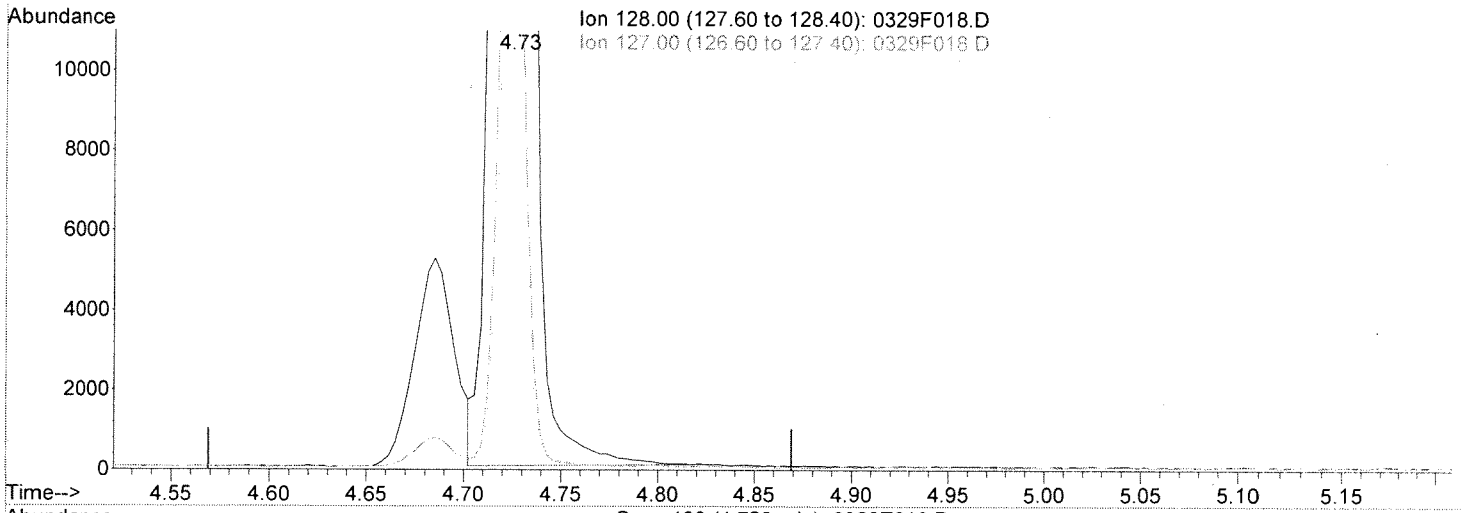
03/30/18

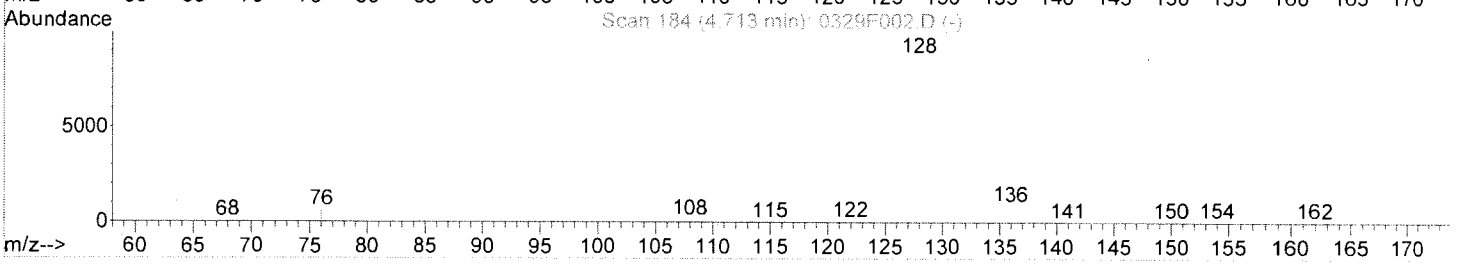
APR 02 2018

0329F018.D 101317PAH.M Fri Mar 30 09:41:13 2018

Data File : J:\MS14\DATA\032918\0329F018.D Vial: 18
Acq On : 29 Mar 2018 11:35 am Operator: LWeiskopf
Sample : KWG1801565-1 LCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:41 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration





TIC: 0329F018.D

(2) Naphthalene (T)

4.73min 511.24ng/ml

response 126649

Ion	Exp%	Act%
128.00	100	100
127.00	14.10	13.48
129.00	10.40	10.85
0.00	0.00	0.00

Manual Integration:

Before

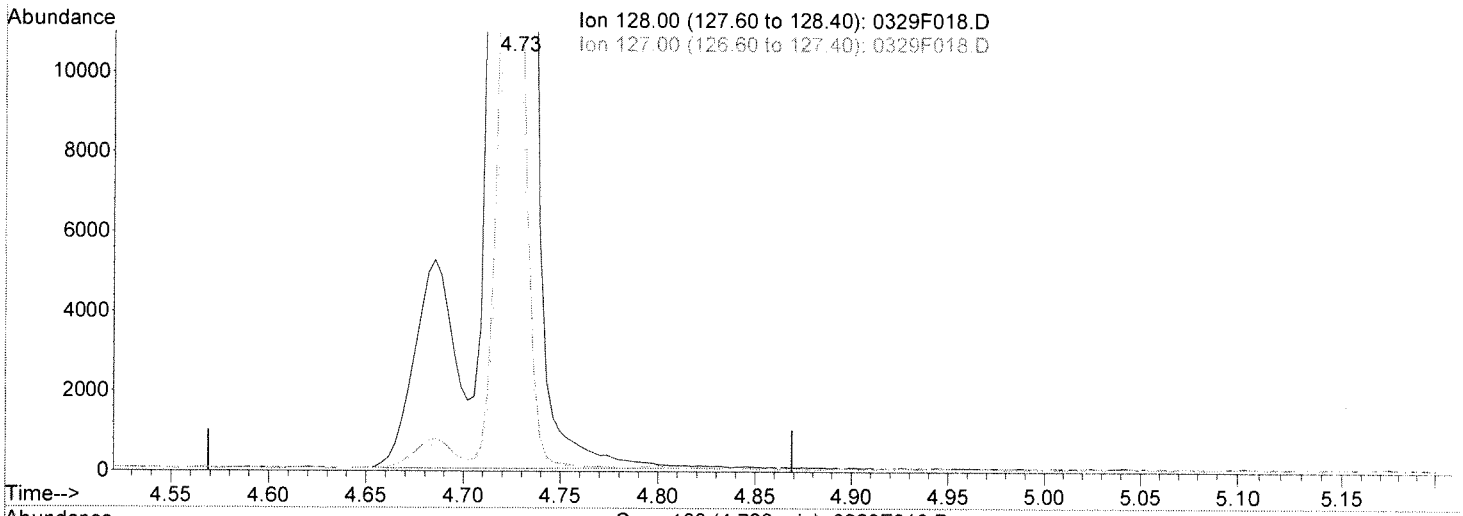
03/30/18

APR 02 2018

0329F018.D 101317PAH.M Fri Mar 30 09:41:18 2018

Data File : J:\MS14\DATA\032918\0329F018.D Vial: 18
Acq On : 29 Mar 2018 11:35 am Operator: LWeiskopf
Sample : KWG1801565-1 LCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:41 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration



TIC: 0329F018.D

(2) Naphthalene (T)

4.73min 542.89ng/ml m

response 134489

Ion	Exp%	Act%
128.00	100	100
127.00	14.10	13.53
129.00	10.40	10.90
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

03/30/18

APR 02 2018

0329F018.D 101317PAH.M Fri Mar 30 09:41:26 2018

Exception Report

Data File: J:\MS14\DATA\032918\0329F019.D
Lab ID: KWG1801565-2
RunType: DLCS
Matrix: WATER

Date Acquired: 03/29/2018 11:59
Date Quantitated: 03/30/2018 09:42
Batch ID: KWG1801713
Analysis Method: 8270D SIM
MethodJoinID: MJ1638

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

K2579
K2582

Primary Review: MAR 30 2018

Secondary Review: APR 02 2018

Printed: 03/30/2018 11:28:42
u:\Stealth\Crystal.rpt\except2.rpt

Page 1 of 1

Quantitation Report

Data File:	J:\MS14\DATA\032918\0329F019.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 11:59	**Quant Date:**	03/30/2018 09:42	**Vial:**	19
Run Type:	DLCS	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1801565-2			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801713	**Prep Lot:**	KWG1801565	**Report Group:**	
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1668292	**Prep Date:**	03/22/2018		

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M	**Calibration ID:**	CAL15579
Title:			
Tune Ref:	J:\MS14\DATA\032918\0329F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\032918\0329F017.D	**Quant based on Method**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.71	0.02	136	43889m	200.00	OK
2	Acenaphthene-d10	6.26	-0.01	164	20767	200.00	OK
3	Phenanthrene-d10	7.50	0.00	188	45542	200.00	OK
4	Chrysene-d12	10.01	0.00	240	53138	200.00	OK
5	Perylene-d12	13.04	0.00	264	59229	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.71	0.00	0.00	176	127016	894.08	89	42-131	OK	
3	Fluoranthene-d10	8.49	0.00	0.00	212	281699	984.42	98	42-133	OK	
4	Terphenyl-d14	8.83	0.00	0.00	244	214851	958.94	96	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.73	0.02	0.00	128	134264m	537.05	2.39		
1	2-Methylnaphthalene	5.37	0.01	0.00	142	89962	516.88	2.30		
1	1-Methylnaphthalene	5.45		0.00	142	82098	533.65	2.37		
1	Biphenyl	5.78		-0.01	154	110550	501.82	2.23		
1	2,6-Dimethylnaphthalene	5.92	0.01	0.00	156	79398	507.16	2.25		
2	Acenaphthylene	6.15	0.01	0.00	152	145555	572.79	2.55		
2	Acenaphthene	6.29		0.00	154	82180	575.11	2.56		
2	Dibenzofuran	6.44		0.00	168	136137	606.33	2.69		
2	2,3,5-Trimethylnaphthalene	6.62		0.00	170	80724	558.54	2.48		
2	Fluorene	6.73		0.00	166	101371	575.59	2.56		
3	Dibenzothiophene	7.42		0.00	184	163979	567.87	2.52		
3	Phenanthrene	7.52		0.00	178	157841	558.92	2.48		
3	Anthracene	7.57		0.00	178	159412	572.35	2.54		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\032918\0329F019.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 11:59	**Quant Date:**	03/30/2018 09:42	**Vial:**	19
Run Type:	DLCS	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1801565-2			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
3	Carbazole	7.70		0.00	167	78539	311.13	1.38		
3	1-Methylphenanthrene	8.03		0.00	192	124721	580.85	2.58		
3	Fluoranthene	8.50	-0.01	0.00	202	186659	556.73	2.47		
4	Pyrene	8.69		0.00	202	201546	628.39	2.79		
4	Benz(a)anthracene	9.99	-0.01	0.00	228	204664	638.71	2.84		
4	Chrysene	10.05		0.00	228	190434	635.58	2.82		
5	Benzo(b)fluoranthene	12.02		0.00	252	223136	596.75	2.65		
5	Benzo(k)fluoranthene	12.09		0.00	252	213360	580.94	2.58		
5	Benzo(e)pyrene	12.73		0.00	252	207586	582.00	2.59		
5	Benzo(a)pyrene	12.87	-0.01	0.00	252	195758	598.93	2.66		
5	Perylene	13.12		0.00	252	196403	609.98	2.71		
5	Indeno(1,2,3-cd)pyrene	15.33		0.00	276	172003	585.78	2.60		
5	Dibenz(a,h)anthracene	15.38		0.00	278	161618	540.59	2.40		
5	Benzo(g,h,i)perylene	15.71		0.00	276	191963	587.60	2.61		

Prep Amount:	450 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\032918\0329F019.D Vial: 19
Acq On : 29 Mar 2018 11:59 am Operator: LWeiskopf
Sample : KWG1801565-2 DLCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 08:13:06 2018 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

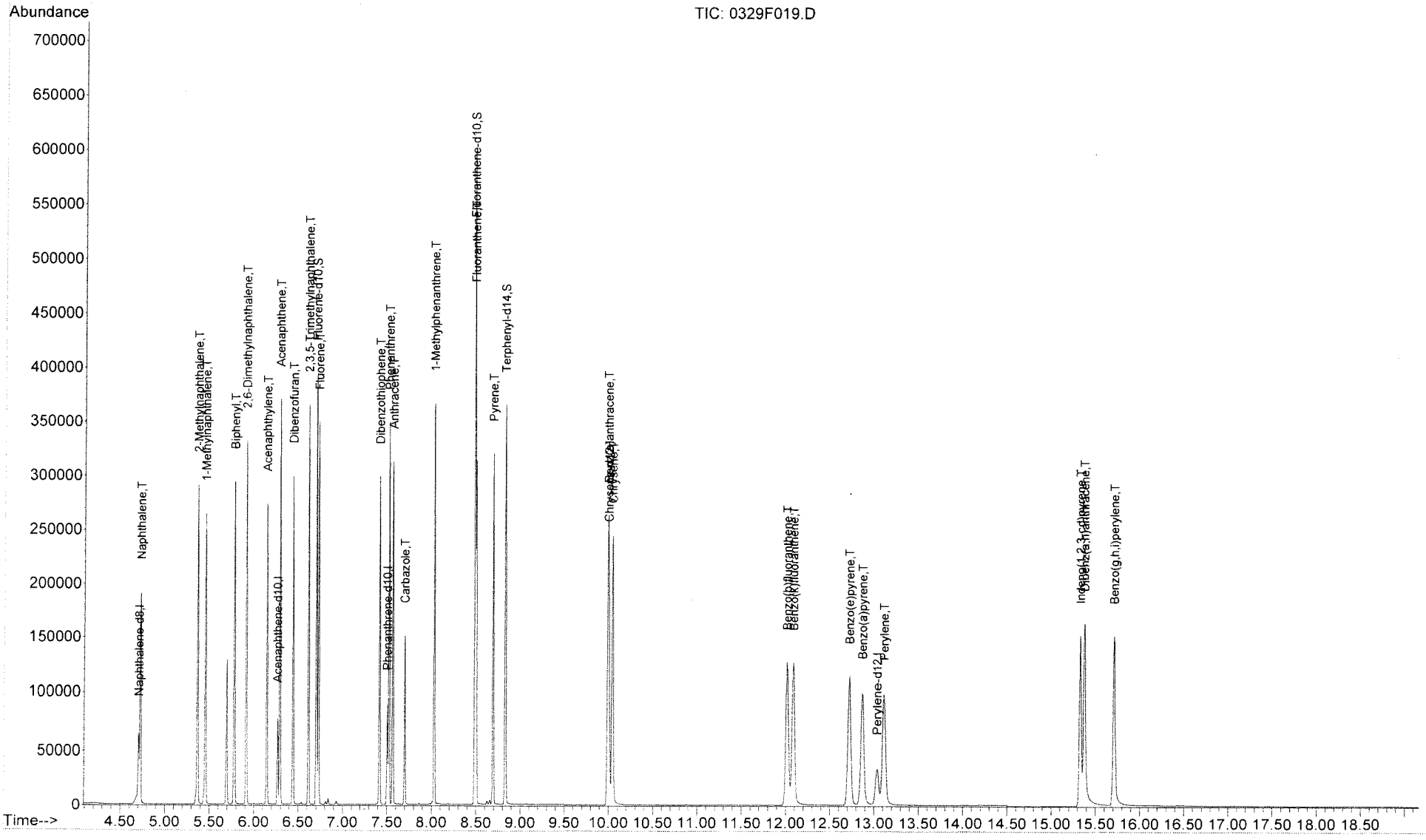
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.71	136	43889m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.26	164	20767	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	45542	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	53138	200.00	ng/ml	0.00
28) Perylene-d12	13.04	264	59229	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0d	0.00	ng/ml	
Spiked Amount 1000.000			Recovery = 0.00%			
13) Fluorene-d10	6.71	176	127016	894.08	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 89.41%			
22) Fluoranthene-d10	8.49	212	281699	984.42	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 98.44%			
25) Terphenyl-d14	8.83	244	214851	958.94	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 95.89%			
Target Compounds						Qvalue
2) Naphthalene	4.73	128	134264m	537.05	ng/ml	
4) 2-Methylnaphthalene	5.37	142	89962	516.88	ng/ml#	82
5) 1-Methylnaphthalene	5.45	142	82098	533.65	ng/ml	91
6) Biphenyl	5.78	154	110550	501.82	ng/ml	98
7) 2,6-Dimethylnaphthalene	5.92	156	79398	507.16	ng/ml	94
9) Acenaphthylene	6.15	152	145555	572.79	ng/ml	99
10) Acenaphthene	6.29	154	82180	575.11	ng/ml	97
11) Dibenzofuran	6.44	168	136137	606.33	ng/ml	97
12) 2,3,5-Trimethylnaphthalene	6.62	170	80724	558.54	ng/ml	93
14) Fluorene	6.73	166	101371	575.59	ng/ml	99
16) Dibenzothiophene	7.42	184	163979	567.87	ng/ml	90
17) Phenanthrene	7.52	178	157841	558.92	ng/ml	100
18) Anthracene	7.57	178	159412	572.35	ng/ml	99
19) Carbazole	7.70	167	78539	311.13	ng/ml	99
20) 1-Methylphenanthrene	8.03	192	124721	580.85	ng/ml	100
21) Fluoranthene	8.50	202	186659	556.73	ng/ml	99
24) Pyrene	8.69	202	201546	628.39	ng/ml	97
26) Benz(a)anthracene	9.99	228	204664	638.71	ng/ml	99
27) Chrysene	10.05	228	190434	635.58	ng/ml	99
29) Benzo(b)fluoranthene	12.02	252	223136	596.75	ng/ml	97
30) Benzo(k)fluoranthene	12.09	252	213360	580.94	ng/ml	97
31) Benzo(e)pyrene	12.73	252	207586	582.00	ng/ml	96
32) Benzo(a)pyrene	12.87	252	195758	598.93	ng/ml	96
33) Perylene	13.12	252	196403	609.98	ng/ml	95
34) Indeno(1,2,3-cd)pyrene	15.33	276	172003	585.78	ng/ml	96
35) Dibenz(a,h)anthracene	15.38	278	161618	540.59	ng/ml	96
36) Benzo(g,h,i)perylene	15.71	276	191963	587.60	ng/ml	94

(#) = qualifier out of range (m) = manual integration
0329F019.D 101317PAH.M Fri Mar 30 09:42:54 2018 Page 1

Quantitation Report (QT Reviewed)

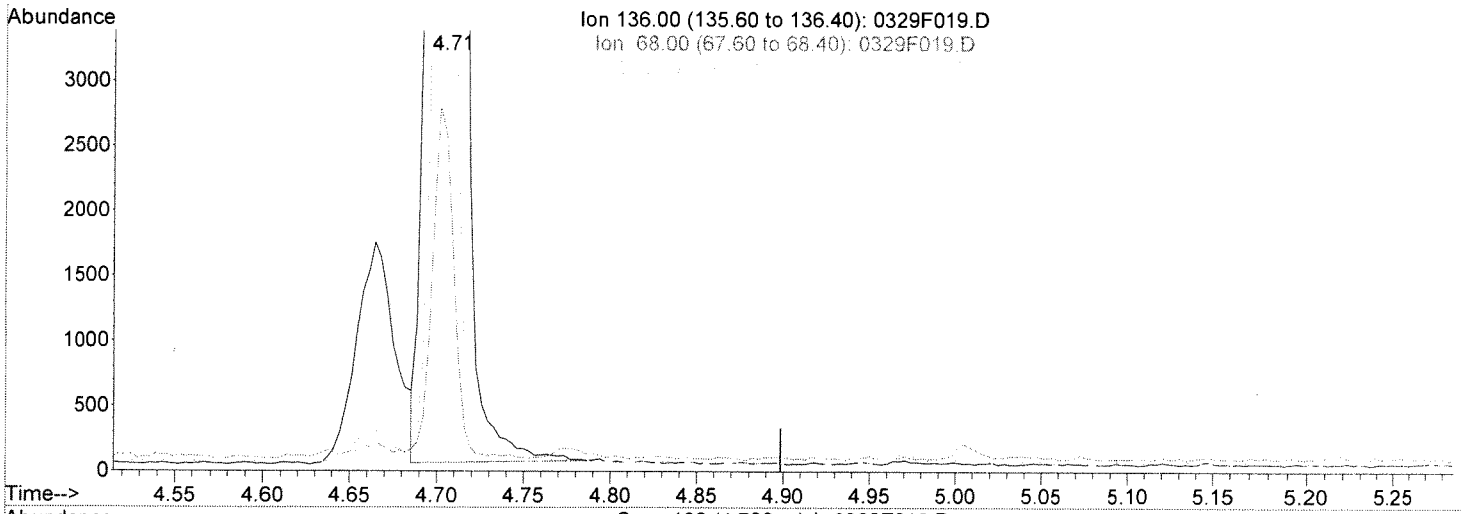
Data File : J:\MS14\DATA\032918\0329F019.D Vial: 19
Acq On : 29 Mar 2018 11:59 am Operator: LWeiskopf
Sample : KWG1801565-2 DLCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:42 2018 Quant Results File: 101317PAH.RES

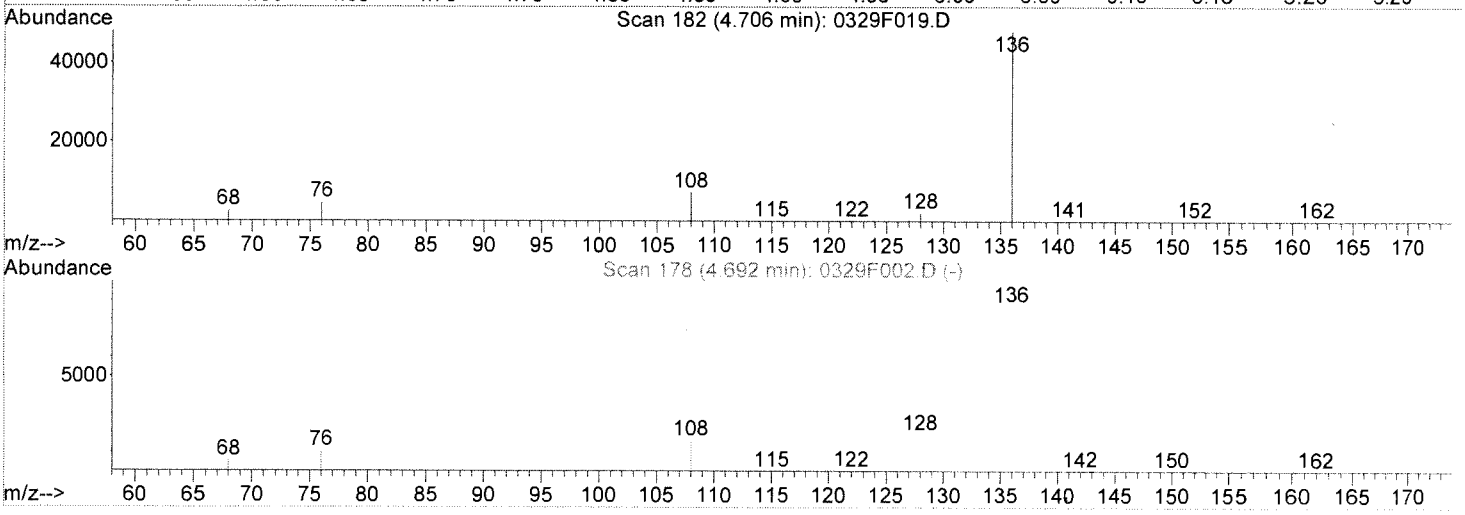
Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration



Data File : J:\MS14\DATA\032918\0329F019.D Vial: 19
Acq On : 29 Mar 2018 11:59 am Operator: LWeiskopf
Sample : KWG1801565-2 DLCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 8:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration





TIC: 0329F019.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml

response 41102

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.13
108.00	11.60	15.08
0.00	0.00	0.00

Manual Integration:

Before

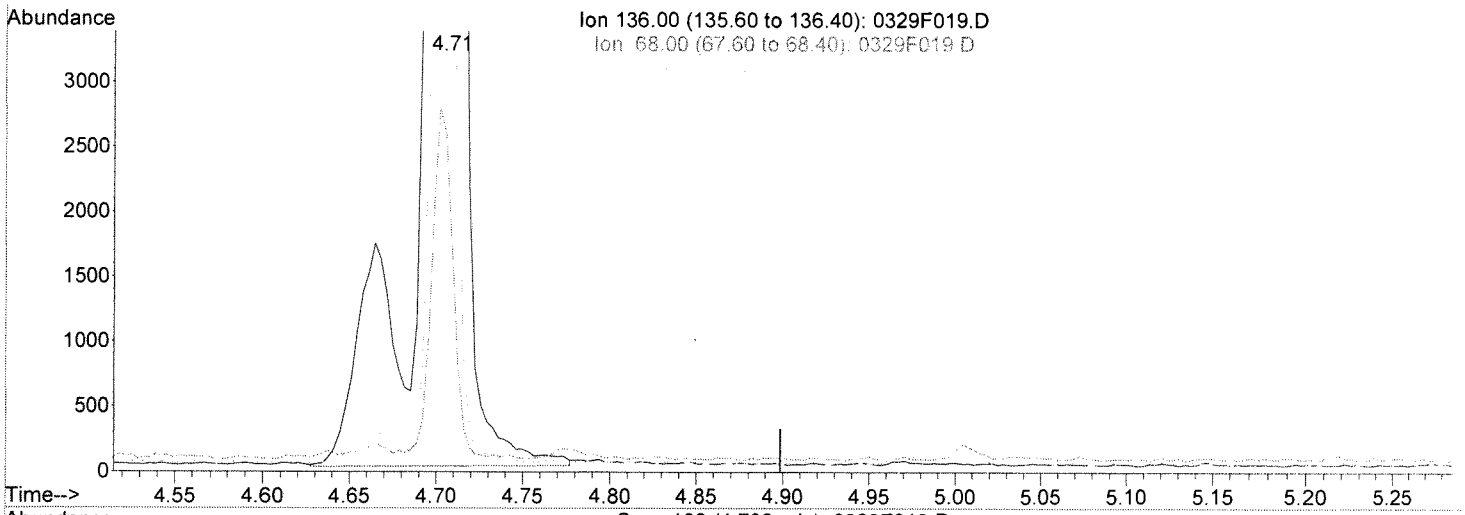
03/30/18

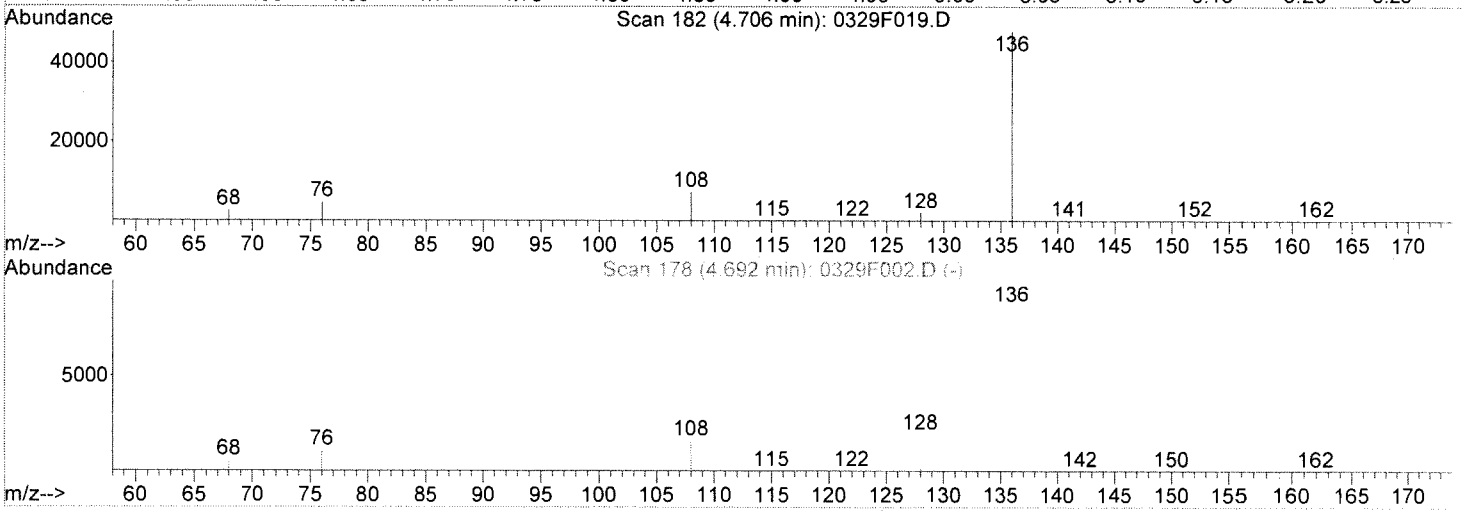
APR 02 2018

0329F019.D 101317PAH.M Fri Mar 30 09:41:52 2018

Data File : J:\MS14\DATA\032918\0329F019.D Vial: 19
Acq On : 29 Mar 2018 11:59 am Operator: LWeiskopf
Sample : KWG1801565-2 DLCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:41 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration





TIC: 0329F019.D

(1) Naphthalene-d8 (I)

4.71min 200.00ng/ml m

response 43889

Ion	Exp%	Act%
136.00	100	100
68.00	6.20	5.39
108.00	11.60	15.22
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

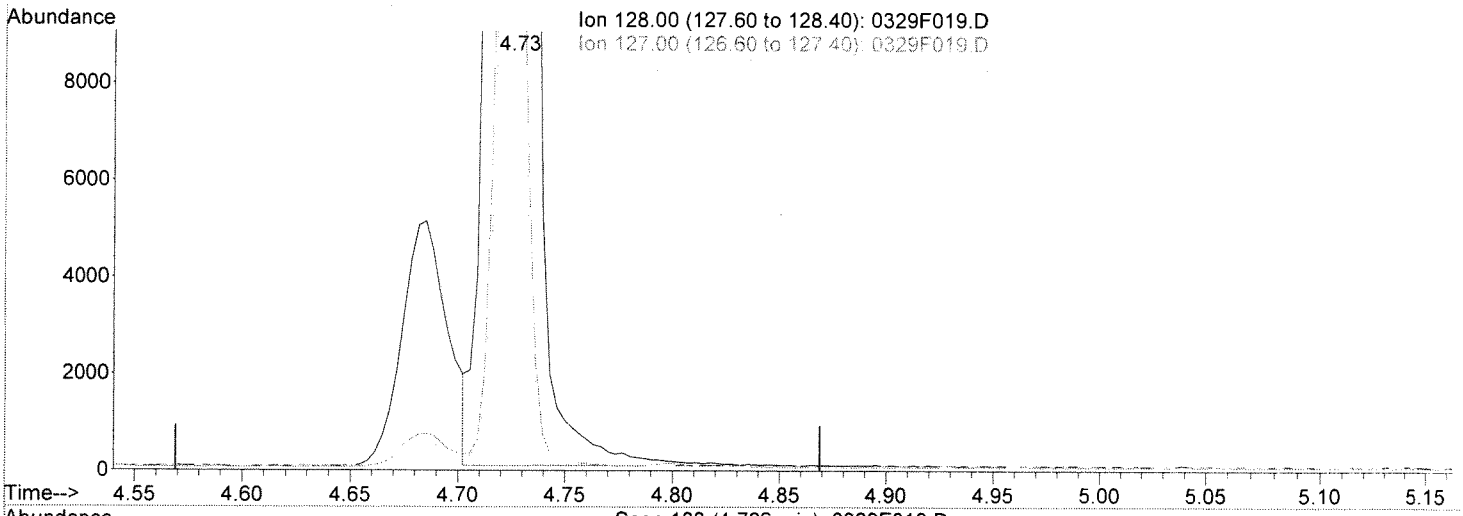
03/30/18

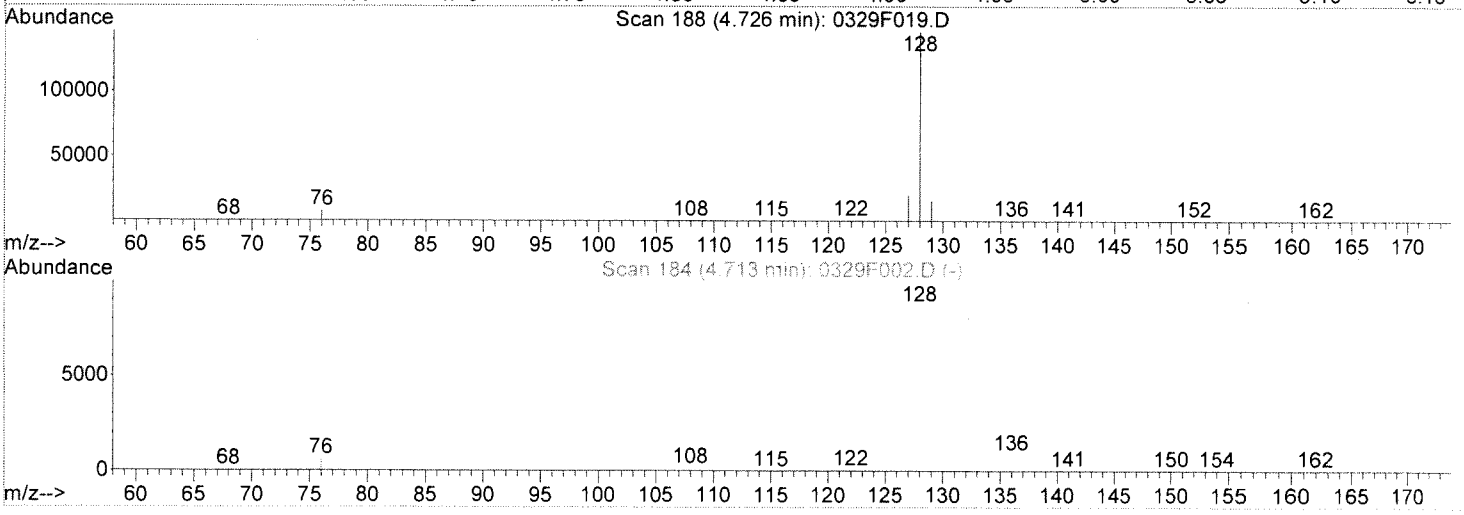
APR 02 2018

0329F019.D 101317PAH.M Fri Mar 30 09:41:56 2018

Data File : J:\MS14\DATA\032918\0329F019.D Vial: 19
Acq On : 29 Mar 2018 11:59 am Operator: LWeiskopf
Sample : KWG1801565-2 DLCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:41 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration





TIC: 0329F019.D

(2) Naphthalene (T)

4.73min 505.65ng/ml

response 126414

Ion	Exp%	Act%
128.00	100	100
127.00	14.10	13.60
129.00	10.40	10.77
0.00	0.00	0.00

Manual Integration:

Before

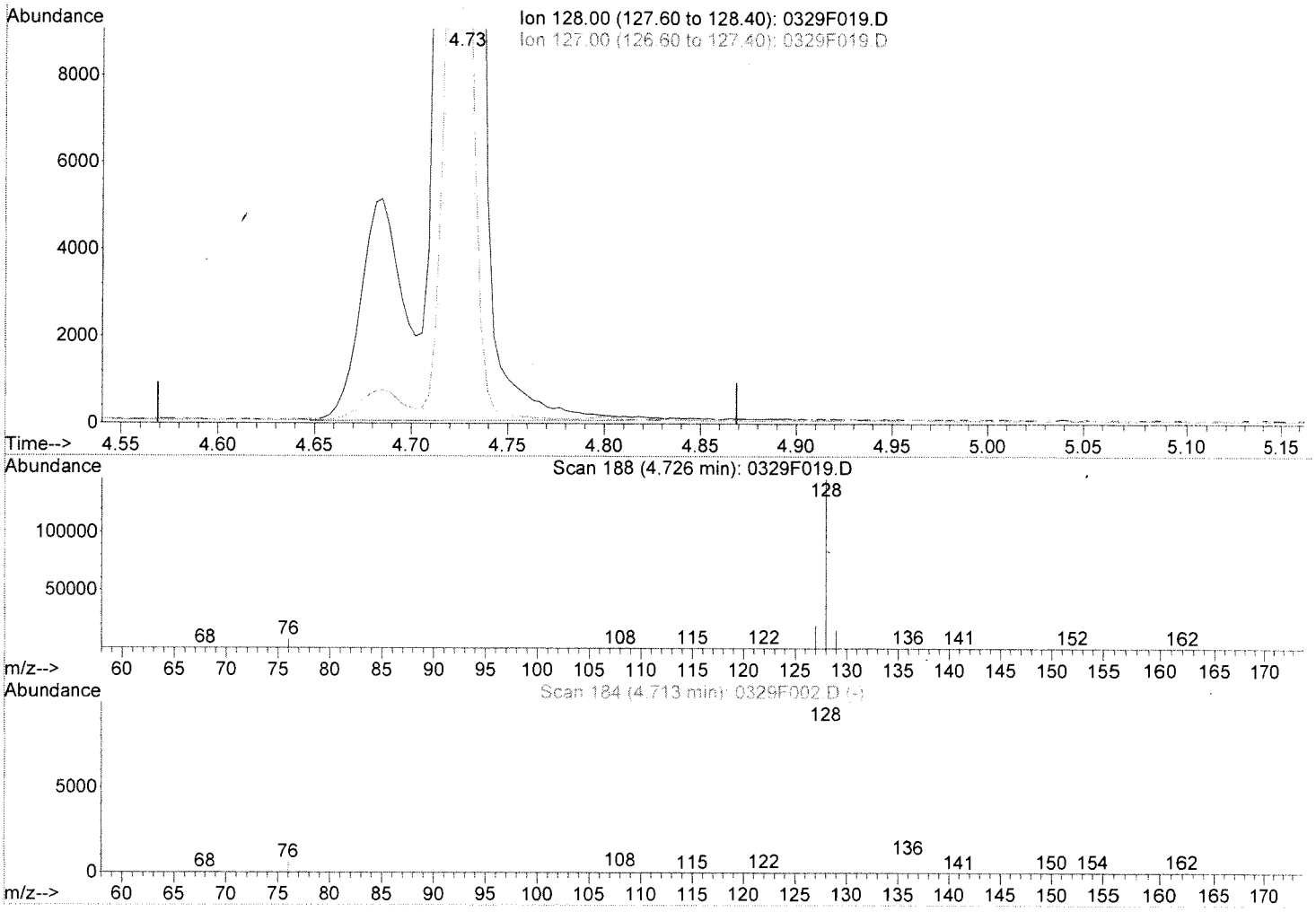
03/30/18

APR 02 2018

0329F019.D 101317PAH.M Fri Mar 30 09:42:02 2018

Data File : J:\MS14\DATA\032918\0329F019.D Vial: 19
Acq On : 29 Mar 2018 11:59 am Operator: LWeiskopf
Sample : KWG1801565-2 DLCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 9:42 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Multiple Level Calibration



TIC: 0329F019.D

(2) Naphthalene (T)

4.73min 537.05ng/ml m

response 134264

Ion	Exp%	Act%
128.00	100	100
127.00	14.10	13.67
129.00	10.40	10.82
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

03/30/18

APR 02 2018

0329F019.D 101317PAH.M Fri Mar 30 09:42:07 2018

Exception Report

Data File: J:\MS14\DATA\032918\0329F001.D
Lab ID: KWG1801713-1
RunType: DFTPP
Matrix: WATER

Date Acquired: 03/29/2018 04:49
Date Quantitated:
Batch ID: KWG1801713
Analysis Method: DFTPP
ListJoinID: LJ1965

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Ion Ratio	NA	NA	NA	x	

Primary Review: MAR 30 2018

Secondary Review: APR 02 2018

Printed: 03/30/2018 11:27:48
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\032918\0329F001.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 04:49	**Quant Date:**		**Vial:**	1
Run Type:	DFTPP	**ListJoinID:**	LJ1965	**Dilution:**	1.0
Lab ID:	KWG1801713-1			**Soln Conc. Units:**	

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**		**Receive Date:**	03/30/2018

Analysis Lot:	KWG1801713	**Prep Lot:**		**Report Group:**	
Analysis Method:	DFTPP	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS14\METHODS\SIM\A_DFTPP.M	**Calibration ID:**	CAL15579
Title:		**Report List ID:**	LJ1965
Tune Ref:		**Method ID:**	MJ190
MB Ref:		**Quant based on Report List**	

Tune Results

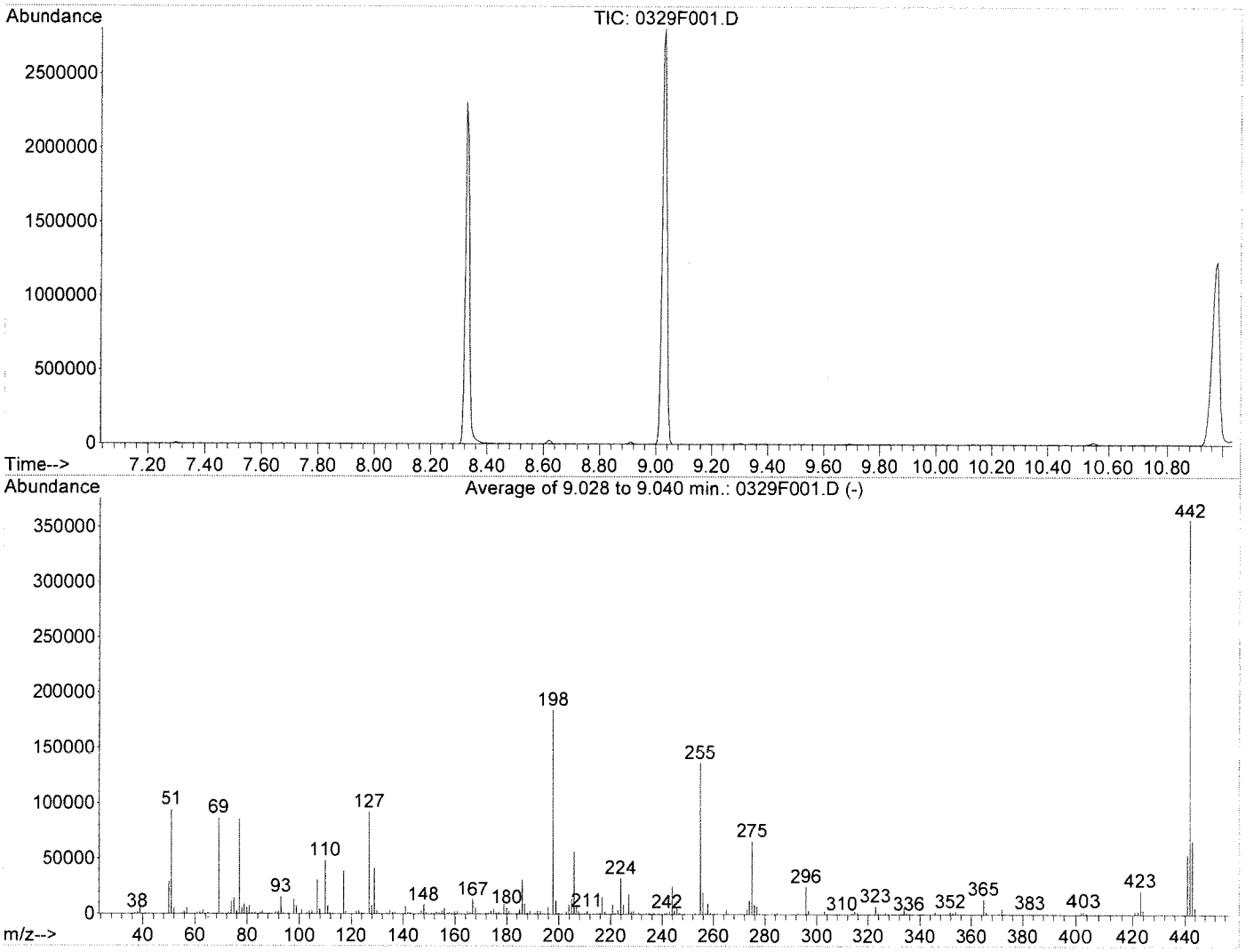
Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	51.3	94501	Pass
68	69	0	2	0.0	0	Pass
69	198	0	100	47.2	86984	Pass
70	69	0	2	0.7	619	Pass
127	198	10	80	50.0	92216	Pass
197	198	0	2	0.0	0	Pass
198	442	30	100	51.4	184296	Pass
199	198	5	9	6.4	11775	Pass
275	198	10	60	35.9	66197	Pass
365	442	1	50	3.9	13824	Pass
441	443	0.01	100	81.2	54056	Pass
442	442	100	100	100.0	358357	Pass
443	442	15	24	18.6	66533	Pass

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\032918\0329F001.D Vial: 1
Acq On : 29 Mar 2018 4:49 am Operator: LWeiskopf
Sample : DFTPP @ 10ug/mL | SVM58-3B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Method : J:\MS14\METHODS\SIM\A_DFTPP.M (RTE Integrator)
Title : dftpp tune mix



AutoFind: Scans 500, 501, 502; Background Corrected with Scan 493

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	51.3	94501	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.2	86984	PASS
70	69	0.00	2	0.7	619	PASS
127	198	10	80	50.0	92216	PASS
197	198	0.00	2	0.0	0	PASS
198	442	30	100	51.4	184296	PASS
199	198	5	9	6.4	11775	PASS
275	198	10	60	35.9	66197	PASS
365	442	1	50	3.9	13824	PASS
441	443	0.01	100	81.2	54056	PASS
442	442	30	100	100.0	358357	PASS
443	442	15	24	18.6	66533	PASS

J:\MS14\DATA\032918\0329F001.D A_DFTPP.M Fri Mar 30 04:59:40 2018

DFTPP @ 10ug/mL | SVM58-3B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	713	52.00	5214	64.95	1318	78.00	5716
37.95	1590	52.85	148	65.90	96	78.90	8680
39.00	7074	54.95	576	66.90	141	79.90	5838
39.90	466	55.90	2428	68.90	86984	80.90	7478
40.90	442	56.90	5457	69.95	619	81.90	1386
43.80	103	58.00	200	73.00	1221	82.90	1573
44.80	98	59.80	74	73.90	11340	84.10	52
47.60	59	60.95	1272	74.90	14377	84.90	1412
48.90	200	61.90	1691	76.00	3418	85.85	2515
50.00	29269	62.95	3485	76.20	2246	86.90	1154
51.00	94501	63.95	511	77.00	85997	87.90	351

Average of 9.028 to 9.040 min.: 0329F001.D
DFTPP @ 10ug/mL | SVM58-3B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
88.95	124	100.10	196	110.90	7365	120.70	71
90.90	2034	100.90	3643	111.85	1245	120.90	114
91.95	2364	101.95	213	112.90	460	121.85	2803
92.90	15558	102.90	1392	114.05	132	122.90	3491
93.85	1005	103.90	2472	114.80	85	123.85	1644
94.70	120	104.90	2749	115.80	348	124.85	1394
95.05	120	105.70	78	116.90	39154	126.90	92216
96.00	442	106.00	579	117.85	2579	127.90	7611
97.90	12898	106.90	30696	118.70	56	128.90	41330
98.90	7499	107.90	4311	118.95	205	129.85	3452
99.85	412	109.90	48544	119.90	405	130.90	743

Average of 9.028 to 9.040 min.: 0329F001.D
DFTPP @ 10ug/mL | SVM58-3B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
131.85	275	142.80	1449	151.50	77	159.85	2003
133.10	220	143.80	215	151.75	426	160.85	2318
133.85	1308	144.00	222	152.85	2030	161.85	761
134.90	3442	144.80	228	153.85	1423	162.95	203
135.90	1514	145.90	1277	154.90	3088	164.00	321
136.90	1808	146.90	3147	155.90	5078	164.80	2625
137.70	296	147.85	8177	156.80	463	165.85	1924
139.75	399	148.85	1483	157.00	417	166.90	12844
140.10	311	149.80	182	157.30	63	167.90	5535
140.90	6926	149.95	287	157.85	1482	168.85	1022
141.85	1780	151.00	790	158.85	921	169.85	422

Average of 9.028 to 9.040 min.: 0329F001.D
DFTPP @ 10ug/mL | SVM58-3B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
170.80	396	181.95	496	191.80	2619	203.90	8531
171.80	934	182.70	195	192.90	3118	204.90	13596
172.85	1149	183.00	89	193.85	632	205.90	56232
173.90	2589	183.85	644	194.90	276	206.90	7089
174.90	4262	184.90	4451	195.90	6139	207.80	2222
175.85	1090	185.90	30984	197.80	184296	208.80	737
176.80	2055	186.90	9446	198.85	11775	209.70	167
177.85	898	187.85	966	199.85	978	210.05	807
178.85	8781	188.85	2451	201.25	925	210.90	2513
179.90	5486	189.80	281	201.60	317	211.70	218
180.90	2643	190.90	974	202.80	2195	212.90	197

Average of 9.028 to 9.040 min.: 0329F001.D
DFTPP @ 10ug/mL | SVM58-3B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
213.70	50	224.90	8224	234.85	1219	243.90	24926
214.80	912	225.85	653	235.75	744	244.85	3399
215.90	1661	226.90	17662	236.80	1216	245.85	6436
216.80	15462	227.85	2236	238.00	56	246.85	1238
217.85	2199	228.85	3174	238.80	692	247.85	443
218.85	216	229.70	160	239.60	123	248.85	836

220.85	8509	230.90	1003	240.10	79	250.70	116
221.80	1131	231.80	146	240.85	977	250.90	128
222.90	3610	232.80	266	241.90	1673	251.70	140
223.90	32328	233.85	1143	242.85	2224	252.00	81

Average of 9.028 to 9.040 min.: 0329F001.D
DFTPP @ 10ug/mL | SVM58-3B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
252.80	941	264.85	4145	278.80	281	293.85	474
254.90	136816	265.85	590	281.80	260	294.90	183
255.90	19530	269.80	179	282.80	768	295.85	24879
256.90	1591	270.75	411	283.85	686	296.85	3259
257.80	9791	271.85	546	284.85	1235	297.80	120
258.85	1534	272.90	4576	285.75	284	300.90	282
259.70	142	273.85	12288	288.85	258	301.80	459
260.00	205	274.90	66197	289.90	357	302.90	3036
260.70	127	275.90	8516	290.80	172	303.85	680
260.90	249	276.80	7504	291.80	289	307.80	307
263.95	262	277.80	1133	292.90	1581	308.75	186

Average of 9.028 to 9.040 min.: 0329F001.D
DFTPP @ 10ug/mL | SVM58-3B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
309.80	264	323.85	1194	338.85	167	353.85	2742
312.85	179	324.85	150	339.80	111	354.90	465
313.85	1185	325.80	161	340.85	951	358.80	213
314.80	2871	326.80	1612	341.60	62	363.90	262
315.80	1664	327.80	841	341.90	58	364.80	13824
316.75	181	328.70	119	345.80	2050	365.80	1879
319.90	53	331.85	617	346.70	228	369.70	72
320.85	680	332.80	1006	346.90	116	369.95	193
321.90	390	333.90	5881	350.75	259	370.85	798
322.10	121	334.90	1545	351.80	2461	371.85	4869
322.90	7283	335.75	213	352.85	1921	372.85	914

Average of 9.028 to 9.040 min.: 0329F001.D
DFTPP @ 10ug/mL | SVM58-3B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
373.90	220	402.80	2910	439.10	92		
382.80	1108	403.80	1169	440.90	54056		
383.70	326	404.80	60	441.90	358357		
383.90	54	414.70	56	442.90	66533		
384.80	60	420.85	2461	443.90	6089		
389.80	611	421.90	2813	444.80	338		
390.80	364	422.90	21256				
391.00	84	423.85	3933				
391.75	408	424.65	245				
400.75	374	425.00	91				
401.85	2006	438.70	75				

Exception Report

Data File: J:\MS14\DATA\033018\0330F001.D
Lab ID: KWG1801739-1
RunType: DFTPP
Matrix: WATER

Date Acquired: 03/30/2018 05:57
Date Quantitated:
Batch ID: KWG1801739
Analysis Method: DFTPP
ListJoinID: LJ1965

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Ion Ratio	NA	NA	NA	x	

Primary Review: APR 0 2 2018

Secondary Review: APR 0 2 2018

Printed: 04/02/2018 10:36:57
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\033018\0330F001.D			**Instrument:**	MS14
Acqu Date:	03/30/2018 05:57	**Quant Date:**		**Vial:**	1
Run Type:	DFTPP	**ListJoinID:**	LJ1965	**Dilution:**	1.0
Lab ID:	KWG1801739-1			**Soln Conc. Units:**	

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**		**Receive Date:**	04/02/2018

Analysis Lot:	KWG1801739	**Prep Lot:**		**Report Group:**	
Analysis Method:	DFTPP	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS14\METHODS\SIM\A_DFTPP.M	**Calibration ID:**	CAL15579
Title:		**Report List ID:**	LJ1965
Tune Ref:		**Method ID:**	MJ190
MB Ref:		**Quant based on Report List**	

Tune Results

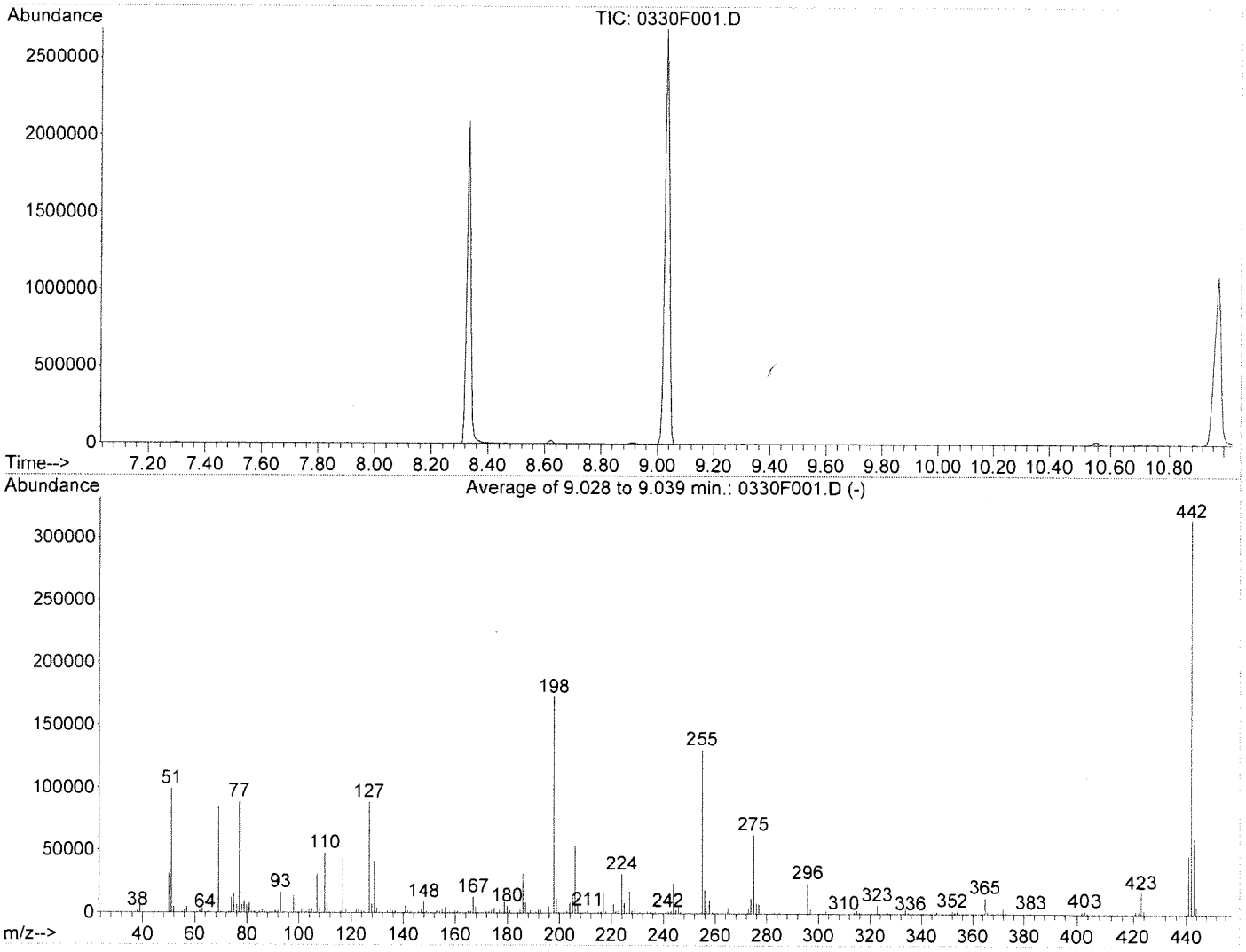
Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	57.2	99130	Pass
68	69	0	2	0.0	0	Pass
69	198	0	100	49.3	85344	Pass
70	69	0	2	0.9	795	Pass
127	198	10	80	51.2	88592	Pass
197	198	0	2	0.0	0	Pass
198	442	30	100	54.7	173162	Pass
199	198	5	9	6.9	11883	Pass
275	198	10	60	36.4	63096	Pass
365	442	1	50	4.1	13086	Pass
441	443	0.01	100	77.5	46957	Pass
442	442	100	100	100.0	316394	Pass
443	442	15	24	19.2	60594	Pass

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\033018\0330F001.D Vial: 1
Acq On : 30 Mar 2018 5:57 am Operator: LWeiskopf
Sample : DFTPP @ 10ug/mL | SVM58-3B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Method : J:\MS14\METHODS\SIM\A_DFTPP.M (RTE Integrator)
Title : dftpp tune mix



AutoFind: Scans 500, 501, 502; Background Corrected with Scan 493

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	57.2	99130	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.3	85344	PASS
70	69	0.00	2	0.9	795	PASS
127	198	10	80	51.2	88592	PASS
197	198	0.00	2	0.0	0	PASS
198	442	30	100	54.7	173162	PASS
199	198	5	9	6.9	11883	PASS
275	198	10	60	36.4	63096	PASS
365	442	1	50	4.1	13086	PASS
441	443	0.01	100	77.5	46957	PASS
442	442	30	100	100.0	316394	PASS
443	442	15	24	19.2	60594	PASS

J:\MS14\DATA\033018\0330F001.D A_DFTPP.M Mon Apr 02 08:51:07 2018

DFTPP @ 10ug/mL | SVM58-3B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	729	51.95	5083	62.90	3335	77.00	89122
38.00	1914	52.85	197	63.95	459	78.00	6600
39.00	6946	54.70	106	64.95	1484	78.90	9308
39.95	329	55.05	596	65.90	83	79.90	6118
40.90	57	55.90	2703	67.00	347	80.90	8144
42.80	54	56.90	5097	68.90	85344	81.90	1622
44.95	199	57.80	337	69.90	795	82.90	1391
47.85	182	59.80	50	72.95	1346	83.80	98
49.10	777	60.00	56	73.95	11833	84.90	1125
50.00	31394	60.95	1178	74.90	14657	85.90	2736
51.00	99130	61.95	1603	76.00	6405	86.90	873

Average of 9.028 to 9.039 min.: 0330F001.D
DFTPP @ 10ug/mL | SVM58-3B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.85	318	99.90	778	110.90	7670	121.85	2465
88.90	74	100.90	3290	111.80	900	122.90	3557
90.85	2133	102.15	182	112.85	486	123.85	1718
91.95	2057	102.85	1422	114.75	221	124.85	1425
92.90	16430	103.85	2957	115.95	1604	126.90	88592
93.90	902	104.90	3135	116.90	43616	127.90	7076
94.85	212	105.80	258	117.90	3068	128.90	41077
95.80	153	106.90	30776	118.80	214	129.90	3788
95.95	318	107.90	4212	119.40	57	130.90	735
97.90	13905	108.95	974	119.85	288	131.95	277
98.90	7928	109.90	47944	120.90	214	132.60	72

Average of 9.028 to 9.039 min.: 0330F001.D
DFTPP @ 10ug/mL | SVM58-3B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
133.80	1861	142.90	1366	152.10	279	162.90	85
134.90	3801	143.90	362	152.85	2141	163.85	375
135.85	1382	144.80	271	153.90	1453	164.90	2293
136.85	1772	145.80	1438	154.85	3458	165.70	336
137.50	90	146.95	3373	155.90	4587	166.00	1507
137.85	266	147.90	8974	156.85	742	166.90	13160
138.70	141	148.85	1637	157.80	1175	167.85	5630
138.85	171	149.80	268	158.85	915	168.85	964
139.95	716	150.85	629	159.85	2036	169.90	516
140.90	6153	151.30	152	160.85	2136	170.85	618
141.90	2023	151.70	302	161.85	633	171.85	1061

Average of 9.028 to 9.039 min.: 0330F001.D
DFTPP @ 10ug/mL | SVM58-3B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
172.90	1372	182.80	202	193.85	755	204.90	14036
173.85	2617	183.90	869	194.75	449	205.90	53957
174.90	4538	184.90	3644	195.85	5503	206.90	6984
175.85	879	185.90	31357	197.80	173162	207.85	2490
176.80	2320	186.90	8423	198.80	11883	208.85	701
177.80	1014	187.85	990	199.80	1073	209.85	1021
178.85	8771	188.85	2548	200.70	171	210.85	2593
179.90	5699	189.85	441	201.30	746	211.80	105
180.90	2407	190.85	1053	201.90	387	212.80	54
181.75	242	191.80	2700	202.85	1911	214.80	939
182.10	83	192.90	2658	203.90	8309	215.90	1514

Average of 9.028 to 9.039 min.: 0330F001.D
DFTPP @ 10ug/mL | SVM58-3B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
216.80	15691	227.80	2384	238.80	676	249.80	223
217.80	1858	228.85	3057	239.85	416	250.80	396
218.75	252	229.90	195	240.80	905	251.85	262
219.85	259	230.85	1144	241.85	1884	252.85	860
220.85	7202	231.90	227	242.90	2153	254.90	131210
221.75	2105	232.90	301	243.90	23850	255.90	19048

223.90	31389	234.85	1252	245.85	6561	257.80	10408
224.90	8455	235.85	941	246.75	1461	258.85	1455
225.80	856	236.85	1225	248.00	308	259.80	145
226.85	17587	237.80	131	248.85	997	260.10	65

Average of 9.028 to 9.039 min.: 0330F001.D
DFTPP @ 10ug/mL | SVM58-3B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
260.80	81	276.85	7565	290.60	65	302.85	2587
263.65	237	277.80	1077	290.80	90	303.95	778
264.80	4636	278.80	96	291.90	312	307.75	435
265.75	798	281.90	69	292.85	1286	308.80	188
269.75	232	282.75	597	293.80	308	309.80	280
270.80	527	283.60	86	294.95	531	312.85	199
271.80	400	283.95	478	295.90	24328	313.85	1174
272.85	4522	284.85	1152	296.80	3718	314.80	2865
273.85	12172	285.85	229	297.70	95	315.85	1388
274.90	63096	288.70	259	300.85	249	316.80	249
275.85	8139	289.80	224	301.80	412	320.70	177

Average of 9.028 to 9.039 min.: 0330F001.D
DFTPP @ 10ug/mL | SVM58-3B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
320.90	588	333.80	4655	353.90	2589	373.80	65
321.70	203	334.85	1362	354.85	512	376.90	84
322.05	285	335.80	53	358.70	55	382.75	1204
322.85	6931	339.90	60	363.80	123	383.75	251
323.70	255	340.80	801	364.80	13086	389.85	678
323.90	965	341.80	260	365.85	1727	390.85	507
326.85	1574	345.85	1718	366.80	69	391.95	216
327.80	921	346.75	320	369.80	232	394.90	61
328.80	80	350.85	146	370.85	668	400.65	211
331.85	566	351.90	2368	371.80	4353	401.00	59
332.75	763	352.85	1700	372.85	1140	401.80	1883

Average of 9.028 to 9.039 min.: 0330F001.D
DFTPP @ 10ug/mL | SVM58-3B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
402.80	2655	440.90	46957				
403.85	1064	441.90	316394				
404.90	65	442.90	60594				
414.70	66	443.90	5618				
420.80	2490	444.85	344				
421.85	2145						
422.90	17378						
423.85	3339						
424.80	229						
425.00	68						
439.30	169						

Exception Report

Data File: J:\MS14\DATA\032918\0329F002.D
Lab ID: KWG1801713-2
RunType: CCV
Matrix: WATER

Date Acquired: 03/29/2018 05:20
Date Quantitated: 03/29/2018 05:40
Batch ID: KWG1801713
Analysis Method: 8270D SIM
MethodJoinID: MJ1638

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: MAR 30 2018

Secondary Review: APR 02 2018

Printed: 03/30/2018 11:27:51
u:\Stealth\Crystal.rpt\except2.rpt

Page 1 of 1

Quantitation Report

Data File:	J:\MS14\DATA\032918\0329F002.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 05:20	**Quant Date:**	03/29/2018 05:40	**Vial:**	2
Run Type:	CCV	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1801713-2			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**		**Receive Date:**	03/30/2018

Analysis Lot:	KWG1801713	**Prep Lot:**		**Report Group:**	
Analysis Method:	8270D SIM	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M			**Calibration ID:**	CAL15579
Title:					
Tune Ref:	J:\MS14\DATA\032918\0329F001.D			**Method ID:**	MJ1638
MB Ref:				**Quant based on Method**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.69	-0.09	136	34773	200.00	OK
2	Acenaphthene-d10	6.27	-0.06	164	18536	200.00	OK
3	Phenanthrene-d10	7.50	-0.06	188	41329	200.00	OK
4	Chrysene-d12	10.01	-0.07	240	49310	200.00	OK
5	Perylene-d12	13.04	-0.10	264	53785	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
2	Fluorene-d10	6.71			176	50467	398.00		42-131	NA
3	Fluoranthene-d10	8.49			212	106086	408.52		42-133	NA
4	Terphenyl-d14	8.83			244	83805	403.08		32-129	NA

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.71			128	75644	381.89			
1	2-Methylnaphthalene	5.36			142	54510	395.29			
1	1-Methylnaphthalene	5.45			142	51291	420.80			
1	Biphenyl	5.78			154	69383	397.52			
1	2,6-Dimethylnaphthalene	5.91			156	49466	398.80			
2	Acenaphthylene	6.14			152	88600	390.62			
2	Acenaphthene	6.29			154	51261	401.91			
2	Dibenzofuran	6.44			168	88058	439.40			
2	2,3,5-Trimethylnaphthalene	6.62			170	50540	391.78			
2	Fluorene	6.73			166	65023	413.64			
3	Dibenzothiophene	7.42			184	102302	390.39			
3	Phenanthrene	7.52			178	102138	398.54			
3	Anthracene	7.57			178	94884	375.39			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\032918\0329F002.D			**Instrument:**	MS14
Acqu Date:	03/29/2018 05:20	**Quant Date:**	03/29/2018 05:40	**Vial:**	2
Run Type:	CCV	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1801713-2			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
3	Carbazole	7.70			167	92222	402.57			
3	1-Methylphenanthrene	8.03			192	80002	410.57			
3	Fluoranthene	8.51			202	124049	407.70			
4	Pyrene	8.69			202	133284	447.82			
4	Benz(a)anthracene	10.00			228	131080	440.82			
4	Chrysene	10.05			228	124379	447.35			
5	Benzo(b)fluoranthene	12.02			252	144685	426.11			
5	Benzo(k)fluoranthene	12.09			252	142798	428.17			
5	Benzo(e)pyrene	12.73			252	135556	418.52			
5	Benzo(a)pyrene	12.88			252	125534	422.95			
5	Perylene	13.12			252	126123	431.36			
5	Indeno(1,2,3-cd)pyrene	15.33			276	119268	447.30			
5	Dibenz(a,h)anthracene	15.38			278	113180	416.89			
5	Benzo(g,h,i)perylene	15.71			276	133659	450.54			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\032918\0329F002.D Vial: 2
Acq On : 29 Mar 2018 5:20 am Operator: LWeiskopf
Sample : SIM-PAH CCV @ 0.4ug/mL | SVM58-39D Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 29 05:40:33 2018 Quant Results File: 101317PAH.RES

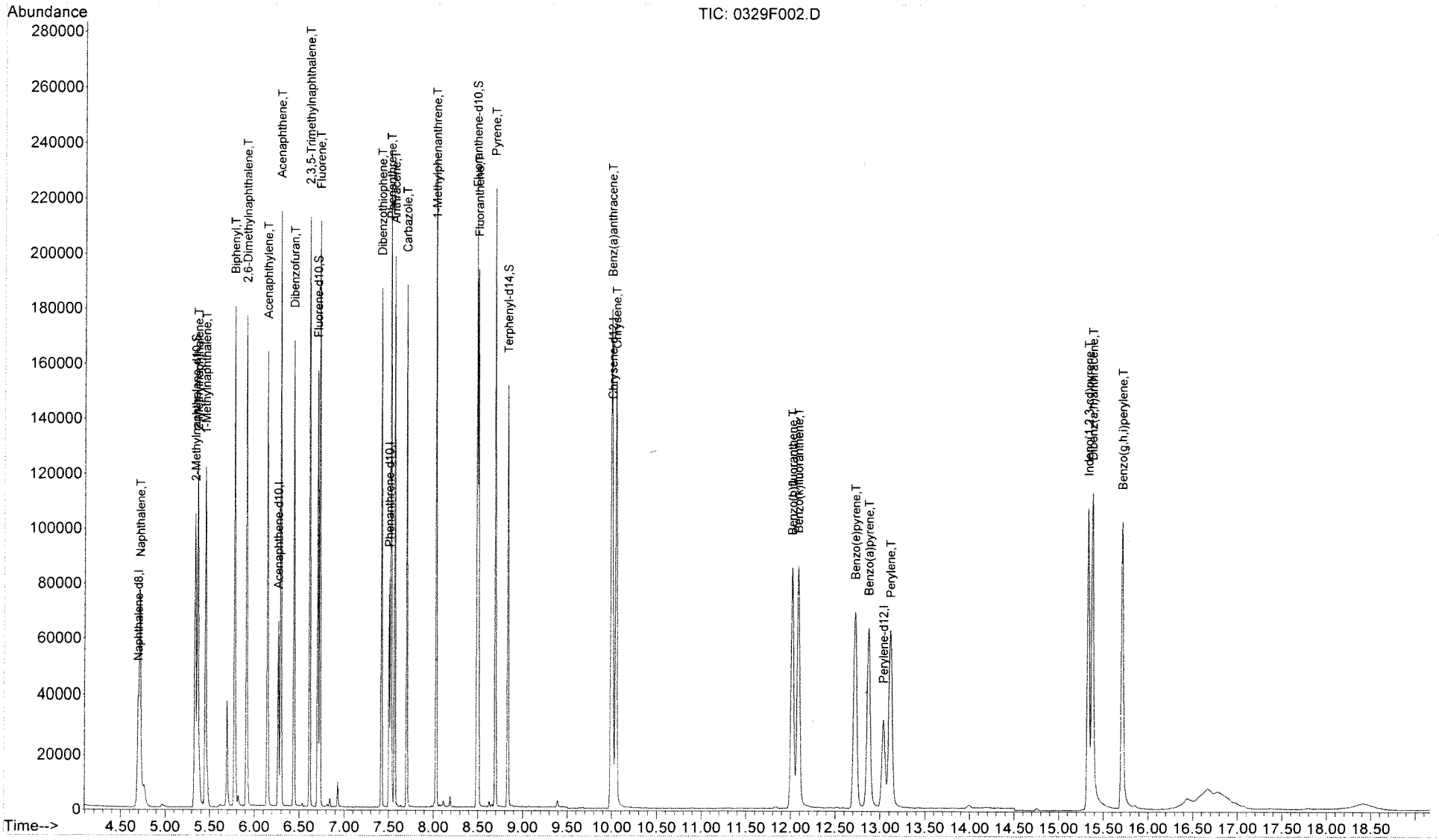
Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Tue Mar 27 10:05:45 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.69	136	34773	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.27	164	18536	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	41329	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	49310	200.00	ng/ml	0.00
28) Perylene-d12	13.04	264	53785	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.33	152	44896	481.57	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 48.16%			
13) Fluorene-d10	6.71	176	50467	398.00	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 39.80%			
22) Fluoranthene-d10	8.49	212	106086	408.52	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 40.85%			
25) Terphenyl-d14	8.83	244	83805	403.08	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 40.31%			
Target Compounds						Qvalue
2) Naphthalene	4.71	128	75644	381.89	ng/ml	99
4) 2-Methylnaphthalene	5.36	142	54510	395.29	ng/ml#	80
5) 1-Methylnaphthalene	5.45	142	51291	420.80	ng/ml	92
6) Biphenyl	5.78	154	69383	397.52	ng/ml	100
7) 2,6-Dimethylnaphthalene	5.91	156	49466	398.80	ng/ml	98
9) Acenaphthylene	6.14	152	88600	390.62	ng/ml	100
10) Acenaphthene	6.29	154	51261	401.91	ng/ml	97
11) Dibenzofuran	6.44	168	88058	439.40	ng/ml	99
12) 2,3,5-Trimethylnaphthalene	6.62	170	50540	391.78	ng/ml	90
14) Fluorene	6.73	166	65023	413.64	ng/ml	99
16) Dibenzothiophene	7.42	184	102302	390.39	ng/ml	89
17) Phenanthrene	7.52	178	102138	398.54	ng/ml	100
18) Anthracene	7.57	178	94884	375.39	ng/ml	100
19) Carbazole	7.70	167	92222	402.57	ng/ml	99
20) 1-Methylphenanthrene	8.03	192	80002	410.57	ng/ml	100
21) Fluoranthene	8.51	202	124049	407.70	ng/ml	94
24) Pyrene	8.69	202	133284	447.82	ng/ml	99
26) Benz(a)anthracene	10.00	228	131080	440.82	ng/ml	99
27) Chrysene	10.05	228	124379	447.35	ng/ml	100
29) Benzo(b)fluoranthene	12.02	252	144685	426.11	ng/ml	97
30) Benzo(k)fluoranthene	12.09	252	142798	428.17	ng/ml	97
31) Benzo(e)pyrene	12.73	252	135556	418.52	ng/ml	96
32) Benzo(a)pyrene	12.88	252	125534	422.95	ng/ml	96
33) Perylene	13.12	252	126123	431.36	ng/ml	95
34) Indeno(1,2,3-cd)pyrene	15.33	276	119268	447.30	ng/ml	95
35) Dibenz(a,h)anthracene	15.38	278	113180	416.89	ng/ml	96
36) Benzo(g,h,i)perylene	15.71	276	133659	450.54	ng/ml	94

(#) = qualifier out of range (m) = manual integration
0329F002.D 101317PAH.M Fri Mar 30 08:12:44 2018 Page 1

Data File : J:\MS14\DATA\032918\0329F002.D Vial: 2
Acq On : 29 Mar 2018 5:20 am Operator: LWeiskopf
Sample : SIM-PAH CCV @ 0.4ug/mL | SVM58-39D Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 29 5:40 2018 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Mar 30 08:12:38 2018
Response via : Initial Calibration



Exception Report

Data File: J:\MS14\DATA\033018\0330F002.D
Lab ID: KWG1801739-2
RunType: CCV
Matrix: WATER

Date Acquired: 03/30/2018 06:21
Date Quantitated: 03/30/2018 07:02
Batch ID: KWG1801739
Analysis Method: 8270D SIM
MethodJoinID: MJ1187

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA		x

OK

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Enviroquant/Stealth Calibration Check	2-Methylnaphthalene-d10	Calc	S-0.00	I-498.86	NT

Primary Review: APR 02 2018

Secondary Review: APR 02 2018

Printed: 04/02/2018 10:37:00
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\033018\0330F002.D			**Instrument:**	MS14
Acqu Date:	03/30/2018 06:21	**Quant Date:**	03/30/2018 07:02	**Vial:**	2
Run Type:	CCV	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1801739-2			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**		**Receive Date:**	04/02/2018

Analysis Lot:	KWG1801739	**Prep Lot:**		**Report Group:**	
Analysis Method:	8270D SIM	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS14\METHODS\SIM\101317PAH.M			**Calibration ID:**	CAL15579
Title:					
Tune Ref:	J:\MS14\DATA\033018\0330F001.D			**Method ID:**	MJ1638
MB Ref:				**Quant based on Method**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.70	-0.08	136	27357	200.00	OK
2	Acenaphthene-d10	6.27	-0.06	164	14847	200.00	OK
3	Phenanthrene-d10	7.50	-0.06	188	33026	200.00	OK
4	Chrysene-d12	10.01	-0.07	240	42596	200.00	OK
5	Perylene-d12	13.04	-0.10	264	46349	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.71			176	39558	389.48		42-131	NA	
3	Fluoranthene-d10	8.49			212	89095	429.34		42-133	NA	
4	Terphenyl-d14	8.83			244	72188	401.93		32-129	NA	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.72			128	61058	391.82			
1	2-Methylnaphthalene	5.36			142	44469	409.89			
1	1-Methylnaphthalene	5.45			142	41762	435.51			
1	Biphenyl	5.78			154	56264	409.74			
1	2,6-Dimethylnaphthalene	5.92			156	39711	406.94			
2	Acenaphthylene	6.15			152	71208	391.95			
2	Acenaphthene	6.30			154	41022	401.54			
2	Dibenzofuran	6.44			168	65493	408.00			
2	2,3,5-Trimethylnaphthalene	6.62			170	40414	391.13			
2	Fluorene	6.73			166	51695	410.57			
3	Dibenzothiophene	7.42			184	81733	390.32			
3	Phenanthrene	7.52			178	82054	400.67			
3	Anthracene	7.57			178	76649	379.49			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\033018\0330F002.D			**Instrument:**	MS14
Acqu Date:	03/30/2018 06:21	**Quant Date:**	03/30/2018 07:02	**Vial:**	2
Run Type:	CCV	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1801739-2			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
3	Carbazole	7.70			167	75282	411.24			
3	1-Methylphenanthrene	8.03			192	65813	422.66			
3	Fluoranthene	8.51			202	104757	430.86			
4	Pyrene	8.69			202	112366	437.04			
4	Benz(a)anthracene	10.00			228	111834	435.38			
4	Chrysene	10.05			228	107698	448.41			
5	Benzo(b)fluoranthene	12.02			252	122585	418.94			
5	Benzo(k)fluoranthene	12.09			252	122268	425.43			
5	Benzo(e)pyrene	12.73			252	115361	413.31			
5	Benzo(a)pyrene	12.87			252	106111	414.87			
5	Perylene	13.12			252	107489	426.61			
5	Indeno(1,2,3-cd)pyrene	15.33			276	101435	441.45			
5	Dibenz(a,h)anthracene	15.38			278	98325	420.28			
5	Benzo(g,h,i)perylene	15.71			276	114610	448.31			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\033018\0330F002.D Vial: 2
Acq On : 30 Mar 2018 6:21 am Operator: LWeiskopf
Sample : SIM-PAH CCV @ 0.4ug/mL | SVM58-39D Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 07:02:05 2018 Quant Results File: 101317PAH.RES

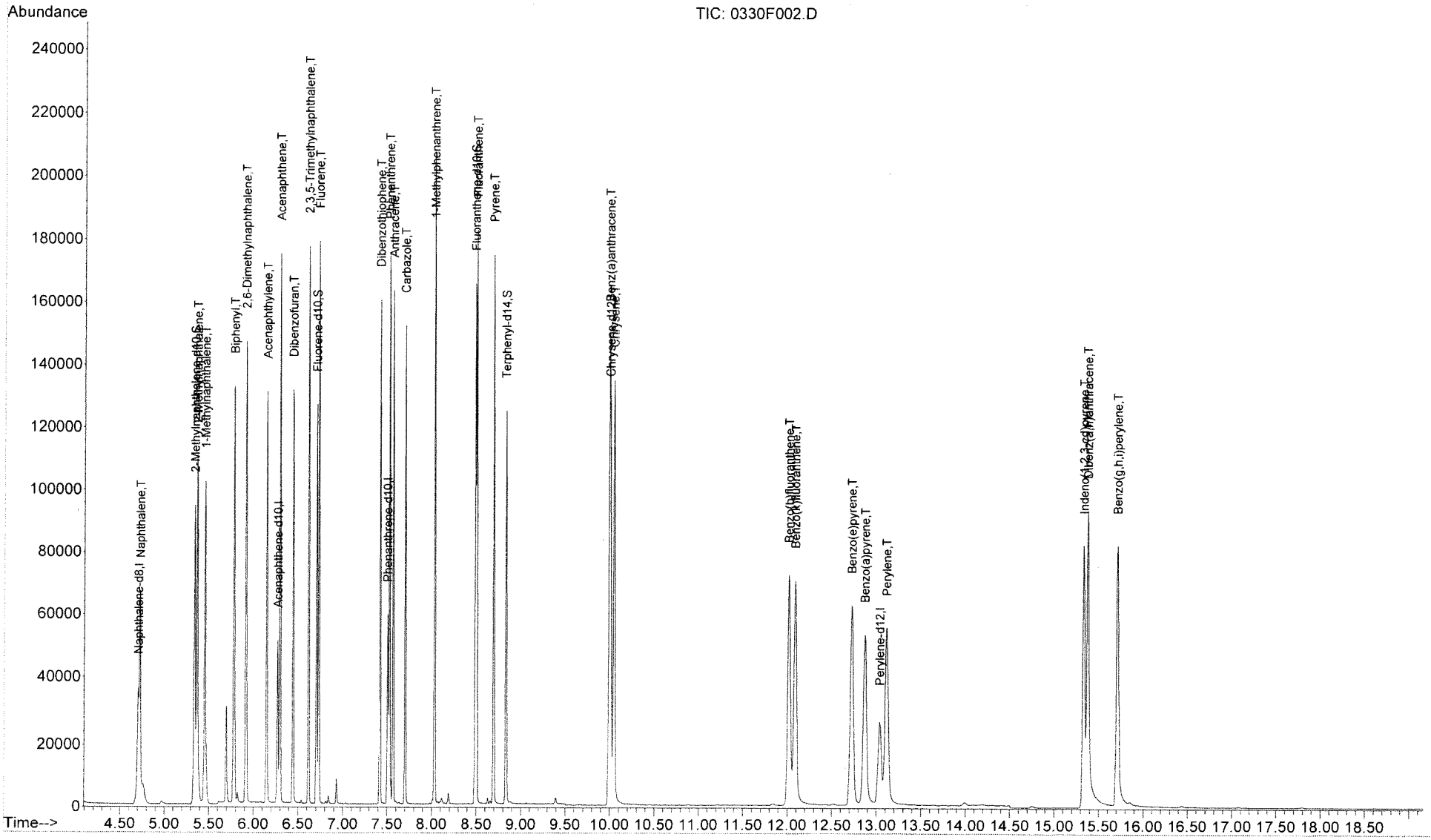
Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Tue Mar 27 10:05:45 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.70	136	27357	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.27	164	14847	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.50	188	33026	200.00	ng/ml	0.00
23) Chrysene-d12	10.01	240	42596	200.00	ng/ml	0.00
28) Perylene-d12	13.04	264	46349	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.34	152	36589	498.86	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 49.89%			
13) Fluorene-d10	6.71	176	39558	389.48	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 38.95%			
22) Fluoranthene-d10	8.49	212	89095	429.34	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 42.93%			
25) Terphenyl-d14	8.83	244	72188	401.93	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 40.19%			
Target Compounds						Qvalue
2) Naphthalene	4.72	128	61058	391.82	ng/ml	99
4) 2-Methylnaphthalene	5.36	142	44469	409.89	ng/ml#	78
5) 1-Methylnaphthalene	5.45	142	41762	435.51	ng/ml	92
6) Biphenyl	5.78	154	56264	409.74	ng/ml	98
7) 2,6-Dimethylnaphthalene	5.92	156	39711	406.94	ng/ml	96
9) Acenaphthylene	6.15	152	71208	391.95	ng/ml	99
10) Acenaphthene	6.30	154	41022	401.54	ng/ml	98
11) Dibenzofuran	6.44	168	65493	408.00	ng/ml	85
12) 2,3,5-Trimethylnaphthalene	6.62	170	40414	391.13	ng/ml	79
14) Fluorene	6.73	166	51695	410.57	ng/ml	99
16) Dibenzothiophene	7.42	184	81733	390.32	ng/ml	95
17) Phenanthrene	7.52	178	82054	400.67	ng/ml	100
18) Anthracene	7.57	178	76649	379.49	ng/ml	99
19) Carbazole	7.70	167	75282	411.24	ng/ml	99
20) 1-Methylphenanthrene	8.03	192	65813	422.66	ng/ml	99
21) Fluoranthene	8.51	202	104757	430.86	ng/ml	95
24) Pyrene	8.69	202	112366	437.04	ng/ml	99
26) Benz(a)anthracene	10.00	228	111834	435.38	ng/ml	99
27) Chrysene	10.05	228	107698	448.41	ng/ml	100
29) Benzo(b)fluoranthene	12.02	252	122585	418.94	ng/ml	97
30) Benzo(k)fluoranthene	12.09	252	122268	425.43	ng/ml	97
31) Benzo(e)pyrene	12.73	252	115361	413.31	ng/ml	96
32) Benzo(a)pyrene	12.87	252	106111	414.87	ng/ml	96
33) Perylene	13.12	252	107489	426.61	ng/ml	95
34) Indeno(1,2,3-cd)pyrene	15.33	276	101435	441.45	ng/ml	95
35) Dibenz(a,h)anthracene	15.38	278	98325	420.28	ng/ml	96
36) Benzo(g,h,i)perylene	15.71	276	114610	448.31	ng/ml	94

(#) = qualifier out of range (m) = manual integration
0330F002.D 101317PAH.M Mon Apr 02 08:52:43 2018 Page 1

Data File : J:\MS14\DATA\033018\0330F002.D Vial: 2
Acq On : 30 Mar 2018 6:21 am Operator: LWeiskopf
Sample : SIM-PAH CCV @ 0.4ug/mL | SVM58-39D Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 7:02 2018 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Mon Apr 02 08:52:37 2018
Response via : Initial Calibration



Preparation Information

Group ID:	KWG1801565	**Prep Method:**	EPA 3511	**Prep Date:**	03/22/18 16:27
Department:	Semivoa GCMS				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K1802579-002	MW-15	8270D PAH SIM	WATER	440ml	2ml
K1802579-003	MW-16	8270D PAH SIM	WATER	455ml	2ml
K1802579-004	MW-17	8270D PAH SIM	WATER	455ml	2ml
K1802579-005	MW-18	8270D PAH SIM	WATER	455ml	2ml
K1802579-006	MW-2	8270D PAH SIM	WATER	450ml	2ml
K1802579-015	MW-30	8270D PAH SIM	WATER	455ml	2ml
K1802579-020	MW-35	8270D PAH SIM	WATER	455ml	2ml
K1802579-021	MW-36	8270D PAH SIM	WATER	450ml	2ml
K1802579-022	MW-37	8270D PAH SIM	WATER	450ml	2ml
K1802579-029	MW-44	8270D PAH SIM	WATER	445ml	2ml
K1802579-030	FIELD BLANK RINSATE	8270D PAH SIM	WATER	445ml	2ml
K1802579-031	MW-3	8270D PAH SIM	WATER	445ml	2ml
K1802582-001	BXS-1	8270D PAH SIM	WATER	440ml	2ml
K1802582-002	BXS-2	8270D PAH SIM	WATER	445ml	2ml
KWG1801565-1	Lab Control Sample	8270D PAH SIM	WATER	450ml	2ml
KWG1801565-2	Duplicate Lab Control Sampl	8270D PAH SIM	WATER	450ml	2ml
KWG1801565-3	Method Blank	8270D PAH SIM	WATER	455ml	2ml

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K1802579-002	1668279					
K1802579-003	1668280					
K1802579-004	1668281					
K1802579-005	1668282					
K1802579-006	1668283					
K1802579-015	1668284					
K1802579-020	1668285					
K1802579-021	1668286					
K1802579-022	1668287					
K1802579-029	1668288					
K1802579-030	1668289					
K1802579-031	1668290					
K1802582-001	1668315					
K1802582-002	1668316					
KWG1801565-1	1668291					
KWG1801565-2	1668292					
KWG1801565-3	1668293					

#310452

IS = SV1 56-31K

Comments:

Started By: AMcFarla Assisted By: — Training: Yes / No

Completed By: AMcFarla Assisted By: — Yes / No

Reviewed By: # Date: 3/29/18 Storage: K-Tundra 1514

Chain of Custody

Relinquished By: Tony McK Date: 3/28/18

Received By: Date: 3/30/18 Extracts Examined: Yes / No

Preparation Information

3/28

Group ID:	KWG1801565	**Prep Method:**	EPA 3511[redacted]	**Prep Date:**	03/22/18 00:00
Department:	Semivoa GCMS				

#	Lab Code	Client ID	B#	√	Product	Matrix	Amt. Ext. mL	pH	Int. Vol.	Final Vol. mL	Surr. Added mL	Spike Added mL
1 *	K1802579-002	MW-15	.01	✓	8270D PAH SIM	WATER	440	6	NA	2	20	—
2	K1802579-003	MW-16	.01	✓	8270D PAH SIM	WATER	455	6		2		—
3	K1802579-004	MW-17	.01	✓	8270D PAH SIM	WATER	455	6		2		—
4	K1802579-005	MW-18	.01	✓	8270D PAH SIM	WATER	455	6		2		—
5 *	K1802579-006	MW-2	.01	✓	8270D PAH SIM	WATER	450	6		2		—
6	K1802579-015	MW-30	.01	✓	8270D PAH SIM	WATER	455	6		2		—
7 *	K1802579-020	MW-35	.01	✓	8270D PAH SIM	WATER	455	6		2		—
8	K1802579-021	MW-36	.01	✓	8270D PAH SIM	WATER	450	6		2		—
9	K1802579-022	MW-37	.01	✓	8270D PAH SIM	WATER	450	6		2		—
10 *	K1802579-029	MW-44	.01	✓	8270D PAH SIM	WATER	445	6		2		—
11	K1802579-030	FIELD BLANK RINSATE	.01	✓	8270D PAH SIM	WATER	445	5		2		—
12	K1802579-031	MW-3	.01	✓	8270D PAH SIM	WATER	445	6		2		—
13	K1802582-001	BXS-1	.02	✓	8270D PAH SIM	WATER	440	6		2		—
14	K1802582-002	BXS-2	.02	✓	8270D PAH SIM	WATER	445	6		2		—
15	KWG1801565-1	Lab Control Sample	—		8270D PAH SIM	WATER	450	5		2		50
16	KWG1801565-2	Duplicate Lab Control Sample	—		8270D PAH SIM	WATER	450	5		2		
17	KWG1801565-3	Method Blank	—		8270D PAH SIM	WATER	455	5		2		—

Comments: Insufficient sample for MS/DMS TM 3/22/18 prep run # 310452
*- vials have approx. 0.8mL of sample TM 3/28/18

Surrogate ID: SVM58-25A, 100/150 ppm, exp. 9/6/18, 20 mL, (syr)

Spike ID: SVM57-33D, 25 ppm, exp. 5/1/18, 50 mL, 4I

Witness: —

Started By: AMcFarla Assisted By: —

Completed By: AMcFarla Assisted By: —

Printed: 03/22/2018 15:34:18 Preparation Information Page 1 of 1

u:\Stealth\Crystal.rpt\prep2.rpt

Preparation Information Benchsheet

Prep Run#: 310452 **Prep WorkFlow:** OrgExtSimAq(7) **Status:** Prepped
Team: Semivoa GCMS/TMCFARLANE **Prep Method:** EPA 3511 **Prep Date/Time:** 3/22/18 02:42 PM
Number of Copies to make: 2

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	K1802579-002	MW-15	.01	8270D/PAH SIM		Water	450mL	2.00mL	
2	K1802582-001	BXS-1	.02	8270D/PAH SIM		Water	450mL	2.00mL	
3	K1802582-002	BXS-2	.02	8270D/PAH SIM		Water	450mL	2.00mL	
4	K1802579-003	MW-16	.01	8270D/PAH SIM		Water	450mL	2.00mL	
5	K1802579-004	MW-17	.01	8270D/PAH SIM		Water	450mL	2.00mL	
6	K1802579-005	MW-18	.01	8270D/PAH SIM		Water	450mL	2.00mL	
7	K1802579-006	MW-2	.01	8270D/PAH SIM		Water	450mL	2.00mL	
8	K1802579-015	MW-30	.01	8270D/PAH SIM		Water	450mL	2.00mL	
9	K1802579-020	MW-35	.01	8270D/PAH SIM		Water	450mL	2.00mL	
10	K1802579-021	MW-36	.01	8270D/PAH SIM		Water	450mL	2.00mL	
11	K1802579-022	MW-37	.01	8270D/PAH SIM		Water	450mL	2.00mL	
12	K1802579-029	MW-44	.01	8270D/PAH SIM		Water	450mL	2.00mL	
13	K1802579-030	FIELD BLANK RINSATE	.01	8270D/PAH SIM		Water	450mL	2.00mL	
14	K1802579-031	MW-3	.01	8270D/PAH SIM		Water	450mL	2.00mL	
15	KQ1804009-01	LCS		8270D/PAH SIM		Liquid	450mL	2.00mL	
16	KQ1804009-02	DLCS		8270D/PAH SIM		Liquid	450mL	2.00mL	
17	KQ1804009-03	MB		8270D/PAH SIM		Liquid	450mL	2.00mL	

Spiking Solutions

Name: 8270 ALL PURPOSE SURROGATE Inventory ID 188655 Logbook Ref: SVM58-25A Expires On: 09/06/2018

K1802579-002	50.00µL	K1802579-003	50.00µL	K1802579-004	50.00µL	K1802579-005	50.00µL	K1802579-006	50.00µL	K1802579-015	50.00µL
K1802579-020	50.00µL	K1802579-021	50.00µL	K1802579-022	50.00µL	K1802579-029	50.00µL	K1802579-030	50.00µL	K1802579-031	50.00µL
K1802582-001	50.00µL	K1802582-002	50.00µL	KQ1804009-01	50.00µL	KQ1804009-02	50.00µL	KQ1804009-03	50.00µL		

NOTE: ~~Std~~ SVM 57-33D Spike not in inventory yet. HT

Preparation Steps

Step:	Extraction	Step:	Final Volume
Started:	3/22/18 14:42	Started:	3/22/18 16:27
Finished:	3/22/18 15:34	Finished:	3/22/18 16:57
By:	~~CPOLLARD~~	By:	TMCFARLANE
Comments	TMCFarlane HT 3/29/18	Comments	

Comments: _____

Preparation Information Benchsheet

Prep Run#: 310452
Team: Semivoa GCMS EMCLARLANE

Prep WorkFlow: OrgExtSimAq(7)
Prep Method: EPA 3511

Status: Prepped
Prep Date/Time: 3/22/18 02:42 PM

Reviewed By: _____ Date: 3/29/18

Chain of Custody

Relinquished By:		Date:		Extracts Examined
Received By:		Date:		Yes No

Pest/PCB/PAH by 3511

Service Request # K1802579, K1802582 **Work Group # Pest:** —
PCB: —
PAH: KWG-1801565

Solvent Lot # 182436

Extraction Start (time/date/initial): 16:27 3/22/18 TM

Extraction Stop (time/date/initial): 16:57 3/22/18 TM

NaCL Lot# 176207
Sulfate Lot #_____

Carbon Clean-up (Ext-Car)(time/date/initial):— Carbon Lot #—
Hexane Lot #—

Florisil Clean-up (Ext-Flor)(time/date/initial):— Florisil Lot #—
Hexane Lot #—

Sulfuric Acid Clean-up (3665) (time/date/initial):— Acid Lot #—

Other Clean-up:— ☐ all samples ☐ some samples:—

Pipette (2 mL) Lot # 139/7646 Pipette (1 mL) Lot # 13617645

Pest Vial: — Vial Storage:—
PCB Vial: — Vial Storage:—
PAH Vial: Green Vial Storage: K: Tundra

Archived Extract Storage: Lennie

Additional Comments: —

☑ Hold times met (if no, reason: _____)
☑ Prep date, time, method, department, product code correct in stealth
☑ Spike information and Q.C. correct (insufficient volume or mass recorded if no Q.C.)
☑ Weights/Volumes and units correct on raw and final bench sheets
☑ Sample IDs have been checked - bottle numbers appended if required
☑ Names present for: started by, completed by, relinquished by, and witnessed by. Training circled.
☑ Extract storage recorded
☑ Additional prep sheet completely filled out (NA or line out blanks)
☑ All clean-ups have been noted on additional prep sheet
☑ Signed service request with Form V, if applicable, has been attached

Injection Log

Directory: J:\MS14\DATA\032918

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0329F001.D	1.	DFTPP @ 10ug/mL | SVM58-3B		29 Mar 2018 04:49
2	2	0329F002.D	1.	SIM-PAH CCV @ 0.4ug/mL | SVM58-39D		29 Mar 2018 05:20
3	3	0329F003.D	1.	KWG1801501-4 MB		29 Mar 2018 05:43
4	4	0329F004.D	1.	KWG1801501-3 LCS		29 Mar 2018 06:06
5	5	0329F005.D	1.	K1801657-003MS		29 Mar 2018 06:29
6	6	0329F006.D	1.	K1801657-003DMS		29 Mar 2018 06:53
7	7	0329F007.D	1.	K1801657-003		29 Mar 2018 07:16
8	8	0329F008.D	1.	K1801657-001		29 Mar 2018 07:39
9	9	0329F009.D	1.	K1801657-002		29 Mar 2018 08:03
10	10	0329F010.D	1.	K1801657-004		29 Mar 2018 08:26
11	11	0329F011.D	1.	K1801657-005		29 Mar 2018 08:50
12	12	0329F012.D	1.	K1801657-006		29 Mar 2018 09:13
13	13	0329F013.D	1.	K1801657-007		29 Mar 2018 09:36
14	14	0329F014.D	1.	K1801657-008		29 Mar 2018 10:00
15	15	0329F015.D	1.	K1801657-009		29 Mar 2018 10:24
16	16	0329F016.D	1.	K1801657-010		29 Mar 2018 10:47
17	17	0329F017.D	1.	KWG1801565-3 MB		29 Mar 2018 11:11
18	18	0329F018.D	1.	KWG1801565-1 LCS		29 Mar 2018 11:35
19	19	0329F019.D	1.	KWG1801565-2 DLCS		29 Mar 2018 11:59
20	20	0329F020.D	1.	K1802579-002		29 Mar 2018 12:23
21	21	0329F021.D	1.	K1802579-003		29 Mar 2018 12:47
22	22	0329F022.D	1.	K1802579-004		29 Mar 2018 13:11
23	23	0329F023.D	1.	K1802579-005		29 Mar 2018 13:35
24	24	0329F024.D	1.	K1802579-006		29 Mar 2018 13:59
25	25	0329F025.D	1.	K1802579-015		29 Mar 2018 14:23
26	26	0329F026.D	1.	K1802579-020		29 Mar 2018 14:47
27	27	0329F027.D	1.	K1802579-021		29 Mar 2018 15:11
28	28	0329F028.D	1.	K1802579-022		29 Mar 2018 15:35
29	29	0329F029.D	1.	K1802579-029		29 Mar 2018 15:58
30	30	0329F030.D	1.	K1802579-030		29 Mar 2018 16:22

CAL 15579
Klims #585342
[illegible] 3/30/18

APR 02 2018

Directory: J:\MS14\DATA\033018

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0330F001.D	1.	DFTPP @ 10ug/mL | SVM58-3B		30 Mar 2018 05:57
2	2	0330F002.D	1.	SIM-PAH CCV @ 0.4ug/mL | SVM58-39D		30 Mar 2018 06:21
3	3	0330F003.D	1.	KWG1801564-3 MB		30 Mar 2018 07:07
4	4	0330F004.D	1.	K1802579-031		30 Mar 2018 07:30
5	5	0330F005.D	1.	K1802582-001		30 Mar 2018 07:53
6	6	0330F006.D	1.	K1802582-002		30 Mar 2018 08:16
7	7	0330F007.D	1.	KWG1801564-1 LCS		30 Mar 2018 08:40
8	8	0330F008.D	1.	KWG1801564-2 DLCS		30 Mar 2018 09:03
9	9	0330F009.D	1.	K1801166-001		30 Mar 2018 09:26
10	10	0330F010.D	1.	K1801166-002		30 Mar 2018 09:49
11	11	0330F011.D	1.	K1801189-001		30 Mar 2018 10:13
12	12	0330F012.D	1.	K1801527-008		30 Mar 2018 10:36
13	13	0330F013.D	1.	K1801699-007		30 Mar 2018 10:59
14	14	0330F014.D	1.	K1801700-007		30 Mar 2018 11:23
15	15	0330F015.D	1.	K1801851-009		30 Mar 2018 11:46
16	16	0330F016.D	1.	~~K1801657-003~~ NC		30 Mar 2018 12:09

CA 15579
Klins # 585528
APR 0 2 2018

APR 0 2 2018

Injection Log

Directory: J:\MS14\DATA\101317

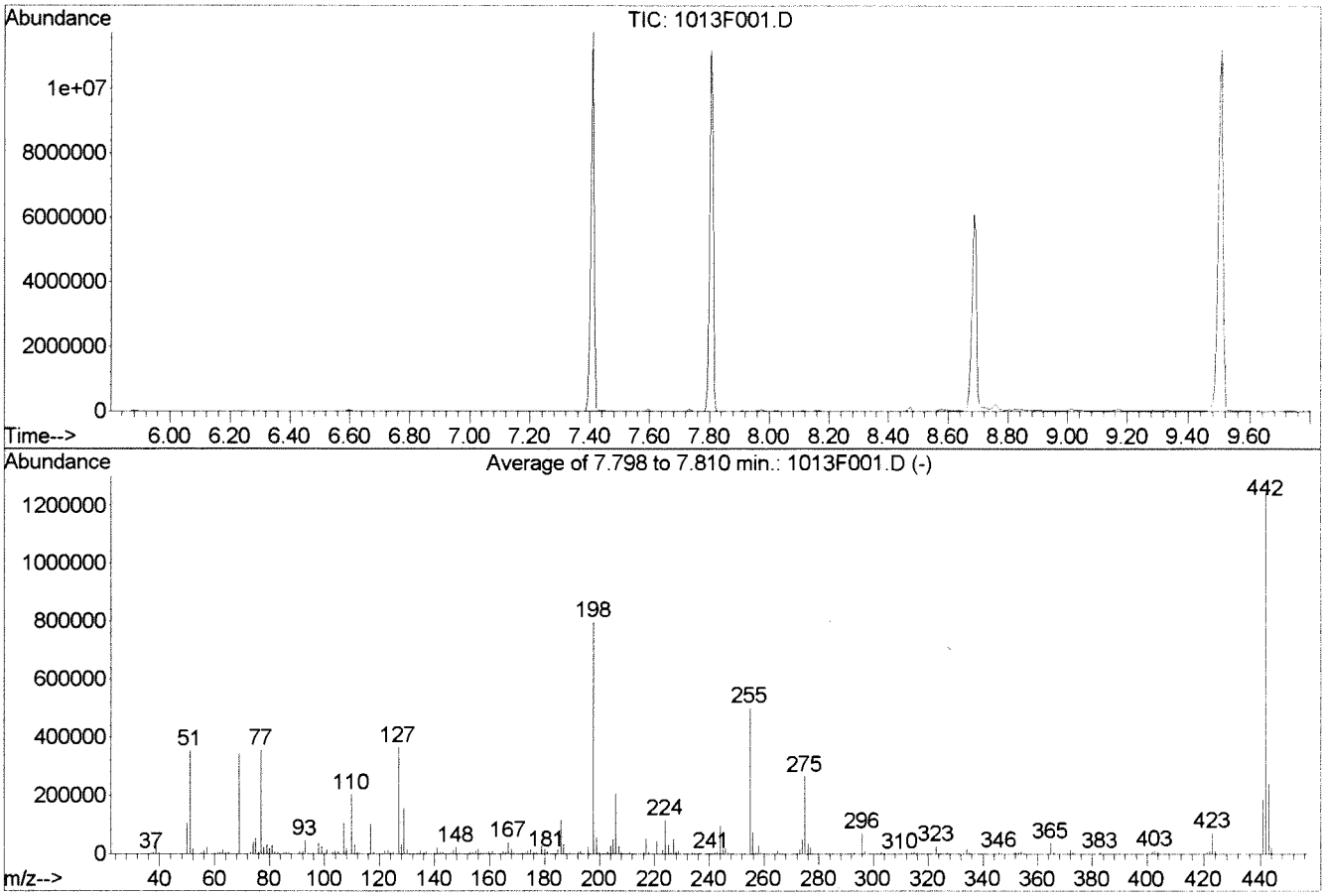
Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	1013F001.D	1.	DFTPP @ 10ug/mL | SVM56-77C		13 Oct 2017 07:5
2	2	1013F002.D	1.	IB		13 Oct 2017 08:1
3	3	1013F003.D	1.	SIM-PAH ICAL @0.004ug/mL | SVM55-65B		13 Oct 2017 08:4
4	4	1013F004.D	1.	SIM-PAH ICAL @0.008ug/mL | SVM55-65C		13 Oct 2017 09:1
5	5	1013F005.D	1.	SIM-PAH ICAL @0.02ug/mL | SVM55-65D		13 Oct 2017 09:3
6	6	1013F006.D	1.	SIM-PAH ICAL @0.1ug/mL | SVM55-65E		13 Oct 2017 10:0
7	7	1013F007.D	1.	SIM-PAH ICAL @0.2ug/mL | SVM55-65F		13 Oct 2017 10:2
8	8	1013F008.D	1.	SIM-PAH ICAL @0.4ug/mL | SVM55-65G		13 Oct 2017 10:4
9	9	1013F009.D	1.	SIM-PAH ICAL @1.0ug/mL | SVM55-65H		13 Oct 2017 11:1
10	10	1013F010.D	1.	SIM-PAH ICAL @1.6ug/mL | SVM55-65I		13 Oct 2017 11:3
11	11	1013F011.D	1.	SIM-PAH ICAL @2.0ug/mL | SVM55-65J		13 Oct 2017 12:0
12	1	1013F012.D	1.	DFTPP @ 10ug/mL | SVM56-77C		13 Oct 2017 12:2
13	2	1013F013.D	1.	SIM-PAH ICV @0.4ug/mL | SVM57-20D		13 Oct 2017 12:4

CAL 15579
SIM-PAH ICAL

OCT 16 2017

Data File : J:\MS14\DATA\101317\1013F001.D
Acq On : 13 Oct 2017 7:53 am
Sample : DFTPP @ 10ug/mL | SVM56-77C
Misc :
MS Integration Params: rteint.p
Method : J:\MS14\METHODS\SIM\A_DFTPP.M (RTE Integrator)
Title : dftpp tune mix

Vial: 1
Operator: LWeiskopf
Inst : MS14
Multiplr: 1.00



AutoFind: Scans 631, 632, 633; Background Corrected with Scan 626

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	44.3	352981	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.1	343472	PASS
70	69	0.00	2	0.7	2461	PASS
127	198	10	80	46.0	366570	PASS
197	198	0.00	2	0.0	0	PASS
198	442	30	100	64.1	797440	PASS
199	198	5	9	6.9	54976	PASS
275	198	10	60	33.3	265160	PASS
365	442	1	50	2.9	36638	PASS
441	443	0.01	100	76.8	186981	PASS
442	442	30	100	100.0	1243434	PASS
443	442	15	24	19.6	243432	PASS

1013F001.D A_DFTPP.M Fri Oct 13 12:55:57 2017

OCT 16 2017

Average of 7.798 to 7.810 min.: 1013F001.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	478	47.00	133	58.90	122	71.90	105
37.05	2210	50.00	104898	59.90	280	72.10	285
38.00	6031	51.00	352981	61.00	4939	73.10	4054
38.95	28372	52.00	18252	62.00	5590	74.00	39565
39.95	1551	53.00	873	63.00	13716	75.00	55232
41.00	746	53.80	53	64.00	1777	76.10	5592
42.00	115	54.10	53	65.00	6639	77.00	355200
42.95	136	54.95	2404	65.95	538	78.00	24696
44.00	516	56.00	10783	68.90	343472	79.00	30620
44.95	678	57.00	22384	69.90	2461	79.95	20772
45.80	90	57.90	1050	70.95	185	80.95	27594

Average of 7.798 to 7.810 min.: 1013F001.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.95	6384	93.95	2957	104.90	9048	116.90	101957
82.95	5951	94.95	842	107.00	108565	117.90	7425
83.90	803	96.00	1782	107.95	17054	118.90	856
85.00	4983	96.90	327	109.90	204160	119.95	1530
85.95	8226	97.95	37834	110.95	30522	120.95	814
86.95	3740	98.95	24797	111.90	3836	121.95	8527
87.95	1195	99.95	2253	112.90	1312	122.95	11864
88.95	699	100.95	13383	113.90	160	123.90	5557
90.95	6898	101.95	993	114.10	241	124.95	5121
92.00	8170	102.95	5444	114.95	387	126.95	366570
92.95	46944	103.95	10319	116.00	2370	128.00	30696

Average of 7.798 to 7.810 min.: 1013F001.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
128.90	155189	139.95	2194	151.05	2614	161.90	2381
129.95	12907	140.90	21521	151.85	1834	162.95	778
130.90	2457	141.95	6694	152.95	6562	163.90	1360
131.95	1424	142.95	4392	153.90	4861	164.90	8191
132.95	795	143.95	1211	154.95	11248	165.95	6698
133.90	5043	144.90	1154	156.00	16599	166.90	39322
134.90	12317	145.90	4325	156.95	3300	167.90	16509
135.95	5128	146.90	10631	157.90	4308	168.95	3061
136.95	5963	147.90	22725	158.95	2968	169.95	1453
137.95	1385	148.95	4313	159.90	6563	170.90	1836
138.85	929	149.95	1404	160.90	8849	171.90	3710

Average of 7.798 to 7.810 min.: 1013F001.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
172.95	4625	183.90	2691	195.00	524	207.90	7774
173.95	8361	184.95	15544	195.90	24658	208.90	2433
175.00	15197	186.00	115112	197.90	797440	209.95	3152
175.95	4517	186.95	33290	198.90	54976	210.90	8053
176.90	8045	187.95	3527	199.95	4289	212.90	693
178.00	2992	188.90	7921	201.40	3398	213.90	443
178.90	28960	189.95	1302	202.90	6248	214.90	2764
179.90	18535	190.95	3170	203.95	28412	216.00	5107
180.95	8580	191.90	8545	205.00	50698	216.90	53005
181.95	1478	192.90	10054	206.00	208122	217.90	6713
182.95	868	193.90	2203	206.95	27460	218.90	800

OCT 16 2017

Average of 7.798 to 7.810 min.: 1013F001.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
220.90	43805	231.95	757	243.00	7648	254.90	501973
221.80	1443	232.90	1148	244.00	96818	255.90	73781
222.95	13270	233.90	3648	245.00	12726	256.95	6112
224.00	116818	234.90	3573	245.90	19927	257.90	30495
225.00	30598	235.90	2640	246.90	3981	258.90	5014
226.00	3693	236.90	3784	247.95	984	259.90	907
226.90	51504	238.00	508	248.85	3484	260.90	959
227.90	7367	238.90	2495	249.95	780	262.80	315
228.90	10220	239.90	1610	250.95	910	264.00	411
229.85	1508	240.90	2916	251.95	1030	264.95	11868
230.90	4021	241.90	6156	252.95	2607	265.85	1749

Average of 7.798 to 7.810 min.: 1013F001.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
266.90	176	277.90	4078	290.90	627	302.95	8772
267.85	180	278.95	839	291.90	1124	303.95	2645
268.90	50	280.95	243	292.90	4569	304.95	350
269.90	699	281.95	625	293.95	1370	307.00	111
270.90	1205	282.95	2351	295.90	70253	307.90	1182
271.95	1582	283.95	1745	296.90	9409	308.85	772
272.90	15595	284.95	3918	297.90	622	309.95	1049
273.95	47586	285.90	1012	298.80	72	310.85	161
274.90	265160	287.90	261	298.95	145	311.90	309
275.90	35088	288.85	823	300.90	965	312.90	690
276.90	22776	289.90	746	301.95	1450	313.95	3839

Average of 7.798 to 7.810 min.: 1013F001.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
314.90	7932	325.80	74	335.90	602	350.00	276
315.95	4826	325.95	465	336.80	50	350.95	795
316.90	988	326.90	4770	338.90	416	352.00	8447
318.00	125	327.90	2623	339.80	56	352.95	6394
318.90	69	328.90	447	340.00	363	354.00	9485
319.95	286	329.80	53	340.90	3114	354.95	1751
320.95	2661	331.10	88	342.00	923	355.90	86
322.00	1737	331.90	1905	344.90	107	356.80	122
323.00	26596	333.00	2842	345.90	5721	357.85	141
324.00	4435	334.00	17907	346.90	1110	358.20	54
324.90	466	334.95	4823	348.00	76	358.90	708

Average of 7.798 to 7.810 min.: 1013F001.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
360.00	140	372.95	4106	392.95	208	421.00	8911
360.80	133	373.90	563	394.95	139	422.00	9583
362.10	78	376.90	342	395.90	79	423.00	71981
362.60	61	382.00	94	396.95	189	424.00	14337
363.00	251	382.90	4410	400.90	1177	424.95	1326
364.90	36638	383.90	1218	401.90	7123	426.00	53
365.90	5526	384.85	312	402.90	10208	436.40	75
366.90	468	388.95	136	403.95	3771	437.30	153
369.90	815	389.90	2312	404.85	467	438.05	395
370.95	2340	390.90	1595	409.95	333	438.70	244
372.00	16063	391.95	1275	414.90	493	439.60	166

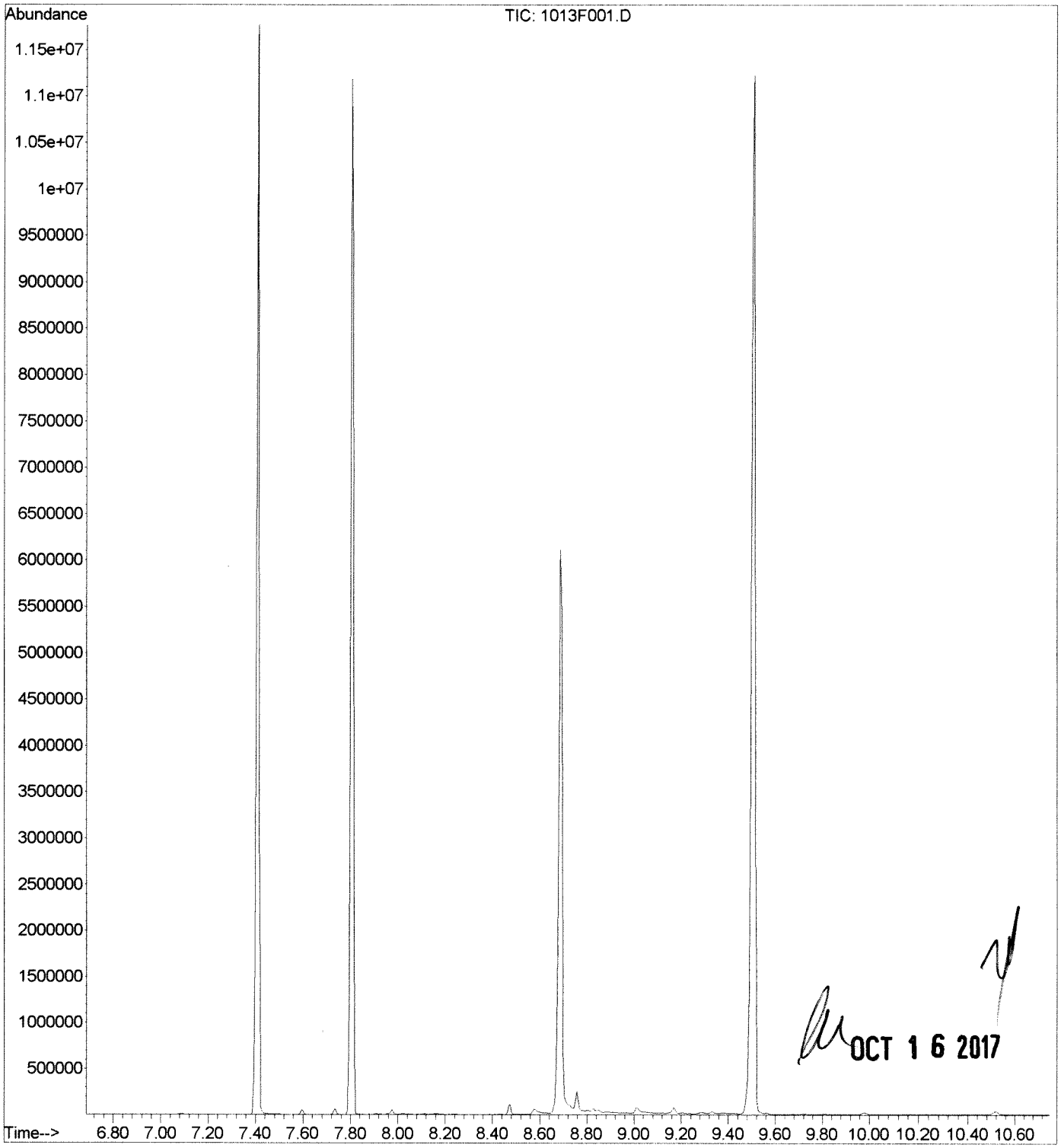
OCT 16 2017

Average of 7.798 to 7.810 min.: 1013F001.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
441.00	186981						
442.00	1243434						
443.00	243432						
444.00	22556						
444.95	1249						

OCT 16 2017

File : J:\MS14\DATA\101317\1013F001.D
Operator : LWeiskopf
Acquired : 13 Oct 2017 7:53 am using AcqMethod SIMLOC
Instrument : MS14
Sample Name: DFTPP @ 10ug/mL | SVM56-77C
Misc Info :
Vial Number: 1



OCT 16 2017

1	4.187	rVB	0.088		26608	4.163	4.251
2	4.563	rVB	0.100		8130	4.551	4.651
3	5.040	rVB	0.047		5807	5.022	5.069
4	5.346	rBV	0.029		2968	5.328	5.357
5	5.475	rBV	0.047		3200	5.457	5.504
6	5.540	rVV	0.053		2232	5.504	5.557
7	5.675	rVB	0.053		2656	5.651	5.704
8	5.757	rVB	0.041		2509	5.746	5.787
9	5.822	rBV	0.047		2641	5.804	5.851
10	5.881	rVV	0.071		24117	5.863	5.934
11	6.122	rBV	0.041		2445	6.110	6.151
12	6.181	rVV	0.047		2578	6.163	6.210
13	6.234	rVV	0.053		3719	6.210	6.263
14	6.298	rVB	0.053		2715	6.287	6.340
15	6.428	rVB	0.041		3166	6.410	6.451
16	6.528	rBV	0.041		3171	6.504	6.545
17	6.598	rVB	0.112		41928	6.545	6.657
18	6.687	rBV	0.053		4329	6.657	6.710
19	6.992	rBV	0.047		2099	6.969	7.016
20	7.087	rBV	0.076		7275	7.057	7.134
21	7.410	rBV	0.088		8673195	7.375	7.463
22	7.592	rVB	0.047		38533	7.569	7.616
23	7.734	rBV	0.059		49263	7.698	7.757
24	7.804	rVV	0.094		9329498	7.769	7.863
25	7.910	rVV	0.059		12416	7.887	7.945
26	7.975	rVV	0.053		50062	7.945	7.998
27	8.022	rVV	0.076		21669	7.998	8.075
28	8.116	rVV	0.035		9508	8.092	8.128
29	8.163	rVV	0.071		22842	8.128	8.198
30	8.228	rVB	0.059		4615	8.222	8.281
31	8.439	rVB	0.047		3583	8.404	8.451
32	8.475	rBV	0.059		94692	8.451	8.510
33	8.575	rBV	0.094		135542	8.545	8.639
34	8.686	rBV	0.100		6720597	8.639	8.739
35	8.757	rVB	0.047		189607	8.739	8.786
36	8.828	rVV	0.024		18161	8.816	8.839
37	9.010	rVB	0.106		105390	8.986	9.092
38	9.169	rVV	0.053	DOD	68351	9.134	9.186
39	9.204	rVB	0.035		10227	9.192	9.228
40	9.286	rBV	0.053		25911	9.257	9.310
41	9.334	rVB	0.041		22676	9.310	9.351
42	9.375	rVB	0.065		12288	9.357	9.422
43	9.510	rVV	0.100	DOT	12354451	9.451	9.551
44	9.563	rVB	0.059		17217	9.551	9.610
45	9.675	rBV	0.035		3266	9.669	9.704
46	9.716	rBV	0.053		7547	9.704	9.757
47	9.804	rVB	0.047		5164	9.786	9.833
48	9.981	rBV	0.065		27464	9.951	10.016
49	10.069	rBV	0.029		2253	10.057	10.086
50	10.169	rBV	0.041		2761	10.145	10.186
51	10.375	rVB	0.041		3444	10.369	10.410
52	10.516	rVB	0.071		54682	10.480	10.551
53	10.704	rBV	0.024		2137	10.692	10.716
54	10.904	rVB	0.053		4151	10.892	10.945
55	11.180	rBV	0.118		109399	11.128	11.245
56	11.851	rBV	0.129		41247	11.739	11.869
57	12.010	rVB	0.118		240459	11.957	12.075
58	12.933	rBV	0.029		2298	12.922	12.951
59	13.057	rBV	0.188		394589	12.974	13.163
60	13.392	rBV	0.047		3887	13.369	13.416
61	13.592	rVB	0.035		2624	13.580	13.616

DOT Breakdown

= 0.62

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62	14.168	rBV	0.176		623506	14.104	14.280
63	14.886	rBV	0.159		740664	14.839	14.998
64	15.433	rBV	0.141		946261	15.392	15.533
65	15.992	rBV	0.124		673666	15.951	16.074
66	16.592	rBV	0.129		607019	16.551	16.680
67	17.257	rBV	0.153		437167	17.209	17.362
68	18.004	rVB	0.118		283434	17.956	18.074
69	18.851	rVB	0.112		185955	18.815	18.927

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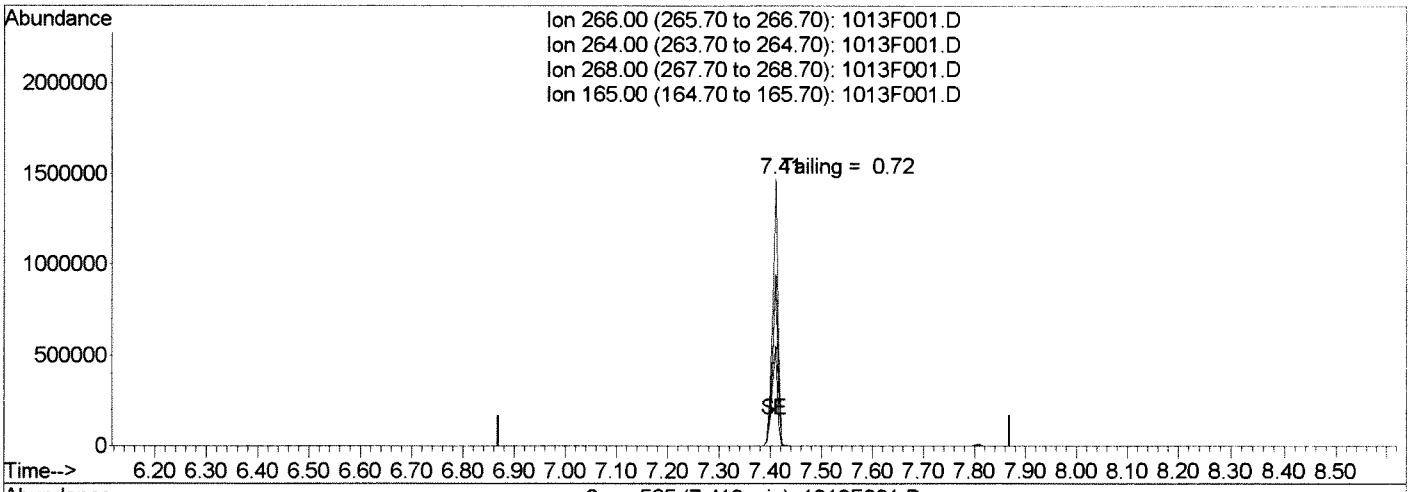
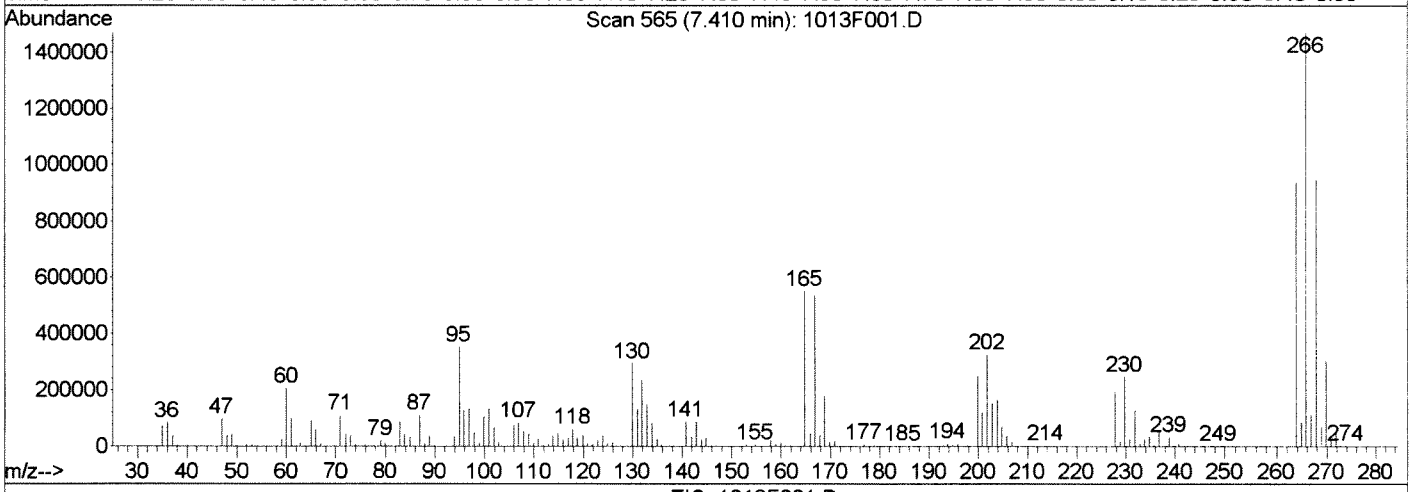
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\101317\1013F001.D Vial: 1
Acq On : 13 Oct 2017 7:53 am Operator: LWeiskopf
Sample : DFTPP @ 10ug/mL | SVM56-77C Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 13 12:55 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\A_DFTPP.M (RTE Integrator)
Title : dftpp tune mix
Last Update : Fri Oct 06 15:31:14 2017
Response via : Single Level Calibration





TIC: 1013F001.D

(1) Pentachlorophenol

7.41min 46.23ng/ml

response 1063796

Ion	Exp%	Act%
266.00	100	100
264.00	62.30	63.76
268.00	72.30	64.27
165.00	42.00	37.43

OK

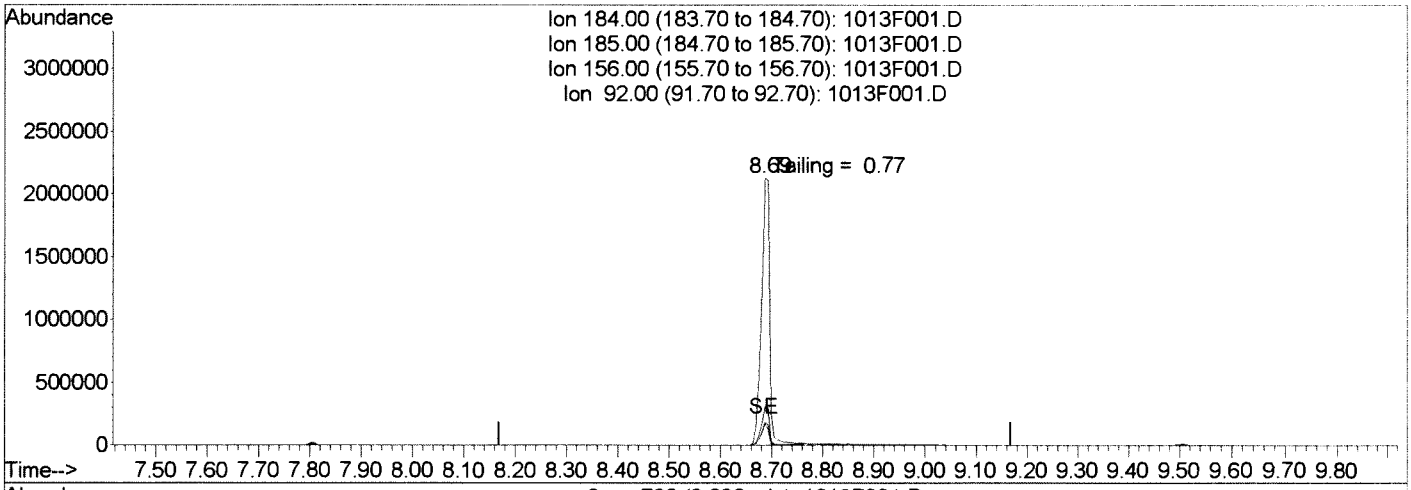
OCT 16 2017

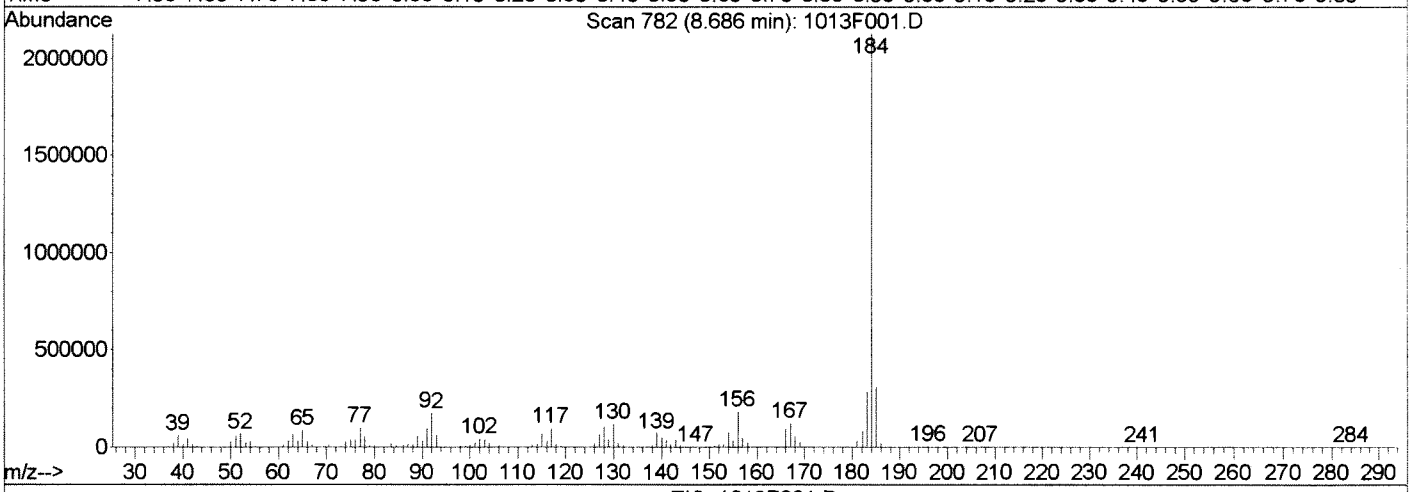
1013F001.D A_DFTPP.M Fri Oct 13 12:56:14 2017

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\101317\1013F001.D Vial: 1
Acq On : 13 Oct 2017 7:53 am Operator: LWeiskopf
Sample : DFTPP @ 10ug/mL | SVM56-77C Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 13 12:55 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\A_DFTPP.M (RTE Integrator)
Title : dftpp tune mix
Last Update : Fri Oct 06 15:31:14 2017
Response via : Single Level Calibration





TIC: 1013F001.D

(3) Benzidine (T)

8.69min 42.21ug/ml

response 2433027

Ion	Exp%	Act%
184.00	100	100
185.00	14.70	14.53
156.00	8.20	8.52
92.00	6.60	8.16

OK -2

OCT 16 2017

1013F001.D A_DFTPP.M Fri Oct 13 12:56:22 2017

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F002.D Vial: 2
Acq On : 13 Oct 2017 8:17 am Operator: LWeiskopf
Sample : IB Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:32 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.78	136	50953	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.33	164	28255	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.56	188	59442	200.00	ng/ml	0.00
23) Chrysene-d12	10.09	240	71142	200.00	ng/ml	0.00
28) Perylene-d12	13.14	264	74168	200.00	ng/ml	-0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
13) Fluorene-d10	6.76	176	76	0.40	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.04%		
22) Fluoranthene-d10	0.00	212	0	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
25) Terphenyl-d14	0.00	244	0	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
Target Compounds						Qvalue
26) Benz(a)anthracene	10.09	228	190	0.44	ng/ml	67

< 1/2 MRL

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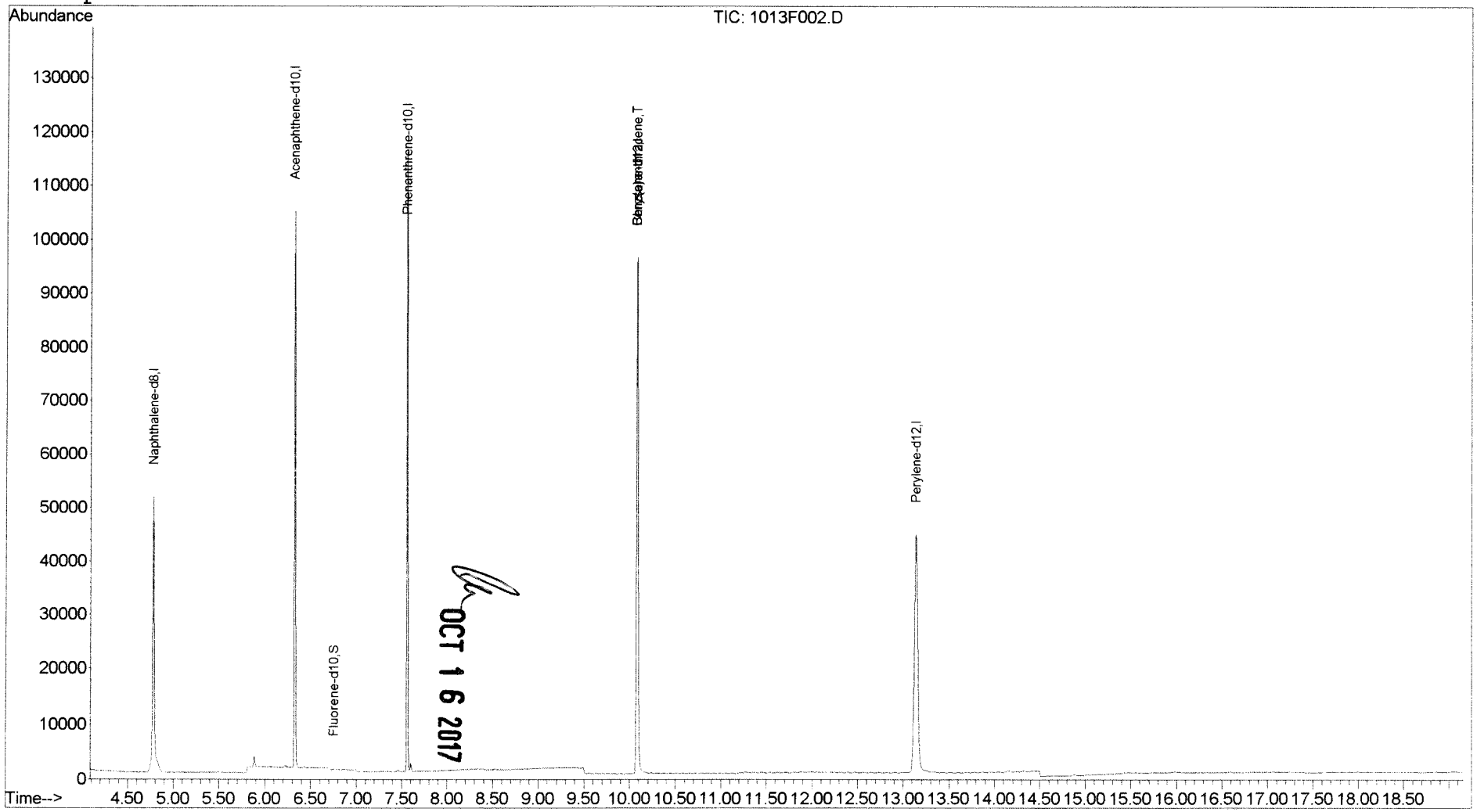
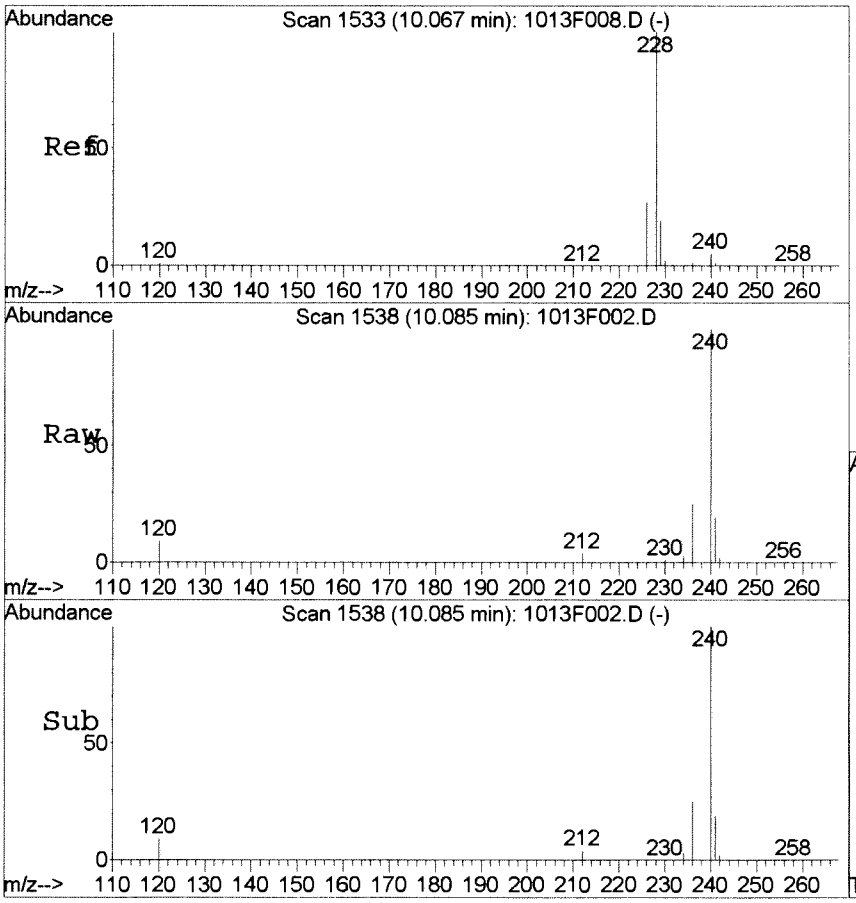
(#) = qualifier out of range (m) = manual integration
1013F002.D 101317PAH.M Mon Oct 16 06:58:50 2017 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F002.D Vial: 2
Acq On : 13 Oct 2017 8:17 am Operator: LWeiskopf
Sample : IB Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 16 6:55 2017 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 12:21:46 2017
Response via : Initial Calibration

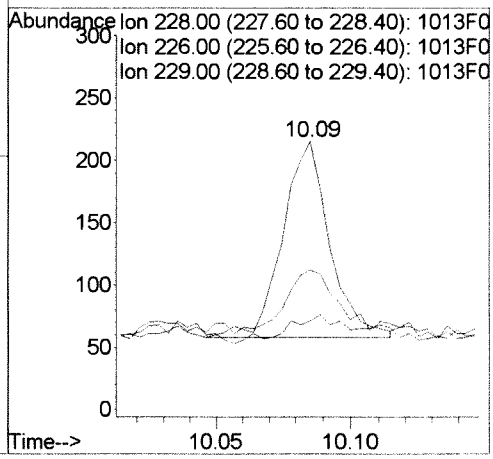




#26
Benz(a)anthracene
Concen: 0.44 ng/ml
RT: 10.09 min Scan# 1538
Delta R.T. 0.01 min
Lab File: 1013F002.D
Acq: 13 Oct 2017 8:17 am

Tgt Ion:228 Resp: 190

Ion	Ratio	Lower	Upper
228	100		
226	7.0	0.0	56.6
229	31.8	0.0	39.7



OCT 16 2017

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F003.D Vial: 3
Acq On : 13 Oct 2017 8:48 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.004ug/mL | SVM55-65B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:33 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.78	136	41675	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.33	164	27104	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.56	188	57370	200.00	ng/ml	0.00
23) Chrysene-d12	10.09	240	71345	200.00	ng/ml	0.00
28) Perylene-d12	13.14	264	69520	200.00	ng/ml	-0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.40	152	496	4.84	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.48%		
13) Fluorene-d10	6.76	176	895	4.89	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.49%		
22) Fluoranthene-d10	8.54	212	1385	3.96	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.40%		
25) Terphenyl-d14	8.90	244	1269	4.20	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.42%		
Target Compounds						Qvalue
2) Naphthalene	4.79	128	987	4.31	ng/ml	95
4) 2-Methylnaphthalene	5.43	142	820	5.54	ng/ml	95
5) 1-Methylnaphthalene	5.52	142	719	5.48	ng/ml	95
6) Biphenyl	5.84	154	999	5.44	ng/ml	98
7) 2,6-Dimethylnaphthalene	5.97	156	748	5.61	ng/ml	96
9) Acenaphthylene	6.21	152	1345	4.21	ng/ml	98
10) Acenaphthene	6.35	154	728	4.03	ng/ml	99
11) Dibenzofuran	6.50	168	1159	4.06	ng/ml	94
12) 2,3,5-Trimethylnaphthalene	6.68	170	811	4.54	ng/ml	92
14) Fluorene	6.79	166	936	4.14	ng/ml	97
16) Dibenzothiophene	7.47	184	1404	3.94	ng/ml	88
17) Phenanthrene	7.58	178	1523	4.47	ng/ml	99
18) Anthracene	7.62	178	1412	4.13	ng/ml	99
19) Carbazole	7.75	167	1280	4.16	ng/ml	99
20) 1-Methylphenanthrene	8.09	192	1048m	3.97	ng/ml	
21) Fluoranthene	8.56	202	1697	4.21	ng/ml	95
24) Pyrene	8.76	202	1729	3.87	ng/ml	79
26) Benz(a)anthracene	10.07	228	1849	4.28	ng/ml	97
27) Chrysene	10.12	228	1619	3.98	ng/ml	99
29) Benzo(b)fluoranthene	12.11	252	1900	4.38	ng/ml	97
30) Benzo(k)fluoranthene	12.19	252	1796	4.14	ng/ml	98
31) Benzo(e)pyrene	12.83	252	1847	4.44	ng/ml	98
32) Benzo(a)pyrene	12.97	252	1547	3.95	ng/ml	95
33) Perylene	13.22	252	1563	4.11	ng/ml	97
34) Indeno(1,2,3-cd)pyrene	15.38	276	1485	4.23	ng/ml	99

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS14\DATA\101317\1013F003.D Vial: 3
Acq On : 13 Oct 2017 8:48 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.004ug/mL | SVM55-65B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:33 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

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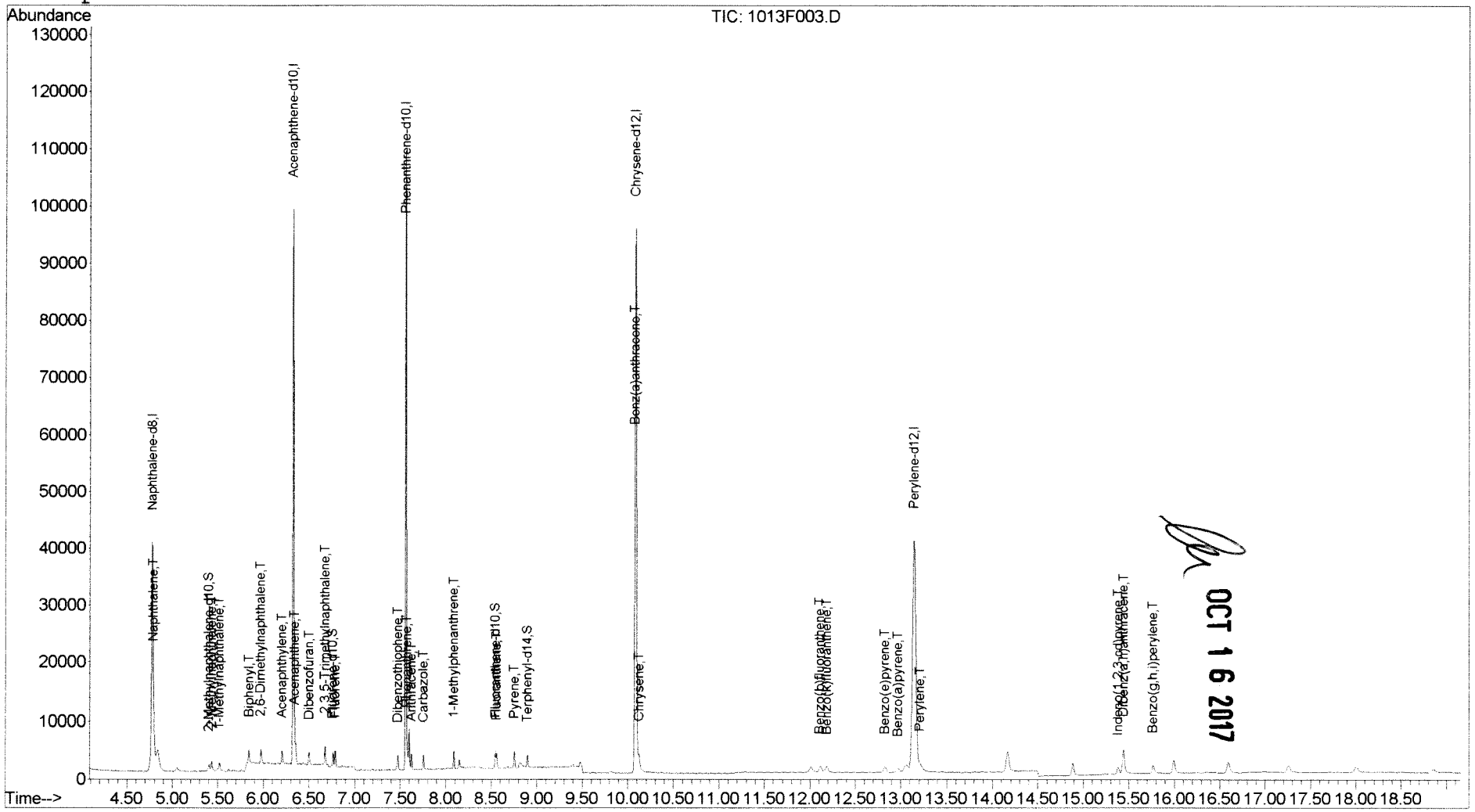
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	Dibenz(a,h)anthracene	15.44	278	1587	4.60	ng/ml#	1
36)	Benzo(g,h,i)perylene	15.76	276	1773	4.33	ng/ml	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F003.D Vial: 3
Acq On : 13 Oct 2017 8:48 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.004ug/mL | SVM55-65B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07 2017 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 12:21:46 2017
Response via : Initial Calibration

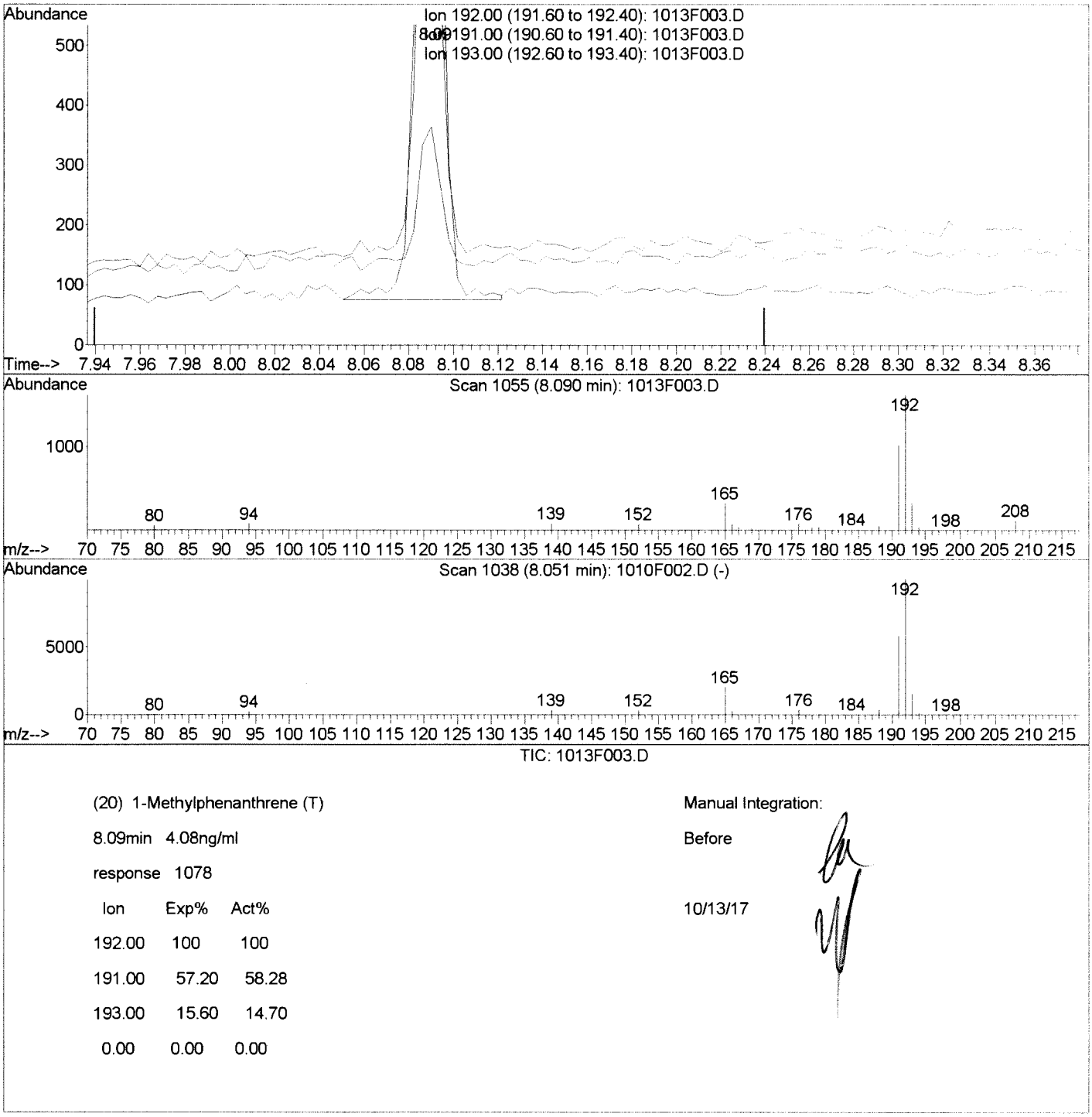


OCT 16 2017

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\101317\1013F003.D Vial: 3
Acq On : 13 Oct 2017 8:48 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.004ug/mL | SVM55-65B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Multiple Level Calibration



(20) 1-Methylphenanthrene (T)

8.09min 4.08ng/ml

response 1078

Ion	Exp%	Act%
192.00	100	100
191.00	57.20	58.28
193.00	15.60	14.70
0.00	0.00	0.00

Manual Integration:

Before

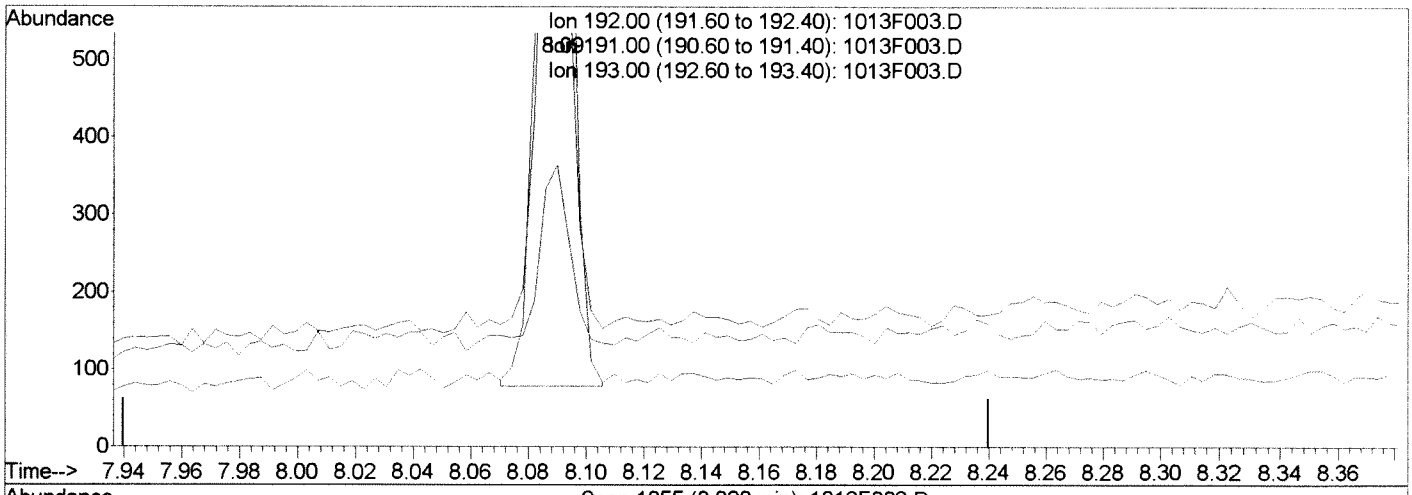
10/13/17

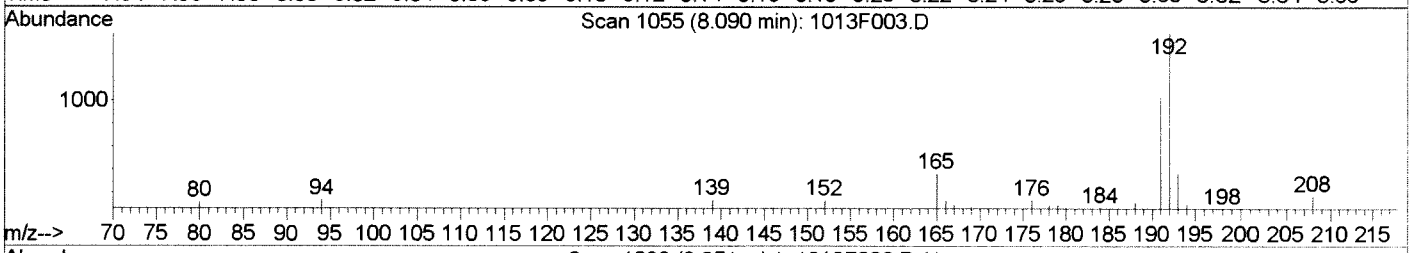
1013F003.D 101317PAH.M Fri Oct 13 12:07:56 2017

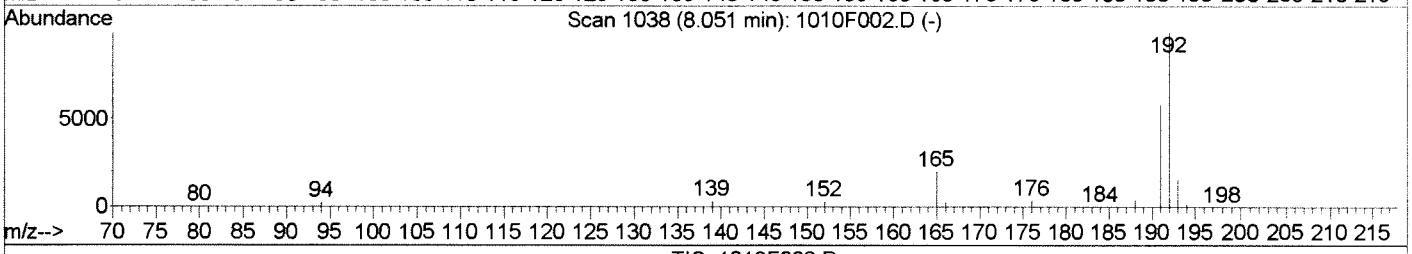
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\101317\1013F003.D Vial: 3
Acq On : 13 Oct 2017 8:48 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.004ug/mL | SVM55-65B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Multiple Level Calibration







TIC: 1013F003.D

(20) 1-Methylphenanthrene (T)

8.09min 3.97ng/ml m

response 1048

Ion	Exp%	Act%
192.00	100	100
191.00	57.20	64.75
193.00	15.60	22.95
0.00	0.00	0.00

Manual Integration:
After
BLC
10/13/17

1013F003.D 101317PAH.M Fri Oct 13 12:08:00 2017

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F004.D Vial: 4
Acq On : 13 Oct 2017 9:12 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.008ug/mL | SVM55-65C Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:33 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.78	136	47787	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.33	164	26925	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.56	188	56670	200.00	ng/ml	0.00
23) Chrysene-d12	10.08	240	71427	200.00	ng/ml	0.00
28) Perylene-d12	13.14	264	72673	200.00	ng/ml	-0.02
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.41	152	1080	9.19	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.92%		
13) Fluorene-d10	6.76	176	1554	8.55	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.85%		
22) Fluoranthene-d10	8.54	212	2675	7.75	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.78%		
25) Terphenyl-d14	8.90	244	2443	8.08	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.81%		
Target Compounds						Qvalue
2) Naphthalene	4.80	128	2273	8.65	ng/ml	99
4) 2-Methylnaphthalene	5.43	142	1555	9.17	ng/ml	96
5) 1-Methylnaphthalene	5.52	142	1429	9.50	ng/ml	95
6) Biphenyl	5.84	154	1941	9.21	ng/ml	98
7) 2,6-Dimethylnaphthalene	5.98	156	1395	9.13	ng/ml	95
9) Acenaphthylene	6.21	152	2555	8.05	ng/ml	99
10) Acenaphthene	6.35	154	1464	8.16	ng/ml	97
11) Dibenzofuran	6.50	168	2284	8.05	ng/ml	94
12) 2,3,5-Trimethylnaphthalene	6.68	170	1507	8.50	ng/ml	96
14) Fluorene	6.79	166	1801	8.02	ng/ml	98
16) Dibenzothiophene	7.47	184	2731	7.77	ng/ml	88
17) Phenanthrene	7.58	178	2843	8.45	ng/ml	98
18) Anthracene	7.62	178	2694	7.97	ng/ml	98
19) Carbazole	7.75	167	2438	8.02	ng/ml	98
20) 1-Methylphenanthrene	8.09	192	2024	7.75	ng/ml	94
21) Fluoranthene	8.56	202	3206	8.05	ng/ml	96
24) Pyrene	8.75	202	3351	7.49	ng/ml	86
26) Benz(a)anthracene	10.07	228	3447	7.98	ng/ml	99
27) Chrysene	10.12	228	3252	7.98	ng/ml	98
29) Benzo(b)fluoranthene	12.11	252	3468	7.65	ng/ml	98
30) Benzo(k)fluoranthene	12.17	252	3539	7.80	ng/ml	97
31) Benzo(e)pyrene	12.82	252	3615	8.31	ng/ml	99
32) Benzo(a)pyrene	12.96	252	3098	7.57	ng/ml	96
33) Perylene	13.21	252	3155	7.94	ng/ml	100
34) Indeno(1,2,3-cd)pyrene	15.38	276	2750	7.49	ng/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F004.D Vial: 4
Acq On : 13 Oct 2017 9:12 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.008ug/mL | SVM55-65C Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:33 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

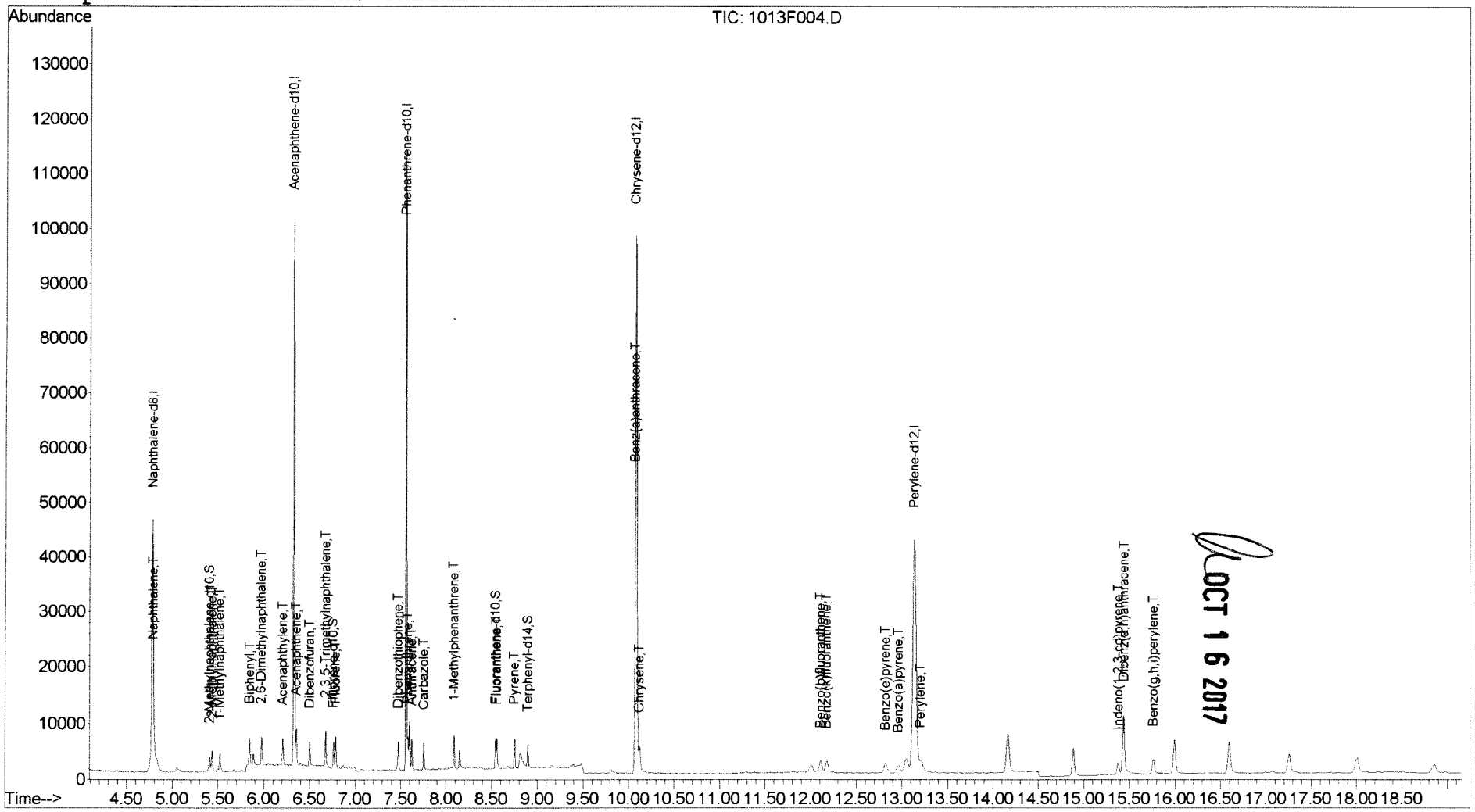
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	Dibenz(a,h)anthracene	15.44	278	3288	9.12	ng/ml#	1
36)	Benzo(g,h,i)perylene	15.76	276	3344	7.80	ng/ml	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F004.D Vial: 4
Acq On : 13 Oct 2017 9:12 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.008ug/mL | SVM55-65C Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07 2017 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 12:21:46 2017
Response via : Initial Calibration



OCT 16 2017

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F005.D Vial: 5
Acq On : 13 Oct 2017 9:36 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.02ug/mL | SVM55-65D Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:33 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.78	136	45890	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.33	164	25817	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.56	188	53248	200.00	ng/ml	0.00
23) Chrysene-d12	10.09	240	68796	200.00	ng/ml	0.00
28) Perylene-d12	13.13	264	70435	200.00	ng/ml	-0.02
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.41	152	2584	22.90	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	2.29%		
13) Fluorene-d10	6.76	176	3384	19.41	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	1.94%		
22) Fluoranthene-d10	8.54	212	6324	19.50	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	1.95%		
25) Terphenyl-d14	8.90	244	5674	19.49	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	1.95%		
Target Compounds						Qvalue
2) Naphthalene	4.80	128	5211	20.66	ng/ml	100
4) 2-Methylnaphthalene	5.43	142	3765	23.12	ng/ml	97
5) 1-Methylnaphthalene	5.52	142	3340	23.12	ng/ml	98
6) Biphenyl	5.84	154	4570	22.59	ng/ml	98
7) 2,6-Dimethylnaphthalene	5.98	156	3356	22.86	ng/ml	92
9) Acenaphthylene	6.21	152	6190	20.33	ng/ml	99
10) Acenaphthene	6.35	154	3463	20.13	ng/ml	98
11) Dibenzofuran	6.50	168	5412	19.90	ng/ml	94
12) 2,3,5-Trimethylnaphthalene	6.68	170	3486	20.50	ng/ml	97
14) Fluorene	6.79	166	4261	19.80	ng/ml	97
16) Dibenzothiophene	7.47	184	6528	19.76	ng/ml	89
17) Phenanthrene	7.58	178	6424	20.32	ng/ml	98
18) Anthracene	7.62	178	6388	20.11	ng/ml	99
19) Carbazole	7.75	167	5771	20.19	ng/ml	99
20) 1-Methylphenanthrene	8.09	192	4861	19.82	ng/ml	96
21) Fluoranthene	8.56	202	7645	20.42	ng/ml	96
24) Pyrene	8.75	202	8074	18.74	ng/ml	94
26) Benz(a)anthracene	10.07	228	8024	19.28	ng/ml	99
27) Chrysene	10.12	228	7563	19.28	ng/ml	100
29) Benzo(b)fluoranthene	12.11	252	8504	19.35	ng/ml	98
30) Benzo(k)fluoranthene	12.17	252	8388	19.08	ng/ml	99
31) Benzo(e)pyrene	12.82	252	8206	19.46	ng/ml	99
32) Benzo(a)pyrene	12.96	252	7628	19.23	ng/ml	99
33) Perylene	13.21	252	7307	18.97	ng/ml	100
34) Indeno(1,2,3-cd)pyrene	15.38	276	6657	18.72	ng/ml	99

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS14\DATA\101317\1013F005.D Vial: 5
Acq On : 13 Oct 2017 9:36 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.02ug/mL | SVM55-65D Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:33 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

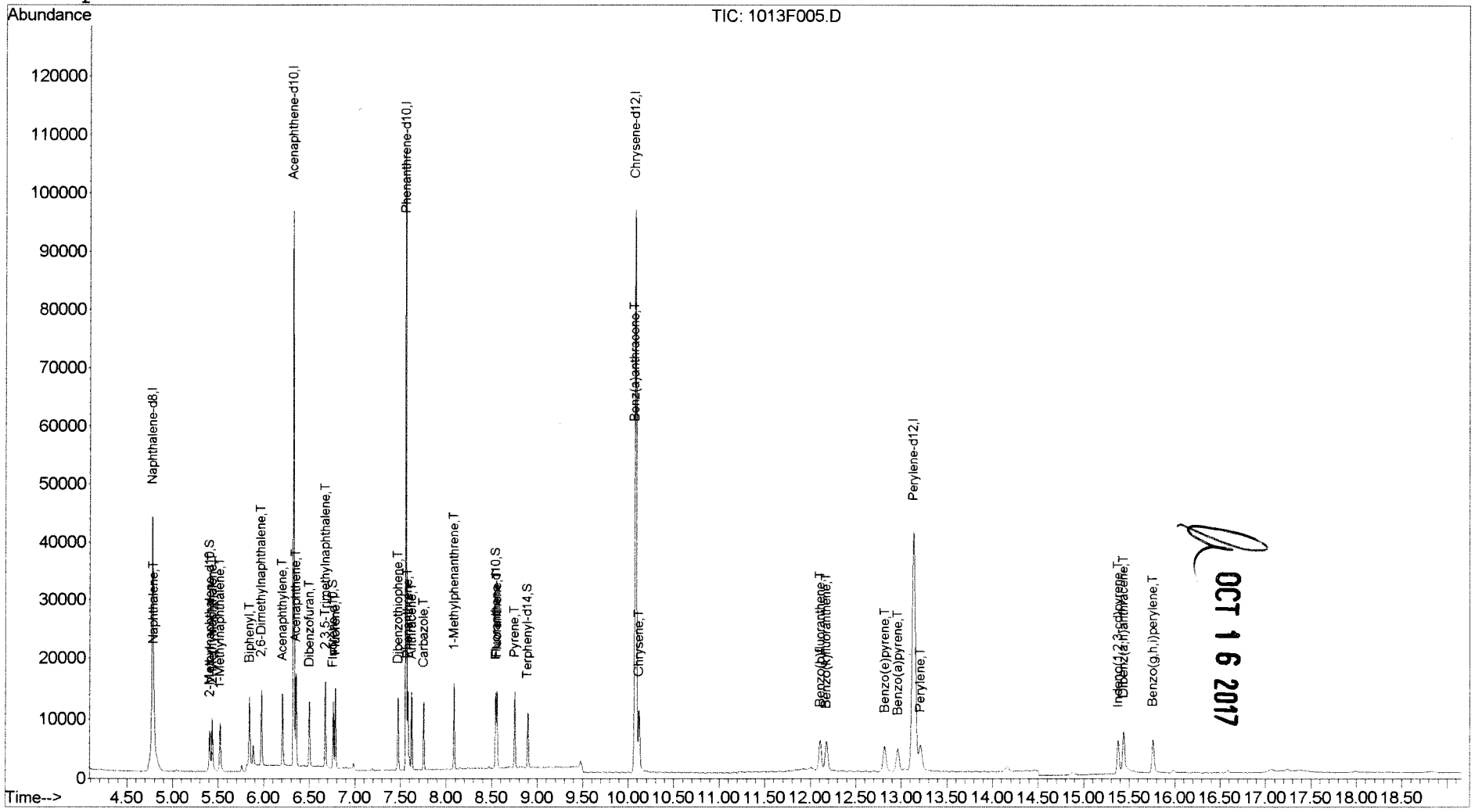
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	Dibenz(a,h)anthracene	15.44	278	6895	19.73	ng/ml	92
36)	Benzo(g,h,i)perylene	15.76	276	7540	18.16	ng/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F005.D Vial: 5
Acq On : 13 Oct 2017 9:36 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.02ug/mL | SVM55-65D Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07 2017 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 12:21:46 2017
Response via : Initial Calibration



OCT 16 2017

Data File : J:\MS14\DATA\101317\1013F006.D Vial: 6
Acq On : 13 Oct 2017 10:00 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.1ug/mL | SVM55-65E Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:34 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.78	136	47748	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.33	164	25479	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.56	188	53623	200.00	ng/ml	0.00
23) Chrysene-d12	10.08	240	69353	200.00	ng/ml	0.00
28) Perylene-d12	13.14	264	70834	200.00	ng/ml	-0.02
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.41	152	12390	105.51	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	10.55%		
13) Fluorene-d10	6.76	176	16004	93.01	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	9.30%		
22) Fluoranthene-d10	8.54	212	31793	97.37	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	9.74%		
25) Terphenyl-d14	8.90	244	27735	94.50	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	9.45%		
Target Compounds						Qvalue
2) Naphthalene	4.80	128	26255	100.03	ng/ml	99
4) 2-Methylnaphthalene	5.43	142	18453	108.90	ng/ml	98
5) 1-Methylnaphthalene	5.52	142	16156	107.46	ng/ml	96
6) Biphenyl	5.84	154	23328	110.82	ng/ml	97
7) 2,6-Dimethylnaphthalene	5.97	156	16147	105.72	ng/ml	94
9) Acenaphthylene	6.21	152	29548	98.34	ng/ml	100
10) Acenaphthene	6.35	154	16725m	98.52	ng/ml	
11) Dibenzofuran	6.50	168	26430	98.47	ng/ml	95
12) 2,3,5-Trimethylnaphthalene	6.68	170	16863	100.47	ng/ml	89
14) Fluorene	6.78	166	20820	98.01	ng/ml	99
16) Dibenzothiophene	7.47	184	32285	97.02	ng/ml	91
17) Phenanthrene	7.58	178	31290	98.30	ng/ml	99
18) Anthracene	7.62	178	31303	97.86	ng/ml	99
19) Carbazole	7.75	167	27927	97.03	ng/ml	99
20) 1-Methylphenanthrene	8.09	192	23701	95.94	ng/ml	99
21) Fluoranthene	8.56	202	37834	100.36	ng/ml	97
24) Pyrene	8.75	202	39428	90.78	ng/ml	97
26) Benz(a)anthracene	10.07	228	38880	92.67	ng/ml	100
27) Chrysene	10.12	228	37506	94.83	ng/ml	99
29) Benzo(b)fluoranthene	12.11	252	41932	94.87	ng/ml	100
30) Benzo(k)fluoranthene	12.18	252	41991	94.96	ng/ml	100
31) Benzo(e)pyrene	12.82	252	39862	93.98	ng/ml	99
32) Benzo(a)pyrene	12.96	252	37198	93.24	ng/ml	100
33) Perylene	13.21	252	36683	94.70	ng/ml	99
34) Indeno(1,2,3-cd)pyrene	15.38	276	33875	94.70	ng/ml	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F006.D Vial: 6
Acq On : 13 Oct 2017 10:00 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.1ug/mL | SVM55-65E Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:34 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

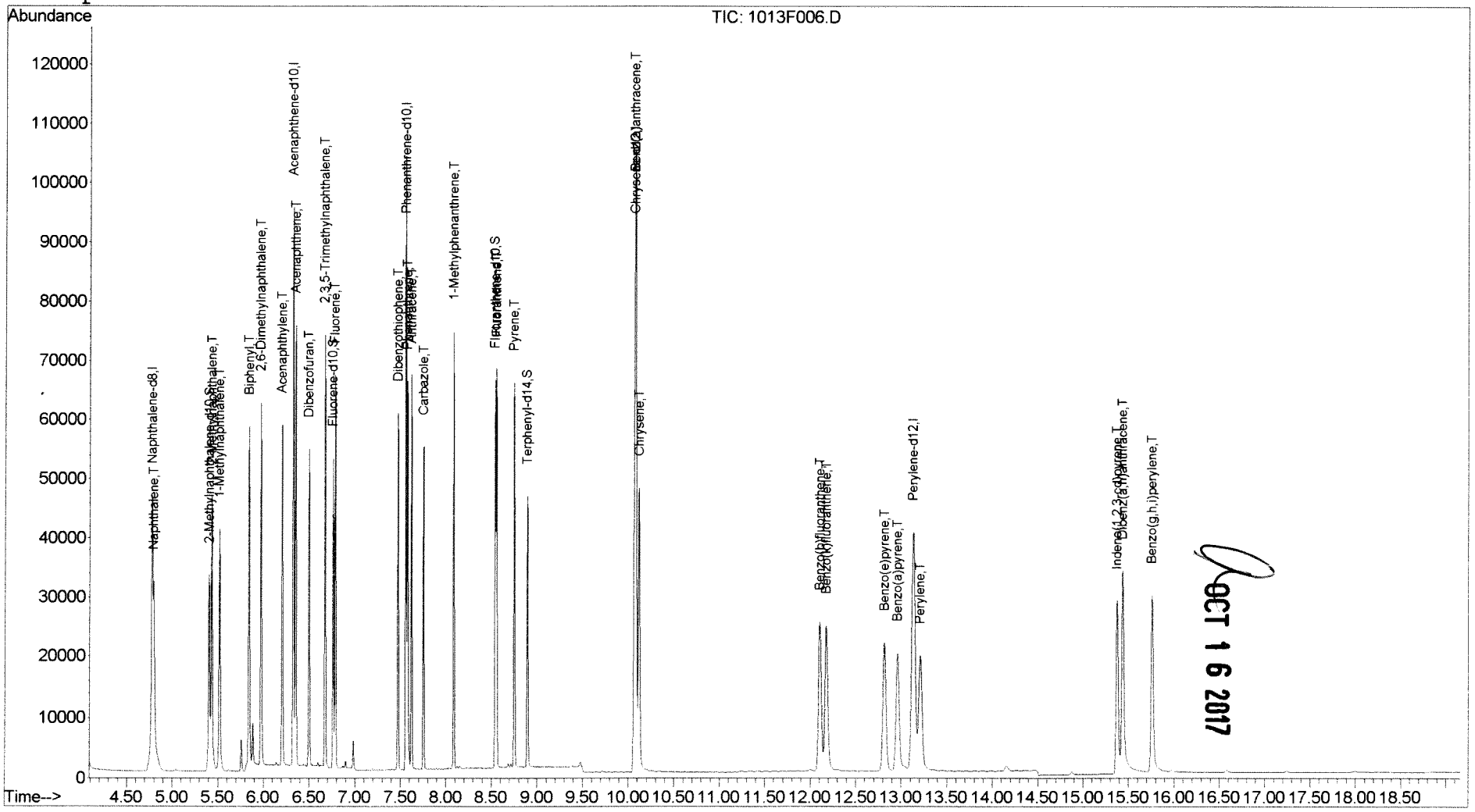
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	Dibenz(a,h)anthracene	15.44	278	33526	95.39	ng/ml	98
36)	Benzo(g,h,i)perylene	15.76	276	37956	90.89	ng/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F006.D Vial: 6
Acq On : 13 Oct 2017 10:00 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.1ug/mL | SVM55-65E Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:08 2017 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 12:21:46 2017
Response via : Initial Calibration

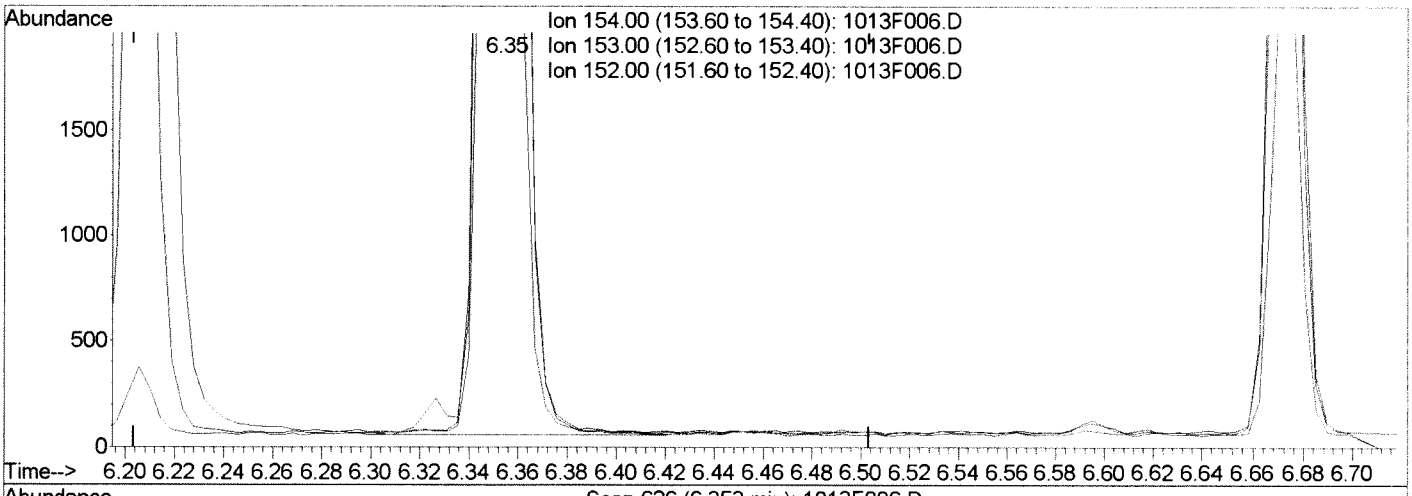


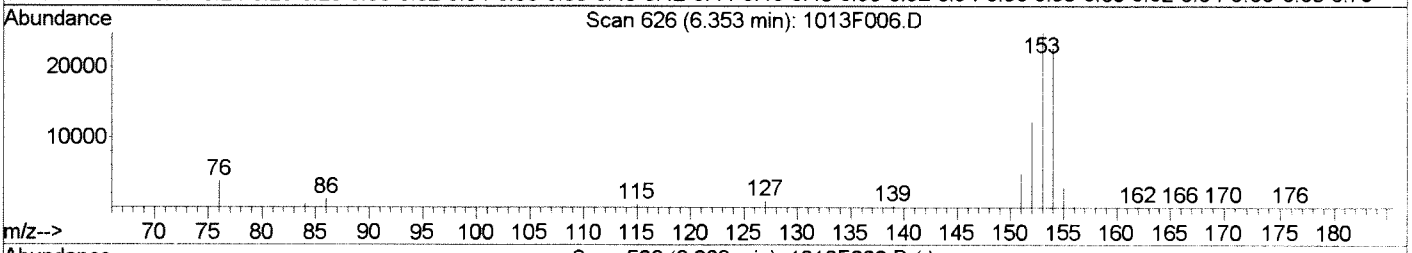
OCT 16 2017

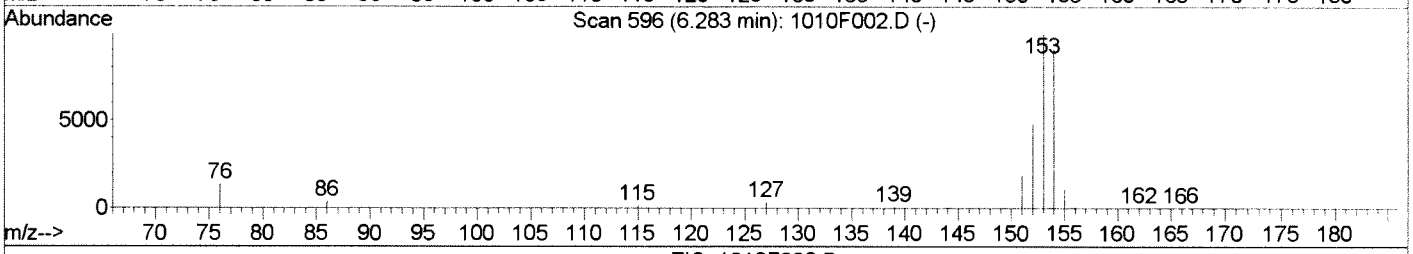
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\101317\1013F006.D Vial: 6
Acq On : 13 Oct 2017 10:00 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.1ug/mL | SVM55-65E Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Multiple Level Calibration







TIC: 1013F006.D

(10) Acenaphthene (T)

6.35min 99.42ng/ml

response 16878

Ion	Exp%	Act%
154.00	100	100
153.00	111.00	109.44
152.00	53.40	53.33
0.00	0.00	0.00

Manual Integration:

Before

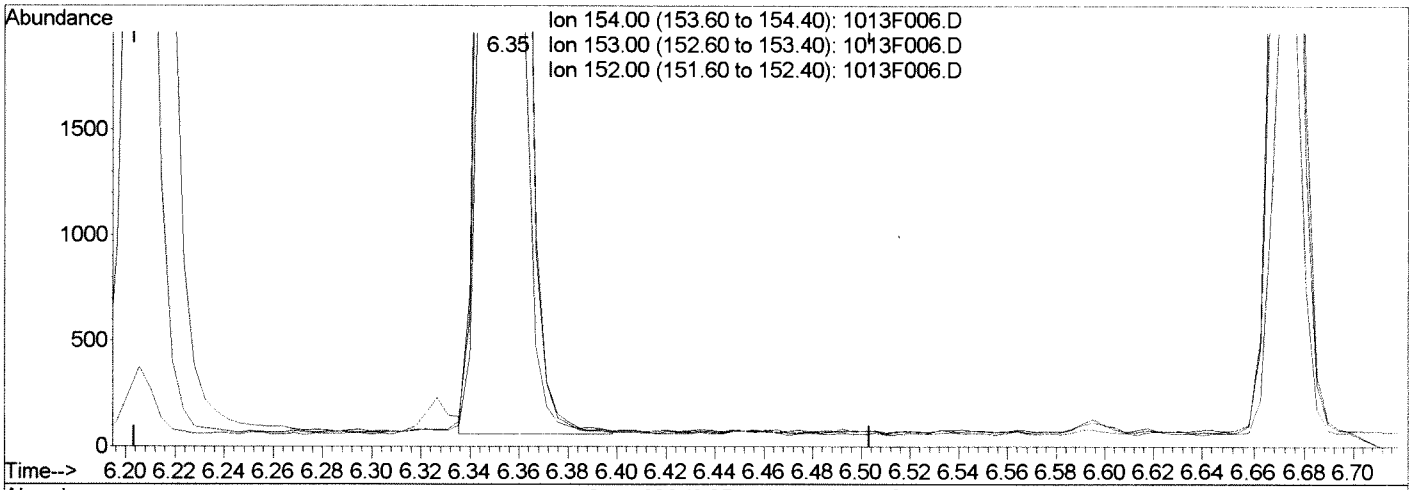
10/13/17

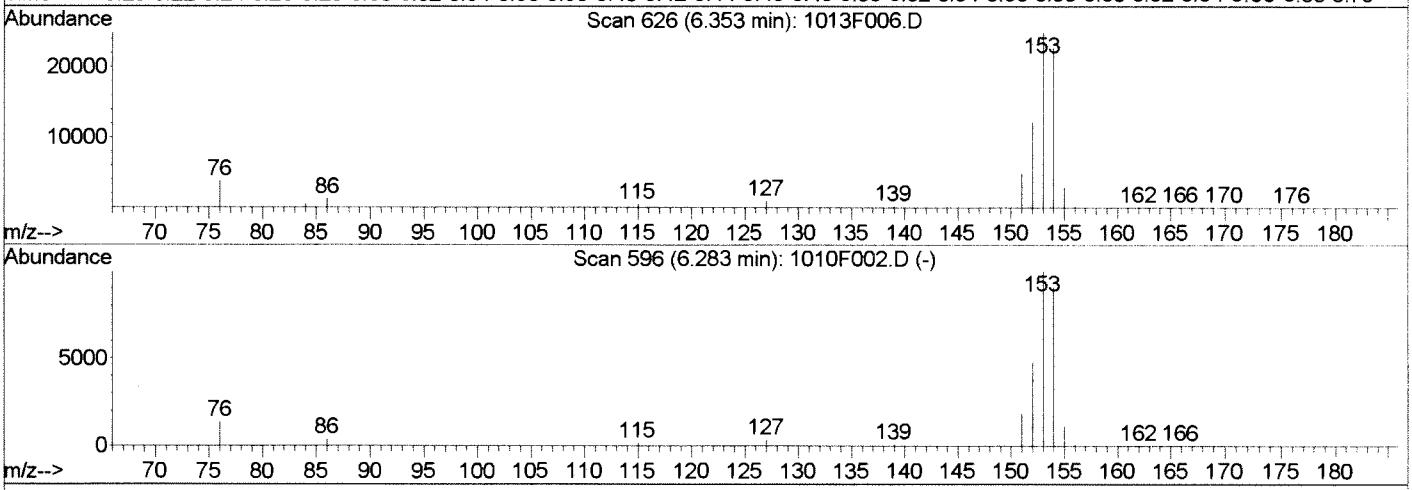
1013F006.D 101317PAH.M Fri Oct 13 12:08:55 2017

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\101317\1013F006.D Vial: 6
Acq On : 13 Oct 2017 10:00 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.1ug/mL | SVM55-65E Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:08 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Multiple Level Calibration





TIC: 1013F006.D

(10) Acenaphthene (T)
6.35min 98.52ng/ml m
response 16725

Ion	Exp%	Act%
154.00	100	100
153.00	111.00	109.45
152.00	53.40	53.50
0.00	0.00	0.00

Manual Integration:
After
IC-Overintegrated
10/13/17

1013F006.D 101317PAH.M Fri Oct 13 12:09:00 2017

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F007.D Vial: 7
Acq On : 13 Oct 2017 10:24 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.2ug/mL | SVM55-65F Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:34 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.78	136	48500	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.33	164	25401	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.56	188	53535	200.00	ng/ml	0.00
23) Chrysene-d12	10.08	240	68419	200.00	ng/ml	0.00
28) Perylene-d12	13.14	264	68823	200.00	ng/ml	-0.02
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.41	152	25094	210.38	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 21.04%			
13) Fluorene-d10	6.76	176	32197	187.68	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 18.77%			
22) Fluoranthene-d10	8.54	212	64319	197.31	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 19.73%			
25) Terphenyl-d14	8.89	244	55720	192.45	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 19.24%			
Target Compounds						Qvalue
2) Naphthalene	4.80	128	54069	202.80	ng/ml	100
4) 2-Methylnaphthalene	5.43	142	37240	216.35	ng/ml	97
5) 1-Methylnaphthalene	5.52	142	32316	211.62	ng/ml	98
6) Biphenyl	5.84	154	47969	224.35	ng/ml	97
7) 2,6-Dimethylnaphthalene	5.97	156	32805	211.45	ng/ml	96
9) Acenaphthylene	6.21	152	59904	199.99	ng/ml	100
10) Acenaphthene	6.35	154	33808	199.76	ng/ml	99
11) Dibenzofuran	6.50	168	53538	200.08	ng/ml	95
12) 2,3,5-Trimethylnaphthalene	6.68	170	34139	204.03	ng/ml	90
14) Fluorene	6.78	166	41926	197.97	ng/ml	98
16) Dibenzothiophene	7.47	184	66193	199.25	ng/ml	92
17) Phenanthrene	7.58	178	63430	199.60	ng/ml	99
18) Anthracene	7.62	178	64212	201.08	ng/ml	99
19) Carbazole	7.75	167	57184	199.02	ng/ml	98
20) 1-Methylphenanthrene	8.09	192	48375	196.14	ng/ml	99
21) Fluoranthene	8.56	202	75412	200.36	ng/ml	98
24) Pyrene	8.75	202	78923	184.19	ng/ml	98
26) Benz(a)anthracene	10.07	228	77758	187.86	ng/ml	100
27) Chrysene	10.12	228	74442	190.80	ng/ml	99
29) Benzo(b)fluoranthene	12.11	252	84426	196.58	ng/ml	99
30) Benzo(k)fluoranthene	12.18	252	84139	195.84	ng/ml	100
31) Benzo(e)pyrene	12.82	252	79124	192.00	ng/ml	99
32) Benzo(a)pyrene	12.96	252	73735	190.23	ng/ml	100
33) Perylene	13.21	252	72554	192.78	ng/ml	100
34) Indeno(1,2,3-cd)pyrene	15.38	276	66675	191.85	ng/ml	99

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS14\DATA\101317\1013F007.D Vial: 7
Acq On : 13 Oct 2017 10:24 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.2ug/mL | SVM55-65F Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:34 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

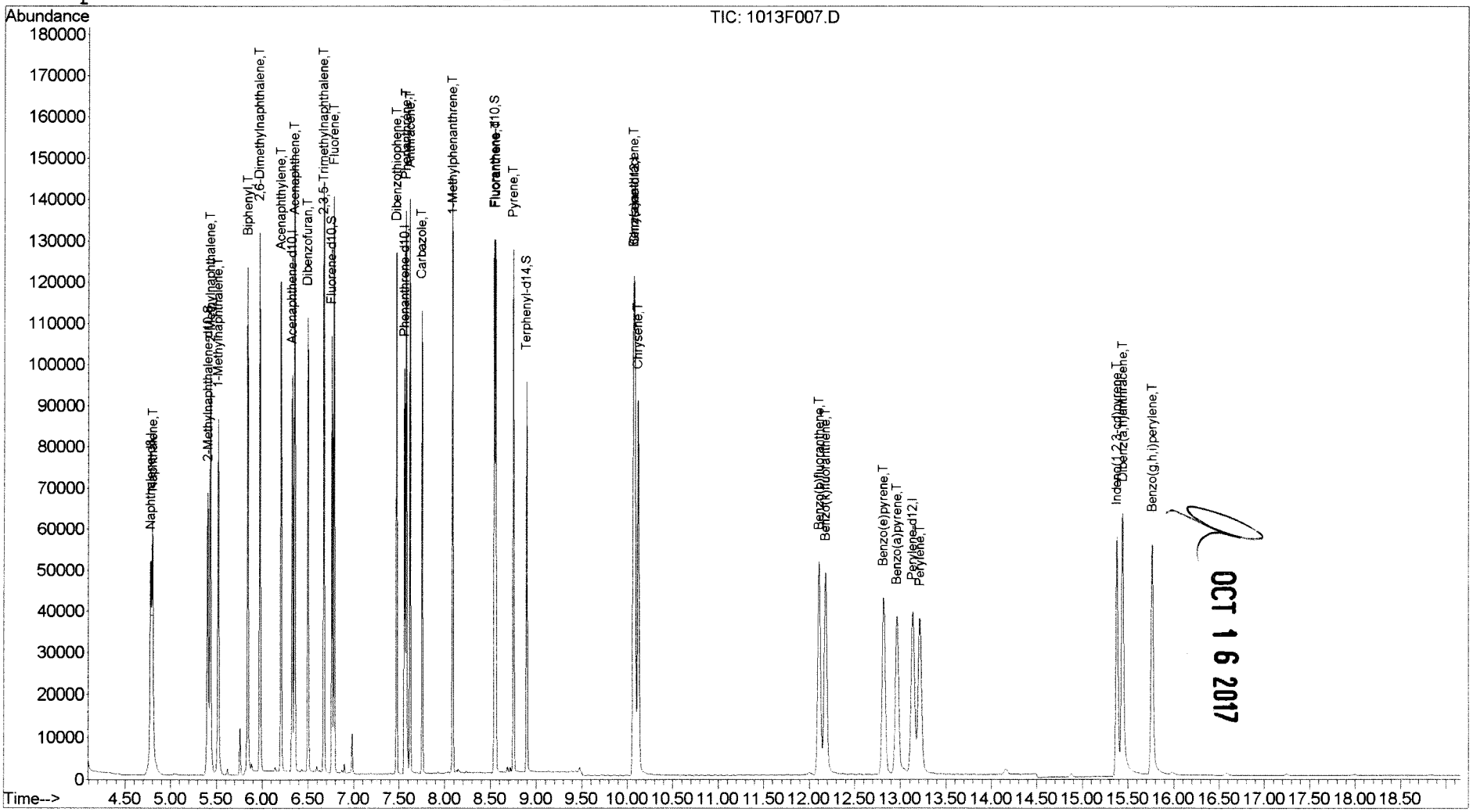
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	Dibenz(a,h)anthracene	15.44	278	66153	193.72	ng/ml	99
36)	Benzo(g,h,i)perylene	15.76	276	74465	183.53	ng/ml	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F007.D Vial: 7
Acq On : 13 Oct 2017 10:24 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.2ug/mL | SVM55-65F Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07 2017 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 12:21:46 2017
Response via : Initial Calibration



OCT 16 2017

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F008.D Vial: 8
Acq On : 13 Oct 2017 10:48 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.4ug/mL | SVM55-65G Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:34 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.78	136	45603m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.33	164	23247	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.56	188	49507	200.00	ng/ml	0.00
23) Chrysene-d12	10.08	240	64481	200.00	ng/ml	0.00
28) Perylene-d12	13.14	264	65038	200.00	ng/ml	-0.02
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.40	152	47750	425.76	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	42.58%		
13) Fluorene-d10	6.76	176	60987	388.45	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	38.84%		
22) Fluoranthene-d10	8.54	212	125900	417.64	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	41.76%		
25) Terphenyl-d14	8.89	244	107399	393.59	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	39.36%		
Target Compounds						Qvalue
2) Naphthalene	4.80	128	104721m	417.74	ng/ml	
4) 2-Methylnaphthalene	5.43	142	70048	432.81	ng/ml	97
5) 1-Methylnaphthalene	5.52	142	61086	425.42	ng/ml	97
6) Biphenyl	5.84	154	87341	434.44	ng/ml	98
7) 2,6-Dimethylnaphthalene	5.97	156	61925	424.50	ng/ml	96
9) Acenaphthylene	6.21	152	114707	418.43	ng/ml	100
10) Acenaphthene	6.35	154	63956	412.91	ng/ml	97
11) Dibenzofuran	6.50	168	101457	414.29	ng/ml	97
12) 2,3,5-Trimethylnaphthalene	6.68	170	65222	425.91	ng/ml	93
14) Fluorene	6.78	166	78823	406.68	ng/ml	99
16) Dibenzothiophene	7.47	184	127570	415.24	ng/ml	92
17) Phenanthrene	7.58	178	121006	411.76	ng/ml	99
18) Anthracene	7.62	178	121734	412.22	ng/ml	99
19) Carbazole	7.75	167	109164	410.83	ng/ml	99
20) 1-Methylphenanthrene	8.09	192	93592	410.36	ng/ml	99
21) Fluoranthene	8.56	202	146379	420.55	ng/ml	97
24) Pyrene	8.75	202	154422	382.41	ng/ml	97
26) Benz(a)anthracene	10.07	228	154204	395.29	ng/ml	99
27) Chrysene	10.12	228	144750	393.66	ng/ml	100
29) Benzo(b)fluoranthene	12.11	252	167112	411.76	ng/ml	100
30) Benzo(k)fluoranthene	12.18	252	165966	408.79	ng/ml	99
31) Benzo(e)pyrene	12.82	252	156411	401.62	ng/ml	100
32) Benzo(a)pyrene	12.97	252	146227	399.20	ng/ml	100
33) Perylene	13.22	252	143140	402.47	ng/ml	100
34) Indeno(1,2,3-cd)pyrene	15.38	276	132633	403.85	ng/ml	100

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS14\DATA\101317\1013F008.D Vial: 8
Acq On : 13 Oct 2017 10:48 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.4ug/mL | SVM55-65G Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:34 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

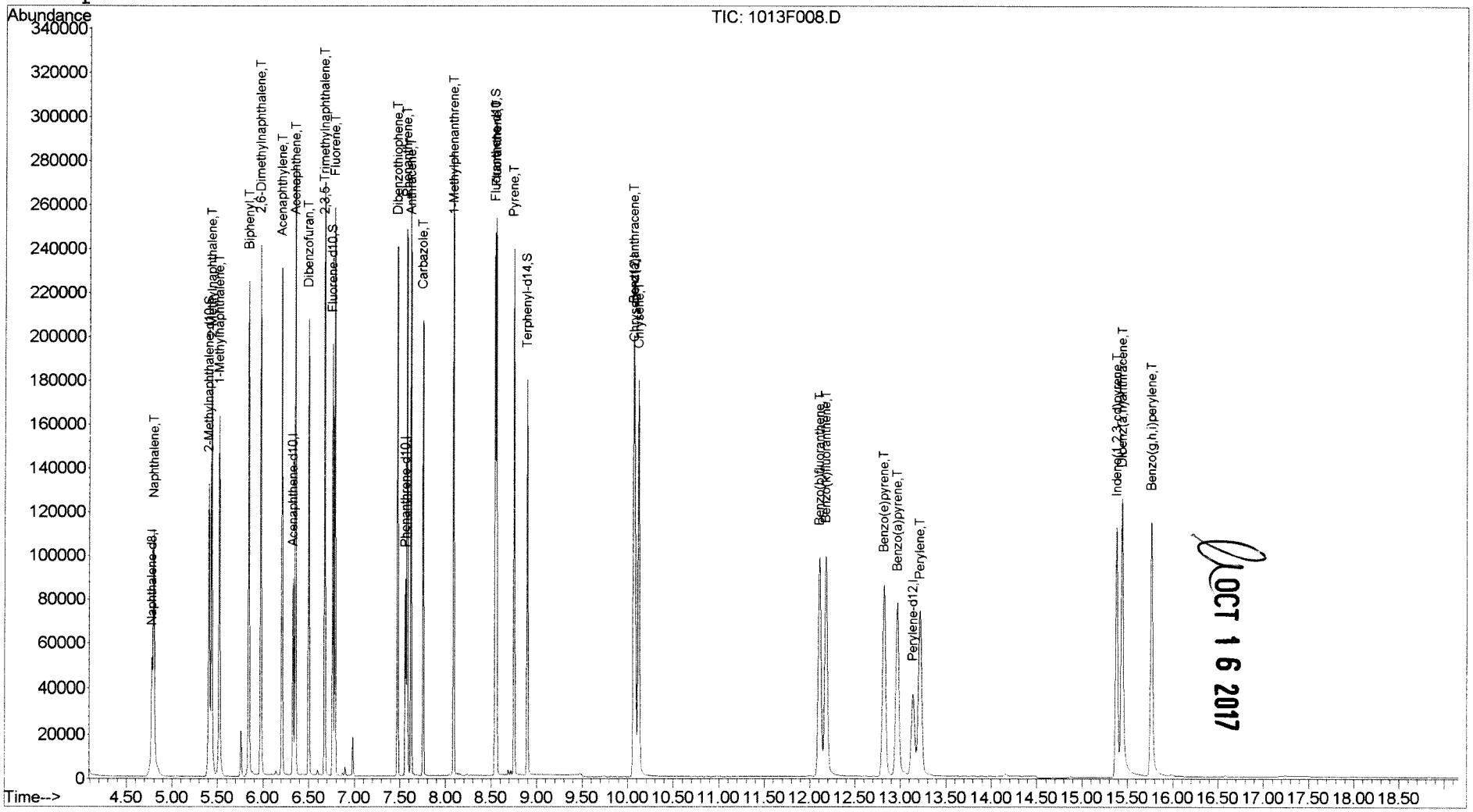
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	Dibenz(a,h)anthracene	15.44	278	126889	393.20	ng/ml	100
36)	Benzo(g,h,i)perylene	15.76	276	144822	377.70	ng/ml	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F008.D Vial: 8
Acq On : 13 Oct 2017 10:48 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.4ug/mL | SVM55-65G Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:09 2017 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 12:21:46 2017
Response via : Initial Calibration

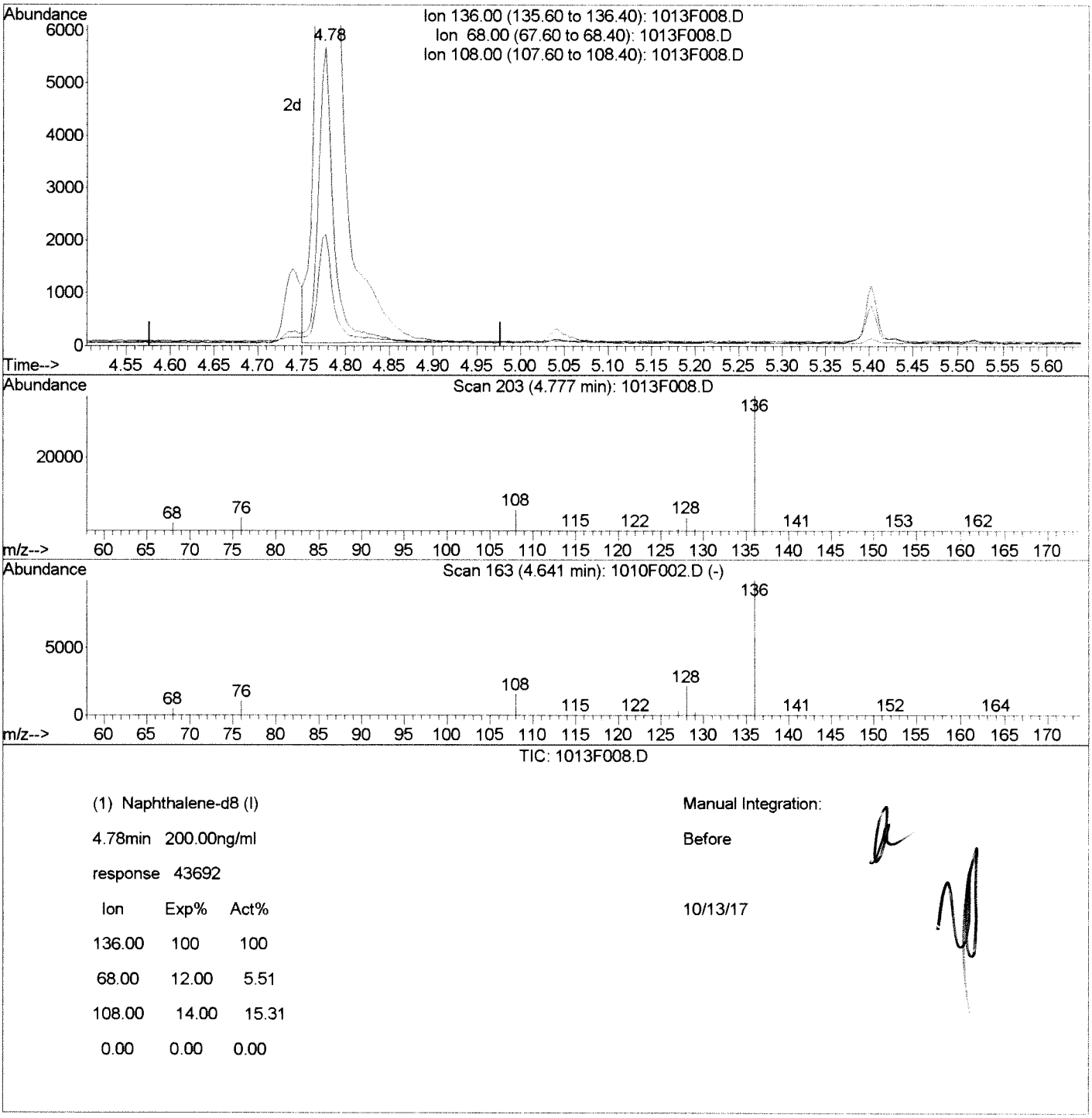


OCT 16 2017

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\101317\1013F008.D Vial: 8
Acq On : 13 Oct 2017 10:48 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.4ug/mL | SVM55-65G Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Multiple Level Calibration



TIC: 1013F008.D

(1) Naphthalene-d8 (I)

4.78min 200.00ng/ml

response 43692

Ion	Exp%	Act%
136.00	100	100
68.00	12.00	5.51
108.00	14.00	15.31
0.00	0.00	0.00

Manual Integration:

Before

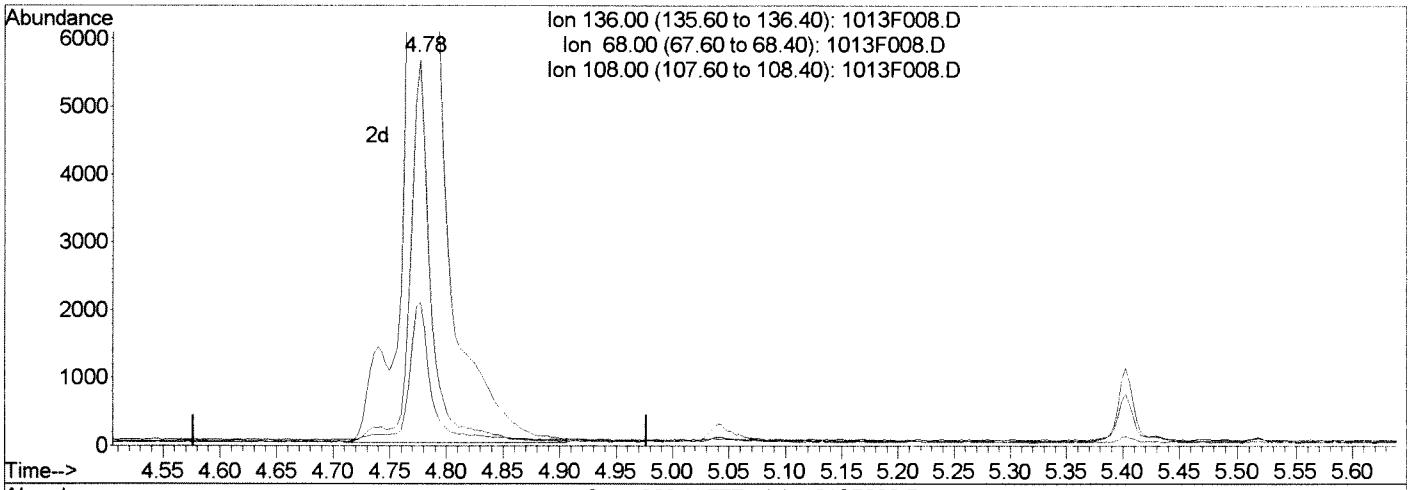
10/13/17

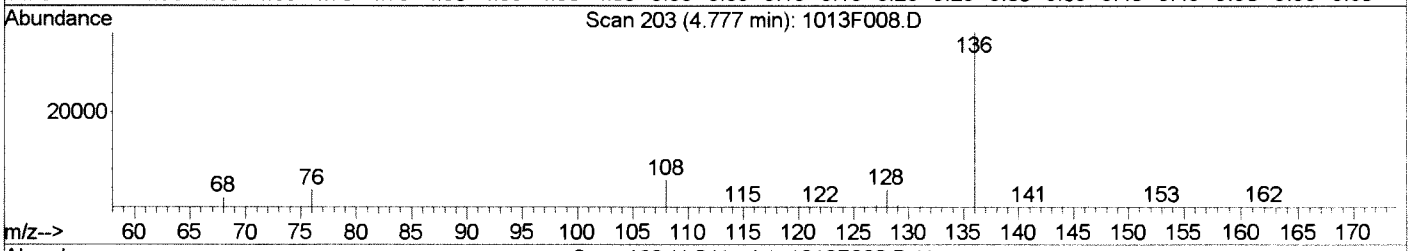
1013F008.D 101317PAH.M Fri Oct 13 12:09:35 2017

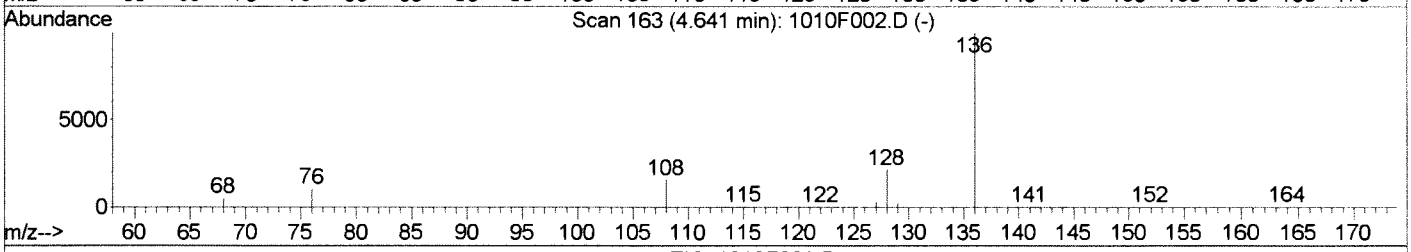
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\101317\1013F008.D Vial: 8
Acq On : 13 Oct 2017 10:48 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.4ug/mL | SVM55-65G Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:09 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Multiple Level Calibration







TIC: 1013F008.D

(1) Naphthalene-d8 (I)

4.78min 200.00ng/ml m

response 45603

Ion	Exp%	Act%
136.00	100	100
68.00	12.00	5.74
108.00	14.00	15.46
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

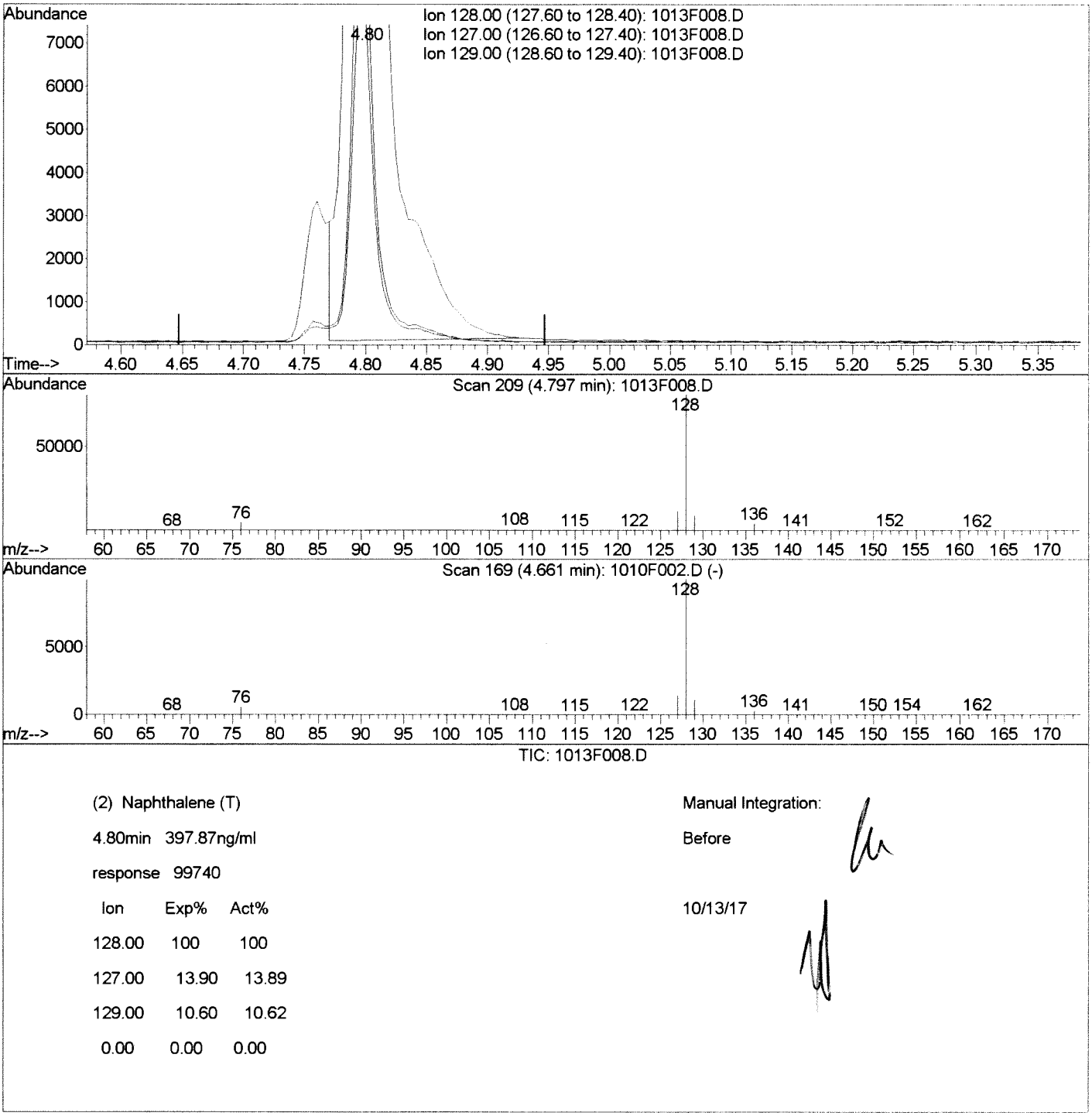
10/13/17

1013F008.D 101317PAH.M Fri Oct 13 12:09:39 2017

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\101317\1013F008.D Vial: 8
Acq On : 13 Oct 2017 10:48 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.4ug/mL | SVM55-65G Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:09 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Multiple Level Calibration



TIC: 1013F008.D

(2) Naphthalene (T)

4.80min 397.87ng/ml

response 99740

Ion	Exp%	Act%
128.00	100	100
127.00	13.90	13.89
129.00	10.60	10.62
0.00	0.00	0.00

Manual Integration:

Before

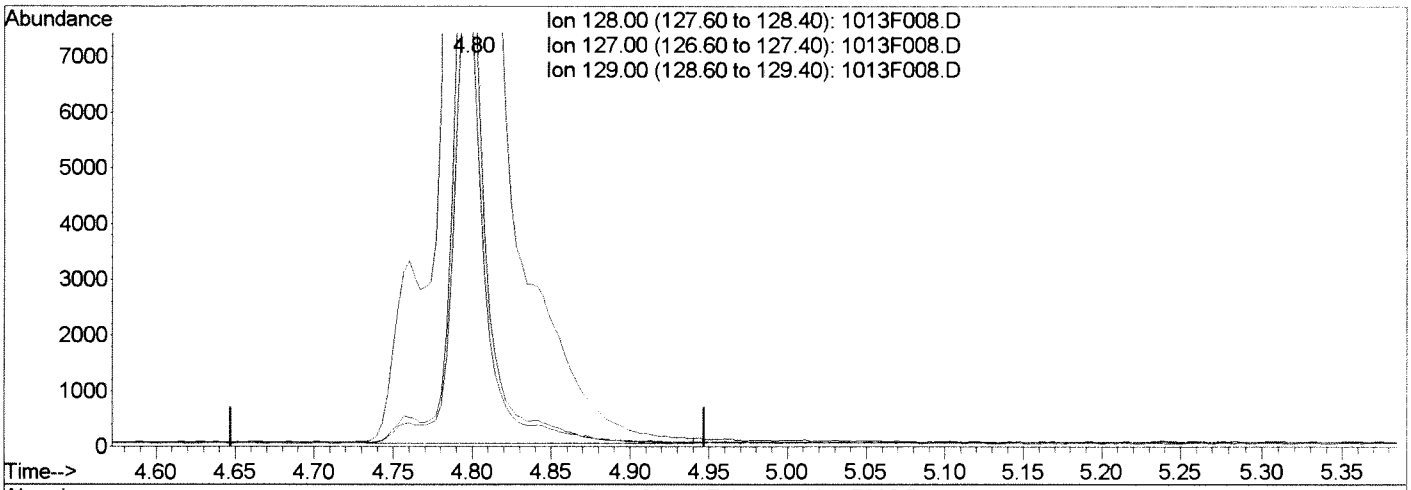
10/13/17

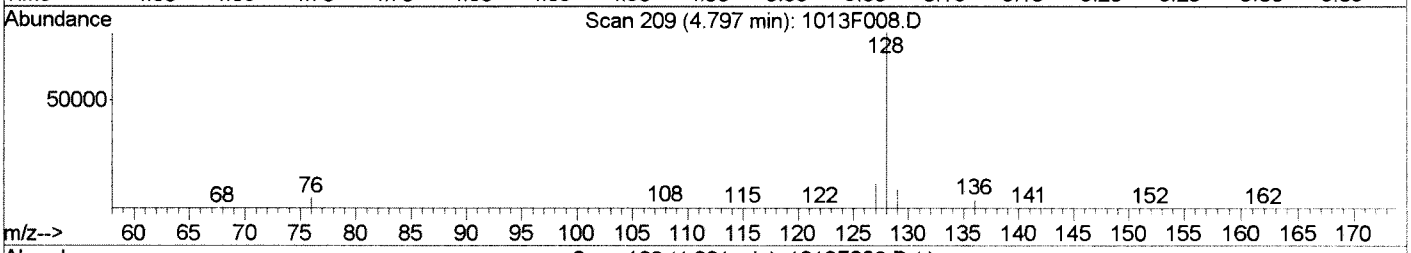
1013F008.D 101317PAH.M Fri Oct 13 12:09:44 2017

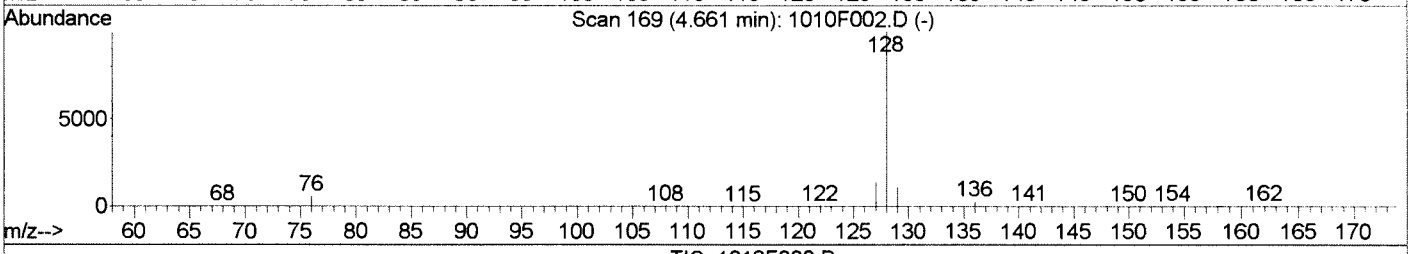
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\101317\1013F008.D Vial: 8
Acq On : 13 Oct 2017 10:48 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @0.4ug/mL | SVM55-65G Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:09 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Multiple Level Calibration







TIC: 1013F008.D

(2) Naphthalene (T)

4.80min 417.74ng/ml m

response 104721

Ion	Exp%	Act%
128.00	100	100
127.00	13.90	13.95
129.00	10.60	10.70
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

10/13/17

1013F008.D 101317PAH.M Fri Oct 13 12:09:49 2017

Data File : J:\MS14\DATA\101317\1013F009.D Vial: 9
Acq On : 13 Oct 2017 11:12 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @1.0ug/mL | SVM55-65H Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:35 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.78	136	44893m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.33	164	22087	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.56	188	46733	200.00	ng/ml	0.00
23) Chrysene-d12	10.09	240	62080	200.00	ng/ml	0.00
28) Perylene-d12	13.15	264	63664	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.41	152	115406	1045.29	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 104.53%			
13) Fluorene-d10	6.76	176	146387	981.36	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 98.14%			
22) Fluoranthene-d10	8.54	212	314020	1103.52	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 110.35%			
25) Terphenyl-d14	8.90	244	262243	998.22	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 99.82%			
Target Compounds						Qvalue
2) Naphthalene	4.80	128	253888m	1028.78	ng/ml	
4) 2-Methylnaphthalene	5.43	142	165388	1038.06	ng/ml	97
5) 1-Methylnaphthalene	5.52	142	145690	1030.68	ng/ml	96
6) Biphenyl	5.84	154	211872	1070.54	ng/ml	98
7) 2,6-Dimethylnaphthalene	5.97	156	149459	1040.75	ng/ml	94
9) Acenaphthylene	6.21	152	276890	1063.10	ng/ml	100
10) Acenaphthene	6.35	154	156228	1061.60	ng/ml	99
11) Dibenzofuran	6.50	168	244656	1051.50	ng/ml	98
12) 2,3,5-Trimethylnaphthalene	6.68	170	154811	1064.02	ng/ml	95
14) Fluorene	6.79	166	189351	1028.25	ng/ml	96
16) Dibenzothiophene	7.47	184	309062	1065.70	ng/ml	88
17) Phenanthrene	7.58	178	290732	1048.02	ng/ml	100
18) Anthracene	7.62	178	291437	1045.46	ng/ml	100
19) Carbazole	7.75	167	266657	1063.12	ng/ml	99
20) 1-Methylphenanthrene	8.09	192	230416	1070.23	ng/ml	100
21) Fluoranthene	8.56	202	357374	1087.70	ng/ml	99
24) Pyrene	8.76	202	385995	992.83	ng/ml	99
26) Benz(a)anthracene	10.07	228	382879	1019.45	ng/ml	100
27) Chrysene	10.12	228	354458	1001.25	ng/ml	99
29) Benzo(b)fluoranthene	12.12	252	413090	1039.82	ng/ml	100
30) Benzo(k)fluoranthene	12.19	252	397941	1001.32	ng/ml	100
31) Benzo(e)pyrene	12.83	252	383914	1007.07	ng/ml	100
32) Benzo(a)pyrene	12.98	252	361012	1006.84	ng/ml	100
33) Perylene	13.23	252	352121	1011.42	ng/ml	100
34) Indeno(1,2,3-cd)pyrene	15.39	276	319556	994.00	ng/ml	100

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS14\DATA\101317\1013F009.D Vial: 9
Acq On : 13 Oct 2017 11:12 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @1.0ug/mL | SVM55-65H Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:35 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

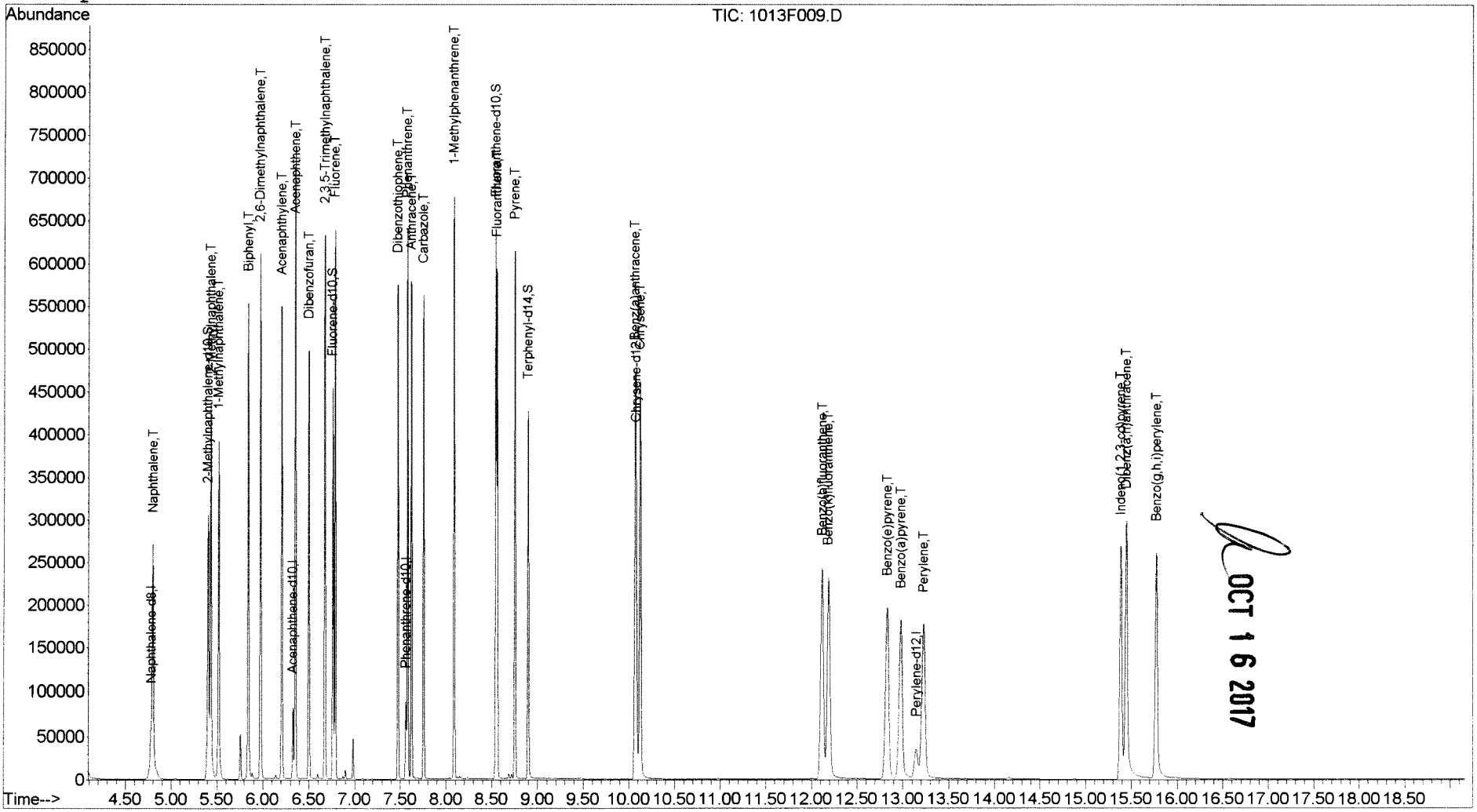
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	Dibenz(a,h)anthracene	15.45	278	310315	982.36	ng/ml	98
36)	Benzo(g,h,i)perylene	15.77	276	339534	904.62	ng/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F009.D Vial: 9
Acq On : 13 Oct 2017 11:12 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @1.0ug/mL | SVM55-65H Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:10 2017 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 12:21:46 2017
Response via : Initial Calibration

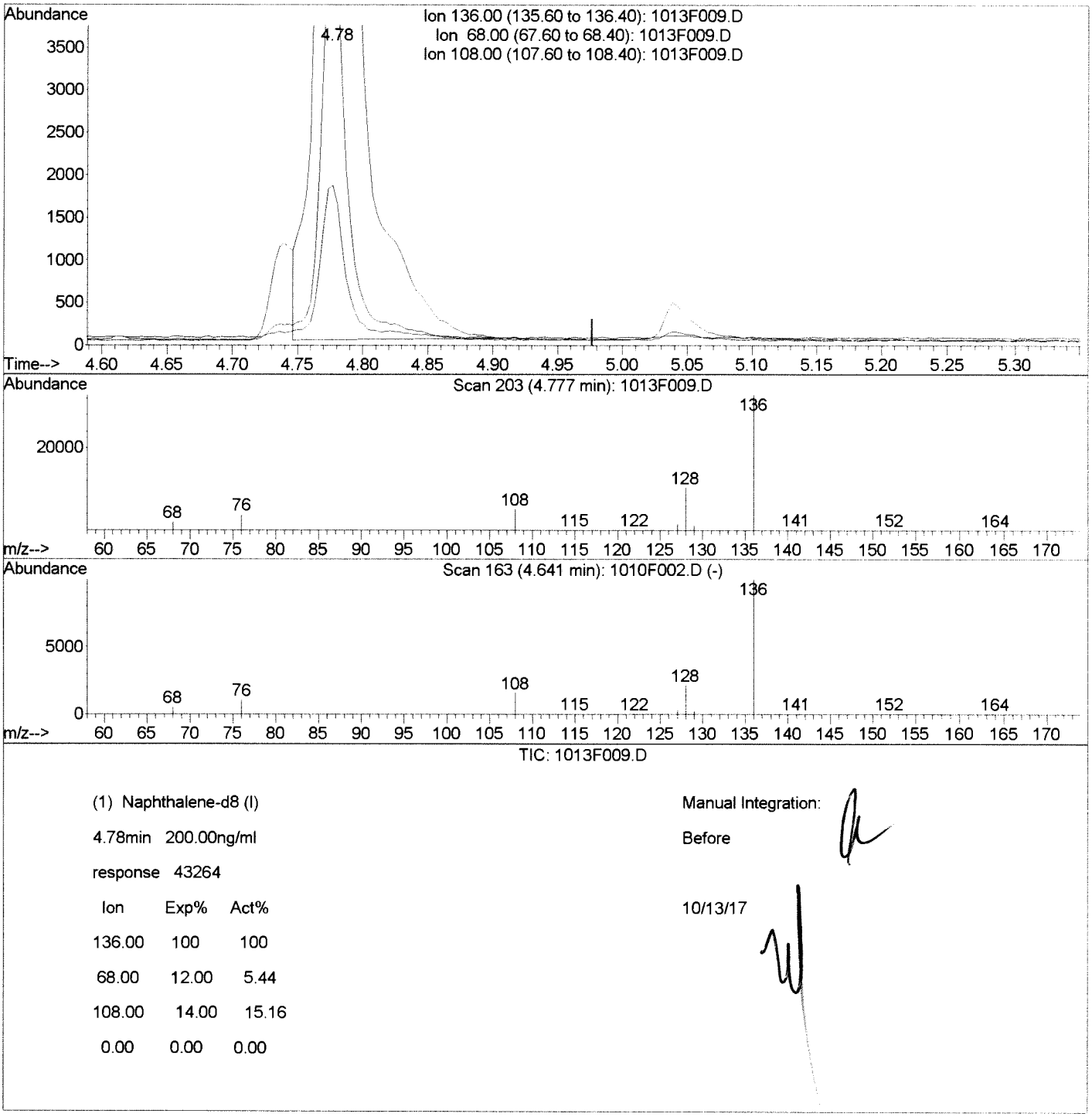


OCT 16 2017

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\101317\1013F009.D Vial: 9
Acq On : 13 Oct 2017 11:12 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @1.0ug/mL | SVM55-65H Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Multiple Level Calibration



TIC: 1013F009.D

(1) Naphthalene-d8 (I)

4.78min 200.00ng/ml

response 43264

Ion	Exp%	Act%
136.00	100	100
68.00	12.00	5.44
108.00	14.00	15.16
0.00	0.00	0.00

Manual Integration:

Before

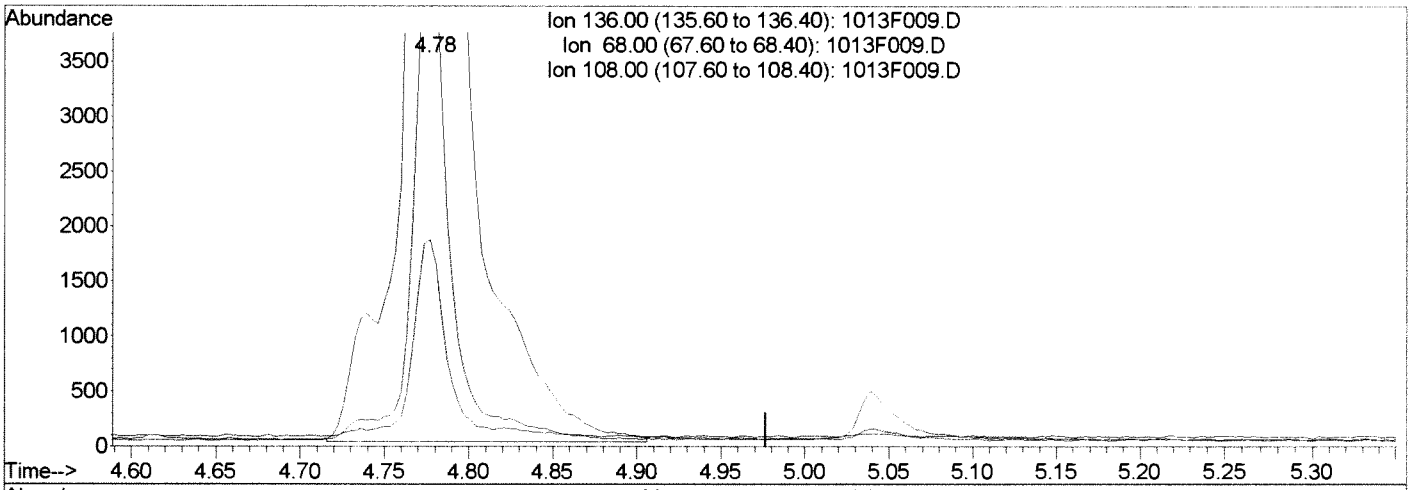
10/13/17

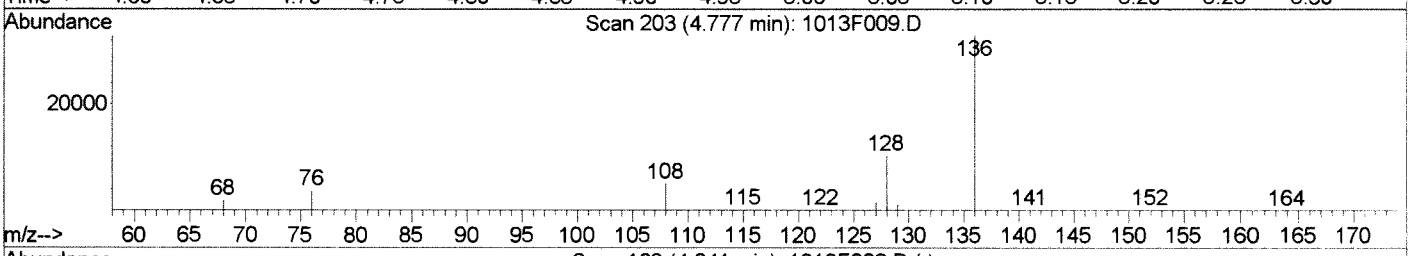
1013F009.D 101317PAH.M Fri Oct 13 12:10:10 2017

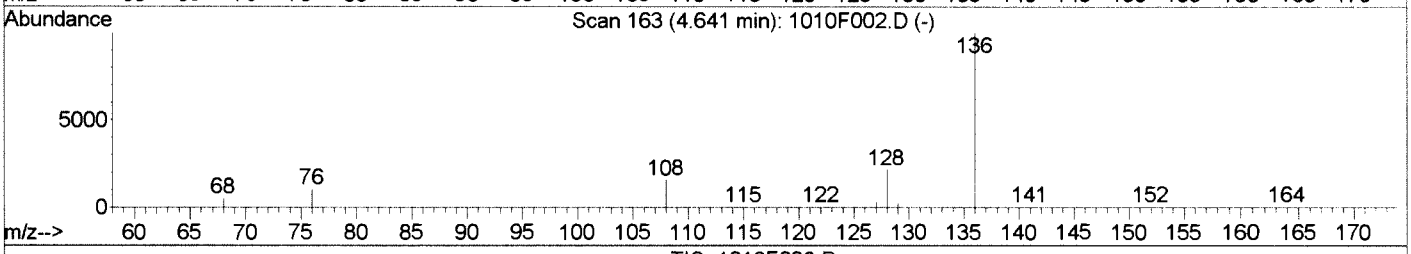
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\101317\1013F009.D Vial: 9
Acq On : 13 Oct 2017 11:12 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @1.0ug/mL | SVM55-65H Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:10 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Multiple Level Calibration







TIC: 1013F009.D

(1) Naphthalene-d8 (I)

4.78min 200.00ng/ml m

response 44893

Ion	Exp%	Act%
136.00	100	100
68.00	12.00	5.69
108.00	14.00	15.34
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

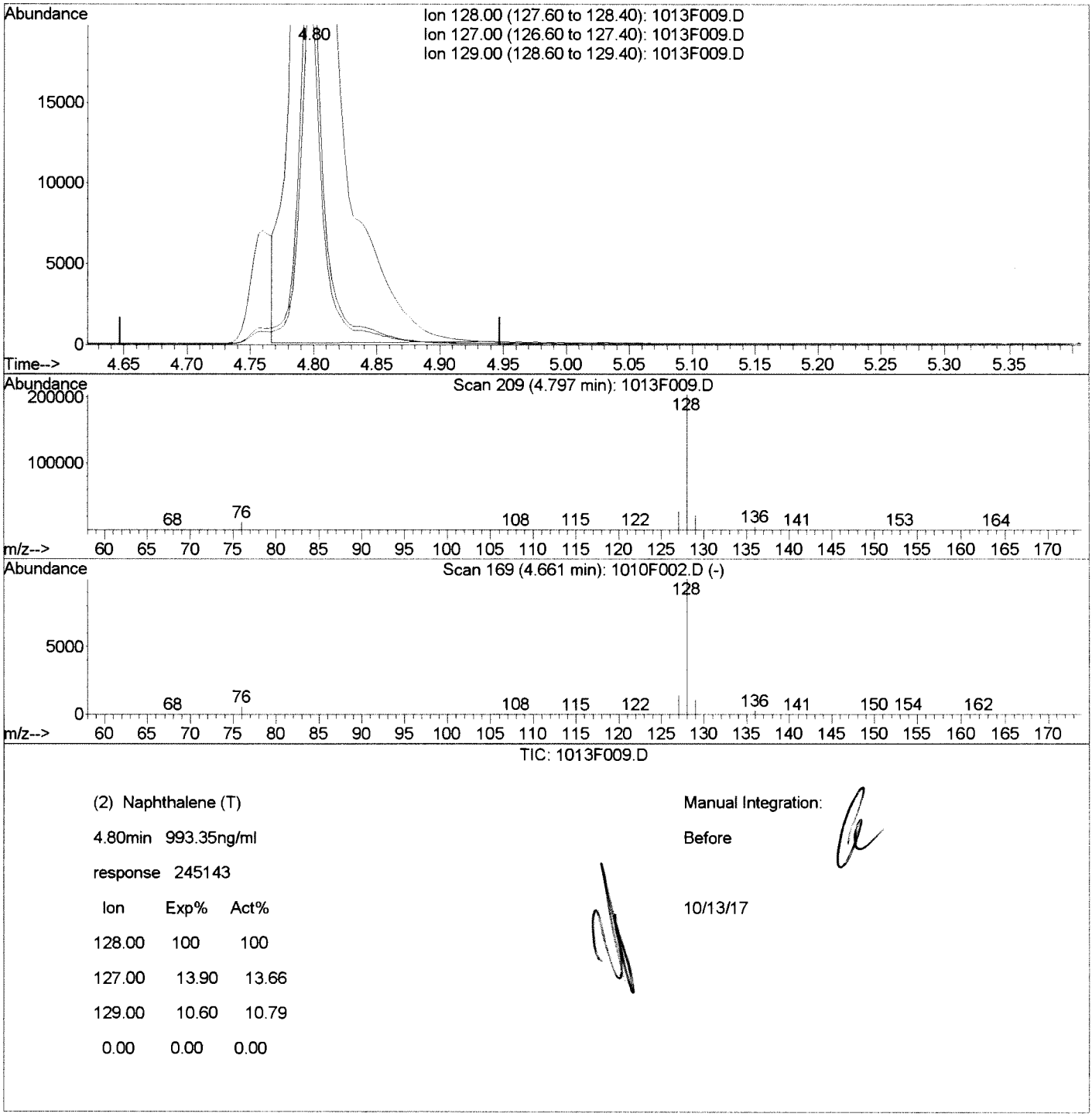
10/13/17

1013F009.D 101317PAH.M Fri Oct 13 12:10:14 2017

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\101317\1013F009.D Vial: 9
Acq On : 13 Oct 2017 11:12 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @1.0ug/mL | SVM55-65H Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:10 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Multiple Level Calibration



TIC: 1013F009.D

(2) Naphthalene (T)

4.80min 993.35ng/ml

response 245143

Ion	Exp%	Act%
128.00	100	100
127.00	13.90	13.66
129.00	10.60	10.79
0.00	0.00	0.00

Manual Integration:

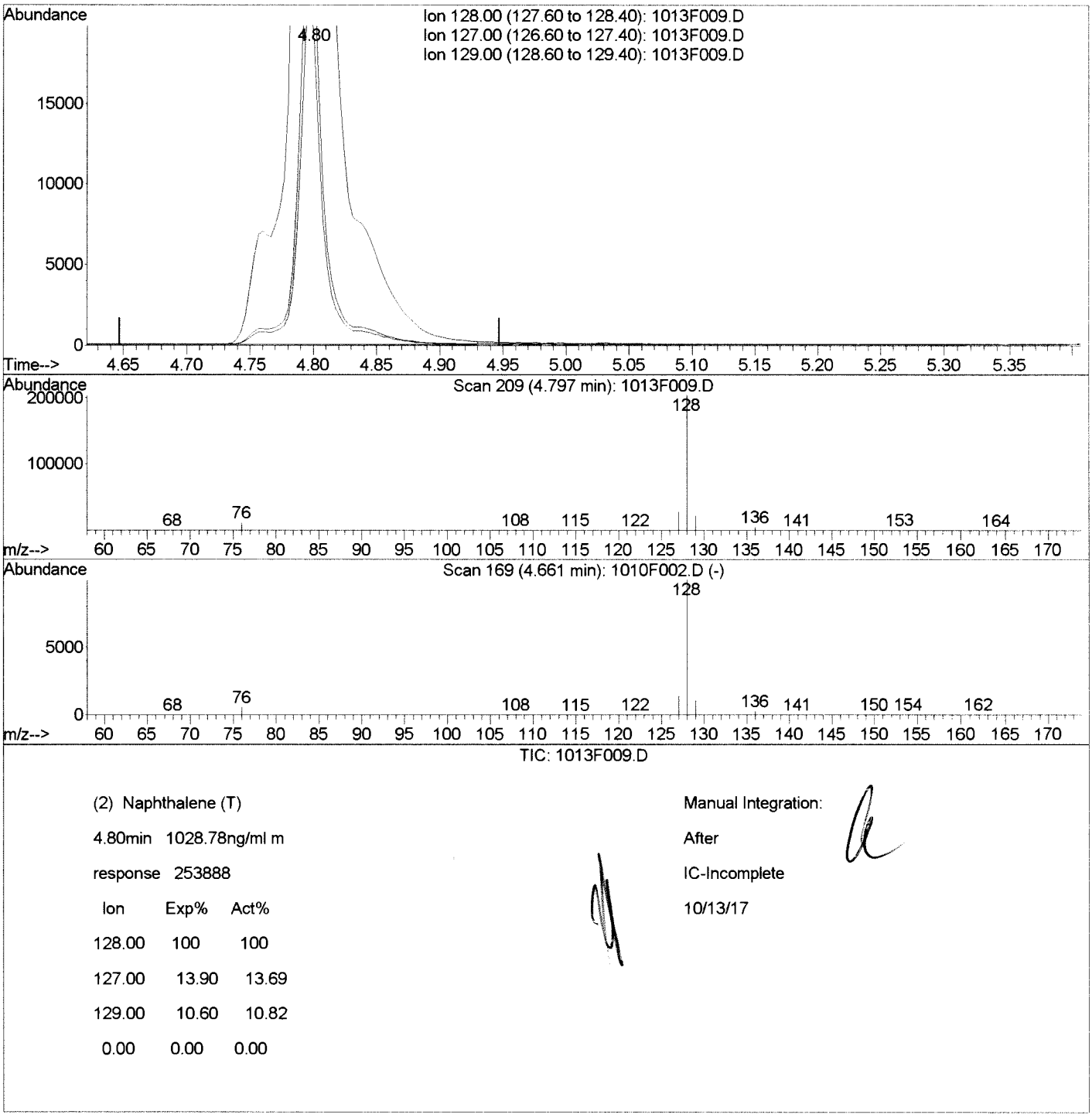
Before

10/13/17

1013F009.D 101317PAH.M Fri Oct 13 12:10:18 2017

Data File : J:\MS14\DATA\101317\1013F009.D Vial: 9
Acq On : 13 Oct 2017 11:12 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @1.0ug/mL | SVM55-65H Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:10 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Multiple Level Calibration



TIC: 1013F009.D

(2) Naphthalene (T)

4.80min 1028.78ng/ml m

response 253888

Ion	Exp%	Act%
128.00	100	100
127.00	13.90	13.69
129.00	10.60	10.82
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

10/13/17

1013F009.D 101317PAH.M Fri Oct 13 12:10:23 2017

Data File : J:\MS14\DATA\101317\1013F010.D Vial: 10
Acq On : 13 Oct 2017 11:37 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @1.6ug/mL | SVM55-65I Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:35 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.78	136	43722m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.33	164	21507	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.56	188	45685	200.00	ng/ml	0.00
23) Chrysene-d12	10.09	240	59649	200.00	ng/ml	0.00
28) Perylene-d12	13.15	264	61432	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.41	152	180131	1675.23	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 167.52%			
13) Fluorene-d10	6.76	176	235377	1620.50	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 162.05%			
22) Fluoranthene-d10	8.54	212	500574	1799.45	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 179.94%			
25) Terphenyl-d14	8.90	244	412340	1633.52	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 163.35%			
Target Compounds						Qvalue
2) Naphthalene	4.80	128	394076	1639.61	ng/ml	99
4) 2-Methylnaphthalene	5.43	142	258392	1665.24	ng/ml	96
5) 1-Methylnaphthalene	5.52	142	229035	1663.70	ng/ml	96
6) Biphenyl	5.84	154	339189	1759.75	ng/ml	99
7) 2,6-Dimethylnaphthalene	5.98	156	237233	1696.21	ng/ml	92
9) Acenaphthylene	6.21	152	439884	1734.45	ng/ml	99
10) Acenaphthene	6.35	154	249476	1740.96	ng/ml	98
11) Dibenzofuran	6.50	168	388315	1713.93	ng/ml	96
12) 2,3,5-Trimethylnaphthalene	6.68	170	236625	1670.20	ng/ml	98
14) Fluorene	6.79	166	301318	1680.40	ng/ml	97
16) Dibenzothiophene	7.48	184	491154	1732.44	ng/ml	96
17) Phenanthrene	7.58	178	463701	1709.88	ng/ml	99
18) Anthracene	7.62	178	463072	1699.27	ng/ml	99
19) Carbazole	7.75	167	428232	1746.45	ng/ml	98
20) 1-Methylphenanthrene	8.09	192	372850	1771.53	ng/ml	99
21) Fluoranthene	8.56	202	564616	1757.88	ng/ml	96
24) Pyrene	8.75	202	611625	1637.30	ng/ml	97
26) Benz(a)anthracene	10.07	228	597794	1656.55	ng/ml	100
27) Chrysene	10.13	228	558084	1640.69	ng/ml	99
29) Benzo(b)fluoranthene	12.12	252	643040	1677.45	ng/ml	99
30) Benzo(k)fluoranthene	12.20	252	624734	1629.10	ng/ml	99
31) Benzo(e)pyrene	12.84	252	597408	1624.04	ng/ml	99
32) Benzo(a)pyrene	12.99	252	564147	1630.53	ng/ml	100
33) Perylene	13.24	252	552577	1644.88	ng/ml	100
34) Indeno(1,2,3-cd)pyrene	15.40	276	497480	1603.67	ng/ml	99

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS14\DATA\101317\1013F010.D Vial: 10
Acq On : 13 Oct 2017 11:37 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @1.6ug/mL | SVM55-65I Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07:35 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

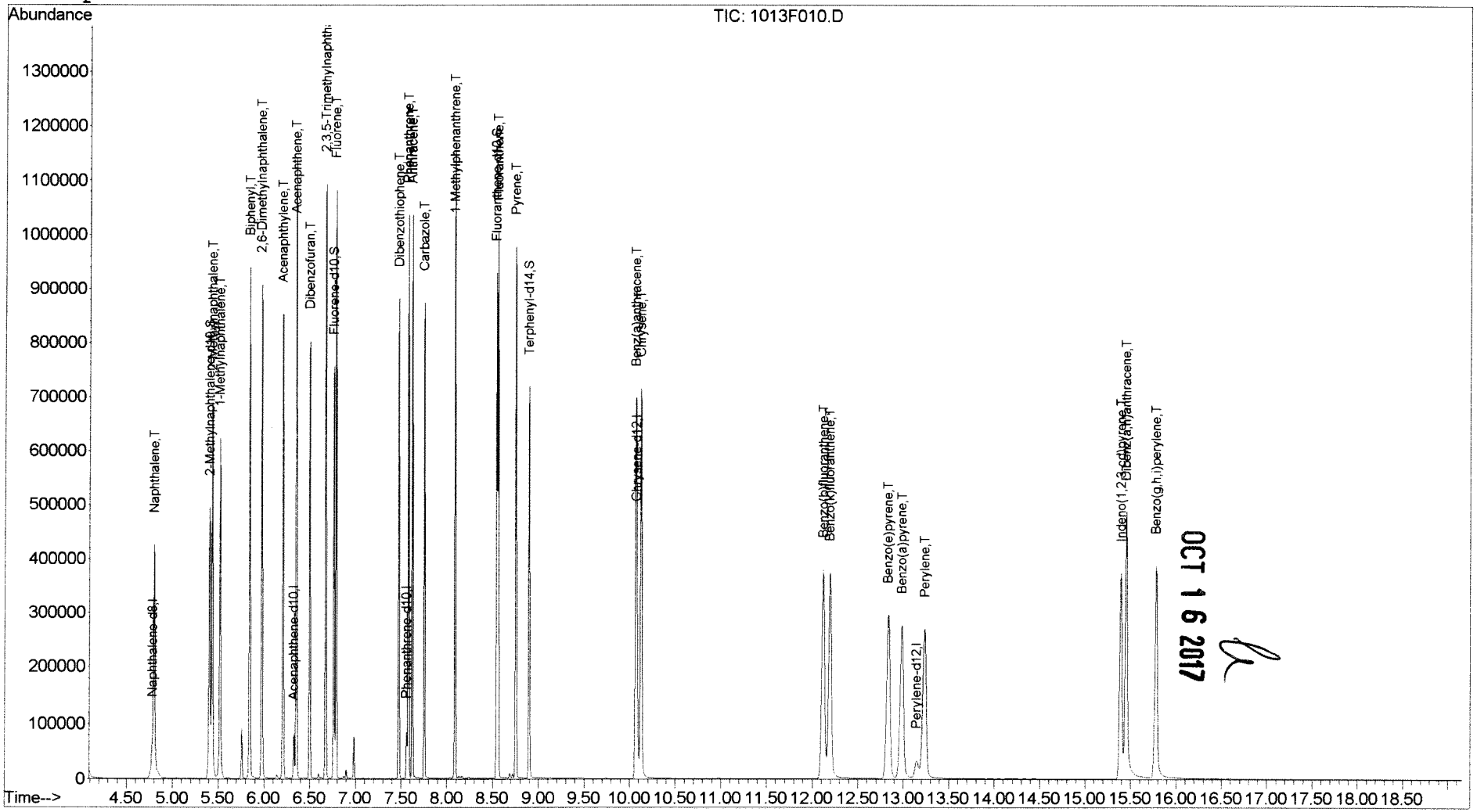
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	Dibenz(a,h)anthracene	15.45	278	488116	1601.36	ng/ml	98
36)	Benzo(g,h,i)perylene	15.78	276	518975	1432.94	ng/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F010.D Vial: 10
Acq On : 13 Oct 2017 11:37 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @1.6ug/mL | SVM55-65I Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:10 2017 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 12:21:46 2017
Response via : Initial Calibration

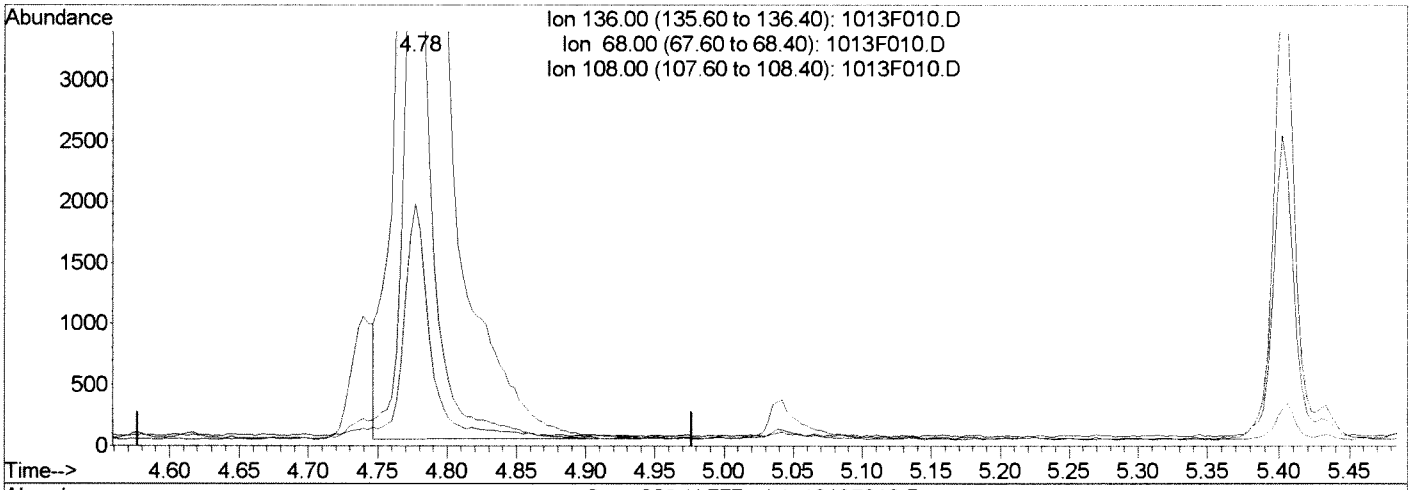


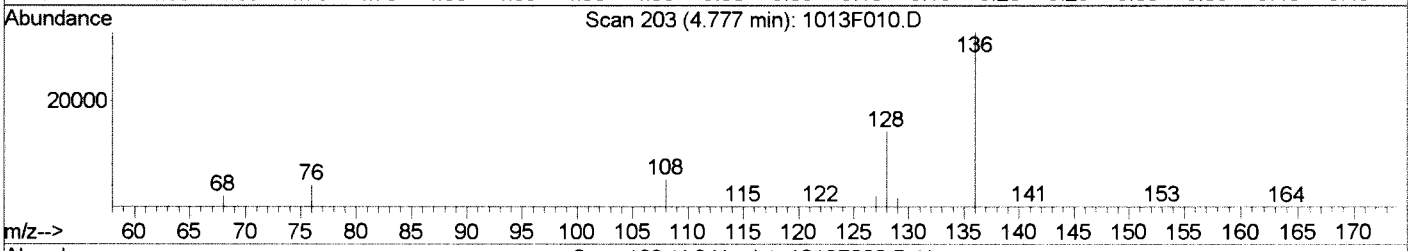
OCT 16 2017

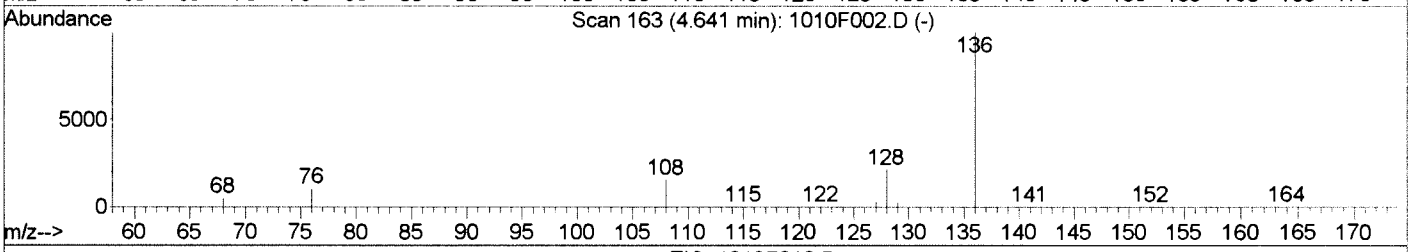
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\101317\1013F010.D Vial: 10
Acq On : 13 Oct 2017 11:37 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @1.6ug/mL | SVM55-65I Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:07 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Multiple Level Calibration







TIC: 1013F010.D

(1) Naphthalene-d8 (I)

4.78min 200.00ng/ml

response 42569

Ion	Exp%	Act%
136.00	100	100
68.00	12.00	5.75
108.00	14.00	15.32
0.00	0.00	0.00

Manual Integration:

Before

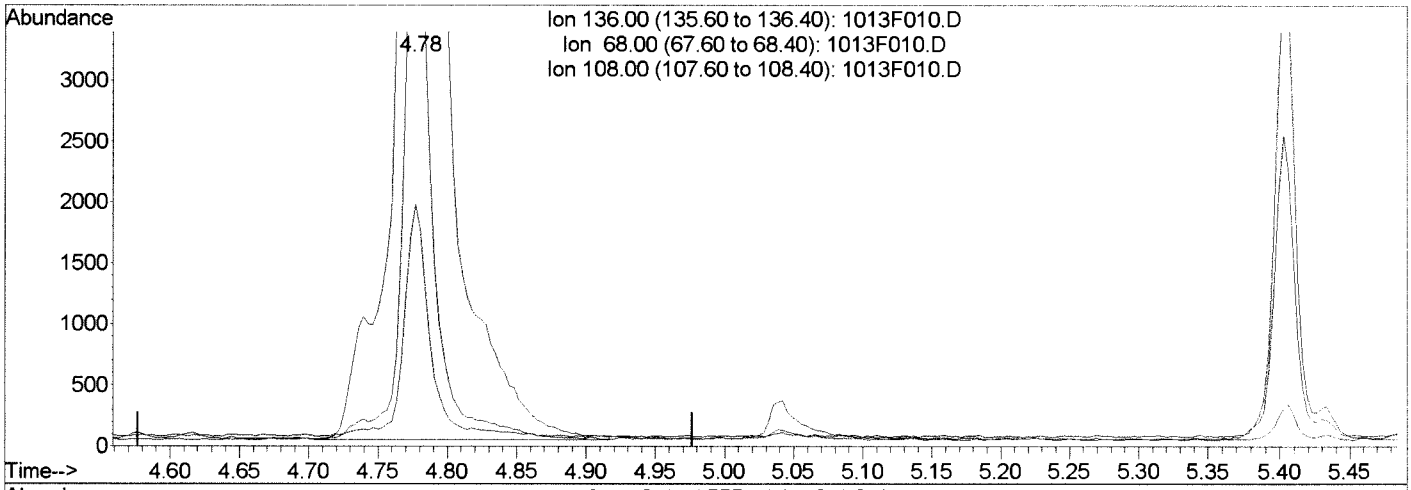
10/13/17

1013F010.D 101317PAH.M Fri Oct 13 12:10:41 2017

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\101317\1013F010.D Vial: 10
Acq On : 13 Oct 2017 11:37 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @1.6ug/mL | SVM55-65I Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:10 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 09:35:08 2017
Response via : Multiple Level Calibration



TIC: 1013F010.D

(1) Naphthalene-d8 (I)

4.78min 200.00ng/ml m

response 43722

Ion	Exp%	Act%
136.00	100	100
68.00	12.00	5.99
108.00	14.00	15.49
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

10/13/17

1013F010.D 101317PAH.M Fri Oct 13 12:10:46 2017

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F011.D Vial: 11
Acq On : 13 Oct 2017 12:01 pm Operator: LWeiskopf
Sample : SIM-PAH ICAL @2.0ug/mL | SVM55-65J Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:21:11 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 12:12:55 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.78	136	45212	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.33	164	22178	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.56	188	47390	200.00	ng/ml	0.00
23) Chrysene-d12	10.09	240	60996	200.00	ng/ml	0.00
28) Perylene-d12	13.15	264	62984	200.00	ng/ml	0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.41	152	232234	1905.86	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 190.59%			
13) Fluorene-d10	6.76	176	305978	2018.91	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 201.89%			
22) Fluoranthene-d10	8.55	212	645892	2192.28	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 219.23%			
25) Terphenyl-d14	8.90	244	527242	2056.50	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 205.65%			
Target Compounds						Qvalue
2) Naphthalene	4.80	128	508152	1969.80	ng/ml	99
4) 2-Methylnaphthalene	5.44	142	332821	1839.74	ng/ml	96
5) 1-Methylnaphthalene	5.52	142	296025	1852.62	ng/ml	98
6) Biphenyl	5.84	154	446540	1963.71	ng/ml	99
7) 2,6-Dimethylnaphthalene	5.98	156	310330	1915.17	ng/ml	93
9) Acenaphthylene	6.21	152	569057	2109.66	ng/ml	100
10) Acenaphthene	6.35	154	323337	2134.64	ng/ml	99
11) Dibenzofuran	6.50	168	503247	2111.81	ng/ml	93
12) 2,3,5-Trimethylnaphthalene	6.68	170	317998	2068.07	ng/ml	96
14) Fluorene	6.79	166	392445	2097.92	ng/ml	97
16) Dibenzothiophene	7.48	184	645944	2170.03	ng/ml	97
17) Phenanthrene	7.58	178	609842	2085.05	ng/ml	99
18) Anthracene	7.62	178	606088	2103.21	ng/ml	99
19) Carbazole	7.75	167	557870	2140.33	ng/ml	98
20) 1-Methylphenanthrene	8.09	192	487355	2206.18	ng/ml	100
21) Fluoranthene	8.56	202	734563	2119.44	ng/ml	94
24) Pyrene	8.76	202	788761	2161.66	ng/ml	94
26) Benz(a)anthracene	10.07	228	760087	2075.08	ng/ml	100
27) Chrysene	10.13	228	715908	2092.22	ng/ml	99
29) Benzo(b)fluoranthene	12.13	252	815756	2058.20	ng/ml	99
30) Benzo(k)fluoranthene	12.20	252	791073	2028.77	ng/ml	99
31) Benzo(e)pyrene	12.85	252	757848	1997.84	ng/ml	99
32) Benzo(a)pyrene	13.00	252	720447	2082.30	ng/ml	99
33) Perylene	13.24	252	703759	2062.54	ng/ml	100
34) Indeno(1,2,3-cd)pyrene	15.40	276	631913	2026.79	ng/ml	99

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS14\DATA\101317\1013F011.D Vial: 11
Acq On : 13 Oct 2017 12:01 pm Operator: LWeiskopf
Sample : SIM-PAH ICAL @2.0ug/mL | SVM55-65J Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:21:11 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 12:12:55 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

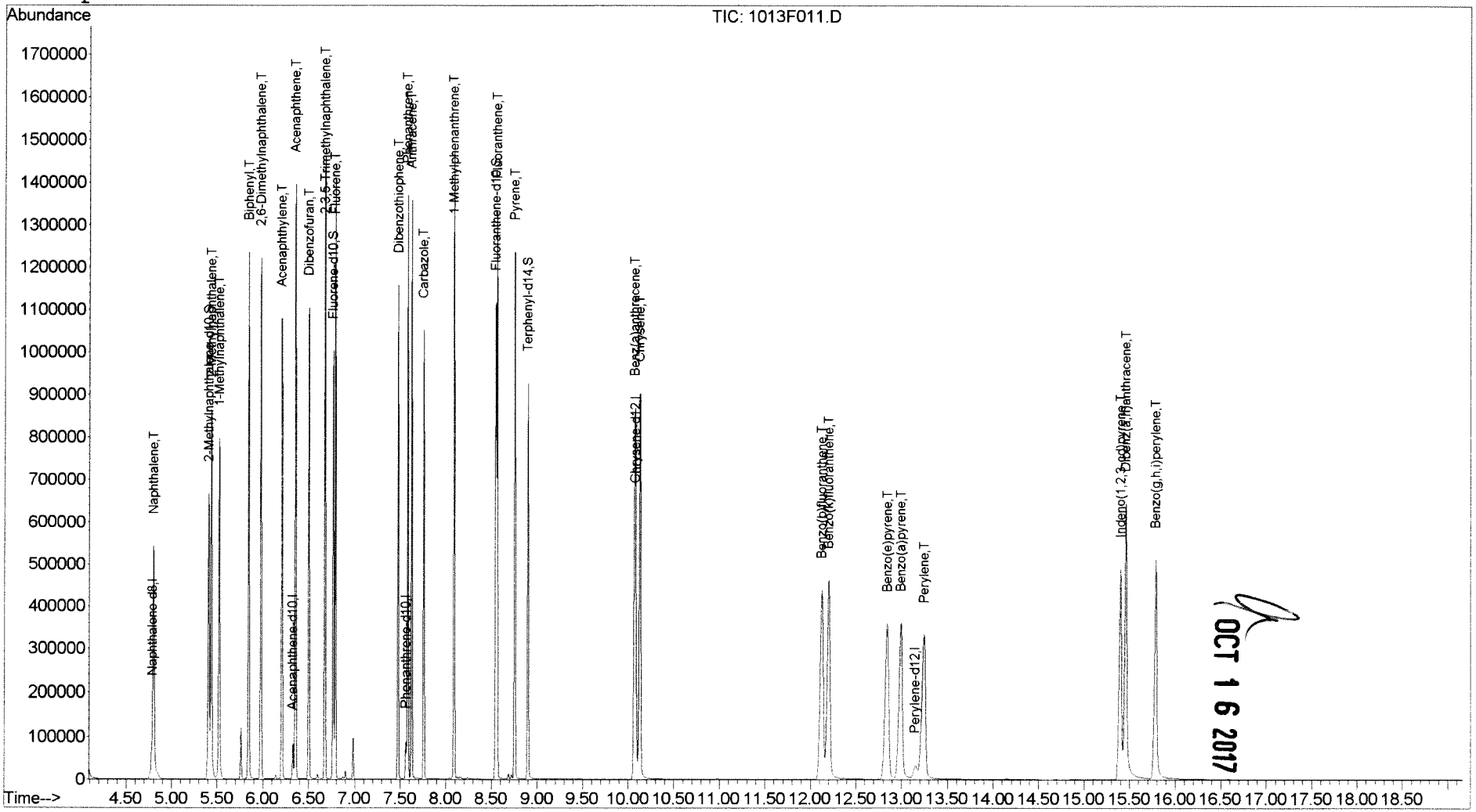
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	Dibenz(a,h)anthracene	15.46	278	619054	1940.82	ng/ml	99
36)	Benzo(g,h,i)perylene	15.79	276	656647	1877.29	ng/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F011.D Vial: 11
Acq On : 13 Oct 2017 12:01 pm Operator: LWeiskopf
Sample : SIM-PAH ICAL @2.0ug/mL | SVM55-65J Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 13 12:21 2017 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 12:21:46 2017
Response via : Initial Calibration

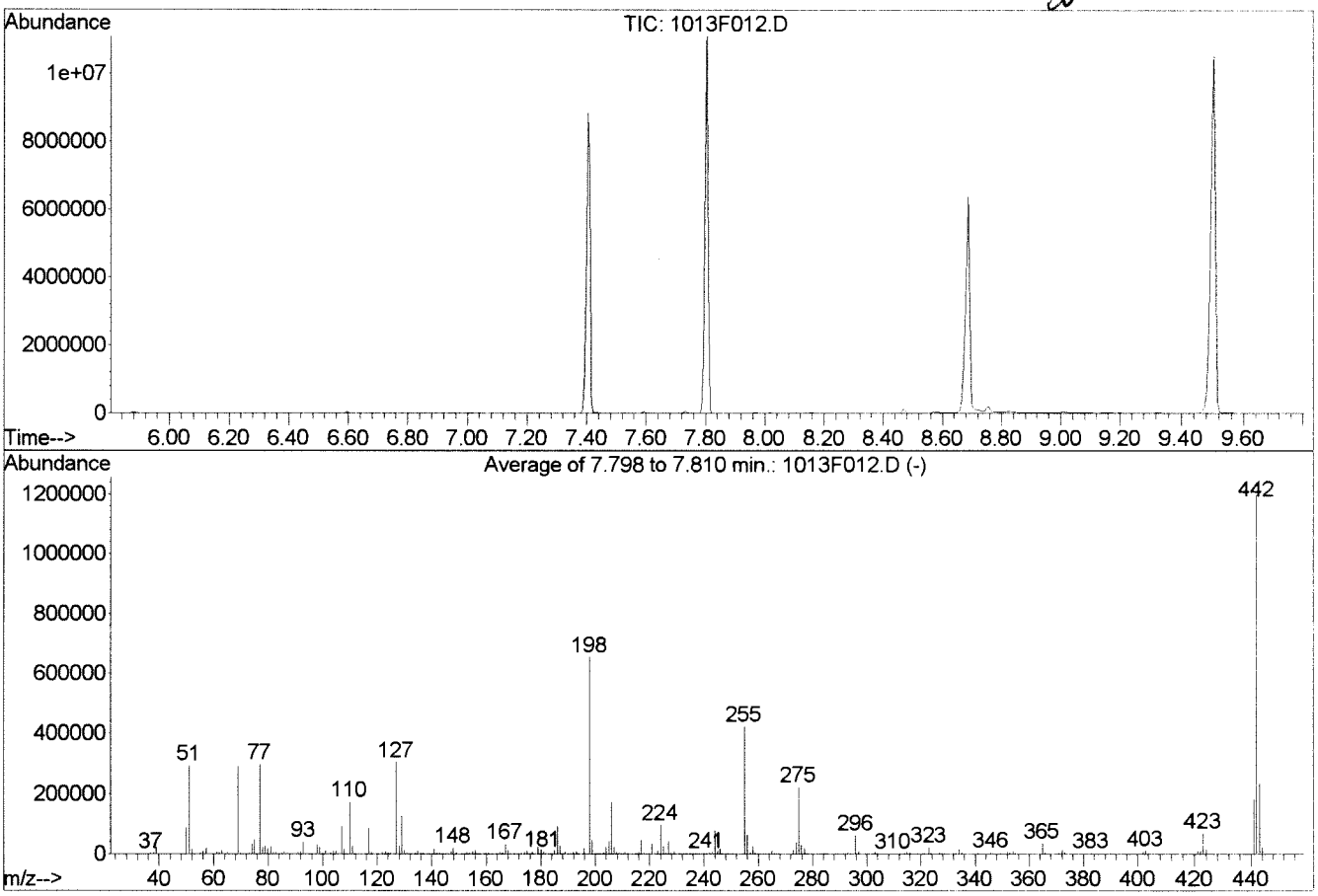


OCT 16 2017

Data File : J:\MS14\DATA\101317\1013F012.D
Acq On : 13 Oct 2017 12:25 pm
Sample : DFTPP @ 10ug/mL | SVM56-77C
Misc :
MS Integration Params: rteint.p
Method : J:\MS14\METHODS\SIM\A_DFTPP.M (RTE Integrator)
Title : dftpp tune mix

Vial: 1
Operator: LWeiskopf
Inst : MS14
Multiplr: 1.00

OCT 16 2017



AutoFind: Scans 631, 632, 633; Background Corrected with Scan 625

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	44.6	291853	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.3	289453	PASS
70	69	0.00	2	0.7	2075	PASS
127	198	10	80	46.4	303613	PASS
197	198	0.00	2	0.0	0	PASS
198	442	30	100	54.5	653760	PASS
199	198	5	9	6.9	45110	PASS
275	198	10	60	33.7	220589	PASS
365	442	1	50	2.9	34400	PASS
441	443	0.01	100	77.6	181341	PASS
442	442	30	100	100.0	1198848	PASS
443	442	15	24	19.5	233600	PASS

1013F012.D A_DFTPP.M Fri Oct 13 12:56:36 2017

Average of 7.798 to 7.810 min.: 1013F012.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	413	48.10	282	60.10	161	71.70	54
37.00	2103	49.05	148	61.00	4156	72.90	264
38.05	5113	50.00	87071	62.00	4704	73.20	3229
39.00	23005	51.00	291853	63.00	11567	74.00	32315
40.00	1159	52.00	14652	64.00	1560	75.00	47466
40.90	616	53.00	690	65.00	5439	76.10	1036
42.00	114	55.00	2211	65.95	505	77.00	297224
43.00	182	56.00	9123	66.80	79	78.00	20319
43.90	340	57.00	18940	68.90	289453	79.00	25647
45.00	487	57.90	834	69.90	2075	79.95	17932
46.90	113	58.95	215	70.95	329	81.00	23072

Average of 7.798 to 7.810 min.: 1013F012.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

OCT 16 2017

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
82.00	5380	92.90	38796	104.90	7594	116.90	84541
82.95	4852	93.90	2475	106.00	291	117.90	6087
83.95	463	94.90	770	106.95	90776	118.90	738
85.00	4606	95.95	1402	107.90	14226	119.95	1283
85.90	7270	97.90	31316	109.90	172840	120.90	348
86.95	3181	98.90	20594	110.90	25232	121.90	7039
88.00	1065	99.95	2052	111.90	3261	122.90	10019
88.95	575	100.95	10933	112.80	395	123.90	4439
90.00	105	101.90	750	113.00	753	124.95	4258
90.95	5401	102.90	4903	114.00	134	126.95	303613
92.00	6508	103.90	8756	115.00	304	128.00	25797

Average of 7.798 to 7.810 min.: 1013F012.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
128.90	126741	139.95	2129	151.00	2277	161.90	1910
129.90	11104	140.90	18189	151.90	1422	162.95	516
130.90	2088	141.90	5763	152.90	5435	163.90	451
131.95	1260	142.90	3668	153.90	3964	164.10	538
132.85	607	143.95	911	154.95	8727	164.90	6769
133.90	4514	145.05	896	156.00	13621	166.00	5633
134.90	10485	145.90	3140	156.95	2865	166.95	33150
135.90	4220	147.00	9132	157.85	3069	167.90	13667
136.95	5062	147.90	19769	158.95	2606	168.95	2524
137.90	1089	148.90	3810	159.90	5353	170.00	1345
138.90	992	149.90	1111	160.90	7220	170.95	1535

Average of 7.798 to 7.810 min.: 1013F012.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
171.95	3237	182.85	868	194.00	1696	204.00	23623
172.90	3741	183.90	2346	194.90	446	205.00	42218
173.95	6839	185.00	12921	195.20	164	206.00	171714
175.00	12243	186.00	93090	195.90	20440	206.95	22372
176.00	3637	186.95	26955	197.90	653760	207.90	6551
176.90	6967	188.00	2818	198.90	45110	208.90	2202
177.95	2602	188.90	6390	199.95	3426	209.90	1127
178.90	23658	189.90	1130	201.00	269	210.90	6640
179.95	15106	190.95	2965	201.45	3124	212.90	440
180.90	7119	191.90	7265	202.10	111	214.05	201
181.90	1320	192.95	8185	202.90	5239	214.90	2246

Average of 7.798 to 7.810 min.: 1013F012.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
216.00	4222	227.90	5993	238.90	1826	249.85	648
216.90	43941	228.90	8533	239.90	1374	250.95	785
217.90	5810	229.95	1298	240.90	2598	251.90	1051
218.95	646	230.90	3392	241.90	5071	253.00	2000
220.95	34591	231.90	698	243.00	6364	254.90	421866
221.90	806	232.95	817	244.00	79194	255.90	62549
222.90	10606	233.90	2663	245.00	10737	256.95	4645
224.00	96397	234.90	3038	245.90	16564	257.90	25704
225.00	25052	235.90	2203	246.90	3440	258.95	4117
226.05	3415	236.90	3233	247.95	747	259.90	622
226.90	43234	237.85	643	248.90	2768	260.95	699

Average of 7.798 to 7.810 min.: 1013F012.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

OCT 16 2017

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
261.80	60	272.10	698	282.95	1716	295.00	355
262.95	264	272.90	12947	283.95	1582	295.90	61802
264.00	746	273.95	39085	285.00	3090	296.95	8550
264.90	10531	274.90	220589	285.90	572	297.85	561
265.90	1549	275.90	29453	287.90	226	298.90	112
266.95	165	276.90	18972	288.90	798	300.85	786
267.90	205	277.90	3083	289.95	584	301.95	1388
269.85	493	278.95	718	290.95	479	302.95	7192
270.90	516	279.95	119	291.95	970	303.95	2125
271.10	434	281.10	129	292.90	4223	304.95	319
271.90	758	281.85	488	293.90	1163	305.80	60

Average of 7.798 to 7.810 min.: 1013F012.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
306.80	89	318.00	110	328.90	347	345.90	5019
307.90	896	318.95	138	330.85	180	346.90	985
308.90	668	320.00	381	331.90	1814	348.00	144
309.90	1041	321.00	2013	332.95	2628	349.90	121
310.85	142	321.95	1362	334.00	15281	350.90	555
311.90	135	323.00	22663	335.00	4105	352.00	7328
312.90	706	323.95	4107	336.00	605	352.95	5727
314.00	3267	324.95	347	338.95	428	354.00	8775
314.90	7483	325.85	545	339.90	468	354.95	1581
316.00	4402	326.90	4031	340.95	2808	355.90	132
316.95	768	327.90	2152	341.90	864	356.80	60

Average of 7.798 to 7.810 min.: 1013F012.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

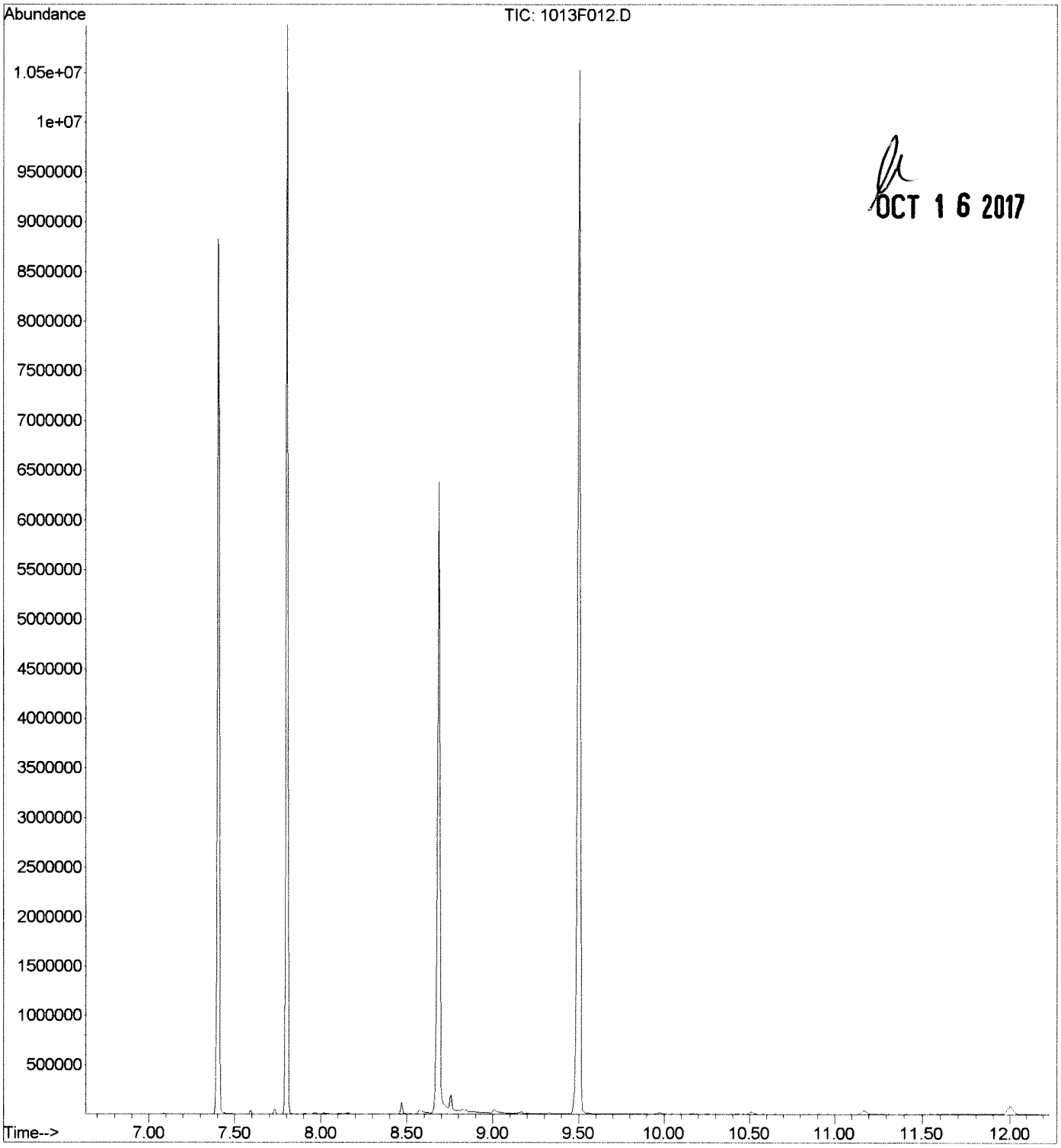
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
357.70	60	372.00	14601	393.00	70	420.95	8660
358.10	77	373.00	3644	394.85	117	421.95	8573
358.95	506	374.00	435	396.85	136	423.00	69122
361.00	151	376.90	351	400.85	998	424.00	13583
362.90	144	382.90	4141	401.95	6286	424.95	1342
363.40	52	383.95	1011	402.95	9540	437.70	61
364.90	34400	384.90	396	403.95	3388	438.10	93
365.90	4726	388.80	51	404.95	531	438.90	278
366.85	359	389.90	1769	409.95	238	439.20	152
369.95	861	390.95	1385	414.95	401	441.00	181341
371.00	2413	391.95	1052	419.95	175	442.00	1198848

Average of 7.798 to 7.810 min.: 1013F012.D
DFTPP @ 10ug/mL | SVM56-77C
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
443.00	233600						
444.00	21101						
445.00	1225						
445.90	52						

OCT 16 2017

File : J:\MS14\DATA\101317\1013F012.D
Operator : LWeiskopf
Acquired : 13 Oct 2017 12:25 pm using AcqMethod SIMLOC
Instrument : MS14
Sample Name: DFTPP @ 10ug/mL | SVM56-77C
Misc Info :
Vial Number: 1



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1	4.181	rVB	0.100	24541	4.163	4.263	
2	5.040	rBV	0.053	4115	5.016	5.069	
3	5.881	rBV	0.071	18853	5.840	5.910	
4	6.434	rVB	0.053	2494	6.410	6.463	
5	6.598	rVB	0.047	25162	6.575	6.622	
6	6.940	rBV	0.041	2201	6.928	6.969	
7	7.087	rBV	0.065	4981	7.063	7.128	
8	7.404	rBV	0.100	7595790	7.369	7.469	
9	7.592	rBV	0.088	25896	7.551	7.639	
10	7.734	rVB	0.059	39972	7.692	7.751	
11	7.804	rBV	0.088	8209739	7.763	7.851	
12	7.904	rVB	0.053	6721	7.887	7.939	
13	7.969	rBV	0.059	17759	7.939	7.998	
14	8.016	rVV	0.094	15338	7.998	8.092	
15	8.110	rVV	0.035	5683	8.092	8.128	
16	8.157	rVB	0.082	15806	8.128	8.210	
17	8.469	rVB	0.065	88950	8.439	8.504	
18	8.575	rBV	0.100	101473	8.539	8.639	
19	8.686	rBV	0.100	6384593	8.639	8.739	
20	8.757	rVV	0.047	200411	8.739	8.786	
21	8.822	rVB	0.059	DDE 51995	8.810	8.869	
22	9.010	rVB	0.129	87176	8.986	9.116	
23	9.163	rVV	0.053	DDD 27210	9.133	9.186	
24	9.198	rVB	0.035	5711	9.186	9.222	
25	9.281	rBV	0.053	6231	9.257	9.310	
26	9.328	rVV	0.035	15731	9.310	9.345	
27	9.369	rVB	0.059	6524	9.357	9.416	
28	9.504	rBV	0.100	DDT 11254230	9.445	9.545	
29	9.722	rVB	0.041	4011	9.704	9.745	
30	9.798	rBV	0.035	3207	9.786	9.822	
31	9.975	rBV	0.100	21706	9.933	10.033	
32	10.157	rVB	0.047	3290	10.133	10.180	
33	10.245	rBV	0.065	4215	10.216	10.280	
34	10.510	rBV	0.082	43277	10.480	10.563	
35	11.175	rBV	0.106	79263	11.133	11.239	
36	11.275	rBV	0.041	2232	11.257	11.298	
37	11.998	rVB	0.176	203226	11.939	12.116	
38	12.633	rVB	0.047	2079	12.616	12.663	
39	12.745	rBV	0.053	2375	12.727	12.780	
40	13.039	rBV	0.194	323482	12.969	13.163	
41	13.604	rBV	0.059	2497	13.574	13.633	
42	14.151	rBV	0.200	516589	14.086	14.286	
43	14.633	rVB	0.065	5739	14.604	14.668	
44	14.874	rBV	0.176	612774	14.827	15.004	
45	15.227	rBV	0.053	13115	15.204	15.257	
46	15.427	rBV	0.176	734785	15.380	15.557	
47	15.768	rVB	0.059	18312	15.751	15.810	
48	15.980	rBV	0.135	576994	15.939	16.074	
49	16.580	rBV	0.176	501677	16.533	16.709	
50	17.245	rBV	0.171	347060	17.198	17.368	
51	17.986	rBV	0.118	240460	17.939	18.056	
52	18.839	rVB	0.135	156167	18.792	18.927	

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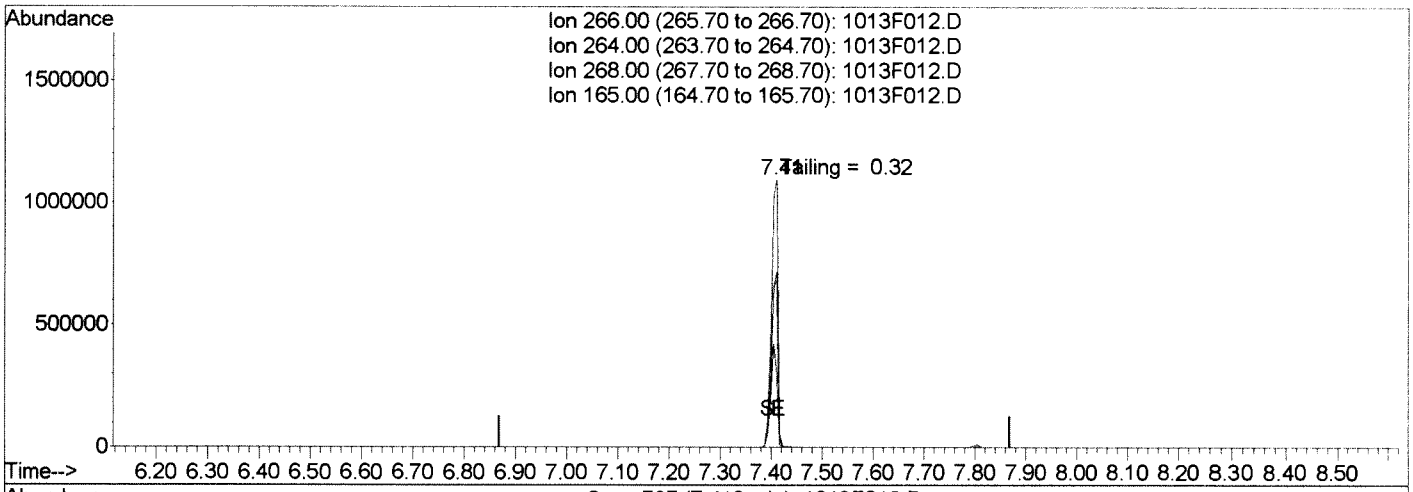
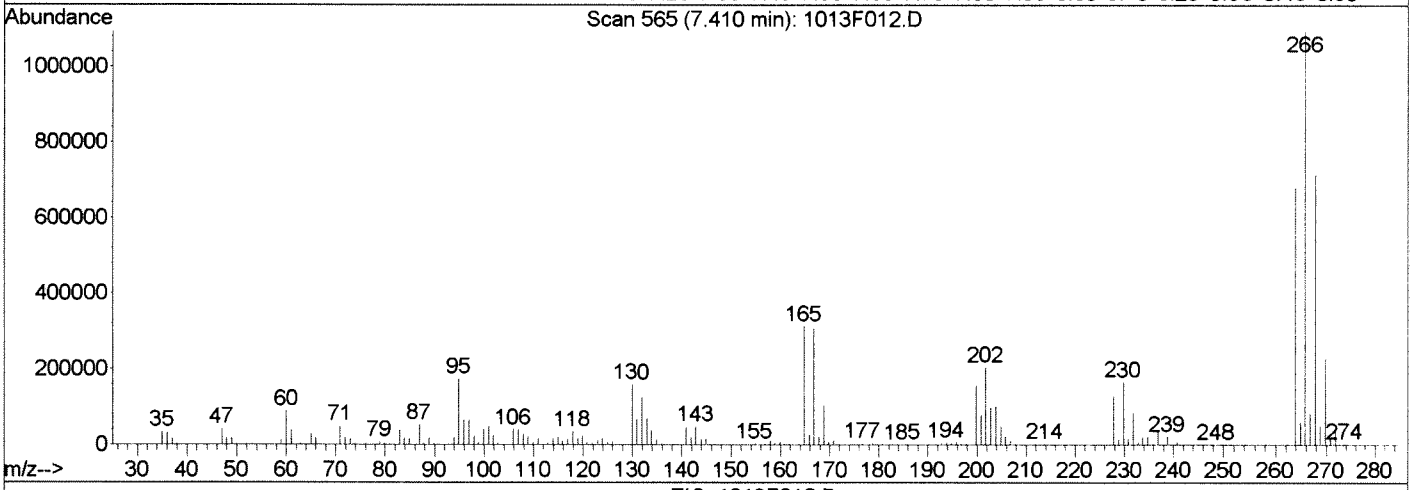
DDT Breakdown = 0.76

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\101317\1013F012.D Vial: 1
Acq On : 13 Oct 2017 12:25 pm Operator: LWeiskopf
Sample : DFTPP @ 10ug/mL | SVM56-77C Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 13 12:56 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\A_DFTPP.M (RTE Integrator)
Title : dftpp tune mix
Last Update : Fri Oct 06 15:31:14 2017
Response via : Single Level Calibration





TIC: 1013F012.D

(1) Pentachlorophenol

7.41min 41.34ng/ml

response 951429

Ion	Exp%	Act%
266.00	100	100
264.00	62.30	62.21
268.00	72.30	65.48
165.00	42.00	28.60

OCT 16 2017

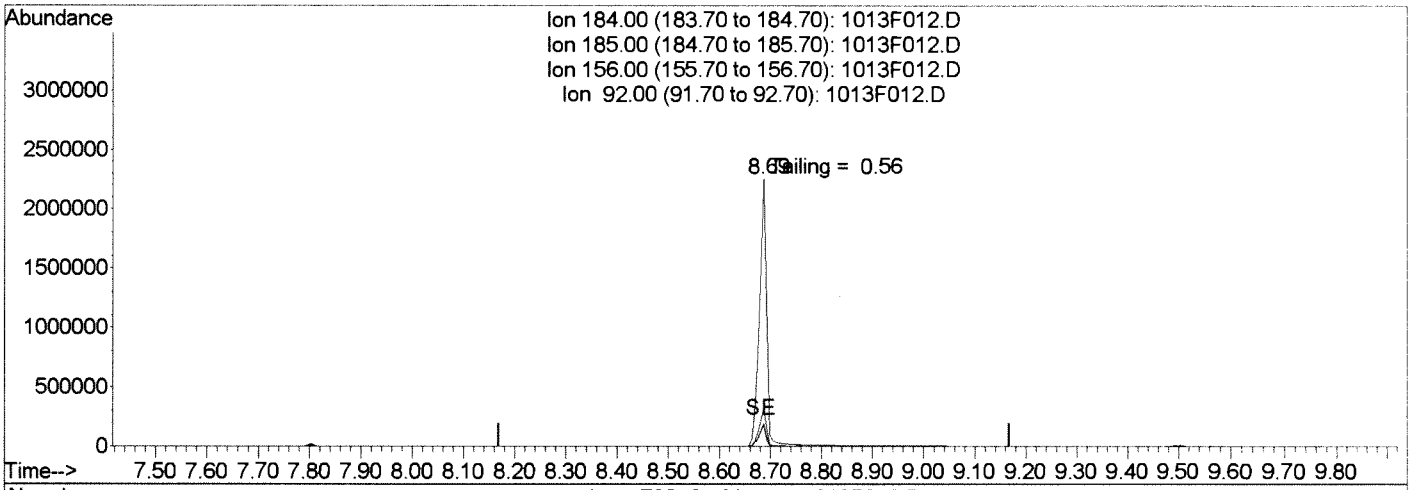
OK

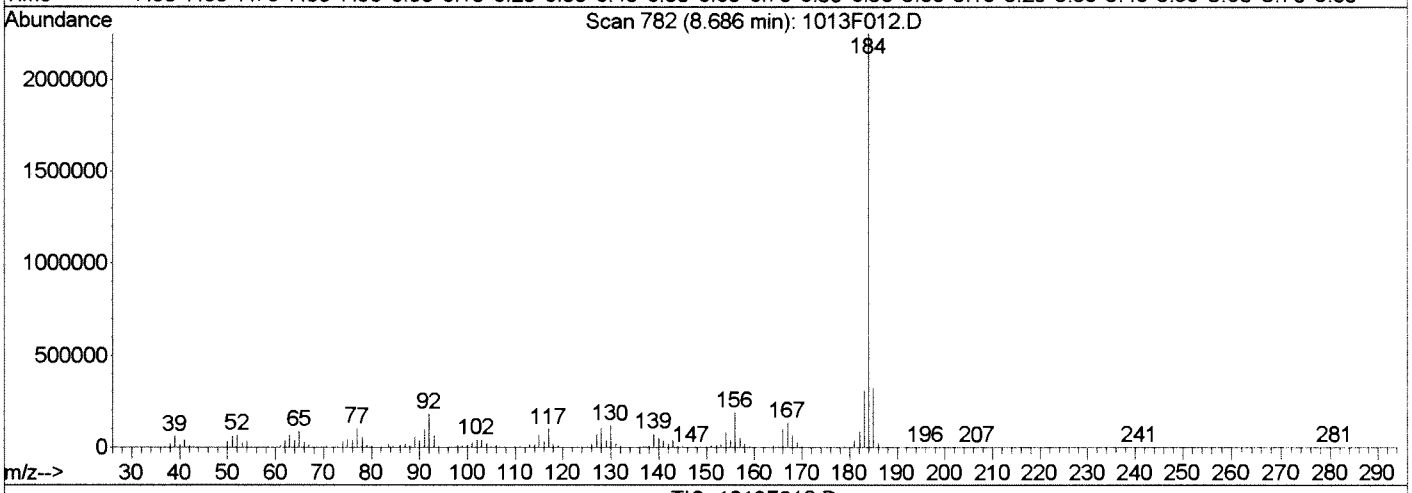
1013F012.D A_DFTPP.M Fri Oct 13 12:57:00 2017

Quantitation Report (QedIt)

Data File : J:\MS14\DATA\101317\1013F012.D Vial: 1
Acq On : 13 Oct 2017 12:25 pm Operator: LWeiskopf
Sample : DFTPP @ 10ug/mL | SVM56-77C Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 13 12:56 2017 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\A_DFTPP.M (RTE Integrator)
Title : dftpp tune mix
Last Update : Fri Oct 06 15:31:14 2017
Response via : Single Level Calibration





TIC: 1013F012.D

(3) Benzidine (T)

8.69min 39.77ug/ml

response 2292414

Ion	Exp%	Act%
184.00	100	100
185.00	14.70	14.34
156.00	8.20	8.43
92.00	6.60	8.14

OCT 16 2017

OK

1013F012.D A_DFTPP.M Fri Oct 13 12:57:06 2017

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F013.D Vial: 2
Acq On : 13 Oct 2017 12:49 pm Operator: LWeiskopf
Sample : SIM-PAH ICV @0.4ug/mL | SVM57-20D Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 16 06:50:06 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 12:21:46 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

OCT 16 2017

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.78	136	42142	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.33	164	21846	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.56	188	47431	200.00	ng/ml	0.00
23) Chrysene-d12	10.08	240	59760	200.00	ng/ml	0.00
28) Perylene-d12	13.13	264	62224	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.41	152	46016	407.28	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 40.73%			
13) Fluorene-d10	6.76	176	60906	407.55	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 40.76%			
22) Fluoranthene-d10	8.54	212	126607	424.82	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 42.48%			
25) Terphenyl-d14	8.89	244	105043	416.88	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 41.69%			
Target Compounds						Qvalue
2) Naphthalene	4.80	128	90612	377.47	ng/ml	100
4) 2-Methylnaphthalene	5.43	142	60329	360.99	ng/ml	97
5) 1-Methylnaphthalene	5.52	142	54681	370.17	ng/ml	97
6) Biphenyl	5.84	154	82377	389.44	ng/ml	98
7) 2,6-Dimethylnaphthalene	5.97	156	55619	370.00	ng/ml	94
9) Acenaphthylene	6.21	152	100630	376.44	ng/ml	99
10) Acenaphthene	6.35	154	57867	384.96	ng/ml	97
11) Dibenzofuran	6.50	168	81637	345.64	ng/ml	96
12) 2,3,5-Trimethylnaphthalene	6.68	170	60241	396.23	ng/ml	90
14) Fluorene	6.78	166	69750	376.49	ng/ml	100
16) Dibenzothiophene	7.47	184	116161	386.25	ng/ml	94
17) Phenanthrene	7.58	178	108432	368.67	ng/ml	99
18) Anthracene	7.62	178	109429	377.24	ng/ml	100
19) Carbazole	7.75	167	96845	368.36	ng/ml	98
20) 1-Methylphenanthrene	8.09	192	84377	377.31	ng/ml	100
21) Fluoranthene	8.56	202	136262	390.23	ng/ml	99
24) Pyrene	8.75	202	136201	377.60	ng/ml	98
26) Benz(a)anthracene	10.07	228	137505	381.57	ng/ml	99
27) Chrysene	10.12	228	129274	383.65	ng/ml	99
29) Benzo(b)fluoranthene	12.11	252	151965	386.85	ng/ml	100
30) Benzo(k)fluoranthene	12.18	252	149810	388.27	ng/ml	100
31) Benzo(e)pyrene	12.82	252	134002	357.61	ng/ml	100
32) Benzo(a)pyrene	12.96	252	130954	381.37	ng/ml	100
33) Perylene	13.21	252	133727	395.33	ng/ml	100
34) Indeno(1,2,3-cd)pyrene	15.38	276	113638	368.38	ng/ml	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\101317\1013F013.D Vial: 2
Acq On : 13 Oct 2017 12:49 pm Operator: LWeiskopf
Sample : SIM-PAH ICV @0.4ug/mL | SVM57-20D Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 16 06:50:06 2017 Quant Results File: 101317PAH.RES

Quant Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 12:21:46 2017
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

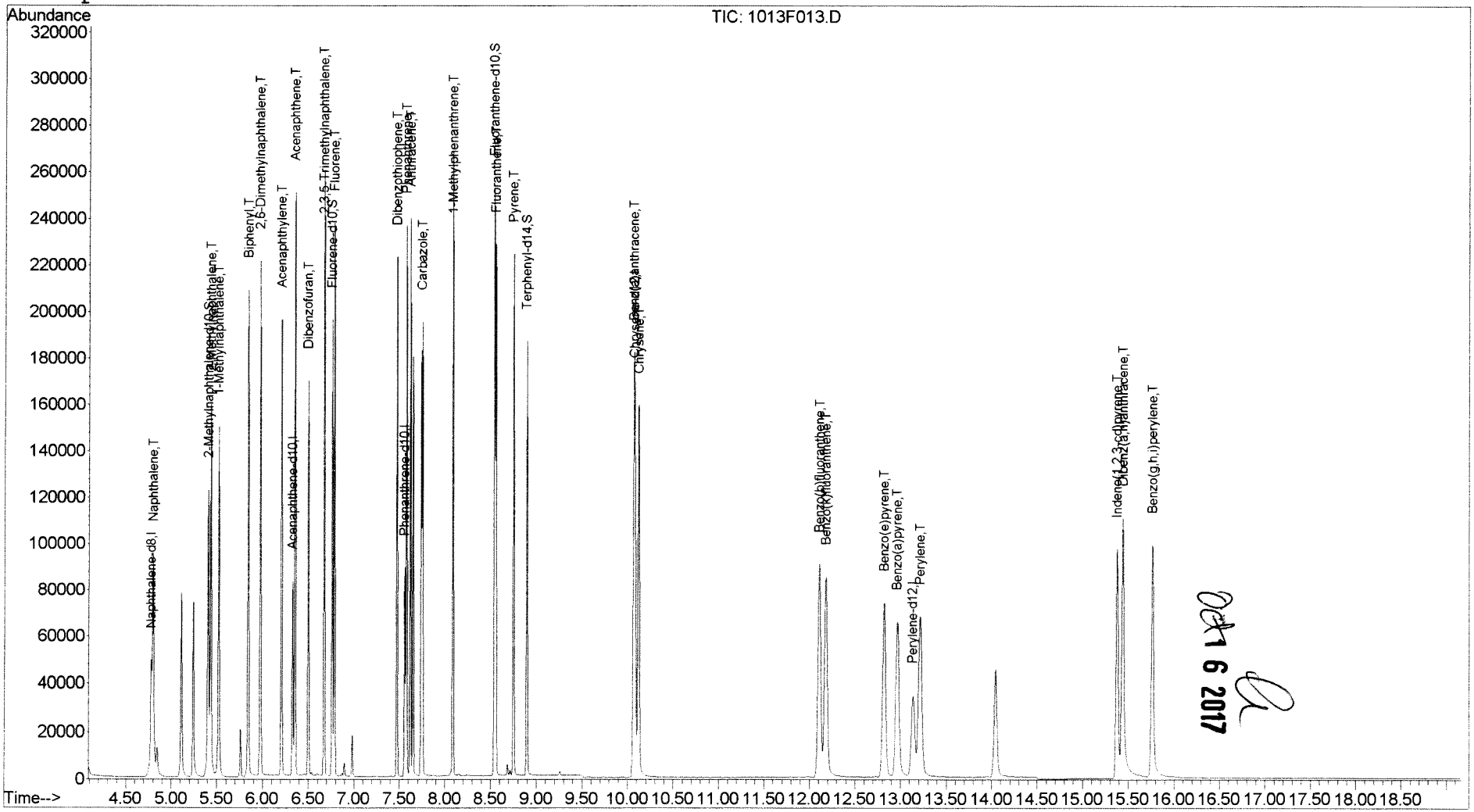
OCT 16 2017

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	Dibenz(a,h)anthracene	15.44	278	115005	366.16	ng/ml	99
36)	Benzo(g,h,i)perylene	15.76	276	127424	371.27	ng/ml	100

(#) = qualifier out of range (m) = manual integration
1013F013.D 101317PAH.M Mon Oct 16 06:50:33 2017 Page 2

Data File : J:\MS14\DATA\101317\1013F013.D Vial: 2
Acq On : 13 Oct 2017 12:49 pm Operator: LWeiskopf
Sample : SIM-PAH ICV @0.4ug/mL | SVM57-20D Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Oct 16 6:50 2017 Quant Results File: 101317PAH.RES

Method : J:\MS14\METHODS\SIM\101317PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Fri Oct 13 12:21:46 2017
Response via : Initial Calibration



Oct 16 2017

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April 10, 2018

Analytical Report for Service Request No: K1802580

Scott Thielke
JH Baxter & Company
85 N. Baxter Road
P.O. Box 10797
Eugene, OR 97440

RE: J.H. Baxter-Arlington / PMP 2014

Dear Scott,

Enclosed are the results of the sample(s) submitted to our laboratory March 20, 2018
For your reference, these analyses have been assigned our service request number **K1802580.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3350. You may also contact me via email at Kelley.Lovejoy@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

for Kelley Lovejoy
Project Manager

ALS Environmental
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1317 South 13th Avenue
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T : +1 360 577 7222
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Raw Data
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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Service Request: K1802580
Date Received: 03/20/2018

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt:

Three water samples were received for analysis at ALS Environmental on 03/20/2018. As instructed, the discreet samples were composited at the laboratory to create one composite sample(s) EW Composite. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

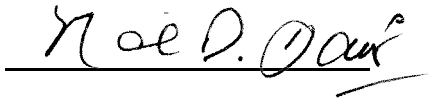
Semivoa GC:

Method 8151A Modified: Sample EW COMPOSITE required dilution due to the presence of elevated levels of target analyte. The reporting limits are adjusted to reflect the dilution.

Method 8151A Modified: The recovery of Tetrachlorophenols, Total in sample EW COMPOSITE and Lab Control Sample was outside the control limits listed in the results summary. The limits are default values temporarily in use until sufficient data points are generated to calculate statistical control limits. Based on the method and historic data, the recoveries observed were in the range expected for this procedure. No further corrective action was taken.

Method 8151A Modified, :The control criteria for matrix spike recovery of Pentachlorophenol for sample EW COMPOSITE were not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

Method 8151A Modified, :The analysis of Chlorinated phenols by EPA 8151A modified makes use of dual column confirmation. When the Continuing Calibration Verification (CCV) criterion is met for both columns, the higher of the two sample results is generally reported. The primary evaluation criteria were not met on the confirmation column for 2,4,6-Trichlorophenol in CCV 0327F049. The results were reported from the column with an acceptable CCV. The data quality was not affected. No further corrective action was necessary.

Approved by  Date 04/09/2018

Chain of Custody

ALS Environmental—Kelso Laboratory
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Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS

1317 South 13th, Kelso, WA 98626 (360) 577-7222 FAX (360) 636-1068

SR# K1802580

PAGE ____ OF ____

0H	7D	28D	180D	7D

Project Name: JH Baxter - Arlington Project Number: ____

Project Manager: ____ Company: JH Baxter

Company/Address: 85 N Baxter Rd Phone: 541-689-3801

City, State, Zip: Eugene, OR 97402 FAX: 541-689-0769

Sampler's Signature: ____

Analysis Requested

Sample I.D.	Date	Time	LAB ID	Matrix	Number of Containers	SM 4500-H+ B / Ph	8270 D / PAH SIM	120.1 / Cond Spec	300.0 Chloride	300.0 / SO4	350.1 / Ammonia T	353.2 / NO2 NO3 T	SM 5220 C / COD T	SM 5310 / TOC T	SM 5550 B / Tan Lign	6010 C / Metals D	6020A / AS D	8151 A Modified/PCP only	REMARKS
EW 1	3/16/18	0822		water	1													X	PCP & breakdown
EW 2	3/16/18	0826		water	1													X	products
~~EW 3~~				water	1													X	
EW 4	3/16/18	0832		water	1													X	

TURNAROUND REQUIREMENTS

____ 24 hr ____ 48 hr ____ 5 day

X Standard (21 days)

____ Provide FAX Preliminary Results

Requested Report Date: ____

Invoice Information

P.O. # ____

Bill to: JH Baxter & Co
San Mateo CA,94402

REPORT REQUIREMENTS

____ I. Routine Report: Results, Method Blank, Surrogate, as required

____ II. Report Dup., MS, MSD as required

____ III. Data Validation Report (includes raw data)

X IV. CLP Deliverable Report

____ V. EDD

Comments/Special Instructions:

Compostie will be put together at ALS.
4 samples will be sent.

Questions? - Please Call Steven Kuhlmeier @ GSI Water Solutions 971-200-8529

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [signature]	Signature: [signature]	Signature:	Signature:
Printed Name: Matt Huse	Printed Name: BD Kirman	Printed Name:	Printed Name:
Firm: JH Baxter	Firm: AW	Firm:	Firm:
Date/Time: 3/19/18 / 1400	Date/Time: 3/20/18 0940	Date/Time:	Date/Time:

PC KV

Cooler Receipt and Preservation Form

Client JH Baxter Service Request *K18* 02580

Received: 3/20/18 Opened: 3/20/18 By: BR Unloaded: 3/20/18 By: BR

1. Samples were received via? *USPS* (*Fed Ex*) *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? front
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID NA	Tracking Number NA	Filed
2.4	2.3	7.1	4.0	-0.1	298		772724389242	
-0.2	-0.3	—	—	-0.1	378		772724389853	

4. Packing material: (*Inserts*) *Baggies* (*Bubble Wrap*) (*Gel Packs*) (*Wet Ice*) *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* NA (Y) N
   If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
12. Was C12/Res negative? NA (Y) N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____

Chlorinated Phenols

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: JH Baxter & Company **Service Request:** K1802580
Project: J.H. Baxter-Arlington/PMP 2014

Cover Page - Organic Analysis Data Package
Chlorinated Phenols

Sample Name	Lab Code	Date Collected	Date Received
EW COMPOSITE	K1802580-004	03/16/2018	03/20/2018
EW COMPOSITEMS	KWG1801629-1	03/16/2018	03/20/2018
EW COMPOSITEDMS	KWG1801629-2	03/16/2018	03/20/2018

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802580
Project:	J.H. Baxter-Arlington/PMP 2014	**Date Collected:**	03/16/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Chlorinated Phenols

Sample Name:	EW COMPOSITE	**Units:**	ug/L
Lab Code:	K1802580-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2,4,6-Trichlorophenol	ND	U	0.50	0.14	1	03/21/18	03/27/18	KWG1801629	
2,4,5-Trichlorophenol	ND	U	1.0	0.16	1	03/21/18	03/27/18	KWG1801629	
Tetrachlorophenols, Total	**13**		1.0	0.28	1	03/21/18	03/27/18	KWG1801629	
Pentachlorophenol	**280**	D	5.0	1.6	10	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	79	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802580
Project:	J.H. Baxter-Arlington/PMP 2014	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Chlorinated Phenols

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1801629-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2,4,6-Trichlorophenol	ND	U	0.50	0.14	1	03/21/18	03/27/18	KWG1801629	
2,4,5-Trichlorophenol	ND	U	1.0	0.16	1	03/21/18	03/27/18	KWG1801629	
Tetrachlorophenols, Total	ND	U	1.0	0.28	1	03/21/18	03/27/18	KWG1801629	
Pentachlorophenol	ND	U	0.50	0.16	1	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	77	55-130	03/27/18	Acceptable

Comments:

QA/QC Report

Client: JH Baxter & Company **Service Request:** K1802580
Project: J.H. Baxter-Arlington/PMP 2014
Sample Matrix: Water

Surrogate Recovery Summary
Chlorinated Phenols

Extraction Method: METHOD **Units:** Percent
Analysis Method: 8151M **Level:** Low

Sample Name	Lab Code	Sur1
EW COMPOSITE	K1802580-004	79
Method Blank	KWG1801629-4	77
EW COMPOSITEMS	KWG1801629-1	77
EW COMPOSITEDMS	KWG1801629-2	75
Lab Control Sample	KWG1801629-3	76

Surrogate Recovery Control Limits (%)

Sur1 = 4-Bromo-2,6-dichlorophenol 55-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Client:	JH Baxter & Company	**Service Request:**	K1802580
Project:	J.H. Baxter-Arlington/PMP 2014	**Date Extracted:**	03/21/2018
Sample Matrix:	Water	**Date Analyzed:**	03/27/2018

Matrix Spike/Duplicate Matrix Spike Summary
Chlorinated Phenols

Sample Name:	EW COMPOSITE	**Units:**	ug/L
Lab Code:	K1802580-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M	**Extraction Lot:**	KWG1801629

		EW COMPOSITEMS KWG1801629-1 Matrix Spike				EW COMPOSITEDMS KWG1801629-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**		**Result**	**Spike Amount**	**%Rec**		**%Rec Limits**	**RPD**	**RPD Limit**
2,4,6-Trichlorophenol	ND	7.61	10.0	76		7.36	10.0	74		34-94	3	30
2,4,5-Trichlorophenol	ND	6.11	10.0	61		6.07	10.0	61		16-107	1	30
Tetrachlorophenols, Total	13	24.3	20.0	57	*	25.1	20.0	61	*	70-130	3	30
Pentachlorophenol	280	272E	10.0	-49	#	287E	10.0	104	#	22-136	5	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802580
Project:	J.H. Baxter-Arlington/PMP 2014	**Date Extracted:**	03/21/2018
Sample Matrix:	Water	**Date Analyzed:**	03/27/2018

Lab Control Spike Summary
Chlorinated Phenols

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	8151M	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1801629

Lab Control Sample
KWG1801629-3
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec		%Rec Limits
2,4,6-Trichlorophenol	7.55	10.0	75		37-91
2,4,5-Trichlorophenol	6.10	10.0	61		20-101
Tetrachlorophenols, Total	12.8	20.0	64	*	70-130
Pentachlorophenol	6.46	10.0	65		42-110

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802580
Project:	J.H. Baxter-Arlington/PMP 2014	**Date Extracted:**	03/21/2018
Sample Matrix:	Water	**Date Analyzed:**	03/27/2018
		Time Analyzed:	13:01

Method Blank Summary
Chlorinated Phenols

Sample Name:	Method Blank	**Instrument ID:**	GC28
Lab Code:	KWG1801629-4	**File ID:**	J:\GC28\DATA\032718\0327F012.D
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M	**Extraction Lot:**	KWG1801629

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
EW COMPOSITE	K1802580-004	J:\GC28\DATA\032718\0327F008.D	03/27/18	11:51
EW COMPOSITEMS	KWG1801629-1	J:\GC28\DATA\032718\0327F009.D	03/27/18	12:09
EW COMPOSITEDMS	KWG1801629-2	J:\GC28\DATA\032718\0327F010.D	03/27/18	12:26
Lab Control Sample	KWG1801629-3	J:\GC28\DATA\032718\0327F011.D	03/27/18	12:44
EW COMPOSITE	K1802580-004	J:\GC28\DATA\032718\0327F048.D	03/27/18	23:33

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802580
Project:	J.H. Baxter-Arlington/PMP 2014	**Date Extracted:**	03/21/2018
Sample Matrix:	Water	**Date Analyzed:**	03/27/2018
		Time Analyzed:	12:44

Lab Control Sample Summary
Chlorinated Phenols

Sample Name:	Lab Control Sample	**Instrument ID:**	GC28
Lab Code:	KWG1801629-3	**File ID:**	J:\GC28\DATA\032718\0327F011.D
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M	**Extraction Lot:**	KWG1801629

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
EW COMPOSITE	K1802580-004	J:\GC28\DATA\032718\0327F008.D	03/27/18	11:51
EW COMPOSITEMS	KWG1801629-1	J:\GC28\DATA\032718\0327F009.D	03/27/18	12:09
EW COMPOSITEDMS	KWG1801629-2	J:\GC28\DATA\032718\0327F010.D	03/27/18	12:26
Method Blank	KWG1801629-4	J:\GC28\DATA\032718\0327F012.D	03/27/18	13:01
EW COMPOSITE	K1802580-004	J:\GC28\DATA\032718\0327F048.D	03/27/18	23:33

Client: JH Baxter & Company **Service Request:** K1802580
Project: J.H. Baxter-Arlington/PMP 2014 **Calibration Date:** 11/27/2017

Initial Calibration Summary
Chlorinated Phenols

Calibration ID: CAL15625 **Column:** Rtx-1701
Instrument ID: GC28

Level ID	File ID
A	J:\GC28\DATA\112717-CAL\1127F127.D
B	J:\GC28\DATA\112717-CAL\1127F128.D
C	J:\GC28\DATA\112717-CAL\1127F129.D
D	J:\GC28\DATA\112717-CAL\1127F130.D
E	J:\GC28\DATA\112717-CAL\1127F131.D
F	J:\GC28\DATA\112717-CAL\1127F132.D
G	J:\GC28\DATA\112717-CAL\1127F133.D
H	J:\GC28\DATA\112717-CAL\1127F134.D
I	J:\GC28\DATA\112717-CAL\1127F135.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
4-Bromo-2,6-dichlorophenol	A	1.0	5.54E+5	B	2.5	5.27E+5	C	5.0	5.06E+5	D	10	4.61E+5	E	25	4.46E+5
	F	100	4.60E+5	G	250	4.25E+5									
2,4,6-Trichlorophenol	A	0.93	4.80E+5	B	2.3	4.17E+5	C	4.7	3.89E+5	D	9.3	3.46E+5	E	23	3.13E+5
	F	93	3.01E+5	G	230	2.68E+5									
2,4,5-Trichlorophenol	A	0.93	2.49E+5	B	2.3	2.29E+5	C	4.7	2.13E+5	D	9.3	1.92E+5	E	23	1.68E+5
	F	93	1.50E+5	G	230	1.26E+5									
2,3,4,5-Tetrachlorophenol	A	0.94	4.84E+5	B	2.4	4.71E+5	C	4.7	4.48E+5	D	9.4	3.97E+5	E	24	3.71E+5
	F	94	3.52E+5	G	240	3.13E+5									
2,3,5,6-Tetrachlorophenol	A	0.94	6.78E+5	B	2.4	6.23E+5	C	4.7	5.92E+5	D	9.4	5.28E+5	E	24	4.97E+5
	F	94	4.87E+5	G	240	4.38E+5									
Pentachlorophenol	A	0.95	8.49E+5	B	2.4	7.89E+5	C	4.8	7.38E+5	D	9.5	6.63E+5	E	24	6.25E+5
	F	95	6.19E+5	G	240	5.61E+5	H	480	5.44E+5	I	950	5.10E+5			

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: JH Baxter & Company **Service Request:** K1802580
Project: J.H. Baxter-Arlington/PMP 2014 **Calibration Date:** 11/27/2017

Initial Calibration Summary
Chlorinated Phenols

Calibration ID: CAL15625 **Column:** Rtx-1701
Instrument ID: GC28

		Calibration Evaluation				
Analyte Name	**Compound Type**	**Fit Type**	**Eval.**	**Eval. Result**	**Q**	**Control Criteria**
4-Bromo-2,6-dichlorophenol	SURR	AverageRF	% RSD	9.7		≤ 20
2,4,6-Trichlorophenol	MS	Linear	R2	0.996		≥ 0.99
2,4,5-Trichlorophenol	MS	Quadratic	COD	1.000		≥ 0.99
2,3,4,5-Tetrachlorophenol	MS	AverageRF	% RSD	15.9		≤ 20
2,3,5,6-Tetrachlorophenol	MS	AverageRF	% RSD	15.4		≤ 20
Pentachlorophenol	MS	AverageRF	% RSD	17.6		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington/PMP 2014

Service Request: K1802580
Calibration Date: 11/27/2017
Date Analyzed: 11/29/2017

Second Source Calibration Verification
Chlorinated Phenols

Calibration Type: External Standard
Analysis Method: 8151M

Calibration ID: CAL15625
Units: ug/L

File ID: J:\GC28\DATA\112717-CAL\1129F005.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
2,4,6-Trichlorophenol	47	45	359000	303000	NA	-3	± 20 %	Linear
2,4,5-Trichlorophenol	47	43	190000	152000	NA	-7	± 20 %	Quadratic
2,3,4,5-Tetrachlorophenol	47	40	405000	341000	-16	NA	± 20 %	AverageRF
2,3,5,6-Tetrachlorophenol	47	41	549000	479000	-13	NA	± 20 %	AverageRF
Pentachlorophenol	48	43	655000	595000	-9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: JH Baxter & Company **Service Request:** K1802580
Project: J.H. Baxter-Arlington/PMP 2014 **Calibration Date:** 11/27/2017

Initial Calibration Summary
Chlorinated Phenols

Calibration ID: CAL15625 **Column:** Rtx-35
Instrument ID: GC28

Level ID	File ID	Level ID	File ID
A	J:\GC28\DATA\112717-CAL\1127F127.D\1127F127c.d	F	J:\GC28\DATA\112717-CAL\1127F132.D\1127F132c.d
B	J:\GC28\DATA\112717-CAL\1127F128.D\1127F128c.d	G	J:\GC28\DATA\112717-CAL\1127F133.D\1127F133c.d
C	J:\GC28\DATA\112717-CAL\1127F129.D\1127F129c.d	H	J:\GC28\DATA\112717-CAL\1127F134.D\1127F134c.d
D	J:\GC28\DATA\112717-CAL\1127F130.D\1127F130c.d	I	J:\GC28\DATA\112717-CAL\1127F135.D\1127F135c.d
E	J:\GC28\DATA\112717-CAL\1127F131.D\1127F131c.d		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
4-Bromo-2,6-dichlorophenol	A	1.0	3.30E+5	B	2.5	3.51E+5	C	5.0	3.53E+5	D	10	3.45E+5	E	25	3.62E+5
	F	100	4.02E+5	G	250	3.80E+5									
2,4,6-Trichlorophenol	A	0.93	4.01E+5	B	2.3	3.53E+5	C	4.7	3.31E+5	D	9.3	3.01E+5	E	23	2.90E+5
	F	93	2.99E+5	G	230	2.75E+5									
2,4,5-Trichlorophenol	A	0.93	1.97E+5	B	2.3	1.87E+5	C	4.7	1.79E+5	D	9.3	1.58E+5	E	23	1.45E+5
	F	93	1.37E+5	G	230	1.24E+5									
2,3,4,5-Tetrachlorophenol	A	0.94	5.35E+5	B	2.4	4.22E+5	C	4.7	3.96E+5	D	9.4	3.50E+5	E	24	3.29E+5
	F	94	3.27E+5	G	240	3.09E+5									
2,3,5,6-Tetrachlorophenol	A	0.94	5.26E+5	B	2.4	5.05E+5	C	4.7	4.94E+5	D	9.4	4.57E+5	E	24	4.47E+5
	F	94	4.63E+5	G	240	4.35E+5									
Pentachlorophenol	A	0.95	8.53E+5	B	2.4	7.40E+5	C	4.8	6.72E+5	D	9.5	6.18E+5	E	24	5.71E+5
	F	95	5.67E+5	G	240	5.45E+5	H	480	5.61E+5	I	950	5.52E+5			

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: JH Baxter & Company **Service Request:** K1802580
Project: J.H. Baxter-Arlington/PMP 2014 **Calibration Date:** 11/27/2017

Initial Calibration Summary
Chlorinated Phenols

Calibration ID: CAL15625 **Column:** Rtx-35
Instrument ID: GC28

		Calibration Evaluation				
Analyte Name	**Compound Type**	**Fit Type**	**Eval.**	**Eval. Result**	**Q**	**Control Criteria**
4-Bromo-2,6-dichlorophenol	SURR	AverageRF	% RSD	6.6		≤ 20
2,4,6-Trichlorophenol	MS	AverageRF	% RSD	13.6		≤ 20
2,4,5-Trichlorophenol	MS	AverageRF	% RSD	17.0		≤ 20
2,3,4,5-Tetrachlorophenol	MS	Linear	R2	0.999		≥ 0.99
2,3,5,6-Tetrachlorophenol	MS	AverageRF	% RSD	7.0		≤ 20
Pentachlorophenol	MS	AverageRF	% RSD	16.7		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington/PMP 2014

Service Request: K1802580
Calibration Date: 11/27/2017
Date Analyzed: 11/29/2017

Second Source Calibration Verification
Chlorinated Phenols

Calibration Type: External Standard
Analysis Method: 8151M

Calibration ID: CAL15625
Units: ug/L

File ID: J:\GC28\DATA\112717-CAL\1129F005.D\1129F005c.d

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
2,4,6-Trichlorophenol	47	40	321000	276000	-14	NA	± 20 %	AverageRF
2,4,5-Trichlorophenol	47	39	161000	135000	-16	NA	± 20 %	AverageRF
2,3,4,5-Tetrachlorophenol	47	46	381000	313000	NA	-2	± 20 %	Linear
2,3,5,6-Tetrachlorophenol	47	44	475000	439000	-8	NA	± 20 %	AverageRF
Pentachlorophenol	48	41	631000	543000	-14	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington/PMP 2014

Service Request: K1802580
Date Analyzed: 03/27/2018

Continuing Calibration Verification Summary
Chlorinated Phenols

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801645
Units: ug/L

File ID: J:\GC28\DATA\032718\0327F003.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	49	483000	477000	-1	NA	± 20	AverageRF
2,4,6-Trichlorophenol	47	55	359000	333000	NA	17	± 20	Linear
2,4,5-Trichlorophenol	47	46	190000	160000	NA	-2	± 20	Quadratic
2,3,4,5-Tetrachlorophenol	47	42	405000	363000	-10	NA	± 20	AverageRF
2,3,5,6-Tetrachlorophenol	47	44	549000	516000	-6	NA	± 20	AverageRF
Pentachlorophenol	48	46	655000	639000	-3	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington/PMP 2014

Service Request: K1802580
Date Analyzed: 03/27/2018

Continuing Calibration Verification Summary
Chlorinated Phenols

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801645
Units: ug/L

File ID: J:\GC28\DATA\032718\0327F003.D\0327F003C.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	58	361000	415000	15	NA	± 20	AverageRF
2,4,6-Trichlorophenol	47	46	321000	316000	-2	NA	± 20	AverageRF
2,4,5-Trichlorophenol	47	43	161000	147000	-9	NA	± 20	AverageRF
2,3,4,5-Tetrachlorophenol	47	50	381000	340000	NA	7	± 20	Linear
2,3,5,6-Tetrachlorophenol	47	49	475000	494000	4	NA	± 20	AverageRF
Pentachlorophenol	48	45	631000	604000	-4	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington/PMP 2014

Service Request: K1802580
Date Analyzed: 03/27/2018

Continuing Calibration Verification Summary
Chlorinated Phenols

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801645
Units: ug/L

File ID: J:\GC28\DATA\032718\0327F013.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	49	483000	468000	-3	NA	± 20	AverageRF
2,4,6-Trichlorophenol	47	54	359000	331000	NA	16	± 20	Linear
2,4,5-Trichlorophenol	47	46	190000	160000	NA	-2	± 20	Quadratic
2,3,4,5-Tetrachlorophenol	47	42	405000	362000	-11	NA	± 20	AverageRF
2,3,5,6-Tetrachlorophenol	47	43	549000	505000	-8	NA	± 20	AverageRF
Pentachlorophenol	48	46	655000	637000	-3	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington/PMP 2014

Service Request: K1802580
Date Analyzed: 03/27/2018

Continuing Calibration Verification Summary
Chlorinated Phenols

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801645
Units: ug/L

File ID: J:\GC28\DATA\032718\0327F013.D\0327F013C.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	54	361000	390000	8	NA	± 20	AverageRF
2,4,6-Trichlorophenol	47	44	321000	300000	-7	NA	± 20	AverageRF
2,4,5-Trichlorophenol	47	40	161000	139000	-14	NA	± 20	AverageRF
2,3,4,5-Tetrachlorophenol	47	48	381000	321000	NA	1	± 20	Linear
2,3,5,6-Tetrachlorophenol	47	46	475000	460000	-3	NA	± 20	AverageRF
Pentachlorophenol	48	43	631000	565000	-10	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client:	JH Baxter & Company	**Service Request:**	K1802580
Project:	J.H. Baxter-Arlington/PMP 2014	**Date Analyzed:**	03/27/2018

Continuing Calibration Verification Summary
Chlorinated Phenols

Calibration Type:	External Standard	**Calibration Date:**	11/27/2017
Analysis Method:	8151M	**Calibration ID:**	CAL15625
		Analysis Lot:	KWG1801645
		Units:	ug/L
File ID:	J:\GC28\DATA\032718\0327F039.D	**Column ID:**	Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	49	483000	477000	-1	NA	± 20	AverageRF
2,4,6-Trichlorophenol	47	55	359000	336000	NA	18	± 20	Linear
2,4,5-Trichlorophenol	47	45	190000	159000	NA	-3	± 20	Quadratic
2,3,4,5-Tetrachlorophenol	47	43	405000	368000	-9	NA	± 20	AverageRF
2,3,5,6-Tetrachlorophenol	47	44	549000	514000	-6	NA	± 20	AverageRF
Pentachlorophenol	48	47	655000	646000	-1	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington/PMP 2014

Service Request: K1802580
Date Analyzed: 03/27/2018

Continuing Calibration Verification Summary
Chlorinated Phenols

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801645
Units: ug/L

File ID: J:\GC28\DATA\032718\0327F039.D\0327F039C.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	55	361000	395000	9	NA	± 20	AverageRF
2,4,6-Trichlorophenol	47	44	321000	304000	-5	NA	± 20	AverageRF
2,4,5-Trichlorophenol	47	41	161000	140000	-13	NA	± 20	AverageRF
2,3,4,5-Tetrachlorophenol	47	48	381000	325000	NA	2	± 20	Linear
2,3,5,6-Tetrachlorophenol	47	46	475000	465000	-2	NA	± 20	AverageRF
Pentachlorophenol	48	42	631000	560000	-11	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington/PMP 2014

Service Request: K1802580
Date Analyzed: 03/27/2018

Continuing Calibration Verification Summary
Chlorinated Phenols

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801645
Units: ug/L

File ID: J:\GC28\DATA\032718\0327F049.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift		Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	51	483000	494000	2	NA		± 20	AverageRF
2,4,6-Trichlorophenol	47	58	359000	350000	NA	23	*	± 20	Linear
2,4,5-Trichlorophenol	47	47	190000	164000	NA	0		± 20	Quadratic
2,3,4,5-Tetrachlorophenol	47	44	405000	377000	-7	NA		± 20	AverageRF
2,3,5,6-Tetrachlorophenol	47	45	549000	529000	-4	NA		± 20	AverageRF
Pentachlorophenol	48	48	655000	661000	1	NA		± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington/PMP 2014

Service Request: K1802580
Date Analyzed: 03/27/2018

Continuing Calibration Verification Summary
Chlorinated Phenols

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 11/27/2017
Calibration ID: CAL15625
Analysis Lot: KWG1801645
Units: ug/L

File ID: J:\GC28\DATA\032718\0327F049.D\0327F049C.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	57	361000	409000	13	NA	± 20	AverageRF
2,4,6-Trichlorophenol	47	46	321000	315000	-2	NA	± 20	AverageRF
2,4,5-Trichlorophenol	47	42	161000	144000	-11	NA	± 20	AverageRF
2,3,4,5-Tetrachlorophenol	47	49	381000	331000	NA	4	± 20	Linear
2,3,5,6-Tetrachlorophenol	47	48	475000	479000	1	NA	± 20	AverageRF
Pentachlorophenol	48	44	631000	587000	-7	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: JH Baxter & Company **Service Request:** K1802580
Project: J.H. Baxter-Arlington/PMP 2014

Analysis Run Log
Chlorinated Phenols

Analysis Method: 8151M **Analysis Lot:** KWG1801645
Instrument ID: GC28
Column: Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0327F003.D	Continuing Calibration Verification	KWG1801645-1	3/27/2018	09:43		3/27/2018	09:52
0327F004.D	Instrument Blank	KWG1801645-2	3/27/2018	10:00		3/27/2018	10:09
0327F005.D	ZZZZZZ	ZZZZZZ	3/27/2018	10:58		3/27/2018	11:07
0327F006.D	ZZZZZZ	ZZZZZZ	3/27/2018	11:17		3/27/2018	11:26
0327F007.D	ZZZZZZ	ZZZZZZ	3/27/2018	11:34		3/27/2018	11:43
0327F008.D	EW COMPOSITE	K1802580-004	3/27/2018	11:51		3/27/2018	12:00
0327F009.D	EW COMPOSITEMS	KWG1801629-1	3/27/2018	12:09		3/27/2018	12:18
0327F010.D	EW COMPOSITEDMS	KWG1801629-2	3/27/2018	12:26		3/27/2018	12:35
0327F011.D	Lab Control Sample	KWG1801629-3	3/27/2018	12:44		3/27/2018	12:53
0327F012.D	Method Blank	KWG1801629-4	3/27/2018	13:01		3/27/2018	13:10
0327F013.D	Continuing Calibration Verification	KWG1801645-3	3/27/2018	13:19		3/27/2018	13:28
0327F014.D	Instrument Blank	KWG1801645-4	3/27/2018	13:36		3/27/2018	13:45
0327F015.D	ZZZZZZ	ZZZZZZ	3/27/2018	13:53		3/27/2018	14:02
0327F016.D	ZZZZZZ	ZZZZZZ	3/27/2018	14:11		3/27/2018	14:20
0327F017.D	ZZZZZZ	ZZZZZZ	3/27/2018	14:28		3/27/2018	14:37
0327F018.D	ZZZZZZ	ZZZZZZ	3/27/2018	14:46		3/27/2018	14:55
0327F019.D	ZZZZZZ	ZZZZZZ	3/27/2018	15:03		3/27/2018	15:12
0327F020.D	ZZZZZZ	ZZZZZZ	3/27/2018	15:21		3/27/2018	15:30
0327F021.D	ZZZZZZ	ZZZZZZ	3/27/2018	15:38		3/27/2018	15:47
0327F022.D	ZZZZZZ	ZZZZZZ	3/27/2018	15:56		3/27/2018	16:05
0327F023.D	ZZZZZZ	ZZZZZZ	3/27/2018	16:13		3/27/2018	16:22
0327F024.D	ZZZZZZ	ZZZZZZ	3/27/2018	16:31		3/27/2018	16:40
0327F025.D	Continuing Calibration Verification	KWG1801645-5	3/27/2018	16:48		3/27/2018	16:57
0327F026.D	Instrument Blank	KWG1801645-6	3/27/2018	17:06		3/27/2018	17:15
0327F027.D	ZZZZZZ	ZZZZZZ	3/27/2018	17:23		3/27/2018	17:32
0327F028.D	ZZZZZZ	ZZZZZZ	3/27/2018	17:41		3/27/2018	17:50
0327F029.D	ZZZZZZ	ZZZZZZ	3/27/2018	17:58		3/27/2018	18:07
0327F030.D	ZZZZZZ	ZZZZZZ	3/27/2018	18:16		3/27/2018	18:25
0327F031.D	ZZZZZZ	ZZZZZZ	3/27/2018	18:33		3/27/2018	18:42
0327F032.D	ZZZZZZ	ZZZZZZ	3/27/2018	18:51		3/27/2018	19:00
0327F033.D	ZZZZZZ	ZZZZZZ	3/27/2018	19:09		3/27/2018	19:18
0327F034.D	ZZZZZZ	ZZZZZZ	3/27/2018	19:26		3/27/2018	19:35
0327F035.D	ZZZZZZ	ZZZZZZ	3/27/2018	19:44		3/27/2018	19:53
0327F036.D	ZZZZZZ	ZZZZZZ	3/27/2018	20:02		3/27/2018	20:11
0327F037.D	ZZZZZZ	ZZZZZZ	3/27/2018	20:19		3/27/2018	20:28

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: JH Baxter & Company **Service Request:** K1802580
Project: J.H. Baxter-Arlington/PMP 2014

Analysis Run Log
Chlorinated Phenols

Analysis Method: 8151M **Analysis Lot:** KWG1801645
Instrument ID: GC28
Column: Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0327F038.D	ZZZZZZ	ZZZZZZ	3/27/2018	20:37		3/27/2018	20:46
0327F039.D	Continuing Calibration Verification	KWG1801645-7	3/27/2018	20:54		3/27/2018	21:03
0327F040.D	Instrument Blank	KWG1801645-8	3/27/2018	21:12		3/27/2018	21:21
0327F041.D	ZZZZZZ	ZZZZZZ	3/27/2018	21:29		3/27/2018	21:38
0327F042.D	ZZZZZZ	ZZZZZZ	3/27/2018	21:47		3/27/2018	21:56
0327F043.D	ZZZZZZ	ZZZZZZ	3/27/2018	22:04		3/27/2018	22:13
0327F044.D	ZZZZZZ	ZZZZZZ	3/27/2018	22:22		3/27/2018	22:31
0327F045.D	ZZZZZZ	ZZZZZZ	3/27/2018	22:40		3/27/2018	22:49
0327F046.D	ZZZZZZ	ZZZZZZ	3/27/2018	22:57		3/27/2018	23:06
0327F047.D	ZZZZZZ	ZZZZZZ	3/27/2018	23:15		3/27/2018	23:24
0327F048.D	EW COMPOSITE	K1802580-004	3/27/2018	23:33		3/27/2018	23:42
0327F049.D	Continuing Calibration Verification	KWG1801645-9	3/27/2018	23:50		3/27/2018	23:59
0327F050.D	Instrument Blank	KWG1801645-10	3/28/2018	00:08		3/28/2018	00:17

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington/PMP 2014
Sample Matrix: Water

Service Request: K1802580
Date Extracted: 03/21/2018

Extraction Prep Log
Chlorinated Phenols

Extraction Method: METHOD
Analysis Method: 8151M

Extraction Lot: KWG1801629
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
EW COMPOSITE	K1802580-004	03/16/18	03/20/18	5mL	1mL	NA	
EW COMPOSITEDL	K1802580-004	03/16/18	03/20/18	5mL	1mL	NA	
Method Blank	KWG1801629-4	NA	NA	5mL	1mL	NA	
EW COMPOSITEMS	KWG1801629-1	03/16/18	03/20/18	5mL	1mL	NA	
EW COMPOSITEDMS	KWG1801629-2	03/16/18	03/20/18	5mL	1mL	NA	
Lab Control Sample	KWG1801629-3	NA	NA	5mL	1mL	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Confirmation Results

Client:	JH Baxter & Company	**Service Request:**	K1802580
Project:	J.H. Baxter-Arlington/PMP 2014	**Date Collected:**	03/16/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018
		Date Extracted:	03/21/2018

Chlorinated Phenols

Sample Name:	EW COMPOSITE	**Units:**	ug/L
Lab Code:	K1802580-004	**Basis:**	NA
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	8151M		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Tetrachlorophenols, Total	1.0	0.28	13	12	8.0		1	03/27/18
Pentachlorophenol	5.0	1.6	280	300	6.9	D	10	03/27/18

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Chlorinated Phenols

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F008.D
Lab ID: K1802580-004
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 11:51
Date Quantitated: 03/27/2018 14:12
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ18017

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	Pentachlorophenol	1359.11	NA	).059997558	dil

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F008.D\0327F008C.D
Lab ID: K1802580-004
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 11:51
Date Quantitated: 03/27/2018 14:12
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ18017

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	Pentachlorophenol	1503.94	NA	).059997558	dil

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F008.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F008.D\0327F008c.d			**Vial:**	6
Acqu Date:	03/27/2018 11:51	**Quant Date:**	03/27/2018 14:12	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ18017	**Soln Conc. Units:**	ug/L
Lab ID:	K1802580-004				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/16/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	K1802580
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668865	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Chlorinated Phenols	**Report List ID:**	LJ18017
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	17004386	14177844	35.23	39.33			79 OK
				%Recovery =	70 OK	79 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
2,4,6-Trichlorophenol			4.12	-0.01	0d	322026	0.0000	1.00	0.14U	0.20J	0.14U
2,4,5-Trichlorophenol	4.21	+0.03	4.67	+0.02	115080	65346	0.0140	0.4060	0.16U	0.16U	0.16U
2,3,5,6-Tetrachlorophenol	4.47	+0.01	4.97	+0.01	33531644	30601024	61.06	64.38	12	13	**12**
2,3,4,5-Tetrachlorophenol	5.01				301004	0d	0.7430	0.0000	0.15J	0.14U	0.14U
Pentachlorophenol	5.16	+0.01	5.56	+0.01	890689930	949052178	1,359	1,504	270E	300E dil	NR

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

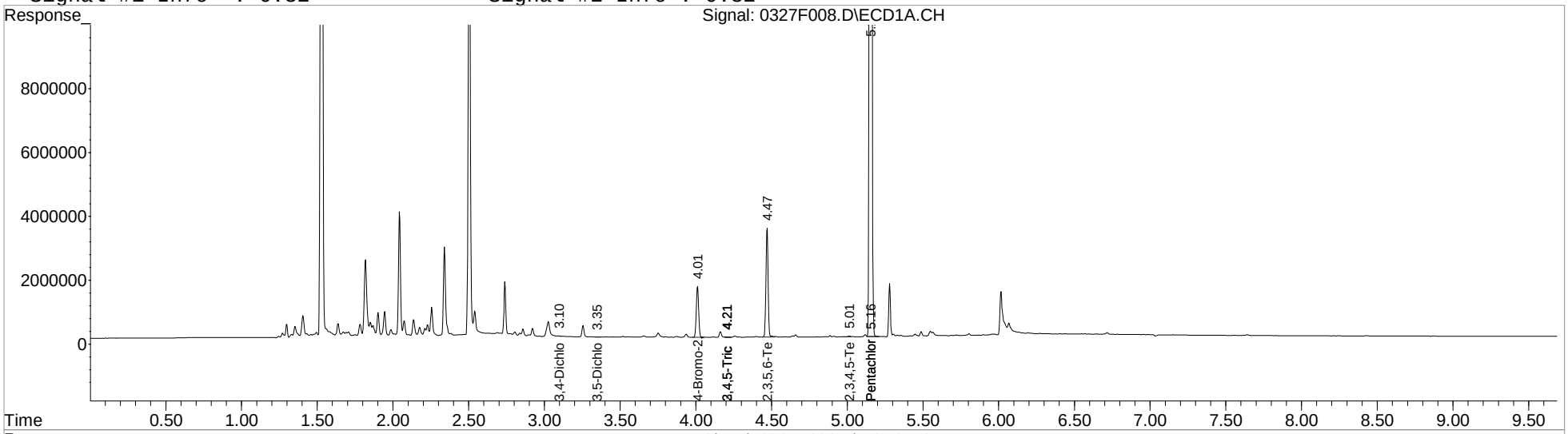
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

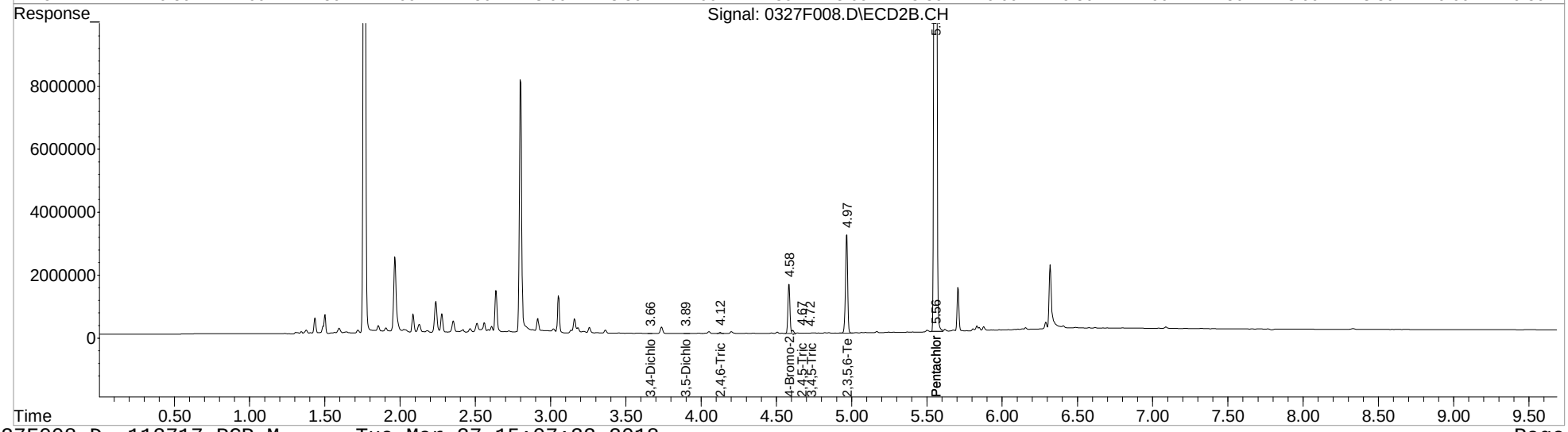
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F008.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC28\DATA\032718\0327F008.D\ECD2B.CH
Acq On : 27 Mar 2018 11:51 am Operator: JD
Sample : K1802580-004 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 14:12 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F008.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC28\DATA\032718\0327F008.D\ECD2B.CH
Acq On : 27 Mar 2018 11:51 am Operator: JD
Sample : K1802580-004 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:22 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.01	4.58	17004386	14177844	35.226	39.327	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.66	49854	24368	2.870	0.065	#
2)		3,5-Dichlorophen	3.35	3.89	14340	11286	1.177	0.913	
3)		2,4,6-Trichlorop	0.00	4.12	0	322026	N.D. d	1.002	
5)		2,4,5-Trichlorop	4.21	4.67	115080	65346	0.014	0.406	#
6)		3,4,5-Trichlorop	4.21	4.72	115080	14742	0.684	0.099	#
7)	M	2,3,5,6-Tetrachl	4.47	4.97	33531644	30601024	61.059	64.376	
8)	M	2,3,4,5-Tetrachl	5.01	0.00	301004	0	0.743	N.D. d	#
9)	M	Pentachloropheno	5.16	5.56	890.7E6	949.1E6	1359.113	1503.944	
10)		Pentachloroaniso	5.16	5.56	890.7E6	949.1E6	1430.579	1582.001	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F048.D
Lab ID: K1802580-004
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 23:33
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ18017

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	2,4,5-Trichlorophenol	895.13	NA	3.449996948	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F048.D\0327F048C.D
Lab ID: K1802580-004
RunType: SMPL
Matrix: WATER

Date Acquired: 03/27/2018 23:33
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
ListJoinID: LJ18017

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F048.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F048.D\0327F048c.d			**Vial:**	6
Acqu Date:	03/27/2018 23:33	**Quant Date:**	03/28/2018 08:46	**Dilution:**	10.0
Run Type:	SMPL	**ListJoinID:**	LJ18017	**Soln Conc. Units:**	ug/L
Lab ID:	K1802580-004				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**	03/16/2018	**Receive Date:**	03/20/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	K1802580
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668865	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Chlorinated Phenols	**Report List ID:**	LJ18017
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	1947876	1207261	4.04	3.35			81 OK
				%Recovery =	81 OK	67 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
2,4,6-Trichlorophenol			4.13		25826	5336	0.0000	0.0170	1.4U	1.4U	1.4U
2,4,5-Trichlorophenol	4.17	-0.02	4.65	-0.01	61552	23345	895.13	0.1450	1800ED	1.6U	1.6U
2,3,5,6-Tetrachlorophenol	4.47		4.97	+0.01	3895448	3032198	7.09	6.38	14D	13D	**13**D
2,3,4,5-Tetrachlorophenol	5.01				28396	44890	0.0700	0.0000	1.4U	1.4U	1.4U
Pentachlorophenol	5.15		5.55		97987266	87340874	149.52	138.41	300D	280D	**280**D

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	10.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F048.D Vial: 6
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 11:33 pm Operator: JD
Sample : K1802580-004@10X Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:23 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.018	4.587	1947876	1207261	4.035	3.349	
		Target Compounds							
1)		3,4-Dichl...	3.098	3.674	10997	19986	0.633	909.739	#
2)		3,5-Dichl...	3.368	3.910	5568	36596	0.457	2.960	#
3)		2,4,6-Tri...	3.444	4.133	25826	5336	N.D.	0.017	
5)		2,4,5-Tri...	4.168	4.647	61552	23345	895.130	0.145	#
6)		3,4,5-Tri...	4.211	4.723	7832	37214	0.047	0.251	#
7)	M	2,3,5,6-T...	4.474	4.967	3895448	3032198	7.093	6.379	
8)	M	2,3,4,5-T...	5.014	5.370	28396	44890	0.070	N.D.	#
9)	M	Pentachlo...	5.154	5.553	97987266	87340874	149.520	138.407	
10)		Pentachlo...	5.154	5.553	97987266	87340874	157.382	145.591	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

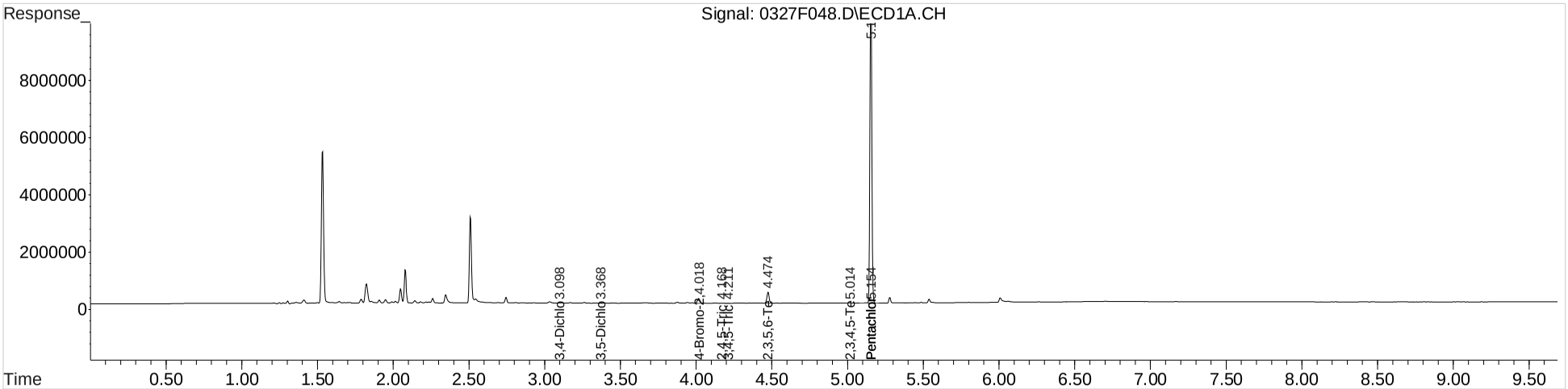
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F048.D Vial: 6
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 11:33 pm Operator: JD
Sample : K1802580-004@10X Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:23 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F012.D
Lab ID: KWG1801629-4
RunType: MB
Matrix: WATER

Date Acquired: 03/27/2018 13:01
Date Quantitated: 03/27/2018 14:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F012.D\0327F012C.D
Lab ID: KWG1801629-4
RunType: MB
Matrix: WATER

Date Acquired: 03/27/2018 13:01
Date Quantitated: 03/27/2018 14:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F012.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F012.D\0327F012c.d			**Vial:**	10
Acqu Date:	03/27/2018 13:01	**Quant Date:**	03/27/2018 14:57	**Dilution:**	1.0
Run Type:	MB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-4				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668871	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:		**Method ID:**	MJ1442
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01		4.59	+0.01	17214760	13899284	35.66	38.55			77 OK
						%Recovery =	71 OK	77 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	-0.01	3.67	+0.02	64462	51792	3.71	1.70	0.742J	0.70U	0.70U
3,5-Dichlorophenol	3.35		3.90		13164	14194	1.08	1.15	1.3U	1.3U	1.3U
2,4,6-Trichlorophenol			4.13		0d	254316	0.0000	0.7910	0.084U	0.158J	0.084U
2,4,5-Trichlorophenol			4.64	-0.01	0d	110854	0.0000	0.6890	0.32U	0.32U	0.32U
3,4,5-Trichlorophenol	4.21		4.70	-0.01	9948	14130	0.0590	0.0950	0.30U	0.30U	0.30U
2,3,5,6-Tetrachlorophenol	4.45	-0.01	4.96		19710	236038	0.0360	0.4970	0.064U	0.0994J	0.064U
2,3,4,5-Tetrachlorophenol	5.01				172332	0d	0.4250	0.0000	0.0850J	0.084U	0.084U
Pentachlorophenol	5.16	+0.01c	5.55	c	13174	44368	0.0200	0.0700	0.15U	0.15U	0.15U
2,3,4,5,6-Pentachloroanisole	5.16	+0.01c	5.55	c	13174	44368	0.0210	0.0740	0.50U	0.50U	0.50U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F012.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F012.D\0327F012c.d			**Vial:**	10
Acqu Date:	03/27/2018 13:01	**Quant Date:**	03/27/2018 14:57	**Dilution:**	1.0
Run Type:	MB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-4				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
		Prep Date:	03/21/2018		
Prep Ref:	1668871				

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:		**Method ID:**	MJ252
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.59	+0.01	17214760	13899284	35.66	38.55			77 OK
					%Recovery =	71 OK	77 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	-0.01	3.67	+0.02	64462	51792	3.71	1.70	0.742J	0.35U	**0.742**J
3,5-Dichlorophenol	3.35		3.90		13164	14194	1.08	1.15	0.65U	0.65U	0.65U
2,4,6-Trichlorophenol			4.13		0**d**	254316	0.0000	0.7910	0.042U	0.158J	0.042U
2,4,5-Trichlorophenol			4.64	-0.01	0**d**	110854	0.0000	0.6890	0.16U	0.16U	0.16U
3,4,5-Trichlorophenol	4.21		4.70	-0.01	9948	14130	0.0590	0.0950	0.15U	0.15U	0.15U
2,3,5,6-Tetrachlorophenol	4.45	-0.01	4.96		19710	236038	0.0360	0.4970	0.032U	0.0994J	0.032U
2,3,4,5-Tetrachlorophenol	5.01				172332	0**d**	0.4250	0.0000	0.0850J	0.042U	**0.0850**JN
Pentachlorophenol	5.16	+0.01 c	5.55	c	13174	44368	0.0200	0.0700	0.071U	0.071U	0.071U
2,3,4,5,6-Pentachloroanisole	5.16	+0.01 c	5.55	c	13174	44368	0.0210	0.0740	0.50U	0.50U	0.50U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

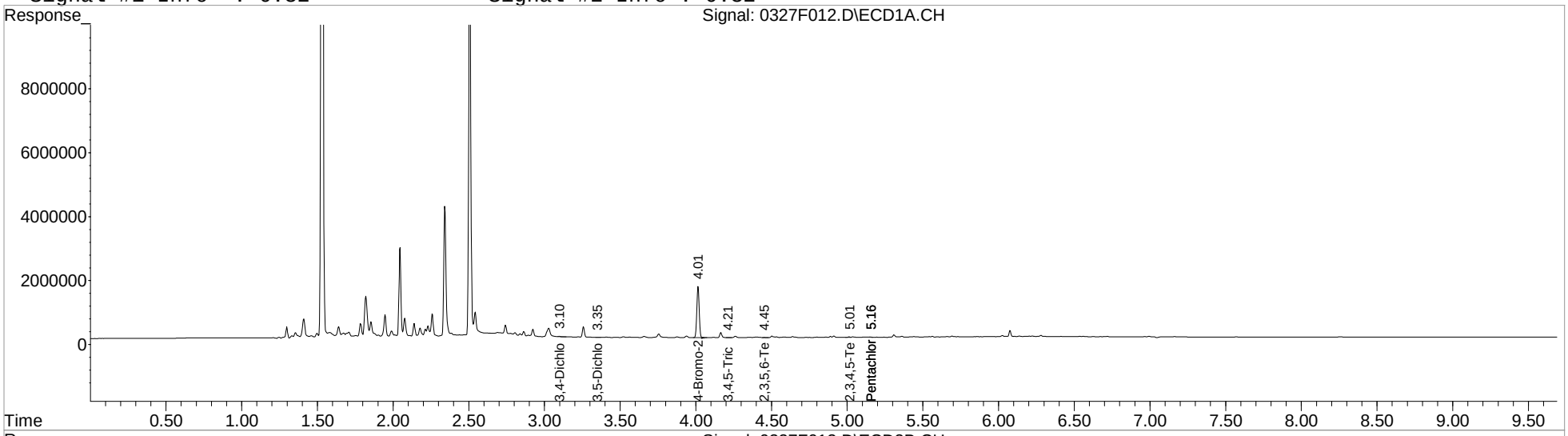
Quantitation Report (QT Reviewed)

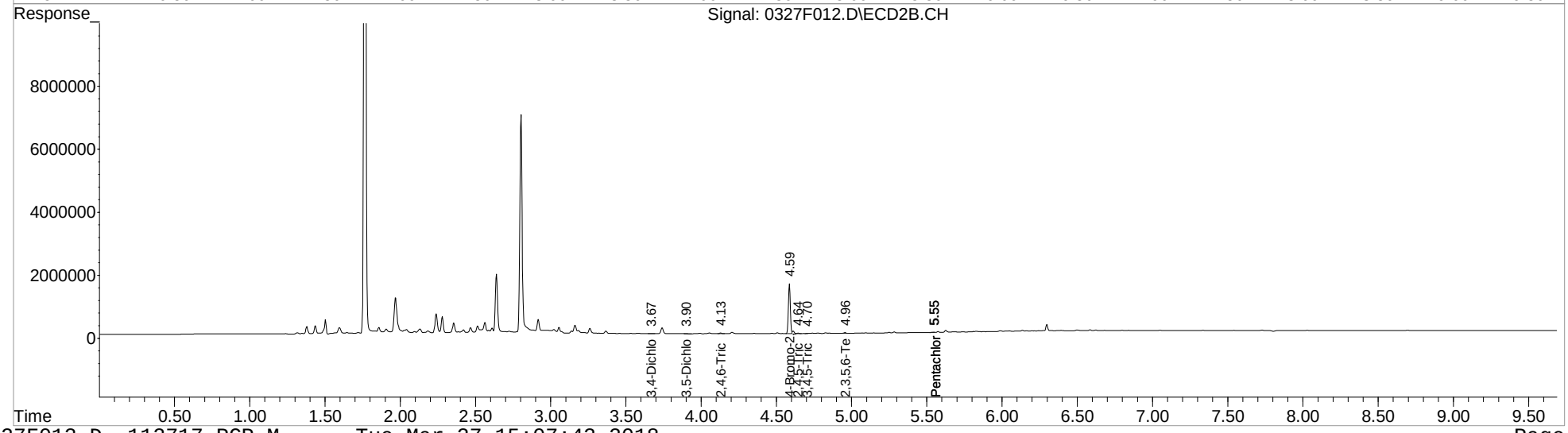
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F012.D\ECD1A.CH Vial: 10
Signal #2 : J:\GC28\DATA\032718\0327F012.D\ECD2B.CH
Acq On : 27 Mar 2018 1:01 pm Operator: JD
Sample : KWG1803560-4 MB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 14:57 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F012.D\ECD1A.CH Vial: 10
Signal #2 : J:\GC28\DATA\032718\0327F012.D\ECD2B.CH
Acq On : 27 Mar 2018 1:01 pm Operator: JD
Sample : KWG1803560-4 MB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:25 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.01	4.59	17214760	13899284	35.661	38.554	
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	64462	51792	3.711	1.703	#
2)		3,5-Dichlorophen	3.35	3.90	13164	14194	1.081	1.148	
3)		2,4,6-Trichlorop	0.00	4.13	0	254316	N.D. d	0.791	
5)		2,4,5-Trichlorop	0.00	4.64	0	110854	N.D. d	0.689	
6)		3,4,5-Trichlorop	4.21	4.70	9948	14130	0.059	0.095	#
7)	M	2,3,5,6-Tetrachl	4.45	4.96	19710	236038	0.036	0.497	#
8)	M	2,3,4,5-Tetrachl	5.01	0.00	172332	0	0.425	N.D. d	#
9)	M	Pentachloropheno	5.16	5.55	13174	44368	0.020	0.070	#
10)		Pentachloroaniso	5.16	5.55	13174	44368	0.021	0.074	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F009.D
Lab ID: KWG1801629-1 -- K1802580-004MS
RunType: MS
Matrix: WATER

Date Acquired: 03/27/2018 12:09
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	Pentachlorophenol	1359.36	NA	).059997558	
	2,3,4,5,6-Pentachloroanisole	1430.84	NA	1000	

MSNA

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F009.D\0327F009C.D
Lab ID: KWG1801629-1 -- K1802580-004MS
RunType: MS
Matrix: WATER

Date Acquired: 03/27/2018 12:09
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	Pentachlorophenol	1498.11	NA	).059997558	
	2,3,4,5,6-Pentachloroanisole	1575.87	NA	1000	

MSNA

Primary Review: _____

Secondary Review: _____

1st JAD 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F009.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F009.D\0327F009c.d			**Vial:**	7
Acqu Date:	03/27/2018 12:09	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-1				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	Method Mod		
Prep Ref:	1668868	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	16574852	13800880	34.34	38.28			77 OK
				%Recovery =	69 OK	77 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16 +0.01	5.56 +0.01	890850748	945370864	1,359	1,498	270E	300E	MSNA **270E**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F009.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F009.D\0327F009c.d			**Vial:**	7
Acqu Date:	03/27/2018 12:09	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	MS	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-1 -- K1802580-004MS				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668868	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ1442
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	16574852	13800880	34.34	38.28			77 OK
				%Recovery =	69 OK	77 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11	3.66 +0.01	760530	425958	43.79	24.67	8.76	4.93	**4.93**P
3,5-Dichlorophenol	3.35	3.90	243872	158684	20.02	12.83	4.00	2.57	**2.57**P
2,4,6-Trichlorophenol	3.45	4.13	10897978	9984878	38.04	31.06	7.61	6.21	**6.21**
2,4,5-Trichlorophenol	4.19 +0.01	4.65	5114942	4864192	30.57	30.24	6.11	6.05	**6.05**
3,4,5-Trichlorophenol	4.22 +0.01	4.72 +0.01	4937248	4395984	29.36	29.67	5.87	5.93	**5.87**
2,3,5,6-Tetrachlorophenol	4.47 +0.01	4.97 +0.01	49474276	46475008	90.09	97.77	18.0	19.6	**18.0**
2,3,4,5-Tetrachlorophenol	5.02 +0.01	5.37	12756598	11462100	31.48	35.75	6.30	7.15	**6.30**
Pentachlorophenol	5.16 +0.01c	5.56 +0.01c	890850748	945370864	1,359	1,498	272E	300E	**272**E
2,3,4,5,6-Pentachloroanisole	5.16 +0.01c	5.56 +0.01c	890850748	945370864	1,431	1,576	286E	315E	**286**E

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F009.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F009.D\0327F009c.d			**Vial:**	7
Acqu Date:	03/27/2018 12:09	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	MS	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-1 -- K1802580-004MS				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668868	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	16574852	13800880	34.34	38.28			77 OK
				%Recovery =	69 OK	77 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11	3.66 +0.01	760530	425958	43.79	24.67	8.76	4.93	**8.76**P
3,5-Dichlorophenol	3.35	3.90	243872	158684	20.02	12.83	4.00	2.57	**4.00**P
2,4,6-Trichlorophenol	3.45	4.13	10897978	9984878	38.04	31.06	7.61	6.21	**7.61**
2,4,5-Trichlorophenol	4.19 +0.01	4.65	5114942	4864192	30.57	30.24	6.11	6.05	**6.11**
3,4,5-Trichlorophenol	4.22 +0.01	4.72 +0.01	4937248	4395984	29.36	29.67	5.87	5.93	**5.87**
2,3,5,6-Tetrachlorophenol	4.47 +0.01	4.97 +0.01	49474276	46475008	90.09	97.77	18.0	19.6	**18.0**
2,3,4,5-Tetrachlorophenol	5.02 +0.01	5.37	12756598	11462100	31.48	35.75	6.30	7.15	**6.30**
Pentachlorophenol	5.16 +0.01c	5.56 +0.01c	890850748	945370864	1,359	1,498	272E	300E	**272**E
2,3,4,5,6-Pentachloroanisole	5.16 +0.01c	5.56 +0.01c	890850748	945370864	1,431	1,576	286E	315E	**286**E

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

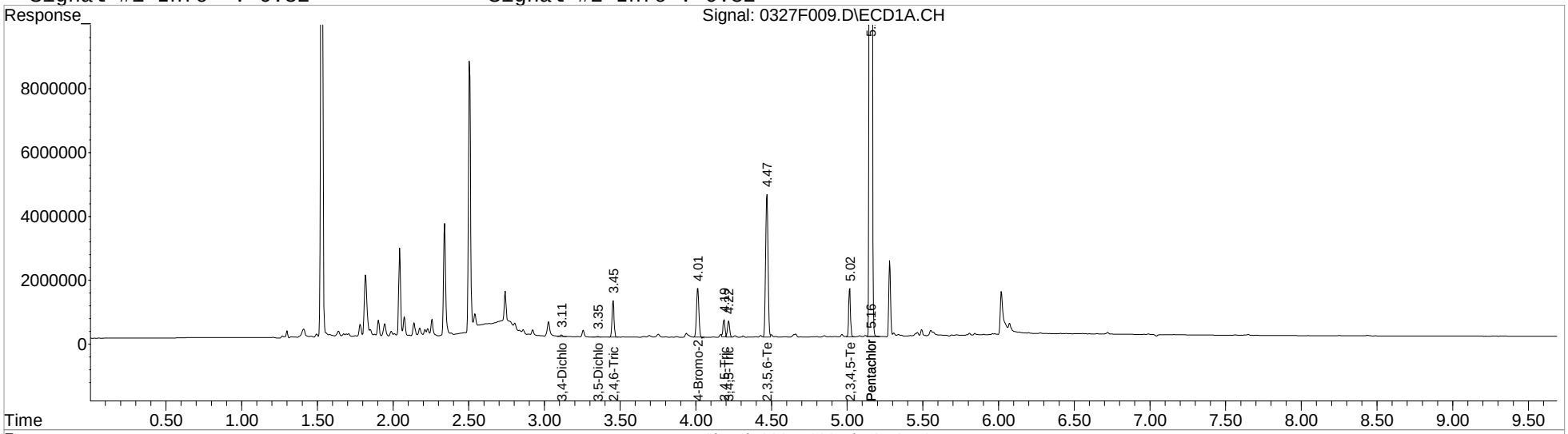
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

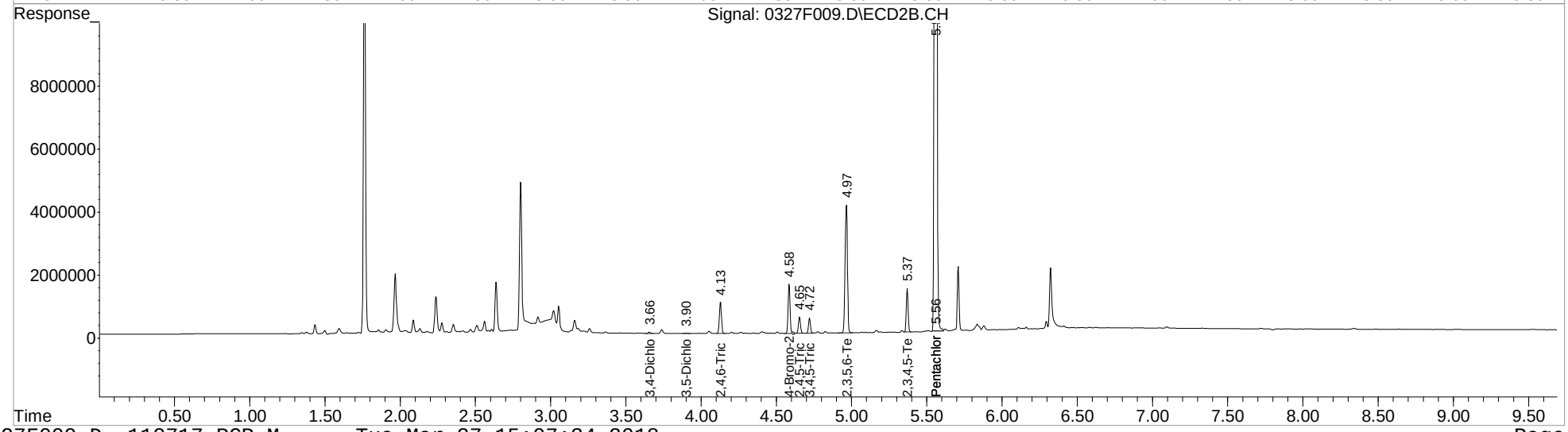
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F009.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC28\DATA\032718\0327F009.D\ECD2B.CH
Acq On : 27 Mar 2018 12:09 pm Operator: JD
Sample : K1802580-004 MS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F009.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC28\DATA\032718\0327F009.D\ECD2B.CH
Acq On : 27 Mar 2018 12:09 pm Operator: JD
Sample : K1802580-004 MS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:22 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.01	4.58	16574852	13800880	34.336	38.281	
		Target Compounds							
1)		3,4-Dichlorophen	3.11	3.66	760530	425958	43.787	24.667	#
2)		3,5-Dichlorophen	3.35	3.90	243872	158684	20.018	12.834	#
3)		2,4,6-Trichlorop	3.45	4.13	10897978	9984878	38.043	31.061	
5)		2,4,5-Trichlorop	4.19	4.65	5114942	4864192	30.565	30.242	
6)		3,4,5-Trichlorop	4.22	4.72	4937248	4395984	29.363	29.668	
7)	M	2,3,5,6-Tetrachl	4.47	4.97	49474276	46475008	90.089	97.771	
8)	M	2,3,4,5-Tetrachl	5.02	5.37	12756598	11462100	31.479	35.751	
9)	M	Pentachloropheno	5.16	5.56	890.9E6	945.4E6	1359.359	1498.110	
10)		Pentachloroaniso	5.16	5.56	890.9E6	945.4E6	1430.837	1575.865	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F010.D
Lab ID: KWG1801629-2 -- K1802580-004DMS
RunType: DMS
Matrix: WATER

Date Acquired: 03/27/2018 12:26
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	Pentachlorophenol	1435.94	NA	).059997558	
	2,3,4,5,6-Pentachloroanisole	1511.44	NA	1000	

MSNA

Primary Review: _____

Secondary Review: _____

Printed: 03/28/2018 13:57:52
u:\Stealth\Crystal.rpt\except2.rpt

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F010.D\0327F010C.D
Lab ID: KWG1801629-2 -- K1802580-004DMS
RunType: DMS
Matrix: WATER

Date Acquired: 03/27/2018 12:26
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	Pentachlorophenol	1564.29	NA	).059997558	
	2,3,4,5,6-Pentachloroanisole	1645.48	NA	1000	

MSNA

Primary Review: _____

Secondary Review: _____

1st JAD 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F010.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F010.D\0327F010c.d			**Vial:**	8
Acqu Date:	03/27/2018 12:26	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	SMPL	**ListJoinID:**	LJ1610	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-2				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	Method Mod		
Prep Ref:	1668869	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:	Pentachlorophenol	**Report List ID:**	LJ1610
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Report List	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	16310536	13460102	33.79	37.34			75 OK
				%Recovery =	68 OK	75 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Pentachlorophenol	5.16 +0.01	5.56 +0.01	941036646	987133464	1,436	1,564	290E	310E	MSNA **290**E

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F010.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F010.D\0327F010c.d			**Vial:**	8
Acqu Date:	03/27/2018 12:26	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	DMS	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-2 -- K1802580-004DMS				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668869	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ1442
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	16310536	13460102	33.79	37.34			75 OK
				%Recovery =	68 OK	75 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11	3.66 +0.01	768066	391876	44.22	22.53	8.84	4.51	**4.51**P
3,5-Dichlorophenol	3.35	3.90	255438	143028	20.97	11.57	4.19	2.31	**2.31**P
2,4,6-Trichlorophenol	3.45	4.13	10551530	9502804	36.80	29.56	7.36	5.91	**5.91**
2,4,5-Trichlorophenol	4.19 +0.01	4.65	5082430	4581598	30.36	28.49	6.07	5.70	**5.70**
3,4,5-Trichlorophenol	4.22 +0.01	4.72 +0.01	4605134	4172044	27.39	28.16	5.48	5.63	**5.48**
2,3,5,6-Tetrachlorophenol	4.47 +0.01	4.97 +0.01	51881138	48000592	94.47	100.98	18.9	20.2	**18.9**
2,3,4,5-Tetrachlorophenol	5.01	5.37	12506030	11042944	30.86	34.41	6.17	6.88	**6.17**
Pentachlorophenol	5.16 +0.01c	5.56 +0.01c	941036646	987133464	1,436	1,564	287E	313E	**287**E
2,3,4,5,6-Pentachloroanisole	5.16 +0.01c	5.56 +0.01c	941036646	987133464	1,511	1,645	302E	329E	**302**E

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F010.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F010.D\0327F010c.d			**Vial:**	8
Acqu Date:	03/27/2018 12:26	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	DMS	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-2 -- K1802580-004DMS				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668869	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	16310536	13460102	33.79	37.34			75 OK
				%Recovery =	68 OK	75 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11	3.66 +0.01	768066	391876	44.22	22.53	8.84	4.51	**8.84**P
3,5-Dichlorophenol	3.35	3.90	255438	143028	20.97	11.57	4.19	2.31	**4.19**P
2,4,6-Trichlorophenol	3.45	4.13	10551530	9502804	36.80	29.56	7.36	5.91	**7.36**
2,4,5-Trichlorophenol	4.19 +0.01	4.65	5082430	4581598	30.36	28.49	6.07	5.70	**6.07**
3,4,5-Trichlorophenol	4.22 +0.01	4.72 +0.01	4605134	4172044	27.39	28.16	5.48	5.63	**5.48**
2,3,5,6-Tetrachlorophenol	4.47 +0.01	4.97 +0.01	51881138	48000592	94.47	100.98	18.9	20.2	**18.9**
2,3,4,5-Tetrachlorophenol	5.01	5.37	12506030	11042944	30.86	34.41	6.17	6.88	**6.17**
Pentachlorophenol	5.16 +0.01c	5.56 +0.01c	941036646	987133464	1,436	1,564	287E	313E	**287**E
2,3,4,5,6-Pentachloroanisole	5.16 +0.01c	5.56 +0.01c	941036646	987133464	1,511	1,645	302E	329E	**302**E

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

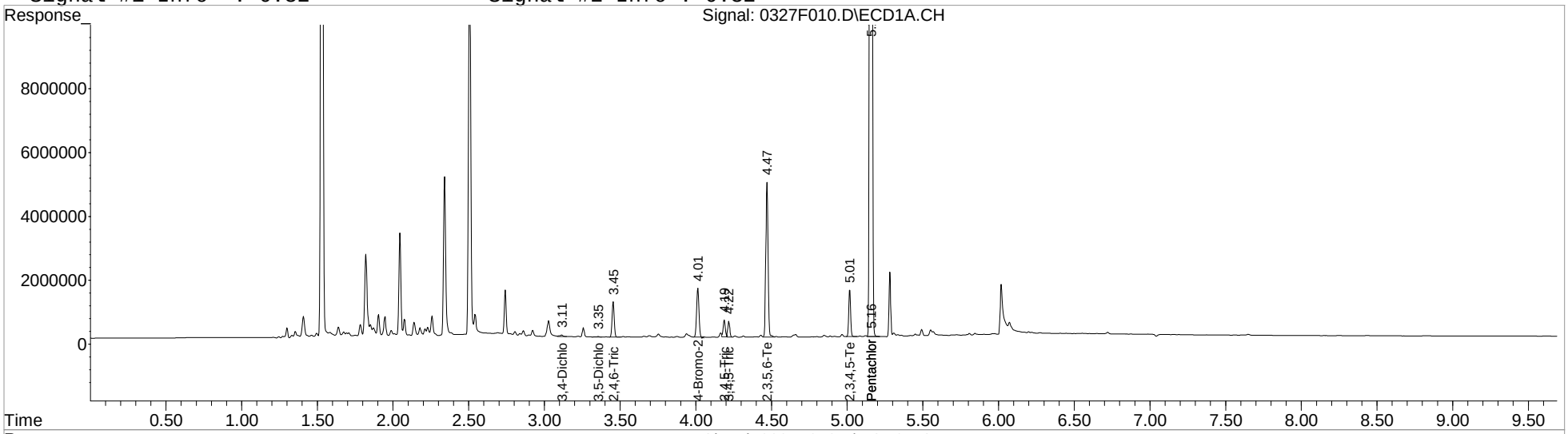
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

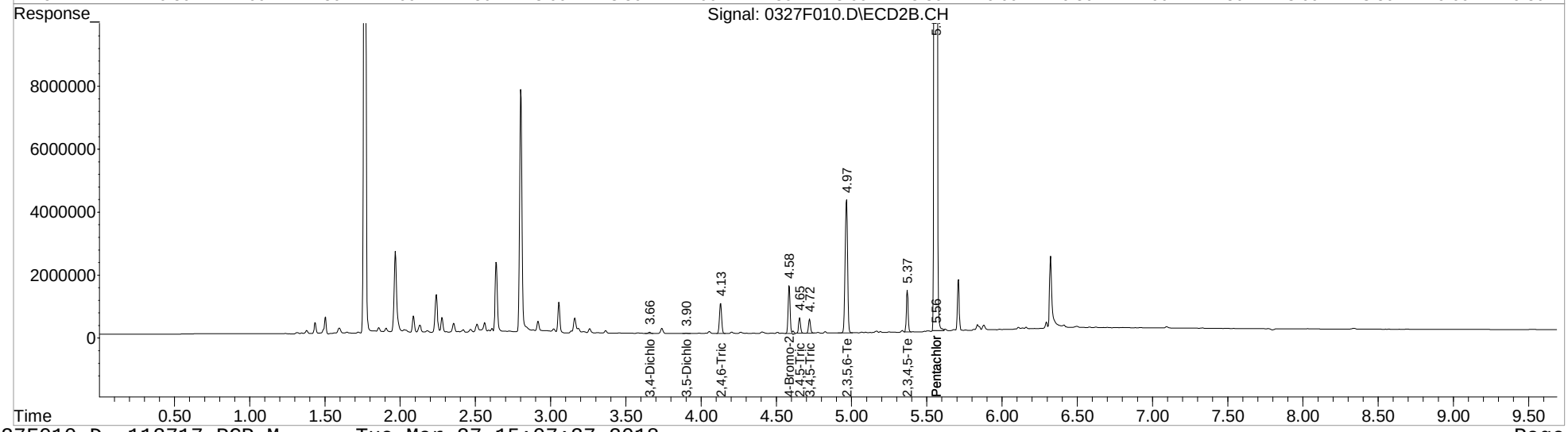
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F010.D\ECD1A.CH Vial: 8
Signal #2 : J:\GC28\DATA\032718\0327F010.D\ECD2B.CH
Acq On : 27 Mar 2018 12:26 pm Operator: JD
Sample : K1802580-004 DMS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F010.D\ECD1A.CH Vial: 8
Signal #2 : J:\GC28\DATA\032718\0327F010.D\ECD2B.CH
Acq On : 27 Mar 2018 12:26 pm Operator: JD
Sample : K1802580-004 DMS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:23 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.01	4.58	16310536	13460102	33.788	37.336	
		Target Compounds							
1)		3,4-Dichlorophen	3.11	3.66	768066	391876	44.221	22.525	#
2)		3,5-Dichlorophen	3.35	3.90	255438	143028	20.967	11.568	#
3)		2,4,6-Trichlorop	3.45	4.13	10551530	9502804	36.799	29.561	
5)		2,4,5-Trichlorop	4.19	4.65	5082430	4581598	30.359	28.485	
6)		3,4,5-Trichlorop	4.22	4.72	4605134	4172044	27.387	28.156	
7)	M	2,3,5,6-Tetrachl	4.47	4.97	51881138	48000592	94.472	100.980	
8)	M	2,3,4,5-Tetrachl	5.01	5.37	12506030	11042944	30.861	34.414	
9)	M	Pentachloropheno	5.16	5.56	941.0E6	987.1E6	1435.938	1564.290	
10)		Pentachloroaniso	5.16	5.56	941.0E6	987.1E6	1511.443	1645.480	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F011.D
Lab ID: KWG1801629-3
RunType: LCS
Matrix: WATER

Date Acquired: 03/27/2018 12:44
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F011.D\0327F011C.D
Lab ID: KWG1801629-3
RunType: LCS
Matrix: WATER

Date Acquired: 03/27/2018 12:44
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F011.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F011.D\0327F011c.d			**Vial:**	9
Acqu Date:	03/27/2018 12:44	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	LCS	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-3				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668870	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ1442
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	16585266	13711716	34.36	38.03			76 OK
				%Recovery =	69 OK	76 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12 +0.01	3.66 +0.01	676608	375552	38.96	21.50	7.79	4.30	**4.30**P
3,5-Dichlorophenol	3.36 +0.01	3.90	249824	131266	20.51	10.62	4.10	2.12	**2.12**P
2,4,6-Trichlorophenol	3.46 +0.01	4.13	10810386	9789532	37.73	30.45	7.55	6.09	**6.09**
2,4,5-Trichlorophenol	4.19 +0.01	4.65	5103566	4544630	30.49	28.26	6.10	5.65	**5.65**
3,4,5-Trichlorophenol	4.22 +0.01	4.72 +0.01	4478936	4059390	26.64	27.40	5.33	5.48	**5.33**
2,3,5,6-Tetrachlorophenol	4.46	4.96	17814072	16839462	32.44	35.43	6.49	7.09	**6.49**
2,3,4,5-Tetrachlorophenol	5.02 +0.01	5.37	12785410	11325054	31.55	35.31	6.31	7.06	**6.31**
Pentachlorophenol	5.16 +0.01c	5.56 +0.01c	23355752	20397942	35.64	32.32	7.13	6.46	**6.46**
2,3,4,5,6-Pentachloroanisole	5.16 +0.01c	5.56 +0.01c	23355752	20397942	37.51	34.00	7.50	6.80	**6.80**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JAD 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F011.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F011.D\0327F011c.d			**Vial:**	9
Acqu Date:	03/27/2018 12:44	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	LCS	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801629-3				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8151A Modified	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**	KWG1801629	**Report Group:**	
Analysis Method:	8151M	**Prep Method:**	METHOD		
Prep Ref:	1668870	**Prep Date:**	03/21/2018		

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:	J:\GC28\DATA\032718\0327F012.D	**Method ID:**	MJ252
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	16585266	13711716	34.36	38.03			76 OK
				%Recovery =	69 OK	76 OK	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12 +0.01	3.66 +0.01	676608	375552	38.96	21.50	7.79	4.30	**7.79**P
3,5-Dichlorophenol	3.36 +0.01	3.90	249824	131266	20.51	10.62	4.10	2.12	**4.10**P
2,4,6-Trichlorophenol	3.46 +0.01	4.13	10810386	9789532	37.73	30.45	7.55	6.09	**7.55**
2,4,5-Trichlorophenol	4.19 +0.01	4.65	5103566	4544630	30.49	28.26	6.10	5.65	**6.10**
3,4,5-Trichlorophenol	4.22 +0.01	4.72 +0.01	4478936	4059390	26.64	27.40	5.33	5.48	**5.33**
2,3,5,6-Tetrachlorophenol	4.46	4.96	17814072	16839462	32.44	35.43	6.49	7.09	**6.49**
2,3,4,5-Tetrachlorophenol	5.02 +0.01	5.37	12785410	11325054	31.55	35.31	6.31	7.06	**6.31**
Pentachlorophenol	5.16 +0.01c	5.56 +0.01c	23355752	20397942	35.64	32.32	7.13	6.46	**6.46**
2,3,4,5,6-Pentachloroanisole	5.16 +0.01c	5.56 +0.01c	23355752	20397942	37.51	34.00	7.50	6.80	**7.50**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	5 mL	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

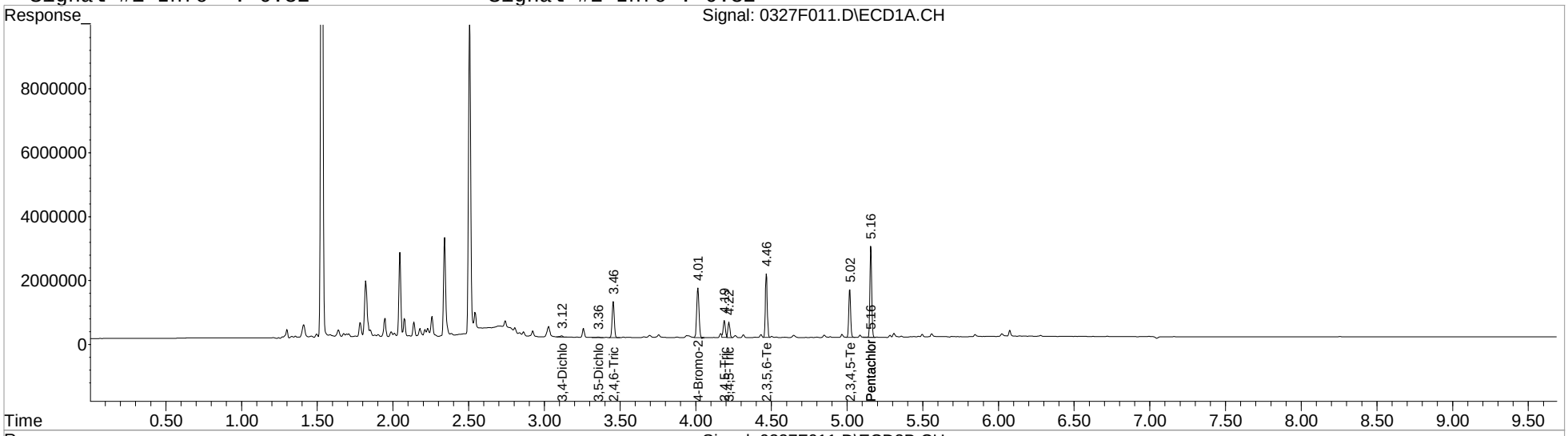
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

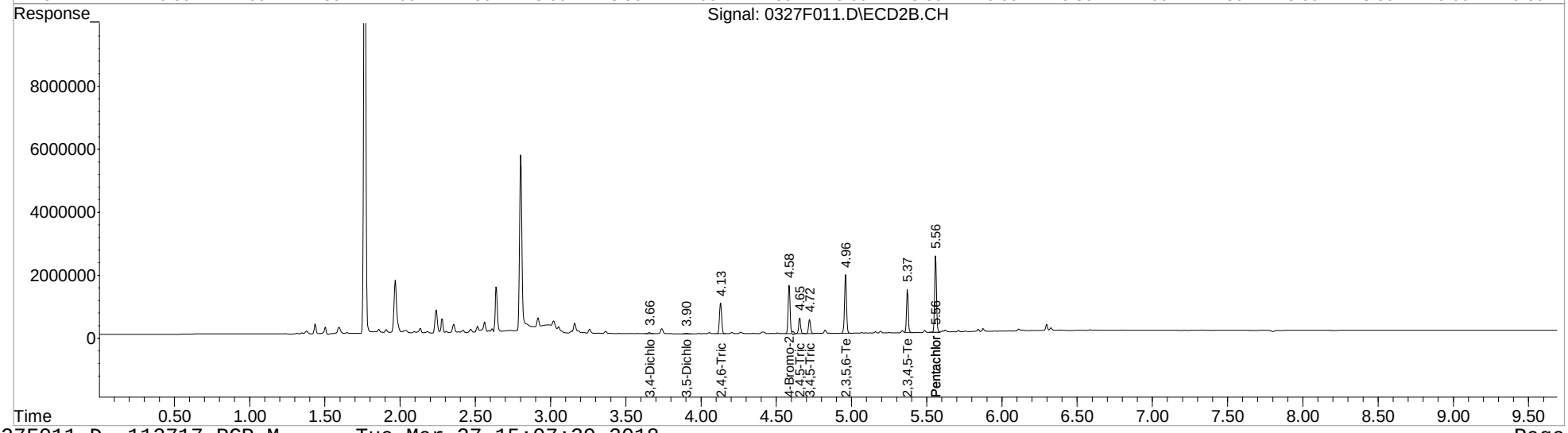
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F011.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC28\DATA\032718\0327F011.D\ECD2B.CH
Acq On : 27 Mar 2018 12:44 pm Operator: JD
Sample : KWG1803560-3 LCS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F011.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC28\DATA\032718\0327F011.D\ECD2B.CH
Acq On : 27 Mar 2018 12:44 pm Operator: JD
Sample : KWG1803560-3 LCS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:24 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.01	4.58	16585266	13711716	34.357	38.034	
		Target Compounds							
1)		3,4-Dichlorophen	3.12	3.66	676608	375552	38.955	21.502	#
2)		3,5-Dichlorophen	3.36	3.90	249824	131266	20.506	10.616	#
3)		2,4,6-Trichlorop	3.46	4.13	10810386	9789532	37.728	30.453	
5)		2,4,5-Trichlorop	4.19	4.65	5103566	4544630	30.493	28.255	
6)		3,4,5-Trichlorop	4.22	4.72	4478936	4059390	26.637	27.396	
7)	M	2,3,5,6-Tetrachl	4.46	4.96	17814072	16839462	32.438	35.426	
8)	M	2,3,4,5-Tetrachl	5.02	5.37	12785410	11325054	31.550	35.314	
9)	M	Pentachloropheno	5.16	5.56	23355752	20397942	35.639	32.324	
10)		Pentachloroaniso	5.16	5.56	23355752	20397942	37.513	34.002	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JAD 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F003.D
Lab ID: KWG1801645-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 09:43
Date Quantitated: 03/27/2018 10:49
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F003.D\0327F003C.D
Lab ID: KWG1801645-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 09:43
Date Quantitated: 03/27/2018 10:49
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F003.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F003.D\0327F003c.d			**Vial:**	1
Acqu Date:	03/27/2018 09:43	**Quant Date:**	03/27/2018 10:49	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-1				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	23828350	20738470	49.36	57.53			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11	3.65	790582	765182	45.52	46.60			
3,5-Dichlorophenol	3.35	3.90	560962	597696	46.05	48.34			
2,4,6-Trichlorophenol	3.45	4.13	15528248	14773054	54.66	45.96			
2,4,5-Trichlorophenol	4.18	4.65	7478448	6860336	45.82	42.65			
3,4,5-Trichlorophenol	4.21	4.71	6812120	6360928	40.51	42.93			
2,3,5,6-Tetrachlorophenol	4.46	4.96	24322208	23313636	44.29	49.05			
2,3,4,5-Tetrachlorophenol	5.01	5.37	17124760	16051332	42.26	50.39			
Pentachlorophenol	5.15 c	5.55 c	30338014	28673440	46.29	45.44			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.55 c	30338014	28673440	48.73	47.80			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F003.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F003.D\0327F003c.d			**Vial:**	1
Acqu Date:	03/27/2018 09:43	**Quant Date:**	03/27/2018 10:49	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-1				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:		**Method ID:**	MJ252
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.01	4.58	23828350	20738470	49.36	57.53			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11	3.65	790582	765182	45.52	46.60			
3,5-Dichlorophenol	3.35	3.90	560962	597696	46.05	48.34			
2,4,6-Trichlorophenol	3.45	4.13	15528248	14773054	54.66	45.96			
2,4,5-Trichlorophenol	4.18	4.65	7478448	6860336	45.82	42.65			
3,4,5-Trichlorophenol	4.21	4.71	6812120	6360928	40.51	42.93			
2,3,5,6-Tetrachlorophenol	4.46	4.96	24322208	23313636	44.29	49.05			
2,3,4,5-Tetrachlorophenol	5.01	5.37	17124760	16051332	42.26	50.39			
Pentachlorophenol	5.15 c	5.55 c	30338014	28673440	46.29	45.44			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.55 c	30338014	28673440	48.73	47.80			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

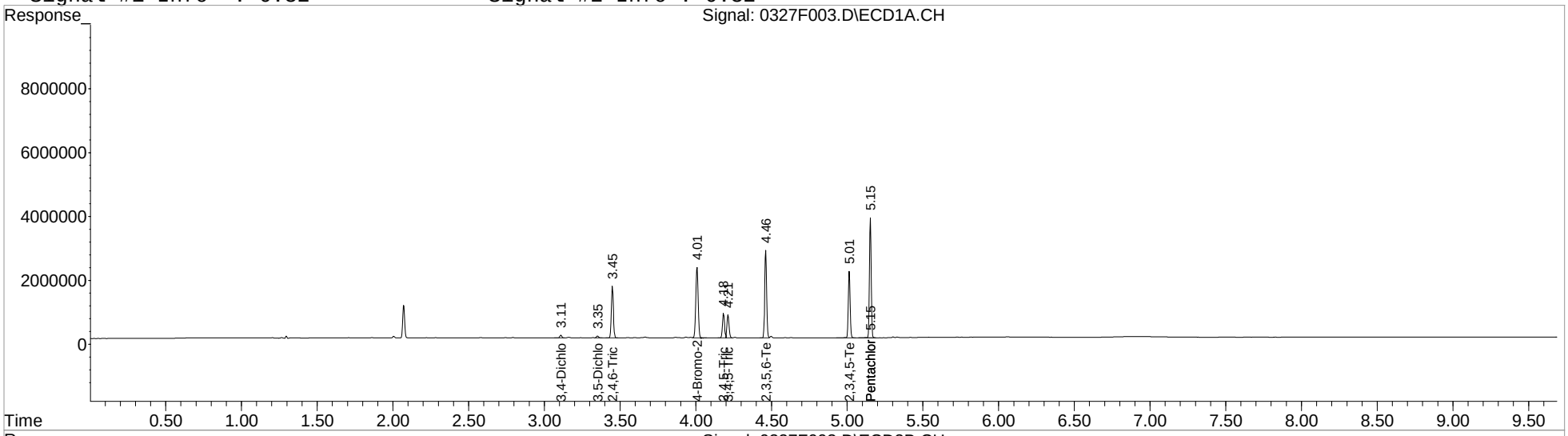
Quantitation Report (QT Reviewed)

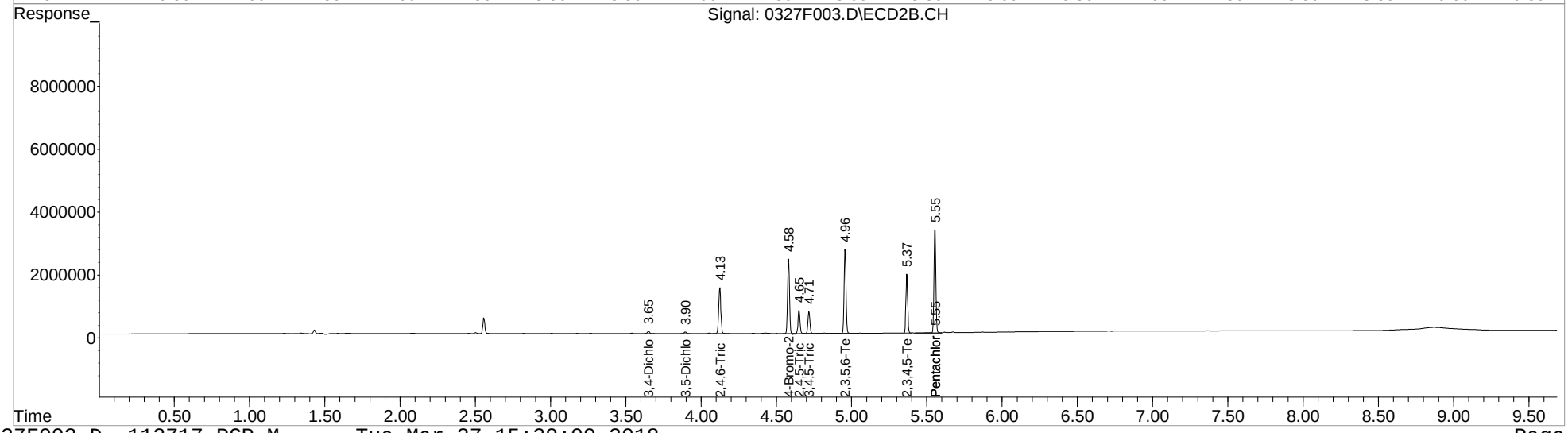
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F003.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032718\0327F003.D\ECD2B.CH
Acq On : 27 Mar 2018 9:43 am Operator: JD
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 10:49 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F003.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032718\0327F003.D\ECD2B.CH
Acq On : 27 Mar 2018 9:43 am Operator: JD
Sample : PENTA01-88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 10:49:20 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.01	4.58	23828350	20738470	49.362	57.525
		Target Compounds						
1)		3,4-Dichlorophen	3.11	3.65	790582	765182	45.517	46.602
2)		3,5-Dichlorophen	3.35	3.90	560962	597696	46.046	48.340
3)		2,4,6-Trichlorop	3.45	4.13	15528248	14773054	54.664	45.955
5)		2,4,5-Trichlorop	4.18	4.65	7478448	6860336	45.815	42.652
6)		3,4,5-Trichlorop	4.21	4.71	6812120	6360928	40.513	42.929
7)	M	2,3,5,6-Tetrachl	4.46	4.96	24322208	23313636	44.289	49.046
8)	M	2,3,4,5-Tetrachl	5.01	5.37	17124760	16051332	42.258	50.390
9)	M	Pentachloropheno	5.15	5.55	30338014	28673440	46.293	45.438
10)		Pentachloroaniso	5.15	5.55	30338014	28673440	48.727	47.797

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JAD 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F013.D
Lab ID: KWG1801645-3
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 13:19
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F013.D\0327F013C.D
Lab ID: KWG1801645-3
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 13:19
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F013.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F013.D\0327F013c.d			**Vial:**	1
Acqu Date:	03/27/2018 13:19	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-3				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:		**Method ID:**	MJ1442
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2	Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.58	23416050	19478526	48.51	54.03	NA
			%Recovery =		NA	NA	**Limits =** 55-130

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12	3.65	801880	746718	46.17	45.38			
3,5-Dichlorophenol	3.36	3.90	567888	575102	46.61	46.51			
2,4,6-Trichlorophenol	3.46	4.13	15444558	14011570	54.36	43.59			
2,4,5-Trichlorophenol	4.19	4.65	7477156	6473214	45.81	40.25			
3,4,5-Trichlorophenol	4.22	4.72	6719844	6002988	39.96	40.51			
2,3,5,6-Tetrachlorophenol	4.47	4.96	23817160	21692100	43.37	45.63			
2,3,4,5-Tetrachlorophenol	5.02	5.37	17070250	15145666	42.12	47.50			
Pentachlorophenol	5.16 c	5.56 c	30271840	26851466	46.19	42.55			
2,3,4,5,6-Pentachloroanisole	5.16 c	5.56 c	30271840	26851466	48.62	44.76			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F013.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F013.D\0327F013c.d			**Vial:**	1
Acqu Date:	03/27/2018 13:19	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-3				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M	**Calibration ID:**	CAL15625
Title:			
MB Ref:		**Method ID:**	MJ252
		Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.58	23416050	19478526	48.51	54.03			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12		3.65		801880	746718	46.17	45.38			
3,5-Dichlorophenol	3.36		3.90		567888	575102	46.61	46.51			
2,4,6-Trichlorophenol	3.46		4.13		15444558	14011570	54.36	43.59			
2,4,5-Trichlorophenol	4.19		4.65		7477156	6473214	45.81	40.25			
3,4,5-Trichlorophenol	4.22		4.72		6719844	6002988	39.96	40.51			
2,3,5,6-Tetrachlorophenol	4.47		4.96		23817160	21692100	43.37	45.63			
2,3,4,5-Tetrachlorophenol	5.02		5.37		17070250	15145666	42.12	47.50			
Pentachlorophenol	5.16	c	5.56	c	30271840	26851466	46.19	42.55			
2,3,4,5,6-Pentachloroanisole	5.16	c	5.56	c	30271840	26851466	48.62	44.76			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

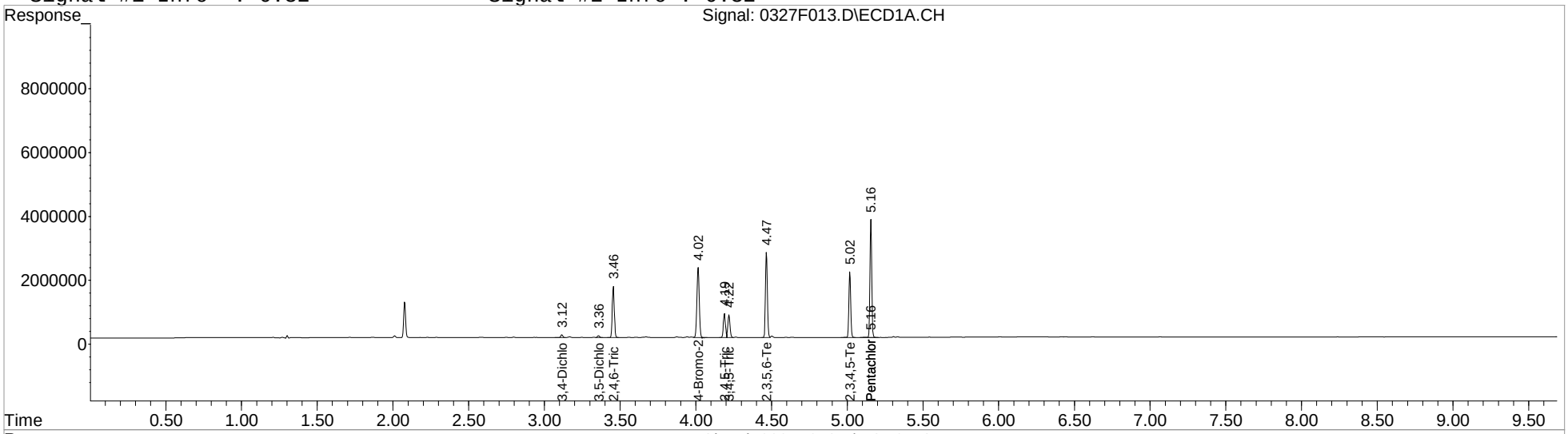
Quantitation Report (Not Reviewed)

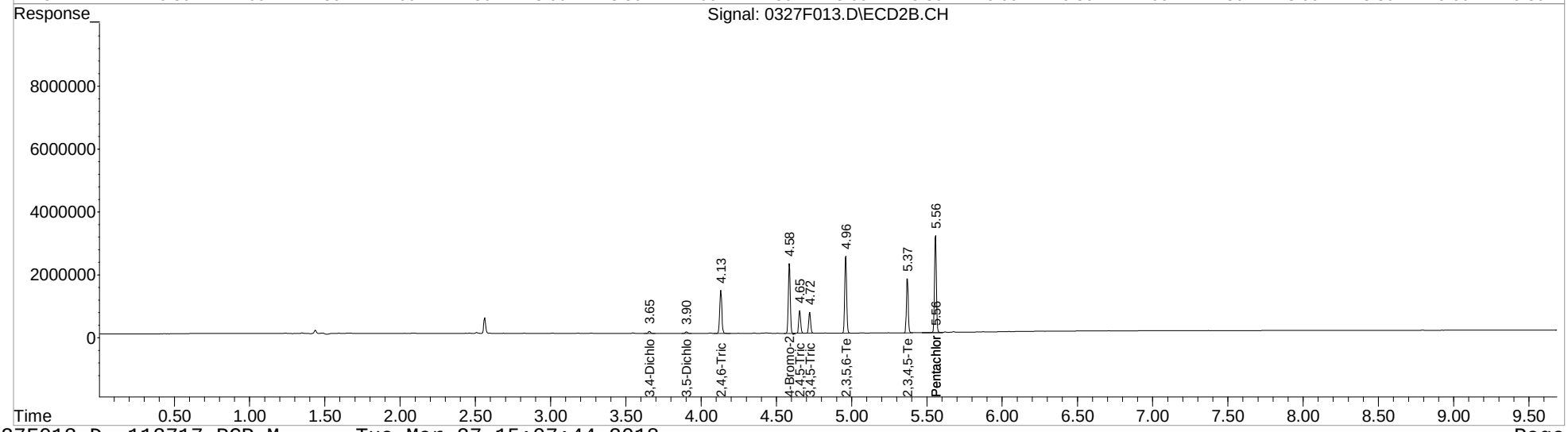
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F013.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032718\0327F013.D\ECD2B.CH
Acq On : 27 Mar 2018 1:19 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (Not Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F013.D\ECD1A.CH Vial: 1
Signal #2 : J:\GC28\DATA\032718\0327F013.D\ECD2B.CH
Acq On : 27 Mar 2018 1:19 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:25 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.58	23416050	19478526	48.508	54.030
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.65	801880	746718	46.168	45.377
2)		3,5-Dichlorophen	3.36	3.90	567888	575102	46.614	46.513
3)		2,4,6-Trichlorop	3.46	4.13	15444558	14011570	54.364	43.587
5)		2,4,5-Trichlorop	4.19	4.65	7477156	6473214	45.806	40.245
6)		3,4,5-Trichlorop	4.22	4.72	6719844	6002988	39.964	40.513
7)	M	2,3,5,6-Tetrachl	4.47	4.96	23817160	21692100	43.369	45.634
8)	M	2,3,4,5-Tetrachl	5.02	5.37	17070250	15145666	42.124	47.501
9)	M	Pentachloropheno	5.16	5.56	30271840	26851466	46.192	42.551
10)		Pentachloroaniso	5.16	5.56	30271840	26851466	48.621	44.759

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F039.D
Lab ID: KWG1801645-7
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 20:54
Date Quantitated: 03/28/2018 11:19
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F039.D\0327F039C.D
Lab ID: KWG1801645-7
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 20:54
Date Quantitated: 03/28/2018 11:19
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F039.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F039.D\0327F039c.d			**Vial:**	1
Acqu Date:	03/27/2018 20:54	**Quant Date:**	03/28/2018 11:19	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-7				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	23829714	19735270	49.37	54.74			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12	3.66	813946	744524	46.86	45.23			
3,5-Dichlorophenol	3.36	3.90	570390	580631	46.82	46.96			
2,4,6-Trichlorophenol	3.46	4.13	15691252	14189490	55.25	44.14			
2,4,5-Trichlorophenol	4.19	4.66	7405974	6539658	45.34	40.66			
3,4,5-Trichlorophenol	4.22	4.72	6974102	6068028	41.48	40.95			
2,3,5,6-Tetrachlorophenol	4.47	4.96	24230272	21934696	44.12	46.15			
2,3,4,5-Tetrachlorophenol	5.01	5.37	17354568	15303823	42.83	48.01			
Pentachlorophenol	5.15 c	5.55 c	30700108	26608405**m**	46.85	42.17			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.55 c	30700108	27974040	49.31	46.63			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F039.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F039.D\0327F039c.d			**Vial:**	1
Acqu Date:	03/27/2018 20:54	**Quant Date:**	03/28/2018 11:19	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-7				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	23829714	19735270	49.37	54.74			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12	3.66	813946	744524	46.86	45.23			
3,5-Dichlorophenol	3.36	3.90	570390	580631	46.82	46.96			
2,4,6-Trichlorophenol	3.46	4.13	15691252	14189490	55.25	44.14			
2,4,5-Trichlorophenol	4.19	4.66	7405974	6539658	45.34	40.66			
3,4,5-Trichlorophenol	4.22	4.72	6974102	6068028	41.48	40.95			
2,3,5,6-Tetrachlorophenol	4.47	4.96	24230272	21934696	44.12	46.15			
2,3,4,5-Tetrachlorophenol	5.01	5.37	17354568	15303823	42.83	48.01			
Pentachlorophenol	5.15 c	5.55 c	30700108	26608405**m**	46.85	42.17			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.55 c	30700108	27974040	49.31	46.63			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F039.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 8:54 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 11:19:29 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.016	4.586	23829714	19735270	49.365	54.742
		Target Compounds						
1)		3,4-Dichl...	3.116	3.656	813946	744524	46.862	45.232
2)		3,5-Dichl...	3.356	3.902	570390	580631	46.820	46.960
3)		2,4,6-Tri...	3.456	4.129	15691252	14189490	55.250	44.140
5)		2,4,5-Tri...	4.190	4.656	7405974	6539658	45.338	40.658
6)		3,4,5-Tri...	4.220	4.719	6974102	6068028	41.476	40.952
7)	M	2,3,5,6-T...	4.466	4.959	24230272	21934696	44.122	46.145
8)	M	2,3,4,5-T...	5.013	5.366	17354568	15303823	42.825	48.006
9)	M	Pentachlo...	5.153	5.552	30700108	26608405	46.846	42.166m
10)		Pentachlo...	5.153	5.552	30700108	27974040	49.309	46.631

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

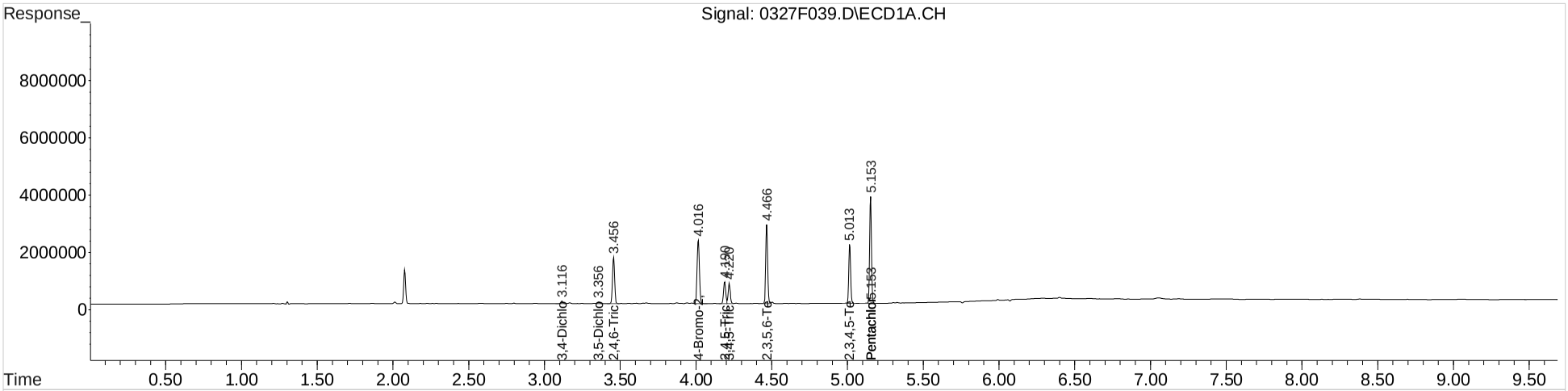
Quantitation Report (QT Reviewed)

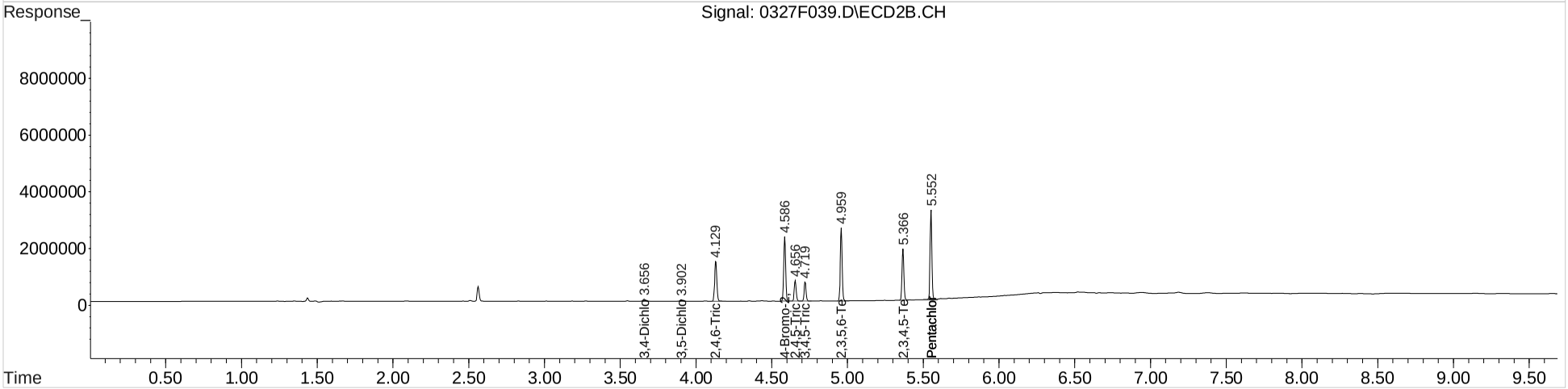
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F039.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 8:54 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 11:19:29 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





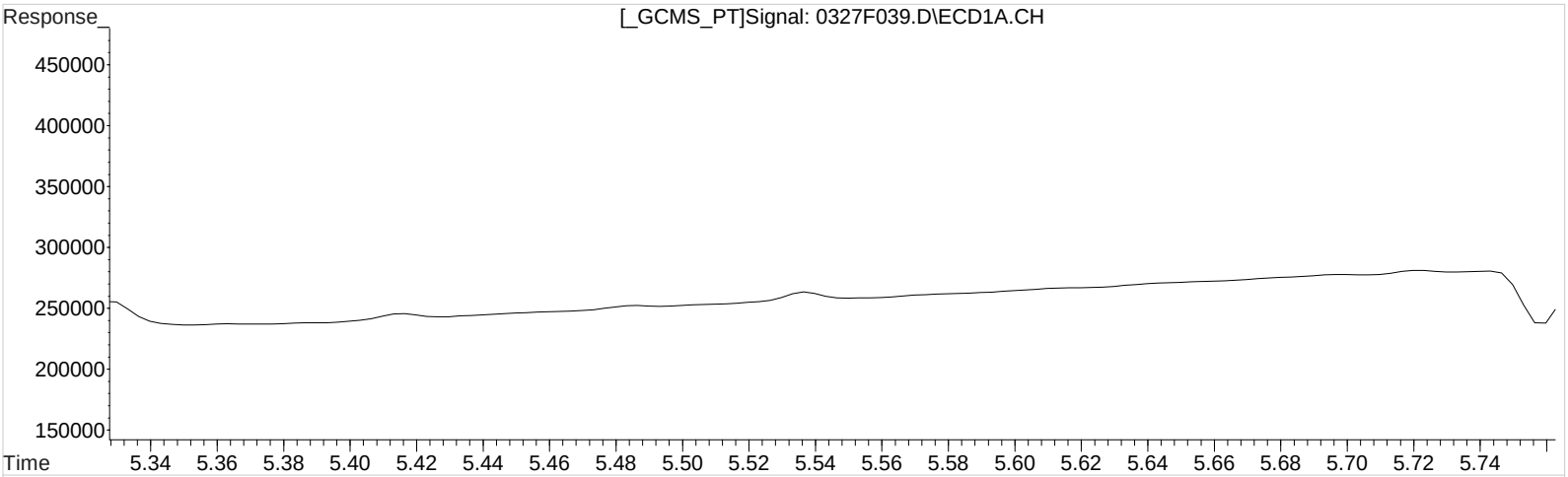
Quantitation Report (Qedit)

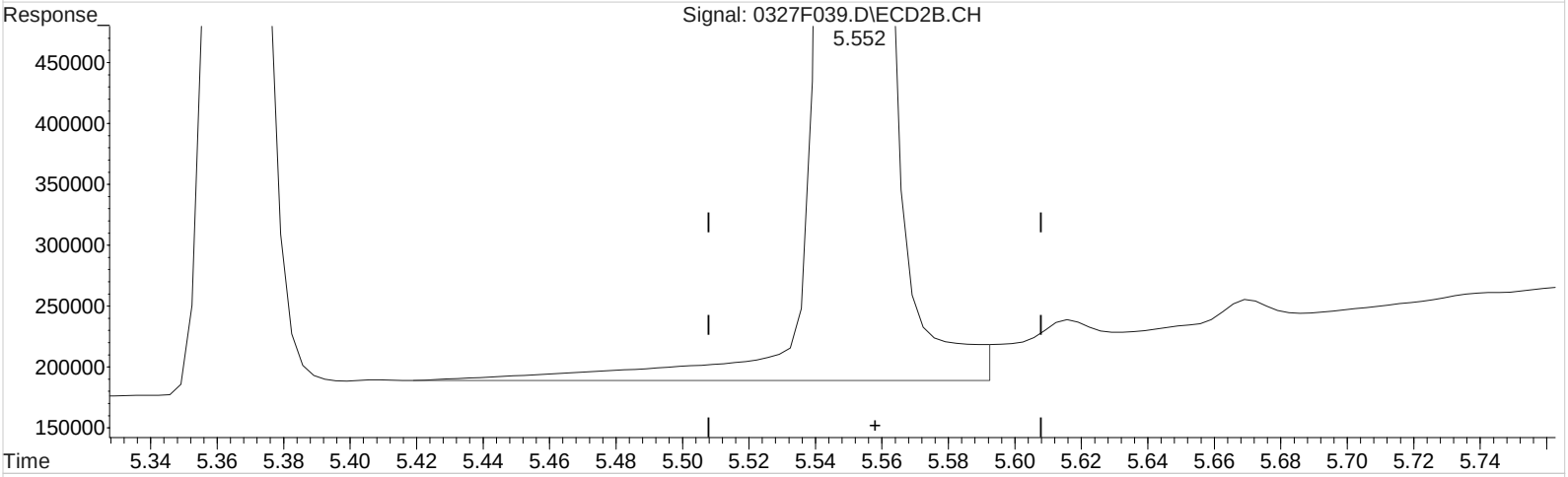
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F039.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 8:54 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:45:56 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.153min 46.846 ug/L

response 30700108

Manual Integration:

Before

03/28/18

(9) Pentachlorophenol #2 (M)

5.552min 44.330 ug/L

response 27974040

(+) = Expected Retention Time

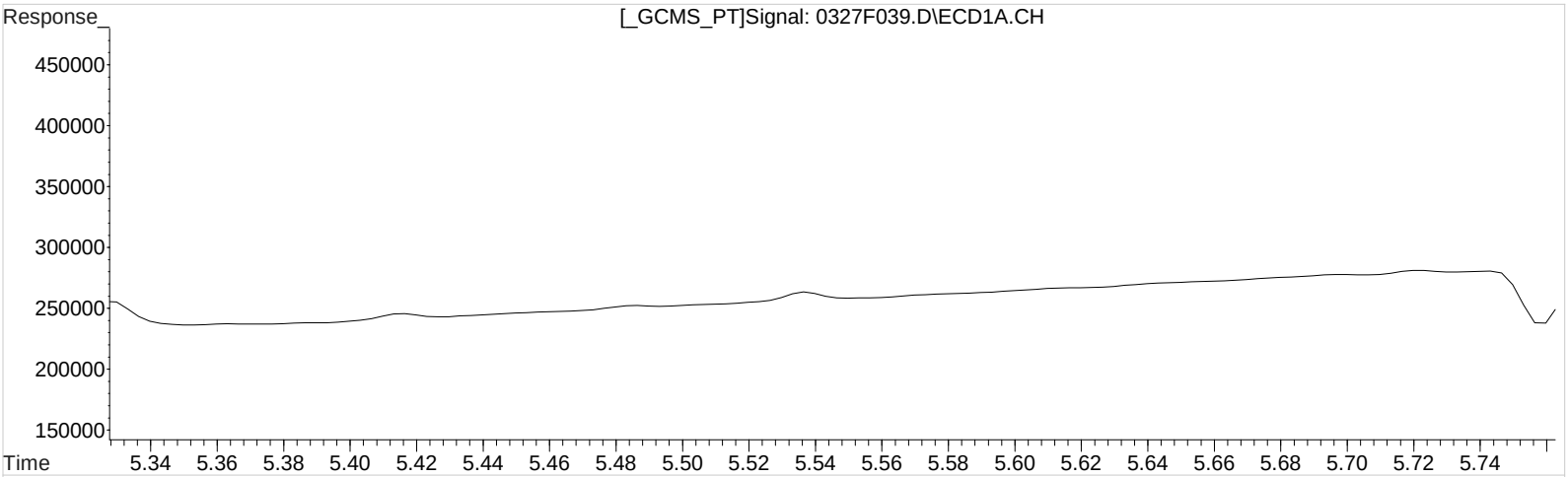
Quantitation Report (Qedit)

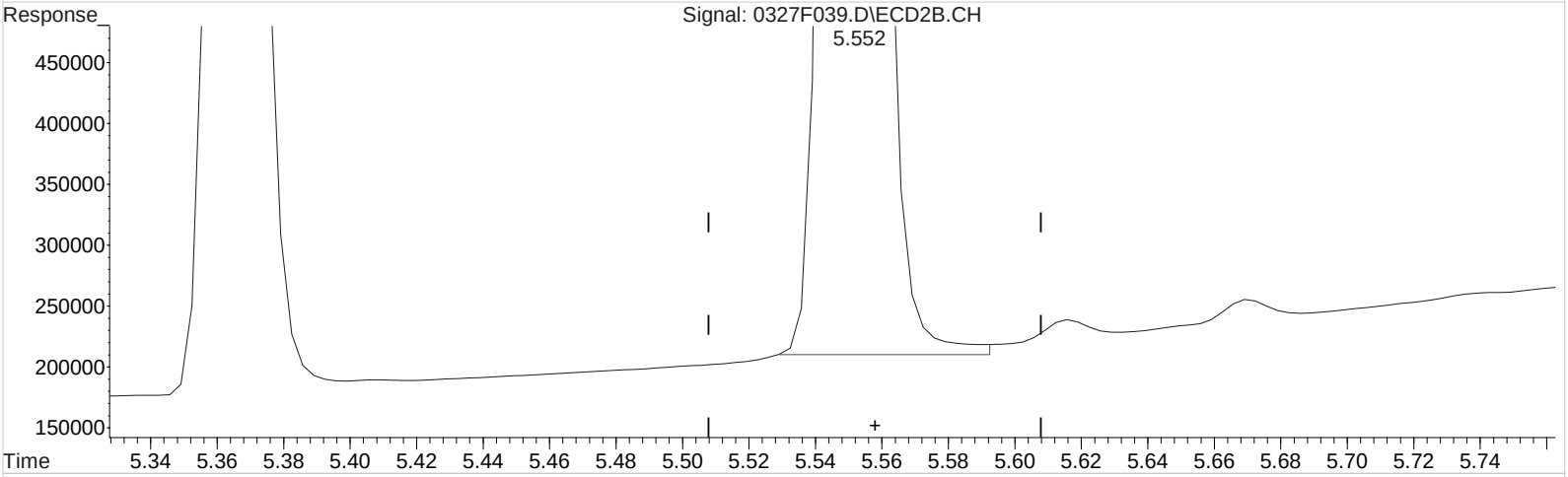
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F039.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 8:54 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:45:56 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.153min 46.846 ug/L

response 30700108

Manual Integration:

After

Baseline/Shoulder

03/28/18

(9) Pentachlorophenol #2 (M)

5.552min 42.166 ug/L m

response 26608405

(+) = Expected Retention Time

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F049.D
Lab ID: KWG1801645-9
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 23:50
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F049.D\0327F049C.D
Lab ID: KWG1801645-9
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 23:50
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F049.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F049.D\0327F049c.d			**Vial:**	1
Acqu Date:	03/27/2018 23:50	**Quant Date:**	03/28/2018 08:46	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-9				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	24685686	20428887	51.14	56.67			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12	3.66	853675	781602	49.15	47.69			
3,5-Dichlorophenol	3.36	3.90	602270	602434	49.44	48.72			
2,4,6-Trichlorophenol	3.46	4.13	16350218	14713326	57.62	45.77			
2,4,5-Trichlorophenol	4.19	4.66	7637508	6720018	46.86	41.78			
3,4,5-Trichlorophenol	4.22	4.72	7214784	6238756	42.91	42.10			
2,3,5,6-Tetrachlorophenol	4.47	4.96	24924013	22609249	45.39	47.56			
2,3,4,5-Tetrachlorophenol	5.01	5.37	17786400	15612392	43.89	48.99			
Pentachlorophenol	5.15 c	5.55 c	31399224	27900024	47.91	44.21			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.55 c	31399224	27900024	50.43	46.51			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F049.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F049.D\0327F049c.d			**Vial:**	1
Acqu Date:	03/27/2018 23:50	**Quant Date:**	03/28/2018 08:46	**Dilution:**	1.0
Run Type:	CCV	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-9				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.02	4.59	24685686	20428887	51.14	56.67			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12	3.66	853675	781602	49.15	47.69			
3,5-Dichlorophenol	3.36	3.90	602270	602434	49.44	48.72			
2,4,6-Trichlorophenol	3.46	4.13	16350218	14713326	57.62	45.77			
2,4,5-Trichlorophenol	4.19	4.66	7637508	6720018	46.86	41.78			
3,4,5-Trichlorophenol	4.22	4.72	7214784	6238756	42.91	42.10			
2,3,5,6-Tetrachlorophenol	4.47	4.96	24924013	22609249	45.39	47.56			
2,3,4,5-Tetrachlorophenol	5.01	5.37	17786400	15612392	43.89	48.99			
Pentachlorophenol	5.15 c	5.55 c	31399224	27900024	47.91	44.21			
2,3,4,5,6-Pentachloroanisole	5.15 c	5.55 c	31399224	27900024	50.43	46.51			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F049.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 11:50 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:26 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.017	4.586	24685686	20428887	51.138	56.666
		Target Compounds						
1)		3,4-Dichl...	3.117	3.660	853675	781602	49.150	47.693
2)		3,5-Dichl...	3.360	3.903	602270	602434	49.436	48.723
3)		2,4,6-Tri...	3.457	4.130	16350218	14713326	57.615	45.770
5)		2,4,5-Tri...	4.190	4.656	7637508	6720018	46.862	41.780
6)		3,4,5-Tri...	4.220	4.720	7214784	6238756	42.907	42.104
7)	M	2,3,5,6-T...	4.467	4.960	24924013	22609249	45.385	47.564
8)	M	2,3,4,5-T...	5.014	5.366	17786400	15612392	43.891	48.990
9)	M	Pentachlo...	5.154	5.553	31399224	27900024	47.912	44.213
10)		Pentachlo...	5.154	5.553	31399224	27900024	50.432	46.507

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

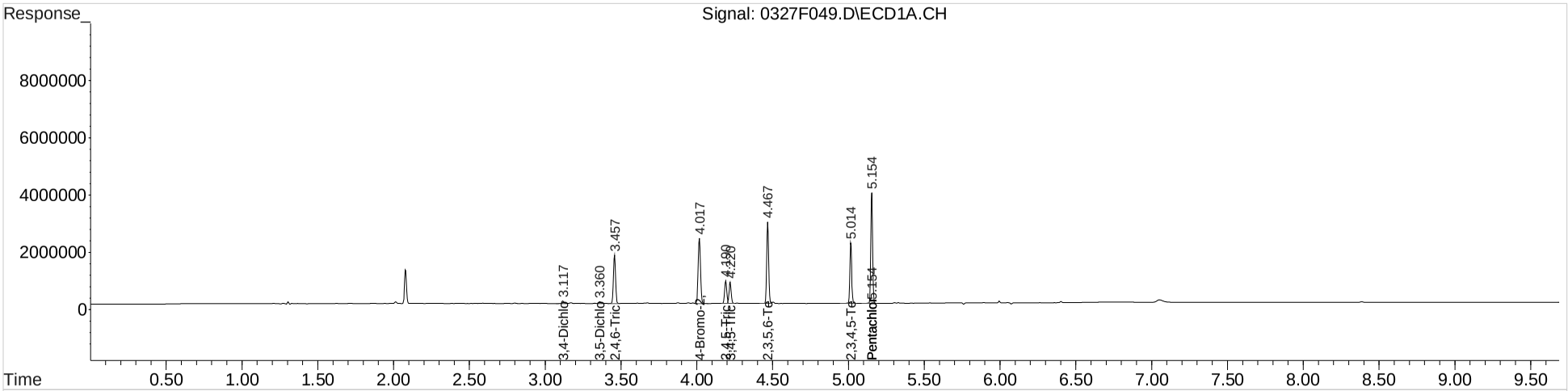
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F049.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 11:50 pm Operator: JD
Sample : PENTA01 88S 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:26 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F050.D
Lab ID: KWG1801645-10
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/28/2018 00:08
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	2,4,5-Trichlorophenol	895.44	NA	3.449996948	quaderr

Primary Review: _____

Secondary Review: _____

Printed: 03/28/2018 13:57:04
u:\Stealth\Crystal.rpt\except2.rpt

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F050.D\0327F050C.D
Lab ID: KWG1801645-10
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/28/2018 00:08
Date Quantitated: 03/28/2018 08:46
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.61	NA	).229995727	quaderr

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F050.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F050.D\0327F050c.d			**Vial:**	2
Acqu Date:	03/28/2018 00:08	**Quant Date:**	03/28/2018 08:46	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-10				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00	4.57	71894	3994	0.1490	0.0110			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12		3.67		11116	5322	0.6400	910.61			
3,5-Dichlorophenol	3.37		3.91		7042	16374	0.5780	1.32			
2,4,6-Trichlorophenol			4.15		46088	45127	0.0000	0.1400			
2,4,5-Trichlorophenol	4.17		4.65		9856	32728	895.44	0.2030			
3,4,5-Trichlorophenol	4.26		4.72		12828	36246	0.0760	0.2450			
2,3,5,6-Tetrachlorophenol	4.45		4.92		4988	85043	0.0090	0.1790			
2,3,4,5-Tetrachlorophenol	4.99				60932	36722	0.1500	0.0000			
Pentachlorophenol	5.15	c	5.54	c	19749	412634	0.0300	0.6540			
2,3,4,5,6-Pentachloroanisole	5.15	c	5.54	c	19749	412634	0.0320	0.6880			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F050.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F050.D\0327F050c.d			**Vial:**	2
Acqu Date:	03/28/2018 00:08	**Quant Date:**	03/28/2018 08:46	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-10				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00	4.57	71894	3994	0.1490	0.0110			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12		3.67		11116	5322	0.6400	910.61			
3,5-Dichlorophenol	3.37		3.91		7042	16374	0.5780	1.32			
2,4,6-Trichlorophenol			4.15		46088	45127	0.0000	0.1400			
2,4,5-Trichlorophenol	4.17		4.65		9856	32728	895.44	0.2030			
3,4,5-Trichlorophenol	4.26		4.72		12828	36246	0.0760	0.2450			
2,3,5,6-Tetrachlorophenol	4.45		4.92		4988	85043	0.0090	0.1790			
2,3,4,5-Tetrachlorophenol	4.99				60932	36722	0.1500	0.0000			
Pentachlorophenol	5.15	c	5.54	c	19749	412634	0.0300	0.6540			
2,3,4,5,6-Pentachloroanisole	5.15	c	5.54	c	19749	412634	0.0320	0.6880			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F050.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Mar 2018 12:08 am Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:29 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
4) S	4-Bromo-2...	3.996	4.572	71894	3994	0.149	0.011	#
	Target Compounds							
1)	3,4-Dichl...	3.116	3.672	11116	5322	0.640	910.611	#
2)	3,5-Dichl...	3.369	3.905	7042	16374	0.578	1.324	#
3)	2,4,6-Tri...	3.443	4.149	46088	45127	N.D.	0.140	
5)	2,4,5-Tri...	4.166	4.645	9856	32728	895.435	0.203	#
6)	3,4,5-Tri...	4.256f	4.722	12828	36246	0.076	0.245	#
7) M	2,3,5,6-T...	4.449	4.922f	4988	85043	0.009	0.179	#
8) M	2,3,4,5-T...	4.989f	5.339f	60932	36722	0.150	N.D.	#
9) M	Pentachlo...	5.153	5.535	19749	412634	0.030	0.654	#
10)	Pentachlo...	5.153	5.535	19749	412634	0.032	0.688	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

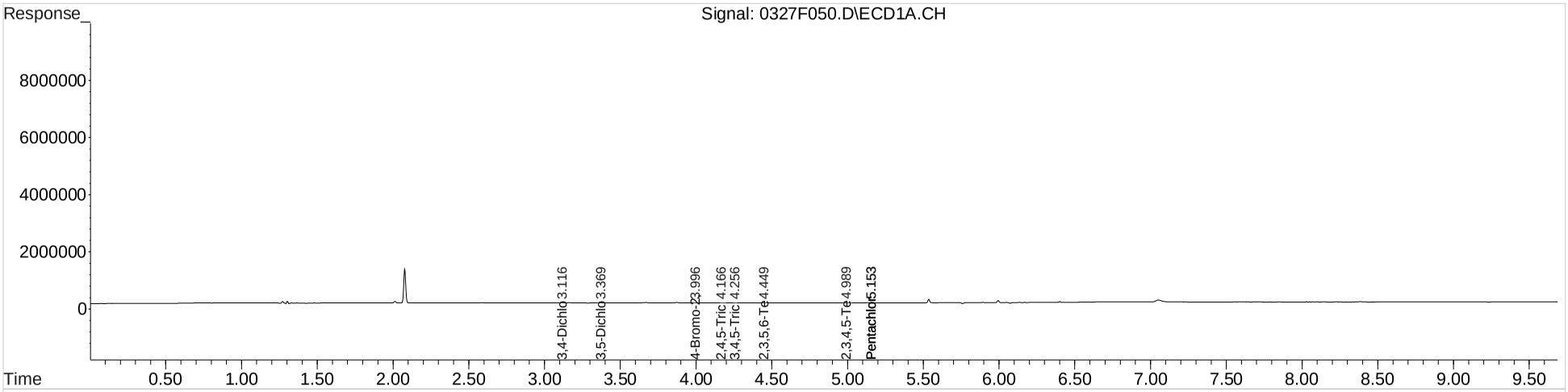
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F050.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Mar 2018 12:08 am Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:46:29 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JAD 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F004.D
Lab ID: KWG1801645-2
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 10:00
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	2,4,5-Trichlorophenol	895.44	NA	3.449996948	quaderr

Primary Review: _____

Secondary Review: _____

Printed: 03/28/2018 13:58:12
u:\Stealth\Crystal.rpt\except2.rpt

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F004.D\0327F004C.D
Lab ID: KWG1801645-2
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 10:00
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.58	NA	).229995727	quaderr

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F004.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F004.D\0327F004c.d			**Vial:**	2
Acqu Date:	03/27/2018 10:00	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-2				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	3.99		47966	0	0.0990	0.0000			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11		3.66		14548	5874	0.8380	910.58			
3,5-Dichlorophenol	3.32		3.90		29466	14626	2.42	1.18			
2,4,6-Trichlorophenol			4.14		50726	54658	0.0000	0.1700			
2,4,5-Trichlorophenol	4.23	c	4.64		9858	34130	895.44	0.2120			
3,4,5-Trichlorophenol	4.23	c	4.72		9858	67572	0.0590	0.4560			
2,3,5,6-Tetrachlorophenol			4.96		0	3934	0.0000	0.0080			
2,3,4,5-Tetrachlorophenol	4.99				10928	3598	0.0270	0.0000			
Pentachlorophenol	5.13	c	5.54	c	43346	546698	0.0660	0.8660			
2,3,4,5,6-Pentachloroanisole	5.13	c	5.54	c	43346	546698	0.0700	0.9110			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F004.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F004.D\0327F004c.d			**Vial:**	2
Acqu Date:	03/27/2018 10:00	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-2				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/27/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	3.99		47966	0	0.0990	0.0000			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.11		3.66		14548	5874	0.8380	910.58			
3,5-Dichlorophenol	3.32		3.90		29466	14626	2.42	1.18			
2,4,6-Trichlorophenol			4.14		50726	54658	0.0000	0.1700			
2,4,5-Trichlorophenol	4.23	c	4.64		9858	34130	895.44	0.2120			
3,4,5-Trichlorophenol	4.23	c	4.72		9858	67572	0.0590	0.4560			
2,3,5,6-Tetrachlorophenol			4.96		0	3934	0.0000	0.0080			
2,3,4,5-Tetrachlorophenol	4.99				10928	3598	0.0270	0.0000			
Pentachlorophenol	5.13	c	5.54	c	43346	546698	0.0660	0.8660			
2,3,4,5,6-Pentachloroanisole	5.13	c	5.54	c	43346	546698	0.0700	0.9110			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

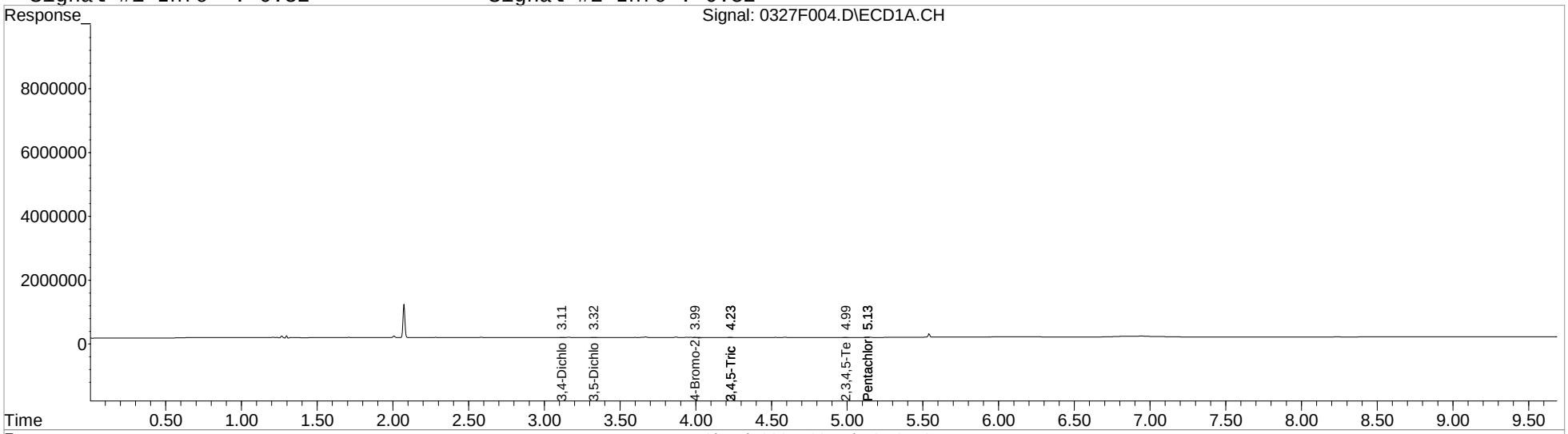
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

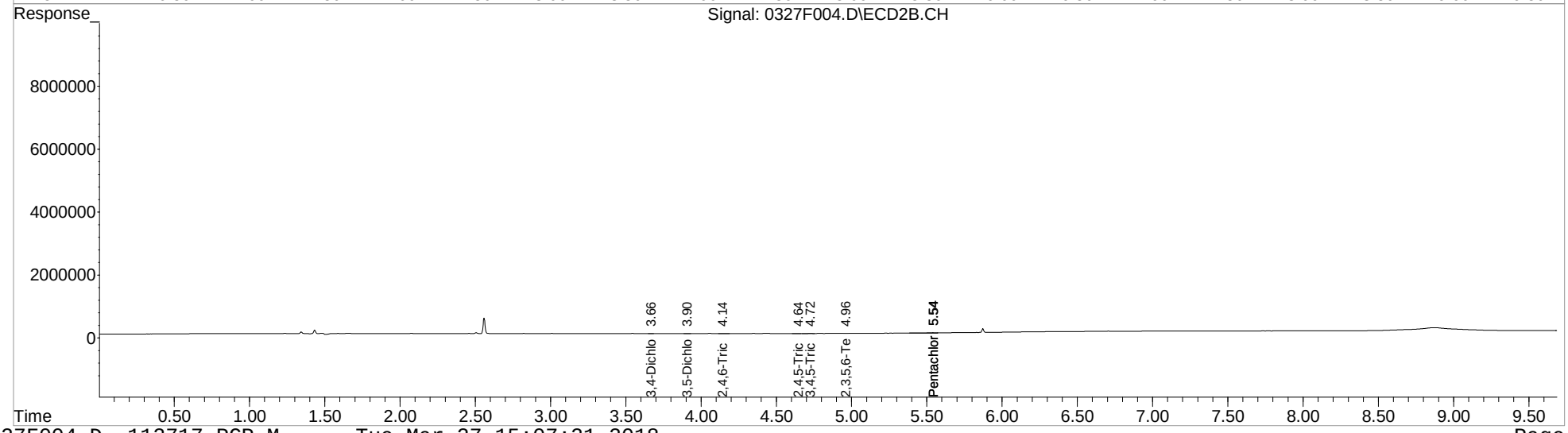
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F004.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032718\0327F004.D\ECD2B.CH
Acq On : 27 Mar 2018 10:00 am Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F004.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032718\0327F004.D\ECD2B.CH
Acq On : 27 Mar 2018 10:00 am Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:19 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	3.99	0.00	47966	0	0.099	N.D.	#
		Target Compounds							
1)		3,4-Dichlorophen	3.11	3.66	14548	5874	0.838	910.578	#
2)		3,5-Dichlorophen	3.32f	3.90	29466	14626	2.419	1.183	#
3)		2,4,6-Trichlorop	3.44	4.14	50726	54658	N.D.	0.170	
5)		2,4,5-Trichlorop	4.23f	4.64	9858	34130	895.435	0.212	#
6)		3,4,5-Trichlorop	4.23	4.72	9858	67572	0.059	0.456	#
7)	M	2,3,5,6-Tetrachl	0.00	4.96	0	3934	N.D.	0.008	#
8)	M	2,3,4,5-Tetrachl	4.99f	5.37	10928	3598	0.027	N.D.	#
9)	M	Pentachloropheno	5.13	5.54	43346	546698	0.066	0.866	#
10)		Pentachloroaniso	5.13	5.54	43346	546698	0.070	0.911	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F014.D
Lab ID: KWG1801645-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 13:36
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/27/18
2nd SM 03/27/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F014.D\0327F014C.D
Lab ID: KWG1801645-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 13:36
Date Quantitated: 03/27/2018 13:57
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.68	NA	).229995727	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F014.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F014.D\0327F014c.d			**Vial:**	2
Acqu Date:	03/27/2018 13:36	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-4				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00		54486	0	0.1130	0.0000			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	3.67	17768	4208	1.02	910.68			
3,5-Dichlorophenol	3.37	3.91	6496	16942	0.5330	1.37			
2,4,6-Trichlorophenol		4.15	47472	40470	0.0000	0.1260			
2,4,5-Trichlorophenol		4.65	0	53054	0.0000	0.3300			
3,4,5-Trichlorophenol	4.26	4.72	7794	51408	0.0460	0.3470			
2,3,5,6-Tetrachlorophenol	4.44	4.92	11906	86544	0.0220	0.1820			
2,3,4,5-Tetrachlorophenol	4.99		26118	6036	0.0640	0.0000			
Pentachlorophenol	5.16 c	5.56 c	30724	52652	0.0470	0.0830			
2,3,4,5,6-Pentachloroanisole	5.16 c	5.56 c	30724	52652	0.0490	0.0880			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/27/18
2nd SM 03/27/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F014.D			**Instrument:**	GC28
Data File #2:	J:\GC28\DATA\032718\0327F014.D\0327F014c.d			**Vial:**	2
Acqu Date:	03/27/2018 13:36	**Quant Date:**	03/27/2018 13:57	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-4				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00		54486	0	0.1130	0.0000			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	3.67	17768	4208	1.02	910.68			
3,5-Dichlorophenol	3.37	3.91	6496	16942	0.5330	1.37			
2,4,6-Trichlorophenol		4.15	47472	40470	0.0000	0.1260			
2,4,5-Trichlorophenol		4.65	0	53054	0.0000	0.3300			
3,4,5-Trichlorophenol	4.26	4.72	7794	51408	0.0460	0.3470			
2,3,5,6-Tetrachlorophenol	4.44	4.92	11906	86544	0.0220	0.1820			
2,3,4,5-Tetrachlorophenol	4.99		26118	6036	0.0640	0.0000			
Pentachlorophenol	5.16 c	5.56 c	30724	52652	0.0470	0.0830			
2,3,4,5,6-Pentachloroanisole	5.16 c	5.56 c	30724	52652	0.0490	0.0880			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

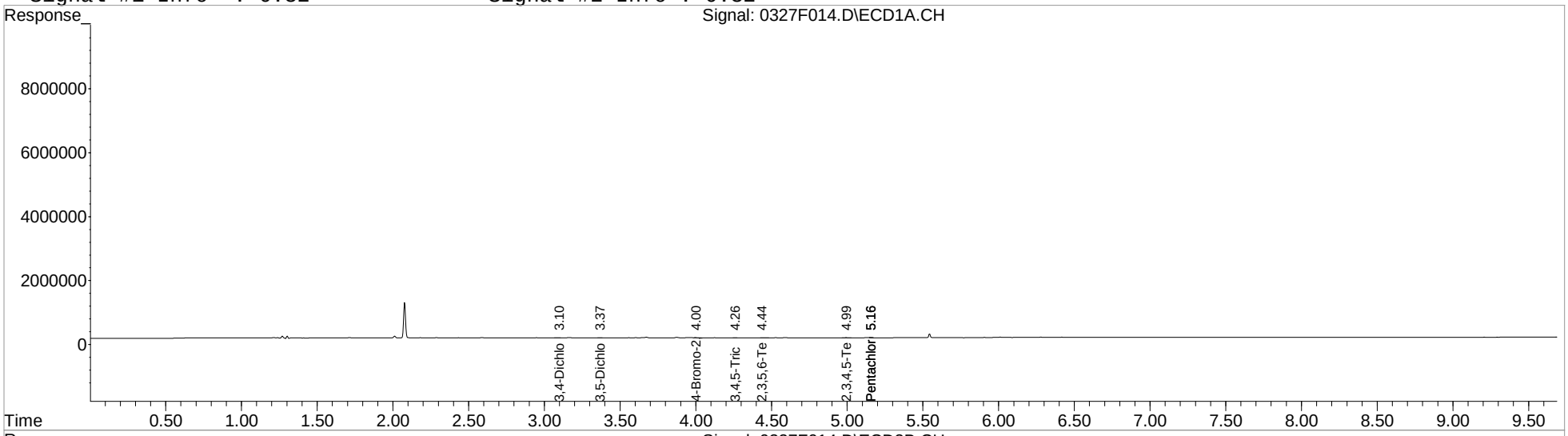
Quantitation Report (Not Reviewed)

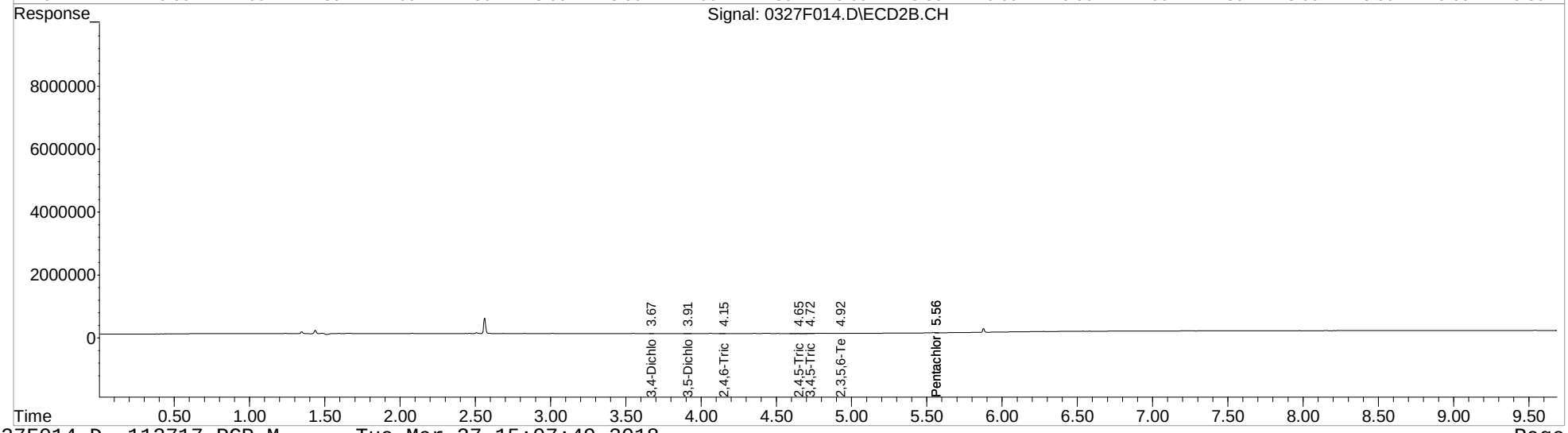
1st JED 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F014.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032718\0327F014.D\ECD2B.CH
Acq On : 27 Mar 2018 1:36 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (Not Reviewed)

1st JAD 03/27/18
2nd SM 03/27/18

Signal #1 : J:\GC28\DATA\032718\0327F014.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC28\DATA\032718\0327F014.D\ECD2B.CH
Acq On : 27 Mar 2018 1:36 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 13:57:26 2018 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15625 MJ252
Last Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.00	0.00	54486	0	0.113	N.D.	#
		Target Compounds							
1)		3,4-Dichlorophen	3.10	3.67	17768	4208	1.023	910.677	#
2)		3,5-Dichlorophen	3.37	3.91	6496	16942	0.533	1.370	#
3)		2,4,6-Trichlorop	3.45	4.15	47472	40470	N.D.	0.126	
5)		2,4,5-Trichlorop	0.00	4.65	0	53054	N.D.	0.330	#
6)		3,4,5-Trichlorop	4.26f	4.72	7794	51408	0.046	0.347	#
7)	M	2,3,5,6-Tetrachl	4.44f	4.92f	11906	86544	0.022	0.182	#
8)	M	2,3,4,5-Tetrachl	4.99	5.38	26118	6036	0.064	N.D.	#
9)	M	Pentachloropheno	5.16	5.56	30724	52652	0.047	0.083	#
10)		Pentachloroaniso	5.16	5.56	30724	52652	0.049	0.088	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F026.D
Lab ID: KWG1801645-6
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 17:06
Date Quantitated: 03/28/2018 09:17
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F026.D\0327F026C.D
Lab ID: KWG1801645-6
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 17:06
Date Quantitated: 03/28/2018 09:17
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.59	NA	).229995727	quaderr

Primary Review: _____

Secondary Review: _____

Printed: 03/28/2018 13:54:21
u:\Stealth\Crystal.rpt\except2.rpt

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F026.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F026.D\0327F026c.d			**Vial:**	2
Acqu Date:	03/27/2018 17:06	**Quant Date:**	03/28/2018 09:17	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-6				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00	4.60	59808	3618	0.1240	0.0100			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10	3.67	15496	5651	0.8920	910.59			
3,5-Dichlorophenol	3.37	3.91	8602	14004	0.7060	1.13			
2,4,6-Trichlorophenol		4.15	53580	53720	0.0000	0.1670			
2,4,5-Trichlorophenol		4.64	0	36240	0.0000	0.2250			
3,4,5-Trichlorophenol	4.26	4.72	9948	32163	0.0590	0.2170			
2,3,5,6-Tetrachlorophenol	4.44	4.92	10905	86042	0.0200	0.1810			
2,3,4,5-Tetrachlorophenol	4.99		30840	7968	0.0760	0.0000			
Pentachlorophenol	5.16 c	5.54 c	17583	152741**m**	0.0270	0.2420			
2,3,4,5,6-Pentachloroanisole	5.16 c	5.54 c	17583	837471	0.0280	1.40			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F026.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F026.D\0327F026c.d			**Vial:**	2
Acqu Date:	03/27/2018 17:06	**Quant Date:**	03/28/2018 09:17	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-6				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00	4.60	59808	3618	0.1240	0.0100			NA
			%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.10		3.67		15496	5651	0.8920	910.59			
3,5-Dichlorophenol	3.37		3.91		8602	14004	0.7060	1.13			
2,4,6-Trichlorophenol			4.15		53580	53720	0.0000	0.1670			
2,4,5-Trichlorophenol			4.64		0	36240	0.0000	0.2250			
3,4,5-Trichlorophenol	4.26		4.72		9948	32163	0.0590	0.2170			
2,3,5,6-Tetrachlorophenol	4.44		4.92		10905	86042	0.0200	0.1810			
2,3,4,5-Tetrachlorophenol	4.99				30840	7968	0.0760	0.0000			
Pentachlorophenol	5.16	c	5.54	c	17583	152741**m**	0.0270	0.2420			
2,3,4,5,6-Pentachloroanisole	5.16	c	5.54	c	17583	837471	0.0280	1.40			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F026.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 5:06 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:17:16 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	3.999	4.598	59808	3618	0.124	0.010	#
		Target Compounds							
1)		3,4-Dichl...	3.096	3.668	15496	5651	0.892	910.592	#
2)		3,5-Dichl...	3.366	3.908	8602	14004	0.706	1.133	#
3)		2,4,6-Tri...	3.446	4.148	53580	53720	N.D.	0.167	
5)		2,4,5-Tri...	0.000	4.645	0	36240	N.D.	0.225	#
6)		3,4,5-Tri...	4.256f	4.725	9948	32163	0.059	0.217	#
7)	M	2,3,5,6-T...	4.442	4.922f	10905	86042	0.020	0.181	#
8)	M	2,3,4,5-T...	4.992	5.338f	30840	7968	0.076	N.D.	#
9)	M	Pentachlo...	5.156	5.538	17583	152741	0.027	0.242m	#
10)		Pentachlo...	5.156	5.538	17583	837471	0.028	1.396	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

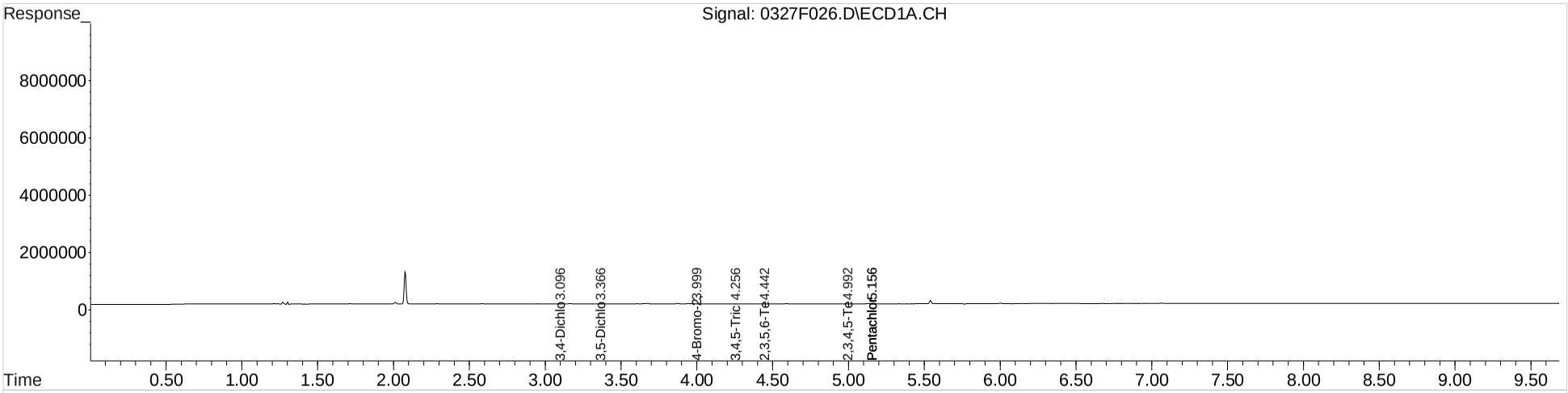
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F026.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 5:06 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:17:16 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

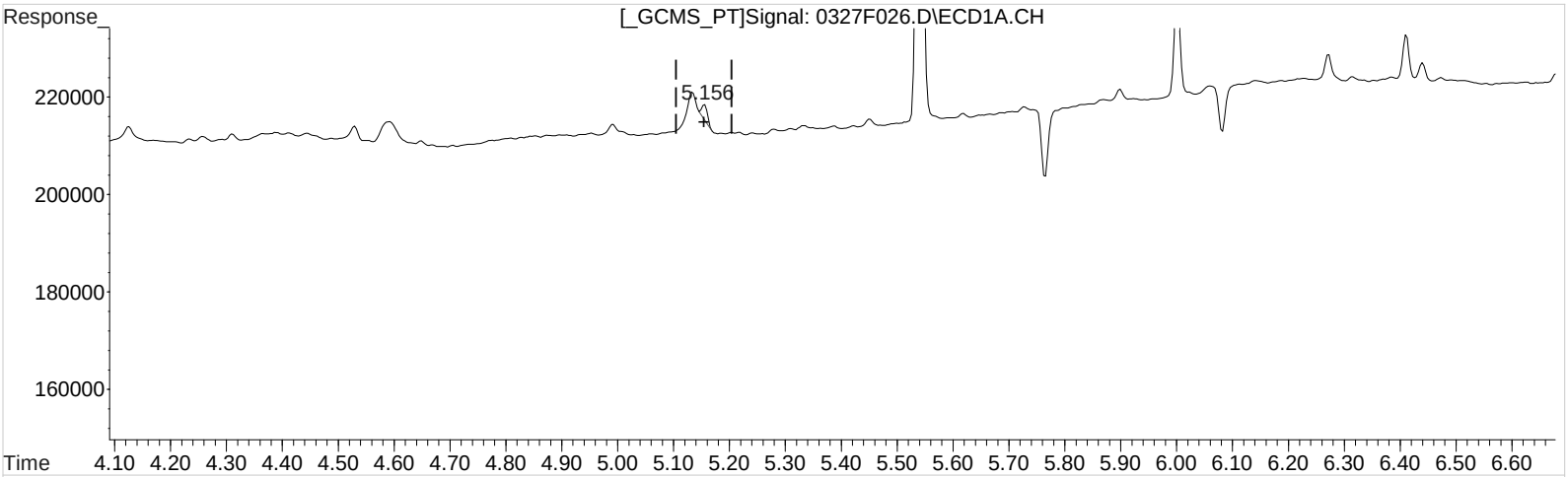


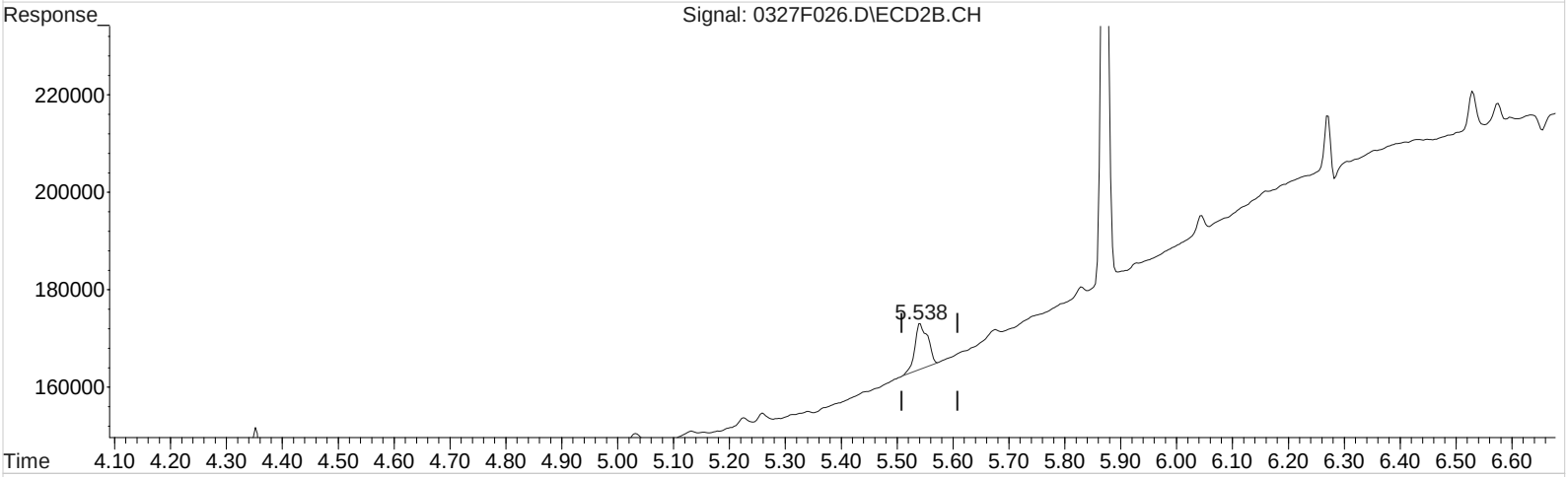
1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F026.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 5:06 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 09:17:16 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.156min 0.027 ug/L

response 17583

Manual Integration:

After

After/No Before

03/28/18

(9) Pentachlorophenol #2 (M)

5.538min 0.242 ug/L m

response 152741

(+) = Expected Retention Time

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F040.D
Lab ID: KWG1801645-8
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 21:12
Date Quantitated: 03/28/2018 08:45
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	2,4,5-Trichlorophenol	895.45	NA	3.449996948	quaderr

Primary Review: _____

Secondary Review: _____

Printed: 03/28/2018 13:55:52
u:\Stealth\Crystal.rpt\except2.rpt

1st JED 03/29/18
2nd JEP 04/04/18

Exception Report

Data File: J:\GC28\DATA\032718\0327F040.D\0327F040C.D
Lab ID: KWG1801645-8
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/27/2018 21:12
Date Quantitated: 03/28/2018 08:45
Batch ID: KWG1801645
Analysis Method: 8151M
MethodJoinID: MJ1442

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Above Highest ICAL Level	3,4-Dichlorophenol	910.71	NA	).229995727	quaderr

Primary Review: _____

Secondary Review: _____

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F040.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F040.D\0327F040c.d			**Vial:**	2
Acqu Date:	03/27/2018 21:12	**Quant Date:**	03/28/2018 08:45	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ1442	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-8				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ1442
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1		RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00			65697	0	0.1360	0.0000			NA
				%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12		3.64	5870	3618	0.3380	910.71			
3,5-Dichlorophenol	3.32		3.91	33154	15263	2.72	1.23			
2,4,6-Trichlorophenol			4.15	35798	41266	0.0000	0.1280			
2,4,5-Trichlorophenol	4.23	c	4.64	6762	36063	895.45	0.2240			
3,4,5-Trichlorophenol	4.23	c	4.72	6762	40312	0.0400	0.2720			
2,3,5,6-Tetrachlorophenol			4.92	0	73653	0.0000	0.1550			
2,3,4,5-Tetrachlorophenol	4.99			41428	21200	0.1020	0.0000			
Pentachlorophenol	5.13	c		54054	0	0.0820	0.0000			
2,3,4,5,6-Pentachloroanisole	5.13	c		54054	0	0.0870	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

1st JED 03/29/18
2nd JEP 04/04/18

Quantitation Report

Data File #1:	J:\GC28\DATA\032718\0327F040.D			**Instrument:**	GC28
Data File #2:	J:\GC28\Data\032718\0327F040.D\0327F040c.d			**Vial:**	2
Acqu Date:	03/27/2018 21:12	**Quant Date:**	03/28/2018 08:45	**Dilution:**	1.0
Run Type:	IB	**MethodJoinID:**	MJ252	**Soln Conc. Units:**	ug/L
Lab ID:	KWG1801645-8				
Signal #1:	Rtx-1701	**Signal #2:**	Rtx-35		

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLI
Prod Code:	8151A MODIFIED	**Collect Date:**		**Receive Date:**	03/28/2018

Analysis Lot:	KWG1801645	**Prep Lot:**		**Report Group:**	
Analysis Method:	8151M	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC28\METHODS\112717-PCP.M			**Calibration ID:**	CAL15625
Title:					
MB Ref:				**Method ID:**	MJ252
				Quant based on Method	

Surrogate Compounds

Parameter Name	RT #1		RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
4-Bromo-2,6-dichlorophenol	4.00			65697	0	0.1360	0.0000			NA
				%Recovery =		NA	NA	**Limits =**	55-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
3,4-Dichlorophenol	3.12		3.64	5870	3618	0.3380	910.71			
3,5-Dichlorophenol	3.32		3.91	33154	15263	2.72	1.23			
2,4,6-Trichlorophenol			4.15	35798	41266	0.0000	0.1280			
2,4,5-Trichlorophenol	4.23	c	4.64	6762	36063	895.45	0.2240			
3,4,5-Trichlorophenol	4.23	c	4.72	6762	40312	0.0400	0.2720			
2,3,5,6-Tetrachlorophenol			4.92	0	73653	0.0000	0.1550			
2,3,4,5-Tetrachlorophenol	4.99			41428	21200	0.1020	0.0000			
Pentachlorophenol	5.13	c		54054	0	0.0820	0.0000			
2,3,4,5,6-Pentachloroanisole	5.13	c		54054	0	0.0870	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F040.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 9:12 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:45:59 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	3.998	0.000	65697	0	0.136	N.D.	#
		Target Compounds							
1)		3,4-Dichl...	3.118	3.640	5870	3618	0.338	910.713	#
2)		3,5-Dichl...	3.324f	3.907	33154	15263	2.721	1.234	#
3)		2,4,6-Tri...	3.441	4.147	35798	41266	N.D.	0.128	
5)		2,4,5-Tri...	4.231f	4.644	6762	36063	895.453	0.224	#
6)		3,4,5-Tri...	4.231	4.724	6762	40312	0.040	0.272	#
7)	M	2,3,5,6-T...	0.000	4.920f	0	73653	N.D.	0.155	#
8)	M	2,3,4,5-T...	4.988f	5.337f	41428	21200	0.102	N.D.	#
9)	M	Pentachlo...	5.131	0.000	54054	0	0.082	N.D.	#
10)		Pentachlo...	5.131	0.000	54054	0	0.087	N.D.	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

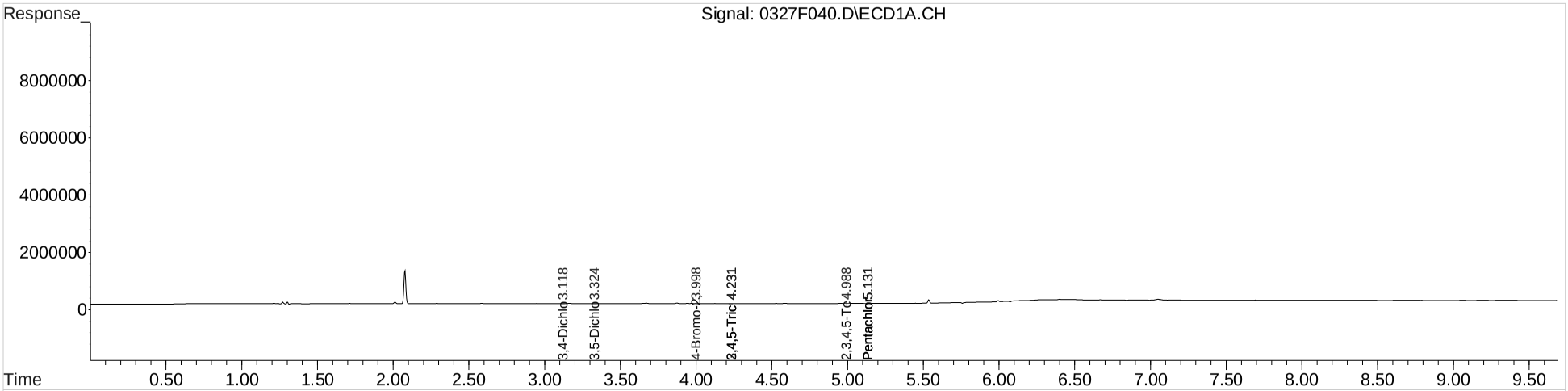
Quantitation Report (QT Reviewed)

1st JED 03/29/18
2nd JEP 04/04/18

Data File : J:\GC28\Data\032718\0327F040.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2018 9:12 pm Operator: JD
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Mar 28 08:45:59 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



Injection Log

Directory: J:\GC28\DATA\112717-CAL

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	1127f124.d	1.	IB		27 Nov 2017 18:01
2	20	1127f127.d	1.	PENTA01-88I 1 PPB		27 Nov 2017 18:57
3	21	1127f128.d	1.	PENTA01-88H 2.5 PPB		27 Nov 2017 19:16
4	22	1127f129.d	1.	PENTA01-88G 5 PPB		27 Nov 2017 19:35
5	23	1127f130.d	1.	PENTA01-88I 10 PPB		27 Nov 2017 19:53
6	24	1127f131.d	1.	PENTA01-88E 25 PPB		27 Nov 2017 20:12
7	25	1127f132.d	1.	PENTA01-88D 100 PPB		27 Nov 2017 20:31
8	26	1127f133.d	1.	PENTA01-88C 250 PPB		27 Nov 2017 20:50
9	27	1127f134.d	1.	PENTA01-88N 500 PPB		27 Nov 2017 21:08
10	28	1127f135.d	1.	PENTA01-88M 1000 PPB		27 Nov 2017 21:27
11	2	1127f136.d	1.	IB		27 Nov 2017 21:46
12	3	1129f005.d	1.	PENTA01-88K 50PPB ICV	SEMIVOA GC\W11122...	29 Nov 2017 12:44

CCL: 15625

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:48:32 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	553952	330490	1.842	1.270	#
		Target Compounds							
1)		3,4-Dichlorophen	3.12	3.67	16518	29596	1.019	1.580	#
2)		3,5-Dichlorophen	3.37	3.91	20988	18718	1.737	1.425	
3)		2,4,6-Trichlorop	3.46	4.14	448728	374818	1.266	1.042	
5)		2,4,5-Trichlorop	4.20	4.67	232648	183740	1.496	1.118	#
6)		3,4,5-Trichlorop	4.23f	4.73	193422	169644	1.216m	1.169	
7)	M	2,3,5,6-Tetrachl	4.47	4.97	639390	495876	1.275	0.987	
8)	M	2,3,4,5-Tetrachl	5.02	5.37	456782	504796	1.344	1.477	
9)	M	Pentachloropheno	5.16	5.56	806520	809946	1.377	1.358	
10)		Pentachloroaniso	5.16	5.56	806520	809946	1.449	1.429	

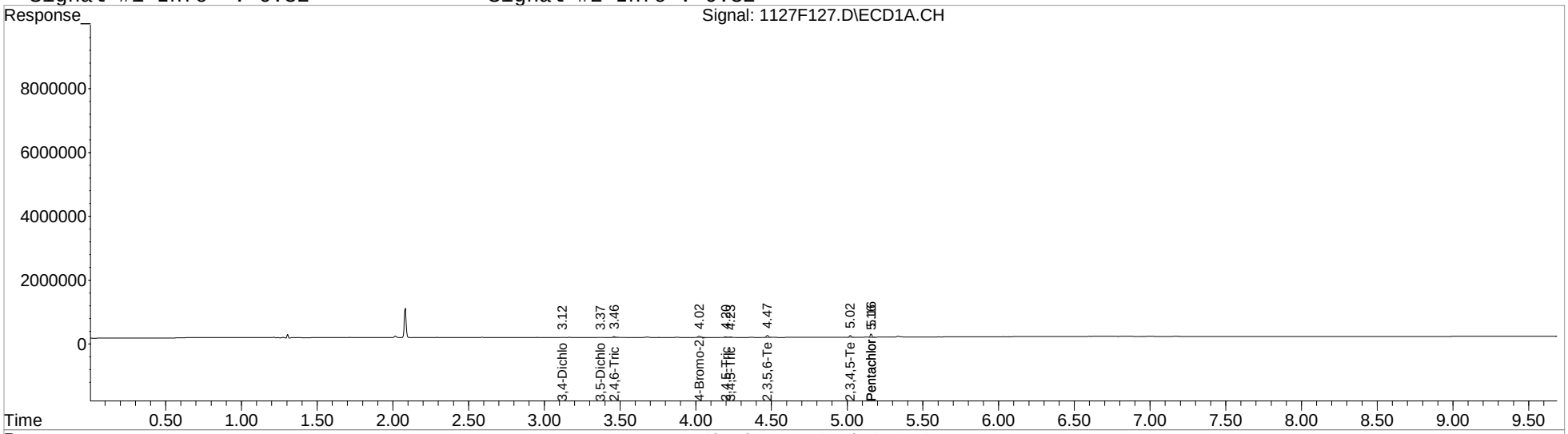
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

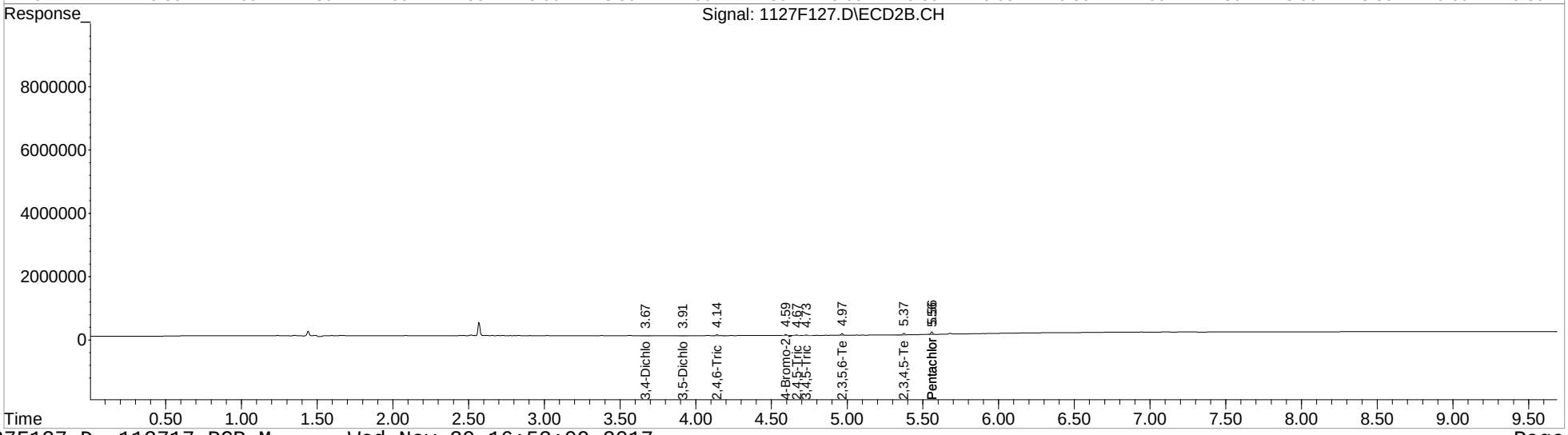
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



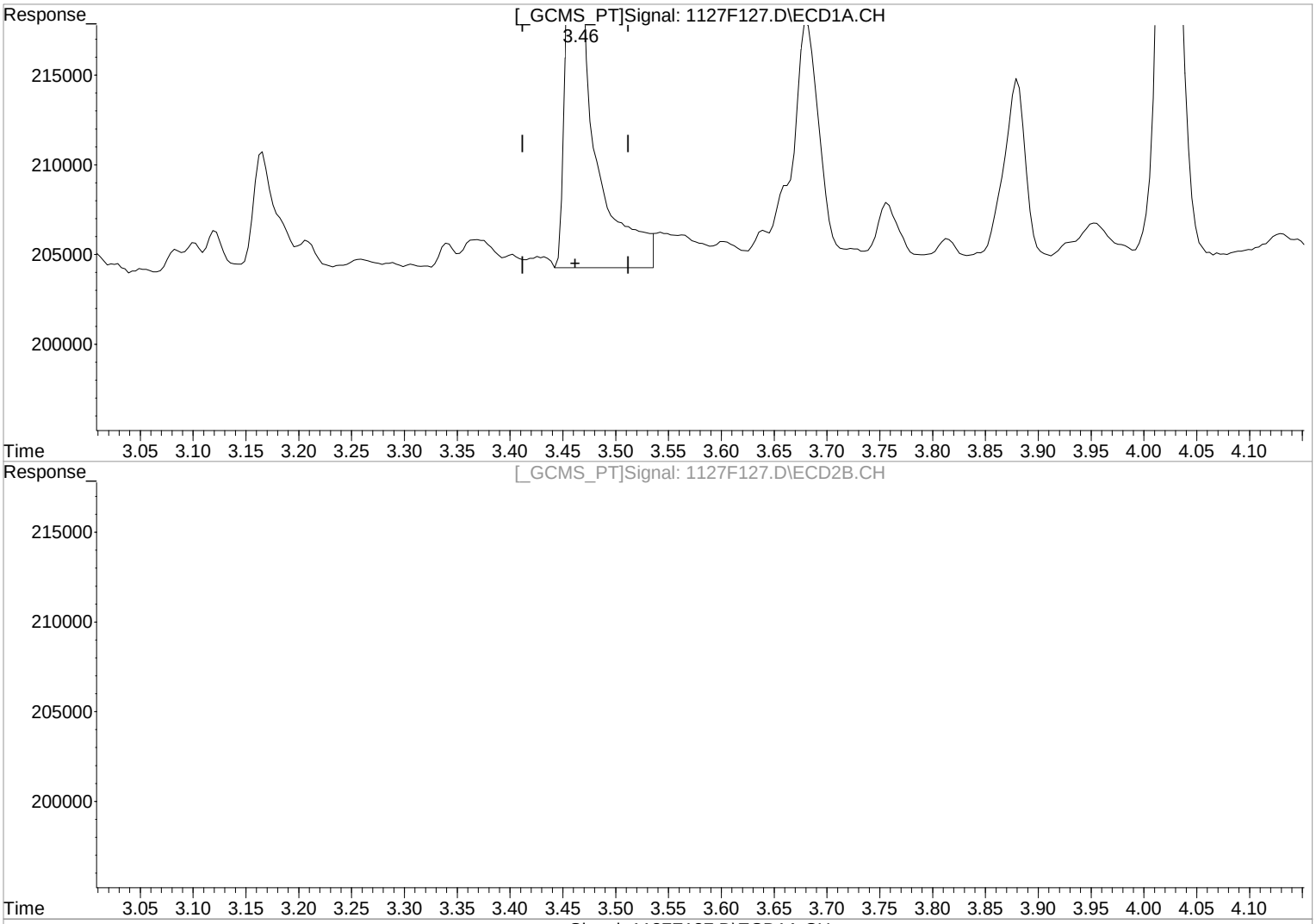


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F127.D\ECD1A.CH

(3) 2,4,6-Trichlorophenol

3.46min 1.266ug/L

response 448728

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(3) 2,4,6-Trichlorophenol #2

4.14min 1.042ug/L

response 374818

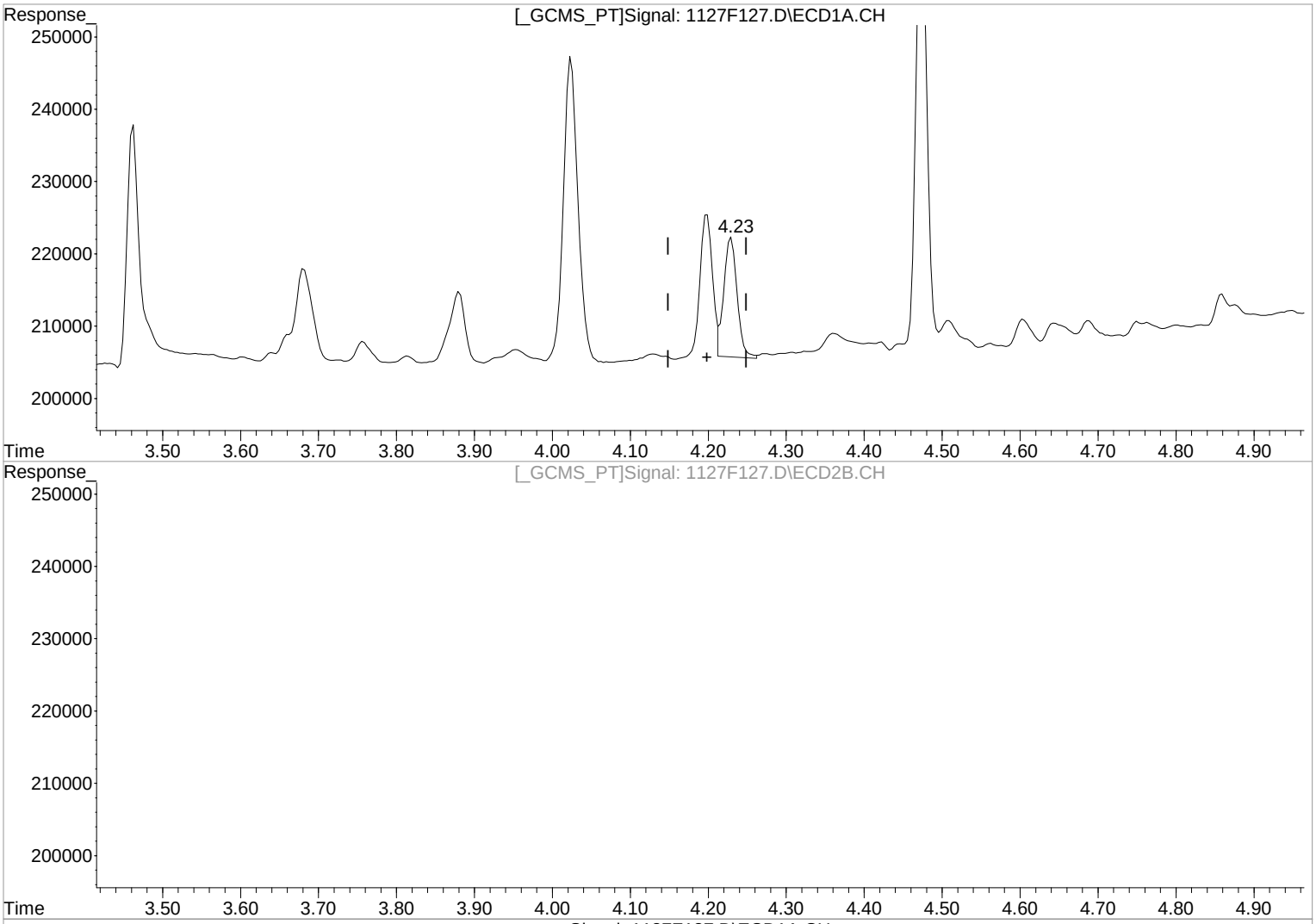
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F127.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 1.216ug/L m

response 193422

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 1.169ug/L

response 169644

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:50:18 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	1317276	876496	4.379	3.368
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	49286	55140	3.040m	2.943
2)		3,5-Dichlorophen	3.36	3.91	38712	36048	3.203m	2.745
3)		2,4,6-Trichlorop	3.46	4.14	974062	824238	2.747	2.292
5)		2,4,5-Trichlorop	4.20	4.66	535528	435750	3.444	2.652
6)		3,4,5-Trichlorop	4.23f	4.73	463666	405392	2.915m	2.794
7)	M	2,3,5,6-Tetrachl	4.47	4.97	1468326	1190526	2.929m	2.369
8)	M	2,3,4,5-Tetrachl	5.02	5.37	1110862	994692	3.268m	2.911
9)	M	Pentachloropheno	5.16	5.56	1873238	1758532	3.199	2.949m
10)		Pentachloroaniso	5.16	5.56	1873238	1755630	3.366	3.097m

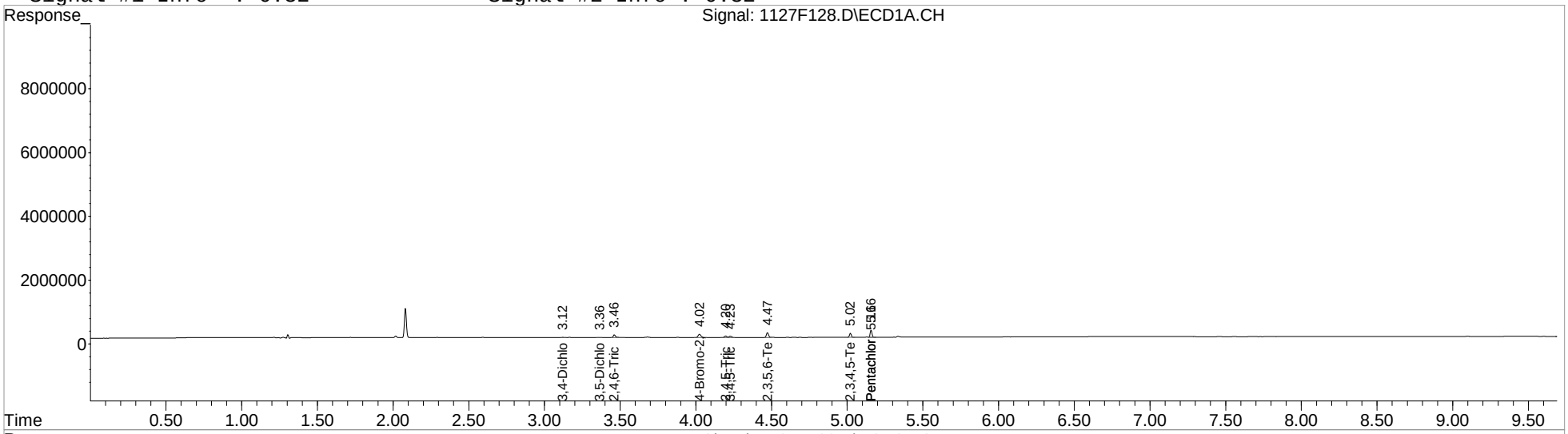
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

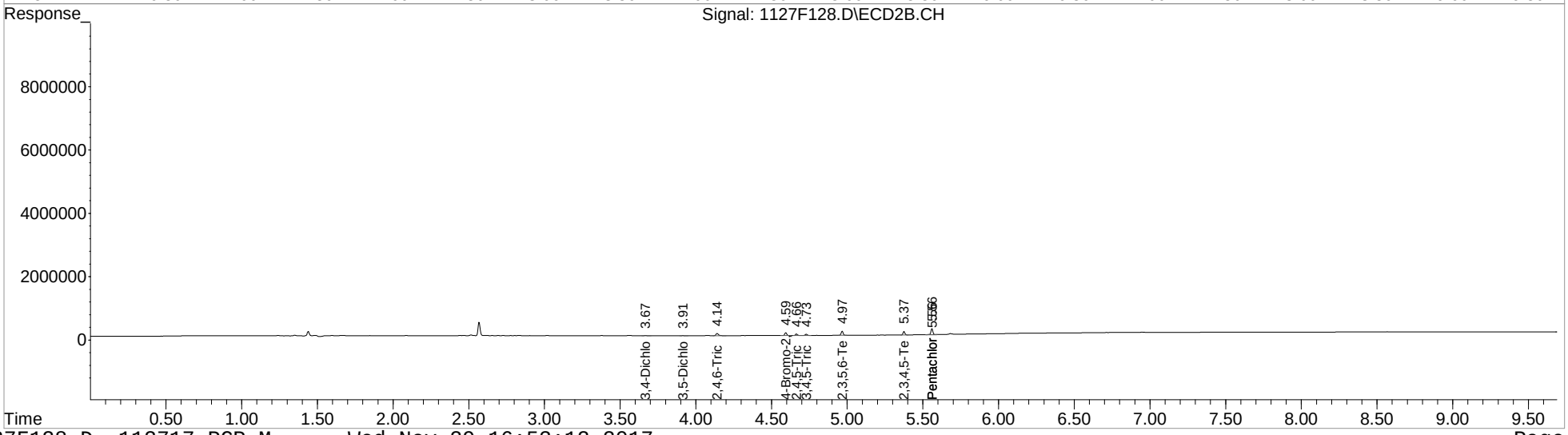
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



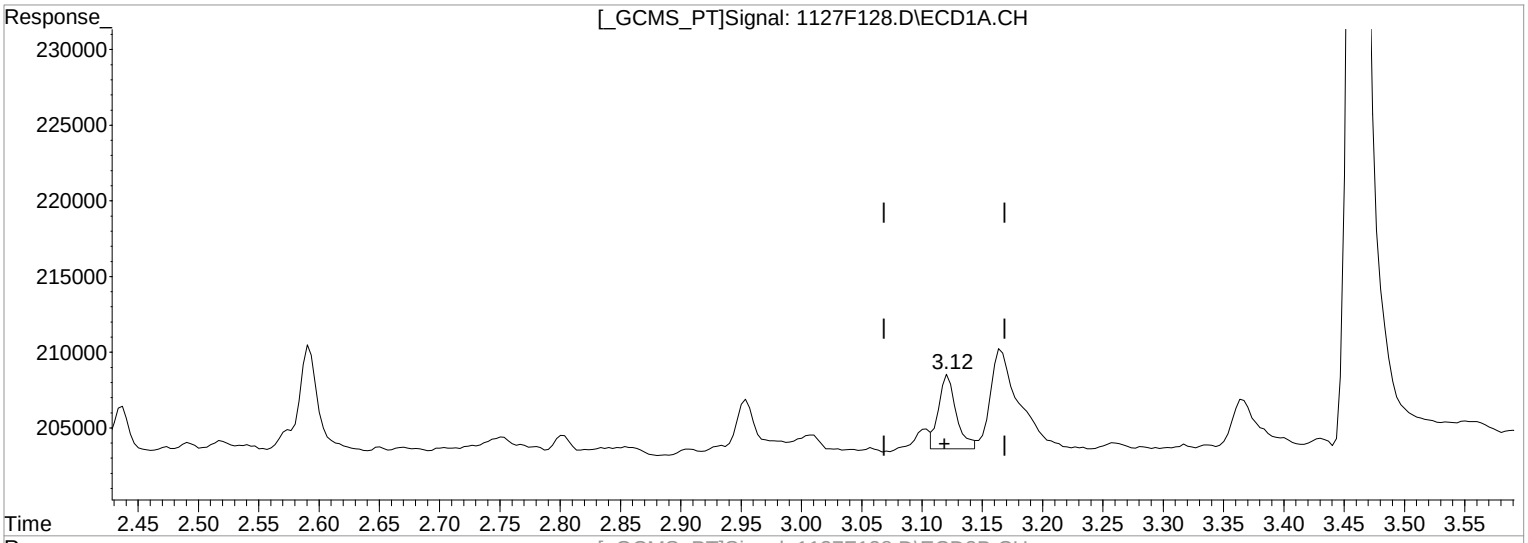


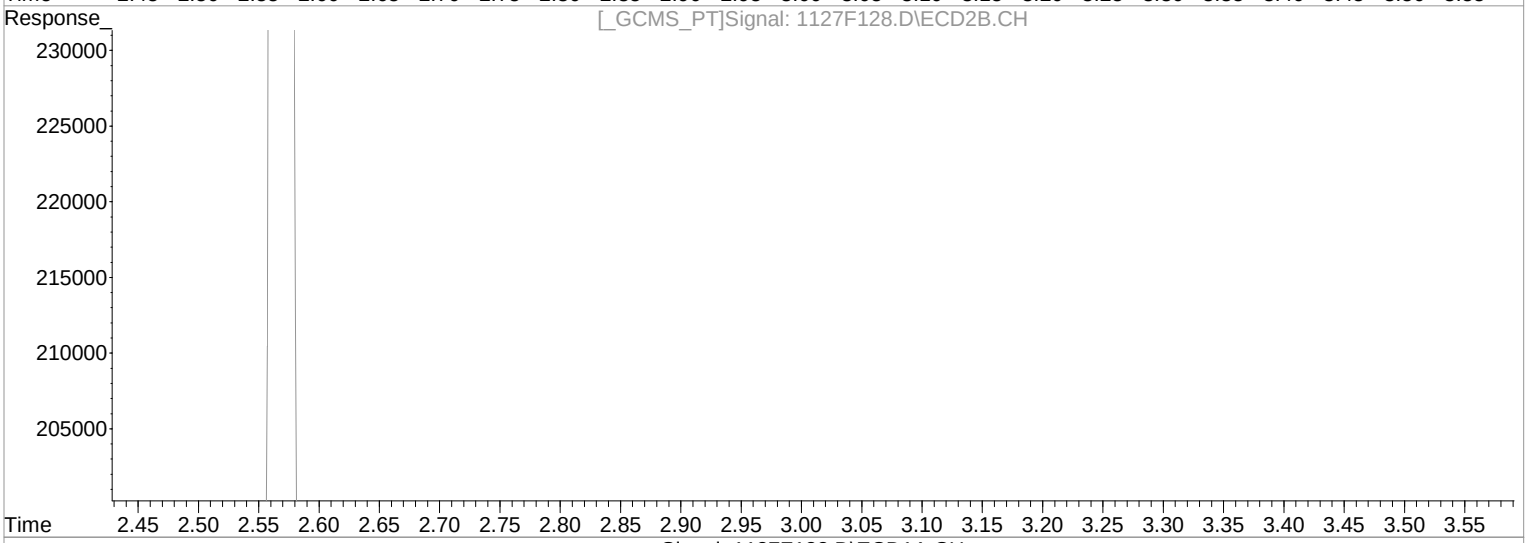
Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration





Signal: 1127F128.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 3.040ug/L m

response 49286

Manual Integration:

After

After, No Before

Baseline Shoulder

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 2.943ug/L

response 55140

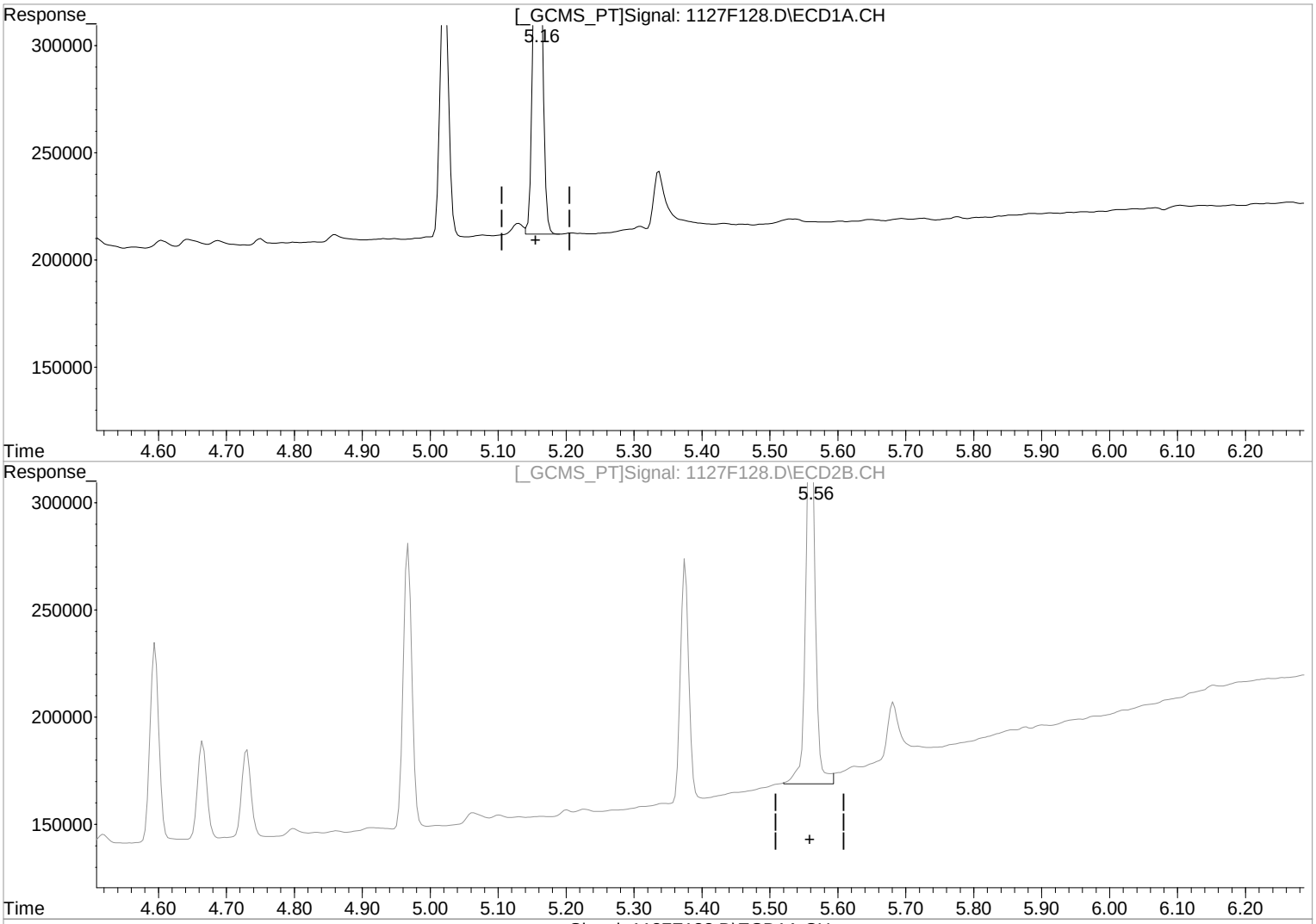
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 3.366ug/L

response 1873238

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(10) Pentachloroanisole #2

5.56min 3.097ug/L m

response 1755630

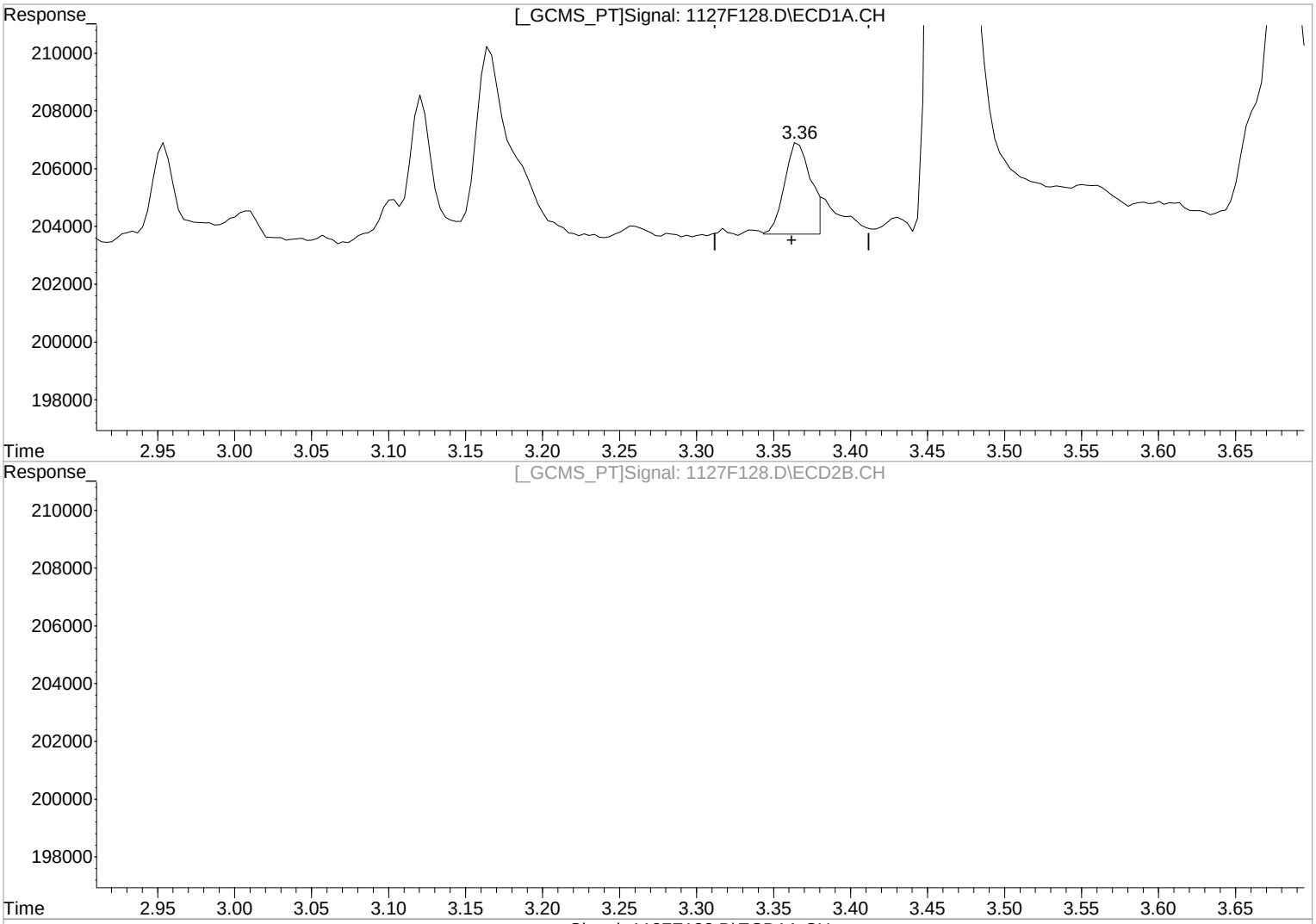
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 3.203ug/L m

response 38712

Manual Integration:

After

After, No Before

Baseline Shoulder

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 2.745ug/L

response 36048

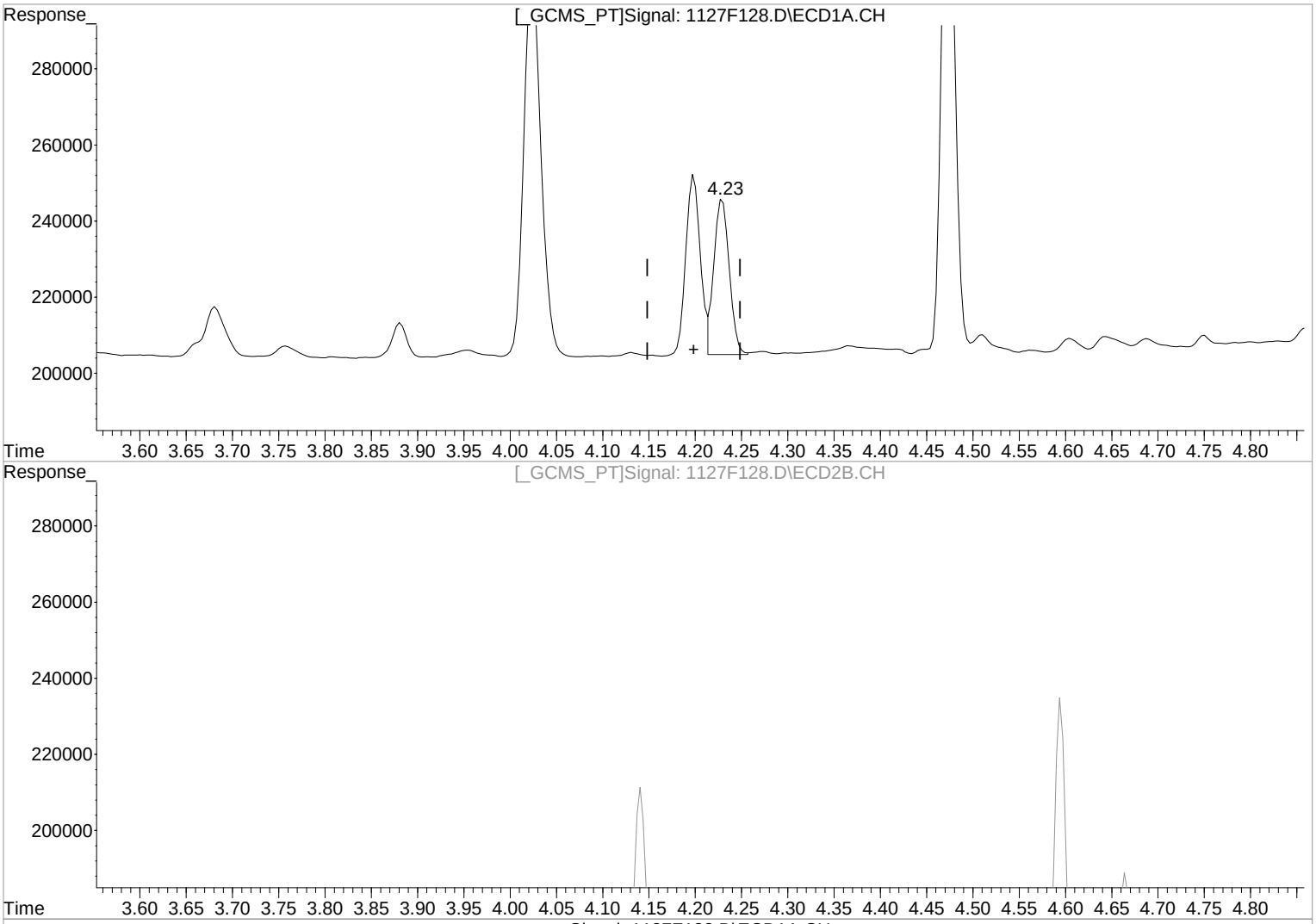
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 2.915ug/L m

response 463666

Manual Integration:

After

After, No Before Wrong peak

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 2.794ug/L

response 405392

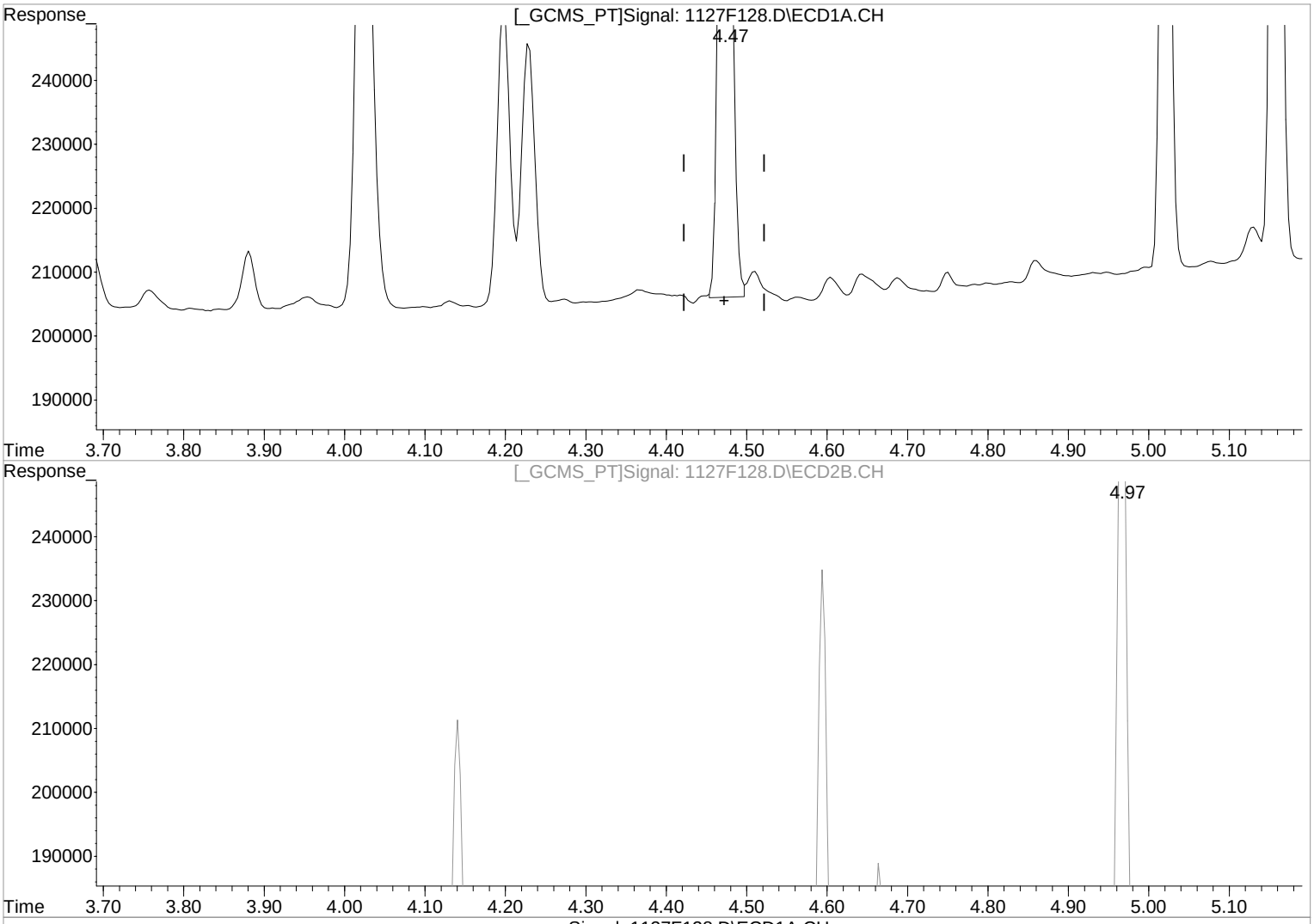
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(7) 2,3,5,6-Tetrachlorophenol (M)

4.47min 2.929ug/L m

response 1468326

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(7) 2,3,5,6-Tetrachlorophenol #2 (M)

4.97min 2.369ug/L

response 1190526

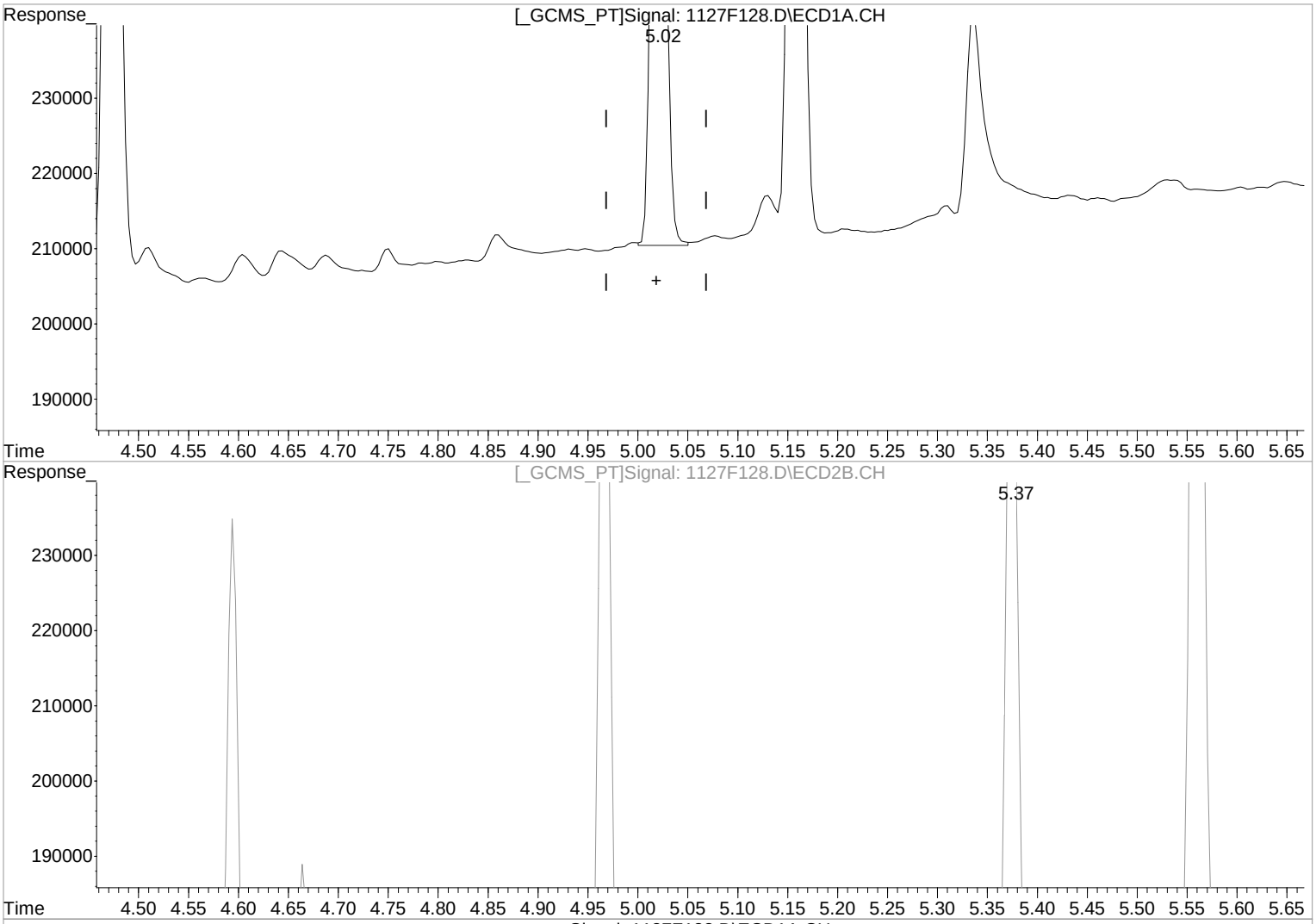
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 3.268ug/L m

response 1110862

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 2.911ug/L

response 994692

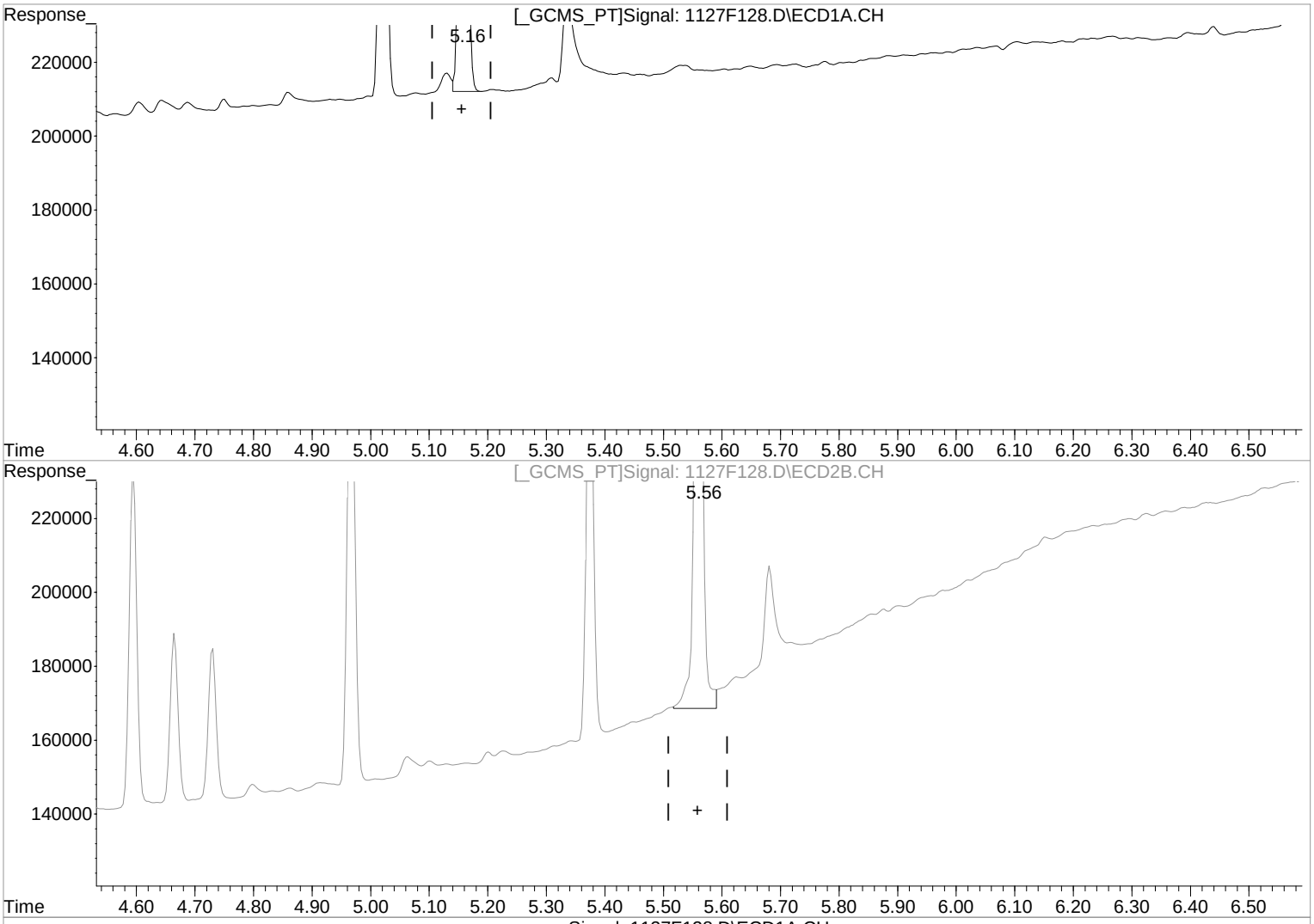
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 3.199ug/L

response 1873238

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 2.949ug/L m

response 1758532

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:54:14 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	2527708	1767222	8.403	6.791
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	86210	99632	5.317m	5.318
2)		3,5-Dichlorophen	3.36	3.91	68638	67856	5.680m	5.167
3)		2,4,6-Trichlorop	3.46	4.14	1814386	1543468	5.117	4.293
5)		2,4,5-Trichlorop	4.20	4.66	996824	834646	6.411	5.080
6)		3,4,5-Trichlorop	4.23f	4.73	897110	748802	5.640m	5.160
7)	M	2,3,5,6-Tetrachl	4.47	4.97	2791280	2329296	5.568m	4.635
8)	M	2,3,4,5-Tetrachl	5.02	5.37	2110338	1864900	6.209m	5.458
9)	M	Pentachloropheno	5.16	5.56	3505892	3190336	5.988	5.351m
10)		Pentachloroaniso	5.16	5.56	3505892	3212868	6.300	5.668m

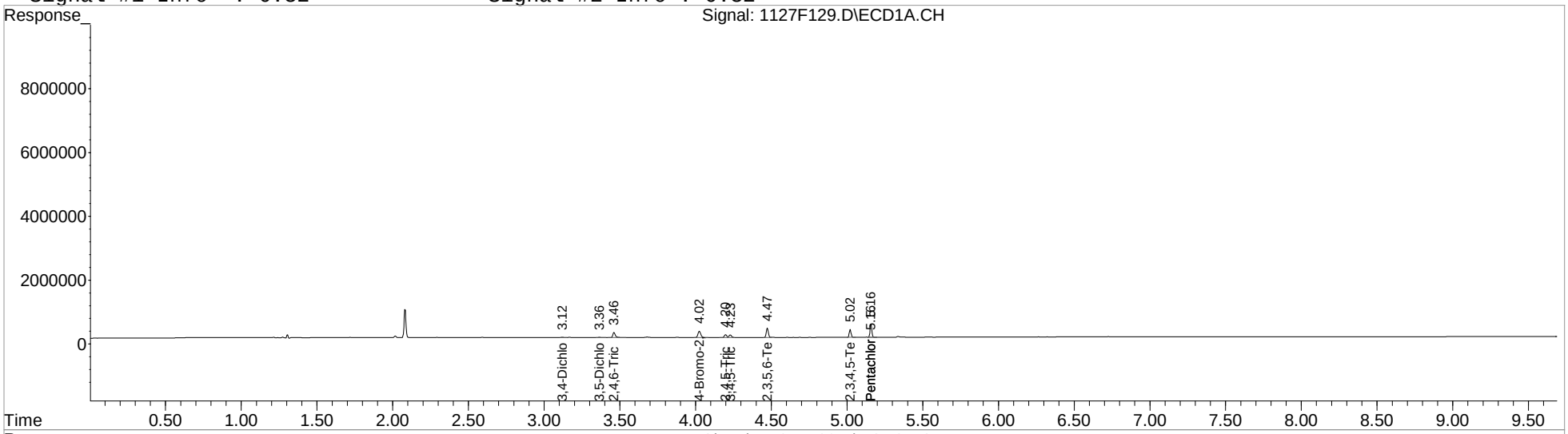
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

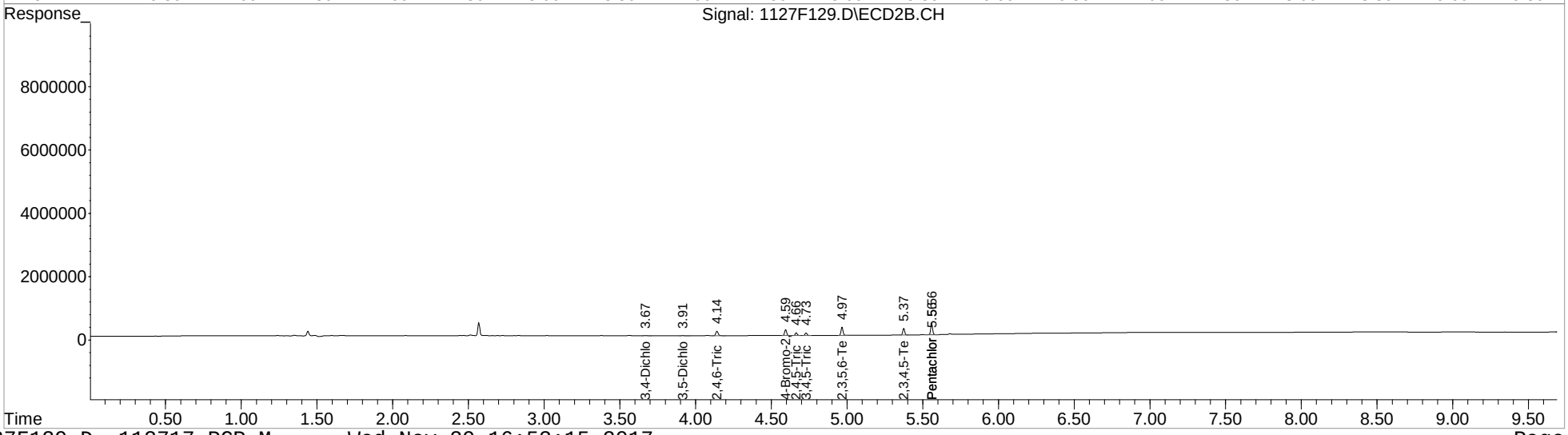
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



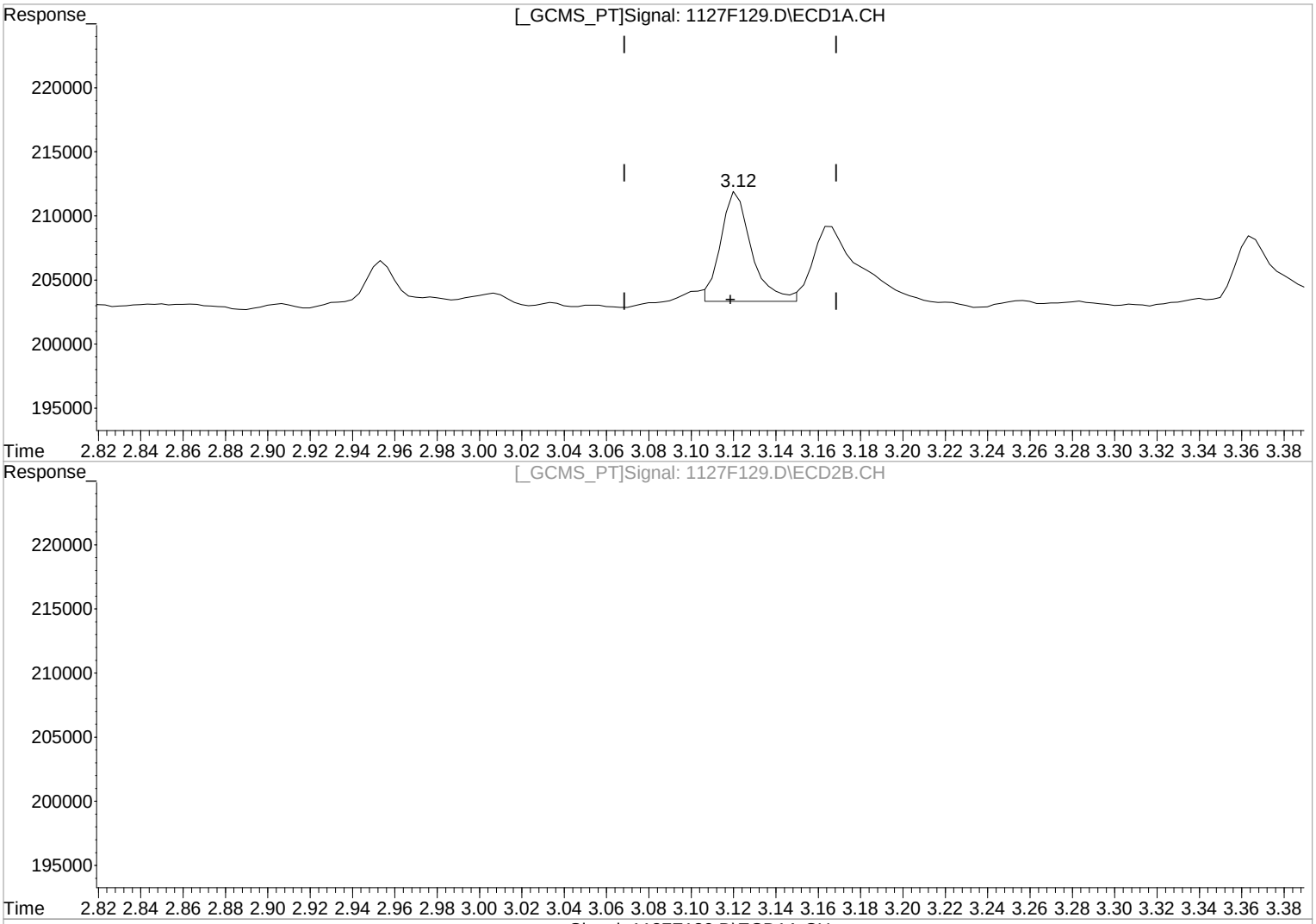


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 5.317ug/L m

response 86210

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 5.318ug/L

response 99632

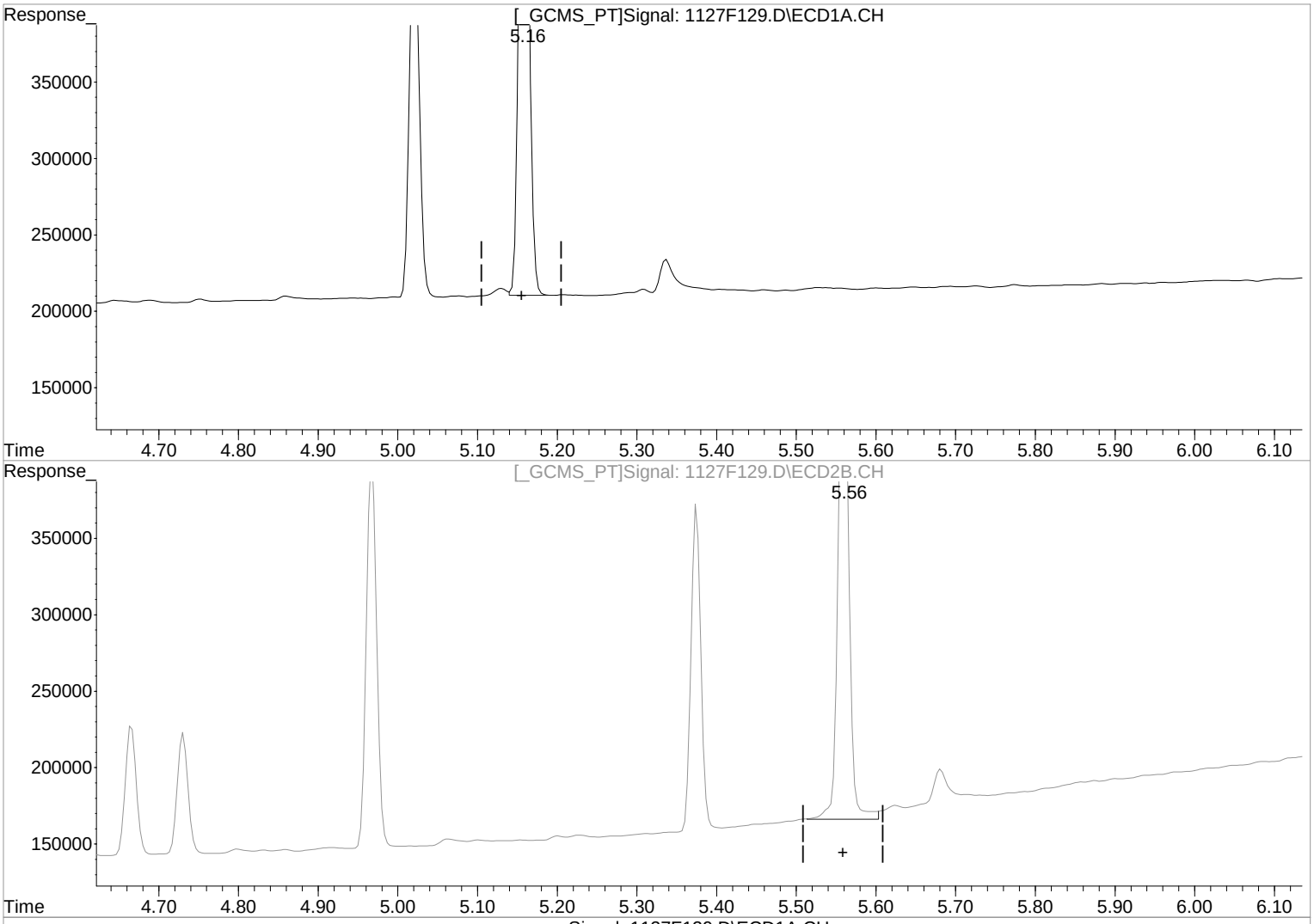
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 6.300ug/L

response 3505892

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(10) Pentachloroanisole #2

5.56min 5.668ug/L m

response 3212868

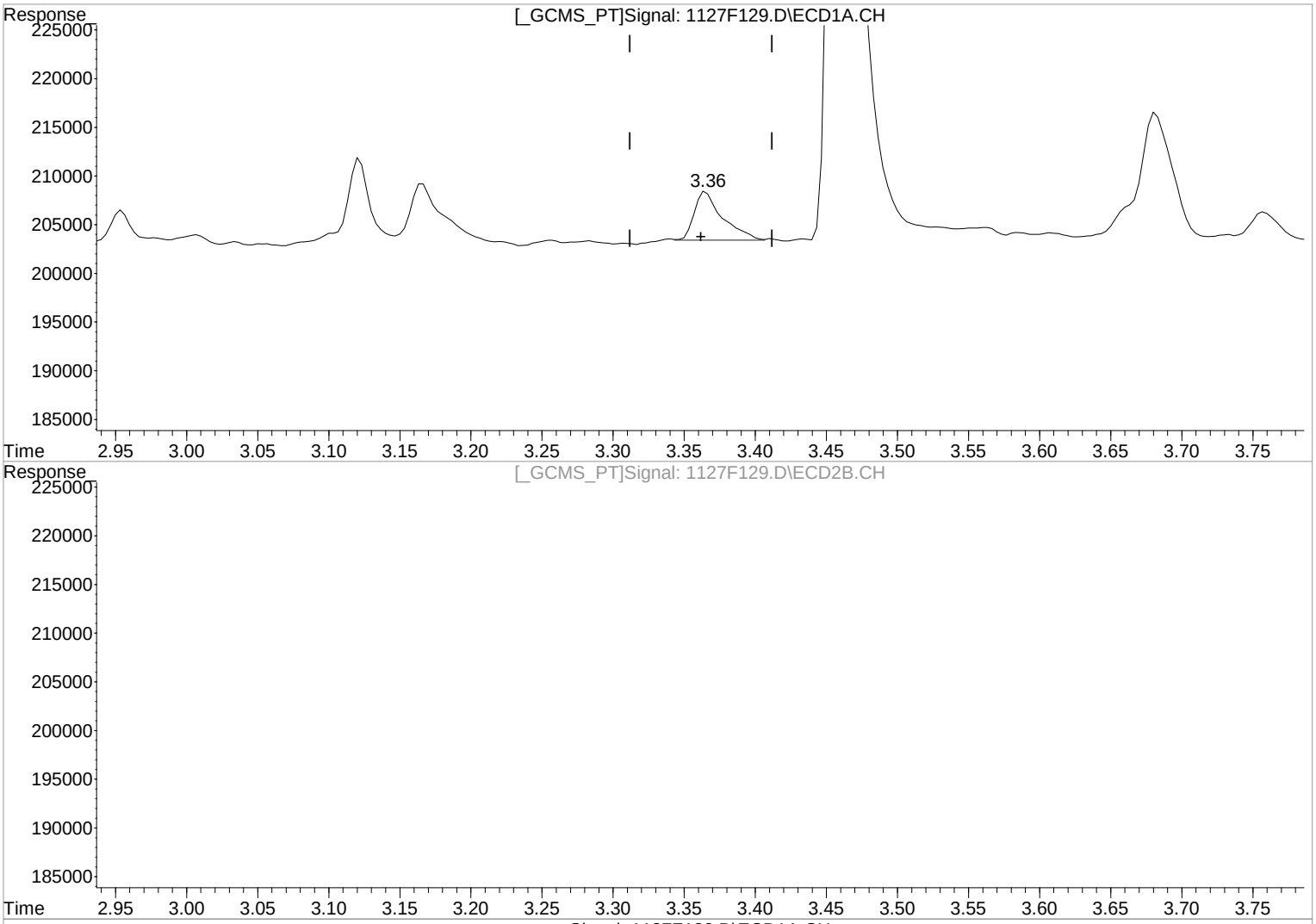
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 5.680ug/L m

response 68638

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 5.167ug/L

response 67856

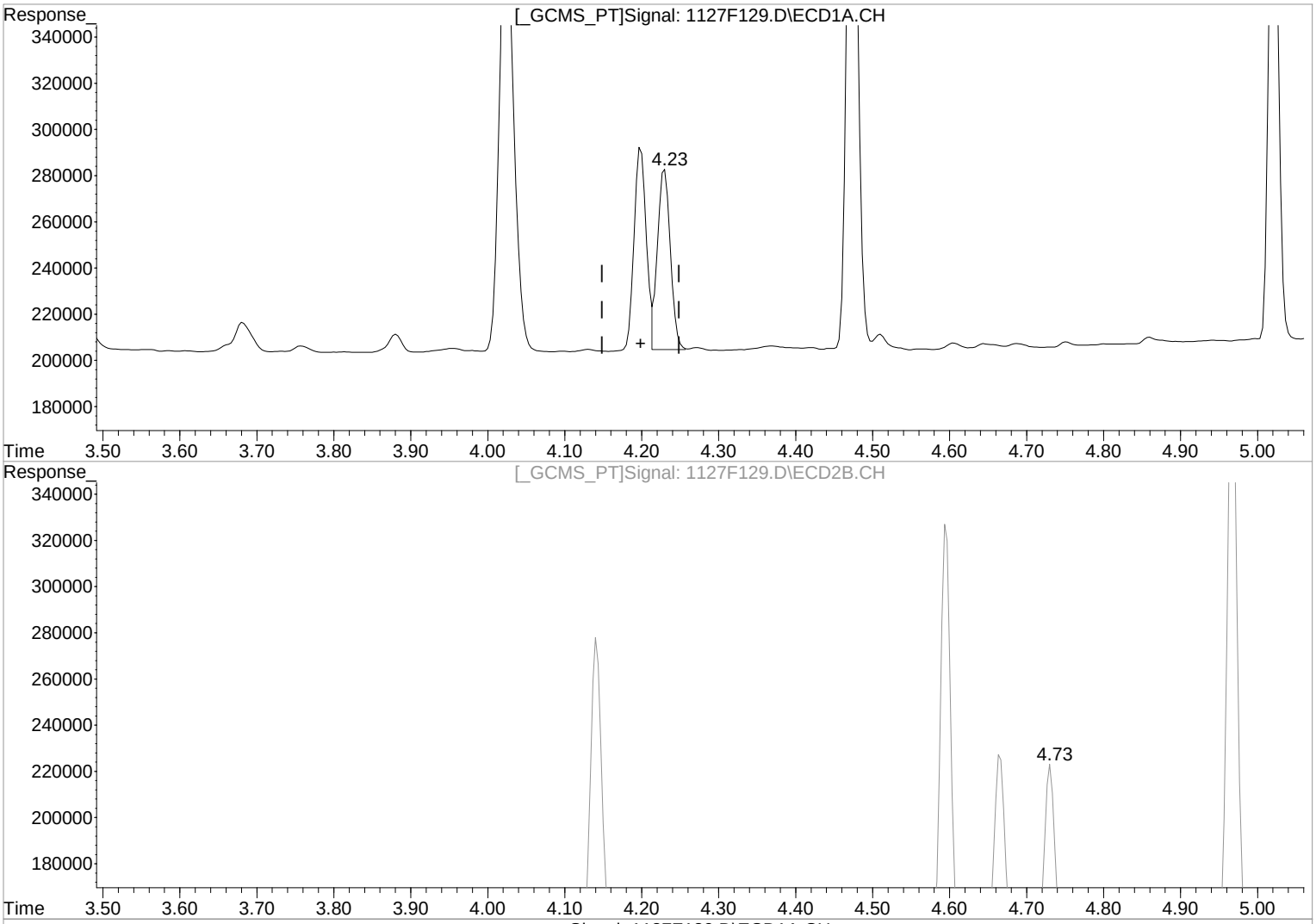
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 5.640ug/L m

response 897110

Manual Integration:

After

Wrong Peak No Before

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 5.160ug/L

response 748802

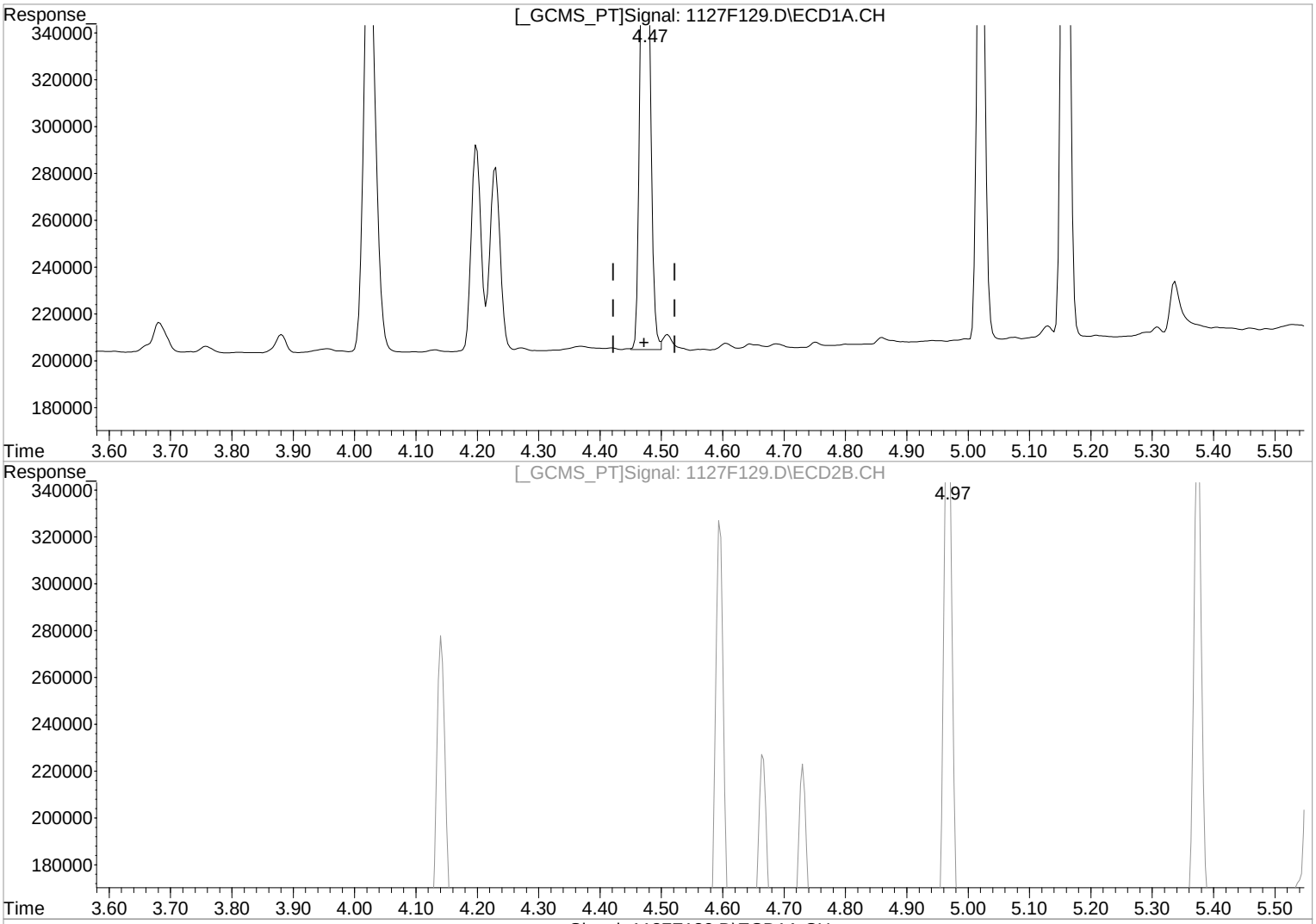
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(7) 2,3,5,6-Tetrachlorophenol (M)

4.47min 5.568ug/L m

response 2791280

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

(7) 2,3,5,6-Tetrachlorophenol #2 (M)

4.97min 4.635ug/L

response 2329296

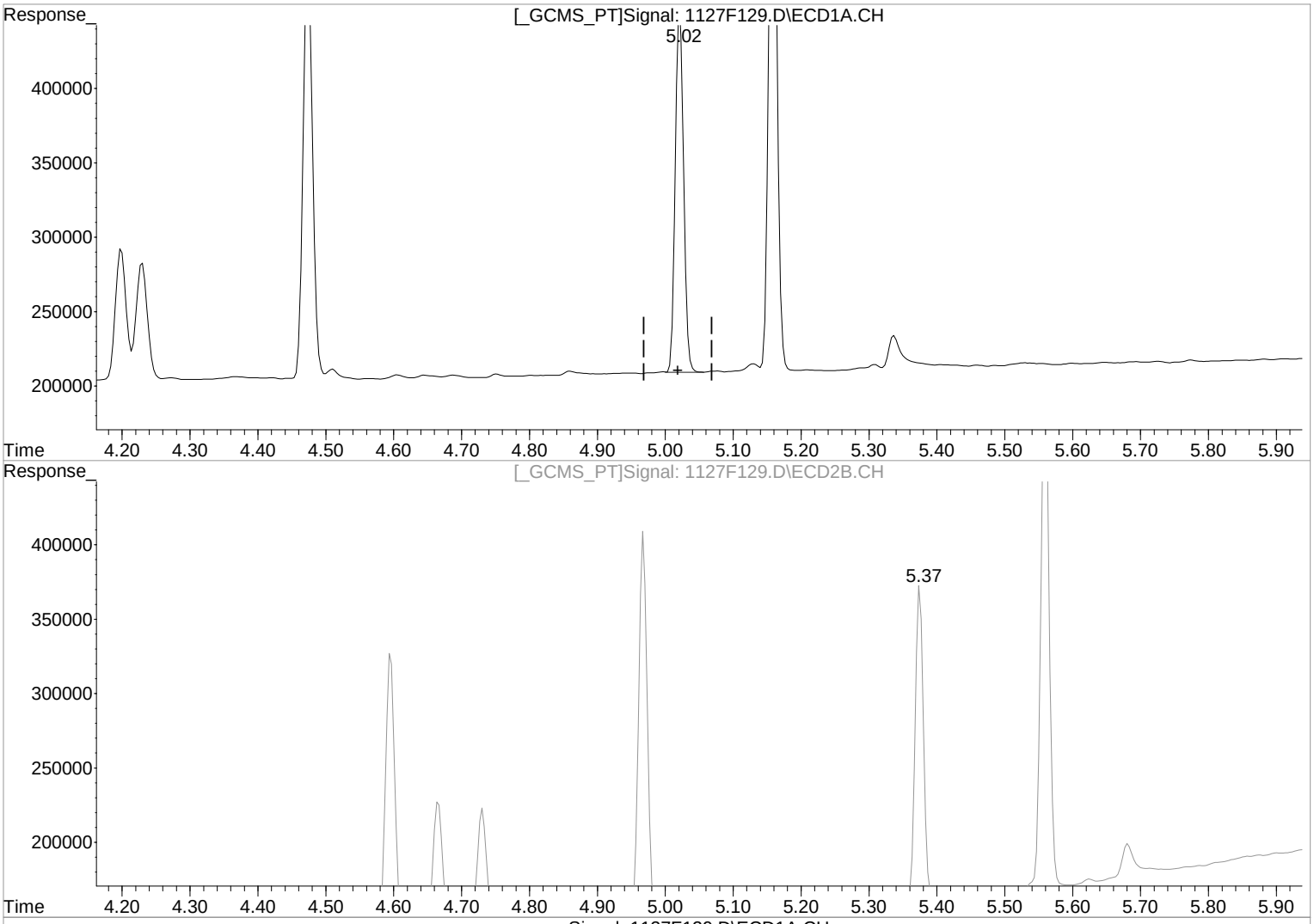
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 6.209ug/L m

response 2110338

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 5.458ug/L

response 1864900

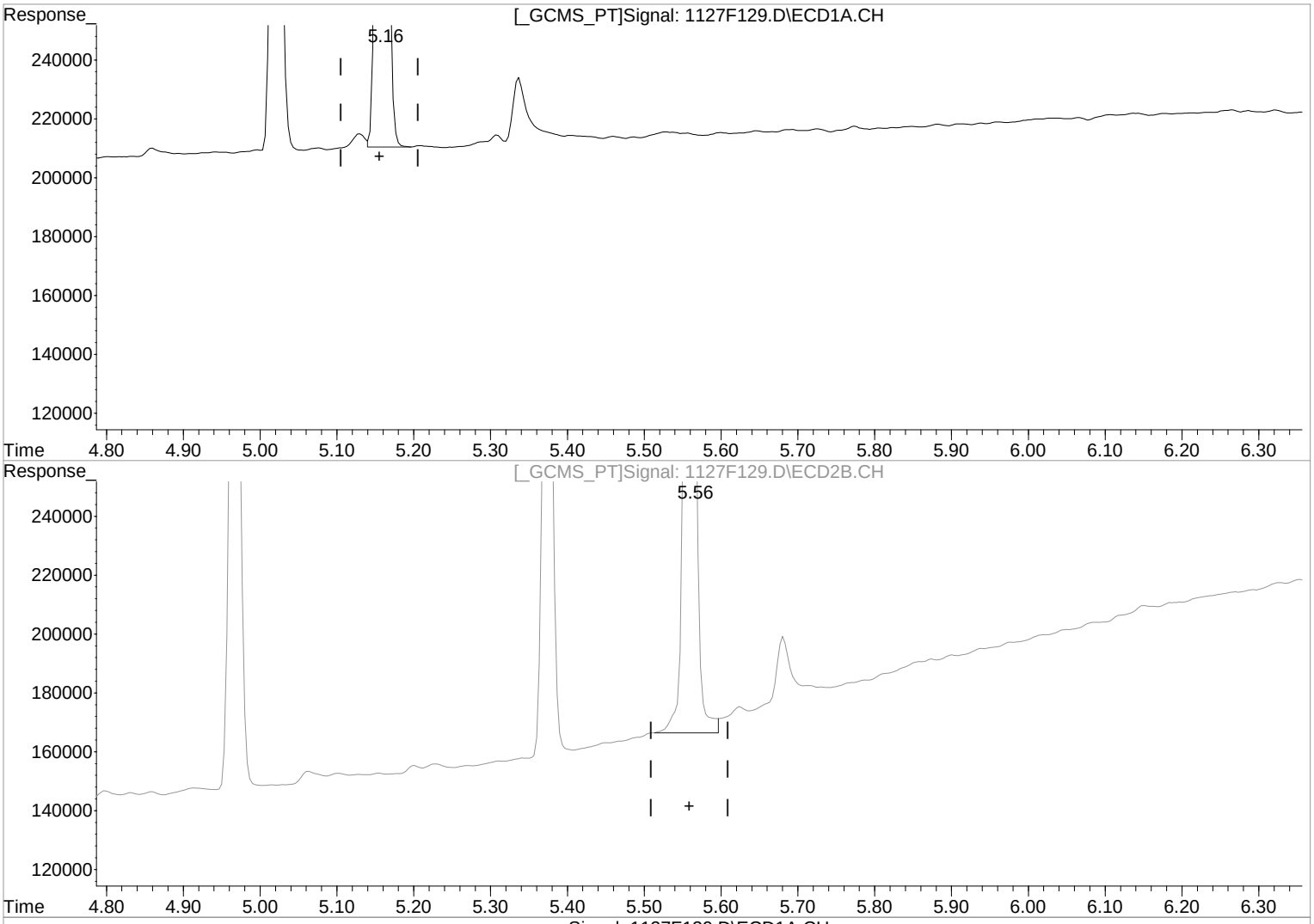
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 5.988ug/L

response 3505892

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 5.351ug/L m

response 3190336

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:57:47 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	4613736	3450884	15.338	13.260
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	163576	175528	10.089m	9.369
2)		3,5-Dichlorophen	3.36	3.91	101688	125108	8.415m	9.526
3)		2,4,6-Trichlorop	3.46	4.14	3229296	2813346	9.108	7.824
5)		2,4,5-Trichlorop	4.20	4.66	1789438	1475642	11.508	8.981
6)		3,4,5-Trichlorop	4.23f	4.73	1550706	1348458	9.750m	9.293
7)	M	2,3,5,6-Tetrachl	4.47	4.96	4983492	4311232	9.941	8.579
8)	M	2,3,4,5-Tetrachl	5.02	5.37	3744556	3299360	11.017m	9.656
9)	M	Pentachloropheno	5.16	5.56	6298030	5874436	10.757	9.853
10)		Pentachloroaniso	5.16	5.56	6298030	5874436	11.317	10.363

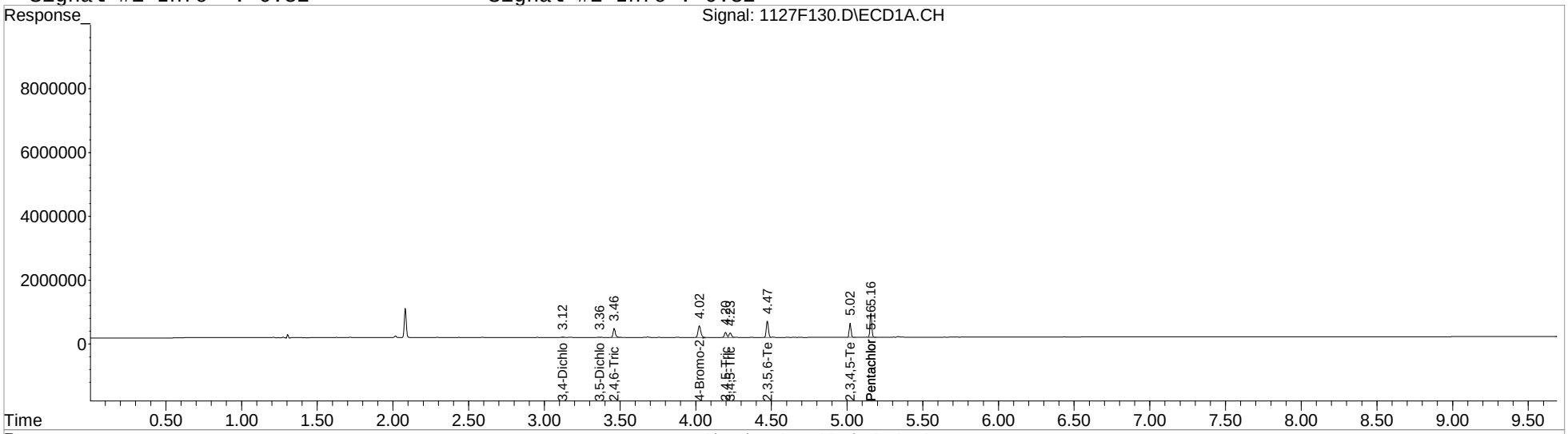
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

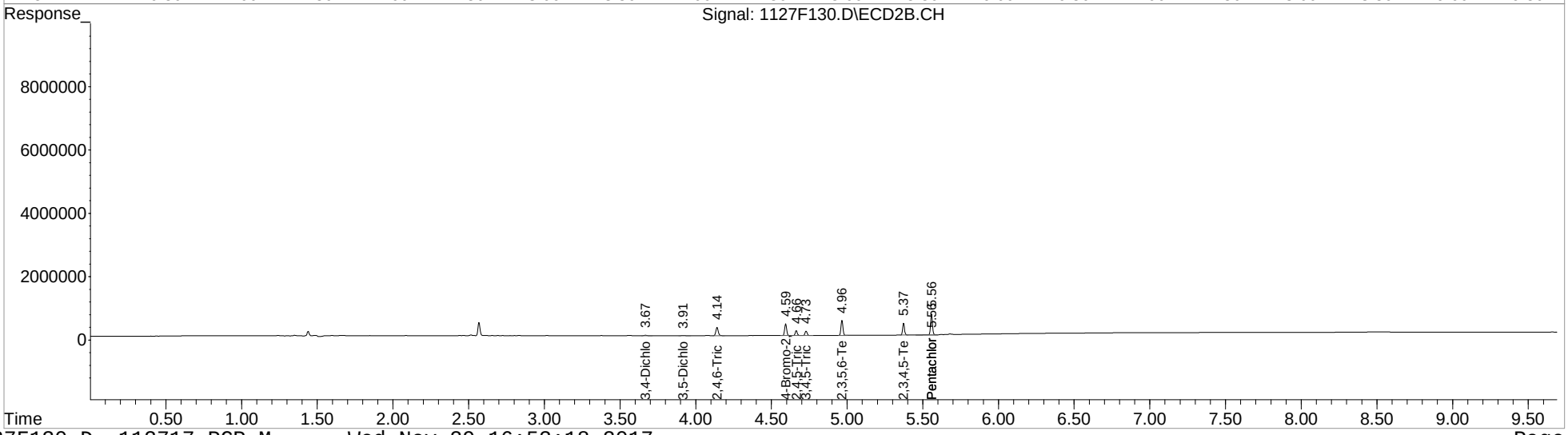
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



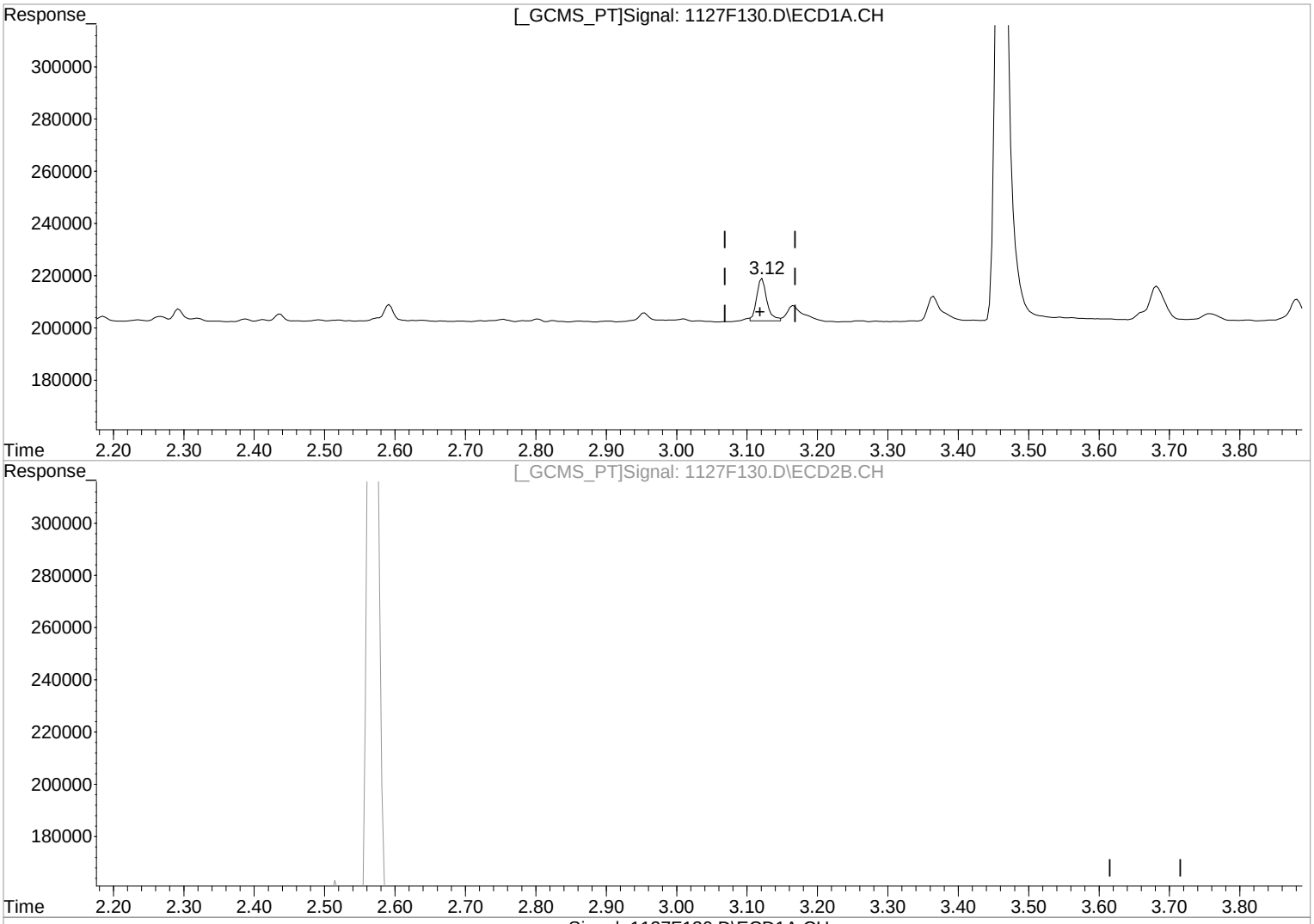


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 10.089ug/L m

response 163576

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 9.369ug/L

response 175528

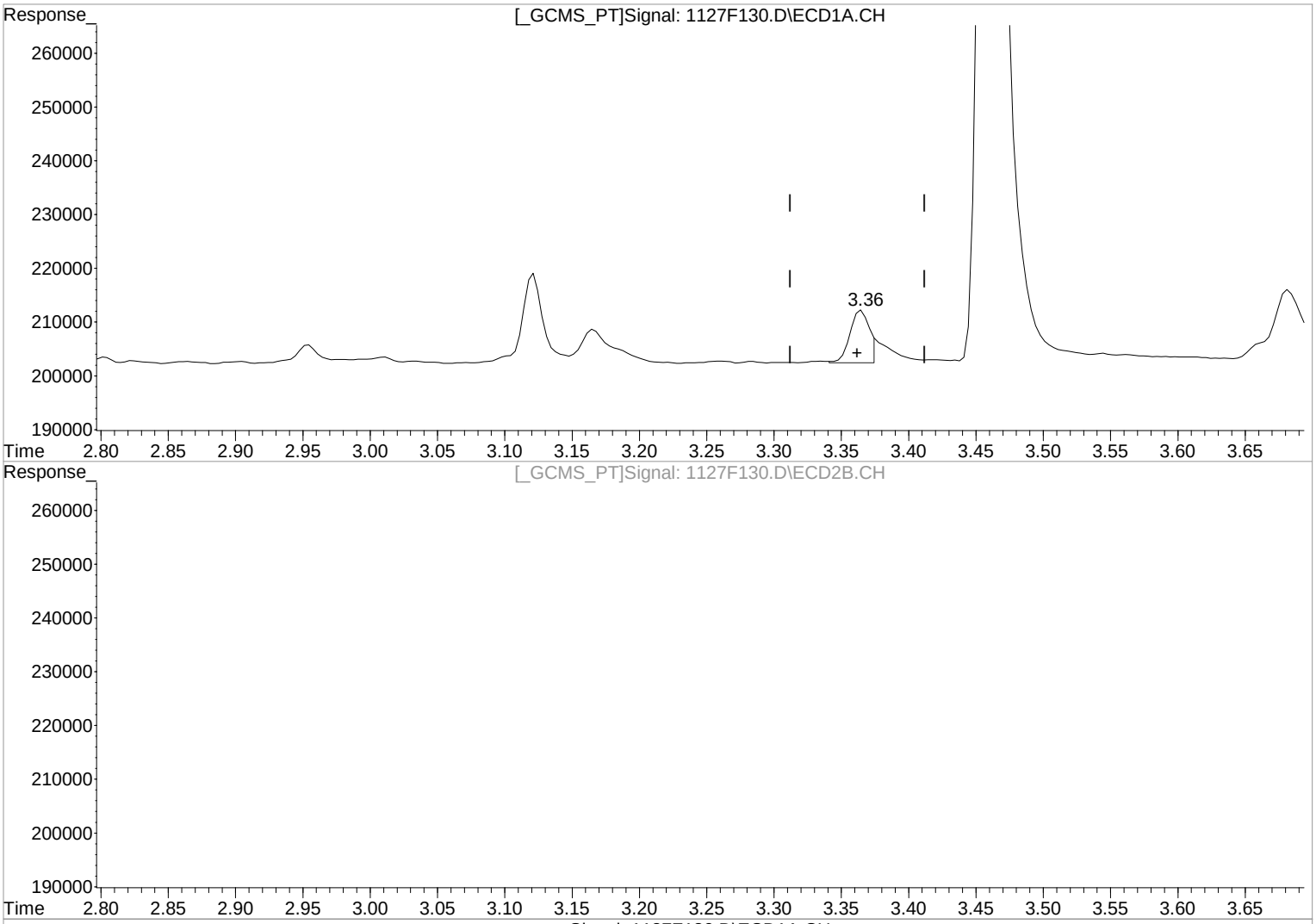
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 8.415ug/L m

response 101688

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 9.526ug/L

response 125108

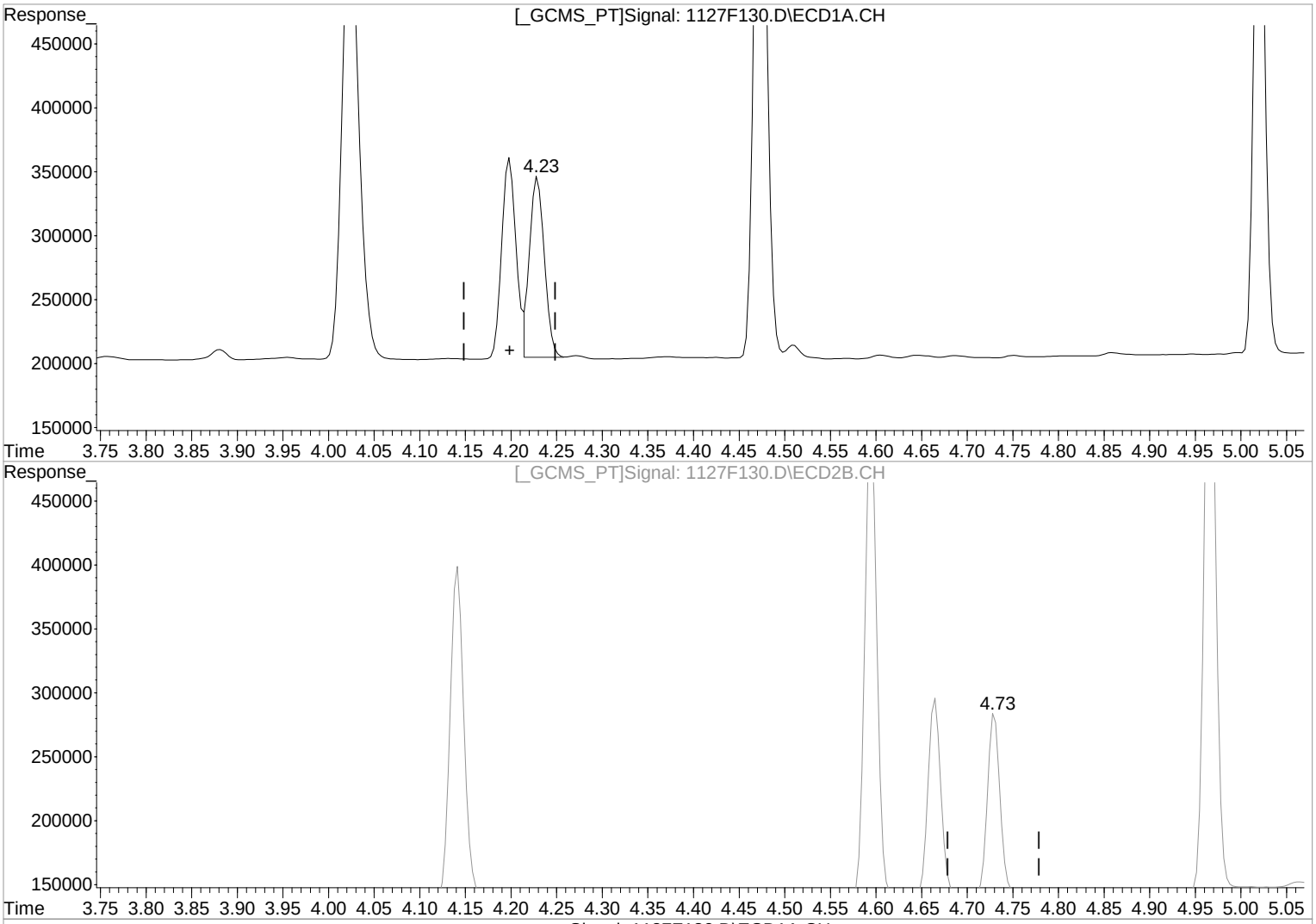
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 9.750ug/L m

response 1550706

Manual Integration:

After

Wrong peak, No Before

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 9.293ug/L

response 1348458

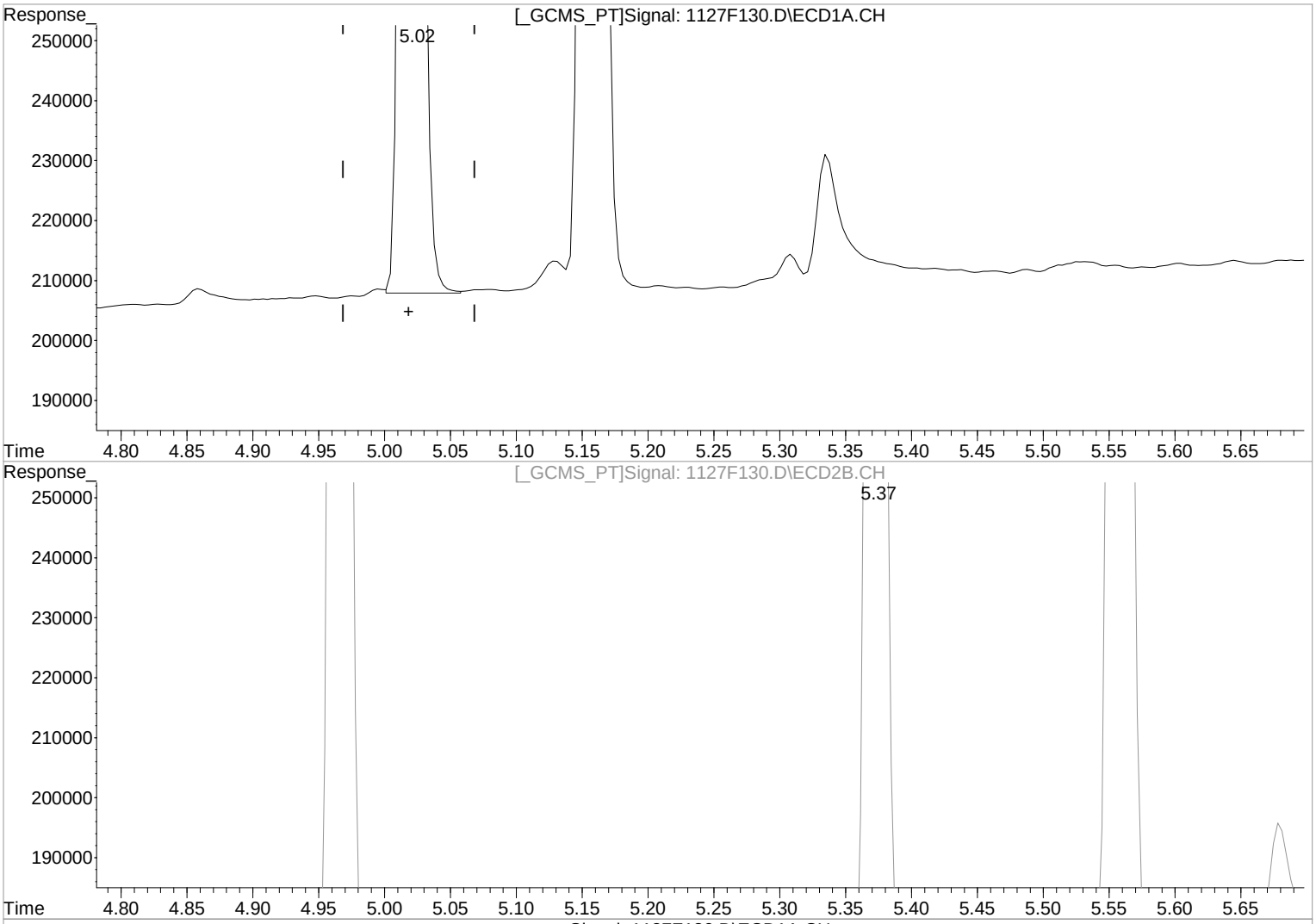
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 11.017ug/L m

response 3744556

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 9.656ug/L

response 3299360

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:00:34 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.60	11143798	9056888	37.047	34.802
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	400014	405654	24.671m	21.652
2)		3,5-Dichlorophen	3.36	3.91	316008	288184	26.150	21.944
3)		2,4,6-Trichlorop	3.46	4.14	7312718	6768082	20.625	18.823
5)		2,4,5-Trichlorop	4.20	4.66	3927156	3388118	25.257	20.621
6)		3,4,5-Trichlorop	4.23f	4.73	3598120	3123178	22.622m	21.523
7)	M	2,3,5,6-Tetrachl	4.47	4.97	11725474	10538308	23.390	20.971
8)	M	2,3,4,5-Tetrachl	5.02	5.37	8743824	7747010	25.726	22.673
9)	M	Pentachloropheno	5.16	5.56	14842634	13563198	25.350	22.748
10)		Pentachloroaniso	5.16	5.56	14842634	13563198	26.670	23.927

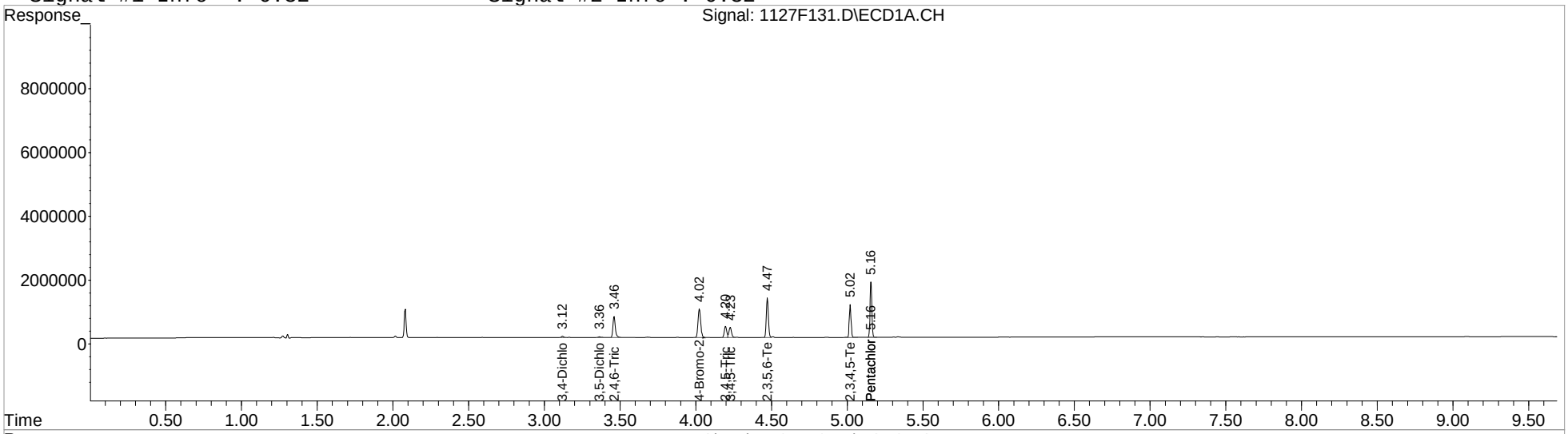
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

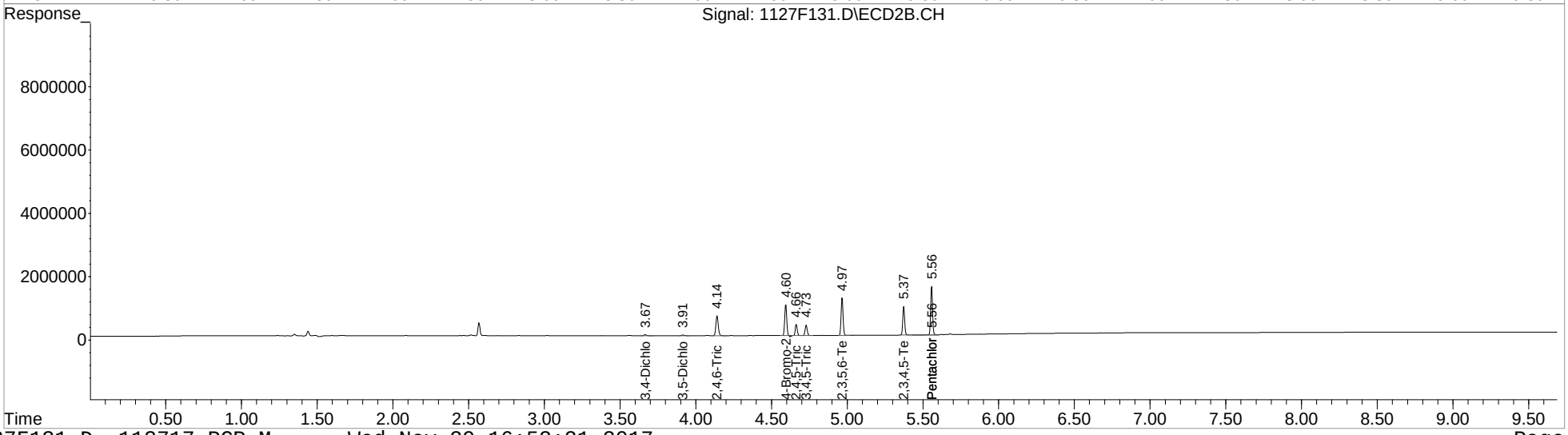
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



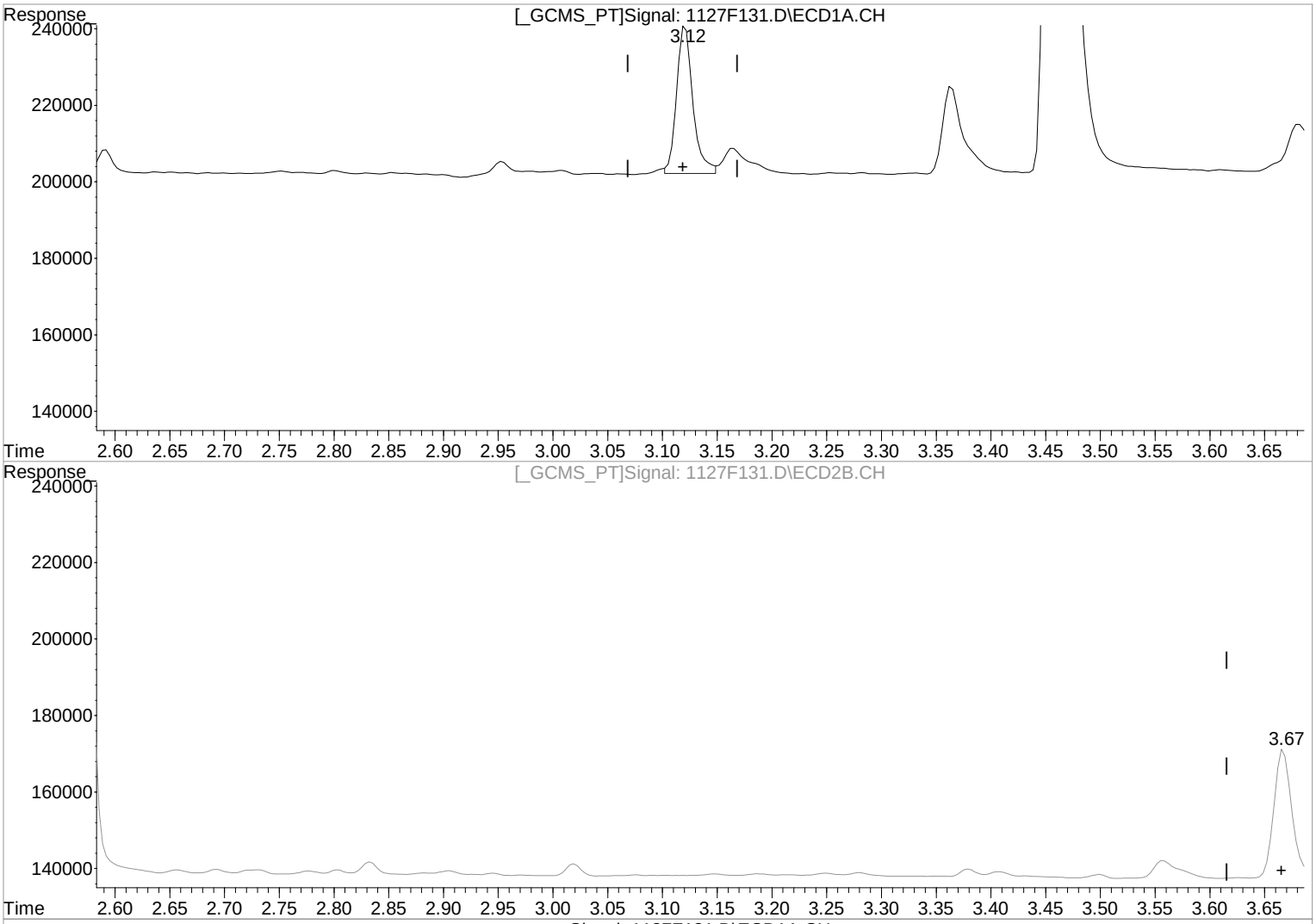


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F131.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 24.671ug/L m

response 400014

(1) 3,4-Dichlorophenol #2

3.67min 21.652ug/L

response 405654

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

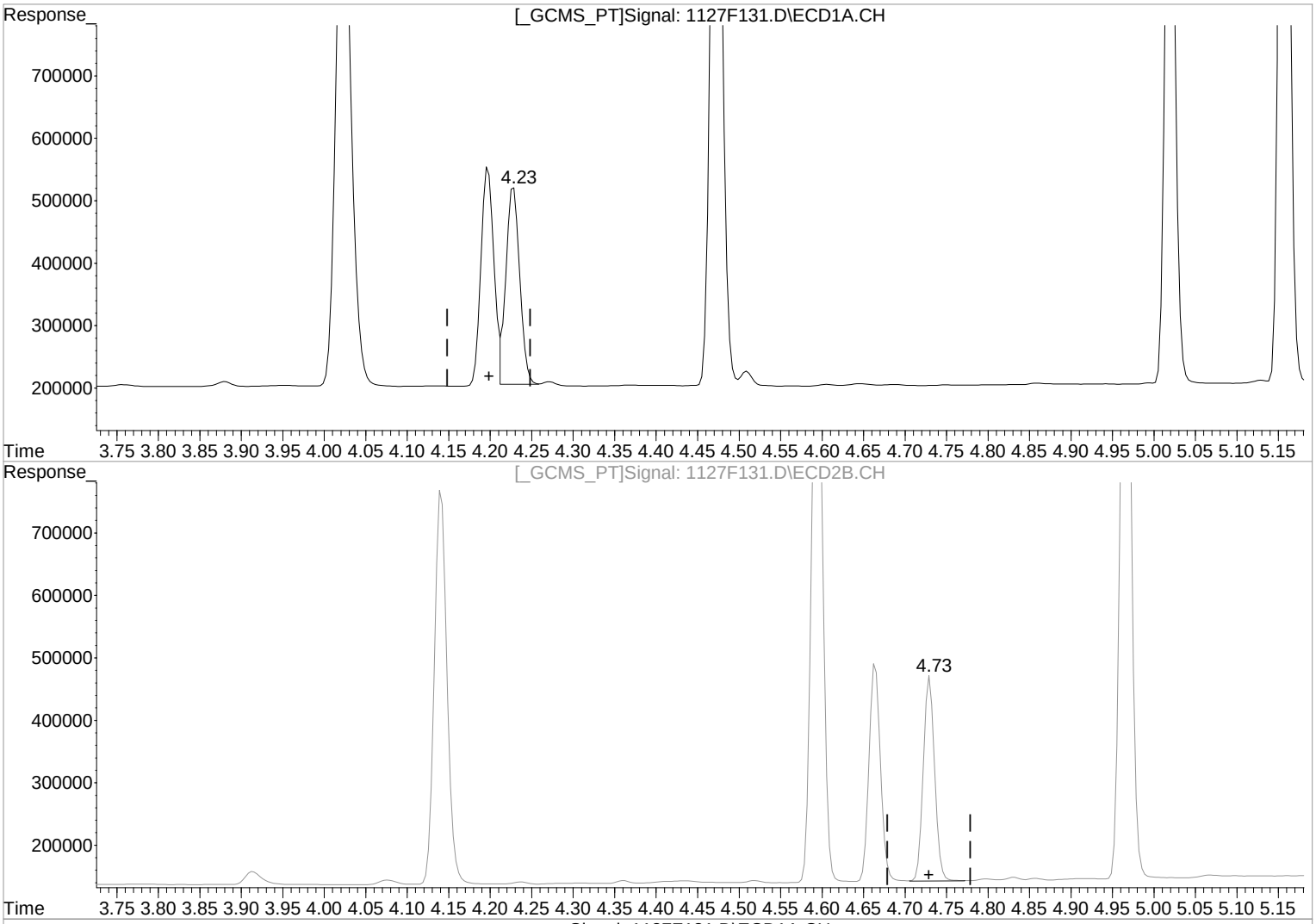
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F131.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 22.622ug/L m

response 3598120

Manual Integration:

After

Wrong peak, No Before

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 21.523ug/L

response 3123178

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:04:32 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	46010514	40158220	152.958	154.311
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	1447870	1405326	89.300	75.009
2)		3,5-Dichlorophen	3.36	3.91	1078920	1058212	89.282	80.579
3)		2,4,6-Trichlorop	3.46	4.14	28084798	27879842	79.211	77.538
5)		2,4,5-Trichlorop	4.20	4.66	14021972	12747090	90.179	77.583
6)		3,4,5-Trichlorop	4.23	4.73	12849696	11876992	80.789	81.849
7)	M	2,3,5,6-Tetrachl	4.47	4.97	45966424	43712650	91.693	86.988
8)	M	2,3,4,5-Tetrachl	5.02	5.37	33226836	30840508	97.760	90.262
9)	M	Pentachloropheno	5.16	5.56	58837190	53885886	100.489	90.377m
10)		Pentachloroaniso	5.16	5.56	58837190	53900478	105.722	95.088m

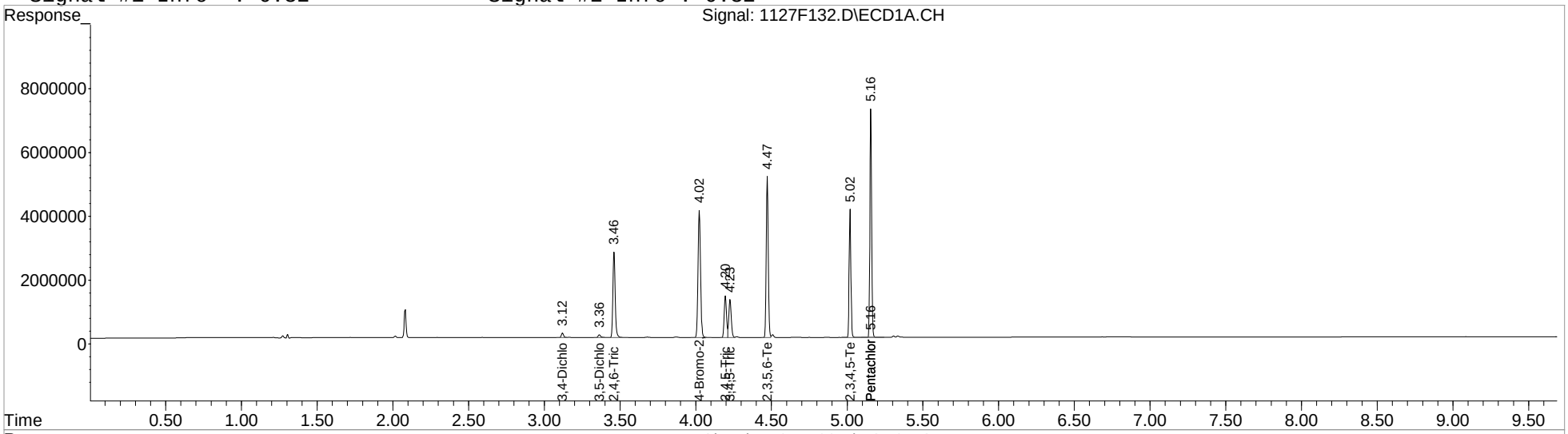
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

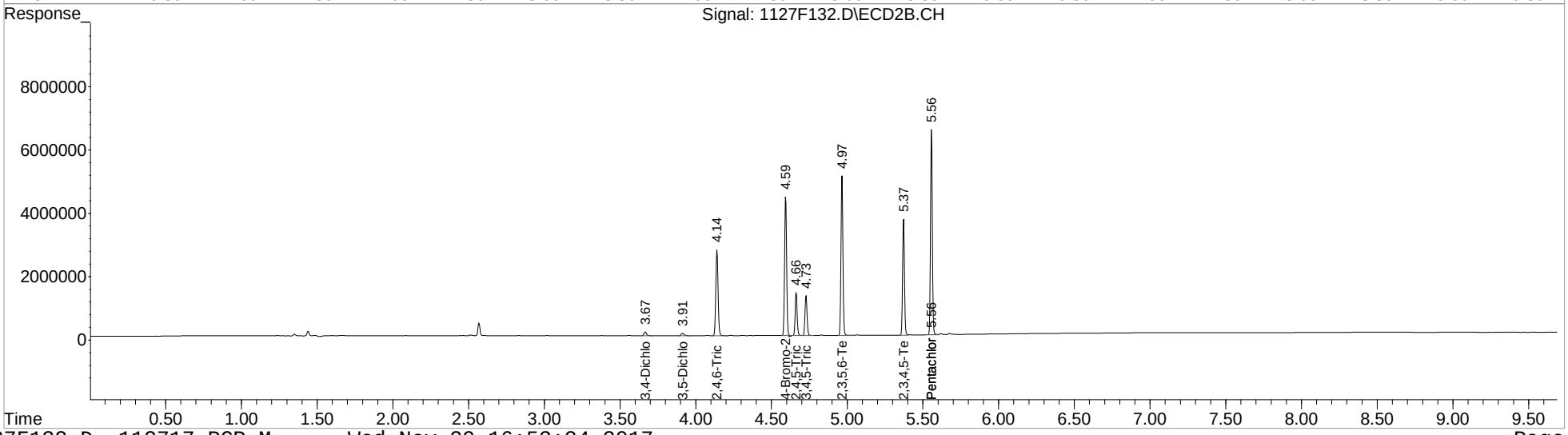
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



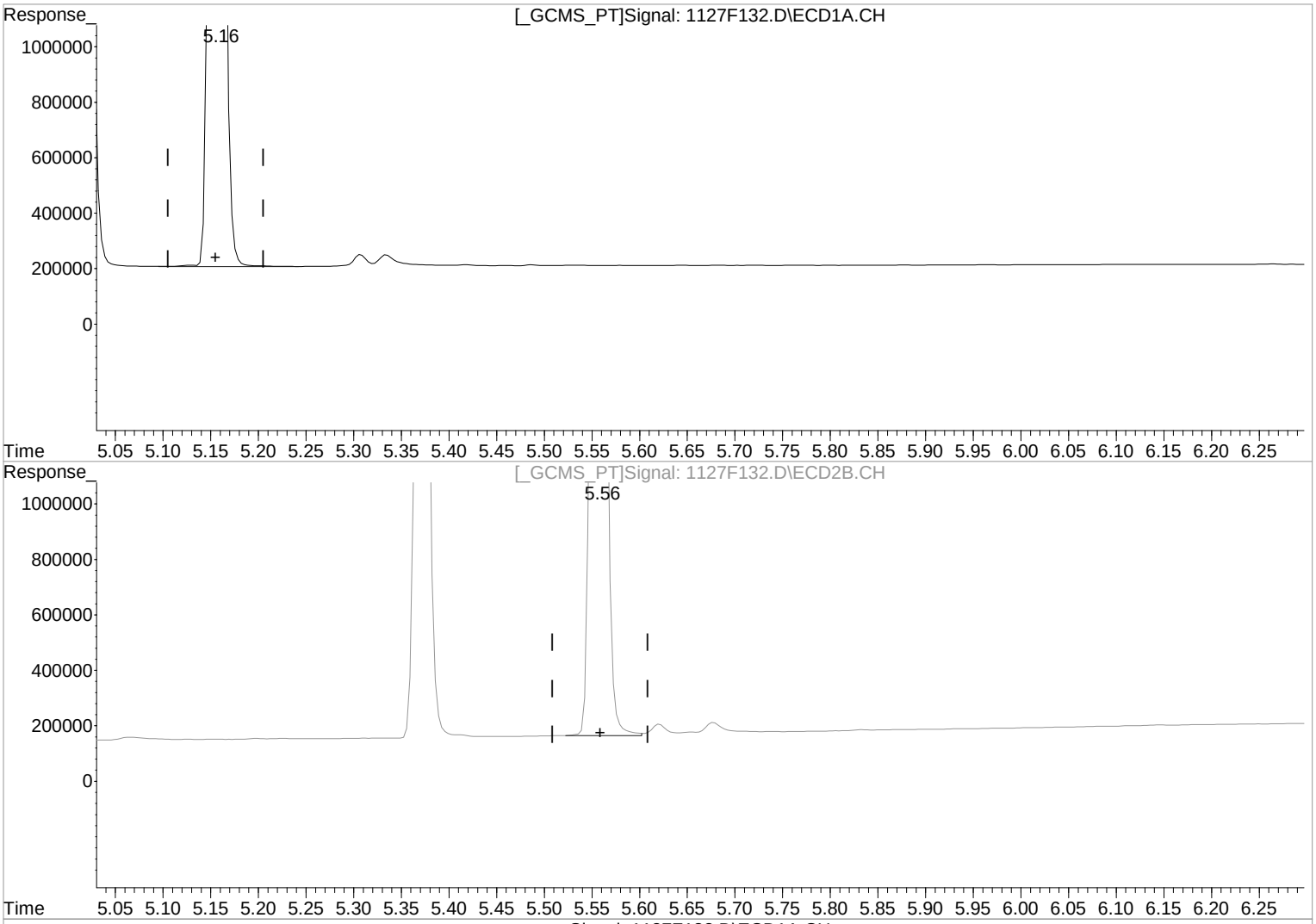


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F132.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 105.722ug/L

response 58837190

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(10) Pentachloroanisole #2

5.56min 95.088ug/L m

response 53900478

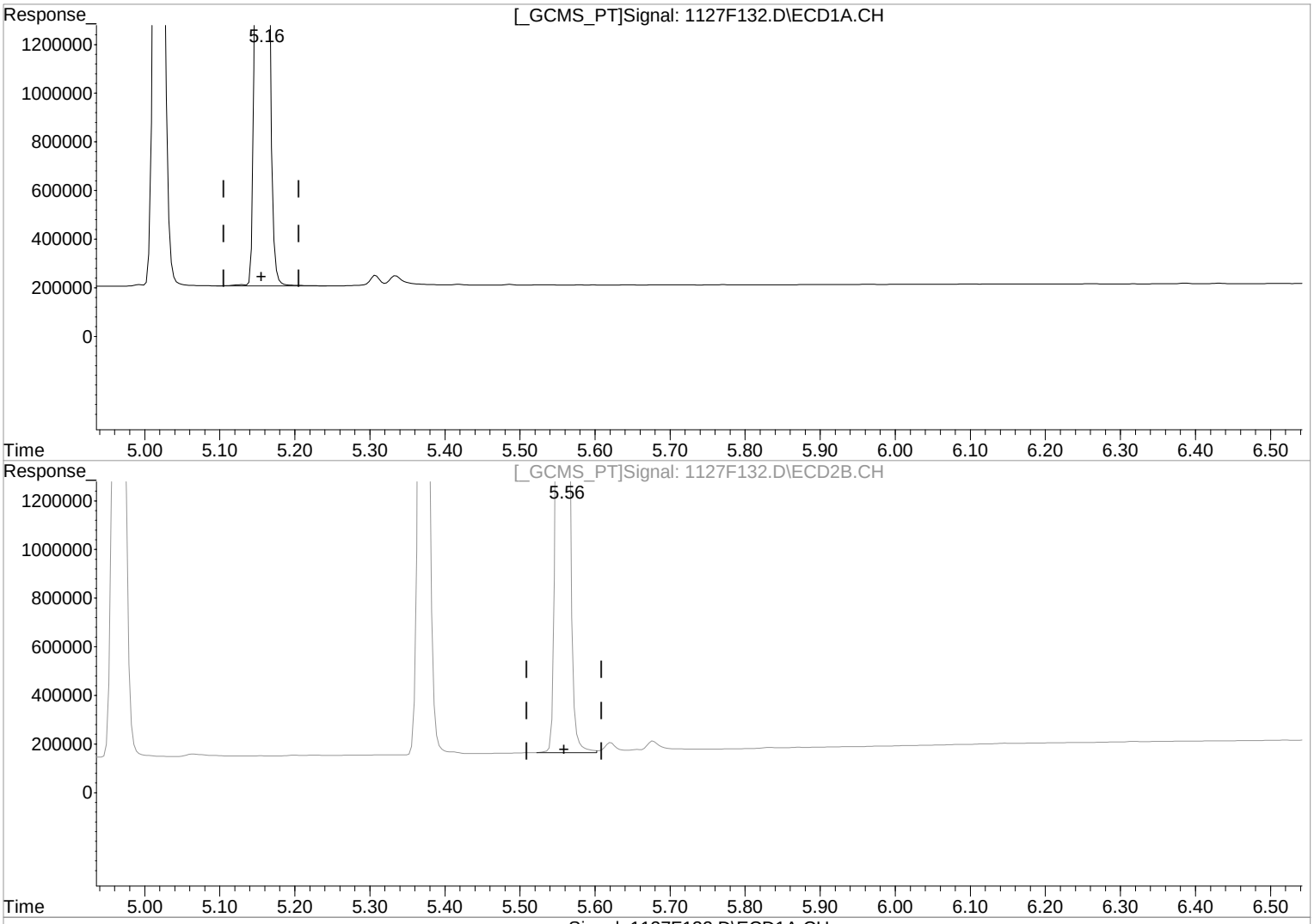
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F132.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 100.489ug/L

response 58837190

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 90.377ug/L m

response 53885886

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD2B.CH
Acq On : 27 Nov 2017 8:50 pm Operator: CV
Sample : PENTA01-88C 250 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:07:29 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	106.4E6	95029258	353.601	365.158
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	2913944	2910812	179.722	155.365
2)		3,5-Dichlorophen	3.36	3.91	2192854	2185628	181.462	166.427
3)		2,4,6-Trichlorop	3.46	4.14	62598844	64308464	176.555	178.851
5)		2,4,5-Trichlorop	4.20	4.66	29452628	28960918	189.418	176.266
6)		3,4,5-Trichlorop	4.23	4.73	28327676	27111646	178.102	186.838
7)	M	2,3,5,6-Tetrachl	4.47	4.97	103.3E6	102.6E6	206.131	204.112
8)	M	2,3,4,5-Tetrachl	5.02	5.37	73882544	72867544	217.377	213.263
9)	M	Pentachloropheno	5.16	5.56	133.3E6	129.4E6	227.744	216.997
10)		Pentachloroaniso	5.16	5.56	133.3E6	129.4E6	239.603	228.245

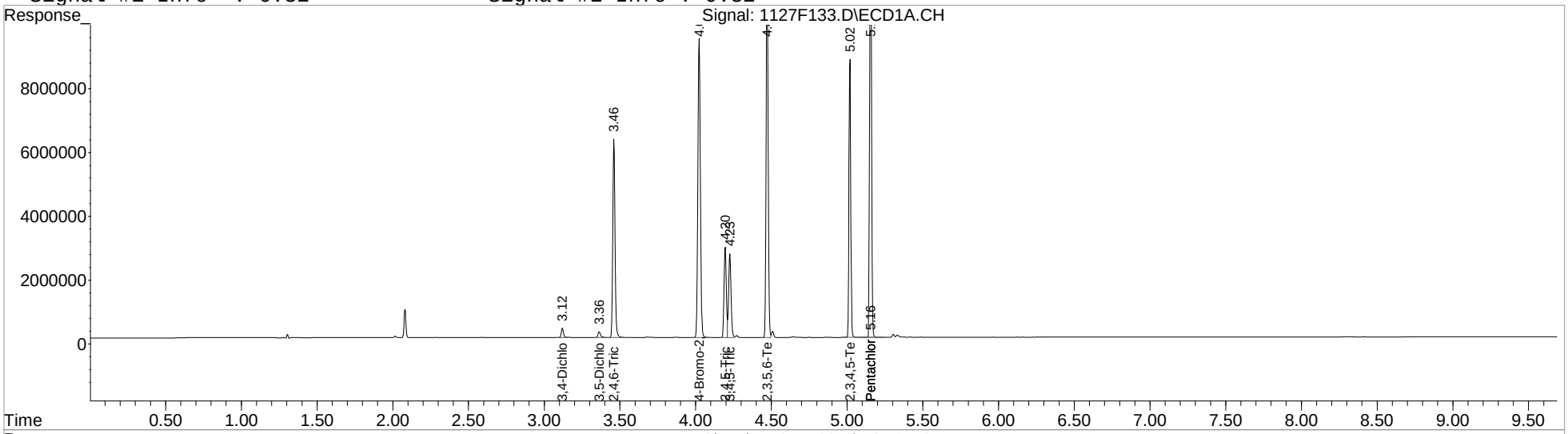
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

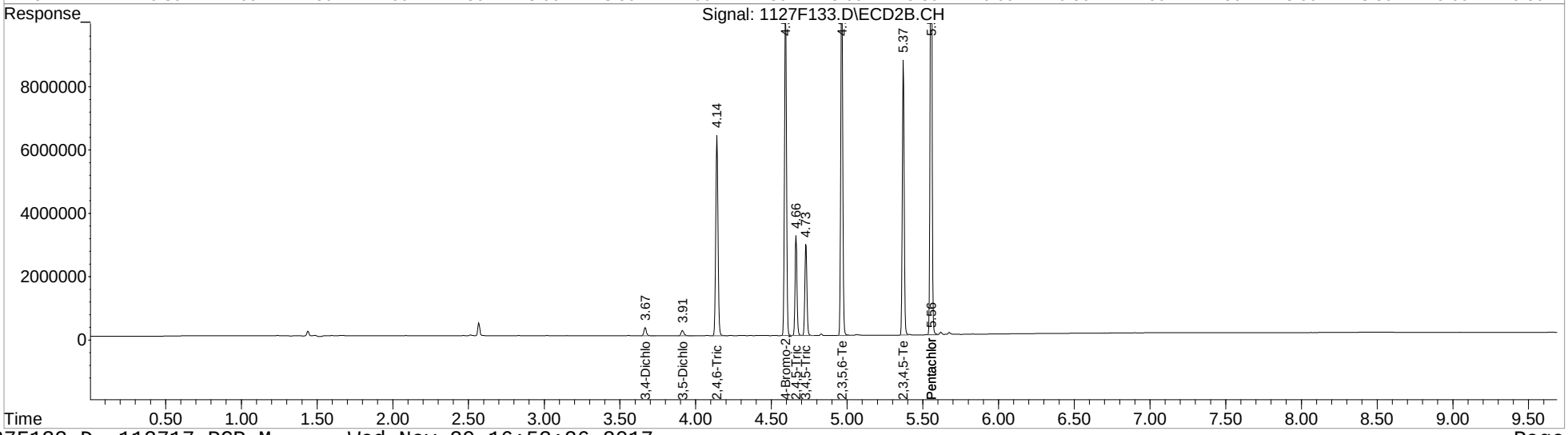
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD2B.CH
Acq On : 27 Nov 2017 8:50 pm Operator: CV
Sample : PENTA01-88C 250 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:07 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD2B.CH
Acq On : 27 Nov 2017 9:08 pm Operator: CV
Sample : PENTA01-88N 500 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:40:27 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	0.00	0.00	0	0	N.D. d	N.D. d
		Target Compounds						
1)		3,4-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
2)		3,5-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
3)		2,4,6-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
5)		2,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
6)		3,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
9)	M	Pentachloropheno	5.15	5.56	258.3E6	266.6E6	441.097	447.195
10)		Pentachloroaniso	5.15	5.56	258.3E6	266.6E6	464.065	470.376

Penta and anisole only

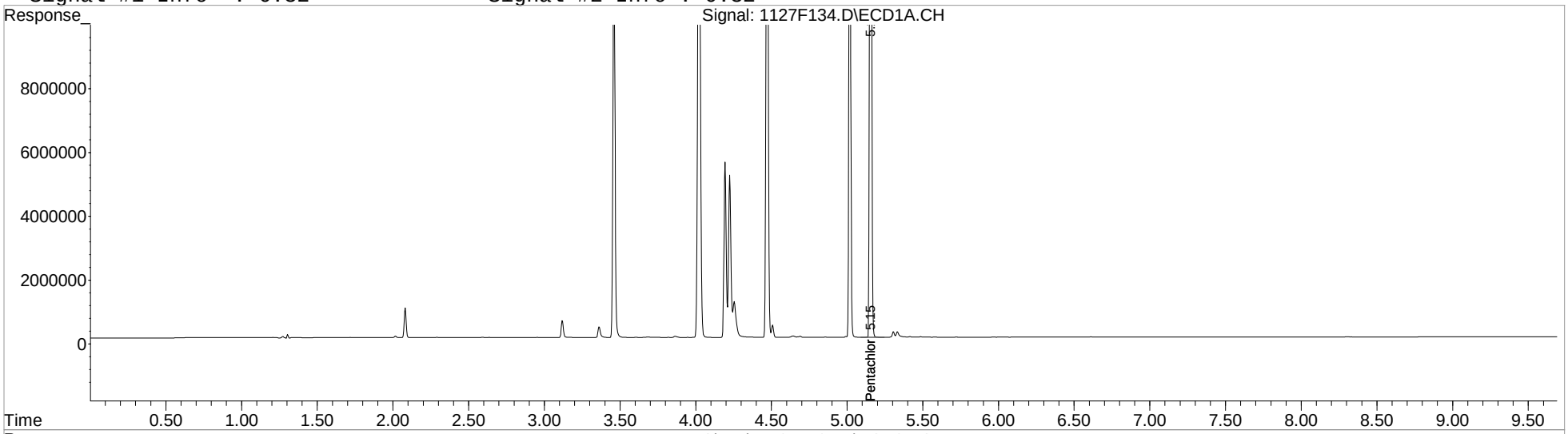
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

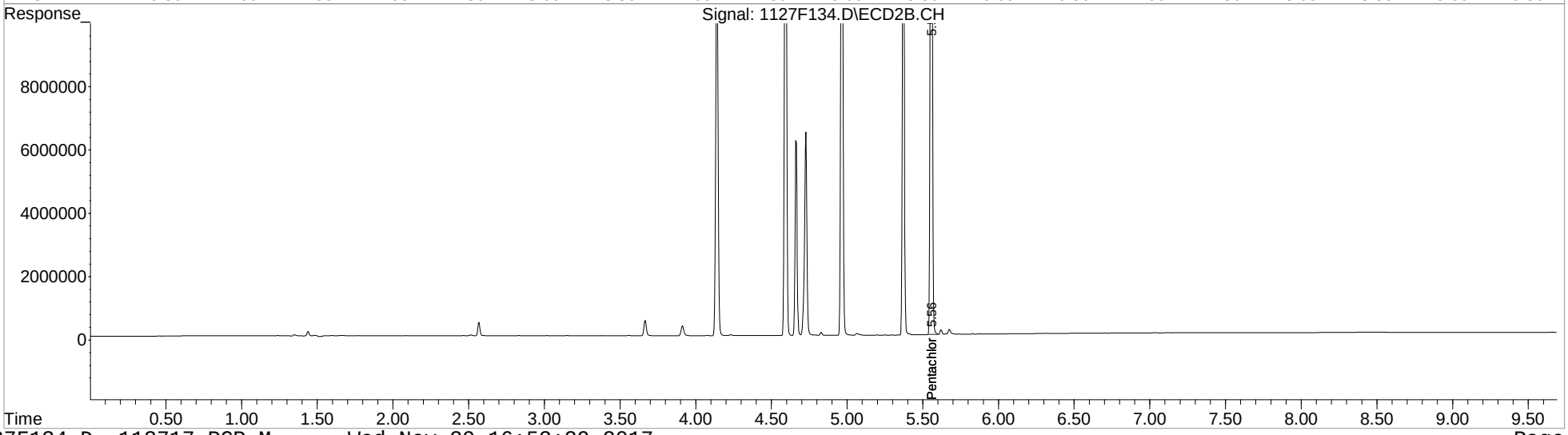
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD2B.CH
Acq On : 27 Nov 2017 9:08 pm Operator: CV
Sample : PENTA01-88N 500 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:40 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD2B.CH
Acq On : 27 Nov 2017 9:27 pm Operator: CV
Sample : PENTA01-88M 1000 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:10:53 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	0.00	0.00	0	0	N.D. d	N.D. d
		Target Compounds						
1)		3,4-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
2)		3,5-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
3)		2,4,6-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
5)		2,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
6)		3,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
9)	M	Pentachloropheno	5.16	5.56	484.7E6	524.6E6	827.802	879.883
10)		Pentachloroaniso	5.16	5.56	484.7E6	524.6E6	870.906	925.495

Penta and anisole only

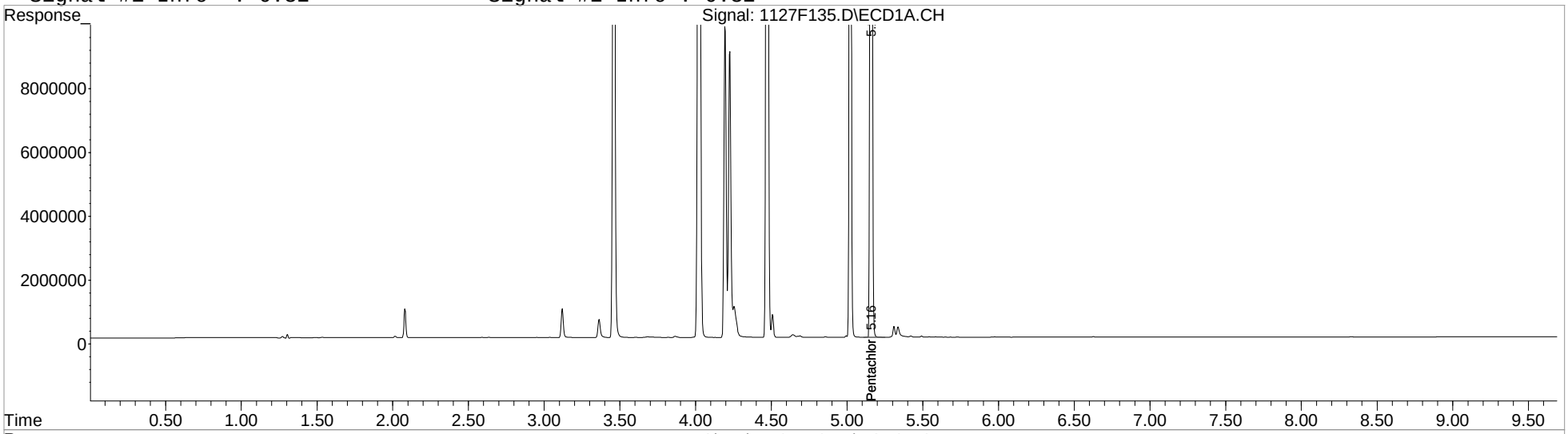
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

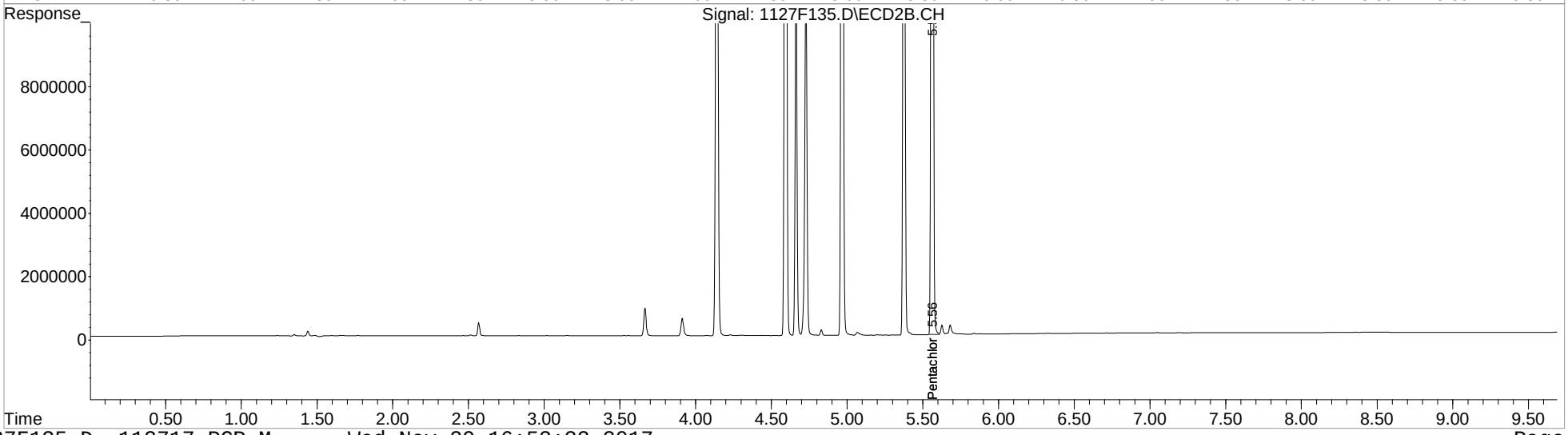
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD2B.CH
Acq On : 27 Nov 2017 9:27 pm Operator: CV
Sample : PENTA01-88M 1000 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:45 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:47:58 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.01	4.57	6162	7584	0.020	0.029 #
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.66	769118	732270	47.437	39.085
2)		3,5-Dichlorophen	3.36	3.91	483034	541656	39.972m	41.245
3)		2,4,6-Trichlorop	3.46	4.14	14150702	12878254	39.911	35.816
5)		2,4,5-Trichlorop	4.19	4.66	7083376	6313060	45.555	38.423
6)		3,4,5-Trichlorop	4.22	4.73	6656538	5862514	41.851	40.401
7)	M	2,3,5,6-Tetrachl	4.47	4.97	22573818	20683576	45.030	41.160
8)	M	2,3,4,5-Tetrachl	5.02	5.37	16083160	14736668	47.320	43.130
9)	M	Pentachloropheno	5.16	5.56	28261942	25806018	49.255	43.863
10)		Pentachloroaniso	5.16	5.56	28261942	25806018	51.824	46.142

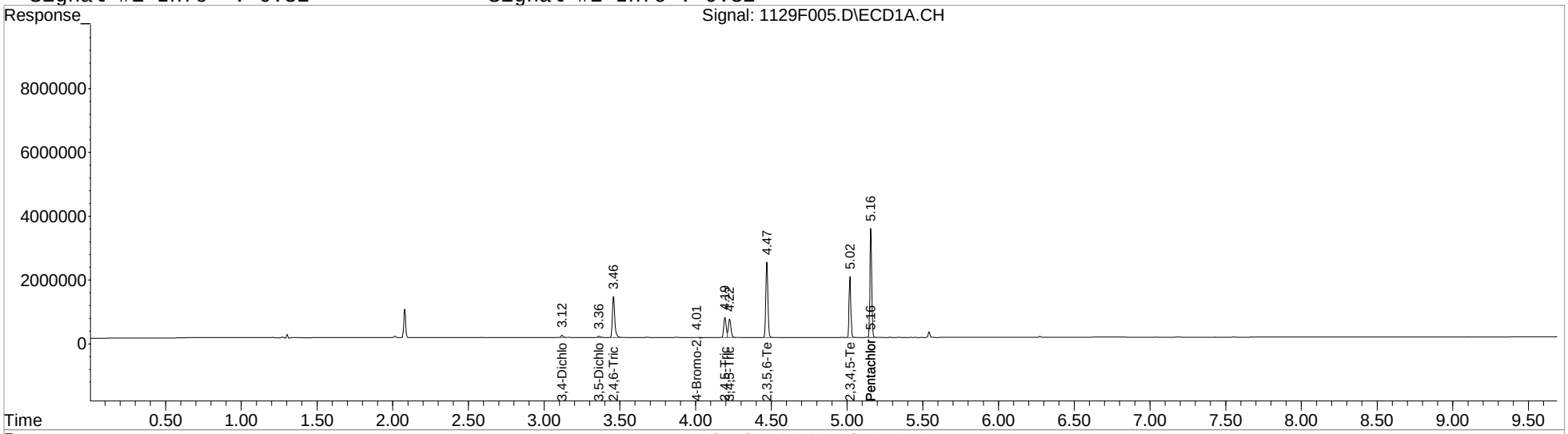
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

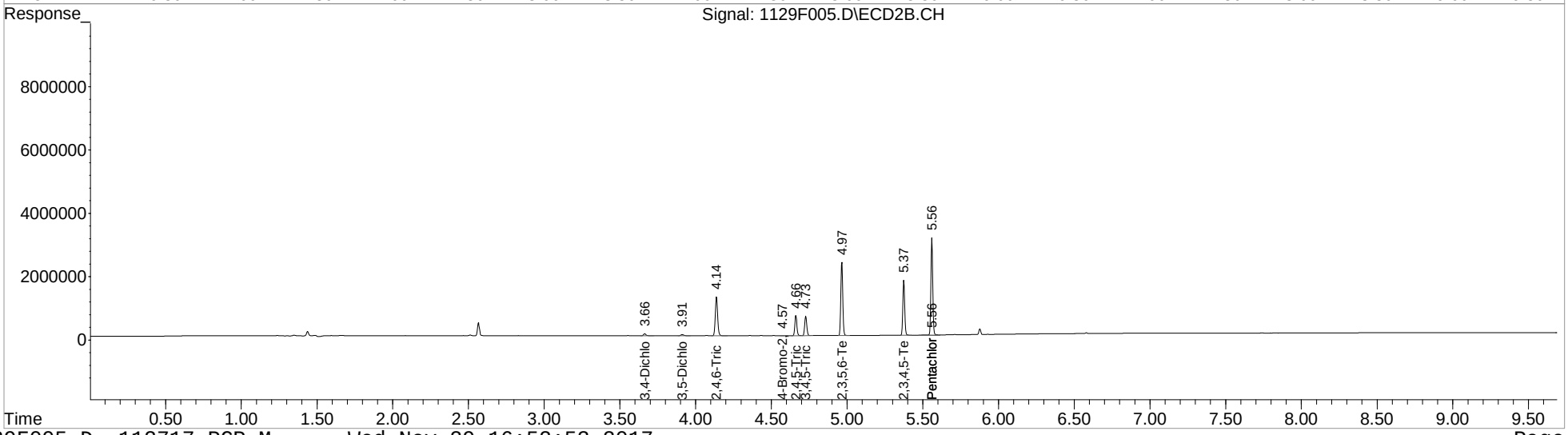
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:48 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



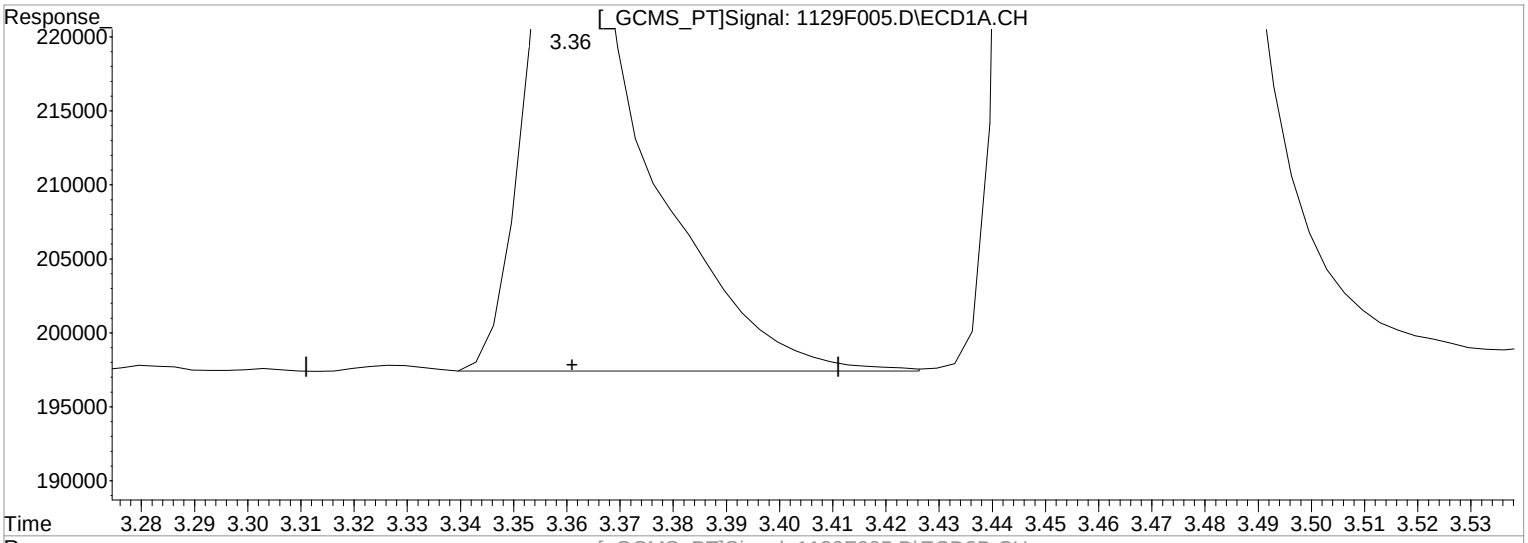


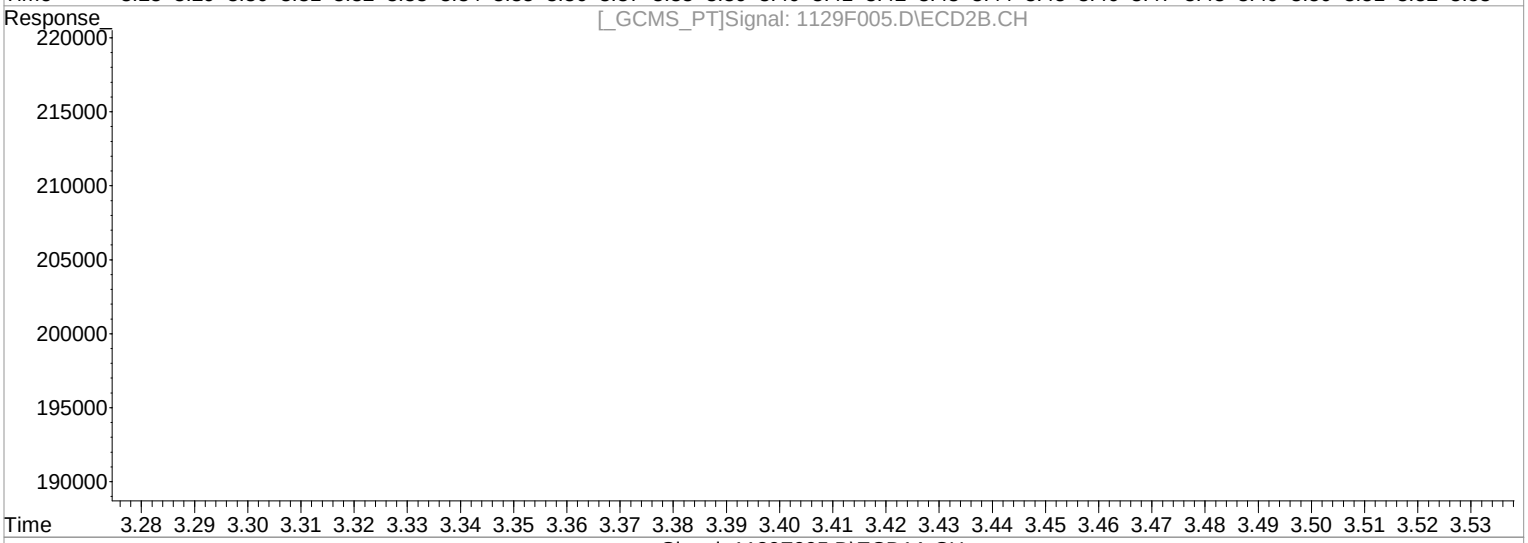
Quantitation Report (Qedit)

1st 11/30/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 30 14:47 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Thu Nov 30 14:18:39 2017
Response via : Multiple Level Calibration





Signal: 1129F005.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 45.764ug/L

response 557528

(2) 3,5-Dichlorophenol #2

3.91min 43.808ug/L

response 541656

Manual Integration:

Before

11/30/17

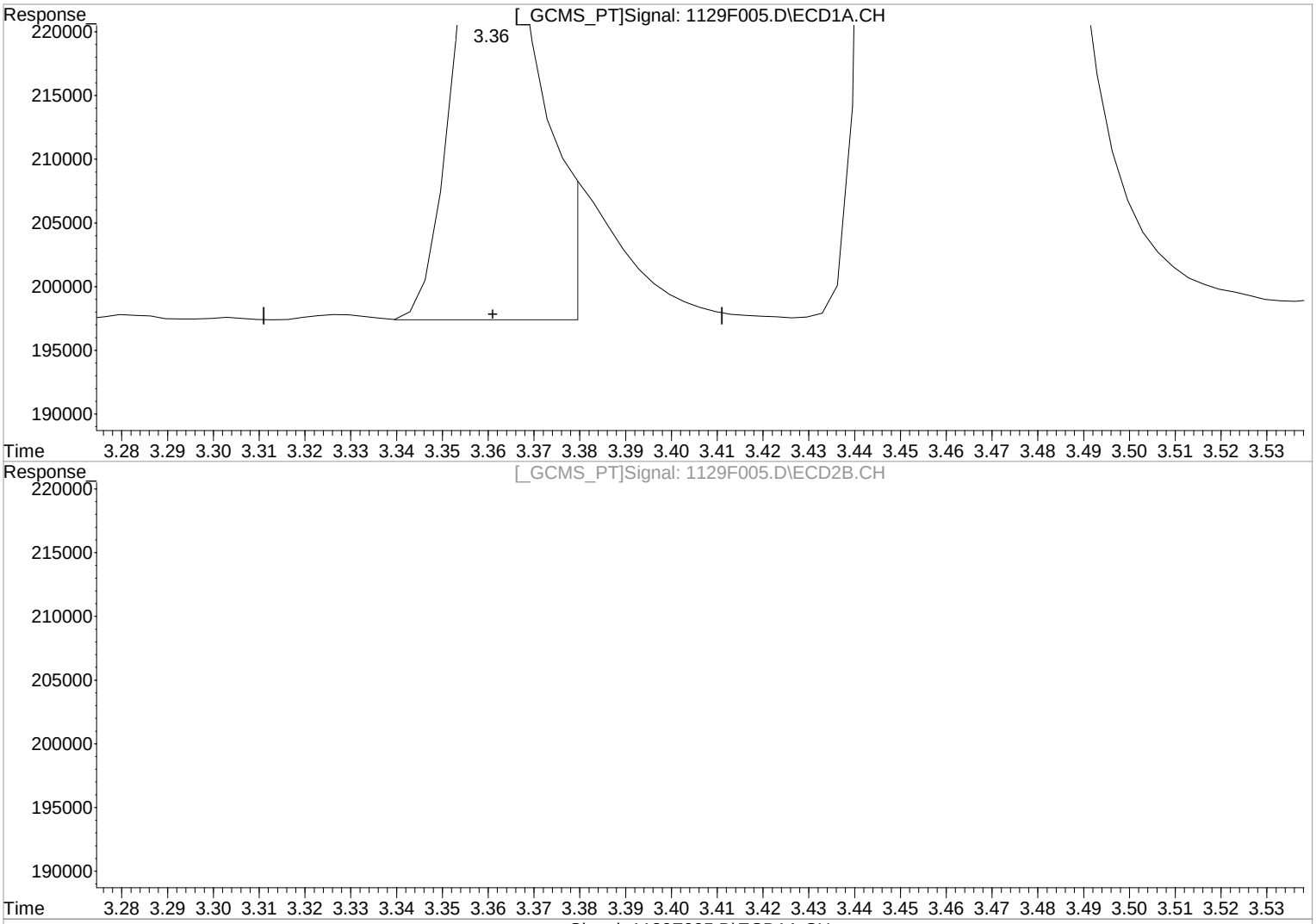
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/30/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 30 14:47 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Thu Nov 30 14:18:39 2017
Response via : Multiple Level Calibration



Signal: 1129F005.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 40.059ug/L m

response 488026

Manual Integration:

After

Baseline/Shoulder

11/30/17

(2) 3,5-Dichlorophenol #2

3.91min 43.808ug/L

response 541656

(+) = Expected Retention Time

Preparation Information

Group ID:	KWG1801629	**Prep Method:**	Method Mod	**Prep Date:**	03/21/18 11:19
Department:	Semivoa GC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.	Solids
K1802548-001	CARBON IN	8151A Modified PCP	WATER	5mL	1mL	
K1802548-002	CARBON MID	8151A Modified PCP	WATER	5mL	1mL	
K1802548-003	PENTA 003	8151A Modified PCP	WATER	5mL	1mL	
K1802579-021	MW-36	8151A Modified PCP	WATER	5mL	1mL	
K1802579-022	MW-37	8151A Modified PCP	WATER	5mL	1mL	
K1802579-023	MW-38	8151A Modified PCP	WATER	5mL	1mL	
K1802579-024	MW-39	8151A Modified PCP	WATER	5mL	1mL	
K1802579-025	MW-40	8151A Modified PCP	WATER	5mL	1mL	
K1802579-026	MW-41	8151A Modified PCP	WATER	5mL	1mL	
K1802579-027	MW-42	8151A Modified PCP	WATER	5mL	1mL	
K1802579-028	MW-43	8151A Modified PCP	WATER	5mL	1mL	
K1802579-029	MW-44	8151A Modified PCP	WATER	5mL	1mL	
K1802579-030	FIELD BLANK RINSATE	8151A Modified PCP	WATER	5mL	1mL	
K1802579-031	MW-3	8151A Modified PCP	WATER	5mL	1mL	
K1802580-004	EW COMPOSITE	8151A Modified PCP	WATER	5mL	1mL	
K1802582-001	BXS-1	8151A Modified PCP	WATER	5mL	1mL	
K1802582-002	BXS-2	8151A Modified PCP	WATER	5mL	1mL	
KWG1801629-1	Matrix Spike	8151A Modified PCP	WATER	5mL	1mL	
KWG1801629-2	Duplicate Matrix Spike	8151A Modified PCP	WATER	5mL	1mL	
KWG1801629-3	Lab Control Sample	8151A Modified PCP	WATER	5mL	1mL	
KWG1801629-4	Method Blank	8151A Modified PCP	WATER	5mL	1mL	

Lab Code	Parent Lab Code	Comments
KWG1801629-1	K1802580-004	KQ1803560-01
KWG1801629-2	K1802580-004	KQ1803560-02
KWG1801629-3		KQ1803560-03
KWG1801629-4		KQ1803560-04

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K1802548-001	1668851					
K1802548-002	1668852					
K1802548-003	1668853					
K1802579-021	1668854					
K1802579-022	1668855					
K1802579-023	1668856					
K1802579-024	1668857					

Comments: Made B.S. for stealth JD 3/27/18

Started By: BWILLARD Assisted By: _____ Training: Yes No

Completed By: WVANDERH Assisted By: _____ Yes No

Reviewed By: _____ Date: _____ Storage: _____

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____ Extracts Examined: Yes No

Group ID:	KWG1801629	**Prep Method:**	Method Mod	**Prep Date:**	03/21/18 11:19
Department:	Semivoa GC				

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K1802579-025	1668858					
K1802579-026	1668859					
K1802579-027	1668860					
K1802579-028	1668861					
K1802579-029	1668862					
K1802579-030	1668863					
K1802579-031	1668864					
K1802580-004	1668865					
K1802582-001	1668866					
K1802582-002	1668867					
KWG1801629-1	1668868					
KWG1801629-2	1668869					
KWG1801629-3	1668870					
KWG1801629-4	1668871					

Comments:

Started By: BWILLARD Assisted By: Training Yes No

Completed By: WVANDERH Assisted By: Yes No

Reviewed By: Date: Storage:

Chain of Custody

Relinquished By: Date:

Received By: Date: Extracts Examined Yes No

Preparation Information Benchsheet

Prep Run#: 310334
Team: Semivoa GC/BWILLARD
Number of Copies to make: 4

Prep WorkFlow: OrgExtPcpAq7
Prep Method: Method Modified

Status: Prepped
Prep Date/Time: 3/21/18 11:19 AM

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	K1802579-021	MW-36	.02	8151A Modified/PCP		Water	5mL	1.00mL	
2	K1802579-022	MW-37	.02	8151A Modified/PCP		Water	5mL	1.00mL	
3	K1802579-023	MW-38	.02	8151A Modified/PCP		Water	5mL	1.00mL	
4	K1802579-024	MW-39	.02	8151A Modified/PCP		Water	5mL	1.00mL	
5	K1802579-025	MW-40	.02	8151A Modified/PCP		Water	5mL	1.00mL	
6	K1802579-026	MW-41	.02	8151A Modified/PCP		Water	5mL	1.00mL	
7	K1802579-027	MW-42	.02	8151A Modified/PCP		Water	5mL	1.00mL	
8	K1802579-028	MW-43	.02	8151A Modified/PCP		Water	5mL	1.00mL	
9	K1802579-029	MW-44	.02	8151A Modified/PCP		Water	5mL	1.00mL	
10	K1802579-030	FIELD BLANK RINSATE	.02	8151A Modified/PCP		Water	5mL	1.00mL	
11	K1802579-031	MW-3	.02	8151A Modified/PCP		Water	5mL	1.00mL	
12	K1802580-004	EW COMPOSITE	.01	8151A Modified/PCP		Water	5mL	1.00mL	
13	K1802582-001	BXS-1	.03	8151A Modified/PCP		Water	5mL	1.00mL	
14	K1802582-002	BXS-2	.03	8151A Modified/PCP		Water	5mL	1.00mL	
15	K1802548-001	CARBON IN	.01	8151A Modified/PCP		Water	5mL	1.00mL	
16	K1802548-002	CARBON MID	.01	8151A Modified/PCP		Water	5mL	1.00mL	
17	K1802548-003	PENTA 003	.01	8151A Modified/PCP		Water	5mL	1.00mL	
18	KQ1803560-01	K1802580-004 MS	.01	8151A Modified/PCP		Liquid	5mL	1.00mL	
19	KQ1803560-02	K1802580-004 DMS	.01	8151A Modified/PCP		Liquid	5mL	1.00mL	
20	KQ1803560-03	LCS		8151A Modified/PCP		Liquid	5mL	1.00mL	
21	KQ1803560-04	MB		8151A Modified/PCP		Liquid	5mL	1.00mL	

Preparation Steps

Step: Extraction
Started: 3/21/18 11:19
Finished: 3/21/18 11:25
By: BWILLARD
Comments

Step: Final Volume
Started: 3/26/18 13:50
Finished: 3/26/18 13:50
By: WVANDERHOFF
Comments

Comments: _____

Reviewed By: _____ Date: 3/26/18

Preparation Information Benchsheet

Prep Run#: 310334
Team: Semivoa GC/BWILLARD

Prep WorkFlow: OrgExtPcpAq7
Prep Method: Method Modified

Status: Prepped
Prep Date/Time: 3/21/18 11:19 AM

Chain of Custody

Relinquished By:		Date: 3-26-19	Extracts Examined
Received By:		Date: 3.28.18	Yes No

Preparation Information Benchsheet

Prep Run#: 310334 **Prep WorkFlow:** OrgExtPcpAq7 **Status:** Final Volume
Team: Semivoa GC/BWILLARD **Prep Method:** Method Modified **Prep Date/Time:** 3/21/18 11:19 AM
Number of Copies to make: 4

#	Lab Code	Client ID	B#	√	Method /Test	Matrix	Amt. Ext. mL	pH	Int. Vol	Final Vol mL	Surr Amt µl	Spike Amt µl
1	**K1802579-021**	MW-36	.02		8151A Modified / PCP	Water	5	<2	NA	1	100	—
2	**K1802579-022**	MW-37	.02		8151A Modified / PCP	Water	5	<2		1		—
3	**K1802579-023**	MW-38	.02		8151A Modified / PCP	Water	5	<2		1		—
4	**K1802579-024**	MW-39	.02		8151A Modified / PCP	Water	5	<2		1		—
5	**K1802579-025**	MW-40	.02		8151A Modified / PCP	Water	5	<2		1		—
6	**K1802579-026**	MW-41	.02		8151A Modified / PCP	Water	5	<2		1		—
7	**K1802579-027**	MW-42	.02		8151A Modified / PCP	Water	5	<2		1		—
8	**K1802579-028**	MW-43	.02		8151A Modified / PCP	Water	5	<2		1		—
9	**K1802579-029**	MW-44	.02		8151A Modified / PCP	Water	5	<2		1		—
10	**K1802579-030**	FIELD BLANK RINSATE	.02		8151A Modified / PCP	Water	5	<2		1		—
11	**K1802579-031**	MW-3	.02		8151A Modified / PCP	Water	5	<2		1		—
12	**K1802580-004**	EW COMPOSITE	.01		8151A Modified / PCP	Water	5	<2		1		—
13	**K1802582-001**	BXS-1	.03		8151A Modified / PCP	Water	5	<2		1		—
14	**K1802582-002**	BXS-2	.03		8151A Modified / PCP	Water	5	<2		1		—
15	**K1802548-001**	CARBON IN	.01		8151A Modified / PCP	Water	5	<2		1		—
16	**K1802548-002**	CARBON MID	.01		8151A Modified / PCP	Water	5	<2		1		—
17	**K1802548-003**	PENTA 003	.01		8151A Modified / PCP	Water	5	<2		1		—
18	**KQ1803560-01**	K1802580-004 MS	.01		8151A Modified / PCP	Liquid	5	<2		1		100
19	**KQ1803560-02**	K1802580-004 DMS	.01		8151A Modified / PCP	Liquid	5	<2		1		"
20	**KQ1803560-03**	LCS			8151A Modified / PCP	Liquid	5	<2		1		"
21	**KQ1803560-04**	MB			8151A Modified / PCP	Liquid	5	<2	"	1	—	—

Comments:

Surrogate ID: Penta 01-87N 500ppb 100µl xp 5-3-18 epp2B

Spike ID: Penta 01-86M 500ppb 100µl xp 3-29-18 epp2B

Witnessed By:

Analyst:

Assisted By:

Additional Prep Information for Method 8151M
Chlorinated Phenols "PCPs" in Water

Service Request # K1802579, K1802580, K1802582, K1802548 **Work Group #** KQ1803560

1:1 Sulfuric Acid Lot # 60426003 Ethyl Ether Lot # DT184

Extraction Start (time/date/initial): 13:38 3-21-18 WS

Extraction Stop (time/date/initial): 14:24 3-21-18 WS

Storage Location (overnight): 25R Acidified Sulfate Lot # DZ03-27Z

N-Evap (time/date/initial): 10:27 3-26-18 WS N-Evap Thermometer ID: DWB-012

Temp as measured: 22 °C Correction factor: 0.0 °C Adjusted temp: 22 °C

Derivatization Start (time/date/initial): 11:31 3-26-18 WS

Derivatization Stop (time/date/initial): 12:23 3-26-18 WS

Diazomethane Lot # DZ03-39J Methanol Lot # DN615

Solvent Exchange to Iso-Octane (time/date/initial): 12:23 3-26-18 WS

Iso-Octane Lot # DM561 N-Evap Thermometer ID: DWB-012

Temp as measured: 22 °C Correction factor: 0.0 °C Adjusted temp: 22 °C

Pipette (1 mL) Lot # 13617645

Vial: red Vial Storage: perto

Additional Comments:

Bench Sheet Review Check List	
☑	Hold times met (if no, reason:)
☐	Prep date, time, method, department, product code correct in stealth
☑	Spike information and Q.C. correct (insufficient volume or mass recorded if no Q.C.)
☑	Weights/Volumes and units correct on raw and final bench sheets
☐	Sample IDs have been checked - bottle numbers appended if required
☑	Names present for: started by, completed by, relinquished by, and witnessed by. Training circled.
☑	Extract storage recorded
☑	Additional prep sheet completely filled out (NA or line out blanks)
☑	All clean-ups have been noted on additional prep sheet
☑	Signed service request with Form V, if applicable, has been attached

Directory: J:\GC28\DATA\032718

Cal: 15625
Run: 585380

ine	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
	99	0327F001.D	1.	PRIMER	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 9:09:4
	99	0327F002.D	1.	PRIMER	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 9:26:2
	1	0327F003.D	1.	PENTA01-88S 50	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 9:43:2
	2	0327F004.D	1.	IB	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 10:00:3
	3	0327F005.D	20.	K1802548-001 20X	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 10:58:5
	4	0327F006.D	1.	K1802548-002	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 11:17:4
	5	0327F007.D	1.	K1802548-003	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 11:34:4
	6	0327F008.D	1.	K1802580-004	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 11:51:5
	7	0327F009.D	1.	K1802580-004 MS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 12:09:2
0	8	0327F010.D	1.	K1802580-004 DMS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 12:26:4
1	9	0327F011.D	1.	KWG1803560-3 LCS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 12:44:0
2	10	0327F012.D	1.	KWG1803560-4 MB	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 1:01:2
3	1	0327F013.D	1.	PENTA01 88S 50	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 1:19:0
4	2	0327F014.D	1.	IB	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 1:36:2
5	11	0327F015.D	1.	K1802579-021	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 1:53:4
6	12	0327F016.D	1.	K1802579-022	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 2:11:1
7	13	0327F017.D	1.	K1802579-023	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 2:28:4
8	14	0327F018.D	1.	K1802579-024	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 2:46:1
9	15	0327F019.D	1.	K1802579-025	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 3:03:4
0	16	0327F020.D	1.	K1802579-026	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 3:21:1
1	17	0327F021.D	1.	K1802579-027	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 3:38:4
2	18	0327F022.D	1.	K1802579-028	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 3:56:0
3	19	0327F023.D	1.	K1802579-029	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 4:13:3
4	20	0327F024.D	1.	K1802579-030	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 4:31:0
5	1	0327F025.D	1.	PENTA01 88S 50	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 4:48:4
6	2	0327F026.D	1.	IB	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 5:06:1
7	21	0327F027.D	1.	K1802579-031	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 5:23:3
8	22	0327F028.D	1.	K1802582-001	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 5:41:0
9	23	0327F029.D	1.	K1802582-002	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 5:58:4

Directory: J:\GC28\DATA\032718

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
30	24	0327F030.D	1.	K1802620-001	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 6:16:1
31	25	0327F031.D	1.	K1802620-001 MS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 6:33:5
32	26	0327F032.D	1.	K1802620-001 DMS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 6:51:2
33	27	0327F033.D	1.	K1802620-002	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 7:09:1
34	28	0327F034.D	1.	K1802620-003	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 7:26:5
35	29	0327F035.D	1.	K1802620-004	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 7:44:3
36	30	0327F036.D	1.	K1802620-005	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 8:02:0
37	31	0327F037.D	1.	K1803636-3 LCS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 8:19:4
38	32	0327F038.D	1.	K1803636-4 MB	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 8:37:1
39	1	0327F039.D	1.	PENTA01 88S 50	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 8:54:4
40	2	0327F040.D	1.	IB	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 9:12:0
41	33	0327F041.D	1.	K1802644-001	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 9:29:3
42	34	0327F042.D	1.	K1802579-017	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 9:47:1
43	35	0327F043.D	1.	K1802579-006	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 10:04:4
44	36	0327F044.D	1.	K1802579-006 MS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 10:22:2
45	37	0327F045.D	1.	K1802579-006 DMS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 10:40:0
46	38	0327F046.D	1.	KQ1803654-3 LCS	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 10:57:4
47	39	0327F047.D	1.	KQ1803654-4 MB	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 11:15:2
48	6	0327F048.D	10.	K1802580-004@10X	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 11:33:0
49	1	0327F049.D	1.	PENTA01 88S 50	SEMIVOA GC\W1112280\1-PEM.H	03/27/22018 11:50:4
50	2	0327F050.D	1.	IB	SEMIVOA GC\W1112280\1-PEM.H	03/28/22018 12:08:0

Injection Log

Directory: J:\GC28\DATA\112717-CAL

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	1127f124.d	1.	IB		27 Nov 2017 18:01
2	20	1127f127.d	1.	PENTA01-88I 1 PPB		27 Nov 2017 18:57
3	21	1127f128.d	1.	PENTA01-88H 2.5 PPB		27 Nov 2017 19:16
4	22	1127f129.d	1.	PENTA01-88G 5 PPB		27 Nov 2017 19:35
5	23	1127f130.d	1.	PENTA01-88I 10 PPB		27 Nov 2017 19:53
6	24	1127f131.d	1.	PENTA01-88E 25 PPB		27 Nov 2017 20:12
7	25	1127f132.d	1.	PENTA01-88D 100 PPB		27 Nov 2017 20:31
8	26	1127f133.d	1.	PENTA01-88C 250 PPB		27 Nov 2017 20:50
9	27	1127f134.d	1.	PENTA01-88N 500 PPB		27 Nov 2017 21:08
10	28	1127f135.d	1.	PENTA01-88M 1000 PPB		27 Nov 2017 21:27
11	2	1127f136.d	1.	IB		27 Nov 2017 21:46
12	3	1129f005.d	1.	PENTA01-88K 50PPB ICV	SEMIVOA GC\W11122...	29 Nov 2017 12:44

CCL: 15625

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:48:32 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	553952	330490	1.842	1.270	#
		Target Compounds							
1)		3,4-Dichlorophen	3.12	3.67	16518	29596	1.019	1.580	#
2)		3,5-Dichlorophen	3.37	3.91	20988	18718	1.737	1.425	
3)		2,4,6-Trichlorop	3.46	4.14	448728	374818	1.266	1.042	
5)		2,4,5-Trichlorop	4.20	4.67	232648	183740	1.496	1.118	#
6)		3,4,5-Trichlorop	4.23f	4.73	193422	169644	1.216m	1.169	
7)	M	2,3,5,6-Tetrachl	4.47	4.97	639390	495876	1.275	0.987	
8)	M	2,3,4,5-Tetrachl	5.02	5.37	456782	504796	1.344	1.477	
9)	M	Pentachloropheno	5.16	5.56	806520	809946	1.377	1.358	
10)		Pentachloroaniso	5.16	5.56	806520	809946	1.449	1.429	

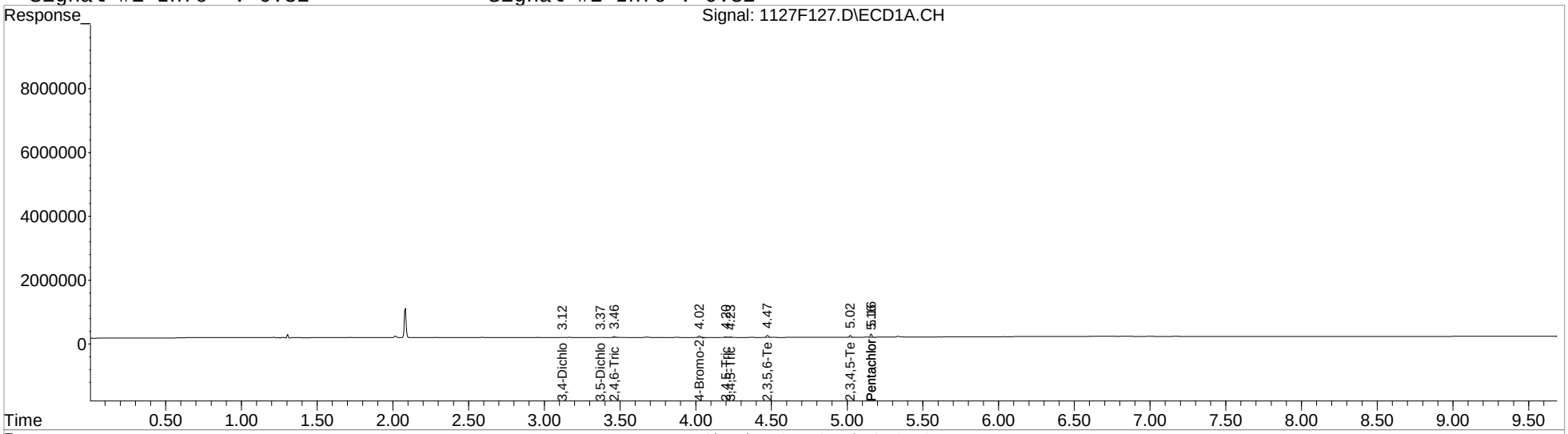
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

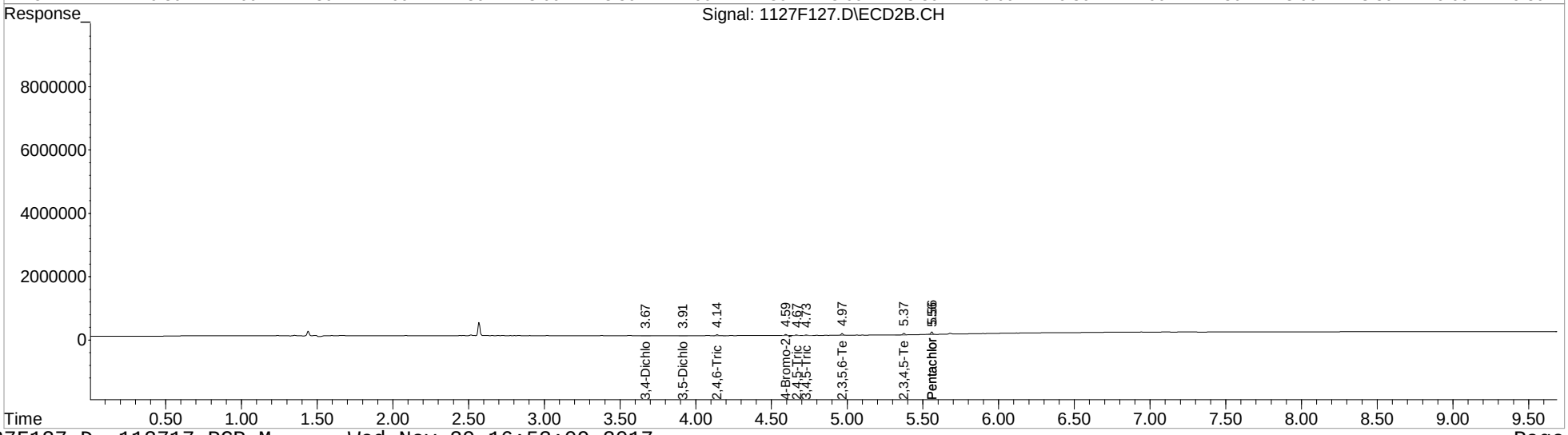
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



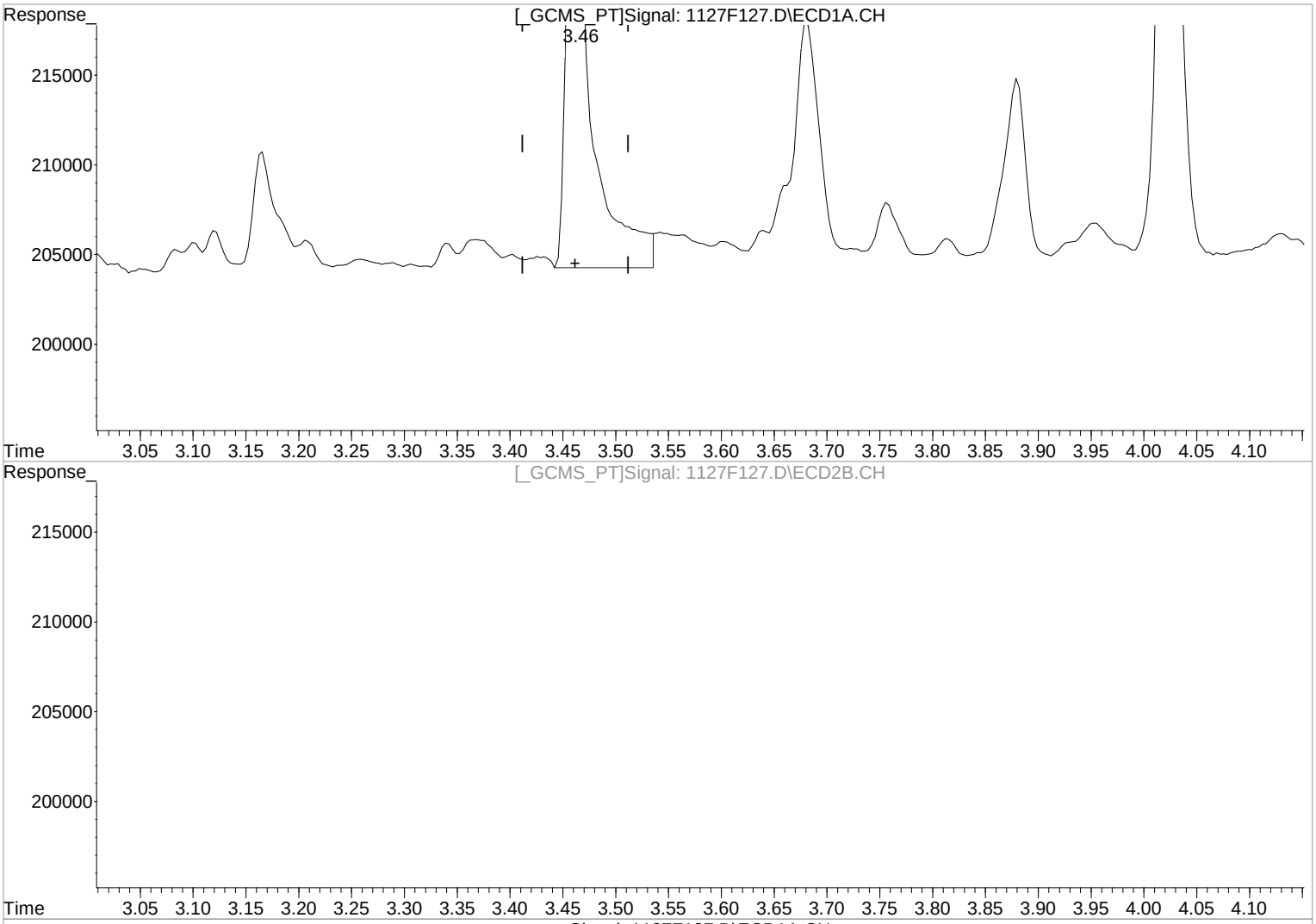


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F127.D\ECD1A.CH

(3) 2,4,6-Trichlorophenol

3.46min 1.266ug/L

response 448728

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(3) 2,4,6-Trichlorophenol #2

4.14min 1.042ug/L

response 374818

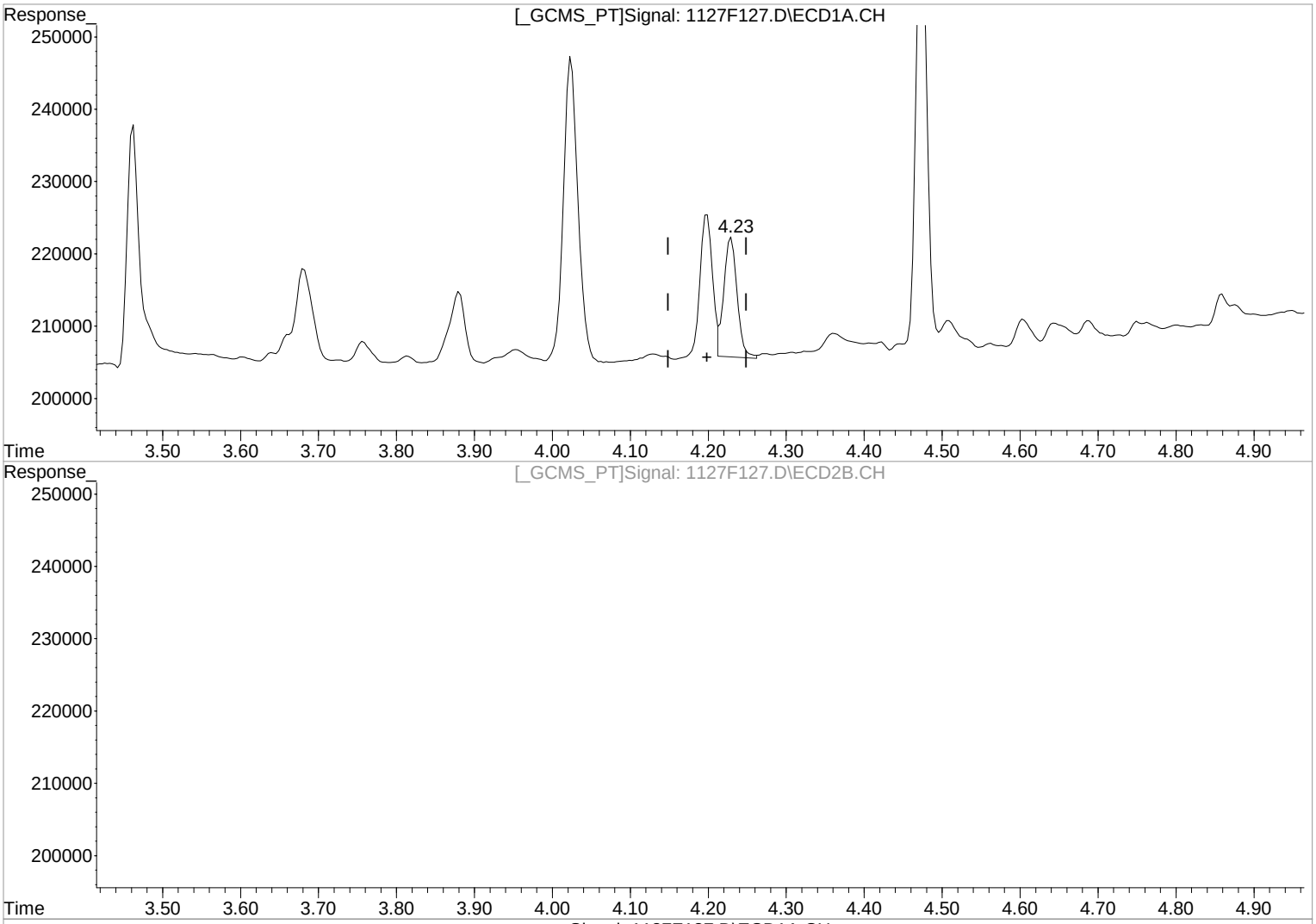
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F127.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 1.216ug/L m

response 193422

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 1.169ug/L

response 169644

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:50:18 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	1317276	876496	4.379	3.368
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	49286	55140	3.040m	2.943
2)		3,5-Dichlorophen	3.36	3.91	38712	36048	3.203m	2.745
3)		2,4,6-Trichlorop	3.46	4.14	974062	824238	2.747	2.292
5)		2,4,5-Trichlorop	4.20	4.66	535528	435750	3.444	2.652
6)		3,4,5-Trichlorop	4.23f	4.73	463666	405392	2.915m	2.794
7)	M	2,3,5,6-Tetrachl	4.47	4.97	1468326	1190526	2.929m	2.369
8)	M	2,3,4,5-Tetrachl	5.02	5.37	1110862	994692	3.268m	2.911
9)	M	Pentachloropheno	5.16	5.56	1873238	1758532	3.199	2.949m
10)		Pentachloroaniso	5.16	5.56	1873238	1755630	3.366	3.097m

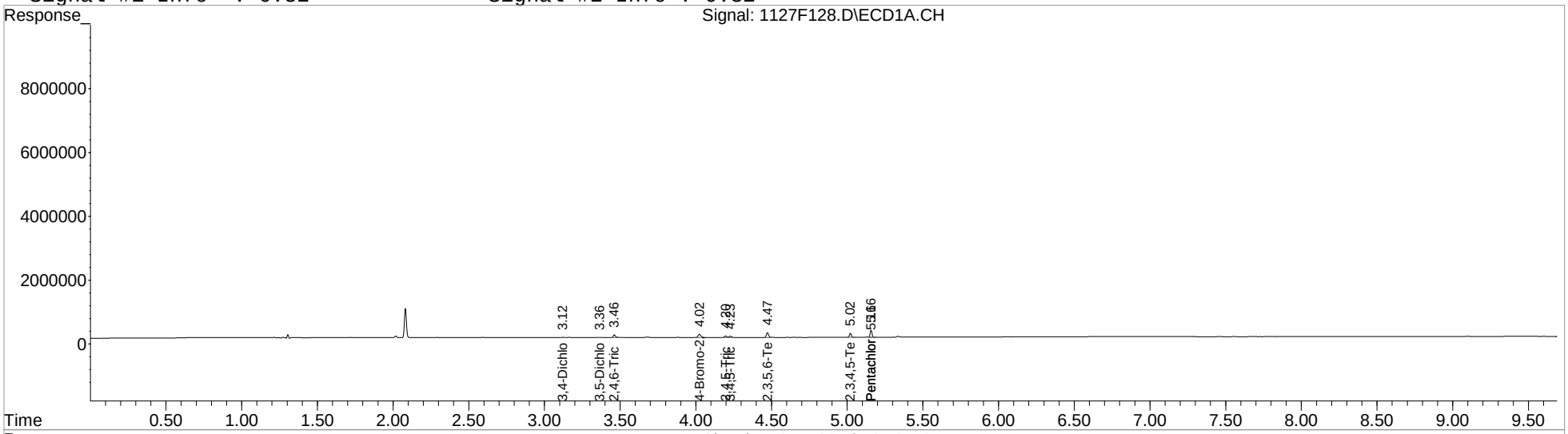
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

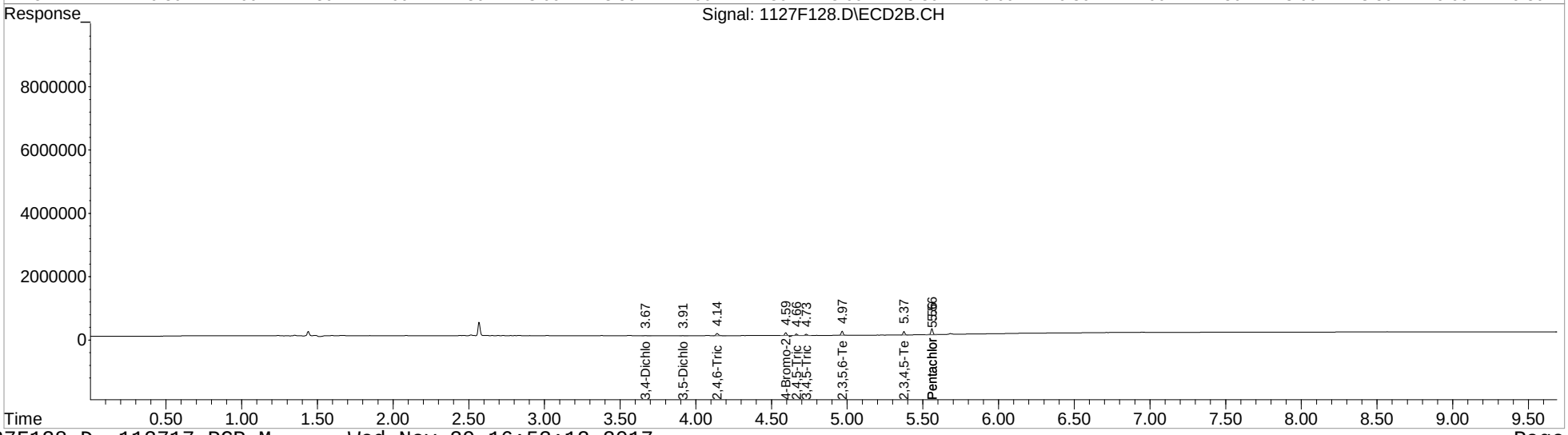
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



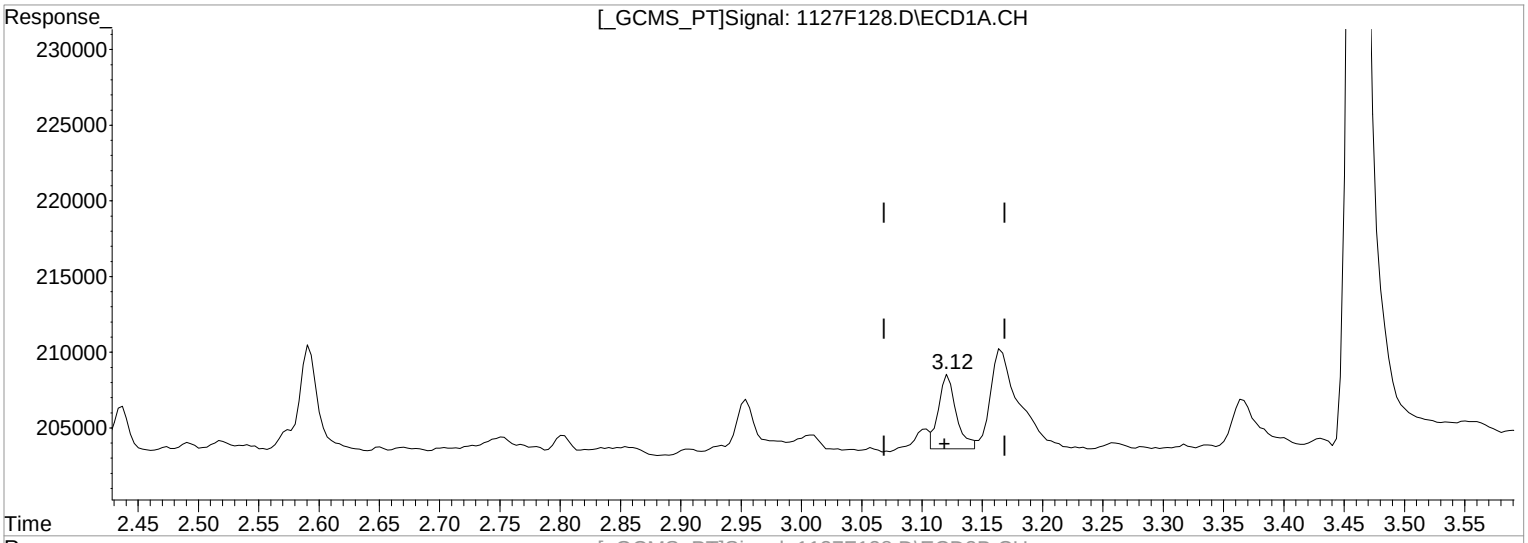


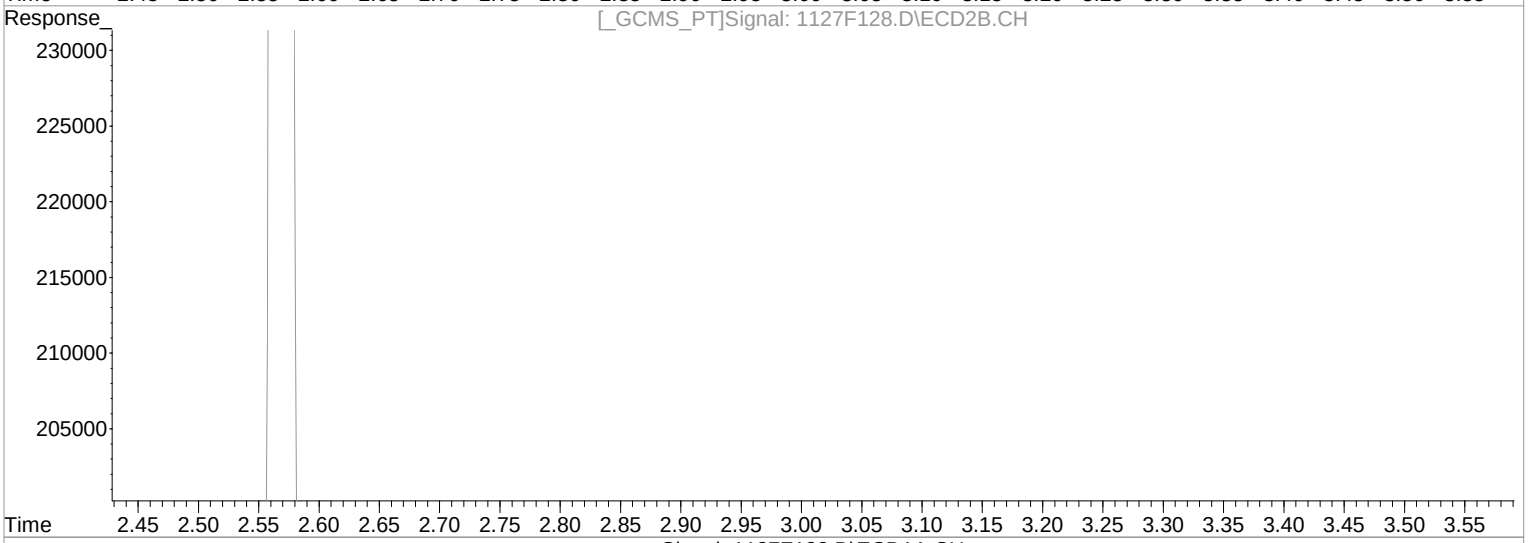
Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration





Signal: 1127F128.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 3.040ug/L m

response 49286

Manual Integration:

After

After, No Before

Baseline Shoulder

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 2.943ug/L

response 55140

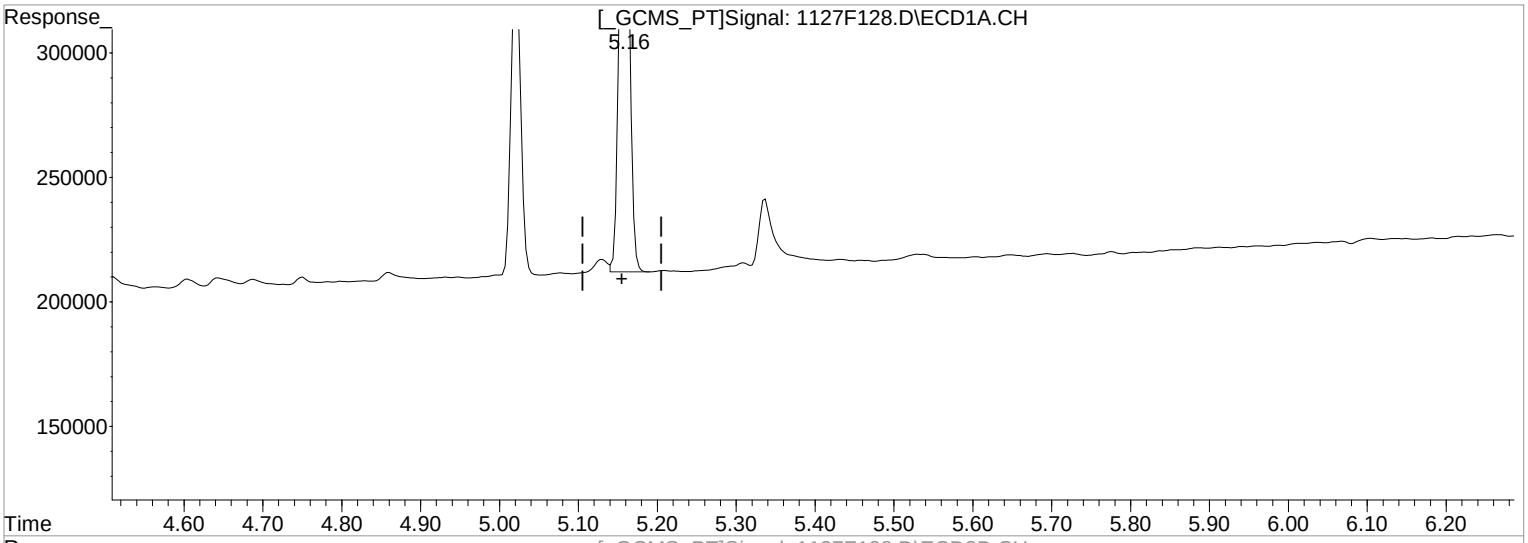
(+) = Expected Retention Time

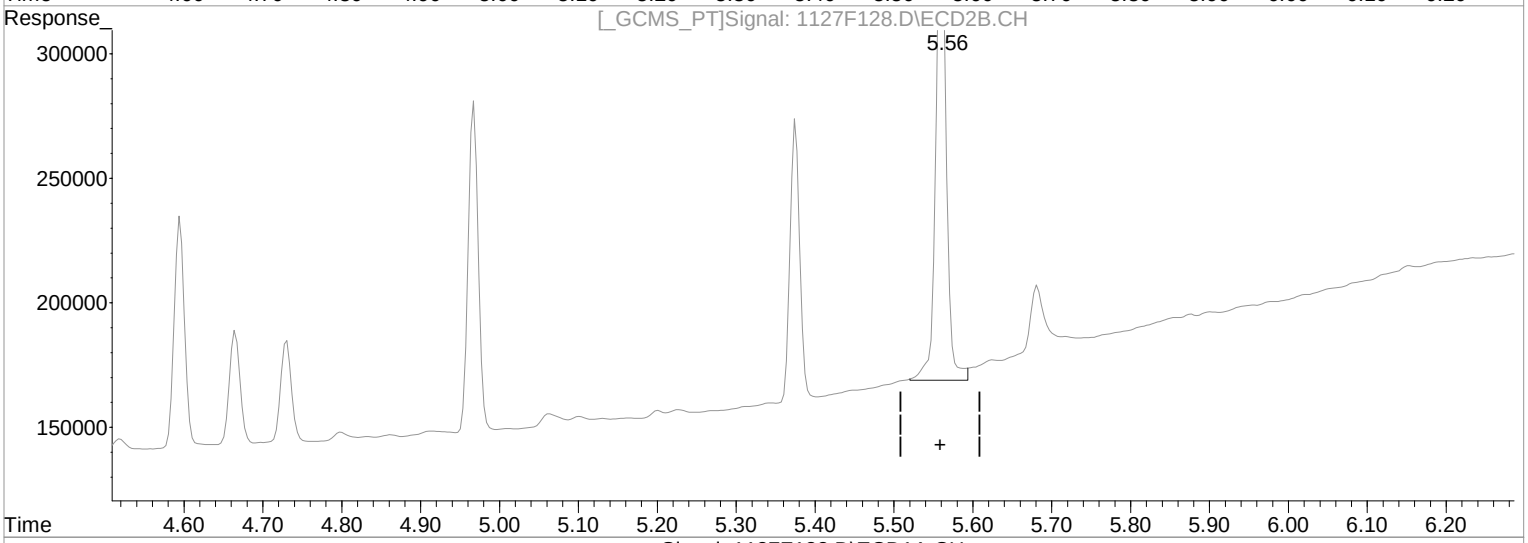
Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration





Signal: 1127F128.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 3.366ug/L

response 1873238

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(10) Pentachloroanisole #2

5.56min 3.097ug/L m

response 1755630

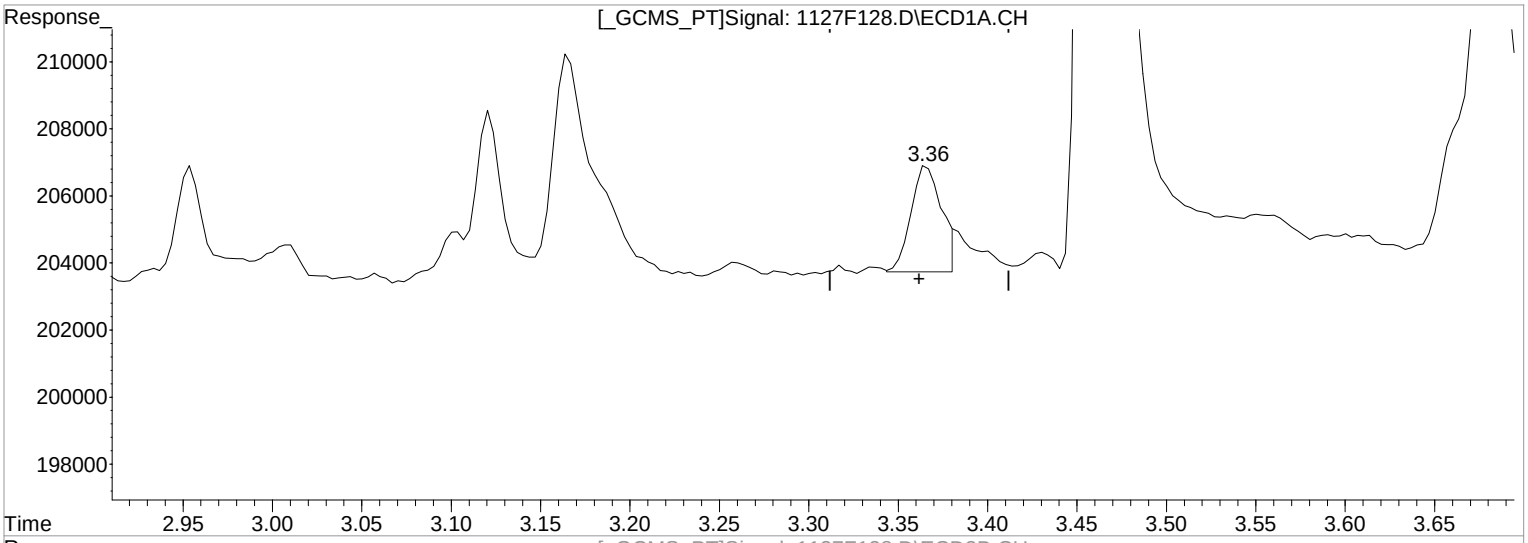
(+) = Expected Retention Time

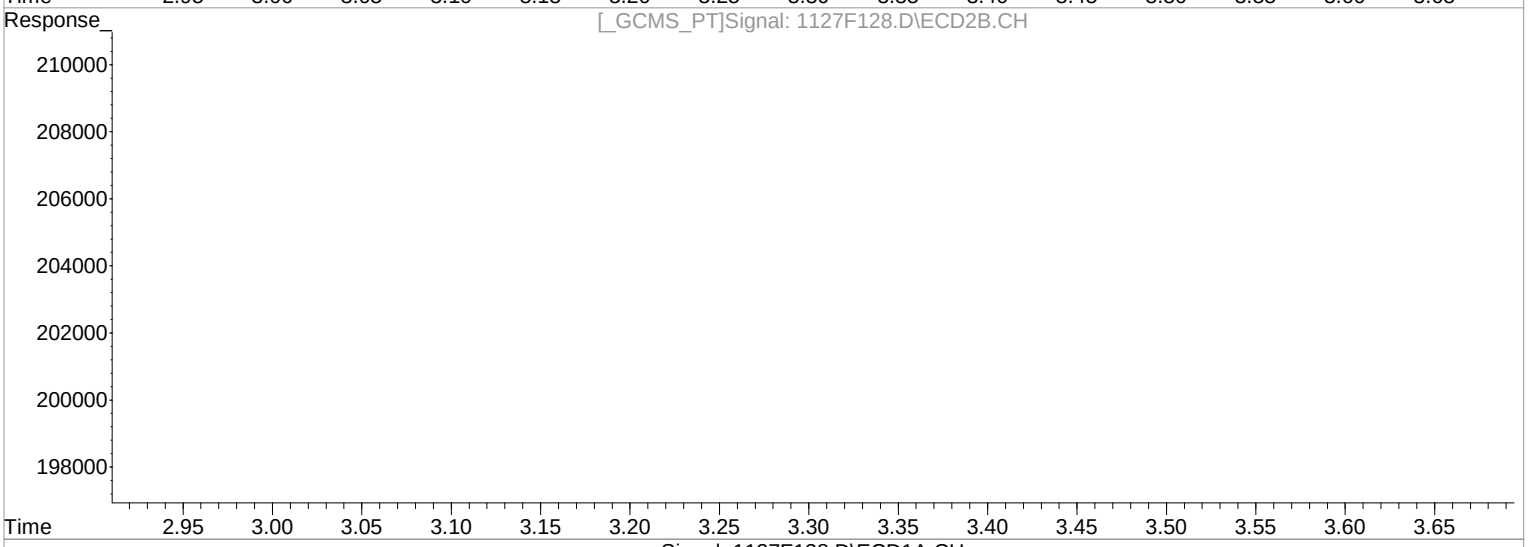
Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration





Signal: 1127F128.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 3.203ug/L m

response 38712

Manual Integration:

After

After, No Before

Baseline Shoulder

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 2.745ug/L

response 36048

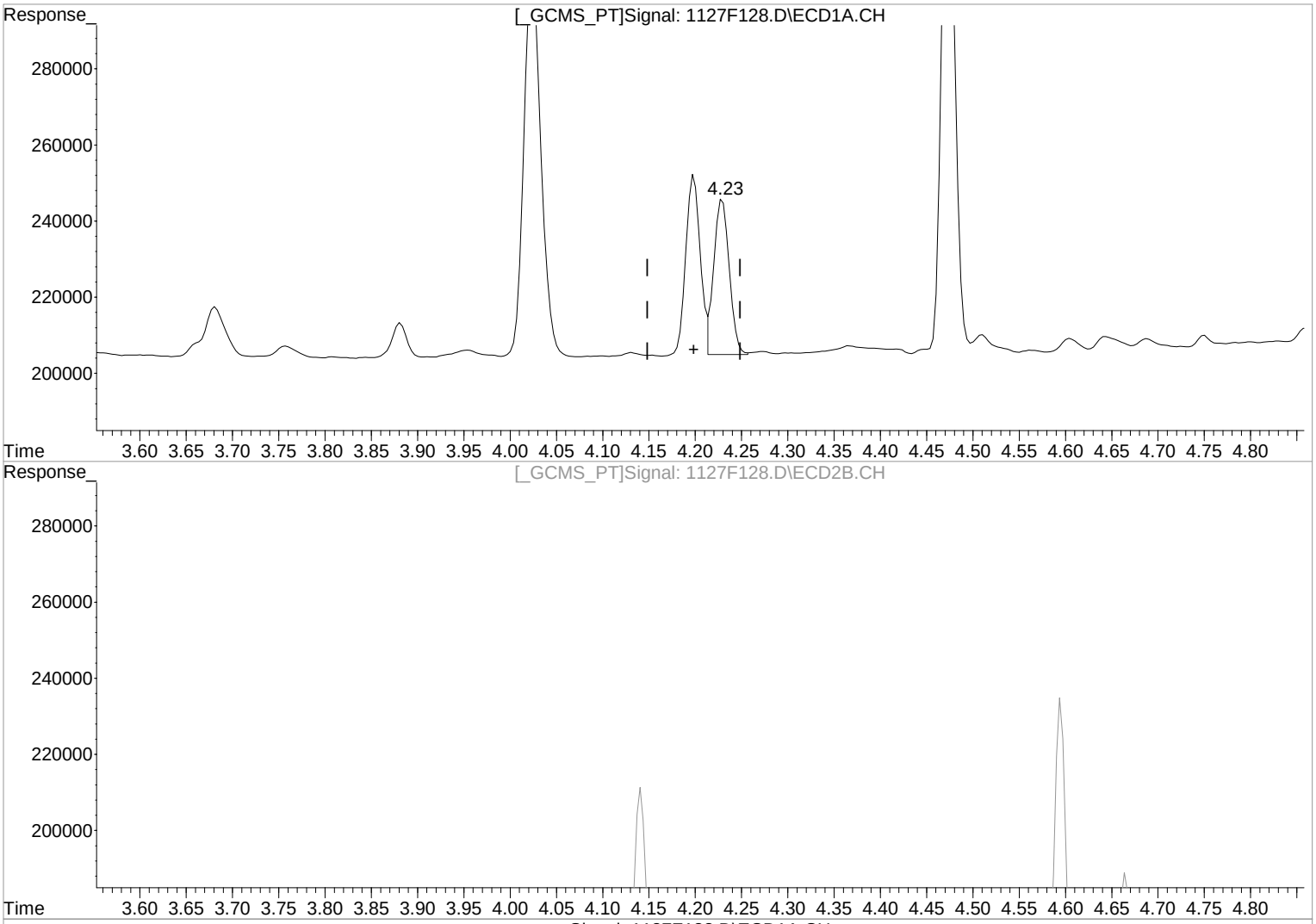
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 2.915ug/L m

response 463666

Manual Integration:

After

After, No Before

Wrong peak

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 2.794ug/L

response 405392

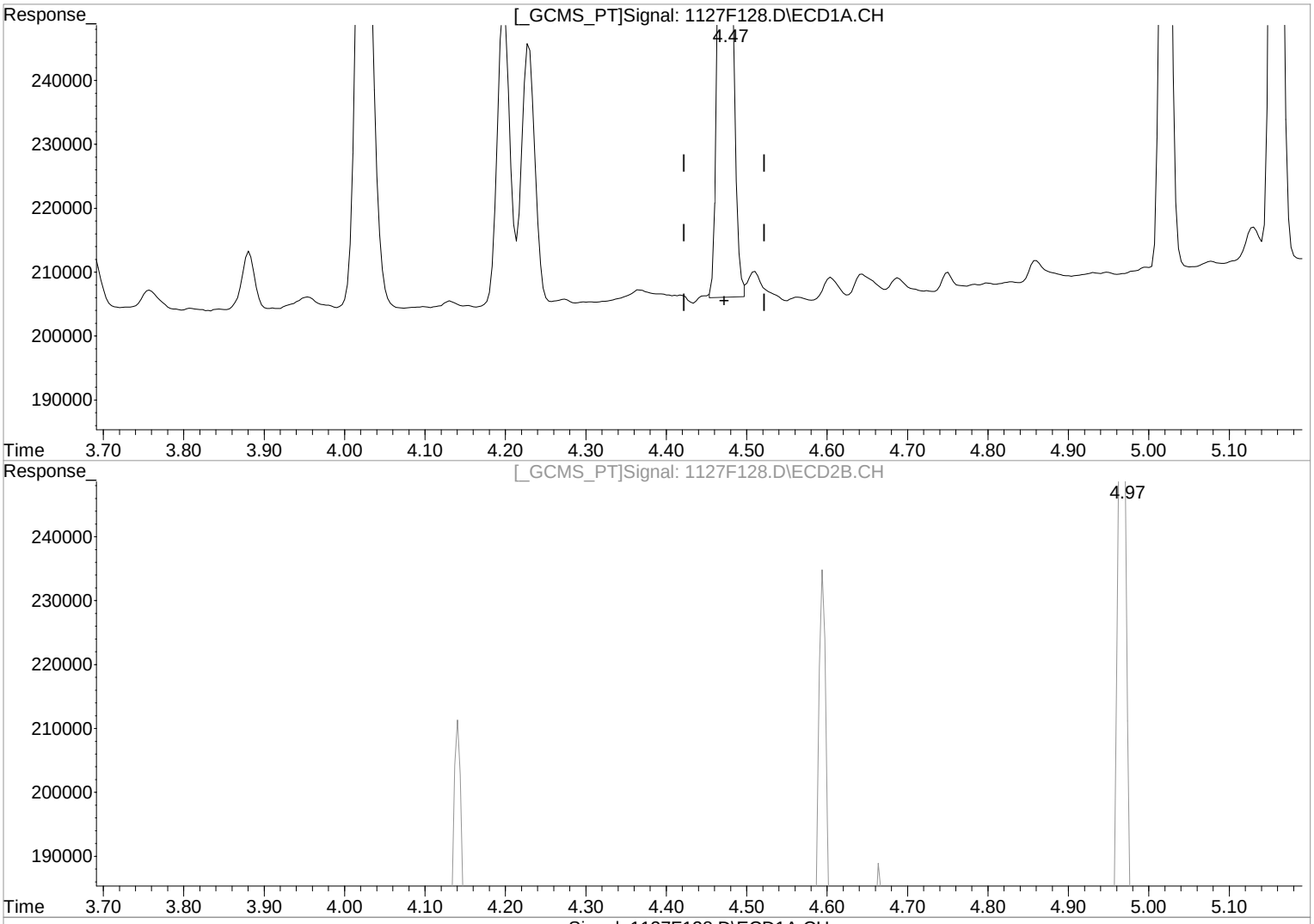
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(7) 2,3,5,6-Tetrachlorophenol (M)

4.47min 2.929ug/L m

response 1468326

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(7) 2,3,5,6-Tetrachlorophenol #2 (M)

4.97min 2.369ug/L

response 1190526

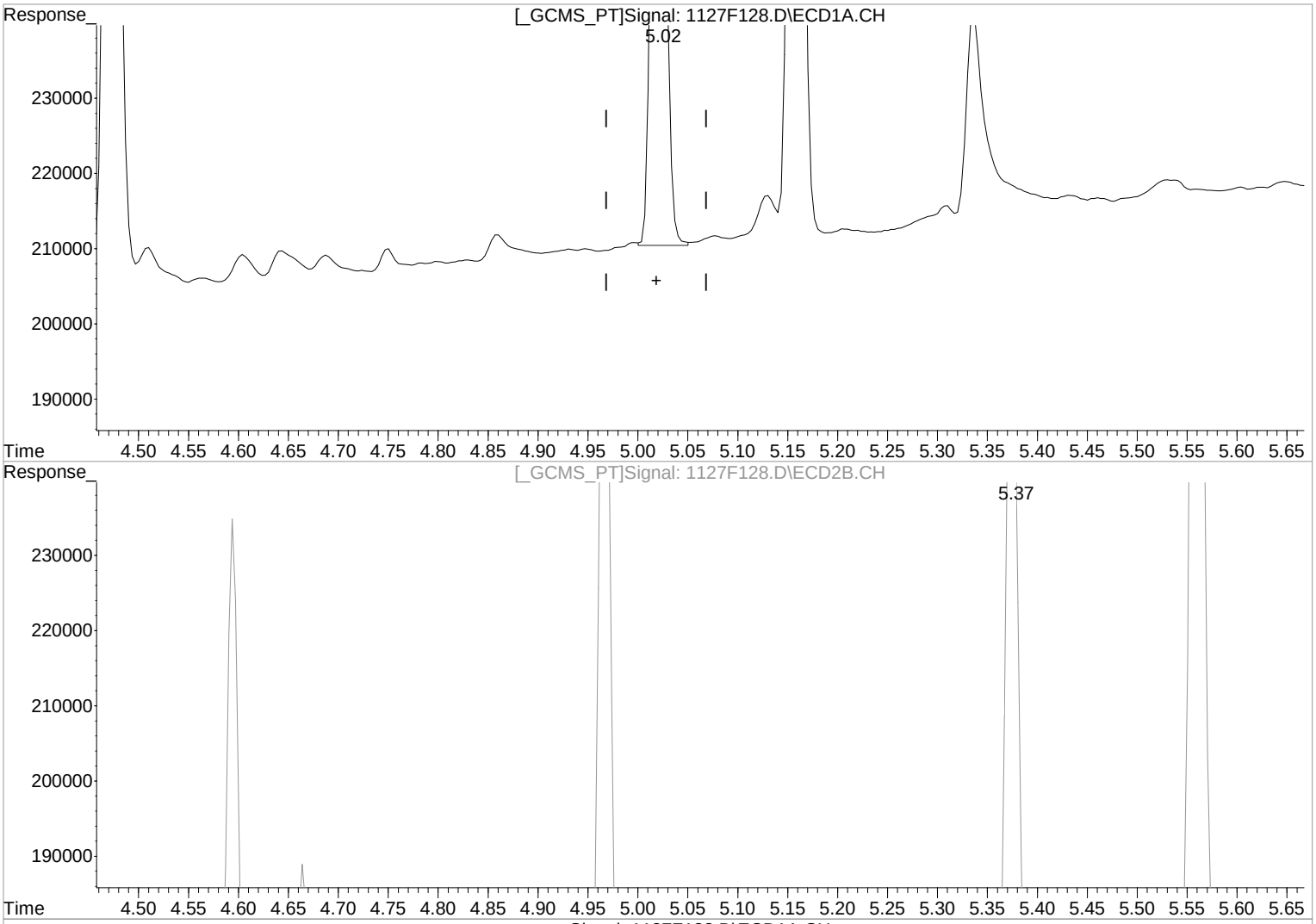
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 3.268ug/L m

response 1110862

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 2.911ug/L

response 994692

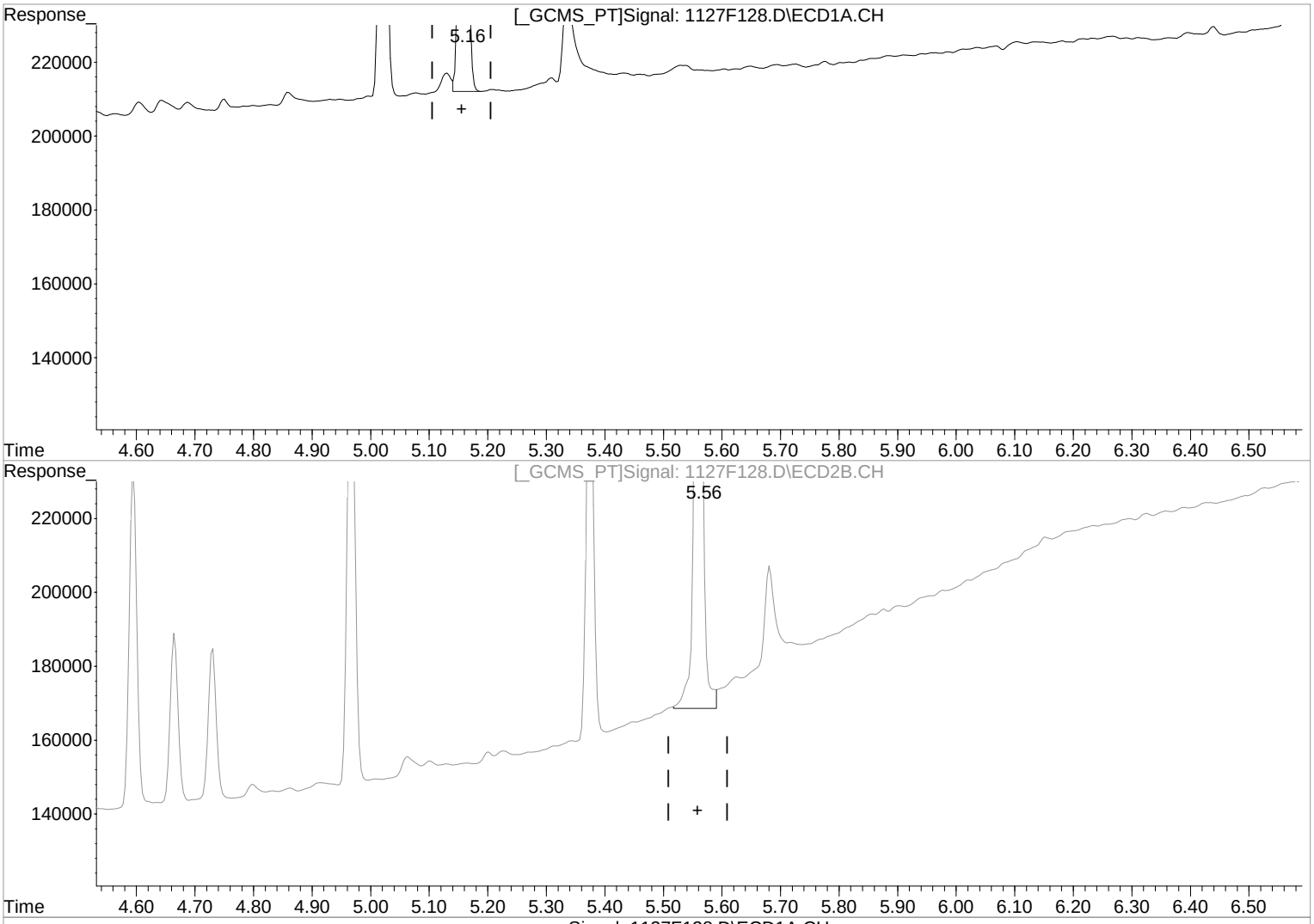
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 3.199ug/L

response 1873238

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 2.949ug/L m

response 1758532

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:54:14 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	2527708	1767222	8.403	6.791
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	86210	99632	5.317m	5.318
2)		3,5-Dichlorophen	3.36	3.91	68638	67856	5.680m	5.167
3)		2,4,6-Trichlorop	3.46	4.14	1814386	1543468	5.117	4.293
5)		2,4,5-Trichlorop	4.20	4.66	996824	834646	6.411	5.080
6)		3,4,5-Trichlorop	4.23f	4.73	897110	748802	5.640m	5.160
7)	M	2,3,5,6-Tetrachl	4.47	4.97	2791280	2329296	5.568m	4.635
8)	M	2,3,4,5-Tetrachl	5.02	5.37	2110338	1864900	6.209m	5.458
9)	M	Pentachloropheno	5.16	5.56	3505892	3190336	5.988	5.351m
10)		Pentachloroaniso	5.16	5.56	3505892	3212868	6.300	5.668m

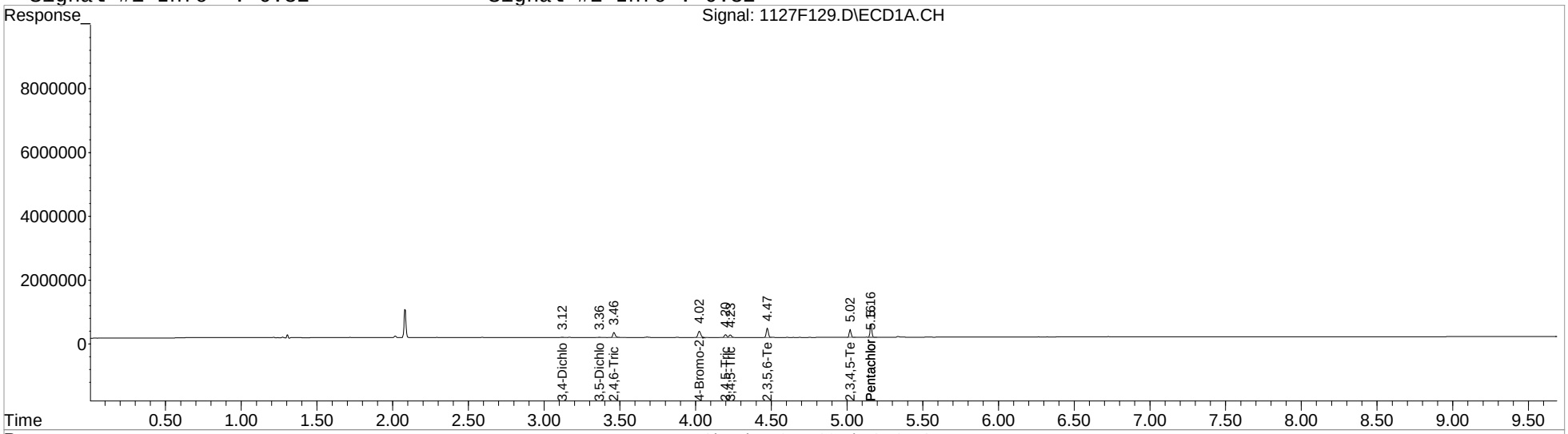
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

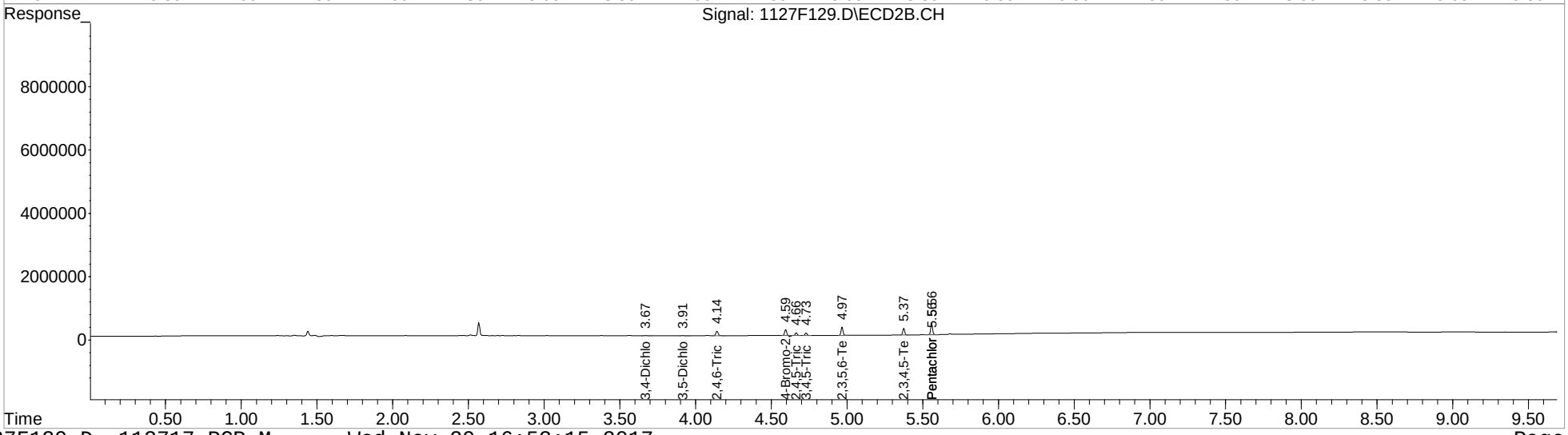
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



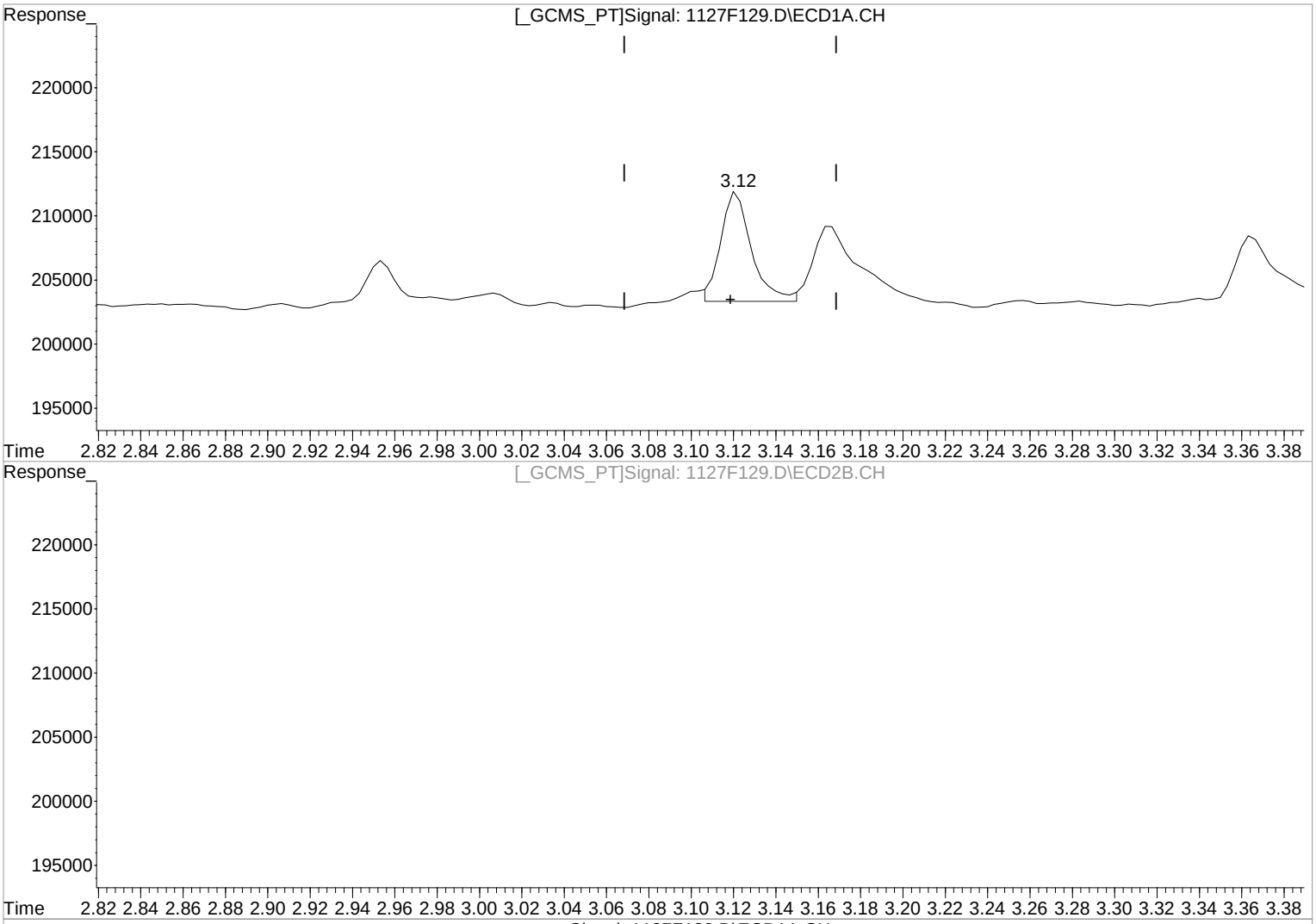


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 5.317ug/L m

response 86210

(1) 3,4-Dichlorophenol #2

3.67min 5.318ug/L

response 99632

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

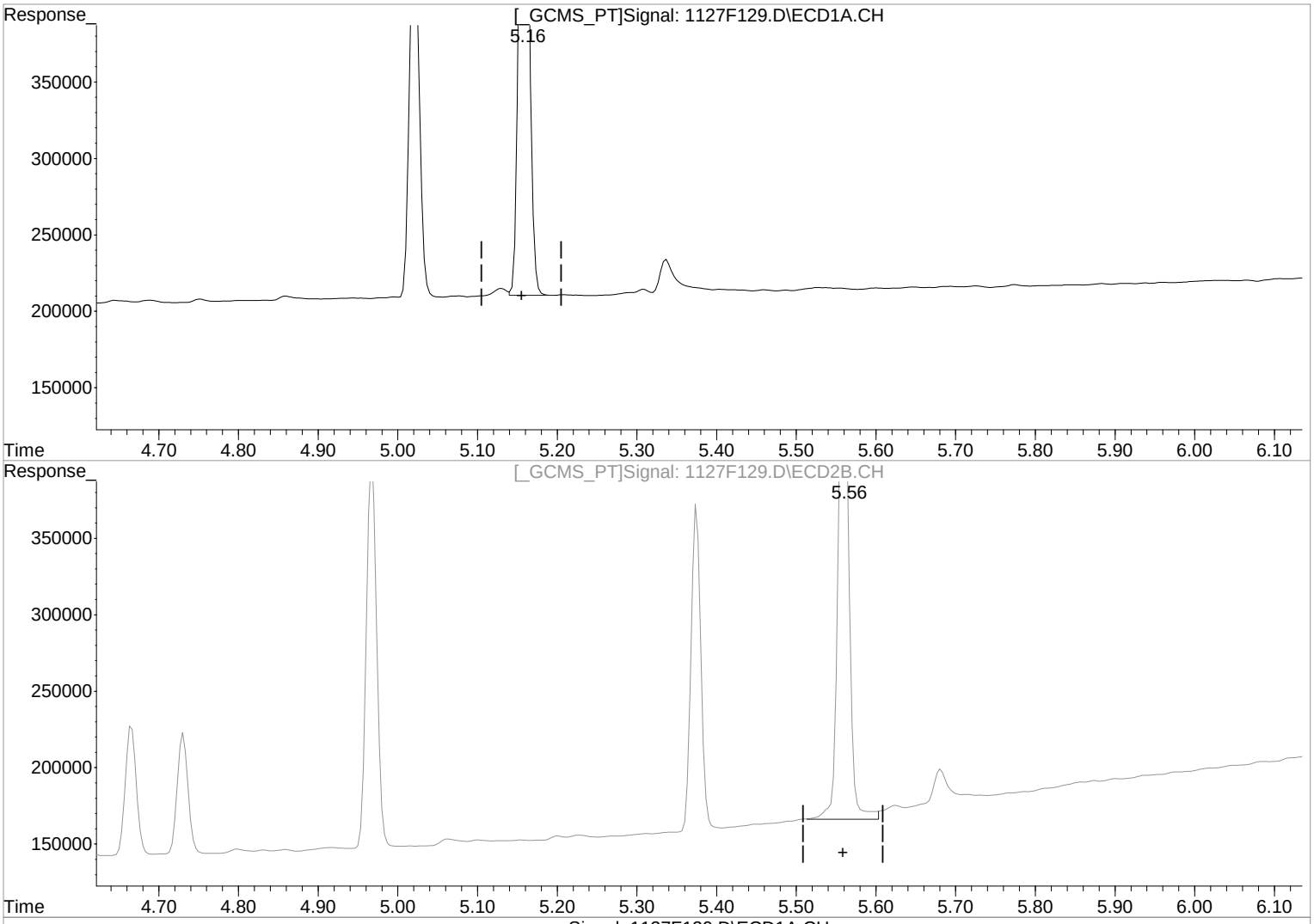
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 6.300ug/L

response 3505892

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(10) Pentachloroanisole #2

5.56min 5.668ug/L m

response 3212868

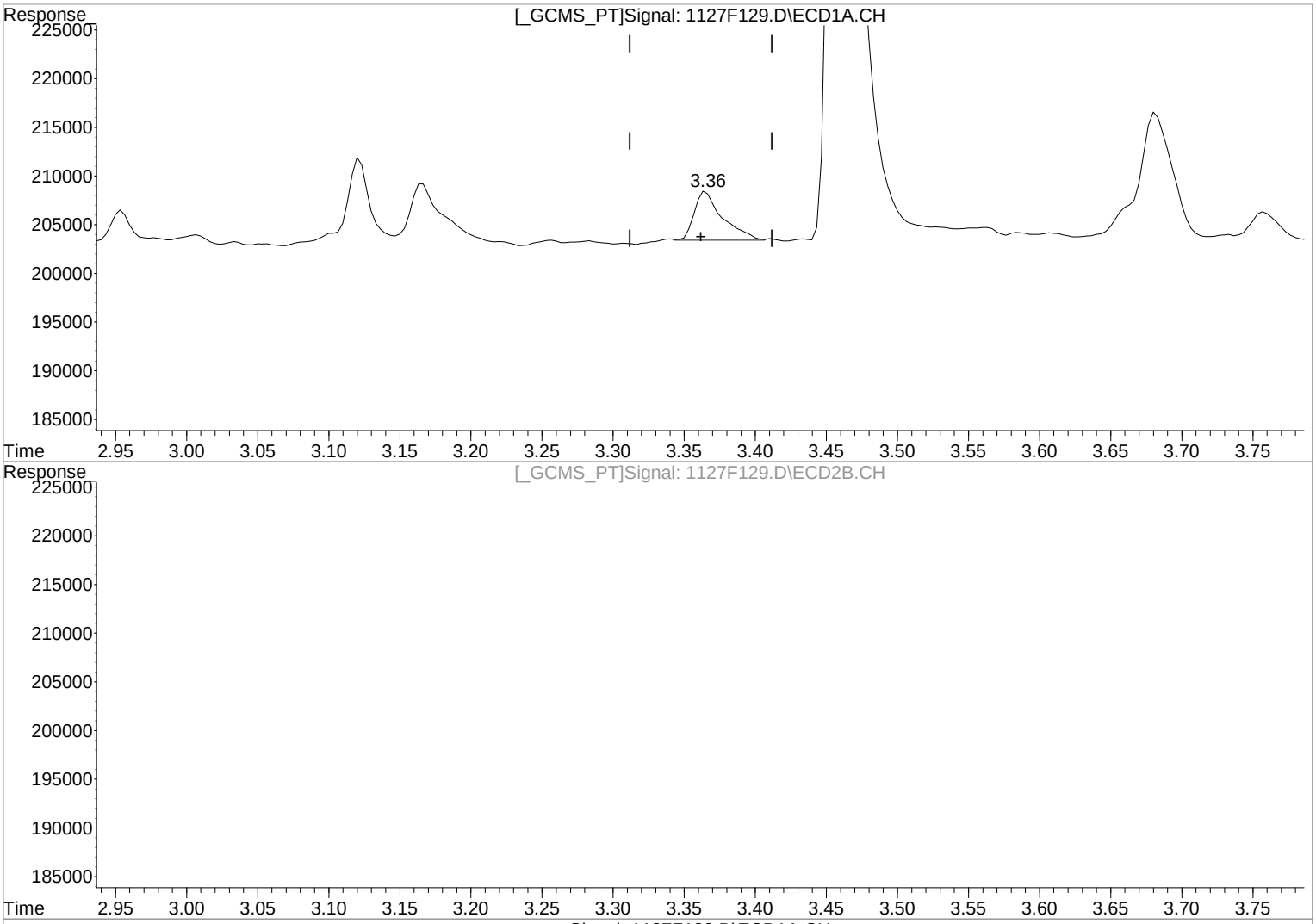
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 5.680ug/L m

response 68638

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 5.167ug/L

response 67856

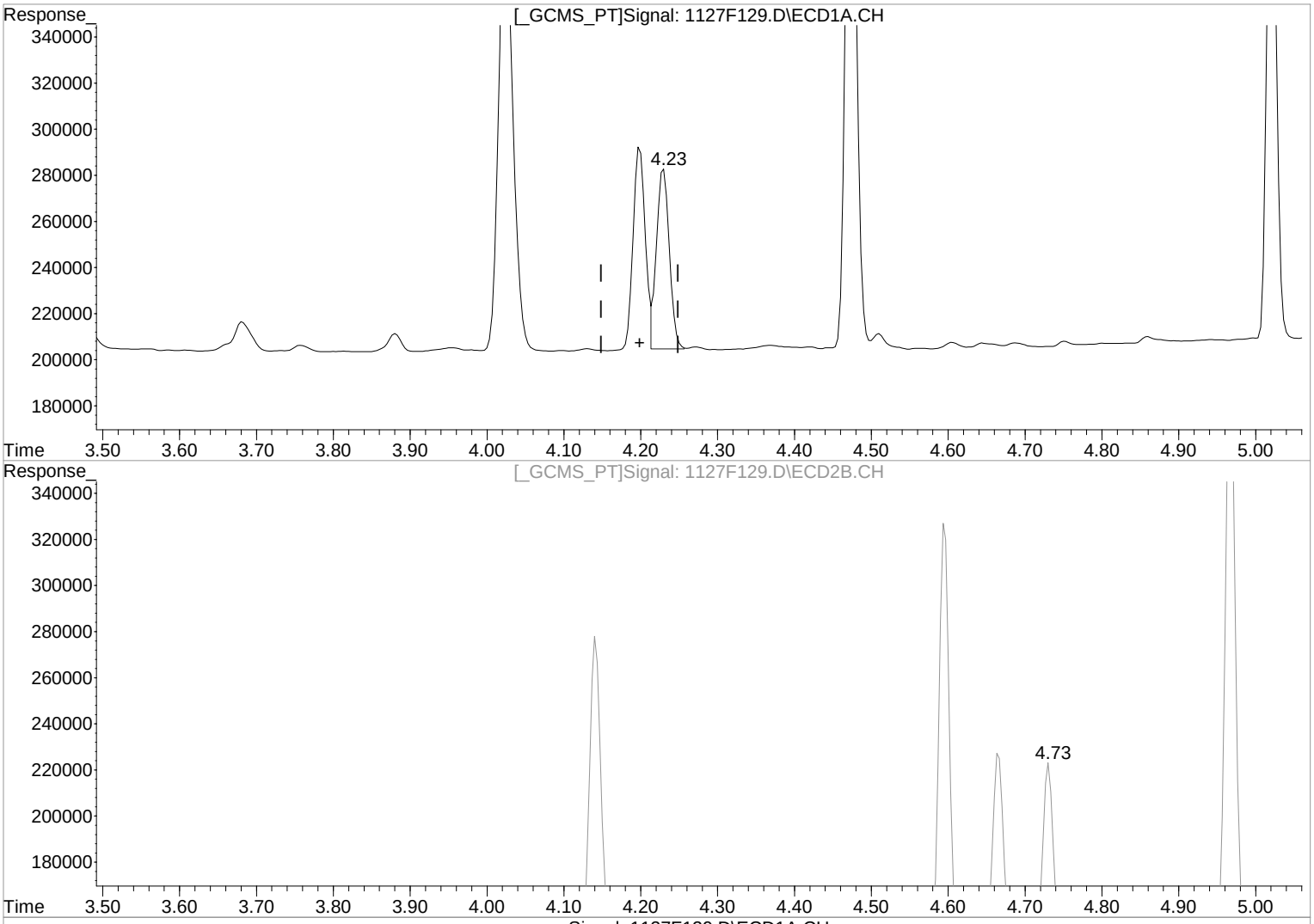
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 5.640ug/L m

response 897110

(6) 3,4,5-Trichlorophenol #2

4.73min 5.160ug/L

response 748802

Manual Integration:

After

Wrong Peak No Before

11/29/17

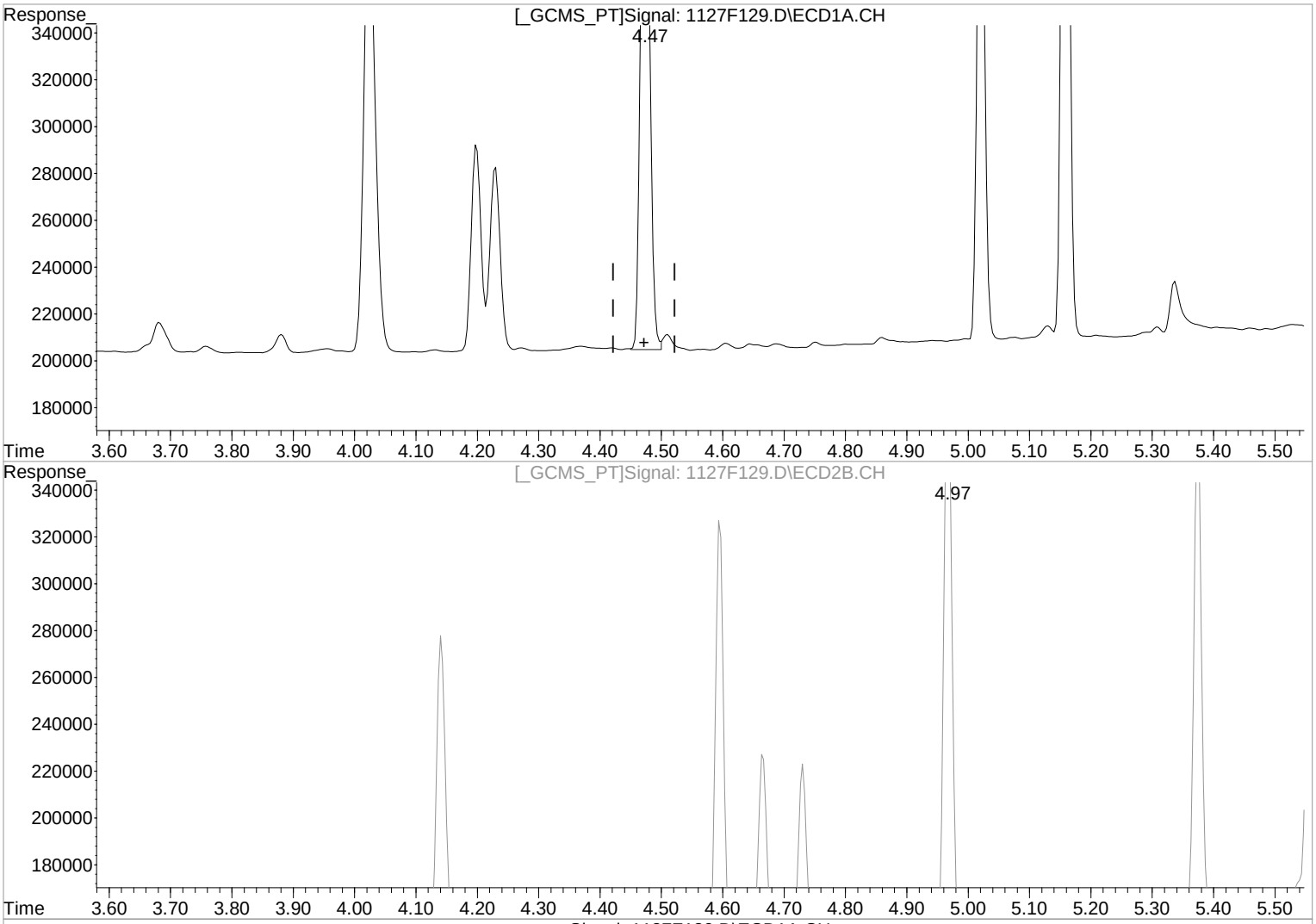
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(7) 2,3,5,6-Tetrachlorophenol (M)

4.47min 5.568ug/L m

response 2791280

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

(7) 2,3,5,6-Tetrachlorophenol #2 (M)

4.97min 4.635ug/L

response 2329296

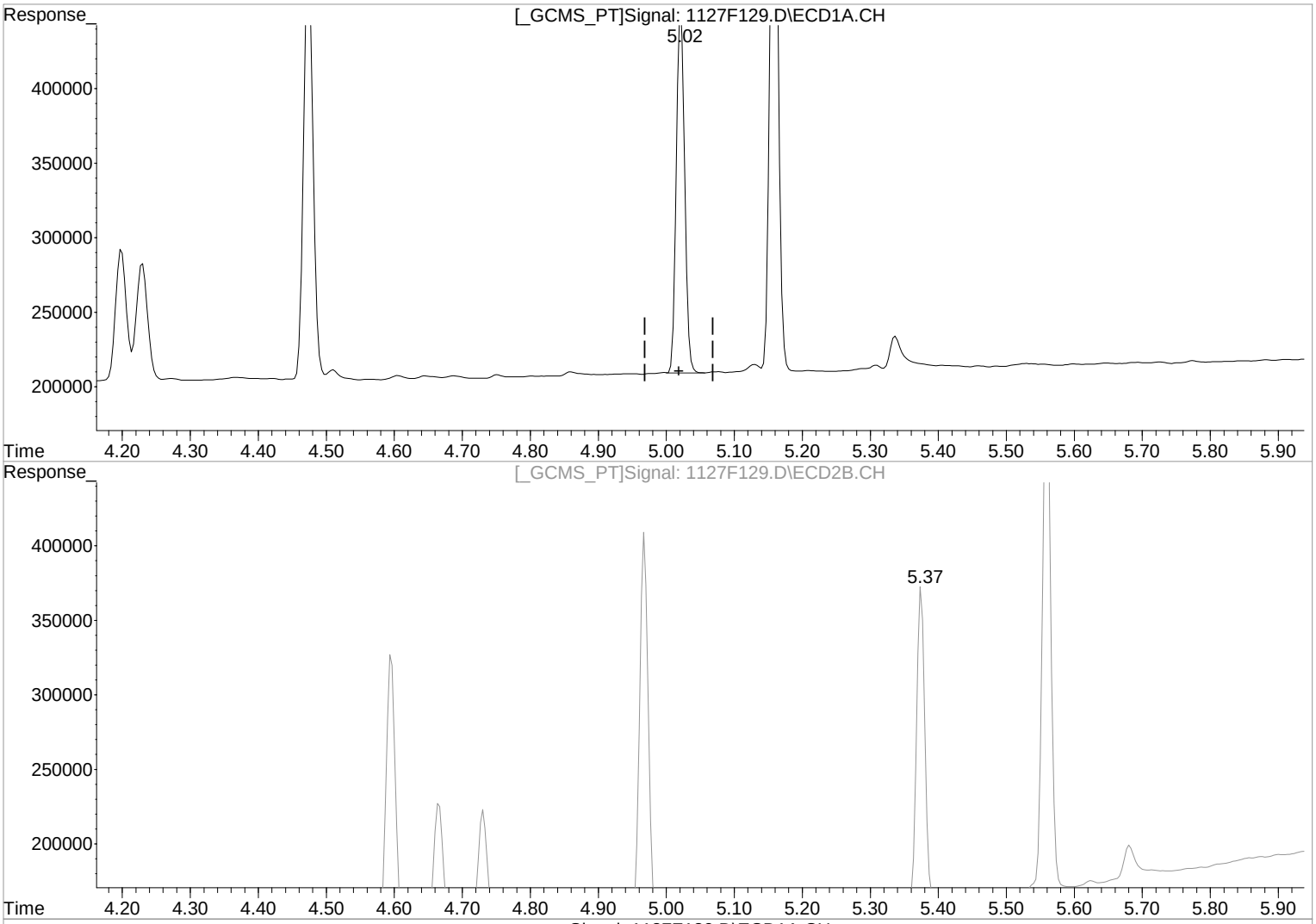
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 6.209ug/L m

response 2110338

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 5.458ug/L

response 1864900

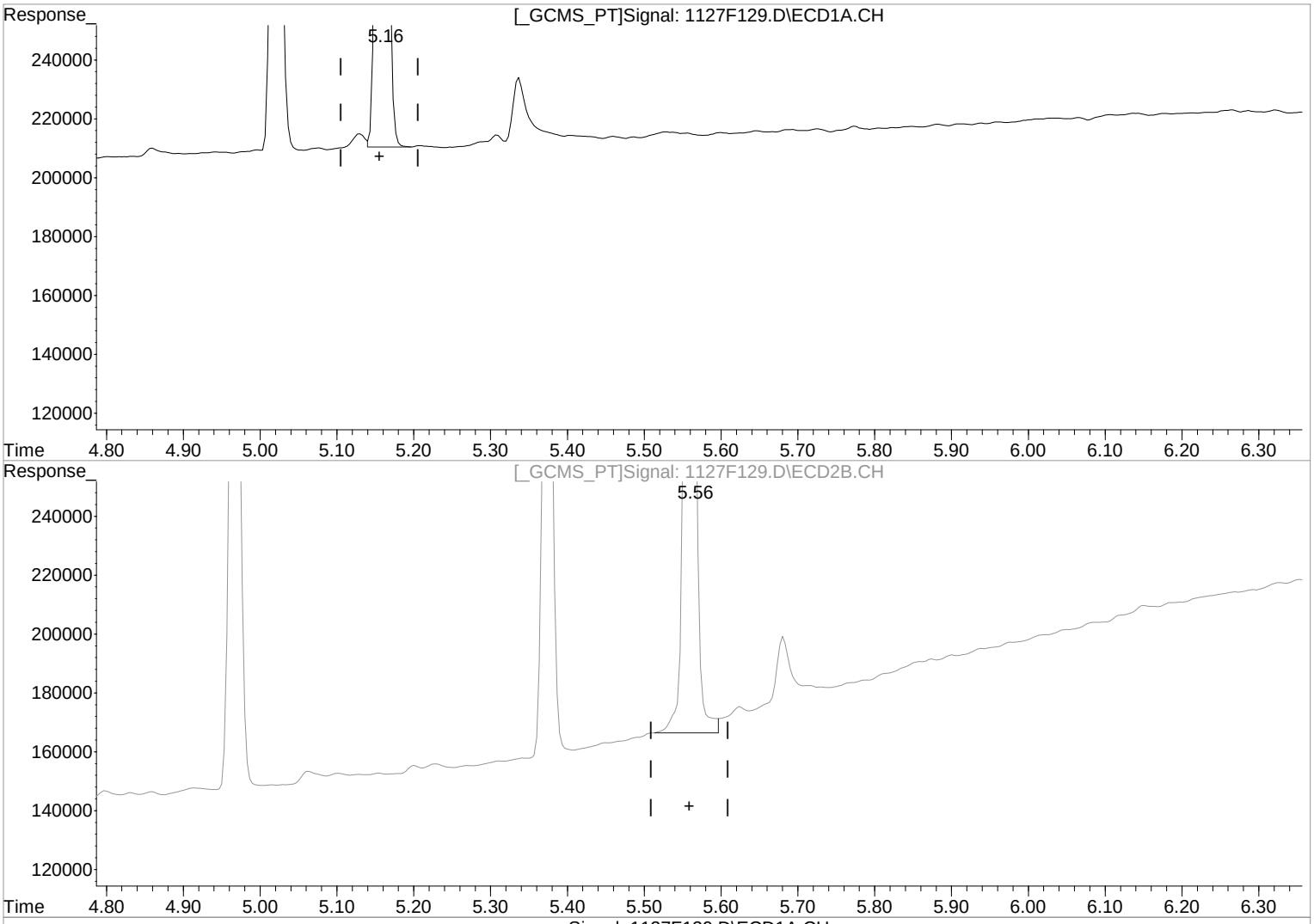
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 5.988ug/L

response 3505892

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 5.351ug/L m

response 3190336

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:57:47 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	4613736	3450884	15.338	13.260
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	163576	175528	10.089m	9.369
2)		3,5-Dichlorophen	3.36	3.91	101688	125108	8.415m	9.526
3)		2,4,6-Trichlorop	3.46	4.14	3229296	2813346	9.108	7.824
5)		2,4,5-Trichlorop	4.20	4.66	1789438	1475642	11.508	8.981
6)		3,4,5-Trichlorop	4.23f	4.73	1550706	1348458	9.750m	9.293
7)	M	2,3,5,6-Tetrachl	4.47	4.96	4983492	4311232	9.941	8.579
8)	M	2,3,4,5-Tetrachl	5.02	5.37	3744556	3299360	11.017m	9.656
9)	M	Pentachloropheno	5.16	5.56	6298030	5874436	10.757	9.853
10)		Pentachloroaniso	5.16	5.56	6298030	5874436	11.317	10.363

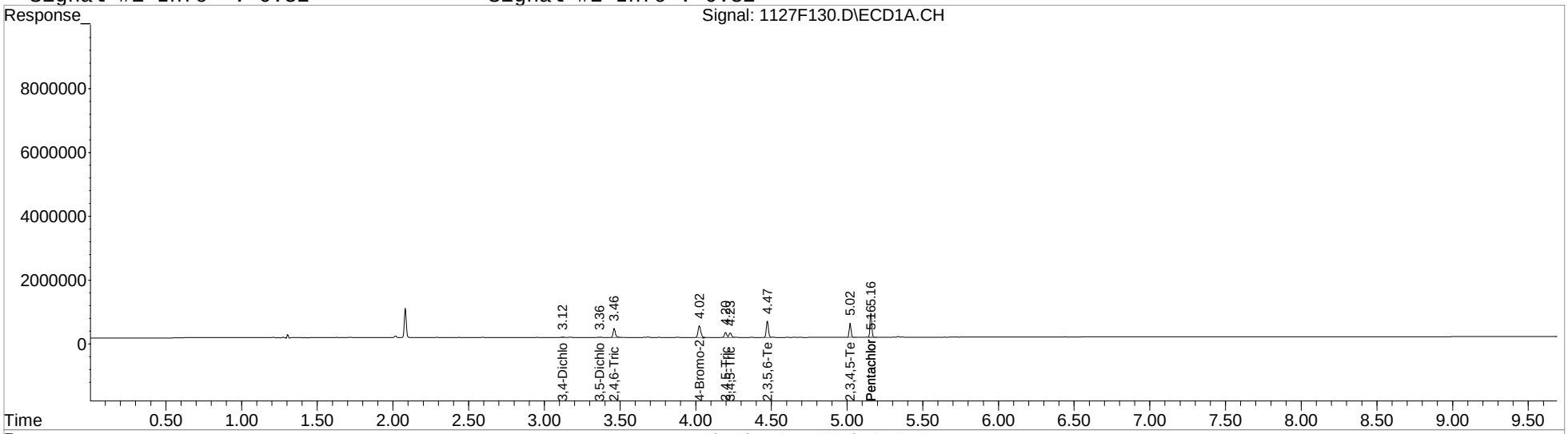
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

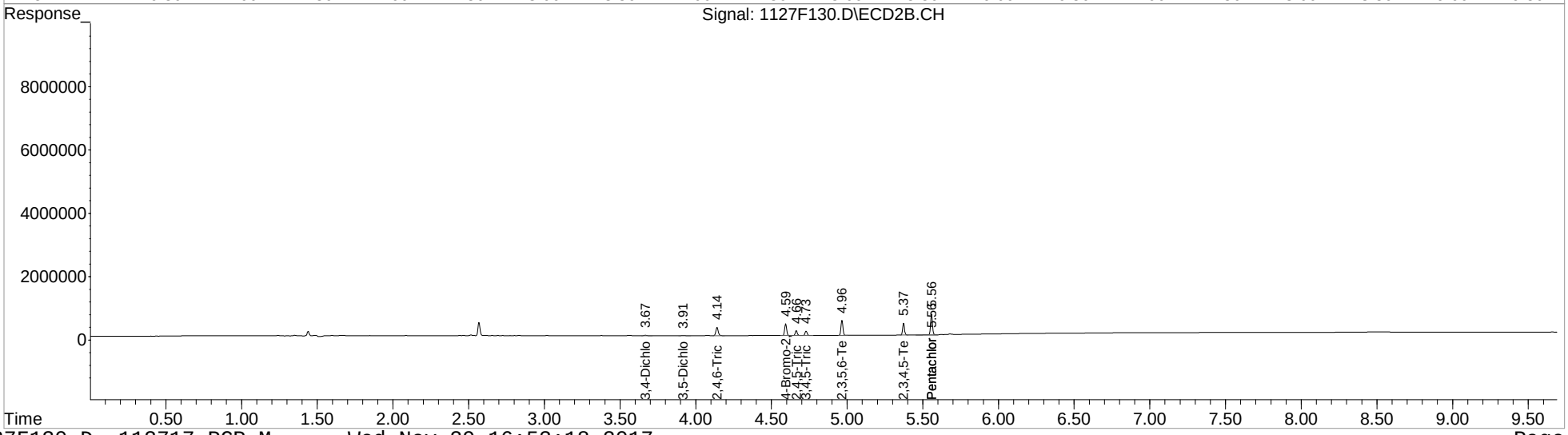
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



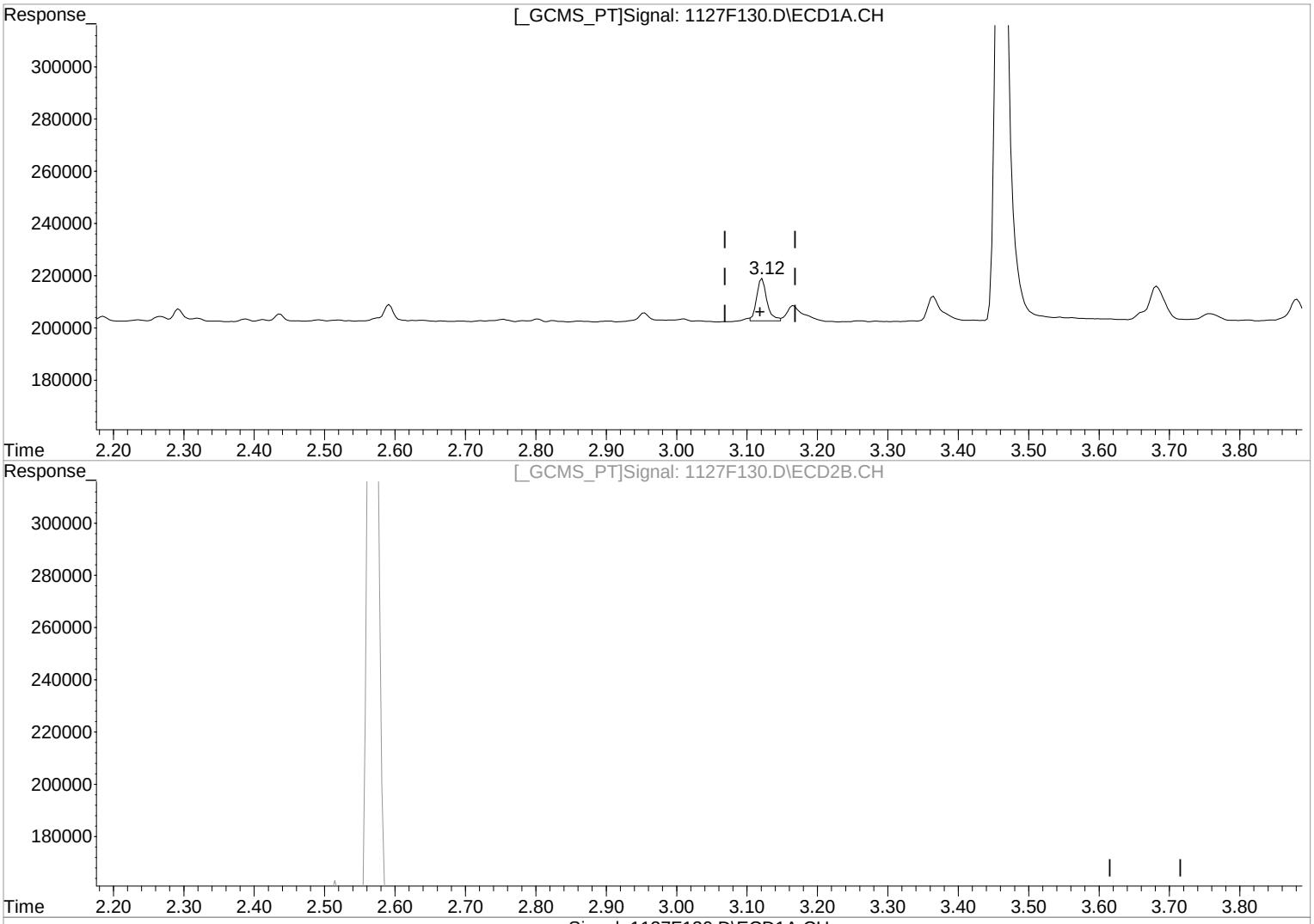


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 10.089ug/L m

response 163576

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 9.369ug/L

response 175528

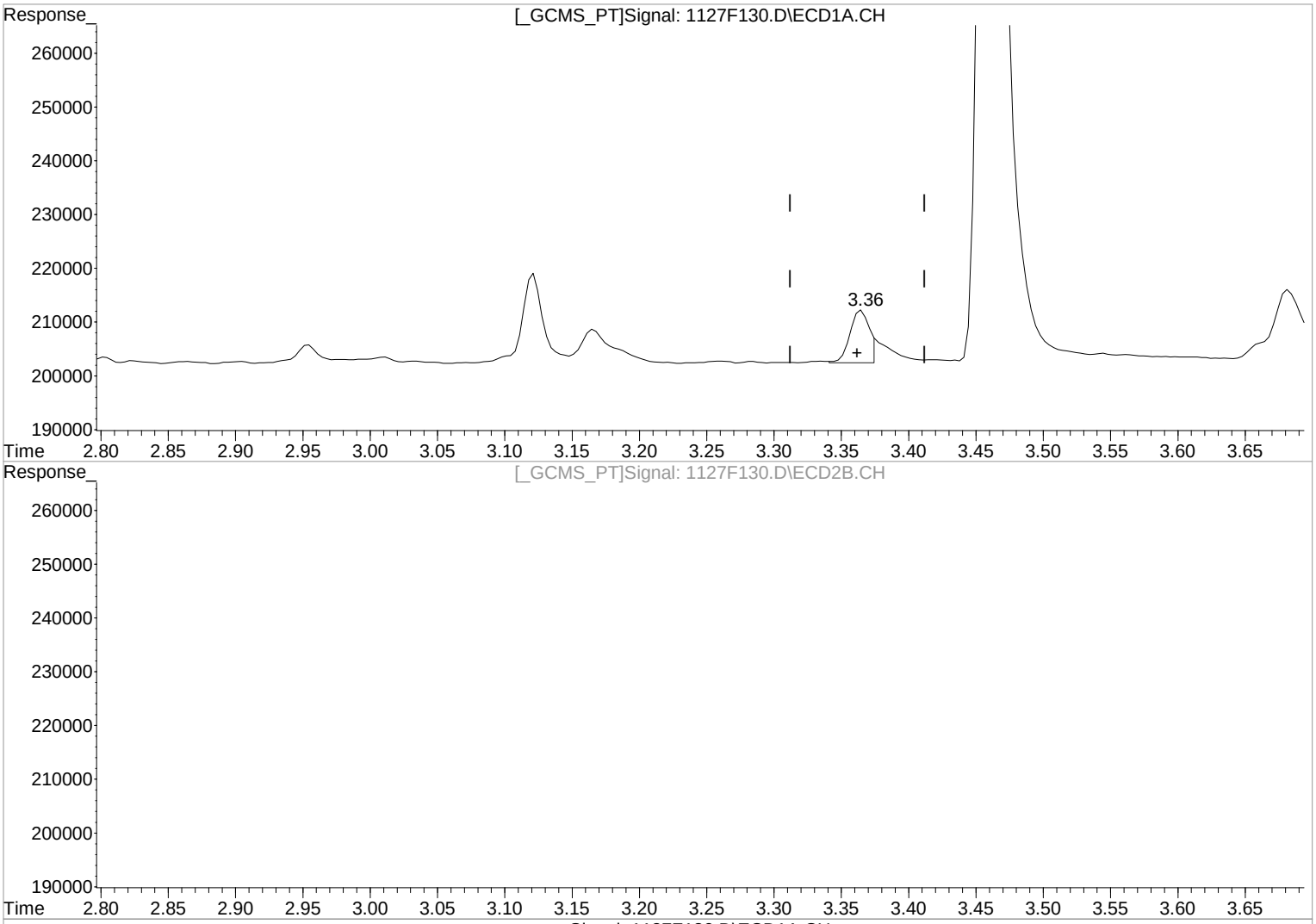
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 8.415ug/L m

response 101688

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 9.526ug/L

response 125108

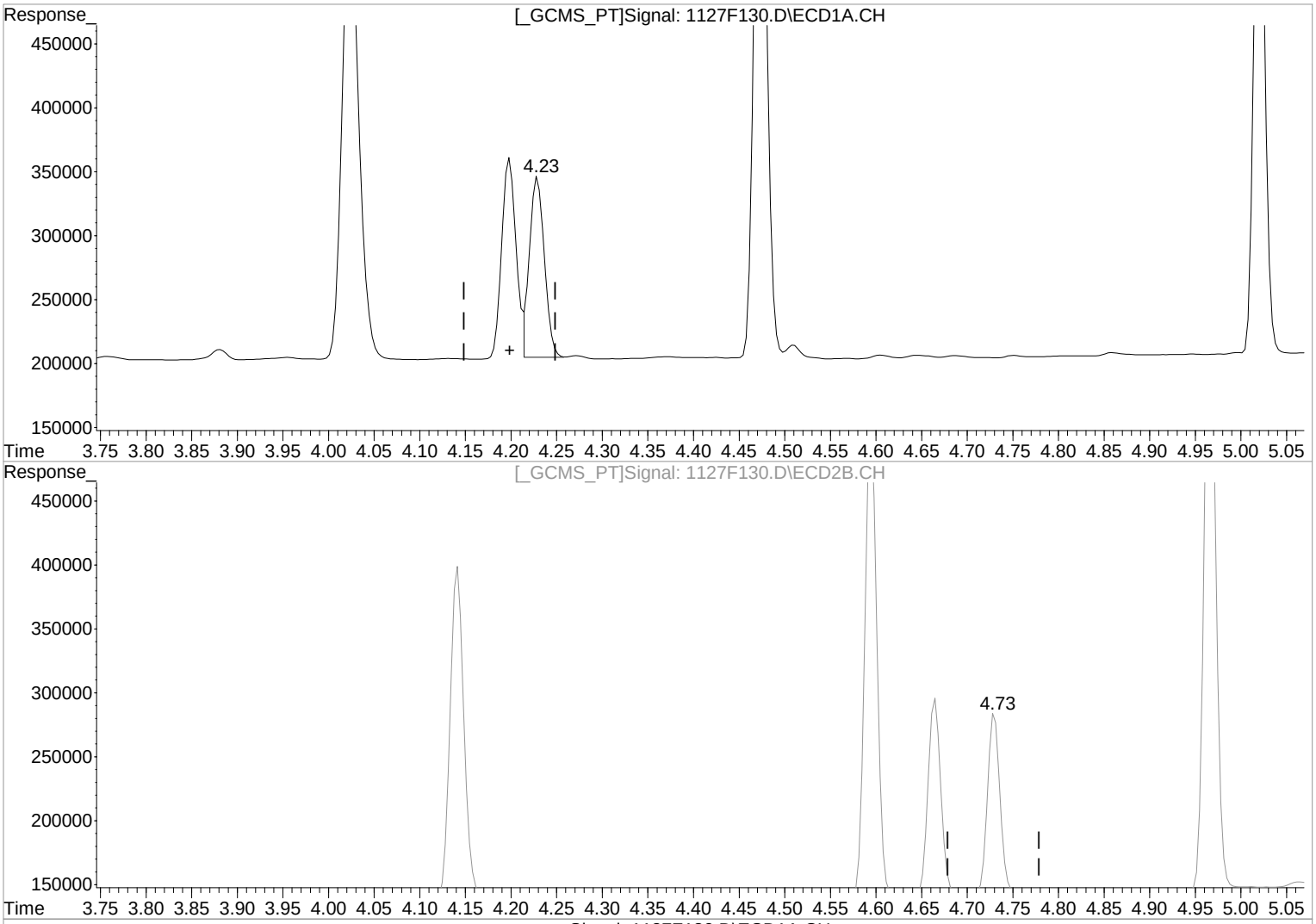
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 9.750ug/L m

response 1550706

Manual Integration:

After

Wrong peak, No Before

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 9.293ug/L

response 1348458

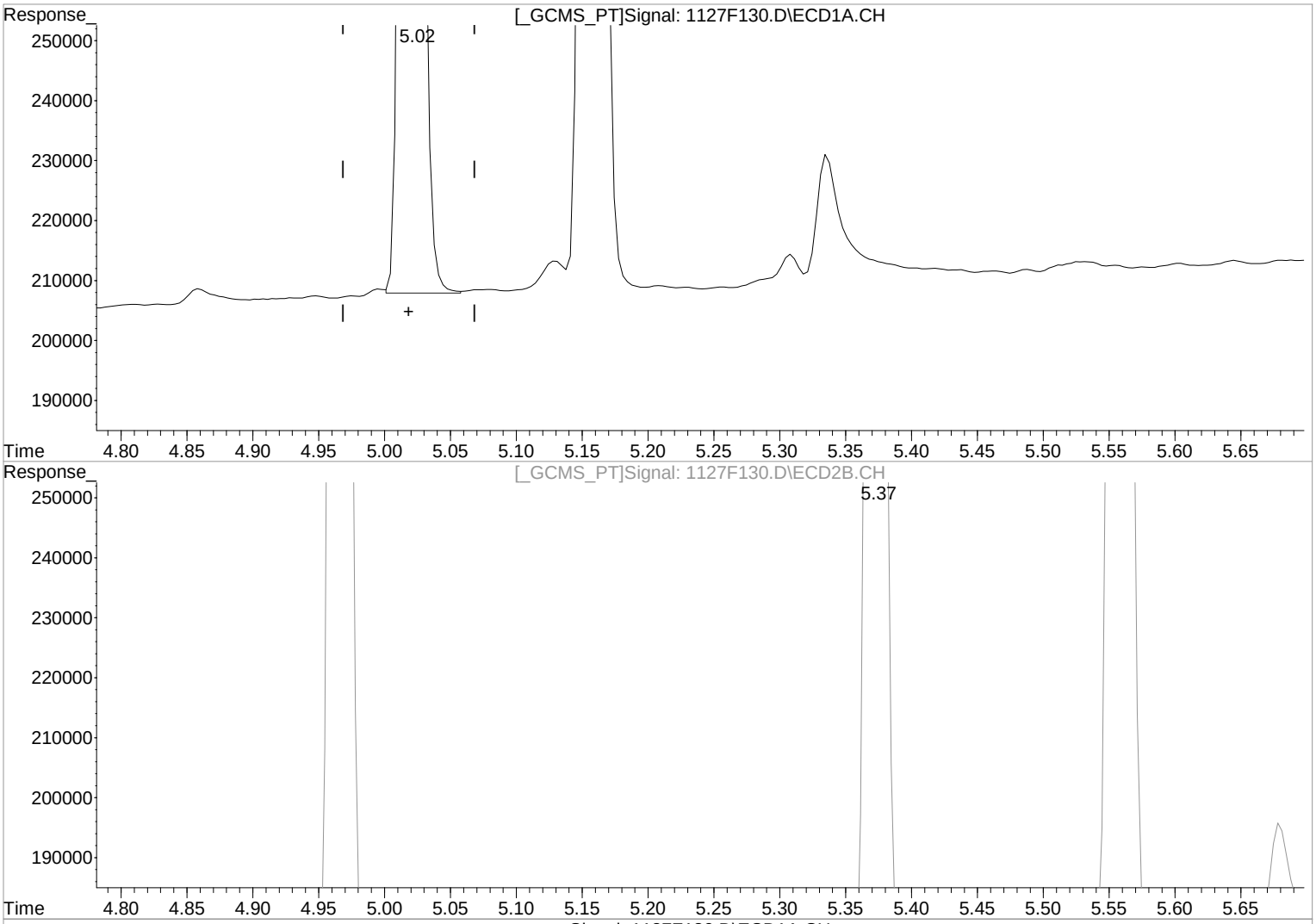
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 11.017ug/L m

response 3744556

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 9.656ug/L

response 3299360

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:00:34 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.60	11143798	9056888	37.047	34.802
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	400014	405654	24.671m	21.652
2)		3,5-Dichlorophen	3.36	3.91	316008	288184	26.150	21.944
3)		2,4,6-Trichlorop	3.46	4.14	7312718	6768082	20.625	18.823
5)		2,4,5-Trichlorop	4.20	4.66	3927156	3388118	25.257	20.621
6)		3,4,5-Trichlorop	4.23f	4.73	3598120	3123178	22.622m	21.523
7)	M	2,3,5,6-Tetrachl	4.47	4.97	11725474	10538308	23.390	20.971
8)	M	2,3,4,5-Tetrachl	5.02	5.37	8743824	7747010	25.726	22.673
9)	M	Pentachloropheno	5.16	5.56	14842634	13563198	25.350	22.748
10)		Pentachloroaniso	5.16	5.56	14842634	13563198	26.670	23.927

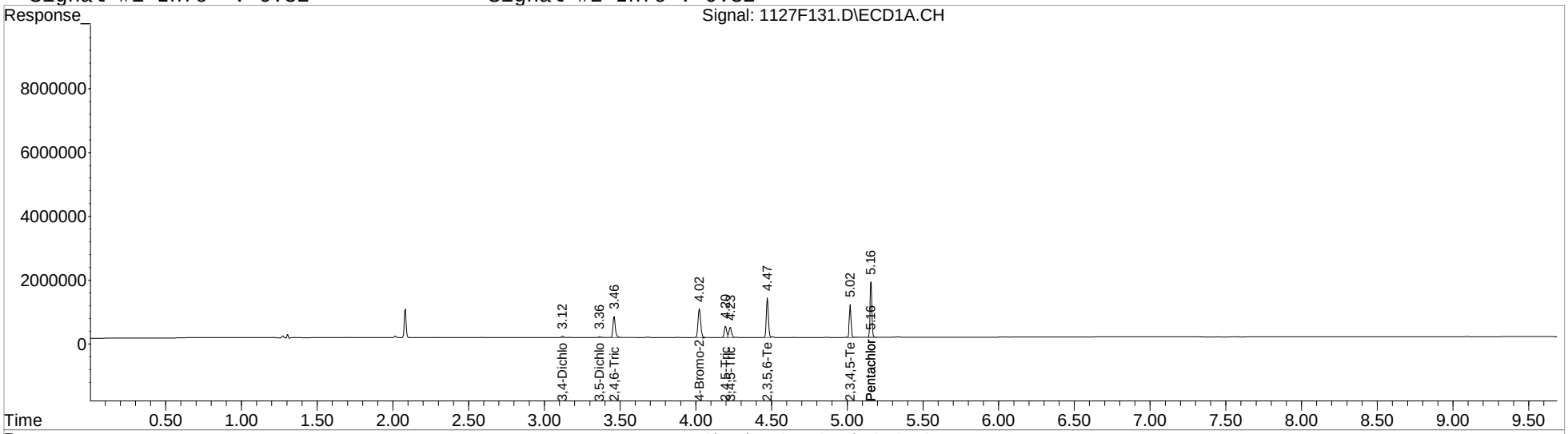
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

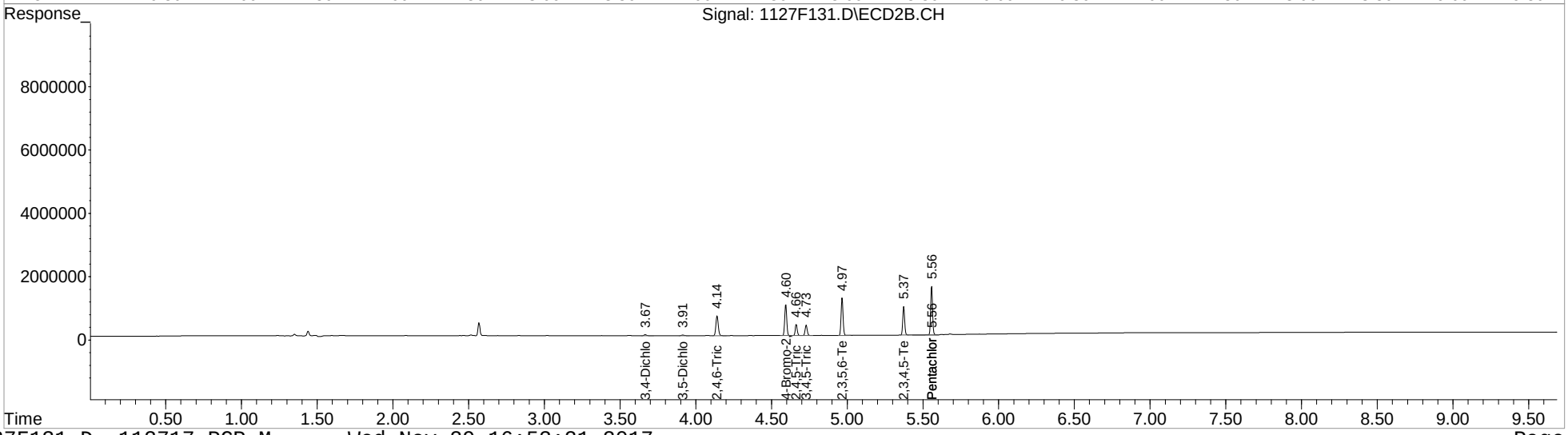
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



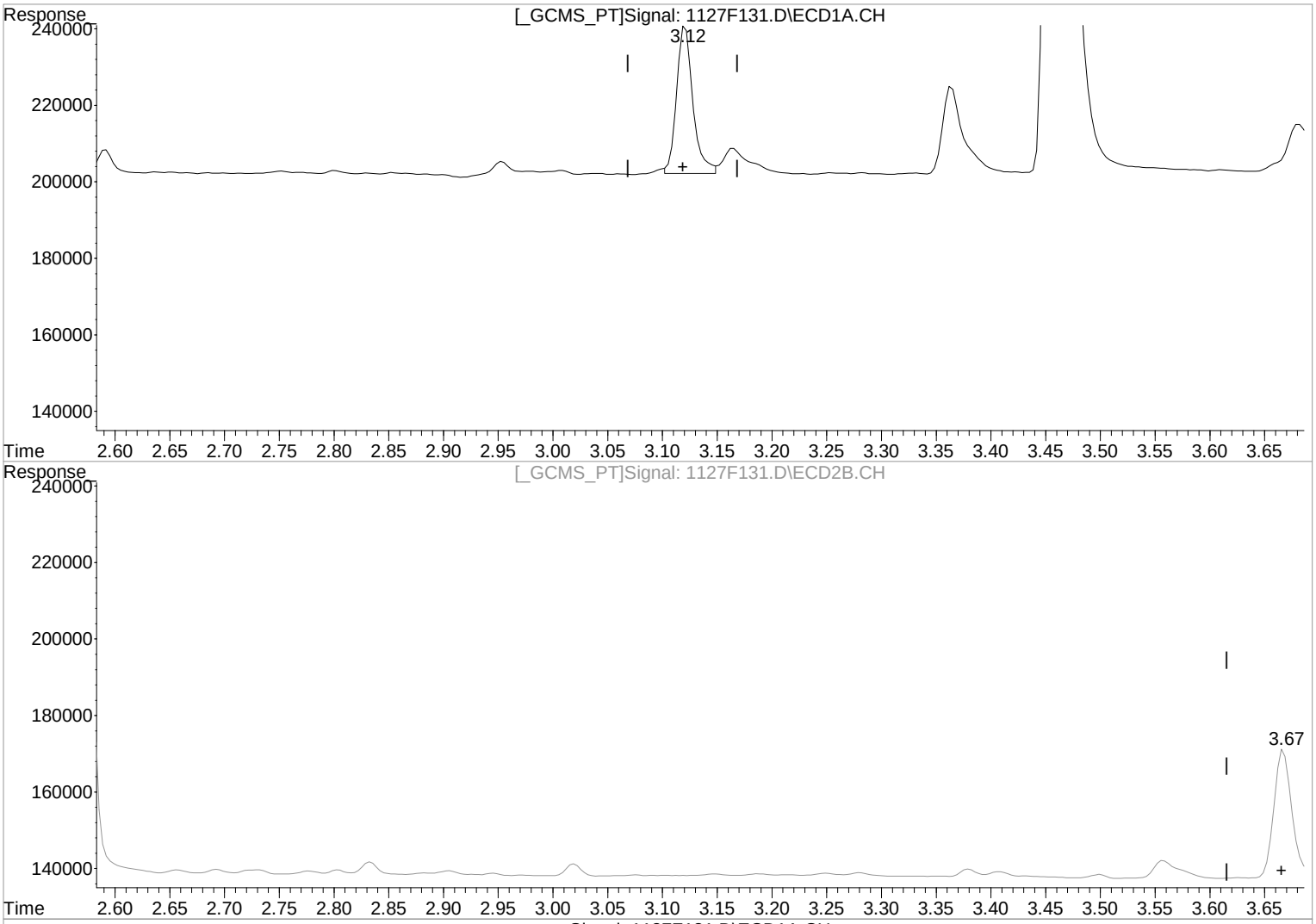


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F131.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 24.671ug/L m

response 400014

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 21.652ug/L

response 405654

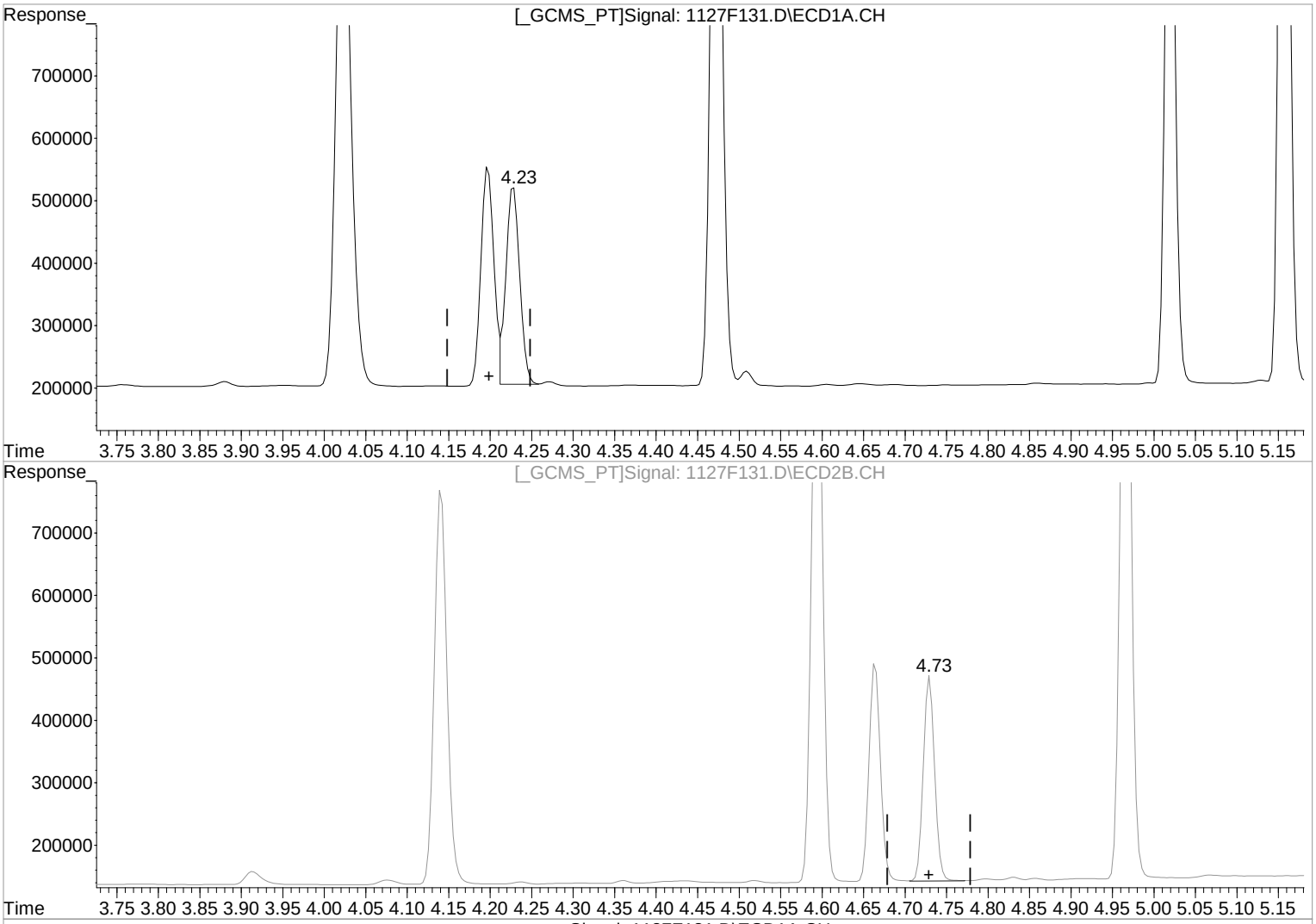
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F131.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 22.622ug/L m

response 3598120

Manual Integration:

After

Wrong peak, No Before

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 21.523ug/L

response 3123178

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:04:32 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	46010514	40158220	152.958	154.311
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	1447870	1405326	89.300	75.009
2)		3,5-Dichlorophen	3.36	3.91	1078920	1058212	89.282	80.579
3)		2,4,6-Trichlorop	3.46	4.14	28084798	27879842	79.211	77.538
5)		2,4,5-Trichlorop	4.20	4.66	14021972	12747090	90.179	77.583
6)		3,4,5-Trichlorop	4.23	4.73	12849696	11876992	80.789	81.849
7)	M	2,3,5,6-Tetrachl	4.47	4.97	45966424	43712650	91.693	86.988
8)	M	2,3,4,5-Tetrachl	5.02	5.37	33226836	30840508	97.760	90.262
9)	M	Pentachloropheno	5.16	5.56	58837190	53885886	100.489	90.377m
10)		Pentachloroaniso	5.16	5.56	58837190	53900478	105.722	95.088m

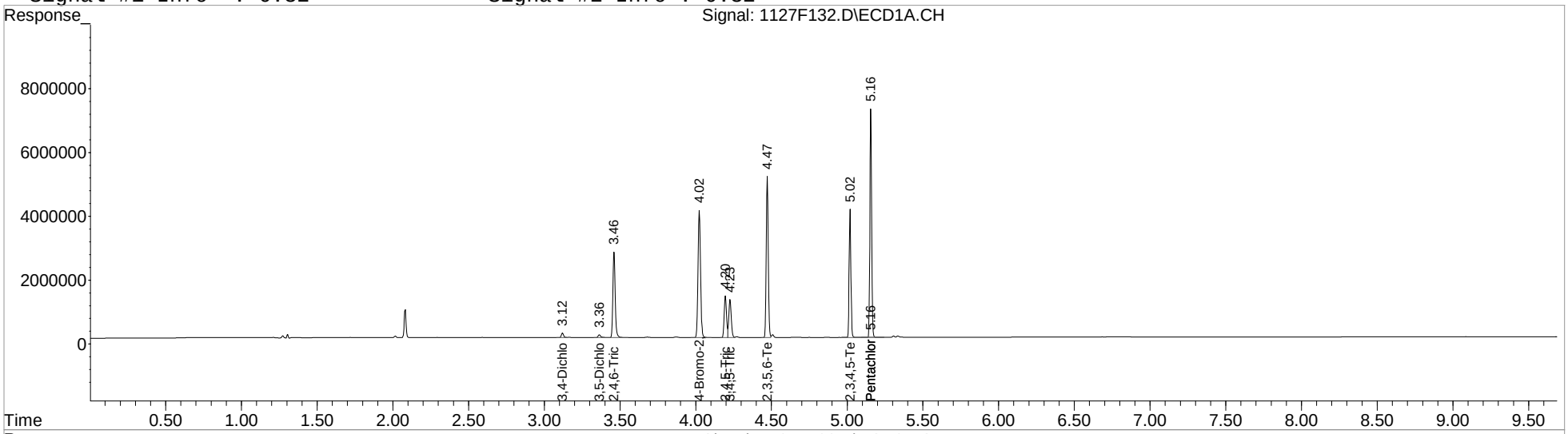
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

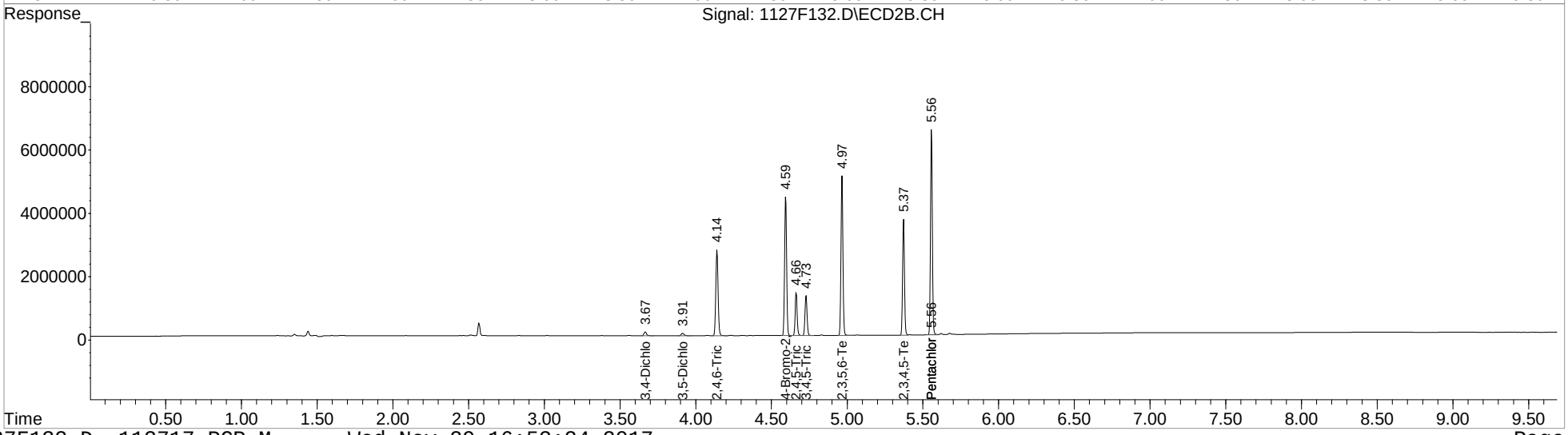
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



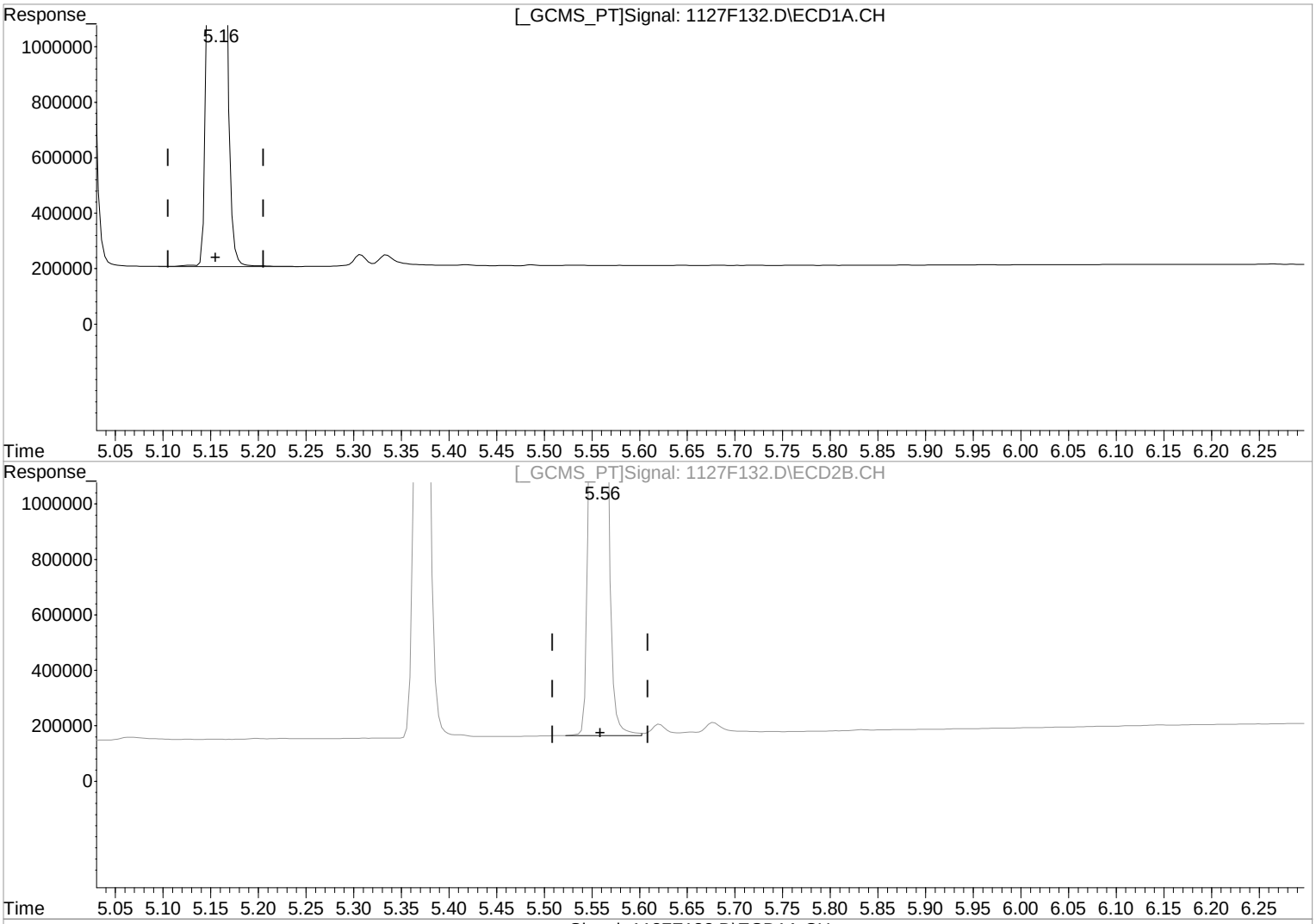


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F132.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 105.722ug/L

response 58837190

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(10) Pentachloroanisole #2

5.56min 95.088ug/L m

response 53900478

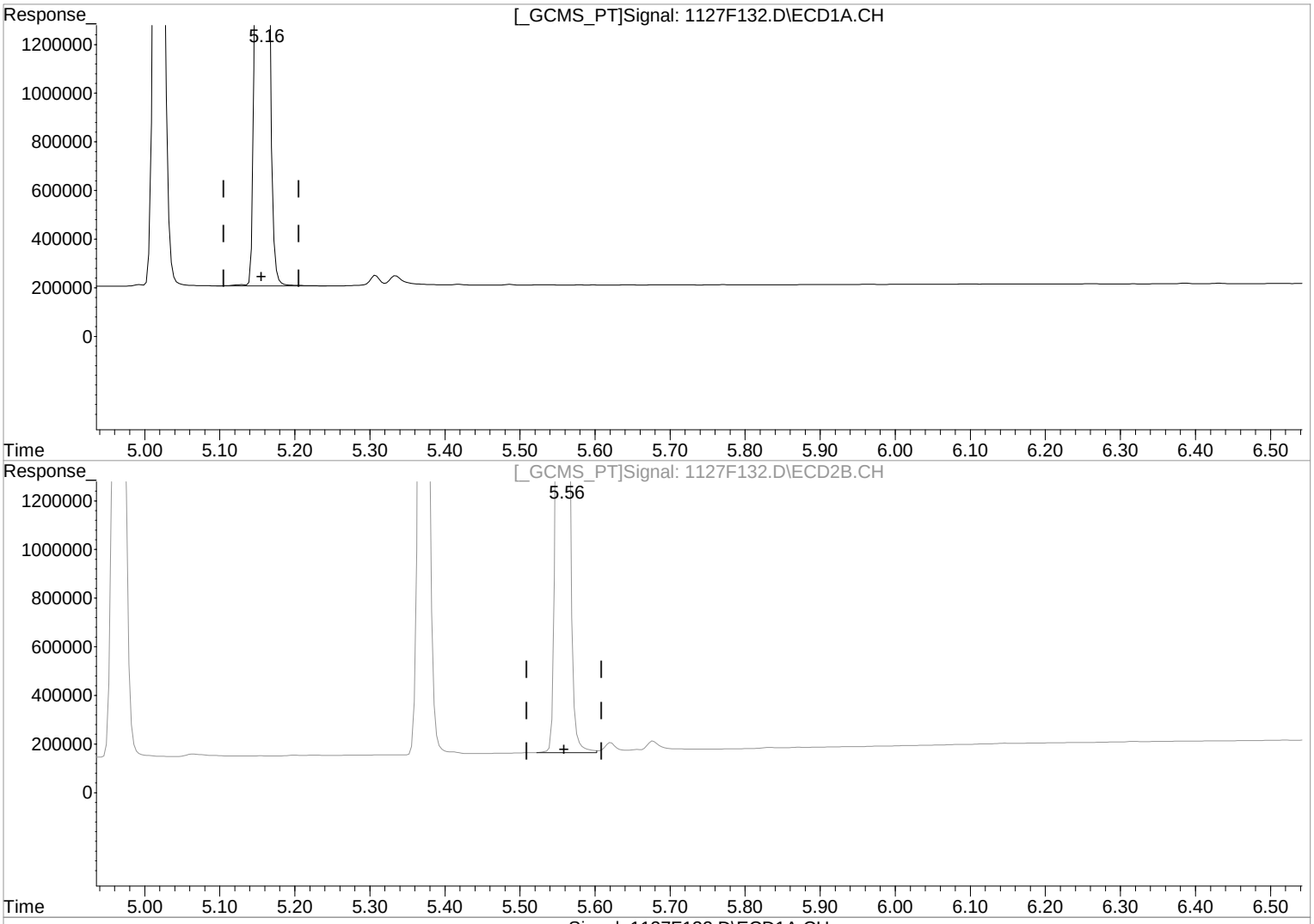
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F132.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 100.489ug/L

response 58837190

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 90.377ug/L m

response 53885886

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD2B.CH
Acq On : 27 Nov 2017 8:50 pm Operator: CV
Sample : PENTA01-88C 250 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:07:29 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	106.4E6	95029258	353.601	365.158
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	2913944	2910812	179.722	155.365
2)		3,5-Dichlorophen	3.36	3.91	2192854	2185628	181.462	166.427
3)		2,4,6-Trichlorop	3.46	4.14	62598844	64308464	176.555	178.851
5)		2,4,5-Trichlorop	4.20	4.66	29452628	28960918	189.418	176.266
6)		3,4,5-Trichlorop	4.23	4.73	28327676	27111646	178.102	186.838
7)	M	2,3,5,6-Tetrachl	4.47	4.97	103.3E6	102.6E6	206.131	204.112
8)	M	2,3,4,5-Tetrachl	5.02	5.37	73882544	72867544	217.377	213.263
9)	M	Pentachloropheno	5.16	5.56	133.3E6	129.4E6	227.744	216.997
10)		Pentachloroaniso	5.16	5.56	133.3E6	129.4E6	239.603	228.245

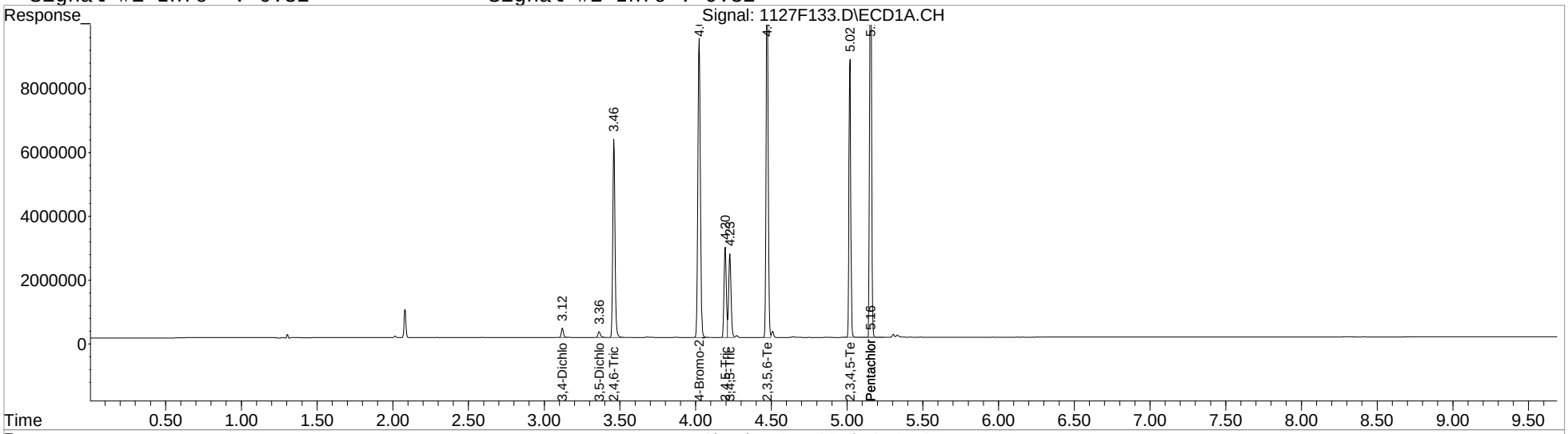
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

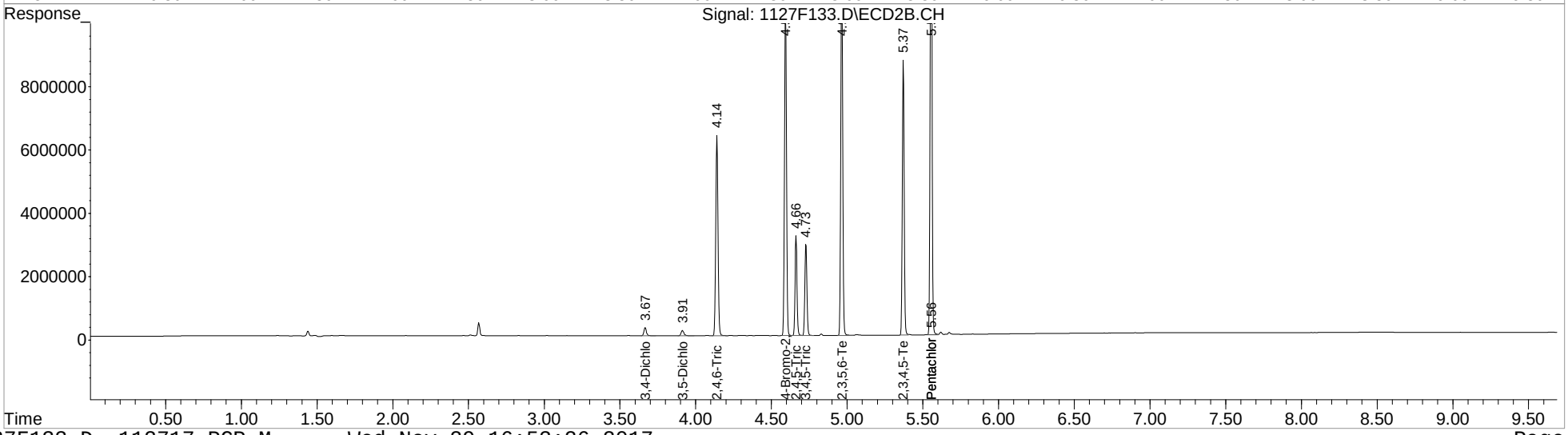
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD2B.CH
Acq On : 27 Nov 2017 8:50 pm Operator: CV
Sample : PENTA01-88C 250 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:07 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD2B.CH
Acq On : 27 Nov 2017 9:08 pm Operator: CV
Sample : PENTA01-88N 500 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:40:27 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	0.00	0.00	0	0	N.D. d	N.D. d
		Target Compounds						
1)		3,4-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
2)		3,5-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
3)		2,4,6-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
5)		2,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
6)		3,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
9)	M	Pentachloropheno	5.15	5.56	258.3E6	266.6E6	441.097	447.195
10)		Pentachloroaniso	5.15	5.56	258.3E6	266.6E6	464.065	470.376

Penta and anisole only

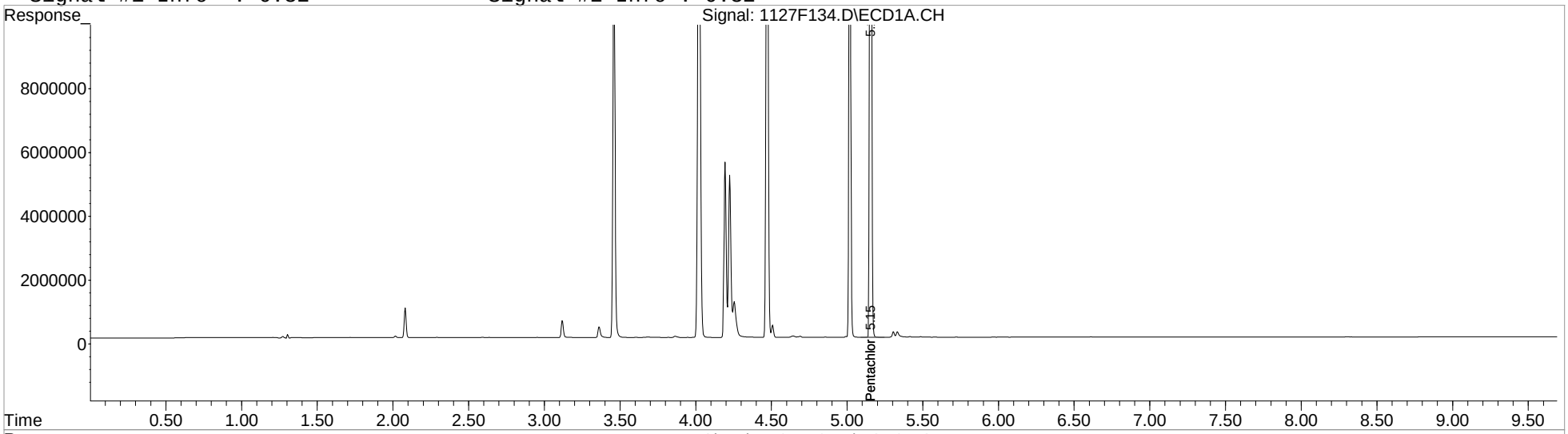
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

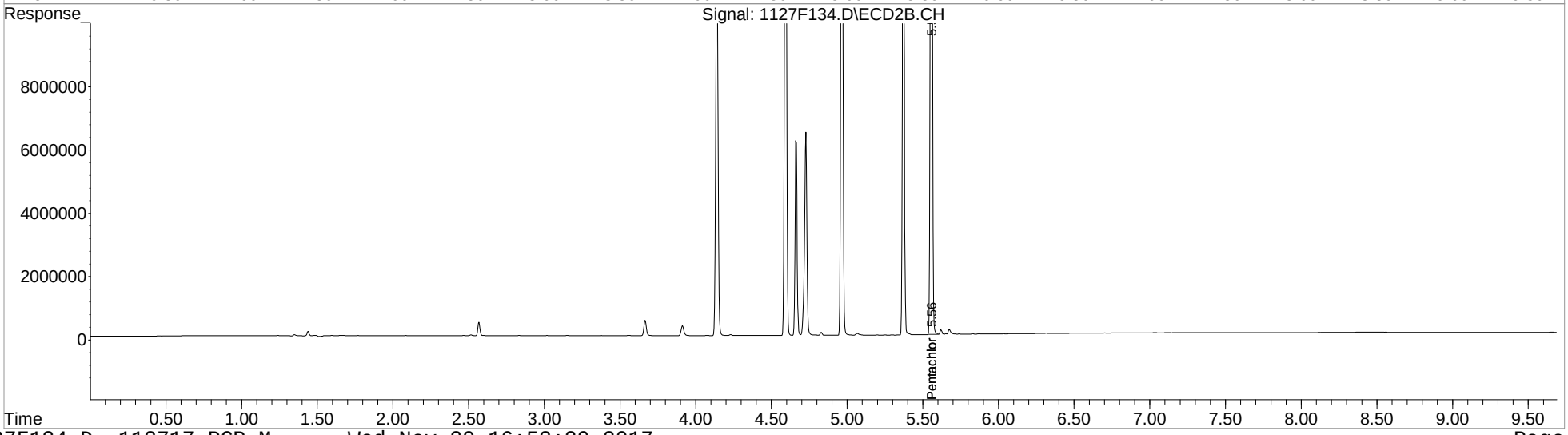
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD2B.CH
Acq On : 27 Nov 2017 9:08 pm Operator: CV
Sample : PENTA01-88N 500 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:40 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD2B.CH
Acq On : 27 Nov 2017 9:27 pm Operator: CV
Sample : PENTA01-88M 1000 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:10:53 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	0.00	0.00	0	0	N.D. d	N.D. d
		Target Compounds						
1)		3,4-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
2)		3,5-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
3)		2,4,6-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
5)		2,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
6)		3,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
9)	M	Pentachloropheno	5.16	5.56	484.7E6	524.6E6	827.802	879.883
10)		Pentachloroaniso	5.16	5.56	484.7E6	524.6E6	870.906	925.495

Penta and anisole only

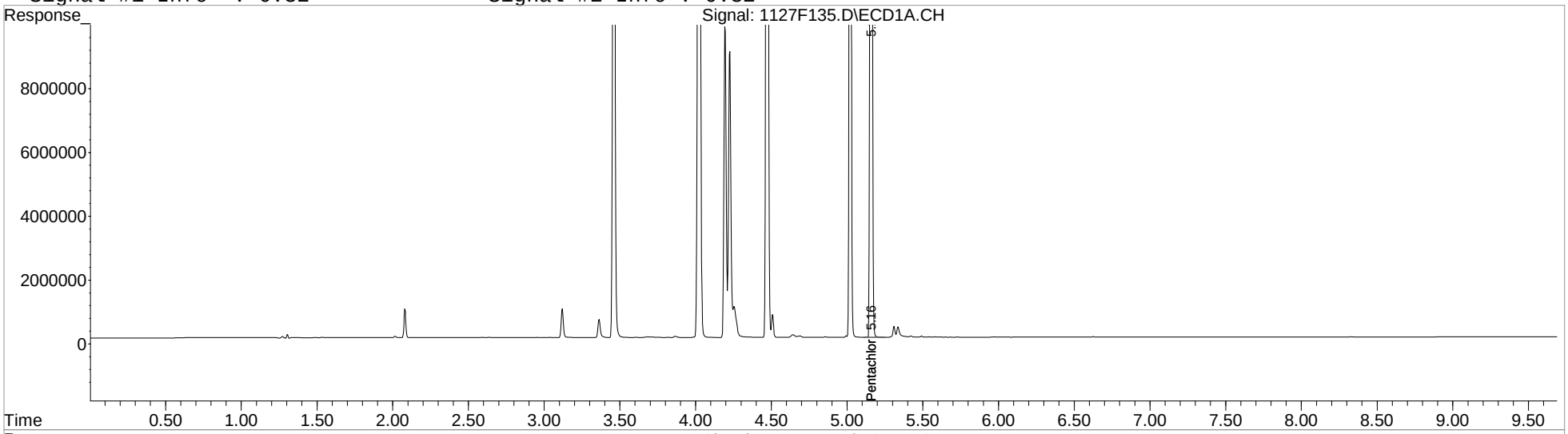
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

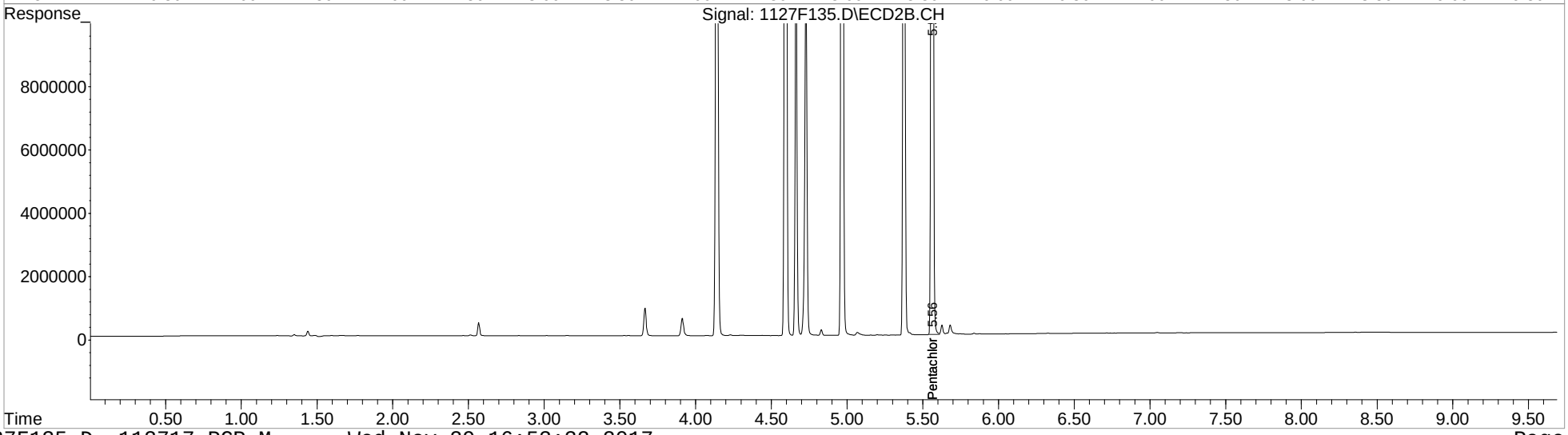
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD2B.CH
Acq On : 27 Nov 2017 9:27 pm Operator: CV
Sample : PENTA01-88M 1000 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:45 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:47:58 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.01	4.57	6162	7584	0.020	0.029 #
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.66	769118	732270	47.437	39.085
2)		3,5-Dichlorophen	3.36	3.91	483034	541656	39.972m	41.245
3)		2,4,6-Trichlorop	3.46	4.14	14150702	12878254	39.911	35.816
5)		2,4,5-Trichlorop	4.19	4.66	7083376	6313060	45.555	38.423
6)		3,4,5-Trichlorop	4.22	4.73	6656538	5862514	41.851	40.401
7)	M	2,3,5,6-Tetrachl	4.47	4.97	22573818	20683576	45.030	41.160
8)	M	2,3,4,5-Tetrachl	5.02	5.37	16083160	14736668	47.320	43.130
9)	M	Pentachloropheno	5.16	5.56	28261942	25806018	49.255	43.863
10)		Pentachloroaniso	5.16	5.56	28261942	25806018	51.824	46.142

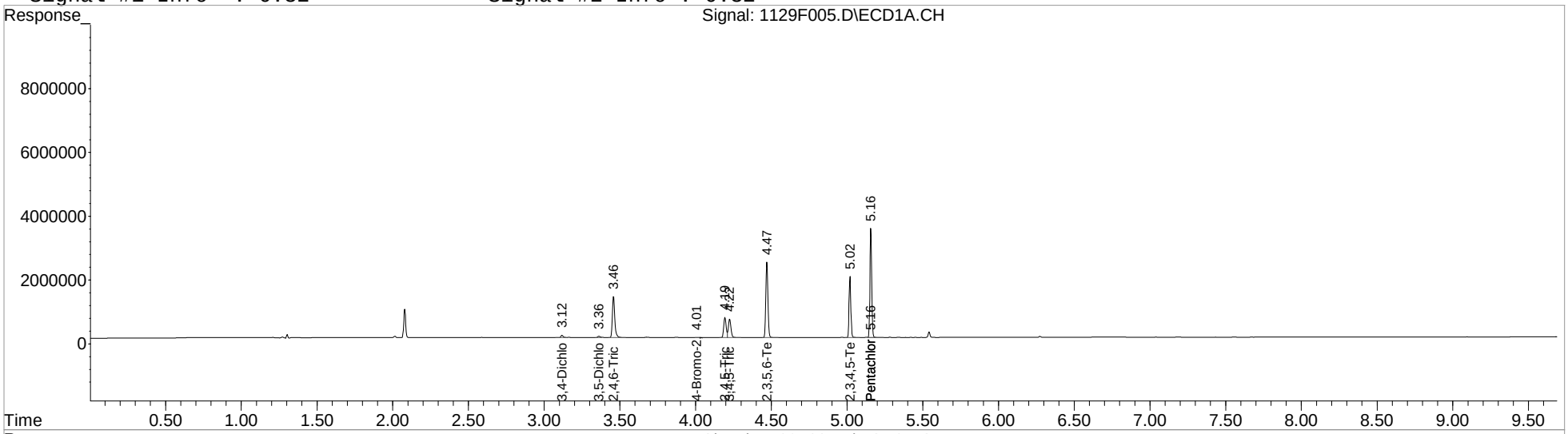
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

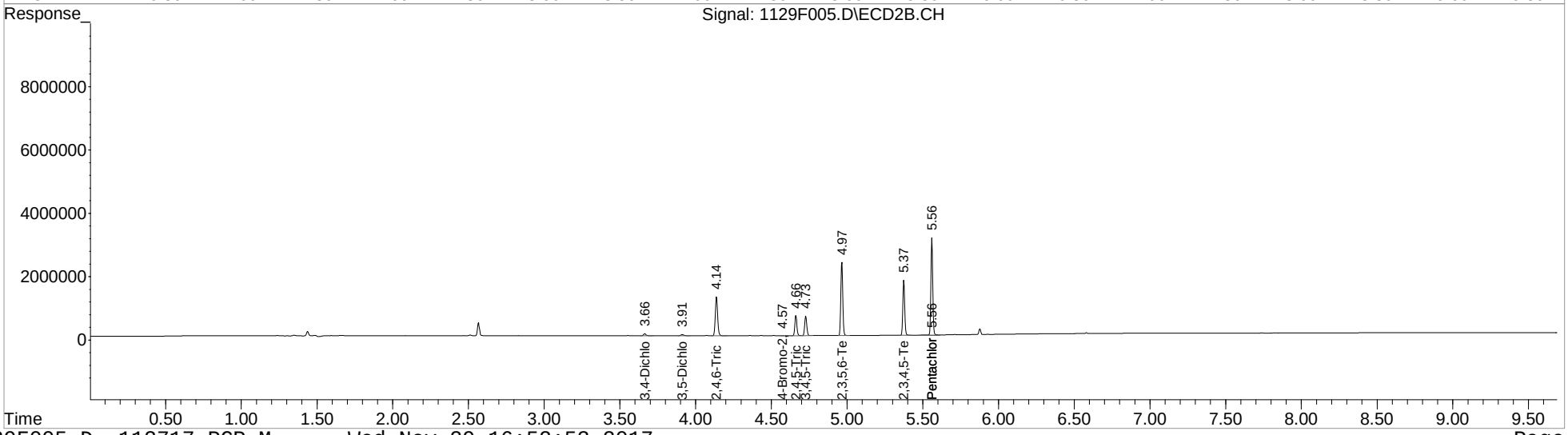
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:48 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



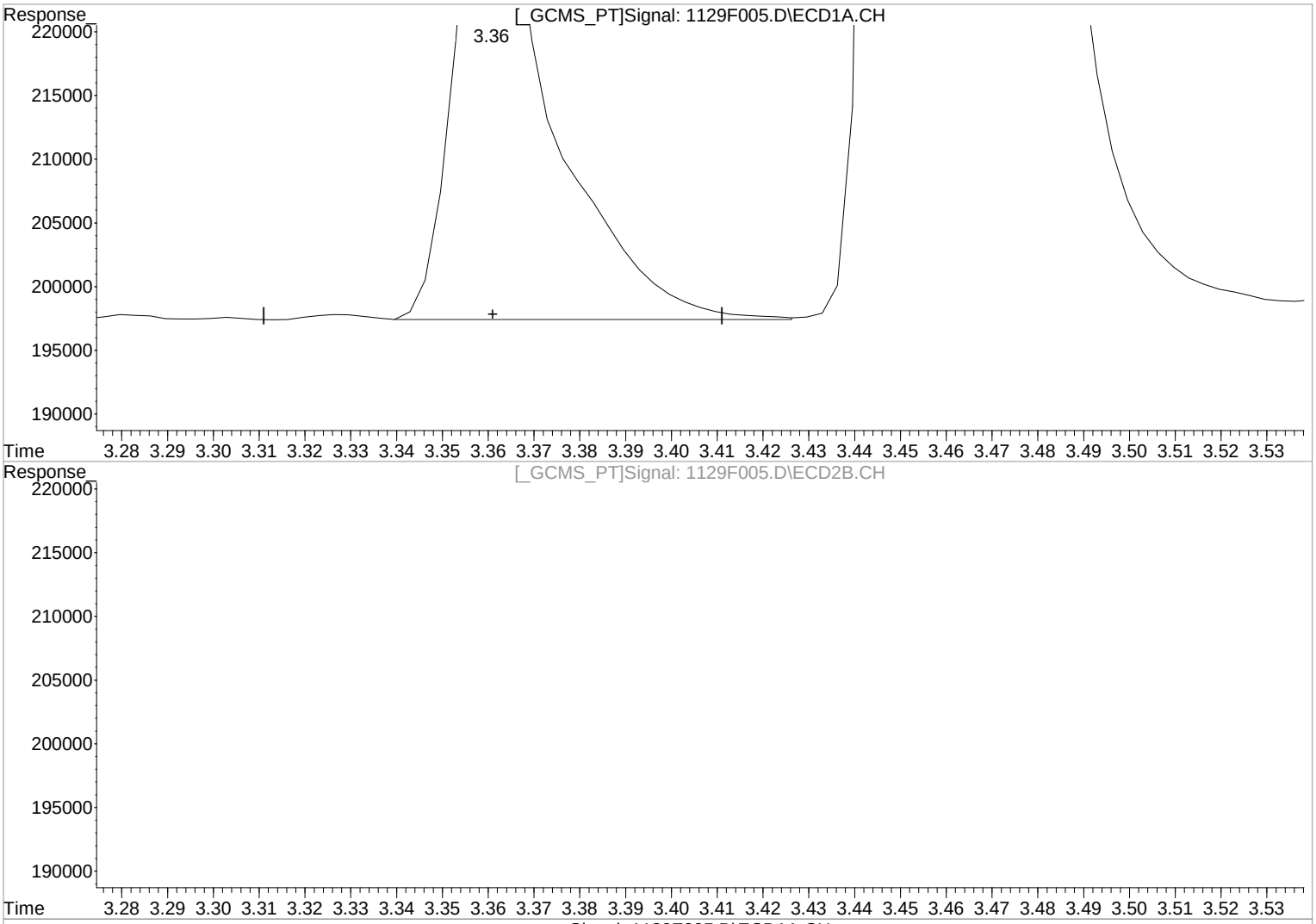


Quantitation Report (Qedit)

1st 11/30/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 30 14:47 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Thu Nov 30 14:18:39 2017
Response via : Multiple Level Calibration



Signal: 1129F005.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 45.764ug/L

response 557528

(2) 3,5-Dichlorophenol #2

3.91min 43.808ug/L

response 541656

Manual Integration:

Before

11/30/17

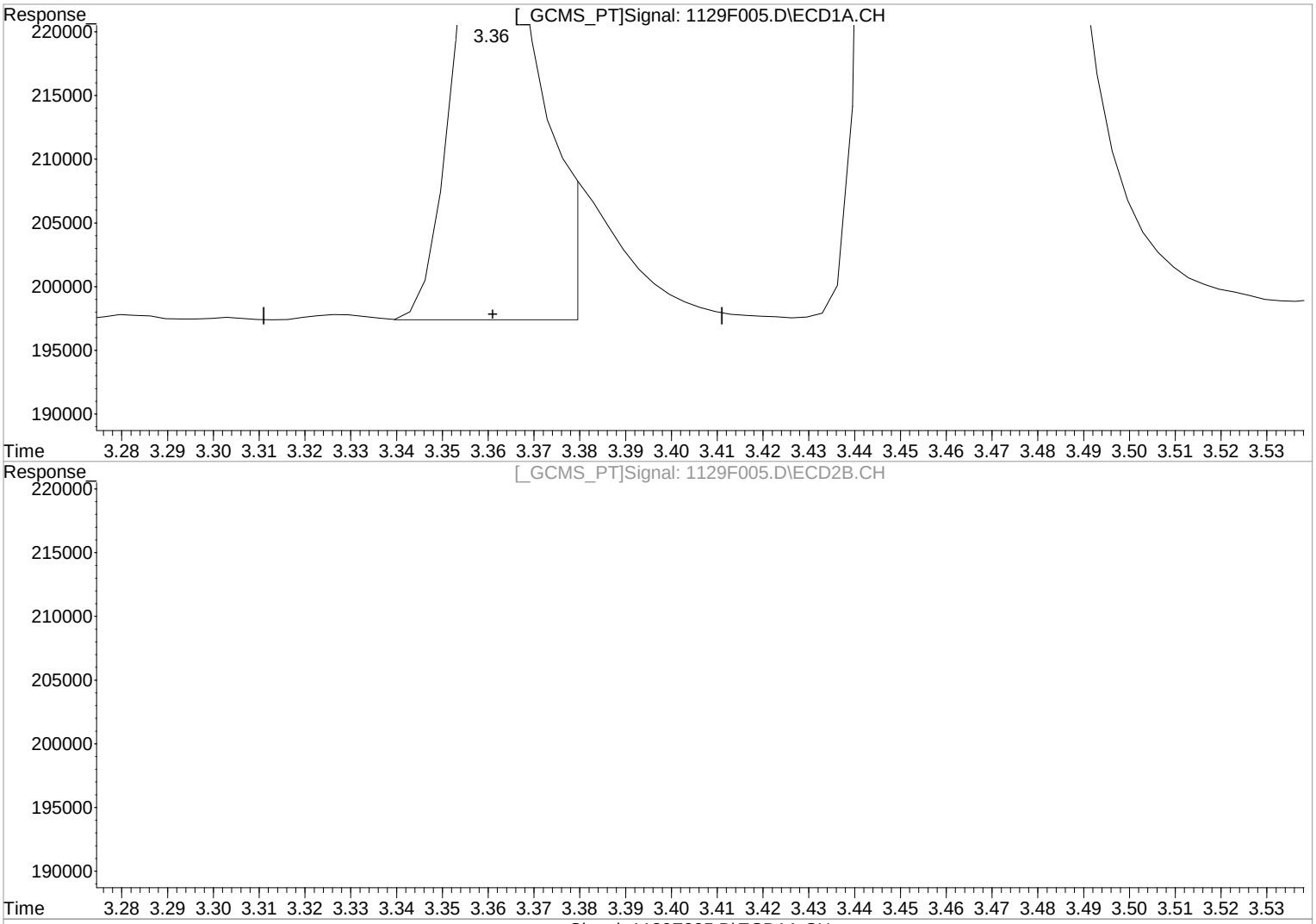
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/30/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 30 14:47 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Thu Nov 30 14:18:39 2017
Response via : Multiple Level Calibration



Signal: 1129F005.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 40.059ug/L m

response 488026

Manual Integration:

After

Baseline/Shoulder

11/30/17

(2) 3,5-Dichlorophenol #2

3.91min 43.808ug/L

response 541656

(+) = Expected Retention Time

ALS Environmental
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www.alsglobal.com

April 12, 2018

Analytical Report for Service Request No: K1802582

Scott Thielke
JH Baxter & Company
85 N. Baxter Road
P.O. Box 10797
Eugene, OR 97440

RE: Arlington Landfill Wells / Landfill Program

Dear Scott,

Enclosed are the results of the sample(s) submitted to our laboratory March 20, 2018
For your reference, these analyses have been assigned our service request number **K1802582.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3350. You may also contact me via email at Kelley.Lovejoy@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Kelley Lovejoy

Kelley Lovejoy
Project Manager

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ALS Group USA, Corp
1317 South 13th Avenue
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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: JH Baxter & Company
Project: Arlington Landfill Wells
Sample Matrix: Water

Service Request: K1802582
Date Received: 03/20/2018

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Laboratory Duplicate (DUP), Matrix Spike (MS), Matrix/Duplicate Matrix Spike (MS/DMS), Laboratory Control Sample (LCS), and Laboratory/Duplicate Laboratory Control Sample (LCS/DLCS).

Sample Receipt:

Three water samples were received for analysis at ALS Environmental on 03/20/2018. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

Semivolatiles by GC/MS:

Insufficient sample volume was received to perform a Matrix Spike/Matrix Spike Duplicate (MS/MSD) with this sample batch. A Laboratory Control Sample/Duplicate Laboratory Control Sample (LCS/DLCS) was analyzed and reported in lieu of the MS/MSD for these samples.

Semivoa GC:

Method 8151A Modified PCP:The control criteria for matrix spike recovery of Pentachlorophenol for sample Batch QC were not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

Approved by Kelley Bourjoy Date 04/12/2018

Chain of Custody

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1317 South 13th, Kelso, WA 98626 (360) 577-7222 FAX (360) 636-1068

SR# K1802582

PAGE _____ OF _____

0H	7D	28D	1800	7D

Project Name: JH Baxter - Arlington **Project Number:** _____

Project Manager: _____ **Company:** JH Baxter

Company/Address: 85 N Baxter Rd **Phone:** 541-689-3801

City, State, Zip: Eugene, OR 97402 **FAX:** 541-689-0769

Sampler's Signature: _____

Sample I.D.	Date	Time	LAB ID	Matrix	Number of Containers	Analysis Requested: SM 4500-H+ B / Ph	8270 D / PAH SIM	120.1 / Cond Spec	300.0 Chloride	300.0 / SO4	350.1 / Ammonia T	353.2 / NO2 NO3 T	SM 5220 C / COD T	SM 5310 / TOC T	SM 5550 B / Tan Lign	6010 C / Metals D	SM 2540 C TDS	8151 A Modified/PCP only	REMARKS
BXS-1	3/17/18	1091		water	2		X											X	Site investigation
BXS-2	3/17/18	157		water	2		X											X	Site investigation
BXS-4	3/17/18	0845		water	4	X		X	X	X	X	X	X	X	X	X	X		Landfill Program

TURNAROUND REQUIREMENTS

_____ 24 hr _____ 48 hr _____ 5 day

_X_ Standard (21 days)

_____ Provide FAX Preliminary Results

Requested Report Date: _____

REPORT REQUIREMENTS

_____ I. Routine Report: Results, Method Blank, Surrogate, as required

_X_ II. Report Dup., MS, MSD as required

_____ III. Data Validation Report (includes raw data)

_____ IV. CLP Deliverable Report

_____ V. EDD

Comments/Special Instructions:

Baxter is responsible for BXS-4 during Quarters 1 & 3

PAH samples have 2 - 500ml amber bottles

BXS 1&2 quarterly for PCP AND PAH'S

Questions? - Please Call Steven Kuhlmeier @ GSI Water Solutions 971-200-8529

Invoice Information

P.O. # _____

Bill to: JH Baxter & Co
San Mateo CA,94402

RELINQUISHED BY:

Signature: _____

Printed Name: Matt Hance

Firm: JH Baxter

Date/Time: 3/19/18 1400

RECEIVED BY:

Signature: _____

Printed Name: Brickman

Firm: ALS

Date/Time: 3/20/18 0940

RELINQUISHED BY:

Signature: _____

Printed Name: _____

Firm: _____

Date/Time: _____

RECEIVED BY:

Signature: _____

Printed Name: _____

Firm: _____

Date/Time: _____

PC KL

Cooler Receipt and Preservation Form

Client J.H. Baxter Service Request *K18* 02582

Received: 3/20/18 Opened: 3/20/18 By: BR Unloaded: 3/20/18 By: BR

1. Samples were received via? *USPS* (*Fed Ex*) *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? front
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID NA	Tracking Number NA	Filed
2.4	2.3	7.1	7.0	-0.1	298		772724389242	
-0.2	-0.3	—	—	-0.1	328		772724389853	

4. Packing material: (*Inserts*) *Baggies* (*Bubble Wrap*) (*Gel Packs*) (*Wet Ice*) *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* NA (Y) N
   If applicable, tissue samples were received: ***Frozen*** ***Partially Thawed*** ***Thawed***
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA (Y) N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA (Y) N
12. Was C12/Res negative? NA (Y) N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____

General Chemistry

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www.alsglobal.com

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/18
Sample Matrix:	Water	**Date Received:**	03/20/18
Analysis Method:	120.1	**Units:**	uMHOS/cm
Prep Method:	None	**Basis:**	NA

Conductivity at 25 Degrees Celsius

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
BXS-4	K1802582-003	**207**	2.0	0.4	1	03/23/18 09:30	
Method Blank	K1802582-MB1	**0.9 J**	2.0	0.4	1	03/23/18 09:30	
Method Blank	K1802582-MB2	**1.0 J**	2.0	0.4	1	03/23/18 09:30	

ALS Group USA, Corp.

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project	Arlington Landfill Wells/Landfill Program	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Analysis Method:	120.1	**Units:**	uMHOS/cm
Prep Method:	None	**Basis:**	NA

Replicate Sample Summary

Conductivity at 25 Degrees Celsius

Sample Name:	Lab Code:	MRL	MDL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
Batch QC	K1802295-005DUP	2.0	0.4	77.2	72.6	74.9	6	20	03/23/18
Batch QC	K1802315-004DUP	2.0	0.4	318	326	322	3	20	03/23/18

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ALS Group USA, Corp.
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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Analyzed:**	03/23/18
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Conductivity at 25 Degrees Celsius

Analysis Method:	120.1	**Units:**	uMHOS/cm
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	585054

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1802582-LCS1	255	234	109	86-113
Lab Control Sample	K1802582-LCS2	257	234	110	86-113
Lab Control Sample	K1802582-LCS3	255	234	109	86-113
Lab Control Sample	K1802582-LCS4	257	234	110	86-113

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/18
Sample Matrix:	Water	**Date Received:**	03/20/18
Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Chloride

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
BXS-4	K1802582-003	**1.96**	0.20	0.06	2	03/29/18 14:22	
Method Blank	K1802582-MB1	ND U	0.10	0.03	1	03/29/18 12:42	

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project	Arlington Landfill Wells/Landfill Program	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Replicate Sample Summary
Chloride

Sample Name:	Lab Code:	MRL	MDL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
Batch QC	K1802883-004DUP	0.20	0.06	ND U	ND U	NC	NC	20	03/29/18
Batch QC	K1802919-004DUP	0.20	0.06	2.50	2.35	2.42	6	20	03/30/18
Batch QC	K1802919-010DUP	0.20	0.06	2.42	2.36	2.39	2	20	03/29/18
Batch QC	K1802919-011DUP	0.20	0.06	3.05	3.04	3.04	<1	20	03/29/18

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	03/30/18
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Chloride

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1802919-004	**Basis:**	NA
Analysis Method:	300.0		
Prep Method:	None		

		Matrix Spike K1802919-004MS			Duplicate Matrix Spike K1802919-004DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	2.50	10.1	8.00	95	10.1	8.00	95	90-110	<1	20

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	03/29/18
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Chloride

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1802883-004	**Basis:**	NA
Analysis Method:	300.0		
Prep Method:	None		

		Matrix Spike			Duplicate Matrix Spike					
		K1802883-004MS			K1802883-004DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	ND U	7.56	8.00	94	7.62	8.00	95	90-110	<1	20

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Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Analyzed:**	03/29/18
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Chloride

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	585554

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1802582-LCS1	5.02	5.00	100	90-110

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/18
Sample Matrix:	Water	**Date Received:**	03/20/18
Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Sulfate

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
BXS-4	K1802582-003	**1.71**	0.20	0.02	2	03/29/18 14:22	
Method Blank	K1802582-MB1	ND U	0.10	0.01	1	03/29/18 12:42	

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project	Arlington Landfill Wells/Landfill Program	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Replicate Sample Summary

Sulfate

Sample Name:	Lab Code:	MRL	MDL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
Batch QC	K1802883-004DUP	0.20	0.02	ND U	0.20 J	NC	NC	20	03/29/18
Batch QC	K1802919-004DUP	0.20	0.02	1.17	1.12	1.14	5	20	03/30/18
Batch QC	K1802919-011DUP	0.20	0.02	5.51	5.38	5.44	2	20	03/29/18

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ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	03/30/18
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1802919-004	**Basis:**	NA
Analysis Method:	300.0		
Prep Method:	None		

		Matrix Spike K1802919-004MS			**Duplicate Matrix Spike** K1802919-004DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	1.17	8.79	8.00	95	8.99	8.00	98	90-110	2	20

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Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	03/29/18
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1802883-004	**Basis:**	NA
Analysis Method:	300.0		
Prep Method:	None		

		Matrix Spike			Duplicate Matrix Spike					
		K1802883-004MS			K1802883-004DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	ND U	7.83	8.00	98	7.88	8.00	98	90-110	<1	20

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ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Analyzed:**	03/29/18
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Sulfate

Analysis Method:	300.0	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	585554

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1802582-LCS1	5.07	5.00	101	90-110

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/18
Sample Matrix:	Water	**Date Received:**	03/20/18
Analysis Method:	353.2	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Nitrate+Nitrite as Nitrogen

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
BXS-4	K1802582-003	ND U	0.050	0.020	1	03/28/18 10:38	
Method Blank	K1802582-MB1	ND U	0.050	0.020	1	03/28/18 10:38	
Method Blank	K1802582-MB2	ND U	0.050	0.020	1	03/28/18 10:38	
Method Blank	K1802582-MB3	ND U	0.050	0.020	1	03/28/18 10:38	

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project	Arlington Landfill Wells/Landfill Program	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Analysis Method:	353.2	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Replicate Sample Summary
Nitrate+Nitrite as Nitrogen

Sample Name:	Lab Code:	MRL	MDL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
Batch QC	K1802416-001DUP	0.050	0.020	ND U	ND U	NC	NC	20	03/28/18
Batch QC	K1802611-010DUP	0.050	0.020	ND U	ND U	NC	NC	20	03/28/18
Batch QC	K1802627-001DUP	0.050	0.020	ND U	ND U	NC	NC	20	03/28/18
Batch QC	K1802630-001DUP	0.050	0.020	ND U	ND U	NC	NC	20	03/28/18
Batch QC	K1802630-005DUP	0.050	0.020	ND U	ND U	NC	NC	20	03/28/18
Batch QC	K1802630-027DUP	0.050	0.020	ND U	ND U	NC	NC	20	03/28/18

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	03/28/18
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Nitrate+Nitrite as Nitrogen

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1802416-001	**Basis:**	NA
Analysis Method:	353.2		
Prep Method:	None		

		Matrix Spike K1802416-001MS			Duplicate Matrix Spike K1802416-001DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate+Nitrite as Nitrogen	ND U	1.02	1.00	102	1.02	1.00	102	90-110	<1	20

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dba ALS Environmental

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	03/28/18
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Nitrate+Nitrite as Nitrogen

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1802611-010	**Basis:**	NA
Analysis Method:	353.2		
Prep Method:	None		

		Matrix Spike K1802611-010MS			Duplicate Matrix Spike K1802611-010DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate+Nitrite as Nitrogen	ND U	1.07	1.00	107	1.07	1.00	107	90-110	<1	20

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ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	03/28/18
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Nitrate+Nitrite as Nitrogen

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1802627-001	**Basis:**	NA
Analysis Method:	353.2		
Prep Method:	None		

		Matrix Spike K1802627-001MS			Duplicate Matrix Spike K1802627-001DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate+Nitrite as Nitrogen	ND U	1.07	1.00	107	1.07	1.00	107	90-110	<1	20

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ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	03/28/18
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Nitrate+Nitrite as Nitrogen

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1802630-001	**Basis:**	NA
Analysis Method:	353.2		
Prep Method:	None		

		Matrix Spike K1802630-001MS			Duplicate Matrix Spike K1802630-001DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate+Nitrite as Nitrogen	ND U	1.07	1.00	107	1.07	1.00	107	90-110	<1	20

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	03/28/18
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Nitrate+Nitrite as Nitrogen

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1802630-005	**Basis:**	NA
Analysis Method:	353.2		
Prep Method:	None		

		Matrix Spike K1802630-005MS			Duplicate Matrix Spike K1802630-005DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate+Nitrite as Nitrogen	ND U	1.07	1.00	107	1.08	1.00	108	90-110	<1	20

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	03/28/18
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Nitrate+Nitrite as Nitrogen

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1802630-027	**Basis:**	NA
Analysis Method:	353.2		
Prep Method:	None		

		Matrix Spike K1802630-027MS			Duplicate Matrix Spike K1802630-027DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate+Nitrite as Nitrogen	ND U	1.08	1.00	108	1.08	1.00	108	90-110	<1	20

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Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Analyzed:**	03/28/18
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Nitrate+Nitrite as Nitrogen

Analysis Method:	353.2	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	585309

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1802582-LCS1	4.59	4.75	97	90-110
Lab Control Sample	K1802582-LCS2	4.29	4.75	90	90-110
Lab Control Sample	K1802582-LCS3	4.58	4.75	96	90-110

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/18
Sample Matrix:	Water	**Date Received:**	03/20/18
Analysis Method:	SM 2540 C	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Solids, Total Dissolved

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
BXS-4	K1802582-003	**133**	5.0	-	1	03/22/18 11:00	
Method Blank	K1802582-MB1	ND U	5.0	-	1	03/22/18 11:00	
Method Blank	K1802582-MB2	ND U	5.0	-	1	03/22/18 11:00	

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project	Arlington Landfill Wells/Landfill Program	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Analysis Method:	SM 2540 C	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Replicate Sample Summary

Solids, Total Dissolved

Sample Name:	Lab Code:	MRL	MDL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
Batch QC	K1802560-003DUP	5.0	-	722	726	724	<1	10	03/22/18
Batch QC	K1802637-001DUP	5.0	-	106	96.7	101	9	10	03/22/18

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Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Analyzed:**	03/22/18
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Solids, Total Dissolved

Analysis Method:	SM 2540 C	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	584959

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1802582-LCS1	507	523	97	85-115

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/18
Sample Matrix:	Water	**Date Received:**	03/20/18
Analysis Method:	SM 4500-H+ B	**Units:**	pH Units
Prep Method:	None	**Basis:**	NA

pH

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
BXS-4	K1802582-003	**8.30**	-	-	1	03/21/18 10:47	H

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/18
Sample Matrix:	Water	**Date Received:**	03/20/18
		Date Analyzed:	03/21/18

Replicate Sample Summary

General Chemistry Parameters

Sample Name:	BXS-4	**Units:**	pH Units
Lab Code:	K1802582-003	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample K1802582-003DUP Result	Average	RPD	RPD Limit
pH	SM 4500-H+ B	-	-	8.30	8.33	8.32	<1	20

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Analyzed:**	03/21/18
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
pH

Analysis Method:	SM 4500-H+ B	**Units:**	pH Units
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	583396

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1802582-LCS1	8.31	8.41	99	85-115

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/18
Sample Matrix:	Water	**Date Received:**	03/20/18
Analysis Method:	SM 4500-NH3 G	**Units:**	mg/L
Prep Method:	Method	**Basis:**	NA

Ammonia as Nitrogen

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
BXS-4	K1802582-003	**0.515**	0.050	0.020	1	03/29/18 15:15	3/29/18	
Method Blank	K1802582-MB1	ND U	0.050	0.020	1	03/29/18 15:15	3/29/18	

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/18
Sample Matrix:	Water	**Date Received:**	03/20/18
Analysis Method:	SM 4500-NH3 G	**Units:**	mg/L
Prep Method:	Method	**Basis:**	NA

Replicate Sample Summary
Ammonia as Nitrogen

Sample Name:	Lab Code:	MRL	MDL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
BXS-4	K1802582-003DUP	0.050	0.020	0.515	0.515	0.515	<1	20	03/29/18

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/18
Sample Matrix:	Water	**Date Received:**	03/20/18
		Date Analyzed:	03/29/18
		Date Extracted:	03/29/18

Duplicate Matrix Spike Summary
Ammonia as Nitrogen

Sample Name:	BXS-4	**Units:**	mg/L
Lab Code:	K1802582-003	**Basis:**	NA
Analysis Method:	SM 4500-NH3 G		
Prep Method:	Method		

		Matrix Spike K1802582-003MS			**Duplicate Matrix Spike** K1802582-003DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Ammonia as Nitrogen	0.515	1.48	1.00	97	1.48	1.00	97	90-110	<1	20

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Analyzed:**	03/29/18
Sample Matrix:	Water	**Date Extracted:**	03/29/18

Lab Control Sample Summary
Ammonia as Nitrogen

Analysis Method:	SM 4500-NH3 G	**Units:**	mg/L
Prep Method:	Method	**Basis:**	NA
		Analysis Lot:	585503

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1802582-LCS1	5.70	6.17	92	90-110

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/18
Sample Matrix:	Water	**Date Received:**	03/20/18
Analysis Method:	SM 5220 C	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Chemical Oxygen Demand (COD)

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
BXS-4	K1802582-003	**11.4**	5.0	3.0	1	03/29/18 15:00	
Method Blank	K1802582-MB1	ND U	5.0	3.0	1	03/29/18 15:00	
Method Blank	K1802582-MB2	ND U	5.0	3.0	1	03/29/18 15:00	
Method Blank	K1802582-MB3	ND U	5.0	3.0	1	03/29/18 15:00	
Method Blank	K1802582-MB4	ND U	5.0	3.0	1	03/29/18 15:00	

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project	Arlington Landfill Wells/Landfill Program	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Analysis Method:	SM 5220 C	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Replicate Sample Summary
Chemical Oxygen Demand (COD)

Sample Name:	Lab Code:	MRL	MDL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
Batch QC	K1802295-001DUP	5.0	3.0	14.6	12.5	13.5	15	20	03/29/18
Batch QC	K1802802-001DUP	5.0	3.0	110	114	112	4	20	03/29/18

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Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	03/29/18
		Date Extracted:	NA

Matrix Spike Summary
Chemical Oxygen Demand (COD)

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1802295-001	**Basis:**	NA
Analysis Method:	SM 5220 C		
Prep Method:	None		

Matrix Spike
K1802295-001MS

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Chemical Oxygen Demand (COD)	14.6	110	100	96	80-128

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Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	03/29/18
		Date Extracted:	NA

Matrix Spike Summary
Chemical Oxygen Demand (COD)

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1802802-001	**Basis:**	NA
Analysis Method:	SM 5220 C		
Prep Method:	None		

Matrix Spike
K1802802-001MS

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Chemical Oxygen Demand (COD)	110	220	100	110	80-128

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Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Analyzed:**	03/29/18
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Chemical Oxygen Demand (COD)

Analysis Method:	SM 5220 C	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	585448

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1802582-LCS1	127	121	105	83-117
Lab Control Sample	K1802582-LCS2	128	121	106	83-117

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/18
Sample Matrix:	Water	**Date Received:**	03/20/18
Analysis Method:	SM 5310 C	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Carbon, Total Organic

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
BXS-4	K1802582-003	**1.53**	0.50	0.07	1	03/23/18 05:48	
Method Blank	K1802582-MB1	ND U	0.50	0.07	1	03/22/18 22:19	
Method Blank	K1802582-MB2	ND U	0.50	0.07	1	03/23/18 07:10	

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/18
Sample Matrix:	Water	**Date Received:**	03/20/18
Analysis Method:	SM 5310 C	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Replicate Sample Summary
Carbon, Total Organic

Sample Name:	Lab Code:	MRL	MDL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
BXS-4	K1802582-003DUP	0.50	0.07	1.53	1.42	1.47	8	10	03/23/18

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/18
Sample Matrix:	Water	**Date Received:**	03/20/18
		Date Analyzed:	03/23/18
		Date Extracted:	NA

Matrix Spike Summary
Carbon, Total Organic

Sample Name:	BXS-4	**Units:**	mg/L
Lab Code:	K1802582-003	**Basis:**	NA
Analysis Method:	SM 5310 C		
Prep Method:	None		

Matrix Spike
K1802582-003MS

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Carbon, Total Organic	1.53	28.1	25.0	106	83-117

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Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Analyzed:**	03/22/18
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Carbon, Total Organic

Analysis Method:	SM 5310 C	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	584630

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1802582-LCS1	24.3	24.0	101	83-117
Lab Control Sample	K1802582-LCS2	24.1	24.0	100	83-117

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/18
Sample Matrix:	Water	**Date Received:**	03/20/18
Analysis Method:	SM 5550 B	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA

Tannin and Lignin

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
BXS-4	K1802582-003	**0.21**	0.20	0.03	1	03/28/18 11:41	
Method Blank	K1802582-MB1	ND U	0.20	0.03	1	03/28/18 11:41	

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project	Arlington Landfill Wells/Landfill Program	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	03/28/18

Replicate Sample Summary

General Chemistry Parameters

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1802680-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample K1802680-001DUP Result	Average	RPD	RPD Limit
Tannin and Lignin	SM 5550 B	0.40	0.06	2.19	2.14	2.16	2	20

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	03/28/18
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Tannin and Lignin

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1802680-001	**Basis:**	NA
Analysis Method:	SM 5550 B		
Prep Method:	None		

		Matrix Spike			Duplicate Matrix Spike					
		K1802680-001MS			K1802680-001DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Tannin and Lignin	2.19	4.02	2.00	91	4.03	2.00	92	75-120	1	20

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Analyzed:**	03/28/18
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Tannin and Lignin

Analysis Method:	SM 5550 B	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	585253

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1802582-LCS1	1.00	1.00	100	85-115

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/18 08:45
Sample Matrix:	Water	**Date Received:**	03/20/18 09:40
Sample Name:	BXS-4	**Basis:**	NA
Lab Code:	K1802582-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Barium	6010C	**35.9**	ug/L	4.2	0.6	1	04/04/18 13:01	03/22/18	
Copper	6010C	**1.4 J**	ug/L	4.2	0.9	1	04/04/18 13:01	03/22/18	
Iron	6010C	**825**	ug/L	21	3	1	04/04/18 13:01	03/22/18	
Manganese	6010C	**115**	ug/L	1.1	0.07	1	04/04/18 13:01	03/22/18	
Nickel	6010C	**1.9 J**	ug/L	4.2	0.4	1	04/04/18 13:01	03/22/18	
Zinc	6010C	**4.2**	ug/L	4.2	0.4	1	04/04/18 13:01	03/22/18	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ1803599-02		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Barium	6010C	ND U	ug/L	4.2	0.6	1	04/04/18 11:52	03/22/18	
Copper	6010C	ND U	ug/L	4.2	0.9	1	04/04/18 11:52	03/22/18	
Iron	6010C	ND U	ug/L	21	3	1	04/04/18 11:52	03/22/18	
Manganese	6010C	**0.1 J**	ug/L	1.1	0.07	1	04/04/18 11:52	03/22/18	
Nickel	6010C	ND U	ug/L	4.2	0.4	1	04/04/18 11:52	03/22/18	
Zinc	6010C	**0.9 J**	ug/L	4.2	0.4	1	04/04/18 11:52	03/22/18	

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project	Arlington Landfill Wells/Landfill Program	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
		Date Analyzed:	04/04/18

Replicate Sample Summary

Total Metals

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K1802516-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ1803599-03 Result	Average	RPD	RPD Limit
Barium	6010C	4.2	0.6	606	601	604	<1	20
Copper	6010C	4.2	0.9	ND U	ND U	ND	-	20
Iron	6010C	21	3	6620	6560	6590	<1	20
Manganese	6010C	1.1	0.07	863	851	857	1	20
Nickel	6010C	4.2	0.4	ND U	ND U	ND	-	20
Zinc	6010C	4.2	0.4	ND U	ND U	ND	-	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 4/10/2018 3:07:58 PM Superset Reference:

ALS Group USA, Corp.
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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	N/A
Sample Matrix:	Ground Water	**Date Received:**	N/A
		Date Analyzed:	04/4/18
		Date Extracted:	03/22/18

Matrix Spike Summary
Total Metals

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K1802516-001	**Basis:**	NA
Analysis Method:	6010C		
Prep Method:	EPA CLP-METALS ILM04.0		

Matrix Spike
KQ1803599-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Barium	606	1580	1000	97	75-125
Copper	ND U	234	250	94	75-125
Iron	6620	7520	1000	91 #	75-125
Manganese	863	1300	500	88	75-125
Nickel	ND U	449	500	90	75-125
Zinc	ND U	448	500	90	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

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Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 4/10/2018 3:07:58 PM Superset Reference:

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: JH Baxter & Company
Project: Arlington Landfill Wells/Landfill Program
Sample Matrix: Water

Service Request: K1802582
Date Analyzed: 04/04/18

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ1803599-01

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Barium	6010C	5000	5000	100	80-120
Copper	6010C	595	625	95	80-120
Iron	6010C	2470	2500	99	80-120
Manganese	6010C	1180	1250	94	80-120
Nickel	6010C	1180	1250	94	80-120
Zinc	6010C	1170	1250	93	80-120

Pentachlorophenol

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	BXS-1	**Units:**	ug/L
Lab Code:	K1802582-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	**8.9**		0.50	0.071	1	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	76	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Pentachlorophenol

Sample Name:	BXS-2	**Units:**	ug/L
Lab Code:	K1802582-002	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.071	1	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	77	55-130	03/27/18	Acceptable

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Pentachlorophenol

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1801629-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.071	1	03/21/18	03/27/18	KWG1801629	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	77	55-130	03/27/18	Acceptable

Comments:

QA/QC Report

Client: JH Baxter & Company **Service Request:** K1802582
Project: Arlington Landfill Wells/Landfill Program
Sample Matrix: Water

Surrogate Recovery Summary
Pentachlorophenol

Extraction Method: METHOD **Units:** Percent
Analysis Method: 8151M **Level:** Low

Sample Name	Lab Code	Sur1
Batch QC	K1802580-004	79
BXS-1	K1802582-001	76
BXS-2	K1802582-002	77
Method Blank	KWG1801629-4	77
Batch QCMS	KWG1801629-1	77
Batch QCDMS	KWG1801629-2	75
Lab Control Sample	KWG1801629-3	76

Surrogate Recovery Control Limits (%)

Sur1 = 4-Bromo-2,6-dichlorophenol 55-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Extracted:**	03/21/2018
Sample Matrix:	Water	**Date Analyzed:**	03/27/2018

Matrix Spike/Duplicate Matrix Spike Summary
Pentachlorophenol

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K1802580-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	8151M	**Extraction Lot:**	KWG1801629

		Batch QCMS KWG1801629-1 Matrix Spike			Batch QCDMS KWG1801629-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Pentachlorophenol	280	272E	10.0	-49 #	287E	10.0	104 #	22-136	5	30

Results flagged with an asterisk (*) indicate values outside control criteria.

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Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Extracted:**	03/21/2018
Sample Matrix:	Water	**Date Analyzed:**	03/27/2018

Lab Control Spike Summary
Pentachlorophenol

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	8151M	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1801629

	Lab Control Sample KWG1801629-3 Lab Control Spike			
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**
Pentachlorophenol	6.46	10.0	65	42-110

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Polynuclear Aromatic Hydrocarbons

ALS Environmental—Kelso Laboratory
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www.alsglobal.com

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	BXS-1	**Units:**	ug/L
Lab Code:	K1802582-001	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.010**	J	0.021	0.0015	1	03/22/18	03/30/18	KWG1801565	
2-Methylnaphthalene	**0.0068**	J	0.021	0.0014	1	03/22/18	03/30/18	KWG1801565	
Acenaphthylene	ND	U	0.021	0.0012	1	03/22/18	03/30/18	KWG1801565	
Acenaphthene	ND	U	0.021	0.0013	1	03/22/18	03/30/18	KWG1801565	
Fluorene	**0.0019**	J	0.021	0.0012	1	03/22/18	03/30/18	KWG1801565	
Phenanthrene	**0.0035**	J	0.021	0.0012	1	03/22/18	03/30/18	KWG1801565	
Anthracene	ND	U	0.021	0.00084	1	03/22/18	03/30/18	KWG1801565	
Fluoranthene	ND	U	0.021	0.00084	1	03/22/18	03/30/18	KWG1801565	
Pyrene	ND	U	0.021	0.0011	1	03/22/18	03/30/18	KWG1801565	
Benz(a)anthracene	**0.0025**	J	0.021	0.0010	1	03/22/18	03/30/18	KWG1801565	
Chrysene	ND	U	0.021	0.00078	1	03/22/18	03/30/18	KWG1801565	
Benzo(b)fluoranthene†	ND	U	0.021	0.00085	1	03/22/18	03/30/18	KWG1801565	
Benzo(k)fluoranthene	ND	U	0.021	0.00097	1	03/22/18	03/30/18	KWG1801565	
Benzo(a)pyrene	ND	U	0.021	0.0012	1	03/22/18	03/30/18	KWG1801565	
Indeno(1,2,3-cd)pyrene	ND	U	0.021	0.00092	1	03/22/18	03/30/18	KWG1801565	
Dibenz(a,h)anthracene	ND	U	0.021	0.0014	1	03/22/18	03/30/18	KWG1801565	
Benzo(g,h,i)perylene	ND	U	0.021	0.00088	1	03/22/18	03/30/18	KWG1801565	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	88	42-131	03/30/18	Acceptable
Fluoranthene-d10	95	42-133	03/30/18	Acceptable
Terphenyl-d14	88	32-129	03/30/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	03/17/2018
Sample Matrix:	Water	**Date Received:**	03/20/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	BXS-2	**Units:**	ug/L
Lab Code:	K1802582-002	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0022**	J	0.021	0.0015	1	03/22/18	03/30/18	KWG1801565	
2-Methylnaphthalene	**0.0027**	J	0.021	0.0014	1	03/22/18	03/30/18	KWG1801565	
Acenaphthylene	ND	U	0.021	0.0012	1	03/22/18	03/30/18	KWG1801565	
Acenaphthene	ND	U	0.021	0.0013	1	03/22/18	03/30/18	KWG1801565	
Fluorene	ND	U	0.021	0.0012	1	03/22/18	03/30/18	KWG1801565	
Phenanthrene	ND	U	0.021	0.0012	1	03/22/18	03/30/18	KWG1801565	
Anthracene	ND	U	0.021	0.00083	1	03/22/18	03/30/18	KWG1801565	
Fluoranthene	ND	U	0.021	0.00083	1	03/22/18	03/30/18	KWG1801565	
Pyrene	ND	U	0.021	0.0011	1	03/22/18	03/30/18	KWG1801565	
Benz(a)anthracene	**0.0022**	J	0.021	0.00099	1	03/22/18	03/30/18	KWG1801565	
Chrysene	ND	U	0.021	0.00077	1	03/22/18	03/30/18	KWG1801565	
Benzo(b)fluoranthene†	ND	U	0.021	0.00084	1	03/22/18	03/30/18	KWG1801565	
Benzo(k)fluoranthene	ND	U	0.021	0.00096	1	03/22/18	03/30/18	KWG1801565	
Benzo(a)pyrene	ND	U	0.021	0.0012	1	03/22/18	03/30/18	KWG1801565	
Indeno(1,2,3-cd)pyrene	ND	U	0.021	0.00091	1	03/22/18	03/30/18	KWG1801565	
Dibenz(a,h)anthracene	ND	U	0.021	0.0014	1	03/22/18	03/30/18	KWG1801565	
Benzo(g,h,i)perylene	ND	U	0.021	0.00087	1	03/22/18	03/30/18	KWG1801565	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	83	42-131	03/30/18	Acceptable
Fluoranthene-d10	89	42-133	03/30/18	Acceptable
Terphenyl-d14	91	32-129	03/30/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1801565-3	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0020**	J	0.020	0.0014	1	03/22/18	03/29/18	KWG1801565	
2-Methylnaphthalene	ND	U	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Acenaphthylene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Acenaphthene	ND	U	0.020	0.0012	1	03/22/18	03/29/18	KWG1801565	
Fluorene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Phenanthrene	**0.0013**	J	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Anthracene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Fluoranthene	ND	U	0.020	0.00082	1	03/22/18	03/29/18	KWG1801565	
Pyrene	ND	U	0.020	0.0010	1	03/22/18	03/29/18	KWG1801565	
Benz(a)anthracene	**0.0023**	J	0.020	0.00097	1	03/22/18	03/29/18	KWG1801565	
Chrysene	ND	U	0.020	0.00076	1	03/22/18	03/29/18	KWG1801565	
Benzo(b)fluoranthene†	ND	U	0.020	0.00083	1	03/22/18	03/29/18	KWG1801565	
Benzo(k)fluoranthene	ND	U	0.020	0.00094	1	03/22/18	03/29/18	KWG1801565	
Benzo(a)pyrene	ND	U	0.020	0.0011	1	03/22/18	03/29/18	KWG1801565	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.00089	1	03/22/18	03/29/18	KWG1801565	
Dibenz(a,h)anthracene	ND	U	0.020	0.0013	1	03/22/18	03/29/18	KWG1801565	
Benzo(g,h,i)perylene	ND	U	0.020	0.00086	1	03/22/18	03/29/18	KWG1801565	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	89	42-131	03/29/18	Acceptable
Fluoranthene-d10	94	42-133	03/29/18	Acceptable
Terphenyl-d14	91	32-129	03/29/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

QA/QC Report

Client: JH Baxter & Company **Service Request:** K1802582
Project: Arlington Landfill Wells/Landfill Program
Sample Matrix: Water

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3511 **Units:** Percent
Analysis Method: 8270D SIM **Level:** Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
BXS-1	K1802582-001	88	95	88
BXS-2	K1802582-002	83	89	91
Method Blank	KWG1801565-3	89	94	91
Lab Control Sample	KWG1801565-1	94	102	91
Duplicate Lab Control Sample	KWG1801565-2	89	98	96

Surrogate Recovery Control Limits (%)

Sur1	=	Fluorene-d10	42-131
Sur2	=	Fluoranthene-d10	42-133
Sur3	=	Terphenyl-d14	32-129

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1802582
Project:	Arlington Landfill Wells/Landfill Program	**Date Extracted:**	03/22/2018
Sample Matrix:	Water	**Date Analyzed:**	03/29/2018

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3511	**Units:**	ug/L
Analysis Method:	8270D SIM	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1801565

	Lab Control Sample KWG1801565-1 Lab Control Spike			Duplicate Lab Control Sample KWG1801565-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	2.41	2.78	87	2.39	2.78	86	52-115	1	30
2-Methylnaphthalene	2.33	2.78	84	2.30	2.78	83	48-120	2	30
Acenaphthylene	2.58	2.78	93	2.55	2.78	92	58-124	2	30
Acenaphthene	2.62	2.78	94	2.56	2.78	92	63-121	2	30
Fluorene	2.62	2.78	94	2.56	2.78	92	68-121	3	30
Phenanthrene	2.56	2.78	92	2.48	2.78	89	64-126	3	30
Anthracene	2.62	2.78	94	2.54	2.78	92	68-127	3	30
Fluoranthene	2.51	2.78	90	2.47	2.78	89	70-127	1	30
Pyrene	2.82	2.78	101	2.79	2.78	101	72-127	1	30
Benz(a)anthracene	2.88	2.78	104	2.84	2.78	102	74-124	1	30
Chrysene	2.84	2.78	102	2.82	2.78	102	74-132	1	30
Benzo(b)fluoranthene	2.66	2.78	96	2.65	2.78	95	73-136	0	30
Benzo(k)fluoranthene	2.66	2.78	96	2.58	2.78	93	74-134	3	30
Benzo(a)pyrene	2.69	2.78	97	2.66	2.78	96	75-131	1	30
Indeno(1,2,3-cd)pyrene	2.66	2.78	96	2.60	2.78	94	63-136	2	30
Dibenz(a,h)anthracene	2.44	2.78	88	2.40	2.78	86	59-135	2	30
Benzo(g,h,i)perylene	2.65	2.78	95	2.61	2.78	94	63-127	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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July 10, 2018

Analytical Report for Service Request No: K1805807

Scott Thielke
JH Baxter & Company
85 N. Baxter Road
P.O. Box 10797
Eugene, OR 97440

RE: J.H. Baxter-Arlington

Dear Scott,

Enclosed are the results of the sample(s) submitted to our laboratory June 19, 2018
For your reference, these analyses have been assigned our service request number **K1805807.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3350. You may also contact me via email at Kelley.Lovejoy@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

for Kelley Lovejoy
Project Manager

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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Service Request: K1805807
Date Received: 06/19/2018

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt:

Two water samples were received for analysis at ALS Environmental on 06/19/2018. The samples were received in good condition and consistent with the accompanying chain of custody form. As instructed, the discreet samples were composited at the laboratory to create one composite sample: EW Composite. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

Semivoa GC:

No significant anomalies were noted with this analysis.

Approved by Noel D. Davis Date 07/10/2018

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS

1317 South 13th, Kelso, WA 98626 (360) 577-7222 FAX (360) 636-1068

SR# K1805807

PAGE _____ OF _____

0H	7D	28D	180D	7D

Project Name: JH Baxter - Arlington **Project Number:** _____

Project Manager: _____ **Company:** JH Baxter

Company/Address: 85 N Baxter Rd **Phone:** 541-689-3801

City, State, Zip: Eugene, OR 97402 **FAX:** 541-689-0769

Sampler's Signature: _____

Sample I.D.	Date	Time	LAB ID	Matrix	Number of Containers	Analysis Requested: SM 4500-H+ B / Ph	8270 D / PAH SIM	120.1 / Cond Spec	300.0 Chloride	300.0 / SO4	350.1 / Ammonia T	353.2 / NO2 NO3 T	SM 5220 C / COD T	SM 5310 / TOC T	SM 5550 B / Tan Lign	6010 C / Metals D	6020A / AS D	8151 A Modified/PCP only	REMARKS
EW 1	6/16/18	1100		water	1													X	PCP & breakdown
EW 2				water	1													X	products
EW 3				water	1													X	
EW 4	6/16/18	1120		water	1													X	

TURNAROUND REQUIREMENTS

_____ 24 hr _____ 48 hr _____ 5 day

X Standard (21 days)

_____ Provide FAX Preliminary Results

Requested Report Date: _____

REPORT REQUIREMENTS

_____ I. Routine Report: Results, Method Blank, Surrogate, as required

_____ II. Report Dup., MS, MSD as required

_____ III. Data Validation Report (includes raw data)

X IV. CLP Deliverable Report

_____ V. EDD

Comments/Special Instructions:

Composite will be put together at ALS.
4 samples will be sent.

Invoice Information

P.O. # _____

Bill to: JH Baxter & Co
San Mateo CA,94402

Questions? - Please Call Steven Kuhlmeier @ GSI Water Solutions 971-200-8529

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: _____	Signature: _____	Signature: _____	Signature: _____
Printed Name: _____	Printed Name: _____	Printed Name: _____	Printed Name: _____
Firm: JH Baxter	Firm: ALS-K	Firm: _____	Firm: _____
Date/Time: _____	Date/Time: 6-19-18 1000	Date/Time: _____	Date/Time: _____

PC KL

Cooler Receipt and Preservation Form

Client JH Baxter Service Request K18 05807

Received: 6-19-18 Opened: 6-19-18 By: JSP Unloaded: 6-19-18 By: JSP

1. Samples were received via? *USPS* *(FedEx)* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *(Cooler)* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y (N) If yes, how many and where? _____

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID (NA)	Tracking Number NA	Filed
-0.3	-0.9	1.8	1.7	-0.1	308		7227 2438 9231	
0.9	0.8	0.7	0.6	-0.1	362		7227 2438 9220	

4. Packing material: *Inserts* *(Baggies)* *(Bubble Wrap)* *Gel Packs* *(Wet Ice)* *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* NA (Y) N

   If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA (Y) N
12. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____

Pentachlorophenol

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805807
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 11:00
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	EW Composite	**Units:**	ug/L
Lab Code:	K1805807-003	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-Trichlorophenol	ND	U	1.0	0.16	1	06/27/18 13:58	6/22/18	
2,4,6-Trichlorophenol	**0.12**	**JP**	0.50	0.042	1	06/27/18 13:58	6/22/18	
3,4,5-Trichlorophenol	ND	U	1.0	0.15	1	06/27/18 13:58	6/22/18	
2,3,4,5-Tetrachlorophenol	ND	U	0.50	0.042	1	06/27/18 13:58	6/22/18	
2,3,5,6-Tetrachlorophenol	**5.6**		0.50	0.032	1	06/27/18 13:58	6/22/18	
Pentachlorophenol (PCP)	**170**		0.50	0.071	1	06/27/18 13:58	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	92	55 - 130	06/27/18 13:58	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805807
Project:	J.H. Baxter-Arlington	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ1808476-04	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-Trichlorophenol	ND	U	1.0	0.16	1	06/27/18 20:00	6/22/18	
2,4,6-Trichlorophenol	**0.090**	**JP**	0.50	0.042	1	06/27/18 20:00	6/22/18	
3,4,5-Trichlorophenol	ND	U	1.0	0.15	1	06/27/18 20:00	6/22/18	
2,3,4,5-Tetrachlorophenol	ND	U	0.50	0.042	1	06/27/18 20:00	6/22/18	
2,3,5,6-Tetrachlorophenol	ND	U	0.50	0.032	1	06/27/18 20:00	6/22/18	
Pentachlorophenol (PCP)	ND	U	0.50	0.071	1	06/27/18 20:00	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	95	55 - 130	06/27/18 20:00	

Client: JH Baxter & Company **Service Request:** K1805807
Project: J.H. Baxter-Arlington
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Pentachlorophenol

Analysis Method: 8151A Modified
Extraction Method: Method

Sample Name	Lab Code	4-Bromo-2,6-dichlorophenol 55-130
EW Composite	K1805807-003	92
Batch QC	K1805809-030	92
Method Blank	KQ1808476-04	95
Lab Control Sample	KQ1808476-03	95
Batch QC	KQ1808476-01	100
Batch QC	KQ1808476-02	98

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1805807
Project:	J.H. Baxter-Arlington	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	06/27/18
		Date Extracted:	06/22/18

Duplicate Matrix Spike Summary
Pentachlorophenol

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K1805809-030	**Basis:**	NA
Analysis Method:	8151A Modified		
Prep Method:	Method		

		Matrix Spike KQ1808476-01			Duplicate Matrix Spike KQ1808476-02					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
2,4,5-Trichlorophenol	ND U	7.04	10.0	70	6.38	10.0	64	16-107	10	30
2,4,6-Trichlorophenol	ND U	8.15	10.0	81	7.77	10.0	78	34-94	5	30
3,4,5-Trichlorophenol	ND U	6.40	10.0	64	5.50	10.0	55	10-107	15	30
2,3,4,5-Tetrachlorophenol	ND U	8.67	10.0	87	8.13	10.0	81	32-104	6	30
2,3,5,6-Tetrachlorophenol	1.0	10.2	10.0	92	10.1	10.0	91	38-118	<1	30
Pentachlorophenol (PCP)	16	24.7	10.0	86	24.6	10.0	84	22-136	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	JH Baxter & Company	**Service Request:**	K1805807
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/27/18
Sample Matrix:	Water	**Date Extracted:**	06/22/18

Lab Control Sample Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Units:**	ug/L
Prep Method:	Method	**Basis:**	NA
		Analysis Lot:	596396

Lab Control Sample
KQ1808476-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
2,3,4,5-Tetrachlorophenol	7.50	10.0	75	36-94
2,3,5,6-Tetrachlorophenol	8.54	10.0	85	42-110
2,4,5-Trichlorophenol	6.09	10.0	61	20-101
2,4,6-Trichlorophenol	7.32	10.0	73	37-91
3,4,5-Trichlorophenol	5.33	10.0	53	10-105
Pentachlorophenol (PCP)	7.55	10.0	75	42-110

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1805807
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/27/18 20:00
Sample Matrix:	Water	**Date Extracted:**	06/22/18

Method Blank Summary
Pentachlorophenol

Sample Name:	Method Blank	**Instrument ID:**	K-GC-28
Lab Code:	KQ1808476-04	**File ID:**	J:\GC28\Data\062718\0627F026.D\
Analysis Method:	8151A Modified	**Analysis Lot:**	596396
Prep Method:	Method	**Extraction Lot:**	316494

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
EW Composite	K1805807-003	J:\GC28\Data\062718\0627F005.D\	06/27/18 13:58
Batch QC	K1805809-030	J:\GC28\Data\062718\0627F018.D\	06/27/18 17:42
Batch QCMS	KQ1808476-01	J:\GC28\Data\062718\0627F023.D\	06/27/18 19:08
Batch QCDMS	KQ1808476-02	J:\GC28\Data\062718\0627F024.D\	06/27/18 19:26
Lab Control Sample	KQ1808476-03	J:\GC28\Data\062718\0627F025.D\	06/27/18 19:43

Client:	JH Baxter & Company	**Service Request:**	K1805807
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/27/18 19:43
Sample Matrix:	Water	**Date Extracted:**	06/22/18

Lab Control Sample Summary
Pentachlorophenol

Sample Name:	Lab Control Sample	**Instrument ID:**	K-GC-28
Lab Code:	KQ1808476-03	**File ID:**	J:\GC28\Data\062718\0627F025.D\
Analysis Method:	8151A Modified	**Analysis Lot:**	596396
Prep Method:	Method	**Extraction Lot:**	316494

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
EW Composite	K1805807-003	J:\GC28\Data\062718\0627F005.D\	06/27/18 13:58
Batch QC	K1805809-030	J:\GC28\Data\062718\0627F018.D\	06/27/18 17:42
Batch QCMS	KQ1808476-01	J:\GC28\Data\062718\0627F023.D\	06/27/18 19:08
Batch QCDMS	KQ1808476-02	J:\GC28\Data\062718\0627F024.D\	06/27/18 19:26
Method Blank	KQ1808476-04	J:\GC28\Data\062718\0627F026.D\	06/27/18 20:00

Client: JH Baxter & Company **Service Request:** K1805807
Project: J.H. Baxter-Arlington **Calibration Date:** 11/27/2017

Initial Calibration Summary
Pentachlorophenol

Calibration ID: KC1800028 **Signal ID:** Rtx-1701
Instrument ID: K-GC-28

#	Lab Code	Sample Name	File Location	Acquisition Date
01	KC1800028-01	PENTA01-88I 1 PPB	J:\GC28\DATA\112717-CAL\1127F127.D	11/27/2017 18:57
02	KC1800028-02	PENTA01-88H 2.5 PPB	J:\GC28\DATA\112717-CAL\1127F128.D	11/27/2017 19:16
03	KC1800028-03	PENTA01-88G 5 PPB	J:\GC28\DATA\112717-CAL\1127F129.D	11/27/2017 19:35
04	KC1800028-04	PENTA01-88I 10 PPB	J:\GC28\DATA\112717-CAL\1127F130.D	11/27/2017 19:53
05	KC1800028-05	PENTA01-88E 25 PPB	J:\GC28\DATA\112717-CAL\1127F131.D	11/27/2017 20:12
06	KC1800028-06	PENTA01-88D 100 PPB	J:\GC28\DATA\112717-CAL\1127F132.D	11/27/2017 20:31
07	KC1800028-07	PENTA01-88C 250 PPB	J:\GC28\DATA\112717-CAL\1127F133.D	11/27/2017 20:50
08	KC1800028-08	PENTA01-88N 500 PPB	J:\GC28\DATA\112717-CAL\1127F134.D	11/27/2017 21:08
09	KC1800028-09	PENTA01-88M 1000 PPB	J:\GC28\DATA\112717-CAL\1127F135.D	11/27/2017 21:27

Analyte

2,3,4,5-Tetrachlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.943	4.844E5	02	2.358	4.711E5	03	4.715	4.476E5	04	9.431	3.97E5
05	23.577	3.709E5	06	94.31	3.523E5	07	235.770	3.134E5			

2,3,5,6-Tetrachlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.943	6.78E5	02	2.358	6.227E5	03	4.715	5.92E5	04	9.431	5.284E5
05	23.577	4.973E5	06	94.31	4.874E5	07	235.770	4.383E5			

2,4,5-Trichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.934	2.491E5	02	2.334	2.294E5	03	4.669	2.135E5	04	9.338	1.916E5
05	23.345	1.682E5	06	93.379	1.502E5	07	233.450	1.262E5			

2,4,6-Trichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.934	4.804E5	02	2.334	4.173E5	03	4.669	3.886E5	04	9.338	3.458E5
05	23.345	3.132E5	06	93.379	3.008E5	07	233.450	2.681E5			

3,4,5-Trichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.934	2.071E5	02	2.334	1.987E5	03	4.669	1.921E5	04	9.338	1.661E5
05	23.345	1.541E5	06	93.379	1.376E5	07	233.450	1.213E5			

4-Bromo-2,6-dichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	5.54E5	02	2.500	5.269E5	03	5.000	5.055E5	04	10.000	4.614E5
05	25.000	4.458E5	06	100	4.601E5	07	250.000	4.255E5			

Pentachlorophenol (PCP)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.950	8.49E5	02	2.375	7.887E5	03	4.750	7.381E5	04	9.501	6.629E5
05	23.752	6.249E5	06	95.01	6.193E5	07	237.520	5.614E5	08	475.030	5.437E5
09	950.060	5.102E5									

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1805807
Calibration Date: 11/27/2017

Initial Calibration Summary
Pentachlorophenol

Calibration ID: KC1800028
Instrument ID: K-GC-28

Signal ID: Rtx-1701

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
2,3,4,5-Tetrachlorophenol	TRG	Average RF	% RSD	15.9	≤20	4.052E5	
2,3,5,6-Tetrachlorophenol	TRG	Average RF	% RSD	15.4	≤20	5.492E5	
2,4,5-Trichlorophenol	TRG	Quadratic	COD	0.9998	≥0.99	1.897E5	
2,4,6-Trichlorophenol	TRG	Linear	R2	0.9958	≥0.99	3.592E5	
3,4,5-Trichlorophenol	TRG	Average RF	% RSD	19.3	≤20	1.681E5	
4-Bromo-2,6-dichlorophenol	SURR	Average RF	% RSD	9.7	≤20	4.827E5	
Pentachlorophenol (PCP)	TRG	Average RF	% RSD	17.6	≤20	6.553E5	

Client: JH Baxter & Company **Service Request:** K1805807
Project: J.H. Baxter-Arlington **Calibration Date:** 11/27/2017

Initial Calibration Summary
Pentachlorophenol

Calibration ID: KC1800028 **Signal ID:** Rtx-35
Instrument ID: K-GC-28

#	Lab Code	Sample Name	File Location	Acquisition Date
01	KC1800028-01	PENTA01-88I 1 PPB	J:\GC28\DATA\112717-CAL\1127F127.D	11/27/2017 18:57
02	KC1800028-02	PENTA01-88H 2.5 PPB	J:\GC28\DATA\112717-CAL\1127F128.D	11/27/2017 19:16
03	KC1800028-03	PENTA01-88G 5 PPB	J:\GC28\DATA\112717-CAL\1127F129.D	11/27/2017 19:35
04	KC1800028-04	PENTA01-88I 10 PPB	J:\GC28\DATA\112717-CAL\1127F130.D	11/27/2017 19:53
05	KC1800028-05	PENTA01-88E 25 PPB	J:\GC28\DATA\112717-CAL\1127F131.D	11/27/2017 20:12
06	KC1800028-06	PENTA01-88D 100 PPB	J:\GC28\DATA\112717-CAL\1127F132.D	11/27/2017 20:31
07	KC1800028-07	PENTA01-88C 250 PPB	J:\GC28\DATA\112717-CAL\1127F133.D	11/27/2017 20:50
08	KC1800028-08	PENTA01-88N 500 PPB	J:\GC28\DATA\112717-CAL\1127F134.D	11/27/2017 21:08
09	KC1800028-09	PENTA01-88M 1000 PPB	J:\GC28\DATA\112717-CAL\1127F135.D	11/27/2017 21:27

Analyte

2,3,4,5-Tetrachlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.943	5.353E5	02	2.358	4.218E5	03	4.715	3.955E5	04	9.431	3.498E5
05	23.577	3.286E5	06	94.31	3.27E5	07	235.770	3.091E5			

2,3,5,6-Tetrachlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.943	5.258E5	02	2.358	5.049E5	03	4.715	4.94E5	04	9.431	4.571E5
05	23.577	4.47E5	06	94.31	4.635E5	07	235.770	4.35E5			

2,4,5-Trichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.934	1.967E5	02	2.334	1.867E5	03	4.669	1.788E5	04	9.338	1.58E5
05	23.345	1.451E5	06	93.379	1.365E5	07	233.450	1.241E5			

2,4,6-Trichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.934	4.013E5	02	2.334	3.531E5	03	4.669	3.306E5	04	9.338	3.013E5
05	23.345	2.899E5	06	93.379	2.986E5	07	233.450	2.755E5			

3,4,5-Trichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.934	1.816E5	02	2.334	1.737E5	03	4.669	1.604E5	04	9.338	1.444E5
05	23.345	1.338E5	06	93.379	1.272E5	07	233.450	1.161E5			

4-Bromo-2,6-dichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	3.305E5	02	2.500	3.506E5	03	5.000	3.534E5	04	10.000	3.451E5
05	25.000	3.623E5	06	100	4.016E5	07	250.000	3.801E5			

Pentachlorophenol (PCP)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.950	8.526E5	02	2.375	7.404E5	03	4.750	6.716E5	04	9.501	6.183E5
05	23.752	5.71E5	06	95.01	5.672E5	07	237.520	5.447E5	08	475.030	5.613E5
09	950.060	5.522E5									

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1805807
Calibration Date: 11/27/2017

Initial Calibration Summary
Pentachlorophenol

Calibration ID: KC1800028
Instrument ID: K-GC-28

Signal ID: Rtx-35

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
2,3,4,5-Tetrachlorophenol	TRG	Linear	R2	0.9993	≥0.99	3.81E5	
2,3,5,6-Tetrachlorophenol	TRG	Average RF	% RSD	7.0	≤20	4.753E5	
2,4,5-Trichlorophenol	TRG	Average RF	% RSD	17.0	≤20	1.608E5	
2,4,6-Trichlorophenol	TRG	Average RF	% RSD	13.6	≤20	3.215E5	
3,4,5-Trichlorophenol	TRG	Average RF	% RSD	16.5	≤20	1.482E5	
4-Bromo-2,6-dichlorophenol	SURR	Average RF	% RSD	6.6	≤20	3.605E5	
Pentachlorophenol (PCP)	TRG	Average RF	% RSD	16.7	≤20	6.31E5	

Client: JH Baxter & Company **Service Request:** K1805807
Project: J.H. Baxter-Arlington **Calibration Date:** 11/27/2017

Initial Calibration Verification Summary
Pentachlorophenol

Calibration ID: KC1800028 **Signal ID:** Rtx-1701
Instrument ID: K-GC-28

#	Lab Code	Sample Name	File Location	Acquisition Date
10	KC1800028-10	PENTA01-88K 50PPB ICV	J:\GC28\DATA\112717-CAL\1129F005.D	11/29/2017 12:44

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
2,4,5-Trichlorophenol	46.7	43.2	1.897E5	1.517E5	-7.420	±20	Quadratic
2,4,6-Trichlorophenol	46.7	49.7	3.592E5	3.031E5	6.49	±20	Linear
3,4,5-Trichlorophenol	46.7	39.6	1.681E5	1.426E5	-15.212	±20	Average RF
2,3,4,5-Tetrachlorophenol	47.2	39.7	4.052E5	3.411E5	-15.826	±20	Average RF
2,3,5,6-Tetrachlorophenol	47.2	41.1	5.492E5	4.788E5	-12.820	±20	Average RF
Pentachlorophenol (PCP)	47.5	43.1	6.553E5	5.95E5	-9.210	±20	Average RF

Client: JH Baxter & Company **Service Request:** K1805807
Project: J.H. Baxter-Arlington **Calibration Date:** 11/27/2017

Initial Calibration Verification Summary
Pentachlorophenol

Calibration ID: KC1800028 **Signal ID:** Rtx-35
Instrument ID: K-GC-28

#	Lab Code	Sample Name	File Location	Acquisition Date
10	KC1800028-10	PENTA01-88K 50PPB ICV	J:\GC28\DATA\112717-CAL\1129F005.D	11/29/2017 12:44

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
2,4,5-Trichlorophenol	46.7	39.2	1.608E5	1.352E5	-15.936	±20	Average RF
2,4,6-Trichlorophenol	46.7	40.1	3.215E5	2.758E5	-14.198	±20	Average RF
3,4,5-Trichlorophenol	46.7	39.6	1.482E5	1.256E5	-15.260	±20	Average RF
2,3,4,5-Tetrachlorophenol	47.2	46.2	3.81E5	3.125E5	-2.022	±20	Linear
2,3,5,6-Tetrachlorophenol	47.2	43.5	4.753E5	4.387E5	-7.714	±20	Average RF
Pentachlorophenol (PCP)	47.5	40.9	6.31E5	5.433E5	-13.906	±20	Average RF

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1805807
Date Analyzed: 06/27/18 13:24

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method: 8151A Modified
File ID: J:\GC28\Data\062718\0627F003.D\
Signal ID: Rtx-35

Calibration Date: 11/27/2017
Calibration ID: KC1800028
Analysis Lot: 596396
Units: ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2,4,5-Trichlorophenol	46.7	41.9	1.608E5	1.443E5	-10.3	NA	±20	Average RF
2,4,6-Trichlorophenol	46.7	43.6	3.215E5	3.003E5	-6.6	NA	±20	Average RF
3,4,5-Trichlorophenol	46.7	42.4	1.482E5	1.345E5	-9.2	NA	±20	Average RF
2,3,4,5-Tetrachlorophenol	47.2	50.3	3.81E5	3.401E5	NA	6.8	±20	Linear
2,3,5,6-Tetrachlorophenol	47.2	47.3	4.753E5	4.77E5	0.3	NA	±20	Average RF
Pentachlorophenol (PCP)	47.5	45.0	6.31E5	5.973E5	-5.3	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	55.3	3.605E5	3.986E5	10.6	NA	±20	Average RF

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1805807
Date Analyzed: 06/27/18 13:24

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method: 8151A Modified
File ID: J:\GC28\Data\062718\0627F003.D\
Signal ID: Rtx-1701

Calibration Date: 11/27/2017
Calibration ID: KC1800028
Analysis Lot: 596396
Units: ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2,4,5-Trichlorophenol	46.7	48.5	1.897E5	1.69E5	NA	3.9	±20	Quadratic
2,4,6-Trichlorophenol	46.7	55.1	3.592E5	3.35E5	NA	18.0	±20	Linear
3,4,5-Trichlorophenol	46.7	43.0	1.681E5	1.548E5	-7.9	NA	±20	Average RF
2,3,4,5-Tetrachlorophenol	47.2	44.7	4.052E5	3.843E5	-5.2	NA	±20	Average RF
2,3,5,6-Tetrachlorophenol	47.2	46.0	5.492E5	5.359E5	-2.4	NA	±20	Average RF
Pentachlorophenol (PCP)	47.5	49.0	6.553E5	6.756E5	3.1	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	51.1	4.827E5	4.933E5	2.2	NA	±20	Average RF

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1805807
Date Analyzed: 06/27/18 16:51

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method: 8151A Modified
File ID: J:\GC28\Data\062718\0627F015.D\
Signal ID: Rtx-35

Calibration Date: 11/27/2017
Calibration ID: KC1800028
Analysis Lot: 596396
Units: ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2,4,5-Trichlorophenol	46.7	41.0	1.608E5	1.413E5	-12.1	NA	±20	Average RF
2,4,6-Trichlorophenol	46.7	42.6	3.215E5	2.934E5	-8.7	NA	±20	Average RF
3,4,5-Trichlorophenol	46.7	41.3	1.482E5	1.31E5	-11.6	NA	±20	Average RF
2,3,4,5-Tetrachlorophenol	47.2	48.9	3.81E5	3.302E5	NA	3.6	±20	Linear
2,3,5,6-Tetrachlorophenol	47.2	45.9	4.753E5	4.63E5	-2.6	NA	±20	Average RF
Pentachlorophenol (PCP)	47.5	43.9	6.31E5	5.828E5	-7.6	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	54.0	3.605E5	3.891E5	7.9	NA	±20	Average RF

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1805807
Date Analyzed: 06/27/18 16:51

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method: 8151A Modified
File ID: J:\GC28\Data\062718\0627F015.D\
Signal ID: Rtx-1701

Calibration Date: 11/27/2017
Calibration ID: KC1800028
Analysis Lot: 596396
Units: ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2,4,5-Trichlorophenol	46.7	50.4	1.897E5	1.749E5	NA	7.9	±20	Quadratic
2,4,6-Trichlorophenol	46.7	57.0	3.592E5	3.466E5	NA	22.1*	±20	Linear
3,4,5-Trichlorophenol	46.7	45.0	1.681E5	1.621E5	-3.6	NA	±20	Average RF
2,3,4,5-Tetrachlorophenol	47.2	46.1	4.052E5	3.961E5	-2.3	NA	±20	Average RF
2,3,5,6-Tetrachlorophenol	47.2	47.7	5.492E5	5.551E5	1.1	NA	±20	Average RF
Pentachlorophenol (PCP)	47.5	50.7	6.553E5	6.99E5	6.7	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	53.2	4.827E5	5.134E5	6.4	NA	±20	Average RF

Client:	JH Baxter & Company	**Service Request:**	K1805807
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/27/18 20:17

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Calibration Date:**	11/27/2017
File ID:	J:\GC28\Data\062718\0627F027.D\	**Calibration ID:**	KC1800028
Signal ID:	Rtx-35	**Analysis Lot:**	596396
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2,4,5-Trichlorophenol	46.7	41.6	1.608E5	1.434E5	-10.8	NA	±20	Average RF
2,4,6-Trichlorophenol	46.7	43.6	3.215E5	3.002E5	-6.6	NA	±20	Average RF
3,4,5-Trichlorophenol	46.7	42.0	1.482E5	1.333E5	-10.0	NA	±20	Average RF
2,3,4,5-Tetrachlorophenol	47.2	49.6	3.81E5	3.351E5	NA	5.2	±20	Linear
2,3,5,6-Tetrachlorophenol	47.2	46.7	4.753E5	4.708E5	-1.0	NA	±20	Average RF
Pentachlorophenol (PCP)	47.5	44.2	6.31E5	5.876E5	-6.9	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	54.9	3.605E5	3.957E5	9.8	NA	±20	Average RF

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1805807
Date Analyzed: 06/27/18 20:17

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method: 8151A Modified
File ID: J:\GC28\Data\062718\0627F027.D\
Signal ID: Rtx-1701

Calibration Date: 11/27/2017
Calibration ID: KC1800028
Analysis Lot: 596396
Units: ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2,4,5-Trichlorophenol	46.7	51.5	1.897E5	1.785E5	NA	10.2	±20	Quadratic
2,4,6-Trichlorophenol	46.7	57.8	3.592E5	3.514E5	NA	23.8*	±20	Linear
3,4,5-Trichlorophenol	46.7	44.3	1.681E5	1.597E5	-5.0	NA	±20	Average RF
2,3,4,5-Tetrachlorophenol	47.2	46.3	4.052E5	3.979E5	-1.8	NA	±20	Average RF
2,3,5,6-Tetrachlorophenol	47.2	47.9	5.492E5	5.576E5	1.5	NA	±20	Average RF
Pentachlorophenol (PCP)	47.5	50.6	6.553E5	6.988E5	6.6	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	53.2	4.827E5	5.141E5	6.5	NA	±20	Average RF

Client: JH Baxter & Company **Service Request:**K1805807
Project: J.H. Baxter-Arlington

Analysis Run Log
Pentachlorophenol

Analysis Method: 8151A Modified **Analysis Lot:**596396
Instrument ID:K-GC-28

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\GC28\Data\062718\0627F003.D\	Continuing Calibration Verification	KQ1808738-01	6/27/2018	13:24:00	
J:\GC28\Data\062718\0627F004.D\	Continuing Calibration Blank	KQ1808738-04	6/27/2018	13:41:00	
J:\GC28\Data\062718\0627F005.D\	EW Composite	K1805807-003	6/27/2018	13:58:00	
J:\GC28\Data\062718\0627F006.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	14:15:00	
J:\GC28\Data\062718\0627F007.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	14:33:00	
J:\GC28\Data\062718\0627F008.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	14:50:00	
J:\GC28\Data\062718\0627F009.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	15:08:00	
J:\GC28\Data\062718\0627F010.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	15:25:00	
J:\GC28\Data\062718\0627F011.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	15:42:00	
J:\GC28\Data\062718\0627F012.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	15:59:00	
J:\GC28\Data\062718\0627F013.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	16:17:00	
J:\GC28\Data\062718\0627F014.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	16:34:00	
J:\GC28\Data\062718\0627F015.D\	Continuing Calibration Verification	KQ1808738-02	6/27/2018	16:51:00	
J:\GC28\Data\062718\0627F016.D\	Continuing Calibration Blank	KQ1808738-05	6/27/2018	17:08:00	
J:\GC28\Data\062718\0627F017.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	17:25:00	
J:\GC28\Data\062718\0627F018.D\	Batch QC	K1805809-030	6/27/2018	17:42:00	
J:\GC28\Data\062718\0627F019.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	17:59:00	
J:\GC28\Data\062718\0627F020.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	18:16:00	
J:\GC28\Data\062718\0627F021.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	18:33:00	
J:\GC28\Data\062718\0627F022.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	18:51:00	
J:\GC28\Data\062718\0627F023.D\	Batch QC MS	KQ1808476-01	6/27/2018	19:08:00	
J:\GC28\Data\062718\0627F024.D\	Batch QC DMS	KQ1808476-02	6/27/2018	19:26:00	
J:\GC28\Data\062718\0627F025.D\	Lab Control Sample	KQ1808476-03	6/27/2018	19:43:00	
J:\GC28\Data\062718\0627F026.D\	Method Blank	KQ1808476-04	6/27/2018	20:00:00	
J:\GC28\Data\062718\0627F027.D\	Continuing Calibration Verification	KQ1808738-03	6/27/2018	20:17:00	
J:\GC28\Data\062718\0627F028.D\	Continuing Calibration Blank	KQ1808738-06	6/27/2018	20:34:00	

Prep Summary Report

Client: JH Baxter & Company **Service Request:** K1805807
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Pentachlorophenol

Prep Method: Method **Extraction Lot:** 316494
Analytical Method: 8151A Modified **Extraction Date:** 06/22/18 12:43

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
EW Composite	K1805807-003	6/16/18	6/19/18	5 mL	1 mL	
Batch QC	K1805809-030	NA	NA	5 mL	1 mL	
Matrix Spike	KQ1808476-01MS	NA	NA	5 mL	1 mL	
Duplicate Matrix Spike	KQ1808476-02DMS	NA	NA	5 mL	1 mL	
Lab Control Sample	KQ1808476-03LCS	NA	NA	5 mL	1 mL	
Method Blank	KQ1808476-04MB	NA	NA	5 mL	1 mL	

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Pentachlorophenol

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 316494 **Prep WorkFlow:** OrgExtPcpAq7 **Status:** Prepped
Team: Semivoa GC/WVANDERHOFF **Prep Method:** Method **Prep Date/Time:** 6/22/18 12:43 PM
Number of Copies to make: 4

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	K1805807-003	EW Composite	.02	8151A Modified/PCP		Water	5mL	1.00mL	
2	K1805808-001	BXS-1	.02	8151A Modified/PCP		Water	5mL	1.00mL	
3	K1805808-002	BXS-2	.02	8151A Modified/PCP		Water	5mL	1.00mL	
4	K1805809-021	MW-37	.02	8151A Modified/PCP		Water	5mL	1.00mL	
5	K1805809-022	MW-38	.02	8151A Modified/PCP		Water	5mL	1.00mL	
6	K1805809-023	MW-39	.02	8151A Modified/PCP		Water	5mL	1.00mL	
7	K1805809-024	MW-40	.02	8151A Modified/PCP		Water	5mL	1.00mL	
8	K1805809-025	MW-41	.02	8151A Modified/PCP		Water	5mL	1.00mL	
9	K1805809-026	MW-42	.02	8151A Modified/PCP		Water	5mL	1.00mL	
10	K1805809-027	MW-43	.02	8151A Modified/PCP		Water	5mL	1.00mL	
11	K1805809-028	MW-44	.02	8151A Modified/PCP		Water	5mL	1.00mL	
12	K1805809-030	MW-3	.02	8151A Modified/PCP		Water	5mL	1.00mL	
13	K1805809-029	Field Blank Rinsate	.02	8151A Modified/PCP		Water	5mL	1.00mL	
14	K1805868-001	Carbon IN	.02	8151A Modified/PCP		Water	5mL	1.00mL	
15	K1805868-002	Carbon MID	.02	8151A Modified/PCP		Water	5mL	1.00mL	
16	K1805868-003	Penta 003	.02	8151A Modified/PCP		Water	5mL	1.00mL	
17	KQ1808476-01	K1805809-030 MS	.02	8151A Modified/PCP		Liquid	5mL	1.00mL	
18	KQ1808476-02	K1805809-030 DMS	.02	8151A Modified/PCP		Liquid	5mL	1.00mL	
19	KQ1808476-03	LCS		8151A Modified/PCP		Liquid	5mL	1.00mL	
20	KQ1808476-04	MB		8151A Modified/PCP		Liquid	5mL	1.00mL	

Spiking Solutions

Name: 8151M Penta Matrix Spike Inventory ID 189190 Logbook Ref: Penta01-89C Expires On: 09/28/2018

KQ1808476-01	100.00µL	KQ1808476-02	100.00µL	KQ1808476-03	100.00µL

Name: 8151M Penta Surrogate Inventory ID 189925 Logbook Ref: Penta01-90D Expires On: 11/02/2018

K1805807-003	100.00µL	K1805808-001	100.00µL	K1805808-002	100.00µL	K1805809-021	100.00µL	K1805809-022	100.00µL	K1805809-023	100.00µL
K1805809-024	100.00µL	K1805809-025	100.00µL	K1805809-026	100.00µL	K1805809-027	100.00µL	K1805809-028	100.00µL	K1805809-029	100.00µL
K1805809-030	100.00µL	K1805868-001	100.00µL	K1805868-002	100.00µL	K1805868-003	100.00µL	KQ1808476-01	100.00µL	KQ1808476-02	100.00µL
KQ1808476-03	100.00µL	KQ1808476-04	100.00µL								

Preparation Information Benchsheet

Prep Run#: 316494
Team: Semivoa GC/WVANDERHOFF

Prep WorkFlow: OrgExtPcpAq7
Prep Method: Method

Status: Prepped
Prep Date/Time: 6/22/18 12:43 PM

Preparation Steps

Step:	Extraction	Step:	Final Volume
Started:	6/22/18 12:43	Started:	6/22/18 14:17
Finished:	6/22/18 12:49	Finished:	6/26/18 13:27
By:	WVANDERHOFF	By:	BWILLARD
Comments		Comments	

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By:		Date:	6-26-18	Extracts Examined	
Received By:		Date:	6.26.18	Yes	No

Preparation Information Benchsheet

Prep Run#: 316494 **Prep WorkFlow:** OrgExtPcpAq7 [redacted] **Status:** Final Volume
Team: Semivoa GC/WVANDERHOFF **Prep Method:** Method **Prep Date/Time:** 6/22/18 12:43 PM
Number of Copies to make: 4

#	Lab Code	Client ID	B#	√	Method /Test	Matrix	Amt. Ext. ml.	pH	Int. Vol	Final Vol ml.	Surr Amt µl	Spike Amt µl
1	K1805807-003	EW Composite	.02	✓	8151A Modified / PCP	Water	5	<2	NA	1	100	—
2	K1805808-001	BXS-1	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
3	K1805808-002	BXS-2	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
4	K1805809-021	MW-37	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
5	K1805809-022	MW-38	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
6	K1805809-023	MW-39	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
7	K1805809-024	MW-40	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
8	K1805809-025	MW-41	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
9	K1805809-026	MW-42	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
10	K1805809-027	MW-43	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
11	K1805809-028	MW-44	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
12	K1805809-030	MW-3	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
13	K1805809-029	Field Blank Rinsate	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
14	K1805868-001	Carbon IN	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
15	K1805868-002	Carbon MID	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
16	K1805868-003	Penta 003	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
17	KQ1808476-01	K1805809-030 MS	.02	✓	8151A Modified / PCP	Liquid	5	<2		1		100
18	KQ1808476-02	K1805809-030 DMS	.02	✓	8151A Modified / PCP	Liquid	5	<2		1		
19	KQ1808476-03	LCS	—	—	8151A Modified / PCP	Liquid	5	<2		1		
20	KQ1808476-04	MB	—	—	8151A Modified / PCP	Liquid	5	<2		1		—

Comments: K1805807-2.5 mls of 001 and 002 to make 003. 6-22-18 NS

Surrogate ID: 189,925-Penta01-90D 189,925-Penta01-90D 189,925-Penta01-90D 189,925-Penta01-90D 189
100 µl. Spp. # 28

Spike ID: 189,190-Penta01-89C 189,925-Penta01-90D 189,190-Penta01-89C 189,925-Penta01-90D 189,1
100 µl. Spp. # 28

Witnessed By:

Analyst: NSV

Assisted By:

Preparation Information Benchsheet

Prep Run#: 316494
Team: Semivoa GC/WVANDERHOFF
Number of Copies to make: 4

Prep WorkFlow: OrgExtPcpAq7
Prep Method: Method

Status: Prepped
Prep Date/Time: 6/22/18 ~~12:43~~ 02:17 PM 0800

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	K1805807-003	EW Composite	.02	8151A Modified/PCP		Water	5mL	1.00mL	
2	K1805808-001	BXS-1	.02	8151A Modified/PCP		Water	5mL	1.00mL	
3	K1805808-002	BXS-2	.02	8151A Modified/PCP		Water	5mL	1.00mL	
4	K1805809-021	MW-37	.02	8151A Modified/PCP		Water	5mL	1.00mL	
5	K1805809-022	MW-38	.02	8151A Modified/PCP		Water	5mL	1.00mL	
6	K1805809-023	MW-39	.02	8151A Modified/PCP		Water	5mL	1.00mL	
7	K1805809-024	MW-40	.02	8151A Modified/PCP		Water	5mL	1.00mL	
8	K1805809-025	MW-41	.02	8151A Modified/PCP		Water	5mL	1.00mL	
9	K1805809-026	MW-42	.02	8151A Modified/PCP		Water	5mL	1.00mL	
10	K1805809-027	MW-43	.02	8151A Modified/PCP		Water	5mL	1.00mL	
11	K1805809-028	MW-44	.02	8151A Modified/PCP		Water	5mL	1.00mL	
12	K1805809-030	MW-3	.02	8151A Modified/PCP		Water	5mL	1.00mL	
13	K1805809-029	Field Blank Rinsate	.02	8151A Modified/PCP		Water	5mL	1.00mL	
14	K1805868-001	Carbon IN	.02	8151A Modified/PCP		Water	5mL	1.00mL	
15	K1805868-002	Carbon MID	.02	8151A Modified/PCP		Water	5mL	1.00mL	
16	K1805868-003	Penta 003	.02	8151A Modified/PCP		Water	5mL	1.00mL	
17	KQ1808476-01	K1805809-030 MS	.02	8151A Modified/PCP		Liquid	5mL	1.00mL	
18	KQ1808476-02	K1805809-030 DMS	.02	8151A Modified/PCP		Liquid	5mL	1.00mL	
19	KQ1808476-03	LCS		8151A Modified/PCP		Liquid	5mL	1.00mL	
20	KQ1808476-04	MB		8151A Modified/PCP		Liquid	5mL	1.00mL	

Spiking Solutions

Name: 8151M Penta Matrix Spike Inventory ID 189190 Logbook Ref: Penta01-89C Expires On: 09/28/2018

KQ1808476-01	100.00µL	KQ1808476-02	100.00µL	KQ1808476-03	100.00µL

Name: 8151M Penta Surrogate Inventory ID 189925 Logbook Ref: Penta01-90D Expires On: 11/02/2018

K1805807-003	100.00µL	K1805808-001	100.00µL	K1805808-002	100.00µL	K1805809-021	100.00µL	K1805809-022	100.00µL	K1805809-023	100.00µL
K1805809-024	100.00µL	K1805809-025	100.00µL	K1805809-026	100.00µL	K1805809-027	100.00µL	K1805809-028	100.00µL	K1805809-029	100.00µL
K1805809-030	100.00µL	K1805868-001	100.00µL	K1805868-002	100.00µL	K1805868-003	100.00µL	KQ1808476-01	100.00µL	KQ1808476-02	100.00µL
KQ1808476-03	100.00µL	KQ1808476-04	100.00µL								

Preparation Information Benchsheet

Prep Run#: 316494
Team: Semivoa GC/WVANDERHOFF

Prep WorkFlow: OrgExtPcpAq7
Prep Method: Method

Status: Prepped
Prep Date/Time: 6/22/18 12:43 PM

Preparation Steps

Step:	Extraction	Step:	Final Volume
Started:	6/22/18 ~~12:43~~ 02:17PM	Started:	6/22/18 14:17
Finished:	6/22/18 12:49	Finished:	6/26/18 13:27
By:	WVANDERHOFF	By:	~~BWILLARD~~ W. VANDERHOFF
Comments		Comments	06/26/18

Comments: _____

Reviewed By: _____ Date: 6-27-18

Chain of Custody

Relinquished By: _____ Date: 6/26/18

Received By: _____ Date: _____

Extracts Examined
Yes No

Chlorinated Phenols "PCPs" in Water

Service Request # K1805807,5808,5809,5868 [redacted] ork Group # KQ1809476

1:1 Sulfuric Acid Lot # 6042603 Ethyl Ether Lot # DT448

Extraction Start (time/date/initial): 14:17 6-22-18 WS

Extraction Stop (time/date/initial): 15:04 6-22-18 WS

Storage Location (overnight): 25R Acidified Sulfate Lot # DZ03 23E

N-Evap (time/date/initial): 10:49 6-26-18 WS N-Evap Thermometer ID: DWB-012

Temp as measured: 22 °C Correction factor: 0.0 °C Adjusted temp: 22 °C

Derivatization Start (time/date/initial): 11:30 6-26-18 DW

Derivatization Stop (time/date/initial): 12:15 6-26-18 WS

Diazomethane Lot # DZ03-39E Methanol Lot # DN615

Solvent Exchange to Iso-Octane (time/date/initial): 12:15 6-26-18 WS

Iso-Octane Lot # DR852 N-Evap Thermometer ID: DWB-012

Temp as measured: 22 °C Correction factor: 0.0 °C Adjusted temp: 22 °C

Pipette (1 mL) Lot # 13617645

Vial: red Vial Storage: pento

Additional Comments:

Bench Sheet Review Check List	
☑	Hold times met (if no, reason:)
☑	Prep date, time, method, department, product code correct in stealth
☑	Spike information and Q.C. correct (insufficient volume or mass recorded if no Q.C.)
☑	Weights/Volumes and units correct on raw and final bench sheets
☑	Sample IDs have been checked - bottle numbers appended if required
☑	Names present for: started by, completed by, relinquished by, and witnessed by. Training circled.
☑	Extract storage recorded
☑	Additional prep sheet completely filled out (NA or line out blanks)
☑	All clean-ups have been noted on additional prep sheet
☑	Signed service request with Form V, if applicable, has been attached

1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F005.D\
Lab ID: K1805807-003
RunType: N/A
Matrix: Water

Date Acquired: 6/27/18 13:58:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)		X
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions		X

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing) - Rtx-1701	2,4,6-Trichlorophenol	22		20	RO
Analyte Coelutions - Rtx-1701	2,4,5-Trichlorophenol	4.20			NA
	3,4,5-Trichlorophenol	4.20			NA

Primary Review: _____

Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F005.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 13:58:00	**Vial:**	7
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805807-003	**Raw Units:**	ug/L

Bottle ID:	K1805807-003.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	K1805807
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01 +0.01	4.58	22136552	17031096	45.857	47.241	92	94	92	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
2,4,5-Trichlorophenol	4.20 +0.01c	4.67 +0.02	116222	51963	0.021	0.323	0.0042U	0.065U	0.16 U	Y
2,4,6-Trichlorophenol	0.00	4.12	0	197852	0.000CCV	0.615	0U	0.12J	0.042 U	Y
3,4,5-Trichlorophenol	4.20 -0.01c	4.72 +0.01	116222	17869	0.691	0.121	0.14U	0.024U	0.15 U	Y
2,3,4,5-Tetrachlorophenol	5.02 +0.01	0.00	122004	0	0.301	0.000	0.060J	0U	0.042 U	Y
2,3,5,6-Tetrachlorophenol	4.47 +0.01	4.96 +0.01	16078057	13288770	29.277	27.956	5.9	5.6	**5.6**	Y
Pentachlorophenol (PCP)	5.16 +0.01	5.56 +0.01	546364818	543957500	833.704	861.998	170	170	**170**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F005.D Vial: 3
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 1:58 pm Operator: SMS
Sample : K1805807-003 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 10:38:39 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
4) S	4-Bromo-2...	4.010	4.579	22136552	17031096	45.857	47.241	
	Target Compounds							
1)	3,4-Dichl...	0.000	3.659	0	41771	N.D. d	1.104	
2)	3,5-Dichl...	0.000	3.896	0	11678	N.D. d	0.944	
3)	2,4,6-Tri...	0.000	4.123	0	197852	N.D. d	0.615	
5)	2,4,5-Tri...	4.203	4.666	116222	51963	0.021	0.323	#
6)	3,4,5-Tri...	4.203	4.716	116222	17869	0.691	0.121	#
7) M	2,3,5,6-T...	4.470	4.963	16078057	13288770	29.277	27.956	
8) M	2,3,4,5-T...	5.017	0.000	122004	0	0.301	N.D. d	#
9) M	Pentachlo...	5.157	5.556	546.4E6	544.0E6	833.704	861.998	
10)	Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

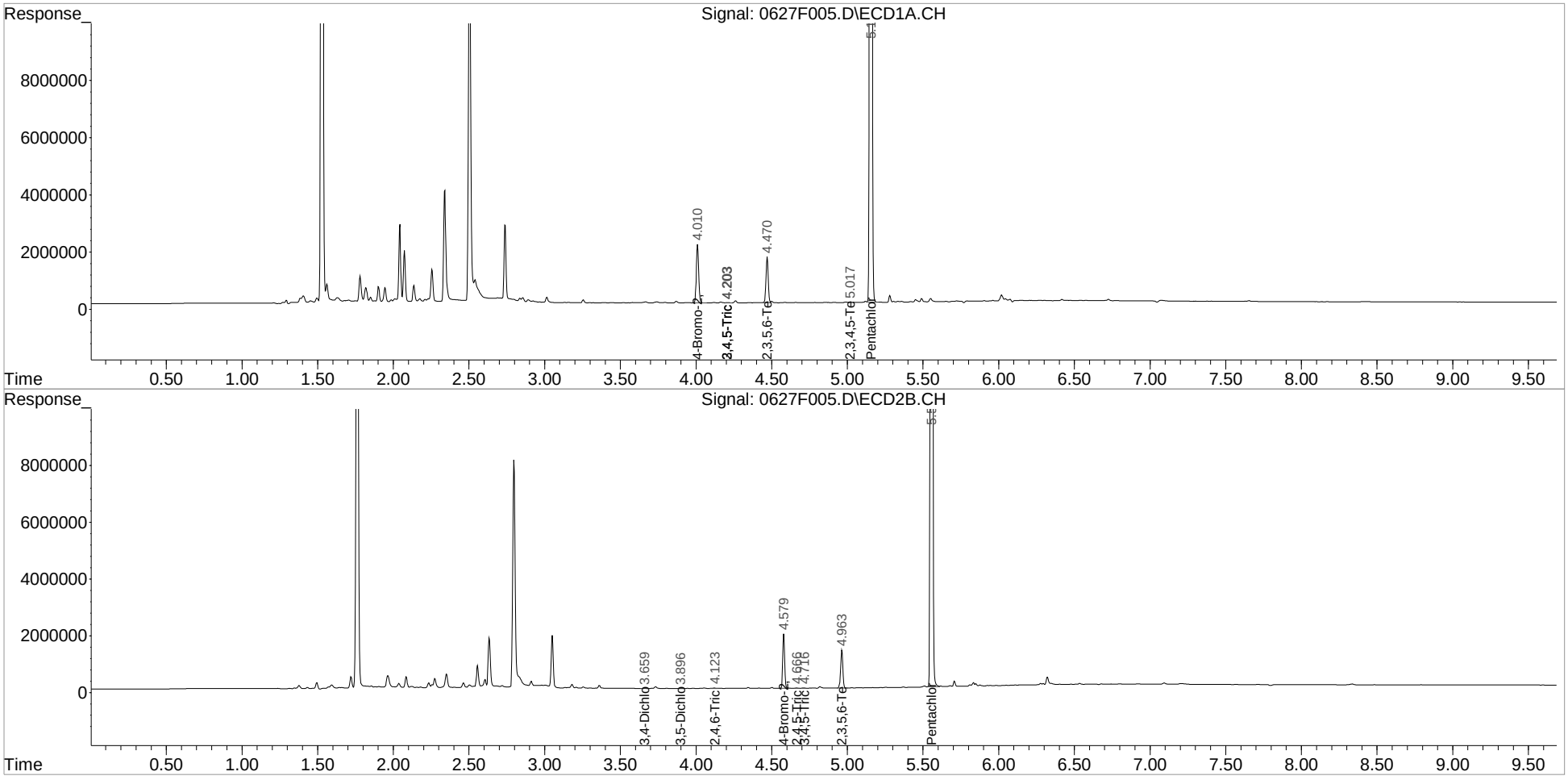
1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F005.D Vial: 3
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 1:58 pm Operator: SMS
Sample : K1805807-003 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 10:38:39 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F018.D\
Lab ID: K1805809-030
RunType: N/A
Matrix: Water

Date Acquired: 6/27/18 17:42:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F018.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 17:42:00	**Vial:**	18
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-030	**Raw Units:**	ug/L

Bottle ID:	K1805809-030.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/17/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	22143322	16953698	45.871	47.027	92	94	92	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15	5.55	60020912	50896562	91.587	80.655	18	16	**16**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F018.D Vial: 14
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 5:42 pm Operator: SMS
Sample : K1805809-030 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:23:41 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.011	4.581	22143322	16953698	45.871	47.027	
		Target Compounds							
1)		3,4-Dichl...	0.000	3.664	0	39659	N.D. d	0.978	
2)		3,5-Dichl...	0.000	3.897	0	16150	N.D. d	1.306	
3)		2,4,6-Tri...	0.000	4.124	0	150774	N.D. d	0.469	
5)		2,4,5-Tri...	4.165	4.664	253640	10728	0.833	0.067	#
6)		3,4,5-Tri...	4.225	4.734	29034	18120	0.173	0.122	#
7)	M	2,3,5,6-T...	4.468	4.961	2846538	2372306	5.183	4.991	
8)	M	2,3,4,5-T...	5.035	0.000	20788	0	0.051	N.D. d	#
9)	M	Pentachlo...	5.151	5.547	60020912	50896562	91.587	80.655	
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d	

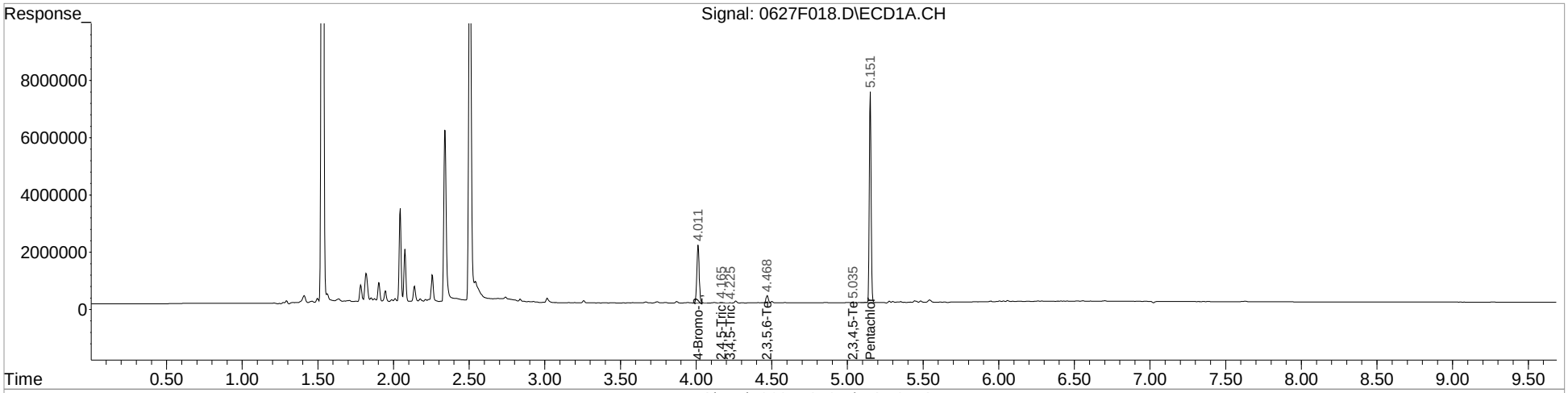
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F018.D Vial: 14
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 5:42 pm Operator: SMS
Sample : K1805809-030 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:23:41 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JAD 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F026.D\
Lab ID: KQ1808476-04
RunType: MB
Matrix: Water

Date Acquired: 6/27/18 20:00:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery - Rtx-1701	2,4,6-Trichlorophenol	22		20	RO
Continuing Calibration Recovery (Closing) - Rtx-1701	2,4,6-Trichlorophenol	24		20	RO

Primary Review: _____

Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F026.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 20:00:00	**Vial:**	26
Run Type:	MB	**Dilution:**	1
Lab ID:	KQ1808476-04	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	II	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/20/18	**Receive Date:**	6/21/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	KQ1808476
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	22851892	17644596	47.339	48.943	95	98	95	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
2,4,5-Trichlorophenol	4.16 -0.03	4.64 -0.01	316970	18402	1.207	0.114	0.24J	0.023U	0.16 U	Y
2,4,6-Trichlorophenol	0.00	4.11 -0.02	0	145114	0.000CCV	0.451	0U	0.090J	0.042 U	Y
3,4,5-Trichlorophenol	4.22	4.70 -0.02	29797	44414	0.177	0.300	0.035U	0.060U	0.15 U	Y
2,3,4,5-Tetrachlorophenol	5.04 +0.03	0.00	13092	0	0.032	0.000	0.0064U	0U	0.042 U	Y
2,3,5,6-Tetrachlorophenol	4.47	4.95 -0.01	18770	280996	0.034	0.591	0.0068U	0.12J	0.032 U	Y
Pentachlorophenol (PCP)	5.13 -0.02	5.56 +0.01	270550	193890	0.413	0.307	0.083J	0.061U	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F026.D Vial: 22
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 8:00 pm Operator: SMS
Sample : KQ1808476-04 MB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:51:35 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.012	4.581	22851892	17644596	47.339	48.943
		Target Compounds						
1)		3,4-Dichl...	0.000	3.664	0	48752	N.D. d	1.521
2)		3,5-Dichl...	0.000	3.898	0	22609	N.D. d	1.829
3)		2,4,6-Tri...	0.000	4.111	0	145114	N.D. d	0.451
5)		2,4,5-Tri...	4.165	4.638	316970	18402	1.207	0.114 #
6)		3,4,5-Tri...	4.225	4.704	29797	44414	0.177	0.300 #
7)	M	2,3,5,6-T...	4.468	4.951	18770	280996	0.034	0.591 #
8)	M	2,3,4,5-T...	5.038	0.000	13092	0	0.032	N.D. d#
9)	M	Pentachlo...	5.132	5.564	270550	193890	0.413	0.307 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

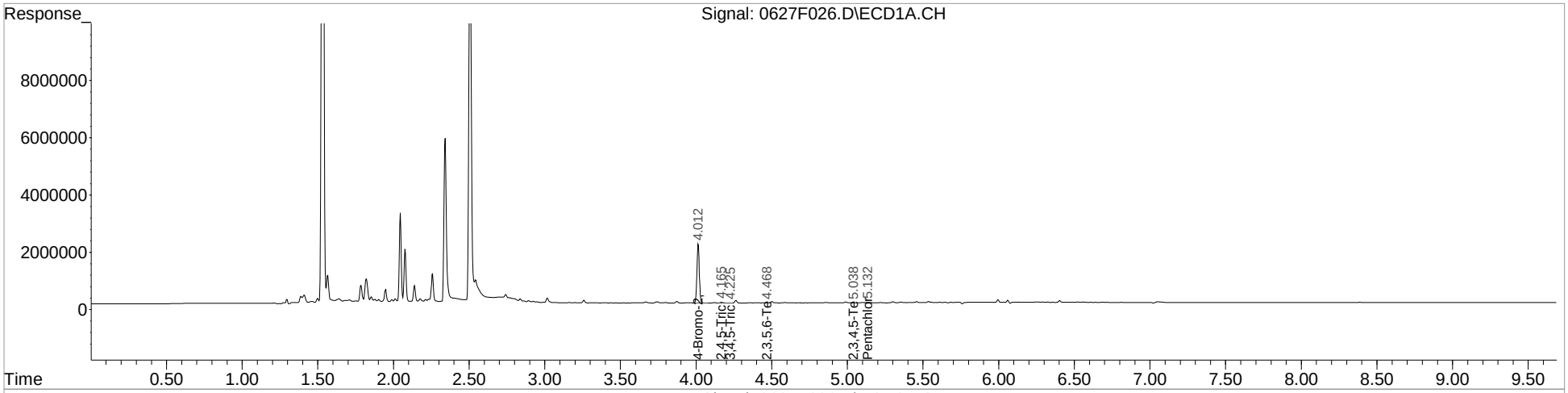
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F026.D Vial: 22
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 8:00 pm Operator: SMS
Sample : KQ1808476-04 MB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:51:35 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JAD 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F025.D\
Lab ID: KQ1808476-03
RunType: LCS
Matrix: Water

Date Acquired: 6/27/18 19:43:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery - Rtx-1701	2,4,6-Trichlorophenol	22		20	RO
Continuing Calibration Recovery (Closing) - Rtx-1701	2,4,6-Trichlorophenol	24		20	RO

Primary Review: _____

Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F025.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 19:43:00	**Vial:**	25
Run Type:	LCS	**Dilution:**	1
Lab ID:	KQ1808476-03	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	II	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/20/18	**Receive Date:**	6/21/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	KQ1808476
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	22854646	17228886	47.345	47.790	95	96	95	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
2,4,5-Trichlorophenol	4.19	4.65	6378628	4895510	38.648	30.436	7.73	6.09	**6.09**	Y
2,4,6-Trichlorophenol	3.46 +0.01	4.13	14094586	11770654	49.518 CCV	36.616	9.90	7.32	**7.32**	Y
3,4,5-Trichlorophenol	4.22	4.72	4991130	3950622	29.683	26.662	5.94	5.33	**5.33**	Y
2,3,4,5-Tetrachlorophenol	5.01	5.36 -0.01	15204751	12702475	37.520	39.708	7.50	7.94	**7.50**	Y
2,3,5,6-Tetrachlorophenol	4.47	4.96	23437007	20544252	42.677	43.220	8.54	8.64	**8.54**	Y
Pentachlorophenol (PCP)	5.15	5.55	28986436	23820278	44.231	37.748	8.85	7.55	**7.55**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F025.D Vial: 21
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 7:43 pm Operator: SMS
Sample : KQ1808476-03 LCS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:50:22 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.013	4.582	22854646	17228886	47.345	47.790	
		Target Compounds							
1)		3,4-Dichl...	3.116	3.652	365560	377396	21.047	21.618	
2)		3,5-Dichl...	3.356	3.899	41408	131199	3.399	10.611	#
3)		2,4,6-Tri...	3.456	4.125	14094586	11770654	49.518	36.616	#
5)		2,4,5-Tri...	4.189	4.652	6378628	4895510	38.648	30.436	
6)		3,4,5-Tri...	4.219	4.715	4991130	3950622	29.683	26.662	
7)	M	2,3,5,6-T...	4.466	4.955	23437007	20544252	42.677	43.220	
8)	M	2,3,4,5-T...	5.013	5.362	15204751	12702475	37.520	39.708	
9)	M	Pentachlo...	5.149	5.545	28986436	23820278	44.231	37.748	
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

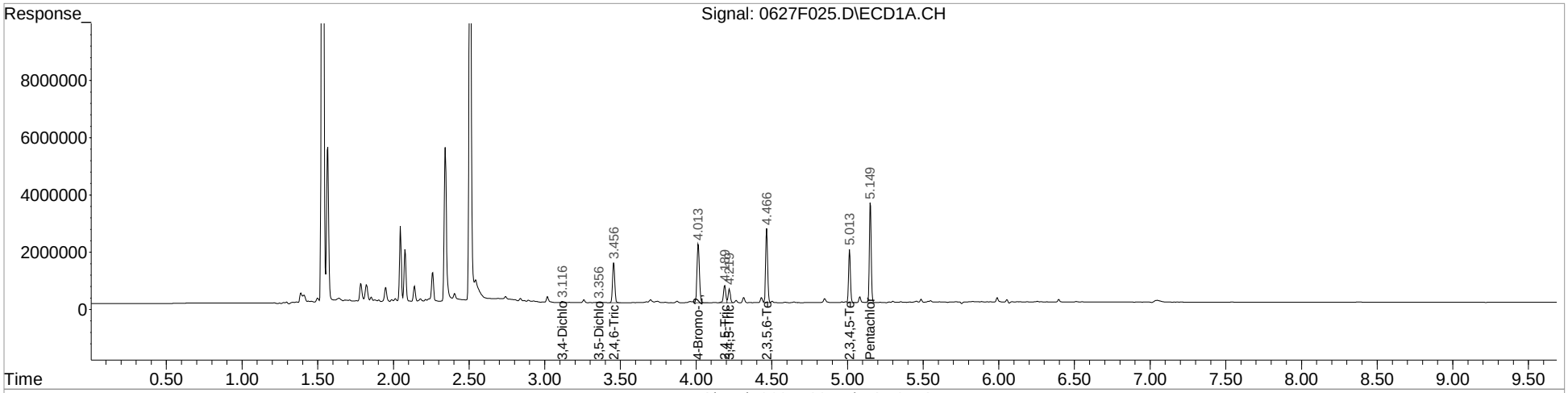
1st JED 06/28/18
2nd TP 07/05/18

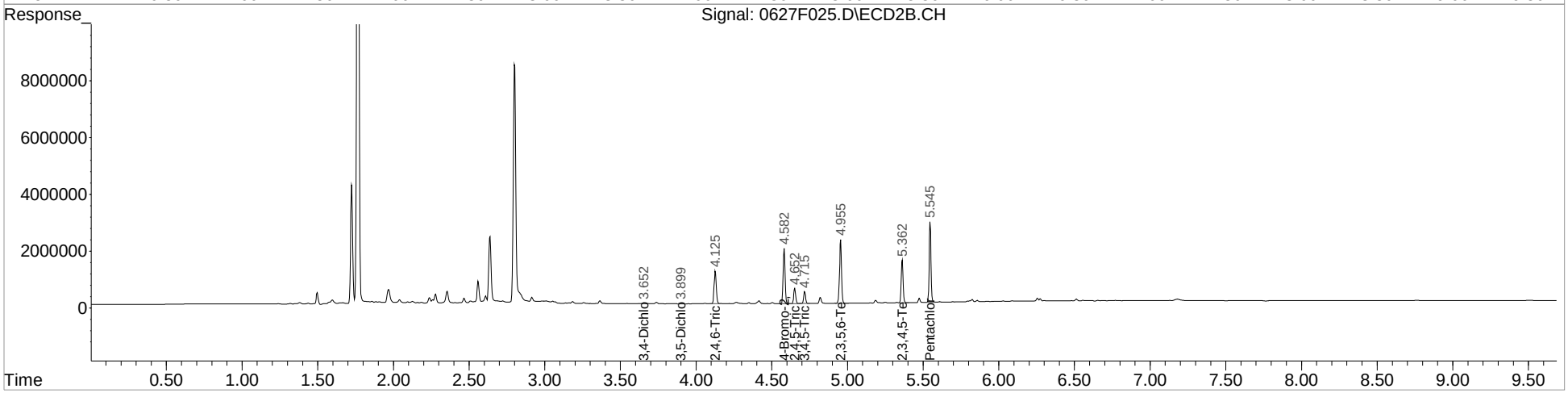
Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F025.D Vial: 21
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 7:43 pm Operator: SMS
Sample : KQ1808476-03 LCS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:50:22 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F023.D\
Lab ID: KQ1808476-01
RunType: MS
Matrix: Water

Date Acquired: 6/27/18 19:08:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery - Rtx-1701	2,4,6-Trichlorophenol	22		20	RO
Continuing Calibration Recovery (Closing) - Rtx-1701	2,4,6-Trichlorophenol	24		20	RO

Primary Review: _____

Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F023.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 19:08:00	**Vial:**	23
Run Type:	MS	**Dilution:**	1
Lab ID:	KQ1808476-01	**Raw Units:**	ug/L

Bottle ID:	K1805809-030.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/17/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	KQ1808476
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.01	4.58	24570332	17979960	50.899	49.873	102	100	100	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
2,4,5-Trichlorophenol	4.19	4.65	7603922	5664151	46.640	35.215	9.33	7.04	**7.04**	Y
2,4,6-Trichlorophenol	3.46 +0.01	4.13	16271976	13098514	57.334 CCV	40.746	11.5	8.15	**8.15**	Y
3,4,5-Trichlorophenol	4.22	4.72	5922788	4740512	35.224	31.993	7.04	6.40	**6.40**	Y
2,3,4,5-Tetrachlorophenol	5.01	5.36 -0.01	17560890	14161767	43.335	44.363	8.67	8.87	**8.67**	Y
2,3,5,6-Tetrachlorophenol	4.47	4.96	29015790	24202040	52.836	50.915	10.6	10.2	**10.2**	Y
Pentachlorophenol (PCP)	5.15	5.55	95280764	78043486	145.390	123.674	29.1	24.7	**24.7**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F023.D Vial: 19
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 7:08 pm Operator: SMS
Sample : K1805809-030 MS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:34:10 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.017	4.583	24570332	17979960	50.899	49.873	
		Target Compounds							
1)		3,4-Dichl...	3.117	3.656	514042	447788	29.596	26.045	
2)		3,5-Dichl...	3.357	3.899	245806	140295	20.177	11.347	#
3)		2,4,6-Tri...	3.457	4.126	16271976	13098514	57.334	40.746	#
5)		2,4,5-Tri...	4.190	4.653	7603922	5664151	46.640	35.215	
6)		3,4,5-Tri...	4.220	4.716	5922788	4740512	35.224	31.993	
7)	M	2,3,5,6-T...	4.467	4.956	29015790	24202040	52.836	50.915	
8)	M	2,3,4,5-T...	5.013	5.363	17560890	14161767	43.335	44.363	
9)	M	Pentachlo...	5.153	5.549	95280764	78043486	145.390	123.674	
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

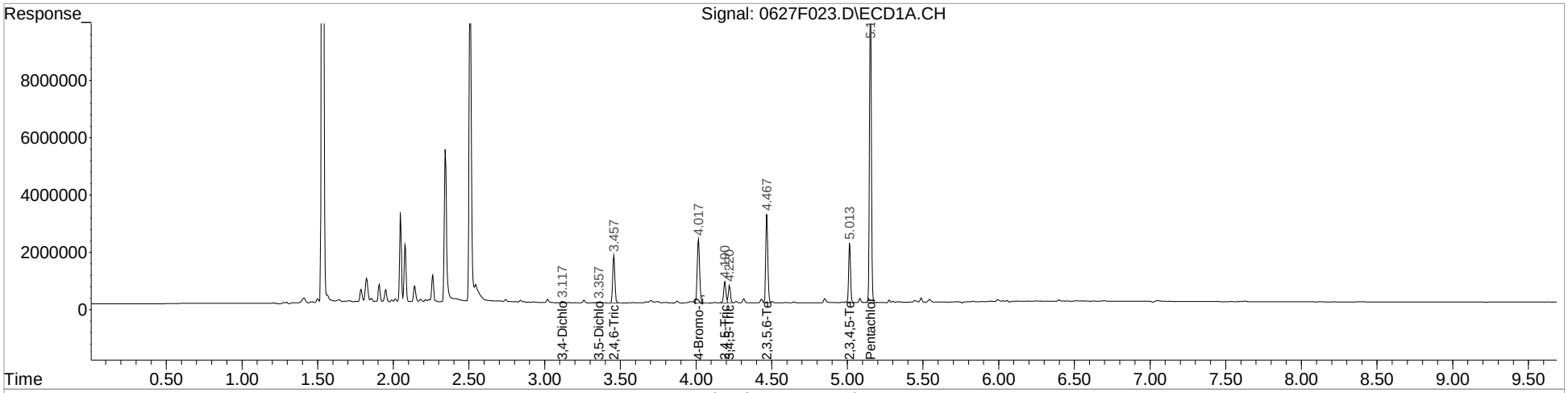
1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F023.D Vial: 19
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 7:08 pm Operator: SMS
Sample : K1805809-030 MS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:34:10 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F024.D\
Lab ID: KQ1808476-02
RunType: DMS
Matrix: Water

Date Acquired: 6/27/18 19:26:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery - Rtx-1701	2,4,6-Trichlorophenol	22		20	RO
Continuing Calibration Recovery (Closing) - Rtx-1701	2,4,6-Trichlorophenol	24		20	RO

Primary Review: _____

Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F024.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 19:26:00	**Vial:**	24
Run Type:	DMS	**Dilution:**	1
Lab ID:	KQ1808476-02	**Raw Units:**	ug/L

Bottle ID:	K1805809-030.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/17/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	KQ1808476
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.01	4.58	23872620	17659922	49.454	48.985	99	98	98	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
2,4,5-Trichlorophenol	4.19	4.65	6817386	5129216	41.492	31.889	8.30	6.38	**6.38**	Y
2,4,6-Trichlorophenol	3.46 +0.01	4.13	15111440	12489028	53.168[CCV]	38.850	10.6	7.77	**7.77**	Y
3,4,5-Trichlorophenol	4.22	4.72	5047548	4073890	30.019	27.494	6.00	5.50	**5.50**	Y
2,3,4,5-Tetrachlorophenol	5.02 +0.01	5.36 -0.01	16481252	13399904	40.670	41.932	8.13	8.39	**8.13**	Y
2,3,5,6-Tetrachlorophenol	4.47	4.96	27908284	23979925	50.819	50.447	10.2	10.1	**10.1**	Y
Pentachlorophenol (PCP)	5.15	5.55	92984010	77510332	141.885	122.829	28.4	24.6	**24.6**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F024.D Vial: 20
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 7:26 pm Operator: SMS
Sample : K1805809-030 DMS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:48:31 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.016	4.582	23872620	17659922	49.454	48.985	
		Target Compounds							
1)		3,4-Dichl...	3.116	3.655	394286	361543	22.701	20.627	
2)		3,5-Dichl...	3.356	3.898	35597	117133	2.922	9.473	#
3)		2,4,6-Tri...	3.456	4.128	15111440	12489028	53.168	38.850	#
5)		2,4,5-Tri...	4.189	4.652	6817386	5129216	41.492	31.889	
6)		3,4,5-Tri...	4.219	4.718	5047548	4073890	30.019	27.494	
7)	M	2,3,5,6-T...	4.466	4.955	27908284	23979925	50.819	50.447	
8)	M	2,3,4,5-T...	5.016	5.362	16481252	13399904	40.670	41.932	
9)	M	Pentachlo...	5.152	5.548	92984010	77510332	141.885	122.829	
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

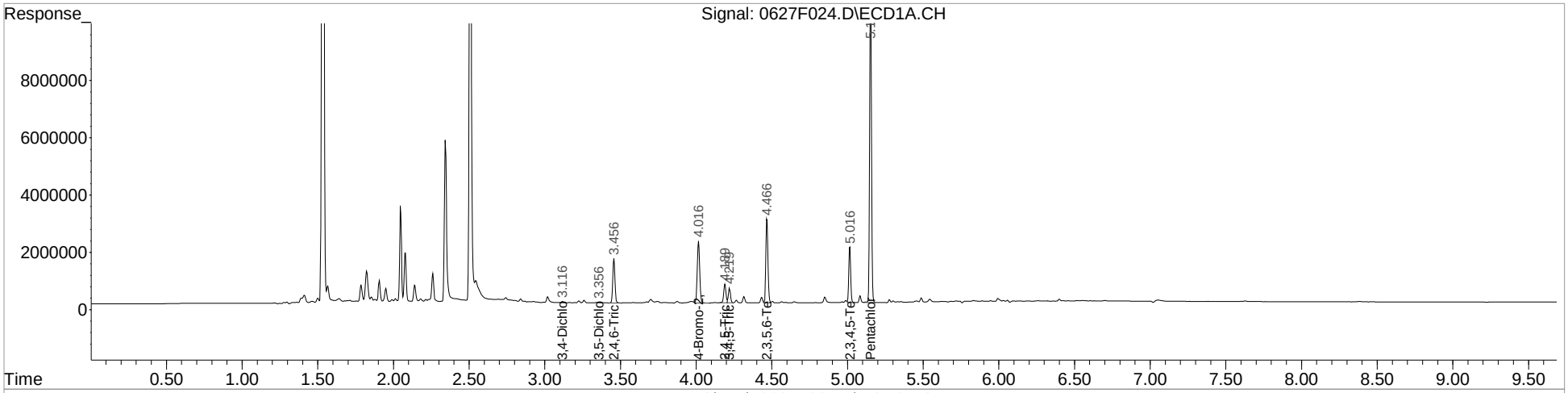
1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F024.D Vial: 20
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 7:26 pm Operator: SMS
Sample : K1805809-030 DMS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:48:31 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JAD 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F004.D\
Lab ID: KQ1808738-04
RunType: CCB
Matrix: Water

Date Acquired: 6/27/18 13:41:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Above Highest ICAL Level		X
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing) - Rtx-1701	2,4,6-Trichlorophenol	22		20	RO
Above Highest ICAL Level - Rtx-1701	2,4,5-Trichlorophenol	895.285		233.45	quaderr

Primary Review: _____

Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F004.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 13:41:00	**Vial:**	4
Run Type:	CCB	**Dilution:**	1
Lab ID:	KQ1808738-04	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**		**Report Group:**	KQ1808738
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	3.99 -0.01	0.00	69534	0	0.144	0.000				55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
2,4,5-Trichlorophenol	4.17 -0.01	4.64 -0.01	35292	23988	895.285	0.149	180E	0.030U	0.16 U	Y
2,4,6-Trichlorophenol	0.00	4.14 +0.02	0	8488	0.000CCV	0.026	0U	0.0052U	0.042 U	Y
3,4,5-Trichlorophenol	4.26 +0.05	4.72 +0.01	12504	37644	0.074	0.254	0.015U	0.051U	0.15 U	Y
2,3,4,5-Tetrachlorophenol	4.99 -0.02	0.00	13672	0	0.034	0.000	0.0068U	0U	0.042 U	Y
2,3,5,6-Tetrachlorophenol	4.45 -0.01	4.98 +0.03	31054	4470	0.057	0.009	0.011U	0.0018U	0.032 U	Y
Pentachlorophenol (PCP)	5.13 -0.02	5.53 -0.02	200364	179268	0.306	0.284	0.061U	0.057U	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F004.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 1:41 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:38:17 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
4) S	4-Bromo-2...	3.992	0.000	69534	0	0.144	N.D. #
	Target Compounds						
1)	3,4-Dichl...	3.092	0.000	13198	0	0.760	N.D. d#
2)	3,5-Dichl...	3.319f	0.000	15078	0	1.238	N.D. d#
3)	2,4,6-Tri...	0.000	4.138	0	8488	N.D. d	0.026
5)	2,4,5-Tri...	4.169	4.638	35292	23988	895.285	0.149 #
6)	3,4,5-Tri...	4.256f	4.718	12504	37644	0.074	0.254 #
7) M	2,3,5,6-T...	4.446	4.975	31054	4470	0.057	0.009 #
8) M	2,3,4,5-T...	4.992	0.000	13672	0	0.034	N.D. #
9) M	Pentachlo...	5.129	5.532f	200364	179268	0.306	0.284m
10)	Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

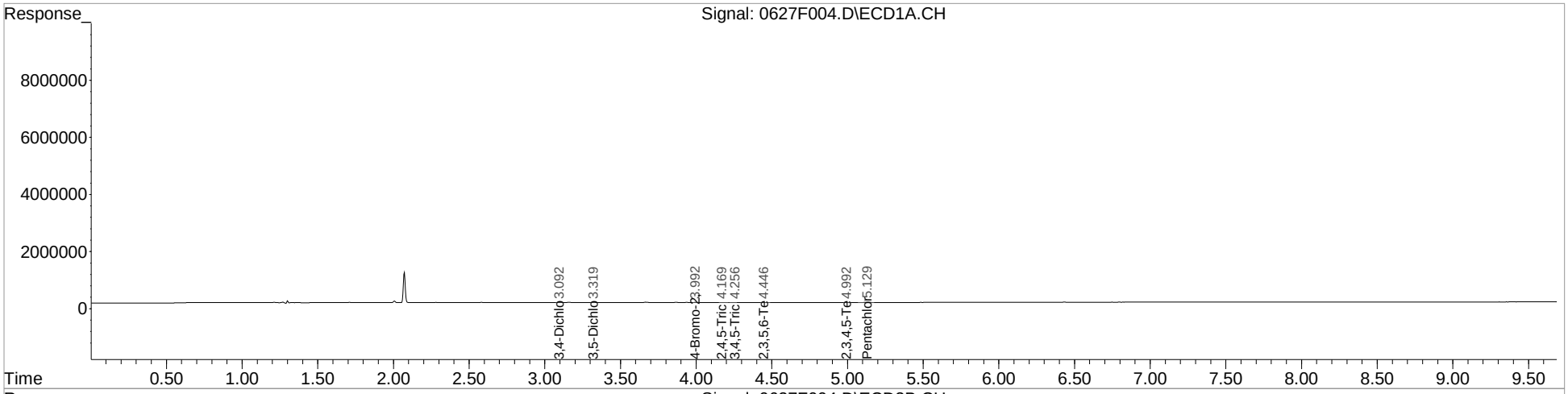
1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F004.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 1:41 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:38:17 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

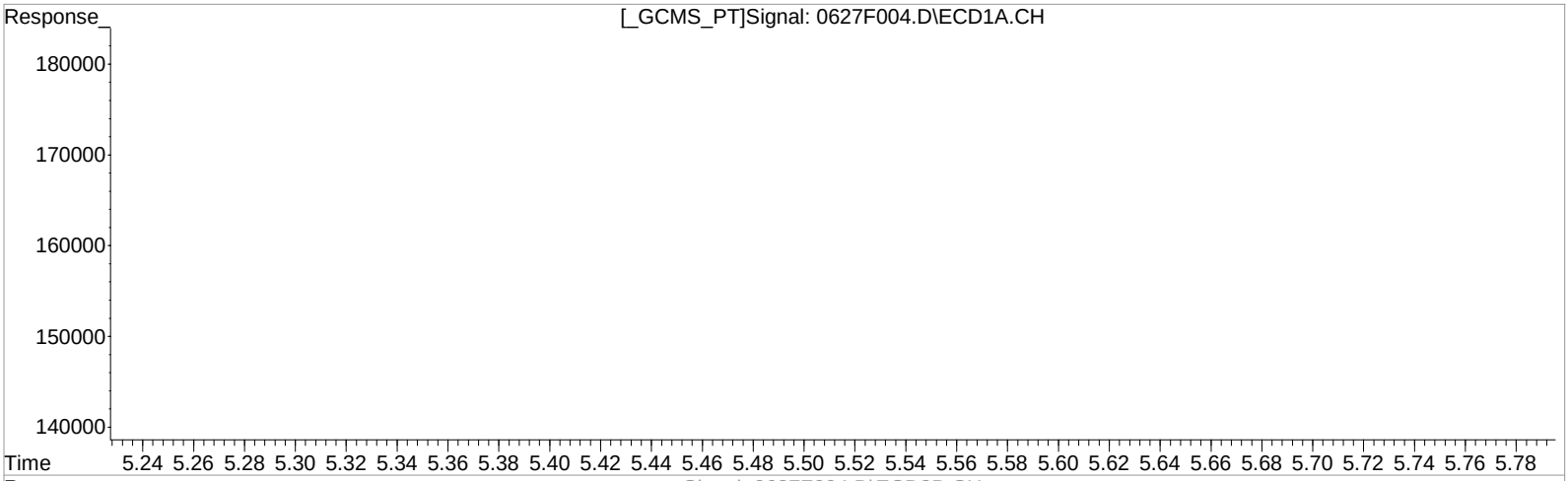


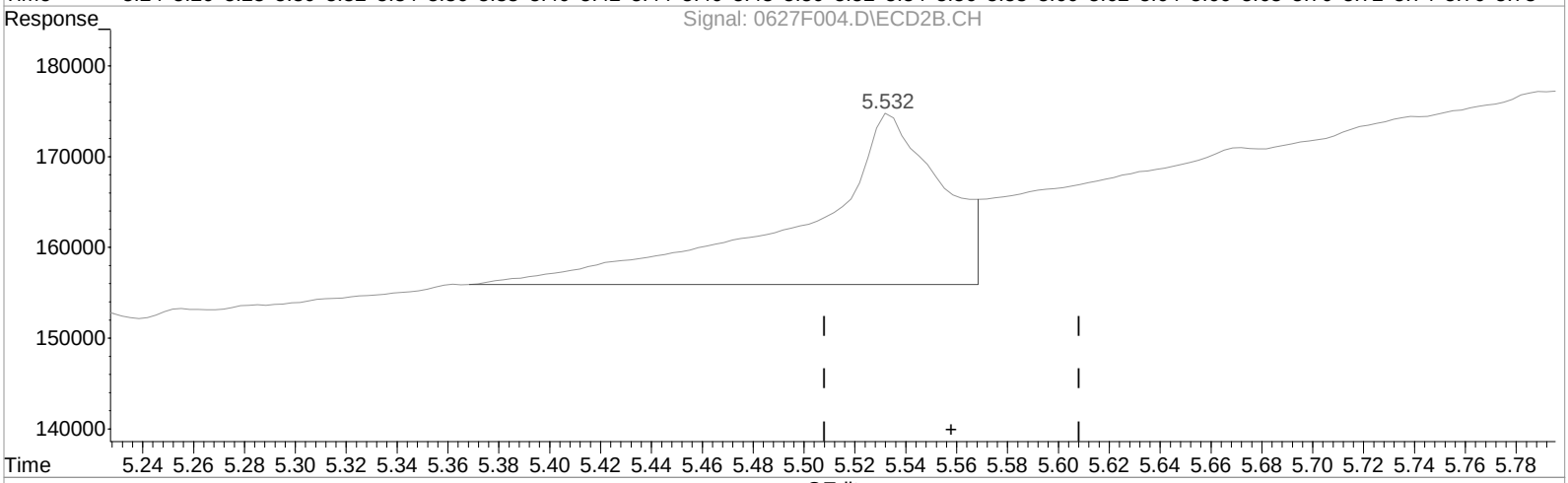
1st JED 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F004.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 1:41 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:20:52 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.129min 0.306 ug/L

response 200364

Manual Integration:

Before

06/28/18

(9) Pentachlorophenol #2 (M)

5.532min 1.151 ug/L

response 726363

(+) = Expected Retention Time

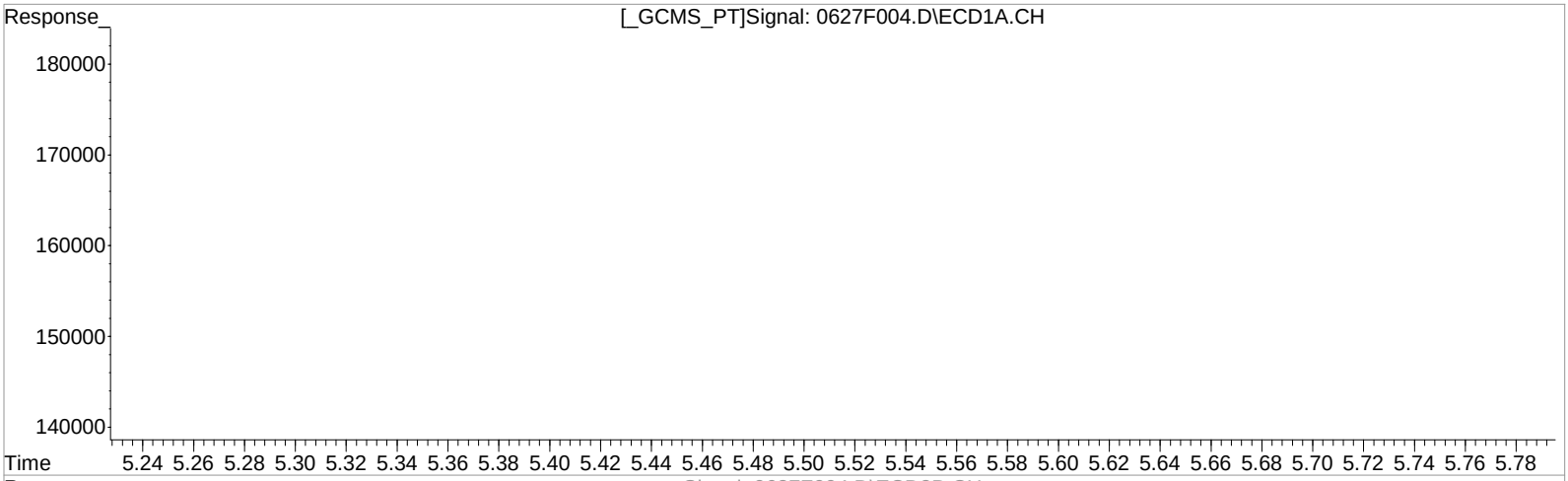
Quantitation Report (Qedit)

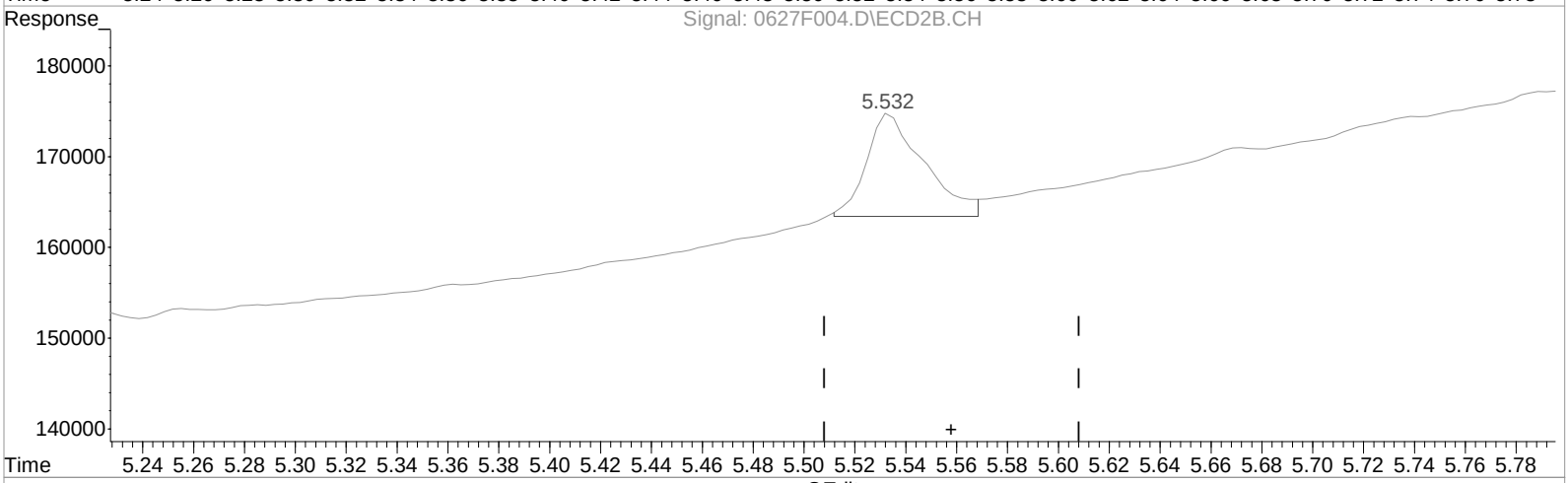
1st JED 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F004.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 1:41 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:20:52 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.129min 0.306 ug/L

response 200364

Manual Integration:

After

Baseline/Shoulder

06/28/18

(9) Pentachlorophenol #2 (M)

5.532min 0.284 ug/L m

response 179268

(+) = Expected Retention Time

1st JAD 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F016.D\
Lab ID: KQ1808738-05
RunType: CCB
Matrix: Water

Date Acquired: 6/27/18 17:08:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery - Rtx-1701	2,4,6-Trichlorophenol	22		20	RO
Continuing Calibration Recovery (Closing) - Rtx-1701	2,4,6-Trichlorophenol	24		20	RO

Primary Review: _____

Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F016.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 17:08:00	**Vial:**	5
Run Type:	CCB	**Dilution:**	1
Lab ID:	KQ1808738-05	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**		**Report Group:**	KQ1808738
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria		Rpt?
4-Bromo-2,6-dichlorophenol	4.00 -0.01	4.56 -0.02	72756	4895	0.151	0.014				55 - 130	i	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
2,4,5-Trichlorophenol	0.00	4.65	0	25646	0.000	0.159	0U	0.032U	0.16 U	Y
2,4,6-Trichlorophenol	0.00	4.14 +0.01	0	8558	0.000CCV	0.027	0U	0.0054U	0.042 U	Y
3,4,5-Trichlorophenol	4.24 +0.02	4.72	6061	29345	0.036	0.198	0.0072U	0.040U	0.15 U	Y
2,3,4,5-Tetrachlorophenol	4.99 -0.02	0.00	35836	0	0.088	0.000	0.018U	0U	0.042 U	Y
2,3,5,6-Tetrachlorophenol	4.45 -0.02	4.98 +0.02	26426	9178	0.048	0.019	0.0096U	0.0038U	0.032 U	Y
Pentachlorophenol (PCP)	5.13 -0.02	5.53 -0.02	174436	1105546	0.266	1.752	0.053U	0.35J	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F016.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 5:08 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:51:29 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	3.997	4.560	72756	4895	0.151	0.014	#
		Target Compounds							
1)		3,4-Dichl...	3.094	0.000	19299	0	1.111	N.D.	#
2)		3,5-Dichl...	0.000	3.903	0	7692	N.D. d	0.622	
3)		2,4,6-Tri...	0.000	4.143	0	8558	N.D. d	0.027	
5)		2,4,5-Tri...	0.000	4.646	0	25646	N.D. d	0.159	
6)		3,4,5-Tri...	4.237	4.723	6061	29345	0.036	0.198	#
7)	M	2,3,5,6-T...	4.450	4.976	26426	9178	0.048	0.019	#
8)	M	2,3,4,5-T...	4.994	0.000	35836	0	0.088	N.D.	#
9)	M	Pentachlo...	5.130	5.533	174436	1105546	0.266	1.752	#
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

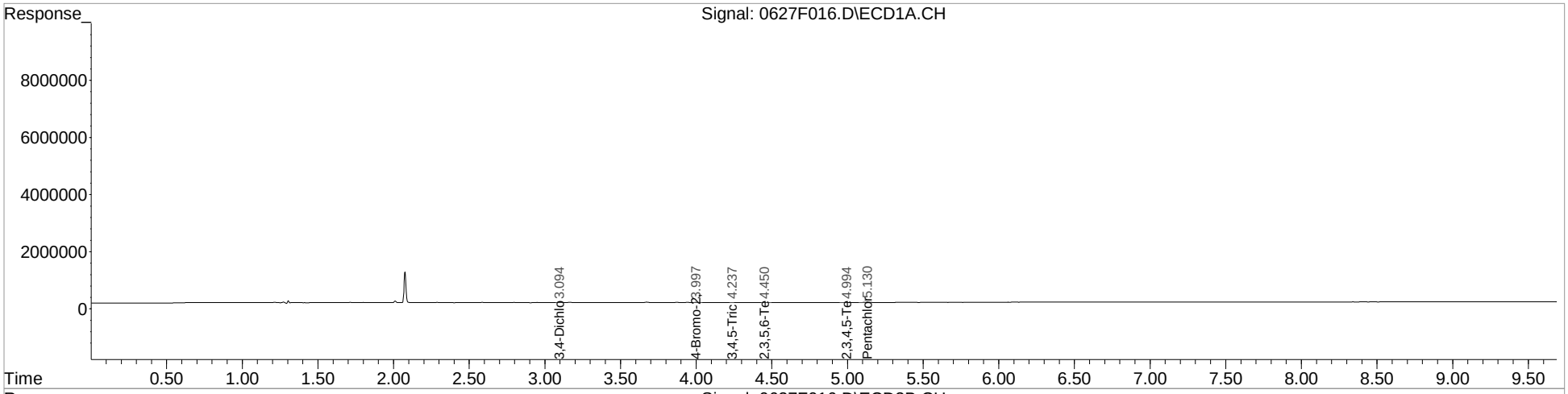
1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F016.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 5:08 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:51:29 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JAD 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F028.D\
Lab ID: KQ1808738-06
RunType: CCB
Matrix: Water

Date Acquired: 6/27/18 20:34:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Surrogates	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery - Rtx-1701	2,4,6-Trichlorophenol	24		20	RO

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F028.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 20:34:00	**Vial:**	6
Run Type:	CCB	**Dilution:**	1
Lab ID:	KQ1808738-06	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**		**Report Group:**	KQ1808738
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.00 -0.02	0.00	71442	0	0.148	0.000				55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
2,4,5-Trichlorophenol	0.00	4.64 -0.01	0	26068	0.000	0.162	0U	0.032U	0.16 U	Y
2,4,6-Trichlorophenol	0.00	4.15 +0.03	0	4642	0.000CCV	0.014	0U	0.0028U	0.042 U	Y
3,4,5-Trichlorophenol	4.18 -0.04	4.72	22901	30133	0.136	0.203	0.027U	0.041U	0.15 U	Y
2,3,4,5-Tetrachlorophenol	5.02 +0.01	0.00	162373	0	0.401	0.000	0.080J	0U	0.042 U	Y
2,3,5,6-Tetrachlorophenol	4.45 -0.02	4.92 -0.03	10141	82660	0.018	0.174	0.0036U	0.035J	0.032 U	Y
Pentachlorophenol (PCP)	5.15	5.53 -0.02	46878	1028380	0.072	1.630	0.014U	0.33J	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F028.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 8:34 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 10:04:47 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	3.999	0.000	71442	0	0.148	N.D.	#
		Target Compounds							
1)		3,4-Dichl...	3.095	0.000	17904	0	1.031	N.D.	d#
2)		3,5-Dichl...	3.325f	3.905	15754	14531	1.293	1.175	
3)		2,4,6-Tri...	0.000	4.148	0	4642	N.D. d	0.014	
5)		2,4,5-Tri...	0.000	4.645	0	26068	N.D. d	0.162	
6)		3,4,5-Tri...	4.175f	4.721	22901	30133	0.136	0.203	#
7)	M	2,3,5,6-T...	4.445	4.918f	10141	82660	0.018	0.174	#
8)	M	2,3,4,5-T...	5.019	0.000	162373	0	0.401	N.D.	#
9)	M	Pentachlo...	5.152	5.535	46878	1028380	0.072m	1.630	#
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D.	d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

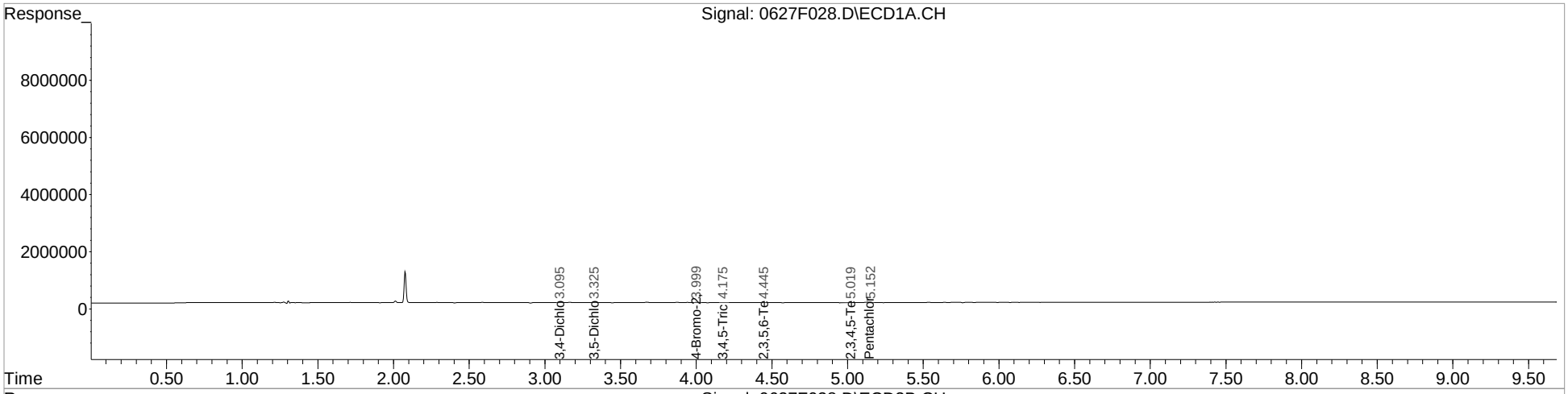
1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F028.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 8:34 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 10:04:47 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



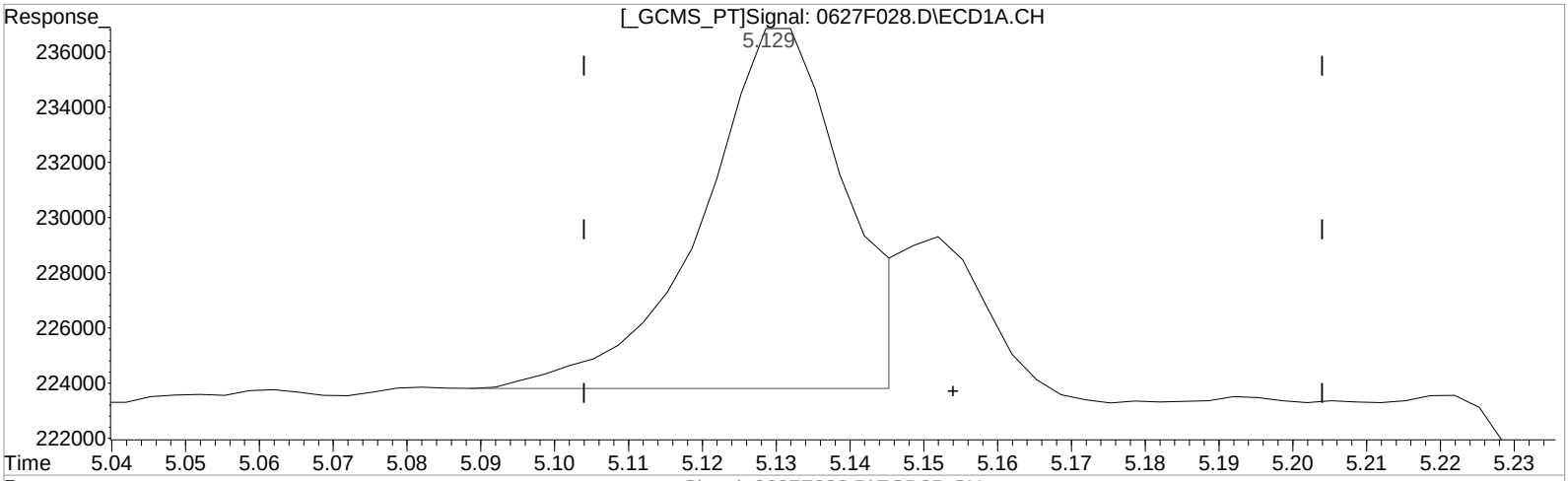
Quantitation Report (Qedit)

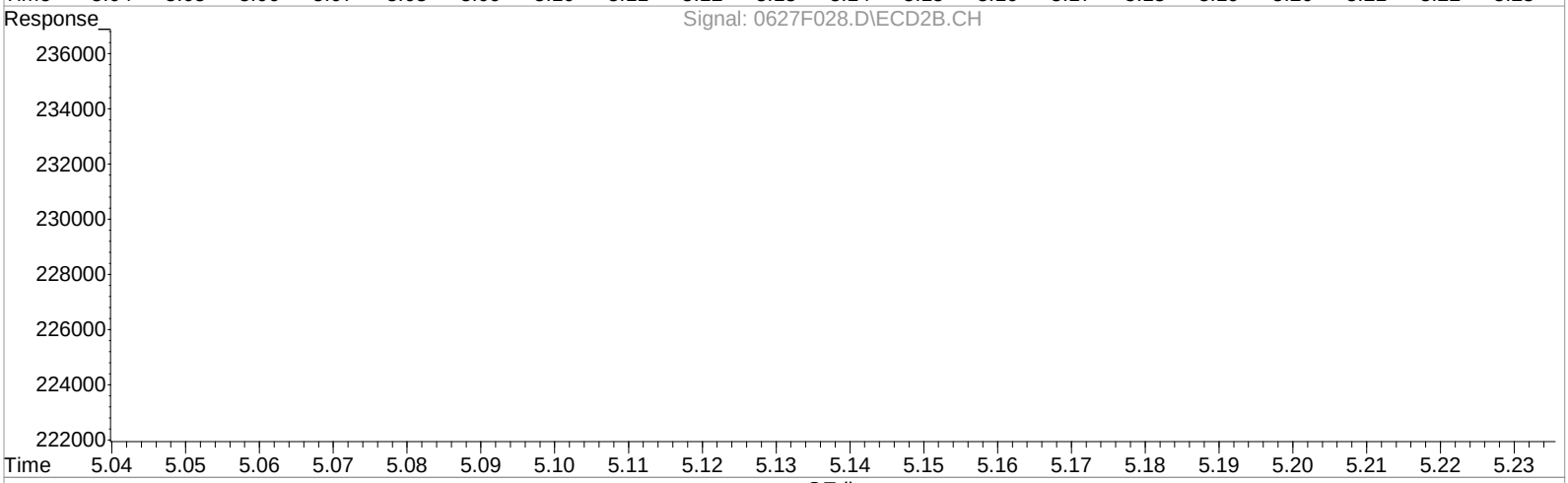
1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F028.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 8:34 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:22:00 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.129min 0.270 ug/L

response 176910

Manual Integration:

Before

06/28/18

(9) Pentachlorophenol #2 (M)

5.535min 1.630 ug/L

response 1028380

(+) = Expected Retention Time

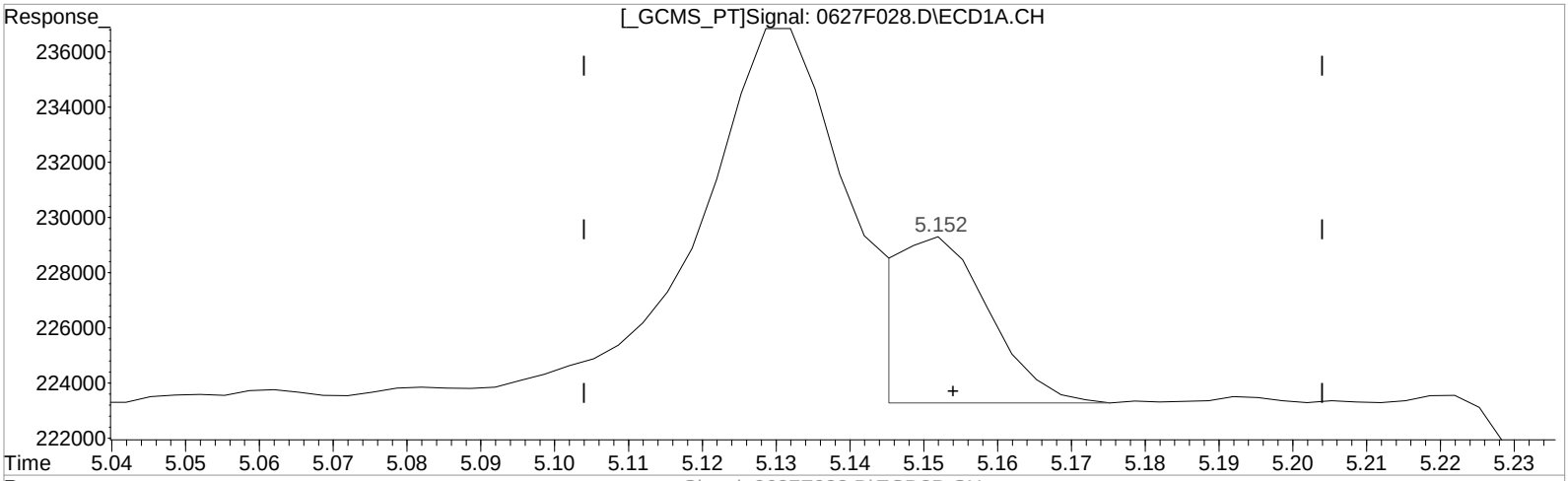
Quantitation Report (Qedit)

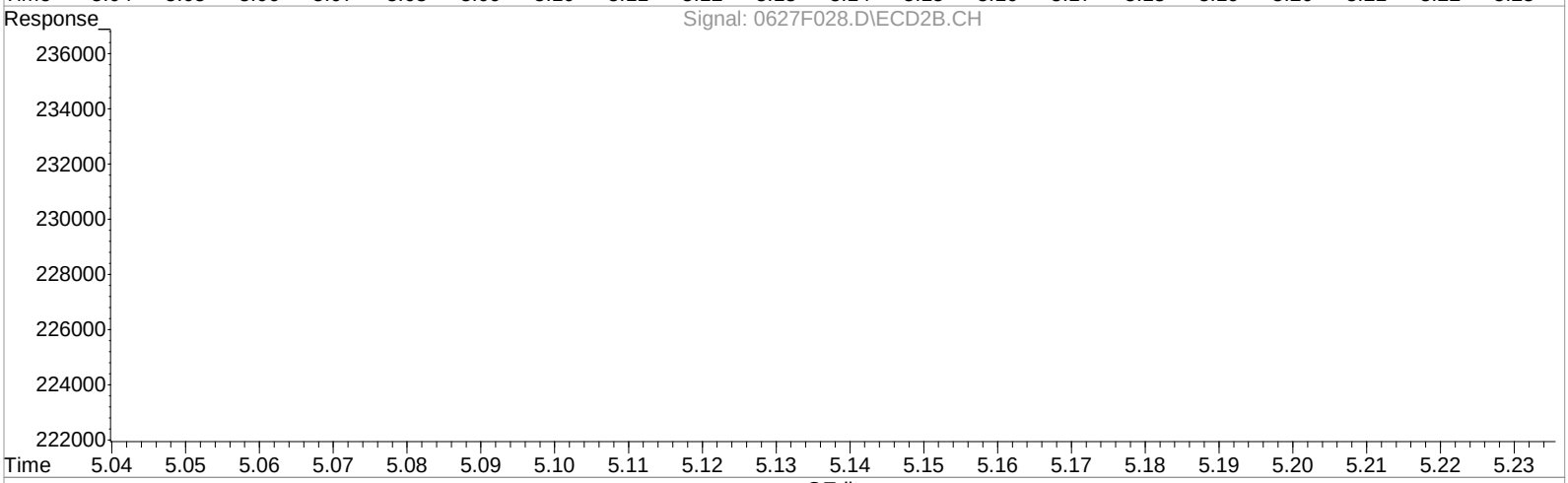
1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F028.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 8:34 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:22:00 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.152min 0.072 ug/L m

response 46878

Manual Integration:

After

Wrong Peak

06/28/18

(9) Pentachlorophenol #2 (M)

5.535min 1.630 ug/L

response 1028380

(+) = Expected Retention Time

1st JAD 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F003.D\
Lab ID: KQ1808738-01
RunType: CCV
Matrix: Water

Date Acquired: 6/27/18 13:24:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F003.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 13:24:00	**Vial:**	1
Run Type:	CCV	**Dilution:**	1
Lab ID:	KQ1808738-01	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**		**Report Group:**	KQ1808738
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	Rpt?
4-Bromo-2,6-dichlorophenol	4.00	4.58	24663102	19929304	51.091	55.280			Y

Target Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Rpt?
2,4,5-Trichlorophenol	4.18	4.65	7890578	6736430	48.533	41.882	48.5	41.9	Y
2,4,6-Trichlorophenol	3.45	4.12	15642048	14020052	55.073	43.613	55.1	43.6	Y
3,4,5-Trichlorophenol	4.21	4.71	7227004	6278432	42.980	42.372	43.0	42.4	Y
2,3,4,5-Tetrachlorophenol	5.01	5.36	18119326	16034235	44.713	50.335	44.7	50.3	Y
2,3,5,6-Tetrachlorophenol	4.46	4.95	25266428	22488343	46.008	47.309	46.0	47.3	Y
Pentachlorophenol (PCP)	5.15	5.55	32090028	28371890	48.967	44.960	49.0	45.0	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F003.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 1:24 pm Operator: SMS
Sample : PENTA01-90K 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:11:36 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.005	4.577	24663102	19929304	51.091	55.280
		Target Compounds						
1)		3,4-Dichl...	3.108	3.644	801772	756073	46.162	45.997
2)		3,5-Dichl...	3.348	3.887	621656	576289	51.028	46.609
3)		2,4,6-Tri...	3.448	4.117	15642048	14020052	55.073	43.613
5)		2,4,5-Tri...	4.181	4.647	7890578	6736430	48.533	41.882
6)		3,4,5-Tri...	4.211	4.711	7227004	6278432	42.980	42.372
7)	M	2,3,5,6-T...	4.461	4.951	25266428	22488343	46.008	47.309
8)	M	2,3,4,5-T...	5.011	5.361	18119326	16034235	44.713	50.335
9)	M	Pentachlo...	5.148	5.547	32090028	28371890	48.967	44.960
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

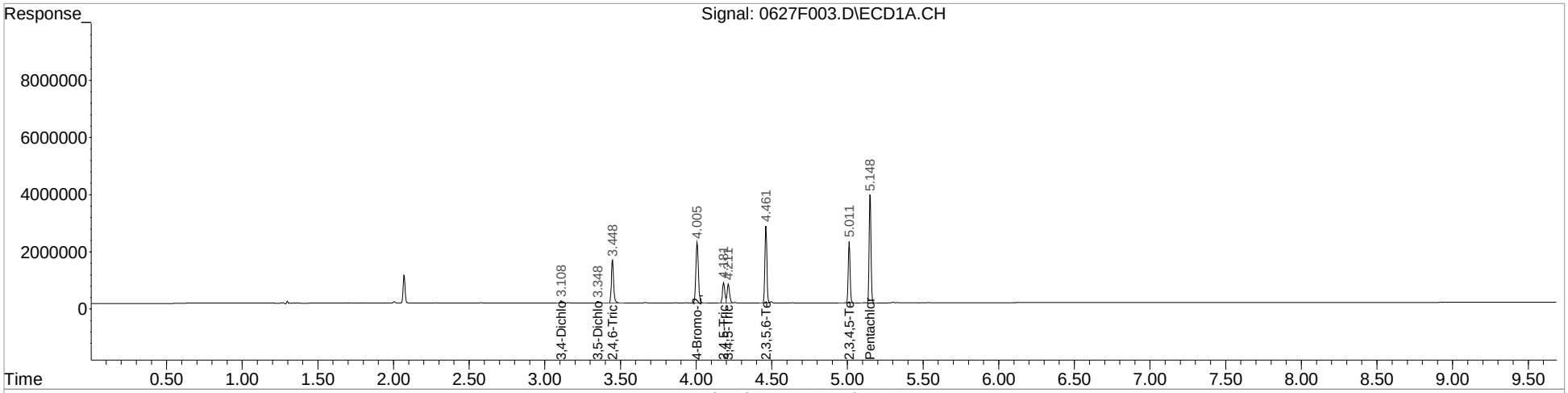
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F003.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 1:24 pm Operator: SMS
Sample : PENTA01-90K 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:11:36 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F015.D\
Lab ID: KQ1808738-02
RunType: CCV
Matrix: Water

Date Acquired: 6/27/18 16:51:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F015.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 16:51:00	**Vial:**	2
Run Type:	CCV	**Dilution:**	1
Lab ID:	KQ1808738-02	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**		**Report Group:**	KQ1808738
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	25671284	19456258	53.180	53.968			Y

Target Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Rpt?
2,4,5-Trichlorophenol	4.19	4.65	8165718	6598444	50.359	41.024	50.4	41.0	Y
2,4,6-Trichlorophenol	3.45	4.13	16184922	13697303	57.022	42.609	57.0	42.6	Y
3,4,5-Trichlorophenol	4.22	4.72	7566510	6118641	44.999	41.294	45.0	41.3	Y
2,3,4,5-Tetrachlorophenol	5.01	5.37	18674187	15570696	46.082	48.857	46.1	48.9	Y
2,3,5,6-Tetrachlorophenol	4.47	4.96	26170872	21830586	47.655	45.926	47.7	45.9	Y
Pentachlorophenol (PCP)	5.15	5.55	33202791	27682736	50.665	43.868	50.7	43.9	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F015.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 4:51 pm Operator: SMS
Sample : PENTA01-90K 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:13:25 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.013	4.583	25671284	19456258	53.180	53.968	
		Target Compounds							
1)		3,4-Dichl...	3.114	3.653	853631	755346	49.147	45.949	
2)		3,5-Dichl...	3.357	3.896	629786	569772	51.695	46.082	
3)		2,4,6-Tri...	3.454	4.126	16184922	13697303	57.022	42.609	#
5)		2,4,5-Tri...	4.187	4.653	8165718	6598444	50.359	41.024	
6)		3,4,5-Tri...	4.217	4.716	7566510	6118641	44.999	41.294	
7)	M	2,3,5,6-T...	4.467	4.956	26170872	21830586	47.655	45.926	
8)	M	2,3,4,5-T...	5.013	5.366	18674187	15570696	46.082	48.857	
9)	M	Pentachlo...	5.154	5.550	33202791	27682736	50.665	43.868	
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

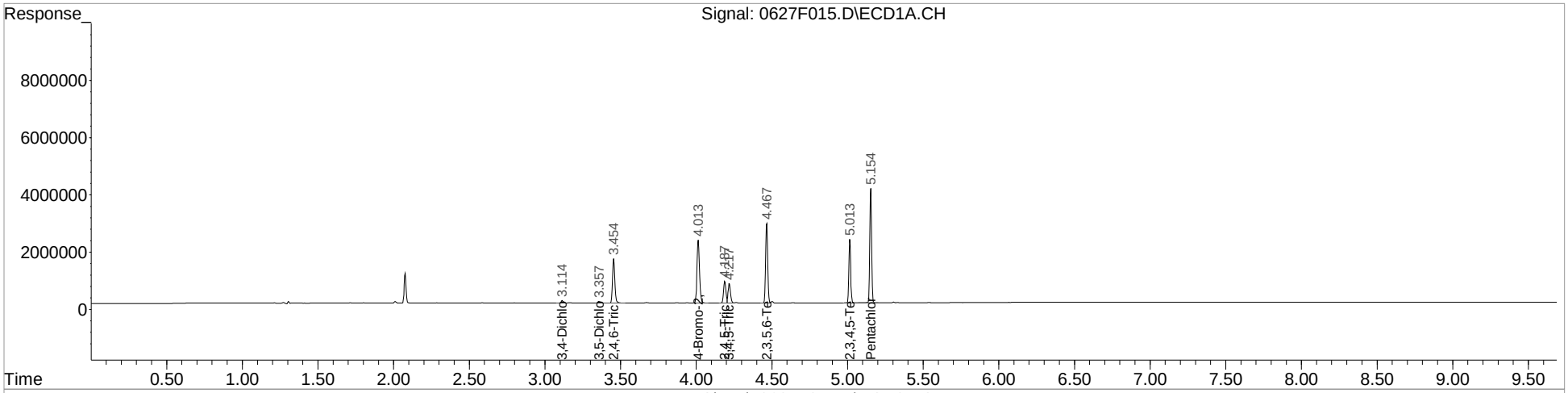
1st JED 06/28/18
2nd TP 07/05/18

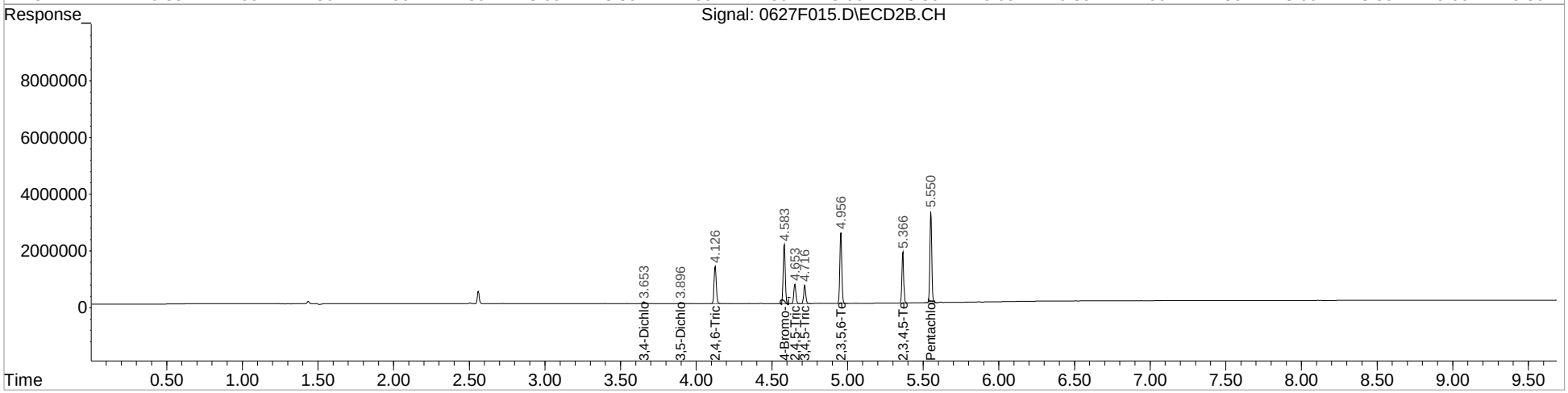
Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F015.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 4:51 pm Operator: SMS
Sample : PENTA01-90K 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:13:25 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JAD 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F027.D\
Lab ID: KQ1808738-03
RunType: CCV
Matrix: Water

Date Acquired: 6/27/18 20:17:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F027.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 20:17:00	**Vial:**	3
Run Type:	CCV	**Dilution:**	1
Lab ID:	KQ1808738-03	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**		**Report Group:**	KQ1808738
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	Rpt?
4-Bromo-2,6-dichlorophenol	4.02	4.58	25703602	19785994	53.247	54.883			Y

Target Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Rpt?
2,4,5-Trichlorophenol	4.19	4.65	8332541	6695449	51.470	41.627	51.5	41.6	Y
2,4,6-Trichlorophenol	3.46	4.12	16407002	14015460	57.819	43.599	57.8	43.6	Y
3,4,5-Trichlorophenol	4.22	4.72	7456544	6224770	44.345	42.010	44.3	42.0	Y
2,3,4,5-Tetrachlorophenol	5.01	5.36	18761128	15799555	46.296	49.587	46.3	49.6	Y
2,3,5,6-Tetrachlorophenol	4.47	4.95	26289424	22197853	47.871	46.698	47.9	46.7	Y
Pentachlorophenol (PCP)	5.15	5.55	33192530	27910057	50.649	44.229	50.6	44.2	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F027.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 8:17 pm Operator: SMS
Sample : PENTA01-90K 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:14:38 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.015	4.581	25703602	19785994	53.247	54.883
		Target Compounds						
1)		3,4-Dichl...	3.115	3.651	851412	762092	49.020	46.396
2)		3,5-Dichl...	3.355	3.898	636473	588504	52.244	47.597
3)		2,4,6-Tri...	3.455	4.124	16407002	14015460	57.819	43.599
5)		2,4,5-Tri...	4.188	4.651	8332541	6695449	51.470	41.627
6)		3,4,5-Tri...	4.218	4.718	7456544	6224770	44.345	42.010
7)	M	2,3,5,6-T...	4.465	4.954	26289424	22197853	47.871	46.698
8)	M	2,3,4,5-T...	5.012	5.361	18761128	15799555	46.296	49.587
9)	M	Pentachlo...	5.152	5.548	33192530	27910057	50.649	44.229
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

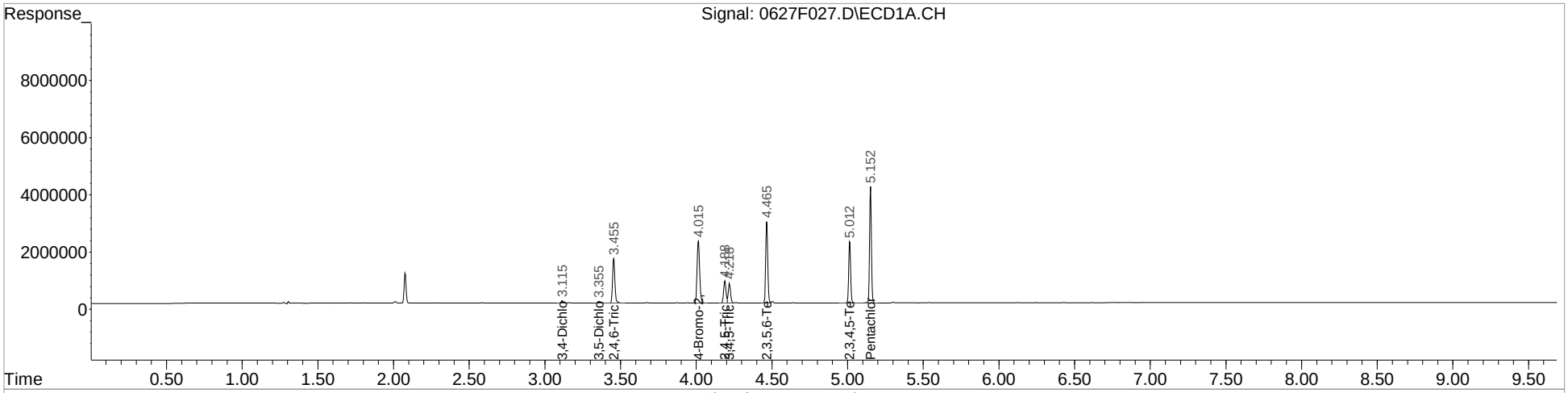
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st JED 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F027.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 8:17 pm Operator: SMS
Sample : PENTA01-90K 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:14:38 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



Sequence Name: C:\GC28\SEQUENCE\062718.S
Comment: Pentachlorophenol and Breakdown Products
Operator: SMS
Data Path: J:\GC28\DATA\062618\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	IB	100	0627F001	PENTHOT2	PRIMER
2	IB	100	0627F002	PENTHOT2	PRIMER
3	CCV	1	0627F003	PENTHOT2	PENTA01-90K 50
4	IB	2	0627F004	PENTHOT2	IB
5	SMPL	3	0627F005	PENTHOT2	K1805807-003
6	SMPL	4	0627F006	PENTHOT2	K1805808-001
7	SMPL	5	0627F007	PENTHOT2	K1805808-002
8	SMPL	6	0627F008	PENTHOT2	K1805809-021
9	SMPL	7	0627F009	PENTHOT2	K1805809-022
10	SMPL	8	0627F010	PENTHOT2	K1805809-023
11	SMPL	9	0627F011	PENTHOT2	K1805809-024 10X
12	SMPL	10	0627F012	PENTHOT2	K1805809-025
13	SMPL	11	0627F013	PENTHOT2	K1805809-026
14	SMPL	12	0627F014	PENTHOT2	K1805809-027
15	CCV	1	0627F015	PENTHOT2	PENTA01-90K 50
16	IB	2	0627F016	PENTHOT2	IB
17	SMPL	13	0627F017	PENTHOT2	K1805809-028
18	SMPL	14	0627F018	PENTHOT2	K1805809-030
19	SMPL	15	0627F019	PENTHOT2	K1805809-029
20	SMPL	16	0627F020	PENTHOT2	K1805868-001 10X
21	SMPL	17	0627F021	PENTHOT2	K1805868-002
22	SMPL	18	0627F022	PENTHOT2	K1805868-003
23	SMPL	19	0627F023	PENTHOT2	K1805809-030 MS
24	SMPL	20	0627F024	PENTHOT2	K1805809-030 DMS
25	SMPL	21	0627F025	PENTHOT2	KQ1808476-03 LCS
26	SMPL	22	0627F026	PENTHOT2	KQ1808476-04 MB
27	CCV	1	0627F027	PENTHOT2	PENTA01-90K 50
28	IB	2	0627F028	PENTHOT2	IB

Tri, penta

Run: 596396
Cal: ICV180028

Last Modified: Wed Jun 27 12:46:30 2018 Page: 1

DILUTION LOG

LAB ID	ALIQUOT	FINAL VOLUME	DILUTION FACTOR	DATE	ANALYST	SOLVENT LOT	COMMENTS
K1805868-001	100uL	1mL	10X	6/26/18	JD	ISO DM121	
K18D5809-D24	100 uL	1 mL	10x	6/27/18	JD	ISO DM121	

Injection Log

Directory: J:\GC28\DATA\112717-CAL

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	1127f124.d	1.	IB		27 Nov 2017 18:01
2	20	1127f127.d	1.	PENTA01-88I 1 PPB		27 Nov 2017 18:57
3	21	1127f128.d	1.	PENTA01-88H 2.5 PPB		27 Nov 2017 19:16
4	22	1127f129.d	1.	PENTA01-88G 5 PPB		27 Nov 2017 19:35
5	23	1127f130.d	1.	PENTA01-88I 10 PPB		27 Nov 2017 19:53
6	24	1127f131.d	1.	PENTA01-88E 25 PPB		27 Nov 2017 20:12
7	25	1127f132.d	1.	PENTA01-88D 100 PPB		27 Nov 2017 20:31
8	26	1127f133.d	1.	PENTA01-88C 250 PPB		27 Nov 2017 20:50
9	27	1127f134.d	1.	PENTA01-88N 500 PPB		27 Nov 2017 21:08
10	28	1127f135.d	1.	PENTA01-88M 1000 PPB		27 Nov 2017 21:27
11	2	1127f136.d	1.	IB		27 Nov 2017 21:46
12	3	1129f005.d	1.	PENTA01-88K 50PPB ICV	SEMIVOA GC\W11122...	29 Nov 2017 12:44

CCL: 15625

1st CV 11/29/17
2nd SM 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:48:32 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	553952	330490	1.842	1.270	#
		Target Compounds							
1)		3,4-Dichlorophen	3.12	3.67	16518	29596	1.019	1.580	#
2)		3,5-Dichlorophen	3.37	3.91	20988	18718	1.737	1.425	
3)		2,4,6-Trichlorop	3.46	4.14	448728	374818	1.266	1.042	
5)		2,4,5-Trichlorop	4.20	4.67	232648	183740	1.496	1.118	#
6)		3,4,5-Trichlorop	4.23f	4.73	193422	169644	1.216m	1.169	
7)	M	2,3,5,6-Tetrachl	4.47	4.97	639390	495876	1.275	0.987	
8)	M	2,3,4,5-Tetrachl	5.02	5.37	456782	504796	1.344	1.477	
9)	M	Pentachloropheno	5.16	5.56	806520	809946	1.377	1.358	
10)		Pentachloroaniso	5.16	5.56	806520	809946	1.449	1.429	

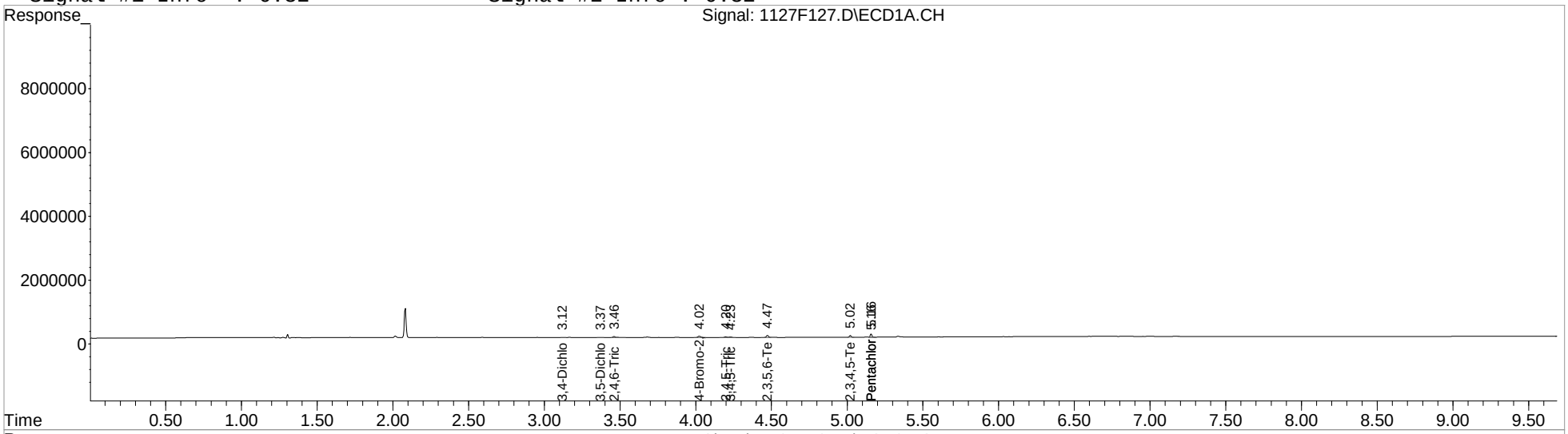
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

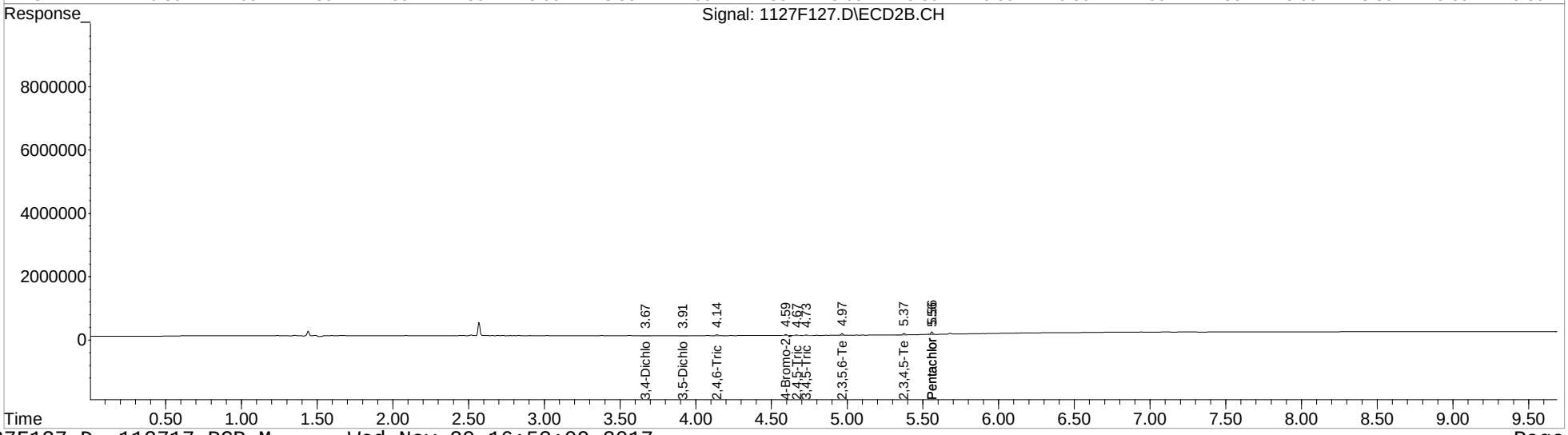
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



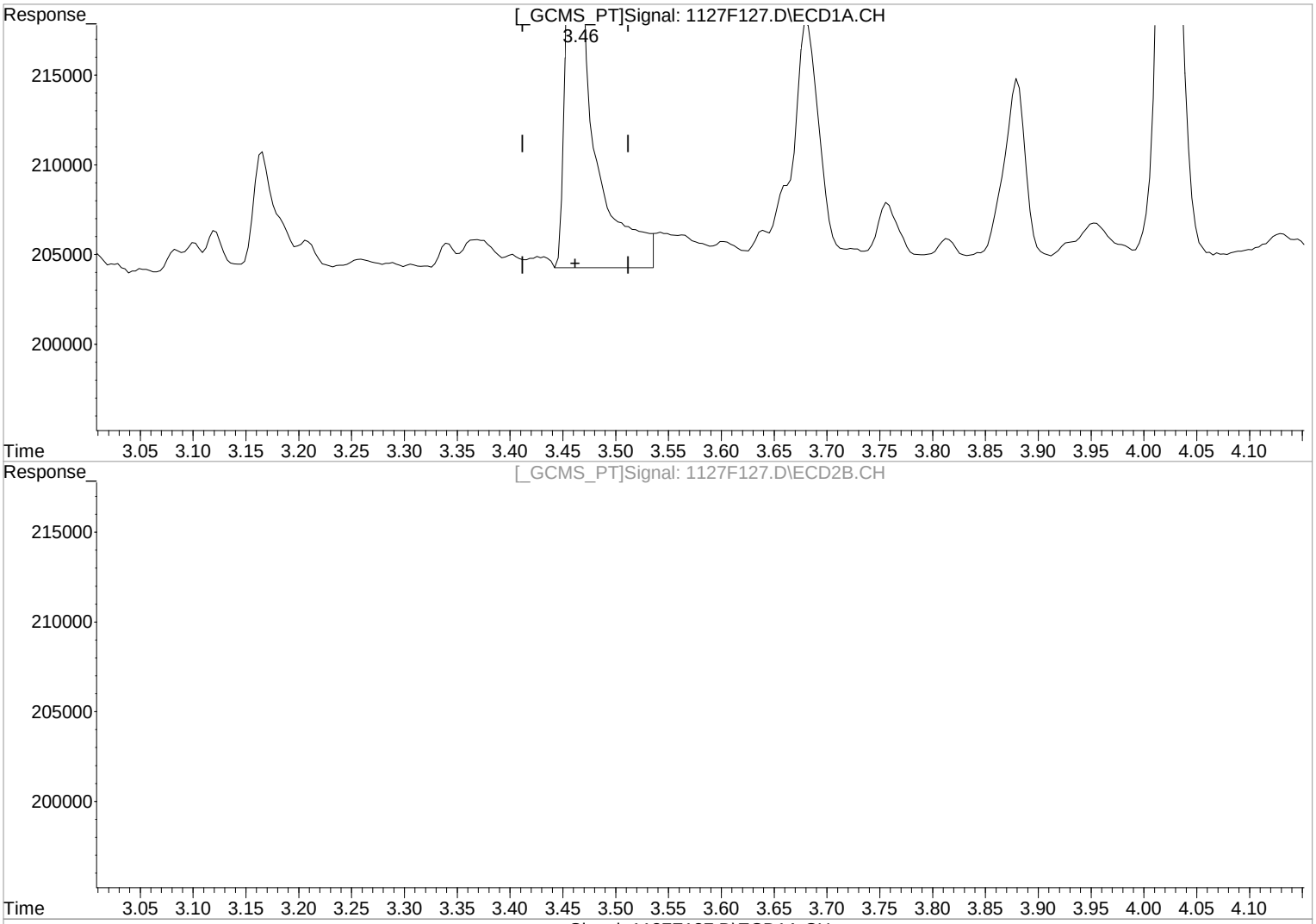


Quantitation Report (Qedit)

1st 11/29/17
2nd 11/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F127.D\ECD1A.CH

(3) 2,4,6-Trichlorophenol

3.46min 1.266ug/L

response 448728

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(3) 2,4,6-Trichlorophenol #2

4.14min 1.042ug/L

response 374818

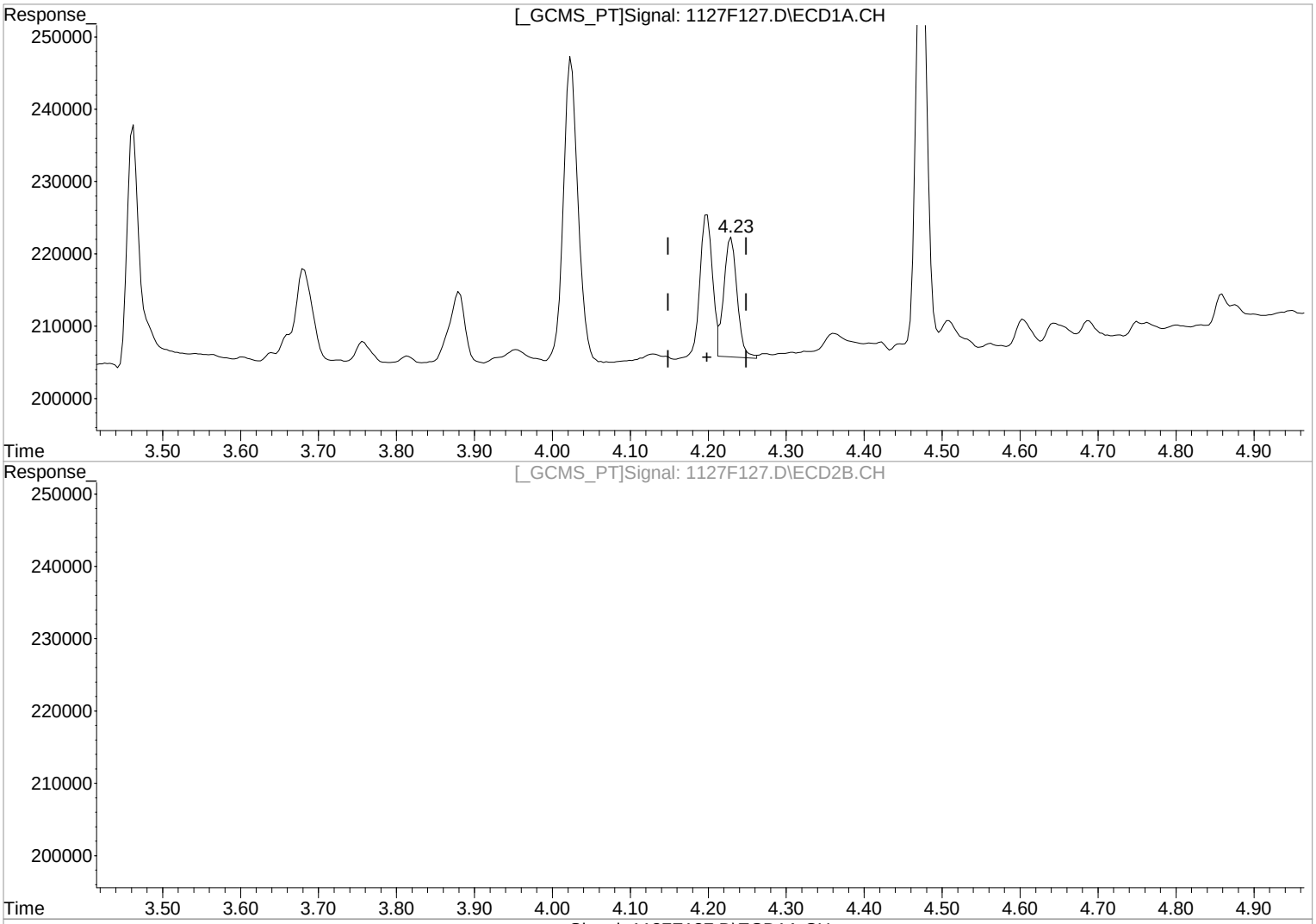
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F127.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 1.216ug/L m

response 193422

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 1.169ug/L

response 169644

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:50:18 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	1317276	876496	4.379	3.368
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	49286	55140	3.040m	2.943
2)		3,5-Dichlorophen	3.36	3.91	38712	36048	3.203m	2.745
3)		2,4,6-Trichlorop	3.46	4.14	974062	824238	2.747	2.292
5)		2,4,5-Trichlorop	4.20	4.66	535528	435750	3.444	2.652
6)		3,4,5-Trichlorop	4.23f	4.73	463666	405392	2.915m	2.794
7)	M	2,3,5,6-Tetrachl	4.47	4.97	1468326	1190526	2.929m	2.369
8)	M	2,3,4,5-Tetrachl	5.02	5.37	1110862	994692	3.268m	2.911
9)	M	Pentachloropheno	5.16	5.56	1873238	1758532	3.199	2.949m
10)		Pentachloroaniso	5.16	5.56	1873238	1755630	3.366	3.097m

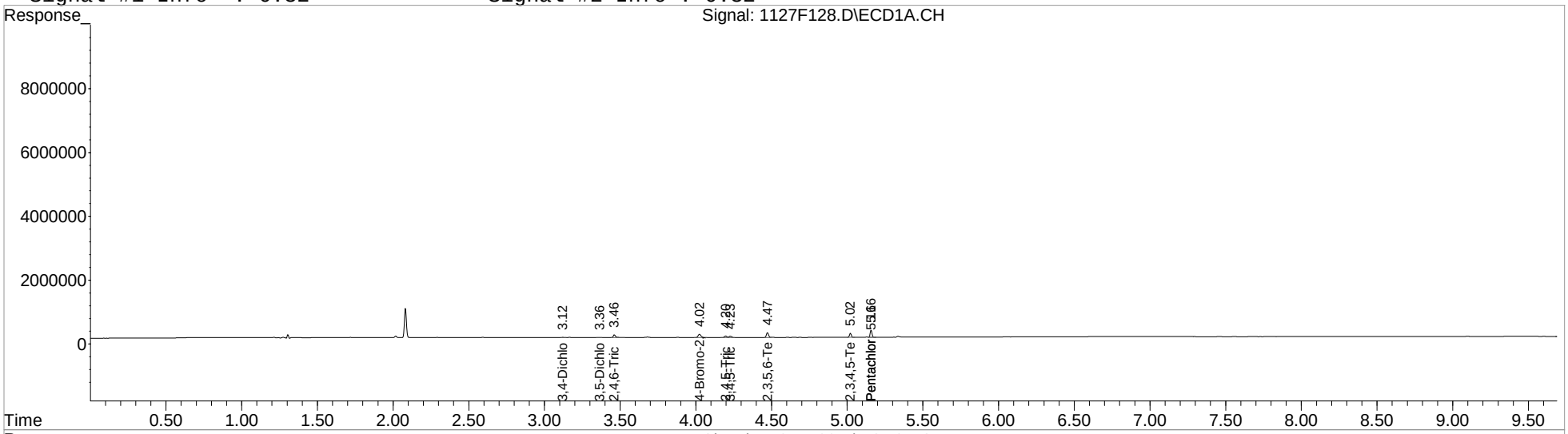
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

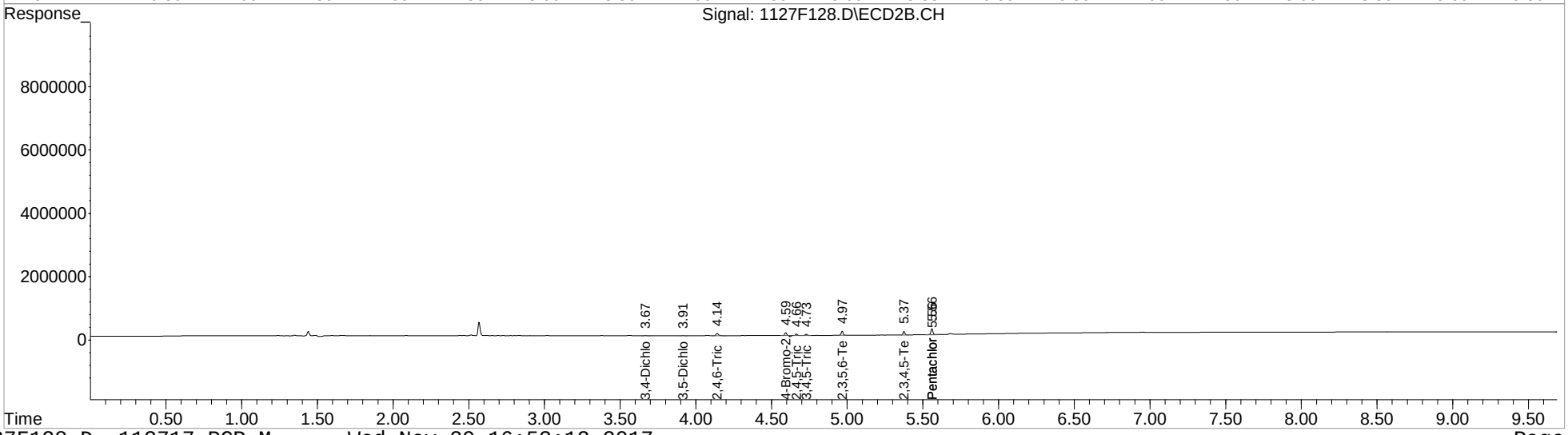
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



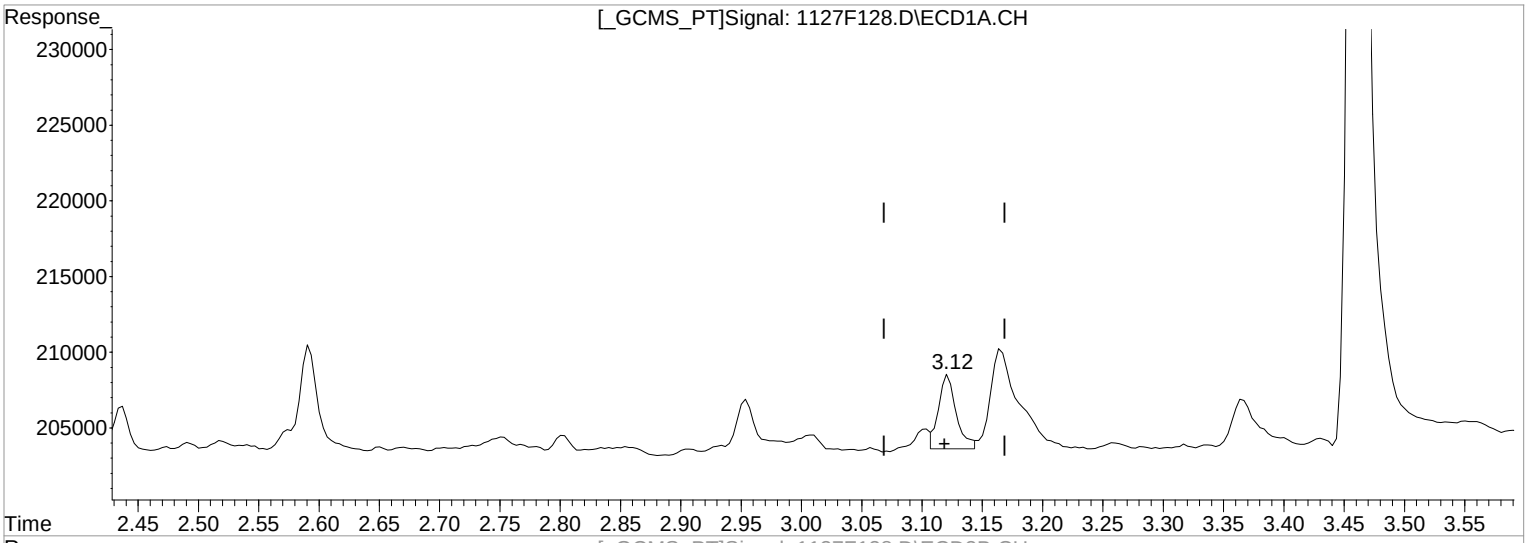


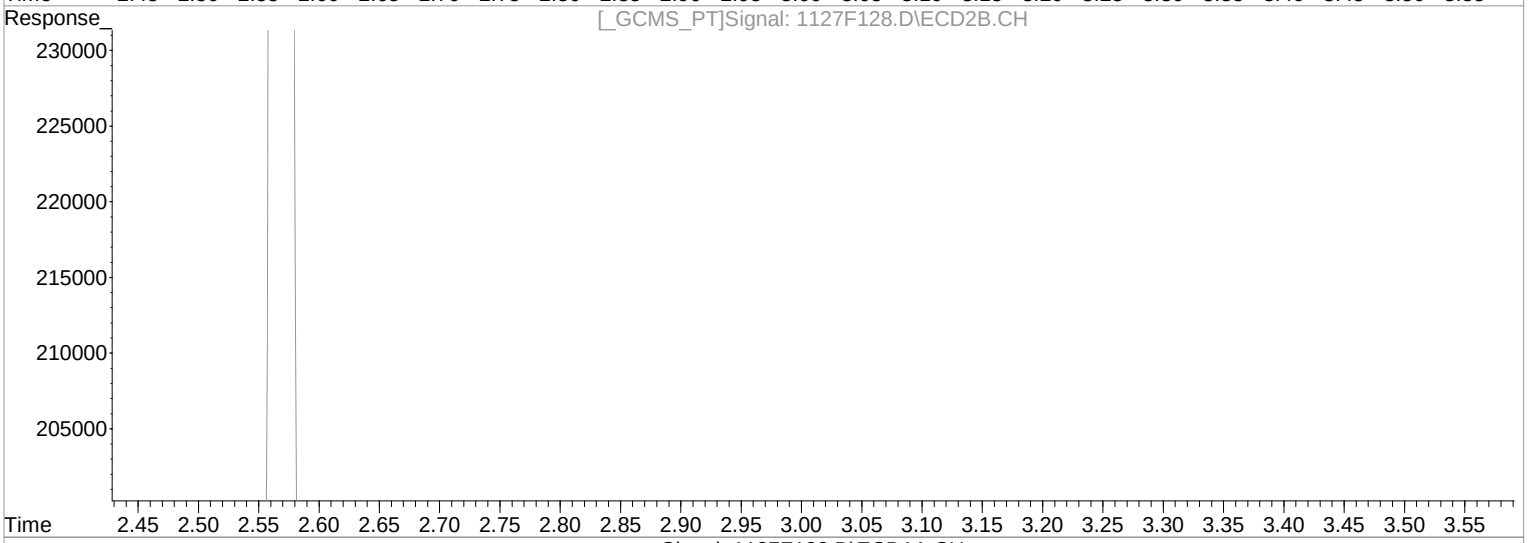
Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration





Signal: 1127F128.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 3.040ug/L m

response 49286

Manual Integration:

After

After, No Before

Baseline Shoulder

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 2.943ug/L

response 55140

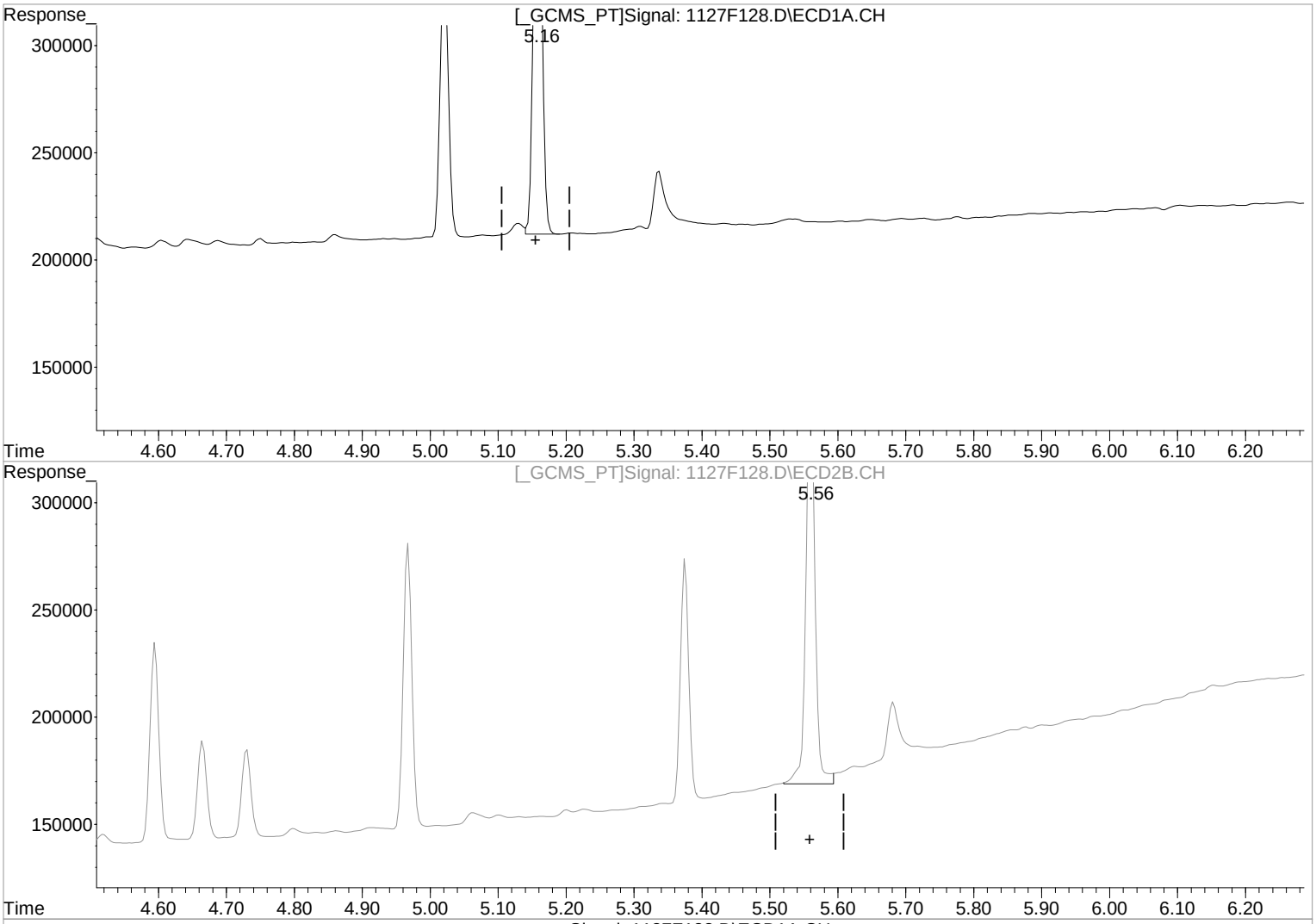
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 3.366ug/L

response 1873238

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(10) Pentachloroanisole #2

5.56min 3.097ug/L m

response 1755630

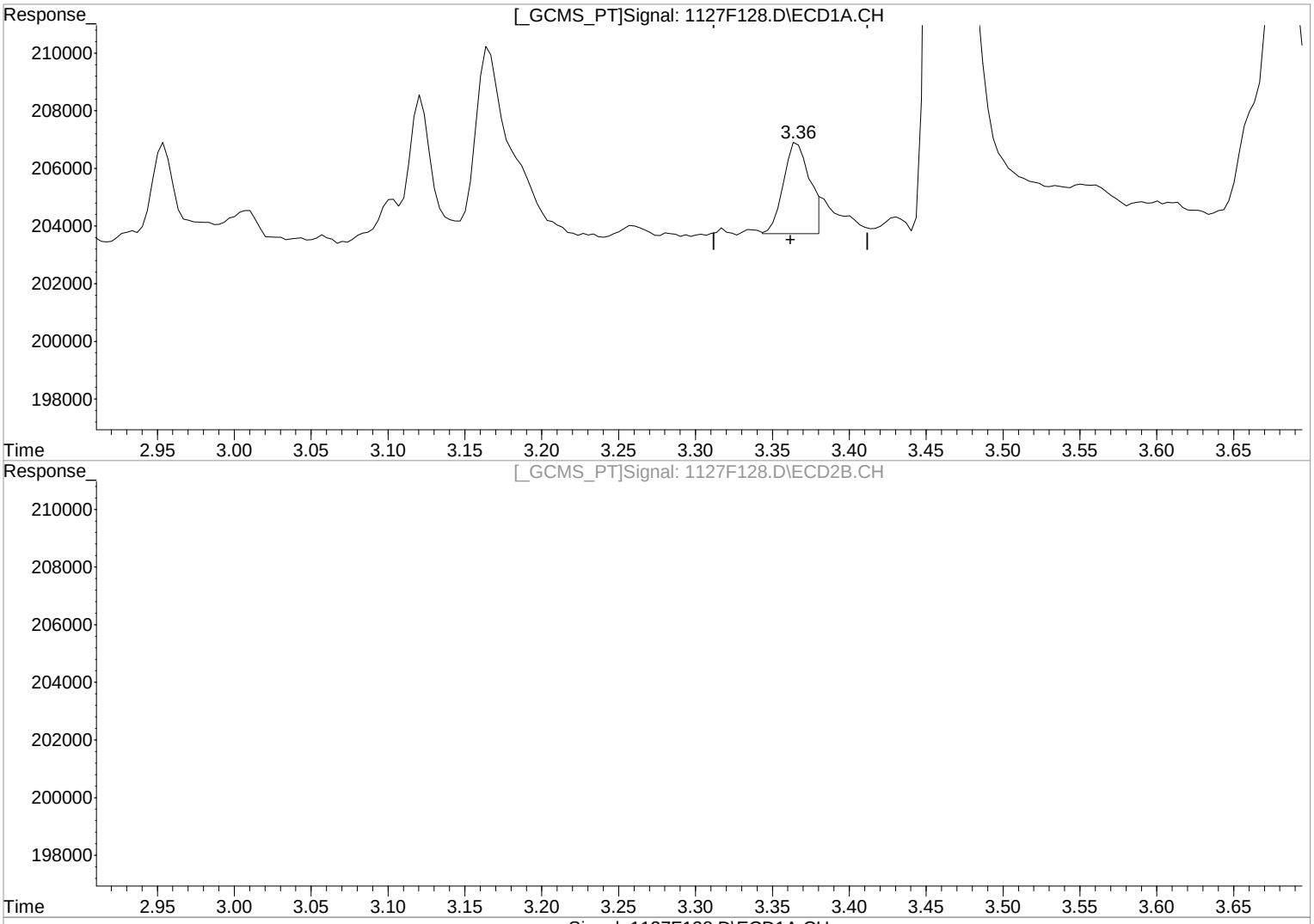
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 3.203ug/L m

response 38712

Manual Integration:

After

After, No Before

Baseline Shoulder

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 2.745ug/L

response 36048

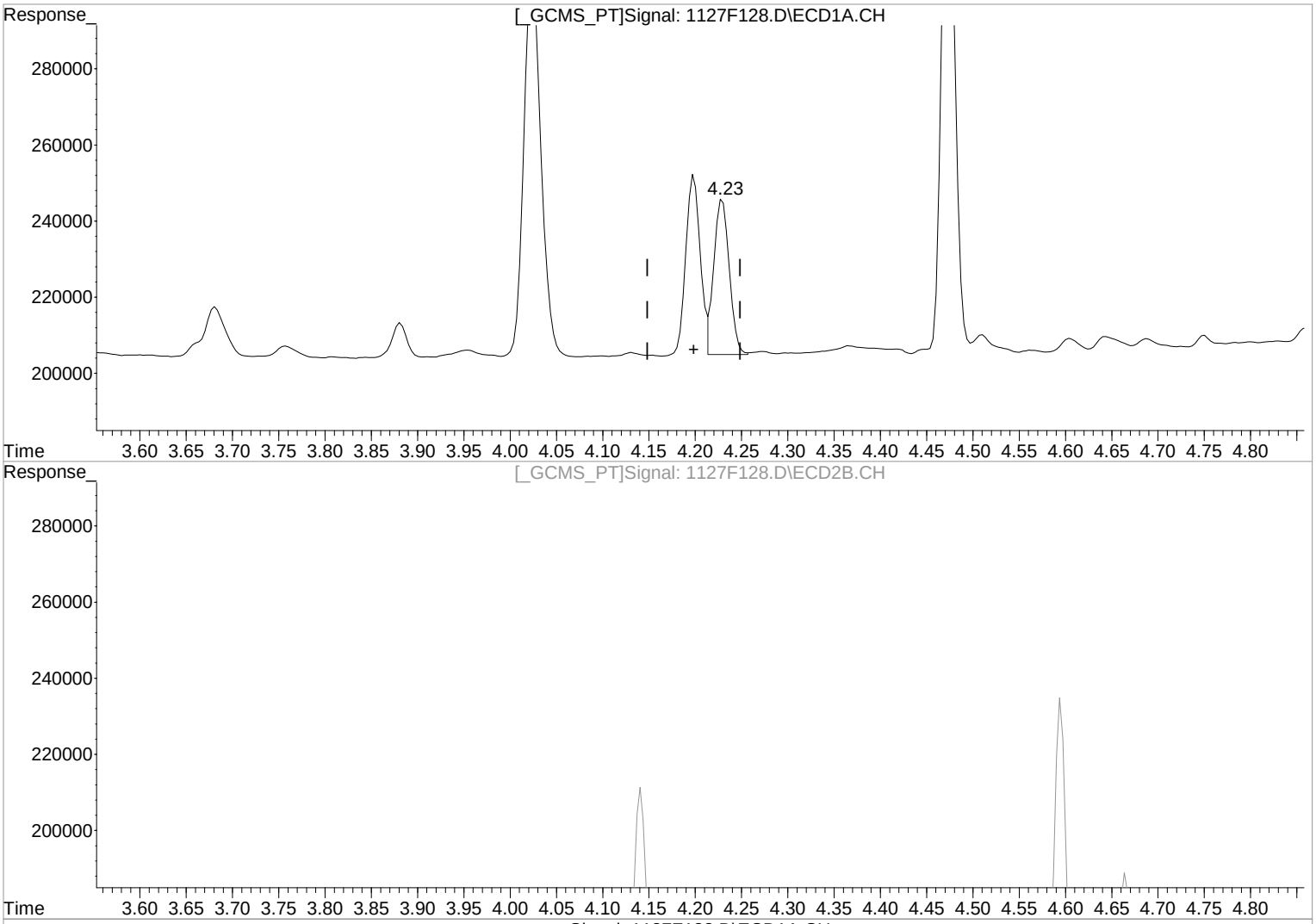
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 2.915ug/L m

response 463666

Manual Integration:

After

After, No Before

Wrong peak

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 2.794ug/L

response 405392

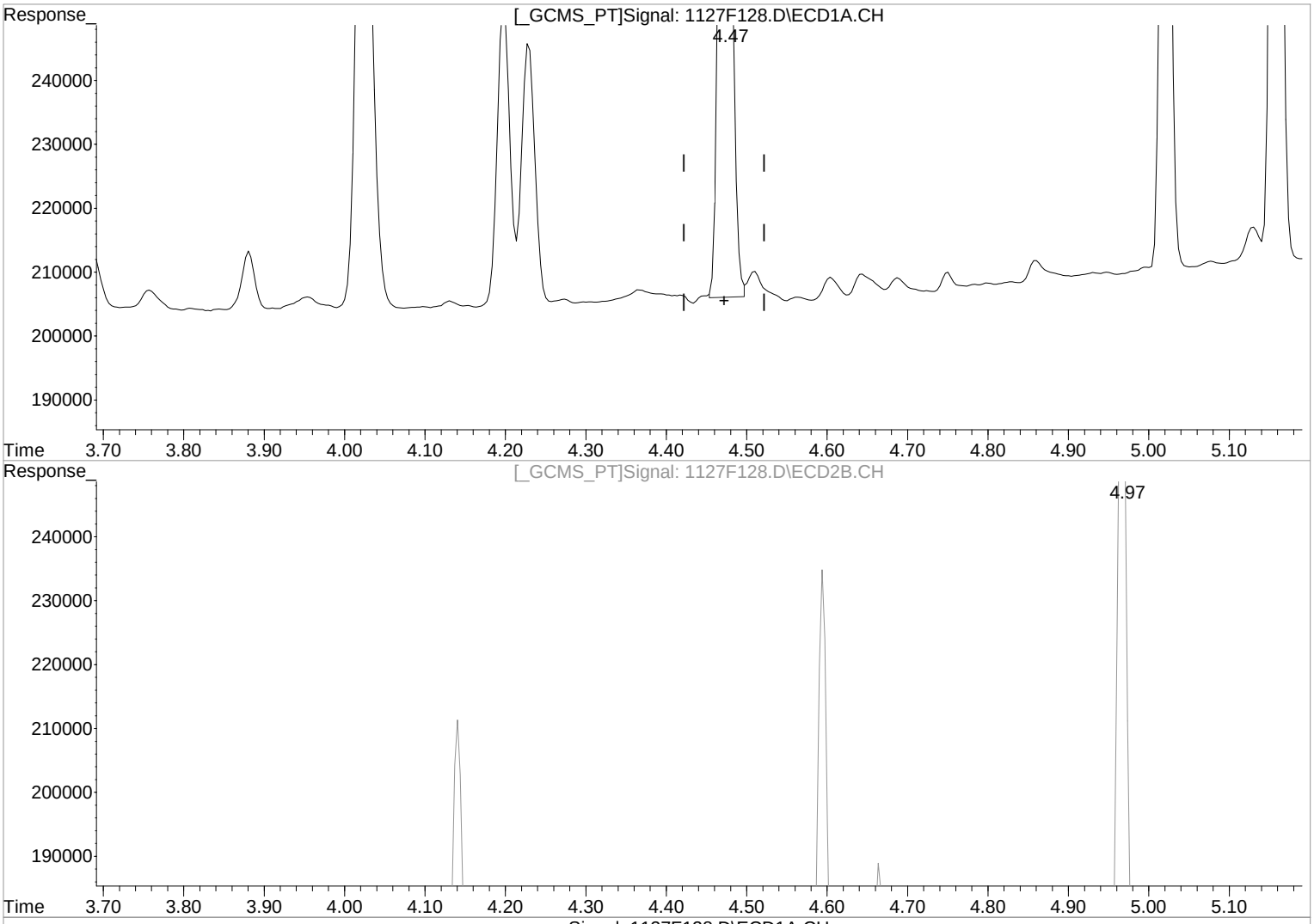
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(7) 2,3,5,6-Tetrachlorophenol (M)

4.47min 2.929ug/L m

response 1468326

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(7) 2,3,5,6-Tetrachlorophenol #2 (M)

4.97min 2.369ug/L

response 1190526

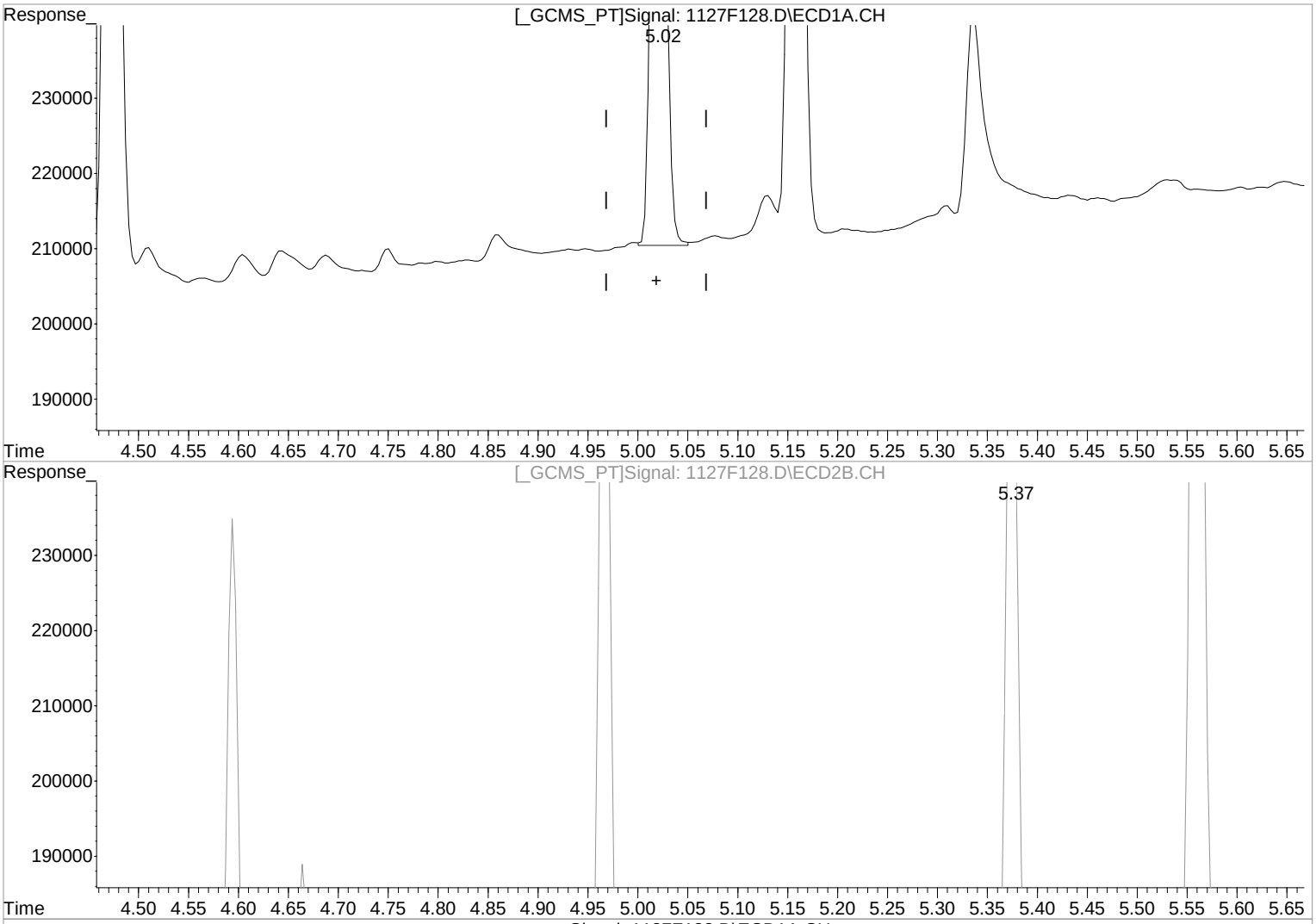
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 3.268ug/L m

response 1110862

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 2.911ug/L

response 994692

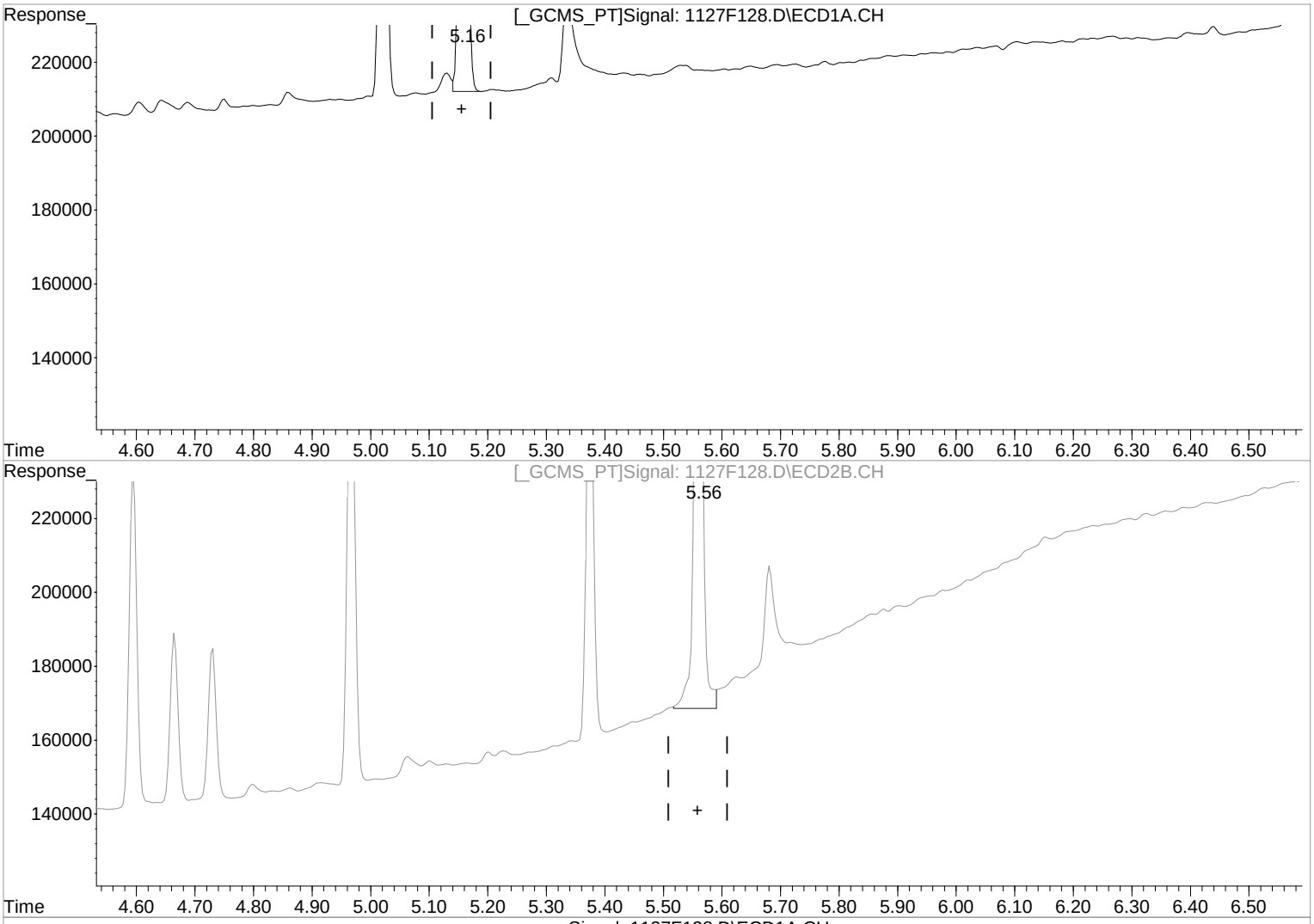
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 3.199ug/L

response 1873238

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 2.949ug/L m

response 1758532

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:54:14 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	2527708	1767222	8.403	6.791
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	86210	99632	5.317m	5.318
2)		3,5-Dichlorophen	3.36	3.91	68638	67856	5.680m	5.167
3)		2,4,6-Trichlorop	3.46	4.14	1814386	1543468	5.117	4.293
5)		2,4,5-Trichlorop	4.20	4.66	996824	834646	6.411	5.080
6)		3,4,5-Trichlorop	4.23f	4.73	897110	748802	5.640m	5.160
7)	M	2,3,5,6-Tetrachl	4.47	4.97	2791280	2329296	5.568m	4.635
8)	M	2,3,4,5-Tetrachl	5.02	5.37	2110338	1864900	6.209m	5.458
9)	M	Pentachloropheno	5.16	5.56	3505892	3190336	5.988	5.351m
10)		Pentachloroaniso	5.16	5.56	3505892	3212868	6.300	5.668m

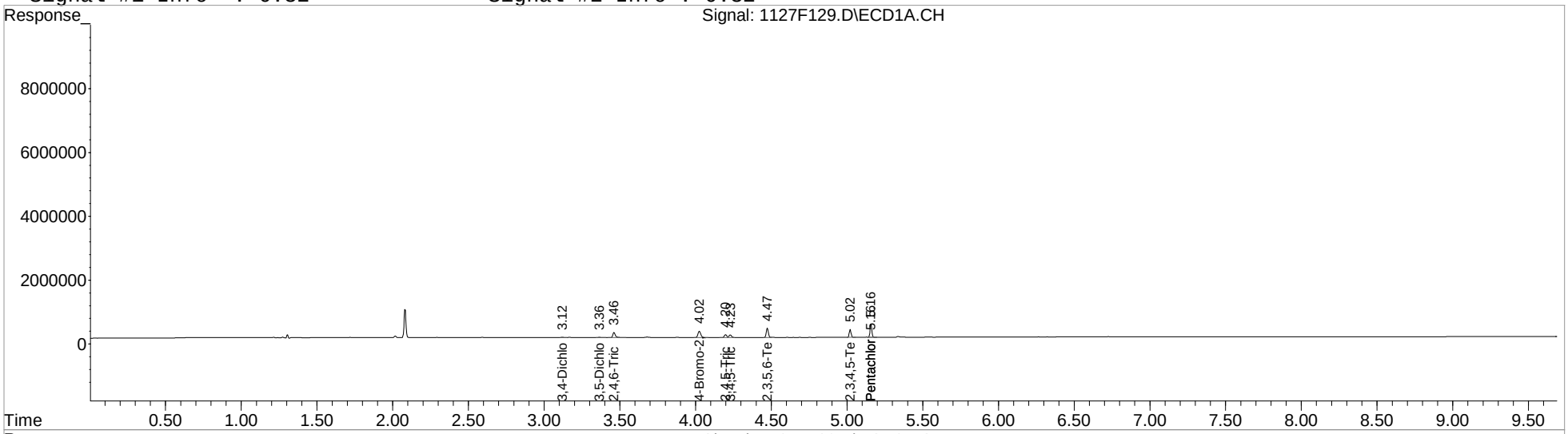
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

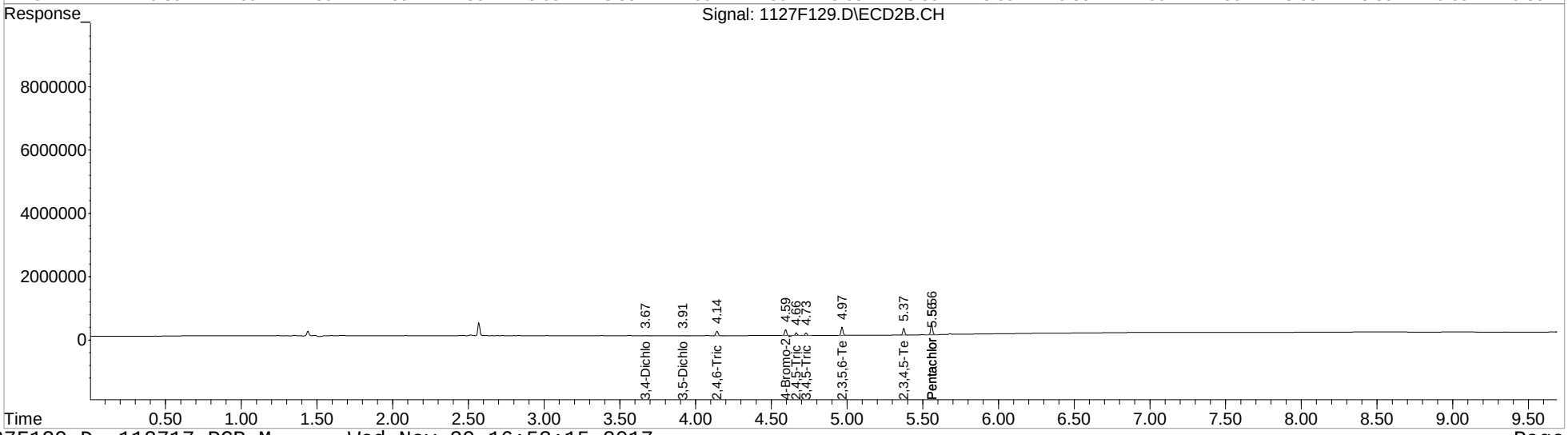
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



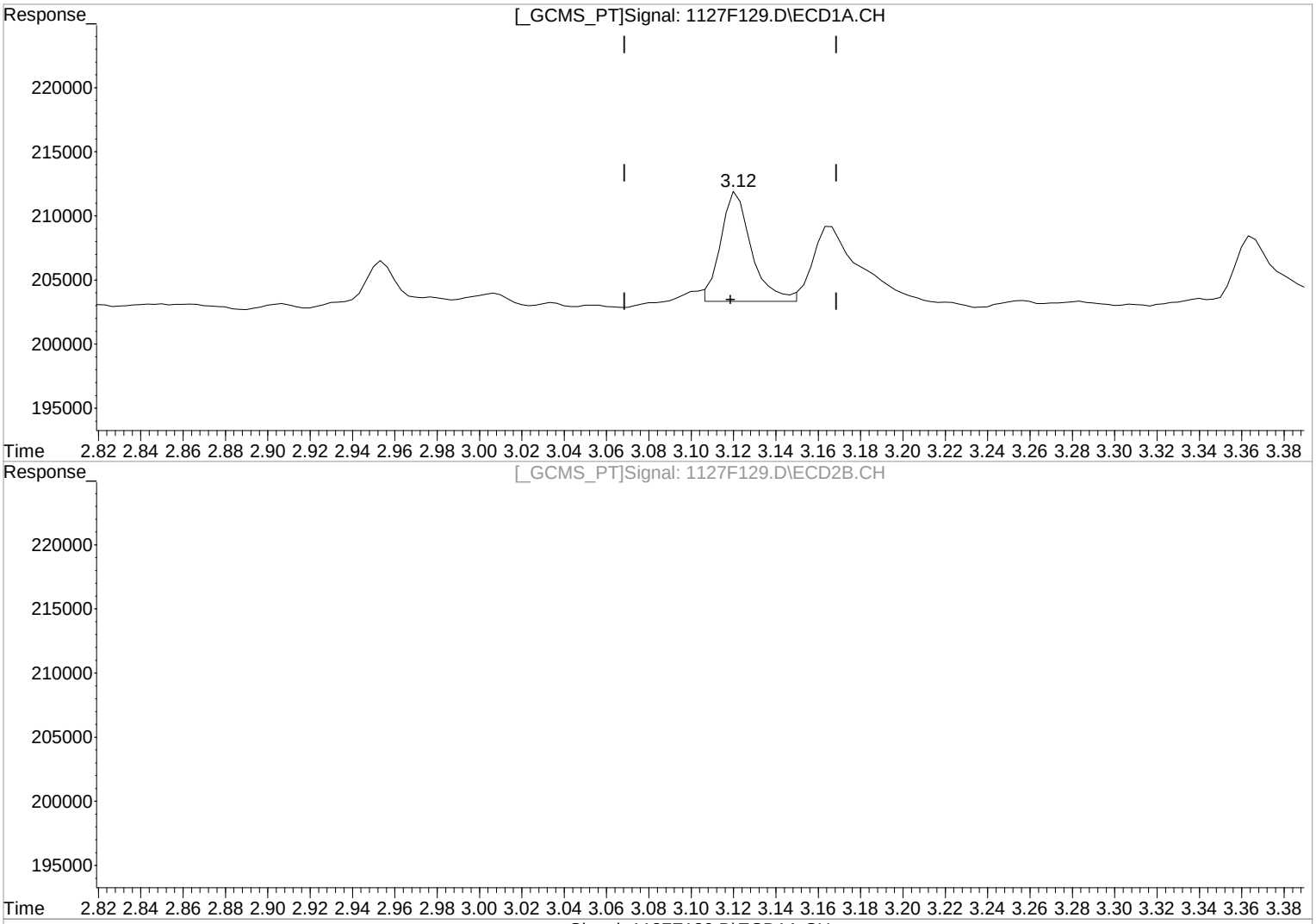


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 5.317ug/L m

response 86210

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 5.318ug/L

response 99632

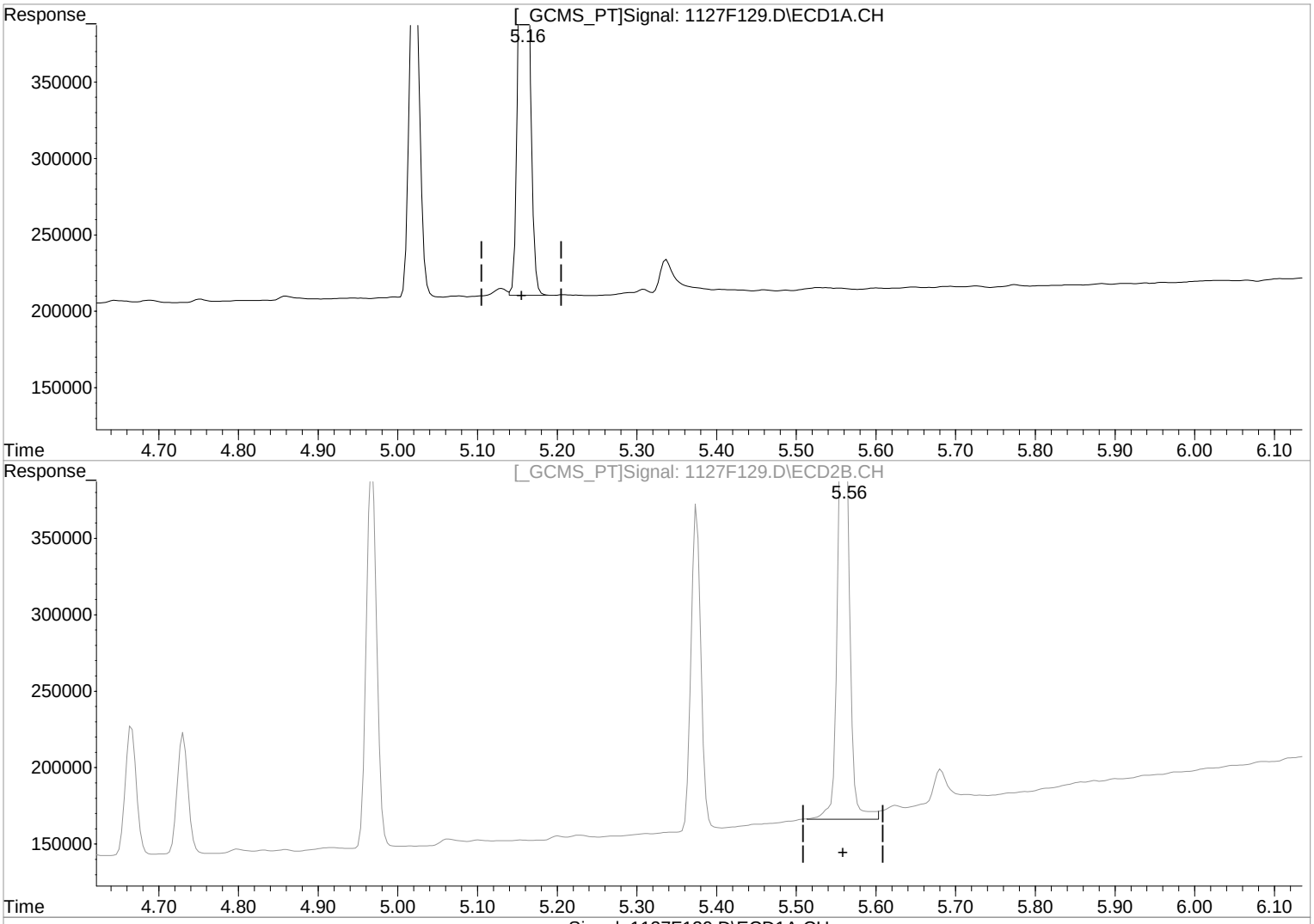
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 6.300ug/L

response 3505892

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(10) Pentachloroanisole #2

5.56min 5.668ug/L m

response 3212868

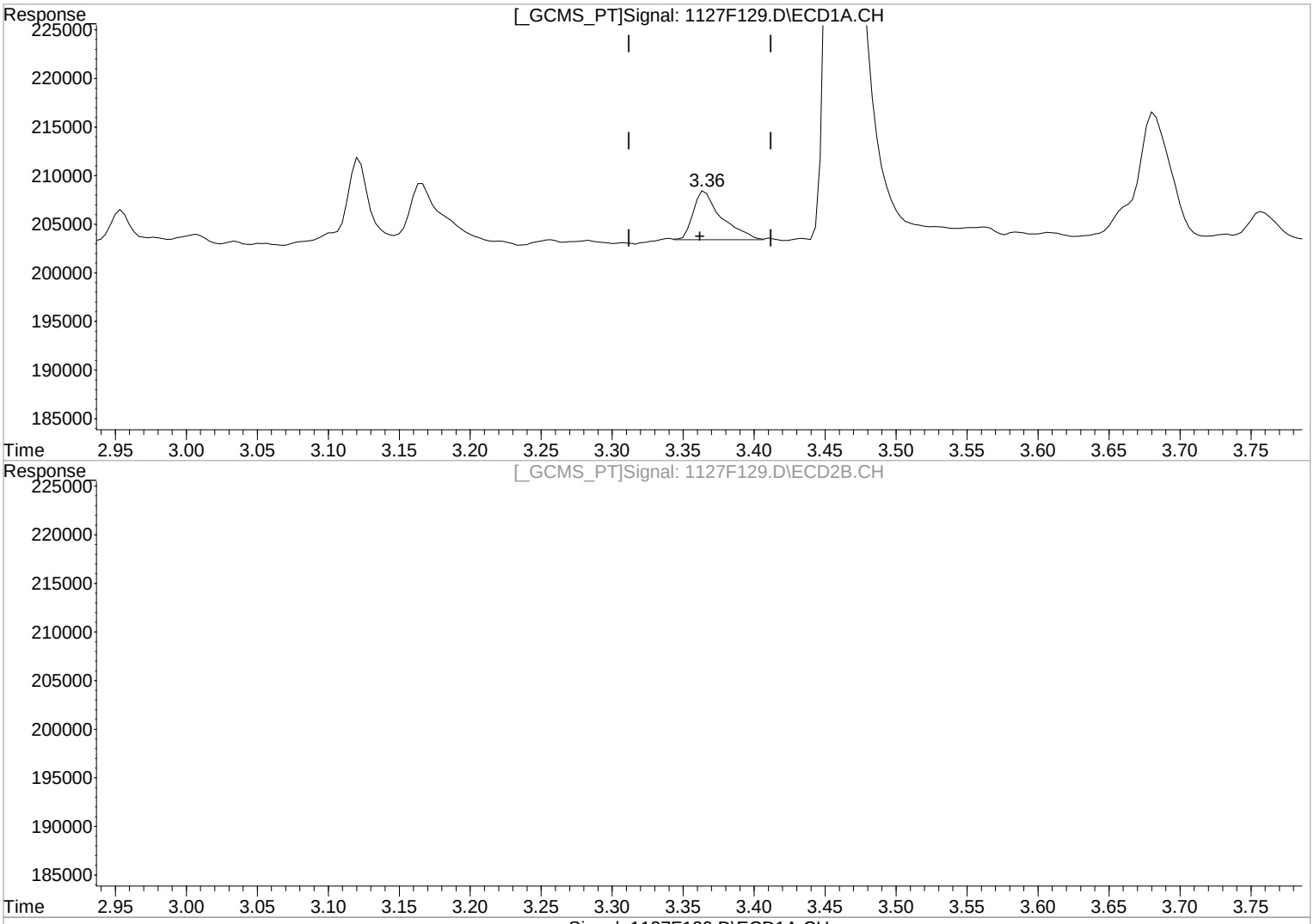
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 11/29/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 5.680ug/L m

response 68638

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 5.167ug/L

response 67856

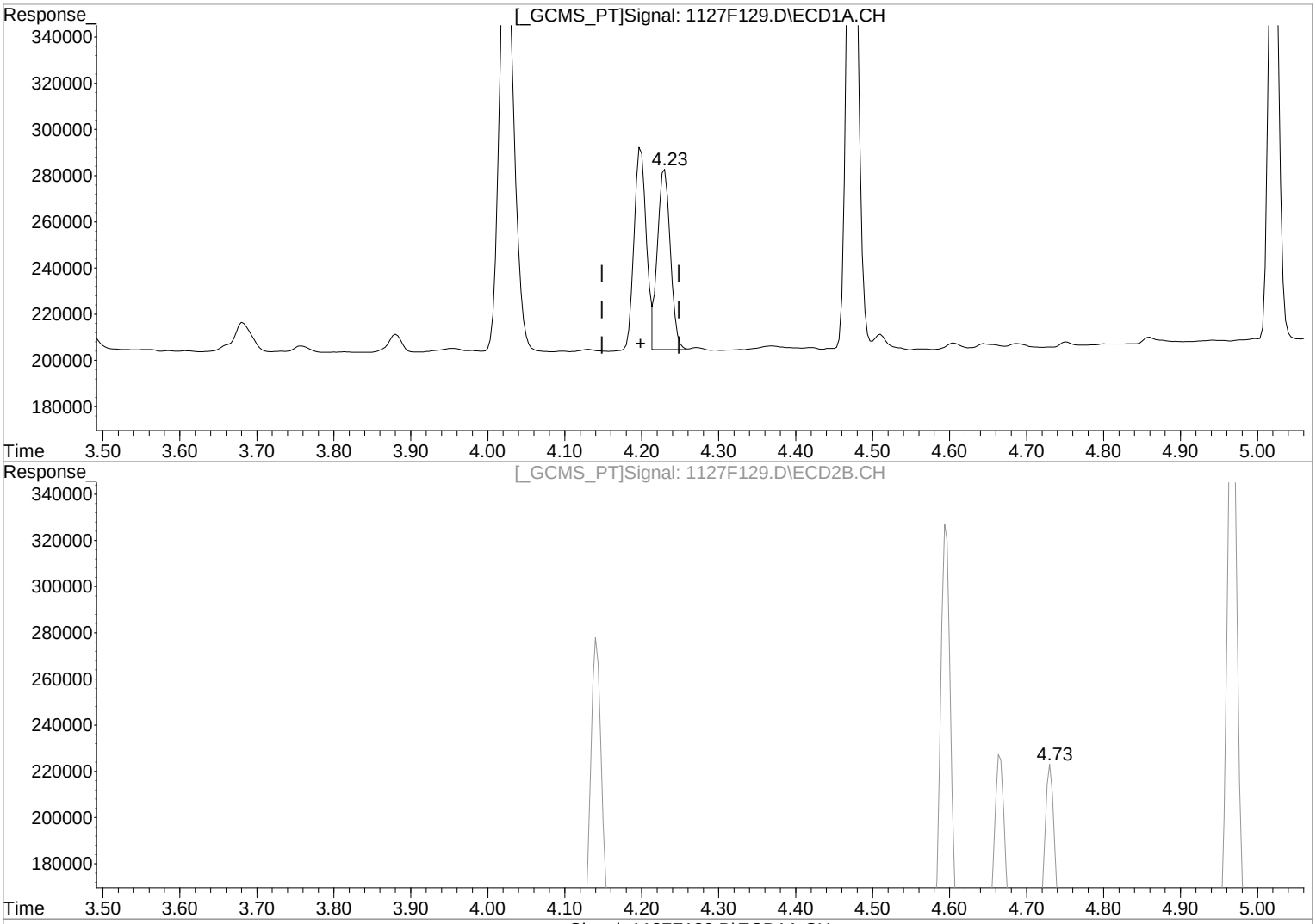
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 5.640ug/L m

response 897110

Manual Integration:

After

Wrong Peak No Before

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 5.160ug/L

response 748802

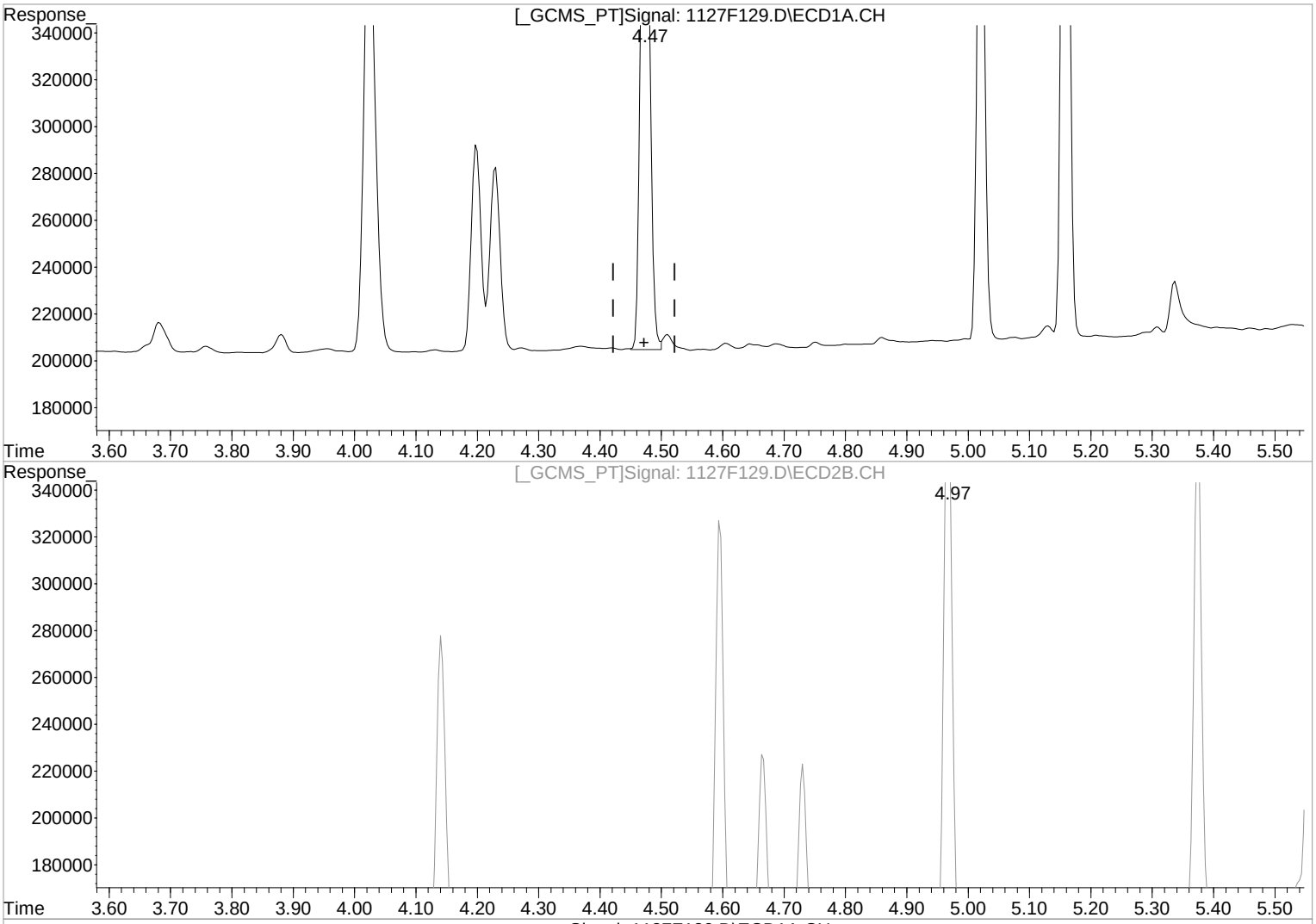
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(7) 2,3,5,6-Tetrachlorophenol (M)

4.47min 5.568ug/L m

response 2791280

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

(7) 2,3,5,6-Tetrachlorophenol #2 (M)

4.97min 4.635ug/L

response 2329296

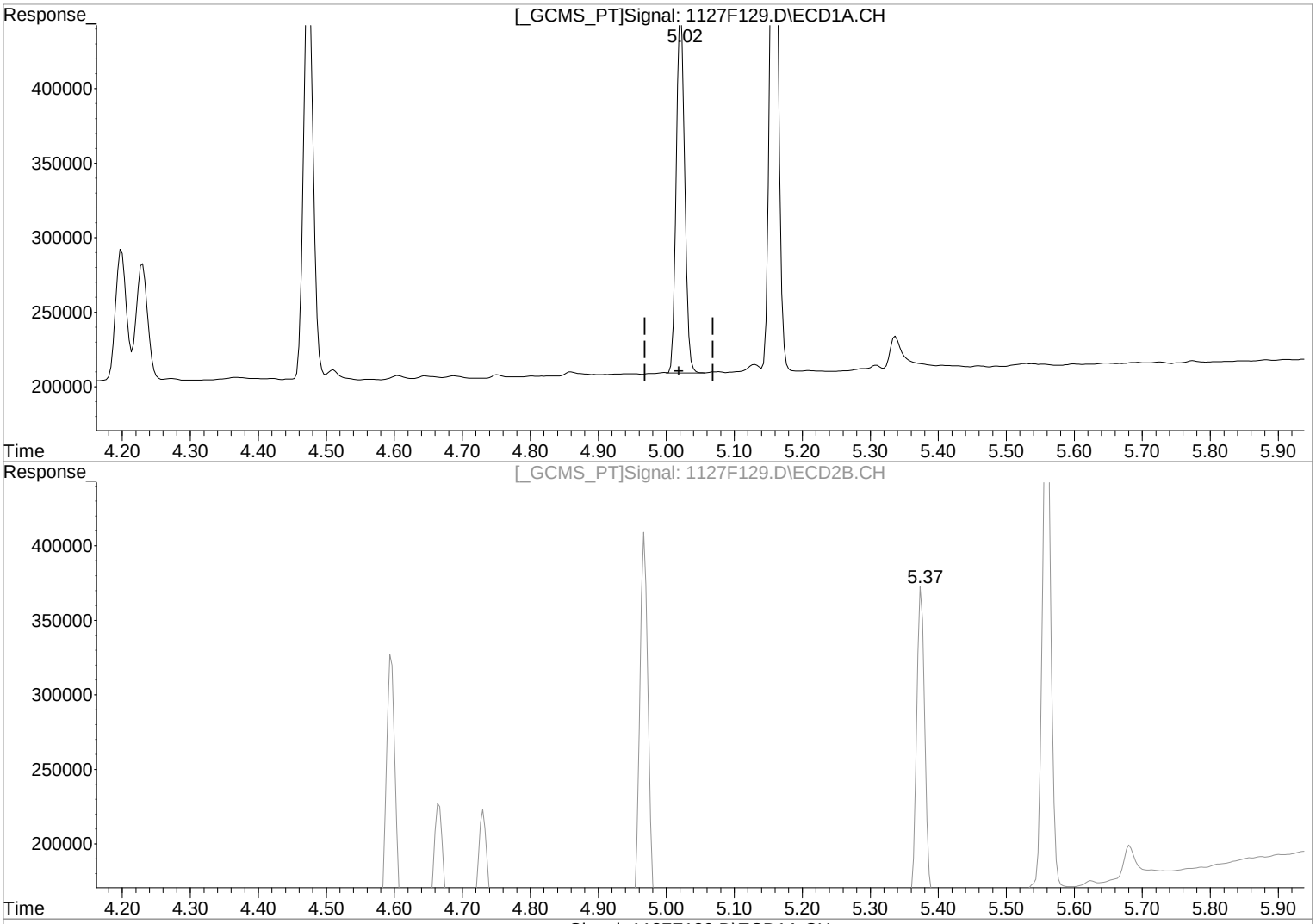
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 6.209ug/L m

response 2110338

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 5.458ug/L

response 1864900

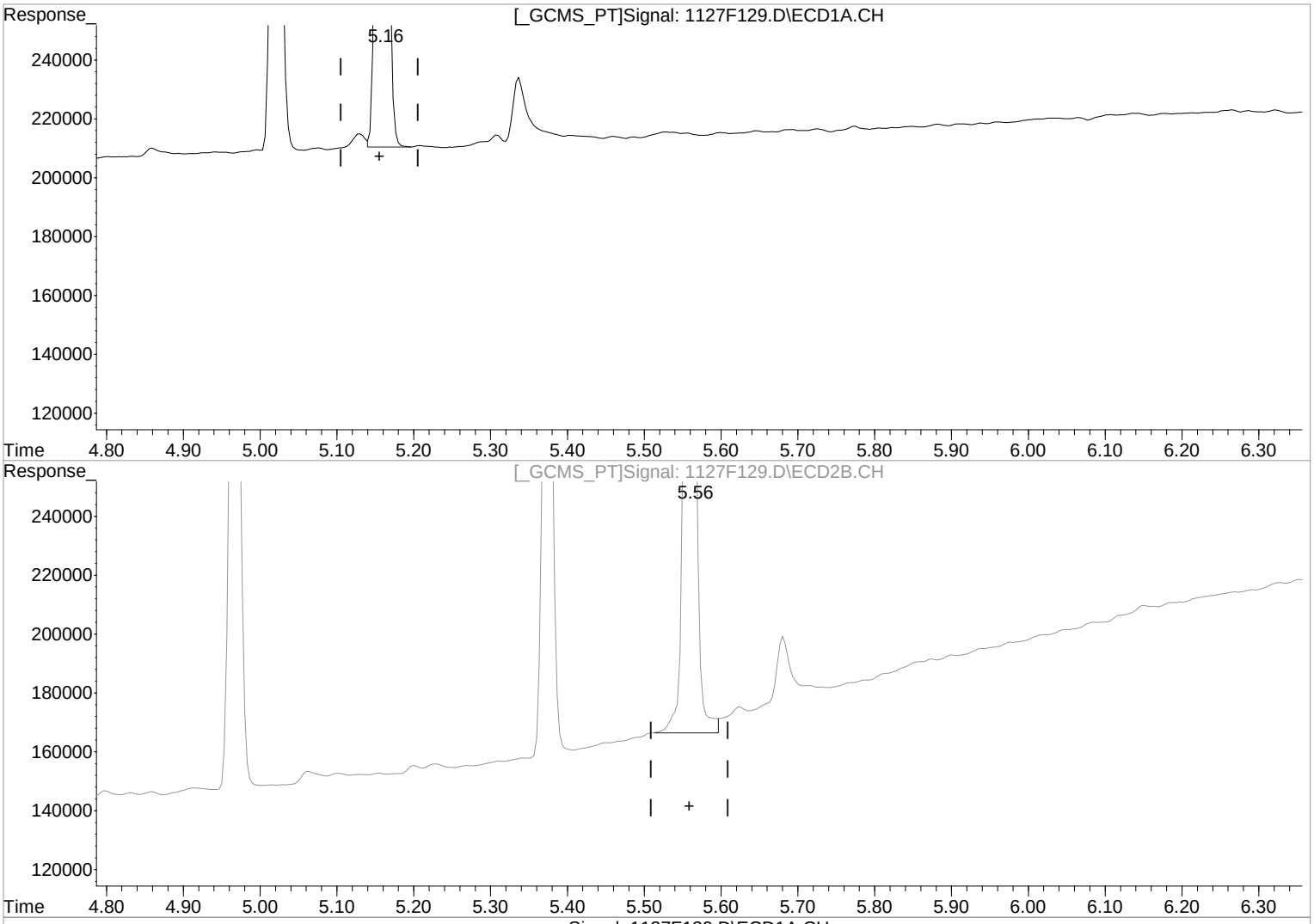
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 5.988ug/L

response 3505892

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 5.351ug/L m

response 3190336

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:57:47 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	4613736	3450884	15.338	13.260
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	163576	175528	10.089m	9.369
2)		3,5-Dichlorophen	3.36	3.91	101688	125108	8.415m	9.526
3)		2,4,6-Trichlorop	3.46	4.14	3229296	2813346	9.108	7.824
5)		2,4,5-Trichlorop	4.20	4.66	1789438	1475642	11.508	8.981
6)		3,4,5-Trichlorop	4.23f	4.73	1550706	1348458	9.750m	9.293
7)	M	2,3,5,6-Tetrachl	4.47	4.96	4983492	4311232	9.941	8.579
8)	M	2,3,4,5-Tetrachl	5.02	5.37	3744556	3299360	11.017m	9.656
9)	M	Pentachloropheno	5.16	5.56	6298030	5874436	10.757	9.853
10)		Pentachloroaniso	5.16	5.56	6298030	5874436	11.317	10.363

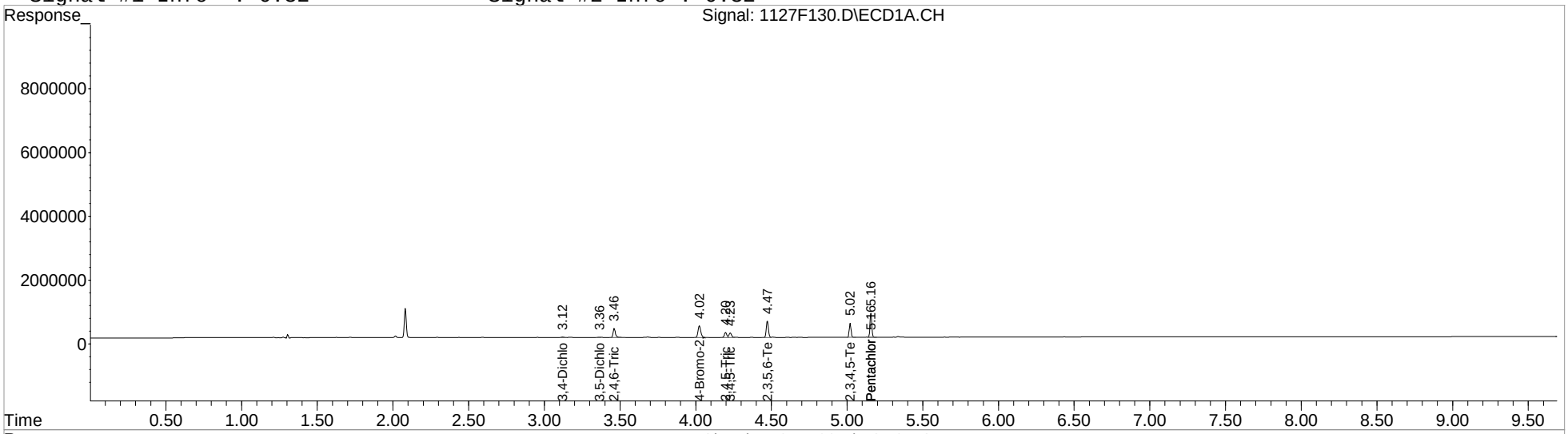
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

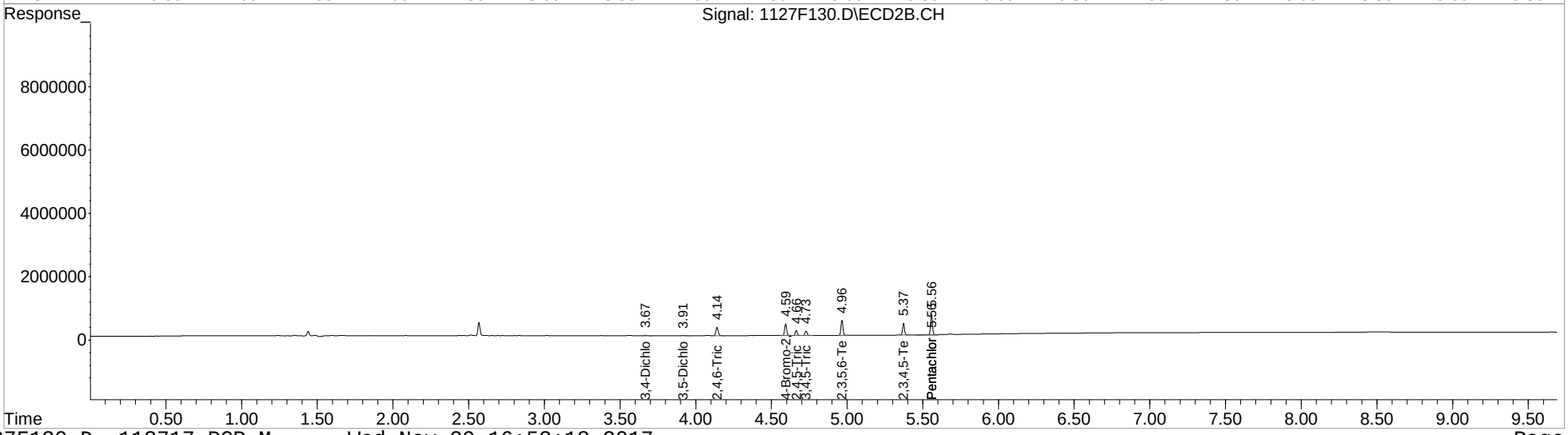
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



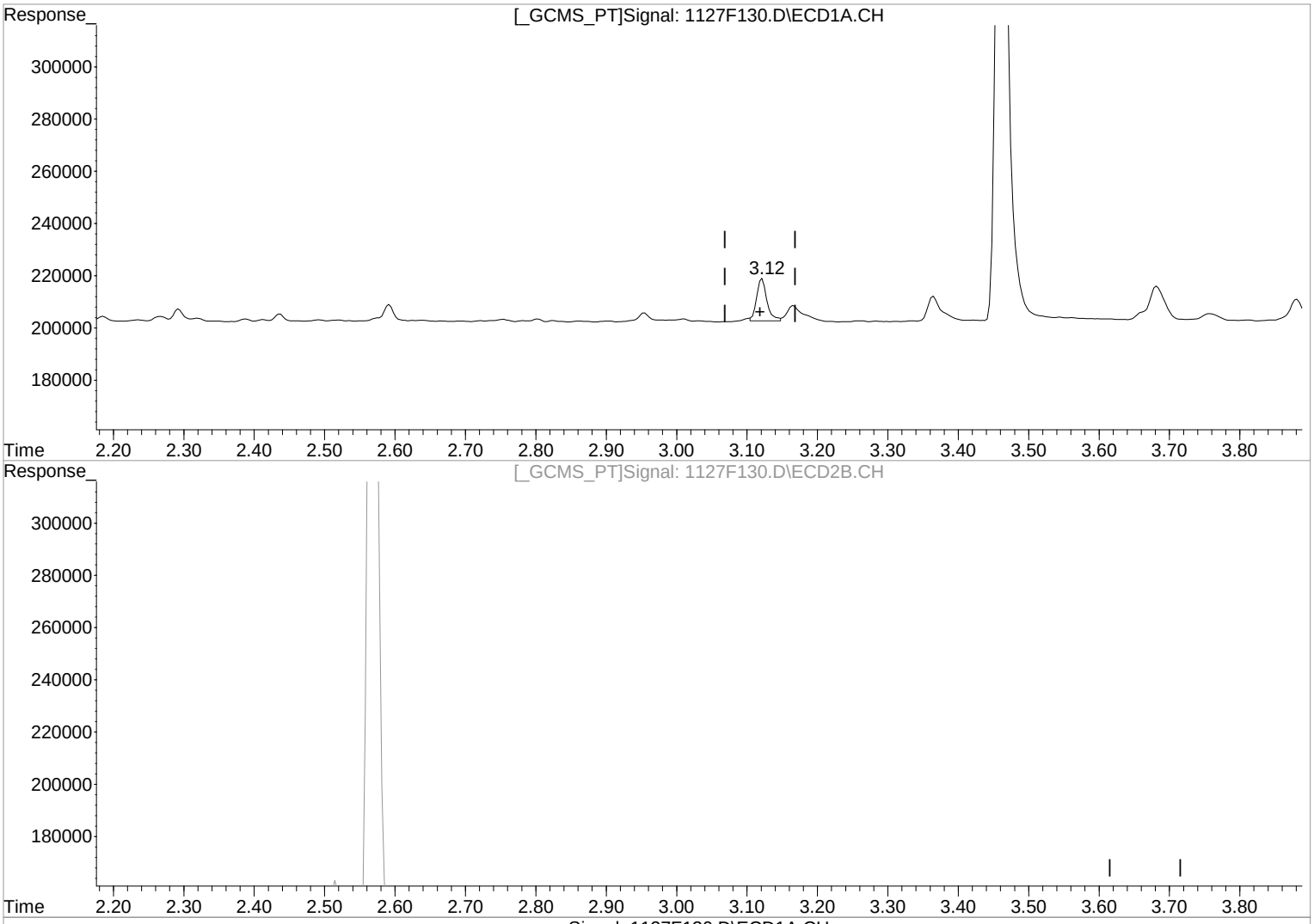


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 10.089ug/L m

response 163576

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 9.369ug/L

response 175528

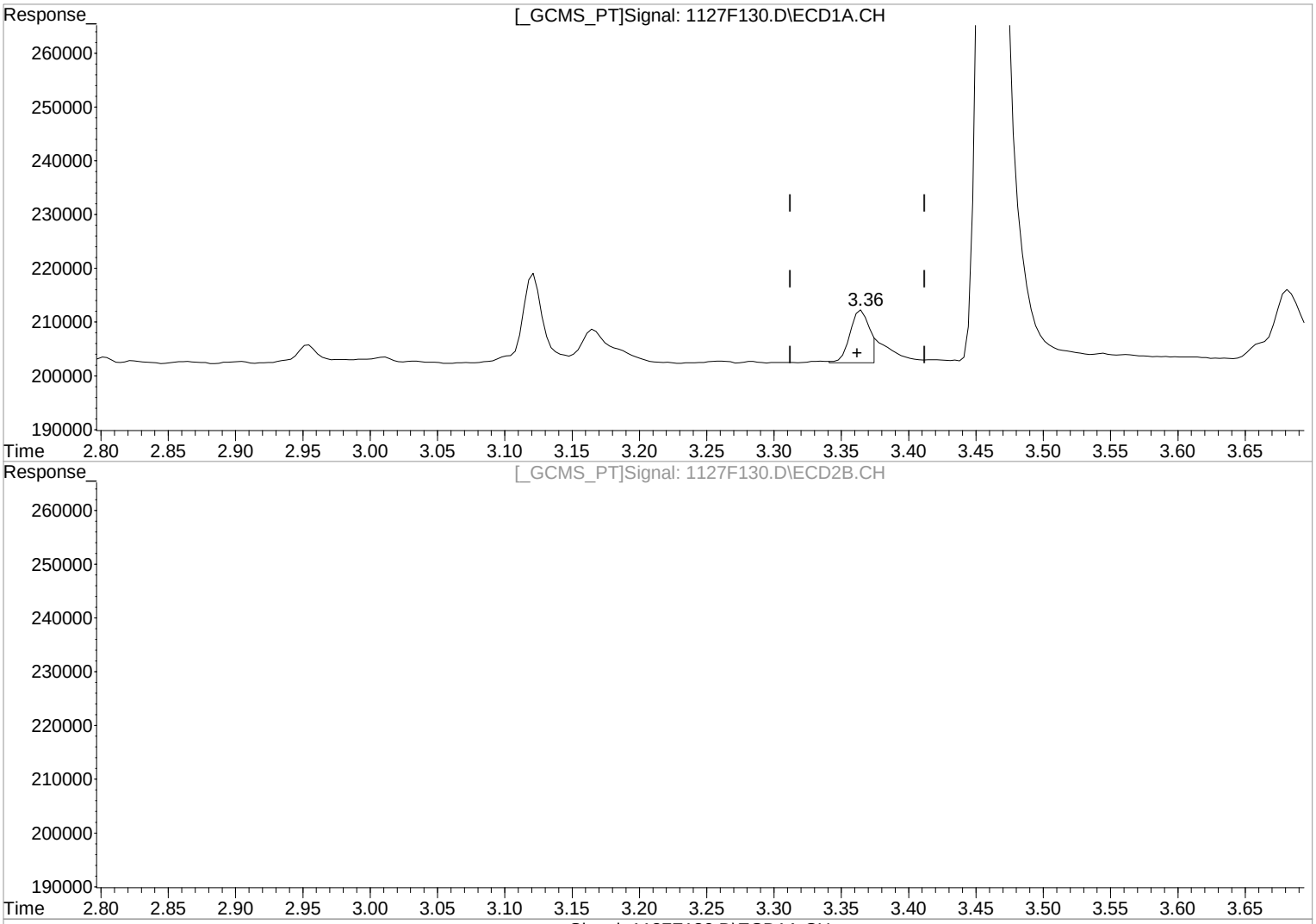
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 8.415ug/L m

response 101688

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 9.526ug/L

response 125108

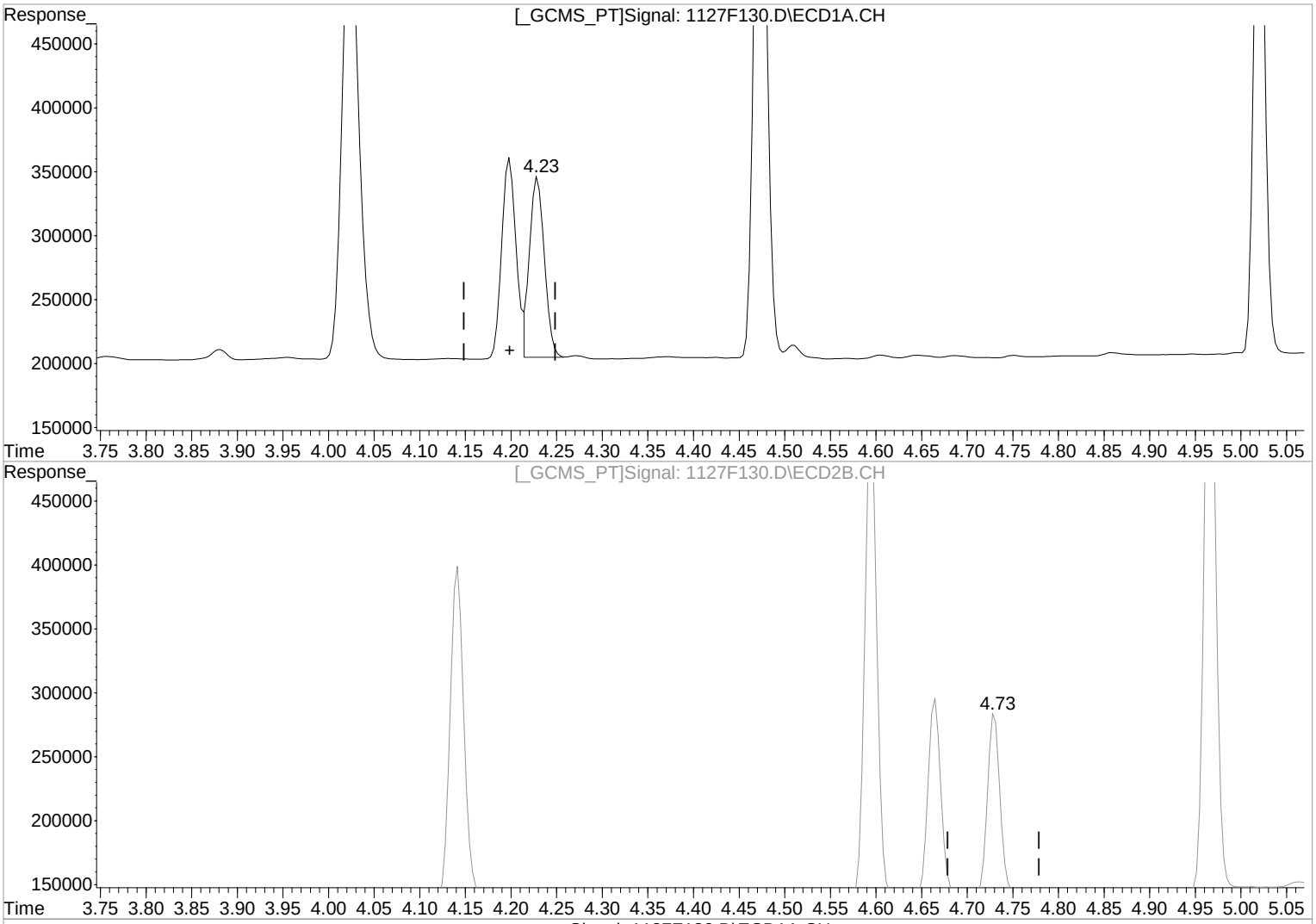
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 9.750ug/L m

response 1550706

Manual Integration:

After

Wrong peak, No Before

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 9.293ug/L

response 1348458

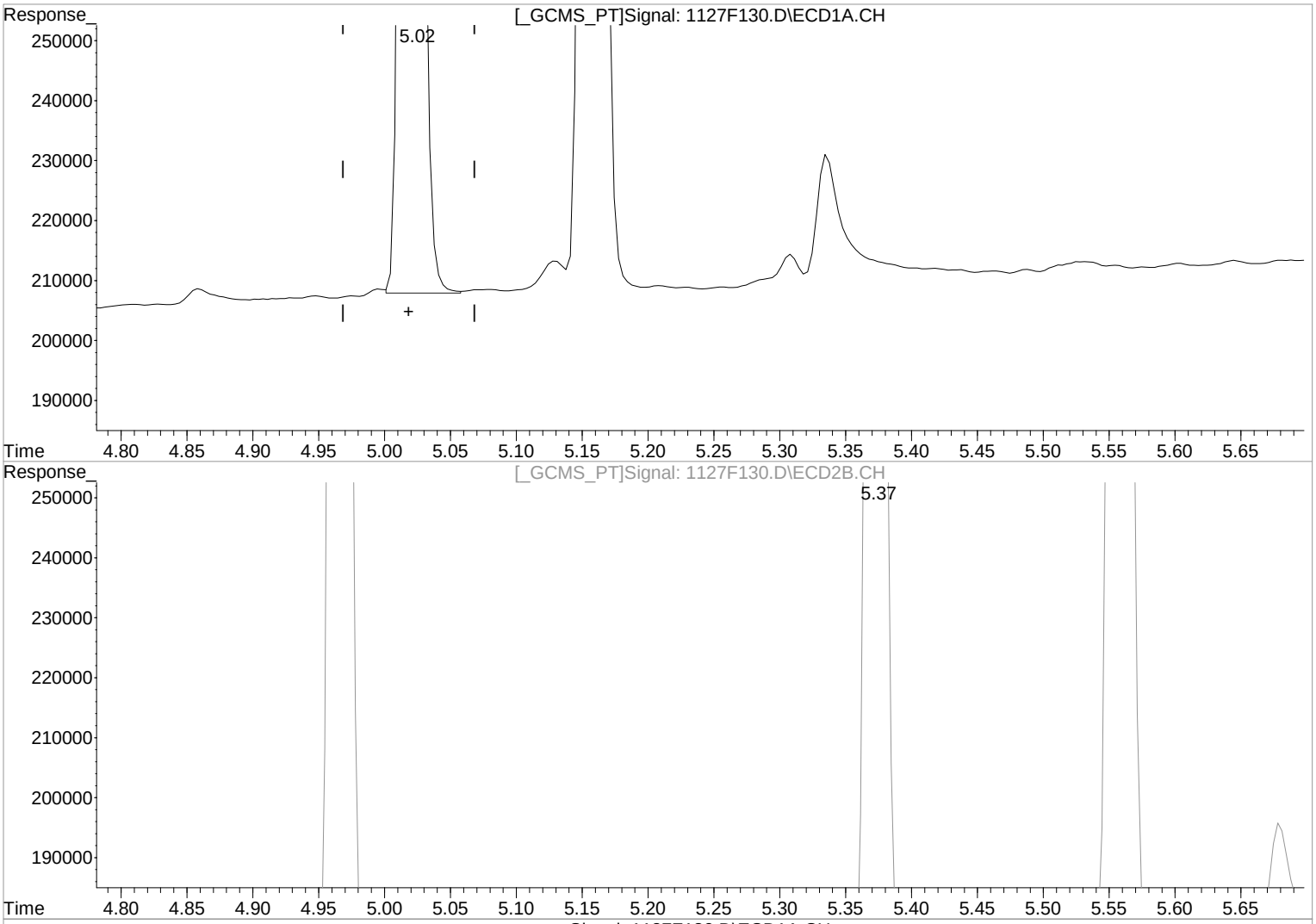
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 11.017ug/L m

response 3744556

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 9.656ug/L

response 3299360

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:00:34 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.60	11143798	9056888	37.047	34.802
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	400014	405654	24.671m	21.652
2)		3,5-Dichlorophen	3.36	3.91	316008	288184	26.150	21.944
3)		2,4,6-Trichlorop	3.46	4.14	7312718	6768082	20.625	18.823
5)		2,4,5-Trichlorop	4.20	4.66	3927156	3388118	25.257	20.621
6)		3,4,5-Trichlorop	4.23f	4.73	3598120	3123178	22.622m	21.523
7)	M	2,3,5,6-Tetrachl	4.47	4.97	11725474	10538308	23.390	20.971
8)	M	2,3,4,5-Tetrachl	5.02	5.37	8743824	7747010	25.726	22.673
9)	M	Pentachloropheno	5.16	5.56	14842634	13563198	25.350	22.748
10)		Pentachloroaniso	5.16	5.56	14842634	13563198	26.670	23.927

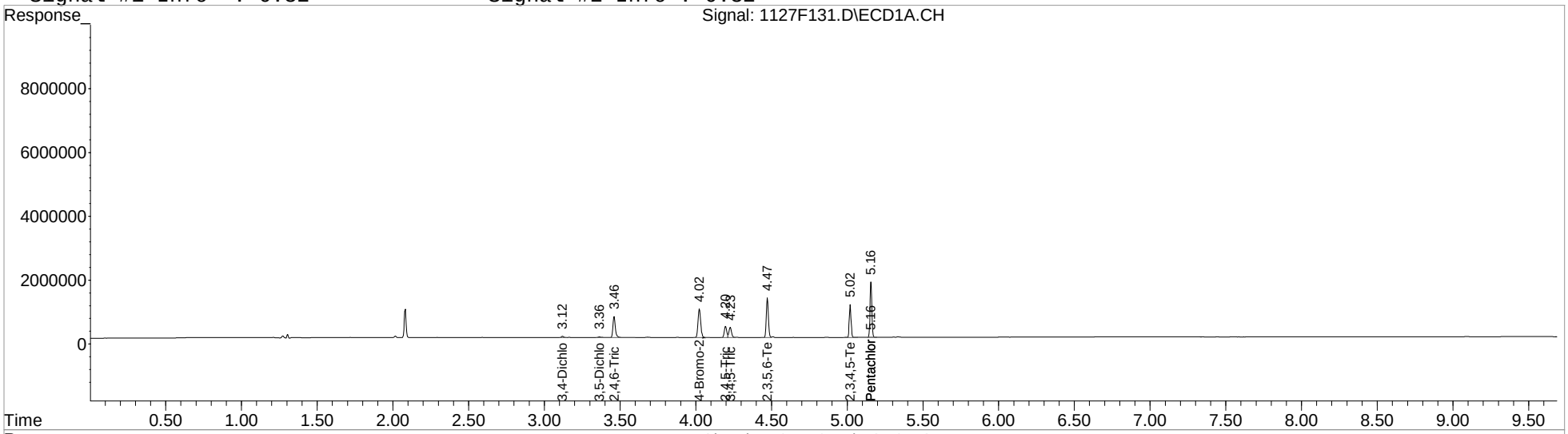
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

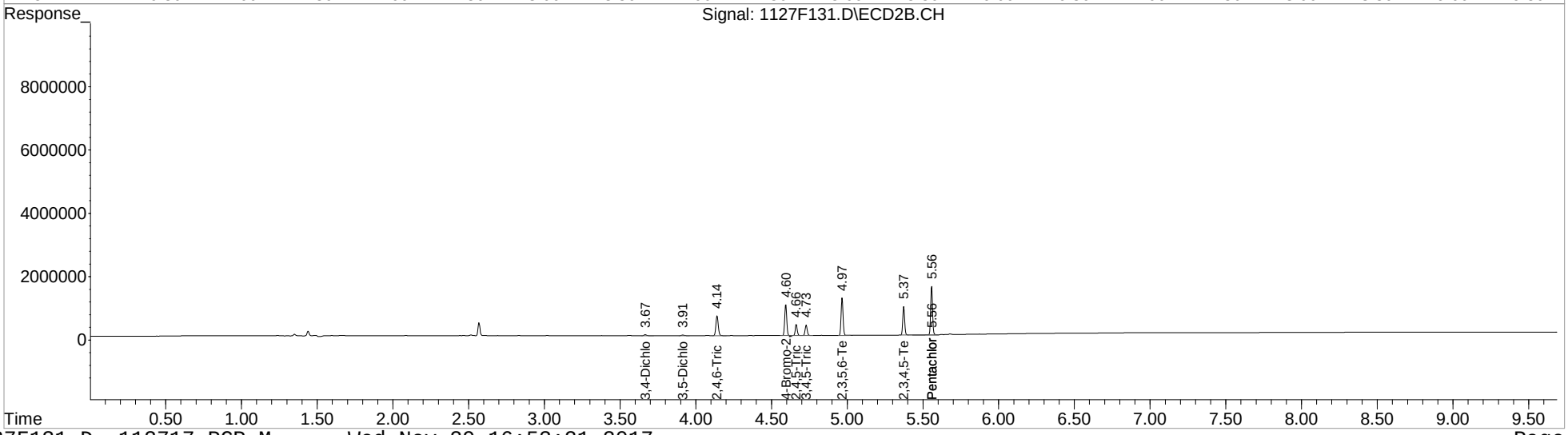
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



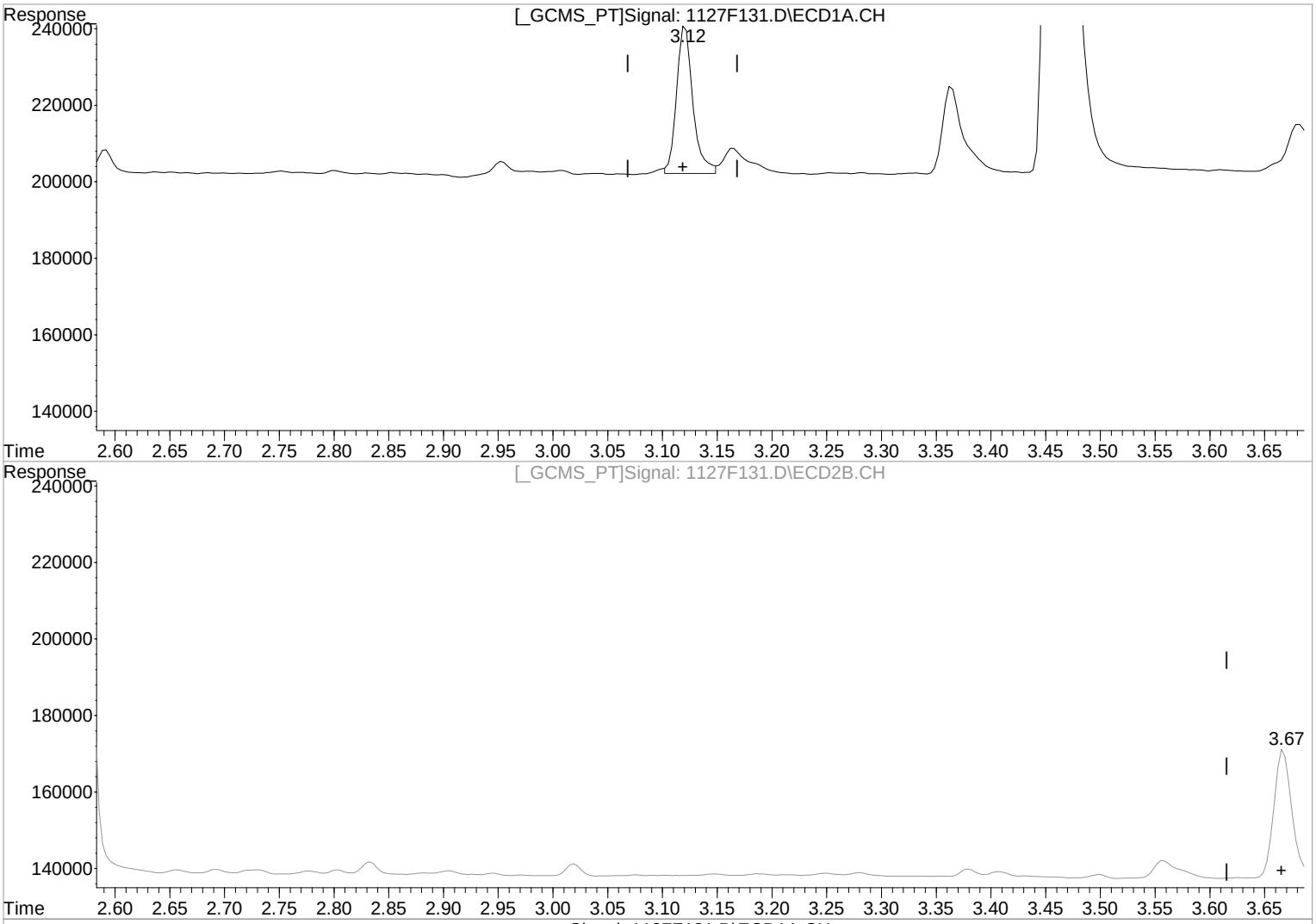


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F131.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 24.671ug/L m

response 400014

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 21.652ug/L

response 405654

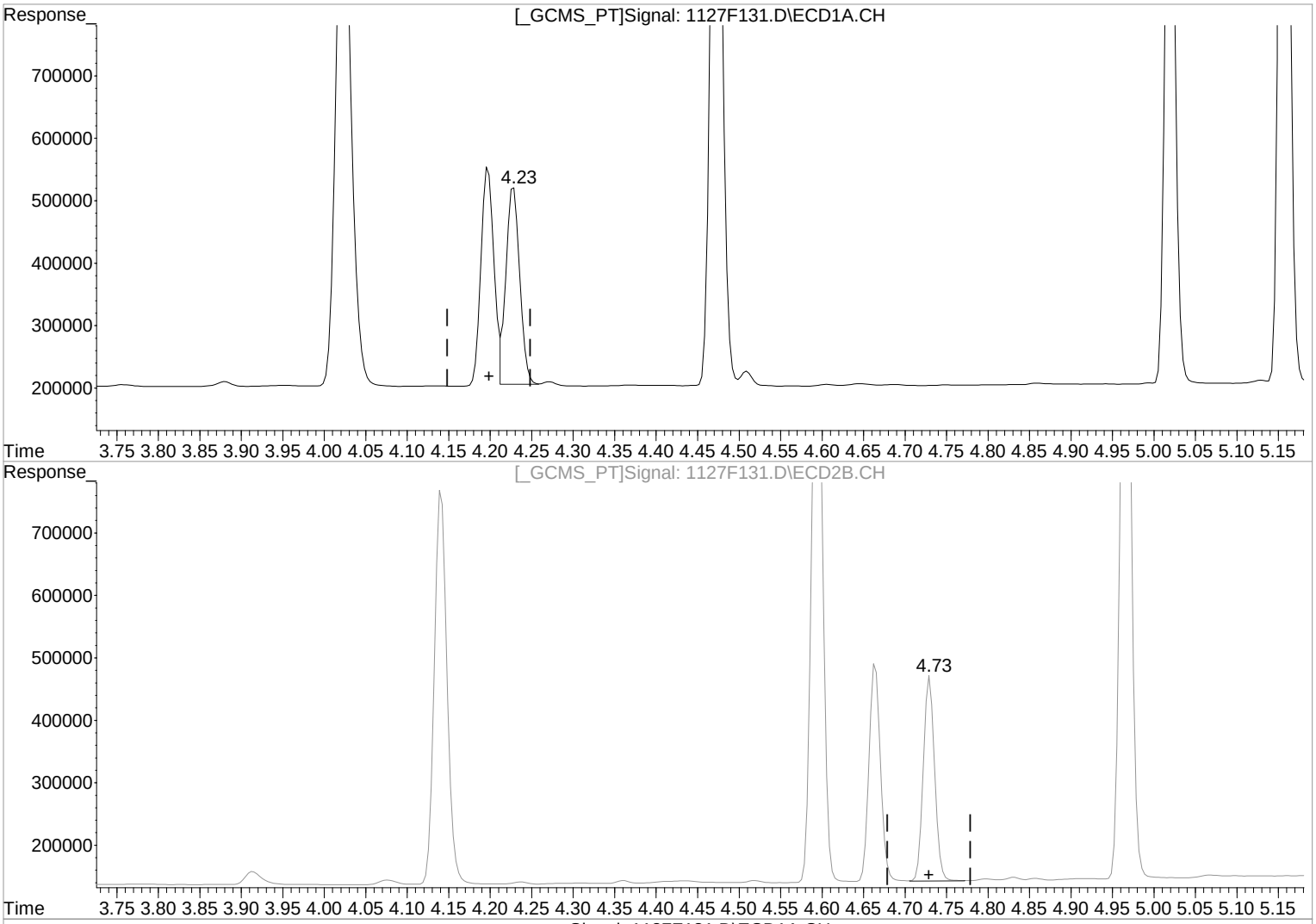
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F131.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 22.622ug/L m

response 3598120

Manual Integration:

After

Wrong peak, No Before

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 21.523ug/L

response 3123178

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:04:32 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	46010514	40158220	152.958	154.311
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	1447870	1405326	89.300	75.009
2)		3,5-Dichlorophen	3.36	3.91	1078920	1058212	89.282	80.579
3)		2,4,6-Trichlorop	3.46	4.14	28084798	27879842	79.211	77.538
5)		2,4,5-Trichlorop	4.20	4.66	14021972	12747090	90.179	77.583
6)		3,4,5-Trichlorop	4.23	4.73	12849696	11876992	80.789	81.849
7)	M	2,3,5,6-Tetrachl	4.47	4.97	45966424	43712650	91.693	86.988
8)	M	2,3,4,5-Tetrachl	5.02	5.37	33226836	30840508	97.760	90.262
9)	M	Pentachloropheno	5.16	5.56	58837190	53885886	100.489	90.377m
10)		Pentachloroaniso	5.16	5.56	58837190	53900478	105.722	95.088m

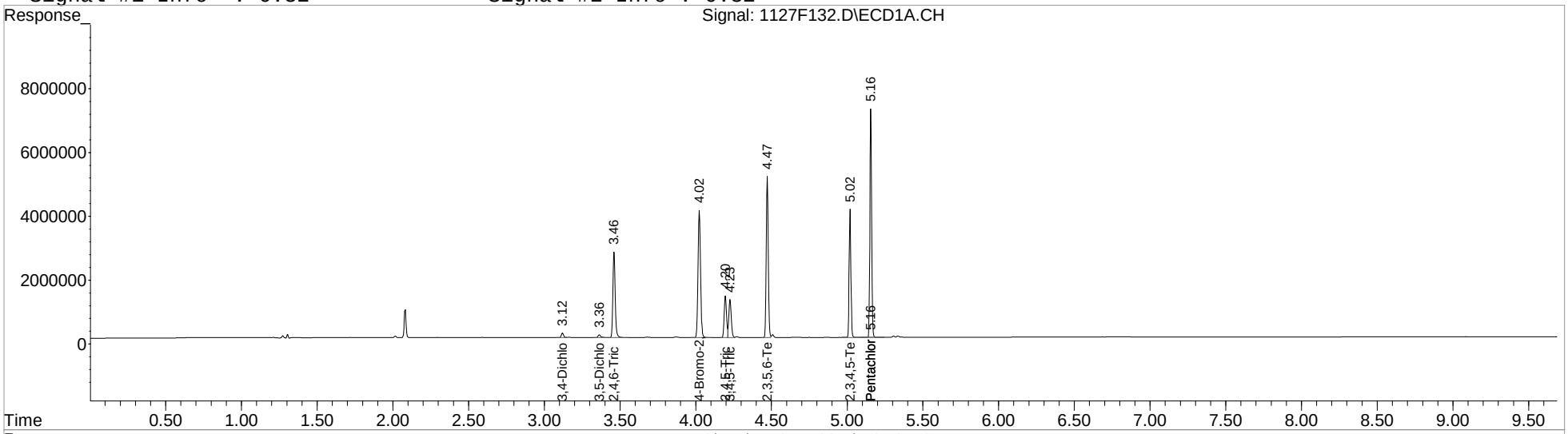
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

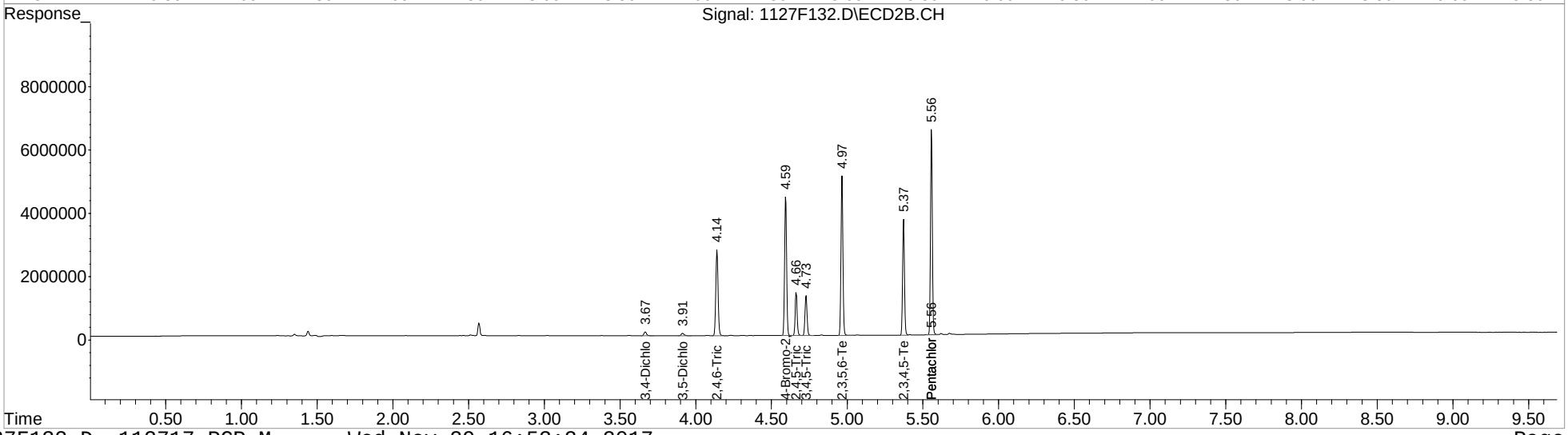
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



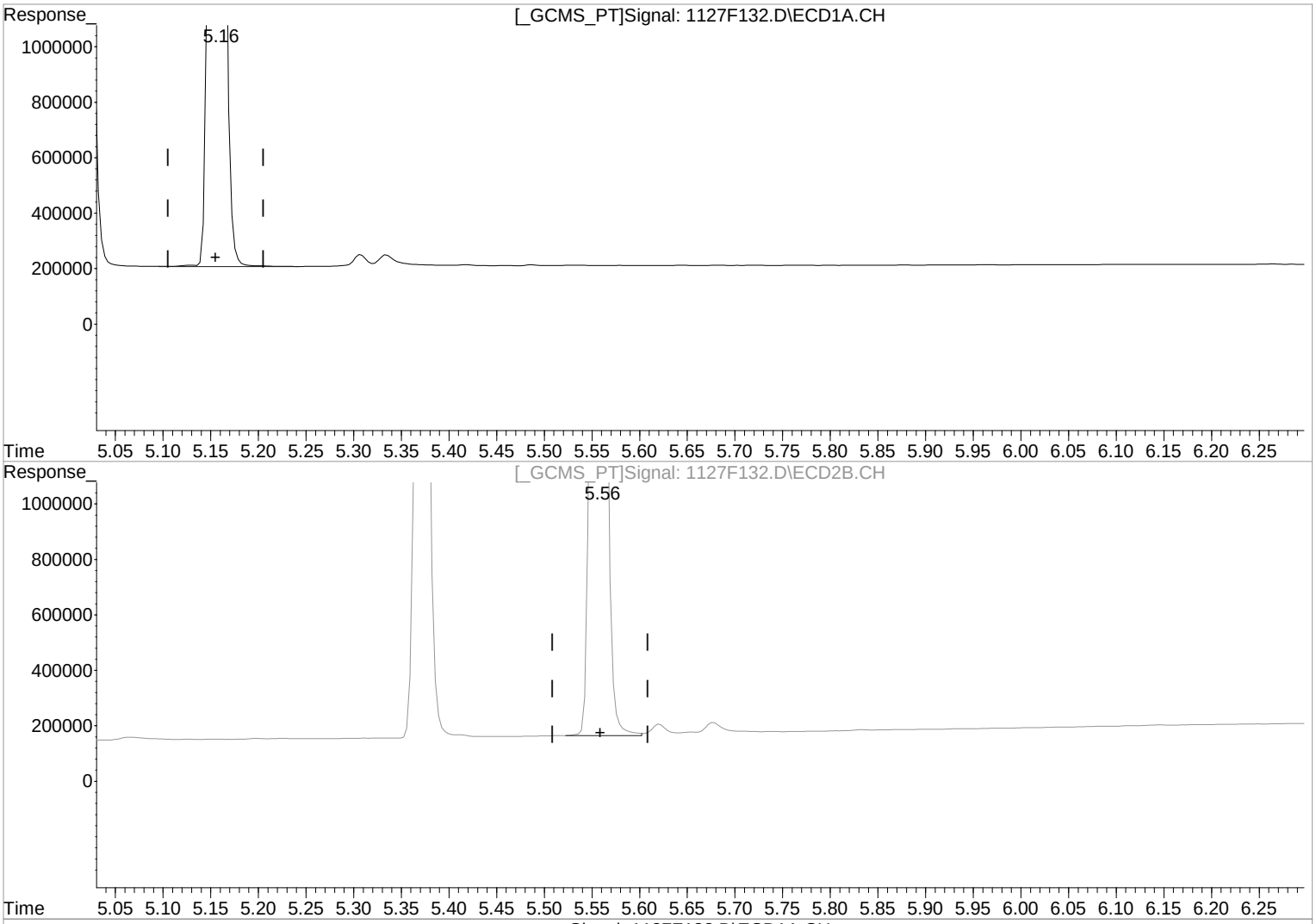


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F132.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 105.722ug/L

response 58837190

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(10) Pentachloroanisole #2

5.56min 95.088ug/L m

response 53900478

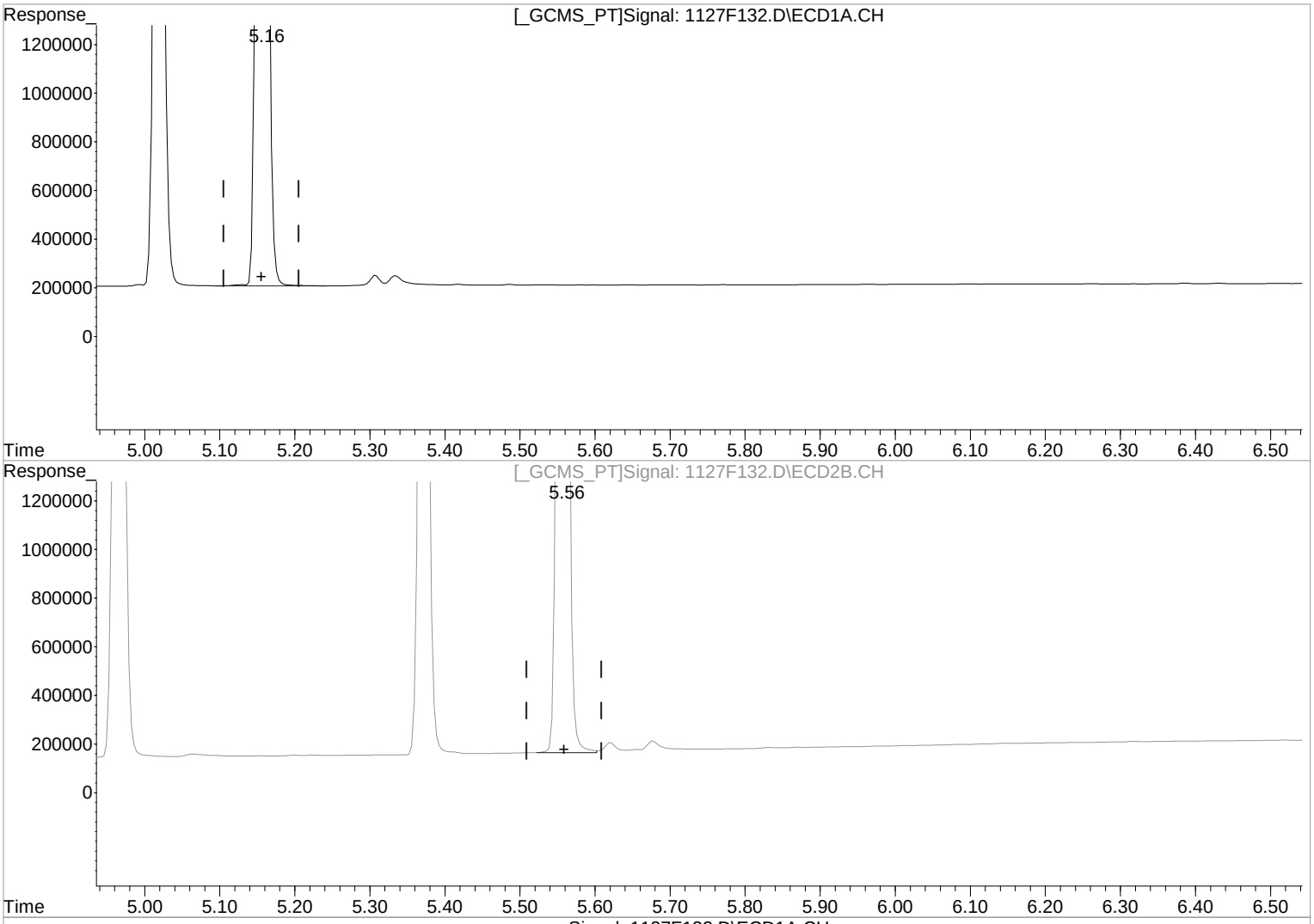
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F132.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 100.489ug/L

response 58837190

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 90.377ug/L m

response 53885886

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD2B.CH
Acq On : 27 Nov 2017 8:50 pm Operator: CV
Sample : PENTA01-88C 250 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:07:29 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	106.4E6	95029258	353.601	365.158
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	2913944	2910812	179.722	155.365
2)		3,5-Dichlorophen	3.36	3.91	2192854	2185628	181.462	166.427
3)		2,4,6-Trichlorop	3.46	4.14	62598844	64308464	176.555	178.851
5)		2,4,5-Trichlorop	4.20	4.66	29452628	28960918	189.418	176.266
6)		3,4,5-Trichlorop	4.23	4.73	28327676	27111646	178.102	186.838
7)	M	2,3,5,6-Tetrachl	4.47	4.97	103.3E6	102.6E6	206.131	204.112
8)	M	2,3,4,5-Tetrachl	5.02	5.37	73882544	72867544	217.377	213.263
9)	M	Pentachloropheno	5.16	5.56	133.3E6	129.4E6	227.744	216.997
10)		Pentachloroaniso	5.16	5.56	133.3E6	129.4E6	239.603	228.245

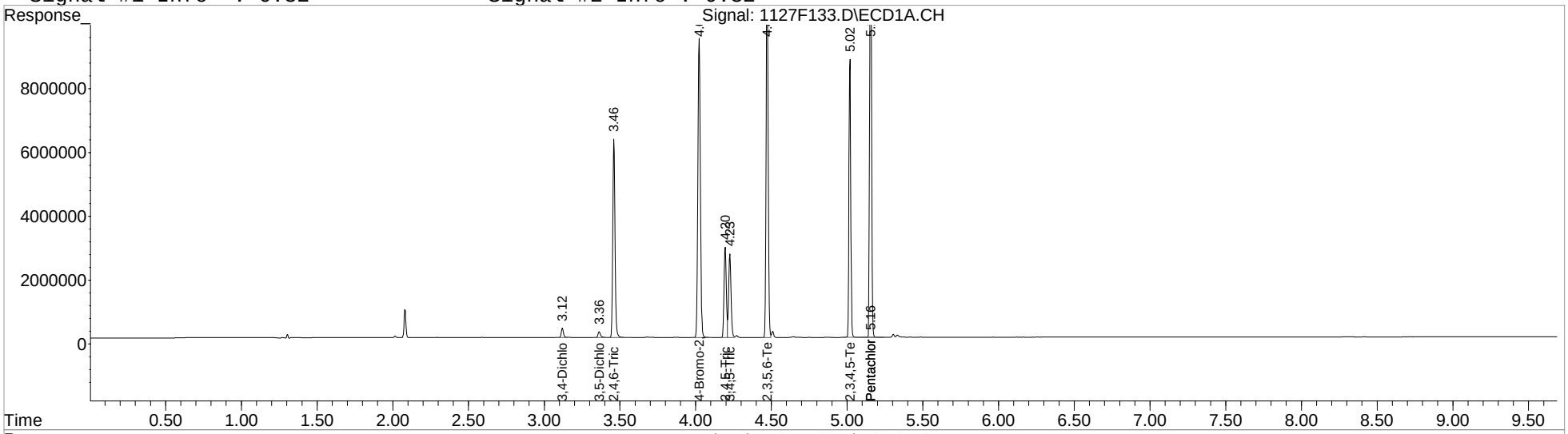
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

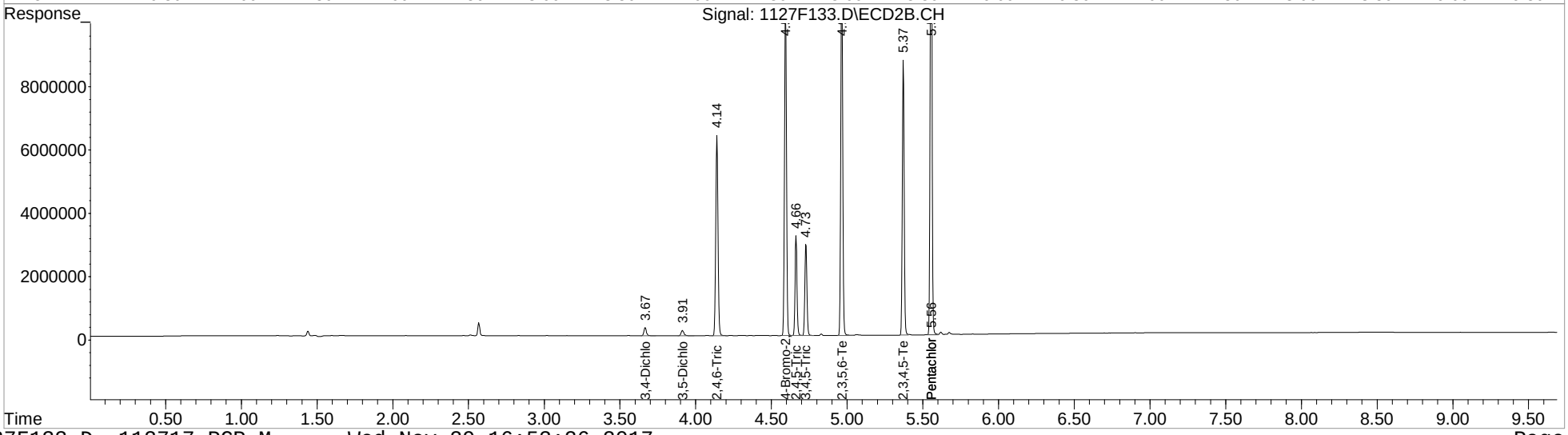
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD2B.CH
Acq On : 27 Nov 2017 8:50 pm Operator: CV
Sample : PENTA01-88C 250 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:07 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD2B.CH
Acq On : 27 Nov 2017 9:08 pm Operator: CV
Sample : PENTA01-88N 500 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:40:27 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	0.00	0.00	0	0	N.D. d	N.D. d
		Target Compounds						
1)		3,4-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
2)		3,5-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
3)		2,4,6-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
5)		2,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
6)		3,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
9)	M	Pentachloropheno	5.15	5.56	258.3E6	266.6E6	441.097	447.195
10)		Pentachloroaniso	5.15	5.56	258.3E6	266.6E6	464.065	470.376

Penta and anisole only

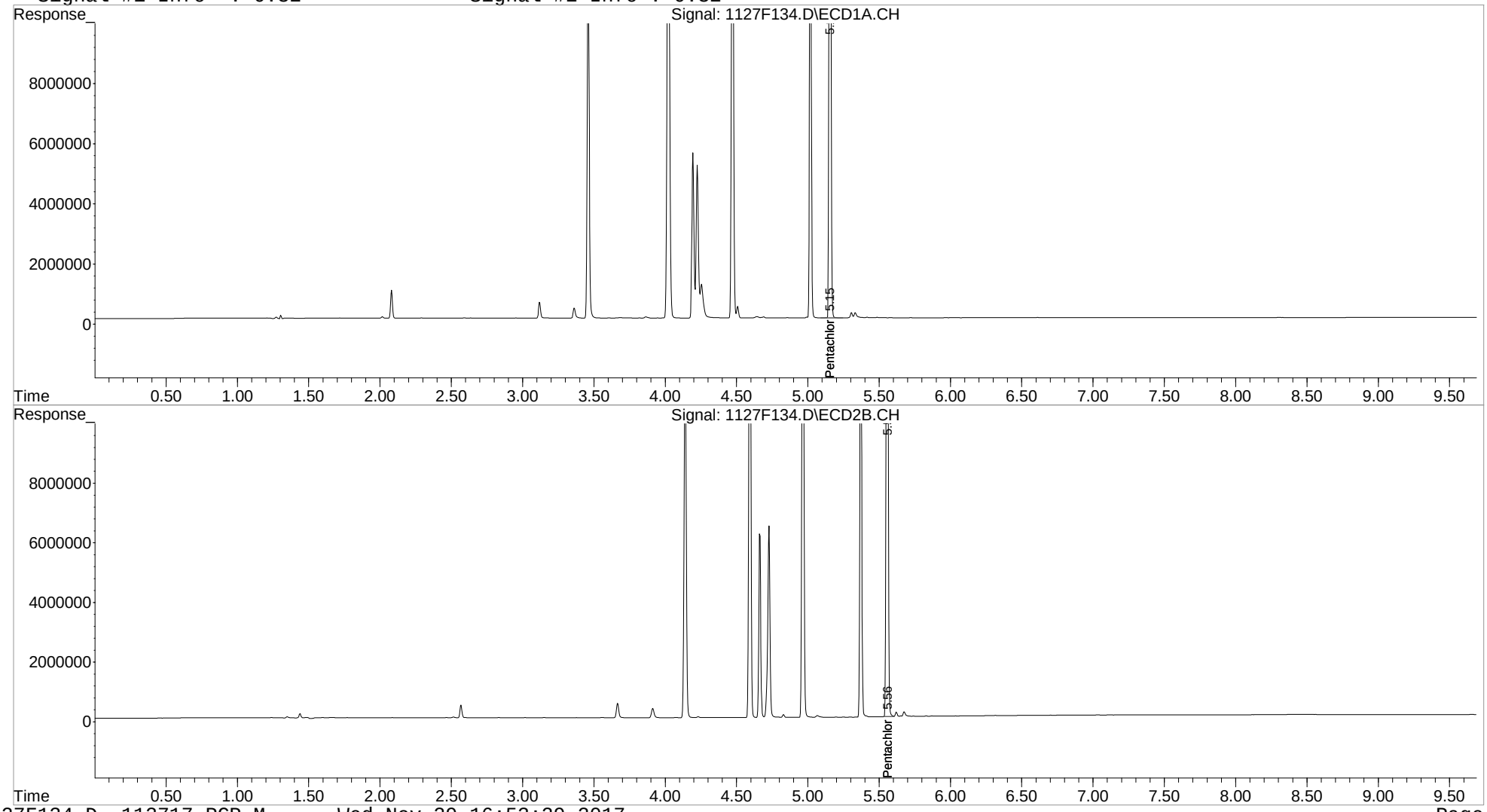
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD2B.CH
Acq On : 27 Nov 2017 9:08 pm Operator: CV
Sample : PENTA01-88N 500 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:40 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD2B.CH
Acq On : 27 Nov 2017 9:27 pm Operator: CV
Sample : PENTA01-88M 1000 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:10:53 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	0.00	0.00	0	0	N.D. d	N.D. d
		Target Compounds						
1)		3,4-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
2)		3,5-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
3)		2,4,6-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
5)		2,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
6)		3,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
9)	M	Pentachloropheno	5.16	5.56	484.7E6	524.6E6	827.802	879.883
10)		Pentachloroaniso	5.16	5.56	484.7E6	524.6E6	870.906	925.495

Penta and anisole only

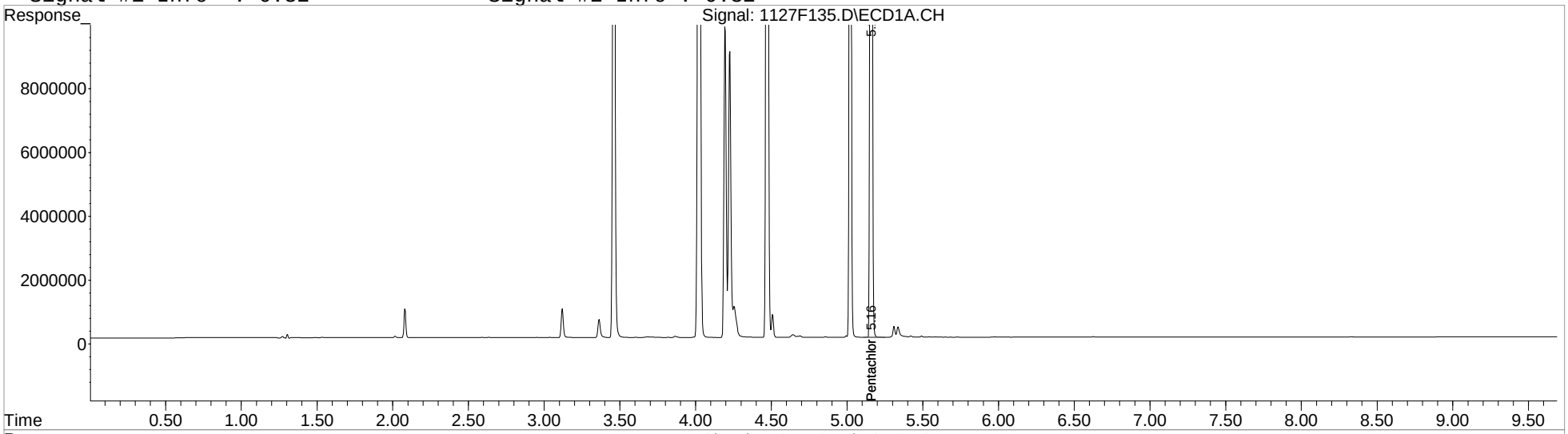
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

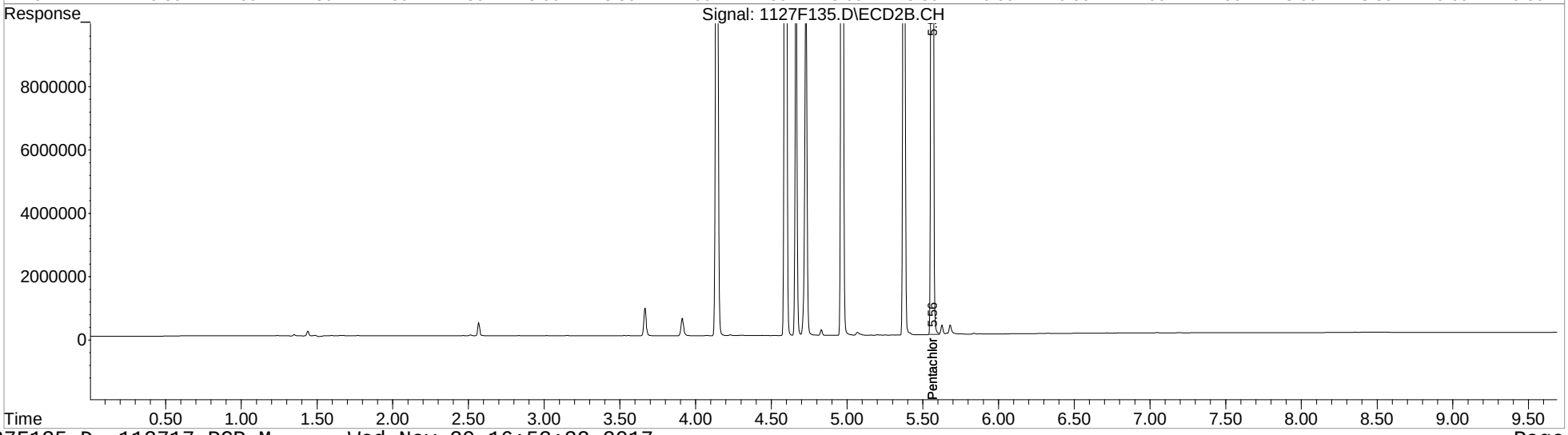
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD2B.CH
Acq On : 27 Nov 2017 9:27 pm Operator: CV
Sample : PENTA01-88M 1000 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:45 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:47:58 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.01	4.57	6162	7584	0.020	0.029 #
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.66	769118	732270	47.437	39.085
2)		3,5-Dichlorophen	3.36	3.91	483034	541656	39.972m	41.245
3)		2,4,6-Trichlorop	3.46	4.14	14150702	12878254	39.911	35.816
5)		2,4,5-Trichlorop	4.19	4.66	7083376	6313060	45.555	38.423
6)		3,4,5-Trichlorop	4.22	4.73	6656538	5862514	41.851	40.401
7)	M	2,3,5,6-Tetrachl	4.47	4.97	22573818	20683576	45.030	41.160
8)	M	2,3,4,5-Tetrachl	5.02	5.37	16083160	14736668	47.320	43.130
9)	M	Pentachloropheno	5.16	5.56	28261942	25806018	49.255	43.863
10)		Pentachloroaniso	5.16	5.56	28261942	25806018	51.824	46.142

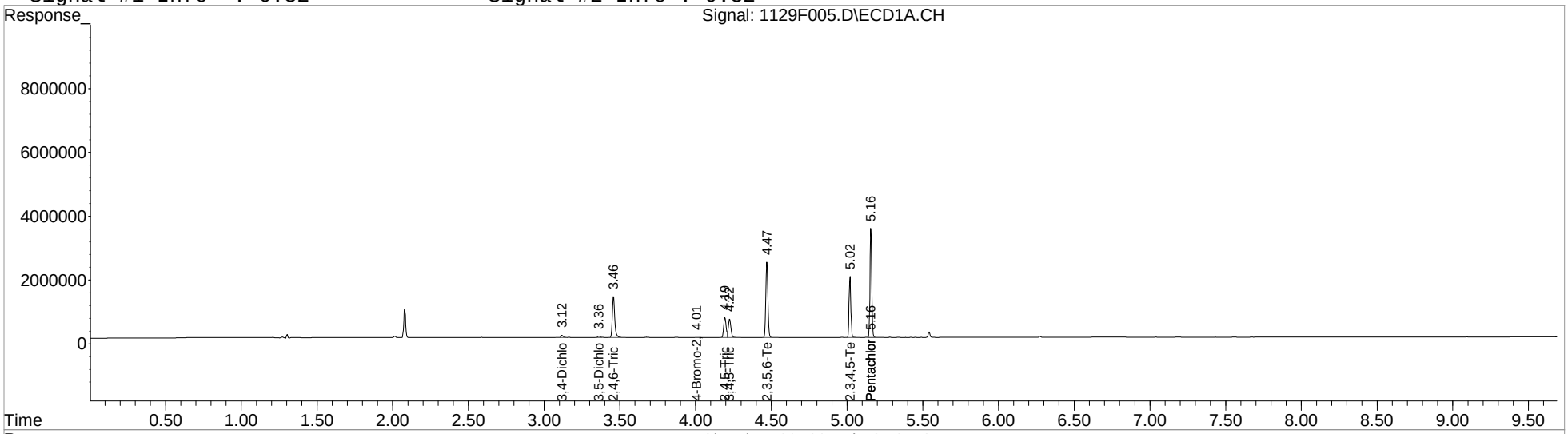
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

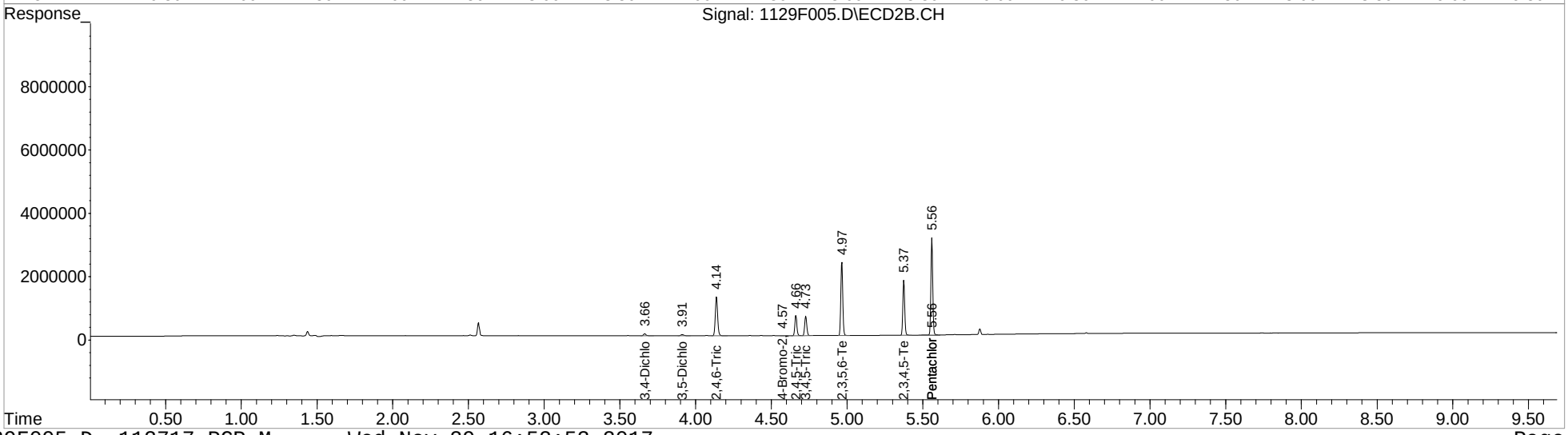
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:48 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



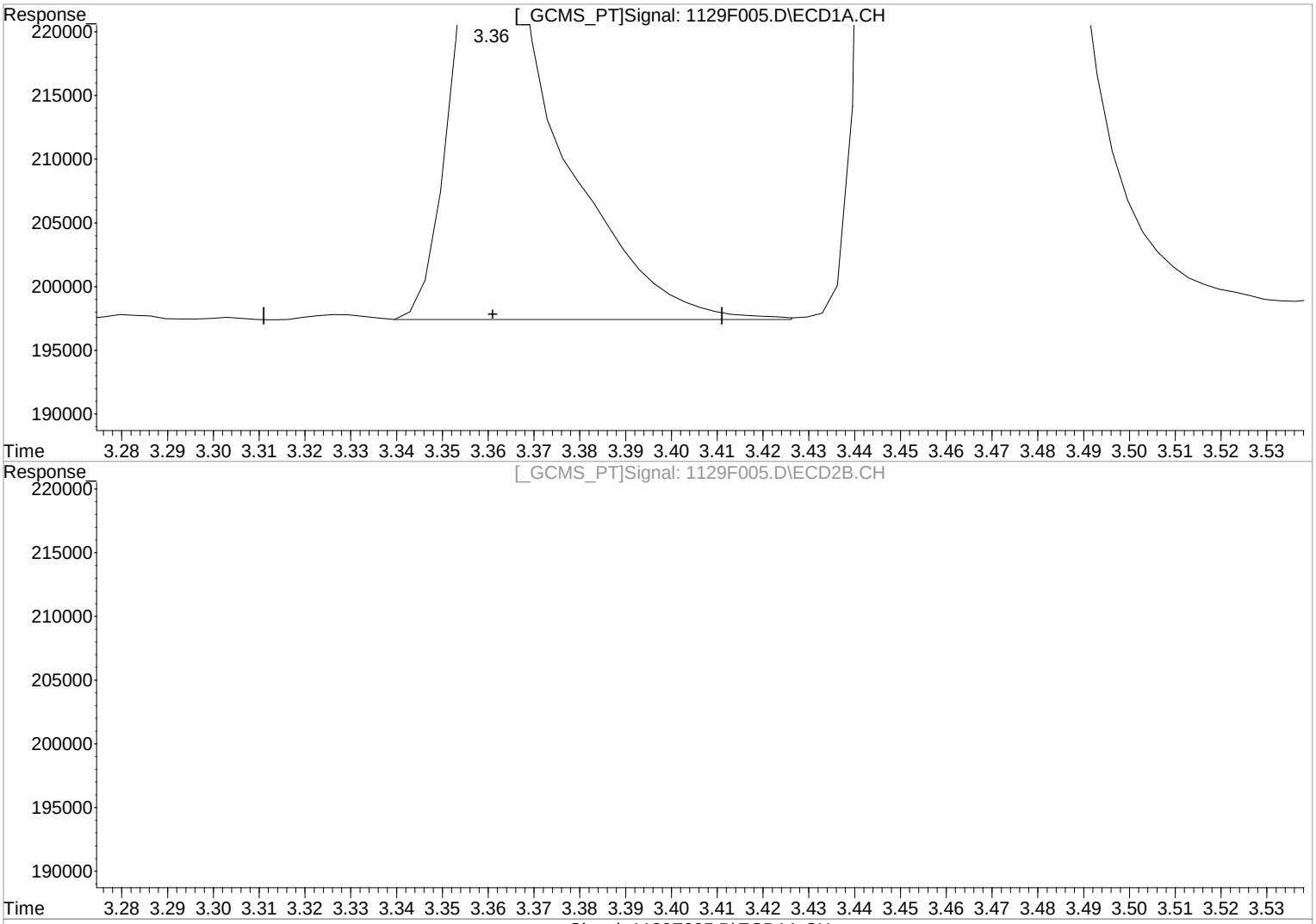


Quantitation Report (Qedit)

1st 11/30/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 30 14:47 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Thu Nov 30 14:18:39 2017
Response via : Multiple Level Calibration



Signal: 1129F005.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 45.764ug/L

response 557528

Manual Integration:

Before

11/30/17

(2) 3,5-Dichlorophenol #2

3.91min 43.808ug/L

response 541656

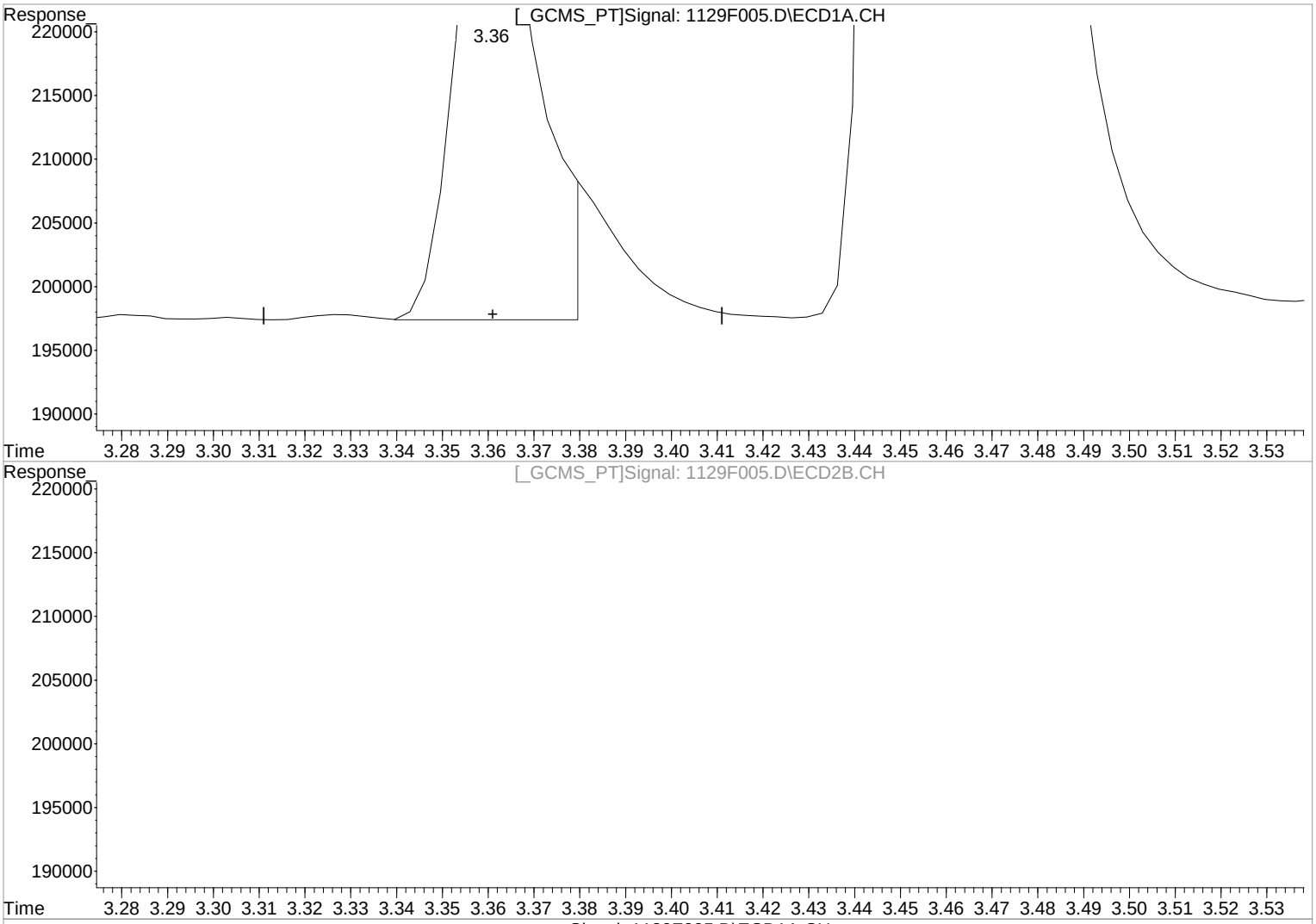
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/30/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 30 14:47 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Thu Nov 30 14:18:39 2017
Response via : Multiple Level Calibration



Signal: 1129F005.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 40.059ug/L m

response 488026

Manual Integration:

After

Baseline/Shoulder

11/30/17

(2) 3,5-Dichlorophenol #2

3.91min 43.808ug/L

response 541656

(+) = Expected Retention Time

July 30, 2018 Service Request No:K1805808

Scott Thielke
JH Baxter & Company
85 N. Baxter Road
P.O. Box 10797
Eugene, OR 97440

Laboratory Results for: JH Baxter - Arlington

Dear Scott,

Enclosed are the results of the sample(s) submitted to our laboratory June 19, 2018
For your reference, these analyses have been assigned our service request number **K1805808.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3350. You may also contact me via email at Kelley.Lovejoy@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Kelley Lovejoy

Kelley Lovejoy
Project Manager

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PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: JH Baxter & Company
Project: JH Baxter - Arlington
Sample Matrix: Water

Service Request: K1805808
Date Received: 06/19/2018

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Laboratory Duplicate (DUP), Matrix Spike (MS), Matrix/Duplicate Matrix Spike (MS/DMS), Laboratory Control Sample (LCS), and Laboratory/Duplicate Laboratory Control Sample (LCS/DLCS).

Sample Receipt:

Two water samples were received for analysis at ALS Environmental on 06/19/2018. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

Semivolatiles by GC/MS:

Method 8270D, 07/10/2018:The spike recovery of several analytes for Laboratory Control Sample (LCS) KWG1803064-1 was outside the lower control criterion. The analytes in question were not detected in the associated field samples. The error associated with reduced recovery indicated a potential low bias. Additional analysis of the associated field samples were not performed because insufficient sample remained for testing. The data was flagged to indicate the problem.

Method 8270D, 07/10/2018:The Relative Percent Difference (RPD) for several analytes in the replicate Laboratory Control Sample (LCS) analyses (KWG1803064-1 and KWG1803064-2) was outside control criteria. Reanalysis of the associated field samples was not be performed because insufficient sample remained for additional testing. The data was flagged to indicate the problem.

Semivoa GC:

No significant anomalies were noted with this analysis.

Approved by Kelley Lovejoy Date 07/30/2018

SAMPLE DETECTION SUMMARY

CLIENT ID: BXS-1			Lab ID: K1805808-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Benz(a)anthracene	0.0044	J	0.0020	0.040	ug/L	8270D SIM

CLIENT ID: BXS-2			Lab ID: K1805808-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Benz(a)anthracene	0.0038	J	0.0020	0.040	ug/L	8270D SIM

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: JH Baxter & Company **Service Request:**K1805808
Project: JH Baxter - Arlington

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K1805808-001	BXS-1	6/17/2018	0930
K1805808-002	BXS-2	6/16/2018	1355

1317 South 13th, Kelso, WA 98626 (360) 577-7222 FAX (360) 636-1068

SR# K1805808

PAGE 1 OF _____

0H	7D	28D	180D	7D

Project Name: JH Baxter - Arlington **Project Number:** _____

Project Manager: _____ **Company:** JH Baxter

Company/Address: 85 N Baxter Rd **Phone:** 541-689-3801

City, State, Zip: Eugene, OR 97402 **FAX:** 541-689-0769

Sampler's Signature: _____

Sample I.D.	Date	Time	LAB ID	Matrix	Number of Containers	SM 4500-H+ B / Ph	8270 D / PAH SIM	120.1 / Cond Spec	300.0 Chloride	300.0 / SO4	350.1 / Ammonia T	353.2 / NO2 NO3 T	SM 5220 C / COD T	SM 5310 / TOC T	SM 5550 B / Tan Lign	6010 C / Metals D	SM 2540 C TDS	8151 A Modified/PCP only	REMARKS
						Analysis Requested													
BXS-1	6/17/18	0930		water	2		X											X	Site investigation
BXS-2	6/16/18	1355	HOLD PLEASE MW	water	2		X											X	Site investigation
~~BXS-5~~ MW				~~water~~	~~2~~		X											X MW	Site investigation
~~BXS-4~~				water	4					X	X		X	X	X	X	X	MW	Landfill Program

TURNAROUND REQUIREMENTS

____ 24 hr ____ 48 hr ____ 5 day

__X__ Standard (21 days)

____ Provide FAX Preliminary Results

Requested Report Date: _____

REPORT REQUIREMENTS

____ I. Routine Report: Results, Method Blank, Surrogate, as required

__X__ II. Report Dup., MS, MSD as required

____ III. Data Validation Report (includes raw data)

____ IV. CLP Deliverable Report

____ V. EDD

Comments/Special Instructions:

Baxter is responsible for BXS-4 during Quarters 1 & 3

PAH samples have 2 - 500ml amber bottles

BXS 1&2 quarterly for PCP AND PAH'S

Questions? - Please Call Steven Kuhlmeier @ GSI Water Solutions 971-200-8529

Invoice Information

P.O. # _____

Bill to: JH Baxter & Co
San Mateo CA,94402

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Printed Name: Matt Housek	Printed Name:	Printed Name:	Printed Name:
Firm: JH Baxter	Firm: ALS-K	Firm:	Firm:
Date/Time: 6/18/18 0900	Date/Time: 6-19-18 1000	Date/Time:	Date/Time:

PC KL

Cooler Receipt and Preservation Form

Client JH Baxter Service Request K18 05808

Received: 6-19-18 Opened: 6-19-18 By: JSP Unloaded: 6-19-18 By: JSP

1. Samples were received via? *USPS* (FedEx) *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (Cooler) *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA Y (N) If yes, how many and where?_____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID (NA)	Tracking Number	NA	Filec
-0.8	-0.9	1.8	1.7	-0.1	308		7227 2438 9231		
0.9	0.8	0.7	0.6	-0.1	362		7227 2438 9220		

4. Packing material: *Inserts* (Baggies) (Bubble Wrap) *Gel Packs* (Wet Ice) *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* NA (Y) N
   If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA (Y) N
12. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

*Notes, Discrepancies, & Resolutions:*_____

Miscellaneous Forms

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Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Sample Results

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Semivolatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
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Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805808
Project:	JH Baxter - Arlington/	**Date Collected:**	06/17/18 09:30
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	BXS-1	**Units:**	ug/L
Lab Code:	K1805808-001	**Basis:**	NA

Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270D SIM
Prep Method: EPA 3511

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Naphthalene	ND U	0.040	0.0028	1	07/10/18 09:10	6/21/18	
2-Methylnaphthalene	ND U	0.040	0.0026	1	07/10/18 09:10	6/21/18	
Acenaphthylene	ND U	0.040	0.0022	1	07/10/18 09:10	6/21/18	
Acenaphthene	ND U	0.040	0.0024	1	07/10/18 09:10	6/21/18	*
Dibenzofuran	ND U	0.040	0.0020	1	07/10/18 09:10	6/21/18	
Fluorene	ND U	0.040	0.0022	1	07/10/18 09:10	6/21/18	*
Phenanthrene	ND U	0.040	0.0022	1	07/10/18 09:10	6/21/18	*
Anthracene	ND U	0.040	0.0017	1	07/10/18 09:10	6/21/18	*
Fluoranthene	ND U	0.040	0.0017	1	07/10/18 09:10	6/21/18	*
Pyrene	ND U	0.040	0.0020	1	07/10/18 09:10	6/21/18	*
Benz(a)anthracene	**0.0044 J**	0.040	0.0020	1	07/10/18 09:10	6/21/18	*
Chrysene	ND U	0.040	0.0016	1	07/10/18 09:10	6/21/18	*
Benzo(b)fluoranthene	ND U	0.040	0.0017	1	07/10/18 09:10	6/21/18	*
Benzo(k)fluoranthene	ND U	0.040	0.0019	1	07/10/18 09:10	6/21/18	*
Benzo(a)pyrene	ND U	0.040	0.0022	1	07/10/18 09:10	6/21/18	*
Indeno(1,2,3-cd)pyrene	ND U	0.040	0.0018	1	07/10/18 09:10	6/21/18	*
Dibenz(a,h)anthracene	ND U	0.040	0.0026	1	07/10/18 09:10	6/21/18	*
Benzo(g,h,i)perylene	ND U	0.040	0.0018	1	07/10/18 09:10	6/21/18	*

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Fluorene-d10	96	42 - 131	07/10/18 09:10	
Fluoranthene-d10	93	42 - 133	07/10/18 09:10	
p-Terphenyl-d14	111	32 - 129	07/10/18 09:10	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805808
Project:	JH Baxter - Arlington/	**Date Collected:**	06/16/18 13:55
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	BXS-2	**Units:**	ug/L
Lab Code:	K1805808-002	**Basis:**	NA

Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270D SIM
Prep Method: EPA 3511

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Naphthalene	ND U	0.040	0.0028	1	07/10/18 09:36	6/21/18	
2-Methylnaphthalene	ND U	0.040	0.0026	1	07/10/18 09:36	6/21/18	
Acenaphthylene	ND U	0.040	0.0022	1	07/10/18 09:36	6/21/18	
Acenaphthene	ND U	0.040	0.0024	1	07/10/18 09:36	6/21/18	*
Dibenzofuran	ND U	0.040	0.0020	1	07/10/18 09:36	6/21/18	
Fluorene	ND U	0.040	0.0022	1	07/10/18 09:36	6/21/18	*
Phenanthrene	ND U	0.040	0.0022	1	07/10/18 09:36	6/21/18	*
Anthracene	ND U	0.040	0.0017	1	07/10/18 09:36	6/21/18	*
Fluoranthene	ND U	0.040	0.0017	1	07/10/18 09:36	6/21/18	*
Pyrene	ND U	0.040	0.0020	1	07/10/18 09:36	6/21/18	*
Benz(a)anthracene	**0.0038 J**	0.040	0.0020	1	07/10/18 09:36	6/21/18	*
Chrysene	ND U	0.040	0.0016	1	07/10/18 09:36	6/21/18	*
Benzo(b)fluoranthene	ND U	0.040	0.0017	1	07/10/18 09:36	6/21/18	*
Benzo(k)fluoranthene	ND U	0.040	0.0019	1	07/10/18 09:36	6/21/18	*
Benzo(a)pyrene	ND U	0.040	0.0022	1	07/10/18 09:36	6/21/18	*
Indeno(1,2,3-cd)pyrene	ND U	0.040	0.0018	1	07/10/18 09:36	6/21/18	*
Dibenz(a,h)anthracene	ND U	0.040	0.0026	1	07/10/18 09:36	6/21/18	*
Benzo(g,h,i)perylene	ND U	0.040	0.0018	1	07/10/18 09:36	6/21/18	*

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Fluorene-d10	96	42 - 131	07/10/18 09:36	
Fluoranthene-d10	93	42 - 133	07/10/18 09:36	
p-Terphenyl-d14	103	32 - 129	07/10/18 09:36	

Semivolatile Organic Compounds by GC

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Phone (360) 577-7222 Fax (360) 425-9096
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Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805808
Project:	JH Baxter - Arlington	**Date Collected:**	06/17/18 09:30
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	BXS-1	**Units:**	ug/L
Lab Code:	K1805808-001	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/27/18 14:15	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	90	55 - 130	06/27/18 14:15	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805808
Project:	JH Baxter - Arlington	**Date Collected:**	06/16/18 13:55
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	BXS-2	**Units:**	ug/L
Lab Code:	K1805808-002	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/27/18 14:33	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	96	55 - 130	06/27/18 14:33	

QC Summary Forms

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Semivolatile Organic Compounds by GC/MS

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Client: JH Baxter & Company **Service Request:** K1805808
Project: JH Baxter - Arlington/
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270D SIM
Extraction Method: EPA 3511

Sample Name	Lab Code	Fluoranthene-d10 42 - 133	Fluorene-d10 42 - 131	p-Terphenyl-d14 32 - 129
BXS-1	K1805808-001	93	96	111
BXS-2	K1805808-002	93	96	103
Lab Control Sample	KWG1803064-1	54	56	105
Duplicate Lab Control Sample	KWG1803064-2	100	102	106
Method Blank	KWG1803064-3	98	100	114

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805808
Project:	JH Baxter - Arlington/	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1803064-3	**Basis:**	NA

Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270D SIM
Prep Method: EPA 3511

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Naphthalene	ND	U	0.040	0.0028	1	07/10/18 07:52	6/21/18	
2-Methylnaphthalene	ND	U	0.040	0.0026	1	07/10/18 07:52	6/21/18	
Acenaphthylene	ND	U	0.040	0.0022	1	07/10/18 07:52	6/21/18	
Acenaphthene	ND	U	0.040	0.0024	1	07/10/18 07:52	6/21/18	*
Dibenzofuran	ND	U	0.040	0.0020	1	07/10/18 07:52	6/21/18	
Fluorene	ND	U	0.040	0.0022	1	07/10/18 07:52	6/21/18	*
Phenanthrene	**0.0023**	**J**	0.040	0.0022	1	07/10/18 07:52	6/21/18	*
Anthracene	ND	U	0.040	0.0017	1	07/10/18 07:52	6/21/18	*
Fluoranthene	ND	U	0.040	0.0017	1	07/10/18 07:52	6/21/18	*
Pyrene	ND	U	0.040	0.0020	1	07/10/18 07:52	6/21/18	*
Benz(a)anthracene	**0.0040**	**J**	0.040	0.0020	1	07/10/18 07:52	6/21/18	*
Chrysene	ND	U	0.040	0.0016	1	07/10/18 07:52	6/21/18	*
Benzo(b)fluoranthene	ND	U	0.040	0.0017	1	07/10/18 07:52	6/21/18	*
Benzo(k)fluoranthene	ND	U	0.040	0.0019	1	07/10/18 07:52	6/21/18	*
Benzo(a)pyrene	ND	U	0.040	0.0022	1	07/10/18 07:52	6/21/18	*
Indeno(1,2,3-cd)pyrene	ND	U	0.040	0.0018	1	07/10/18 07:52	6/21/18	*
Dibenz(a,h)anthracene	ND	U	0.040	0.0026	1	07/10/18 07:52	6/21/18	*
Benzo(g,h,i)perylene	ND	U	0.040	0.0018	1	07/10/18 07:52	6/21/18	*

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Fluorene-d10	100	42 - 131	07/10/18 07:52	
Fluoranthene-d10	98	42 - 133	07/10/18 07:52	
p-Terphenyl-d14	114	32 - 129	07/10/18 07:52	

Client:	JH Baxter & Company	**Service Request:**	K1805808
Project:	JH Baxter - Arlington/	**Date Analyzed:**	07/10/18
Sample Matrix:	Water	**Date Extracted:**	06/21/18

Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Analysis Method:	8270D SIM	**Units:**	ug/L
Prep Method:	EPA 3511	**Basis:**	NA
		Analysis Lot:	KWG1803359

	Lab Control Sample KWG1803064-1			Duplicate Lab Control Sample KWG1803064-2					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
2-Methylnaphthalene	1.53	2.78	55	2.84	2.78	102	48-120	60 *	30
Acenaphthene	1.62	2.78	58 *	3.19	2.78	115	63-121	65 *	30
Acenaphthylene	1.69	2.78	61	3.23	2.78	116	58-124	63 *	30
Anthracene	1.61	2.78	58 *	3.30	2.78	119	68-127	69 *	30
Benz(a)anthracene	1.51	2.78	54 *	3.22	2.78	116	74-124	72 *	30
Benzo(a)pyrene	1.53	2.78	55 *	3.32	2.78	120	75-131	74 *	30
Benzo(b)fluoranthene	1.57	2.78	56 *	3.39	2.78	122	73-136	74 *	30
Benzo(g,h,i)perylene	1.55	2.78	56 *	3.27	2.78	118	63-127	72 *	30
Benzo(k)fluoranthene	1.61	2.78	58 *	3.35	2.78	121	74-134	70 *	30
Chrysene	1.57	2.78	57 *	3.27	2.78	118	74-132	70 *	30
Dibenz(a,h)anthracene	1.36	2.78	49 *	2.95	2.78	106	59-135	74 *	30
Dibenzofuran	1.68	2.78	60	3.26	2.78	117	56-132	64 *	30
Fluoranthene	1.47	2.78	53 *	3.02	2.78	109	70-127	69 *	30
Fluorene	1.58	2.78	57 *	3.16	2.78	114	68-121	67 *	30
Indeno(1,2,3-cd)pyrene	1.47	2.78	53 *	3.24	2.78	117	63-136	75 *	30
Naphthalene	1.68	2.78	60	2.94	2.78	106	52-115	55 *	30
Phenanthrene	1.58	2.78	57 *	3.22	2.78	116	64-126	69 *	30
Pyrene	1.71	2.78	62 *	3.45	2.78	124	72-127	67 *	30

Semivolatile Organic Compounds by GC

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: JH Baxter & Company **Service Request:** K1805808
Project: JH Baxter - Arlington
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Pentachlorophenol

Analysis Method: 8151A Modified
Extraction Method: Method

Sample Name	Lab Code	4-Bromo-2,6-dichlorophenol 55-130
BXS-1	K1805808-001	90
BXS-2	K1805808-002	96
Method Blank	KQ1808476-04	95
Lab Control Sample	KQ1808476-03	95

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805808
Project:	JH Baxter - Arlington	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ1808476-04	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/27/18 20:00	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	95	55 - 130	06/27/18 20:00	

Client:	JH Baxter & Company	**Service Request:**	K1805808
Project:	JH Baxter - Arlington	**Date Analyzed:**	06/27/18
Sample Matrix:	Water	**Date Extracted:**	06/22/18

Lab Control Sample Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Units:**	ug/L
Prep Method:	Method	**Basis:**	NA
		Analysis Lot:	596396

Lab Control Sample
KQ1808476-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Pentachlorophenol (PCP)	7.55	10.0	75	42-110

ALS Environmental
ALS Group USA, Corp
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www.alsglobal.com

July 30, 2018

Analytical Report for Service Request No: K1805809

Scott Thielke
JH Baxter & Company
85 N. Baxter Road
P.O. Box 10797
Eugene, OR 97440

RE: J.H. Baxter-Arlington

Dear Scott,

Enclosed are the results of the sample(s) submitted to our laboratory June 19, 2018
For your reference, these analyses have been assigned our service request number **K1805809.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3350. You may also contact me via email at Kelley.Lovejoy@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Kelley Lovejoy
Project Manager

ALS Environmental
ALS Group USA, Corp
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Kelso, WA 98626
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www.alsglobal.com

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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Service Request: K1805809
Date Received: 06/19/2018

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt:

Thirty water samples were received for analysis at ALS Environmental on 06/19/2018. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

Semivolatiles by GC/MS:

Method 8270D, 07/10/2018:The spike recovery of several analytes for Laboratory Control Sample (LCS) KWG1803064-1 was outside the lower control criterion. The analytes in question were not detected in the associated field samples. The error associated with reduced recovery indicated a potential low bias. Additional analysis of the associated field samples were not performed because insufficient sample remained for testing. The data was flagged to indicate the problem.

Method 8270D, 07/10/2018:The Relative Percent Difference (RPD) for several analytes in the replicate Laboratory Control Sample (LCS) analyses (KWG1803064-1 and KWG1803064-2) was outside control criteria. Reanalysis of the associated field samples was not be performed because insufficient sample remained for additional testing. The data was flagged to indicate the problem.

Semivoa GC:

No significant anomalies were noted with this analysis.

Approved by Kelley Bourjoy Date 07/30/2018

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

1317 South 13th, Kelso, WA 98626 (360) 577-7222 FAX (360) 636-1068

SR# K180 5809

PAGE _____ OF _____

0H | 7D | 28D | 180D | 7D

Project Name: JH Baxter - Arlington **Project Number:** _____

Project Manager: _____ **Company:** JH Baxter

Company/Address: 85 N Baxter Rd **Phone:** 541-689-3801

City, State, Zip: Eugene, OR 97402 **FAX:** 541-689-0769

Sampler's Signature: _____

Sample I.D.	Date	Time	LAB ID	Matrix	Number of Containers	SM 4500-H+ B / Ph	8270 D / PAH SIM	120.1 / Cond Spec	300.0 Chloride	300.0 / SO4	350.1 / Ammonia T	353.2 / NO2 NO3 T	SM 5220 C / COD T	SM 5310 / TOC T	SM 5550 B / Tan Lign	6010 C / Metals D	6020A / AS D	8151 A Modified / PCP only	REMARKS
					Analysis Requested														
HCMW-7	6/16/16	1252		water	1													X	PMP program
MW-15	6/17/16	0707		water	2		X											X	SI Program
~~MW-16~~				~~water~~	2		X											X	SI Program
MW-17	6/17/16	0732		water	2		X											X	SI Program
MW-18	6/16/16	1012		water	2		X											X	SI Program
MW-2	1	1316		water	2		X											X	SI Program
MW-22	6/16/16	0711		water	1													X	PMP program
MW-23	6/17/16	0806		water	1													X	PMP program
MW-24	6/17/16	0816		water	1													X	PMP program
MW-25	1	0756		water	1													X	PMP program
MW-26	6/17/16	1136		water	1													X	PMP program

TURNAROUND REQUIREMENTS

_____ 24 hr _____ 48 hr _____ 5 day

__X__ Standard (21 days)

_____ Provide FAX Preliminary Results

Requested Report Date: _____

REPORT REQUIREMENTS

_____ I. Routine Report: Results, Method Blank, Surrogate, as required

_____ II. Report Dup., MS, MSD as required

_____ III. Data Validation Report (includes raw data)

__X__ IV. CLP Deliverable Report

_____ V. EDD

Comments/Special Instructions:

PAH samples have 2 - 500ml amber bottles

Questions? - Please Call Steven Kuhlmeier @ GSI Water Solutions 971-200-8529

Invoice Information

P.O. # _____

Bill to: JH Baxter & Co
San Mateo CA,94402

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: _____	Signature: _____	Signature: _____	Signature: _____
Printed Name: _____	Printed Name: _____	Printed Name: _____	Printed Name: _____
Firm: JH Baxter	Firm: ALS-K	Firm: _____	Firm: _____
Date/Time: _____	Date/Time: 6/18 0000	Date/Time: _____	Date/Time: _____

ALS Environmental

1317 South 13th, Kelso, WA 98626 (360) 577-7222 FAX (360) 636-1068

SR# K1805809

PAGE _____ OF _____

0H	7D	28D	180D	7D

Project Name: JH Baxter - Arlington **Project Number:** _____

Project Manager: _____ **Company:** JH Baxter

Company/Address: 85 N Baxter Rd **Phone:** 541-689-3801

City, State, Zip: Eugene, OR 97402 **FAX:** 541-689-0769

Sampler's Signature: _____

Sample I.D.	Date	Time	LAB ID	Matrix	Number of Containers	Analysis Requested: SM 4500-H+ B / Ph	8270 D / PAH SIM	120.1 / Cond Spec	300.0 Chloride	300.0 / SO4	350.1 / Ammonia T	353.2 / NO2 NO3 T	SM 5220 C / COD T	SM 5310 / TOC T	SM 5550 B / Tan Lign	6010 C / Metals D	6020A / AS D	8151 A Modified / PCP only	REMARKS
MW - 27	6/16/18	1100		water	1													X	PMP program
MW - 28		0649		water	1													X	PMP program
MW - 29		1335		water	1													X	PMP program
MW - 30		1530		water	2		X											X	SI program
MW - 31		1505		water	1													X	PMP program
MW - 32		0735		water	1													X	PMP program
MW - 33		0845		water	1													X	PMP program
MW - 34		1356		water	1													X	PMP program
MW - 35		0858		water	2		X											X	PMP program
MW - 36	6/16/18	1411		water	2		X											X	SI program
MW - 37	6/17/18	0813		water	2		X											X	SI program

TURNAROUND REQUIREMENTS

_____ 24 hr _____ 48 hr _____ 5 day

__X__ Standard (21 days)

_____ Provide FAX Preliminary Results

Requested Report Date: _____

REPORT REQUIREMENTS

_____ I. Routine Report: Results, Method Blank, Surrogate, as required

_____ II. Report Dup., MS, MSD as required

_____ III. Data Validation Report (includes raw data)

__X__ IV. CLP Deliverable Report

_____ V. EDD

Comments/Special Instructions:

PAH samples have 2 - 500ml amber bottles

Questions? - Please Call Steven Kuhlmeier @ GSI Water Solutions 971-200-8529

Invoice Information

P.O. # _____

Bill to: JH Baxter & Co
San Mateo CA,94402

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: _____	Signature: _____	Signature: _____	Signature: _____
Printed Name: _____	Printed Name: _____	Printed Name: _____	Printed Name: _____
Firm: JH Baxter	Firm: ALS K	Firm: _____	Firm: _____
Date/Time: _____	Date/Time: 6/19/18 1000	Date/Time: _____	Date/Time: _____

1317 South 13th, Kelso, WA 98626 (360) 577-7222 FAX (360) 636-1068

SR# K1805809

PAGE _____ OF _____

0H	7D	28D	180D	7D

Project Name: JH Baxter - Arlington **Project Number:**

Project Manager: **Company:** JH Baxter

Company/Address: 85 N Baxter Rd **Phone:** 541-689-3801

City, State, Zip: Eugene, OR 97402 **FAX:** 541-689-0769

Sampler's Signature:

Sample I.D.	Date	Time	LAB ID	Matrix	Number of Containers	Analysis Requested: SM 4500-H+ B / Ph	8270 D / PAH SIM	120.1 / Cond Spec	300.0 Chloride	300.0 / SO4	350.1 / Ammonia T	353.2 / NO2 NO3 T	SM 5220 C / COD T	SM 5310 / TOC T	SM 5550 B / Tan Lign	6010 C / Metals D	6020A / AS D	8151 A Modified / PCP only	REMARKS
MW - 38	6/16/18	1416		water	1													X	SI program
MW - 39	6/17/18	0849		water	1													X	SI program
MW - 40	"	0646		water	1													X	SI program
MW - 41	6/17/18	0758		water	1													X	SI program
MW - 42	6/16/18	1819		water	1													X	SI program
MW - 43	6/16/18	0931		water	1													X	SI program
MW - 44	6/16/18	1815		water	1													X	SI program
FIELD BLANK RINSATE	6/17/18	1000	'FB'	water	2		X											X	PMP program
MW - 3		0836		water	2		X											X	SI program
~~MW - 2~~				water	~~2~~		~~X~~											X	SI program

TURNAROUND REQUIREMENTS

_____ 24 hr _____ 48 hr _____ 5 day

__X__ Standard (21 days)

_____ Provide FAX Preliminary Results

Requested Report Date:_____

REPORT REQUIREMENTS

_____ I. Routine Report: Results, Method Blank, Surrogate, as required

_____ II. Report Dup., MS, MSD as required

_____ III. Data Validation Report (includes raw data)

__X__ IV. CLP Deliverable Report

_____ V. EDD

Comments/Special Instructions:

PAH samples have 2 - 500ml amber bottles

Lab note: No pH or conductivity on field blank.

Questions? - Please Call Steven Kuhlmeier @ GSI Water Solutions 971-200-8529

Invoice Information

P.O. #

Bill to: JH Baxter & Co

San Mateo CA,94402

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Printed Name:	Printed Name:	Printed Name:	Printed Name:
Firm: JH Baxter	Firm: ALS-K	Firm:	Firm:
Date/Time:	Date/Time: 6-19-18	Date/Time:	Date/Time:

PC KL

Cooler Receipt and Preservation Form

Client JH Baxter Service Request K18 05809

Received: 6-19-18 Opened: 6-19-18 By: JSP Unloaded: 6-19-18 By: JSP

1. Samples were received via? *USPS* *FedEx* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y (N) If yes, how many and where? _____

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID (NA)	Tracking Number	NA	Filed
-0.8	-0.9	1.8	1.7	-0.1	308		7227 2438 9231		
0.9	0.8	0.7	0.6	-0.1	362		7227 2438 9220		

4. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* NA (Y) N

   If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA (Y) N
12. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____

Pentachlorophenol

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 12:52
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	HCMW-7	**Units:**	ug/L
Lab Code:	K1805809-001	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	**0.18 J**	0.50	0.071	1	06/29/18 09:38	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	92	55 - 130	06/29/18 09:38	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/17/18 07:07
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-15	**Units:**	ug/L
Lab Code:	K1805809-002	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/29/18 09:55	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	96	55 - 130	06/29/18 09:55	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/17/18 07:32
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-17	**Units:**	ug/L
Lab Code:	K1805809-003	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/29/18 10:13	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	97	55 - 130	06/29/18 10:13	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 10:12
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-18	**Units:**	ug/L
Lab Code:	K1805809-004	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/29/18 10:30	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	90	55 - 130	06/29/18 10:30	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 13:16
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-2	**Units:**	ug/L
Lab Code:	K1805809-005	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/29/18 10:48	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	89	55 - 130	06/29/18 10:48	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 07:11
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-22	**Units:**	ug/L
Lab Code:	K1805809-006	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	**42**	0.50	0.071	1	06/29/18 11:05	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	97	55 - 130	06/29/18 11:05	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/17/18 06:16
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-23	**Units:**	ug/L
Lab Code:	K1805809-007	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	**6.8**	0.50	0.071	1	06/29/18 11:23	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	94	55 - 130	06/29/18 11:23	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/17/18 08:16
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-24	**Units:**	ug/L
Lab Code:	K1805809-008	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	**100**	0.50	0.071	1	06/29/18 11:40	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	96	55 - 130	06/29/18 11:40	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/17/18 07:56
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-25	**Units:**	ug/L
Lab Code:	K1805809-009	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	**140**	0.50	0.071	1	06/29/18 11:57	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	90	55 - 130	06/29/18 11:57	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/17/18 11:30
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-26	**Units:**	ug/L
Lab Code:	K1805809-010	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/29/18 12:14	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	93	55 - 130	06/29/18 12:14	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 11:00
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-27	**Units:**	ug/L
Lab Code:	K1805809-011	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/29/18 13:06	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	90	55 - 130	06/29/18 13:06	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 06:49
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-28	**Units:**	ug/L
Lab Code:	K1805809-012	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	**0.14 J**	0.50	0.071	1	06/29/18 13:23	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	89	55 - 130	06/29/18 13:23	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 13:35
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-29	**Units:**	ug/L
Lab Code:	K1805809-013	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/29/18 13:41	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	89	55 - 130	06/29/18 13:41	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 15:30
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-30	**Units:**	ug/L
Lab Code:	K1805809-014	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/29/18 13:58	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	94	55 - 130	06/29/18 13:58	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 15:05
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-31	**Units:**	ug/L
Lab Code:	K1805809-015	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/29/18 14:15	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	90	55 - 130	06/29/18 14:15	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 07:35
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-32	**Units:**	ug/L
Lab Code:	K1805809-016	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	**6.5**	0.50	0.071	1	06/29/18 14:33	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	94	55 - 130	06/29/18 14:33	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 08:45
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-33	**Units:**	ug/L
Lab Code:	K1805809-017	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	**0.12 JP**	0.50	0.071	1	06/29/18 14:51	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	87	55 - 130	06/29/18 14:51	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 13:56
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-34	**Units:**	ug/L
Lab Code:	K1805809-018	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	**0.072 J**	0.50	0.071	1	06/29/18 15:08	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	84	55 - 130	06/29/18 15:08	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 08:58
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-35	**Units:**	ug/L
Lab Code:	K1805809-019	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/29/18 15:26	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	77	55 - 130	06/29/18 15:26	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 14:41
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-36	**Units:**	ug/L
Lab Code:	K1805809-020	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	**4.3**	0.50	0.071	1	06/29/18 15:43	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	91	55 - 130	06/29/18 15:43	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/17/18 08:13
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-37	**Units:**	ug/L
Lab Code:	K1805809-021	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/27/18 14:50	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	85	55 - 130	06/27/18 14:50	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 14:16
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-38	**Units:**	ug/L
Lab Code:	K1805809-022	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/27/18 15:08	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	88	55 - 130	06/27/18 15:08	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/17/18 08:49
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-39	**Units:**	ug/L
Lab Code:	K1805809-023	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	**0.80**	0.50	0.071	1	06/27/18 15:25	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	87	55 - 130	06/27/18 15:25	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/17/18 06:46
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-40	**Units:**	ug/L
Lab Code:	K1805809-024	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	**230**	5.0	0.71	10	06/27/18 15:42	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	84	55 - 130	06/27/18 15:42	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/17/18 07:58
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-41	**Units:**	ug/L
Lab Code:	K1805809-025	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/27/18 15:59	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	90	55 - 130	06/27/18 15:59	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 10:19
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-42	**Units:**	ug/L
Lab Code:	K1805809-026	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/27/18 16:17	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	95	55 - 130	06/27/18 16:17	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 09:31
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-43	**Units:**	ug/L
Lab Code:	K1805809-027	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/27/18 16:34	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	92	55 - 130	06/27/18 16:34	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 10:15
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-44	**Units:**	ug/L
Lab Code:	K1805809-028	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/27/18 17:25	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	91	55 - 130	06/27/18 17:25	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18 10:00
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	Field Blank Rinsate	**Units:**	ug/L
Lab Code:	K1805809-029	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/27/18 17:59	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	94	55 - 130	06/27/18 17:59	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/17/18 08:36
Sample Matrix:	Water	**Date Received:**	06/19/18 10:00
Sample Name:	MW-3	**Units:**	ug/L
Lab Code:	K1805809-030	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	**16**	0.50	0.071	1	06/27/18 17:42	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	92	55 - 130	06/27/18 17:42	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ1808475-04	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/29/18 17:28	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	84	55 - 130	06/29/18 17:28	

Analytical Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KQ1808476-04	**Basis:**	NA

Pentachlorophenol

Analysis Method: 8151A Modified
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Pentachlorophenol (PCP)	ND U	0.50	0.071	1	06/27/18 20:00	6/22/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromo-2,6-dichlorophenol	95	55 - 130	06/27/18 20:00	

Client: JH Baxter & Company **Service Request:** K1805809
Project: J.H. Baxter-Arlington
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Pentachlorophenol

Analysis Method: 8151A Modified
Extraction Method: Method

Sample Name	Lab Code	4-Bromo-2,6-dichlorophenol 55-130
HCMW-7	K1805809-001	92
MW-15	K1805809-002	96
MW-17	K1805809-003	97
MW-18	K1805809-004	90
MW-2	K1805809-005	89
MW-22	K1805809-006	97
MW-23	K1805809-007	94
MW-24	K1805809-008	96
MW-25	K1805809-009	90
MW-26	K1805809-010	93
MW-27	K1805809-011	90
MW-28	K1805809-012	89
MW-29	K1805809-013	89
MW-30	K1805809-014	94
MW-31	K1805809-015	90
MW-32	K1805809-016	94
MW-33	K1805809-017	87
MW-34	K1805809-018	84
MW-35	K1805809-019	77
MW-36	K1805809-020	91
MW-37	K1805809-021	85
MW-38	K1805809-022	88
MW-39	K1805809-023	87
MW-40	K1805809-024	84
MW-41	K1805809-025	90
MW-42	K1805809-026	95
MW-43	K1805809-027	92
MW-44	K1805809-028	91
Field Blank Rinsate	K1805809-029	94
MW-3	K1805809-030	92
Method Blank	KQ1808475-04	84
Method Blank	KQ1808476-04	95
Lab Control Sample	KQ1808475-03	93
Lab Control Sample	KQ1808476-03	95
MW-36	KQ1808475-01	89
MW-36	KQ1808475-02	94
MW-3	KQ1808476-01	100

Client: JH Baxter & Company **Service Request:** K1805809
Project: J.H. Baxter-Arlington
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Pentachlorophenol

Analysis Method: 8151A Modified
Extraction Method: Method

Sample Name	Lab Code	4-Bromo-2,6-dichlorophenol 55-130
MW-3	KQ1808476-02	98

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/18
Sample Matrix:	Water	**Date Received:**	06/19/18
		Date Analyzed:	06/29/18
		Date Extracted:	06/22/18

Duplicate Matrix Spike Summary
Pentachlorophenol

Sample Name:	MW-36	**Units:**	ug/L
Lab Code:	K1805809-020	**Basis:**	NA
Analysis Method:	8151A Modified		
Prep Method:	Method		

		Matrix Spike KQ1808475-01			Duplicate Matrix Spike KQ1808475-02					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Pentachlorophenol (PCP)	4.3	12.0	10.0	77	12.2	10.0	79	22-136	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/17/18
Sample Matrix:	Water	**Date Received:**	06/19/18
		Date Analyzed:	06/27/18
		Date Extracted:	06/22/18

Duplicate Matrix Spike Summary
Pentachlorophenol

Sample Name:	MW-3	**Units:**	ug/L
Lab Code:	K1805809-030	**Basis:**	NA
Analysis Method:	8151A Modified		
Prep Method:	Method		

		Matrix Spike KQ1808476-01			Duplicate Matrix Spike KQ1808476-02					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Pentachlorophenol (PCP)	16	24.7	10.0	86	24.6	10.0	84	22-136	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/29/18
Sample Matrix:	Water	**Date Extracted:**	06/22/18

Lab Control Sample Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Units:**	ug/L
Prep Method:	Method	**Basis:**	NA
		Analysis Lot:	596781

Lab Control Sample
KQ1808475-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Pentachlorophenol (PCP)	7.31	10.0	73	42-110

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/27/18
Sample Matrix:	Water	**Date Extracted:**	06/22/18

Lab Control Sample Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Units:**	ug/L
Prep Method:	Method	**Basis:**	NA
		Analysis Lot:	596396

Lab Control Sample
KQ1808476-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Pentachlorophenol (PCP)	7.55	10.0	75	42-110

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/29/18 17:28
Sample Matrix:	Water	**Date Extracted:**	06/22/18

Method Blank Summary
Pentachlorophenol

Sample Name:	Method Blank	**Instrument ID:**	K-GC-28
Lab Code:	KQ1808475-04	**File ID:**	J:\GC28\Data\062918\0629F032.D\
Analysis Method:	8151A Modified	**Analysis Lot:**	596781
Prep Method:	Method	**Extraction Lot:**	316493

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
HCMW-7	K1805809-001	J:\GC28\Data\062918\0629F005.D\	06/29/18 09:38
MW-15	K1805809-002	J:\GC28\Data\062918\0629F006.D\	06/29/18 09:55
MW-17	K1805809-003	J:\GC28\Data\062918\0629F007.D\	06/29/18 10:13
MW-18	K1805809-004	J:\GC28\Data\062918\0629F008.D\	06/29/18 10:30
MW-2	K1805809-005	J:\GC28\Data\062918\0629F009.D\	06/29/18 10:48
MW-22	K1805809-006	J:\GC28\Data\062918\0629F010.D\	06/29/18 11:05
MW-23	K1805809-007	J:\GC28\Data\062918\0629F011.D\	06/29/18 11:23
MW-24	K1805809-008	J:\GC28\Data\062918\0629F012.D\	06/29/18 11:40
MW-25	K1805809-009	J:\GC28\Data\062918\0629F013.D\	06/29/18 11:57
MW-26	K1805809-010	J:\GC28\Data\062918\0629F014.D\	06/29/18 12:14
MW-27	K1805809-011	J:\GC28\Data\062918\0629F017.D\	06/29/18 13:06
MW-28	K1805809-012	J:\GC28\Data\062918\0629F018.D\	06/29/18 13:23
MW-29	K1805809-013	J:\GC28\Data\062918\0629F019.D\	06/29/18 13:41
MW-30	K1805809-014	J:\GC28\Data\062918\0629F020.D\	06/29/18 13:58
MW-31	K1805809-015	J:\GC28\Data\062918\0629F021.D\	06/29/18 14:15
MW-32	K1805809-016	J:\GC28\Data\062918\0629F022.D\	06/29/18 14:33
MW-33	K1805809-017	J:\GC28\Data\062918\0629F023.D\	06/29/18 14:51
MW-34	K1805809-018	J:\GC28\Data\062918\0629F024.D\	06/29/18 15:08
MW-35	K1805809-019	J:\GC28\Data\062918\0629F025.D\	06/29/18 15:26
MW-36	K1805809-020	J:\GC28\Data\062918\0629F026.D\	06/29/18 15:43
MW-36MS	KQ1808475-01	J:\GC28\Data\062918\0629F029.D\	06/29/18 16:36
MW-36DMS	KQ1808475-02	J:\GC28\Data\062918\0629F030.D\	06/29/18 16:53
Lab Control Sample	KQ1808475-03	J:\GC28\Data\062918\0629F031.D\	06/29/18 17:11

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/27/18 20:00
Sample Matrix:	Water	**Date Extracted:**	06/22/18

Method Blank Summary
Pentachlorophenol

Sample Name:	Method Blank	**Instrument ID:**	K-GC-28
Lab Code:	KQ1808476-04	**File ID:**	J:\GC28\Data\062718\0627F026.D\
Analysis Method:	8151A Modified	**Analysis Lot:**	596396
Prep Method:	Method	**Extraction Lot:**	316494

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
MW-37	K1805809-021	J:\GC28\Data\062718\0627F008.D\	06/27/18 14:50
MW-38	K1805809-022	J:\GC28\Data\062718\0627F009.D\	06/27/18 15:08
MW-39	K1805809-023	J:\GC28\Data\062718\0627F010.D\	06/27/18 15:25
MW-40	K1805809-024	J:\GC28\Data\062718\0627F011.D\	06/27/18 15:42
MW-41	K1805809-025	J:\GC28\Data\062718\0627F012.D\	06/27/18 15:59
MW-42	K1805809-026	J:\GC28\Data\062718\0627F013.D\	06/27/18 16:17
MW-43	K1805809-027	J:\GC28\Data\062718\0627F014.D\	06/27/18 16:34
MW-44	K1805809-028	J:\GC28\Data\062718\0627F017.D\	06/27/18 17:25
MW-3	K1805809-030	J:\GC28\Data\062718\0627F018.D\	06/27/18 17:42
Field Blank Rinsate	K1805809-029	J:\GC28\Data\062718\0627F019.D\	06/27/18 17:59
MW-3MS	KQ1808476-01	J:\GC28\Data\062718\0627F023.D\	06/27/18 19:08
MW-3DMS	KQ1808476-02	J:\GC28\Data\062718\0627F024.D\	06/27/18 19:26
Lab Control Sample	KQ1808476-03	J:\GC28\Data\062718\0627F025.D\	06/27/18 19:43

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/29/18 17:11
Sample Matrix:	Water	**Date Extracted:**	06/22/18

Lab Control Sample Summary
Pentachlorophenol

Sample Name:	Lab Control Sample	**Instrument ID:**	K-GC-28
Lab Code:	KQ1808475-03	**File ID:**	J:\GC28\Data\062918\0629F031.D\
Analysis Method:	8151A Modified	**Analysis Lot:**	596781
Prep Method:	Method	**Extraction Lot:**	316493

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
HCMW-7	K1805809-001	J:\GC28\Data\062918\0629F005.D\	06/29/18 09:38
MW-15	K1805809-002	J:\GC28\Data\062918\0629F006.D\	06/29/18 09:55
MW-17	K1805809-003	J:\GC28\Data\062918\0629F007.D\	06/29/18 10:13
MW-18	K1805809-004	J:\GC28\Data\062918\0629F008.D\	06/29/18 10:30
MW-2	K1805809-005	J:\GC28\Data\062918\0629F009.D\	06/29/18 10:48
MW-22	K1805809-006	J:\GC28\Data\062918\0629F010.D\	06/29/18 11:05
MW-23	K1805809-007	J:\GC28\Data\062918\0629F011.D\	06/29/18 11:23
MW-24	K1805809-008	J:\GC28\Data\062918\0629F012.D\	06/29/18 11:40
MW-25	K1805809-009	J:\GC28\Data\062918\0629F013.D\	06/29/18 11:57
MW-26	K1805809-010	J:\GC28\Data\062918\0629F014.D\	06/29/18 12:14
MW-27	K1805809-011	J:\GC28\Data\062918\0629F017.D\	06/29/18 13:06
MW-28	K1805809-012	J:\GC28\Data\062918\0629F018.D\	06/29/18 13:23
MW-29	K1805809-013	J:\GC28\Data\062918\0629F019.D\	06/29/18 13:41
MW-30	K1805809-014	J:\GC28\Data\062918\0629F020.D\	06/29/18 13:58
MW-31	K1805809-015	J:\GC28\Data\062918\0629F021.D\	06/29/18 14:15
MW-32	K1805809-016	J:\GC28\Data\062918\0629F022.D\	06/29/18 14:33
MW-33	K1805809-017	J:\GC28\Data\062918\0629F023.D\	06/29/18 14:51
MW-34	K1805809-018	J:\GC28\Data\062918\0629F024.D\	06/29/18 15:08
MW-35	K1805809-019	J:\GC28\Data\062918\0629F025.D\	06/29/18 15:26
MW-36	K1805809-020	J:\GC28\Data\062918\0629F026.D\	06/29/18 15:43
MW-36MS	KQ1808475-01	J:\GC28\Data\062918\0629F029.D\	06/29/18 16:36
MW-36DMS	KQ1808475-02	J:\GC28\Data\062918\0629F030.D\	06/29/18 16:53
Method Blank	KQ1808475-04	J:\GC28\Data\062918\0629F032.D\	06/29/18 17:28

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QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/27/18 19:43
Sample Matrix:	Water	**Date Extracted:**	06/22/18

Lab Control Sample Summary
Pentachlorophenol

Sample Name:	Lab Control Sample	**Instrument ID:**	K-GC-28
Lab Code:	KQ1808476-03	**File ID:**	J:\GC28\Data\062718\0627F025.D\
Analysis Method:	8151A Modified	**Analysis Lot:**	596396
Prep Method:	Method	**Extraction Lot:**	316494

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
MW-37	K1805809-021	J:\GC28\Data\062718\0627F008.D\	06/27/18 14:50
MW-38	K1805809-022	J:\GC28\Data\062718\0627F009.D\	06/27/18 15:08
MW-39	K1805809-023	J:\GC28\Data\062718\0627F010.D\	06/27/18 15:25
MW-40	K1805809-024	J:\GC28\Data\062718\0627F011.D\	06/27/18 15:42
MW-41	K1805809-025	J:\GC28\Data\062718\0627F012.D\	06/27/18 15:59
MW-42	K1805809-026	J:\GC28\Data\062718\0627F013.D\	06/27/18 16:17
MW-43	K1805809-027	J:\GC28\Data\062718\0627F014.D\	06/27/18 16:34
MW-44	K1805809-028	J:\GC28\Data\062718\0627F017.D\	06/27/18 17:25
MW-3	K1805809-030	J:\GC28\Data\062718\0627F018.D\	06/27/18 17:42
Field Blank Rinsate	K1805809-029	J:\GC28\Data\062718\0627F019.D\	06/27/18 17:59
MW-3MS	KQ1808476-01	J:\GC28\Data\062718\0627F023.D\	06/27/18 19:08
MW-3DMS	KQ1808476-02	J:\GC28\Data\062718\0627F024.D\	06/27/18 19:26
Method Blank	KQ1808476-04	J:\GC28\Data\062718\0627F026.D\	06/27/18 20:00

Client: JH Baxter & Company **Service Request:** K1805809
Project: J.H. Baxter-Arlington **Calibration Date:** 11/27/2017

Initial Calibration Summary
Pentachlorophenol

Calibration ID: KC1800028 **Signal ID:** Rtx-1701
Instrument ID: K-GC-28

#	Lab Code	Sample Name	File Location	Acquisition Date
01	KC1800028-01	PENTA01-88I 1 PPB	J:\GC28\DATA\112717-CAL\1127F127.D	11/27/2017 18:57
02	KC1800028-02	PENTA01-88H 2.5 PPB	J:\GC28\DATA\112717-CAL\1127F128.D	11/27/2017 19:16
03	KC1800028-03	PENTA01-88G 5 PPB	J:\GC28\DATA\112717-CAL\1127F129.D	11/27/2017 19:35
04	KC1800028-04	PENTA01-88I 10 PPB	J:\GC28\DATA\112717-CAL\1127F130.D	11/27/2017 19:53
05	KC1800028-05	PENTA01-88E 25 PPB	J:\GC28\DATA\112717-CAL\1127F131.D	11/27/2017 20:12
06	KC1800028-06	PENTA01-88D 100 PPB	J:\GC28\DATA\112717-CAL\1127F132.D	11/27/2017 20:31
07	KC1800028-07	PENTA01-88C 250 PPB	J:\GC28\DATA\112717-CAL\1127F133.D	11/27/2017 20:50
08	KC1800028-08	PENTA01-88N 500 PPB	J:\GC28\DATA\112717-CAL\1127F134.D	11/27/2017 21:08
09	KC1800028-09	PENTA01-88M 1000 PPB	J:\GC28\DATA\112717-CAL\1127F135.D	11/27/2017 21:27

Analyte

4-Bromo-2,6-dichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	5.54E5	02	2.500	5.269E5	03	5.000	5.055E5	04	10.000	4.614E5
05	25.000	4.458E5	06	100	4.601E5	07	250.000	4.255E5			

Pentachlorophenol (PCP)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.950	8.49E5	02	2.375	7.887E5	03	4.750	7.381E5	04	9.501	6.629E5
05	23.752	6.249E5	06	95.01	6.193E5	07	237.520	5.614E5	08	475.030	5.437E5
09	950.060	5.102E5									

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1805809
Calibration Date: 11/27/2017

Initial Calibration Summary
Pentachlorophenol

Calibration ID: KC1800028
Instrument ID: K-GC-28

Signal ID: Rtx-1701

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
4-Bromo-2,6-dichlorophenol	SURR	Average RF	% RSD	9.7	≤20	4.827E5	
Pentachlorophenol (PCP)	TRG	Average RF	% RSD	17.6	≤20	6.553E5	

Client: JH Baxter & Company **Service Request:** K1805809
Project: J.H. Baxter-Arlington **Calibration Date:** 11/27/2017

Initial Calibration Summary
Pentachlorophenol

Calibration ID: KC1800028 **Signal ID:** Rtx-35
Instrument ID: K-GC-28

#	Lab Code	Sample Name	File Location	Acquisition Date
01	KC1800028-01	PENTA01-88I 1 PPB	J:\GC28\DATA\112717-CAL\1127F127.D	11/27/2017 18:57
02	KC1800028-02	PENTA01-88H 2.5 PPB	J:\GC28\DATA\112717-CAL\1127F128.D	11/27/2017 19:16
03	KC1800028-03	PENTA01-88G 5 PPB	J:\GC28\DATA\112717-CAL\1127F129.D	11/27/2017 19:35
04	KC1800028-04	PENTA01-88I 10 PPB	J:\GC28\DATA\112717-CAL\1127F130.D	11/27/2017 19:53
05	KC1800028-05	PENTA01-88E 25 PPB	J:\GC28\DATA\112717-CAL\1127F131.D	11/27/2017 20:12
06	KC1800028-06	PENTA01-88D 100 PPB	J:\GC28\DATA\112717-CAL\1127F132.D	11/27/2017 20:31
07	KC1800028-07	PENTA01-88C 250 PPB	J:\GC28\DATA\112717-CAL\1127F133.D	11/27/2017 20:50
08	KC1800028-08	PENTA01-88N 500 PPB	J:\GC28\DATA\112717-CAL\1127F134.D	11/27/2017 21:08
09	KC1800028-09	PENTA01-88M 1000 PPB	J:\GC28\DATA\112717-CAL\1127F135.D	11/27/2017 21:27

Analyte

4-Bromo-2,6-dichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	3.305E5	02	2.500	3.506E5	03	5.000	3.534E5	04	10.000	3.451E5
05	25.000	3.623E5	06	100	4.016E5	07	250.000	3.801E5			

Pentachlorophenol (PCP)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.950	8.526E5	02	2.375	7.404E5	03	4.750	6.716E5	04	9.501	6.183E5
05	23.752	5.71E5	06	95.01	5.672E5	07	237.520	5.447E5	08	475.030	5.613E5
09	950.060	5.522E5									

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1805809
Calibration Date: 11/27/2017

Initial Calibration Summary
Pentachlorophenol

Calibration ID: KC1800028
Instrument ID: K-GC-28

Signal ID: Rtx-35

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
4-Bromo-2,6-dichlorophenol	SURR	Average RF	% RSD	6.6	≤20	3.605E5	
Pentachlorophenol (PCP)	TRG	Average RF	% RSD	16.7	≤20	6.31E5	

Client: JH Baxter & Company **Service Request:** K1805809
Project: J.H. Baxter-Arlington **Calibration Date:** 11/27/2017

Initial Calibration Verification Summary
Pentachlorophenol

Calibration ID: KC1800028 **Signal ID:** Rtx-1701
Instrument ID: K-GC-28

#	Lab Code	Sample Name	File Location	Acquisition Date
10	KC1800028-10	PENTA01-88K 50PPB ICV	J:\GC28\DATA\112717-CAL\1129F005.D	11/29/2017 12:44

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Pentachlorophenol (PCP)	47.5	43.1	6.553E5	5.95E5	-9.210	±20	Average RF

Client: JH Baxter & Company **Service Request:** K1805809
Project: J.H. Baxter-Arlington **Calibration Date:** 11/27/2017

Initial Calibration Verification Summary
Pentachlorophenol

Calibration ID: KC1800028 **Signal ID:** Rtx-35
Instrument ID: K-GC-28

#	Lab Code	Sample Name	File Location	Acquisition Date
10	KC1800028-10	PENTA01-88K 50PPB ICV	J:\GC28\DATA\112717-CAL\1129F005.D	11/29/2017 12:44

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Pentachlorophenol (PCP)	47.5	40.9	6.31E5	5.433E5	-13.906	±20	Average RF

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/27/18 13:24

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Calibration Date:**	11/27/2017
File ID:	J:\GC28\Data\062718\0627F003.D\	**Calibration ID:**	KC1800028
Signal ID:	Rtx-35	**Analysis Lot:**	596396
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Pentachlorophenol (PCP)	47.5	45.0	6.31E5	5.973E5	-5.3	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	55.3	3.605E5	3.986E5	10.6	NA	±20	Average RF

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/27/18 13:24

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Calibration Date:**	11/27/2017
File ID:	J:\GC28\Data\062718\0627F003.D\	**Calibration ID:**	KC1800028
Signal ID:	Rtx-1701	**Analysis Lot:**	596396
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Pentachlorophenol (PCP)	47.5	49.0	6.553E5	6.756E5	3.1	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	51.1	4.827E5	4.933E5	2.2	NA	±20	Average RF

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/27/18 16:51

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Calibration Date:**	11/27/2017
File ID:	J:\GC28\Data\062718\0627F015.D\	**Calibration ID:**	KC1800028
Signal ID:	Rtx-35	**Analysis Lot:**	596396
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Pentachlorophenol (PCP)	47.5	43.9	6.31E5	5.828E5	-7.6	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	54.0	3.605E5	3.891E5	7.9	NA	±20	Average RF

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/27/18 16:51

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Calibration Date:**	11/27/2017
File ID:	J:\GC28\Data\062718\0627F015.D\	**Calibration ID:**	KC1800028
Signal ID:	Rtx-1701	**Analysis Lot:**	596396
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Pentachlorophenol (PCP)	47.5	50.7	6.553E5	6.99E5	6.7	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	53.2	4.827E5	5.134E5	6.4	NA	±20	Average RF

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/27/18 20:17

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Calibration Date:**	11/27/2017
File ID:	J:\GC28\Data\062718\0627F027.D\	**Calibration ID:**	KC1800028
Signal ID:	Rtx-35	**Analysis Lot:**	596396
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Pentachlorophenol (PCP)	47.5	44.2	6.31E5	5.876E5	-6.9	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	54.9	3.605E5	3.957E5	9.8	NA	±20	Average RF

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/27/18 20:17

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Calibration Date:**	11/27/2017
File ID:	J:\GC28\Data\062718\0627F027.D\	**Calibration ID:**	KC1800028
Signal ID:	Rtx-1701	**Analysis Lot:**	596396
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Pentachlorophenol (PCP)	47.5	50.6	6.553E5	6.988E5	6.6	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	53.2	4.827E5	5.141E5	6.5	NA	±20	Average RF

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/29/18 09:03

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Calibration Date:**	11/27/2017
File ID:	J:\GC28\Data\062918\0629F003.D\	**Calibration ID:**	KC1800028
Signal ID:	Rtx-35	**Analysis Lot:**	596781
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Pentachlorophenol (PCP)	47.5	44.8	6.31E5	5.945E5	-5.8	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	55.5	3.605E5	4.004E5	11.1	NA	±20	Average RF

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/29/18 09:03

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Calibration Date:**	11/27/2017
File ID:	J:\GC28\Data\062918\0629F003.D\	**Calibration ID:**	KC1800028
Signal ID:	Rtx-1701	**Analysis Lot:**	596781
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Pentachlorophenol (PCP)	47.5	50.1	6.553E5	6.908E5	5.4	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	53.0	4.827E5	5.116E5	6.0	NA	±20	Average RF

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/29/18 12:32

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Calibration Date:**	11/27/2017
File ID:	J:\GC28\Data\062918\0629F015.D\	**Calibration ID:**	KC1800028
Signal ID:	Rtx-35	**Analysis Lot:**	596781
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Pentachlorophenol (PCP)	47.5	44.5	6.31E5	5.917E5	-6.2	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	55.0	3.605E5	3.969E5	10.1	NA	±20	Average RF

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/29/18 12:32

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Calibration Date:**	11/27/2017
File ID:	J:\GC28\Data\062918\0629F015.D\	**Calibration ID:**	KC1800028
Signal ID:	Rtx-1701	**Analysis Lot:**	596781
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Pentachlorophenol (PCP)	47.5	51.2	6.553E5	7.068E5	7.8	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	54.1	4.827E5	5.226E5	8.3	NA	±20	Average RF

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/29/18 16:01

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Calibration Date:**	11/27/2017
File ID:	J:\GC28\Data\062918\0629F027.D\	**Calibration ID:**	KC1800028
Signal ID:	Rtx-35	**Analysis Lot:**	596781
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Pentachlorophenol (PCP)	47.5	44.0	6.31E5	5.843E5	-7.4	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	54.1	3.605E5	3.904E5	8.3	NA	±20	Average RF

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/29/18 16:01

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Calibration Date:**	11/27/2017
File ID:	J:\GC28\Data\062918\0629F027.D\	**Calibration ID:**	KC1800028
Signal ID:	Rtx-1701	**Analysis Lot:**	596781
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Pentachlorophenol (PCP)	47.5	51.5	6.553E5	7.099E5	8.3	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	54.5	4.827E5	5.261E5	9.0	NA	±20	Average RF

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/29/18 17:46

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Calibration Date:**	11/27/2017
File ID:	J:\GC28\Data\062918\0629F033.D\	**Calibration ID:**	KC1800028
Signal ID:	Rtx-35	**Analysis Lot:**	596781
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Pentachlorophenol (PCP)	47.5	44.3	6.31E5	5.883E5	-6.8	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	55.1	3.605E5	3.975E5	10.3	NA	±20	Average RF

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Analyzed:**	06/29/18 17:46

Continuing Calibration Verification (CCV) Summary
Pentachlorophenol

Analysis Method:	8151A Modified	**Calibration Date:**	11/27/2017
File ID:	J:\GC28\Data\062918\0629F033.D\	**Calibration ID:**	KC1800028
Signal ID:	Rtx-1701	**Analysis Lot:**	596781
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Pentachlorophenol (PCP)	47.5	51.6	6.553E5	7.124E5	8.7	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50.0	54.6	4.827E5	5.268E5	9.1	NA	±20	Average RF

Client: JH Baxter & Company **Service Request:**K1805809
Project: J.H. Baxter-Arlington

Analysis Run Log
Pentachlorophenol

Analysis Method: 8151A Modified **Analysis Lot:**596396
Instrument ID:K-GC-28

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\GC28\Data\062718\0627F003.D\	Continuing Calibration Verification	KQ1808738-01	6/27/2018	13:24:00	
J:\GC28\Data\062718\0627F004.D\	Continuing Calibration Blank	KQ1808738-04	6/27/2018	13:41:00	
J:\GC28\Data\062718\0627F005.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	13:58:00	
J:\GC28\Data\062718\0627F006.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	14:15:00	
J:\GC28\Data\062718\0627F007.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	14:33:00	
J:\GC28\Data\062718\0627F008.D\	MW-37	K1805809-021	6/27/2018	14:50:00	
J:\GC28\Data\062718\0627F009.D\	MW-38	K1805809-022	6/27/2018	15:08:00	
J:\GC28\Data\062718\0627F010.D\	MW-39	K1805809-023	6/27/2018	15:25:00	
J:\GC28\Data\062718\0627F011.D\	MW-40	K1805809-024	6/27/2018	15:42:00	
J:\GC28\Data\062718\0627F012.D\	MW-41	K1805809-025	6/27/2018	15:59:00	
J:\GC28\Data\062718\0627F013.D\	MW-42	K1805809-026	6/27/2018	16:17:00	
J:\GC28\Data\062718\0627F014.D\	MW-43	K1805809-027	6/27/2018	16:34:00	
J:\GC28\Data\062718\0627F015.D\	Continuing Calibration Verification	KQ1808738-02	6/27/2018	16:51:00	
J:\GC28\Data\062718\0627F016.D\	Continuing Calibration Blank	KQ1808738-05	6/27/2018	17:08:00	
J:\GC28\Data\062718\0627F017.D\	MW-44	K1805809-028	6/27/2018	17:25:00	
J:\GC28\Data\062718\0627F018.D\	MW-3	K1805809-030	6/27/2018	17:42:00	
J:\GC28\Data\062718\0627F019.D\	Field Blank Rinsate	K1805809-029	6/27/2018	17:59:00	
J:\GC28\Data\062718\0627F020.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	18:16:00	
J:\GC28\Data\062718\0627F021.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	18:33:00	
J:\GC28\Data\062718\0627F022.D\	ZZZZZZZ	ZZZZZZZ	6/27/2018	18:51:00	
J:\GC28\Data\062718\0627F023.D\	MW-3 MS	KQ1808476-01	6/27/2018	19:08:00	
J:\GC28\Data\062718\0627F024.D\	MW-3 DMS	KQ1808476-02	6/27/2018	19:26:00	
J:\GC28\Data\062718\0627F025.D\	Lab Control Sample	KQ1808476-03	6/27/2018	19:43:00	
J:\GC28\Data\062718\0627F026.D\	Method Blank	KQ1808476-04	6/27/2018	20:00:00	
J:\GC28\Data\062718\0627F027.D\	Continuing Calibration Verification	KQ1808738-03	6/27/2018	20:17:00	
J:\GC28\Data\062718\0627F028.D\	Continuing Calibration Blank	KQ1808738-06	6/27/2018	20:34:00	

Client: JH Baxter & Company **Service Request:**K1805809
Project: J.H. Baxter-Arlington

Analysis Run Log
Pentachlorophenol

Analysis Method: 8151A Modified **Analysis Lot:**596781
Instrument ID:K-GC-28

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\GC28\Data\062918\0629F003.D\	Continuing Calibration Verification	KQ1808757-01	6/29/2018	09:03:00	
J:\GC28\Data\062918\0629F004.D\	Continuing Calibration Blank	KQ1808757-05	6/29/2018	09:20:00	
J:\GC28\Data\062918\0629F005.D\	HCMW-7	K1805809-001	6/29/2018	09:38:00	
J:\GC28\Data\062918\0629F006.D\	MW-15	K1805809-002	6/29/2018	09:55:00	
J:\GC28\Data\062918\0629F007.D\	MW-17	K1805809-003	6/29/2018	10:13:00	
J:\GC28\Data\062918\0629F008.D\	MW-18	K1805809-004	6/29/2018	10:30:00	
J:\GC28\Data\062918\0629F009.D\	MW-2	K1805809-005	6/29/2018	10:48:00	
J:\GC28\Data\062918\0629F010.D\	MW-22	K1805809-006	6/29/2018	11:05:00	
J:\GC28\Data\062918\0629F011.D\	MW-23	K1805809-007	6/29/2018	11:23:00	
J:\GC28\Data\062918\0629F012.D\	MW-24	K1805809-008	6/29/2018	11:40:00	
J:\GC28\Data\062918\0629F013.D\	MW-25	K1805809-009	6/29/2018	11:57:00	
J:\GC28\Data\062918\0629F014.D\	MW-26	K1805809-010	6/29/2018	12:14:00	
J:\GC28\Data\062918\0629F015.D\	Continuing Calibration Verification	KQ1808757-02	6/29/2018	12:32:00	
J:\GC28\Data\062918\0629F016.D\	Continuing Calibration Blank	KQ1808757-06	6/29/2018	12:49:00	
J:\GC28\Data\062918\0629F017.D\	MW-27	K1805809-011	6/29/2018	13:06:00	
J:\GC28\Data\062918\0629F018.D\	MW-28	K1805809-012	6/29/2018	13:23:00	
J:\GC28\Data\062918\0629F019.D\	MW-29	K1805809-013	6/29/2018	13:41:00	
J:\GC28\Data\062918\0629F020.D\	MW-30	K1805809-014	6/29/2018	13:58:00	
J:\GC28\Data\062918\0629F021.D\	MW-31	K1805809-015	6/29/2018	14:15:00	
J:\GC28\Data\062918\0629F022.D\	MW-32	K1805809-016	6/29/2018	14:33:00	
J:\GC28\Data\062918\0629F023.D\	MW-33	K1805809-017	6/29/2018	14:51:00	
J:\GC28\Data\062918\0629F024.D\	MW-34	K1805809-018	6/29/2018	15:08:00	
J:\GC28\Data\062918\0629F025.D\	MW-35	K1805809-019	6/29/2018	15:26:00	
J:\GC28\Data\062918\0629F026.D\	MW-36	K1805809-020	6/29/2018	15:43:00	
J:\GC28\Data\062918\0629F027.D\	Continuing Calibration Verification	KQ1808757-03	6/29/2018	16:01:00	
J:\GC28\Data\062918\0629F028.D\	Continuing Calibration Blank	KQ1808757-07	6/29/2018	16:18:00	
J:\GC28\Data\062918\0629F029.D\	MW-36 MS	KQ1808475-01	6/29/2018	16:36:00	
J:\GC28\Data\062918\0629F030.D\	MW-36 DMS	KQ1808475-02	6/29/2018	16:53:00	
J:\GC28\Data\062918\0629F031.D\	Lab Control Sample	KQ1808475-03	6/29/2018	17:11:00	
J:\GC28\Data\062918\0629F032.D\	Method Blank	KQ1808475-04	6/29/2018	17:28:00	
J:\GC28\Data\062918\0629F033.D\	Continuing Calibration Verification	KQ1808757-04	6/29/2018	17:46:00	
J:\GC28\Data\062918\0629F034.D\	Continuing Calibration Blank	KQ1808757-08	6/29/2018	18:03:00	

Prep Summary Report

Client: JH Baxter & Company **Service Request:**K1805809
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Pentachlorophenol

Prep Method: Method **Extraction Lot:** 316493
Analytical Method: 8151A Modified **Extraction Date:** 06/22/18 12:37

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
HCMW-7	K1805809-001	6/16/18	6/19/18	5 mL	1 mL	
MW-15	K1805809-002	6/17/18	6/19/18	5 mL	1 mL	
MW-17	K1805809-003	6/17/18	6/19/18	5 mL	1 mL	
MW-18	K1805809-004	6/16/18	6/19/18	5 mL	1 mL	
MW-2	K1805809-005	6/16/18	6/19/18	5 mL	1 mL	
MW-22	K1805809-006	6/16/18	6/19/18	5 mL	1 mL	
MW-23	K1805809-007	6/17/18	6/19/18	5 mL	1 mL	
MW-24	K1805809-008	6/17/18	6/19/18	5 mL	1 mL	
MW-25	K1805809-009	6/17/18	6/19/18	5 mL	1 mL	
MW-26	K1805809-010	6/17/18	6/19/18	5 mL	1 mL	
MW-27	K1805809-011	6/16/18	6/19/18	5 mL	1 mL	
MW-28	K1805809-012	6/16/18	6/19/18	5 mL	1 mL	
MW-29	K1805809-013	6/16/18	6/19/18	5 mL	1 mL	
MW-30	K1805809-014	6/16/18	6/19/18	5 mL	1 mL	
MW-31	K1805809-015	6/16/18	6/19/18	5 mL	1 mL	
MW-32	K1805809-016	6/16/18	6/19/18	5 mL	1 mL	
MW-33	K1805809-017	6/16/18	6/19/18	5 mL	1 mL	
MW-34	K1805809-018	6/16/18	6/19/18	5 mL	1 mL	
MW-35	K1805809-019	6/16/18	6/19/18	5 mL	1 mL	
MW-36	K1805809-020	6/16/18	6/19/18	5 mL	1 mL	
Matrix Spike	KQ1808475-01MS	6/16/18	6/19/18	5 mL	1 mL	
Duplicate Matrix Spike	KQ1808475-02DMS	6/16/18	6/19/18	5 mL	1 mL	
Lab Control Sample	KQ1808475-03LCS	NA	NA	5 mL	1 mL	
Method Blank	KQ1808475-04MB	NA	NA	5 mL	1 mL	

Prep Summary Report

Client: JH Baxter & Company **Service Request:** K1805809
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Pentachlorophenol

Prep Method: Method **Extraction Lot:** 316494
Analytical Method: 8151A Modified **Extraction Date:** 06/22/18 12:43

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
MW-37	K1805809-021	6/17/18	6/19/18	5 mL	1 mL	
MW-38	K1805809-022	6/16/18	6/19/18	5 mL	1 mL	
MW-39	K1805809-023	6/17/18	6/19/18	5 mL	1 mL	
MW-40	K1805809-024	6/17/18	6/19/18	5 mL	1 mL	
MW-41	K1805809-025	6/17/18	6/19/18	5 mL	1 mL	
MW-42	K1805809-026	6/16/18	6/19/18	5 mL	1 mL	
MW-43	K1805809-027	6/16/18	6/19/18	5 mL	1 mL	
MW-44	K1805809-028	6/16/18	6/19/18	5 mL	1 mL	
Field Blank Rinsate	K1805809-029	6/16/18	6/19/18	5 mL	1 mL	
MW-3	K1805809-030	6/17/18	6/19/18	5 mL	1 mL	
Matrix Spike	KQ1808476-01MS	6/17/18	6/19/18	5 mL	1 mL	
Duplicate Matrix Spike	KQ1808476-02DMS	6/17/18	6/19/18	5 mL	1 mL	
Lab Control Sample	KQ1808476-03LCS	NA	NA	5 mL	1 mL	
Method Blank	KQ1808476-04MB	NA	NA	5 mL	1 mL	

Polynuclear Aromatic Hydrocarbons

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: JH Baxter & Company **Service Request:** K1805809
Project: J.H. Baxter-Arlington

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
MW-15	K1805809-002	06/17/2018	06/19/2018
MW-17	K1805809-003	06/17/2018	06/19/2018
MW-18	K1805809-004	06/16/2018	06/19/2018
MW-2	K1805809-005	06/16/2018	06/19/2018
MW-30	K1805809-014	06/16/2018	06/19/2018
MW-35	K1805809-019	06/16/2018	06/19/2018
MW-36	K1805809-020	06/16/2018	06/19/2018
MW-37	K1805809-021	06/17/2018	06/19/2018
Field Blank Rinsate	K1805809-029	06/16/2018	06/19/2018
MW-3	K1805809-030	06/17/2018	06/19/2018

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/17/2018
Sample Matrix:	Water	**Date Received:**	06/19/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-15	**Units:**	ug/L
Lab Code:	K1805809-002	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.040	0.0028	1	06/21/18	07/10/18	KWG1803064	
2-Methylnaphthalene	ND	U	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	
Acenaphthylene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	
Acenaphthene	ND	U	0.040	0.0024	1	06/21/18	07/10/18	KWG1803064	*
Fluorene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Phenanthrene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Anthracene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Fluoranthene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Pyrene	ND	U	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Benz(a)anthracene	**0.0043**	J	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Chrysene	ND	U	0.040	0.0016	1	06/21/18	07/10/18	KWG1803064	*
Benzo(b)fluoranthene†	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Benzo(k)fluoranthene	ND	U	0.040	0.0019	1	06/21/18	07/10/18	KWG1803064	*
Benzo(a)pyrene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Indeno(1,2,3-cd)pyrene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*
Dibenz(a,h)anthracene	ND	U	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	*
Benzo(g,h,i)perylene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	99	42-131	07/10/18	Acceptable
Fluoranthene-d10	96	42-133	07/10/18	Acceptable
Terphenyl-d14	109	32-129	07/10/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/17/2018
Sample Matrix:	Water	**Date Received:**	06/19/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-17	**Units:**	ug/L
Lab Code:	K1805809-003	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.040	0.0028	1	06/21/18	07/10/18	KWG1803064	
2-Methylnaphthalene	ND	U	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	
Acenaphthylene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	
Acenaphthene	ND	U	0.040	0.0024	1	06/21/18	07/10/18	KWG1803064	*
Fluorene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Phenanthrene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Anthracene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Fluoranthene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Pyrene	ND	U	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Benz(a)anthracene	**0.0041**	J	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Chrysene	ND	U	0.040	0.0016	1	06/21/18	07/10/18	KWG1803064	*
Benzo(b)fluoranthene†	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Benzo(k)fluoranthene	ND	U	0.040	0.0019	1	06/21/18	07/10/18	KWG1803064	*
Benzo(a)pyrene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Indeno(1,2,3-cd)pyrene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*
Dibenz(a,h)anthracene	ND	U	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	*
Benzo(g,h,i)perylene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	100	42-131	07/10/18	Acceptable
Fluoranthene-d10	98	42-133	07/10/18	Acceptable
Terphenyl-d14	113	32-129	07/10/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/2018
Sample Matrix:	Water	**Date Received:**	06/19/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-18	**Units:**	ug/L
Lab Code:	K1805809-004	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0062**	J	0.040	0.0028	1	06/21/18	07/10/18	KWG1803064	
2-Methylnaphthalene	**0.0067**	J	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	
Acenaphthylene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	
Acenaphthene	ND	U	0.040	0.0024	1	06/21/18	07/10/18	KWG1803064	*
Fluorene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Phenanthrene	**0.0057**	J	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Anthracene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Fluoranthene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Pyrene	**0.0028**	J	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Benz(a)anthracene	**0.0041**	J	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Chrysene	ND	U	0.040	0.0016	1	06/21/18	07/10/18	KWG1803064	*
Benzo(b)fluoranthene†	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Benzo(k)fluoranthene	ND	U	0.040	0.0019	1	06/21/18	07/10/18	KWG1803064	*
Benzo(a)pyrene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Indeno(1,2,3-cd)pyrene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*
Dibenz(a,h)anthracene	ND	U	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	*
Benzo(g,h,i)perylene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	96	42-131	07/10/18	Acceptable
Fluoranthene-d10	94	42-133	07/10/18	Acceptable
Terphenyl-d14	104	32-129	07/10/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/2018
Sample Matrix:	Water	**Date Received:**	06/19/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-2	**Units:**	ug/L
Lab Code:	K1805809-005	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.040	0.0028	1	06/21/18	07/10/18	KWG1803064	
2-Methylnaphthalene	ND	U	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	
Acenaphthylene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	
Acenaphthene	**0.0071**	J	0.040	0.0024	1	06/21/18	07/10/18	KWG1803064	*
Fluorene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Phenanthrene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Anthracene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Fluoranthene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Pyrene	ND	U	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Benz(a)anthracene	**0.0040**	J	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Chrysene	ND	U	0.040	0.0016	1	06/21/18	07/10/18	KWG1803064	*
Benzo(b)fluoranthene†	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Benzo(k)fluoranthene	ND	U	0.040	0.0019	1	06/21/18	07/10/18	KWG1803064	*
Benzo(a)pyrene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Indeno(1,2,3-cd)pyrene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*
Dibenz(a,h)anthracene	ND	U	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	*
Benzo(g,h,i)perylene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	99	42-131	07/10/18	Acceptable
Fluoranthene-d10	96	42-133	07/10/18	Acceptable
Terphenyl-d14	109	32-129	07/10/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/2018
Sample Matrix:	Water	**Date Received:**	06/19/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-30	**Units:**	ug/L
Lab Code:	K1805809-014	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0037**	J	0.040	0.0028	1	06/21/18	07/10/18	KWG1803064	
2-Methylnaphthalene	**0.0040**	J	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	
Acenaphthylene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	
Acenaphthene	ND	U	0.040	0.0024	1	06/21/18	07/10/18	KWG1803064	*
Fluorene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Phenanthrene	**0.0028**	J	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Anthracene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Fluoranthene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Pyrene	ND	U	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Benz(a)anthracene	**0.0038**	J	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Chrysene	ND	U	0.040	0.0016	1	06/21/18	07/10/18	KWG1803064	*
Benzo(b)fluoranthene†	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Benzo(k)fluoranthene	ND	U	0.040	0.0019	1	06/21/18	07/10/18	KWG1803064	*
Benzo(a)pyrene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Indeno(1,2,3-cd)pyrene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*
Dibenz(a,h)anthracene	ND	U	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	*
Benzo(g,h,i)perylene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	102	42-131	07/10/18	Acceptable
Fluoranthene-d10	99	42-133	07/10/18	Acceptable
Terphenyl-d14	114	32-129	07/10/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/2018
Sample Matrix:	Water	**Date Received:**	06/19/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-35	**Units:**	ug/L
Lab Code:	K1805809-019	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.040	0.0028	1	06/21/18	07/10/18	KWG1803064	
2-Methylnaphthalene	ND	U	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	
Acenaphthylene	ND	Ui	0.040	0.0032	1	06/21/18	07/10/18	KWG1803064	
Acenaphthene	ND	Ui	0.040	0.033	1	06/21/18	07/10/18	KWG1803064	*
Fluorene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Phenanthrene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Anthracene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Fluoranthene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Pyrene	ND	U	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Benz(a)anthracene	**0.0078**	J	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Chrysene	ND	U	0.040	0.0016	1	06/21/18	07/10/18	KWG1803064	*
Benzo(b)fluoranthene†	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Benzo(k)fluoranthene	ND	U	0.040	0.0019	1	06/21/18	07/10/18	KWG1803064	*
Benzo(a)pyrene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Indeno(1,2,3-cd)pyrene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*
Dibenz(a,h)anthracene	ND	U	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	*
Benzo(g,h,i)perylene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	97	42-131	07/10/18	Acceptable
Fluoranthene-d10	95	42-133	07/10/18	Acceptable
Terphenyl-d14	103	32-129	07/10/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/2018
Sample Matrix:	Water	**Date Received:**	06/19/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-36	**Units:**	ug/L
Lab Code:	K1805809-020	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0036**	J	0.040	0.0028	1	06/21/18	07/10/18	KWG1803064	
2-Methylnaphthalene	**0.0027**	J	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	
Acenaphthylene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	
Acenaphthene	ND	U	0.040	0.0024	1	06/21/18	07/10/18	KWG1803064	*
Fluorene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Phenanthrene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Anthracene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Fluoranthene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Pyrene	ND	U	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Benz(a)anthracene	**0.0038**	J	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Chrysene	ND	U	0.040	0.0016	1	06/21/18	07/10/18	KWG1803064	*
Benzo(b)fluoranthene†	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Benzo(k)fluoranthene	ND	U	0.040	0.0019	1	06/21/18	07/10/18	KWG1803064	*
Benzo(a)pyrene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Indeno(1,2,3-cd)pyrene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*
Dibenz(a,h)anthracene	ND	U	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	*
Benzo(g,h,i)perylene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	96	42-131	07/10/18	Acceptable
Fluoranthene-d10	93	42-133	07/10/18	Acceptable
Terphenyl-d14	106	32-129	07/10/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/17/2018
Sample Matrix:	Water	**Date Received:**	06/19/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-37	**Units:**	ug/L
Lab Code:	K1805809-021	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.050	0.0035	1	06/21/18	07/10/18	KWG1803064	
2-Methylnaphthalene	ND	U	0.050	0.0033	1	06/21/18	07/10/18	KWG1803064	
Acenaphthylene	ND	U	0.050	0.0028	1	06/21/18	07/10/18	KWG1803064	
Acenaphthene	ND	U	0.050	0.0030	1	06/21/18	07/10/18	KWG1803064	*
Fluorene	ND	U	0.050	0.0028	1	06/21/18	07/10/18	KWG1803064	*
Phenanthrene	ND	U	0.050	0.0028	1	06/21/18	07/10/18	KWG1803064	*
Anthracene	ND	U	0.050	0.0021	1	06/21/18	07/10/18	KWG1803064	*
Fluoranthene	ND	U	0.050	0.0021	1	06/21/18	07/10/18	KWG1803064	*
Pyrene	ND	U	0.050	0.0025	1	06/21/18	07/10/18	KWG1803064	*
Benz(a)anthracene	**0.0051**	J	0.050	0.0025	1	06/21/18	07/10/18	KWG1803064	*
Chrysene	ND	U	0.050	0.0019	1	06/21/18	07/10/18	KWG1803064	*
Benzo(b)fluoranthene†	ND	U	0.050	0.0021	1	06/21/18	07/10/18	KWG1803064	*
Benzo(k)fluoranthene	ND	U	0.050	0.0024	1	06/21/18	07/10/18	KWG1803064	*
Benzo(a)pyrene	ND	U	0.050	0.0028	1	06/21/18	07/10/18	KWG1803064	*
Indeno(1,2,3-cd)pyrene	ND	U	0.050	0.0023	1	06/21/18	07/10/18	KWG1803064	*
Dibenz(a,h)anthracene	ND	U	0.050	0.0033	1	06/21/18	07/10/18	KWG1803064	*
Benzo(g,h,i)perylene	ND	U	0.050	0.0022	1	06/21/18	07/10/18	KWG1803064	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	72	42-131	07/10/18	Acceptable
Fluoranthene-d10	70	42-133	07/10/18	Acceptable
Terphenyl-d14	79	32-129	07/10/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/16/2018
Sample Matrix:	Water	**Date Received:**	06/19/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	Field Blank Rinsate	**Units:**	ug/L
Lab Code:	K1805809-029	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.16**		0.040	0.0028	1	06/21/18	07/10/18	KWG1803064	
2-Methylnaphthalene	**0.034**	J	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	
Acenaphthylene	**0.0092**	J	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	
Acenaphthene	**0.021**	J	0.040	0.0024	1	06/21/18	07/10/18	KWG1803064	*
Fluorene	**0.078**		0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Phenanthrene	**0.088**		0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Anthracene	**0.0051**	J	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Fluoranthene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Pyrene	ND	U	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Benz(a)anthracene	**0.0036**	J	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Chrysene	ND	U	0.040	0.0016	1	06/21/18	07/10/18	KWG1803064	*
Benzo(b)fluoranthene†	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Benzo(k)fluoranthene	ND	U	0.040	0.0019	1	06/21/18	07/10/18	KWG1803064	*
Benzo(a)pyrene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Indeno(1,2,3-cd)pyrene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*
Dibenz(a,h)anthracene	ND	U	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	*
Benzo(g,h,i)perylene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	95	42-131	07/10/18	Acceptable
Fluoranthene-d10	94	42-133	07/10/18	Acceptable
Terphenyl-d14	110	32-129	07/10/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	06/17/2018
Sample Matrix:	Water	**Date Received:**	06/19/2018

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-3	**Units:**	ug/L
Lab Code:	K1805809-030	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.040	0.0028	1	06/21/18	07/10/18	KWG1803064	
2-Methylnaphthalene	ND	U	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	
Acenaphthylene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	
Acenaphthene	ND	U	0.040	0.0024	1	06/21/18	07/10/18	KWG1803064	*
Fluorene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Phenanthrene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Anthracene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Fluoranthene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Pyrene	ND	U	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Benz(a)anthracene	**0.0038**	J	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Chrysene	ND	U	0.040	0.0016	1	06/21/18	07/10/18	KWG1803064	*
Benzo(b)fluoranthene†	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Benzo(k)fluoranthene	ND	U	0.040	0.0019	1	06/21/18	07/10/18	KWG1803064	*
Benzo(a)pyrene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Indeno(1,2,3-cd)pyrene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*
Dibenz(a,h)anthracene	ND	U	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	*
Benzo(g,h,i)perylene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	106	42-131	07/10/18	Acceptable
Fluoranthene-d10	102	42-133	07/10/18	Acceptable
Terphenyl-d14	119	32-129	07/10/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

Analytical Results

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1803064-3	**Basis:**	NA
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.040	0.0028	1	06/21/18	07/10/18	KWG1803064	
2-Methylnaphthalene	ND	U	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	
Acenaphthylene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	
Acenaphthene	ND	U	0.040	0.0024	1	06/21/18	07/10/18	KWG1803064	*
Fluorene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Phenanthrene	**0.0023**	J	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Anthracene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Fluoranthene	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Pyrene	ND	U	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Benz(a)anthracene	**0.0040**	J	0.040	0.0020	1	06/21/18	07/10/18	KWG1803064	*
Chrysene	ND	U	0.040	0.0016	1	06/21/18	07/10/18	KWG1803064	*
Benzo(b)fluoranthene†	ND	U	0.040	0.0017	1	06/21/18	07/10/18	KWG1803064	*
Benzo(k)fluoranthene	ND	U	0.040	0.0019	1	06/21/18	07/10/18	KWG1803064	*
Benzo(a)pyrene	ND	U	0.040	0.0022	1	06/21/18	07/10/18	KWG1803064	*
Indeno(1,2,3-cd)pyrene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*
Dibenz(a,h)anthracene	ND	U	0.040	0.0026	1	06/21/18	07/10/18	KWG1803064	*
Benzo(g,h,i)perylene	ND	U	0.040	0.0018	1	06/21/18	07/10/18	KWG1803064	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	100	42-131	07/10/18	Acceptable
Fluoranthene-d10	98	42-133	07/10/18	Acceptable
Terphenyl-d14	114	32-129	07/10/18	Acceptable

† Analyte Comments

Benzo(b)fluoranthene	This analyte cannot be separated from Benzo(j)fluoranthene.

Comments:

QA/QC Report

Client: JH Baxter & Company **Service Request:** K1805809
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3511 **Units:** Percent
Analysis Method: 8270D SIM **Level:** Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
MW-15	K1805809-002	99	96	109
MW-17	K1805809-003	100	98	113
MW-18	K1805809-004	96	94	104
MW-2	K1805809-005	99	96	109
MW-30	K1805809-014	102	99	114
MW-35	K1805809-019	97	95	103
MW-36	K1805809-020	96	93	106
MW-37	K1805809-021	72	70	79
Field Blank Rinsate	K1805809-029	95	94	110
MW-3	K1805809-030	106	102	119
Method Blank	KWG1803064-3	100	98	114
Lab Control Sample	KWG1803064-1	56	54	105
Duplicate Lab Control Sample	KWG1803064-2	102	100	106

Surrogate Recovery Control Limits (%)

Sur1	=	Fluorene-d10	42-131
Sur2	=	Fluoranthene-d10	42-133
Sur3	=	Terphenyl-d14	32-129

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1805809
Date Analyzed: 07/10/2018
Time Analyzed: 07:27

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\071018\0710F002.D
Instrument ID: MS14
Analysis Method: 8270D SIM

Lab Code: KWG1803359-2
Analysis Lot: KWG1803359

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	65,505	4.81	28,647	6.37	60,882	7.60
	Upper Limit ==>	131,010	5.31	57,294	6.87	121,764	8.10
	Lower Limit ==>	32,753	4.31	14,324	5.87	30,441	7.10
	ICAL Result ==>	71,705	4.82	32,604	6.37	74,856	7.61
Associated Analyses							
Method Blank	KWG1803064-3	83,011	4.82	39,132	6.37	77,837	7.60
Lab Control Sample	KWG1803064-1	84,590	4.82	37,956	6.37	77,126	7.60
Duplicate Lab Control Sample	KWG1803064-2	82,407	4.82	36,226	6.37	74,145	7.60
MW-15	K1805809-002	82,929	4.82	39,717	6.37	79,809	7.60
MW-17	K1805809-003	83,379	4.82	39,721	6.37	79,363	7.60
MW-18	K1805809-004	83,244	4.82	39,409	6.37	78,414	7.60
MW-2	K1805809-005	82,761	4.82	39,130	6.37	77,982	7.60
MW-30	K1805809-014	83,513	4.83	39,438	6.37	78,743	7.60
MW-35	K1805809-019	82,737	4.82	39,131	6.37	77,545	7.60
MW-36	K1805809-020	82,756	4.82	39,086	6.37	76,920	7.60
MW-37	K1805809-021	84,623	4.82	40,166	6.37	78,909	7.60
Field Blank Rinsate	K1805809-029	80,732	4.82	38,704	6.37	75,821	7.60
MW-3	K1805809-030	79,328	4.82	37,193	6.37	73,643	7.60

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1805809
Date Analyzed: 07/10/2018
Time Analyzed: 07:27

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\071018\0710F002.D
Instrument ID: MS14
Analysis Method: 8270D SIM

Lab Code: KWG1803359-2
Analysis Lot: KWG1803359

		Chrysene-d12		Perylene-d12	
		Area	**RT**	**Area**	**RT**
	Results ==>	73,588	10.17	78,610	13.34
	Upper Limit ==>	147,176	10.67	157,220	13.84
	Lower Limit ==>	36,794	9.67	39,305	12.84
	ICAL Result ==>	82,173	10.18	80,332	13.36
Associated Analyses					
Method Blank	KWG1803064-3	70,703	10.17	72,237	13.34
Lab Control Sample	KWG1803064-1	74,289	10.17	72,717	13.35
Duplicate Lab Control Sample	KWG1803064-2	73,250	10.17	74,124	13.35
MW-15	K1805809-002	75,746	10.17	80,399	13.34
MW-17	K1805809-003	71,744	10.17	74,952	13.34
MW-18	K1805809-004	73,933	10.17	76,258	13.34
MW-2	K1805809-005	72,069	10.17	75,149	13.34
MW-30	K1805809-014	71,817	10.17	73,341	13.34
MW-35	K1805809-019	71,811	10.17	76,699	13.35
MW-36	K1805809-020	72,762	10.17	76,436	13.35
MW-37	K1805809-021	73,038	10.17	78,685	13.35
Field Blank Rinsate	K1805809-029	68,789	10.17	70,021	13.34
MW-3	K1805809-030	66,143	10.17	66,046	13.35

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Service Request: K1805809
Date Extracted: 06/21/2018
Date Analyzed: 07/10/2018

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3511
Analysis Method: 8270D SIM

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG1803064

	Lab Control Sample KWG1803064-1 Lab Control Spike				Duplicate Lab Control Sample KWG1803064-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Spike Amount**	**%Rec**		**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	1.68	2.78	60		2.94	2.78	106	52-115	55 *	30
2-Methylnaphthalene	1.53	2.78	55		2.84	2.78	102	48-120	60 *	30
Acenaphthylene	1.69	2.78	61		3.23	2.78	116	58-124	63 *	30
Acenaphthene	1.62	2.78	58	*	3.19	2.78	115	63-121	65 *	30
Fluorene	1.58	2.78	57	*	3.16	2.78	114	68-121	67 *	30
Phenanthrene	1.58	2.78	57	*	3.22	2.78	116	64-126	69 *	30
Anthracene	1.61	2.78	58	*	3.30	2.78	119	68-127	69 *	30
Fluoranthene	1.47	2.78	53	*	3.02	2.78	109	70-127	69 *	30
Pyrene	1.71	2.78	62	*	3.45	2.78	124	72-127	67 *	30
Benz(a)anthracene	1.51	2.78	54	*	3.22	2.78	116	74-124	72 *	30
Chrysene	1.57	2.78	57	*	3.27	2.78	118	74-132	70 *	30
Benzo(b)fluoranthene	1.57	2.78	56	*	3.39	2.78	122	73-136	74 *	30
Benzo(k)fluoranthene	1.61	2.78	58	*	3.35	2.78	121	74-134	70 *	30
Benzo(a)pyrene	1.53	2.78	55	*	3.32	2.78	120	75-131	74 *	30
Indeno(1,2,3-cd)pyrene	1.47	2.78	53	*	3.24	2.78	117	63-136	75 *	30
Dibenz(a,h)anthracene	1.36	2.78	49	*	2.95	2.78	106	59-135	74 *	30
Benzo(g,h,i)perylene	1.55	2.78	56	*	3.27	2.78	118	63-127	72 *	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington a	**Date Extracted:**	06/21/2018
Sample Matrix:	Water	**Date Analyzed:**	07/10/2018
		Time Analyzed:	07:52

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Instrument ID:**	MS14
Lab Code:	KWG1803064-3	**File ID:**	J:\MS14\DATA\071018\0710F003.D
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM	**Extraction Lot:**	KWG1803064

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1803064-1	J:\MS14\DATA\071018\0710F004.D	07/10/18	08:18
Duplicate Lab Control Sample	KWG1803064-2	J:\MS14\DATA\071018\0710F005.D	07/10/18	08:44
MW-15	K1805809-002	J:\MS14\DATA\071018\0710F008.D	07/10/18	10:02
MW-17	K1805809-003	J:\MS14\DATA\071018\0710F009.D	07/10/18	10:28
MW-18	K1805809-004	J:\MS14\DATA\071018\0710F010.D	07/10/18	10:54
MW-2	K1805809-005	J:\MS14\DATA\071018\0710F011.D	07/10/18	11:20
MW-30	K1805809-014	J:\MS14\DATA\071018\0710F012.D	07/10/18	11:46
MW-35	K1805809-019	J:\MS14\DATA\071018\0710F013.D	07/10/18	12:13
MW-36	K1805809-020	J:\MS14\DATA\071018\0710F014.D	07/10/18	12:39
MW-37	K1805809-021	J:\MS14\DATA\071018\0710F015.D	07/10/18	13:05
Field Blank Rinsate	K1805809-029	J:\MS14\DATA\071018\0710F016.D	07/10/18	13:31
MW-3	K1805809-030	J:\MS14\DATA\071018\0710F017.D	07/10/18	13:57

QA/QC Report

Client:	JH Baxter & Company	**Service Request:**	K1805809
Project:	J.H. Baxter-Arlington	**Date Extracted:**	06/21/2018
Sample Matrix:	Water	**Date Analyzed:**	07/10/2018
		Time Analyzed:	08:18

Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Instrument ID:**	MS14
Lab Code:	KWG1803064-1	**File ID:**	J:\MS14\DATA\071018\0710F004.D
Extraction Method:	EPA 3511	**Level:**	Low
Analysis Method:	8270D SIM	**Extraction Lot:**	KWG1803064

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG1803064-3	J:\MS14\DATA\071018\0710F003.D	07/10/18	07:52
MW-15	K1805809-002	J:\MS14\DATA\071018\0710F008.D	07/10/18	10:02
MW-17	K1805809-003	J:\MS14\DATA\071018\0710F009.D	07/10/18	10:28
MW-18	K1805809-004	J:\MS14\DATA\071018\0710F010.D	07/10/18	10:54
MW-2	K1805809-005	J:\MS14\DATA\071018\0710F011.D	07/10/18	11:20
MW-30	K1805809-014	J:\MS14\DATA\071018\0710F012.D	07/10/18	11:46
MW-35	K1805809-019	J:\MS14\DATA\071018\0710F013.D	07/10/18	12:13
MW-36	K1805809-020	J:\MS14\DATA\071018\0710F014.D	07/10/18	12:39
MW-37	K1805809-021	J:\MS14\DATA\071018\0710F015.D	07/10/18	13:05
Field Blank Rinsate	K1805809-029	J:\MS14\DATA\071018\0710F016.D	07/10/18	13:31
MW-3	K1805809-030	J:\MS14\DATA\071018\0710F017.D	07/10/18	13:57

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1805809
Date Analyzed: 07/10/2018
Time Analyzed: 07:01

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\071018\0710F001.D
Instrument ID: MS14
Column:

Analysis Method: 8270D SIM
Analysis Lot: KWG1803359

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	33.0	69597	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	35.9	75818	PASS
70	69	0	2	0.7	506	PASS
127	198	10	80	42.8	90322	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	52.1	211029	PASS
199	198	5	9	6.4	13402	PASS
275	198	10	60	34.6	73056	PASS
365	442	1	50	2.8	11185	PASS
441	443	0	100	76.1	59861	PASS
442	442	100	100	100.0	405013	PASS
443	442	15	24	19.4	78698	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1803359-2	J:\MS14\DATA\071018\0710F002.D	07/10/2018	07:27	
Method Blank	KWG1803064-3	J:\MS14\DATA\071018\0710F003.D	07/10/2018	07:52	
Lab Control Sample	KWG1803064-1	J:\MS14\DATA\071018\0710F004.D	07/10/2018	08:18	
Duplicate Lab Control Sample	KWG1803064-2	J:\MS14\DATA\071018\0710F005.D	07/10/2018	08:44	
MW-15	K1805809-002	J:\MS14\DATA\071018\0710F008.D	07/10/2018	10:02	
MW-17	K1805809-003	J:\MS14\DATA\071018\0710F009.D	07/10/2018	10:28	
MW-18	K1805809-004	J:\MS14\DATA\071018\0710F010.D	07/10/2018	10:54	
MW-2	K1805809-005	J:\MS14\DATA\071018\0710F011.D	07/10/2018	11:20	
MW-30	K1805809-014	J:\MS14\DATA\071018\0710F012.D	07/10/2018	11:46	
MW-35	K1805809-019	J:\MS14\DATA\071018\0710F013.D	07/10/2018	12:13	
MW-36	K1805809-020	J:\MS14\DATA\071018\0710F014.D	07/10/2018	12:39	
MW-37	K1805809-021	J:\MS14\DATA\071018\0710F015.D	07/10/2018	13:05	
Field Blank Rinsate	K1805809-029	J:\MS14\DATA\071018\0710F016.D	07/10/2018	13:31	
MW-3	K1805809-030	J:\MS14\DATA\071018\0710F017.D	07/10/2018	13:57	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1805809
Calibration Date: 07/05/2018

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL15772
Instrument ID: MS14

Column: MS

Level ID	File ID
A	J:\MS14\DATA\070518\0705F003.D
B	J:\MS14\DATA\070518\0705F004.D
C	J:\MS14\DATA\070518\0705F005.D
D	J:\MS14\DATA\070518\0705F006.D
E	J:\MS14\DATA\070518\0705F007.D
F	J:\MS14\DATA\070518\0705F008.D
G	J:\MS14\DATA\070518\0705F009.D
H	J:\MS14\DATA\070518\0705F010.D
I	J:\MS14\DATA\070518\0705F011.D
J	J:\MS14\DATA\070518\0705F012.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	2.0	1.15	B	4.0	1.07	C	8.0	1.15	D	20	1.13	E	100	1.13
	F	200	1.10	G	400	1.09	H	1000	1.06	I	1600	1.06	J	2000	1.02
2-Methylnaphthalene	A	2.0	0.846	B	4.0	0.740	C	8.0	0.742	D	20	0.722	E	100	0.715
	F	200	0.691	G	400	0.666	H	1000	0.632	I	1600	0.632	J	2000	0.620
Acenaphthylene	A	2.0	2.49	B	4.0	2.33	C	8.0	2.31	D	20	2.28	E	100	2.34
	F	200	2.34	G	400	2.34	H	1000	2.34	I	1600	2.36	J	2000	2.27
Acenaphthene	A	2.0	1.39	B	4.0	1.34	C	8.0	1.32	D	20	1.33	E	100	1.36
	F	200	1.36	G	400	1.34	H	1000	1.34	I	1600	1.34	J	2000	1.29
Fluorene	A	2.0	1.82	B	4.0	1.69	C	8.0	1.68	D	20	1.68	E	100	1.73
	F	200	1.71	G	400	1.65	H	1000	1.60	I	1600	1.57	J	2000	1.54
Phenanthrene	A	2.0	1.36	B	4.0	1.28	C	8.0	1.25	D	20	1.21	E	100	1.22
	F	200	1.22	G	400	1.20	H	1000	1.17	I	1600	1.18	J	2000	1.13
Anthracene	A	2.0	1.33	B	4.0	1.20	C	8.0	1.15	D	20	1.14	E	100	1.20
	F	200	1.21	G	400	1.19	H	1000	1.19	I	1600	1.19	J	2000	1.14
Fluoranthene	A	2.0	1.59	B	4.0	1.42	C	8.0	1.40	D	20	1.42	E	100	1.54
	F	200	1.55	G	400	1.47	H	1000	1.47	I	1600	1.56	J	2000	1.47
Pyrene	A	2.0	1.49	B	4.0	1.43	C	8.0	1.35	D	20	1.38	E	100	1.39
	F	200	1.41	G	400	1.40	H	1000	1.41	I	1600	1.42	J	2000	1.37
Benz(a)anthracene	A	2.0	1.60	B	4.0	1.30	C	8.0	1.19	D	20	1.17	E	100	1.16
	F	200	1.18	G	400	1.22	H	1000	1.28	I	1600	1.29	J	2000	1.25
Chrysene	A	2.0	1.39	B	4.0	1.26	C	8.0	1.22	D	20	1.25	E	100	1.22
	F	200	1.23	G	400	1.22	H	1000	1.23	I	1600	1.24	J	2000	1.21
Benzo(b)fluoranthene	A	2.0	1.39	B	4.0	1.15	C	8.0	1.12	D	20	1.16	E	100	1.22
	F	200	1.26	G	400	1.29	H	1000	1.31	I	1600	1.31	J	2000	1.25
Benzo(k)fluoranthene	A	2.0	1.21	B	4.0	1.24	C	8.0	1.21	D	20	1.23	E	100	1.26
	F	200	1.28	G	400	1.29	H	1000	1.28	I	1600	1.29	J	2000	1.22
Benzo(a)pyrene	A	2.0	1.10	B	4.0	0.978	C	8.0	0.994	D	20	0.995	E	100	1.02
	F	200	1.04	G	400	1.06	H	1000	1.10	I	1600	1.13	J	2000	1.07

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: JH Baxter & Company **Service Request:** K1805809
Project: J.H. Baxter-Arlington **Calibration Date:** 07/05/2018

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL15772 **Column:** MS
Instrument ID: MS14

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Indeno(1,2,3-cd)pyrene	A	2.0	1.03	B	4.0	0.896	C	8.0	0.829	D	20	0.820	E	100	0.899
	F	200	0.918	G	400	0.935	H	1000	0.970	I	1600	0.984	J	2000	0.962
Dibenz(a,h)anthracene	A	2.0	1.06	B	4.0	1.05	C	8.0	0.987	D	20	1.01	E	100	0.985
	F	200	0.979	G	400	0.967	H	1000	0.992	I	1600	1.00	J	2000	0.971
Benzo(g,h,i)perylene	A	2.0	1.36	B	4.0	1.25	C	8.0	1.16	D	20	1.15	E	100	1.17
	F	200	1.16	G	400	1.15	H	1000	1.15	I	1600	1.16	J	2000	1.11
Fluorene-d10				B	4.0	1.59	C	8.0	1.41	D	20	1.29	E	100	1.29
	F	200	1.28	G	400	1.26	H	1000	1.24	I	1600	1.22	J	2000	1.19
Fluoranthene-d10	A	2.0	1.29	B	4.0	1.16	C	8.0	1.12	D	20	1.16	E	100	1.25
	F	200	1.26	G	400	1.23	H	1000	1.29	I	1600	1.36	J	2000	1.28
Terphenyl-d14				B	4.0	1.09	C	8.0	0.955	D	20	0.911	E	100	0.886
	F	200	0.877	G	400	0.872	H	1000	0.874	I	1600	0.874	J	2000	0.838

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: JH Baxter & Company **Service Request:** K1805809
Project: J.H. Baxter-Arlington **Calibration Date:** 07/05/2018

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL15772 **Column:** MS
Instrument ID: MS14

		Calibration Evaluation					RRF Evaluation		
Analyte Name	**Compound Type**	**Fit Type**	**Eval.**	**Eval. Result**	**Q**	**Control Criteria**	**Average RRF**	**Q**	**Minimum RRF**
Naphthalene	MS	AverageRF	% RSD	3.9		≤ 20	1.10		0.70
2-Methylnaphthalene	MS	AverageRF	% RSD	9.7		≤ 20	0.701		0.40
Acenaphthylene	MS	AverageRF	% RSD	2.6		≤ 20	2.34		0.90
Acenaphthene	MS	AverageRF	% RSD	2.0		≤ 20	1.34		0.90
Fluorene	MS	AverageRF	% RSD	5.0		≤ 20	1.67		0.90
Phenanthrene	MS	AverageRF	% RSD	5.1		≤ 20	1.22		0.70
Anthracene	MS	AverageRF	% RSD	4.5		≤ 20	1.19		0.70
Fluoranthene	MS	AverageRF	% RSD	4.5		≤ 20	1.49		0.60
Pyrene	MS	AverageRF	% RSD	2.7		≤ 20	1.40		0.60
Benz(a)anthracene	MS	AverageRF	% RSD	10.3		≤ 20	1.27		0.80
Chrysene	MS	AverageRF	% RSD	4.3		≤ 20	1.25		0.70
Benzo(b)fluoranthene	MS	AverageRF	% RSD	6.9		≤ 20	1.25		0.70
Benzo(k)fluoranthene	MS	AverageRF	% RSD	2.8		≤ 20	1.25		0.70
Benzo(a)pyrene	MS	AverageRF	% RSD	4.9		≤ 20	1.05		0.70
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	7.1		≤ 20	0.924		0.50
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	3.0		≤ 20	0.999		0.40
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	6.1		≤ 20	1.18		0.50
Fluorene-d10	SURR	AverageRF	% RSD	9.3		≤ 20	1.31		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	5.9		≤ 20	1.24		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	8.2		≤ 20	0.908		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1805809
Calibration Date: 07/05/2018
Date Analyzed: 07/05/2018

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270D SIM

Calibration ID: CAL15772
Units: ng/ml

File ID: J:\MS14\DATA\070518\0705F013.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	400	390	1.10	1.08	-1	NA	± 30 %	AverageRF
2-Methylnaphthalene	400	380	0.701	0.659	-6	NA	± 30 %	AverageRF
Acenaphthylene	400	400	2.34	2.32	-1	NA	± 30 %	AverageRF
Acenaphthene	400	390	1.34	1.31	-3	NA	± 30 %	AverageRF
Fluorene	400	390	1.67	1.63	-2	NA	± 30 %	AverageRF
Phenanthrene	400	380	1.22	1.16	-5	NA	± 30 %	AverageRF
Anthracene	400	390	1.19	1.17	-2	NA	± 30 %	AverageRF
Fluoranthene	400	420	1.49	1.55	4	NA	± 30 %	AverageRF
Pyrene	400	390	1.40	1.37	-2	NA	± 30 %	AverageRF
Benz(a)anthracene	400	370	1.27	1.16	-9	NA	± 30 %	AverageRF
Chrysene	400	380	1.25	1.18	-5	NA	± 30 %	AverageRF
Benzo(b)fluoranthene	400	410	1.25	1.28	2	NA	± 30 %	AverageRF
Benzo(k)fluoranthene	400	410	1.25	1.30	4	NA	± 30 %	AverageRF
Benzo(a)pyrene	400	400	1.05	1.05	0	NA	± 30 %	AverageRF
Indeno(1,2,3-cd)pyrene	400	360	0.924	0.820	-11	NA	± 30 %	AverageRF
Dibenz(a,h)anthracene	400	340	0.999	0.856	-14	NA	± 30 %	AverageRF
Benzo(g,h,i)perylene	400	340	1.18	1.01	-14	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1805809
Date Analyzed: 07/10/2018

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270D SIM

Calibration Date: 07/05/2018
Calibration ID: CAL15772
Analysis Lot: KWG1803359
Units: ng/ml

File ID: J:\MS14\DATA\071018\0710F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	400	420	0.70	1.10	1.15	5	NA	± 20	AverageRF
2-Methylnaphthalene	400	400	0.40	0.701	0.706	1	NA	± 20	AverageRF
Acenaphthylene	400	430	0.90	2.34	2.53	8	NA	± 20	AverageRF
Acenaphthene	400	430	0.90	1.34	1.45	8	NA	± 20	AverageRF
Fluorene	400	420	0.90	1.67	1.74	4	NA	± 20	AverageRF
Phenanthrene	400	420	0.70	1.22	1.28	5	NA	± 20	AverageRF
Anthracene	400	390	0.70	1.19	1.16	-3	NA	± 20	AverageRF
Fluoranthene	400	460	0.60	1.49	1.71	15	NA	± 20	AverageRF
Pyrene	400	430	0.60	1.40	1.51	7	NA	± 20	AverageRF
Benz(a)anthracene	400	420	0.80	1.27	1.32	4	NA	± 20	AverageRF
Chrysene	400	430	0.70	1.25	1.33	6	NA	± 20	AverageRF
Benzo(b)fluoranthene	400	430	0.70	1.25	1.35	8	NA	± 20	AverageRF
Benzo(k)fluoranthene	400	430	0.70	1.25	1.33	6	NA	± 20	AverageRF
Benzo(a)pyrene	400	420	0.70	1.05	1.11	6	NA	± 20	AverageRF
Indeno(1,2,3-cd)pyrene	400	440	0.50	0.924	1.01	10	NA	± 20	AverageRF
Dibenz(a,h)anthracene	400	400	0.40	0.999	1.01	1	NA	± 20	AverageRF
Benzo(g,h,i)perylene	400	430	0.50	1.18	1.26	7	NA	± 20	AverageRF
Fluorene-d10	400	380	0.01	1.31	1.26	-4	NA	± 20	AverageRF
Fluoranthene-d10	400	440	0.01	1.24	1.37	10	NA	± 20	AverageRF
Terphenyl-d14	400	380	0.01	0.908	0.862	-5	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: JH Baxter & Company **Service Request:** K1805809
Project: J.H. Baxter-Arlington

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270D SIM **Analysis Lot:** KWG1803359
Instrument ID: MS14

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0710F001.D	GC/MS Tuning - Decafluorotriphenylphosph	KWG1803359-1	7/10/2018	07:01		7/10/2018	07:21
0710F002.D	Continuing Calibration Verification	KWG1803359-2	7/10/2018	07:27		7/10/2018	07:46
0710F003.D	Method Blank	KWG1803064-3	7/10/2018	07:52		7/10/2018	08:11
0710F004.D	Lab Control Sample	KWG1803064-1	7/10/2018	08:18		7/10/2018	08:37
0710F005.D	Duplicate Lab Control Sample	KWG1803064-2	7/10/2018	08:44		7/10/2018	09:03
0710F006.D	ZZZZZZ	ZZZZZZ	7/10/2018	09:10		7/10/2018	09:29
0710F007.D	ZZZZZZ	ZZZZZZ	7/10/2018	09:36		7/10/2018	09:55
0710F008.D	MW-15	K1805809-002	7/10/2018	10:02		7/10/2018	10:21
0710F009.D	MW-17	K1805809-003	7/10/2018	10:28		7/10/2018	10:47
0710F010.D	MW-18	K1805809-004	7/10/2018	10:54		7/10/2018	11:13
0710F011.D	MW-2	K1805809-005	7/10/2018	11:20		7/10/2018	11:39
0710F012.D	MW-30	K1805809-014	7/10/2018	11:46		7/10/2018	12:05
0710F013.D	MW-35	K1805809-019	7/10/2018	12:13		7/10/2018	12:32
0710F014.D	MW-36	K1805809-020	7/10/2018	12:39		7/10/2018	12:58
0710F015.D	MW-37	K1805809-021	7/10/2018	13:05		7/10/2018	13:24
0710F016.D	Field Blank Rinsate	K1805809-029	7/10/2018	13:31		7/10/2018	13:50
0710F017.D	MW-3	K1805809-030	7/10/2018	13:57		7/10/2018	14:16
0710F018.D	ZZZZZZ	ZZZZZZ	7/10/2018	14:24		7/10/2018	14:43
0710F019.D	ZZZZZZ	ZZZZZZ	7/10/2018	14:50		7/10/2018	15:09
0710F020.D	ZZZZZZ	ZZZZZZ	7/10/2018	15:16		7/10/2018	15:35
0710F021.D	ZZZZZZ	ZZZZZZ	7/10/2018	15:42		7/10/2018	16:01

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Service Request: K1805809
Date Extracted: 06/21/2018

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3511
Analysis Method: 8270D SIM

Extraction Lot: KWG1803064
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-15	K1805809-002	06/17/18	06/19/18	450ml	4ml	NA	
MW-17	K1805809-003	06/17/18	06/19/18	450ml	4ml	NA	
MW-18	K1805809-004	06/16/18	06/19/18	450ml	4ml	NA	
MW-2	K1805809-005	06/16/18	06/19/18	450ml	4ml	NA	
MW-30	K1805809-014	06/16/18	06/19/18	450ml	4ml	NA	
MW-35	K1805809-019	06/16/18	06/19/18	450ml	4ml	NA	
MW-36	K1805809-020	06/16/18	06/19/18	450ml	4ml	NA	
MW-37	K1805809-021	06/17/18	06/19/18	360ml	4ml	NA	
Field Blank Rinsate	K1805809-029	06/16/18	06/19/18	450ml	4ml	NA	
MW-3	K1805809-030	06/17/18	06/19/18	450ml	4ml	NA	
Method Blank	KWG1803064-3	NA	NA	450ml	4ml	NA	
Lab Control Sample	KWG1803064-1	NA	NA	450ml	4ml	NA	
Duplicate Lab Control Sample	KWG1803064-2	NA	NA	450ml	4ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Pentachlorophenol

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 316494 **Prep WorkFlow:** OrgExtPcpAq7 **Status:** Prepped
Team: Semivoa GC/WVANDERHOFF **Prep Method:** Method **Prep Date/Time:** 6/22/18 12:43 PM
Number of Copies to make: 4

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	K1805807-003	EW Composite	.02	8151A Modified/PCP		Water	5mL	1.00mL	
2	K1805808-001	BXS-1	.02	8151A Modified/PCP		Water	5mL	1.00mL	
3	K1805808-002	BXS-2	.02	8151A Modified/PCP		Water	5mL	1.00mL	
4	K1805809-021	MW-37	.02	8151A Modified/PCP		Water	5mL	1.00mL	
5	K1805809-022	MW-38	.02	8151A Modified/PCP		Water	5mL	1.00mL	
6	K1805809-023	MW-39	.02	8151A Modified/PCP		Water	5mL	1.00mL	
7	K1805809-024	MW-40	.02	8151A Modified/PCP		Water	5mL	1.00mL	
8	K1805809-025	MW-41	.02	8151A Modified/PCP		Water	5mL	1.00mL	
9	K1805809-026	MW-42	.02	8151A Modified/PCP		Water	5mL	1.00mL	
10	K1805809-027	MW-43	.02	8151A Modified/PCP		Water	5mL	1.00mL	
11	K1805809-028	MW-44	.02	8151A Modified/PCP		Water	5mL	1.00mL	
12	K1805809-030	MW-3	.02	8151A Modified/PCP		Water	5mL	1.00mL	
13	K1805809-029	Field Blank Rinsate	.02	8151A Modified/PCP		Water	5mL	1.00mL	
14	K1805868-001	Carbon IN	.02	8151A Modified/PCP		Water	5mL	1.00mL	
15	K1805868-002	Carbon MID	.02	8151A Modified/PCP		Water	5mL	1.00mL	
16	K1805868-003	Penta 003	.02	8151A Modified/PCP		Water	5mL	1.00mL	
17	KQ1808476-01	K1805809-030 MS	.02	8151A Modified/PCP		Liquid	5mL	1.00mL	
18	KQ1808476-02	K1805809-030 DMS	.02	8151A Modified/PCP		Liquid	5mL	1.00mL	
19	KQ1808476-03	LCS		8151A Modified/PCP		Liquid	5mL	1.00mL	
20	KQ1808476-04	MB		8151A Modified/PCP		Liquid	5mL	1.00mL	

Spiking Solutions

Name: 8151M Penta Matrix Spike Inventory ID 189190 Logbook Ref: Penta01-89C Expires On: 09/28/2018

KQ1808476-01	100.00µL	KQ1808476-02	100.00µL	KQ1808476-03	100.00µL

Name: 8151M Penta Surrogate Inventory ID 189925 Logbook Ref: Penta01-90D Expires On: 11/02/2018

K1805807-003	100.00µL	K1805808-001	100.00µL	K1805808-002	100.00µL	K1805809-021	100.00µL	K1805809-022	100.00µL	K1805809-023	100.00µL
K1805809-024	100.00µL	K1805809-025	100.00µL	K1805809-026	100.00µL	K1805809-027	100.00µL	K1805809-028	100.00µL	K1805809-029	100.00µL
K1805809-030	100.00µL	K1805868-001	100.00µL	K1805868-002	100.00µL	K1805868-003	100.00µL	KQ1808476-01	100.00µL	KQ1808476-02	100.00µL
KQ1808476-03	100.00µL	KQ1808476-04	100.00µL								

Preparation Information Benchsheet

Prep Run#: 316494
Team: Semivoa GC/WVANDERHOFF

Prep WorkFlow: OrgExtPcpAq7
Prep Method: Method

Status: Prepped
Prep Date/Time: 6/22/18 12:43 PM

Preparation Steps

Step:	Extraction	Step:	Final Volume
Started:	6/22/18 12:43	Started:	6/22/18 14:17
Finished:	6/22/18 12:49	Finished:	6/26/18 13:27
By:	WVANDERHOFF	By:	BWILLARD
Comments		Comments	

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By:		Date:	6-26-18	Extracts Examined	
Received By:		Date:	6.26.18	Yes	No

Preparation Information Benchsheet

Prep Run#: 316494 **Prep WorkFlow:** OrgExtPcpAq7 [redacted] **Status:** Final Volume
Team: Semivoa GC/WVANDERHOFF **Prep Method:** Method **Prep Date/Time:** 6/22/18 12:43 PM
Number of Copies to make: 4

#	Lab Code	Client ID	B#	√	Method /Test	Matrix	Amt. Ext. ml.	pH	Int. Vol	Final Vol ml.	Surr Amt µl	Spike Amt µl
1	K1805807-003	EW Composite	.02	✓	8151A Modified / PCP	Water	5	<2	NA	1	100	—
2	K1805808-001	BXS-1	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
3	K1805808-002	BXS-2	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
4	K1805809-021	MW-37	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
5	K1805809-022	MW-38	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
6	K1805809-023	MW-39	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
7	K1805809-024	MW-40	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
8	K1805809-025	MW-41	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
9	K1805809-026	MW-42	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
10	K1805809-027	MW-43	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
11	K1805809-028	MW-44	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
12	K1805809-030	MW-3	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
13	K1805809-029	Field Blank Rinsate	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
14	K1805868-001	Carbon IN	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
15	K1805868-002	Carbon MID	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
16	K1805868-003	Penta 003	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
17	KQ1808476-01	K1805809-030 MS	.02	✓	8151A Modified / PCP	Liquid	5	<2		1		100
18	KQ1808476-02	K1805809-030 DMS	.02	✓	8151A Modified / PCP	Liquid	5	<2		1		
19	KQ1808476-03	LCS	—	—	8151A Modified / PCP	Liquid	5	<2		1		
20	KQ1808476-04	MB	—	—	8151A Modified / PCP	Liquid	5	<2		1		—

Comments: K1805807-2.5 mls of 001 and 002 to make 003. 6-22-18 NS

Surrogate ID: 189,925-Penta01-90D 189,925-Penta01-90D 189,925-Penta01-90D 189,925-Penta01-90D 189
100 µl. Spp. # 28

Spike ID: 189,190-Penta01-89C 189,925-Penta01-90D 189,190-Penta01-89C 189,925-Penta01-90D 189,1
100 µl. Spp. # 28

Witnessed By:

Analyst: NSV

Assisted By:

Preparation Information Benchsheet

Prep Run#: 316494
Team: Semivoa GC/WVANDERHOFF
Number of Copies to make: 4

Prep WorkFlow: OrgExtPcpAq7
Prep Method: Method

Status: Prepped
Prep Date/Time: 6/22/18 ~~12:43~~ 02:17 PM 0800

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	K1805807-003	EW Composite	.02	8151A Modified/PCP		Water	5mL	1.00mL	
2	K1805808-001	BXS-1	.02	8151A Modified/PCP		Water	5mL	1.00mL	
3	K1805808-002	BXS-2	.02	8151A Modified/PCP		Water	5mL	1.00mL	
4	K1805809-021	MW-37	.02	8151A Modified/PCP		Water	5mL	1.00mL	
5	K1805809-022	MW-38	.02	8151A Modified/PCP		Water	5mL	1.00mL	
6	K1805809-023	MW-39	.02	8151A Modified/PCP		Water	5mL	1.00mL	
7	K1805809-024	MW-40	.02	8151A Modified/PCP		Water	5mL	1.00mL	
8	K1805809-025	MW-41	.02	8151A Modified/PCP		Water	5mL	1.00mL	
9	K1805809-026	MW-42	.02	8151A Modified/PCP		Water	5mL	1.00mL	
10	K1805809-027	MW-43	.02	8151A Modified/PCP		Water	5mL	1.00mL	
11	K1805809-028	MW-44	.02	8151A Modified/PCP		Water	5mL	1.00mL	
12	K1805809-030	MW-3	.02	8151A Modified/PCP		Water	5mL	1.00mL	
13	K1805809-029	Field Blank Rinsate	.02	8151A Modified/PCP		Water	5mL	1.00mL	
14	K1805868-001	Carbon IN	.02	8151A Modified/PCP		Water	5mL	1.00mL	
15	K1805868-002	Carbon MID	.02	8151A Modified/PCP		Water	5mL	1.00mL	
16	K1805868-003	Penta 003	.02	8151A Modified/PCP		Water	5mL	1.00mL	
17	KQ1808476-01	K1805809-030 MS	.02	8151A Modified/PCP		Liquid	5mL	1.00mL	
18	KQ1808476-02	K1805809-030 DMS	.02	8151A Modified/PCP		Liquid	5mL	1.00mL	
19	KQ1808476-03	LCS		8151A Modified/PCP		Liquid	5mL	1.00mL	
20	KQ1808476-04	MB		8151A Modified/PCP		Liquid	5mL	1.00mL	

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Spiking Solutions

Name: 8151M Penta Matrix Spike Inventory ID 189190 Logbook Ref: Penta01-89C Expires On: 09/28/2018

KQ1808476-01	100.00µL	KQ1808476-02	100.00µL	KQ1808476-03	100.00µL

Name: 8151M Penta Surrogate Inventory ID 189925 Logbook Ref: Penta01-90D Expires On: 11/02/2018

K1805807-003	100.00µL	K1805808-001	100.00µL	K1805808-002	100.00µL	K1805809-021	100.00µL	K1805809-022	100.00µL	K1805809-023	100.00µL
K1805809-024	100.00µL	K1805809-025	100.00µL	K1805809-026	100.00µL	K1805809-027	100.00µL	K1805809-028	100.00µL	K1805809-029	100.00µL
K1805809-030	100.00µL	K1805868-001	100.00µL	K1805868-002	100.00µL	K1805868-003	100.00µL	KQ1808476-01	100.00µL	KQ1808476-02	100.00µL
KQ1808476-03	100.00µL	KQ1808476-04	100.00µL								

Preparation Information Benchsheet

Prep Run#: 316494
Team: Semivoa GC/WVANDERHOFF

Prep WorkFlow: OrgExtPcpAq7
Prep Method: Method

Status: Prepped
Prep Date/Time: 6/22/18 12:43 PM

Preparation Steps

Step:	Extraction	Step:	Final Volume
Started:	6/22/18 ~~12:43~~ 02:17PM	Started:	6/22/18 14:17
Finished:	6/22/18 12:49	Finished:	6/26/18 13:27
By:	WVANDERHOFF	By:	~~BWILLARD~~ W. VANDERHOFF
Comments		Comments	06/26/18

Comments: _____

Reviewed By: _____ Date: 6-27-18

Chain of Custody

Relinquished By: _____ Date: 6/26/18

Received By: _____ Date: _____

Extracts Examined
Yes No

Chlorinated Phenols "PCPs" in Water

Service Request # K1805807,5808,5809,5868 [redacted] ork Group # KQ1809476

1:1 Sulfuric Acid Lot # 6042603 Ethyl Ether Lot # DT448

Extraction Start (time/date/initial): 14:17 6-22-18 WS

Extraction Stop (time/date/initial): 15:04 6-22-18 WS

Storage Location (overnight): 25R Acidified Sulfate Lot # DZ03 23E

N-Evap (time/date/initial): 10:49 6-26-18 WS N-Evap Thermometer ID: DWB-012

Temp as measured: 22 °C Correction factor: 0.0 °C Adjusted temp: 22 °C

Derivatization Start (time/date/initial): 11:30 6-26-18 DW

Derivatization Stop (time/date/initial): 12:15 6-26-18 WS

Diazomethane Lot # DZ03-39E Methanol Lot # DN615

Solvent Exchange to Iso-Octane (time/date/initial): 12:15 6-26-18 WS

Iso-Octane Lot # DR852 N-Evap Thermometer ID: DWB-012

Temp as measured: 22 °C Correction factor: 0.0 °C Adjusted temp: 22 °C

Pipette (1 mL) Lot # 13617645

Vial: red Vial Storage: pento

Additional Comments:

Bench Sheet Review Check List
☑ Hold times met (if no, reason:)
☑ Prep date, time, method, department, product code correct in stealth
☑ Spike information and Q.C. correct (insufficient volume or mass recorded if no Q.C.)
☑ Weights/Volumes and units correct on raw and final bench sheets
☑ Sample IDs have been checked - bottle numbers appended if required
☑ Names present for: started by, completed by, relinquished by, and witnessed by. Training circled.
☑ Extract storage recorded
☑ Additional prep sheet completely filled out (NA or line out blanks)
☑ All clean-ups have been noted on additional prep sheet
☑ Signed service request with Form V, if applicable, has been attached

Preparation Information Benchsheet

Prep Run#: 316493 **Prep WorkFlow:** OrgExtPcpAq7 **Status:** Prepped
Team: Semivoa GC/WVANDERHOFF **Prep Method:** Method **Prep Date/Time:** 6/22/18 ~~12:37~~ 02:19 06/24 PM
Number of Copies to make: 1

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	K1805809-001	HCMW-7	.02	8151A Modified/PCP		Water	5mL	1.00mL	
2	K1805809-002	MW-15	.02	8151A Modified/PCP		Water	5mL	1.00mL	
3	K1805809-003	MW-17	.02	8151A Modified/PCP		Water	5mL	1.00mL	
4	K1805809-004	MW-18	.02	8151A Modified/PCP		Water	5mL	1.00mL	
5	K1805809-005	MW-2	.02	8151A Modified/PCP		Water	5mL	1.00mL	
6	K1805809-006	MW-22	.02	8151A Modified/PCP		Water	5mL	1.00mL	
7	K1805809-007	MW-23	.02	8151A Modified/PCP		Water	5mL	1.00mL	
8	K1805809-008	MW-24	.02	8151A Modified/PCP		Water	5mL	1.00mL	
9	K1805809-009	MW-25	.02	8151A Modified/PCP		Water	5mL	1.00mL	
10	K1805809-010	MW-26	.02	8151A Modified/PCP		Water	5mL	1.00mL	
11	K1805809-011	MW-27	.02	8151A Modified/PCP		Water	5mL	1.00mL	
12	K1805809-012	MW-28	.02	8151A Modified/PCP		Water	5mL	1.00mL	
13	K1805809-013	MW-29	.02	8151A Modified/PCP		Water	5mL	1.00mL	
14	K1805809-014	MW-30	.02	8151A Modified/PCP		Water	5mL	1.00mL	
15	K1805809-015	MW-31	.02	8151A Modified/PCP		Water	5mL	1.00mL	
16	K1805809-016	MW-32	.02	8151A Modified/PCP		Water	5mL	1.00mL	
17	K1805809-017	MW-33	.02	8151A Modified/PCP		Water	5mL	1.00mL	
18	K1805809-018	MW-34	.02	8151A Modified/PCP		Water	5mL	1.00mL	
19	K1805809-019	MW-35	.02	8151A Modified/PCP		Water	5mL	1.00mL	
20	K1805809-020	MW-36	.02	8151A Modified/PCP		Water	5mL	1.00mL	
21	KQ1808475-01	K1805809-020 MS	.02	8151A Modified/PCP		Liquid	5mL	1.00mL	
22	KQ1808475-02	K1805809-020 DMS	.02	8151A Modified/PCP		Liquid	5mL	1.00mL	
23	KQ1808475-03	LCS		8151A Modified/PCP		Liquid	5mL	1.00mL	
24	KQ1808475-04	MB		8151A Modified/PCP		Liquid	5mL	1.00mL	

Spiking Solutions

Name: 8151M Penta Matrix Spike Inventory ID 189190 Logbook Ref: Penta01-89C Expires On: 09/28/2018

KQ1808475-01 100.00µL KQ1808475-02 100.00µL KQ1808475-03 100.00µL

Name: 8151M Penta Surrogate Inventory ID 189925 Logbook Ref: Penta01-90D Expires On: 11/02/2018

K1805809-001	100.00µL	K1805809-002	100.00µL	K1805809-003	100.00µL	K1805809-004	100.00µL	K1805809-005	100.00µL	K1805809-006	100.00µL
K1805809-007	100.00µL	K1805809-008	100.00µL	K1805809-009	100.00µL	K1805809-010	100.00µL	K1805809-011	100.00µL	K1805809-012	100.00µL
K1805809-013	100.00µL	K1805809-014	100.00µL	K1805809-015	100.00µL	K1805809-016	100.00µL	K1805809-017	100.00µL	K1805809-018	100.00µL

Preparation Information Benchsheet

Prep Run#: 316493 **Prep WorkFlow:** OrgExtPcpAq7 **Status:** Prepped
Team: Semivoa GC/WVANDERHOFF **Prep Method:** Method **Prep Date/Time:** 6/22/18 12:37 PM

K1805809-019	100.00µL	K1805809-020	100.00µL	KQ1808475-01	100.00µL	KQ1808475-02	100.00µL	KQ1808475-03	100.00µL	KQ1808475-04	100.00µL

Preparation Steps

Step:	Extraction	Step:	Derivitization	Step:	Final Volume
Started:	6/22/18 ~~12:37~~ 14:19	Started:	6/22/18 14:19	Started:	6/22/18 14:19
Finished:	6/22/18 12:41	Finished:	6/25/18 16:10	Finished:	6/25/18 16:11
By:	WVANDERHOFF	By:	WVANDERHOFF	By:	WVANDERHOFF
Comments		Comments		Comments	

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Comments: _____

Reviewed By: _____ Date: 6-27-18

Chain of Custody

Relinquished By: _____ Date: 6-25-18

Received By: _____ Date: 6-28-18

Extracts Examined (Yes) No

Preparation Information Benchsheet

Prep Run#: 316493 **Prep WorkFlow:** OrgExtPcpAq7 **Status:** Derivitization
Team: Semivoa GC/WVANDERHOFF **Prep Method:** Method **Prep Date/Time:** 6/22/18 12:37 PM
Number of Copies to make: 1

#	Lab Code	Client ID	B#	√	Method /Test	Matrix	Amt. Ext. ml.	pH	Int. Vol	Final Vol ml.	Surr Amt µl	Spike Amt µl
1	**K1805809-001**	HCMW-7	.02	✓	8151A Modified / PCP	Water	5	<2	NA	1	100	—
2	**K1805809-002**	MW-15	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
3	**K1805809-003**	MW-17	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
4	**K1805809-004**	MW-18	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
5	**K1805809-005**	MW-2	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
6	**K1805809-006**	MW-22	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
7	**K1805809-007**	MW-23	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
8	**K1805809-008**	MW-24	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
9	**K1805809-009**	MW-25	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
10	**K1805809-010**	MW-26	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
11	**K1805809-011**	MW-27	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
12	**K1805809-012**	MW-28	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
13	**K1805809-013**	MW-29	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
14	**K1805809-014**	MW-30	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
15	**K1805809-015**	MW-31	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
16	**K1805809-016**	MW-32	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
17	**K1805809-017**	MW-33	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
18	**K1805809-018**	MW-34	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
19	**K1805809-019**	MW-35	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
20	**K1805809-020**	MW-36	.02	✓	8151A Modified / PCP	Water	5	<2		1		—
21	**KQ1808475-01**	K1805809-020 MS	.02	✓	8151A Modified / PCP	Liquid	5	<2		1		100
22	**KQ1808475-02**	K1805809-020 DMS	.02	✓	8151A Modified / PCP	Liquid	5	<2		1		
23	**KQ1808475-03**	LCS	—	—	8151A Modified / PCP	Liquid	5	<2		1		
24	**KQ1808475-04**	MB	—	—	8151A Modified / PCP	Liquid	5	<2		1		—

Comments:

Surrogate ID: 189,925-Penta01-90D 189,925-Penta01-90D 189,925-Penta01-90D 189,925-Penta01-90D 189 Spike ID: 189,190-Penta01-89C 189,925-Penta01-90D 189,190-Penta01-89C 189,925-Penta01-90D 189,1

100 µl. epp.#28 100 µl epp.#28

Witnessed By:

Analyst: WEV Assisted By:

Chlorinated Phenols "PCPs" in Water

Service Request # ~~KQ~~ KQ1805809 (KS 6.22.18) Work Group # KQ1809475

1:1 Sulfuric Acid Lot # 6042603 Ethyl Ether Lot # DT449

Extraction Start (time/date/initial): 14:19 06/22/18 ZRP

Extraction Stop (time/date/initial): 1505 06/22/18 ZRP

Storage Location (overnight): 25R Acidified Sulfate Lot # DZ03-28E

N-Evap (time/date/initial): 12:50 6-25-18 NE N-Evap Thermometer ID: DWB-012

Temp as measured: 22 °C Correction factor: 0.0 °C Adjusted temp: 22 °C

Derivatization Start (time/date/initial): 14:07 6-25-18 NE

Derivatization Stop (time/date/initial): 14:40 6-25-18 NE

Diazomethane Lot # DZ03-39F Methanol Lot # DN615

Solvent Exchange to Iso-Octane (time/date/initial): 14:40 6-25-18 NE

Iso-Octane Lot # DR253 N-Evap Thermometer ID: DWB-012

Temp as measured: 22 °C Correction factor: 0.0 °C Adjusted temp: 22 °C

Pipette (1 mL) Lot # 13617645

Vial: red Vial Storage: pentex

Additional Comments:

✓	Bench Sheet Review Check List
☑	Hold times met (if no, reason:)
☑	Prep date, time, method, department, product code correct in stealth
☑	Spike information and Q.C. correct (insufficient volume or mass recorded if no Q.C.)
☑	Weights/Volumes and units correct on raw and final bench sheets
☑	Sample IDs have been checked - bottle numbers appended if required
☑	Names present for: started by, completed by, relinquished by, and witnessed by. Training circled.
☑	Extract storage recorded
☑	Additional prep sheet completely filled out (NA or line out blanks)
☑	All clean-ups have been noted on additional prep sheet
☑	Signed service request with Form V, if applicable, has been attached

1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F005.D\
Lab ID: K1805809-001
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 09:38:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F005.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 09:38:00	**Vial:**	9
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-001	**Raw Units:**	ug/L

Bottle ID:	K1805809-001.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	22426238	16495143	46.457	45.755	93	92	92	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15	5.55	590185	701914	0.901	1.112	0.18J	0.22J	**0.18** J	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F005.D Vial: 3
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 9:38 am Operator: MC
Sample : K1805809-001 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:08:56 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.011	4.581	22426238	16495143	46.457	45.755
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.155	5.554	590185	701914	0.901	1.112
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

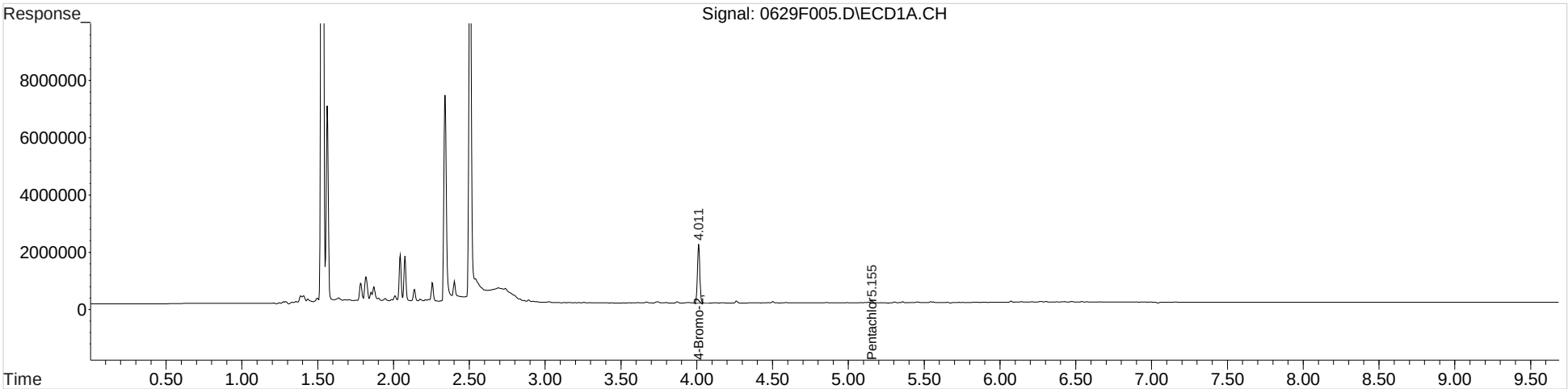
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F005.D Vial: 3
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 9:38 am Operator: MC
Sample : K1805809-001 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:08:56 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F006.D\
Lab ID: K1805809-002
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 09:55:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F006.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 09:55:00	**Vial:**	10
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-002	**Raw Units:**	ug/L

Bottle ID:	K1805809-002.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/17/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	23875085	17380544	49.459	48.210	99	96	96	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15	5.56 +0.01	359060	27048	0.548	0.043	0.11J	0.0086U	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F006.D Vial: 4
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 9:55 am Operator: MC
Sample : K1805809-002 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:14:39 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.015	4.581	23875085	17380544	49.459	48.210
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.151	5.557	359060	27048	0.548m	0.043 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

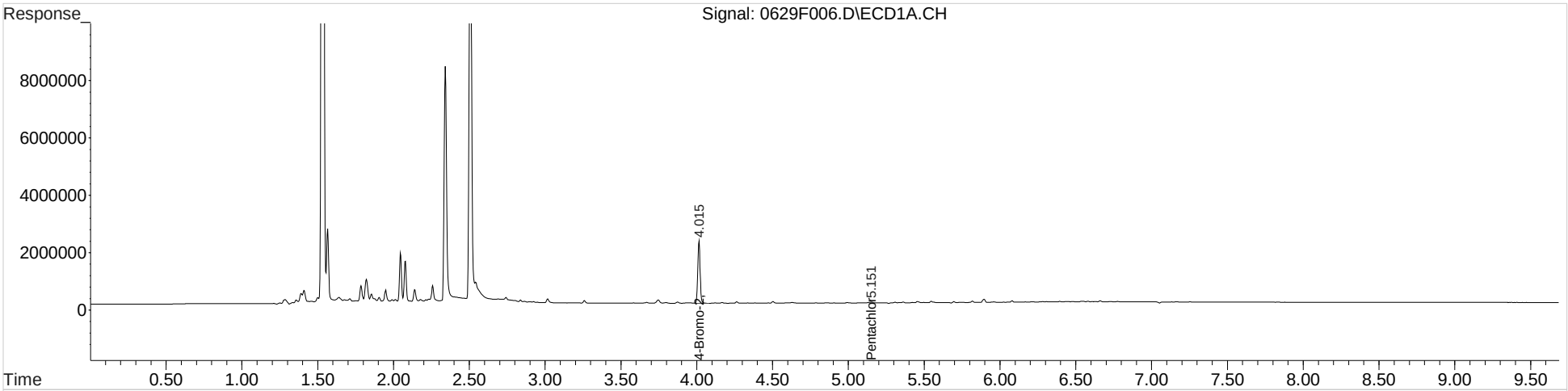
1st mc 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F006.D Vial: 4
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 9:55 am Operator: MC
Sample : K1805809-002 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:14:39 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



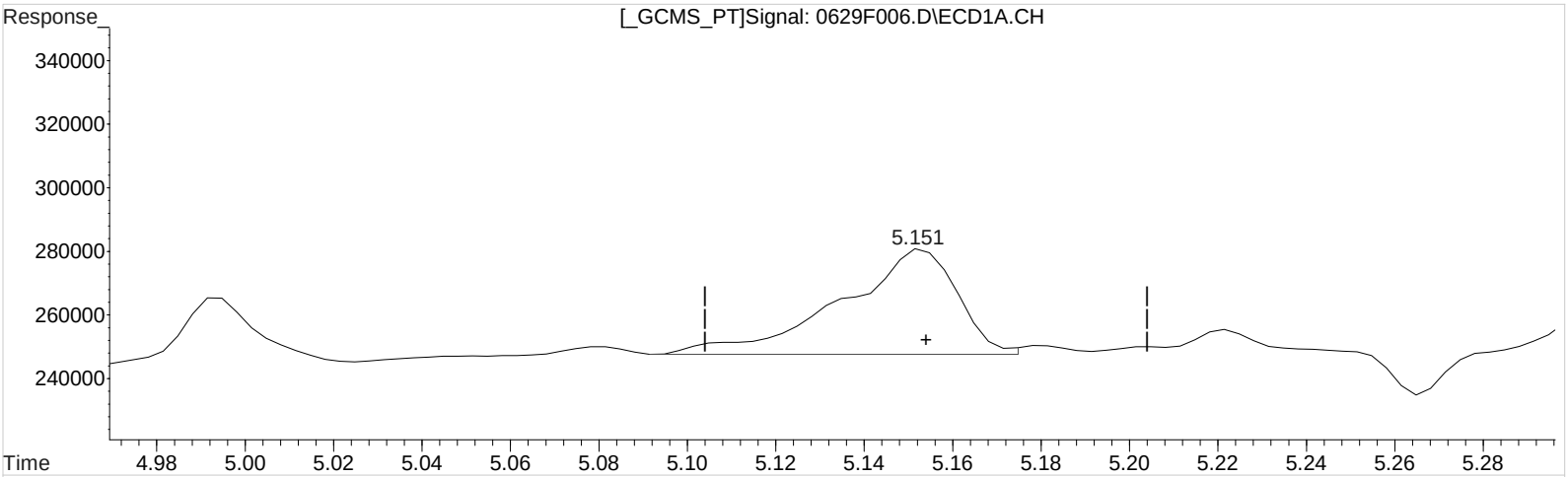
Quantitation Report (Qedit)

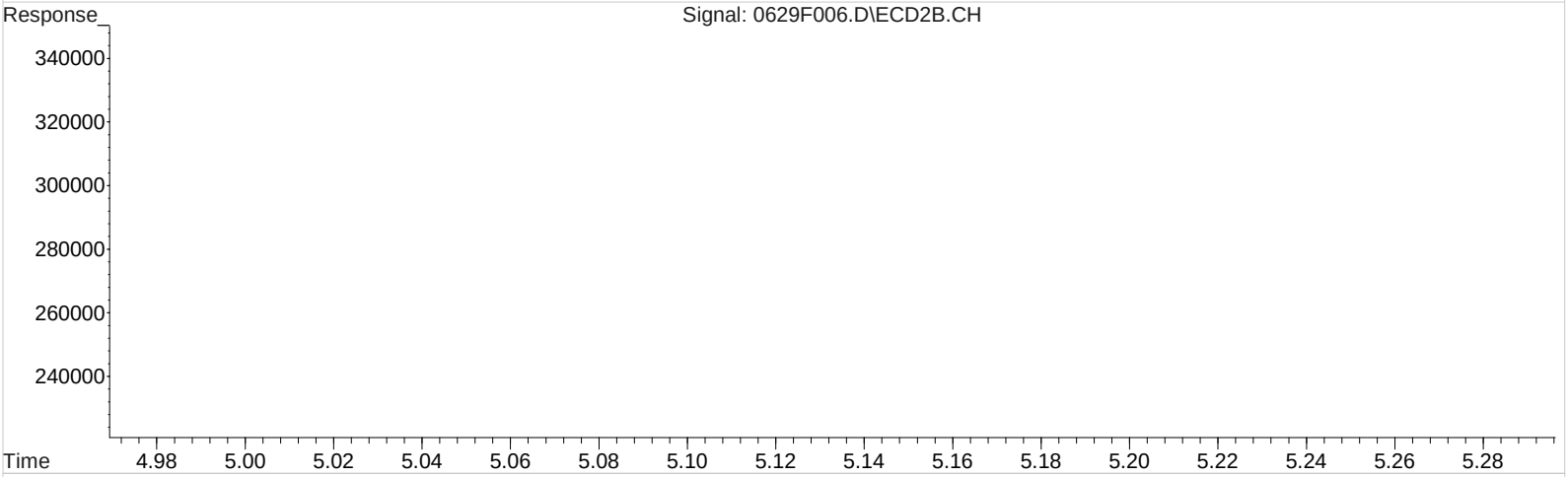
1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F006.D Vial: 4
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 9:55 am Operator: MC
Sample : K1805809-002 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 15:27:10 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.151min 0.929 ug/L

response 608722

Manual Integration:

Before

06/29/18

(9) Pentachlorophenol #2 (M)

5.557min 0.043 ug/L

response 27048

(+) = Expected Retention Time

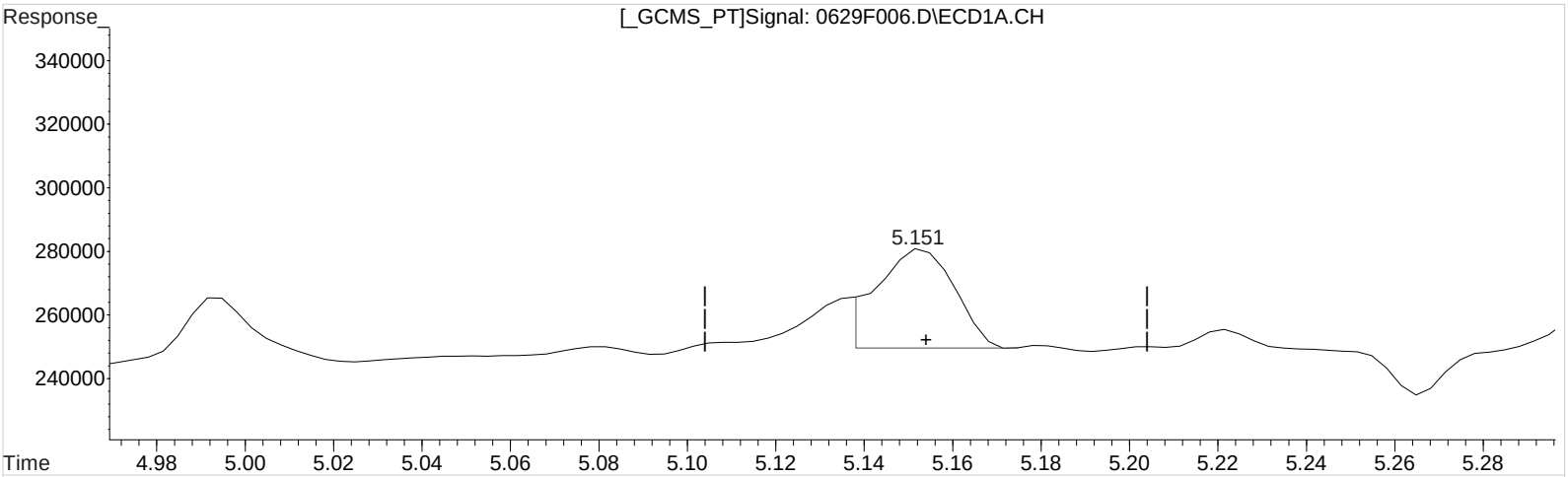
Quantitation Report (Qedit)

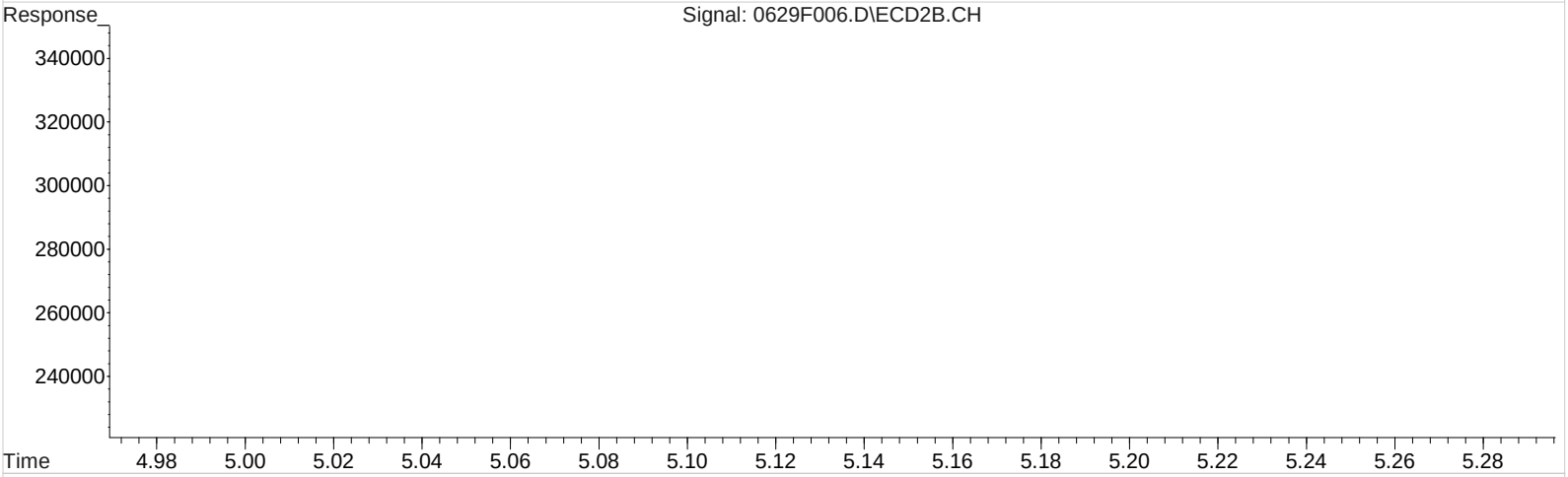
1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F006.D Vial: 4
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 9:55 am Operator: MC
Sample : K1805809-002 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 15:27:10 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.151min 0.548 ug/L m

response 359060

Manual Integration:

After

Baseline/Shoulder

06/29/18

(9) Pentachlorophenol #2 (M)

5.557min 0.043 ug/L

response 27048

(+) = Expected Retention Time

1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F007.D\
Lab ID: K1805809-003
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 10:13:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F007.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 10:13:00	**Vial:**	11
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-003	**Raw Units:**	ug/L

Bottle ID:	K1805809-003.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/17/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	24113454	17446573	49.952	48.394	100	97	97	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.16 +0.01	5.57 +0.02	44302	449252	0.068	0.712	0.014U	0.14J	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F007.D Vial: 5
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 10:13 am Operator: MC
Sample : K1805809-003 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 07:46:33 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.014	4.584	24113454	17446573	49.952	48.394
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.158	5.574	44302	449252	0.068	0.712 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

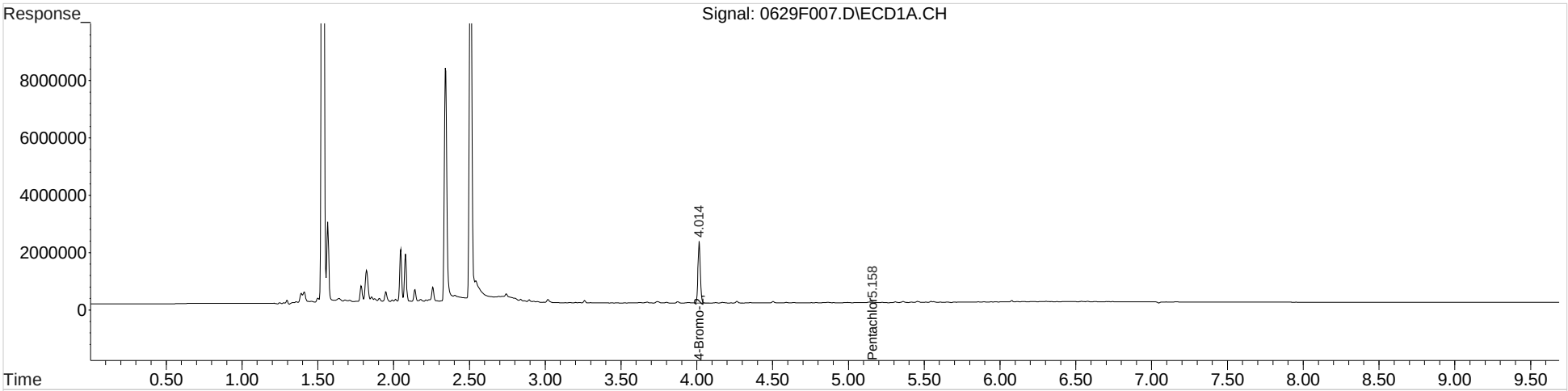
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F007.D Vial: 5
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 10:13 am Operator: MC
Sample : K1805809-003 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 07:46:33 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F008.D\
Lab ID: K1805809-004
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 10:30:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F008.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 10:30:00	**Vial:**	12
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-004	**Raw Units:**	ug/L

Bottle ID:	K1805809-004.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.01	4.58	22822417	16170894	47.278	44.855	95	90	90	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.16 +0.01	5.55	200232	134296	0.306	0.213	0.061U	0.043U	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st mc 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F008.D Vial: 6
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 10:30 am Operator: MC
Sample : K1805809-004 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:18:55 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
4) S	4-Bromo-2...	4.016	4.582	22822417	16170894	47.278	44.855
	Target Compounds						
1)	3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)	3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)	2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)	2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)	3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7) M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8) M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9) M	Pentachlo...	5.156	5.552	200232	134296	0.306	0.213 #
10)	Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

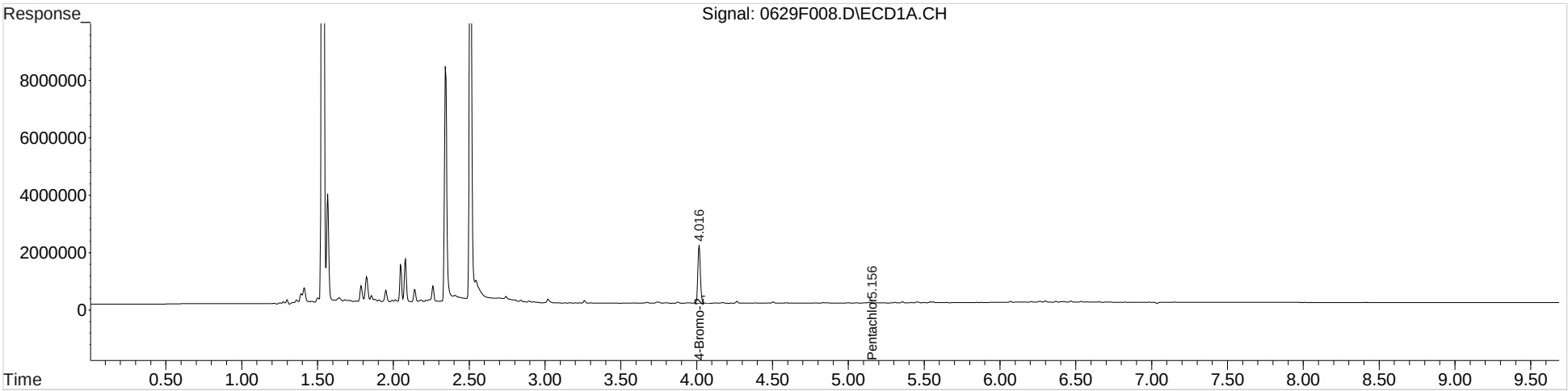
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F008.D Vial: 6
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 10:30 am Operator: MC
Sample : K1805809-004 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:18:55 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F009.D\
Lab ID: K1805809-005
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 10:48:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F009.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 10:48:00	**Vial:**	13
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-005	**Raw Units:**	ug/L

Bottle ID:	K1805809-005.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.01	4.58	22255156	16018078	46.103	44.431	92	89	89	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15	5.57 +0.02	23038	293352	0.035	0.465	0.0070U	0.093J	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F009.D Vial: 7
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 10:48 am Operator: MC
Sample : K1805809-005 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:19:59 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.018	4.584	22255156	16018078	46.103	44.431
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.155	5.571	23038	293352	0.035	0.465 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

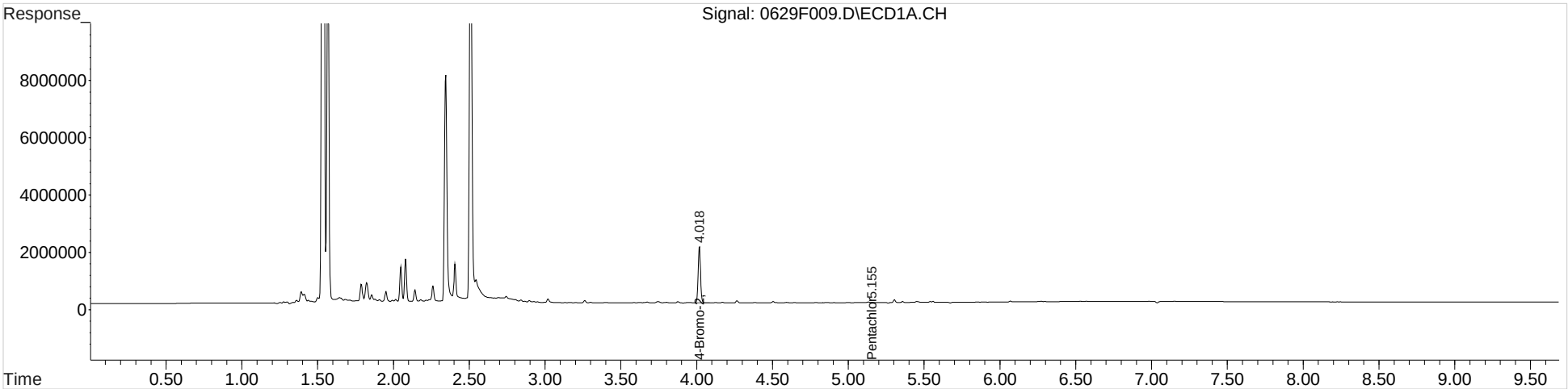
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F009.D Vial: 7
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 10:48 am Operator: MC
Sample : K1805809-005 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:19:59 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F010.D\
Lab ID: K1805809-006
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 11:05:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F010.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 11:05:00	**Vial:**	14
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-006	**Raw Units:**	ug/L

Bottle ID:	K1805809-006.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.01	4.58	23629062	17417930	48.949	48.314	98	97	97	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.16 +0.01	5.55	152694558	133213034	232.998	211.100	47	42	**42**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F010.D Vial: 8
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 11:05 am Operator: MC
Sample : K1805809-006 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 07:48:51 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.016	4.582	23629062	17417930	48.949	48.314
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.156	5.552	152.7E6	133.2E6	232.998m	211.100
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

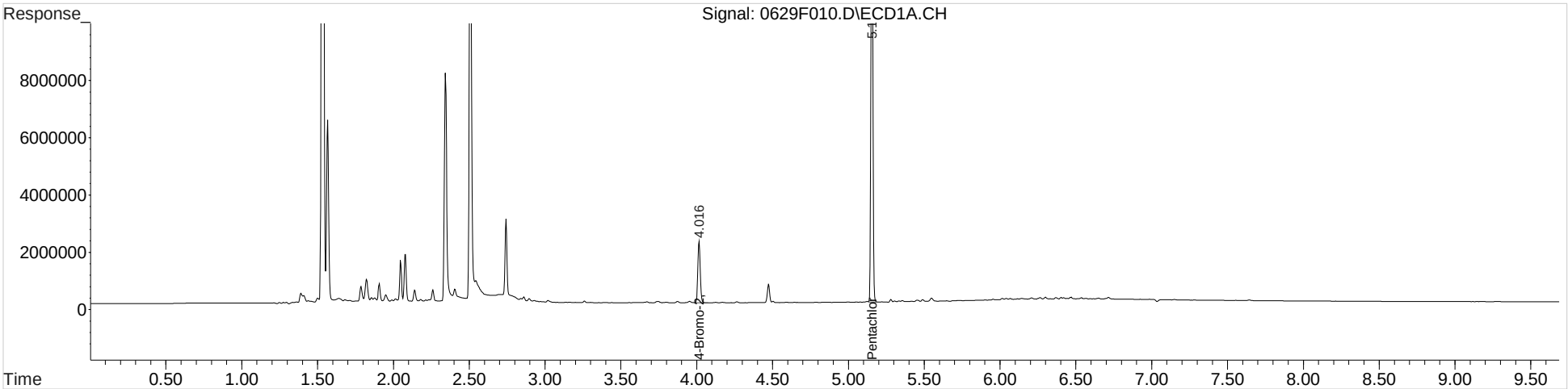
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F010.D Vial: 8
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 11:05 am Operator: MC
Sample : K1805809-006 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 07:48:51 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



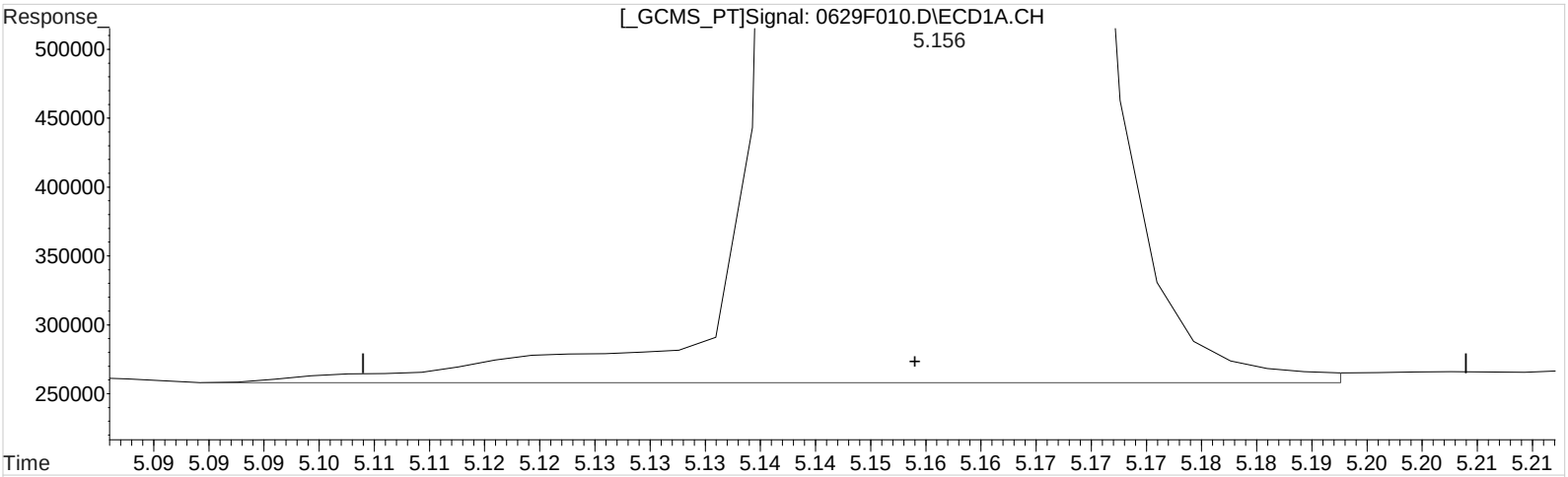
Quantitation Report (Qedit)

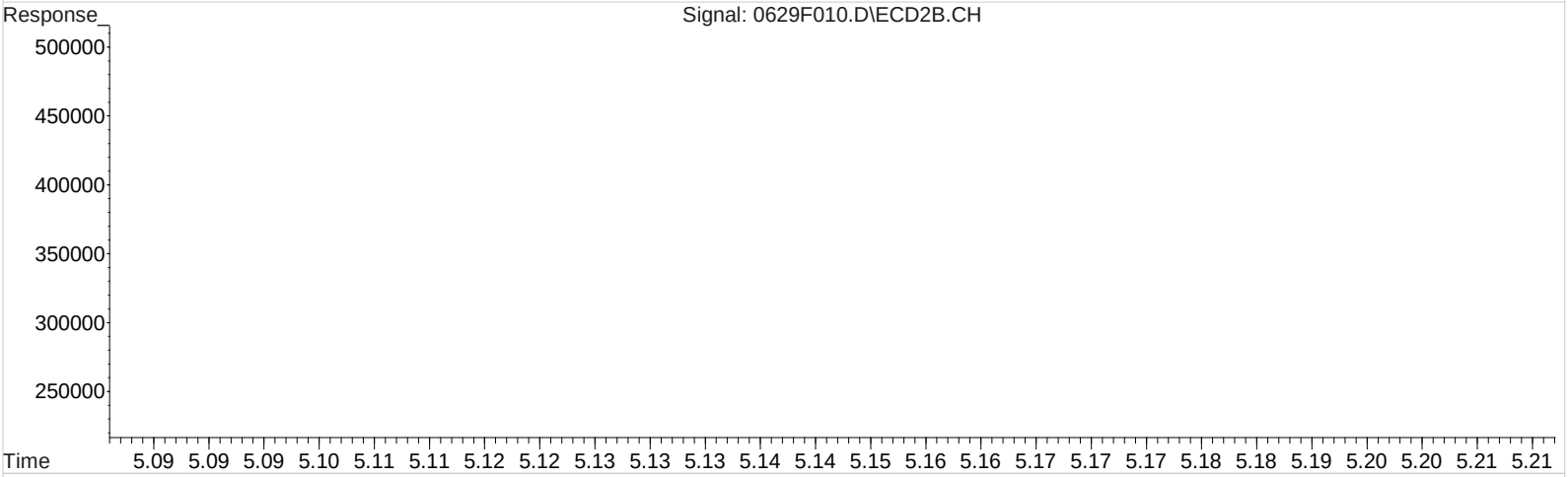
1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F010.D Vial: 8
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 11:05 am Operator: MC
Sample : K1805809-006 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 15:27:22 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.156min 233.880 ug/L

response 153272434

Manual Integration:

Before

06/29/18

(9) Pentachlorophenol #2 (M)

5.552min 211.100 ug/L

response 133213034

(+) = Expected Retention Time

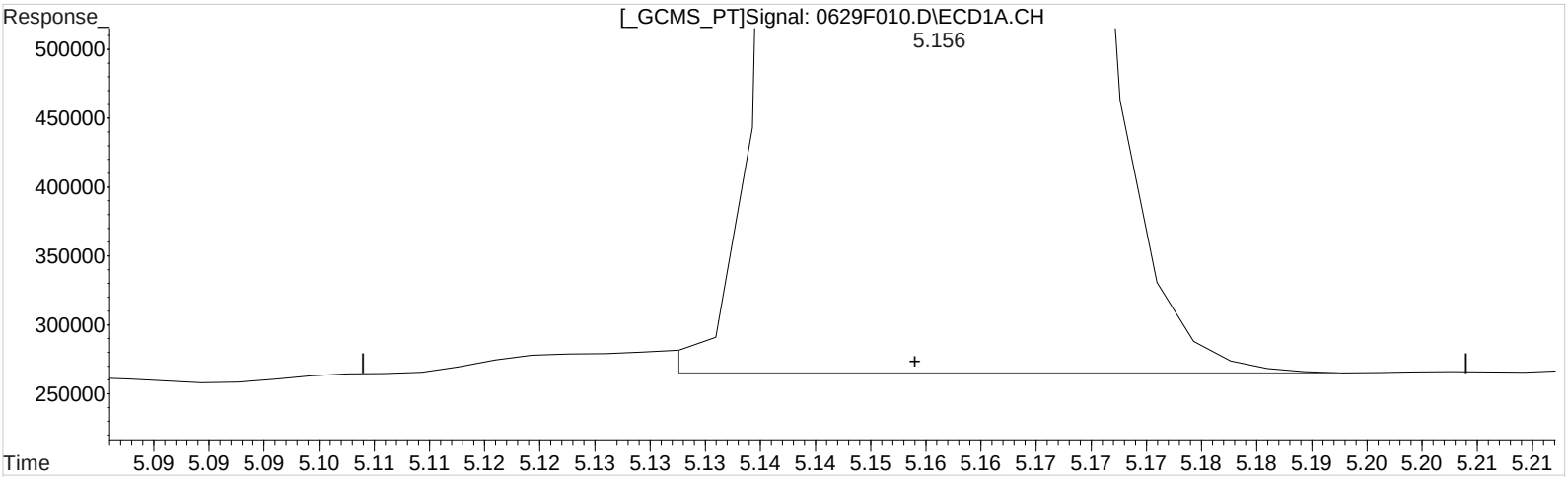
Quantitation Report (Qedit)

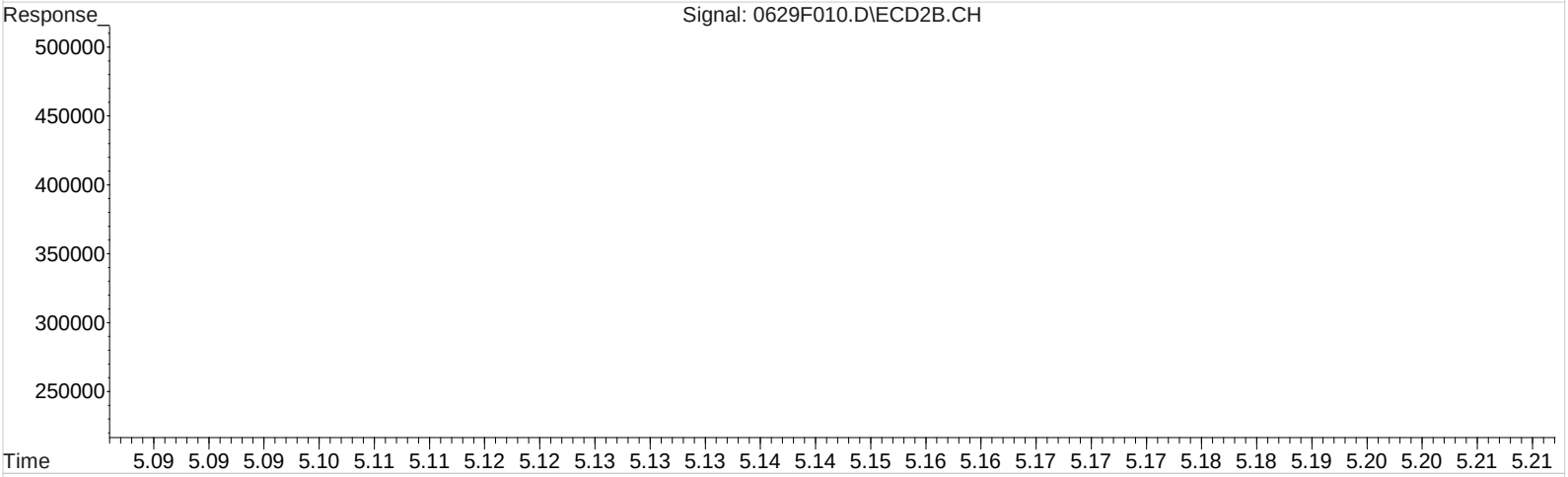
1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F010.D Vial: 8
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 11:05 am Operator: MC
Sample : K1805809-006 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 15:27:22 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.156min 232.998 ug/L m

response 152694558

Manual Integration:

After

Baseline/Shoulder

06/29/18

(9) Pentachlorophenol #2 (M)

5.552min 211.100 ug/L

response 133213034

(+) = Expected Retention Time

1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F011.D\
Lab ID: K1805809-007
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 11:23:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F011.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 11:23:00	**Vial:**	15
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-007	**Raw Units:**	ug/L

Bottle ID:	K1805809-007.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/17/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.01	4.58	22779039	17025211	47.188	47.225	94	94	94	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15	5.55	25817814	21462156	39.396	34.011	7.9	6.8	**6.8**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F011.D Vial: 9
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 11:23 am Operator: MC
Sample : K1805809-007 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:37:08 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.016	4.582	22779039	17025211	47.188	47.225
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.152	5.552	25817814	21462156	39.396m	34.011
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

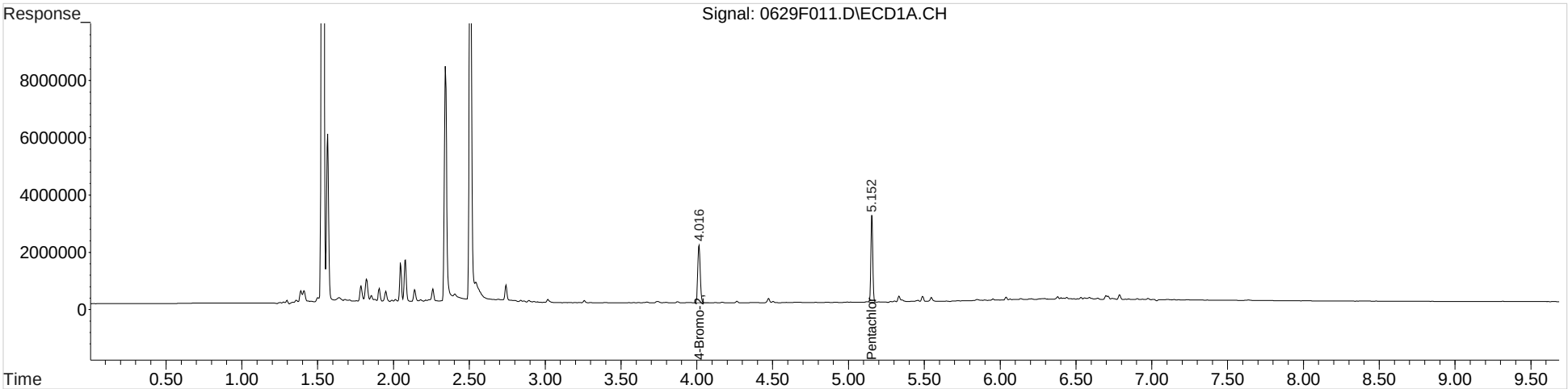
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F011.D Vial: 9
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 11:23 am Operator: MC
Sample : K1805809-007 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:37:08 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



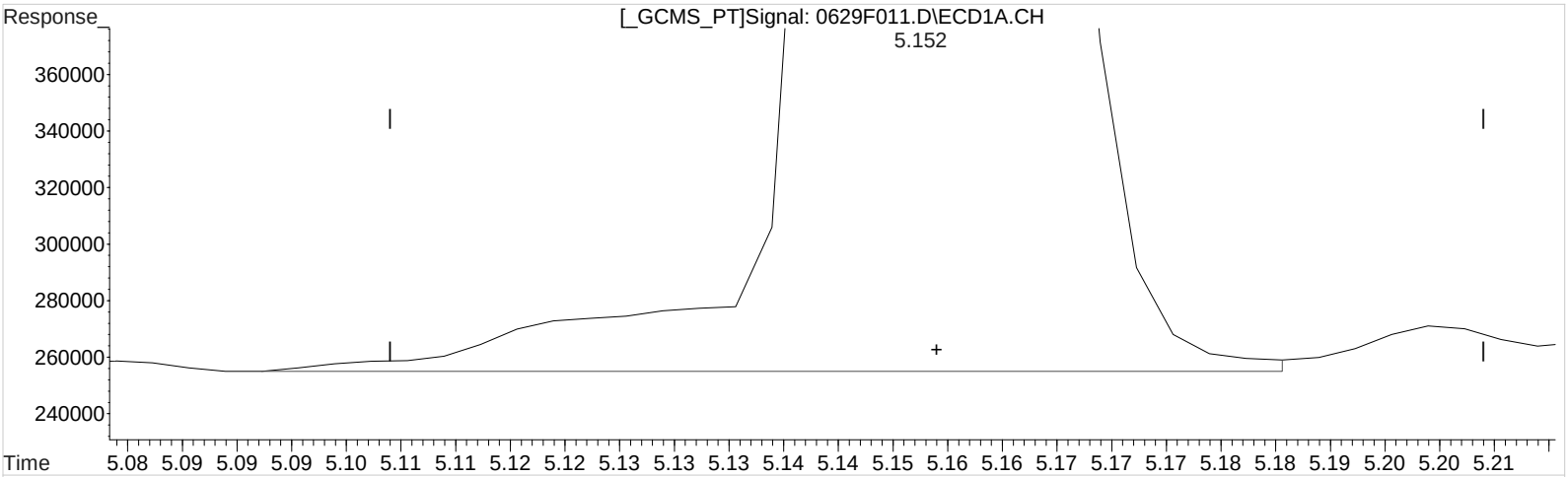
Quantitation Report (Qedit)

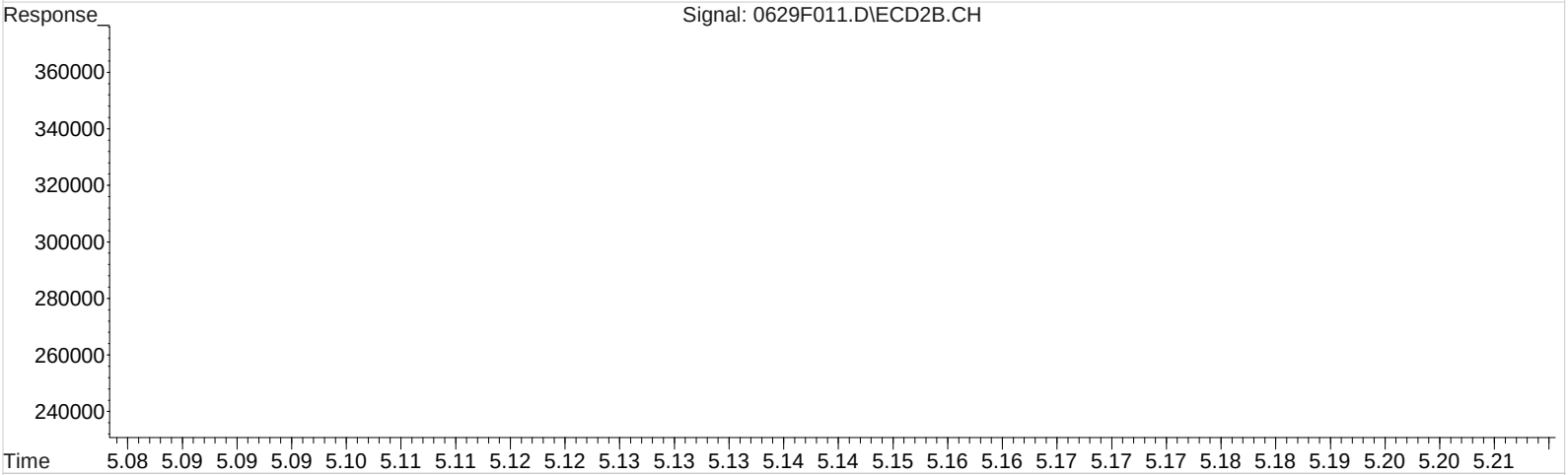
1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F011.D Vial: 9
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 11:23 am Operator: MC
Sample : K1805809-007 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 15:27:25 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.152min 40.099 ug/L

response 26278491

Manual Integration:

Before

06/29/18

(9) Pentachlorophenol #2 (M)

5.552min 34.011 ug/L

response 21462156

(+) = Expected Retention Time

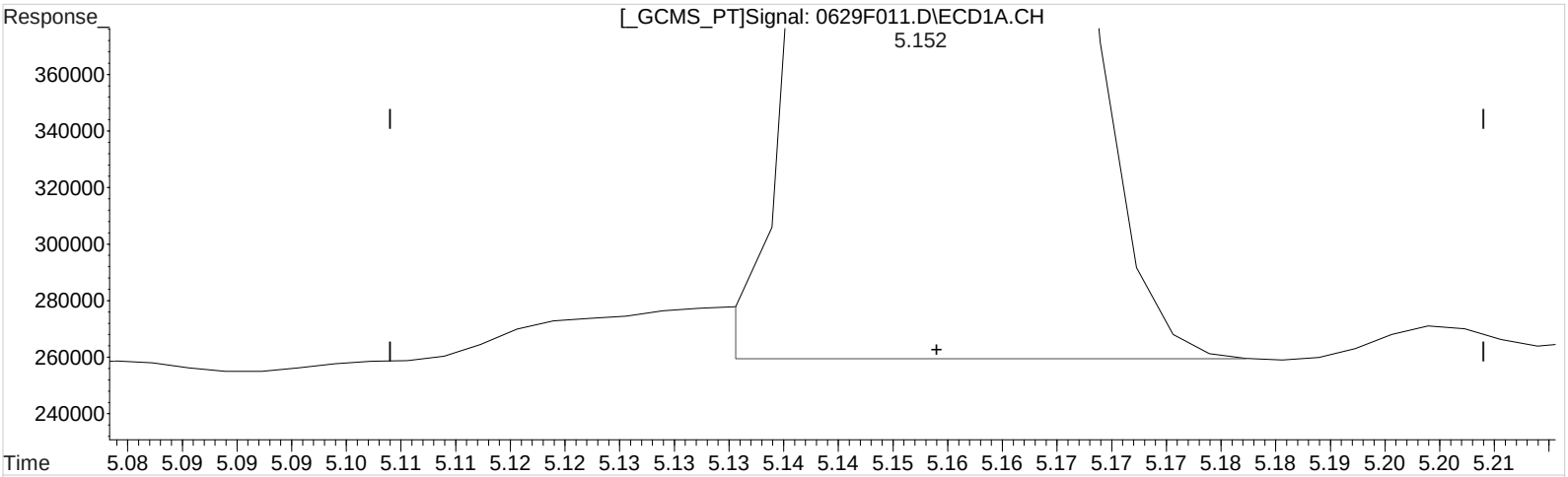
Quantitation Report (Qedit)

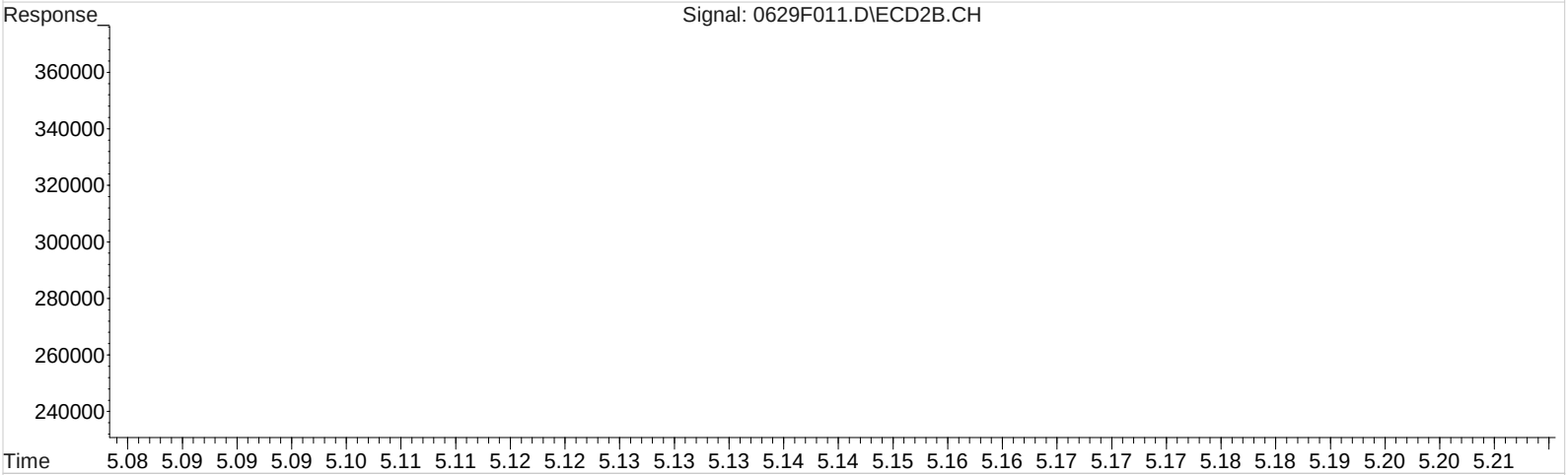
1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F011.D Vial: 9
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 11:23 am Operator: MC
Sample : K1805809-007 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 15:27:25 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.152min 39.396 ug/L m

response 25817814

Manual Integration:

After

Baseline/Shoulder

06/29/18

(9) Pentachlorophenol #2 (M)

5.552min 34.011 ug/L

response 21462156

(+) = Expected Retention Time

1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F012.D\
Lab ID: K1805809-008
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 11:40:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F012.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 11:40:00	**Vial:**	16
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-008	**Raw Units:**	ug/L

Bottle ID:	K1805809-008.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/17/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	23256969	17672177	48.178	49.019	96	98	96	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.16 +0.01	5.55	341372930	324194006	520.905	513.744	100	100	**100**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F012.D Vial: 10
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 11:40 am Operator: MC
Sample : K1805809-008 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:38:44 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.012	4.582	23256969	17672177	48.178	49.019
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.156	5.555	341.4E6	324.2E6	520.905	513.744
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

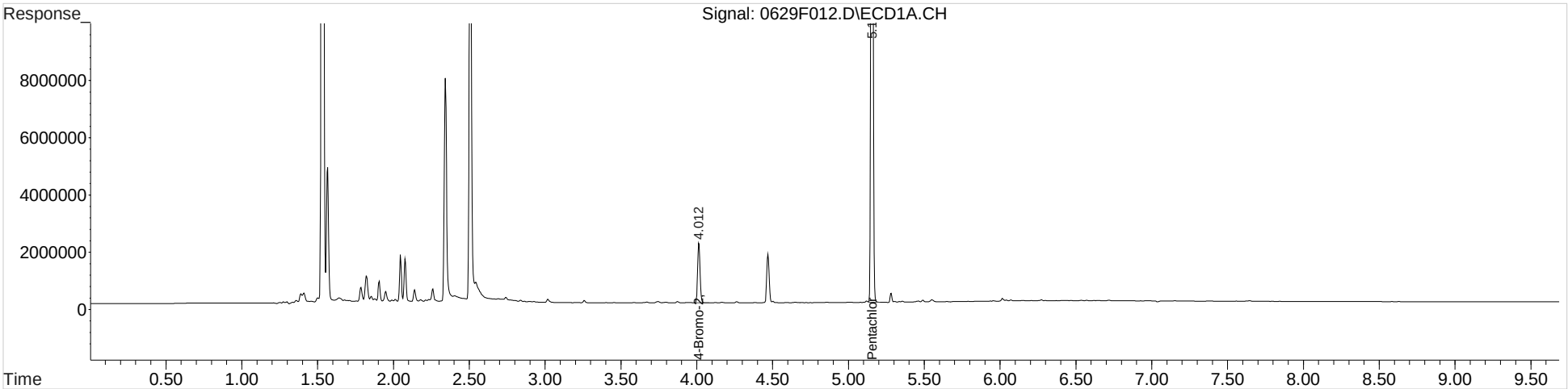
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F012.D Vial: 10
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 11:40 am Operator: MC
Sample : K1805809-008 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:38:44 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F013.D\
Lab ID: K1805809-009
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 11:57:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F013.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 11:57:00	**Vial:**	17
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-009	**Raw Units:**	ug/L

Bottle ID:	K1805809-009.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/17/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	21729279	16530004	45.014	45.851	90	92	90	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15	5.56 +0.01	443826719	430737196	677.240	682.581	140	140	**140**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F013.D Vial: 11
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 11:57 am Operator: MC
Sample : K1805809-009 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:49:15 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.014	4.580	21729279	16530004	45.014	45.851
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.154	5.557	443.8E6	430.7E6	677.240	682.581
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

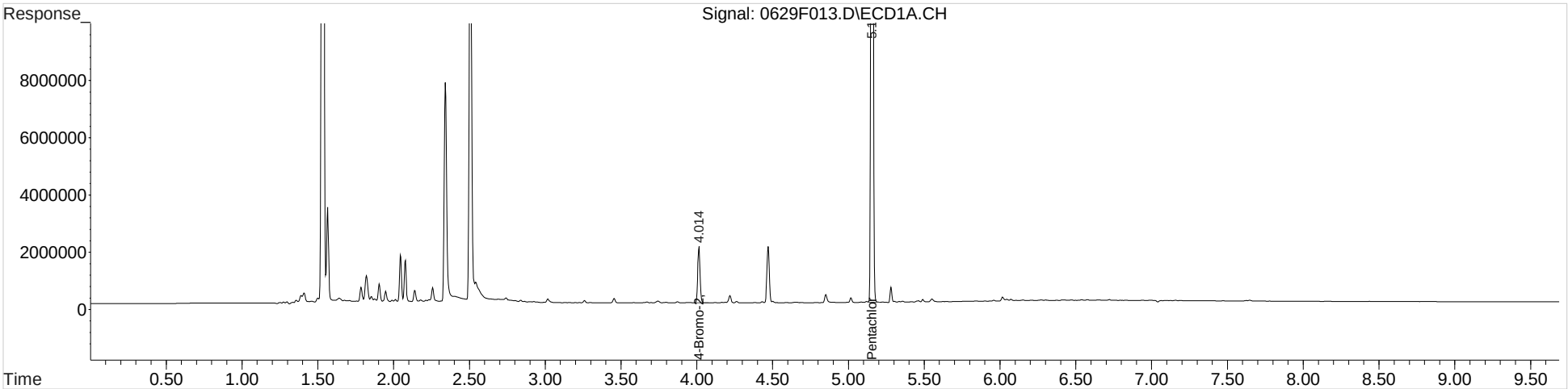
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F013.D Vial: 11
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 11:57 am Operator: MC
Sample : K1805809-009 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:49:15 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F014.D\
Lab ID: K1805809-010
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 12:14:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F014.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 12:14:00	**Vial:**	18
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-010	**Raw Units:**	ug/L

Bottle ID:	K1805809-010.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/17/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	22446296	17080089	46.499	47.377	93	95	93	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15	5.55	217392	316315	0.332	0.501	0.066U	0.10J	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st mc 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F014.D Vial: 12
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 12:14 pm Operator: MC
Sample : K1805809-010 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:51:50 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.015	4.580	22446296	17080089	46.499	47.377
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.154	5.551	217392	316315	0.332	0.501 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

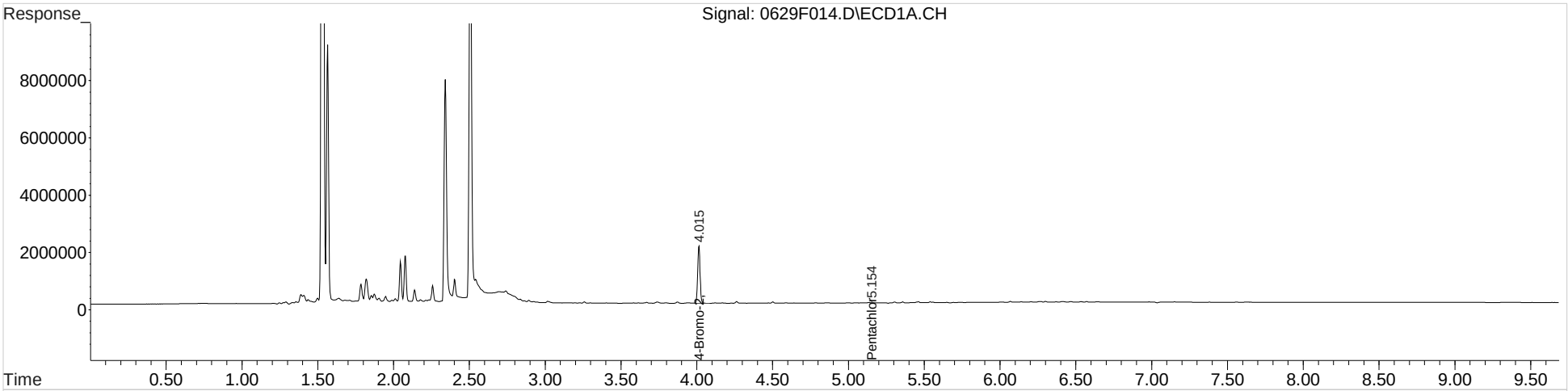
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F014.D Vial: 12
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 12:14 pm Operator: MC
Sample : K1805809-010 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:51:50 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F017.D\
Lab ID: K1805809-011
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 13:06:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F017.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 13:06:00	**Vial:**	19
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-011	**Raw Units:**	ug/L

Bottle ID:	K1805809-011.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	21614922	16511282	44.777	45.799	90	92	90	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15	5.55	191314	50672	0.292	0.080	0.058U	0.016U	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F017.D Vial: 13
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 1:06 pm Operator: MC
Sample : K1805809-011 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:54:19 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
4) S	4-Bromo-2...	4.014	4.580	21614922	16511282	44.777	45.799
	Target Compounds						
1)	3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)	3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)	2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)	2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)	3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7) M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8) M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9) M	Pentachlo...	5.154	5.553	191314	50672	0.292	0.080 #
10)	Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

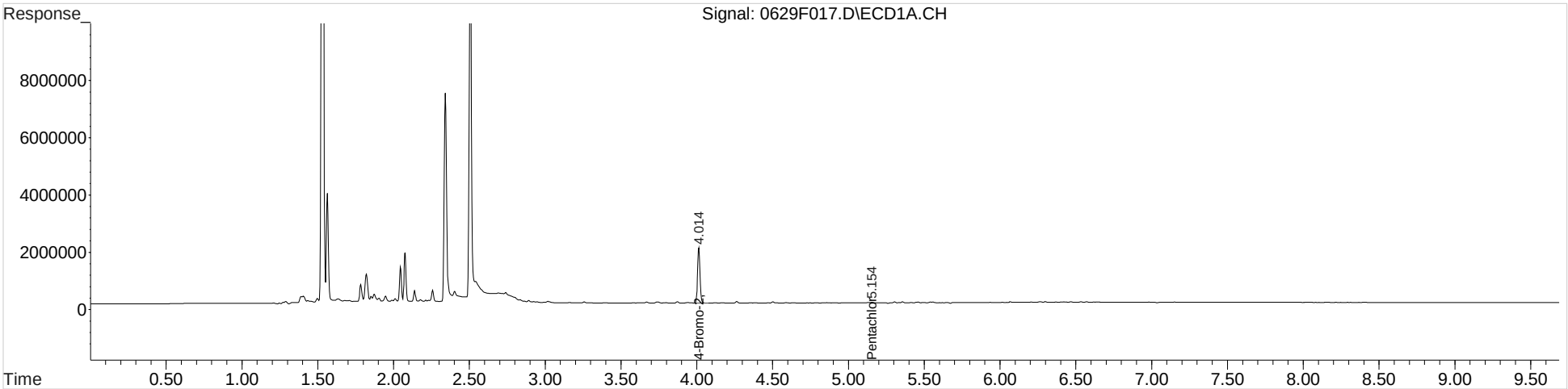
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F017.D Vial: 13
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 1:06 pm Operator: MC
Sample : K1805809-011 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 16:54:19 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F018.D\
Lab ID: K1805809-012
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 13:23:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F018.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 13:23:00	**Vial:**	20
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-012	**Raw Units:**	ug/L

Bottle ID:	K1805809-012.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	21389380	16377077	44.309	45.427	89	91	89	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15	5.55	445520	544174	0.680	0.862	0.14J	0.17J	**0.14** J	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F018.D Vial: 14
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 1:23 pm Operator: MC
Sample : K1805809-012 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:02:13 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.011	4.581	21389380	16377077	44.309	45.427
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.155	5.551	445520	544174	0.680	0.862 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

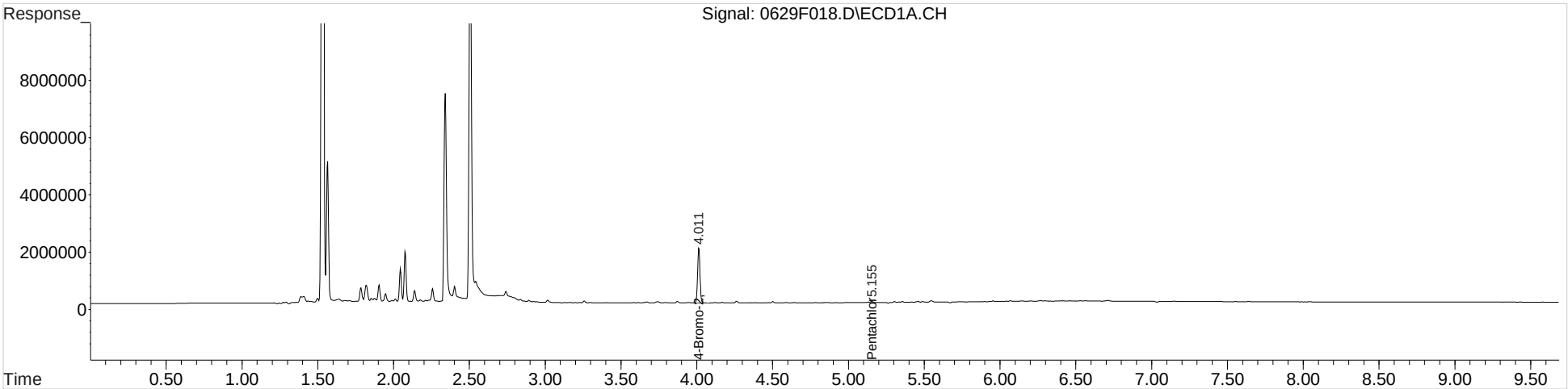
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F018.D Vial: 14
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 1:23 pm Operator: MC
Sample : K1805809-012 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:02:13 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F019.D\
Lab ID: K1805809-013
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 13:41:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F019.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 13:41:00	**Vial:**	21
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-013	**Raw Units:**	ug/L

Bottle ID:	K1805809-013.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	21570244	16547110	44.684	45.899	89	92	89	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.16 +0.01	5.56 +0.01	166714	97704	0.254	0.155	0.051U	0.031U	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F019.D Vial: 15
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 1:41 pm Operator: MC
Sample : K1805809-013 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:02:42 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.013	4.582	21570244	16547110	44.684	45.899
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.156	5.555	166714	97704	0.254	0.155 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

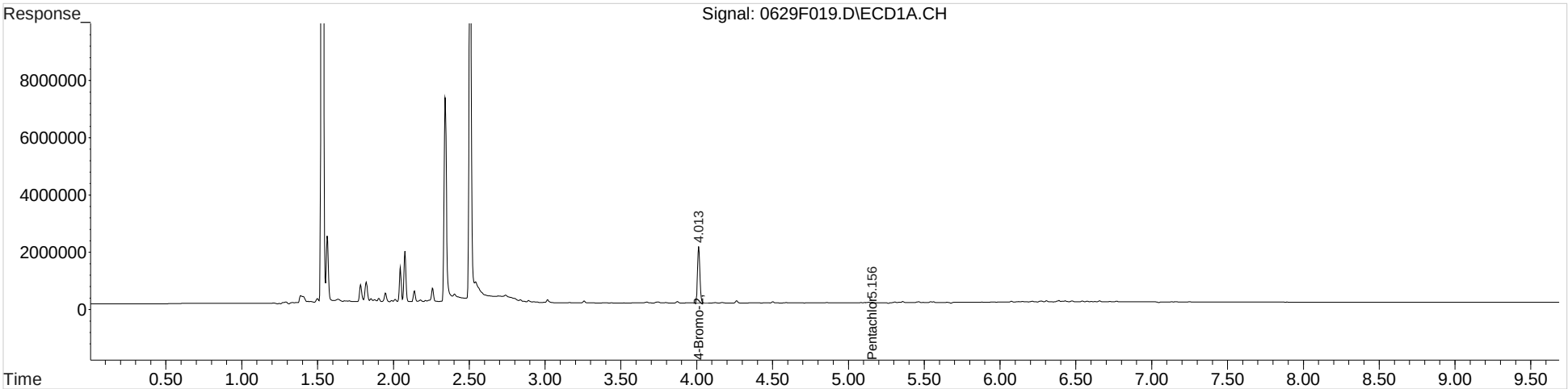
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F019.D Vial: 15
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 1:41 pm Operator: MC
Sample : K1805809-013 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:02:42 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F020.D\
Lab ID: K1805809-014
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 13:58:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F020.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 13:58:00	**Vial:**	22
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-014	**Raw Units:**	ug/L

Bottle ID:	K1805809-014.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	22648376	17387658	46.917	48.230	94	96	94	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.16 +0.01	5.56 +0.01	209830	65326	0.320	0.104	0.064U	0.021U	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F020.D Vial: 16
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 1:58 pm Operator: MC
Sample : K1805809-014 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:03:31 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.014	4.583	22648376	17387658	46.917	48.230
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.157	5.557	209830	65326	0.320	0.104 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

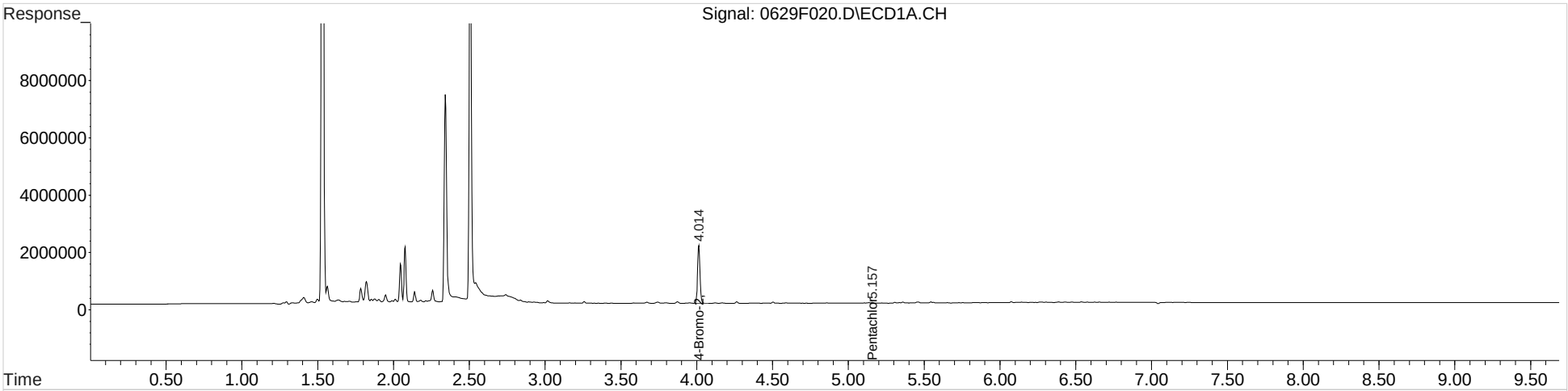
1st mc 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F020.D Vial: 16
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 1:58 pm Operator: MC
Sample : K1805809-014 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:03:31 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F021.D\
Lab ID: K1805809-015
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 14:15:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F021.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 14:15:00	**Vial:**	23
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-015	**Raw Units:**	ug/L

Bottle ID:	K1805809-015.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	21677071	16462736	44.905	45.665	90	91	90	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15	5.57 +0.02	193682	371508	0.296	0.589	0.059U	0.12J	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F021.D Vial: 17
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 2:15 pm Operator: MC
Sample : K1805809-015 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:04:30 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.015	4.581	21677071	16462736	44.905	45.665
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.155	5.571	193682	371508	0.296	0.589 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

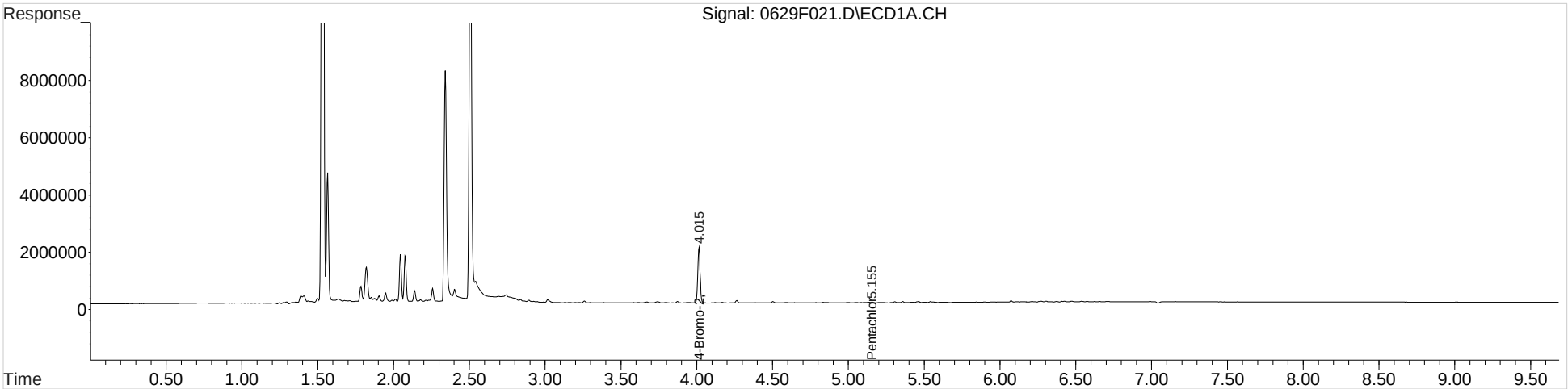
1st mc 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F021.D Vial: 17
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 2:15 pm Operator: MC
Sample : K1805809-015 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:04:30 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F022.D\
Lab ID: K1805809-016
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 14:33:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F022.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 14:33:00	**Vial:**	24
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-016	**Raw Units:**	ug/L

Bottle ID:	K1805809-016.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	22808068	17000531	47.248	47.156	94	94	94	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.16 +0.01	5.56 +0.01	26371654	20646998	40.241	32.719	8.0	6.5	**6.5**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F022.D Vial: 18
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 2:33 pm Operator: MC
Sample : K1805809-016 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:06:18 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.014	4.583	22808068	17000531	47.248	47.156
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.157	5.556	26371654	20646998	40.241m	32.719
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

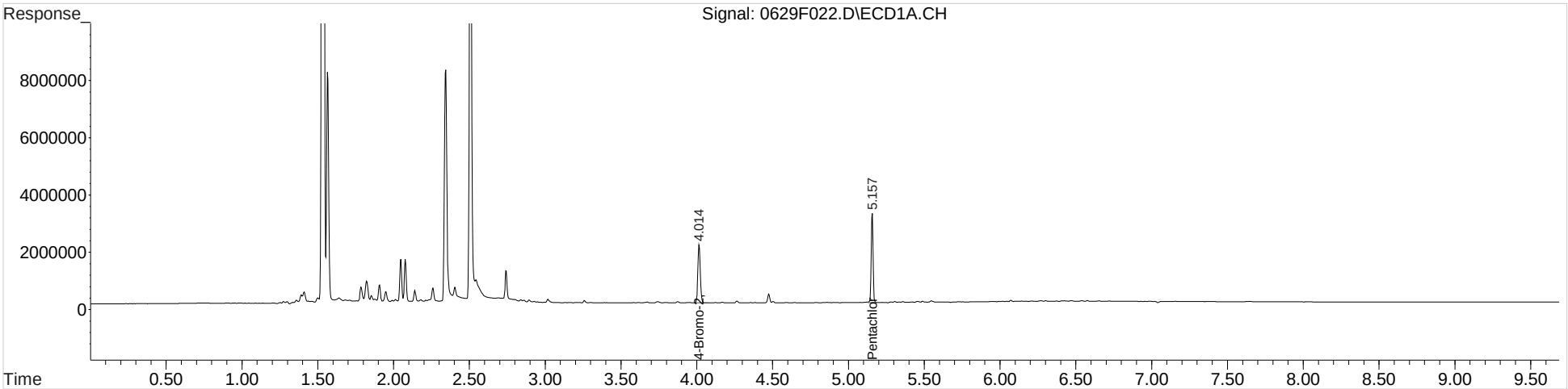
1st MC 06/30/18
2nd TP 07/05/18

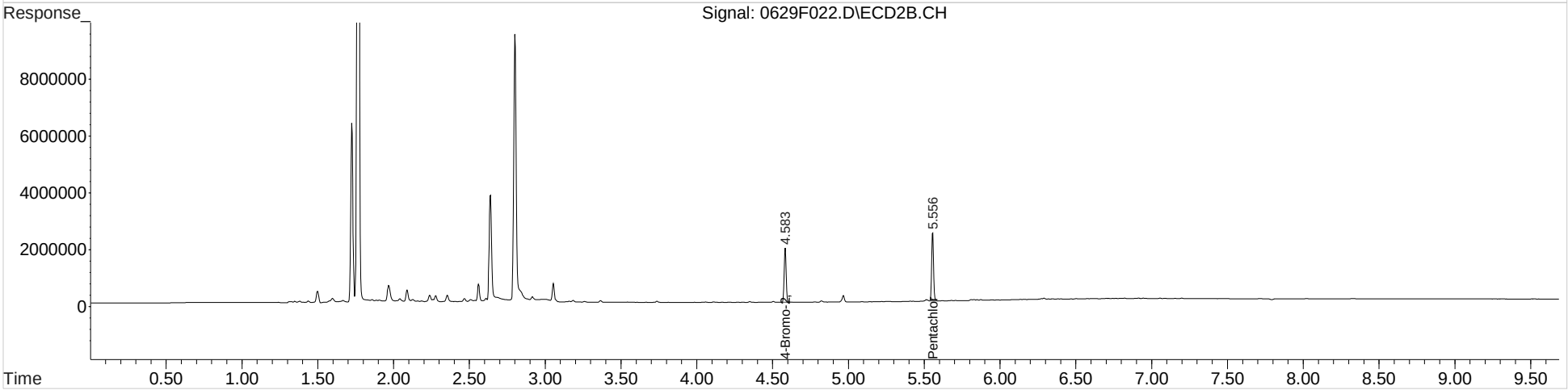
Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F022.D Vial: 18
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 2:33 pm Operator: MC
Sample : K1805809-016 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:06:18 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





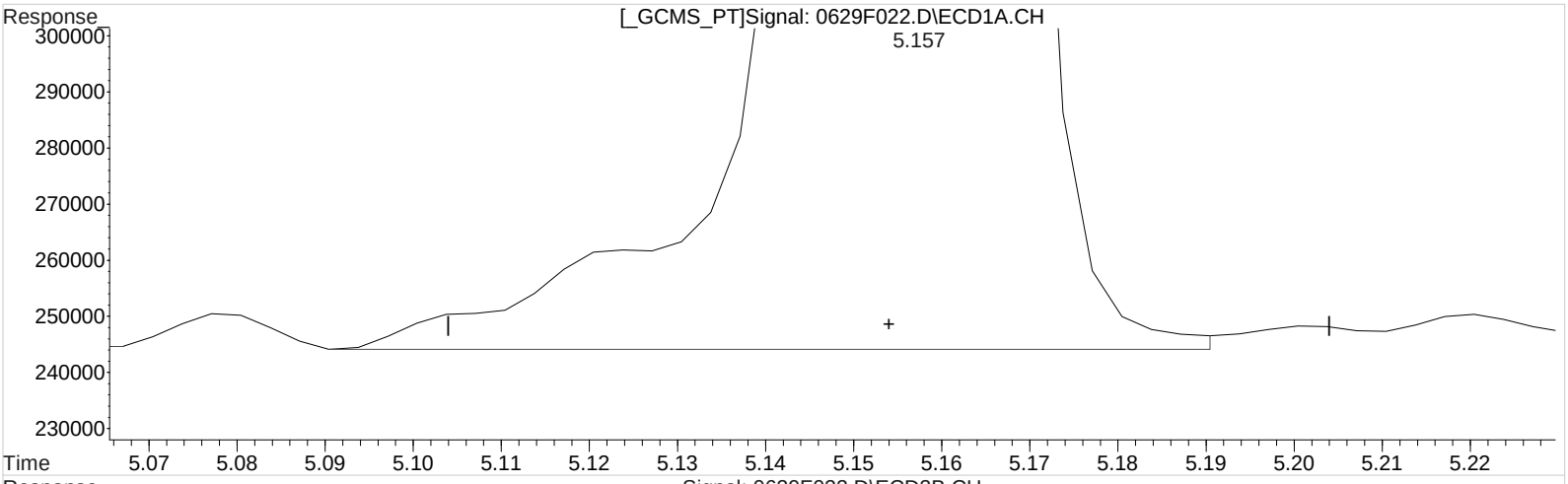
Quantitation Report (Qedit)

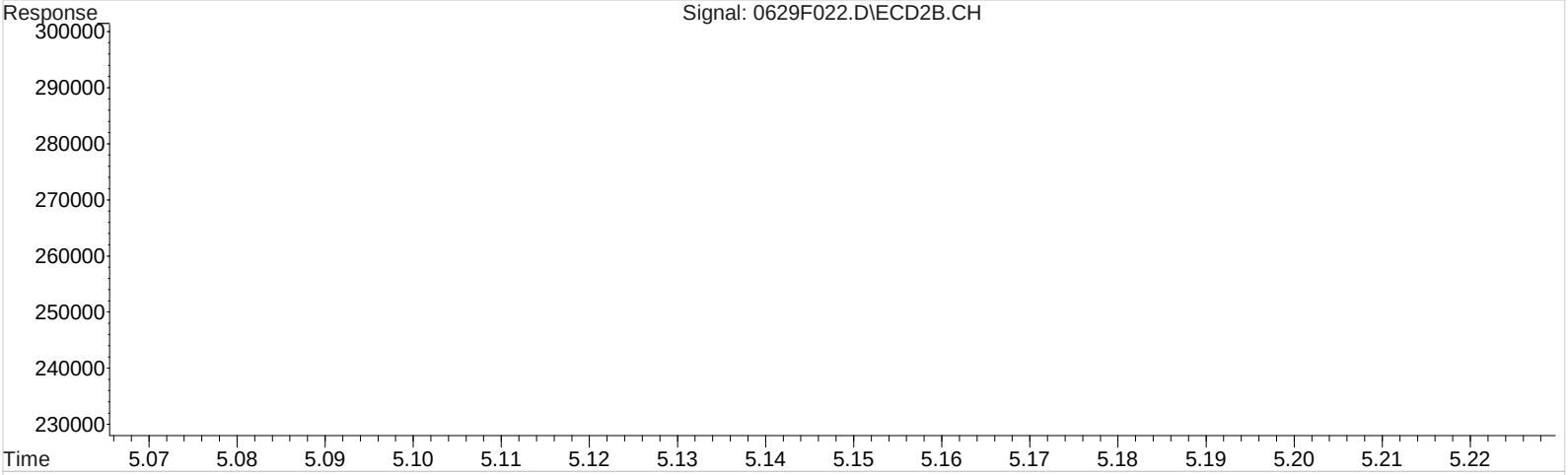
1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F022.D Vial: 18
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 2:33 pm Operator: MC
Sample : K1805809-016 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 15:27:58 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.157min 40.702 ug/L

response 26673682

Manual Integration:

Before

06/29/18

(9) Pentachlorophenol #2 (M)

5.556min 32.719 ug/L

response 20646998

(+) = Expected Retention Time

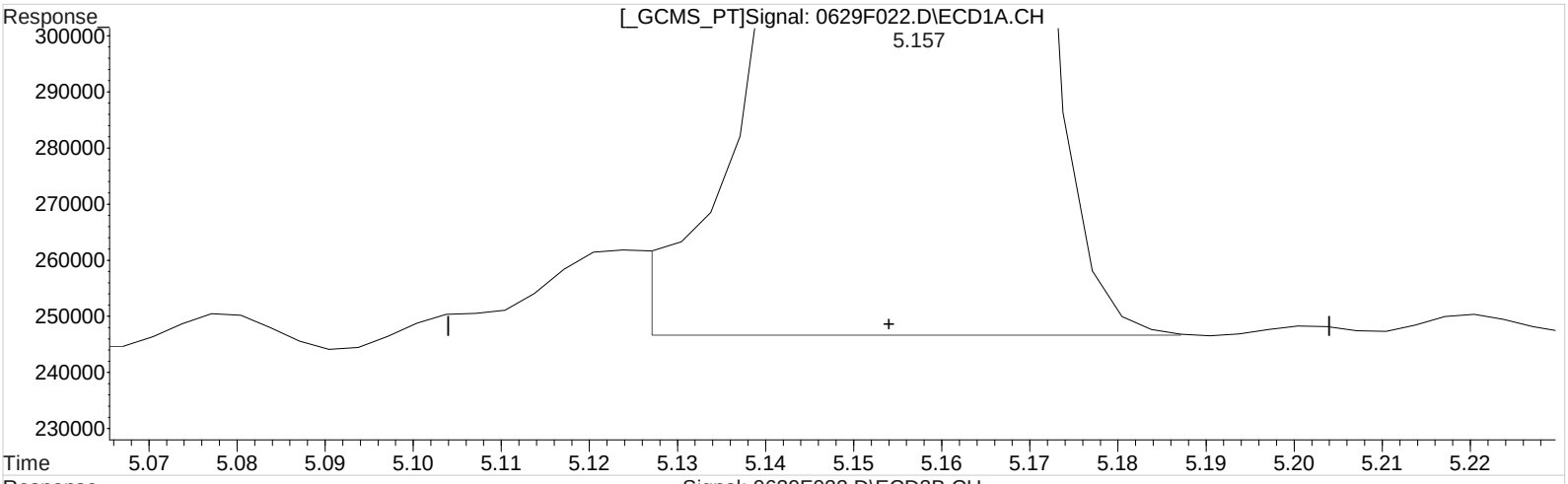
Quantitation Report (Qedit)

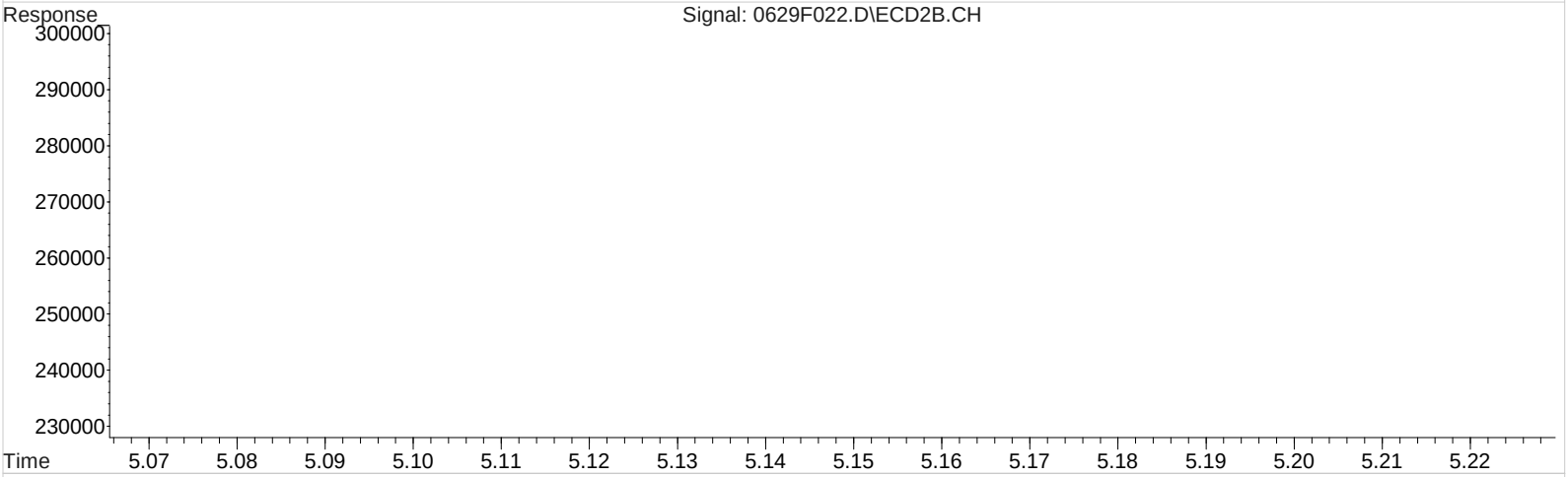
1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F022.D Vial: 18
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 2:33 pm Operator: MC
Sample : K1805809-016 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 15:27:58 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.157min 40.241 ug/L m

response 26371654

Manual Integration:

After

Baseline/Shoulder

06/29/18

(9) Pentachlorophenol #2 (M)

5.556min 32.719 ug/L

response 20646998

(+) = Expected Retention Time

1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F023.D\
Lab ID: K1805809-017
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 14:51:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F023.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 14:51:00	**Vial:**	25
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-017	**Raw Units:**	ug/L

Bottle ID:	K1805809-017.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.01	4.58	21697454	15625012	44.948	43.341	90	87	87	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc		Rpt?
Pentachlorophenol (PCP)	5.16 +0.01	5.56 +0.01	400260	643872	0.611	1.020	0.12J	0.20J	**0.12** J	P	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F023.D Vial: 19
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 2:51 pm Operator: MC
Sample : K1805809-017 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:07:20 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.017	4.583	21697454	15625012	44.948	43.341
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.157	5.556	400260	643872	0.611	1.020 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

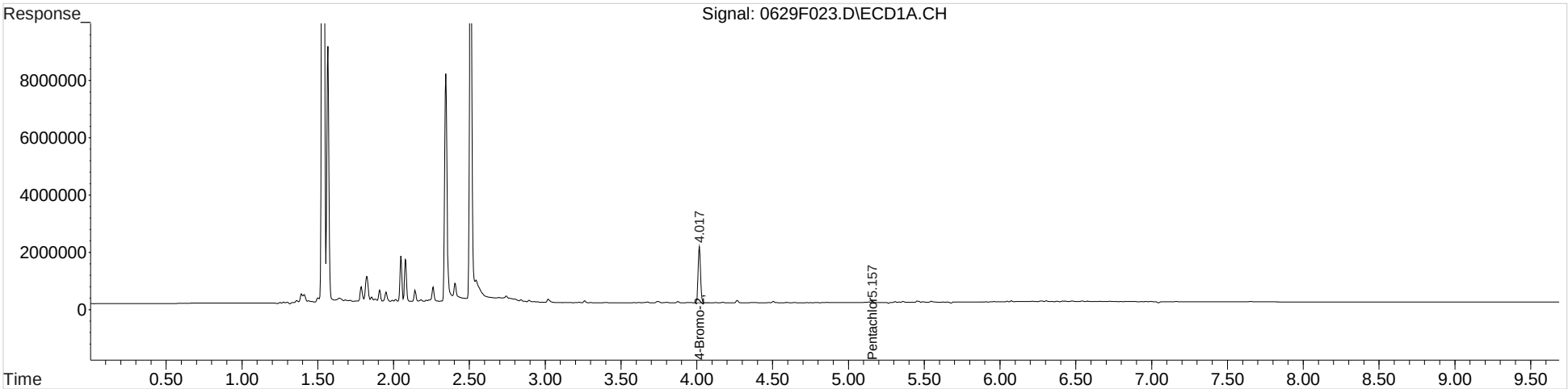
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F023.D Vial: 19
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 2:51 pm Operator: MC
Sample : K1805809-017 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:07:20 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F024.D\
Lab ID: K1805809-018
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 15:08:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F024.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 15:08:00	**Vial:**	26
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-018	**Raw Units:**	ug/L

Bottle ID:	K1805809-018.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.01	4.58	21170120	15207241	43.855	42.182	88	84	84	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.16 +0.01	5.55	257008	225999	0.392	0.358	0.078J	0.072J	**0.072** J	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F024.D Vial: 20
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 3:08 pm Operator: MC
Sample : K1805809-018 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 07:55:13 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.018	4.584	21170120	15207241	43.855	42.182
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.158	5.554	257008	225999	0.392	0.358
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

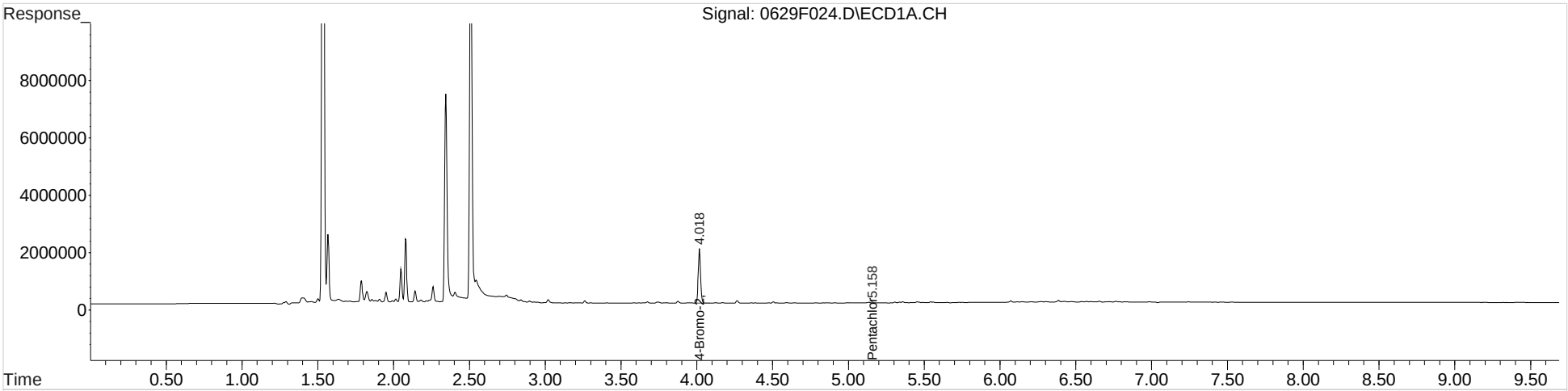
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F024.D Vial: 20
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 3:08 pm Operator: MC
Sample : K1805809-018 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 07:55:13 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F025.D\
Lab ID: K1805809-019
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 15:26:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F025.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 15:26:00	**Vial:**	27
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-019	**Raw Units:**	ug/L

Bottle ID:	K1805809-019.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.01	4.59 +0.01	19157744	13876944	39.686	38.492	79	77	77	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.16 +0.01	5.56 +0.01	175082	49069	0.267	0.078	0.053U	0.016U	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F025.D Vial: 21
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 3:26 pm Operator: MC
Sample : K1805809-019 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:09:41 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.016	4.585	19157744	13876944	39.686	38.492
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.156	5.555	175082	49069	0.267	0.078 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

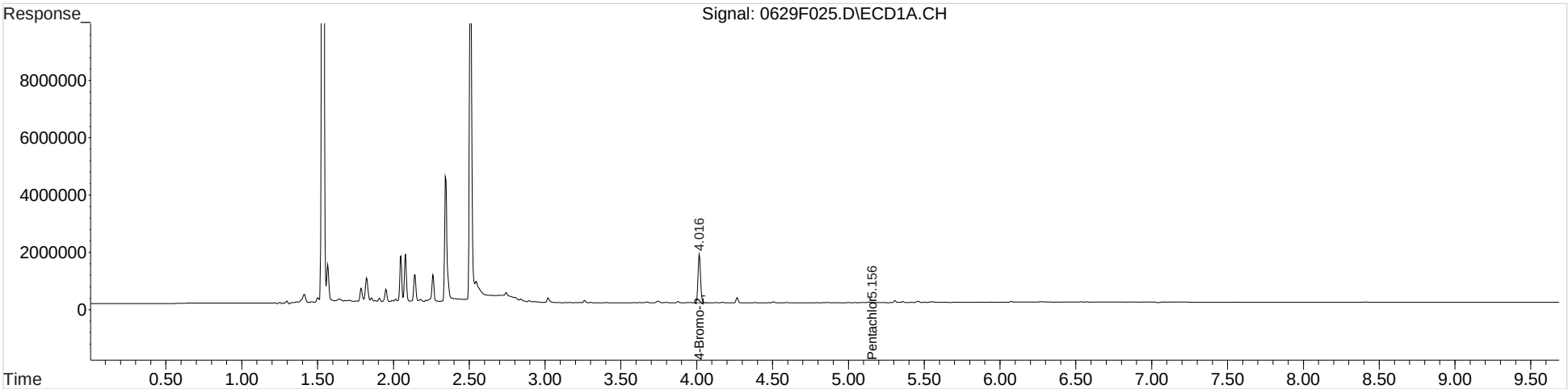
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F025.D Vial: 21
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 3:26 pm Operator: MC
Sample : K1805809-019 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:09:41 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F026.D\
Lab ID: K1805809-020
RunType: N/A
Matrix: Water

Date Acquired: 6/29/18 15:43:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F026.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 15:43:00	**Vial:**	28
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-020	**Raw Units:**	ug/L

Bottle ID:	K1805809-020.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.01	4.58	22097718	16326480	45.777	45.287	92	91	91	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.16 +0.01	5.56 +0.01	16895102	13635174	25.780	21.607	5.2	4.3	**4.3**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st mc 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F026.D Vial: 22
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 3:43 pm Operator: MC
Sample : K1805809-020 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:12:54 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.017	4.583	22097718	16326480	45.777	45.287
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.157	5.557	16895102	13635174	25.780m	21.607
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

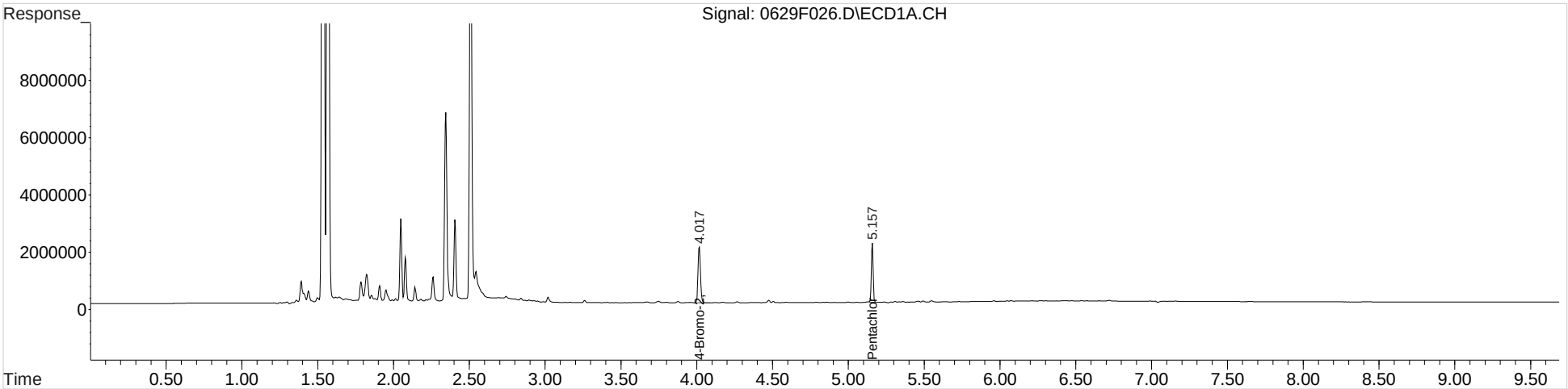
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F026.D Vial: 22
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 3:43 pm Operator: MC
Sample : K1805809-020 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:12:54 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



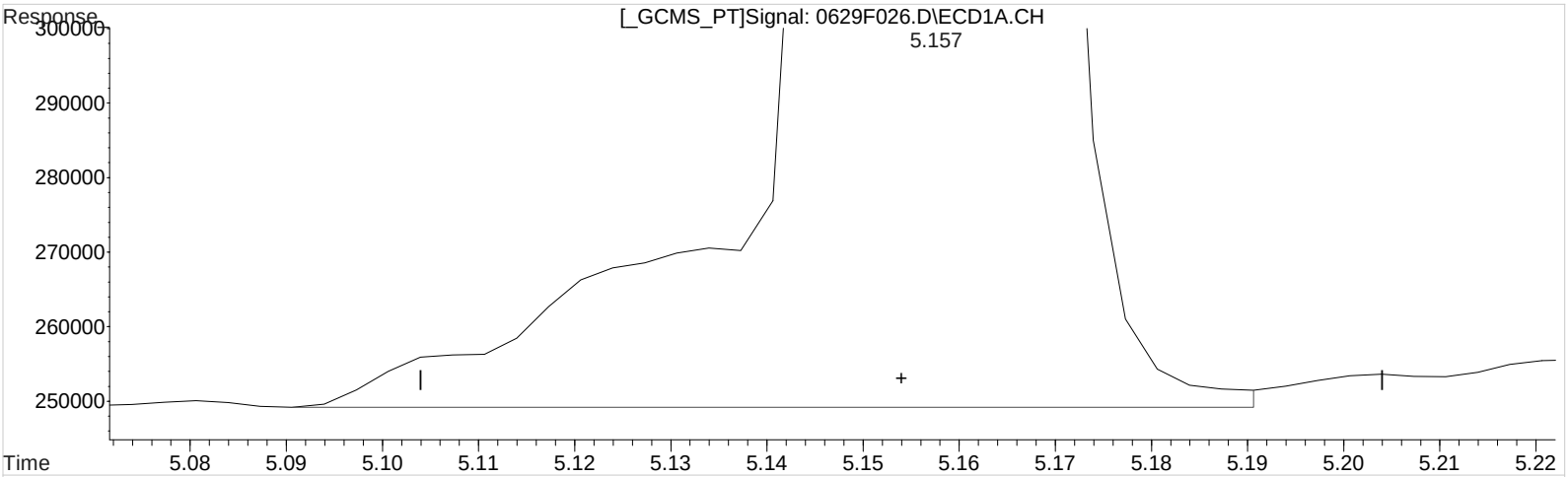
Quantitation Report (Qedit)

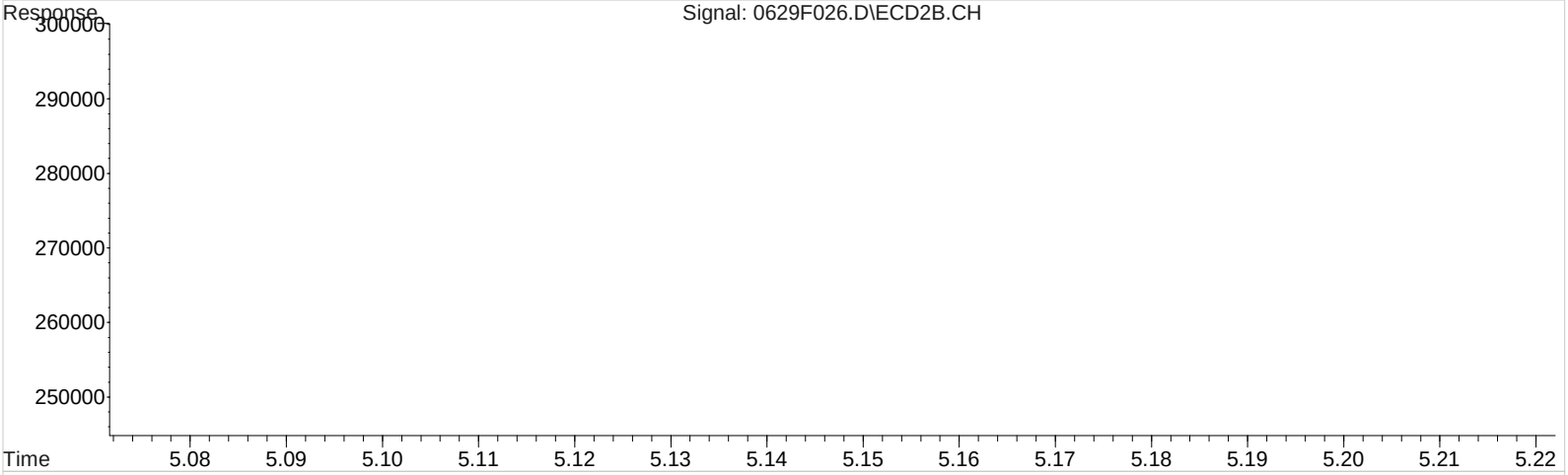
1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F026.D Vial: 22
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 3:43 pm Operator: MC
Sample : K1805809-020 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:10:48 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.157min 26.414 ug/L

response 17310415

Manual Integration:

Before

06/29/18

(9) Pentachlorophenol #2 (M)

5.557min 21.607 ug/L

response 13635174

(+) = Expected Retention Time

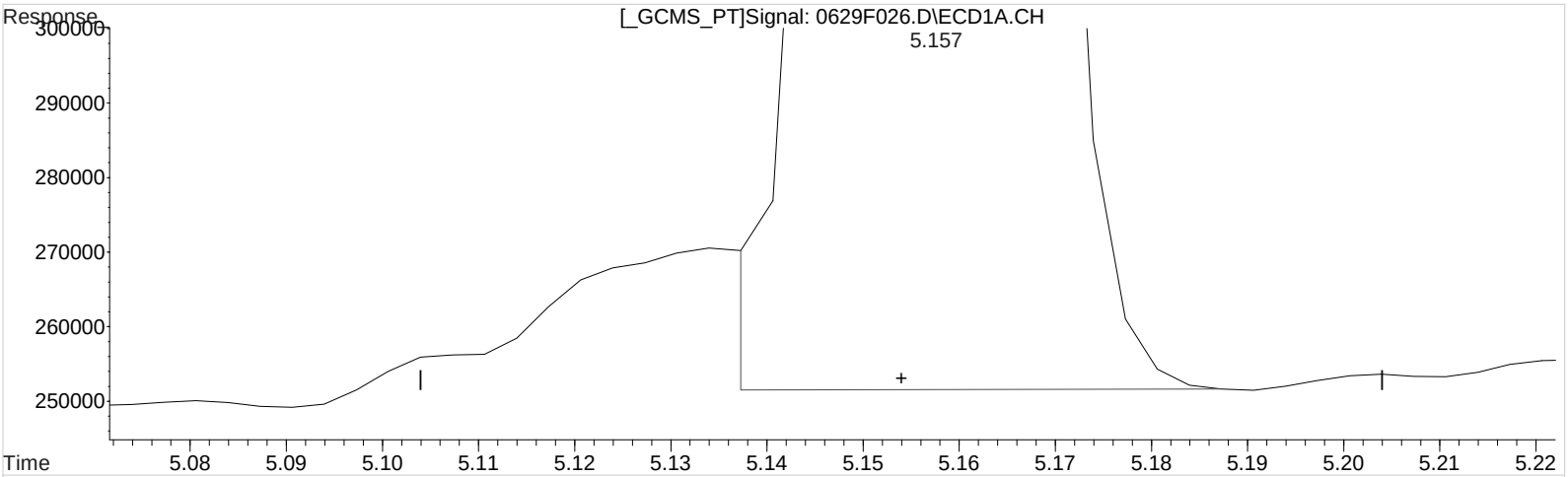
Quantitation Report (Qedit)

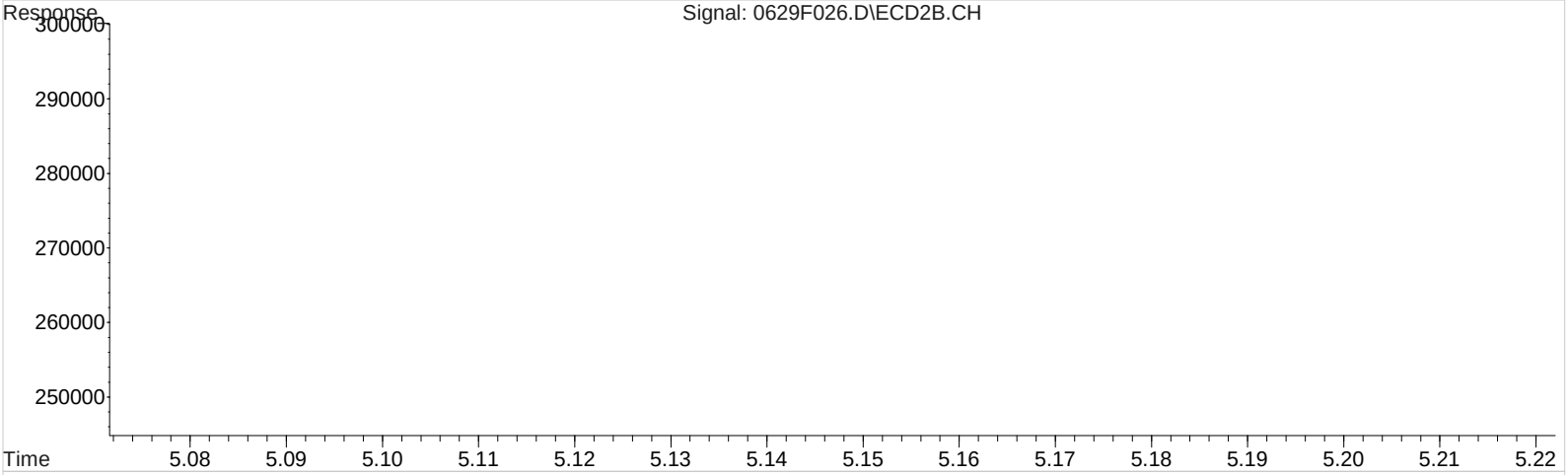
1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F026.D Vial: 22
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 3:43 pm Operator: MC
Sample : K1805809-020 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:10:48 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.157min 25.780 ug/L m

response 16895102

Manual Integration:

After

Baseline/Shoulder

06/29/18

(9) Pentachlorophenol #2 (M)

5.557min 21.607 ug/L

response 13635174

(+) = Expected Retention Time

1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F008.D\
Lab ID: K1805809-021
RunType: N/A
Matrix: Water

Date Acquired: 6/27/18 14:50:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F008.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 14:50:00	**Vial:**	10
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-021	**Raw Units:**	ug/L

Bottle ID:	K1805809-021.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/17/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01 +0.01	4.58	21518402	15342259	44.577	42.557	89	85	85	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.16 +0.01	5.55	456681	196388	0.697	0.311	0.14J	0.062U	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F008.D Vial: 6
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 2:50 pm Operator: SMS
Sample : K1805809-021 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 10:50:59 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.015	4.584	21518402	15342259	44.577	42.557
		Target Compounds						
1)		3,4-Dichl...	0.000	3.667	0	44074	N.D. d	1.241
2)		3,5-Dichl...	3.354	0.000	12438	0	1.021	N.D. d#
3)		2,4,6-Tri...	0.000	4.127	0	88692	N.D. d	0.276
5)		2,4,5-Tri...	4.168	4.644	346886	24350	1.384	0.151 #
6)		3,4,5-Tri...	4.228	4.717	26868	15719	0.160	0.106 #
7)	M	2,3,5,6-T...	4.474	4.954	42224	280264	0.077	0.590 #
8)	M	2,3,4,5-T...	4.995	5.364	211408	327566	0.522	0.234 #
9)	M	Pentachlo...	5.158	5.554	456681	196388	0.697	0.311 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

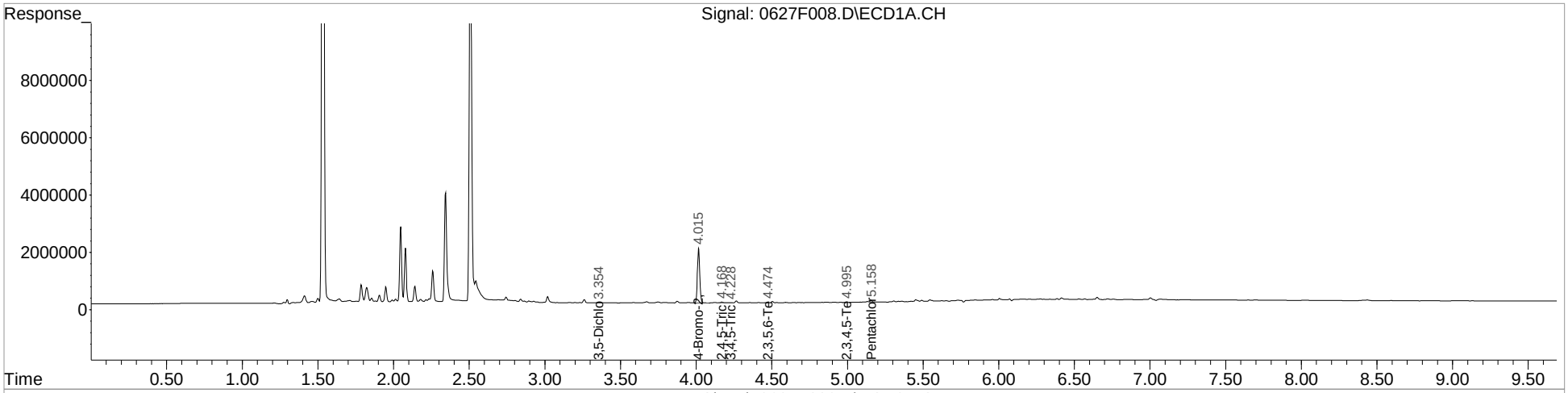
1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F008.D Vial: 6
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 2:50 pm Operator: SMS
Sample : K1805809-021 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 10:50:59 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F009.D\
Lab ID: K1805809-022
RunType: N/A
Matrix: Water

Date Acquired: 6/27/18 15:08:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F009.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 15:08:00	**Vial:**	11
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-022	**Raw Units:**	ug/L

Bottle ID:	K1805809-022.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.02	4.58	22063702	15795066	45.706	43.813	91	88	88	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.16 +0.01	5.55	211470	47366	0.323	0.075	0.065U	0.015U	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F009.D Vial: 7
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 3:08 pm Operator: SMS
Sample : K1805809-022 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 10:54:38 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
4) S	4-Bromo-2...	4.016	4.582	22063702	15795066	45.706	43.813
	Target Compounds						
1)	3,4-Dichl...	0.000	3.666	0	35868	N.D. d	0.751
2)	3,5-Dichl...	0.000	3.902	0	12990	N.D. d	1.051
3)	2,4,6-Tri...	0.000	4.129	0	122182	N.D. d	0.380
5)	2,4,5-Tri...	4.170	4.642	321574	13437	1.234	0.084 #
6)	3,4,5-Tri...	4.230	4.702	8238	23884	0.049	0.161 #
7) M	2,3,5,6-T...	4.476	4.952	26600	266626	0.048	0.561 #
8) M	2,3,4,5-T...	4.993	0.000	351282	0	0.867	N.D. d#
9) M	Pentachlo...	5.156	5.552	211470	47366	0.323	0.075 #
10)	Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

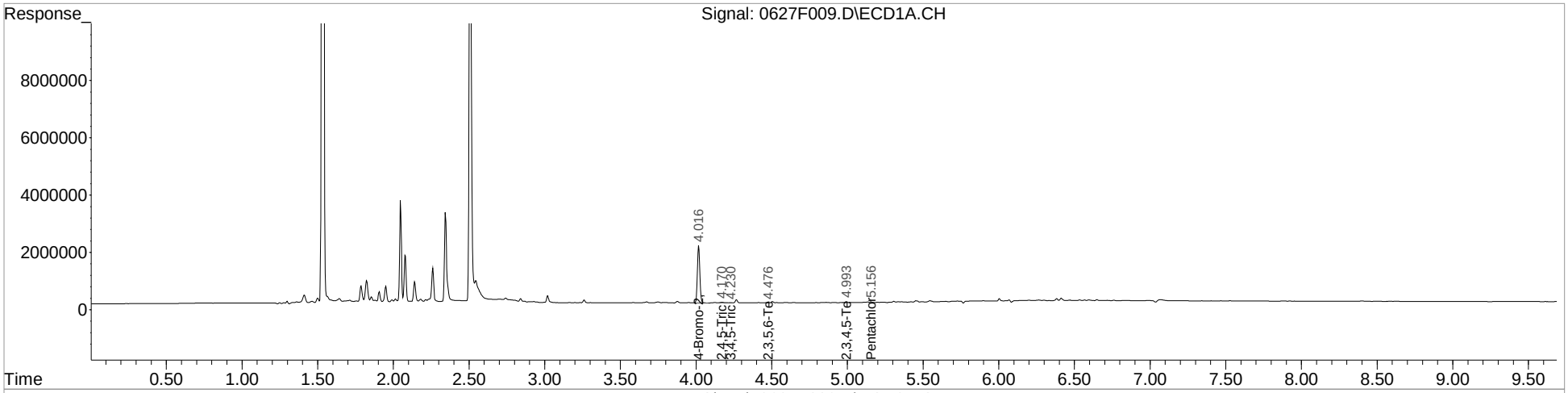
1st JED 06/28/18
2nd TP 07/05/18

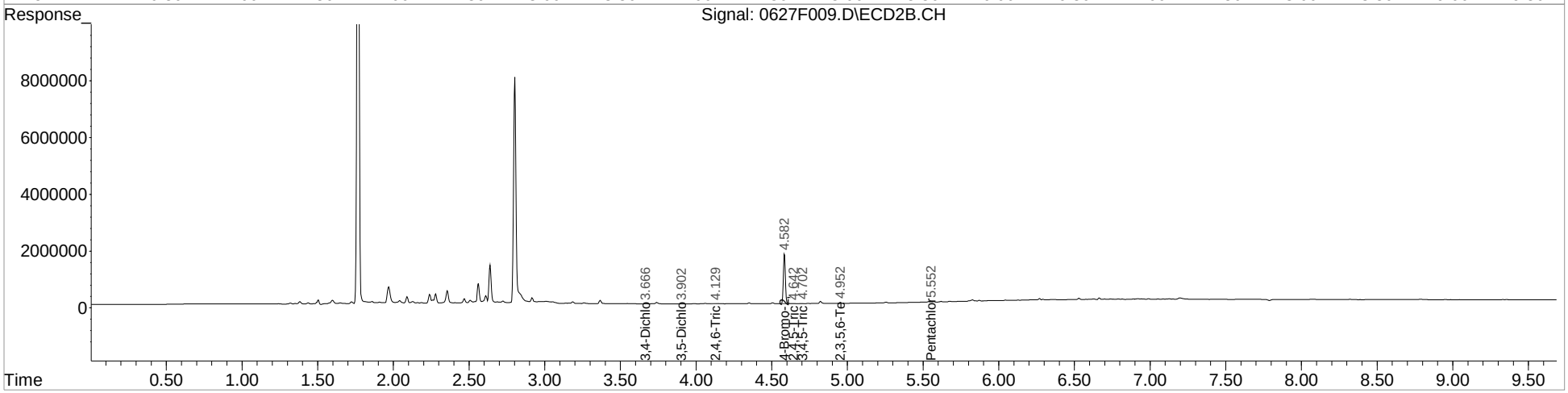
Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F009.D Vial: 7
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 3:08 pm Operator: SMS
Sample : K1805809-022 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 10:54:38 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F010.D\
Lab ID: K1805809-023
RunType: N/A
Matrix: Water

Date Acquired: 6/27/18 15:25:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F010.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 15:25:00	**Vial:**	12
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-023	**Raw Units:**	ug/L

Bottle ID:	K1805809-023.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/17/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.02	4.58	21449036	15711086	44.433	43.580	89	87	87	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15	5.55	2932638	2512347	4.475	3.981	0.90	0.80	**0.80**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F010.D Vial: 8
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 3:25 pm Operator: SMS
Sample : K1805809-023 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:00:04 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.017	4.583	21449036	15711086	44.433	43.580
		Target Compounds						
1)		3,4-Dichl...	3.130	0.000	17972	0	1.035	N.D. d#
2)		3,5-Dichl...	3.354	3.903	7742	8934	0.635	0.723
3)		2,4,6-Tri...	0.000	4.113	0	146568	N.D. d	0.456
5)		2,4,5-Tri...	4.167	4.640	310626	18282	1.170	0.114 #
6)		3,4,5-Tri...	4.227	4.706	20346	57284	0.121	0.387 #
7)	M	2,3,5,6-T...	4.474	4.953	92251	294534	0.168	0.620 #
8)	M	2,3,4,5-T...	4.990	0.000	234029	0	0.578	N.D. d#
9)	M	Pentachlo...	5.154	5.553	2932638	2512347	4.475m	3.981
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

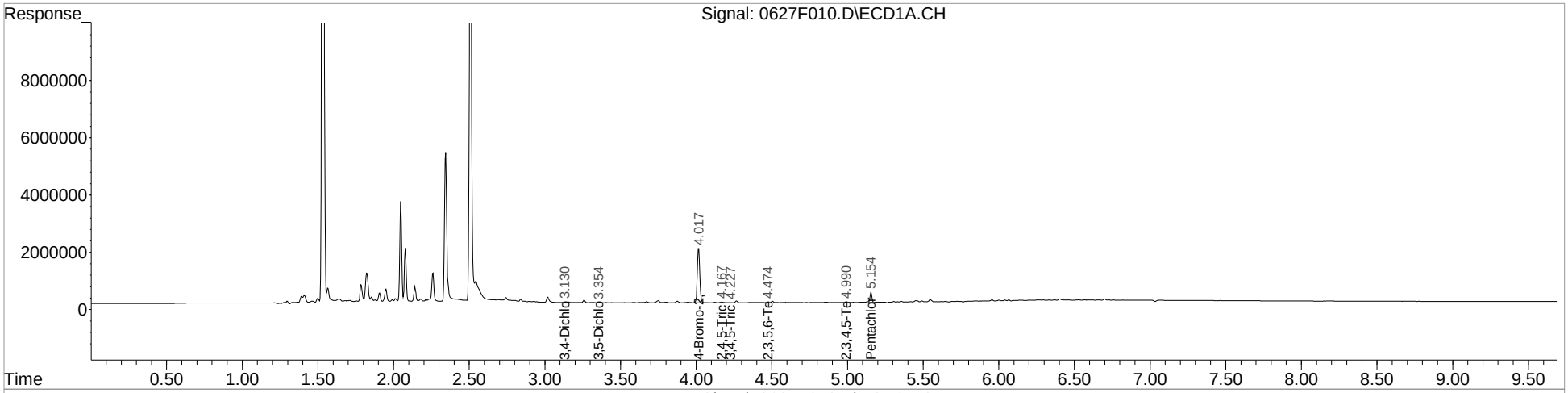
1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F010.D Vial: 8
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 3:25 pm Operator: SMS
Sample : K1805809-023 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:00:04 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



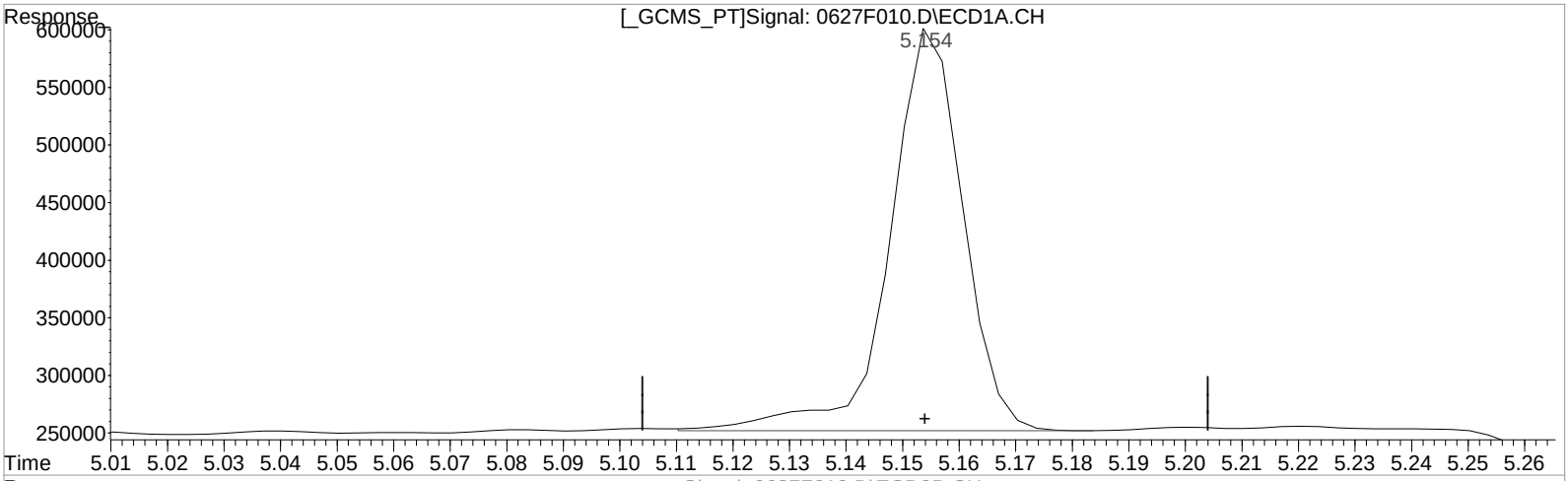
Quantitation Report (Qedit)

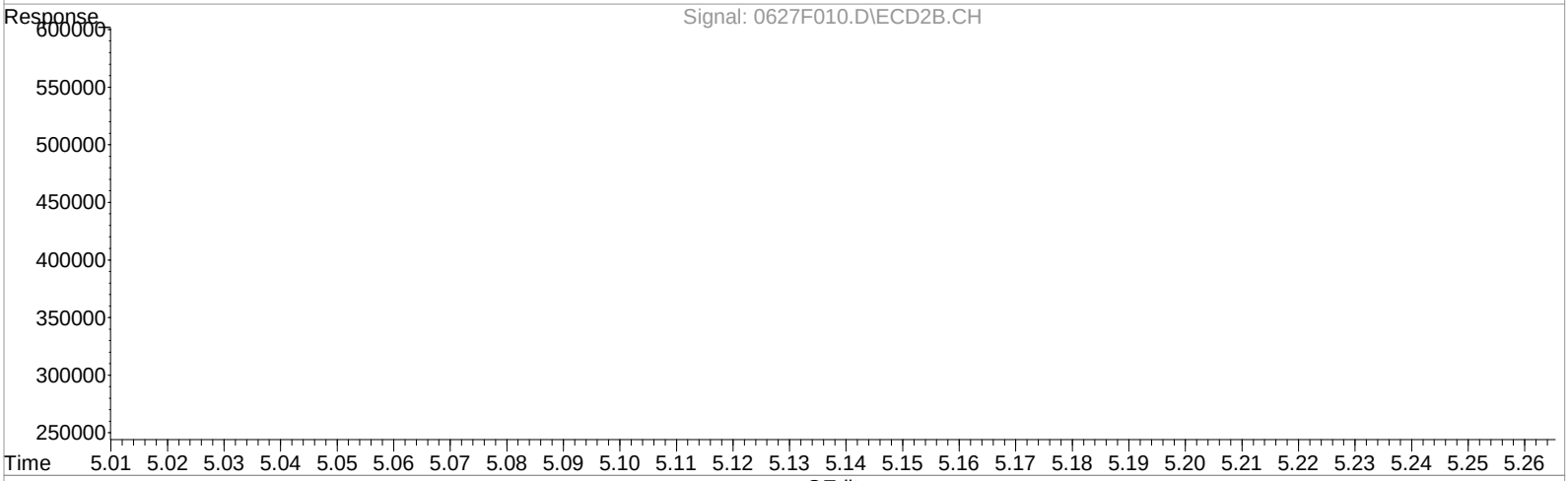
1st JED 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F010.D Vial: 8
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 3:25 pm Operator: SMS
Sample : K1805809-023 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:21:12 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.154min 4.789 ug/L

response 3138346

Manual Integration:

Before

06/28/18

(9) Pentachlorophenol #2 (M)

5.553min 3.981 ug/L

response 2512347

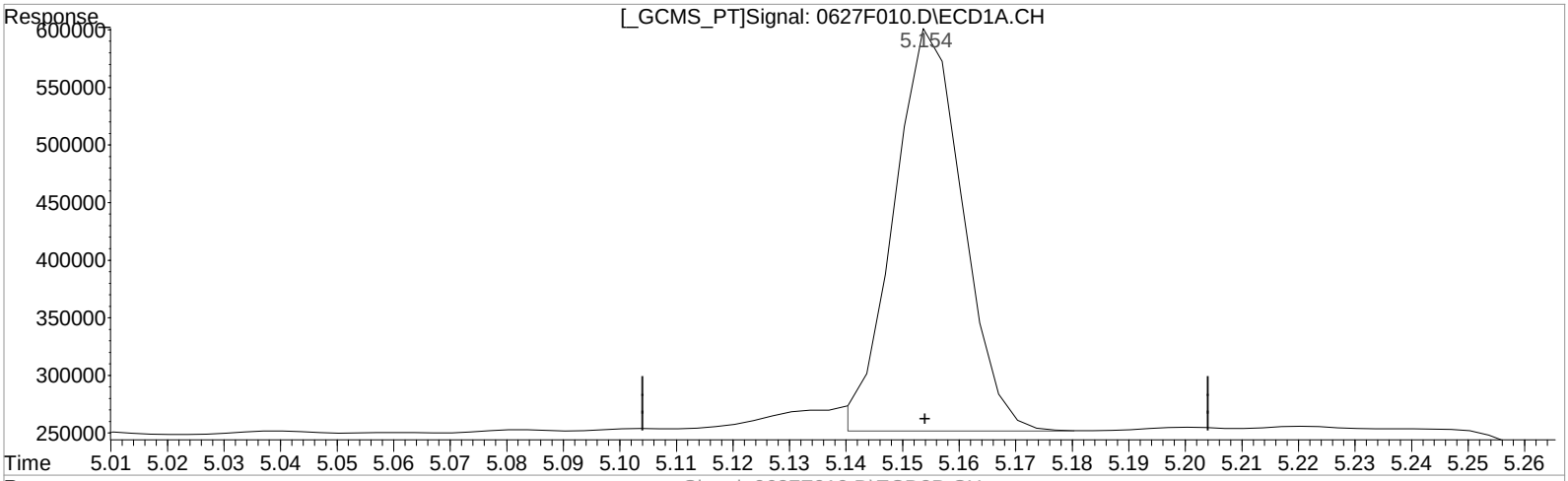
(+) = Expected Retention Time

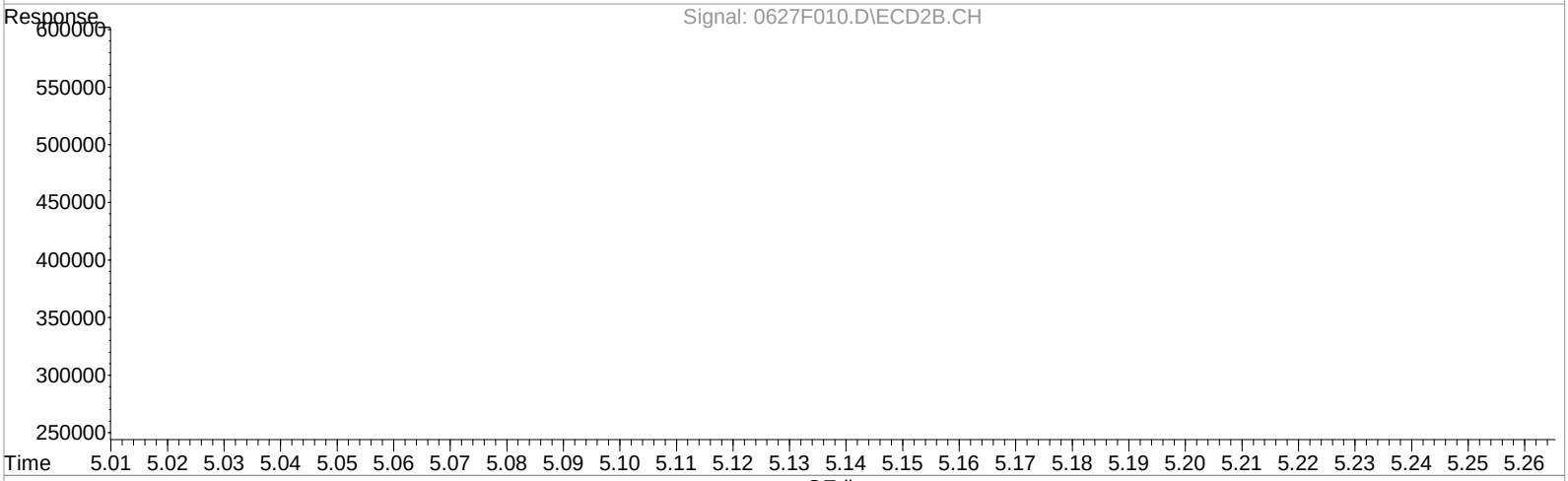
1st JED 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F010.D Vial: 8
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 3:25 pm Operator: SMS
Sample : K1805809-023 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:21:12 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.154min 4.475 ug/L m

response 2932638

Manual Integration:

After

Baseline/Shoulder

06/28/18

(9) Pentachlorophenol #2 (M)

5.553min 3.981 ug/L

response 2512347

(+) = Expected Retention Time

1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F011.D\
Lab ID: K1805809-024
RunType: N/A
Matrix: Water

Date Acquired: 6/27/18 15:42:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F011.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 15:42:00	**Vial:**	13
Run Type:	N/A	**Dilution:**	10
Lab ID:	K1805809-024	**Raw Units:**	ug/L

Bottle ID:	K1805809-024.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/17/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.02	4.58	2543192	1509202	5.268	4.186	105	84	84	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15	5.55	86595936	72069062	132.138	114.206	260	230	**230**	Y

Prep Amount:	5 mL	**Dilution:**	10
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F011.D Vial: 9
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 3:42 pm Operator: SMS
Sample : K1805809-024 10X Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:06:09 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
4) S	4-Bromo-2...	4.016	4.582	2543192	1509202	5.268	4.186
	Target Compounds						
1)	3,4-Dichl...	3.096	0.000	8170	0	0.470	N.D. d#
2)	3,5-Dichl...	0.000	3.902	0	8648	N.D. d	0.699
3)	2,4,6-Tri...	0.000	4.129	0	5024	N.D. d	0.016
5)	2,4,5-Tri...	0.000	4.649	0	3868	N.D. d	0.024
6)	3,4,5-Tri...	4.173f	4.729	80158	52408	0.477	0.354 #
7) M	2,3,5,6-T...	4.473	4.966	2152116	1487864	3.919	3.130
8) M	2,3,4,5-T...	5.016	0.000	10267	0	0.025	N.D. d#
9) M	Pentachlo...	5.153	5.552	86595936	72069062	132.138	114.206
10)	Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

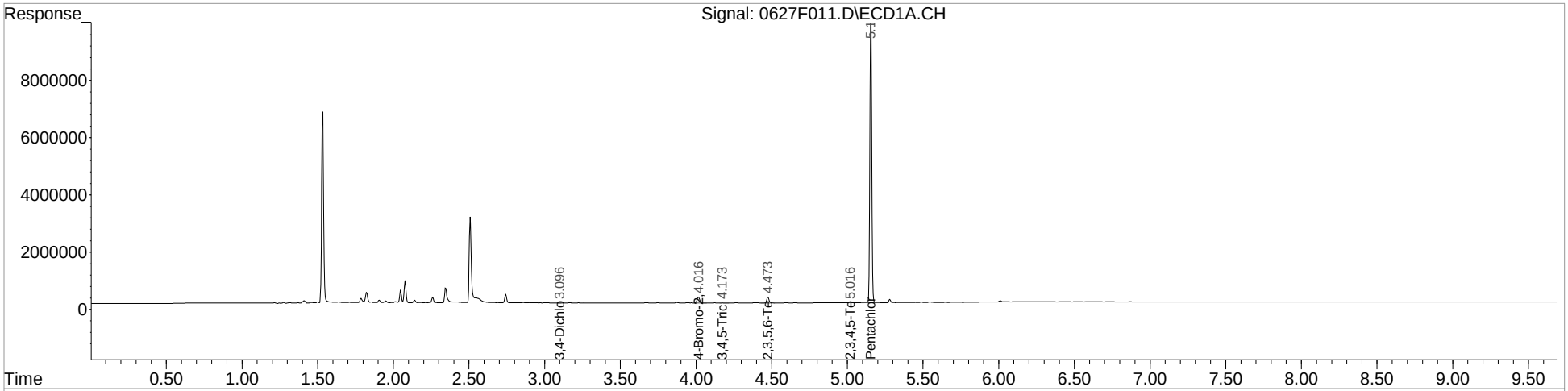
1st JED 06/28/18
2nd TP 07/05/18

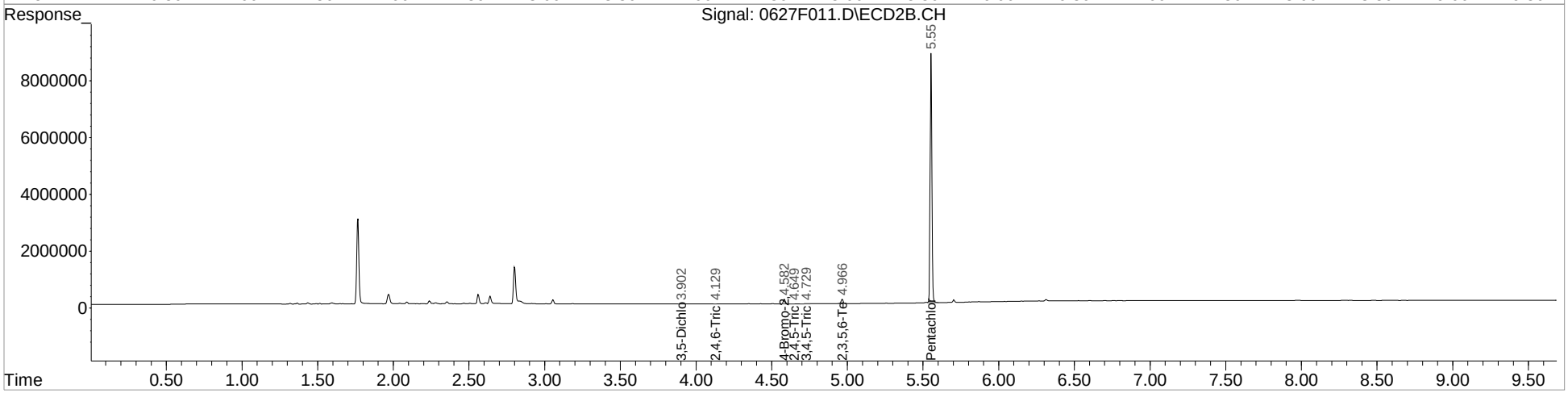
Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F011.D Vial: 9
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 3:42 pm Operator: SMS
Sample : K1805809-024 10X Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:06:09 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F012.D\
Lab ID: K1805809-025
RunType: N/A
Matrix: Water

Date Acquired: 6/27/18 15:59:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F012.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 15:59:00	**Vial:**	14
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-025	**Raw Units:**	ug/L

Bottle ID:	K1805809-025.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/17/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.02	4.58	21676958	16239866	44.905	45.046	90	90	90	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15	5.56 +0.01	81637	255016	0.125	0.404	0.025U	0.081J	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F012.D Vial: 10
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 3:59 pm Operator: SMS
Sample : K1805809-025 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:09:06 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
4) S	4-Bromo-2...	4.015	4.581	21676958	16239866	44.905	45.046
	Target Compounds						
1)	3,4-Dichl...	0.000	3.665	0	39238	N.D. d	0.953
2)	3,5-Dichl...	3.352	3.901	16678	15702	1.369	1.270
3)	2,4,6-Tri...	0.000	4.128	0	80580	N.D. d	0.251
5)	2,4,5-Tri...	4.169	4.668	325734	4626	1.259	0.029 #
6)	3,4,5-Tri...	4.229	4.718	7575	9543	0.045	0.064 #
7) M	2,3,5,6-T...	4.472	4.951	69829	260312	0.127	0.548 #
8) M	2,3,4,5-T...	5.035	0.000	26246	0	0.065	N.D. d#
9) M	Pentachlo...	5.152	5.565	81637	255016	0.125	0.404 #
10)	Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

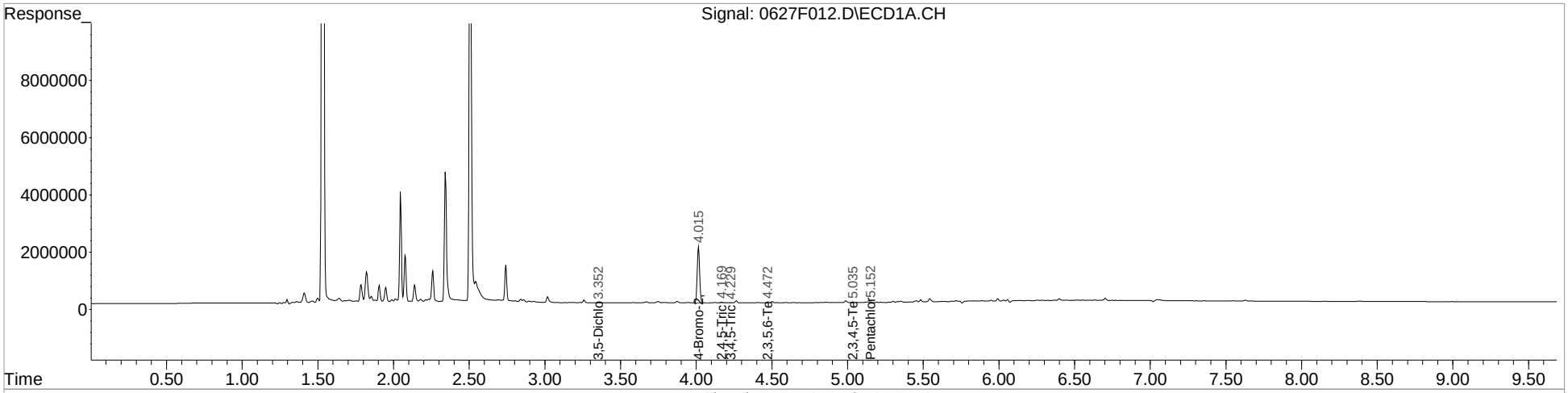
1st JED 06/28/18
2nd TP 07/05/18

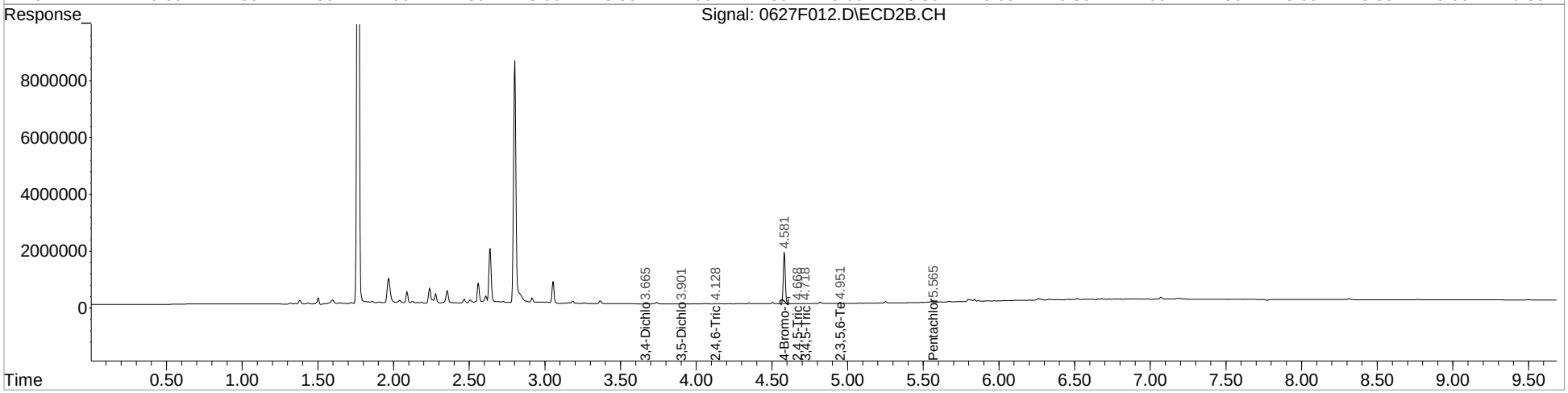
Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F012.D Vial: 10
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 3:59 pm Operator: SMS
Sample : K1805809-025 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:09:06 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F013.D\
Lab ID: K1805809-026
RunType: N/A
Matrix: Water

Date Acquired: 6/27/18 16:17:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F013.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 16:17:00	**Vial:**	15
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-026	**Raw Units:**	ug/L

Bottle ID:	K1805809-026.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.02	4.58	22830262	17343229	47.294	48.107	95	96	95	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.16 +0.01	5.55	256198	81874	0.391	0.130	0.078J	0.026U	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F013.D Vial: 11
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 4:17 pm Operator: SMS
Sample : K1805809-026 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:11:10 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.015	4.581	22830262	17343229	47.294	48.107
		Target Compounds						
1)		3,4-Dichl...	3.092	3.664	24307	47755	1.399	1.462
2)		3,5-Dichl...	0.000	3.901	0	8390	N.D. d	0.679
3)		2,4,6-Tri...	0.000	4.124	0	60940	N.D. d	0.190
5)		2,4,5-Tri...	4.165	4.668	350572	3944	1.406	0.025 #
6)		3,4,5-Tri...	4.225	4.701	11252	38150	0.067	0.257 #
7)	M	2,3,5,6-T...	4.475	4.951	78776	306924	0.143	0.646 #
8)	M	2,3,4,5-T...	4.992	0.000	737880	0	1.821	N.D. d#
9)	M	Pentachlo...	5.155	5.554	256198	81874	0.391	0.130 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

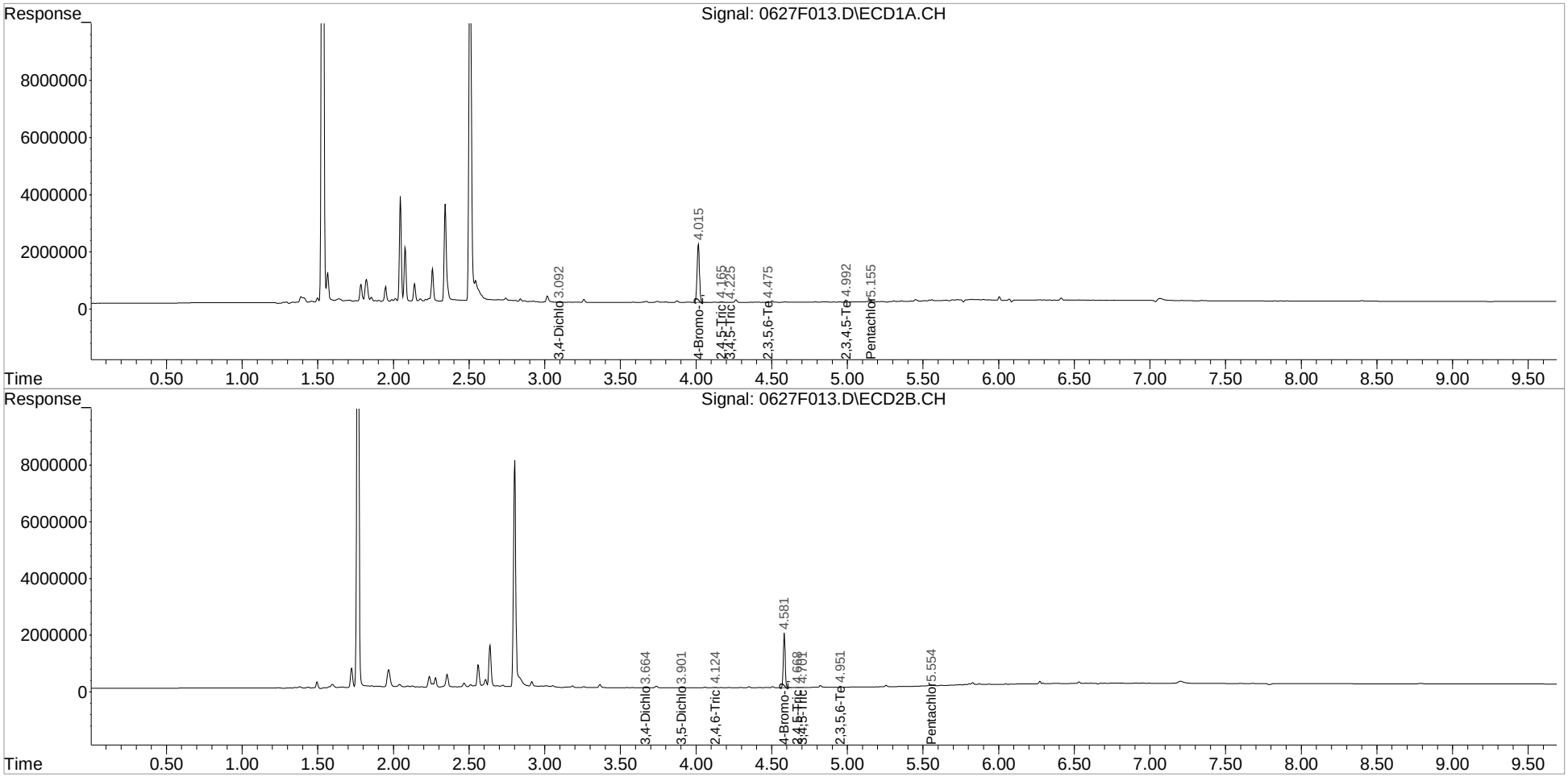
1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F013.D Vial: 11
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 4:17 pm Operator: SMS
Sample : K1805809-026 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:11:10 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F014.D\
Lab ID: K1805809-027
RunType: N/A
Matrix: Water

Date Acquired: 6/27/18 16:34:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F014.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 16:34:00	**Vial:**	16
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-027	**Raw Units:**	ug/L

Bottle ID:	K1805809-027.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01 +0.01	4.58	22207426	16996924	46.004	47.146	92	94	92	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15	5.57 +0.02	279134	168415	0.426	0.267	0.085J	0.053U	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F014.D Vial: 12
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 4:34 pm Operator: SMS
Sample : K1805809-027 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:12:58 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
4) S	4-Bromo-2...	4.013	4.583	22207426	16996924	46.004	47.146
	Target Compounds						
1)	3,4-Dichl...	3.133	3.666	15909	46182	0.916	1.367 #
2)	3,5-Dichl...	0.000	3.899	0	11788	N.D. d	0.953
3)	2,4,6-Tri...	0.000	4.113	0	175938	N.D. d	0.547
5)	2,4,5-Tri...	4.167	4.639	294483	28163	1.074	0.175 #
6)	3,4,5-Tri...	4.223	4.699	63666	15655	0.379	0.106 #
7) M	2,3,5,6-T...	4.473	4.949	75933	307570	0.138	0.647 #
8) M	2,3,4,5-T...	5.017	5.376	289374	309224	0.714	0.176 #
9) M	Pentachlo...	5.153	5.566	279134	168415	0.426	0.267 #
10)	Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

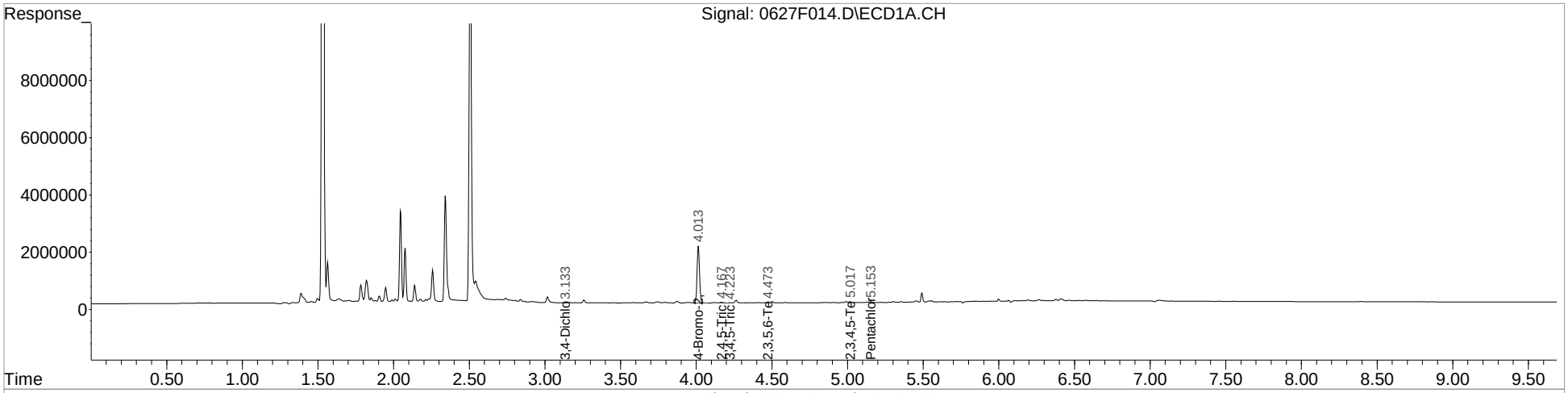
1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F014.D Vial: 12
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 4:34 pm Operator: SMS
Sample : K1805809-027 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:12:58 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F017.D\
Lab ID: K1805809-028
RunType: N/A
Matrix: Water

Date Acquired: 6/27/18 17:25:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F017.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 17:25:00	**Vial:**	17
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-028	**Raw Units:**	ug/L

Bottle ID:	K1805809-028.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	21965056	16811120	45.502	46.631	91	93	91	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15	5.57 +0.02	191447	167371	0.292	0.265	0.058U	0.053U	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F017.D Vial: 13
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 5:25 pm Operator: SMS
Sample : K1805809-028 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:22:09 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
4) S	4-Bromo-2...	4.010	4.579	21965056	16811120	45.502	46.631
	Target Compounds						
1)	3,4-Dichl...	3.127	0.000	23699	0	1.364	N.D. d#
2)	3,5-Dichl...	0.000	3.896	0	18616	N.D. d	1.506
3)	2,4,6-Tri...	0.000	4.126	0	73102	N.D. d	0.227
5)	2,4,5-Tri...	4.163	4.639	331947	15488	1.296	0.096 #
6)	3,4,5-Tri...	4.223	4.736	6972	54500	0.041	0.368 #
7) M	2,3,5,6-T...	4.470	4.949	23323	264300	0.042	0.556 #
8) M	2,3,4,5-T...	5.033	0.000	39376	0	0.097	N.D. d#
9) M	Pentachlo...	5.150	5.566	191447	167371	0.292	0.265
10)	Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

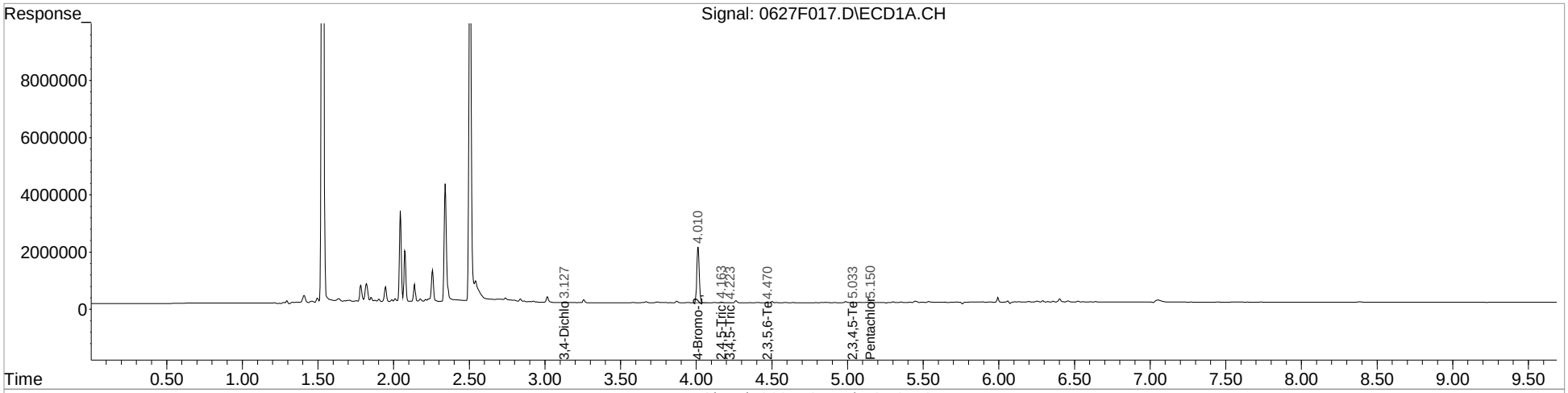
1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F017.D Vial: 13
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 5:25 pm Operator: SMS
Sample : K1805809-028 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:22:09 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F019.D\
Lab ID: K1805809-029
RunType: N/A
Matrix: Water

Date Acquired: 6/27/18 17:59:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F019.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 17:59:00	**Vial:**	19
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-029	**Raw Units:**	ug/L

Bottle ID:	K1805809-029.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	22661082	17792568	46.944	49.353	94	99	94	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.13 -0.02	5.55	271746	37928	0.415	0.060	0.083J	0.012U	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F019.D Vial: 15
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 5:59 pm Operator: SMS
Sample : K1805809-029 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:25:39 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.012	4.582	22661082	17792568	46.944	49.353
		Target Compounds						
1)		3,4-Dichl...	0.000	3.662	0	52500	N.D. d	1.745
2)		3,5-Dichl...	0.000	3.898	0	31328	N.D. d	2.534
3)		2,4,6-Tri...	0.000	4.125	0	129386	N.D. d	0.402
5)		2,4,5-Tri...	4.166	4.642	299112	13770	1.102	0.086 #
6)		3,4,5-Tri...	4.222	4.702	38492	5125	0.229	0.035 #
7)	M	2,3,5,6-T...	4.462	4.948	30351	349686	0.055	0.736 #
8)	M	2,3,4,5-T...	5.036	0.000	21404	0	0.053	N.D. d#
9)	M	Pentachlo...	5.132	5.548	271746	37928	0.415	0.060 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

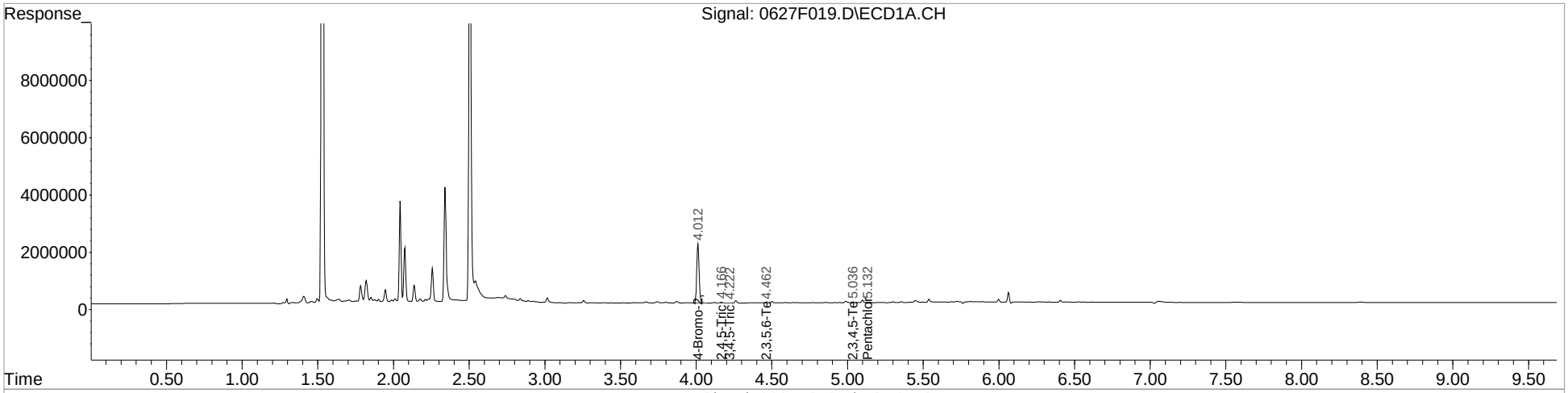
1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F019.D Vial: 15
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 5:59 pm Operator: SMS
Sample : K1805809-029 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:25:39 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F018.D\
Lab ID: K1805809-030
RunType: N/A
Matrix: Water

Date Acquired: 6/27/18 17:42:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F018.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 17:42:00	**Vial:**	18
Run Type:	N/A	**Dilution:**	1
Lab ID:	K1805809-030	**Raw Units:**	ug/L

Bottle ID:	K1805809-030.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/17/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	K1805809
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	22143322	16953698	45.871	47.027	92	94	92	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15	5.55	60020912	50896562	91.587	80.655	18	16	**16**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F018.D Vial: 14
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 5:42 pm Operator: SMS
Sample : K1805809-030 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:23:41 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
4) S	4-Bromo-2...	4.011	4.581	22143322	16953698	45.871	47.027
	Target Compounds						
1)	3,4-Dichl...	0.000	3.664	0	39659	N.D. d	0.978
2)	3,5-Dichl...	0.000	3.897	0	16150	N.D. d	1.306
3)	2,4,6-Tri...	0.000	4.124	0	150774	N.D. d	0.469
5)	2,4,5-Tri...	4.165	4.664	253640	10728	0.833	0.067 #
6)	3,4,5-Tri...	4.225	4.734	29034	18120	0.173	0.122 #
7) M	2,3,5,6-T...	4.468	4.961	2846538	2372306	5.183	4.991
8) M	2,3,4,5-T...	5.035	0.000	20788	0	0.051	N.D. d#
9) M	Pentachlo...	5.151	5.547	60020912	50896562	91.587	80.655
10)	Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

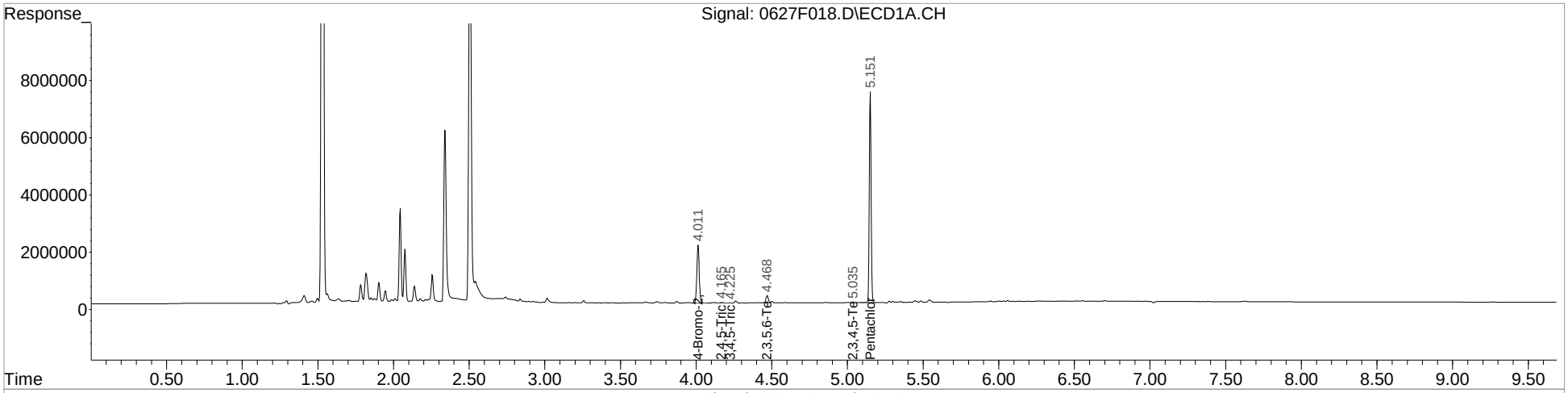
1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F018.D Vial: 14
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 5:42 pm Operator: SMS
Sample : K1805809-030 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:23:41 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F032.D\
Lab ID: KQ1808475-04
RunType: MB
Matrix: Water

Date Acquired: 6/29/18 17:28:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F032.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 17:28:00	**Vial:**	32
Run Type:	MB	**Dilution:**	1
Lab ID:	KQ1808475-04	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	KQ1808475
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01 -0.01	4.58	20169241	15148110	41.782	42.018	84	84	84	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.16	5.57 +0.02	25220	230318	0.038	0.365	0.0076U	0.073J	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F032.D Vial: 26
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 5:28 pm Operator: MC
Sample : MB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 07:40:49 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.014	4.584	20169241	15148110	41.782	42.018
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.158	5.574	25220	230318	0.038	0.365 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

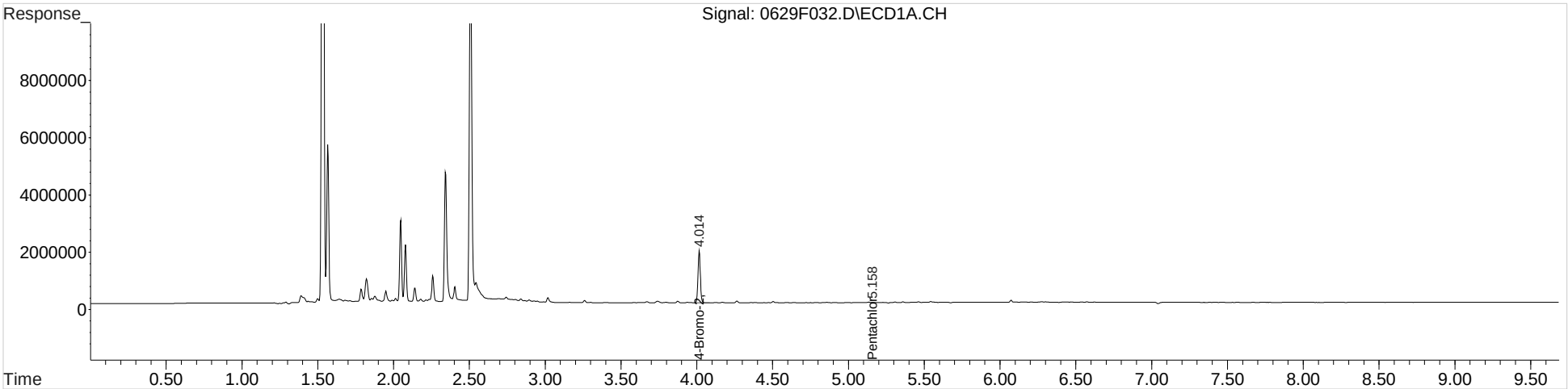
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F032.D Vial: 26
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 5:28 pm Operator: MC
Sample : MB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 07:40:49 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F026.D\
Lab ID: KQ1808476-04
RunType: MB
Matrix: Water

Date Acquired: 6/27/18 20:00:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery - Rtx-1701	2,4,6-Trichlorophenol	22		20	RO
Continuing Calibration Recovery (Closing) - Rtx-1701	2,4,6-Trichlorophenol	24		20	RO

Primary Review: _____

Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F026.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 20:00:00	**Vial:**	26
Run Type:	MB	**Dilution:**	1
Lab ID:	KQ1808476-04	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	II	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/20/18	**Receive Date:**	6/21/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	KQ1808476
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	22851892	17644596	47.339	48.943	95	98	95	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
2,4,5-Trichlorophenol	4.16 -0.03	4.64 -0.01	316970	18402	1.207	0.114	0.24J	0.023U	0.16 U	Y
2,4,6-Trichlorophenol	0.00	4.11 -0.02	0	145114	0.000CCV	0.451	0U	0.090J	0.042 U	Y
3,4,5-Trichlorophenol	4.22	4.70 -0.02	29797	44414	0.177	0.300	0.035U	0.060U	0.15 U	Y
2,3,4,5-Tetrachlorophenol	5.04 +0.03	0.00	13092	0	0.032	0.000	0.0064U	0U	0.042 U	Y
2,3,5,6-Tetrachlorophenol	4.47	4.95 -0.01	18770	280996	0.034	0.591	0.0068U	0.12J	0.032 U	Y
Pentachlorophenol (PCP)	5.13 -0.02	5.56 +0.01	270550	193890	0.413	0.307	0.083J	0.061U	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F026.D Vial: 22
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 8:00 pm Operator: SMS
Sample : KQ1808476-04 MB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:51:35 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.012	4.581	22851892	17644596	47.339	48.943
		Target Compounds						
1)		3,4-Dichl...	0.000	3.664	0	48752	N.D. d	1.521
2)		3,5-Dichl...	0.000	3.898	0	22609	N.D. d	1.829
3)		2,4,6-Tri...	0.000	4.111	0	145114	N.D. d	0.451
5)		2,4,5-Tri...	4.165	4.638	316970	18402	1.207	0.114 #
6)		3,4,5-Tri...	4.225	4.704	29797	44414	0.177	0.300 #
7)	M	2,3,5,6-T...	4.468	4.951	18770	280996	0.034	0.591 #
8)	M	2,3,4,5-T...	5.038	0.000	13092	0	0.032	N.D. d#
9)	M	Pentachlo...	5.132	5.564	270550	193890	0.413	0.307 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

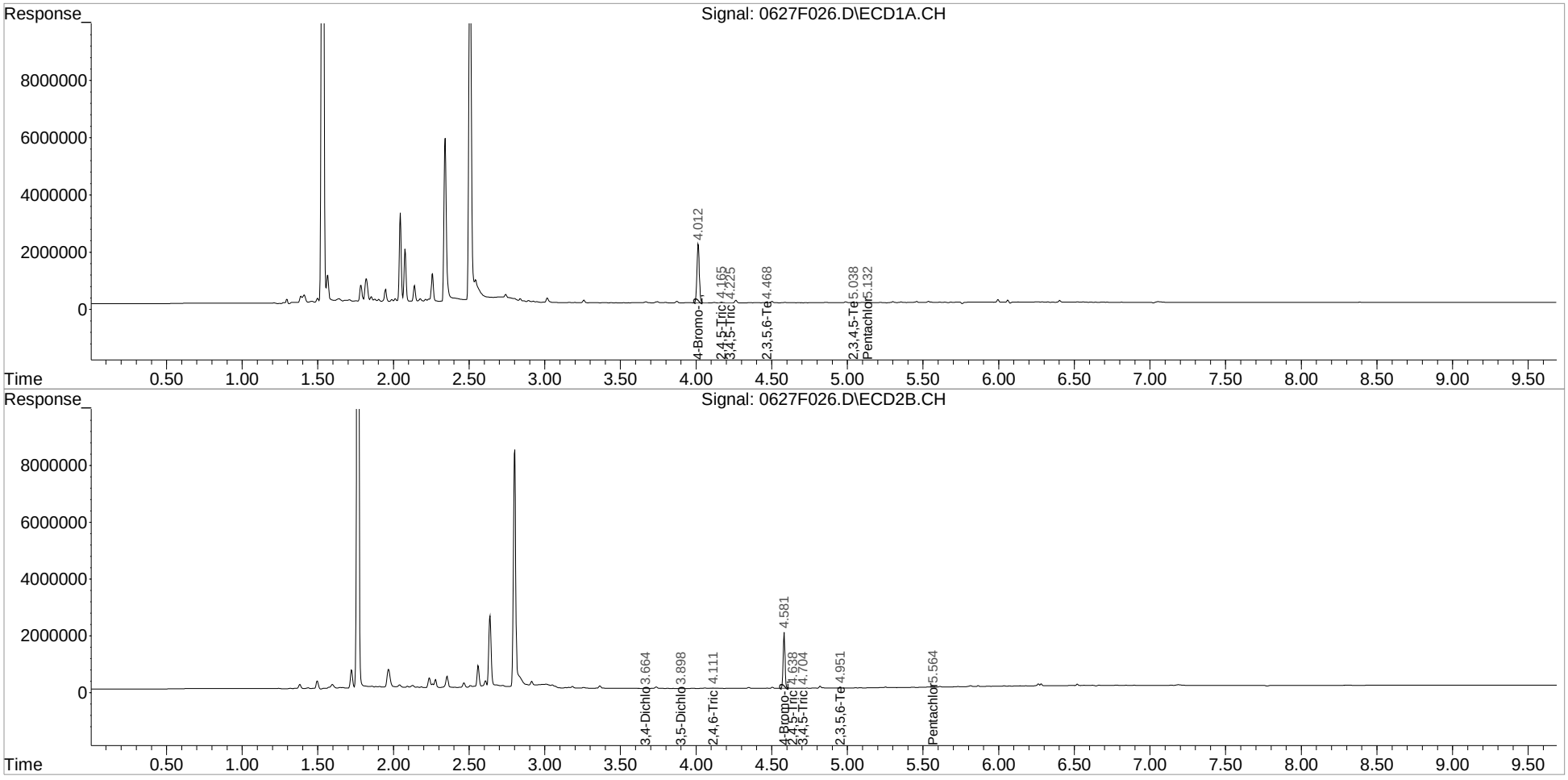
1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F026.D Vial: 22
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 8:00 pm Operator: SMS
Sample : KQ1808476-04 MB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:51:35 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F031.D\
Lab ID: KQ1808475-03
RunType: LCS
Matrix: Water

Date Acquired: 6/29/18 17:11:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F031.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 17:11:00	**Vial:**	31
Run Type:	LCS	**Dilution:**	1
Lab ID:	KQ1808475-03	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	KQ1808475
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01 -0.01	4.58	22442788	16831940	46.492	46.689	93	93	93	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15 -0.01	5.55	28118200	23059036	42.906	36.541	8.58	7.31	**7.31**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F031.D Vial: 25
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 5:11 pm Operator: MC
Sample : LCS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 07:37:28 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.014	4.583	22442788	16831940	46.492	46.689
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.154	5.550	28118200	23059036	42.906	36.541
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

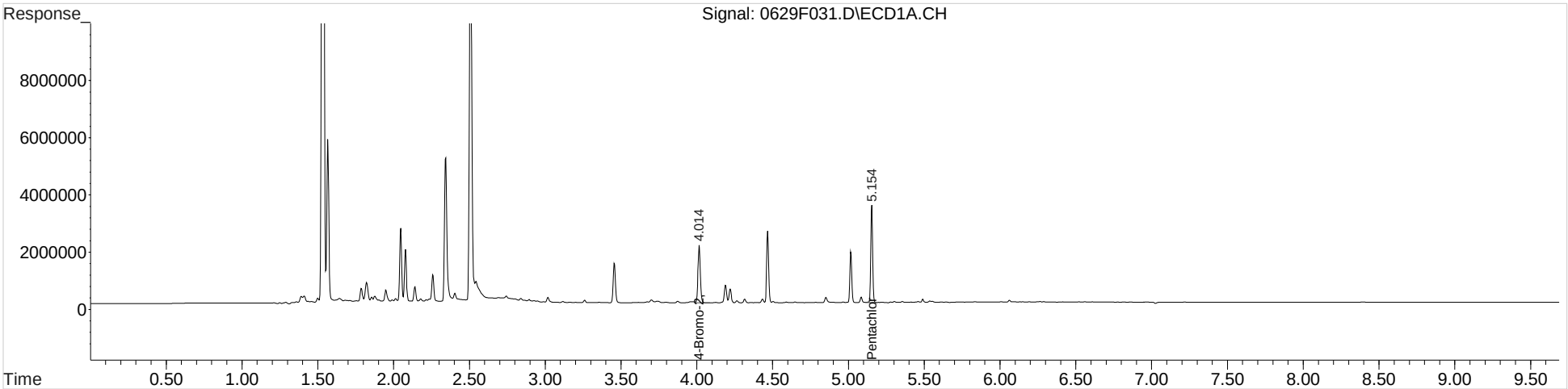
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F031.D Vial: 25
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 5:11 pm Operator: MC
Sample : LCS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 07:37:28 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JAD 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F025.D\
Lab ID: KQ1808476-03
RunType: LCS
Matrix: Water

Date Acquired: 6/27/18 19:43:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery - Rtx-1701	2,4,6-Trichlorophenol	22		20	RO
Continuing Calibration Recovery (Closing) - Rtx-1701	2,4,6-Trichlorophenol	24		20	RO

Primary Review: _____

Secondary Review: _____

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1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F025.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 19:43:00	**Vial:**	25
Run Type:	LCS	**Dilution:**	1
Lab ID:	KQ1808476-03	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	II	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/20/18	**Receive Date:**	6/21/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	KQ1808476
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	22854646	17228886	47.345	47.790	95	96	95	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
2,4,5-Trichlorophenol	4.19	4.65	6378628	4895510	38.648	30.436	7.73	6.09	**6.09**	Y
2,4,6-Trichlorophenol	3.46 +0.01	4.13	14094586	11770654	49.518 CCV	36.616	9.90	7.32	**7.32**	Y
3,4,5-Trichlorophenol	4.22	4.72	4991130	3950622	29.683	26.662	5.94	5.33	**5.33**	Y
2,3,4,5-Tetrachlorophenol	5.01	5.36 -0.01	15204751	12702475	37.520	39.708	7.50	7.94	**7.50**	Y
2,3,5,6-Tetrachlorophenol	4.47	4.96	23437007	20544252	42.677	43.220	8.54	8.64	**8.54**	Y
Pentachlorophenol (PCP)	5.15	5.55	28986436	23820278	44.231	37.748	8.85	7.55	**7.55**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F025.D Vial: 21
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 7:43 pm Operator: SMS
Sample : KQ1808476-03 LCS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:50:22 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.013	4.582	22854646	17228886	47.345	47.790	
		Target Compounds							
1)		3,4-Dichl...	3.116	3.652	365560	377396	21.047	21.618	
2)		3,5-Dichl...	3.356	3.899	41408	131199	3.399	10.611	#
3)		2,4,6-Tri...	3.456	4.125	14094586	11770654	49.518	36.616	#
5)		2,4,5-Tri...	4.189	4.652	6378628	4895510	38.648	30.436	
6)		3,4,5-Tri...	4.219	4.715	4991130	3950622	29.683	26.662	
7)	M	2,3,5,6-T...	4.466	4.955	23437007	20544252	42.677	43.220	
8)	M	2,3,4,5-T...	5.013	5.362	15204751	12702475	37.520	39.708	
9)	M	Pentachlo...	5.149	5.545	28986436	23820278	44.231	37.748	
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

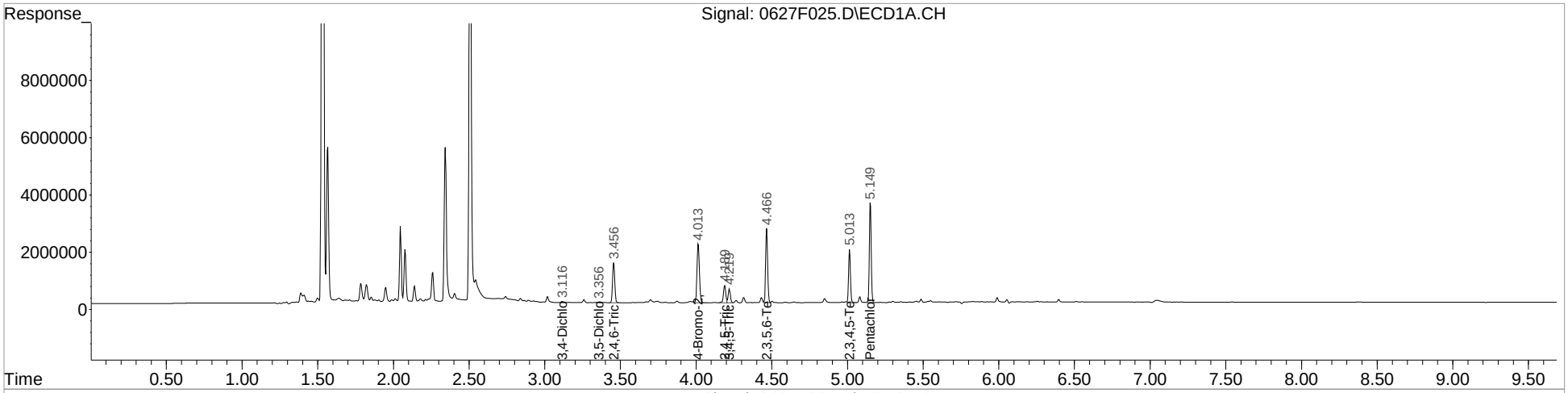
1st JED 06/28/18
2nd TP 07/05/18

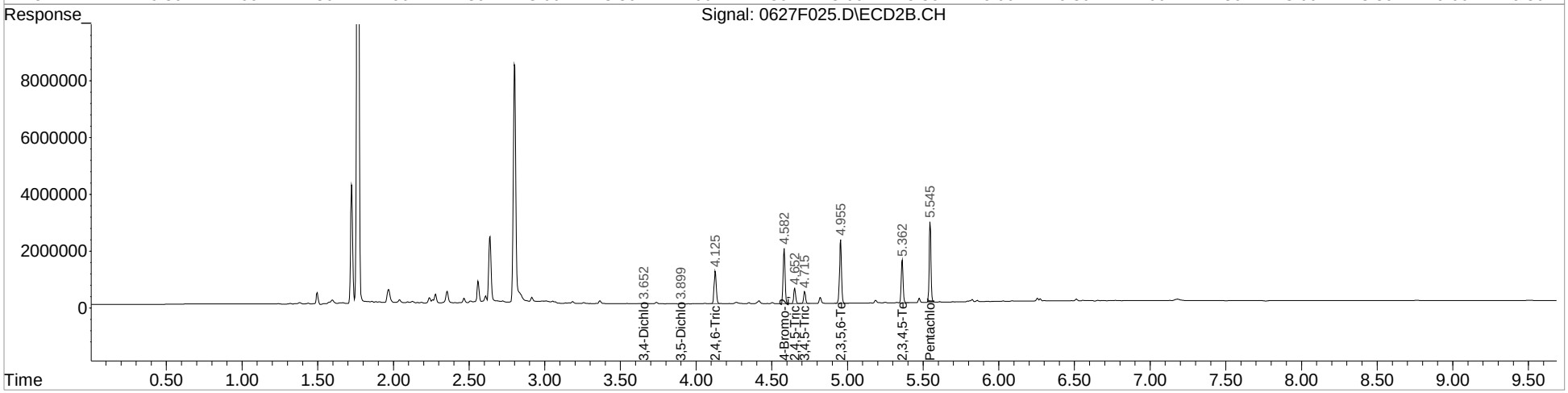
Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F025.D Vial: 21
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 7:43 pm Operator: SMS
Sample : KQ1808476-03 LCS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:50:22 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F029.D\
Lab ID: KQ1808475-01
RunType: MS
Matrix: Water

Date Acquired: 6/29/18 16:36:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F029.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 16:36:00	**Vial:**	29
Run Type:	MS	**Dilution:**	1
Lab ID:	KQ1808475-01	**Raw Units:**	ug/L

Bottle ID:	K1805809-020.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	KQ1808475
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.01 -0.01	4.58	21378956	16123788	44.288	44.724	89	89	89	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.16	5.55	45480220	37793441	69.399	59.891	13.9	12.0	**12.0**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F029.D Vial: 23
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 4:36 pm Operator: MC
Sample : K1805809-020 MS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:16:24 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.015	4.584	21378956	16123788	44.288	44.724
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.158	5.554	45480220	37793441	69.399	59.891
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

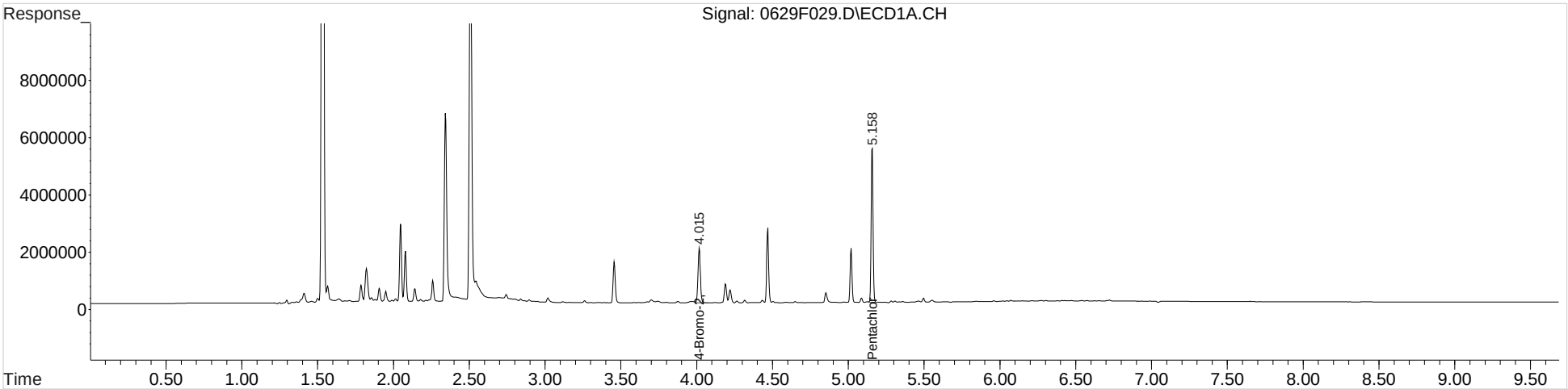
1st mc 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F029.D Vial: 23
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 4:36 pm Operator: MC
Sample : K1805809-020 MS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:16:24 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F023.D\
Lab ID: KQ1808476-01
RunType: MS
Matrix: Water

Date Acquired: 6/27/18 19:08:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery - Rtx-1701	2,4,6-Trichlorophenol	22		20	
Continuing Calibration Recovery (Closing) - Rtx-1701	2,4,6-Trichlorophenol	24		20	~~RO~~ RO

Primary Review: _____

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Secondary Review: _____

1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F023.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 19:08:00	**Vial:**	23
Run Type:	MS	**Dilution:**	1
Lab ID:	KQ1808476-01	**Raw Units:**	ug/L

Bottle ID:	K1805809-030.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/17/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	KQ1808476
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.01	4.58	24570332	17979960	50.899	49.873	102	100	100	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
2,4,5-Trichlorophenol	4.19	4.65	7603922	5664151	46.640	35.215	9.33	7.04	**7.04**	Y
2,4,6-Trichlorophenol	3.46 +0.01	4.13	16271976	13098514	57.334CCV	40.746	11.5	8.15	**8.15**	Y
3,4,5-Trichlorophenol	4.22	4.72	5922788	4740512	35.224	31.993	7.04	6.40	**6.40**	Y
2,3,4,5-Tetrachlorophenol	5.01	5.36 -0.01	17560890	14161767	43.335	44.363	8.67	8.87	**8.67**	Y
2,3,5,6-Tetrachlorophenol	4.47	4.96	29015790	24202040	52.836	50.915	10.6	10.2	**10.2**	Y
Pentachlorophenol (PCP)	5.15	5.55	95280764	78043486	145.390	123.674	29.1	24.7	**24.7**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F023.D Vial: 19
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 7:08 pm Operator: SMS
Sample : K1805809-030 MS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:34:10 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.017	4.583	24570332	17979960	50.899	49.873	
		Target Compounds							
1)		3,4-Dichl...	3.117	3.656	514042	447788	29.596	26.045	
2)		3,5-Dichl...	3.357	3.899	245806	140295	20.177	11.347	#
3)		2,4,6-Tri...	3.457	4.126	16271976	13098514	57.334	40.746	#
5)		2,4,5-Tri...	4.190	4.653	7603922	5664151	46.640	35.215	
6)		3,4,5-Tri...	4.220	4.716	5922788	4740512	35.224	31.993	
7)	M	2,3,5,6-T...	4.467	4.956	29015790	24202040	52.836	50.915	
8)	M	2,3,4,5-T...	5.013	5.363	17560890	14161767	43.335	44.363	
9)	M	Pentachlo...	5.153	5.549	95280764	78043486	145.390	123.674	
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

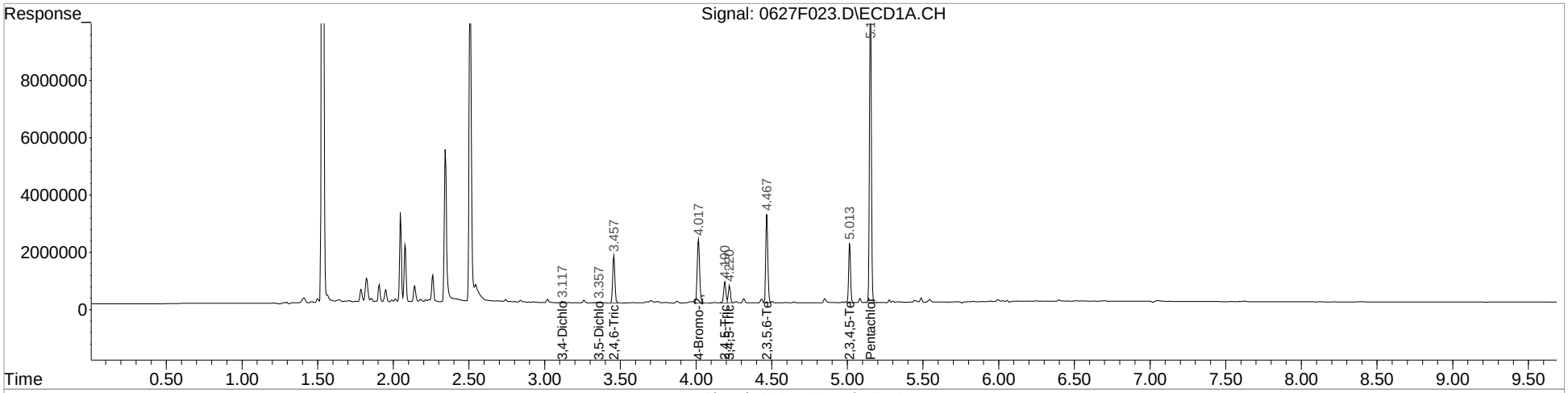
1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F023.D Vial: 19
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 7:08 pm Operator: SMS
Sample : K1805809-030 MS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:34:10 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F030.D\
Lab ID: KQ1808475-02
RunType: DMS
Matrix: Water

Date Acquired: 6/29/18 16:53:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st mc 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F030.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 16:53:00	**Vial:**	30
Run Type:	DMS	**Dilution:**	1
Lab ID:	KQ1808475-02	**Raw Units:**	ug/L

Bottle ID:	K1805809-020.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**	316493	**Report Group:**	KQ1808475
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02	4.58	22689448	16988828	47.003	47.124	94	94	94	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.16	5.55	46247152	38449443	70.569	60.930	14.1	12.2	**12.2**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F030.D Vial: 24
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 4:53 pm Operator: MC
Sample : K1805809-020 DMS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:19:35 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.017	4.583	22689448	16988828	47.003	47.124
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.157	5.553	46247152	38449443	70.569	60.930
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

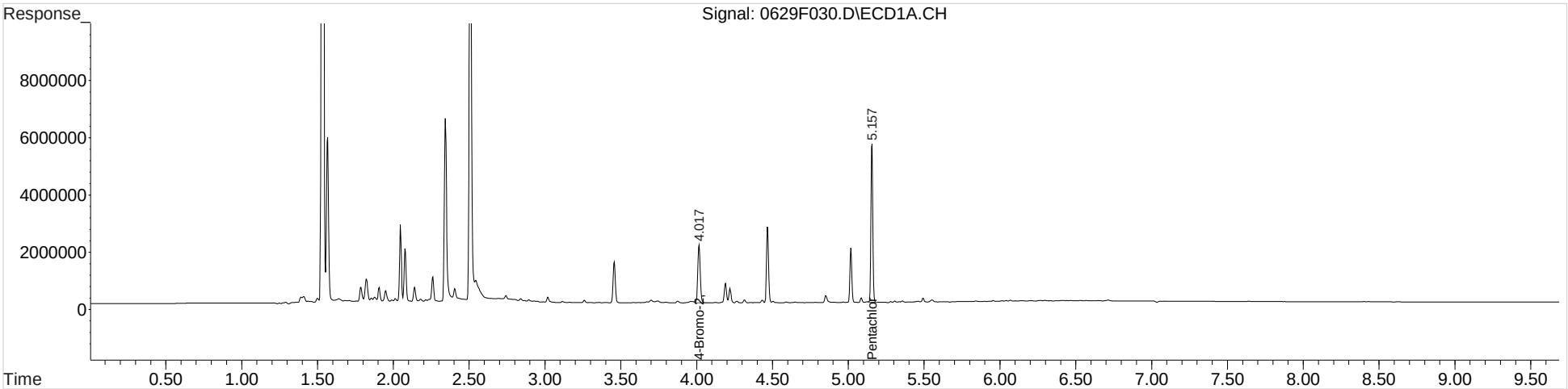
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F030.D Vial: 24
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 4:53 pm Operator: MC
Sample : K1805809-020 DMS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:19:35 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JAD 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F024.D\
Lab ID: KQ1808476-02
RunType: DMS
Matrix: Water

Date Acquired: 6/27/18 19:26:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery - Rtx-1701	2,4,6-Trichlorophenol	22		20	RO
Continuing Calibration Recovery (Closing) - Rtx-1701	2,4,6-Trichlorophenol	24		20	RO

Primary Review: _____

Secondary Review: _____

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1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F024.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 19:26:00	**Vial:**	24
Run Type:	DMS	**Dilution:**	1
Lab ID:	KQ1808476-02	**Raw Units:**	ug/L

Bottle ID:	K1805809-030.02	**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/17/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**	316494	**Report Group:**	KQ1808476
Analysis	8151A Modified	**Prep Method:**	Method		
		Prep Date:	6/22/18		

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.02 +0.01	4.58	23872620	17659922	49.454	48.985	99	98	98	55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
2,4,5-Trichlorophenol	4.19	4.65	6817386	5129216	41.492	31.889	8.30	6.38	**6.38**	Y
2,4,6-Trichlorophenol	3.46 +0.01	4.13	15111440	12489028	53.168CCV	38.850	10.6	7.77	**7.77**	Y
3,4,5-Trichlorophenol	4.22	4.72	5047548	4073890	30.019	27.494	6.00	5.50	**5.50**	Y
2,3,4,5-Tetrachlorophenol	5.02 +0.01	5.36 -0.01	16481252	13399904	40.670	41.932	8.13	8.39	**8.13**	Y
2,3,5,6-Tetrachlorophenol	4.47	4.96	27908284	23979925	50.819	50.447	10.2	10.1	**10.1**	Y
Pentachlorophenol (PCP)	5.15	5.55	92984010	77510332	141.885	122.829	28.4	24.6	**24.6**	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F024.D Vial: 20
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 7:26 pm Operator: SMS
Sample : K1805809-030 DMS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:48:31 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.016	4.582	23872620	17659922	49.454	48.985	
		Target Compounds							
1)		3,4-Dichl...	3.116	3.655	394286	361543	22.701	20.627	
2)		3,5-Dichl...	3.356	3.898	35597	117133	2.922	9.473	#
3)		2,4,6-Tri...	3.456	4.128	15111440	12489028	53.168	38.850	#
5)		2,4,5-Tri...	4.189	4.652	6817386	5129216	41.492	31.889	
6)		3,4,5-Tri...	4.219	4.718	5047548	4073890	30.019	27.494	
7)	M	2,3,5,6-T...	4.466	4.955	27908284	23979925	50.819	50.447	
8)	M	2,3,4,5-T...	5.016	5.362	16481252	13399904	40.670	41.932	
9)	M	Pentachlo...	5.152	5.548	92984010	77510332	141.885	122.829	
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

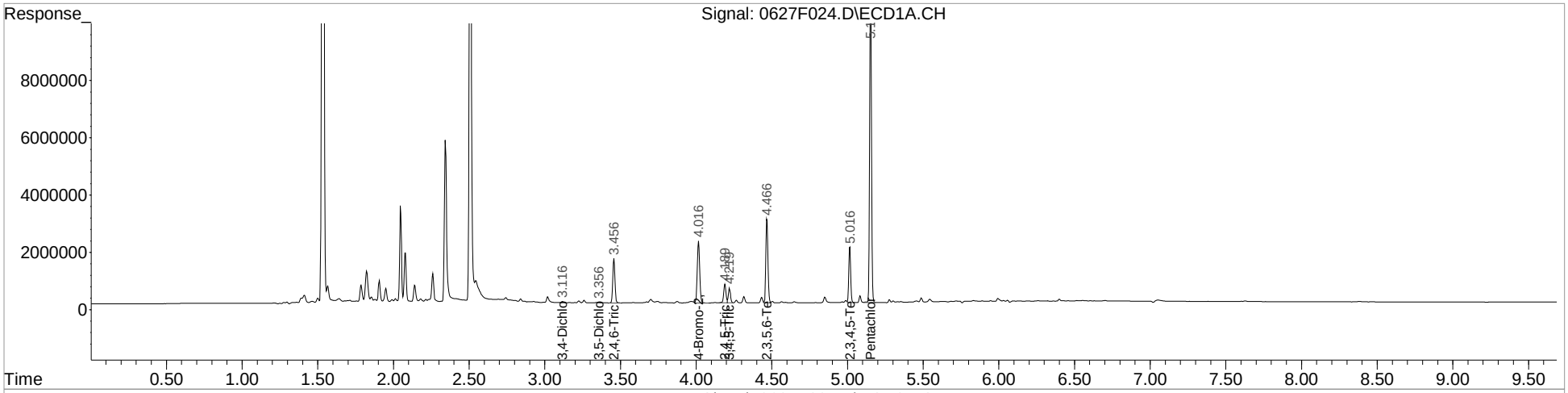
1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F024.D Vial: 20
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 7:26 pm Operator: SMS
Sample : K1805809-030 DMS Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 11:48:31 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JAD 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F004.D\
Lab ID: KQ1808738-04
RunType: CCB
Matrix: Water

Date Acquired: 6/27/18 13:41:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Above Highest ICAL Level		X
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing) - Rtx-1701	2,4,6-Trichlorophenol	22		20	RO
Above Highest ICAL Level - Rtx-1701	2,4,5-Trichlorophenol	895.285		233.45	quaderr

Primary Review: _____

Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F004.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 13:41:00	**Vial:**	4
Run Type:	CCB	**Dilution:**	1
Lab ID:	KQ1808738-04	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**		**Report Group:**	KQ1808738
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	3.99 -0.01	0.00	69534	0	0.144	0.000				55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
2,4,5-Trichlorophenol	4.17 -0.01	4.64 -0.01	35292	23988	895.285	0.149	180E	0.030U	0.16 U	Y
2,4,6-Trichlorophenol	0.00	4.14 +0.02	0	8488	0.000CCV	0.026	0U	0.0052U	0.042 U	Y
3,4,5-Trichlorophenol	4.26 +0.05	4.72 +0.01	12504	37644	0.074	0.254	0.015U	0.051U	0.15 U	Y
2,3,4,5-Tetrachlorophenol	4.99 -0.02	0.00	13672	0	0.034	0.000	0.0068U	0U	0.042 U	Y
2,3,5,6-Tetrachlorophenol	4.45 -0.01	4.98 +0.03	31054	4470	0.057	0.009	0.011U	0.0018U	0.032 U	Y
Pentachlorophenol (PCP)	5.13 -0.02	5.53 -0.02	200364	179268	0.306	0.284	0.061U	0.057U	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F004.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 1:41 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:38:17 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
4) S	4-Bromo-2...	3.992	0.000	69534	0	0.144	N.D. #
	Target Compounds						
1)	3,4-Dichl...	3.092	0.000	13198	0	0.760	N.D. d#
2)	3,5-Dichl...	3.319f	0.000	15078	0	1.238	N.D. d#
3)	2,4,6-Tri...	0.000	4.138	0	8488	N.D. d	0.026
5)	2,4,5-Tri...	4.169	4.638	35292	23988	895.285	0.149 #
6)	3,4,5-Tri...	4.256f	4.718	12504	37644	0.074	0.254 #
7) M	2,3,5,6-T...	4.446	4.975	31054	4470	0.057	0.009 #
8) M	2,3,4,5-T...	4.992	0.000	13672	0	0.034	N.D. #
9) M	Pentachlo...	5.129	5.532f	200364	179268	0.306	0.284m
10)	Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

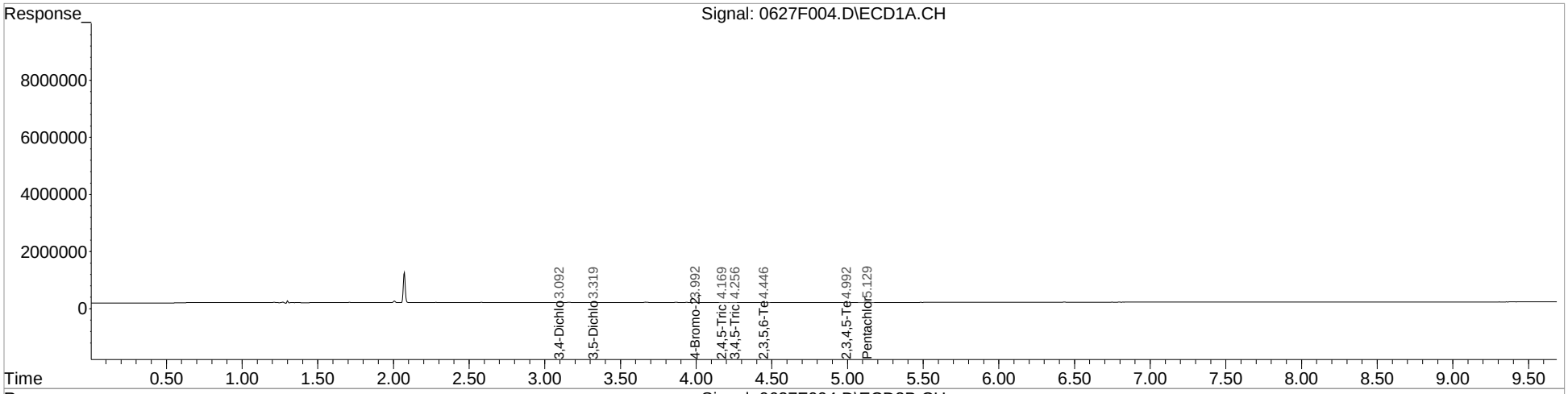
1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F004.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 1:41 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:38:17 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



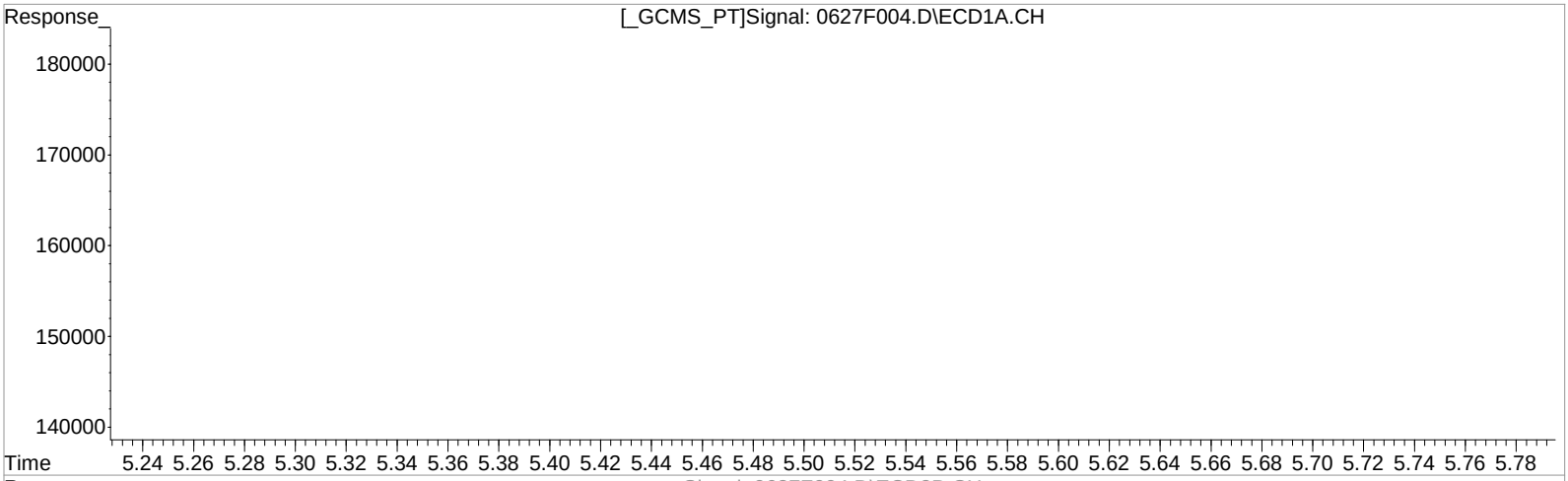
Quantitation Report (Qedit)

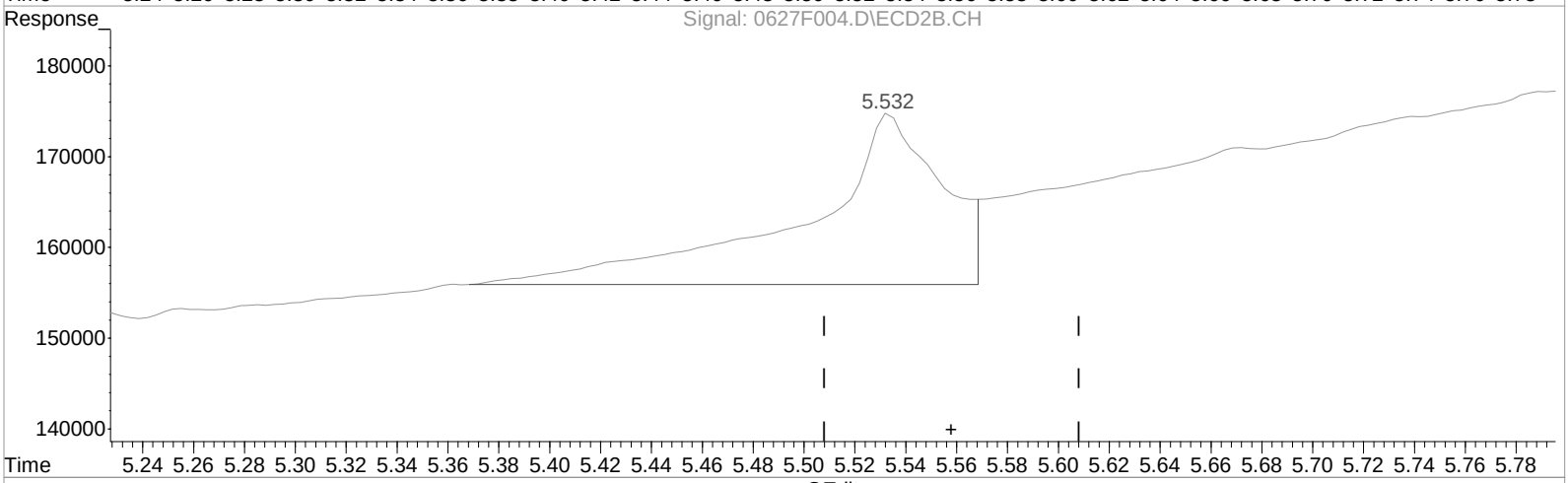
1st JED 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F004.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 1:41 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:20:52 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.129min 0.306 ug/L

response 200364

Manual Integration:

Before

06/28/18

(9) Pentachlorophenol #2 (M)

5.532min 1.151 ug/L

response 726363

(+) = Expected Retention Time

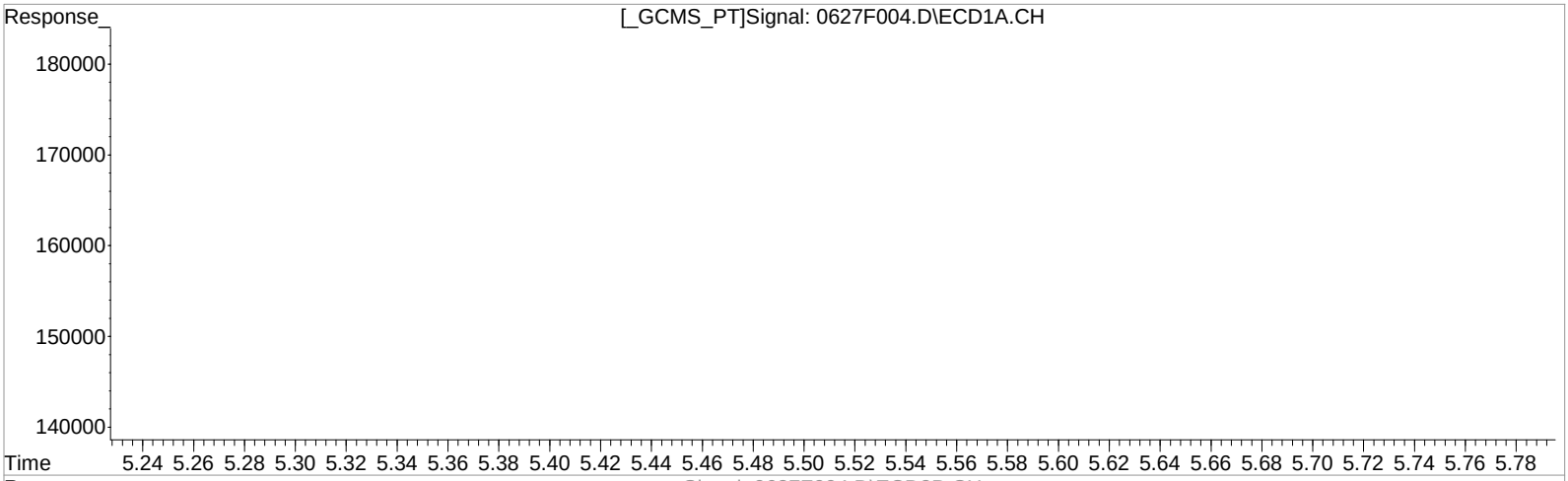
Quantitation Report (Qedit)

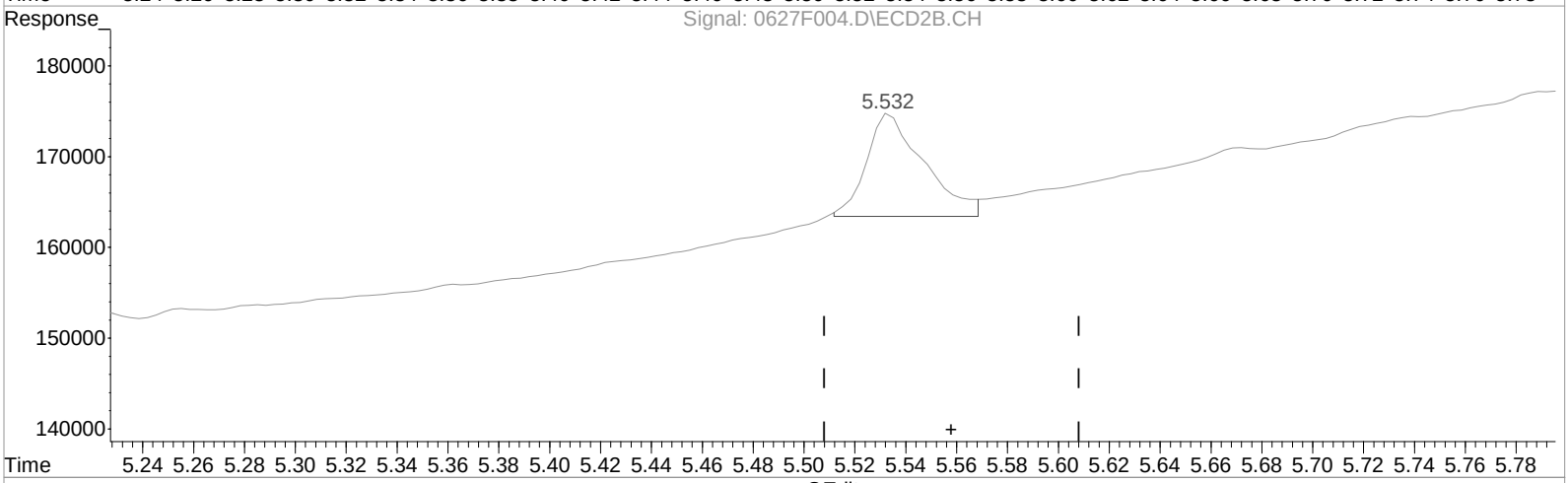
1st JED 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F004.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 1:41 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:20:52 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.129min 0.306 ug/L

response 200364

Manual Integration:

After

Baseline/Shoulder

06/28/18

(9) Pentachlorophenol #2 (M)

5.532min 0.284 ug/L m

response 179268

(+) = Expected Retention Time

1st JAD 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F016.D\
Lab ID: KQ1808738-05
RunType: CCB
Matrix: Water

Date Acquired: 6/27/18 17:08:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery - Rtx-1701	2,4,6-Trichlorophenol	22		20	RO
Continuing Calibration Recovery (Closing) - Rtx-1701	2,4,6-Trichlorophenol	24		20	RO

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F016.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 17:08:00	**Vial:**	5
Run Type:	CCB	**Dilution:**	1
Lab ID:	KQ1808738-05	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**		**Report Group:**	KQ1808738
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria		Rpt?
4-Bromo-2,6-dichlorophenol	4.00 -0.01	4.56 -0.02	72756	4895	0.151	0.014				55 - 130	i	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
2,4,5-Trichlorophenol	0.00	4.65	0	25646	0.000	0.159	0U	0.032U	0.16 U	Y
2,4,6-Trichlorophenol	0.00	4.14 +0.01	0	8558	0.000CCV	0.027	0U	0.0054U	0.042 U	Y
3,4,5-Trichlorophenol	4.24 +0.02	4.72	6061	29345	0.036	0.198	0.0072U	0.040U	0.15 U	Y
2,3,4,5-Tetrachlorophenol	4.99 -0.02	0.00	35836	0	0.088	0.000	0.018U	0U	0.042 U	Y
2,3,5,6-Tetrachlorophenol	4.45 -0.02	4.98 +0.02	26426	9178	0.048	0.019	0.0096U	0.0038U	0.032 U	Y
Pentachlorophenol (PCP)	5.13 -0.02	5.53 -0.02	174436	1105546	0.266	1.752	0.053U	0.35J	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F016.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 5:08 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:51:29 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	3.997	4.560	72756	4895	0.151	0.014	#
		Target Compounds							
1)		3,4-Dichl...	3.094	0.000	19299	0	1.111	N.D.	#
2)		3,5-Dichl...	0.000	3.903	0	7692	N.D. d	0.622	
3)		2,4,6-Tri...	0.000	4.143	0	8558	N.D. d	0.027	
5)		2,4,5-Tri...	0.000	4.646	0	25646	N.D. d	0.159	
6)		3,4,5-Tri...	4.237	4.723	6061	29345	0.036	0.198	#
7)	M	2,3,5,6-T...	4.450	4.976	26426	9178	0.048	0.019	#
8)	M	2,3,4,5-T...	4.994	0.000	35836	0	0.088	N.D.	#
9)	M	Pentachlo...	5.130	5.533	174436	1105546	0.266	1.752	#
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

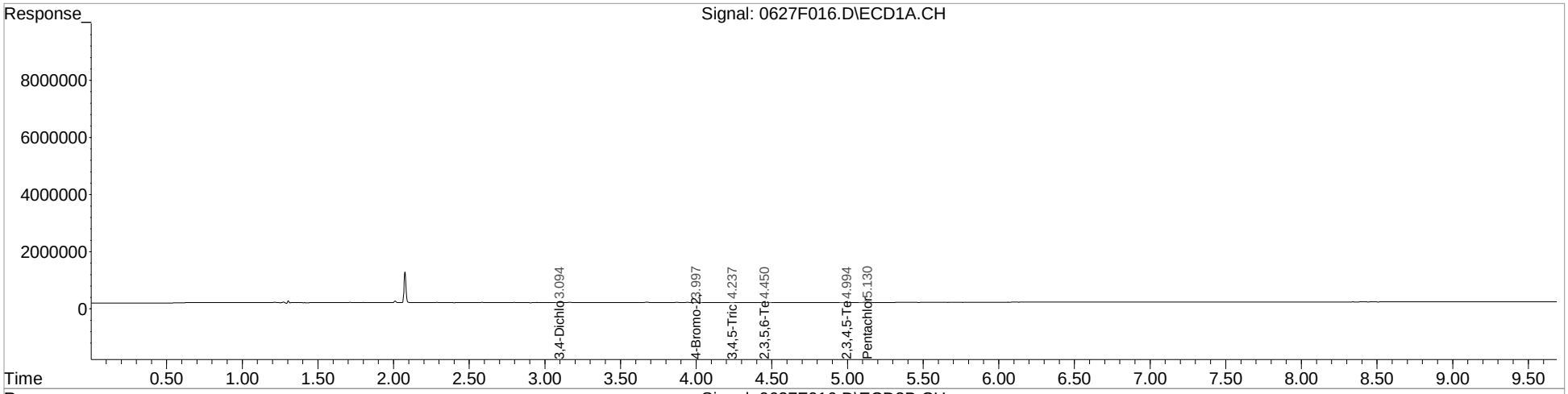
1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F016.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 5:08 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:51:29 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F028.D\
Lab ID: KQ1808738-06
RunType: CCB
Matrix: Water

Date Acquired: 6/27/18 20:34:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Surrogates	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery - Rtx-1701	2,4,6-Trichlorophenol	24		20	RO

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F028.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 20:34:00	**Vial:**	6
Run Type:	CCB	**Dilution:**	1
Lab ID:	KQ1808738-06	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**		**Report Group:**	KQ1808738
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.00 -0.02	0.00	71442	0	0.148	0.000				55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
2,4,5-Trichlorophenol	0.00	4.64 -0.01	0	26068	0.000	0.162	0U	0.032U	0.16 U	Y
2,4,6-Trichlorophenol	0.00	4.15 +0.03	0	4642	0.000CCV	0.014	0U	0.0028U	0.042 U	Y
3,4,5-Trichlorophenol	4.18 -0.04	4.72	22901	30133	0.136	0.203	0.027U	0.041U	0.15 U	Y
2,3,4,5-Tetrachlorophenol	5.02 +0.01	0.00	162373	0	0.401	0.000	0.080J	0U	0.042 U	Y
2,3,5,6-Tetrachlorophenol	4.45 -0.02	4.92 -0.03	10141	82660	0.018	0.174	0.0036U	0.035J	0.032 U	Y
Pentachlorophenol (PCP)	5.15	5.53 -0.02	46878	1028380	0.072	1.630	0.014U	0.33J	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F028.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 8:34 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 10:04:47 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	3.999	0.000	71442	0	0.148	N.D.	#
		Target Compounds							
1)		3,4-Dichl...	3.095	0.000	17904	0	1.031	N.D.	d#
2)		3,5-Dichl...	3.325f	3.905	15754	14531	1.293	1.175	
3)		2,4,6-Tri...	0.000	4.148	0	4642	N.D. d	0.014	
5)		2,4,5-Tri...	0.000	4.645	0	26068	N.D. d	0.162	
6)		3,4,5-Tri...	4.175f	4.721	22901	30133	0.136	0.203	#
7)	M	2,3,5,6-T...	4.445	4.918f	10141	82660	0.018	0.174	#
8)	M	2,3,4,5-T...	5.019	0.000	162373	0	0.401	N.D.	#
9)	M	Pentachlo...	5.152	5.535	46878	1028380	0.072m	1.630	#
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D.	d

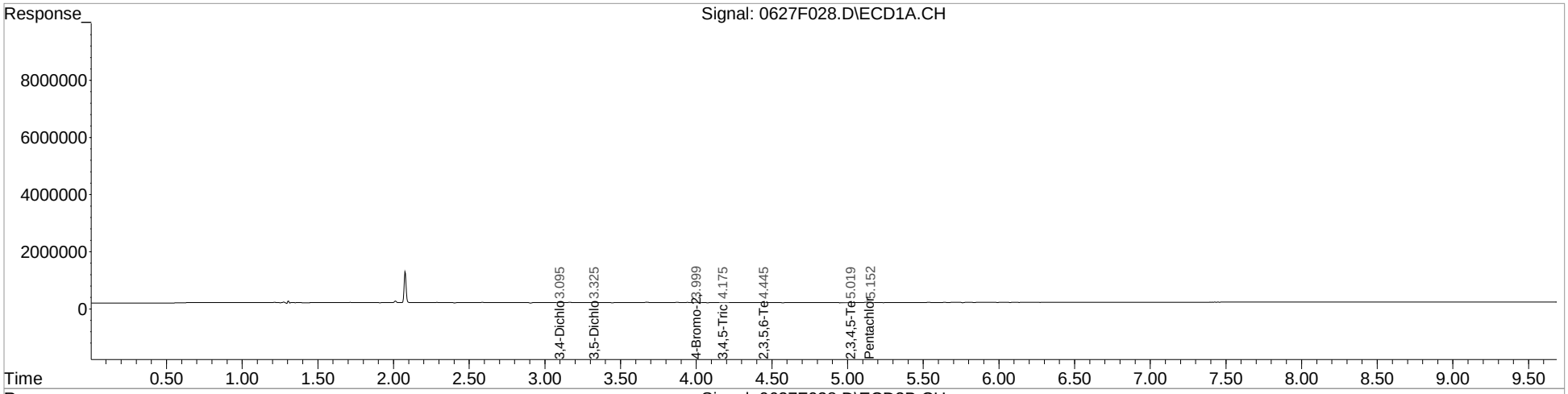
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F028.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 8:34 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 10:04:47 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



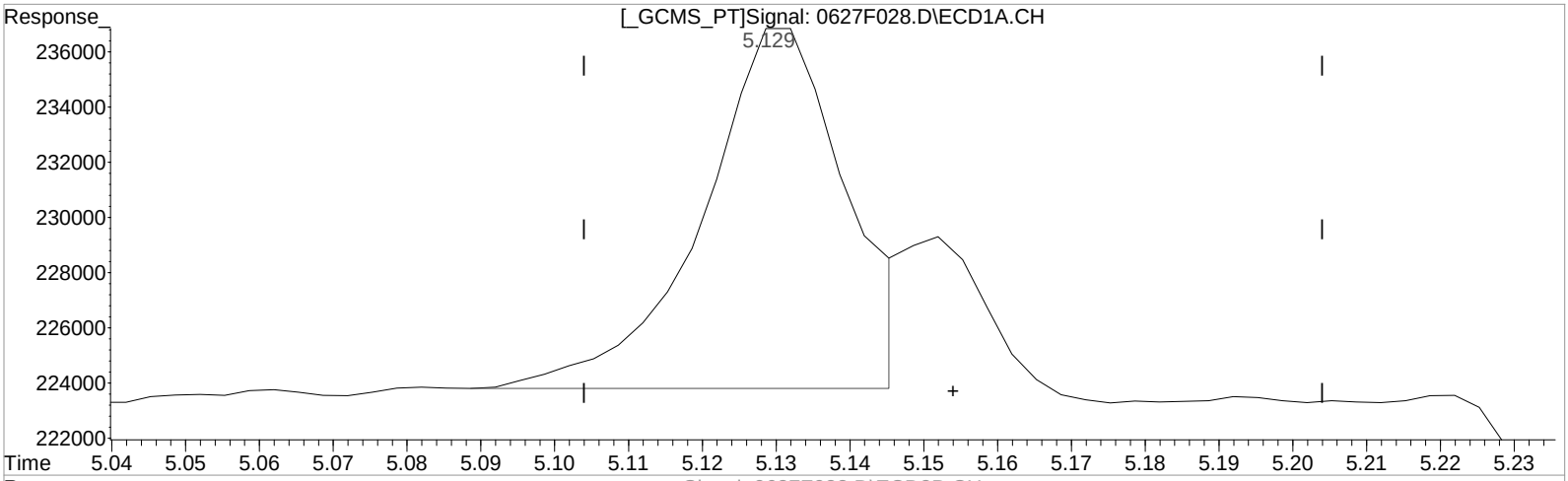
Quantitation Report (Qedit)

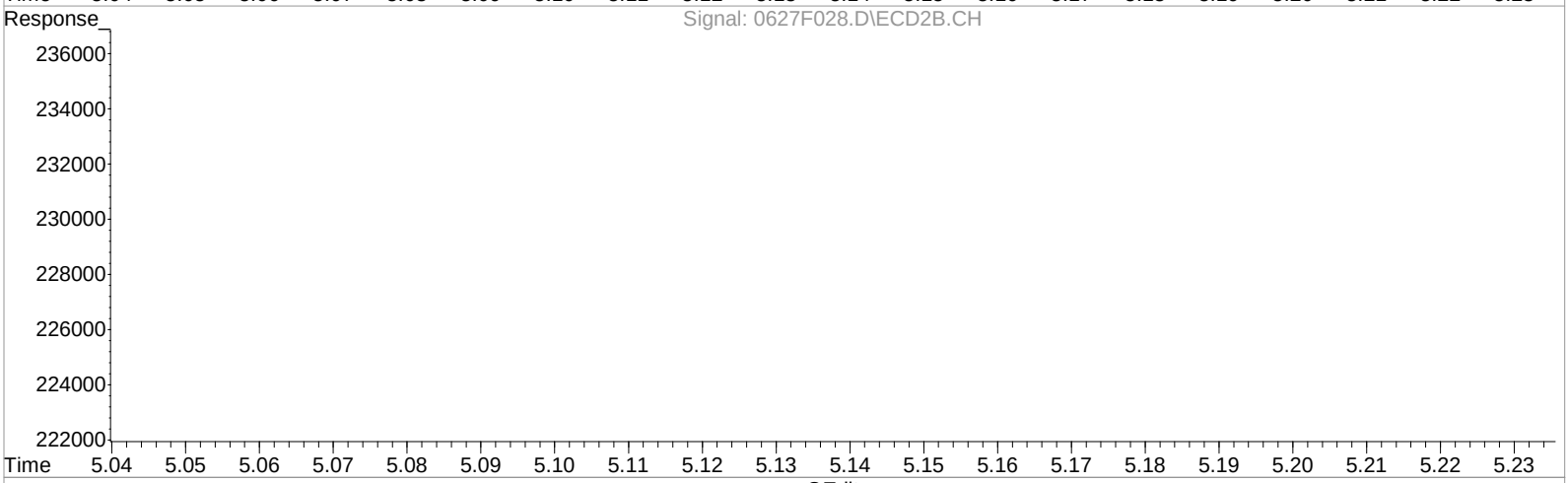
1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F028.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 8:34 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:22:00 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.129min 0.270 ug/L

response 176910

Manual Integration:

Before

06/28/18

(9) Pentachlorophenol #2 (M)

5.535min 1.630 ug/L

response 1028380

(+) = Expected Retention Time

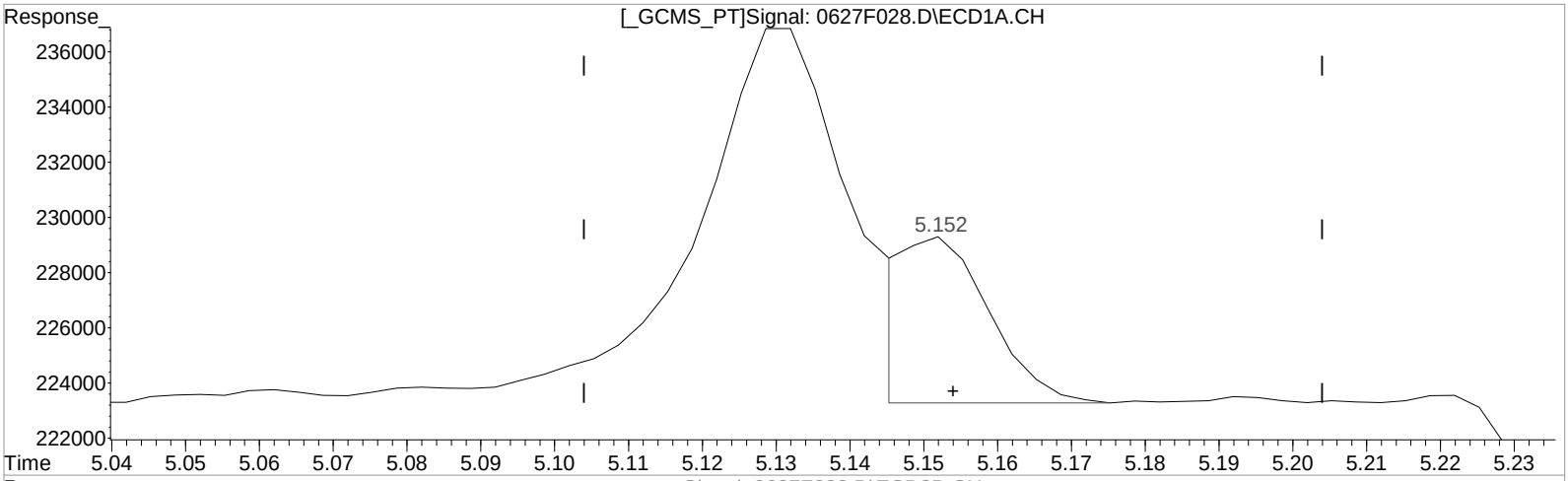
Quantitation Report (Qedit)

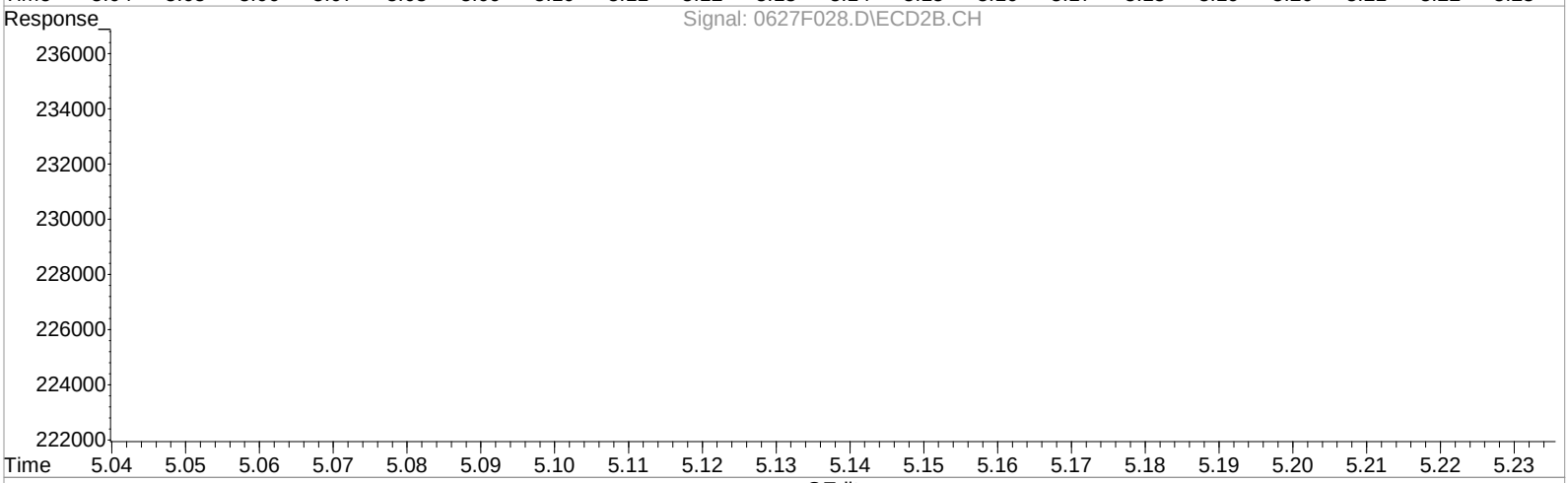
1st JED 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F028.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 8:34 pm Operator: SMS
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:22:00 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.152min 0.072 ug/L m

response 46878

Manual Integration:

After

Wrong Peak

06/28/18

(9) Pentachlorophenol #2 (M)

5.535min 1.630 ug/L

response 1028380

(+) = Expected Retention Time

1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F004.D\
Lab ID: KQ1808757-05
RunType: CCB
Matrix: Water

Date Acquired: 6/29/18 09:20:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Surrogates	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F004.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 09:20:00	**Vial:**	5
Run Type:	CCB	**Dilution:**	1
Lab ID:	KQ1808757-05	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**		**Report Group:**	KQ1808757
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	3.99 -0.02	0.00	42348	0	0.088	0.000				55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.13 -0.02	5.54 -0.01	234511	916132	0.358	1.452	0.072Ui	0.29Ui	0.073 Ui	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F004.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 9:20 am Operator: MC
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 15:32:19 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	3.992	0.000	42348	0	0.088	N.D. #
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.132	5.538	234511	916132	0.358	1.452 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

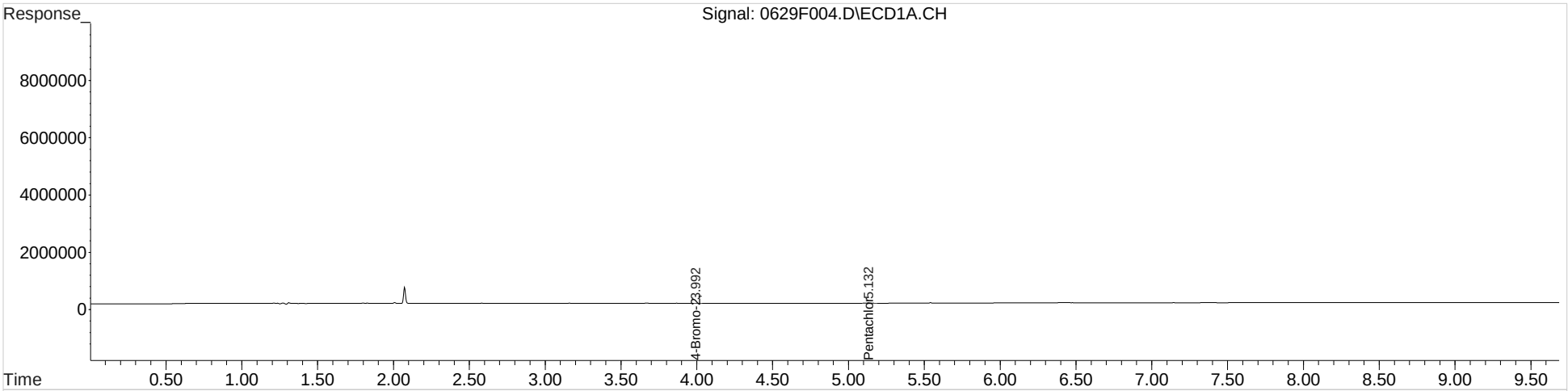
1st MC 06/30/18
2nd TP 07/05/18

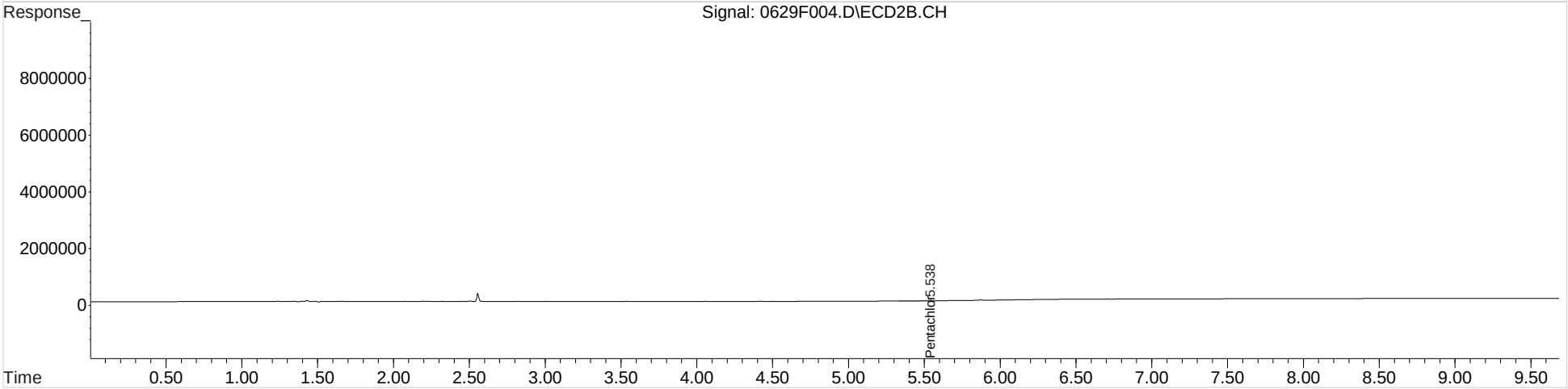
Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F004.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 9:20 am Operator: MC
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 15:32:19 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F016.D\
Lab ID: KQ1808757-06
RunType: CCB
Matrix: Water

Date Acquired: 6/29/18 12:49:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Surrogates	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F016.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 12:49:00	**Vial:**	6
Run Type:	CCB	**Dilution:**	1
Lab ID:	KQ1808757-06	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**		**Report Group:**	KQ1808757
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.00 -0.01	0.00	40436	0	0.084	0.000				55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.13 -0.02	5.54 -0.01	187502	469132	0.286	0.743	0.057U	0.15J	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st mc 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F016.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 12:49 pm Operator: MC
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 15:36:53 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	3.998	0.000	40436	0	0.084	N.D. #
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.134	5.537	187502	469132	0.286	0.743 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

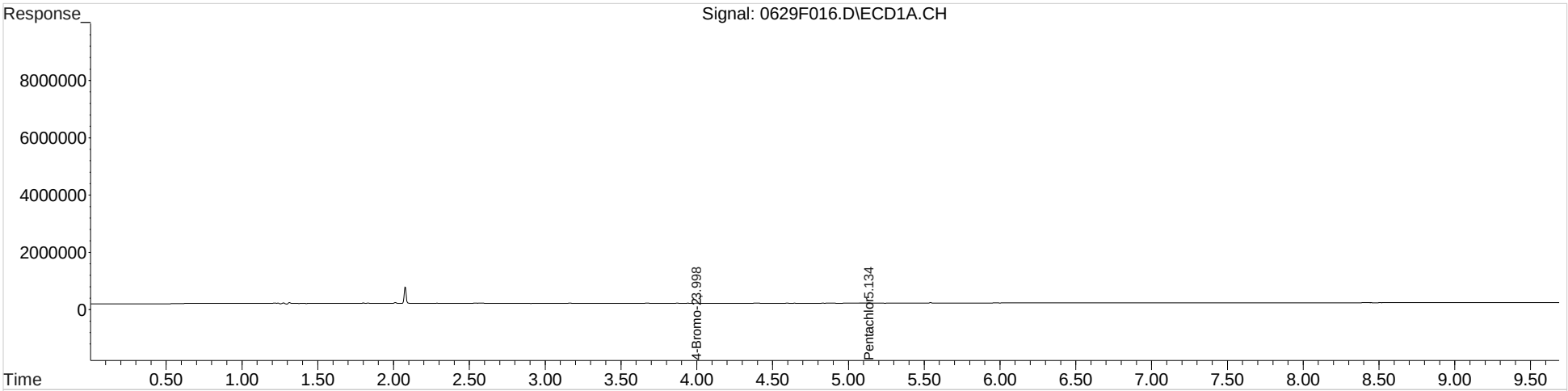
1st MC 06/30/18
2nd TP 07/05/18

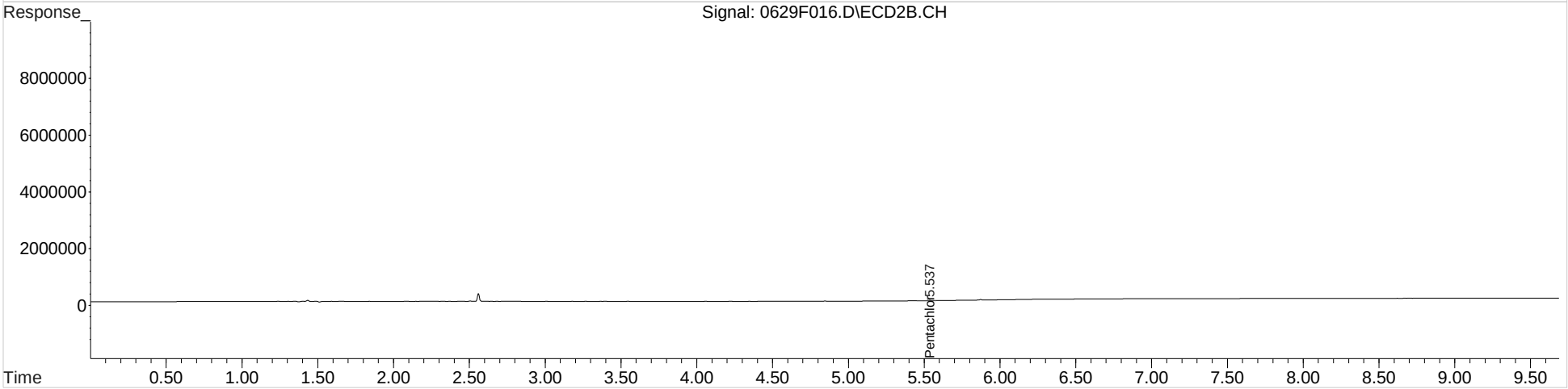
Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F016.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 12:49 pm Operator: MC
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 15:36:53 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F028.D\
Lab ID: KQ1808757-07
RunType: CCB
Matrix: Water

Date Acquired: 6/29/18 16:18:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Surrogates	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F028.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 16:18:00	**Vial:**	7
Run Type:	CCB	**Dilution:**	1
Lab ID:	KQ1808757-07	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**		**Report Group:**	KQ1808757
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria		Rpt?
4-Bromo-2,6-dichlorophenol	4.00 -0.02	4.60 +0.02	35324	5807	0.073	0.016				55 - 130	i	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15 -0.01	5.54 -0.01	65826	847599	0.100	1.343	0.020U	0.27J	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F028.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 4:18 pm Operator: MC
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 08:13:20 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.000	4.596	35324	5807	0.073	0.016 #
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.154	5.536	65826	847599	0.100m	1.343 #
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

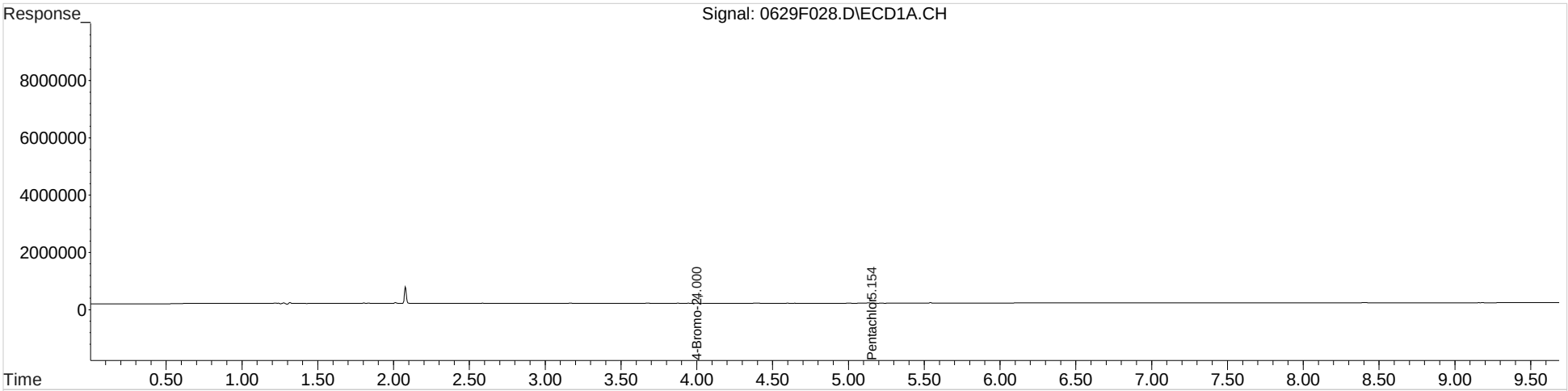
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F028.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 4:18 pm Operator: MC
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 08:13:20 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



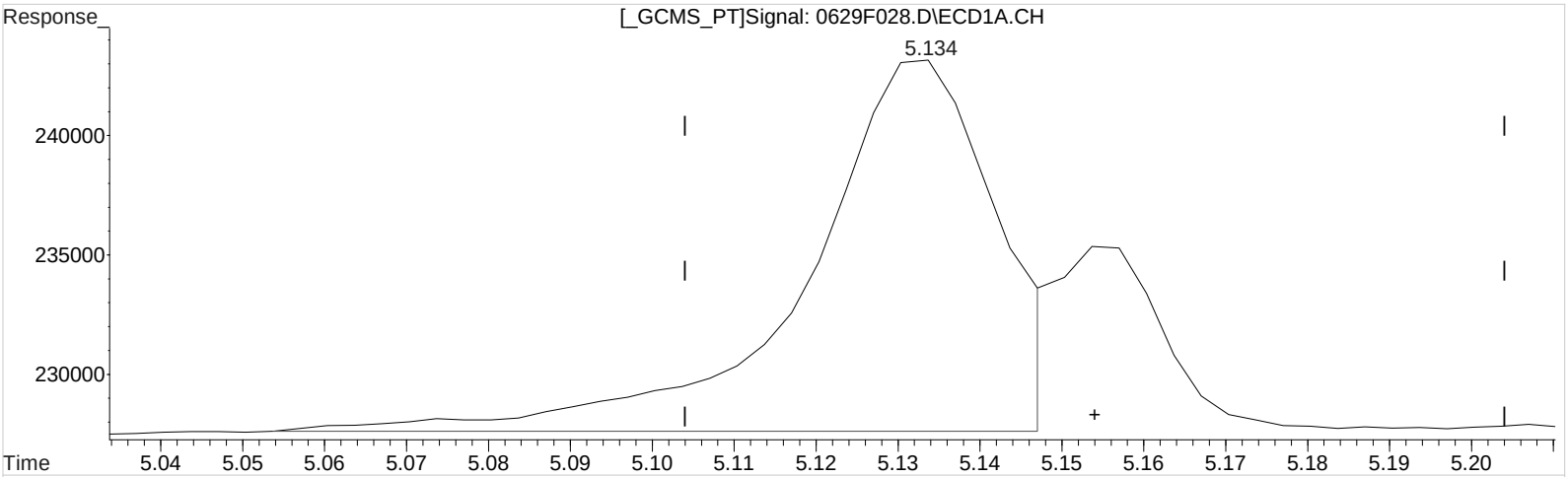
Quantitation Report (Qedit)

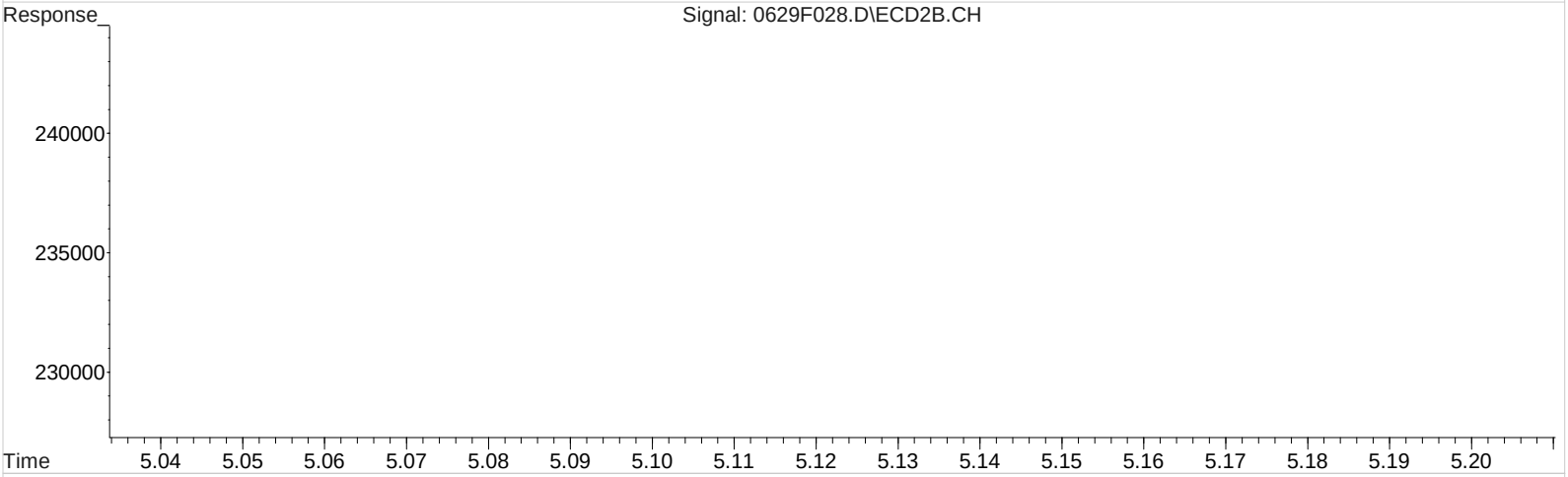
1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F028.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 4:18 pm Operator: MC
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:15:34 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.134min 0.380 ug/L

response 249192

Manual Integration:

Before

06/30/18

(9) Pentachlorophenol #2 (M)

5.536min 1.343 ug/L

response 847599

(+) = Expected Retention Time

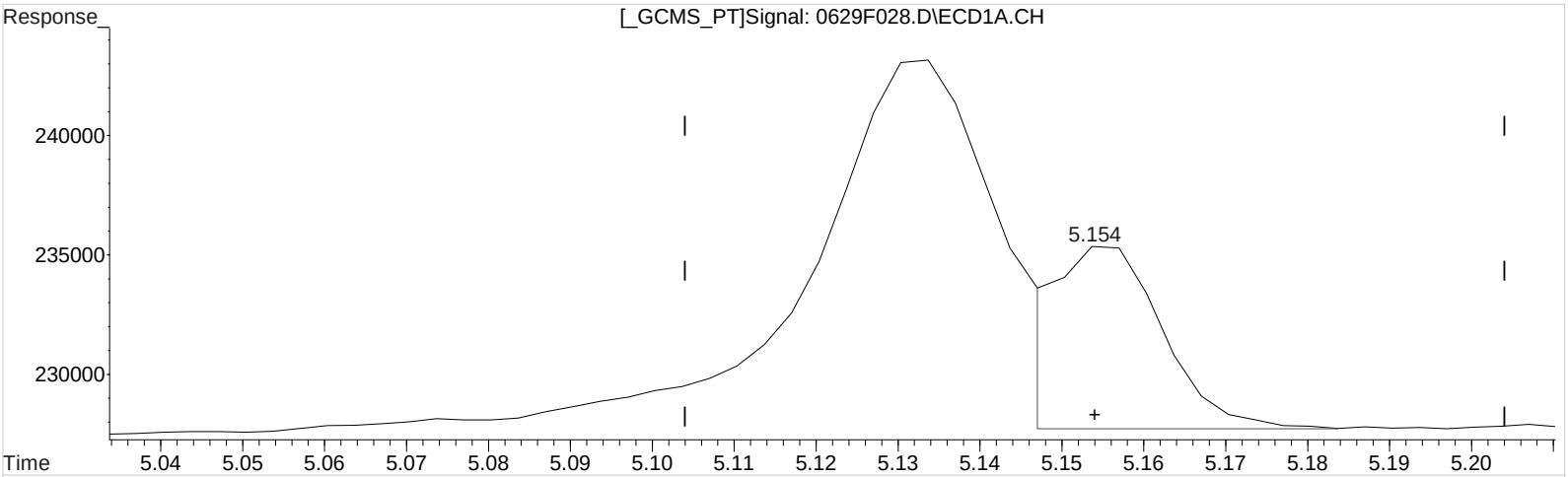
Quantitation Report (Qedit)

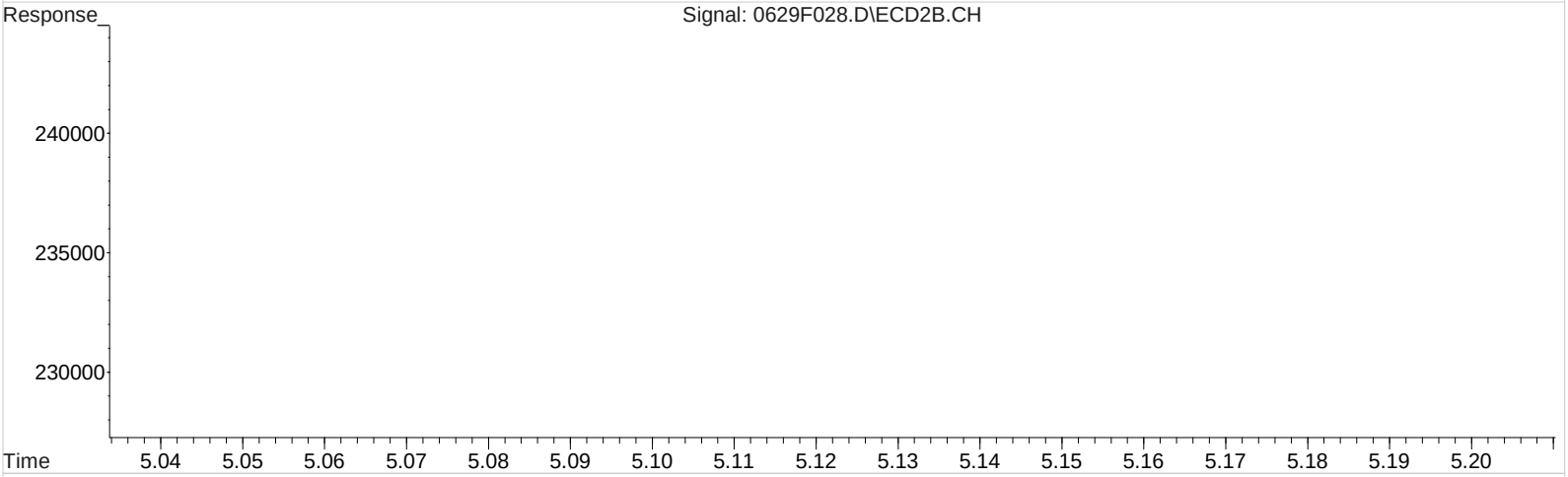
1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F028.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 4:18 pm Operator: MC
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:15:34 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.154min 0.100 ug/L m

response 65826

Manual Integration:

After

Wrong Peak

06/30/18

(9) Pentachlorophenol #2 (M)

5.536min 1.343 ug/L

response 847599

(+) = Expected Retention Time

1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F034.D\
Lab ID: KQ1808757-08
RunType: CCB
Matrix: Water

Date Acquired: 6/29/18 18:03:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Surrogates	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

Printed: 6/30/18 8:25
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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F034.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 18:03:00	**Vial:**	8
Run Type:	CCB	**Dilution:**	1
Lab ID:	KQ1808757-08	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**		**Report Group:**	KQ1808757
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	% Rec	% Rec Criteria	Rpt?
4-Bromo-2,6-dichlorophenol	4.00 -0.02	0.00	38930	0	0.081	0.000				55 - 130	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Primary Conc	Rpt?
Pentachlorophenol (PCP)	5.15 -0.01	5.54 -0.01	20537	1055747	0.031	1.673	0.0062U	0.33J	0.071 U	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F034.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 6:03 pm Operator: MC
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 07:42:15 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
4) S	4-Bromo-2...	4.001	0.000	38930	0	0.081	N.D. #
	Target Compounds						
1)	3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)	3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)	2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)	2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)	3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7) M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8) M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9) M	Pentachlo...	5.155	5.541	20537	1055747	0.031	1.673 #
10)	Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

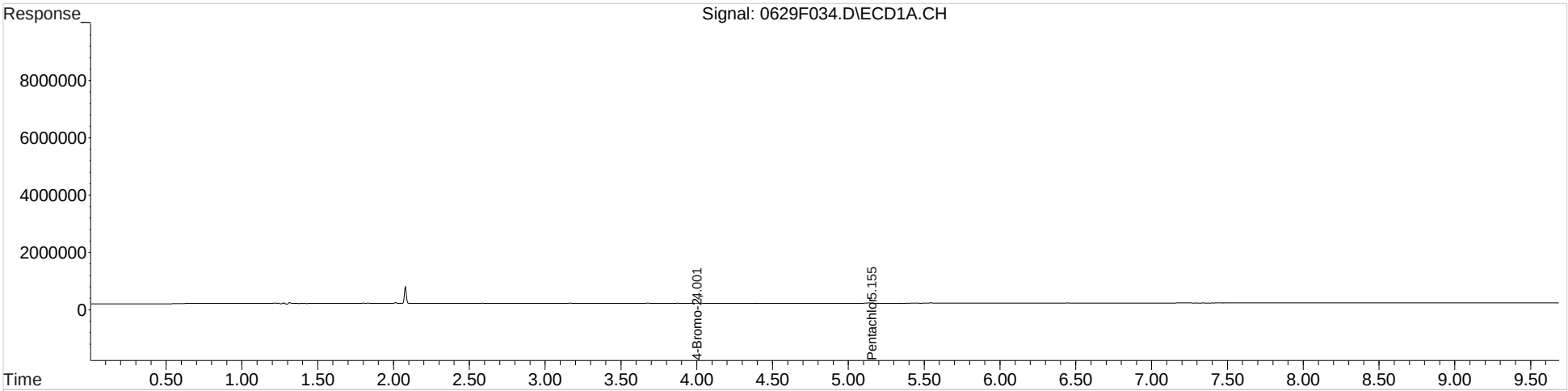
1st MC 06/30/18
2nd TP 07/05/18

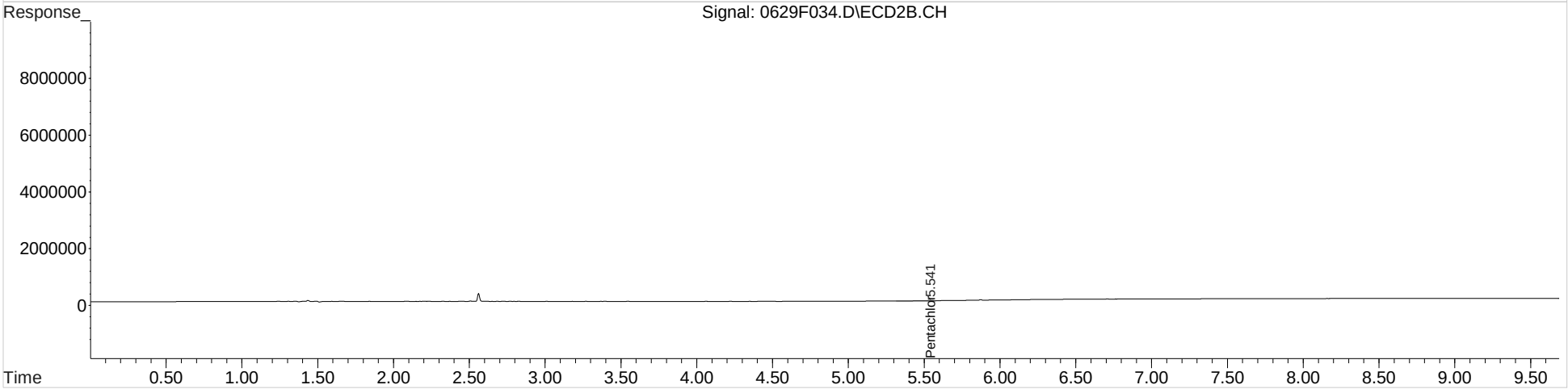
Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F034.D Vial: 2
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 6:03 pm Operator: MC
Sample : IB Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 07:42:15 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F003.D\
Lab ID: KQ1808738-01
RunType: CCV
Matrix: Water

Date Acquired: 6/27/18 13:24:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F003.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 13:24:00	**Vial:**	1
Run Type:	CCV	**Dilution:**	1
Lab ID:	KQ1808738-01	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**		**Report Group:**	KQ1808738
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	Rpt?
4-Bromo-2,6-dichlorophenol	4.00	4.58	24663102	19929304	51.091	55.280			Y

Target Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Rpt?
2,4,5-Trichlorophenol	4.18	4.65	7890578	6736430	48.533	41.882	48.5	41.9	Y
2,4,6-Trichlorophenol	3.45	4.12	15642048	14020052	55.073	43.613	55.1	43.6	Y
3,4,5-Trichlorophenol	4.21	4.71	7227004	6278432	42.980	42.372	43.0	42.4	Y
2,3,4,5-Tetrachlorophenol	5.01	5.36	18119326	16034235	44.713	50.335	44.7	50.3	Y
2,3,5,6-Tetrachlorophenol	4.46	4.95	25266428	22488343	46.008	47.309	46.0	47.3	Y
Pentachlorophenol (PCP)	5.15	5.55	32090028	28371890	48.967	44.960	49.0	45.0	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F003.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 1:24 pm Operator: SMS
Sample : PENTA01-90K 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:11:36 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.005	4.577	24663102	19929304	51.091	55.280
		Target Compounds						
1)		3,4-Dichl...	3.108	3.644	801772	756073	46.162	45.997
2)		3,5-Dichl...	3.348	3.887	621656	576289	51.028	46.609
3)		2,4,6-Tri...	3.448	4.117	15642048	14020052	55.073	43.613
5)		2,4,5-Tri...	4.181	4.647	7890578	6736430	48.533	41.882
6)		3,4,5-Tri...	4.211	4.711	7227004	6278432	42.980	42.372
7)	M	2,3,5,6-T...	4.461	4.951	25266428	22488343	46.008	47.309
8)	M	2,3,4,5-T...	5.011	5.361	18119326	16034235	44.713	50.335
9)	M	Pentachlo...	5.148	5.547	32090028	28371890	48.967	44.960
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

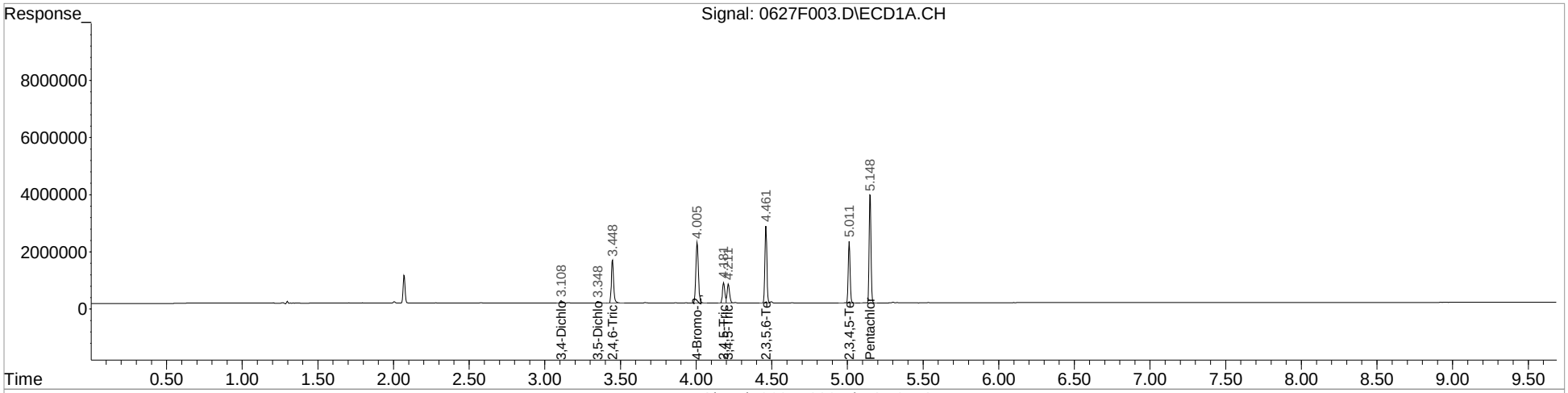
1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F003.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 1:24 pm Operator: SMS
Sample : PENTA01-90K 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:11:36 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F015.D\
Lab ID: KQ1808738-02
RunType: CCV
Matrix: Water

Date Acquired: 6/27/18 16:51:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JAD 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F015.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 16:51:00	**Vial:**	2
Run Type:	CCV	**Dilution:**	1
Lab ID:	KQ1808738-02	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**		**Report Group:**	KQ1808738
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	25671284	19456258	53.180	53.968			Y

Target Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Rpt?
2,4,5-Trichlorophenol	4.19	4.65	8165718	6598444	50.359	41.024	50.4	41.0	Y
2,4,6-Trichlorophenol	3.45	4.13	16184922	13697303	57.022	42.609	57.0	42.6	Y
3,4,5-Trichlorophenol	4.22	4.72	7566510	6118641	44.999	41.294	45.0	41.3	Y
2,3,4,5-Tetrachlorophenol	5.01	5.37	18674187	15570696	46.082	48.857	46.1	48.9	Y
2,3,5,6-Tetrachlorophenol	4.47	4.96	26170872	21830586	47.655	45.926	47.7	45.9	Y
Pentachlorophenol (PCP)	5.15	5.55	33202791	27682736	50.665	43.868	50.7	43.9	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F015.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 4:51 pm Operator: SMS
Sample : PENTA01-90K 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:13:25 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2...	4.013	4.583	25671284	19456258	53.180	53.968	
		Target Compounds							
1)		3,4-Dichl...	3.114	3.653	853631	755346	49.147	45.949	
2)		3,5-Dichl...	3.357	3.896	629786	569772	51.695	46.082	
3)		2,4,6-Tri...	3.454	4.126	16184922	13697303	57.022	42.609	#
5)		2,4,5-Tri...	4.187	4.653	8165718	6598444	50.359	41.024	
6)		3,4,5-Tri...	4.217	4.716	7566510	6118641	44.999	41.294	
7)	M	2,3,5,6-T...	4.467	4.956	26170872	21830586	47.655	45.926	
8)	M	2,3,4,5-T...	5.013	5.366	18674187	15570696	46.082	48.857	
9)	M	Pentachlo...	5.154	5.550	33202791	27682736	50.665	43.868	
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

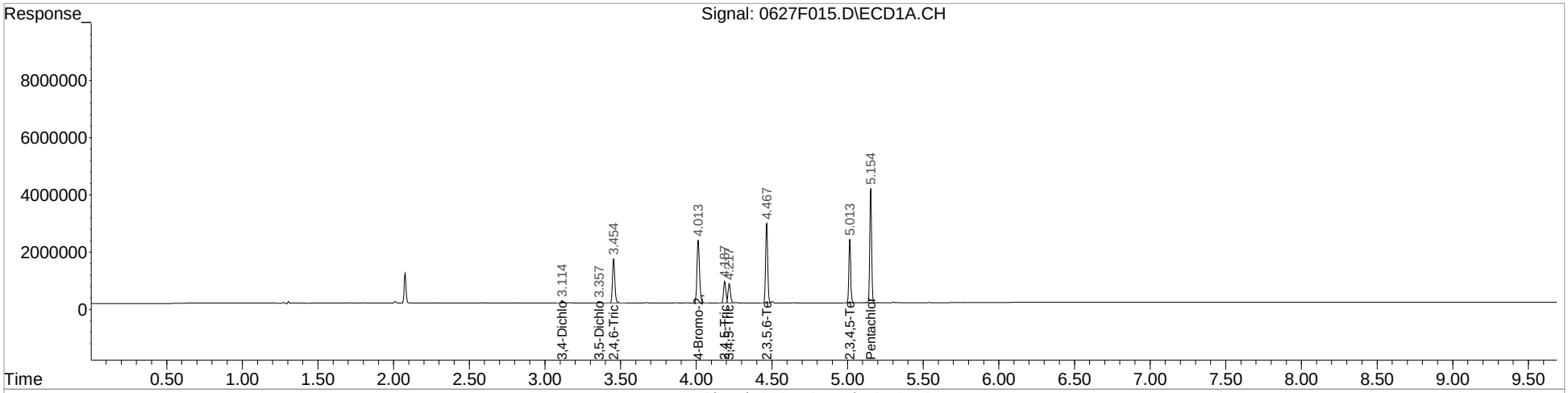
1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F015.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 4:51 pm Operator: SMS
Sample : PENTA01-90K 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:13:25 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st JED 06/28/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062718\0627F027.D\
Lab ID: KQ1808738-03
RunType: CCV
Matrix: Water

Date Acquired: 6/27/18 20:17:00
Batch ID: 596396
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062718\0627F027.D\	**Instrument:**	K-GC-28
Acqu Date:	6/27/18 20:17:00	**Vial:**	3
Run Type:	CCV	**Dilution:**	1
Lab ID:	KQ1808738-03	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596396	**Prep Lot:**		**Report Group:**	KQ1808738
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18597

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	Rpt?
4-Bromo-2,6-dichlorophenol	4.02	4.58	25703602	19785994	53.247	54.883			Y

Target Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Rpt?
2,4,5-Trichlorophenol	4.19	4.65	8332541	6695449	51.470	41.627	51.5	41.6	Y
2,4,6-Trichlorophenol	3.46	4.12	16407002	14015460	57.819	43.599	57.8	43.6	Y
3,4,5-Trichlorophenol	4.22	4.72	7456544	6224770	44.345	42.010	44.3	42.0	Y
2,3,4,5-Tetrachlorophenol	5.01	5.36	18761128	15799555	46.296	49.587	46.3	49.6	Y
2,3,5,6-Tetrachlorophenol	4.47	4.95	26289424	22197853	47.871	46.698	47.9	46.7	Y
Pentachlorophenol (PCP)	5.15	5.55	33192530	27910057	50.649	44.229	50.6	44.2	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st JAD 06/28/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062718\0627F027.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 8:17 pm Operator: SMS
Sample : PENTA01-90K 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:14:38 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.015	4.581	25703602	19785994	53.247	54.883
		Target Compounds						
1)		3,4-Dichl...	3.115	3.651	851412	762092	49.020	46.396
2)		3,5-Dichl...	3.355	3.898	636473	588504	52.244	47.597
3)		2,4,6-Tri...	3.455	4.124	16407002	14015460	57.819	43.599
5)		2,4,5-Tri...	4.188	4.651	8332541	6695449	51.470	41.627
6)		3,4,5-Tri...	4.218	4.718	7456544	6224770	44.345	42.010
7)	M	2,3,5,6-T...	4.465	4.954	26289424	22197853	47.871	46.698
8)	M	2,3,4,5-T...	5.012	5.361	18761128	15799555	46.296	49.587
9)	M	Pentachlo...	5.152	5.548	33192530	27910057	50.649	44.229
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

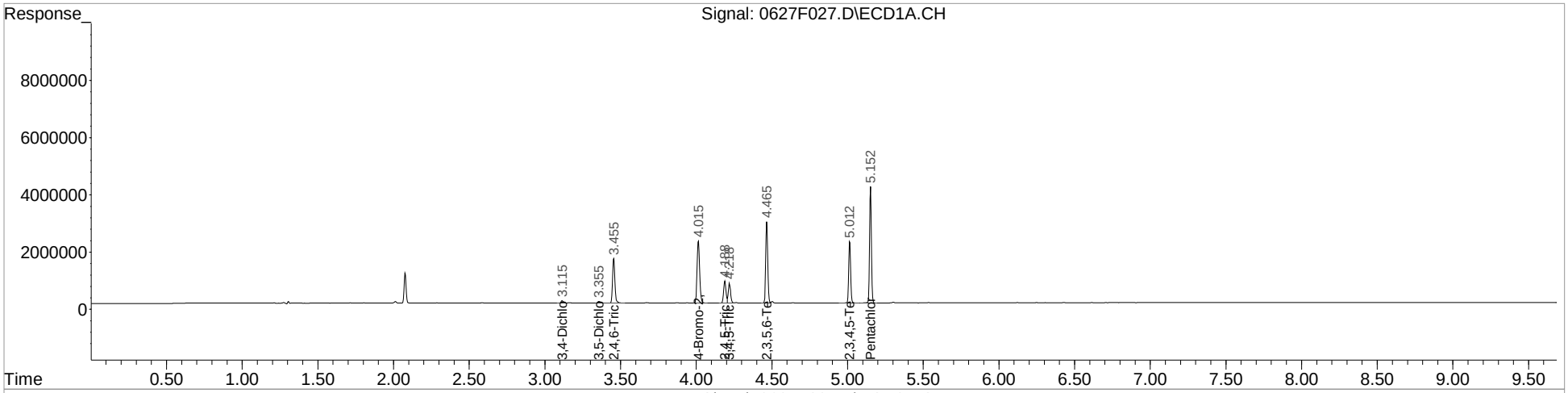
1st JED 06/28/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062718\0627F027.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2018 8:17 pm Operator: SMS
Sample : PENTA01-90K 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 28 09:14:38 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F003.D\
Lab ID: KQ1808757-01
RunType: CCV
Matrix: Water

Date Acquired: 6/29/18 09:03:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F003.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 09:03:00	**Vial:**	1
Run Type:	CCV	**Dilution:**	1
Lab ID:	KQ1808757-01	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**		**Report Group:**	KQ1808757
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	25580718	20021806	52.992	55.537			Y

Target Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Rpt?
Pentachlorophenol (PCP)	5.15	5.55	32813517	28240994	50.071	44.753	50.1	44.8	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F003.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 9:03 am Operator: MC
Sample : PENTA01-90M 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 15:29:17 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.007	4.577	25580718	20021806	52.992	55.537
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.151	5.550	32813517	28240994	50.071	44.753
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

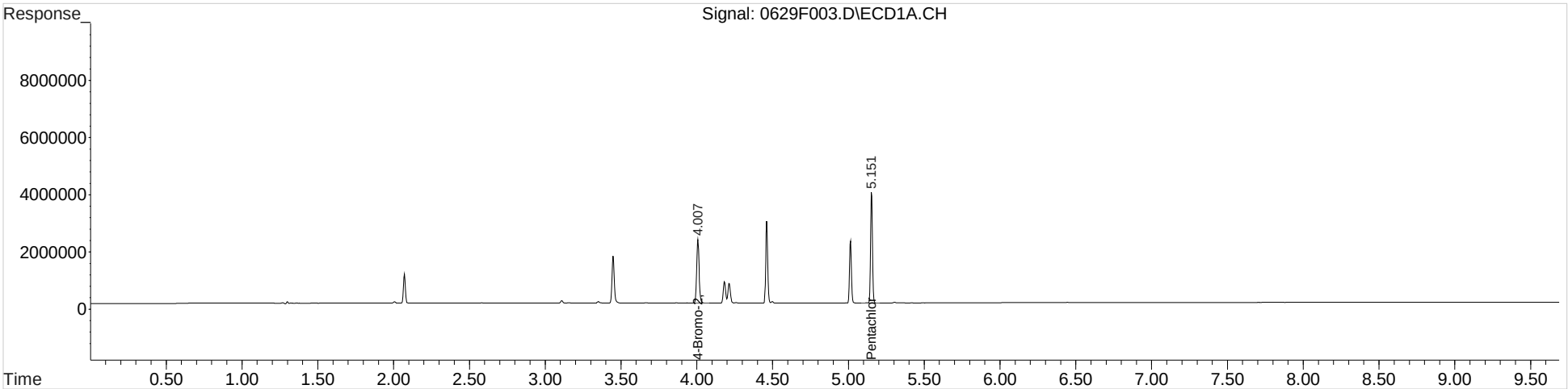
1st mc 06/30/18
2nd TP 07/05/18

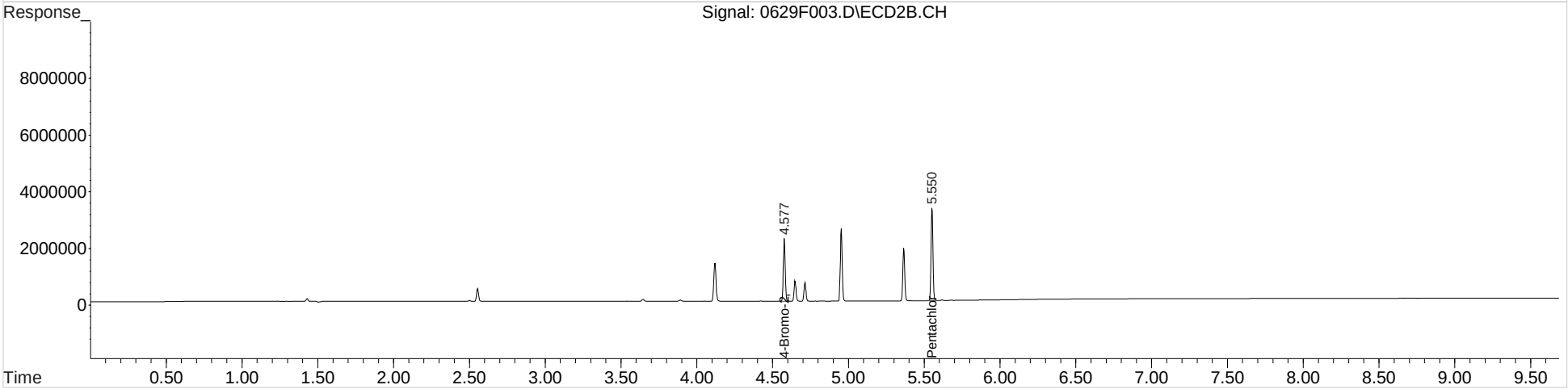
Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F003.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 9:03 am Operator: MC
Sample : PENTA01-90M 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 15:29:17 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F015.D\
Lab ID: KQ1808757-02
RunType: CCV
Matrix: Water

Date Acquired: 6/29/18 12:32:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F015.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 12:32:00	**Vial:**	2
Run Type:	CCV	**Dilution:**	1
Lab ID:	KQ1808757-02	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**		**Report Group:**	KQ1808757
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	Rpt?
4-Bromo-2,6-dichlorophenol	4.01	4.58	26128400	19844443	54.127	55.045			Y

Target Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Rpt?
Pentachlorophenol (PCP)	5.15	5.55	33571584	28105300	51.227	44.538	51.2	44.5	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F015.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 12:32 pm Operator: MC
Sample : PENTA01-90M 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 15:31:33 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.014	4.580	26128400	19844443	54.127	55.045
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.154	5.550	33571584	28105300	51.227	44.538
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

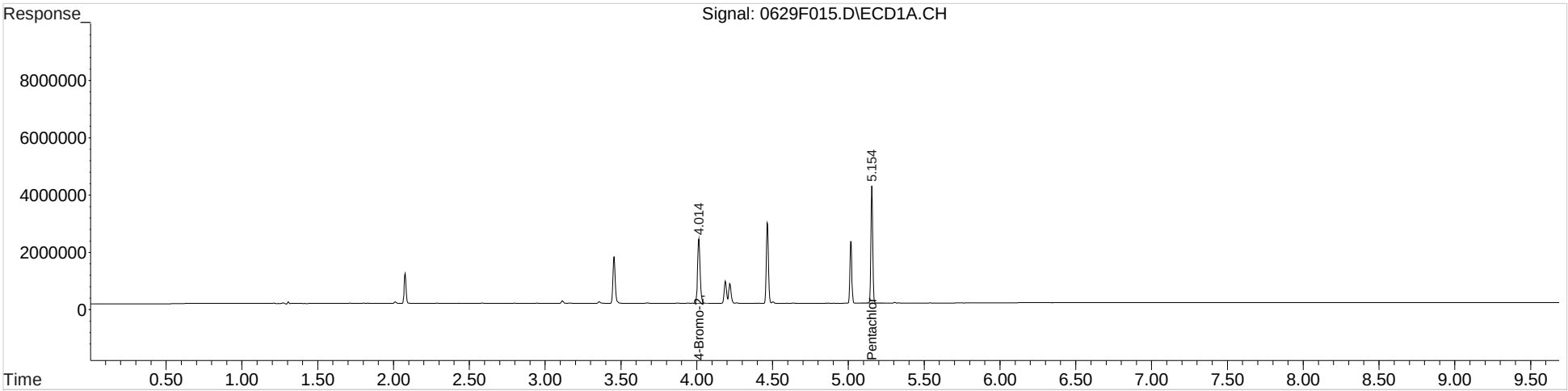
1st mc 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F015.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 12:32 pm Operator: MC
Sample : PENTA01-90M 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 15:31:33 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F027.D\
Lab ID: KQ1808757-03
RunType: CCV
Matrix: Water

Date Acquired: 6/29/18 16:01:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F027.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 16:01:00	**Vial:**	3
Run Type:	CCV	**Dilution:**	1
Lab ID:	KQ1808757-03	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**		**Report Group:**	KQ1808757
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	Rpt?
4-Bromo-2,6-dichlorophenol	4.02	4.58	26304128	19520796	54.491	54.147			Y

Target Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Rpt?
Pentachlorophenol (PCP)	5.16	5.55	33721478	27754093	51.456	43.981	51.5	44.0	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F027.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 4:01 pm Operator: MC
Sample : PENTA01-90M 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 08:07:35 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.018	4.584	26304128	19520796	54.491	54.147
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.158	5.554	33721478	27754093	51.456m	43.981
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

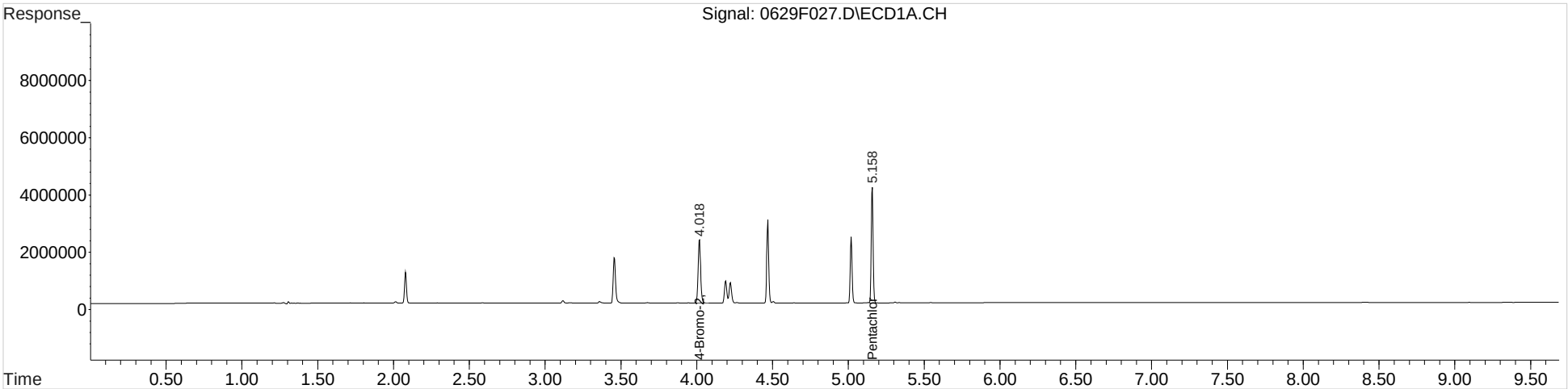
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F027.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 4:01 pm Operator: MC
Sample : PENTA01-90M 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 08:07:35 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



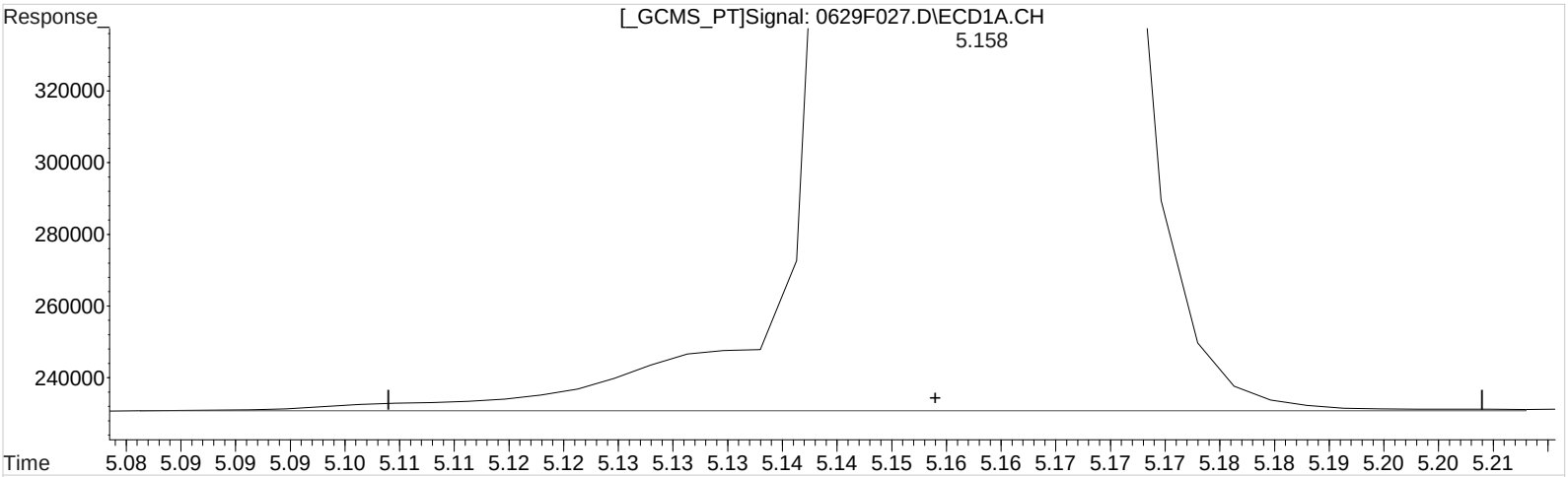
Quantitation Report (Qedit)

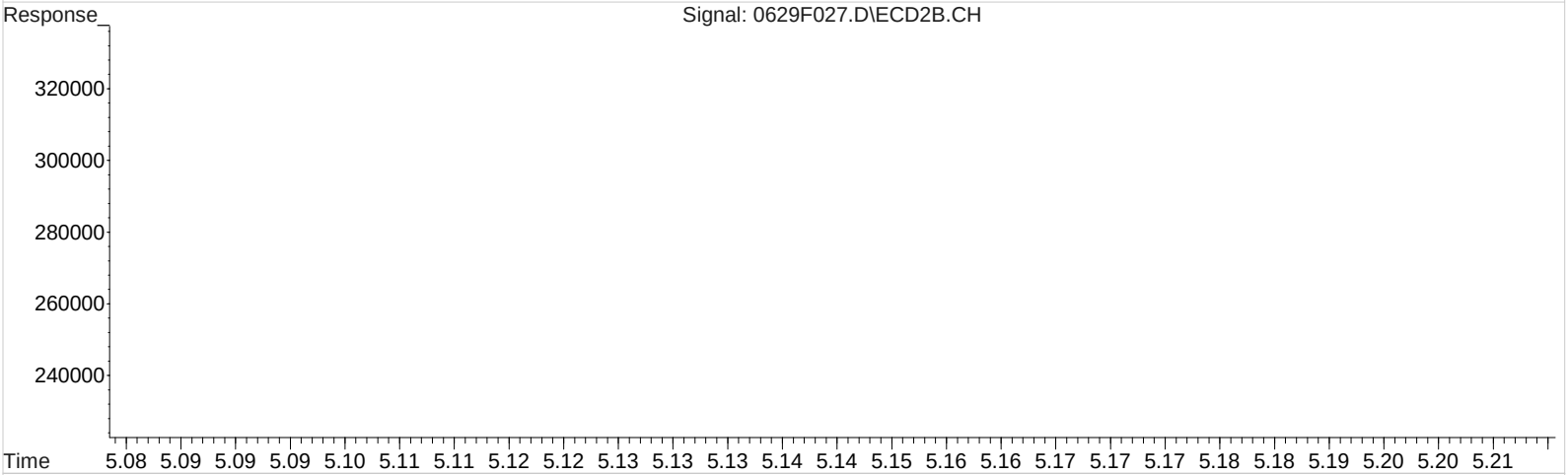
1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F027.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 4:01 pm Operator: MC
Sample : PENTA01-90M 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:13:49 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.158min 51.785 ug/L

response 33937074

Manual Integration:

Before

06/30/18

(9) Pentachlorophenol #2 (M)

5.554min 43.981 ug/L

response 27754093

(+) = Expected Retention Time

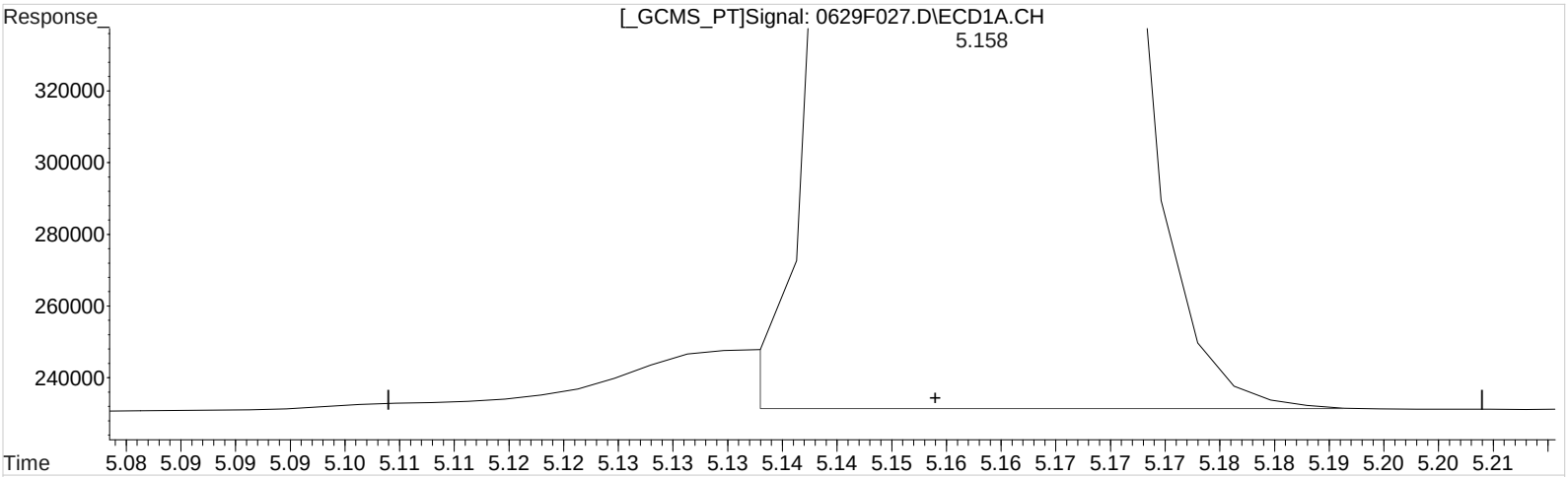
Quantitation Report (Qedit)

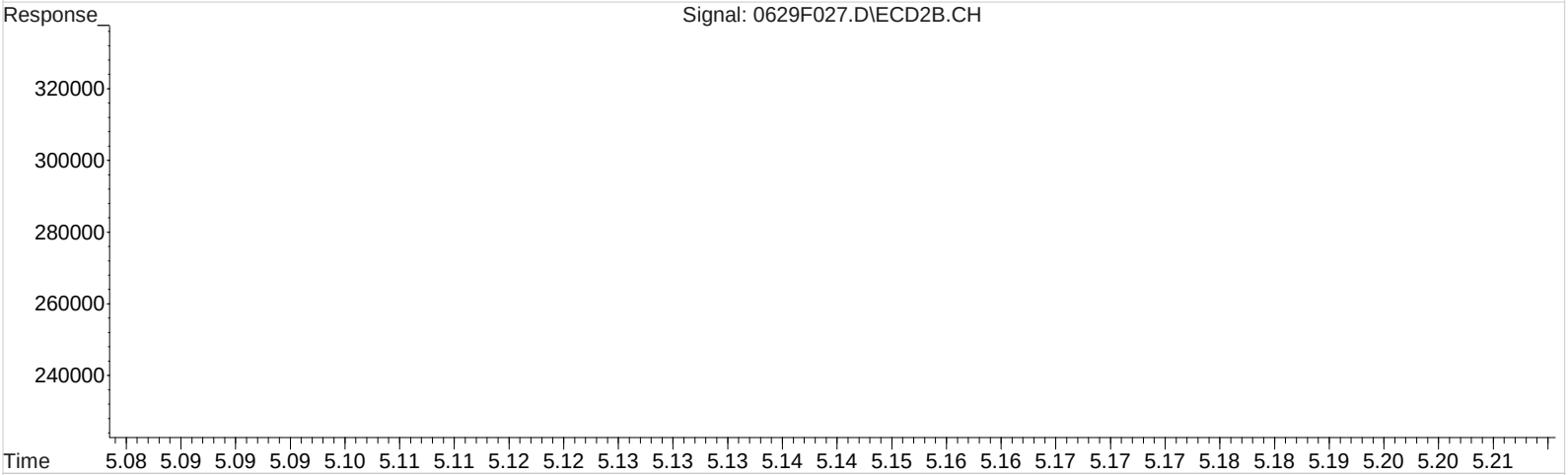
1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F027.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 4:01 pm Operator: MC
Sample : PENTA01-90M 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 29 17:13:49 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





QEdit

(9) Pentachlorophenol (M)

5.158min 51.456 ug/L m

response 33721478

Manual Integration:

After

Baseline/Shoulder

06/30/18

(9) Pentachlorophenol #2 (M)

5.554min 43.981 ug/L

response 27754093

(+) = Expected Retention Time

1st MC 06/30/18
2nd TP 07/05/18

Validation Report

Data File: J:\GC28\Data\062918\0629F033.D\
Lab ID: KQ1808757-04
RunType: CCV
Matrix: Water

Date Acquired: 6/29/18 17:46:00
Batch ID: 596781
Analysis Method: 8151A Modified/PCP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

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\\alprews001\starlims$\LIMSReps\QuantValidation.rpt

Secondary Review: _____

1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report

Data File:	J:\GC28\Data\062918\0629F033.D\	**Instrument:**	K-GC-28
Acqu Date:	6/29/18 17:46:00	**Vial:**	4
Run Type:	CCV	**Dilution:**	1
Lab ID:	KQ1808757-04	**Raw Units:**	ug/L

Bottle ID:		**Tier:**	IV	**Matrix:**	Water
Prod Code:	PCP	**Collect Date:**	6/16/18	**Receive Date:**	6/19/18

Analysis Lot:	596781	**Prep Lot:**		**Report Group:**	KQ1808757
Analysis	8151A Modified	**Prep Method:**			
		Prep Date:			

Title:	Pentachlorophenol	**Calibration ID:**	KC1800028
		Report List ID:	18595

Surrogate Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	% Rec 1	% Rec 2	Rpt?
4-Bromo-2,6-dichlorophenol	4.02	4.58	26339246	19875080	54.563	55.130			Y

Target Compounds

Parameter Name	RT 1	RT 2	Resp 1	Resp 2	Solution Conc 1	Solution Conc 2	Final Conc 1	Final Conc 2	Rpt?
Pentachlorophenol (PCP)	5.16	5.55	33836864	27942614	51.632	44.280	51.6	44.3	Y

Prep Amount:	5 mL	**Dilution:**	1
Prep Final Amount:	1.00 mL	**Basis Factor:**	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report (QT Reviewed)

1st MC 06/30/18
2nd TP 07/05/18

Data File : J:\GC28\Data\062918\0629F033.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 5:46 pm Operator: MC
Sample : PENTA01-90M 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 07:41:26 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2...	4.016	4.582	26339246	19875080	54.563	55.130
		Target Compounds						
1)		3,4-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
2)		3,5-Dichl...	0.000	0.000	0	0	N.D. d	N.D. d
3)		2,4,6-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
5)		2,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
6)		3,4,5-Tri...	0.000	0.000	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-T...	0.000	0.000	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-T...	0.000	0.000	0	0	N.D. d	N.D. d
9)	M	Pentachlo...	5.156	5.555	33836864	27942614	51.632	44.280
10)		Pentachlo...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

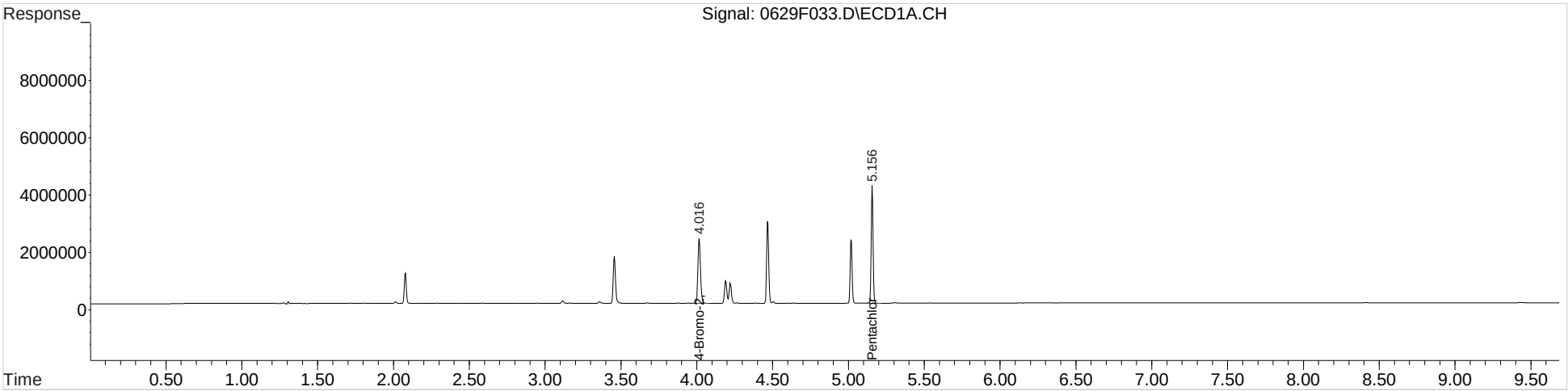
1st MC 06/30/18
2nd TP 07/05/18

Quantitation Report (QT Reviewed)

Data File : J:\GC28\Data\062918\0629F033.D Vial: 1
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Jun 2018 5:46 pm Operator: MC
Sample : PENTA01-90M 50 Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT2.P
Quant Time: Jun 30 07:41:26 2018
Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M
Quant Title : Chlorinated Phenols CAL 15625 MJ252
QLast Update : Wed Dec 27 13:57:40 2017
Response via : Initial Calibration
DataAcq Meth:PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



Sequence Name: C:\GC28\SEQUENCE\062718.S
Comment: Pentachlorophenol and Breakdown Products
Operator: SMS
Data Path: J:\GC28\DATA\062618\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	IB	100	0627F001	PENTHOT2	PRIMER
2	IB	100	0627F002	PENTHOT2	PRIMER
3	CCV	1	0627F003	PENTHOT2	PENTA01-90K 50
4	IB	2	0627F004	PENTHOT2	IB
5	SMPL	3	0627F005	PENTHOT2	K1805807-003
6	SMPL	4	0627F006	PENTHOT2	K1805808-001
7	SMPL	5	0627F007	PENTHOT2	K1805808-002
8	SMPL	6	0627F008	PENTHOT2	K1805809-021
9	SMPL	7	0627F009	PENTHOT2	K1805809-022
10	SMPL	8	0627F010	PENTHOT2	K1805809-023
11	SMPL	9	0627F011	PENTHOT2	K1805809-024 10X
12	SMPL	10	0627F012	PENTHOT2	K1805809-025
13	SMPL	11	0627F013	PENTHOT2	K1805809-026
14	SMPL	12	0627F014	PENTHOT2	K1805809-027
15	CCV	1	0627F015	PENTHOT2	PENTA01-90K 50
16	IB	2	0627F016	PENTHOT2	IB
17	SMPL	13	0627F017	PENTHOT2	K1805809-028
18	SMPL	14	0627F018	PENTHOT2	K1805809-030
19	SMPL	15	0627F019	PENTHOT2	K1805809-029
20	SMPL	16	0627F020	PENTHOT2	K1805868-001 10X
21	SMPL	17	0627F021	PENTHOT2	K1805868-002
22	SMPL	18	0627F022	PENTHOT2	K1805868-003
23	SMPL	19	0627F023	PENTHOT2	K1805809-030 MS
24	SMPL	20	0627F024	PENTHOT2	K1805809-030 DMS
25	SMPL	21	0627F025	PENTHOT2	KQ1808476-03 LCS
26	SMPL	22	0627F026	PENTHOT2	KQ1808476-04 MB
27	CCV	1	0627F027	PENTHOT2	PENTA01-90K 50
28	IB	2	0627F028	PENTHOT2	IB

Tri, penta

Run: 596396
Cal: ICV180028

Last Modified: Wed Jun 27 12:46:30 2018 Page: 1

DILUTION LOG

LAB ID	ALIQUOT	FINAL VOLUME	DILUTION FACTOR	DATE	ANALYST	SOLVENT LOT	COMMENTS
K1805868-001	100uL	1mL	10X	6/26/18	JD	ISO DM121	
K18D5809-D24	100 uL	1 mL	10x	6/27/18	JD	ISO DM121	

Sequence Name: C:\GC28\SEQUENCE\062918.S
Comment: Pentachlorophenol and Breakdown Products
Operator: MC
Data Path: J:\GC28\DATA\062918\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	IB	100	0629F001	PENTHOT2	PRIMER
2	IB	100	0629F002	PENTHOT2	PRIMER
3	CCV	1	0629F003	PENTHOT2	PENTA01-90M 50
4	IB	2	0629F004	PENTHOT2	IB
5	SMPL	3	0629F005	PENTHOT2	K1805809-001
6	SMPL	4	0629F006	PENTHOT2	K1805809-002
7	SMPL	5	0629F007	PENTHOT2	K1805809-003
8	SMPL	6	0629F008	PENTHOT2	K1805809-004
9	SMPL	7	0629F009	PENTHOT2	K1805809-005
10	SMPL	8	0629F010	PENTHOT2	K1805809-006
11	SMPL	9	0629F011	PENTHOT2	K1805809-007
12	SMPL	10	0629F012	PENTHOT2	K1805809-008
13	SMPL	11	0629F013	PENTHOT2	K1805809-009
14	SMPL	12	0629F014	PENTHOT2	K1805809-010
15	CCV	1	0629F015	PENTHOT2	PENTA01-90M 50
16	IB	2	0629F016	PENTHOT2	IB
17	SMPL	13	0629F017	PENTHOT2	K1805809-011
18	SMPL	14	0629F018	PENTHOT2	K1805809-012
19	SMPL	15	0629F019	PENTHOT2	K1805809-013
20	SMPL	16	0629F020	PENTHOT2	K1805809-014
21	SMPL	17	0629F021	PENTHOT2	K1805809-015
22	SMPL	18	0629F022	PENTHOT2	K1805809-016
23	SMPL	19	0629F023	PENTHOT2	K1805809-017
24	SMPL	20	0629F024	PENTHOT2	K1805809-018
25	SMPL	21	0629F025	PENTHOT2	K1805809-019
26	SMPL	22	0629F026	PENTHOT2	K1805809-020
27	CCV	1	0629F027	PENTHOT2	PENTA01-90M 50
28	IB	2	0629F028	PENTHOT2	IB
29	SMPL	23	0629F029	PENTHOT2	K1805809-020 MS
30	SMPL	24	0629F030	PENTHOT2	K1805809-020 DMS
31	LCS	25	0629F031	PENTHOT2	LCS
32	MB	26	0629F032	PENTHOT2	MB
33	CCV	1	0629F033	PENTHOT2	PENTA01-90M 50
34	IB	2	0629F034	PENTHOT2	IB

Run# 596781

Cal: KC1800028

Last Modified: Fri Jun 29 08:26:55 2018 Page: 1

Injection Log

Directory: J:\GC28\DATA\112717-CAL

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	1127f124.d	1.	IB		27 Nov 2017 18:01
2	20	1127f127.d	1.	PENTA01-88I 1 PPB		27 Nov 2017 18:57
3	21	1127f128.d	1.	PENTA01-88H 2.5 PPB		27 Nov 2017 19:16
4	22	1127f129.d	1.	PENTA01-88G 5 PPB		27 Nov 2017 19:35
5	23	1127f130.d	1.	PENTA01-88I 10 PPB		27 Nov 2017 19:53
6	24	1127f131.d	1.	PENTA01-88E 25 PPB		27 Nov 2017 20:12
7	25	1127f132.d	1.	PENTA01-88D 100 PPB		27 Nov 2017 20:31
8	26	1127f133.d	1.	PENTA01-88C 250 PPB		27 Nov 2017 20:50
9	27	1127f134.d	1.	PENTA01-88N 500 PPB		27 Nov 2017 21:08
10	28	1127f135.d	1.	PENTA01-88M 1000 PPB		27 Nov 2017 21:27
11	2	1127f136.d	1.	IB		27 Nov 2017 21:46
12	3	1129f005.d	1.	PENTA01-88K 50PPB ICV	SEMIVOA GC\W11122...	29 Nov 2017 12:44

CCL: 15625

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:48:32 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
4)	S	4-Bromo-2,6-dich	4.02	4.59	553952	330490	1.842	1.270	#
		Target Compounds							
1)		3,4-Dichlorophen	3.12	3.67	16518	29596	1.019	1.580	#
2)		3,5-Dichlorophen	3.37	3.91	20988	18718	1.737	1.425	
3)		2,4,6-Trichlorop	3.46	4.14	448728	374818	1.266	1.042	
5)		2,4,5-Trichlorop	4.20	4.67	232648	183740	1.496	1.118	#
6)		3,4,5-Trichlorop	4.23f	4.73	193422	169644	1.216m	1.169	
7)	M	2,3,5,6-Tetrachl	4.47	4.97	639390	495876	1.275	0.987	
8)	M	2,3,4,5-Tetrachl	5.02	5.37	456782	504796	1.344	1.477	
9)	M	Pentachloropheno	5.16	5.56	806520	809946	1.377	1.358	
10)		Pentachloroaniso	5.16	5.56	806520	809946	1.449	1.429	

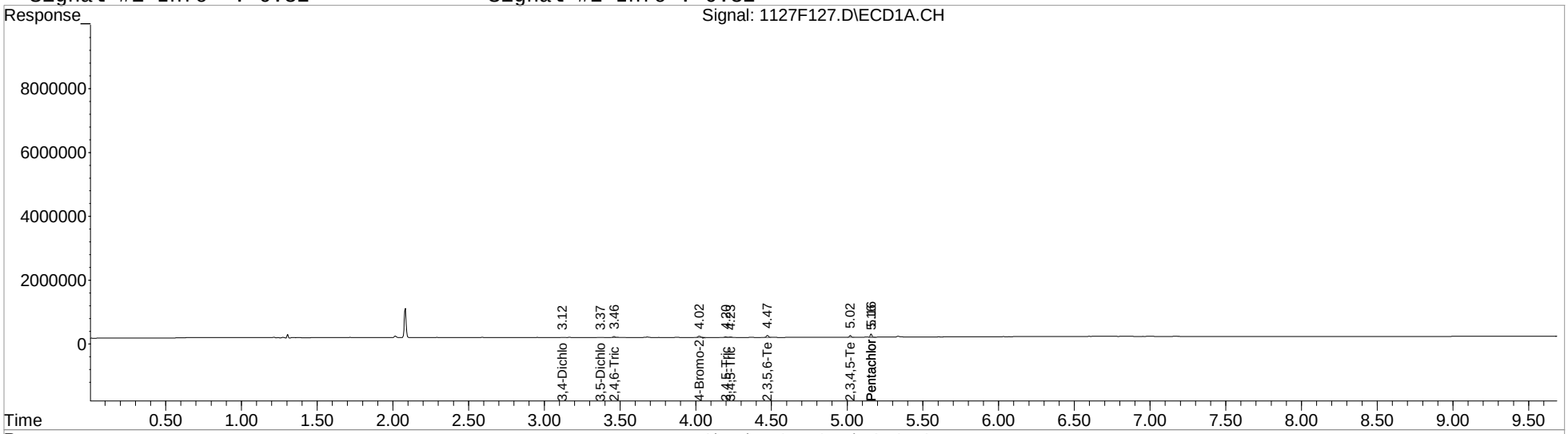
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

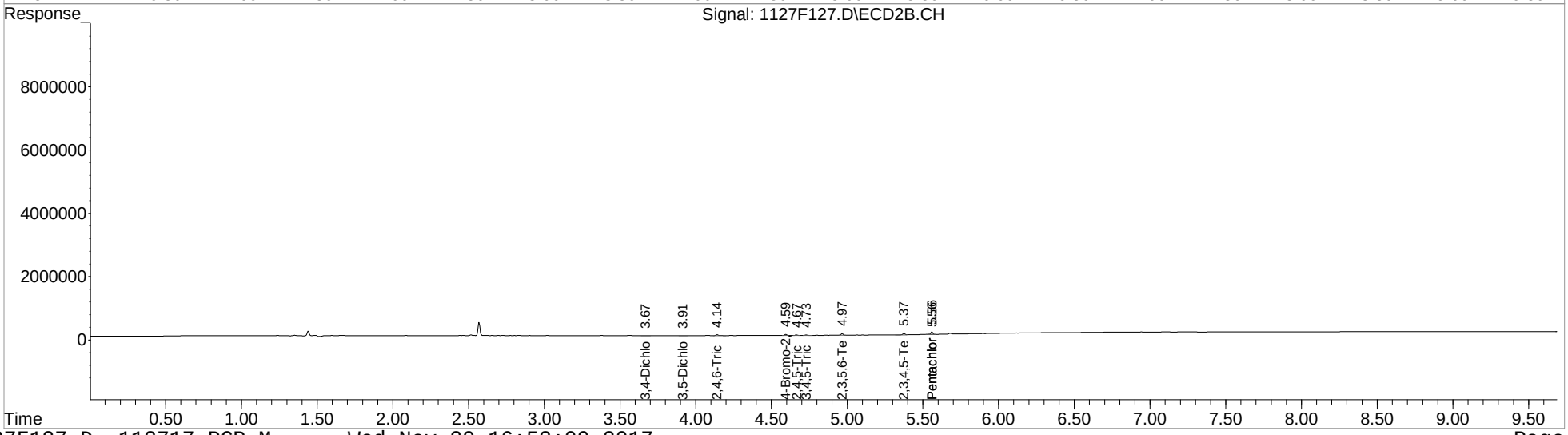
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



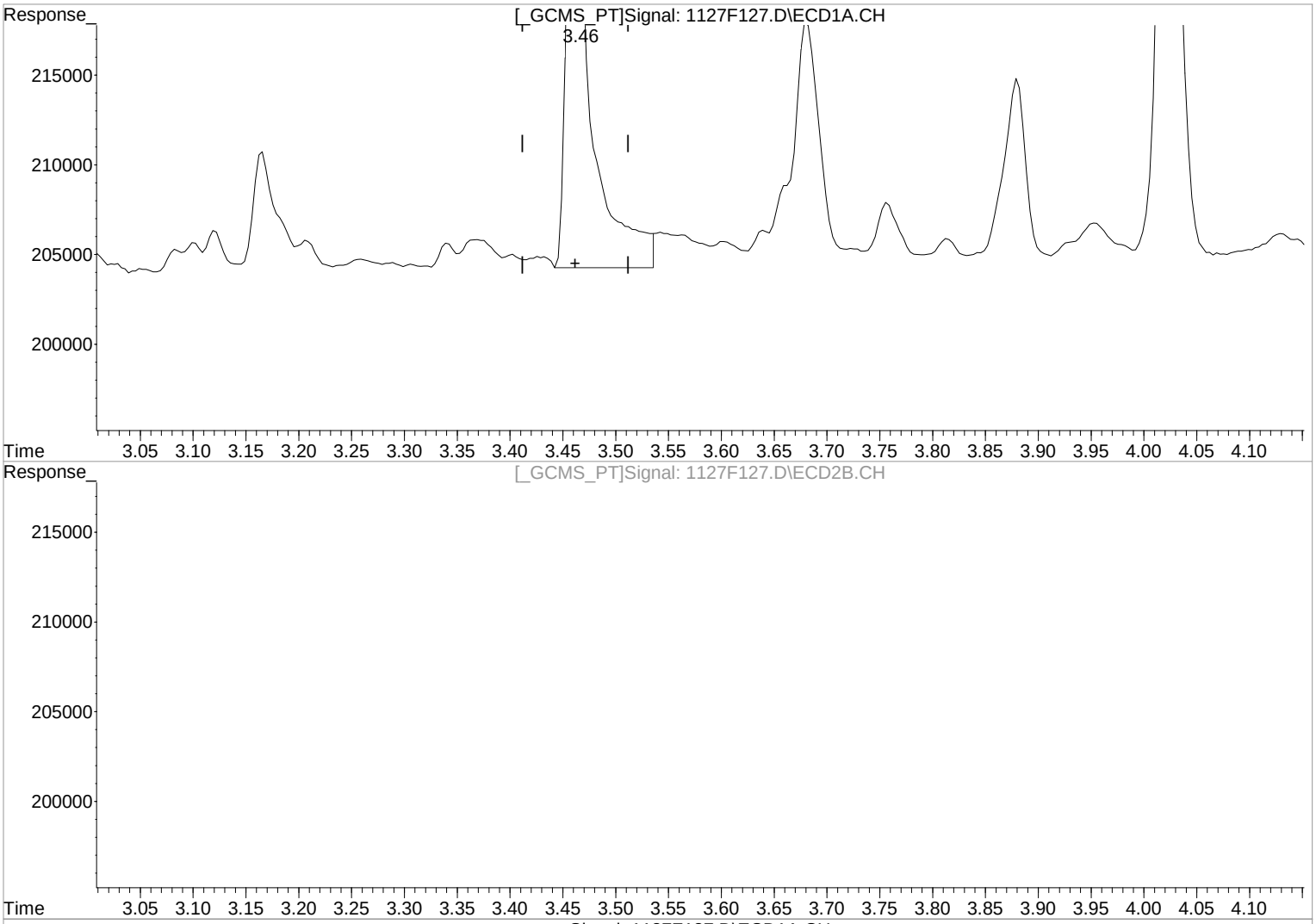


Quantitation Report (Qedit)

1st 11/29/17
2nd 11/29/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F127.D\ECD1A.CH

(3) 2,4,6-Trichlorophenol

3.46min 1.266ug/L

response 448728

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(3) 2,4,6-Trichlorophenol #2

4.14min 1.042ug/L

response 374818

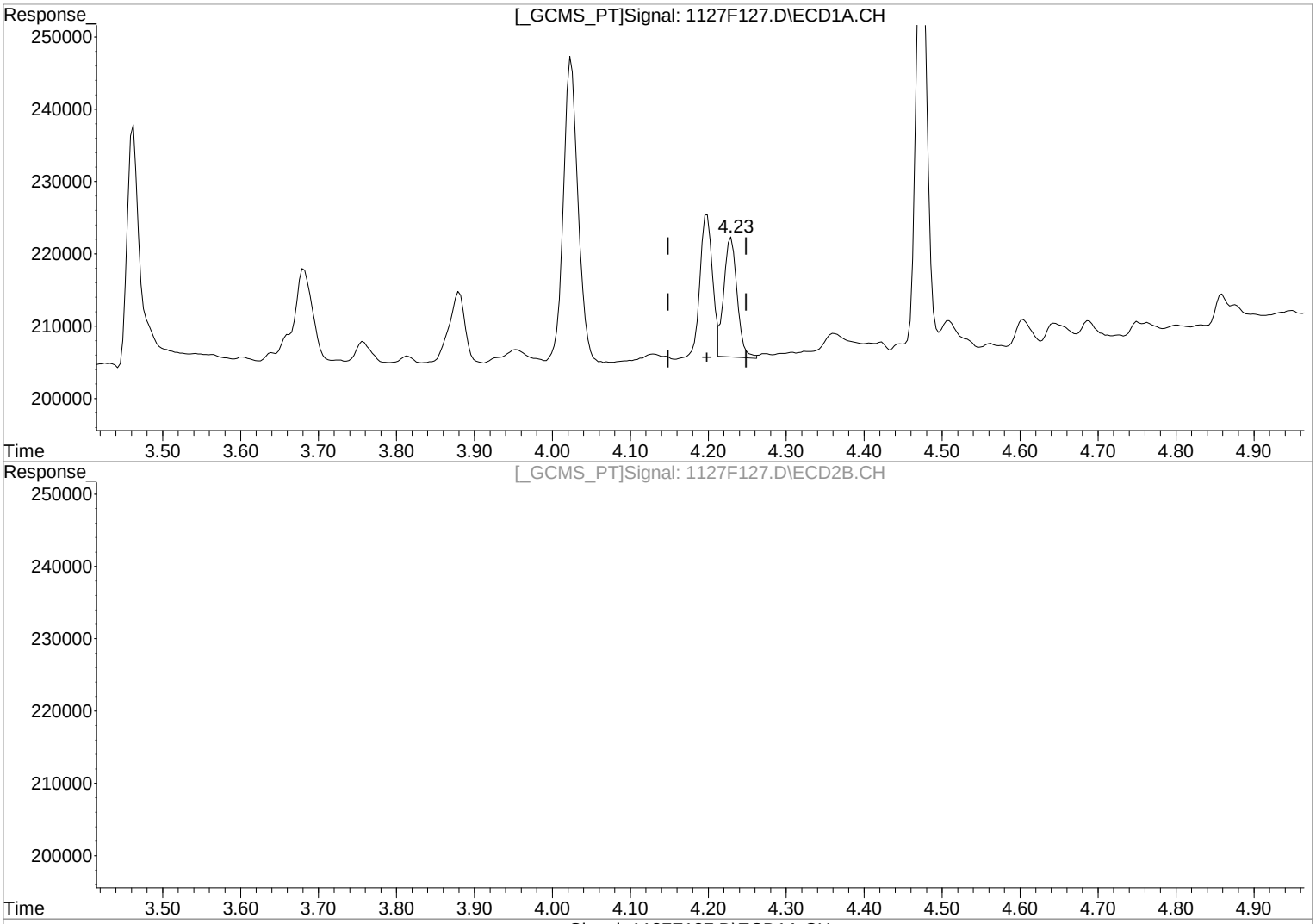
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC28\DATA\112717-CAL\1127F127.D\ECD2B.CH
Acq On : 27 Nov 2017 6:57 pm Operator: CV
Sample : PENTA01-88I 1 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:49 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F127.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 1.216ug/L m

response 193422

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 1.169ug/L

response 169644

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:50:18 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	1317276	876496	4.379	3.368
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	49286	55140	3.040m	2.943
2)		3,5-Dichlorophen	3.36	3.91	38712	36048	3.203m	2.745
3)		2,4,6-Trichlorop	3.46	4.14	974062	824238	2.747	2.292
5)		2,4,5-Trichlorop	4.20	4.66	535528	435750	3.444	2.652
6)		3,4,5-Trichlorop	4.23f	4.73	463666	405392	2.915m	2.794
7)	M	2,3,5,6-Tetrachl	4.47	4.97	1468326	1190526	2.929m	2.369
8)	M	2,3,4,5-Tetrachl	5.02	5.37	1110862	994692	3.268m	2.911
9)	M	Pentachloropheno	5.16	5.56	1873238	1758532	3.199	2.949m
10)		Pentachloroaniso	5.16	5.56	1873238	1755630	3.366	3.097m

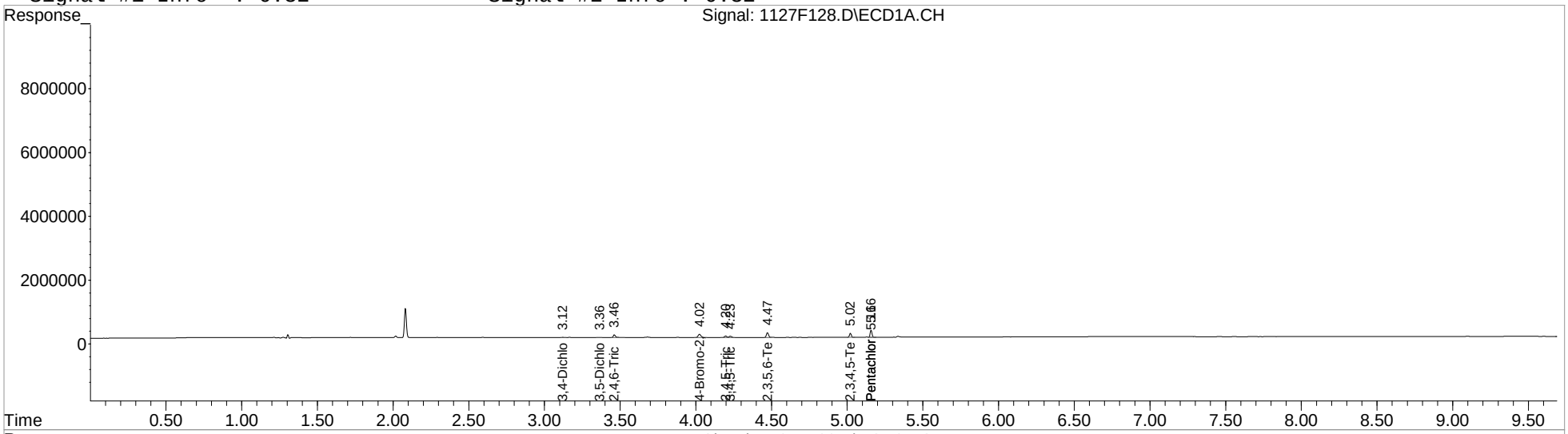
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

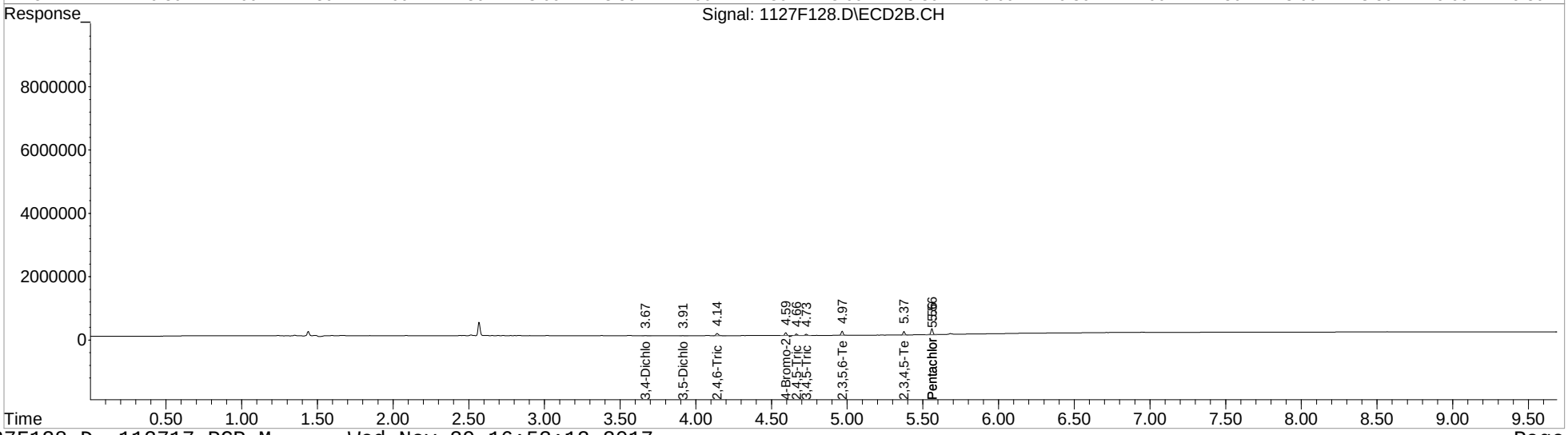
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



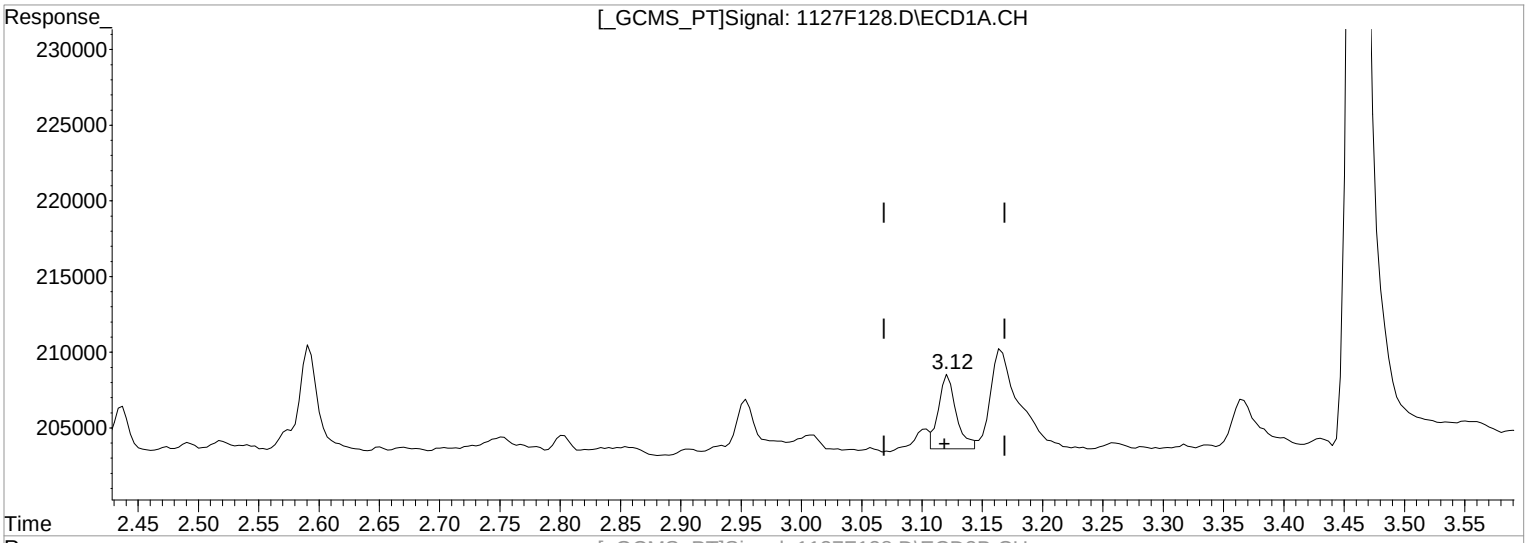


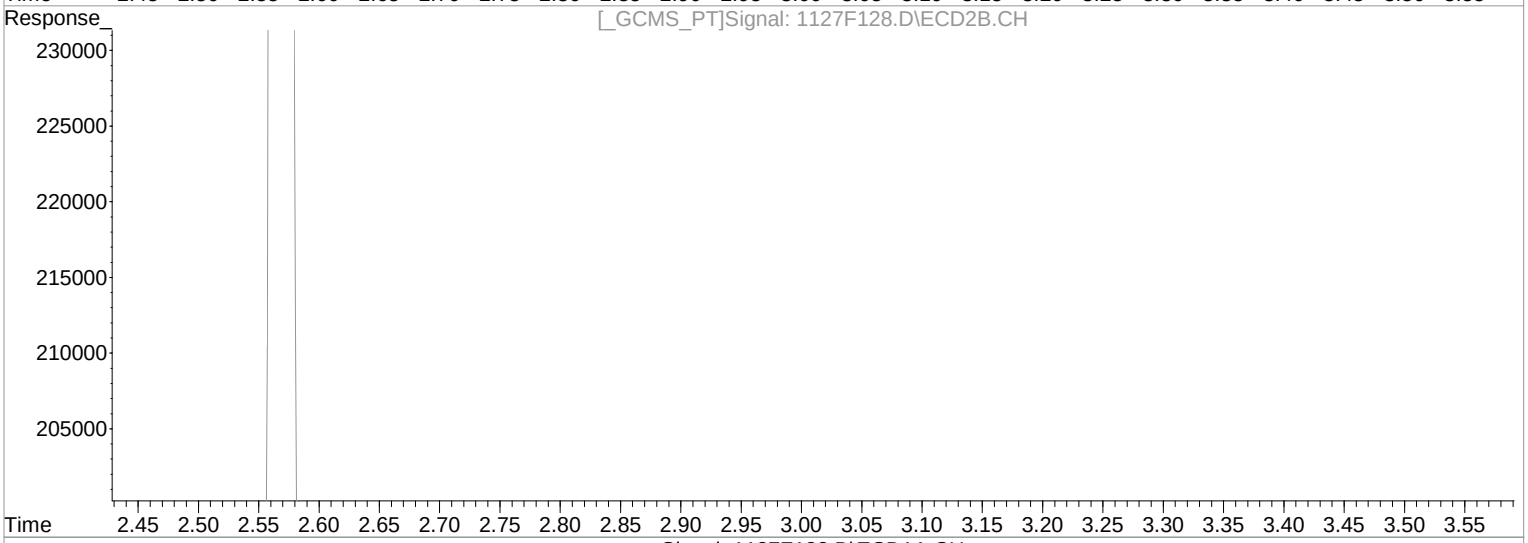
Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration





Signal: 1127F128.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 3.040ug/L m

response 49286

Manual Integration:

After

After, No Before

Baseline Shoulder

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 2.943ug/L

response 55140

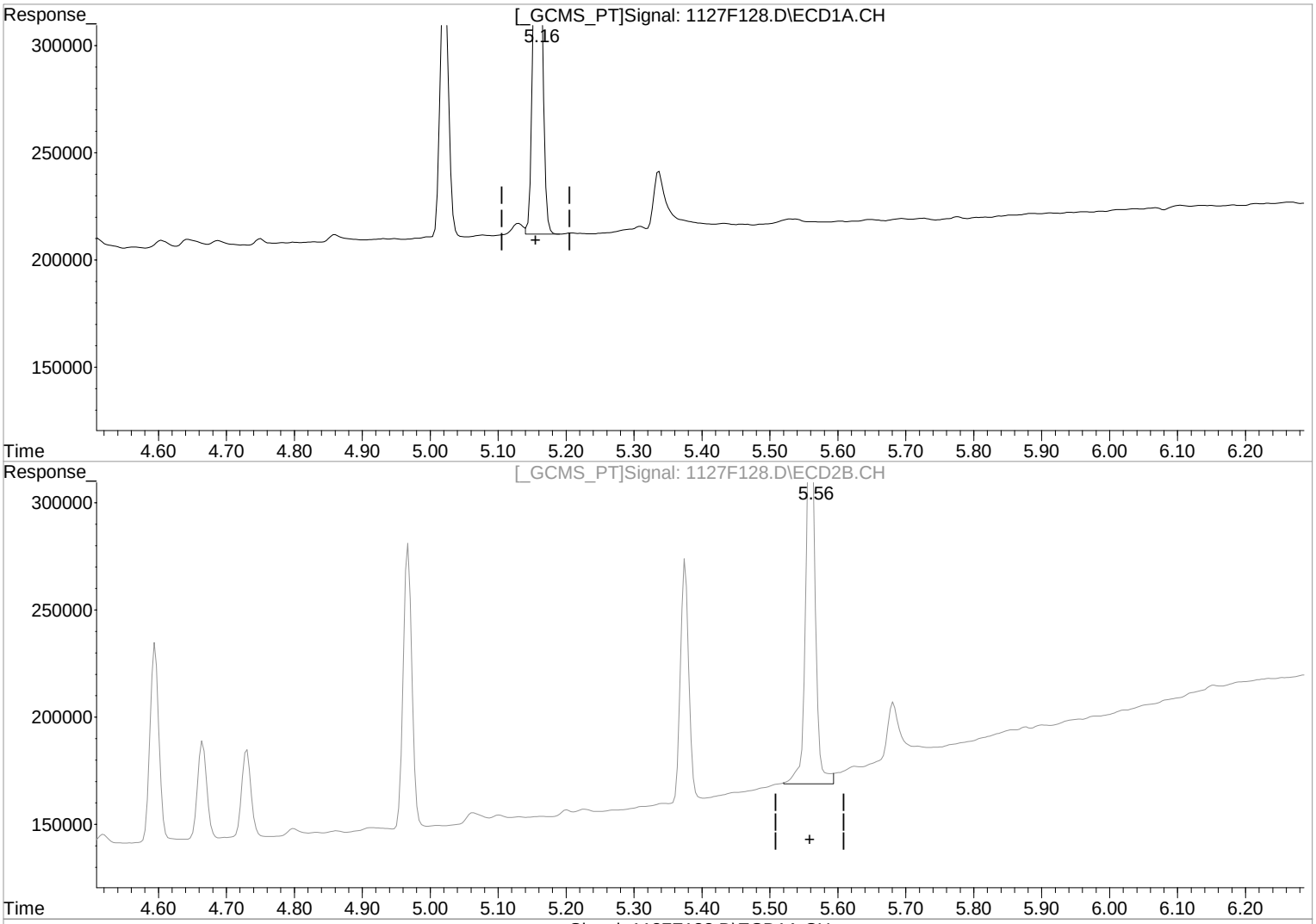
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 3.366ug/L

response 1873238

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(10) Pentachloroanisole #2

5.56min 3.097ug/L m

response 1755630

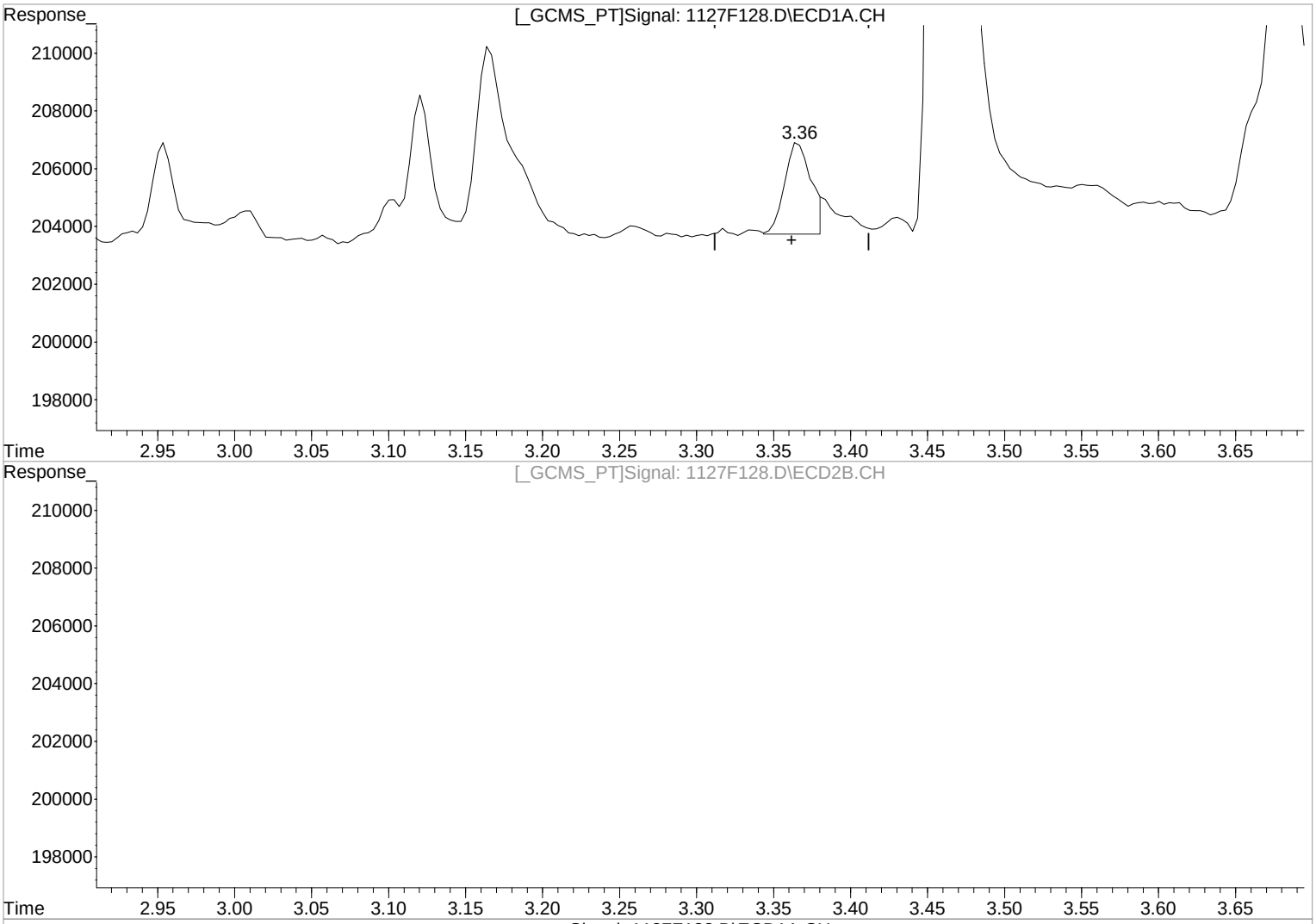
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 3.203ug/L m

response 38712

Manual Integration:

After

After, No Before

Baseline Shoulder

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 2.745ug/L

response 36048

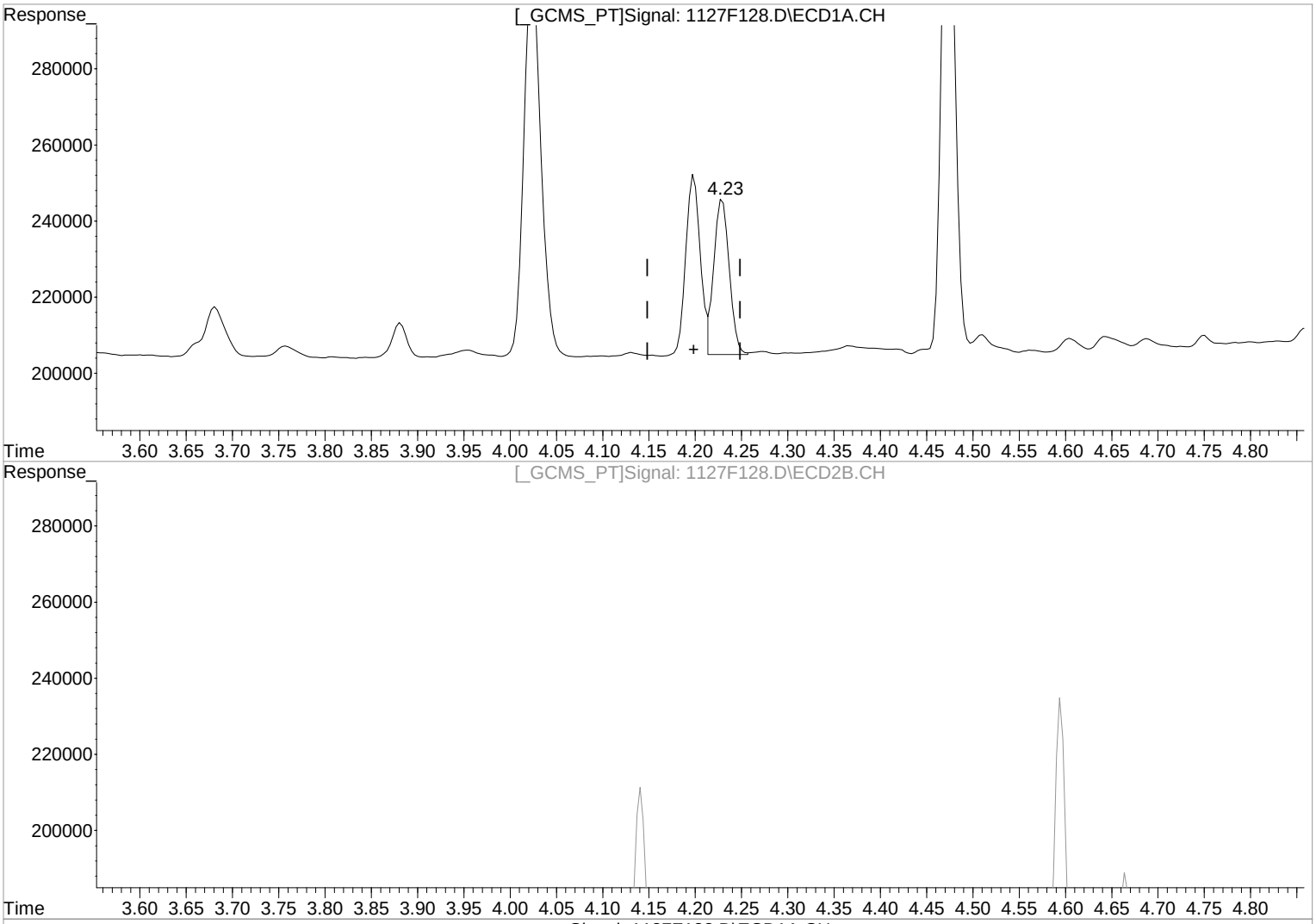
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 2.915ug/L m

response 463666

Manual Integration:

After

After, No Before

Wrong peak

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 2.794ug/L

response 405392

(+) = Expected Retention Time

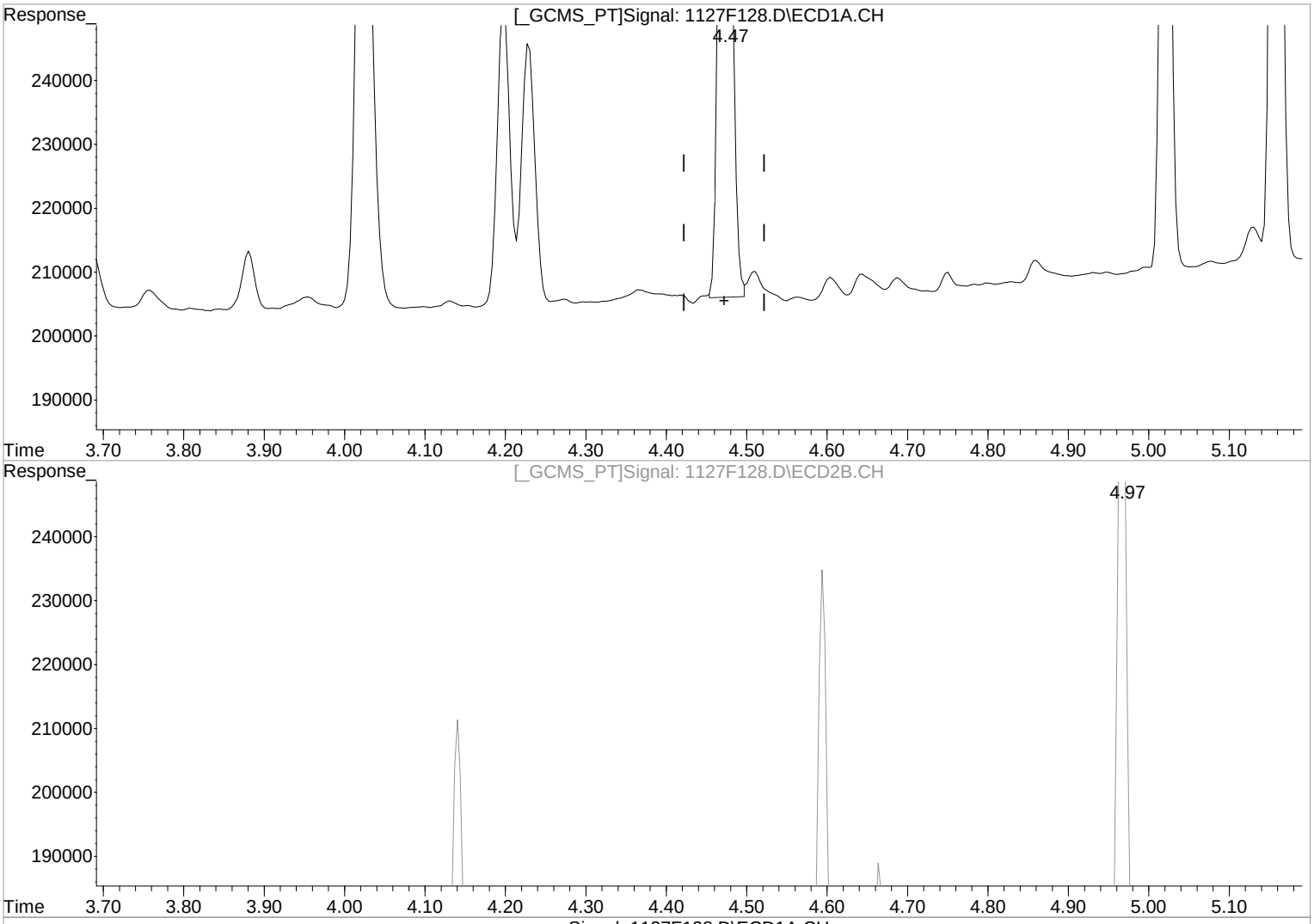
1127F128.D 112717-PCP.M Wed Nov 29 17:04:10 2017

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(7) 2,3,5,6-Tetrachlorophenol (M)

4.47min 2.929ug/L m

response 1468326

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(7) 2,3,5,6-Tetrachlorophenol #2 (M)

4.97min 2.369ug/L

response 1190526

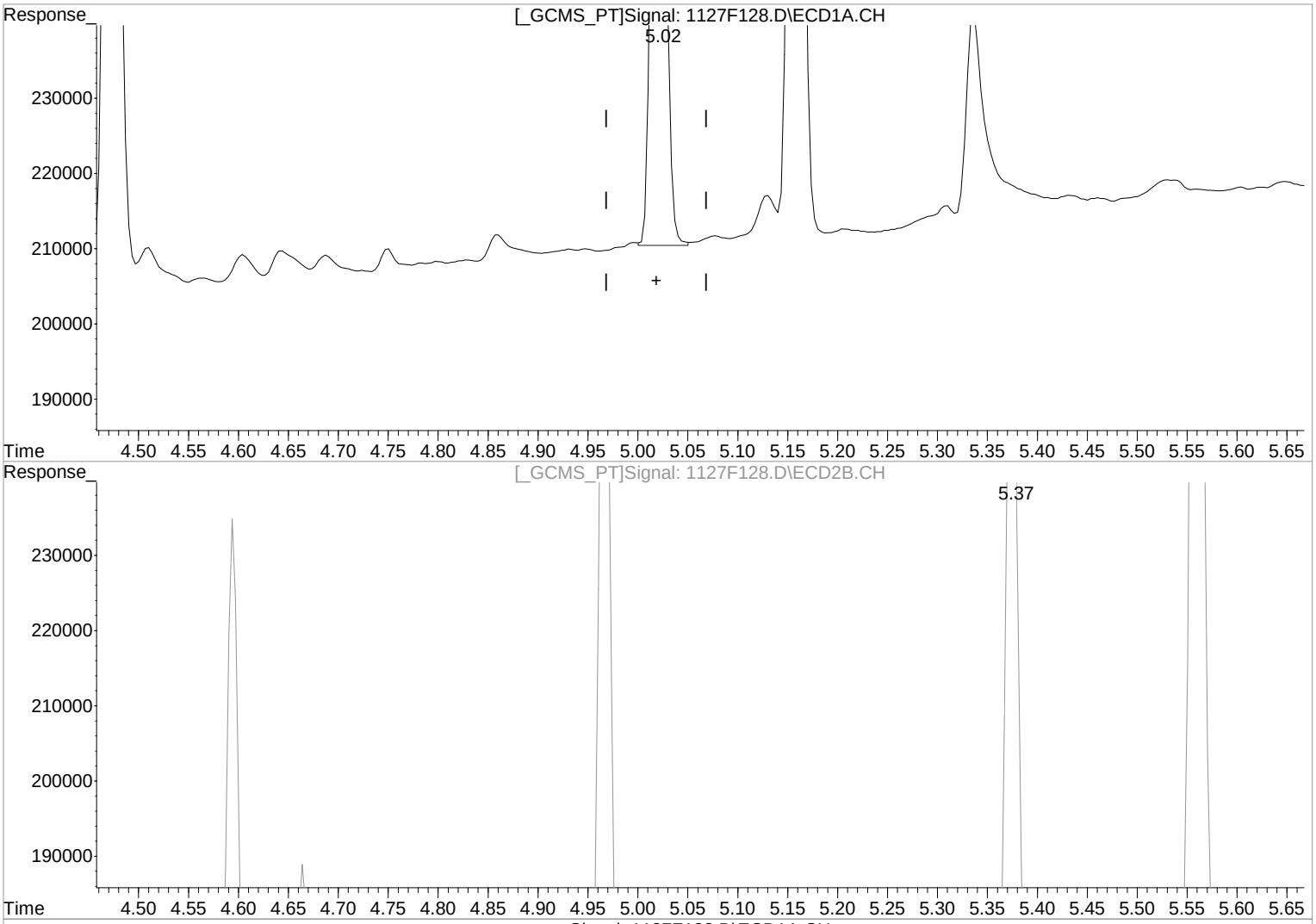
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 11/29/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 3.268ug/L m

response 1110862

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 2.911ug/L

response 994692

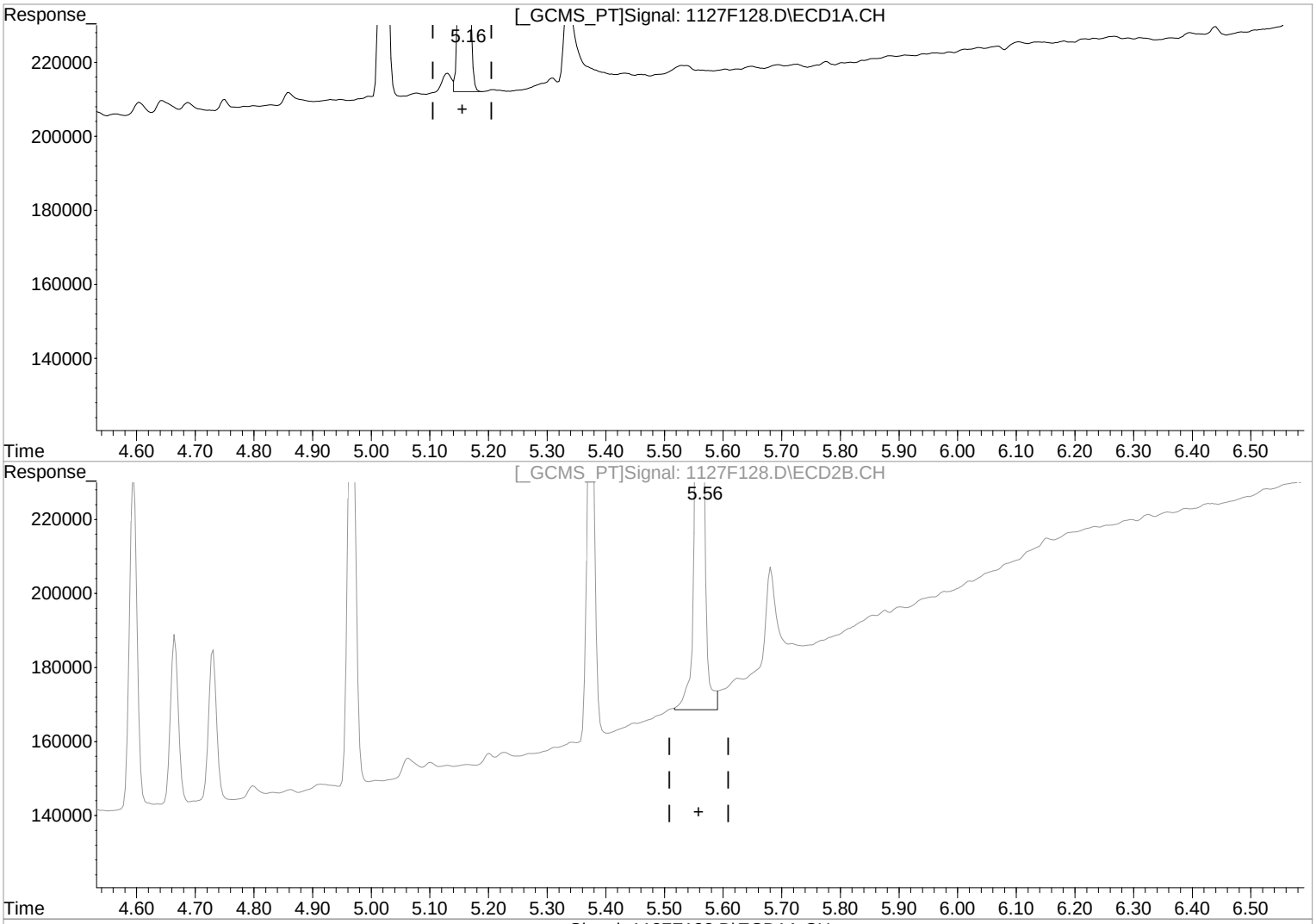
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC28\DATA\112717-CAL\1127F128.D\ECD2B.CH
Acq On : 27 Nov 2017 7:16 pm Operator: CV
Sample : PENTA01-88H 2.5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:53 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F128.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 3.199ug/L

response 1873238

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 2.949ug/L m

response 1758532

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:54:14 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	2527708	1767222	8.403	6.791
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	86210	99632	5.317m	5.318
2)		3,5-Dichlorophen	3.36	3.91	68638	67856	5.680m	5.167
3)		2,4,6-Trichlorop	3.46	4.14	1814386	1543468	5.117	4.293
5)		2,4,5-Trichlorop	4.20	4.66	996824	834646	6.411	5.080
6)		3,4,5-Trichlorop	4.23f	4.73	897110	748802	5.640m	5.160
7)	M	2,3,5,6-Tetrachl	4.47	4.97	2791280	2329296	5.568m	4.635
8)	M	2,3,4,5-Tetrachl	5.02	5.37	2110338	1864900	6.209m	5.458
9)	M	Pentachloropheno	5.16	5.56	3505892	3190336	5.988	5.351m
10)		Pentachloroaniso	5.16	5.56	3505892	3212868	6.300	5.668m

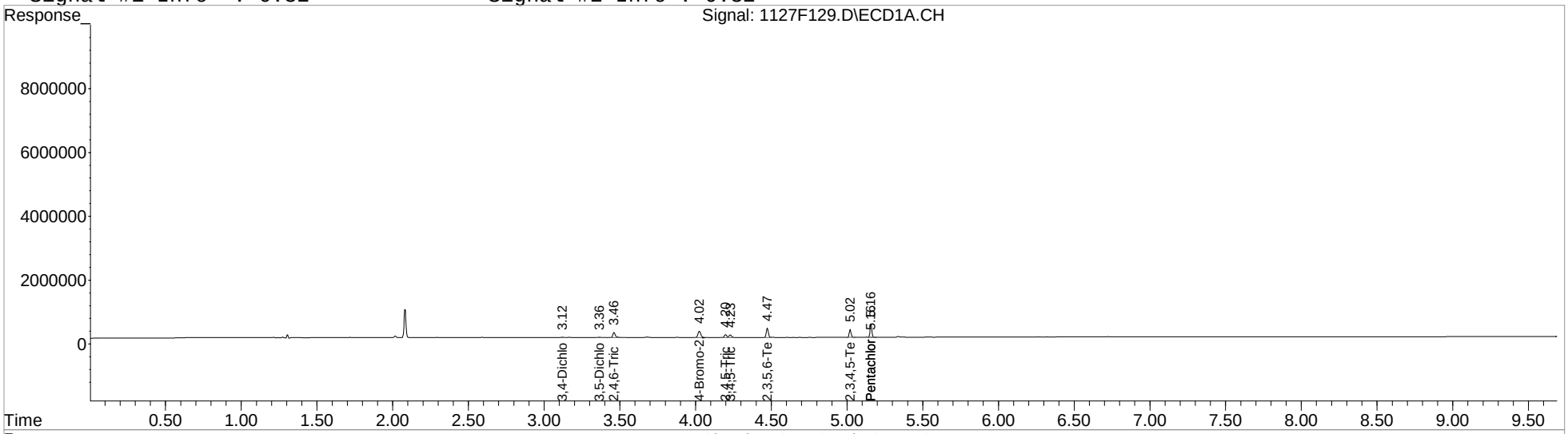
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

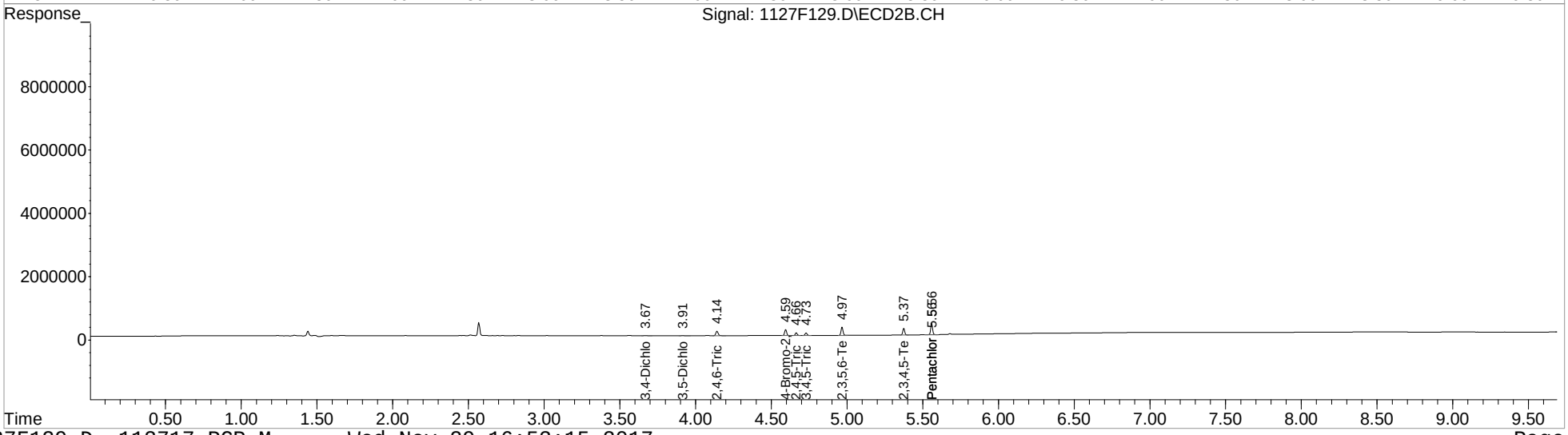
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



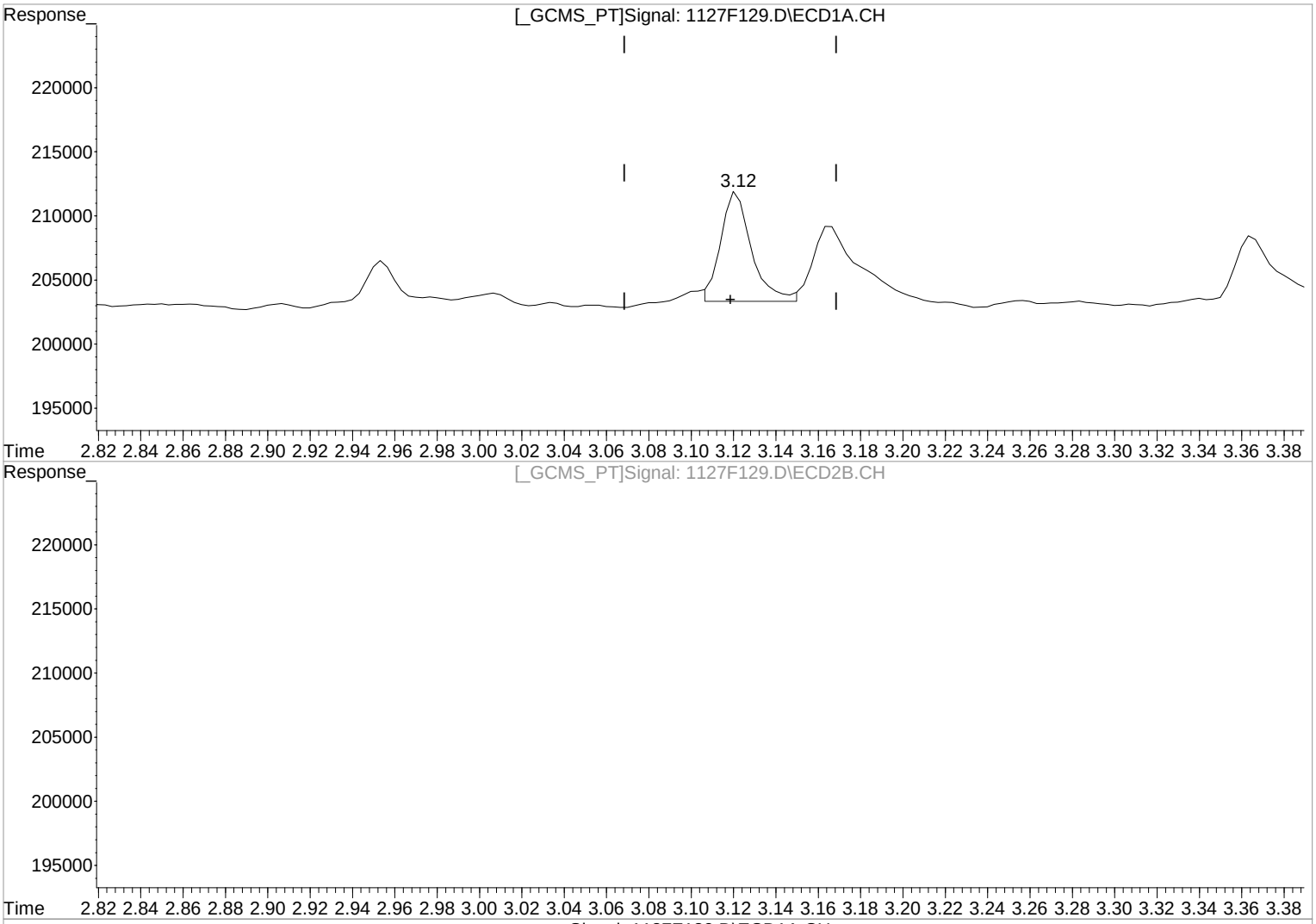


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 5.317ug/L m

response 86210

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 5.318ug/L

response 99632

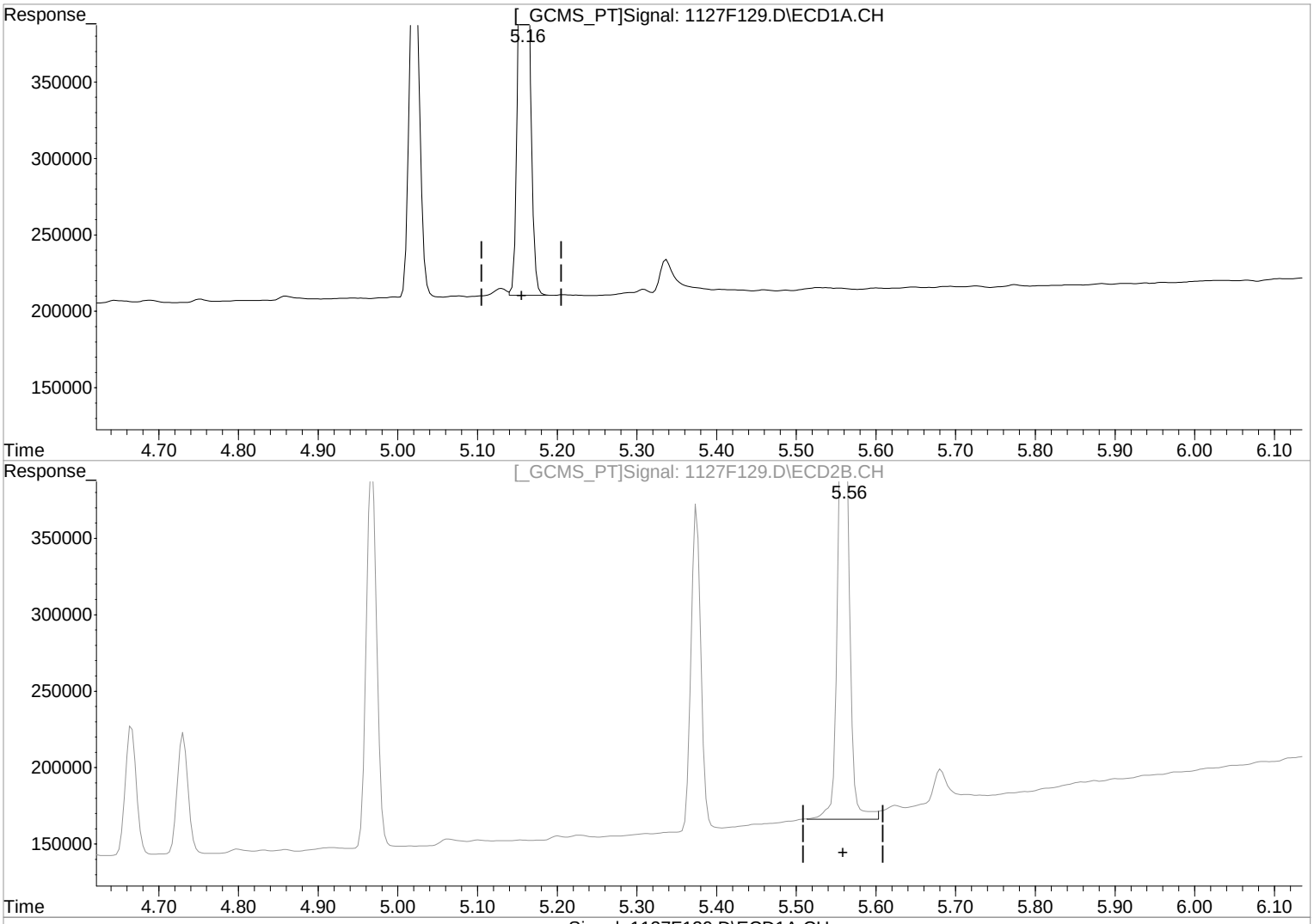
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 6.300ug/L

response 3505892

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(10) Pentachloroanisole #2

5.56min 5.668ug/L m

response 3212868

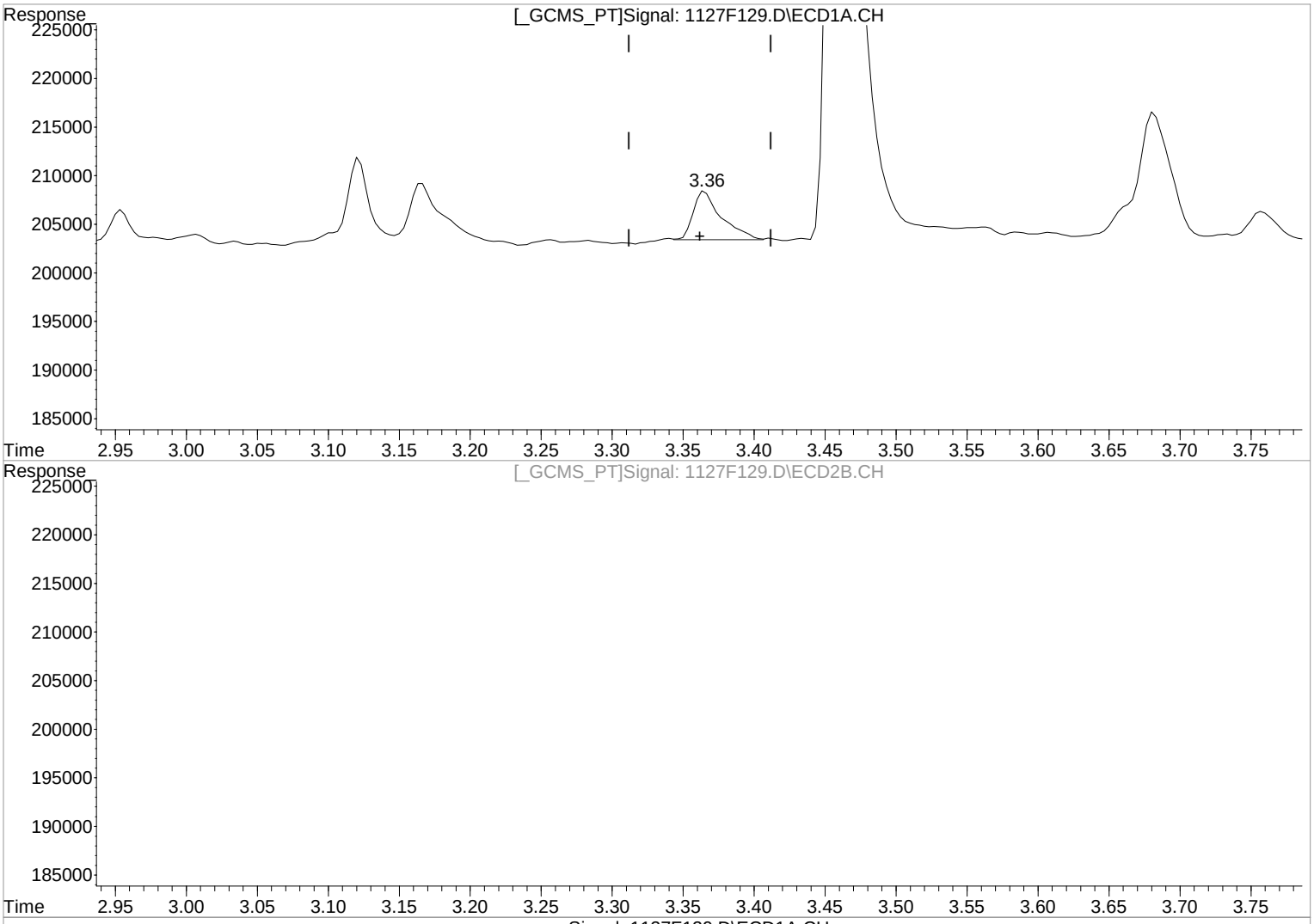
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 11/29/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 5.680ug/L m

response 68638

Manual Integration:

After

After, No Before Baseline Shoulder

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 5.167ug/L

response 67856

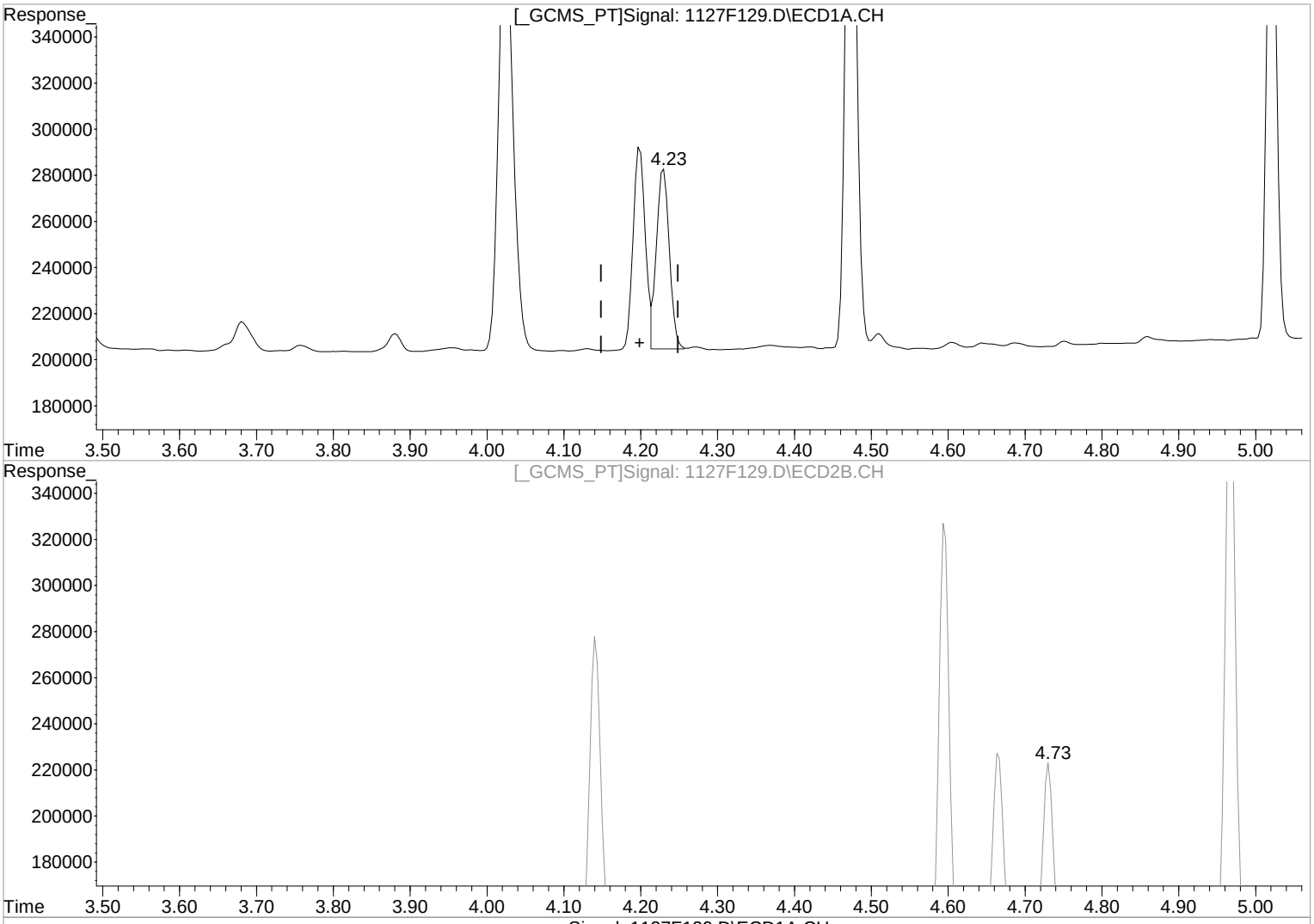
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 11/29/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 5.640ug/L m

response 897110

(6) 3,4,5-Trichlorophenol #2

4.73min 5.160ug/L

response 748802

Manual Integration:

After

Wrong Peak No Before

11/29/17

(+) = Expected Retention Time

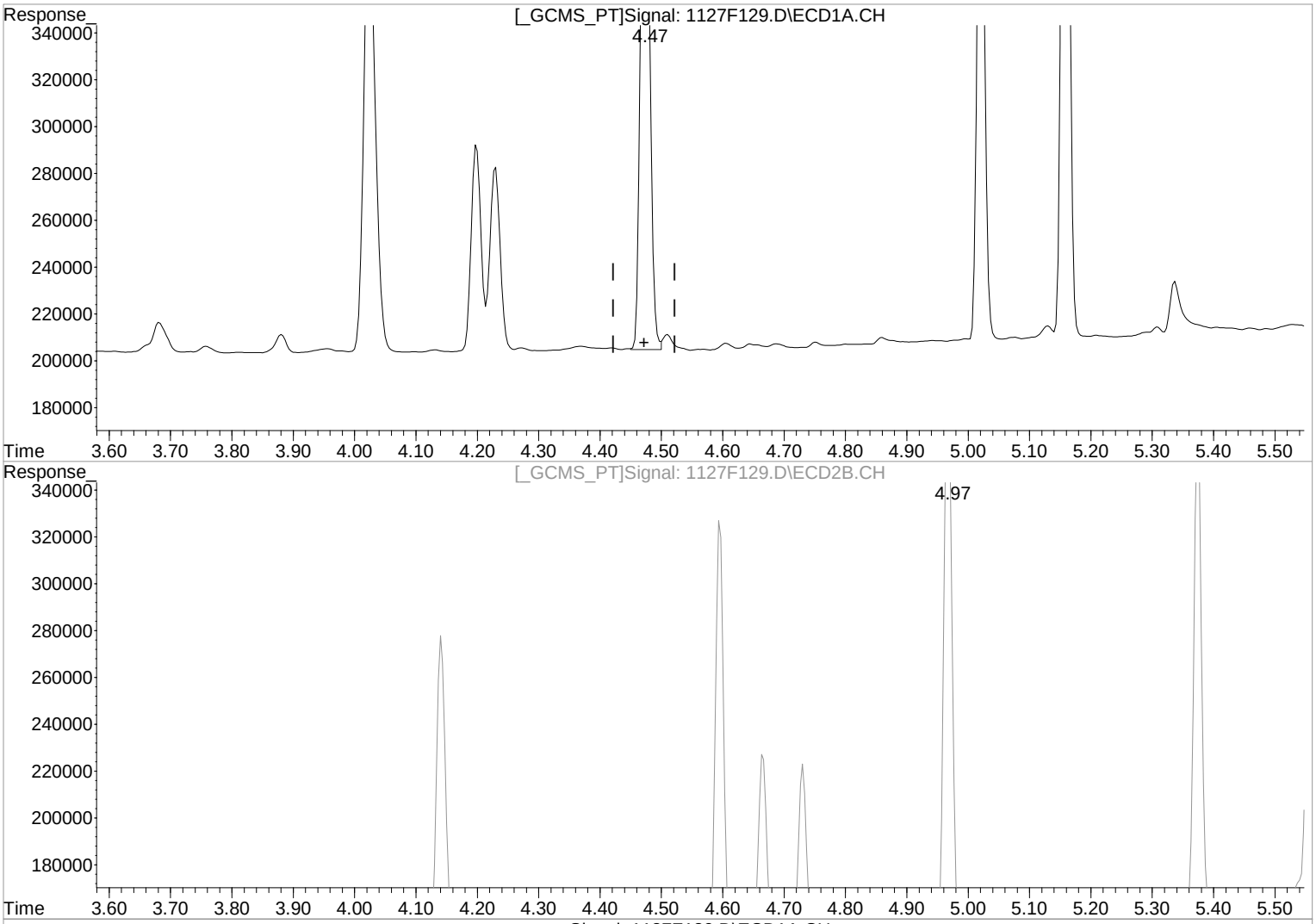
1127F129.D 112717-PCP.M Wed Nov 29 17:06:04 2017

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(7) 2,3,5,6-Tetrachlorophenol (M)

4.47min 5.568ug/L m

response 2791280

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

(7) 2,3,5,6-Tetrachlorophenol #2 (M)

4.97min 4.635ug/L

response 2329296

(+) = Expected Retention Time

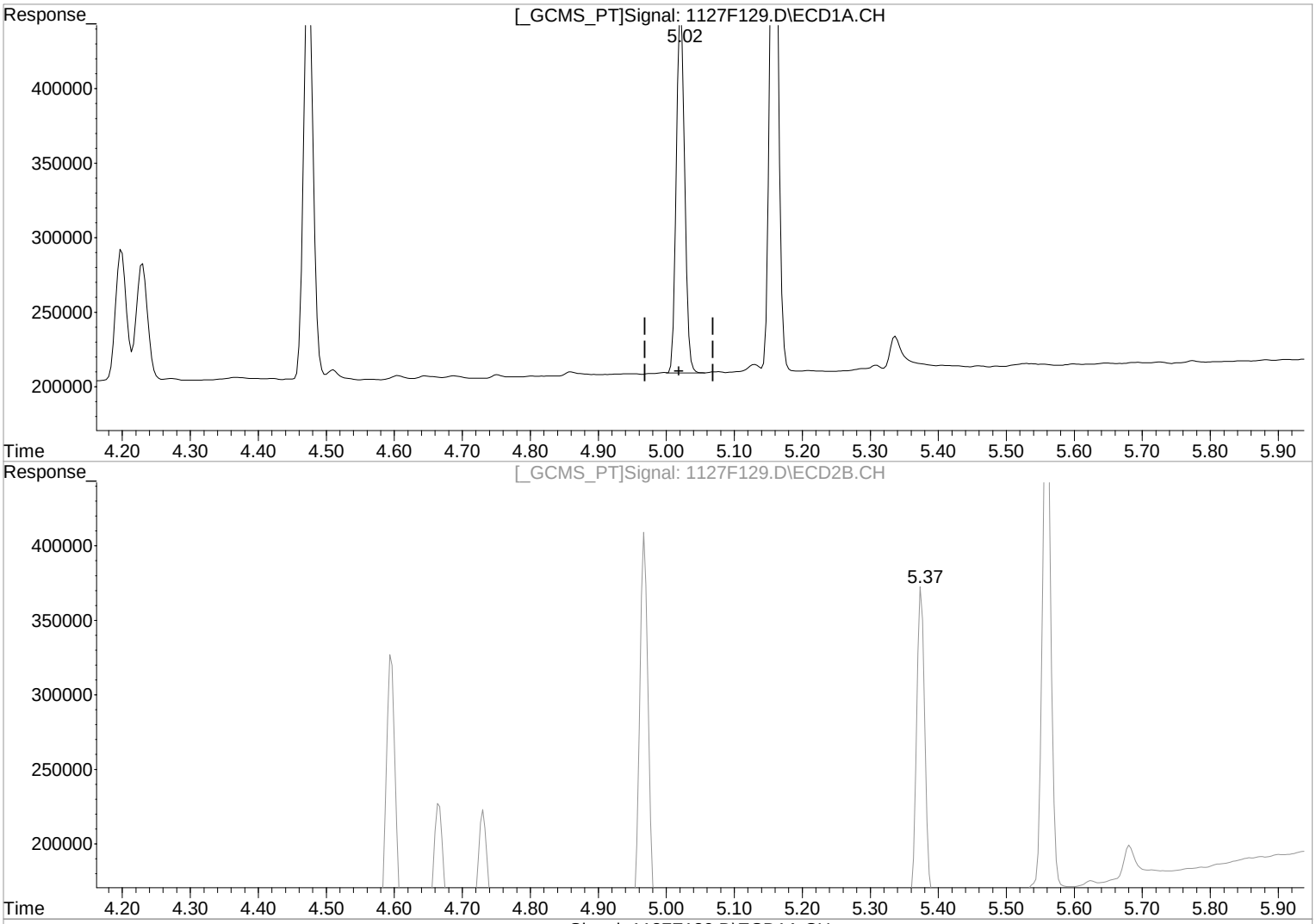
1127F129.D 112717-PCP.M Wed Nov 29 17:06:23 2017

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 6.209ug/L m

response 2110338

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 5.458ug/L

response 1864900

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

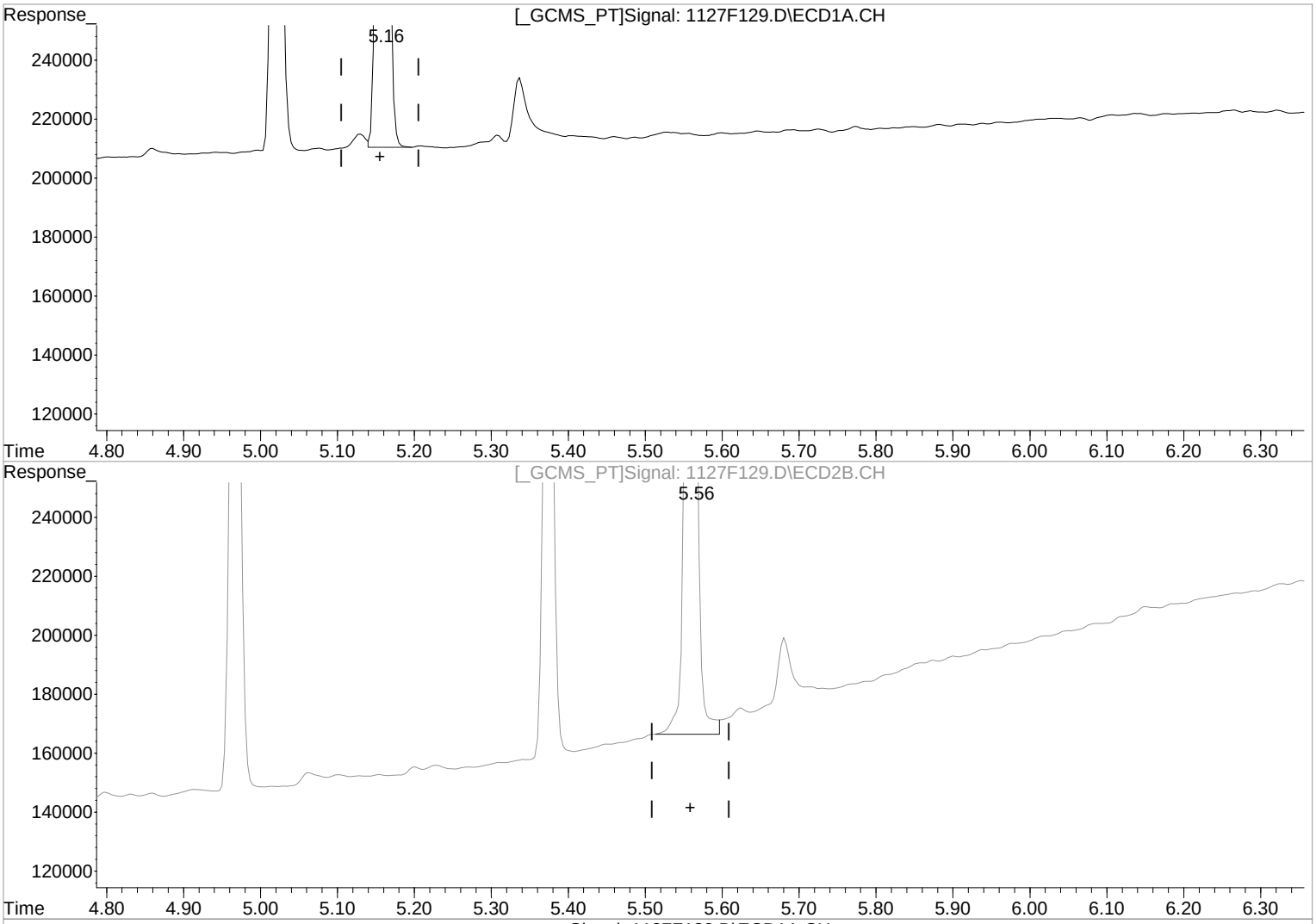
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC28\DATA\112717-CAL\1127F129.D\ECD2B.CH
Acq On : 27 Nov 2017 7:35 pm Operator: CV
Sample : PENTA01-88G 5 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:56 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F129.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 5.988ug/L

response 3505892

Manual Integration:

After

After, No Before Baseline shoulder

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 5.351ug/L m

response 3190336

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:57:47 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	4613736	3450884	15.338	13.260
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	163576	175528	10.089m	9.369
2)		3,5-Dichlorophen	3.36	3.91	101688	125108	8.415m	9.526
3)		2,4,6-Trichlorop	3.46	4.14	3229296	2813346	9.108	7.824
5)		2,4,5-Trichlorop	4.20	4.66	1789438	1475642	11.508	8.981
6)		3,4,5-Trichlorop	4.23f	4.73	1550706	1348458	9.750m	9.293
7)	M	2,3,5,6-Tetrachl	4.47	4.96	4983492	4311232	9.941	8.579
8)	M	2,3,4,5-Tetrachl	5.02	5.37	3744556	3299360	11.017m	9.656
9)	M	Pentachloropheno	5.16	5.56	6298030	5874436	10.757	9.853
10)		Pentachloroaniso	5.16	5.56	6298030	5874436	11.317	10.363

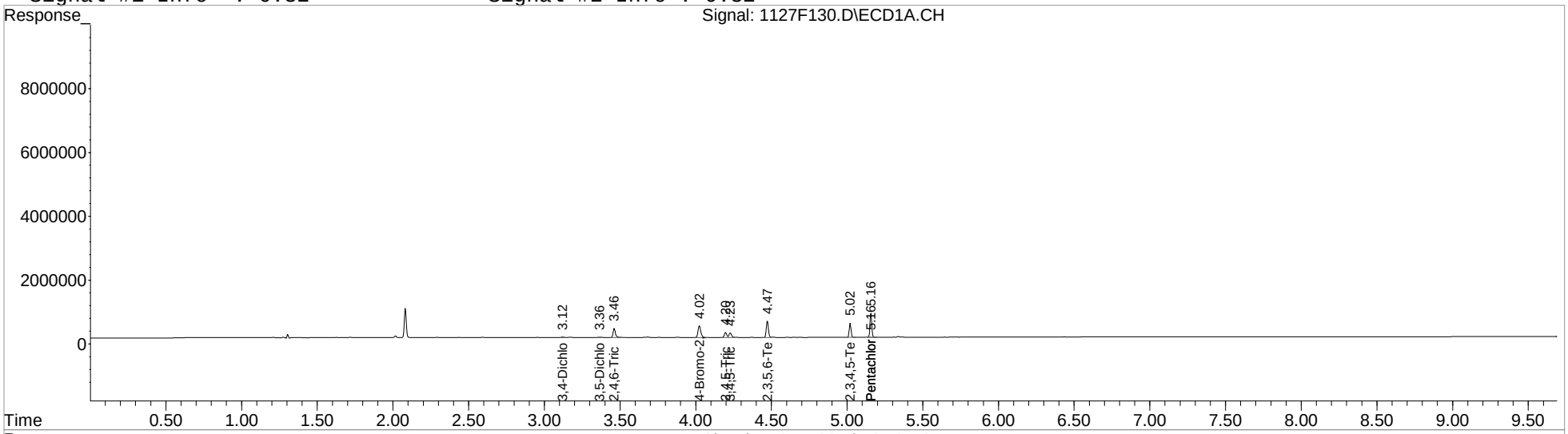
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

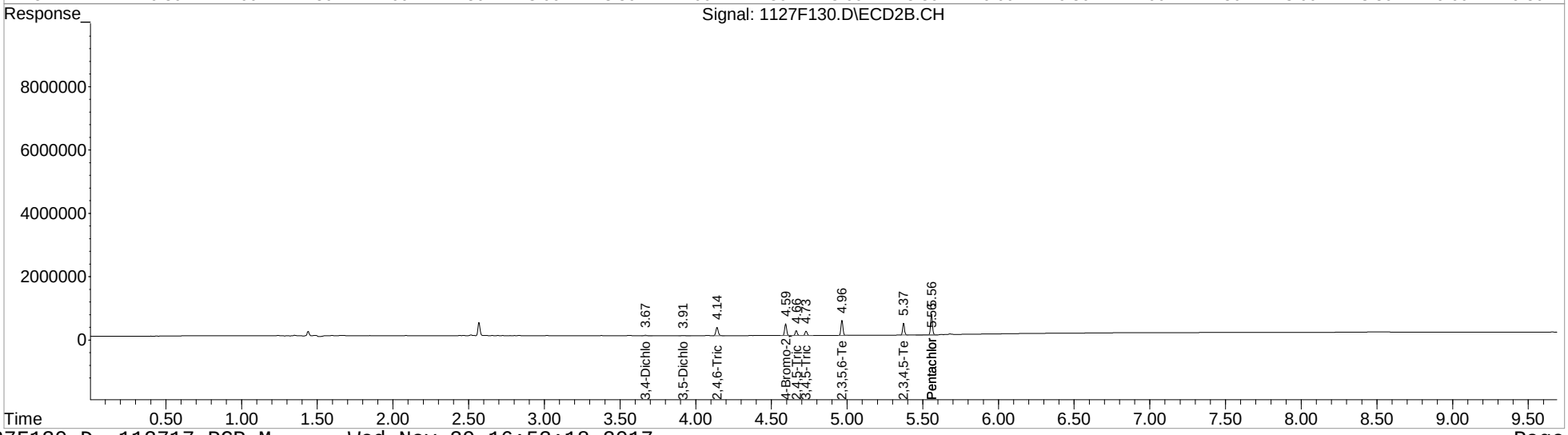
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



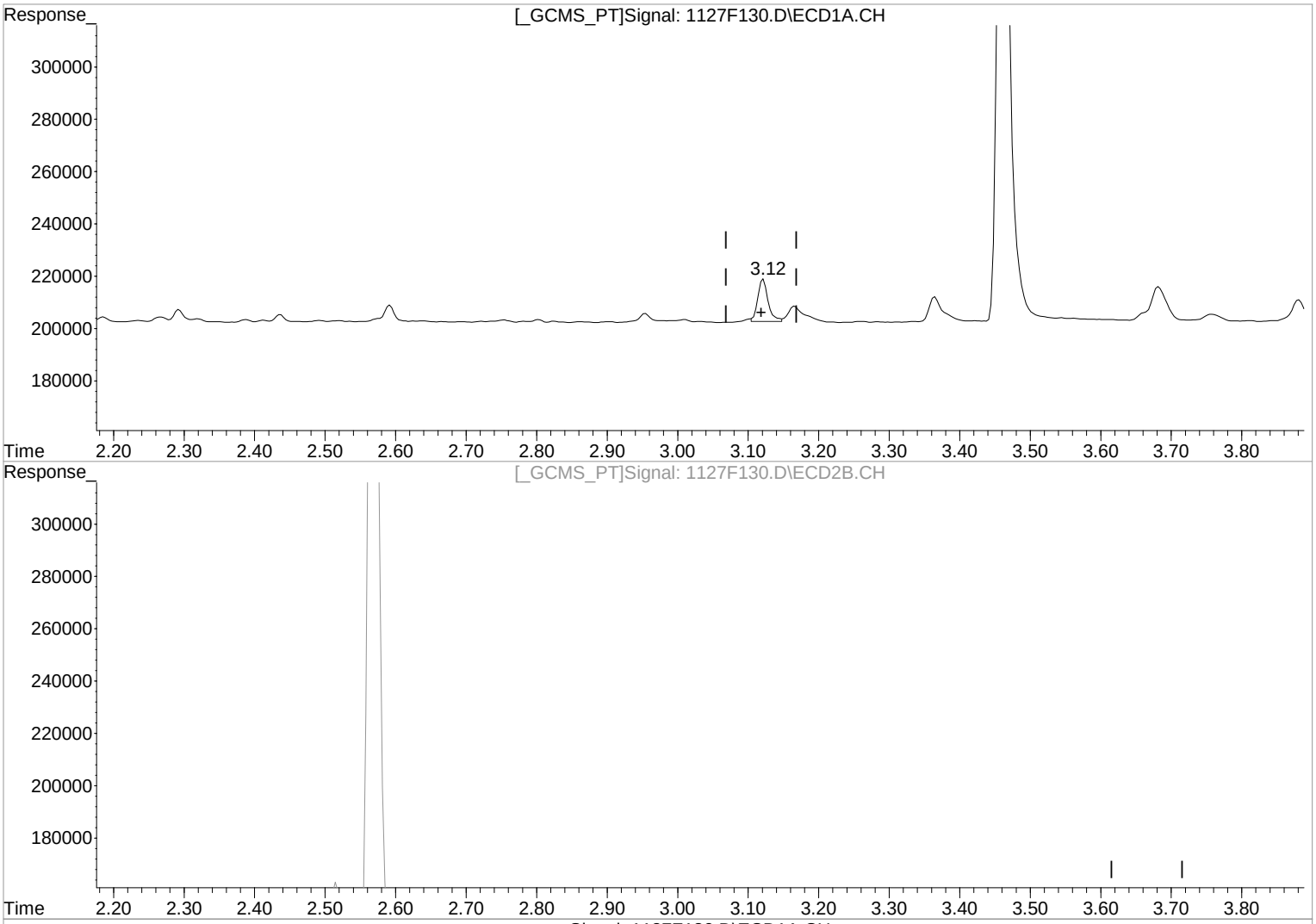


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 10.089ug/L m

response 163576

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(1) 3,4-Dichlorophenol #2

3.67min 9.369ug/L

response 175528

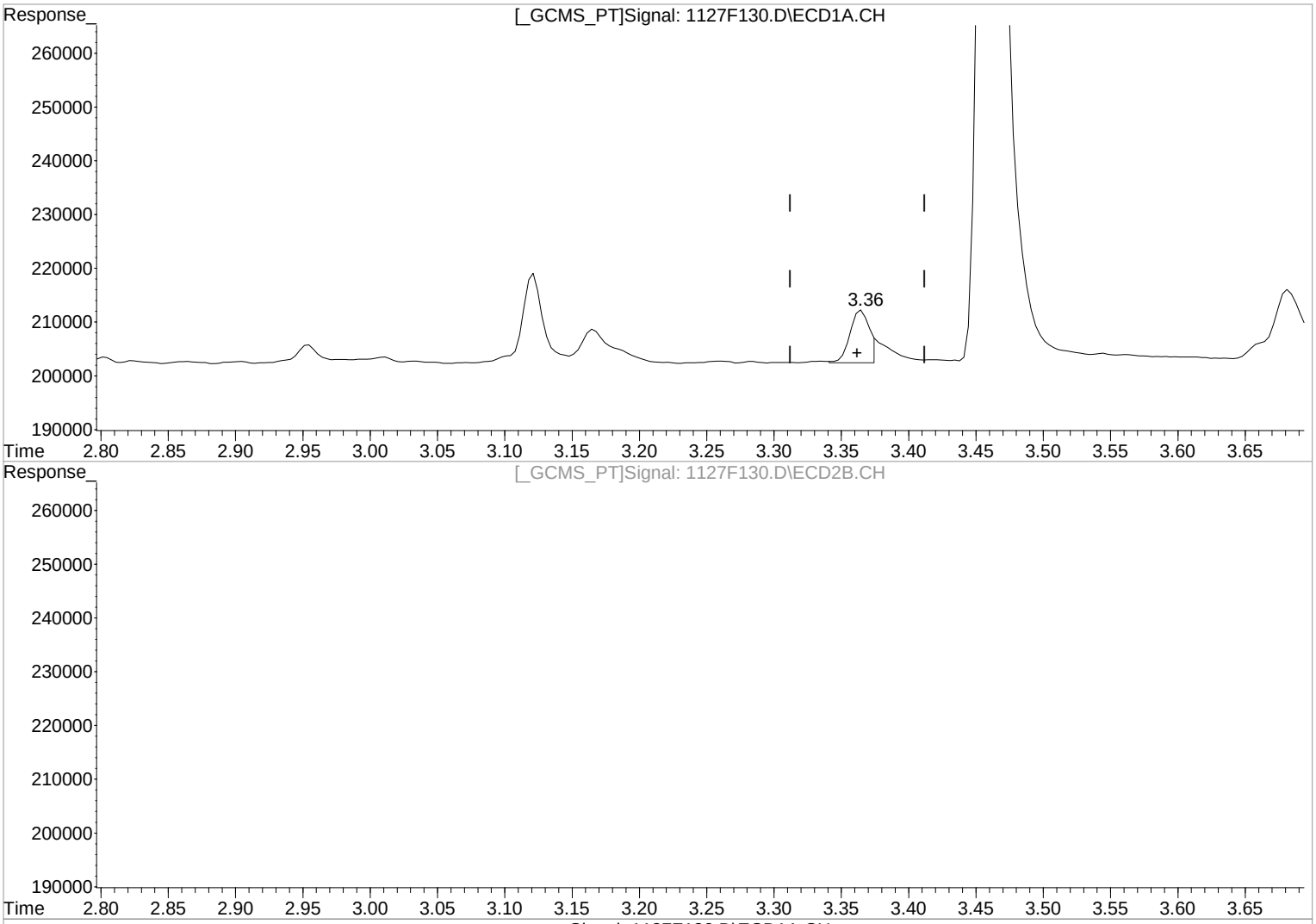
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 8.415ug/L m

response 101688

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(2) 3,5-Dichlorophenol #2

3.91min 9.526ug/L

response 125108

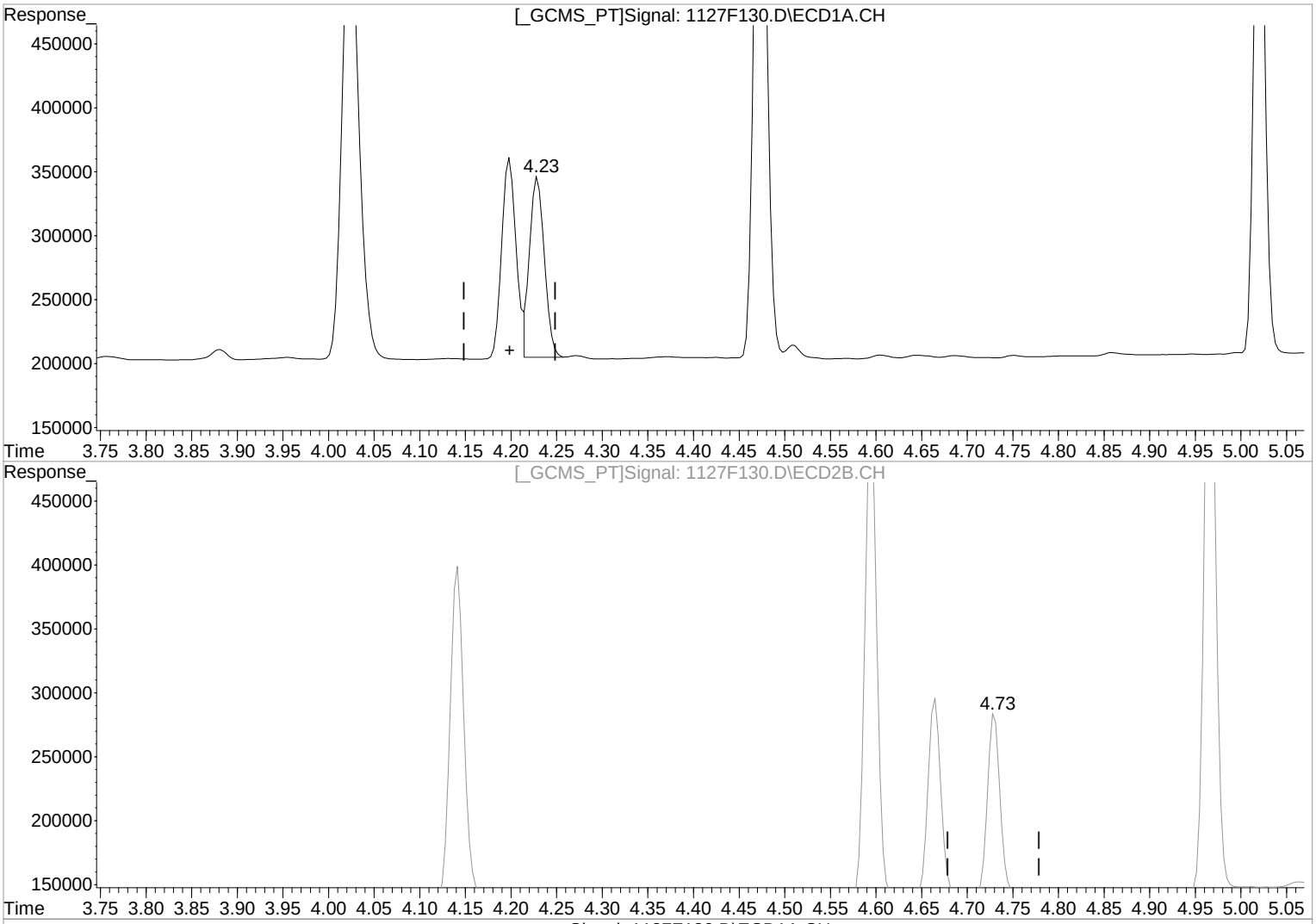
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 9.750ug/L m

response 1550706

Manual Integration:

After

Wrong peak, No Before

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 9.293ug/L

response 1348458

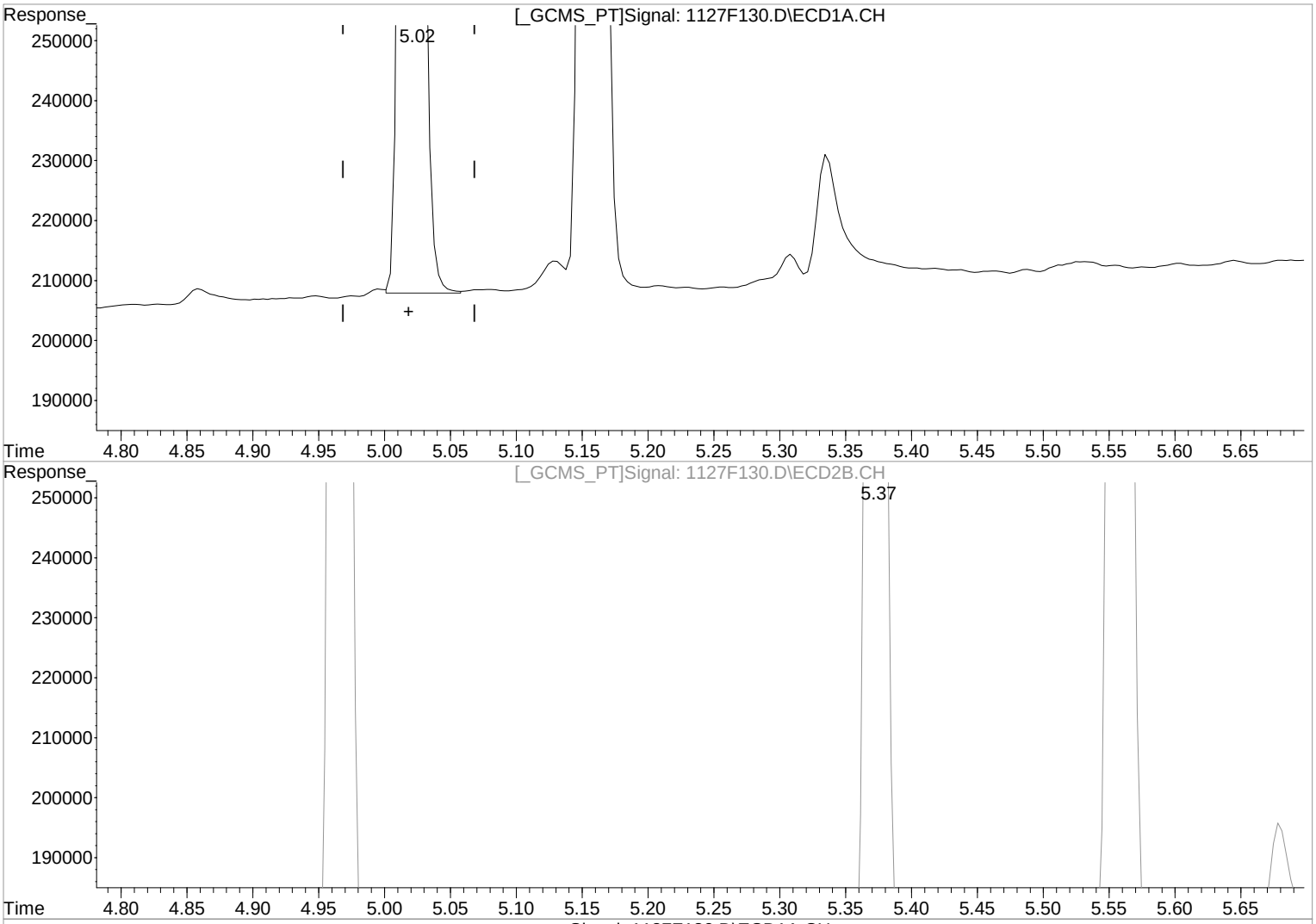
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC28\DATA\112717-CAL\1127F130.D\ECD2B.CH
Acq On : 27 Nov 2017 7:53 pm Operator: CV
Sample : PENTA01-88I 10 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 16:59 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F130.D\ECD1A.CH

(8) 2,3,4,5-Tetrachlorophenol (M)

5.02min 11.017ug/L m

response 3744556

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(8) 2,3,4,5-Tetrachlorophenol #2 (M)

5.37min 9.656ug/L

response 3299360

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:00:34 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.60	11143798	9056888	37.047	34.802
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	400014	405654	24.671m	21.652
2)		3,5-Dichlorophen	3.36	3.91	316008	288184	26.150	21.944
3)		2,4,6-Trichlorop	3.46	4.14	7312718	6768082	20.625	18.823
5)		2,4,5-Trichlorop	4.20	4.66	3927156	3388118	25.257	20.621
6)		3,4,5-Trichlorop	4.23f	4.73	3598120	3123178	22.622m	21.523
7)	M	2,3,5,6-Tetrachl	4.47	4.97	11725474	10538308	23.390	20.971
8)	M	2,3,4,5-Tetrachl	5.02	5.37	8743824	7747010	25.726	22.673
9)	M	Pentachloropheno	5.16	5.56	14842634	13563198	25.350	22.748
10)		Pentachloroaniso	5.16	5.56	14842634	13563198	26.670	23.927

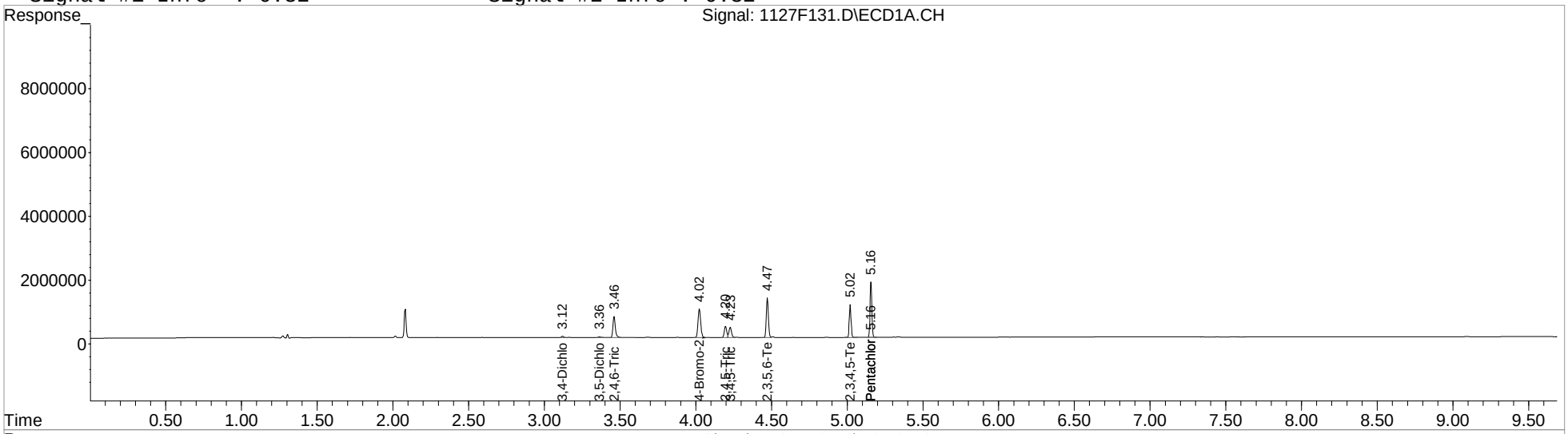
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

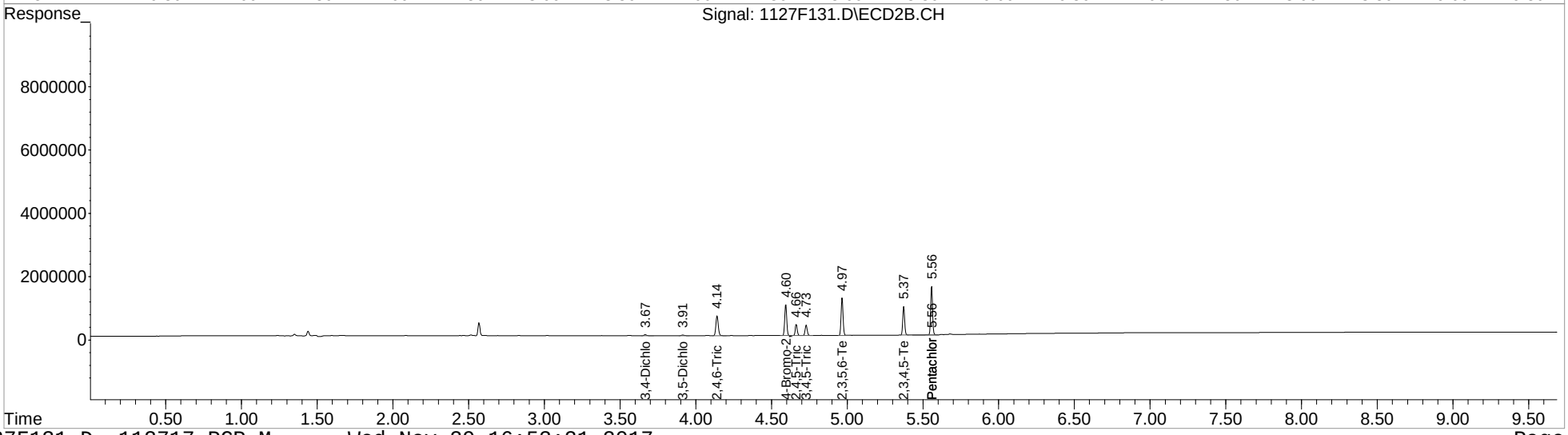
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 16:46:57 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



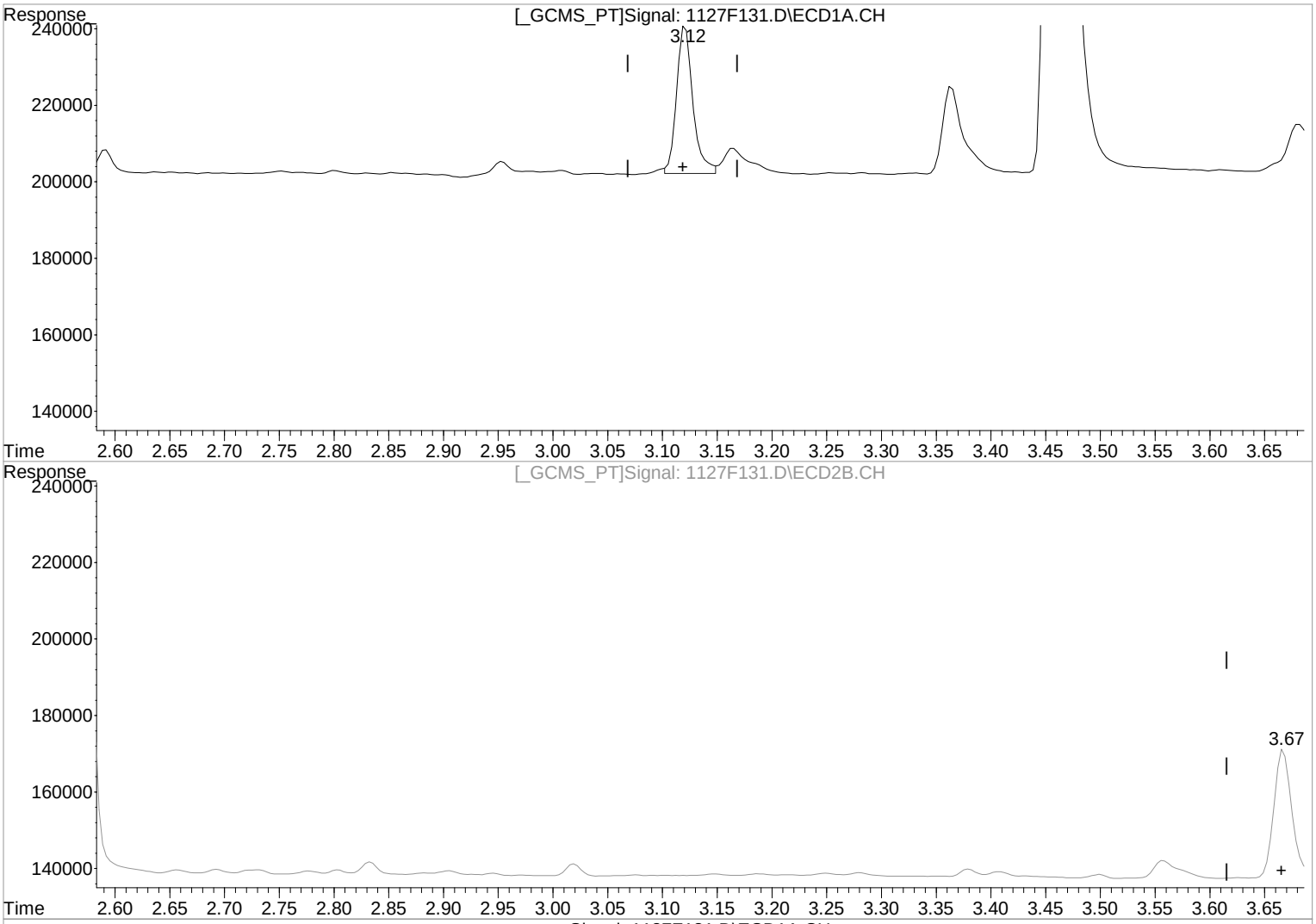


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F131.D\ECD1A.CH

(1) 3,4-Dichlorophenol

3.12min 24.671ug/L m

response 400014

(1) 3,4-Dichlorophenol #2

3.67min 21.652ug/L

response 405654

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(+) = Expected Retention Time

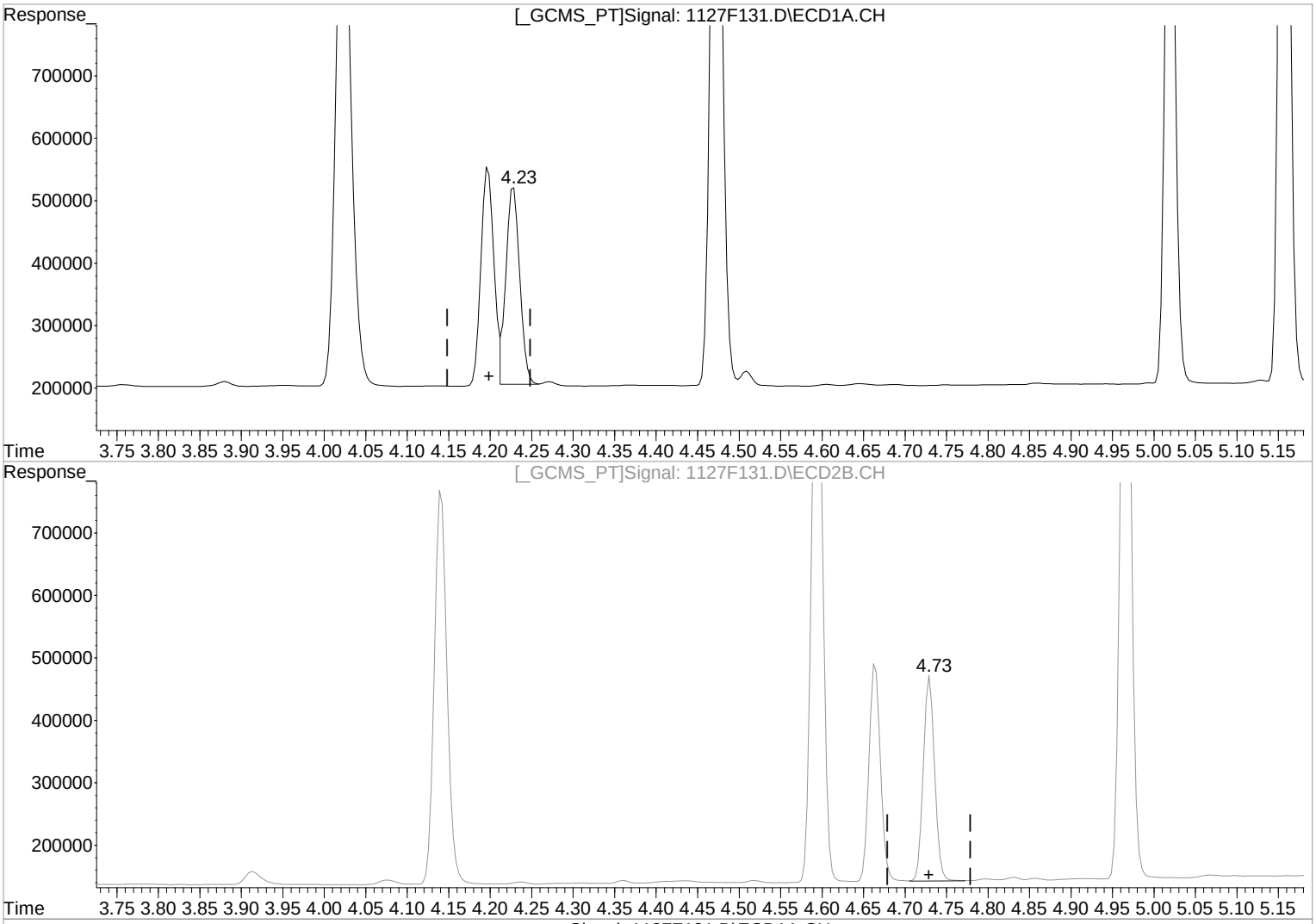
1127F131.D 112717-PCP.M Wed Nov 29 17:09:30 2017

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC28\DATA\112717-CAL\1127F131.D\ECD2B.CH
Acq On : 27 Nov 2017 8:12 pm Operator: CV
Sample : PENTA01-88E 25 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:01 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F131.D\ECD1A.CH

(6) 3,4,5-Trichlorophenol

4.23min 22.622ug/L m

response 3598120

Manual Integration:

After

Wrong peak, No Before

11/29/17

(6) 3,4,5-Trichlorophenol #2

4.73min 21.523ug/L

response 3123178

(+) = Expected Retention Time

1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:04:32 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	46010514	40158220	152.958	154.311
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	1447870	1405326	89.300	75.009
2)		3,5-Dichlorophen	3.36	3.91	1078920	1058212	89.282	80.579
3)		2,4,6-Trichlorop	3.46	4.14	28084798	27879842	79.211	77.538
5)		2,4,5-Trichlorop	4.20	4.66	14021972	12747090	90.179	77.583
6)		3,4,5-Trichlorop	4.23	4.73	12849696	11876992	80.789	81.849
7)	M	2,3,5,6-Tetrachl	4.47	4.97	45966424	43712650	91.693	86.988
8)	M	2,3,4,5-Tetrachl	5.02	5.37	33226836	30840508	97.760	90.262
9)	M	Pentachloropheno	5.16	5.56	58837190	53885886	100.489	90.377m
10)		Pentachloroaniso	5.16	5.56	58837190	53900478	105.722	95.088m

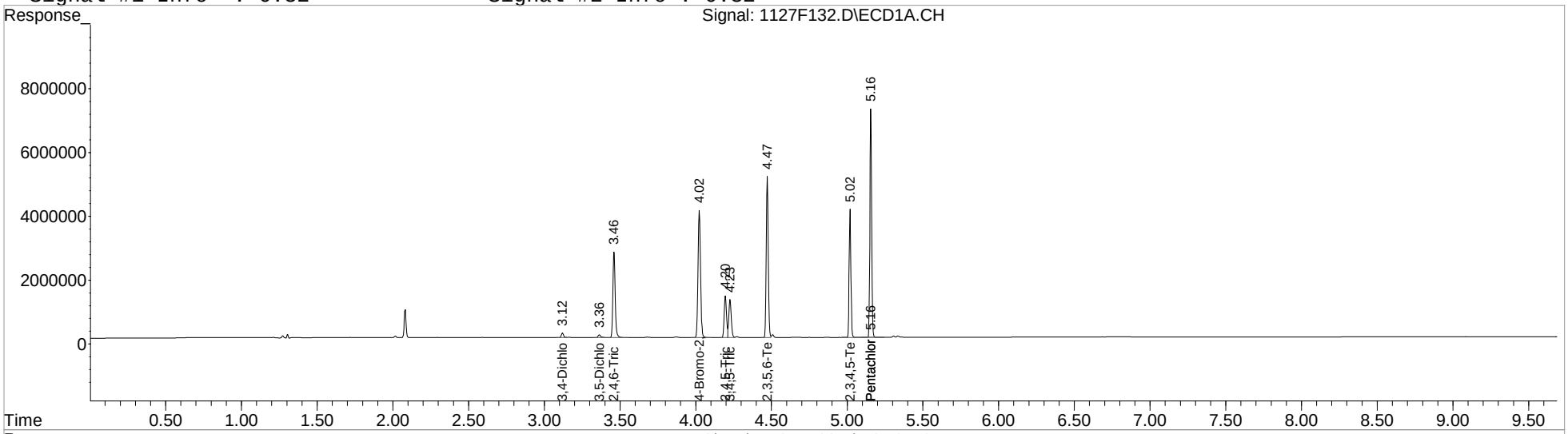
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

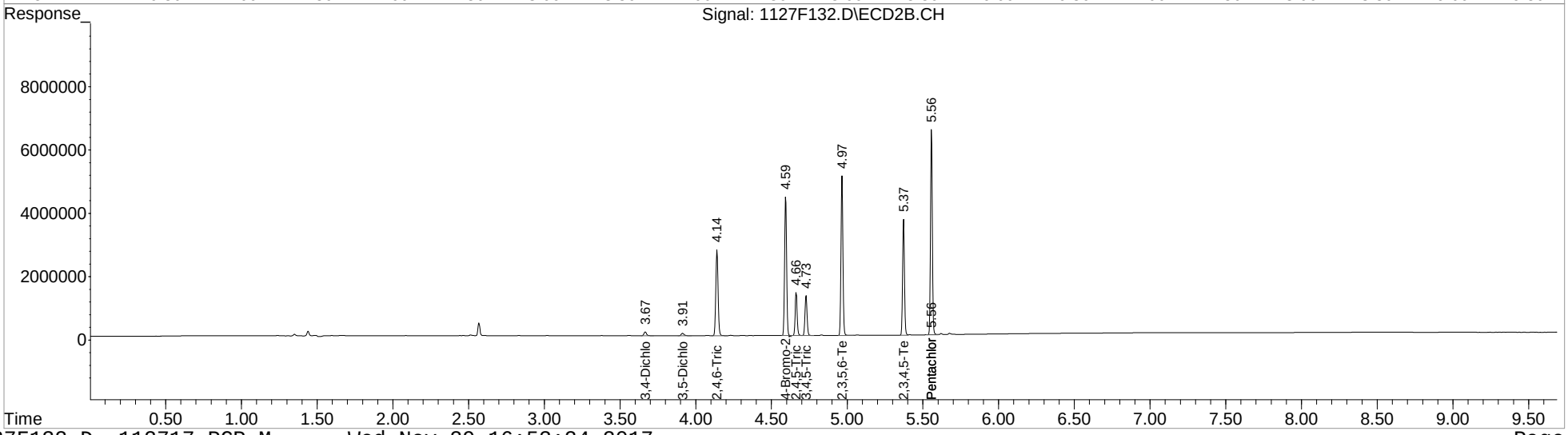
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



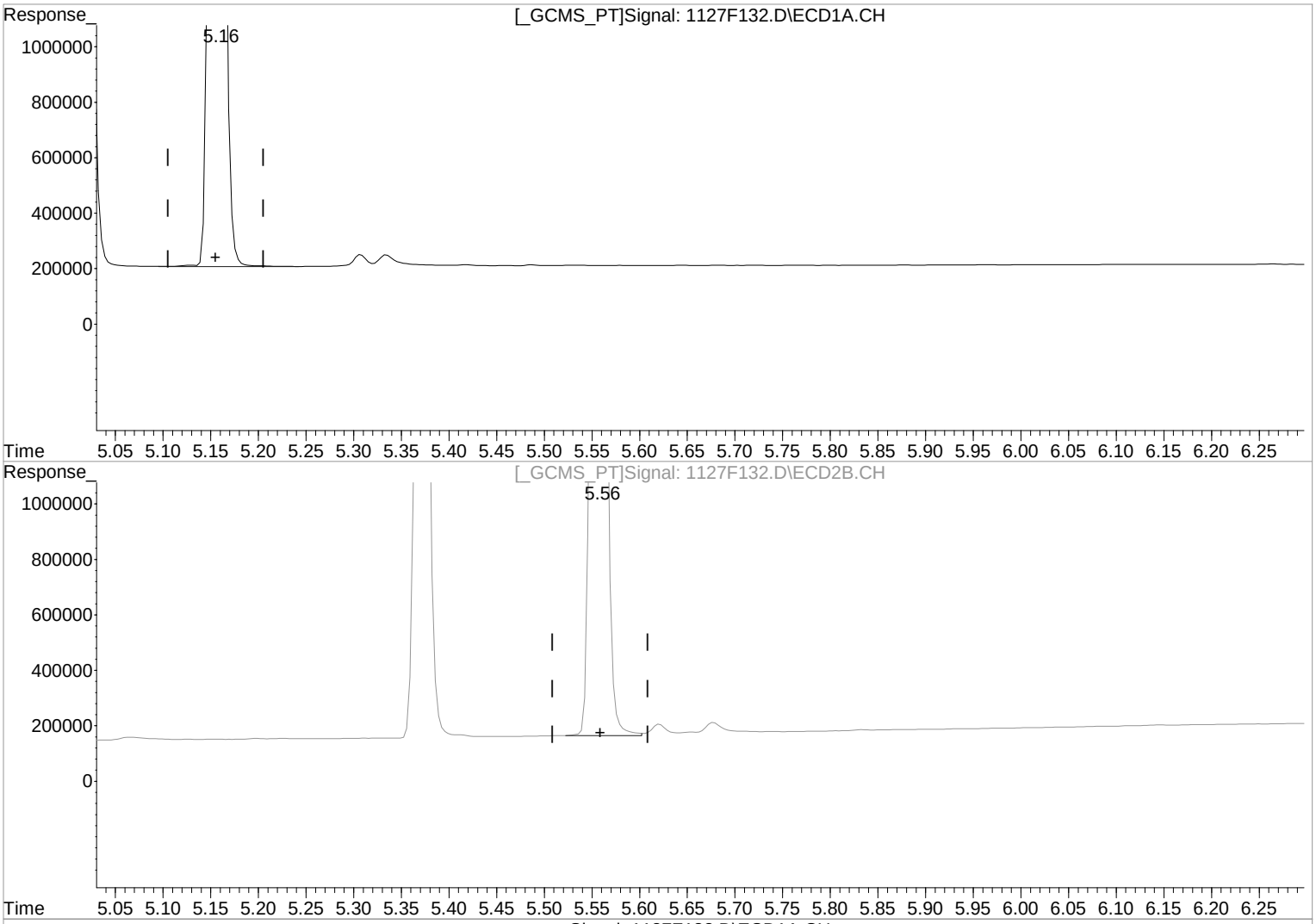


Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F132.D\ECD1A.CH

(10) Pentachloroanisole

5.16min 105.722ug/L

response 58837190

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(10) Pentachloroanisole #2

5.56min 95.088ug/L m

response 53900478

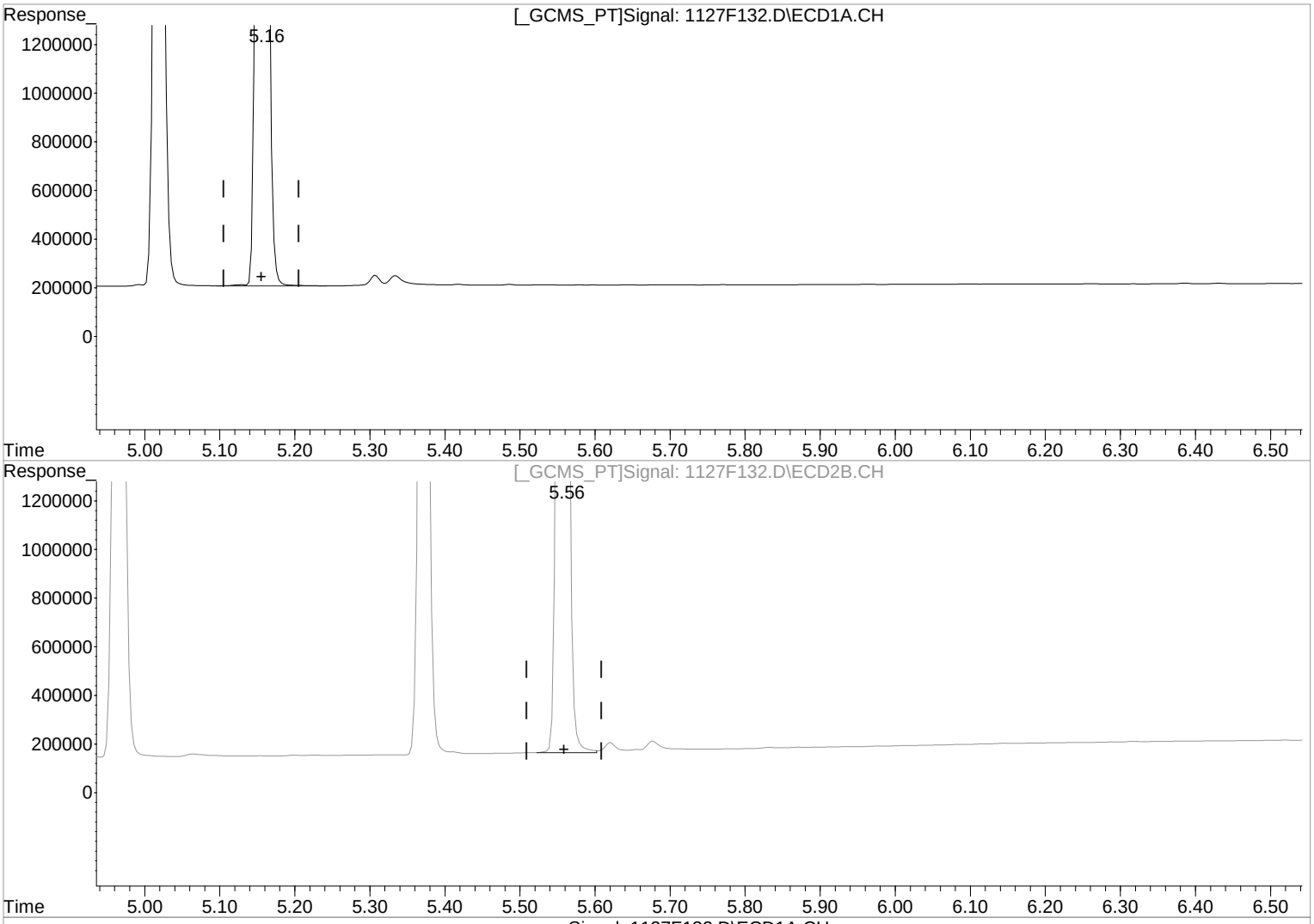
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC28\DATA\112717-CAL\1127F132.D\ECD2B.CH
Acq On : 27 Nov 2017 8:31 pm Operator: CV
Sample : PENTA01-88D 100 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:06 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration



Signal: 1127F132.D\ECD1A.CH

(9) Pentachlorophenol (M)

5.16min 100.489ug/L

response 58837190

Manual Integration:

After

Baseline Shoulder, No Before

11/29/17

(9) Pentachlorophenol #2 (M)

5.56min 90.377ug/L m

response 53885886

(+) = Expected Retention Time

1st CV 11/29/17
2nd SM 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD2B.CH
Acq On : 27 Nov 2017 8:50 pm Operator: CV
Sample : PENTA01-88C 250 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:07:29 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.02	4.59	106.4E6	95029258	353.601	365.158
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.67	2913944	2910812	179.722	155.365
2)		3,5-Dichlorophen	3.36	3.91	2192854	2185628	181.462	166.427
3)		2,4,6-Trichlorop	3.46	4.14	62598844	64308464	176.555	178.851
5)		2,4,5-Trichlorop	4.20	4.66	29452628	28960918	189.418	176.266
6)		3,4,5-Trichlorop	4.23	4.73	28327676	27111646	178.102	186.838
7)	M	2,3,5,6-Tetrachl	4.47	4.97	103.3E6	102.6E6	206.131	204.112
8)	M	2,3,4,5-Tetrachl	5.02	5.37	73882544	72867544	217.377	213.263
9)	M	Pentachloropheno	5.16	5.56	133.3E6	129.4E6	227.744	216.997
10)		Pentachloroaniso	5.16	5.56	133.3E6	129.4E6	239.603	228.245

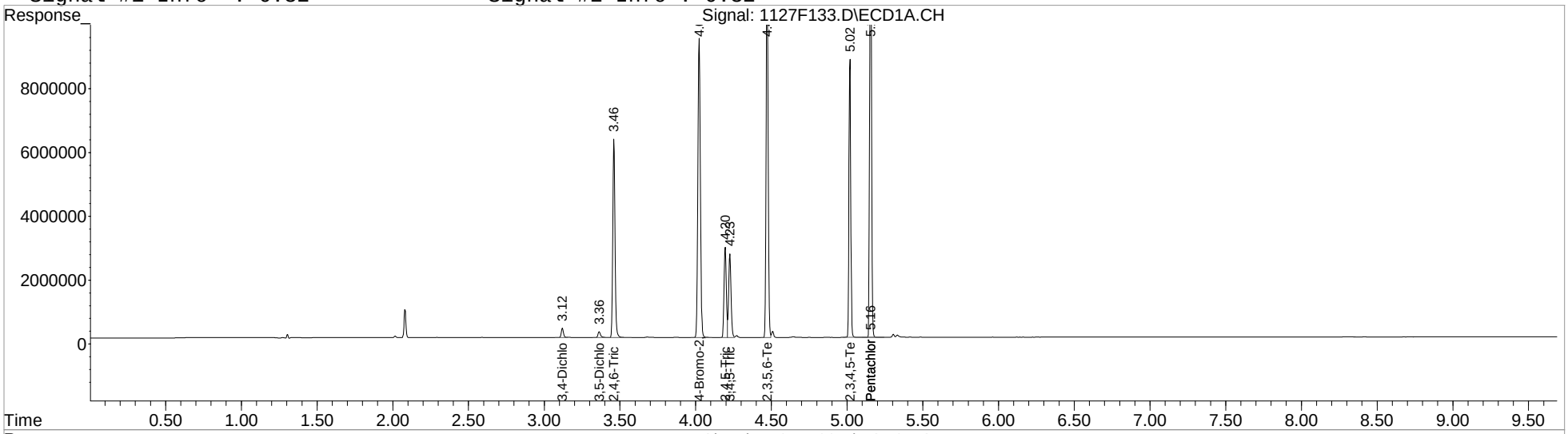
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

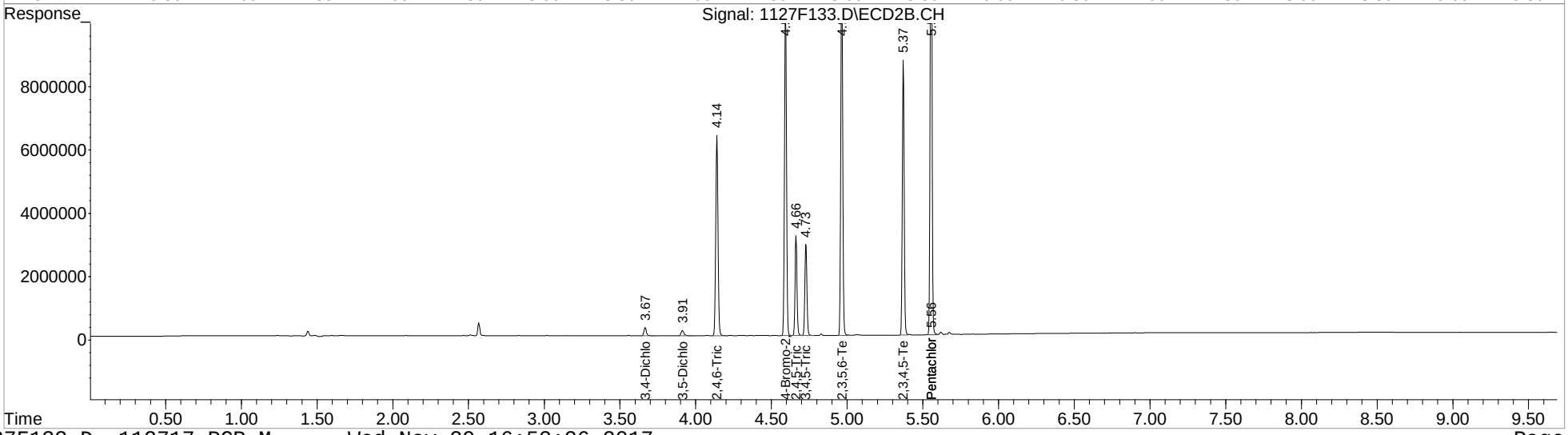
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC28\DATA\112717-CAL\1127F133.D\ECD2B.CH
Acq On : 27 Nov 2017 8:50 pm Operator: CV
Sample : PENTA01-88C 250 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:07 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD2B.CH
Acq On : 27 Nov 2017 9:08 pm Operator: CV
Sample : PENTA01-88N 500 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:40:27 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	0.00	0.00	0	0	N.D. d	N.D. d
		Target Compounds						
1)		3,4-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
2)		3,5-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
3)		2,4,6-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
5)		2,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
6)		3,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
9)	M	Pentachloropheno	5.15	5.56	258.3E6	266.6E6	441.097	447.195
10)		Pentachloroaniso	5.15	5.56	258.3E6	266.6E6	464.065	470.376

Penta and anisole only

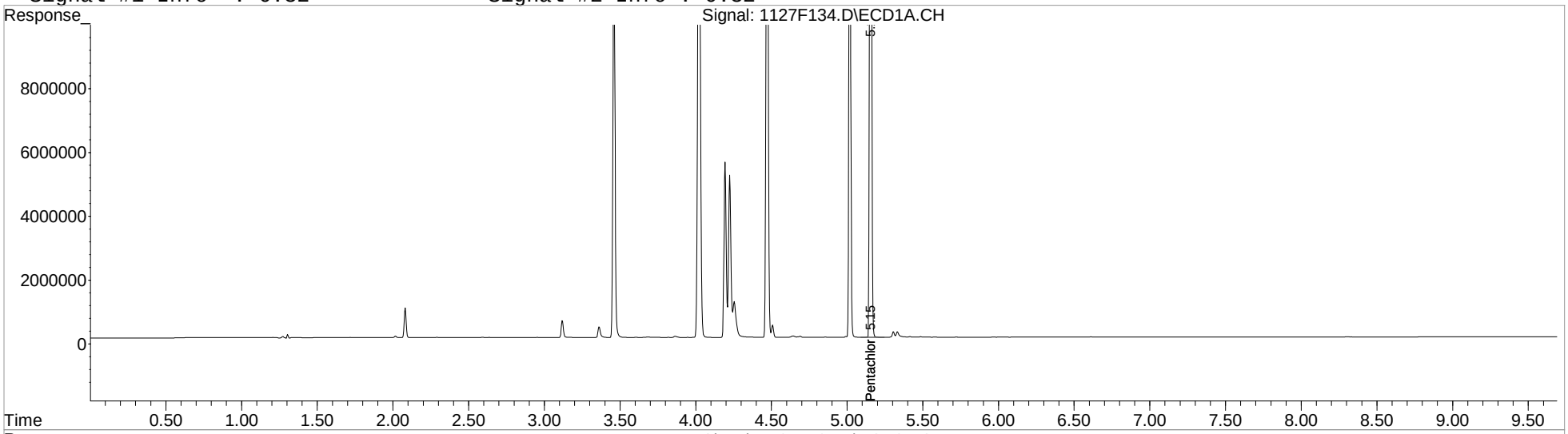
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

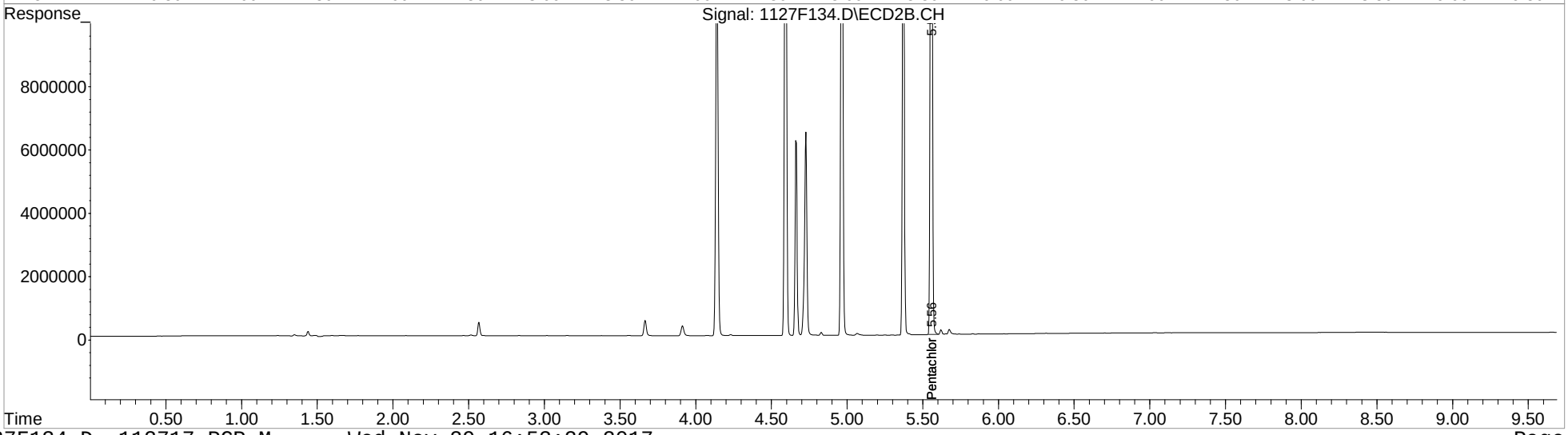
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC28\DATA\112717-CAL\1127F134.D\ECD2B.CH
Acq On : 27 Nov 2017 9:08 pm Operator: CV
Sample : PENTA01-88N 500 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:40 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st 11/29/17
2nd 12/12/17

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD2B.CH
Acq On : 27 Nov 2017 9:27 pm Operator: CV
Sample : PENTA01-88M 1000 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 28 17:10:53 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	0.00	0.00	0	0	N.D. d	N.D. d
		Target Compounds						
1)		3,4-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
2)		3,5-Dichlorophen	0.00	0.00	0	0	N.D. d	N.D. d
3)		2,4,6-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
5)		2,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
6)		3,4,5-Trichlorop	0.00	0.00	0	0	N.D. d	N.D. d
7)	M	2,3,5,6-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
8)	M	2,3,4,5-Tetrachl	0.00	0.00	0	0	N.D. d	N.D. d
9)	M	Pentachloropheno	5.16	5.56	484.7E6	524.6E6	827.802	879.883
10)		Pentachloroaniso	5.16	5.56	484.7E6	524.6E6	870.906	925.495

Penta and anisole only

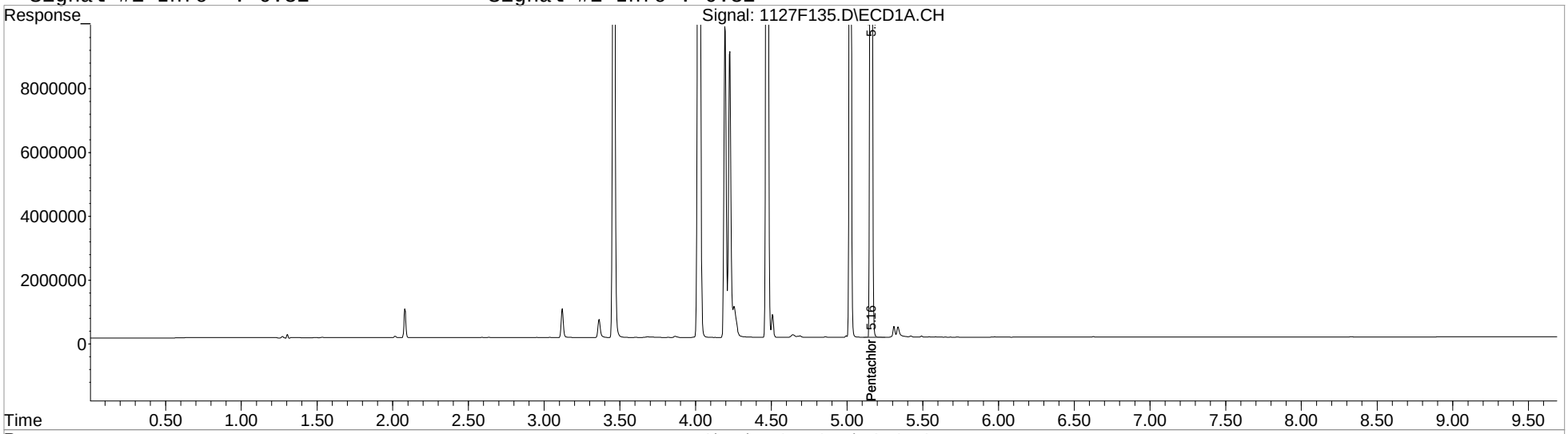
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

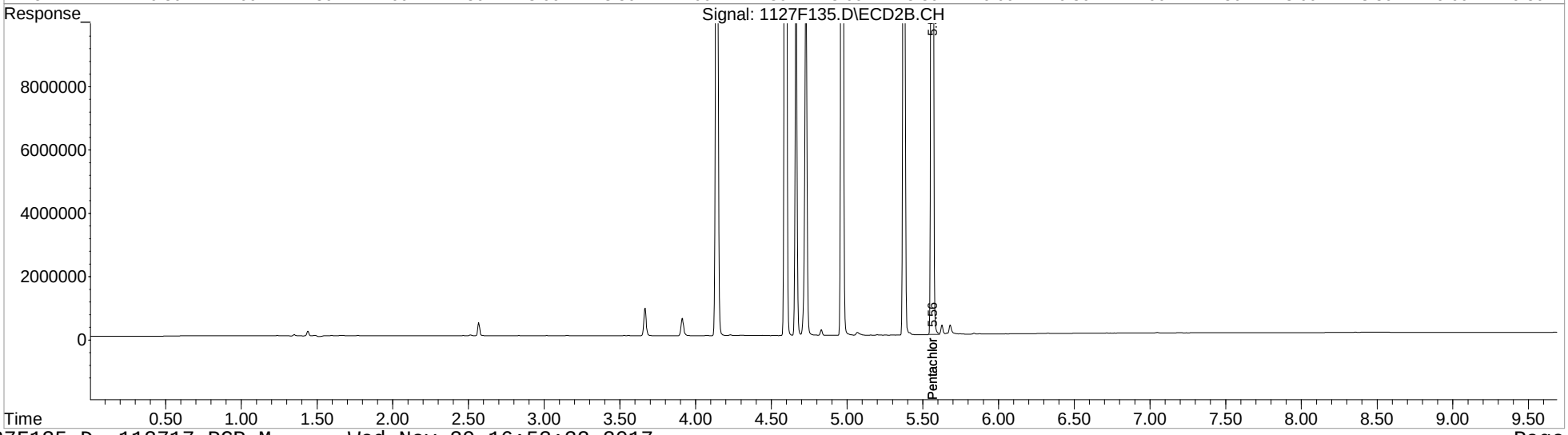
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC28\DATA\112717-CAL\1127F135.D\ECD2B.CH
Acq On : 27 Nov 2017 9:27 pm Operator: CV
Sample : PENTA01-88M 1000 PPB Inst : GC28
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:45 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Tue Nov 28 17:04:16 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:47:58 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Initial Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
4)	S	4-Bromo-2,6-dich	4.01	4.57	6162	7584	0.020	0.029 #
		Target Compounds						
1)		3,4-Dichlorophen	3.12	3.66	769118	732270	47.437	39.085
2)		3,5-Dichlorophen	3.36	3.91	483034	541656	39.972m	41.245
3)		2,4,6-Trichlorop	3.46	4.14	14150702	12878254	39.911	35.816
5)		2,4,5-Trichlorop	4.19	4.66	7083376	6313060	45.555	38.423
6)		3,4,5-Trichlorop	4.22	4.73	6656538	5862514	41.851	40.401
7)	M	2,3,5,6-Tetrachl	4.47	4.97	22573818	20683576	45.030	41.160
8)	M	2,3,4,5-Tetrachl	5.02	5.37	16083160	14736668	47.320	43.130
9)	M	Pentachloropheno	5.16	5.56	28261942	25806018	49.255	43.863
10)		Pentachloroaniso	5.16	5.56	28261942	25806018	51.824	46.142

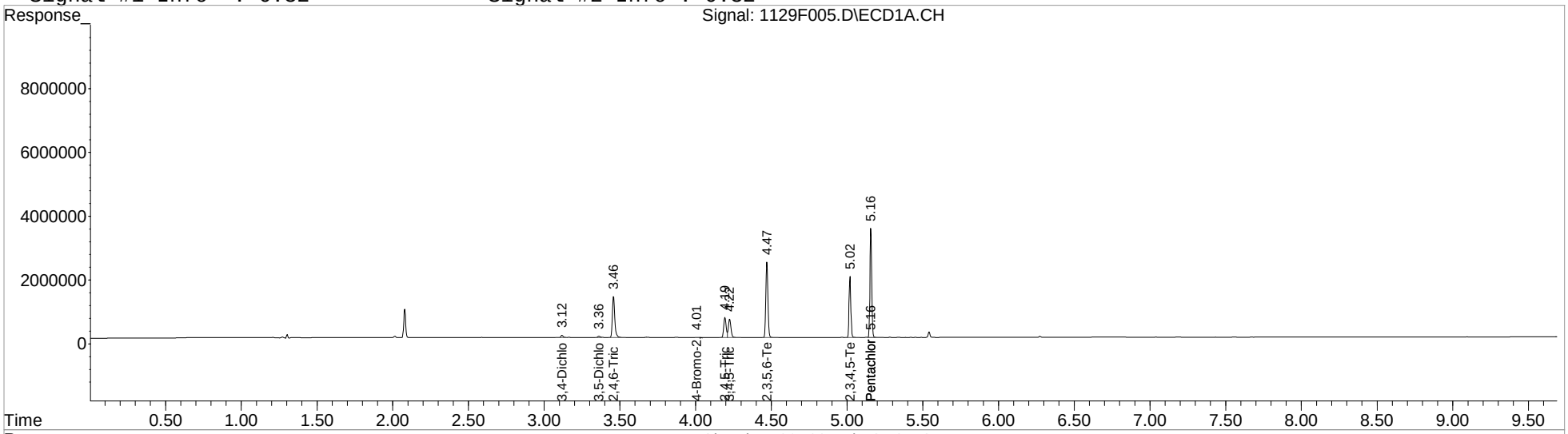
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

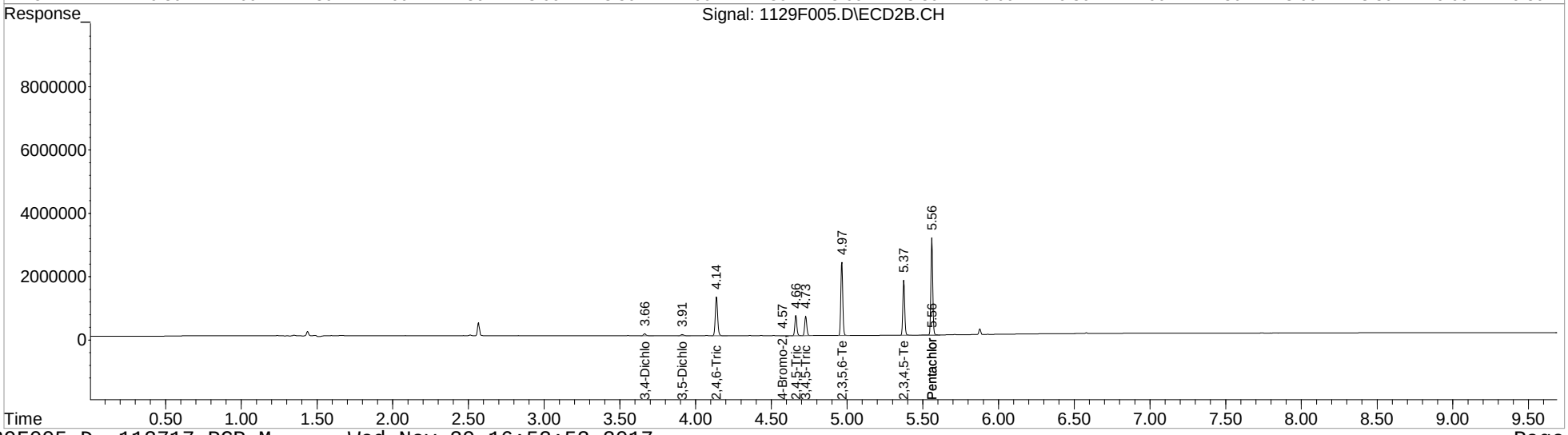
1st 11/29/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 29 16:48 2017 Quant Results File: 112717-PCP.RES

Quant Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Wed Nov 29 16:45:31 2017
Response via : Multiple Level Calibration
DataAcq Meth : PENTHOT2.M

Volume Inj. : 1µl
Signal #1 Phase : Rtx-1701 Signal #2 Phase: Rtx-35
Signal #1 Info : 0.32 Signal #2 Info : 0.32



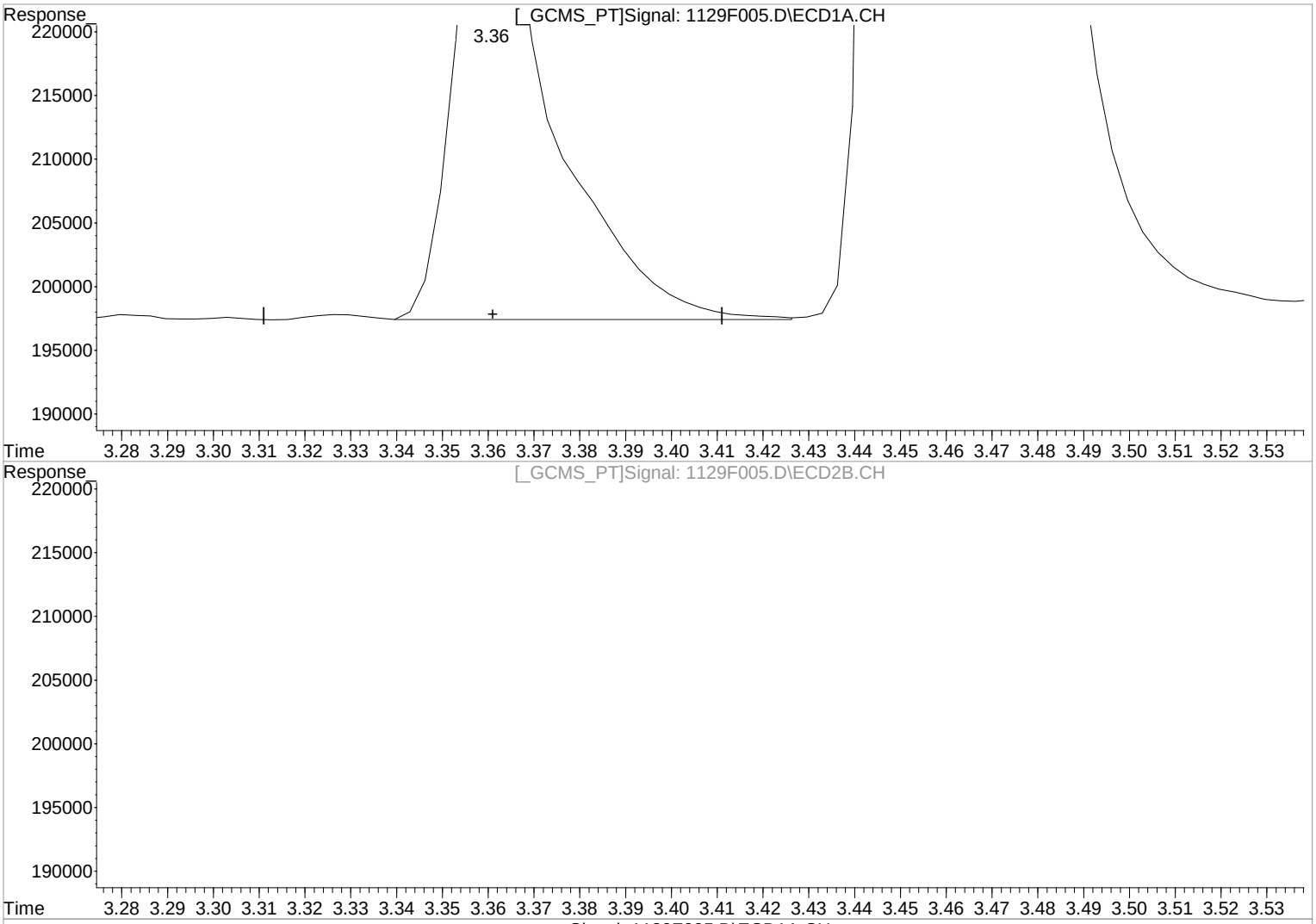


Quantitation Report (Qedit)

1st 11/30/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 30 14:47 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Thu Nov 30 14:18:39 2017
Response via : Multiple Level Calibration



Signal: 1129F005.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 45.764ug/L

response 557528

Manual Integration:

Before

11/30/17

(2) 3,5-Dichlorophenol #2

3.91min 43.808ug/L

response 541656

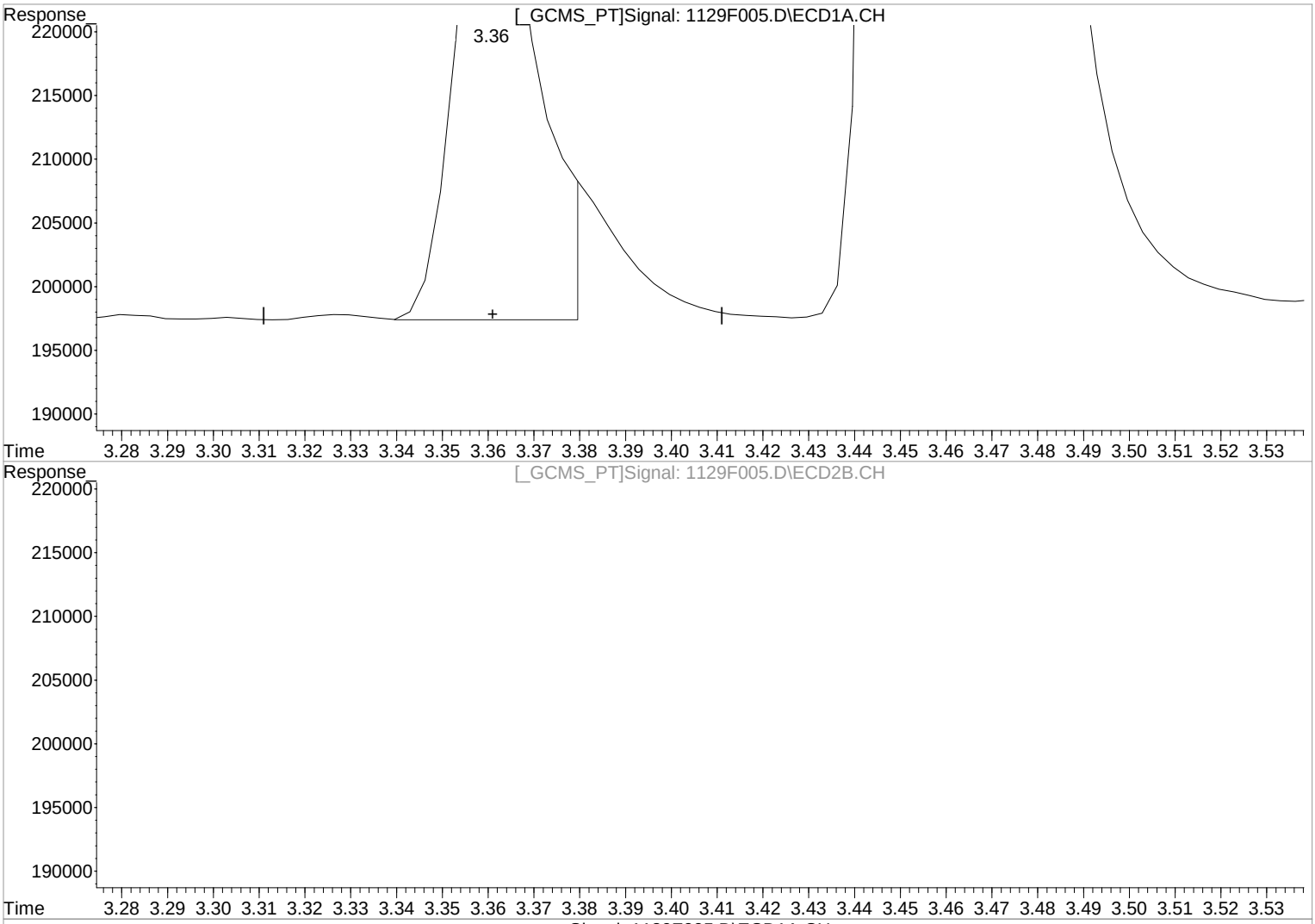
(+) = Expected Retention Time

Quantitation Report (Qedit)

1st 11/30/17
2nd 12/12/17

Signal #1 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC28\DATA\112717-CAL\1129F005.D\ECD2B.CH
Acq On : 29 Nov 2017 12:44 pm Operator: CV
Sample : PENTA01-88K 50PPB ICV Inst : GC28
Misc : SEMIVOA GC\W1112280\1-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Nov 30 14:47 2017 Quant Results File: 112717-PCP.RES

Method : J:\GC28\METHODS\112717-PCP.M (RTE Integrator)
Title : Chlorinated Phenols CAL 15040 MJ252
Last Update : Thu Nov 30 14:18:39 2017
Response via : Multiple Level Calibration



Signal: 1129F005.D\ECD1A.CH

(2) 3,5-Dichlorophenol

3.36min 40.059ug/L m

response 488026

Manual Integration:

After

Baseline/Shoulder

11/30/17

(2) 3,5-Dichlorophenol #2

3.91min 43.808ug/L

response 541656

(+) = Expected Retention Time

Polynuclear Aromatic Hydrocarbons

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information

Group ID:	KWG1803064	**Prep Method:**	EPA 3511	**Prep Date:**	06/21/18 08:33
Department:	Semivoa GCMS				@ 2154

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K1805808-001	BXS-1	8270D PAH SIM	WATER	450ml	4ml
K1805808-002	BXS-2	8270D PAH SIM	WATER	450ml	4ml
K1805809-002	MW-15	8270D PAH SIM	WATER	450ml	4ml
K1805809-003	MW-17	8270D PAH SIM	WATER	450ml	4ml
K1805809-004	MW-18	8270D PAH SIM	WATER	450ml	4ml
K1805809-005	MW-2	8270D PAH SIM	WATER	450ml	4ml
K1805809-014	MW-30	8270D PAH SIM	WATER	450ml	4ml
K1805809-019	MW-35	8270D PAH SIM	WATER	450ml	4ml
K1805809-020	MW-36	8270D PAH SIM	WATER	450ml	4ml
K1805809-021	MW-37	8270D PAH SIM	WATER	360ml	4ml
K1805809-029	Field Blank Rinsate	8270D PAH SIM	WATER	450ml	4ml
K1805809-030	MW-3	8270D PAH SIM	WATER	450ml	4ml
KWG1803064-1	Lab Control Sample	8270D PAH SIM	WATER	450ml	4ml
KWG1803064-2	Duplicate Lab Control Sampl	8270D PAH SIM	WATER	450ml	4ml
KWG1803064-3	Method Blank	8270D PAH SIM	WATER	450ml	4ml

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K1805808-001	1680446					
K1805808-002	1680447					
K1805809-002	1680448					
K1805809-003	1680449					
K1805809-004	1680450					
K1805809-005	1680451					
K1805809-014	1680452					
K1805809-019	1680453					
K1805809-020	1680454					
K1805809-021	1680455					
K1805809-029	1680457					
K1805809-030	1680445					
KWG1803064-1	1680458					
KWG1803064-2	1680459					
KWG1803064-3	1680460					

Comments: IS = SVM 57-100D

Started By: RHolden Assisted By: _____ Training: Yes / No

Completed By: AMcFarla Assisted By: _____ Yes / No

Reviewed By: _____ Date: 7-5-18 Storage: N514

Chain of Custody

Relinquished By: Tony McFarlane Date: 7/2/18

Received By: _____ Date: 7/11/18 Extracts Examined: Yes / No

Preparation Information

Group ID: KWG1803064 **Prep Method:** EPA 3511 **Prep Date:** 06/21/18 00:00
Department: Semivoa GCMS 21 RRH 6-21-18

#	Lab Code	Client ID	B#	√	Product	Matrix	Amt. Ext. mL	pH	Int. Vol.	Final Vol. mL	Surr. Added mL	Spike Added mL
1	K1805808-001	BXS-1	.01	✓	8270D PAH SIM	WATER	450	6	NA	* 1 4	20 mL	✓
2	K1805808-002	BXS-2	.01	✓	8270D PAH SIM	WATER	450	6		1 4		
3	K1805809-002	MW-15	.01	✓	8270D PAH SIM	WATER	450	6		1 4		
4	K1805809-003	MW-17	.01	✓	8270D PAH SIM	WATER	450	6		1 4		
5	K1805809-004	MW-18	.01	✓	8270D PAH SIM	WATER	450	6		1 4		
6	K1805809-005	MW-2	.01	✓	8270D PAH SIM	WATER	450	5		1 4		
7	K1805809-014	MW-30	.01	✓	8270D PAH SIM	WATER	450	5		1 4		
8	K1805809-019	MW-35	.01	✓	8270D PAH SIM	WATER	450	5		1 4		
9	K1805809-020	MW-36	.01	✓	8270D PAH SIM	WATER	450	6		1 4		
10	K1805809-021	MW-37	.01	✓	8270D PAH SIM	WATER	360	6		1 4	✓	
11	~~K1805809-028~~	~~MW-44~~ RRH 6-21-18	.01	✓	~~8270D PAH SIM~~	~~WATER~~		~~5~~		1		
12	K1805809-029	Field Blank Rinsate	.01	✓	8270D PAH SIM	WATER	450	5		1 4		
13	K1805809-030	MW-3	.01	✓	8270D PAH SIM	WATER	450	6		1 4		
14	KWG1803064-1	Lab Control Sample			8270D PAH SIM	WATER	450	5		1 4		50 mL
15	KWG1803064-2	Duplicate Lab Control Sample			8270D PAH SIM	WATER	450	5		1 4		✓
16	KWG1803064-3	Method Blank			8270D PAH SIM	WATER	450	5	✓	1 4		✓

* EE TM 7/2/18

Comments: Lim's Group # 316340
(1) K1805809-28 Sample cancelled.
Samples sat in fridge until I was notified they were there on 7/2/18 TM 7/2/18

Surrogate ID: SVM58-77-B, 100/150ppm, XP: 10-24-18
Spike ID: SVM58-16-C, 25ppm, XP: 8-26-18
Witness: No Witness

Pulled off less than 0.1mL of hexane from sample, added 2mL more and put on shaker table again. TM 7/2/18

Started By: RHolden Assisted By: K. Petersen (spiked samples)
Completed By: TMcFarlane Final Volume pulled from samples Assisted By: —

K1805809 **Pest/PCB/PAH by 3511**

Service Request # K1805808 Work Group # Pest: -NA-
PCB: -NA-
PAH: KWG-1803064

Solvent Lot # 192699

Extraction Start (time/date/initial): 08:33 / 6-21-18 / RPH
Extraction Stop (time/date/initial): 09:03 / 6-21-18 / RPH

NaCL Lot# 093010
Sulfate Lot # 171696

Carbon Clean-up (Ext-Car)(time/date/initial): — Carbon Lot # —
Hexane Lot # —

Florisil Clean-up (Ext-Flor)(time/date/initial): — Florisil Lot # —
Hexane Lot # —

Sulfuric Acid Clean-up (3665) (time/date/initial): — Acid Lot # —

Other Clean-up: — ☐ all samples ☐ some samples: —

Pipette (2 mL) Lot # 20717646 Pipette (1 mL) Lot # 136745

Pest Vial: — Vial Storage: —
PCB Vial: — Vial Storage: —
PAH Vial: ~~KS~~ Green Vial Storage: K-Tundra
TM EE 7/2/18
Archived Extract Storage: Nutty

Additional Comments: —

☑	Hold times met (if no, reason:)
☑	Prep date, time, method, department, product code correct in stealth
☑	Spike information and Q.C. correct (insufficient volume or mass recorded if no Q.C.)
☑	Weights/Volumes and units correct on raw and final bench sheets
☑	Sample IDs have been checked - bottle numbers appended if required
☑	Names present for: started by, completed by, relinquished by, and witnessed by. Training circled.
☑	Extract storage recorded
☑	Additional prep sheet completely filled out (NA or line out blanks)
☑	All clean-ups have been noted on additional prep sheet
☑	Signed service request with Form V, if applicable, has been attached

Exception Report

Data File: J:\MS14\DATA\071018\0710F008.D
Lab ID: K1805809-002
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 10:02
Date Quantitated: 07/11/2018 07:05
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA		x
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Lab Control Spike	Acenaphthene	58	63	121	
	Fluorene	57	68	121	Narrate -
	Phenanthrene	57	64	126	No sample
	Anthracene	58	68	127	for RX
	Fluoranthene	53	70	127	
	Pyrene	62	72	127	
	Benz(a)anthracene	54	74	124	
	Chrysene	57	74	132	

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:56:14
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\MS14\DATA\071018\0710F008.D
Lab ID: K1805809-002
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 10:02
Date Quantitated: 07/11/2018 07:05
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	Benzo(b)fluoranthene	56	73	136	Narrate
	Benzo(k)fluoranthene	58	74	134	
	Benzo(a)pyrene	55	75	131	
	Indeno(1,2,3-cd)pyrene	53	63	136	
	Dibenz(a,h)anthracene	49	59	135	
	Benzo(g,h,i)perylene	56	63	127	

Primary Review: JUL 1 1 2018

Secondary Review: JUL 2 3 2018

Printed: 07/11/2018 07:56:14
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\071018\0710F008.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 10:02	**Quant Date:**	07/11/2018 07:05	**Vial:**	8
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-002			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	1V	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	06/17/2018	**Receive Date:**	06/19/2018

Analysis Lot:	KWG1803359	**Prep Lot:**	KWG1803064	**Report Group:**	K1805809
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1680448	**Prep Date:**	06/21/2018		

Quant Method:	J:\MS14\METHODS\SIM\070518PAH.M	**Calibration ID:**	CAL15772
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\071018\0710F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\071018\0710F003.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.82	0.01	136	82929m	200.00	OK
2	Acenaphthene-d10	6.37	0.00	164	39717	200.00	OK
3	Phenanthrene-d10	7.60	0.00	188	79809	200.00	OK
4	Chrysene-d12	10.17	0.00	240	75746	200.00	OK
5	Perylene-d12	13.34	0.00	264	80399	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.80	0.00	0.00	176	128932	496.50	99	42-131	OK	
3	Fluoranthene-d10	8.59	0.00	0.00	212	237577	479.68	96	42-133	OK	
4	Terphenyl-d14	8.95	0.00	0.00	244	186886	543.35	109	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene				128	0		0.0028	U	
1	2-Methylnaphthalene				142	0d		0.0026	U	
2	Acenaphthylene				152	0		0.0022	U	
2	Acenaphthene				154	0d		0.0024	U	
2	Fluorene				166	0d		0.0022	U	
3	Phenanthrene				178	0d		0.0022	U	
3	Anthracene				178	0d		0.0017	U	
3	Fluoranthene				202	0d		0.0017	U	
4	Pyrene				202	0d		0.0020	U	
4	Benz(a)anthracene	10.17	0.01	0.00	228	230	0.4800	0.0043	J	
4	Chrysene				228	0d		0.0016	U	
5	Benzo(b)fluoranthene				252	0d		0.0017	U	
5	Benzo(k)fluoranthene				252	0d		0.0019	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\071018\0710F008.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 10:02	**Quant Date:**	07/11/2018 07:05	**Vial:**	8
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-002			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0d		0.0022	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.0018	U	
5	Dibenz(a,h)anthracene				278	0		0.0026	U	
5	Benzo(g,h,i)perylene				276	0		0.0018	U	

Prep Amount: 450 ml **Dilution:** 1.0
Prep Final Vol: 4 ml **Unit Factor:** 1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\071018\0710F008.D Vial: 8
Acq On : 10 Jul 2018 10:02 am Operator: LWeiskopf
Sample : K1805809-002 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 06:12:56 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

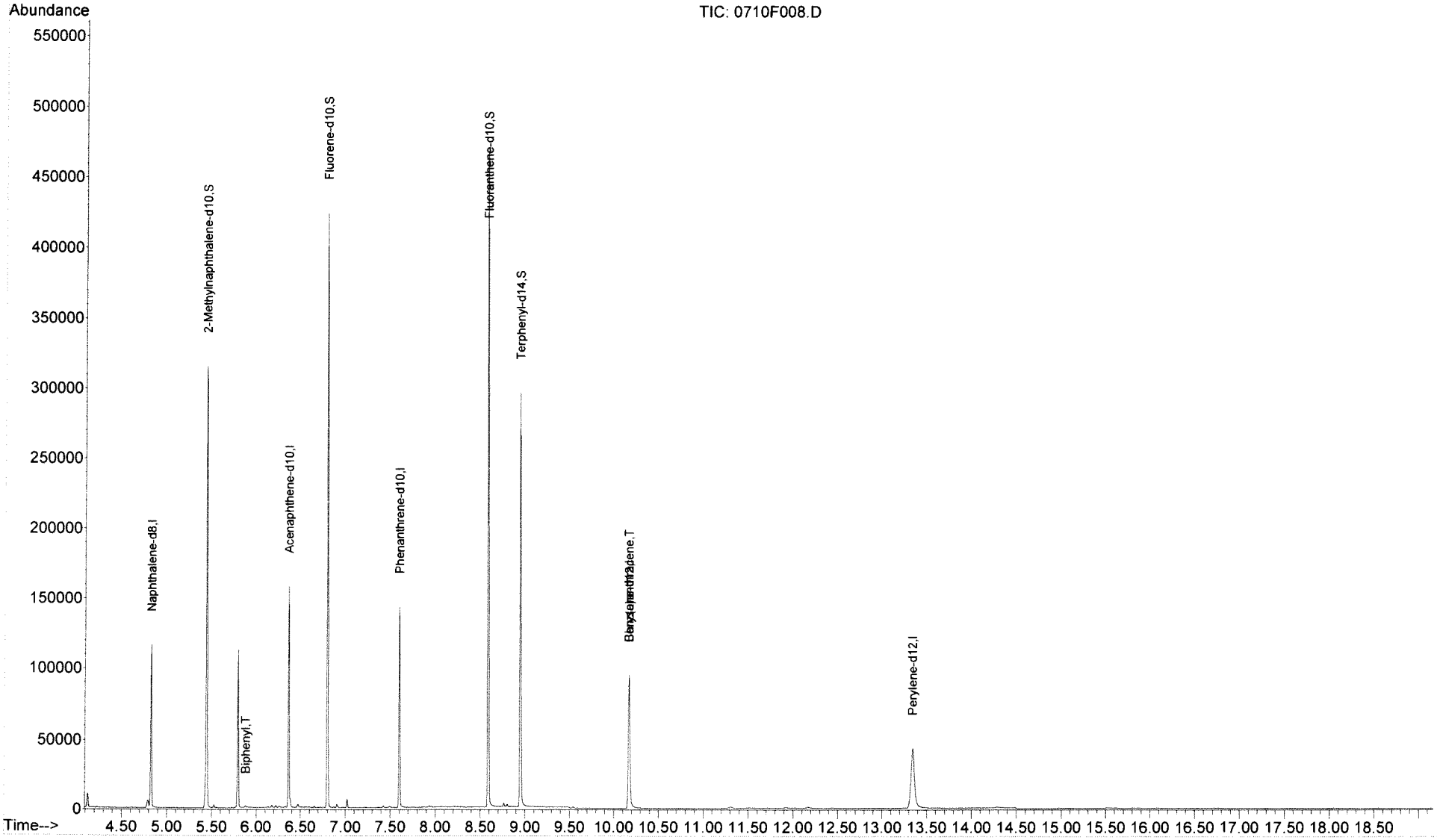
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	82929m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	39717	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.60	188	79809	200.00	ng/ml	0.00
23) Chrysene-d12	10.17	240	75746	200.00	ng/ml	0.00
28) Perylene-d12	13.34	264	80399	200.00	ng/ml	-0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.45	152	102114	432.79	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 43.28%			
13) Fluorene-d10	6.80	176	128932	496.50	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 49.65%			
22) Fluoranthene-d10	8.59	212	237577	479.68	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 47.97%			
25) Terphenyl-d14	8.95	244	186886	543.35	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 54.34%			
Target Compounds						Qvalue
6) Biphenyl	5.88	154	527	1.47	ng/ml	95
26) Benz(a)anthracene	10.17	228	230	0.48	ng/ml	72

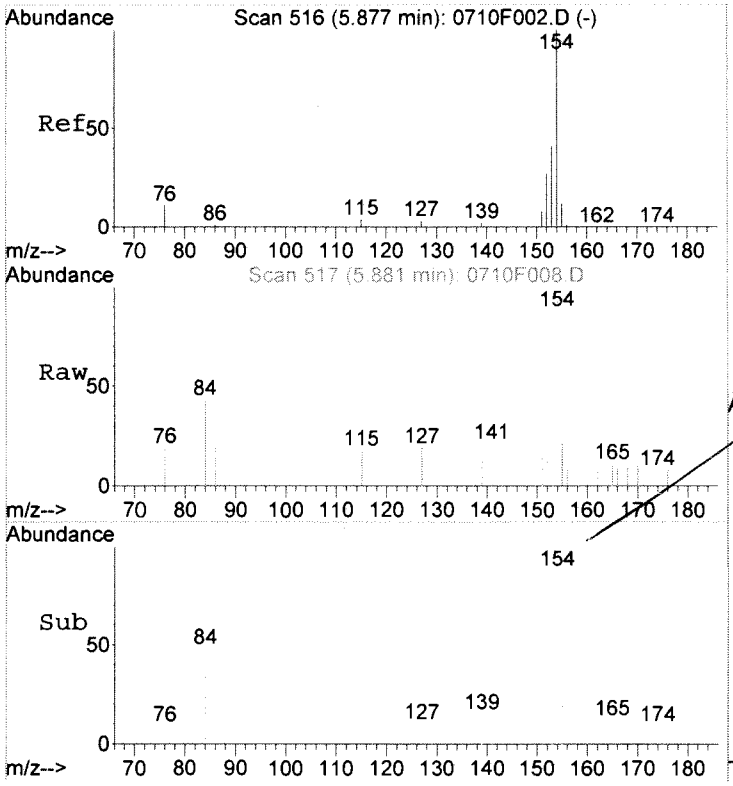
(#) = qualifier out of range (m) = manual integration
0710F008.D 070518PAH.M Wed Jul 11 07:09:07 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\071018\0710F008.D Vial: 8
Acq On : 10 Jul 2018 10:02 am Operator: LWeiskopf
Sample : K1805809-002 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:05 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Initial Calibration

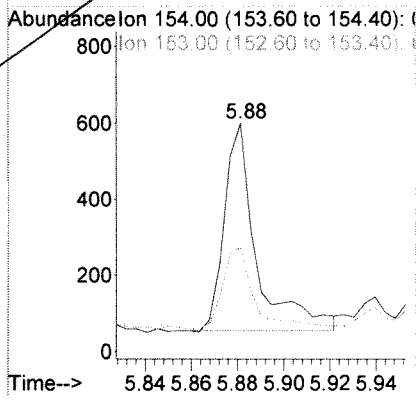


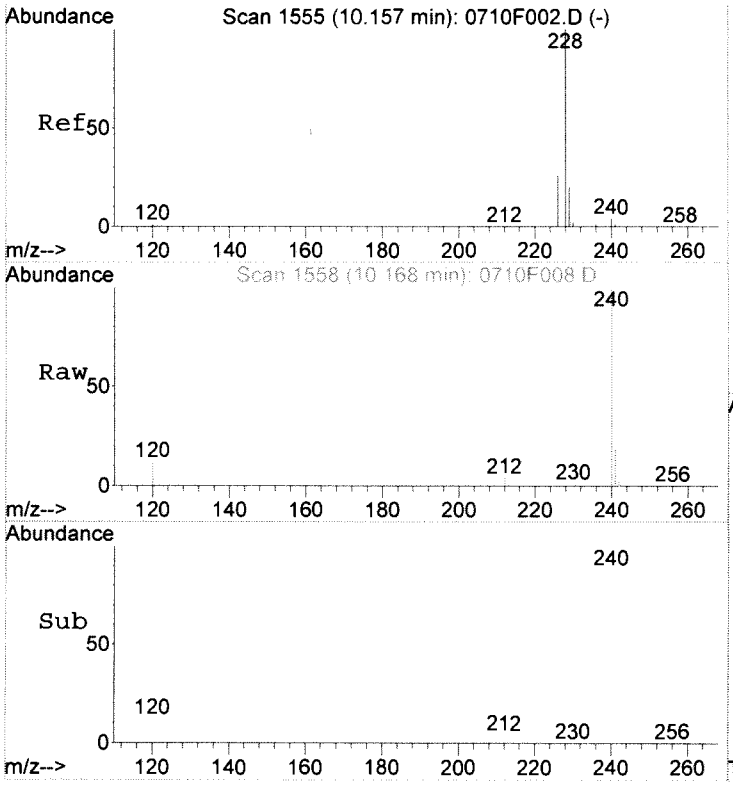


#6
Biphenyl
Concen: 1.47 ng/ml
RT: 5.88 min Scan# 517
Delta R.T. 0.00 min
Lab File: 0710F008.D
Acq: 10 Jul 2018 10:02 am

Tgt Ion:154 Resp: 527

Ion	Ratio	Lower	Upper
154	100		
153	39.4	8.2	68.2
152	20.9	6.0	46.0

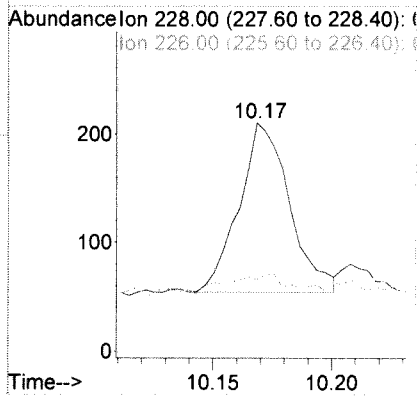




#26
Benz(a)anthracene
Concen: 0.48 ng/ml
RT: 10.17 min Scan# 1558
Delta R.T. 0.00 min
Lab File: 0710F008.D
Acq: 10 Jul 2018 10:02 am

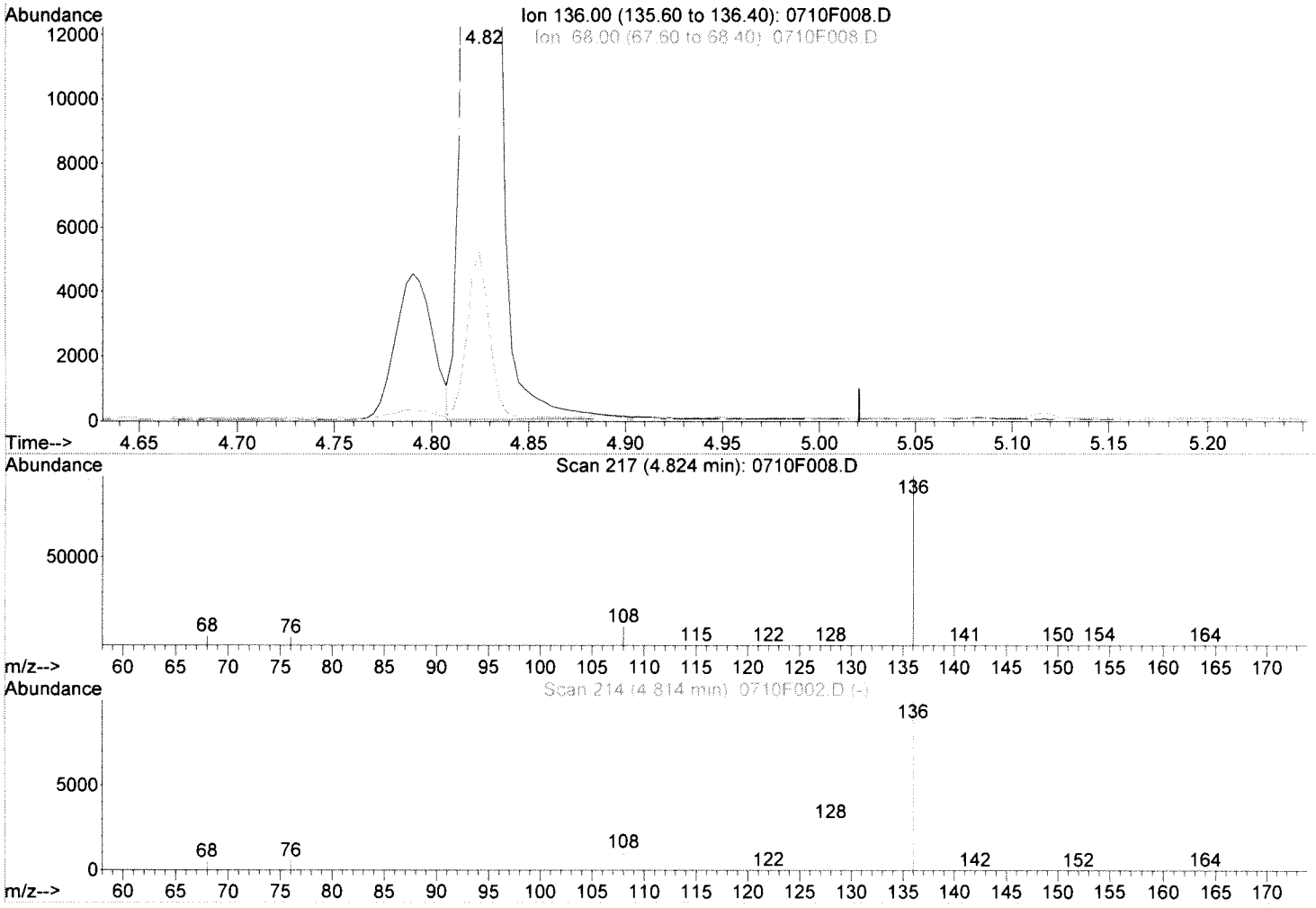
Tgt Ion:228 Resp: 230

Ion	Ratio	Lower	Upper
228	100		
226	6.4	0.0	56.0
229	26.3	0.0	39.5



Data File : J:\MS14\DATA\071018\0710F008.D Vial: 8
Acq On : 10 Jul 2018 10:02 am Operator: LWeiskopf
Sample : K1805809-002 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 6:12 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration



TIC: 0710F008.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml

response 76980

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.35
108.00	9.50	11.00
0.00	0.00	0.00

Manual Integration:

Before

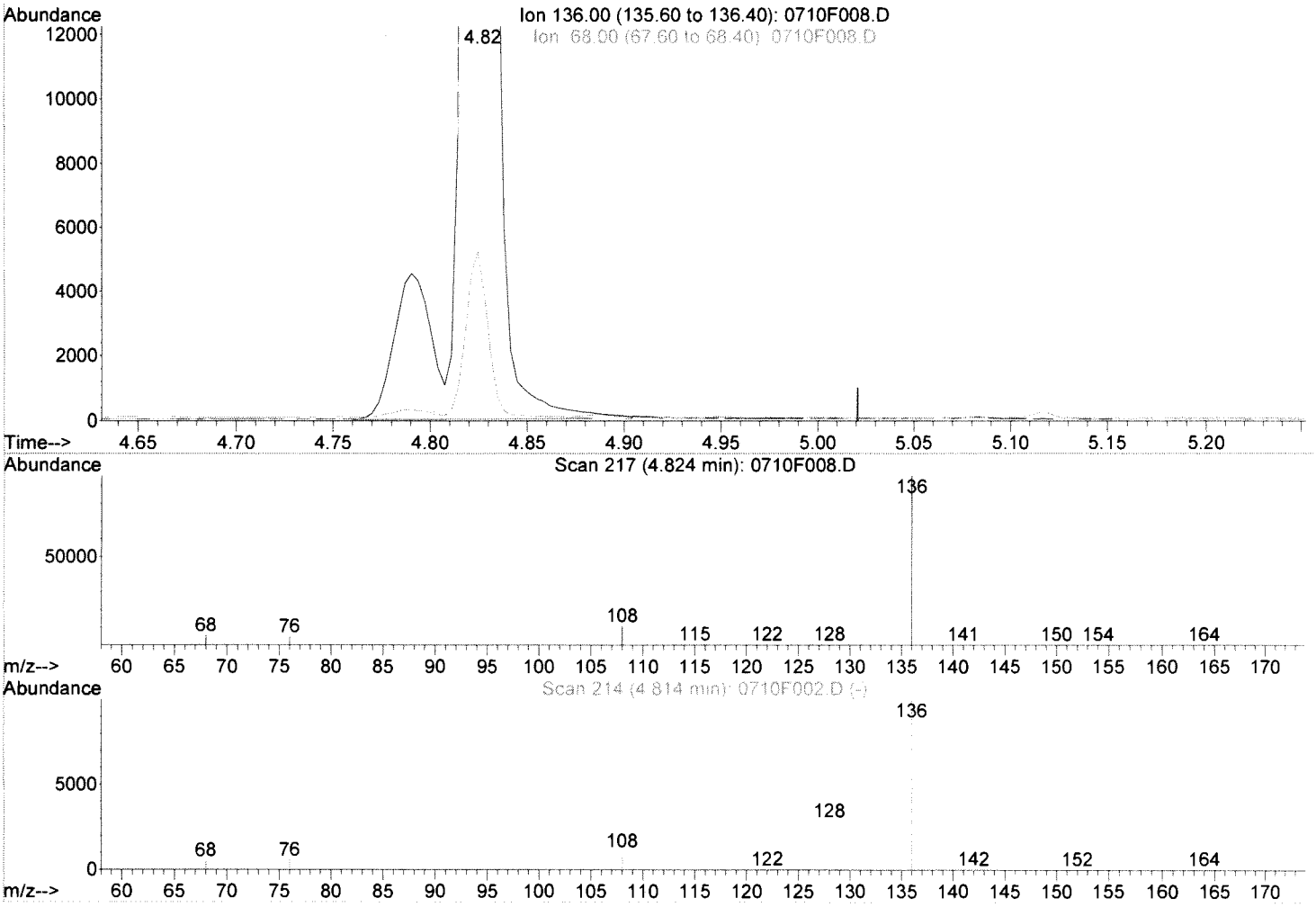
07/11/18

JUL 23 2018

0710F008.D 070518PAH.M Wed Jul 11 07:04:42 2018

Data File : J:\MS14\DATA\071018\0710F008.D Vial: 8
Acq On : 10 Jul 2018 10:02 am Operator: LWeiskopf
Sample : K1805809-002 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:04 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration



TIC: 0710F008.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml m

response 82929

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.47
108.00	9.50	11.06
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

07/11/18

JUL 23 2018

0710F008.D 070518PAH.M Wed Jul 11 07:04:50 2018

Exception Report

Data File: J:\MS14\DATA\071018\0710F009.D
Lab ID: K1805809-003
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 10:28
Date Quantitated: 07/11/2018 07:06
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA		x
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Lab Control Spike	Acenaphthene	58	63	121	
	Fluorene	57	68	121	
	Phenanthrene	57	64	126	No sample for EX
	Anthracene	58	68	127	
	Fluoranthene	53	70	127	
	Pyrene	62	72	127	
	Benz(a)anthracene	54	74	124	
	Chrysene	57	74	132	

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:56:18
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\MS14\DATA\071018\0710F009.D
Lab ID: K1805809-003
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 10:28
Date Quantitated: 07/11/2018 07:06
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	Benzo(b)fluoranthene	56	73	136	Narrate
	Benzo(k)fluoranthene	58	74	134	
	Benzo(a)pyrene	55	75	131	
	Indeno(1,2,3-cd)pyrene	53	63	136	
	Dibenz(a,h)anthracene	49	59	135	
	Benzo(g,h,i)perylene	56	63	127	

Primary Review: JUL 1 1 2018

Secondary Review: JUL 2 3 2018

Printed: 07/11/2018 07:56:18
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\071018\0710F009.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 10:28	**Quant Date:**	07/11/2018 07:06	**Vial:**	9
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-003			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	06/17/2018	**Receive Date:**	06/19/2018

Analysis Lot:	KWG1803359	**Prep Lot:**	KWG1803064	**Report Group:**	K1805809
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1680449	**Prep Date:**	06/21/2018		

Quant Method:	J:\MS14\METHODS\SIM\070518PAH.M	**Calibration ID:**	CAL15772
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\071018\0710F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\071018\0710F003.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.82	0.01	136	83379m	200.00	OK
2	Acenaphthene-d10	6.37	0.00	164	39721	200.00	OK
3	Phenanthrene-d10	7.60	0.00	188	79363	200.00	OK
4	Chrysene-d12	10.17	0.00	240	71744	200.00	OK
5	Perylene-d12	13.34	0.00	264	74952	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.80	0.00	0.00	176	130014	500.62	100	42-131	OK	
3	Fluoranthene-d10	8.59	0.00	0.00	212	240345	488.00	98	42-133	OK	
4	Terphenyl-d14	8.95	0.00	0.00	244	183569	563.48	113	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene				128	0		0.0028	U	
1	2-Methylnaphthalene				142	0d		0.0026	U	
2	Acenaphthylene				152	0		0.0022	U	
2	Acenaphthene				154	0d		0.0024	U	
2	Fluorene				166	0d		0.0022	U	
3	Phenanthrene				178	0d		0.0022	U	
3	Anthracene				178	0		0.0017	U	
3	Fluoranthene				202	0d		0.0017	U	
4	Pyrene				202	0		0.0020	U	
4	Benz(a)anthracene	10.17	0.01	0.00	228	211	0.4600	0.0041	J	
4	Chrysene				228	0d		0.0016	U	
5	Benzo(b)fluoranthene				252	0d		0.0017	U	
5	Benzo(k)fluoranthene				252	0		0.0019	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\071018\0710F009.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 10:28	**Quant Date:**	07/11/2018 07:06	**Vial:**	9
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-003			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0d		0.0022	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.0018	U	
5	Dibenz(a,h)anthracene				278	0		0.0026	U	
5	Benzo(g,h,i)perylene				276	0		0.0018	U	

Prep Amount:	450 ml	**Dilution:**	1.0
Prep Final Vol:	4 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\071018\0710F009.D Vial: 9
Acq On : 10 Jul 2018 10:28 am Operator: LWeiskopf
Sample : K1805809-003 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 06:12:58 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

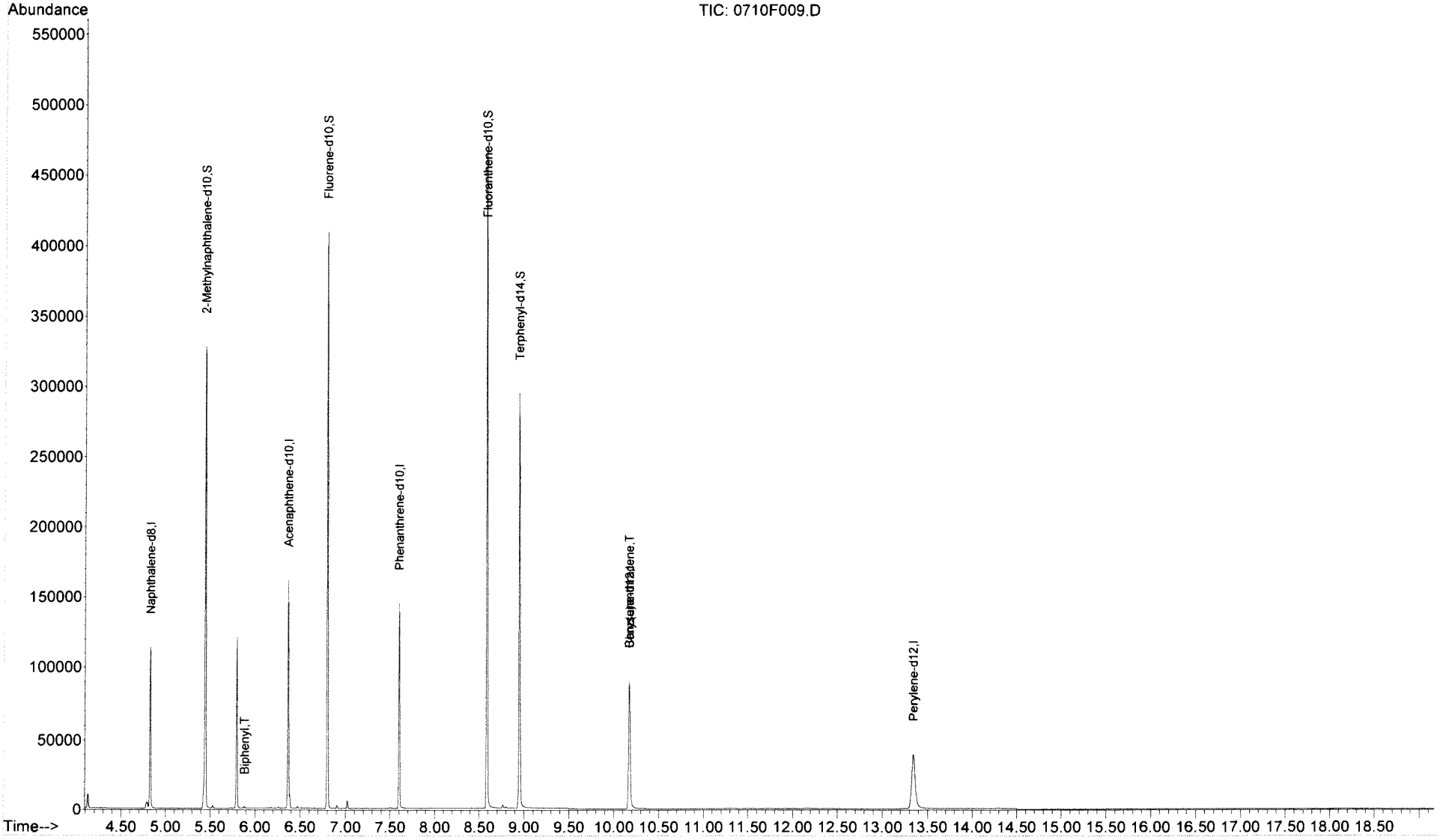
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	83379m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	39721	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.60	188	79363	200.00	ng/ml	0.00
23) Chrysene-d12	10.17	240	71744	200.00	ng/ml	0.00
28) Perylene-d12	13.34	264	74952	200.00	ng/ml	-0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.45	152	105177	443.37	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 44.34%			
13) Fluorene-d10	6.80	176	130014	500.62	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 50.06%			
22) Fluoranthene-d10	8.59	212	240345	488.00	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 48.80%			
25) Terphenyl-d14	8.95	244	183569	563.48	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 56.35%			
Target Compounds						Qvalue
6) Biphenyl	5.88	154	464	1.29	ng/ml	99
26) Benz(a)anthracene	10.17	228	211	0.46	ng/ml	75

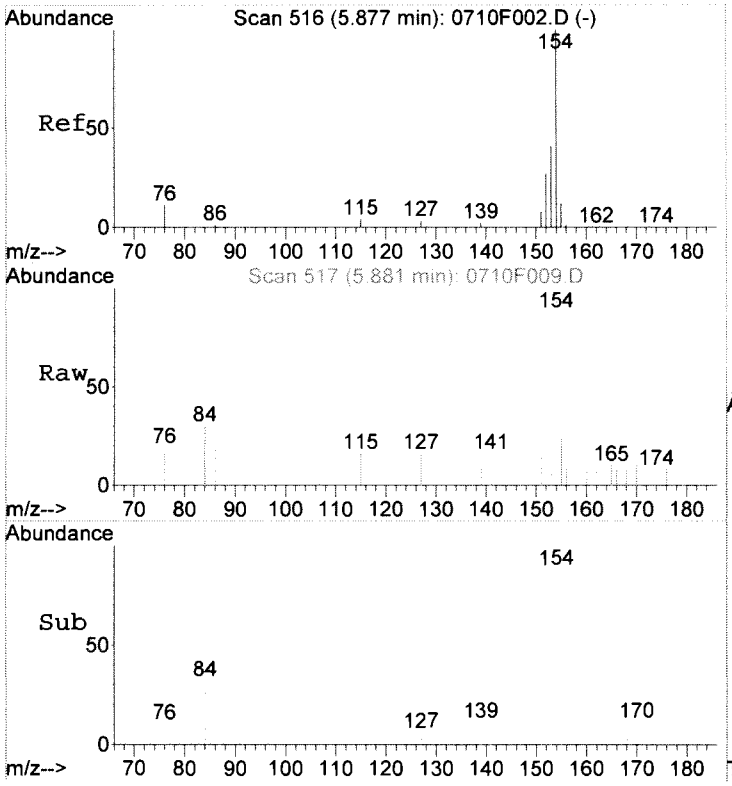
(#) = qualifier out of range (m) = manual integration
0710F009.D 070518PAH.M Wed Jul 11 07:09:10 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\071018\0710F009.D Vial: 9
Acq On : 10 Jul 2018 10:28 am Operator: LWeiskopf
Sample : K1805809-003 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:06 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Initial Calibration

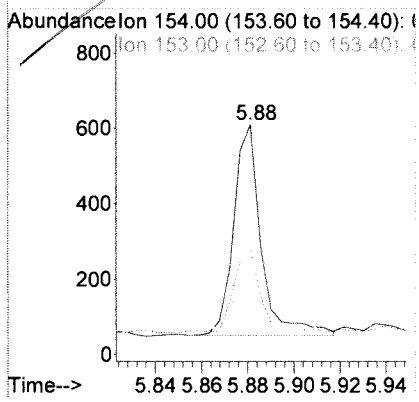


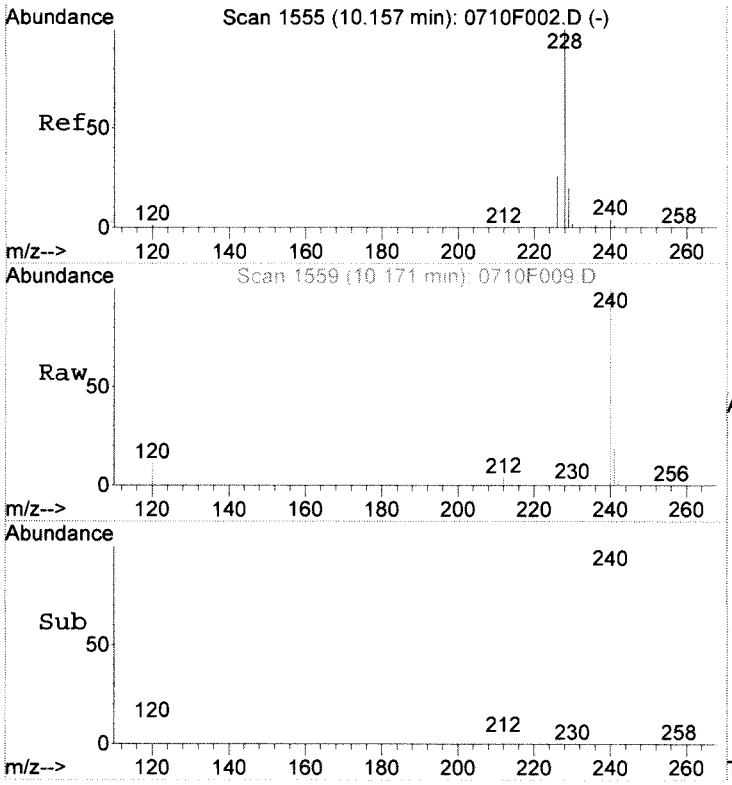


#6
Biphenyl
Concen: 1.29 ng/ml
RT: 5.88 min Scan# 517
Delta R.T. 0.00 min
Lab File: 0710F009.D
Acq: 10 Jul 2018 10:28 am

Tgt Ion:154 Resp: 464

Ion	Ratio	Lower	Upper
154	100		
153	38.8	8.2	68.2
152	26.1	6.0	46.0

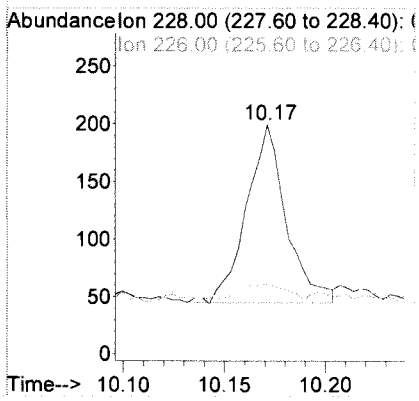




#26
Benz(a)anthracene
Concen: 0.46 ng/ml
RT: 10.17 min Scan# 1559
Delta R.T. 0.01 min
Lab File: 0710F009.D
Acq: 10 Jul 2018 10:28 am

Tgt Ion:228 Resp: 211

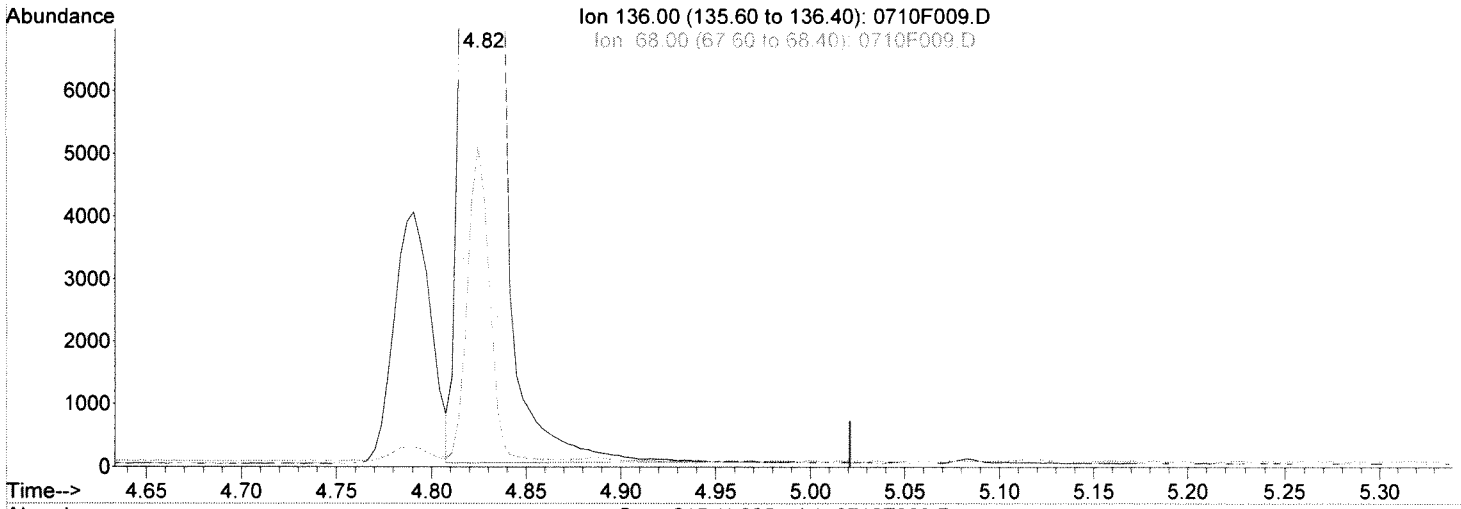
Ion	Ratio	Lower	Upper
228	100		
226	7.1	0.0	56.0
229	23.4	0.0	39.5

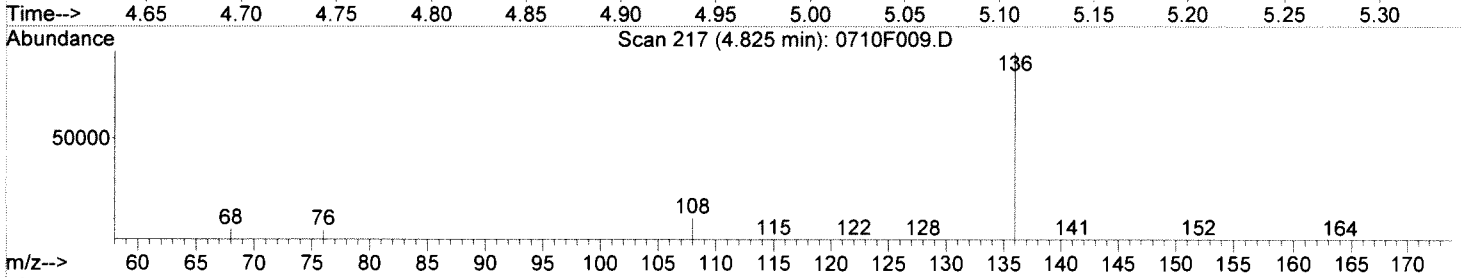


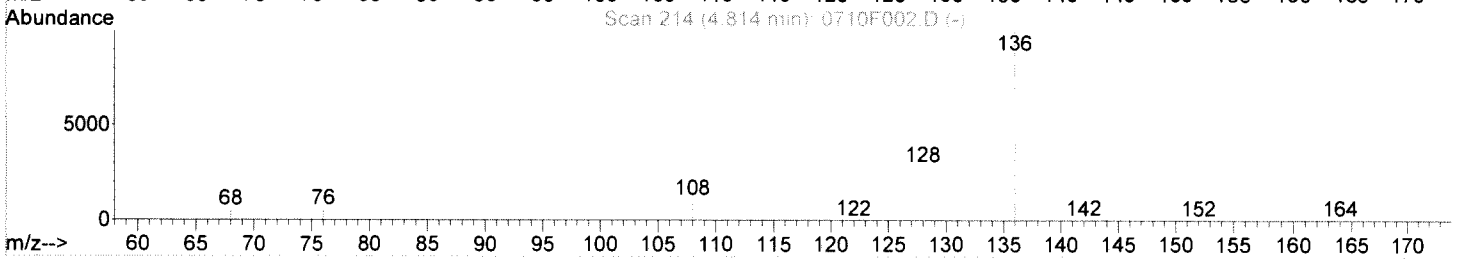
Quantitation Report (QedIt)

Data File : J:\MS14\DATA\071018\0710F009.D Vial: 9
Acq On : 10 Jul 2018 10:28 am Operator: LWeiskopf
Sample : K1805809-003 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 6:12 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration







TIC: 0710F009.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml

response 77861

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.40
108.00	9.50	11.39
0.00	0.00	0.00

Manual Integration:

Before

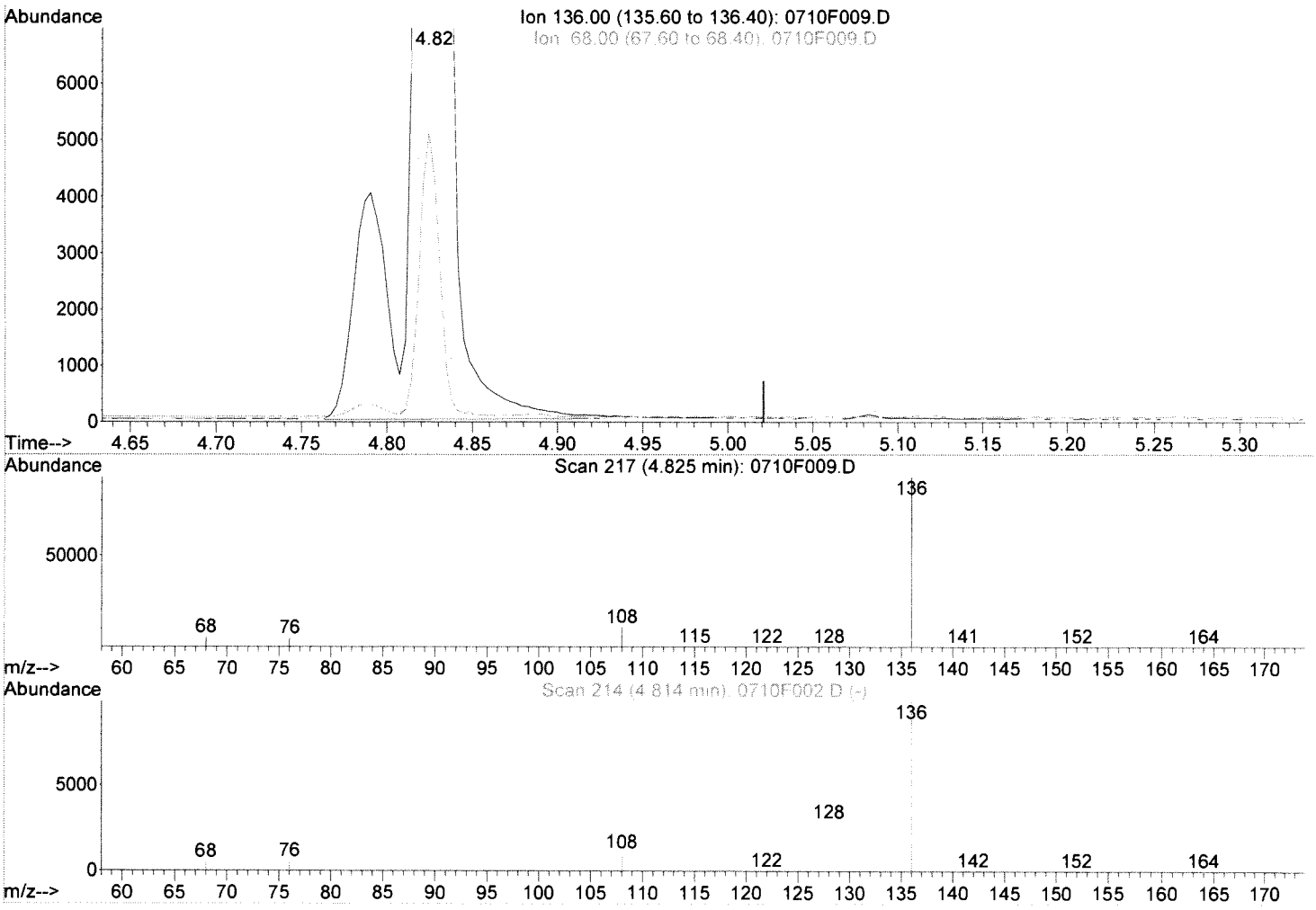
07/11/18

JUL 23 2018

0710F009.D 070518PAH.M Wed Jul 11 07:05:31 2018

Data File : J:\MS14\DATA\071018\0710F009.D Vial: 9
Acq On : 10 Jul 2018 10:28 am Operator: LWeiskopf
Sample : K1805809-003 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:05 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration



TIC: 0710F009.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml m

response 83379

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.49
108.00	9.50	11.45
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

07/11/18

JUL 23 2018

0710F009.D 070518PAH.M Wed Jul 11 07:05:38 2018

Exception Report

Data File: J:\MS14\DATA\071018\0710F010.D
Lab ID: K1805809-004
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 10:54
Date Quantitated: 07/11/2018 07:07
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA		x
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Lab Control Spike	Acenaphthene	58	63	121	
	Fluorene	57	68	121	
	Phenanthrene	57	64	126	No sample for RX
	Anthracene	58	68	127	
	Fluoranthene	53	70	127	
	Pyrene	62	72	127	
	Benz(a)anthracene	54	74	124	
	Chrysene	57	74	132	

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:56:22
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\MS14\DATA\071018\0710F010.D
Lab ID: K1805809-004
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 10:54
Date Quantitated: 07/11/2018 07:07
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	Benzo(b)fluoranthene	56	73	136	Narrate
	Benzo(k)fluoranthene	58	74	134	
	Benzo(a)pyrene	55	75	131	
	Indeno(1,2,3-cd)pyrene	53	63	136	
	Dibenz(a,h)anthracene	49	59	135	
	Benzo(g,h,i)perylene	56	63	127	

Primary Review: JUL 1 1 2018

Secondary Review: JUL 2 3 2018

Printed: 07/11/2018 07:56:22
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\071018\0710F010.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 10:54	**Quant Date:**	07/11/2018 07:07	**Vial:**	10
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-004			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	06/16/2018	**Receive Date:**	06/19/2018

Analysis Lot:	KWG1803359	**Prep Lot:**	KWG1803064	**Report Group:**	K1805809
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1680450	**Prep Date:**	06/21/2018		

Quant Method:	J:\MS14\METHODS\SIM\070518PAH.M	**Calibration ID:**	CAL15772
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\071018\0710F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\071018\0710F003.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.82	0.01	136	83244**m**	200.00	OK
2	Acenaphthene-d10	6.37	0.00	164	39409	200.00	OK
3	Phenanthrene-d10	7.60	0.00	188	78414	200.00	OK
4	Chrysene-d12	10.17	0.00	240	73933	200.00	OK
5	Perylene-d12	13.34	0.00	264	76258	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.80	0.00	0.00	176	123425	479.01	96	42-131	OK	
3	Fluoranthene-d10	8.59	0.00	0.00	212	227769	468.06	94	42-133	OK	
4	Terphenyl-d14	8.95	0.00	0.00	244	174135	518.70	104	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.84	0.01	0.00	128	320	0.7000	0.0062	J	
1	2-Methylnaphthalene	5.47		0.00	142	218	0.7500	0.0067	J	
2	Acenaphthylene				152	0**d**		0.0022	U	
2	Acenaphthene				154	0**d**		0.0024	U	
2	Fluorene	6.82		0.00	166	75	0.2300	0.0022	U	
3	Phenanthrene	7.62		0.00	178	308	0.6400	0.0057	J	
3	Anthracene				178	0**d**		0.0017	U	
3	Fluoranthene				202	0**d**		0.0017	U	
4	Pyrene	8.80		0.00	202	165	0.3200	0.0028	J	
4	Benz(a)anthracene	10.17	0.01	0.00	228	217	0.4600	0.0041	J	
4	Chrysene				228	0**d**		0.0016	U	
5	Benzo(b)fluoranthene				252	0		0.0017	U	
5	Benzo(k)fluoranthene				252	0		0.0019	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\071018\0710F010.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 10:54	**Quant Date:**	07/11/2018 07:07	**Vial:**	10
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-004			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0		0.0022	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.0018	U	
5	Dibenz(a,h)anthracene				278	0		0.0026	U	
5	Benzo(g,h,i)perylene				276	0d		0.0018	U	

Prep Amount:	450 ml	**Dilution:**	1.0
Prep Final Vol:	4 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\071018\0710F010.D Vial: 10
Acq On : 10 Jul 2018 10:54 am Operator: LWeiskopf
Sample : K1805809-004 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 06:13:01 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

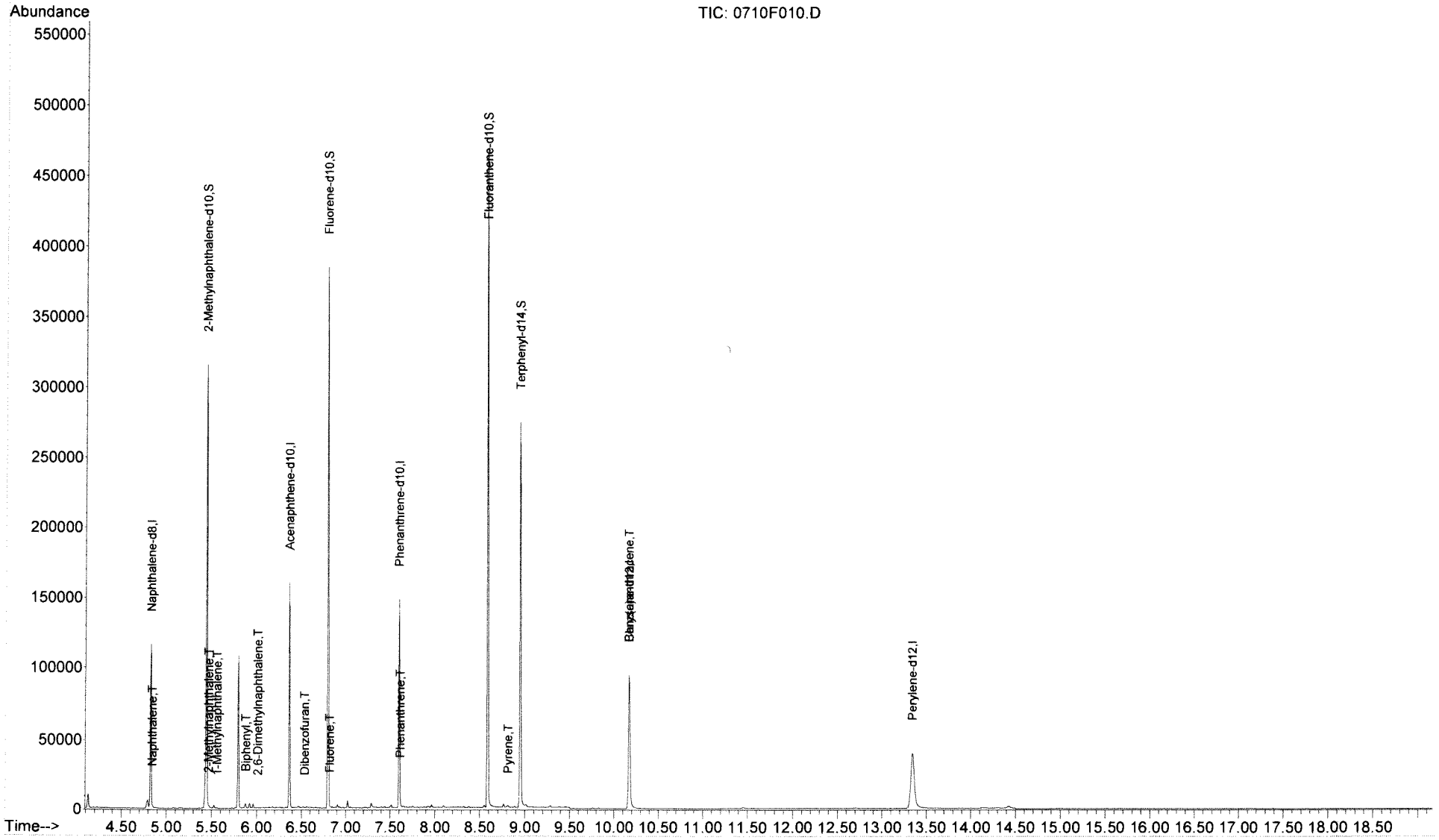
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	83244m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	39409	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.60	188	78414	200.00	ng/ml	0.00
23) Chrysene-d12	10.17	240	73933	200.00	ng/ml	0.00
28) Perylene-d12	13.34	264	76258	200.00	ng/ml	-0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.44	152	98926	417.69	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 41.77%			
13) Fluorene-d10	6.80	176	123425	479.01	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 47.90%			
22) Fluoranthene-d10	8.59	212	227769	468.06	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 46.81%			
25) Terphenyl-d14	8.95	244	174135	518.70	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 51.87%			
Target Compounds						Qvalue
2) Naphthalene	4.84	128	320	0.70	ng/ml	96
4) 2-Methylnaphthalene	5.47	142	218	0.75	ng/ml	94
5) 1-Methylnaphthalene	5.56	142	146	0.52	ng/ml	94
6) Biphenyl	5.88	154	767	2.13	ng/ml	90
7) 2,6-Dimethylnaphthalene	6.02	156	79	0.31	ng/ml	87
11) Dibenzofuran	6.54	168	109	0.26	ng/ml	86
14) Fluorene	6.82	166	75	0.23	ng/ml	93
17) Phenanthrene	7.62	178	308	0.64	ng/ml	92
24) Pyrene	8.80	202	165	0.32	ng/ml#	1
26) Benz(a)anthracene	10.17	228	217	0.46	ng/ml	67

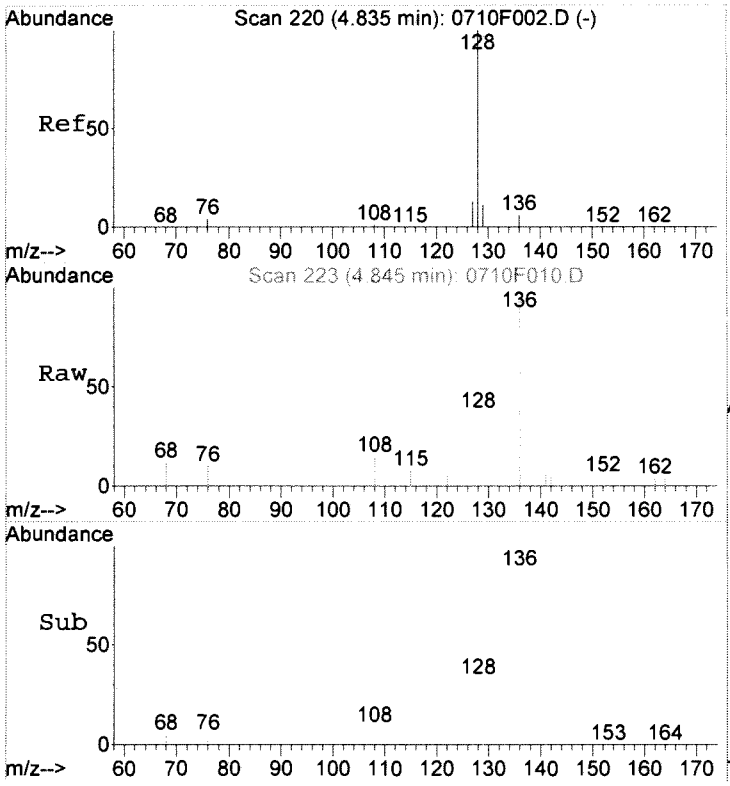
(#) = qualifier out of range (m) = manual integration
0710F010.D 070518PAH.M Wed Jul 11 07:09:12 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\071018\0710F010.D Vial: 10
Acq On : 10 Jul 2018 10:54 am Operator: LWeiskopf
Sample : K1805809-004 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:07 2018 Quant Results File: 070518PAH.RES

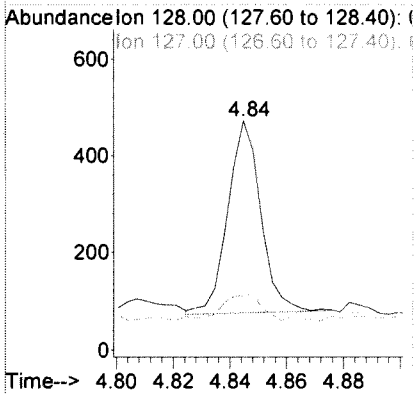
Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Initial Calibration

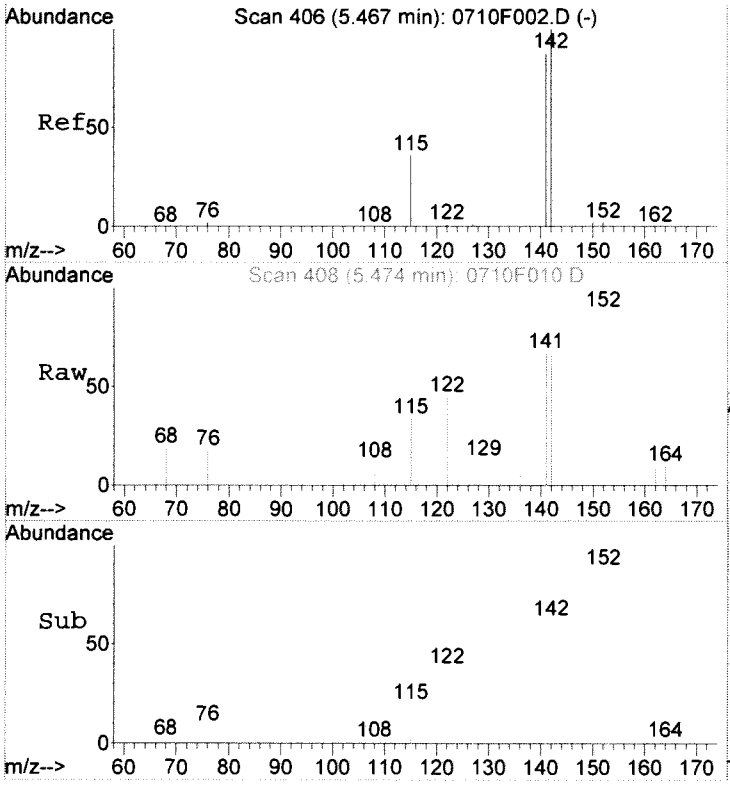




#2
Naphthalene
Concen: 0.70 ng/ml
RT: 4.84 min Scan# 223
Delta R.T. 0.00 min
Lab File: 0710F010.D
Acq: 10 Jul 2018 10:54 am

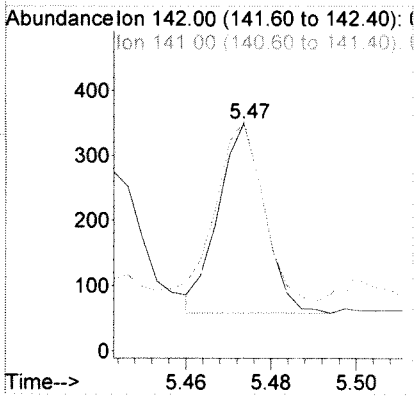
Tgt Ion:128	Resp:	320	
Ion	Ratio	Lower	Upper
128	100		
127	11.0	0.0	42.4
129	9.5	0.0	30.8

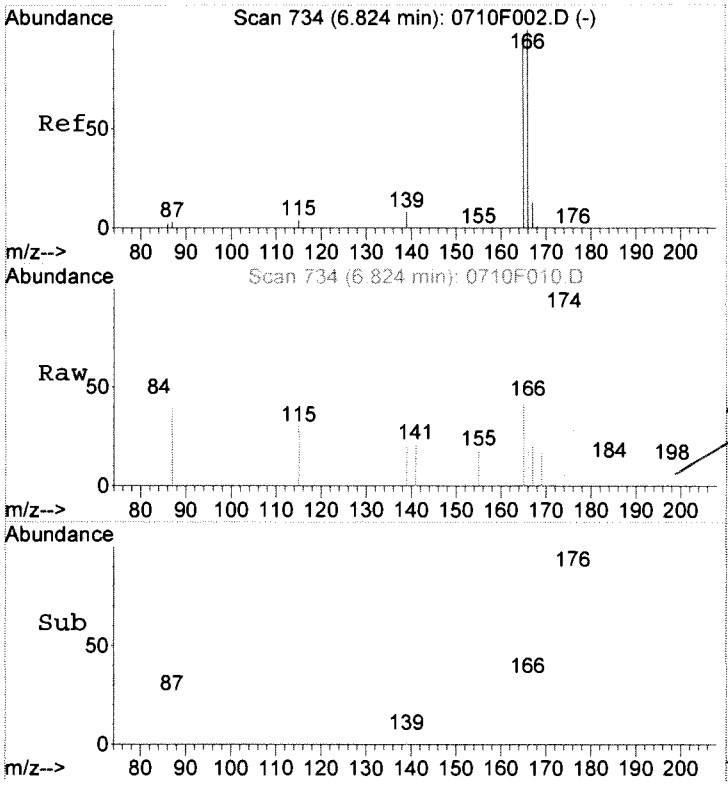




#4
2-Methylnaphthalene
Concen: 0.75 ng/ml
RT: 5.47 min Scan# 408
Delta R.T. -0.00 min
Lab File: 0710F010.D
Acq: 10 Jul 2018 10:54 am

Tgt Ion:142	Resp:	218	
Ion	Ratio	Lower	Upper
142	100		
141	90.8	53.0	113.0
115	30.1	10.2	50.2

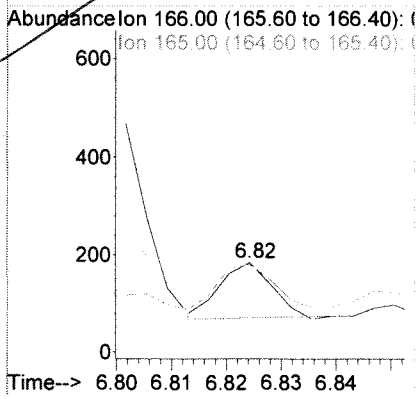


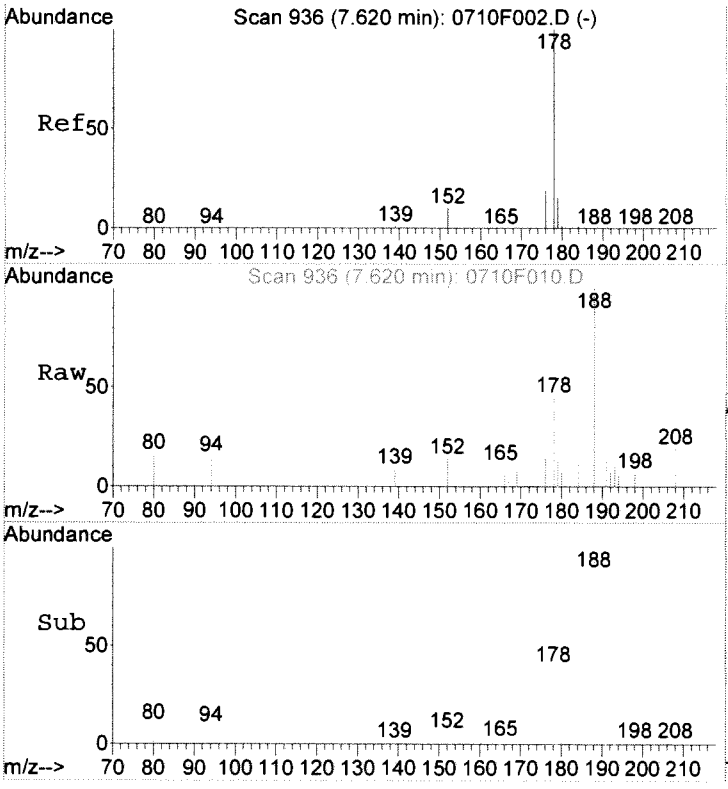


#14
Fluorene
Concen: 0.23 ng/ml
RT: 6.82 min Scan# 734
Delta R.T. -0.00 min
Lab File: 0710F010.D
Acq: 10 Jul 2018 10:54 am

Tgt Ion:166 Resp: 75

Ion	Ratio	Lower	Upper
166	100		
165	85.5	61.5	121.5
167	17.3	0.0	33.0

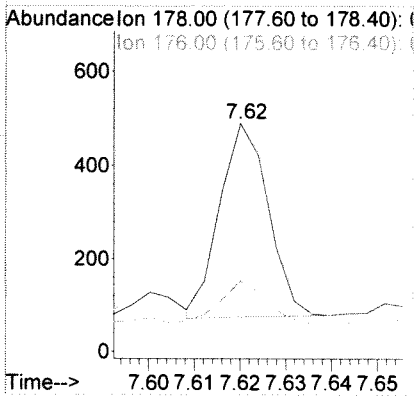


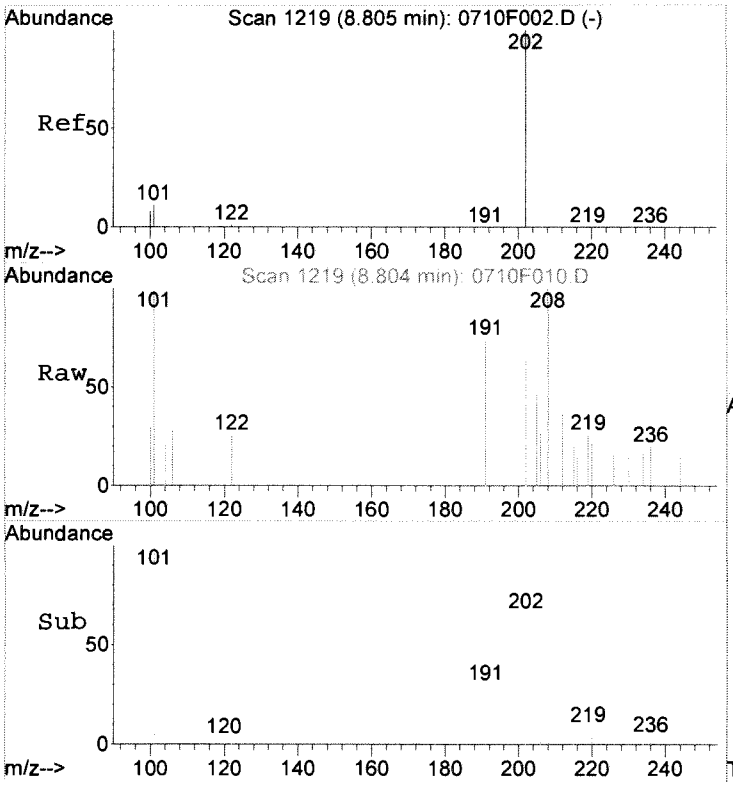


#17
Phenanthrene
Concen: 0.64 ng/ml
RT: 7.62 min Scan# 936
Delta R.T. -0.00 min
Lab File: 0710F010.D
Acq: 10 Jul 2018 10:54 am

Tgt Ion:178 Resp: 308

Ion	Ratio	Lower	Upper
178	100		
176	22.4	0.0	48.5
179	12.2	0.0	35.2

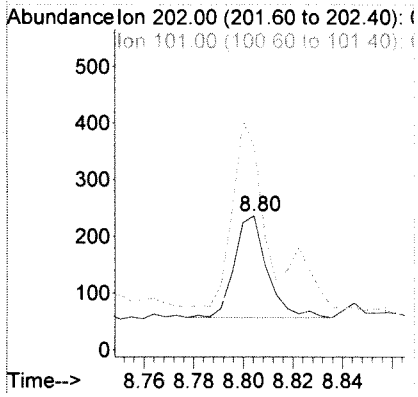


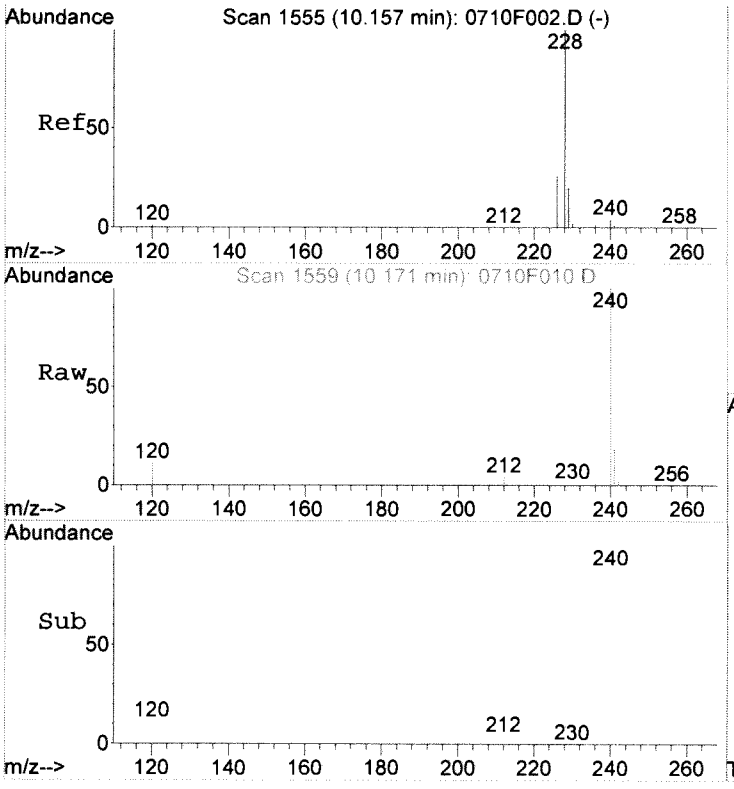


#24
Pyrene
Concen: 0.32 ng/ml
RT: 8.80 min Scan# 1219
Delta R.T. -0.00 min
Lab File: 0710F010.D
Acq: 10 Jul 2018 10:54 am

Tgt Ion:202 Resp: 165

Ion	Ratio	Lower	Upper
202	100		
101	158.7	0.0	41.8#
100	21.8	0.0	28.7

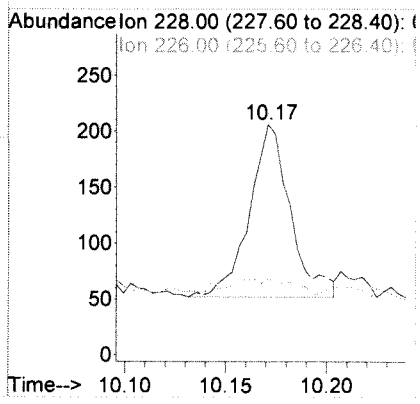




#26
Benz(a)anthracene
Concen: 0.46 ng/ml
RT: 10.17 min Scan# 1559
Delta R.T. 0.01 min
Lab File: 0710F010.D
Acq: 10 Jul 2018 10:54 am

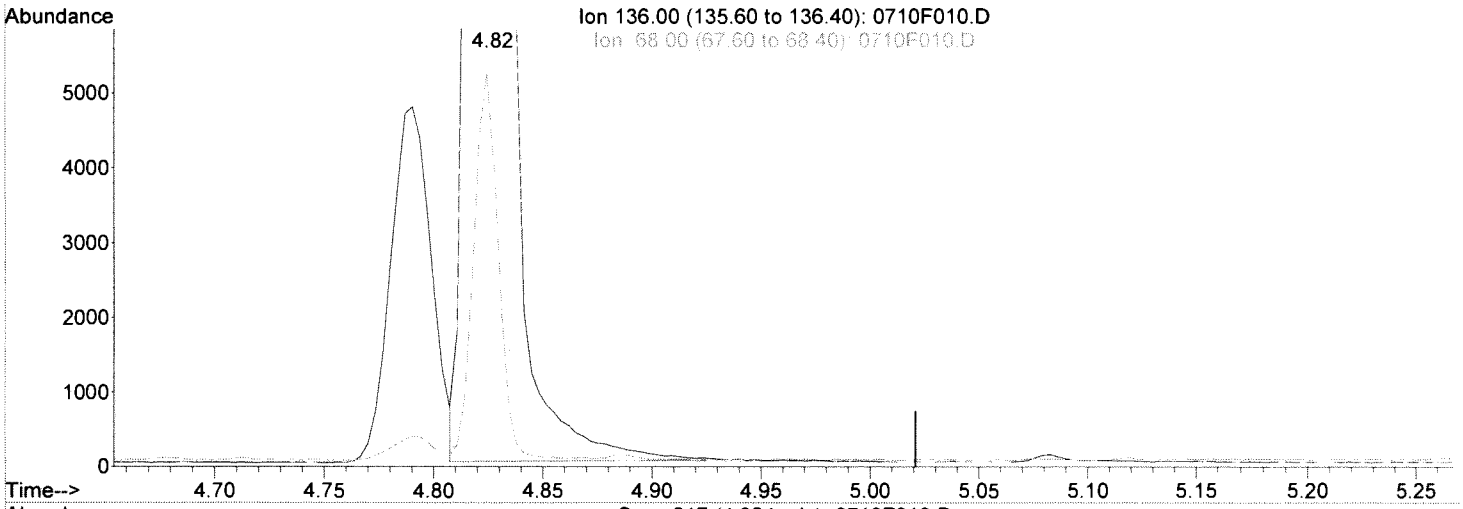
Tgt Ion:228 Resp: 217

Ion	Ratio	Lower	Upper
228	100		
226	7.1	0.0	56.0
229	32.5	0.0	39.5



Data File : J:\MS14\DATA\071018\0710F010.D Vial: 10
Acq On : 10 Jul 2018 10:54 am Operator: LWeiskopf
Sample : K1805809-004 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 6:12 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration



TIC: 0710F010.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml

response 76790

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.46
108.00	9.50	11.20
0.00	0.00	0.00

Manual Integration:

Before

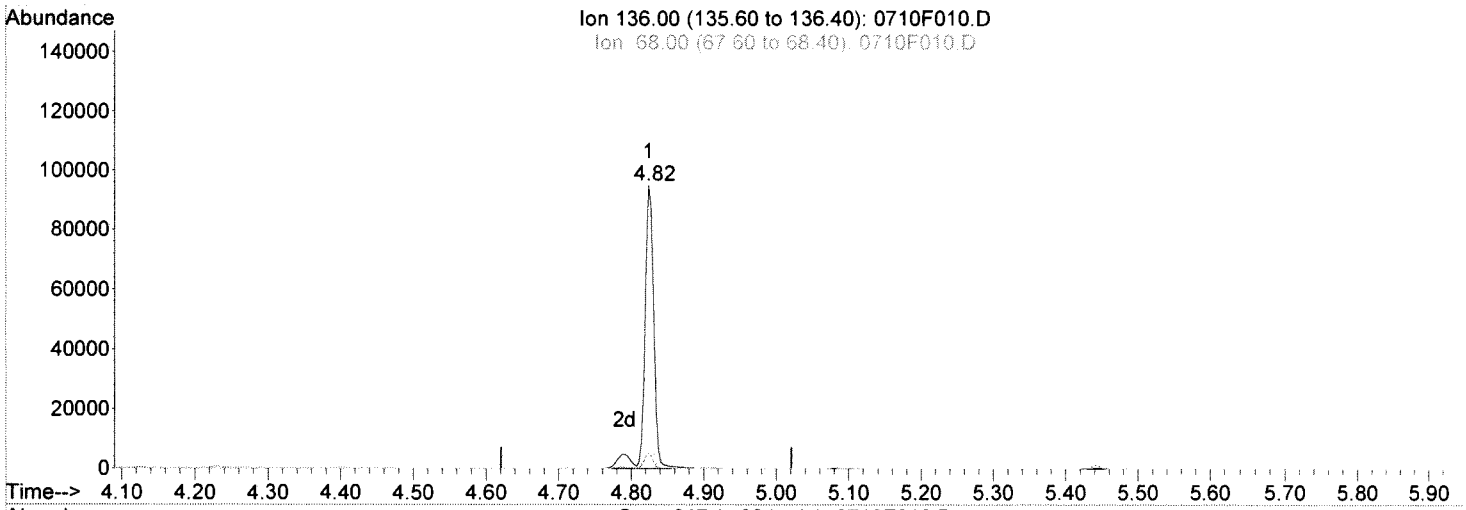
07/11/18

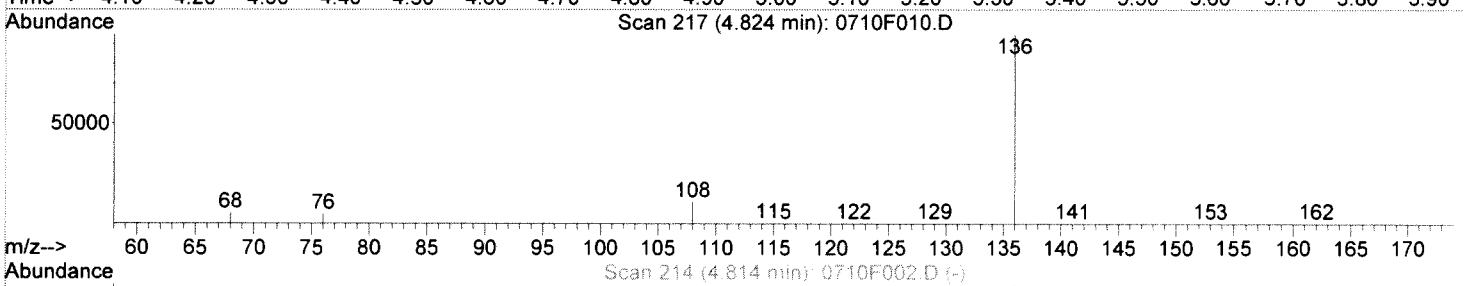
JUL 23 2018

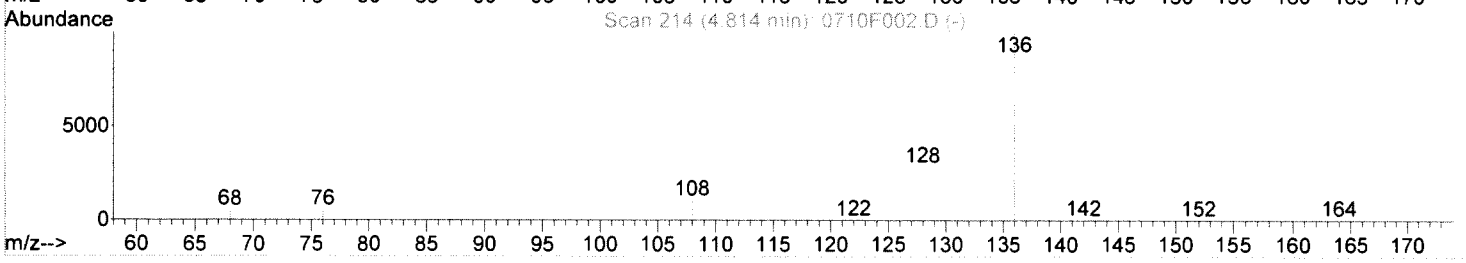
0710F010.D 070518PAH.M Wed Jul 11 07:06:21 2018

Data File : J:\MS14\DATA\071018\0710F010.D Vial: 10
Acq On : 10 Jul 2018 10:54 am Operator: LWeiskopf
Sample : K1805809-004 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:06 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration







TIC: 0710F010.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml m

response 83244

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.54
108.00	9.50	11.26
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

07/11/18

JUL 23 2018

0710F010.D 070518PAH.M Wed Jul 11 07:06:28 2018

Exception Report

Data File: J:\MS14\DATA\071018\0710F011.D
Lab ID: K1805809-005
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 11:20
Date Quantitated: 07/11/2018 07:08
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA		x
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Lab Control Spike	Acenaphthene	58	63	121	
	Fluorene	57	68	121	
	Phenanthrene	57	64	126	No Sample for RX
	Anthracene	58	68	127	
	Fluoranthene	53	70	127	
	Pyrene	62	72	127	
	Benz(a)anthracene	54	74	124	
	Chrysene	57	74	132	

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:56:26
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\MS14\DATA\071018\0710F011.D
Lab ID: K1805809-005
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 11:20
Date Quantitated: 07/11/2018 07:08
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	Benzo(b)fluoranthene	56	73	136	Narrate
	Benzo(k)fluoranthene	58	74	134	
	Benzo(a)pyrene	55	75	131	
	Indeno(1,2,3-cd)pyrene	53	63	136	
	Dibenz(a,h)anthracene	49	59	135	
	Benzo(g,h,i)perylene	56	63	127	

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:56:26
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\071018\0710F011.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 11:20	**Quant Date:**	07/11/2018 07:08	**Vial:**	11
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-005			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	06/16/2018	**Receive Date:**	06/19/2018

Analysis Lot:	KWG1803359	**Prep Lot:**	KWG1803064	**Report Group:**	K1805809
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1680451	**Prep Date:**	06/21/2018		

Quant Method:	J:\MS14\METHODS\SIM\070518PAH.M	**Calibration ID:**	CAL15772
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\071018\0710F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\071018\0710F003.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.82	0.01	136	82761**m**	200.00	OK
2	Acenaphthene-d10	6.37	0.00	164	39130	200.00	OK
3	Phenanthrene-d10	7.60	0.00	188	77982	200.00	OK
4	Chrysene-d12	10.17	0.00	240	72069	200.00	OK
5	Perylene-d12	13.34	0.00	264	75149	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.80	0.00	0.00	176	126486	494.39	99	42-131	OK	
3	Fluoranthene-d10	8.59	0.00	0.00	212	232391	480.20	96	42-133	OK	
4	Terphenyl-d14	8.95	0.00	0.00	244	178219	544.59	109	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene				128	0		0.0028	U	
1	2-Methylnaphthalene				142	0**d**		0.0026	U	
2	Acenaphthylene				152	0		0.0022	U	
2	Acenaphthene	6.37	-0.02	0.00	154	210	0.8000	0.0071	J	
2	Fluorene				166	0**d**		0.0022	U	
3	Phenanthrene				178	0**d**		0.0022	U	
3	Anthracene				178	0		0.0017	U	
3	Fluoranthene				202	0**d**		0.0017	U	
4	Pyrene				202	0		0.0020	U	
4	Benz(a)anthracene	10.17	0.01	0.00	228	203	0.4500	0.0040	J	
4	Chrysene				228	0**d**		0.0016	U	
5	Benzo(b)fluoranthene				252	0**d**		0.0017	U	
5	Benzo(k)fluoranthene				252	0		0.0019	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\071018\0710F011.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 11:20	**Quant Date:**	07/11/2018 07:08	**Vial:**	11
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-005			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0		0.0022	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.0018	U	
5	Dibenz(a,h)anthracene				278	0		0.0026	U	
5	Benzo(g,h,i)perylene				276	0		0.0018	U	

Prep Amount:	450 ml	**Dilution:**	1.0
Prep Final Vol:	4 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\071018\0710F011.D Vial: 11
Acq On : 10 Jul 2018 11:20 am Operator: LWeiskopf
Sample : K1805809-005 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 06:13:03 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

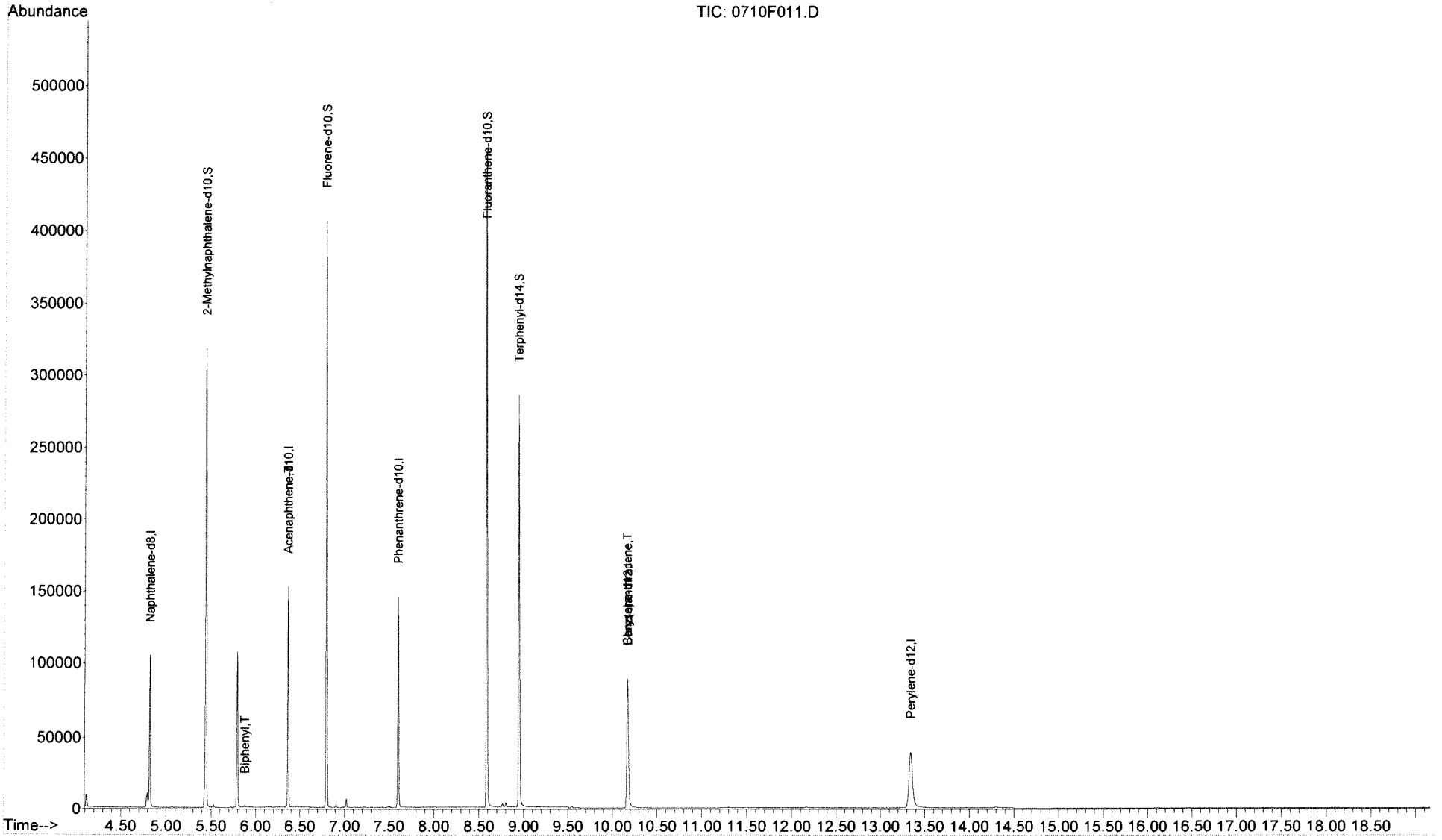
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	82761m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	39130	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.60	188	77982	200.00	ng/ml	0.00
23) Chrysene-d12	10.17	240	72069	200.00	ng/ml	0.00
28) Perylene-d12	13.34	264	75149	200.00	ng/ml	-0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.44	152	101551	431.28	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	43.13%		
13) Fluorene-d10	6.80	176	126486	494.39	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	49.44%		
22) Fluoranthene-d10	8.59	212	232391	480.20	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	48.02%		
25) Terphenyl-d14	8.95	244	178219	544.59	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	54.46%		
Target Compounds						Qvalue
6) Biphenyl	5.88	154	479	1.34	ng/ml	94
10) Acenaphthene	6.37	154	210	0.80	ng/ml#	17
26) Benz(a)anthracene	10.17	228	203	0.45	ng/ml	67

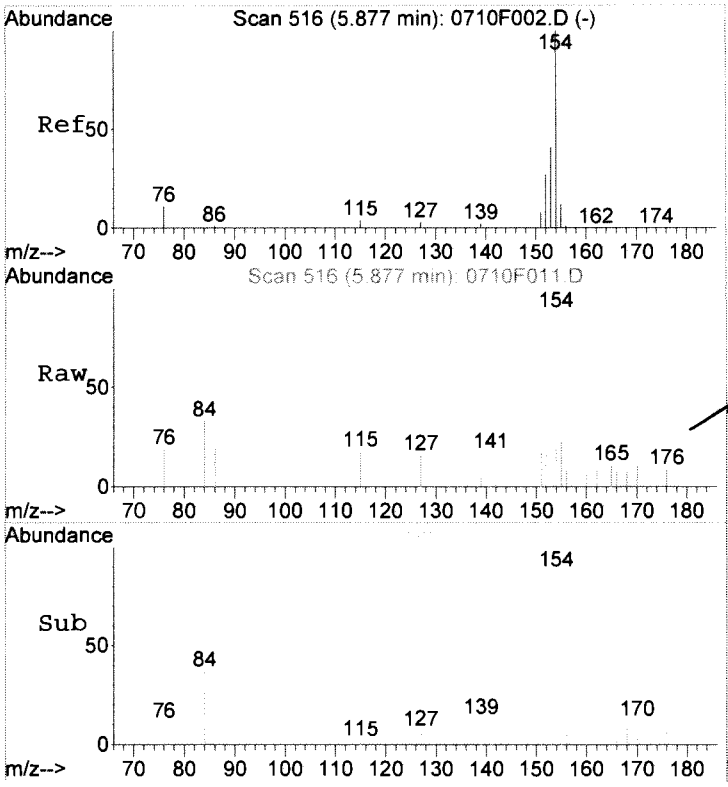
(#) = qualifier out of range (m) = manual integration
0710F011.D 070518PAH.M Wed Jul 11 07:09:17 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\071018\0710F011.D Vial: 11
Acq On : 10 Jul 2018 11:20 am Operator: LWeiskopf
Sample : K1805809-005 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:08 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Initial Calibration

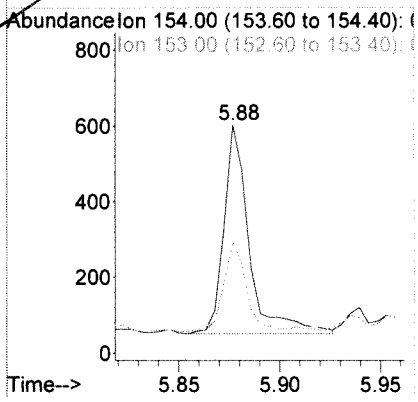


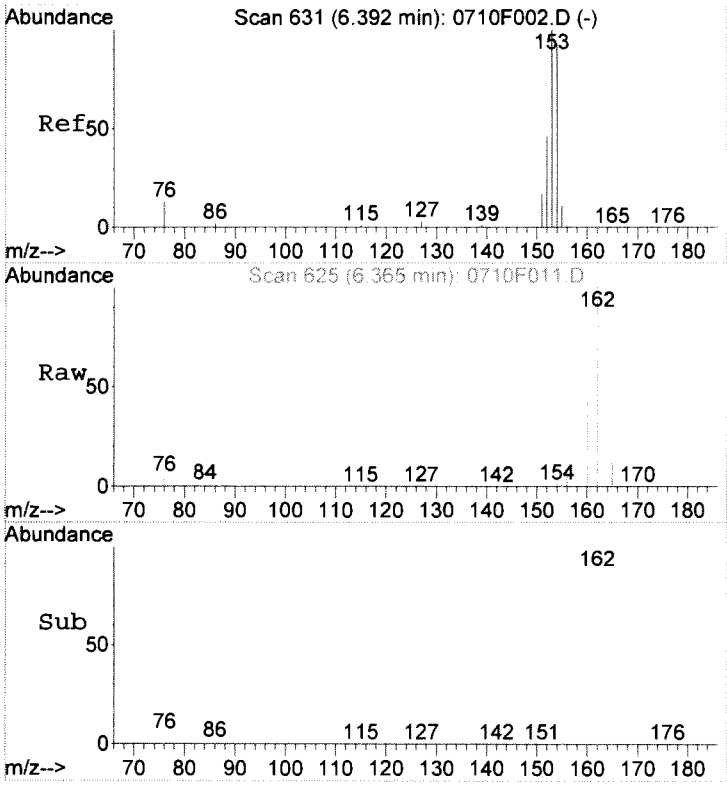


#6
Biphenyl
Concen: 1.34 ng/ml
RT: 5.88 min Scan# 516
Delta R.T. -0.00 min
Lab File: 0710F011.D
Acq: 10 Jul 2018 11:20 am

Tgt Ion:154 Resp: 479

Ion	Ratio	Lower	Upper
154	100		
153	42.5	8.2	68.2
152	27.8	6.0	46.0

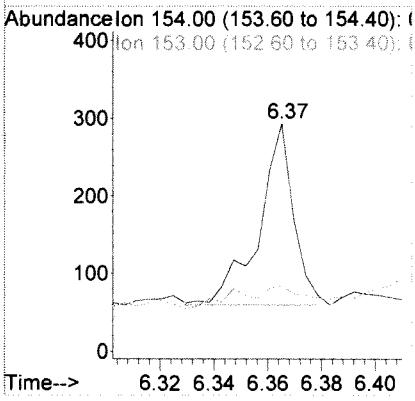


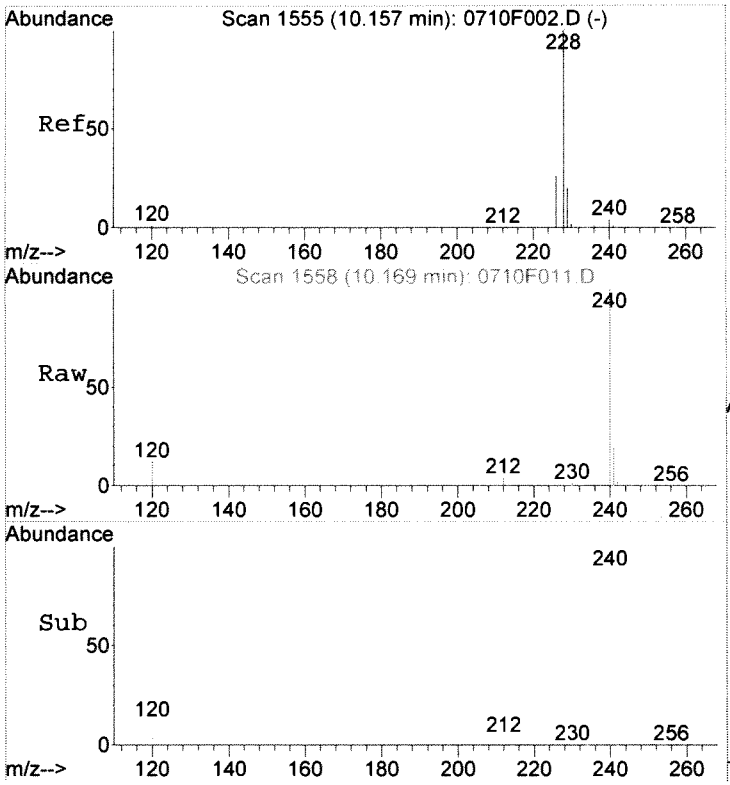


#10
Acenaphthene
Concen: 0.80 ng/ml
RT: 6.37 min Scan# 625
Delta R.T. -0.03 min
Lab File: 0710F011.D
Acq: 10 Jul 2018 11:20 am

Tgt Ion:154 Resp: 210

Ion	Ratio	Lower	Upper
154	100		
153	12.8	74.1	134.1#
152	1.3	19.4	79.4#

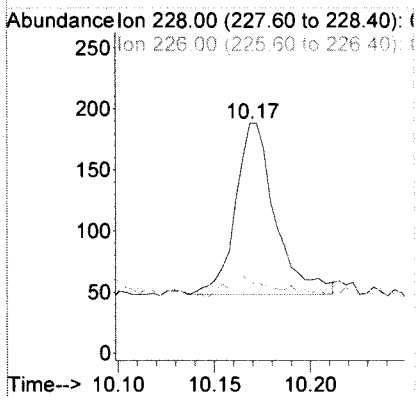




#26
Benz(a)anthracene
Concen: 0.45 ng/ml
RT: 10.17 min Scan# 1558
Delta R.T. 0.00 min
Lab File: 0710F011.D
Acq: 10 Jul 2018 11:20 am

Tgt Ion:228 Resp: 203

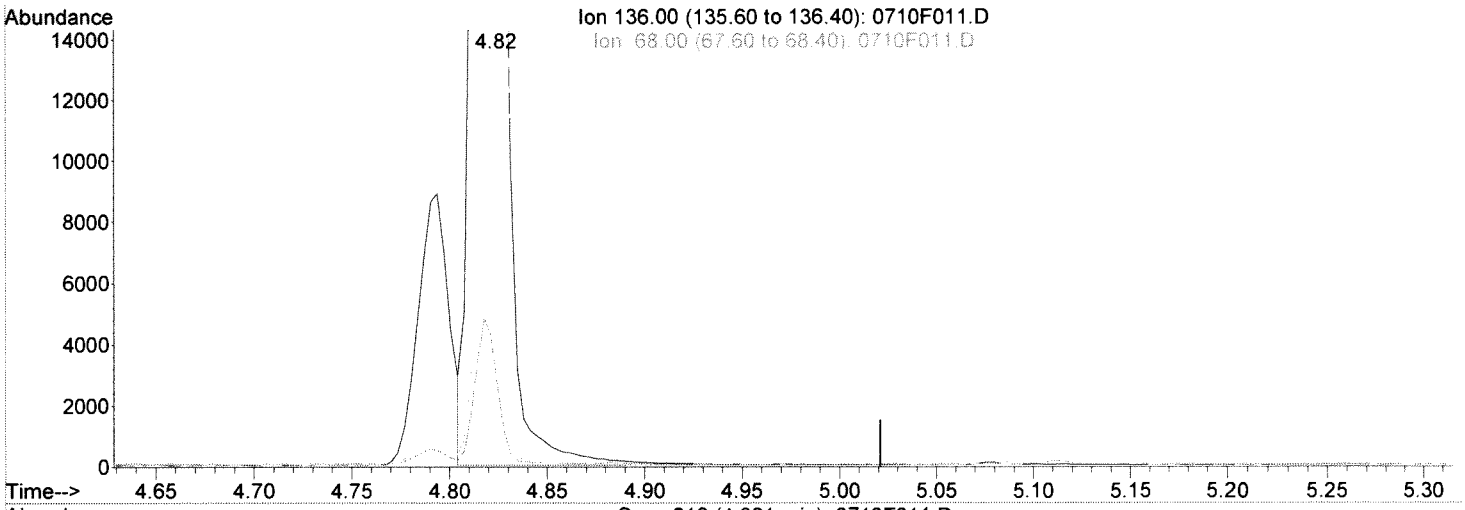
Ion	Ratio	Lower	Upper
228	100		
226	5.0	0.0	56.0
229	30.0	0.0	39.5

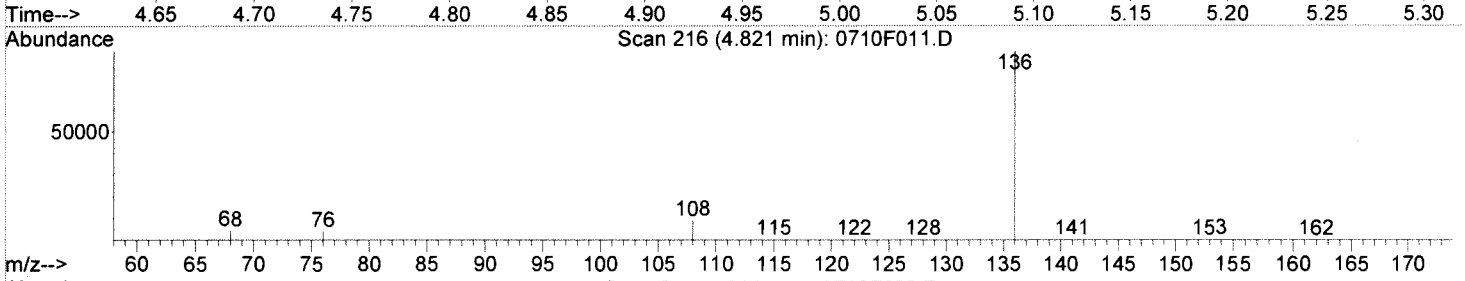


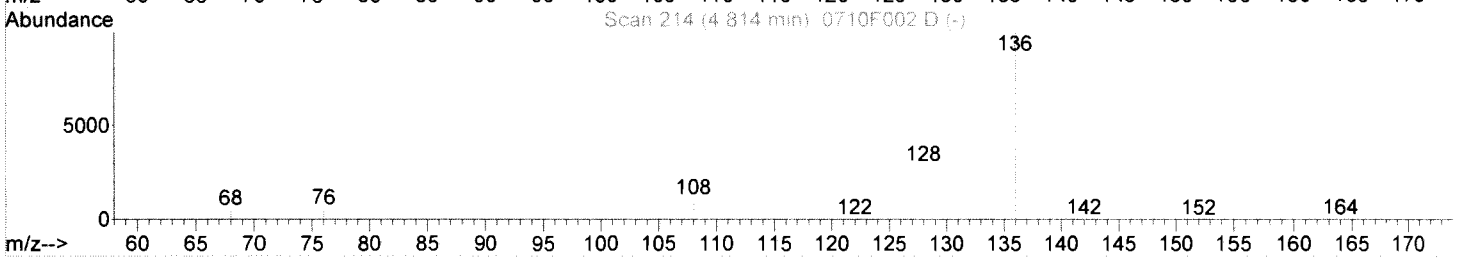
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\071018\0710F011.D Vial: 11
Acq On : 10 Jul 2018 11:20 am Operator: LWeiskopf
Sample : K1805809-005 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 6:12 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration







TIC: 0710F011.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml

response 72747

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	4.81
108.00	9.50	10.21
0.00	0.00	0.00

Manual Integration:

Before

07/11/18

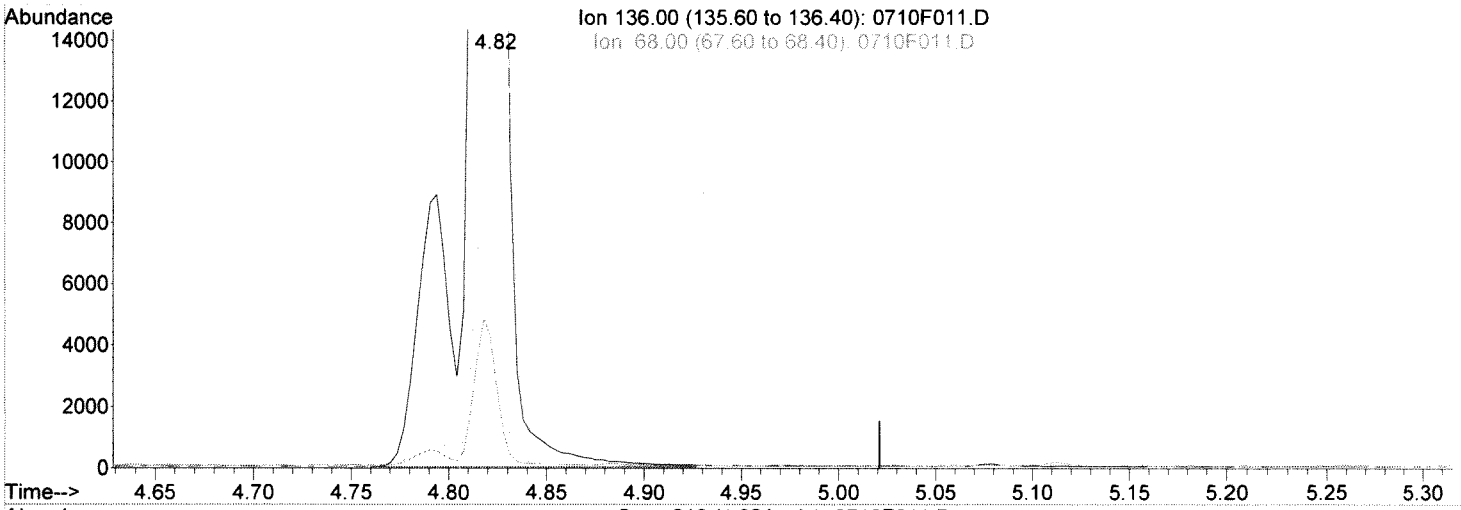
JUL 23 2018

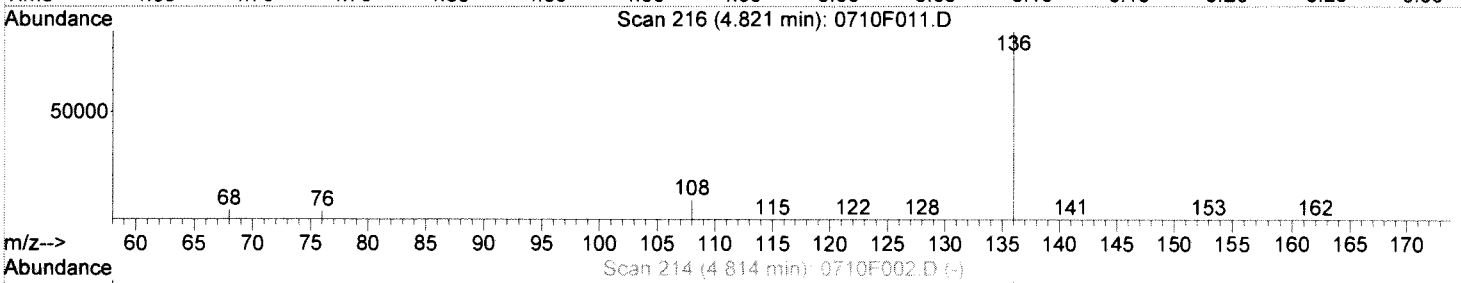
0710F011.D 070518PAH.M Wed Jul 11 07:07:39 2018

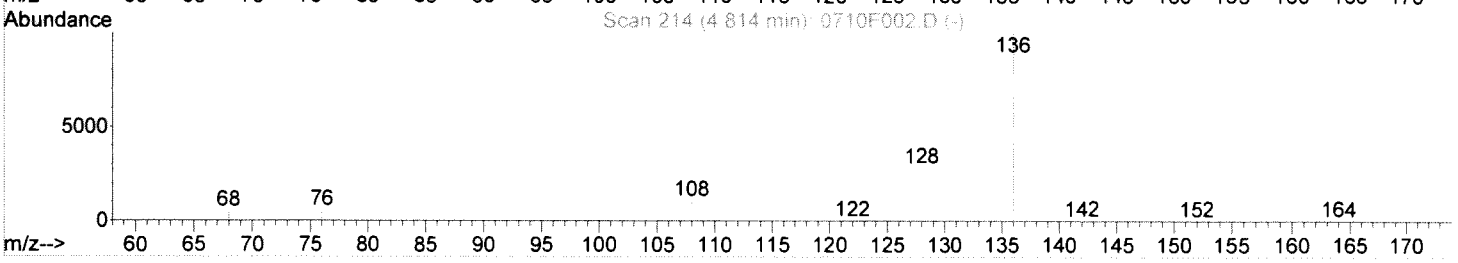
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\071018\0710F011.D Vial: 11
Acq On : 10 Jul 2018 11:20 am Operator: LWeiskopf
Sample : K1805809-005 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:07 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration







TIC: 0710F011.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml m

response 82761

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	4.91
108.00	9.50	10.26
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

07/11/18

JUL 23 2018

0710F011.D 070518PAH.M Wed Jul 11 07:07:46 2018

Exception Report

Data File: J:\MS14\DATA\071018\0710F012.D
Lab ID: K1805809-014
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 11:46
Date Quantitated: 07/11/2018 07:10
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA		x
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Lab Control Spike	Acenaphthene	58	63	121	
	Fluorene	57	68	121	
	Phenanthrene	57	64	126	
	Anthracene	58	68	127	No sample for RX
	Fluoranthene	53	70	127	
	Pyrene	62	72	127	
	Benz(a)anthracene	54	74	124	
	Chrysene	57	74	132	

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:56:30
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\MS14\DATA\071018\0710F012.D
Lab ID: K1805809-014
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 11:46
Date Quantitated: 07/11/2018 07:10
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	Benzo(b)fluoranthene	56	73	136	NaMate
	Benzo(k)fluoranthene	58	74	134	
	Benzo(a)pyrene	55	75	131	
	Indeno(1,2,3-cd)pyrene	53	63	136	
	Dibenz(a,h)anthracene	49	59	135	
	Benzo(g,h,i)perylene	56	63	127	

Primary Review: JUL 1 1 2018

Secondary Review: JUL 2 3 2018

Printed: 07/11/2018 07:56:30
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\071018\0710F012.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 11:46	**Quant Date:**	07/11/2018 07:10	**Vial:**	12
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-014			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	06/16/2018	**Receive Date:**	06/19/2018

Analysis Lot:	KWG1803359	**Prep Lot:**	KWG1803064	**Report Group:**	K1805809
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1680452	**Prep Date:**	06/21/2018		

Quant Method:	J:\MS14\METHODS\SIM\070518PAH.M	**Calibration ID:**	CAL15772
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\071018\0710F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\071018\0710F003.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.83	0.02	136	83513m	200.00	OK
2	Acenaphthene-d10	6.37	0.00	164	39438	200.00	OK
3	Phenanthrene-d10	7.60	0.00	188	78743	200.00	OK
4	Chrysene-d12	10.17	0.00	240	71817	200.00	OK
5	Perylene-d12	13.34	0.00	264	73341	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.80	0.00	0.00	176	131788	511.09	102	42-131	OK	
3	Fluoranthene-d10	8.59	0.00	0.00	212	240796	492.76	99	42-133	OK	
4	Terphenyl-d14	8.95	0.00	0.00	244	185297	568.21	114	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.85	0.02	0.00	128	192	0.4200	0.0037	J	
1	2-Methylnaphthalene	5.47		0.00	142	132m	0.4500	0.0040	J	
2	Acenaphthylene				152	0d		0.0022	U	
2	Acenaphthene				154	0d		0.0024	U	
2	Fluorene				166	0d		0.0022	U	
3	Phenanthrene	7.62		0.00	178	155	0.3200	0.0028	J	
3	Anthracene				178	0d		0.0017	U	
3	Fluoranthene				202	0d		0.0017	U	
4	Pyrene				202	0d		0.0020	U	
4	Benz(a)anthracene	10.17	0.01	0.00	228	197	0.4300	0.0038	J	
4	Chrysene				228	0d		0.0016	U	
5	Benzo(b)fluoranthene				252	0		0.0017	U	
5	Benzo(k)fluoranthene				252	0		0.0019	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\071018\0710F012.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 11:46	**Quant Date:**	07/11/2018 07:10	**Vial:**	12
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-014			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0d		0.0022	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.0018	U	
5	Dibenz(a,h)anthracene				278	0		0.0026	U	
5	Benzo(g,h,i)perylene				276	0		0.0018	U	

Prep Amount: 450 ml **Dilution:** 1.0
Prep Final Vol: 4 ml **Unit Factor:** 1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\071018\0710F012.D Vial: 12
Acq On : 10 Jul 2018 11:46 am Operator: LWeiskopf
Sample : K1805809-014 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 06:13:05 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

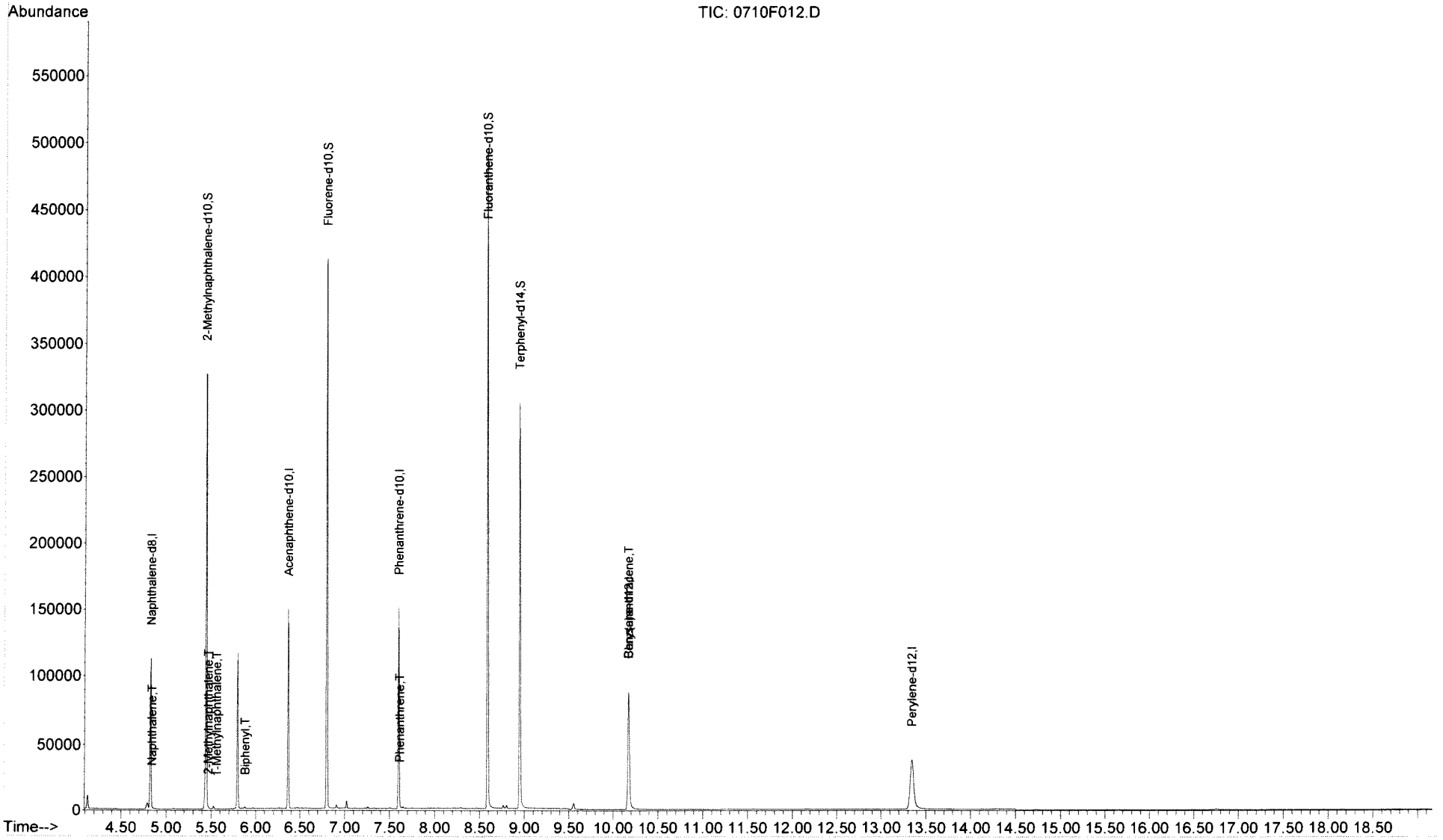
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.83	136	83513m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	39438	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.60	188	78743	200.00	ng/ml	0.00
23) Chrysene-d12	10.17	240	71817	200.00	ng/ml	0.00
28) Perylene-d12	13.34	264	73341	200.00	ng/ml	-0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.45	152	106543	448.41	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	44.84%		
13) Fluorene-d10	6.80	176	131788	511.09	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	51.11%		
22) Fluoranthene-d10	8.59	212	240796	492.76	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	49.28%		
25) Terphenyl-d14	8.95	244	185297	568.21	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	56.82%		
Target Compounds						Qvalue
2) Naphthalene	4.85	128	192	0.42	ng/ml	91
4) 2-Methylnaphthalene	5.47	142	132m	0.45	ng/ml	
5) 1-Methylnaphthalene	5.56	142	83	0.29	ng/ml	97
6) Biphenyl	5.88	154	483	1.34	ng/ml	96
17) Phenanthrene	7.62	178	155	0.32	ng/ml	97
26) Benz(a)anthracene	10.17	228	197	0.43	ng/ml	66

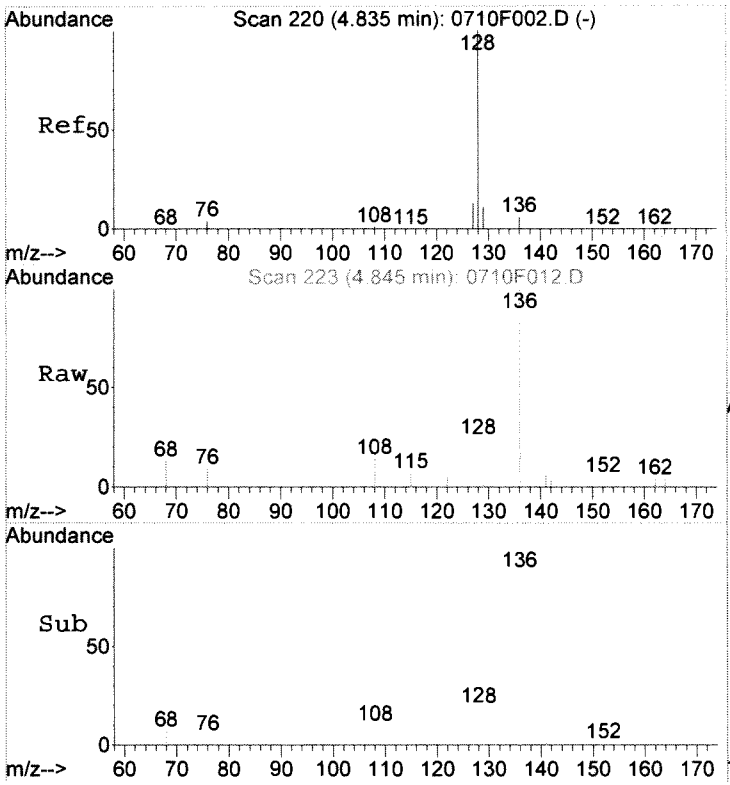
(#) = qualifier out of range (m) = manual integration
0710F012.D 070518PAH.M Wed Jul 11 07:13:21 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\071018\0710F012.D Vial: 12
Acq On : 10 Jul 2018 11:46 am Operator: LWeiskopf
Sample : K1805809-014 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:10 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Initial Calibration

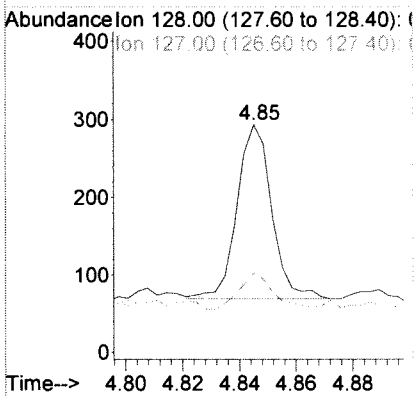


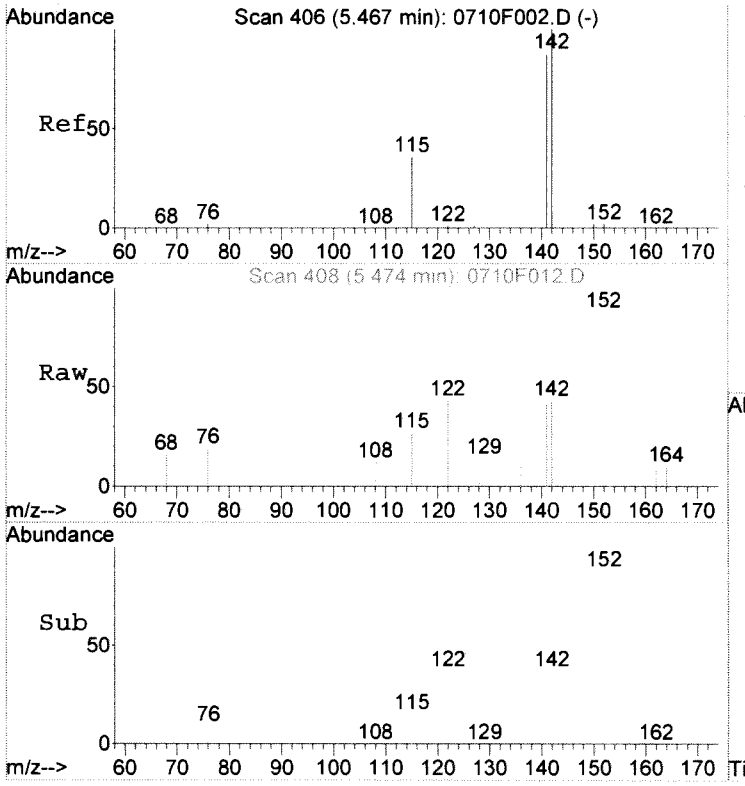


#2
Naphthalene
Concen: 0.42 ng/ml
RT: 4.85 min Scan# 223
Delta R.T. 0.00 min
Lab File: 0710F012.D
Acq: 10 Jul 2018 11:46 am

Tgt Ion:128 Resp: 192

Ion	Ratio	Lower	Upper
128	100		
127	16.4	0.0	42.4
129	13.3	0.0	30.8

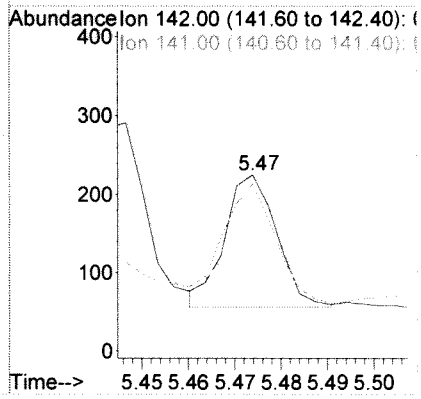


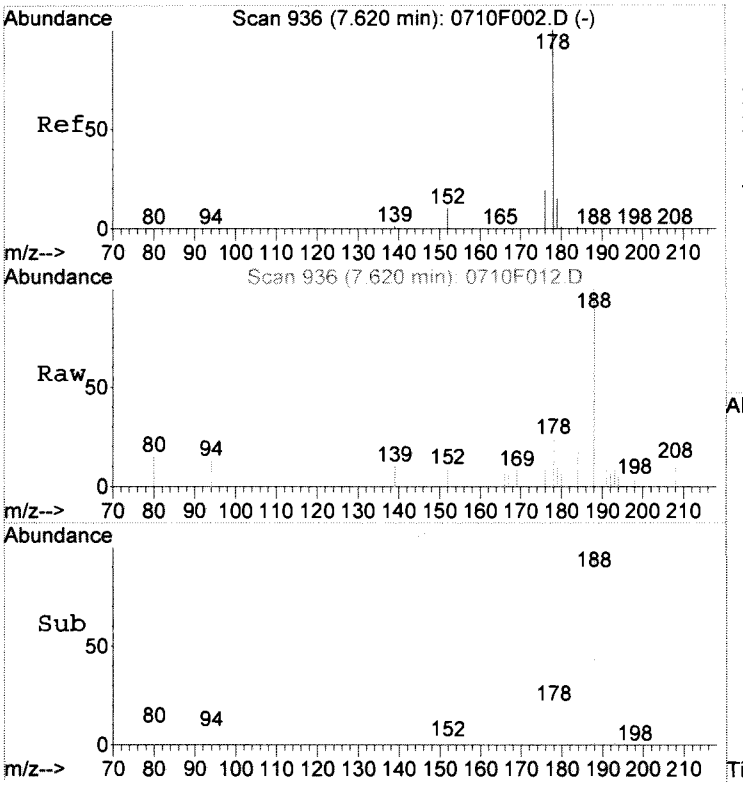


#4
2-Methylnaphthalene
Concen: 0.45 ng/ml m
RT: 5.47 min Scan# 408
Delta R.T. 0.00 min
Lab File: 0710F012.D
Acq: 10 Jul 2018 11:46 am

Tgt Ion:142 Resp: 132

Ion	Ratio	Lower	Upper
142	100		
141	94.7	53.0	113.0
115	63.6	10.2	50.2#

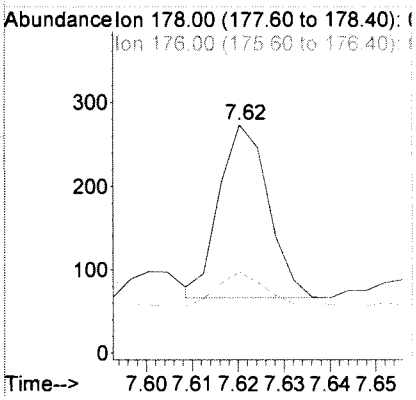


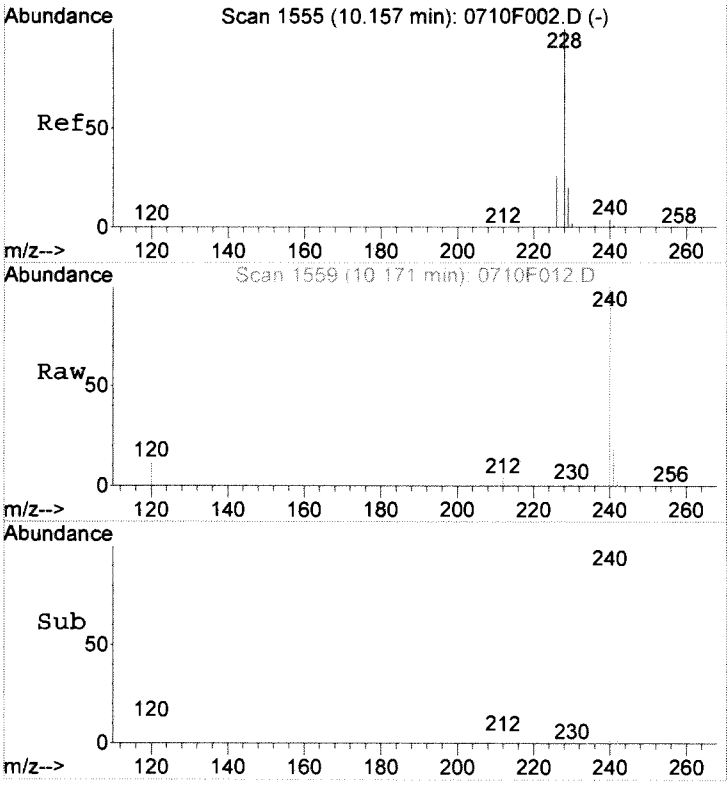


#17
Phenanthrene
Concen: 0.32 ng/ml
RT: 7.62 min Scan# 936
Delta R.T. -0.00 min
Lab File: 0710F012.D
Acq: 10 Jul 2018 11:46 am

Tgt Ion:178 Resp: 155

Ion	Ratio	Lower	Upper
178	100		
176	19.7	0.0	48.5
179	13.9	0.0	35.2

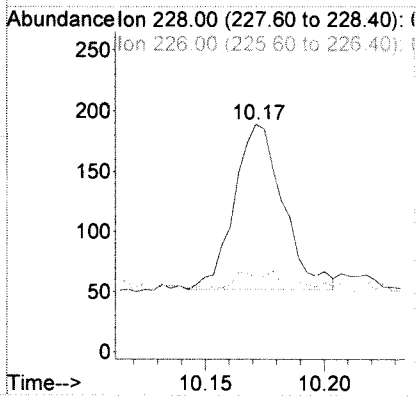




#26
Benz(a)anthracene
Concen: 0.43 ng/ml
RT: 10.17 min Scan# 1559
Delta R.T. 0.01 min
Lab File: 0710F012.D
Acq: 10 Jul 2018 11:46 am

Tgt Ion:228 Resp: 197

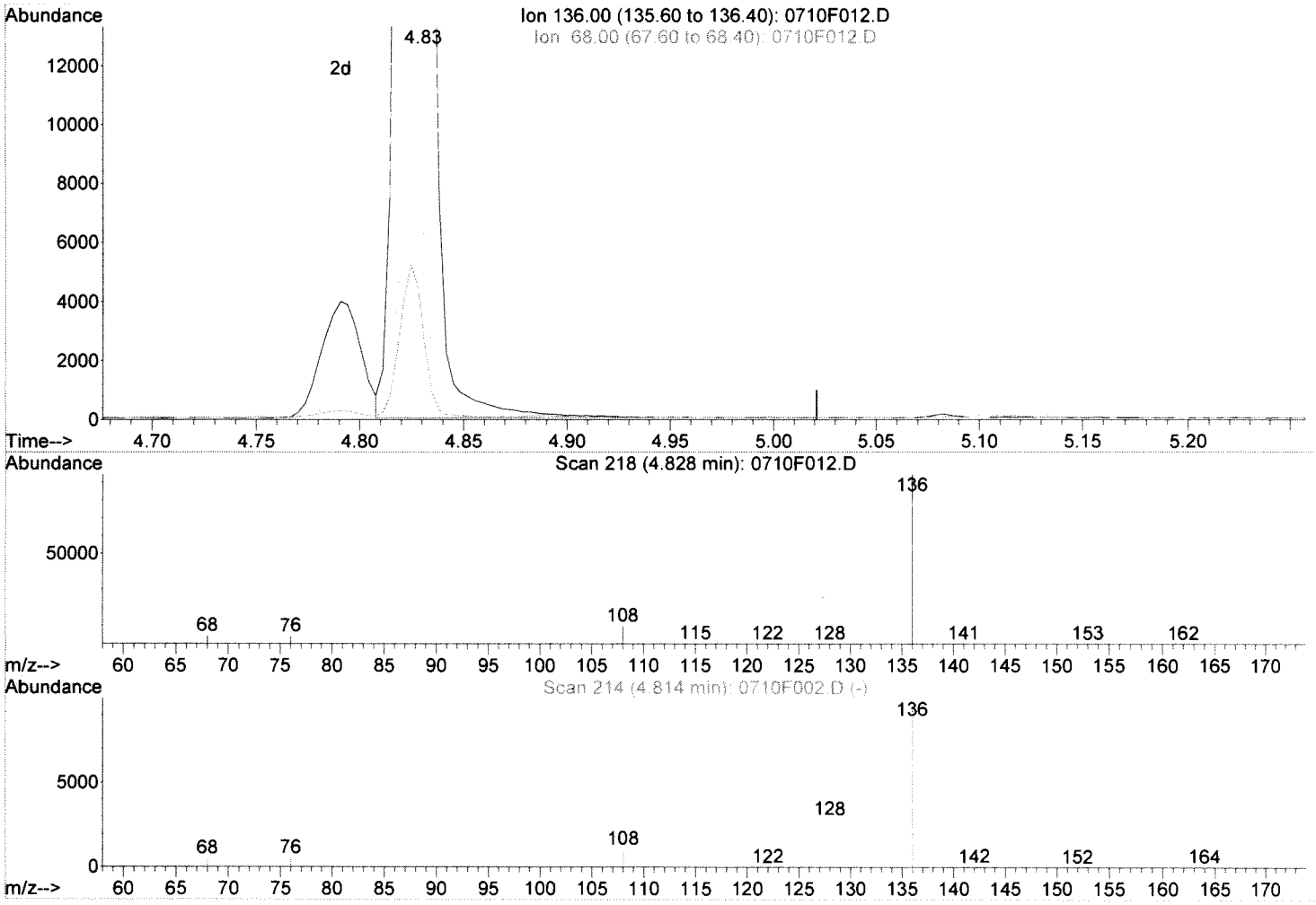
Ion	Ratio	Lower	Upper
228	100		
226	6.6	0.0	56.0
229	32.1	0.0	39.5



Quantitation Report (Qedit)

Data File : J:\MS14\DATA\071018\0710F012.D Vial: 12
Acq On : 10 Jul 2018 11:46 am Operator: LWeiskopf
Sample : K1805809-014 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 6:12 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration



TIC: 0710F012.D

(1) Naphthalene-d8 (I)

4.83min 200.00ng/ml

response 78238

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	4.64
108.00	9.50	10.11
0.00	0.00	0.00

Manual Integration:

Before

07/11/18

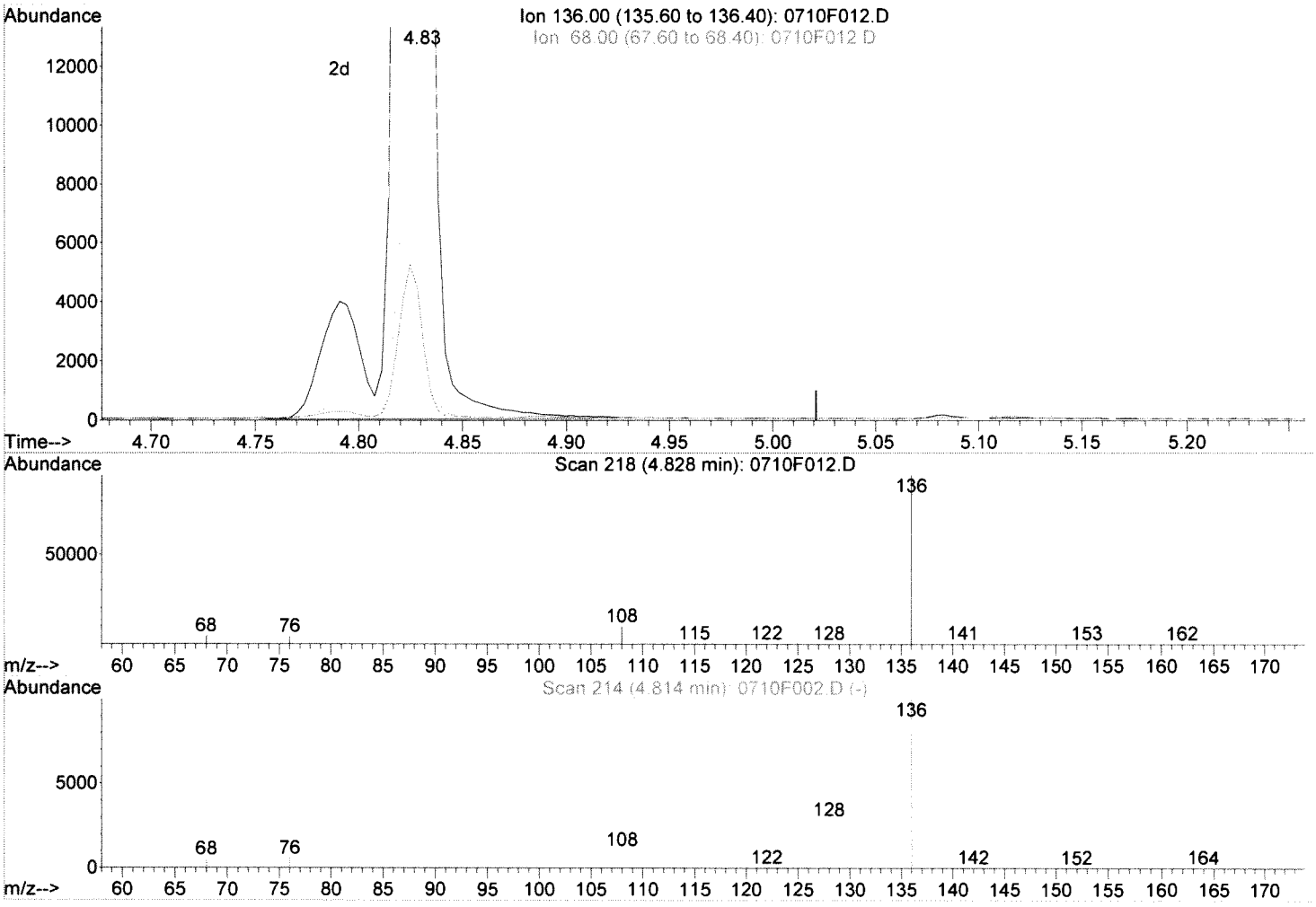
JUL 23 2018

0710F012.D 070518PAH.M Wed Jul 11 07:09:33 2018

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\071018\0710F012.D Vial: 12
Acq On : 10 Jul 2018 11:46 am Operator: LWeiskopf
Sample : K1805809-014 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:09 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration



TIC: 0710F012.D

(1) Naphthalene-d8 (I)

4.83min 200.00ng/ml m

response 83513

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	4.73
108.00	9.50	10.17
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

07/11/18

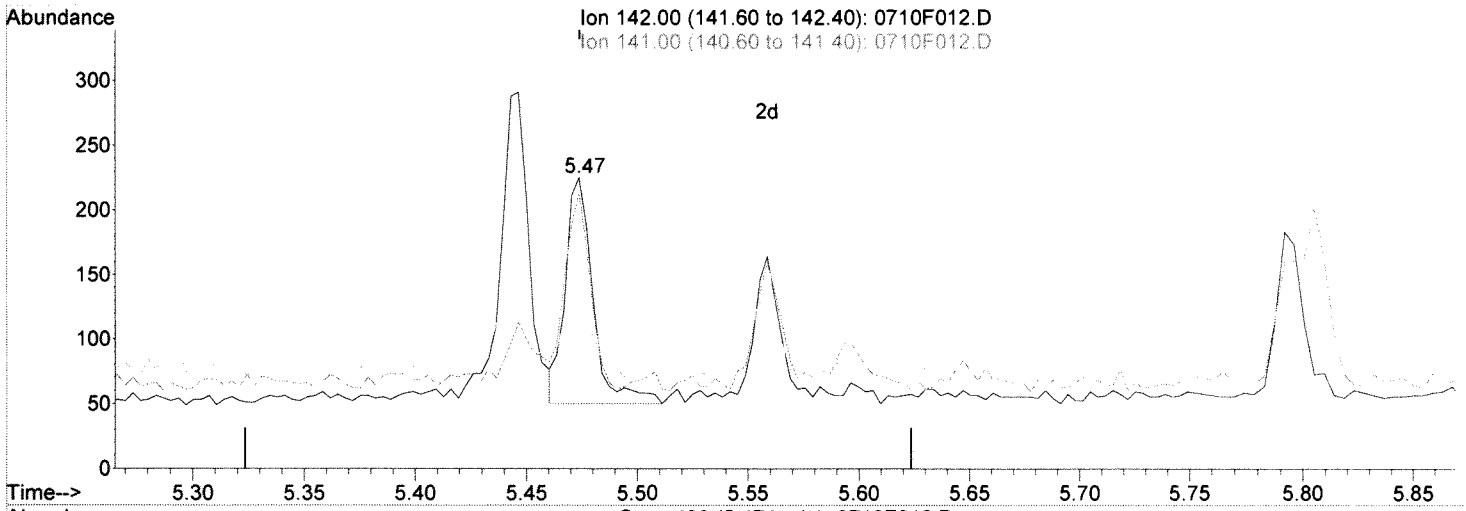
JUL 23 2018

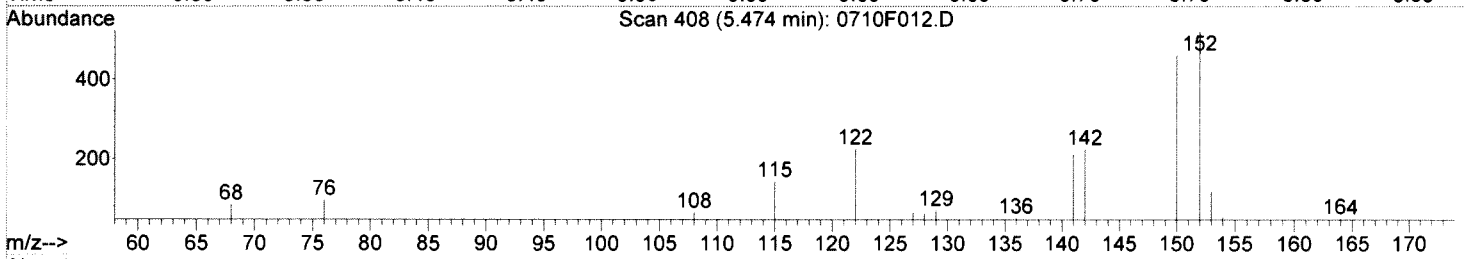
0710F012.D 070518PAH.M Wed Jul 11 07:09:41 2018

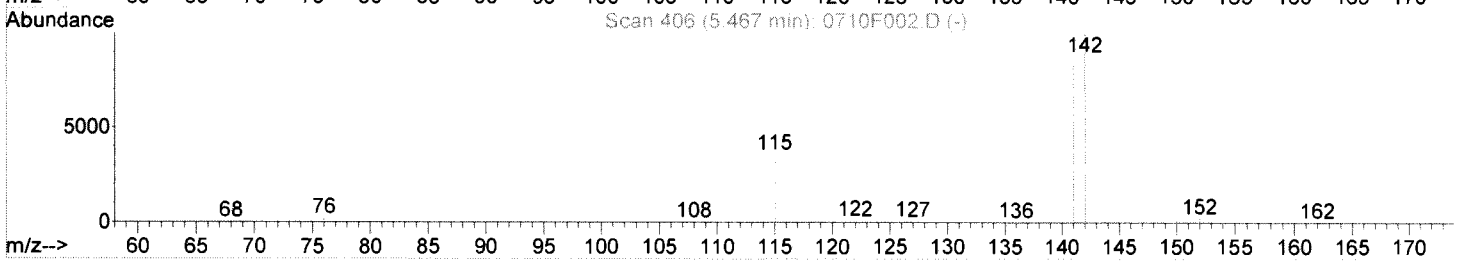
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\071018\0710F012.D Vial: 12
Acq On : 10 Jul 2018 11:46 am Operator: LWeiskopf
Sample : K1805809-014 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:09 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration







TIC: 0710F012.D

(4) 2-Methylnaphthalene (T)

5.47min 0.52ng/ml

response 152

Ion	Exp%	Act%
142.00	100	100
141.00	83.00	86.86
115.00	30.20	40.00
0.00	0.00	0.00

Manual Integration:

Before

07/11/18

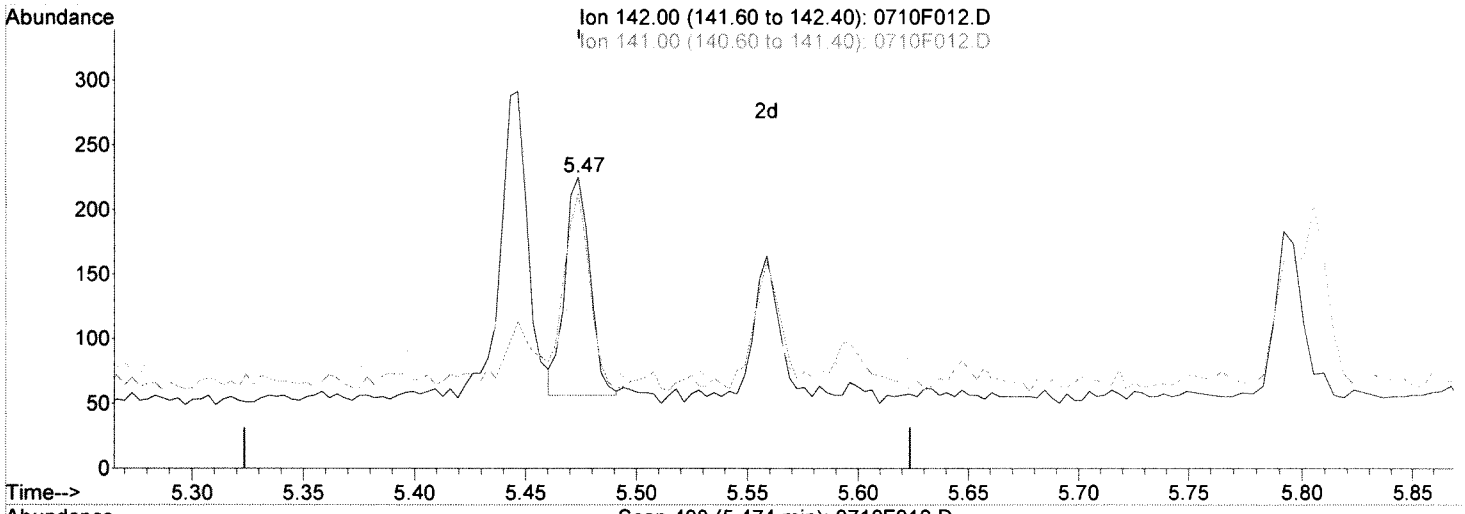
JUL 2 3 2018

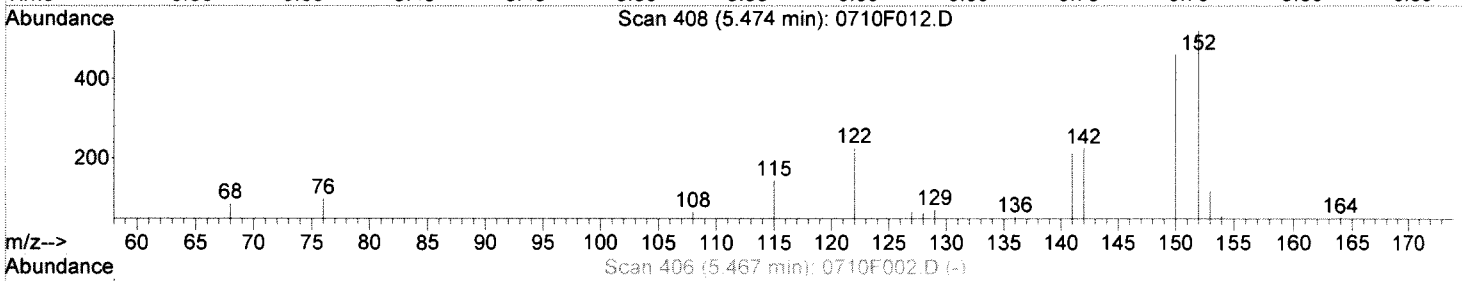
0710F012.D 070518PAH.M Wed Jul 11 07:09:49 2018

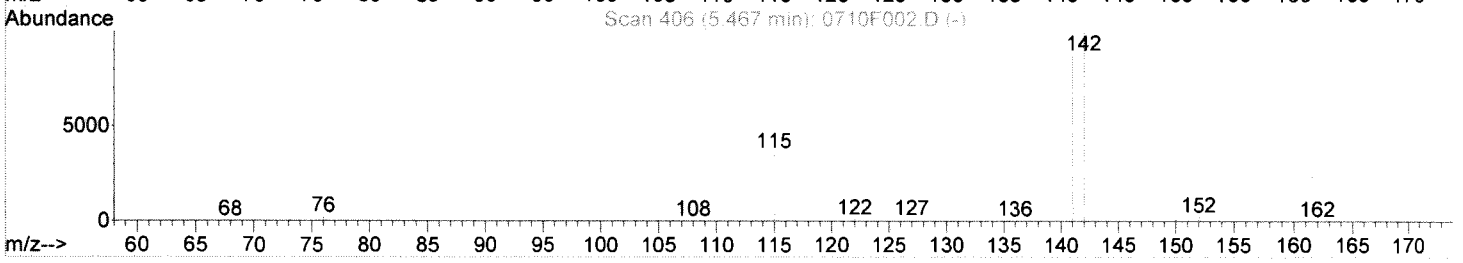
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\071018\0710F012.D Vial: 12
Acq On : 10 Jul 2018 11:46 am Operator: LWeiskopf
Sample : K1805809-014 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:09 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration







TIC: 0710F012.D

(4) 2-Methylnaphthalene (T)

5.47min 0.45ng/ml m

response 132

Ion	Exp%	Act%
142.00	100	100
141.00	83.00	94.67
115.00	30.20	63.56#
0.00	0.00	0.00

Manual Integration:

After

BLC

07/11/18

JUL 23 2018

0710F012.D 070518PAH.M Wed Jul 11 07:09:55 2018

Exception Report

Data File: J:\MS14\DATA\071018\0710F013.D
Lab ID: K1805809-019
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 12:13
Date Quantitated: 07/11/2018 07:12
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA		x
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Lab Control Spike	Acenaphthene	58	63	121	
	Fluorene	57	68	121	
	Phenanthrene	57	64	126	
	Anthracene	58	68	127	No sample for RX
	Fluoranthene	53	70	127	
	Pyrene	62	72	127	
	Benz(a)anthracene	54	74	124	
	Chrysene	57	74	132	

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:56:34
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\MS14\DATA\071018\0710F013.D
Lab ID: K1805809-019
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 12:13
Date Quantitated: 07/11/2018 07:12
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	Benzo(b)fluoranthene	56	73	136	Narrate
	Benzo(k)fluoranthene	58	74	134	
	Benzo(a)pyrene	55	75	131	
	Indeno(1,2,3-cd)pyrene	53	63	136	
	Dibenz(a,h)anthracene	49	59	135	
	Benzo(g,h,i)perylene	56	63	127	

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:56:34
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\071018\0710F013.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 12:13	**Quant Date:**	07/11/2018 07:12	**Vial:**	13
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-019			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	06/16/2018	**Receive Date:**	06/19/2018

Analysis Lot:	KWG1803359	**Prep Lot:**	KWG1803064	**Report Group:**	K1805809
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1680453	**Prep Date:**	06/21/2018		

Quant Method:	J:\MS14\METHODS\SIM\070518PAH.M	**Calibration ID:**	CAL15772
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\071018\0710F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\071018\0710F003.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.82	0.01	136	82737m	200.00	OK
2	Acenaphthene-d10	6.37	0.00	164	39131	200.00	OK
3	Phenanthrene-d10	7.60	0.00	188	77545	200.00	OK
4	Chrysene-d12	10.17	0.00	240	71811	200.00	OK
5	Perylene-d12	13.35	0.01	264	76699	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.80	0.00	0.00	176	124072	484.94	97	42-131	OK	
3	Fluoranthene-d10	8.59	0.00	0.00	212	228106	474.00	95	42-133	OK	
4	Terphenyl-d14	8.95	0.00	0.00	244	167758	514.47	103	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene				128	0		0.0028	U	
1	2-Methylnaphthalene				142	0d		0.0026	U	
2	Acenaphthylene	6.26	0.02	0.00	152	162	0.3500	0.0032	Ui	
2	Acenaphthene	6.38	-0.01	0.00	154	949m	3.61	0.033	Ui	
2	Fluorene				166	0d		0.0022	U	
3	Phenanthrene	7.62		0.00	178	108	0.2300	0.0022	U	
3	Anthracene				178	0d		0.0017	U	
3	Fluoranthene				202	0d		0.0017	U	
4	Pyrene	8.77	-0.03	0.00	202	76	0.1500	0.0020	U	
4	Benz(a)anthracene	10.17	0.01	0.00	228	400	0.8800	0.0078	J	
4	Chrysene				228	0d		0.0016	U	
5	Benzo(b)fluoranthene	12.28		0.00	252	93	0.1900	0.0017	U	
5	Benzo(k)fluoranthene				252	0		0.0019	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\071018\0710F013.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 12:13	**Quant Date:**	07/11/2018 07:12	**Vial:**	13
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-019			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0		0.0022	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.0018	U	
5	Dibenz(a,h)anthracene				278	0		0.0026	U	
5	Benzo(g,h,i)perylene	15.88		0.00	276	72	0.1600	0.0018	U	

Prep Amount:	450 ml	**Dilution:**	1.0
Prep Final Vol:	4 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\071018\0710F013.D Vial: 13
Acq On : 10 Jul 2018 12:13 pm Operator: LWeiskopf
Sample : K1805809-019 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 06:13:07 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	82737m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	39131	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.60	188	77545	200.00	ng/ml	0.00
23) Chrysene-d12	10.17	240	71811	200.00	ng/ml	0.00
28) Perylene-d12	13.35	264	76699	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.45	152	101706	432.06	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	43.21%		
13) Fluorene-d10	6.80	176	124072	484.94	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	48.49%		
22) Fluoranthene-d10	8.59	212	228106	474.00	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	47.40%		
25) Terphenyl-d14	8.95	244	167758	514.47	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	51.45%		
Target Compounds						Qvalue
6) Biphenyl	5.88	154	457	1.28	ng/ml	97
9) Acenaphthylene	6.26	152	162	0.35	ng/ml#	1
10) Acenaphthene	6.38	154	949m	3.61	ng/ml	
17) Phenanthrene	7.62	178	108	0.23	ng/ml	82
24) Pyrene	8.77	202	76	0.15	ng/ml	76
26) Benz(a)anthracene	10.17	228	400	0.88	ng/ml#	63
29) Benzo(b)fluoranthene	12.28	252	93	0.19	ng/ml	85
31) Benzo(e)pyrene	13.02	252	150	0.32	ng/ml	99
36) Benzo(g,h,i)perylene	15.88	276	72	0.16	ng/ml	93

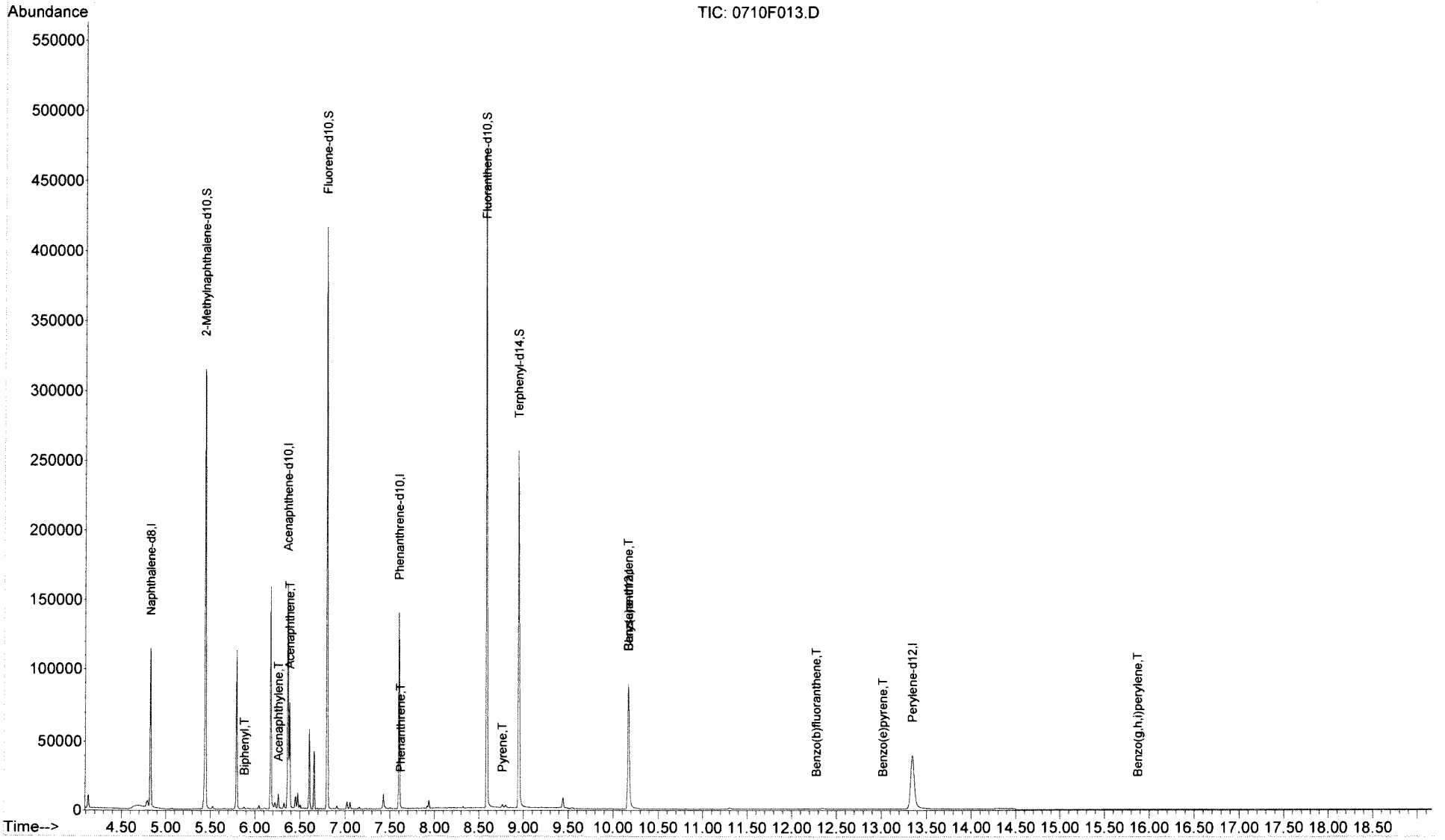
/

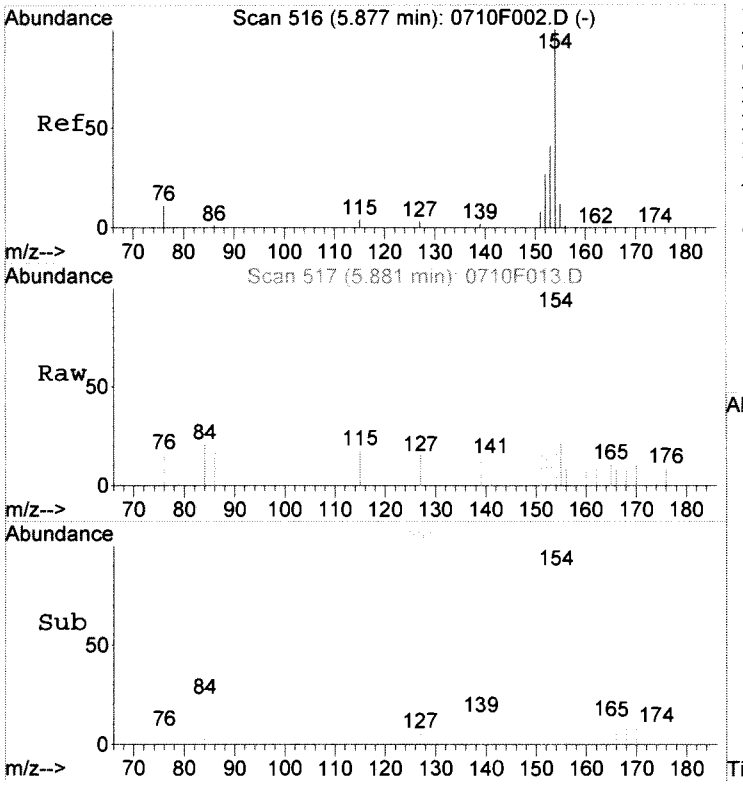
(#) = qualifier out of range (m) = manual integration
0710F013.D 070518PAH.M Wed Jul 11 07:13:27 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\071018\0710F013.D Vial: 13
Acq On : 10 Jul 2018 12:13 pm Operator: LWeiskopf
Sample : K1805809-019 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:12 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Initial Calibration

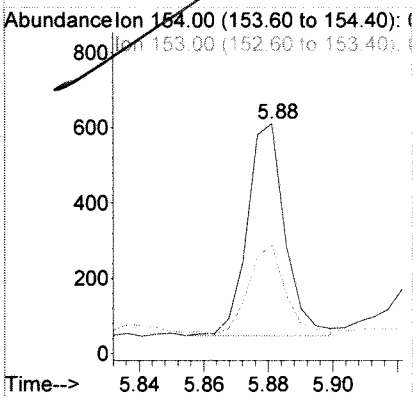


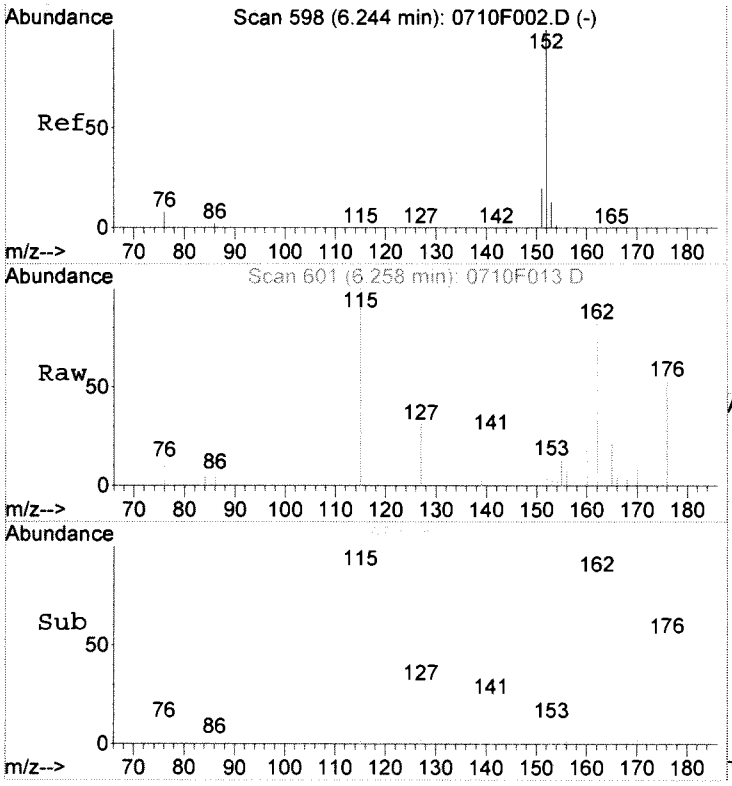


#6
Biphenyl
Concen: 1.28 ng/ml
RT: 5.88 min Scan# 517
Delta R.T. 0.00 min
Lab File: 0710F013.D
Acq: 10 Jul 2018 12:13 pm

Tgt Ion:154 Resp: 457

Ion	Ratio	Lower	Upper
154	100		
153	41.0	8.2	68.2
152	25.9	6.0	46.0

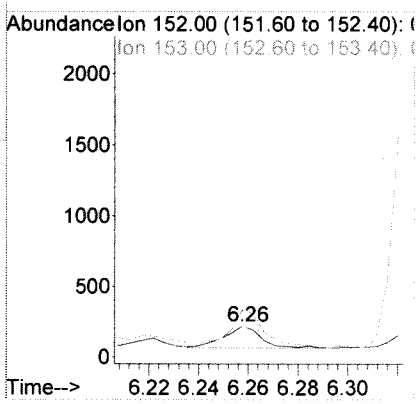


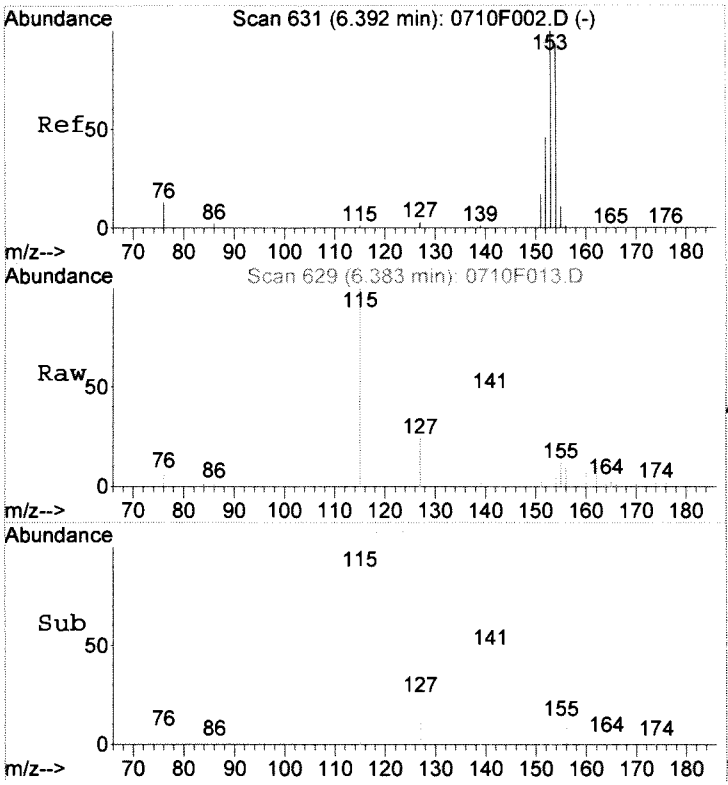


#9
Acenaphthylene
Concen: 0.35 ng/ml
RT: 6.26 min Scan# 601
Delta R.T. 0.01 min
Lab File: 0710F013.D
Acq: 10 Jul 2018 12:13 pm

Tgt Ion:152 Resp: 162

Ion	Ratio	Lower	Upper
152	100		
153	158.6	0.0	42.8#
151	56.7	0.0	39.0#

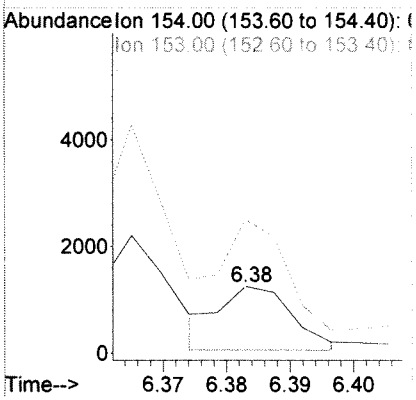


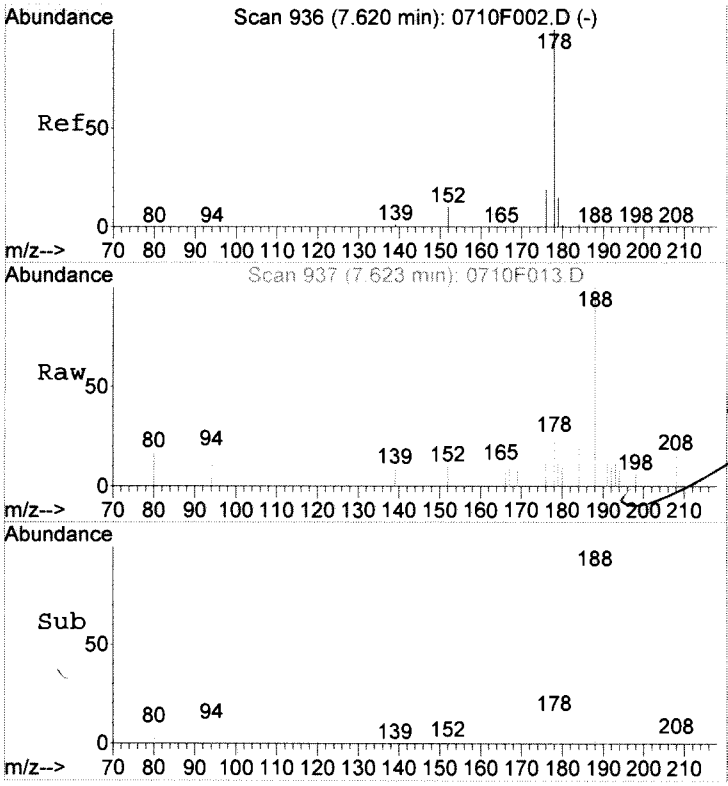


#10
Acenaphthene
Concen: 3.61 ng/ml m
RT: 6.38 min Scan# 629
Delta R.T. -0.01 min
Lab File: 0710F013.D
Acq: 10 Jul 2018 12:13 pm

Tgt Ion:154 Resp: 949

Ion	Ratio	Lower	Upper
154	100		
153	200.7	74.1	134.1#
152	99.7	19.4	79.4#

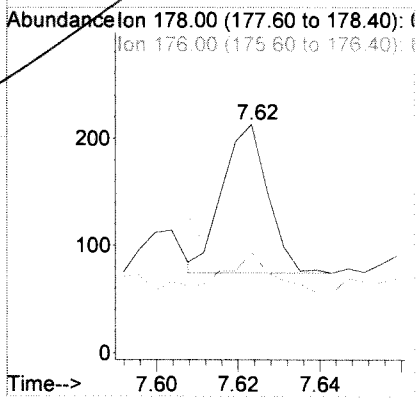


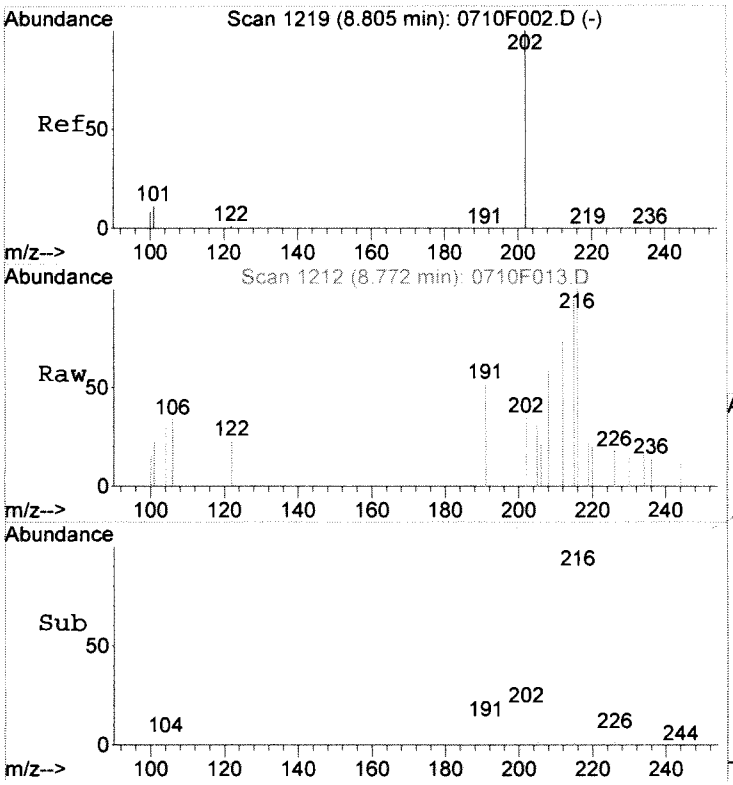


#17
Phenanthrene
Concen: 0.23 ng/ml
RT: 7.62 min Scan# 937
Delta R.T. -0.00 min
Lab File: 0710F013.D
Acq: 10 Jul 2018 12:13 pm

Tgt Ion:178 Resp: 108

Ion	Ratio	Lower	Upper
178	100		
176	26.6	0.0	48.5
179	7.9	0.0	35.2

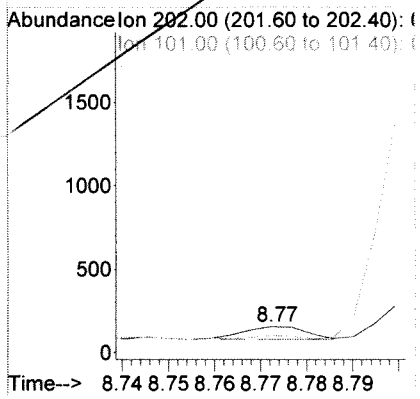


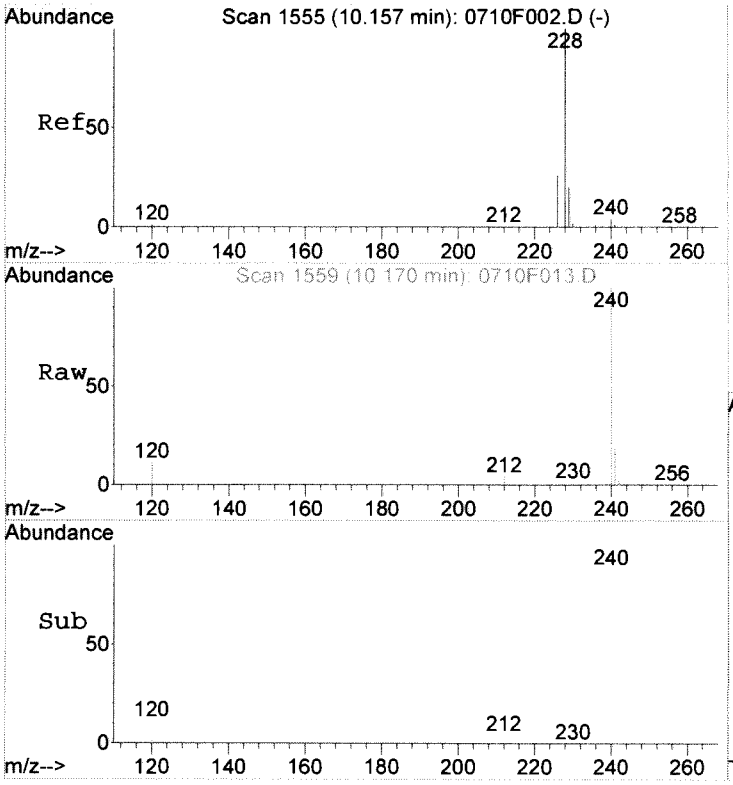


#24
Pyrene
Concen: 0.15 ng/ml
RT: 8.77 min Scan# 1212
Delta R.T. -0.04 min
Lab File: 0710F013.D
Acq: 10 Jul 2018 12:13 pm

Tgt Ion:202 Resp: 76

Ion	Ratio	Lower	Upper
202	100		
101	26.9	0.0	41.8
100	7.7	0.0	28.7

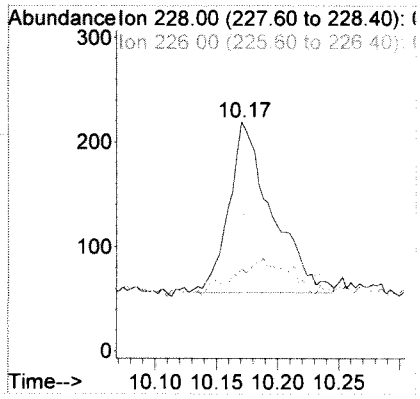




#26
Benz(a)anthracene
Concen: 0.88 ng/ml
RT: 10.17 min Scan# 1559
Delta R.T. 0.01 min
Lab File: 0710F013.D
Acq: 10 Jul 2018 12:13 pm

Tgt Ion:228 Resp: 400

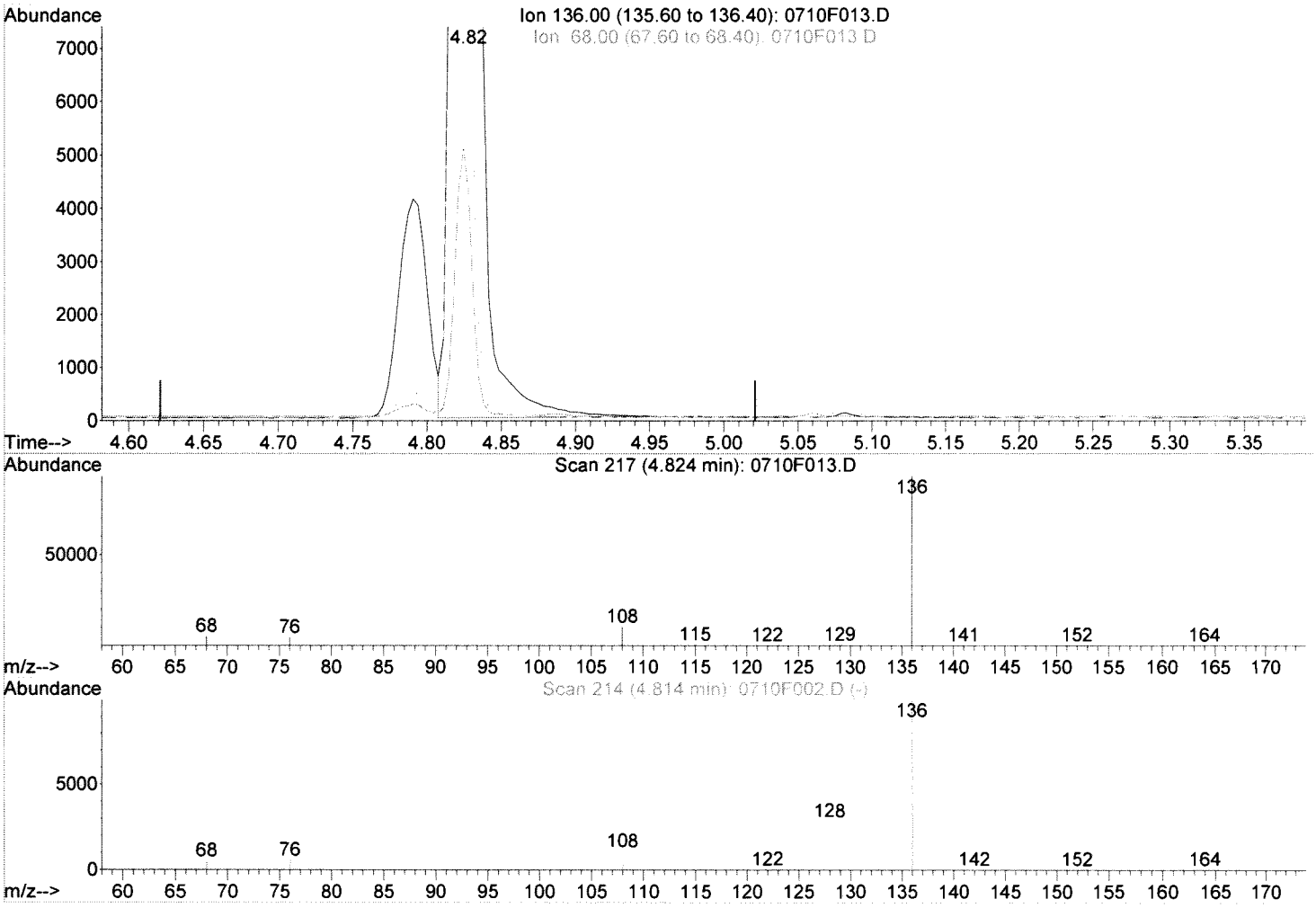
Ion	Ratio	Lower	Upper
228	100		
226	14.1	0.0	56.0
229	44.8	0.0	39.5#



Quantitation Report (Qedit)

Data File : J:\MS14\DATA\071018\0710F013.D Vial: 13
Acq On : 10 Jul 2018 12:13 pm Operator: LWeiskopf
Sample : K1805809-019 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 6:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration



TIC: 0710F013.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml

response 77127

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.44
108.00	9.50	11.06
0.00	0.00	0.00

Manual Integration:

Before

07/11/18

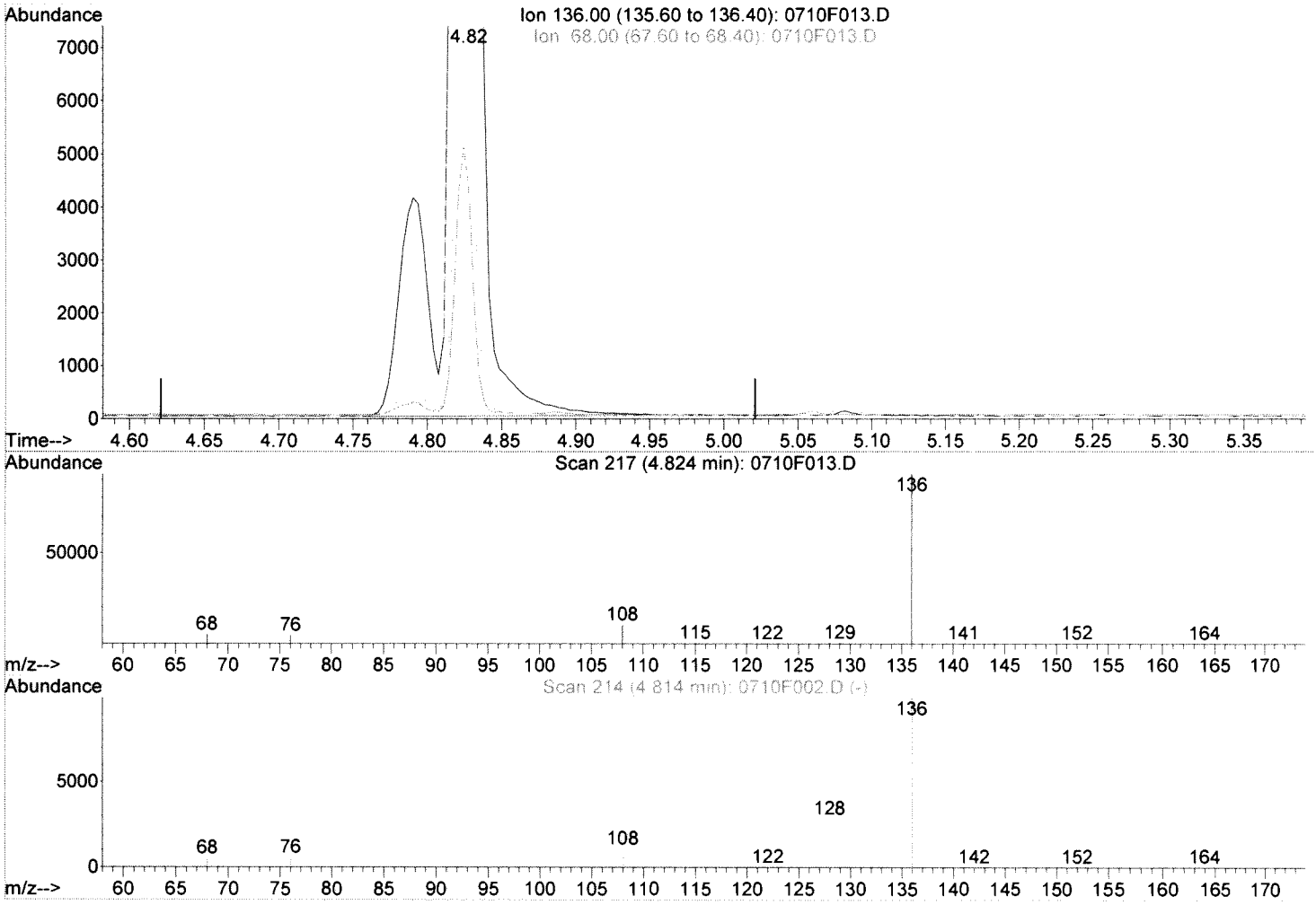
JUL 23 2018

0710F013.D 070518PAH.M Wed Jul 11 07:10:38 2018

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\071018\0710F013.D Vial: 13
Acq On : 10 Jul 2018 12:13 pm Operator: LWeiskopf
Sample : K1805809-019 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:10 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration



TIC: 0710F013.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml m

response 82737

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.51
108.00	9.50	11.11
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

07/11/18

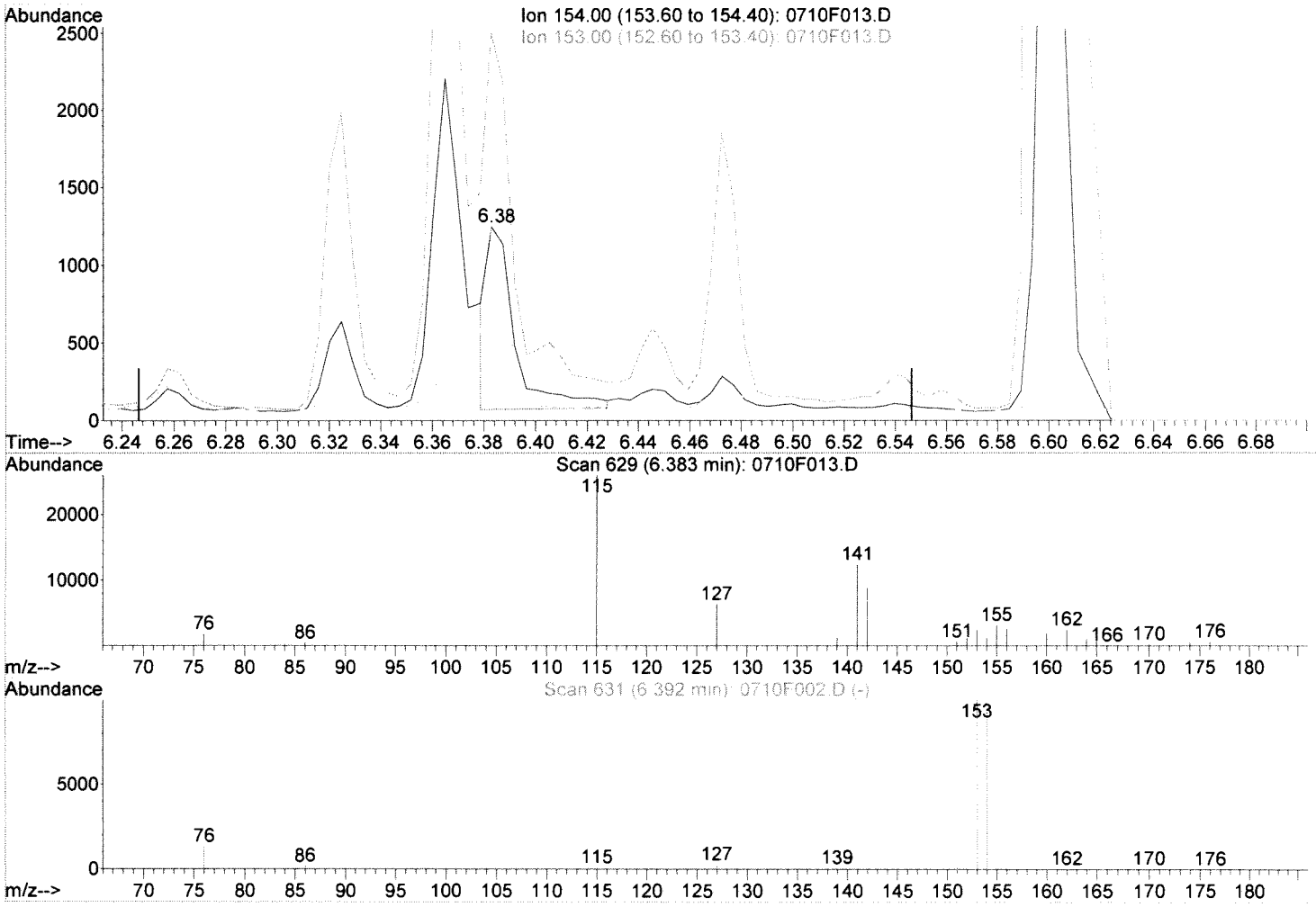
JUL 23 2018

0710F013.D 070518PAH.M Wed Jul 11 07:10:46 2018

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\071018\0710F013.D Vial: 13
Acq On : 10 Jul 2018 12:13 pm Operator: LWeiskopf
Sample : K1805809-019 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:10 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration



TIC: 0710F013.D

(10) Acenaphthene (T)

6.38min 3.42ng/ml

response 897

Ion	Exp%	Act%
154.00	100	100
153.00	104.10	201.61#
152.00	49.40	104.29#
0.00	0.00	0.00

Manual Integration:

Before

07/11/18

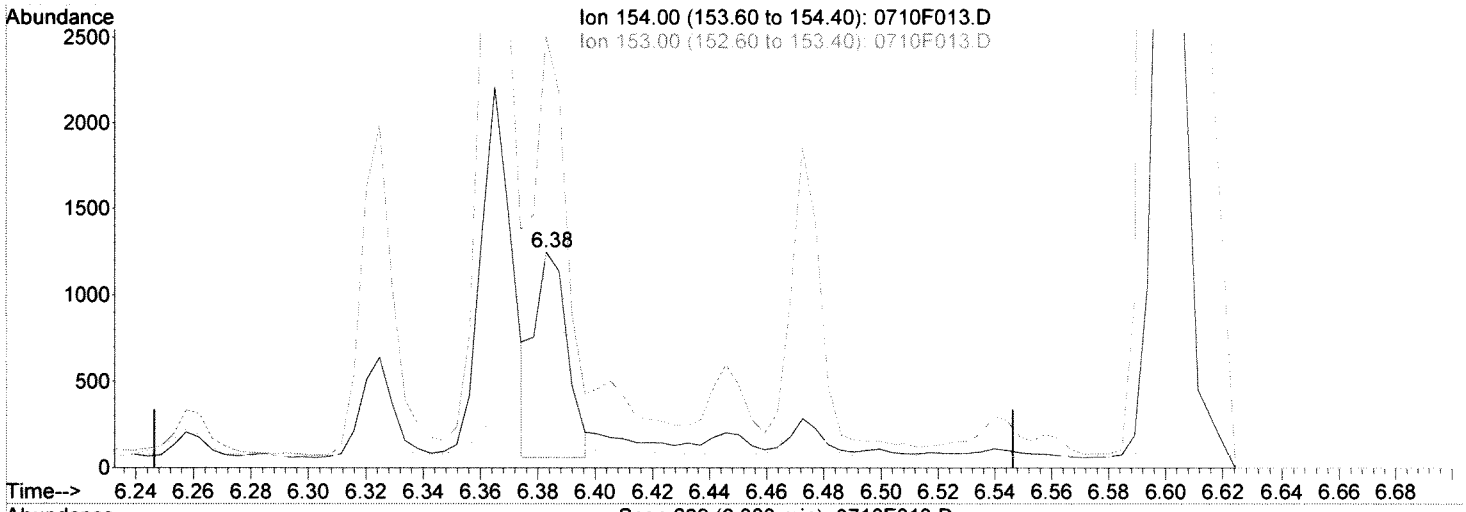
JUL 23 2018

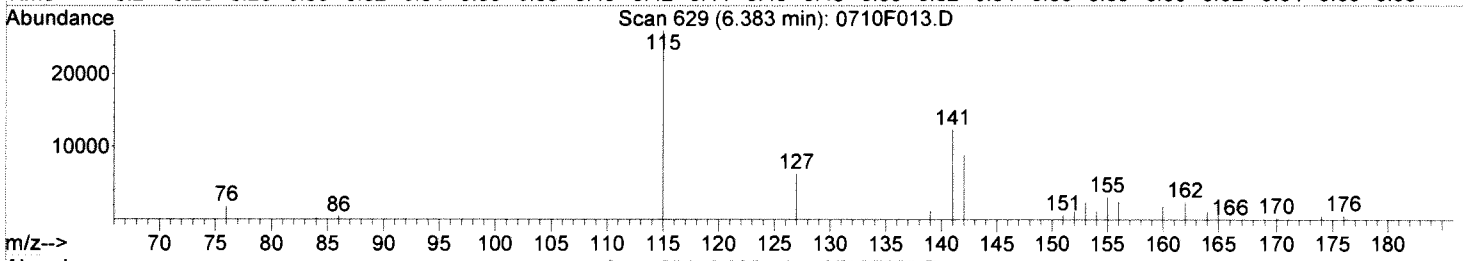
0710F013.D 070518PAH.M Wed Jul 11 07:11:12 2018

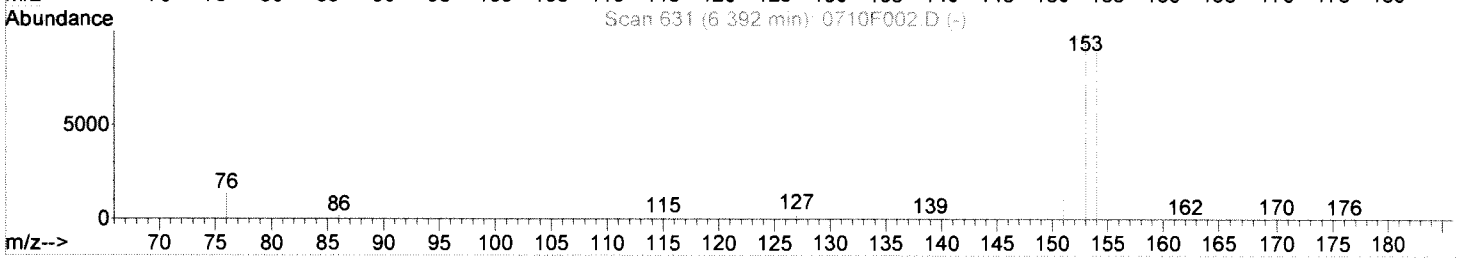
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\071018\0710F013.D Vial: 13
Acq On : 10 Jul 2018 12:13 pm Operator: LWeiskopf
Sample : K1805809-019 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:11 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration







TIC: 0710F013.D

(10) Acenaphthene (T)

6.38min 3.61ng/ml m

response 949

Ion	Exp%	Act%
154.00	100	100
153.00	104.10	200.72#
152.00	49.40	99.68#
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

07/11/18

i_matrix

JUL 23 2018

0710F013.D 070518PAH.M Wed Jul 11 07:11:17 2018

Exception Report

Data File: J:\MS14\DATA\071018\0710F014.D
Lab ID: K1805809-020
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 12:39
Date Quantitated: 07/11/2018 07:13
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA		x
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Lab Control Spike	Acenaphthene	58	63	121	
	Fluorene	57	68	121	
	Phenanthrene	57	64	126	No sample for RX
	Anthracene	58	68	127	
	Fluoranthene	53	70	127	
	Pyrene	62	72	127	
	Benz(a)anthracene	54	74	124	
	Chrysene	57	74	132	

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:56:38
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\MS14\DATA\071018\0710F014.D
Lab ID: K1805809-020
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 12:39
Date Quantitated: 07/11/2018 07:13
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	Benzo(b)fluoranthene	56	73	136	Narrate
	Benzo(k)fluoranthene	58	74	134	
	Benzo(a)pyrene	55	75	131	
	Indeno(1,2,3-cd)pyrene	53	63	136	
	Dibenz(a,h)anthracene	49	59	135	
	Benzo(g,h,i)perylene	56	63	127	

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:56:38
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\071018\0710F014.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 12:39	**Quant Date:**	07/11/2018 07:13	**Vial:**	14
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-020			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	06/16/2018	**Receive Date:**	06/19/2018

Analysis Lot:	KWG1803359	**Prep Lot:**	KWG1803064	**Report Group:**	K1805809
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1680454	**Prep Date:**	06/21/2018		

Quant Method:	J:\MS14\METHODS\SIM\070518PAH.M	**Calibration ID:**	CAL15772
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\071018\0710F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\071018\0710F003.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.82	0.01	136	82756m	200.00	OK
2	Acenaphthene-d10	6.37	0.00	164	39086	200.00	OK
3	Phenanthrene-d10	7.60	0.00	188	76920	200.00	OK
4	Chrysene-d12	10.17	0.00	240	72762	200.00	OK
5	Perylene-d12	13.35	0.01	264	76436	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.80	0.00	0.00	176	123039	481.45	96	42-131	OK	
3	Fluoranthene-d10	8.59	0.00	0.00	212	222235	465.56	93	42-133	OK	
4	Terphenyl-d14	8.95	0.00	0.00	244	174416	527.89	106	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.85	0.02	0.00	128	185	0.4100	0.0036	J	
1	2-Methylnaphthalene	5.47		0.00	142	86	0.3000	0.0027	J	
2	Acenaphthylene				152	0d		0.0022	U	
2	Acenaphthene				154	0d		0.0024	U	
2	Fluorene				166	0d		0.0022	U	
3	Phenanthrene				178	0d		0.0022	U	
3	Anthracene				178	0d		0.0017	U	
3	Fluoranthene				202	0d		0.0017	U	
4	Pyrene				202	0d		0.0020	U	
4	Benz(a)anthracene	10.17	0.01	0.00	228	196	0.4300	0.0038	J	
4	Chrysene				228	0d		0.0016	U	
5	Benzo(b)fluoranthene				252	0		0.0017	U	
5	Benzo(k)fluoranthene				252	0		0.0019	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\071018\0710F014.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 12:39	**Quant Date:**	07/11/2018 07:13	**Vial:**	14
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-020			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0		0.0022	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.0018	U	
5	Dibenz(a,h)anthracene				278	0		0.0026	U	
5	Benzo(g,h,i)perylene				276	0d		0.0018	U	

Prep Amount:	450 ml	**Dilution:**	1.0
Prep Final Vol:	4 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\071018\0710F014.D Vial: 14
Acq On : 10 Jul 2018 12:39 pm Operator: LWeiskopf
Sample : K1805809-020 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 06:13:10 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

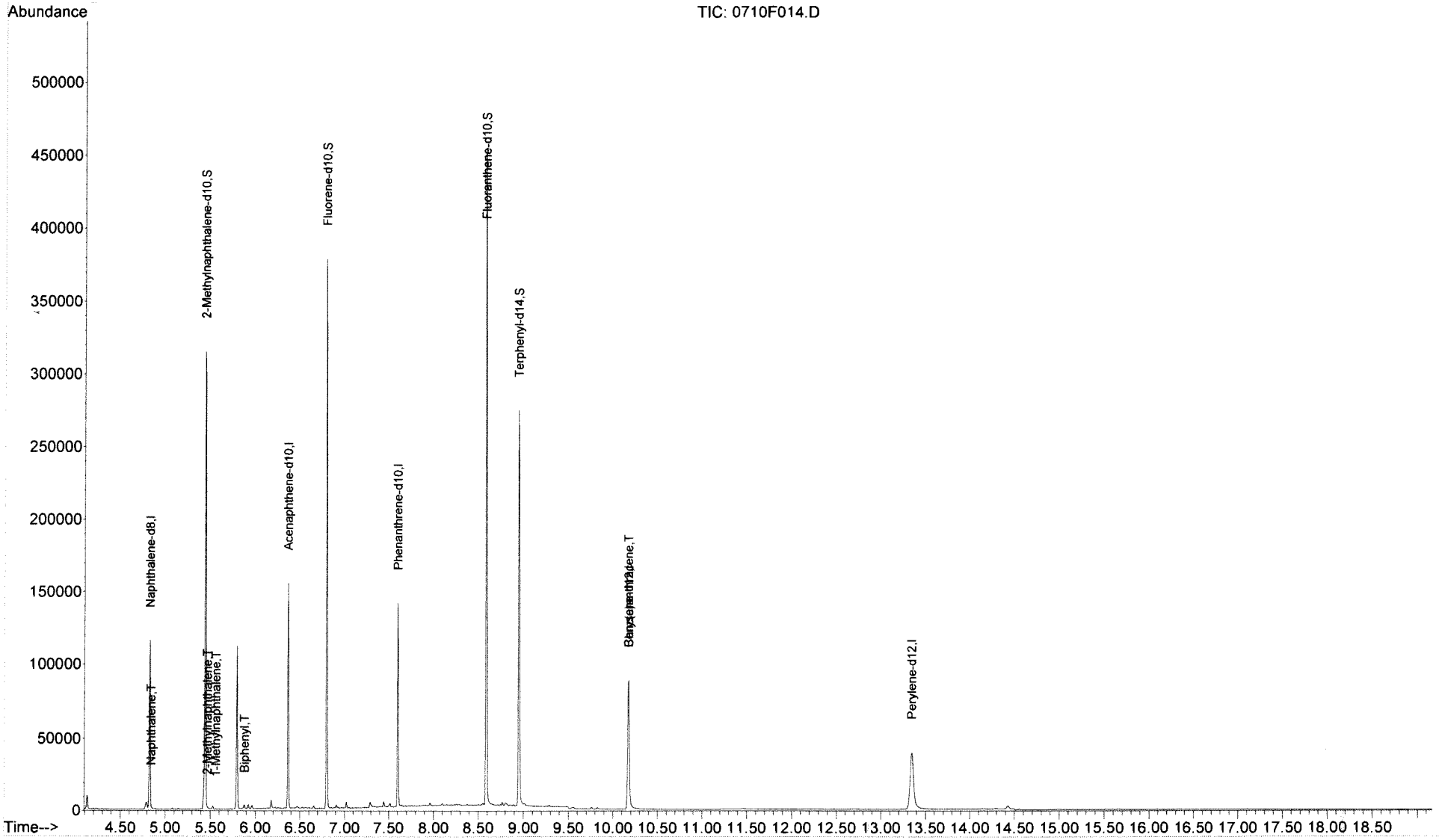
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	82756m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	39086	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.60	188	76920	200.00	ng/ml	0.00
23) Chrysene-d12	10.17	240	72762	200.00	ng/ml	0.00
28) Perylene-d12	13.35	264	76436	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.44	152	99100	420.90	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	42.09%		
13) Fluorene-d10	6.80	176	123039	481.45	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	48.14%		
22) Fluoranthene-d10	8.59	212	222235	465.56	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	46.56%		
25) Terphenyl-d14	8.95	244	174416	527.89	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	52.79%		
Target Compounds						Qvalue
2) Naphthalene	4.85	128	185	0.41	ng/ml	90
4) 2-Methylnaphthalene	5.47	142	86	0.30	ng/ml	88
5) 1-Methylnaphthalene	5.56	142	81m	0.29	ng/ml	
6) Biphenyl	5.88	154	708	1.98	ng/ml	87
26) Benz(a)anthracene	10.17	228	196	0.43	ng/ml	59

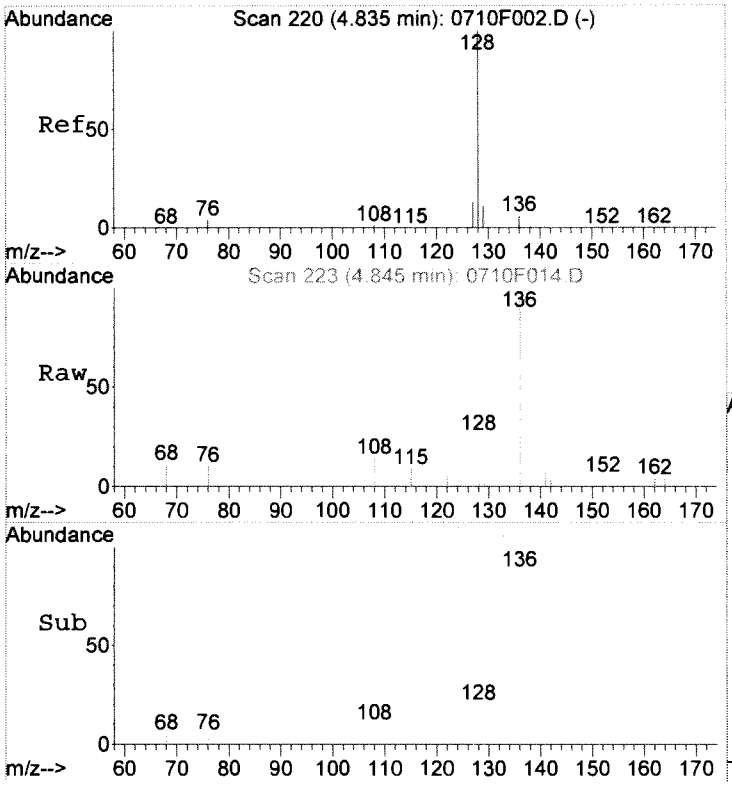
(#) = qualifier out of range (m) = manual integration
0710F014.D 070518PAH.M Wed Jul 11 07:13:32 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\071018\0710F014.D Vial: 14
Acq On : 10 Jul 2018 12:39 pm Operator: LWeiskopf
Sample : K1805809-020 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:13 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Initial Calibration

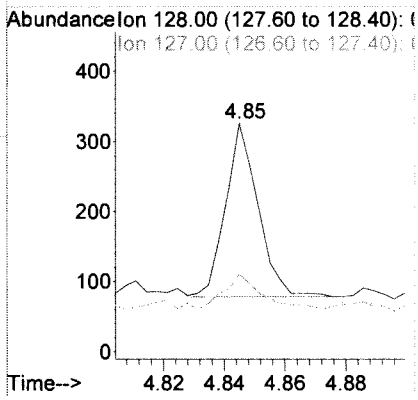


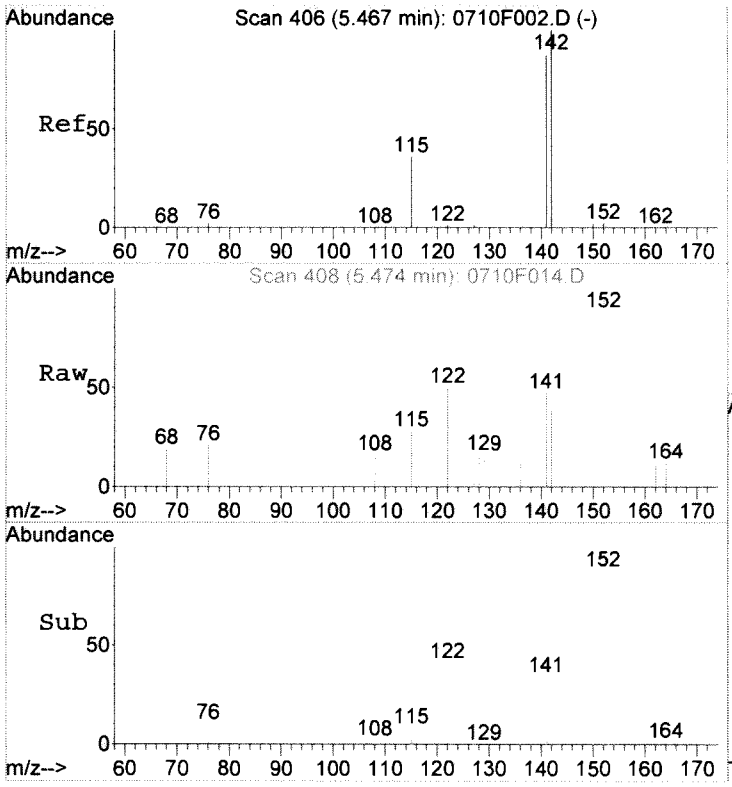


#2
Naphthalene
Concen: 0.41 ng/ml
RT: 4.85 min Scan# 223
Delta R.T. 0.00 min
Lab File: 0710F014.D
Acq: 10 Jul 2018 12:39 pm

Tgt Ion:128 Resp: 185

Ion	Ratio	Lower	Upper
128	100		
127	18.1	0.0	42.4
129	9.3	0.0	30.8

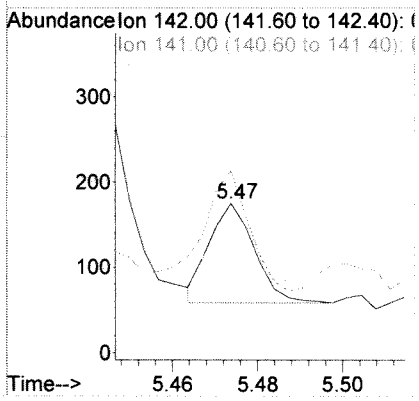


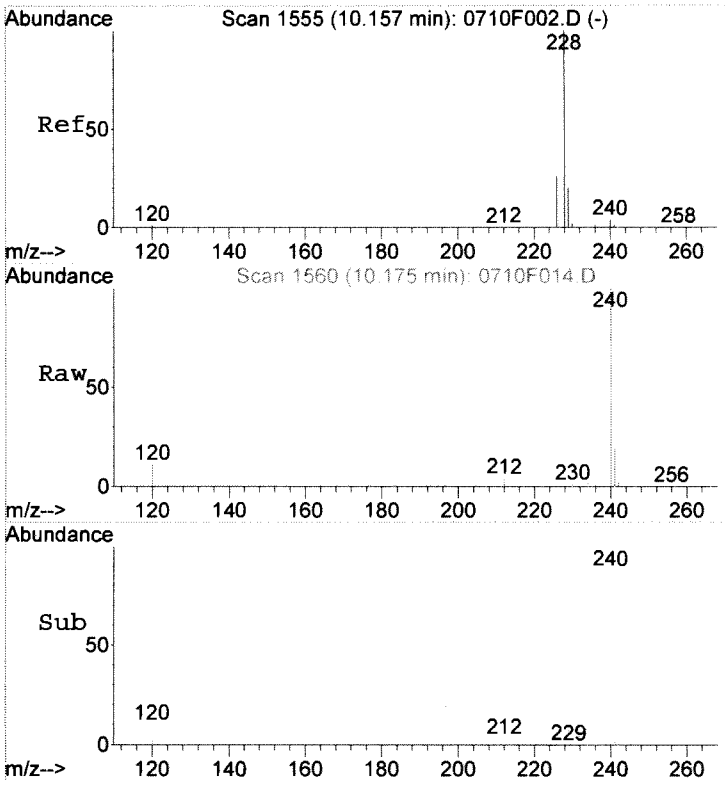


#4
2-Methylnaphthalene
Concen: 0.30 ng/ml
RT: 5.47 min Scan# 408
Delta R.T. 0.00 min
Lab File: 0710F014.D
Acq: 10 Jul 2018 12:39 pm

Tgt Ion:142 Resp: 86

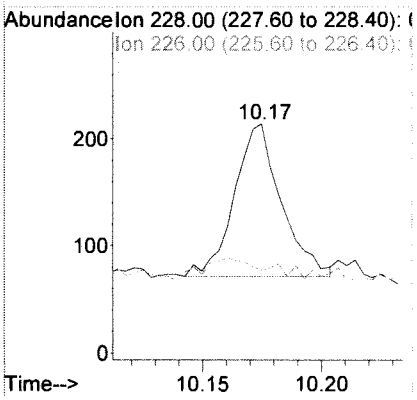
Ion	Ratio	Lower	Upper
142	100		
141	94.0	53.0	113.0
115	24.8	10.2	50.2





#26
Benz(a)anthracene
Concen: 0.43 ng/ml
RT: 10.17 min Scan# 1560
Delta R.T. 0.01 min
Lab File: 0710F014.D
Acq: 10 Jul 2018 12:39 pm

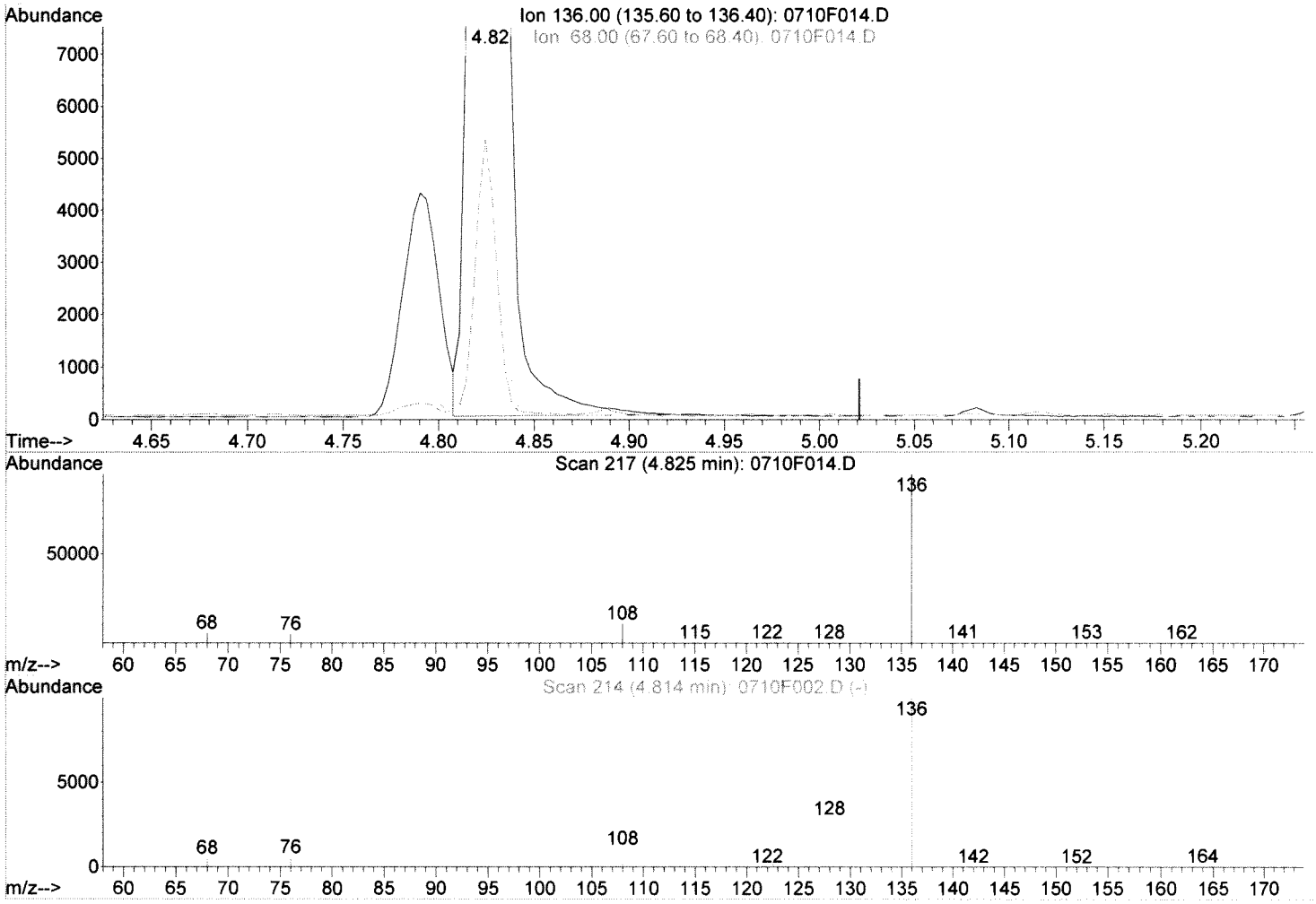
Tgt Ion:228	Resp:	196	
Ion	Ratio	Lower	Upper
228	100		
226	2.1	0.0	56.0
229	34.3	0.0	39.5



Quantitation Report (Qedit)

Data File : J:\MS14\DATA\071018\0710F014.D Vial: 14
Acq On : 10 Jul 2018 12:39 pm Operator: LWeiskopf
Sample : K1805809-020 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 6:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration



TIC: 0710F014.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml

response 76890

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.57
108.00	9.50	11.25
0.00	0.00	0.00

Manual Integration:

Before

07/11/18

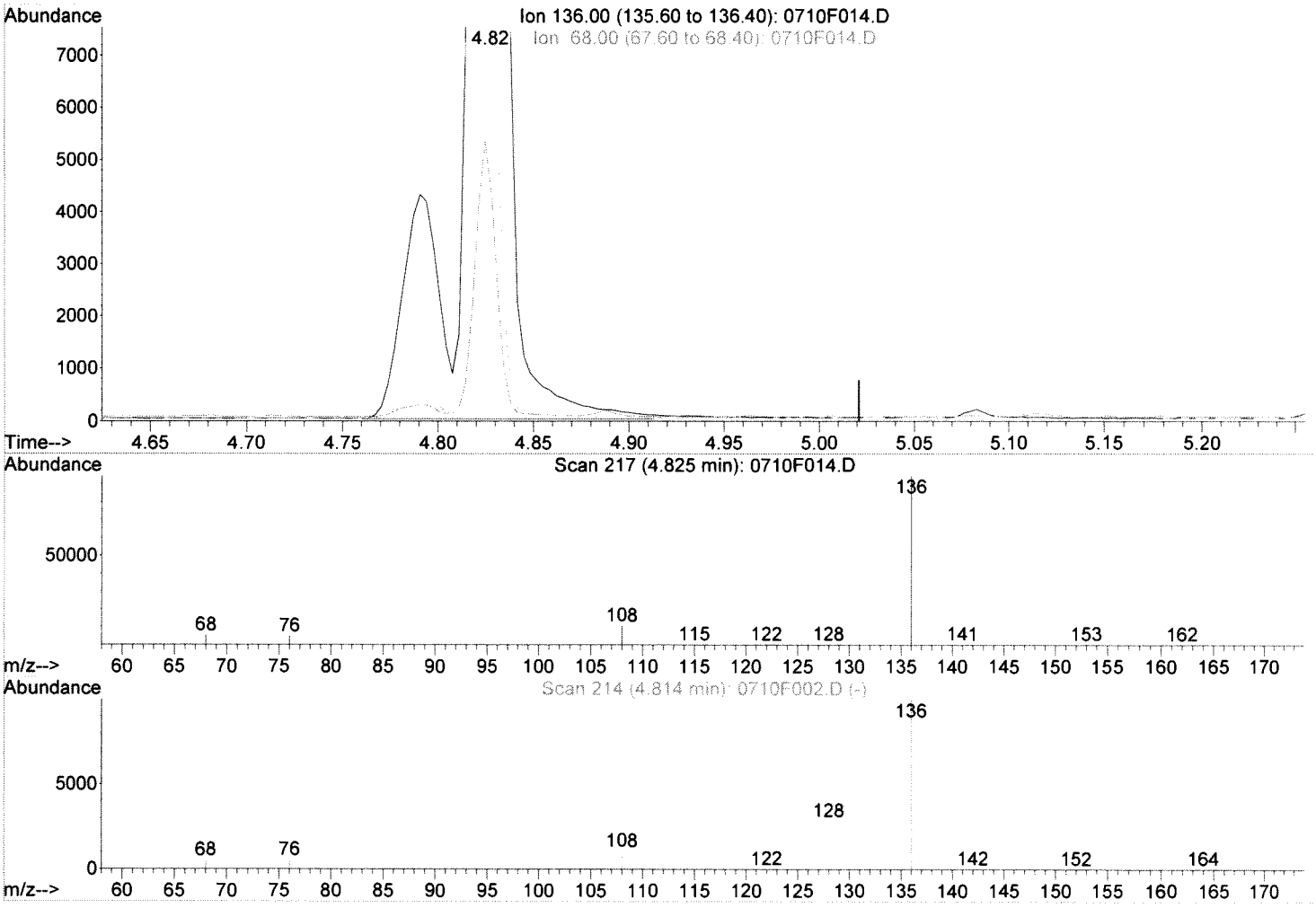
JUL 23 2018

0710F014.D 070518PAH.M Wed Jul 11 07:12:20 2018

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\071018\0710F014.D Vial: 14
Acq On : 10 Jul 2018 12:39 pm Operator: LWeiskopf
Sample : K1805809-020 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:12 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration



TIC: 0710F014.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml m

response 82756

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.66
108.00	9.50	11.31
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

07/11/18

JUL 23 2018

0710F014.D 070518PAH.M Wed Jul 11 07:12:26 2018

Exception Report

Data File: J:\MS14\DATA\071018\0710F015.D
Lab ID: K1805809-021
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 13:05
Date Quantitated: 07/11/2018 07:16
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA		x
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Lab Control Spike	Acenaphthene	58	63	121	
	Fluorene	57	68	121	
	Phenanthrene	57	64	126	No sample for RX
	Anthracene	58	68	127	
	Fluoranthene	53	70	127	
	Pyrene	62	72	127	
	Benz(a)anthracene	54	74	124	
	Chrysene	57	74	132	

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:56:42
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\MS14\DATA\071018\0710F015.D
Lab ID: K1805809-021
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 13:05
Date Quantitated: 07/11/2018 07:16
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	Benzo(b)fluoranthene	56	73	136	Narrate
	Benzo(k)fluoranthene	58	74	134	
	Benzo(a)pyrene	55	75	131	
	Indeno(1,2,3-cd)pyrene	53	63	136	
	Dibenz(a,h)anthracene	49	59	135	
	Benzo(g,h,i)perylene	56	63	127	

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:56:42
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\071018\0710F015.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 13:05	**Quant Date:**	07/11/2018 07:16	**Vial:**	15
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-021			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	06/17/2018	**Receive Date:**	06/19/2018

Analysis Lot:	KWG1803359	**Prep Lot:**	KWG1803064	**Report Group:**	K1805809
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1680455	**Prep Date:**	06/21/2018		

Quant Method:	J:\MS14\METHODS\SIM\070518PAH.M	**Calibration ID:**	CAL15772
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\071018\0710F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\071018\0710F003.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.82	0.01	136	84623m	200.00	OK
2	Acenaphthene-d10	6.37	0.00	164	40166	200.00	OK
3	Phenanthrene-d10	7.60	0.00	188	78909	200.00	OK
4	Chrysene-d12	10.17	0.00	240	73038	200.00	OK
5	Perylene-d12	13.35	0.01	264	78685	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.80	0.00	0.00	176	94288	359.03	72	42-131	OK	
3	Fluoranthene-d10	8.59	0.00	0.00	212	170808	348.80	70	42-133	OK	
4	Terphenyl-d14	8.95	0.00	0.00	244	130764	394.28	79	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene				128	0		0.0035	U	
1	2-Methylnaphthalene				142	0d		0.0033	U	
2	Acenaphthylene				152	0d		0.0028	U	
2	Acenaphthene				154	0d		0.0030	U	
2	Fluorene				166	0d		0.0028	U	
3	Phenanthrene				178	0d		0.0028	U	
3	Anthracene				178	0d		0.0021	U	
3	Fluoranthene				202	0d		0.0021	U	
4	Pyrene				202	0d		0.0025	U	
4	Benz(a)anthracene	10.17	0.01	0.00	228	214	0.4600	0.0051	J	
4	Chrysene				228	0d		0.0019	U	
5	Benzo(b)fluoranthene				252	0d		0.0021	U	
5	Benzo(k)fluoranthene				252	0d		0.0024	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\071018\0710F015.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 13:05	**Quant Date:**	07/11/2018 07:16	**Vial:**	15
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-021			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0**d**		0.0028	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.0023	U	
5	Dibenz(a,h)anthracene				278	0		0.0033	U	
5	Benzo(g,h,i)perylene				276	0		0.0022	U	

Prep Amount:	360 ml	**Dilution:**	1.0
Prep Final Vol:	4 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\071018\0710F015.D Vial: 15
Acq On : 10 Jul 2018 1:05 pm Operator: LWeiskopf
Sample : K1805809-021 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 06:13:12 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

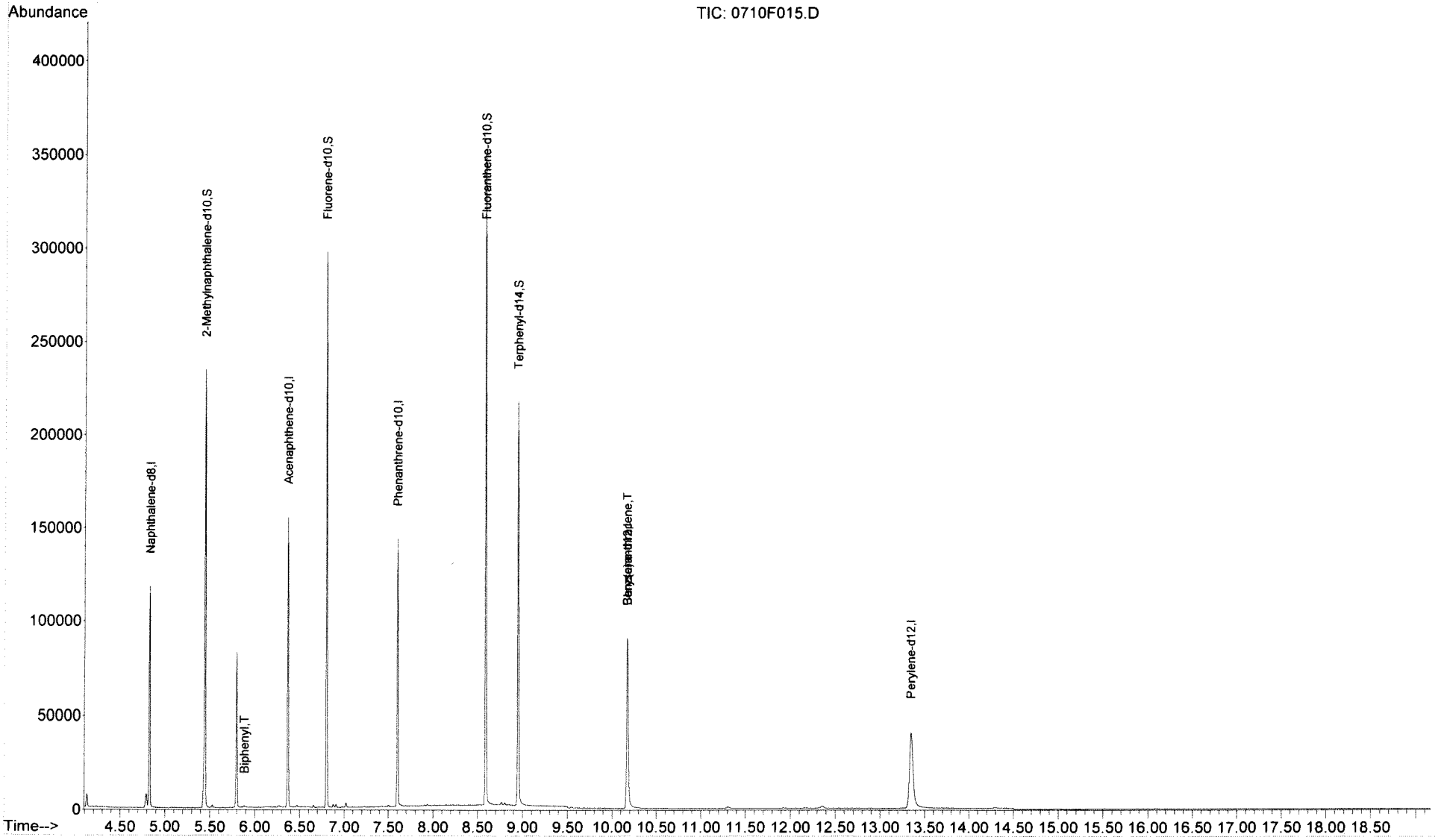
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	84623m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	40166	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.60	188	78909	200.00	ng/ml	0.00
23) Chrysene-d12	10.17	240	73038	200.00	ng/ml	0.00
28) Perylene-d12	13.35	264	78685	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.44	152	74563	309.70	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 30.97%			
13) Fluorene-d10	6.80	176	94288	359.03	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 35.90%			
22) Fluoranthene-d10	8.59	212	170808	348.80	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 34.88%			
25) Terphenyl-d14	8.95	244	130764	394.28	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 39.43%			
Target Compounds						Qvalue
6) Biphenyl	5.88	154	367	1.00	ng/ml	97
26) Benz(a)anthracene	10.17	228	214	0.46	ng/ml	80

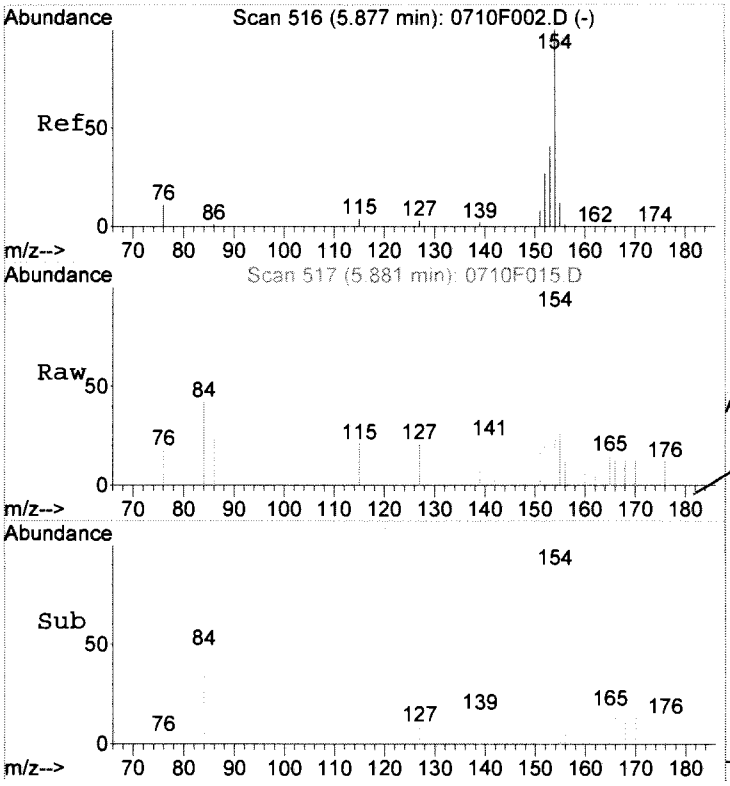
(#) = qualifier out of range (m) = manual integration
0710F015.D 070518PAH.M Wed Jul 11 07:18:53 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\071018\0710F015.D Vial: 15
Acq On : 10 Jul 2018 1:05 pm Operator: LWeiskopf
Sample : K1805809-021 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:16 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Initial Calibration

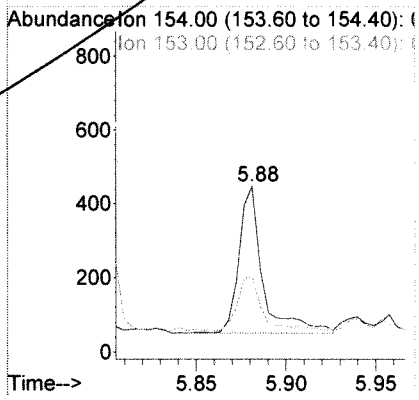


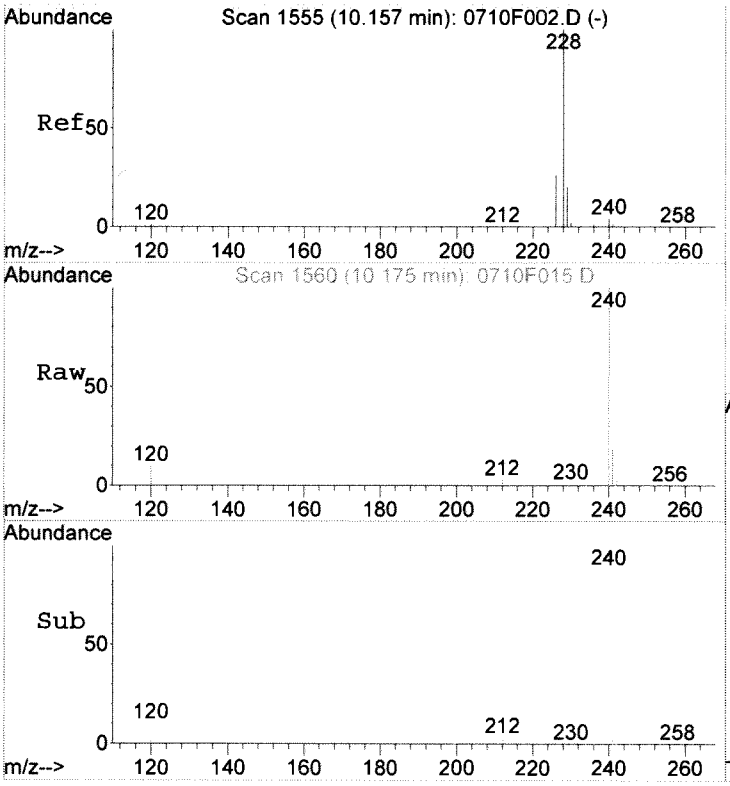


#6
Biphenyl
Concen: 1.00 ng/ml
RT: 5.88 min Scan# 517
Delta R.T. 0.00 min
Lab File: 0710F015.D
Acq: 10 Jul 2018 1:05 pm

Tgt Ion:154 Resp: 367

Ion	Ratio	Lower	Upper
154	100		
153	36.4	8.2	68.2
152	24.5	6.0	46.0

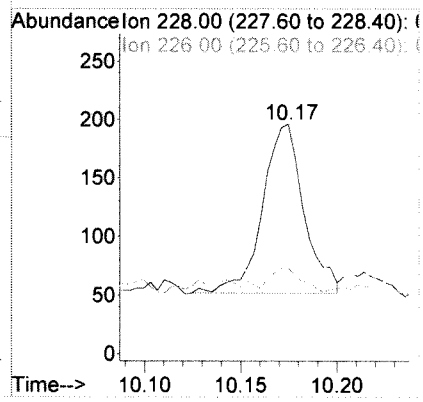




#26
Benz(a)anthracene
Concen: 0.46 ng/ml
RT: 10.17 min Scan# 1560
Delta R.T. 0.01 min
Lab File: 0710F015.D
Acq: 10 Jul 2018 1:05 pm

Tgt Ion:228 Resp: 214

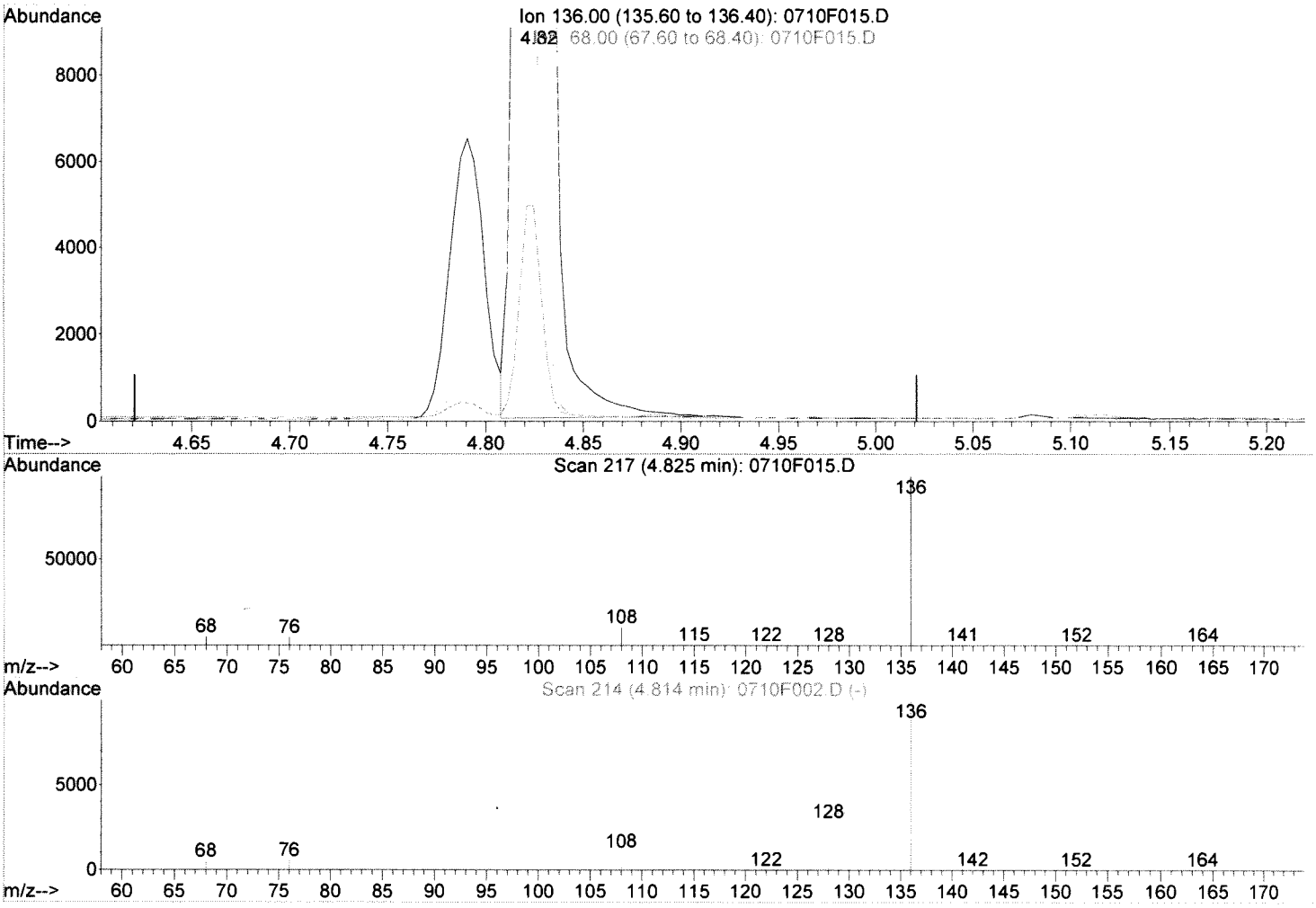
Ion	Ratio	Lower	Upper
228	100		
226	11.8	0.0	56.0
229	23.6	0.0	39.5



Quantitation Report (Qedit)

Data File : J:\MS14\DATA\071018\0710F015.D Vial: 15
Acq On : 10 Jul 2018 1:05 pm Operator: LWeiskopf
Sample : K1805809-021 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 6:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration



TIC: 0710F015.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml

response 76512

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	4.97
108.00	9.50	10.47
0.00	0.00	0.00

Manual Integration:

Before

07/11/18

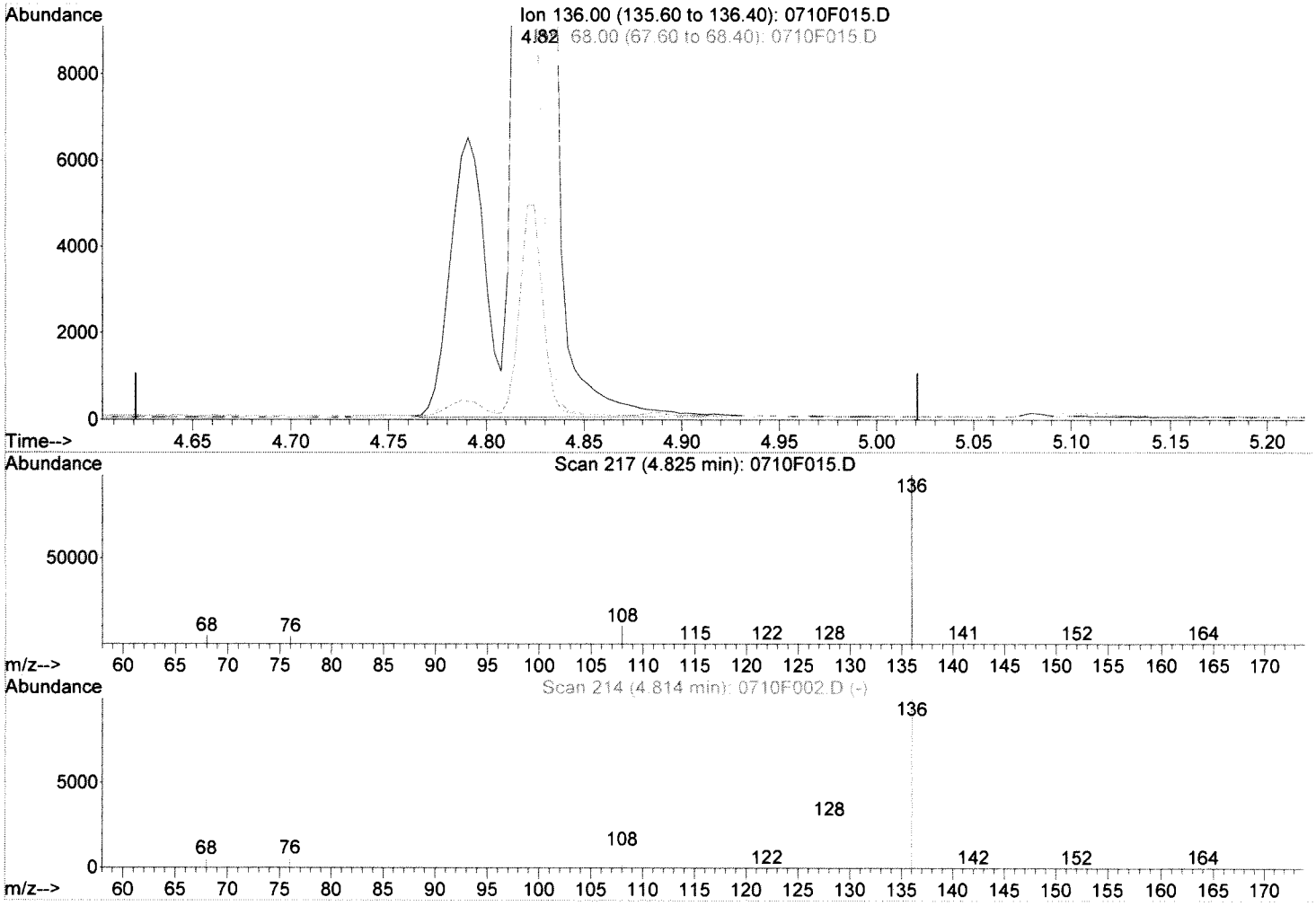
JUL 23 2018

0710F015.D 070518PAH.M Wed Jul 11 07:15:16 2018

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\071018\0710F015.D Vial: 15
Acq On : 10 Jul 2018 1:05 pm Operator: LWeiskopf
Sample : K1805809-021 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:15 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration



TIC: 0710F015.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml m

response 84623

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.05
108.00	9.50	10.52
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

07/11/18

JUL 23 2018

0710F015.D 070518PAH.M Wed Jul 11 07:15:28 2018

Exception Report

Data File: J:\MS14\DATA\071018\0710F016.D
Lab ID: K1805809-029
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 13:31
Date Quantitated: 07/11/2018 07:17
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA		x
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Lab Control Spike	Acenaphthene	58	63	121	
	Fluorene	57	68	121	
	Phenanthrene	57	64	126	
	Anthracene	58	68	127	No sample for Rx
	Fluoranthene	53	70	127	
	Pyrene	62	72	127	
	Benz(a)anthracene	54	74	124	
	Chrysene	57	74	132	

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:56:46
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\MS14\DATA\071018\0710F016.D
Lab ID: K1805809-029
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 13:31
Date Quantitated: 07/11/2018 07:17
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	Benzo(b)fluoranthene	56	73	136	Narrate
	Benzo(k)fluoranthene	58	74	134	
	Benzo(a)pyrene	55	75	131	
	Indeno(1,2,3-cd)pyrene	53	63	136	
	Dibenz(a,h)anthracene	49	59	135	
	Benzo(g,h,i)perylene	56	63	127	

Primary Review: JUL 1 1 2018

Secondary Review: JUL 2 3 2018

Printed: 07/11/2018 07:56:46
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\071018\0710F016.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 13:31	**Quant Date:**	07/11/2018 07:17	**Vial:**	16
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-029			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	06/16/2018	**Receive Date:**	06/19/2018

Analysis Lot:	KWG1803359	**Prep Lot:**	KWG1803064	**Report Group:**	K1805809
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1680457	**Prep Date:**	06/21/2018		

Quant Method:	J:\MS14\METHODS\SIM\070518PAH.M	**Calibration ID:**	CAL15772
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\071018\0710F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\071018\0710F003.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.82	0.01	136	80732m	200.00	OK
2	Acenaphthene-d10	6.37	0.00	164	38704	200.00	OK
3	Phenanthrene-d10	7.60	0.00	188	75821	200.00	OK
4	Chrysene-d12	10.17	0.00	240	68789	200.00	OK
5	Perylene-d12	13.34	0.00	264	70021	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.80	0.00	0.00	176	120790	477.32	95	42-131	OK	
3	Fluoranthene-d10	8.59	0.00	0.00	212	221649	471.06	94	42-133	OK	
4	Terphenyl-d14	8.95	0.00	0.00	244	171319	548.47	110	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.84	0.01	0.00	128	7957m	17.98	0.16		
1	2-Methylnaphthalene	5.47		0.00	142	1092	3.86	0.034	J	
2	Acenaphthylene	6.24		0.00	152	469m	1.04	0.0092	J	
2	Acenaphthene	6.39		0.00	154	604	2.33	0.021	J	
2	Fluorene	6.82		0.00	166	2847	8.83	0.078		
3	Phenanthrene	7.62		0.00	178	4565	9.85	0.088		
3	Anthracene	7.66		0.00	178	257m	0.5700	0.0051	J	
3	Fluoranthene				202	0d		0.0017	U	
4	Pyrene				202	0d		0.0020	U	
4	Benz(a)anthracene	10.17	0.01	0.00	228	173	0.4000	0.0036	J	
4	Chrysene				228	0d		0.0016	U	
5	Benzo(b)fluoranthene				252	0d		0.0017	U	
5	Benzo(k)fluoranthene				252	0		0.0019	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\071018\0710F016.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 13:31	**Quant Date:**	07/11/2018 07:17	**Vial:**	16
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-029			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0d		0.0022	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.0018	U	
5	Dibenz(a,h)anthracene				278	0		0.0026	U	
5	Benzo(g,h,i)perylene				276	0		0.0018	U	

Prep Amount:	450 ml	**Dilution:**	1.0
Prep Final Vol:	4 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\071018\0710F016.D Vial: 16
Acq On : 10 Jul 2018 1:31 pm Operator: LWeiskopf
Sample : K1805809-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 06:13:14 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

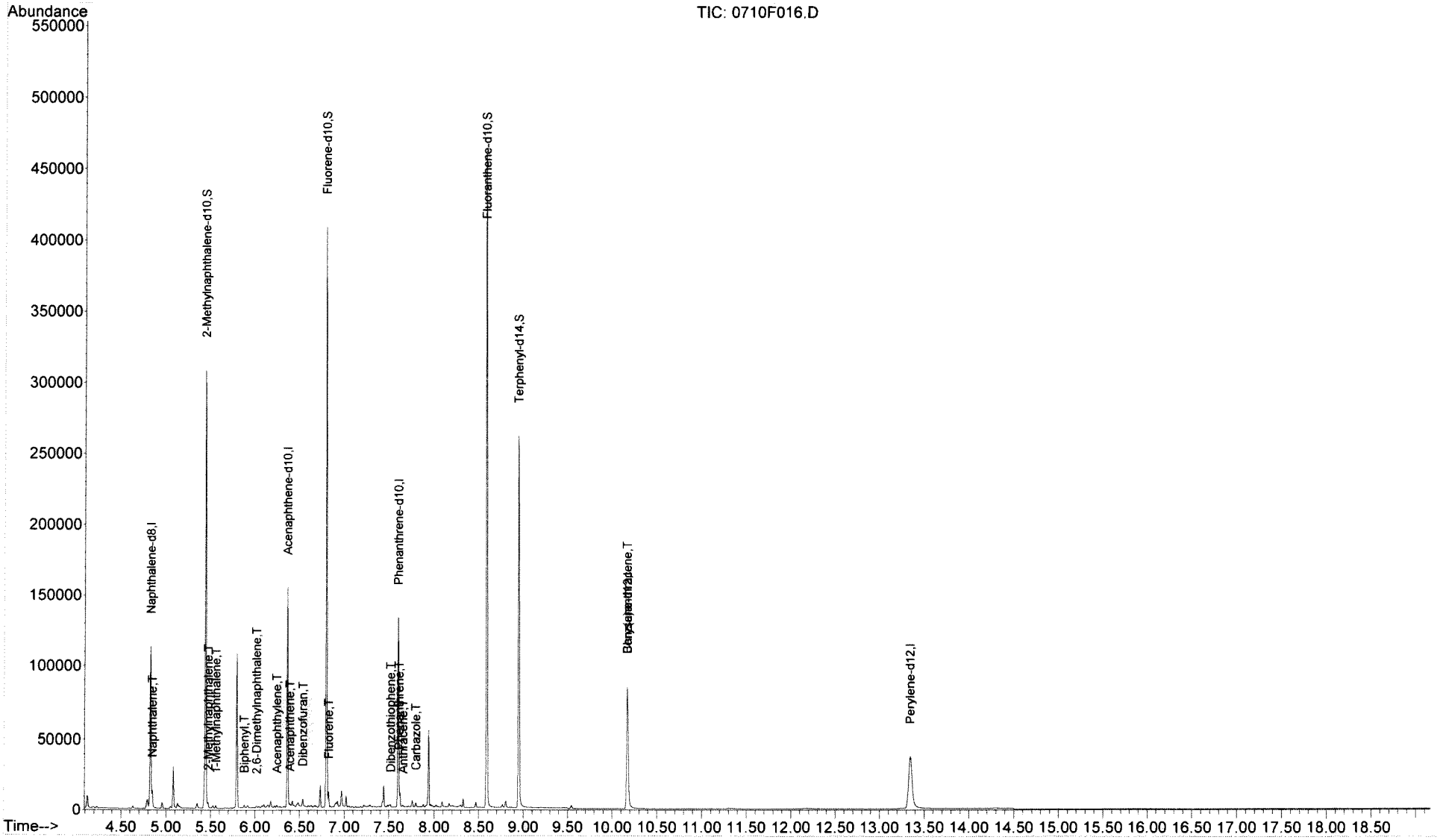
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	80732m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	38704	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.60	188	75821	200.00	ng/ml	0.00
23) Chrysene-d12	10.17	240	68789	200.00	ng/ml	0.00
28) Perylene-d12	13.34	264	70021	200.00	ng/ml	-0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.44	152	96747	421.20	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 42.12%			
13) Fluorene-d10	6.80	176	120790	477.32	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 47.73%			
22) Fluoranthene-d10	8.59	212	221649	471.06	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 47.11%			
25) Terphenyl-d14	8.95	244	171319	548.47	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 54.85%			
Target Compounds						Qvalue
2) Naphthalene	4.84	128	7957m	17.98	ng/ml	
4) 2-Methylnaphthalene	5.47	142	1092	3.86	ng/ml	99
5) 1-Methylnaphthalene	5.56	142	724	2.65	ng/ml	97
6) Biphenyl	5.88	154	828	2.37	ng/ml	93
7) 2,6-Dimethylnaphthalene	6.01	156	300	1.23	ng/ml	92
9) Acenaphthylene	6.24	152	469m	1.04	ng/ml	
10) Acenaphthene	6.39	154	604	2.33	ng/ml	95
11) Dibenzofuran	6.54	168	2972	7.14	ng/ml	86
14) Fluorene	6.82	166	2847	8.83	ng/ml	95
16) Dibenzothiophene	7.52	184	1086	2.32	ng/ml	98
17) Phenanthrene	7.62	178	4565	9.85	ng/ml	99
18) Anthracene	7.66	178	257m	0.57	ng/ml	
19) Carbazole	7.80	167	1550	3.79	ng/ml	97
26) Benz(a)anthracene	10.17	228	173	0.40	ng/ml#	62

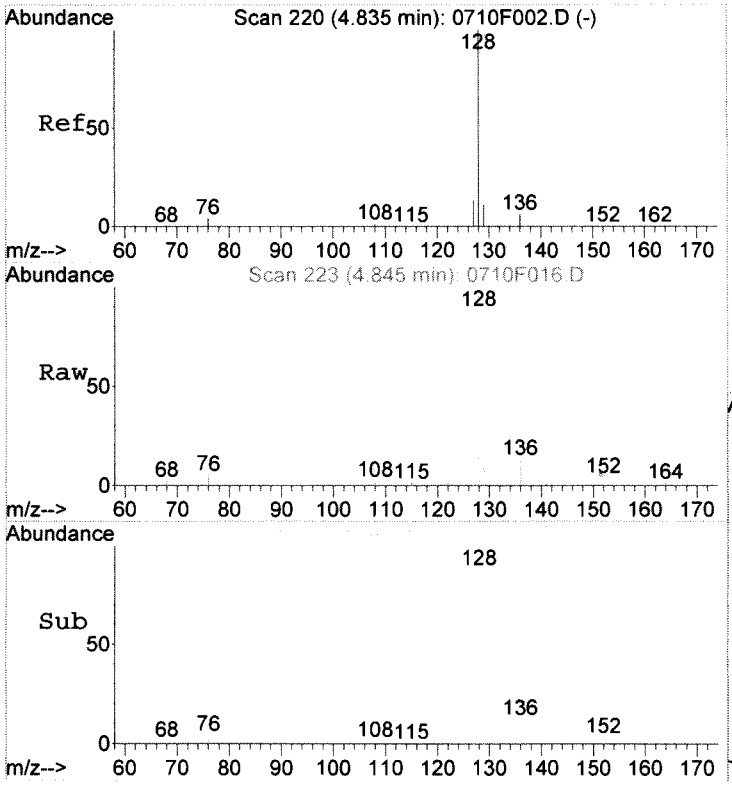
(#) = qualifier out of range (m) = manual integration
0710F016.D 070518PAH.M Wed Jul 11 07:18:58 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\071018\0710F016.D Vial: 16
Acq On : 10 Jul 2018 1:31 pm Operator: LWeiskopf
Sample : K1805809-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:17 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Initial Calibration

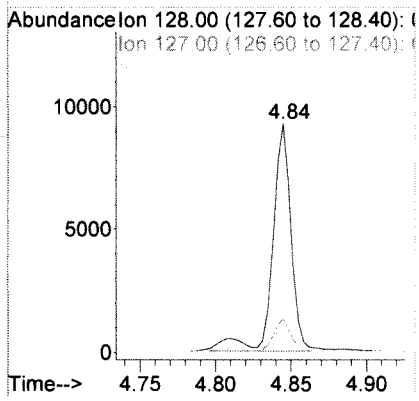


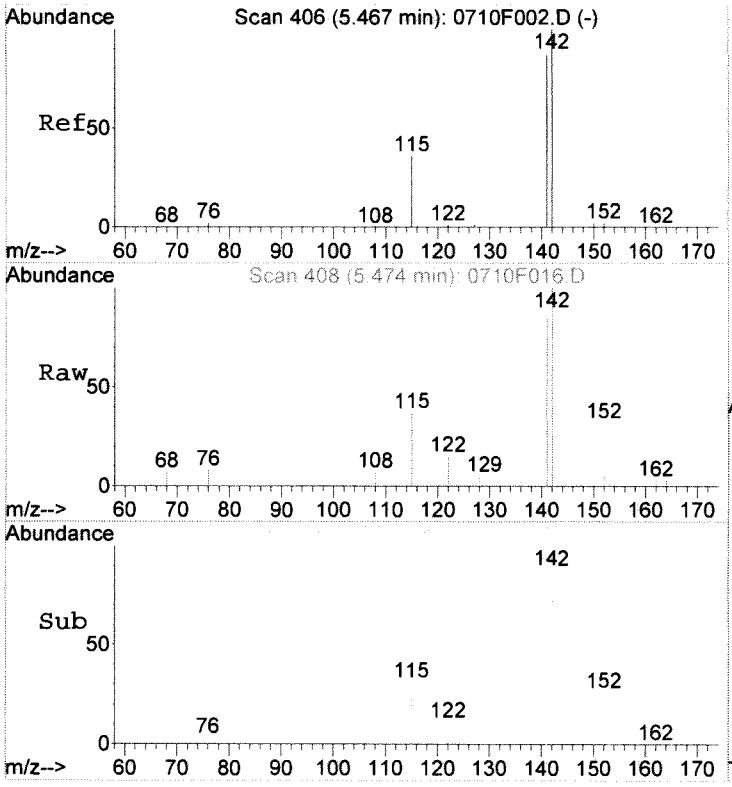


#2
Naphthalene
Concen: 17.98 ng/ml m
RT: 4.84 min Scan# 223
Delta R.T. 0.00 min
Lab File: 0710F016.D
Acq: 10 Jul 2018 1:31 pm

Tgt Ion:128 Resp: 7957

Ion	Ratio	Lower	Upper
128	100		
127	14.5	0.0	42.4
129	11.9	0.0	30.8

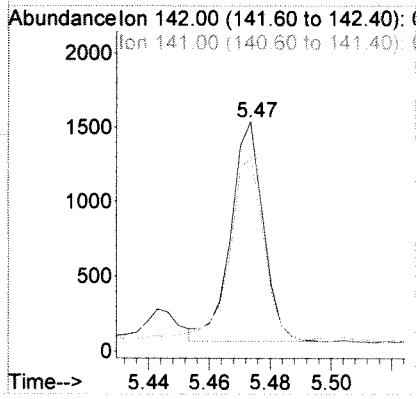


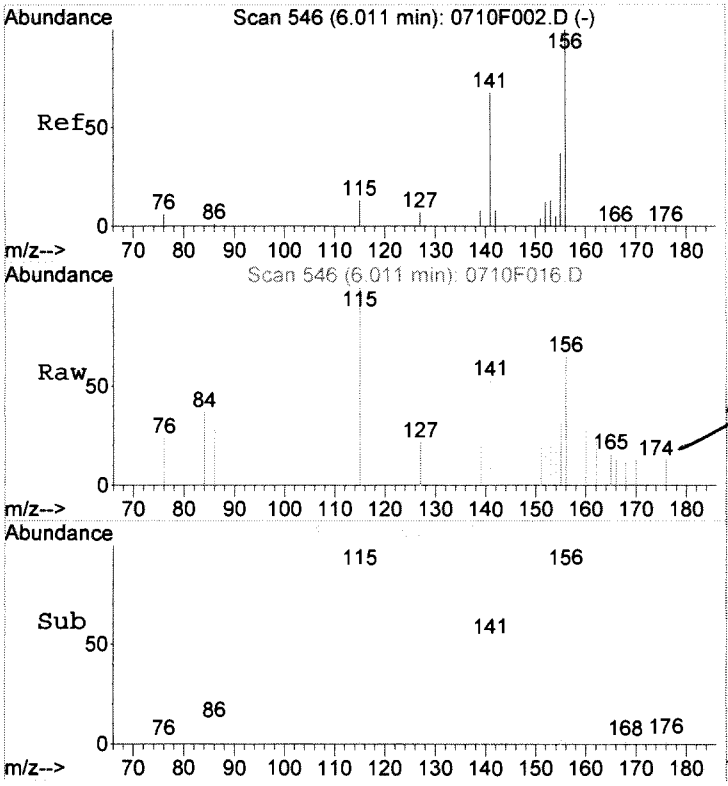


#4
2-Methylnaphthalene
Concen: 3.86 ng/ml
RT: 5.47 min Scan# 408
Delta R.T. -0.00 min
Lab File: 0710F016.D
Acq: 10 Jul 2018 1:31 pm

Tgt Ion:142 Resp: 1092

Ion	Ratio	Lower	Upper
142	100		
141	82.9	53.0	113.0
115	29.1	10.2	50.2

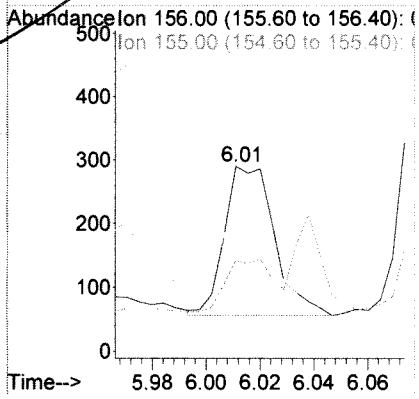


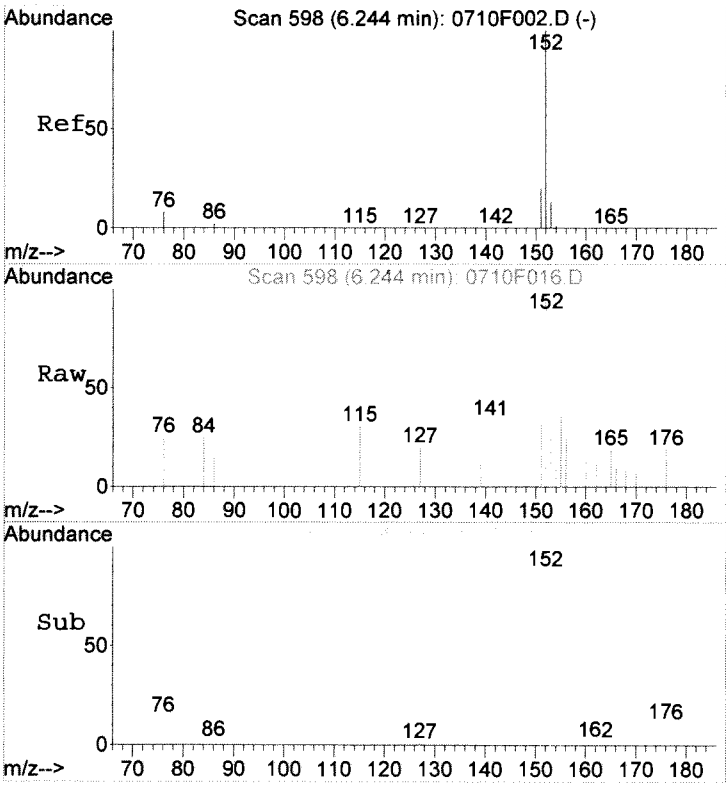


#7
2,6-Dimethylnaphthalene
Concen: 1.23 ng/ml
RT: 6.01 min Scan# 546
Delta R.T. -0.00 min
Lab File: 0710F016.D
Acq: 10 Jul 2018 1:31 pm

Tgt Ion:156 Resp: 300

Ion	Ratio	Lower	Upper
156	100		
155	34.2	4.1	64.1
141	59.4	49.1	89.1

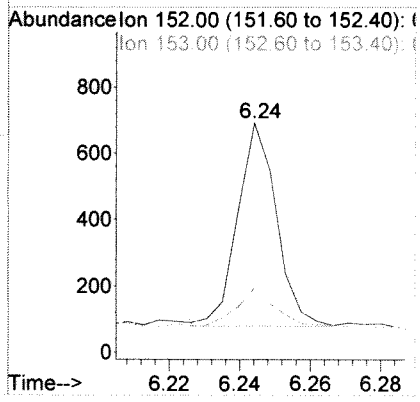


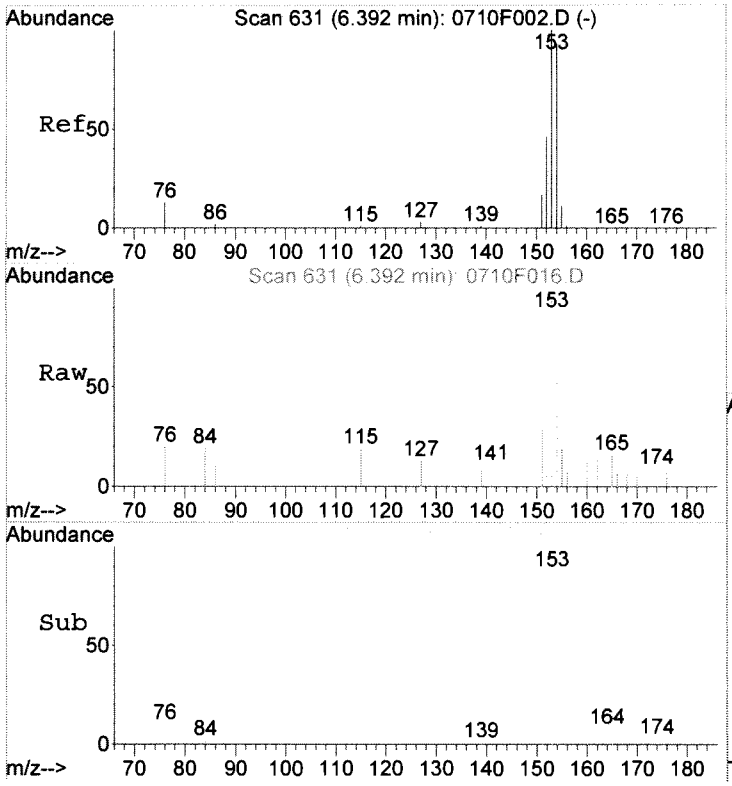


#9
Acenaphthylene
Concen: 1.04 ng/ml m
RT: 6.24 min Scan# 598
Delta R.T. -0.00 min
Lab File: 0710F016.D
Acq: 10 Jul 2018 1:31 pm

Tgt Ion:152 Resp: 469

Ion	Ratio	Lower	Upper
152	100		
153	28.0	0.0	42.8
151	32.1	0.0	39.0

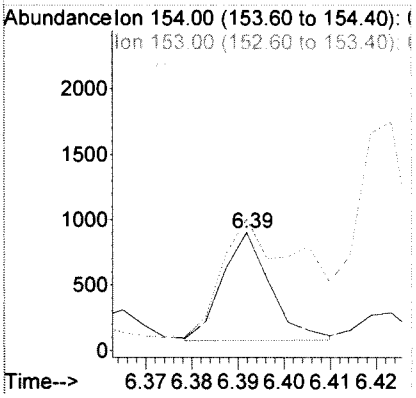


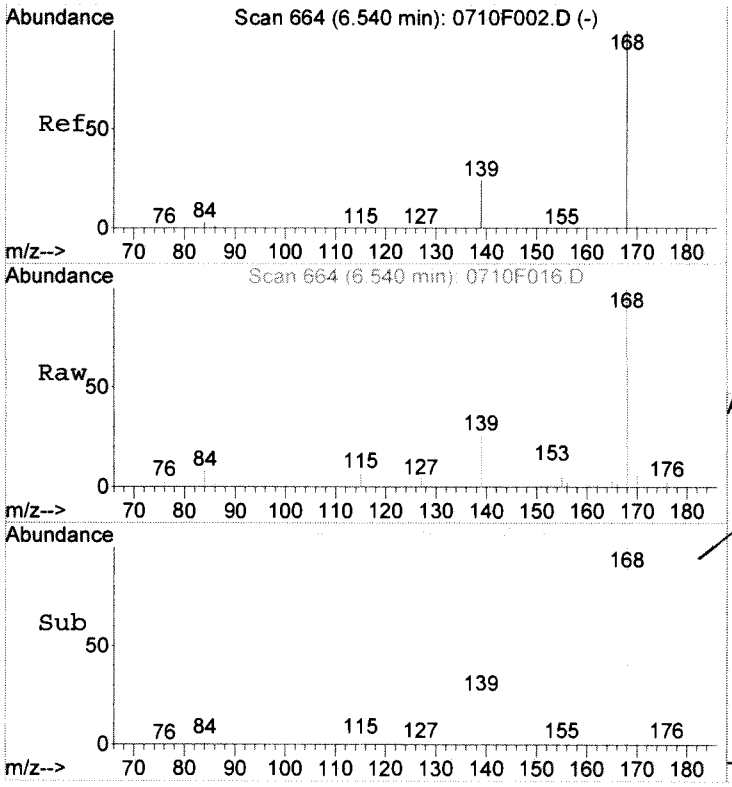


#10
Acenaphthene
Concen: 2.33 ng/ml
RT: 6.39 min Scan# 631
Delta R.T. -0.00 min
Lab File: 0710F016.D
Acq: 10 Jul 2018 1:31 pm

Tgt Ion:154 Resp: 604

Ion	Ratio	Lower	Upper
154	100		
153	111.5	74.1	134.1
152	48.5	19.4	79.4

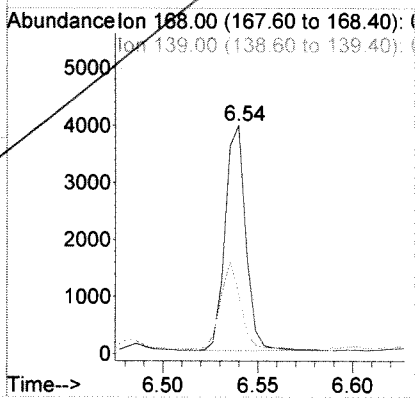


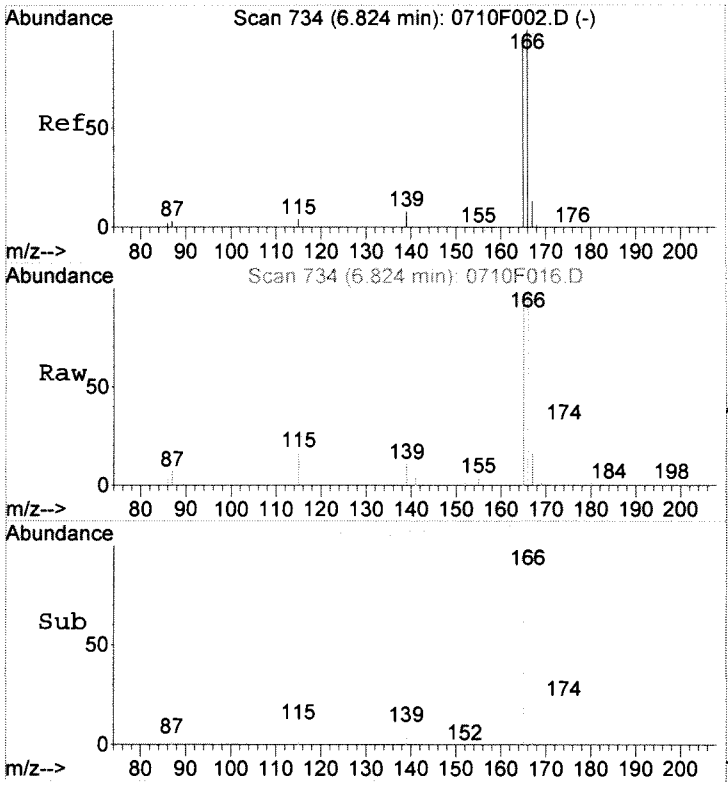


#11
Dibenzofuran
Concen: 7.14 ng/ml
RT: 6.54 min Scan# 664
Delta R.T. -0.00 min
Lab File: 0710F016.D
Acq: 10 Jul 2018 1:31 pm

Tgt Ion:168 Resp: 2972

Ion	Ratio	Lower	Upper
168	100		
139	24.5	2.9	62.9
84	2.9	0.0	24.6

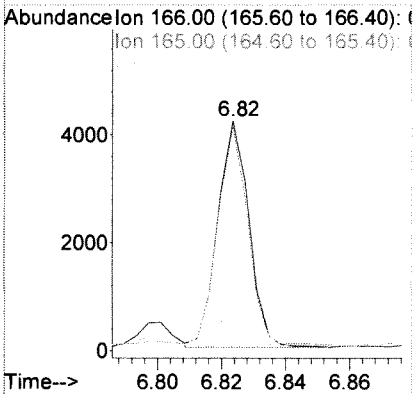


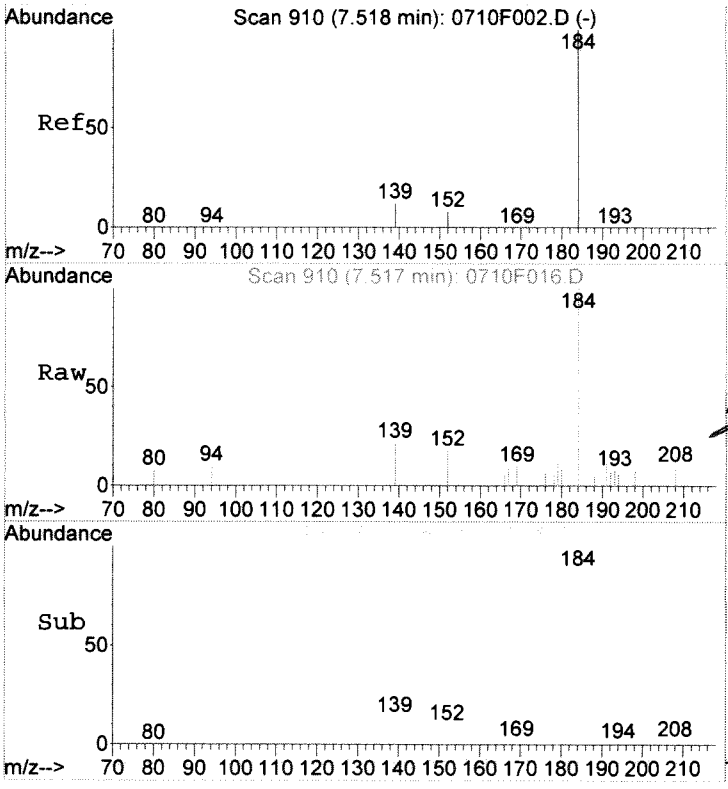


#14
Fluorene
Concen: 8.83 ng/ml
RT: 6.82 min Scan# 734
Delta R.T. -0.00 min
Lab File: 0710F016.D
Acq: 10 Jul 2018 1:31 pm

Tgt Ion:166 Resp: 2847

Ion	Ratio	Lower	Upper
166	100		
165	96.1	61.5	121.5
167	14.3	0.0	33.0

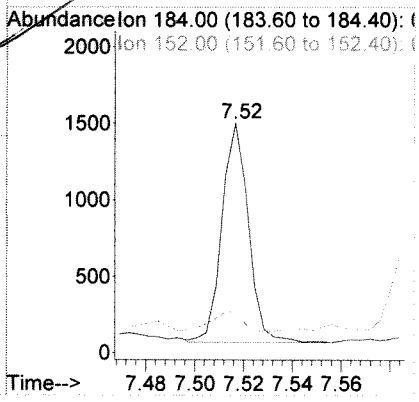


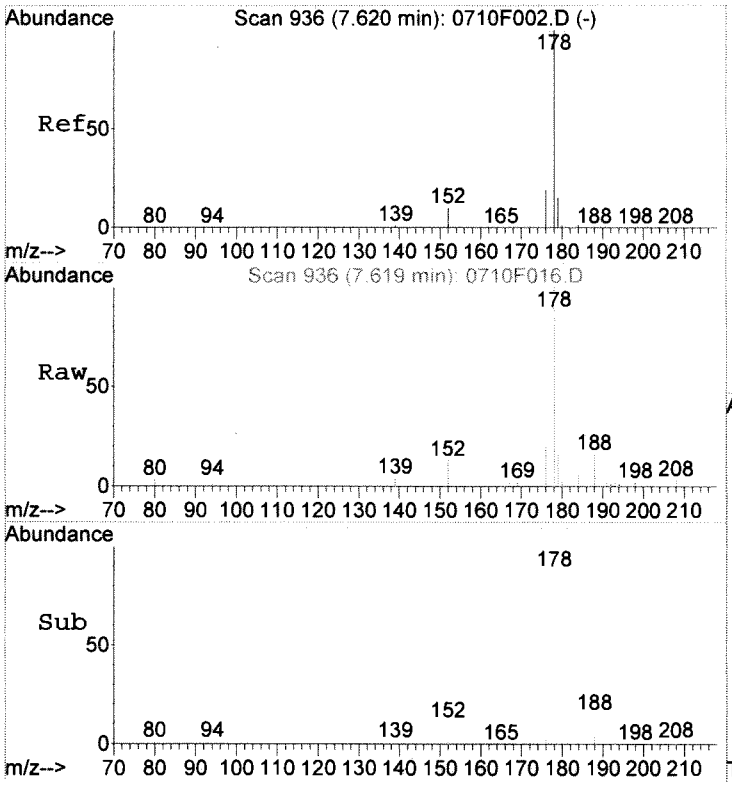


#16
Dibenzothiophene
Concen: 2.32 ng/ml
RT: 7.52 min Scan# 910
Delta R.T. -0.00 min
Lab File: 0710F016.D
Acq: 10 Jul 2018 1:31 pm

Tgt Ion:184 Resp: 1086

Ion	Ratio	Lower	Upper
184	100		
152	8.3	0.0	38.9
139	13.8	0.0	34.9

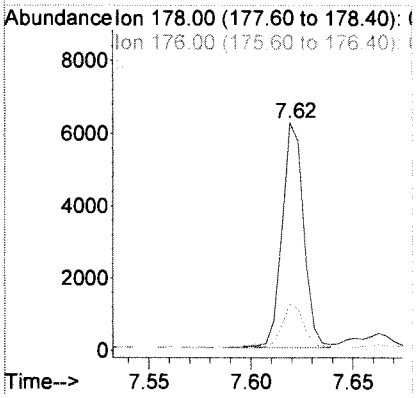


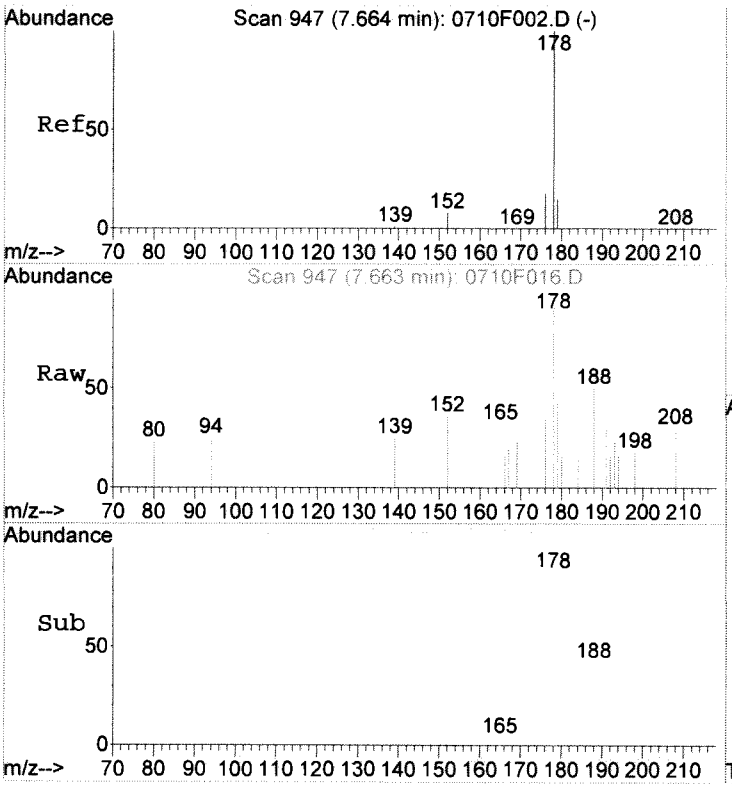


#17
Phenanthrene
Concen: 9.85 ng/ml
RT: 7.62 min Scan# 936
Delta R.T. -0.00 min
Lab File: 0710F016.D
Acq: 10 Jul 2018 1:31 pm

Tgt Ion:178 Resp: 4565

Ion	Ratio	Lower	Upper
178	100		
176	19.1	0.0	48.5
179	15.1	0.0	35.2

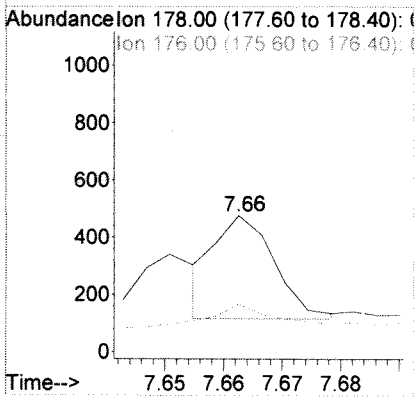


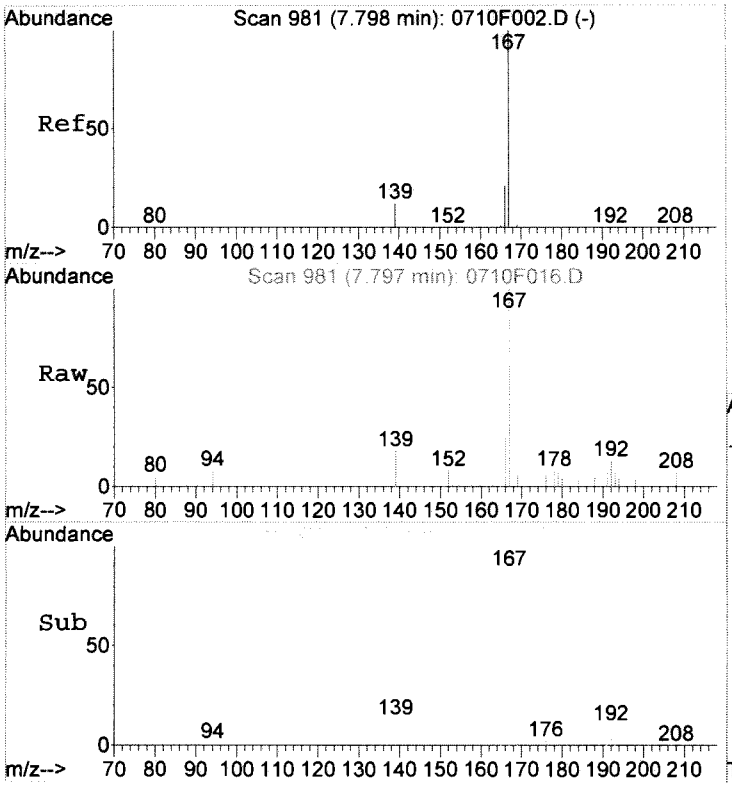


#18
Anthracene
Concen: 0.57 ng/ml m
RT: 7.66 min Scan# 947
Delta R.T. -0.00 min
Lab File: 0710F016.D
Acq: 10 Jul 2018 1:31 pm

Tgt Ion:178 Resp: 257

Ion	Ratio	Lower	Upper
178	100		
176	34.7	0.0	48.1
179	42.5	0.0	35.2#

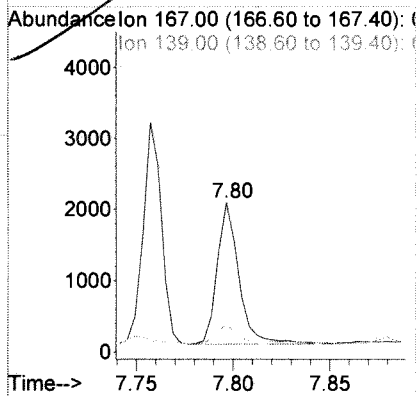


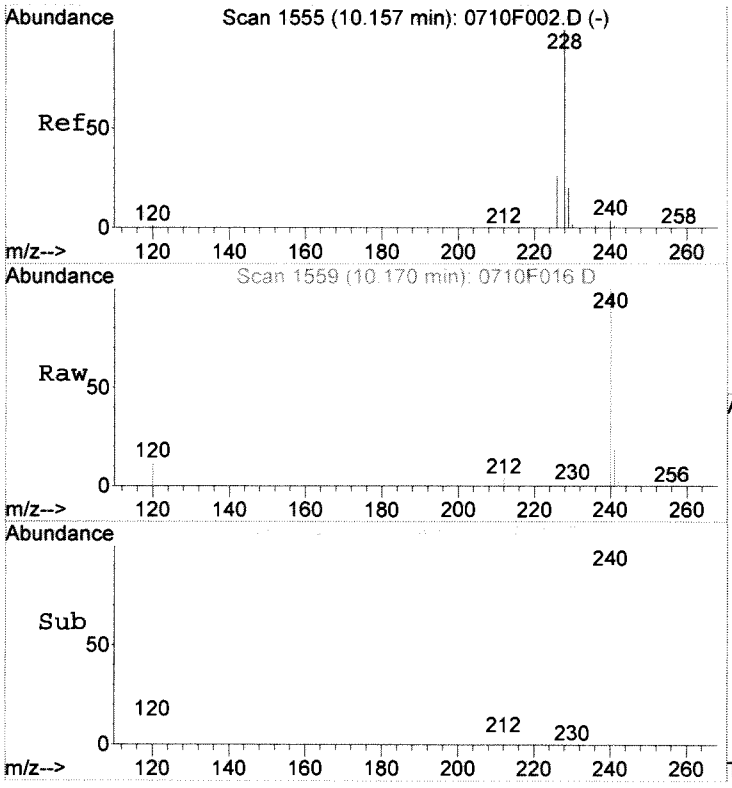


#19
Carbazole
Concen: 3.79 ng/ml
RT: 7.80 min Scan# 981
Delta R.T. -0.00 min
Lab File: 0710F016.D
Acq: 10 Jul 2018 1:31 pm

Tgt Ion:167 Resp: 1550

Ion	Ratio	Lower	Upper
167	100		
139	13.5	0.0	42.9
166	21.7	0.0	40.0

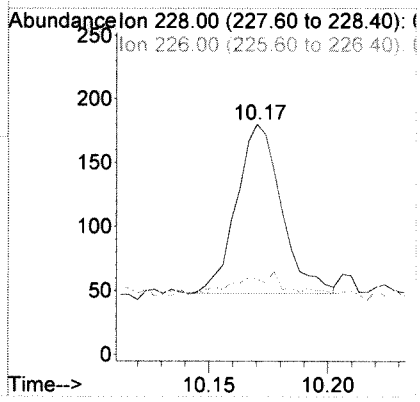




#26
Benz(a)anthracene
Concen: 0.40 ng/ml
RT: 10.17 min Scan# 1559
Delta R.T. 0.01 min
Lab File: 0710F016.D
Acq: 10 Jul 2018 1:31 pm

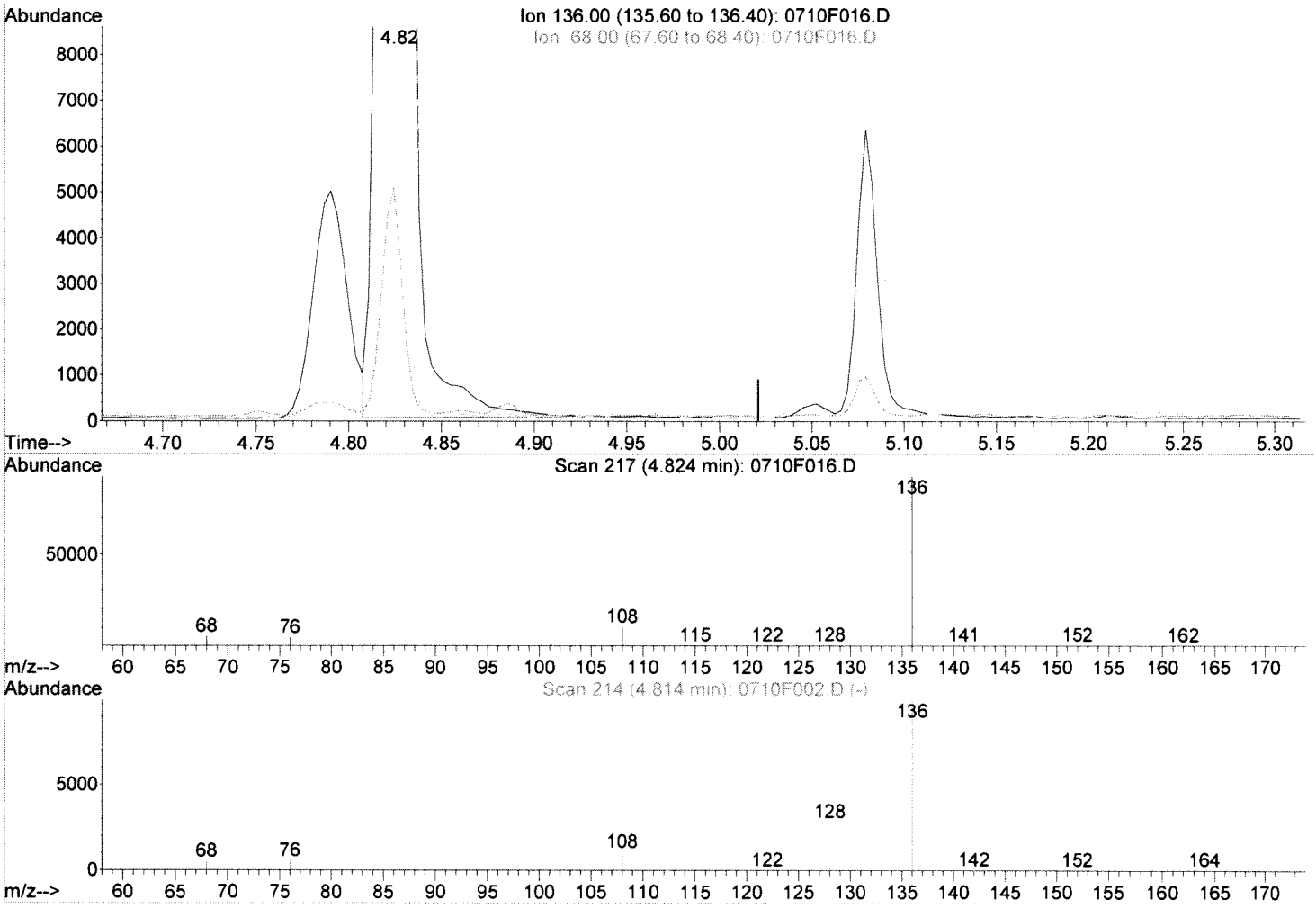
Tgt Ion:228 Resp: 173

Ion	Ratio	Lower	Upper
228	100		
226	9.1	0.0	56.0
229	40.2	0.0	39.5#



Data File : J:\MS14\DATA\071018\0710F016.D Vial: 16
Acq On : 10 Jul 2018 1:31 pm Operator: LWeiskopf
Sample : K1805809-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 6:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration



TIC: 0710F016.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml

response 74017

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.35
108.00	9.50	11.05
0.00	0.00	0.00

Manual Integration:

Before

07/11/18

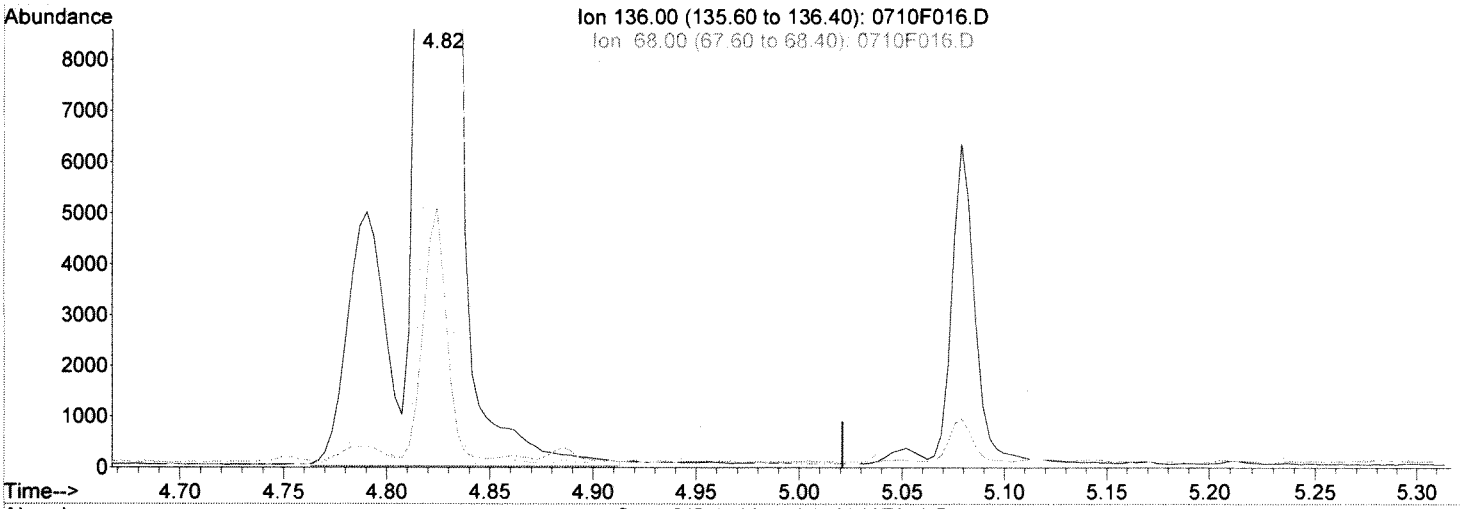
JUL 23 2018

0710F016.D 070518PAH.M Wed Jul 11 07:16:10 2018

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\071018\0710F016.D Vial: 16
Acq On : 10 Jul 2018 1:31 pm Operator: LWeiskopf
Sample : K1805809-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:16 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration



TIC: 0710F016.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml m

response 80732

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.48
108.00	9.50	11.15
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

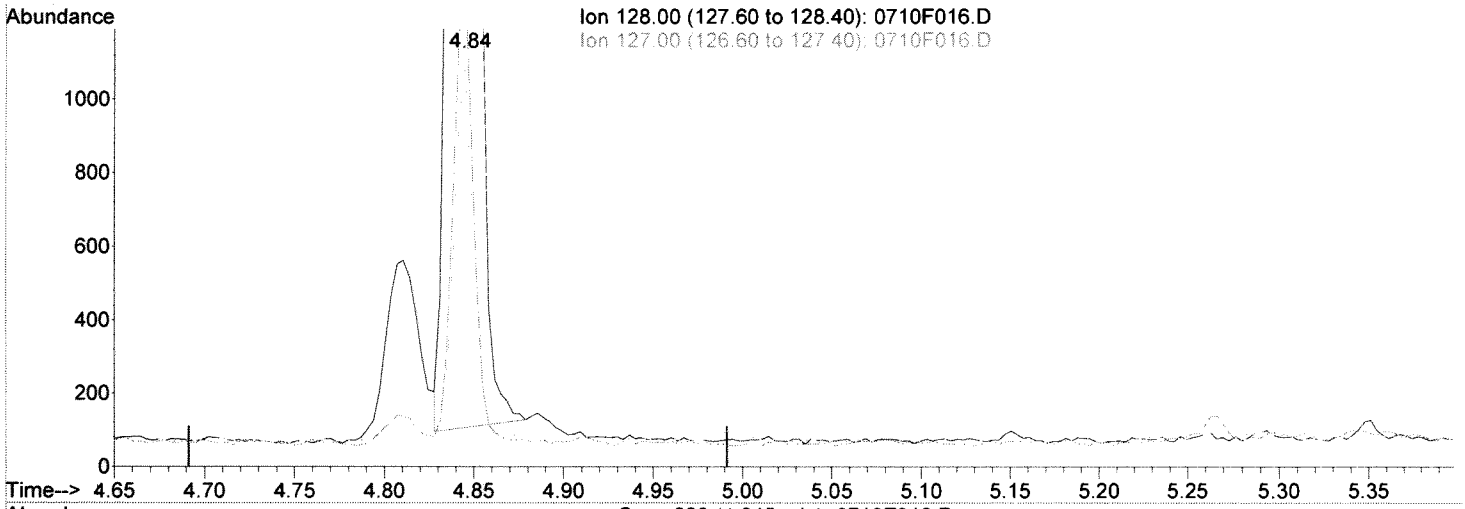
07/11/18

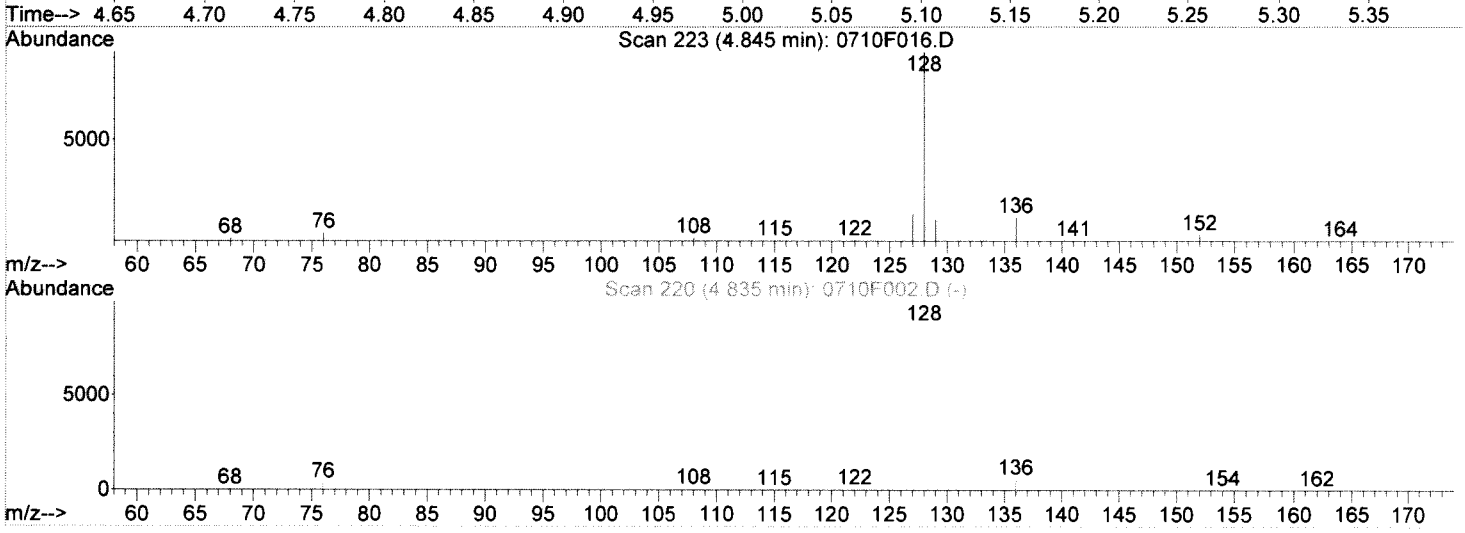
JUL 23 2018

0710F016.D 070518PAH.M Wed Jul 11 07:16:20 2018

Data File : J:\MS14\DATA\071018\0710F016.D Vial: 16
Acq On : 10 Jul 2018 1:31 pm Operator: LWeiskopf
Sample : K1805809-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:16 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration





TIC: 0710F016.D

(2) Naphthalene (T)

4.84min 16.17ng/ml

response 7153

Ion	Exp%	Act%
128.00	100	100
127.00	12.40	13.97
129.00	10.80	11.18
0.00	0.00	0.00

Manual Integration:

Before

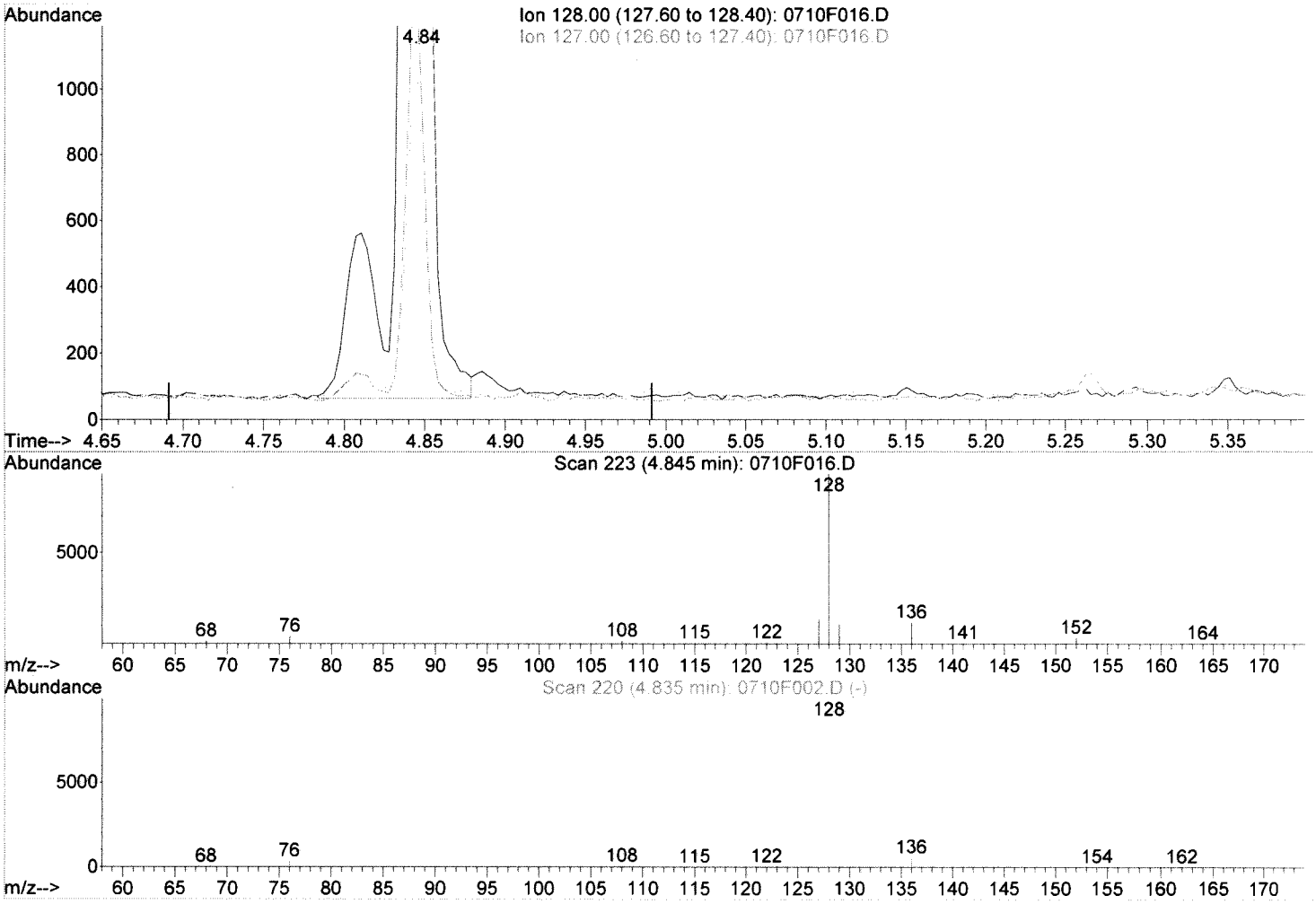
07/11/18

JUL 23 2018

0710F016.D 070518PAH.M Wed Jul 11 07:16:31 2018

Data File : J:\MS14\DATA\071018\0710F016.D Vial: 16
Acq On : 10 Jul 2018 1:31 pm Operator: LWeiskopf
Sample : K1805809-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:16 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration



TIC: 0710F016.D

(2) Naphthalene (T)

4.84min 17.98ng/ml m

response 7957

Ion	Exp%	Act%
128.00	100	100
127.00	12.40	14.53
129.00	10.80	11.85
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

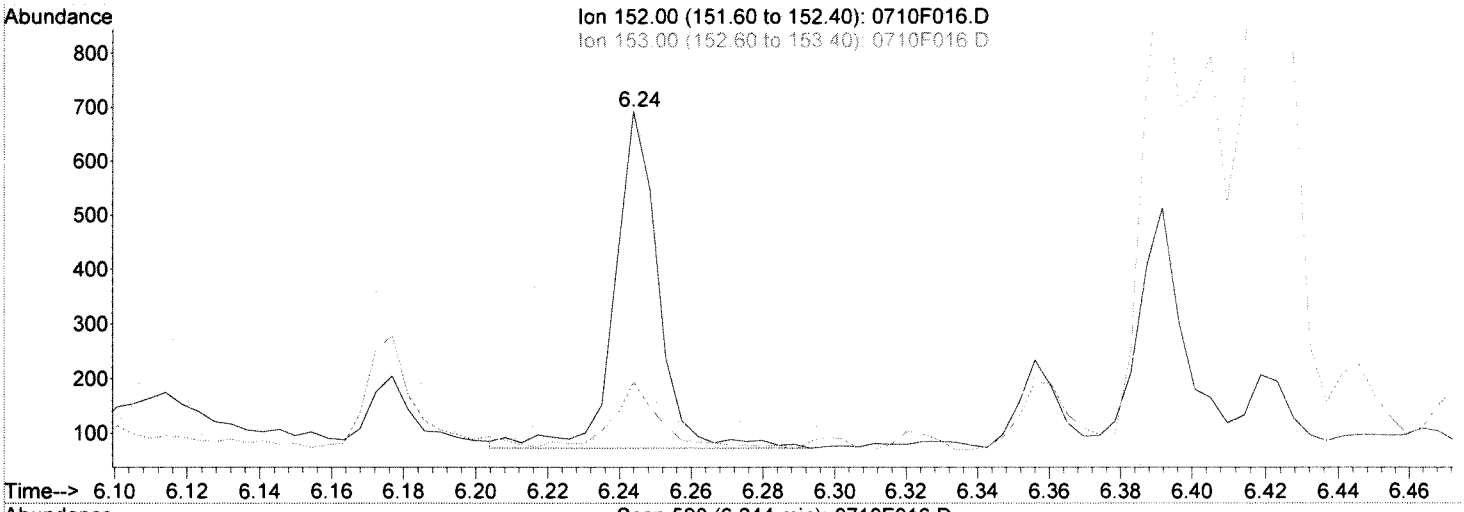
07/11/18

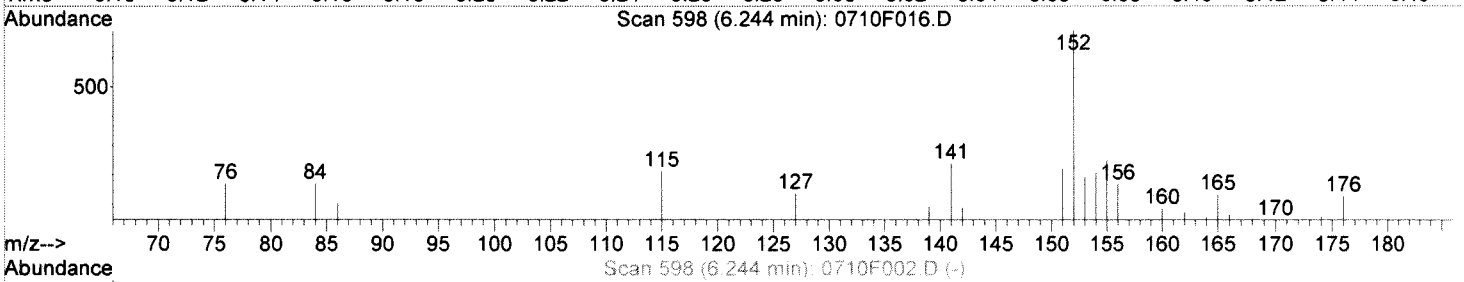
JUL 23 2018

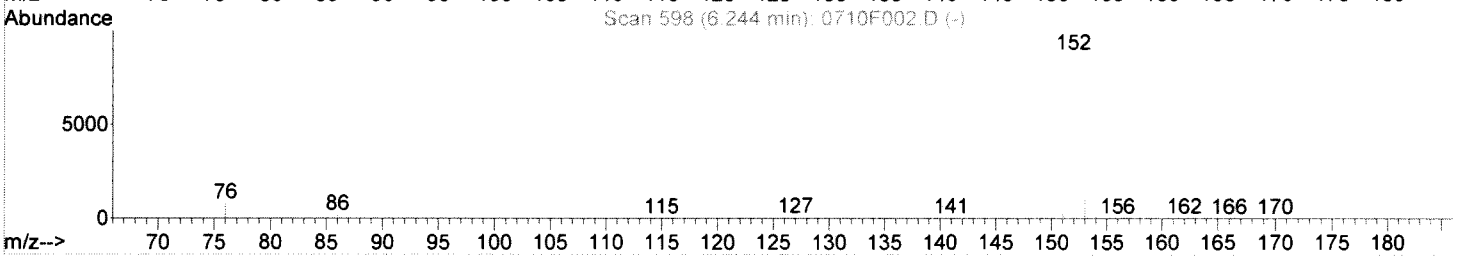
0710F016.D 070518PAH.M Wed Jul 11 07:16:44 2018

Data File : J:\MS14\DATA\071018\0710F016.D Vial: 16
Acq On : 10 Jul 2018 1:31 pm Operator: LWeiskopf
Sample : K1805809-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:16 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration







TIC: 0710F016.D

(9) Acenaphthylene (T)

6.24min 1.15ng/ml

response 522

Ion	Exp%	Act%
152.00	100	100
153.00	12.80	17.45
151.00	19.00	20.36
0.00	0.00	0.00

Manual Integration:

Before

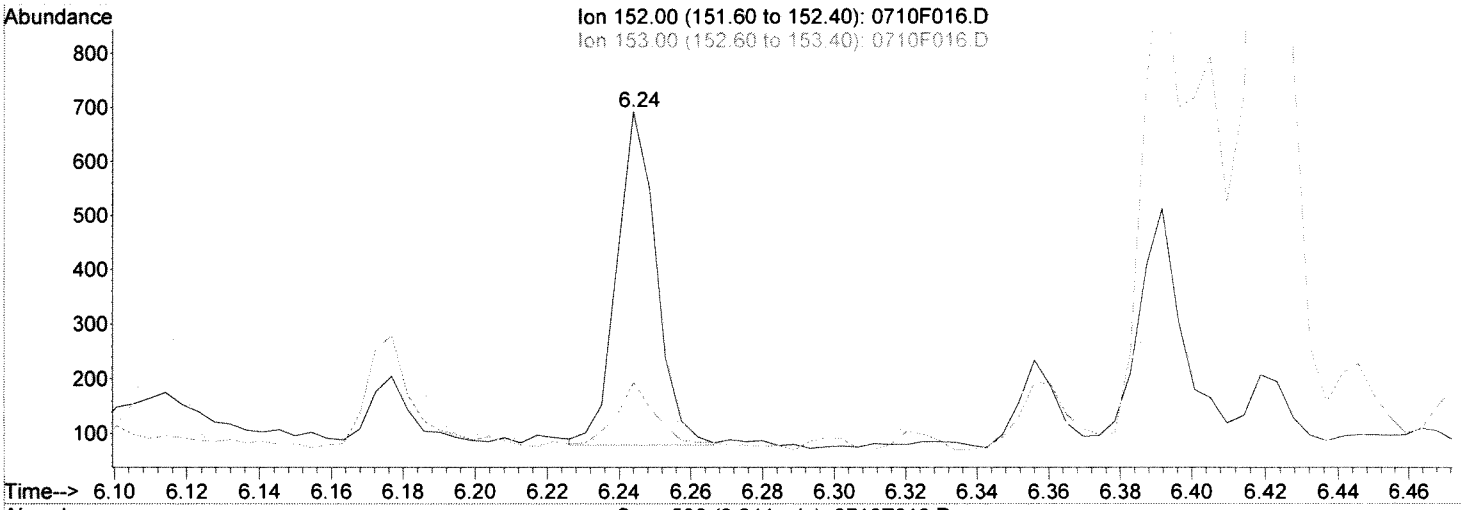
07/11/18

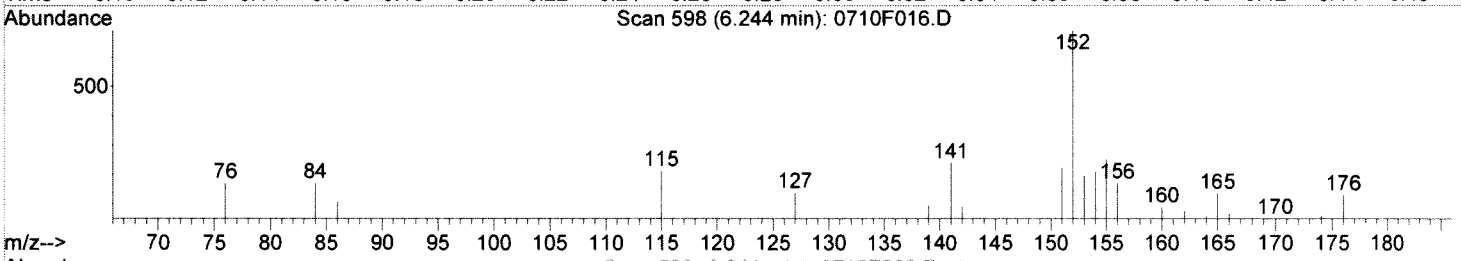
JUL 23 2018

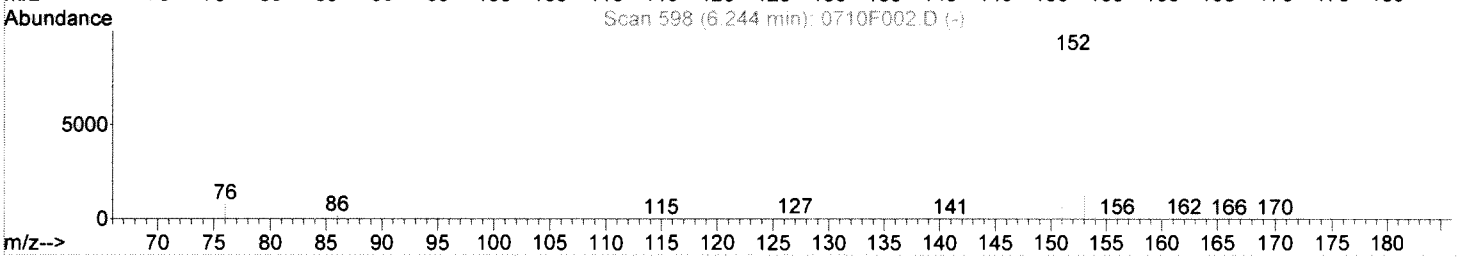
0710F016.D 070518PAH.M Wed Jul 11 07:16:56 2018

Data File : J:\MS14\DATA\071018\0710F016.D Vial: 16
Acq On : 10 Jul 2018 1:31 pm Operator: LWeiskopf
Sample : K1805809-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:16 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration







TIC: 0710F016.D

(9) Acenaphthylene (T)

6.24min 1.04ng/ml m

response 469

Ion	Exp%	Act%
152.00	100	100
153.00	12.80	28.03
151.00	19.00	32.08
0.00	0.00	0.00

Manual Integration:

After

BLC

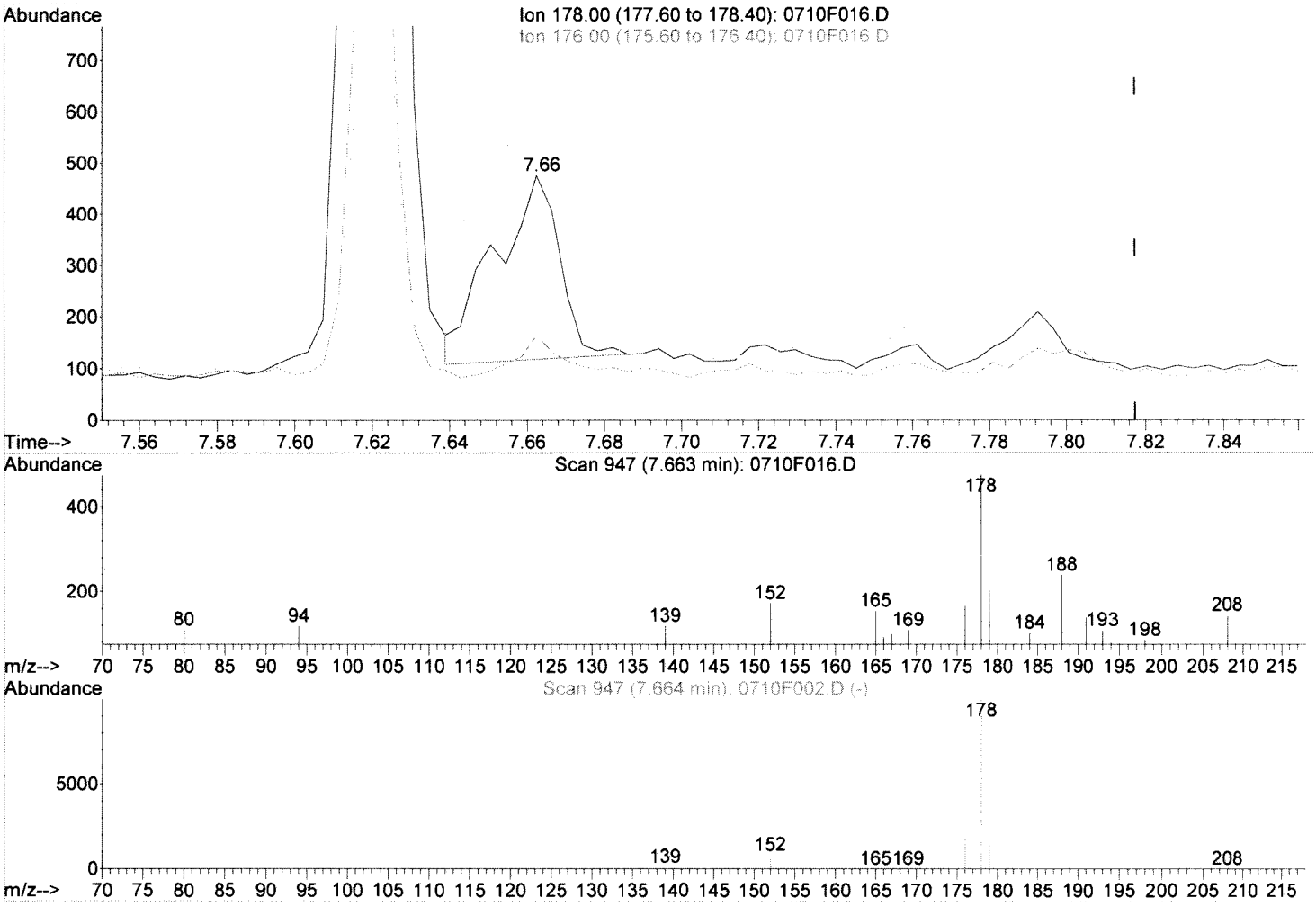
07/11/18

JUL 23 2018

0710F016.D 070518PAH.M Wed Jul 11 07:17:02 2018

Data File : J:\MS14\DATA\071018\0710F016.D Vial: 16
Acq On : 10 Jul 2018 1:31 pm Operator: LWeiskopf
Sample : K1805809-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:17 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration



TIC: 0710F016.D

(18) Anthracene (T)

7.66min 0.91ng/ml

response 414

Ion	Exp%	Act%
178.00	100	100
176.00	18.10	19.65
179.00	15.20	12.43
0.00	0.00	0.00

Manual Integration:

Before

07/11/18

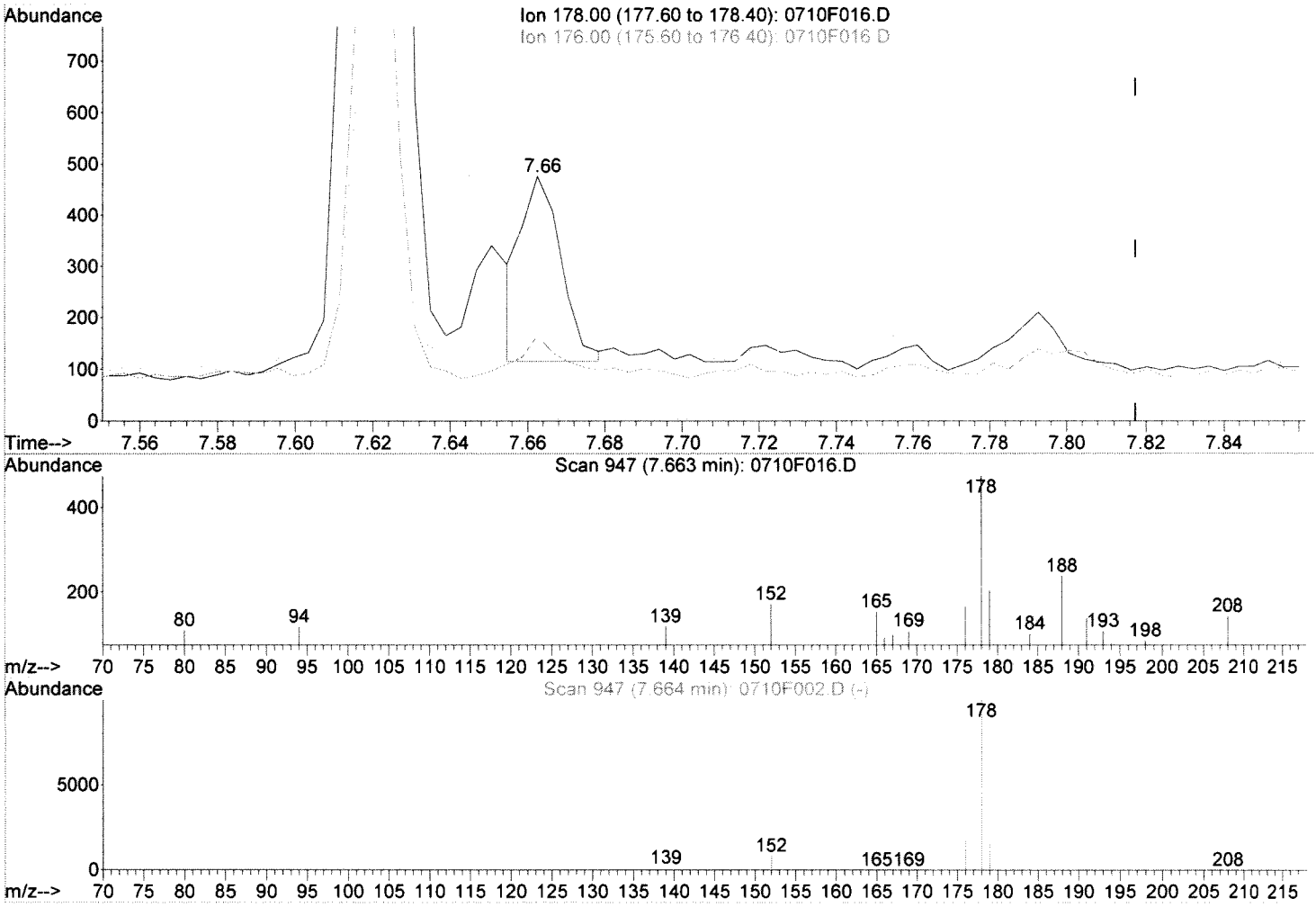
JUL 23 2018

0710F016.D 070518PAH.M Wed Jul 11 07:17:22 2018

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\071018\0710F016.D Vial: 16
Acq On : 10 Jul 2018 1:31 pm Operator: LWeiskopf
Sample : K1805809-029 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:17 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration



TIC: 0710F016.D

(18) Anthracene (T)

7.66min 0.57ng/ml m

response 257

Ion	Exp%	Act%
178.00	100	100
176.00	18.10	34.74
179.00	15.20	42.53#
0.00	0.00	0.00

Manual Integration:

After

IC-Overintegrated

07/11/18

JUL 23 2018

0710F016.D 070518PAH.M Wed Jul 11 07:17:28 2018

Exception Report

Data File: J:\MS14\DATA\071018\0710F017.D
Lab ID: K1805809-030
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 13:57
Date Quantitated: 07/11/2018 07:18
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA		x
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Lab Control Spike	Acenaphthene	58	63	121	
	Fluorene	57	68	121	
	Phenanthrene	57	64	126	NC sample for 2X
	Anthracene	58	68	127	
	Fluoranthene	53	70	127	
	Pyrene	62	72	127	
	Benz(a)anthracene	54	74	124	
	Chrysene	57	74	132	

Primary Review: JUL 1 1 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:56:50
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\MS14\DATA\071018\0710F017.D
Lab ID: K1805809-030
RunType: SMPL
Matrix: WATER

Date Acquired: 07/10/2018 13:57
Date Quantitated: 07/11/2018 07:18
Batch ID: KWG1803359
Analysis Method: 8270D SIM
ListJoinID: LJ18599

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	Benzo(b)fluoranthene	56	73	136	Narrate
	Benzo(k)fluoranthene	58	74	134	
	Benzo(a)pyrene	55	75	131	
	Indeno(1,2,3-cd)pyrene	53	63	136	
	Dibenz(a,h)anthracene	49	59	135	
	Benzo(g,h,i)perylene	56	63	127	

Primary Review: JUL 1 1 2018

Secondary Review: JUL 2 3 2018

Printed: 07/11/2018 07:56:50
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\071018\0710F017.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 13:57	**Quant Date:**	07/11/2018 07:18	**Vial:**	17
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-030			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**	06/17/2018	**Receive Date:**	06/19/2018

Analysis Lot:	KWG1803359	**Prep Lot:**	KWG1803064	**Report Group:**	K1805809
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1680445	**Prep Date:**	06/21/2018		

Quant Method:	J:\MS14\METHODS\SIM\070518PAH.M	**Calibration ID:**	CAL15772
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ18599
Tune Ref:	J:\MS14\DATA\071018\0710F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\071018\0710F003.D	**Quant based on Report List**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.82	0.01	136	79328m	200.00	OK
2	Acenaphthene-d10	6.37	0.00	164	37193	200.00	OK
3	Phenanthrene-d10	7.60	0.00	188	73643	200.00	OK
4	Chrysene-d12	10.17	0.00	240	66143	200.00	OK
5	Perylene-d12	13.35	0.01	264	66046	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.80	0.00	0.00	176	129206	531.32	106	42-131	OK	
3	Fluoranthene-d10	8.59	0.00	0.00	212	232791	509.37	102	42-133	OK	
4	Terphenyl-d14	8.95	0.00	0.00	244	179062	596.19	119	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.84	0.01	0.00	128	65	0.1500	0.0028	U	
1	2-Methylnaphthalene				142	0d		0.0026	U	
2	Acenaphthylene				152	0		0.0022	U	
2	Acenaphthene				154	0d		0.0024	U	
2	Fluorene				166	0d		0.0022	U	
3	Phenanthrene				178	0		0.0022	U	
3	Anthracene				178	0		0.0017	U	
3	Fluoranthene				202	0d		0.0017	U	
4	Pyrene				202	0		0.0020	U	
4	Benz(a)anthracene	10.17	0.01	0.00	228	178	0.4300	0.0038	J	
4	Chrysene				228	0d		0.0016	U	
5	Benzo(b)fluoranthene				252	0		0.0017	U	
5	Benzo(k)fluoranthene				252	0		0.0019	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\071018\0710F017.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 13:57	**Quant Date:**	07/11/2018 07:18	**Vial:**	17
Run Type:	SMPL	**ListJoinID:**	LJ18599	**Dilution:**	1.0
Lab ID:	K1805809-030			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Benzo(a)pyrene				252	0		0.0022	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.0018	U	
5	Dibenz(a,h)anthracene				278	0		0.0026	U	
5	Benzo(g,h,i)perylene				276	0		0.0018	U	

Prep Amount:	450 ml	**Dilution:**	1.0
Prep Final Vol:	4 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\071018\0710F017.D Vial: 17
Acq On : 10 Jul 2018 1:57 pm Operator: LWeiskopf
Sample : K1805809-030 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 06:13:16 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

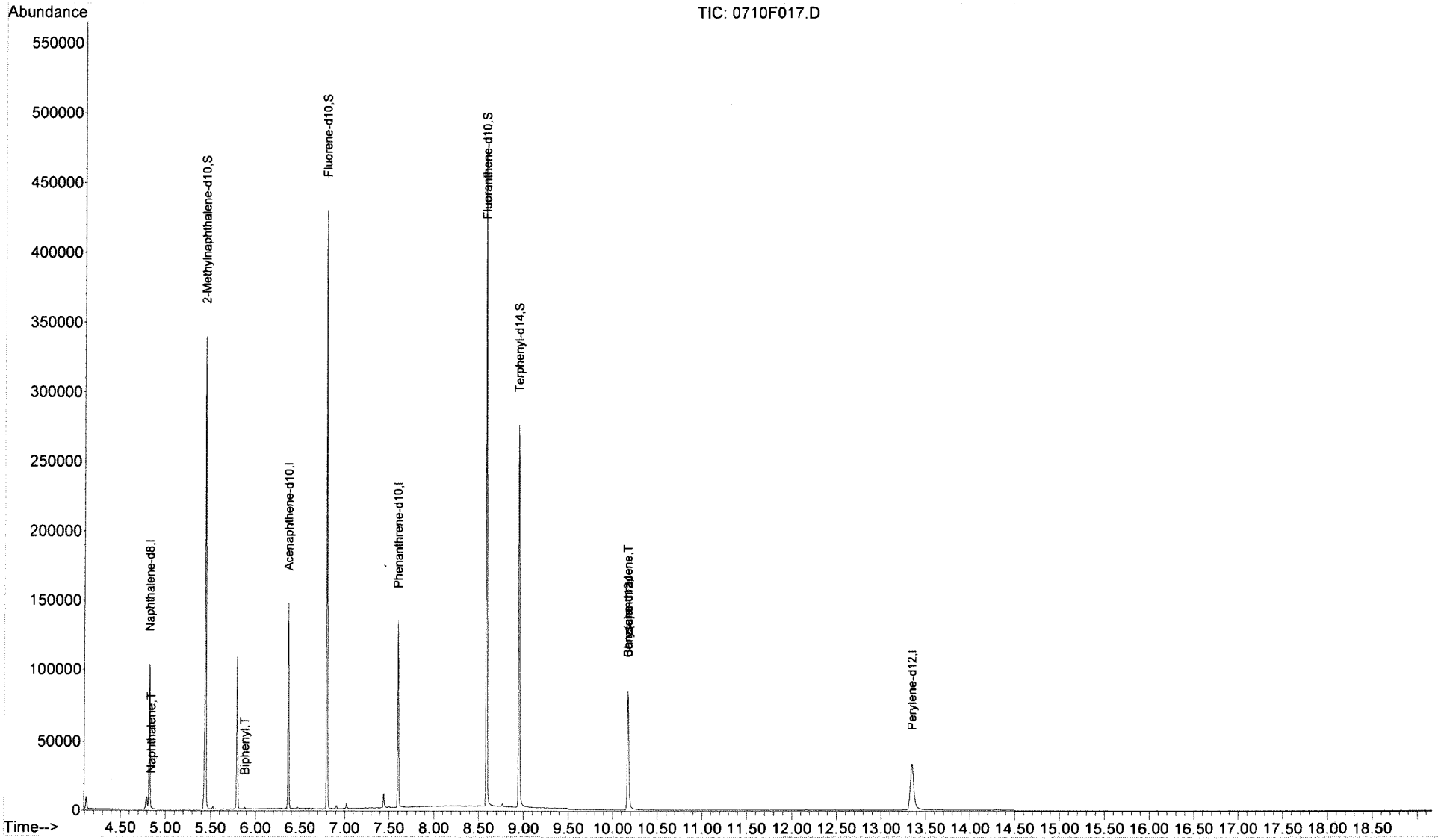
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	79328m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	37193	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.60	188	73643	200.00	ng/ml	0.00
23) Chrysene-d12	10.17	240	66143	200.00	ng/ml	0.00
28) Perylene-d12	13.35	264	66046	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.44	152	104496	462.99	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 46.30%			
13) Fluorene-d10	6.80	176	129206	531.32	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 53.13%			
22) Fluoranthene-d10	8.59	212	232791	509.37	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 50.94%			
25) Terphenyl-d14	8.95	244	179062	596.19	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 59.62%			
Target Compounds						Qvalue
2) Naphthalene	4.84	128	65	0.15	ng/ml	76
6) Biphenyl	5.88	154	476	1.39	ng/ml	97
26) Benz(a)anthracene	10.17	228	178	0.43	ng/ml	70

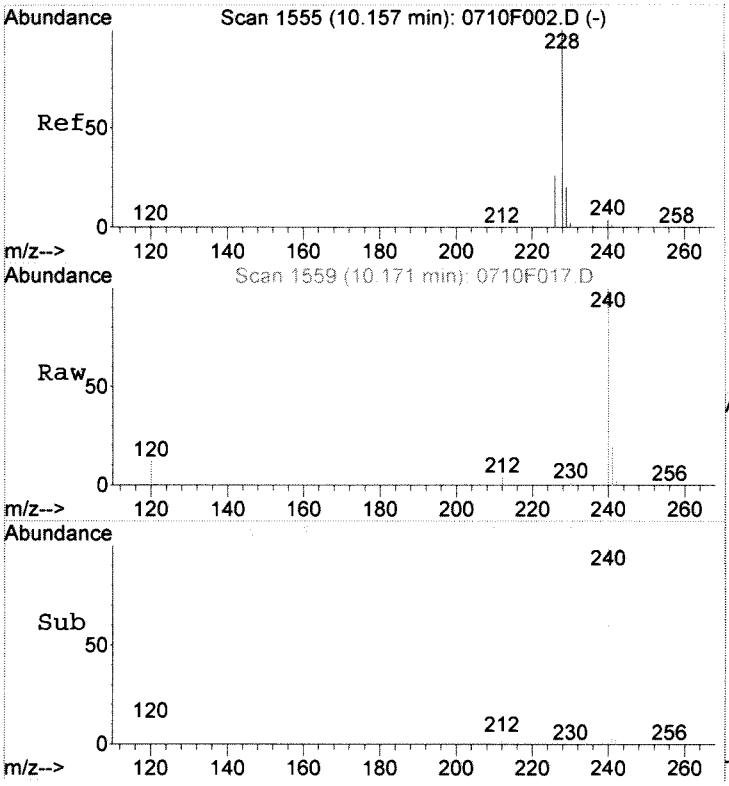
(#) = qualifier out of range (m) = manual integration
0710F017.D 070518PAH.M Wed Jul 11 07:19:04 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\071018\0710F017.D Vial: 17
Acq On : 10 Jul 2018 1:57 pm Operator: LWeiskopf
Sample : K1805809-030 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:18 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Initial Calibration

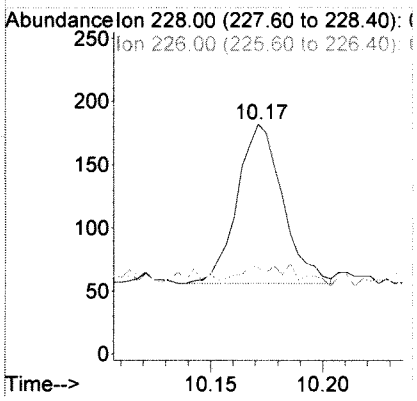




#26
Benz(a)anthracene
Concen: 0.43 ng/ml
RT: 10.17 min Scan# 1559
Delta R.T. 0.01 min
Lab File: 0710F017.D
Acq: 10 Jul 2018 1:57 pm

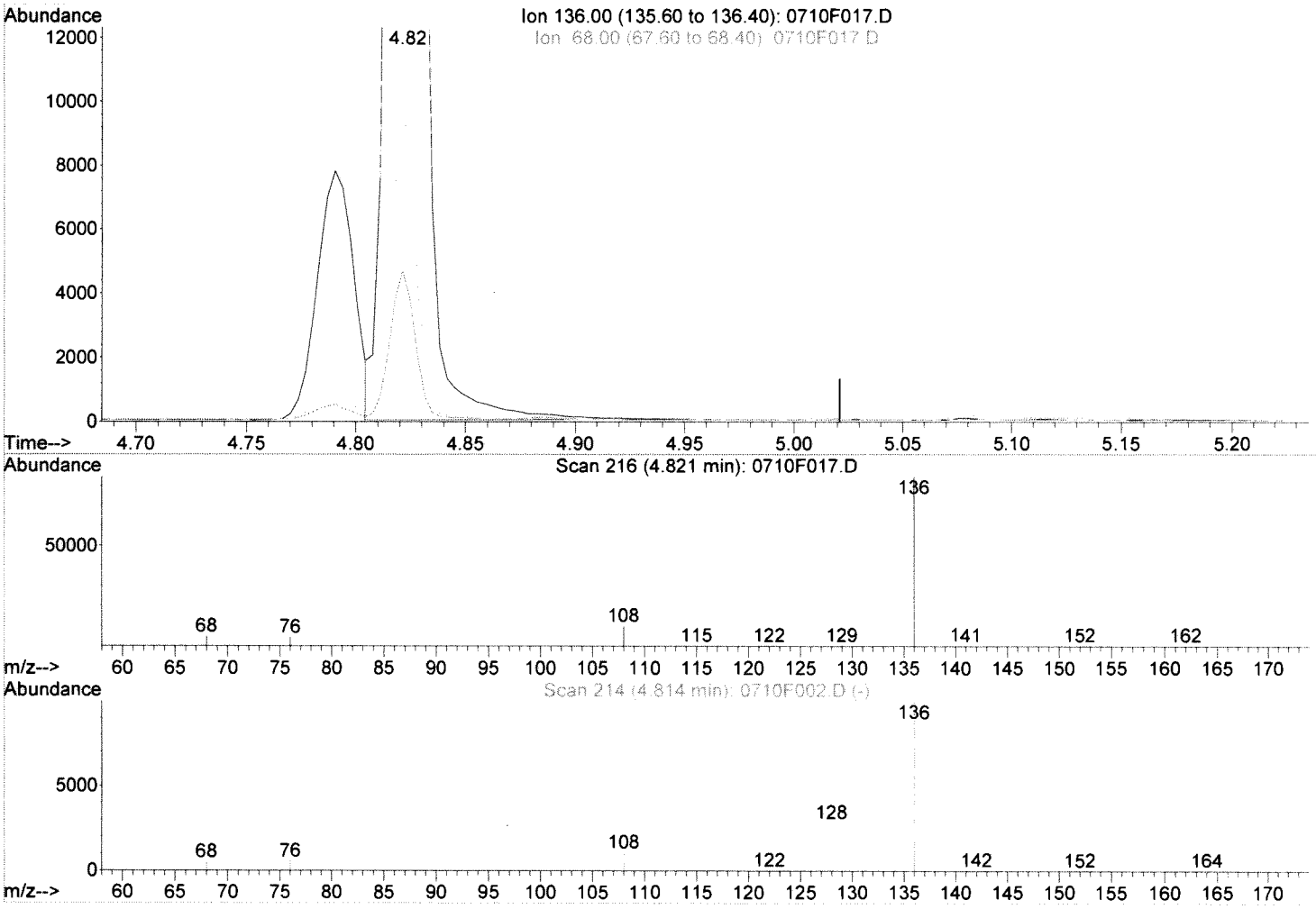
Tgt Ion:228 Resp: 178

Ion	Ratio	Lower	Upper
228	100		
226	11.1	0.0	56.0
229	33.3	0.0	39.5



Data File : J:\MS14\DATA\071018\0710F017.D Vial: 17
Acq On : 10 Jul 2018 1:57 pm Operator: LWeiskopf
Sample : K1805809-030 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 6:13 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration



TIC: 0710F017.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml

response 70303

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.46
108.00	9.50	11.53
0.00	0.00	0.00

Manual Integration:

Before

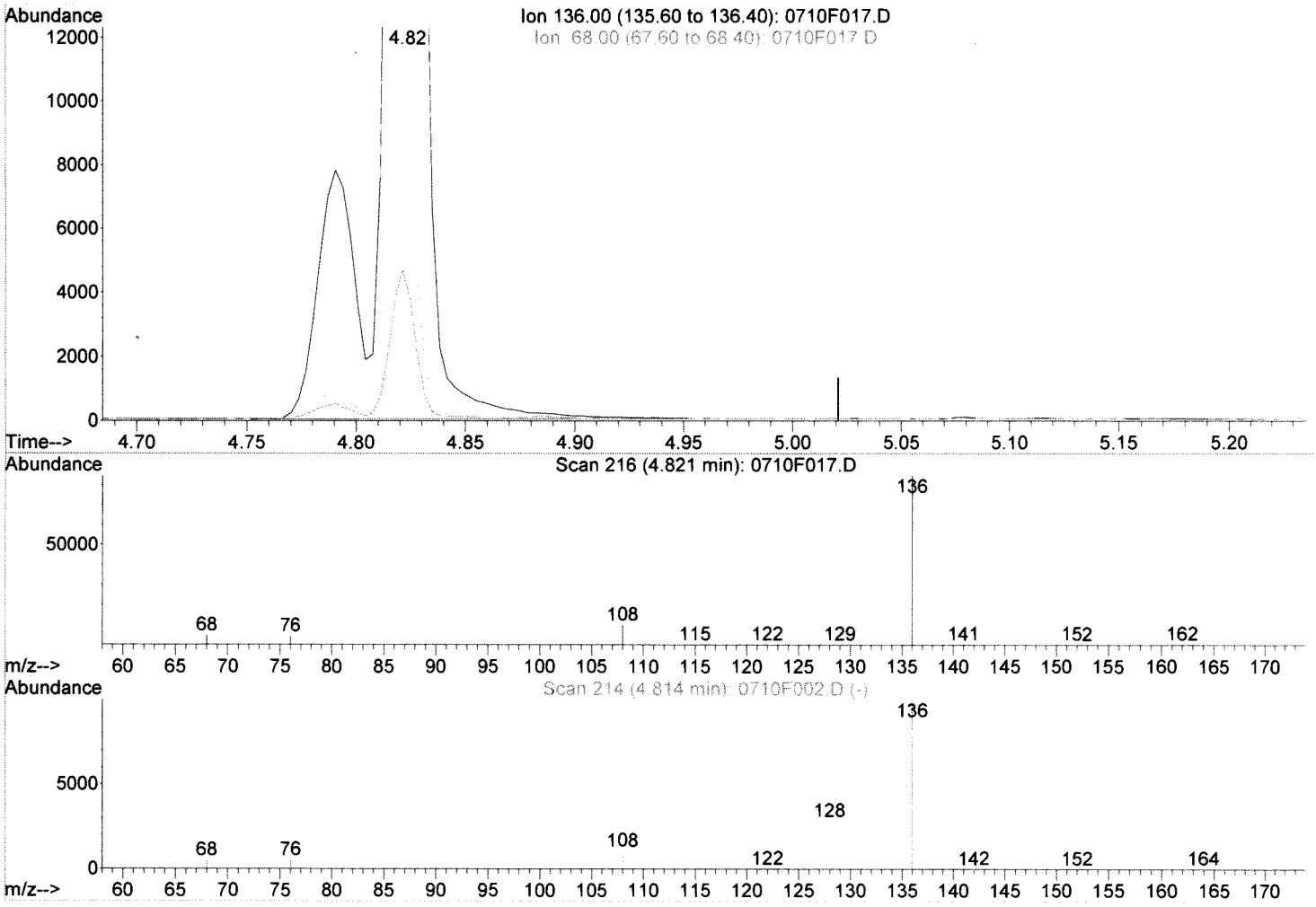
07/11/18

JUL 23 2018

0710F017.D 070518PAH.M Wed Jul 11 07:18:01 2018

Data File : J:\MS14\DATA\071018\0710F017.D Vial: 17
Acq On : 10 Jul 2018 1:57 pm Operator: LWeiskopf
Sample : K1805809-030 Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:18 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Multiple Level Calibration



TIC: 0710F017.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml m

response 79328

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.55
108.00	9.50	11.60
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

07/11/18

JUL 23 2018

0710F017.D 070518PAH.M Wed Jul 11 07:18:07 2018

Exception Report

Data File: J:\MS14\DATA\071018\0710F003.D
Lab ID: KWG1803064-3
RunType: MB
Matrix: WATER

Date Acquired: 07/10/2018 07:52
Date Quantitated: 07/11/2018 07:01
Batch ID: KWG1803359
Analysis Method: 8270D SIM
MethodJoinID: MJ1638

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

K5508
K5509

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:55:55
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\071018\0710F003.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 07:52	**Quant Date:**	07/11/2018 07:01	**Vial:**	3
Run Type:	MB	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1803064-3			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**		**Receive Date:**	07/05/2018

Analysis Lot:	KWG1803359	**Prep Lot:**	KWG1803064	**Report Group:**	
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1680460	**Prep Date:**	06/21/2018		

Quant Method:	J:\MS14\METHODS\SIM\070518PAH.M	**Calibration ID:**	CAL15772
Title:			
Tune Ref:	J:\MS14\DATA\071018\0710F001.D	**Method ID:**	MJ1638
MB Ref:		**Quant based on Method**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.82	0.01	136	83011m	200.00	OK
2	Acenaphthene-d10	6.37	0.00	164	39132	200.00	OK
3	Phenanthrene-d10	7.60	0.00	188	77837	200.00	OK
4	Chrysene-d12	10.17	0.00	240	70703	200.00	OK
5	Perylene-d12	13.34	0.00	264	72237	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.80	0.00	0.00	176	127414	497.99	100	42-131	OK	
3	Fluoranthene-d10	8.59	0.00	0.00	212	235606	487.75	98	42-133	OK	
4	Terphenyl-d14	8.95	0.00	0.00	244	182477	568.37	114	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene				128	0		0.0028	U	
1	2-Methylnaphthalene				142	0d		0.0026	U	
1	1-Methylnaphthalene				142	0d		0.0026	U	
1	Biphenyl	5.88		0.00	154	461	1.29	0.0115	J	
1	2,6-Dimethylnaphthalene				156	0		0.0032	U	
2	Acenaphthylene				152	0		0.0022	U	
2	Acenaphthene				154	0d		0.0024	U	
2	Dibenzofuran				168	0d		0.0020	U	
2	2,3,5-Trimethylnaphthalene				170	0d		0.0016	U	
2	Fluorene				166	0d		0.0022	U	
3	Dibenzothiophene				184	0d		0.0017	U	
3	Phenanthrene	7.62		0.00	178	124	0.2600	0.00231	J	
3	Anthracene				178	0d		0.0017	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\071018\0710F003.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 07:52	**Quant Date:**	07/11/2018 07:01	**Vial:**	3
Run Type:	MB	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1803064-3			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
3	Carbazole				167	0d		0.0022	U	
3	1-Methylphenanthrene				192	0		0.0017	U	
3	Fluoranthene				202	0d		0.0017	U	
4	Pyrene				202	0d		0.0020	U	
4	Benz(a)anthracene	10.17	0.01	0.00	228	201	0.4500	0.00400	J	
4	Chrysene				228	0d		0.0016	U	
5	Benzo(b)fluoranthene				252	0		0.0017	U	
5	Benzo(k)fluoranthene				252	0		0.0019	U	
5	Benzo(e)pyrene				252	0		0.0030	U	
5	Benzo(a)pyrene				252	0		0.0022	U	
5	Perylene				252	0d		0.0017	U	
5	Indeno(1,2,3-cd)pyrene				276	0		0.0018	U	
5	Dibenz(a,h)anthracene				278	0		0.0026	U	
5	Benzo(g,h,i)perylene				276	0		0.0018	U	

Prep Amount:	450 ml	**Dilution:**	1.0
Prep Final Vol:	4 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\071018\0710F003.D Vial: 3
Acq On : 10 Jul 2018 7:52 am Operator: LWeiskopf
Sample : KWG1803064-3 MB Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 06:12:43 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

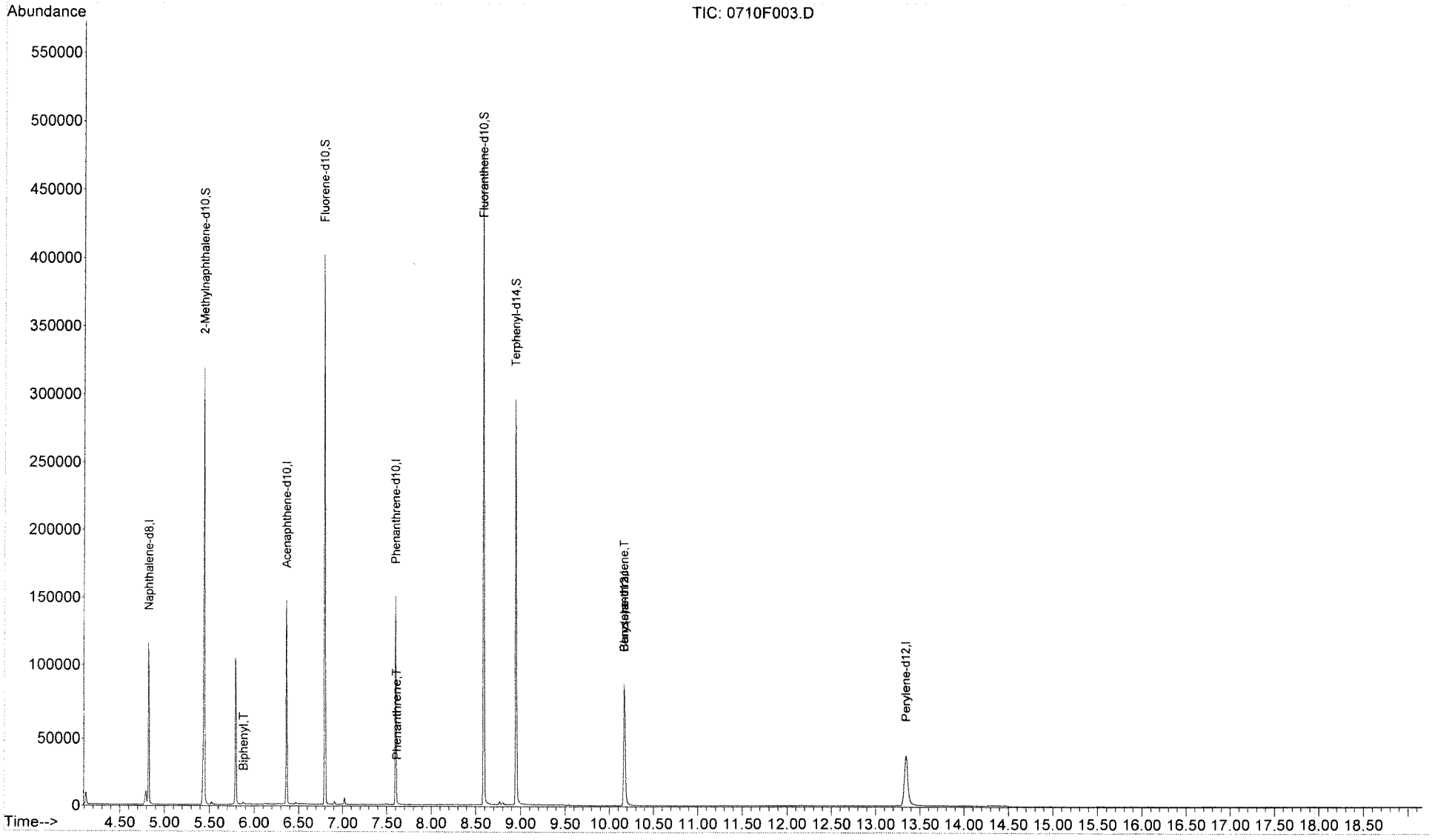
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	83011m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	39132	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.60	188	77837	200.00	ng/ml	0.00
23) Chrysene-d12	10.17	240	70703	200.00	ng/ml	0.00
28) Perylene-d12	13.34	264	72237	200.00	ng/ml	-0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.44	152	100419	425.19	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	42.52%		
13) Fluorene-d10	6.80	176	127414	497.99	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	49.80%		
22) Fluoranthene-d10	8.59	212	235606	487.75	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	48.77%		
25) Terphenyl-d14	8.95	244	182477	568.37	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	56.84%		
Target Compounds						Qvalue
6) Biphenyl	5.88	154	461	1.29	ng/ml	95
17) Phenanthrene	7.62	178	124	0.26	ng/ml	97
26) Benz(a)anthracene	10.17	228	201	0.45	ng/ml	69

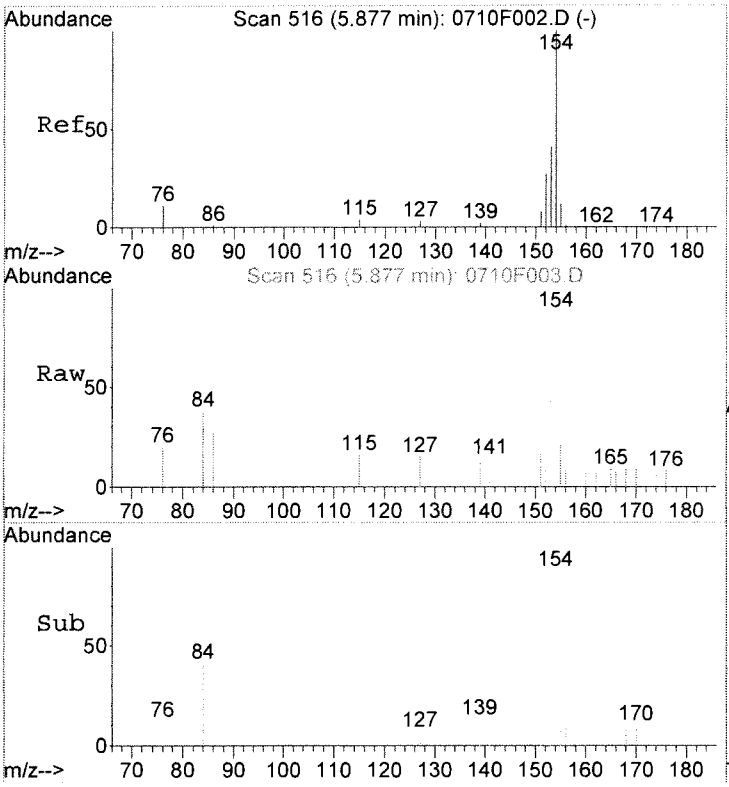
(#) = qualifier out of range (m) = manual integration
0710F003.D 070518PAH.M Wed Jul 11 07:08:33 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\071018\0710F003.D Vial: 3
Acq On : 10 Jul 2018 7:52 am Operator: LWeiskopf
Sample : KWG1803064-3 MB Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:01 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration

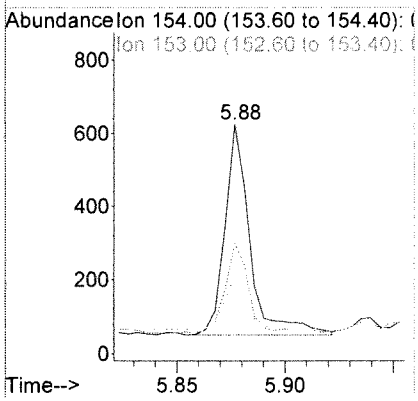


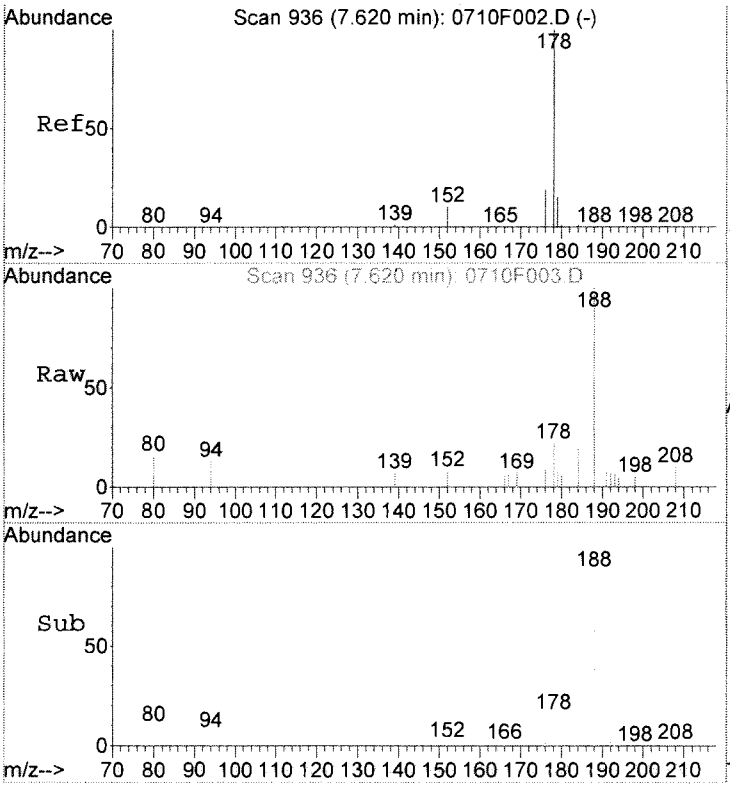


#6
Biphenyl
Concen: 1.29 ng/ml
RT: 5.88 min Scan# 516
Delta R.T. -0.00 min
Lab File: 0710F003.D
Acq: 10 Jul 2018 7:52 am

Tgt Ion:154 Resp: 461

Ion	Ratio	Lower	Upper
154	100		
153	41.9	8.2	68.2
152	24.9	6.0	46.0

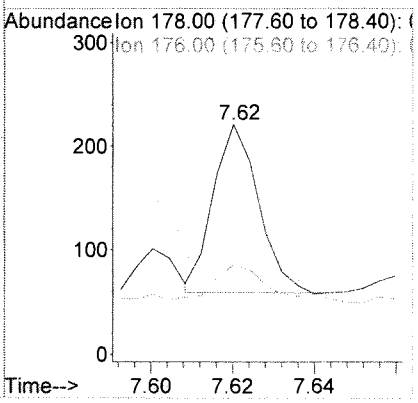


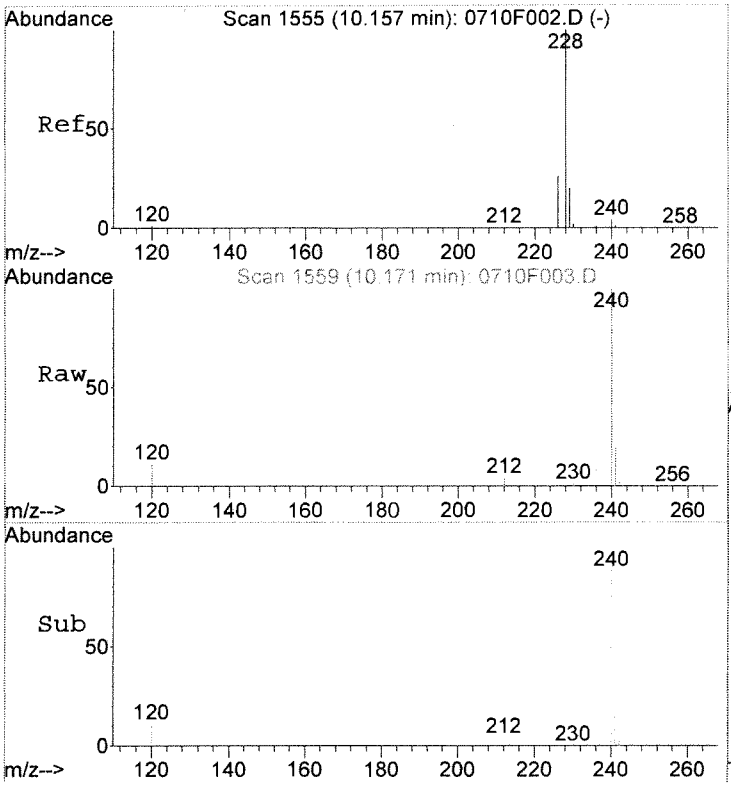


#17
Phenanthrene
Concen: 0.26 ng/ml
RT: 7.62 min Scan# 936
Delta R.T. -0.00 min
Lab File: 0710F003.D
Acq: 10 Jul 2018 7:52 am

Tgt Ion:178 Resp: 124

Ion	Ratio	Lower	Upper
178	100		
176	20.4	0.0	48.5
179	15.4	0.0	35.2

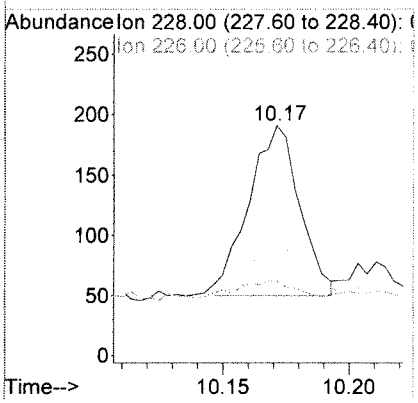




#26
Benz(a)anthracene
Concen: 0.45 ng/ml
RT: 10.17 min Scan# 1559
Delta R.T. 0.01 min
Lab File: 0710F003.D
Acq: 10 Jul 2018 7:52 am

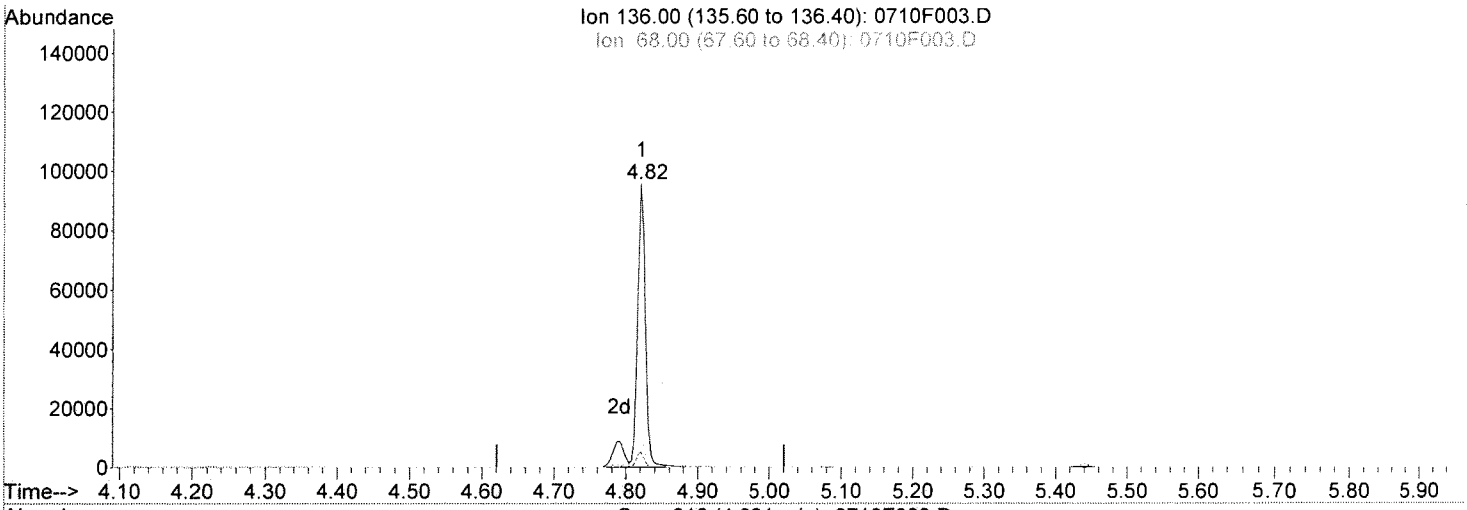
Tgt Ion:228 Resp: 201

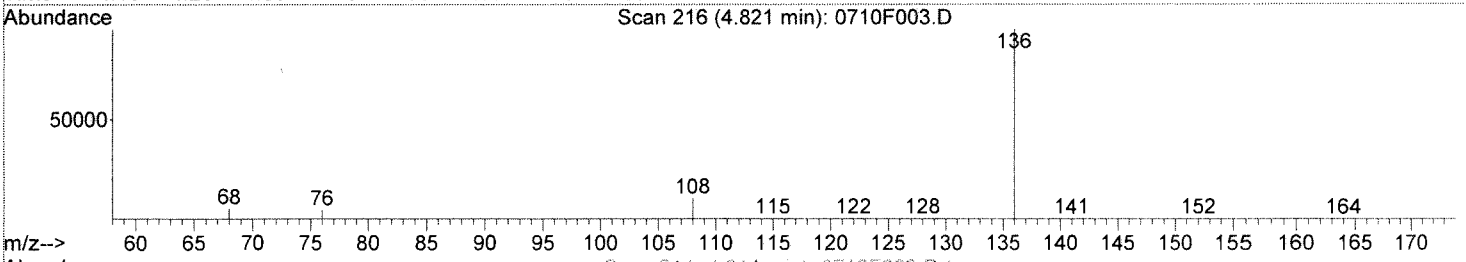
Ion	Ratio	Lower	Upper
228	100		
226	8.5	0.0	56.0
229	31.2	0.0	39.5

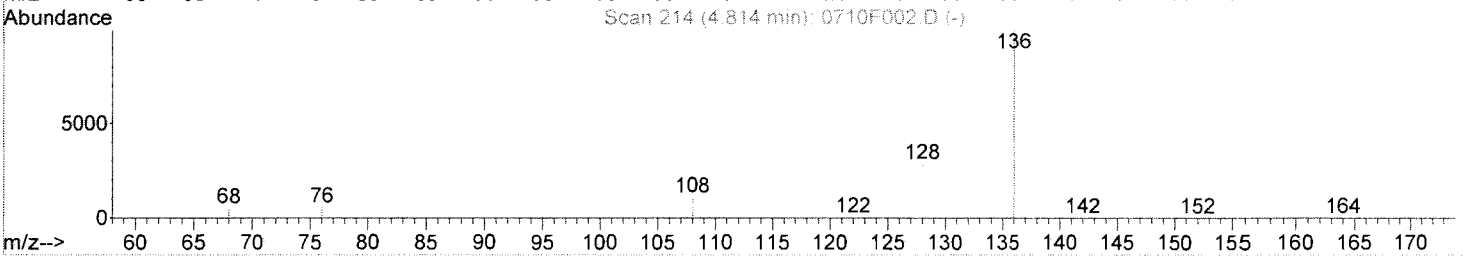


Data File : J:\MS14\DATA\071018\0710F003.D Vial: 3
Acq On : 10 Jul 2018 7:52 am Operator: LWeiskopf
Sample : KWG1803064-3 MB Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 6:12 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration







TIC: 0710F003.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml

response 72892

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.26
108.00	9.50	10.77
0.00	0.00	0.00

Manual Integration:

Before

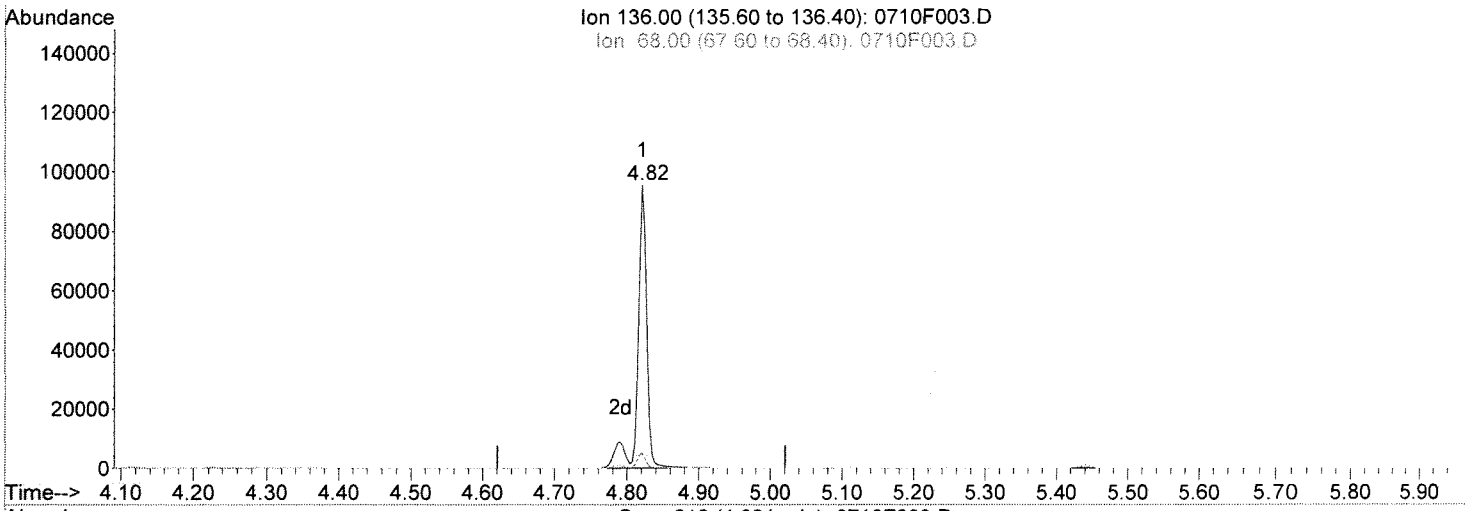
07/11/18

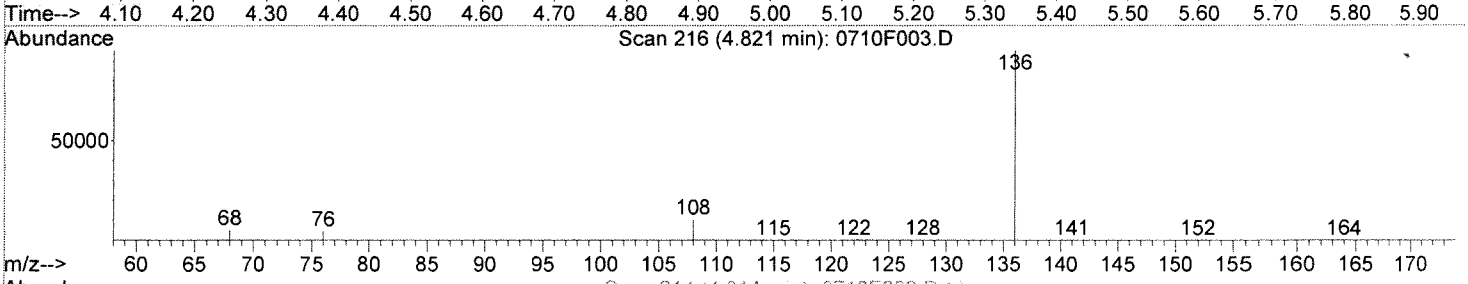
JUL 23 2018

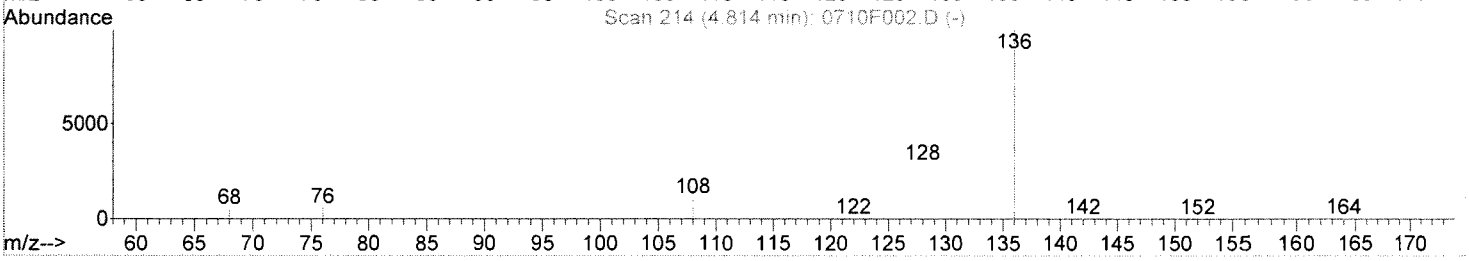
0710F003.D 070518PAH.M Wed Jul 11 07:00:34 2018

Data File : J:\MS14\DATA\071018\0710F003.D Vial: 3
Acq On : 10 Jul 2018 7:52 am Operator: LWeiskopf
Sample : KWG1803064-3 MB Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:00 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration







TIC: 0710F003.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml m

response 83011

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.34
108.00	9.50	10.82
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

07/11/18

JUL 23 2018

0710F003.D 070518PAH.M Wed Jul 11 07:00:43 2018

Exception Report

Data File: J:\MS14\DATA\071018\0710F004.D
Lab ID: KWG1803064-1
RunType: LCS
Matrix: WATER

Date Acquired: 07/10/2018 08:18
Date Quantitated: 07/11/2018 07:01
Batch ID: KWG1803359
Analysis Method: 8270D SIM
MethodJoinID: MJ1638

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

K5808
K5809

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:55:59
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\071018\0710F004.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 08:18	**Quant Date:**	07/11/2018 07:01	**Vial:**	4
Run Type:	LCS	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1803064-1			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**		**Receive Date:**	07/05/2018

Analysis Lot:	KWG1803359	**Prep Lot:**	KWG1803064	**Report Group:**	
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1680458	**Prep Date:**	06/21/2018		

Quant Method:	J:\MS14\METHODS\SIM\070518PAH.M	**Calibration ID:**	CAL15772
Title:			
Tune Ref:	J:\MS14\DATA\071018\0710F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\071018\0710F003.D	**Quant based on Method**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.82	0.01	136	84590m	200.00	OK
2	Acenaphthene-d10	6.37	0.00	164	37956	200.00	OK
3	Phenanthrene-d10	7.60	0.00	188	77126	200.00	OK
4	Chrysene-d12	10.17	0.00	240	74289	200.00	OK
5	Perylene-d12	13.35	0.01	264	72717	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.80	0.00	0.00	176	69809	281.30	56	42-131	OK	
3	Fluoranthene-d10	8.59	0.00	0.00	212	128816	269.13	54	42-133	OK	
4	Terphenyl-d14	8.95	0.00	0.00	244	177768	526.98	105	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.84	0.01	0.00	128	87558m	188.87	1.68		
1	2-Methylnaphthalene	5.47		0.00	142	50920	171.82	1.53		
1	1-Methylnaphthalene	5.56		0.00	142	48636	169.63	1.51		
1	Biphenyl	5.88		0.00	154	63379	173.41	1.54		
1	2,6-Dimethylnaphthalene	6.01		0.00	156	42863	168.11	1.49		
2	Acenaphthylene	6.24		0.00	152	84234	189.85	1.69		
2	Acenaphthene	6.39		0.00	154	46438	182.35	1.62		
2	Dibenzofuran	6.54		0.00	168	77169	189.02	1.68		
2	2,3,5-Trimethylnaphthalene	6.71		0.00	170	41784	174.24	1.55		
2	Fluorene	6.82		0.00	166	56354	178.16	1.58		
3	Dibenzothiophene	7.52		0.00	184	87857	184.36	1.64		
3	Phenanthrene	7.62		0.00	178	83509	177.22	1.58		
3	Anthracene	7.66		0.00	178	83317	180.99	1.61		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\071018\0710F004.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 08:18	**Quant Date:**	07/11/2018 07:01	**Vial:**	4
Run Type:	LCS	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1803064-1			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
3	Carbazole	7.80		0.00	167	73782	177.54	1.58		
3	1-Methylphenanthrene	8.13		0.00	192	62637	168.69	1.50		
3	Fluoranthene	8.60		0.00	202	95158	165.88	1.47		
4	Pyrene	8.80		0.00	202	100626	192.86	1.71		
4	Benz(a)anthracene	10.16		0.00	228	80032	170.28	1.51		
4	Chrysene	10.21		0.00	228	82093	176.97	1.57		
5	Benzo(b)fluoranthene	12.28		0.00	252	80013	176.39	1.57		
5	Benzo(k)fluoranthene	12.35		0.00	252	82343	180.95	1.61		
5	Benzo(e)pyrene	13.02		0.00	252	79014	179.00	1.59		
5	Benzo(a)pyrene	13.17		0.00	252	65814	172.51	1.53		
5	Perylene	13.42	-0.01	0.00	252	72472	181.62	1.61		
5	Indeno(1,2,3-cd)pyrene	15.48	-0.01	0.00	276	55624	165.61	1.47		
5	Dibenz(a,h)anthracene	15.55		0.00	278	55399	152.45	1.36		
5	Benzo(g,h,i)perylene	15.88		0.00	276	74589	173.89	1.55		

Prep Amount:	450 ml	**Dilution:**	1.0
Prep Final Vol:	4 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Lab Control Spike Summary Report

Lab Control Spike Information ***ListJoinID :*** LJ18599

Data File:	J:\MS14\DATA\071018\0710F004.D	**Instrument:**	MS14
Lab ID:	KWG1803064-1	**Dilution:**	1
Client ID:	Lab Control Sample	**Units:**	ug/L
Prod Code:	8270D PAH SIM	**Acqu Date:**	07/10/2018 08:18
Matrix:	WATER	**Quant Date:**	07/11/2018 07:01

Duplicate Lab Control Spike Information

Data File:	J:\MS14\DATA\071018\0710F005.D	**Instrument:**	MS14
Lab ID:	KWG1803064-2	**Dilution:**	1
Client ID:	Duplicate Lab Control Sample	**Units:**	ug/L
Prod Code:	8270D PAH SIM	**Acqu Date:**	07/10/2018 08:44
Matrix:	WATER	**Quant Date:**	07/11/2018 07:02

	LCS			DLCS					
Parameter Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	1.68	2.78	60	2.94	2.78	106	52-115	55 *	30
2-Methylnaphthalene	1.53	2.78	55	2.84	2.78	102	48-120	60 *	30
Acenaphthylene	1.69	2.78	61	3.23	2.78	116	58-124	63 *	30
Acenaphthene	1.62	2.78	58 *	3.19	2.78	115	63-121	65 *	30
Fluorene	1.58	2.78	57 *	3.16	2.78	114	68-121	67 *	30
Phenanthrene	1.58	2.78	57 *	3.22	2.78	116	64-126	69 *	30
Anthracene	1.61	2.78	58 *	3.30	2.78	119	68-127	69 *	30
Fluoranthene	1.47	2.78	53 *	3.02	2.78	109	70-127	69 *	30
Pyrene	1.71	2.78	62 *	3.45	2.78	124	72-127	67 *	30
Benz(a)anthracene	1.51	2.78	54 *	3.22	2.78	116	74-124	72 *	30
Chrysene	1.57	2.78	57 *	3.27	2.78	118	74-132	70 *	30
Benzo(b)fluoranthene	1.57	2.78	56 *	3.39	2.78	122	73-136	74 *	30
Benzo(k)fluoranthene	1.61	2.78	58 *	3.35	2.78	121	74-134	70 *	30
Benzo(a)pyrene	1.53	2.78	55 *	3.32	2.78	120	75-131	74 *	30
Indeno(1,2,3-cd)pyrene	1.47	2.78	53 *	3.24	2.78	117	63-136	75 *	30
Dibenz(a,h)anthracene	1.36	2.78	49 *	2.95	2.78	106	59-135	74 *	30
Benzo(g,h,i)perylene	1.55	2.78	56 *	3.27	2.78	118	63-127	72 *	30

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Lab Control Spike Summary Report

Lab Control Spike Information — **ListJoinID :** LJ18861

Data File:	J:\MS14\DATA\071018\0710F004.D	**Instrument:**	MS14
Lab ID:	KWG1803064-1	**Dilution:**	1
Client ID:	Lab Control Sample	**Units:**	ug/L
Prod Code:	8270D PAH SIM	**Acqu Date:**	07/10/2018 08:18
Matrix:	WATER	**Quant Date:**	07/11/2018 07:01

Duplicate Lab Control Spike Information

Data File:	J:\MS14\DATA\071018\0710F005.D	**Instrument:**	MS14
Lab ID:	KWG1803064-2	**Dilution:**	1
Client ID:	Duplicate Lab Control Sample	**Units:**	ug/L
Prod Code:	8270D PAH SIM	**Acqu Date:**	07/10/2018 08:44
Matrix:	WATER	**Quant Date:**	07/11/2018 07:02

	LCS			DLCS						
Parameter Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**		**RPD Limit**
Naphthalene	1.68	2.78	60	2.94	2.78	106	52-115	55	*	30
2-Methylnaphthalene	1.53	2.78	55	2.84	2.78	102	48-120	60	*	30
Acenaphthylene	1.69	2.78	61	3.23	2.78	116	58-124	63	*	30
Acenaphthene	1.62	2.78	58 *	3.19	2.78	115	63-121	65	*	30
Dibenzofuran	1.68	2.78	60	3.26	2.78	117	56-132	64	*	30
Fluorene	1.58	2.78	57 *	3.16	2.78	114	68-121	67	*	30
Phenanthrene	1.58	2.78	57 *	3.22	2.78	116	64-126	69	*	30
Anthracene	1.61	2.78	58 *	3.30	2.78	119	68-127	69	*	30
Fluoranthene	1.47	2.78	53 *	3.02	2.78	109	70-127	69	*	30
Pyrene	1.71	2.78	62 *	3.45	2.78	124	72-127	67	*	30
Benz(a)anthracene	1.51	2.78	54 *	3.22	2.78	116	74-124	72	*	30
Chrysene	1.57	2.78	57 *	3.27	2.78	118	74-132	70	*	30
Benzo(b)fluoranthene	1.57	2.78	56 *	3.39	2.78	122	73-136	74	*	30
Benzo(k)fluoranthene	1.61	2.78	58 *	3.35	2.78	121	74-134	70	*	30
Benzo(a)pyrene	1.53	2.78	55 *	3.32	2.78	120	75-131	74	*	30
Indeno(1,2,3-cd)pyrene	1.47	2.78	53 *	3.24	2.78	117	63-136	75	*	30
Dibenz(a,h)anthracene	1.36	2.78	49 *	2.95	2.78	106	59-135	74	*	30
Benzo(g,h,i)perylene	1.55	2.78	56 *	3.27	2.78	118	63-127	72	*	30

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed: 07/11/2018 07:52:02
u:\Stealth\Crystal.rpt\dlcs1.rpt

Data File : J:\MS14\DATA\071018\0710F004.D Vial: 4
Acq On : 10 Jul 2018 8:18 am Operator: LWeiskopf
Sample : KWG1803064-1 LCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 06:12:47 2018 Quant Results File: 070518PAH.RES

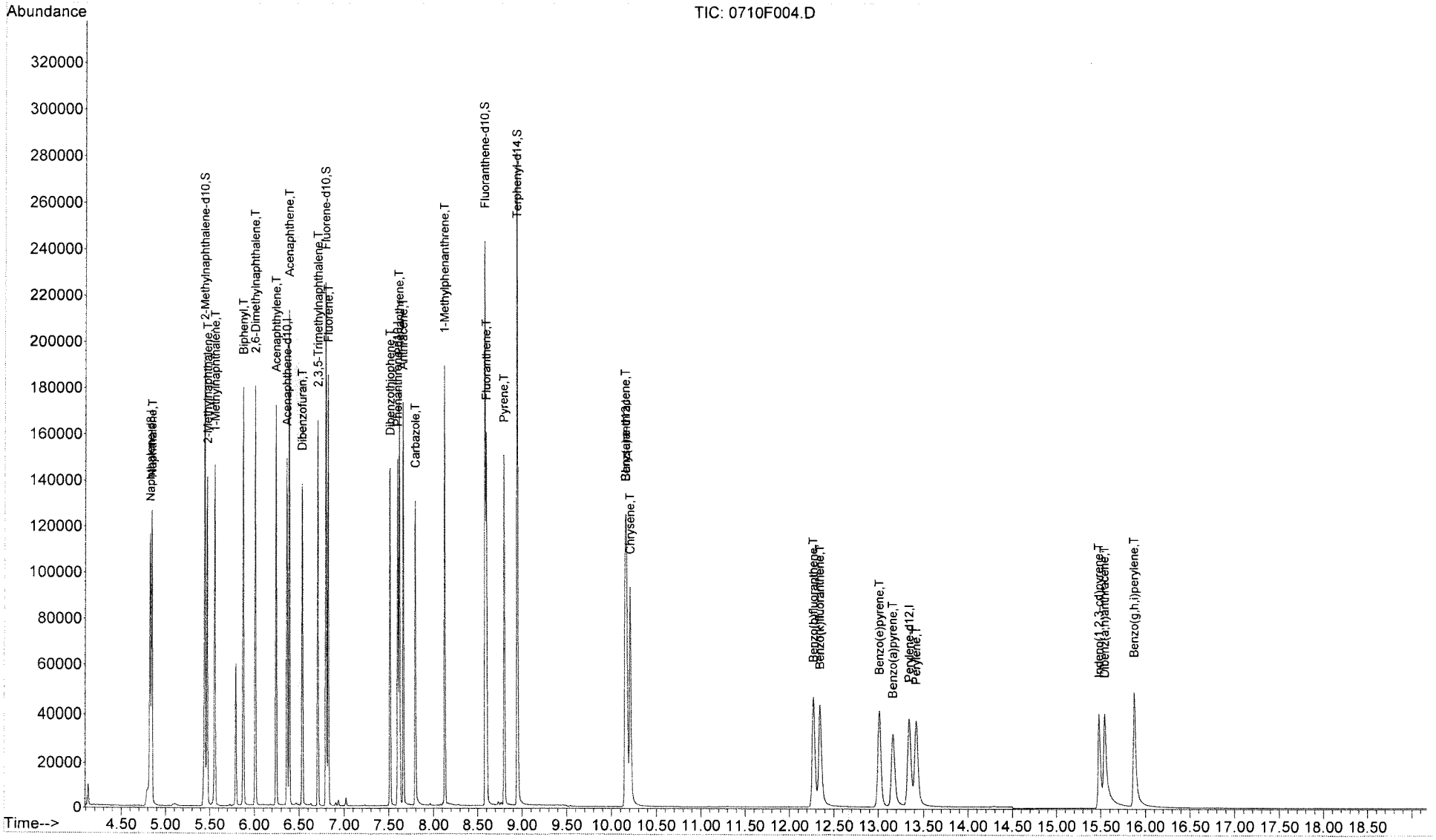
Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	84590m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	37956	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.60	188	77126	200.00	ng/ml	0.00
23) Chrysene-d12	10.17	240	74289	200.00	ng/ml	0.00
28) Perylene-d12	13.35	264	72717	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.44	152	58396	242.64	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 24.26%			
13) Fluorene-d10	6.80	176	69809	281.30	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 28.13%			
22) Fluoranthene-d10	8.59	212	128816	269.13	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 26.91%			
25) Terphenyl-d14	8.95	244	177768	526.98	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 52.70%			
Target Compounds						Qvalue
2) Naphthalene	4.84	128	87558m	188.87	ng/ml	
4) 2-Methylnaphthalene	5.47	142	50920	171.82	ng/ml	97
5) 1-Methylnaphthalene	5.56	142	48636	169.63	ng/ml	96
6) Biphenyl	5.88	154	63379	173.41	ng/ml	96
7) 2,6-Dimethylnaphthalene	6.01	156	42863	168.11	ng/ml	97
9) Acenaphthylene	6.24	152	84234	189.85	ng/ml	99
10) Acenaphthene	6.39	154	46438	182.35	ng/ml	97
11) Dibenzofuran	6.54	168	77169	189.02	ng/ml	87
12) 2,3,5-Trimethylnaphthalene	6.71	170	41784	174.24	ng/ml	92
14) Fluorene	6.82	166	56354	178.16	ng/ml	98
16) Dibenzothiophene	7.52	184	87857	184.36	ng/ml	94
17) Phenanthrene	7.62	178	83509	177.22	ng/ml	100
18) Anthracene	7.66	178	83317	180.99	ng/ml	99
19) Carbazole	7.80	167	73782	177.54	ng/ml	98
20) 1-Methylphenanthrene	8.13	192	62637	168.69	ng/ml	96
21) Fluoranthene	8.60	202	95158	165.88	ng/ml	99
24) Pyrene	8.80	202	100626	192.86	ng/ml	95
26) Benz(a)anthracene	10.16	228	80032	170.28	ng/ml	99
27) Chrysene	10.21	228	82093	176.97	ng/ml	99
29) Benzo(b)fluoranthene	12.28	252	80013	176.39	ng/ml	99
30) Benzo(k)fluoranthene	12.35	252	82343	180.95	ng/ml	98
31) Benzo(e)pyrene	13.02	252	79014	179.00	ng/ml	97
32) Benzo(a)pyrene	13.17	252	65814	172.51	ng/ml	97
33) Perylene	13.42	252	72472	181.62	ng/ml	97
34) Indeno(1,2,3-cd)pyrene	15.48	276	55624	165.61	ng/ml	98
35) Dibenz(a,h)anthracene	15.55	278	55399	152.45	ng/ml	98
36) Benzo(g,h,i)perylene	15.88	276	74589	173.89	ng/ml	97

(#) = qualifier out of range (m) = manual integration
0710F004.D 070518PAH.M Wed Jul 11 07:08:41 2018 Page 1

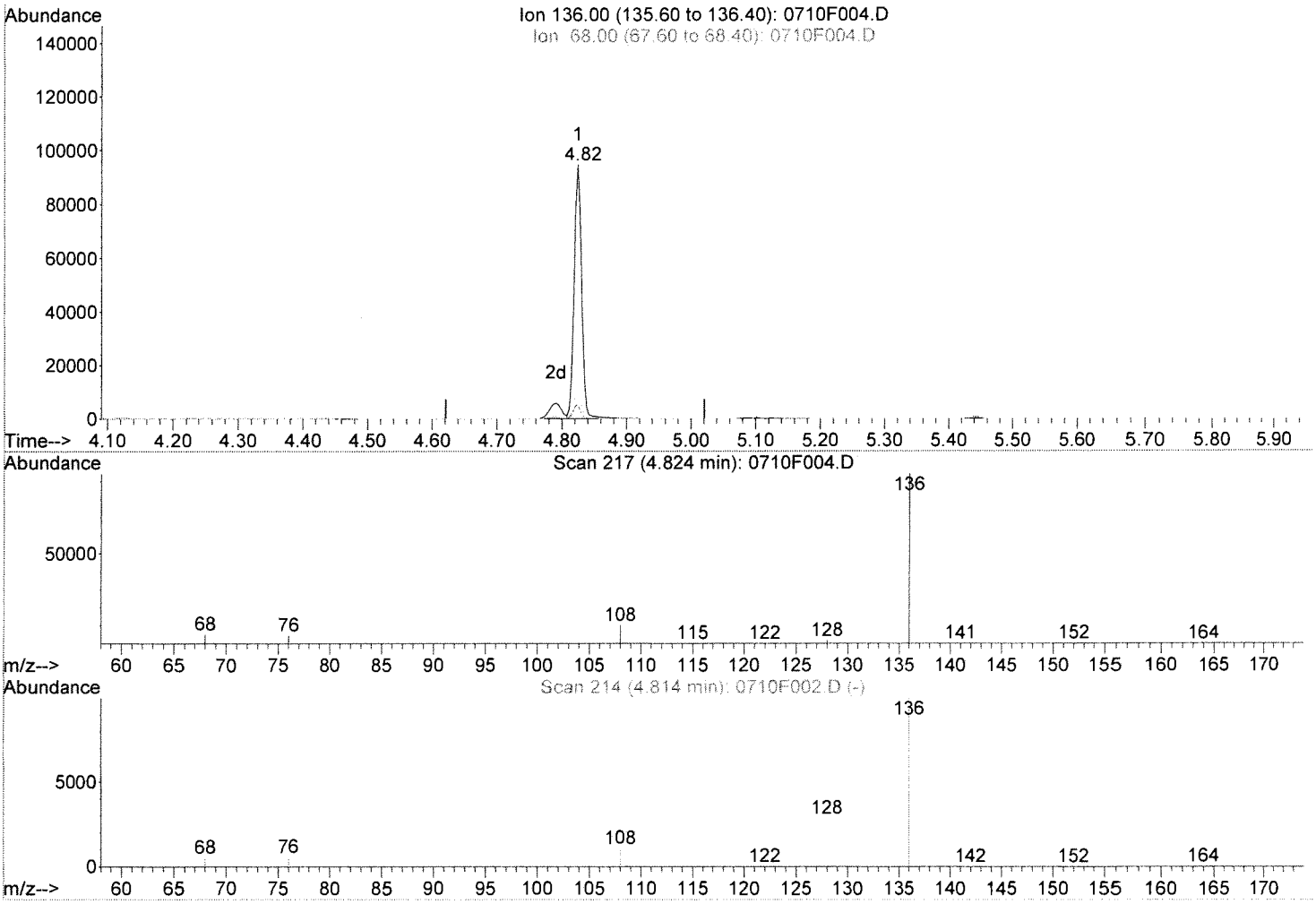
Data File : J:\MS14\DATA\071018\0710F004.D Vial: 4
Acq On : 10 Jul 2018 8:18 am Operator: LWeiskopf
Sample : KWG1803064-1 LCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:01 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Initial Calibration



Data File : J:\MS14\DATA\071018\0710F004.D Vial: 4
Acq On : 10 Jul 2018 8:18 am Operator: LWeiskopf
Sample : KWG1803064-1 LCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 6:12 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration



TIC: 0710F004.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml

response 76922

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.23
108.00	9.50	10.70
0.00	0.00	0.00

Manual Integration:

Before

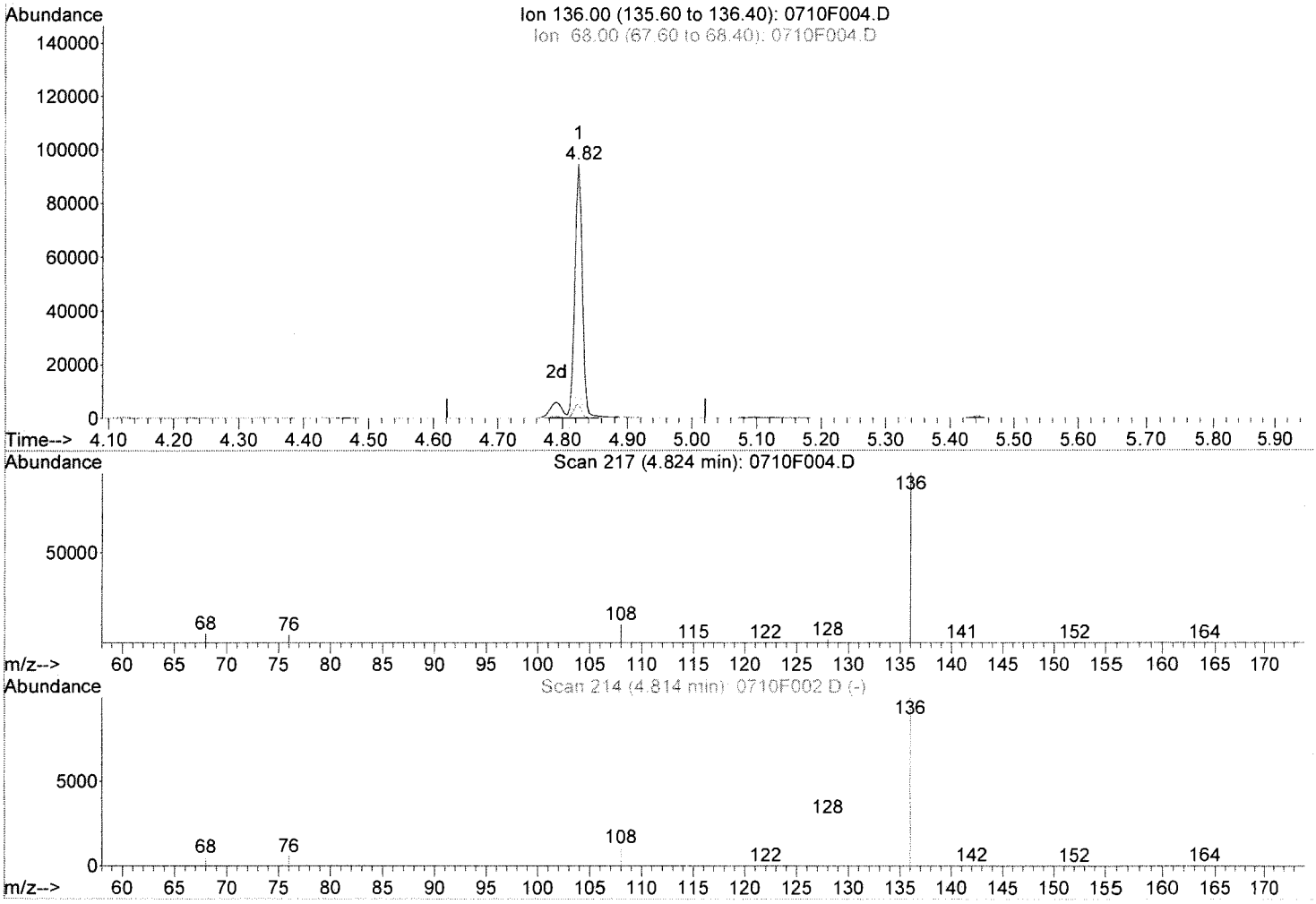
07/11/18

JUL 23 2018

0710F004.D 070518PAH.M Wed Jul 11 07:01:31 2018

Data File : J:\MS14\DATA\071018\0710F004.D Vial: 4
Acq On : 10 Jul 2018 8:18 am Operator: LWeiskopf
Sample : KWG1803064-1 LCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:01 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration



TIC: 0710F004.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml m

response 84590

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.31
108.00	9.50	10.76
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

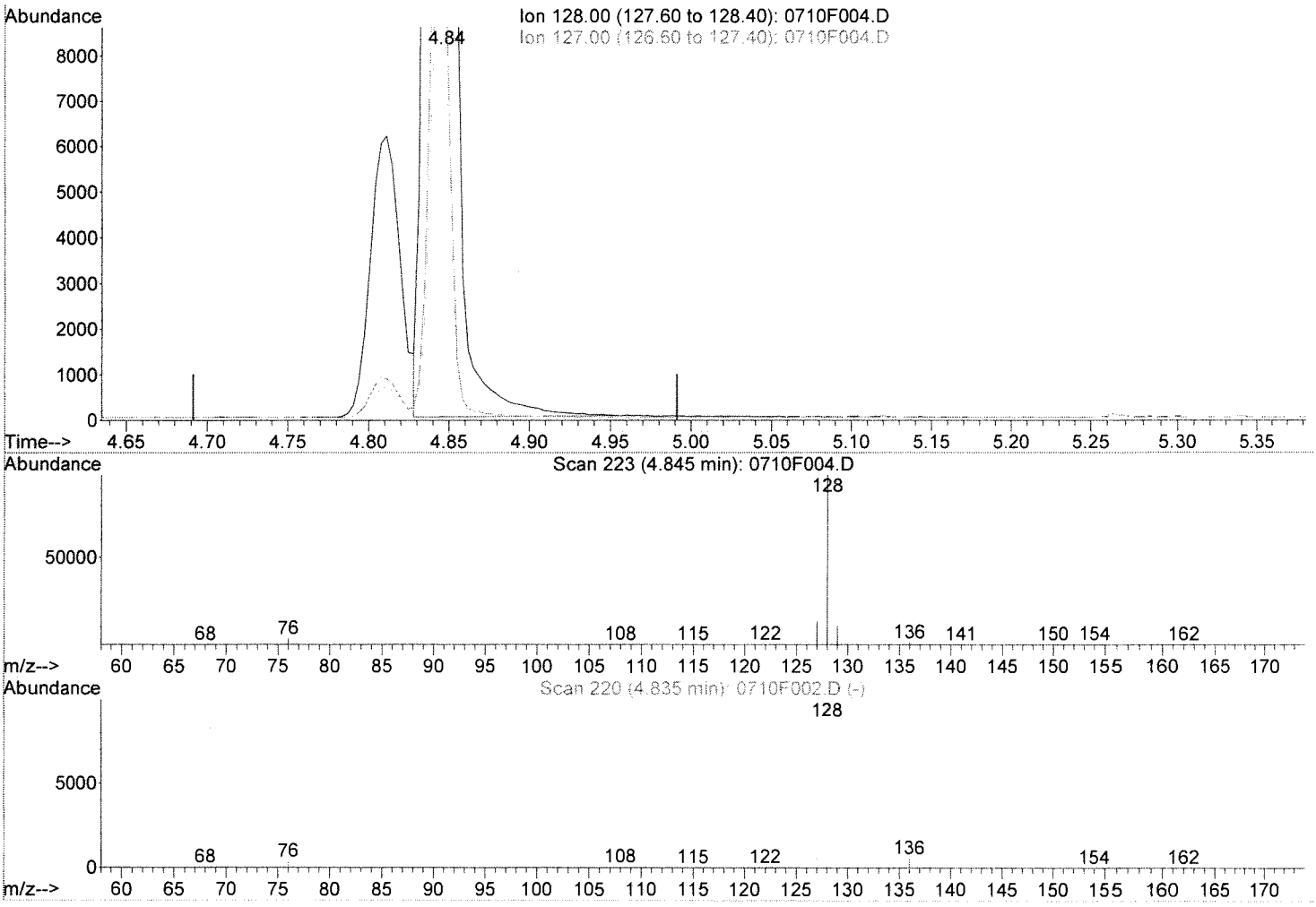
07/11/18

JUL 23 2018

0710F004.D 070518PAH.M Wed Jul 11 07:01:40 2018

Data File : J:\MS14\DATA\071018\0710F004.D Vial: 4
Acq On : 10 Jul 2018 8:18 am Operator: LWeiskopf
Sample : KWG1803064-1 LCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:01 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration



TIC: 0710F004.D

(2) Naphthalene (T)

4.84min 170.71ng/ml

response 79137

Ion	Exp%	Act%
128.00	100	100
127.00	12.40	13.41
129.00	10.80	10.84
0.00	0.00	0.00

Manual Integration:

Before

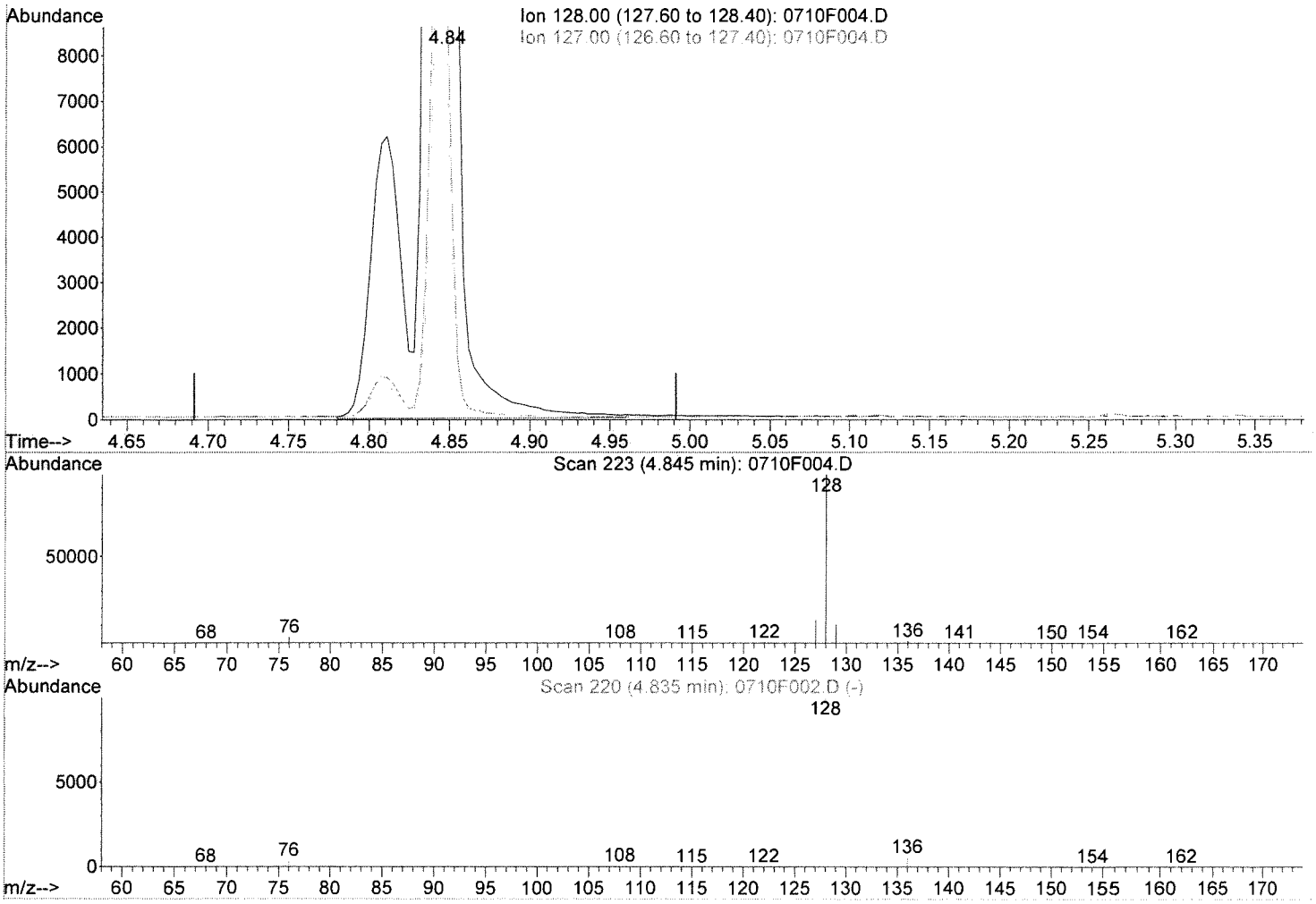
07/11/18

JUL 23 2018

0710F004.D 070518PAH.M Wed Jul 11 07:01:46 2018

Data File : J:\MS14\DATA\071018\0710F004.D Vial: 4
Acq On : 10 Jul 2018 8:18 am Operator: LWeiskopf
Sample : KWG1803064-1 LCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:01 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration



TIC: 0710F004.D

(2) Naphthalene (T)

4.84min 188.87ng/ml m

response 87558

Ion	Exp%	Act%
128.00	100	100
127.00	12.40	13.46
129.00	10.80	10.89
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

07/11/18

JUL 23 2018

0710F004.D 070518PAH.M Wed Jul 11 07:01:51 2018

Data File: J:\MS14\DATA\071018\0710F005.D
Lab ID: KWG1803064-2
RunType: DLCS
Matrix: WATER

Date Acquired: 07/10/2018 08:44
Date Quantitated: 07/11/2018 07:02
Batch ID: KWG1803359
Analysis Method: 8270D SIM
MethodJoinID: MJ1638

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

K5808
K5809

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:56:03
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\071018\0710F005.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 08:44	**Quant Date:**	07/11/2018 07:02	**Vial:**	5
Run Type:	DLCS	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1803064-2			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**		**Receive Date:**	07/05/2018

Analysis Lot:	KWG1803359	**Prep Lot:**	KWG1803064	**Report Group:**	
Analysis Method:	8270D SIM	**Prep Method:**	EPA 3511		
Prep Ref:	1680459	**Prep Date:**	06/21/2018		

Quant Method:	J:\MS14\METHODS\SIM\070518PAH.M	**Calibration ID:**	CAL15772
Title:			
Tune Ref:	J:\MS14\DATA\071018\0710F001.D	**Method ID:**	MJ1638
MB Ref:	J:\MS14\DATA\071018\0710F003.D	**Quant based on Method**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.82	0.01	136	82407m	200.00	OK
2	Acenaphthene-d10	6.37	0.00	164	36226	200.00	OK
3	Phenanthrene-d10	7.60	0.00	188	74145	200.00	OK
4	Chrysene-d12	10.17	0.00	240	73250	200.00	OK
5	Perylene-d12	13.35	0.01	264	74124	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.80	0.00	0.00	176	120740	509.76	102	42-131	OK	
3	Fluoranthene-d10	8.59	0.00	0.00	212	229533	498.84	100	42-133	OK	
4	Terphenyl-d14	8.95	0.00	0.00	244	176866	531.74	106	32-129	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.84	0.01	0.00	128	149463m	330.95	2.94		
1	2-Methylnaphthalene	5.47		0.00	142	92144	319.16	2.84		
1	1-Methylnaphthalene	5.56		0.00	142	87587	313.58	2.79		
1	Biphenyl	5.88		0.00	154	117998	331.41	2.95		
1	2,6-Dimethylnaphthalene	6.01		0.00	156	82285	331.27	2.94		
2	Acenaphthylene	6.24		0.00	152	153963	363.59	3.23		
2	Acenaphthene	6.39		0.00	154	87313	359.22	3.19		
2	Dibenzofuran	6.54		0.00	168	142751	366.36	3.26		
2	2,3,5-Trimethylnaphthalene	6.71		0.00	170	82412	360.07	3.20		
2	Fluorene	6.82		0.00	166	107385	355.70	3.16		
3	Dibenzothiophene	7.52		0.00	184	173894	379.56	3.37		
3	Phenanthrene	7.62		0.00	178	164076	362.20	3.22		
3	Anthracene	7.66		0.00	178	164375	371.42	3.30		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\071018\0710F005.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 08:44	**Quant Date:**	07/11/2018 07:02	**Vial:**	5
Run Type:	DLCS	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1803064-2			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
3	Carbazole	7.80		0.00	167	89389	223.74	1.99		
3	1-Methylphenanthrene	8.13		0.00	192	125461	351.46	3.12		
3	Fluoranthene	8.60		0.00	202	187238	339.51	3.02		
4	Pyrene	8.80		0.00	202	199874	388.52	3.45		
4	Benz(a)anthracene	10.16		0.00	228	168087	362.70	3.22		
4	Chrysene	10.21		0.00	228	168494	368.37	3.27		
5	Benzo(b)fluoranthene	12.28		0.00	252	176479	381.67	3.39		
5	Benzo(k)fluoranthene	12.35		0.00	252	174688	376.60	3.35		
5	Benzo(e)pyrene	13.02		0.00	252	168629	374.77	3.33		
5	Benzo(a)pyrene	13.17		0.00	252	145373	373.80	3.32		
5	Perylene	13.43		0.00	252	155788	383.01	3.40		
5	Indeno(1,2,3-cd)pyrene	15.49		0.00	276	124938	364.91	3.24		
5	Dibenz(a,h)anthracene	15.55		0.00	278	123136	332.42	2.95		
5	Benzo(g,h,i)perylene	15.88		0.00	276	161059	368.34	3.27		

Prep Amount:	450 ml	**Dilution:**	1.0
Prep Final Vol:	4 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\071018\0710F005.D Vial: 5
Acq On : 10 Jul 2018 8:44 am Operator: LWeiskopf
Sample : KWG1803064-2 DLCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 06:12:49 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

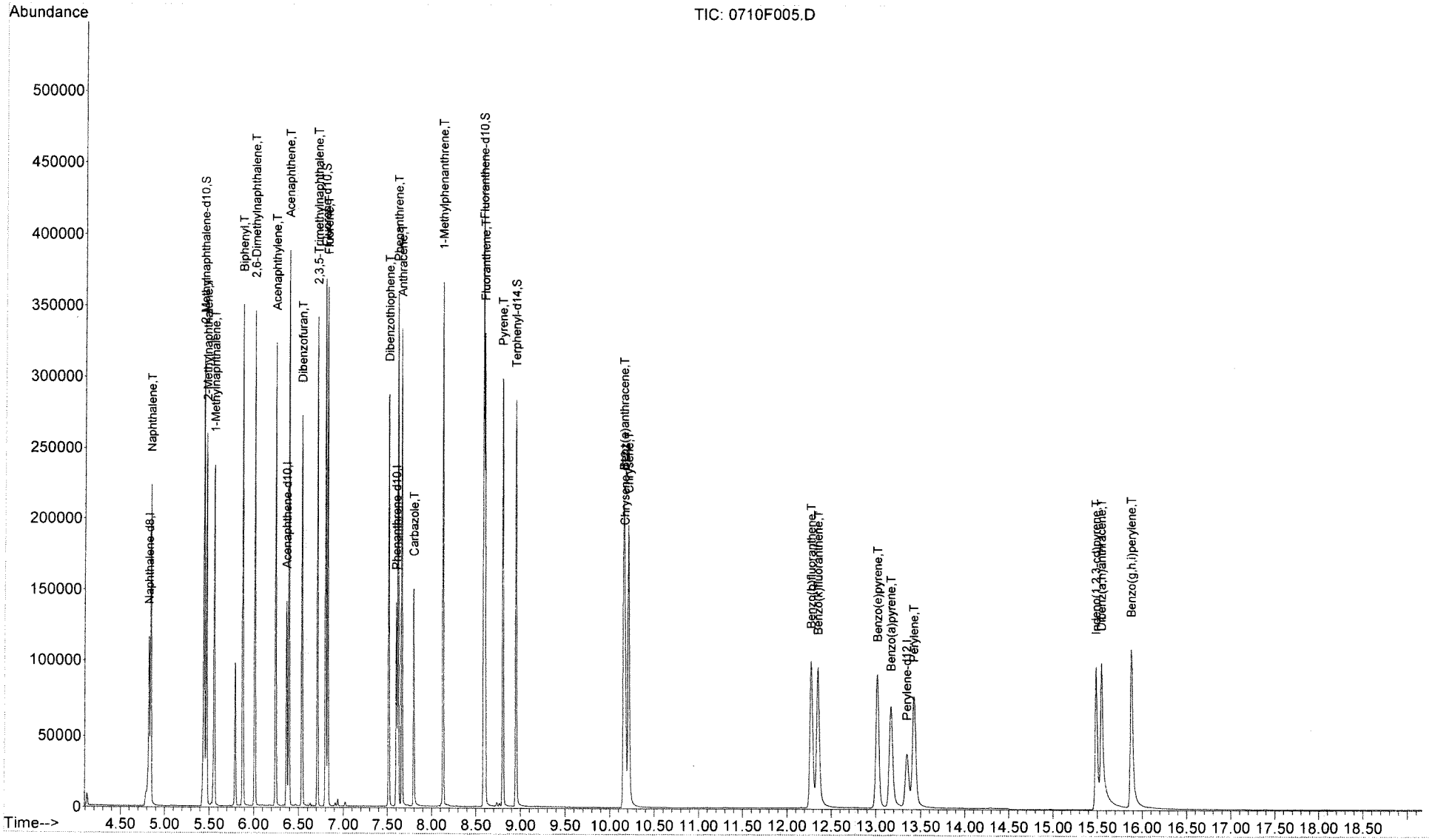
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	82407m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	36226	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.60	188	74145	200.00	ng/ml	0.00
23) Chrysene-d12	10.17	240	73250	200.00	ng/ml	0.00
28) Perylene-d12	13.35	264	74124	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.44	152	100152	427.17	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	42.72%		
13) Fluorene-d10	6.80	176	120740	509.76	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	50.98%		
22) Fluoranthene-d10	8.59	212	229533	498.84	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	49.88%		
25) Terphenyl-d14	8.95	244	176866	531.74	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	53.17%		
Target Compounds						Qvalue
2) Naphthalene	4.84	128	149463m	330.95	ng/ml	
4) 2-Methylnaphthalene	5.47	142	92144	319.16	ng/ml	94
5) 1-Methylnaphthalene	5.56	142	87587	313.58	ng/ml	97
6) Biphenyl	5.88	154	117998	331.41	ng/ml	95
7) 2,6-Dimethylnaphthalene	6.01	156	82285	331.27	ng/ml	97
9) Acenaphthylene	6.24	152	153963	363.59	ng/ml	98
10) Acenaphthene	6.39	154	87313	359.22	ng/ml	98
11) Dibenzofuran	6.54	168	142751	366.36	ng/ml	88
12) 2,3,5-Trimethylnaphthalene	6.71	170	82412	360.07	ng/ml	90
14) Fluorene	6.82	166	107385	355.70	ng/ml	98
16) Dibenzothiophene	7.52	184	173894	379.56	ng/ml	93
17) Phenanthrene	7.62	178	164076	362.20	ng/ml	100
18) Anthracene	7.66	178	164375	371.42	ng/ml	99
19) Carbazole	7.80	167	89389	223.74	ng/ml	98
20) 1-Methylphenanthrene	8.13	192	125461	351.46	ng/ml	96
21) Fluoranthene	8.60	202	187238	339.51	ng/ml	99
24) Pyrene	8.80	202	199874	388.52	ng/ml	98
26) Benz(a)anthracene	10.16	228	168087	362.70	ng/ml	100
27) Chrysene	10.21	228	168494	368.37	ng/ml	100
29) Benzo(b)fluoranthene	12.28	252	176479	381.67	ng/ml	98
30) Benzo(k)fluoranthene	12.35	252	174688	376.60	ng/ml	98
31) Benzo(e)pyrene	13.02	252	168629	374.77	ng/ml	98
32) Benzo(a)pyrene	13.17	252	145373	373.80	ng/ml	98
33) Perylene	13.43	252	155788	383.01	ng/ml	97
34) Indeno(1,2,3-cd)pyrene	15.49	276	124938	364.91	ng/ml	98
35) Dibenz(a,h)anthracene	15.55	278	123136	332.42	ng/ml	99
36) Benzo(g,h,i)perylene	15.88	276	161059	368.34	ng/ml	98

(#) = qualifier out of range (m) = manual integration
0710F005.D 070518PAH.M Wed Jul 11 07:08:46 2018 Page 1

Quantitation Report (QT Reviewed)

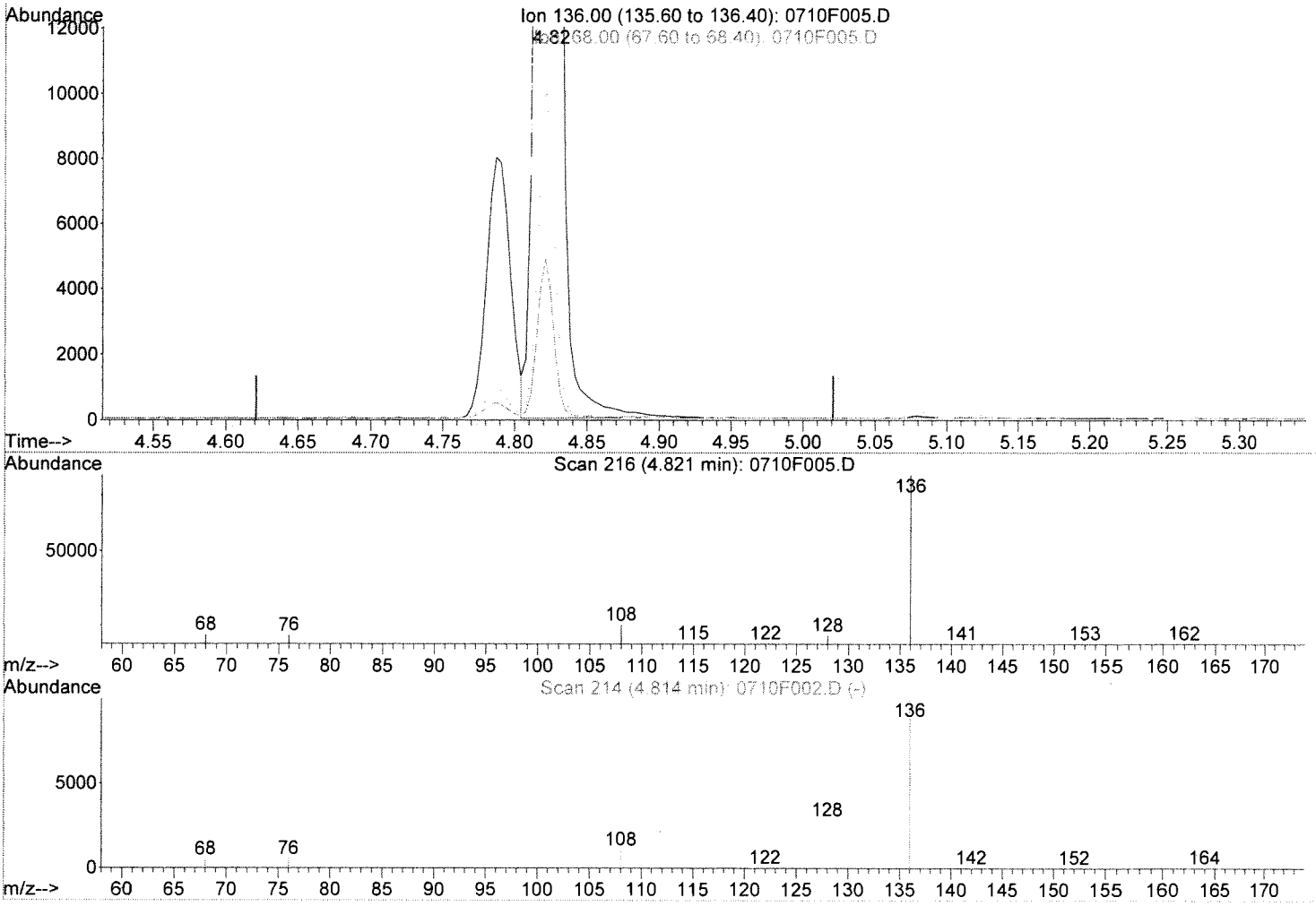
Data File : J:\MS14\DATA\071018\0710F005.D Vial: 5
Acq On : 10 Jul 2018 8:44 am Operator: LWeiskopf
Sample : KWG1803064-2 DLCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:02 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Wed Jul 11 07:00:21 2018
Response via : Initial Calibration



Data File : J:\MS14\DATA\071018\0710F005.D Vial: 5
Acq On : 10 Jul 2018 8:44 am Operator: LWeiskopf
Sample : KWG1803064-2 DLCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 6:12 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration



TIC: 0710F005.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml

response 73027

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.33
108.00	9.50	11.09
0.00	0.00	0.00

Manual Integration:

Before

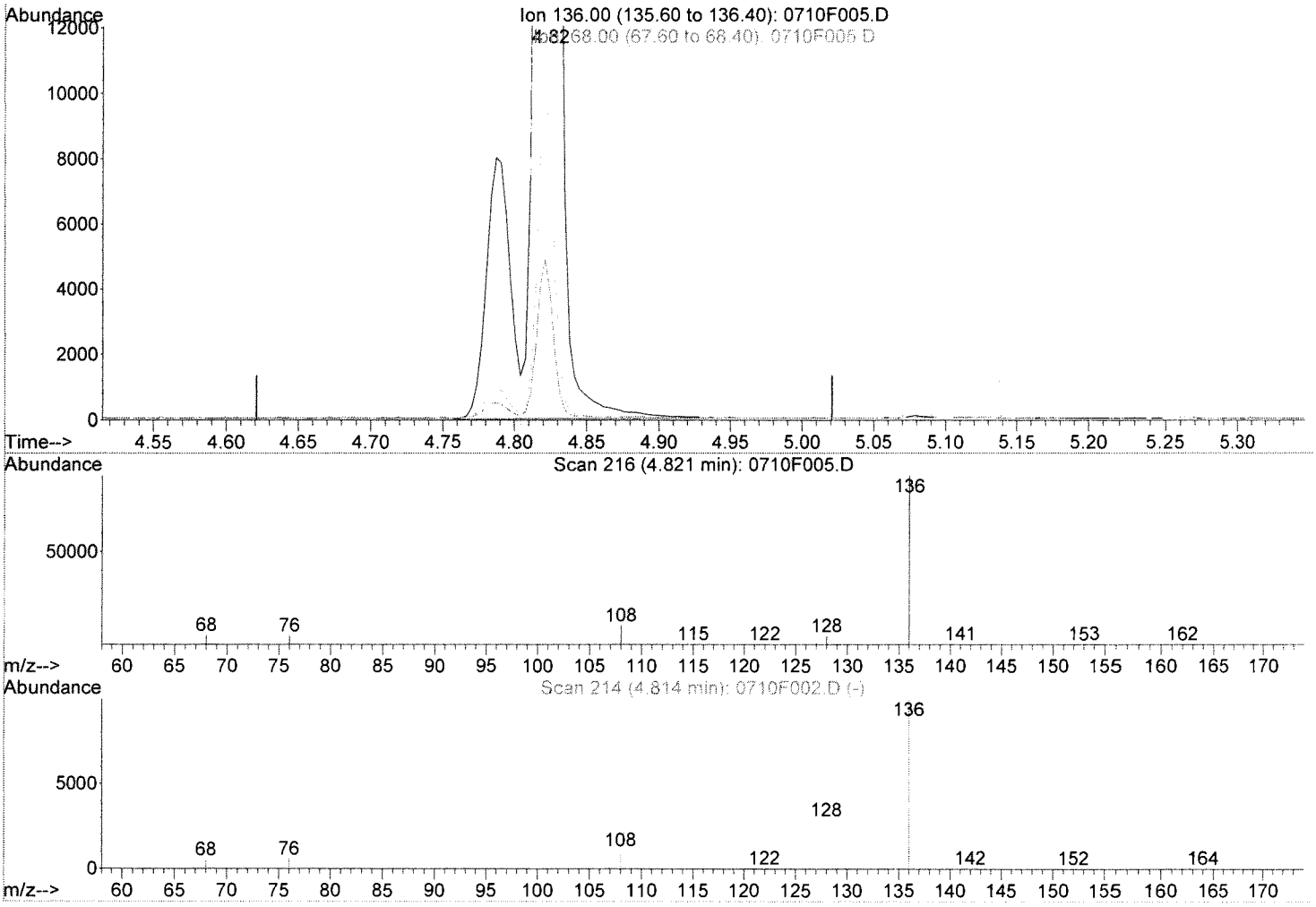
07/11/18

JUL 23 2018

0710F005.D 070518PAH.M Wed Jul 11 07:02:08 2018

Data File : J:\MS14\DATA\071018\0710F005.D Vial: 5
Acq On : 10 Jul 2018 8:44 am Operator: LWeiskopf
Sample : KWG1803064-2 DLCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:02 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration



TIC: 0710F005.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml m

response 82407

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.40
108.00	9.50	11.14
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

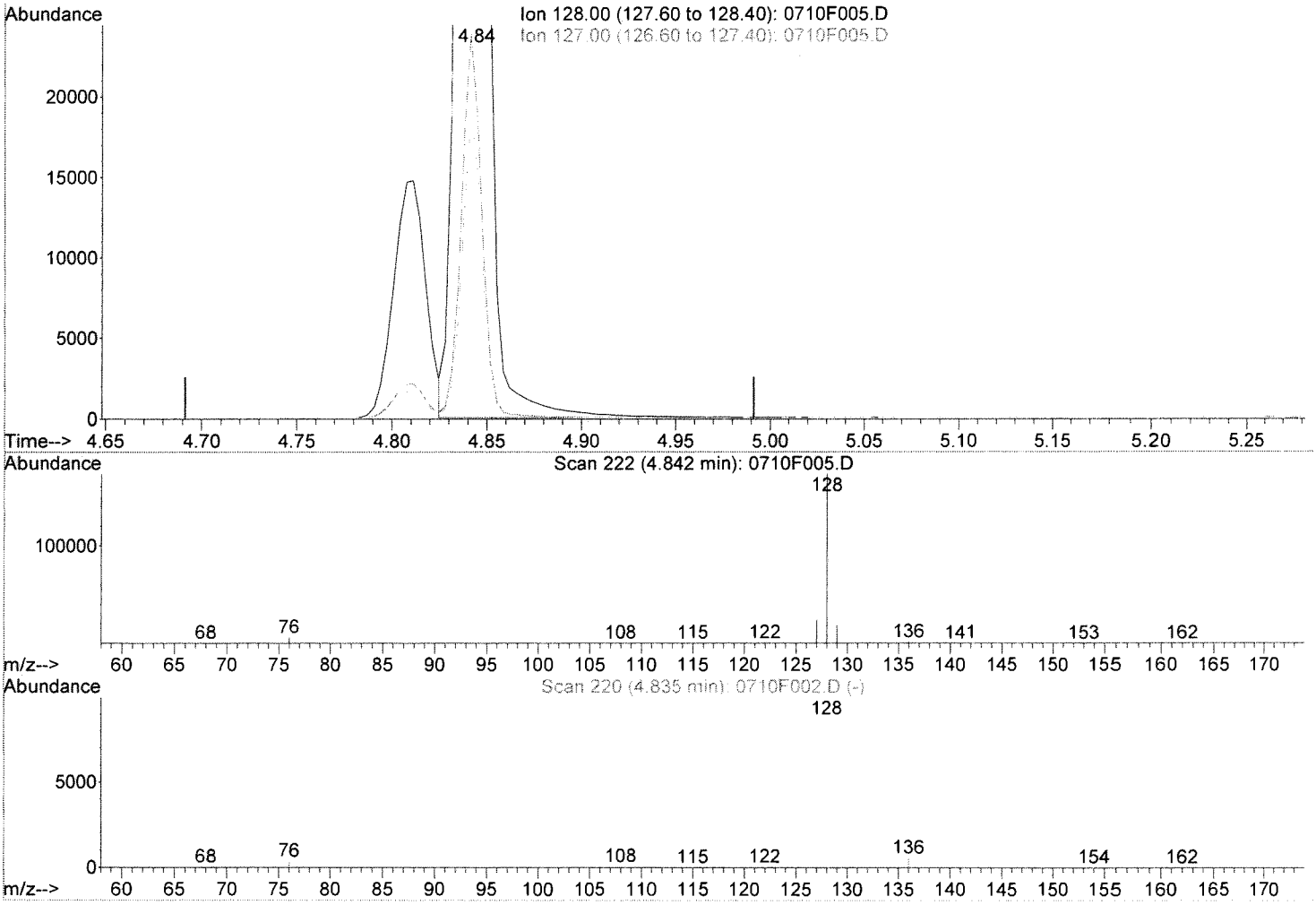
07/11/18

JUL 23 2018

0710F005.D 070518PAH.M Wed Jul 11 07:02:15 2018

Data File : J:\MS14\DATA\071018\0710F005.D Vial: 5
Acq On : 10 Jul 2018 8:44 am Operator: LWeiskopf
Sample : KWG1803064-2 DLCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:02 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration



TIC: 0710F005.D

(2) Naphthalene (T)

4.84min 291.97ng/ml

response 131857

Ion	Exp%	Act%
128.00	100	100
127.00	12.40	13.77
129.00	10.80	10.78
0.00	0.00	0.00

Manual Integration:

Before

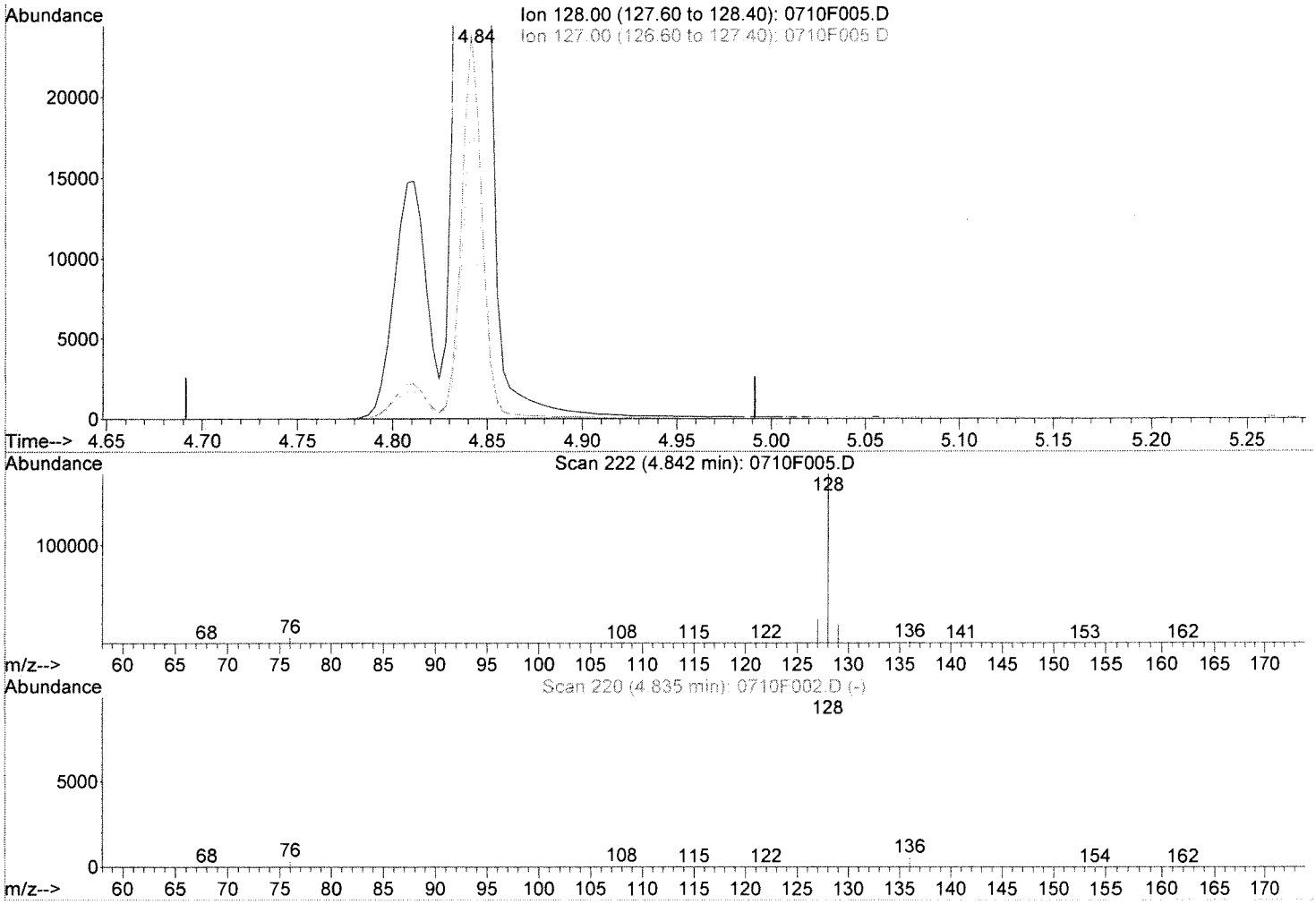
07/11/18

JUL 23 2018

0710F005.D 070518PAH.M Wed Jul 11 07:02:22 2018

Data File : J:\MS14\DATA\071018\0710F005.D Vial: 5
Acq On : 10 Jul 2018 8:44 am Operator: LWeiskopf
Sample : KWG1803064-2 DLCS Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 7:02 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration



TIC: 0710F005.D

(2) Naphthalene (T)

4.84min 330.95ng/ml m

response 149463

Ion	Exp%	Act%
128.00	100	100
127.00	12.40	13.79
129.00	10.80	10.81
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

07/11/18

JUL 23 2018

0710F005.D 070518PAH.M Wed Jul 11 07:02:29 2018

Directory: J:\ms14\data\071018

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0710F001.D	1.	DFTPP @ 10ug/mL | SVM59-5B		10 Jul 2018 07:01
2	2	0710F002.D	1.	SIM-PAH CCV @ 0.4ug/mL | SVM59-21B		10 Jul 2018 07:27
3	3	0710F003.D	1.	KWG1803064-3 MB		10 Jul 2018 07:52
4	4	0710F004.D	1.	KWG1803064-1 LCS		10 Jul 2018 08:18
5	5	0710F005.D	1.	KWG1803064-2 DLCS		10 Jul 2018 08:44
6	6	0710F006.D	1.	K1805808-001		10 Jul 2018 09:10
7	7	0710F007.D	1.	K1805808-002		10 Jul 2018 09:36
8	8	0710F008.D	1.	K1805809-002		10 Jul 2018 10:02
9	9	0710F009.D	1.	K1805809-003		10 Jul 2018 10:28
10	10	0710F010.D	1.	K1805809-004		10 Jul 2018 10:54
11	11	0710F011.D	1.	K1805809-005		10 Jul 2018 11:20
12	12	0710F012.D	1.	K1805809-014		10 Jul 2018 11:46
13	13	0710F013.D	1.	K1805809-019		10 Jul 2018 12:13
14	14	0710F014.D	1.	K1805809-020		10 Jul 2018 12:39
15	15	0710F015.D	1.	K1805809-021		10 Jul 2018 13:05
16	16	0710F016.D	1.	K1805809-029		10 Jul 2018 13:31
17	17	0710F017.D	1.	K1805809-030		10 Jul 2018 13:57
18	18	0710F018.D	1.	K1805178-001DIL 250X		10 Jul 2018 14:24
19	19	0710F019.D	1.	K1805180-006DIL 50X		10 Jul 2018 14:50
20	20	0710F020.D	1.	K1805180-007DIL 20X		10 Jul 2018 15:16
21	21	0710F021.D	1.	K1805180-008DIL 20X		10 Jul 2018 15:42
22	95	0710F022.D	1.	PR		10 Jul 2018 16:08
23	95	0710F023.D	1.	PR		10 Jul 2018 16:34
24	95	0710F024.D	1.	PR		10 Jul 2018 17:00

NR

CAL 15772

*LIMS # 598094

7/11/18

JUL 23 2018

DILUTION LOG MS 14

Date: 7/10/18 Prepared by: LWPISKOS Solvent Lot #: DS524

LAB ID.	ALIQUOT	FINAL VOLUME	DILUTION FACTOR	COMMENTS
K1505178-1	100ul	0.5mL	250X	5X Dil. of 50X
K1505150-6	10ul	↓	50X	
↓ -7	25ul	↓	20X	
↓ -8	↓	↓	20X	

7/11/18

JUL 23 2018

R:\SVM\DILUTION LOG.DOC

Exception Report

Data File: J:\MS14\DATA\071018\0710F001.D
Lab ID: KWG1803359-1
RunType: DFTPP
Matrix: WATER

Date Acquired: 07/10/2018 07:01
Date Quantitated:
Batch ID: KWG1803359
Analysis Method: DFTPP
ListJoinID: LJ1965

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Ion Ratio	NA	NA	NA	x	

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:55:47
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\071018\0710F001.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 07:01	**Quant Date:**		**Vial:**	1
Run Type:	DFTPP	**ListJoinID:**	LJ1965	**Dilution:**	1.0
Lab ID:	KWG1803359-1			**Soln Conc. Units:**	

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**		**Receive Date:**	07/11/2018

Analysis Lot:	KWG1803359	**Prep Lot:**		**Report Group:**	
Analysis Method:	DFTPP	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS14\METHODS\SIM\A_DFTPP.M			**Calibration ID:**	CAL15772
Title:				**Report List ID:**	LJ1965
Tune Ref:				**Method ID:**	MJ190
MB Ref:				**Quant based on Report List**	

Tune Results

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	33.0	69597	Pass
68	69	0	2	0.0	0	Pass
69	198	0	100	35.9	75818	Pass
70	69	0	2	0.7	506	Pass
127	198	10	80	42.8	90322	Pass
197	198	0	2	0.0	0	Pass
198	442	30	100	52.1	211029	Pass
199	198	5	9	6.4	13402	Pass
275	198	10	60	34.6	73056	Pass
365	442	1	50	2.8	11185	Pass
441	443	0.01	100	76.1	59861	Pass
442	442	100	100	100.0	405013	Pass
443	442	15	24	19.4	78698	Pass

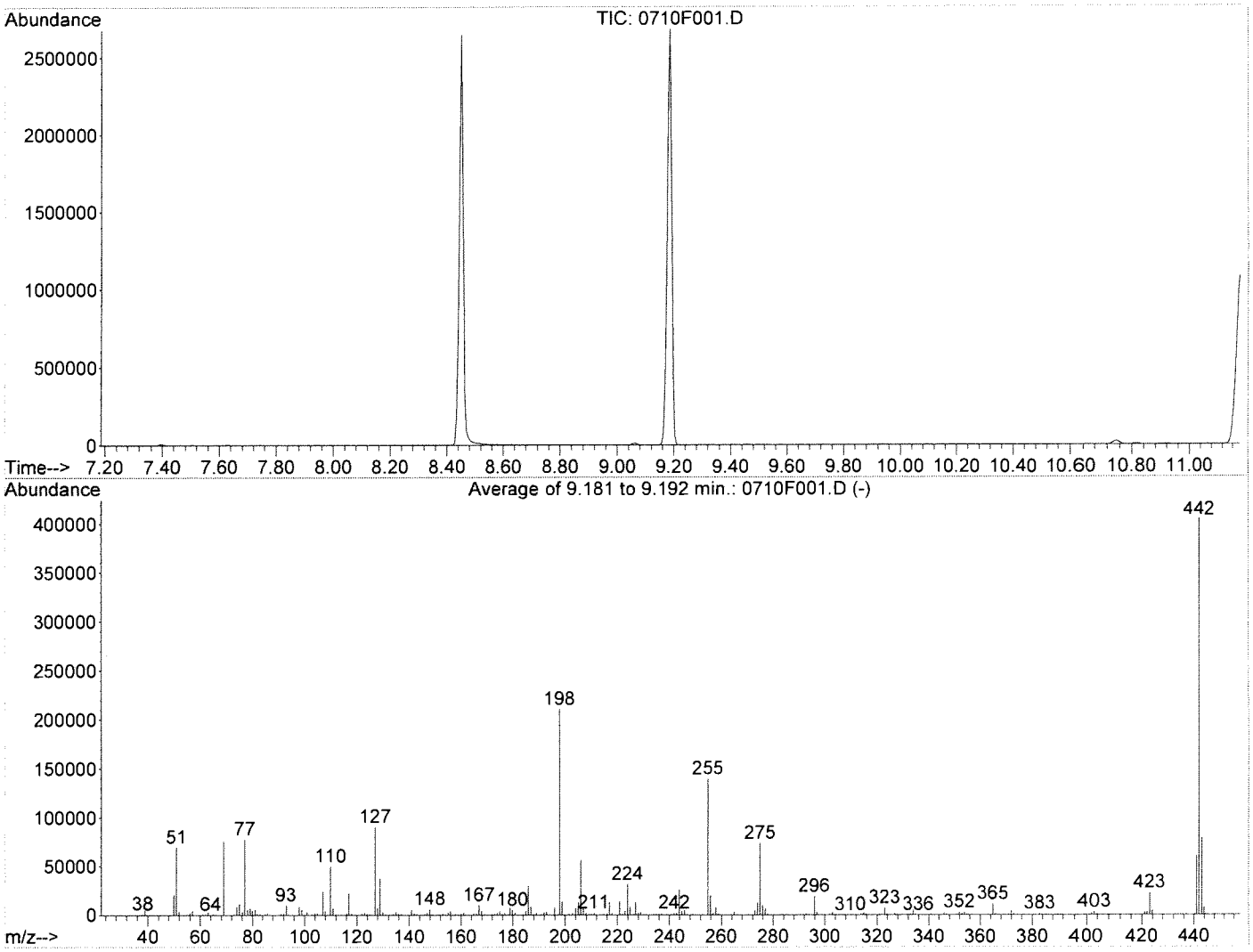
U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS14\DATA\071018\0710F001.D
Acq On : 10 Jul 2018 7:01 am
Sample : DFTPP @ 10ug/mL | SVM59-5B
Misc :
MS Integration Params: rteint.p
Method : J:\MS14\METHODS\SIM\A_DFTPP.M (RTE Integrator)
Title : dftpp tune mix

Vial: 1
Operator: LWeiskopf
Inst : MS14
Multiplr: 1.00



AutoFind: Scans 526, 527, 528; Background Corrected with Scan 519

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	33.0	69597	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	35.9	75818	PASS
70	69	0.00	2	0.7	506	PASS
127	198	10	80	42.8	90322	PASS
197	198	0.00	2	0.0	0	PASS
198	442	30	100	52.1	211029	PASS
199	198	5	9	6.4	13402	PASS
275	198	10	60	34.6	73056	PASS
365	442	1	50	2.8	11185	PASS
441	443	0.01	100	76.1	59861	PASS
442	442	30	100	100.0	405013	PASS
443	442	15	24	19.4	78698	PASS

J:\MS14\DATA\071018\0710F001.D A_DFTPP.M Wed Jul 11 06:13:47 2018

DFTPP @ 10ug/mL | SVM59-5B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	54	53.05	187	66.85	177	79.95	4464
37.00	419	54.95	550	67.20	100	81.00	5790
38.00	1159	56.00	2234	68.95	75818	81.90	1501
39.00	5128	57.00	4475	69.85	506	82.95	1308
39.95	206	57.90	168	73.00	836	83.95	157
41.00	331	61.00	1012	74.00	8500	85.00	1208
44.00	52	62.00	1065	75.00	11464	85.90	1971
44.90	57	63.00	2879	76.05	3224	86.90	783
50.00	20519	63.95	358	77.00	77693	87.85	259
51.00	69597	65.00	1240	78.00	5471	88.85	138
52.00	3518	65.80	67	79.00	6719	91.00	1630

Average of 9.181 to 9.192 min.: 0710F001.D
DFTPP @ 10ug/mL | SVM59-5B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.00	1815	102.90	1082	115.95	2046	128.00	7264
92.95	10109	103.10	260	116.90	22200	128.90	37034
93.85	665	103.95	2202	117.90	1603	129.90	3177
95.00	246	104.90	1980	118.85	155	130.80	510
95.95	480	106.95	24325	119.85	321	131.85	447
96.90	105	107.90	4223	120.90	91	132.90	185
97.90	8263	109.90	49712	121.95	2045	133.90	1279
98.95	5672	110.95	6942	122.90	2835	134.90	3010
99.90	548	111.90	844	123.90	1222	135.90	1401
100.90	3014	112.90	234	124.90	1193	137.00	1366
101.90	202	114.95	137	126.95	90322	137.85	221

Average of 9.181 to 9.192 min.: 0710F001.D
DFTPP @ 10ug/mL | SVM59-5B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
138.10	147	148.90	994	159.95	1632	170.85	566
138.95	230	150.00	157	160.95	2421	171.85	905
139.95	589	151.00	724	161.85	699	173.00	1225
140.90	5198	151.85	464	162.90	131	173.90	2072
141.95	1785	152.95	1568	163.95	276	174.95	3653
142.90	1014	153.85	1181	164.90	2044	175.95	1223
143.90	239	155.00	2625	165.95	1598	176.90	2146
144.85	251	155.95	4270	166.90	10090	177.70	232
145.90	1142	156.90	822	167.90	4249	177.85	445
146.90	2526	157.90	972	168.85	779	178.90	7171
147.90	5850	158.95	676	169.85	345	179.90	5137

Average of 9.181 to 9.192 min.: 0710F001.D
DFTPP @ 10ug/mL | SVM59-5B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
180.90	2081	190.95	853	203.95	7041	215.90	1332
181.80	301	191.90	2350	204.95	12910	216.90	13307
182.80	196	192.90	2746	205.90	56074	217.95	1691
183.90	629	193.85	513	206.95	7102	218.80	61
184.95	3873	195.00	185	207.90	1995	219.00	62
185.90	29693	195.90	7044	208.90	610	220.90	13514
186.90	8403	197.90	211029	209.90	570	221.90	911
187.90	731	198.90	13402	210.20	361	222.90	3682
188.10	198	199.90	1076	210.95	2161	223.90	31178
188.90	2006	201.45	1056	212.85	133	224.90	8128
189.80	298	202.90	1598	214.85	697	226.00	1125

Average of 9.181 to 9.192 min.: 0710F001.D
DFTPP @ 10ug/mL | SVM59-5B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
226.90	13284	237.85	162	248.85	938	258.85	1408
227.90	1844	238.85	614	250.00	162	259.85	223
228.90	2650	239.90	379	250.70	57	260.85	203
229.80	282	240.90	880	250.85	153	263.85	324
230.90	1090	241.90	1775	251.85	204	264.90	3240
231.90	242	242.95	1900	252.10	56	265.85	542

233.85	845	244.90	3546	254.90	139320	270.95	147
234.90	911	245.90	4827	255.90	20076	271.90	175
235.90	603	246.85	1037	256.90	1656	272.10	290
236.90	986	247.85	195	257.90	7843	272.90	4388

Average of 9.181 to 9.192 min.: 0710F001.D
DFTPP @ 10ug/mL | SVM59-5B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
273.90	12578	288.80	238	302.90	2351	320.85	705
274.90	73056	289.85	188	303.95	788	321.85	468
275.90	9673	290.90	103	307.90	349	322.95	7042
276.90	5943	291.90	271	308.90	168	323.90	1345
277.90	907	292.85	1224	309.80	191	324.90	70
278.85	180	293.85	374	312.10	62	325.85	130
282.00	59	295.90	18655	312.80	59	326.85	1286
282.85	583	296.90	2687	313.90	1028	327.90	779
283.85	413	297.80	92	314.90	2251	329.00	55
284.90	1140	300.90	257	315.90	1461	331.95	562
285.85	212	301.90	339	316.95	242	332.90	731

Average of 9.181 to 9.192 min.: 0710F001.D
DFTPP @ 10ug/mL | SVM59-5B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
333.90	4766	352.90	1828	373.80	134	404.80	63
334.95	1406	353.90	2764	376.85	143	414.90	62
335.90	81	354.85	497	382.90	1238	420.95	2639
338.80	58	358.80	212	383.85	406	421.95	2765
339.90	61	364.00	93	389.90	791	422.95	22237
340.85	870	364.90	11185	390.90	480	423.90	4277
341.85	172	365.85	1591	391.85	329	424.90	480
345.90	1803	369.85	223	400.85	326	439.20	111
346.85	361	370.90	733	401.90	2026	441.00	59861
350.70	54	371.95	4277	402.90	3037	441.95	405013
351.90	2819	372.95	1191	403.85	1014	443.00	78698

Average of 9.181 to 9.192 min.: 0710F001.D
DFTPP @ 10ug/mL | SVM59-5B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
443.95	7286						
444.90	436						

Exception Report

Data File: J:\MS14\DATA\071018\0710F002.D
Lab ID: KWG1803359-2
RunType: CCV
Matrix: WATER

Date Acquired: 07/10/2018 07:27
Date Quantitated: 07/11/2018 06:12
Batch ID: KWG1803359
Analysis Method: 8270D SIM
MethodJoinID: MJ1238

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: JUL 11 2018

Secondary Review: JUL 23 2018

Printed: 07/11/2018 07:55:51
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Data File:	J:\MS14\DATA\071018\0710F002.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 07:27	**Quant Date:**	07/11/2018 06:12	**Vial:**	2
Run Type:	CCV	**MethodJoinID:**	MJ1238	**Dilution:**	1.0
Lab ID:	KWG1803359-2			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**		**Receive Date:**	07/11/2018

Analysis Lot:	KWG1803359	**Prep Lot:**		**Report Group:**	
Analysis Method:	8270D SIM	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS14\METHODS\SIM\070518PAH.M	**Calibration ID:**	CAL15772
Title:			
Tune Ref:	J:\MS14\DATA\071018\0710F001.D	**Method ID:**	MJ1238
MB Ref:		**Quant based on Method**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.81	-0.01	136	65505	200.00	OK
2	Acenaphthene-d10	6.37	0.00	164	28647	200.00	OK
3	Phenanthrene-d10	7.60	-0.01	188	60882	200.00	OK
4	Chrysene-d12	10.17	-0.01	240	73588	200.00	OK
5	Perylene-d12	13.34	-0.02	264	78610	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.80			176	72110	384.99		42-106	NA	
3	Fluoranthene-d10	8.59			212	166282	440.10		45-109	NA	
4	Terphenyl-d14	8.95			244	126831	379.56		41-102	NA	

Target Compounds

Final Conc. Units: ug/Kg

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.83			128	150343	418.79			
1	2-Methylnaphthalene	5.47			142	92456	402.87			
1	1-Methylnaphthalene	5.56			142	87661	394.82			
1	Biphenyl	5.88			154	112844	398.71			
1	2,6-Dimethylnaphthalene	6.01			156	78995	400.08			
2	Acenaphthylene	6.24			152	144724	432.19			
2	Acenaphthene	6.39			154	82964	431.63			
2	Dibenzofuran	6.54			168	135196	438.76			
2	2,3,5-Trimethylnaphthalene	6.71			170	76609	423.28			
2	Fluorene	6.82			166	99732	417.75			
3	Dibenzothiophene	7.52			184	162772	432.69			
3	Phenanthrene	7.62			178	156124	419.73			
3	Anthracene	7.66			178	140647	387.04			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\071018\0710F002.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 07:27	**Quant Date:**	07/11/2018 06:12	**Vial:**	2
Run Type:	CCV	**MethodJoinID:**	MJ1238	**Dilution:**	1.0
Lab ID:	KWG1803359-2			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/Kg

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
3	Carbazole	7.80			167	150029	457.32			
3	1-Methylphenanthrene	8.13			192	126397	431.22			
3	Fluoranthene	8.60			202	208455	460.32			
4	Pyrene	8.80			202	222012	429.57			
4	Benz(a)anthracene	10.16			228	193612	415.86			
4	Chrysene	10.21			228	195500	425.45			
5	Benzo(b)fluoranthene	12.28			252	211903	432.12			
5	Benzo(k)fluoranthene	12.35			252	209292	425.45			
5	Benzo(e)pyrene	13.02			252	199833	418.78			
5	Benzo(a)pyrene	13.17			252	174744	423.69			
5	Perylene	13.43			252	185175	429.28			
5	Indeno(1,2,3-cd)pyrene	15.49			276	159534	439.37			
5	Dibenz(a,h)anthracene	15.55			278	158947	404.61			
5	Benzo(g,h,i)perylene	15.88			276	198842	428.80			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL15772
Method ID: MJ1238

DataFile: J:\MS14\DATA\071018\0710F002.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Naphthalene		MS	AverageRF	20	0.70	1.096	1.148	5			
2-Methylnaphthalene		MS	AverageRF	20	0.40	0.701	0.706	1			
1-Methylnaphthalene		MS	AverageRF	20	0.01	0.678	0.669	-1			
Biphenyl		MS	AverageRF	20	0.01	0.864	0.861	0			
2,6-Dimethylnaphthalene		MS	AverageRF	20	0.01	0.603	0.603	0			
Acenaphthylene		MS	AverageRF	20	0.90	2.338	2.526	8			
Acenaphthene		MS	AverageRF	20	0.90	1.342	1.448	8			
Dibenzofuran		MS	AverageRF	20	0.80	2.151	2.360	10			
2,3,5-Trimethylnaphthalene		MS	AverageRF	20	0.01	1.264	1.337	6			
Fluorene-d10		SURR	AverageRF	20	0.01	1.308	1.259	-4			
Fluorene		MS	AverageRF	20	0.90	1.667	1.741	4			
Dibenzothiophene		MS	AverageRF	20	0.01	1.236	1.337	8			
Phenanthrene		MS	AverageRF	20	0.70	1.222	1.282	5			
Anthracene		MS	AverageRF	20	0.70	1.194	1.155	-3			
Carbazole		MS	AverageRF	20	0.01	1.078	1.232	14			
1-Methylphenanthrene		MS	AverageRF	20	0.01	0.963	1.038	8			
Fluoranthene-d10		SURR	AverageRF	20	0.01	1.241	1.366	10			
Fluoranthene		MS	AverageRF	20	0.60	1.488	1.712	15			
Pyrene		MS	AverageRF	20	0.60	1.405	1.508	7			
Terphenyl-d14		SURR	AverageRF	20	0.01	0.908	0.862	-5			
Benz(a)anthracene		MS	AverageRF	20	0.80	1.265	1.316	4			
Chrysene		MS	AverageRF	20	0.70	1.249	1.328	6			
Benzo(b)fluoranthene		MS	AverageRF	20	0.70	1.248	1.348	8			
Benzo(k)fluoranthene		MS	AverageRF	20	0.70	1.252	1.331	6			
Benzo(e)pyrene		MS	AverageRF	20	0.01	1.214	1.271	5			
Benzo(a)pyrene		MS	AverageRF	20	0.70	1.049	1.111	6			
Perylene		MS	AverageRF	20	0.01	1.097	1.178	7			
Indeno(1,2,3-cd)pyrene		MS	AverageRF	20	0.50	0.924	1.015	10			
Dibenz(a,h)anthracene		MS	AverageRF	20	0.40	0.999	1.011	1			
Benzo(g,h,i)perylene		MS	AverageRF	20	0.50	1.180	1.265	7			

Quantitation Report

Data File:	J:\MS14\DATA\071018\0710F002.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 07:27	**Quant Date:**	07/11/2018 06:12	**Vial:**	2
Run Type:	CCV	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1803359-2			**Soln Conc. Units:**	ng/ml

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270D PAH SIM	**Collect Date:**		**Receive Date:**	07/11/2018

Analysis Lot:	KWG1803359	**Prep Lot:**		**Report Group:**	
Analysis Method:	8270D SIM	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS14\METHODS\SIM\070518PAH.M			**Calibration ID:**	CAL15772
Title:					
Tune Ref:	J:\MS14\DATA\071018\0710F001.D			**Method ID:**	MJ1638
MB Ref:				**Quant based on Method**	

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Naphthalene-d8	4.81	-0.01	136	65505	200.00	OK
2	Acenaphthene-d10	6.37	0.00	164	28647	200.00	OK
3	Phenanthrene-d10	7.60	-0.01	188	60882	200.00	OK
4	Chrysene-d12	10.17	-0.01	240	73588	200.00	OK
5	Perylene-d12	13.34	-0.02	264	78610	200.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
2	Fluorene-d10	6.80			176	72110	384.99		42-131	NA	
3	Fluoranthene-d10	8.59			212	166282	440.10		42-133	NA	
4	Terphenyl-d14	8.95			244	126831	379.56		32-129	NA	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Naphthalene	4.83			128	150343	418.79			
1	2-Methylnaphthalene	5.47			142	92456	402.87			
1	1-Methylnaphthalene	5.56			142	87661	394.82			
1	Biphenyl	5.88			154	112844	398.71			
1	2,6-Dimethylnaphthalene	6.01			156	78995	400.08			
2	Acenaphthylene	6.24			152	144724	432.19			
2	Acenaphthene	6.39			154	82964	431.63			
2	Dibenzofuran	6.54			168	135196	438.76			
2	2,3,5-Trimethylnaphthalene	6.71			170	76609	423.28			
2	Fluorene	6.82			166	99732	417.75			
3	Dibenzothiophene	7.52			184	162772	432.69			
3	Phenanthrene	7.62			178	156124	419.73			
3	Anthracene	7.66			178	140647	387.04			

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B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS14\DATA\071018\0710F002.D			**Instrument:**	MS14
Acqu Date:	07/10/2018 07:27	**Quant Date:**	07/11/2018 06:12	**Vial:**	2
Run Type:	CCV	**MethodJoinID:**	MJ1638	**Dilution:**	1.0
Lab ID:	KWG1803359-2			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
3	Carbazole	7.80			167	150029	457.32			
3	1-Methylphenanthrene	8.13			192	126397	431.22			
3	Fluoranthene	8.60			202	208455	460.32			
4	Pyrene	8.80			202	222012	429.57			
4	Benz(a)anthracene	10.16			228	193612	415.86			
4	Chrysene	10.21			228	195500	425.45			
5	Benzo(b)fluoranthene	12.28			252	211903	432.12			
5	Benzo(k)fluoranthene	12.35			252	209292	425.45			
5	Benzo(e)pyrene	13.02			252	199833	418.78			
5	Benzo(a)pyrene	13.17			252	174744	423.69			
5	Perylene	13.43			252	185175	429.28			
5	Indeno(1,2,3-cd)pyrene	15.49			276	159534	439.37			
5	Dibenz(a,h)anthracene	15.55			278	158947	404.61			
5	Benzo(g,h,i)perylene	15.88			276	198842	428.80			

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J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL15772
Method ID: MJ1638

DataFile: J:\MS14\DATA\071018\0710F002.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Naphthalene		MS	AverageRF	20	0.70	1.096	1.148	5			
2-Methylnaphthalene		MS	AverageRF	20	0.40	0.701	0.706	1			
1-Methylnaphthalene		MS	AverageRF	20	0.01	0.678	0.669	-1			
Biphenyl		MS	AverageRF	20	0.01	0.864	0.861	0			
2,6-Dimethylnaphthalene		MS	AverageRF	20	0.01	0.603	0.603	0			
Acenaphthylene		MS	AverageRF	20	0.90	2.338	2.526	8			
Acenaphthene		MS	AverageRF	20	0.90	1.342	1.448	8			
Dibenzofuran		MS	AverageRF	20	0.80	2.151	2.360	10			
2,3,5-Trimethylnaphthalene		MS	AverageRF	20	0.01	1.264	1.337	6			
Fluorene-d10		SURR	AverageRF	20	0.01	1.308	1.259	-4			
Fluorene		MS	AverageRF	20	0.90	1.667	1.741	4			
Dibenzothiophene		MS	AverageRF	20	0.01	1.236	1.337	8			
Phenanthrene		MS	AverageRF	20	0.70	1.222	1.282	5			
Anthracene		MS	AverageRF	20	0.70	1.194	1.155	-3			
Carbazole		MS	AverageRF	20	0.01	1.078	1.232	14			
1-Methylphenanthrene		MS	AverageRF	20	0.01	0.963	1.038	8			
Fluoranthene-d10		SURR	AverageRF	20	0.01	1.241	1.366	10			
Fluoranthene		MS	AverageRF	20	0.60	1.488	1.712	15			
Pyrene		MS	AverageRF	20	0.60	1.405	1.508	7			
Terphenyl-d14		SURR	AverageRF	20	0.01	0.908	0.862	-5			
Benz(a)anthracene		MS	AverageRF	20	0.80	1.265	1.316	4			
Chrysene		MS	AverageRF	20	0.70	1.249	1.328	6			
Benzo(b)fluoranthene		MS	AverageRF	20	0.70	1.248	1.348	8			
Benzo(k)fluoranthene		MS	AverageRF	20	0.70	1.252	1.331	6			
Benzo(e)pyrene		MS	AverageRF	20	0.01	1.214	1.271	5			
Benzo(a)pyrene		MS	AverageRF	20	0.70	1.049	1.111	6			
Perylene		MS	AverageRF	20	0.01	1.097	1.178	7			
Indeno(1,2,3-cd)pyrene		MS	AverageRF	20	0.50	0.924	1.015	10			
Dibenz(a,h)anthracene		MS	AverageRF	20	0.40	0.999	1.011	1			
Benzo(g,h,i)perylene		MS	AverageRF	20	0.50	1.180	1.265	7			

Data File : J:\MS14\DATA\071018\0710F002.D Vial: 2
Acq On : 10 Jul 2018 7:27 am Operator: LWeiskopf
Sample : SIM-PAH CCV @ 0.4ug/mL | SVM59-21B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Naphthalene-d8	1.000	1.000	0.0	91	0.00
2	T	Naphthalene	1.096	1.148	-4.7	96	0.00
3	S	2-Methylnaphthalene-d10	0.569	0.543	4.6	91	0.00
4	T	2-Methylnaphthalene	0.701	0.706	-0.7	97	0.00
5	T	1-Methylnaphthalene	0.678	0.669	1.3	97	0.00
6	T	Biphenyl	0.864	0.861	0.3	95	0.00
7	T	2,6-Dimethylnaphthalene	0.603	0.603	0.0	96	0.00
8	I	Acenaphthene-d10	1.000	1.000	0.0	88	0.00
9	T	Acenaphthylene	2.338	2.526	-8.0	95	0.00
10	T	Acenaphthene	1.342	1.448	-7.9	95	0.00
11	T	Dibenzofuran	2.151	2.360	-9.7	97	0.00
12	T	2,3,5-Trimethylnaphthalene	1.264	1.337	-5.8	92	0.00
13	S	Fluorene-d10	1.308	1.259	3.7	88	0.00
14	T	Fluorene	1.667	1.741	-4.4	93	0.00
15	I	Phenanthrene-d10	1.000	1.000	0.0	81	0.00
16	T	Dibenzothiophene	1.236	1.337	-8.2	86	0.00
17	T	Phenanthrene	1.222	1.282	-4.9	87	0.00
18	T	Anthracene	1.194	1.155	3.3	79	0.00
19	T	Carbazole	1.078	1.232	-14.3	92	0.00
20	T	1-Methylphenanthrene	0.963	1.038	-7.8	88	0.00
21	T	Fluoranthene	1.488	1.712	-15.1	95	0.00
22	S	Fluoranthene-d10	1.241	1.366	-10.1	90	0.00
23	I	Chrysene-d12	1.000	1.000	0.0	90	0.00
24	T	Pyrene	1.405	1.508	-7.3	97	0.00
25	S	Terphenyl-d14	0.908	0.862	5.1	89	0.00
26	T	Benz(a)anthracene	1.265	1.316	-4.0	96	0.00
27	T	Chrysene	1.249	1.328	-6.3	97	0.00
28	I	Perylene-d12	1.000	1.000	0.0	98	-0.01
29	T	Benzo(b)fluoranthene	1.248	1.348	-8.0	102	0.00
30	T	Benzo(k)fluoranthene	1.252	1.331	-6.3	101	0.00
31	T	Benzo(e)pyrene	1.214	1.271	-4.7	102	0.00
32	T	Benzo(a)pyrene	1.049	1.111	-5.9	102	0.00
33	T	Perylene	1.097	1.178	-7.4	103	0.00
34	T	Indeno(1,2,3-cd)pyrene	0.924	1.015	-9.8	106	0.00
35	T	Dibenz(a,h)anthracene	0.999	1.011	-1.2	102	0.00
36	T	Benzo(g,h,i)perylene	1.180	1.265	-7.2	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
0710F002.D 070518PAH.M Wed Jul 11 06:12:28 2018 Page 1

Data File : J:\MS14\DATA\071018\0710F002.D Vial: 2
Acq On : 10 Jul 2018 7:27 am Operator: LWeiskopf
Sample : SIM-PAH CCV @ 0.4ug/mL | SVM59-21B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 06:12:09 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

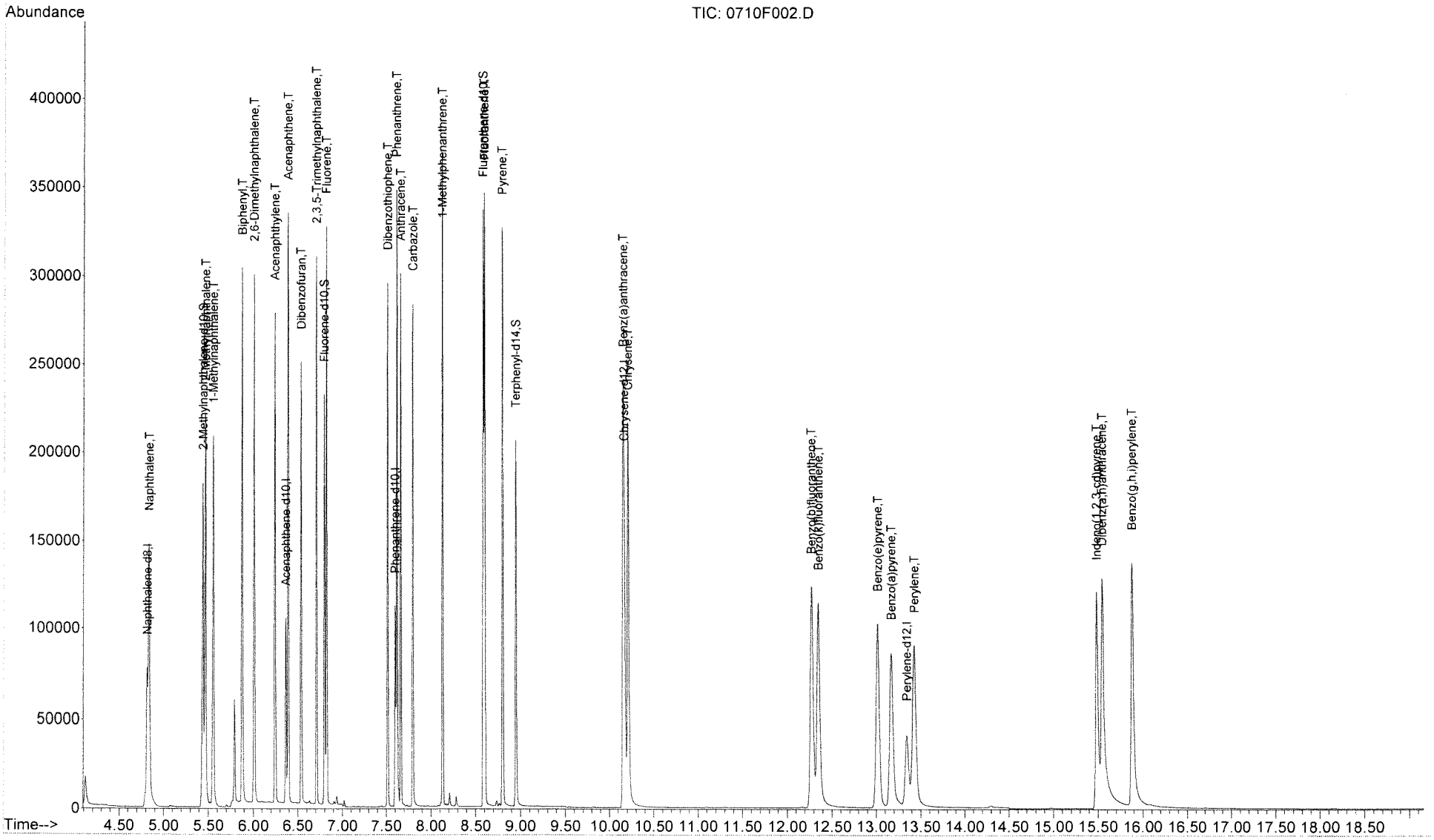
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.81	136	65505	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	28647	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.60	188	60882	200.00	ng/ml	0.00
23) Chrysene-d12	10.17	240	73588	200.00	ng/ml	0.00
28) Perylene-d12	13.34	264	78610	200.00	ng/ml	-0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.44	152	71192	381.99	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 38.20%			
13) Fluorene-d10	6.80	176	72110	384.99	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 38.50%			
22) Fluoranthene-d10	8.59	212	166282	440.10	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 44.01%			
25) Terphenyl-d14	8.95	244	126831	379.56	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 37.96%			
Target Compounds						Qvalue
2) Naphthalene	4.83	128	150343	418.79	ng/ml	98
4) 2-Methylnaphthalene	5.47	142	92456	402.87	ng/ml	94
5) 1-Methylnaphthalene	5.56	142	87661	394.82	ng/ml	97
6) Biphenyl	5.88	154	112844	398.71	ng/ml	96
7) 2,6-Dimethylnaphthalene	6.01	156	78995	400.08	ng/ml	98
9) Acenaphthylene	6.24	152	144724	432.19	ng/ml	98
10) Acenaphthene	6.39	154	82964	431.63	ng/ml	98
11) Dibenzofuran	6.54	168	135196	438.76	ng/ml	85
12) 2,3,5-Trimethylnaphthalene	6.71	170	76609	423.28	ng/ml	94
14) Fluorene	6.82	166	99732	417.75	ng/ml	99
16) Dibenzothiophene	7.52	184	162772	432.69	ng/ml	95
17) Phenanthrene	7.62	178	156124	419.73	ng/ml	100
18) Anthracene	7.66	178	140647	387.04	ng/ml	100
19) Carbazole	7.80	167	150029	457.32	ng/ml	97
20) 1-Methylphenanthrene	8.13	192	126397	431.22	ng/ml	96
21) Fluoranthene	8.60	202	208455	460.32	ng/ml	99
24) Pyrene	8.80	202	222012	429.57	ng/ml	98
26) Benz(a)anthracene	10.16	228	193612	415.86	ng/ml	100
27) Chrysene	10.21	228	195500	425.45	ng/ml	100
29) Benzo(b)fluoranthene	12.28	252	211903	432.12	ng/ml	98
30) Benzo(k)fluoranthene	12.35	252	209292	425.45	ng/ml	99
31) Benzo(e)pyrene	13.02	252	199833	418.78	ng/ml	97
32) Benzo(a)pyrene	13.17	252	174744	423.69	ng/ml	98
33) Perylene	13.43	252	185175	429.28	ng/ml	97
34) Indeno(1,2,3-cd)pyrene	15.49	276	159534	439.37	ng/ml	98
35) Dibenz(a,h)anthracene	15.55	278	158947	404.61	ng/ml	98
36) Benzo(g,h,i)perylene	15.88	276	198842	428.80	ng/ml	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\071018\0710F002.D Vial: 2
Acq On : 10 Jul 2018 7:27 am Operator: LWeiskopf
Sample : SIM-PAH CCV @ 0.4ug/mL | SVM59-21B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 11 6:12 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration



Injection Log

Directory: J:\MS14\DATA\070518

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0705F001.D	1.	DFTPP @ 10ug/mL | SVM59-5B		5 Jul 2018 05:25
2	2	0705F002.D	1.	IB		5 Jul 2018 05:55
3	3	0705F003.D	1.	SIM-PAH ICAL @.002ug/mL | SVM59-4A		5 Jul 2018 06:20
4	4	0705F004.D	1.	SIM-PAH ICAL @.004ug/mL | SVM59-4B		5 Jul 2018 06:44
5	5	0705F005.D	1.	SIM-PAH ICAL @.008ug/mL | SVM59-4C		5 Jul 2018 07:09
6	6	0705F006.D	1.	SIM-PAH ICAL @ 0.02ug/mL | SVM59-4D		5 Jul 2018 07:34
7	7	0705F007.D	1.	SIM-PAH ICAL @ 0.1ug/mL | SVM59-4E		5 Jul 2018 07:58
8	8	0705F008.D	1.	SIM-PAH ICAL @ 0.2ug/mL | SVM59-4F		5 Jul 2018 08:23
9	9	0705F009.D	1.	SIM-PAH ICAL @ 0.4ug/mL | SVM59-4G		5 Jul 2018 08:49
10	10	0705F010.D	1.	SIM-PAH ICAL @ 1.0ug/mL | SVM59-4H		5 Jul 2018 09:15
11	11	0705F011.D	1.	SIM-PAH ICAL @ 1.6ug/mL | SVM59-4I		5 Jul 2018 09:40
12	12	0705F012.D	1.	SIM-PAH ICAL @ 2.0ug/mL | SVM59-4J		5 Jul 2018 10:06
13	13	0705F013.D	1.	SIM-PAH ICAL @ 0.4ug/mL | SVM59-4K ICV		5 Jul 2018 10:32
14	2	0705F014.D	1.	SIM-PAH CCV @ 0.4ug/mL | SVM59-21B		5 Jul 2018 10:56
15	3	0705F015.D	1.	KQ1808822-3 MB		5 Jul 2018 11:21
16	4	0705F016.D	1.	KQ1808822-1 LCS		5 Jul 2018 11:46
17	5	0705F017.D	1.	KQ1808822-2 DLCS		5 Jul 2018 12:11
18	6	0705F018.D	1.	K1806167-007		5 Jul 2018 12:36
19	7	0705F019.D	1.	K1806167-008		5 Jul 2018 13:01
20	8	0705F020.D	1.	K1805517-004		5 Jul 2018 13:26
21	9	0705F021.D	1.	K1805519-006		5 Jul 2018 13:51
22	2	0705F022.D	1.	SIM-PAH CCV @ 0.4ug/mL | SVM59-21B		5 Jul 2018 14:16
23	100	0705F023.D	1.	DCM		5 Jul 2018 14:42
24	100	0705F024.D	1.	DCM		5 Jul 2018 15:07
25	100	0705F025.D	1.	DCM		5 Jul 2018 15:32

SIM-PAH ICAL *
CAL 15772

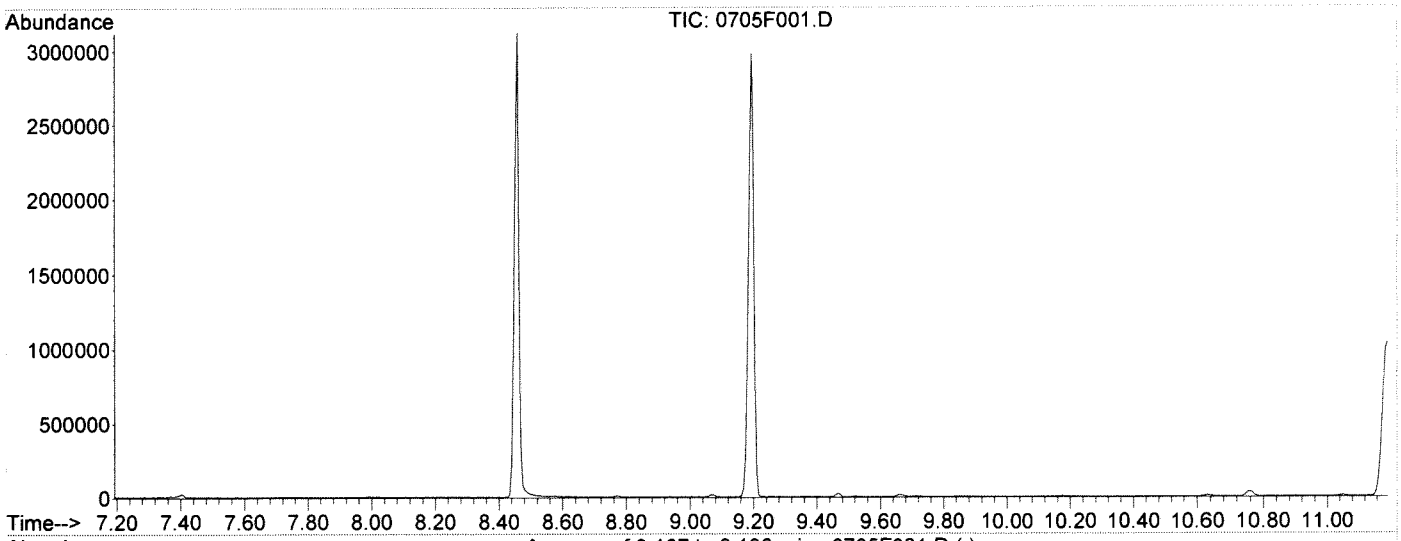
JUL 10 2018

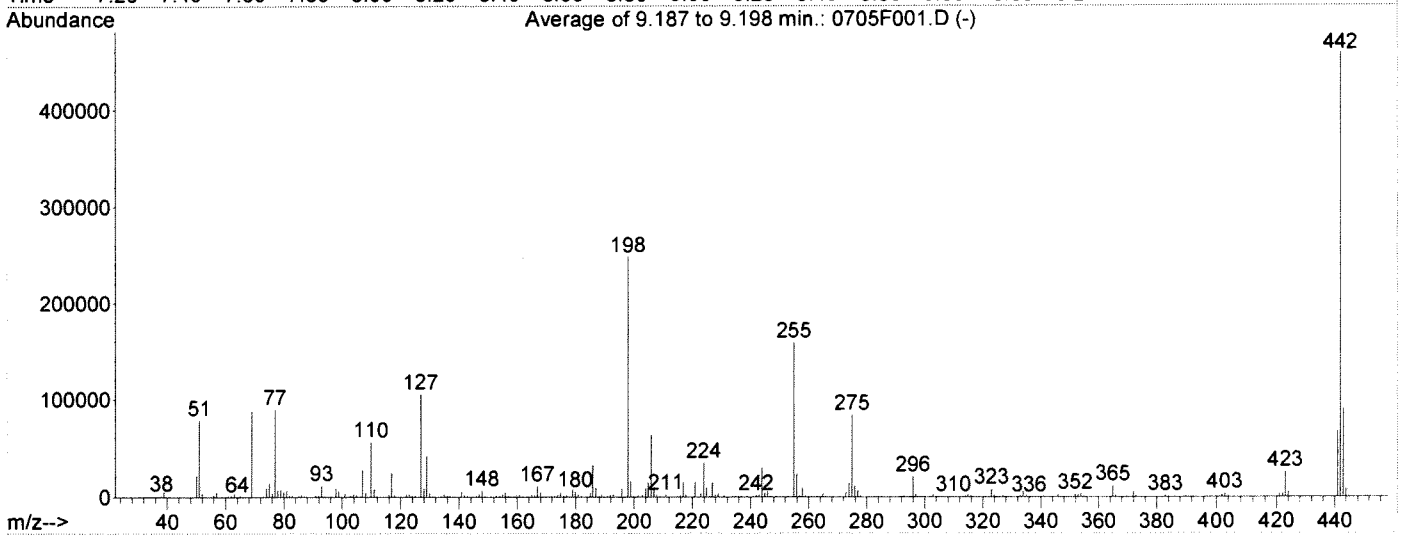
* DDT Breakdown does not pass for DOD

JUL 23 2018

Data File : J:\MS14\DATA\070518\0705F001.D
Acq On : 5 Jul 2018 5:25 am
Sample : DFTPP @ 10ug/mL | SVM59-5B
Misc :
MS Integration Params: rteint.p
Method : J:\MS14\METHODS\SIM\A_DFTPP.M (RTE Integrator)
Title : dftpp tune mix

Vial: 1
Operator: LWeiskopf
Inst : MS14
Multiplr: 1.00





AutoFind: Scans 527, 528, 529; Background Corrected with Scan 520

JUL 10 2018

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	31.6	78426	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	35.5	88073	PASS
70	69	0.00	2	0.7	618	PASS
127	198	10	80	42.5	105565	PASS
197	198	0.00	2	0.0	0	PASS
198	442	30	100	54.1	248384	PASS
199	198	5	9	6.6	16335	PASS
275	198	10	60	33.8	83986	PASS
365	442	1	50	2.5	11502	PASS
441	443	0.01	100	74.8	67032	PASS
442	442	30	100	100.0	459029	PASS
443	442	15	24	19.5	89658	PASS

JUL 23 2018

J:\MS14\DATA\070518\0705F001.D A_DFTPP.M Tue Jul 10 13:21:19 2018

Average of 9.187 to 9.198 min.: 0705F001.D
DFTPP @ 10ug/mL | SVM59-5B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	55	52.00	3879	65.95	143	79.95	4894
37.05	555	53.00	261	68.95	88073	80.95	6330
38.05	1375	54.95	560	69.95	618	81.95	1661
38.95	5705	55.95	2411	71.90	50	82.95	1588
39.95	359	57.00	5177	73.05	937	84.00	249
41.00	130	58.00	286	74.00	9183	85.00	1641
43.95	46	60.95	1044	75.00	13897	85.95	2305
44.95	118	61.95	1266	76.10	3364	86.95	1005
47.90	60	63.00	3390	77.00	89864	87.90	372
50.00	21640	64.00	510	78.00	6647	88.90	121
51.00	78426	64.95	1628	78.90	7624	89.10	154

Average of 9.187 to 9.198 min.: 0705F001.D
DFTPP @ 10ug/mL | SVM59-5B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
90.90	1792	101.95	204	115.00	310	126.90	105565
91.95	2023	102.90	1691	116.00	2356	127.95	8578
92.90	11707	103.90	2763	116.90	24304	128.90	42181
93.95	775	104.95	2424	117.90	1867	129.90	3659
95.00	91	106.10	408	118.90	191	130.90	770
96.05	651	106.90	27474	119.95	514	131.80	249
97.90	9222	107.95	4439	121.00	182	132.00	121
98.90	6123	109.90	56429	121.90	2341	132.50	66
99.90	670	110.90	8016	122.90	3237	132.85	220
100.95	3375	111.95	1079	123.90	1464	133.90	1212
101.80	77	112.95	376	124.90	1389	134.90	3175

Average of 9.187 to 9.198 min.: 0705F001.D
DFTPP @ 10ug/mL | SVM59-5B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
135.95	1581	145.90	1252	154.95	2905	165.95	2084
136.90	1686	146.95	3059	155.90	4657	166.90	10969
137.95	372	147.90	6452	156.95	1008	167.90	4706
138.85	356	148.95	1143	157.85	1181	168.95	783
139.80	160	149.90	256	158.90	886	169.95	430
140.05	426	150.10	117	159.85	1723	170.85	538
140.90	5847	150.95	861	160.90	2589	171.85	1047
141.90	2059	151.90	297	161.85	783	172.90	1393
142.85	1340	152.10	180	162.90	290	173.95	2406
143.90	381	152.90	1797	164.05	320	174.95	4321
144.90	372	153.90	1268	164.90	2581	175.95	1455

Average of 9.187 to 9.198 min.: 0705F001.D
DFTPP @ 10ug/mL | SVM59-5B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
176.90	2055	187.90	947	199.90	1191	210.90	2460
177.95	905	188.90	2200	201.35	1447	212.90	117
178.90	7694	189.85	380	202.90	1805	214.85	699
179.95	5477	190.90	1072	203.95	8787	215.90	1676
180.95	2505	191.90	2640	204.90	14947	216.90	15031
181.90	442	192.90	2945	205.90	63352	217.90	2102
182.85	316	193.95	729	206.90	7896	218.80	81
183.90	713	195.05	482	207.90	2069	220.90	15668
184.95	4018	195.90	8727	208.90	587	222.90	3810
185.90	32610	197.90	248384	209.90	368	223.90	34880
186.90	9496	198.90	16335	210.20	283	224.90	9377

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Average of 9.187 to 9.198 min.: 0705F001.D
DFTPP @ 10ug/mL | SVM59-5B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
225.95	1140	235.90	933	246.85	1011	255.90	23106
226.90	14624	236.90	1446	247.95	218	256.90	1835
227.85	2172	237.85	310	248.85	1018	257.90	9016
228.85	3083	238.85	675	249.80	172	258.90	1463
229.85	480	239.85	455	250.70	69	259.80	309
230.90	1381	240.90	757	250.85	226	260.90	353

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231.90	253	241.95	1949	251.85	290	262.90	66
232.85	169	242.95	2258	252.70	199	263.10	59
233.20	67	243.90	29725	252.90	482	263.75	201
233.90	998	244.90	4225	253.20	126	264.00	96
234.90	1322	245.90	5770	254.90	158872	264.90	3495

Average of 9.187 to 9.198 min.: 0705F001.D
DFTPP @ 10ug/mL | SVM59-5B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
265.85	619	278.85	285	293.85	453	308.85	193
270.00	133	281.90	79	295.00	454	309.90	385
270.90	377	282.80	763	295.90	20642	312.85	202
271.80	142	283.85	601	296.90	2999	313.90	1134
272.00	206	284.95	1076	297.90	205	314.90	2476
272.90	5151	285.85	322	300.90	301	315.95	1437
273.90	14274	288.90	232	301.95	454	316.90	298
274.90	83986	289.85	150	302.90	2563	320.90	772
275.90	11422	290.90	65	303.90	756	321.95	556
276.90	6530	291.95	338	304.90	56	322.95	8149
277.85	1062	292.90	1563	307.85	295	323.90	1466

Average of 9.187 to 9.198 min.: 0705F001.D
DFTPP @ 10ug/mL | SVM59-5B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
324.90	87	340.90	968	364.00	108	382.90	1630
325.90	77	341.90	329	364.90	11502	383.90	380
326.85	1526	345.85	2051	365.80	1676	384.90	117
327.85	720	346.85	362	366.70	51	389.95	795
331.95	568	349.80	60	369.85	379	390.95	639
332.95	873	350.90	87	370.85	708	391.85	413
333.90	5301	351.95	2974	371.90	5196	400.85	394
334.95	1634	352.95	2014	372.85	1411	401.90	2440
335.95	265	353.90	3134	373.90	223	402.90	3531
338.90	127	354.90	543	376.90	51	403.90	1201
339.80	223	358.85	158	381.90	55	404.75	167

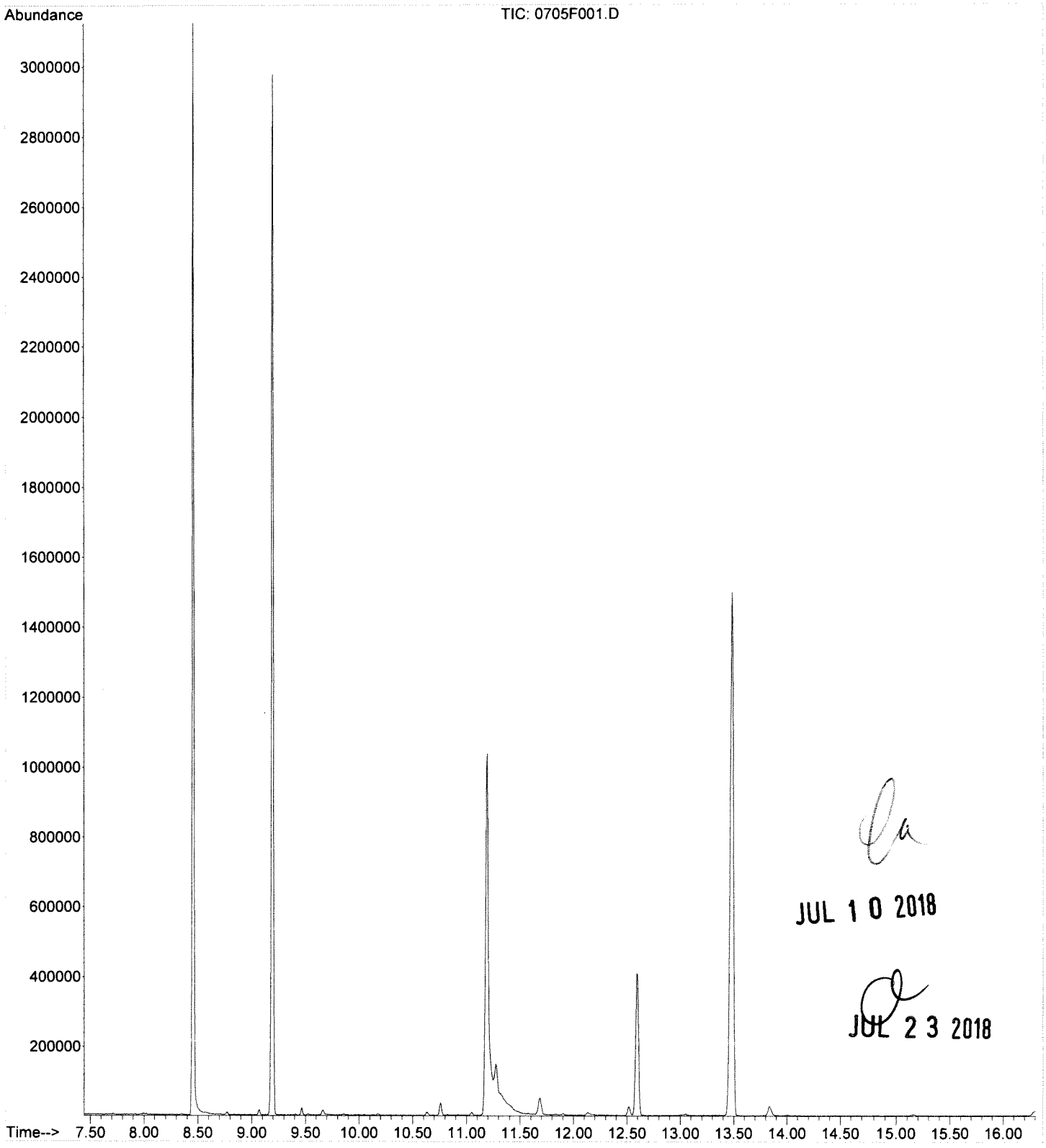
Average of 9.187 to 9.198 min.: 0705F001.D
DFTPP @ 10ug/mL | SVM59-5B
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
414.80	84	443.95	8040				
420.90	3016	444.85	540				
421.95	3375						
422.95	25485						
423.95	4967						
424.90	464						
438.70	54						
439.25	139						
441.00	67032						
441.95	459029						
443.00	89658						

JUL 10 2018

JUL 23 2018

File : J:\MS14\DATA\070518\0705F001.D
Operator : LWeiskopf
Acquired : 5 Jul 2018 5:25 am using AcqMethod SIMLOC
Instrument : MS14
Sample Name: DFTPP @ 10ug/mL | SVM59-5B
Misc Info :
Vial Number: 1



JUL 10 2018

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1	6.187	rVB	0.488	1987385	6.105	6.593	
2	7.057	rBV	0.041	3731	7.028	7.069	
3	7.334	rBV	0.053	3715	7.299	7.352	
4	7.404	rVB	0.106	36179	7.352	7.457	
5	7.516	rBV	0.065	3182	7.499	7.563	
6	7.710	rVB	0.059	3376	7.704	7.763	
7	7.993	rBV	0.035	2761	7.975	8.010	
8	8.299	rVB	0.041	2214	8.287	8.328	
9	8.346	rBV	0.047	5014	8.328	8.375	
10	8.457	rBV	0.135	3203395	8.416	8.551	
11	8.681	rVB	0.041	2639	8.663	8.704	
12	8.769	rVB	0.071	10831	8.740	8.810	
13	8.846	rBV	0.053	2224	8.810	8.863	
14	8.975	rBV	0.047	2581	8.951	8.998	
15	9.069	rVB	0.071	18989	9.040	9.110	
16	9.193	rBV	0.100	3509225	9.140	9.240	
17	9.404	rVB	0.053	3173	9.387	9.440	
18	9.469	rBV	0.059	23918	9.440	9.498	
19	9.522	rBV	0.053	5060	9.498	9.551	
20	9.663	rVB	0.159	32886	9.616	9.775	
21	9.804	rVB	0.035	2003	9.775	9.810	
22	9.857	rBV	0.059	5114	9.822	9.881	
23	10.175	rVB	0.047	6135	10.157	10.204	
24	10.634	rBV	0.071	13791	10.598	10.669	
25	10.681	rVB	0.041	2185	10.669	10.710	
26	10.757	rBV	0.082	53994	10.710	10.792	
27	10.822	rBV	0.047	2829	10.792	10.840	
28	11.051	rVB	0.065	12366	11.022	11.087	
29	11.192	rBV	0.129	2187343	11.122	11.251	
30	11.275	rVV	0.282	658438	11.257	11.540	
31	11.575	rVB	0.035	2755	11.563	11.598	
32	11.687	rVB	0.106	102651	11.645	11.751	
33	11.839	rVB	0.047	4197	11.816	11.863	
34	11.898	rBV	0.059	6775	11.863	11.922	
35	12.057	rBV	0.035	3096	12.034	12.069	
36	12.134	rVV	0.094	20222	12.098	12.192	
37	12.516	rBV	0.088	46521	12.463	12.551	
38	12.592	rVB	0.135	786356	12.551	12.686	
39	12.710	rBV	0.053	3295	12.686	12.739	
40	13.004	rBV	0.035	2370	12.975	13.010	
41	13.051	rVB	0.071	8125	13.016	13.086	
42	13.481	rVB	0.153	3197373	13.410	13.563	
43	13.833	rBV	0.141	68576	13.769	13.910	
44	14.004	rBV	0.053	5139	13.969	14.022	
45	14.081	rBV	0.035	2153	14.057	14.092	
46	14.351	rBV	0.041	2270	14.322	14.363	
47	14.439	rBV	0.035	2025	14.428	14.463	
48	15.151	rVB	0.076	10207	15.122	15.198	
49	15.457	rBV	0.065	2538	15.422	15.486	
50	15.722	rBV	0.071	4571	15.686	15.757	
51	15.822	rBV	0.029	2077	15.810	15.839	
52	16.298	rBV	0.141	48519	16.233	16.374	
53	16.427	rBV	0.035	2054	16.410	16.445	
54	16.716	rBV	0.059	3667	16.669	16.727	
55	17.133	rBV	0.047	2569	17.122	17.169	
56	17.198	rBV	0.041	2297	17.169	17.210	
57	17.398	rVB	0.082	40761	17.357	17.439	
58	17.521	rBV	0.047	2468	17.504	17.551	
59	17.704	rBV	0.029	2157	17.692	17.721	
60	17.927	rBV	0.029	2686	17.910	17.939	
61	18.133	rBV	0.147	147806	18.086	18.233	
62	18.680	rBV	0.112	236488	18.639	18.751	
63	19.121	rBV	0.112	340886	19.092	19.204	
64	19.586	rBV	0.141	356044	19.551	19.692	
65	20.151	rBV	0.218	445560	20.110	20.327	
66	20.745	rBV	0.059	179011	20.710	20.768	

DDT Breakdown = 22%

* Does not pass for DOD >20%

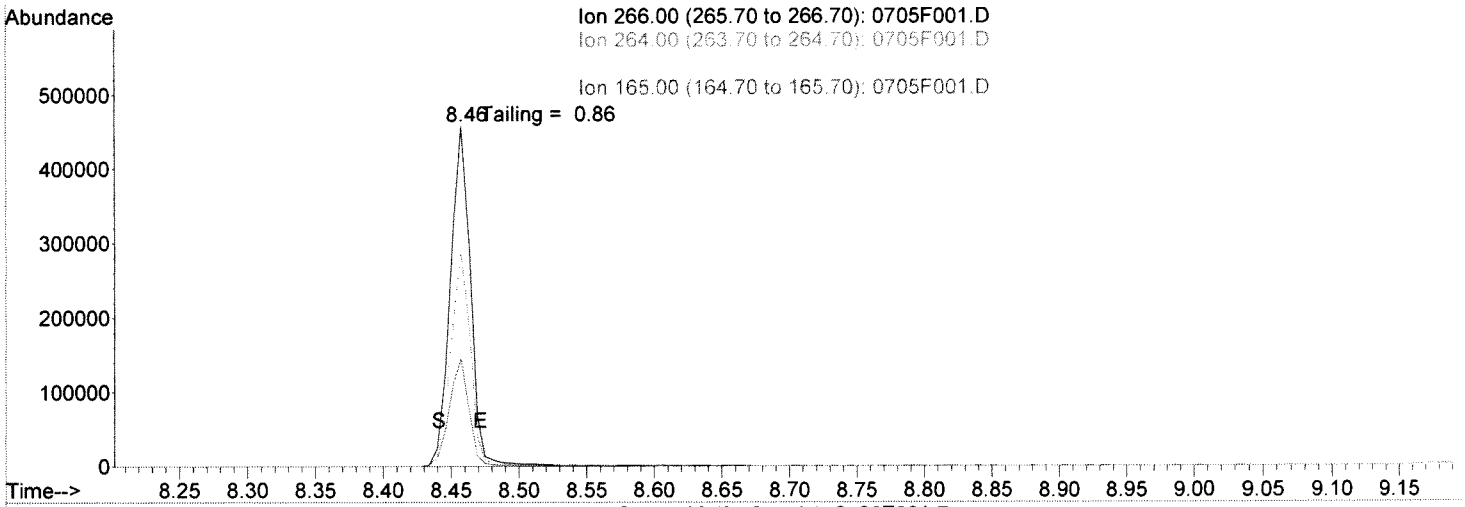
JUL 10 2018

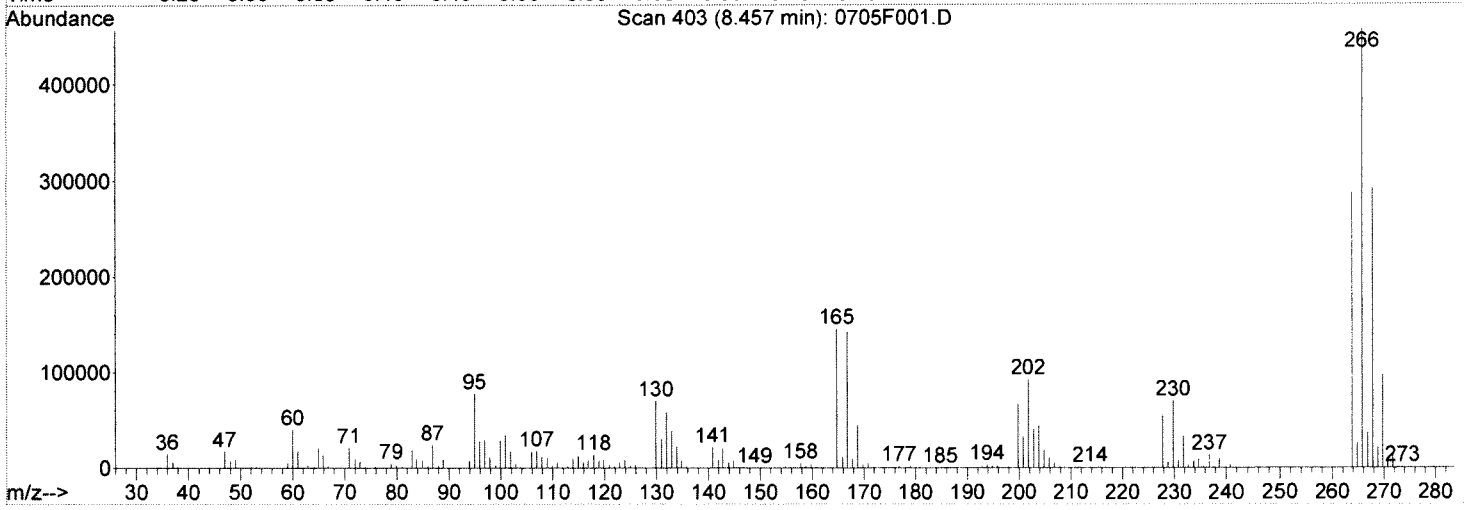
JUL 23 2018

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\070518\0705F001.D Vial: 1
Acq On : 5 Jul 2018 5:25 am Operator: LWeiskopf
Sample : DFTPP @ 10ug/mL | SVM59-5B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 5 5:53 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\A_DFTPP.M (RTE Integrator)
Title : dftpp tune mix
Last Update : Tue Oct 17 14:59:38 2017
Response via : Single Level Calibration





TIC: 0705F001.D

(1) Pentachlorophenol

7.37min 0.00ng/ml

response 0

Ion	Exp%	Act%
266.00	100	0.00
264.00	62.30	0.00#
268.00	72.30	0.00#
165.00	42.00	0.00#

JUL 10 2018

JUL 23 2018

0705F001.D A_DFTPP.M Tue Jul 10 13:21:54 2018

Data File : J:\MS14\DATA\070518\0705F002.D Vial: 2
Acq On : 5 Jul 2018 5:55 am Operator: LWeiskopf
Sample : IB Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 05 09:03:21 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	71688	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	40197	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.61	188	96503	200.00	ng/ml	0.00
23) Chrysene-d12	10.18	240	100801	200.00	ng/ml	0.00
28) Perylene-d12	13.37	264	100839	200.00	ng/ml	0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	0.00	152	0	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
13) Fluorene-d10	6.81	176	246	0.94	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.09%		
22) Fluoranthene-d10	0.00	212	0	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
25) Terphenyl-d14	0.00	244	0	0.00	ng/ml	
Spiked Amount 1000.000			Recovery =	0.00%		
Target Compounds						Qvalue
26) Benz(a)anthracene	10.19	228	290	0.45	ng/ml	61

L 1/2 MRL

JUL 10 2018

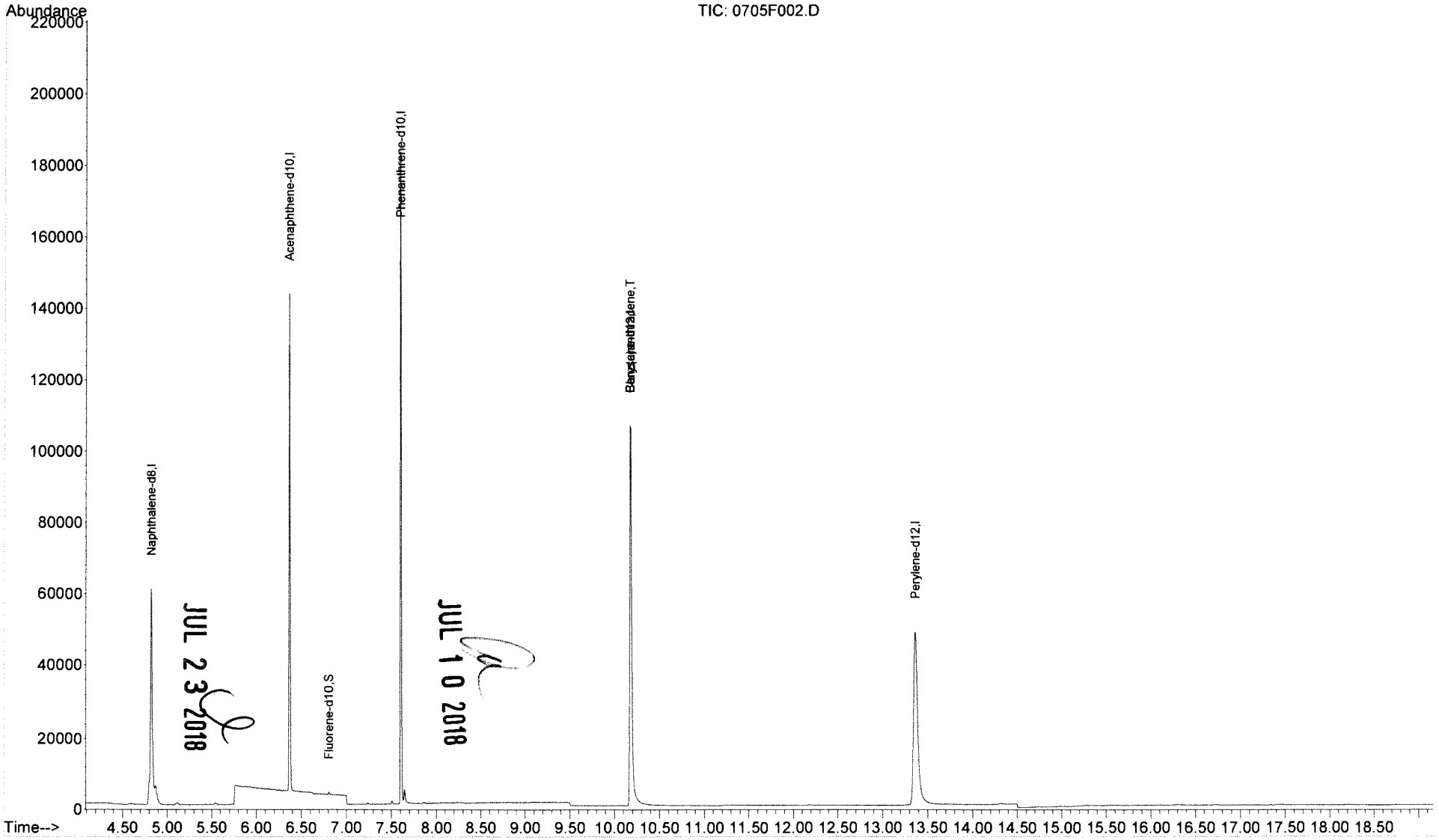
JUL 23 2018

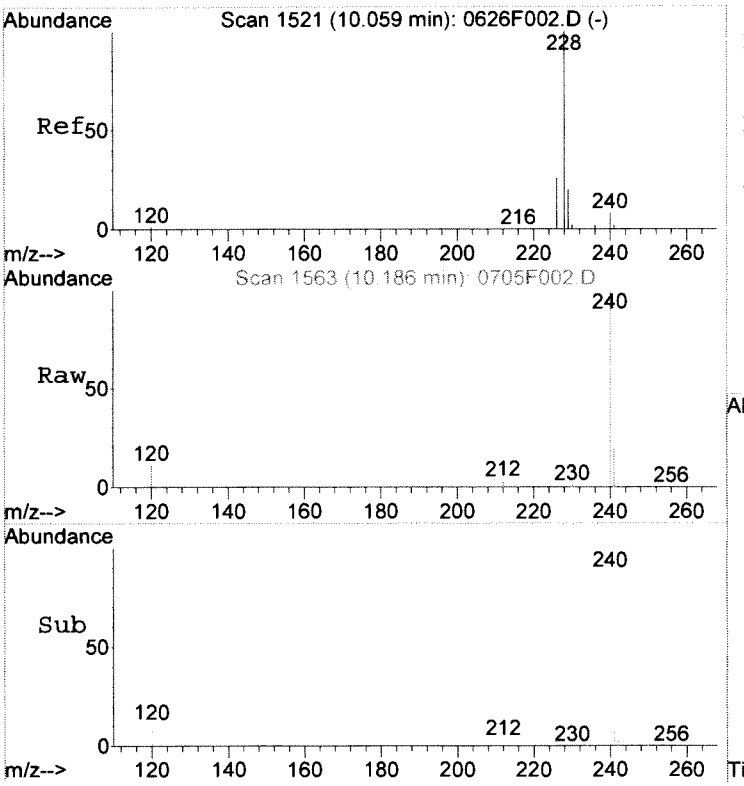
(#) = qualifier out of range (m) = manual integration
0705F002.D 070518PAH.M Tue Jul 10 13:20:51 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\070518\0705F002.D Vial: 2
Acq On : 5 Jul 2018 5:55 am Operator: LWeiskopf
Sample : IB Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 10 13:20 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration

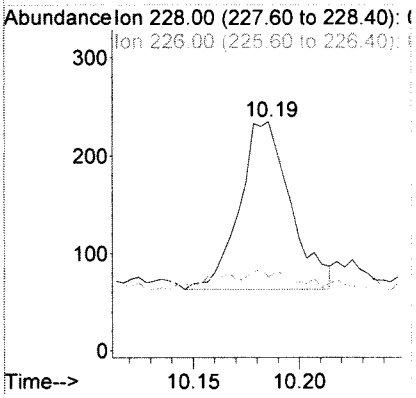




#26
Benz(a)anthracene
Concen: 0.45 ng/ml
RT: 10.19 min Scan# 1563
Delta R.T. 0.02 min
Lab File: 0705F002.D
Acq: 5 Jul 2018 5:55 am

Tgt Ion:228 Resp: 290

Ion	Ratio	Lower	Upper
228	100		
226	4.7	0.0	56.0
229	35.5	0.0	39.5



JUL 10 2018

JUL 23 2018

Data File : J:\MS14\DATA\070518\0705F003.D Vial: 3
Acq On : 5 Jul 2018 6:20 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.002ug/mL | SVM59-4A Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 05 09:03:21 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	73447m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	36197	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.61	188	82979	200.00	ng/ml	0.00
23) Chrysene-d12	10.18	240	92925	200.00	ng/ml	0.00
28) Perylene-d12	13.36	264	96486	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.45	152	500	2.37	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.24%		
13) Fluorene-d10	6.81	176	707	2.99	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.30%		
22) Fluoranthene-d10	8.59	212	1069	2.27	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.23%		
25) Terphenyl-d14	8.96	244	1335	3.16	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.32%		
Target Compounds						Qvalue
2) Naphthalene	4.84	128	844m	2.18	ng/ml	
4) 2-Methylnaphthalene	5.48	142	621	2.53	ng/ml	97
5) 1-Methylnaphthalene	5.56	142	605	2.50	ng/ml	99
6) Biphenyl	5.89	154	711m	2.34	ng/ml	
7) 2,6-Dimethylnaphthalene	6.02	156	526	2.39	ng/ml	97
9) Acenaphthylene	6.25	152	900	2.30	ng/ml	96
10) Acenaphthene	6.40	154	502	2.24	ng/ml	94
11) Dibenzofuran	6.54	168	811	2.20	ng/ml	91
12) 2,3,5-Trimethylnaphthalene	6.72	170	475	2.14	ng/ml	77
14) Fluorene	6.83	166	660	2.34	ng/ml	99
16) Dibenzothiophene	7.52	184	1084	2.44	ng/ml	99
17) Phenanthrene	7.63	178	1128m	2.43	ng/ml	
18) Anthracene	7.67	178	1104	2.45	ng/ml	98
19) Carbazole	7.80	167	897	2.26	ng/ml	94
20) 1-Methylphenanthrene	8.14	192	855	2.43	ng/ml	92
21) Fluoranthene	8.61	202	1317	2.49	ng/ml	97
24) Pyrene	8.81	202	1381	2.16	ng/ml	56
26) Benz(a)anthracene	10.17	228	1491	2.53	ng/ml	98
27) Chrysene	10.22	228	1295	2.37	ng/ml	98
29) Benzo(b)fluoranthene	12.29	252	1343	2.32	ng/ml	97
30) Benzo(k)fluoranthene	12.36	252	1164	2.06	ng/ml	95
31) Benzo(e)pyrene	13.02	252	1305	2.37	ng/ml	97
32) Benzo(a)pyrene	13.18	252	1060	2.05	ng/ml	96
33) Perylene	13.44	252	1166	2.20	ng/ml	97
34) Indeno(1,2,3-cd)pyrene	15.50	276	989	1.59	ng/ml	93
35) Dibenz(a,h)anthracene	15.56	278	1018m	1.64	ng/ml	
36) Benzo(g,h,i)perylene	15.89	276	1310	1.89	ng/ml	96

JUL 10 2018

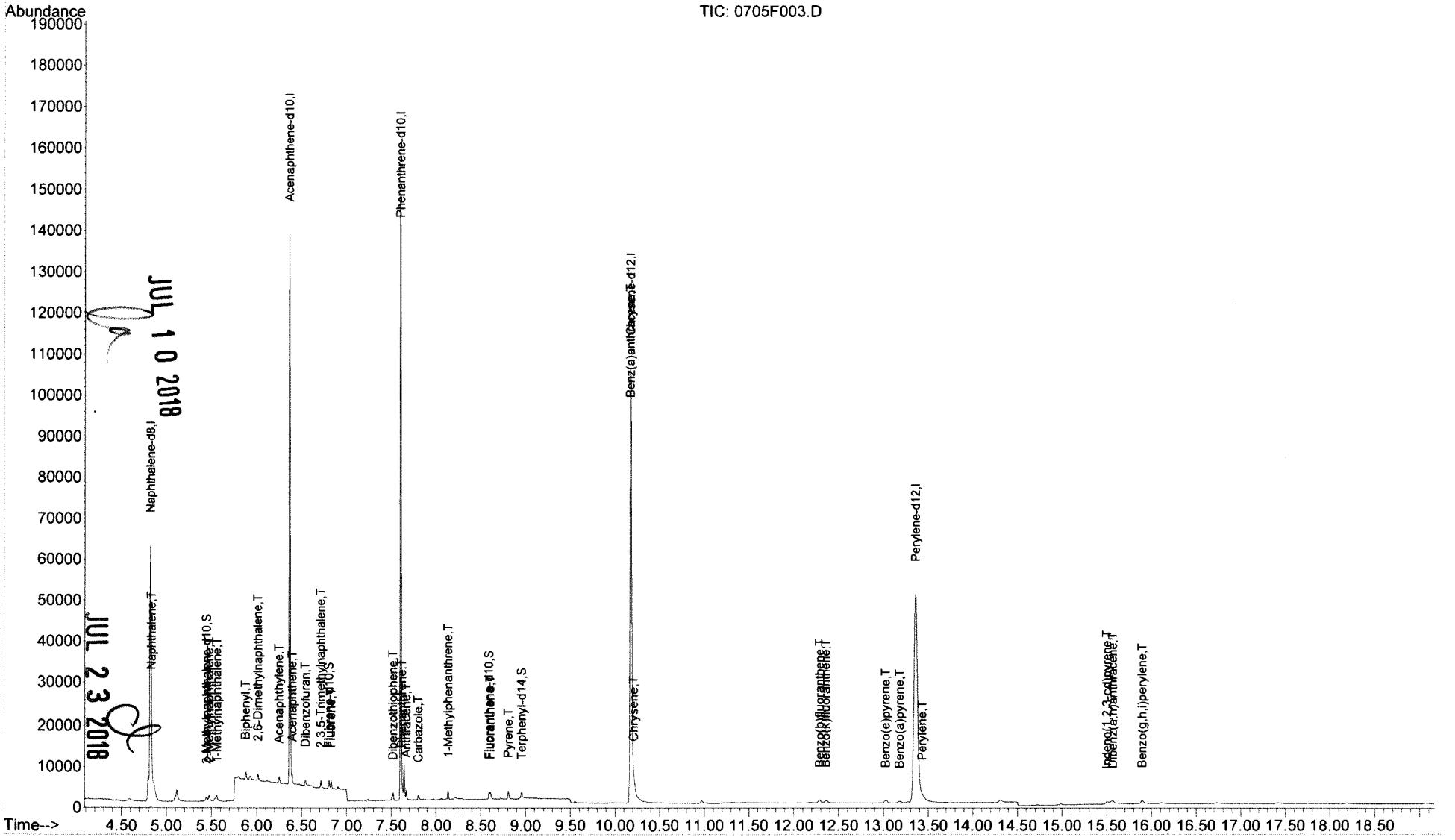
JUL 23 2018

(#) = qualifier out of range (m) = manual integration
0705F003.D 070518PAH.M Thu Jul 05 09:26:24 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\070518\0705F003.D Vial: 3
Acq On : 5 Jul 2018 6:20 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.002ug/mL | SVM59-4A Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:20 2018 Quant Results File: 070518PAH.RES

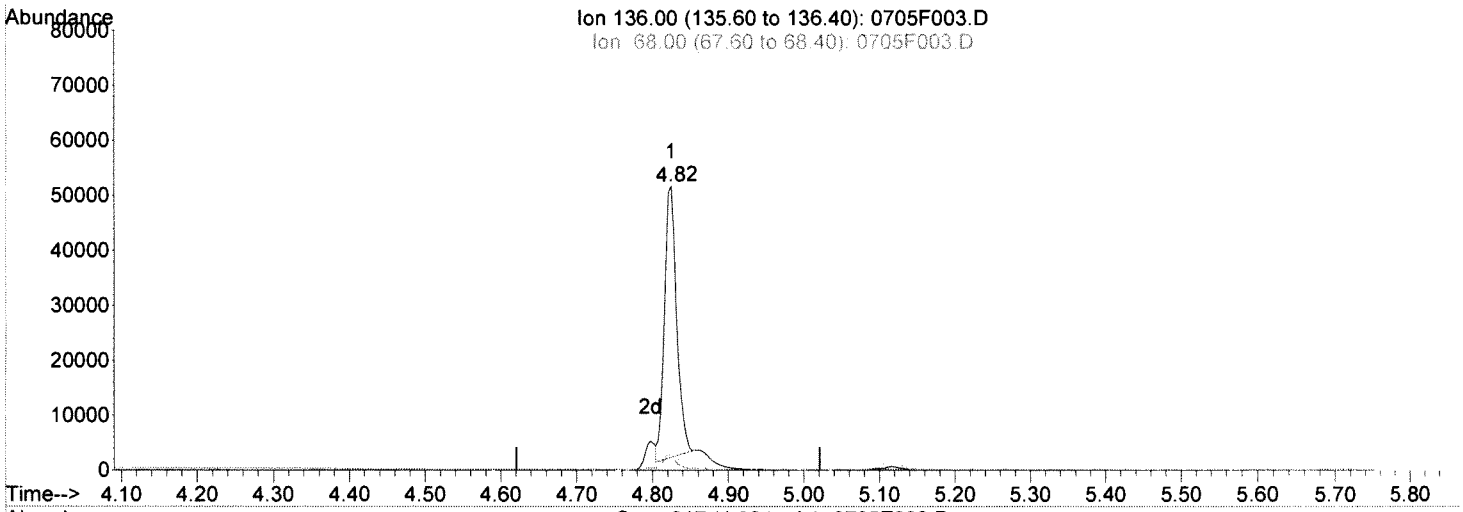
Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Initial Calibration

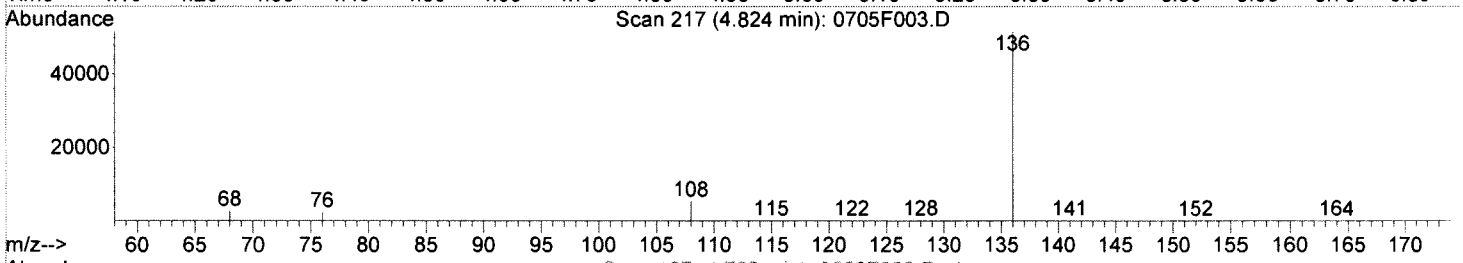


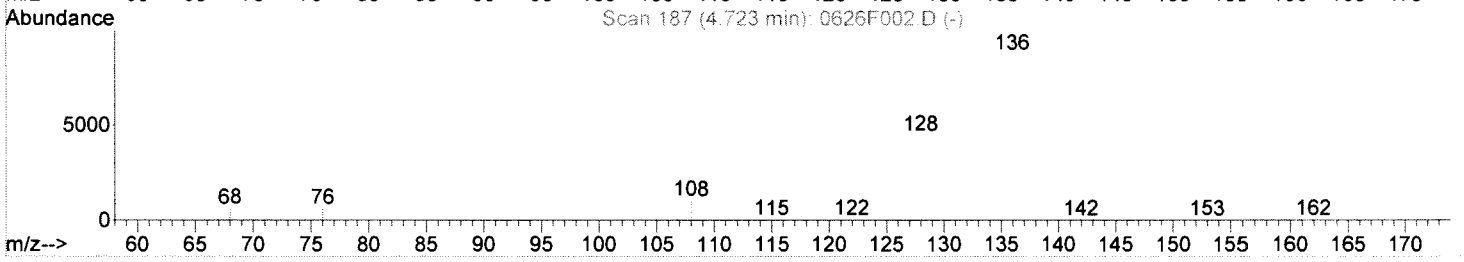
JUL 10 2018
JUL 23 2018

Data File : J:\MS14\DATA\070518\0705F003.D Vial: 3
Acq On : 5 Jul 2018 6:20 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.002ug/mL | SVM59-4A Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:03 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F003.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml

response 55060

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	4.88
108.00	9.50	10.17
0.00	0.00	0.00

Manual Integration:

Before

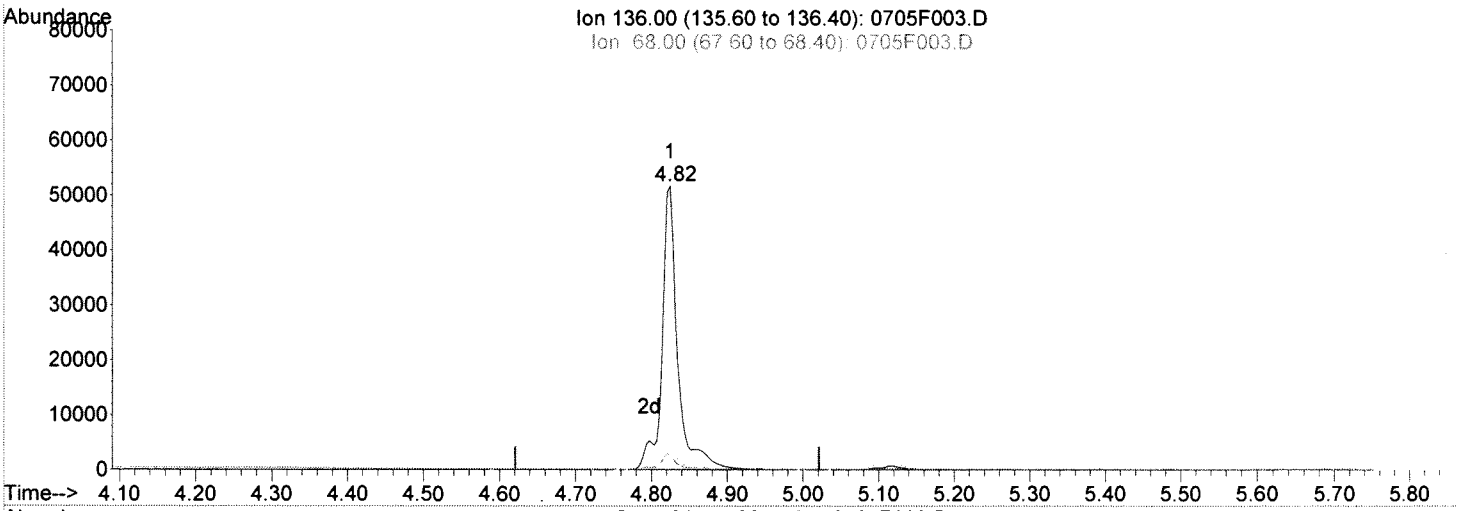
07/05/18

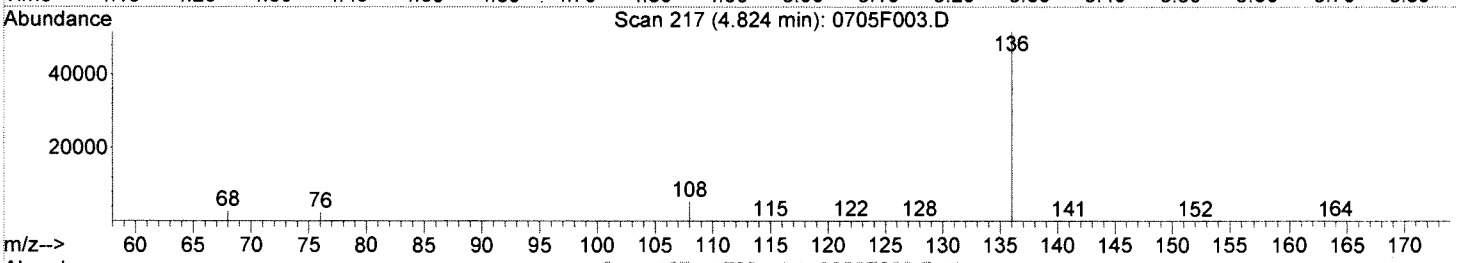
JUL 23 2018

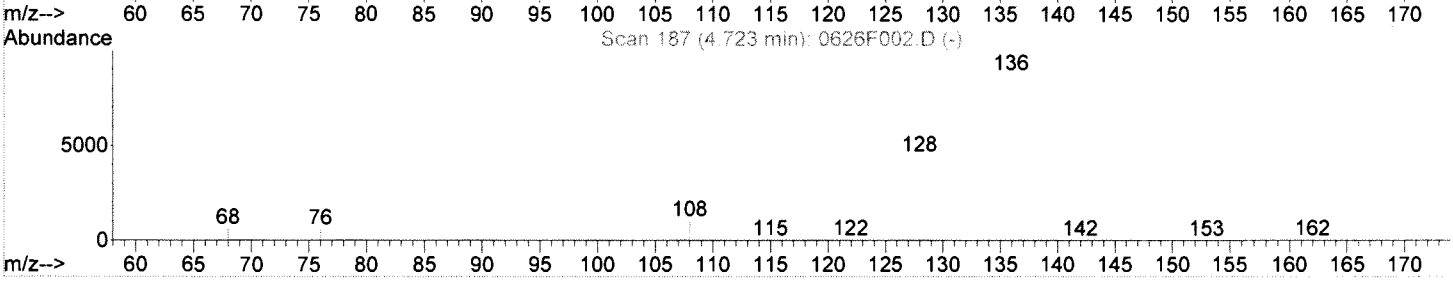
0705F003.D 070518PAH.M Thu Jul 05 09:19:12 2018

Data File : J:\MS14\DATA\070518\0705F003.D Vial: 3
Acq On : 5 Jul 2018 6:20 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.002ug/mL | SVM59-4A Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:19 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F003.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml m

response 73447

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.23
108.00	9.50	10.38
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

07/05/18

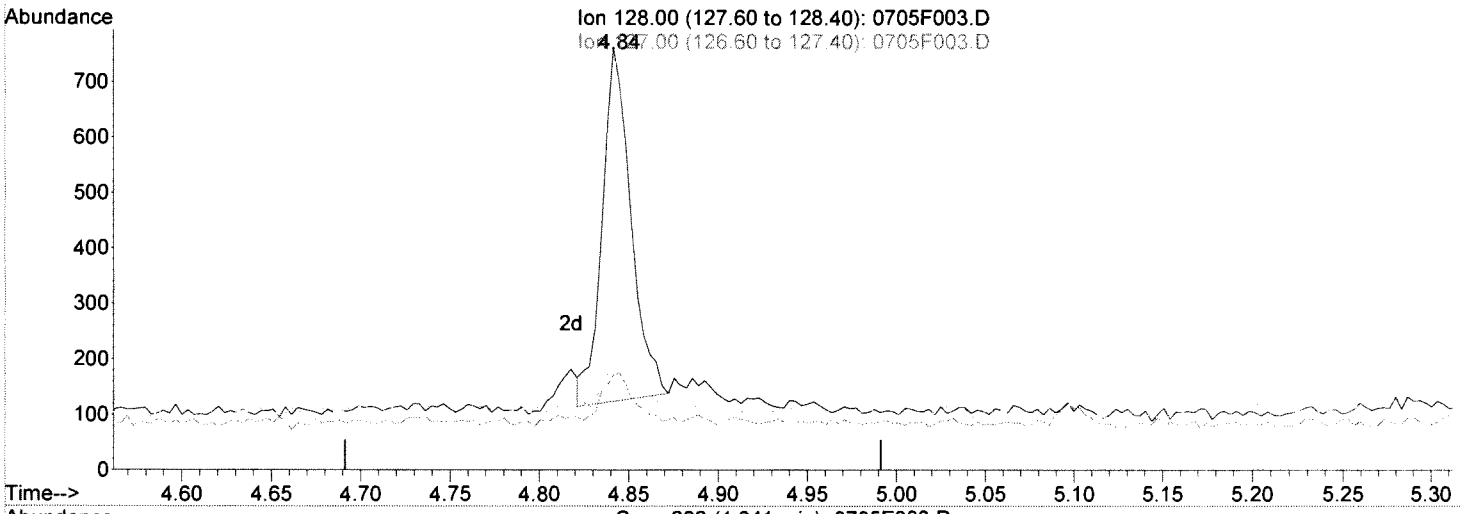
JUL 23 2018

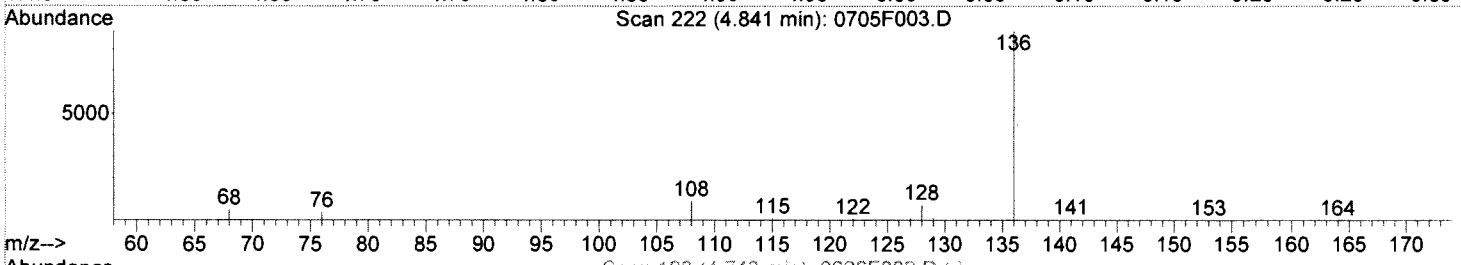
0705F003.D 070518PAH.M Thu Jul 05 09:19:21 2018

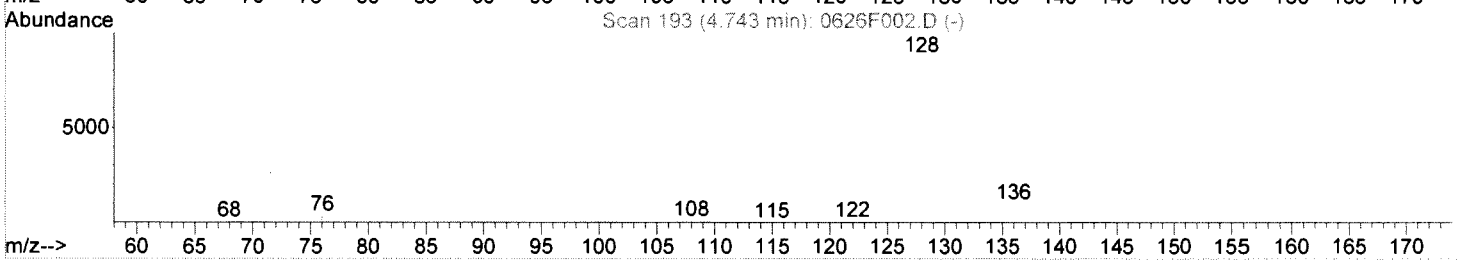
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\070518\0705F003.D Vial: 3
Acq On : 5 Jul 2018 6:20 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.002ug/mL | SVM59-4A Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:19 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F003.D

(2) Naphthalene (T)

4.84min 1.85ng/ml

response 716

Ion	Exp%	Act%
128.00	100	100
127.00	12.40	12.66
129.00	10.80	8.01
0.00	0.00	0.00

Manual Integration:

Before

07/05/18

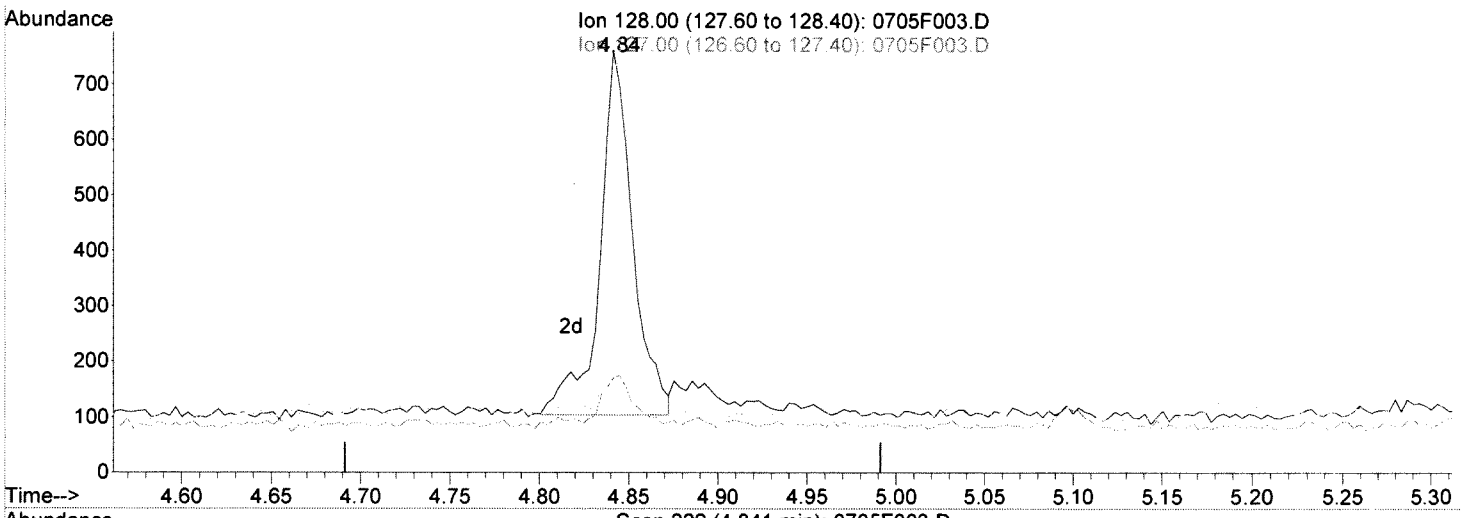
JUL 23 2018

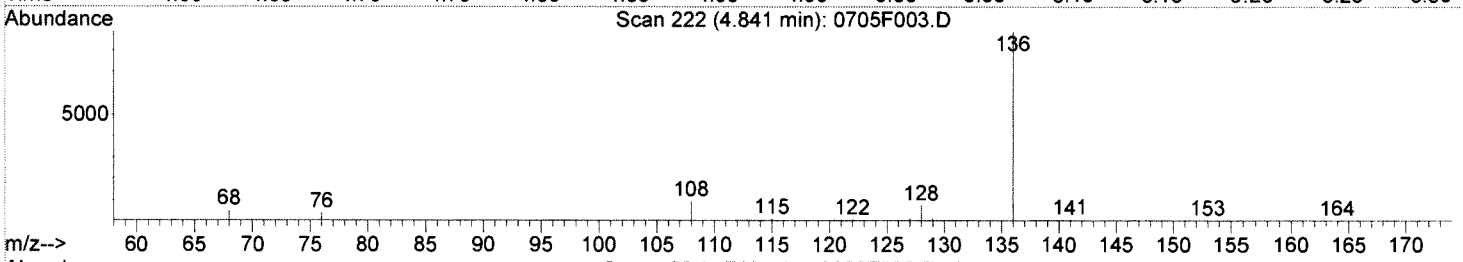
0705F003.D 070518PAH.M Thu Jul 05 09:19:26 2018

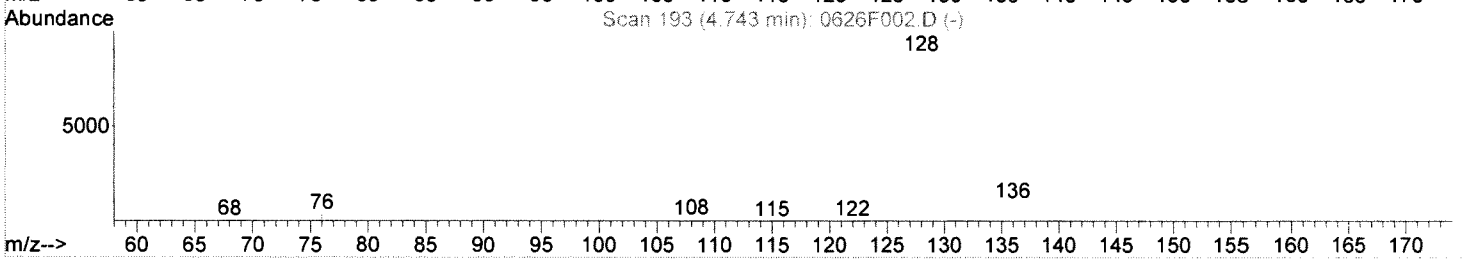
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\070518\0705F003.D Vial: 3
Acq On : 5 Jul 2018 6:20 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.002ug/mL | SVM59-4A Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:19 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F003.D

(2) Naphthalene (T)

4.84min 2.18ng/ml m

response 844

Ion	Exp%	Act%
128.00	100	100
127.00	12.40	22.31
129.00	10.80	21.52
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

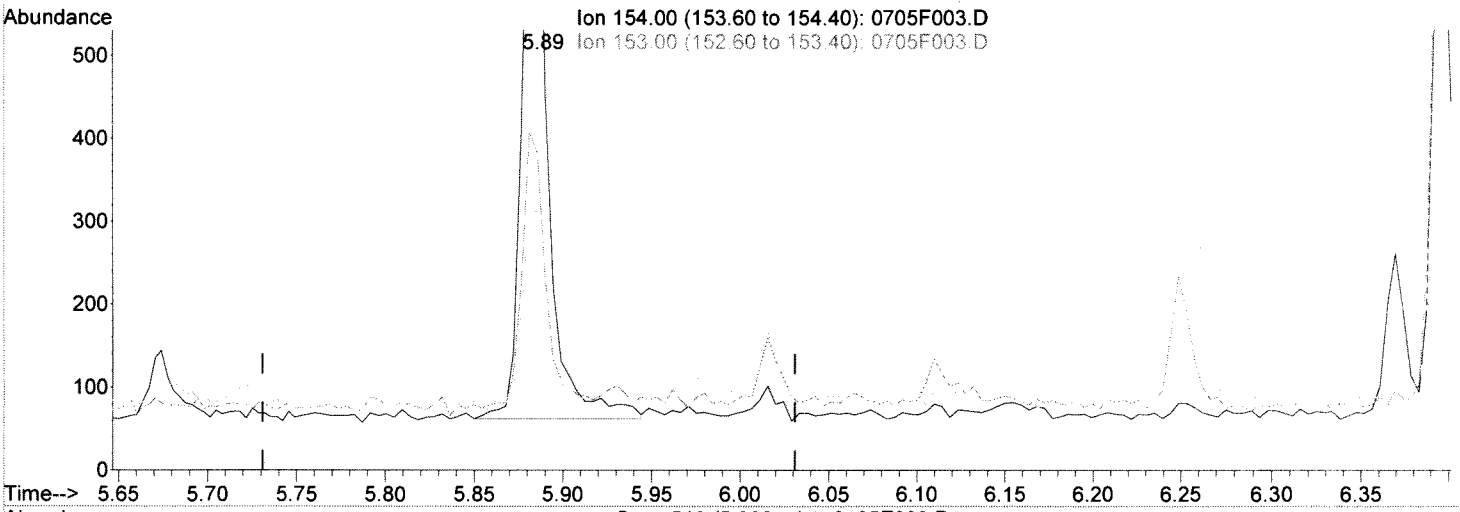
07/05/18

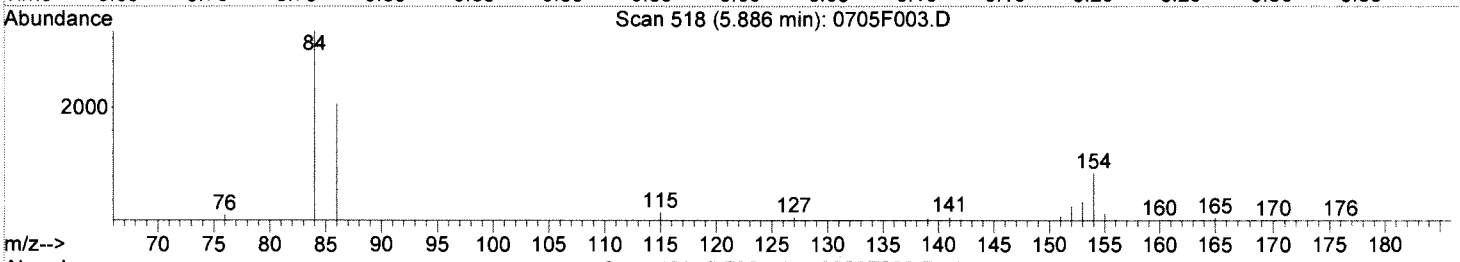
JUL 23 2018

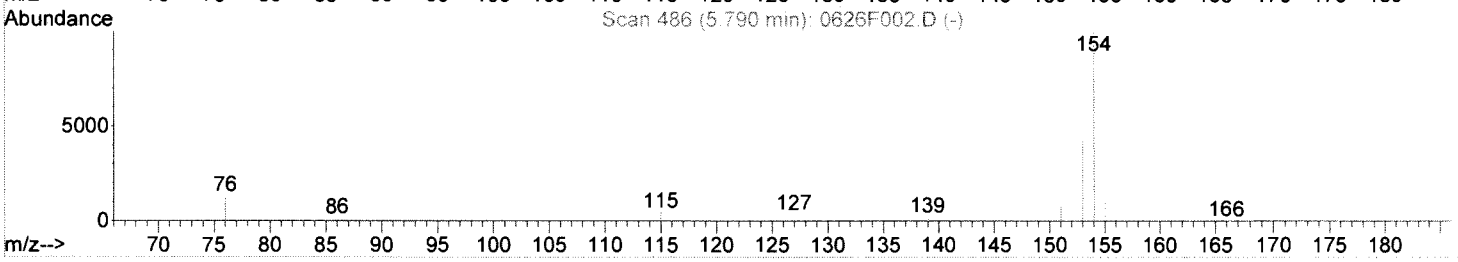
0705F003.D 070518PAH.M Thu Jul 05 09:19:32 2018

Data File : J:\MS14\DATA\070518\0705F003.D Vial: 3
Acq On : 5 Jul 2018 6:20 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.002ug/mL | SVM59-4A Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:19 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F003.D

(6) Biphenyl (T)

5.89min 2.55ng/ml

response 775

Ion	Exp%	Act%
154.00	100	100
153.00	38.20	37.64
152.00	26.00	28.07
0.00	0.00	0.00

Manual Integration:

Before

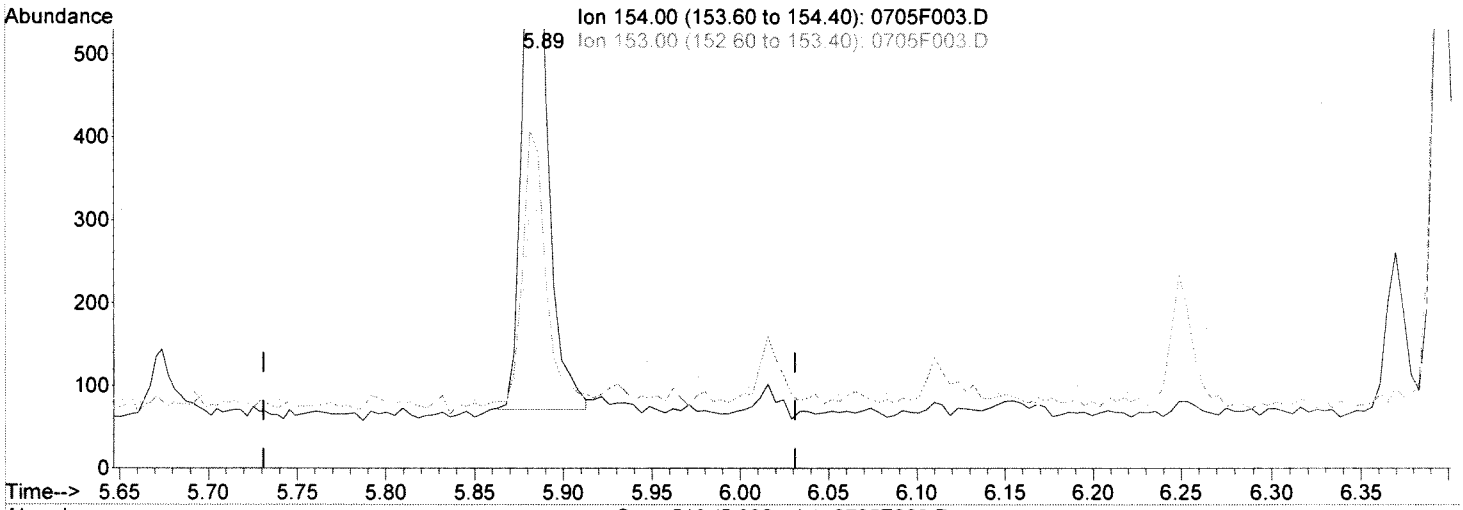
07/05/18

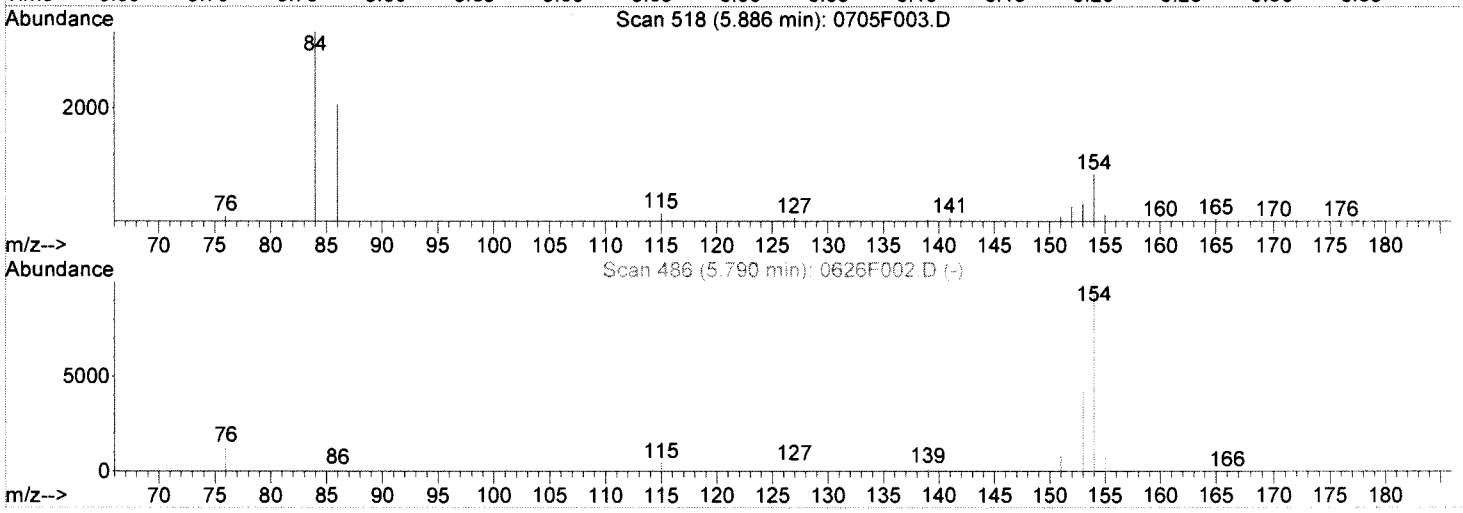
JUL 23 2018

0705F003.D 070518PAH.M Thu Jul 05 09:19:41 2018

Data File : J:\MS14\DATA\070518\0705F003.D Vial: 3
Acq On : 5 Jul 2018 6:20 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.002ug/mL | SVM59-4A Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:19 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration





TIC: 0705F003.D

(6) Biphenyl (T)

5.89min 2.34ng/ml m

response 711

Ion	Exp%	Act%
154.00	100	100
153.00	38.20	44.06
152.00	26.00	35.64
0.00	0.00	0.00

Manual Integration:

After

BLC

07/05/18

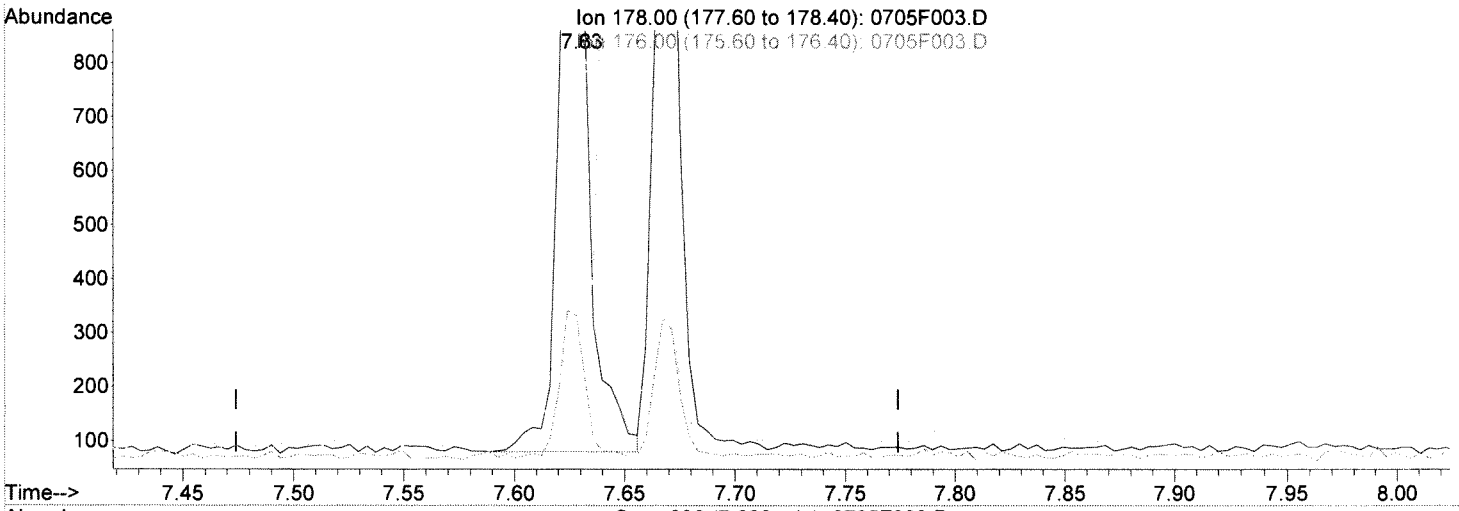
JUL 23 2018

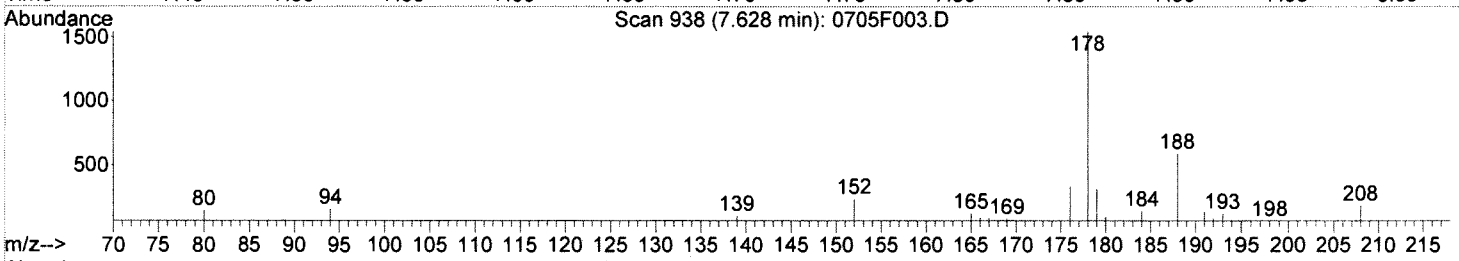
0705F003.D 070518PAH.M Thu Jul 05 09:20:06 2018

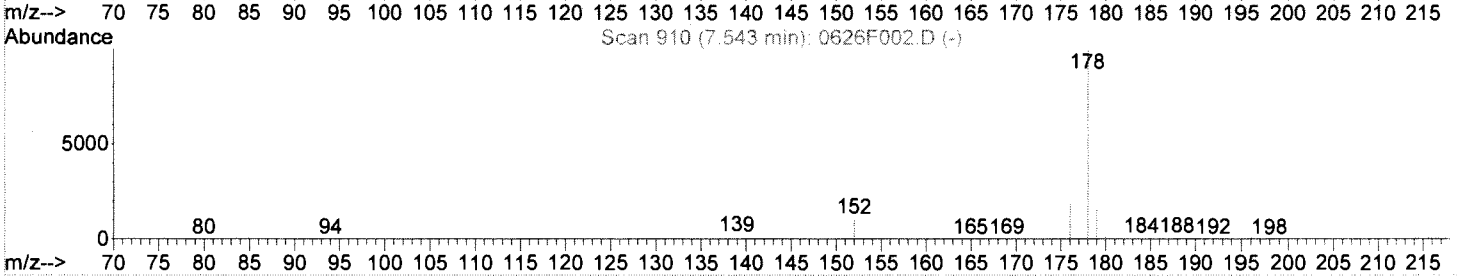
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\070518\0705F003.D Vial: 3
Acq On : 5 Jul 2018 6:20 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.002ug/mL | SVM59-4A Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:19 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F003.D

(17) Phenanthrene (T)

7.63min 2.62ng/ml

response 1217

Ion	Exp%	Act%
178.00	100	100
176.00	18.50	17.78
179.00	15.20	14.57
0.00	0.00	0.00

Manual Integration:

Before

07/05/18

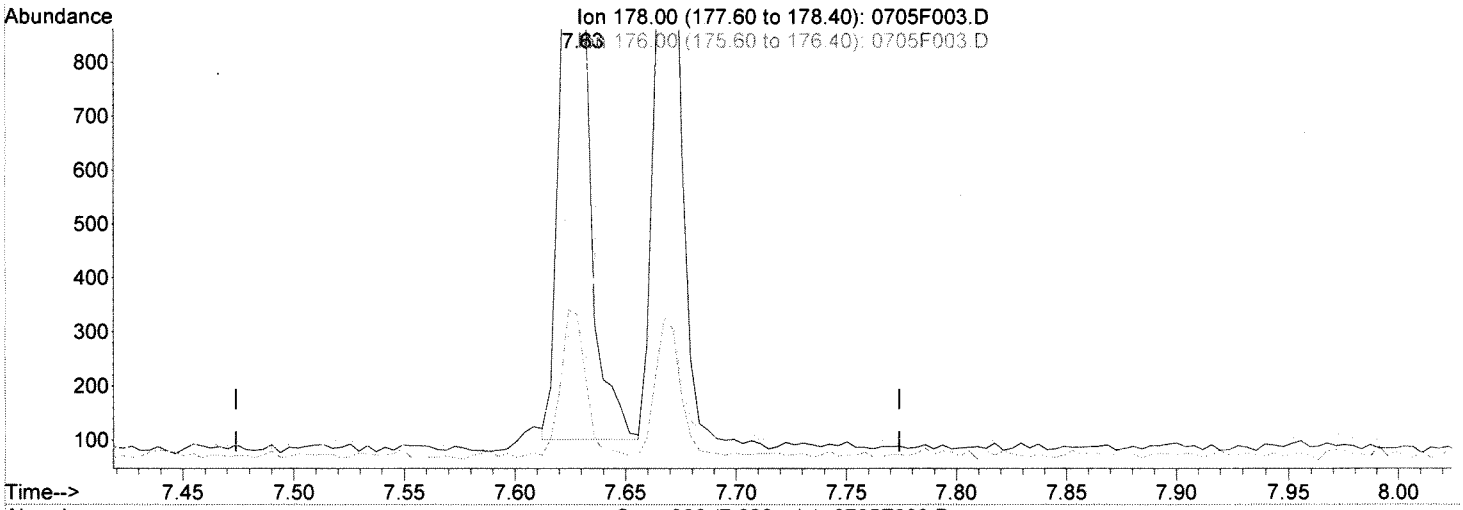
JUL 23 2018

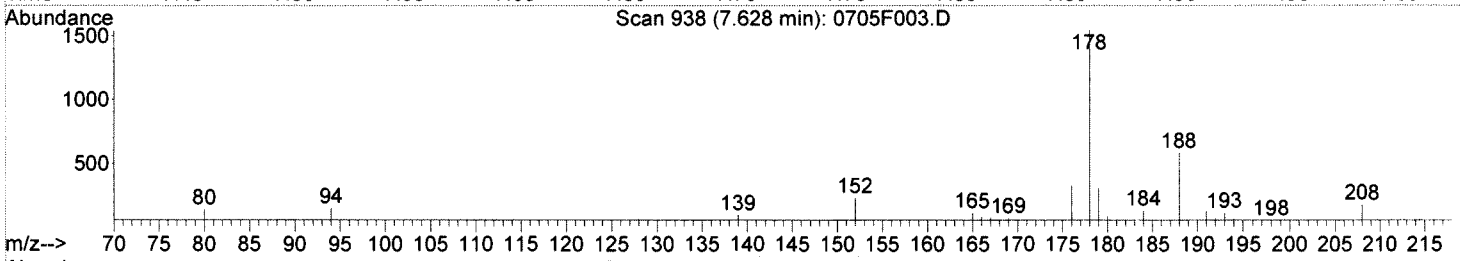
0705F003.D 070518PAH.M Thu Jul 05 09:20:23 2018

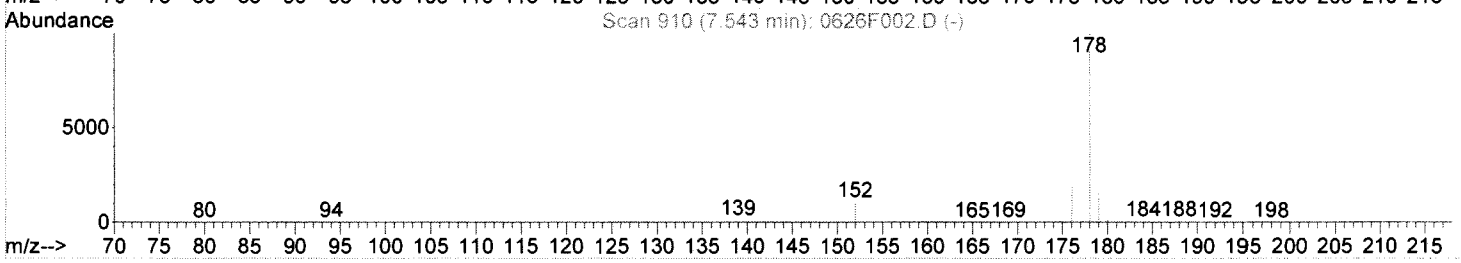
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\070518\0705F003.D Vial: 3
Acq On : 5 Jul 2018 6:20 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.002ug/mL | SVM59-4A Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:20 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F003.D

(17) Phenanthrene (T)

7.63min 2.43ng/ml m

response 1128

Ion	Exp%	Act%
178.00	100	100
176.00	18.50	21.53
179.00	15.20	20.04
0.00	0.00	0.00

Manual Integration:

After

BLC

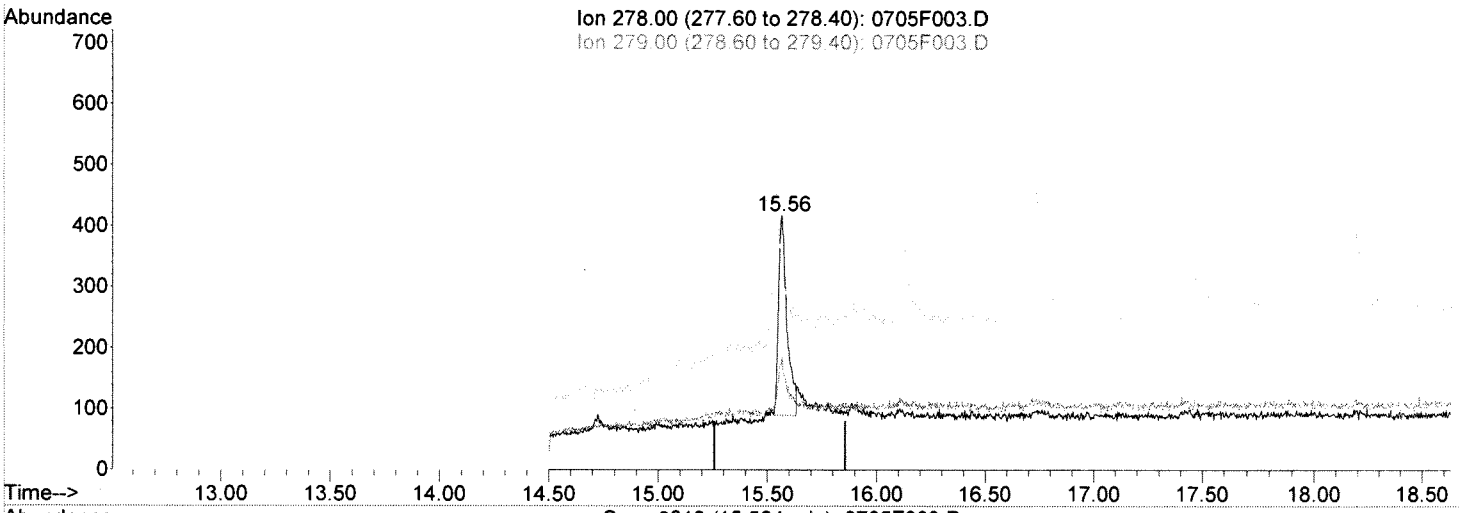
07/05/18

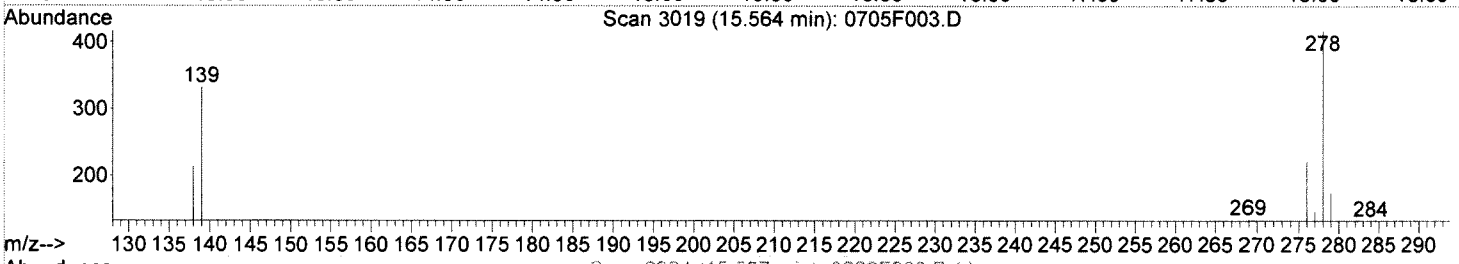
JUL 23 2018

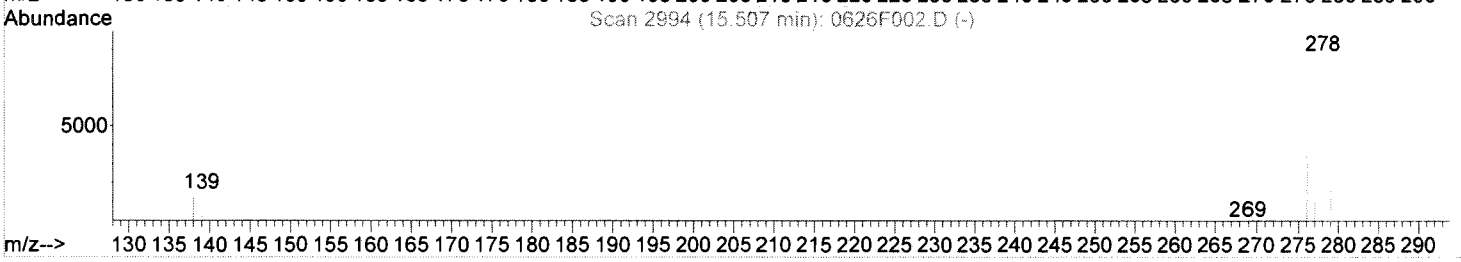
0705F003.D 070518PAH.M Thu Jul 05 09:20:39 2018

Data File : J:\MS14\DATA\070518\0705F003.D Vial: 3
Acq On : 5 Jul 2018 6:20 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.002ug/mL | SVM59-4A Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:20 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F003.D

(35) Dibenz(a,h)anthracene (T)

15.56min 1.44ng/ml

response 891

Ion	Exp%	Act%
278.00	100	100
279.00	23.60	21.34
139.00	13.40	26.22
0.00	0.00	0.00

Manual Integration:

Before

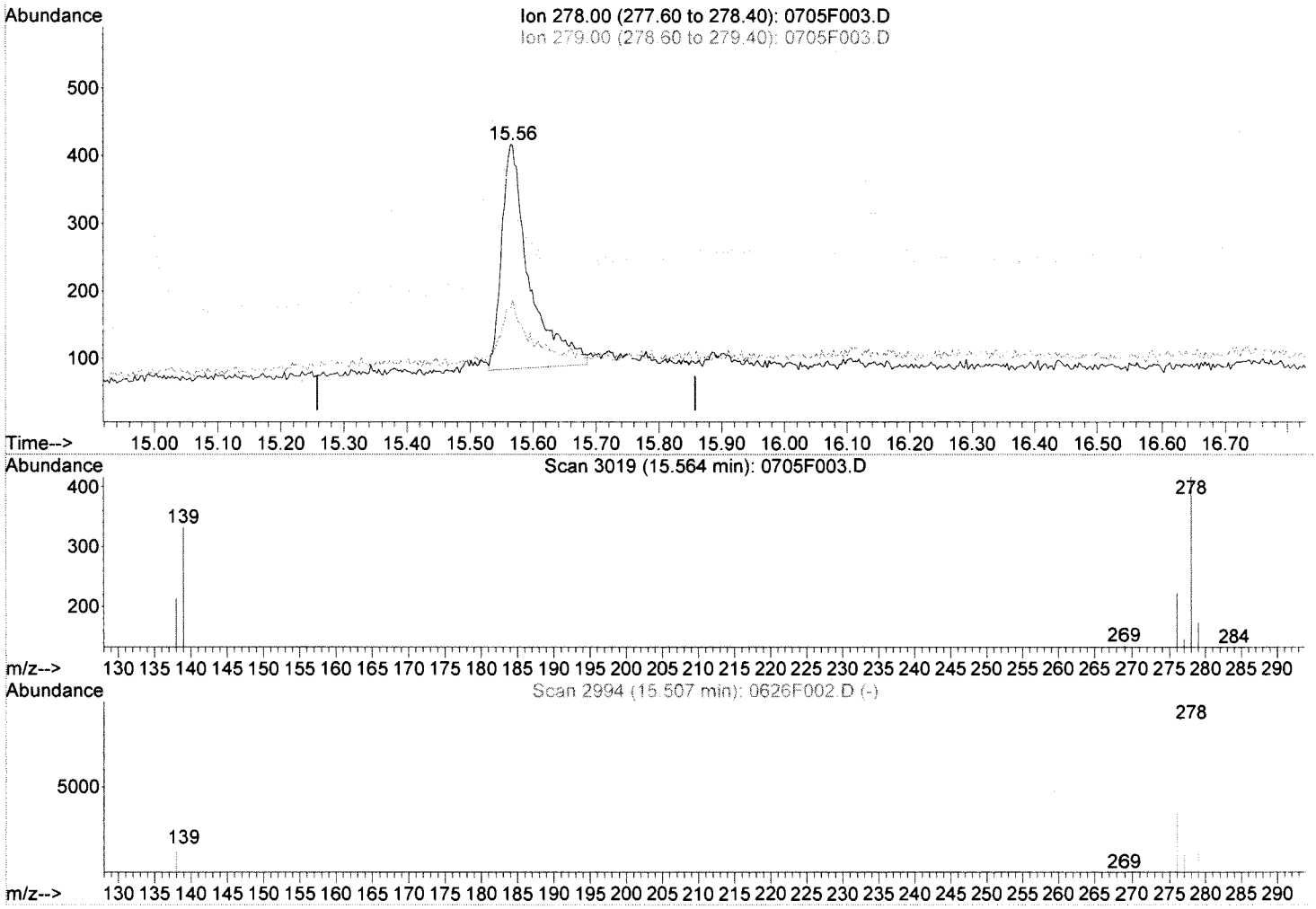
07/05/18

JUL 23 2018

0705F003.D 070518PAH.M Thu Jul 05 09:20:56 2018

Data File : J:\MS14\DATA\070518\0705F003.D Vial: 3
Acq On : 5 Jul 2018 6:20 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.002ug/mL | SVM59-4A Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:20 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration



TIC: 0705F003.D

(35) Dibenz(a,h)anthracene (T)

15.56min 1.64ng/ml m

response 1018

Ion	Exp%	Act%
278.00	100	100
279.00	23.60	41.73
139.00	13.40	79.62#
0.00	0.00	0.00

Manual Integration:

After

BLC

07/05/18

JUL 23 2018

0705F003.D 070518PAH.M Thu Jul 05 09:21:08 2018

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\070518\0705F004.D Vial: 4
Acq On : 5 Jul 2018 6:44 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.004ug/mL | SVM59-4B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 05 09:03:22 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	74636	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	35937	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.61	188	82337	200.00	ng/ml	0.00
23) Chrysene-d12	10.18	240	91904	200.00	ng/ml	0.00
28) Perylene-d12	13.36	264	93943	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.45	152	893	4.16	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 0.42%			
13) Fluorene-d10	6.81	176	1141	4.85	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 0.48%			
22) Fluoranthene-d10	8.59	212	1918	4.10	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 0.41%			
25) Terphenyl-d14	8.96	244	1998	4.79	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 0.48%			
Target Compounds						Qvalue
2) Naphthalene	4.84	128	1601	4.08	ng/ml	98
4) 2-Methylnaphthalene	5.48	142	1105	4.43	ng/ml	99
5) 1-Methylnaphthalene	5.56	142	1100	4.48	ng/ml	100
6) Biphenyl	5.88	154	1418	4.59	ng/ml	95
7) 2,6-Dimethylnaphthalene	6.02	156	933	4.18	ng/ml	89
9) Acenaphthylene	6.25	152	1672	4.30	ng/ml	97
10) Acenaphthene	6.40	154	963	4.33	ng/ml	95
11) Dibenzofuran	6.54	168	1535	4.20	ng/ml	93
12) 2,3,5-Trimethylnaphthalene	6.72	170	910	4.12	ng/ml	96
14) Fluorene	6.83	166	1217m	4.34	ng/ml	
16) Dibenzothiophene	7.52	184	1995	4.53	ng/ml	99
17) Phenanthrene	7.62	178	2103m	4.56	ng/ml	
18) Anthracene	7.67	178	1974	4.41	ng/ml	99
19) Carbazole	7.80	167	1663	4.23	ng/ml	98
20) 1-Methylphenanthrene	8.14	192	1540	4.41	ng/ml	98
21) Fluoranthene	8.61	202	2336	4.45	ng/ml	94
24) Pyrene	8.81	202	2627	4.15	ng/ml#	48
26) Benz(a)anthracene	10.16	228	2386	4.09	ng/ml	99
27) Chrysene	10.22	228	2325m	4.29	ng/ml	
29) Benzo(b)fluoranthene	12.29	252	2161	3.83	ng/ml	99
30) Benzo(k)fluoranthene	12.36	252	2338m	4.25	ng/ml	
31) Benzo(e)pyrene	13.02	252	2201	4.11	ng/ml	97
32) Benzo(a)pyrene	13.18	252	1837	3.65	ng/ml	96
33) Perylene	13.43	252	1931	3.74	ng/ml	95
34) Indeno(1,2,3-cd)pyrene	15.50	276	1684	2.78	ng/ml	97
35) Dibenz(a,h)anthracene	15.56	278	1972m	3.27	ng/ml	
36) Benzo(g,h,i)perylene	15.89	276	2348m	3.48	ng/ml	

JUL 10 2018

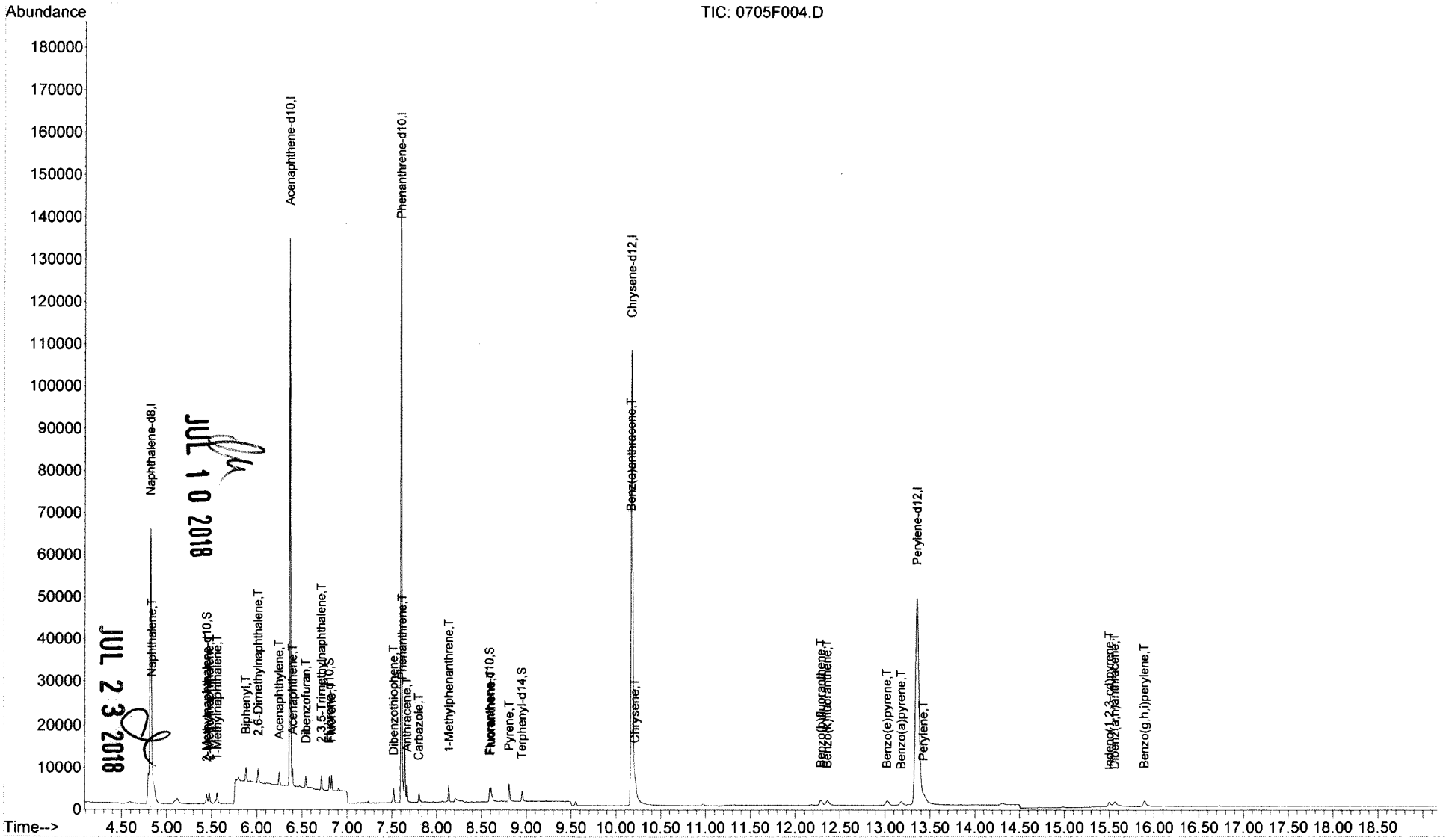
JUL 23 2018

(#) = qualifier out of range (m) = manual integration
0705F004.D 070518PAH.M Thu Jul 05 09:26:27 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\070518\0705F004.D Vial: 4
Acq On : 5 Jul 2018 6:44 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.004ug/mL | SVM59-4B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:22 2018 Quant Results File: 070518PAH.RES

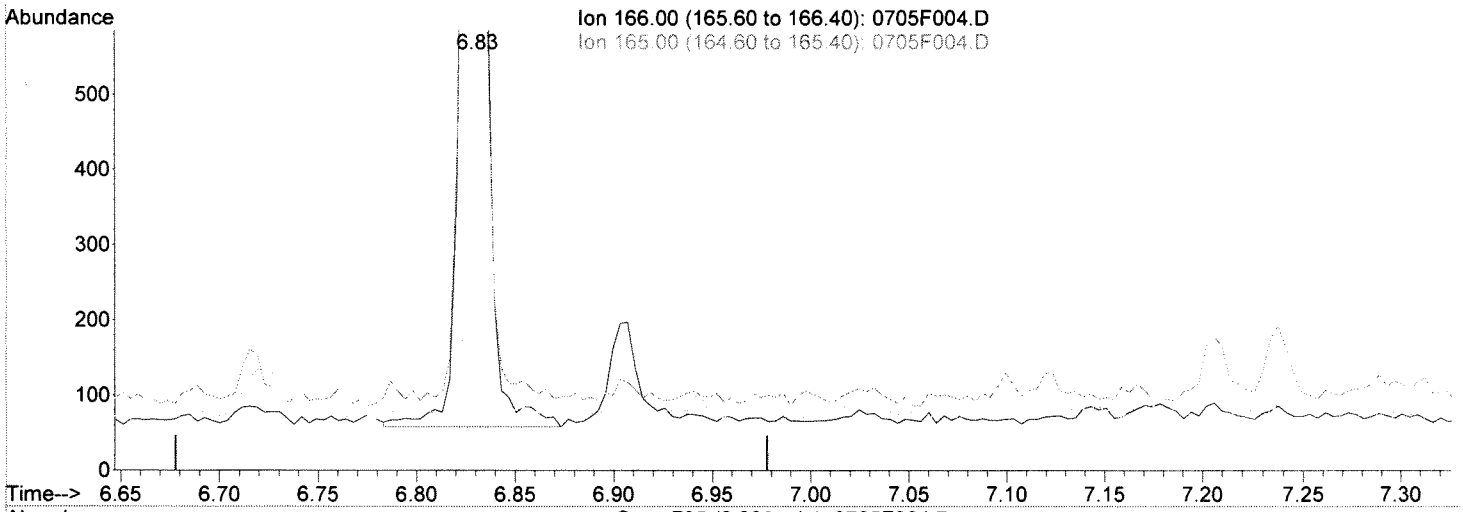
Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Initial Calibration

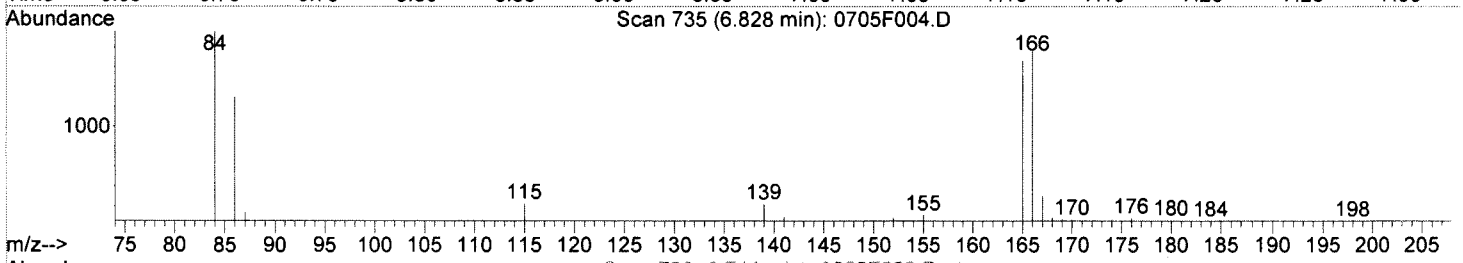


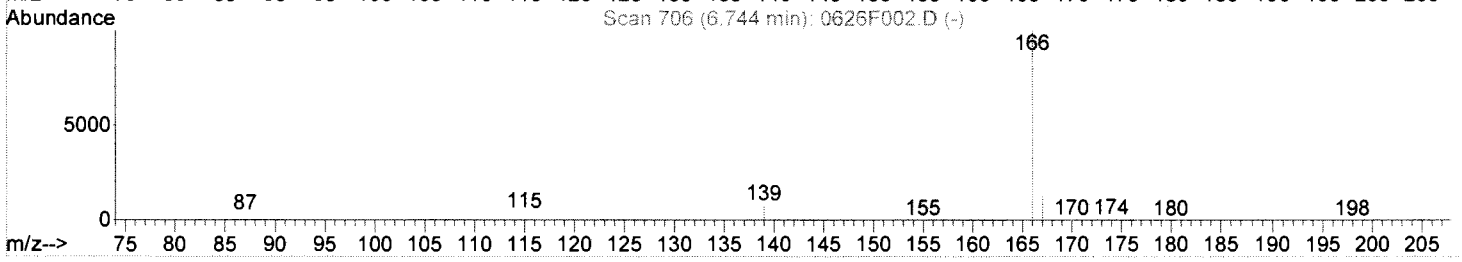
JUL 23 2018
JUL 10 2018

Data File : J:\MS14\DATA\070518\0705F004.D Vial: 4
Acq On : 5 Jul 2018 6:44 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.004ug/mL | SVM59-4B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:03 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F004.D

(14) Fluorene (T)

6.83min 4.56ng/ml

response 1279

Ion	Exp%	Act%
166.00	100	100
165.00	91.50	92.29
167.00	13.00	13.41
0.00	0.00	0.00

Manual Integration:

Before

07/05/18

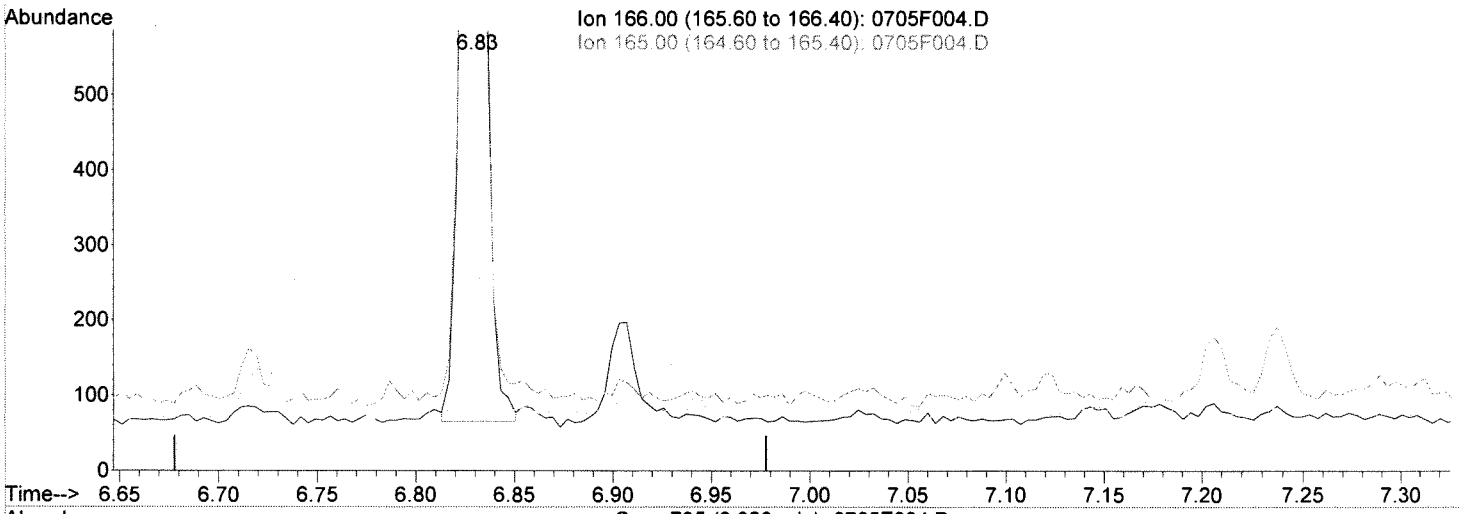
JUL 2 3 2018

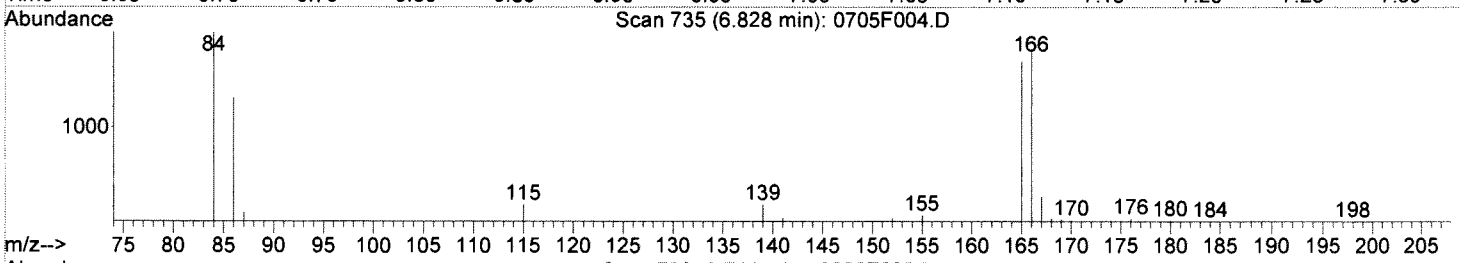
0705F004.D 070518PAH.M Thu Jul 05 09:21:24 2018

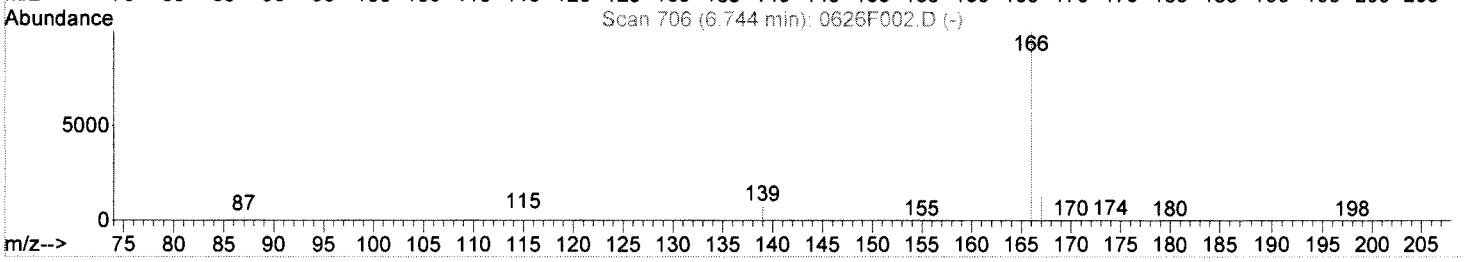
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\070518\0705F004.D Vial: 4
Acq On : 5 Jul 2018 6:44 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.004ug/mL | SVM59-4B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:21 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F004.D

(14) Fluorene (T)

6.83min 4.34ng/ml m

response 1217

Ion	Exp%	Act%
166.00	100	100
165.00	91.50	94.71
167.00	13.00	17.18
0.00	0.00	0.00

Manual Integration:

After

BLC

07/05/18

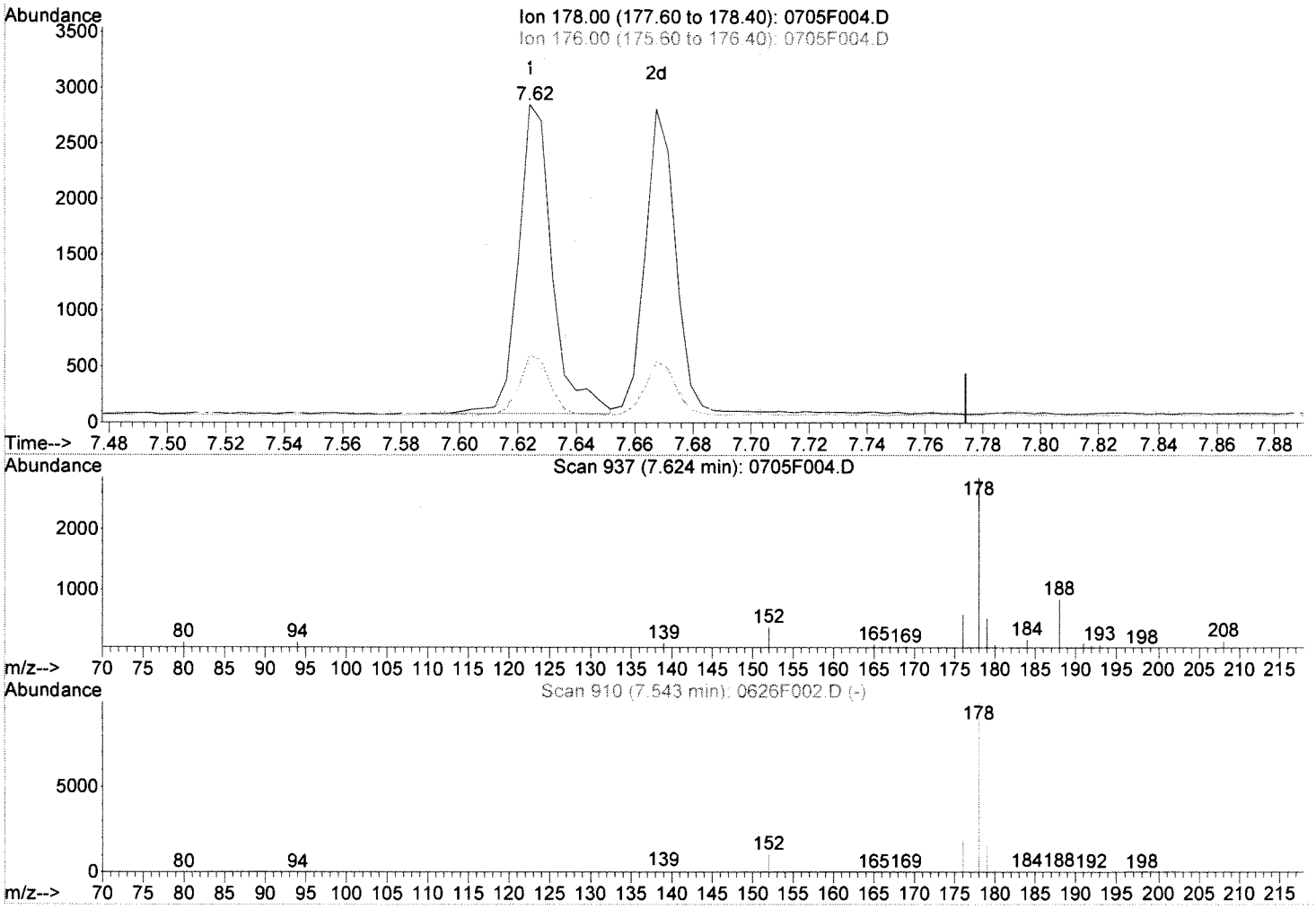
JUL 23 2018

0705F004.D 070518PAH.M Thu Jul 05 09:21:29 2018

Quantitation Report (Quan)

Data File : J:\MS14\DATA\070518\0705F004.D Vial: 4
Acq On : 5 Jul 2018 6:44 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.004ug/mL | SVM59-4B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:21 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration



TIC: 0705F004.D

(17) Phenanthrene (T)

7.62min 4.81ng/ml

response 2220

Ion	Exp%	Act%
178.00	100	100
176.00	18.50	19.44
179.00	15.20	16.08
0.00	0.00	0.00

Manual Integration:

Before

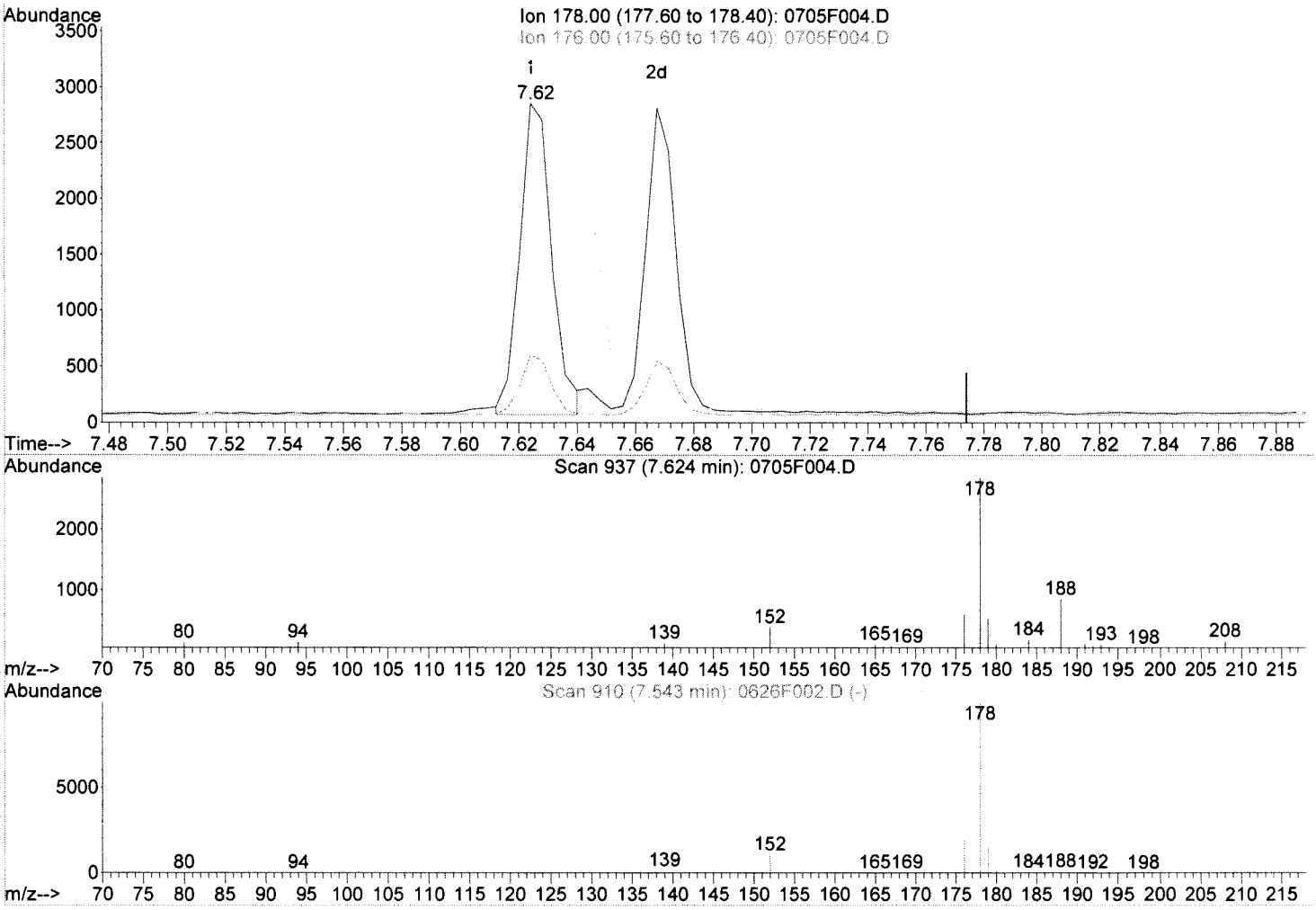
07/05/18

JUL 23 2018

0705F004.D 070518PAH.M Thu Jul 05 09:21:36 2018

Data File : J:\MS14\DATA\070518\0705F004.D Vial: 4
Acq On : 5 Jul 2018 6:44 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.004ug/mL | SVM59-4B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:21 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration



TIC: 0705F004.D

(17) Phenanthrene (T)

7.62min 4.56ng/ml m

response 2103

Ion	Exp%	Act%
178.00	100	100
176.00	18.50	21.14
179.00	15.20	18.62
0.00	0.00	0.00

Manual Integration:

After

IC-Overintegrated

07/05/18

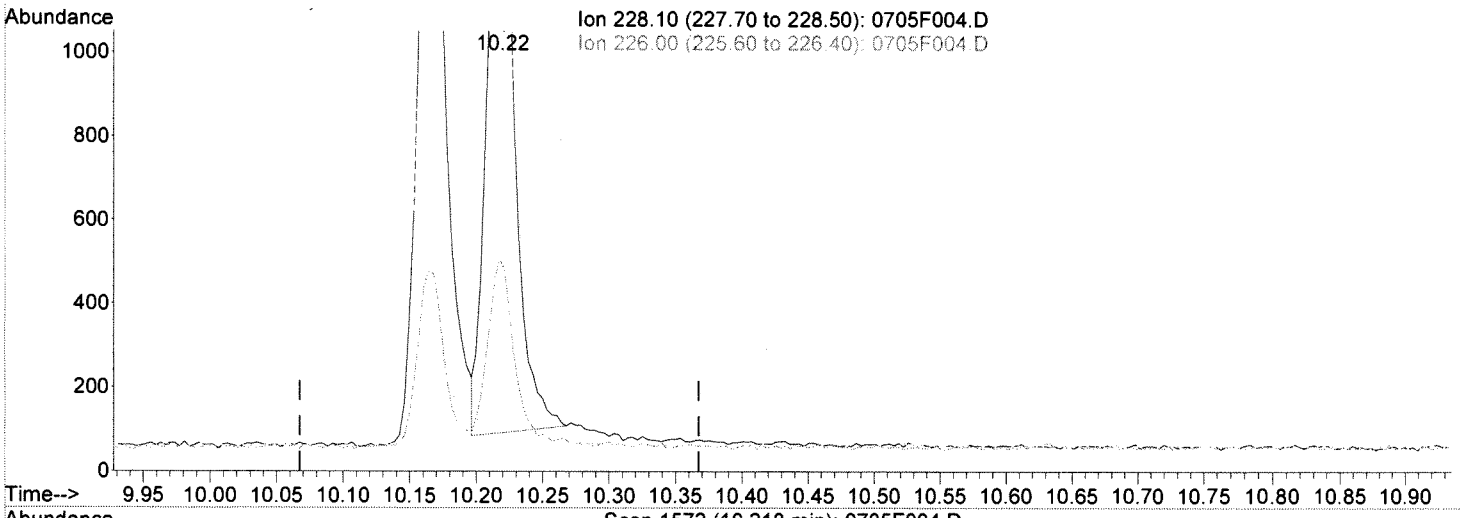
JUL 23 2018

0705F004.D 070518PAH.M Thu Jul 05 09:21:44 2018

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\070518\0705F004.D Vial: 4
Acq On : 5 Jul 2018 6:44 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.004ug/mL | SVM59-4B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:21 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration



TIC: 0705F004.D

(27) Chrysene (T)

10.22min 3.95ng/ml

response 2138

Ion	Exp%	Act%
228.10	100	100
226.00	28.60	27.84
229.00	19.40	19.46
0.00	0.00	0.00

Manual Integration:

Before

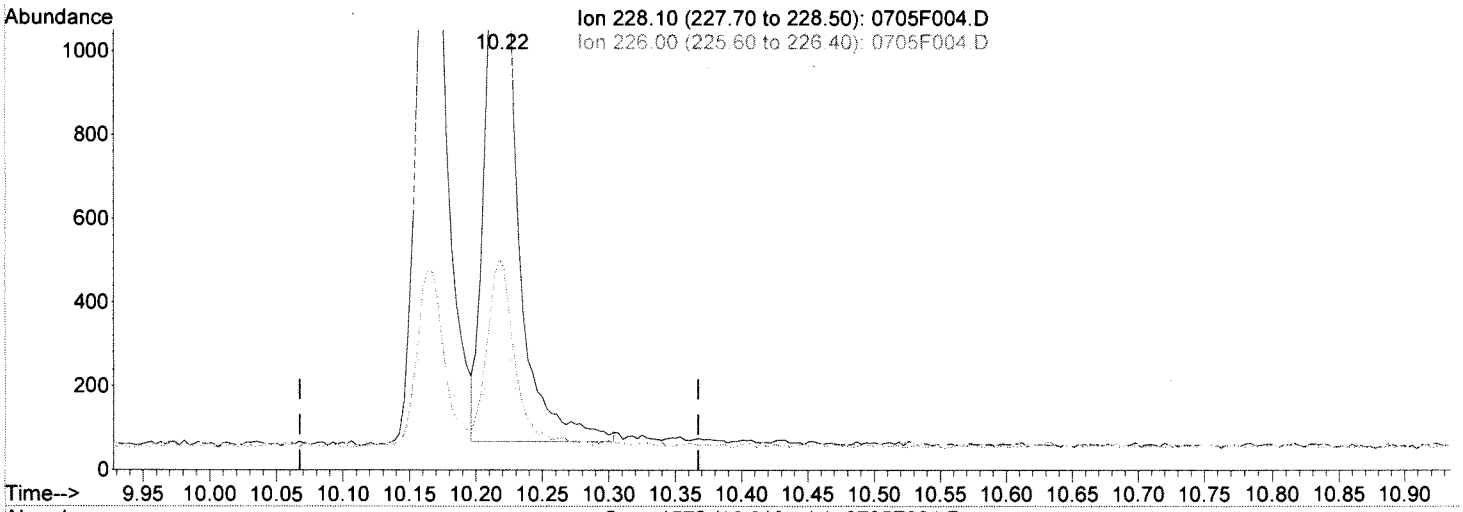
07/05/18

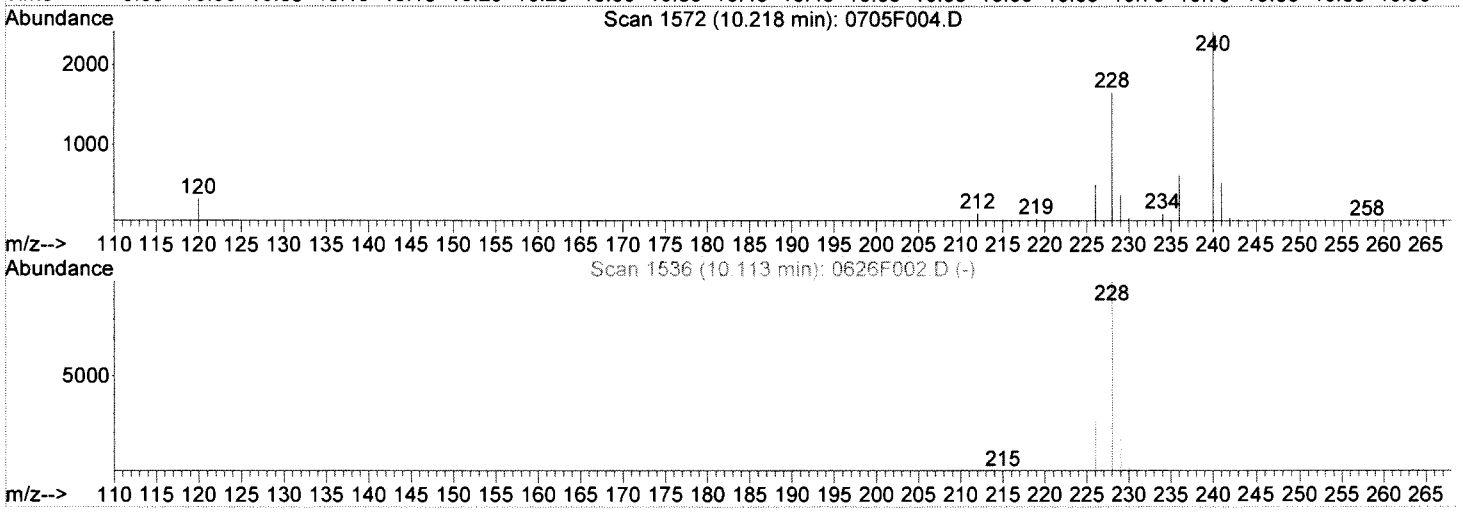
JUL 23 2018

0705F004.D 070518PAH.M Thu Jul 05 09:21:52 2018

Data File : J:\MS14\DATA\070518\0705F004.D Vial: 4
Acq On : 5 Jul 2018 6:44 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.004ug/mL | SVM59-4B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:21 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration





TIC: 0705F004.D

(27) Chrysene (T)

10.22min 4.29ng/ml m

response 2325

Ion	Exp%	Act%
228.10	100	100
226.00	28.60	30.48
229.00	19.40	22.05
0.00	0.00	0.00

Manual Integration:

After

BLC

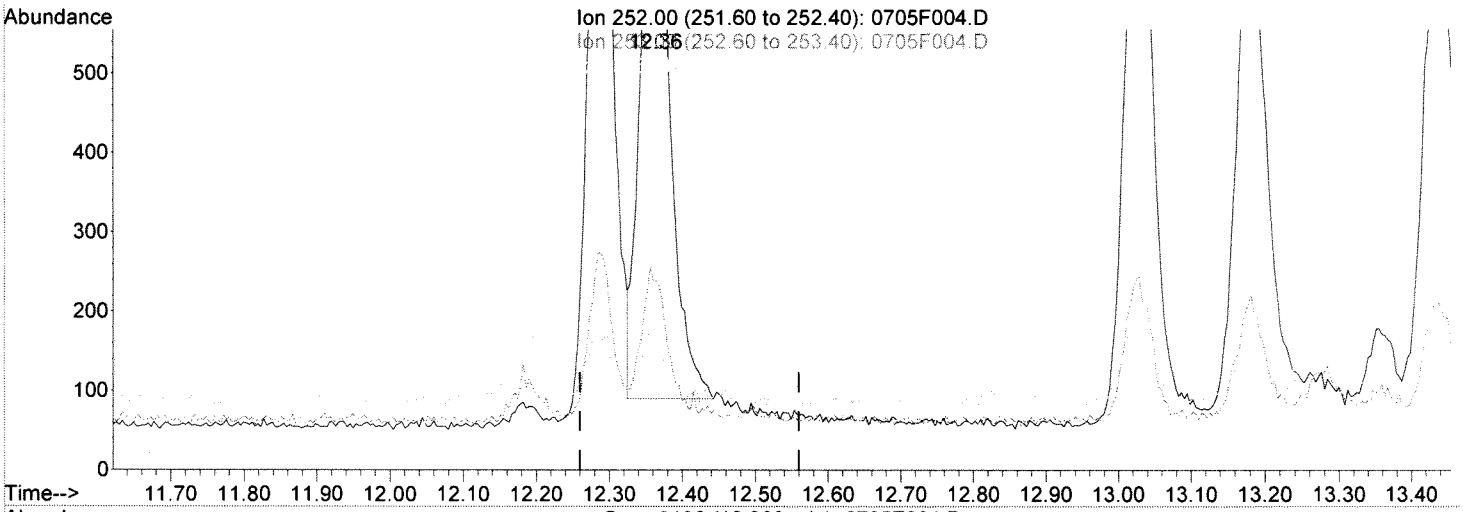
07/05/18

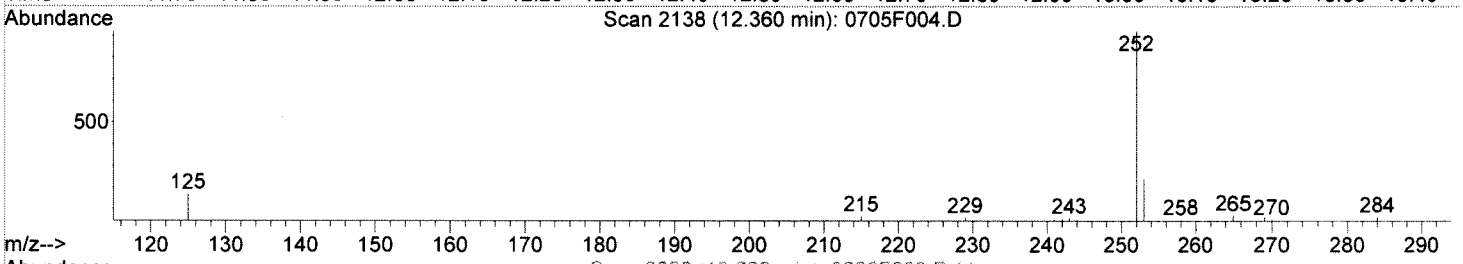
JUL 23 2018

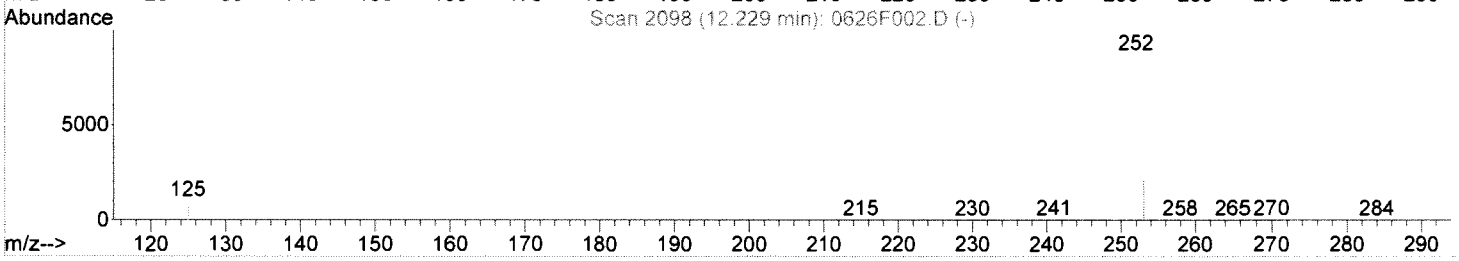
0705F004.D 070518PAH.M Thu Jul 05 09:21:59 2018

Data File : J:\MS14\DATA\070518\0705F004.D Vial: 4
Acq On : 5 Jul 2018 6:44 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.004ug/mL | SVM59-4B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:21 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F004.D

(30) Benzo(k)fluoranthene (T)

12.36min 3.84ng/ml

response 2111

Ion	Exp%	Act%
252.00	100	100
253.00	21.30	19.74
125.00	7.50	9.15
0.00	0.00	0.00

Manual Integration:

Before

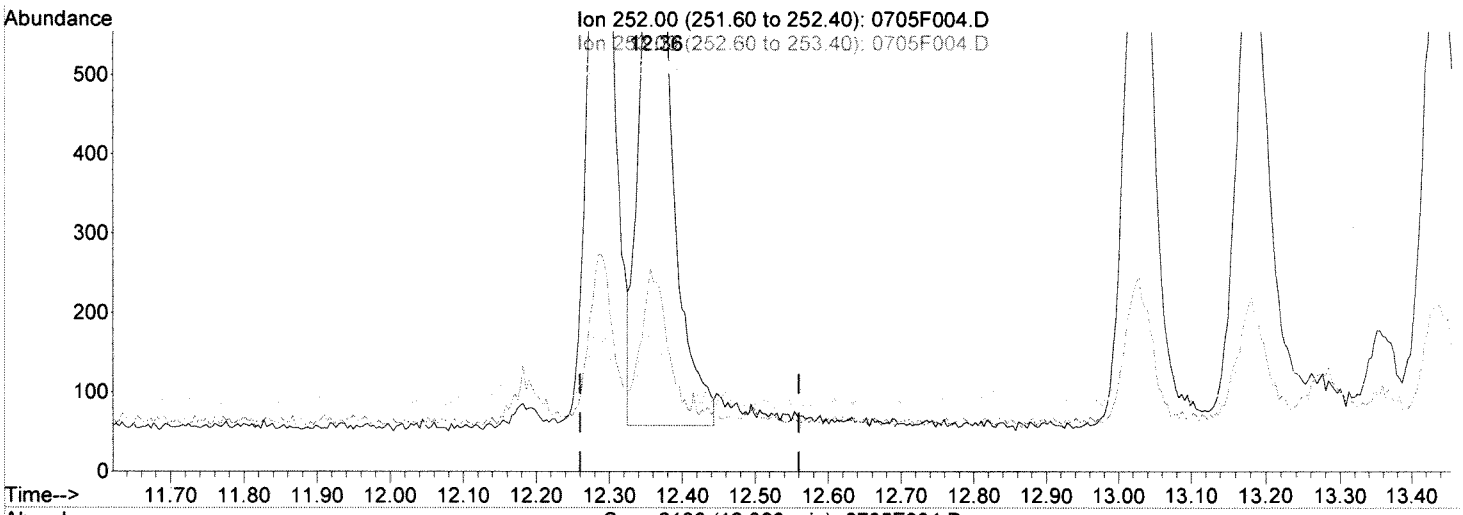
07/05/18

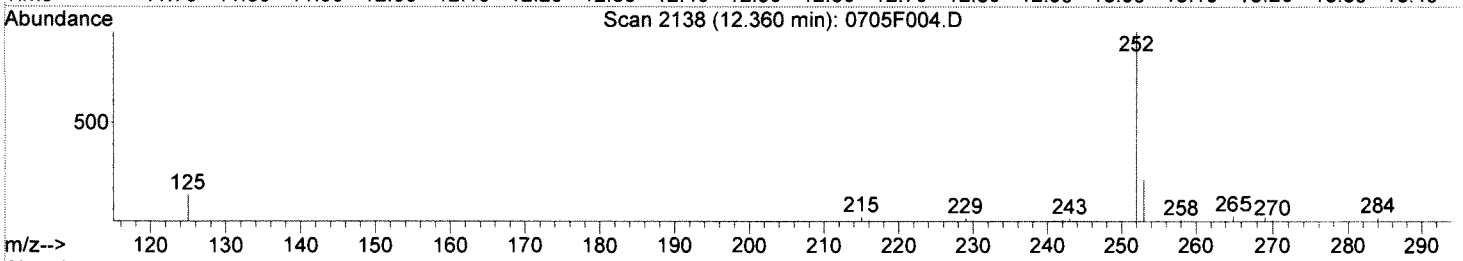
JUL 23 2018

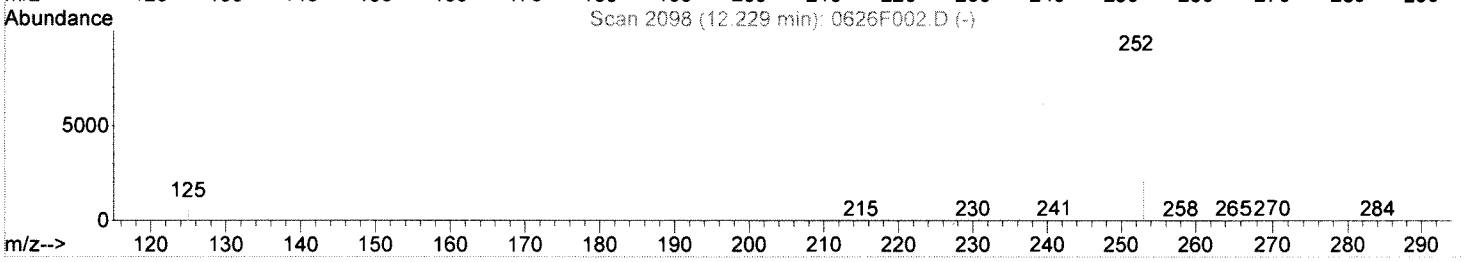
0705F004.D 070518PAH.M Thu Jul 05 09:22:07 2018

Data File : J:\MS14\DATA\070518\0705F004.D Vial: 4
Acq On : 5 Jul 2018 6:44 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.004ug/mL | SVM59-4B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:22 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F004.D

(30) Benzo(k)fluoranthene (T)

12.36min 4.25ng/ml m

response 2338

Ion	Exp%	Act%
252.00	100	100
253.00	21.30	25.95
125.00	7.50	18.35
0.00	0.00	0.00

Manual Integration:

After

BLC

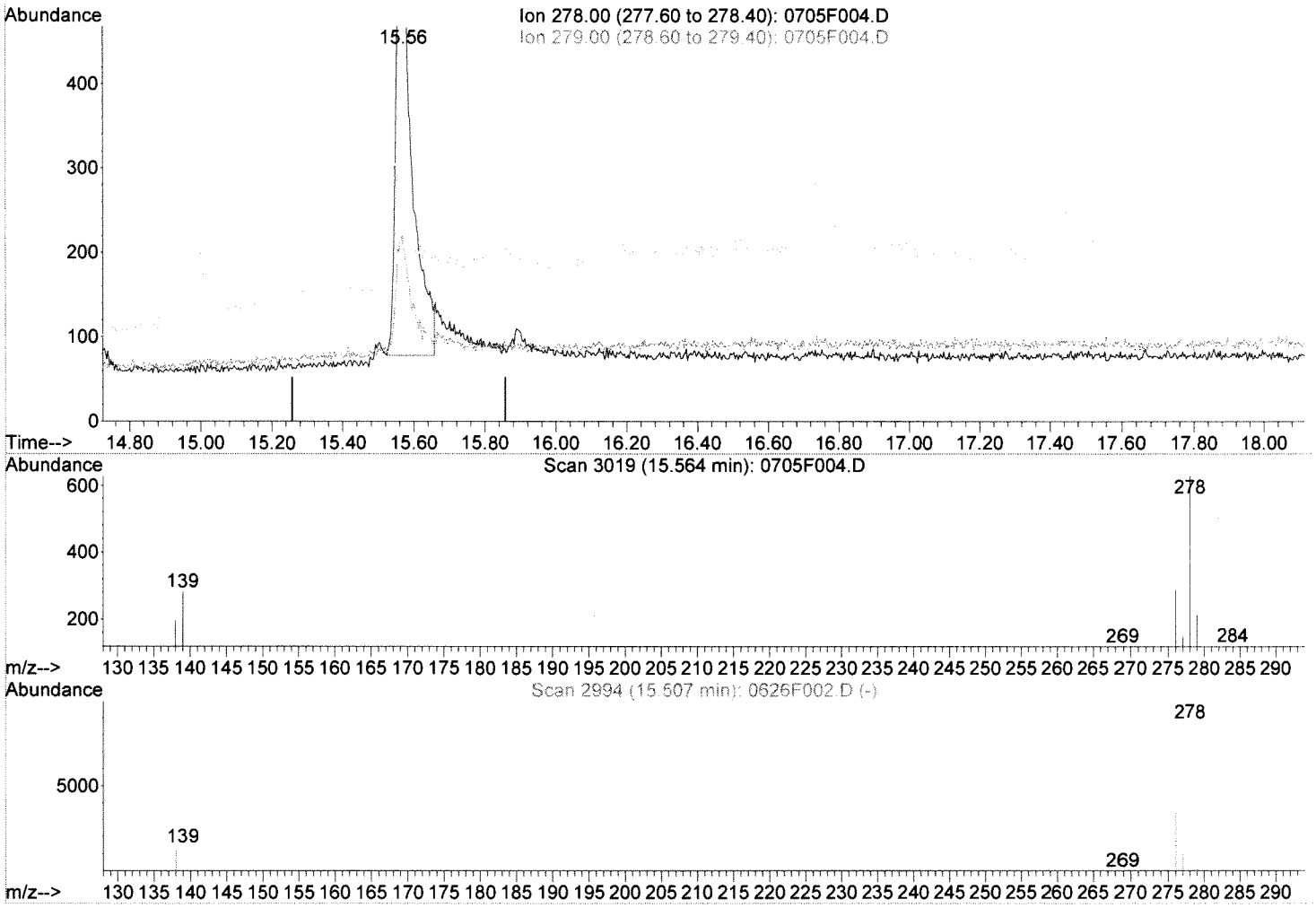
07/05/18

JUL 23 2018

0705F004.D 070518PAH.M Thu Jul 05 09:22:13 2018

Data File : J:\MS14\DATA\070518\0705F004.D Vial: 4
Acq On : 5 Jul 2018 6:44 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.004ug/mL | SVM59-4B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:22 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration



TIC: 0705F004.D

(35) Dibenz(a,h)anthracene (T)

15.56min 2.73ng/ml

response 1649

Ion	Exp%	Act%
278.00	100	100
279.00	23.60	24.18
139.00	13.40	17.45
0.00	0.00	0.00

Manual Integration:

Before

07/05/18

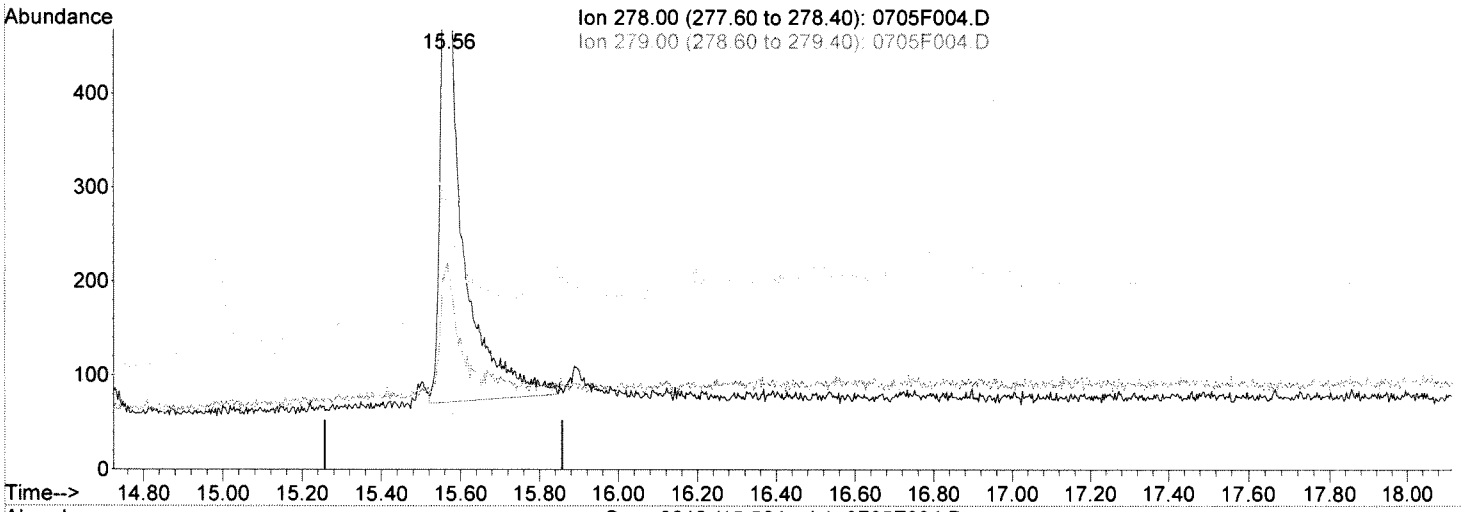
JUL 23 2018

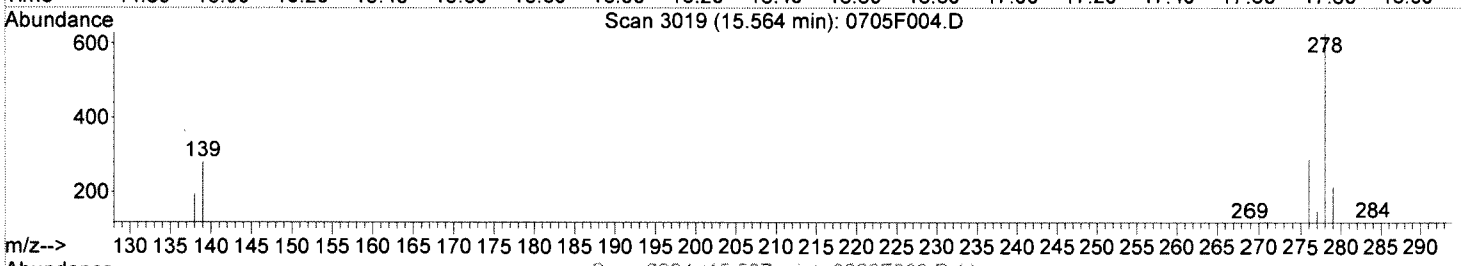
0705F004.D 070518PAH.M Thu Jul 05 09:22:22 2018

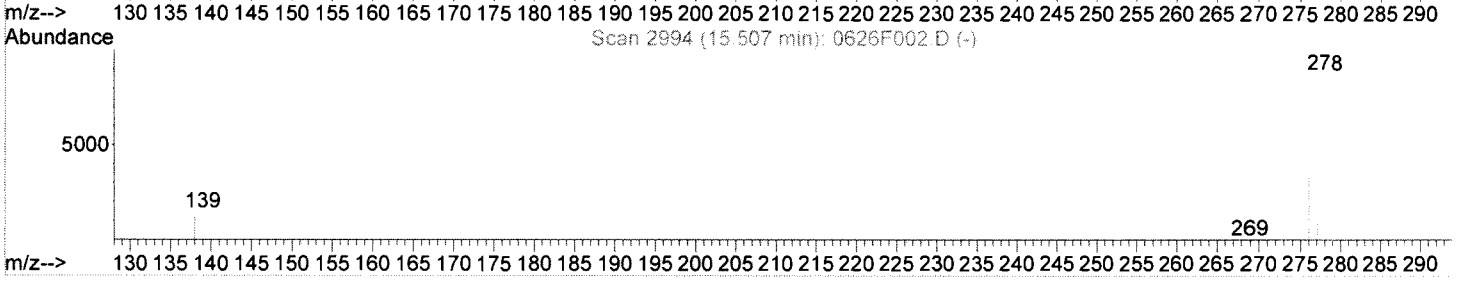
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\070518\0705F004.D Vial: 4
Acq On : 5 Jul 2018 6:44 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.004ug/mL | SVM59-4B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:22 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F004.D

(35) Dibenz(a,h)anthracene (T)

15.56min 3.27ng/ml m

response 1972

Ion	Exp%	Act%
278.00	100	100
279.00	23.60	34.08
139.00	13.40	44.90#
0.00	0.00	0.00

Manual Integration:

After

BLC

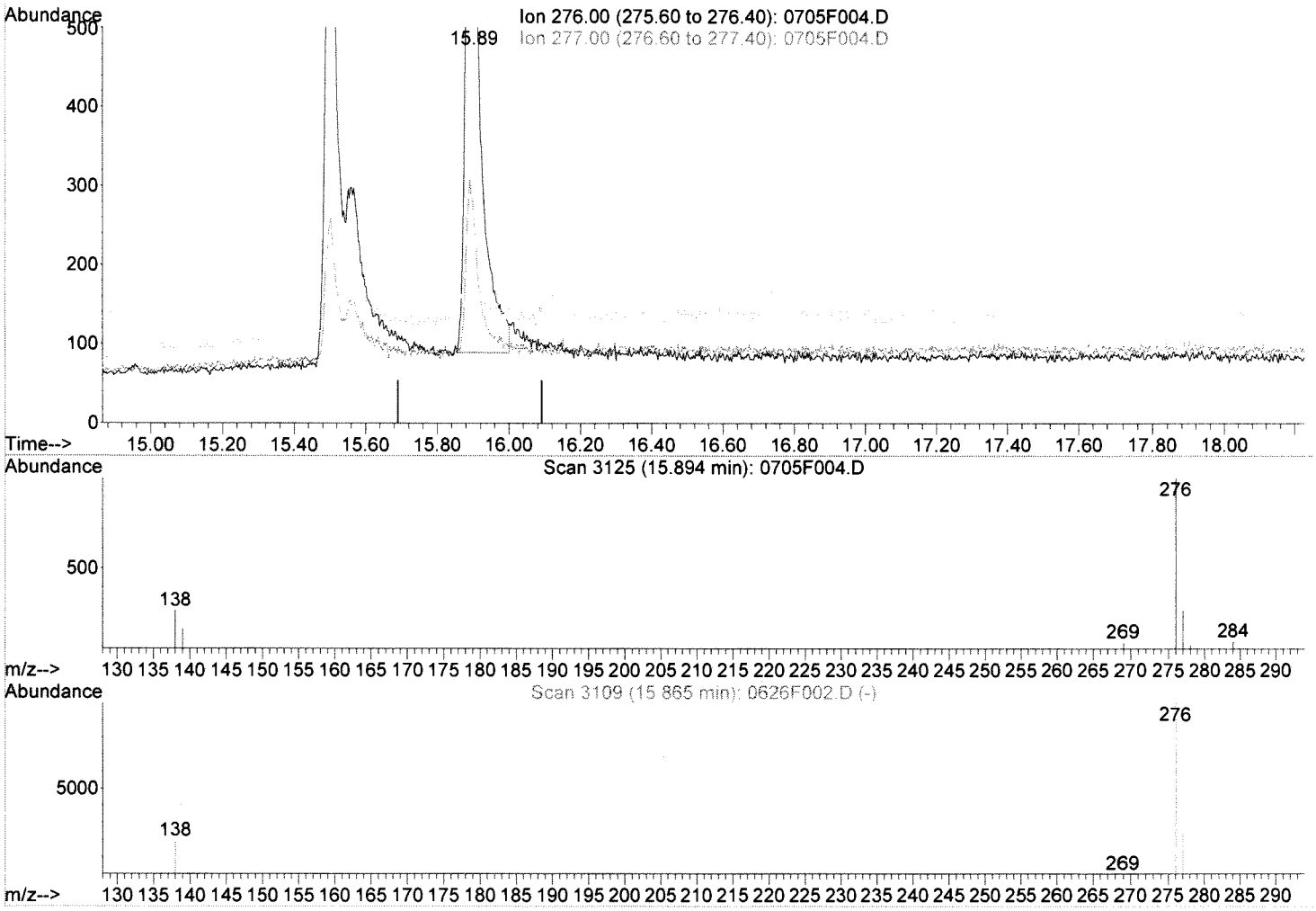
07/05/18

JUL 23 2018

0705F004.D 070518PAH.M Thu Jul 05 09:22:28 2018

Data File : J:\MS14\DATA\070518\0705F004.D Vial: 4
Acq On : 5 Jul 2018 6:44 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.004ug/mL | SVM59-4B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:22 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration



TIC: 0705F004.D

(36) Benzo(g,h,i)perylene (T)

15.89min 3.26ng/ml

response 2200

Ion	Exp%	Act%
276.00	100	100
277.00	23.50	22.57
138.00	17.20	16.72
0.00	0.00	0.00

Manual Integration:

Before

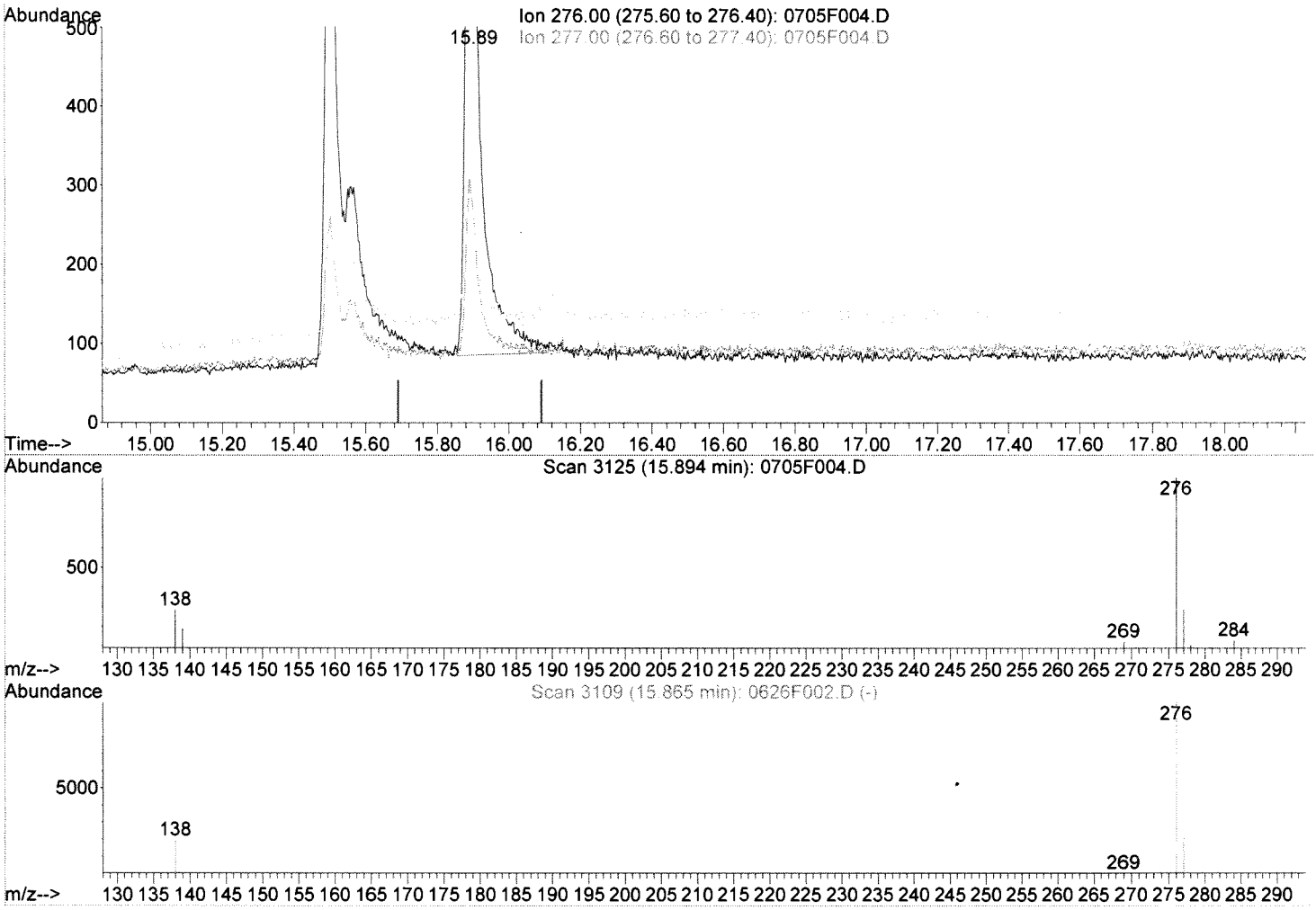
07/05/18

JUL 23 2018

0705F004.D 070518PAH.M Thu Jul 05 09:22:35 2018

Data File : J:\MS14\DATA\070518\0705F004.D Vial: 4
Acq On : 5 Jul 2018 6:44 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.004ug/mL | SVM59-4B Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:22 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration



TIC: 0705F004.D

(36) Benzo(g,h,i)perylene (T)

15.89min 3.48ng/ml m

response 2348

Ion	Exp%	Act%
276.00	100	100
277.00	23.50	29.83
138.00	17.20	29.52
0.00	0.00	0.00

Manual Integration:

After

BLC

07/05/18

JUL 23 2018

0705F004.D 070518PAH.M Thu Jul 05 09:22:47 2018

Data File : J:\MS14\DATA\070518\0705F005.D Vial: 5
Acq On : 5 Jul 2018 7:09 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.008ug/mL | SVM59-4C Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 05 09:03:22 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	74319	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	35806	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.61	188	83085	200.00	ng/ml	0.00
23) Chrysene-d12	10.18	240	89078	200.00	ng/ml	0.00
28) Perylene-d12	13.36	264	88889	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.45	152	1738	8.13	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.81%		
13) Fluorene-d10	6.81	176	2018	8.62	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.86%		
22) Fluoranthene-d10	8.59	212	3721	7.88	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.79%		
25) Terphenyl-d14	8.96	244	3402	8.41	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	0.84%		
Target Compounds						Qvalue
2) Naphthalene	4.84	128	3405	8.70	ng/ml	97
4) 2-Methylnaphthalene	5.47	142	2205	8.88	ng/ml	93
5) 1-Methylnaphthalene	5.56	142	2126	8.69	ng/ml	96
6) Biphenyl	5.88	154	2713	8.83	ng/ml	94
7) 2,6-Dimethylnaphthalene	6.02	156	1843	8.29	ng/ml	98
9) Acenaphthylene	6.25	152	3302	8.52	ng/ml	99
10) Acenaphthene	6.40	154	1893	8.55	ng/ml	94
11) Dibenzofuran	6.54	168	3054	8.39	ng/ml	90
12) 2,3,5-Trimethylnaphthalene	6.72	170	1793	8.15	ng/ml	83
14) Fluorene	6.83	166	2409m	8.62	ng/ml	
16) Dibenzothiophene	7.52	184	4042	9.09	ng/ml	96
17) Phenanthrene	7.63	178	4142	8.90	ng/ml	99
18) Anthracene	7.67	178	3833	8.48	ng/ml	97
19) Carbazole	7.81	167	3206	8.07	ng/ml	96
20) 1-Methylphenanthrene	8.14	192	3014	8.55	ng/ml	96
21) Fluoranthene	8.61	202	4639	8.76	ng/ml	96
24) Pyrene	8.81	202	4800	7.83	ng/ml	92
26) Benz(a)anthracene	10.16	228	4257	7.53	ng/ml	99
27) Chrysene	10.22	228	4349	8.29	ng/ml	99
29) Benzo(b)fluoranthene	12.29	252	3981	7.46	ng/ml	98
30) Benzo(k)fluoranthene	12.36	252	4293m	8.25	ng/ml	
31) Benzo(e)pyrene	13.03	252	4167	8.23	ng/ml	96
32) Benzo(a)pyrene	13.18	252	3534	7.42	ng/ml	94
33) Perylene	13.44	252	3536	7.25	ng/ml	98
34) Indeno(1,2,3-cd)pyrene	15.50	276	2948	5.14	ng/ml	98
35) Dibenz(a,h)anthracene	15.56	278	3510m	6.14	ng/ml	
36) Benzo(g,h,i)perylene	15.89	276	4119	6.45	ng/ml	96

JUL 10 2018

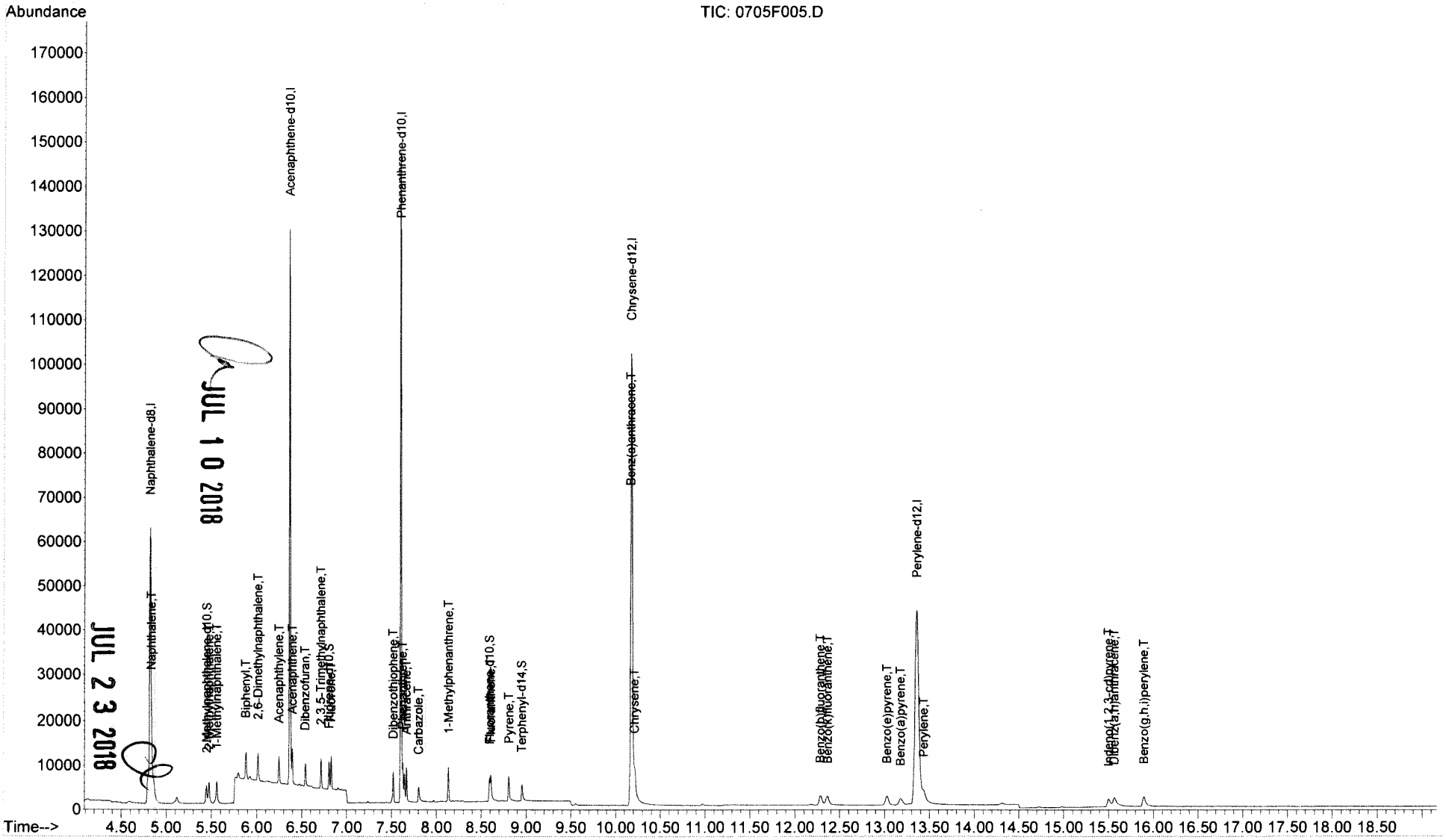
JUL 23 2018

(#) = qualifier out of range (m) = manual integration
0705F005.D 070518PAH.M Thu Jul 05 09:26:29 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\070518\0705F005.D Vial: 5
Acq On : 5 Jul 2018 7:09 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.008ug/mL | SVM59-4C Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:23 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Initial Calibration



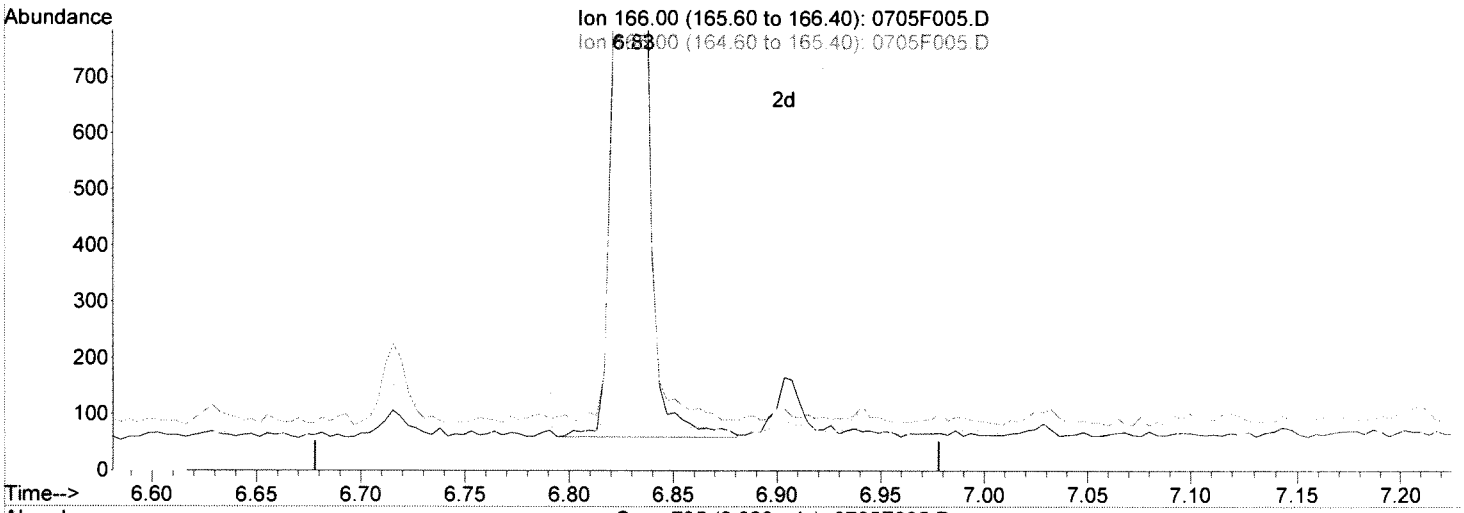
JUL 10 2018

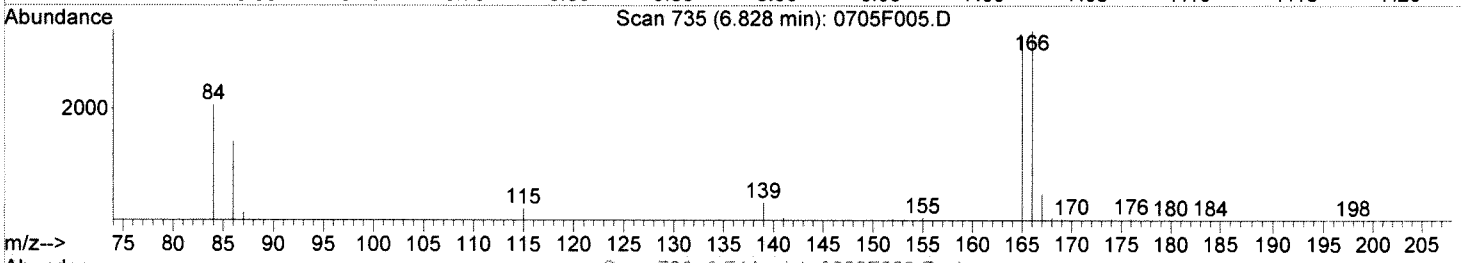
JUL 23 2018

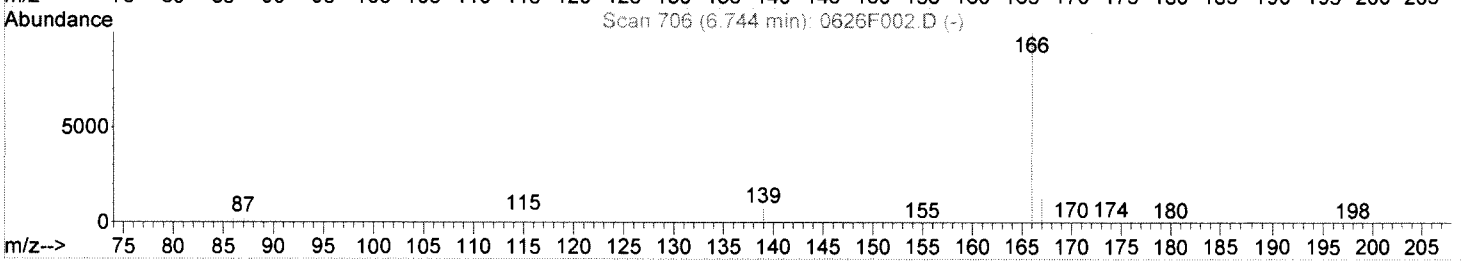
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\070518\0705F005.D Vial: 5
Acq On : 5 Jul 2018 7:09 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.008ug/mL | SVM59-4C Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:03 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F005.D

(14) Fluorene (T)

6.83min 8.72ng/ml

response 2436

Ion	Exp%	Act%
166.00	100	100
165.00	91.50	96.50
167.00	13.00	12.96
0.00	0.00	0.00

Manual Integration:

Before

07/05/18

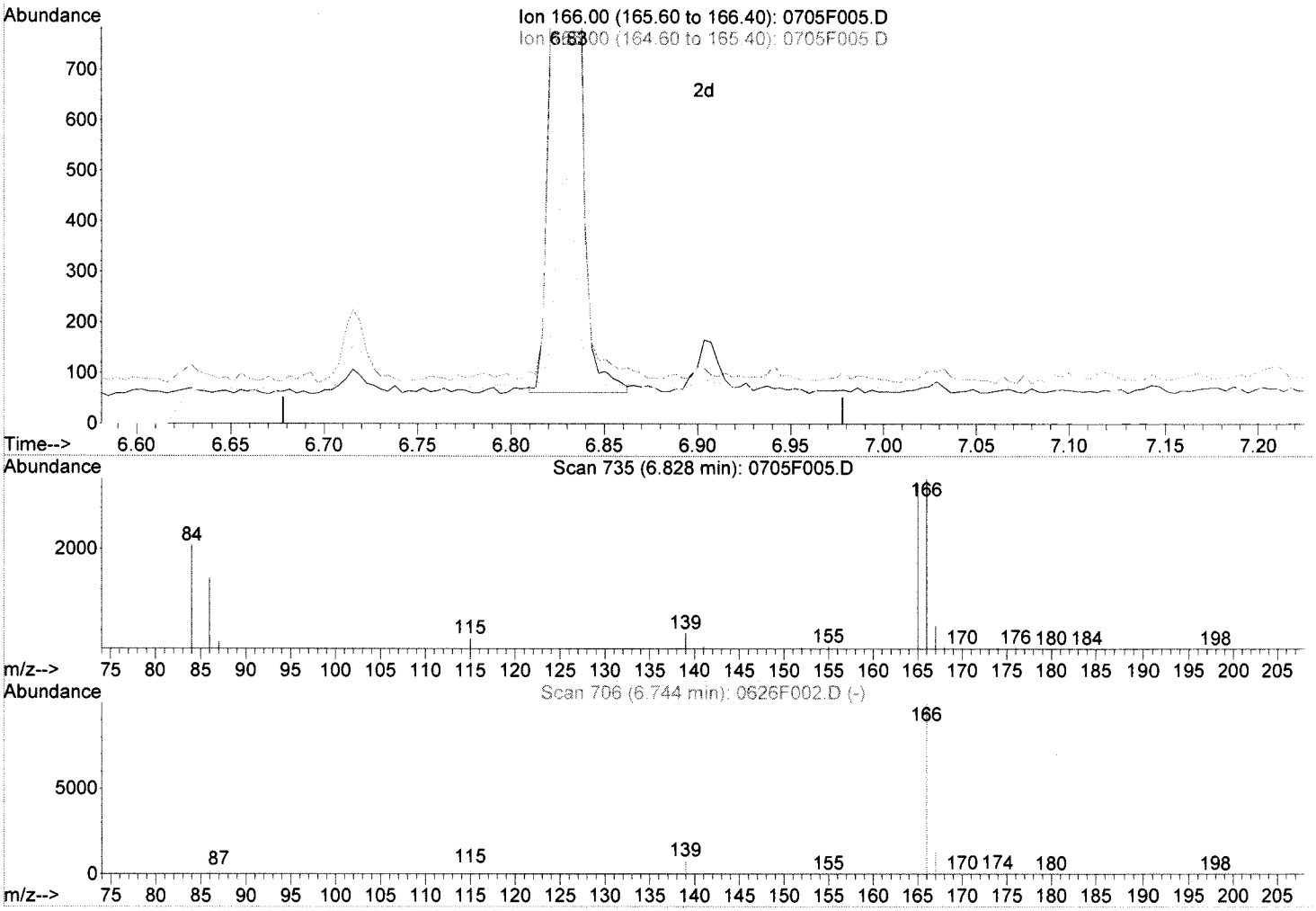
JUL 23 2018

0705F005.D 070518PAH.M Thu Jul 05 09:23:03 2018

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\070518\0705F005.D Vial: 5
Acq On : 5 Jul 2018 7:09 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.008ug/mL | SVM59-4C Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:23 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration



TIC: 0705F005.D

(14) Fluorene (T)

6.83min 8.62ng/ml m

response 2409

Ion	Exp%	Act%
166.00	100	100
165.00	91.50	97.42
167.00	13.00	14.98
0.00	0.00	0.00

Manual Integration:

After

BLC

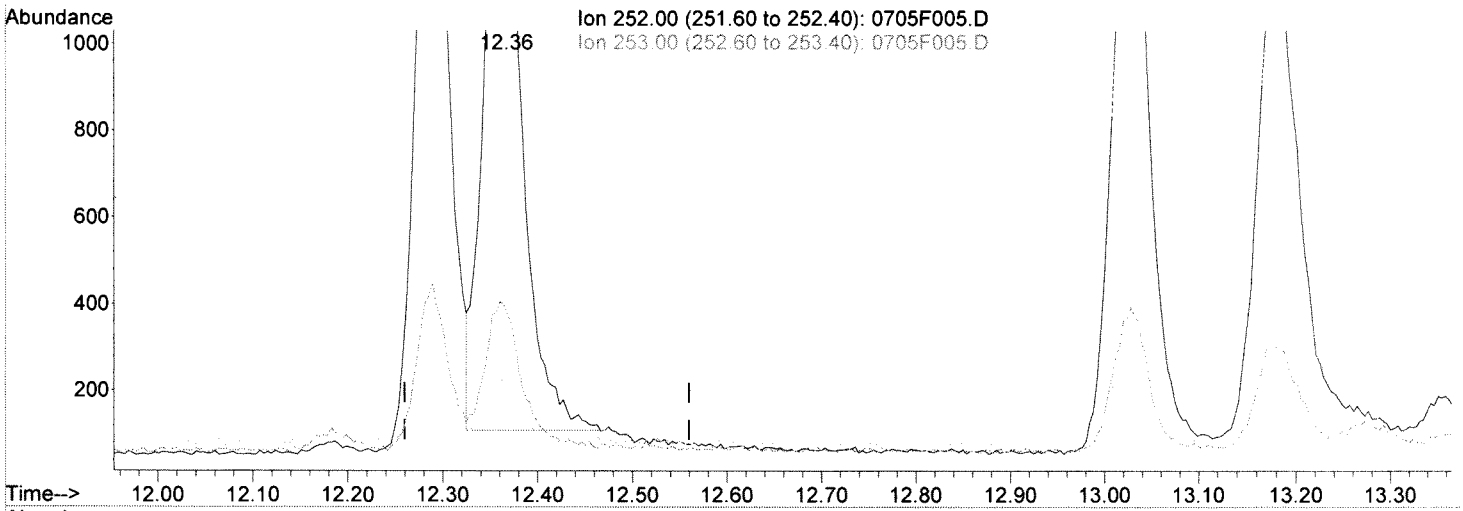
07/05/18

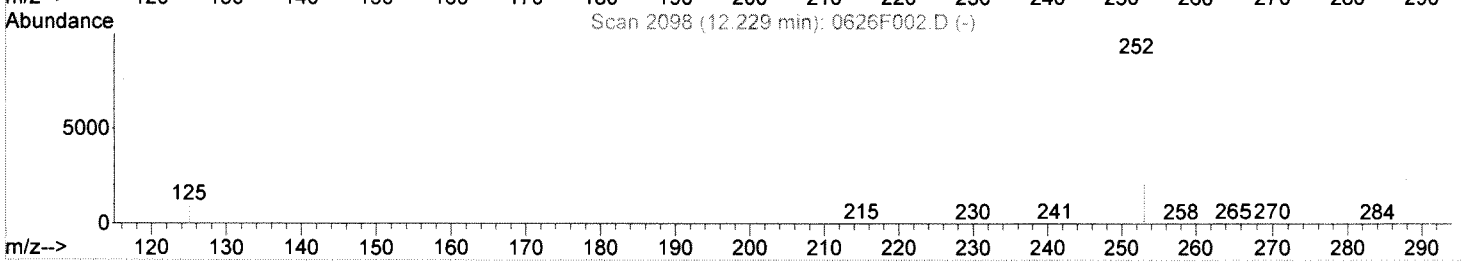
JUL 23 2018

0705F005.D 070518PAH.M Thu Jul 05 09:23:08 2018

Data File : J:\MS14\DATA\070518\0705F005.D Vial: 5
Acq On : 5 Jul 2018 7:09 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.008ug/mL | SVM59-4C Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:23 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration





TIC: 0705F005.D

(30) Benzo(k)fluoranthene (T)

12.36min 7.80ng/ml

response 4056

Ion	Exp%	Act%
252.00	100	100
253.00	21.30	21.20
125.00	7.50	9.75
0.00	0.00	0.00

Manual Integration:

Before

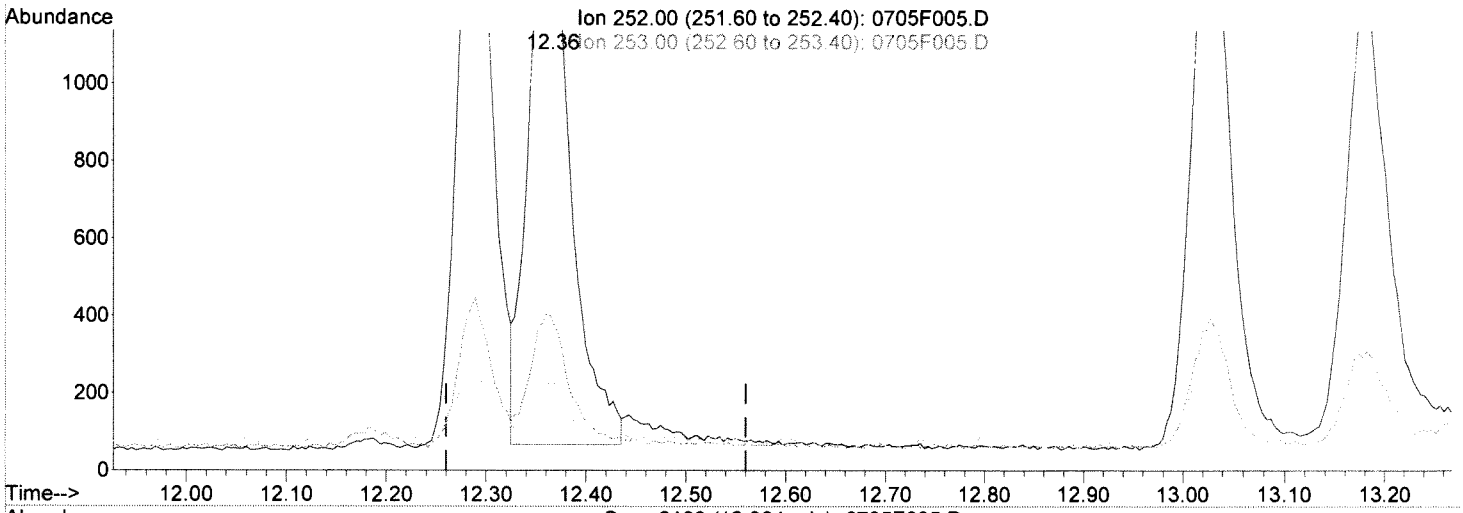
07/05/18

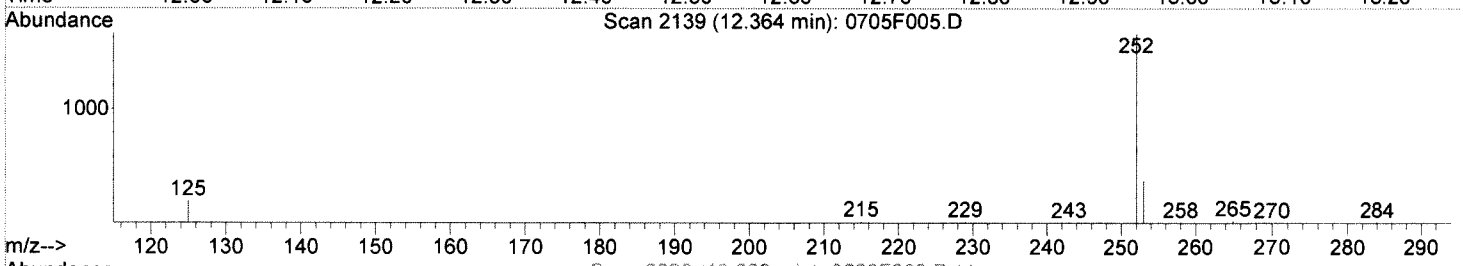
JUL 23 2018

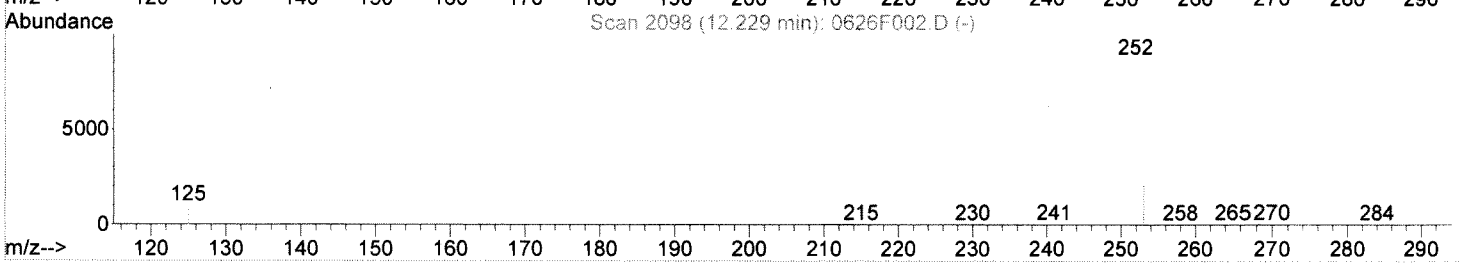
0705F005.D 070518PAH.M Thu Jul 05 09:23:25 2018

Data File : J:\MS14\DATA\070518\0705F005.D Vial: 5
Acq On : 5 Jul 2018 7:09 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.008ug/mL | SVM59-4C Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:23 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F005.D

(30) Benzo(k)fluoranthene (T)

12.36min 8.25ng/ml m

response 4293

Ion	Exp%	Act%
252.00	100	100
253.00	21.30	24.45
125.00	7.50	13.94
0.00	0.00	0.00

Manual Integration:

After

BLC

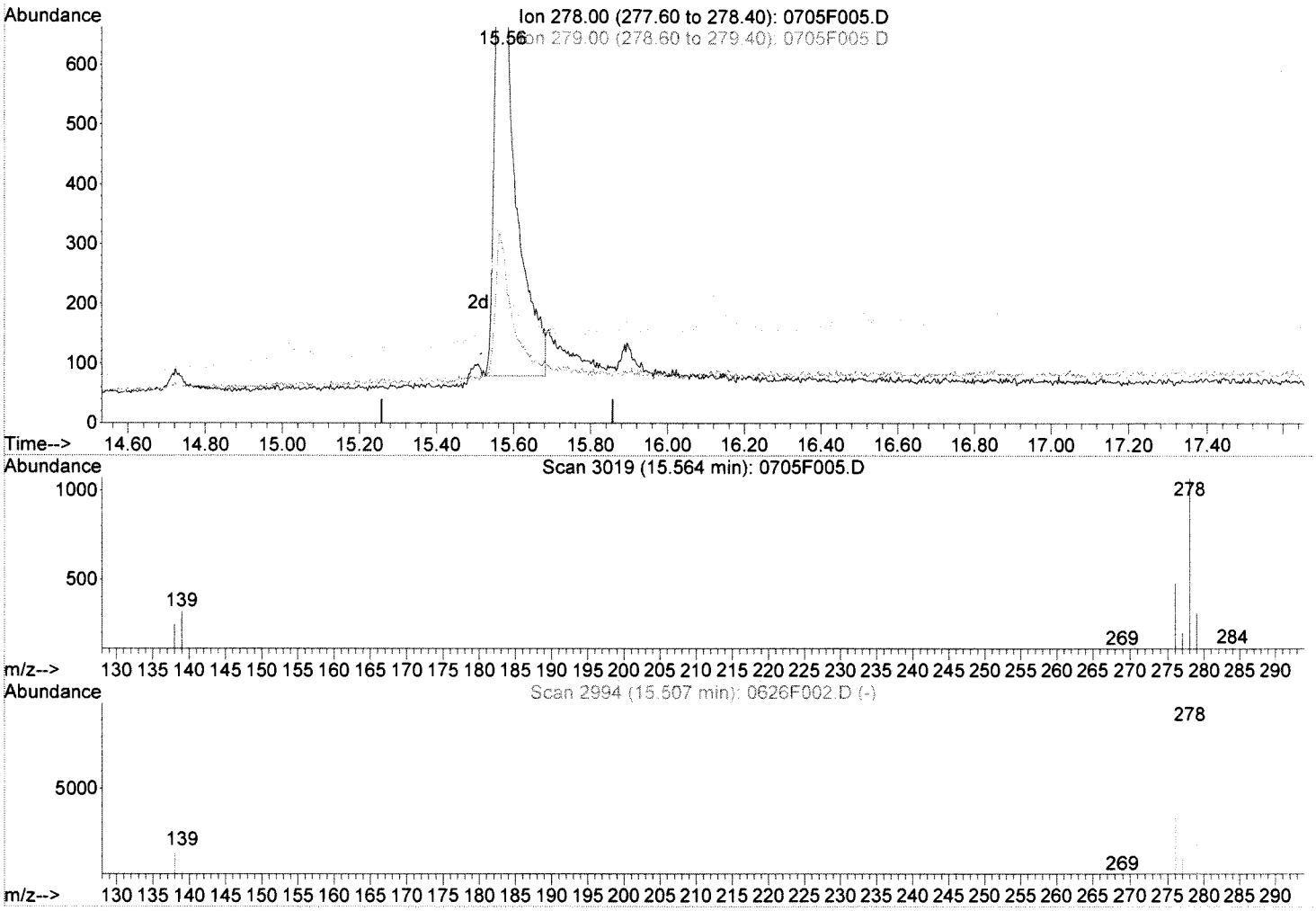
07/05/18

JUL 23 2018

0705F005.D 070518PAH.M Thu Jul 05 09:23:44 2018

Data File : J:\MS14\DATA\070518\0705F005.D Vial: 5
Acq On : 5 Jul 2018 7:09 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.008ug/mL | SVM59-4C Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:23 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration



TIC: 0705F005.D

(35) Dibenz(a,h)anthracene (T)

15.56min 5.36ng/ml

response 3062

Ion	Exp%	Act%
278.00	100	100
279.00	23.60	23.94
139.00	13.40	16.60
0.00	0.00	0.00

Manual Integration:

Before

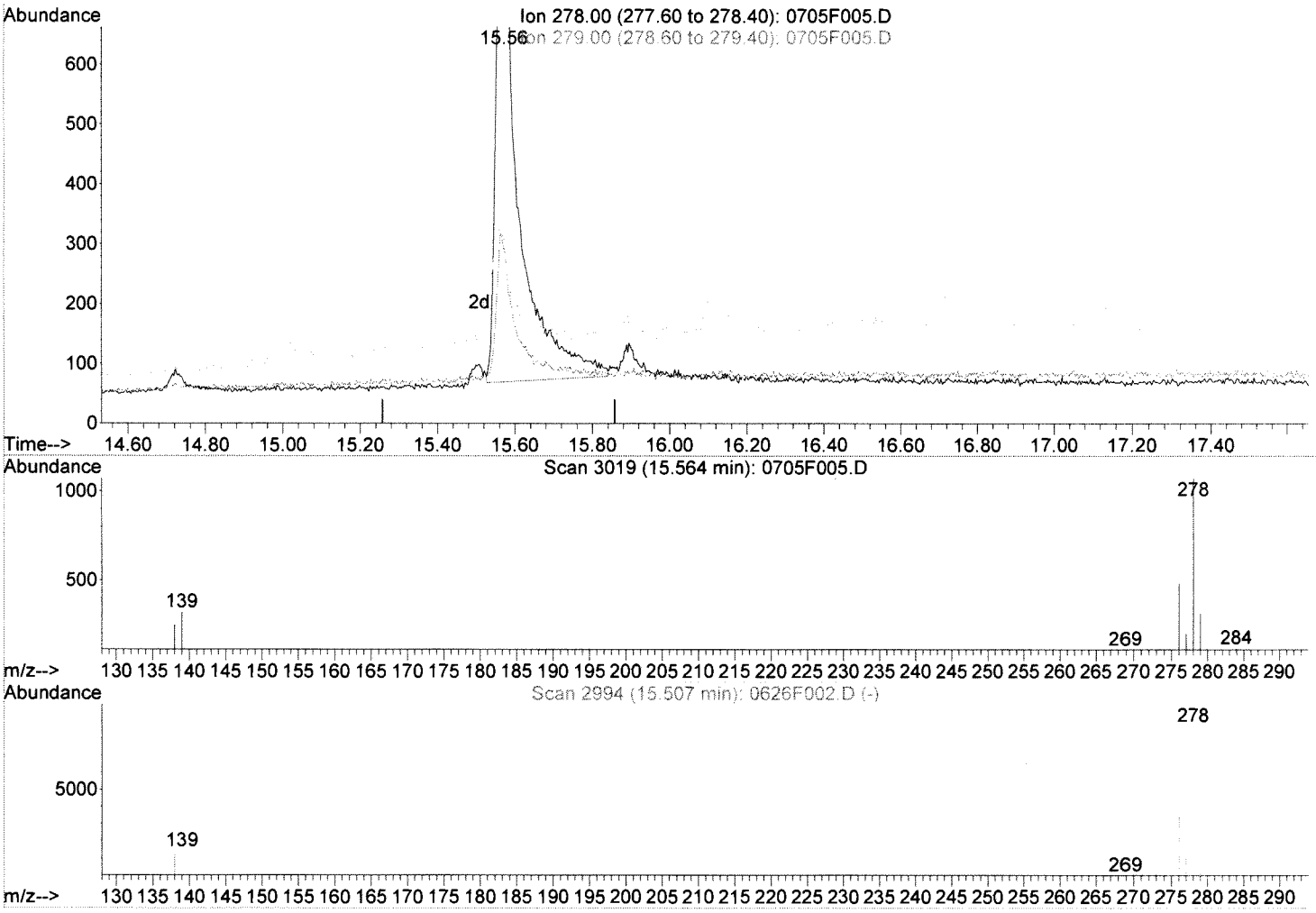
07/05/18

JUL 23 2018

0705F005.D 070518PAH.M Thu Jul 05 09:23:56 2018

Data File : J:\MS14\DATA\070518\0705F005.D Vial: 5
Acq On : 5 Jul 2018 7:09 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @.008ug/mL | SVM59-4C Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:23 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration



TIC: 0705F005.D

(35) Dibenz(a,h)anthracene (T)

15.56min 6.14ng/ml m

response 3510

Ion	Exp%	Act%
278.00	100	100
279.00	23.60	29.45
139.00	13.40	29.92
0.00	0.00	0.00

Manual Integration:

After

BLC

07/05/18

JUL 23 2018

0705F005.D 070518PAH.M Thu Jul 05 09:24:02 2018

Data File : J:\MS14\DATA\070518\0705F006.D Vial: 6
Acq On : 5 Jul 2018 7:34 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 0.02ug/mL | SVM59-4D Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 05 09:03:23 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	73118	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	34798	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.61	188	80899	200.00	ng/ml	0.00
23) Chrysene-d12	10.18	240	86319	200.00	ng/ml	0.00
28) Perylene-d12	13.36	264	83840	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.45	152	4162	19.79	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	1.98%		
13) Fluorene-d10	6.80	176	4482	19.69	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	1.97%		
22) Fluoranthene-d10	8.59	212	9399	20.44	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	2.04%		
25) Terphenyl-d14	8.96	244	7861	20.06	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	2.01%		
Target Compounds						Qvalue
2) Naphthalene	4.84	128	8259	21.46	ng/ml	98
4) 2-Methylnaphthalene	5.47	142	5278	21.59	ng/ml	93
5) 1-Methylnaphthalene	5.56	142	5124	21.29	ng/ml	96
6) Biphenyl	5.88	154	6463	21.37	ng/ml	93
7) 2,6-Dimethylnaphthalene	6.02	156	4425	20.22	ng/ml	98
9) Acenaphthylene	6.25	152	7920	21.02	ng/ml	97
10) Acenaphthene	6.40	154	4641	21.56	ng/ml	97
11) Dibenzofuran	6.54	168	7882	22.29	ng/ml	90
12) 2,3,5-Trimethylnaphthalene	6.71	170	4317	20.19	ng/ml	86
14) Fluorene	6.83	166	5835	21.49	ng/ml	97
16) Dibenzothiophene	7.52	184	9655	22.29	ng/ml	98
17) Phenanthrene	7.62	178	9811	21.65	ng/ml	99
18) Anthracene	7.67	178	9232	20.97	ng/ml	99
19) Carbazole	7.80	167	7951	20.57	ng/ml	97
20) 1-Methylphenanthrene	8.14	192	7323	21.33	ng/ml	98
21) Fluoranthene	8.61	202	11524	22.34	ng/ml	98
24) Pyrene	8.81	202	11891	20.01	ng/ml	95
26) Benz(a)anthracene	10.16	228	10097	18.43	ng/ml	99
27) Chrysene	10.22	228	10790	21.22	ng/ml	99
29) Benzo(b)fluoranthene	12.29	252	9692	19.25	ng/ml	98
30) Benzo(k)fluoranthene	12.36	252	10330	21.05	ng/ml	97
31) Benzo(e)pyrene	13.03	252	9943	20.82	ng/ml	97
32) Benzo(a)pyrene	13.18	252	8339	18.56	ng/ml	98
33) Perylene	13.44	252	8875	19.28	ng/ml	96
34) Indeno(1,2,3-cd)pyrene	15.50	276	6871	12.70	ng/ml	98
35) Dibenz(a,h)anthracene	15.56	278	8426m	15.64	ng/ml	
36) Benzo(g,h,i)perylene	15.90	276	9608	15.95	ng/ml	97

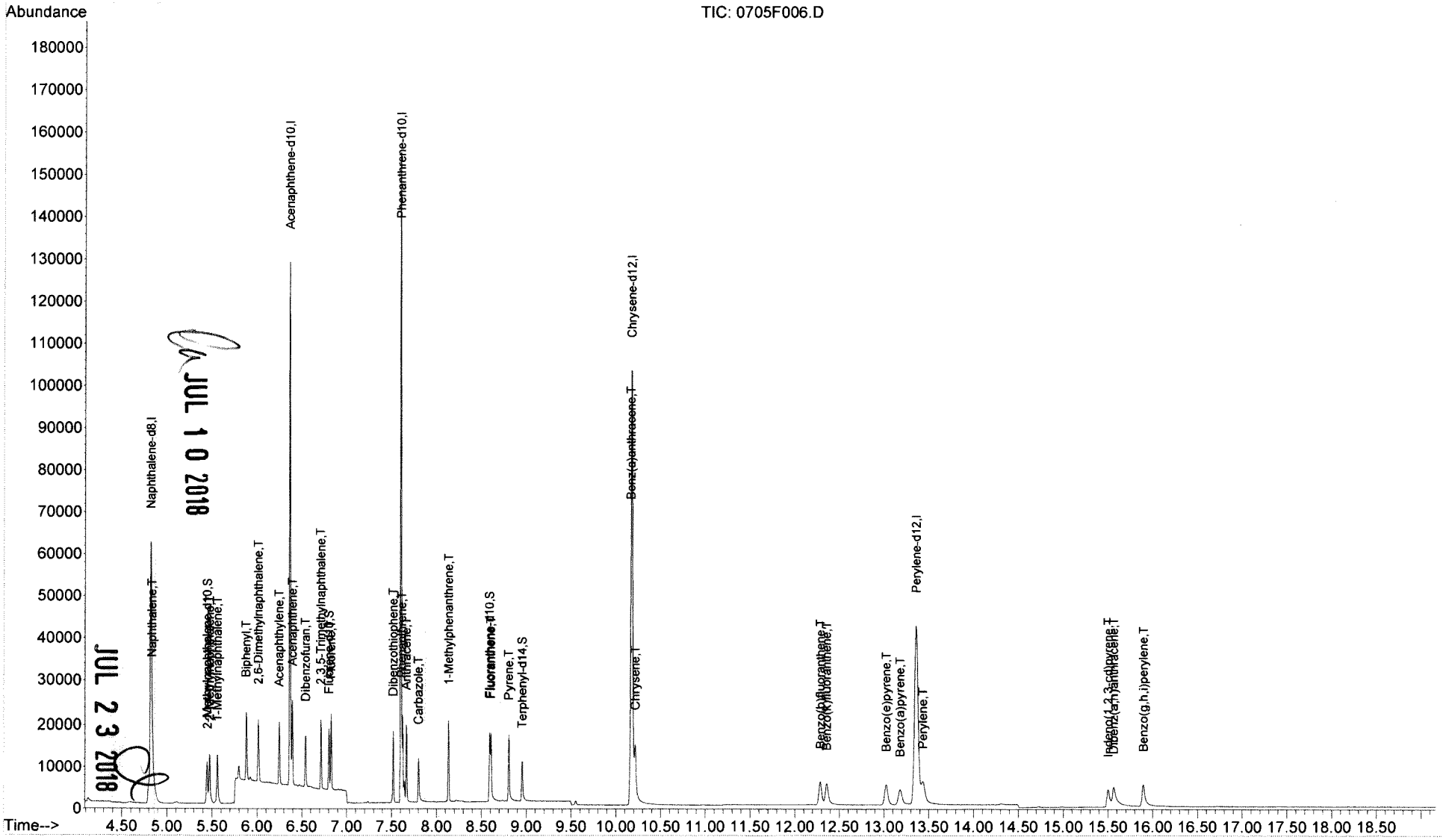
JUL 10 2018

JUL 23 2018

(#) = qualifier out of range (m) = manual integration
0705F006.D 070518PAH.M Thu Jul 05 09:26:31 2018 Page 1

Data File : J:\MS14\DATA\070518\0705F006.D Vial: 6
Acq On : 5 Jul 2018 7:34 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 0.02ug/mL | SVM59-4D Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:24 2018 Quant Results File: 070518PAH.RES

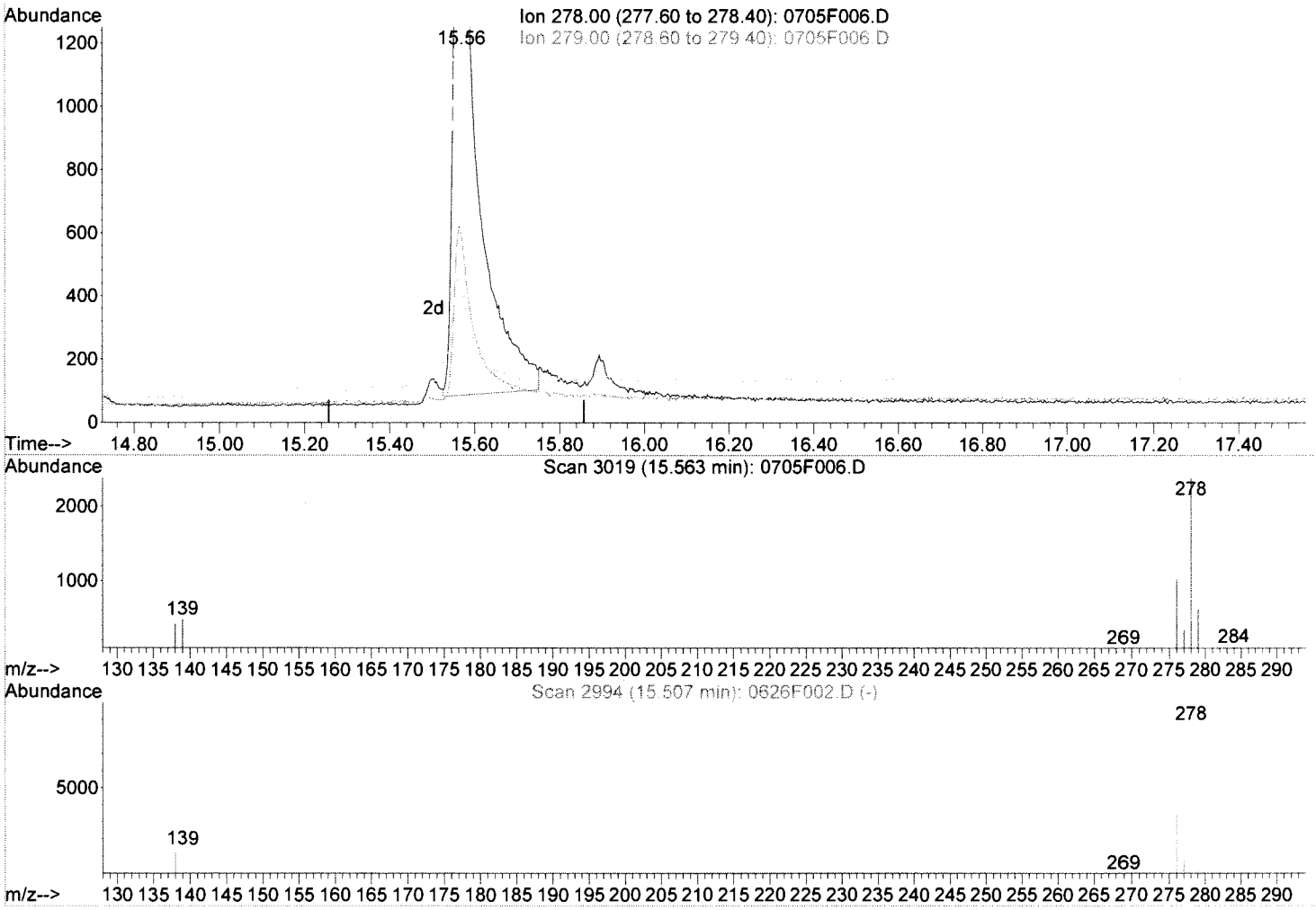
Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Initial Calibration



JUL 23 2018
JUL 10 2018

Data File : J:\MS14\DATA\070518\0705F006.D Vial: 6
Acq On : 5 Jul 2018 7:34 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 0.02ug/mL | SVM59-4D Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:03 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration



TIC: 0705F006.D

(35) Dibenz(a,h)anthracene (T)

15.56min 13.97ng/ml

response 7526

Ion	Exp%	Act%
278.00	100	100
279.00	23.60	24.17
139.00	13.40	14.91
0.00	0.00	0.00

Manual Integration:

Before

07/05/18

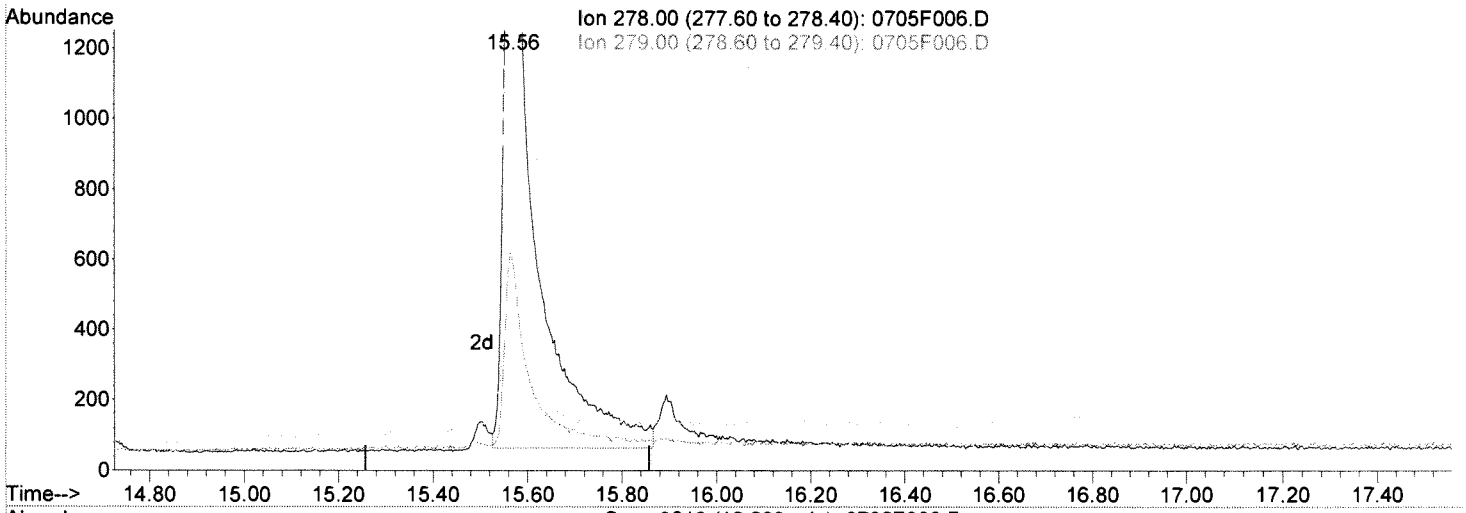
JUL 2 3 2018

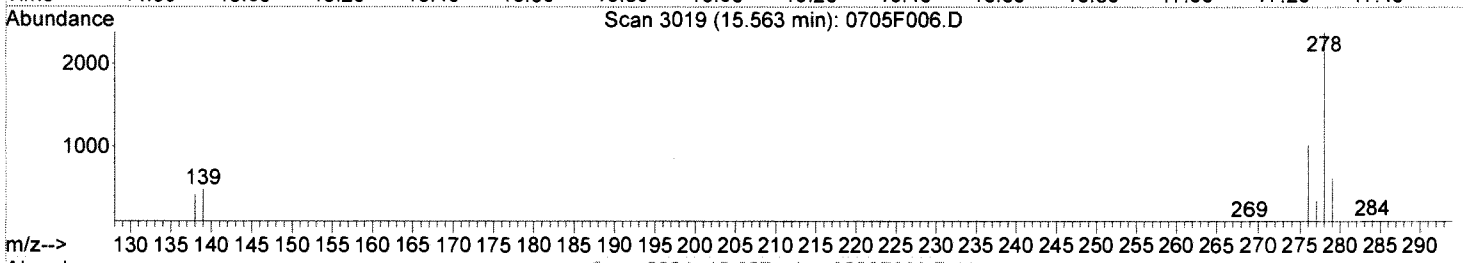
0705F006.D 070518PAH.M Thu Jul 05 09:24:31 2018

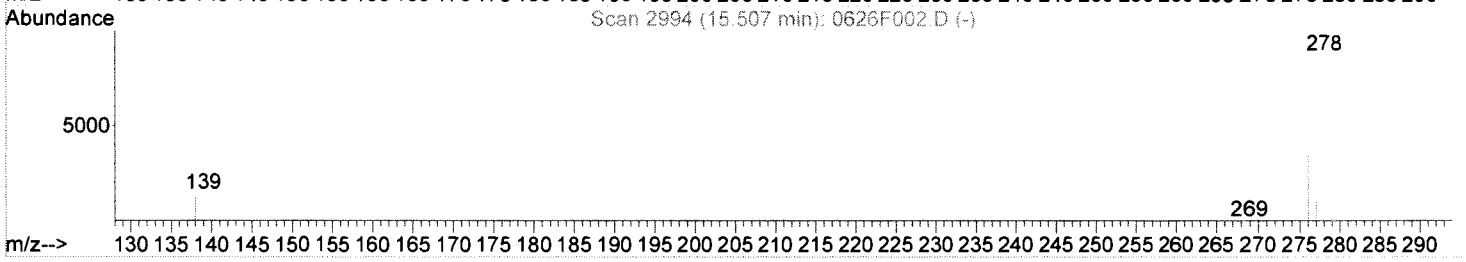
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\070518\0705F006.D Vial: 6
Acq On : 5 Jul 2018 7:34 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 0.02ug/mL | SVM59-4D Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:24 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F006.D

(35) Dibenz(a,h)anthracene (T)

15.56min 15.64ng/ml m

response 8426

Ion	Exp%	Act%
278.00	100	100
279.00	23.60	26.09
139.00	13.40	20.13
0.00	0.00	0.00

Manual Integration:

After

BLC

07/05/18

JUL 23 2018

0705F006.D 070518PAH.M Thu Jul 05 09:24:38 2018

Data File : J:\MS14\DATA\070518\0705F007.D Vial: 7
Acq On : 5 Jul 2018 7:58 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 0.1ug/mL | SVM59-4E Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 05 09:03:23 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	70670m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	32798	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.60	188	76139	200.00	ng/ml	0.00
23) Chrysene-d12	10.18	240	85759	200.00	ng/ml	0.00
28) Perylene-d12	13.36	264	83282	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.45	152	20108	98.90	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	9.89%		
13) Fluorene-d10	6.81	176	21219	98.91	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	9.89%		
22) Fluoranthene-d10	8.59	212	47576	109.92	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	10.99%		
25) Terphenyl-d14	8.95	244	38003	97.59	ng/ml	0.00
Spiked Amount 1000.000			Recovery =	9.76%		
Target Compounds						Qvalue
2) Naphthalene	4.84	128	40042	107.64	ng/ml	98
4) 2-Methylnaphthalene	5.47	142	25280	107.01	ng/ml	94
5) 1-Methylnaphthalene	5.56	142	24053	103.40	ng/ml	95
6) Biphenyl	5.88	154	30777	105.29	ng/ml	96
7) 2,6-Dimethylnaphthalene	6.02	156	21226	100.37	ng/ml	97
9) Acenaphthylene	6.25	152	38401	108.12	ng/ml	98
10) Acenaphthene	6.40	154	22384	110.33	ng/ml	97
11) Dibenzofuran	6.54	168	35685	107.08	ng/ml	83
12) 2,3,5-Trimethylnaphthalene	6.72	170	21062	104.51	ng/ml	87
14) Fluorene	6.83	166	28293	110.55	ng/ml	98
16) Dibenzothiophene	7.52	184	47366	116.19	ng/ml	95
17) Phenanthrene	7.62	178	46626	109.30	ng/ml	100
18) Anthracene	7.67	178	45759	110.46	ng/ml	100
19) Carbazole	7.80	167	40927	112.47	ng/ml	98
20) 1-Methylphenanthrene	8.13	192	36309	112.37	ng/ml	97
21) Fluoranthene	8.61	202	58692	120.88	ng/ml	99
24) Pyrene	8.81	202	59770	101.23	ng/ml	98
26) Benz(a)anthracene	10.16	228	49572	91.05	ng/ml	100
27) Chrysene	10.22	228	52473	103.86	ng/ml	100
29) Benzo(b)fluoranthene	12.29	252	50892	101.77	ng/ml	98
30) Benzo(k)fluoranthene	12.36	252	52612	107.93	ng/ml	98
31) Benzo(e)pyrene	13.02	252	49291	103.90	ng/ml	97
32) Benzo(a)pyrene	13.18	252	42599	95.45	ng/ml	98
33) Perylene	13.44	252	44587	97.51	ng/ml	97
34) Indeno(1,2,3-cd)pyrene	15.50	276	37447	69.70	ng/ml	98
35) Dibenz(a,h)anthracene	15.56	278	40999	76.60	ng/ml	98
36) Benzo(g,h,i)perylene	15.89	276	48657	81.29	ng/ml	97

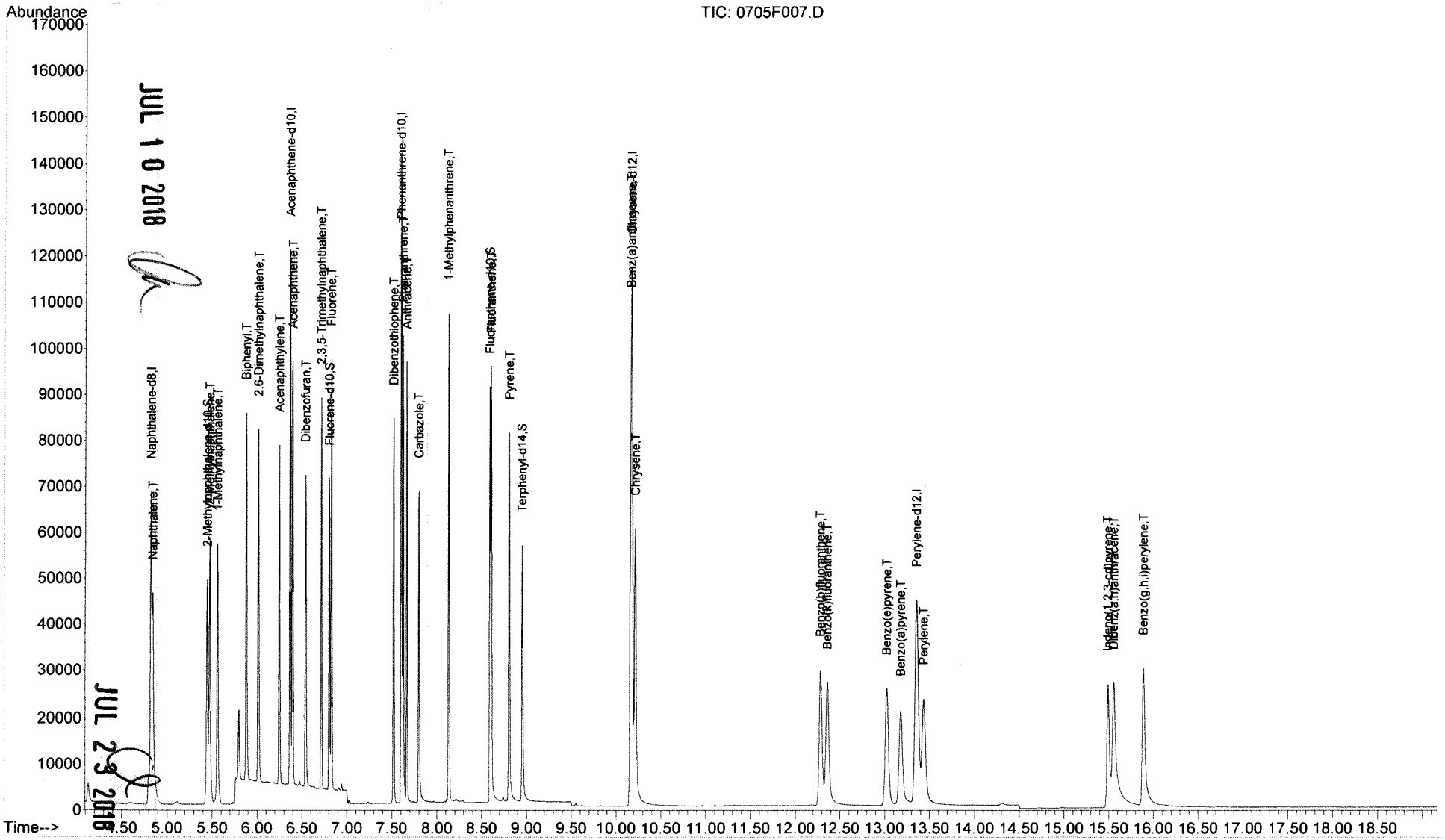
JUL 10 2018

JUL 23 2018

(#) = qualifier out of range (m) = manual integration
0705F007.D 070518PAH.M Thu Jul 05 09:26:32 2018 Page 1

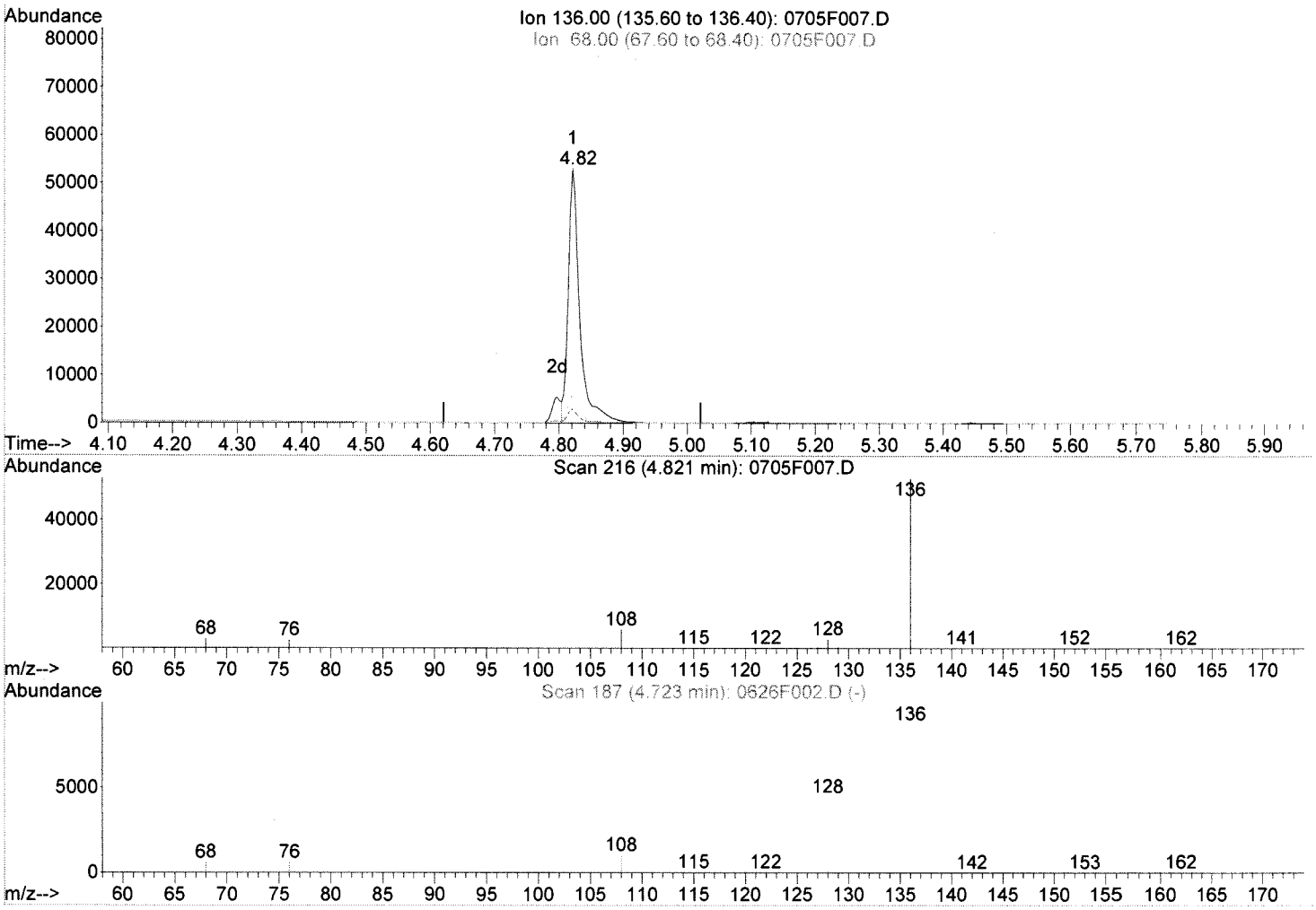
Data File : J:\MS14\DATA\070518\0705F007.D Vial: 7
Acq On : 5 Jul 2018 7:58 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 0.1ug/mL | SVM59-4E Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:24 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Initial Calibration



Data File : J:\MS14\DATA\070518\0705F007.D Vial: 7
Acq On : 5 Jul 2018 7:58 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 0.1ug/mL | SVM59-4E Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:03 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration



TIC: 0705F007.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml

response 65200

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.26
108.00	9.50	10.86
0.00	0.00	0.00

Manual Integration:

Before

07/05/18

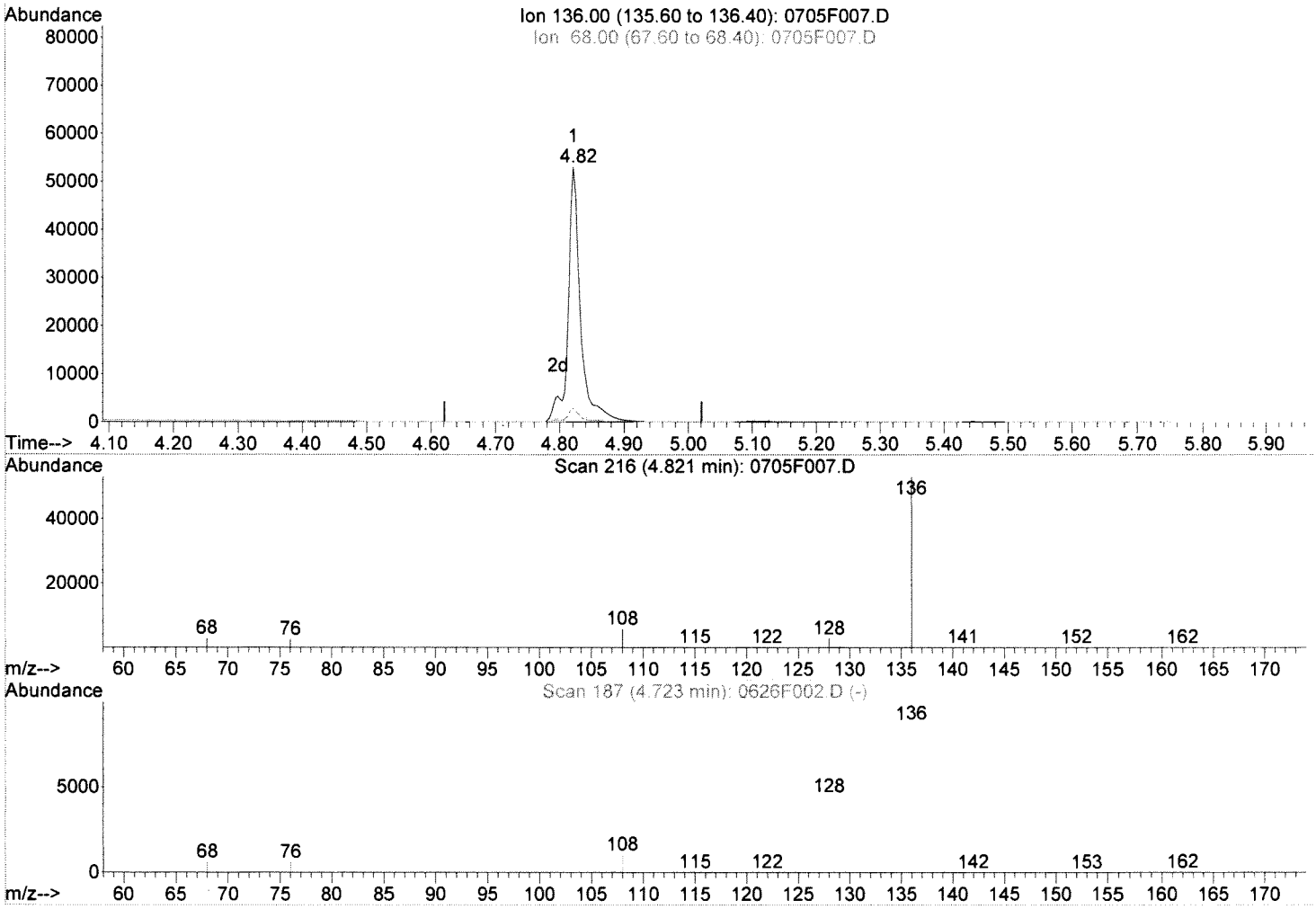
JUL 23 2018

0705F007.D 070518PAH.M Thu Jul 05 09:24:46 2018

Quantitation Report (Qedit)

Data File : J:\MS14\DATA\070518\0705F007.D Vial: 7
Acq On : 5 Jul 2018 7:58 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 0.1ug/mL | SVM59-4E Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:24 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration



TIC: 0705F007.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml m

response 70670

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.46
108.00	9.50	10.99
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

07/05/18

JUL 23 2018

0705F007.D 070518PAH.M Thu Jul 05 09:24:53 2018

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\070518\0705F008.D Vial: 8
Acq On : 5 Jul 2018 8:23 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 0.2ug/mL | SVM59-4F Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 05 09:03:24 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	70575m	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	32176	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.61	188	74199	200.00	ng/ml	0.00
23) Chrysene-d12	10.18	240	83530	200.00	ng/ml	0.00
28) Perylene-d12	13.36	264	81195	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.45	152	39334	193.73	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 19.37%			
13) Fluorene-d10	6.81	176	41267	196.08	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 19.61%			
22) Fluoranthene-d10	8.59	212	93374	221.37	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 22.14%			
25) Terphenyl-d14	8.95	244	73275	193.18	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 19.32%			
Target Compounds						Qvalue
2) Naphthalene	4.84	128	77964	209.87	ng/ml	98
4) 2-Methylnaphthalene	5.47	142	48741	206.60	ng/ml	95
5) 1-Methylnaphthalene	5.56	142	46362	199.57	ng/ml	94
6) Biphenyl	5.88	154	59804	204.87	ng/ml	96
7) 2,6-Dimethylnaphthalene	6.02	156	41318	195.65	ng/ml	98
9) Acenaphthylene	6.25	152	75146	215.66	ng/ml	98
10) Acenaphthene	6.40	154	43898	220.56	ng/ml	96
11) Dibenzofuran	6.54	168	71044	217.29	ng/ml	87
12) 2,3,5-Trimethylnaphthalene	6.72	170	41226	208.51	ng/ml	87
14) Fluorene	6.83	166	54941	218.82	ng/ml	98
16) Dibenzothiophene	7.52	184	92937	233.93	ng/ml	97
17) Phenanthrene	7.62	178	90184	216.94	ng/ml	99
18) Anthracene	7.67	178	89432	221.54	ng/ml	99
19) Carbazole	7.80	167	81250	229.13	ng/ml	98
20) 1-Methylphenanthrene	8.14	192	71799	228.01	ng/ml	97
21) Fluoranthene	8.61	202	114761	242.54	ng/ml	99
24) Pyrene	8.81	202	117619	204.53	ng/ml	98
26) Benz(a)anthracene	10.16	228	98814	186.34	ng/ml	99
27) Chrysene	10.22	228	103028	209.36	ng/ml	100
29) Benzo(b)fluoranthene	12.29	252	102629	210.51	ng/ml	98
30) Benzo(k)fluoranthene	12.36	252	104077	219.00	ng/ml	98
31) Benzo(e)pyrene	13.03	252	97433	210.66	ng/ml	97
32) Benzo(a)pyrene	13.18	252	84248	193.62	ng/ml	97
33) Perylene	13.44	252	88169	197.79	ng/ml	97
34) Indeno(1,2,3-cd)pyrene	15.50	276	74564	142.35	ng/ml	99
35) Dibenz(a,h)anthracene	15.56	278	79520	152.39	ng/ml	98
36) Benzo(g,h,i)perylene	15.89	276	94140	161.32	ng/ml	98

JUL 10 2018

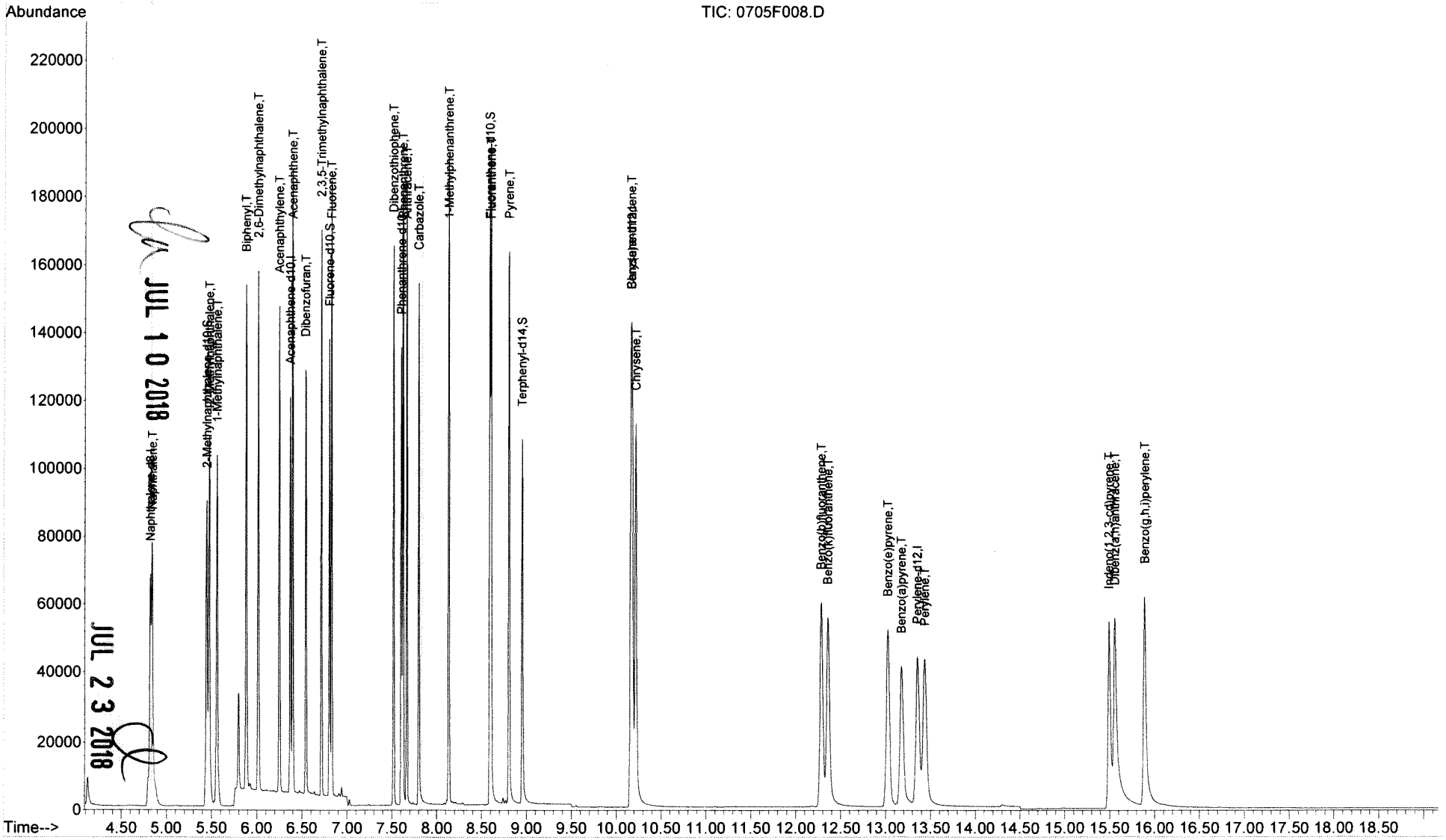
JUL 23 2018

(#) = qualifier out of range (m) = manual integration
0705F008.D 070518PAH.M Thu Jul 05 09:26:34 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\070518\0705F008.D Vial: 8
Acq On : 5 Jul 2018 8:23 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 0.2ug/mL | SVM59-4F Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:25 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Initial Calibration



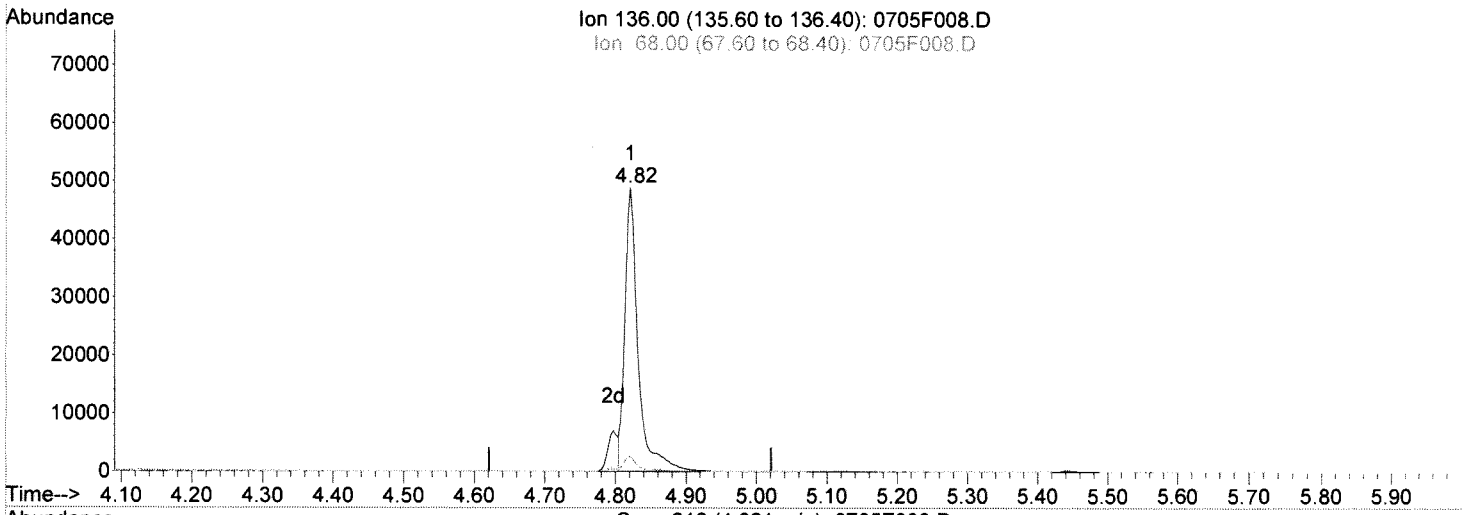
JUL 10 2018

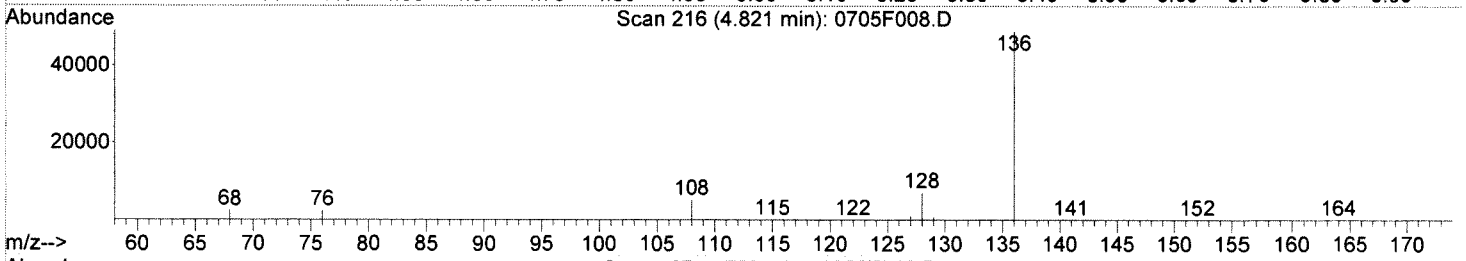
JUL 23 2018

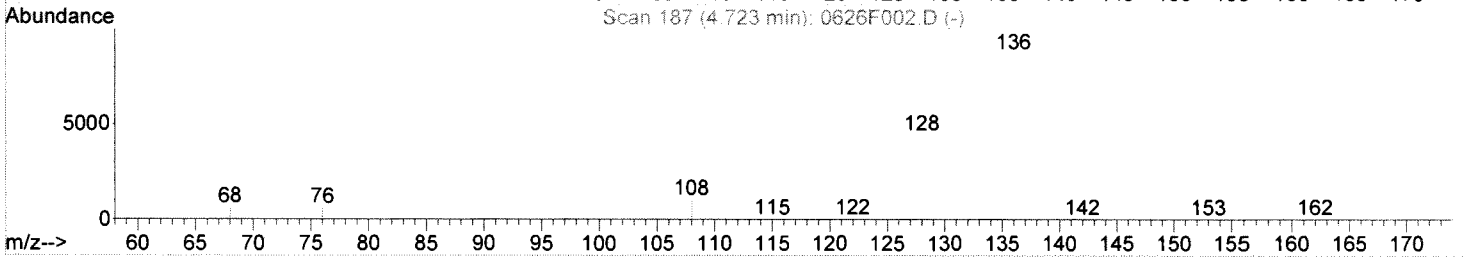
Quantitation Report (Qedit)

Data File : J:\MS14\DATA\070518\0705F008.D Vial: 8
Acq On : 5 Jul 2018 8:23 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 0.2ug/mL | SVM59-4F Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:03 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F008.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml

response 63461

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	4.97
108.00	9.50	10.50
0.00	0.00	0.00

Manual Integration:

Before

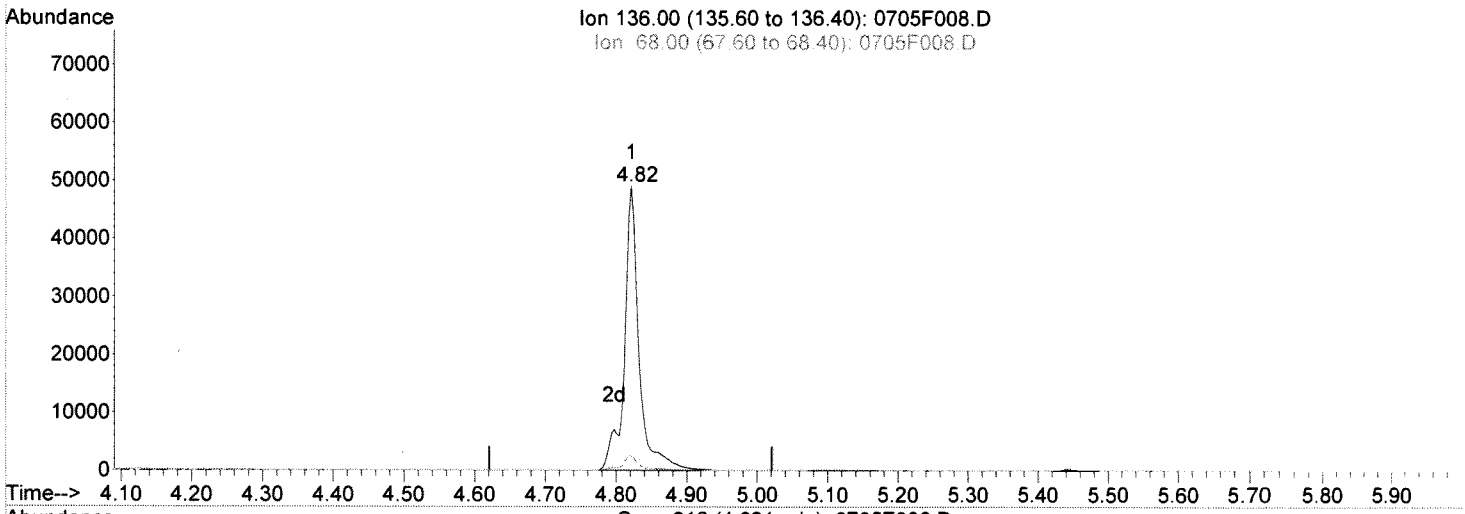
07/05/18

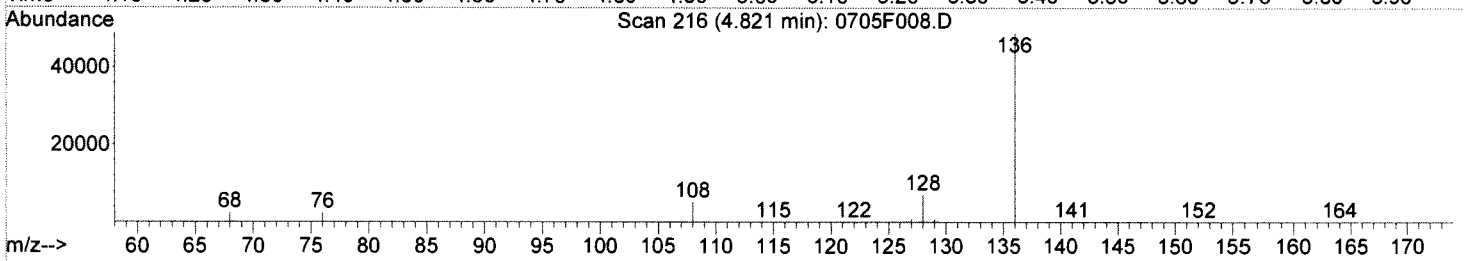
JUL 23 2018

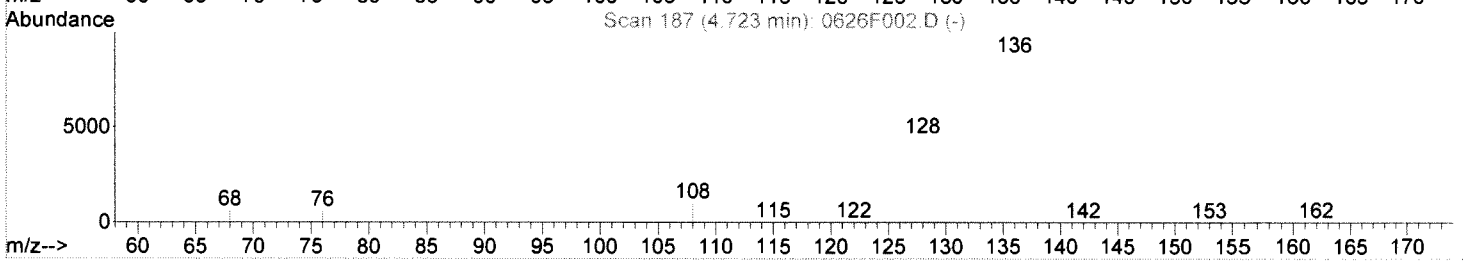
0705F008.D 070518PAH.M Thu Jul 05 09:25:17 2018

Data File : J:\MS14\DATA\070518\0705F008.D Vial: 8
Acq On : 5 Jul 2018 8:23 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 0.2ug/mL | SVM59-4F Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:25 2018 Quant Results File: temp.res

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Multiple Level Calibration







TIC: 0705F008.D

(1) Naphthalene-d8 (I)

4.82min 200.00ng/ml m

response 70575

Ion	Exp%	Act%
136.00	100	100
68.00	4.90	5.16
108.00	9.50	10.61
0.00	0.00	0.00

Manual Integration:

After

IC-Incomplete

07/05/18

JUL 23 2018

0705F008.D 070518PAH.M Thu Jul 05 09:25:24 2018

Data File : J:\MS14\DATA\070518\0705F009.D Vial: 9
Acq On : 5 Jul 2018 8:49 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 0.4ug/mL | SVM59-4G Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 05 09:14:22 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	71705	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	32604	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.61	188	74856	200.00	ng/ml	0.00
23) Chrysene-d12	10.18	240	82173	200.00	ng/ml	0.00
28) Perylene-d12	13.36	264	80332	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.45	152	78486	380.47	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 38.05%			
13) Fluorene-d10	6.81	176	82259	385.72	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 38.57%			
22) Fluoranthene-d10	8.59	212	184887	434.48	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 43.45%			
25) Terphenyl-d14	8.96	244	143276	383.97	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 38.40%			
Target Compounds						Qvalue
2) Naphthalene	4.84	128	155878	412.99	ng/ml	98
4) 2-Methylnaphthalene	5.47	142	95580	398.75	ng/ml	94
5) 1-Methylnaphthalene	5.56	142	90804	384.71	ng/ml	95
6) Biphenyl	5.88	154	118297	398.86	ng/ml	96
7) 2,6-Dimethylnaphthalene	6.02	156	82685	385.36	ng/ml	98
9) Acenaphthylene	6.25	152	152841	432.87	ng/ml	98
10) Acenaphthene	6.40	154	87682	434.76	ng/ml	98
11) Dibenzofuran	6.54	168	138868	419.16	ng/ml	86
12) 2,3,5-Trimethylnaphthalene	6.72	170	83060	414.59	ng/ml	86
14) Fluorene	6.83	166	107758	423.54	ng/ml	98
16) Dibenzothiophene	7.52	184	188575	470.49	ng/ml	97
17) Phenanthrene	7.62	178	179856	428.84	ng/ml	99
18) Anthracene	7.67	178	178463	438.20	ng/ml	100
19) Carbazole	7.80	167	162681	454.74	ng/ml	98
20) 1-Methylphenanthrene	8.14	192	144299	454.22	ng/ml	98
21) Fluoranthene	8.61	202	219375	459.57	ng/ml	99
24) Pyrene	8.81	202	229536	405.74	ng/ml	99
26) Benz(a)anthracene	10.17	228	201063	385.42	ng/ml	100
27) Chrysene	10.22	228	201050	415.30	ng/ml	100
29) Benzo(b)fluoranthene	12.29	252	208027	431.28	ng/ml	98
30) Benzo(k)fluoranthene	12.37	252	208045	442.47	ng/ml	99
31) Benzo(e)pyrene	13.03	252	196825	430.13	ng/ml	98
32) Benzo(a)pyrene	13.19	252	170924	397.04	ng/ml	98
33) Perylene	13.44	252	179299	406.54	ng/ml	98
34) Indeno(1,2,3-cd)pyrene	15.50	276	150203	289.82	ng/ml	99
35) Dibenz(a,h)anthracene	15.56	278	155435	301.08	ng/ml	99
36) Benzo(g,h,i)perylene	15.89	276	183964	318.63	ng/ml	98

JUL 10 2018

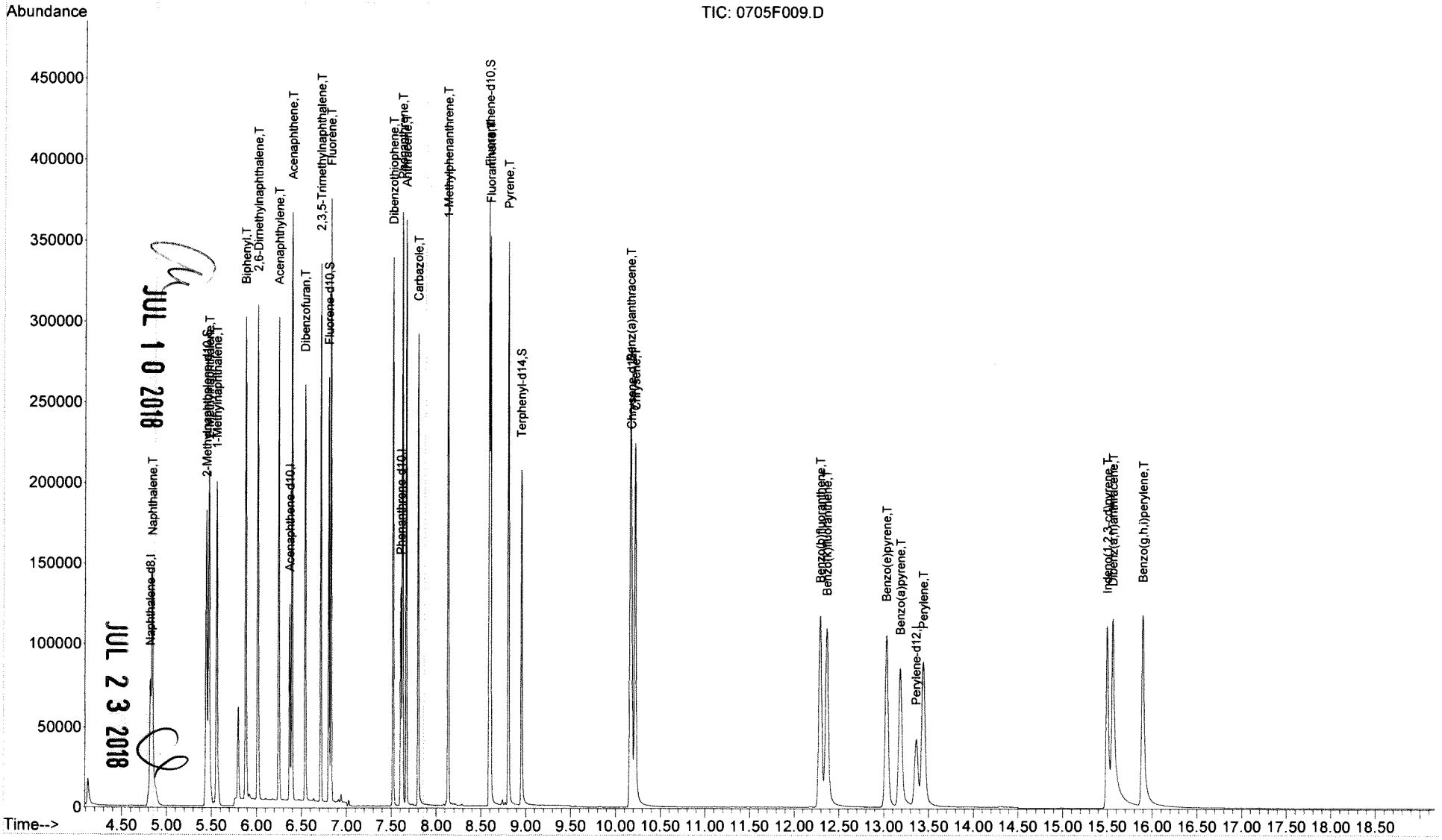
JUL 23 2018

(#) = qualifier out of range (m) = manual integration
0705F009.D 070518PAH.M Thu Jul 05 09:26:35 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\070518\0705F009.D Vial: 9
Acq On : 5 Jul 2018 8:49 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 0.4ug/mL | SVM59-4G Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:14 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:03:01 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\070518\0705F010.D Vial: 10
Acq On : 5 Jul 2018 9:15 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 1.0ug/mL | SVM59-4H Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 05 09:48:17 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	69412	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	30769	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.61	188	70583	200.00	ng/ml	0.00
23) Chrysene-d12	10.19	240	79522	200.00	ng/ml	0.00
28) Perylene-d12	13.37	264	81410	200.00	ng/ml	0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.45	152	184804	907.67	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 90.77%			
13) Fluorene-d10	6.81	176	190812	916.19	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 91.62%			
22) Fluoranthene-d10	8.59	212	455924	1066.72	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 106.67%			
25) Terphenyl-d14	8.96	244	347655	938.87	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 93.89%			
Target Compounds						Qvalue
2) Naphthalene	4.84	128	367696	948.19	ng/ml	98
4) 2-Methylnaphthalene	5.48	142	219355	863.79	ng/ml	97
5) 1-Methylnaphthalene	5.56	142	212595	866.70	ng/ml	97
6) Biphenyl	5.89	154	276999	892.79	ng/ml	97
7) 2,6-Dimethylnaphthalene	6.02	156	196138	913.82	ng/ml	95
9) Acenaphthylene	6.25	152	360038	997.97	ng/ml	98
10) Acenaphthene	6.40	154	205495	988.80	ng/ml	97
11) Dibenzofuran	6.54	168	322488	959.84	ng/ml	91
12) 2,3,5-Trimethylnaphthalene	6.72	170	193593	988.59	ng/ml	99
14) Fluorene	6.83	166	245978	935.74	ng/ml	97
16) Dibenzothiophene	7.52	184	439359	1003.54	ng/ml	100
17) Phenanthrene	7.63	178	414332	940.61	ng/ml	99
18) Anthracene	7.67	178	419384	987.58	ng/ml	99
19) Carbazole	7.80	167	404658	1100.23	ng/ml	98
20) 1-Methylphenanthrene	8.14	192	347505	1034.49	ng/ml	98
21) Fluoranthene	8.61	202	519560	992.83	ng/ml	99
24) Pyrene	8.81	202	562492	1006.51	ng/ml	97
26) Benz(a)anthracene	10.17	228	508744	1014.38	ng/ml	100
27) Chrysene	10.22	228	489265	977.76	ng/ml	99
29) Benzo(b)fluoranthene	12.30	252	535153	1070.28	ng/ml	98
30) Benzo(k)fluoranthene	12.38	252	520540	1025.34	ng/ml	98
31) Benzo(e)pyrene	13.04	252	502578	1017.92	ng/ml	97
32) Benzo(a)pyrene	13.20	252	449140	1074.34	ng/ml	98
33) Perylene	13.45	252	464957	1057.38	ng/ml	97
34) Indeno(1,2,3-cd)pyrene	15.50	276	394714	1073.61	ng/ml	98
35) Dibenz(a,h)anthracene	15.57	278	403598	987.53	ng/ml	99
36) Benzo(g,h,i)perylene	15.90	276	466206	956.17	ng/ml	97

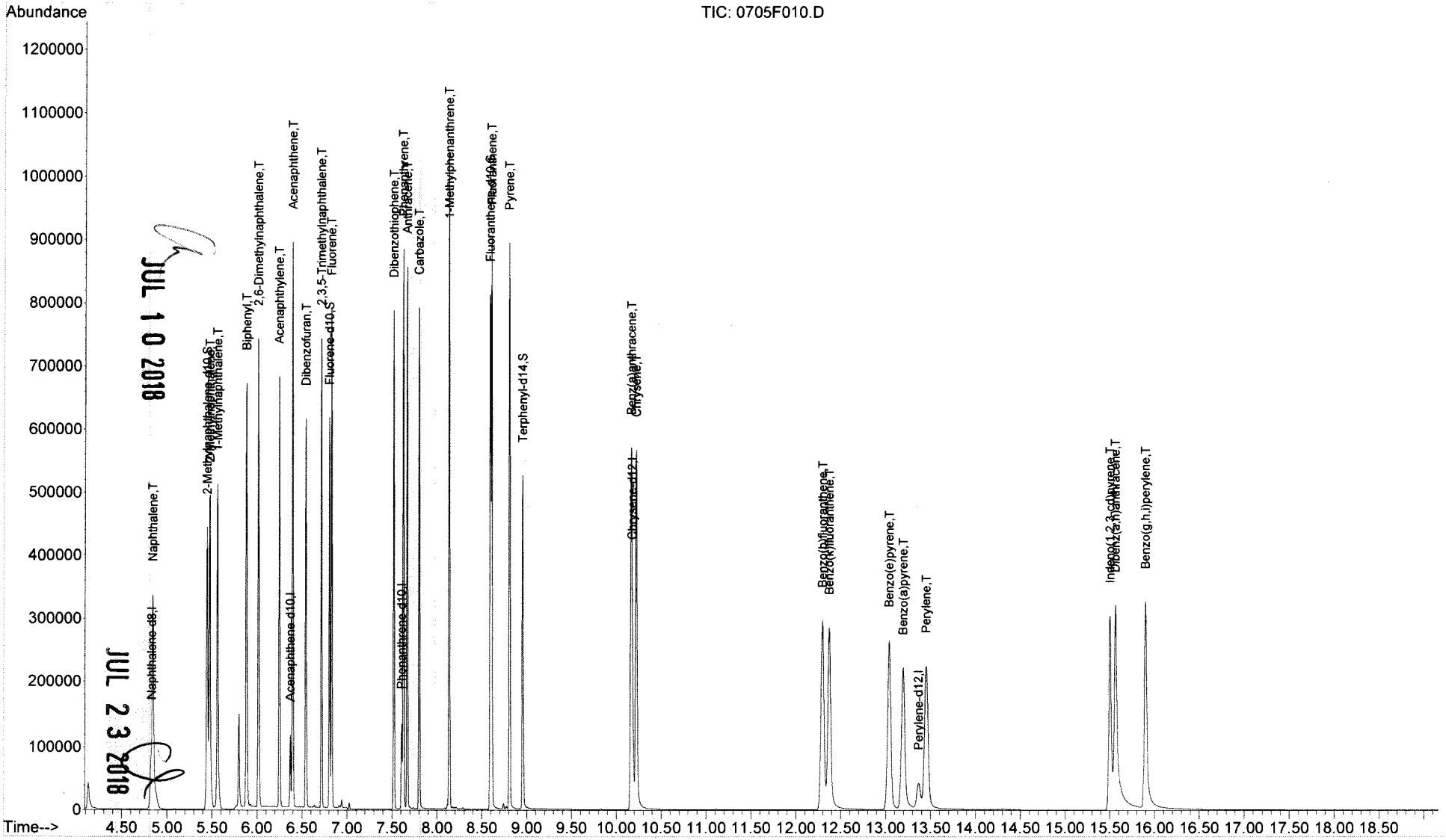
JUL 10 2018

JUL 23 2018

(#) = qualifier out of range (m) = manual integration
0705F010.D 070518PAH.M Thu Jul 05 09:48:50 2018 Page 1

Data File : J:\MS14\DATA\070518\0705F010.D Vial: 10
Acq On : 5 Jul 2018 9:15 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 1.0ug/mL | SVM59-4H Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 9:48 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:29:47 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\070518\0705F011.D Vial: 11
Acq On : 5 Jul 2018 9:40 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 1.6ug/mL | SVM59-4I Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 05 10:02:16 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	64178	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	28525	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.61	188	62772	200.00	ng/ml	0.00
23) Chrysene-d12	10.19	240	75145	200.00	ng/ml	0.00
28) Perylene-d12	13.37	264	78339	200.00	ng/ml	0.02
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.45	152	272832	1449.31	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 144.93%			
13) Fluorene-d10	6.81	176	278041	1440.05	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 144.01%			
22) Fluoranthene-d10	8.60	212	684812	1801.62	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 180.16%			
25) Terphenyl-d14	8.96	244	525273	1501.16	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 150.12%			
Target Compounds						Qvalue
2) Naphthalene	4.84	128	541857	1511.26	ng/ml	98
4) 2-Methylnaphthalene	5.47	142	324697	1382.90	ng/ml	94
5) 1-Methylnaphthalene	5.56	142	315492	1391.09	ng/ml	98
6) Biphenyl	5.89	154	409502	1427.50	ng/ml	98
7) 2,6-Dimethylnaphthalene	6.02	156	293154	1477.21	ng/ml	96
9) Acenaphthylene	6.25	152	537650	1607.52	ng/ml	97
10) Acenaphthene	6.40	154	305261	1584.40	ng/ml	99
11) Dibenzofuran	6.54	168	482376	1548.67	ng/ml	96
12) 2,3,5-Trimethylnaphthalene	6.72	170	286617	1578.76	ng/ml	99
14) Fluorene	6.83	166	358904	1472.73	ng/ml	99
16) Dibenzothiophene	7.52	184	622758	1599.44	ng/ml	98
17) Phenanthrene	7.63	178	590962	1508.54	ng/ml	99
18) Anthracene	7.67	178	596906	1580.52	ng/ml	99
19) Carbazole	7.80	167	601900	1840.16	ng/ml	97
20) 1-Methylphenanthrene	8.14	192	509135	1704.24	ng/ml	97
21) Fluoranthene	8.61	202	782828	1682.06	ng/ml	97
24) Pyrene	8.81	202	853446	1616.09	ng/ml	99
26) Benz(a)anthracene	10.17	228	775348	1636.01	ng/ml	100
27) Chrysene	10.23	228	746304	1578.30	ng/ml	99
29) Benzo(b)fluoranthene	12.30	252	822540	1709.52	ng/ml	98
30) Benzo(k)fluoranthene	12.38	252	807991	1653.94	ng/ml	98
31) Benzo(e)pyrene	13.05	252	777119	1635.67	ng/ml	97
32) Benzo(a)pyrene	13.21	252	705721	1754.26	ng/ml	98
33) Perylene	13.47	252	728379	1721.38	ng/ml	97
34) Indeno(1,2,3-cd)pyrene	15.51	276	616455	1742.47	ng/ml	98
35) Dibenz(a,h)anthracene	15.57	278	629331	1600.23	ng/ml	98
36) Benzo(g,h,i)perylene	15.91	276	724541	1544.26	ng/ml	97

JUL 10 2018

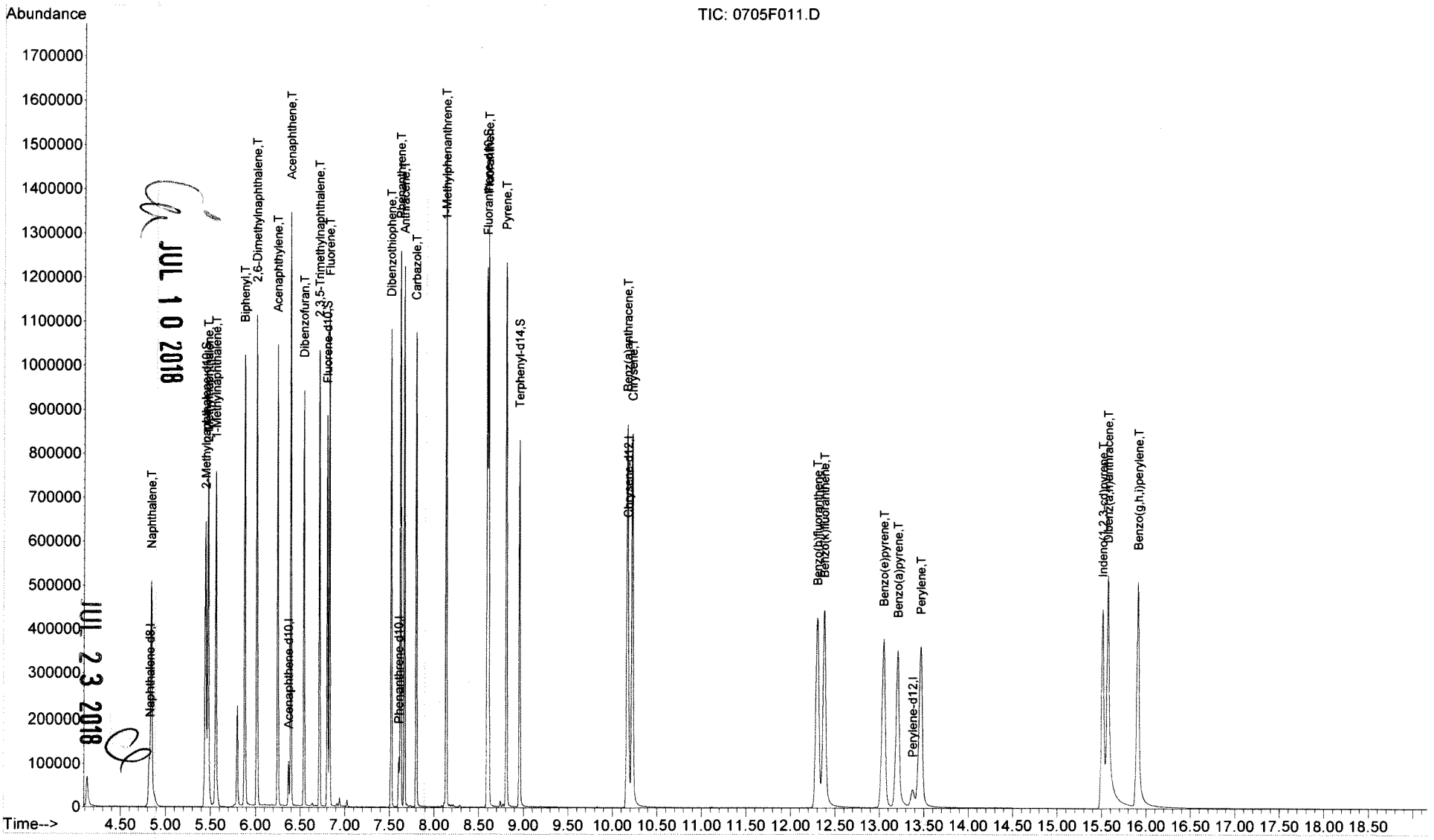
JUL 23 2018

(#) = qualifier out of range (m) = manual integration
0705F011.D 070518PAH.M Thu Jul 05 10:19:34 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\070518\0705F011.D Vial: 11
Acq On : 5 Jul 2018 9:40 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 1.6ug/mL | SVM59-4I Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 10:02 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 09:29:47 2018
Response via : Initial Calibration



JUL 10 2018
JUL 23 2018

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\070518\0705F012.D Vial: 12
Acq On : 5 Jul 2018 10:06 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 2.0ug/mL | SVM59-4J Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 05 10:29:14 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:22:28 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	64693	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	29460	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.61	188	65856	200.00	ng/ml	0.00
23) Chrysene-d12	10.19	240	76396	200.00	ng/ml	0.01
28) Perylene-d12	13.38	264	81769	200.00	ng/ml	0.02
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.45	152	336271	1809.58	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 180.96%			
13) Fluorene-d10	6.81	176	349938	1796.17	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 179.62%			
22) Fluoranthene-d10	8.60	212	842006	2067.17	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 206.72%			
25) Terphenyl-d14	8.96	244	639890	1826.84	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 182.68%			
Target Compounds						Qvalue
2) Naphthalene	4.84	128	662714	1855.74	ng/ml	98
4) 2-Methylnaphthalene	5.48	142	401402	1748.81	ng/ml	97
5) 1-Methylnaphthalene	5.56	142	391056	1762.21	ng/ml	98
6) Biphenyl	5.89	154	509623	1805.51	ng/ml	98
7) 2,6-Dimethylnaphthalene	6.02	156	364423	1855.31	ng/ml	95
9) Acenaphthylene	6.25	152	667886	1932.96	ng/ml	97
10) Acenaphthene	6.40	154	379974	1914.05	ng/ml	99
11) Dibenzofuran	6.54	168	593627	1860.29	ng/ml	93
12) 2,3,5-Trimethylnaphthalene	6.72	170	356871	1908.58	ng/ml	99
14) Fluorene	6.83	166	452235	1825.99	ng/ml	100
16) Dibenzothiophene	7.53	184	783059	1916.29	ng/ml	93
17) Phenanthrene	7.63	178	745068	1836.64	ng/ml	99
18) Anthracene	7.67	178	749181	1896.01	ng/ml	99
19) Carbazole	7.80	167	748510	2122.19	ng/ml	97
20) 1-Methylphenanthrene	8.14	192	637166	2010.66	ng/ml	97
21) Fluoranthene	8.62	202	965070	1966.89	ng/ml	98
24) Pyrene	8.81	202	1049294	1950.82	ng/ml	99
26) Benz(a)anthracene	10.17	228	958468	1981.16	ng/ml	99
27) Chrysene	10.23	228	922294	1926.21	ng/ml	99
29) Benzo(b)fluoranthene	12.31	252	1022372	2004.81	ng/ml	98
30) Benzo(k)fluoranthene	12.39	252	995235	1939.04	ng/ml	97
31) Benzo(e)pyrene	13.06	252	960859	1928.95	ng/ml	97
32) Benzo(a)pyrene	13.21	252	878540	2053.28	ng/ml	97
33) Perylene	13.47	252	906235	2021.93	ng/ml	97
34) Indeno(1,2,3-cd)pyrene	15.52	276	786803	2092.86	ng/ml	97
35) Dibenz(a,h)anthracene	15.58	278	793720	1936.22	ng/ml	98
36) Benzo(g,h,i)perylene	15.92	276	909030	1872.57	ng/ml	97

JUL 10 2018

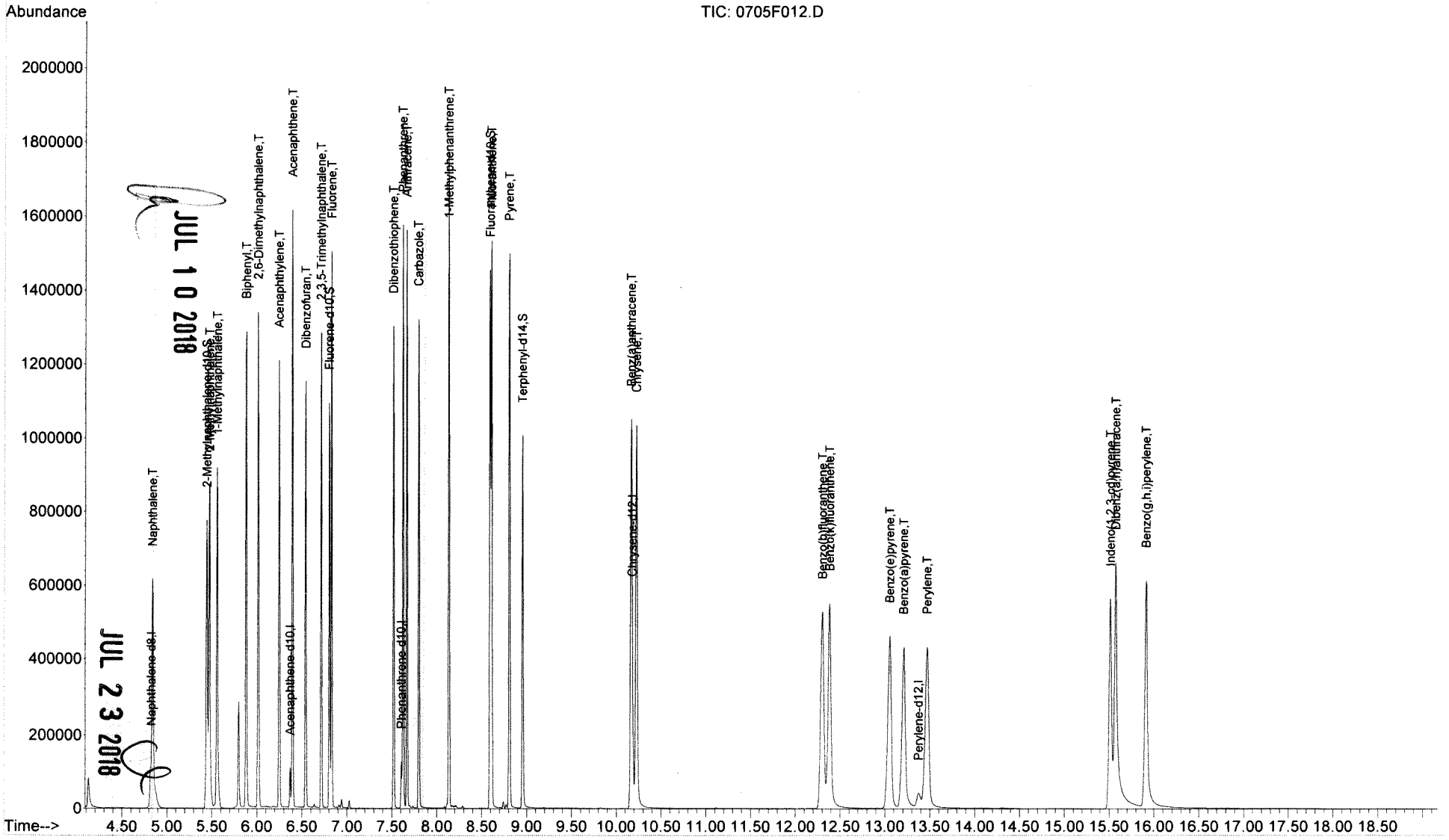
JUL 23 2018

(#) = qualifier out of range (m) = manual integration
0705F012.D 070518PAH.M Thu Jul 05 10:29:56 2018 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS14\DATA\070518\0705F012.D Vial: 12
Acq On : 5 Jul 2018 10:06 am Operator: LWeiskopf
Sample : SIM-PAH ICAL @ 2.0ug/mL | SVM59-4J Inst : MS14
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 5 10:29 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration



Data File : J:\MS14\DATA\070518\0705F013.D Vial: 13
Acq On : 5 Jul 2018 10:32 am Operator: LWeiskopf
Sample : SIM-PAH ~~ICAL~~ @ 0.4ug/mL | SVM59-4K Inst : MS14
Misc : ICV 07-10-18 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 10 13:22:26 2018 Quant Results File: 070518PAH.RES

Quant Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
Last Update : Thu Jul 05 10:29:47 2018
Response via : Initial Calibration
DataAcq Meth : A_PAHAT05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	4.82	136	61551	200.00	ng/ml	0.00
8) Acenaphthene-d10	6.37	164	28320	200.00	ng/ml	0.00
15) Phenanthrene-d10	7.61	188	65919	200.00	ng/ml	0.00
23) Chrysene-d12	10.18	240	73980	200.00	ng/ml	0.00
28) Perylene-d12	13.36	264	69707	200.00	ng/ml	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-d10	5.45	152	67241	383.97	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 38.40%			
13) Fluorene-d10	6.81	176	72879	393.59	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 39.36%			
22) Fluoranthene-d10	8.59	212	169512	414.37	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 41.44%			
25) Terphenyl-d14	8.95	244	132171	393.45	ng/ml	0.00
Spiked Amount 1000.000			Recovery = 39.34%			
Target Compounds						Qvalue
2) Naphthalene	4.84	128	133136	394.69	ng/ml	98
4) 2-Methylnaphthalene	5.47	142	81152	376.33	ng/ml	94
5) 1-Methylnaphthalene	5.56	142	73865	354.06	ng/ml	97
6) Biphenyl	5.88	154	109181	410.55	ng/ml	95
7) 2,6-Dimethylnaphthalene	6.02	156	76561	412.66	ng/ml	97
9) Acenaphthylene	6.25	152	131172	396.24	ng/ml	98
10) Acenaphthene	6.40	154	74072	389.82	ng/ml	97
11) Dibenzofuran	6.54	168	115901	380.48	ng/ml	85
12) 2,3,5-Trimethylnaphthalene	6.72	170	74303	415.27	ng/ml	87
14) Fluorene	6.83	166	92419	391.59	ng/ml	98
16) Dibenzothiophene	7.52	184	173178	425.17	ng/ml	96
17) Phenanthrene	7.62	178	153156	380.29	ng/ml	100
18) Anthracene	7.67	178	153837	390.99	ng/ml	100
19) Carbazole	7.80	167	153670	432.63	ng/ml	98
20) 1-Methylphenanthrene	8.13	192	134641	424.25	ng/ml	96
21) Fluoranthene	8.61	202	204345	416.76	ng/ml	99
24) Pyrene	8.81	202	203183	391.05	ng/ml	98
26) Benz(a)anthracene	10.16	228	171031	365.41	ng/ml	100
27) Chrysene	10.22	228	175131	379.10	ng/ml	100
29) Benzo(b)fluoranthene	12.29	252	178235	409.89	ng/ml	98
30) Benzo(k)fluoranthene	12.36	252	180710	414.27	ng/ml	99
31) Benzo(e)pyrene	13.03	252	172829	408.45	ng/ml	98
32) Benzo(a)pyrene	13.18	252	145793	398.64	ng/ml	98
33) Perylene	13.44	252	168063	439.37	ng/ml	97
34) Indeno(1,2,3-cd)pyrene	15.50	276	114354	355.16	ng/ml	99
35) Dibenz(a,h)anthracene	15.56	278	119276	342.40	ng/ml	98
36) Benzo(g,h,i)perylene	15.89	276	141117	343.18	ng/ml	98

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(#) = qualifier out of range (m) = manual integration
0705F013.D 070518PAH.M Tue Jul 10 13:22:52 2018 Page 1

Quantitation Report (QT Reviewed)

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Acq On : 5 Jul 2018 10:32 am Operator: LWeiskopf
Sample : SIM-PAH ~~ICAL~~ @ 0.4ug/mL | SVM59-4K Inst : MS14
Misc : ICV 7-10-18 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 10 13:22 2018 Quant Results File: 070518PAH.RES

Method : J:\MS14\METHODS\SIM\070518PAH.M (RTE Integrator)
Title : PAHS and ALKYLATED HOMOLOGS
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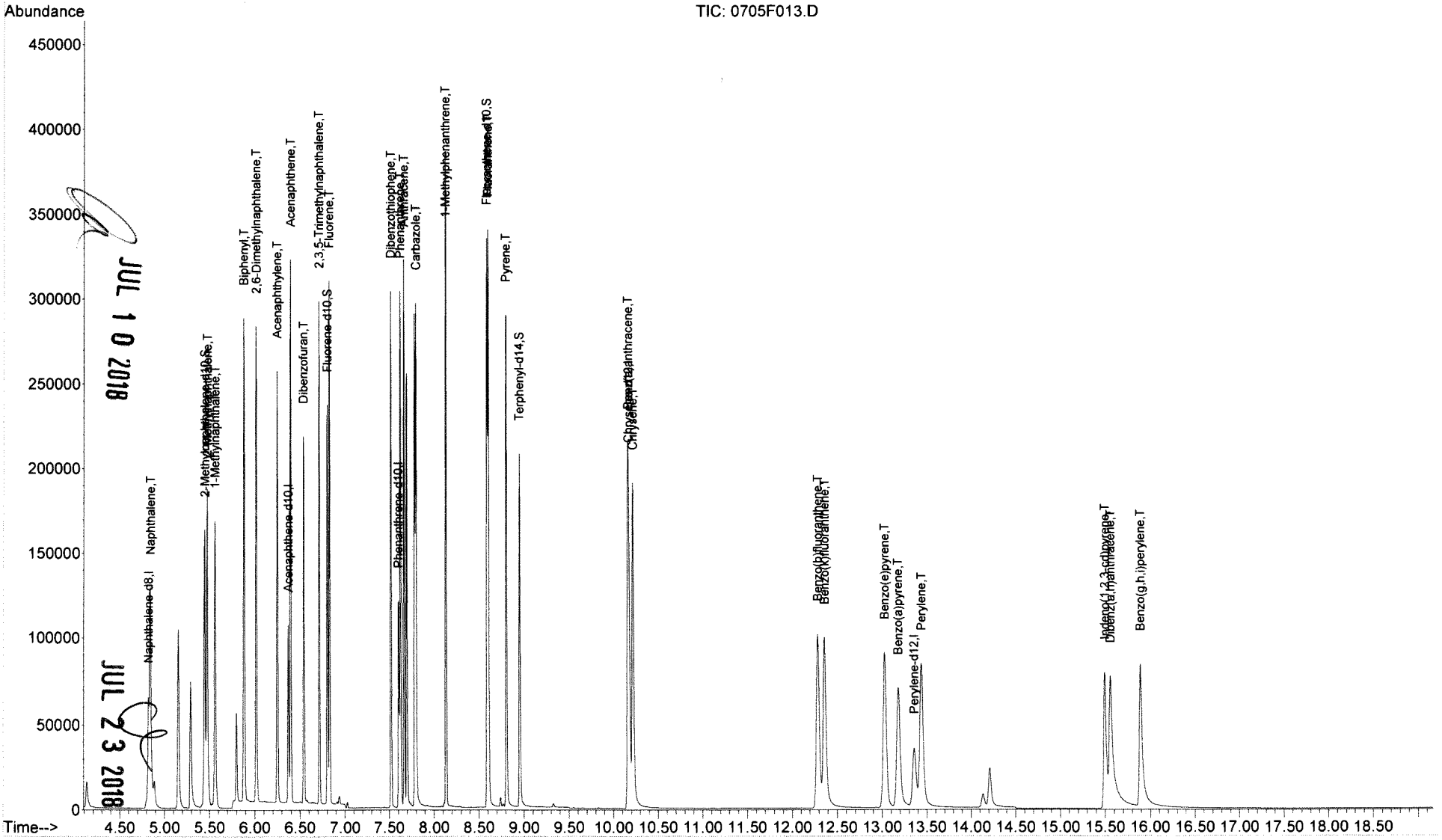

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JUL 23 2018