UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
HOUSTON BRANCH
10625 FALLSTONE RD.
HOUSTON, TEXAS 77099

March 14, 2019

MEMORANDUM

SUBJECT: Contract Laboratory Program Data Review

FROM: Raymond Flores, ESAT Regional Project Officer
Environmental Services Branch (6MD-HL)

NOTICE FOR R.F.

TO: Katrina Coltrain, Remedial Project Manager (6SF-RL)

Site: WILCOX OIL

Case#: 48019

SDG#: F9E54

The EPA Region 6 Environmental Services Branch ESAT data review team has completed a review of the submitted Contract Laboratory Program (CLP) data package for the referenced site. The samples analyzed and reviewed are detailed in the attached Regional data review report.

The data package is acceptable for regional use. Problems, if any, are listed in the report narrative. If you have any questions regarding the data review report, please contact me at (281) 983-2139.

100017619

ENVIRONMENTAL SERVICES ASSISTANCE TEAM

ESAT Region 6
10625 Fallstone Road
Houston, TX 77099

Alion Science and Technology

MEMORANDUM

DATE: March 13, 2019

TO: Raymond Flores, ESAT PO, Region 6 EPA

FROM: Ying-Ping Hsieh, Data Reviewer, ESAT YPH

THRU: Dominic G. Jarecki, ESAT Program Manager, ESAT DGJ

SUBJECT: CLP Data Review

Contract No.:	EP-W-13-026
TO No.:	002
Task/Sub-Task:	2-11
ESAT Doc. No.:	1902-211-0009
TDF No.:	6-19-058A
ESAT File No.:	O-1464

Attached is the data review summary for Case # 48019
SDG # F9E54
Site Wilcox Oil

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
HOUSTON BRANCH
10625 FALLSTONE ROAD
HOUSTON, TEXAS 77099
ORGANIC REGIONAL DATA ASSESSMENT

CASE NO.	48019	SITE	Wilcox Oil
LABORATORY	CHM	NO. OF SAMPLES	20
CONTRACT#	EP-W-14-030	MATRIX	Soil
SDG#	F9E54	REVIEWER (IF NOT ESB)	ESAT
SOW#	SOM02.4	REVIEWER'S NAME	Ying-Ping Hsieh
SF#	303DD2GG	COMPLETION DATE	March 13, 2019

SAMPLE NO.				
F9E54	F9E60	F9E64	F9E68	F9E80
F9E55	F9E61	F9E65	F9E69	F9F33
F9E56	F9E62	F9E66	F9E74	F9F34
F9E57	F9E63	F9E67	F9E75	F9F35

DATA ASSESSMENT SUMMARY

	SVOA	PAHSIM
1. HOLDING TIMES	O	O
2. GC/MS TUNE/INSTR. PERFORM.	O	O
3. CALIBRATIONS	M	O
4. BLANKS	O	O
5. DMC/SURROGATES	O	O
6. MATRIX SPIKE/DUPLICATE/LCS	N/A	N/A
7. OTHER QC	N/A	N/A
8. INTERNAL STANDARDS	O	O
9. COMPOUND ID/QUANTITATION	O	O
10. PERFORMANCE/COMPLETENESS	O	O
11. OVERALL ASSESSMENT	M	O

O = Data had no problems.
M = Data qualified because of major or minor problems.
Z = Data unacceptable.
NA = Not applicable.

ACTION ITEMS:

AREA OF CONCERN: **SVOA** Acetophenone and N-nitroso-di-n-propylamine failed the technical %D calibration criteria for one closing CCV.

COMMENTS/CLARIFICATIONS
REGION 6 CLP QA REVIEW

CASE 48019 **SDG** F9E54 **SITE** Wilcox Oil **LAB** CHM

COMMENTS: This SDG consisted of 20 soil samples for SVOA and PAHSIM analyses following CLP SOW SOM02.4. All samples were analyzed at the low level. MS/MSD analyses were not required for this case.

The SOW requires that the soil/sediment sample results be adjusted for moisture content and dilution, which raised adjusted QLs above the CRQLs specified in the SOW. The adjusted CRQLs were reported by the laboratory and are referred to as SQLs in this report.

S4VEM Review was performed for this package as requested by the Region. The target compounds of concern with the project screening levels are listed on pages 43 to 45 of this report. No target compound of concern was reported at a concentration above the project screening level in the samples. Although both the full scan and SIM analysis results are available for all samples, the SIM analysis results are designated for use only when the full scan analysis reported non-detect or below the SQL results.

OVERALL ASSESSMENT: Some results were qualified for one SVOA sample because of a calibration problem. ESAT's final data qualifiers in the DST indicate the technical usability of all reported sample results. An Evidence Audit was conducted for the CSF, and the audit results were reported on the Evidence Inventory Checklist. The DST in this report is the final version.

ORGANIC ACRONYMS

%D	Percent Difference
%RSD	Percent Relative Standard Deviation
ARO	Aroclors
BFB	4-Bromofluorobenzene
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenylphosphine
DMC	Deuterated Monitoring Compound
DST	Data Summary Table
EDM	EXES Data Manager
GC/ECD	Gas Chromatograph/Electron Capture Detector
GC/MS	Gas Chromatograph/Mass Spectrometer
GPC	Gel Permeation Chromatography
IC	Initial Calibration
INDA(B,C)	Individual Standard Mixture A(or B or C)
IS	Internal Standard
LCS	Laboratory Control Sample
LMVOA	Low/Medium Volatile Organic Analysis
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NFG	National Functional Guidelines
OTR/COC	Organic Traffic Report/Chain of Custody
PAH	Polynuclear Aromatic Hydrocarbon
PE	Performance Evaluation
PEM	Performance Evaluation Mixture
PEST	Pesticides
QA	Quality Assurance
QC	Quality Control
QL	Quantitation Limit
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RRT	Relative Retention Time
RSCC	Regional Sample Control Center
RT	Retention Time
S3VEM	Stage 3 Validation Electronic and Manual (previously called Modified CADRE Review)
S4VEM	Stage 4 Validation Electronic and Manual (previously called Standard Review)
SDG	Sample Delivery Group
SDMC	Semivolatile Deuterated Monitoring Compound
SIM	Selected Ion Monitoring
SMO	Sample Management Office
SOW	Statement of Work
SQL	Sample Quantitation Limit
SVOA	Semivolatile Organic Analysis
TCL	Target Compound List
TCX	Tetrachloro-m-xylene
TIC	Tentatively Identified Compound
TVOA	Trace Volatile Organic Analysis
VDMC	Volatile Deuterated Monitoring Compound
VOA	Volatile Organic Analysis

HEADER DEFINITIONS FOR ORGANIC EXCEL DST

CASE: Case Number

SDG: SDG Number

EPASAMP: EPA Sample Number

LABID: Laboratory File/Sample ID

MATRIX: Sample Matrix

ANDATE: Sample Analysis Date

ANTIME: Sample Analysis Time

CASNUM: Compound CAS Number

ANALYTE: Compound Name

CONC: Compound Concentration

VALDQAL: Region 6 Organic Data Validation Qualifier (see Organic Data Qualifier Definitions on the next page)

UNITS: Concentration Units

ADJCRQL: Adjusted Contract Required Quantitation Limit Value

SMPDATE: Sampling Date

STATLOC: Station Location

Disclaimer: ESAT verified the accuracy of the information reported in the Excel DST only for the following data fields: CASE, SDG, EPASAMP, MATRIX, ANALYTE, CONC, UNITS, VALDQAL, and ADJCRQL. The data qualifiers in the VALDQAL column indicate the technical usability of the reported results.

ORGANIC DATA QUALIFIER DEFINITIONS

The following definitions provide brief explanations of the ESAT-Region 6 qualifiers assigned to results in the Data Summary Table.

U Not detected at reported quantitation limit.

N Identification is tentative.

J Estimated value.

L Reported concentration is below the CRQL.

M Reported concentration should be used as a raised quantitation limit because of interferences and/or laboratory contamination.

R Unusable.

+ High biased. Actual concentration may be lower than the concentration reported.

- Low biased. Actual concentration may be higher than the concentration reported.

F+ A false positive exists.

F- A false negative exists.

UJ Estimated quantitation limit.

T Identification is questionable because of absence of other commonly coexisting pesticides.

C Identification of pesticide or Aroclor has been confirmed by Gas Chromatography/Mass Spectrometer (GC/MS).

X Identification of pesticide or Aroclor could not be confirmed by GC/MS when attempted.

***** Result not recommended for use because of associated QA/QC performance inferior to that from other analysis.

CASE	SDG	EPASAMP	LABID	MATRIX	ANDATE	ANTIME	CASNUM	ANALYTE	CONC	VALDQAL	UNITS	ADJCRQL	SMPDATE	STATLOC	DVLEV
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	123-91-1	1,4-Dioxane	76	U	ug/kg	76	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	100-52-7	Benzaldehyde	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	108-95-2	Phenol	130	LJ	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	111-44-4	Bis(2-Chloroethyl)ether	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	95-48-7	2-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	108-60-1	2,2-oxybis(1-Chloropropane)	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	98-86-2	Acetophenone	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	106-44-5	4-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	106-47-8	4-Chloroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	105-60-2	Caprolactam	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	77-47-4	Hexachlorocyclopentadiene	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	131-11-3	Dimethylphthalate	210		ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	99-09-2	3-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	51-28-5	2,4-Dinitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	100-02-7	4-Nitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	100-01-6	4-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	534-52-1	4,6-Dinitro-2-methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	1912-24-9	Atrazine	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	87-86-5	Pentachlorophenol	370	U *	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	86-74-8	Carbazole	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM

48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	206-44-0	Fluoranthene	370	U *	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	91-94-1	3,3-Dichlorobenzidine	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	117-84-0	Di-n-octyl phthalate	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	91-20-3	Naphthalene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	91-57-6	2-Methylnaphthalene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	208-96-8	Acenaphthylene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	83-32-9	Acenaphthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	86-73-7	Fluorene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	87-86-5	Pentachlorophenol	7.6	U	ug/kg	7.6	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	85-01-8	Phenanthrene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	120-12-7	Anthracene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	206-44-0	Fluoranthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	129-00-0	Pyrene	0.96	LJ	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	56-55-3	Benzo(a)anthracene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	218-01-9	Chrysene	1.1	LJ	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	205-99-2	Benzo(b)fluoranthene	0.83	LJ	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	207-08-9	Benzo(k)fluoranthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	50-32-8	Benzo(a)pyrene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	53-70-3	Dibenzo(a,h)anthracene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	191-24-2	Benzo(g,h,i)perylene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	123-91-1	1,4-Dioxane	79	U	ug/kg	79	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	100-52-7	Benzaldehyde	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	108-95-2	Phenol	300	LJ	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	111-44-4	Bis(2-Chloroethyl)ether	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	95-57-8	2-Chlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	95-48-7	2-Methylphenol	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	108-60-1	2,2-oxybis(1-Chloropropane)	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	98-86-2	Acetophenone	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	106-44-5	4-Methylphenol	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	621-64-7	N-Nitroso-di-n-propylamine	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	67-72-1	Hexachloroethane	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	98-95-3	Nitrobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	78-59-1	Isophorone	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	88-75-5	2-Nitrophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	105-67-9	2,4-Dimethylphenol	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	111-91-1	Bis(2-Chloroethoxy)methane	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	120-83-2	2,4-Dichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	91-20-3	Naphthalene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	106-47-8	4-Chloroaniline	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	87-68-3	Hexachlorobutadiene	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	105-60-2	Caprolactam	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM

48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	59-50-7	4-Chloro-3-methylphenol	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	91-57-6	2-Methylnaphthalene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	77-47-4	Hexachlorocyclopentadiene	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	88-06-2	2,4,6-Trichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	95-95-4	2,4,5-Trichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	92-52-4	1,1-Biphenyl	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	91-58-7	2-Chloronaphthalene	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	88-74-4	2-Nitroaniline	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	131-11-3	Dimethylphthalate	460		ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	606-20-2	2,6-Dinitrotoluene	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	208-96-8	Acenaphthylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	99-09-2	3-Nitroaniline	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	83-32-9	Acenaphthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	51-28-5	2,4-Dinitrophenol	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	100-02-7	4-Nitrophenol	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	132-64-9	Dibenzofuran	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	121-14-2	2,4-Dinitrotoluene	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	84-66-2	Diethylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	86-73-7	Fluorene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	7005-72-3	4-Chlorophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	100-01-6	4-Nitroaniline	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	534-52-1	4,6-Dinitro-2-methylphenol	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	86-30-6	N-Nitrosodiphenylamine	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	95-94-3	1,2,4,5-Tetrachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	101-55-3	4-Bromophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	118-74-1	Hexachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	1912-24-9	Atrazine	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	87-86-5	Pentachlorophenol	390	U *	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	85-01-8	Phenanthrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	120-12-7	Anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	86-74-8	Carbazole	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	84-74-2	Di-n-butylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	206-44-0	Fluoranthene	390	U *	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	129-00-0	Pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	85-68-7	Butylbenzylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	91-94-1	3,3-Dichlorobenzidine	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	56-55-3	Benzo(a)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	218-01-9	Chrysene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	117-81-7	Bis(2-ethylhexyl)phthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	117-84-0	Di-n-octyl phthalate	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	205-99-2	Benzo(b)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	207-08-9	Benzo(k)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	50-32-8	Benzo(a)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	193-39-5	Indeno(1,2,3-cd)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	53-70-3	Dibenzo(a,h)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	191-24-2	Benzo(g,h,i)perylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	58-90-2	2,3,4,6-Tetrachlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	91-20-3	Naphthalene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	91-57-6	2-Methylnaphthalene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	208-96-8	Acenaphthylene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	83-32-9	Acenaphthene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	86-73-7	Fluorene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	87-86-5	Pentachlorophenol	7.9	U	ug/kg	7.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	85-01-8	Phenanthrene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM

48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	120-12-7	Anthracene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	206-44-0	Fluoranthene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	129-00-0	Pyrene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	56-55-3	Benzo(a)anthracene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	218-01-9	Chrysene	0.83		LJ	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	205-99-2	Benzo(b)fluoranthene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	207-08-9	Benzo(k)fluoranthene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	50-32-8	Benzo(a)pyrene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	53-70-3	Dibenzo(a,h)anthracene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	191-24-2	Benzo(g,h,i)perylene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	123-91-1	1,4-Dioxane	77	U		ug/kg	77	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	100-52-7	Benzaldehyde	380	U		ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	108-95-2	Phenol	140		LJ	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	111-44-4	Bis(2-Chloroethyl)ether	380	U		ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	95-57-8	2-Chlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	95-48-7	2-Methylphenol	380	U		ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	108-60-1	2,2-oxybis(1-Chloropropane)	380	U		ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	98-86-2	Acetophenone	380	U		ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	106-44-5	4-Methylphenol	380	U		ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	621-64-7	N-Nitroso-di-n-propylamine	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	67-72-1	Hexachloroethane	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	98-95-3	Nitrobenzene	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	78-59-1	Isophorone	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	88-75-5	2-Nitrophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	105-67-9	2,4-Dimethylphenol	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	111-91-1	Bis(2-Chloroethoxy)methane	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	120-83-2	2,4-Dichlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	91-20-3	Naphthalene	200	U *		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	106-47-8	4-Chloroaniline	380	U		ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	87-68-3	Hexachlorobutadiene	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	105-60-2	Caprolactam	380	U		ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	59-50-7	4-Chloro-3-methylphenol	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	91-57-6	2-Methylnaphthalene	200	U *		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	77-47-4	Hexachlorocyclopentadiene	380	U		ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	88-06-2	2,4,6-Trichlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	95-95-4	2,4,5-Trichlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	92-52-4	1,1-Biphenyl	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	91-58-7	2-Chloronaphthalene	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	88-74-4	2-Nitroaniline	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	131-11-3	Dimethylphthalate	240			ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	606-20-2	2,6-Dinitrotoluene	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	208-96-8	Acenaphthylene	200	U *		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	99-09-2	3-Nitroaniline	380	U		ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	83-32-9	Acenaphthene	200	U *		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	51-28-5	2,4-Dinitrophenol	380	U		ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	100-02-7	4-Nitrophenol	380	U		ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	132-64-9	Dibenzofuran	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	121-14-2	2,4-Dinitrotoluene	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	84-66-2	Diethylphthalate	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	86-73-7	Fluorene	200	U *		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	7005-72-3	4-Chlorophenyl-phenylether	200	U		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	100-01-6	4-Nitroaniline	380	U		ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	534-52-1	4,6-Dinitro-2-methylphenol	380	U		ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM

48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	86-30-6	N-Nitrosodiphenylamine	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	95-94-3	1,2,4,5-Tetrachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	101-55-3	4-Bromophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	118-74-1	Hexachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	1912-24-9	Atrazine	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	87-86-5	Pentachlorophenol	380	U *	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	85-01-8	Phenanthrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	120-12-7	Anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	86-74-8	Carbazole	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	84-74-2	Di-n-butylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	206-44-0	Fluoranthene	380	U *	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	129-00-0	Pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	85-68-7	Butylbenzylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	91-94-1	3,3-Dichlorobenzidine	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	56-55-3	Benzo(a)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	218-01-9	Chrysene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	117-81-7	Bis(2-ethylhexyl)phthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	117-84-0	Di-n-octyl phthalate	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	205-99-2	Benzo(b)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	207-08-9	Benzo(k)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	50-32-8	Benzo(a)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	193-39-5	Indeno(1,2,3-cd)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	53-70-3	Dibenzo(a,h)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	191-24-2	Benzo(g,h,i)perylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	58-90-2	2,3,4,6-Tetrachlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	91-20-3	Naphthalene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	91-57-6	2-Methylnaphthalene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	208-96-8	Acenaphthylene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	83-32-9	Acenaphthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	86-73-7	Fluorene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	87-86-5	Pentachlorophenol	7.7	U	ug/kg	7.7	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	85-01-8	Phenanthrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	120-12-7	Anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	206-44-0	Fluoranthene	0.92	LJ	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	129-00-0	Pyrene	1.2	LJ	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	56-55-3	Benzo(a)anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	218-01-9	Chrysene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	205-99-2	Benzo(b)fluoranthene	0.92	LJ	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	207-08-9	Benzo(k)fluoranthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	50-32-8	Benzo(a)pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	53-70-3	Dibenzo(a,h)anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	191-24-2	Benzo(g,h,i)perylene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	123-91-1	1,4-Dioxane	78	U	ug/kg	78	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	100-52-7	Benzaldehyde	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	108-95-2	Phenol	260	LJ	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	111-44-4	Bis(2-Chloroethyl)ether	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	95-57-8	2-Chlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	95-48-7	2-Methylphenol	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	108-60-1	2,2-oxybis(1-Chloropropane)	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	98-86-2	Acetophenone	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	106-44-5	4-Methylphenol	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	621-64-7	N-Nitroso-di-n-propylamine	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	67-72-1	Hexachloroethane	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM

48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	98-95-3	Nitrobenzene	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	78-59-1	Isophorone	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	88-75-5	2-Nitrophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	105-67-9	2,4-Dimethylphenol	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	111-91-1	Bis(2-Chloroethoxy)methane	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	120-83-2	2,4-Dichlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	91-20-3	Naphthalene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	106-47-8	4-Chloroaniline	380	U		ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	87-68-3	Hexachlorobutadiene	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	105-60-2	Caprolactam	380	U		ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	59-50-7	4-Chloro-3-methylphenol	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	91-57-6	2-Methylnaphthalene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	77-47-4	Hexachlorocyclopentadiene	380	U		ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	88-06-2	2,4,6-Trichlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	95-95-4	2,4,5-Trichlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	92-52-4	1,1-Biphenyl	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	91-58-7	2-Chloronaphthalene	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	88-74-4	2-Nitroaniline	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	131-11-3	Dimethylphthalate	420			ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	606-20-2	2,6-Dinitrotoluene	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	208-96-8	Acenaphthylene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	99-09-2	3-Nitroaniline	380	U		ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	83-32-9	Acenaphthene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	51-28-5	2,4-Dinitrophenol	380	U		ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	100-02-7	4-Nitrophenol	380	U		ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	132-64-9	Dibenzofuran	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	121-14-2	2,4-Dinitrotoluene	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	84-66-2	Diethylphthalate	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	86-73-7	Fluorene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	7005-72-3	4-Chlorophenyl-phenylether	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	100-01-6	4-Nitroaniline	380	U		ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	534-52-1	4,6-Dinitro-2-methylphenol	380	U		ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	86-30-6	N-Nitrosodiphenylamine	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	95-94-3	1,2,4,5-Tetrachlorobenzene	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	101-55-3	4-Bromophenyl-phenylether	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	118-74-1	Hexachlorobenzene	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	1912-24-9	Atrazine	380	U		ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	87-86-5	Pentachlorophenol	380	U	*	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	85-01-8	Phenanthrene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	120-12-7	Anthracene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	86-74-8	Carbazole	380	U		ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	84-74-2	Di-n-butylphthalate	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	206-44-0	Fluoranthene	380	U	*	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	129-00-0	Pyrene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	85-68-7	Butylbenzylphthalate	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	91-94-1	3,3-Dichlorobenzidine	380	U		ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	56-55-3	Benzo(a)anthracene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	218-01-9	Chrysene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	117-81-7	Bis(2-ethylhexyl)phthalate	200	U		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	117-84-0	Di-n-octyl phthalate	380	U		ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	205-99-2	Benzo(b)fluoranthene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	207-08-9	Benzo(k)fluoranthene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	50-32-8	Benzo(a)pyrene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	193-39-5	Indeno(1,2,3-cd)pyrene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM

48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	53-70-3	Dibenzo(a,h)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	191-24-2	Benzo(g,h,i)perylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	58-90-2	2,3,4,6-Tetrachlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	91-20-3	Naphthalene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	91-57-6	2-Methylnaphthalene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	208-96-8	Acenaphthylene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	83-32-9	Acenaphthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	86-73-7	Fluorene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	87-86-5	Pentachlorophenol	7.8	U	ug/kg	7.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	85-01-8	Phenanthrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	120-12-7	Anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	206-44-0	Fluoranthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	129-00-0	Pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	56-55-3	Benzo(a)anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	218-01-9	Chrysene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	205-99-2	Benzo(b)fluoranthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	207-08-9	Benzo(k)fluoranthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	50-32-8	Benzo(a)pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	53-70-3	Dibenzo(a,h)anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	191-24-2	Benzo(g,h,i)perylene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	123-91-1	1,4-Dioxane	83	U	ug/kg	83	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	100-52-7	Benzaldehyde	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	108-95-2	Phenol	150	LJ	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	111-44-4	Bis(2-Chloroethyl)ether	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	95-57-8	2-Chlorophenol	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	95-48-7	2-Methylphenol	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	108-60-1	2,2-oxybis(1-Chloropropane)	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	98-86-2	Acetophenone	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	106-44-5	4-Methylphenol	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	621-64-7	N-Nitroso-di-n-propylamine	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	67-72-1	Hexachloroethane	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	98-95-3	Nitrobenzene	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	78-59-1	Isophorone	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	88-75-5	2-Nitrophenol	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	105-67-9	2,4-Dimethylphenol	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	111-91-1	Bis(2-Chloroethoxy)methane	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	120-83-2	2,4-Dichlorophenol	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	91-20-3	Naphthalene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	106-47-8	4-Chloroaniline	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	87-68-3	Hexachlorobutadiene	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	105-60-2	Caprolactam	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	59-50-7	4-Chloro-3-methylphenol	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	91-57-6	2-Methylnaphthalene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	77-47-4	Hexachlorocyclopentadiene	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	88-06-2	2,4,6-Trichlorophenol	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	95-95-4	2,4,5-Trichlorophenol	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	92-52-4	1,1-Biphenyl	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	91-58-7	2-Chloronaphthalene	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	88-74-4	2-Nitroaniline	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	131-11-3	Dimethylphthalate	240		ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	606-20-2	2,6-Dinitrotoluene	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	208-96-8	Acenaphthylene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	99-09-2	3-Nitroaniline	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM

48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	83-32-9	Acenaphthene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	51-28-5	2,4-Dinitrophenol	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	100-02-7	4-Nitrophenol	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	132-64-9	Dibenzofuran	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	121-14-2	2,4-Dinitrotoluene	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	84-66-2	Diethylphthalate	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	86-73-7	Fluorene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	7005-72-3	4-Chlorophenyl-phenylether	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	100-01-6	4-Nitroaniline	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	534-52-1	4,6-Dinitro-2-methylphenol	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	86-30-6	N-Nitrosodiphenylamine	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	95-94-3	1,2,4,5-Tetrachlorobenzene	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	101-55-3	4-Bromophenyl-phenylether	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	118-74-1	Hexachlorobenzene	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	1912-24-9	Atrazine	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	87-86-5	Pentachlorophenol	410	U *	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	85-01-8	Phenanthrene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	120-12-7	Anthracene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	86-74-8	Carbazole	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	84-74-2	Di-n-butylphthalate	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	206-44-0	Fluoranthene	410	U *	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	129-00-0	Pyrene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	85-68-7	Butylbenzylphthalate	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	91-94-1	3,3-Dichlorobenzidine	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	56-55-3	Benzo(a)anthracene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	218-01-9	Chrysene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	117-81-7	Bis(2-ethylhexyl)phthalate	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	117-84-0	Di-n-octyl phthalate	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	205-99-2	Benzo(b)fluoranthene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	207-08-9	Benzo(k)fluoranthene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	50-32-8	Benzo(a)pyrene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	193-39-5	Indeno(1,2,3-cd)pyrene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	53-70-3	Dibenzo(a,h)anthracene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	191-24-2	Benzo(g,h,i)perylene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	58-90-2	2,3,4,6-Tetrachlorophenol	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	91-20-3	Naphthalene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	91-57-6	2-Methylnaphthalene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	208-96-8	Acenaphthylene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	83-32-9	Acenaphthene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	86-73-7	Fluorene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	87-86-5	Pentachlorophenol	8.3	U	ug/kg	8.3	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	85-01-8	Phenanthrene	1.4	LJ	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	120-12-7	Anthracene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	206-44-0	Fluoranthene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	129-00-0	Pyrene	1.7	LJ	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	56-55-3	Benzo(a)anthracene	0.91	LJ	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	218-01-9	Chrysene	1.3	LJ	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	205-99-2	Benzo(b)fluoranthene	0.95	LJ	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	207-08-9	Benzo(k)fluoranthene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	50-32-8	Benzo(a)pyrene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	193-39-5	Indeno(1,2,3-cd)pyrene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	53-70-3	Dibenzo(a,h)anthracene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	191-24-2	Benzo(g,h,i)perylene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	123-91-1	1,4-Dioxane	79	U	ug/kg	79	12/03/2018	ETF-SB-147-2.0	S4VEM

48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	100-52-7	Benzaldehyde	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	108-95-2	Phenol	240	LJ		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	111-44-4	Bis(2-Chloroethyl)ether	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	95-57-8	2-Chlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	95-48-7	2-Methylphenol	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	108-60-1	2,2-oxybis(1-Chloropropane)	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	98-86-2	Acetophenone	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	106-44-5	4-Methylphenol	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	621-64-7	N-Nitroso-di-n-propylamine	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	67-72-1	Hexachloroethane	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	98-95-3	Nitrobenzene	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	78-59-1	Isophorone	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	88-75-5	2-Nitrophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	105-67-9	2,4-Dimethylphenol	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	111-91-1	Bis(2-Chloroethoxy)methane	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	120-83-2	2,4-Dichlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	91-20-3	Naphthalene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	106-47-8	4-Chloroaniline	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	87-68-3	Hexachlorobutadiene	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	105-60-2	Caprolactam	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	59-50-7	4-Chloro-3-methylphenol	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	91-57-6	2-Methylnaphthalene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	77-47-4	Hexachlorocyclopentadiene	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	88-06-2	2,4,6-Trichlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	95-95-4	2,4,5-Trichlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	92-52-4	1,1-Biphenyl	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	91-58-7	2-Chloronaphthalene	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	88-74-4	2-Nitroaniline	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	131-11-3	Dimethylphthalate	380			ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	606-20-2	2,6-Dinitrotoluene	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	208-96-8	Acenaphthylene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	99-09-2	3-Nitroaniline	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	83-32-9	Acenaphthene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	51-28-5	2,4-Dinitrophenol	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	100-02-7	4-Nitrophenol	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	132-64-9	Dibenzofuran	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	121-14-2	2,4-Dinitrotoluene	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	84-66-2	Diethylphthalate	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	86-73-7	Fluorene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	7005-72-3	4-Chlorophenyl-phenylether	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	100-01-6	4-Nitroaniline	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	534-52-1	4,6-Dinitro-2-methylphenol	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	86-30-6	N-Nitrosodiphenylamine	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	95-94-3	1,2,4,5-Tetrachlorobenzene	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	101-55-3	4-Bromophenyl-phenylether	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	118-74-1	Hexachlorobenzene	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	1912-24-9	Atrazine	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	87-86-5	Pentachlorophenol	390	U	*	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	85-01-8	Phenanthrene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	120-12-7	Anthracene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	86-74-8	Carbazole	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	84-74-2	Di-n-butylphthalate	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	206-44-0	Fluoranthene	390	U	*	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	129-00-0	Pyrene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM

48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	85-68-7	Butylbenzylphthalate	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	91-94-1	3,3-Dichlorobenzidine	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	56-55-3	Benzo(a)anthracene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	218-01-9	Chrysene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	117-81-7	Bis(2-ethylhexyl)phthalate	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	117-84-0	Di-n-octyl phthalate	390	U		ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	205-99-2	Benzo(b)fluoranthene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	207-08-9	Benzo(k)fluoranthene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	50-32-8	Benzo(a)pyrene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	193-39-5	Indeno(1,2,3-cd)pyrene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	53-70-3	Dibenzo(a,h)anthracene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	191-24-2	Benzo(g,h,i)perylene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	58-90-2	2,3,4,6-Tetrachlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	91-20-3	Naphthalene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	91-57-6	2-Methylnaphthalene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	208-96-8	Acenaphthylene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	83-32-9	Acenaphthene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	86-73-7	Fluorene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	87-86-5	Pentachlorophenol	7.9	U		ug/kg	7.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	85-01-8	Phenanthrene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	120-12-7	Anthracene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	206-44-0	Fluoranthene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	129-00-0	Pyrene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	56-55-3	Benzo(a)anthracene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	218-01-9	Chrysene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	205-99-2	Benzo(b)fluoranthene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	207-08-9	Benzo(k)fluoranthene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	50-32-8	Benzo(a)pyrene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	53-70-3	Dibenzo(a,h)anthracene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	191-24-2	Benzo(g,h,i)perylene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	123-91-1	1,4-Dioxane	76	U		ug/kg	76	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	100-52-7	Benzaldehyde	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	108-95-2	Phenol	130	LJ		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	111-44-4	Bis(2-Chloroethyl)ether	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	95-57-8	2-Chlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	95-48-7	2-Methylphenol	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	108-60-1	2,2-oxybis(1-Chloropropane)	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	98-86-2	Acetophenone	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	106-44-5	4-Methylphenol	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	621-64-7	N-Nitroso-di-n-propylamine	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	67-72-1	Hexachloroethane	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	98-95-3	Nitrobenzene	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	78-59-1	Isophorone	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	88-75-5	2-Nitrophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	105-67-9	2,4-Dimethylphenol	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	120-83-2	2,4-Dichlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	91-20-3	Naphthalene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	106-47-8	4-Chloroaniline	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	87-68-3	Hexachlorobutadiene	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	105-60-2	Caprolactam	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	59-50-7	4-Chloro-3-methylphenol	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	91-57-6	2-Methylnaphthalene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM

48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	77-47-4	Hexachlorocyclopentadiene	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	88-06-2	2,4,6-Trichlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	95-95-4	2,4,5-Trichlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	92-52-4	1,1-Biphenyl	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	91-58-7	2-Chloronaphthalene	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	88-74-4	2-Nitroaniline	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	131-11-3	Dimethylphthalate	210			ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	606-20-2	2,6-Dinitrotoluene	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	208-96-8	Acenaphthylene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	99-09-2	3-Nitroaniline	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	83-32-9	Acenaphthene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	51-28-5	2,4-Dinitrophenol	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	100-02-7	4-Nitrophenol	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	132-64-9	Dibenzofuran	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	121-14-2	2,4-Dinitrotoluene	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	84-66-2	Diethylphthalate	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	86-73-7	Fluorene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	7005-72-3	4-Chlorophenyl-phenylether	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	100-01-6	4-Nitroaniline	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	534-52-1	4,6-Dinitro-2-methylphenol	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	86-30-6	N-Nitrosodiphenylamine	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	101-55-3	4-Bromophenyl-phenylether	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	118-74-1	Hexachlorobenzene	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	1912-24-9	Atrazine	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	87-86-5	Pentachlorophenol	370	U	*	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	85-01-8	Phenanthrene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	120-12-7	Anthracene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	86-74-8	Carbazole	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	84-74-2	Di-n-butylphthalate	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	206-44-0	Fluoranthene	370	U	*	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	129-00-0	Pyrene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	85-68-7	Butylbenzylphthalate	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	91-94-1	3,3-Dichlorobenzidine	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	56-55-3	Benzo(a)anthracene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	218-01-9	Chrysene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	117-84-0	Di-n-octyl phthalate	370	U		ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	205-99-2	Benzo(b)fluoranthene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	207-08-9	Benzo(k)fluoranthene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	50-32-8	Benzo(a)pyrene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	53-70-3	Dibenzo(a,h)anthracene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	191-24-2	Benzo(g,h,i)perylene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	91-20-3	Naphthalene	0.81	LJ		ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	91-57-6	2-Methylnaphthalene	1.8	LJ		ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	208-96-8	Acenaphthylene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	83-32-9	Acenaphthene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	86-73-7	Fluorene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	87-86-5	Pentachlorophenol	7.6	U		ug/kg	7.6	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	85-01-8	Phenanthrene	16			ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	120-12-7	Anthracene	0.98	LJ		ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	206-44-0	Fluoranthene	2.8	LJ		ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM

48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	129-00-0	Pyrene	16		ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	56-55-3	Benzo(a)anthracene	7.7		ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	218-01-9	Chrysene	13		ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	205-99-2	Benzo(b)fluoranthene	3.5	LJ	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	207-08-9	Benzo(k)fluoranthene	0.83	LJ	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	50-32-8	Benzo(a)pyrene	4.5		ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	193-39-5	Indeno(1,2,3-cd)pyrene	1.5	LJ	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	53-70-3	Dibenzo(a,h)anthracene	1.5	LJ	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	191-24-2	Benzo(g,h,i)perylene	3.3	LJ	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	123-91-1	1,4-Dioxane	76	U	ug/kg	76	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	100-52-7	Benzaldehyde	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	108-95-2	Phenol	260	LJ	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	111-44-4	Bis(2-Chloroethyl)ether	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	95-48-7	2-Methylphenol	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	108-60-1	2,2-oxybis(1-Chloropropane)	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	98-86-2	Acetophenone	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	106-44-5	4-Methylphenol	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	106-47-8	4-Chloroaniline	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	105-60-2	Caprolactam	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	77-47-4	Hexachlorocyclopentadiene	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	131-11-3	Dimethylphthalate	400		ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	99-09-2	3-Nitroaniline	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	51-28-5	2,4-Dinitrophenol	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	100-02-7	4-Nitrophenol	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	100-01-6	4-Nitroaniline	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	534-52-1	4,6-Dinitro-2-methylphenol	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM

48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	1912-24-9	Atrazine	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	87-86-5	Pentachlorophenol	380	U *	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	86-74-8	Carbazole	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	206-44-0	Fluoranthene	380	U *	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	91-94-1	3,3-Dichlorobenzidine	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	117-84-0	Di-n-octyl phthalate	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	91-20-3	Naphthalene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	91-57-6	2-Methylnaphthalene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	208-96-8	Acenaphthylene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	83-32-9	Acenaphthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	86-73-7	Fluorene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	87-86-5	Pentachlorophenol	7.6	U	ug/kg	7.6	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	85-01-8	Phenanthrene	1.6	LJ	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	120-12-7	Anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	206-44-0	Fluoranthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	129-00-0	Pyrene	1.4	LJ	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	56-55-3	Benzo(a)anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	218-01-9	Chrysene	1.2	LJ	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	205-99-2	Benzo(b)fluoranthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	207-08-9	Benzo(k)fluoranthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	50-32-8	Benzo(a)pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	53-70-3	Dibenzo(a,h)anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	191-24-2	Benzo(g,h,i)perylene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	123-91-1	1,4-Dioxane	78	U	ug/kg	78	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	100-52-7	Benzaldehyde	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	108-95-2	Phenol	100	LJ	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	111-44-4	Bis(2-Chloroethyl)ether	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	95-57-8	2-Chlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	95-48-7	2-Methylphenol	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	108-60-1	2,2-oxybis(1-Chloropropane)	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	98-86-2	Acetophenone	390	UJ	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	106-44-5	4-Methylphenol	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	621-64-7	N-Nitroso-di-n-propylamine	200	UJ	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	67-72-1	Hexachloroethane	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	98-95-3	Nitrobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	78-59-1	Isophorone	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM

48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	88-75-5	2-Nitrophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	105-67-9	2,4-Dimethylphenol	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	111-91-1	Bis(2-Chloroethoxy)methane	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	120-83-2	2,4-Dichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	91-20-3	Naphthalene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	106-47-8	4-Chloroaniline	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	87-68-3	Hexachlorobutadiene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	105-60-2	Caprolactam	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	59-50-7	4-Chloro-3-methylphenol	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	91-57-6	2-Methylnaphthalene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	77-47-4	Hexachlorocyclopentadiene	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	88-06-2	2,4,6-Trichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	95-95-4	2,4,5-Trichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	92-52-4	1,1-Biphenyl	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	91-58-7	2-Chloronaphthalene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	88-74-4	2-Nitroaniline	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	131-11-3	Dimethylphthalate	150	LJ	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	606-20-2	2,6-Dinitrotoluene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	208-96-8	Acenaphthylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	99-09-2	3-Nitroaniline	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	83-32-9	Acenaphthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	51-28-5	2,4-Dinitrophenol	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	100-02-7	4-Nitrophenol	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	132-64-9	Dibenzofuran	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	121-14-2	2,4-Dinitrotoluene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	84-66-2	Diethylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	86-73-7	Fluorene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	7005-72-3	4-Chlorophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	100-01-6	4-Nitroaniline	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	534-52-1	4,6-Dinitro-2-methylphenol	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	86-30-6	N-Nitrosodiphenylamine	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	95-94-3	1,2,4,5-Tetrachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	101-55-3	4-Bromophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	118-74-1	Hexachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	1912-24-9	Atrazine	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	87-86-5	Pentachlorophenol	390	U *	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	85-01-8	Phenanthrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	120-12-7	Anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	86-74-8	Carbazole	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	84-74-2	Di-n-butylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	206-44-0	Fluoranthene	390	U *	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	129-00-0	Pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	85-68-7	Butylbenzylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	91-94-1	3,3-Dichlorobenzidine	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	56-55-3	Benzo(a)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	218-01-9	Chrysene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	117-81-7	Bis(2-ethylhexyl)phthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	117-84-0	Di-n-octyl phthalate	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	205-99-2	Benzo(b)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	207-08-9	Benzo(k)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	50-32-8	Benzo(a)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	193-39-5	Indeno(1,2,3-cd)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	53-70-3	Dibenzo(a,h)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	191-24-2	Benzo(g,h,i)perylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM

48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	58-90-2	2,3,4,6-Tetrachlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	91-20-3	Naphthalene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	91-57-6	2-Methylnaphthalene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	208-96-8	Acenaphthylene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	83-32-9	Acenaphthene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	86-73-7	Fluorene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	87-86-5	Pentachlorophenol	7.8	U		ug/kg	7.8	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	85-01-8	Phenanthrene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	120-12-7	Anthracene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	206-44-0	Fluoranthene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	129-00-0	Pyrene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	56-55-3	Benzo(a)anthracene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	218-01-9	Chrysene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	205-99-2	Benzo(b)fluoranthene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	207-08-9	Benzo(k)fluoranthene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	50-32-8	Benzo(a)pyrene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	53-70-3	Dibenzo(a,h)anthracene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	191-24-2	Benzo(g,h,i)perylene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	123-91-1	1,4-Dioxane	77	U		ug/kg	77	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	100-52-7	Benzaldehyde	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	108-95-2	Phenol	110	LJ		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	111-44-4	Bis(2-Chloroethyl)ether	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	95-57-8	2-Chlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	95-48-7	2-Methylphenol	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	108-60-1	2,2-oxybis(1-Chloropropane)	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	98-86-2	Acetophenone	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	106-44-5	4-Methylphenol	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	621-64-7	N-Nitroso-di-n-propylamine	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	67-72-1	Hexachloroethane	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	98-95-3	Nitrobenzene	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	78-59-1	Isophorone	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	88-75-5	2-Nitrophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	105-67-9	2,4-Dimethylphenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	111-91-1	Bis(2-Chloroethoxy)methane	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	120-83-2	2,4-Dichlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	91-20-3	Naphthalene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	106-47-8	4-Chloroaniline	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	87-68-3	Hexachlorobutadiene	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	105-60-2	Caprolactam	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	59-50-7	4-Chloro-3-methylphenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	91-57-6	2-Methylnaphthalene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	77-47-4	Hexachlorocyclopentadiene	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	88-06-2	2,4,6-Trichlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	95-95-4	2,4,5-Trichlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	92-52-4	1,1-Biphenyl	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	91-58-7	2-Chloronaphthalene	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	88-74-4	2-Nitroaniline	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	131-11-3	Dimethylphthalate	160	LJ		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	606-20-2	2,6-Dinitrotoluene	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	208-96-8	Acenaphthylene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	99-09-2	3-Nitroaniline	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	83-32-9	Acenaphthene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	51-28-5	2,4-Dinitrophenol	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM

48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	100-02-7	4-Nitrophenol	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	132-64-9	Dibenzofuran	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	121-14-2	2,4-Dinitrotoluene	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	84-66-2	Diethylphthalate	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	86-73-7	Fluorene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	7005-72-3	4-Chlorophenyl-phenylether	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	100-01-6	4-Nitroaniline	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	534-52-1	4,6-Dinitro-2-methylphenol	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	86-30-6	N-Nitrosodiphenylamine	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	95-94-3	1,2,4,5-Tetrachlorobenzene	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	101-55-3	4-Bromophenyl-phenylether	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	118-74-1	Hexachlorobenzene	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	1912-24-9	Atrazine	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	87-86-5	Pentachlorophenol	380	U	*	ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	85-01-8	Phenanthrene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	120-12-7	Anthracene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	86-74-8	Carbazole	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	84-74-2	Di-n-butylphthalate	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	206-44-0	Fluoranthene	380	U	*	ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	129-00-0	Pyrene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	85-68-7	Butylbenzylphthalate	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	91-94-1	3,3-Dichlorobenzidine	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	56-55-3	Benzo(a)anthracene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	218-01-9	Chrysene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	117-81-7	Bis(2-ethylhexyl)phthalate	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	117-84-0	Di-n-octyl phthalate	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	205-99-2	Benzo(b)fluoranthene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	207-08-9	Benzo(k)fluoranthene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	50-32-8	Benzo(a)pyrene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	193-39-5	Indeno(1,2,3-cd)pyrene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	53-70-3	Dibenzo(a,h)anthracene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	191-24-2	Benzo(g,h,i)perylene	200	U	*	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	58-90-2	2,3,4,6-Tetrachlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	91-20-3	Naphthalene	3.8	U		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	91-57-6	2-Methylnaphthalene	3.8	U		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	208-96-8	Acenaphthylene	3.8	U		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	83-32-9	Acenaphthene	3.8	U		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	86-73-7	Fluorene	3.8	U		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	87-86-5	Pentachlorophenol	7.7	U		ug/kg	7.7	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	85-01-8	Phenanthrene	3.8	U		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	120-12-7	Anthracene	3.8	U		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	206-44-0	Fluoranthene	0.80	LJ		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	129-00-0	Pyrene	3.8	U		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	56-55-3	Benzo(a)anthracene	3.8	U		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	218-01-9	Chrysene	3.8	U		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	205-99-2	Benzo(b)fluoranthene	3.8	U		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	207-08-9	Benzo(k)fluoranthene	3.8	U		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	50-32-8	Benzo(a)pyrene	3.8	U		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.8	U		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	53-70-3	Dibenzo(a,h)anthracene	3.8	U		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	191-24-2	Benzo(g,h,i)perylene	3.8	U		ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	123-91-1	1,4-Dioxane	73	U		ug/kg	73	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	100-52-7	Benzaldehyde	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	108-95-2	Phenol	140	LJ		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM

48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	111-44-4	Bis(2-Chloroethyl)ether	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	95-57-8	2-Chlorophenol	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	95-48-7	2-Methylphenol	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	108-60-1	2,2-oxybis(1-Chloropropane)	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	98-86-2	Acetophenone	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	106-44-5	4-Methylphenol	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	621-64-7	N-Nitroso-di-n-propylamine	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	67-72-1	Hexachloroethane	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	98-95-3	Nitrobenzene	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	78-59-1	Isophorone	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	88-75-5	2-Nitrophenol	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	105-67-9	2,4-Dimethylphenol	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	111-91-1	Bis(2-Chloroethoxy)methane	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	120-83-2	2,4-Dichlorophenol	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	91-20-3	Naphthalene	180	U	*	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	106-47-8	4-Chloroaniline	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	87-68-3	Hexachlorobutadiene	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	105-60-2	Caprolactam	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	59-50-7	4-Chloro-3-methylphenol	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	91-57-6	2-Methylnaphthalene	180	U	*	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	77-47-4	Hexachlorocyclopentadiene	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	88-06-2	2,4,6-Trichlorophenol	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	95-95-4	2,4,5-Trichlorophenol	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	92-52-4	1,1-Biphenyl	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	91-58-7	2-Chloronaphthalene	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	88-74-4	2-Nitroaniline	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	131-11-3	Dimethylphthalate	140	LJ		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	606-20-2	2,6-Dinitrotoluene	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	208-96-8	Acenaphthylene	180	U	*	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	99-09-2	3-Nitroaniline	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	83-32-9	Acenaphthene	180	U	*	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	51-28-5	2,4-Dinitrophenol	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	100-02-7	4-Nitrophenol	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	132-64-9	Dibenzofuran	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	121-14-2	2,4-Dinitrotoluene	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	84-66-2	Diethylphthalate	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	86-73-7	Fluorene	180	U	*	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	7005-72-3	4-Chlorophenyl-phenylether	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	100-01-6	4-Nitroaniline	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	534-52-1	4,6-Dinitro-2-methylphenol	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	86-30-6	N-Nitrosodiphenylamine	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	95-94-3	1,2,4,5-Tetrachlorobenzene	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	101-55-3	4-Bromophenyl-phenylether	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	118-74-1	Hexachlorobenzene	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	1912-24-9	Atrazine	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	87-86-5	Pentachlorophenol	360	U	*	ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	85-01-8	Phenanthrene	180	U	*	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	120-12-7	Anthracene	180	U	*	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	86-74-8	Carbazole	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	84-74-2	Di-n-butylphthalate	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	206-44-0	Fluoranthene	360	U	*	ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	129-00-0	Pyrene	180	U	*	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	85-68-7	Butylbenzylphthalate	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	91-94-1	3,3-Dichlorobenzidine	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM

48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	56-55-3	Benzo(a)anthracene	180	U *	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	218-01-9	Chrysene	180	U *	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	117-81-7	Bis(2-ethylhexyl)phthalate	180	U	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	117-84-0	Di-n-octyl phthalate	360	U	ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	205-99-2	Benzo(b)fluoranthene	180	U *	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	207-08-9	Benzo(k)fluoranthene	180	U *	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	50-32-8	Benzo(a)pyrene	180	U *	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	193-39-5	Indeno(1,2,3-cd)pyrene	180	U *	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	53-70-3	Dibenzo(a,h)anthracene	180	U *	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	191-24-2	Benzo(g,h,i)perylene	180	U *	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	58-90-2	2,3,4,6-Tetrachlorophenol	180	U	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	91-20-3	Naphthalene	1.6	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	91-57-6	2-Methylnaphthalene	4.0		ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	208-96-8	Acenaphthylene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	83-32-9	Acenaphthene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	86-73-7	Fluorene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	87-86-5	Pentachlorophenol	7.3	U	ug/kg	7.3	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	85-01-8	Phenanthrene	4.9		ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	120-12-7	Anthracene	1.0	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	206-44-0	Fluoranthene	3.4	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	129-00-0	Pyrene	5.6		ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	56-55-3	Benzo(a)anthracene	2.7	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	218-01-9	Chrysene	3.4	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	205-99-2	Benzo(b)fluoranthene	3.7		ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	207-08-9	Benzo(k)fluoranthene	1.3	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	50-32-8	Benzo(a)pyrene	3.0	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	193-39-5	Indeno(1,2,3-cd)pyrene	2.1	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	53-70-3	Dibenzo(a,h)anthracene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	191-24-2	Benzo(g,h,i)perylene	3.1	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	123-91-1	1,4-Dioxane	75	U	ug/kg	75	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	100-52-7	Benzaldehyde	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	108-95-2	Phenol	100	LJ	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	111-44-4	Bis(2-Chloroethyl)ether	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	95-48-7	2-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	108-60-1	2,2-oxybis(1-Chloropropane)	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	98-86-2	Acetophenone	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	106-44-5	4-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	106-47-8	4-Chloroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	105-60-2	Caprolactam	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	77-47-4	Hexachlorocyclopentadiene	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM

48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	131-11-3	Dimethylphthalate	110	LJ	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	99-09-2	3-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	51-28-5	2,4-Dinitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	100-02-7	4-Nitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	100-01-6	4-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	534-52-1	4,6-Dinitro-2-methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	1912-24-9	Atrazine	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	87-86-5	Pentachlorophenol	370	U *	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	86-74-8	Carbazole	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	206-44-0	Fluoranthene	370	U *	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	91-94-1	3,3-Dichlorobenzidine	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	117-84-0	Di-n-octyl phthalate	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	91-20-3	Naphthalene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	91-57-6	2-Methylnaphthalene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	208-96-8	Acenaphthylene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	83-32-9	Acenaphthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	86-73-7	Fluorene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	87-86-5	Pentachlorophenol	7.5	U	ug/kg	7.5	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	85-01-8	Phenanthrene	1.1	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	120-12-7	Anthracene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	206-44-0	Fluoranthene	1.2	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	129-00-0	Pyrene	1.2	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	56-55-3	Benzo(a)anthracene	0.83	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM

48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	218-01-9	Chrysene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	205-99-2	Benzo(b)fluoranthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	207-08-9	Benzo(k)fluoranthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	50-32-8	Benzo(a)pyrene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	53-70-3	Dibenzo(a,h)anthracene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	191-24-2	Benzo(g,h,i)perylene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	123-91-1	1,4-Dioxane	74	U	ug/kg	74	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	100-52-7	Benzaldehyde	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	108-95-2	Phenol	140	LJ	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	111-44-4	Bis(2-Chloroethyl)ether	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	95-48-7	2-Methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	108-60-1	2,2-oxybis(1-Chloropropane)	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	98-86-2	Acetophenone	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	106-44-5	4-Methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	106-47-8	4-Chloroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	105-60-2	Caprolactam	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	77-47-4	Hexachlorocyclopentadiene	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	131-11-3	Dimethylphthalate	230		ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	99-09-2	3-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	51-28-5	2,4-Dinitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	100-02-7	4-Nitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	100-01-6	4-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	534-52-1	4,6-Dinitro-2-methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM

48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	1912-24-9	Atrazine	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	87-86-5	Pentachlorophenol	360	U *	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	86-74-8	Carbazole	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	206-44-0	Fluoranthene	360	U *	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	91-94-1	3,3-Dichlorobenzidine	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	117-84-0	Di-n-octyl phthalate	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	91-20-3	Naphthalene	3.4	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	91-57-6	2-Methylnaphthalene	9.9		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	208-96-8	Acenaphthylene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	83-32-9	Acenaphthene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	86-73-7	Fluorene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	87-86-5	Pentachlorophenol	7.4	U	ug/kg	7.4	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	85-01-8	Phenanthrene	14		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	120-12-7	Anthracene	3.3	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	206-44-0	Fluoranthene	3.2	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	129-00-0	Pyrene	14		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	56-55-3	Benzo(a)anthracene	6.0		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	218-01-9	Chrysene	10		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	205-99-2	Benzo(b)fluoranthene	2.9	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	207-08-9	Benzo(k)fluoranthene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	50-32-8	Benzo(a)pyrene	3.5	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	193-39-5	Indeno(1,2,3-cd)pyrene	2.1	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	53-70-3	Dibenzo(a,h)anthracene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	191-24-2	Benzo(g,h,i)perylene	5.3		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	123-91-1	1,4-Dioxane	74	U	ug/kg	74	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	100-52-7	Benzaldehyde	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	108-95-2	Phenol	150	LJ	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	111-44-4	Bis(2-Chloroethyl)ether	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	95-48-7	2-Methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	108-60-1	2,2-oxybis(1-Chloropropane)	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	98-86-2	Acetophenone	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	106-44-5	4-Methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM

48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	106-47-8	4-Chloroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	105-60-2	Caprolactam	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	77-47-4	Hexachlorocyclopentadiene	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	131-11-3	Dimethylphthalate	240		ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	99-09-2	3-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	51-28-5	2,4-Dinitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	100-02-7	4-Nitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	100-01-6	4-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	534-52-1	4,6-Dinitro-2-methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	1912-24-9	Atrazine	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	87-86-5	Pentachlorophenol	360	U *	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	86-74-8	Carbazole	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	206-44-0	Fluoranthene	360	U *	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	91-94-1	3,3-Dichlorobenzidine	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	117-84-0	Di-n-octyl phthalate	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	91-20-3	Naphthalene	1.5	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM

48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	91-57-6	2-Methylnaphthalene	4.5		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	208-96-8	Acenaphthylene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	83-32-9	Acenaphthene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	86-73-7	Fluorene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	87-86-5	Pentachlorophenol	7.4	U	ug/kg	7.4	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	85-01-8	Phenanthrene	9.8		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	120-12-7	Anthracene	1.9	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	206-44-0	Fluoranthene	2.5	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	129-00-0	Pyrene	8.6		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	56-55-3	Benzo(a)anthracene	4.8		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	218-01-9	Chrysene	7.3		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	205-99-2	Benzo(b)fluoranthene	2.5	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	207-08-9	Benzo(k)fluoranthene	0.92	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	50-32-8	Benzo(a)pyrene	2.7	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	193-39-5	Indeno(1,2,3-cd)pyrene	1.5	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	53-70-3	Dibenzo(a,h)anthracene	1.2	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	191-24-2	Benzo(g,h,i)perylene	2.9	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	123-91-1	1,4-Dioxane	75	U	ug/kg	75	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	100-52-7	Benzaldehyde	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	108-95-2	Phenol	110	LJ	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	111-44-4	Bis(2-Chloroethyl)ether	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	95-48-7	2-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	108-60-1	2,2-oxybis(1-Chloropropane)	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	98-86-2	Acetophenone	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	106-44-5	4-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	106-47-8	4-Chloroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	105-60-2	Caprolactam	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	77-47-4	Hexachlorocyclopentadiene	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	131-11-3	Dimethylphthalate	170	LJ	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	99-09-2	3-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	51-28-5	2,4-Dinitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	100-02-7	4-Nitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM

48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	121-14-2	2,4-Dinitrotoluene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	84-66-2	Diethylphthalate	190	U		ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	86-73-7	Fluorene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	7005-72-3	4-Chlorophenyl-phenylether	190	U		ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	100-01-6	4-Nitroaniline	370	U		ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	534-52-1	4,6-Dinitro-2-methylphenol	370	U		ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	86-30-6	N-Nitrosodiphenylamine	190	U		ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	101-55-3	4-Bromophenyl-phenylether	190	U		ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	118-74-1	Hexachlorobenzene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	1912-24-9	Atrazine	370	U		ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	87-86-5	Pentachlorophenol	370	U	*	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	85-01-8	Phenanthrene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	120-12-7	Anthracene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	86-74-8	Carbazole	370	U		ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	84-74-2	Di-n-butylphthalate	190	U		ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	206-44-0	Fluoranthene	370	U	*	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	129-00-0	Pyrene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	85-68-7	Butylbenzylphthalate	190	U		ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	91-94-1	3,3-Dichlorobenzidine	370	U		ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	56-55-3	Benzo(a)anthracene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	218-01-9	Chrysene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U		ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	117-84-0	Di-n-octyl phthalate	370	U		ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	205-99-2	Benzo(b)fluoranthene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	207-08-9	Benzo(k)fluoranthene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	50-32-8	Benzo(a)pyrene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	53-70-3	Dibenzo(a,h)anthracene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	191-24-2	Benzo(g,h,i)perylene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	91-20-3	Naphthalene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	91-57-6	2-Methylnaphthalene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	208-96-8	Acenaphthylene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	83-32-9	Acenaphthene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	86-73-7	Fluorene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	87-86-5	Pentachlorophenol	7.5	U		ug/kg	7.5	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	85-01-8	Phenanthrene	4.4			ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	120-12-7	Anthracene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	206-44-0	Fluoranthene	3.3	LJ		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	129-00-0	Pyrene	5.0			ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	56-55-3	Benzo(a)anthracene	3.1	LJ		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	218-01-9	Chrysene	3.9			ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	205-99-2	Benzo(b)fluoranthene	3.7			ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	207-08-9	Benzo(k)fluoranthene	1.3	LJ		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	50-32-8	Benzo(a)pyrene	2.1	LJ		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	193-39-5	Indeno(1,2,3-cd)pyrene	1.4	LJ		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	53-70-3	Dibenzo(a,h)anthracene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	191-24-2	Benzo(g,h,i)perylene	1.3	LJ		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	123-91-1	1,4-Dioxane	76	U		ug/kg	76	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	100-52-7	Benzaldehyde	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	108-95-2	Phenol	120	LJ		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	111-44-4	Bis(2-Chloroethyl)ether	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	95-57-8	2-Chlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM

48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	95-48-7	2-Methylphenol	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	108-60-1	2,2-oxybis(1-Chloropropane)	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	98-86-2	Acetophenone	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	106-44-5	4-Methylphenol	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	621-64-7	N-Nitroso-di-n-propylamine	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	67-72-1	Hexachloroethane	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	98-95-3	Nitrobenzene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	78-59-1	Isophorone	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	88-75-5	2-Nitrophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	105-67-9	2,4-Dimethylphenol	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	120-83-2	2,4-Dichlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	91-20-3	Naphthalene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	106-47-8	4-Chloroaniline	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	87-68-3	Hexachlorobutadiene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	105-60-2	Caprolactam	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	59-50-7	4-Chloro-3-methylphenol	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	91-57-6	2-Methylnaphthalene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	77-47-4	Hexachlorocyclopentadiene	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	88-06-2	2,4,6-Trichlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	95-95-4	2,4,5-Trichlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	92-52-4	1,1-Biphenyl	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	91-58-7	2-Chloronaphthalene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	88-74-4	2-Nitroaniline	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	131-11-3	Dimethylphthalate	130	LJ		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	606-20-2	2,6-Dinitrotoluene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	208-96-8	Acenaphthylene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	99-09-2	3-Nitroaniline	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	83-32-9	Acenaphthene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	51-28-5	2,4-Dinitrophenol	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	100-02-7	4-Nitrophenol	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	132-64-9	Dibenzofuran	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	121-14-2	2,4-Dinitrotoluene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	84-66-2	Diethylphthalate	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	86-73-7	Fluorene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	7005-72-3	4-Chlorophenyl-phenylether	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	100-01-6	4-Nitroaniline	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	534-52-1	4,6-Dinitro-2-methylphenol	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	86-30-6	N-Nitrosodiphenylamine	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	101-55-3	4-Bromophenyl-phenylether	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	118-74-1	Hexachlorobenzene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	1912-24-9	Atrazine	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	87-86-5	Pentachlorophenol	370	U	*	ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	85-01-8	Phenanthrene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	120-12-7	Anthracene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	86-74-8	Carbazole	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	84-74-2	Di-n-butylphthalate	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	206-44-0	Fluoranthene	370	U	*	ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	129-00-0	Pyrene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	85-68-7	Butylbenzylphthalate	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	91-94-1	3,3-Dichlorobenzidine	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	56-55-3	Benzo(a)anthracene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	218-01-9	Chrysene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM

48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	117-84-0	Di-n-octyl phthalate	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	205-99-2	Benzo(b)fluoranthene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	207-08-9	Benzo(k)fluoranthene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	50-32-8	Benzo(a)pyrene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	53-70-3	Dibenzo(a,h)anthracene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	191-24-2	Benzo(g,h,i)perylene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	91-20-3	Naphthalene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	91-57-6	2-Methylnaphthalene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	208-96-8	Acenaphthylene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	83-32-9	Acenaphthene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	86-73-7	Fluorene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	87-86-5	Pentachlorophenol	7.6	U		ug/kg	7.6	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	85-01-8	Phenanthrene	0.94	LJ		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	120-12-7	Anthracene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	206-44-0	Fluoranthene	0.94	LJ		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	129-00-0	Pyrene	1.4	LJ		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	56-55-3	Benzo(a)anthracene	0.83	LJ		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	218-01-9	Chrysene	1.1	LJ		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	205-99-2	Benzo(b)fluoranthene	1.3	LJ		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	207-08-9	Benzo(k)fluoranthene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	50-32-8	Benzo(a)pyrene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	53-70-3	Dibenzo(a,h)anthracene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	191-24-2	Benzo(g,h,i)perylene	3.7	U		ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	123-91-1	1,4-Dioxane	73	U		ug/kg	73	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	100-52-7	Benzaldehyde	360	U		ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	108-95-2	Phenol	120	LJ		ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	111-44-4	Bis(2-Chloroethyl)ether	360	U		ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	95-57-8	2-Chlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	95-48-7	2-Methylphenol	360	U		ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	108-60-1	2,2-oxybis(1-Chloropropane)	360	U		ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	98-86-2	Acetophenone	360	U		ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	106-44-5	4-Methylphenol	360	U		ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	621-64-7	N-Nitroso-di-n-propylamine	190	U		ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	67-72-1	Hexachloroethane	190	U		ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	98-95-3	Nitrobenzene	190	U		ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	78-59-1	Isophorone	190	U		ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	88-75-5	2-Nitrophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	105-67-9	2,4-Dimethylphenol	190	U		ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U		ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	120-83-2	2,4-Dichlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	91-20-3	Naphthalene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	106-47-8	4-Chloroaniline	360	U		ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	87-68-3	Hexachlorobutadiene	190	U		ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	105-60-2	Caprolactam	360	U		ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	59-50-7	4-Chloro-3-methylphenol	190	U		ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	91-57-6	2-Methylnaphthalene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	77-47-4	Hexachlorocyclopentadiene	360	U		ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	88-06-2	2,4,6-Trichlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	95-95-4	2,4,5-Trichlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	92-52-4	1,1-Biphenyl	190	U		ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM

48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	131-11-3	Dimethylphthalate	220		ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	99-09-2	3-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	51-28-5	2,4-Dinitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	100-02-7	4-Nitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	100-01-6	4-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	534-52-1	4,6-Dinitro-2-methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	1912-24-9	Atrazine	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	87-86-5	Pentachlorophenol	360	U *	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	86-74-8	Carbazole	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	206-44-0	Fluoranthene	360	U *	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	91-94-1	3,3-Dichlorobenzidine	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	117-84-0	Di-n-octyl phthalate	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	91-20-3	Naphthalene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	91-57-6	2-Methylnaphthalene	1.3	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	208-96-8	Acenaphthylene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	83-32-9	Acenaphthene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	86-73-7	Fluorene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	87-86-5	Pentachlorophenol	7.3	U	ug/kg	7.3	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	85-01-8	Phenanthrene	2.5	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	120-12-7	Anthracene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	206-44-0	Fluoranthene	2.5	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	129-00-0	Pyrene	3.4	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	56-55-3	Benzo(a)anthracene	1.8	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	218-01-9	Chrysene	2.3	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	205-99-2	Benzo(b)fluoranthene	2.4	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM

48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	207-08-9	Benzo(k)fluoranthene	0.84	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	50-32-8	Benzo(a)pyrene	1.4	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	193-39-5	Indeno(1,2,3-cd)pyrene	0.91	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	53-70-3	Dibenzo(a,h)anthracene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	191-24-2	Benzo(g,h,i)perylene	1.0	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	123-91-1	1,4-Dioxane	75	U	ug/kg	75	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	100-52-7	Benzaldehyde	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	108-95-2	Phenol	140	LJ	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	111-44-4	Bis(2-Chloroethyl)ether	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	95-48-7	2-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	108-60-1	2,2-oxybis(1-Chloropropane)	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	98-86-2	Acetophenone	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	106-44-5	4-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	106-47-8	4-Chloroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	105-60-2	Caprolactam	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	77-47-4	Hexachlorocyclopentadiene	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	131-11-3	Dimethylphthalate	230		ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	99-09-2	3-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	51-28-5	2,4-Dinitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	100-02-7	4-Nitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	100-01-6	4-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	534-52-1	4,6-Dinitro-2-methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	1912-24-9	Atrazine	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	87-86-5	Pentachlorophenol	370	U *	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM

48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	86-74-8	Carbazole	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	206-44-0	Fluoranthene	370	U *	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	91-94-1	3,3-Dichlorobenzidine	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	117-84-0	Di-n-octyl phthalate	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	91-20-3	Naphthalene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	91-57-6	2-Methylnaphthalene	1.8	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	208-96-8	Acenaphthylene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	83-32-9	Acenaphthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	86-73-7	Fluorene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	87-86-5	Pentachlorophenol	7.5	U	ug/kg	7.5	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	85-01-8	Phenanthrene	3.2	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	120-12-7	Anthracene	1.1	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	206-44-0	Fluoranthene	4.0		ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	129-00-0	Pyrene	5.1		ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	56-55-3	Benzo(a)anthracene	2.8	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	218-01-9	Chrysene	3.4	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	205-99-2	Benzo(b)fluoranthene	3.4	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	207-08-9	Benzo(k)fluoranthene	1.2	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	50-32-8	Benzo(a)pyrene	2.5	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	193-39-5	Indeno(1,2,3-cd)pyrene	1.5	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	53-70-3	Dibenzo(a,h)anthracene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	191-24-2	Benzo(g,h,i)perylene	2.1	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	123-91-1	1,4-Dioxane	74	U	ug/kg	74	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	100-52-7	Benzaldehyde	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	108-95-2	Phenol	170	LJ	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	111-44-4	Bis(2-Chloroethyl)ether	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	95-48-7	2-Methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	108-60-1	2,2-oxybis(1-Chloropropane)	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	98-86-2	Acetophenone	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	106-44-5	4-Methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM

48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	106-47-8	4-Chloroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	105-60-2	Caprolactam	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	77-47-4	Hexachlorocyclopentadiene	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	131-11-3	Dimethylphthalate	250		ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	99-09-2	3-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	51-28-5	2,4-Dinitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	100-02-7	4-Nitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	100-01-6	4-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	534-52-1	4,6-Dinitro-2-methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	1912-24-9	Atrazine	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	87-86-5	Pentachlorophenol	360	U *	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	86-74-8	Carbazole	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	206-44-0	Fluoranthene	360	U *	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	91-94-1	3,3-Dichlorobenzidine	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	117-84-0	Di-n-octyl phthalate	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	91-20-3	Naphthalene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	91-57-6	2-Methylnaphthalene	1.9	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	208-96-8	Acenaphthylene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM

48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	83-32-9	Acenaphthene	3.6	U		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	86-73-7	Fluorene	3.6	U		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	87-86-5	Pentachlorophenol	7.4	U		ug/kg	7.4	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	85-01-8	Phenanthrene	3.9			ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	120-12-7	Anthracene	0.88	LJ		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	206-44-0	Fluoranthene	1.2	LJ		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	129-00-0	Pyrene	3.6			ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	56-55-3	Benzo(a)anthracene	2.3	LJ		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	218-01-9	Chrysene	3.3	LJ		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	205-99-2	Benzo(b)fluoranthene	1.5	LJ		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	207-08-9	Benzo(k)fluoranthene	3.6	U		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	50-32-8	Benzo(a)pyrene	1.7	LJ		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	193-39-5	Indeno(1,2,3-cd)pyrene	0.95	LJ		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	53-70-3	Dibenzo(a,h)anthracene	3.6	U		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	191-24-2	Benzo(g,h,i)perylene	1.7	LJ		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	123-91-1	1,4-Dioxane	74	U		ug/kg	74	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	100-52-7	Benzaldehyde	360	U		ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	108-95-2	Phenol	170	LJ		ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	111-44-4	Bis(2-Chloroethyl)ether	360	U		ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	95-57-8	2-Chlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	95-48-7	2-Methylphenol	360	U		ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	108-60-1	2,2-oxybis(1-Chloropropane)	360	U		ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	98-86-2	Acetophenone	360	U		ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	106-44-5	4-Methylphenol	360	U		ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	621-64-7	N-Nitroso-di-n-propylamine	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	67-72-1	Hexachloroethane	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	98-95-3	Nitrobenzene	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	78-59-1	Isophorone	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	88-75-5	2-Nitrophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	105-67-9	2,4-Dimethylphenol	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	120-83-2	2,4-Dichlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	91-20-3	Naphthalene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	106-47-8	4-Chloroaniline	360	U		ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	87-68-3	Hexachlorobutadiene	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	105-60-2	Caprolactam	360	U		ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	59-50-7	4-Chloro-3-methylphenol	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	91-57-6	2-Methylnaphthalene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	77-47-4	Hexachlorocyclopentadiene	360	U		ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	88-06-2	2,4,6-Trichlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	95-95-4	2,4,5-Trichlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	92-52-4	1,1-Biphenyl	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	91-58-7	2-Chloronaphthalene	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	88-74-4	2-Nitroaniline	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	131-11-3	Dimethylphthalate	250			ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	606-20-2	2,6-Dinitrotoluene	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	208-96-8	Acenaphthylene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	99-09-2	3-Nitroaniline	360	U		ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	83-32-9	Acenaphthene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	51-28-5	2,4-Dinitrophenol	360	U		ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	100-02-7	4-Nitrophenol	360	U		ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	132-64-9	Dibenzofuran	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	121-14-2	2,4-Dinitrotoluene	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	84-66-2	Diethylphthalate	190	U		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM

48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	100-01-6	4-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	534-52-1	4,6-Dinitro-2-methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	1912-24-9	Atrazine	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	87-86-5	Pentachlorophenol	360	U *	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	86-74-8	Carbazole	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	206-44-0	Fluoranthene	360	U *	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	91-94-1	3,3-Dichlorobenzidine	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	117-84-0	Di-n-octyl phthalate	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	91-20-3	Naphthalene	4.6		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	91-57-6	2-Methylnaphthalene	15		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	208-96-8	Acenaphthylene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	83-32-9	Acenaphthene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	86-73-7	Fluorene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	87-86-5	Pentachlorophenol	7.4	U	ug/kg	7.4	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	85-01-8	Phenanthrene	22		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	120-12-7	Anthracene	21		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	206-44-0	Fluoranthene	5.0		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	129-00-0	Pyrene	31		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	56-55-3	Benzo(a)anthracene	7.7		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	218-01-9	Chrysene	13		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	205-99-2	Benzo(b)fluoranthene	3.8		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	207-08-9	Benzo(k)fluoranthene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	50-32-8	Benzo(a)pyrene	5.2		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.1	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	53-70-3	Dibenzo(a,h)anthracene	1.9	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	191-24-2	Benzo(g,h,i)perylene	9.6		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM

INORGANIC/ORGANIC COMPLETE SDG FILE (CSF) INVENTORY CHECKLIST

Case No. 48019 SDG No. F9E54 SDG Nos. To Follow Mod. Ref No. _____ Date Rec 12/24/18

EPA Lab ID: CHM

Lab Location: Mountainside, NJ

Region: 6 Audit No.: 48019/F9E54

Re_Submitted CSF? Yes X No

Box No(s): 1

COMMENTS:

Item Description

3. The auditor corrected some page number errors on Forms DC-2-3 and DC-2-4.

14./15. Sample tags were not used for this case.

Over for additional comments.

ORIGINALS	YES	NO	N/A
CUSTODY SEALS			
1. Present on package?	X		
2. Intact upon receipt?	X		
FORM DC-2			
3. Numbering scheme accurate?		X	
4. Are enclosed documents listed?	X		
5. Are listed documents enclosed?	X		
FORM DC-1			
6. Present?	X		
7. Complete?	X		
8. Accurate?	X		
TRAFFIC REPORT /CHAIN-OF-CUSTODY RECORD(s)			
9. Signed?	X		
10. Dated?	X		
AIRBILLS/AIRBILL STICKER			
11. Present?	X		
12. Signed?	X		
13. Dated?	X		
SAMPLE TAGS			
14. Does DC-1 list tags as being included?			X
15. Present?			X
OTHER DOCUMENTS			
16. Complete?	X		
17. Legible?	X		
18. Original?		X	
18a. If "NO", does the copy indicate where original documents are located?	X		

Audited by: _____ Ying-Ping Hsieh / ESAT Data Reviewer Date 3/11/19

Audited by: _____ _____ Date _____

Signature Printed Name/Title

DC-2__

USEPA CLP COC (REGION COPY)
DateShipped: 12/3/2018
CarrierName: FedEx
AirbillNo: 7738 6632 1029

CHAIN OF CUSTODY RECORD
Wilcox Oil/OK
Case #: 48019
Cooler #:

No: 6-120318-141135-0004
Lab: Chemtech Consulting Group
Lab Contact: Snehal Mehta
Lab Phone: 908-789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
ETF-SB-144-0.5	F9E54	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1354 (Ice to 6C), 1355 (Ice to 6C) (2)	ETF-SB-144-0.5	12/03/2018 13:20	Field Sample
ETF-SB-144-2.0	F9E55	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1357 (Ice to 6C), 1358 (Ice to 6C) (2)	ETF-SB-144-2.0	12/03/2018 13:25	Field Sample
ETF-SB-145-0.5	F9E56	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1360 (Ice to 6C), 1361 (Ice to 6C) (2)	ETF-SB-145-0.5	12/03/2018 13:30	Field Sample
ETF-SB-145-2.0	F9E57	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1363 (Ice to 6C), 1364 (Ice to 6C) (2)	ETF-SB-145-2.0	12/03/2018 13:35	Field Sample
ETF-SB-147-0.5	F9E60	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1372 (Ice to 6C), 1373 (Ice to 6C) (2)	ETF-SB-147-0.5	12/03/2018 13:40	Field Sample
ETF-SB-147-2.0	F9E61	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1375 (Ice to 6C), 1376 (Ice to 6C) (2)	ETF-SB-147-2.0	12/03/2018 13:45	Field Sample
ETF-SB-151-2.0-DUP	F9F34	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1667 (Ice to 6C), 1668 (Ice to 6C) (2)	ETF-SB-151-2.0-DUP	12/03/2018 11:35	Field Sample
ETF-SB-151-0.5-DUP	F9F35	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1670 (Ice to 6C), 1671 (Ice to 6C) (2)	ETF-SB-151-0.5-DUP	12/03/2018 11:30	Field Sample

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Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: SVOA/PAHSIM =SVOA/PAHSIM by SOM02.4

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	EA	12/03/2018 1800	FedEX	12/03/2018 1800	

USEPA CLP COC (REGION COPY)
DateShipped: 12/3/2018
CarrierName: FedEx
AirbillNo: 7738 6628 2495

CHAIN OF CUSTODY RECORD
Wilcox Oil/OK
Case #: 48019
Cooler #:

No: 6-120318-135356-0003
Lab: Chemtech Consulting Group
Lab Contact: Snehal Mehta
Lab Phone: 908-789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
ETF-SB-149-0.5	F9E64	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1384 (Ice to 6C), 1385 (Ice to 6C) (2)	ETF-SB-149-0.5	12/03/2018 12:00	Field Sample
ETF-SB-149-2.0	F9E65	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1387 (Ice to 6C), 1388 (Ice to 6C) (2)	ETF-SB-149-2.0	12/03/2018 12:05	Field Sample
ETF-SB-150-0.5	F9E66	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1390 (Ice to 6C), 1391 (Ice to 6C) (2)	ETF-SB-150-0.5	12/03/2018 11:45	Field Sample
ETF-SB-150-2.0	F9E67	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1393 (Ice to 6C), 1394 (Ice to 6C) (2)	ETF-SB-150-2.0	12/03/2018 11:50	Field Sample
ETF-SB-154-0.5	F9E74	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1414 (Ice to 6C), 1415 (Ice to 6C) (2)	ETF-SB-154-0.5	12/03/2018 10:30	Field Sample
ETF-SB-154-2.0	F9E75	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1417 (Ice to 6C), 1418 (Ice to 6C) (2)	ETF-SB-154-2.0	12/03/2018 10:35	Field Sample
ETF-SB-157-0.5	F9E80	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1432 (Ice to 6C), 1433 (Ice to 6C) (2)	ETF-SB-157-0.5	12/03/2018 09:00	Field Sample
ETF-SB-150-0.5-DUP	F9F33	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1664 (Ice to 6C), 1665 (Ice to 6C) (2)	ETF-SB-150-0.5-DUP	12/03/2018 11:45	Field Sample

Page 41 of 45

Special Instructions:	**Shipment for Case Complete? N**
	Samples Transferred From Chain of Custody #

Analysis Key: SVOA/PAHSIM =SVOA/PAHSIM by SOM02.4

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	EA	12/03/2018 1800	FedEx	12/03/2018 1800	

USEPA CLP COC (REGION COPY)
DateShipped: 12/3/2018
CarrierName: FedEx.
AirbillNo: 7738 6631 0444

CHAIN OF CUSTODY RECORD
Wilcox Oil/OK
Case #: 48019
Cooler #:

No: 6-120318-142320-0005
Lab: Chemtech Consulting Group
Lab Contact: Snehal Mehta
Lab Phone: 908-789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
ETF-SB-148-0.5	F9E62	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1378 (Ice to 6C), 1379 (Ice to 6C) (2)	ETF-SB-148-0.5	12/03/2018 13:50	Field Sample
ETF-SB-148-2.0	F9E63	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1381 (Ice to 6C), 1382 (Ice to 6C) (2)	ETF-SB-148-2.0	12/03/2018 13:55	Field Sample
ETF-SB-151-0.5	F9E68	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1396 (Ice to 6C), 1397 (Ice to 6C) (2)	ETF-SB-151-0.5	12/03/2018 11:30	Field Sample
ETF-SB-151-2.0	F9E69	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1399 (Ice to 6C), 1400 (Ice to 6C) (2)	ETF-SB-151-2.0	12/03/2018 11:35	Field Sample
ETF-SB-155-0.5	F9E76	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1420 (Ice to 6C), 1421 (Ice to 6C) (2)	ETF-SB-155-0.5	12/03/2018 10:50	Field Sample
ETF-SB-155-2.0	F9E77	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1423 (Ice to 6C), 1424 (Ice to 6C) (2)	ETF-SB-155-2.0	12/03/2018 10:55	Field Sample
ETF-SB-156-0.5	F9E78	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1426 (Ice to 6C), 1427 (Ice to 6C) (2)	ETF-SB-156-0.5	12/03/2018 11:10	Field Sample
ETF-SB-156-2.0	F9E79	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1429 (Ice to 6C), 1430 (Ice to 6C) (2)	ETF-SB-156-2.0	12/03/2018 11:15	Field Sample

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Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: SVOA/PAHSIM =SVOA/PAHSIM by SOM02.4

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	EA	12/03/2018 1800	FedEx	12/03/2018 1800	

TARGET COMPOUNDS OF CONCERN - IF PROJECT SCREENING LEVELS ARE LOWER THAN CLP SOW CRQLs, USE CLP CRQLs

Analyte	Units	Project Screening Level(4)
1,1,2-Trichloroethane	µg/L	5
1,2-Dibromo-3-chloropropane	µg/L	0.2
1,2-Dibromoethane (EDB)	µg/L	0.05
2-Butanone (Methyl Ethyl Ketone)	µg/L	5,600
Acetone	µg/L	14,000
Benzene	µg/L	5
Chloroform(6)	µg/L	80
Ethylbenzene	µg/L	700
Isopropylbenzene (Cumene)	µg/L	450
Methylcyclohexane	µg/L	13000
Methylene Chloride	µg/L	5
Toluene	µg/L	1,000
m,p-Xylene	µg/L	10,000
o-Xylene	µg/L	190
2-Methylnaphthalene	µg/L	36
2-Methylphenol	µg/L	930
3,3'-Dichlorobenzidine	µg/L	0.13
4,6-Dinitro-2-methylphenol	µg/L	1.5
4-Methylphenol	µg/L	1,900
Acenaphthene	µg/L	530
Dibenzofuran	µg/L	7.9
Naphthalene	µg/L	0.17
Phenanthrene	µg/L	120
Phenol	µg/L	5,800
Pyrene	µg/L	120
Anthracene	µg/L	1,800
Benzo(a)anthracene	µg/L	0.012
Benzo(a)pyrene	µg/L	0.2
Benzo(b)fluoranthene	µg/L	0.034
Benzo(g,h,i)perylene	µg/L	120.00
Benzo(k)fluoranthene	µg/L	0.34
Chrysene	µg/L	3.4
Dibenz(a,h)anthracene	µg/L	0.0034
Fluoranthene	µg/L	800
Fluorene	µg/L	290
Indeno(1,2,3-cd)pyrene	µg/L	0.034
Naphthalene	µg/L	0.17

Phenanthrene	µg/L	120.00
Pyrene	µg/L	120
2-Methylnaphthalene	µg/L	36

SOILS - TARGET COMPOUNDS OF CONCERN - IF PROJECT SCREENING LEVELS ARE LOWER THAN CLP SOW CRQLs, USE CLP CRQLs

Analyte	Units	Project Screening Level(5)
1,1,2,2-Tetrachloroethane	mg/kg	0.127
1,2-Dibromo-3-chloropropane	mg/kg	0.0053
1,2-Dibromoethane (EDB)	mg/kg	0.036
1,2-Dichlorobenzene	mg/kg	0.01
1,2-Dichloroethane	mg/kg	0.02
1,2-Dichloropropane	mg/kg	0.002
2-Butanone (Methyl ethyl ketone)	mg/kg	35
Acetone	mg/kg	2.5
Benzene	mg/kg	0.01
Bromodichloromethane	mg/kg	0.29
Carbon Tetrachloride	mg/kg	0.4
Chloroform	mg/kg	0.001
Cyclohexane	mg/kg	6,500
Ethylbenzene	mg/kg	0.03
Isopropylbenzene (Cumene)	mg/kg	1,900
Methylcyclohexane	mg/kg	6500
Tetrachloroethene	mg/kg	0.002
Toluene	mg/kg	0.01
Trichloroethene	mg/kg	0.001
Vinyl Chloride	mg/kg	0.01
m,p-Xylene	mg/kg	580
o-Xylene	mg/kg	0.1
2-Methylnaphthalene	mg/kg	3.24
Anthracene	mg/kg	0.1
Atrazine	mg/kg	0.00005
Benzo(a)anthracene	mg/kg	1.10
Benzo(a)pyrene	mg/kg	0.110
Benzo(b)fluoranthene	mg/kg	1.10
Benzo(g,h,i)perylene	mg/kg	1.1
Benzo(k)fluoranthene	mg/kg	11.0
Chrysene	mg/kg	110.0
Dibenz(a,h)anthracene	mg/kg	0.110
Dibenzofuran	mg/kg	73

Fluoranthene	mg/kg	0.1
Fluorene	mg/kg	29
Hexachlorobenzene	mg/kg	0.0025
Hexachlorobutadiene	mg/kg	0.04
Hexachlorocyclopentadiene	mg/kg	0.755
Hexachloroethane	mg/kg	0.596
Indeno(1,2,3-cd)pyrene	mg/kg	0.16
Naphthalene	mg/kg	0.099
Phenanthrene	mg/kg	0.1
Phenol	mg/kg	0.05
Pyrene	mg/kg	0.1

U.S. EPA Region 6 Laboratory
ESB FILE REQUEST / IN-FILING FORM

CONTACT Raymond Flores_____ PHONE _281 983-2139_____

DATE__3/14/2019__

_x___NEW FILE OR ___IN-FILING

Choose Program Type

___ AIR
___ FIFRA
___ MULTI-MEDIA
___ NPDES
___ PCB
___ RCRA
_x_ SUPERFUND
___ TSCA
___ WATER
Other _____

Choose File Type

___ ADMINISTRATIVE
___ ENFORCEMENT
___ FINAL REPORT
___ PROCUREMENT
___ QAPP
_x__ RAW DATA
____ SOP
___ CRIMINAL

Other: Completed CLP Data Review

Project or Facility Name: WILCOX OIL COMPANY

Facility Address (if applicable) BRISTOW, OK

CERCLIS Number OK0001010917____ FRS Number _____

Project Number __Case/SDG 48019/F9E54_ Work Order Number _____

Special Instructions: CLP DATA, Package 1 of 1_____

_____

_____

****

For Record Center Staff only:

DATE RECV'D _____ DATE PULLED _____ DATE FILED _____

Requested from FRC? YES NO Date of request _____

Date returned to FRC _____

Method Compliance Results Report

Thu, 3 Jan 2019 12:38:49

SDG: F9E54 **Case: 48019** **Client: EPA Region 6** **Submission Event ID: 715021** **Version: 2.00** **Submission Type: First Submission**
Contract: EPW14030 **Lab: CHM** **DRD: 12-24-2018** **LRD: 12-04-2018** **Mailed: 12-31-2018** **Screening Type: Automated** **Sub Group ID: 31057016**

Cover Page

Uploaded	Method	Case	Contract	SDG	File Name	MA
12-24-2018 15:44:14	Semivolatiles	48019	EPW14030	F9E54	48019_F9E54_EPW14030_1_SEDD_5-2_GENERAL_3_3_SVOA.xml	
12-24-2018 15:44:14	Semivolatiles by SIM	48019	EPW14030	F9E54	48019_F9E54_EPW14030_1_SEDD_5-2_GENERAL_3_3_SVOA_SIM.xml	

Method Compliance Results Report

SDG: F9E54 **Case: 48019** **Client: EPA Region 6** **Submission Event ID: 715021** **Version: 2.00** **Submission Type: First Submission**

Contract: EPW14030 **Lab: CHM** **DRD: 12-24-2018** **LRD: 12-04-2018** **Mailed: 12-31-2018** **Screening Type: Automated** **Sub Group ID: 31057016**

Sample Summary and Lab Receipt Date				
Sample Number	**Semivolatiles**	**Semivolatiles by SIM**	**Automated**	**Manual**
F9E54	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9E55	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9E56	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9E57	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9E60	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9E61	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9E62	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9E63	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9E64	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9E65	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9E66	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9E67	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9E68	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9E69	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9E74	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9E75	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9E80	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9F33	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9F34	12-04-2018 12:33:00	12-04-2018 12:33:00		
F9F35	12-04-2018 12:33:00	12-04-2018 12:33:00		
Totals	20	20		

Method Compliance Results Report

Thu, 3 Jan 2019 12:38:49

SDG: F9E54	**Case: 48019**	**Client: EPA Region 6**	**Submission Event ID: 715021**	**Version: 2.00**	**Submission Type: First Submission**
Contract: EPW14030	**Lab: CHM**	**DRD: 12-24-2018**	**LRD: 12-04-2018**	**Mailed: 12-31-2018**	**Screening Type: Automated** **Sub Group ID: 31057016**

Grace Period Notification

Some defects have been modified/enhanced in the CCS automated screening system. CLP laboratories are allowed a two-week grace period to make necessary changes for future submissions. If any of these defects are applicable to this SDG, they will be listed in the CCS Notification section following the defect detail.

Method	Test Name	Defect Message	Expiration Date

Method Compliance Results Report

Thu, 3 Jan 2019 12:38:49

SDG: F9E54 **Case: 48019** **Client: EPA Region 6** **Submission Event ID: 715021** **Version: 2.00** **Submission Type: First Submission**
Contract: EPW14030 **Lab: CHM** **DRD: 12-24-2018** **LRD: 12-04-2018** **Mailed: 12-31-2018** **Screening Type: Automated** **Sub Group ID: 31057016**

Full Assessment (FA) Defect Summary

Method	Category	Test Name	Defect Message	Samples with Defect
Semivolatiles			No Initial Assessment Defects were found for this method.	
Semivolatiles by SIM			No Initial Assessment Defects were found for this method.	

Method Compliance Results Report

Thu, 3 Jan 2019 12:38:49

SDG: F9E54 **Case: 48019** **Client: EPA Region 6** **Submission Event ID: 715021** **Version: 2.00** **Submission Type: First Submission**
Contract: EPW14030 **Lab: CHM** **DRD: 12-24-2018** **LRD: 12-04-2018** **Mailed: 12-31-2018** **Screening Type: Automated** **Sub Group ID: 31057016**

File Skeleton

Semivolatiles

#	QC	Sample	Type	Date	M	L	DF	File ID	Inst	Col	Run	AB	ABE	PREP	Clean	Store
1	Tune	DFTPP64	Initial	11-19-2018 17:50:00			1.0	BM017687.D	BNA_M	ZB-GR	BM017688.D					
2	ICAL	SSTD00551	RRF005	11-19-2018 18:26:00			1.0	BM017688.D	BNA_M	ZB-GR	BM017688.D	BM017690.D				
3	ICAL	SSTD01052	RRF010	11-19-2018 19:02:00			1.0	BM017689.D	BNA_M	ZB-GR	BM017688.D	BM017690.D				
4	ICAL	SSTD02053	RRF020	11-19-2018 19:38:00			1.0	BM017690.D	BNA_M	ZB-GR	BM017688.D	BM017690.D				
5	ICAL	SSTD04054	RRF040	11-19-2018 20:14:00			1.0	BM017691.D	BNA_M	ZB-GR	BM017688.D	BM017690.D				
6	ICAL	SSTD08055	RRF080	11-19-2018 20:50:00			1.0	BM017692.D	BNA_M	ZB-GR	BM017688.D	BM017690.D				
7	ICAL	SSTD16056	RRF160	11-19-2018 21:26:00			1.0	BM017693.D	BNA_M	ZB-GR	BM017688.D	BM017690.D				
8	ICV	SICV57	RRF57	11-19-2018 22:02:00			1.0	BM017694.D	BNA_M	ZB-GR	BM017688.D	BM017694.D	BM017694.D			
9	Tune	DFTPP74	Initial	12-08-2018 10:33:00			1.0	BM018011.D	BNA_M	ZB-GR	BM017688.D					
10	CCV	SSTD02084	RRF020	12-08-2018 11:10:00			1.0	BM018012.D	BNA_M	ZB-GR	BM017688.D	BM018012.D	BM018012.D			
11	FS	F9E64	Initial	12-08-2018 11:46:00	S	L	1.0	BM018013.D	BNA_M	ZB-GR	BM017688.D	BM018012.D	BM018023.D	PB115349, PB115349	BM017688.D, BM017688.D	
12	MB	SBLK49	Initial	12-08-2018 17:16:00	S	L	1.0	BM018022.D	BNA_M	ZB-GR	BM017688.D	BM018012.D	BM018023.D	PB115349, PB115349	BM017688.D, BM017688.D	
13	CCV	SSTD02085	RRF020	12-08-2018 17:53:00			1.0	BM018023.D	BNA_M	ZB-GR	BM017688.D	BM018023.D	BM018023.D			
14	Tune	DFTPP77	Initial	12-12-2018 14:08:00			1.0	BM018092.D	BNA_M	ZB-GR	BM017688.D					
15	CCV	SSTD02093	RRF020	12-12-2018 15:26:00			1.0	BM018093.D	BNA_M	ZB-GR	BM017688.D	BM018093.D	BM018093.D			
16	FS	F9E65	Initial	12-12-2018 16:02:00	S	L	1.0	BM018094.D	BNA_M	ZB-GR	BM017688.D	BM018093.D	BM018109.D	PB115349, PB115349	BM017688.D, BM017688.D	
17	FS	F9E74	Initial	12-12-2018 16:38:00	S	L	1.0	BM018095.D	BNA_M	ZB-GR	BM017688.D	BM018093.D	BM018109.D	PB115349, PB115349	BM017688.D, BM017688.D	
18	FS	F9E75	Initial	12-12-2018 17:15:00	S	L	1.0	BM018096.D	BNA_M	ZB-GR	BM017688.D	BM018093.D	BM018109.D	PB115349, PB115349	BM017688.D, BM017688.D	
19	FS	F9E80	Initial	12-12-2018 17:51:00	S	L	1.0	BM018097.D	BNA_M	ZB-GR	BM017688.D	BM018093.D	BM018109.D	PB115349, PB115349	BM017688.D, BM017688.D	

Method Compliance Results Report

Thu, 3 Jan 2019 12:38:49

SDG: F9E54 **Case: 48019** **Client: EPA Region 6** **Submission Event ID: 715021** **Version: 2.00** **Submission Type: First Submission**
Contract: EPW14030 **Lab: CHM** **DRD: 12-24-2018** **LRD: 12-04-2018** **Mailed: 12-31-2018** **Screening Type: Automated** **Sub Group ID: 31057016**

File Skeleton

Semivolatiles

#	QC	Sample	Type	Date	M	L	DF	File ID	Inst	Col	Run	AB	ABE	PREP	Clean	Store
20	FS	F9E54	Initial	12-12-2018 18:27:00	S	L	1.0	BM018098.D	BNA_M	ZB-GR	BM017688.D	BM018093.D	BM018109.D	PB115349, PB115349	BM017688.D, BM017688.D	
21	FS	F9E55	Initial	12-12-2018 19:03:00	S	L	1.0	BM018099.D	BNA_M	ZB-GR	BM017688.D	BM018093.D	BM018109.D	PB115349, PB115349	BM017688.D, BM017688.D	
22	FS	F9E56	Initial	12-12-2018 19:40:00	S	L	1.0	BM018100.D	BNA_M	ZB-GR	BM017688.D	BM018093.D	BM018109.D	PB115349, PB115349	BM017688.D, BM017688.D	
23	FS	F9E57	Initial	12-12-2018 20:16:00	S	L	1.0	BM018101.D	BNA_M	ZB-GR	BM017688.D	BM018093.D	BM018109.D	PB115349, PB115349	BM017688.D, BM017688.D	
24	FS	F9E60	Initial	12-12-2018 20:52:00	S	L	1.0	BM018102.D	BNA_M	ZB-GR	BM017688.D	BM018093.D	BM018109.D	PB115349, PB115349	BM017688.D, BM017688.D	
25	FS	F9E61	Initial	12-12-2018 21:28:00	S	L	1.0	BM018103.D	BNA_M	ZB-GR	BM017688.D	BM018093.D	BM018109.D	PB115349, PB115349	BM017688.D, BM017688.D	
26	FS	F9E62	Initial	12-12-2018 22:04:00	S	L	1.0	BM018104.D	BNA_M	ZB-GR	BM017688.D	BM018093.D	BM018109.D	PB115349, PB115349	BM017688.D, BM017688.D	
27	FS	F9E63	Initial	12-12-2018 22:40:00	S	L	1.0	BM018105.D	BNA_M	ZB-GR	BM017688.D	BM018093.D	BM018109.D	PB115349, PB115349	BM017688.D, BM017688.D	
28	FS	F9F34	Initial	12-12-2018 23:16:00	S	L	1.0	BM018106.D	BNA_M	ZB-GR	BM017688.D	BM018093.D	BM018109.D	PB115349, PB115349	BM017688.D, BM017688.D	
29	CCV	SSTD02094	RRF020	12-13-2018 01:04:00			1.0	BM018109.D	BNA_M	ZB-GR	BM017688.D	BM018109.D	BM018109.D			
30	FS	F9E68	Initial	12-13-2018 01:43:00	S	L	1.0	BM018110.D	BNA_M	ZB-GR	BM017688.D	BM018109.D	BM018124.D	PB115349, PB115349	BM017688.D, BM017688.D	
31	FS	F9E69	Initial	12-13-2018 02:19:00	S	L	1.0	BM018111.D	BNA_M	ZB-GR	BM017688.D	BM018109.D	BM018124.D	PB115349, PB115349	BM017688.D, BM017688.D	
32	FS	F9F33	Initial	12-13-2018 02:55:00	S	L	1.0	BM018112.D	BNA_M	ZB-GR	BM017688.D	BM018109.D	BM018124.D	PB115349, PB115349	BM017688.D, BM017688.D	
33	FS	F9E67	Initial	12-13-2018 03:31:00	S	L	1.0	BM018113.D	BNA_M	ZB-GR	BM017688.D	BM018109.D	BM018124.D	PB115349, PB115349	BM017688.D, BM017688.D	
34	FS	F9E66	Initial	12-13-2018 04:07:00	S	L	1.0	BM018114.D	BNA_M	ZB-GR	BM017688.D	BM018109.D	BM018124.D	PB115349, PB115349	BM017688.D, BM017688.D	
35	FS	F9F35	Initial	12-13-2018	S	L	1.0	BM018115.D	BNA_M	ZB-GR	BM017688.D	BM018109.D	BM018124.D	PB115349,	BM017688.D	

Method Compliance Results Report

Thu, 3 Jan 2019 12:38:49

SDG: F9E54 **Case: 48019** **Client: EPA Region 6** **Submission Event ID: 715021** **Version: 2.00** **Submission Type: First Submission**
Contract: EPW14030 **Lab: CHM** **DRD: 12-24-2018** **LRD: 12-04-2018** **Mailed: 12-31-2018** **Screening Type: Automated** **Sub Group ID: 31057016**

File Skeleton

Semivolatiles															
#	**QC**	**Sample**	**Type**	**Date**	**M**	**L**	**DF**	**File ID**	**Inst**	**Col**	**Run**	**AB**	**ABE**	**PREP**	**Clean**	**Store**
				04:43:00										PB115349	,BM017688.D	
36	CCV	SSTD02095	RRF020	12-13-2018 10:43:00			1.0	BM018124.D	BNA_M	ZB-GR	BM017688.D	BM018124.D	BM018124.D			

Method Compliance Results Report

Thu, 3 Jan 2019 12:38:49

SDG: F9E54 **Case: 48019** **Client: EPA Region 6** **Submission Event ID: 715021** **Version: 2.00** **Submission Type: First Submission**
Contract: EPW14030 **Lab: CHM** **DRD: 12-24-2018** **LRD: 12-04-2018** **Mailed: 12-31-2018** **Screening Type: Automated** **Sub Group ID: 31057016**

File Skeleton

Semivolatiles by SIM

#	QC	Sample	Type	Date	M	L	DF	File ID	Inst	Col	Run	AB	ABE	PREP	Clean	Store
1	Tune	DFTPP54	Initial	11-19-2018 11:40:00			1.0	BN003588.D	BNA_N	ZB-GR	BN003589.D					
2	ICAL	SSTD0.161	RRF0.1	11-19-2018 12:15:00			1.0	BN003589.D	BNA_N	ZB-GR	BN003589.D	BN003591.D				
3	ICAL	SSTD0.262	RRF0.2	11-19-2018 12:50:00			1.0	BN003590.D	BNA_N	ZB-GR	BN003589.D	BN003591.D				
4	ICAL	SSTD0.463	RRF0.4	11-19-2018 13:25:00			1.0	BN003591.D	BNA_N	ZB-GR	BN003589.D	BN003591.D				
5	ICAL	SSTD0.864	RRF0.8	11-19-2018 14:00:00			1.0	BN003592.D	BNA_N	ZB-GR	BN003589.D	BN003591.D				
6	ICAL	SSTD1.665	RRF1.6	11-19-2018 14:35:00			1.0	BN003593.D	BNA_N	ZB-GR	BN003589.D	BN003591.D				
7	ICAL	SSTD3.266	RRF3.2	11-19-2018 15:10:00			1.0	BN003594.D	BNA_N	ZB-GR	BN003589.D	BN003591.D				
8	ICV	SICV67	RRF67	11-19-2018 15:45:00			1.0	BN003595.D	BNA_N	ZB-GR	BN003589.D	BN003595.D	BN003595.D			
9	Tune	DFTPP62	Initial	12-06-2018 13:57:00			1.0	BN003729.D	BNA_N	ZB-GR	BN003589.D					
10	CCV	SSTD0.489	RRF0.4	12-06-2018 14:32:00			1.0	BN003730.D	BNA_N	ZB-GR	BN003589.D	BN003730.D	BN003730.D			
11	FS	F9E64	Initial	12-06-2018 21:09:00	S	L	1.0	BN003741.D	BNA_N	ZB-GR	BN003589.D	BN003730.D	BN003743.D	PB115350, PB115350	BN003589.D, BN003589.D	
12	MB	SBLK50	Initial	12-06-2018 21:45:00	S	L	1.0	BN003742.D	BNA_N	ZB-GR	BN003589.D	BN003730.D	BN003743.D	PB115350, PB115350	BN003589.D, BN003589.D	
13	CCV	SSTD0.490	RRF0.4	12-06-2018 22:20:00			1.0	BN003743.D	BNA_N	ZB-GR	BN003589.D	BN003743.D	BN003743.D			
14	FS	F9E65	Initial	12-07-2018 00:05:00	S	L	1.0	BN003744.D	BNA_N	ZB-GR	BN003589.D	BN003743.D	BN003756.D	PB115350, PB115350	BN003589.D, BN003589.D	
15	FS	F9E74	Initial	12-07-2018 00:40:00	S	L	1.0	BN003745.D	BNA_N	ZB-GR	BN003589.D	BN003743.D	BN003756.D	PB115350, PB115350	BN003589.D, BN003589.D	
16	FS	F9E75	Initial	12-07-2018 01:15:00	S	L	1.0	BN003746.D	BNA_N	ZB-GR	BN003589.D	BN003743.D	BN003756.D	PB115350, PB115350	BN003589.D, BN003589.D	
17	FS	F9E80	Initial	12-07-2018 01:50:00	S	L	1.0	BN003747.D	BNA_N	ZB-GR	BN003589.D	BN003743.D	BN003756.D	PB115350, PB115350	BN003589.D, BN003589.D	
18	FS	F9E54	Initial	12-07-2018 02:25:00	S	L	1.0	BN003748.D	BNA_N	ZB-GR	BN003589.D	BN003743.D	BN003756.D	PB115350, PB115350	BN003589.D, BN003589.D	
19	FS	F9E55	Initial	12-07-2018	S	L	1.0	BN003749.D	BNA_N	ZB-GR	BN003589.D	BN003743.D	BN003756.D	PB115350,	BN003589.D	

Method Compliance Results Report

Thu, 3 Jan 2019 12:38:49

SDG: F9E54 **Case: 48019** **Client: EPA Region 6** **Submission Event ID: 715021** **Version: 2.00** **Submission Type: First Submission**
Contract: EPW14030 **Lab: CHM** **DRD: 12-24-2018** **LRD: 12-04-2018** **Mailed: 12-31-2018** **Screening Type: Automated** **Sub Group ID: 31057016**

File Skeleton

Semivolatiles by SIM															
#	QC	Sample	Type	Date	M	L	DF	File ID	Inst	Col	Run	AB	ABE	PREP	Clean	Store
				03:00:00										PB115350	, BN003589.D	
20	FS	F9E56	Initial	12-07-2018 03:35:00	S	L	1.0	BN003750.D	BNA_N	ZB-GR	BN003589.D	BN003743.D	BN003756.D	PB115350, PB115350	BN003589.D , BN003589.D	
21	FS	F9E57	Initial	12-07-2018 04:09:00	S	L	1.0	BN003751.D	BNA_N	ZB-GR	BN003589.D	BN003743.D	BN003756.D	PB115350, PB115350	BN003589.D , BN003589.D	
22	FS	F9E60	Initial	12-07-2018 04:44:00	S	L	1.0	BN003752.D	BNA_N	ZB-GR	BN003589.D	BN003743.D	BN003756.D	PB115350, PB115350	BN003589.D , BN003589.D	
23	FS	F9E61	Initial	12-07-2018 05:19:00	S	L	1.0	BN003753.D	BNA_N	ZB-GR	BN003589.D	BN003743.D	BN003756.D	PB115350, PB115350	BN003589.D , BN003589.D	
24	FS	F9E62	Initial	12-07-2018 05:54:00	S	L	1.0	BN003754.D	BNA_N	ZB-GR	BN003589.D	BN003743.D	BN003756.D	PB115350, PB115350	BN003589.D , BN003589.D	
25	FS	F9E63	Initial	12-07-2018 06:29:00	S	L	1.0	BN003755.D	BNA_N	ZB-GR	BN003589.D	BN003743.D	BN003756.D	PB115350, PB115350	BN003589.D , BN003589.D	
26	CCV	SSTD0.491	RRF0.4	12-07-2018 07:04:00			1.0	BN003756.D	BNA_N	ZB-GR	BN003589.D	BN003756.D	BN003756.D			
27	Tune	DFTPP69	Initial	12-15-2018 08:31:00			1.0	BN003949.D	BNA_N	ZB-GR	BN003589.D					
28	CCV	SSTD0.417	RRF0.4	12-15-2018 09:48:00			1.0	BN003950.D	BNA_N	ZB-GR	BN003589.D	BN003950.D	BN003950.D			
29	FS	F9F34	Initial	12-15-2018 10:24:00	S	L	1.0	BN003951.D	BNA_N	ZB-GR	BN003589.D	BN003950.D	BN003964.D	PB115350, PB115350	BN003589.D , BN003589.D	
30	FS	F9E66	Initial	12-15-2018 12:09:00	S	L	1.0	BN003954.D	BNA_N	ZB-GR	BN003589.D	BN003950.D	BN003964.D	PB115350, PB115350	BN003589.D , BN003589.D	
31	FS	F9E67	Initial	12-15-2018 13:20:00	S	L	1.0	BN003956.D	BNA_N	ZB-GR	BN003589.D	BN003950.D	BN003964.D	PB115350, PB115350	BN003589.D , BN003589.D	
32	FS	F9F33	Initial	12-15-2018 14:31:00	S	L	1.0	BN003958.D	BNA_N	ZB-GR	BN003589.D	BN003950.D	BN003964.D	PB115350, PB115350	BN003589.D , BN003589.D	
33	FS	F9F35	Initial	12-15-2018 15:42:00	S	L	1.0	BN003960.D	BNA_N	ZB-GR	BN003589.D	BN003950.D	BN003964.D	PB115350, PB115350	BN003589.D , BN003589.D	
34	FS	F9E68	Initial	12-15-2018 16:52:00	S	L	1.0	BN003962.D	BNA_N	ZB-GR	BN003589.D	BN003950.D	BN003964.D	PB115350, PB115350	BN003589.D , BN003589.D	
35	CCV	SSTD0.418	RRF0.4	12-15-2018			1.0	BN003964.D	BNA_N	ZB-GR	BN003589.D	BN003964.D	BN003964.D			

Method Compliance Results Report

SDG: F9E54 **Case: 48019** **Client: EPA Region 6** **Submission Event ID: 715021** **Version: 2.00** **Submission Type: First Submission**
Contract: EPW14030 **Lab: CHM** **DRD: 12-24-2018** **LRD: 12-04-2018** **Mailed: 12-31-2018** **Screening Type: Automated** **Sub Group ID: 31057016**

File Skeleton

Semivolatiles by SIM																
#	**QC**	**Sample**	**Type**	**Date**	**M**	**L**	**DF**	**File ID**	**Inst**	**Col**	**Run**	**AB**	**ABE**	**PREP**	**Clean**	**Store**
				18:38:00												
36	FS	F9E69	Initial	12-15-2018 19:14:00	S	L	1.0	BN003965.D	BNA_N	ZB-GR	BN003589.D	BN003964.D	BN003980.D	PB115350, PB115350	BN003589.D , BN003589.D	
37	CCV	SSTD0.419	RRF0.4	12-16-2018 04:44:00			1.0	BN003980.D	BNA_N	ZB-GR	BN003589.D	BN003980.D	BN003980.D			

Method Compliance Results Report

Thu, 3 Jan 2019 12:38:49

SDG: F9E54	**Case: 48019**	**Client: EPA Region 6**	**Submission Event ID: 715021**	**Version: 2.00**	**Submission Type: First Submission**
Contract: EPW14030	**Lab: CHM**	**DRD: 12-24-2018**	**LRD: 12-04-2018**	**Mailed: 12-31-2018**	**Screening Type: Automated** **Sub Group ID: 31057016**

Automated Full Assessment (FA) Defect Detail - Semivolatiles

NONE FOUND

Method Compliance Results Report

Thu, 3 Jan 2019 12:38:49

SDG: F9E54	**Case: 48019**	**Client: EPA Region 6**	**Submission Event ID: 715021**	**Version: 2.00**	**Submission Type: First Submission**
Contract: EPW14030	**Lab: CHM**	**DRD: 12-24-2018**	**LRD: 12-04-2018**	**Mailed: 12-31-2018**	**Screening Type: Automated** **Sub Group ID: 31057016**

Automated Full Assessment (FA) Defect Detail - Semivolatiles by SIM

NONE FOUND

Method Compliance Results Report

Thu, 3 Jan 2019 12:38:49

SDG: F9E54	**Case: 48019**	**Client: EPA Region 6**	**Submission Event ID: 715021**	**Version: 2.00**	**Submission Type: First Submission**
Contract: EPW14030	**Lab: CHM**	**DRD: 12-24-2018**	**LRD: 12-04-2018**	**Mailed: 12-31-2018**	**Screening Type: Automated** **Sub Group ID: 31057016**

Manual Defect Detail

NONE FOUND

Method Compliance Results Report

SDG: F9E54	**Case: 48019**	**Client: EPA Region 6**	**Submission Event ID: 715021**	**Version: 2.00**	**Submission Type: First Submission**
Contract: EPW14030	**Lab: CHM**	**DRD: 12-24-2018**	**LRD: 12-04-2018**	**Mailed: 12-31-2018**	**Screening Type: Automated** **Sub Group ID: 31057016**

General Comments

NONE FOUND

Method Compliance Results Report

Thu, 3 Jan 2019 12:38:49

SDG: F9E54	**Case: 48019**	**Client: EPA Region 6**	**Submission Event ID: 715021**	**Version: 2.00**	**Submission Type: First Submission**
Contract: EPW14030	**Lab: CHM**	**DRD: 12-24-2018**	**LRD: 12-04-2018**	**Mailed: 12-31-2018**	**Screening Type: Automated** **Sub Group ID: 31057016**

Grace Period Defect Detail - Semivolatiles

NONE FOUND

Method Compliance Results Report

Thu, 3 Jan 2019 12:38:49

SDG: F9E54	**Case: 48019**	**Client: EPA Region 6**	**Submission Event ID: 715021**	**Version: 2.00**	**Submission Type: First Submission**
Contract: EPW14030	**Lab: CHM**	**DRD: 12-24-2018**	**LRD: 12-04-2018**	**Mailed: 12-31-2018**	**Screening Type: Automated** **Sub Group ID: 31057016**

Grace Period Defect Detail - Semivolatiles by SIM

NONE FOUND

CASE	SDG	EPASAMP	LABID	MATRIX	ANDATE	ANTIME	CASNUM	ANALYTE	CONC	VALDQAL	UNITS	ADJCRQL	SMPDATE	STATLOC	DVLEV
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	123-91-1	1,4-Dioxane	76	U	ug/kg	76	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	100-52-7	Benzaldehyde	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	108-95-2	Phenol	130	LJ	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	111-44-4	Bis(2-Chloroethyl)ether	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	95-48-7	2-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	108-60-1	2,2-oxybis(1-Chloropropane)	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	98-86-2	Acetophenone	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	106-44-5	4-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	106-47-8	4-Chloroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	105-60-2	Caprolactam	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	77-47-4	Hexachlorocyclopentadiene	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	131-11-3	Dimethylphthalate	210		ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	99-09-2	3-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	51-28-5	2,4-Dinitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	100-02-7	4-Nitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	100-01-6	4-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	534-52-1	4,6-Dinitro-2-methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	1912-24-9	Atrazine	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	87-86-5	Pentachlorophenol	370	U *	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	86-74-8	Carbazole	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM

48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	206-44-0	Fluoranthene	370	U *	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	91-94-1	3,3-Dichlorobenzidine	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	117-84-0	Di-n-octyl phthalate	370	U	ug/kg	370	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54	J6227-09	S	12/12/2018	18:27:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	91-20-3	Naphthalene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	91-57-6	2-Methylnaphthalene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	208-96-8	Acenaphthylene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	83-32-9	Acenaphthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	86-73-7	Fluorene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	87-86-5	Pentachlorophenol	7.6	U	ug/kg	7.6	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	85-01-8	Phenanthrene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	120-12-7	Anthracene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	206-44-0	Fluoranthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	129-00-0	Pyrene	0.96	LJ	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	56-55-3	Benzo(a)anthracene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	218-01-9	Chrysene	1.1	LJ	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	205-99-2	Benzo(b)fluoranthene	0.83	LJ	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	207-08-9	Benzo(k)fluoranthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	50-32-8	Benzo(a)pyrene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	53-70-3	Dibenzo(a,h)anthracene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E54(SIM)	J6227-09	S	12/07/2018	02:25:00	191-24-2	Benzo(g,h,i)perylene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-144-0.5	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	123-91-1	1,4-Dioxane	79	U	ug/kg	79	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	100-52-7	Benzaldehyde	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	108-95-2	Phenol	300	LJ	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	111-44-4	Bis(2-Chloroethyl)ether	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	95-57-8	2-Chlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	95-48-7	2-Methylphenol	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	108-60-1	2,2-oxybis(1-Chloropropane)	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	98-86-2	Acetophenone	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	106-44-5	4-Methylphenol	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	621-64-7	N-Nitroso-di-n-propylamine	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	67-72-1	Hexachloroethane	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	98-95-3	Nitrobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	78-59-1	Isophorone	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	88-75-5	2-Nitrophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	105-67-9	2,4-Dimethylphenol	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	111-91-1	Bis(2-Chloroethoxy)methane	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	120-83-2	2,4-Dichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	91-20-3	Naphthalene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	106-47-8	4-Chloroaniline	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	87-68-3	Hexachlorobutadiene	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	105-60-2	Caprolactam	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM

48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	59-50-7	4-Chloro-3-methylphenol	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	91-57-6	2-Methylnaphthalene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	77-47-4	Hexachlorocyclopentadiene	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	88-06-2	2,4,6-Trichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	95-95-4	2,4,5-Trichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	92-52-4	1,1-Biphenyl	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	91-58-7	2-Chloronaphthalene	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	88-74-4	2-Nitroaniline	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	131-11-3	Dimethylphthalate	460		ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	606-20-2	2,6-Dinitrotoluene	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	208-96-8	Acenaphthylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	99-09-2	3-Nitroaniline	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	83-32-9	Acenaphthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	51-28-5	2,4-Dinitrophenol	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	100-02-7	4-Nitrophenol	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	132-64-9	Dibenzofuran	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	121-14-2	2,4-Dinitrotoluene	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	84-66-2	Diethylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	86-73-7	Fluorene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	7005-72-3	4-Chlorophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	100-01-6	4-Nitroaniline	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	534-52-1	4,6-Dinitro-2-methylphenol	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	86-30-6	N-Nitrosodiphenylamine	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	95-94-3	1,2,4,5-Tetrachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	101-55-3	4-Bromophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	118-74-1	Hexachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	1912-24-9	Atrazine	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	87-86-5	Pentachlorophenol	390	U *	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	85-01-8	Phenanthrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	120-12-7	Anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	86-74-8	Carbazole	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	84-74-2	Di-n-butylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	206-44-0	Fluoranthene	390	U *	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	129-00-0	Pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	85-68-7	Butylbenzylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	91-94-1	3,3-Dichlorobenzidine	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	56-55-3	Benzo(a)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	218-01-9	Chrysene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	117-81-7	Bis(2-ethylhexyl)phthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	117-84-0	Di-n-octyl phthalate	390	U	ug/kg	390	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	205-99-2	Benzo(b)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	207-08-9	Benzo(k)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	50-32-8	Benzo(a)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	193-39-5	Indeno(1,2,3-cd)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	53-70-3	Dibenzo(a,h)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	191-24-2	Benzo(g,h,i)perylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55	J6227-10	S	12/12/2018	19:03:00	58-90-2	2,3,4,6-Tetrachlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	91-20-3	Naphthalene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	91-57-6	2-Methylnaphthalene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	208-96-8	Acenaphthylene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	83-32-9	Acenaphthene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	86-73-7	Fluorene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	87-86-5	Pentachlorophenol	7.9	U	ug/kg	7.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	85-01-8	Phenanthrene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM

48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	120-12-7	Anthracene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	206-44-0	Fluoranthene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	129-00-0	Pyrene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	56-55-3	Benzo(a)anthracene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	218-01-9	Chrysene	0.83	LJ	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	205-99-2	Benzo(b)fluoranthene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	207-08-9	Benzo(k)fluoranthene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	50-32-8	Benzo(a)pyrene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	53-70-3	Dibenzo(a,h)anthracene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E55(SIM)	J6227-10	S	12/07/2018	03:00:00	191-24-2	Benzo(g,h,i)perylene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-144-2.0	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	123-91-1	1,4-Dioxane	77	U	ug/kg	77	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	100-52-7	Benzaldehyde	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	108-95-2	Phenol	140	LJ	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	111-44-4	Bis(2-Chloroethyl)ether	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	95-57-8	2-Chlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	95-48-7	2-Methylphenol	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	108-60-1	2,2-oxybis(1-Chloropropane)	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	98-86-2	Acetophenone	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	106-44-5	4-Methylphenol	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	621-64-7	N-Nitroso-di-n-propylamine	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	67-72-1	Hexachloroethane	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	98-95-3	Nitrobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	78-59-1	Isophorone	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	88-75-5	2-Nitrophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	105-67-9	2,4-Dimethylphenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	111-91-1	Bis(2-Chloroethoxy)methane	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	120-83-2	2,4-Dichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	91-20-3	Naphthalene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	106-47-8	4-Chloroaniline	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	87-68-3	Hexachlorobutadiene	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	105-60-2	Caprolactam	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	59-50-7	4-Chloro-3-methylphenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	91-57-6	2-Methylnaphthalene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	77-47-4	Hexachlorocyclopentadiene	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	88-06-2	2,4,6-Trichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	95-95-4	2,4,5-Trichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	92-52-4	1,1-Biphenyl	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	91-58-7	2-Chloronaphthalene	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	88-74-4	2-Nitroaniline	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	131-11-3	Dimethylphthalate	240		ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	606-20-2	2,6-Dinitrotoluene	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	208-96-8	Acenaphthylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	99-09-2	3-Nitroaniline	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	83-32-9	Acenaphthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	51-28-5	2,4-Dinitrophenol	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	100-02-7	4-Nitrophenol	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	132-64-9	Dibenzofuran	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	121-14-2	2,4-Dinitrotoluene	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	84-66-2	Diethylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	86-73-7	Fluorene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	7005-72-3	4-Chlorophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	100-01-6	4-Nitroaniline	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	534-52-1	4,6-Dinitro-2-methylphenol	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM

48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	86-30-6	N-Nitrosodiphenylamine	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	95-94-3	1,2,4,5-Tetrachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	101-55-3	4-Bromophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	118-74-1	Hexachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	1912-24-9	Atrazine	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	87-86-5	Pentachlorophenol	380	U *	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	85-01-8	Phenanthrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	120-12-7	Anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	86-74-8	Carbazole	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	84-74-2	Di-n-butylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	206-44-0	Fluoranthene	380	U *	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	129-00-0	Pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	85-68-7	Butylbenzylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	91-94-1	3,3-Dichlorobenzidine	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	56-55-3	Benzo(a)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	218-01-9	Chrysene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	117-81-7	Bis(2-ethylhexyl)phthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	117-84-0	Di-n-octyl phthalate	380	U	ug/kg	380	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	205-99-2	Benzo(b)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	207-08-9	Benzo(k)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	50-32-8	Benzo(a)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	193-39-5	Indeno(1,2,3-cd)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	53-70-3	Dibenzo(a,h)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	191-24-2	Benzo(g,h,i)perylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56	J6227-11	S	12/12/2018	19:40:00	58-90-2	2,3,4,6-Tetrachlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	91-20-3	Naphthalene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	91-57-6	2-Methylnaphthalene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	208-96-8	Acenaphthylene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	83-32-9	Acenaphthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	86-73-7	Fluorene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	87-86-5	Pentachlorophenol	7.7	U	ug/kg	7.7	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	85-01-8	Phenanthrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	120-12-7	Anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	206-44-0	Fluoranthene	0.92	LJ	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	129-00-0	Pyrene	1.2	LJ	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	56-55-3	Benzo(a)anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	218-01-9	Chrysene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	205-99-2	Benzo(b)fluoranthene	0.92	LJ	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	207-08-9	Benzo(k)fluoranthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	50-32-8	Benzo(a)pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	53-70-3	Dibenzo(a,h)anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E56(SIM)	J6227-11	S	12/07/2018	03:35:00	191-24-2	Benzo(g,h,i)perylene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-0.5	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	123-91-1	1,4-Dioxane	78	U	ug/kg	78	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	100-52-7	Benzaldehyde	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	108-95-2	Phenol	260	LJ	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	111-44-4	Bis(2-Chloroethyl)ether	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	95-57-8	2-Chlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	95-48-7	2-Methylphenol	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	108-60-1	2,2-oxybis(1-Chloropropane)	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	98-86-2	Acetophenone	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	106-44-5	4-Methylphenol	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	621-64-7	N-Nitroso-di-n-propylamine	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	67-72-1	Hexachloroethane	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM

48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	98-95-3	Nitrobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	78-59-1	Isophorone	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	88-75-5	2-Nitrophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	105-67-9	2,4-Dimethylphenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	111-91-1	Bis(2-Chloroethoxy)methane	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	120-83-2	2,4-Dichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	91-20-3	Naphthalene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	106-47-8	4-Chloroaniline	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	87-68-3	Hexachlorobutadiene	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	105-60-2	Caprolactam	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	59-50-7	4-Chloro-3-methylphenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	91-57-6	2-Methylnaphthalene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	77-47-4	Hexachlorocyclopentadiene	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	88-06-2	2,4,6-Trichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	95-95-4	2,4,5-Trichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	92-52-4	1,1-Biphenyl	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	91-58-7	2-Chloronaphthalene	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	88-74-4	2-Nitroaniline	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	131-11-3	Dimethylphthalate	420		ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	606-20-2	2,6-Dinitrotoluene	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	208-96-8	Acenaphthylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	99-09-2	3-Nitroaniline	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	83-32-9	Acenaphthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	51-28-5	2,4-Dinitrophenol	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	100-02-7	4-Nitrophenol	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	132-64-9	Dibenzofuran	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	121-14-2	2,4-Dinitrotoluene	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	84-66-2	Diethylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	86-73-7	Fluorene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	7005-72-3	4-Chlorophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	100-01-6	4-Nitroaniline	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	534-52-1	4,6-Dinitro-2-methylphenol	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	86-30-6	N-Nitrosodiphenylamine	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	95-94-3	1,2,4,5-Tetrachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	101-55-3	4-Bromophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	118-74-1	Hexachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	1912-24-9	Atrazine	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	87-86-5	Pentachlorophenol	380	U *	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	85-01-8	Phenanthrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	120-12-7	Anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	86-74-8	Carbazole	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	84-74-2	Di-n-butylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	206-44-0	Fluoranthene	380	U *	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	129-00-0	Pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	85-68-7	Butylbenzylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	91-94-1	3,3-Dichlorobenzidine	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	56-55-3	Benzo(a)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	218-01-9	Chrysene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	117-81-7	Bis(2-ethylhexyl)phthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	117-84-0	Di-n-octyl phthalate	380	U	ug/kg	380	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	205-99-2	Benzo(b)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	207-08-9	Benzo(k)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	50-32-8	Benzo(a)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	193-39-5	Indeno(1,2,3-cd)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM

48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	53-70-3	Dibenzo(a,h)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	191-24-2	Benzo(g,h,i)perylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57	J6227-12	S	12/12/2018	20:16:00	58-90-2	2,3,4,6-Tetrachlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	91-20-3	Naphthalene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	91-57-6	2-Methylnaphthalene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	208-96-8	Acenaphthylene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	83-32-9	Acenaphthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	86-73-7	Fluorene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	87-86-5	Pentachlorophenol	7.8	U	ug/kg	7.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	85-01-8	Phenanthrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	120-12-7	Anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	206-44-0	Fluoranthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	129-00-0	Pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	56-55-3	Benzo(a)anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	218-01-9	Chrysene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	205-99-2	Benzo(b)fluoranthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	207-08-9	Benzo(k)fluoranthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	50-32-8	Benzo(a)pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	53-70-3	Dibenzo(a,h)anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E57(SIM)	J6227-12	S	12/07/2018	04:09:00	191-24-2	Benzo(g,h,i)perylene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-145-2.0	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	123-91-1	1,4-Dioxane	83	U	ug/kg	83	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	100-52-7	Benzaldehyde	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	108-95-2	Phenol	150	LJ	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	111-44-4	Bis(2-Chloroethyl)ether	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	95-57-8	2-Chlorophenol	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	95-48-7	2-Methylphenol	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	108-60-1	2,2-oxybis(1-Chloropropane)	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	98-86-2	Acetophenone	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	106-44-5	4-Methylphenol	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	621-64-7	N-Nitroso-di-n-propylamine	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	67-72-1	Hexachloroethane	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	98-95-3	Nitrobenzene	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	78-59-1	Isophorone	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	88-75-5	2-Nitrophenol	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	105-67-9	2,4-Dimethylphenol	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	111-91-1	Bis(2-Chloroethoxy)methane	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	120-83-2	2,4-Dichlorophenol	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	91-20-3	Naphthalene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	106-47-8	4-Chloroaniline	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	87-68-3	Hexachlorobutadiene	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	105-60-2	Caprolactam	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	59-50-7	4-Chloro-3-methylphenol	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	91-57-6	2-Methylnaphthalene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	77-47-4	Hexachlorocyclopentadiene	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	88-06-2	2,4,6-Trichlorophenol	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	95-95-4	2,4,5-Trichlorophenol	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	92-52-4	1,1-Biphenyl	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	91-58-7	2-Chloronaphthalene	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	88-74-4	2-Nitroaniline	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	131-11-3	Dimethylphthalate	240		ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	606-20-2	2,6-Dinitrotoluene	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	208-96-8	Acenaphthylene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	99-09-2	3-Nitroaniline	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM

48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	83-32-9	Acenaphthene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	51-28-5	2,4-Dinitrophenol	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	100-02-7	4-Nitrophenol	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	132-64-9	Dibenzofuran	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	121-14-2	2,4-Dinitrotoluene	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	84-66-2	Diethylphthalate	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	86-73-7	Fluorene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	7005-72-3	4-Chlorophenyl-phenylether	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	100-01-6	4-Nitroaniline	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	534-52-1	4,6-Dinitro-2-methylphenol	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	86-30-6	N-Nitrosodiphenylamine	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	95-94-3	1,2,4,5-Tetrachlorobenzene	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	101-55-3	4-Bromophenyl-phenylether	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	118-74-1	Hexachlorobenzene	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	1912-24-9	Atrazine	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	87-86-5	Pentachlorophenol	410	U *	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	85-01-8	Phenanthrene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	120-12-7	Anthracene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	86-74-8	Carbazole	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	84-74-2	Di-n-butylphthalate	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	206-44-0	Fluoranthene	410	U *	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	129-00-0	Pyrene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	85-68-7	Butylbenzylphthalate	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	91-94-1	3,3-Dichlorobenzidine	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	56-55-3	Benzo(a)anthracene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	218-01-9	Chrysene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	117-81-7	Bis(2-ethylhexyl)phthalate	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	117-84-0	Di-n-octyl phthalate	410	U	ug/kg	410	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	205-99-2	Benzo(b)fluoranthene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	207-08-9	Benzo(k)fluoranthene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	50-32-8	Benzo(a)pyrene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	193-39-5	Indeno(1,2,3-cd)pyrene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	53-70-3	Dibenzo(a,h)anthracene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	191-24-2	Benzo(g,h,i)perylene	210	U *	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60	J6227-13	S	12/12/2018	20:52:00	58-90-2	2,3,4,6-Tetrachlorophenol	210	U	ug/kg	210	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	91-20-3	Naphthalene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	91-57-6	2-Methylnaphthalene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	208-96-8	Acenaphthylene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	83-32-9	Acenaphthene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	86-73-7	Fluorene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	87-86-5	Pentachlorophenol	8.3	U	ug/kg	8.3	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	85-01-8	Phenanthrene	1.4	LJ	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	120-12-7	Anthracene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	206-44-0	Fluoranthene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	129-00-0	Pyrene	1.7	LJ	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	56-55-3	Benzo(a)anthracene	0.91	LJ	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	218-01-9	Chrysene	1.3	LJ	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	205-99-2	Benzo(b)fluoranthene	0.95	LJ	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	207-08-9	Benzo(k)fluoranthene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	50-32-8	Benzo(a)pyrene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	193-39-5	Indeno(1,2,3-cd)pyrene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	53-70-3	Dibenzo(a,h)anthracene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E60(SIM)	J6227-13	S	12/07/2018	04:44:00	191-24-2	Benzo(g,h,i)perylene	4.1	U	ug/kg	4.1	12/03/2018	ETF-SB-147-0.5	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	123-91-1	1,4-Dioxane	79	U	ug/kg	79	12/03/2018	ETF-SB-147-2.0	S4VEM

48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	100-52-7	Benzaldehyde	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	108-95-2	Phenol	240	LJ	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	111-44-4	Bis(2-Chloroethyl)ether	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	95-57-8	2-Chlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	95-48-7	2-Methylphenol	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	108-60-1	2,2-oxybis(1-Chloropropane)	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	98-86-2	Acetophenone	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	106-44-5	4-Methylphenol	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	621-64-7	N-Nitroso-di-n-propylamine	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	67-72-1	Hexachloroethane	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	98-95-3	Nitrobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	78-59-1	Isophorone	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	88-75-5	2-Nitrophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	105-67-9	2,4-Dimethylphenol	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	111-91-1	Bis(2-Chloroethoxy)methane	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	120-83-2	2,4-Dichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	91-20-3	Naphthalene	200	U *	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	106-47-8	4-Chloroaniline	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	87-68-3	Hexachlorobutadiene	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	105-60-2	Caprolactam	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	59-50-7	4-Chloro-3-methylphenol	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	91-57-6	2-Methylnaphthalene	200	U *	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	77-47-4	Hexachlorocyclopentadiene	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	88-06-2	2,4,6-Trichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	95-95-4	2,4,5-Trichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	92-52-4	1,1-Biphenyl	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	91-58-7	2-Chloronaphthalene	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	88-74-4	2-Nitroaniline	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	131-11-3	Dimethylphthalate	380		ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	606-20-2	2,6-Dinitrotoluene	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	208-96-8	Acenaphthylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	99-09-2	3-Nitroaniline	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	83-32-9	Acenaphthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	51-28-5	2,4-Dinitrophenol	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	100-02-7	4-Nitrophenol	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	132-64-9	Dibenzofuran	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	121-14-2	2,4-Dinitrotoluene	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	84-66-2	Diethylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	86-73-7	Fluorene	200	U *	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	7005-72-3	4-Chlorophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	100-01-6	4-Nitroaniline	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	534-52-1	4,6-Dinitro-2-methylphenol	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	86-30-6	N-Nitrosodiphenylamine	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	95-94-3	1,2,4,5-Tetrachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	101-55-3	4-Bromophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	118-74-1	Hexachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	1912-24-9	Atrazine	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	87-86-5	Pentachlorophenol	390	U *	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	85-01-8	Phenanthrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	120-12-7	Anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	86-74-8	Carbazole	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	84-74-2	Di-n-butylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	206-44-0	Fluoranthene	390	U *	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	129-00-0	Pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM

48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	85-68-7	Butylbenzylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	91-94-1	3,3-Dichlorobenzidine	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	56-55-3	Benzo(a)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	218-01-9	Chrysene	200	U *	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	117-81-7	Bis(2-ethylhexyl)phthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	117-84-0	Di-n-octyl phthalate	390	U	ug/kg	390	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	205-99-2	Benzo(b)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	207-08-9	Benzo(k)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	50-32-8	Benzo(a)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	193-39-5	Indeno(1,2,3-cd)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	53-70-3	Dibenzo(a,h)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	191-24-2	Benzo(g,h,i)perylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61	J6227-14	S	12/12/2018	21:28:00	58-90-2	2,3,4,6-Tetrachlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	91-20-3	Naphthalene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	91-57-6	2-Methylnaphthalene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	208-96-8	Acenaphthylene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	83-32-9	Acenaphthene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	86-73-7	Fluorene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	87-86-5	Pentachlorophenol	7.9	U	ug/kg	7.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	85-01-8	Phenanthrene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	120-12-7	Anthracene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	206-44-0	Fluoranthene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	129-00-0	Pyrene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	56-55-3	Benzo(a)anthracene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	218-01-9	Chrysene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	205-99-2	Benzo(b)fluoranthene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	207-08-9	Benzo(k)fluoranthene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	50-32-8	Benzo(a)pyrene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	53-70-3	Dibenzo(a,h)anthracene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E61(SIM)	J6227-14	S	12/07/2018	05:19:00	191-24-2	Benzo(g,h,i)perylene	3.9	U	ug/kg	3.9	12/03/2018	ETF-SB-147-2.0	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	123-91-1	1,4-Dioxane	76	U	ug/kg	76	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	100-52-7	Benzaldehyde	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	108-95-2	Phenol	130	LJ	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	111-44-4	Bis(2-Chloroethyl)ether	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	95-48-7	2-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	108-60-1	2,2-oxybis(1-Chloropropane)	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	98-86-2	Acetophenone	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	106-44-5	4-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	106-47-8	4-Chloroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	105-60-2	Caprolactam	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM

48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	77-47-4	Hexachlorocyclopentadiene	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	131-11-3	Dimethylphthalate	210		ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	99-09-2	3-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	51-28-5	2,4-Dinitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	100-02-7	4-Nitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	100-01-6	4-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	534-52-1	4,6-Dinitro-2-methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	1912-24-9	Atrazine	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	87-86-5	Pentachlorophenol	370	U *	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	86-74-8	Carbazole	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	206-44-0	Fluoranthene	370	U *	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	91-94-1	3,3-Dichlorobenzidine	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	117-84-0	Di-n-octyl phthalate	370	U	ug/kg	370	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62	J6227-17	S	12/12/2018	22:04:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	91-20-3	Naphthalene	0.81	LJ	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	91-57-6	2-Methylnaphthalene	1.8	LJ	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	208-96-8	Acenaphthylene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	83-32-9	Acenaphthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	86-73-7	Fluorene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	87-86-5	Pentachlorophenol	7.6	U	ug/kg	7.6	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	85-01-8	Phenanthrene	16		ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	120-12-7	Anthracene	0.98	LJ	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	206-44-0	Fluoranthene	2.8	LJ	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM

48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	129-00-0	Pyrene	16		ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	56-55-3	Benzo(a)anthracene	7.7		ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	218-01-9	Chrysene	13		ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	205-99-2	Benzo(b)fluoranthene	3.5	LJ	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	207-08-9	Benzo(k)fluoranthene	0.83	LJ	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	50-32-8	Benzo(a)pyrene	4.5		ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	193-39-5	Indeno(1,2,3-cd)pyrene	1.5	LJ	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	53-70-3	Dibenzo(a,h)anthracene	1.5	LJ	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E62(SIM)	J6227-17	S	12/07/2018	05:54:00	191-24-2	Benzo(g,h,i)perylene	3.3	LJ	ug/kg	3.7	12/03/2018	ETF-SB-148-0.5	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	123-91-1	1,4-Dioxane	76	U	ug/kg	76	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	100-52-7	Benzaldehyde	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	108-95-2	Phenol	260	LJ	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	111-44-4	Bis(2-Chloroethyl)ether	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	95-48-7	2-Methylphenol	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	108-60-1	2,2-oxybis(1-Chloropropane)	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	98-86-2	Acetophenone	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	106-44-5	4-Methylphenol	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	106-47-8	4-Chloroaniline	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	105-60-2	Caprolactam	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	77-47-4	Hexachlorocyclopentadiene	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	131-11-3	Dimethylphthalate	400		ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	99-09-2	3-Nitroaniline	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	51-28-5	2,4-Dinitrophenol	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	100-02-7	4-Nitrophenol	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	100-01-6	4-Nitroaniline	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	534-52-1	4,6-Dinitro-2-methylphenol	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM

48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	1912-24-9	Atrazine	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	87-86-5	Pentachlorophenol	380	U *	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	86-74-8	Carbazole	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	206-44-0	Fluoranthene	380	U *	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	91-94-1	3,3-Dichlorobenzidine	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	117-84-0	Di-n-octyl phthalate	380	U	ug/kg	380	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63	J6227-18	S	12/12/2018	22:40:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	91-20-3	Naphthalene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	91-57-6	2-Methylnaphthalene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	208-96-8	Acenaphthylene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	83-32-9	Acenaphthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	86-73-7	Fluorene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	87-86-5	Pentachlorophenol	7.6	U	ug/kg	7.6	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	85-01-8	Phenanthrene	1.6	LJ	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	120-12-7	Anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	206-44-0	Fluoranthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	129-00-0	Pyrene	1.4	LJ	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	56-55-3	Benzo(a)anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	218-01-9	Chrysene	1.2	LJ	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	205-99-2	Benzo(b)fluoranthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	207-08-9	Benzo(k)fluoranthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	50-32-8	Benzo(a)pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	53-70-3	Dibenzo(a,h)anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E63(SIM)	J6227-18	S	12/07/2018	06:29:00	191-24-2	Benzo(g,h,i)perylene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-148-2.0	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	123-91-1	1,4-Dioxane	78	U	ug/kg	78	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	100-52-7	Benzaldehyde	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	108-95-2	Phenol	100	LJ	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	111-44-4	Bis(2-Chloroethyl)ether	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	95-57-8	2-Chlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	95-48-7	2-Methylphenol	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	108-60-1	2,2-oxybis(1-Chloropropane)	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	98-86-2	Acetophenone	390	UJ	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	106-44-5	4-Methylphenol	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	621-64-7	N-Nitroso-di-n-propylamine	200	UJ	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	67-72-1	Hexachloroethane	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	98-95-3	Nitrobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	78-59-1	Isophorone	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM

48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	88-75-5	2-Nitrophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	105-67-9	2,4-Dimethylphenol	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	111-91-1	Bis(2-Chloroethoxy)methane	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	120-83-2	2,4-Dichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	91-20-3	Naphthalene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	106-47-8	4-Chloroaniline	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	87-68-3	Hexachlorobutadiene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	105-60-2	Caprolactam	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	59-50-7	4-Chloro-3-methylphenol	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	91-57-6	2-Methylnaphthalene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	77-47-4	Hexachlorocyclopentadiene	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	88-06-2	2,4,6-Trichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	95-95-4	2,4,5-Trichlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	92-52-4	1,1-Biphenyl	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	91-58-7	2-Chloronaphthalene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	88-74-4	2-Nitroaniline	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	131-11-3	Dimethylphthalate	150	LJ	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	606-20-2	2,6-Dinitrotoluene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	208-96-8	Acenaphthylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	99-09-2	3-Nitroaniline	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	83-32-9	Acenaphthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	51-28-5	2,4-Dinitrophenol	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	100-02-7	4-Nitrophenol	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	132-64-9	Dibenzofuran	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	121-14-2	2,4-Dinitrotoluene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	84-66-2	Diethylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	86-73-7	Fluorene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	7005-72-3	4-Chlorophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	100-01-6	4-Nitroaniline	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	534-52-1	4,6-Dinitro-2-methylphenol	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	86-30-6	N-Nitrosodiphenylamine	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	95-94-3	1,2,4,5-Tetrachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	101-55-3	4-Bromophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	118-74-1	Hexachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	1912-24-9	Atrazine	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	87-86-5	Pentachlorophenol	390	U *	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	85-01-8	Phenanthrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	120-12-7	Anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	86-74-8	Carbazole	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	84-74-2	Di-n-butylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	206-44-0	Fluoranthene	390	U *	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	129-00-0	Pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	85-68-7	Butylbenzylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	91-94-1	3,3-Dichlorobenzidine	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	56-55-3	Benzo(a)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	218-01-9	Chrysene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	117-81-7	Bis(2-ethylhexyl)phthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	117-84-0	Di-n-octyl phthalate	390	U	ug/kg	390	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	205-99-2	Benzo(b)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	207-08-9	Benzo(k)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	50-32-8	Benzo(a)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	193-39-5	Indeno(1,2,3-cd)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	53-70-3	Dibenzo(a,h)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	191-24-2	Benzo(g,h,i)perylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM

48019	F9E54	F9E64	J6227-01	S	12/08/2018	11:46:00	58-90-2	2,3,4,6-Tetrachlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	91-20-3	Naphthalene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	91-57-6	2-Methylnaphthalene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	208-96-8	Acenaphthylene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	83-32-9	Acenaphthene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	86-73-7	Fluorene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	87-86-5	Pentachlorophenol	7.8	U		ug/kg	7.8	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	85-01-8	Phenanthrene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	120-12-7	Anthracene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	206-44-0	Fluoranthene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	129-00-0	Pyrene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	56-55-3	Benzo(a)anthracene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	218-01-9	Chrysene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	205-99-2	Benzo(b)fluoranthene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	207-08-9	Benzo(k)fluoranthene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	50-32-8	Benzo(a)pyrene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	53-70-3	Dibenzo(a,h)anthracene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E64(SIM)	J6227-01	S	12/06/2018	21:09:00	191-24-2	Benzo(g,h,i)perylene	3.9	U		ug/kg	3.9	12/03/2018	ETF-SB-149-0.5	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	123-91-1	1,4-Dioxane	77	U		ug/kg	77	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	100-52-7	Benzaldehyde	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	108-95-2	Phenol	110		LJ	ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	111-44-4	Bis(2-Chloroethyl)ether	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	95-57-8	2-Chlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	95-48-7	2-Methylphenol	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	108-60-1	2,2-oxybis(1-Chloropropane)	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	98-86-2	Acetophenone	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	106-44-5	4-Methylphenol	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	621-64-7	N-Nitroso-di-n-propylamine	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	67-72-1	Hexachloroethane	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	98-95-3	Nitrobenzene	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	78-59-1	Isophorone	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	88-75-5	2-Nitrophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	105-67-9	2,4-Dimethylphenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	111-91-1	Bis(2-Chloroethoxy)methane	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	120-83-2	2,4-Dichlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	91-20-3	Naphthalene	200	U *		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	106-47-8	4-Chloroaniline	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	87-68-3	Hexachlorobutadiene	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	105-60-2	Caprolactam	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	59-50-7	4-Chloro-3-methylphenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	91-57-6	2-Methylnaphthalene	200	U *		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	77-47-4	Hexachlorocyclopentadiene	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	88-06-2	2,4,6-Trichlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	95-95-4	2,4,5-Trichlorophenol	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	92-52-4	1,1-Biphenyl	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	91-58-7	2-Chloronaphthalene	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	88-74-4	2-Nitroaniline	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	131-11-3	Dimethylphthalate	160		LJ	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	606-20-2	2,6-Dinitrotoluene	200	U		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	208-96-8	Acenaphthylene	200	U *		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	99-09-2	3-Nitroaniline	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	83-32-9	Acenaphthene	200	U *		ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	51-28-5	2,4-Dinitrophenol	380	U		ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM

48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	100-02-7	4-Nitrophenol	380	U	ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	132-64-9	Dibenzofuran	200	U	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	121-14-2	2,4-Dinitrotoluene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	84-66-2	Diethylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	86-73-7	Fluorene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	7005-72-3	4-Chlorophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	100-01-6	4-Nitroaniline	380	U	ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	534-52-1	4,6-Dinitro-2-methylphenol	380	U	ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	86-30-6	N-Nitrosodiphenylamine	200	U	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	95-94-3	1,2,4,5-Tetrachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	101-55-3	4-Bromophenyl-phenylether	200	U	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	118-74-1	Hexachlorobenzene	200	U	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	1912-24-9	Atrazine	380	U	ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	87-86-5	Pentachlorophenol	380	U *	ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	85-01-8	Phenanthrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	120-12-7	Anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	86-74-8	Carbazole	380	U	ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	84-74-2	Di-n-butylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	206-44-0	Fluoranthene	380	U *	ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	129-00-0	Pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	85-68-7	Butylbenzylphthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	91-94-1	3,3-Dichlorobenzidine	380	U	ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	56-55-3	Benzo(a)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	218-01-9	Chrysene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	117-81-7	Bis(2-ethylhexyl)phthalate	200	U	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	117-84-0	Di-n-octyl phthalate	380	U	ug/kg	380	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	205-99-2	Benzo(b)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	207-08-9	Benzo(k)fluoranthene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	50-32-8	Benzo(a)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	193-39-5	Indeno(1,2,3-cd)pyrene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	53-70-3	Dibenzo(a,h)anthracene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	191-24-2	Benzo(g,h,i)perylene	200	U *	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65	J6227-02	S	12/12/2018	16:02:00	58-90-2	2,3,4,6-Tetrachlorophenol	200	U	ug/kg	200	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	91-20-3	Naphthalene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	91-57-6	2-Methylnaphthalene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	208-96-8	Acenaphthylene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	83-32-9	Acenaphthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	86-73-7	Fluorene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	87-86-5	Pentachlorophenol	7.7	U	ug/kg	7.7	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	85-01-8	Phenanthrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	120-12-7	Anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	206-44-0	Fluoranthene	0.80	LJ	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	129-00-0	Pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	56-55-3	Benzo(a)anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	218-01-9	Chrysene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	205-99-2	Benzo(b)fluoranthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	207-08-9	Benzo(k)fluoranthene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	50-32-8	Benzo(a)pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	53-70-3	Dibenzo(a,h)anthracene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E65(SIM)	J6227-02	S	12/07/2018	00:05:00	191-24-2	Benzo(g,h,i)perylene	3.8	U	ug/kg	3.8	12/03/2018	ETF-SB-149-2.0	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	123-91-1	1,4-Dioxane	73	U	ug/kg	73	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	100-52-7	Benzaldehyde	360	U	ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	108-95-2	Phenol	140	LJ	ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM

48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	111-44-4	Bis(2-Chloroethyl)ether	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	95-57-8	2-Chlorophenol	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	95-48-7	2-Methylphenol	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	108-60-1	2,2-oxybis(1-Chloropropane)	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	98-86-2	Acetophenone	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	106-44-5	4-Methylphenol	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	621-64-7	N-Nitroso-di-n-propylamine	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	67-72-1	Hexachloroethane	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	98-95-3	Nitrobenzene	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	78-59-1	Isophorone	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	88-75-5	2-Nitrophenol	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	105-67-9	2,4-Dimethylphenol	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	111-91-1	Bis(2-Chloroethoxy)methane	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	120-83-2	2,4-Dichlorophenol	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	91-20-3	Naphthalene	180	U	*	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	106-47-8	4-Chloroaniline	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	87-68-3	Hexachlorobutadiene	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	105-60-2	Caprolactam	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	59-50-7	4-Chloro-3-methylphenol	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	91-57-6	2-Methylnaphthalene	180	U	*	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	77-47-4	Hexachlorocyclopentadiene	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	88-06-2	2,4,6-Trichlorophenol	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	95-95-4	2,4,5-Trichlorophenol	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	92-52-4	1,1-Biphenyl	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	91-58-7	2-Chloronaphthalene	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	88-74-4	2-Nitroaniline	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	131-11-3	Dimethylphthalate	140	LJ		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	606-20-2	2,6-Dinitrotoluene	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	208-96-8	Acenaphthylene	180	U	*	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	99-09-2	3-Nitroaniline	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	83-32-9	Acenaphthene	180	U	*	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	51-28-5	2,4-Dinitrophenol	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	100-02-7	4-Nitrophenol	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	132-64-9	Dibenzofuran	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	121-14-2	2,4-Dinitrotoluene	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	84-66-2	Diethylphthalate	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	86-73-7	Fluorene	180	U	*	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	7005-72-3	4-Chlorophenyl-phenylether	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	100-01-6	4-Nitroaniline	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	534-52-1	4,6-Dinitro-2-methylphenol	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	86-30-6	N-Nitrosodiphenylamine	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	95-94-3	1,2,4,5-Tetrachlorobenzene	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	101-55-3	4-Bromophenyl-phenylether	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	118-74-1	Hexachlorobenzene	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	1912-24-9	Atrazine	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	87-86-5	Pentachlorophenol	360	U	*	ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	85-01-8	Phenanthrene	180	U	*	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	120-12-7	Anthracene	180	U	*	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	86-74-8	Carbazole	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	84-74-2	Di-n-butylphthalate	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	206-44-0	Fluoranthene	360	U	*	ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	129-00-0	Pyrene	180	U	*	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	85-68-7	Butylbenzylphthalate	180	U		ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	91-94-1	3,3-Dichlorobenzidine	360	U		ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM

48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	56-55-3	Benzo(a)anthracene	180	U *	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	218-01-9	Chrysene	180	U *	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	117-81-7	Bis(2-ethylhexyl)phthalate	180	U	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	117-84-0	Di-n-octyl phthalate	360	U	ug/kg	360	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	205-99-2	Benzo(b)fluoranthene	180	U *	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	207-08-9	Benzo(k)fluoranthene	180	U *	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	50-32-8	Benzo(a)pyrene	180	U *	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	193-39-5	Indeno(1,2,3-cd)pyrene	180	U *	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	53-70-3	Dibenzo(a,h)anthracene	180	U *	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	191-24-2	Benzo(g,h,i)perylene	180	U *	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66	J6227-03	S	12/13/2018	04:07:00	58-90-2	2,3,4,6-Tetrachlorophenol	180	U	ug/kg	180	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	91-20-3	Naphthalene	1.6	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	91-57-6	2-Methylnaphthalene	4.0		ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	208-96-8	Acenaphthylene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	83-32-9	Acenaphthene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	86-73-7	Fluorene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	87-86-5	Pentachlorophenol	7.3	U	ug/kg	7.3	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	85-01-8	Phenanthrene	4.9		ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	120-12-7	Anthracene	1.0	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	206-44-0	Fluoranthene	3.4	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	129-00-0	Pyrene	5.6		ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	56-55-3	Benzo(a)anthracene	2.7	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	218-01-9	Chrysene	3.4	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	205-99-2	Benzo(b)fluoranthene	3.7		ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	207-08-9	Benzo(k)fluoranthene	1.3	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	50-32-8	Benzo(a)pyrene	3.0	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	193-39-5	Indeno(1,2,3-cd)pyrene	2.1	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	53-70-3	Dibenzo(a,h)anthracene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E66(SIM)	J6227-03	S	12/15/2018	12:09:00	191-24-2	Benzo(g,h,i)perylene	3.1	LJ	ug/kg	3.6	12/03/2018	ETF-SB-150-0.5	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	123-91-1	1,4-Dioxane	75	U	ug/kg	75	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	100-52-7	Benzaldehyde	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	108-95-2	Phenol	100	LJ	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	111-44-4	Bis(2-Chloroethyl)ether	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	95-48-7	2-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	108-60-1	2,2-oxybis(1-Chloropropane)	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	98-86-2	Acetophenone	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	106-44-5	4-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	106-47-8	4-Chloroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	105-60-2	Caprolactam	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	77-47-4	Hexachlorocyclopentadiene	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM

48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	131-11-3	Dimethylphthalate	110	LJ	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	99-09-2	3-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	51-28-5	2,4-Dinitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	100-02-7	4-Nitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	100-01-6	4-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	534-52-1	4,6-Dinitro-2-methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	1912-24-9	Atrazine	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	87-86-5	Pentachlorophenol	370	U *	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	86-74-8	Carbazole	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	206-44-0	Fluoranthene	370	U *	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	91-94-1	3,3-Dichlorobenzidine	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	117-84-0	Di-n-octyl phthalate	370	U	ug/kg	370	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67	J6227-04	S	12/13/2018	03:31:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	91-20-3	Naphthalene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	91-57-6	2-Methylnaphthalene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	208-96-8	Acenaphthylene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	83-32-9	Acenaphthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	86-73-7	Fluorene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	87-86-5	Pentachlorophenol	7.5	U	ug/kg	7.5	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	85-01-8	Phenanthrene	1.1	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	120-12-7	Anthracene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	206-44-0	Fluoranthene	1.2	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	129-00-0	Pyrene	1.2	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	56-55-3	Benzo(a)anthracene	0.83	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM

48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	218-01-9	Chrysene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	205-99-2	Benzo(b)fluoranthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	207-08-9	Benzo(k)fluoranthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	50-32-8	Benzo(a)pyrene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	53-70-3	Dibenzo(a,h)anthracene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E67(SIM)	J6227-04	S	12/15/2018	13:20:00	191-24-2	Benzo(g,h,i)perylene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-2.0	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	123-91-1	1,4-Dioxane	74	U	ug/kg	74	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	100-52-7	Benzaldehyde	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	108-95-2	Phenol	140	LJ	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	111-44-4	Bis(2-Chloroethyl)ether	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	95-48-7	2-Methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	108-60-1	2,2-oxybis(1-Chloropropane)	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	98-86-2	Acetophenone	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	106-44-5	4-Methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	106-47-8	4-Chloroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	105-60-2	Caprolactam	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	77-47-4	Hexachlorocyclopentadiene	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	131-11-3	Dimethylphthalate	230		ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	99-09-2	3-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	51-28-5	2,4-Dinitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	100-02-7	4-Nitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	100-01-6	4-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	534-52-1	4,6-Dinitro-2-methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM

48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	1912-24-9	Atrazine	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	87-86-5	Pentachlorophenol	360	U *	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	86-74-8	Carbazole	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	206-44-0	Fluoranthene	360	U *	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	91-94-1	3,3-Dichlorobenzidine	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	117-84-0	Di-n-octyl phthalate	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68	J6227-19	S	12/13/2018	01:43:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	91-20-3	Naphthalene	3.4	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	91-57-6	2-Methylnaphthalene	9.9		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	208-96-8	Acenaphthylene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	83-32-9	Acenaphthene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	86-73-7	Fluorene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	87-86-5	Pentachlorophenol	7.4	U	ug/kg	7.4	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	85-01-8	Phenanthrene	14		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	120-12-7	Anthracene	3.3	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	206-44-0	Fluoranthene	3.2	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	129-00-0	Pyrene	14		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	56-55-3	Benzo(a)anthracene	6.0		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	218-01-9	Chrysene	10		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	205-99-2	Benzo(b)fluoranthene	2.9	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	207-08-9	Benzo(k)fluoranthene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	50-32-8	Benzo(a)pyrene	3.5	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	193-39-5	Indeno(1,2,3-cd)pyrene	2.1	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	53-70-3	Dibenzo(a,h)anthracene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E68(SIM)	J6227-19	S	12/15/2018	16:52:00	191-24-2	Benzo(g,h,i)perylene	5.3		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	123-91-1	1,4-Dioxane	74	U	ug/kg	74	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	100-52-7	Benzaldehyde	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	108-95-2	Phenol	150	LJ	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	111-44-4	Bis(2-Chloroethyl)ether	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	95-48-7	2-Methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	108-60-1	2,2-oxybis(1-Chloropropane)	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	98-86-2	Acetophenone	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	106-44-5	4-Methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM

48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	106-47-8	4-Chloroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	105-60-2	Caprolactam	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	77-47-4	Hexachlorocyclopentadiene	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	131-11-3	Dimethylphthalate	240		ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	99-09-2	3-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	51-28-5	2,4-Dinitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	100-02-7	4-Nitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	100-01-6	4-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	534-52-1	4,6-Dinitro-2-methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	1912-24-9	Atrazine	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	87-86-5	Pentachlorophenol	360	U *	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	86-74-8	Carbazole	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	206-44-0	Fluoranthene	360	U *	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	91-94-1	3,3-Dichlorobenzidine	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	117-84-0	Di-n-octyl phthalate	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69	J6227-20	S	12/13/2018	02:19:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	91-20-3	Naphthalene	1.5	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM

48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	91-57-6	2-Methylnaphthalene	4.5		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	208-96-8	Acenaphthylene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	83-32-9	Acenaphthene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	86-73-7	Fluorene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	87-86-5	Pentachlorophenol	7.4	U	ug/kg	7.4	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	85-01-8	Phenanthrene	9.8		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	120-12-7	Anthracene	1.9	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	206-44-0	Fluoranthene	2.5	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	129-00-0	Pyrene	8.6		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	56-55-3	Benzo(a)anthracene	4.8		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	218-01-9	Chrysene	7.3		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	205-99-2	Benzo(b)fluoranthene	2.5	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	207-08-9	Benzo(k)fluoranthene	0.92	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	50-32-8	Benzo(a)pyrene	2.7	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	193-39-5	Indeno(1,2,3-cd)pyrene	1.5	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	53-70-3	Dibenzo(a,h)anthracene	1.2	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E69(SIM)	J6227-20	S	12/15/2018	19:14:00	191-24-2	Benzo(g,h,i)perylene	2.9	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	123-91-1	1,4-Dioxane	75	U	ug/kg	75	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	100-52-7	Benzaldehyde	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	108-95-2	Phenol	110	LJ	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	111-44-4	Bis(2-Chloroethyl)ether	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	95-48-7	2-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	108-60-1	2,2-oxybis(1-Chloropropane)	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	98-86-2	Acetophenone	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	106-44-5	4-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	106-47-8	4-Chloroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	105-60-2	Caprolactam	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	77-47-4	Hexachlorocyclopentadiene	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	131-11-3	Dimethylphthalate	170	LJ	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	99-09-2	3-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	51-28-5	2,4-Dinitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	100-02-7	4-Nitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM

48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	100-01-6	4-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	534-52-1	4,6-Dinitro-2-methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	1912-24-9	Atrazine	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	87-86-5	Pentachlorophenol	370	U *	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	86-74-8	Carbazole	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	206-44-0	Fluoranthene	370	U *	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	91-94-1	3,3-Dichlorobenzidine	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	117-84-0	Di-n-octyl phthalate	370	U	ug/kg	370	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74	J6227-05	S	12/12/2018	16:38:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	91-20-3	Naphthalene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	91-57-6	2-Methylnaphthalene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	208-96-8	Acenaphthylene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	83-32-9	Acenaphthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	86-73-7	Fluorene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	87-86-5	Pentachlorophenol	7.5	U	ug/kg	7.5	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	85-01-8	Phenanthrene	4.4		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	120-12-7	Anthracene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	206-44-0	Fluoranthene	3.3	LJ	ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	129-00-0	Pyrene	5.0		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	56-55-3	Benzo(a)anthracene	3.1	LJ	ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	218-01-9	Chrysene	3.9		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	205-99-2	Benzo(b)fluoranthene	3.7		ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	207-08-9	Benzo(k)fluoranthene	1.3	LJ	ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	50-32-8	Benzo(a)pyrene	2.1	LJ	ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	193-39-5	Indeno(1,2,3-cd)pyrene	1.4	LJ	ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	53-70-3	Dibenzo(a,h)anthracene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E74(SIM)	J6227-05	S	12/07/2018	00:40:00	191-24-2	Benzo(g,h,i)perylene	1.3	LJ	ug/kg	3.7	12/03/2018	ETF-SB-154-0.5	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	123-91-1	1,4-Dioxane	76	U	ug/kg	76	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	100-52-7	Benzaldehyde	370	U	ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	108-95-2	Phenol	120	LJ	ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	111-44-4	Bis(2-Chloroethyl)ether	370	U	ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM

48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	95-48-7	2-Methylphenol	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	108-60-1	2,2-oxybis(1-Chloropropane)	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	98-86-2	Acetophenone	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	106-44-5	4-Methylphenol	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	621-64-7	N-Nitroso-di-n-propylamine	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	67-72-1	Hexachloroethane	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	98-95-3	Nitrobenzene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	78-59-1	Isophorone	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	88-75-5	2-Nitrophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	105-67-9	2,4-Dimethylphenol	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	120-83-2	2,4-Dichlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	91-20-3	Naphthalene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	106-47-8	4-Chloroaniline	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	87-68-3	Hexachlorobutadiene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	105-60-2	Caprolactam	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	59-50-7	4-Chloro-3-methylphenol	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	91-57-6	2-Methylnaphthalene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	77-47-4	Hexachlorocyclopentadiene	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	88-06-2	2,4,6-Trichlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	95-95-4	2,4,5-Trichlorophenol	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	92-52-4	1,1-Biphenyl	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	91-58-7	2-Chloronaphthalene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	88-74-4	2-Nitroaniline	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	131-11-3	Dimethylphthalate	130	LJ		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	606-20-2	2,6-Dinitrotoluene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	208-96-8	Acenaphthylene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	99-09-2	3-Nitroaniline	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	83-32-9	Acenaphthene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	51-28-5	2,4-Dinitrophenol	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	100-02-7	4-Nitrophenol	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	132-64-9	Dibenzofuran	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	121-14-2	2,4-Dinitrotoluene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	84-66-2	Diethylphthalate	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	86-73-7	Fluorene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	7005-72-3	4-Chlorophenyl-phenylether	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	100-01-6	4-Nitroaniline	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	534-52-1	4,6-Dinitro-2-methylphenol	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	86-30-6	N-Nitrosodiphenylamine	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	101-55-3	4-Bromophenyl-phenylether	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	118-74-1	Hexachlorobenzene	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	1912-24-9	Atrazine	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	87-86-5	Pentachlorophenol	370	U	*	ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	85-01-8	Phenanthrene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	120-12-7	Anthracene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	86-74-8	Carbazole	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	84-74-2	Di-n-butylphthalate	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	206-44-0	Fluoranthene	370	U	*	ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	129-00-0	Pyrene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	85-68-7	Butylbenzylphthalate	190	U		ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	91-94-1	3,3-Dichlorobenzidine	370	U		ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	56-55-3	Benzo(a)anthracene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	218-01-9	Chrysene	190	U	*	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM

48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	117-84-0	Di-n-octyl phthalate	370	U	ug/kg	370	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75	J6227-06	S	12/12/2018	17:15:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	91-20-3	Naphthalene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	91-57-6	2-Methylnaphthalene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	208-96-8	Acenaphthylene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	83-32-9	Acenaphthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	86-73-7	Fluorene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	87-86-5	Pentachlorophenol	7.6	U	ug/kg	7.6	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	85-01-8	Phenanthrene	0.94	LJ	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	120-12-7	Anthracene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	206-44-0	Fluoranthene	0.94	LJ	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	129-00-0	Pyrene	1.4	LJ	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	56-55-3	Benzo(a)anthracene	0.83	LJ	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	218-01-9	Chrysene	1.1	LJ	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	205-99-2	Benzo(b)fluoranthene	1.3	LJ	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	207-08-9	Benzo(k)fluoranthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	50-32-8	Benzo(a)pyrene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	53-70-3	Dibenzo(a,h)anthracene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E75(SIM)	J6227-06	S	12/07/2018	01:15:00	191-24-2	Benzo(g,h,i)perylene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-154-2.0	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	123-91-1	1,4-Dioxane	73	U	ug/kg	73	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	100-52-7	Benzaldehyde	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	108-95-2	Phenol	120	LJ	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	111-44-4	Bis(2-Chloroethyl)ether	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	95-48-7	2-Methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	108-60-1	2,2-oxybis(1-Chloropropane)	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	98-86-2	Acetophenone	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	106-44-5	4-Methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	106-47-8	4-Chloroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	105-60-2	Caprolactam	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	77-47-4	Hexachlorocyclopentadiene	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM

48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	131-11-3	Dimethylphthalate	220		ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	99-09-2	3-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	51-28-5	2,4-Dinitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	100-02-7	4-Nitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	100-01-6	4-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	534-52-1	4,6-Dinitro-2-methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	1912-24-9	Atrazine	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	87-86-5	Pentachlorophenol	360	U *	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	86-74-8	Carbazole	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	206-44-0	Fluoranthene	360	U *	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	91-94-1	3,3-Dichlorobenzidine	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	117-84-0	Di-n-octyl phthalate	360	U	ug/kg	360	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80	J6227-07	S	12/12/2018	17:51:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	91-20-3	Naphthalene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	91-57-6	2-Methylnaphthalene	1.3	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	208-96-8	Acenaphthylene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	83-32-9	Acenaphthene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	86-73-7	Fluorene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	87-86-5	Pentachlorophenol	7.3	U	ug/kg	7.3	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	85-01-8	Phenanthrene	2.5	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	120-12-7	Anthracene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	206-44-0	Fluoranthene	2.5	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	129-00-0	Pyrene	3.4	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	56-55-3	Benzo(a)anthracene	1.8	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	218-01-9	Chrysene	2.3	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	205-99-2	Benzo(b)fluoranthene	2.4	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM

48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	207-08-9	Benzo(k)fluoranthene	0.84	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	50-32-8	Benzo(a)pyrene	1.4	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	193-39-5	Indeno(1,2,3-cd)pyrene	0.91	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	53-70-3	Dibenzo(a,h)anthracene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9E80(SIM)	J6227-07	S	12/07/2018	01:50:00	191-24-2	Benzo(g,h,i)perylene	1.0	LJ	ug/kg	3.6	12/03/2018	ETF-SB-157-0.5	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	123-91-1	1,4-Dioxane	75	U	ug/kg	75	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	100-52-7	Benzaldehyde	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	108-95-2	Phenol	140	LJ	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	111-44-4	Bis(2-Chloroethyl)ether	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	95-48-7	2-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	108-60-1	2,2-oxybis(1-Chloropropane)	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	98-86-2	Acetophenone	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	106-44-5	4-Methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	106-47-8	4-Chloroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	105-60-2	Caprolactam	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	77-47-4	Hexachlorocyclopentadiene	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	131-11-3	Dimethylphthalate	230		ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	99-09-2	3-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	51-28-5	2,4-Dinitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	100-02-7	4-Nitrophenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	100-01-6	4-Nitroaniline	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	534-52-1	4,6-Dinitro-2-methylphenol	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	1912-24-9	Atrazine	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	87-86-5	Pentachlorophenol	370	U *	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM

48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	86-74-8	Carbazole	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	206-44-0	Fluoranthene	370	U *	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	91-94-1	3,3-Dichlorobenzidine	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	117-84-0	Di-n-octyl phthalate	370	U	ug/kg	370	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33	J6227-08	S	12/13/2018	02:55:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	91-20-3	Naphthalene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	91-57-6	2-Methylnaphthalene	1.8	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	208-96-8	Acenaphthylene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	83-32-9	Acenaphthene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	86-73-7	Fluorene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	87-86-5	Pentachlorophenol	7.5	U	ug/kg	7.5	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	85-01-8	Phenanthrene	3.2	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	120-12-7	Anthracene	1.1	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	206-44-0	Fluoranthene	4.0		ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	129-00-0	Pyrene	5.1		ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	56-55-3	Benzo(a)anthracene	2.8	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	218-01-9	Chrysene	3.4	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	205-99-2	Benzo(b)fluoranthene	3.4	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	207-08-9	Benzo(k)fluoranthene	1.2	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	50-32-8	Benzo(a)pyrene	2.5	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	193-39-5	Indeno(1,2,3-cd)pyrene	1.5	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	53-70-3	Dibenzo(a,h)anthracene	3.7	U	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F33(SIM)	J6227-08	S	12/15/2018	14:31:00	191-24-2	Benzo(g,h,i)perylene	2.1	LJ	ug/kg	3.7	12/03/2018	ETF-SB-150-0.5-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	123-91-1	1,4-Dioxane	74	U	ug/kg	74	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	100-52-7	Benzaldehyde	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	108-95-2	Phenol	170	LJ	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	111-44-4	Bis(2-Chloroethyl)ether	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	95-48-7	2-Methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	108-60-1	2,2-oxybis(1-Chloropropane)	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	98-86-2	Acetophenone	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	106-44-5	4-Methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM

48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	106-47-8	4-Chloroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	105-60-2	Caprolactam	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	77-47-4	Hexachlorocyclopentadiene	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	131-11-3	Dimethylphthalate	250		ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	99-09-2	3-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	51-28-5	2,4-Dinitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	100-02-7	4-Nitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	100-01-6	4-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	534-52-1	4,6-Dinitro-2-methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	1912-24-9	Atrazine	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	87-86-5	Pentachlorophenol	360	U *	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	86-74-8	Carbazole	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	206-44-0	Fluoranthene	360	U *	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	91-94-1	3,3-Dichlorobenzidine	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	117-84-0	Di-n-octyl phthalate	360	U	ug/kg	360	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34	J6227-15	S	12/12/2018	23:16:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	91-20-3	Naphthalene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	91-57-6	2-Methylnaphthalene	1.9	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	208-96-8	Acenaphthylene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM

48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	83-32-9	Acenaphthene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	86-73-7	Fluorene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	87-86-5	Pentachlorophenol	7.4	U	ug/kg	7.4	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	85-01-8	Phenanthrene	3.9		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	120-12-7	Anthracene	0.88	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	206-44-0	Fluoranthene	1.2	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	129-00-0	Pyrene	3.6		ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	56-55-3	Benzo(a)anthracene	2.3	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	218-01-9	Chrysene	3.3	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	205-99-2	Benzo(b)fluoranthene	1.5	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	207-08-9	Benzo(k)fluoranthene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	50-32-8	Benzo(a)pyrene	1.7	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	193-39-5	Indeno(1,2,3-cd)pyrene	0.95	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	53-70-3	Dibenzo(a,h)anthracene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F34(SIM)	J6227-15	S	12/15/2018	10:24:00	191-24-2	Benzo(g,h,i)perylene	1.7	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-2.0-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	123-91-1	1,4-Dioxane	74	U	ug/kg	74	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	100-52-7	Benzaldehyde	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	108-95-2	Phenol	170	LJ	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	111-44-4	Bis(2-Chloroethyl)ether	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	95-57-8	2-Chlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	95-48-7	2-Methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	108-60-1	2,2-oxybis(1-Chloropropane)	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	98-86-2	Acetophenone	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	106-44-5	4-Methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	621-64-7	N-Nitroso-di-n-propylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	67-72-1	Hexachloroethane	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	98-95-3	Nitrobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	78-59-1	Isophorone	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	88-75-5	2-Nitrophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	105-67-9	2,4-Dimethylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	111-91-1	Bis(2-Chloroethoxy)methane	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	120-83-2	2,4-Dichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	91-20-3	Naphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	106-47-8	4-Chloroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	87-68-3	Hexachlorobutadiene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	105-60-2	Caprolactam	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	59-50-7	4-Chloro-3-methylphenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	91-57-6	2-Methylnaphthalene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	77-47-4	Hexachlorocyclopentadiene	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	88-06-2	2,4,6-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	95-95-4	2,4,5-Trichlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	92-52-4	1,1-Biphenyl	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	91-58-7	2-Chloronaphthalene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	88-74-4	2-Nitroaniline	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	131-11-3	Dimethylphthalate	250		ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	606-20-2	2,6-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	208-96-8	Acenaphthylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	99-09-2	3-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	83-32-9	Acenaphthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	51-28-5	2,4-Dinitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	100-02-7	4-Nitrophenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	132-64-9	Dibenzofuran	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	121-14-2	2,4-Dinitrotoluene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	84-66-2	Diethylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM

48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	86-73-7	Fluorene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	7005-72-3	4-Chlorophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	100-01-6	4-Nitroaniline	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	534-52-1	4,6-Dinitro-2-methylphenol	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	86-30-6	N-Nitrosodiphenylamine	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	101-55-3	4-Bromophenyl-phenylether	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	118-74-1	Hexachlorobenzene	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	1912-24-9	Atrazine	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	87-86-5	Pentachlorophenol	360	U *	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	85-01-8	Phenanthrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	120-12-7	Anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	86-74-8	Carbazole	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	84-74-2	Di-n-butylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	206-44-0	Fluoranthene	360	U *	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	129-00-0	Pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	85-68-7	Butylbenzylphthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	91-94-1	3,3-Dichlorobenzidine	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	56-55-3	Benzo(a)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	218-01-9	Chrysene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	117-81-7	Bis(2-ethylhexyl)phthalate	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	117-84-0	Di-n-octyl phthalate	360	U	ug/kg	360	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	205-99-2	Benzo(b)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	207-08-9	Benzo(k)fluoranthene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	50-32-8	Benzo(a)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	193-39-5	Indeno(1,2,3-cd)pyrene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	53-70-3	Dibenzo(a,h)anthracene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	191-24-2	Benzo(g,h,i)perylene	190	U *	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35	J6227-16	S	12/13/2018	04:43:00	58-90-2	2,3,4,6-Tetrachlorophenol	190	U	ug/kg	190	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	91-20-3	Naphthalene	4.6		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	91-57-6	2-Methylnaphthalene	15		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	208-96-8	Acenaphthylene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	83-32-9	Acenaphthene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	86-73-7	Fluorene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	87-86-5	Pentachlorophenol	7.4	U	ug/kg	7.4	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	85-01-8	Phenanthrene	22		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	120-12-7	Anthracene	21		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	206-44-0	Fluoranthene	5.0		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	129-00-0	Pyrene	31		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	56-55-3	Benzo(a)anthracene	7.7		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	218-01-9	Chrysene	13		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	205-99-2	Benzo(b)fluoranthene	3.8		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	207-08-9	Benzo(k)fluoranthene	3.6	U	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	50-32-8	Benzo(a)pyrene	5.2		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	193-39-5	Indeno(1,2,3-cd)pyrene	3.1	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	53-70-3	Dibenzo(a,h)anthracene	1.9	LJ	ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM
48019	F9E54	F9F35(SIM)	J6227-16	S	12/15/2018	15:42:00	191-24-2	Benzo(g,h,i)perylene	9.6		ug/kg	3.6	12/03/2018	ETF-SB-151-0.5-DUP	S4VEM

SDG COVER PAGE

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Cas No.: 48019 MA No. : SDG No.: F9E54

SOW No. : SOM02.4

EPA Sample No.	Lab Sample ID	Trace VOA	Low Med VOA	Analysis Method SVOA	SVOA SIM	PEST	ARO
F9E64	J6227-01			X	X		
F9E65	J6227-02			X	X		
F9E66	J6227-03			X	X		
F9E67	J6227-04			X	X		
F9E74	J6227-05			X	X		
F9E75	J6227-06			X	X		
F9E80	J6227-07			X	X		
F9F33	J6227-08			X	X		
F9E54	J6227-09			X	X		
F9E55	J6227-10			X	X		
F9E56	J6227-11			X	X		
F9E57	J6227-12			X	X		
F9E60	J6227-13			X	X		
F9E61	J6227-14			X	X		
F9F34	J6227-15			X	X		
F9F35	J6227-16			X	X		
F9E62	J6227-17			X	X		
F9E63	J6227-18			X	X		
F9E68	J6227-19			X	X		
F9E69	J6227-20			X	X		

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the SDG Narrative.Release of the data contained in this hardcopy data package and in the electronic data submitted has been authorized by the Laboratory Manager or the Manager's designee,as verified by the following signature.

Signature: Mildred V Reyes Name: Mildred V Reyes

Date: 12/21/18 Title: QA QC / DCO

SDG # F9E54

USEPA CLP COC (LAB COPY)

DateShipped: 12/3/2018
CarrierName: FedEx
AirbillNo: 7738 6628 2495

CHAIN OF CUSTODY RECORD

Case #: 48019
Cooler #:

No: 6-120318-135356-0003

Lab: Chemtech Consulting Group
Lab Contact: Snehal Mehta
Lab Phone: 908-789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
ETF-SB-149-0.5	F9E64	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1384 (Ice to 6C), 1385 (Ice to 6C) (2)	ETF-SB-149-0.5	12/03/2018 12:00	1
ETF-SB-149-2.0	F9E65	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1387 (Ice to 6C), 1388 (Ice to 6C) (2)	ETF-SB-149-2.0	12/03/2018 12:05	2
ETF-SB-150-0.5	F9E66	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1390 (Ice to 6C), 1391 (Ice to 6C) (2)	ETF-SB-150-0.5	12/03/2018 11:45	3
ETF-SB-150-2.0	F9E67	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1393 (Ice to 6C), 1394 (Ice to 6C) (2)	ETF-SB-150-2.0	12/03/2018 11:50	4
ETF-SB-154-0.5	F9E74	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1414 (Ice to 6C), 1415 (Ice to 6C) (2)	ETF-SB-154-0.5	12/03/2018 10:30	5
ETF-SB-154-2.0	F9E75	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1417 (Ice to 6C), 1418 (Ice to 6C) (2)	ETF-SB-154-2.0	12/03/2018 10:35	6
ETF-SB-157-0.5	F9E80	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1432 (Ice to 6C), 1433 (Ice to 6C) (2)	ETF-SB-157-0.5	12/03/2018 09:00	7
ETF-SB-150-0.5-DUP	F9F33	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1664 (Ice to 6C), 1665 (Ice to 6C) (2)	ETF-SB-150-0.5-DUP	12/03/2018 11:45	8

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: SVOA/PAHSIM =SVOA/PAHSIM by SOM02.4

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	[signature] EA	12/03/18 1800	FedEx	12/03/18 1800	
			[signature]	12:35 12-4-18	IR Gun #1 - 2.4

2

SDG # F9E54

USEPA CLP COC (LAB COPY)

DateShipped: 12/3/2018
CarrierName: FedEx
AirbillNo: 7738 6632 1029

CHAIN OF CUSTODY RECORD

Case #: 48019
Cooler #:

No: 6-120318-141135-0004

Lab: Chemtech Consulting Group
Lab Contact: Snehal Mehta
Lab Phone: 908-789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
ETF-SB-144-0.5	F9E54	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1354 (Ice to 6C), 1355 (Ice to 6C) (2)	ETF-SB-144-0.5	12/03/2018 13:20	NO TAGS on
ETF-SB-144-2.0	F9E55	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1357 (Ice to 6C), 1358 (Ice to 6C) (2)	ETF-SB-144-2.0	12/03/2018 13:25	
ETF-SB-145-0.5	F9E56	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1360 (Ice to 6C), 1361 (Ice to 6C) (2)	ETF-SB-145-0.5	12/03/2018 13:30	
ETF-SB-145-2.0	F9E57	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1363 (Ice to 6C), 1364 (Ice to 6C) (2)	ETF-SB-145-2.0	12/03/2018 13:35	
ETF-SB-147-0.5	F9E60	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1372 (Ice to 6C), 1373 (Ice to 6C) (2)	ETF-SB-147-0.5	12/03/2018 13:40	
ETF-SB-147-2.0	F9E61	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1375 (Ice to 6C), 1376 (Ice to 6C) (2)	ETF-SB-147-2.0	12/03/2018 13:45	
ETF-SB-151-2.0-DUP	F9F34	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1667 (Ice to 6C), 1668 (Ice to 6C) (2)	ETF-SB-151-2.0-DUP	12/03/2018 11:35	
ETF-SB-151-0.5-DUP	F9F35	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1670 (Ice to 6C), 1671 (Ice to 6C) (2)	ETF-SB-151-0.5-DUP	12/03/2018 11:30	

1 to
+1
+2
+3
+4
+5
+6

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: SVOA/PAHSIM =SVOA/PAHSIM by SOM02.4

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	EA	12/03/2018 1800	FedEx	12/03/2018 1800	
			Paul Czulak	12-4-18 12 33	IR Gun #1 2.4 C

3

SDG # F9E54

USEPA CLP COC (LAB COPY)

DateShipped: 12/3/2018
CarrierName: FedEx
AirbillNo: 7738 6631 0444

CHAIN OF CUSTODY RECORD

Case #: 48019
Cooler #:

No: 6-120318-142320-0005

Lab: Chemtech Consulting Group
Lab Contact: Snehal Mehta
Lab Phone: 908-789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
ETF-SB-148-0.5	F9E62	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1378 (Ice to 6C), 1379 (Ice to 6C) (2)	ETF-SB-148-0.5	12/03/2018 13:50	17
ETF-SB-148-2.0	F9E63	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1381 (Ice to 6C), 1382 (Ice to 6C) (2)	ETF-SB-148-2.0	12/03/2018 13:55	18
ETF-SB-151-0.5	F9E68	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1396 (Ice to 6C), 1397 (Ice to 6C) (2)	ETF-SB-151-0.5	12/03/2018 11:30	19
ETF-SB-151-2.0	F9E69	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1399 (Ice to 6C), 1400 (Ice to 6C) (2)	ETF-SB-151-2.0	12/03/2018 11:35	20
ETF-SB-155-0.5	F9E76	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1420 (Ice to 6C), 1421 (Ice to 6C) (2)	ETF-SB-155-0.5	12/03/2018 10:50	
ETF-SB-155-2.0	F9E77	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1423 (Ice to 6C), 1424 (Ice to 6C) (2)	ETF-SB-155-2.0	12/03/2018 10:55	
ETF-SB-156-0.5	F9E78	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1426 (Ice to 6C), 1427 (Ice to 6C) (2)	ETF-SB-156-0.5	12/03/2018 11:10	
ETF-SB-156-2.0	F9E79	Soil/ Will Ganter	Grab	SVOA/PAHSIM (21)	1429 (Ice to 6C), 1430 (Ice to 6C) (2)	ETF-SB-156-2.0	12/03/2018 11:15	

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: SVOA/PAHSIM =SVOA/PAHSIM by SOM02.4

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	EA	12/03/2018 1800	FedEx	12/03/2018 1800	
				12:33 12/4/18	IR Gun #1 - 2.3°C

Sample Delivery Group (SDG) Cover Sheet

SDG Number	F9E54	Case Number	48019	Contract Number	EP-W-14-030
Lab Code	CHM	SDG Turnaround	21 DAYS	Delivery CLIN(s)	1 & 2

First Sample Received in SDG	F9E54	Last Sample Received in SDG	F9F35
First Sample Receipt Date	12/4/2018 12:33	Last Sample Receipt Date	12/4/2018 12:33

USEPA Sample Numbers in SDG (Listed in Numerical Order)

CLP Sample ID	Sample Type	Requested Analytical CLIN(s)/SubCLIN(s)	Solicitation Number	MA Number(s)
F9E54	Field Sample	0017AB,0014AB	N/A	N/A
F9E55	Field Sample	0014AB,0017AB	N/A	N/A
F9E56	Field Sample	0017AB,0014AB	N/A	N/A
F9E57	Field Sample	0014AB,0017AB	N/A	N/A
F9E60	Field Sample	0017AB,0014AB	N/A	N/A
F9E61	Field Sample	0014AB,0017AB	N/A	N/A
F9E62	Field Sample	0014AB,0017AB	N/A	N/A
F9E63	Field Sample	0014AB,0017AB	N/A	N/A
F9E64	Field Sample	0017AB,0014AB	N/A	N/A
F9E65	Field Sample	0017AB,0014AB	N/A	N/A
F9E66	Field Sample	0014AB,0017AB	N/A	N/A
F9E67	Field Sample	0014AB,0017AB	N/A	N/A
F9E68	Field Sample	0014AB,0017AB	N/A	N/A
F9E69	Field Sample	0017AB,0014AB	N/A	N/A
F9E74	Field Sample	0014AB,0017AB	N/A	N/A
F9E75	Field Sample	0017AB,0014AB	N/A	N/A
F9E80	Field Sample	0017AB,0014AB	N/A	N/A
F9F33	Field Sample	0014AB,0017AB	N/A	N/A
F9F34	Field Sample	0014AB,0017AB	N/A	N/A
F9F35	Field Sample	0017AB,0014AB	N/A	N/A

Note: *There are a maximum of 20 **field** samples (excluding PE samples) in an SDG. Attach TR/COC Records to this form in alphanumeric order (the order listed above on this form).*

Signature _____ Date 12/5/18

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name CHEMTECH CONSULTING GROUP		Page 1 of 3
Received By (Print Name) Jessenia Peña		Log-in Date **12/4/2018**
Received By (Signature)		
Case Number 48019	SDG No. F9E54	MA No. N/A

Remarks:	
1. Custody Seal (s)	Present, Intact
2. Custody Seal Nos.	N/A
3. Traffic Reports/Chain Of Custody Records	Present
4. Airbill	Present
5. Airbill No.	773866282495
6. Sample Tags Sample Tag #	Absent Listed on Traffic Report
7. Sample Condition	Intact
8. Shipping Container Temperature Indicator Bottle	Present
9. Shipping Container Temperature	2.4 Degree C
10. Does information on Traffic Reports/Chain of Custody Records and Sample Tags agree ?	Yes
11. Date Received at Lab	12/04/2018
12. Time Received	12:33

	EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample shipment, etc.
1	F9E64	1384,85	J6227-01	Intact
2	F9E65	1387,88	J6227-02	Intact
3	F9E66	1390,91	J6227-03	Intact
4	F9E67	1393,94	J6227-04	Intact
5	F9E74	1414,15	J6227-05	Intact
6	F9E75	1417,18	J6227-06	Intact
7	F9E80	1432,33	J6227-07	Intact
8	F9F33	1664,65	J6227-08	Intact
9				
10				
11				
12				
13				
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26				

* Contact SMO and attach record of resolution

Reviewed By	Logbook No. 2
Date 12/4/18	Logbook Page No.

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name CHEMTECH CONSULTING GROUP		Page 2 of 3
Received By (Print Name) Esperanza Rosa		Log-in Date **12/4/2018**
Received By (Signature)		
Case Number 48019	SDG No. F9E54	MA No. N/A

Remarks:	
1. Custody Seal (s)	Present, Intact
2. Custody Seal Nos.	N/A
3. Traffic Reports/Chain Of Custody Records	Present
4. Airbill	Present
5. Airbill No.	773866321029
6. Sample Tags Sample Tag #	Absent Listed on Traffic Report
7. Sample Condition	Intact
8. Shipping Container Temperature Indicator Bottle	Present
9. Shipping Container Temperature	2.4 Degree C
10. Does information on Traffic Reports/Chain of Custody Records and Sample Tags agree ?	Yes
11. Date Received at Lab	12/04/2018
12.Time Received	12:33

	EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample shipment, etc.
1	F9E54	1354,55	J6227-09	Intact
2	F9E55	1357,58	J6227-10	Intact
3	F9E56	1360,61	J6227-11	Intact
4	F9E57	1363,64	J6227-12	Intact
5	F9E60	1372,73	J6227-13	Intact
6	F9E61	1375,76	J6227-14	Intact
7	F9F34	1667,68	J6227-15	Intact
8	F9F35	1670,71	J6227-16	Intact
9				
10				
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26				

* Contact SMO and attach record of resolution

Reviewed By	Logbook No.
Date 12/4/18	Logbook Page No.

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name CHEMTECH CONSULTING GROUP		Page 3 of 3
Received By (Print Name) Cassandra Reis		Log-in Date **12/4/2018**
Received By (Signature)		
Case Number 48019	SDG No. F9E54	MA No. N/A

Remarks:	
1. Custody Seal (s)	Present, Intact
2. Custody Seal Nos.	N/A
3. Traffic Reports/Chain Of Custody Records	Present
4. Airbill	Present
5. Airbill No.	773866310444
6. Sample Tags Sample Tag #	Absent Listed on Traffic Report
7. Sample Condition	Intact
8. Shipping Container Temperature Indicator Bottle	Present
9. Shipping Container Temperature	2.3 Degree C
10. Does information on Traffic Reports/Chain of Custody Records and Sample Tags agree ?	Yes
11. Date Received at Lab	12/04/2018
12. Time Received	12:33

	EPA Sample #	Corresponding: Sample Tag #	Corresponding: Assigned Lab #	Remarks: Condition of Sample shipment, etc.
1	F9E62	1378,79	J6227-17	Intact
2	F9E63	1381,82	J6227-18	Intact
3	F9E68	1396,97	J6227-19	Intact
4	F9E69	1399,1400	J6227-20	Intact
5				
6				
7				
8				
9				
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* Contact SMO and attach record of resolution

Reviewed By	Logbook No.
Date 12/4/18	Logbook Page No.

FORM DC-2
FULL ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LAB NAME	CHEMTECH CONSULTING GROUP
LAB CODE	CHM
CONTRACT NO.	EPW14030
CASE NO.	48019
SDG NO.	F9E54
MA NO.	
SOW NO.	SOM02.4

All documents delivered in the complete SDG File must be original documents where possible. (Reference - Exhibit B Section 2.4)

		PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
1.	SDG Cover Page	1	1	✓	
2.	Traffic Report/Chain of Custody Record(s)	2	5	✓	
3.	Sample Log-In Sheet (DC-1)	6	8	✓	
4.	CSF Inventory Sheet (DC-2)	9	15	✓	
5.	SDG Narrative	16	40	✓	
Organic Analysis					
Trace Volatiles					
	Quality Control Summary				
6.	Deuterated Monitoring Compound Recovery (Form 2A-OR and Form 2B-OR)	NA	NA	✓	
7.	Matrix Spike/Matrix Spike Duplicate Recovery (Form 3A-OR)(if requeste by the EPA Region)	NA	NA	✓	
8.	Method Blank Summary (Form 4-OR)	NA	NA	✓	
9.	GC/MS Instrument Performance Check (Form 5-OR)	NA	NA	✓	
10.	Internal Standard Area and Retention Summary (Form 8A-OR)	NA	NA	✓	
	Sample Data				
11.	TAL Results - Organics Analysis Data Sheet (Form 1A-OR)	NA	NA	✓	
12.	Tentatively Identified Compounds (Form 1B-OR)				
13.	Raw Data for each sample:				
	Reconstructed total ion chromatograms (RICs) for each sample				
	Raw Spectra and bacground-subtracted mass spectra of target analytes identified				
	Quantitation Reports				
	Mass Spectra of all reported TICs with three best library matches				
	Standards Data (All Instruments)				
14.	GC/MS Initial Calibration Data (Form 6A-OR)	NA	NA	✓	
15.	RICs and Quantitation Reports for all Standards				

FORM DC-2

FULL ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
16. Initial Calibration Verification and Continuing Calibration Verification for GC/MS (Form 7-OR)	NA	NA	✓	
17. RICs and Quantitation Reports for all Standards				
Quality Control Data				
18. Performance Check	NA	NA	✓	
19. Blank Data	NA	NA	✓	
20. Matrix Spike/Matrix Spike Duplicate Data (Form 3A-OR) (if requested by EPA Region)	NA	NA	✓	
21. Original Preparation and analysis forms or copies of preparation and analysis logbook pages (including screening records if applicable)	NA	NA	✓	
Low-Medium Volatiles				
Quality Control Summary				
22. Deuterated Monitoring Compound Recovery (Form 2A-OR and Form 2B-OR)	NA	NA	✓	
23. Matrix Spike/Matrix Spike Duplicate Recovery (Form 3A-OR) (if requested by EPA Region)	NA	NA	✓	
24. Method Blank Summary (Form 4-OR)	NA	NA	✓	
25. GC/MS Instrument Performance Check (Form 5-OR)	NA	NA	✓	
26. Internal Standard Area and Retention Time Summary (Form 8A-OR)	NA	NA	✓	
Sample Data				
27. TAL Results - Organics Analysis Data Sheet (Form 1A-OR)	NA	NA	✓	
28. Tentatively Identified Compounds (Form 1B-OR)				
29. Raw Data for Each Sample:				
Reconstructed total ion chromatograms (RICs) for each sample				
Raw Spectra and background-subtracted mass spectra of target analytes identified				
Quantitation Reports				
Mass Spectra of all reported TICs with three best library matches				
Standards Data (All Instruments)				
30. GC/MS Initial Calibration Data (Form 6A-OR)	NA	NA	✓	
31. RICs and Quantitation Reports for all Standards				
32. Initial Calibration Verification and Continuing Calibration Verification for GC/MS (Form 7A-OR)	NA	NA	✓	
33. RICs and Quantitation Reports for all Standards				
Quality Control Data				
34. Performance Check	NA	NA	✓	

FORM DC-2
FULL ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
35. Blank Data	NA	NA	✓	
36. Matrix Spike/Matrix Spike Duplicate Data (if requested by EPA Region)	NA	NA	✓	
37. Original preparation and analysis forms or copies of preparation and analysis logbook pages (including TCLP/SPLP logs, Percent Solid Determinations logs, and screening records if applicable)	NA	NA	✓	
Semivolatiles				
Quality Control Summary				
38. Deuterated Monitoring Compound Recovery (Form 2A-OR and Form 2B-OR)	41	42	✓	
39. Matrix Spike/Matrix Spike Duplicate Recovery (Form 3A-OR) (if requested by EPA Region)	NA	NA	✓	
40. Method Blank Summary (Form 4-OR)	43	43	✓	
41. GC/MS Instrument Performance Check (Form 5-OR)	44	46	✓	
42. Internal Standard Area and Retention Time Summary (Form 8A-OR)	47	52	✓	
Sample Data				
43. TAL Results - Organics Analysis Data Sheet (Form 1A-OR)	53	551	✓	
44. Tentatively Identified Compounds (Form 1B-OR)				
45. Raw Data for Each sample:				
Reconstructed total ion chromatograms (RICs) for each sample	NA	NA	✓	
Raw Spectra and background-subtracted mass spectra of target analytes identified				
Quantitation Reports				
Mass Spectra of all reported TICs with three best library matches				
GPC chromatograms (if GPC is required)				
Standards Data (All Instruments)				
46. GC/MS Initial Calibration Data (Form 6A-OR)	552	599	✓	
47. RICs and Quantitation Reports for all Standards				
48. Initial Calibration Verification and Continuing Calibration Verification for GC/MS (Form 7A-OR)	600	671	✓	
49. RICs and Quantitation Reports for all Standards				
Quality Control Data				
50. Performance Check	672	707	✓	
51. Blank Data	708	728	✓	
52. Matrix Spike/Matrix Spike Duplicate Data (if requested by EPA Region)	NA	NA	✓	

FORM DC-2

FULL ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
53. Raw GPC Data	NA	NA	✓	
54. For SIM analysis (if requested), at the same sequence as listed above, except for that Form 1B-OR and TIC spectra data which are not required for SIM method.	893	1449	✓	
55. Original preparation and analysis forms or copies of preparation and analysis logbook pages (including TCLP/SPLP logs, Percent Solid Determinations logs, and screening records if applicable)	729-892,1450-1529		✓	
Pesticides				
Quality Control Summary				
56. Surrogate Recovery (Form 2C-OR)	NA	NA	✓	
57. Matrix Spike/Matrix Spike Duplicate Recovery (Form 3A-OR each columns)	NA	NA	✓	
58. Laboratory Control Sample Recovery (Form 3B-OR each column)	NA	NA	✓	
59. Method Blank Summary (Form 4-OR)	NA	NA	✓	
Sample Data				
60. TAL Results - Organics Analysis Data Sheet (Form 1A-OR)	NA	NA	✓	
61. Raw Data for Each Sample:				
Chromatograms (Primary Column)				
Chromatograms (Secondary Column)				
Quantitation Reports				
Manual Worksheets				
62. For Pesticides by GC/MS Confirmation:				
Copies of raw spectra and copies of background-subtracted mass spectra of target analytes (samples & standards)				
Standards Data				
63. Initial Calibration of Single Component Analytes (Form 6B-OR and 6C-OR)	NA	NA	✓	
64. Initial Calibration of Multicomponent Analytes (Form 6D-OR and 6E-OR)	NA	NA	✓	
65. Analyte Resolution Summary (Form 6G-OR)	NA	NA	✓	
66. Pesticide Performance Evaluation Mixture Calibration Verification Summary (Form 7B-OR)	NA	NA	✓	

FORM DC-2

FULL ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
67. Continuing Calibration Verification Summary (Form 7C-OR)	NA	NA	✓	
68. Multicomponent Coninuing Calibration Verification Summary (Form 7D-OR)	NA	NA	✓	
69. Analytical Sequence (Form 8B-OR)	NA	NA	✓	
70. Florisil Cartridge Check (Form 9A-OR)	NA	NA	✓	
71. GPC Calibration Verification (Form 9B-OR)	NA	NA	✓	
72. Identification Summary for Single Component Analytes (Form 10A-OR)	NA	NA	✓	
73. Identification Summary for Multicomponent Analytes (Form 10B-OR)				
74. Chromatograms and Quantitation Reports:	NA	NA	✓	
A printout of Retention Times and corresponding peak areas or peak heights				
Quality Control Data				
75. Blank Data	NA	NA	✓	
76. Matrix Spike/Matrix Spike Duplicate Data	NA	NA	✓	
77. Laboratory Control Sample	NA	NA	✓	
78. Raw GPC Data	NA	NA	✓	
79. Raw Florisil Data	NA	NA	✓	
80. Original preparation and analysis forms or copies of preparation and analysis logbook pages (including TCLP/SPLP logs, Percent Solid Determinations logs, and screening records if applicable)	NA	NA	✓	
Aroclor Data				
Quality Control Summary				
81. Surrogate Recovery (Form 2C-OR)	NA	NA	✓	
82. Matrix Spike/Matrix Spike Duplicate Summary (Form 3A-OR)	NA	NA	✓	
83. Laboratory Control Sample Recovery (Form 3B-OR for each column)	NA	NA	✓	
84. Method Blank Summary (Form 4-OR)	NA	NA	✓	
Sample Data				
85. TAL Results - Organics Analysis Data Sheet (Form 1A-OR)	NA	NA	✓	

FORM DC-2

FULL ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
86. Raw Data for Each Sample:	NA	NA	✓	
Chromatograms (Primary Column)	NA	NA	✓	
Chromatograms (Secondary Column)	NA	NA	✓	
Quantitation Reports	NA	NA	✓	
Manual Worksheets	NA	NA	✓	
87. For Aroclors by GC/MS Confirmation:	NA	NA	✓	
Copies of raw spectra and copies of background-subtracted mass spectra of target analytes (samples & standards)	NA	NA	✓	
Standards Data				
88. Initial Calibration of Multicomponent Analytes(Form 6D-OR, Form 6E-OR, and Form 6F-OR)	NA	NA	✓	
89. Multicomponent Continuing Calibration Verification Summary (Form 7D-OR)	NA	NA	✓	
90. Analytical Sequence (Form 8B-OR)	NA	NA	✓	
91. Identification Summary for Multicomponent Analytes (Form 10B-OR)	NA	NA	✓	
92. Chromatograms and data system printouts:	NA	NA	✓	
A printout of Retention Times and corresponding peak areas or peak heights				
Qaulity Control Data				
93. Blank Data	NA	NA	✓	
94. Matrix Spike/Matrix Spike Duplicate Data	NA	NA	✓	
95. Laboratory Control Sample (LCS) Data	NA	NA	✓	
96. Raw GPC Data (if performed)	NA	NA	✓	
97. Original preparation and analysis forms or copies of preparation and analysis logbook pages (including Percent Solid Determinations logs and screening records if applicable)	NA	NA	✓	
Additional				
98. EPA Shipping/Receiving Documents Airbills (No. of shipments 3)	1530	1532	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	1533	1535	✓	

FORM DC-2

FULL ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
99. Misc. Shipping/Receiving Records (list all individual records) Communication Logs	NA	NA	✓	
100. Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)	1536	1539	✓	
101. PE/PT Instruction Forms	NA	NA	✓	
102. Other Records (describe or list)				
Communication Log	NA	NA	✓	

103. Comments

Completed by: Mildred U Reyes (CLP Lab) (Signature) Mildred U Reyes/DCO (Printed Name/Title) 12/31/18 (Date)

Audited by: (EPA) (Signature) (Printed Name/Title) (Date)

SDG NARRATIVE

LAB NAME: CHEMTECH CONSULTING GROUP
CASE: 48019
SDG: F9E54
CONTRACT: EPW14030
LAB CODE: CHM
CHEMTECH PROJECT: J6227
MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pH
J6227-01	F9E64	
J6227-02	F9E65	
J6227-03	F9E66	
J6227-04	F9E67	
J6227-05	F9E74	
J6227-06	F9E75	
J6227-07	F9E80	
J6227-08	F9F33	
J6227-09	F9E54	
J6227-10	F9E55	
J6227-11	F9E56	
J6227-12	F9E57	
J6227-13	F9E60	
J6227-14	F9E61	
J6227-15	F9F34	
J6227-16	F9F35	
J6227-17	F9E62	
J6227-18	F9E63	
J6227-19	F9E68	
J6227-20	F9E69	

20 Soil samples were delivered to the laboratory intact on 12/04/2018.

Test requested on the Chain of Custody was Semivolatile Organic and Semivolatile Organic-SIM by Method SOM02.4.

Sample Tags were not received with the samples.

The temperature of the samples was measured using an I R Gun. The samples temperature was 2.3 and 2.4 degrees Celsius.

Shipping Discrepancies and/or QC issues:

Issue 1: Sample tags were not received with samples at the laboratory. Sample tag numbers may or may not be listed on the TR/COC.

Resolution 1: In accordance with previous direction from Region 6, the laboratory will note the issue in the SDG Narrative, and proceed with the analysis of the sample. The Resolution will be applied to all samples received for this Case.

Semivolatiles

The samples were analyzed on instrument BNA_M using GC Column ZB-GR Semi Volatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA.

Semivolatile Organic samples for Soil samples were extracted by Method SOM02.4 on 12/05/18. The analysis of SVOC was based on method SOM02.4_SVOC.

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for F9E66 [1,4-Dioxane-d8 - 29%], F9E67 [1,4-Dioxane-d8 - 22%], F9E74 [1,4-Dioxane-d8 - 37%], F9E75 [1,4-Dioxane-d8 - 32%], F9E80 [1,4-Dioxane-d8 - 38%], F9F33 [1,4-Dioxane-d8 - 29%], F9E60 [1,4-Dioxane-d8 - 33%], F9F34 [1,4-Dioxane-d8 - 37%], F9F35 [1,4-Dioxane-d8 - 36%], F9E62 [1,4-Dioxane-d8 - 37%], F9E68 [1,4-Dioxane-d8 - 33%], F9E69 [1 and4-Dioxane-d8 - 31%].As per method four surrogates are allowed to fail. No further corrective action was taken.

The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met requirements.

The Continuous Calibration (SSTD02085) File ID BM018023.D met the requirements except for Acetophenone,N-Nitroso-di-n-propylamine and 4-Methylphenol-d8. As per method an opening Continuous Calibration or closing Continuous Calibration, up to four compounds are allowed to fail, not exceed 40%. Therefore no further corrective action was taken.

The Continuous Calibration (SSTD02094) File ID BM018109.D met the requirements except for 1,4-Dioxane-d8. As per method four compounds are allowed to fail, not exceed 40%. Therefore no further corrective action was taken.
The Tuning criteria met requirements.

See **Manual Integration report** for the manual integration information at the end of the case narrative.

Concentration of SOIL Sample:

Concentration ug/Kg,
(dry weight basis) = $\frac{(Ax)\ (Is)\ (Vt)\ (DF)\ (GPC)}{(Ais)\ (\overline{RRF})\ (Vi)\ (Wt)\ (D)}$

Where,

Ax = Area of the characteristic ion for the compound to be measured.
Ais = Area of the characteristic ion for the internal standard.
Is = Amount of internal standard injected in ng.
V_i = Volume of extract injected in microliters (uL)
V_t = Volume of concentrated extract in microliters (uL)
W_t = Weight of the original sample extracted in g
Df = Dilution factor

$\overline{RRF}$ = Mean Relative Response Factor determined from the initial calibration standard.
GPC = $\frac{Vin}{Vout}$ = GPC factor (If no GPC is performed, GPC=1)
Vout = Volume of extract collected after GPC cleanup.
D = % dry weight or $\frac{100 - \%Moisture}{100}$

Example calculation of **F9E54** for Phenol:

Ax = 25356
Ais = 80927
Is = 20
Vi = 1
Vt = 500
Wt = 30.1
Df = 1
RRF = 1.823
GPC = 2
D= 0.879

Concentration
(dry weight basis) ug/Kg = $\frac{(25356)(20)(500)(1)(2)}{(80927)\ (1.823)\ (1)\ (30.1)\ (0.879)}$

= 130 ug/Kg

RRF Calculation of standard 20 ppb for **Naphthalene** with instrument M for method 11/19/18

RRF= Area of compound / Area of Internal Standard X Conc. of Internal Standard / Conc. of Compound

= 950804/925685 X 20/20

= 1.027 (Reported RRF)

Semivolatiles SIM:

The samples were analyzed on instrument BNA_N using GC Column ZB-Semi Volatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA.

Semivolatile Organic samples for Soil were extracted by Method SOM02.4 on 12/05/18. The analysis of SVOC was based on method SOM02.4_SIM.

The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements.
The Continuous Calibration met the requirements.
The Tuning criteria met requirements.

See **Manual Integration report** for the manual integration information at the end of the case narrative.

Concentration of SOIL Sample:

Concentration ug/Kg,
(dry weight basis) = $\frac{(Ax)\ (Is)\ (Vt)\ (DF)\ (GPC)}{(Ais)\ (\overline{RRF})\ (Vi)\ (Wt)\ (D)}$

Where,

Ax = Area of the characteristic ion for the compound to be measured.
Ais = Area of the characteristic ion for the internal standard.
Is = Amount of internal standard injected in ng.
V_i = Volume of extract injected in microliters (uL)
V_t = Volume of concentrated extract in microliters (uL)
W_t = Weight of the original sample extracted in g
Df = Dilution factor

$\overline{RRF}$ = Mean Relative Response Factor determined from the initial calibration standard.
GPC = Vin = GPC factor (If no GPC is performed, GPC=1)
Vout = Volume of extract collected after GPC cleanup.

D = % dry weight or $\frac{100 - \%Moisture}{100}$

Example calculation of **F9E54** Pyrene:

Ax = 2098
Ais = 22996
Is = 0.4
Vi = 1
Vt = 500
Wt = 30.1
Df = 1

RRF = 1.435
GPC = 2
D= 0.879

Concentration
(dry weight basis) ug/Kg = $\frac{(2098)(0.4)(500)(1)(2)}{(22996)(1.435)(1)(30.1)(0.879)}$

= 0.94 ug/Kg

RRF Calculation of standard 0.4 ppb for **Naphthalene** with instrument N for method 11/19/18

RRF= Area of compound / Area of Internal Standard X Conc. of Internal Standard / Conc. of Compound

= 19175 / 17586 X 0.4/0.4

= 1.090 (Reported RRF)

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature Mildred V Reyes Name: Mildred V. Reyes

Date: 12/21/18 Title: Document Control Officer

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Manual Integration Report

Sequence:	bm111918	Instrument	BNA_m

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTD01052/ SSTD01052	BM017689.D	Benzaldehyde	Jagrut	11/20/2018 5:09:30 PM	Sohil	11/20/2018 5:10:22 PM	Peak Integrated by Software incorrectly
SSTD01052/ SSTD01052	BM017689.D	Caprolactam	Jagrut	11/20/2018 5:09:30 PM	Sohil	11/20/2018 5:10:22 PM	Peak Integrated by Software incorrectly
SSTD02053/ SSTD02053	BM017690.D	Caprolactam	Jagrut	11/20/2018 5:09:33 PM	Sohil	11/20/2018 5:10:24 PM	Peak Integrated by Software incorrectly
SSTD04054/ SSTD04054	BM017691.D	Caprolactam	Jagrut	11/20/2018 5:09:35 PM	Sohil	11/20/2018 5:10:26 PM	Peak Integrated by Software incorrectly
SSTD08055/ SSTD08055	BM017692.D	Caprolactam	Jagrut	11/20/2018 5:09:38 PM	Sohil	11/20/2018 5:10:28 PM	Peak Integrated by Software incorrectly
SSTD16056/ SSTD16056	BM017693.D	Caprolactam	Jagrut	11/20/2018 5:09:41 PM	Sohil	11/20/2018 5:10:30 PM	Peak Integrated by Software incorrectly
SSTDICV020/ SICV57	BM017694.D	Caprolactam	Jagrut	11/20/2018 5:09:43 PM	Sohil	11/20/2018 5:10:32 PM	Peak Integrated by Software incorrectly
SSTDCCC020EC/ SSTD02058	BM017697.D	Caprolactam	Jagrut	11/20/2018 5:09:47 PM	Sohil	11/20/2018 5:10:36 PM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	BM120818	Instrument	BNA_m

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-01/ F9E64	BM018013.D	4-Nitrophenol-d4	Jagrut	12/10/2018 9:34:01 AM	Sohil	12/11/2018 8:46:46 AM	Peak Integrated by Software incorrectly
PB115349BL/ SBLK49	BM018022.D	4-Nitrophenol-d4	Jagrut	12/10/2018 9:34:23 AM	Sohil	12/11/2018 8:46:54 AM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	BM121218	Instrument	BNA_m

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDCCC020/ SSTD02093	BM018093.D	Caprolactam	Jagrut	12/13/2018 6:14:26 PM	Sohil	12/13/2018 6:15:58 PM	Peak Integrated by Software incorrectly
J6227-02/ F9E65	BM018094.D	2,4-Dichlorophenol-d3	Jagrut	12/13/2018 6:14:28 PM	Sohil	12/13/2018 6:16:00 PM	Peak Integrated by Software incorrectly
J6227-02/ F9E65	BM018094.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:28 PM	Sohil	12/13/2018 6:16:00 PM	Peak Integrated by Software incorrectly
J6227-05/ F9E74	BM018095.D	2,4-Dichlorophenol-d3	Jagrut	12/13/2018 6:14:29 PM	Sohil	12/13/2018 6:16:01 PM	Peak Integrated by Software incorrectly
J6227-05/ F9E74	BM018095.D	4-Chloroaniline-d4	Jagrut	12/13/2018 6:14:29 PM	Sohil	12/13/2018 6:16:01 PM	Peak Integrated by Software incorrectly
J6227-05/ F9E74	BM018095.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:29 PM	Sohil	12/13/2018 6:16:01 PM	Peak Integrated by Software incorrectly
J6227-06/ F9E75	BM018096.D	2,4-Dichlorophenol-d3	Jagrut	12/13/2018 6:14:30 PM	Sohil	12/13/2018 6:16:03 PM	Peak Integrated by Software incorrectly
J6227-06/ F9E75	BM018096.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:30 PM	Sohil	12/13/2018 6:16:03 PM	Peak Integrated by Software incorrectly
J6227-07/ F9E80	BM018097.D	2,4-Dichlorophenol-d3	Jagrut	12/13/2018 6:14:38 PM	Sohil	12/13/2018 6:16:05 PM	Peak Integrated by Software incorrectly
J6227-07/ F9E80	BM018097.D	4-Chloroaniline-d4	Jagrut	12/13/2018 6:14:38 PM	Sohil	12/13/2018 6:16:05 PM	Peak Integrated by Software incorrectly
J6227-07/ F9E80	BM018097.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:38 PM	Sohil	12/13/2018 6:16:05 PM	Peak Integrated by Software incorrectly
J6227-09/ F9E54	BM018098.D	1,4-Dioxane-d8	Jagrut	12/13/2018 6:14:32 PM	Sohil	12/13/2018 6:16:07 PM	Peak Integrated by Software incorrectly
J6227-09/ F9E54	BM018098.D	2,4-Dichlorophenol-d3	Jagrut	12/13/2018 6:14:32 PM	Sohil	12/13/2018 6:16:07 PM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	BM121218	Instrument	BNA_m

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-09/ F9E54	BM018098.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:32 PM	Sohil	12/13/2018 6:16:07 PM	Peak Integrated by Software incorrectly
J6227-09/ F9E54	BM018098.D	Nitrobenzene-d5	Jagrut	12/13/2018 6:14:32 PM	Sohil	12/13/2018 6:16:07 PM	Peak Integrated by Software incorrectly
J6227-10/ F9E55	BM018099.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:33 PM	Sohil	12/13/2018 6:16:08 PM	Peak Integrated by Software incorrectly
J6227-11/ F9E56	BM018100.D	4,6-Dinitro-2-methylphenol-d2	Jagrut	12/13/2018 6:14:34 PM	Sohil	12/13/2018 6:16:10 PM	Peak Integrated by Software incorrectly
J6227-11/ F9E56	BM018100.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:34 PM	Sohil	12/13/2018 6:16:10 PM	Peak Integrated by Software incorrectly
J6227-12/ F9E57	BM018101.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:35 PM	Sohil	12/13/2018 6:16:11 PM	Peak Integrated by Software incorrectly
J6227-13/ F9E60	BM018102.D	2,4-Dichlorophenol-d3	Jagrut	12/13/2018 6:14:42 PM	Sohil	12/13/2018 6:16:13 PM	Peak Integrated by Software incorrectly
J6227-13/ F9E60	BM018102.D	4-Chloroaniline-d4	Jagrut	12/13/2018 6:14:42 PM	Sohil	12/13/2018 6:16:13 PM	Peak Integrated by Software incorrectly
J6227-13/ F9E60	BM018102.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:42 PM	Sohil	12/13/2018 6:16:13 PM	Peak Integrated by Software incorrectly
J6227-14/ F9E61	BM018103.D	1,4-Dioxane-d8	Jagrut	12/13/2018 6:14:43 PM	Sohil	12/13/2018 6:16:15 PM	Peak Integrated by Software incorrectly
J6227-17/ F9E62	BM018104.D	2,4-Dichlorophenol-d3	Jagrut	12/13/2018 6:14:44 PM	Sohil	12/13/2018 6:16:17 PM	Peak Integrated by Software incorrectly
J6227-17/ F9E62	BM018104.D	4-Chloroaniline-d4	Jagrut	12/13/2018 6:14:44 PM	Sohil	12/13/2018 6:16:17 PM	Peak Integrated by Software incorrectly
J6227-17/ F9E62	BM018104.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:44 PM	Sohil	12/13/2018 6:16:17 PM	Peak Integrated by Software incorrectly

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Sequence:	BM121218	Instrument	BNA_m

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-18/ F9E63	BM018105.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:44 PM	Sohil	12/13/2018 6:16:19 PM	Peak Integrated by Software incorrectly
J6227-15/ F9F34	BM018106.D	2,4-Dichlorophenol-d3	Jagrut	12/13/2018 6:14:45 PM	Sohil	12/13/2018 6:16:21 PM	Peak Integrated by Software incorrectly
J6227-15/ F9F34	BM018106.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:45 PM	Sohil	12/13/2018 6:16:21 PM	Peak Integrated by Software incorrectly
SSTDCCC020/ SSTD02094	BM018109.D	1,4-Dioxane	Jagrut	12/13/2018 6:14:48 PM	Sohil	12/13/2018 6:16:27 PM	Peak Integrated by Software incorrectly
SSTDCCC020/ SSTD02094	BM018109.D	2,2"-oxybis(1-Chloroprop ane)	Jagrut	12/13/2018 6:14:48 PM	Sohil	12/13/2018 6:16:27 PM	Peak Integrated by Software incorrectly
SSTDCCC020/ SSTD02094	BM018109.D	2,4-Dinitrophenol	Jagrut	12/13/2018 6:14:48 PM	Sohil	12/13/2018 6:16:27 PM	Peak Integrated by Software incorrectly
SSTDCCC020/ SSTD02094	BM018109.D	2-Nitroaniline	Jagrut	12/13/2018 6:14:48 PM	Sohil	12/13/2018 6:16:27 PM	Peak Integrated by Software incorrectly
SSTDCCC020/ SSTD02094	BM018109.D	4-Nitrophenol	Jagrut	12/13/2018 6:14:48 PM	Sohil	12/13/2018 6:16:27 PM	Peak Integrated by Software incorrectly
J6227-19/ F9E68	BM018110.D	2,4-Dichlorophenol-d3	Jagrut	12/13/2018 6:14:49 PM	Sohil	12/13/2018 6:16:29 PM	Peak Integrated by Software incorrectly
J6227-19/ F9E68	BM018110.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:49 PM	Sohil	12/13/2018 6:16:29 PM	Peak Integrated by Software incorrectly
J6227-20/ F9E69	BM018111.D	1,4-Dioxane-d8	Jagrut	12/13/2018 6:14:50 PM	Sohil	12/13/2018 6:16:53 PM	Peak Integrated by Software incorrectly
J6227-20/ F9E69	BM018111.D	2,4-Dichlorophenol-d3	Jagrut	12/13/2018 6:14:50 PM	Sohil	12/13/2018 6:16:53 PM	Peak Integrated by Software incorrectly
J6227-20/ F9E69	BM018111.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:50 PM	Sohil	12/13/2018 6:16:53 PM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	BM121218	Instrument	BNA_m

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-08/ F9F33	BM018112.D	1,4-Dioxane-d8	Jagrut	12/13/2018 6:14:51 PM	Sohil	12/13/2018 6:16:55 PM	Peak Integrated by Software incorrectly
J6227-08/ F9F33	BM018112.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:51 PM	Sohil	12/13/2018 6:16:55 PM	Peak Integrated by Software incorrectly
J6227-04/ F9E67	BM018113.D	1,4-Dioxane-d8	Jagrut	12/13/2018 6:14:51 PM	Sohil	12/13/2018 6:16:57 PM	Peak Integrated by Software incorrectly
J6227-04/ F9E67	BM018113.D	2,4-Dichlorophenol-d3	Jagrut	12/13/2018 6:14:51 PM	Sohil	12/13/2018 6:16:57 PM	Peak Integrated by Software incorrectly
J6227-04/ F9E67	BM018113.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:51 PM	Sohil	12/13/2018 6:16:57 PM	Peak Integrated by Software incorrectly
J6227-03/ F9E66	BM018114.D	4-Nitrophenol-d4	Jagrut	12/13/2018 6:14:52 PM	Sohil	12/13/2018 6:16:58 PM	Peak Integrated by Software incorrectly
SSTDCCC020E C/ SSTD02095	BM018124.D	1,4-Dioxane	Jagrut	12/13/2018 6:15:20 PM	Sohil	12/13/2018 6:17:13 PM	Peak Integrated by Software incorrectly
SSTDCCC020E C/ SSTD02095	BM018124.D	Benzo(b)fluoranthene	Jagrut	12/13/2018 6:15:20 PM	Sohil	12/13/2018 6:17:13 PM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	BN111918	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason

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Manual Integration Report

Sequence:	BN120618	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-01/ F9E64	BN003741.D	Chrysene-d12	Jagrut	12/7/2018 6:05:38 PM	mohammad	12/10/2018 12:20:31 PM	Peak Integrated by Software incorrectly
J6227-01/ F9E64	BN003741.D	Fluoranthene-d10	Jagrut	12/7/2018 6:05:38 PM	mohammad	12/10/2018 12:20:31 PM	Peak Integrated by Software incorrectly
J6227-01/ F9E64	BN003741.D	Perylene-d12	Jagrut	12/7/2018 6:05:38 PM	mohammad	12/10/2018 12:20:31 PM	Peak Integrated by Software incorrectly
J6227-01/ F9E64	BN003741.D	Phenanthrene-d10	Jagrut	12/7/2018 6:05:38 PM	mohammad	12/10/2018 12:20:31 PM	Peak Integrated by Software incorrectly
PB115350BL/ SBLK50	BN003742.D	Chrysene-d12	Jagrut	12/7/2018 6:05:40 PM	mohammad	12/10/2018 12:20:34 PM	Peak Integrated by Software incorrectly
PB115350BL/ SBLK50	BN003742.D	Fluoranthene-d10	Jagrut	12/7/2018 6:05:40 PM	mohammad	12/10/2018 12:20:34 PM	Peak Integrated by Software incorrectly
PB115350BL/ SBLK50	BN003742.D	Perylene-d12	Jagrut	12/7/2018 6:05:40 PM	mohammad	12/10/2018 12:20:34 PM	Peak Integrated by Software incorrectly
PB115350BL/ SBLK50	BN003742.D	Phenanthrene-d10	Jagrut	12/7/2018 6:05:40 PM	mohammad	12/10/2018 12:20:34 PM	Peak Integrated by Software incorrectly
J6227-02/ F9E65	BN003744.D	Chrysene-d12	Jagrut	12/7/2018 6:05:42 PM	mohammad	12/10/2018 12:20:37 PM	Peak Integrated by Software incorrectly
J6227-02/ F9E65	BN003744.D	Fluoranthene	Jagrut	12/7/2018 6:05:42 PM	mohammad	12/10/2018 12:20:37 PM	Peak Integrated by Software incorrectly
J6227-02/ F9E65	BN003744.D	Fluoranthene-d10	Jagrut	12/7/2018 6:05:42 PM	mohammad	12/10/2018 12:20:37 PM	Peak Integrated by Software incorrectly
J6227-02/ F9E65	BN003744.D	Perylene-d12	Jagrut	12/7/2018 6:05:42 PM	mohammad	12/10/2018 12:20:37 PM	Peak Integrated by Software incorrectly
J6227-02/ F9E65	BN003744.D	Phenanthrene-d10	Jagrut	12/7/2018 6:05:42 PM	mohammad	12/10/2018 12:20:37 PM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	BN120618	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-05/ F9E74	BN003745.D	Benzo(b)fluoranthene	Jagrut	12/7/2018 6:05:45 PM	mohammad	12/10/2018 12:20:40 PM	Peak Integrated by Software incorrectly
J6227-05/ F9E74	BN003745.D	Benzo(k)fluoranthene	Jagrut	12/7/2018 6:05:45 PM	mohammad	12/10/2018 12:20:40 PM	Peak Integrated by Software incorrectly
J6227-05/ F9E74	BN003745.D	Pyrene	Jagrut	12/7/2018 6:05:45 PM	mohammad	12/10/2018 12:20:40 PM	Peak Integrated by Software incorrectly
J6227-06/ F9E75	BN003746.D	Benzo(b)fluoranthene	Jagrut	12/7/2018 6:05:48 PM	mohammad	12/10/2018 12:20:43 PM	Peak Integrated by Software incorrectly
J6227-06/ F9E75	BN003746.D	Chrysene-d12	Jagrut	12/7/2018 6:05:48 PM	mohammad	12/10/2018 12:20:43 PM	Peak Integrated by Software incorrectly
J6227-06/ F9E75	BN003746.D	Fluoranthene	Jagrut	12/7/2018 6:05:48 PM	mohammad	12/10/2018 12:20:43 PM	Peak Integrated by Software incorrectly
J6227-06/ F9E75	BN003746.D	Fluoranthene-d10	Jagrut	12/7/2018 6:05:48 PM	mohammad	12/10/2018 12:20:43 PM	Peak Integrated by Software incorrectly
J6227-06/ F9E75	BN003746.D	Perylene-d12	Jagrut	12/7/2018 6:05:48 PM	mohammad	12/10/2018 12:20:43 PM	Peak Integrated by Software incorrectly
J6227-06/ F9E75	BN003746.D	Phenanthrene	Jagrut	12/7/2018 6:05:48 PM	mohammad	12/10/2018 12:20:43 PM	Peak Integrated by Software incorrectly
J6227-06/ F9E75	BN003746.D	Phenanthrene-d10	Jagrut	12/7/2018 6:05:48 PM	mohammad	12/10/2018 12:20:43 PM	Peak Integrated by Software incorrectly
J6227-07/ F9E80	BN003747.D	Benzo(b)fluoranthene	Jagrut	12/7/2018 6:05:50 PM	mohammad	12/10/2018 12:20:45 PM	Peak Integrated by Software incorrectly
J6227-07/ F9E80	BN003747.D	Benzo(k)fluoranthene	Jagrut	12/7/2018 6:05:50 PM	mohammad	12/10/2018 12:20:45 PM	Peak Integrated by Software incorrectly
J6227-07/ F9E80	BN003747.D	Chrysene-d12	Jagrut	12/7/2018 6:05:50 PM	mohammad	12/10/2018 12:20:45 PM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	BN120618	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-07/ F9E80	BN003747.D	Fluoranthene	Jagrut	12/7/2018 6:05:50 PM	mohammad	12/10/2018 12:20:45 PM	Peak Integrated by Software incorrectly
J6227-07/ F9E80	BN003747.D	Fluoranthene-d10	Jagrut	12/7/2018 6:05:50 PM	mohammad	12/10/2018 12:20:45 PM	Peak Integrated by Software incorrectly
J6227-07/ F9E80	BN003747.D	Perylene-d12	Jagrut	12/7/2018 6:05:50 PM	mohammad	12/10/2018 12:20:45 PM	Peak Integrated by Software incorrectly
J6227-07/ F9E80	BN003747.D	Phenanthrene-d10	Jagrut	12/7/2018 6:05:50 PM	mohammad	12/10/2018 12:20:45 PM	Peak Integrated by Software incorrectly
J6227-07/ F9E80	BN003747.D	Pyrene	Jagrut	12/7/2018 6:05:50 PM	mohammad	12/10/2018 12:20:45 PM	Peak Integrated by Software incorrectly
J6227-09/ F9E54	BN003748.D	Benzo(b)fluoranthene	Jagrut	12/7/2018 6:05:52 PM	mohammad	12/10/2018 12:20:49 PM	Peak Integrated by Software incorrectly
J6227-09/ F9E54	BN003748.D	Chrysene-d12	Jagrut	12/7/2018 6:05:52 PM	mohammad	12/10/2018 12:20:49 PM	Peak Integrated by Software incorrectly
J6227-09/ F9E54	BN003748.D	Fluoranthene-d10	Jagrut	12/7/2018 6:05:52 PM	mohammad	12/10/2018 12:20:49 PM	Peak Integrated by Software incorrectly
J6227-09/ F9E54	BN003748.D	Perylene-d12	Jagrut	12/7/2018 6:05:52 PM	mohammad	12/10/2018 12:20:49 PM	Peak Integrated by Software incorrectly
J6227-09/ F9E54	BN003748.D	Phenanthrene-d10	Jagrut	12/7/2018 6:05:52 PM	mohammad	12/10/2018 12:20:49 PM	Peak Integrated by Software incorrectly
J6227-10/ F9E55	BN003749.D	Chrysene-d12	Jagrut	12/7/2018 6:05:55 PM	mohammad	12/10/2018 12:20:52 PM	Peak Integrated by Software incorrectly
J6227-10/ F9E55	BN003749.D	Fluoranthene-d10	Jagrut	12/7/2018 6:05:55 PM	mohammad	12/10/2018 12:20:52 PM	Peak Integrated by Software incorrectly
J6227-10/ F9E55	BN003749.D	Perylene-d12	Jagrut	12/7/2018 6:05:55 PM	mohammad	12/10/2018 12:20:52 PM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	BN120618	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-10/ F9E55	BN003749.D	Phenanthrene-d10	Jagrut	12/7/2018 6:05:55 PM	mohammad	12/10/2018 12:20:52 PM	Peak Integrated by Software incorrectly
J6227-11/ F9E56	BN003750.D	Benzo(b)fluoranthene	Jagrut	12/7/2018 6:05:57 PM	mohammad	12/10/2018 12:20:55 PM	Peak Integrated by Software incorrectly
J6227-11/ F9E56	BN003750.D	Chrysene-d12	Jagrut	12/7/2018 6:05:57 PM	mohammad	12/10/2018 12:20:55 PM	Peak Integrated by Software incorrectly
J6227-11/ F9E56	BN003750.D	Fluoranthene	Jagrut	12/7/2018 6:05:57 PM	mohammad	12/10/2018 12:20:55 PM	Peak Integrated by Software incorrectly
J6227-11/ F9E56	BN003750.D	Fluoranthene-d10	Jagrut	12/7/2018 6:05:57 PM	mohammad	12/10/2018 12:20:55 PM	Peak Integrated by Software incorrectly
J6227-11/ F9E56	BN003750.D	Perylene-d12	Jagrut	12/7/2018 6:05:57 PM	mohammad	12/10/2018 12:20:55 PM	Peak Integrated by Software incorrectly
J6227-11/ F9E56	BN003750.D	Phenanthrene-d10	Jagrut	12/7/2018 6:05:57 PM	mohammad	12/10/2018 12:20:55 PM	Peak Integrated by Software incorrectly
J6227-12/ F9E57	BN003751.D	Chrysene-d12	Jagrut	12/7/2018 6:05:59 PM	mohammad	12/10/2018 12:20:58 PM	Peak Integrated by Software incorrectly
J6227-12/ F9E57	BN003751.D	Fluoranthene-d10	Jagrut	12/7/2018 6:05:59 PM	mohammad	12/10/2018 12:20:58 PM	Peak Integrated by Software incorrectly
J6227-12/ F9E57	BN003751.D	Perylene-d12	Jagrut	12/7/2018 6:05:59 PM	mohammad	12/10/2018 12:20:58 PM	Peak Integrated by Software incorrectly
J6227-12/ F9E57	BN003751.D	Phenanthrene-d10	Jagrut	12/7/2018 6:05:59 PM	mohammad	12/10/2018 12:20:58 PM	Peak Integrated by Software incorrectly
J6227-13/ F9E60	BN003752.D	Benzo(b)fluoranthene	Jagrut	12/7/2018 6:06:02 PM	mohammad	12/10/2018 12:21:00 PM	Peak Integrated by Software incorrectly
J6227-13/ F9E60	BN003752.D	Chrysene-d12	Jagrut	12/7/2018 6:06:02 PM	mohammad	12/10/2018 12:21:00 PM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	BN120618	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-13/ F9E60	BN003752.D	Fluoranthene-d10	Jagrut	12/7/2018 6:06:02 PM	mohammad	12/10/2018 12:21:00 PM	Peak Integrated by Software incorrectly
J6227-13/ F9E60	BN003752.D	Perylene-d12	Jagrut	12/7/2018 6:06:02 PM	mohammad	12/10/2018 12:21:00 PM	Peak Integrated by Software incorrectly
J6227-13/ F9E60	BN003752.D	Phenanthrene-d10	Jagrut	12/7/2018 6:06:02 PM	mohammad	12/10/2018 12:21:00 PM	Peak Integrated by Software incorrectly
J6227-14/ F9E61	BN003753.D	Chrysene-d12	Jagrut	12/7/2018 6:06:04 PM	mohammad	12/10/2018 12:21:04 PM	Peak Integrated by Software incorrectly
J6227-14/ F9E61	BN003753.D	Fluoranthene-d10	Jagrut	12/7/2018 6:06:04 PM	mohammad	12/10/2018 12:21:04 PM	Peak Integrated by Software incorrectly
J6227-14/ F9E61	BN003753.D	Perylene-d12	Jagrut	12/7/2018 6:06:04 PM	mohammad	12/10/2018 12:21:04 PM	Peak Integrated by Software incorrectly
J6227-14/ F9E61	BN003753.D	Phenanthrene-d10	Jagrut	12/7/2018 6:06:04 PM	mohammad	12/10/2018 12:21:04 PM	Peak Integrated by Software incorrectly
J6227-17/ F9E62	BN003754.D	Benzo(a)anthracene	Jagrut	12/7/2018 6:06:07 PM	mohammad	12/10/2018 12:21:06 PM	Peak Integrated by Software incorrectly
J6227-17/ F9E62	BN003754.D	Benzo(b)fluoranthene	Jagrut	12/7/2018 6:06:07 PM	mohammad	12/10/2018 12:21:06 PM	Peak Integrated by Software incorrectly
J6227-17/ F9E62	BN003754.D	Benzo(k)fluoranthene	Jagrut	12/7/2018 6:06:07 PM	mohammad	12/10/2018 12:21:06 PM	Peak Integrated by Software incorrectly
J6227-17/ F9E62	BN003754.D	Perylene-d12	Jagrut	12/7/2018 6:06:07 PM	mohammad	12/10/2018 12:21:06 PM	Peak Integrated by Software incorrectly
J6227-18/ F9E63	BN003755.D	Chrysene-d12	Jagrut	12/7/2018 6:06:09 PM	mohammad	12/10/2018 12:21:10 PM	Peak Integrated by Software incorrectly
J6227-18/ F9E63	BN003755.D	Fluoranthene-d10	Jagrut	12/7/2018 6:06:09 PM	mohammad	12/10/2018 12:21:10 PM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	BN120618	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-18/ F9E63	BN003755.D	Perylene-d12	Jagrut	12/7/2018 6:06:09 PM	mohammad	12/10/2018 12:21:10 PM	Peak Integrated by Software incorrectly
J6227-18/ F9E63	BN003755.D	Phenanthrene-d10	Jagrut	12/7/2018 6:06:09 PM	mohammad	12/10/2018 12:21:10 PM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	BN121518	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-15/ F9F34	BN003951.D	Anthracene	Jagrut	12/17/2018 4:22:23 PM	Sohil	12/17/2018 4:23:43 PM	Peak Integrated by Software incorrectly
J6227-15/ F9F34	BN003951.D	Benzo(a)anthracene	Jagrut	12/17/2018 4:22:23 PM	Sohil	12/17/2018 4:23:43 PM	Peak Integrated by Software incorrectly
J6227-15/ F9F34	BN003951.D	Benzo(a)pyrene	Jagrut	12/17/2018 4:22:23 PM	Sohil	12/17/2018 4:23:43 PM	Peak Integrated by Software incorrectly
J6227-15/ F9F34	BN003951.D	Benzo(b)fluoranthene	Jagrut	12/17/2018 4:22:23 PM	Sohil	12/17/2018 4:23:43 PM	Peak Integrated by Software incorrectly
J6227-15/ F9F34	BN003951.D	Benzo(g,h,i)perylene	Jagrut	12/17/2018 4:22:23 PM	Sohil	12/17/2018 4:23:43 PM	Peak Integrated by Software incorrectly
J6227-15/ F9F34	BN003951.D	Chrysene	Jagrut	12/17/2018 4:22:23 PM	Sohil	12/17/2018 4:23:43 PM	Peak Integrated by Software incorrectly
J6227-15/ F9F34	BN003951.D	Chrysene-d12	Jagrut	12/17/2018 4:22:23 PM	Sohil	12/17/2018 4:23:43 PM	Peak Integrated by Software incorrectly
J6227-15/ F9F34	BN003951.D	Fluoranthene	Jagrut	12/17/2018 4:22:23 PM	Sohil	12/17/2018 4:23:43 PM	Peak Integrated by Software incorrectly
J6227-15/ F9F34	BN003951.D	Fluoranthene-d10	Jagrut	12/17/2018 4:22:23 PM	Sohil	12/17/2018 4:23:43 PM	Peak Integrated by Software incorrectly
J6227-15/ F9F34	BN003951.D	Indeno(1,2,3-cd)pyrene	Jagrut	12/17/2018 4:22:23 PM	Sohil	12/17/2018 4:23:43 PM	Peak Integrated by Software incorrectly
J6227-15/ F9F34	BN003951.D	Perylene-d12	Jagrut	12/17/2018 4:22:23 PM	Sohil	12/17/2018 4:23:43 PM	Peak Integrated by Software incorrectly
J6227-15/ F9F34	BN003951.D	Phenanthrene-d10	Jagrut	12/17/2018 4:22:23 PM	Sohil	12/17/2018 4:23:43 PM	Peak Integrated by Software incorrectly
J6227-15/ F9F34	BN003951.D	Pyrene	Jagrut	12/17/2018 4:22:23 PM	Sohil	12/17/2018 4:23:43 PM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	BN121518	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-03/ F9E66	BN003954.D	Anthracene	Jagrut	12/17/2018 4:22:27 PM	Sohil	12/17/2018 4:23:47 PM	Peak Integrated by Software incorrectly
J6227-03/ F9E66	BN003954.D	Benzo(a)anthracene	Jagrut	12/17/2018 4:22:27 PM	Sohil	12/17/2018 4:23:47 PM	Peak Integrated by Software incorrectly
J6227-03/ F9E66	BN003954.D	Benzo(a)pyrene	Jagrut	12/17/2018 4:22:27 PM	Sohil	12/17/2018 4:23:47 PM	Peak Integrated by Software incorrectly
J6227-03/ F9E66	BN003954.D	Benzo(b)fluoranthene	Jagrut	12/17/2018 4:22:27 PM	Sohil	12/17/2018 4:23:47 PM	Peak Integrated by Software incorrectly
J6227-03/ F9E66	BN003954.D	Benzo(g,h,i)perylene	Jagrut	12/17/2018 4:22:27 PM	Sohil	12/17/2018 4:23:47 PM	Peak Integrated by Software incorrectly
J6227-03/ F9E66	BN003954.D	Benzo(k)fluoranthene	Jagrut	12/17/2018 4:22:27 PM	Sohil	12/17/2018 4:23:47 PM	Peak Integrated by Software incorrectly
J6227-03/ F9E66	BN003954.D	Chrysene	Jagrut	12/17/2018 4:22:27 PM	Sohil	12/17/2018 4:23:47 PM	Peak Integrated by Software incorrectly
J6227-03/ F9E66	BN003954.D	Chrysene-d12	Jagrut	12/17/2018 4:22:27 PM	Sohil	12/17/2018 4:23:47 PM	Peak Integrated by Software incorrectly
J6227-03/ F9E66	BN003954.D	Fluoranthene	Jagrut	12/17/2018 4:22:27 PM	Sohil	12/17/2018 4:23:47 PM	Peak Integrated by Software incorrectly
J6227-03/ F9E66	BN003954.D	Fluoranthene-d10	Jagrut	12/17/2018 4:22:27 PM	Sohil	12/17/2018 4:23:47 PM	Peak Integrated by Software incorrectly
J6227-03/ F9E66	BN003954.D	Indeno(1,2,3-cd)pyrene	Jagrut	12/17/2018 4:22:27 PM	Sohil	12/17/2018 4:23:47 PM	Peak Integrated by Software incorrectly
J6227-03/ F9E66	BN003954.D	Perylene-d12	Jagrut	12/17/2018 4:22:27 PM	Sohil	12/17/2018 4:23:47 PM	Peak Integrated by Software incorrectly
J6227-03/ F9E66	BN003954.D	Phenanthrene-d10	Jagrut	12/17/2018 4:22:27 PM	Sohil	12/17/2018 4:23:47 PM	Peak Integrated by Software incorrectly

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Sequence:	BN121518	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-03/ F9E66	BN003954.D	Pyrene	Jagrut	12/17/2018 4:22:27 PM	Sohil	12/17/2018 4:23:47 PM	Peak Integrated by Software incorrectly
J6227-04/ F9E67	BN003956.D	Benzo(a)anthracene	Jagrut	12/17/2018 4:22:29 PM	Sohil	12/17/2018 4:23:50 PM	Peak Integrated by Software incorrectly
J6227-04/ F9E67	BN003956.D	Chrysene-d12	Jagrut	12/17/2018 4:22:29 PM	Sohil	12/17/2018 4:23:50 PM	Peak Integrated by Software incorrectly
J6227-04/ F9E67	BN003956.D	Fluoranthene	Jagrut	12/17/2018 4:22:29 PM	Sohil	12/17/2018 4:23:50 PM	Peak Integrated by Software incorrectly
J6227-04/ F9E67	BN003956.D	Fluoranthene-d10	Jagrut	12/17/2018 4:22:29 PM	Sohil	12/17/2018 4:23:50 PM	Peak Integrated by Software incorrectly
J6227-04/ F9E67	BN003956.D	Perylene-d12	Jagrut	12/17/2018 4:22:29 PM	Sohil	12/17/2018 4:23:50 PM	Peak Integrated by Software incorrectly
J6227-04/ F9E67	BN003956.D	Phenanthrene	Jagrut	12/17/2018 4:22:29 PM	Sohil	12/17/2018 4:23:50 PM	Peak Integrated by Software incorrectly
J6227-04/ F9E67	BN003956.D	Phenanthrene-d10	Jagrut	12/17/2018 4:22:29 PM	Sohil	12/17/2018 4:23:50 PM	Peak Integrated by Software incorrectly
J6227-04/ F9E67	BN003956.D	Pyrene	Jagrut	12/17/2018 4:22:29 PM	Sohil	12/17/2018 4:23:50 PM	Peak Integrated by Software incorrectly
J6227-08/ F9F33	BN003958.D	Anthracene	Jagrut	12/17/2018 4:22:30 PM	Sohil	12/17/2018 4:23:51 PM	Peak Integrated by Software incorrectly
J6227-08/ F9F33	BN003958.D	Benzo(a)anthracene	Jagrut	12/17/2018 4:22:30 PM	Sohil	12/17/2018 4:23:51 PM	Peak Integrated by Software incorrectly
J6227-08/ F9F33	BN003958.D	Benzo(a)pyrene	Jagrut	12/17/2018 4:22:30 PM	Sohil	12/17/2018 4:23:51 PM	Peak Integrated by Software incorrectly
J6227-08/ F9F33	BN003958.D	Benzo(b)fluoranthene	Jagrut	12/17/2018 4:22:30 PM	Sohil	12/17/2018 4:23:51 PM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	BN121518	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-08/ F9F33	BN003958.D	Benzo(g,h,i)perylene	Jagrut	12/17/2018 4:22:30 PM	Sohil	12/17/2018 4:23:51 PM	Peak Integrated by Software incorrectly
J6227-08/ F9F33	BN003958.D	Benzo(k)fluoranthene	Jagrut	12/17/2018 4:22:30 PM	Sohil	12/17/2018 4:23:51 PM	Peak Integrated by Software incorrectly
J6227-08/ F9F33	BN003958.D	Chrysene	Jagrut	12/17/2018 4:22:30 PM	Sohil	12/17/2018 4:23:51 PM	Peak Integrated by Software incorrectly
J6227-08/ F9F33	BN003958.D	Chrysene-d12	Jagrut	12/17/2018 4:22:30 PM	Sohil	12/17/2018 4:23:51 PM	Peak Integrated by Software incorrectly
J6227-08/ F9F33	BN003958.D	Fluoranthene	Jagrut	12/17/2018 4:22:30 PM	Sohil	12/17/2018 4:23:51 PM	Peak Integrated by Software incorrectly
J6227-08/ F9F33	BN003958.D	Fluoranthene-d10	Jagrut	12/17/2018 4:22:30 PM	Sohil	12/17/2018 4:23:51 PM	Peak Integrated by Software incorrectly
J6227-08/ F9F33	BN003958.D	Indeno(1,2,3-cd)pyrene	Jagrut	12/17/2018 4:22:30 PM	Sohil	12/17/2018 4:23:51 PM	Peak Integrated by Software incorrectly
J6227-08/ F9F33	BN003958.D	Perylene-d12	Jagrut	12/17/2018 4:22:30 PM	Sohil	12/17/2018 4:23:51 PM	Peak Integrated by Software incorrectly
J6227-08/ F9F33	BN003958.D	Phenanthrene-d10	Jagrut	12/17/2018 4:22:30 PM	Sohil	12/17/2018 4:23:51 PM	Peak Integrated by Software incorrectly
J6227-08/ F9F33	BN003958.D	Pyrene	Jagrut	12/17/2018 4:22:30 PM	Sohil	12/17/2018 4:23:51 PM	Peak Integrated by Software incorrectly
J6227-16/ F9F35	BN003960.D	Anthracene	Jagrut	12/17/2018 4:22:33 PM	Sohil	12/17/2018 4:23:53 PM	Peak Integrated by Software incorrectly
J6227-16/ F9F35	BN003960.D	Benzo(a)anthracene	Jagrut	12/17/2018 4:22:33 PM	Sohil	12/17/2018 4:23:53 PM	Peak Integrated by Software incorrectly
J6227-16/ F9F35	BN003960.D	Benzo(a)pyrene	Jagrut	12/17/2018 4:22:33 PM	Sohil	12/17/2018 4:23:53 PM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	BN121518	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-16/ F9F35	BN003960.D	Benzo(b)fluoranthene	Jagrut	12/17/2018 4:22:33 PM	Sohil	12/17/2018 4:23:53 PM	Peak Integrated by Software incorrectly
J6227-16/ F9F35	BN003960.D	Benzo(g,h,i)perylene	Jagrut	12/17/2018 4:22:33 PM	Sohil	12/17/2018 4:23:53 PM	Peak Integrated by Software incorrectly
J6227-16/ F9F35	BN003960.D	Chrysene	Jagrut	12/17/2018 4:22:33 PM	Sohil	12/17/2018 4:23:53 PM	Peak Integrated by Software incorrectly
J6227-16/ F9F35	BN003960.D	Chrysene-d12	Jagrut	12/17/2018 4:22:33 PM	Sohil	12/17/2018 4:23:53 PM	Peak Integrated by Software incorrectly
J6227-16/ F9F35	BN003960.D	Dibenzo(a,h)anthracene	Jagrut	12/17/2018 4:22:33 PM	Sohil	12/17/2018 4:23:53 PM	Peak Integrated by Software incorrectly
J6227-16/ F9F35	BN003960.D	Fluoranthene	Jagrut	12/17/2018 4:22:33 PM	Sohil	12/17/2018 4:23:53 PM	Peak Integrated by Software incorrectly
J6227-16/ F9F35	BN003960.D	Fluoranthene-d10	Jagrut	12/17/2018 4:22:33 PM	Sohil	12/17/2018 4:23:53 PM	Peak Integrated by Software incorrectly
J6227-16/ F9F35	BN003960.D	Indeno(1,2,3-cd)pyrene	Jagrut	12/17/2018 4:22:33 PM	Sohil	12/17/2018 4:23:53 PM	Peak Integrated by Software incorrectly
J6227-16/ F9F35	BN003960.D	Perylene-d12	Jagrut	12/17/2018 4:22:33 PM	Sohil	12/17/2018 4:23:53 PM	Peak Integrated by Software incorrectly
J6227-16/ F9F35	BN003960.D	Phenanthrene	Jagrut	12/17/2018 4:22:33 PM	Sohil	12/17/2018 4:23:53 PM	Peak Integrated by Software incorrectly
J6227-16/ F9F35	BN003960.D	Phenanthrene-d10	Jagrut	12/17/2018 4:22:33 PM	Sohil	12/17/2018 4:23:53 PM	Peak Integrated by Software incorrectly
J6227-19/ F9E68	BN003962.D	Anthracene	Jagrut	12/17/2018 4:22:34 PM	Sohil	12/17/2018 4:23:54 PM	Peak Integrated by Software incorrectly
J6227-19/ F9E68	BN003962.D	Benzo(a)anthracene	Jagrut	12/17/2018 4:22:34 PM	Sohil	12/17/2018 4:23:54 PM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	BN121518	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-19/ F9E68	BN003962.D	Benzo(b)fluoranthene	Jagrut	12/17/2018 4:22:34 PM	Sohil	12/17/2018 4:23:54 PM	Peak Integrated by Software incorrectly
J6227-19/ F9E68	BN003962.D	Chrysene	Jagrut	12/17/2018 4:22:34 PM	Sohil	12/17/2018 4:23:54 PM	Peak Integrated by Software incorrectly
J6227-19/ F9E68	BN003962.D	Chrysene-d12	Jagrut	12/17/2018 4:22:34 PM	Sohil	12/17/2018 4:23:54 PM	Peak Integrated by Software incorrectly
J6227-19/ F9E68	BN003962.D	Fluoranthene	Jagrut	12/17/2018 4:22:34 PM	Sohil	12/17/2018 4:23:54 PM	Peak Integrated by Software incorrectly
J6227-19/ F9E68	BN003962.D	Fluoranthene-d10	Jagrut	12/17/2018 4:22:34 PM	Sohil	12/17/2018 4:23:54 PM	Peak Integrated by Software incorrectly
J6227-19/ F9E68	BN003962.D	Perylene-d12	Jagrut	12/17/2018 4:22:34 PM	Sohil	12/17/2018 4:23:54 PM	Peak Integrated by Software incorrectly
J6227-19/ F9E68	BN003962.D	Phenanthrene-d10	Jagrut	12/17/2018 4:22:34 PM	Sohil	12/17/2018 4:23:54 PM	Peak Integrated by Software incorrectly
J6227-20/ F9E69	BN003965.D	Anthracene	Jagrut	12/17/2018 4:22:35 PM	Sohil	12/17/2018 4:23:55 PM	Peak Integrated by Software incorrectly
J6227-20/ F9E69	BN003965.D	Benzo(b)fluoranthene	Jagrut	12/17/2018 4:22:35 PM	Sohil	12/17/2018 4:23:55 PM	Peak Integrated by Software incorrectly
J6227-20/ F9E69	BN003965.D	Benzo(k)fluoranthene	Jagrut	12/17/2018 4:22:35 PM	Sohil	12/17/2018 4:23:55 PM	Peak Integrated by Software incorrectly
J6227-20/ F9E69	BN003965.D	Chrysene-d12	Jagrut	12/17/2018 4:22:35 PM	Sohil	12/17/2018 4:23:55 PM	Peak Integrated by Software incorrectly
J6227-20/ F9E69	BN003965.D	Fluoranthene	Jagrut	12/17/2018 4:22:35 PM	Sohil	12/17/2018 4:23:55 PM	Peak Integrated by Software incorrectly
J6227-20/ F9E69	BN003965.D	Fluoranthene-d10	Jagrut	12/17/2018 4:22:35 PM	Sohil	12/17/2018 4:23:55 PM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	BN121518	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
J6227-20/ F9E69	BN003965.D	Perylene-d12	Jagrut	12/17/2018 4:22:35 PM	Sohil	12/17/2018 4:23:55 PM	Peak Integrated by Software incorrectly
J6227-20/ F9E69	BN003965.D	Phenanthrene-d10	Jagrut	12/17/2018 4:22:35 PM	Sohil	12/17/2018 4:23:55 PM	Peak Integrated by Software incorrectly
J6227-20/ F9E69	BN003965.D	Pyrene	Jagrut	12/17/2018 4:22:35 PM	Sohil	12/17/2018 4:23:55 PM	Peak Integrated by Software incorrectly

FORM 2A-OR
DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name : Chemtech Consulting Group Contract: EPW14030

Lab Code : CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method : SVOA Level : Low

Matrix : Soil

EPA Sample No .	DMC1 (DXE)	DMC2 (PHL)	DMC3 (BCE)	DMC4 (2CP)	DMC5 (4MP)	DMC6 (NBZ)	DMC7 (2NP)	DMC8 (DCP)	DMC9 (4CA)
F9E54	44	34	37	38	33	41	39	33	51
F9E55	72	77	73	83	77	82	84	73	121
F9E56	40	36	39	44	38	42	44	33	55
F9E57	57	68	71	77	72	82	82	66	112
F9E60	33 *	35	36	39	32	40	39	33	47
F9E61	50	58	57	65	57	68	65	57	90
F9E62	37 *	34	35	39	31	39	39	34	46
F9E63	58	62	59	67	61	70	73	59	106
F9E64	49	36	41	44	35	47	44	34	53
F9E65	45	43	42	49	45	51	50	44	61
F9E66	29 *	38	35	40	34	40	39	36	27
F9E67	22 *	30	29	33	28	35	34	31	25
F9E68	33 *	36	39	43	34	45	45	39	33
F9E69	31 *	36	38	41	32	42	42	37	48
F9E74	37 *	31	33	34	30	35	35	29	11
F9E75	32 *	33	35	37	30	36	35	30	33
F9E80	38 *	32	36	37	30	38	38	32	49
F9F33	29 *	35	32	39	31	42	41	38	33
F9F34	37 *	43	47	50	36	49	52	44	61
F9F35	36 *	42	42	44	39	51	51	44	41
SBLK49	70	55	54	62	52	65	61	52	90

	QC LIMITS
DMC1 (DXE) = 1,4-Dioxane-d8	40 - 110
DMC2 (PHL) = Phenol-d5	10 - 130
DMC3 (BCE) = Bis(2-Chloroethyl)ether-d8	10 - 150
DMC4 (2CP) = 2-Chlorophenol-d4	15 - 120
DMC5 (4MP) = 4-Methylphenol-d8	10 - 140
DMC6 (NBZ) = Nitrobenzene-d5	10 - 135
DMC7 (2NP) = 2-Nitrophenol-d4	10 - 120
DMC8 (DCP) = 2,4-Dichlorophenol-d3	10 - 140
DMC9 (4CA) = 4-Chloroaniline-d4	1 - 145

FORM 2B-OR
DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name : Chemtech Consulting Group Contract : EPW14030
Lab Code : CHM Case No.: 48019 MA No.: _____ SDG No.: F9E54
Analytical Method : SVOA Level : Low
Matrix : Soil

EPA Sample No .	DMC10 (DMP)	DMC11 ACY	DMC12 (4NP)	DMC13 (FLR)	DMC14 (NMP)	DMC15 (ANC)	DMC16 (PYR)	DMC17 (BAP)	Tot Out
F9E54	44	38	23	42	26	39	37	36	0
F9E55	87	87	76	86	67	86	85	87	0
F9E56	46	41	30	43	32	43	44	43	0
F9E57	79	81	65	83	75	84	80	82	0
F9E60	41	38	26	40	30	41	40	42	1
F9E61	72	71	46	70	53	70	69	71	0
F9E62	41	38	27	40	29	40	39	40	1
F9E63	72	71	58	72	54	70	73	73	0
F9E64	48	44	24	46	27	46	50	42	0
F9E65	51	50	38	49	35	50	47	50	0
F9E66	42	42	31	42	18	39	43	40	1
F9E67	34	35	23	34	20	34	37	35	1
F9E68	45	42	32	45	35	43	41	41	1
F9E69	45	41	30	44	31	42	42	42	1
F9E74	39	34	24	37	26	35	32	31	1
F9E75	39	36	23	38	25	39	35	36	1
F9E80	44	36	27	41	28	38	36	36	1
F9F33	45	43	29	41	28	40	40	39	1
F9F34	54	48	36	52	41	51	42	48	1
F9F35	48	46	31	44	20	43	49	45	1
SBLK49	70	68	41	69	43	77	81	77	0

	OC LIMITS
DMC10 (DMP) = Dimethylphthalate-d6	10 - 145
DMC11 (ACY) = Acenaphthylene-d8	15 - 120
DMC12 (4NP) = 4-Nitrophenol-d4	10 - 150
DMC13 (FLR) = Fluorene-d10	20 - 140
DMC14 (NMP) = 4,6-Dinitro-2-methylphenol-d2	10 - 130
DMC15 (ANC) = Anthracene-d10	10 - 150
DMC16 (PYR) = Pyrene-d10	10 - 130
DMC17 (BAP) = Benzo(a)pyrene-d12	10 - 140

EPA SAMPLE NO.

SBLK49

FORM 4-OR
METHOD BLANK SUMMARY

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : _____ sdg no.: F9E54
Analytical Method: SVOA
Level : Low
Matrix : Soil
Lab Sample ID: PB115349BL
Instrument ID: BNA_M
Lab File ID : BM018022.D
Extraction Type : SOXH
Date Extracted : 12/05/2018
GC Column ( ) : ZB-GR ID : 0.25 (mm)
Date Analyzed : 12/08/2018
GC Column ( ) : _____ ID : _____ (mm)
Time Analyzed : 17:16
Heated Purge: (Y/N) _____ Cleanup(Y/N): Y
Cleanup Types : GPC

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE / TIME ANALYZED
F9E64	J6227-01	BM018013.D	12/08/2018 11:46
F9E65	J6227-02	BM018094.D	12/12/2018 16:02
F9E74	J6227-05	BM018095.D	12/12/2018 16:38
F9E75	J6227-06	BM018096.D	12/12/2018 17:15
F9E80	J6227-07	BM018097.D	12/12/2018 17:51
F9E54	J6227-09	BM018098.D	12/12/2018 18:27
F9E55	J6227-10	BM018099.D	12/12/2018 19:03
F9E56	J6227-11	BM018100.D	12/12/2018 19:40
F9E57	J6227-12	BM018101.D	12/12/2018 20:16
F9E60	J6227-13	BM018102.D	12/12/2018 20:52
F9E61	J6227-14	BM018103.D	12/12/2018 21:28
F9E62	J6227-17	BM018104.D	12/12/2018 22:04
F9E63	J6227-18	BM018105.D	12/12/2018 22:40
F9F34	J6227-15	BM018106.D	12/12/2018 23:16
F9E68	J6227-19	BM018110.D	12/13/2018 01:43
F9E69	J6227-20	BM018111.D	12/13/2018 02:19
F9F33	J6227-08	BM018112.D	12/13/2018 02:55
F9E67	J6227-04	BM018113.D	12/13/2018 03:31
F9E66	J6227-03	BM018114.D	12/13/2018 04:07
F9F35	J6227-16	BM018115.D	12/13/2018 04:43

FORM 5-OR
GC/MS INSTRUMENT PERFORMANCE CHECK

EPA SAMPLE NO.
DFTPP64

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Lab File ID : BM017687.D
Instrument ID: BNA_M
BFB / DFTPP : DFTPP
GC Column : ZB-GR ID : 0.25 (mm)
Injection Date : 11/19/2018
Injection Time : 17:50

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	34.2	
68	Less than 2.0% of mass 69	0.8(2)	1
69	Present	40.2	
70	Less than 2.0% of mass 69	0.3(0.7)	1
127	10.0 - 80.0% of mass 198	46.1	
197	Less than 2.0% of mass 198	0.6	
198	Base Peak, 100% relative abundance	100	
199	5.0 to 9.0% of mass 198	6.6	
275	10.0 - 60.0% of mass 198	29.1	
365	Greater than 1% of mass 198	4.2	
441	Present, but less than mass 443	12.5	
442	Greater than 50.0% of mass 198	81.1	
443	15.0 - 24.0% of mass 442	16(19.7)	2

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTD00551	SSTD00551	BM017688.D	11/19/2018	18:26
SSTD01052	SSTD01052	BM017689.D	11/19/2018	19:02
SSTD02053	SSTD02053	BM017690.D	11/19/2018	19:38
SSTD04054	SSTD04054	BM017691.D	11/19/2018	20:14
SSTD08055	SSTD08055	BM017692.D	11/19/2018	20:50
SSTD16056	SSTD16056	BM017693.D	11/19/2018	21:26
SICV57	SSTDICV020	BM017694.D	11/19/2018	22:02

FORM 5-OR
GC/MS INSTRUMENT PERFORMANCE CHECK

EPA SAMPLE NO.
DFTPP74

Lab Name : Chemtech Consulting Group Contract : EPW14030
Lab Code: CHM Case No.: 48019 MA No. : SDG No.: F9E54
Analytical Method : SVOA Lab File ID : BM018011.D
Instrument ID: BNA_M BFB / DFTPP : DFTPP
GC Column : ZB-GR ID : 0.25 (mm)
Injection Date : 12/08/2018 Injection Time : 10:33

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	34.2	
68	Less than 2.0% of mass 69	0.8(2)	1
69	Present	39.3	
70	Less than 2.0% of mass 69	0.2(0.5)	1
127	10.0 - 80.0% of mass 198	46.2	
197	Less than 2.0% of mass 198	0.6	
198	Base Peak, 100% relative abundance	100	
199	5.0 to 9.0% of mass 198	6.8	
275	10.0 - 60.0% of mass 198	28.6	
365	Greater than 1% of mass 198	4.1	
441	Present, but less than mass 443	12.3	
442	Greater than 50.0% of mass 198	82	
443	15.0 - 24.0% of mass 442	16.1(19.6)	2

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTD02084	SSTDCCC020	BM018012.D	12/08/2018	11:10
F9E64	J6227-01	BM018013.D	12/08/2018	11:46
SBLK49	PB115349BL	BM018022.D	12/08/2018	17:16
SSTD02085	SSTDCCC020EC	BM018023.D	12/08/2018	17:53

FORM 5-OR
GC/MS INSTRUMENT PERFORMANCE CHECK

EPA SAMPLE NO.
DFTPP77

Lab Name : Chemtech Consulting Group Contract : EPW14030
Lab Code: CHM Case No.: 48019 MA No. : SDG No.: F9E54
Analytical Method : SVOA Lab File ID : BM018092.D
Instrument ID: BNA_M BFB / DFTPP : DFTPP
GC Column : ZB-GR ID : 0.25 (mm)
Injection Date : 12/12/2018 Injection Time : 14:08

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	31.3
68	Less than 2.0% of mass 69	0.6(1.7) 1
69	Present	37.1
70	Less than 2.0% of mass 69	0.2(0.6) 1
127	10.0 - 80.0% of mass 198	43.6
197	Less than 2.0% of mass 198	0.8
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	28.1
365	Greater than 1% of mass 198	4.1
441	Present, but less than mass 443	13
442	Greater than 50.0% of mass 198	84.6
443	15.0 - 24.0% of mass 442	16.2(19.1) 2

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTD02093	SSTDCCC020	BM018093.D	12/12/2018	15:26
F9E65	J6227-02	BM018094.D	12/12/2018	16:02
F9E74	J6227-05	BM018095.D	12/12/2018	16:38
F9E75	J6227-06	BM018096.D	12/12/2018	17:15
F9E80	J6227-07	BM018097.D	12/12/2018	17:51
F9E54	J6227-09	BM018098.D	12/12/2018	18:27
F9E55	J6227-10	BM018099.D	12/12/2018	19:03
F9E56	J6227-11	BM018100.D	12/12/2018	19:40
F9E57	J6227-12	BM018101.D	12/12/2018	20:16
F9E60	J6227-13	BM018102.D	12/12/2018	20:52
F9E61	J6227-14	BM018103.D	12/12/2018	21:28
F9E62	J6227-17	BM018104.D	12/12/2018	22:04
F9E63	J6227-18	BM018105.D	12/12/2018	22:40
F9F34	J6227-15	BM018106.D	12/12/2018	23:16
SSTD02094	SSTDCCC020	BM018109.D	12/13/2018	01:04
F9E68	J6227-19	BM018110.D	12/13/2018	01:43
F9E69	J6227-20	BM018111.D	12/13/2018	02:19
F9F33	J6227-08	BM018112.D	12/13/2018	02:55
F9E67	J6227-04	BM018113.D	12/13/2018	03:31
F9E66	J6227-03	BM018114.D	12/13/2018	04:07
F9F35	J6227-16	BM018115.D	12/13/2018	04:43
SSTD02095	SSTDCCC020EC	BM018124.D	12/13/2018	10:43

FORM 8A-OR
INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Chemtech Consulting Group Contract: EPW14030
Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54
Analytical Method: SVOA Level : LOW
EPA Sample No. : SSTD02084 Lab File ID (Standard) : BM018012.D
Instrument ID : BNA_M Init.Calib.Date(s): 11/19/2018
GC Column : ZB-GR ID: 0.25 (mm) Date Analyzed : 12/08/2018
Heated Purge: Time Analyzed : 11:10

	IS1 (DCB) AREA	RT	IS2 (NPT) AREA	RT	IS3 (ANT) AREA	RT
12 HOUR STD	143132	7.56	588517	10.32	314676	14.20
UPPER LIMIT	286264	8.06	1177030	10.82	629352	14.7
LOWER LIMIT	71566	7.06	294259	9.82	157338	13.7
EPA SAMPLE NO.						
F9E64	134232	7.56	533383	10.32	278109	14.20
SBLK49	119755	7.56	467621	10.32	247753	14.20

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

FORM 8A-OR
INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Chemtech Consulting Group | Contract: EPW14030
Lab Code: CHM | Case No.: 48019 | MA No.: | SDG No.: F9E54
Analytical Method: SVOA | Level : LOW
EPA Sample No. : SSTD02084 | Lab File ID (Standard) : BM018012.D
Instrument ID : BNA_M | Init.Calib.Date(s): 11/19/2018
GC Column : ZB-GR | ID: 0.25 (mm) | Date Analyzed : 12/08/2018
Heated Purge: | Time Analyzed : 11:10

	IS4 (PHN) AREA	RT	IS5 (CRY) AREA	RT	IS6 (PRY) AREA	RT
12 HOUR STD	664966	16.96	676580	21.17	645458	23.34
UPPER LIMIT	1329930	17.46	1353160	21.67	1290920	23.84
LOWER LIMIT	332483	16.46	338290	20.67	322729	22.84
EPA SAMPLE NO.						
F9E64	582640	16.96	568226	21.17	558623	23.34
SBLK49	531099	16.96	560210	21.17	574723	23.35

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

FORM 8A-OR
INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Chemtech Consulting Group Contract: EPW14030
Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54
Analytical Method: SVOA Level : LOW
EPA Sample No. : SSTD02093 Lab File ID (Standard) : BM018093.D
Instrument ID : BNA_M Init.Calib.Date(s): 11/19/2018
GC Column : ZB-GR ID: 0.25 (mm) Date Analyzed : 12/12/2018
Heated Purge: Time Analyzed : 15:26

	IS1 (DCB) AREA	RT	IS2 (NPT) AREA	RT	IS3 (ANT) AREA	RT
12 HOUR STD	89795	7.55	419634	10.31	260163	14.19
UPPER LIMIT	179590	8.05	839268	10.81	520326	14.69
LOWER LIMIT	44897.5	7.05	209817	9.81	130082	13.69
EPA SAMPLE NO.						
F9E65	89745	7.55	400989	10.31	254584	14.20
F9E74	88555	7.55	412360	10.31	250423	14.19
F9E75	69642	7.55	334345	10.31	213541	14.19
F9E80	91018	7.55	421555	10.31	258104	14.19
F9E54	80927	7.55	375756	10.31	230996	14.19
F9E55	86222	7.55	398606	10.31	240141	14.19
F9E56	93143	7.55	437139	10.31	273960	14.19
F9E57	100220	7.55	436016	10.31	265524	14.19
F9E60	100062	7.55	461488	10.31	255277	14.19
F9E61	96209	7.55	439651	10.31	271554	14.19
F9F34	104834	7.55	485051	10.31	267057	14.19
F9E62	116696	7.54	523308	10.31	328570	14.19
F9E63	109977	7.55	501752	10.31	282864	14.19

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

FORM 8A-OR
INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Chemtech Consulting Group | Contract: EPW14030
Lab Code: CHM | Case No.: 48019 | MA No.: | SDG No.: F9E54
Analytical Method: SVOA | Level : LOW
EPA Sample No. : SSTD02093 | Lab File ID (Standard) : BM018093.D
Instrument ID : BNA_M | Init.Calib.Date(s): 11/19/2018
GC Column : ZB-GR | ID: 0.25 (mm) | Date Analyzed : 12/12/2018
Heated Purge: | Time Analyzed : 15:26

	IS4 (PHN) AREA	RT	IS5 (CRY) AREA	RT	IS6 (PRY) AREA	RT
12 HOUR STD	608961	16.96	765114	21.17	828724	23.34
UPPER LIMIT	1217920	17.46	1530230	21.67	1657450	23.84
LOWER LIMIT	304481	16.46	382557	20.67	414362	22.84
EPA SAMPLE NO.						
F9E65	620723	16.96	780974	21.17	868370	23.35
F9E74	586204	16.96	736047	21.17	848706	23.34
F9E75	513096	16.96	665542	21.17	796372	23.34
F9E80	635282	16.95	815737	21.17	928131	23.34
F9E54	565957	16.95	706290	21.17	805418	23.34
F9E55	577309	16.95	716093	21.17	801681	23.34
F9E56	665462	16.95	760069	21.17	852814	23.34
F9E57	558270	16.95	699589	21.17	801983	23.34
F9E60	599914	16.95	743010	21.17	896798	23.34
F9E61	646568	16.95	800716	21.17	905273	23.34
F9F34	621836	16.95	857798	21.17	969297	23.34
F9E62	771841	16.95	958156	21.17	1069110	23.34
F9E63	719462	16.95	794079	21.17	977875	23.34

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

FORM 8A-OR
INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Chemtech Consulting Group Contract: EPW14030
Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54
Analytical Method: SVOA Level : LOW
EPA Sample No. : SSTD02094 Lab File ID (Standard) : BM018109.D
Instrument ID : BNA_M Init.Calib.Date(s): 11/19/2018
GC Column : ZB-GR ID: 0.25 (mm) Date Analyzed : 12/13/2018
Heated Purge: Time Analyzed : 01:04

	IS1 (DCB) AREA	RT	IS2 (NPT) AREA	RT	IS3 (ANT) AREA	RT
12 HOUR STD	107624	7.54	516210	10.31	274974	14.19
UPPER LIMIT	215248	8.04	1032420	10.81	549948	14.69
LOWER LIMIT	53812	7.04	258105	9.81	137487	13.69
EPA SAMPLE NO.						
F9E66	141001	7.54	649758	10.31	388205	14.19
F9E67	142946	7.54	588265	10.31	373377	14.19
F9F33	124457	7.54	529544	10.30	296825	14.19
F9F35	152554	7.54	669638	10.31	415958	14.19
F9E69	110911	7.55	505499	10.31	309753	14.19
F9E68	120419	7.54	541193	10.31	288011	14.19

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

FORM 8A-OR
INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Chemtech Consulting Group | Contract: EPW14030
Lab Code: CHM | Case No.: 48019 | MA No.: | SDG No.: F9E54
Analytical Method: SVOA | Level : LOW
EPA Sample No. : SSTD02094 | Lab File ID (Standard) : BM018109.D
Instrument ID : BNA_M | Init.Calib.Date(s): 11/19/2018
GC Column : ZB-GR | ID: 0.25 (mm) | Date Analyzed : 12/13/2018
Heated Purge: | Time Analyzed : 01:04

	IS4 (PHN) AREA	RT	IS5 (CRY) AREA	RT	IS6 (PRY) AREA	RT
12 HOUR STD	638176	16.95	772824	21.17	830240	23.34
UPPER LIMIT	1276350	17.45	1545650	21.67	1660480	23.84
LOWER LIMIT	319088	16.45	386412	20.67	415120	22.84
EPA SAMPLE NO.						
F9E66	812211	16.95	856212	21.16	783233	23.33
F9E67	826434	16.95	820461	21.16	721713	23.34
F9F33	697888	16.95	850909	21.16	877377	23.33
F9F35	915047	16.95	1021950	21.16	901991	23.34
F9E69	729580	16.95	894463	21.16	851666	23.34
F9E68	672840	16.95	831077	21.16	834132	23.33

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E54

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-09
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018098.D
% Solids : 87.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	76	U
100-52-7	Benzaldehyde	370	U
108-95-2	Phenol	130	J
111-44-4	Bis(2-Chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	190	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2-oxybis(1-Chloropropane)	370	U
98-86-2	Acetophenone	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	190	U
67-72-1	Hexachloroethane	190	U
98-95-3	Nitrobenzene	190	U
78-59-1	Isophorone	190	U
88-75-5	2-Nitrophenol	190	U
105-67-9	2,4-Dimethylphenol	190	U
111-91-1	Bis(2-Chloroethoxy)methane	190	U
120-83-2	2,4-Dichlorophenol	190	U
91-20-3	Naphthalene	190	U
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	190	U
105-60-2	Caprolactam	370	U
59-50-7	4-Chloro-3-methylphenol	190	U
91-57-6	2-Methylnaphthalene	190	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E54

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-09
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018098.D
% Solids : 87.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	190	U
92-52-4	1,1-Biphenyl	190	U
91-58-7	2-Chloronaphthalene	190	U
88-74-4	2-Nitroaniline	190	U
131-11-3	Dimethylphthalate	210	
606-20-2	2,6-Dinitrotoluene	190	U
208-96-8	Acenaphthylene	190	U
99-09-2	3-Nitroaniline	370	U
83-32-9	Acenaphthene	190	U
51-28-5	2,4-Dinitrophenol	370	U
100-02-7	4-Nitrophenol	370	U
132-64-9	Dibenzofuran	190	U
121-14-2	2,4-Dinitrotoluene	190	U
84-66-2	Diethylphthalate	190	U
86-73-7	Fluorene	190	U
7005-72-3	4-Chlorophenyl-phenylether	190	U
100-01-6	4-Nitroaniline	370	U
534-52-1	4,6-Dinitro-2-methylphenol	370	U
86-30-6	N-Nitrosodiphenylamine	190	U
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U
101-55-3	4-Bromophenyl-phenylether	190	U
118-74-1	Hexachlorobenzene	190	U
1912-24-9	Atrazine	370	U
87-86-5	Pentachlorophenol	370	U
85-01-8	Phenanthrene	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E54

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-09
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018098.D
% Solids : 87.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	190	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	190	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	190	U
85-68-7	Butylbenzylphthalate	190	U
91-94-1	3,3-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	190	U
218-01-9	Chrysene	190	U
117-81-7	Bis(2-ethylhexyl)phthalate	190	U
117-84-0	Di-n-octyl phthalate	370	U
205-99-2	Benzo(b)fluoranthene	190	U
207-08-9	Benzo(k)fluoranthene	190	U
50-32-8	Benzo(a)pyrene	190	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	U
53-70-3	Dibenzo(a,h)anthracene	190	U
191-24-2	Benzo(g,h,i)perylene	190	U
58-90-2	2,3,4,6-Tetrachlorophenol	190	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E54

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-09
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018098.D
% Solids : 87.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/12/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1		unknown-01	4.72	90	J
2	000057-10-3	n-Hexadecanoic acid	17.86	170	JN
3		unknown-02	23.93	85	J
4	E966796	Total Alkanes	N/A	510	

EPA-designated Registry Number.

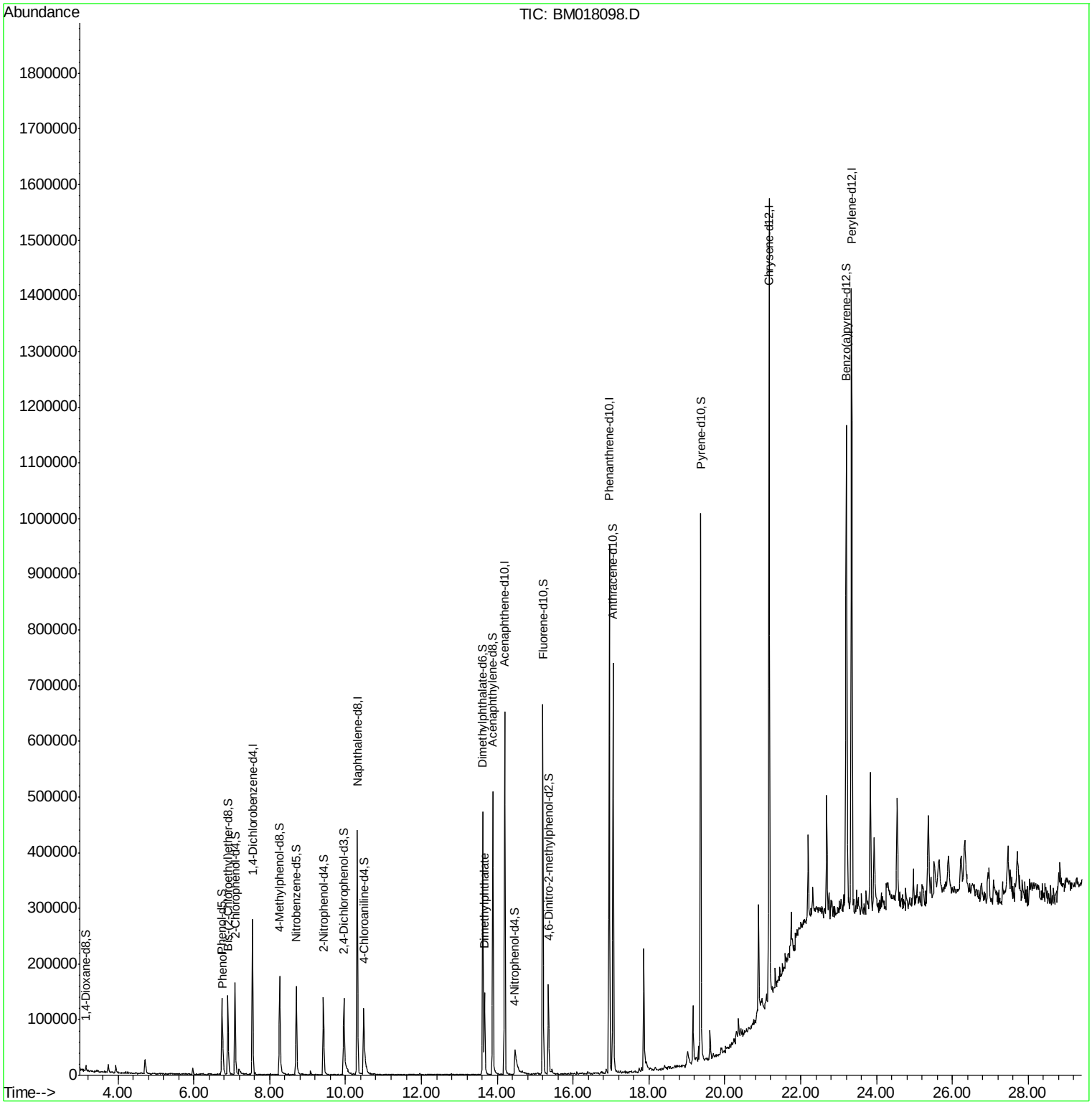
Quantitation Report (LSC Reviewed)

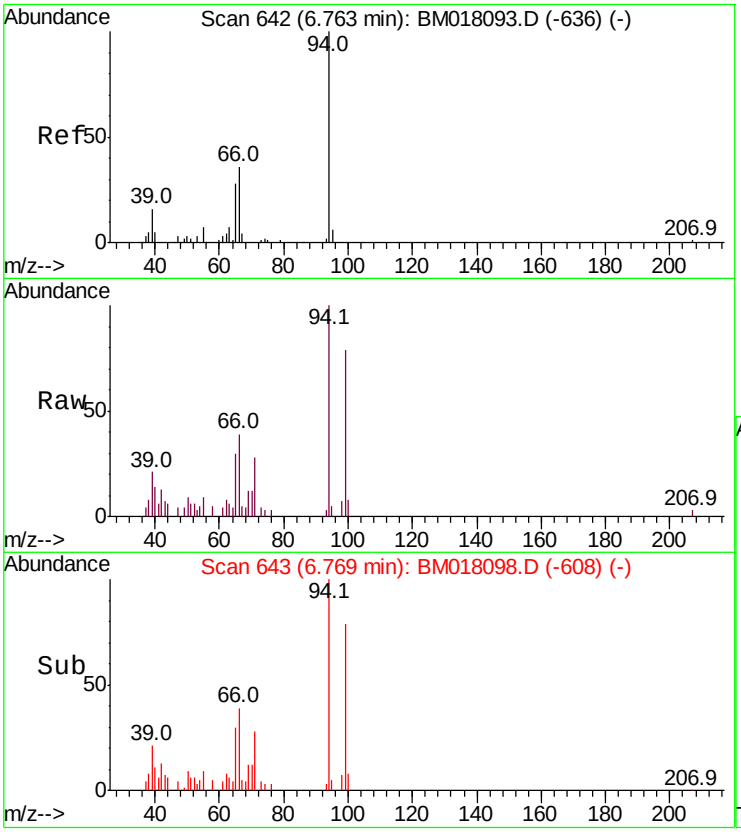
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 13 03:03:26 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E54

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:07 PM

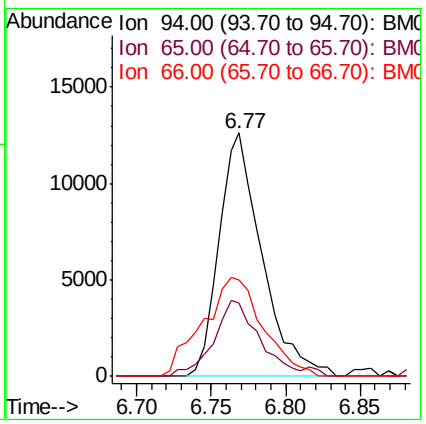




#6
Phenol
Concen: 3.437 ng/ul
RT: 6.77 min Scan# 643
Delta R.T. 0.01 min
Lab File: BM018098.D
Acq: 12 Dec 2018 18:27

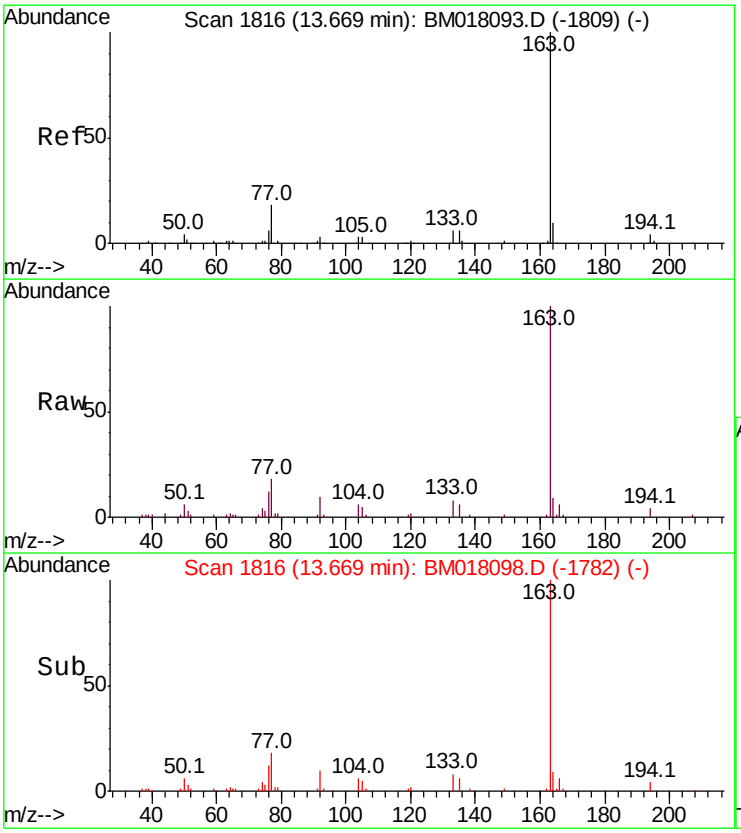
Tgt Ion: 94 Resp: 25356

Ion	Ratio	Lower	Upper
94	100		
65	30.4	24.7	37.1
66	39.3	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9E54

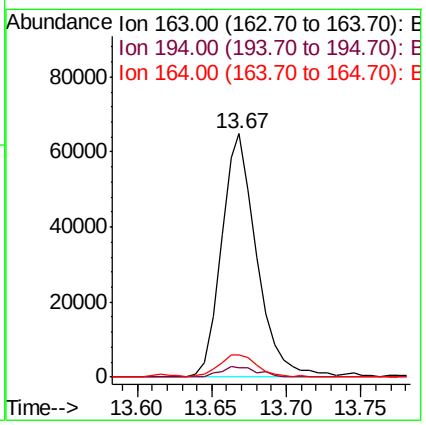
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:07 PM



#44
Dimethylphthalate
Concen: 5.510 ng/ul
RT: 13.67 min Scan# 1816
Delta R.T. -0.00 min
Lab File: BM018098.D
Acq: 12 Dec 2018 18:27

Tgt Ion:163 Resp: 107001

Ion	Ratio	Lower	Upper
163	100		
194	3.8	3.4	5.0
164	8.9	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E54

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:07 PM

Quant Time: Dec 13 03:03:26 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	80927	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	375756	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	230996	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	565957	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	706290	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	805418	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	6220m	3.52	ng/uL	0.00
5) Phenol-d5	6.74	99	100565	13.61	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	65087	14.60	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	88461	15.30	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	80817	13.38	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	46917m	16.26	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	51396	15.54	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.96	165	82538m	13.11	ng/ul	0.01
29) 4-Chloroaniline-d4	10.47	131	109929	20.35	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	353564	17.64	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	372052	15.34	ng/ul	0.00
51) 4-Nitrophenol-d4	14.47	143	33598m	9.22	ng/ul	0.03
57) Fluorene-d10	15.20	176	288697	16.68	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	42043	10.39	ng/ul	0.00
70) Anthracene-d10	17.05	188	440947	15.65	ng/ul	0.00
78) Pyrene-d10	19.36	212	503969	14.75	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	635168	14.54	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.77	94	25356	3.437	ng/ul	96
44) Dimethylphthalate	13.67	163	107001	5.510	ng/ul	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E54

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.040	7	9	12	rVV3	4114	5092	0.24%	0.024%
2	3.081	15	16	19	rVB2	3951	2714	0.13%	0.013%
3	3.152	25	28	36	rVB2	10409	14949	0.71%	0.072%
4	3.275	45	49	51	rBV4	2543	3004	0.14%	0.014%
5	3.399	68	70	71	rBV	2489	2488	0.12%	0.012%
6	3.416	71	73	75	rVV2	2792	2379	0.11%	0.011%
7	3.446	75	78	80	rVV3	3913	4125	0.19%	0.020%
8	3.610	105	106	108	rBV	2749	2189	0.10%	0.010%
9	3.646	110	112	117	rVB3	4263	4150	0.20%	0.020%
10	3.704	119	122	124	rVB4	1798	2193	0.10%	0.010%
11	3.746	124	129	135	rBV2	15117	24547	1.16%	0.118%
12	3.940	158	162	169	rBV5	14229	21260	1.00%	0.102%
13	4.199	203	206	210	rVB4	2699	4063	0.19%	0.019%
14	4.598	270	274	276	rBV2	1965	2815	0.13%	0.013%
15	4.716	289	294	307	rBV3	25222	56082	2.65%	0.268%
16	5.893	490	494	498	rVB3	2651	3380	0.16%	0.016%
17	5.975	502	508	513	rBV3	11554	19104	0.90%	0.091%
18	6.410	579	582	585	rBV3	2048	2178	0.10%	0.010%
19	6.740	631	638	654	rBV2	137623	339088	16.01%	1.623%
20	6.898	659	665	678	rVB	140997	232846	11.00%	1.115%
21	7.087	691	697	705	rBV	165353	298082	14.08%	1.427%
22	7.192	711	715	720	rBV4	9594	19086	0.90%	0.091%
23	7.545	765	775	785	rBV	280008	474056	22.39%	2.269%
24	7.610	785	786	791	rVB2	3550	4985	0.24%	0.024%
25	8.263	891	897	913	rBV2	177111	351260	16.59%	1.682%
26	8.381	915	917	921	rVB2	2074	2354	0.11%	0.011%
27	8.634	956	960	963	rVB2	1629	2521	0.12%	0.012%
28	8.704	966	972	987	rVV	158239	293599	13.87%	1.406%
29	9.081	1029	1036	1040	rVB	7457	8963	0.42%	0.043%
30	9.416	1087	1093	1103	rBV	140467	255889	12.08%	1.225%
31	9.957	1178	1185	1199	rBV	137320	318355	15.03%	1.524%
32	10.092	1206	1208	1214	rVB5	2556	2568	0.12%	0.012%
33	10.204	1223	1227	1230	rVB2	1681	2745	0.13%	0.013%
34	10.310	1237	1245	1255	rBV	439033	751540	35.49%	3.598%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E54

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	10.410	1259	1262	1267	rVB5	2020	3282	0.15%	0.016%
36	10.480	1267	1274	1287	rBV	119762	328947	15.53%	1.575%
37	10.598	1292	1294	1299	rVB2	2742	3558	0.17%	0.017%
38	11.457	1436	1440	1443	rVB3	1373	2161	0.10%	0.010%
39	11.575	1454	1460	1462	rVB3	1599	2604	0.12%	0.012%
40	11.951	1523	1524	1528	rVB2	2470	2745	0.13%	0.013%
41	13.616	1801	1807	1812	rVV	472066	713514	33.70%	3.416%
42	13.669	1812	1816	1828	rVB	145995	249964	11.80%	1.197%
43	13.886	1846	1853	1865	rBV	508930	751508	35.49%	3.598%
44	14.198	1899	1906	1916	rBV2	651821	1056866	49.91%	5.060%
45	14.468	1947	1952	1971	rBV4	43989	179099	8.46%	0.857%
46	15.010	2038	2044	2046	rBV3	2493	4400	0.21%	0.021%
47	15.051	2046	2051	2052	rBV4	2801	2994	0.14%	0.014%
48	15.198	2070	2076	2090	rBV	664493	1047487	49.47%	5.015%
49	15.351	2096	2102	2110	rBV	159946	268685	12.69%	1.286%
50	15.445	2115	2118	2125	rVV4	8634	13979	0.66%	0.067%
51	15.498	2125	2127	2132	rVB3	2095	2897	0.14%	0.014%
52	15.933	2197	2201	2204	rBV3	3299	5268	0.25%	0.025%
53	16.098	2226	2229	2230	rBV2	4126	3505	0.17%	0.017%
54	16.157	2236	2239	2241	rBV	2161	2929	0.14%	0.014%
55	16.380	2275	2277	2278	rBV2	4134	3183	0.15%	0.015%
56	16.721	2331	2335	2336	rBV3	3459	4491	0.21%	0.022%
57	16.780	2344	2345	2349	rVB2	3387	2439	0.12%	0.012%
58	16.874	2355	2361	2368	rBV5	8591	16246	0.77%	0.078%
59	16.957	2368	2375	2385	rBV	949354	1396588	65.96%	6.686%
60	17.051	2385	2391	2405	rVB2	733966	1142576	53.96%	5.470%
61	17.251	2422	2425	2428	rBV3	2832	3993	0.19%	0.019%
62	17.327	2435	2438	2441	rBV3	2172	3234	0.15%	0.015%
63	17.362	2441	2444	2446	rVV3	2994	3143	0.15%	0.015%
64	17.745	2504	2509	2514	rBV6	8214	17459	0.82%	0.084%
65	17.809	2514	2520	2523	rBV6	8073	12302	0.58%	0.059%
66	17.862	2524	2529	2537	rBV	219265	319330	15.08%	1.529%
67	18.033	2555	2558	2562	rVB5	4302	6599	0.31%	0.032%
68	18.080	2565	2566	2568	rBV2	3554	2289	0.11%	0.011%
69	18.156	2574	2579	2580	rBV3	6547	8520	0.40%	0.041%
70	18.262	2595	2597	2600	rBV4	2558	3047	0.14%	0.015%
71	18.333	2606	2609	2613	rBV4	3934	4881	0.23%	0.023%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E54

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

72	18.409	2620	2622	2624	rBV3	5906	5289	0.25%	0.025%
73	18.521	2639	2641	2643	rVB2	5214	3574	0.17%	0.017%
74	18.615	2655	2657	2659	rBV3	4047	3596	0.17%	0.017%
75	18.727	2674	2676	2677	rBV2	4695	3482	0.16%	0.017%
76	18.745	2677	2679	2682	rVV3	3578	3902	0.18%	0.019%
77	18.886	2701	2703	2705	rBV3	3796	3754	0.18%	0.018%
78	18.968	2715	2717	2718	rBV	5261	3938	0.19%	0.019%
79	19.003	2719	2723	2724	rVV3	16165	19349	0.91%	0.093%
80	19.033	2725	2728	2736	rVB6	20943	43600	2.06%	0.209%
81	19.156	2744	2749	2756	rBV3	103710	162242	7.66%	0.777%
82	19.303	2771	2774	2777	rVB2	24984	23225	1.10%	0.111%
83	19.362	2778	2784	2794	rBV	981880	1368765	64.64%	6.553%
84	19.609	2822	2826	2831	rBV	53284	79883	3.77%	0.382%
85	19.698	2839	2841	2842	rBV2	6551	4125	0.19%	0.020%
86	19.898	2873	2875	2879	rBV4	8445	10868	0.51%	0.052%
87	20.021	2895	2896	2897	rBV	13743	8495	0.40%	0.041%
88	20.180	2921	2923	2927	rBV4	8874	10506	0.50%	0.050%
89	20.309	2944	2945	2948	rBV3	16504	16561	0.78%	0.079%
90	20.362	2951	2954	2958	rVB5	30253	37920	1.79%	0.182%
91	20.892	3040	3044	3050	rBV	190924	264664	12.50%	1.267%
92	21.168	3086	3091	3101	rBV	1439115	2010081	94.93%	9.623%
93	21.750	3188	3190	3193	rBV2	61455	65773	3.11%	0.315%
94	22.203	3263	3267	3273	rVB3	144457	189220	8.94%	0.906%
95	22.686	3345	3349	3355	rVB2	206448	283675	13.40%	1.358%
96	23.203	3431	3437	3447	rVB	866810	1916948	90.53%	9.177%
97	23.338	3454	3460	3468	rVB	1108486	2117485	100.00%	10.137%
98	23.838	3540	3545	3553	rVB2	250159	477974	22.57%	2.288%
99	23.933	3558	3561	3570	rVB5	117524	239376	11.30%	1.146%
100	24.544	3660	3665	3671	rVB3	184889	378648	17.88%	1.813%

Sum of corrected areas: 20888279

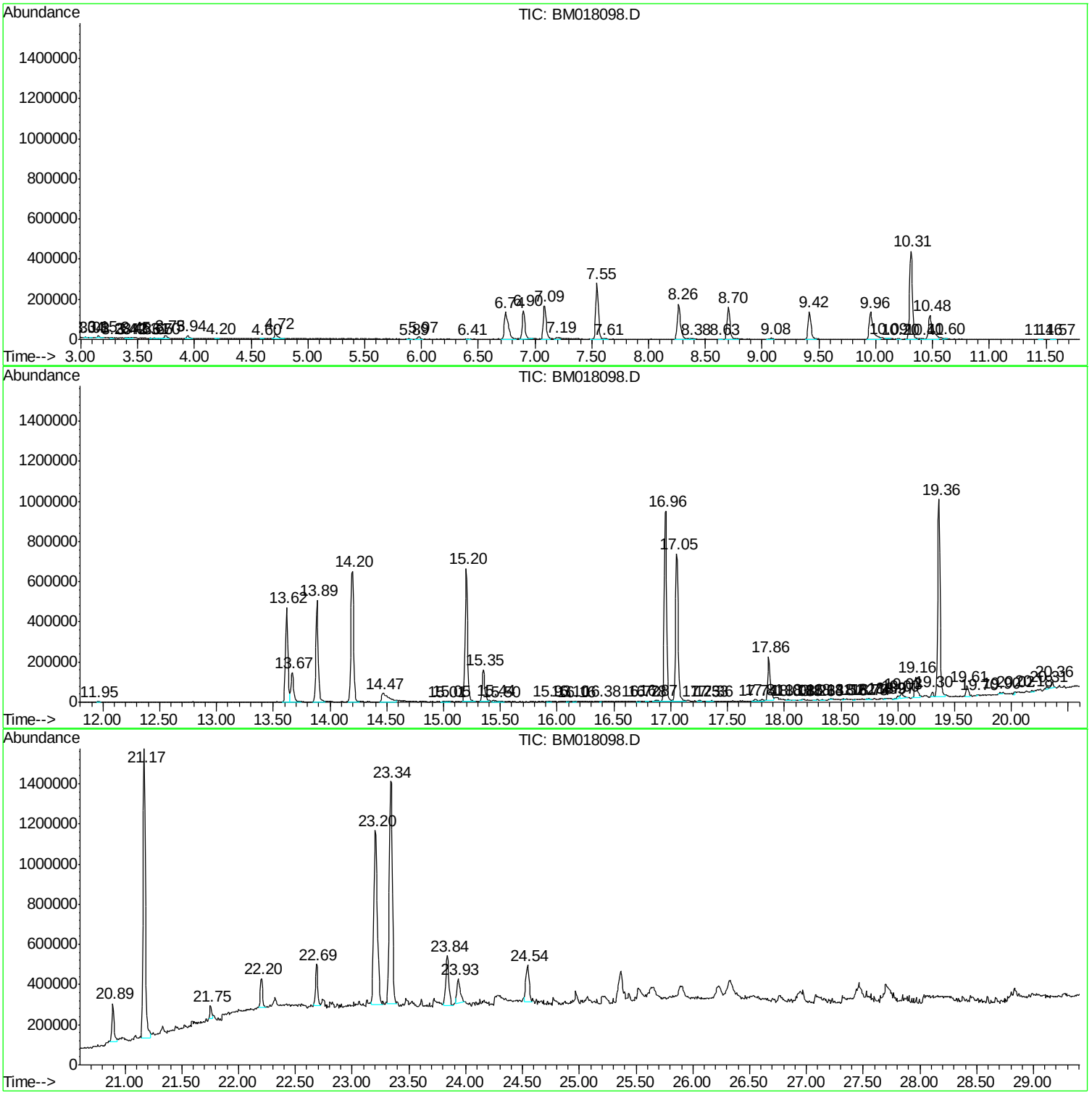
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E54

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E54

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

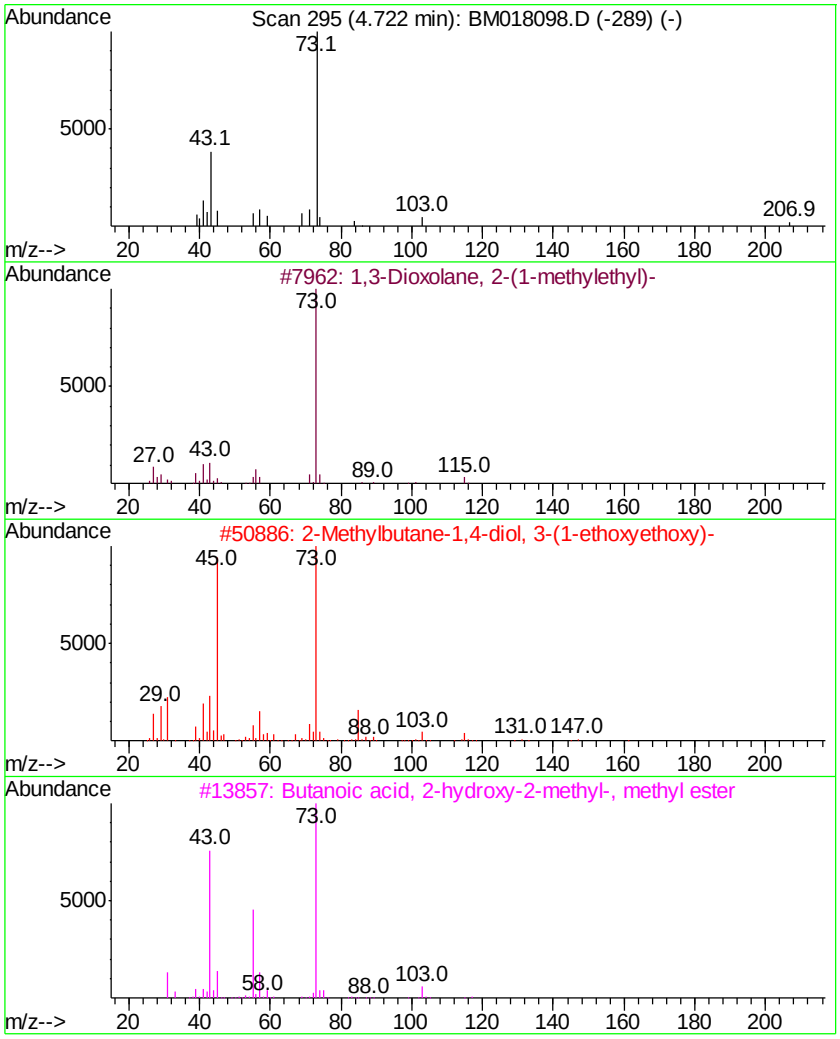
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

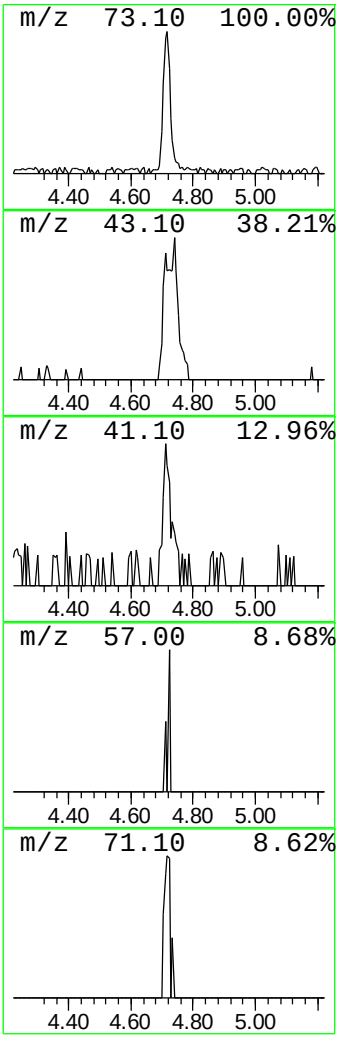
****

Peak Number 1 unknown-01 Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.72	2.37 ng/ul	56082	1,4-Dichlorobenzene-d4	7.55

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3-Dioxolane, 2-(1-methylethyl)-	116	C6H12O2	000822-83-3	25
2	2-Methylbutane-1,4-diol, 3-(1-et...	192	C9H20O4	088481-54-3	9
3	Butanoic acid, 2-hydroxy-2-methy...	132	C6H12O3	032793-34-3	9
4	Acetic acid, 3-[1,3]dioxolan-2-y...	174	C8H14O4	1000186-02-3	9
5	1,3-Dioxolane	74	C3H6O2	000646-06-0	7





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E54

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

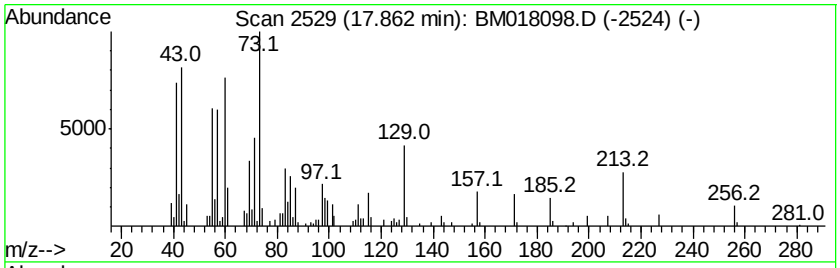
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

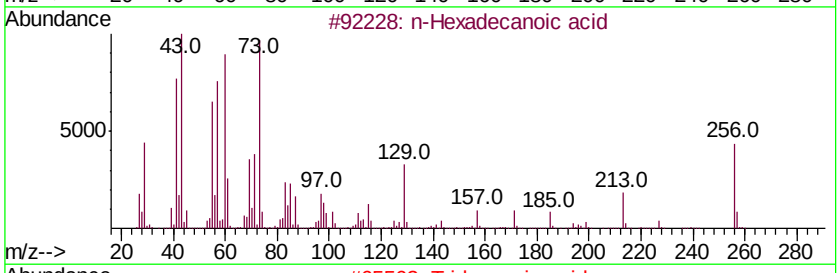
****

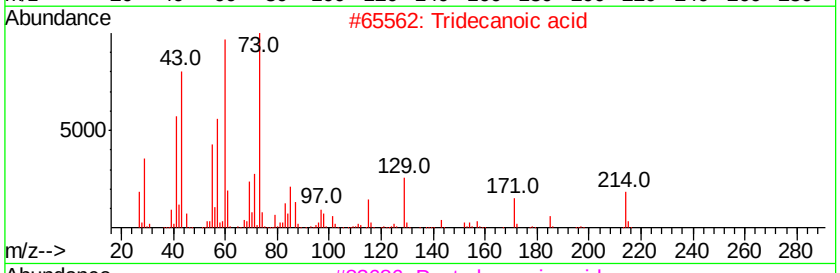
Peak Number 2 n-Hexadecanoic acid Concentration Rank 1

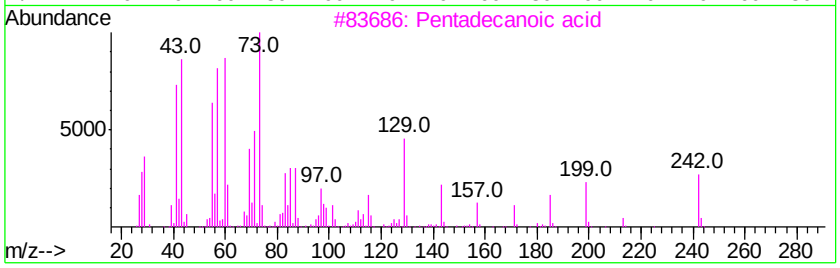
R.T.	EstConc	Area	Relative to ISTD	R.T.
17.86	4.57 ng/ul	319330	Phenanthrene-d10	16.95

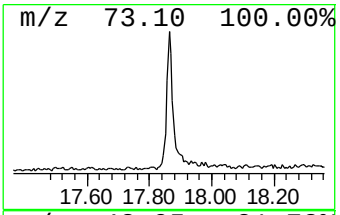
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	Tridecanoic acid	214	C13H26O2	000638-53-9	86
3	Pentadecanoic acid	242	C15H30O2	001002-84-2	72
4	Tridecanoic acid	214	C13H26O2	000638-53-9	70
5	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	38

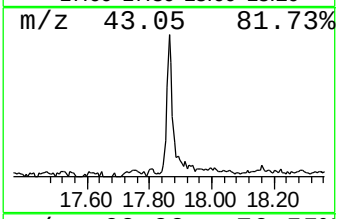


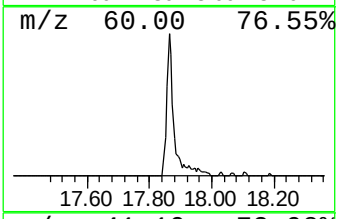


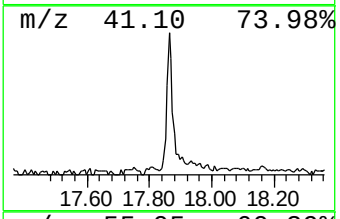


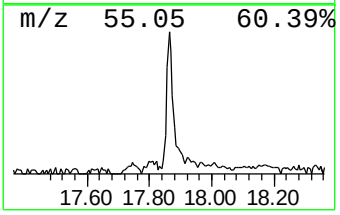












Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E54

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

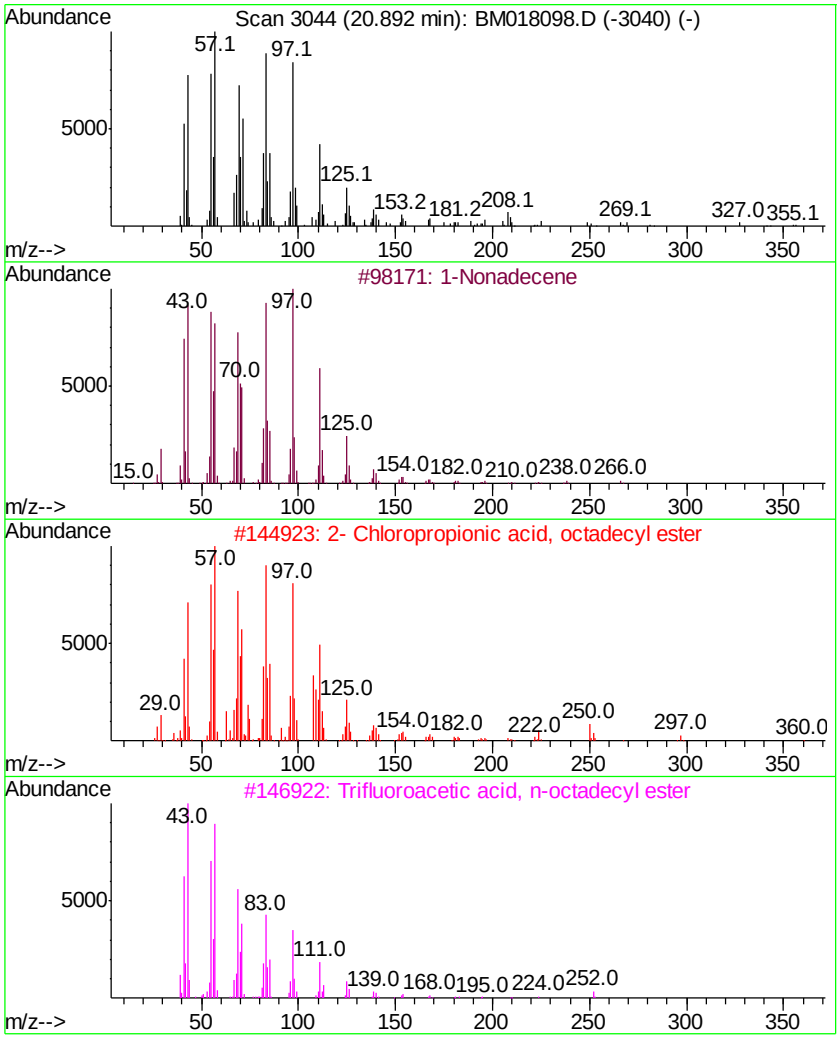
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

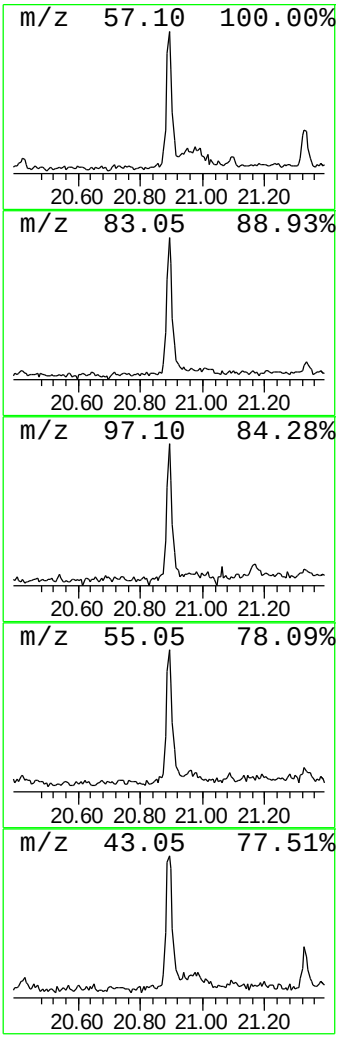
****

Peak Number 3 (DEL) Alkane: Cyclic20.89 Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	2.63 ng/ul	264664	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Nonadecene	266	C19H38	018435-45-5	98
2	2- Chloropropionic acid, octadec...	360	C21H41ClO2	088104-31-8	94
3	Trifluoroacetic acid, n-octadecy...	366	C20H37F3O2	079392-43-1	91
4	Cyclotetracosane	336	C24H48	000297-03-0	91
5	Trichloroacetic acid, hexadecyl ...	386	C18H33Cl3O2	074339-54-1	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E54

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

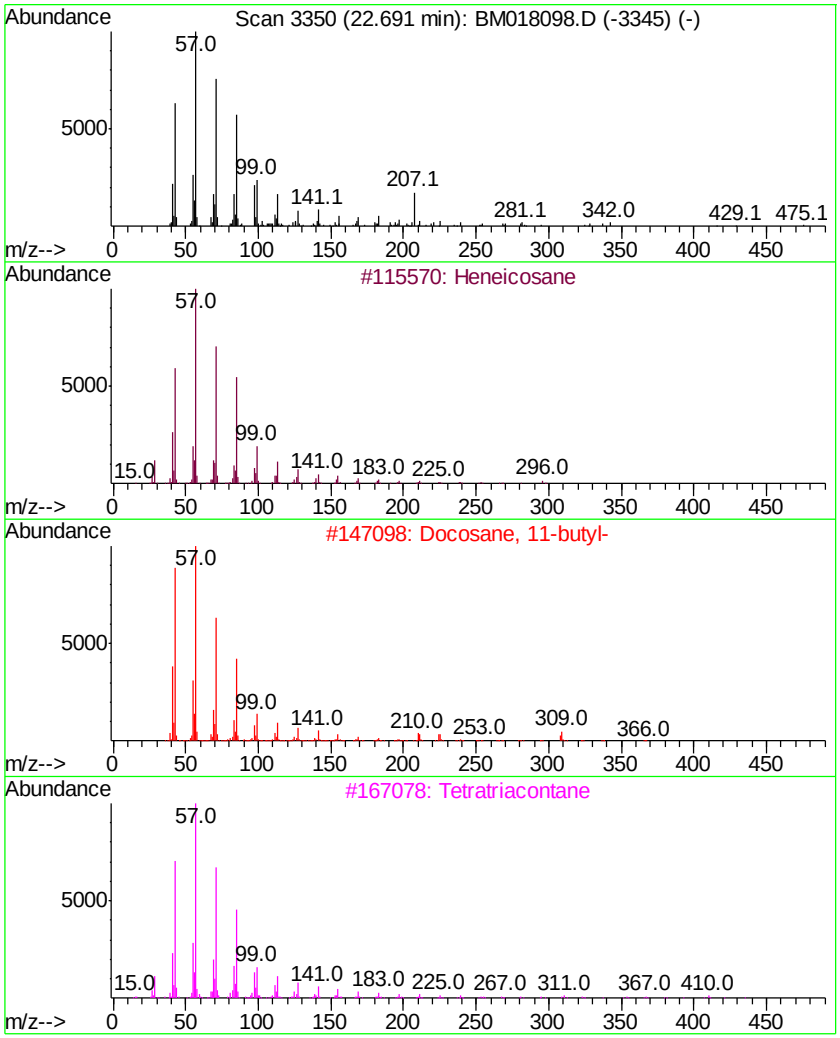
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

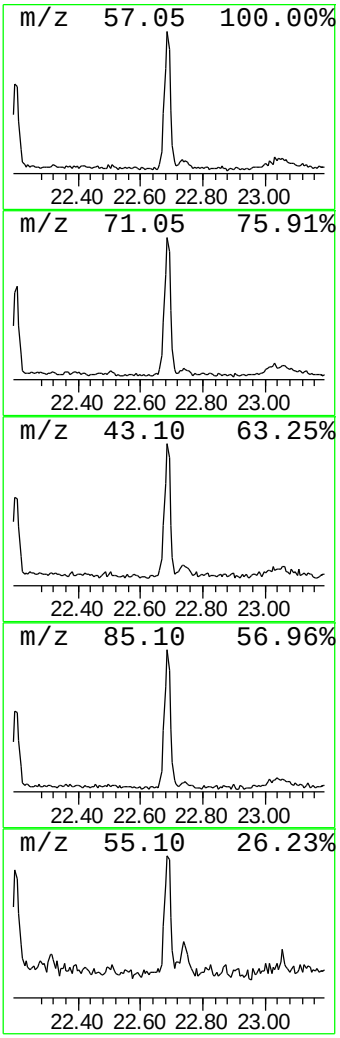
****

Peak Number 4 (DEL) Alkane: Straight-Chai... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.69	2.68 ng/ul	283675	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	91
2	Docosane, 11-butyl-	366	C26H54	013475-76-8	91
3	Tetratriacontane	479	C34H70	014167-59-0	91
4	Nonacosane	408	C29H60	000630-03-5	91
5	Heneicosane	296	C21H44	000629-94-7	90





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E54

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

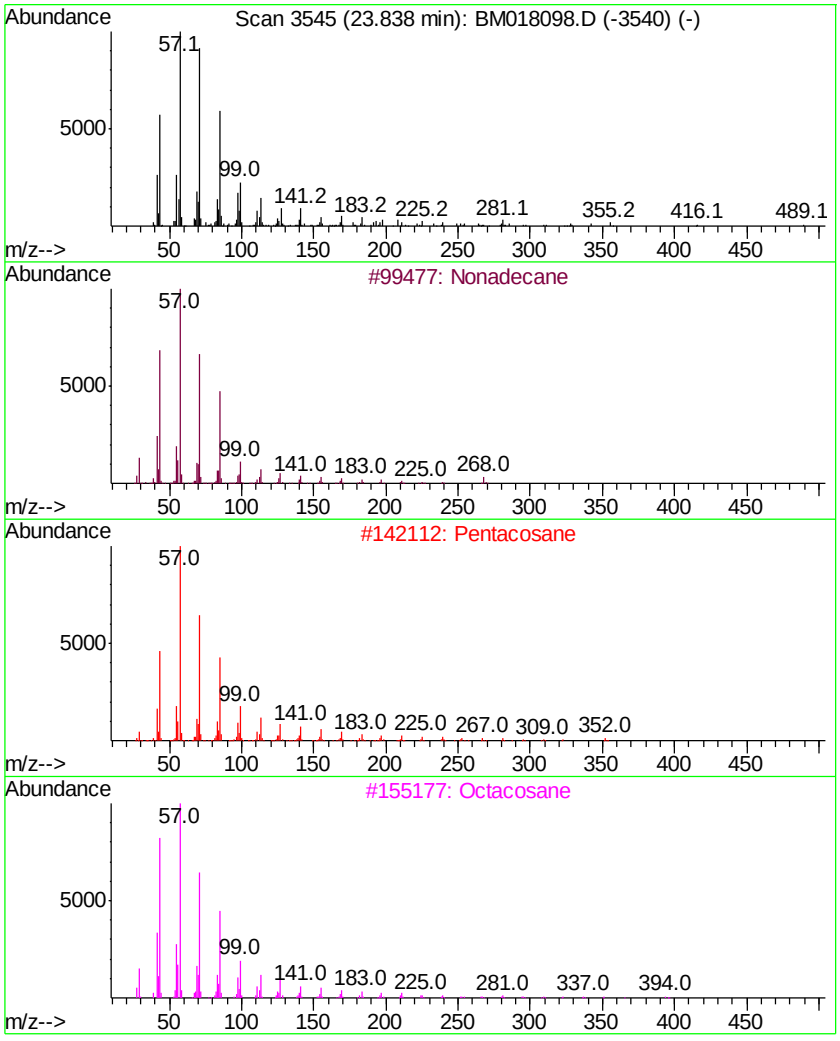
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

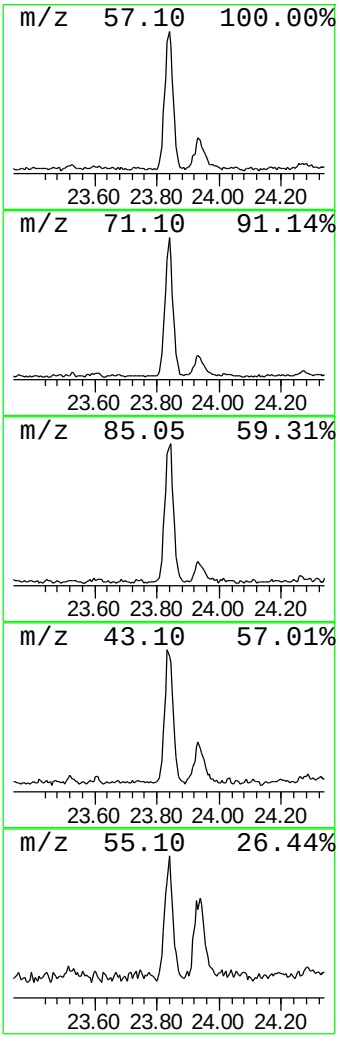
****

Peak Number 5 (DEL) Alkane: Straight-Chai... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.84	4.51 ng/ul	477974	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonadecane	268	C19H40	000629-92-5	93
2	Pentacosane	352	C25H52	000629-99-2	91
3	Octacosane	394	C28H58	000630-02-4	91
4	Heneicosane	296	C21H44	000629-94-7	91
5	Triacontane	422	C30H62	000638-68-6	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E54

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

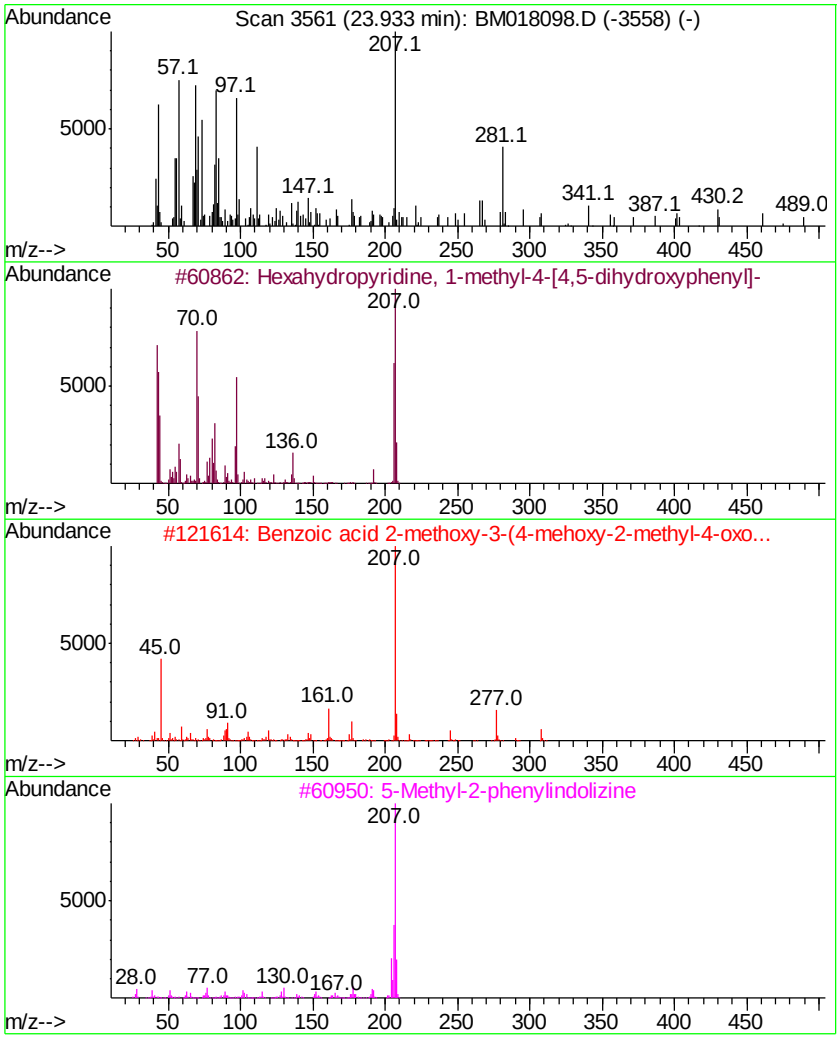
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

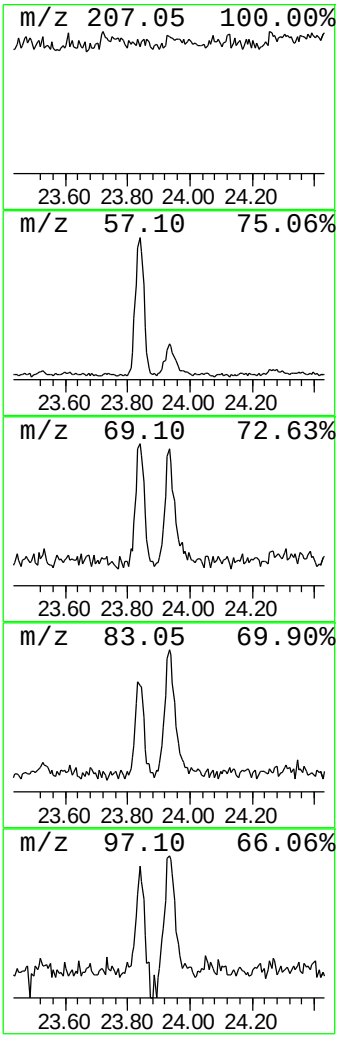
****

Peak Number 6 unknown-02 Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.93	2.26 ng/ul	239376	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexahydropyridine, 1-methyl-4-[4...	207	C12H17NO2	094427-47-1	43
2	Benzoic acid 2-methoxy-3-(4-meho...	308	C16H20O6	056704-62-2	22
3	5-Methyl-2-phenylindolizine	207	C15H13N	036944-99-7	22
4	Benz[b]-1,4-oxazepine-4(5H)-thio...	207	C11H13NOS	1000258-63-4	22
5	Methyl (7-hydroxy-1H-benzimidazo...	207	C9H9N3O3	041261-35-2	22





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E54

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

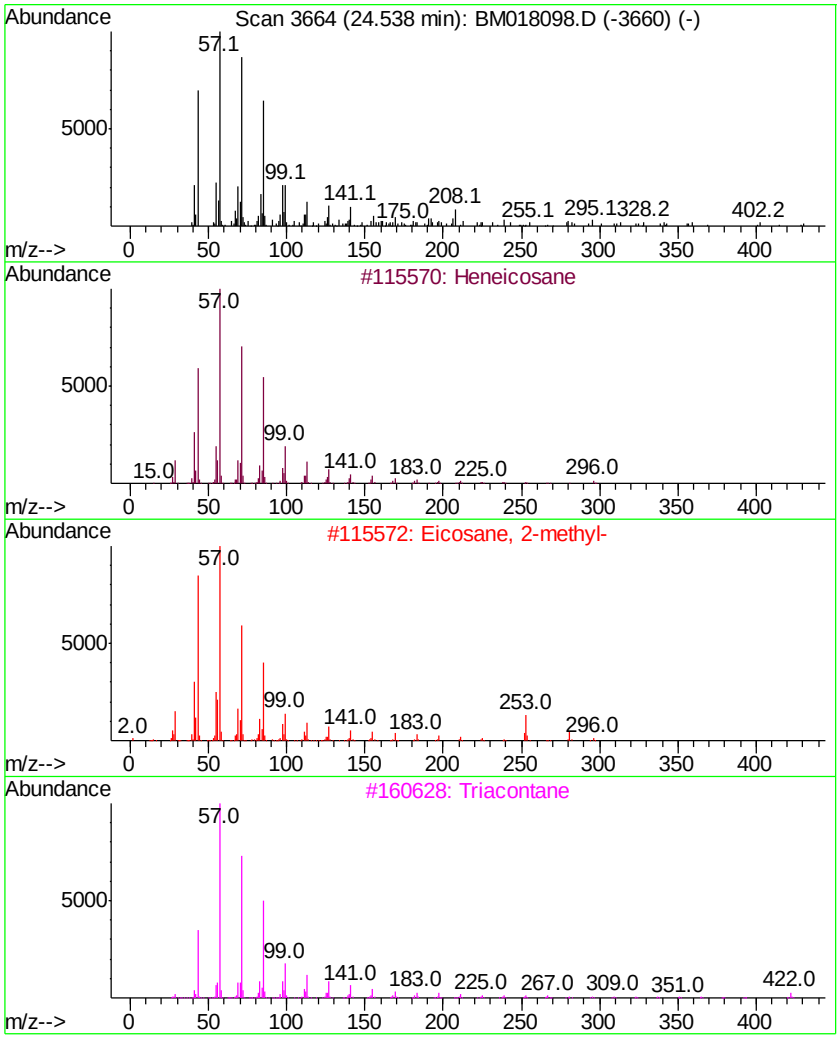
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

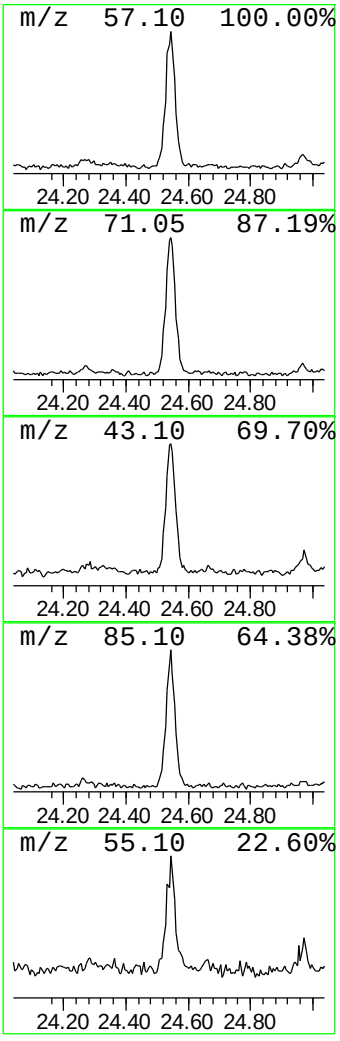
****

Peak Number 7 (DEL) Alkane: Straight-Chai... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.54	3.58 ng/ul	378648	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	97
2	Eicosane, 2-methyl-	296	C21H44	001560-84-5	93
3	Triacontane	422	C30H62	000638-68-6	90
4	Tetratriacontane	479	C34H70	014167-59-0	90
5	Octacosane	394	C28H58	000630-02-4	87





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E54

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown-01	4.72	2.4	ng/ul	56082	1	7.55	474056	20.0
n-Hexadecanoic acid	17.86	4.6	ng/ul	319330	4	16.95	1396590	20.0
(DEL) Alkane: Cyc...	20.89	2.6	ng/ul	264664	5	21.17	2010080	20.0
(DEL) Alkane: Str...	22.69	2.7	ng/ul	283675	6	23.34	2117490	20.0
(DEL) Alkane: Str...	23.84	4.5	ng/ul	477974	6	23.34	2117490	20.0
unknown-02	23.93	2.3	ng/ul	239376	6	23.34	2117490	20.0
(DEL) Alkane: Str...	24.54	3.6	ng/ul	378648	6	23.34	2117490	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

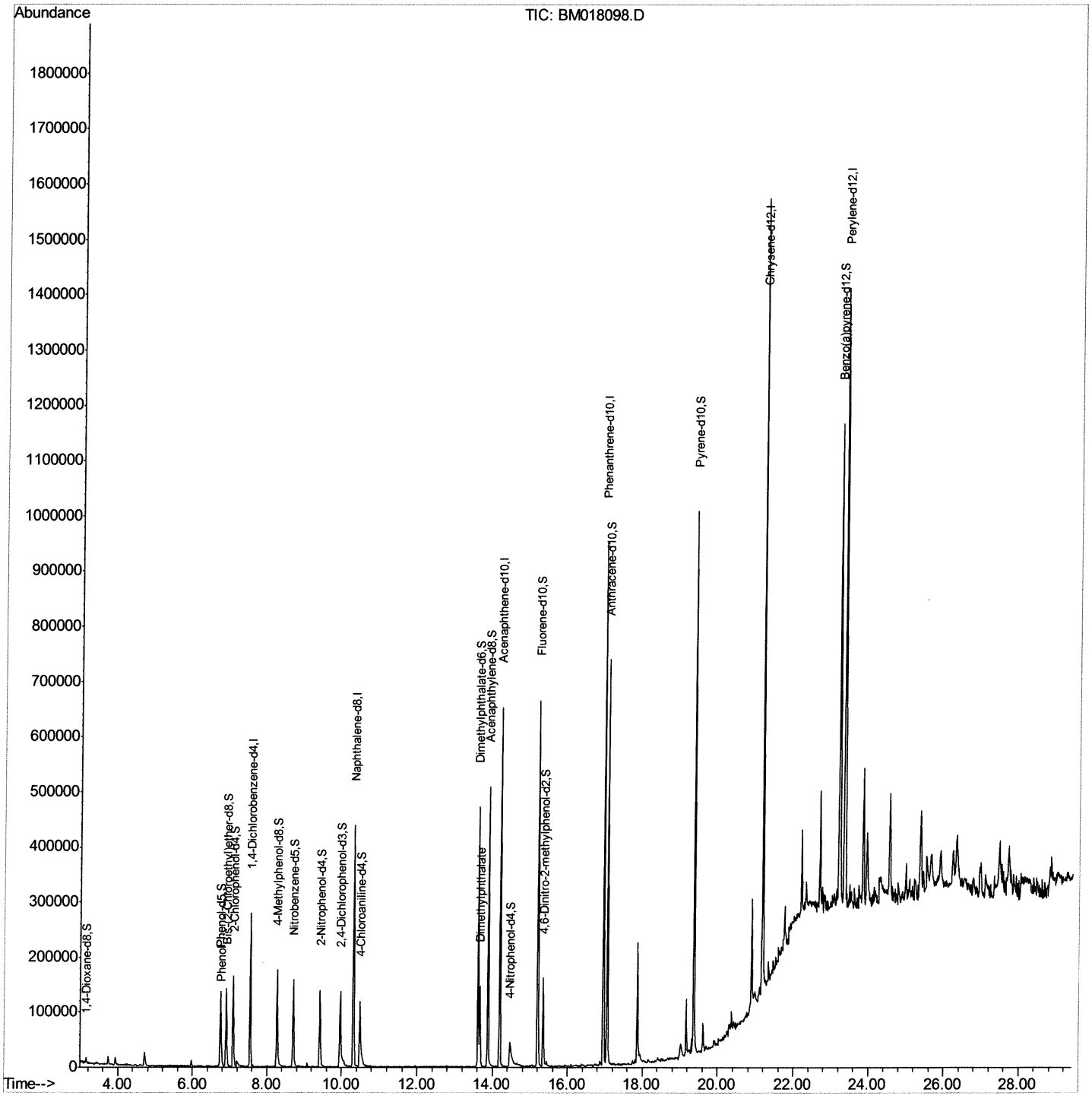
Quantitation Report (QT Reviewed)

Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 13 03:03:26 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E54

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:07 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

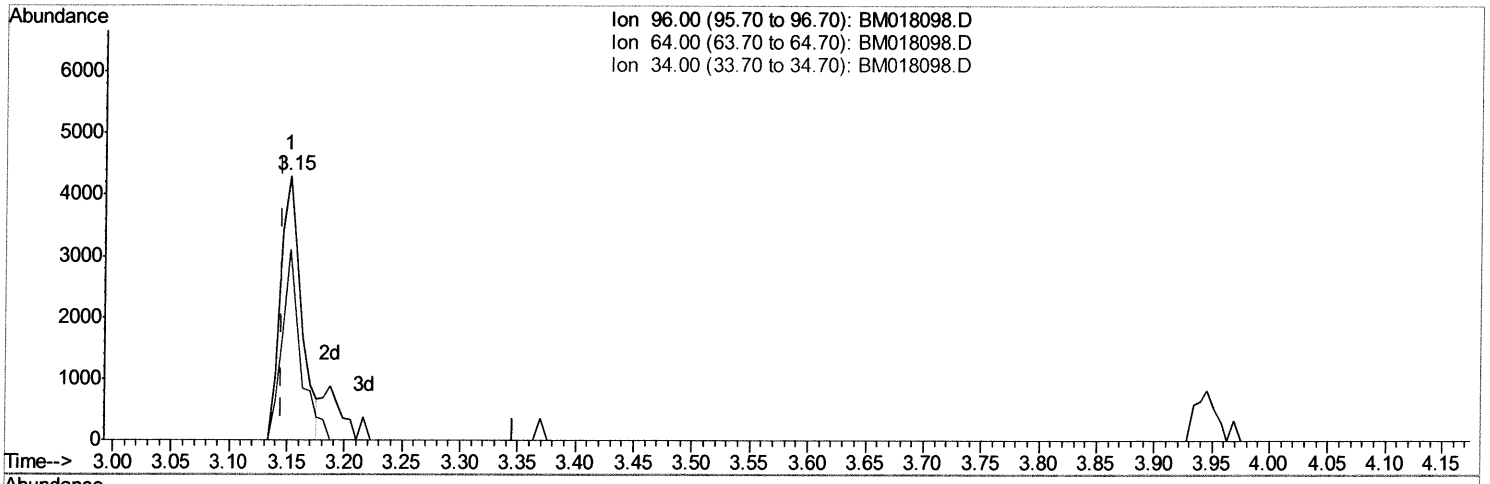
Quantitation Report (Qedit)

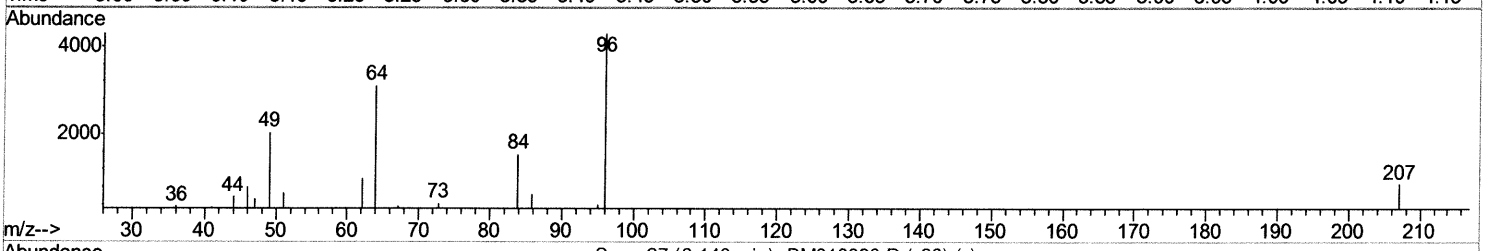
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

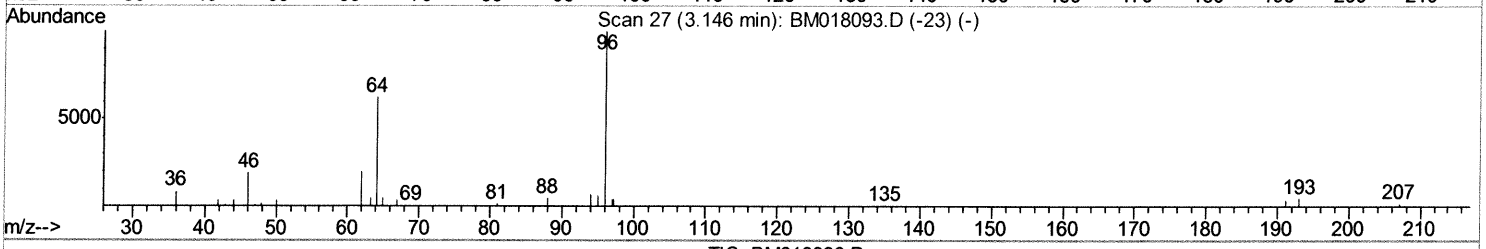
Quant Time: Dec 13 02:41:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E54

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:07 PM







TIC: BM018098.D

(3) 1,4-Dioxane-d8 (S)

3.152min (+0.006) 3.01ng/uL

response 5328

Ion	Exp%	Act%
96.00	100	100
64.00	68.40	72.27
34.00	0.00	0.00
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

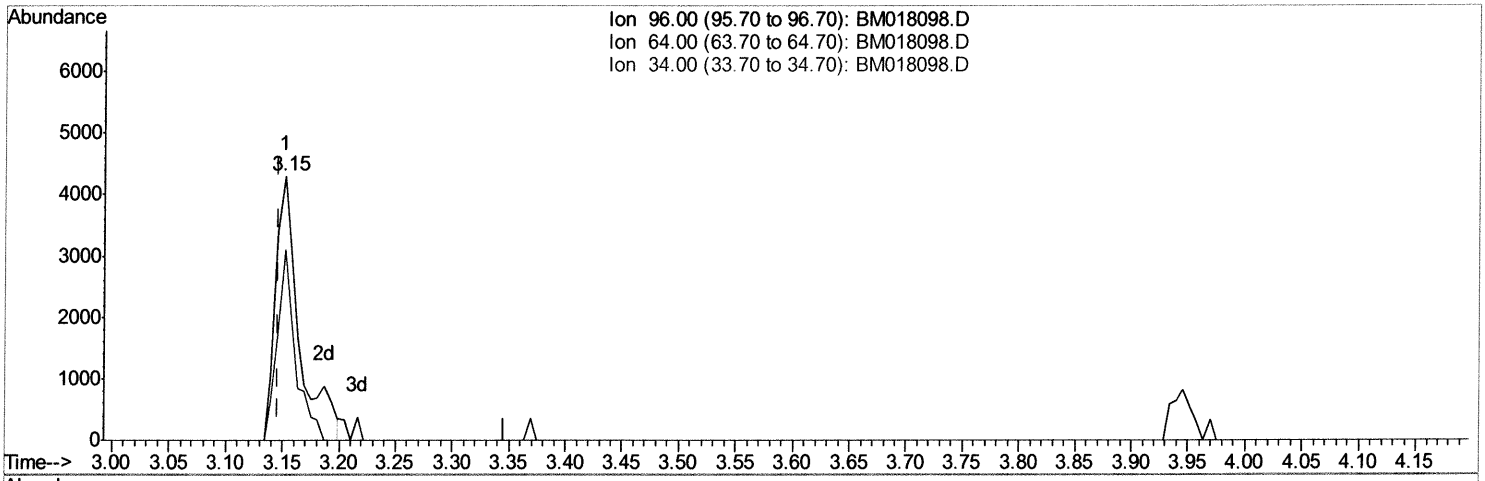
Quantitation Report (Qedit)

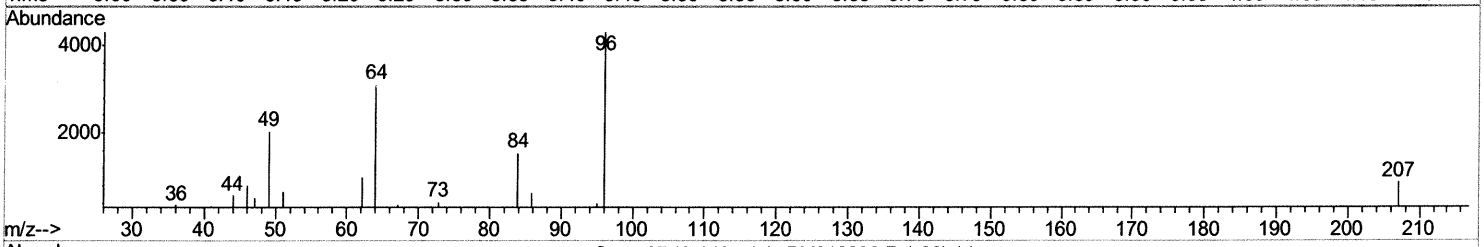
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

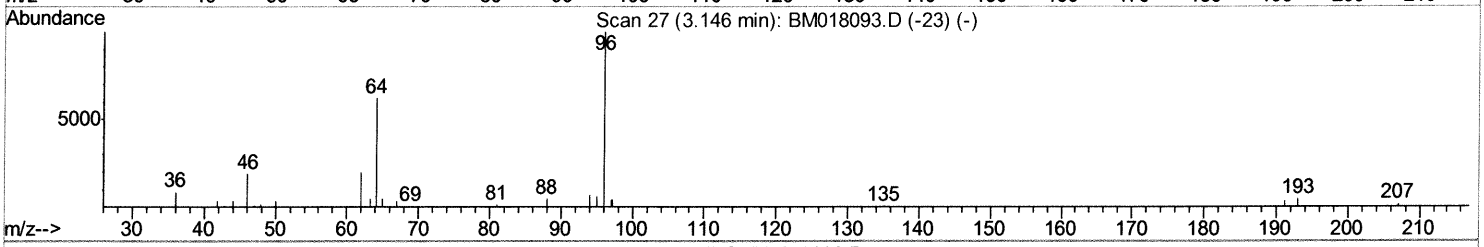
Quant Time: Dec 13 02:41:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E54

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:07 PM







TIC: BM018098.D

(3) 1,4-Dioxane-d8 (S)

3.152min (+0.006) 3.52ng/uL m SJ 12/13/18

response 6220

Ion	Exp%	Act%
96.00	100	100
64.00	68.40	72.27
34.00	0.00	0.00
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

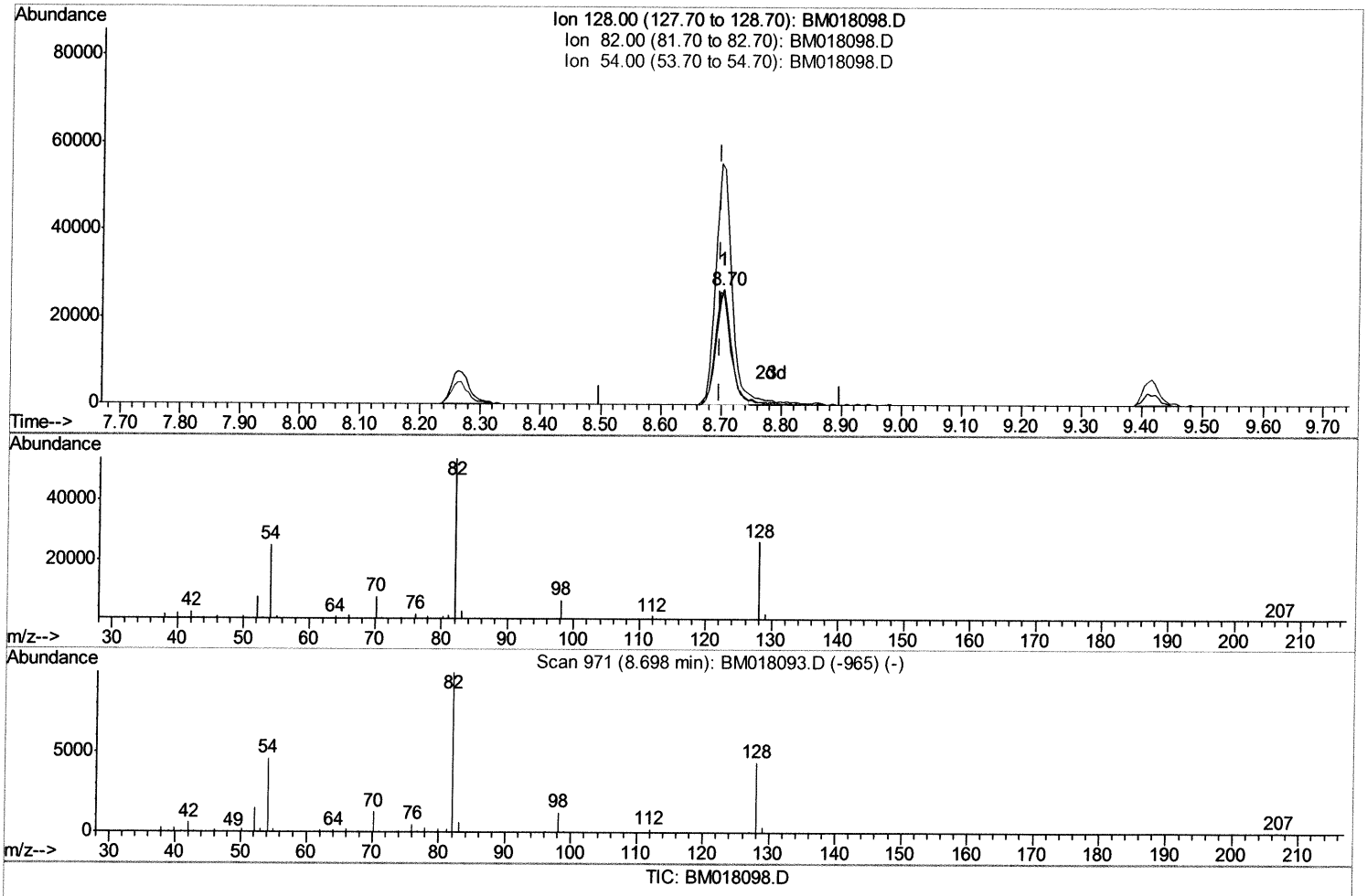
Quantitation Report (Qedit)

Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 13 02:41:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E54

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:07 PM



TIC: BM018098.D

(19) Nitrobenzene-d5 (S)

8.704min (+0.006) 15.82ng/ul

response 45656

Ion	Exp%	Act%
128.00	100	100
82.00	241.00	205.22
54.00	118.90	95.69
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

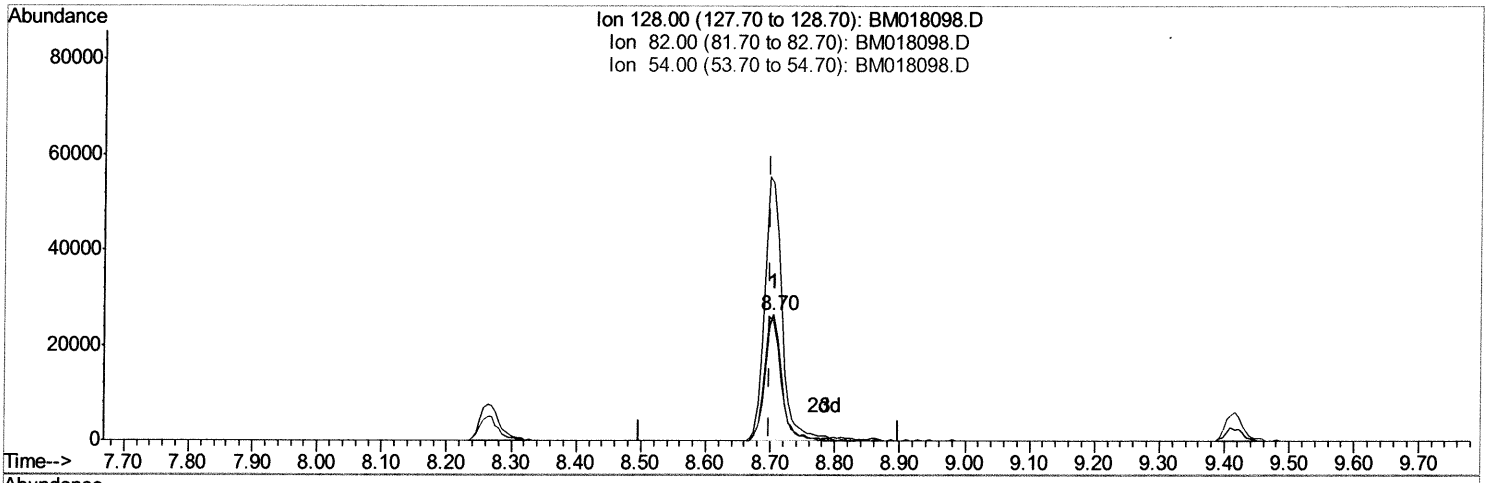
Quantitation Report (Qedit)

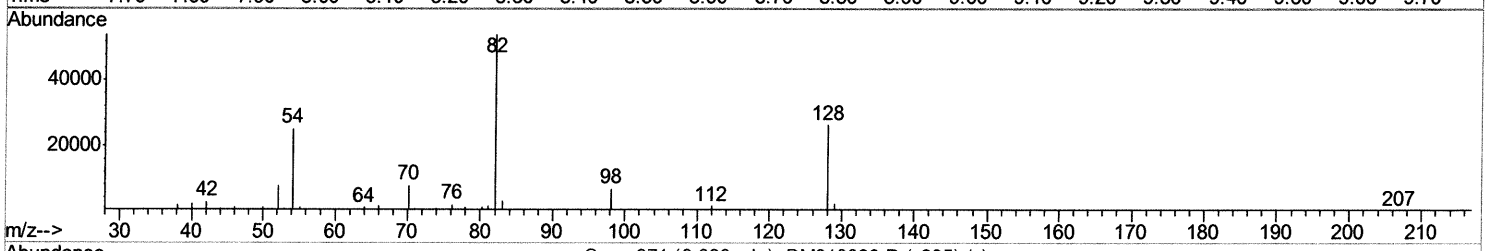
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

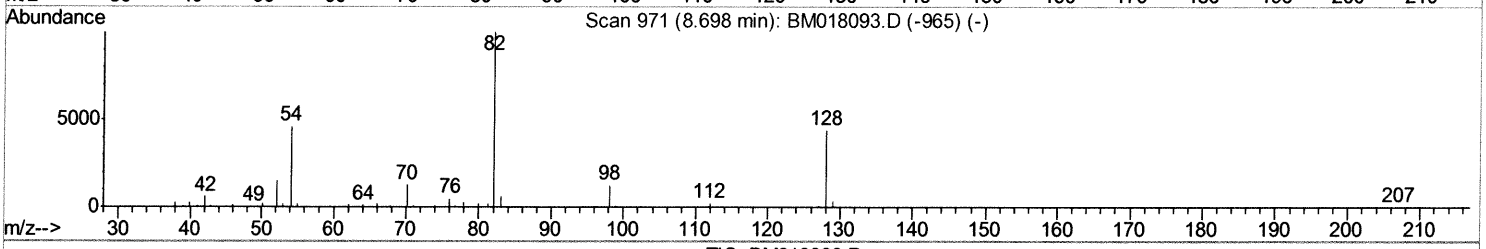
Quant Time: Dec 13 02:41:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E54

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:07 PM







TIC: BM018098.D

(19) Nitrobenzene-d5 (S)

8.704min (+0.006) 16.26ng/ul m) SJ 12/13/18

response 46917

Ion	Exp%	Act%
128.00	100	100
82.00	241.00	205.22
54.00	118.90	95.69
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

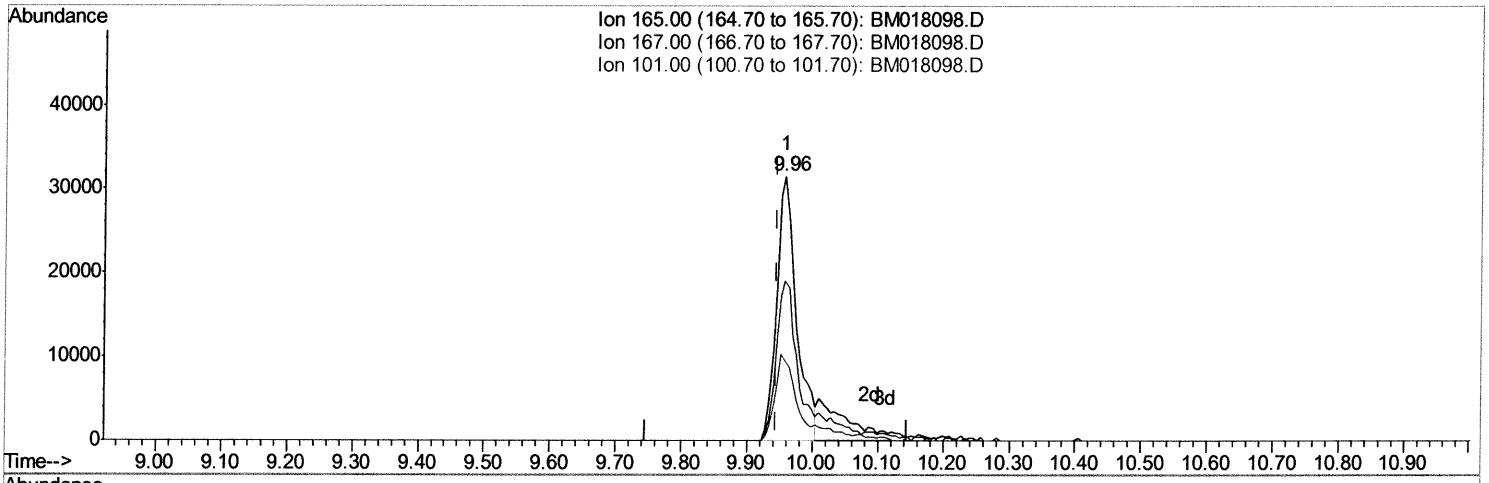
Quantitation Report (Qedit)

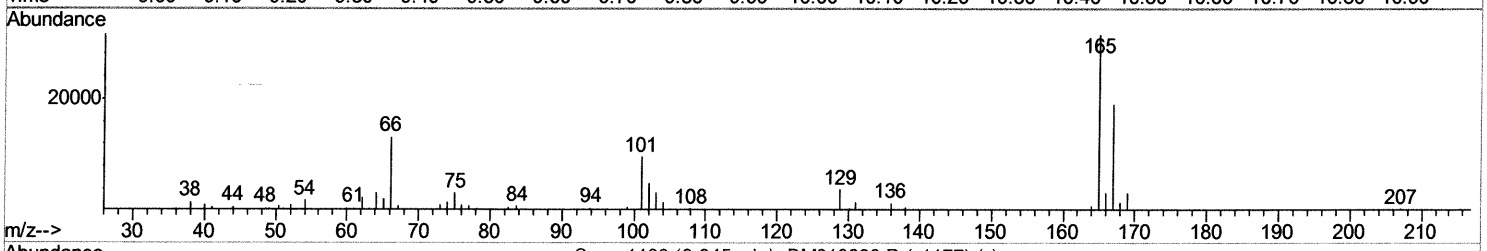
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

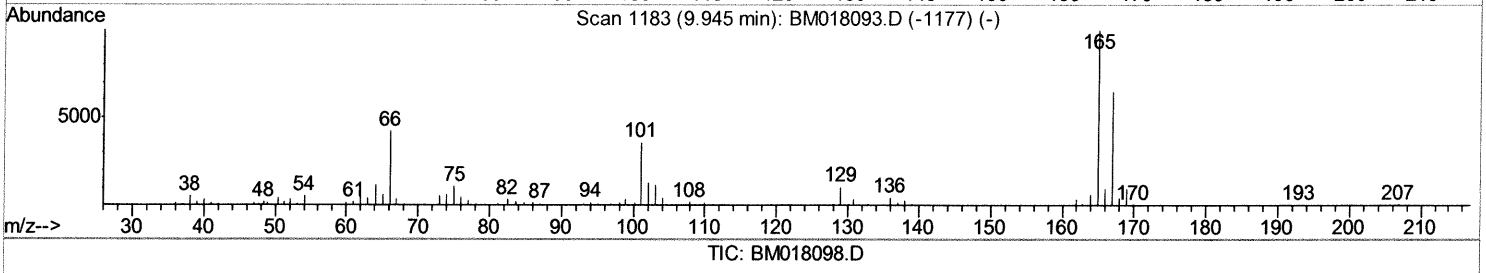
Quant Time: Dec 13 02:41:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E54

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:07 PM







TIC: BM018098.D

(26) 2,4-Dichlorophenol-d3 (S)

9.957min (+0.012) 10.60ng/ul

response 66760

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	60.57
101.00	34.80	30.53
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

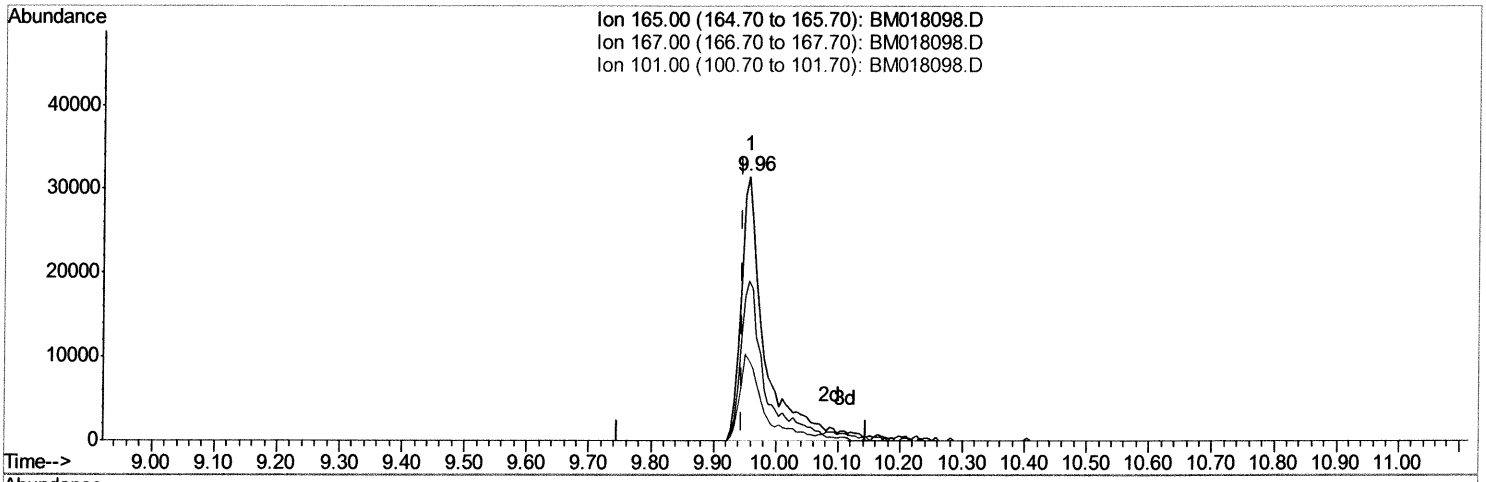
Quantitation Report (Qedit)

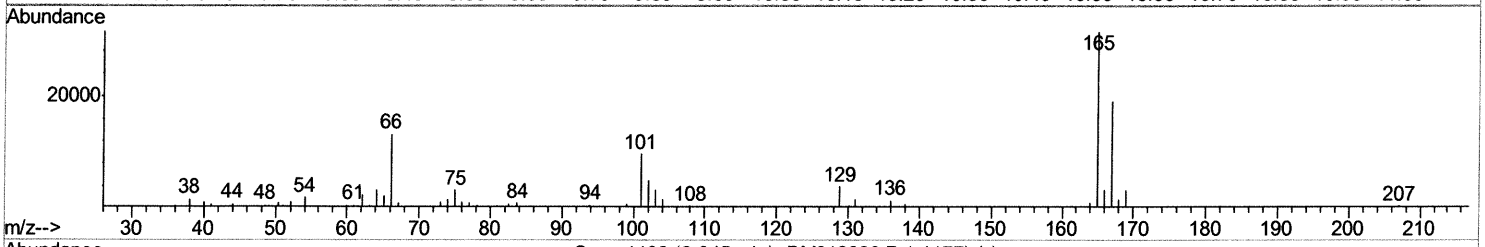
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

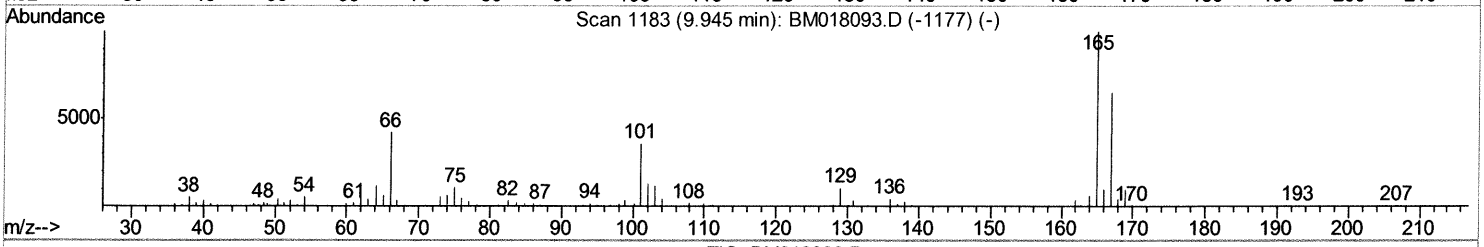
Quant Time: Dec 13 02:41:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E54

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:07 PM







TIC: BM018098.D

(26) 2,4-Dichlorophenol-d3 (S)

9.957min (+0.012) 13.11ng/ul m > SJ 12/13/18

response 82538

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	60.57
101.00	34.80	30.53
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

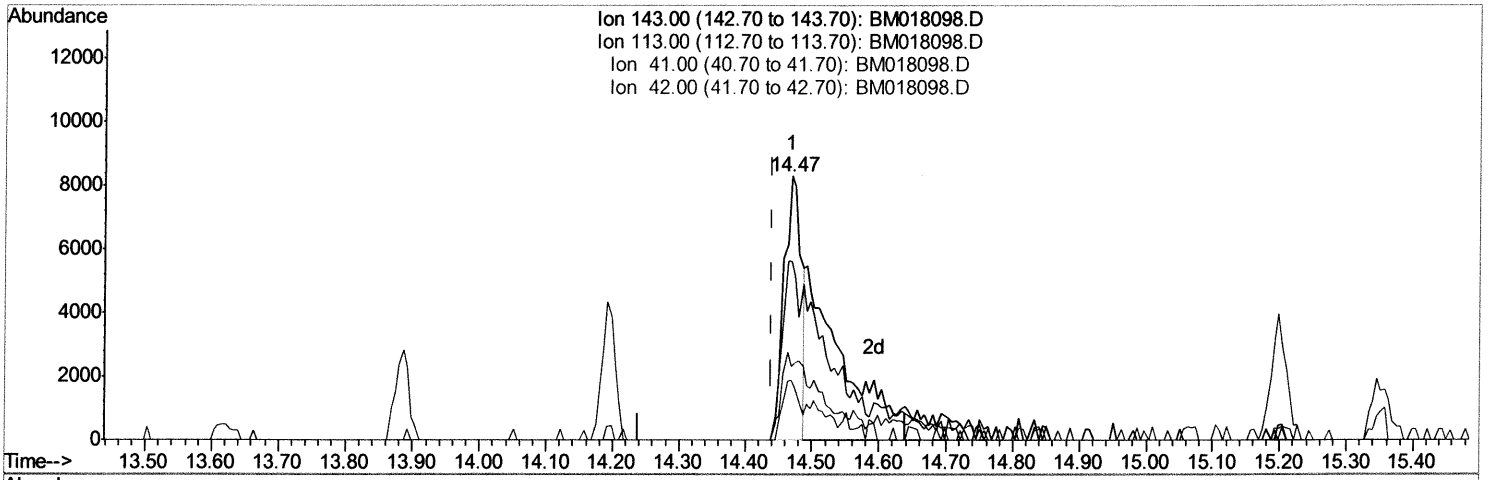
Quantitation Report (Qedit)

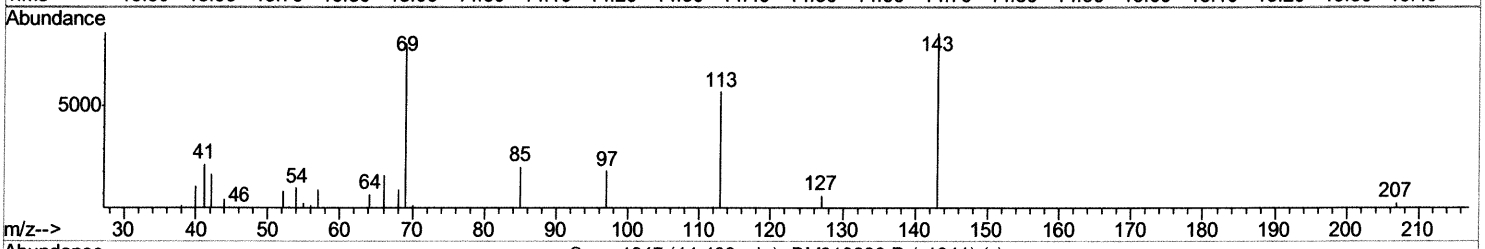
Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

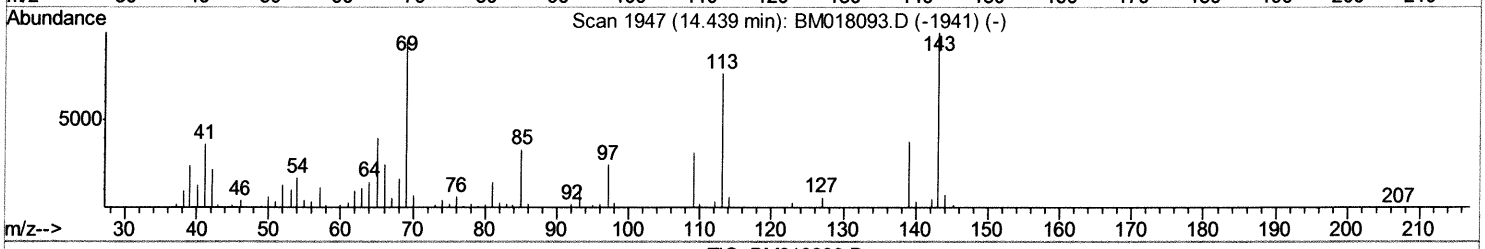
Quant Time: Dec 13 02:41:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E54

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:07 PM







TIC: BM018098.D

(51) 4-Nitrophenol-d4 (S)

14.468min (+0.029) 4.07ng/ul

response 14833

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	67.71
41.00	40.10	27.95#
42.00	26.80	22.83

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

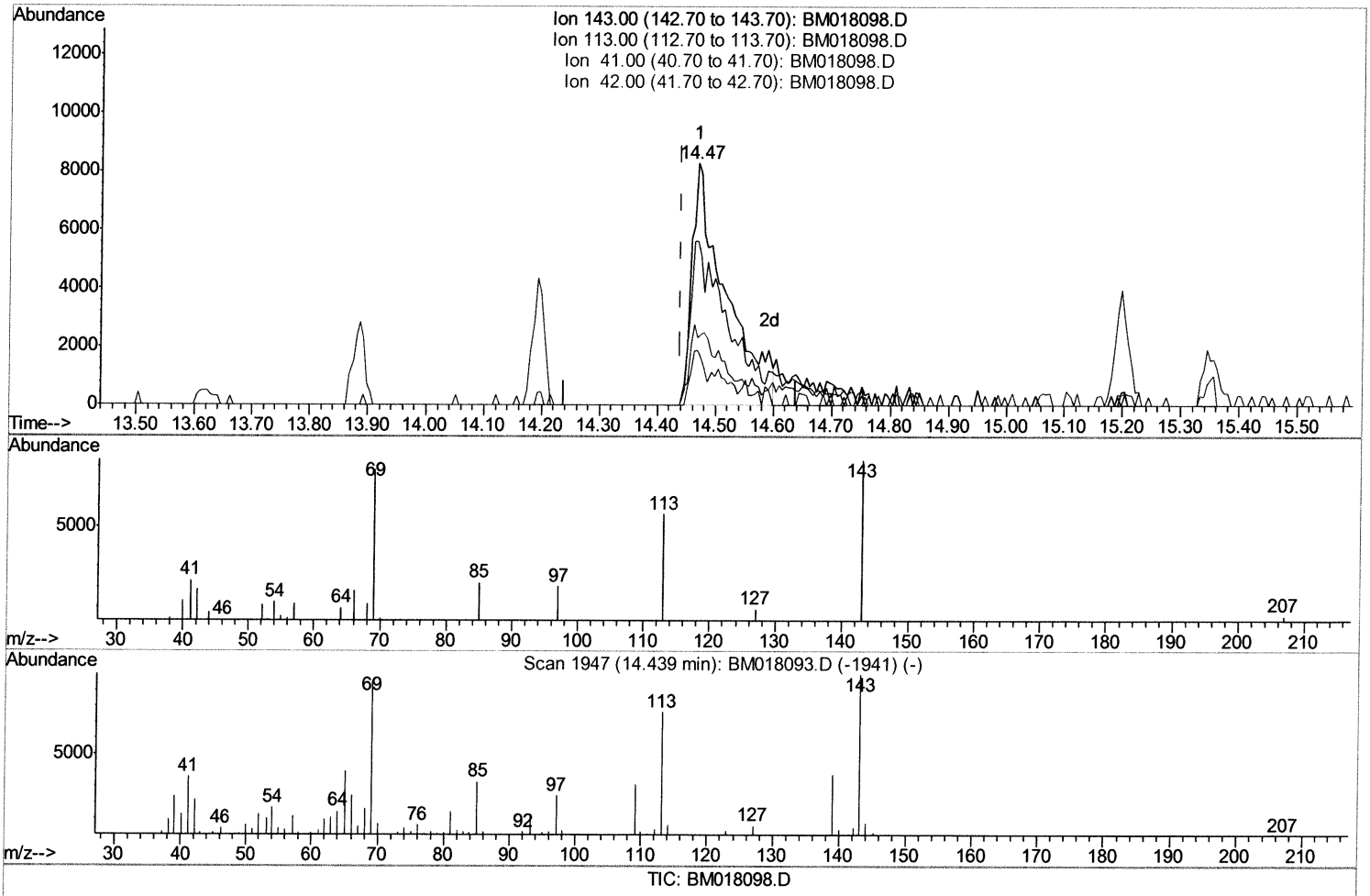
Quantitation Report (Qedit)

Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 13 02:41:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E54

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:07 PM



TIC: BM018098.D

(51) 4-Nitrophenol-d4 (S)

14.468min (+0.029) 9.22ng/ul m> SJ 12/13/18

response 33598

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	67.71
41.00	40.10	27.95#
42.00	26.80	22.83

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018098.D
Acq On : 12 Dec 2018 18:27
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 13 03:03:26 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9E54

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:07 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	80927	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	375756	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	230996	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	565957	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	706290	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	805418	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	6220m	3.52	ng/uL	0.00
5) Phenol-d5	6.74	99	100565	13.61	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	65087	14.60	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	88461	15.30	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	80817	13.38	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	46917m	16.26	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	51396	15.54	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.96	165	82538m	13.11	ng/ul	0.01
29) 4-Chloroaniline-d4	10.47	131	109929	20.35	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	353564	17.64	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	372052	15.34	ng/ul	0.00
51) 4-Nitrophenol-d4	14.47	143	33598m	9.22	ng/ul	0.03
57) Fluorene-d10	15.20	176	288697	16.68	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	42043	10.39	ng/ul	0.00
70) Anthracene-d10	17.05	188	440947	15.65	ng/ul	0.00
78) Pyrene-d10	19.36	212	503969	14.75	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	635168	14.54	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.77	94	25356	3.437	ng/ul	96
44) Dimethylphthalate	13.67	163	107001	5.510	ng/ul	97

SJ 12/13/18

SJ 12/13/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E55

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-10
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018099.D
% Solids : 84.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	79	U
100-52-7	Benzaldehyde	390	U
108-95-2	Phenol	300	J
111-44-4	Bis(2-Chloroethyl)ether	390	U
95-57-8	2-Chlorophenol	200	U
95-48-7	2-Methylphenol	390	U
108-60-1	2,2-oxybis(1-Chloropropane)	390	U
98-86-2	Acetophenone	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-di-n-propylamine	200	U
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	Bis(2-Chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	200	U
105-60-2	Caprolactam	390	U
59-50-7	4-Chloro-3-methylphenol	200	U
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	390	U
88-06-2	2,4,6-Trichlorophenol	200	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E55

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-10
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018099.D
% Solids : 84.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	200	U
92-52-4	1,1-Biphenyl	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	200	U
131-11-3	Dimethylphthalate	460	
606-20-2	2,6-Dinitrotoluene	200	U
208-96-8	Acenaphthylene	200	U
99-09-2	3-Nitroaniline	390	U
83-32-9	Acenaphthene	200	U
51-28-5	2,4-Dinitrophenol	390	U
100-02-7	4-Nitrophenol	390	U
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	200	U
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	390	U
534-52-1	4,6-Dinitro-2-methylphenol	390	U
86-30-6	N-Nitrosodiphenylamine	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
1912-24-9	Atrazine	390	U
87-86-5	Pentachlorophenol	390	U
85-01-8	Phenanthrene	200	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E55

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-10
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018099.D
% Solids : 84.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	200	U
86-74-8	Carbazole	390	U
84-74-2	Di-n-butylphthalate	200	U
206-44-0	Fluoranthene	390	U
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U
91-94-1	3,3-Dichlorobenzidine	390	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	200	U
117-84-0	Di-n-octyl phthalate	390	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
58-90-2	2,3,4,6-Tetrachlorophenol	200	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E55

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-10
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018099.D
% Solids : 84.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/12/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000057-10-3	n-Hexadecanoic acid	17.87	400	JN
2	000057-11-4	Octadecanoic acid	19.16	140	JN
3	000301-02-0	9-Octadecenamide, (Z)-	20.31	960	JN
4	004630-07-3	Naphthalene, 1,2,3,5,6,7,8,8a-octa	25.66	240	JN
5	E966796	Total Alkanes	N/A	260	

EPA-designated Registry Number.

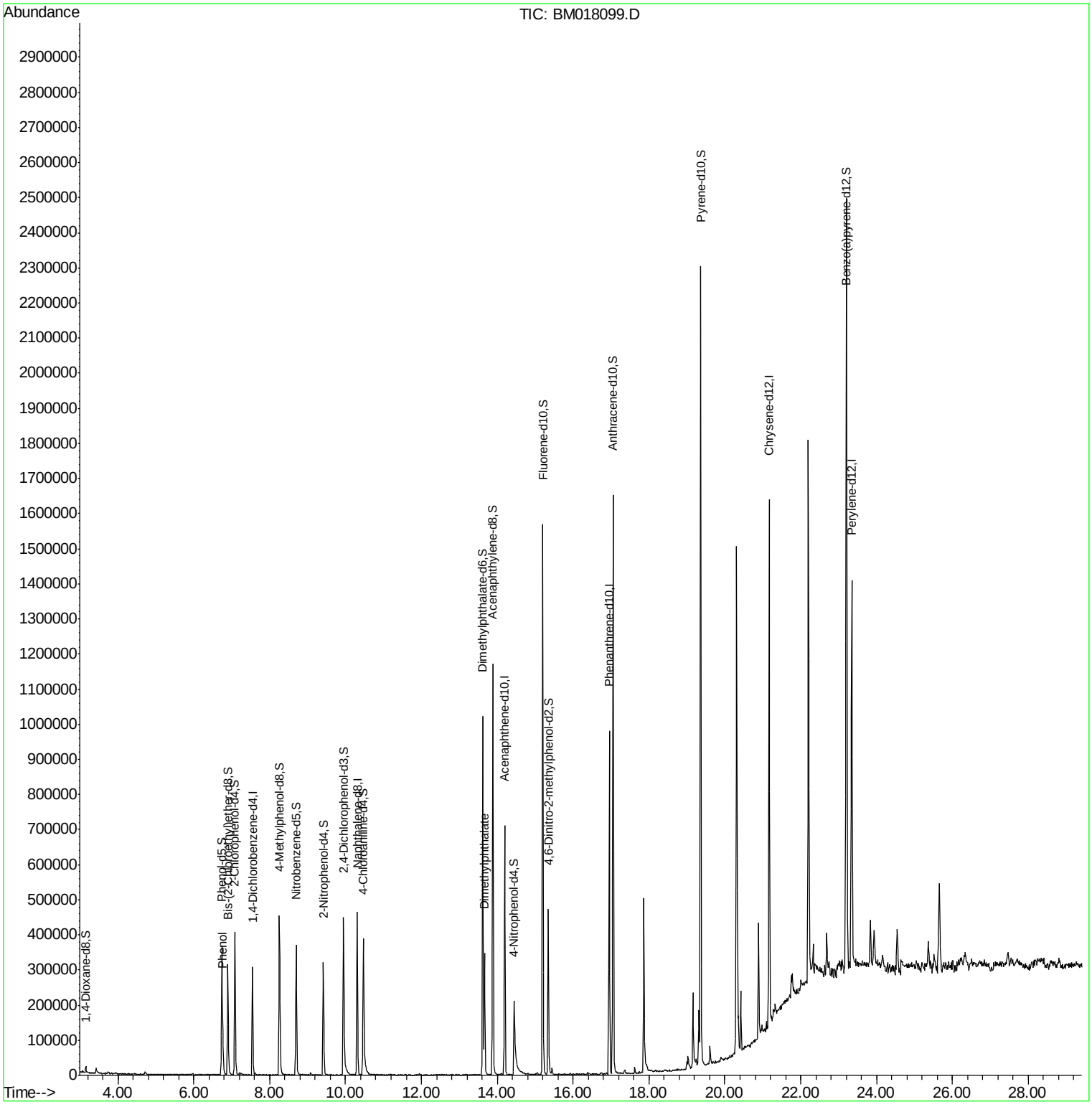
Quantitation Report (LSC Reviewed)

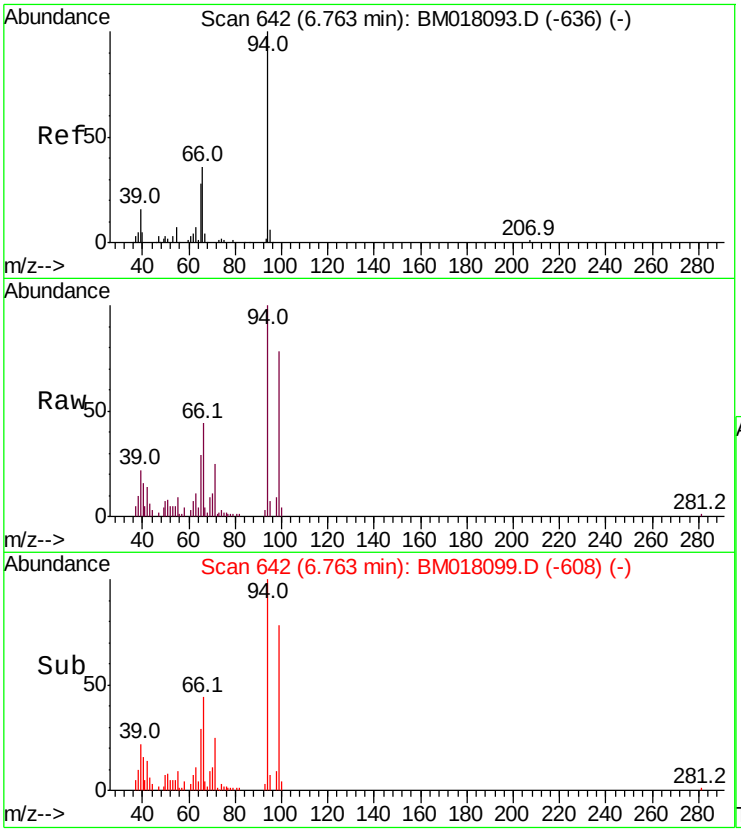
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018099.D
Acq On : 12 Dec 2018 19:03
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 13 03:06:45 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E55

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:08 PM

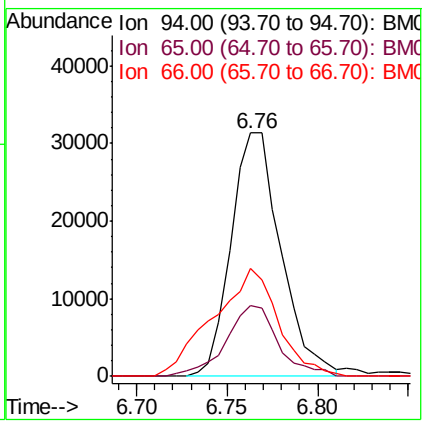




#6
Phenol
Concen: 7.639 ng/ul
RT: 6.76 min Scan# 642
Delta R.T. -0.00 min
Lab File: BM018099.D
Acq: 12 Dec 2018 19:03

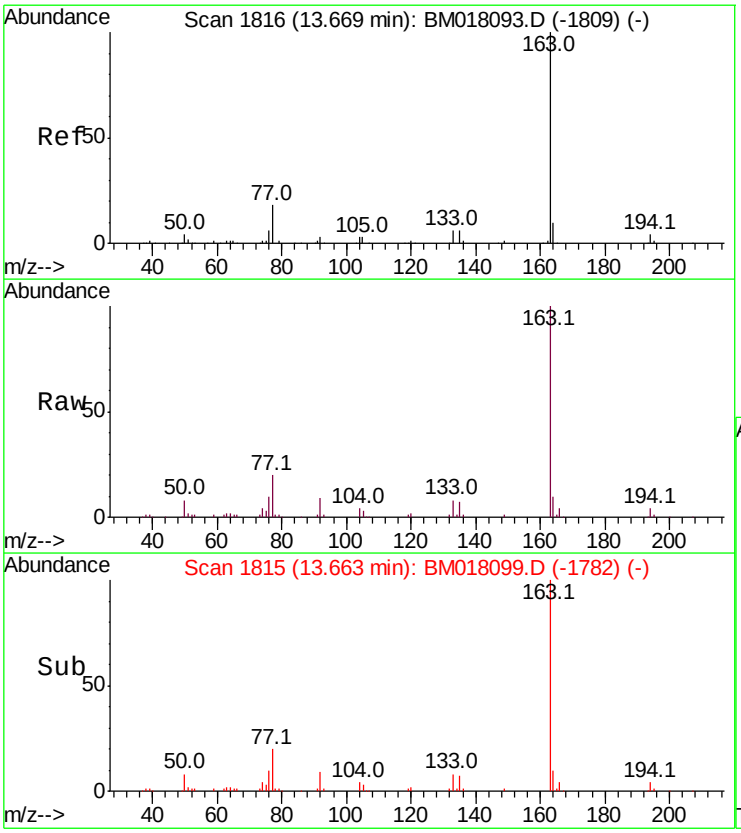
Tgt Ion: 94 Resp: 60046

Ion	Ratio	Lower	Upper
94	100		
65	29.1	24.7	37.1
66	44.1	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9E55

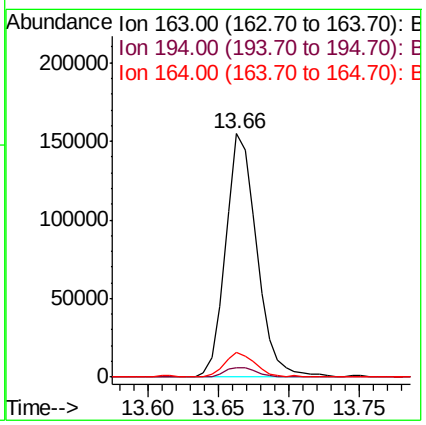
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:08 PM



#44
Dimethylphthalate
Concen: 11.761 ng/ul
RT: 13.66 min Scan# 1815
Delta R.T. -0.01 min
Lab File: BM018099.D
Acq: 12 Dec 2018 19:03

Tgt Ion:163 Resp: 237428

Ion	Ratio	Lower	Upper
163	100		
194	4.0	3.4	5.0
164	10.1	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018099.D
Acq On : 12 Dec 2018 19:03
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9E55

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:08 PM

Quant Time: Dec 13 03:06:45 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	86222	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	398606	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	240141	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	577309	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	716093	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	801681	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	10868	5.77	ng/uL	0.00
5) Phenol-d5	6.74	99	242879	30.84	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	138475	29.16	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	204397	33.17	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	199033	30.93	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	100435	32.80	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	117549	33.51	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	194332	29.10	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	276465	48.24	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	726946	34.89	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	879710	34.89	ng/ul	0.00
51) 4-Nitrophenol-d4	14.44	143	114809m	30.31	ng/ul	0.00
57) Fluorene-d10	15.20	176	617794	34.34	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	111041	26.91	ng/ul	0.00
70) Anthracene-d10	17.05	188	987990	34.37	ng/ul	0.00
78) Pyrene-d10	19.36	212	1172675	33.84	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	1521720	35.00	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	60046	7.639	ng/ul	98
44) Dimethylphthalate	13.66	163	237428	11.761	ng/ul	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018099.D
Acq On : 12 Dec 2018 19:03
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E55

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.063	10	13	17	rBV5	4876	6866	0.17%	0.018%
2	3.151	24	28	35	rVB	18152	25711	0.64%	0.066%
3	3.416	69	73	82	rBV	14563	32604	0.81%	0.083%
4	3.740	126	128	133	rVB5	4729	7120	0.18%	0.018%
5	3.946	160	163	167	rVB4	4864	6150	0.15%	0.016%
6	4.716	289	294	299	rBV2	8655	12615	0.32%	0.032%
7	5.969	505	507	512	rVB2	3232	4543	0.11%	0.012%
8	6.739	631	638	652	rBV2	366005	814337	20.35%	2.078%
9	6.898	659	665	676	rBV	312932	489897	12.24%	1.250%
10	7.081	690	696	709	rBV	406455	688705	17.21%	1.758%
11	7.545	769	775	784	rBV	306707	502993	12.57%	1.284%
12	7.616	784	787	793	rVB3	6135	9462	0.24%	0.024%
13	8.257	890	896	910	rBV	453937	839711	20.99%	2.143%
14	8.698	965	971	980	rBV	371745	640874	16.02%	1.636%
15	9.080	1030	1036	1042	rVB2	6415	9787	0.24%	0.025%
16	9.416	1086	1093	1112	rBV	319878	579681	14.49%	1.480%
17	9.945	1177	1183	1197	rBV	448141	870654	21.76%	2.222%
18	10.310	1239	1245	1255	rVB	463041	774417	19.35%	1.977%
19	10.469	1265	1272	1292	rBV	388051	883845	22.09%	2.256%
20	11.945	1516	1523	1531	rVB2	5928	12857	0.32%	0.033%
21	13.615	1801	1807	1812	rBV	1021229	1481117	37.02%	3.780%
22	13.663	1812	1815	1827	rVB	344632	520831	13.02%	1.329%
23	13.886	1846	1853	1869	rBV	1170684	1794759	44.86%	4.581%
24	14.192	1899	1905	1916	rBV2	710372	1102857	27.56%	2.815%
25	14.445	1942	1948	1972	rBV	209726	633974	15.84%	1.618%
26	15.045	2047	2050	2051	rVV	6024	5099	0.13%	0.013%
27	15.062	2051	2053	2057	rVB3	4469	4741	0.12%	0.012%
28	15.198	2069	2076	2087	rBV	1566036	2260686	56.50%	5.770%
29	15.345	2094	2101	2114	rVV	471168	726837	18.17%	1.855%
30	15.445	2114	2118	2127	rVB	17543	26620	0.67%	0.068%
31	15.621	2145	2148	2154	rVB6	3489	5506	0.14%	0.014%
32	16.386	2273	2278	2282	rBV4	5881	10435	0.26%	0.027%
33	16.745	2329	2339	2341	rBV5	4882	10616	0.27%	0.027%
34	16.880	2356	2362	2366	rBV5	5931	9837	0.25%	0.025%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018099.D
Acq On : 12 Dec 2018 19:03
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E55

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	16.951	2368	2374	2381	rBV	977047	1426318	35.65%	3.640%
36	17.051	2385	2391	2404	rVV	1647424	2541761	63.53%	6.487%
37	17.151	2404	2408	2412	rVB4	3324	6087	0.15%	0.016%
38	17.362	2438	2444	2449	rBV6	11871	21373	0.53%	0.055%
39	17.627	2484	2489	2496	rVB4	19889	26493	0.66%	0.068%
40	17.739	2504	2508	2513	rVB6	5349	9608	0.24%	0.025%
41	17.803	2516	2519	2524	rBV5	4605	5660	0.14%	0.014%
42	17.868	2524	2530	2539	rBV	498406	724542	18.11%	1.849%
43	18.068	2562	2564	2568	rVB4	5223	6081	0.15%	0.016%
44	18.162	2577	2580	2581	rBV3	6713	5390	0.13%	0.014%
45	18.415	2619	2623	2626	rVV5	5501	7770	0.19%	0.020%
46	18.468	2630	2632	2635	rVB4	4934	4795	0.12%	0.012%
47	18.503	2635	2638	2642	rBV6	3711	7050	0.18%	0.018%
48	18.750	2673	2680	2682	rBV8	4796	9027	0.23%	0.023%
49	18.997	2717	2722	2725	rBV	22040	39201	0.98%	0.100%
50	19.033	2725	2728	2732	rVV4	24680	33000	0.82%	0.084%
51	19.109	2739	2741	2744	rBV4	3459	4897	0.12%	0.012%
52	19.156	2744	2749	2761	rVV	216316	364736	9.12%	0.931%
53	19.245	2761	2764	2769	rVV	21187	37166	0.93%	0.095%
54	19.321	2770	2777	2779	rVV2	154274	246904	6.17%	0.630%
55	19.362	2779	2784	2795	rVB	2268912	3166757	79.15%	8.083%
56	19.609	2822	2826	2832	rBV	49704	72509	1.81%	0.185%
57	20.309	2938	2945	2958	rBV	1445190	2463064	61.56%	6.286%
58	20.421	2960	2964	2968	rBV	166242	188572	4.71%	0.481%
59	20.891	3040	3044	3051	rBV	320942	433751	10.84%	1.107%
60	21.097	3075	3079	3081	rBV2	28259	34521	0.86%	0.088%
61	21.168	3086	3091	3099	rBV	1505734	2029795	50.73%	5.181%
62	22.203	3262	3267	3278	rBV	1542485	2384922	59.61%	6.087%
63	22.685	3346	3349	3354	rBV3	110965	167429	4.18%	0.427%
64	23.209	3431	3438	3447	rVB	2194031	4001161	100.00%	10.212%
65	23.344	3454	3461	3469	rBV	1098148	2060218	51.49%	5.258%
66	23.838	3542	3545	3553	rVB2	127758	222790	5.57%	0.569%
67	25.656	3849	3854	3864	rVB8	244474	620146	15.50%	1.583%

Sum of corrected areas: 39180238

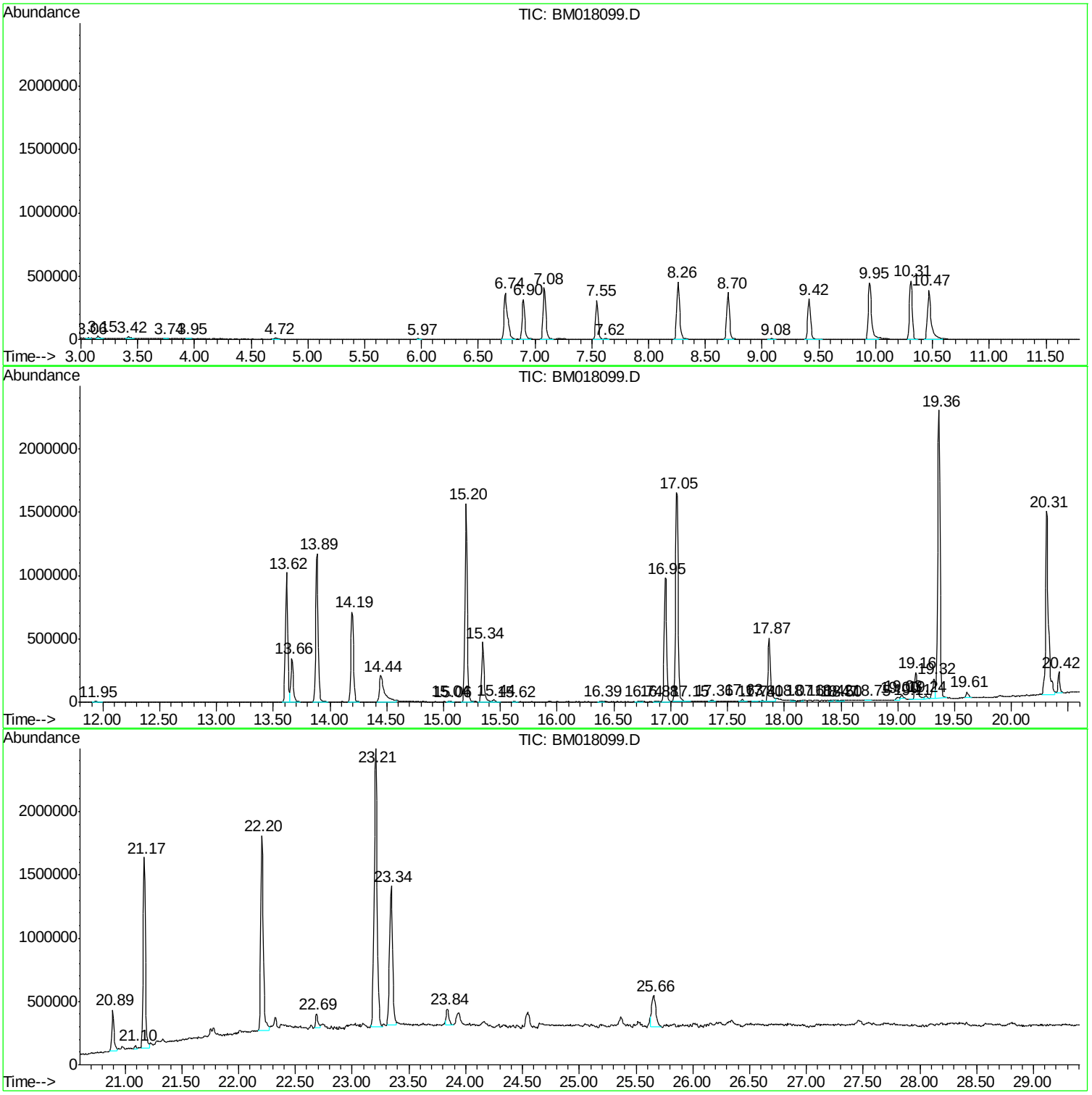
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018099.D
Acq On : 12 Dec 2018 19:03
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E55

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018099.D
Acq On : 12 Dec 2018 19:03
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E55

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

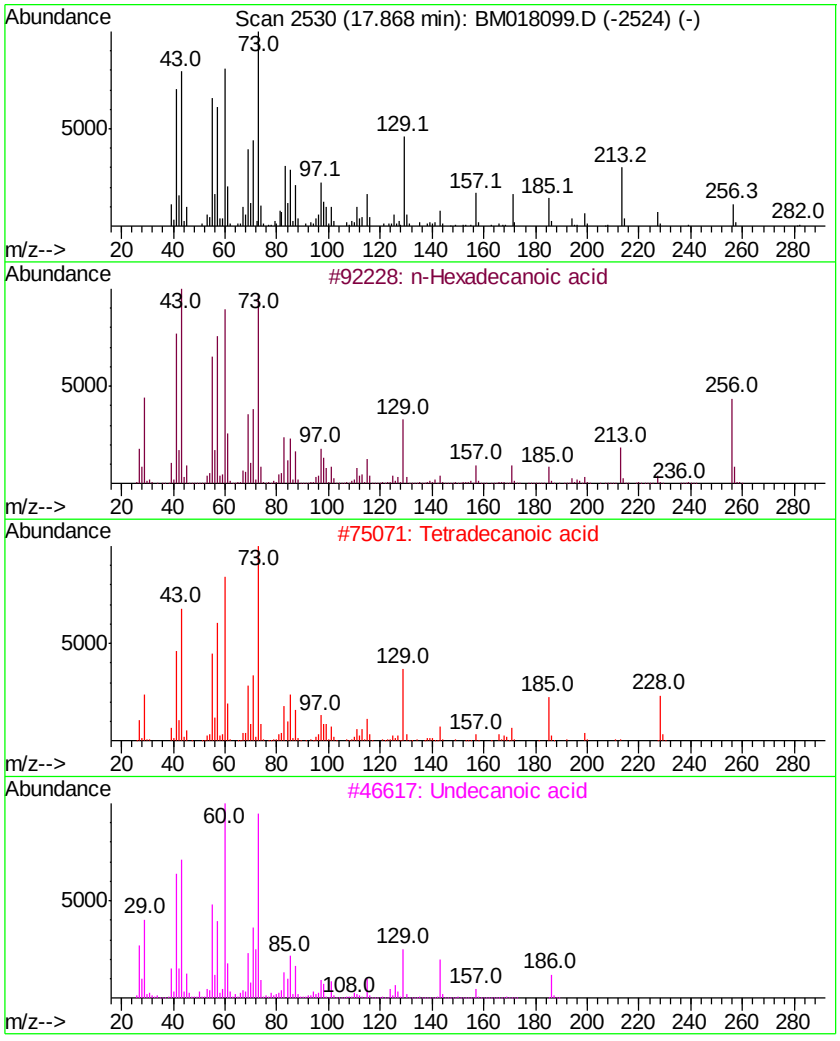
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

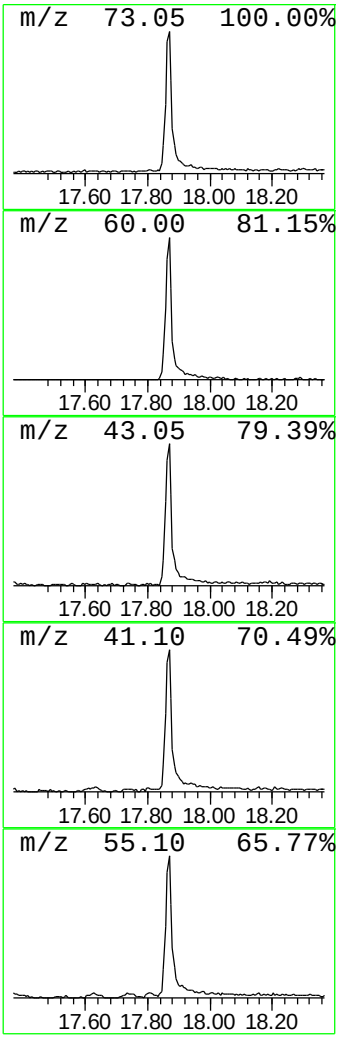
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.87	10.16 ng/ul	724542	Phenanthrene-d10	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
2	Tetradecanoic acid	228	C14H28O2	000544-63-8	91
3	Undecanoic acid	186	C11H22O2	000112-37-8	83
4	Pentadecanoic acid	242	C15H30O2	001002-84-2	81
5	n-Decanoic acid	172	C10H20O2	000334-48-5	76





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018099.D
Acq On : 12 Dec 2018 19:03
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E55

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

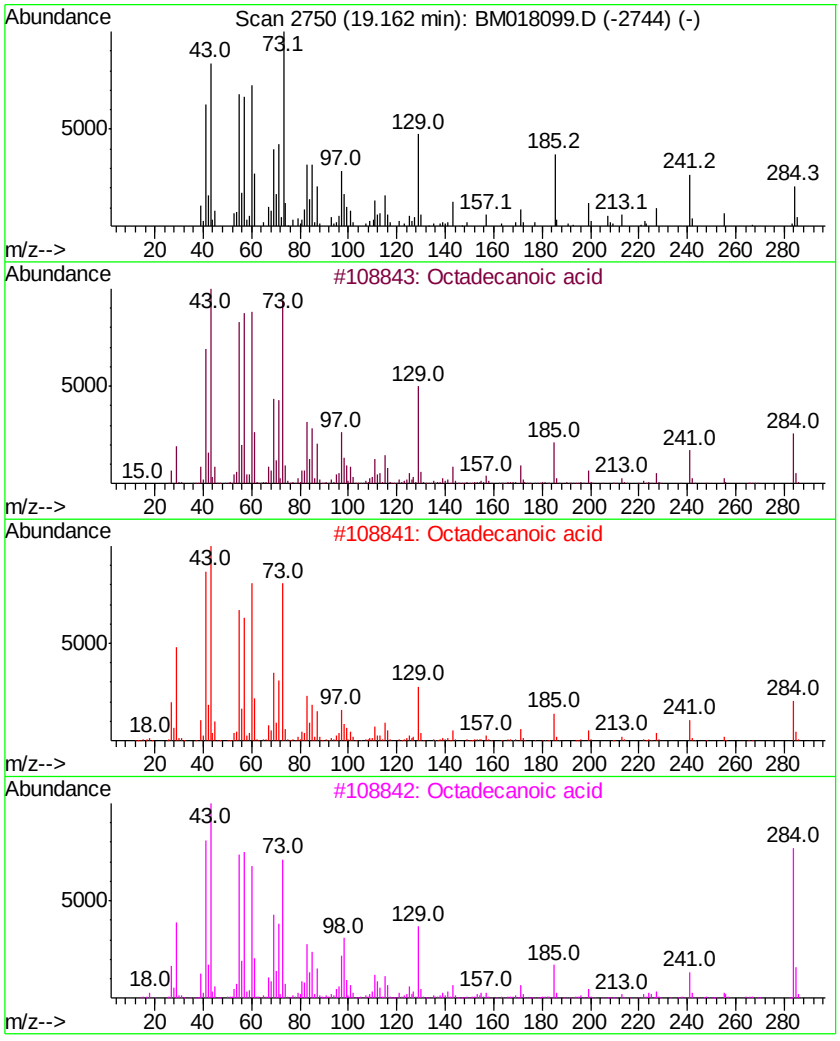
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

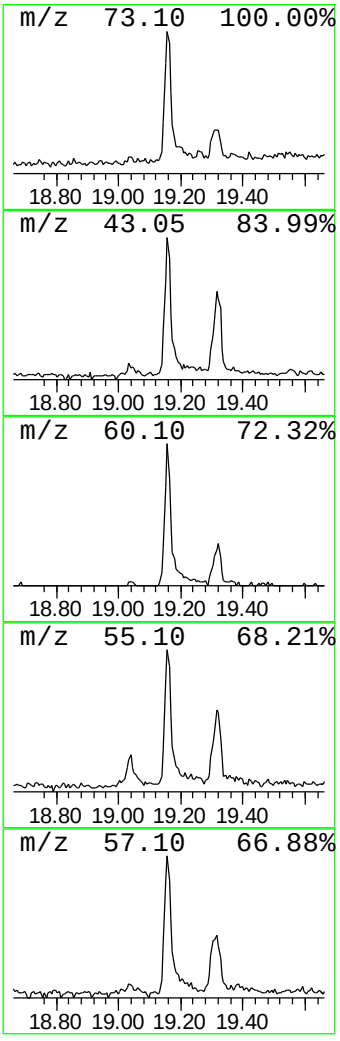
****

Peak Number 2 Octadecanoic acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.16	3.59 ng/ul	364736	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Octadecanoic acid	284	C18H36O2	000057-11-4	95
3	Octadecanoic acid	284	C18H36O2	000057-11-4	95
4	Octadecanoic acid	284	C18H36O2	000057-11-4	93
5	Tetradecanoic acid	228	C14H28O2	000544-63-8	83





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018099.D
Acq On : 12 Dec 2018 19:03
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E55

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

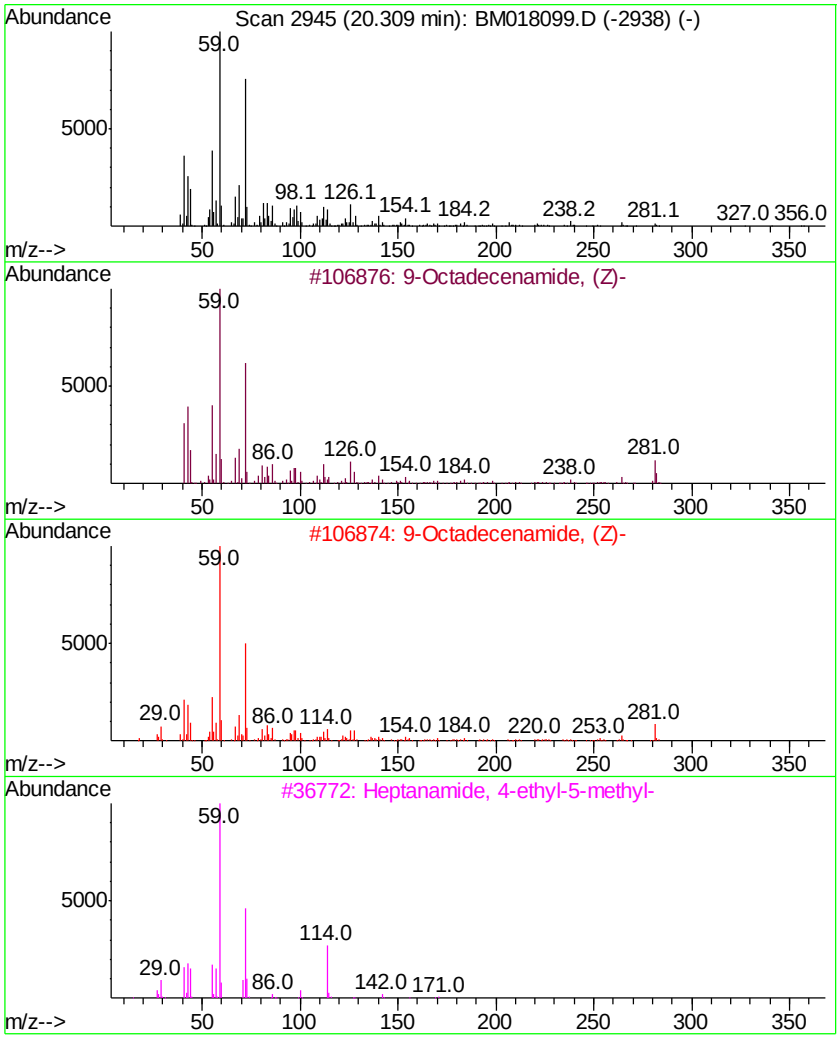
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

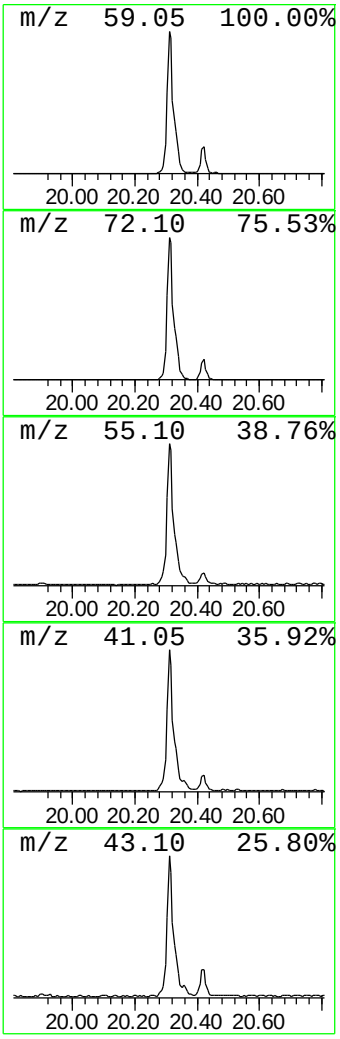
****

Peak Number 3 9-Octadecenamide, (Z)- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.31	24.27 ng/ul	2463060	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Octadecenamide, (Z)-	281	C18H35NO	000301-02-0	80
2	9-Octadecenamide, (Z)-	281	C18H35NO	000301-02-0	59
3	Heptanamide, 4-ethyl-5-methyl-	171	C10H21NO	054789-40-1	47
4	Pentadecanamide, 15-bromo-	319	C15H30BrNO	1000163-86-1	47
5	Octanamide	143	C8H17NO	000629-01-6	43





Library Search Compound Report

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Data File : BM018099.D
Acq On : 12 Dec 2018 19:03
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E55

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

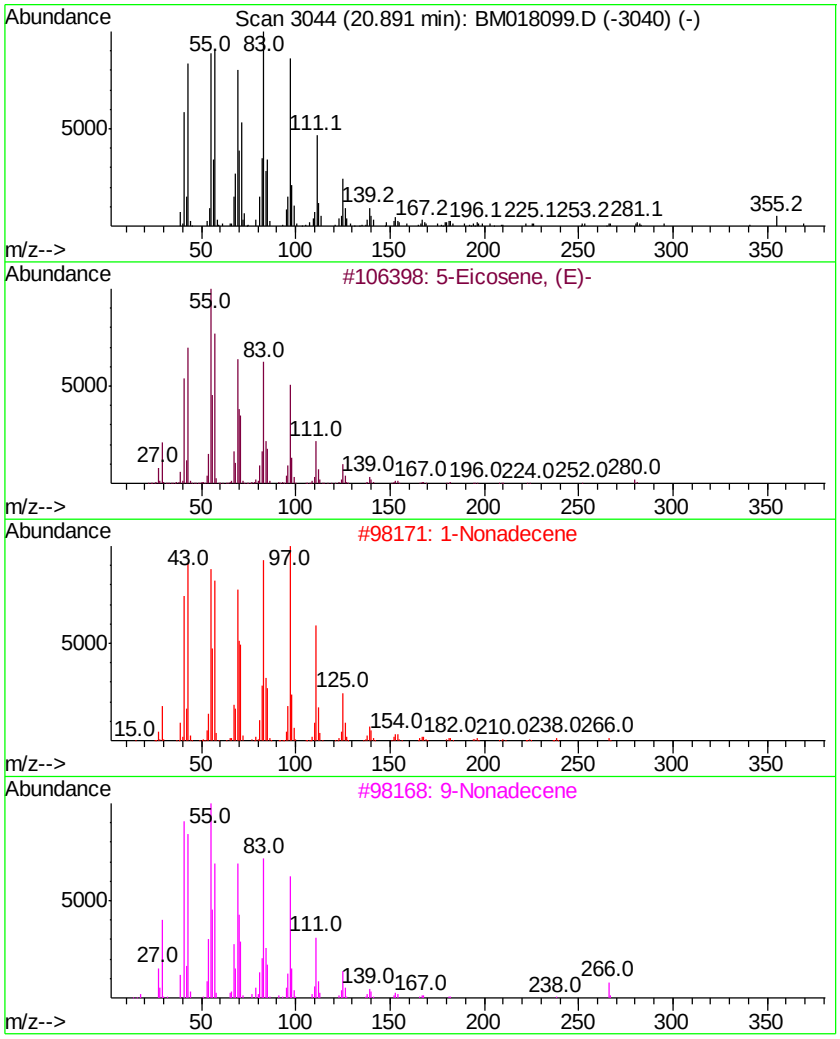
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

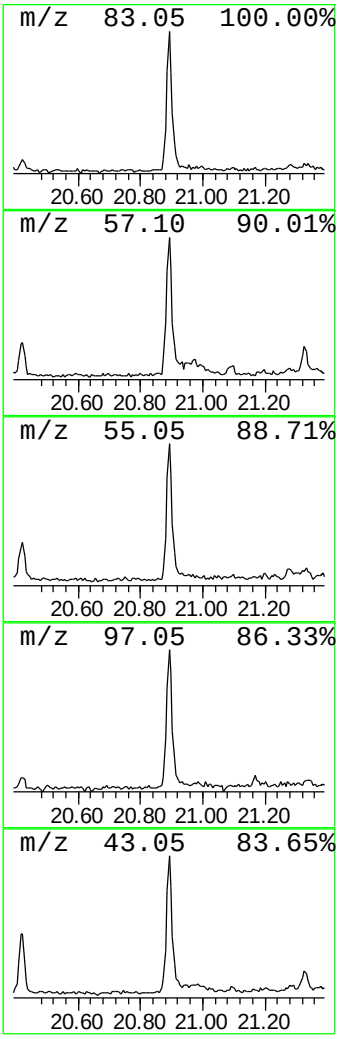
****

Peak Number 4 (DEL) Alkane: Cyclic20.89 Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	4.27 ng/ul	433751	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Eicosene, (E)-	280	C20H40	074685-30-6	98
2	1-Nonadecene	266	C19H38	018435-45-5	97
3	9-Nonadecene	266	C19H38	031035-07-1	93
4	E-15-Heptadecenal	252	C17H32O	1000130-97-9	92
5	1-Heneicosyl formate	340	C22H44O2	077899-03-7	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018099.D
Acq On : 12 Dec 2018 19:03
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E55

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

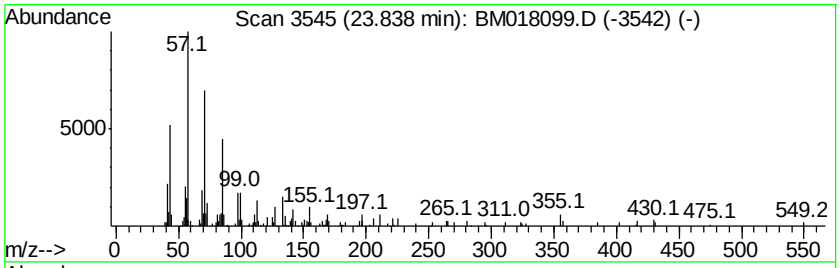
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

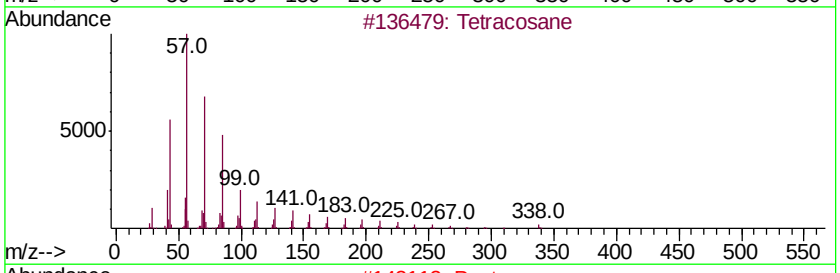
****

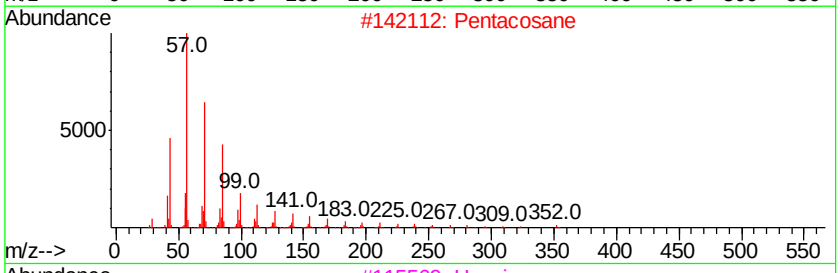
Peak Number 6 (DEL) Alkane: Straight-Chai... Concentration Rank 7

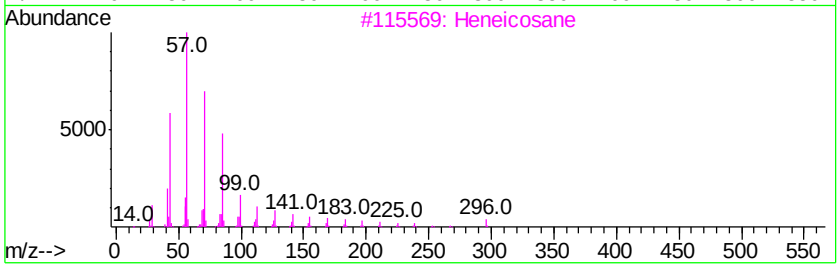
R.T.	EstConc	Area	Relative to ISTD	R.T.
23.84	2.16 ng/ul	222790	Perylene-d12	23.34

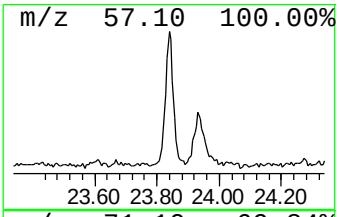
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetracosane	338	C24H50	000646-31-1	74
2	Pentacosane	352	C25H52	000629-99-2	74
3	Heneicosane	296	C21H44	000629-94-7	72
4	Hexadecane, 1-iodo-	352	C16H33I	000544-77-4	72
5	Docosane, 11-decyl-	451	C32H66	055401-55-3	72

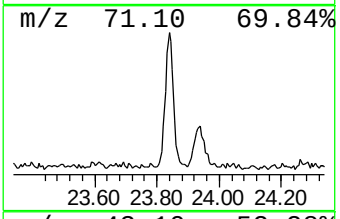


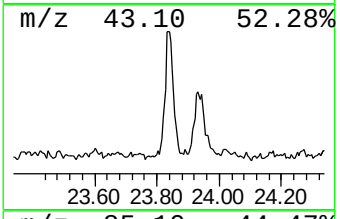


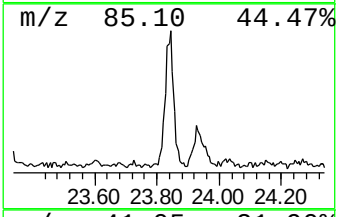


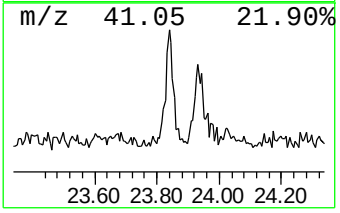












Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018099.D
Acq On : 12 Dec 2018 19:03
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E55

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

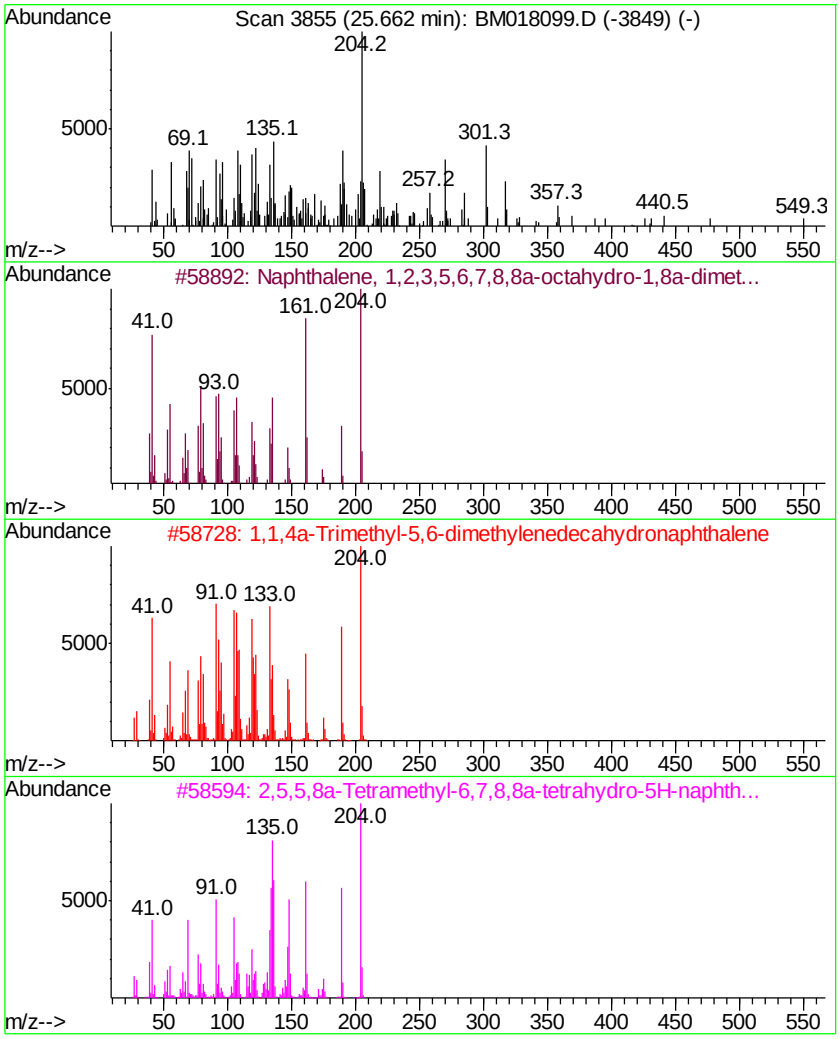
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

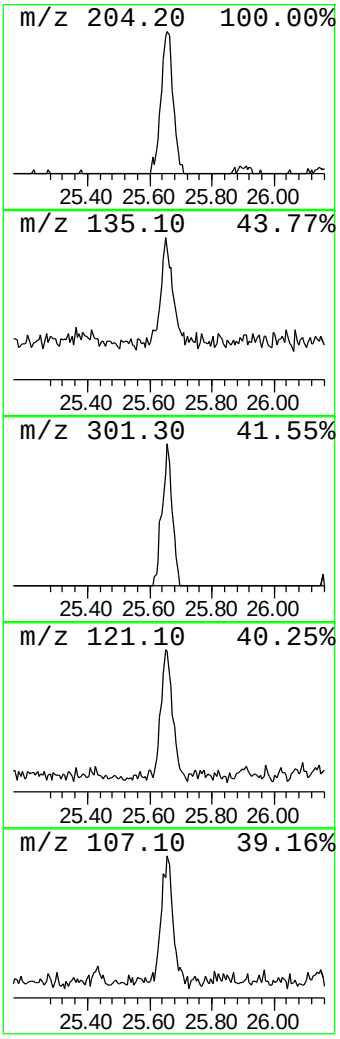
****

Peak Number 7 Naphthalene, 1,2,3,5,6,7,8,... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.66	6.02 ng/ul	620146	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,5,6,7,8,8a-oc...	204	C15H24	004630-07-3	83
2	1,1,4a-Trimethyl-5,6-dimethylene...	204	C15H24	1000193-60-8	58
3	2,5,5,8a-Tetramethyl-6,7,8,8a-te...	204	C14H20O	124957-09-1	46
4	Guaia-3,9-diene	204	C15H24	000489-83-8	45
5	1-Naphthalenecarboxylic acid, de...	316	C21H32O2	015798-13-7	40





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018099.D
Acq On : 12 Dec 2018 19:03
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E55

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	17.87	10.2	ng/ul	724542	4	16.95	1426320	20.0
Octadecanoic acid	19.16	3.6	ng/ul	364736	5	21.17	2029800	20.0
9-Octadecenamide,...	20.31	24.3	ng/ul	2463060	5	21.17	2029800	20.0
(DEL) Alkane: Cyc...	20.89	4.3	ng/ul	433751	5	21.17	2029800	20.0
(DEL) Alkane: Str...	23.84	2.2	ng/ul	222790	6	23.34	2060220	20.0
Naphthalene, 1,2,...	25.66	6.0	ng/ul	620146	6	23.34	2060220	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

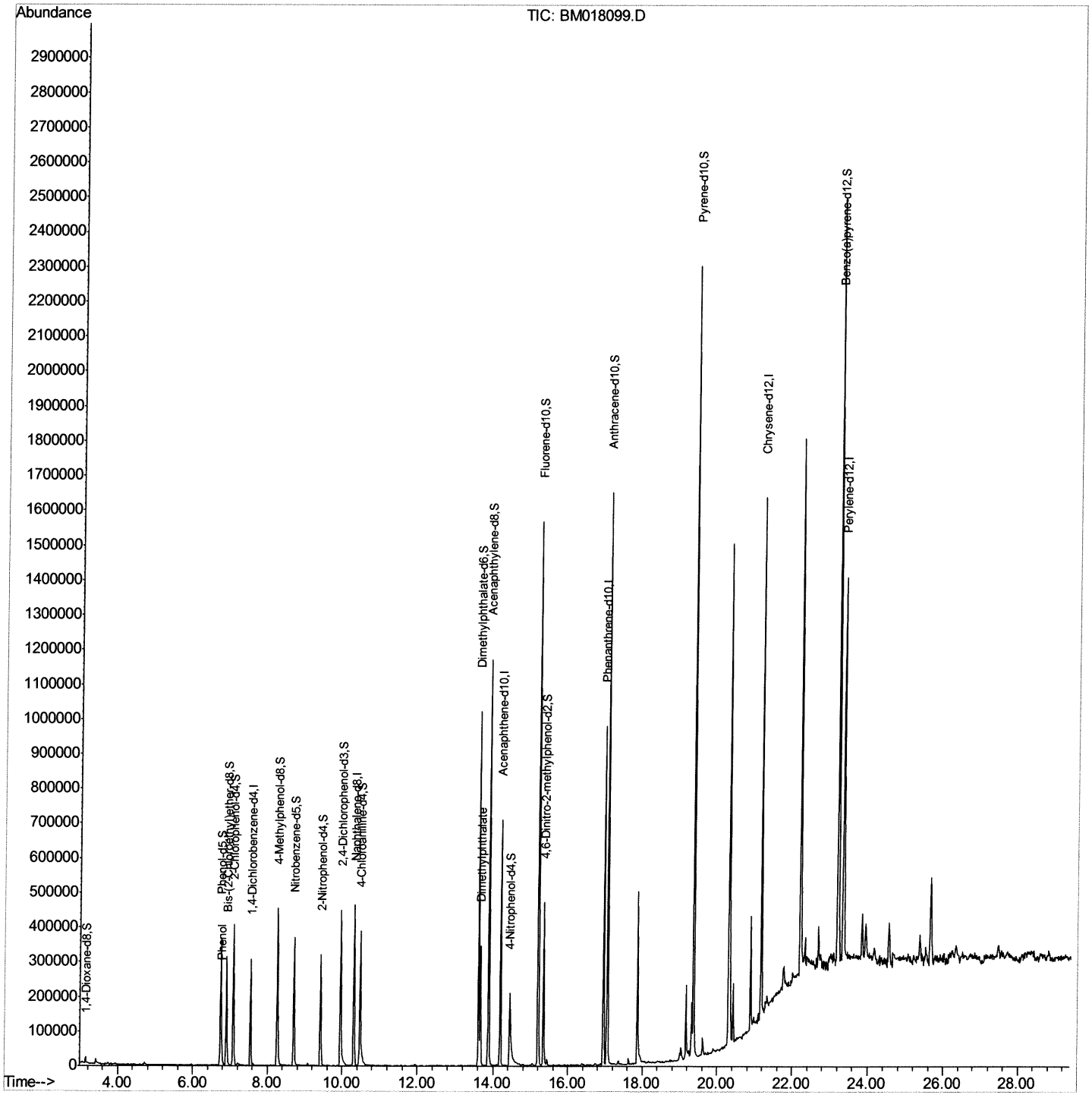
Quantitation Report (QT Reviewed)

Data File : BM018099.D
Acq On : 12 Dec 2018 19:03
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 13 03:06:45 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E55

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:08 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

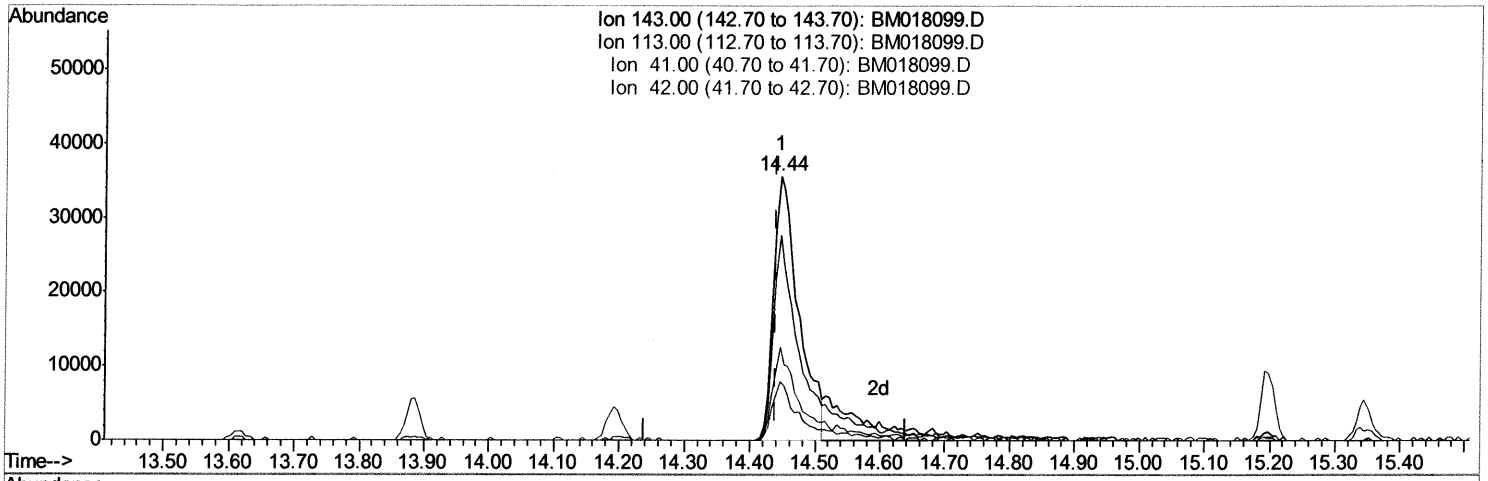
Quantitation Report (Qedit)

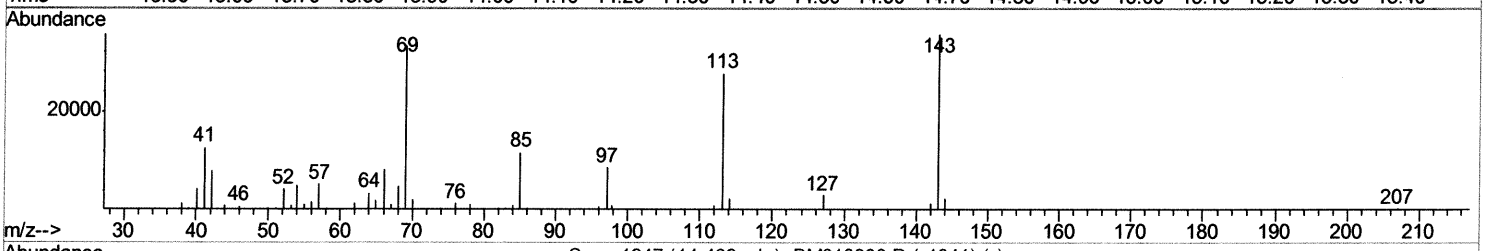
Data File : BM018099.D
Acq On : 12 Dec 2018 19:03
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 8 Sample Multiplier: 1

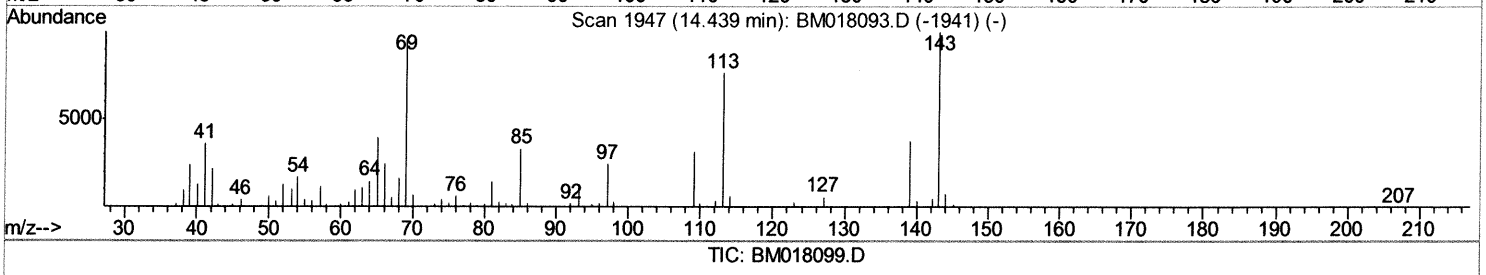
Quant Time: Dec 13 02:41:25 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E55

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:08 PM







TIC: BM018099.D

(51) 4-Nitrophenol-d4 (S)

14.445min (+0.006) 24.91ng/ul

response 94377

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	77.90
41.00	40.10	35.67
42.00	26.80	22.47

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

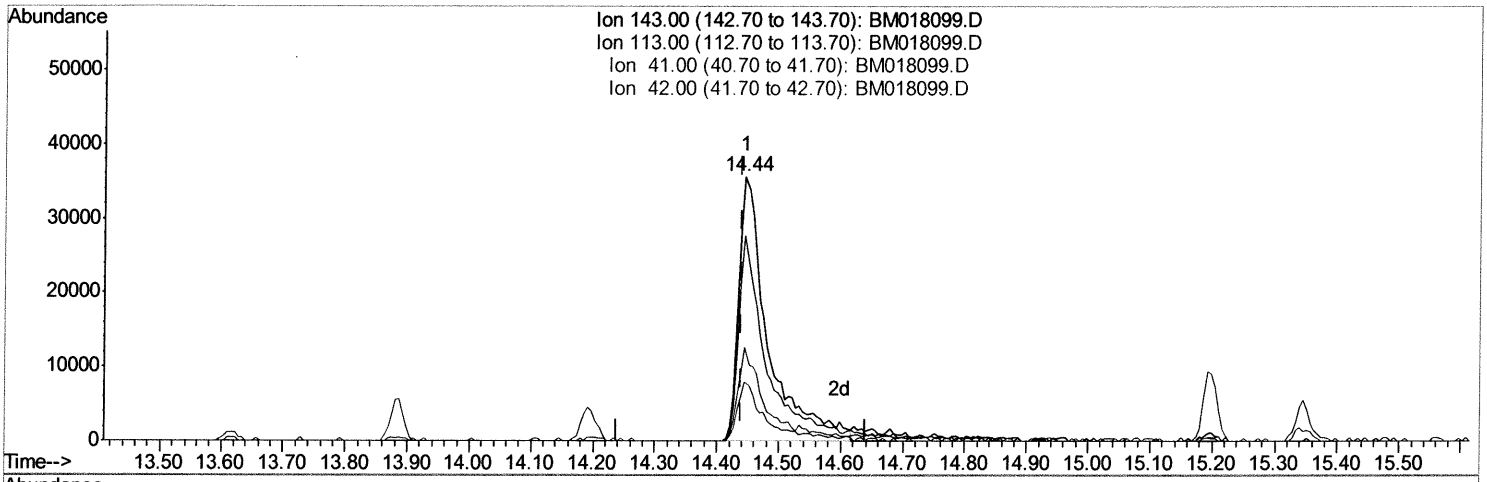
Quantitation Report (Qedit)

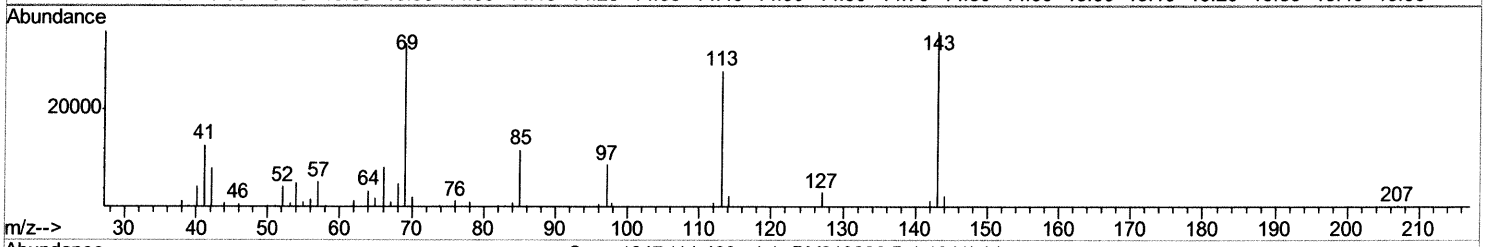
Data File : BM018099.D
Acq On : 12 Dec 2018 19:03
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 8 Sample Multiplier: 1

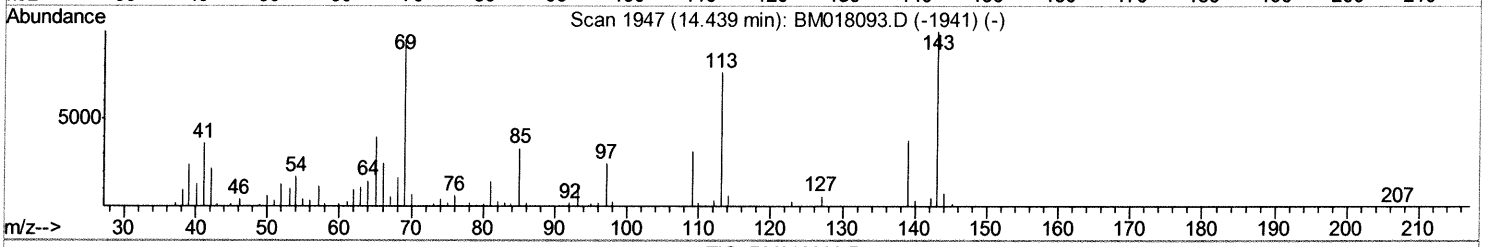
Quant Time: Dec 13 02:41:25 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E55

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:08 PM







TIC: BM018099.D

(51) 4-Nitrophenol-d4 (S)

14.445min (+0.006) 30.31ng/ul m) SJ 12/13/18

response 114809

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	77.90
41.00	40.10	35.67
42.00	26.80	22.47

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018099.D
Acq On : 12 Dec 2018 19:03
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 13 03:06:45 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9E55

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:08 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	86222	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	398606	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	240141	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	577309	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	716093	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	801681	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	10868	5.77	ng/uL	0.00
5) Phenol-d5	6.74	99	242879	30.84	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	138475	29.16	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	204397	33.17	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	199033	30.93	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	100435	32.80	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	117549	33.51	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	194332	29.10	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	276465	48.24	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	726946	34.89	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	879710	34.89	ng/ul	0.00
51) 4-Nitrophenol-d4	14.44	143	114809m	30.31	ng/ul	0.00
57) Fluorene-d10	15.20	176	617794	34.34	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	111041	26.91	ng/ul	0.00
70) Anthracene-d10	17.05	188	987990	34.37	ng/ul	0.00
78) Pyrene-d10	19.36	212	1172675	33.84	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	1521720	35.00	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	60046	7.639	ng/ul	98
44) Dimethylphthalate	13.66	163	237428	11.761	ng/ul	100

SJ 12/13/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E56

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-11
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018100.D
% Solids : 86.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	77	U
100-52-7	Benzaldehyde	380	U
108-95-2	Phenol	140	J
111-44-4	Bis(2-Chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	200	U
95-48-7	2-Methylphenol	380	U
108-60-1	2,2-oxybis(1-Chloropropane)	380	U
98-86-2	Acetophenone	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	200	U
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	Bis(2-Chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	200	U
105-60-2	Caprolactam	380	U
59-50-7	4-Chloro-3-methylphenol	200	U
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	200	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E56

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-11
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018100.D
% Solids : 86.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	200	U
92-52-4	1,1-Biphenyl	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	200	U
131-11-3	Dimethylphthalate	240	
606-20-2	2,6-Dinitrotoluene	200	U
208-96-8	Acenaphthylene	200	U
99-09-2	3-Nitroaniline	380	U
83-32-9	Acenaphthene	200	U
51-28-5	2,4-Dinitrophenol	380	U
100-02-7	4-Nitrophenol	380	U
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	200	U
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	380	U
534-52-1	4,6-Dinitro-2-methylphenol	380	U
86-30-6	N-Nitrosodiphenylamine	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
1912-24-9	Atrazine	380	U
87-86-5	Pentachlorophenol	380	U
85-01-8	Phenanthrene	200	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E56

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-11
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018100.D
% Solids : 86.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	200	U
86-74-8	Carbazole	380	U
84-74-2	Di-n-butylphthalate	200	U
206-44-0	Fluoranthene	380	U
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U
91-94-1	3,3-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	200	U
117-84-0	Di-n-octyl phthalate	380	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
58-90-2	2,3,4,6-Tetrachlorophenol	200	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E56

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-11
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018100.D
% Solids : 86.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/12/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000057-10-3	n-Hexadecanoic acid	17.86	170	JN
2	1000282-97-3	Heptafluorobutanoic acid, heptadec	20.89	91	JN
3	1000140-07-7	1,4-Dimethyl-8-isopropylidenetricy	25.66	990	JN
4	E966796	Total Alkanes	N/A	120	

EPA-designated Registry Number.

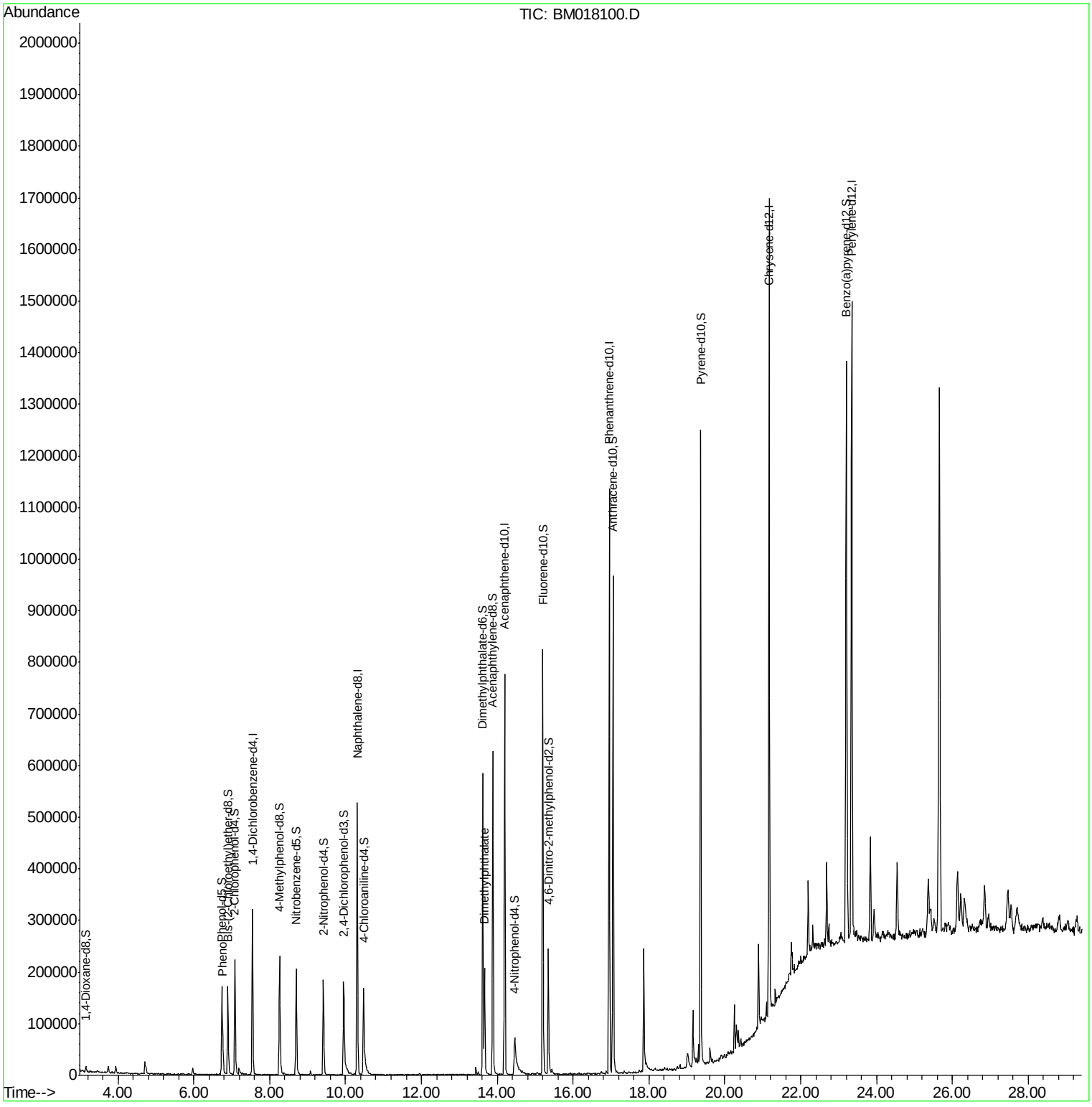
Quantitation Report (LSC Reviewed)

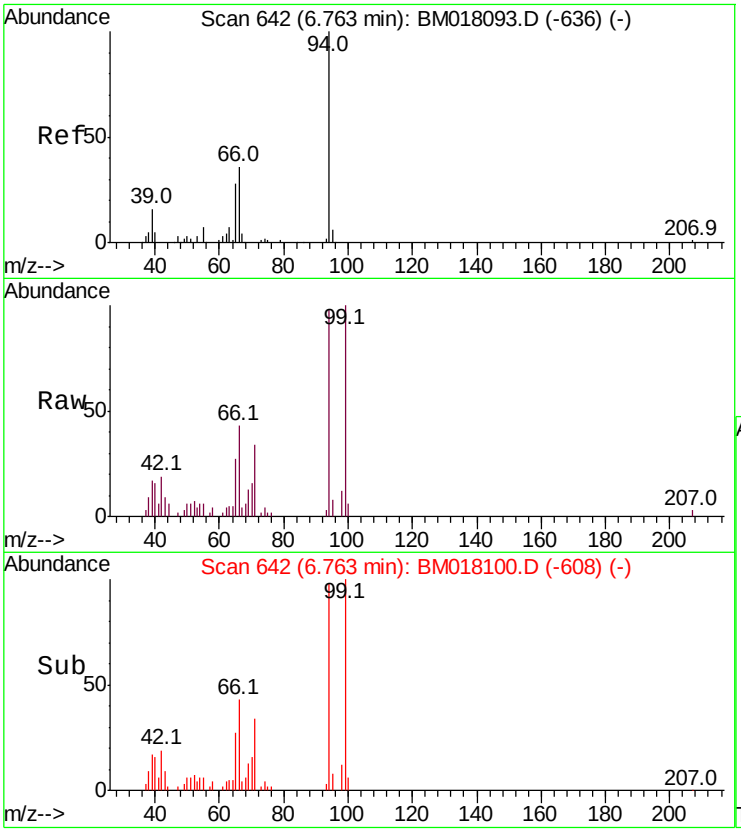
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 13 03:09:13 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E56

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:10 PM

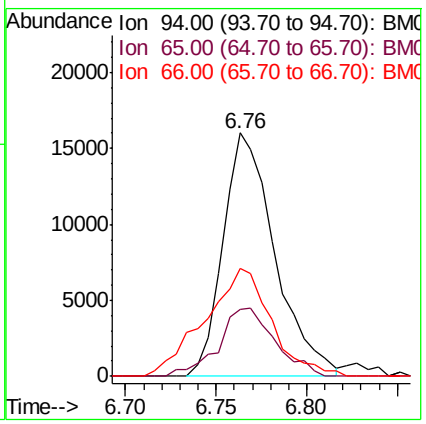




#6
Phenol
Concen: 3.760 ng/ul
RT: 6.76 min Scan# 642
Delta R.T. -0.00 min
Lab File: BM018100.D
Acq: 12 Dec 2018 19:40

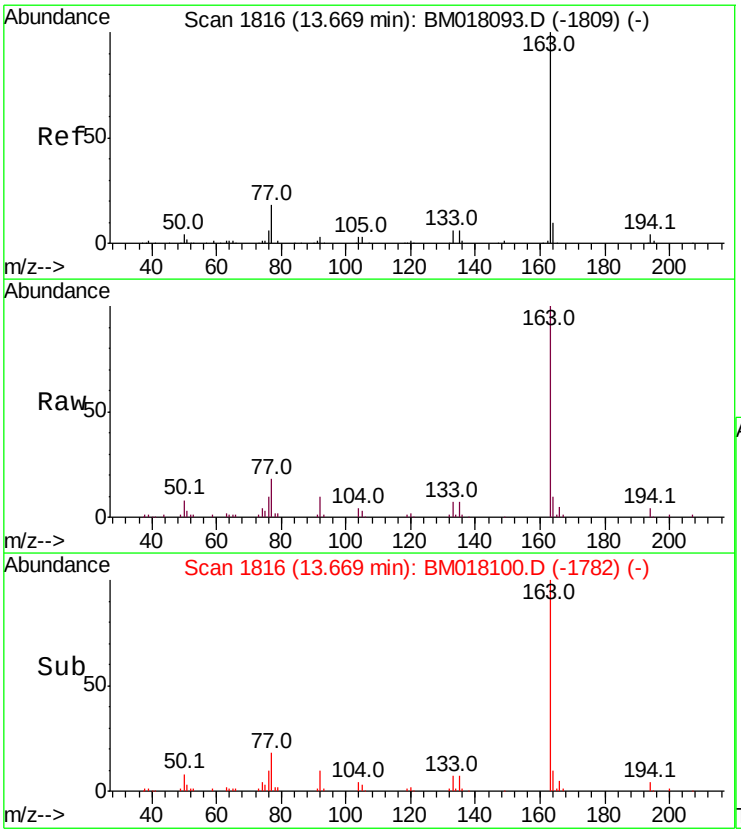
Tgt Ion: 94 Resp: 31925

Ion	Ratio	Lower	Upper
94	100		
65	27.7	24.7	37.1
66	44.4	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9E56

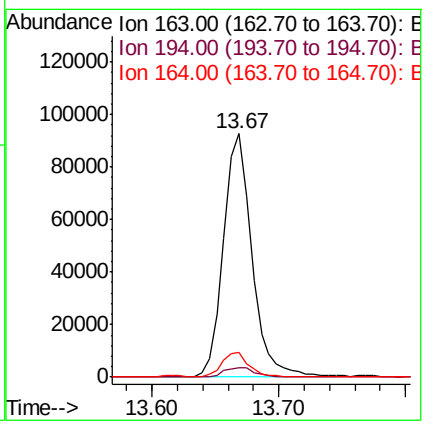
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:10 PM



#44
Dimethylphthalate
Concen: 6.305 ng/ul
RT: 13.67 min Scan# 1816
Delta R.T. -0.00 min
Lab File: BM018100.D
Acq: 12 Dec 2018 19:40

Tgt Ion:163 Resp: 145200

Ion	Ratio	Lower	Upper
163	100		
194	4.0	3.4	5.0
164	10.1	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E56

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:10 PM

Quant Time: Dec 13 03:09:13 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	93143	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	437139	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	273960	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	665462	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	760069	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	852814	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	6454	3.17	ng/uL	0.00
5) Phenol-d5	6.74	99	123008	14.46	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	79425	15.48	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	115851	17.41	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	104574	15.05	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	56763	16.91	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	67852	17.64	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	96936	13.24	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	139455	22.19	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	435581	18.32	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	475889	16.54	ng/ul	0.00
51) 4-Nitrophenol-d4	14.46	143	52059m	12.05	ng/ul	0.02
57) Fluorene-d10	15.20	176	353972	17.24	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	61270m	12.88	ng/ul	0.00
70) Anthracene-d10	17.05	188	572241	17.27	ng/ul	0.00
78) Pyrene-d10	19.36	212	642998	17.48	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	789052	17.06	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	31925	3.760	ng/ul	97
44) Dimethylphthalate	13.67	163	145200	6.305	ng/ul	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E56

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.152	25	28	34	rVB2	11471	16975	0.59%	0.064%
2	3.746	124	129	139	rVB2	14528	26295	0.92%	0.099%
3	3.834	141	144	148	rVV2	2575	4436	0.15%	0.017%
4	3.887	150	153	156	rBV3	2215	3299	0.12%	0.012%
5	3.946	156	163	171	rBV7	13804	23309	0.81%	0.088%
6	4.352	228	232	238	rBV5	2127	4610	0.16%	0.017%
7	4.710	289	293	295	rBV	23268	27819	0.97%	0.105%
8	5.975	502	508	514	rBV2	13035	18833	0.66%	0.071%
9	6.675	623	627	629	rBV2	2194	3056	0.11%	0.012%
10	6.740	632	638	651	rBV2	170806	407194	14.23%	1.533%
11	6.898	659	665	676	rVV	169287	279514	9.77%	1.052%
12	7.081	690	696	708	rBV	221553	384836	13.44%	1.449%
13	7.193	711	715	720	rBV	10887	19643	0.69%	0.074%
14	7.545	768	775	783	rBV	319536	532724	18.61%	2.006%
15	8.263	889	897	914	rBV	230422	443756	15.50%	1.671%
16	8.698	964	971	986	rBV	205484	373827	13.06%	1.408%
17	9.081	1032	1036	1041	rVB3	7383	9440	0.33%	0.036%
18	9.416	1086	1093	1103	rBV	183980	334403	11.68%	1.259%
19	9.951	1178	1184	1206	rBV2	181413	433035	15.13%	1.630%
20	10.310	1238	1245	1256	rVB	525896	873791	30.53%	3.290%
21	10.475	1266	1273	1291	rBV2	167990	439201	15.34%	1.654%
22	11.945	1519	1523	1529	rBV	3132	5896	0.21%	0.022%
23	13.439	1774	1777	1780	rBV3	15867	16015	0.56%	0.060%
24	13.492	1784	1786	1791	rVB4	5302	6574	0.23%	0.025%
25	13.616	1800	1807	1812	rBV	583715	883987	30.88%	3.328%
26	13.669	1812	1816	1829	rVB	205900	327768	11.45%	1.234%
27	13.886	1847	1853	1865	rBV	625937	968874	33.85%	3.648%
28	14.192	1899	1905	1920	rBV2	777082	1251730	43.73%	4.713%
29	14.463	1945	1951	1961	rBV2	70279	225495	7.88%	0.849%
30	14.657	1983	1984	1992	rVB3	4302	5953	0.21%	0.022%
31	15.045	2046	2050	2051	rBV2	2639	3725	0.13%	0.014%
32	15.198	2070	2076	2088	rBV	823333	1291954	45.14%	4.864%
33	15.345	2096	2101	2112	rBV	241344	381713	13.34%	1.437%
34	15.439	2114	2117	2123	rVB4	8457	11710	0.41%	0.044%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E56

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	16.157	2235	2239	2240	rBV3	2879	2935	0.10%	0.011%
36	16.386	2274	2278	2282	rBV3	2960	3733	0.13%	0.014%
37	16.733	2332	2337	2338	rBV3	4167	6046	0.21%	0.023%
38	16.874	2357	2361	2365	rBV4	6804	11200	0.39%	0.042%
39	16.951	2368	2374	2385	rVV2	1133229	1656967	57.89%	6.239%
40	17.051	2385	2391	2405	rVV	962885	1486393	51.93%	5.597%
41	17.139	2405	2406	2412	rVV3	3769	4338	0.15%	0.016%
42	17.351	2440	2442	2444	rBV3	4696	4404	0.15%	0.017%
43	17.745	2505	2509	2513	rBV5	6130	9550	0.33%	0.036%
44	17.804	2515	2519	2521	rBV3	5354	6763	0.24%	0.025%
45	17.862	2524	2529	2538	rBV	239444	366372	12.80%	1.379%
46	18.168	2577	2581	2583	rBV4	3802	4798	0.17%	0.018%
47	18.286	2599	2601	2605	rBV5	3760	4657	0.16%	0.018%
48	18.415	2620	2623	2625	rBV3	5259	5931	0.21%	0.022%
49	18.533	2641	2643	2648	rBV6	3604	5701	0.20%	0.021%
50	18.627	2658	2659	2662	rBV2	4177	3745	0.13%	0.014%
51	18.733	2672	2677	2678	rBV3	6537	9126	0.32%	0.034%
52	18.821	2690	2692	2695	rVB3	9825	11169	0.39%	0.042%
53	18.904	2704	2706	2708	rBV2	3629	3625	0.13%	0.014%
54	19.004	2718	2723	2726	rBV5	18498	31969	1.12%	0.120%
55	19.033	2726	2728	2731	rVB4	17841	19616	0.69%	0.074%
56	19.157	2743	2749	2754	rBV	110411	170503	5.96%	0.642%
57	19.251	2762	2765	2767	rBV4	8690	9644	0.34%	0.036%
58	19.304	2771	2774	2777	rBV2	38335	40129	1.40%	0.151%
59	19.362	2778	2784	2793	rVB2	1223171	1723507	60.21%	6.489%
60	19.609	2823	2826	2833	rBV2	26825	39559	1.38%	0.149%
61	19.904	2871	2876	2878	rBV5	10180	17720	0.62%	0.067%
62	20.251	2930	2935	2939	rBV	94571	125709	4.39%	0.473%
63	20.309	2939	2945	2951	rVV5	50056	116085	4.06%	0.437%
64	20.362	2951	2954	2958	rVV3	36629	48991	1.71%	0.184%
65	20.421	2962	2964	2969	rVB5	15405	20012	0.70%	0.075%
66	20.892	3040	3044	3051	rBV	164389	248236	8.67%	0.935%
67	21.092	3075	3078	3082	rBV2	33109	38107	1.33%	0.143%
68	21.168	3086	3091	3101	rBV	1580361	2094113	73.16%	7.885%
69	21.327	3115	3118	3122	rBV5	31992	49850	1.74%	0.188%
70	21.750	3187	3190	3192	rBV2	63452	73894	2.58%	0.278%
71	22.203	3263	3267	3272	rBV3	133716	176829	6.18%	0.666%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E56

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

72	22.686	3345	3349	3354	rVB2	153731	208360	7.28%	0.785%
73	23.203	3431	3437	3448	rVB	1119534	2225874	77.77%	8.381%
74	23.344	3454	3461	3468	rBV	1222783	2212789	77.31%	8.332%
75	23.839	3541	3545	3551	rVB	201818	356655	12.46%	1.343%
76	25.656	3846	3854	3864	rVB2	1052791	2862303	100.00%	10.777%

Sum of corrected areas: 26559297

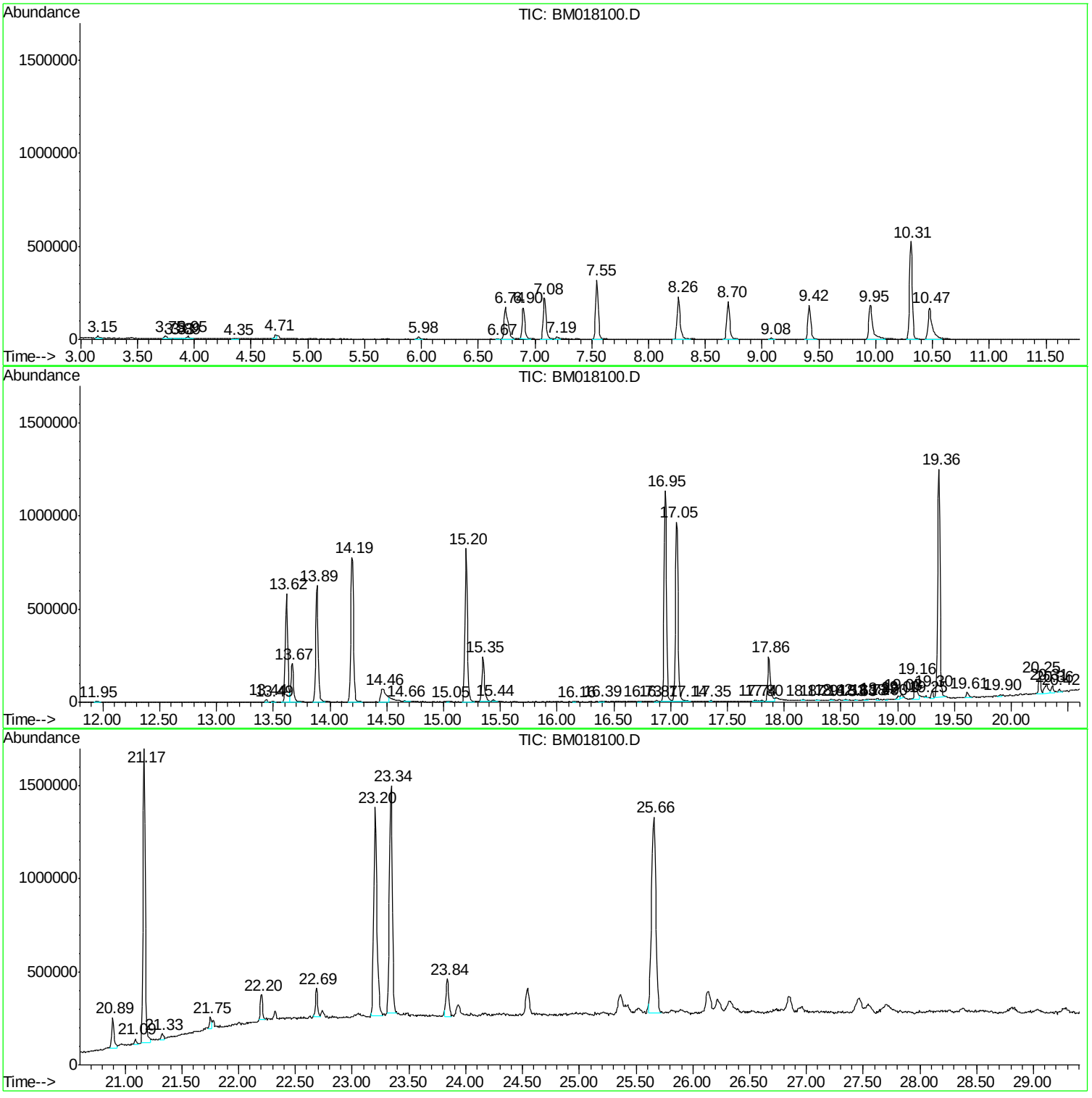
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E56

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E56

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

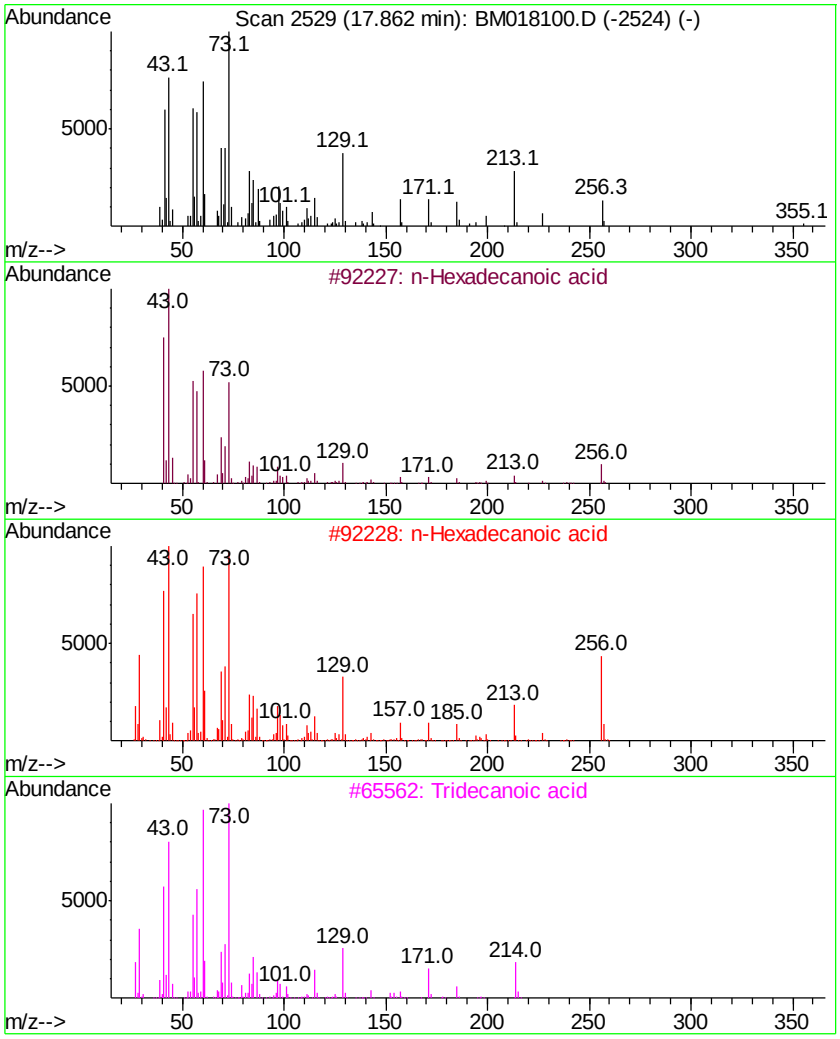
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

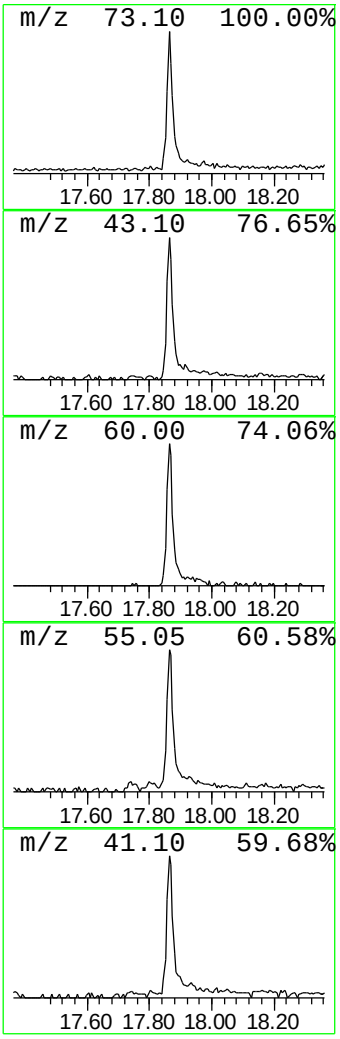
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.86	4.42 ng/ul	366372	Phenanthrene-d10	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
3	Tridecanoic acid	214	C13H26O2	000638-53-9	89
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	74
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	72





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E56

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

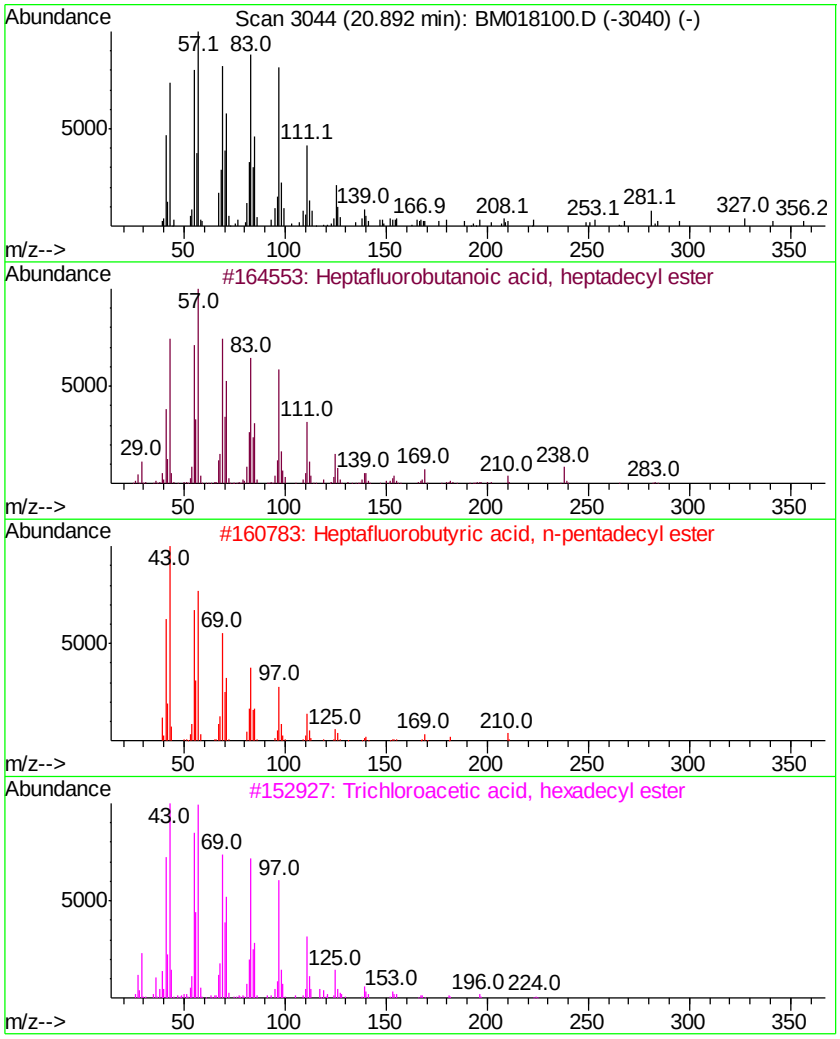
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

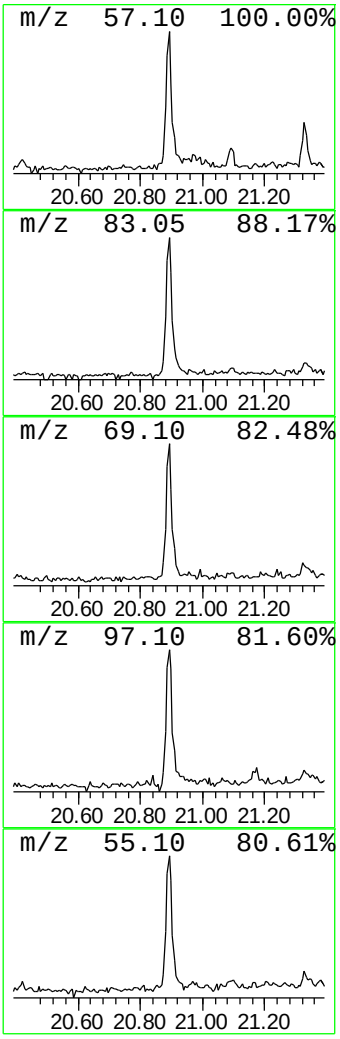
****

Peak Number 2 Heptafluorobutanoic acid, h... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	2.37 ng/ul	248236	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	94
2	Heptafluorobutyric acid, n-penta...	424	C19H31F7O2	1000216-79-3	91
3	Trichloroacetic acid, hexadecyl ...	386	C18H33Cl3O2	074339-54-1	91
4	Heptafluorobutyric acid, n-octad...	466	C22H37F7O2	000400-57-7	91
5	Pentafluoropropionic acid, hexad...	388	C19H33F5O2	006222-07-7	91





Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E56

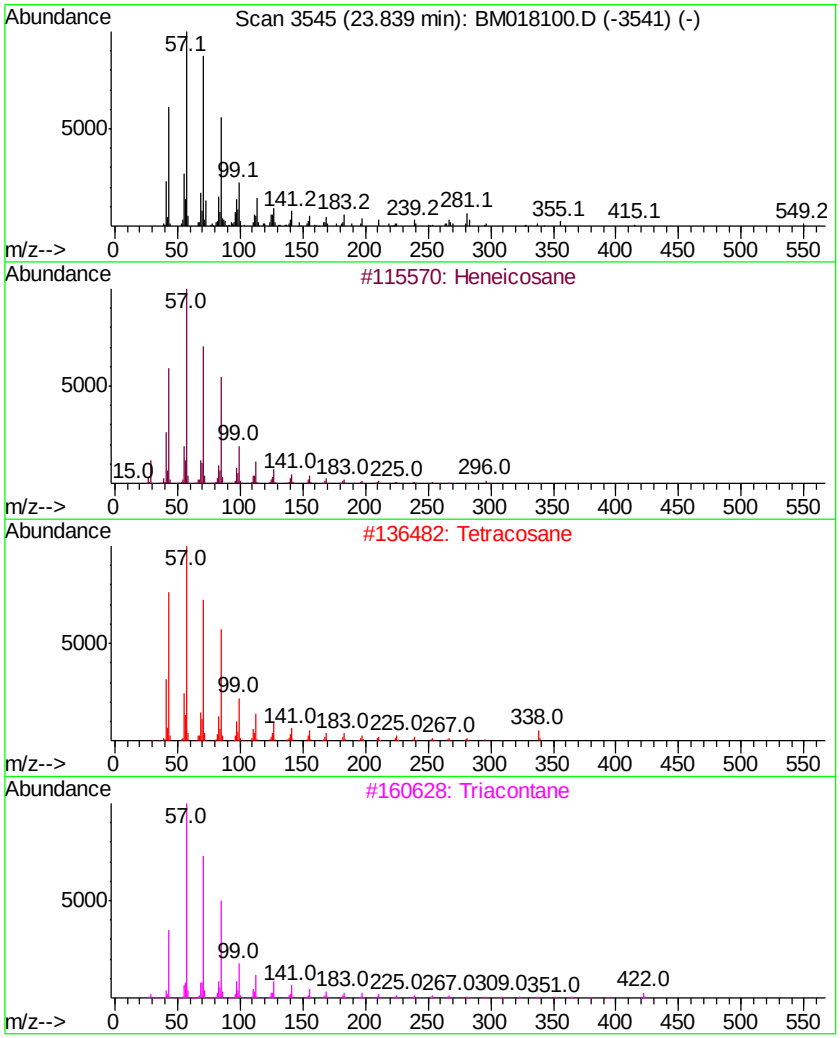
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

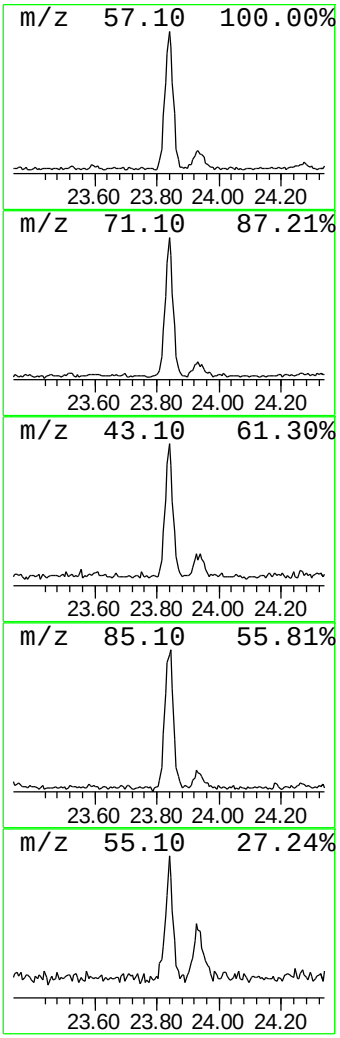
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 3 (DEL) Alkane: Straight-Chai... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.84	3.22 ng/ul	356655	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	95
2	Tetracosane	338	C24H50	000646-31-1	90
3	Triacontane	422	C30H62	000638-68-6	90
4	Eicosane	282	C20H42	000112-95-8	90
5	Heptadecane, 9-octyl-	352	C25H52	007225-64-1	87





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E56

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

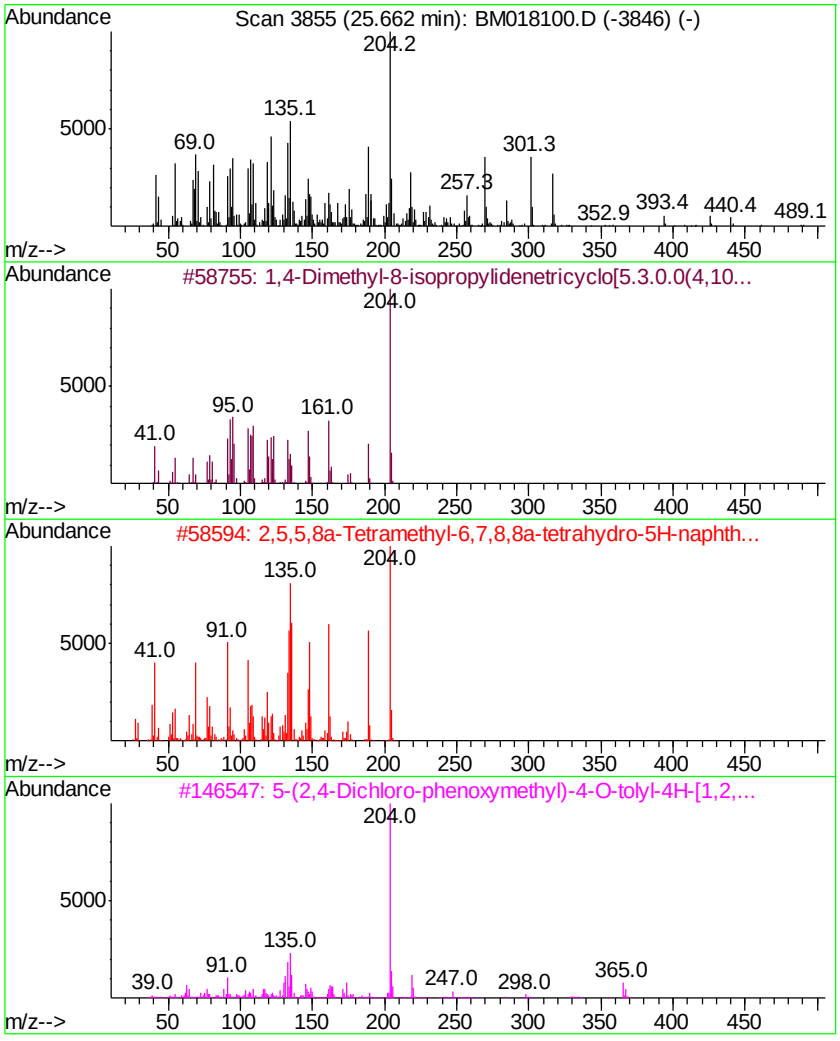
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

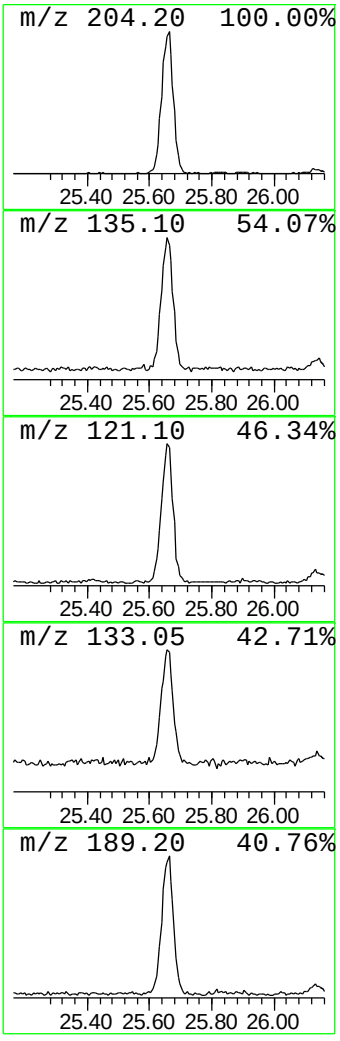
****

Peak Number 4 1,4-Dimethyl-8-isopropylide... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.66	25.87 ng/ul	2862300	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Dimethyl-8-isopropylidenetri...	204	C15H24	1000140-07-7	62
2	2,5,5,8a-Tetramethyl-6,7,8,8a-te...	204	C14H20O	124957-09-1	58
3	5-(2,4-Dichloro-phenoxymethyl)-4...	365	C16H13Cl2N3OS	1000296-81-4	49
4	1H-3a,7-Methanoazulene, 2,3,6,7,...	204	C15H24	000560-32-7	49
5	Guaia-3,9-diene	204	C15H24	000489-83-8	46





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E56

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	17.86	4.4	ng/ul	366372	4	16.95	1656970	20.0
Heptafluorobutano...	20.89	2.4	ng/ul	248236	5	21.17	2094110	20.0
(DEL) Alkane: Str...	23.84	3.2	ng/ul	356655	6	23.34	2212790	20.0
1,4-Dimethyl-8-is...	25.66	25.9	ng/ul	2862300	6	23.34	2212790	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

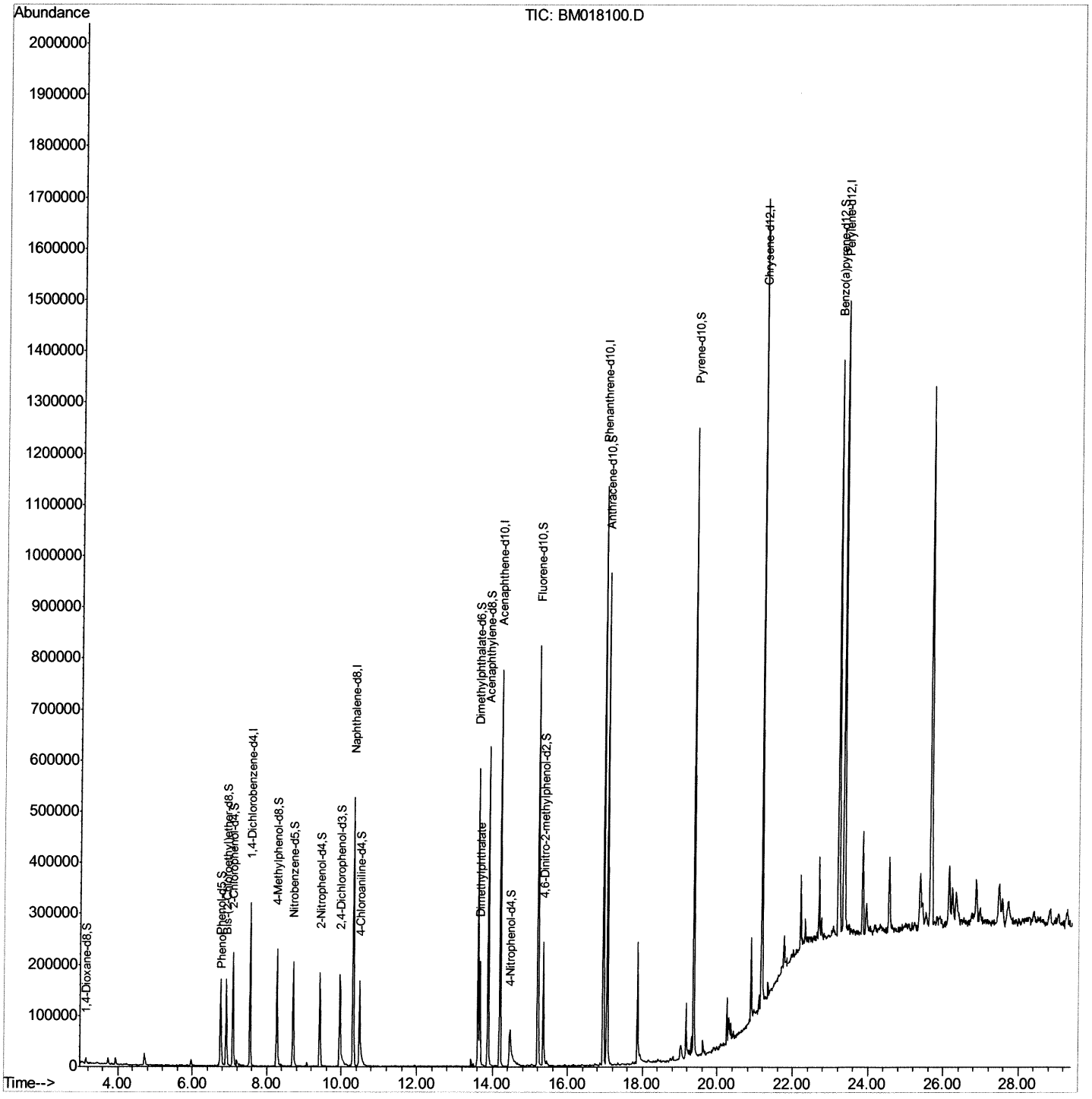
Quantitation Report (QT Reviewed)

Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 13 03:09:13 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E56

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:10 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

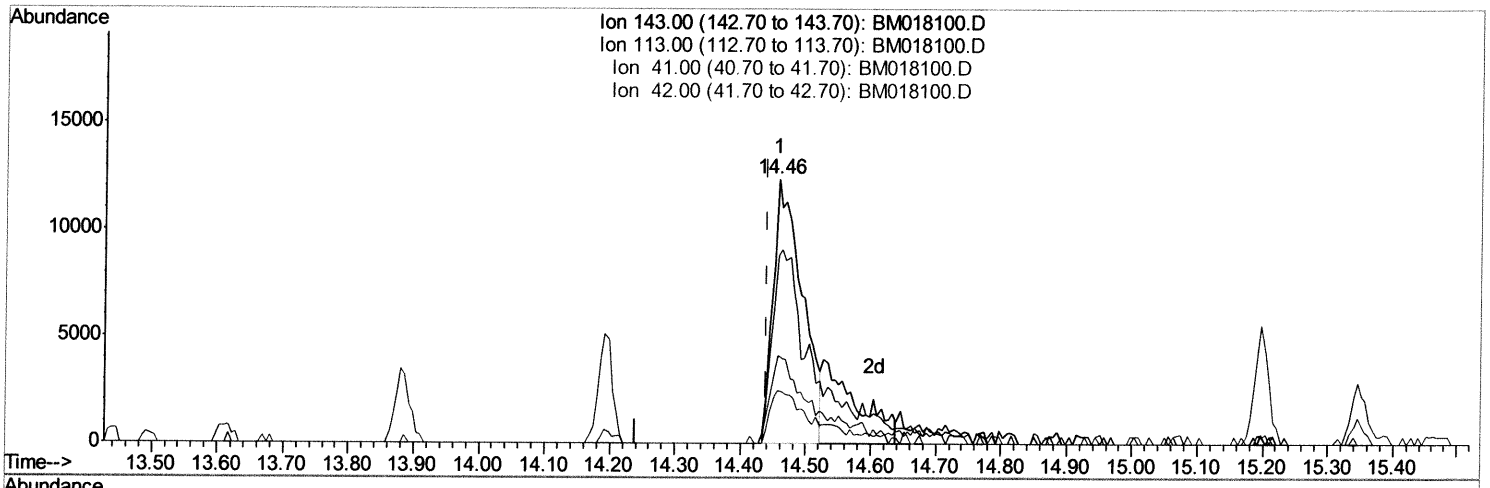
Quantitation Report (Qedit)

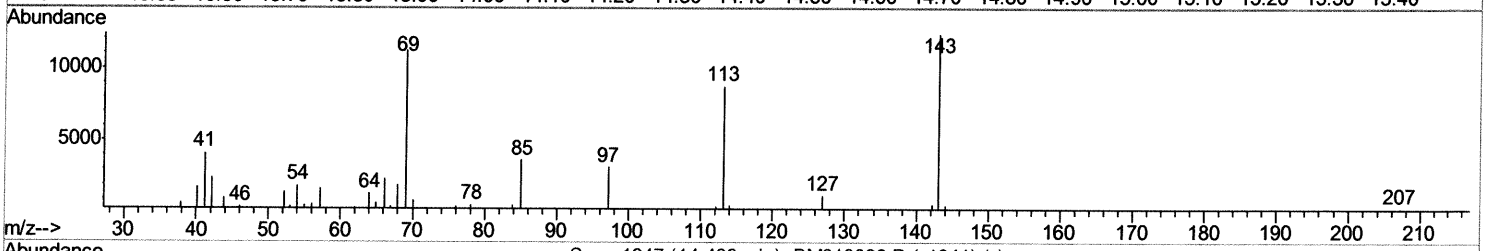
Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

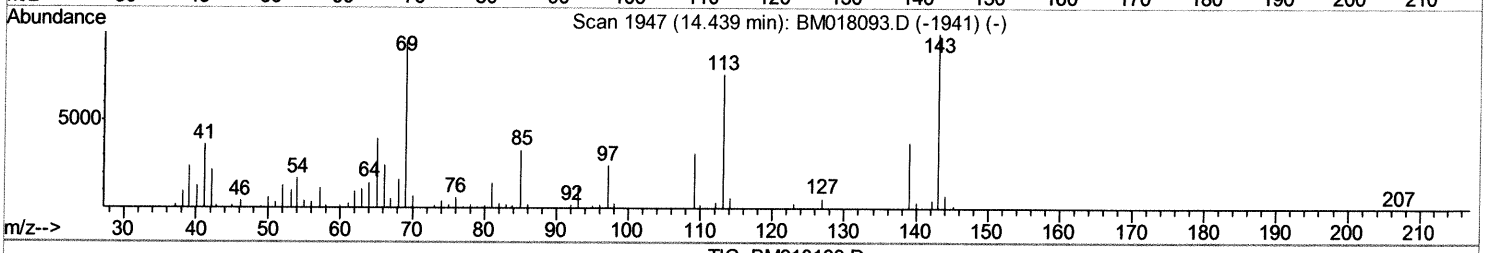
Quant Time: Dec 13 02:41:32 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E56

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:10 PM







TIC: BM018100.D

(51) 4-Nitrophenol-d4 (S)

14.457min (+0.018) 8.89ng/ul

response 38440

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	70.79
41.00	40.10	33.24
42.00	26.80	20.09#

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

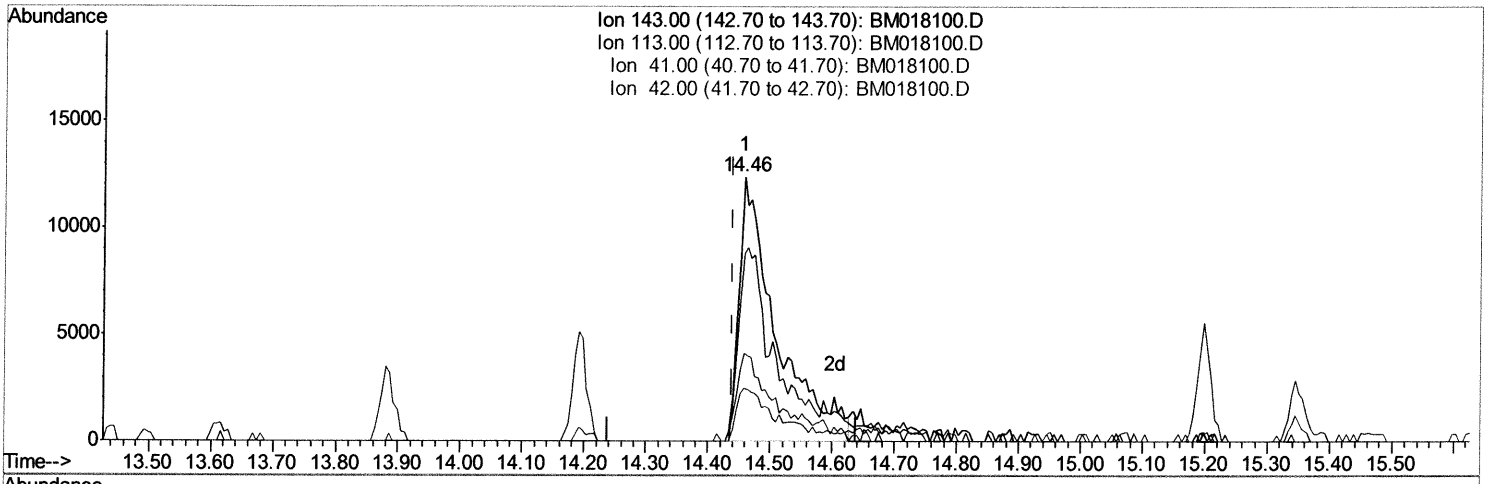
Quantitation Report (Qedit)

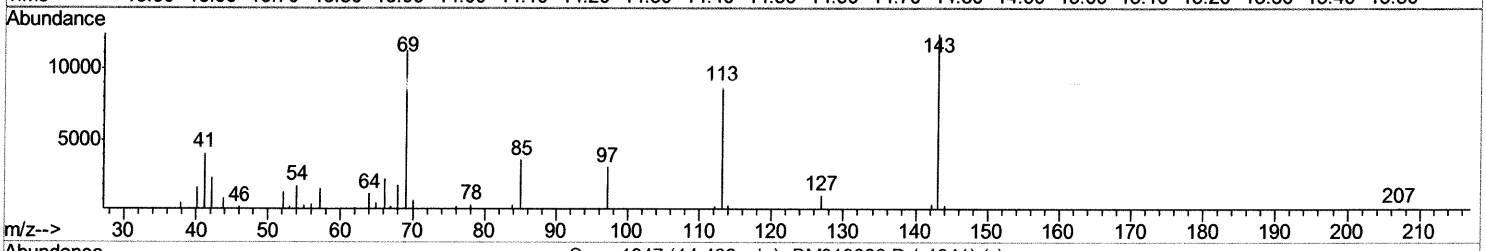
Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

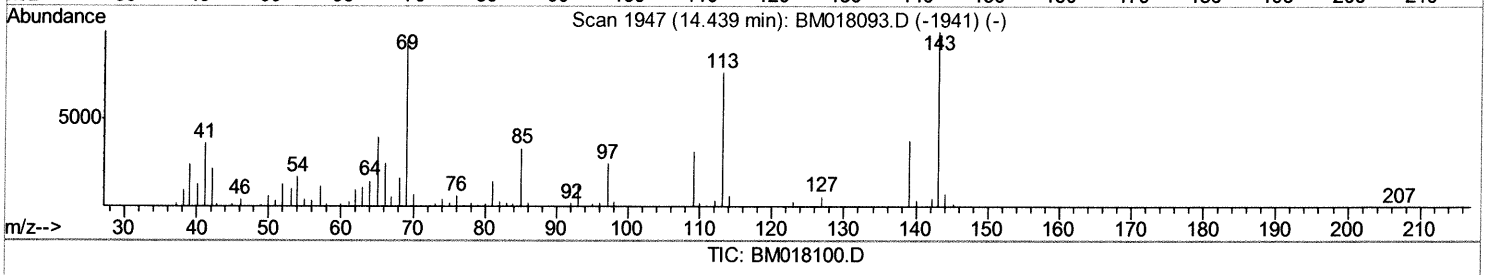
Quant Time: Dec 13 02:41:32 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E56

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:10 PM







TIC: BM018100.D

(51) 4-Nitrophenol-d4 (S)

14.457min (+0.018) 12.05ng/ul m SJ 12/13/18

response 52059

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	70.79
41.00	40.10	33.24
42.00	26.80	20.09#

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

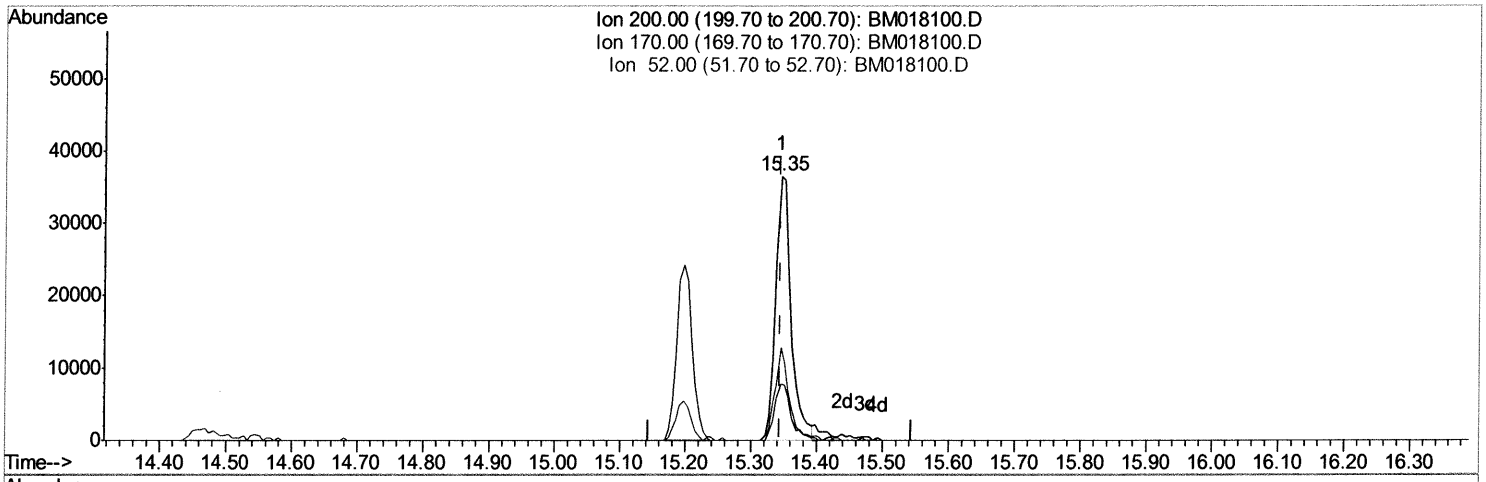
Quantitation Report (Qedit)

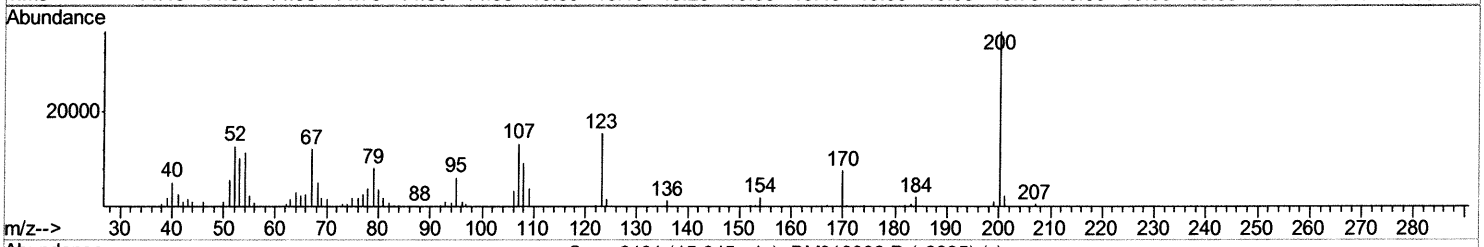
Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

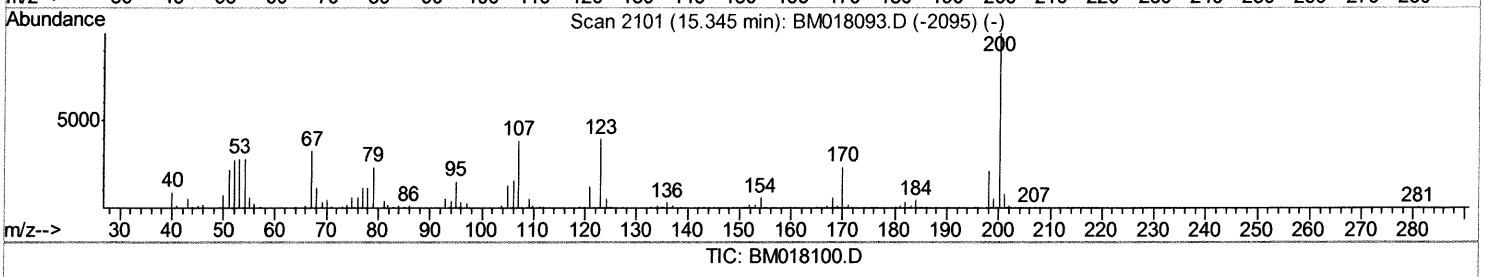
Quant Time: Dec 13 02:41:32 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E56

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:10 PM







TIC: BM018100.D

(62) 4,6-Dinitro-2-methylphenol-d2 (S)

15.345min (-0.000) 12.55ng/ul

response 59708

Ion	Exp%	Act%
200.00	100	100
170.00	21.80	21.21
52.00	44.50	35.14#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

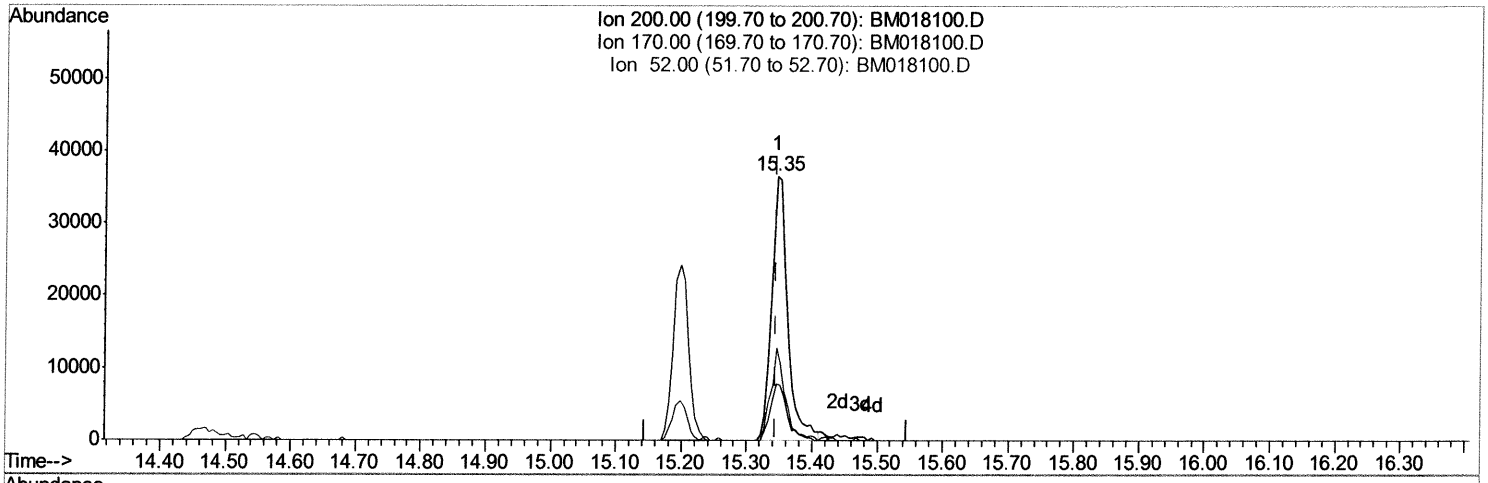
Quantitation Report (Qedit)

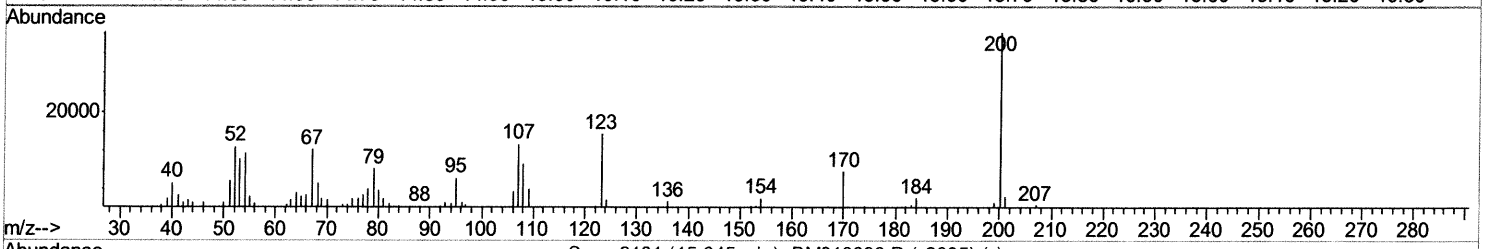
Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

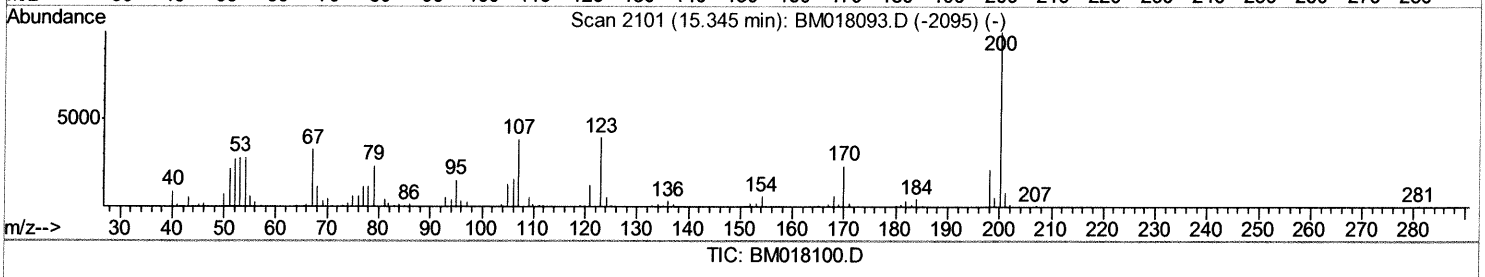
Quant Time: Dec 13 02:41:32 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E56

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:10 PM







TIC: BM018100.D

(62) 4,6-Dinitro-2-methylphenol-d2 (S)

15.345min (-0.000) 12.88ng/ul m > SJ 12/13/18

response 61270

Ion	Exp%	Act%
200.00	100	100
170.00	21.80	21.21
52.00	44.50	35.14#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018100.D
Acq On : 12 Dec 2018 19:40
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 13 03:09:13 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9E56

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:10 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	93143	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	437139	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	273960	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	665462	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	760069	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	852814	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	6454	3.17	ng/uL	0.00
5) Phenol-d5	6.74	99	123008	14.46	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	79425	15.48	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	115851	17.41	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	104574	15.05	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	56763	16.91	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	67852	17.64	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	96936	13.24	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	139455	22.19	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	435581	18.32	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	475889	16.54	ng/ul	0.00
51) 4-Nitrophenol-d4	14.46	143	52059m	12.05	ng/ul	0.02
57) Fluorene-d10	15.20	176	353972	17.24	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	61270m	12.88	ng/ul	0.00
70) Anthracene-d10	17.05	188	572241	17.27	ng/ul	0.00
78) Pyrene-d10	19.36	212	642998	17.48	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	789052	17.06	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	31925	3.760	ng/ul	97
44) Dimethylphthalate	13.67	163	145200	6.305	ng/ul	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SJ 12/13/18

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E57

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-12
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018101.D
% Solids : 86.1
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	78	U
100-52-7	Benzaldehyde	380	U
108-95-2	Phenol	260	J
111-44-4	Bis(2-Chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	200	U
95-48-7	2-Methylphenol	380	U
108-60-1	2,2-oxybis(1-Chloropropane)	380	U
98-86-2	Acetophenone	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	200	U
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	Bis(2-Chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	200	U
105-60-2	Caprolactam	380	U
59-50-7	4-Chloro-3-methylphenol	200	U
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	200	U

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Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	200	U
92-52-4	1,1-Biphenyl	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	200	U
131-11-3	Dimethylphthalate	420	
606-20-2	2,6-Dinitrotoluene	200	U
208-96-8	Acenaphthylene	200	U
99-09-2	3-Nitroaniline	380	U
83-32-9	Acenaphthene	200	U
51-28-5	2,4-Dinitrophenol	380	U
100-02-7	4-Nitrophenol	380	U
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	200	U
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	380	U
534-52-1	4,6-Dinitro-2-methylphenol	380	U
86-30-6	N-Nitrosodiphenylamine	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
1912-24-9	Atrazine	380	U
87-86-5	Pentachlorophenol	380	U
85-01-8	Phenanthrene	200	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E57

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-12
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018101.D
% Solids : 86.1
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	200	U
86-74-8	Carbazole	380	U
84-74-2	Di-n-butylphthalate	200	U
206-44-0	Fluoranthene	380	U
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U
91-94-1	3,3-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	200	U
117-84-0	Di-n-octyl phthalate	380	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
58-90-2	2,3,4,6-Tetrachlorophenol	200	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E57

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-12
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018101.D
% Solids : 86.1
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/12/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000057-10-3	n-Hexadecanoic acid	17.86	300	JN
2	000057-11-4	Octadecanoic acid	19.16	110	JN
3	000111-06-8	Hexadecanoic acid, butyl ester	19.3	210	JN
4	000123-95-5	Octadecanoic acid, butyl ester	20.36	150	JN
5	004630-07-3	Naphthalene, 1,2,3,5,6,7,8,8a-octa	25.66	560	JN
6	E966796	Total Alkanes	N/A	350	

EPA-designated Registry Number.

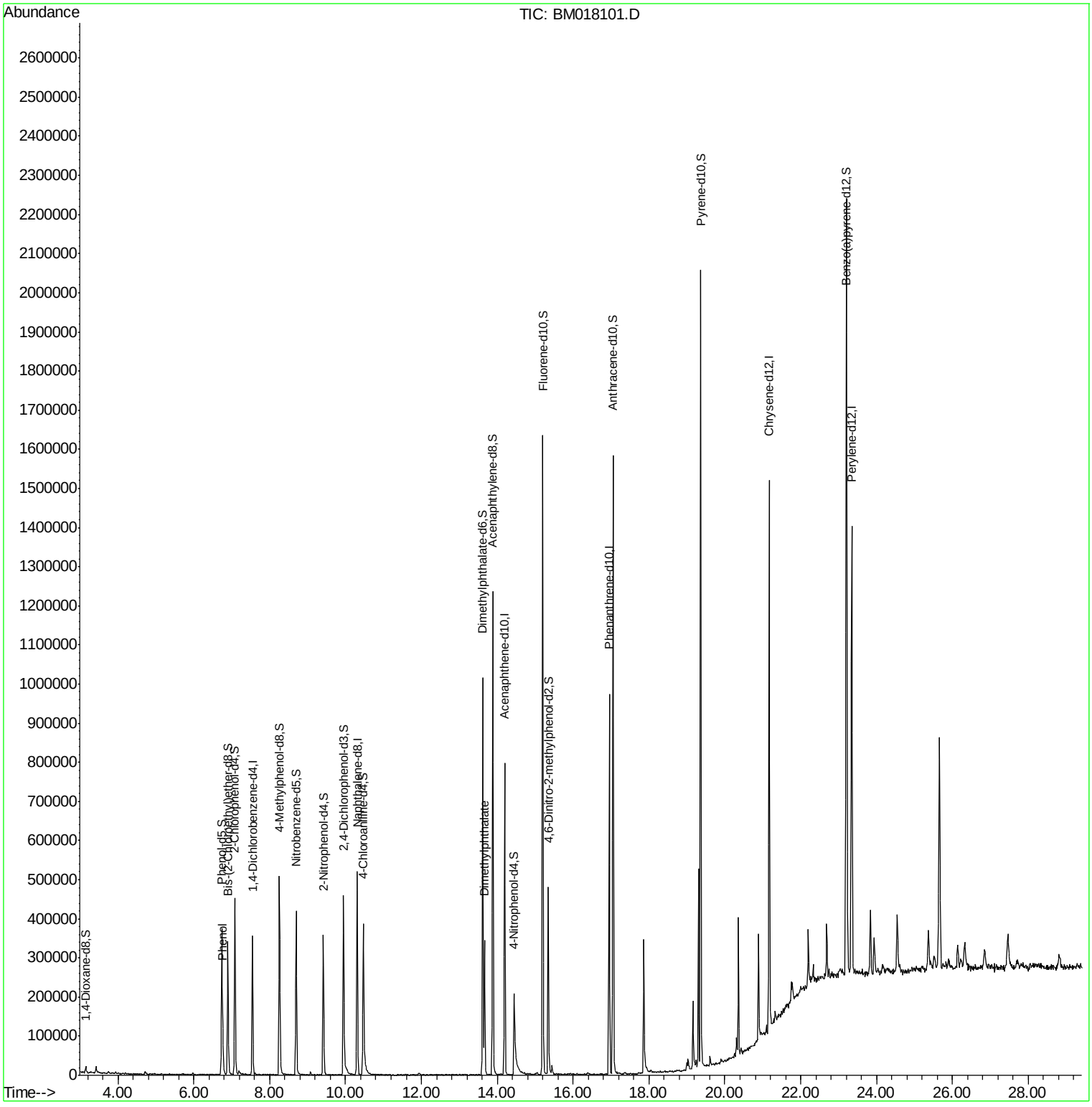
Quantitation Report (LSC Reviewed)

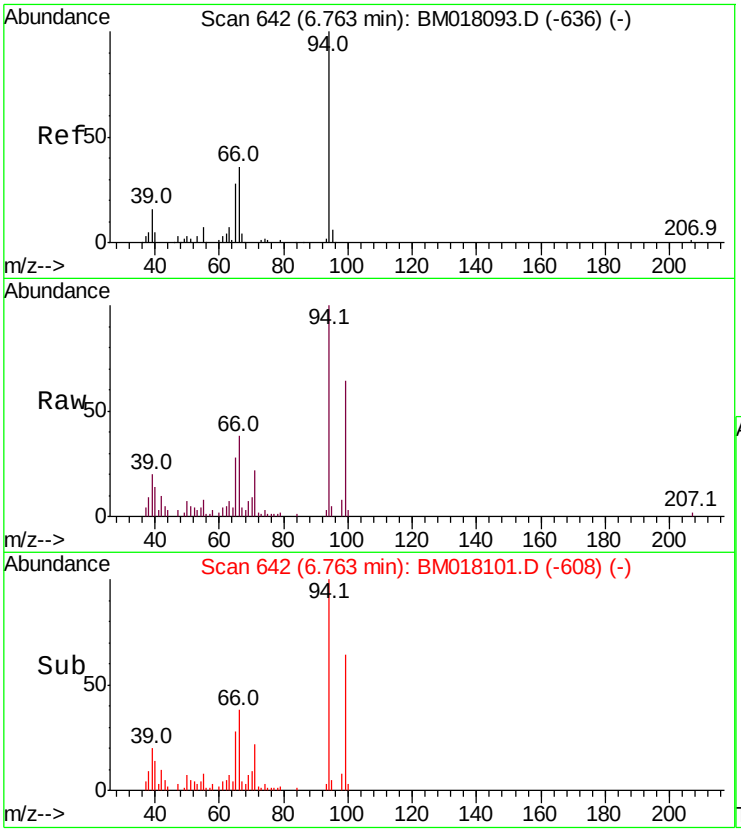
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 13 03:11:00 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E57

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:11 PM

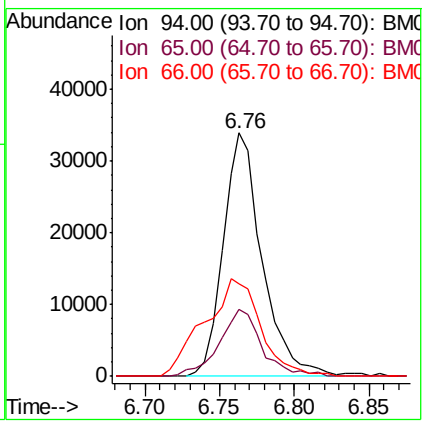




#6
Phenol
Concen: 6.748 ng/ul
RT: 6.76 min Scan# 642
Delta R.T. -0.00 min
Lab File: BM018101.D
Acq: 12 Dec 2018 20:16

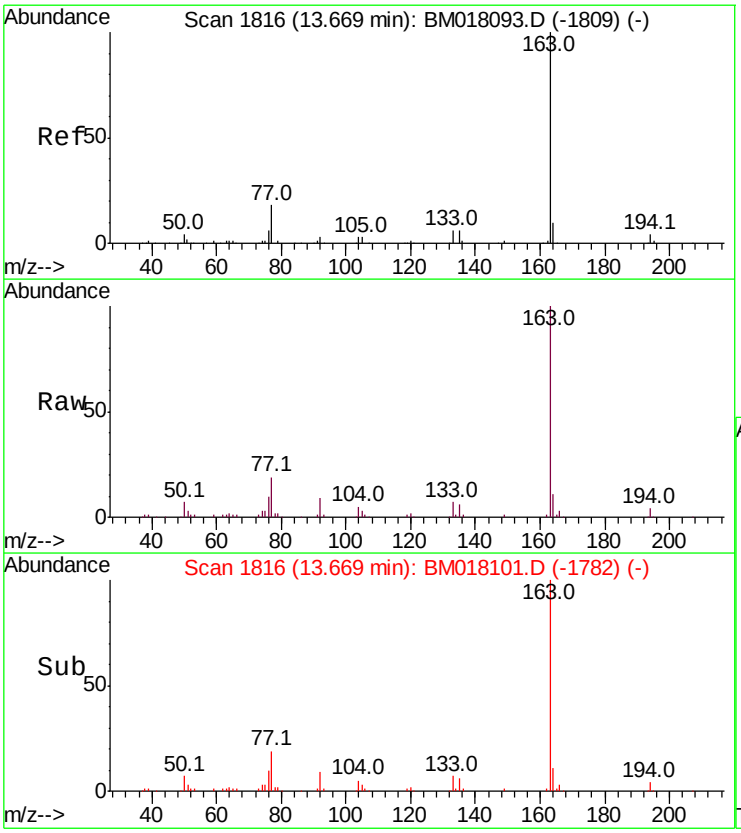
Tgt Ion: 94 Resp: 61656

Ion	Ratio	Lower	Upper
94	100		
65	27.7	24.7	37.1
66	37.8	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9E57

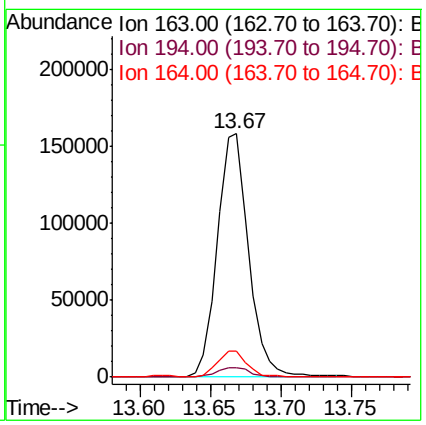
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:11 PM



#44
Dimethylphthalate
Concen: 10.956 ng/ul
RT: 13.67 min Scan# 1816
Delta R.T. -0.00 min
Lab File: BM018101.D
Acq: 12 Dec 2018 20:16

Tgt Ion:163 Resp: 244536

Ion	Ratio	Lower	Upper
163	100		
194	3.8	3.4	5.0
164	10.8	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9E57

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:11 PM

Quant Time: Dec 13 03:11:00 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	100220	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	436016	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	265524	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	558270	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	699589	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	801983	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	10073	4.60	ng/uL	0.00
5) Phenol-d5	6.74	99	249699	27.28	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	157268	28.49	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	220874	30.84	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	214590	28.69	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	109302	32.64	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	126268	32.90	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	193031	26.42	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	281385	44.88	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	725590	31.49	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	908497	32.58	ng/ul	0.00
51) 4-Nitrophenol-d4	14.45	143	108294m	25.85	ng/ul	0.00
57) Fluorene-d10	15.20	176	659919	33.17	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	120017	30.07	ng/ul	0.00
70) Anthracene-d10	17.05	188	933991	33.60	ng/ul	0.00
78) Pyrene-d10	19.36	212	1089257	32.18	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	1428345	32.84	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	61656	6.748	ng/ul	93
44) Dimethylphthalate	13.67	163	244536	10.956	ng/ul	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E57

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.152	24	28	35	rBV2	18814	29692	0.78%	0.083%
2	3.416	70	73	83	rBV	17379	30788	0.81%	0.086%
3	3.746	125	129	136	rBV7	5501	11346	0.30%	0.032%
4	3.946	159	163	167	rVB3	4272	6710	0.18%	0.019%
5	4.199	201	206	208	rBV5	2975	3844	0.10%	0.011%
6	4.716	289	294	296	rBV	7256	9695	0.25%	0.027%
7	4.740	296	298	303	rVB4	4821	6841	0.18%	0.019%
8	5.693	456	460	462	rBV2	2633	4043	0.11%	0.011%
9	5.975	505	508	512	rBV3	4947	6233	0.16%	0.017%
10	6.740	631	638	655	rBV2	373518	831843	21.87%	2.319%
11	6.898	657	665	679	rBV	341683	566327	14.89%	1.579%
12	7.081	690	696	710	rBV	451062	759218	19.96%	2.117%
13	7.193	710	715	721	rVV3	8964	18418	0.48%	0.051%
14	7.545	767	775	784	rBV	355956	585272	15.39%	1.632%
15	7.610	784	786	792	rVB4	5741	8273	0.22%	0.023%
16	8.257	889	896	909	rBV	508455	927793	24.40%	2.587%
17	8.698	961	971	983	rBV	418769	726073	19.09%	2.024%
18	9.081	1031	1036	1041	rVB2	9293	13442	0.35%	0.037%
19	9.410	1086	1092	1104	rBV	358224	628672	16.53%	1.753%
20	9.945	1176	1183	1195	rBV	458775	862455	22.68%	2.405%
21	10.310	1235	1245	1255	rBV	519755	871765	22.92%	2.430%
22	10.469	1265	1272	1288	rBV	386807	882704	23.21%	2.461%
23	11.933	1516	1521	1528	rBV3	3763	9166	0.24%	0.026%
24	13.616	1801	1807	1812	rBV	1014807	1486017	39.07%	4.143%
25	13.669	1812	1816	1825	rVB	342555	526616	13.85%	1.468%
26	13.880	1845	1852	1866	rBV	1235812	1867102	49.10%	5.205%
27	14.192	1899	1905	1922	rVB2	796205	1225637	32.23%	3.417%
28	14.445	1941	1948	1967	rBV2	207729	601353	15.81%	1.677%
29	14.663	1983	1985	1992	rVV4	3607	4506	0.12%	0.013%
30	14.716	1992	1994	1999	rVB3	3324	5206	0.14%	0.015%
31	15.151	2063	2068	2069	rBV2	2399	3920	0.10%	0.011%
32	15.198	2069	2076	2087	rVV	1632600	2413363	63.46%	6.728%
33	15.345	2095	2101	2113	rBV	476860	753169	19.80%	2.100%
34	15.445	2113	2118	2122	rVB2	20915	28100	0.74%	0.078%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E57

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	15.886	2188	2193	2195	rVB2	2530	3836	0.10%	0.011%
36	15.927	2195	2200	2202	rBV2	3469	5085	0.13%	0.014%
37	16.951	2368	2374	2385	rBV	971090	1351481	35.54%	3.768%
38	17.051	2385	2391	2404	rBV2	1580147	2337637	61.47%	6.517%
39	17.351	2439	2442	2445	rBV3	4819	6749	0.18%	0.019%
40	17.739	2506	2508	2512	rVB3	3830	4374	0.12%	0.012%
41	17.804	2517	2519	2522	rBV3	3780	3850	0.10%	0.011%
42	17.862	2524	2529	2539	rBV	342913	521068	13.70%	1.453%
43	18.421	2621	2624	2627	rVB3	4374	5014	0.13%	0.014%
44	18.739	2674	2678	2680	rBV3	4204	4948	0.13%	0.014%
45	18.927	2705	2710	2713	rBV5	3665	5284	0.14%	0.015%
46	18.998	2716	2722	2725	rBV2	21648	38894	1.02%	0.108%
47	19.033	2725	2728	2732	rVB6	21609	28675	0.75%	0.080%
48	19.157	2744	2749	2759	rBV	172881	269410	7.08%	0.751%
49	19.245	2763	2764	2768	rVB	16945	17308	0.46%	0.048%
50	19.304	2770	2774	2778	rBV	502976	521326	13.71%	1.453%
51	19.362	2778	2784	2793	rVB	2027357	2862800	75.28%	7.981%
52	19.609	2822	2826	2831	rBV	24620	34996	0.92%	0.098%
53	19.745	2847	2849	2850	rBV2	5485	4191	0.11%	0.012%
54	19.898	2873	2875	2877	rBV2	7418	6381	0.17%	0.018%
55	20.309	2942	2945	2950	rBV3	38666	53012	1.39%	0.148%
56	20.362	2950	2954	2960	rVB	348954	382708	10.06%	1.067%
57	20.892	3040	3044	3052	rBV	263565	346910	9.12%	0.967%
58	21.092	3076	3078	3081	rBV3	20164	15479	0.41%	0.043%
59	21.168	3086	3091	3102	rVV2	1402850	1959644	51.53%	5.463%
60	21.756	3188	3191	3193	rBV4	48316	62245	1.64%	0.174%
61	22.203	3264	3267	3272	rVB2	129166	158953	4.18%	0.443%
62	22.686	3346	3349	3354	rVB2	136440	191635	5.04%	0.534%
63	23.209	3431	3438	3450	rBV	1976576	3803011	100.00%	10.603%
64	23.344	3455	3461	3470	rVB	1136473	2074695	54.55%	5.784%
65	23.844	3541	3546	3553	rVB2	164939	302655	7.96%	0.844%
66	24.550	3661	3666	3672	rVB3	134389	264647	6.96%	0.738%
67	25.656	3847	3854	3864	rVB3	587783	1503512	39.53%	4.192%

Sum of corrected areas: 35868015

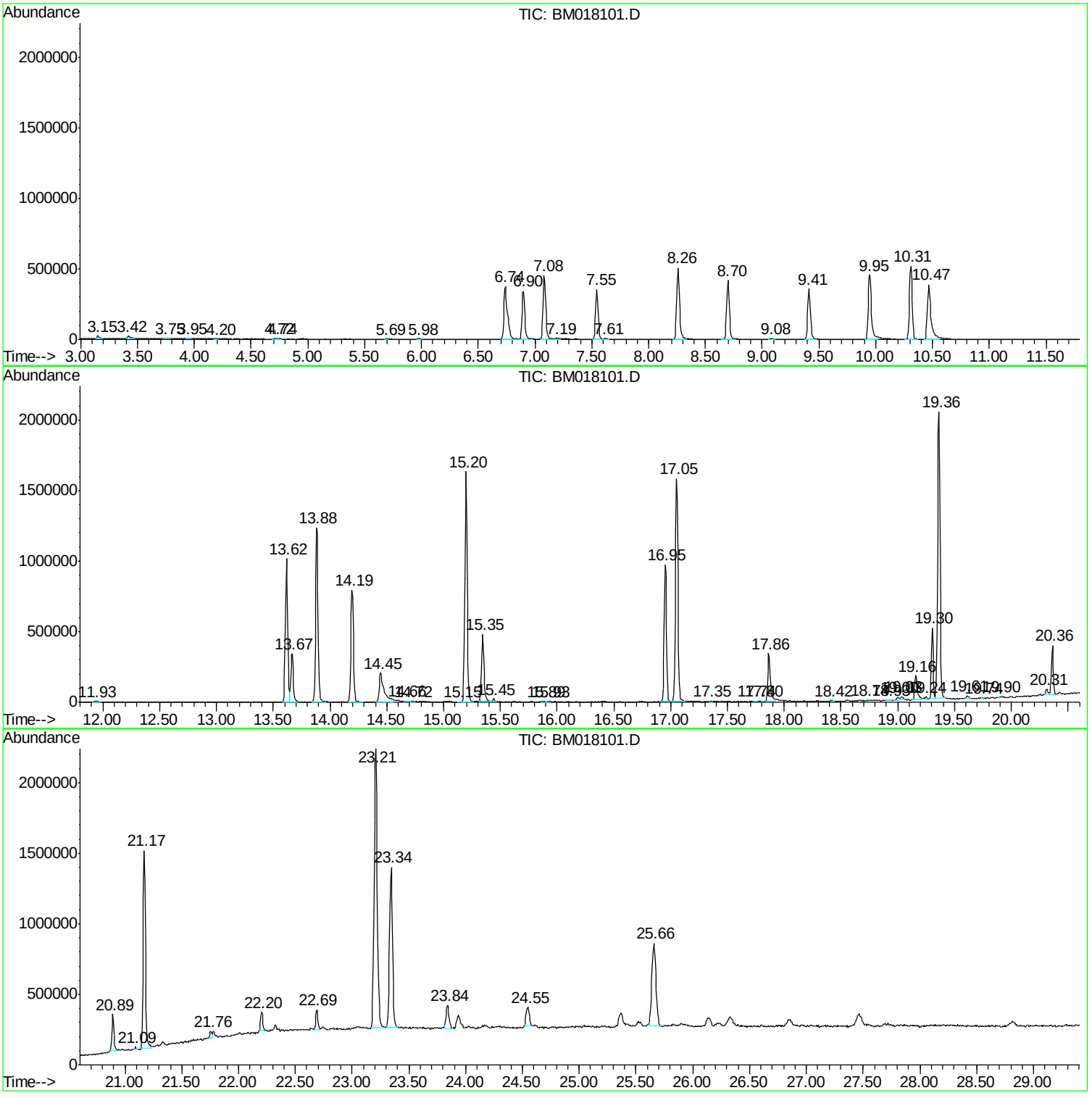
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E57

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E57

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

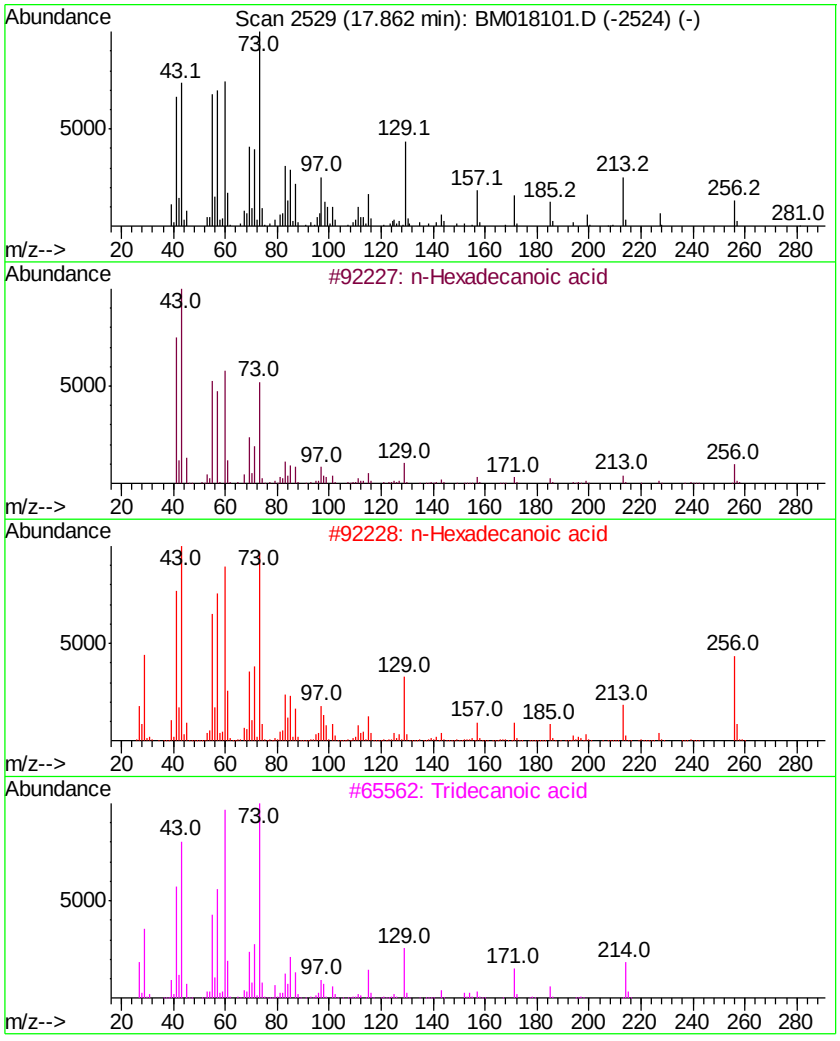
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

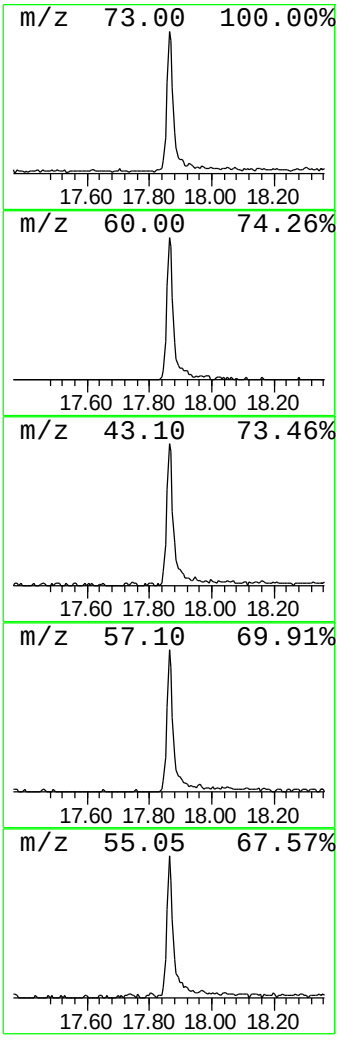
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.86	7.71 ng/ul	521068	Phenanthrene-d10	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	95
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	95
3	Tridecanoic acid	214	C13H26O2	000638-53-9	76
4	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	76
5	n-Decanoic acid	172	C10H20O2	000334-48-5	76





Library Search Compound Report

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Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E57

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

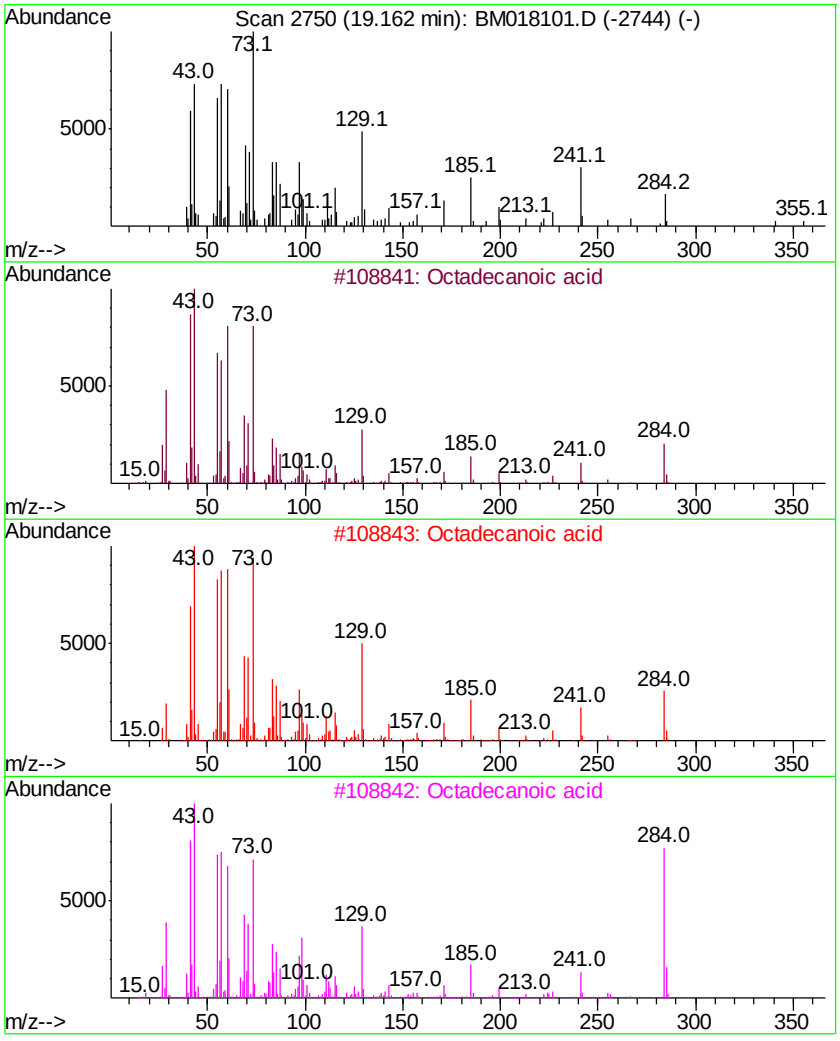
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

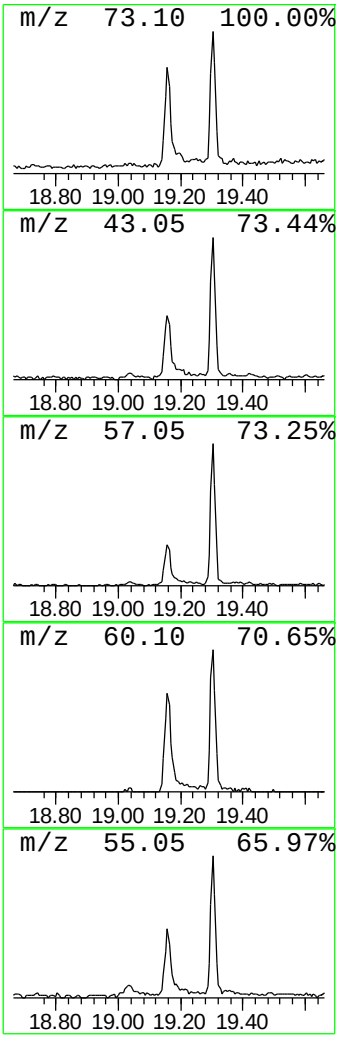
****

Peak Number 2 Octadecanoic acid Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.16	2.75 ng/ul	269410	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	98
2	Octadecanoic acid	284	C18H36O2	000057-11-4	97
3	Octadecanoic acid	284	C18H36O2	000057-11-4	89
4	Octadecanoic acid	284	C18H36O2	000057-11-4	53
5	Tetradecanoic acid	228	C14H28O2	000544-63-8	50





Library Search Compound Report

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Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E57

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

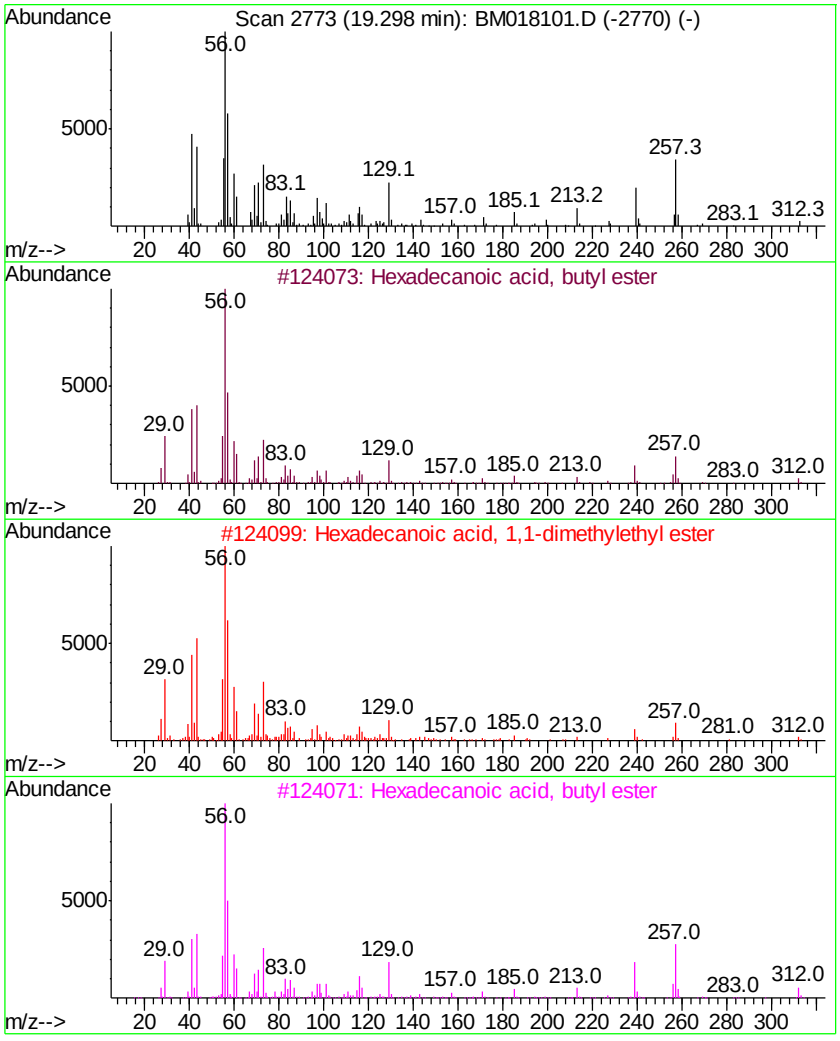
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

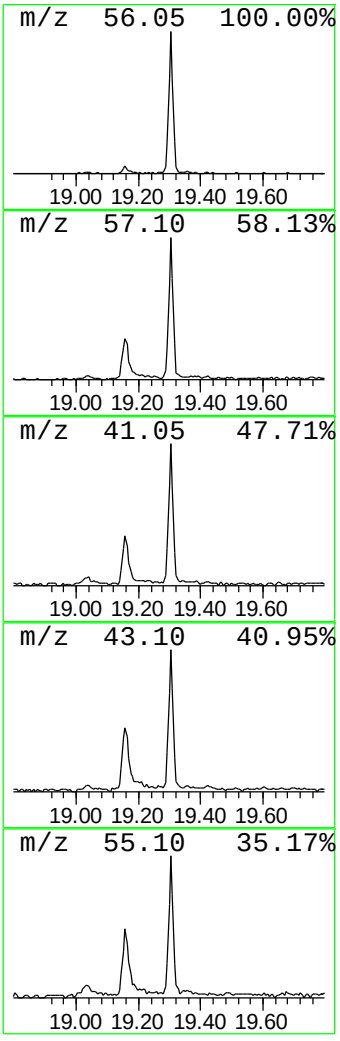
****

Peak Number 3 Hexadecanoic acid, butyl ester Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.30	5.32 ng/ul	521326	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	93
2	Hexadecanoic acid, 1,1-dimethyle...	312	C20H40O2	031158-91-5	90
3	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	87
4	Hexadecanoic acid, 2-methylpropy...	312	C20H40O2	000110-34-9	86
5	Nipecotic acid	129	C6H11NO2	000498-95-3	38





Library Search Compound Report

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Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E57

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

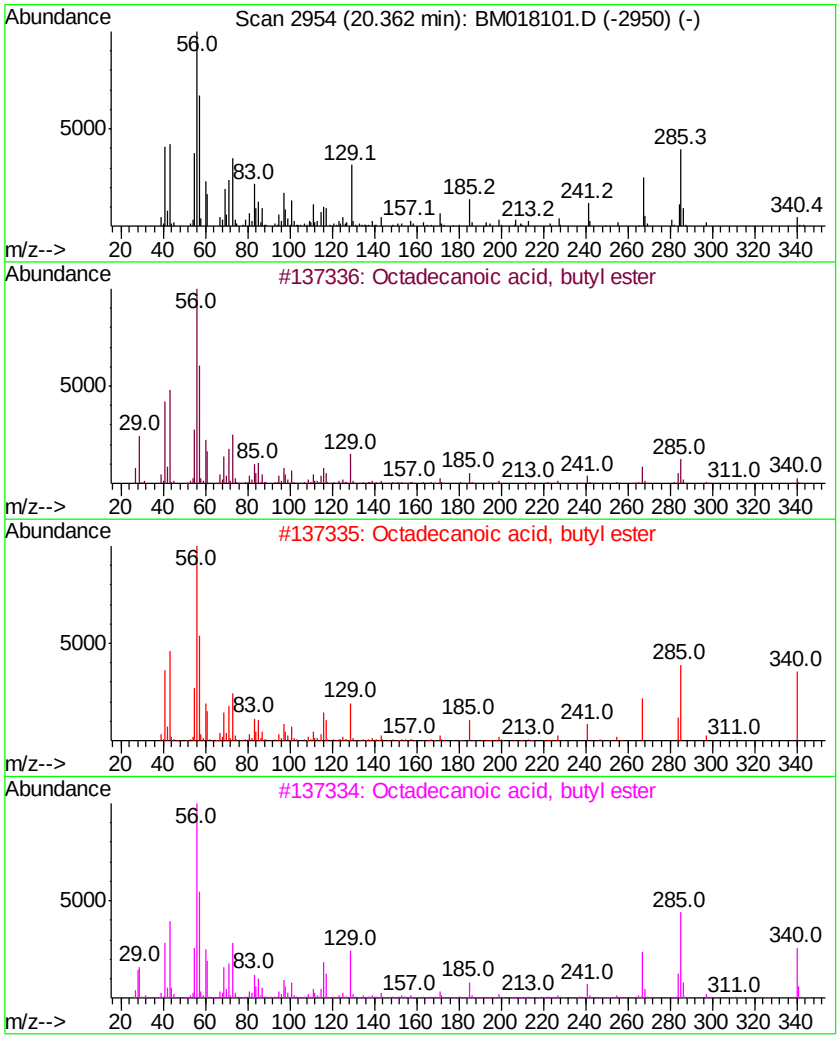
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

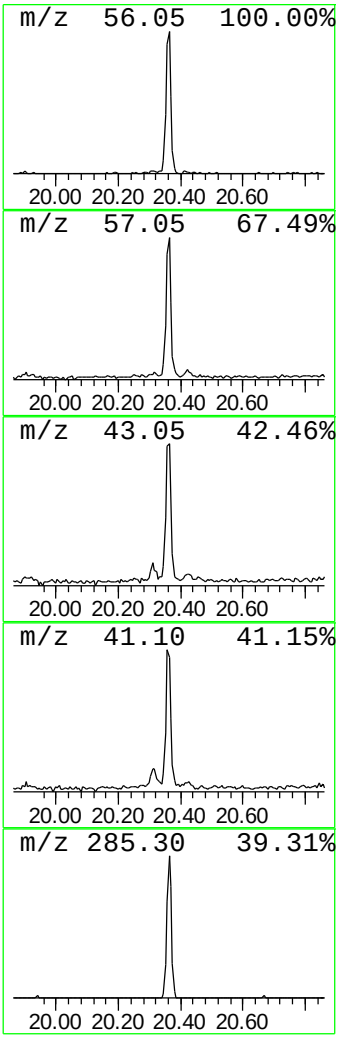
****

Peak Number 4 Octadecanoic acid, butyl ester Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.36	3.91 ng/ul	382708	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	95
2	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	93
3	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	91
4	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	83
5	n-Butyl myristate	284	C18H36O2	000110-36-1	43





Library Search Compound Report

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Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E57

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

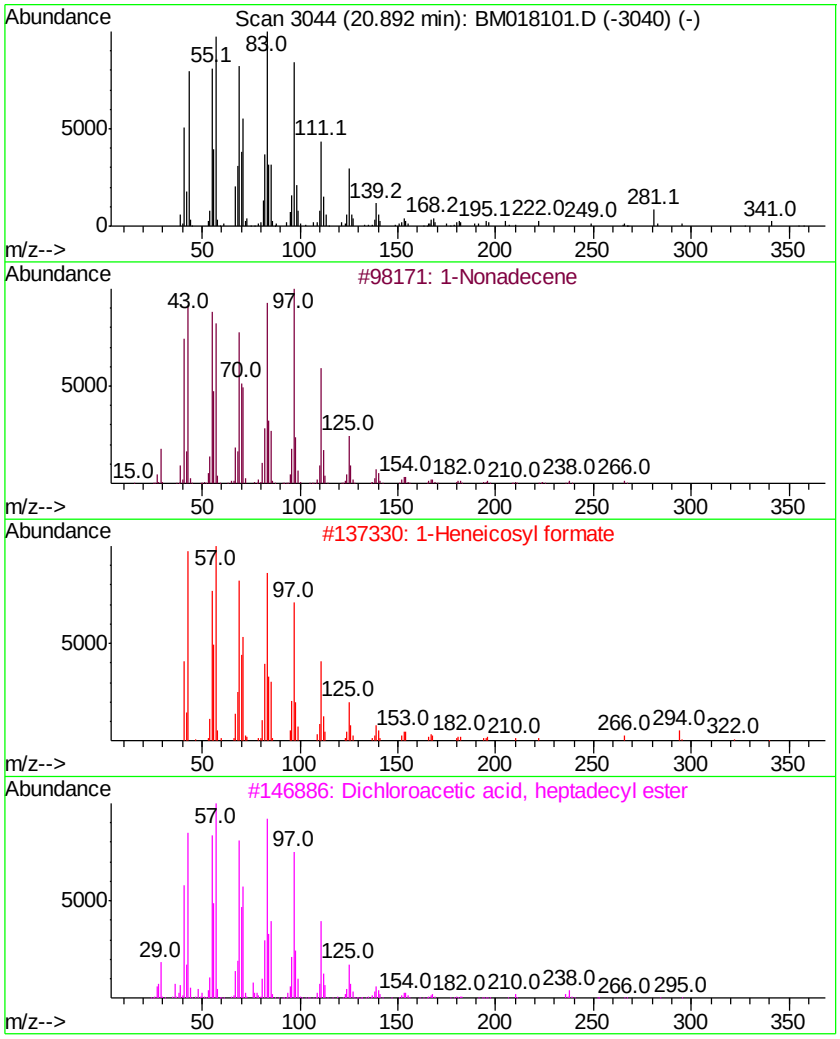
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

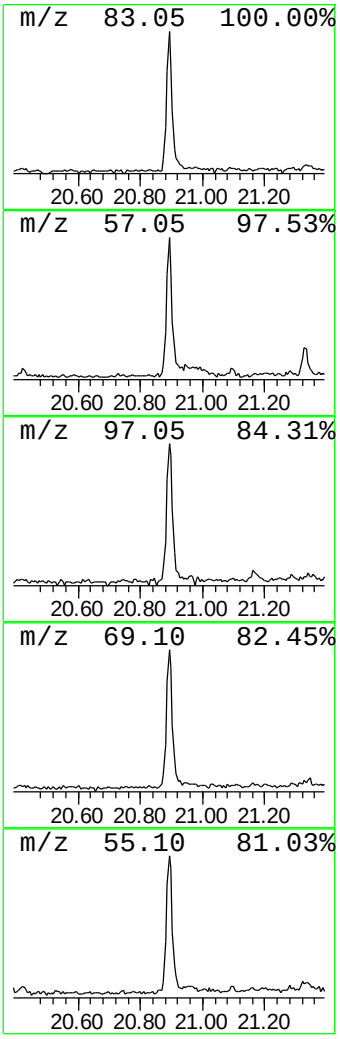
****

Peak Number 5 (DEL) Alkane: Cyclic20.89 Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	3.54 ng/ul	346910	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Nonadecene	266	C19H38	018435-45-5	93
2	1-Heneicosyl formate	340	C22H44O2	077899-03-7	91
3	Dichloroacetic acid, heptadecyl ...	366	C19H36Cl2O2	1000282-98-2	91
4	Trifluoroacetic acid, n-heptadec...	324	C17H31F3O2	1000216-79-2	91
5	Bromoacetic acid, octadecyl ester	390	C20H39BrO2	018992-03-5	91





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Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E57

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

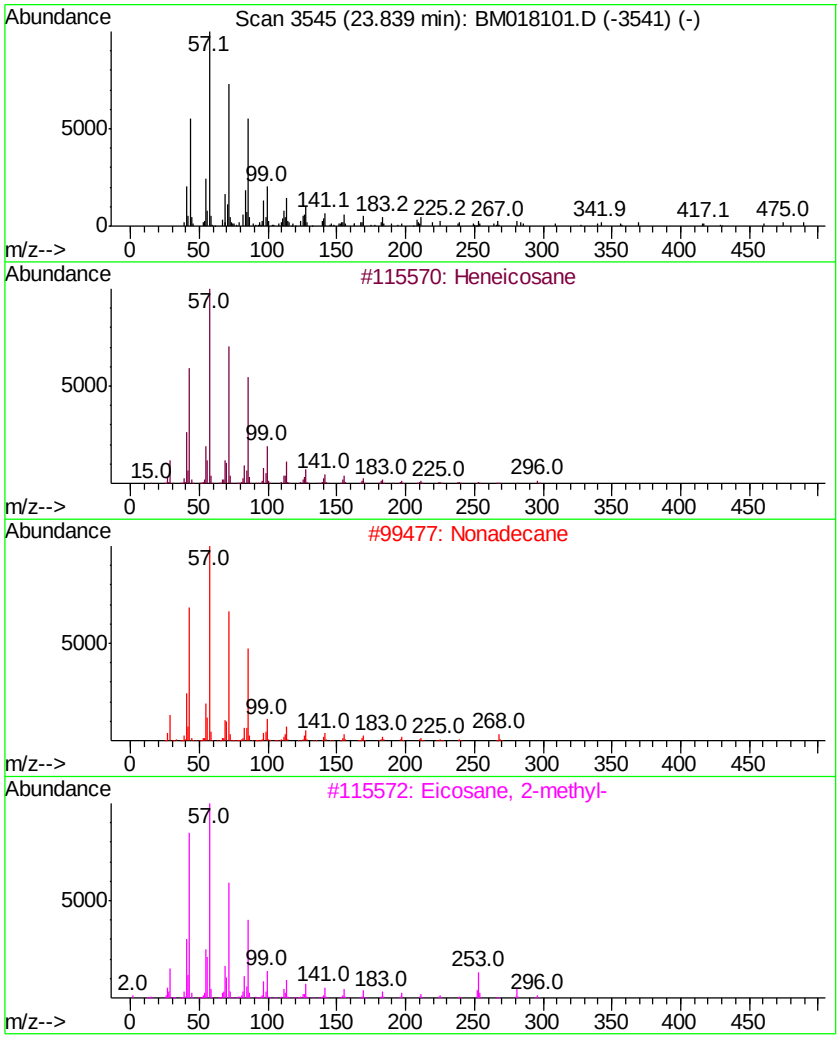
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

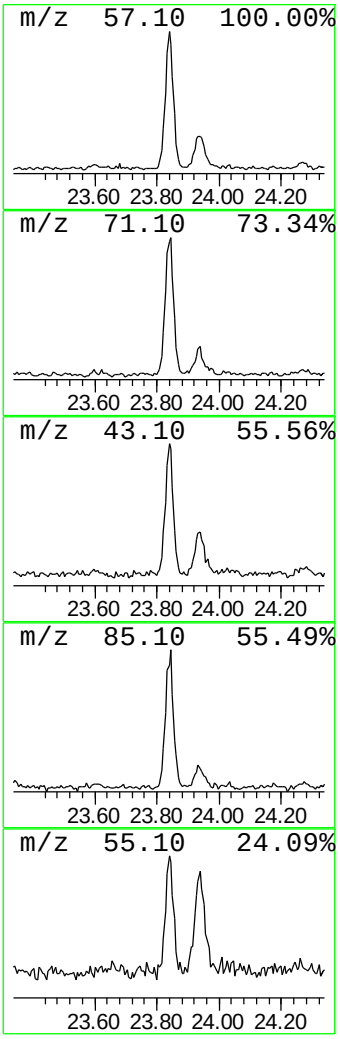
****

Peak Number 6 (DEL) Alkane: Straight-Chai... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.84	2.92 ng/ul	302655	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	98
2	Nonadecane	268	C19H40	000629-92-5	93
3	Eicosane, 2-methyl-	296	C21H44	001560-84-5	93
4	Octacosane	394	C28H58	000630-02-4	90
5	Eicosane	282	C20H42	000112-95-8	90





Library Search Compound Report

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Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E57

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

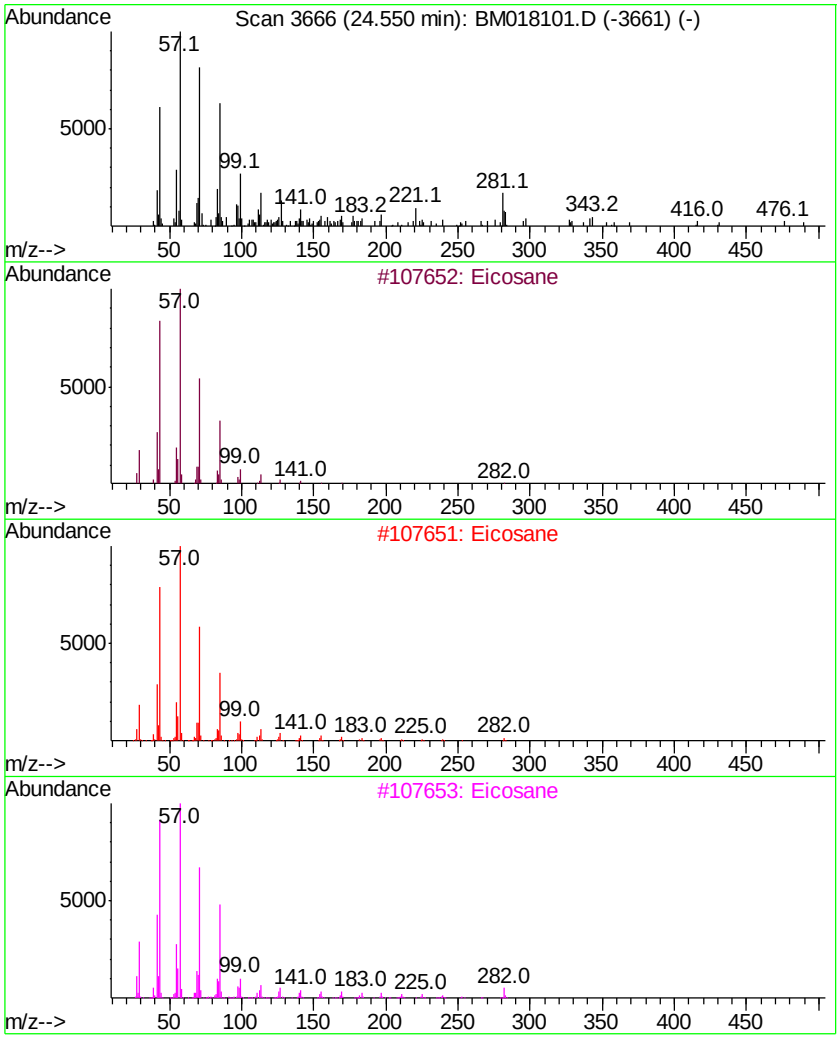
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

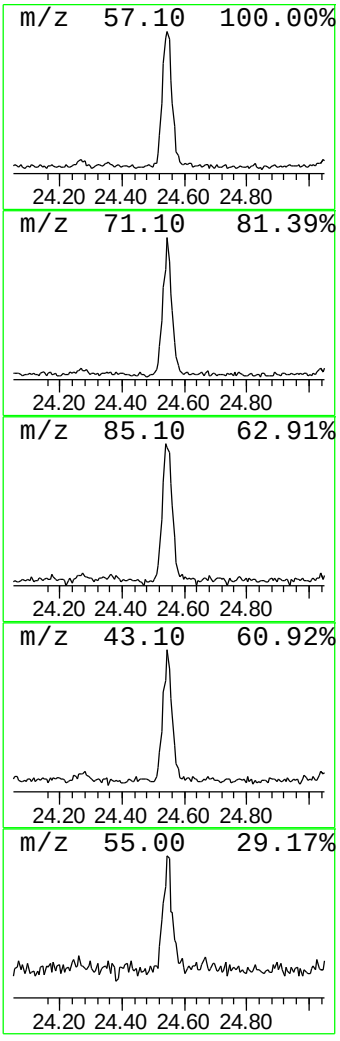
****

Peak Number 7 (DEL) Alkane: Straight-Chai... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.55	2.55 ng/ul	264647	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	90
2	Eicosane	282	C20H42	000112-95-8	89
3	Eicosane	282	C20H42	000112-95-8	76
4	Tetratriacontane	479	C34H70	014167-59-0	74
5	Tridecane, 3-methyl-	198	C14H30	006418-41-3	74





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E57

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

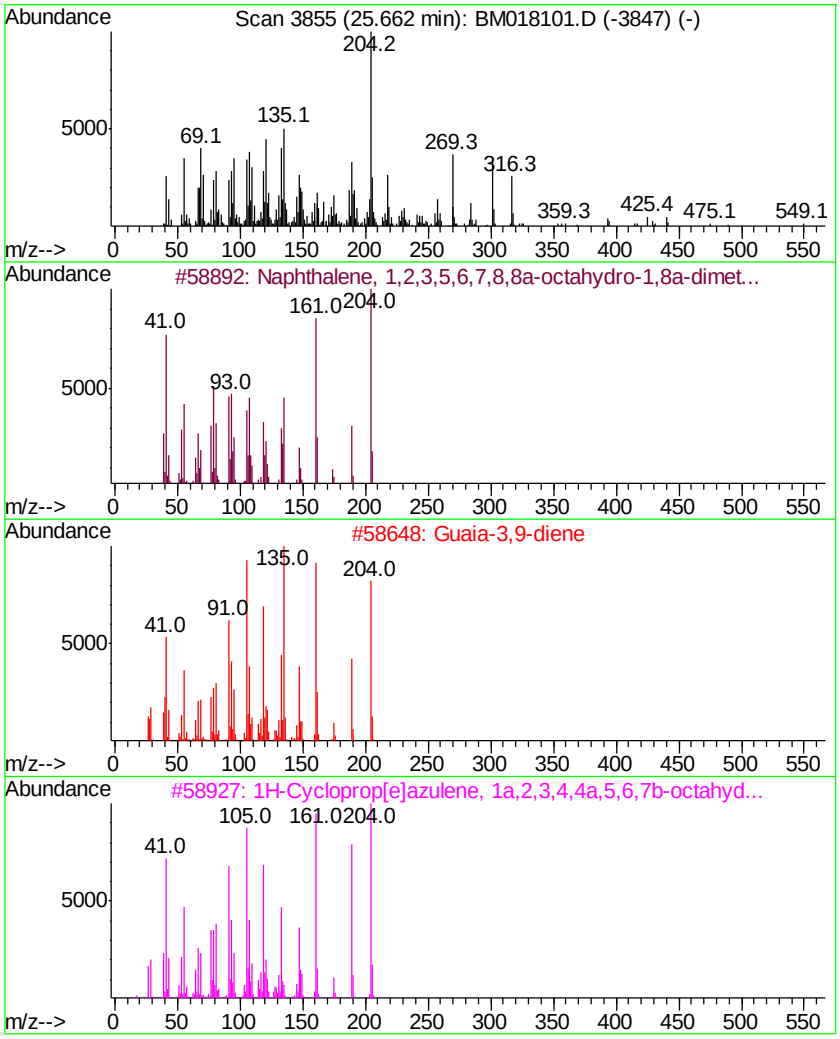
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

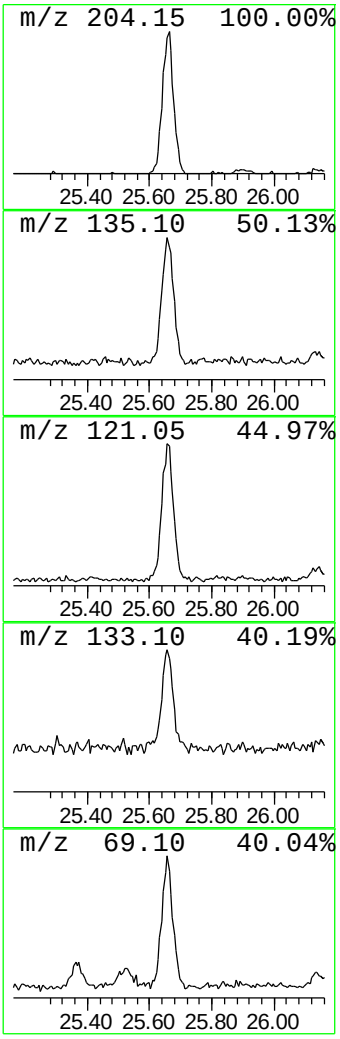
****

Peak Number 8 Naphthalene, 1,2,3,5,6,7,8,... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.66	14.49 ng/ul	1503510	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,5,6,7,8,8a-oc...	204	C15H24	004630-07-3	62
2	Guaia-3,9-diene	204	C15H24	000489-83-8	58
3	1H-Cycloprop[e]azulene, 1a,2,3,4...	204	C15H24	000489-40-7	50
4	1H-3a,7-Methanoazulene, 2,3,6,7,...	204	C15H24	000560-32-7	49
5	2,5,5,8a-Tetramethyl-6,7,8,8a-te...	204	C14H20O	124957-09-1	49





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E57

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	17.86	7.7	ng/ul	521068	4	16.95	1351480	20.0
Octadecanoic acid	19.16	2.8	ng/ul	269410	5	21.17	1959640	20.0
Hexadecanoic acid...	19.30	5.3	ng/ul	521326	5	21.17	1959640	20.0
Octadecanoic acid...	20.36	3.9	ng/ul	382708	5	21.17	1959640	20.0
(DEL) Alkane: Cyc...	20.89	3.5	ng/ul	346910	5	21.17	1959640	20.0
(DEL) Alkane: Str...	23.84	2.9	ng/ul	302655	6	23.34	2074700	20.0
(DEL) Alkane: Str...	24.55	2.5	ng/ul	264647	6	23.34	2074700	20.0
Naphthalene, 1,2,...	25.66	14.5	ng/ul	1503510	6	23.34	2074700	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

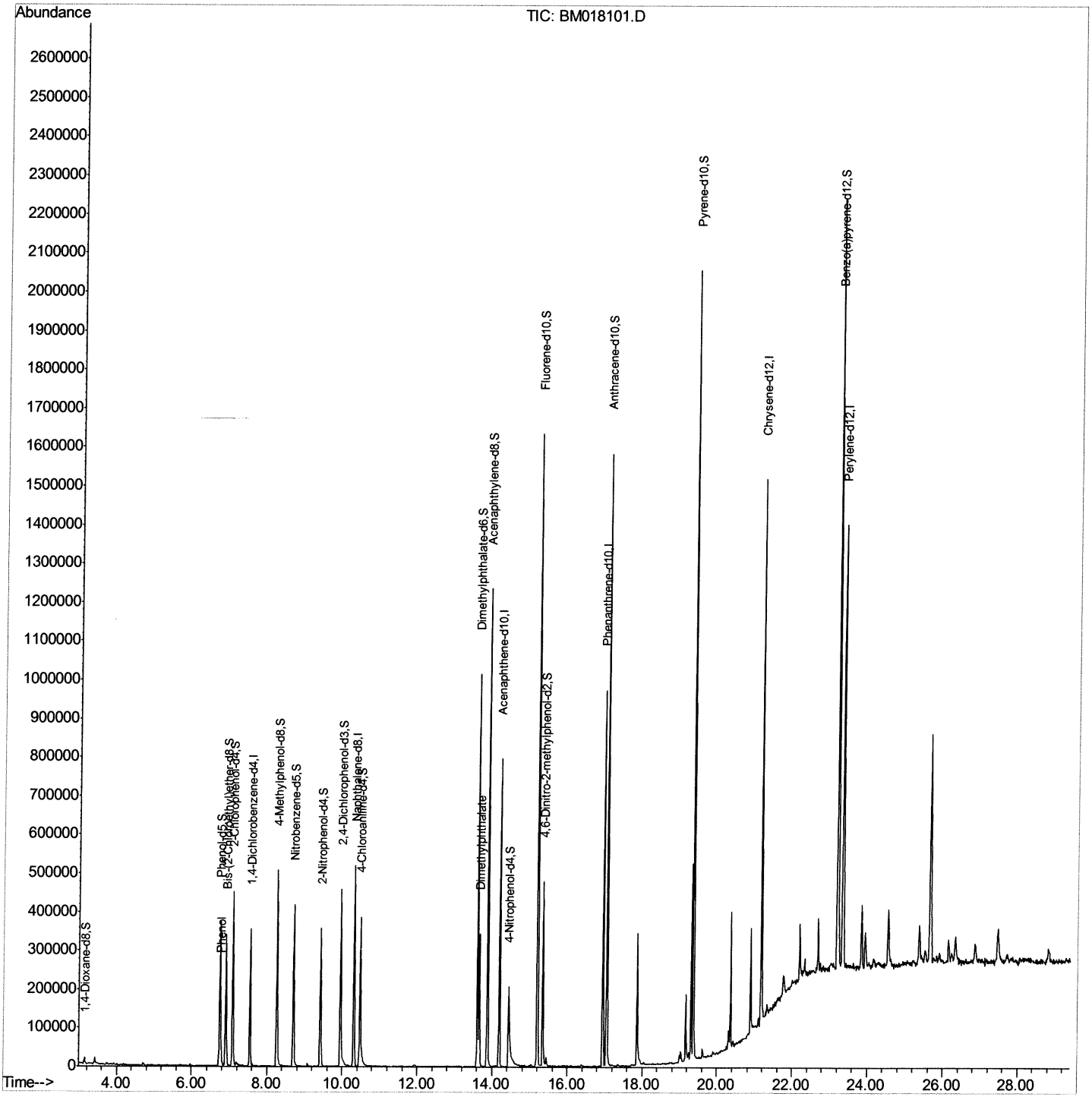
Quantitation Report (QT Reviewed)

Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 13 03:11:00 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E57

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:11 PM



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Quantitation Report (Qedit)

Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 13 02:41:41 2018
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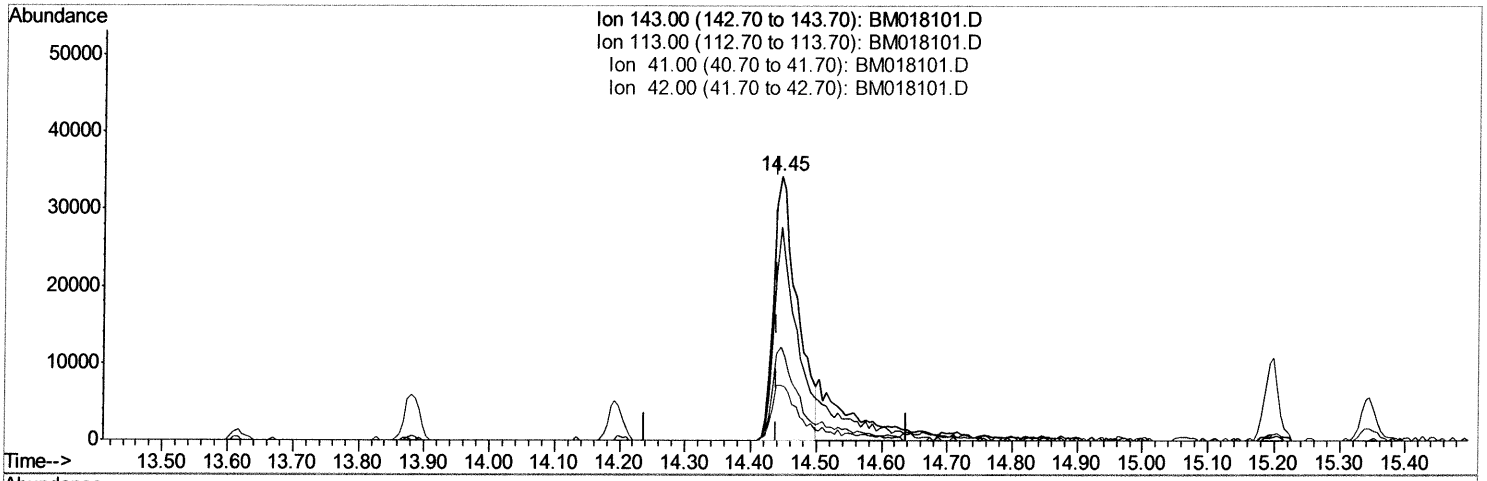
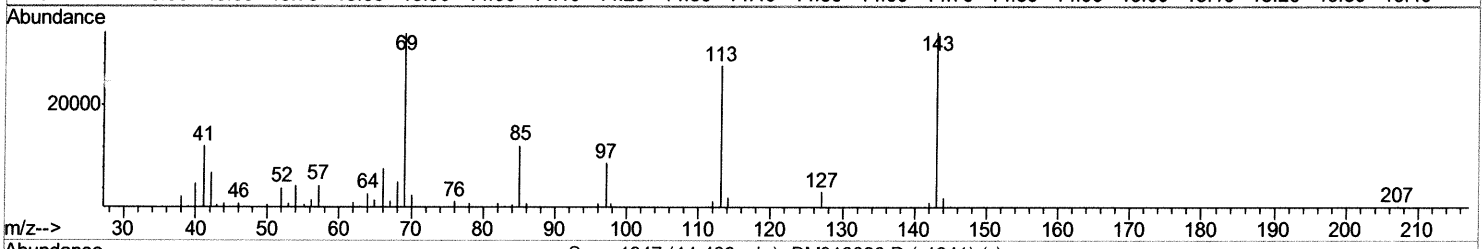
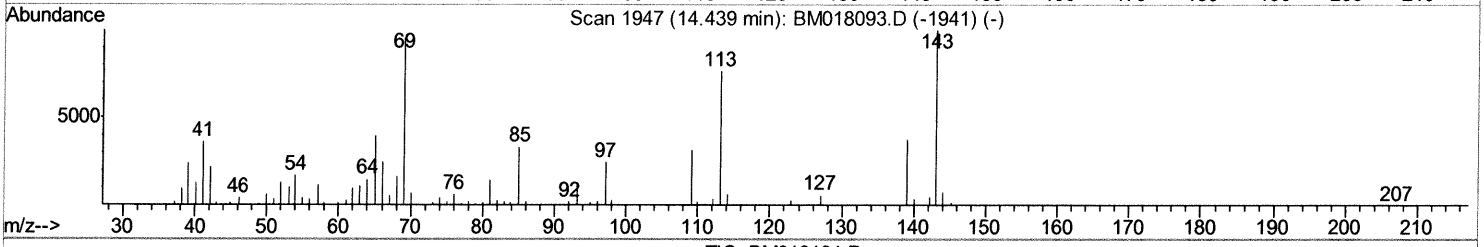
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E57

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:11 PM







TIC: BM018101.D

(51) 4-Nitrophenol-d4 (S)

14.445min (+0.006) 20.32ng/ul

response 85135

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	80.90
41.00	40.10	35.39
42.00	26.80	20.91#

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

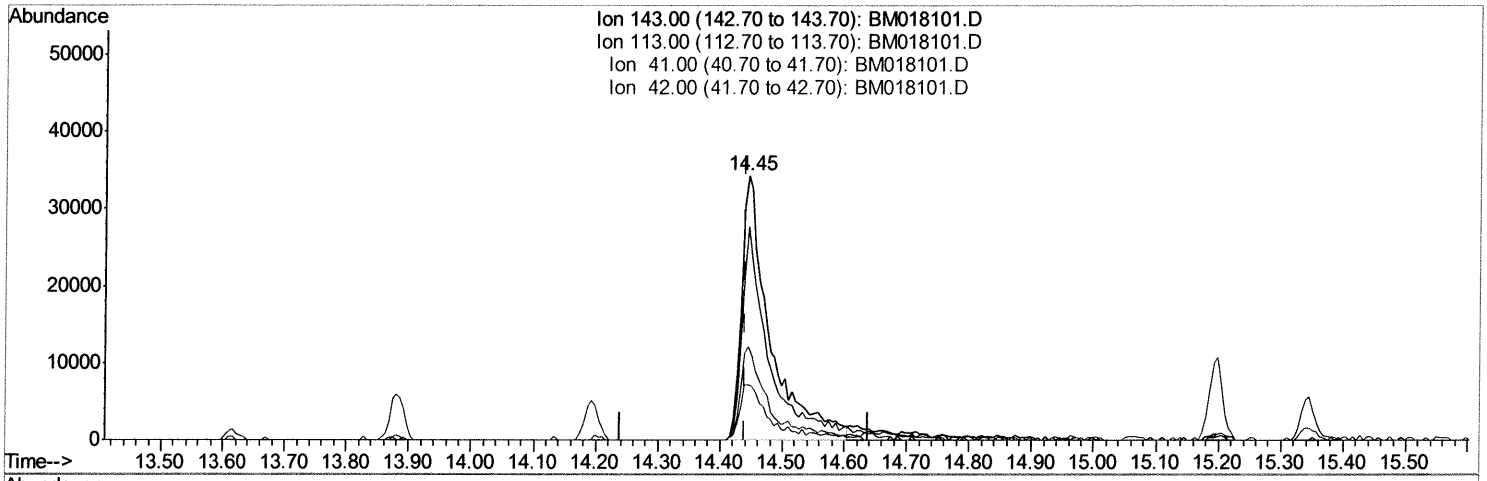
Quantitation Report (Qedit)

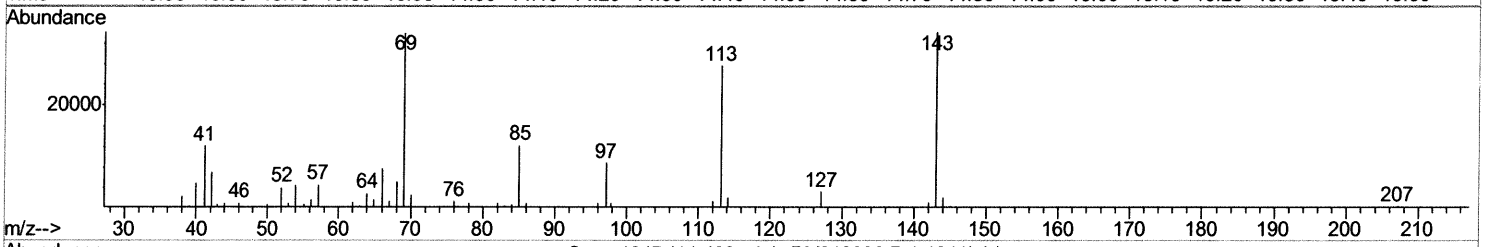
Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

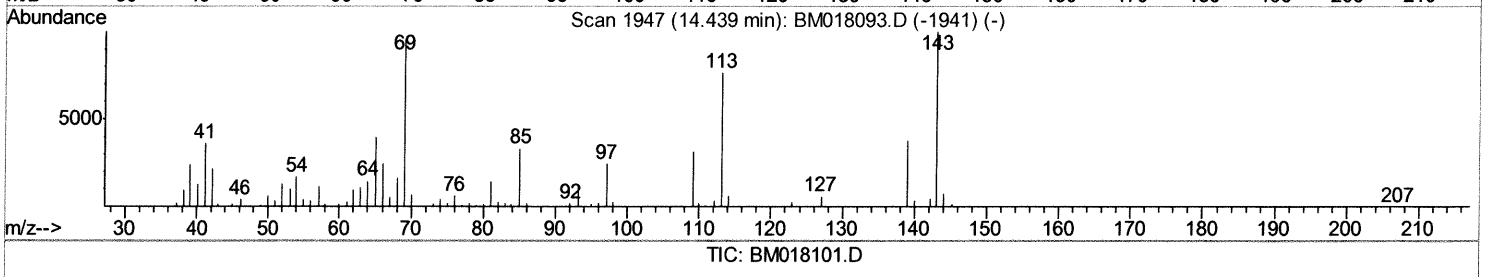
Quant Time: Dec 13 02:41:41 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E57

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:11 PM







TIC: BM018101.D

(51) 4-Nitrophenol-d4 (S)

14.445min (+0.006) 25.85ng/ul m > SJ 12/13/18

response 108294

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	80.90
41.00	40.10	35.39
42.00	26.80	20.91#

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018101.D
Acq On : 12 Dec 2018 20:16
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 13 03:11:00 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9E57

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:11 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	100220	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	436016	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	265524	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	558270	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	699589	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	801983	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	10073	4.60	ng/uL	0.00
5) Phenol-d5	6.74	99	249699	27.28	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	157268	28.49	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	220874	30.84	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	214590	28.69	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	109302	32.64	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	126268	32.90	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	193031	26.42	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	281385	44.88	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	725590	31.49	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	908497	32.58	ng/ul	0.00
51) 4-Nitrophenol-d4	14.45	143	108294m	25.85	ng/ul	0.00
57) Fluorene-d10	15.20	176	659919	33.17	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	120017	30.07	ng/ul	0.00
70) Anthracene-d10	17.05	188	933991	33.60	ng/ul	0.00
78) Pyrene-d10	19.36	212	1089257	32.18	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	1428345	32.84	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	61656	6.748	ng/ul	93
44) Dimethylphthalate	13.67	163	244536	10.956	ng/ul	98

SJ 12/13/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E60

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-13
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018102.D
% Solids : 80.5
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	83	U
100-52-7	Benzaldehyde	410	U
108-95-2	Phenol	150	J
111-44-4	Bis(2-Chloroethyl)ether	410	U
95-57-8	2-Chlorophenol	210	U
95-48-7	2-Methylphenol	410	U
108-60-1	2,2-oxybis(1-Chloropropane)	410	U
98-86-2	Acetophenone	410	U
106-44-5	4-Methylphenol	410	U
621-64-7	N-Nitroso-di-n-propylamine	210	U
67-72-1	Hexachloroethane	210	U
98-95-3	Nitrobenzene	210	U
78-59-1	Isophorone	210	U
88-75-5	2-Nitrophenol	210	U
105-67-9	2,4-Dimethylphenol	210	U
111-91-1	Bis(2-Chloroethoxy)methane	210	U
120-83-2	2,4-Dichlorophenol	210	U
91-20-3	Naphthalene	210	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	210	U
105-60-2	Caprolactam	410	U
59-50-7	4-Chloro-3-methylphenol	210	U
91-57-6	2-Methylnaphthalene	210	U
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	210	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E60

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-13
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018102.D
% Solids : 80.5
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	210	U
92-52-4	1,1-Biphenyl	210	U
91-58-7	2-Chloronaphthalene	210	U
88-74-4	2-Nitroaniline	210	U
131-11-3	Dimethylphthalate	240	
606-20-2	2,6-Dinitrotoluene	210	U
208-96-8	Acenaphthylene	210	U
99-09-2	3-Nitroaniline	410	U
83-32-9	Acenaphthene	210	U
51-28-5	2,4-Dinitrophenol	410	U
100-02-7	4-Nitrophenol	410	U
132-64-9	Dibenzofuran	210	U
121-14-2	2,4-Dinitrotoluene	210	U
84-66-2	Diethylphthalate	210	U
86-73-7	Fluorene	210	U
7005-72-3	4-Chlorophenyl-phenylether	210	U
100-01-6	4-Nitroaniline	410	U
534-52-1	4,6-Dinitro-2-methylphenol	410	U
86-30-6	N-Nitrosodiphenylamine	210	U
95-94-3	1,2,4,5-Tetrachlorobenzene	210	U
101-55-3	4-Bromophenyl-phenylether	210	U
118-74-1	Hexachlorobenzene	210	U
1912-24-9	Atrazine	410	U
87-86-5	Pentachlorophenol	410	U
85-01-8	Phenanthrene	210	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E60

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-13
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018102.D
% Solids : 80.5
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	210	U
86-74-8	Carbazole	410	U
84-74-2	Di-n-butylphthalate	210	U
206-44-0	Fluoranthene	410	U
129-00-0	Pyrene	210	U
85-68-7	Butylbenzylphthalate	210	U
91-94-1	3,3-Dichlorobenzidine	410	U
56-55-3	Benzo(a)anthracene	210	U
218-01-9	Chrysene	210	U
117-81-7	Bis(2-ethylhexyl)phthalate	210	U
117-84-0	Di-n-octyl phthalate	410	U
205-99-2	Benzo(b)fluoranthene	210	U
207-08-9	Benzo(k)fluoranthene	210	U
50-32-8	Benzo(a)pyrene	210	U
193-39-5	Indeno(1,2,3-cd)pyrene	210	U
53-70-3	Dibenzo(a,h)anthracene	210	U
191-24-2	Benzo(g,h,i)perylene	210	U
58-90-2	2,3,4,6-Tetrachlorophenol	210	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E60

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-13
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018102.D
% Solids : 80.5
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/12/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000057-10-3	n-Hexadecanoic acid	17.86	210	JN
2	056221-91-1	13-Tetradecen-1-ol acetate	22.74	95	JN
3	E966796	Total Alkanes	N/A	740	

EPA-designated Registry Number.

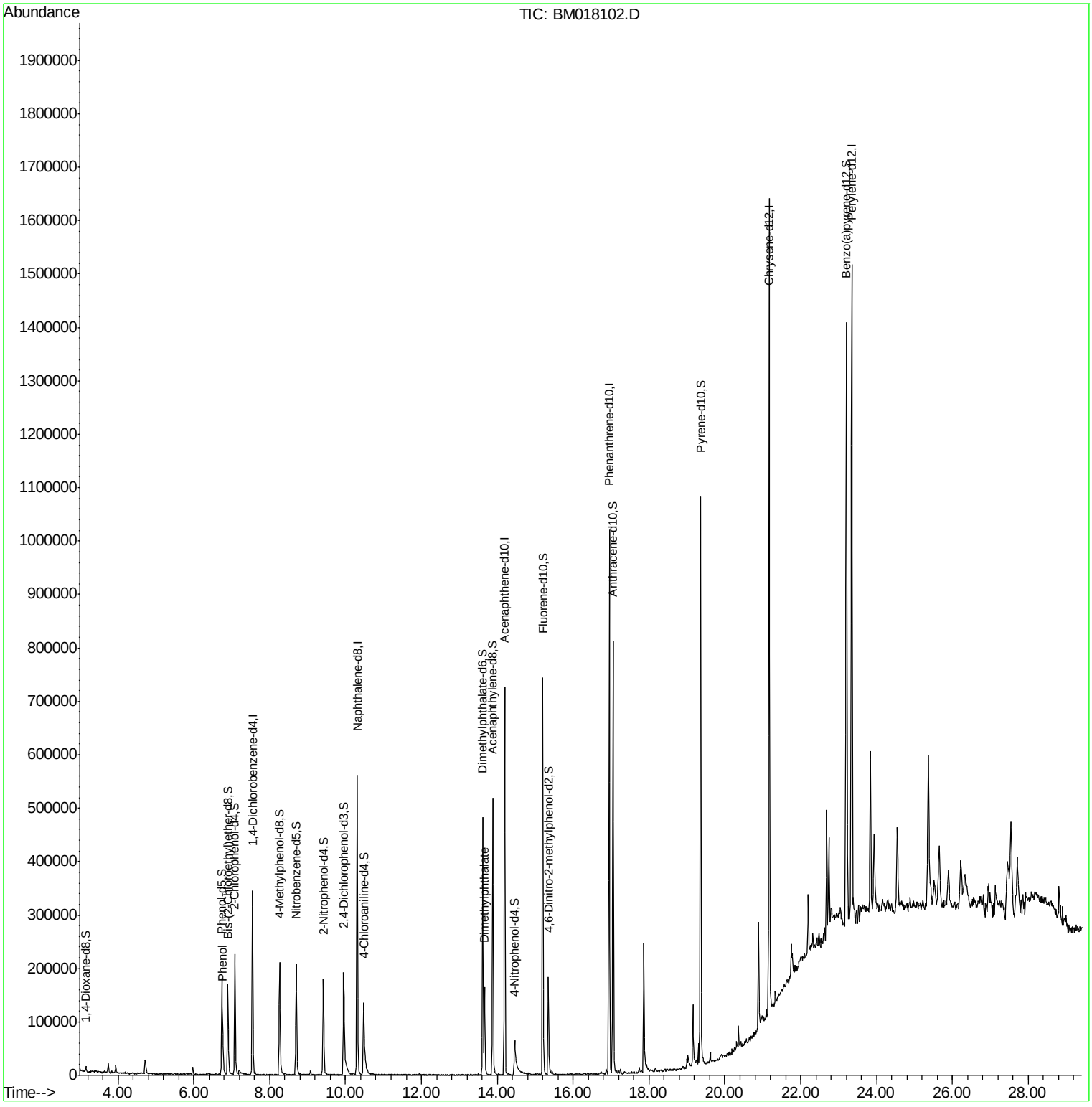
Quantitation Report (LSC Reviewed)

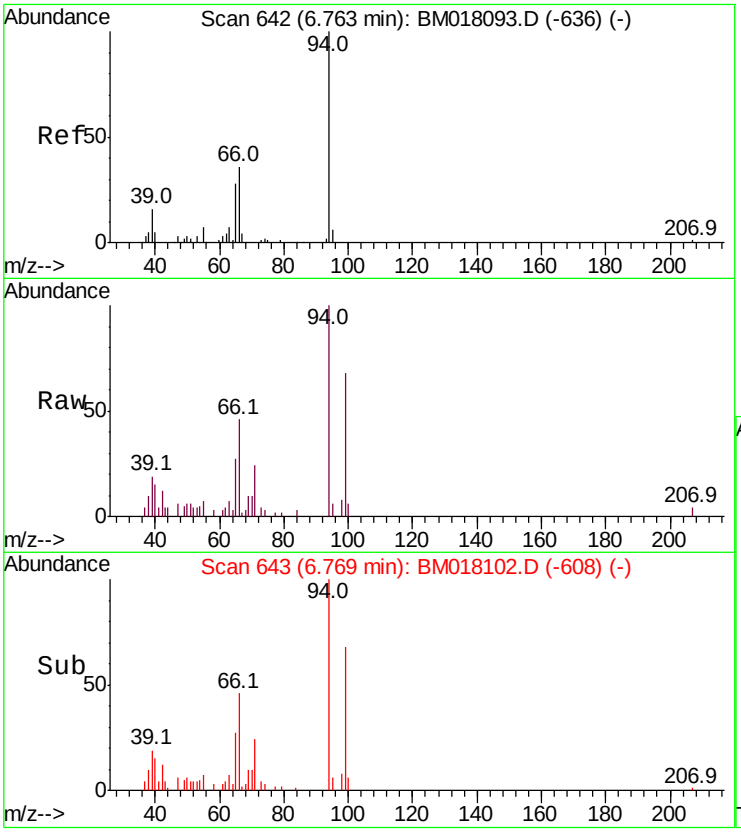
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 13 03:14:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E60

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:13 PM

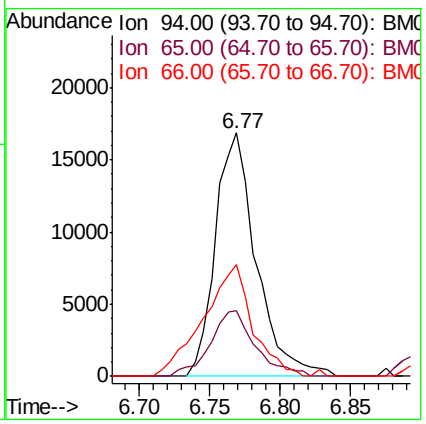




#6
Phenol
Concen: 3.721 ng/ul
RT: 6.77 min Scan# 643
Delta R.T. 0.01 min
Lab File: BM018102.D
Acq: 12 Dec 2018 20:52

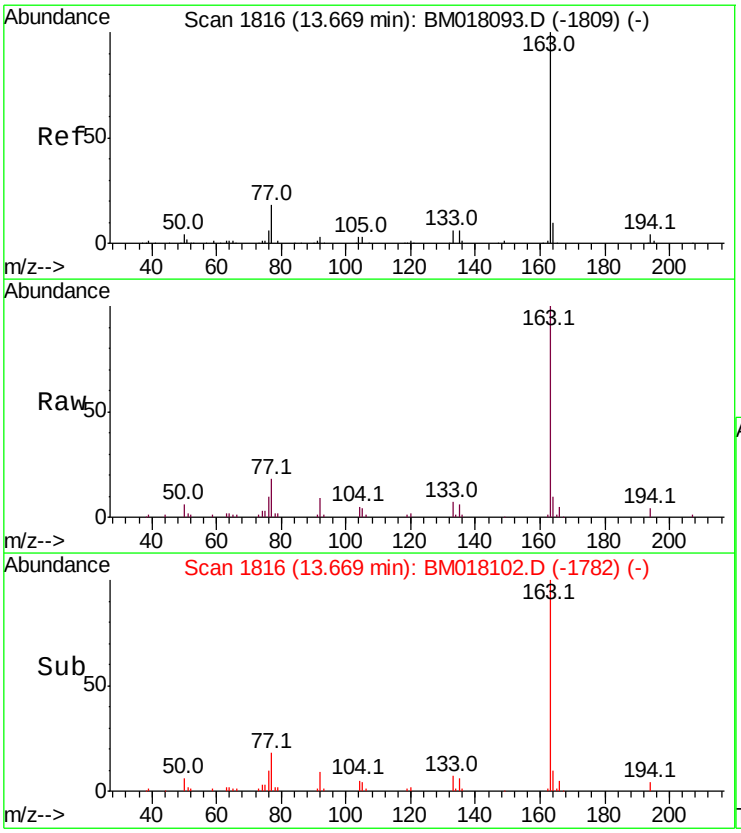
Tgt Ion: 94 Resp: 33940

Ion	Ratio	Lower	Upper
94	100		
65	26.9	24.7	37.1
66	45.7	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9E60

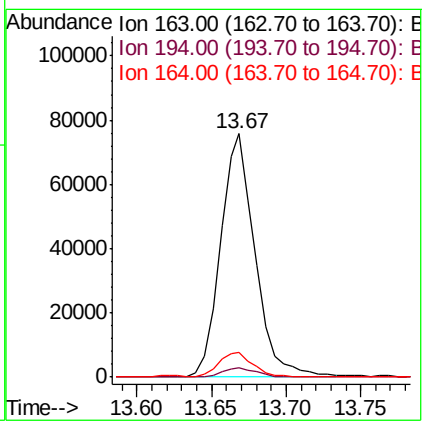
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:13 PM



#44
Dimethylphthalate
Concen: 5.711 ng/ul
RT: 13.67 min Scan# 1816
Delta R.T. -0.00 min
Lab File: BM018102.D
Acq: 12 Dec 2018 20:52

Tgt Ion:163 Resp: 122549

Ion	Ratio	Lower	Upper
163	100		
194	4.1	3.4	5.0
164	10.4	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9E60

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:13 PM

Quant Time: Dec 13 03:14:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	100062	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	461488	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	255277	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	599914	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	743010	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	896798	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	5785	2.65	ng/uL	0.00
5) Phenol-d5	6.74	99	128671	14.08	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	78488	14.24	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	112009	15.66	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	96185	12.88	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	56855	16.04	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	63902	15.73	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	103473m	13.38	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	125299m	18.88	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	363108	16.39	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	405841	15.14	ng/ul	0.00
51) 4-Nitrophenol-d4	14.47	143	42176m	10.47	ng/ul	0.03
57) Fluorene-d10	15.20	176	308399	16.12	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	51224	11.94	ng/ul	0.00
70) Anthracene-d10	17.05	188	485586	16.26	ng/ul	0.00
78) Pyrene-d10	19.36	212	581849	16.18	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	810115	16.66	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.77	94	33940	3.721	ng/ul	95
44) Dimethylphthalate	13.67	163	122549	5.711	ng/ul	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E60

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.152	25	28	34	rVB	11023	14423	0.62%	0.061%
2	3.593	100	103	105	rBV4	3170	4346	0.19%	0.018%
3	3.746	124	129	136	rVV2	17216	27890	1.21%	0.118%
4	3.834	139	144	147	rBV5	3886	6287	0.27%	0.027%
5	3.940	158	162	170	rVV	15261	21518	0.93%	0.091%
6	3.993	170	171	175	rVB2	2252	2584	0.11%	0.011%
7	4.252	212	215	219	rVB3	2356	3045	0.13%	0.013%
8	4.328	225	228	229	rBV	2361	2485	0.11%	0.011%
9	4.599	271	274	277	rVB3	2515	2603	0.11%	0.011%
10	4.716	289	294	296	rBV	25844	36037	1.56%	0.153%
11	5.399	408	410	413	rBV2	2308	2422	0.10%	0.010%
12	5.793	474	477	479	rBV	1963	2319	0.10%	0.010%
13	5.975	503	508	513	rBV2	15114	20782	0.90%	0.088%
14	6.740	630	638	651	rBV2	180983	436473	18.86%	1.849%
15	6.899	659	665	678	rVV	167982	279024	12.06%	1.182%
16	6.981	678	679	684	rVB2	2165	2325	0.10%	0.010%
17	7.081	689	696	707	rBV	225510	382693	16.54%	1.621%
18	7.193	712	715	724	rBV2	6101	13921	0.60%	0.059%
19	7.363	740	744	748	rVB5	1939	2997	0.13%	0.013%
20	7.546	768	775	784	rBV	344911	570421	24.65%	2.417%
21	7.616	784	787	789	rVB2	3371	2924	0.13%	0.012%
22	8.181	881	883	888	rBV2	1596	2658	0.11%	0.011%
23	8.263	888	897	909	rBV	210462	401390	17.34%	1.701%
24	8.698	965	971	984	rBV	206708	381873	16.50%	1.618%
25	9.081	1029	1036	1040	rVB2	8198	13195	0.57%	0.056%
26	9.416	1086	1093	1107	rBV	178742	332837	14.38%	1.410%
27	9.951	1178	1184	1204	rBV	191545	454613	19.64%	1.926%
28	10.104	1209	1210	1215	rVB4	2864	3437	0.15%	0.015%
29	10.310	1235	1245	1254	rBV	561156	925835	40.01%	3.923%
30	10.369	1254	1255	1260	rVB2	3202	2992	0.13%	0.013%
31	10.475	1266	1273	1297	rBV	133397	385906	16.67%	1.635%
32	13.492	1783	1786	1789	rVB2	3710	4063	0.18%	0.017%
33	13.616	1801	1807	1812	rBV	481426	719967	31.11%	3.051%
34	13.669	1812	1816	1828	rVB	162546	264603	11.43%	1.121%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E60

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	13.886	1846	1853	1868	rBV	518973	819310	35.40%	3.471%
36	14.192	1899	1905	1916	rBV2	725761	1135722	49.07%	4.812%
37	14.463	1945	1951	1975	rBV2	63435	223431	9.65%	0.947%
38	14.851	2014	2017	2020	rVB2	1918	2487	0.11%	0.011%
39	15.063	2046	2053	2057	rBV2	3209	6472	0.28%	0.027%
40	15.198	2070	2076	2087	rBV	742860	1104577	47.73%	4.680%
41	15.345	2097	2101	2115	rBV	181079	300186	12.97%	1.272%
42	15.445	2115	2118	2124	rVB3	6935	11040	0.48%	0.047%
43	15.933	2196	2201	2203	rVB4	2595	3205	0.14%	0.014%
44	16.098	2225	2229	2230	rBV2	2543	2758	0.12%	0.012%
45	16.280	2254	2260	2263	rBV	2104	2805	0.12%	0.012%
46	16.386	2275	2278	2281	rBV4	2844	3950	0.17%	0.017%
47	16.516	2296	2300	2302	rBV3	1976	2596	0.11%	0.011%
48	16.739	2334	2338	2341	rBV3	4156	6623	0.29%	0.028%
49	16.868	2356	2360	2367	rVB5	9283	17109	0.74%	0.072%
50	16.951	2367	2374	2385	rBV	1019429	1461400	63.15%	6.192%
51	17.051	2385	2391	2400	rVV2	805939	1214124	52.46%	5.144%
52	17.145	2405	2407	2413	rVV3	6440	8409	0.36%	0.036%
53	17.204	2413	2417	2421	rVV4	5479	7992	0.35%	0.034%
54	17.251	2421	2425	2430	rVB4	9601	14178	0.61%	0.060%
55	17.357	2439	2443	2449	rVV6	3037	5367	0.23%	0.023%
56	17.451	2457	2459	2461	rBV2	3054	2876	0.12%	0.012%
57	17.598	2481	2484	2486	rBV4	2853	2787	0.12%	0.012%
58	17.745	2505	2509	2513	rBV5	11131	16316	0.71%	0.069%
59	17.804	2517	2519	2524	rVB3	6082	8480	0.37%	0.036%
60	17.863	2524	2529	2539	rBV	241984	367596	15.88%	1.558%
61	17.986	2548	2550	2551	rVB2	3913	2641	0.11%	0.011%
62	18.004	2551	2553	2555	rVB3	5287	3949	0.17%	0.017%
63	18.021	2555	2556	2560	rBV4	3104	4015	0.17%	0.017%
64	18.163	2576	2580	2584	rBV7	6931	13154	0.57%	0.056%
65	18.257	2591	2596	2598	rBV5	3088	4267	0.18%	0.018%
66	18.286	2598	2601	2603	rBV3	2615	2665	0.12%	0.011%
67	18.410	2619	2622	2624	rBV3	4396	4807	0.21%	0.020%
68	18.462	2628	2631	2633	rBV4	3113	3372	0.15%	0.014%
69	18.521	2639	2641	2643	rBV3	2109	2342	0.10%	0.010%
70	18.545	2643	2645	2647	rBV3	3990	3647	0.16%	0.015%
71	18.662	2663	2665	2668	rBV2	4035	3935	0.17%	0.017%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E60

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

72	18.733	2674	2677	2679	rBV3	3121	3760	0.16%	0.016%
73	18.898	2700	2705	2708	rBV5	5958	10225	0.44%	0.043%
74	18.951	2712	2714	2716	rBV2	3326	3244	0.14%	0.014%
75	19.004	2719	2723	2726	rBV5	16789	28401	1.23%	0.120%
76	19.033	2726	2728	2738	rVB9	21649	41948	1.81%	0.178%
77	19.157	2744	2749	2762	rBV2	115457	193801	8.37%	0.821%
78	19.245	2762	2764	2770	rVB4	9973	14315	0.62%	0.061%
79	19.304	2770	2774	2777	rBV3	40028	47364	2.05%	0.201%
80	19.362	2778	2784	2793	rVV	1056679	1535531	66.35%	6.506%
81	19.615	2823	2827	2831	rBV4	18894	27023	1.17%	0.114%
82	19.898	2873	2875	2876	rBV2	6882	5475	0.24%	0.023%
83	20.192	2924	2925	2928	rBV2	11325	10573	0.46%	0.045%
84	20.251	2933	2935	2939	rVV5	9758	14141	0.61%	0.060%
85	20.362	2951	2954	2957	rBV2	39941	41336	1.79%	0.175%
86	20.892	3040	3044	3049	rBV2	195802	266175	11.50%	1.128%
87	21.168	3086	3091	3101	rBV	1520901	2038999	88.10%	8.639%
88	21.756	3188	3191	3193	rBV2	50683	61854	2.67%	0.262%
89	22.203	3263	3267	3273	rBV	107397	140246	6.06%	0.594%
90	22.686	3343	3349	3353	rBV2	244767	384593	16.62%	1.630%
91	22.739	3355	3358	3366	rVB5	163558	265971	11.49%	1.127%
92	23.203	3431	3437	3447	rBV	1120717	2262058	97.74%	9.584%
93	23.345	3454	3461	3467	rBV	1220148	2314290	100.00%	9.806%
94	23.839	3541	3545	3554	rVB	295455	523633	22.63%	2.219%
95	24.544	3661	3665	3673	rVB2	145050	305689	13.21%	1.295%
96	25.368	3800	3805	3814	rVB	247766	529128	22.86%	2.242%

Sum of corrected areas: 23601251

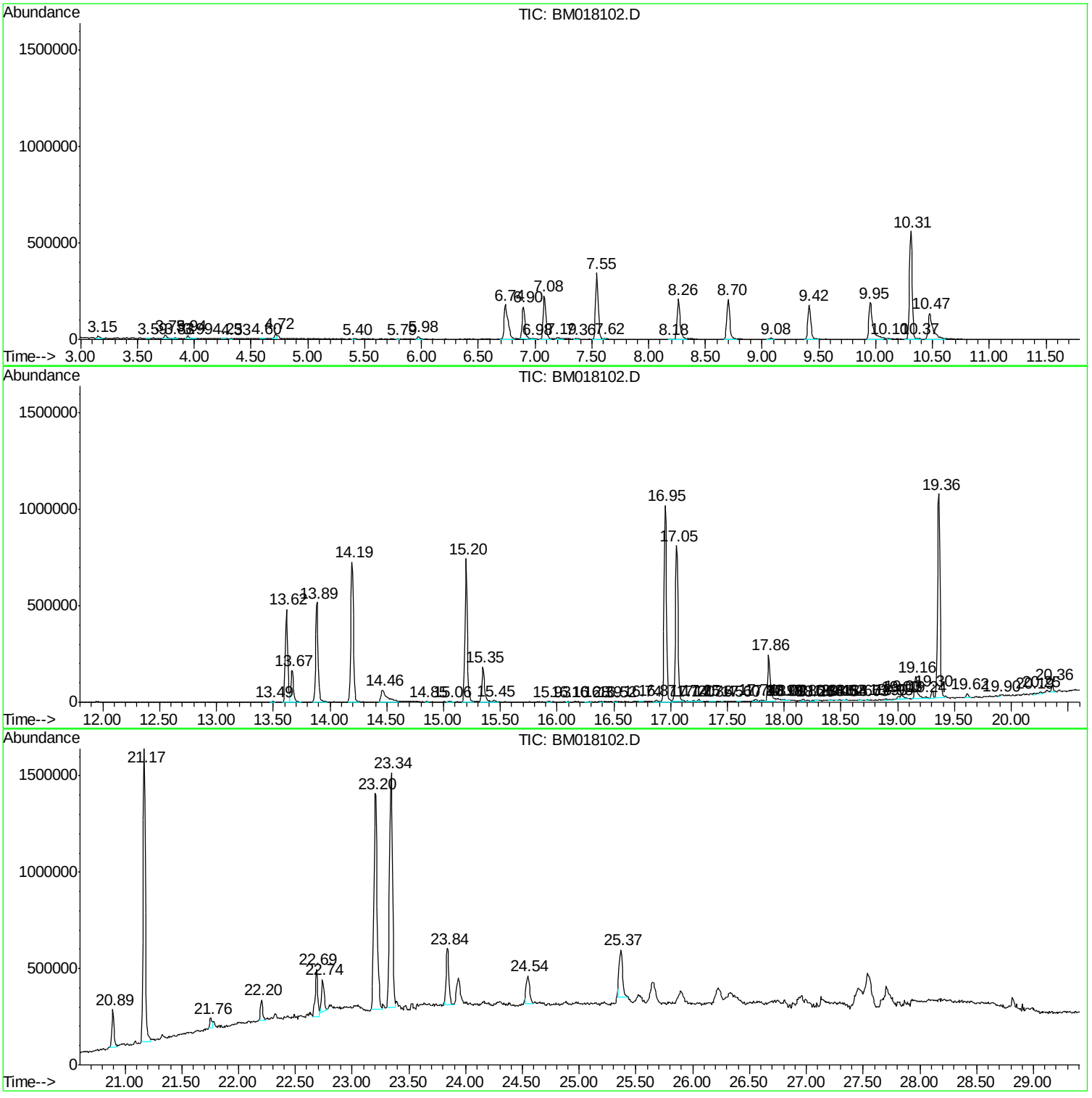
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E60

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E60

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

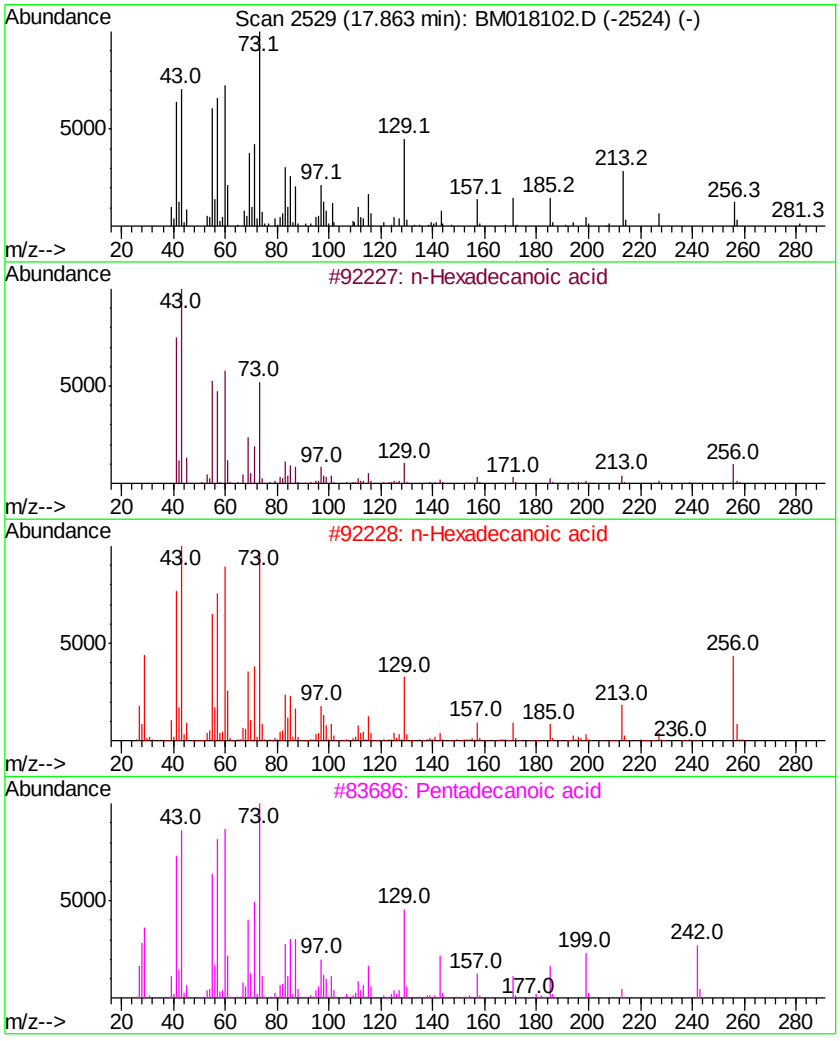
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

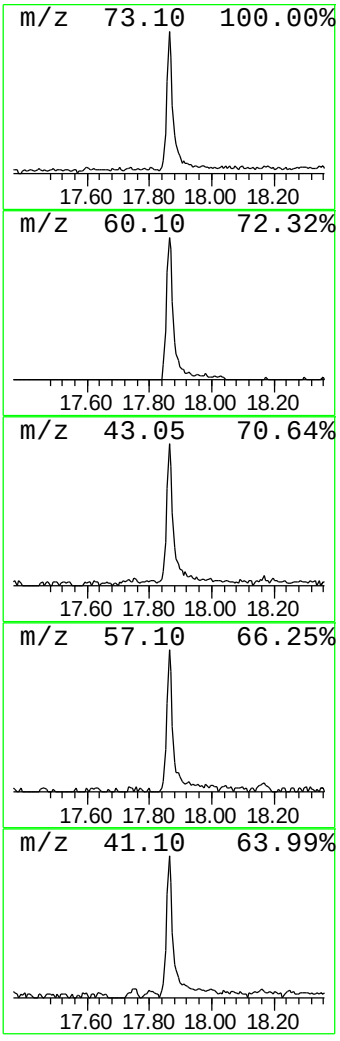
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.86	5.03 ng/ul	367596	Phenanthrene-d10	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	97
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
3	Pentadecanoic acid	242	C15H30O2	001002-84-2	81
4	Tridecanoic acid	214	C13H26O2	000638-53-9	60
5	Tridecanoic acid	214	C13H26O2	000638-53-9	49





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E60

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

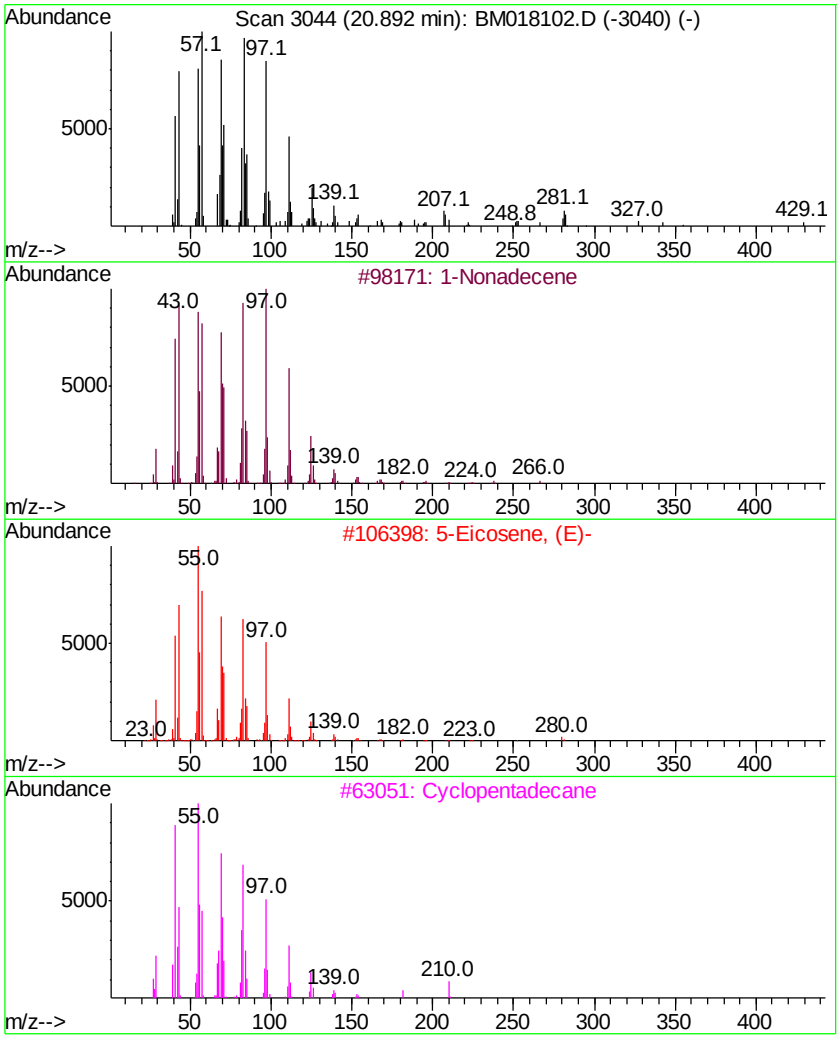
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

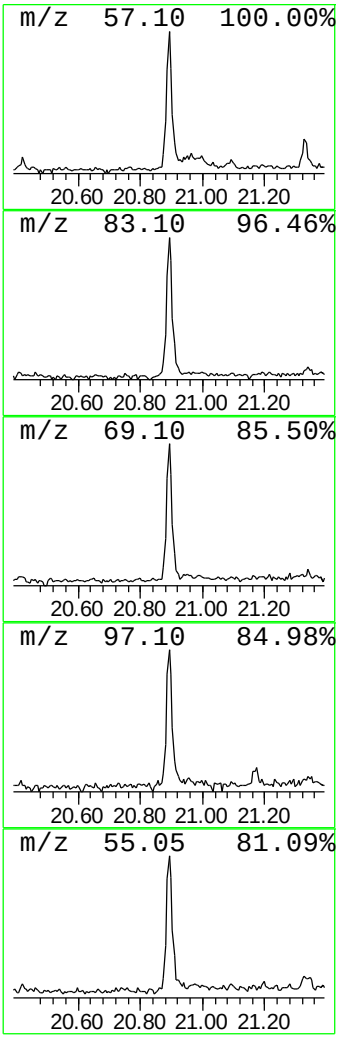
****

Peak Number 2 (DEL) Alkane: Cyclic20.89 Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	2.61 ng/ul	266175	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Nonadecene	266	C19H38	018435-45-5	99
2	5-Eicosene, (E)-	280	C20H40	074685-30-6	98
3	Cyclopentadecane	210	C15H30	000295-48-7	97
4	1-Heneicosyl formate	340	C22H44O2	077899-03-7	95
5	9-Eicosene, (E)-	280	C20H40	074685-29-3	93





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E60

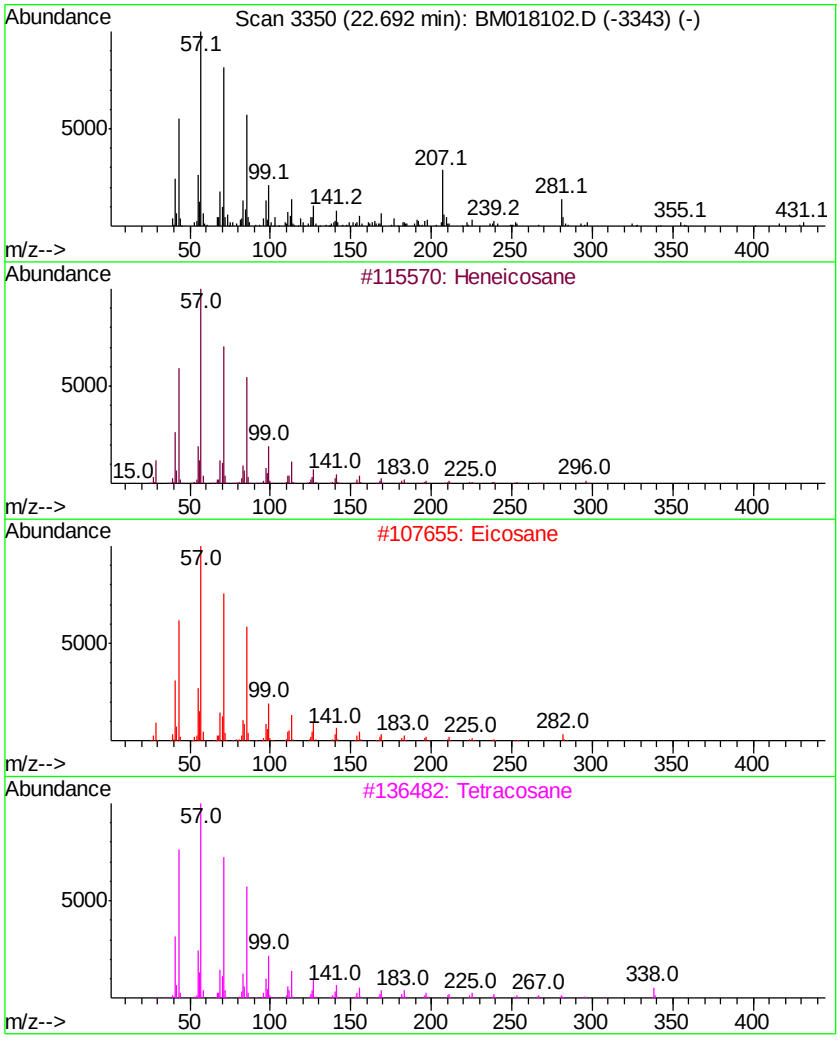
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

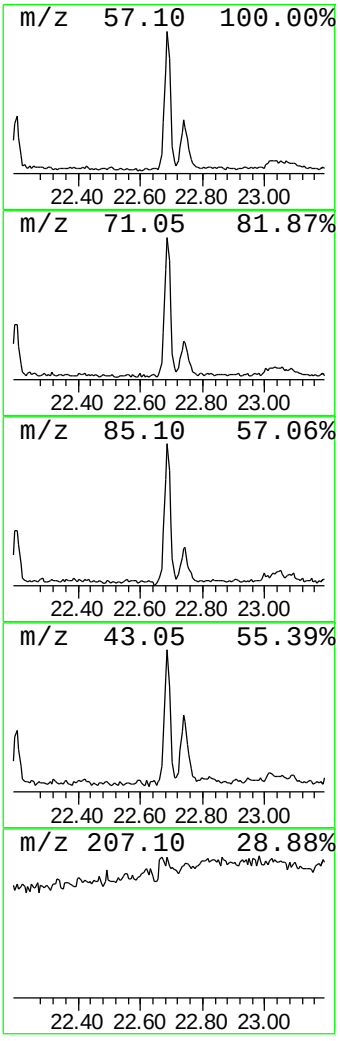
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 3 (DEL) Alkane: Straight-Chai... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.69	3.32 ng/ul	384593	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	98
2	Eicosane	282	C20H42	000112-95-8	93
3	Tetracosane	338	C24H50	000646-31-1	83
4	Pentacosane	352	C25H52	000629-99-2	83
5	Octacosane	394	C28H58	000630-02-4	81





Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E60

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

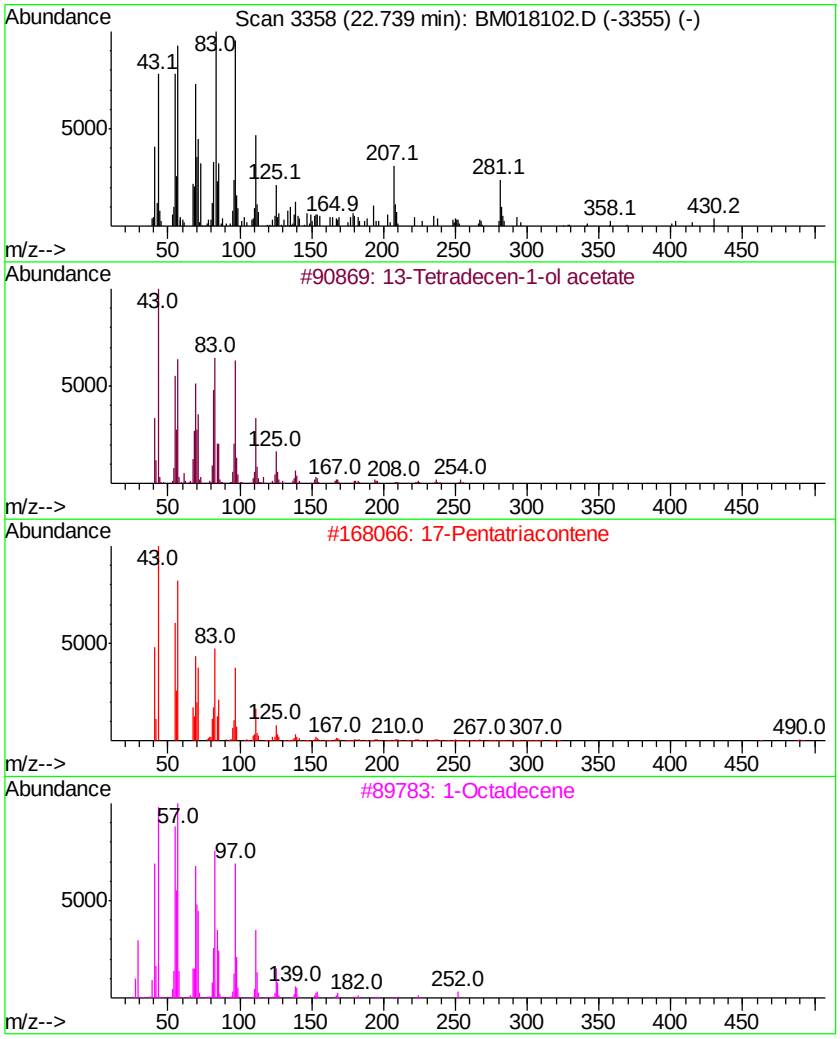
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

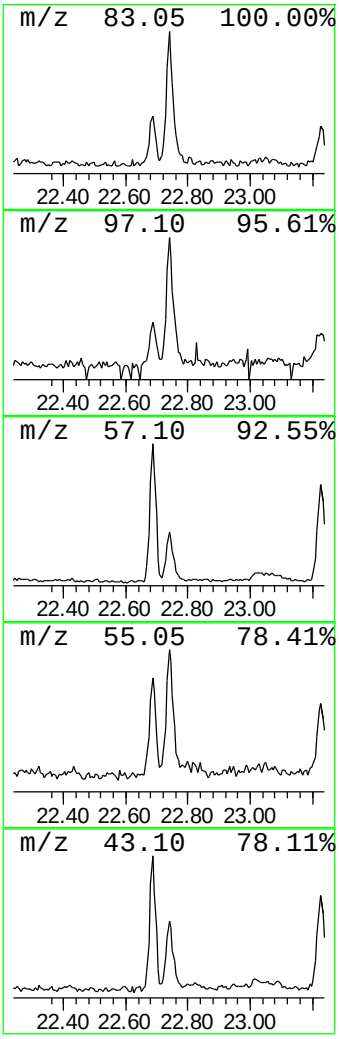
****

Peak Number 4 13-Tetradecen-1-ol acetate Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.74	2.30 ng/ul	265971	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	13-Tetradecen-1-ol acetate	254	C16H30O2	056221-91-1	68
2	17-Pentatriacontene	491	C35H70	006971-40-0	68
3	1-Octadecene	252	C18H36	000112-88-9	68
4	1-Octadecene	252	C18H36	000112-88-9	64
5	10-Heneicosene (c,t)	294	C21H42	095008-11-0	64





Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E60

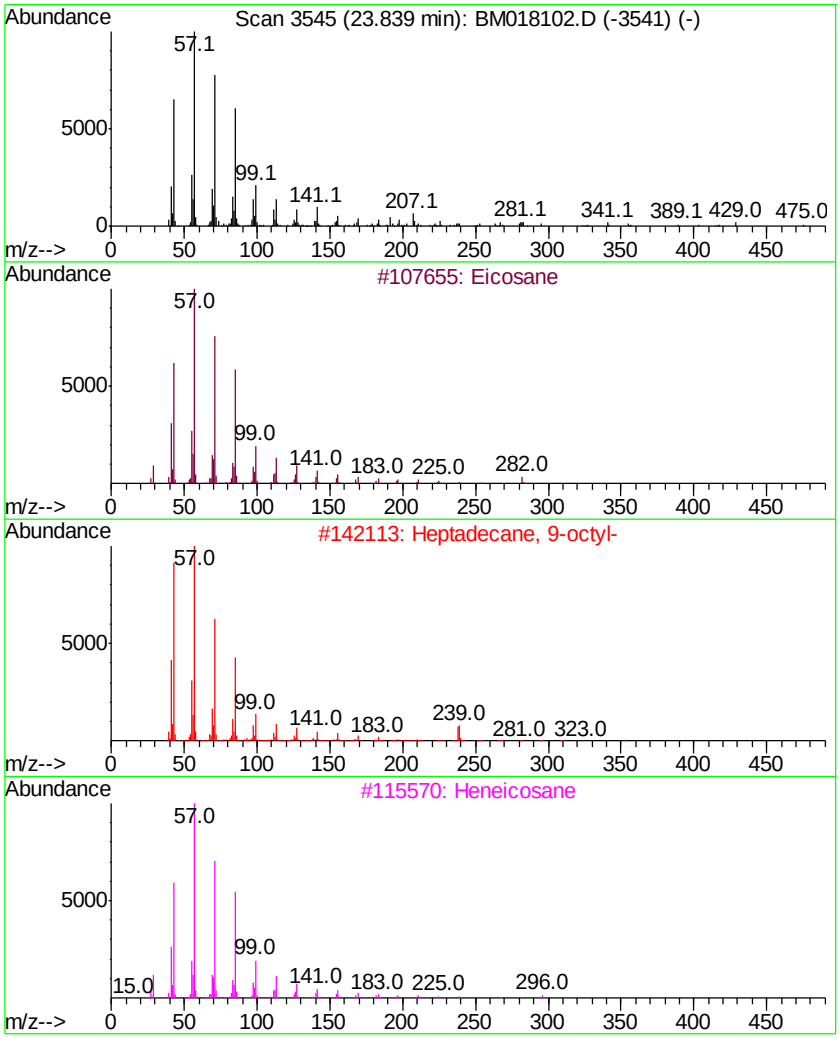
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

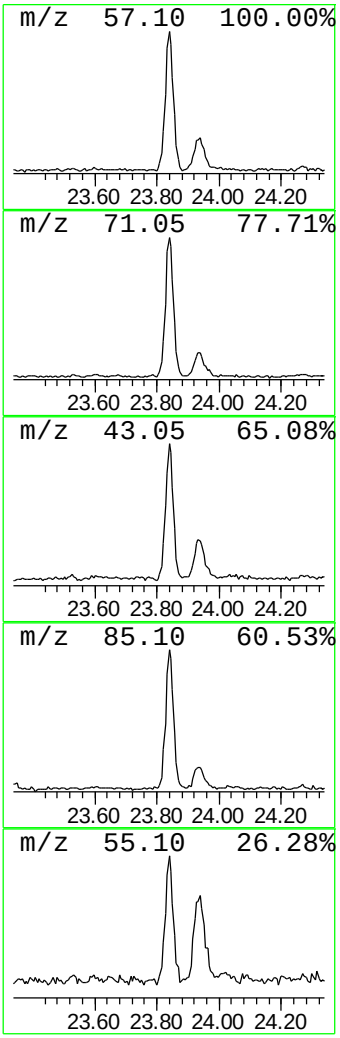
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 (DEL) Alkane: Straight-Chai... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.84	4.53 ng/ul	523633	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	94
2	Heptadecane, 9-octyl-	352	C25H52	007225-64-1	91
3	Heneicosane	296	C21H44	000629-94-7	91
4	Triacontane	422	C30H62	000638-68-6	91
5	Tetratriacontane	479	C34H70	014167-59-0	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E60

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

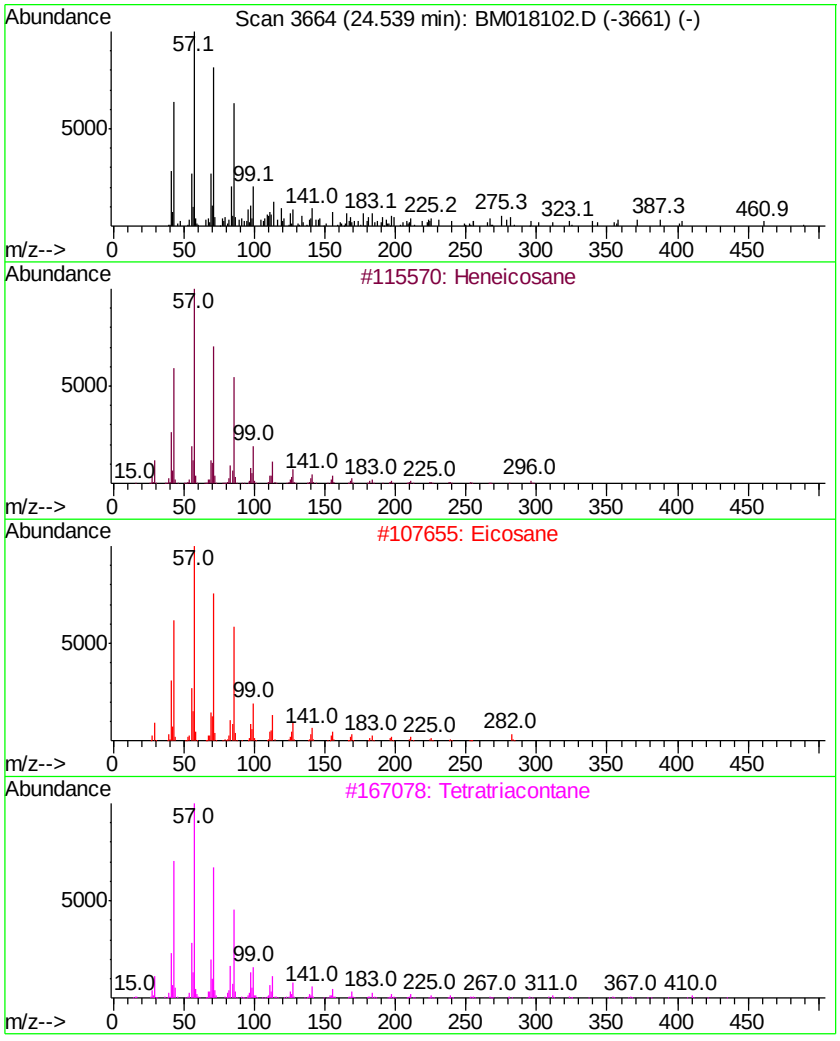
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

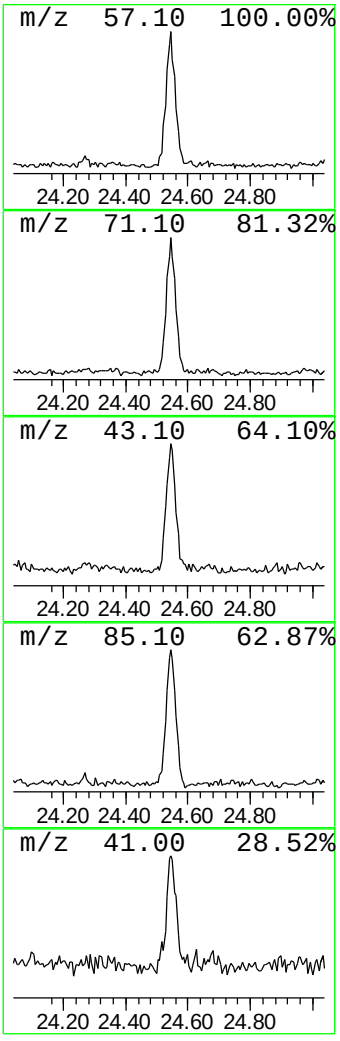
****

Peak Number 6 (DEL) Alkane: Straight-Chai... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.54	2.64 ng/ul	305689	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	95
2	Eicosane	282	C20H42	000112-95-8	81
3	Tetratriacontane	479	C34H70	014167-59-0	81
4	Octadecane	254	C18H38	000593-45-3	74
5	Tetracosane	338	C24H50	000646-31-1	74





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E60

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

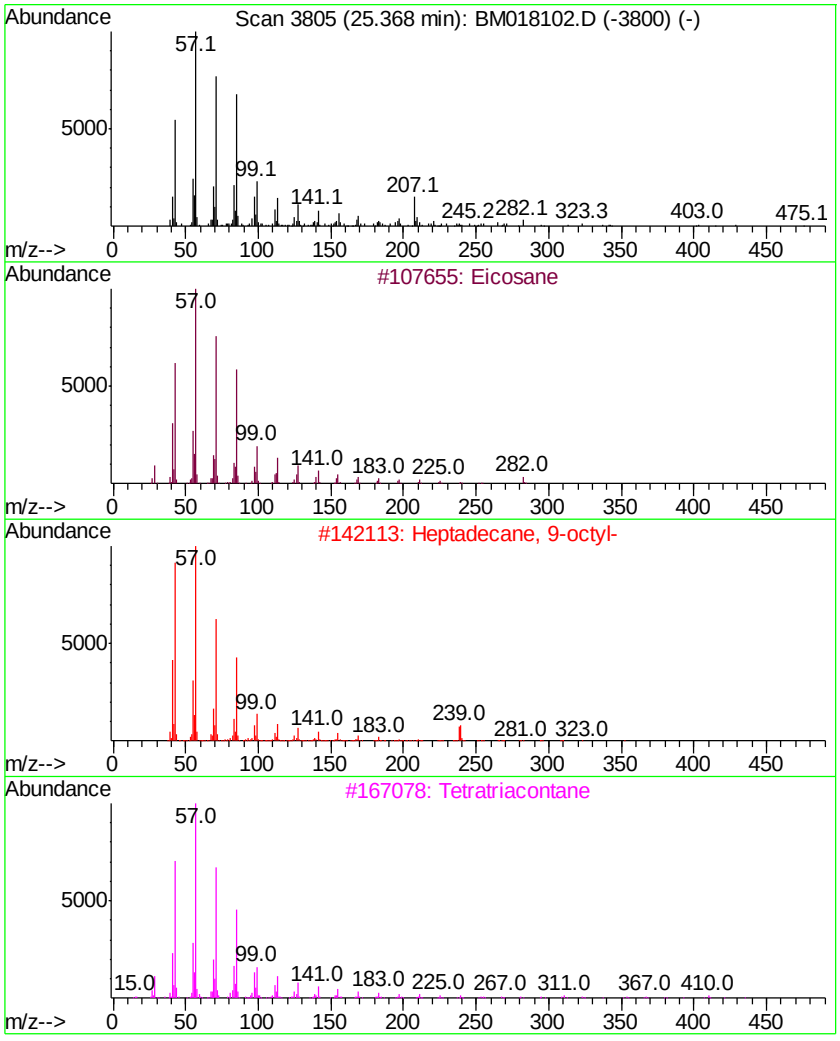
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

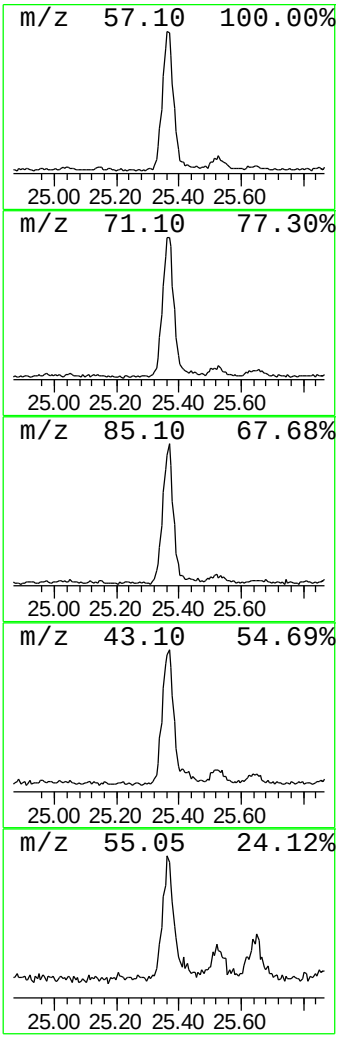
****

Peak Number 7 (DEL) Alkane: Straight-Chai... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.37	4.57 ng/ul	529128	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	91
2	Heptadecane, 9-octyl-	352	C25H52	007225-64-1	91
3	Tetratriacontane	479	C34H70	014167-59-0	90
4	Dodecane, 2-methyl-	184	C13H28	001560-97-0	90
5	Heneicosane, 11-(1-ethylpropyl)-	366	C26H54	055282-11-6	90





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E60

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	17.86	5.0	ng/ul	367596	4	16.95	1461400	20.0
(DEL) Alkane: Cyc...	20.89	2.6	ng/ul	266175	5	21.17	2039000	20.0
(DEL) Alkane: Str...	22.69	3.3	ng/ul	384593	6	23.34	2314290	20.0
13-Tetradecen-1-o...	22.74	2.3	ng/ul	265971	6	23.34	2314290	20.0
(DEL) Alkane: Str...	23.84	4.5	ng/ul	523633	6	23.34	2314290	20.0
(DEL) Alkane: Str...	24.54	2.6	ng/ul	305689	6	23.34	2314290	20.0
(DEL) Alkane: Str...	25.37	4.6	ng/ul	529128	6	23.34	2314290	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

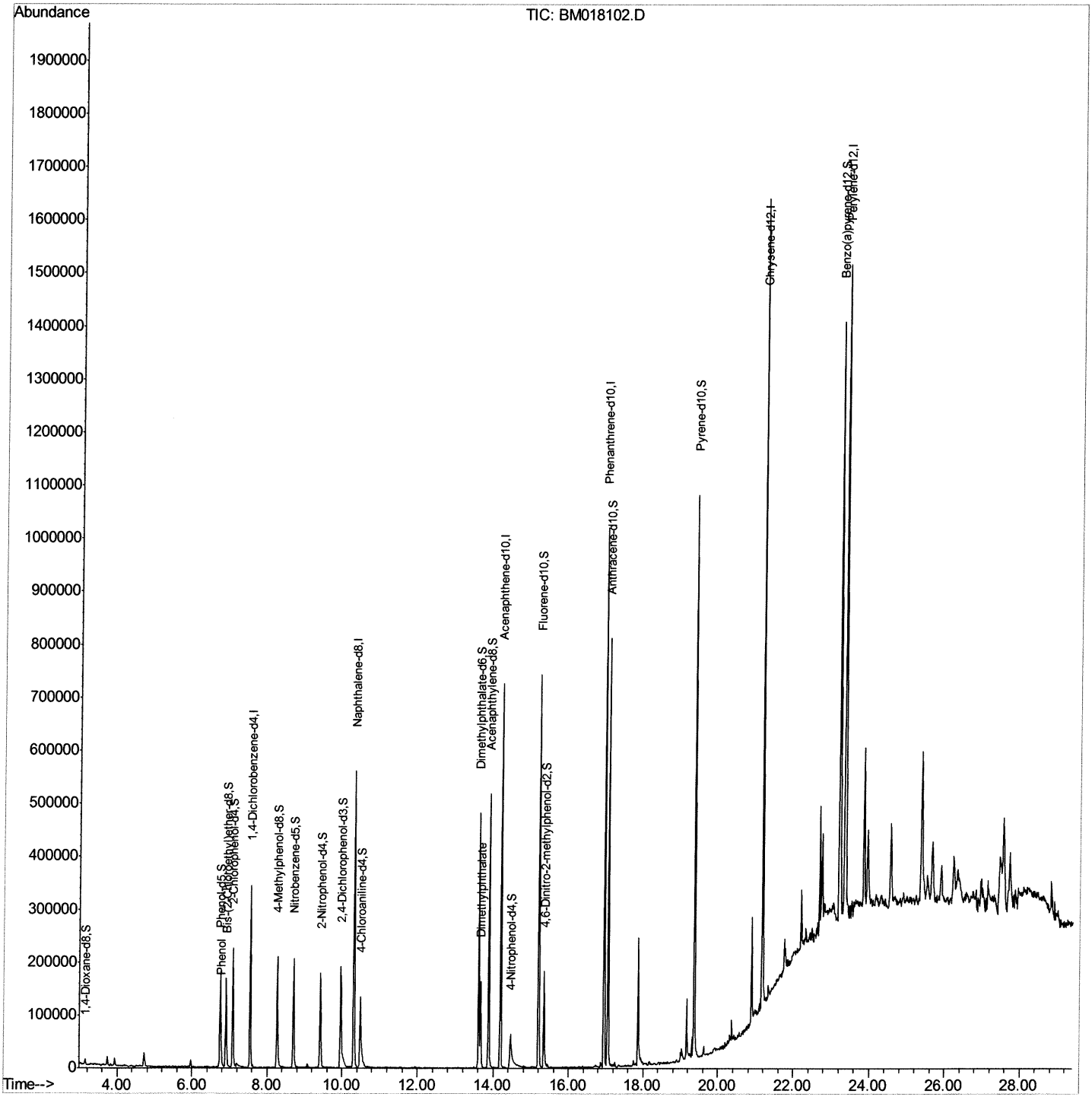
Quantitation Report (QT Reviewed)

Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 13 03:14:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E60

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:13 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

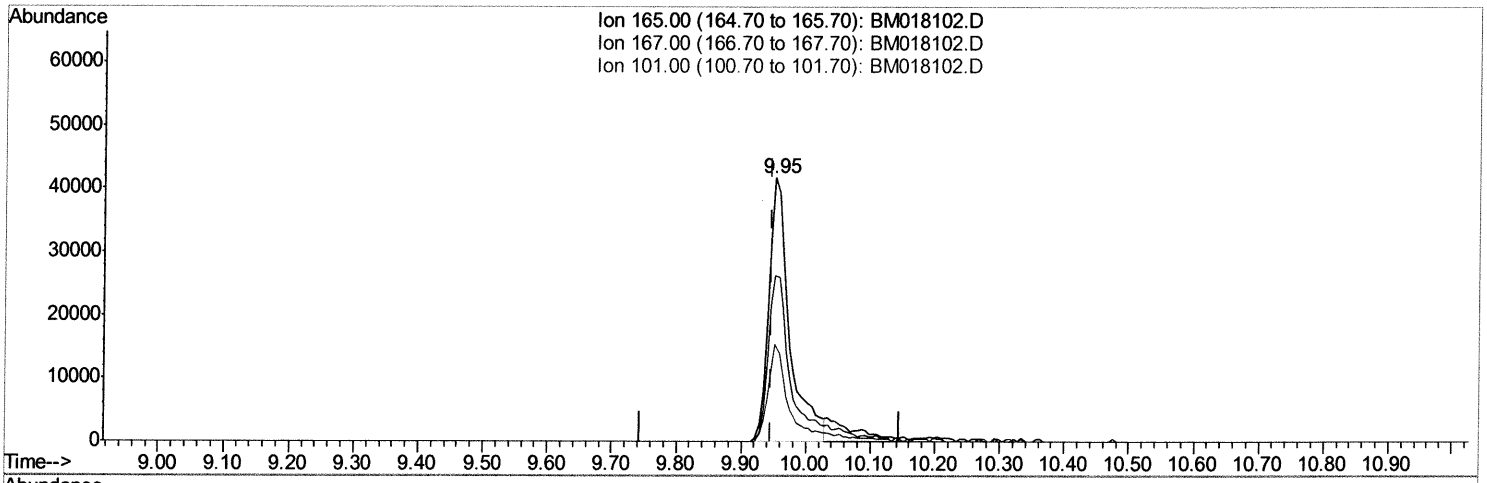
Quantitation Report (Qedit)

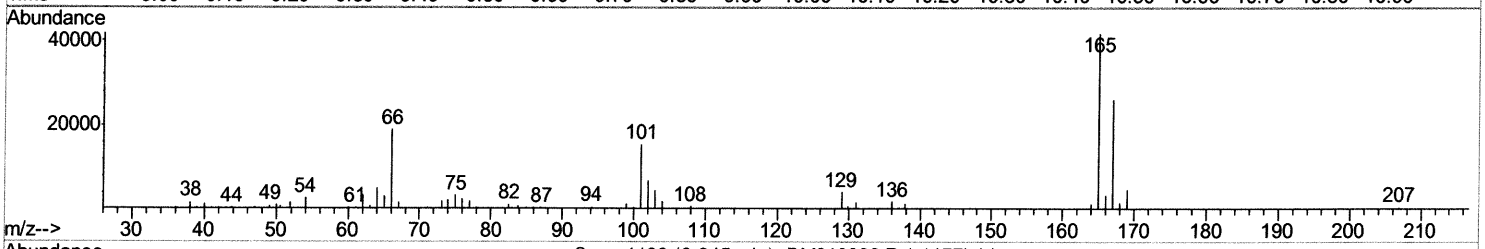
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

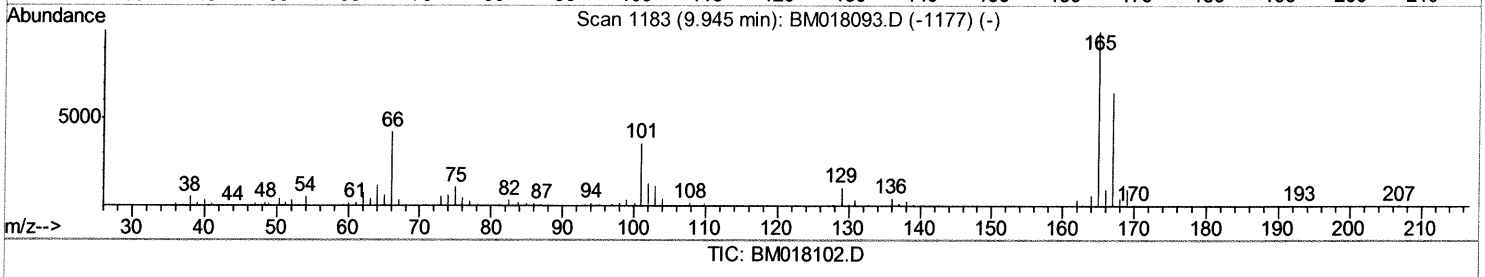
Quant Time: Dec 13 02:41:49 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E60

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:13 PM







TIC: BM018102.D

(26) 2,4-Dichlorophenol-d3 (S)

9.951min (+0.006) 12.13ng/ul

response 93783

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	62.52
101.00	34.80	37.05
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

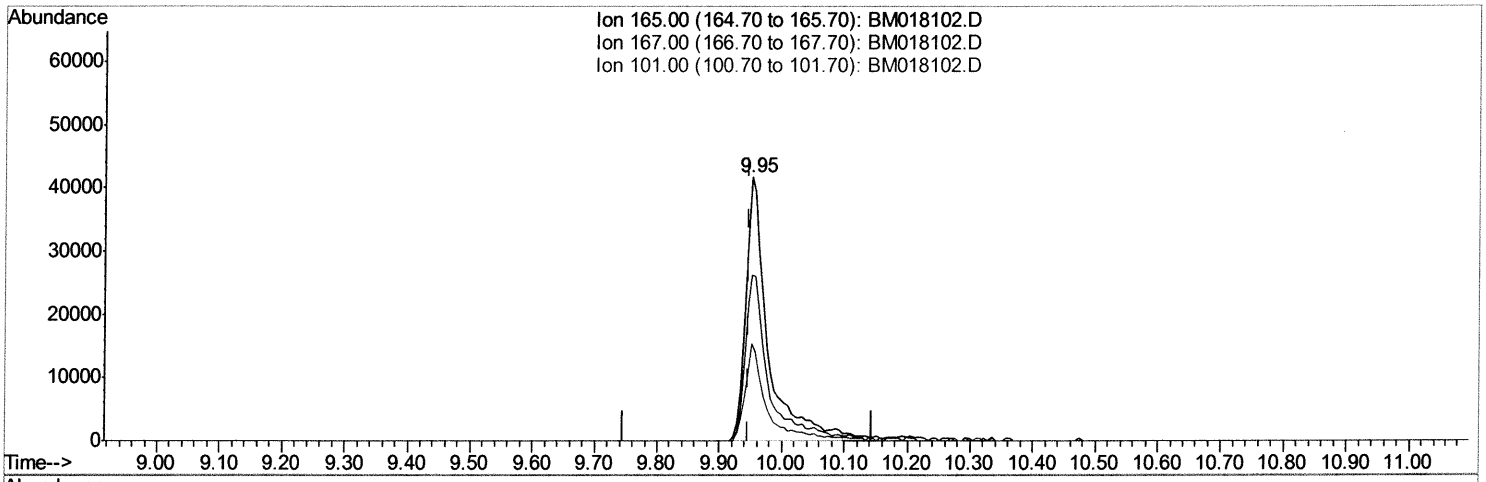
Quantitation Report (Qedit)

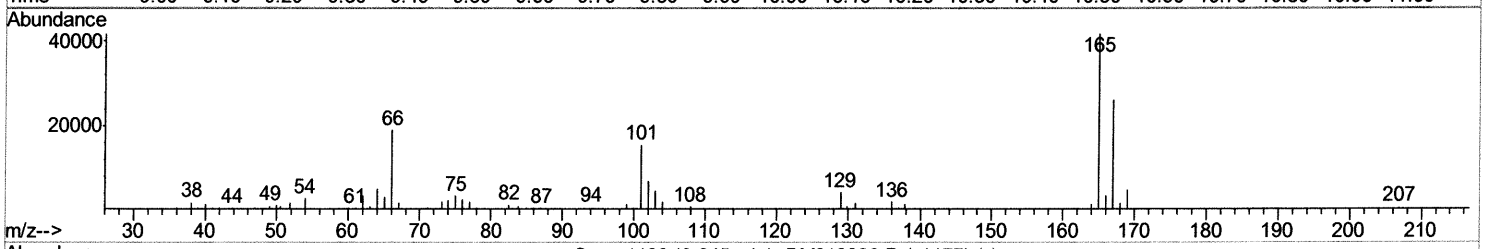
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

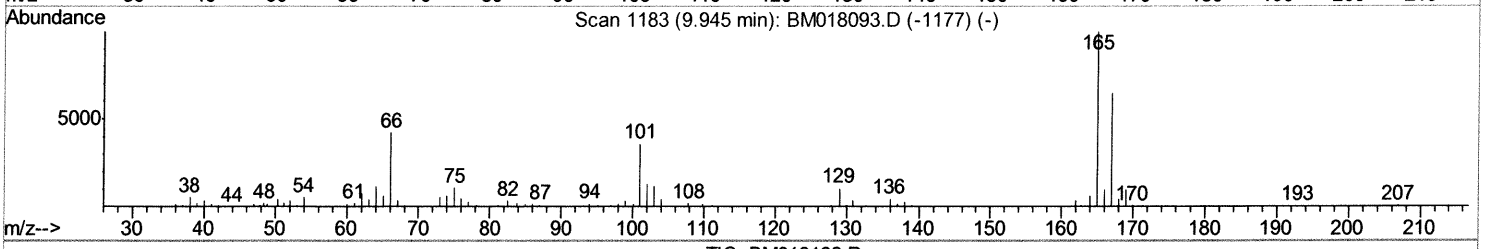
Quant Time: Dec 13 02:41:49 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E60

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:13 PM







TIC: BM018102.D

(26) 2,4-Dichlorophenol-d3 (S)

9.951min (+0.006) 13.38ng/ul m> SJ 12/13/18

response 103473

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	62.52
101.00	34.80	37.05
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

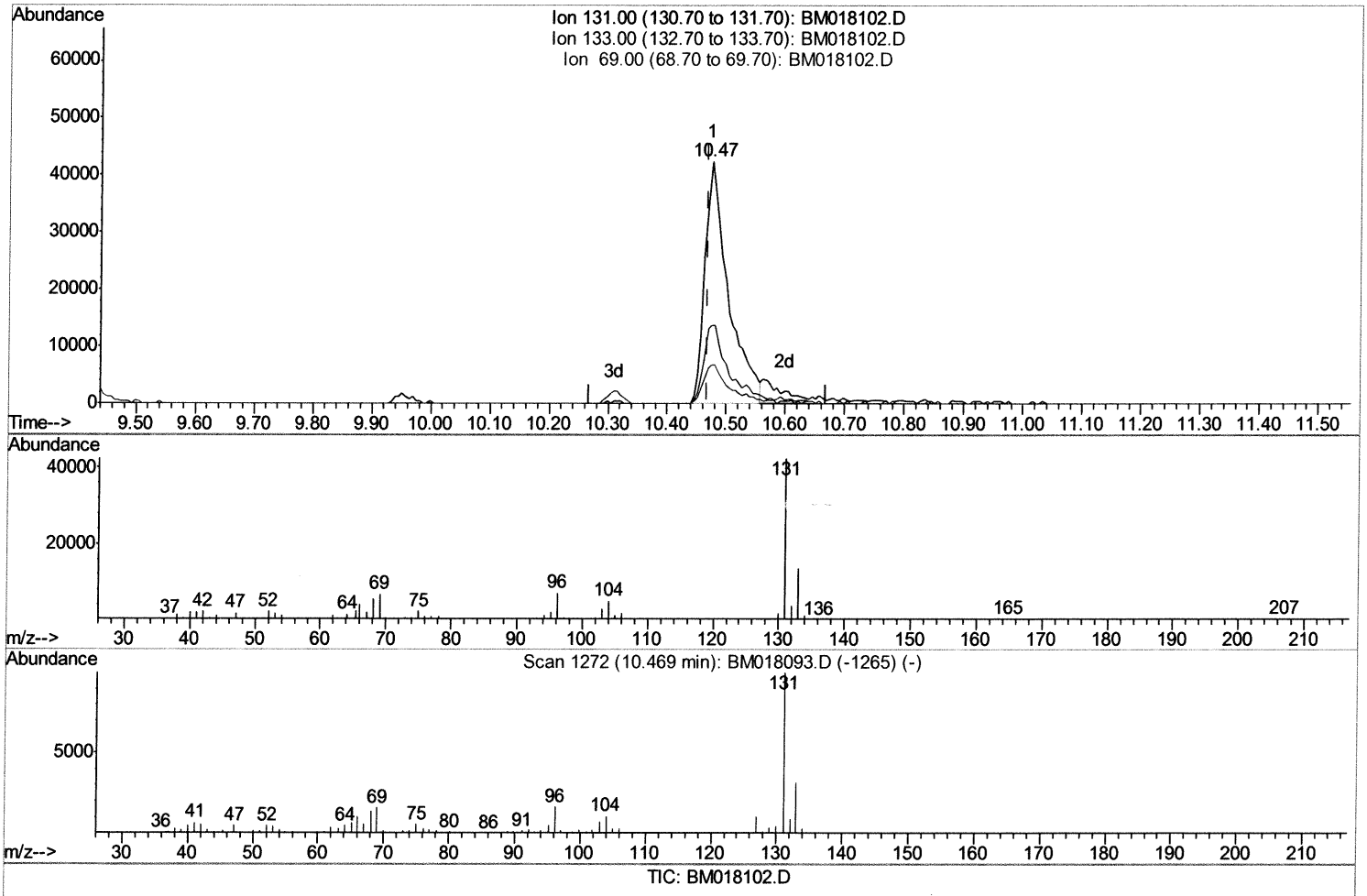
Quantitation Report (Qedit)

Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 13 02:41:49 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E60

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:13 PM



TIC: BM018102.D

(29) 4-Chloroaniline-d4 (S)

10.475min (+0.006) 17.54ng/ul

response 116366

Ion	Exp%	Act%
131.00	100	100
133.00	32.40	32.16
69.00	18.90	15.90
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

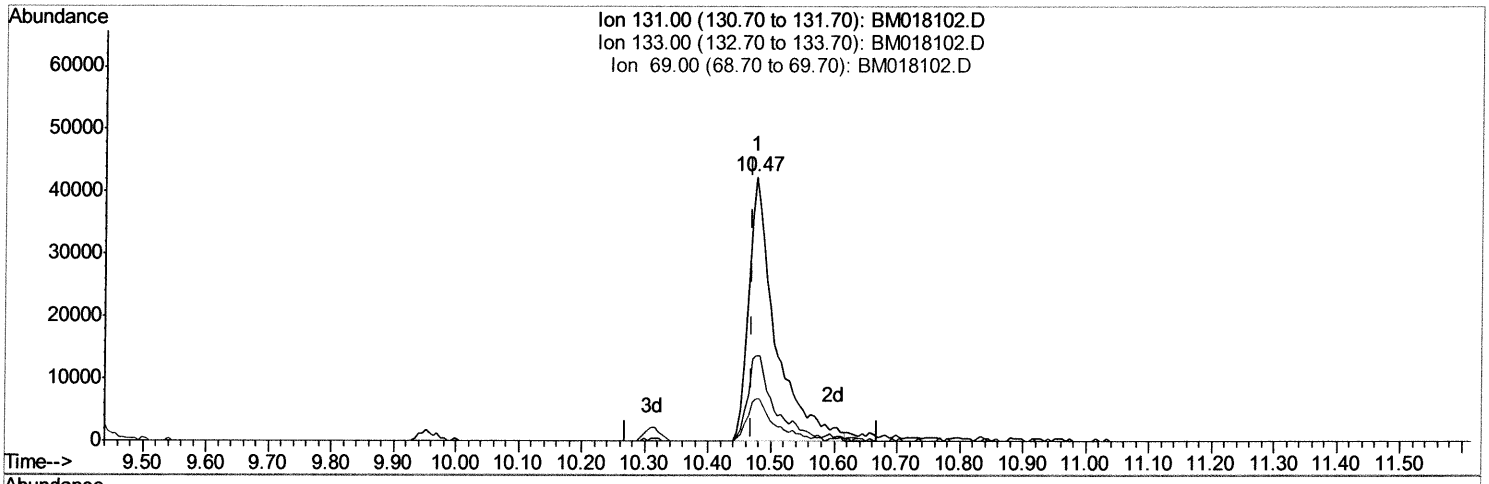
Quantitation Report (Qedit)

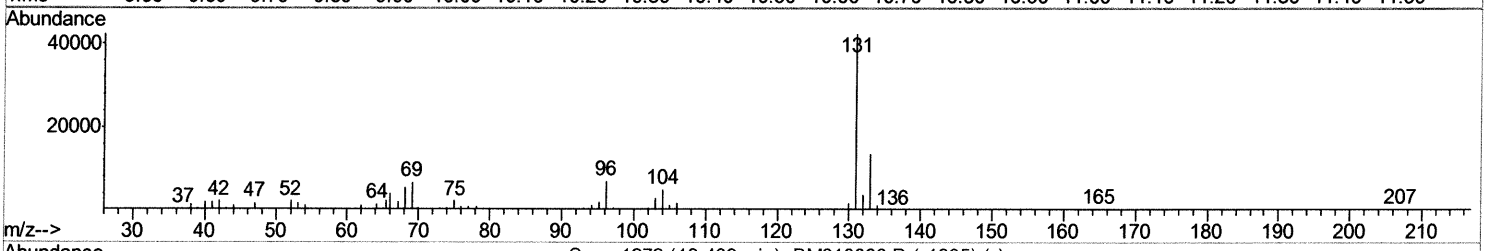
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

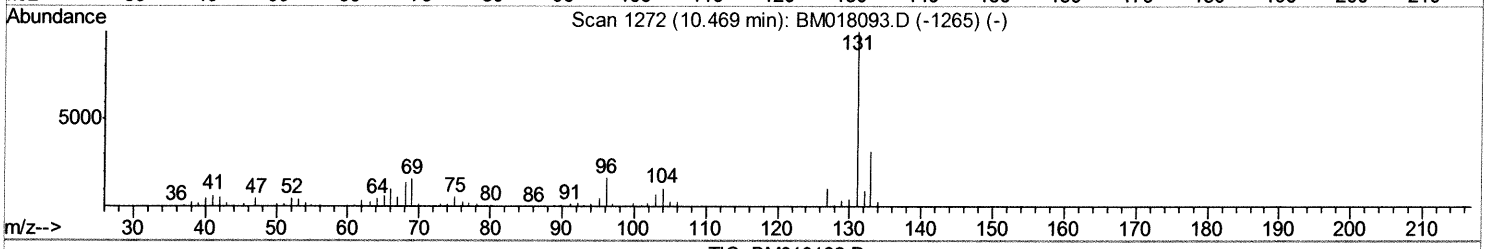
Quant Time: Dec 13 02:41:49 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E60

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:13 PM







TIC: BM018102.D

(29) 4-Chloroaniline-d4 (S)

10.475min (+0.006) 18.88ng/ul m> SJ 12/13/18

response 125299

Ion	Exp%	Act%
131.00	100	100
133.00	32.40	32.16
69.00	18.90	15.90
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

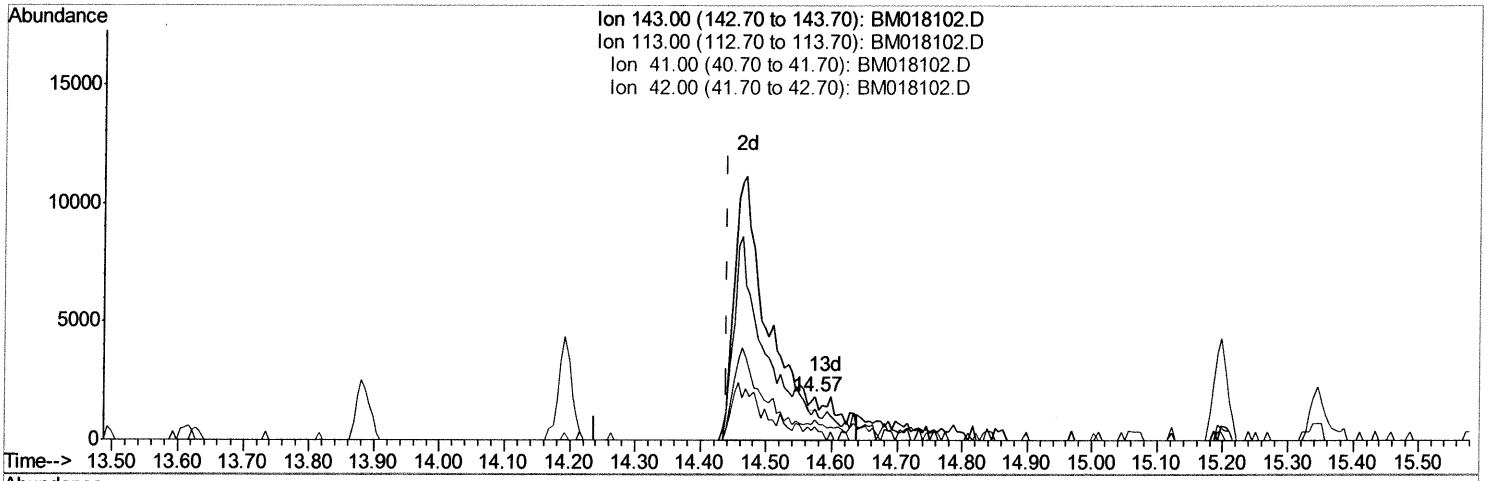
Quantitation Report (Qedit)

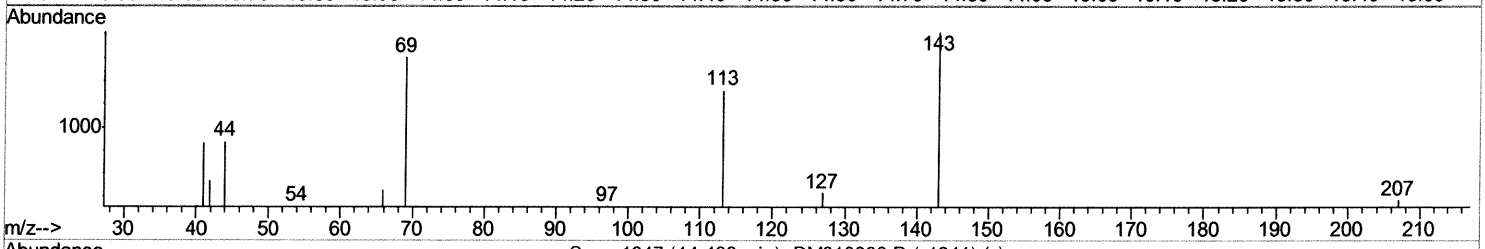
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

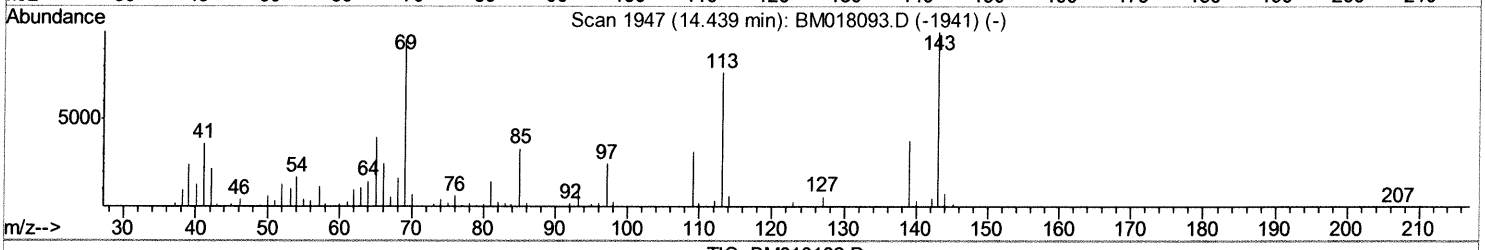
Quant Time: Dec 13 02:41:49 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E60

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:13 PM







TIC: BM018102.D

(51) 4-Nitrophenol-d4 (S)

14.575min (+0.135) 0.08ng/ul

response 305

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	72.27
41.00	40.10	46.96
42.00	26.80	29.42

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

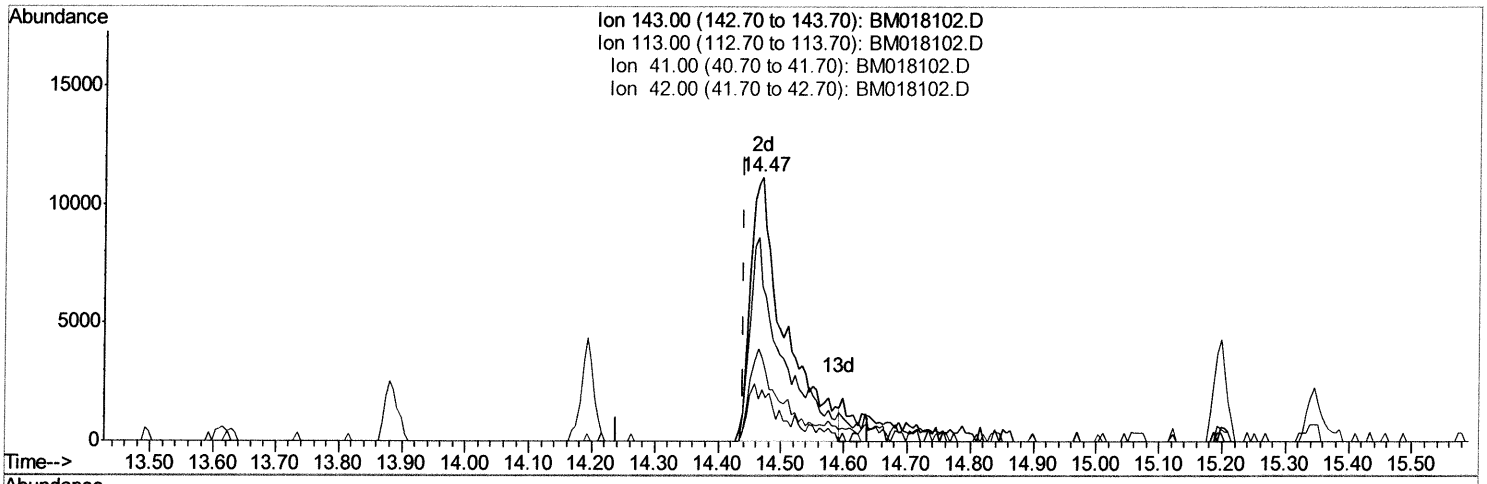
Quantitation Report (Qedit)

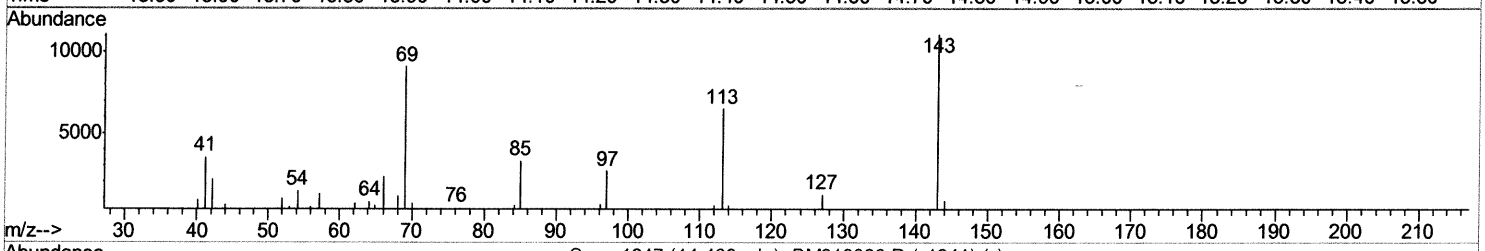
Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

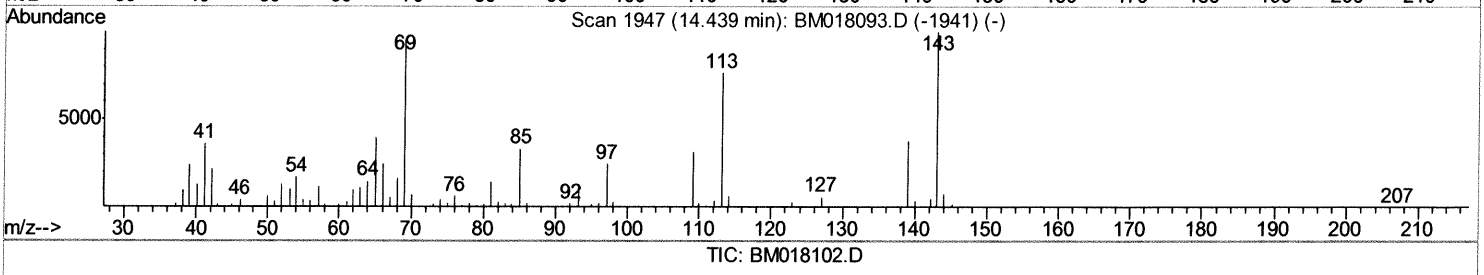
Quant Time: Dec 13 02:41:49 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E60

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:13 PM







TIC: BM018102.D

(51) 4-Nitrophenol-d4 (S)

14.469min (+0.029) 10.47ng/ul m) SJ 12/13/18

response 42176

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	58.44#
41.00	40.10	31.57#
42.00	26.80	19.70#

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018102.D
Acq On : 12 Dec 2018 20:52
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 13 03:14:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9E60

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:13 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	100062	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	461488	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	255277	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	599914	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	743010	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	896798	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	5785	2.65	ng/uL	0.00
5) Phenol-d5	6.74	99	128671	14.08	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	78488	14.24	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	112009	15.66	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	96185	12.88	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	56855	16.04	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	63902	15.73	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	103473m	13.38	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	125299m	18.88	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	363108	16.39	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	405841	15.14	ng/ul	0.00
51) 4-Nitrophenol-d4	14.47	143	42176m	10.47	ng/ul	0.03
57) Fluorene-d10	15.20	176	308399	16.12	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	51224	11.94	ng/ul	0.00
70) Anthracene-d10	17.05	188	485586	16.26	ng/ul	0.00
78) Pyrene-d10	19.36	212	581849	16.18	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	810115	16.66	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.77	94	33940	3.721	ng/ul	95
44) Dimethylphthalate	13.67	163	122549	5.711	ng/ul	99

SJ 12/13/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E61

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-14
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018103.D
% Solids : 84.2
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	79	U
100-52-7	Benzaldehyde	390	U
108-95-2	Phenol	240	J
111-44-4	Bis(2-Chloroethyl)ether	390	U
95-57-8	2-Chlorophenol	200	U
95-48-7	2-Methylphenol	390	U
108-60-1	2,2-oxybis(1-Chloropropane)	390	U
98-86-2	Acetophenone	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-di-n-propylamine	200	U
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	Bis(2-Chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	200	U
105-60-2	Caprolactam	390	U
59-50-7	4-Chloro-3-methylphenol	200	U
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	390	U
88-06-2	2,4,6-Trichlorophenol	200	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E61

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-14
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018103.D
% Solids : 84.2
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	200	U
92-52-4	1,1-Biphenyl	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	200	U
131-11-3	Dimethylphthalate	380	
606-20-2	2,6-Dinitrotoluene	200	U
208-96-8	Acenaphthylene	200	U
99-09-2	3-Nitroaniline	390	U
83-32-9	Acenaphthene	200	U
51-28-5	2,4-Dinitrophenol	390	U
100-02-7	4-Nitrophenol	390	U
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	200	U
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	390	U
534-52-1	4,6-Dinitro-2-methylphenol	390	U
86-30-6	N-Nitrosodiphenylamine	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
1912-24-9	Atrazine	390	U
87-86-5	Pentachlorophenol	390	U
85-01-8	Phenanthrene	200	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E61

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-14
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018103.D
% Solids : 84.2
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	200	U
86-74-8	Carbazole	390	U
84-74-2	Di-n-butylphthalate	200	U
206-44-0	Fluoranthene	390	U
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U
91-94-1	3,3-Dichlorobenzidine	390	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	200	U
117-84-0	Di-n-octyl phthalate	390	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
58-90-2	2,3,4,6-Tetrachlorophenol	200	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E61

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-14
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018103.D
% Solids : 84.2
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/12/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000057-10-3	n-Hexadecanoic acid	17.86	240	JN
2	000057-11-4	Octadecanoic acid	19.16	100	JN
3	1000282-97-3	Heptafluorobutanoic acid, heptadec	20.89	130	JN
4	124957-09-1	2,5,5,8a-Tetramethyl-6,7,8,8a-tetr	25.66	150	JN
5	E966796	Total Alkanes	N/A	110	

EPA-designated Registry Number.

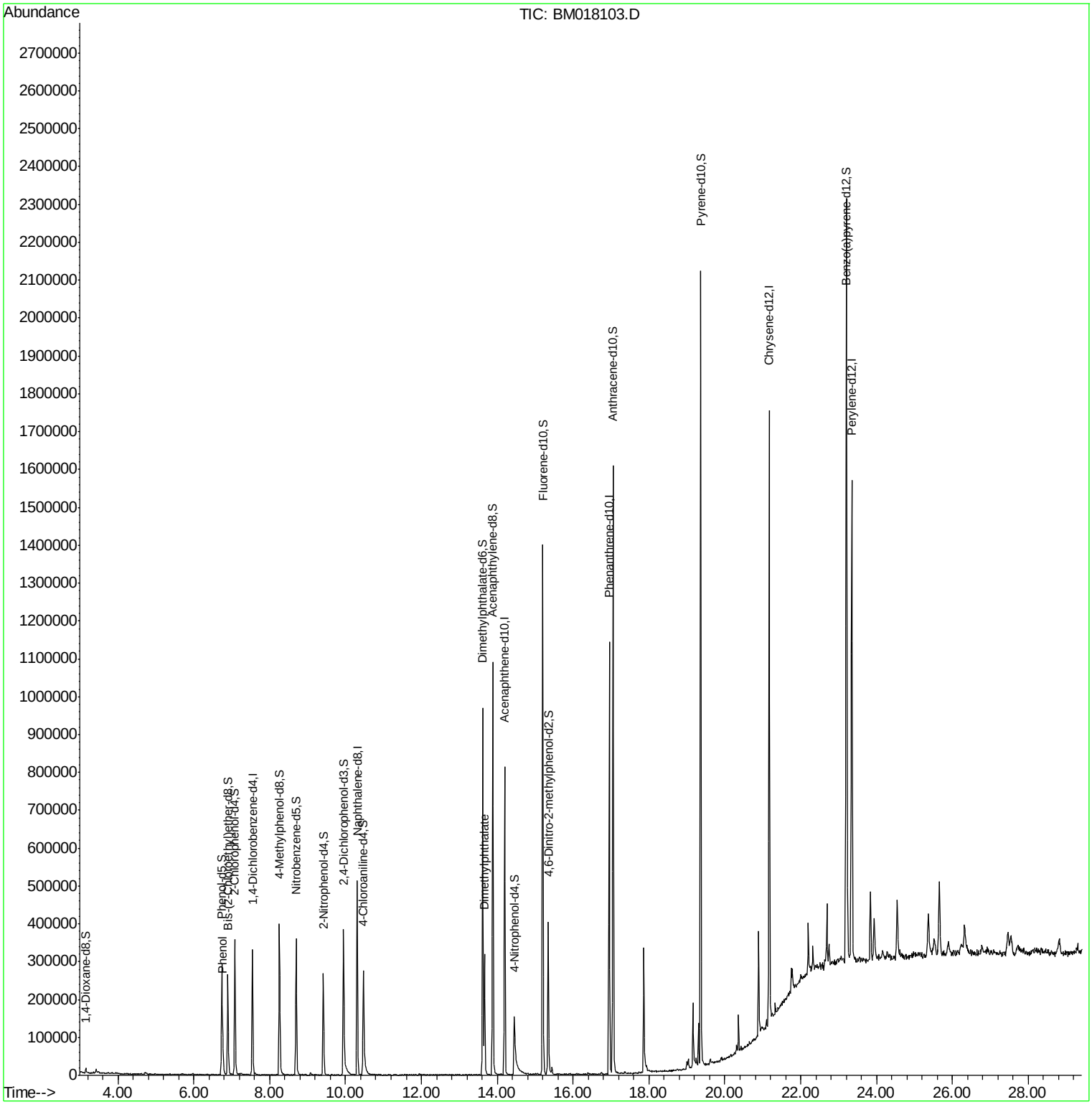
Quantitation Report (LSC Reviewed)

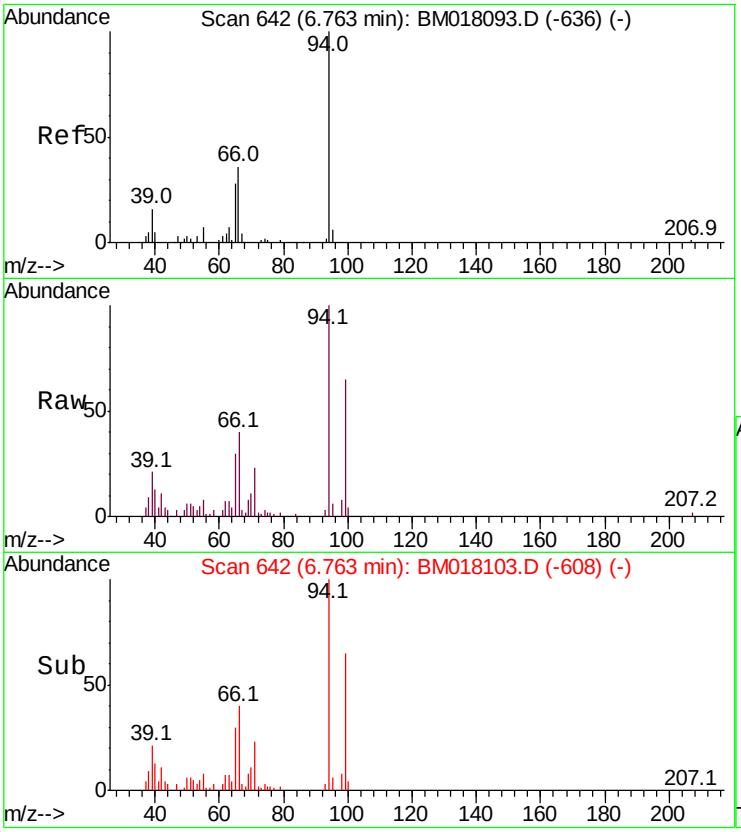
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018103.D
Acq On : 12 Dec 2018 21:28
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 13 03:16:19 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E61

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:15 PM

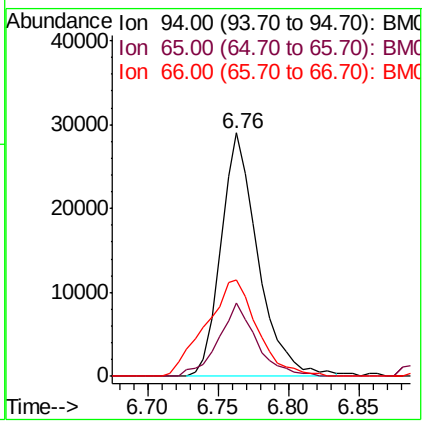




#6
Phenol
Concen: 6.016 ng/ul
RT: 6.76 min Scan# 642
Delta R.T. -0.00 min
Lab File: BM018103.D
Acq: 12 Dec 2018 21:28

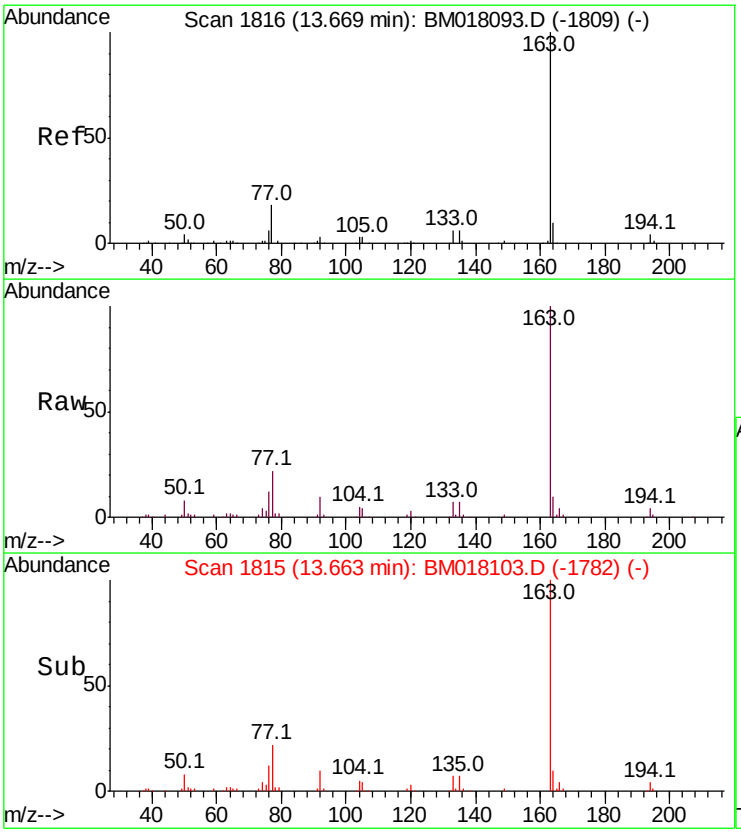
Tgt Ion: 94 Resp: 52766

Ion	Ratio	Lower	Upper
94	100		
65	30.1	24.7	37.1
66	39.6	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9E61

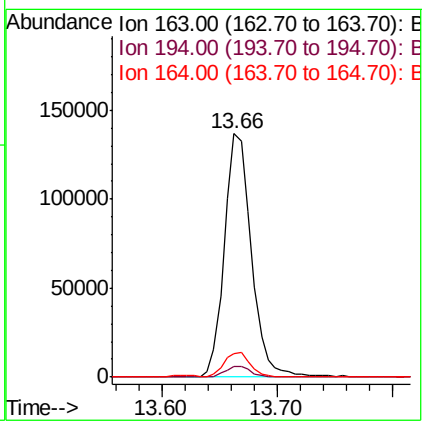
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:15 PM



#44
Dimethylphthalate
Concen: 9.738 ng/ul
RT: 13.66 min Scan# 1815
Delta R.T. -0.01 min
Lab File: BM018103.D
Acq: 12 Dec 2018 21:28

Tgt Ion:163 Resp: 222291

Ion	Ratio	Lower	Upper
163	100		
194	4.3	3.4	5.0
164	9.5	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018103.D
Acq On : 12 Dec 2018 21:28
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9E61

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:15 PM

Quant Time: Dec 13 03:16:19 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	96209	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	439651	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	271554	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	646568	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	800716	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	905273	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	8440m	4.01	ng/uL	0.00
5) Phenol-d5	6.74	99	203127	23.12	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	119764	22.60	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	178576	25.97	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	163738	22.81	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	92470	27.38	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	100448	25.96	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	166625	22.62	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	228443	36.14	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	678535	28.80	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	809666	28.39	ng/ul	0.00
51) 4-Nitrophenol-d4	14.45	143	79098	18.46	ng/ul	0.01
57) Fluorene-d10	15.20	176	569577	27.99	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	98072	21.22	ng/ul	0.00
70) Anthracene-d10	17.05	188	902155	28.03	ng/ul	0.00
78) Pyrene-d10	19.36	212	1071044	27.64	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	1385770	28.23	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	52766	6.016	ng/ul	96
44) Dimethylphthalate	13.66	163	222291	9.738	ng/ul	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018103.D
Acq On : 12 Dec 2018 21:28
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E61

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.152	24	28	37	rVB2	14323	22706	0.61%	0.069%
2	3.422	71	74	81	rVB	11005	17135	0.46%	0.052%
3	3.946	160	163	164	rBV2	3846	4260	0.11%	0.013%
4	4.710	287	293	297	rBV4	6007	11928	0.32%	0.036%
5	5.975	504	508	511	rBV3	3180	5318	0.14%	0.016%
6	6.739	631	638	654	rBV2	292840	680476	18.29%	2.075%
7	6.898	659	665	676	rVV	263171	429768	11.55%	1.311%
8	7.081	690	696	709	rVV	356169	596005	16.02%	1.818%
9	7.204	712	717	721	rVV4	2977	5542	0.15%	0.017%
10	7.245	721	724	729	rVB5	3135	4447	0.12%	0.014%
11	7.545	768	775	782	rBV	331179	563566	15.15%	1.719%
12	7.616	785	787	792	rVB3	4740	4735	0.13%	0.014%
13	8.257	889	896	909	rBV	400722	705137	18.95%	2.151%
14	8.698	964	971	984	rBV	359720	610000	16.40%	1.861%
15	9.081	1031	1036	1041	rBV2	7353	12489	0.34%	0.038%
16	9.410	1085	1092	1104	rBV	269196	497462	13.37%	1.517%
17	9.945	1177	1183	1206	rBV	384786	805992	21.67%	2.458%
18	10.310	1238	1245	1256	rBV	513441	866644	23.30%	2.643%
19	10.469	1265	1272	1293	rBV	275762	695961	18.71%	2.123%
20	10.598	1293	1294	1298	rVB3	3811	4393	0.12%	0.013%
21	11.945	1515	1523	1533	rVB5	4425	12624	0.34%	0.039%
22	13.616	1801	1807	1812	rBV	969900	1417744	38.11%	4.324%
23	13.663	1812	1815	1829	rVB	317176	498888	13.41%	1.522%
24	13.880	1846	1852	1867	rBV	1090454	1680426	45.17%	5.125%
25	14.192	1899	1905	1922	rVB2	812481	1273790	34.24%	3.885%
26	14.451	1943	1949	1969	rBV	152652	495362	13.32%	1.511%
27	14.663	1983	1985	1990	rVB5	3257	3943	0.11%	0.012%
28	15.051	2046	2051	2052	rBV2	3887	6343	0.17%	0.019%
29	15.198	2069	2076	2089	rBV	1398676	2125447	57.13%	6.483%
30	15.345	2095	2101	2114	rBV	402343	641073	17.23%	1.955%
31	15.439	2114	2117	2128	rVB2	18828	30503	0.82%	0.093%
32	15.927	2197	2200	2203	rBV4	3402	4363	0.12%	0.013%
33	16.386	2275	2278	2283	rBV3	4118	6984	0.19%	0.021%
34	16.739	2333	2338	2344	rBV6	5205	9157	0.25%	0.028%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018103.D
Acq On : 12 Dec 2018 21:28
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E61

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	16.951	2368	2374	2382	rBV2	1140666	1621394	43.58%	4.945%
36	17.051	2385	2391	2404	rVV	1602736	2340484	62.91%	7.138%
37	17.180	2412	2413	2419	rBV4	2795	3954	0.11%	0.012%
38	17.809	2516	2520	2524	rBV4	4946	9152	0.25%	0.028%
39	17.862	2524	2529	2540	rVV	329705	497164	13.36%	1.516%
40	17.933	2540	2541	2546	rVB3	14388	17340	0.47%	0.053%
41	18.209	2585	2588	2590	rBV3	3423	4385	0.12%	0.013%
42	18.421	2620	2624	2625	rVB4	3481	4010	0.11%	0.012%
43	18.745	2674	2679	2680	rBV4	4268	5892	0.16%	0.018%
44	19.003	2718	2723	2726	rBV2	18594	33649	0.90%	0.103%
45	19.039	2726	2729	2735	rVB7	24249	35568	0.96%	0.108%
46	19.156	2744	2749	2761	rBV	173686	295637	7.95%	0.902%
47	19.250	2761	2765	2768	rVV	19733	26786	0.72%	0.082%
48	19.303	2770	2774	2778	rBV	112175	132351	3.56%	0.404%
49	19.362	2778	2784	2793	rVV	2093333	2894468	77.81%	8.828%
50	19.486	2803	2805	2806	rVB2	5673	3727	0.10%	0.011%
51	19.615	2822	2827	2832	rBV	16988	35553	0.96%	0.108%
52	19.745	2847	2849	2851	rBV3	4801	3906	0.10%	0.012%
53	20.362	2950	2954	2958	rVB	96531	103100	2.77%	0.314%
54	20.892	3040	3044	3050	rBV	270799	364572	9.80%	1.112%
55	21.168	3086	3091	3102	rBV	1622553	2288346	61.51%	6.979%
56	21.756	3188	3191	3193	rBV4	62288	74195	1.99%	0.226%
57	22.203	3264	3267	3273	rVB2	119726	133566	3.59%	0.407%
58	22.691	3346	3350	3354	rVB	152394	193926	5.21%	0.591%
59	23.209	3431	3438	3447	rBV	2002371	3720144	100.00%	11.346%
60	23.344	3455	3461	3474	rVB2	1266240	2401804	64.56%	7.326%
61	23.838	3541	3545	3553	rVB	180084	348364	9.36%	1.063%
62	25.656	3850	3854	3863	rVB8	189775	442733	11.90%	1.350%

Sum of corrected areas: 32786781

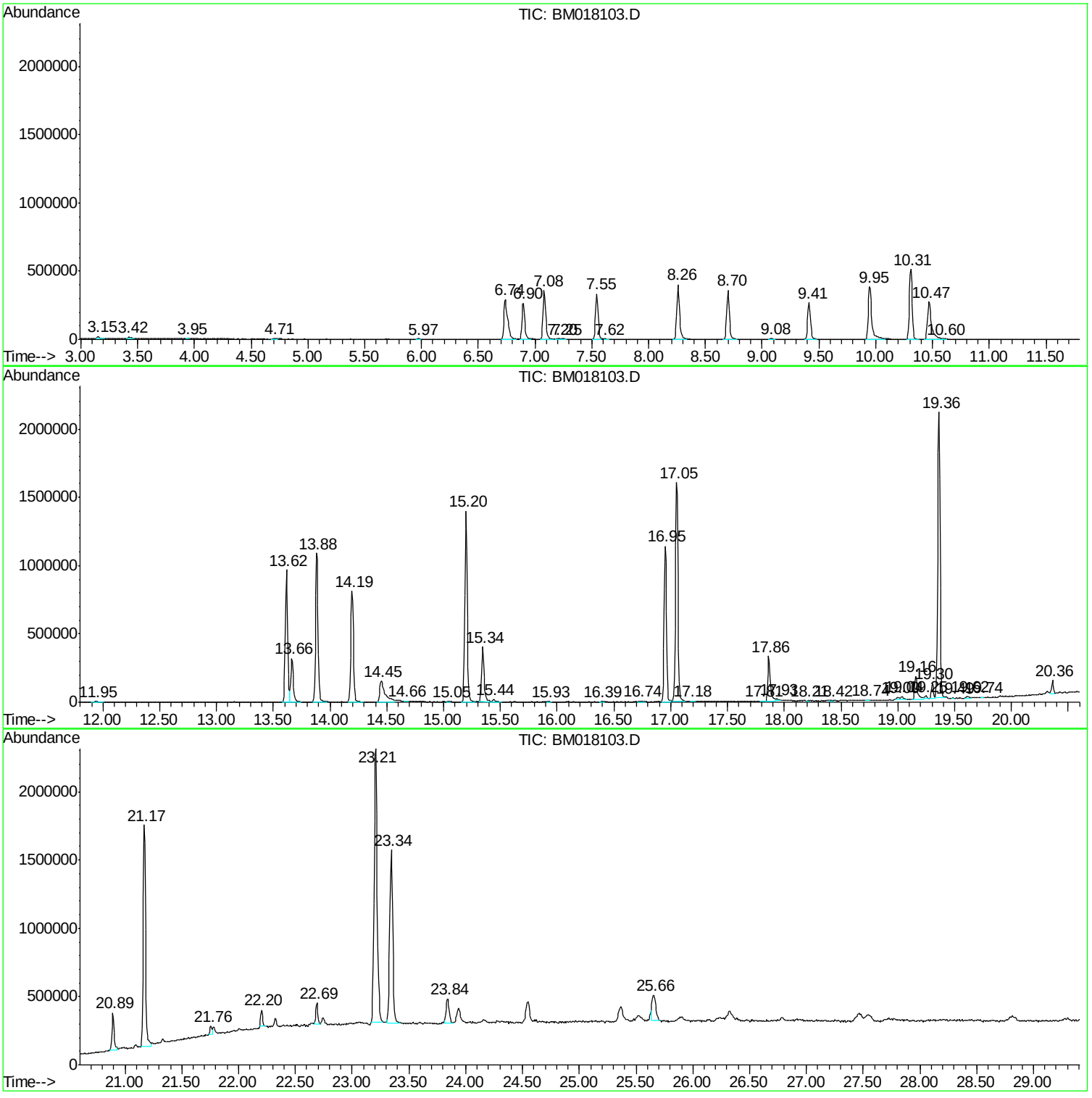
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018103.D
Acq On : 12 Dec 2018 21:28
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E61

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018103.D
Acq On : 12 Dec 2018 21:28
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E61

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

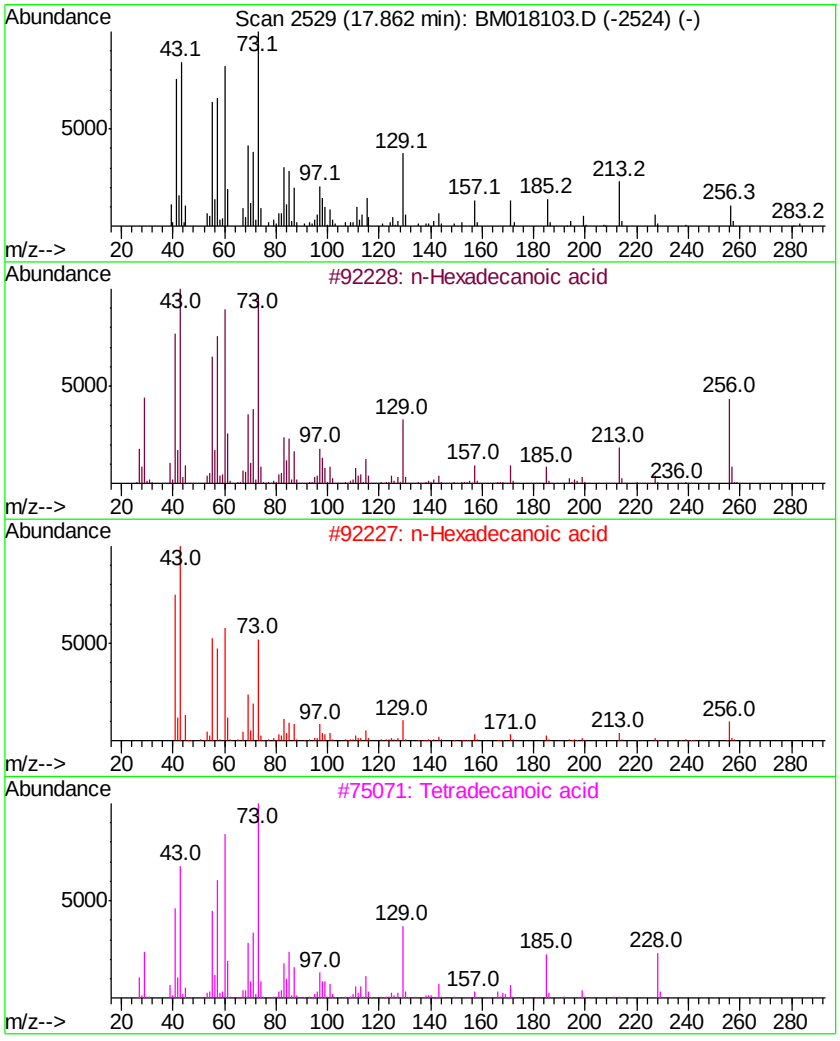
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

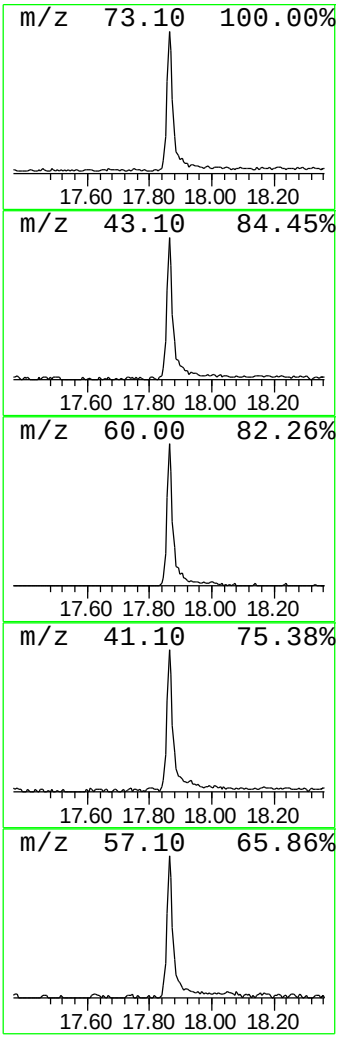
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.86	6.13 ng/ul	497164	Phenanthrene-d10	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	94
4	Tridecanoic acid	214	C13H26O2	000638-53-9	91
5	Dodecanoic acid	200	C12H24O2	000143-07-7	80





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018103.D
Acq On : 12 Dec 2018 21:28
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E61

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

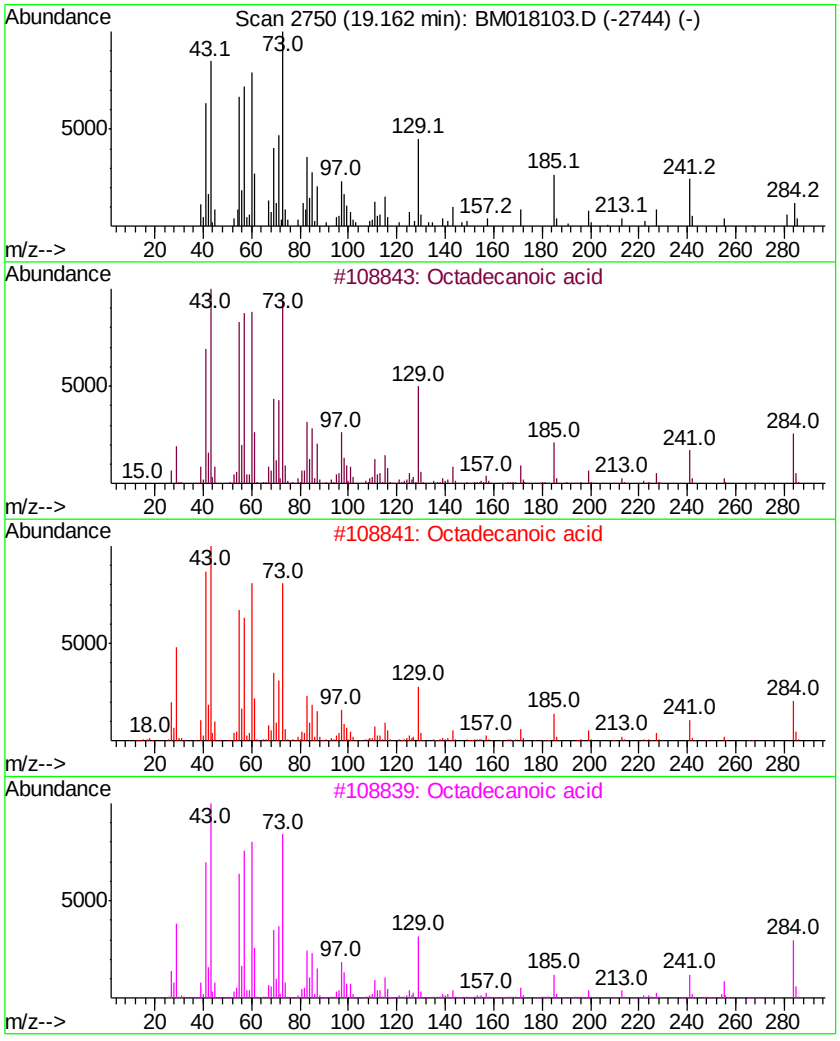
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

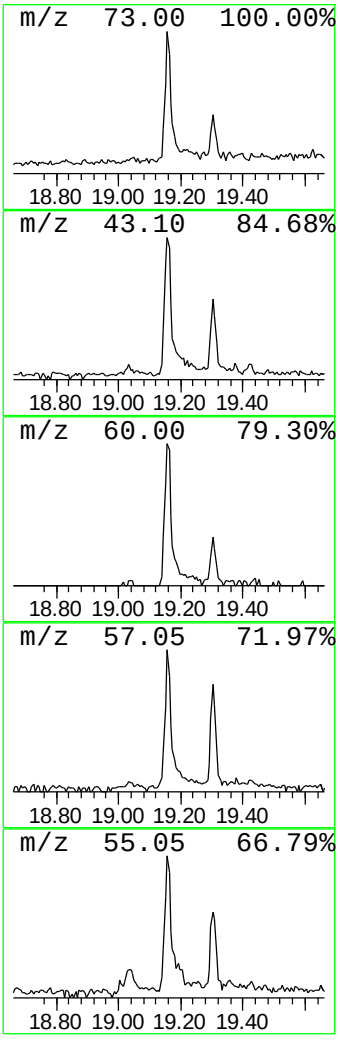
****

Peak Number 2 Octadecanoic acid Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.16	2.58 ng/ul	295637	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Octadecanoic acid	284	C18H36O2	000057-11-4	98
3	Octadecanoic acid	284	C18H36O2	000057-11-4	94
4	Octadecanoic acid	284	C18H36O2	000057-11-4	91
5	Tetradecanoic acid	228	C14H28O2	000544-63-8	74





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018103.D
Acq On : 12 Dec 2018 21:28
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E61

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

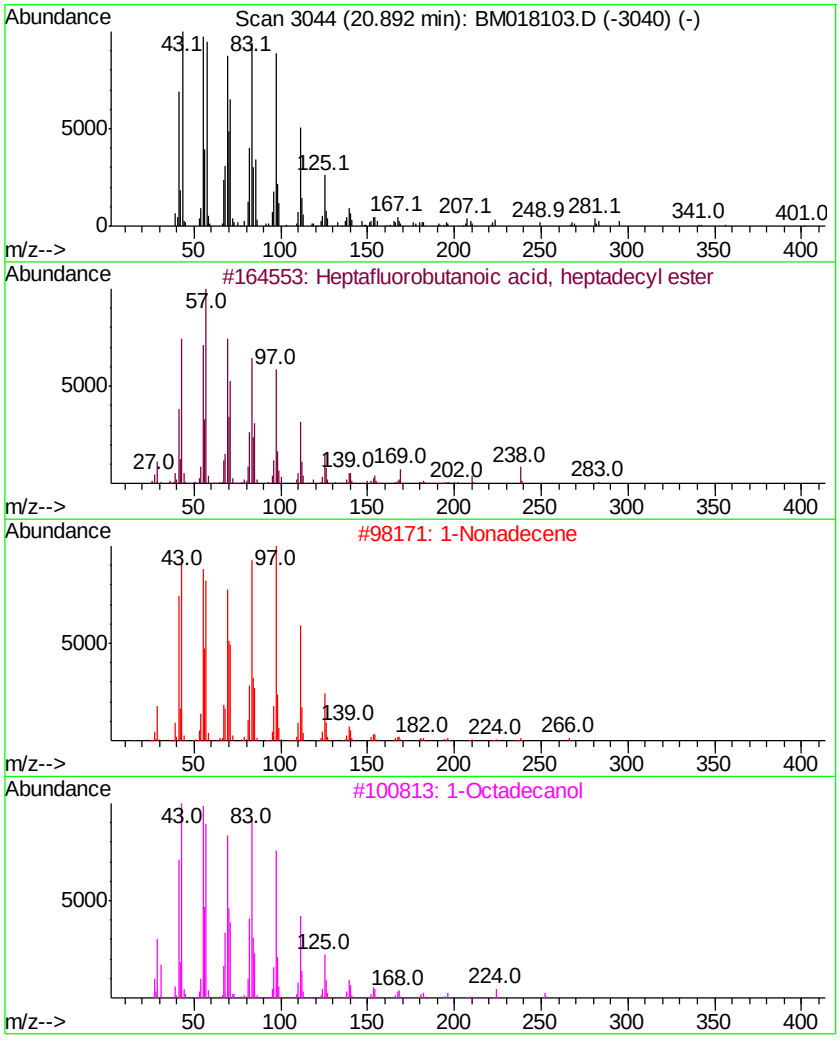
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

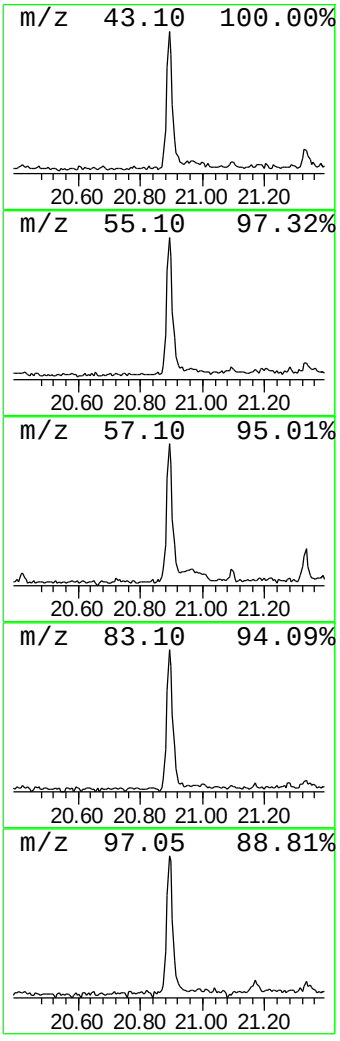
****

Peak Number 3 Heptafluorobutanoic acid, h... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	3.19 ng/ul	364572	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	94
2	1-Nonadecene	266	C19H38	018435-45-5	91
3	1-Octadecanol	270	C18H38O	000112-92-5	91
4	Trichloroacetic acid, hexadecyl ...	386	C18H33Cl3O2	074339-54-1	91
5	1-Heneicosyl formate	340	C22H44O2	077899-03-7	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018103.D
Acq On : 12 Dec 2018 21:28
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E61

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

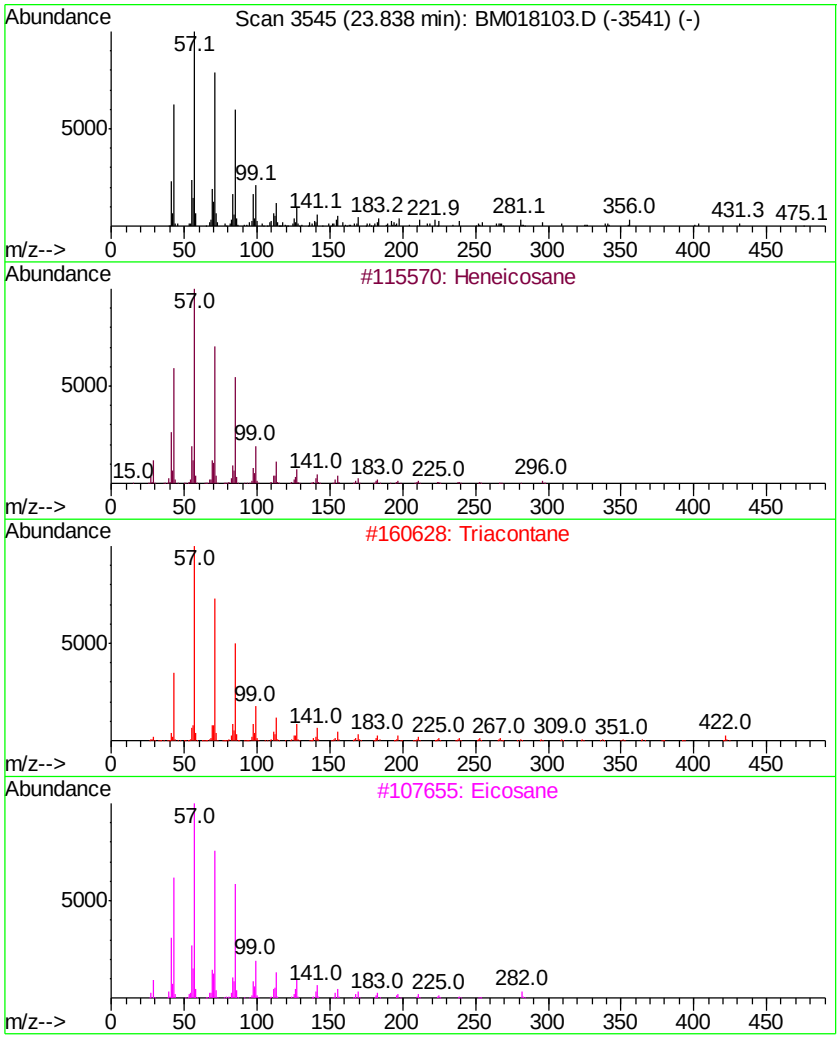
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

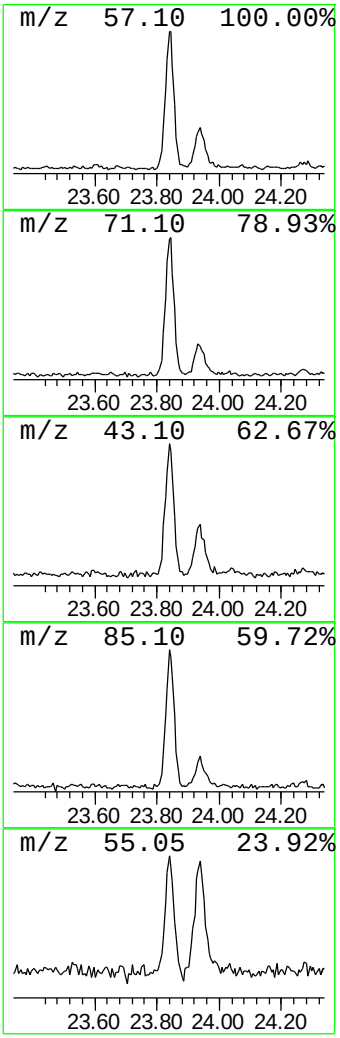
****

Peak Number 4 (DEL) Alkane: Straight-Chai... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.84	2.90 ng/ul	348364	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	97
2	Triacontane	422	C30H62	000638-68-6	91
3	Eicosane	282	C20H42	000112-95-8	91
4	Pentadecane, 8-hexyl-	296	C21H44	013475-75-7	91
5	Octacosane	394	C28H58	000630-02-4	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018103.D
Acq On : 12 Dec 2018 21:28
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E61

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

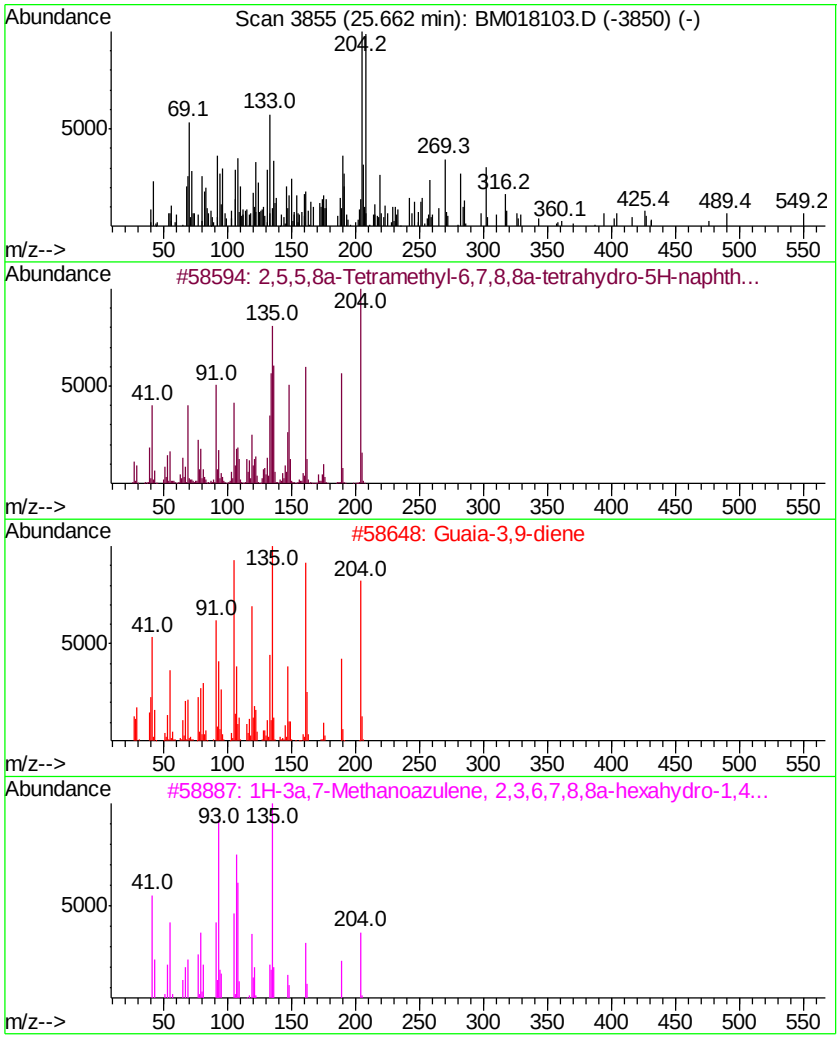
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

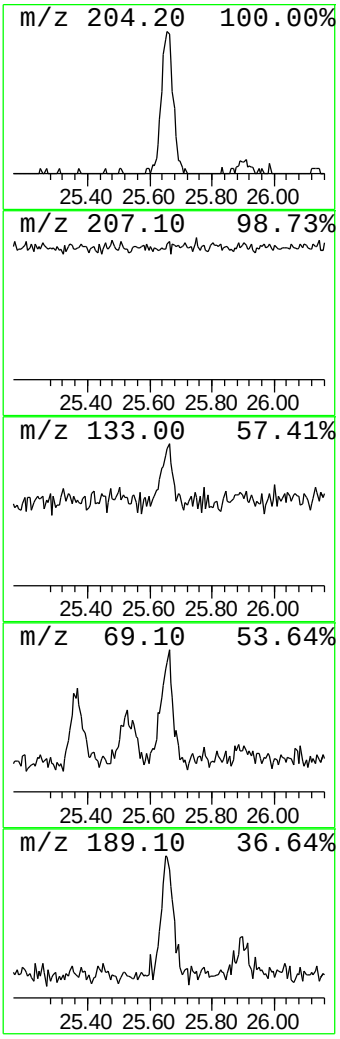
****

Peak Number 5 2,5,5,8a-Tetramethyl-6,7,8,... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.66	3.69 ng/ul	442733	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,5,5,8a-Tetramethyl-6,7,8,8a-te...	204	C14H20O	124957-09-1	55
2	Guaia-3,9-diene	204	C15H24	000489-83-8	45
3	1H-3a,7-Methanoazulene, 2,3,6,7,...	204	C15H24	000560-32-7	38
4	1H-Cyclopropa[e]azulene, 1a,2,3,4...	204	C15H24	000489-40-7	38
5	1,4-Dimethyl-8-isopropylidenetri...	204	C15H24	1000140-07-7	30





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018103.D
Acq On : 12 Dec 2018 21:28
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E61

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	17.86	6.1	ng/ul	497164	4	16.95	1621390	20.0
Octadecanoic acid	19.16	2.6	ng/ul	295637	5	21.17	2288350	20.0
Heptafluorobutano...	20.89	3.2	ng/ul	364572	5	21.17	2288350	20.0
(DEL) Alkane: Str...	23.84	2.9	ng/ul	348364	6	23.34	2401800	20.0
2,5,5,8a-Tetramet...	25.66	3.7	ng/ul	442733	6	23.34	2401800	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

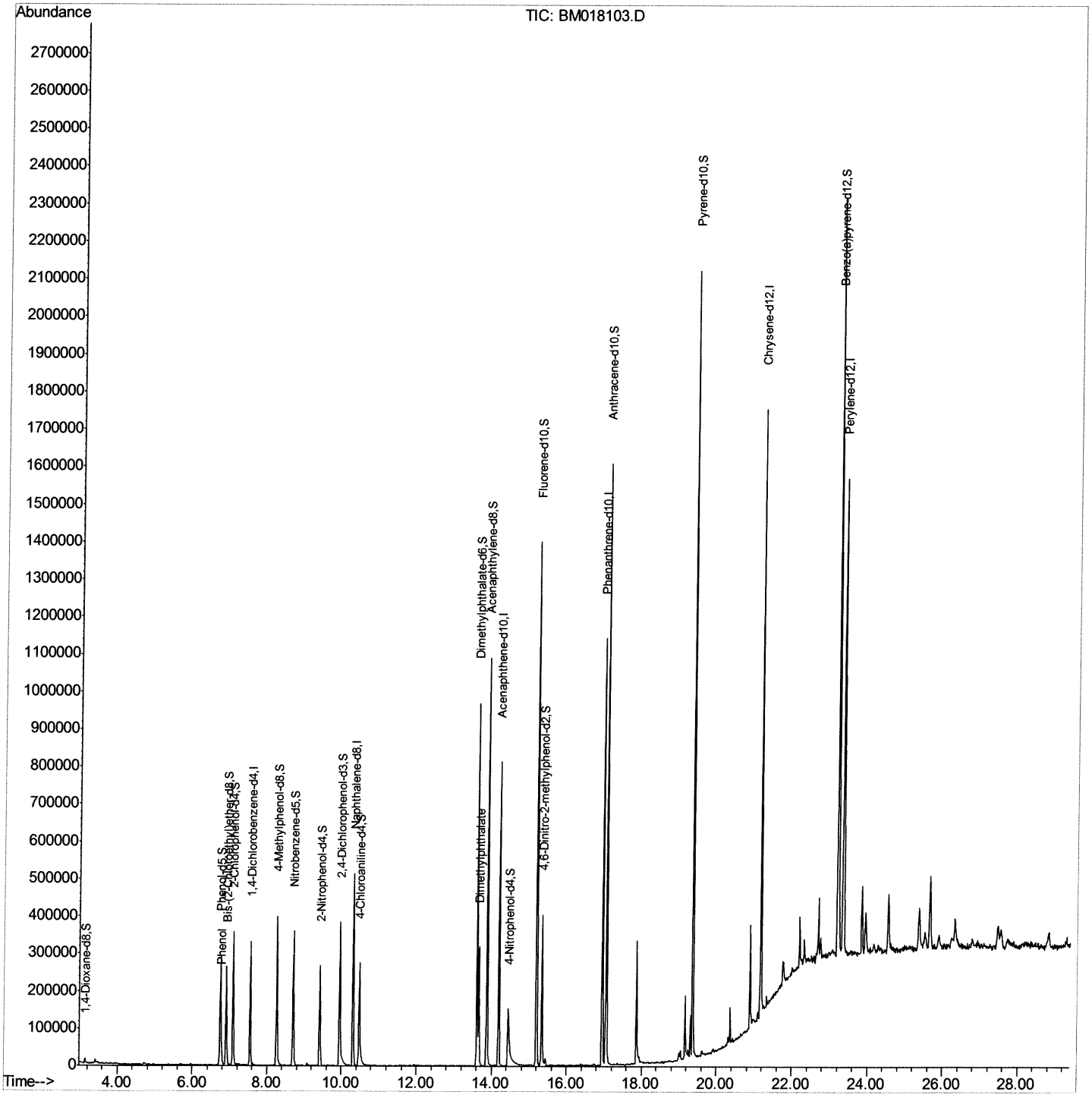
Quantitation Report (QT Reviewed)

Data File : BM018103.D
Acq On : 12 Dec 2018 21:28
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 13 03:16:19 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E61

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:15 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

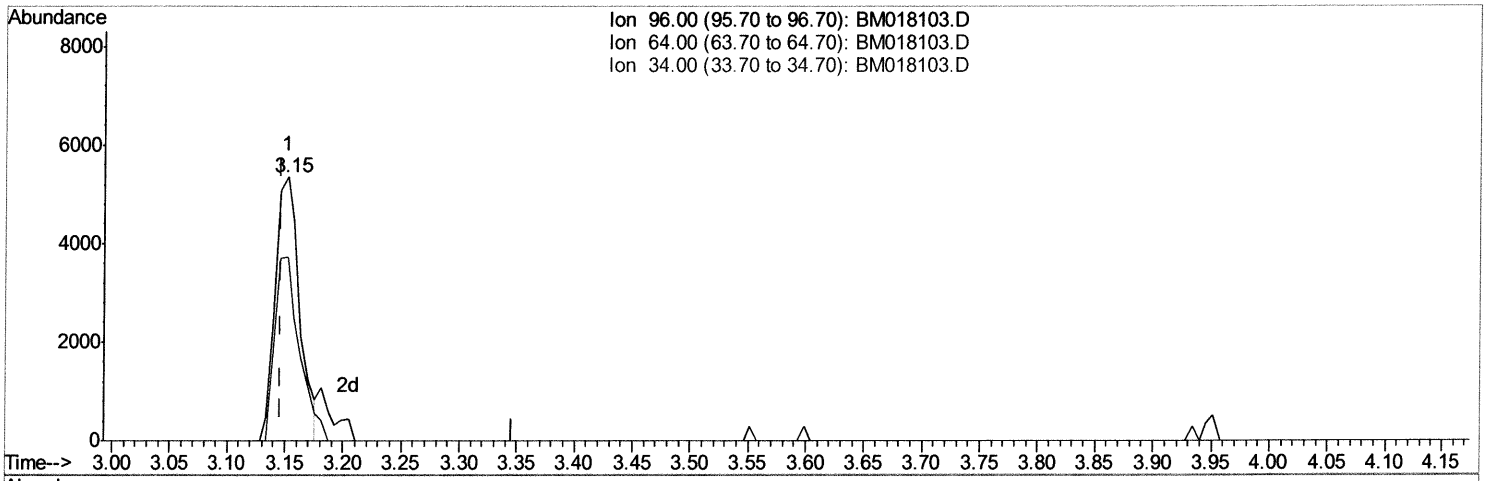
Quantitation Report (Qedit)

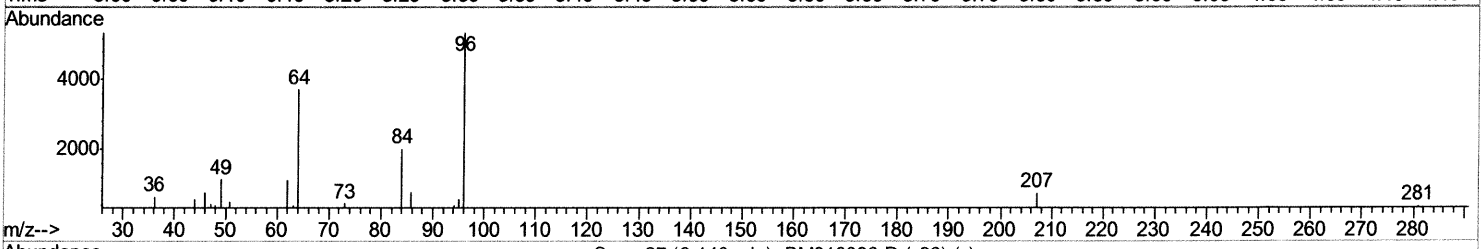
Data File : BM018103.D
Acq On : 12 Dec 2018 21:28
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 12 Sample Multiplier: 1

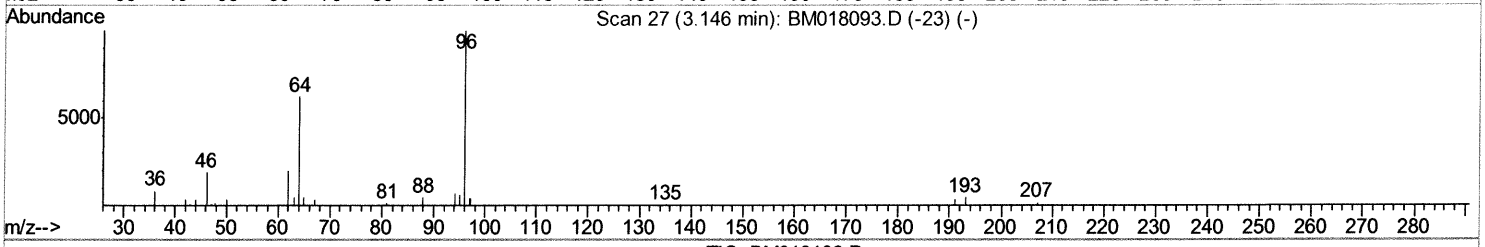
Quant Time: Dec 13 02:41:56 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E61

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:15 PM







TIC: BM018103.D

(3) 1,4-Dioxane-d8 (S)

3.152min (+0.006) 3.68ng/uL

response 7734

Ion	Exp%	Act%
96.00	100	100
64.00	68.40	69.63
34.00	0.00	0.00
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

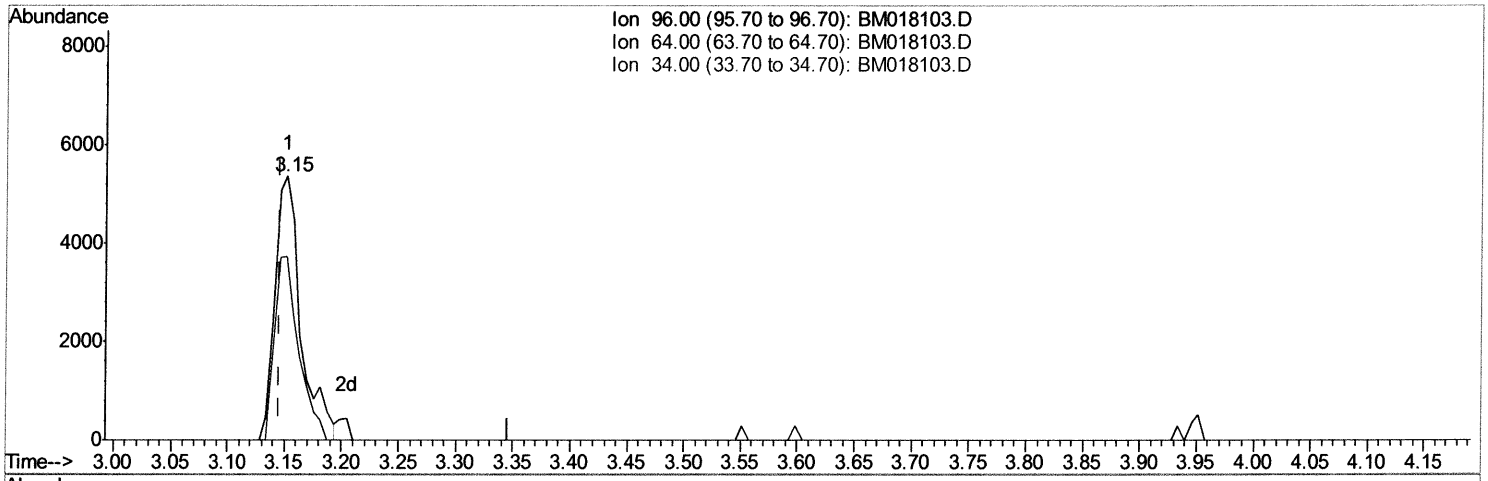
Quantitation Report (Qedit)

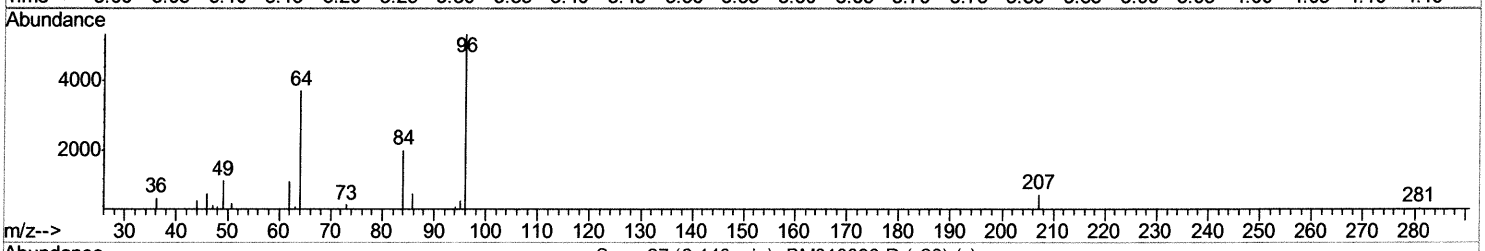
Data File : BM018103.D
Acq On : 12 Dec 2018 21:28
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 12 Sample Multiplier: 1

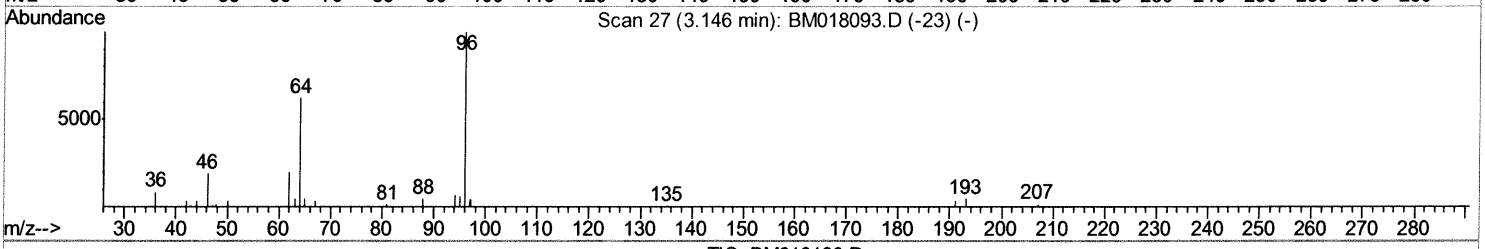
Quant Time: Dec 13 02:41:56 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E61

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:15 PM







TIC: BM018103.D

(3) 1,4-Dioxane-d8 (S)

3.152min (+0.006) 4.01ng/uL m SJ 12/13/18

response 8440

Ion	Exp%	Act%
96.00	100	100
64.00	68.40	69.63
34.00	0.00	0.00
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018103.D
Acq On : 12 Dec 2018 21:28
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 13 03:16:19 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E61

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:15 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	96209	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	439651	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	271554	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	646568	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	800716	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	905273	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	8440m>	4.01	ng/uL	0.00
5) Phenol-d5	6.74	99	203127	23.12	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	119764	22.60	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	178576	25.97	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	163738	22.81	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	92470	27.38	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	100448	25.96	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	166625	22.62	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	228443	36.14	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	678535	28.80	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	809666	28.39	ng/ul	0.00
51) 4-Nitrophenol-d4	14.45	143	79098	18.46	ng/ul	0.01
57) Fluorene-d10	15.20	176	569577	27.99	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	98072	21.22	ng/ul	0.00
70) Anthracene-d10	17.05	188	902155	28.03	ng/ul	0.00
78) Pyrene-d10	19.36	212	1071044	27.64	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	1385770	28.23	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	52766	6.016	ng/ul	96
44) Dimethylphthalate	13.66	163	222291	9.738	ng/ul	99

SJ 12/13/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E62

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-17
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018104.D
% Solids : 87.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	76	U
100-52-7	Benzaldehyde	370	U
108-95-2	Phenol	130	J
111-44-4	Bis(2-Chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	190	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2-oxybis(1-Chloropropane)	370	U
98-86-2	Acetophenone	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	190	U
67-72-1	Hexachloroethane	190	U
98-95-3	Nitrobenzene	190	U
78-59-1	Isophorone	190	U
88-75-5	2-Nitrophenol	190	U
105-67-9	2,4-Dimethylphenol	190	U
111-91-1	Bis(2-Chloroethoxy)methane	190	U
120-83-2	2,4-Dichlorophenol	190	U
91-20-3	Naphthalene	190	U
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	190	U
105-60-2	Caprolactam	370	U
59-50-7	4-Chloro-3-methylphenol	190	U
91-57-6	2-Methylnaphthalene	190	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E62

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-17
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018104.D
% Solids : 87.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	190	U
92-52-4	1,1-Biphenyl	190	U
91-58-7	2-Chloronaphthalene	190	U
88-74-4	2-Nitroaniline	190	U
131-11-3	Dimethylphthalate	210	
606-20-2	2,6-Dinitrotoluene	190	U
208-96-8	Acenaphthylene	190	U
99-09-2	3-Nitroaniline	370	U
83-32-9	Acenaphthene	190	U
51-28-5	2,4-Dinitrophenol	370	U
100-02-7	4-Nitrophenol	370	U
132-64-9	Dibenzofuran	190	U
121-14-2	2,4-Dinitrotoluene	190	U
84-66-2	Diethylphthalate	190	U
86-73-7	Fluorene	190	U
7005-72-3	4-Chlorophenyl-phenylether	190	U
100-01-6	4-Nitroaniline	370	U
534-52-1	4,6-Dinitro-2-methylphenol	370	U
86-30-6	N-Nitrosodiphenylamine	190	U
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U
101-55-3	4-Bromophenyl-phenylether	190	U
118-74-1	Hexachlorobenzene	190	U
1912-24-9	Atrazine	370	U
87-86-5	Pentachlorophenol	370	U
85-01-8	Phenanthrene	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E62

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-17
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018104.D
% Solids : 87.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	190	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	190	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	190	U
85-68-7	Butylbenzylphthalate	190	U
91-94-1	3,3-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	190	U
218-01-9	Chrysene	190	U
117-81-7	Bis(2-ethylhexyl)phthalate	190	U
117-84-0	Di-n-octyl phthalate	370	U
205-99-2	Benzo(b)fluoranthene	190	U
207-08-9	Benzo(k)fluoranthene	190	U
50-32-8	Benzo(a)pyrene	190	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	U
53-70-3	Dibenzo(a,h)anthracene	190	U
191-24-2	Benzo(g,h,i)perylene	190	U
58-90-2	2,3,4,6-Tetrachlorophenol	190	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E62

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-17
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018104.D
% Solids : 87.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/12/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000057-10-3	n-Hexadecanoic acid	17.86	220	JN
2	077899-03-7	1-Heneicosyl formate	20.89	90	JN
3	E966796	Total Alkanes	N/A	510	

EPA-designated Registry Number.

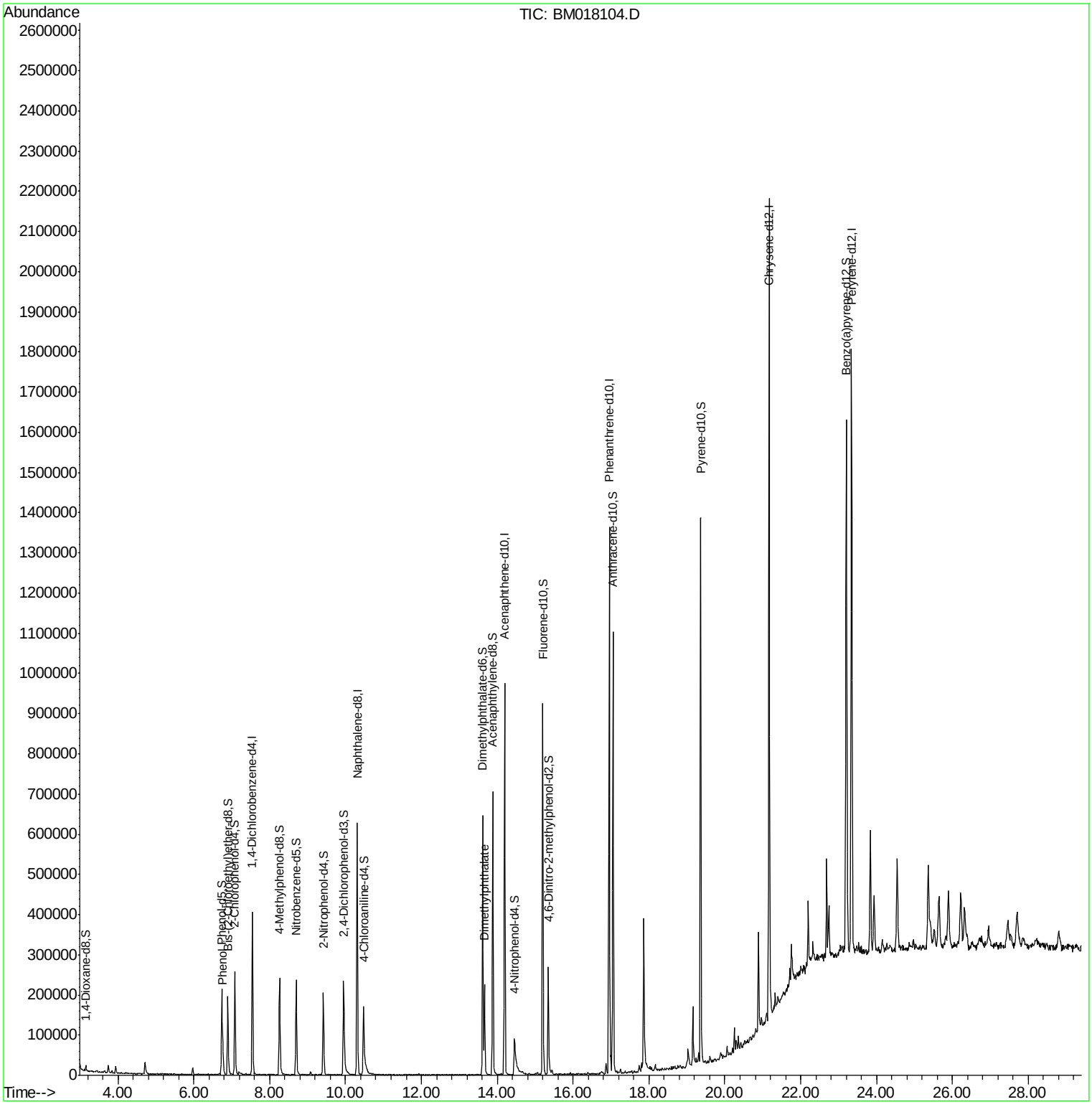
Quantitation Report (LSC Reviewed)

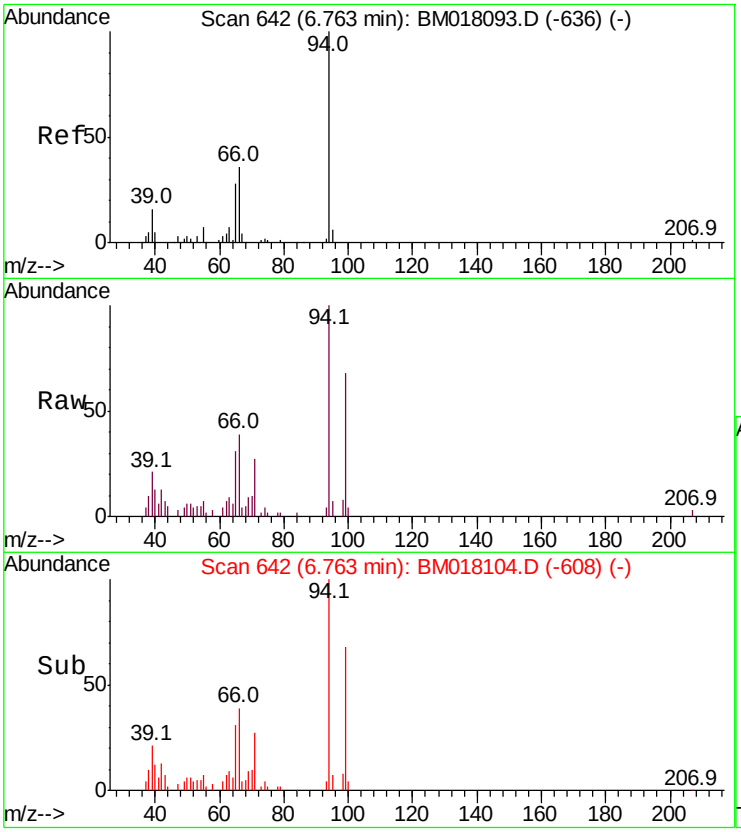
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 13 03:26:06 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E62

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:17 PM

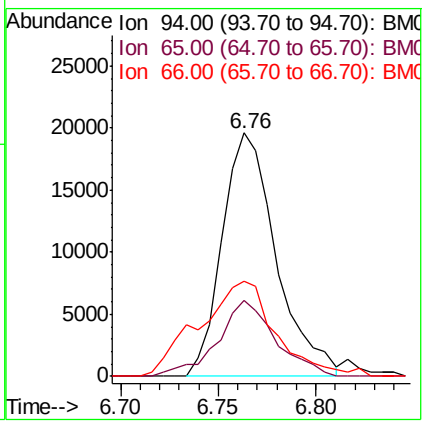




#6
Phenol
Concen: 3.537 ng/ul
RT: 6.76 min Scan# 642
Delta R.T. 0.00 min
Lab File: BM018104.D
Acq: 12 Dec 2018 22:04

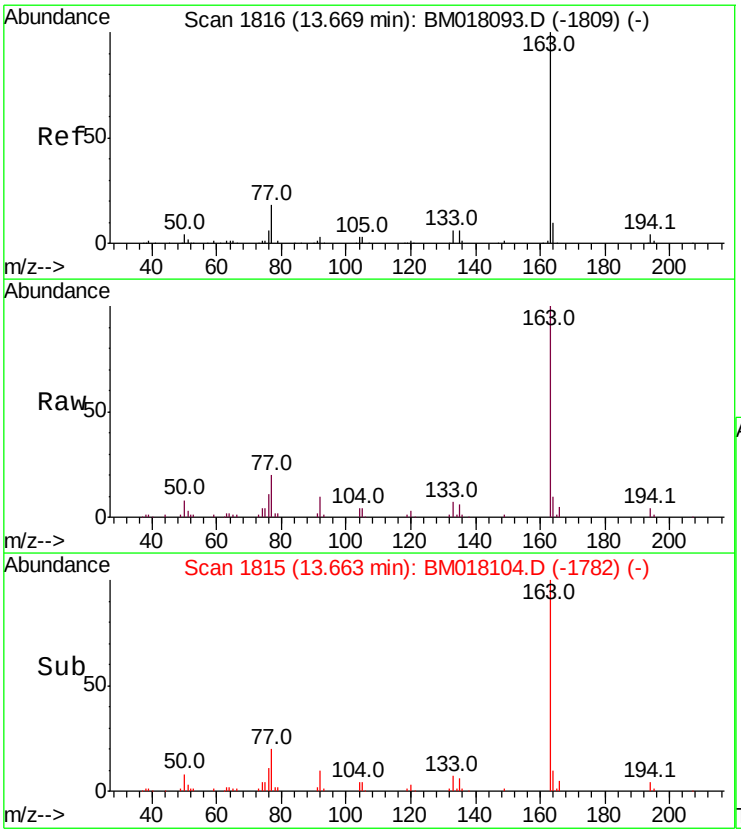
Tgt Ion: 94 Resp: 37626

Ion	Ratio	Lower	Upper
94	100		
65	31.1	24.7	37.1
66	38.9	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9E62

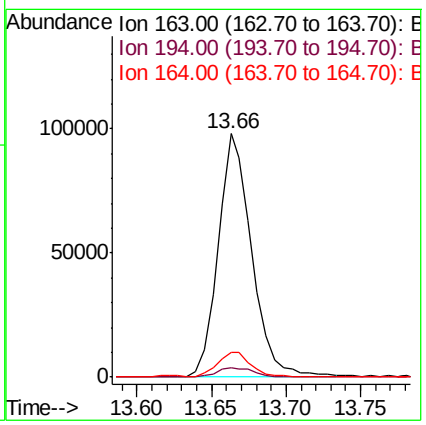
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:17 PM



#44
Dimethylphthalate
Concen: 5.591 ng/ul
RT: 13.66 min Scan# 1815
Delta R.T. -0.01 min
Lab File: BM018104.D
Acq: 12 Dec 2018 22:04

Tgt Ion:163 Resp: 154433

Ion	Ratio	Lower	Upper
163	100		
194	4.0	3.4	5.0
164	10.2	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E62

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:17 PM

Quant Time: Dec 13 03:26:06 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	116696	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	523308	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	328570	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	771841	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	958156	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	1069108	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	7586	2.98	ng/uL	0.00
5) Phenol-d5	6.74	99	144545	13.56	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	90870	14.14	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	129044	15.47	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	109242	12.55	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	62714	15.60	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	72344	15.71	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	117648m	13.42	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	139284m	18.51	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	469264	16.46	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	520730	15.09	ng/ul	0.00
51) 4-Nitrophenol-d4	14.46	143	56169m	10.84	ng/ul	0.02
57) Fluorene-d10	15.20	176	391763	15.91	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	63348	11.48	ng/ul	0.00
70) Anthracene-d10	17.05	188	622091	16.19	ng/ul	0.00
78) Pyrene-d10	19.36	212	729386	15.73	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	936344	16.15	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	37626	3.537	ng/ul	96
44) Dimethylphthalate	13.66	163	154433	5.591	ng/ul	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E62

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.111	20	21	25	rVB3	4957	3884	0.14%	0.013%
2	3.152	25	28	33	rBV3	13923	19507	0.68%	0.065%
3	3.652	107	113	115	rBV4	4722	8238	0.29%	0.027%
4	3.746	124	129	136	rVB2	19034	31127	1.09%	0.104%
5	3.834	141	144	148	rBV3	5291	6540	0.23%	0.022%
6	3.946	159	163	169	rBV3	18133	26521	0.93%	0.088%
7	4.193	203	205	210	rVB3	2967	5064	0.18%	0.017%
8	4.246	210	214	218	rBV3	3716	5052	0.18%	0.017%
9	4.716	290	294	303	rVB2	27185	53684	1.88%	0.179%
10	5.128	359	364	368	rVB3	2158	4591	0.16%	0.015%
11	5.169	368	371	375	rBV3	2143	3663	0.13%	0.012%
12	5.975	503	508	513	rVB2	17021	23851	0.84%	0.080%
13	6.740	631	638	653	rBV2	212537	496842	17.40%	1.656%
14	6.899	658	665	676	rBV	194507	322532	11.29%	1.075%
15	7.081	688	696	708	rBV	256354	439153	15.38%	1.464%
16	7.193	712	715	720	rBV3	8008	14543	0.51%	0.048%
17	7.369	739	745	748	rBV4	3083	5115	0.18%	0.017%
18	7.540	767	774	784	rBV	405140	685799	24.01%	2.286%
19	7.622	786	788	791	rVB2	3717	3295	0.12%	0.011%
20	8.263	888	897	911	rBV	241353	469669	16.45%	1.566%
21	8.698	964	971	985	rBV	236848	425155	14.89%	1.417%
22	9.081	1032	1036	1042	rVB3	8582	14354	0.50%	0.048%
23	9.416	1085	1093	1104	rBV	205121	372656	13.05%	1.242%
24	9.951	1178	1184	1201	rBV	233985	508030	17.79%	1.694%
25	10.310	1237	1245	1257	rBV	627308	1048956	36.73%	3.497%
26	10.475	1266	1273	1292	rBV	169137	471572	16.51%	1.572%
27	11.928	1515	1520	1522	rBV2	3477	4820	0.17%	0.016%
28	13.616	1799	1807	1812	rBV	647004	975700	34.16%	3.253%
29	13.663	1812	1815	1827	rVB	223393	345715	12.10%	1.153%
30	13.880	1845	1852	1869	rBV	706413	1092190	38.24%	3.641%
31	14.098	1886	1889	1892	rVB4	3195	3945	0.14%	0.013%
32	14.192	1898	1905	1916	rBV2	973040	1515165	53.05%	5.052%
33	14.457	1944	1950	1964	rBV3	90999	290937	10.19%	0.970%
34	15.004	2040	2043	2047	rVB2	3539	4385	0.15%	0.015%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E62

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	15.045	2047	2050	2051	rBV2	4905	4864	0.17%	0.016%
36	15.198	2068	2076	2089	rBV	924916	1462420	51.21%	4.876%
37	15.345	2096	2101	2111	rVV	268897	435100	15.23%	1.451%
38	15.439	2114	2117	2126	rVB6	12401	22142	0.78%	0.074%
39	15.621	2145	2148	2151	rBV3	2803	3806	0.13%	0.013%
40	15.927	2195	2200	2203	rBV4	4176	5899	0.21%	0.020%
41	16.092	2225	2228	2231	rBV4	2895	3991	0.14%	0.013%
42	16.316	2263	2266	2270	rBV2	2690	3350	0.12%	0.011%
43	16.386	2274	2278	2281	rVV4	3457	5584	0.20%	0.019%
44	16.516	2296	2300	2301	rBV2	3507	4284	0.15%	0.014%
45	16.727	2331	2336	2337	rBV3	5133	6974	0.24%	0.023%
46	16.868	2355	2360	2366	rBV4	27222	43251	1.51%	0.144%
47	16.951	2367	2374	2379	rVV	1361246	1940141	67.93%	6.468%
48	16.992	2379	2381	2385	rVV	46971	61879	2.17%	0.206%
49	17.051	2385	2391	2404	rVV2	1100187	1621927	56.79%	5.407%
50	17.151	2406	2408	2412	rVV4	6538	8383	0.29%	0.028%
51	17.192	2412	2415	2418	rVV3	5337	7865	0.28%	0.026%
52	17.251	2421	2425	2430	rVB4	11830	16916	0.59%	0.056%
53	17.463	2458	2461	2463	rVV3	4693	5390	0.19%	0.018%
54	17.498	2463	2467	2468	rVV2	3628	4480	0.16%	0.015%
55	17.545	2471	2475	2479	rVB5	6802	9789	0.34%	0.033%
56	17.674	2493	2497	2498	rBV3	3171	3645	0.13%	0.012%
57	17.739	2503	2508	2516	rBV8	19652	41234	1.44%	0.137%
58	17.804	2516	2519	2522	rBV4	22013	27977	0.98%	0.093%
59	17.863	2522	2529	2539	rBV2	372089	577451	20.22%	1.925%
60	18.021	2553	2556	2561	rVV7	8877	9966	0.35%	0.033%
61	18.063	2561	2563	2567	rVB4	7251	8238	0.29%	0.027%
62	18.163	2575	2580	2585	rBV6	17023	28378	0.99%	0.095%
63	18.233	2590	2592	2594	rBV2	4646	4925	0.17%	0.016%
64	18.292	2600	2602	2604	rBV2	3704	3348	0.12%	0.011%
65	18.345	2607	2611	2613	rBV4	6544	9599	0.34%	0.032%
66	18.415	2621	2623	2629	rBV7	4681	6707	0.23%	0.022%
67	18.468	2629	2632	2637	rVB7	3985	6305	0.22%	0.021%
68	18.545	2643	2645	2648	rVB4	4070	4004	0.14%	0.013%
69	18.592	2650	2653	2657	rBV4	9695	13839	0.48%	0.046%
70	18.639	2657	2661	2664	rVV5	8829	12241	0.43%	0.041%
71	18.674	2666	2667	2673	rVB5	8442	9882	0.35%	0.033%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E62

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

72	18.757	2680	2681	2686	rBV3	5230	6612	0.23%	0.022%
73	18.857	2696	2698	2701	rVB4	5487	5015	0.18%	0.017%
74	18.892	2701	2704	2709	rBV7	7898	12189	0.43%	0.041%
75	19.010	2719	2724	2725	rBV3	19686	32686	1.14%	0.109%
76	19.033	2725	2728	2731	rVV4	28748	40338	1.41%	0.134%
77	19.157	2744	2749	2759	rBV2	147639	244866	8.57%	0.816%
78	19.245	2762	2764	2768	rVB3	10599	11823	0.41%	0.039%
79	19.304	2771	2774	2778	rBV3	24177	24134	0.85%	0.080%
80	19.362	2778	2784	2792	rBV	1352637	2019793	70.72%	6.734%
81	19.604	2822	2825	2829	rBV3	17158	24039	0.84%	0.080%
82	19.715	2842	2844	2847	rBV4	8387	10169	0.36%	0.034%
83	19.892	2873	2874	2877	rBV3	11103	11679	0.41%	0.039%
84	19.956	2883	2885	2886	rBV2	8886	5708	0.20%	0.019%
85	20.062	2899	2903	2905	rBV3	22438	30362	1.06%	0.101%
86	20.198	2922	2926	2930	rBV5	14810	20977	0.73%	0.070%
87	20.251	2930	2935	2940	rBV4	65555	99220	3.47%	0.331%
88	20.292	2940	2942	2943	rBV2	21400	15989	0.56%	0.053%
89	20.362	2950	2954	2957	rBV5	33293	38416	1.35%	0.128%
90	20.892	3040	3044	3052	rBV	237386	332472	11.64%	1.108%
91	21.168	3085	3091	3102	rBV	2039431	2797726	97.96%	9.328%
92	21.756	3188	3191	3200	rBV6	84539	162796	5.70%	0.543%
93	22.203	3263	3267	3270	rBV2	151421	189369	6.63%	0.631%
94	22.686	3345	3349	3353	rBV	234232	316403	11.08%	1.055%
95	22.739	3355	3358	3365	rVB6	120608	192255	6.73%	0.641%
96	23.203	3430	3437	3448	rVB	1320740	2736335	95.81%	9.123%
97	23.339	3454	3460	3472	rVB	1497957	2855985	100.00%	9.522%
98	23.839	3540	3545	3553	rVB	299739	549733	19.25%	1.833%
99	24.544	3660	3665	3673	rVB2	222162	469716	16.45%	1.566%
100	25.362	3799	3804	3822	rVB2	196301	588989	20.62%	1.964%

Sum of corrected areas: 29994218

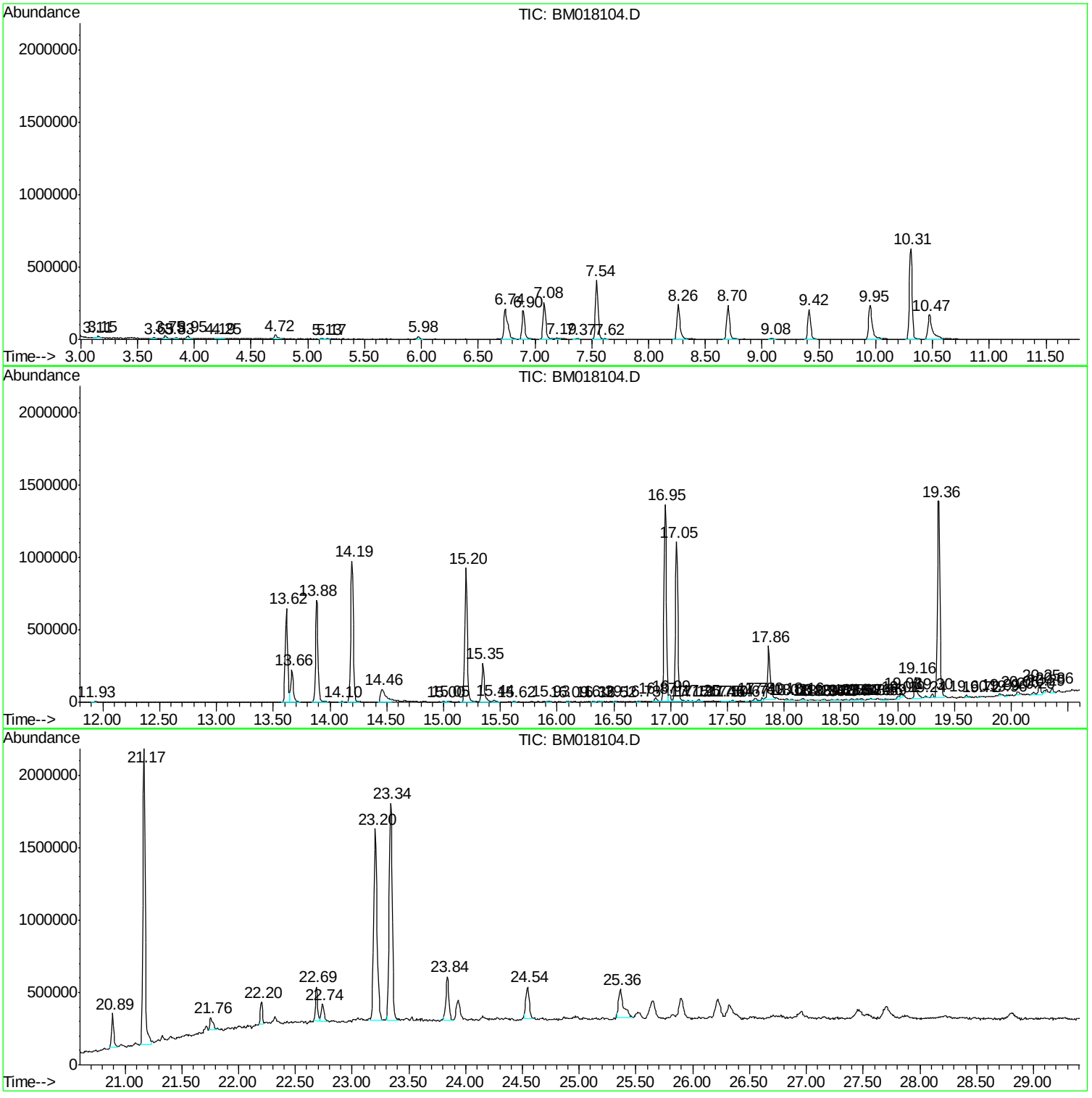
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E62

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E62

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

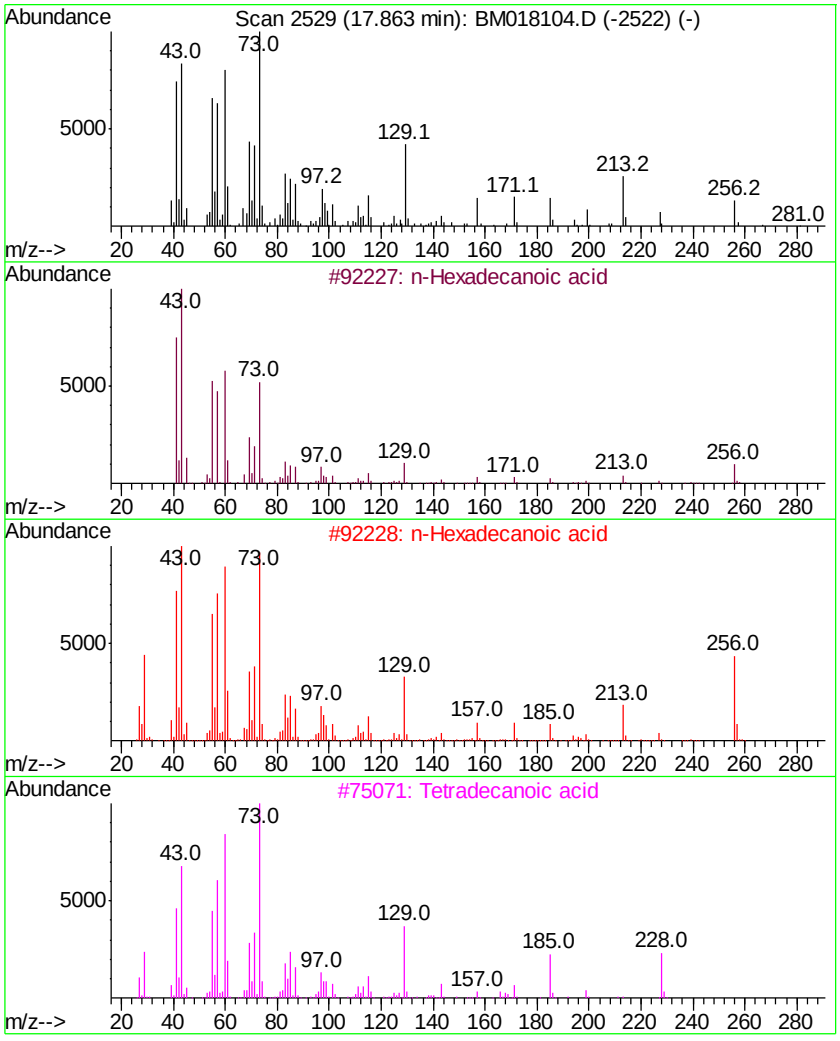
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

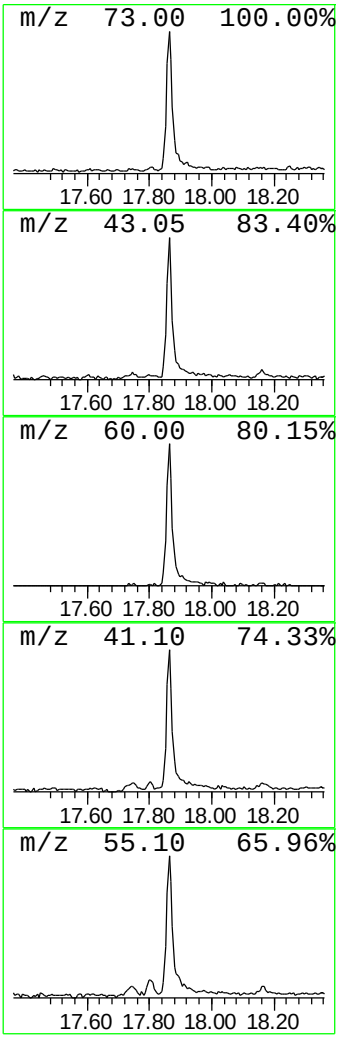
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.86	5.95 ng/ul	577451	Phenanthrene-d10	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	93
4	Tridecanoic acid	214	C13H26O2	000638-53-9	89
5	Tridecanoic acid	214	C13H26O2	000638-53-9	87





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E62

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

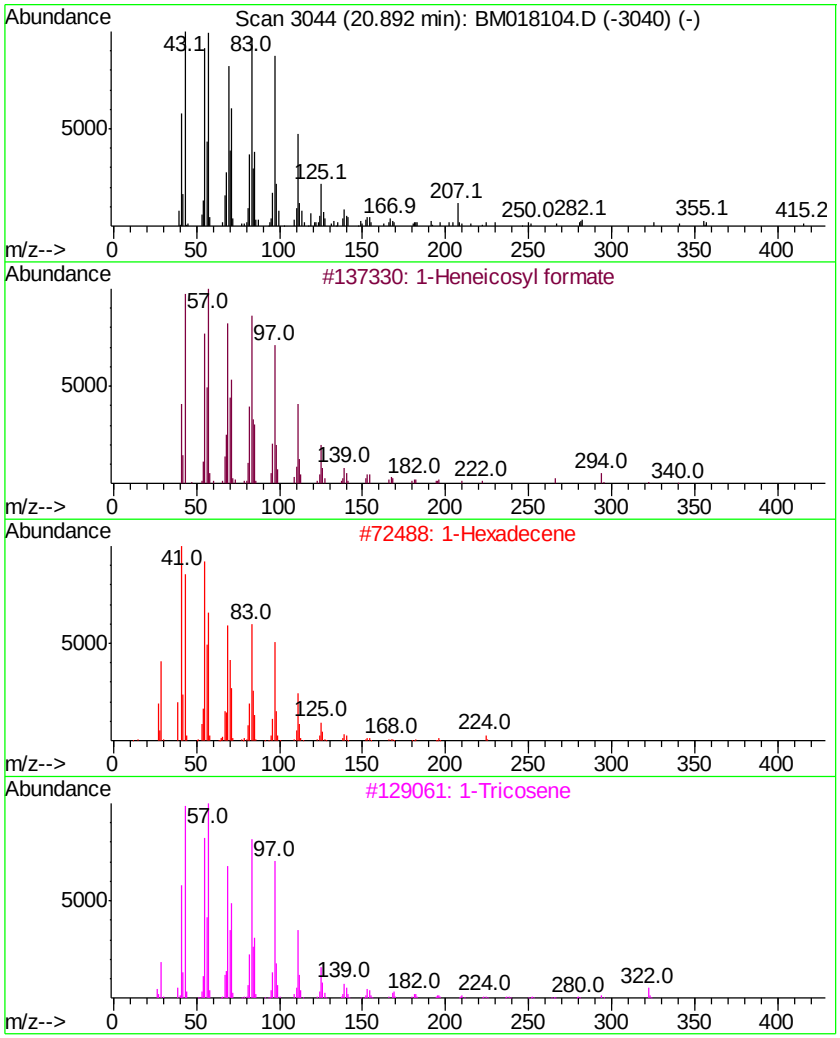
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

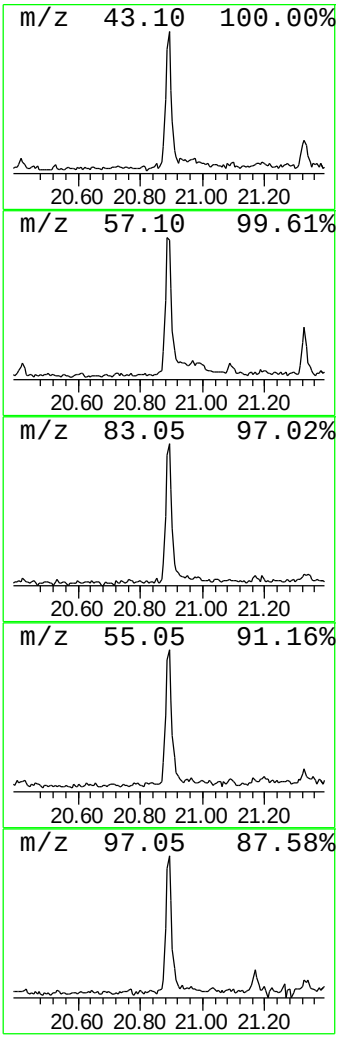
****

Peak Number 2 1-Heneicosyl formate Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	2.38 ng/ul	332472	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Heneicosyl formate	340	C22H44O2	077899-03-7	94
2	1-Hexadecene	224	C16H32	000629-73-2	93
3	1-Tricosene	322	C23H46	018835-32-0	93
4	Dichloroacetic acid, heptadecyl ...	366	C19H36Cl2O2	1000282-98-2	93
5	3-Eicosene, (E)-	280	C20H40	074685-33-9	92





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E62

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

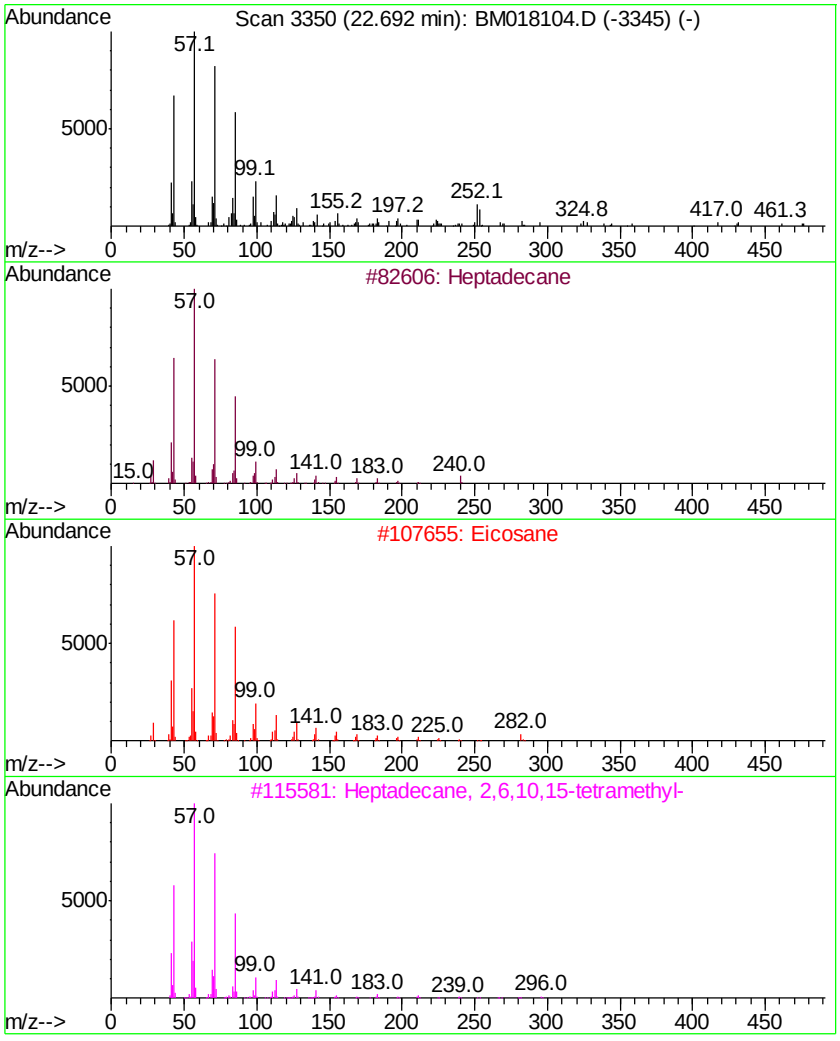
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

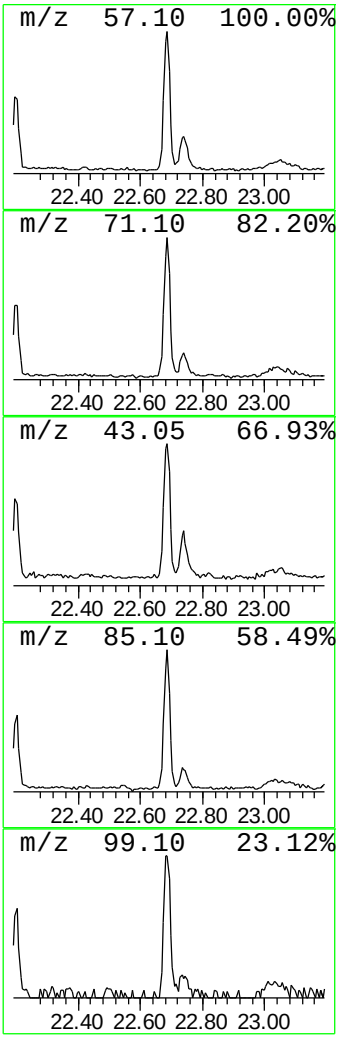
****

Peak Number 3 (DEL) Alkane: Straight-Chai... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.69	2.22 ng/ul	316403	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptadecane	240	C17H36	000629-78-7	93
2	Eicosane	282	C20H42	000112-95-8	93
3	Heptadecane, 2,6,10,15-tetramethyl-	296	C21H44	054833-48-6	91
4	Tetracosane	338	C24H50	000646-31-1	90
5	Triacontane	422	C30H62	000638-68-6	90





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E62

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

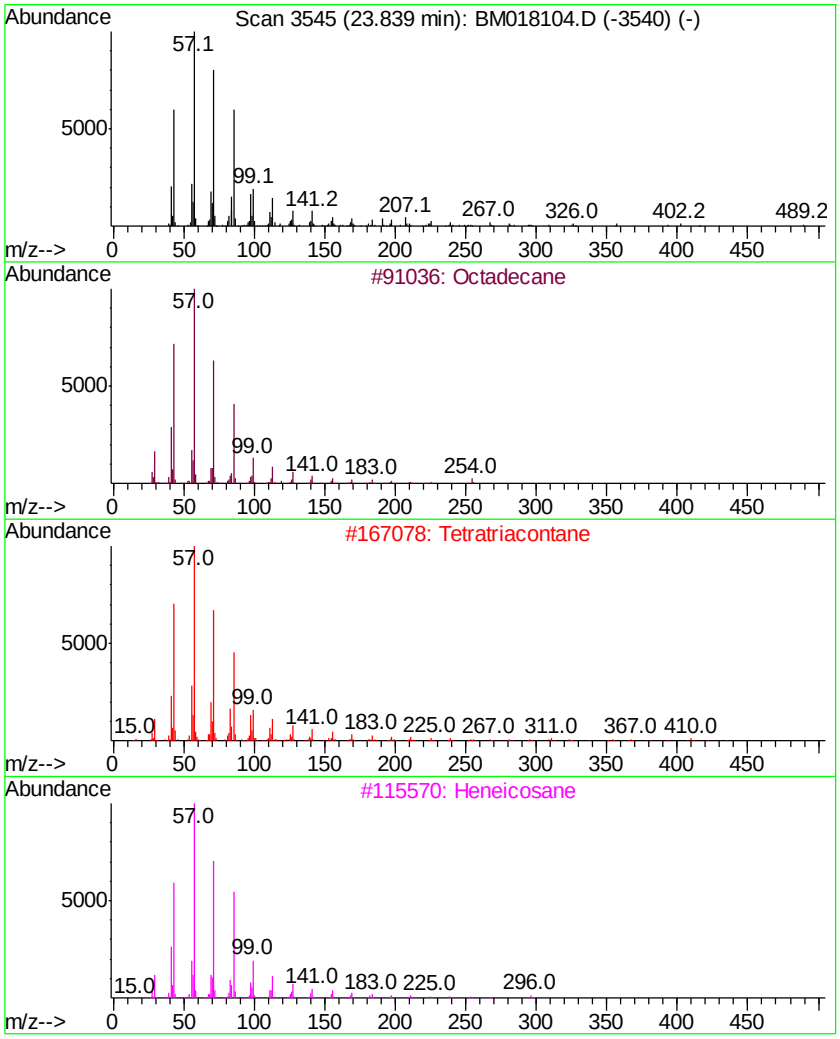
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

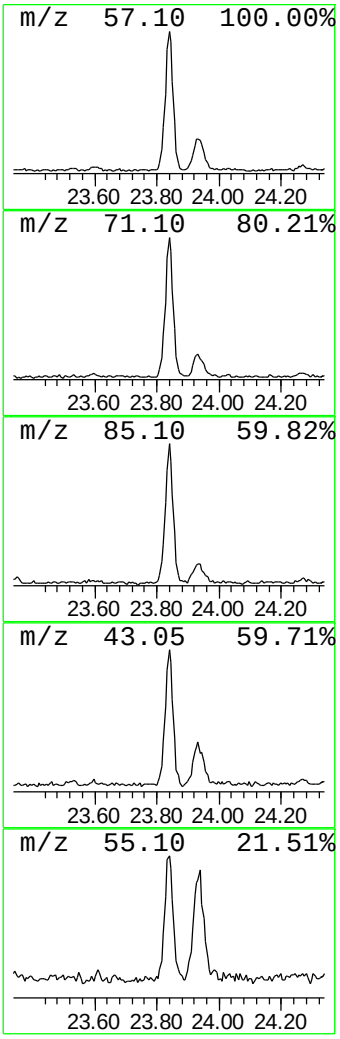
****

Peak Number 4 (DEL) Alkane: Straight-Chai... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.84	3.85 ng/ul	549733	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	95
2	Tetratriacontane	479	C34H70	014167-59-0	91
3	Heneicosane	296	C21H44	000629-94-7	91
4	Tetracosane	338	C24H50	000646-31-1	91
5	Triacontane	422	C30H62	000638-68-6	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E62

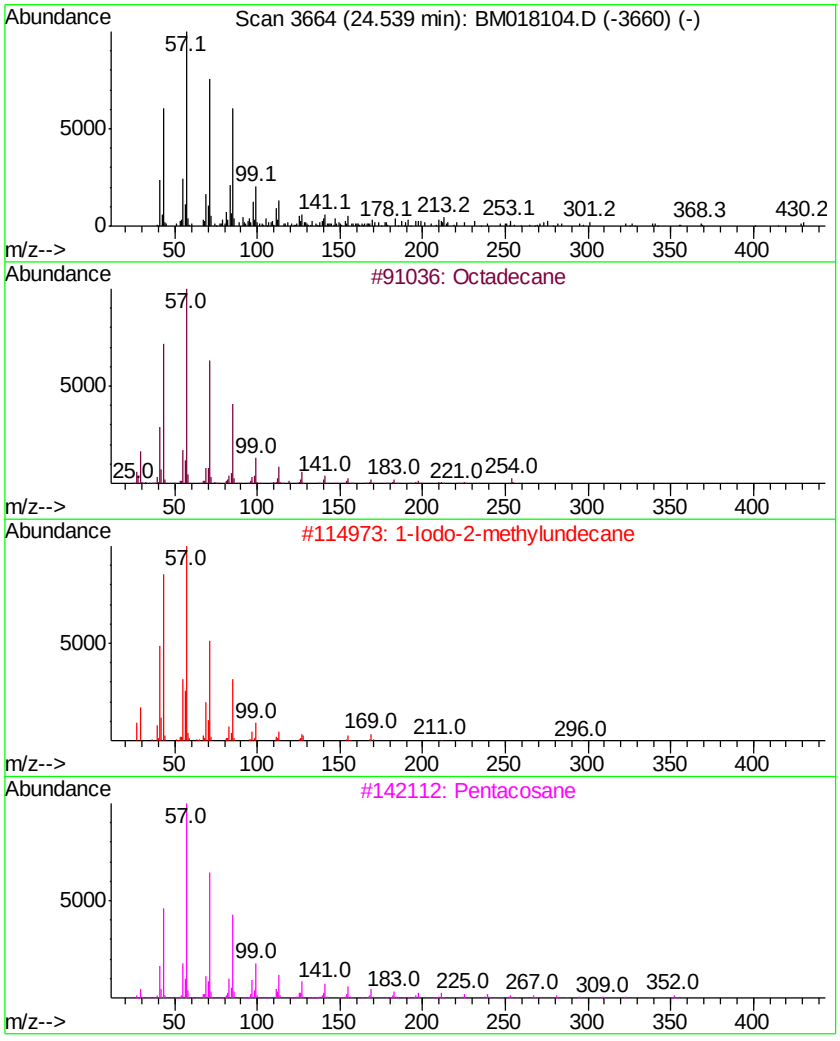
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

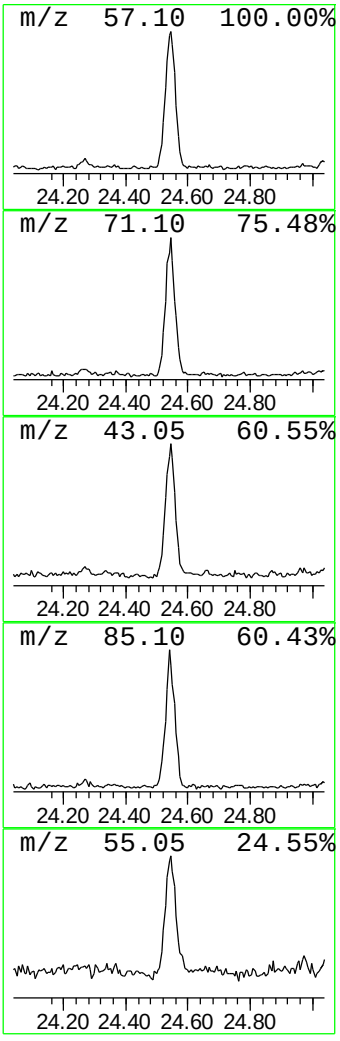
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 (DEL) Alkane: Straight-Chai... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.54	3.29 ng/ul	469716	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	97
2	1-Iodo-2-methylundecane	296	C12H25I	073105-67-6	87
3	Pentacosane	352	C25H52	000629-99-2	87
4	Triacontane	422	C30H62	000638-68-6	87
5	Tetratriacontane	479	C34H70	014167-59-0	87





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E62

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

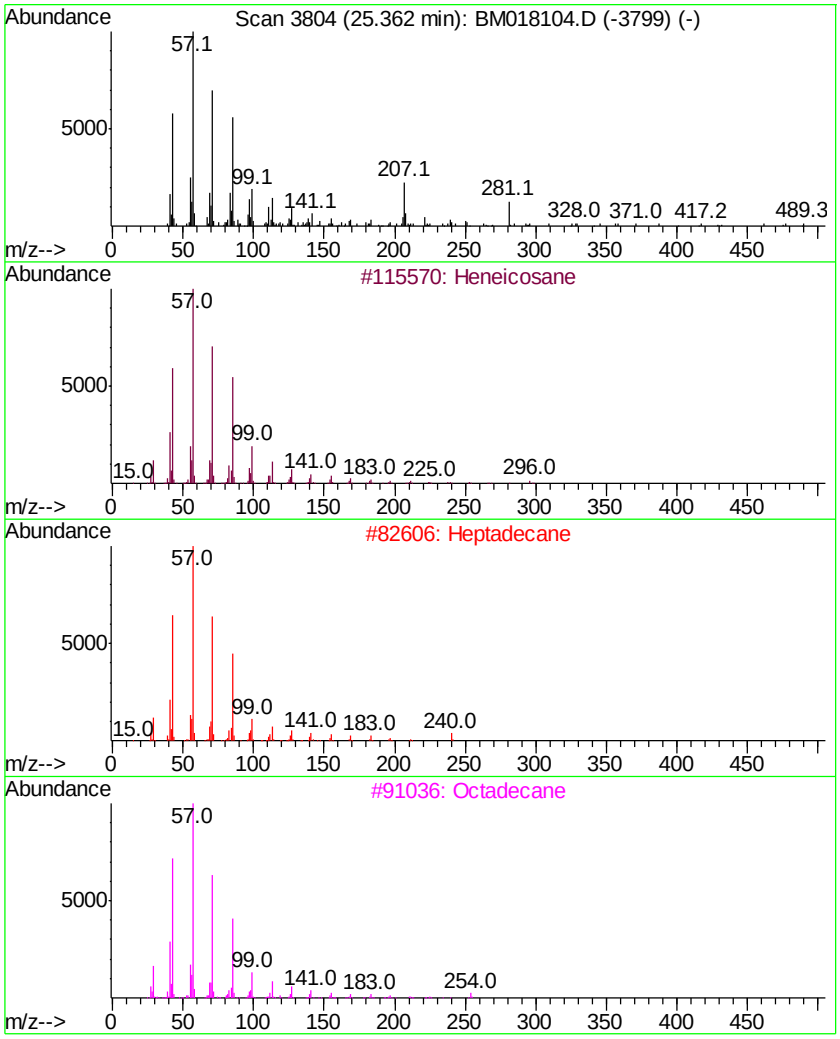
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

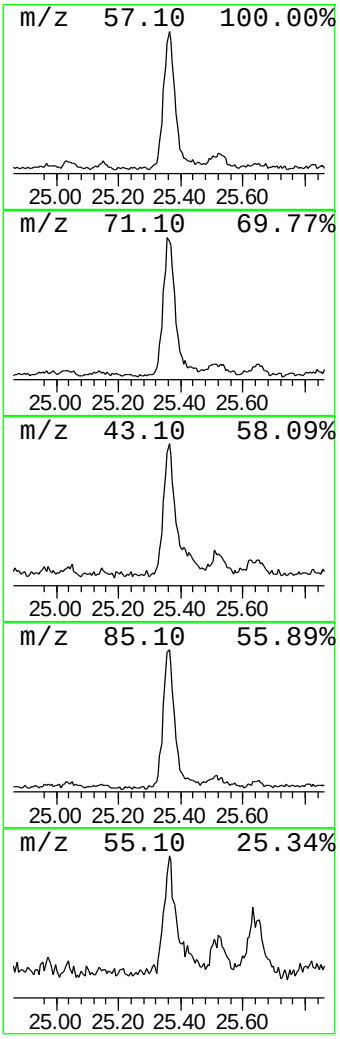
****

Peak Number 6 (DEL) Alkane: Straight-Chai... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.36	4.12 ng/ul	588989	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	96
2	Heptadecane	240	C17H36	000629-78-7	90
3	Octadecane	254	C18H38	000593-45-3	60
4	Pentadecane, 8-heptyl-	310	C22H46	071005-15-7	53
5	Hentriacontane	437	C31H64	000630-04-6	53





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E62

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	17.86	6.0	ng/ul	577451	4	16.95	1940140	20.0
1-Heneicosyl formate	20.89	2.4	ng/ul	332472	5	21.17	2797730	20.0
(DEL) Alkane: Str...	22.69	2.2	ng/ul	316403	6	23.34	2855990	20.0
(DEL) Alkane: Str...	23.84	3.9	ng/ul	549733	6	23.34	2855990	20.0
(DEL) Alkane: Str...	24.54	3.3	ng/ul	469716	6	23.34	2855990	20.0
(DEL) Alkane: Str...	25.36	4.1	ng/ul	588989	6	23.34	2855990	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

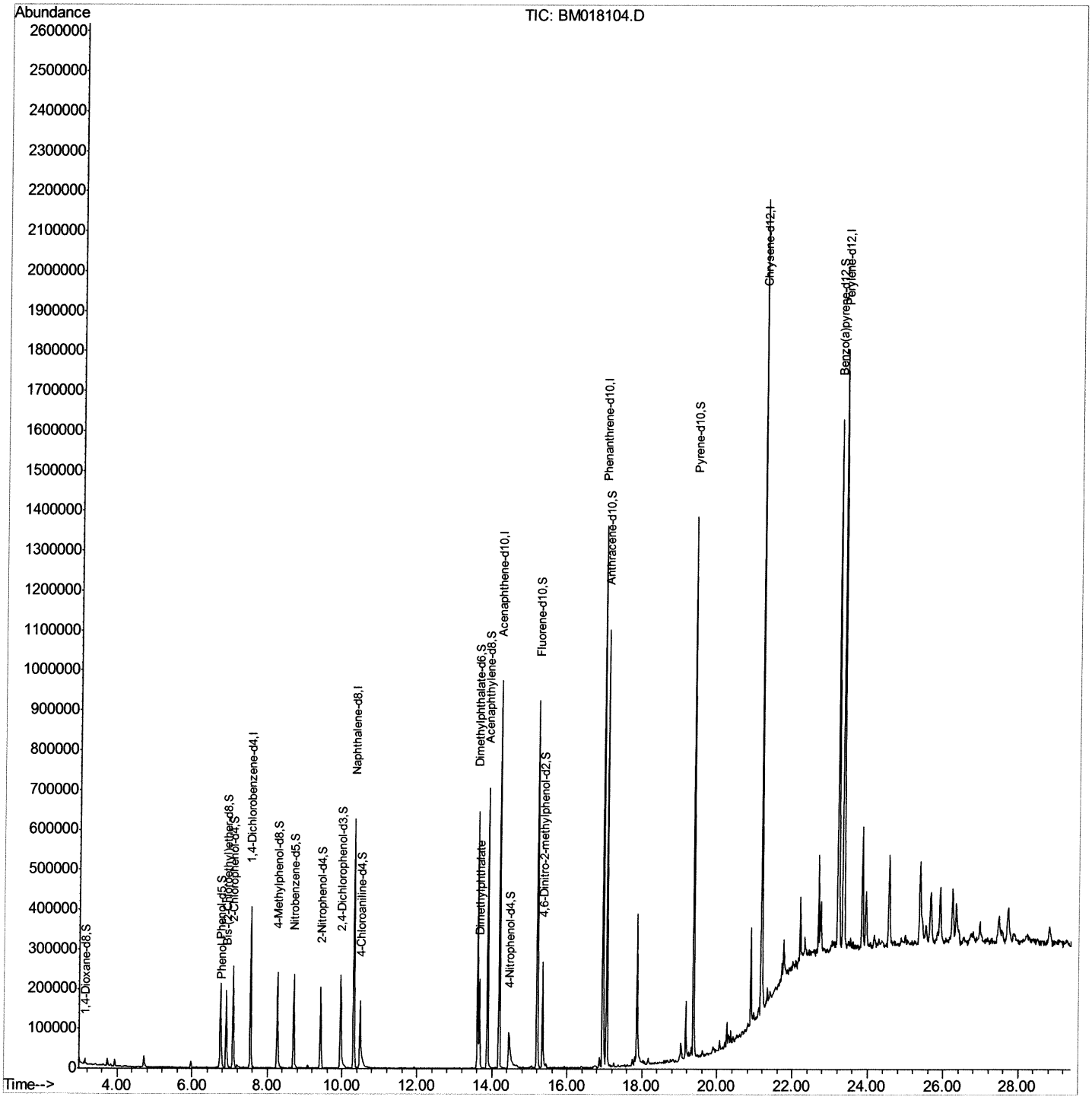
Quantitation Report (QT Reviewed)

Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 13 03:26:06 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E62

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:17 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

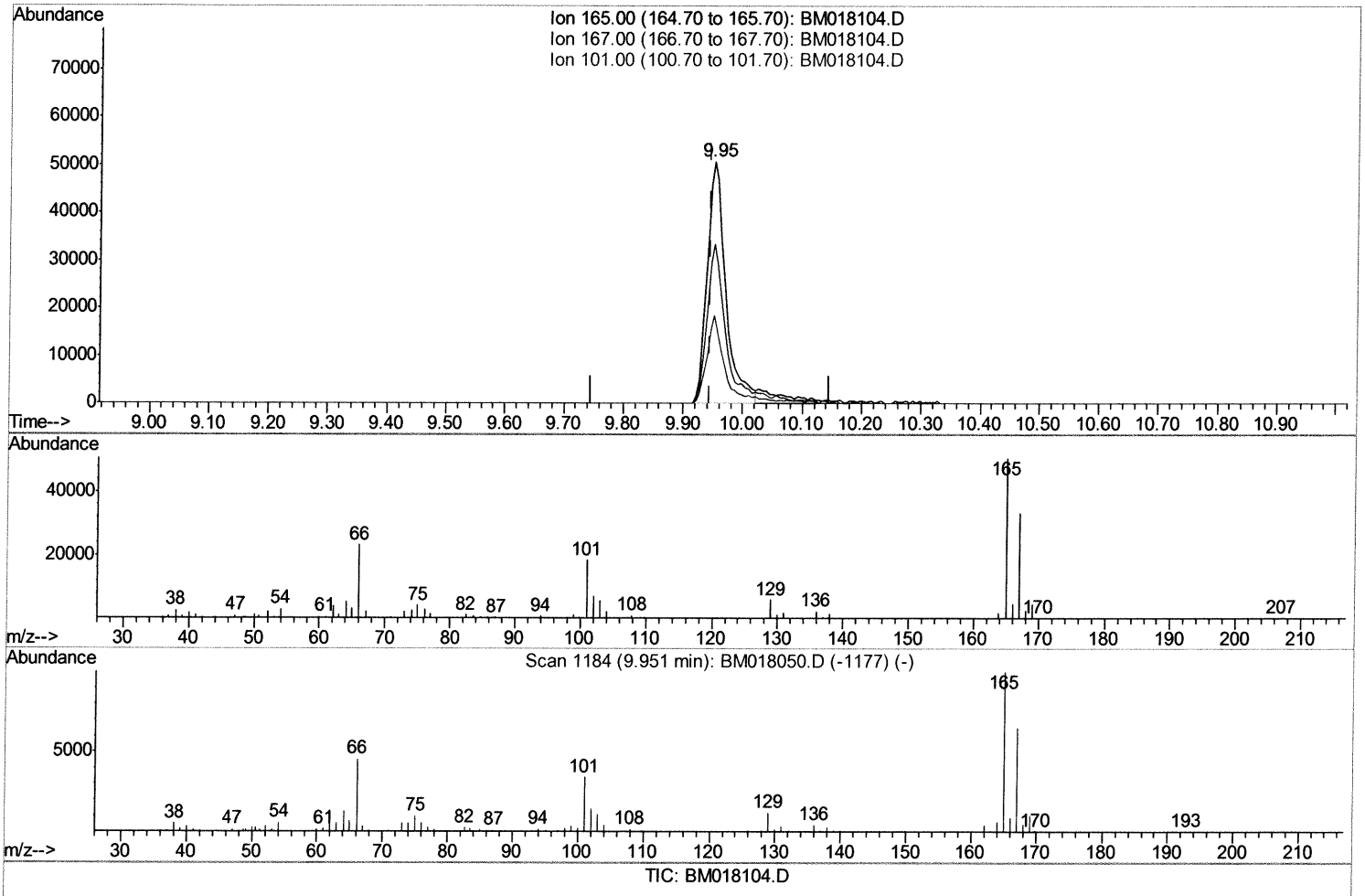
Quantitation Report (Qedit)

Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 13 02:42:03 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E62

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:17 PM



TIC: BM018104.D

(26) 2,4-Dichlorophenol-d3 (S)

9.951min (+0.006) 12.60ng/ul

response 110454

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	65.74
101.00	34.80	36.52
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

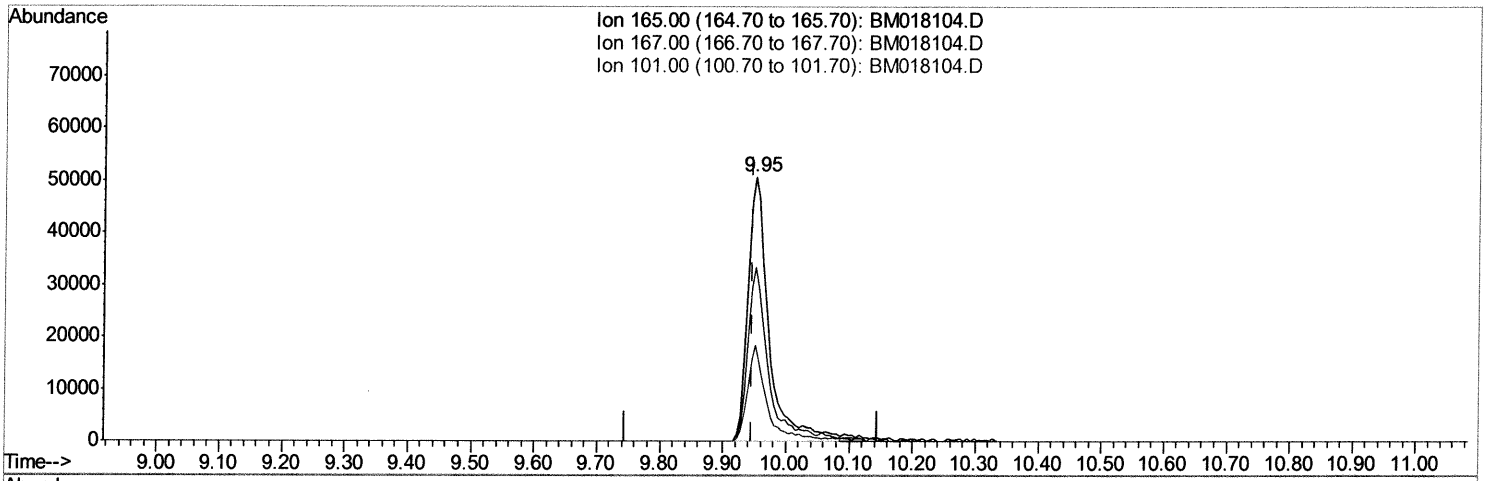
Quantitation Report (Qedit)

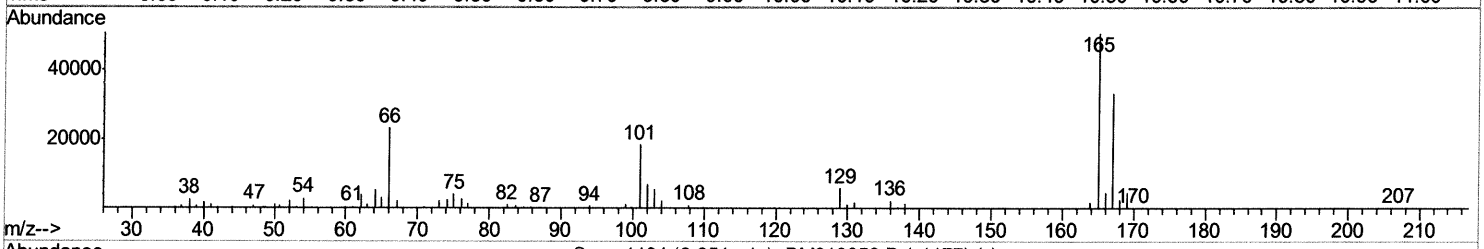
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

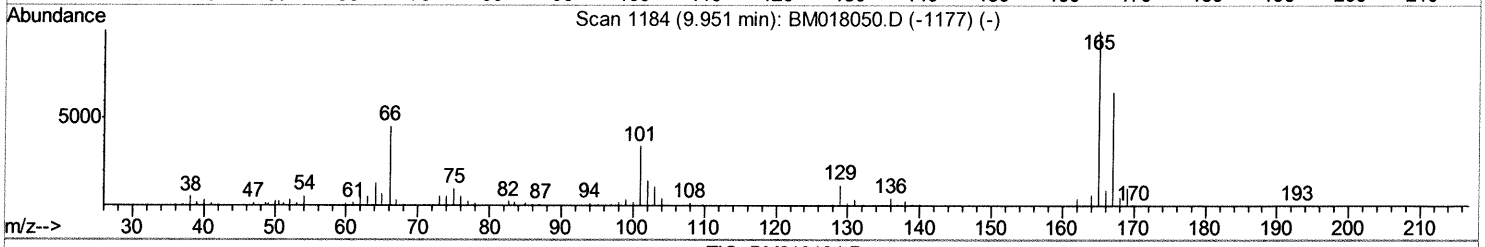
Quant Time: Dec 13 02:42:03 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E62

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:17 PM







TIC: BM018104.D

(26) 2,4-Dichlorophenol-d3 (S)

9.951min (+0.006) 13.42ng/ul m SJ 12/13/18

response 117648

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	65.74
101.00	34.80	36.52
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

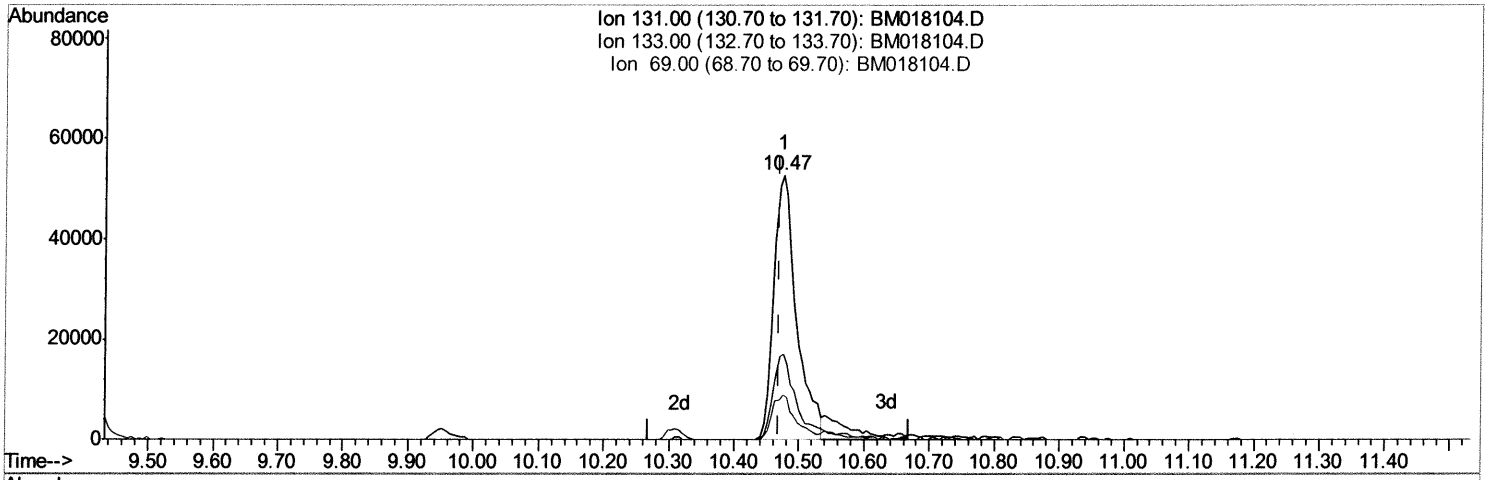
Quantitation Report (Qedit)

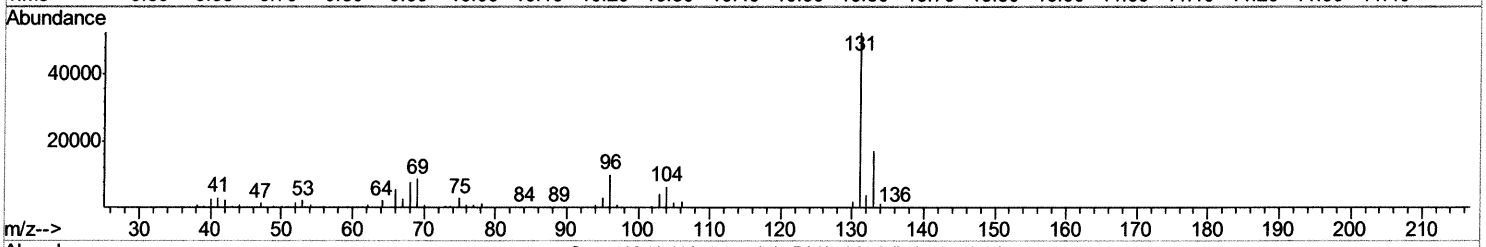
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

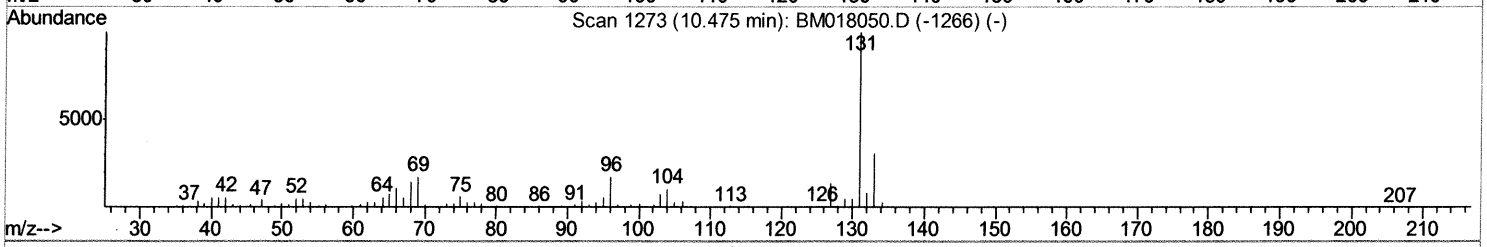
Quant Time: Dec 13 02:42:03 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E62

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:17 PM







TIC: BM018104.D

(29) 4-Chloroaniline-d4 (S)

10.475min (+0.006) 17.02ng/ul

response 128076

Ion	Exp%	Act%
131.00	100	100
133.00	32.40	32.34
69.00	18.90	16.81
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

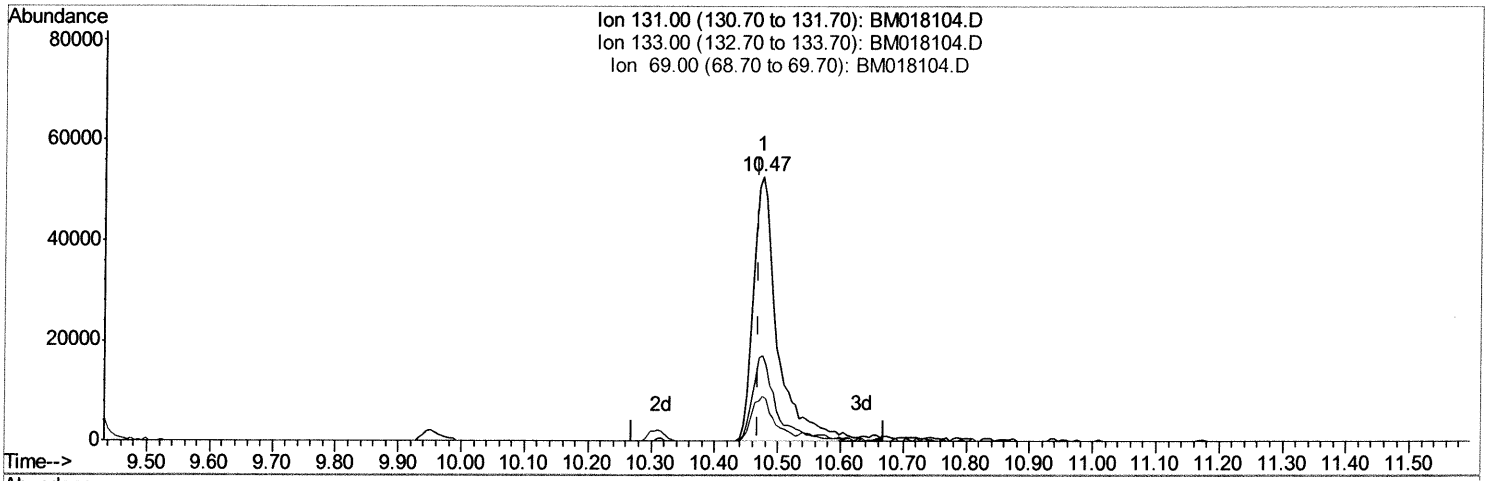
Quantitation Report (Qedit)

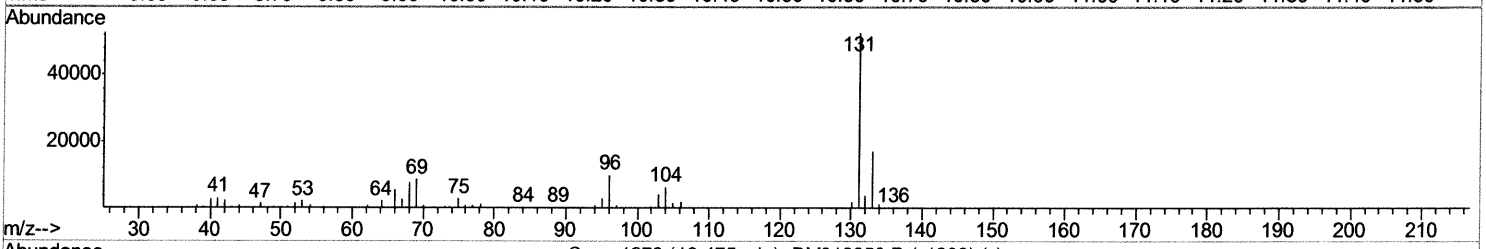
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

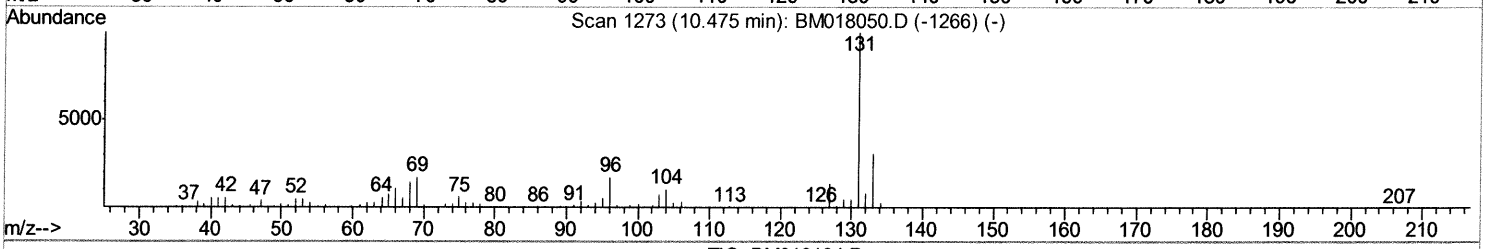
Quant Time: Dec 13 02:42:03 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E62

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:17 PM







TIC: BM018104.D

(29) 4-Chloroaniline-d4 (S)

10.475min (+0.006) 18.51ng/ul m > SJ 12/13/18

response 139284

Ion	Exp%	Act%
131.00	100	100
133.00	32.40	32.34
69.00	18.90	16.81
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

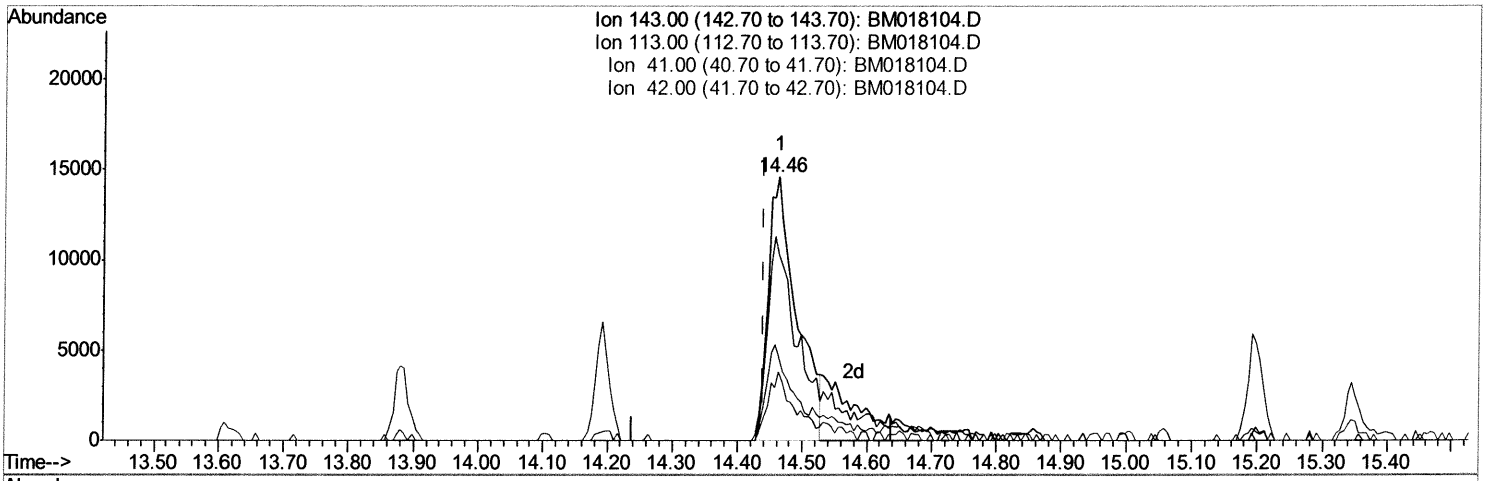
Quantitation Report (Qedit)

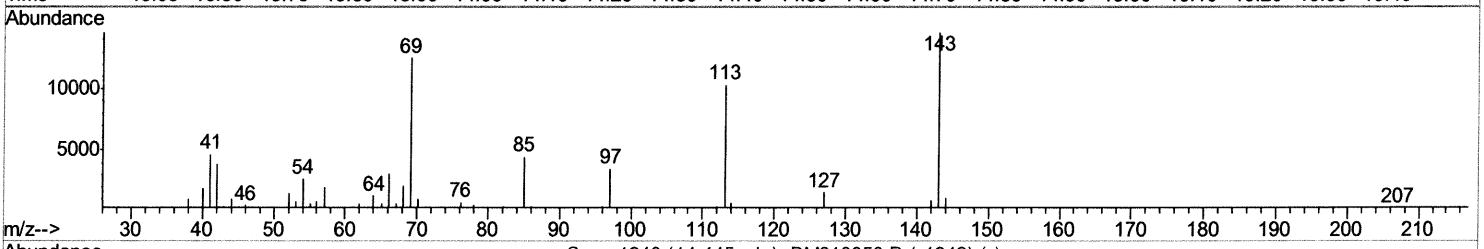
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

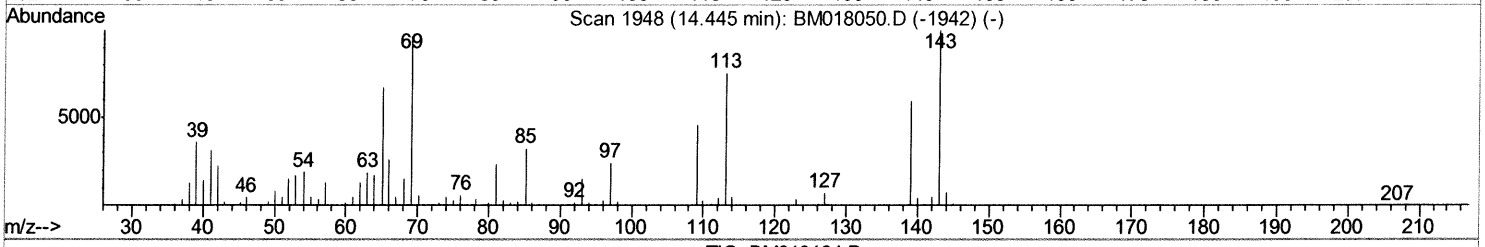
Quant Time: Dec 13 02:42:03 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E62

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:17 PM







TIC: BM018104.D

(51) 4-Nitrophenol-d4 (S)

14.463min (+0.024) 8.71ng/ul

response 45126

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	70.68
41.00	40.10	31.73#
42.00	26.80	26.15

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

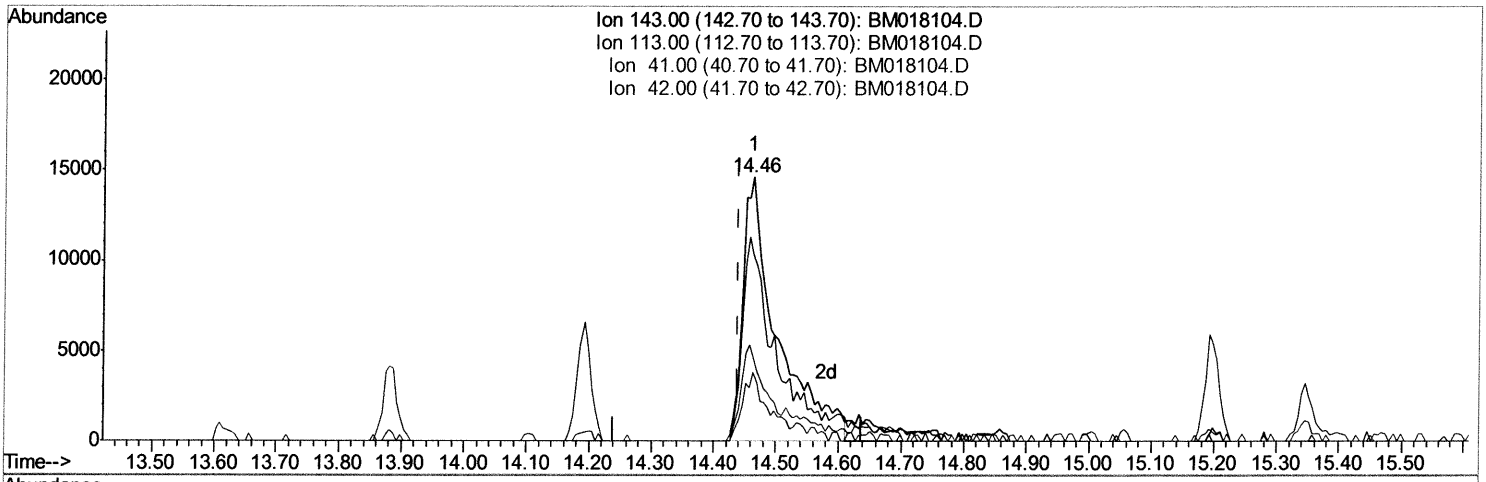
Quantitation Report (Qedit)

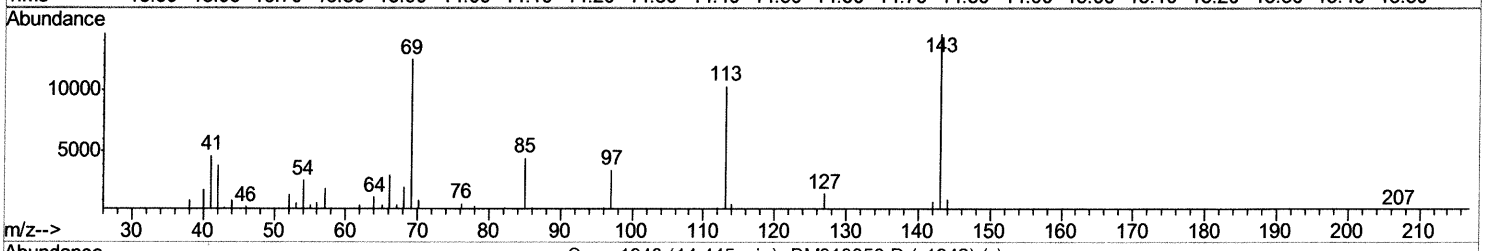
Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

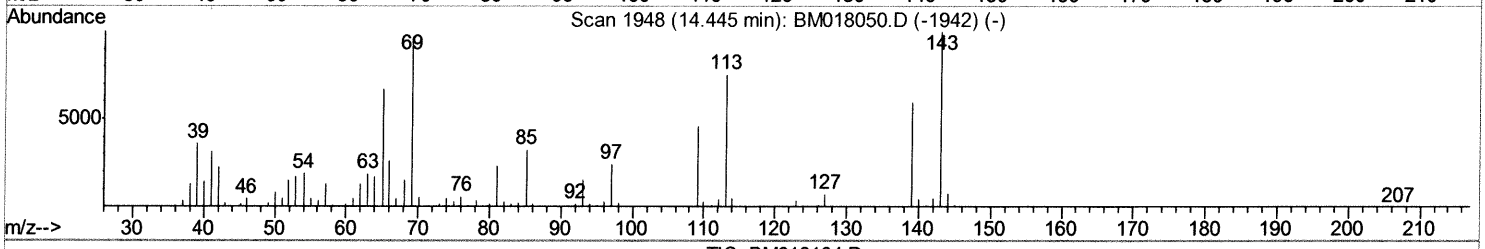
Quant Time: Dec 13 02:42:03 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E62

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:17 PM







TIC: BM018104.D

(51) 4-Nitrophenol-d4 (S)

14.463min (+0.024) 10.84ng/ul m > SJ 12/13/18

response 56169

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	70.68
41.00	40.10	31.73#
42.00	26.80	26.15

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018104.D
Acq On : 12 Dec 2018 22:04
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 13 03:26:06 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9E62

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:17 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	116696	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	523308	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	328570	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	771841	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	958156	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	1069108	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	7586	2.98	ng/uL	0.00
5) Phenol-d5	6.74	99	144545	13.56	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	90870	14.14	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	129044	15.47	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	109242	12.55	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	62714	15.60	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	72344	15.71	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	117648m	13.42	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	139284m	18.51	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	469264	16.46	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	520730	15.09	ng/ul	0.00
51) 4-Nitrophenol-d4	14.46	143	56169m	10.84	ng/ul	0.02
57) Fluorene-d10	15.20	176	391763	15.91	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	63348	11.48	ng/ul	0.00
70) Anthracene-d10	17.05	188	622091	16.19	ng/ul	0.00
78) Pyrene-d10	19.36	212	729386	15.73	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	936344	16.15	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	37626	3.537	ng/ul	96
44) Dimethylphthalate	13.66	163	154433	5.591	ng/ul	100

SJ 12/13/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E63

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-18
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018105.D
% Solids : 87.4
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	76	U
100-52-7	Benzaldehyde	380	U
108-95-2	Phenol	260	J
111-44-4	Bis(2-Chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	190	U
95-48-7	2-Methylphenol	380	U
108-60-1	2,2-oxybis(1-Chloropropane)	380	U
98-86-2	Acetophenone	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	190	U
67-72-1	Hexachloroethane	190	U
98-95-3	Nitrobenzene	190	U
78-59-1	Isophorone	190	U
88-75-5	2-Nitrophenol	190	U
105-67-9	2,4-Dimethylphenol	190	U
111-91-1	Bis(2-Chloroethoxy)methane	190	U
120-83-2	2,4-Dichlorophenol	190	U
91-20-3	Naphthalene	190	U
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	190	U
105-60-2	Caprolactam	380	U
59-50-7	4-Chloro-3-methylphenol	190	U
91-57-6	2-Methylnaphthalene	190	U
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E63

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-18
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018105.D
% Solids : 87.4
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	190	U
92-52-4	1,1-Biphenyl	190	U
91-58-7	2-Chloronaphthalene	190	U
88-74-4	2-Nitroaniline	190	U
131-11-3	Dimethylphthalate	400	
606-20-2	2,6-Dinitrotoluene	190	U
208-96-8	Acenaphthylene	190	U
99-09-2	3-Nitroaniline	380	U
83-32-9	Acenaphthene	190	U
51-28-5	2,4-Dinitrophenol	380	U
100-02-7	4-Nitrophenol	380	U
132-64-9	Dibenzofuran	190	U
121-14-2	2,4-Dinitrotoluene	190	U
84-66-2	Diethylphthalate	190	U
86-73-7	Fluorene	190	U
7005-72-3	4-Chlorophenyl-phenylether	190	U
100-01-6	4-Nitroaniline	380	U
534-52-1	4,6-Dinitro-2-methylphenol	380	U
86-30-6	N-Nitrosodiphenylamine	190	U
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U
101-55-3	4-Bromophenyl-phenylether	190	U
118-74-1	Hexachlorobenzene	190	U
1912-24-9	Atrazine	380	U
87-86-5	Pentachlorophenol	380	U
85-01-8	Phenanthrene	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E63

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-18
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018105.D
% Solids : 87.4
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	190	U
86-74-8	Carbazole	380	U
84-74-2	Di-n-butylphthalate	190	U
206-44-0	Fluoranthene	380	U
129-00-0	Pyrene	190	U
85-68-7	Butylbenzylphthalate	190	U
91-94-1	3,3-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	190	U
218-01-9	Chrysene	190	U
117-81-7	Bis(2-ethylhexyl)phthalate	190	U
117-84-0	Di-n-octyl phthalate	380	U
205-99-2	Benzo(b)fluoranthene	190	U
207-08-9	Benzo(k)fluoranthene	190	U
50-32-8	Benzo(a)pyrene	190	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	U
53-70-3	Dibenzo(a,h)anthracene	190	U
191-24-2	Benzo(g,h,i)perylene	190	U
58-90-2	2,3,4,6-Tetrachlorophenol	190	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E63

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-18
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018105.D
% Solids : 87.4
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/12/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000057-10-3	n-Hexadecanoic acid	17.86	200	JN
2	074339-54-1	Trichloroacetic acid, hexadecyl es	20.89	120	JN
3	E966796	Total Alkanes	N/A	220	

EPA-designated Registry Number.

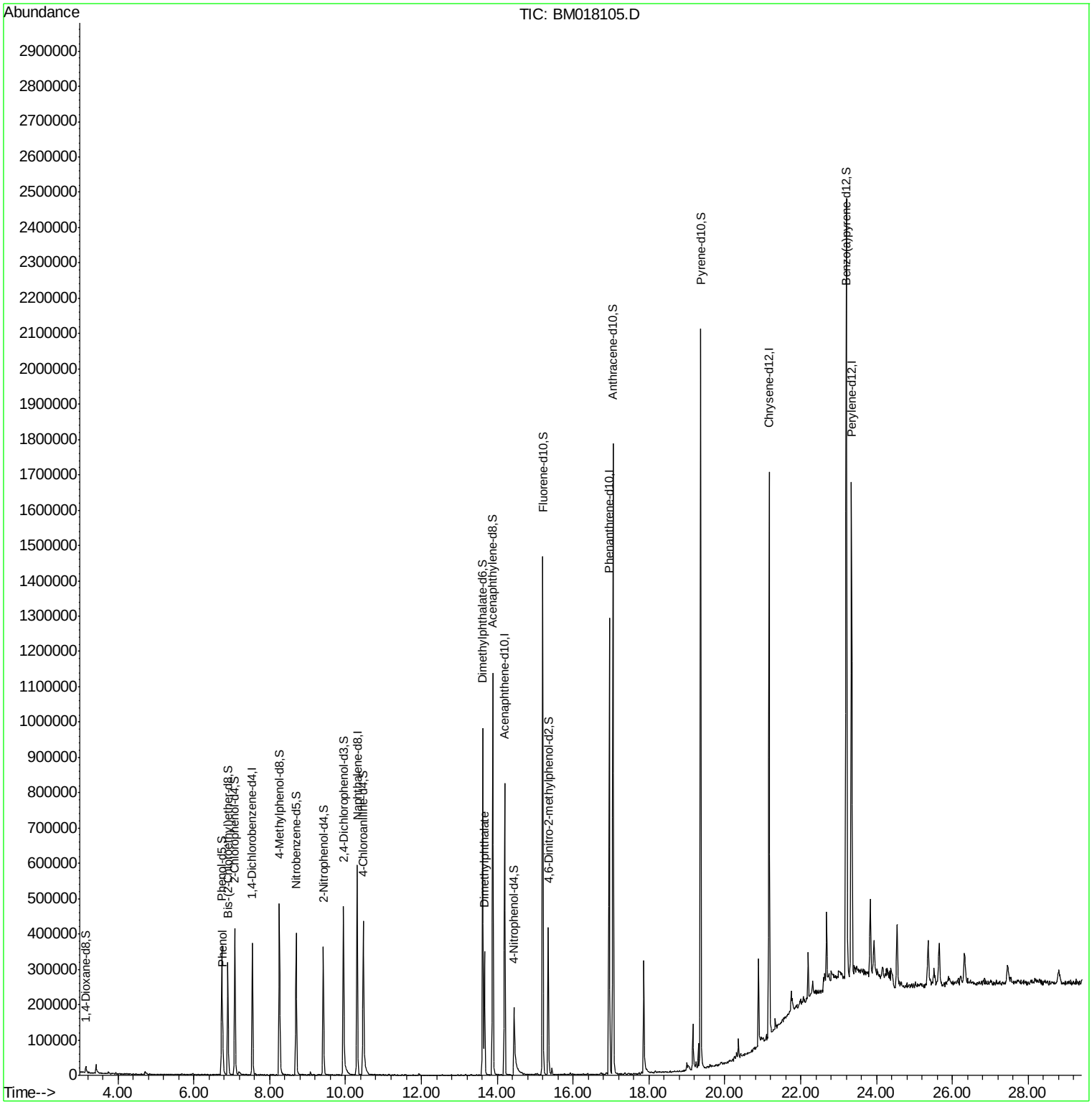
Quantitation Report (LSC Reviewed)

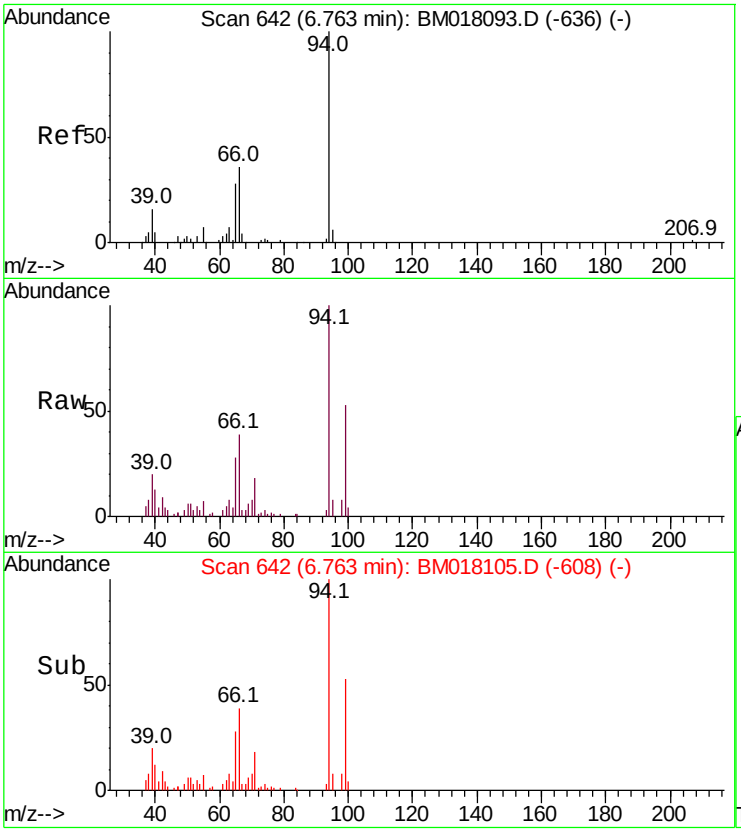
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018105.D
Acq On : 12 Dec 2018 22:40
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 13 03:28:41 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E63

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:19 PM

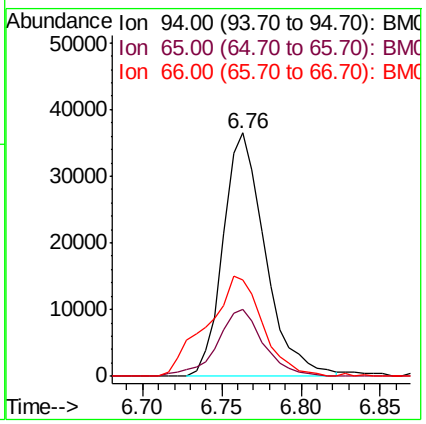




#6
Phenol
Concen: 6.711 ng/ul
RT: 6.76 min Scan# 642
Delta R.T. -0.00 min
Lab File: BM018105.D
Acq: 12 Dec 2018 22:40

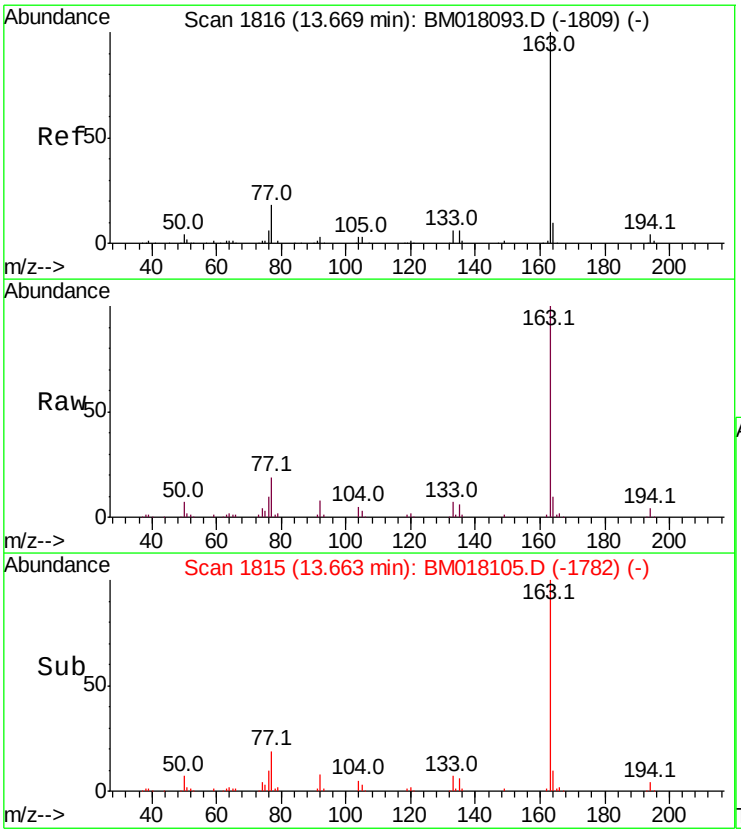
Tgt Ion: 94 Resp: 67287

Ion	Ratio	Lower	Upper
94	100		
65	27.6	24.7	37.1
66	39.5	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9E63

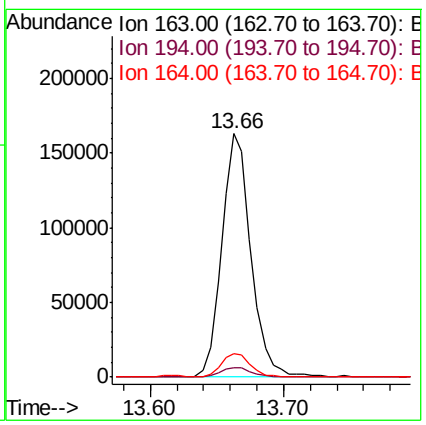
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:19 PM



#44
Dimethylphthalate
Concen: 10.481 ng/ul
RT: 13.66 min Scan# 1815
Delta R.T. -0.01 min
Lab File: BM018105.D
Acq: 12 Dec 2018 22:40

Tgt Ion:163 Resp: 249222

Ion	Ratio	Lower	Upper
163	100		
194	3.9	3.4	5.0
164	9.9	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018105.D
Acq On : 12 Dec 2018 22:40
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9E63

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:19 PM

Quant Time: Dec 13 03:28:41 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	109977	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	501752	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	282864	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	719462	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	794079	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	977875	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	11129	4.63	ng/uL	0.00
5) Phenol-d5	6.73	99	248586	24.75	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.89	67	142835	23.58	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	210667	26.81	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	200772	24.46	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	107169	27.81	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	129039	29.22	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	197951	23.55	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	304907	42.26	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	708204	28.85	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	843867	28.41	ng/ul	0.00
51) 4-Nitrophenol-d4	14.45	143	102864m	23.05	ng/ul	0.00
57) Fluorene-d10	15.20	176	611076	28.83	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	110845	21.55	ng/ul	0.00
70) Anthracene-d10	17.05	188	1005826	28.08	ng/ul	0.00
78) Pyrene-d10	19.36	212	1116682	29.06	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	1550072	29.23	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	67287	6.711	ng/ul	94
44) Dimethylphthalate	13.66	163	249222	10.481	ng/ul	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018105.D
Acq On : 12 Dec 2018 22:40
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E63

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.152	25	28	32	rBV2	17985	24971	0.59%	0.071%
2	3.416	69	73	84	rBV	25160	46557	1.11%	0.133%
3	3.746	126	129	132	rBV2	4104	5199	0.12%	0.015%
4	3.946	160	163	166	rVB4	4926	5935	0.14%	0.017%
5	4.716	287	294	296	rBV	7948	11232	0.27%	0.032%
6	4.734	296	297	306	rVB2	5361	7682	0.18%	0.022%
7	6.734	631	637	652	rBV2	366548	836139	19.91%	2.385%
8	6.893	659	664	680	rBV	317674	519215	12.36%	1.481%
9	7.081	689	696	710	rBV	416582	706337	16.82%	2.015%
10	7.193	710	715	720	rBV3	7153	14677	0.35%	0.042%
11	7.540	768	774	783	rBV	373527	629656	14.99%	1.796%
12	7.610	783	786	793	rVB4	5348	9454	0.23%	0.027%
13	8.257	888	896	911	rBV	486837	848818	20.21%	2.421%
14	8.698	961	971	986	rBV	402726	691429	16.47%	1.972%
15	9.075	1031	1035	1041	rBV4	8889	13719	0.33%	0.039%
16	9.410	1084	1092	1103	rBV	363867	627748	14.95%	1.791%
17	9.945	1176	1183	1203	rBV	477775	927792	22.09%	2.646%
18	10.310	1236	1245	1253	rBV	595308	990247	23.58%	2.824%
19	10.469	1264	1272	1291	rBV	435262	961746	22.90%	2.743%
20	11.933	1517	1521	1522	rBV3	4197	5224	0.12%	0.015%
21	11.951	1522	1524	1528	rVB2	3631	4312	0.10%	0.012%
22	13.616	1801	1807	1811	rBV	983267	1404528	33.45%	4.006%
23	13.663	1811	1815	1826	rVB	349472	545529	12.99%	1.556%
24	13.880	1846	1852	1865	rBV	1137627	1695432	40.37%	4.836%
25	14.192	1898	1905	1917	rBV2	825445	1267815	30.19%	3.616%
26	14.445	1942	1948	1964	rBV	191641	523541	12.47%	1.493%
27	15.010	2037	2044	2046	rBV2	3445	5179	0.12%	0.015%
28	15.045	2048	2050	2058	rVB5	5242	8948	0.21%	0.026%
29	15.198	2069	2076	2088	rBV	1466137	2178190	51.87%	6.213%
30	15.345	2095	2101	2112	rBV	416052	665887	15.86%	1.899%
31	15.439	2114	2117	2126	rVB2	17985	25424	0.61%	0.073%
32	15.927	2196	2200	2204	rVB2	4504	6124	0.15%	0.017%
33	16.727	2330	2336	2337	rBV4	4428	6841	0.16%	0.020%
34	16.874	2356	2361	2367	rBV5	5671	11177	0.27%	0.032%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018105.D
Acq On : 12 Dec 2018 22:40
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E63

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	16.951	2368	2374	2385	rVV2	1292069	1781096	42.41%	5.080%
36	17.051	2385	2391	2405	rVB	1783765	2537405	60.42%	7.237%
37	17.368	2440	2445	2451	rVB4	4576	8502	0.20%	0.024%
38	17.739	2504	2508	2513	rBV3	4372	7786	0.19%	0.022%
39	17.804	2516	2519	2524	rVB4	5877	6766	0.16%	0.019%
40	17.862	2524	2529	2539	rBV	319427	467416	11.13%	1.333%
41	18.162	2578	2580	2584	rVV5	6459	8033	0.19%	0.023%
42	18.539	2640	2644	2647	rBV5	3678	6100	0.15%	0.017%
43	18.957	2713	2715	2717	rBV2	4657	4619	0.11%	0.013%
44	18.998	2717	2722	2725	rBV	22334	31103	0.74%	0.089%
45	19.033	2725	2728	2732	rVV5	8687	12774	0.30%	0.036%
46	19.157	2744	2749	2760	rBV2	129624	219491	5.23%	0.626%
47	19.245	2760	2764	2769	rVB	17448	25740	0.61%	0.073%
48	19.304	2770	2774	2777	rBV	68857	75378	1.80%	0.215%
49	19.362	2777	2784	2792	rBV	2088192	2937575	69.95%	8.379%
50	19.609	2823	2826	2829	rBV2	7680	9657	0.23%	0.028%
51	19.656	2832	2834	2836	rBV3	6200	5799	0.14%	0.017%
52	20.109	2909	2911	2914	rBV4	6749	6319	0.15%	0.018%
53	20.309	2943	2945	2949	rBV4	13068	14525	0.35%	0.041%
54	20.362	2950	2954	2959	rVB2	53908	61370	1.46%	0.175%
55	20.892	3039	3044	3050	rBV	245083	351539	8.37%	1.003%
56	21.168	3085	3091	3102	rBV	1601679	2214456	52.73%	6.316%
57	21.750	3187	3190	3193	rBV3	55190	71424	1.70%	0.204%
58	22.197	3263	3266	3271	rVB2	123482	147452	3.51%	0.421%
59	22.603	3333	3335	3336	rBV	42726	31618	0.75%	0.090%
60	22.686	3345	3349	3353	rVB	184721	249896	5.95%	0.713%
61	23.203	3430	3437	3446	rBV	2198555	4199294	100.00%	11.978%
62	23.339	3453	3460	3471	rVB	1395244	2586024	61.58%	7.376%
63	23.833	3540	3544	3552	rVB	211410	395901	9.43%	1.129%
64	24.538	3659	3664	3671	rVB2	169536	351974	8.38%	1.004%

Sum of corrected areas: 35059736

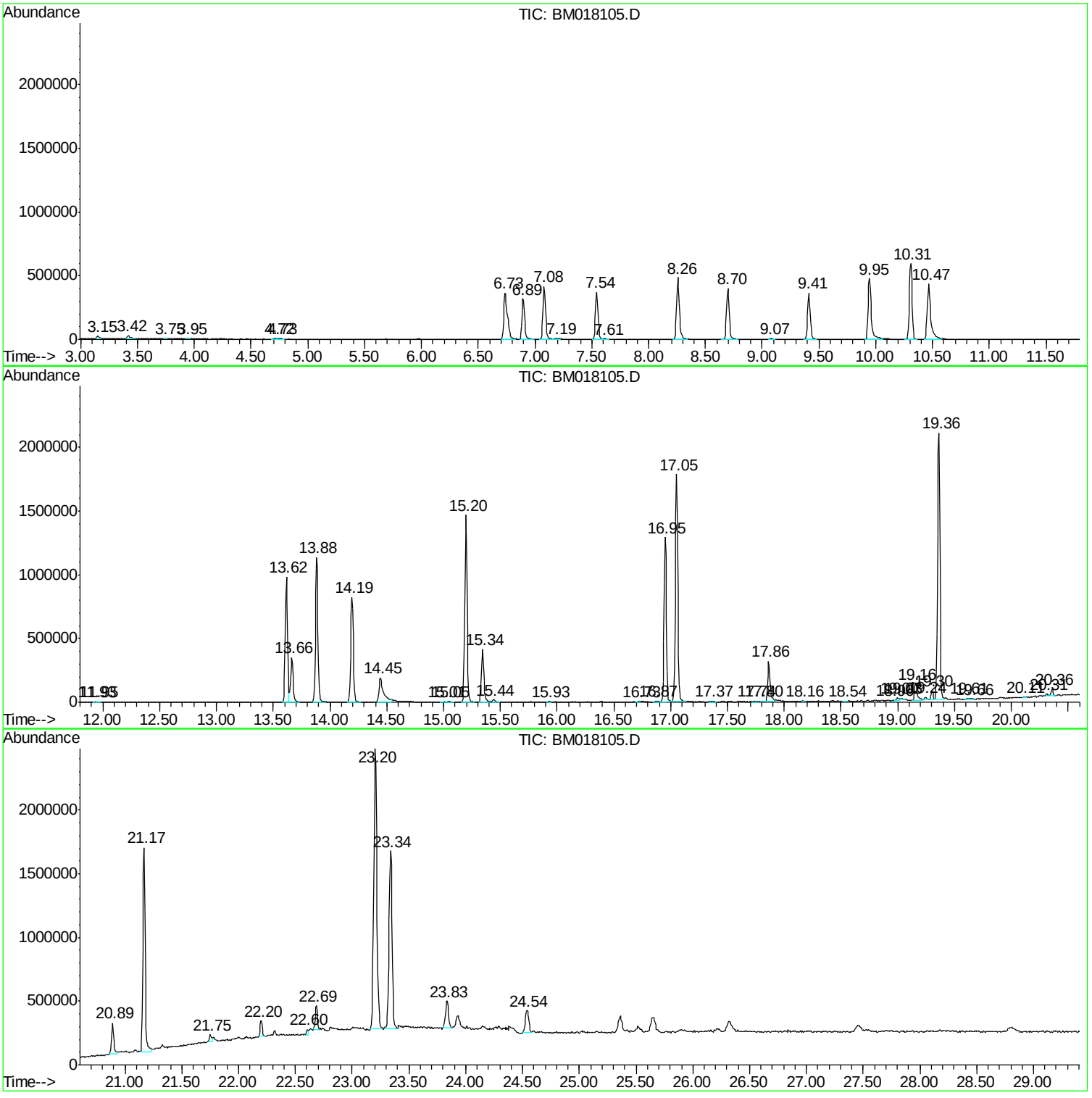
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018105.D
Acq On : 12 Dec 2018 22:40
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E63

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018105.D
Acq On : 12 Dec 2018 22:40
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E63

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

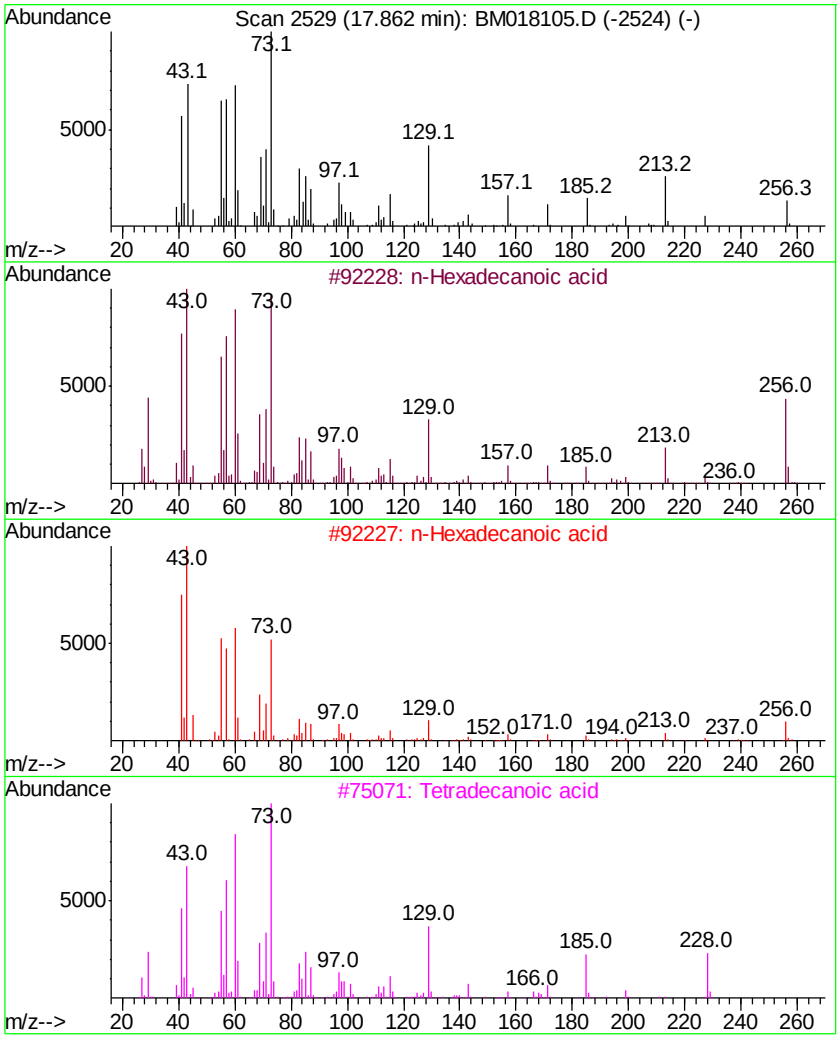
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

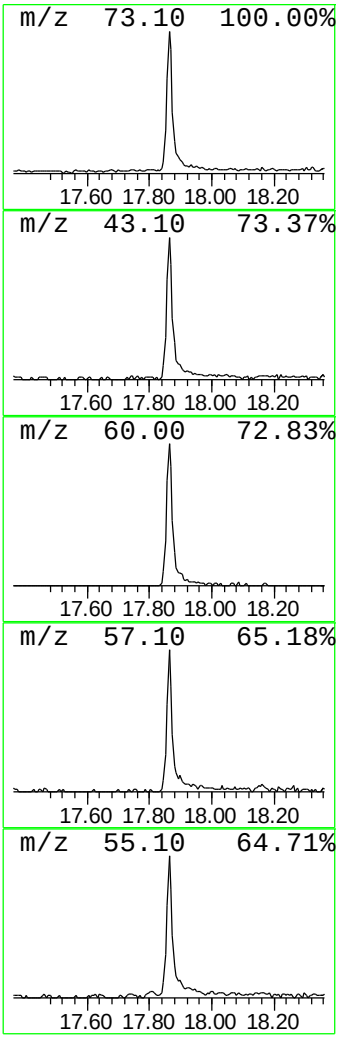
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.86	5.25 ng/ul	467416	Phenanthrene-d10	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	95
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	72
4	Pentadecanoic acid	242	C15H30O2	001002-84-2	68
5	n-Decanoic acid	172	C10H20O2	000334-48-5	62





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018105.D
Acq On : 12 Dec 2018 22:40
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E63

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

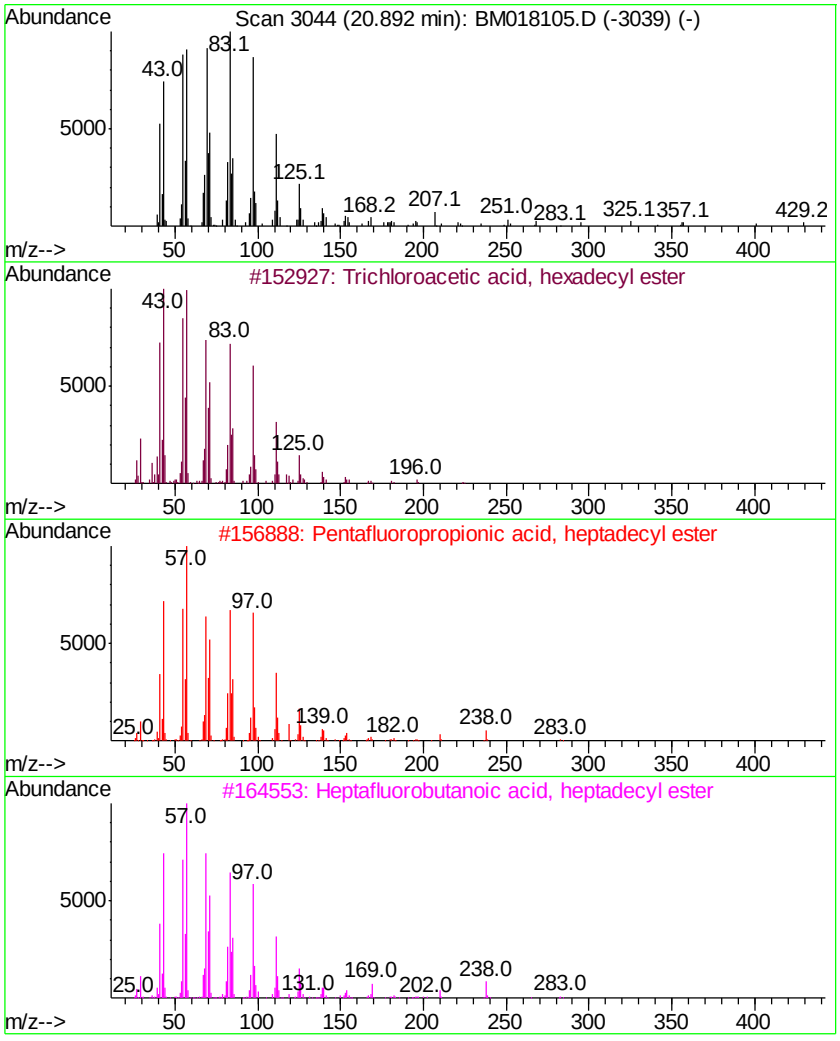
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

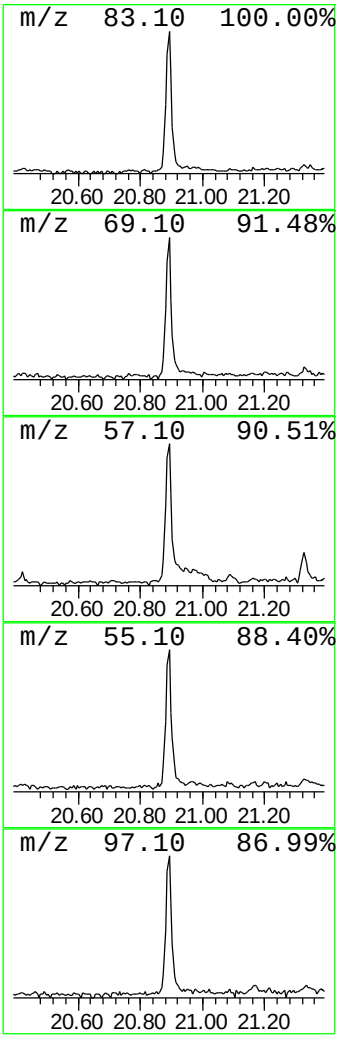
****

Peak Number 2 Trichloroacetic acid, hexad... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	3.17 ng/ul	351539	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Trichloroacetic acid, hexadecyl ...	386	C18H33Cl3O2	074339-54-1	91
2	Pentafluoropropionic acid, hepta...	402	C20H35F5O2	1000283-04-2	91
3	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	87
4	Trifluoroacetic acid, n-octadecy...	366	C20H37F3O2	079392-43-1	83
5	Cycloeicosane	280	C20H40	000296-56-0	76





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018105.D
Acq On : 12 Dec 2018 22:40
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E63

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

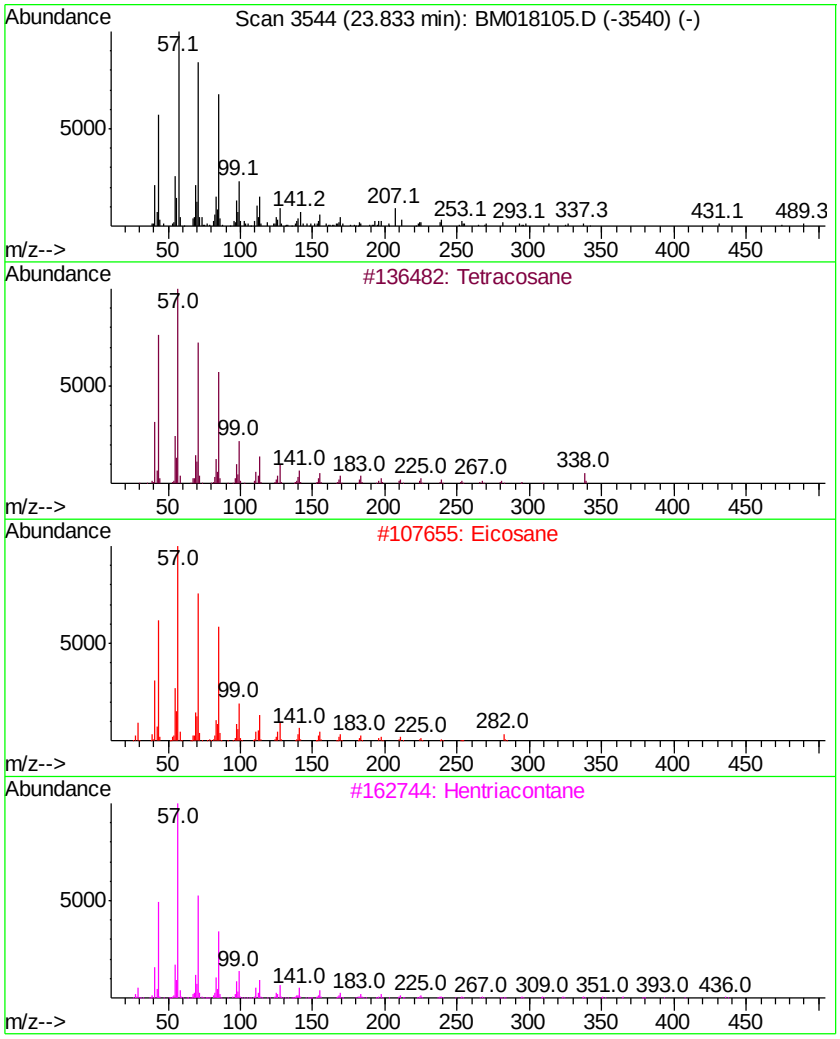
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

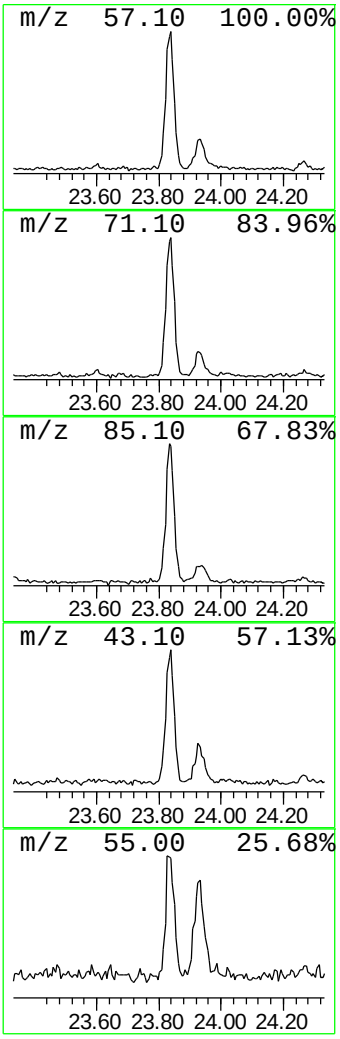
****

Peak Number 3 (DEL) Alkane: Straight-Chai... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.83	3.06 ng/ul	395901	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetracosane	338	C24H50	000646-31-1	90
2	Eicosane	282	C20H42	000112-95-8	90
3	Hentriacontane	437	C31H64	000630-04-6	90
4	Octacosane	394	C28H58	000630-02-4	90
5	Pentacosane	352	C25H52	000629-99-2	90





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018105.D
Acq On : 12 Dec 2018 22:40
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E63

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

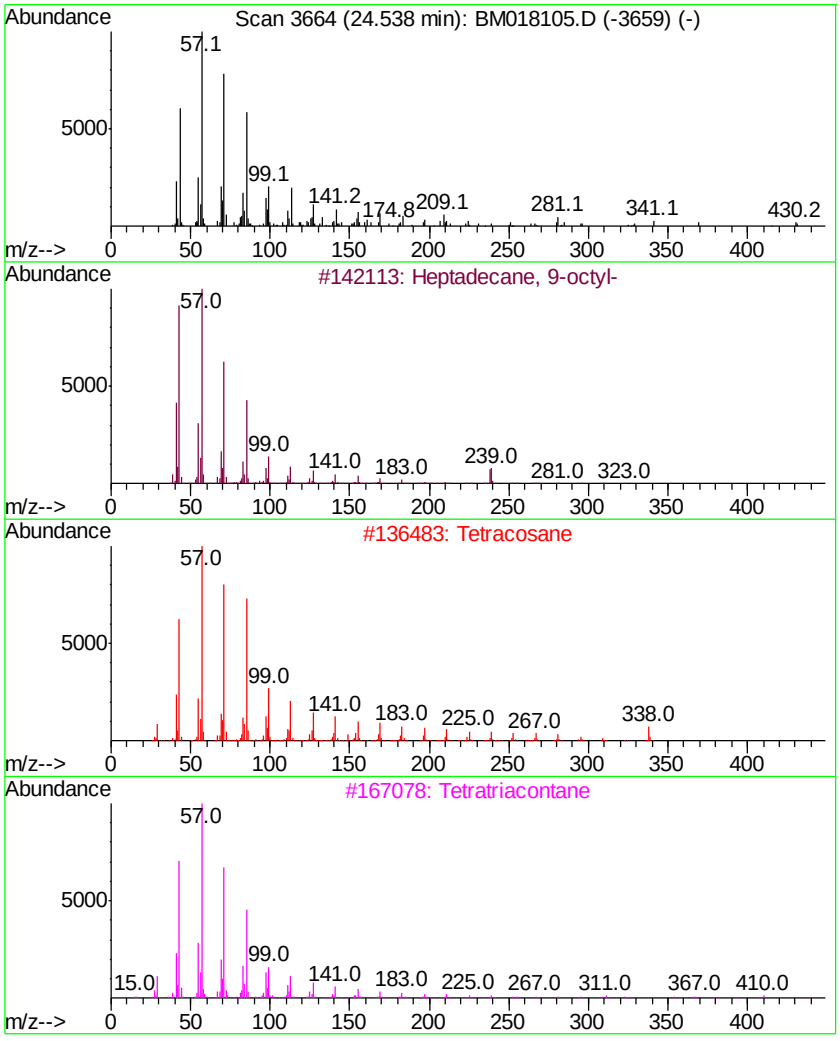
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

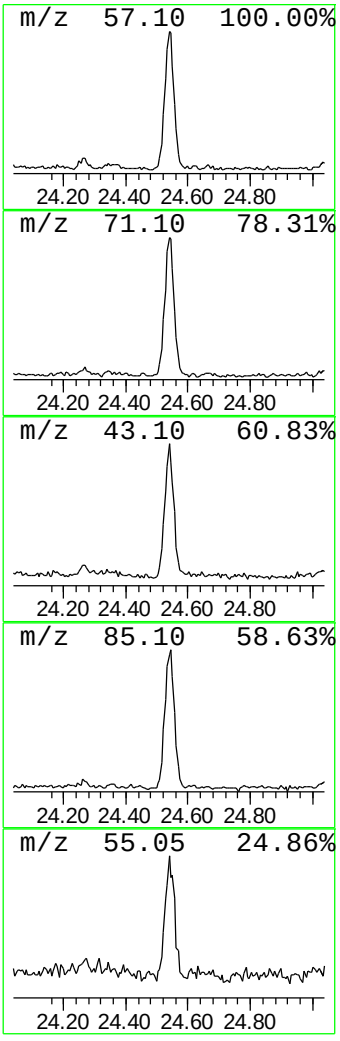
****

Peak Number 4 (DEL) Alkane: Straight-Chai... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.54	2.72 ng/ul	351974	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptadecane, 9-octyl-	352	C25H52	007225-64-1	91
2	Tetracosane	338	C24H50	000646-31-1	91
3	Tetratriacontane	479	C34H70	014167-59-0	90
4	Tetratetracontane	619	C44H90	007098-22-8	90
5	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	89





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018105.D
Acq On : 12 Dec 2018 22:40
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E63

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	17.86	5.3	ng/ul	467416	4	16.95	1781100	20.0
Trichloroacetic a...	20.89	3.2	ng/ul	351539	5	21.17	2214460	20.0
(DEL) Alkane: Str...	23.83	3.1	ng/ul	395901	6	23.34	2586020	20.0
(DEL) Alkane: Str...	24.54	2.7	ng/ul	351974	6	23.34	2586020	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

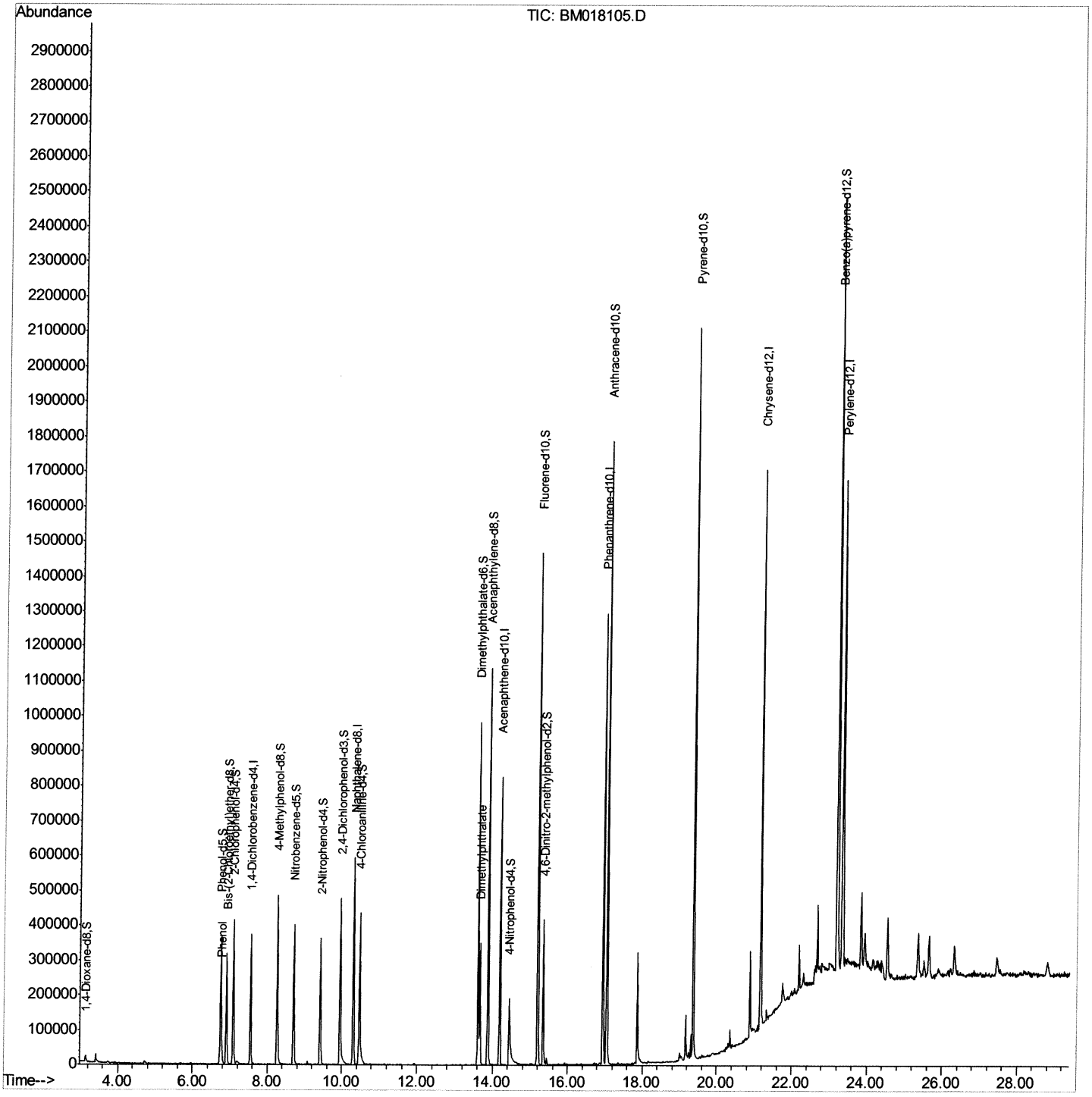
Quantitation Report (QT Reviewed)

Data File : BM018105.D
Acq On : 12 Dec 2018 22:40
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 13 03:28:41 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E63

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:19 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

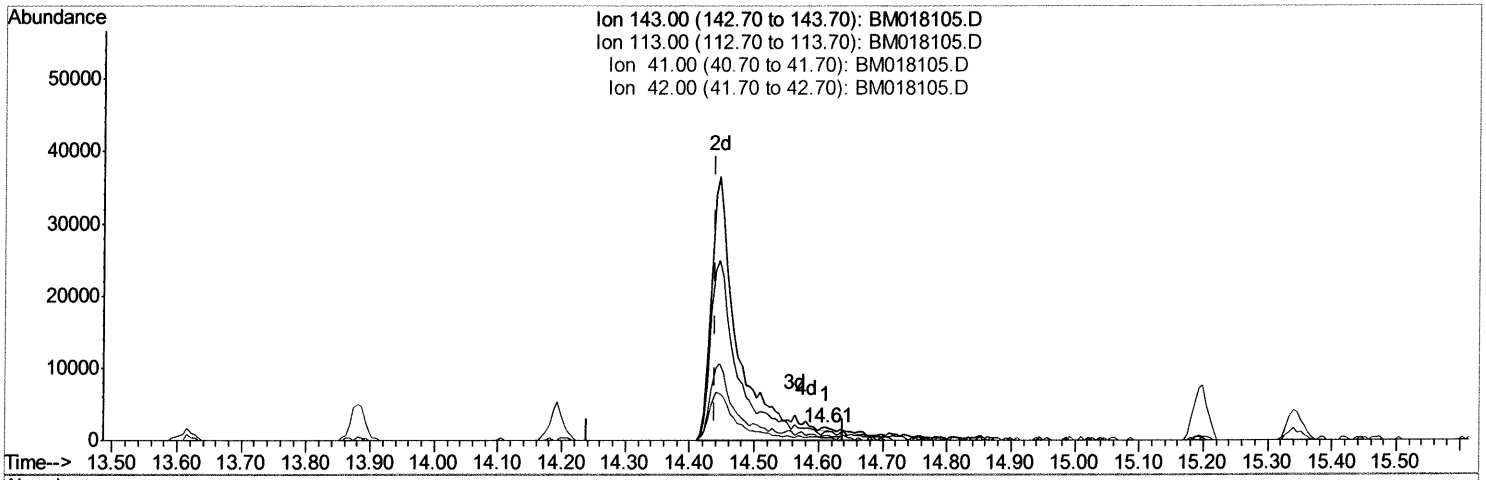
Quantitation Report (Qedit)

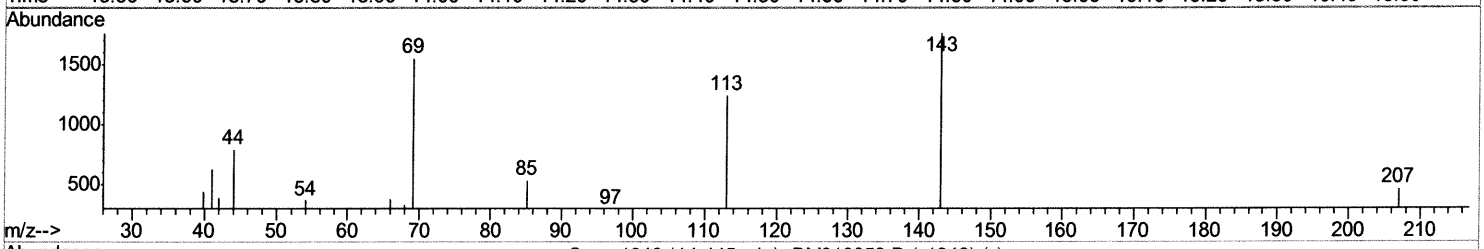
Data File : BM018105.D
Acq On : 12 Dec 2018 22:40
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 14 Sample Multiplier: 1

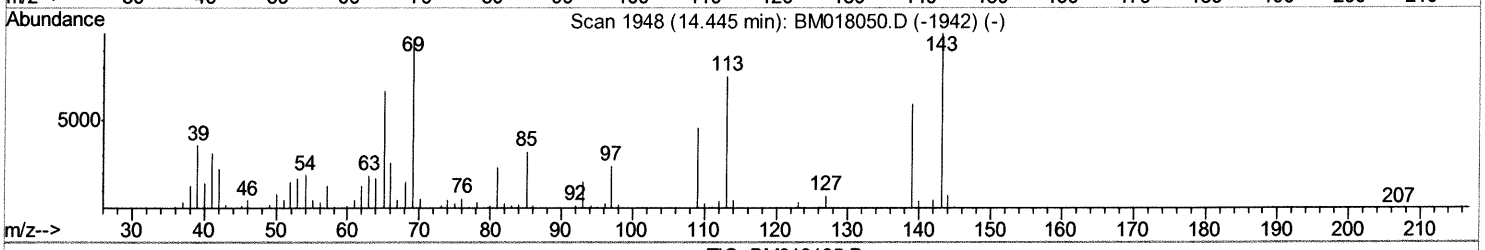
Quant Time: Dec 13 02:42:10 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E63

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:19 PM







TIC: BM018105.D

(51) 4-Nitrophenol-d4 (S)

14.610min (+0.171) 0.08ng/ul

response 343

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	70.71
41.00	40.10	35.61
42.00	26.80	22.47

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

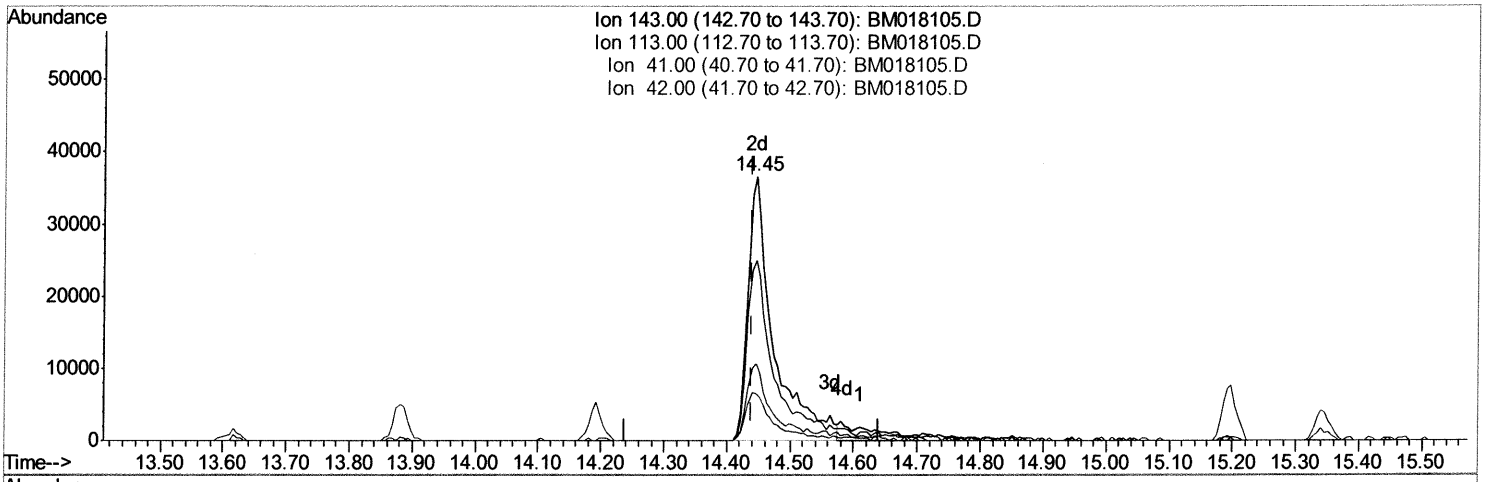
Quantitation Report (Qedit)

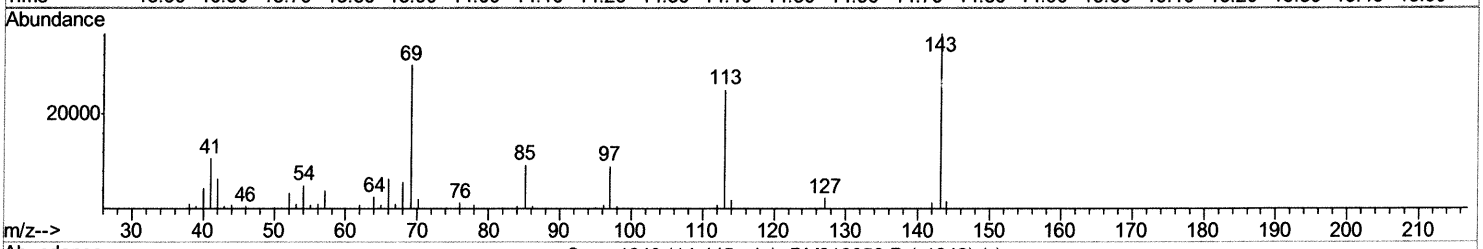
Data File : BM018105.D
Acq On : 12 Dec 2018 22:40
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 14 Sample Multiplier: 1

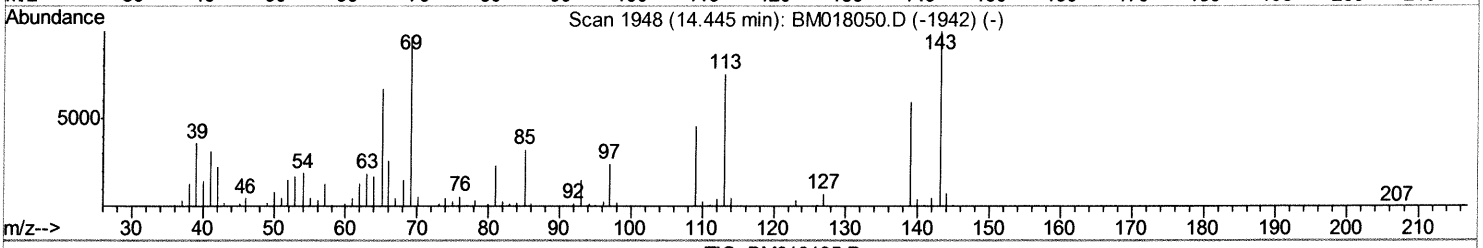
Quant Time: Dec 13 02:42:10 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E63

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:19 PM







TIC: BM018105.D

(51) 4-Nitrophenol-d4 (S)

14.445min (+0.006) 23.05ng/ul m > SJ 12/13/18

response 102864

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	68.37
41.00	40.10	29.17#
42.00	26.80	17.62#

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018105.D
Acq On : 12 Dec 2018 22:40
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 13 03:28:41 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9E63

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:19 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	109977	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	501752	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	282864	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	719462	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	794079	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	977875	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	11129	4.63	ng/uL	0.00
5) Phenol-d5	6.73	99	248586	24.75	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.89	67	142835	23.58	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	210667	26.81	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	200772	24.46	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	107169	27.81	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	129039	29.22	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	197951	23.55	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	304907	42.26	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	708204	28.85	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	843867	28.41	ng/ul	0.00
51) 4-Nitrophenol-d4	14.45	143	102864m	23.05	ng/ul	0.00
57) Fluorene-d10	15.20	176	611076	28.83	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	110845	21.55	ng/ul	0.00
70) Anthracene-d10	17.05	188	1005826	28.08	ng/ul	0.00
78) Pyrene-d10	19.36	212	1116682	29.06	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	1550072	29.23	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	67287	6.711	ng/ul	94
44) Dimethylphthalate	13.66	163	249222	10.481	ng/ul	99

SJ 12/13/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E64

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-01
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018013.D
% Solids : 85.1
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/08/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	78	U
100-52-7	Benzaldehyde	390	U
108-95-2	Phenol	100	J
111-44-4	Bis(2-Chloroethyl)ether	390	U
95-57-8	2-Chlorophenol	200	U
95-48-7	2-Methylphenol	390	U
108-60-1	2,2-oxybis(1-Chloropropane)	390	U
98-86-2	Acetophenone	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-di-n-propylamine	200	U
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	Bis(2-Chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	200	U
105-60-2	Caprolactam	390	U
59-50-7	4-Chloro-3-methylphenol	200	U
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	390	U
88-06-2	2,4,6-Trichlorophenol	200	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E64

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-01
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018013.D
% Solids : 85.1
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/08/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	200	U
92-52-4	1,1-Biphenyl	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	200	U
131-11-3	Dimethylphthalate	150	J
606-20-2	2,6-Dinitrotoluene	200	U
208-96-8	Acenaphthylene	200	U
99-09-2	3-Nitroaniline	390	U
83-32-9	Acenaphthene	200	U
51-28-5	2,4-Dinitrophenol	390	U
100-02-7	4-Nitrophenol	390	U
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	200	U
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	390	U
534-52-1	4,6-Dinitro-2-methylphenol	390	U
86-30-6	N-Nitrosodiphenylamine	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
1912-24-9	Atrazine	390	U
87-86-5	Pentachlorophenol	390	U
85-01-8	Phenanthrene	200	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E64

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-01
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018013.D
% Solids : 85.1
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/08/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	200	U
86-74-8	Carbazole	390	U
84-74-2	Di-n-butylphthalate	200	U
206-44-0	Fluoranthene	390	U
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U
91-94-1	3,3-Dichlorobenzidine	390	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	200	U
117-84-0	Di-n-octyl phthalate	390	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
58-90-2	2,3,4,6-Tetrachlorophenol	200	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E64

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-01
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018013.D
% Solids : 85.1
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/08/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	137235-48-4	6S-2,3,8,8-Tetramethyltricyclo[5.2	13.09	100	JN
2	000057-10-3	n-Hexadecanoic acid	17.87	130	JN
3	137235-51-9	1,2,4,8-Tetramethylbicyclo[6.3.0]u	25.67	1000	JN
4	E966796	Total Alkanes	N/A	0.0	

EPA-designated Registry Number.

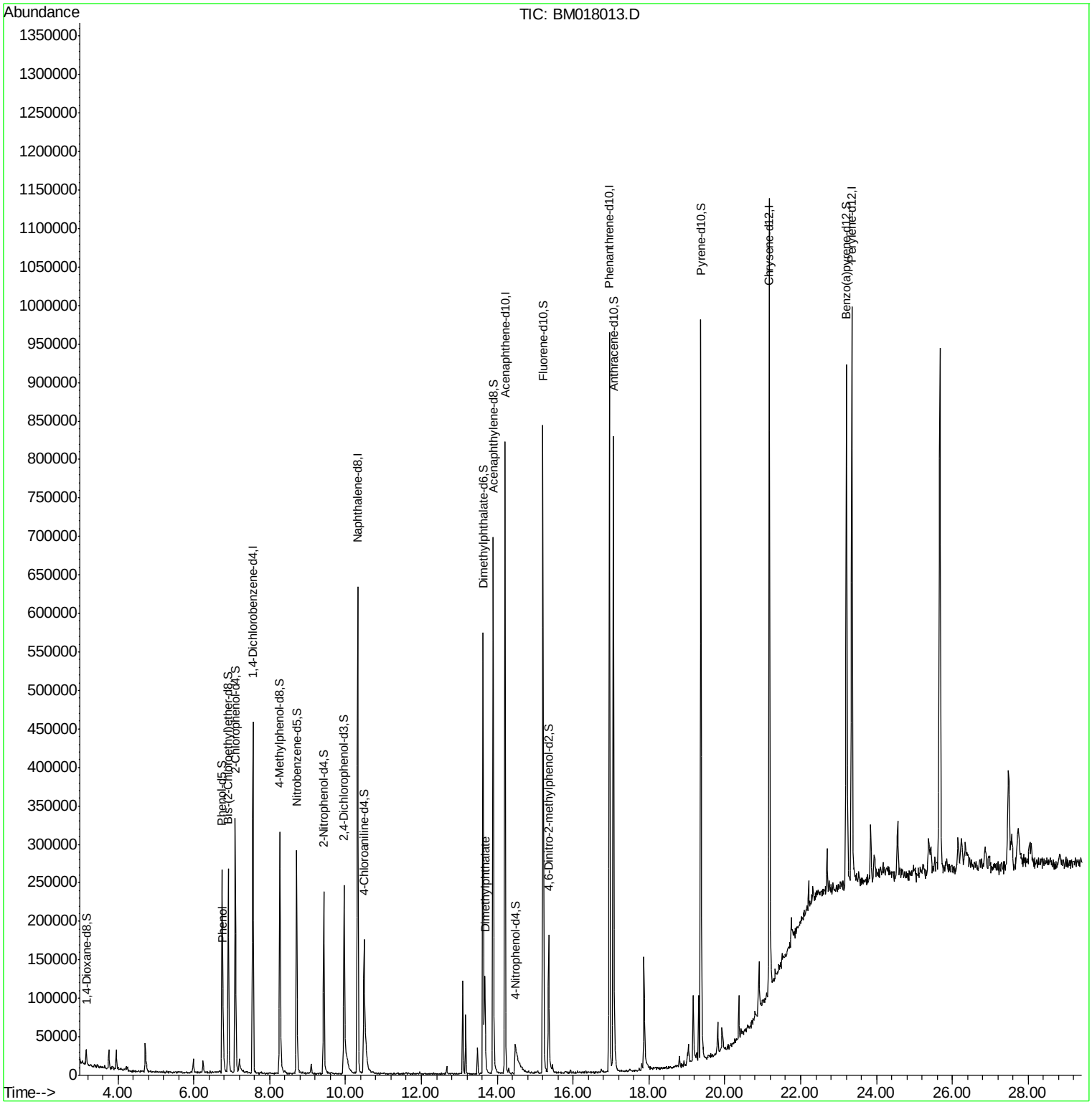
Quantitation Report (LSC Reviewed)

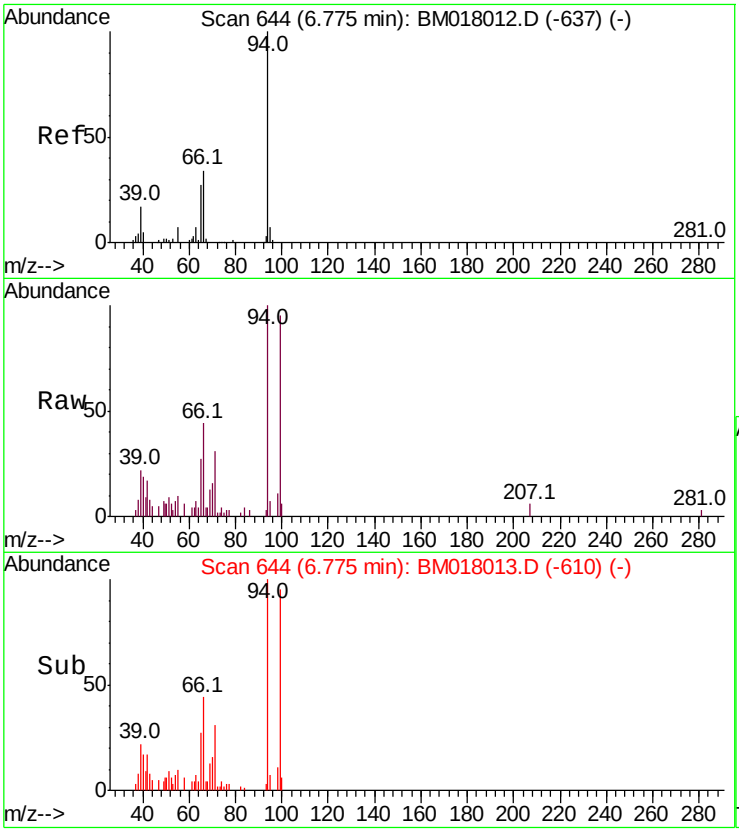
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018013.D
Acq On : 08 Dec 2018 11:46
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 10 04:00:15 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Dec 10 03:53:59 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E64

Manual Integrations APPROVED
Sohil
12/11/2018 8:46:46 AM

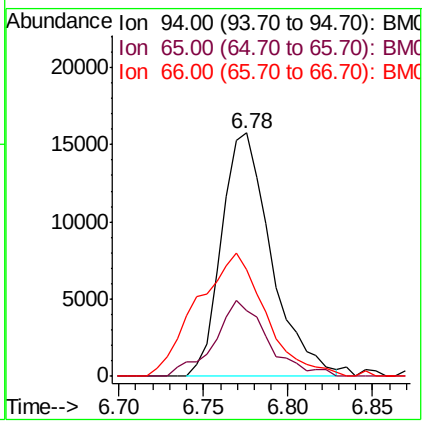




#6
Phenol
Concen: 2.635 ng/ul
RT: 6.78 min Scan# 644
Delta R.T. 0.00 min
Lab File: BM018013.D
Acq: 08 Dec 2018 11:46

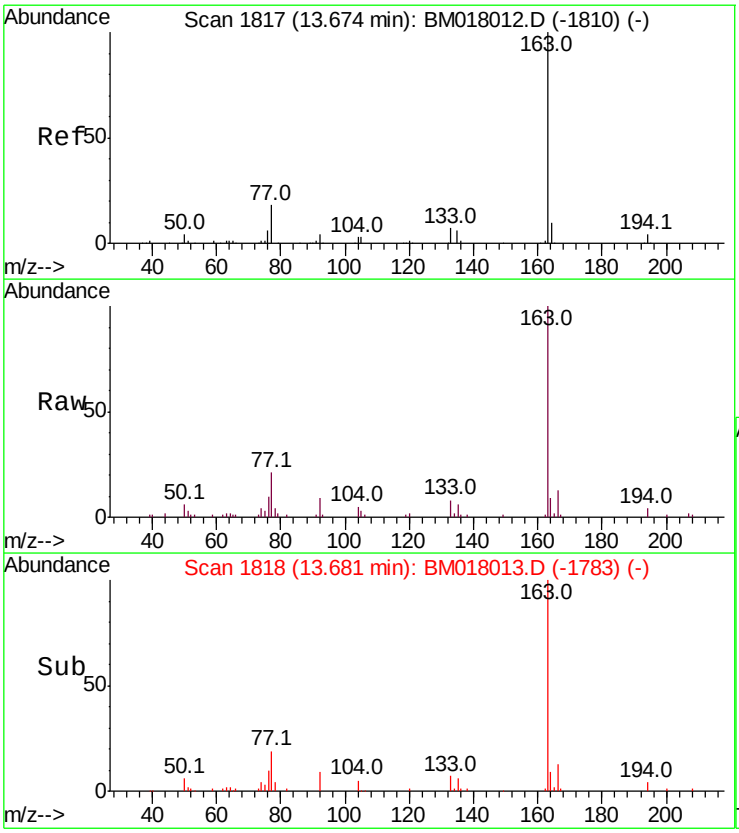
Tgt Ion: 94 Resp: 32241

Ion	Ratio	Lower	Upper
94	100		
65	26.8	24.7	37.1
66	43.9	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9E64

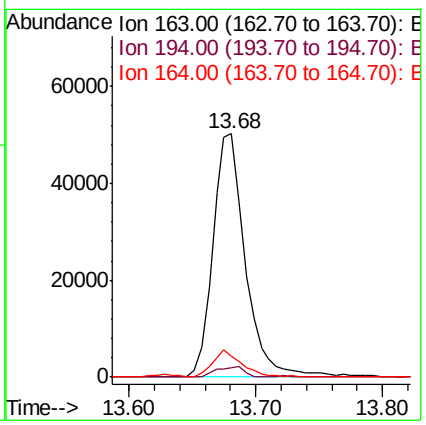
Manual Integrations APPROVED
Sohil
12/11/2018 8:46:46 AM



#44
Dimethylphthalate
Concen: 3.818 ng/ul
RT: 13.68 min Scan# 1818
Delta R.T. 0.01 min
Lab File: BM018013.D
Acq: 08 Dec 2018 11:46

Tgt Ion:163 Resp: 89270

Ion	Ratio	Lower	Upper
163	100		
194	3.8	3.4	5.0
164	8.6	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018013.D
Acq On : 08 Dec 2018 11:46
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9E64

Manual Integrations APPROVED
Sohil
12/11/2018 8:46:46 AM

Quant Time: Dec 10 04:00:15 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Dec 10 03:53:59 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.56	152	134232	20.00	ng/ul	0.00
18) Naphthalene-d8	10.32	136	533383	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.20	164	278109	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.96	188	582640	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	568226	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	558623	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.16	96	11400	3.89	ng/uL	0.00
5) Phenol-d5	6.75	99	178375	14.55	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	122083	16.51	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	167798	17.49	ng/ul	0.00
13) 4-Methylphenol-d8	8.27	113	142095	14.19	ng/ul	0.00
19) Nitrobenzene-d5	8.71	128	76332	18.63	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	83213	17.73	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.96	165	120618	13.50	ng/ul	0.01
29) 4-Chloroaniline-d4	10.49	131	162462	21.18	ng/ul	0.00
43) Dimethylphthalate-d6	13.63	166	462960	19.19	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	513580	17.59	ng/ul	0.00
51) 4-Nitrophenol-d4	14.48	143	42615m	9.71	ng/ul	0.04
57) Fluorene-d10	15.21	176	382744	18.37	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.36	200	44302	10.64	ng/ul	0.00
70) Anthracene-d10	17.06	188	533692	18.40	ng/ul	0.00
78) Pyrene-d10	19.36	212	546751	19.89	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	512939	16.93	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.78	94	32241	2.635	ng/ul	96
44) Dimethylphthalate	13.68	163	89270	3.818	ng/ul	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018013.D
Acq On : 08 Dec 2018 11:46
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E64

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.064	11	13	17	rVB5	3825	3439	0.19%	0.015%
2	3.129	21	24	26	rBV3	3489	2981	0.16%	0.013%
3	3.164	26	30	35	rBB	19776	26429	1.43%	0.112%
4	3.452	76	79	82	rBV3	4834	5847	0.32%	0.025%
5	3.658	110	114	115	rBV4	4279	4160	0.23%	0.018%
6	3.758	127	131	139	rVB	25619	40492	2.19%	0.171%
7	3.811	139	140	143	rBV3	3217	2347	0.13%	0.010%
8	3.852	145	147	150	rVV3	4317	4747	0.26%	0.020%
9	3.911	154	157	160	rBV5	3092	3441	0.19%	0.015%
10	3.952	160	164	170	rVV2	25095	36519	1.98%	0.154%
11	4.023	175	176	180	rBV3	1975	2443	0.13%	0.010%
12	4.152	197	198	202	rVV3	2520	3535	0.19%	0.015%
13	4.217	204	209	211	rVV4	5781	10565	0.57%	0.045%
14	4.252	214	215	219	rVB3	5730	5937	0.32%	0.025%
15	4.370	234	235	238	rBV2	2582	2357	0.13%	0.010%
16	4.723	291	295	304	rBV	37433	67740	3.67%	0.286%
17	4.781	304	305	308	rVB3	3262	2305	0.12%	0.010%
18	5.734	464	467	471	rVB3	1592	2321	0.13%	0.010%
19	5.987	505	510	513	rBV2	17845	27350	1.48%	0.116%
20	6.240	549	553	559	rBV3	15788	24976	1.35%	0.106%
21	6.746	633	639	653	rBV2	264176	583474	31.60%	2.465%
22	6.905	660	666	680	rVV	263601	420253	22.76%	1.775%
23	7.093	692	698	710	rBV	330464	559479	30.30%	2.363%
24	7.199	710	716	722	rBV2	15993	28197	1.53%	0.119%
25	7.558	768	777	786	rVV	456658	781028	42.30%	3.299%
26	7.622	786	788	792	rVV4	3654	4766	0.26%	0.020%
27	7.728	803	806	809	rBV2	2363	2866	0.16%	0.012%
28	7.975	846	848	850	rBV2	2398	2533	0.14%	0.011%
29	8.269	892	898	913	rBV	314199	608938	32.98%	2.572%
30	8.387	916	918	923	rVV4	4151	6898	0.37%	0.029%
31	8.711	966	973	983	rBV	289352	511201	27.68%	2.159%
32	9.093	1033	1038	1044	rVB2	11836	18726	1.01%	0.079%
33	9.422	1088	1094	1103	rBV	236421	430601	23.32%	1.819%
34	9.499	1105	1107	1110	rVV2	3281	2897	0.16%	0.012%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018013.D
Acq On : 08 Dec 2018 11:46
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E64

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	9.728	1142	1146	1150	rBV2	1483	2920	0.16%	0.012%
36	9.963	1179	1186	1209	rBV	245149	598626	32.42%	2.529%
37	10.322	1240	1247	1258	rVV	631808	1073281	58.12%	4.534%
38	10.487	1268	1275	1297	rBV	173430	528076	28.60%	2.231%
39	10.652	1301	1303	1306	rVB3	3078	2900	0.16%	0.012%
40	10.863	1333	1339	1341	rVB3	2685	3529	0.19%	0.015%
41	11.346	1417	1421	1424	rBV2	1593	2982	0.16%	0.013%
42	11.734	1482	1487	1490	rBV2	1247	2296	0.12%	0.010%
43	11.963	1520	1526	1531	rVB4	3387	6756	0.37%	0.029%
44	12.669	1640	1646	1650	rBV2	10475	15507	0.84%	0.066%
45	13.093	1713	1718	1726	rVB	120604	169247	9.17%	0.715%
46	13.169	1726	1731	1737	rBV2	77018	106561	5.77%	0.450%
47	13.481	1780	1784	1793	rBV4	34699	50644	2.74%	0.214%
48	13.628	1803	1809	1814	rBV	571700	938212	50.81%	3.963%
49	13.675	1814	1817	1831	rVB	125201	224641	12.17%	0.949%
50	13.893	1847	1854	1867	rBV	695935	1069345	57.91%	4.517%
51	14.204	1900	1907	1921	rBV2	820542	1308339	70.85%	5.527%
52	14.304	1921	1924	1931	rVB3	7960	11849	0.64%	0.050%
53	14.481	1947	1954	1958	rBV3	39135	92976	5.04%	0.393%
54	15.016	2042	2045	2048	rVV3	2385	2565	0.14%	0.011%
55	15.069	2052	2054	2059	rVB2	4152	5610	0.30%	0.024%
56	15.204	2071	2077	2090	rBV	842125	1417609	76.77%	5.988%
57	15.357	2098	2103	2117	rBV	177751	320495	17.36%	1.354%
58	15.451	2117	2119	2126	rVB5	10567	15755	0.85%	0.067%
59	15.592	2138	2143	2146	rBV4	1488	3008	0.16%	0.013%
60	15.616	2146	2147	2155	rVV3	1671	2761	0.15%	0.012%
61	15.787	2174	2176	2179	rBV2	2233	2716	0.15%	0.011%
62	15.887	2190	2193	2196	rVB3	2675	2502	0.14%	0.011%
63	15.934	2199	2201	2203	rBV3	4419	3867	0.21%	0.016%
64	16.345	2269	2271	2275	rVB2	3212	3685	0.20%	0.016%
65	16.522	2298	2301	2306	rVB4	1766	2629	0.14%	0.011%
66	16.634	2316	2320	2323	rVB2	1631	2313	0.13%	0.010%
67	16.745	2335	2339	2342	rBV3	4827	6020	0.33%	0.025%
68	16.957	2369	2375	2387	rBV2	959438	1443422	78.17%	6.097%
69	17.063	2387	2393	2408	rVV2	824791	1384415	74.97%	5.848%
70	17.475	2459	2463	2464	rBV4	2204	2608	0.14%	0.011%
71	17.586	2477	2482	2483	rBV2	1490	2477	0.13%	0.010%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018013.D
Acq On : 08 Dec 2018 11:46
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E64

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

72	17.745	2505	2509	2513	rVB3	3812	3084	0.17%	0.013%
73	17.810	2516	2520	2526	rBV3	10450	17931	0.97%	0.076%
74	17.869	2526	2530	2541	rBV	145246	248021	13.43%	1.048%
75	18.075	2563	2565	2569	rVB4	2446	3009	0.16%	0.013%
76	18.116	2569	2572	2574	rBV3	2763	3479	0.19%	0.015%
77	18.192	2583	2585	2588	rVB4	3917	4460	0.24%	0.019%
78	18.216	2588	2589	2593	rBV4	3632	4182	0.23%	0.018%
79	18.516	2639	2640	2642	rBV2	3360	2681	0.15%	0.011%
80	18.710	2670	2673	2675	rBV4	2099	2421	0.13%	0.010%
81	18.804	2685	2689	2696	rVB3	14895	22493	1.22%	0.095%
82	18.851	2696	2697	2698	rBV	5052	2260	0.12%	0.010%
83	18.922	2706	2709	2712	rBV3	8144	9858	0.53%	0.042%
84	19.010	2720	2724	2727	rBV4	17112	29203	1.58%	0.123%
85	19.045	2727	2730	2736	rVB4	23211	36535	1.98%	0.154%
86	19.163	2746	2750	2758	rBV2	85108	140743	7.62%	0.595%
87	19.263	2763	2767	2769	rBV4	6481	7792	0.42%	0.033%
88	19.310	2771	2775	2779	rBV	84620	99527	5.39%	0.420%
89	19.369	2779	2785	2794	rBV2	958717	1465569	79.37%	6.191%
90	19.633	2828	2830	2832	rBV3	6062	4757	0.26%	0.020%
91	19.810	2854	2860	2864	rBV2	39826	55844	3.02%	0.236%
92	19.898	2873	2875	2877	rBV3	8430	8650	0.47%	0.037%
93	19.927	2877	2880	2883	rBV2	25317	33608	1.82%	0.142%
94	20.098	2907	2909	2912	rVB3	6329	4310	0.23%	0.018%
95	20.369	2951	2955	2960	rBV2	56670	67048	3.63%	0.283%
96	20.898	3041	3045	3053	rBV4	62099	108199	5.86%	0.457%
97	21.174	3087	3092	3106	rBV	1030457	1593901	86.32%	6.733%
98	23.204	3432	3437	3448	rBV	672876	1365338	73.94%	5.767%
99	23.345	3455	3461	3470	rBV2	733218	1407497	76.22%	5.945%
100	25.668	3848	3856	3871	rVB3	681982	1846515	100.00%	7.800%

Sum of corrected areas: 23673847

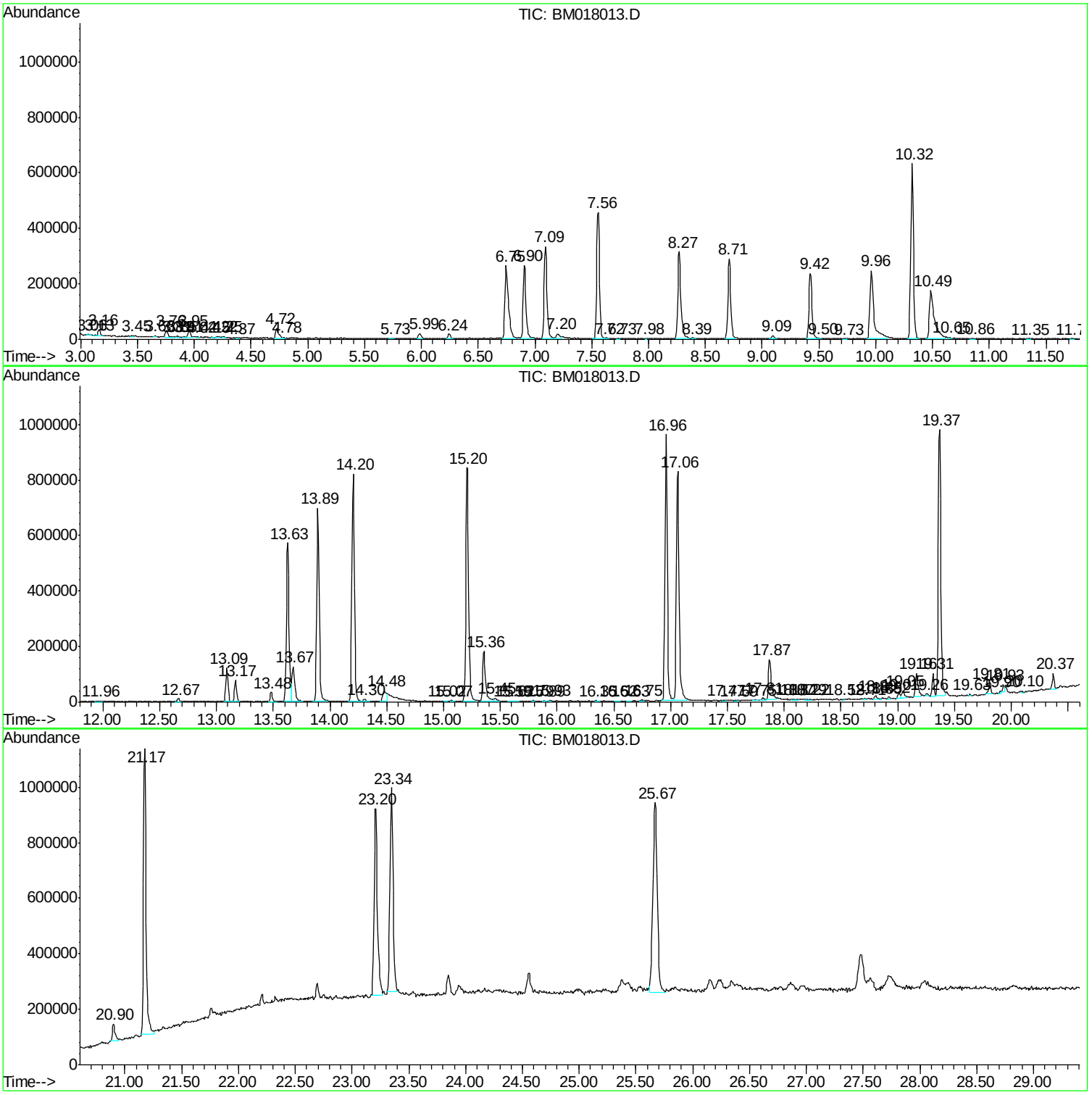
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018013.D
Acq On : 08 Dec 2018 11:46
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E64

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018013.D
Acq On : 08 Dec 2018 11:46
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E64

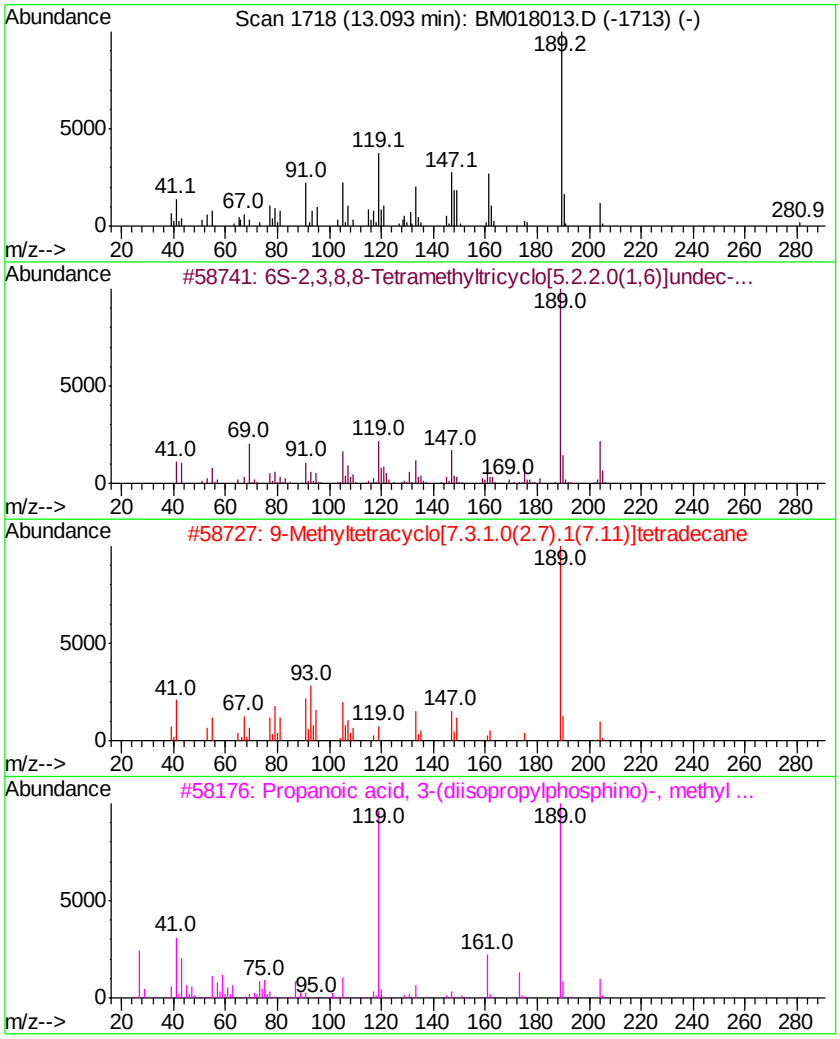
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

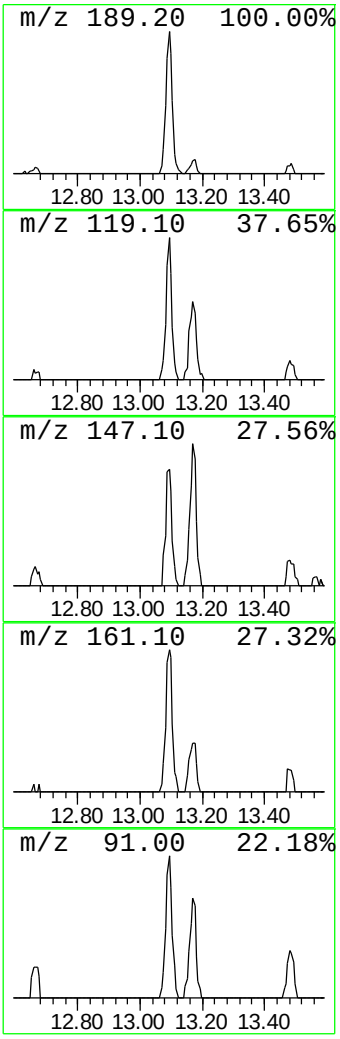
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 6S-2,3,8,8-Tetramethyltricy... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.09	2.59 ng/ul	169247	Acenaphthene-d10	14.20

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	6S-2,3,8,8-Tetramethyltricyclo[5...	204	C15H24	137235-48-4	80
2	9-Methyltetracyclo[7.3.1.0(2.7)....	204	C15H24	1000215-30-5	59
3	Propanoic acid, 3-(diisopropylph...	204	C10H21O2P	162608-94-8	47
4	2-Isopropenyl-4a,8-dimethyl-1,2,...	204	C15H24	1000192-43-5	40
5	Benzene, 1,3,5-tris(1-methylethyl)-	204	C15H24	000717-74-8	38





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018013.D
Acq On : 08 Dec 2018 11:46
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E64

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

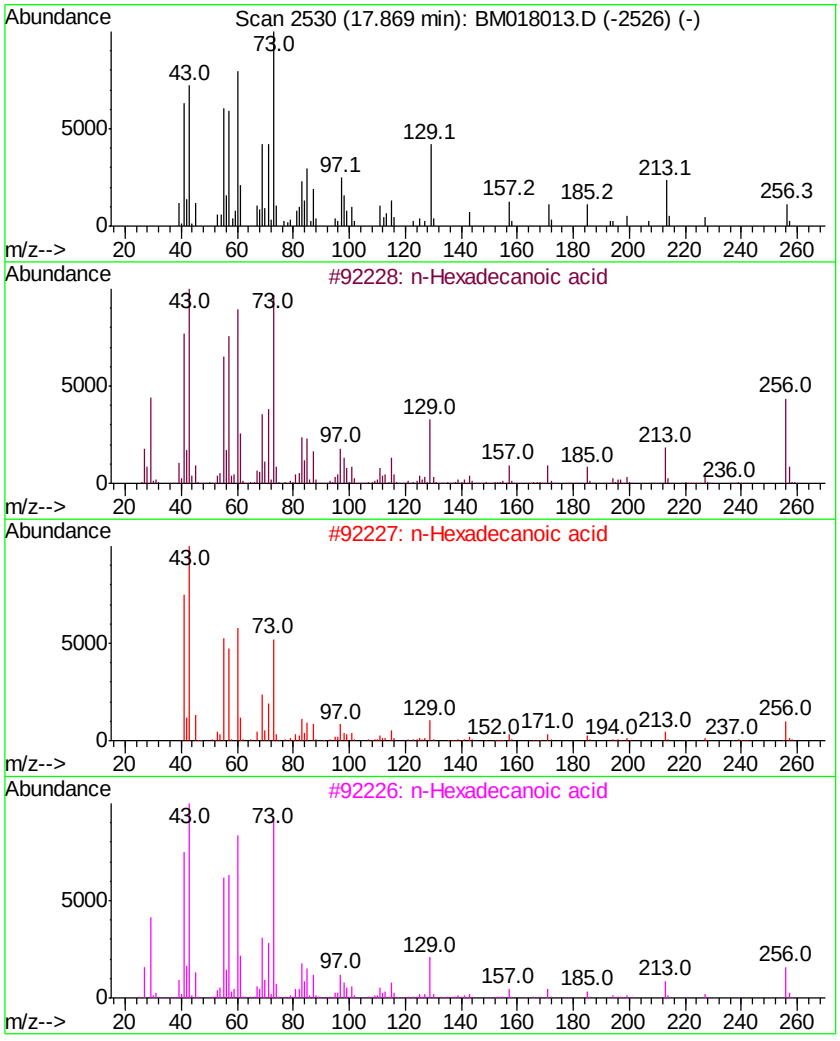
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

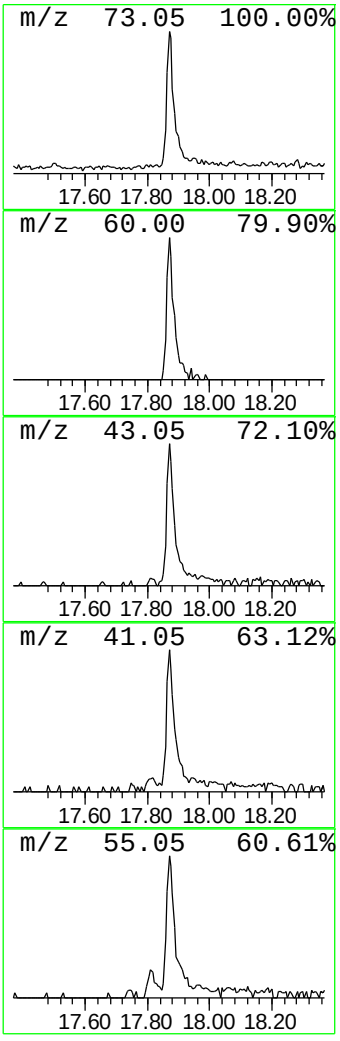
****

Peak Number 2 n-Hexadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.87	3.44 ng/ul	248021	Phenanthrene-d10	16.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	97
3	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	90
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	83
5	n-Decanoic acid	172	C10H20O2	000334-48-5	76





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018013.D
Acq On : 08 Dec 2018 11:46
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E64

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

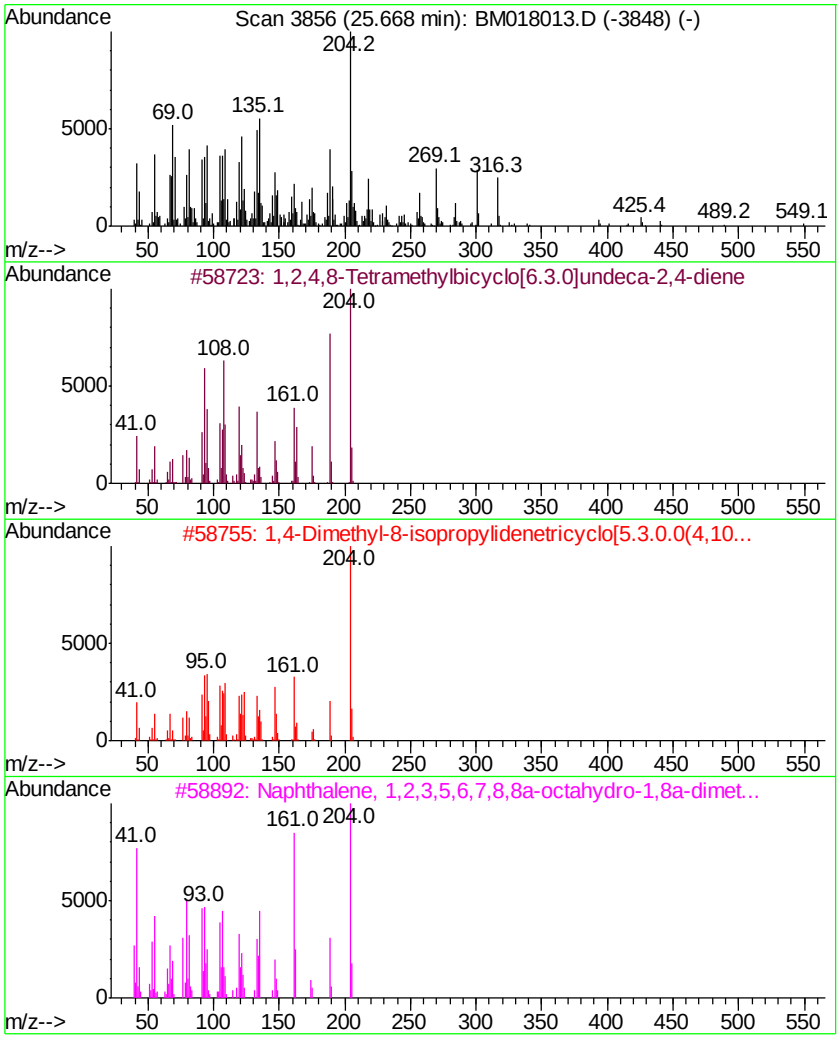
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

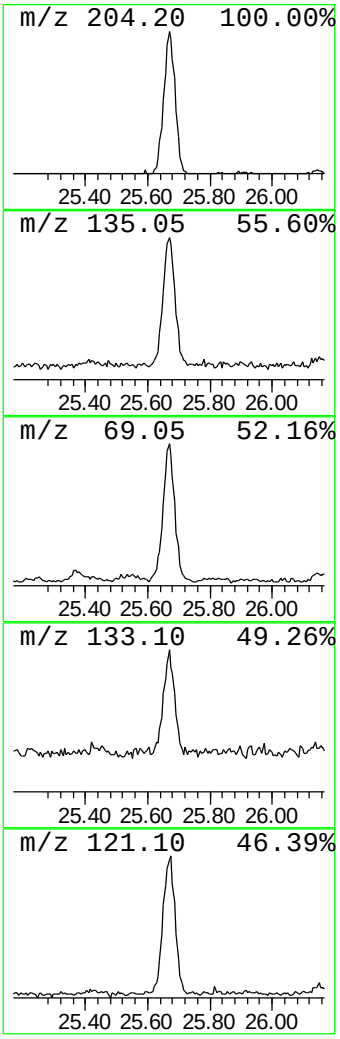
****

Peak Number 3 1,2,4,8-Tetramethylbicyclo[... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.67	26.24 ng/ul	1846520	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2,4,8-Tetramethylbicyclo[6.3.0...	204	C15H24	137235-51-9	78
2	1,4-Dimethyl-8-isopropylidenetri...	204	C15H24	1000140-07-7	52
3	Naphthalene, 1,2,3,5,6,7,8,8a-oc...	204	C15H24	004630-07-3	52
4	1H-3a,7-Methanoazulene, 2,3,6,7,...	204	C15H24	000560-32-7	46
5	Naphthalene, decahydro-4a-methyl...	204	C15H24	017066-67-0	45





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM120818\
Data File : BM018013.D
Acq On : 08 Dec 2018 11:46
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E64

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
6S-2,3,8,8-Tetram...	13.09	2.6	ng/ul	169247	3	14.20	1308340	20.0
n-Hexadecanoic acid	17.87	3.4	ng/ul	248021	4	16.96	1443420	20.0
1,2,4,8-Tetrameth...	25.67	26.2	ng/ul	1846520	6	23.34	1407500	20.0

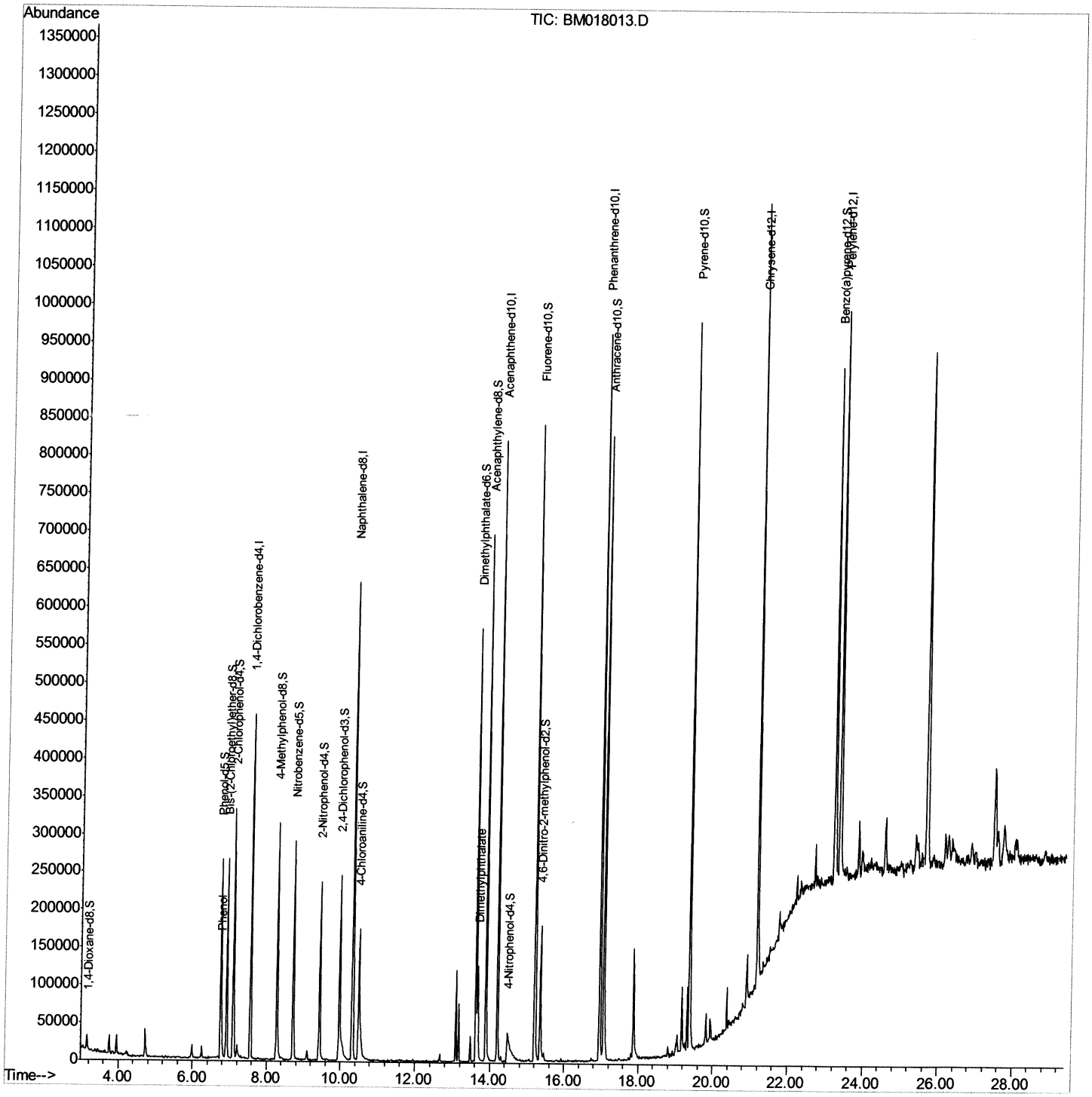
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM120818\
Data File : BM018013.D
Acq On : 08 Dec 2018 11:46
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 10 04:00:15 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Dec 10 03:53:59 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E64

Manual Integrations APPROVED
Sohil
12/11/2018 8:46:46 AM

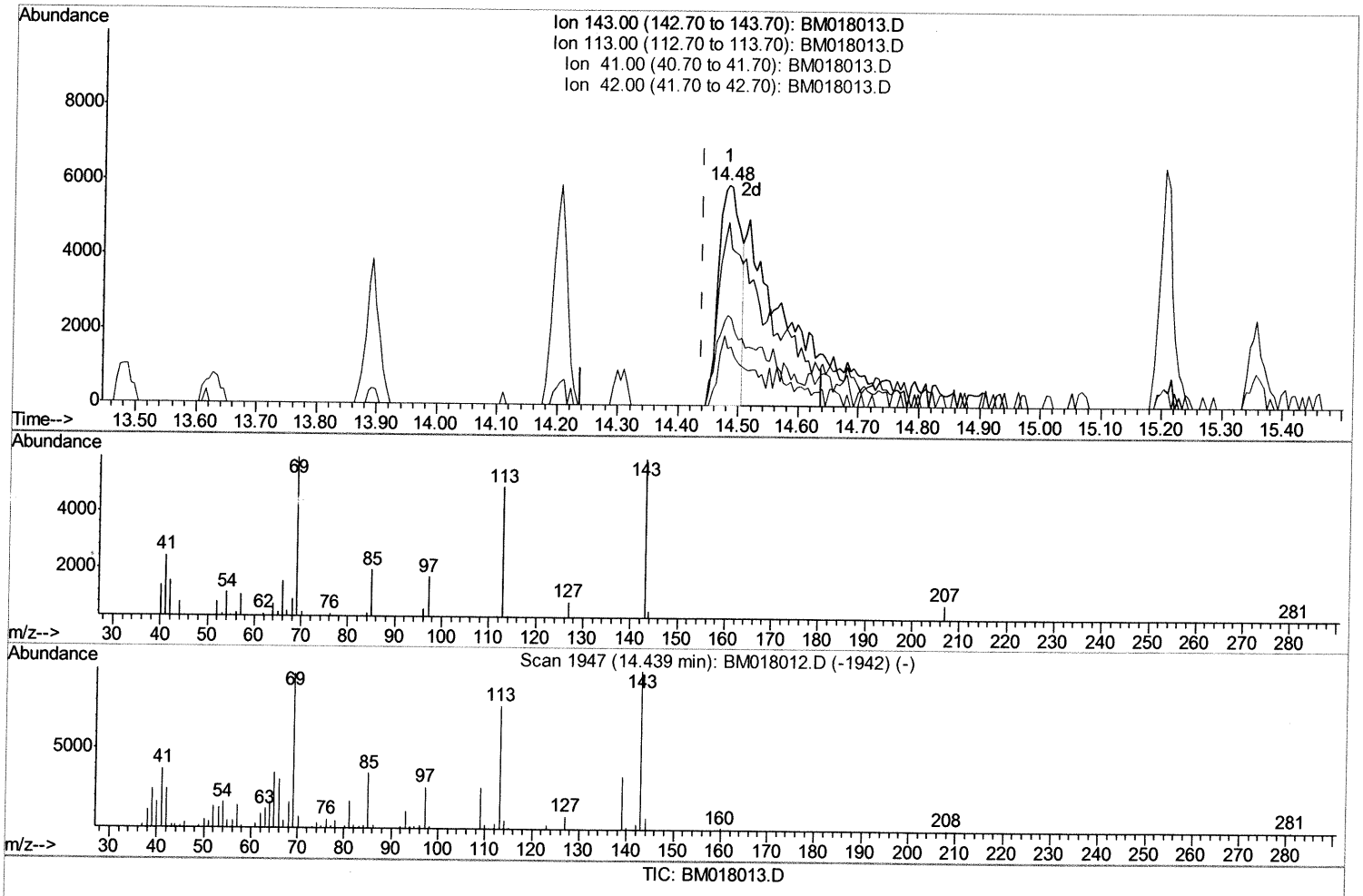


Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM120818\
Data File : BM018013.D
Acq On : 08 Dec 2018 11:46
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 10 03:56:29 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Dec 10 03:53:59 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E64

Manual Integrations APPROVED
Sohil
12/11/2018 8:46:46 AM



TIC: BM018013.D

(51) 4-Nitrophenol-d4 (S)

14.481min (+0.042) 3.37ng/ul

response 14796

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	82.88
41.00	40.10	40.99
42.00	26.80	25.82

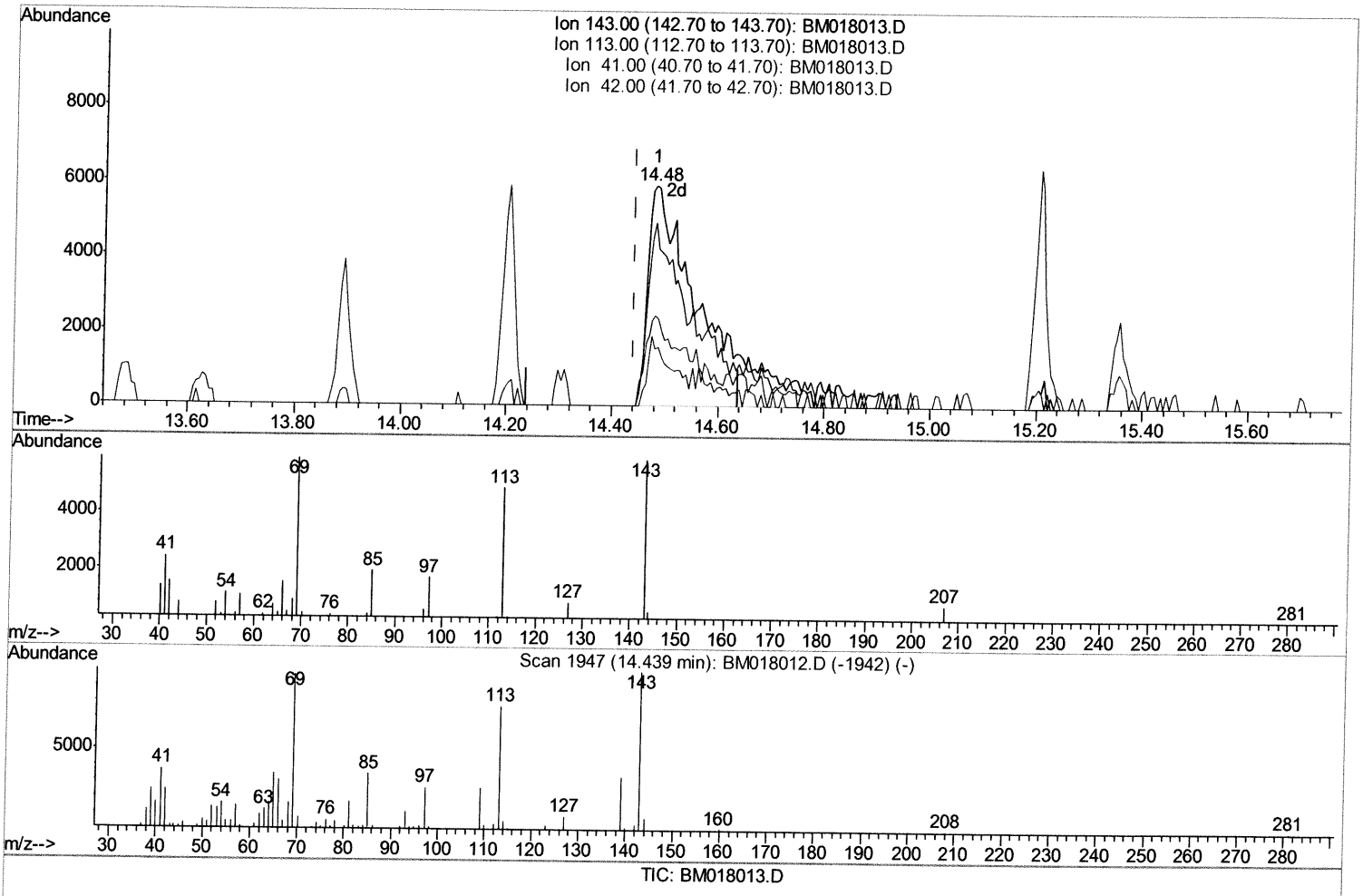
Quantitation Report (Qedit)

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM120818\
Data File : BM018013.D
Acq On : 08 Dec 2018 11:46
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 10 03:56:29 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Dec 10 03:53:59 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E64

Manual Integrations APPROVED
Sohil
12/11/2018 8:46:46 AM



TIC: BM018013.D

(51) 4-Nitrophenol-d4 (S)

14.481min (+0.042) 9.71ng/ul m> SJ 12/11/18

response 42615

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	82.88
41.00	40.10	40.99
42.00	26.80	25.82

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM120818\
Data File : BM018013.D
Acq On : 08 Dec 2018 11:46
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 10 04:00:15 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Dec 10 03:53:59 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9E64

Manual Integrations APPROVED
Sohil
12/11/2018 8:46:46 AM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.56	152	134232	20.00	ng/ul	0.00
18) Naphthalene-d8	10.32	136	533383	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.20	164	278109	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.96	188	582640	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	568226	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	558623	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.16	96	11400	3.89	ng/uL	0.00
5) Phenol-d5	6.75	99	178375	14.55	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	122083	16.51	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	167798	17.49	ng/ul	0.00
13) 4-Methylphenol-d8	8.27	113	142095	14.19	ng/ul	0.00
19) Nitrobenzene-d5	8.71	128	76332	18.63	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	83213	17.73	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.96	165	120618	13.50	ng/ul	0.01
29) 4-Chloroaniline-d4	10.49	131	162462	21.18	ng/ul	0.00
43) Dimethylphthalate-d6	13.63	166	462960	19.19	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	513580	17.59	ng/ul	0.00
51) 4-Nitrophenol-d4	14.48	143	42615m	9.71	ng/ul	0.04
57) Fluorene-d10	15.21	176	382744	18.37	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.36	200	44302	10.64	ng/ul	0.00
70) Anthracene-d10	17.06	188	533692	18.40	ng/ul	0.00
78) Pyrene-d10	19.36	212	546751	19.89	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	512939	16.93	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.78	94	32241	2.635	ng/ul	96
44) Dimethylphthalate	13.68	163	89270	3.818	ng/ul	97

SJ 12/11/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E65

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-02
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018094.D
% Solids : 86.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	77	U
100-52-7	Benzaldehyde	380	U
108-95-2	Phenol	110	J
111-44-4	Bis(2-Chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	200	U
95-48-7	2-Methylphenol	380	U
108-60-1	2,2-oxybis(1-Chloropropane)	380	U
98-86-2	Acetophenone	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	200	U
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	Bis(2-Chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	200	U
105-60-2	Caprolactam	380	U
59-50-7	4-Chloro-3-methylphenol	200	U
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	200	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E65

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-02
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018094.D
% Solids : 86.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	200	U
92-52-4	1,1-Biphenyl	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	200	U
131-11-3	Dimethylphthalate	160	J
606-20-2	2,6-Dinitrotoluene	200	U
208-96-8	Acenaphthylene	200	U
99-09-2	3-Nitroaniline	380	U
83-32-9	Acenaphthene	200	U
51-28-5	2,4-Dinitrophenol	380	U
100-02-7	4-Nitrophenol	380	U
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	200	U
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	380	U
534-52-1	4,6-Dinitro-2-methylphenol	380	U
86-30-6	N-Nitrosodiphenylamine	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
1912-24-9	Atrazine	380	U
87-86-5	Pentachlorophenol	380	U
85-01-8	Phenanthrene	200	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E65

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-02
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018094.D
% Solids : 86.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	200	U
86-74-8	Carbazole	380	U
84-74-2	Di-n-butylphthalate	200	U
206-44-0	Fluoranthene	380	U
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U
91-94-1	3,3-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	200	U
117-84-0	Di-n-octyl phthalate	380	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
58-90-2	2,3,4,6-Tetrachlorophenol	200	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E65

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-02
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018094.D
% Solids : 86.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/12/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000057-10-3	n-Hexadecanoic acid	17.87	690	JN
2	000057-11-4	Octadecanoic acid	19.16	320	JN
3	000111-06-8	Hexadecanoic acid, butyl ester	19.31	99	JN
4	007683-64-9	Squalene	22.33	210	JN
5	1000193-60-8	1,1,4a-Trimethyl-5,6-dimethylenede	25.66	270	JN
6	E966796	Total Alkanes	N/A	650	

EPA-designated Registry Number.

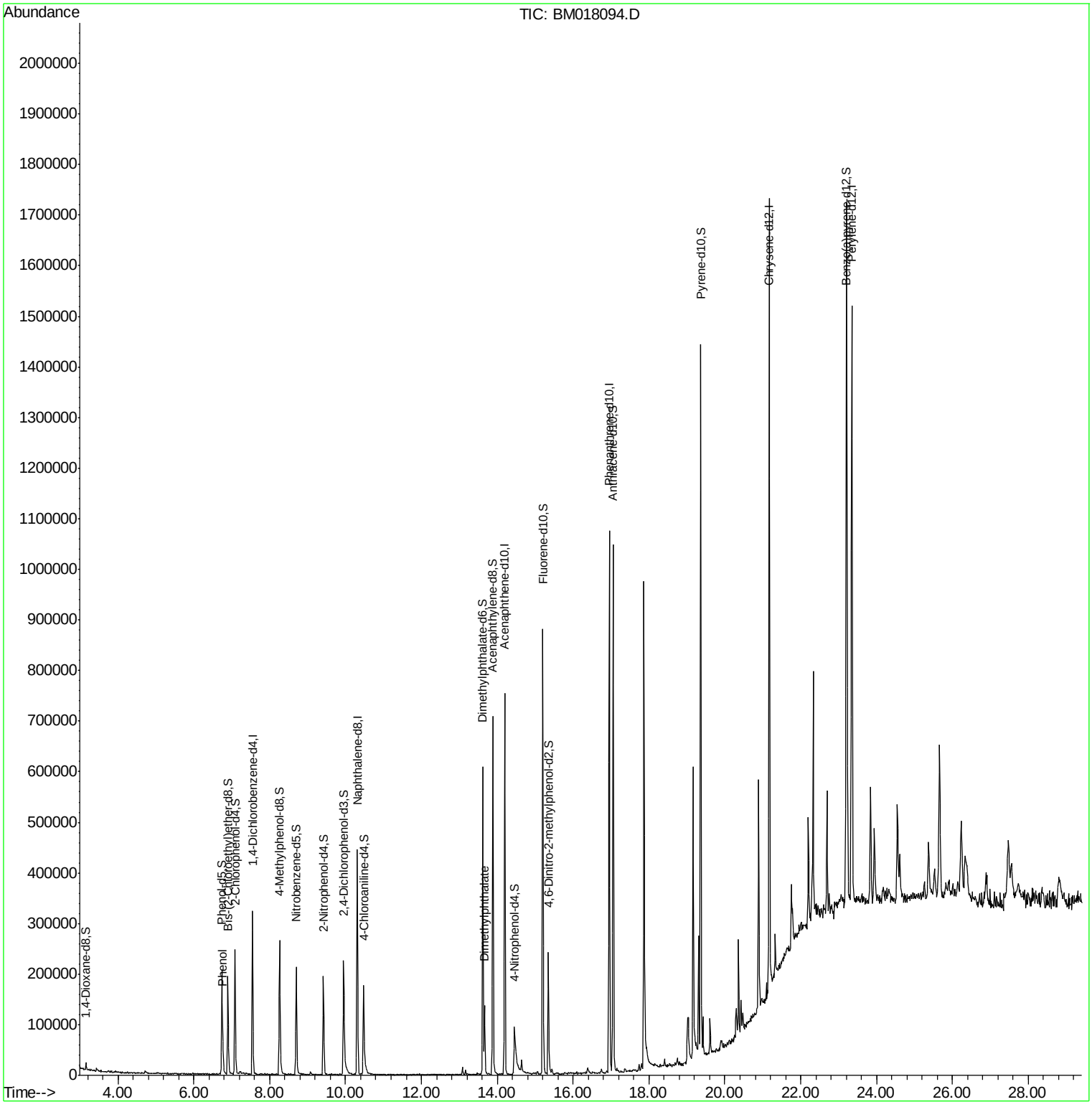
Quantitation Report (LSC Reviewed)

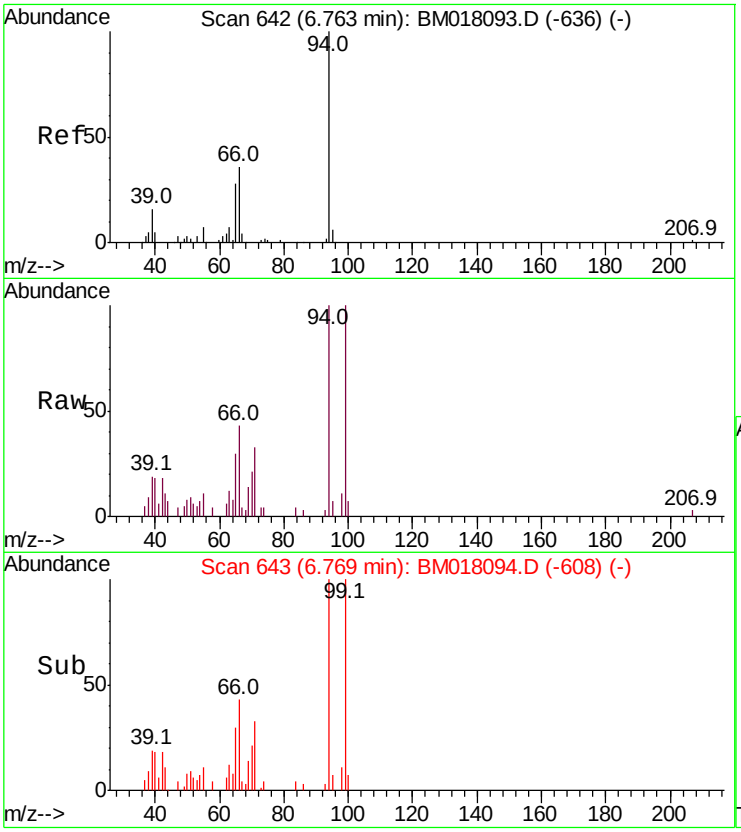
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018094.D
Acq On : 12 Dec 2018 16:02
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 13 02:50:33 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E65

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:00 PM

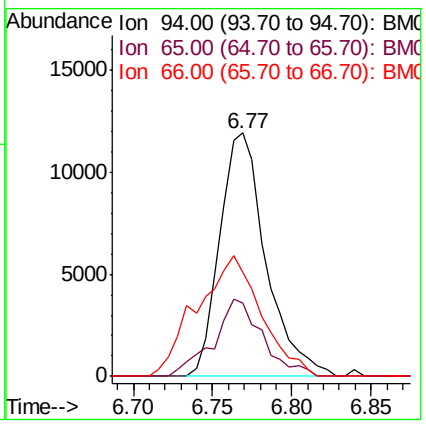




#6
Phenol
Concen: 2.952 ng/ul
RT: 6.77 min Scan# 643
Delta R.T. 0.01 min
Lab File: BM018094.D
Acq: 12 Dec 2018 16:02

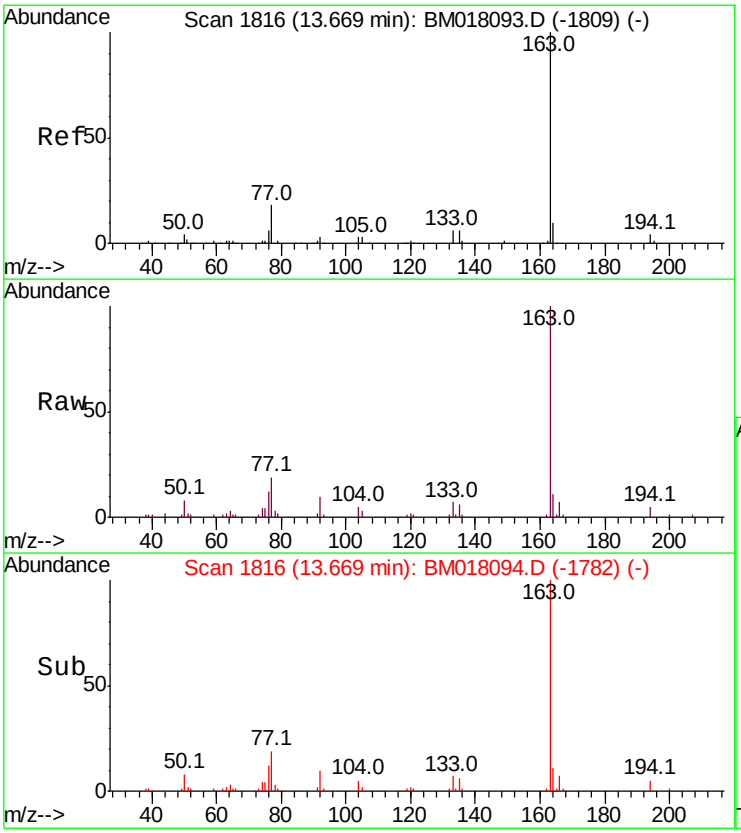
Tgt Ion: 94 Resp: 24150

Ion	Ratio	Lower	Upper
94	100		
65	29.9	24.7	37.1
66	42.9	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9E65

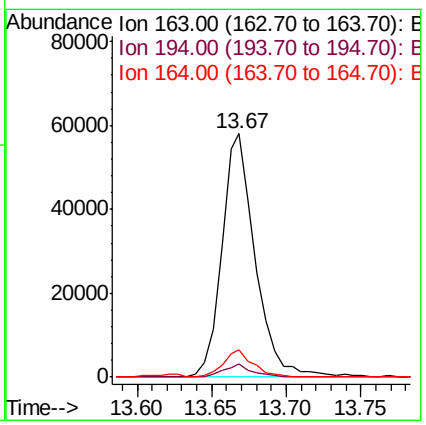
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:00 PM



#44
Dimethylphthalate
Concen: 4.225 ng/ul
RT: 13.67 min Scan# 1816
Delta R.T. -0.00 min
Lab File: BM018094.D
Acq: 12 Dec 2018 16:02

Tgt Ion:163 Resp: 90417

Ion	Ratio	Lower	Upper
163	100		
194	5.3	3.4	5.0#
164	11.0	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018094.D
Acq On : 12 Dec 2018 16:02
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9E65

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:00 PM

Quant Time: Dec 13 02:50:33 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	89745	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	400989	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.20	164	254584	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.96	188	620723	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	780974	20.00	ng/ul	0.00
85) Perylene-d12	23.35	264	868370	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	7109	3.63	ng/uL	0.00
5) Phenol-d5	6.74	99	139810	17.06	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	83870	16.97	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	125870	19.63	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	119901	17.90	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	62502	20.29	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	70953	20.10	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	117224m	17.45	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	140140	24.31	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	452851	20.50	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	533031	19.94	ng/ul	0.00
51) 4-Nitrophenol-d4	14.46	143	61093m	15.21	ng/ul	0.02
57) Fluorene-d10	15.20	176	373100	19.56	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	62078	13.99	ng/ul	0.00
70) Anthracene-d10	17.06	188	616542	19.95	ng/ul	0.00
78) Pyrene-d10	19.36	212	718021	19.00	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	947863	20.13	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.77	94	24150	2.952	ng/ul	99
44) Dimethylphthalate	13.67	163	90417	4.225	ng/ul#	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018094.D
Acq On : 12 Dec 2018 16:02
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E65

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.152	26	28	34	rVB3	14632	18334	0.67%	0.061%
2	3.434	73	76	77	rBV2	4797	4796	0.18%	0.016%
3	3.516	88	90	96	rVB4	3520	5784	0.21%	0.019%
4	3.834	142	144	147	rVB3	3646	2970	0.11%	0.010%
5	3.940	159	162	166	rBV5	3608	3821	0.14%	0.013%
6	4.716	291	294	297	rBV	4739	5069	0.19%	0.017%
7	5.975	505	508	511	rVB3	3079	3293	0.12%	0.011%
8	6.140	531	536	538	rVB3	1983	3107	0.11%	0.010%
9	6.234	549	552	555	rVB4	2761	2991	0.11%	0.010%
10	6.604	612	615	619	rBV3	2094	3399	0.12%	0.011%
11	6.740	632	638	654	rBV2	207337	444952	16.35%	1.486%
12	6.898	659	665	677	rBV	194108	306593	11.26%	1.024%
13	7.010	681	684	690	rVB4	1663	3039	0.11%	0.010%
14	7.087	690	697	711	rBV	246213	426909	15.68%	1.426%
15	7.198	711	716	719	rBV5	4842	7898	0.29%	0.026%
16	7.545	769	775	782	rBV	323186	515120	18.92%	1.721%
17	8.263	890	897	912	rBV	264740	503663	18.50%	1.683%
18	8.704	964	972	981	rBV	213190	389090	14.29%	1.300%
19	9.081	1030	1036	1041	rBV3	5132	7712	0.28%	0.026%
20	9.416	1086	1093	1103	rBV	194565	342218	12.57%	1.143%
21	9.628	1123	1129	1134	rVB3	2645	5479	0.20%	0.018%
22	9.851	1166	1167	1173	rVB2	2928	3762	0.14%	0.013%
23	9.951	1178	1184	1203	rBV	225216	484427	17.80%	1.618%
24	10.310	1238	1245	1258	rVB	445158	781069	28.70%	2.609%
25	10.475	1264	1273	1290	rBV	176968	428953	15.76%	1.433%
26	11.939	1517	1522	1523	rBV3	2531	2927	0.11%	0.010%
27	13.080	1712	1716	1721	rVB2	15291	19182	0.70%	0.064%
28	13.163	1726	1730	1735	rBV4	10078	14619	0.54%	0.049%
29	13.469	1781	1782	1785	rVB	3506	2954	0.11%	0.010%
30	13.616	1801	1807	1812	rBV	607612	913252	33.55%	3.051%
31	13.669	1812	1816	1827	rVV	135710	218129	8.01%	0.729%
32	13.886	1845	1853	1864	rBV	707866	1104876	40.59%	3.691%
33	14.198	1899	1906	1918	rBV2	753473	1179906	43.35%	3.942%
34	14.421	1940	1944	1945	rBV	5162	5649	0.21%	0.019%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018094.D
Acq On : 12 Dec 2018 16:02
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E65

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	14.457	1945	1950	1971	rVV2	92922	320142	11.76%	1.069%
36	14.639	1978	1981	1985	rVB6	19996	27377	1.01%	0.091%
37	14.945	2028	2033	2035	rBV3	2054	3233	0.12%	0.011%
38	15.039	2047	2049	2050	rBV	4680	3390	0.12%	0.011%
39	15.063	2052	2053	2059	rVB4	5942	5582	0.21%	0.019%
40	15.198	2070	2076	2088	rVV	880195	1379429	50.68%	4.608%
41	15.280	2088	2090	2094	rVV2	2947	3720	0.14%	0.012%
42	15.345	2096	2101	2113	rVV	241148	394499	14.49%	1.318%
43	15.445	2113	2118	2124	rVB7	9757	19392	0.71%	0.065%
44	15.604	2143	2145	2150	rVB2	3053	4098	0.15%	0.014%
45	15.774	2170	2174	2180	rBV3	3480	7821	0.29%	0.026%
46	15.874	2188	2191	2196	rBV4	3131	4988	0.18%	0.017%
47	15.921	2196	2199	2200	rBV2	2994	3199	0.12%	0.011%
48	16.151	2234	2238	2241	rBV2	2840	3704	0.14%	0.012%
49	16.339	2267	2270	2273	rVB3	3429	3037	0.11%	0.010%
50	16.380	2273	2277	2284	rBV5	11425	24689	0.91%	0.082%
51	16.668	2324	2326	2331	rBV4	2440	3490	0.13%	0.012%
52	16.721	2331	2335	2336	rBV2	3829	4446	0.16%	0.015%
53	16.751	2338	2340	2345	rVB5	6501	5376	0.20%	0.018%
54	16.886	2361	2363	2368	rVV4	5166	6055	0.22%	0.020%
55	16.957	2368	2375	2382	rVV	1072760	1538970	56.54%	5.141%
56	17.004	2382	2383	2385	rVV2	9229	7018	0.26%	0.023%
57	17.057	2385	2392	2405	rVV2	1043483	1604570	58.95%	5.360%
58	17.151	2405	2408	2412	rVV4	8252	13387	0.49%	0.045%
59	17.180	2412	2413	2416	rVV3	3949	3561	0.13%	0.012%
60	17.257	2423	2426	2428	rBV3	3145	3659	0.13%	0.012%
61	17.357	2440	2443	2448	rBV6	6254	10621	0.39%	0.035%
62	17.462	2458	2461	2463	rVB4	3201	3485	0.13%	0.012%
63	17.562	2474	2478	2480	rBV4	3200	4235	0.16%	0.014%
64	17.592	2480	2483	2488	rVV6	3495	7274	0.27%	0.024%
65	17.739	2504	2508	2513	rVB5	13029	20537	0.75%	0.069%
66	17.774	2513	2514	2516	rBV2	3670	3113	0.11%	0.010%
67	17.804	2516	2519	2525	rBV6	12691	18901	0.69%	0.063%
68	17.868	2525	2530	2540	rBV	961856	1388276	51.00%	4.638%
69	18.286	2599	2601	2602	rBV2	4971	3089	0.11%	0.010%
70	18.415	2619	2623	2628	rVB6	15163	21345	0.78%	0.071%
71	18.668	2664	2666	2667	rBV2	3768	3799	0.14%	0.013%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018094.D
Acq On : 12 Dec 2018 16:02
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E65

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

72	18.745	2674	2679	2683	rBV6	14303	24899	0.91%	0.083%
73	18.798	2685	2688	2691	rBV5	7180	7342	0.27%	0.025%
74	18.862	2697	2699	2701	rBV2	4323	4075	0.15%	0.014%
75	18.909	2705	2707	2708	rBV2	5504	4661	0.17%	0.016%
76	19.009	2718	2724	2726	rBV5	91634	130519	4.80%	0.436%
77	19.039	2726	2729	2737	rVB4	79496	142722	5.24%	0.477%
78	19.162	2744	2750	2762	rBV	576959	912492	33.52%	3.048%
79	19.309	2771	2775	2779	rBV	225753	282883	10.39%	0.945%
80	19.362	2779	2784	2791	rVV	1398345	1943658	71.41%	6.493%
81	19.427	2791	2795	2802	rVB2	74110	96196	3.53%	0.321%
82	19.609	2822	2826	2835	rVB	67105	92991	3.42%	0.311%
83	19.903	2872	2876	2877	rBV4	15266	19536	0.72%	0.065%
84	20.174	2920	2922	2924	rBV2	11608	10226	0.38%	0.034%
85	20.298	2939	2943	2944	rBV2	50085	58696	2.16%	0.196%
86	20.362	2950	2954	2959	rVB	182331	203913	7.49%	0.681%
87	20.421	2961	2964	2968	rVV	58119	71838	2.64%	0.240%
88	20.462	2969	2971	2974	rVB3	28733	27181	1.00%	0.091%
89	20.892	3040	3044	3053	rBV	448533	625593	22.98%	2.090%
90	21.174	3086	3092	3100	rBV	1562240	2193287	80.58%	7.327%
91	21.333	3116	3119	3123	rBV2	78433	89006	3.27%	0.297%
92	21.756	3188	3191	3194	rBV	113087	148459	5.45%	0.496%
93	22.203	3264	3267	3272	rBV	202944	266328	9.78%	0.890%
94	22.327	3284	3288	3293	rVB	459541	630636	23.17%	2.107%
95	22.692	3346	3350	3354	rBV	237364	306431	11.26%	1.024%
96	23.209	3432	3438	3449	rBV	1373942	2721904	100.00%	9.093%
97	23.344	3455	3461	3469	rBV2	1173088	2309970	84.87%	7.717%
98	23.844	3542	3546	3554	rVB2	231122	426044	15.65%	1.423%
99	23.939	3558	3562	3573	rVB5	143302	315230	11.58%	1.053%
100	25.662	3849	3855	3865	rVB8	301693	817946	30.05%	2.732%

Sum of corrected areas: 29934111

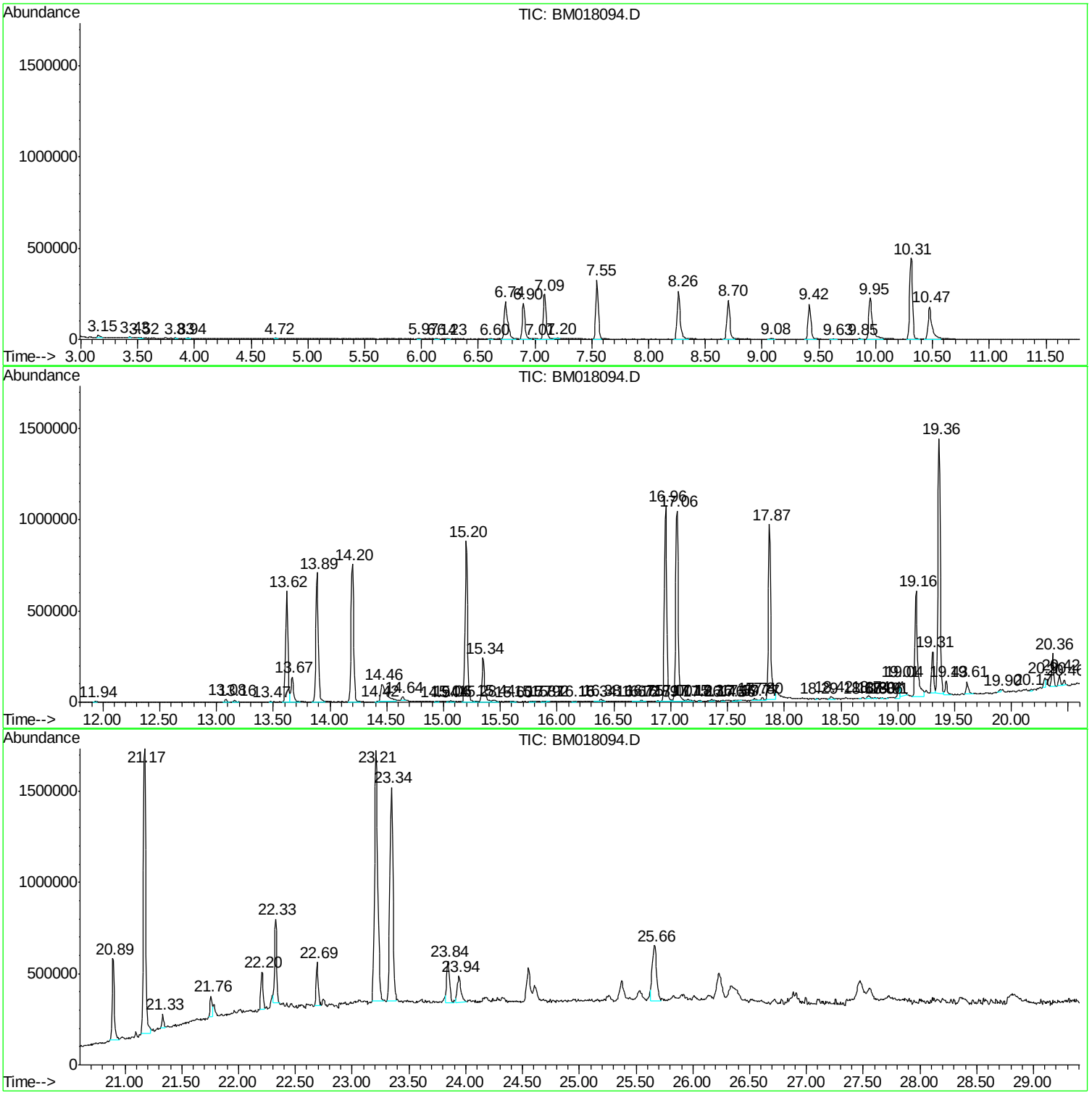
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018094.D
Acq On : 12 Dec 2018 16:02
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E65

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018094.D
Acq On : 12 Dec 2018 16:02
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E65

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

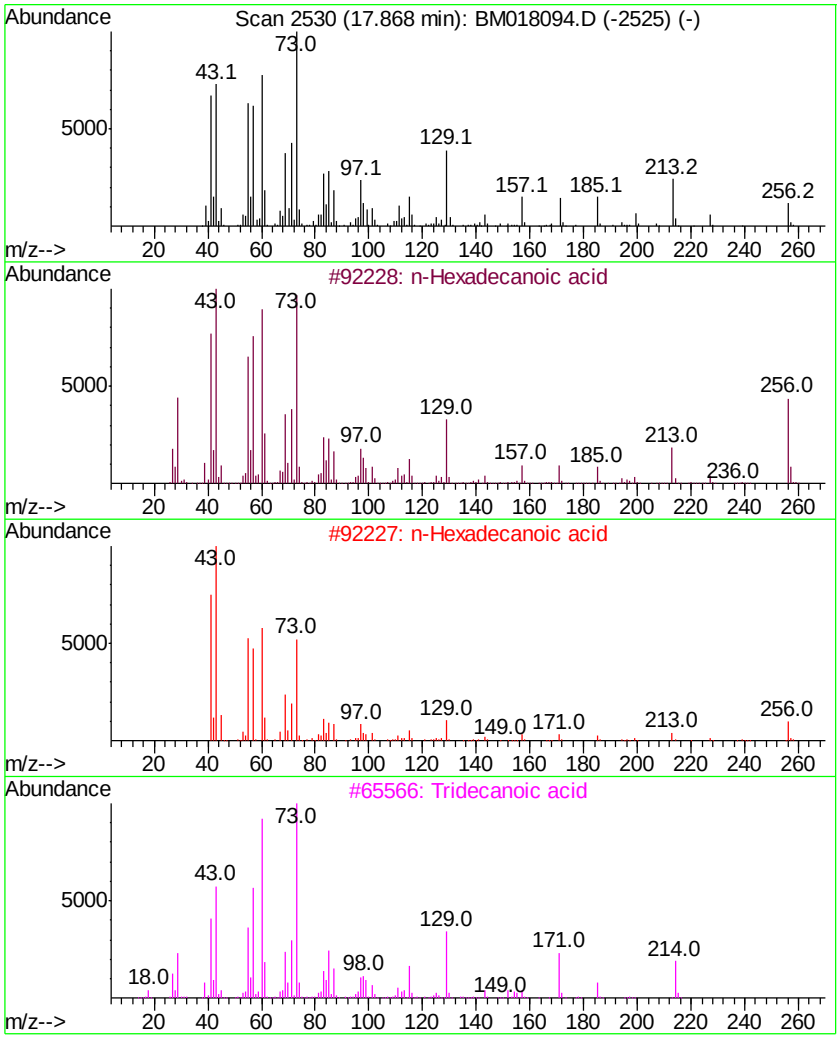
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

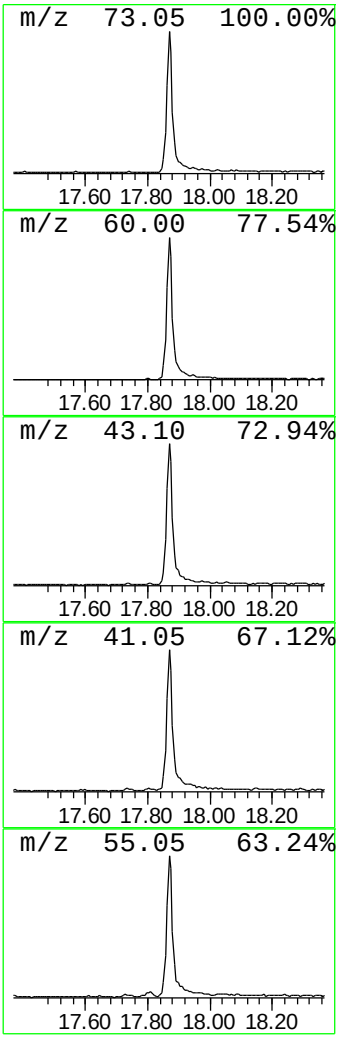
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.87	18.04 ng/ul	1388280	Phenanthrene-d10	16.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	97
3	Tridecanoic acid	214	C13H26O2	000638-53-9	89
4	Tridecanoic acid	214	C13H26O2	000638-53-9	89
5	Tetradecanoic acid	228	C14H28O2	000544-63-8	89





Library Search Compound Report

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Data File : BM018094.D
Acq On : 12 Dec 2018 16:02
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E65

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

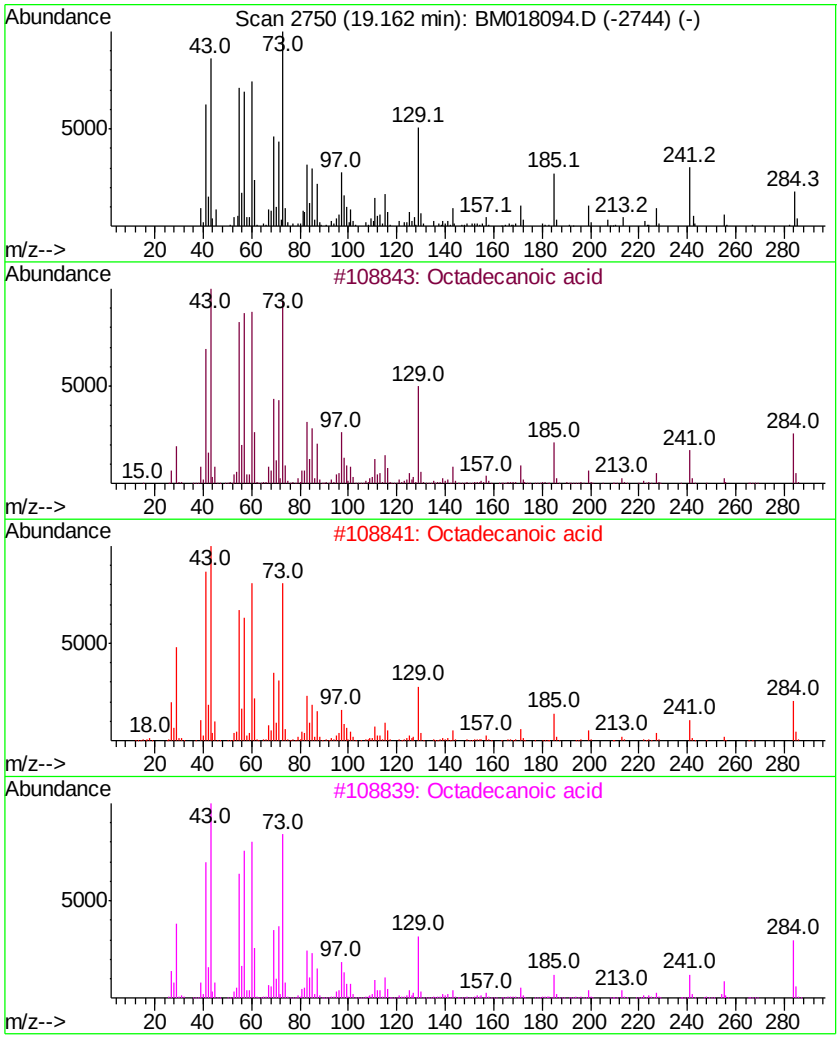
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

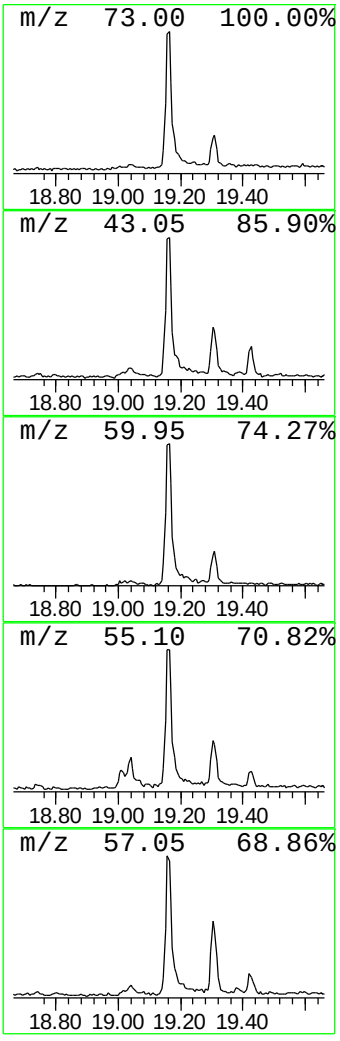
****

Peak Number 2 Octadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.16	8.32 ng/ul	912492	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Octadecanoic acid	284	C18H36O2	000057-11-4	98
3	Octadecanoic acid	284	C18H36O2	000057-11-4	94
4	Octadecanoic acid	284	C18H36O2	000057-11-4	91
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	90





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Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E65

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Quant Title : SVOA CALIBRATION

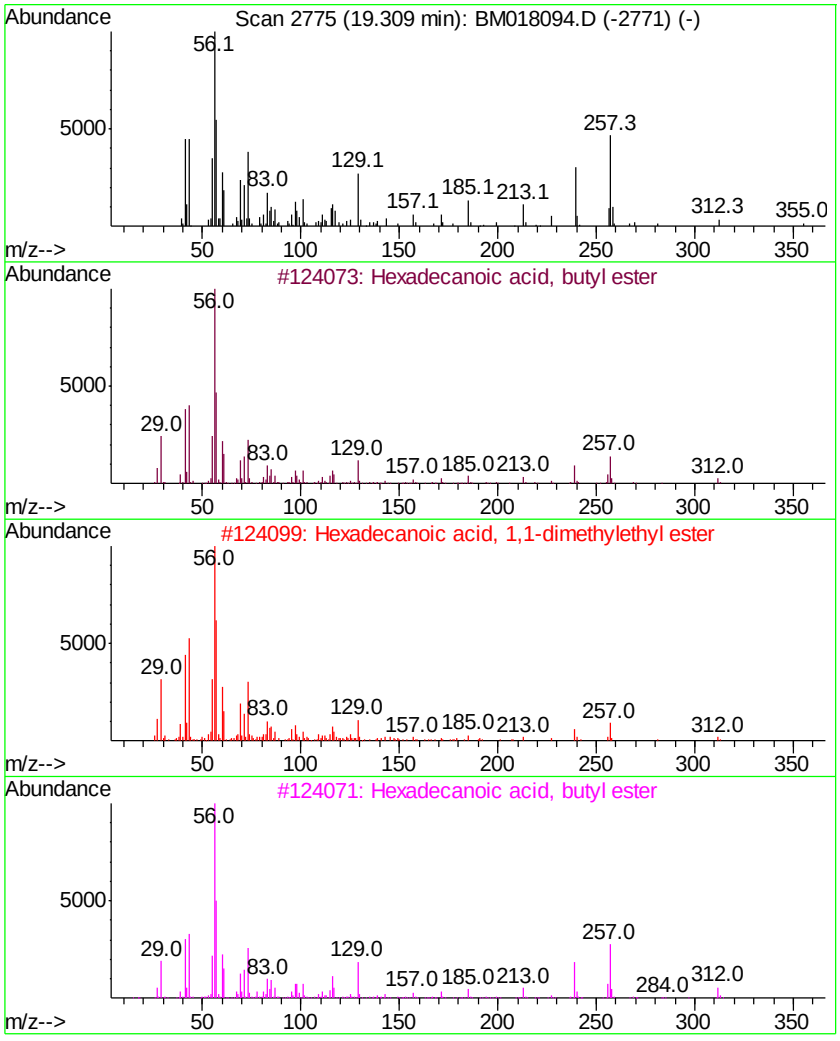
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

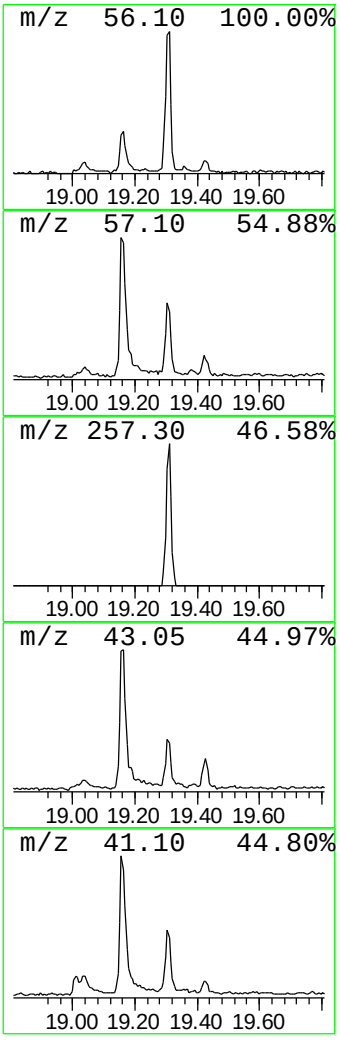
****

Peak Number 3 Hexadecanoic acid, butyl ester Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.31	2.58 ng/ul	282883	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	92
2	Hexadecanoic acid, 1,1-dimethyle...	312	C20H40O2	031158-91-5	90
3	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	87
4	Hexadecanoic acid, 2-methylpropy...	312	C20H40O2	000110-34-9	86
5	Nipecotic acid	129	C6H11NO2	000498-95-3	35





Library Search Compound Report

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Misc :
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Instrument : BNA_M
ClientSampleId : F9E65

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

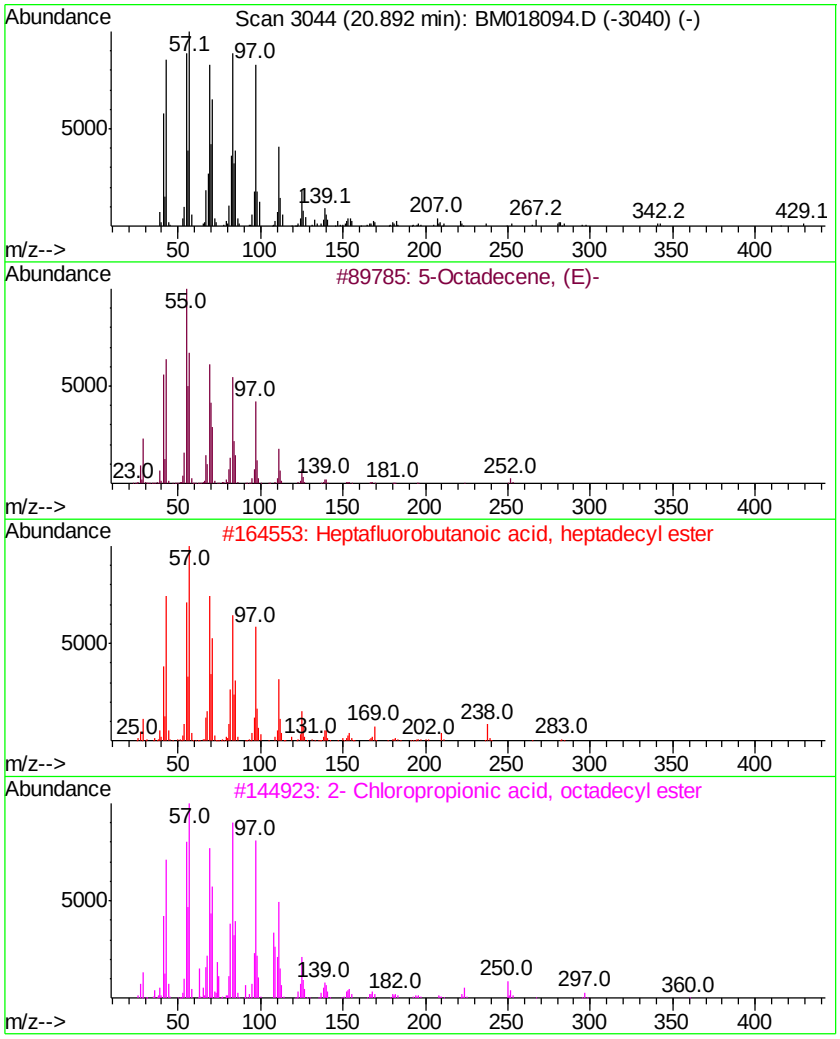
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

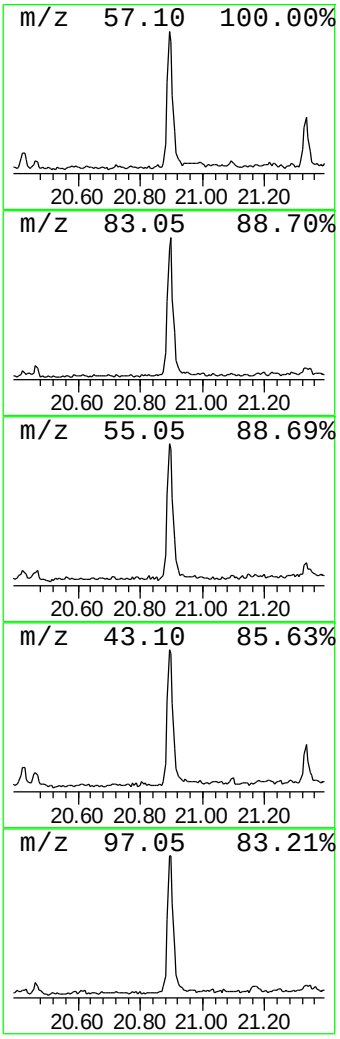
****

Peak Number 4 (DEL) Alkane: Cyclic20.89 Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	5.70 ng/ul	625593	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Octadecene, (E)-	252	C18H36	007206-21-5	95
2	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	94
3	2- Chloropropionic acid, octadec...	360	C21H41ClO2	088104-31-8	94
4	1-Heneicosyl formate	340	C22H44O2	077899-03-7	94
5	Heptafluorobutyric acid, n-octad...	466	C22H37F7O2	000400-57-7	91





Library Search Compound Report

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Acq On : 12 Dec 2018 16:02
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E65

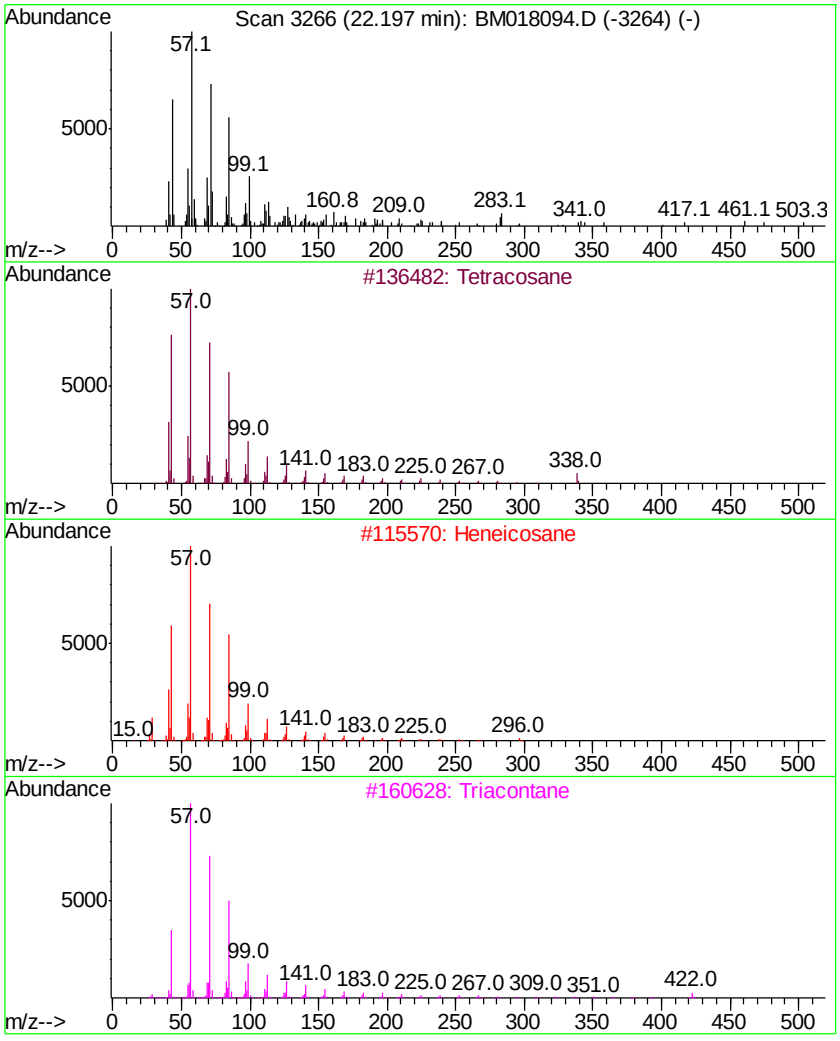
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

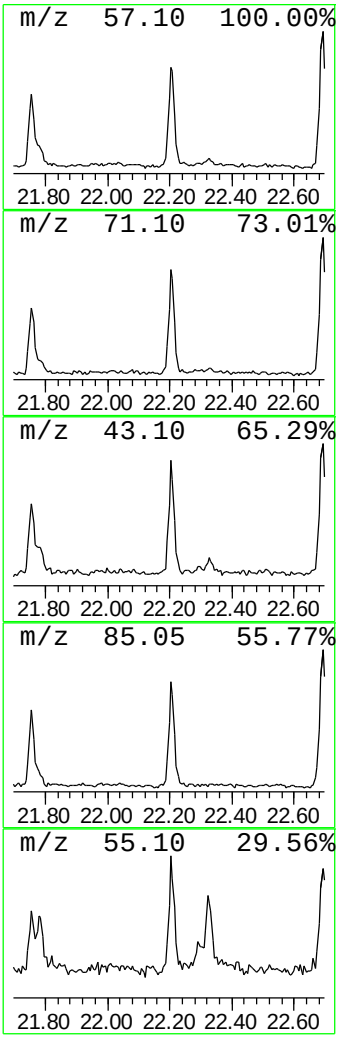
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 (DEL) Alkane: Straight-Chai... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.20	2.43 ng/ul	266328	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetracosane	338	C24H50	000646-31-1	81
2	Heneicosane	296	C21H44	000629-94-7	81
3	Triacontane	422	C30H62	000638-68-6	81
4	Eicosane	282	C20H42	000112-95-8	81
5	Tetracontane	563	C40H82	004181-95-7	74





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Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E65

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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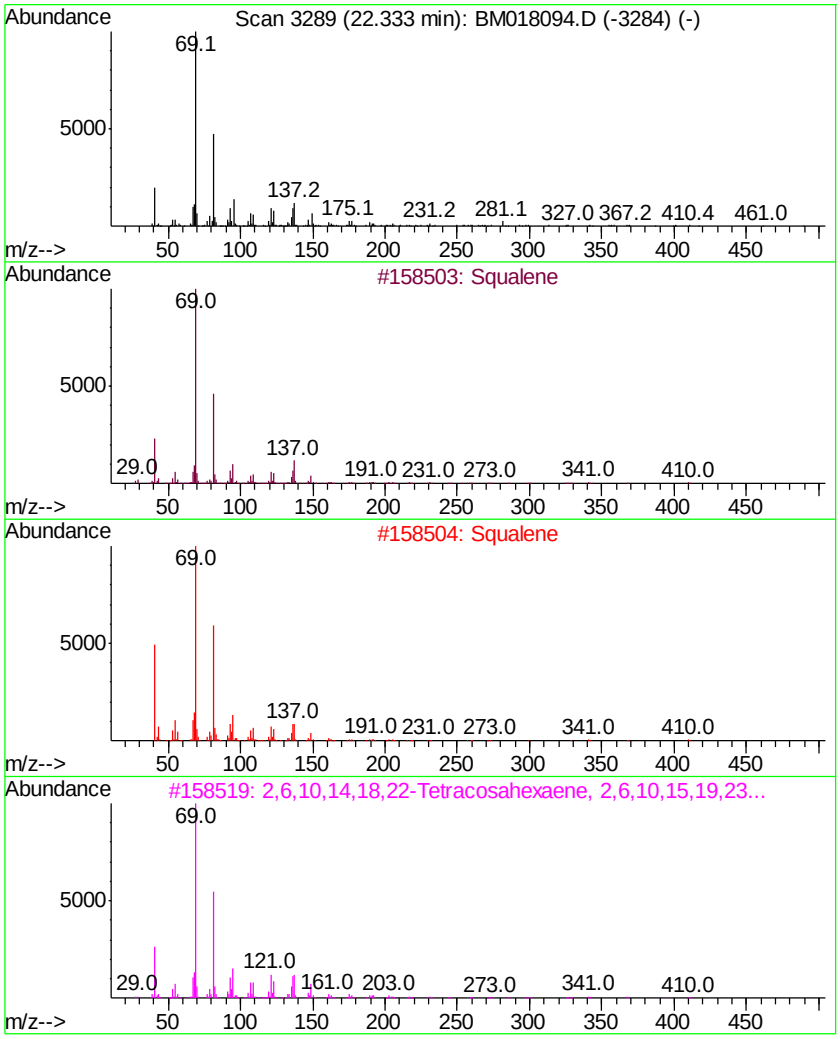
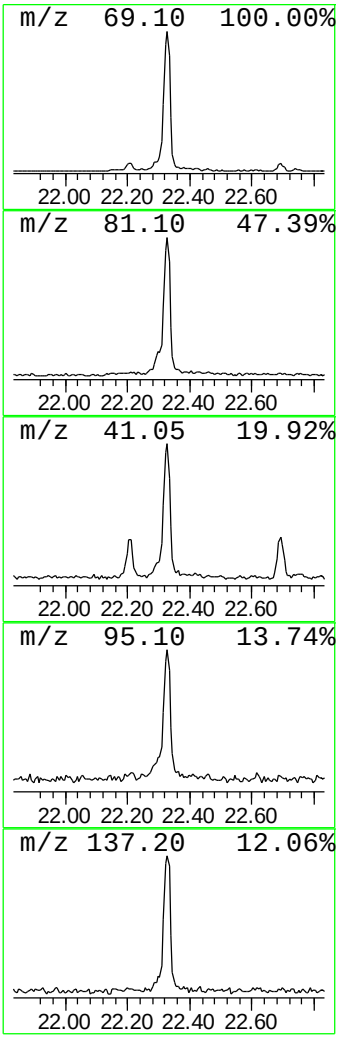
Peak Number 6 Squalene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.33	5.46 ng/ul	630636	Perylene-d12	23.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Squalene	410	C30H50	007683-64-9	91
2	Squalene	410	C30H50	007683-64-9	91
3	2,6,10,14,18,22-Tetracosahexaene...	410	C30H50	000111-02-4	91
4	2,6,10,14,18,22-Tetracosahexaene...	410	C30H50	000111-02-4	91
5	Docosa-2,6,10,14,18-pentaen-22-a...	384	C27H44O	1000163-04-7	91





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Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E65

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

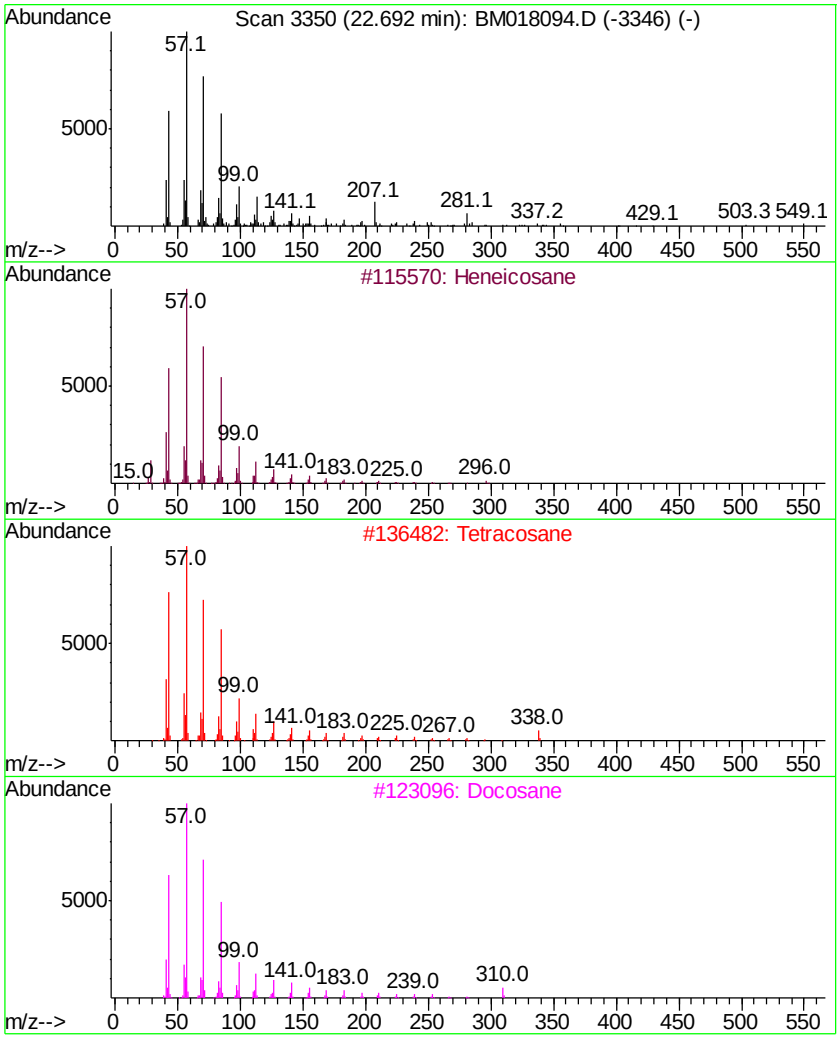
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

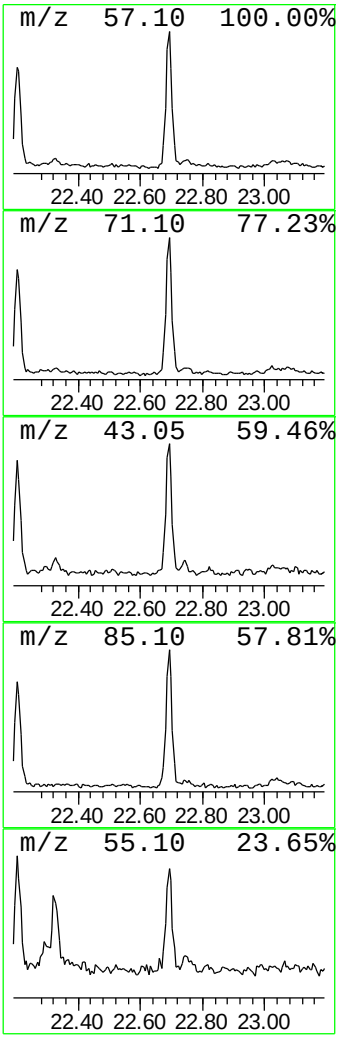
****

Peak Number 7 (DEL) Alkane: Straight-Chai... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.69	2.65 ng/ul	306431	Perylene-d12	23.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	92
2	Tetracosane	338	C24H50	000646-31-1	90
3	Docosane	310	C22H46	000629-97-0	87
4	Triacontane	422	C30H62	000638-68-6	87
5	Eicosane, 7-hexyl-	366	C26H54	055333-99-8	86





Library Search Compound Report

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Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E65

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

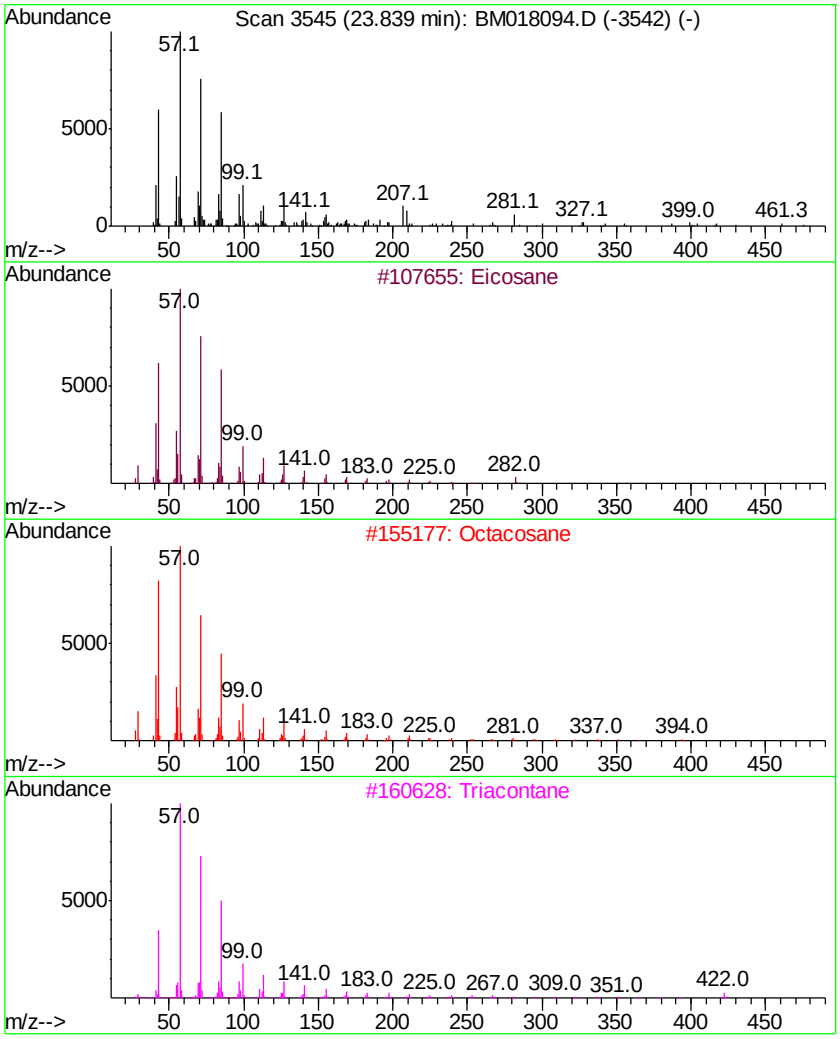
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

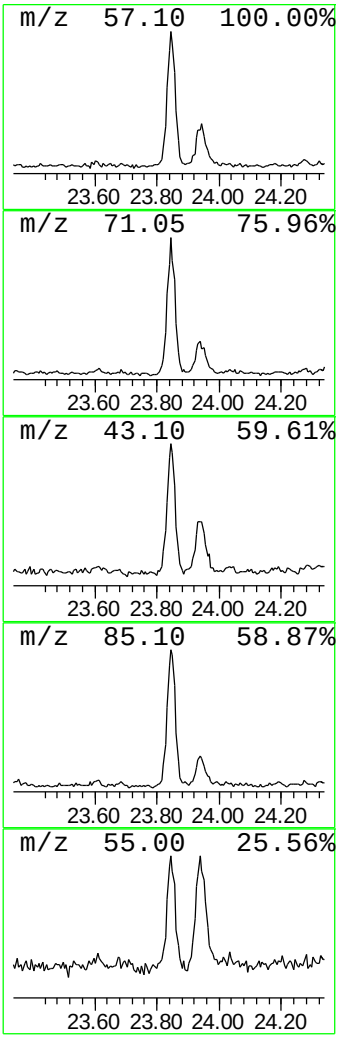
****

Peak Number 8 (DEL) Alkane: Straight-Chai... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.84	3.69 ng/ul	426044	Perylene-d12	23.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	93
2	Octacosane	394	C28H58	000630-02-4	87
3	Triacontane	422	C30H62	000638-68-6	87
4	Heptadecane, 9-octyl-	352	C25H52	007225-64-1	87
5	Pentacosane	352	C25H52	000629-99-2	87





Library Search Compound Report

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Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E65

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

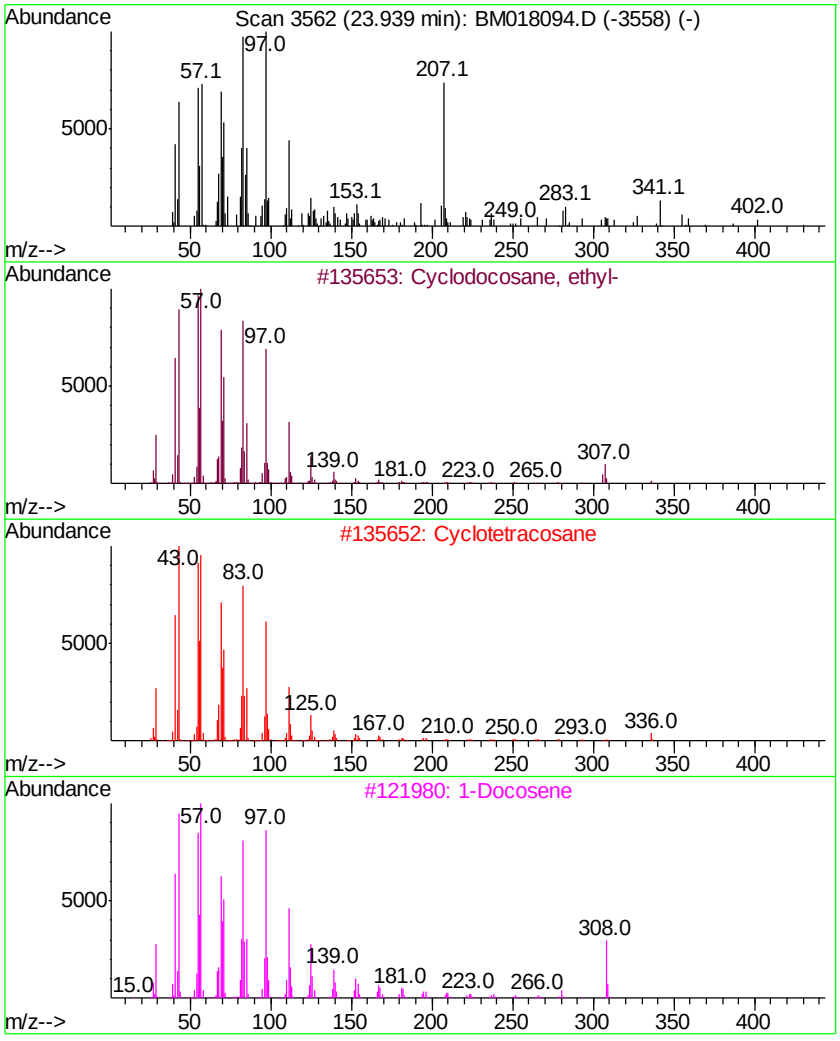
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

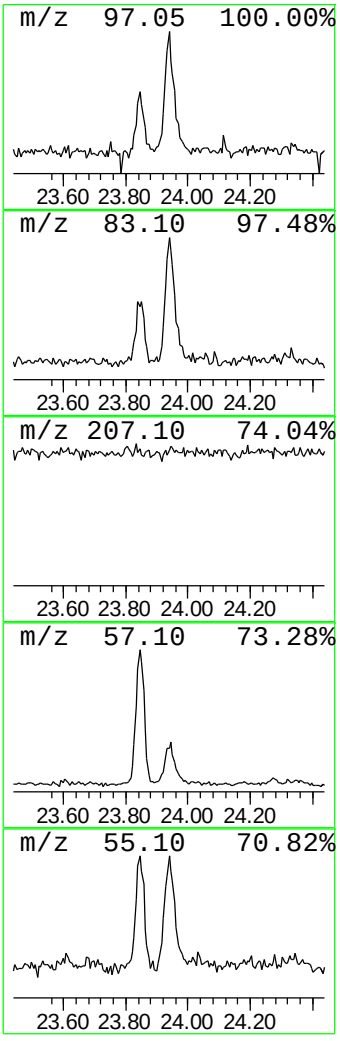
****

Peak Number 9 (DEL) Alkane: Cyclic23.94 Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.94	2.73 ng/ul	315230	Perylene-d12	23.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclodocosane, ethyl-	336	C24H48	1000151-22-6	62
2	Cyclotetracosane	336	C24H48	000297-03-0	58
3	1-Docosene	308	C22H44	001599-67-3	53
4	Cyclohexane, 1,1'-(2-propyl-1,3-...	250	C18H34	055030-21-2	49
5	1-Heptadecene	238	C17H34	006765-39-5	49





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Sample : J6227-02
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Instrument : BNA_M
ClientSampleId : F9E65

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

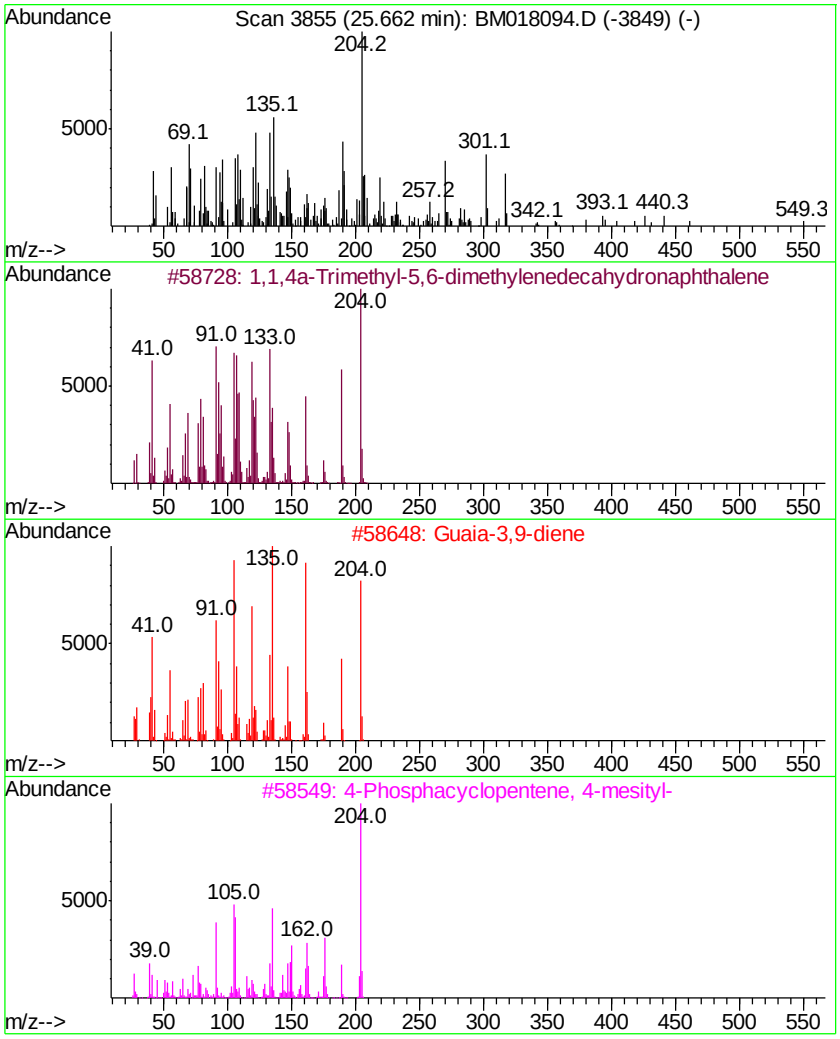
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

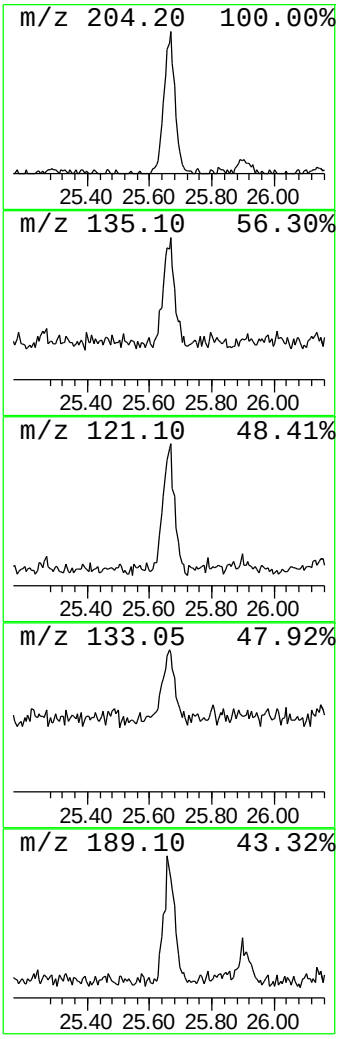
****

Peak Number 10 1,1,4a-Trimethyl-5,6-dimeth... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.66	7.08 ng/ul	817946	Perylene-d12	23.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1,4a-Trimethyl-5,6-dimethylene...	204	C15H24	1000193-60-8	50
2	Guaia-3,9-diene	204	C15H24	000489-83-8	49
3	4-Phosphacyclopentene, 4-mesityl-	204	C13H17P	214605-01-3	43
4	2,5,5,8a-Tetramethyl-6,7,8,8a-te...	204	C14H20O	124957-09-1	43
5	Cyclopropene, 1,3-dimethyl-2,3-b...	204	C7H6F6	054932-73-9	43





Tentatively Identified Compound (LSC) summary

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Acq On : 12 Dec 2018 16:02
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E65

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	17.87	18.0	ng/ul	1388280	4	16.96	1538970	20.0
Octadecanoic acid	19.16	8.3	ng/ul	912492	5	21.17	2193290	20.0
Hexadecanoic acid...	19.31	2.6	ng/ul	282883	5	21.17	2193290	20.0
(DEL) Alkane: Cyc...	20.89	5.7	ng/ul	625593	5	21.17	2193290	20.0
(DEL) Alkane: Str...	22.20	2.4	ng/ul	266328	5	21.17	2193290	20.0
Squalene	22.33	5.5	ng/ul	630636	6	23.35	2309970	20.0
(DEL) Alkane: Str...	22.69	2.6	ng/ul	306431	6	23.35	2309970	20.0
(DEL) Alkane: Str...	23.84	3.7	ng/ul	426044	6	23.35	2309970	20.0
(DEL) Alkane: Cyc...	23.94	2.7	ng/ul	315230	6	23.35	2309970	20.0
1,1,4a-Trimethyl-...	25.66	7.1	ng/ul	817946	6	23.35	2309970	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018094.D
Acq On : 12 Dec 2018 16:02
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 13 02:50:33 2018
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Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
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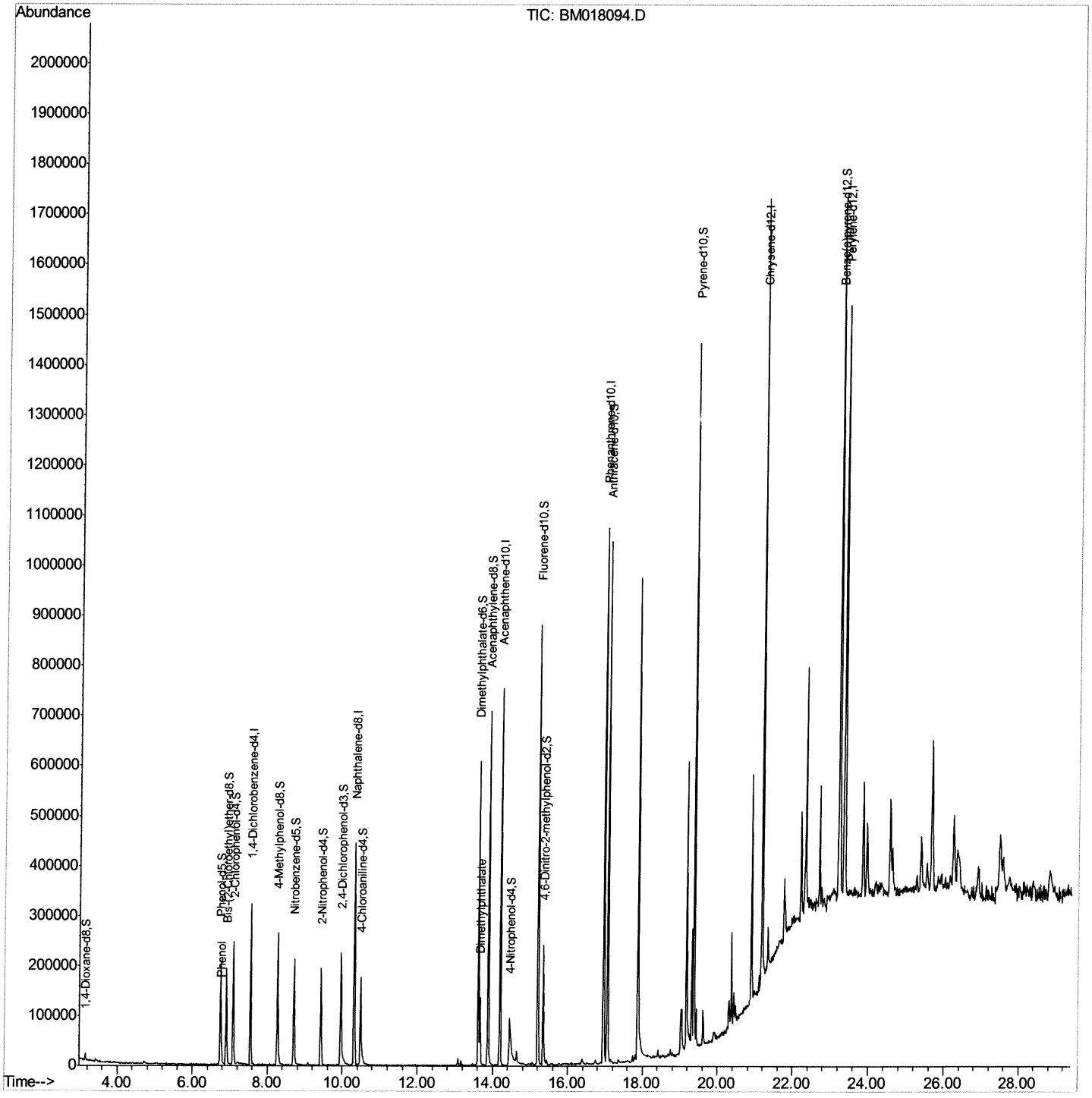
Manual Integrations APPROVED

Sohil
12/13/2018 6:16:00 PM



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Quantitation Report (Qedit)

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Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 13 02:40:50 2018
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Response via : Initial Calibration

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BNA_M
ClientSampleId :
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Manual Integrations APPROVED
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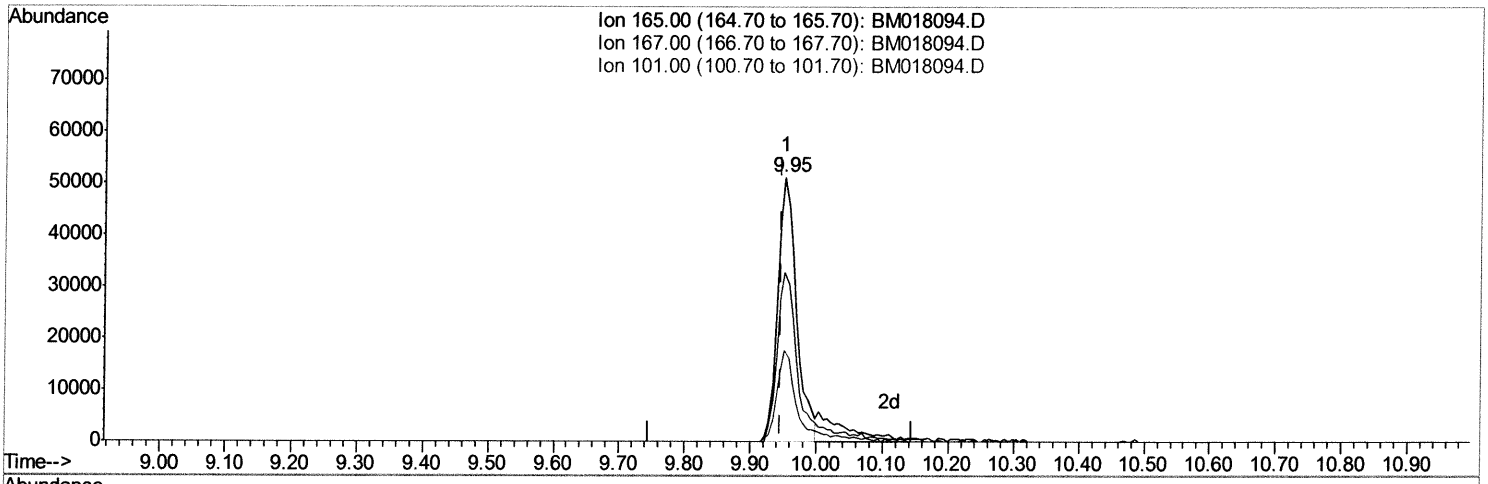
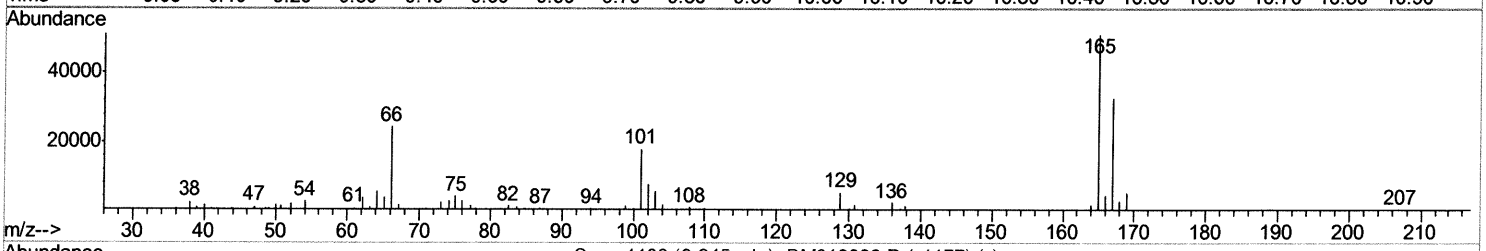
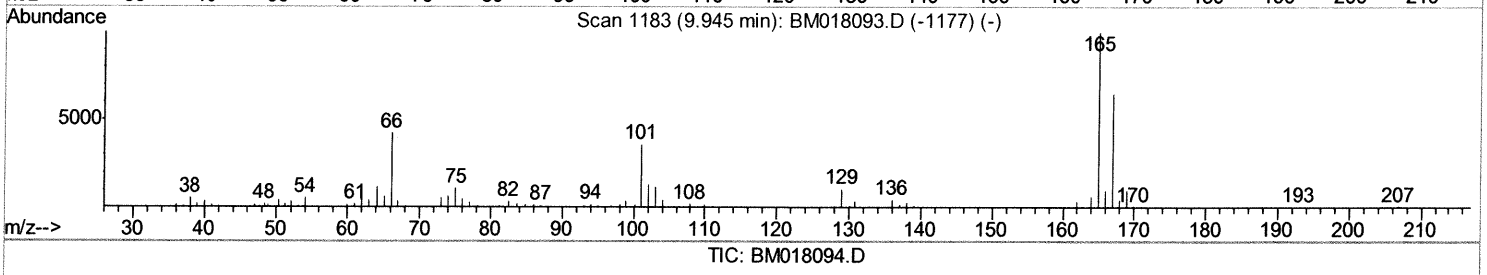
12/13/2018 6:16:00 PM







TIC: BM018094.D

(26) 2,4-Dichlorophenol-d3 (S)

9.951min (+0.006) 15.05ng/ul

response 101131

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	64.05
101.00	34.80	34.74
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

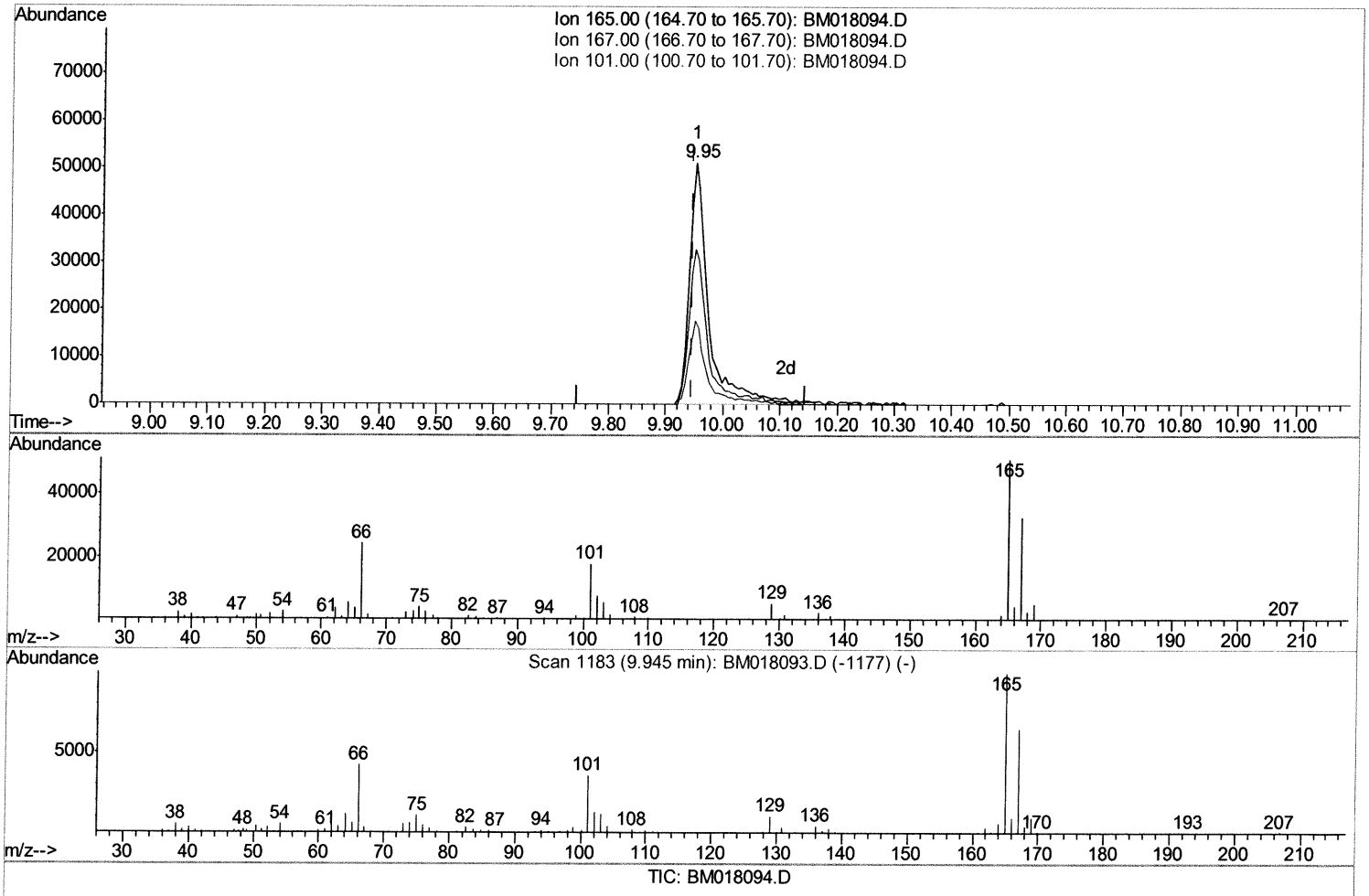
Quantitation Report (Qedit)

Data File : BM018094.D
Acq On : 12 Dec 2018 16:02
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 13 02:40:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E65

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:00 PM



TIC: BM018094.D

(26) 2,4-Dichlorophenol-d3 (S)

9.951min (+0.006) 17.45ng/ul m > SJ 12/13/18

response 117224

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	64.05
101.00	34.80	34.74
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

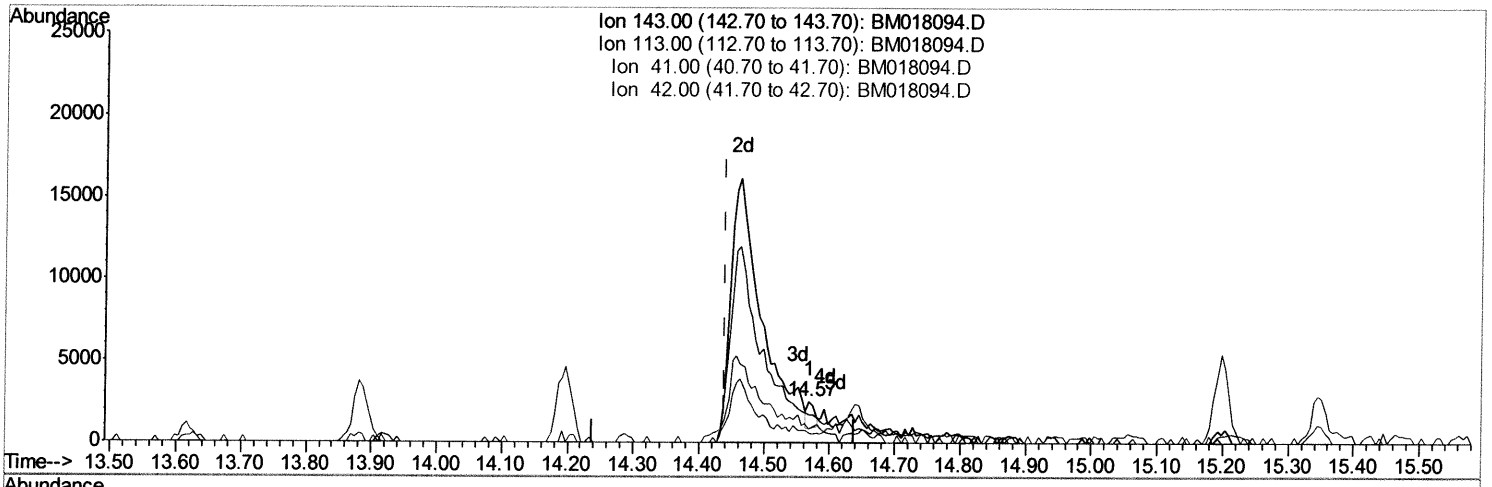
Quantitation Report (Qedit)

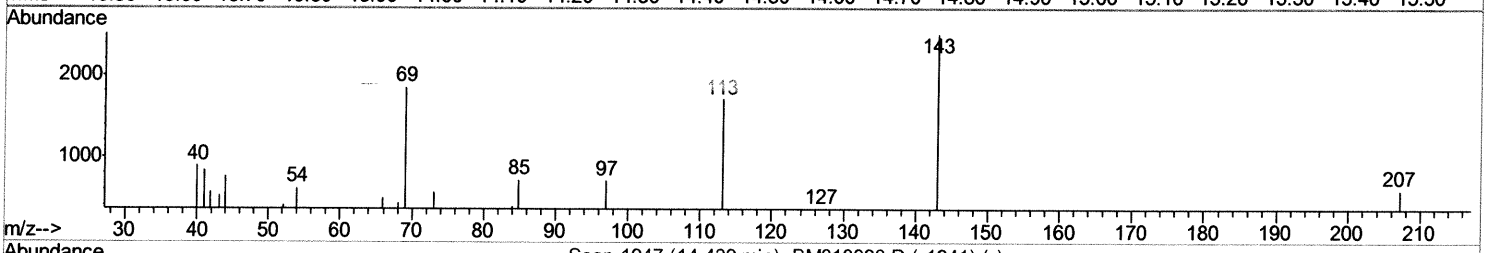
Data File : BM018094.D
Acq On : 12 Dec 2018 16:02
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

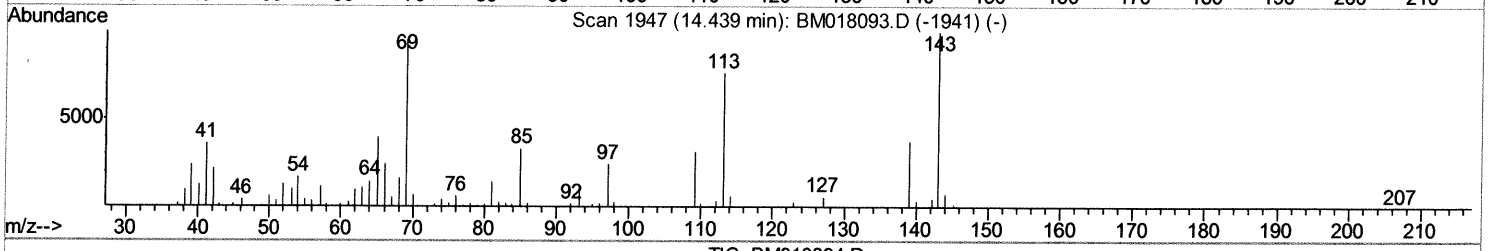
Quant Time: Dec 13 02:40:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E65

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:00 PM







TIC: BM018094.D

(51) 4-Nitrophenol-d4 (S)

14.569min (+0.129) 0.30ng/ul

response 1209

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	68.22
41.00	40.10	33.13
42.00	26.80	22.43

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

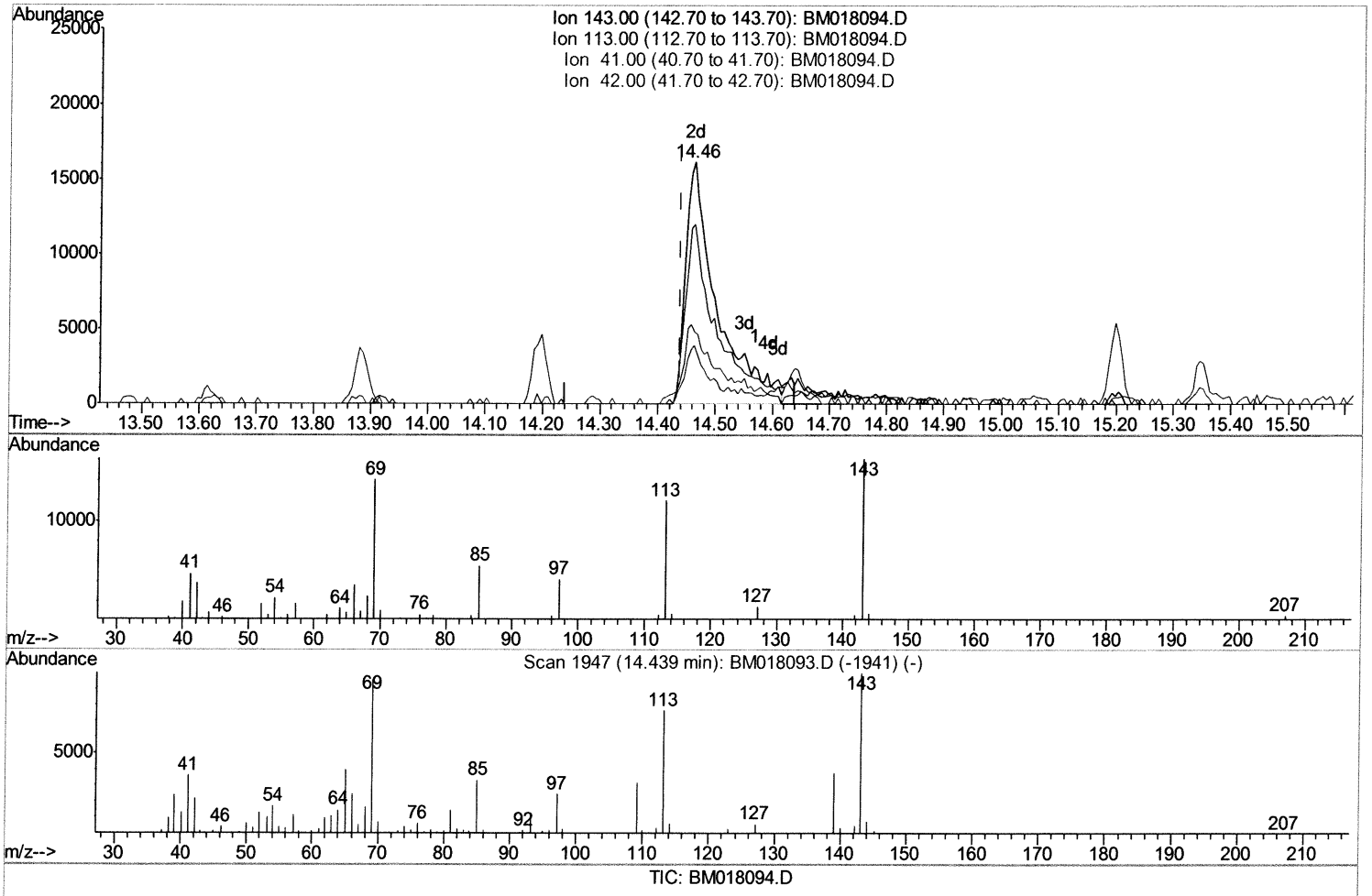
Quantitation Report (Qedit)

Data File : BM018094.D
Acq On : 12 Dec 2018 16:02
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 13 02:40:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E65

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:00 PM



TIC: BM018094.D

(51) 4-Nitrophenol-d4 (S)

14.463min (+0.023) 15.21ng/ul m > SJ 12/13/18

response 61093

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	74.20
41.00	40.10	29.53#
42.00	26.80	24.20

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018094.D
Acq On : 12 Dec 2018 16:02
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 13 02:50:33 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9E65

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:00 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	89745	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	400989	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.20	164	254584	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.96	188	620723	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	780974	20.00	ng/ul	0.00
85) Perylene-d12	23.35	264	868370	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	7109	3.63	ng/uL	0.00
5) Phenol-d5	6.74	99	139810	17.06	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	83870	16.97	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	125870	19.63	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	119901	17.90	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	62502	20.29	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	70953	20.10	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	117224m	17.45	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	140140	24.31	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	452851	20.50	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	533031	19.94	ng/ul	0.00
51) 4-Nitrophenol-d4	14.46	143	61093m	15.21	ng/ul	0.02
57) Fluorene-d10	15.20	176	373100	19.56	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	62078	13.99	ng/ul	0.00
70) Anthracene-d10	17.06	188	616542	19.95	ng/ul	0.00
78) Pyrene-d10	19.36	212	718021	19.00	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	947863	20.13	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.77	94	24150	2.952	ng/ul	99
44) Dimethylphthalate	13.67	163	90417	4.225	ng/ul#	97

SJ 12/13/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E66

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-03
Sample wt/vol : 30.2 (g/mL): g
Lab File ID : BM018114.D
% Solids : 91.4
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	73	U
100-52-7	Benzaldehyde	360	U
108-95-2	Phenol	140	J
111-44-4	Bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	180	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2-oxybis(1-Chloropropane)	360	U
98-86-2	Acetophenone	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	180	U
67-72-1	Hexachloroethane	180	U
98-95-3	Nitrobenzene	180	U
78-59-1	Isophorone	180	U
88-75-5	2-Nitrophenol	180	U
105-67-9	2,4-Dimethylphenol	180	U
111-91-1	Bis(2-Chloroethoxy)methane	180	U
120-83-2	2,4-Dichlorophenol	180	U
91-20-3	Naphthalene	180	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	180	U
105-60-2	Caprolactam	360	U
59-50-7	4-Chloro-3-methylphenol	180	U
91-57-6	2-Methylnaphthalene	180	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	180	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E66

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-03
Sample wt/vol : 30.2 (g/mL): g
Lab File ID : BM018114.D
% Solids : 91.4
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	180	U
92-52-4	1,1-Biphenyl	180	U
91-58-7	2-Chloronaphthalene	180	U
88-74-4	2-Nitroaniline	180	U
131-11-3	Dimethylphthalate	140	J
606-20-2	2,6-Dinitrotoluene	180	U
208-96-8	Acenaphthylene	180	U
99-09-2	3-Nitroaniline	360	U
83-32-9	Acenaphthene	180	U
51-28-5	2,4-Dinitrophenol	360	U
100-02-7	4-Nitrophenol	360	U
132-64-9	Dibenzofuran	180	U
121-14-2	2,4-Dinitrotoluene	180	U
84-66-2	Diethylphthalate	180	U
86-73-7	Fluorene	180	U
7005-72-3	4-Chlorophenyl-phenylether	180	U
100-01-6	4-Nitroaniline	360	U
534-52-1	4,6-Dinitro-2-methylphenol	360	U
86-30-6	N-Nitrosodiphenylamine	180	U
95-94-3	1,2,4,5-Tetrachlorobenzene	180	U
101-55-3	4-Bromophenyl-phenylether	180	U
118-74-1	Hexachlorobenzene	180	U
1912-24-9	Atrazine	360	U
87-86-5	Pentachlorophenol	360	U
85-01-8	Phenanthrene	180	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E66

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-03
Sample wt/vol : 30.2 (g/mL): g
Lab File ID : BM018114.D
% Solids : 91.4
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	180	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	180	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	180	U
85-68-7	Butylbenzylphthalate	180	U
91-94-1	3,3-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	180	U
218-01-9	Chrysene	180	U
117-81-7	Bis(2-ethylhexyl)phthalate	180	U
117-84-0	Di-n-octyl phthalate	360	U
205-99-2	Benzo(b)fluoranthene	180	U
207-08-9	Benzo(k)fluoranthene	180	U
50-32-8	Benzo(a)pyrene	180	U
193-39-5	Indeno(1,2,3-cd)pyrene	180	U
53-70-3	Dibenzo(a,h)anthracene	180	U
191-24-2	Benzo(g,h,i)perylene	180	U
58-90-2	2,3,4,6-Tetrachlorophenol	180	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E66

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-03
Sample wt/vol : 30.2 (g/mL): g
Lab File ID : BM018114.D
% Solids : 91.4
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/13/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000475-20-7	1,4-Methanoazulene, decahydro-4,8,	13.44	150	JN
2	000077-53-2	Cedrol	15.48	160	JN
3	000057-10-3	n-Hexadecanoic acid	17.86	320	JN
4	000057-11-4	Octadecanoic acid	19.16	170	JN
5	000511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,1	20.25	150	JN
6	022160-86-7	Podocarpa-6,8,11,13-tetraen-12-ol,	20.29	87	JN
7	000083-47-6	.gamma.-Sitosterol	26.22	220	JN
8	E966796	Total Alkanes	N/A	830	

EPA-designated Registry Number.

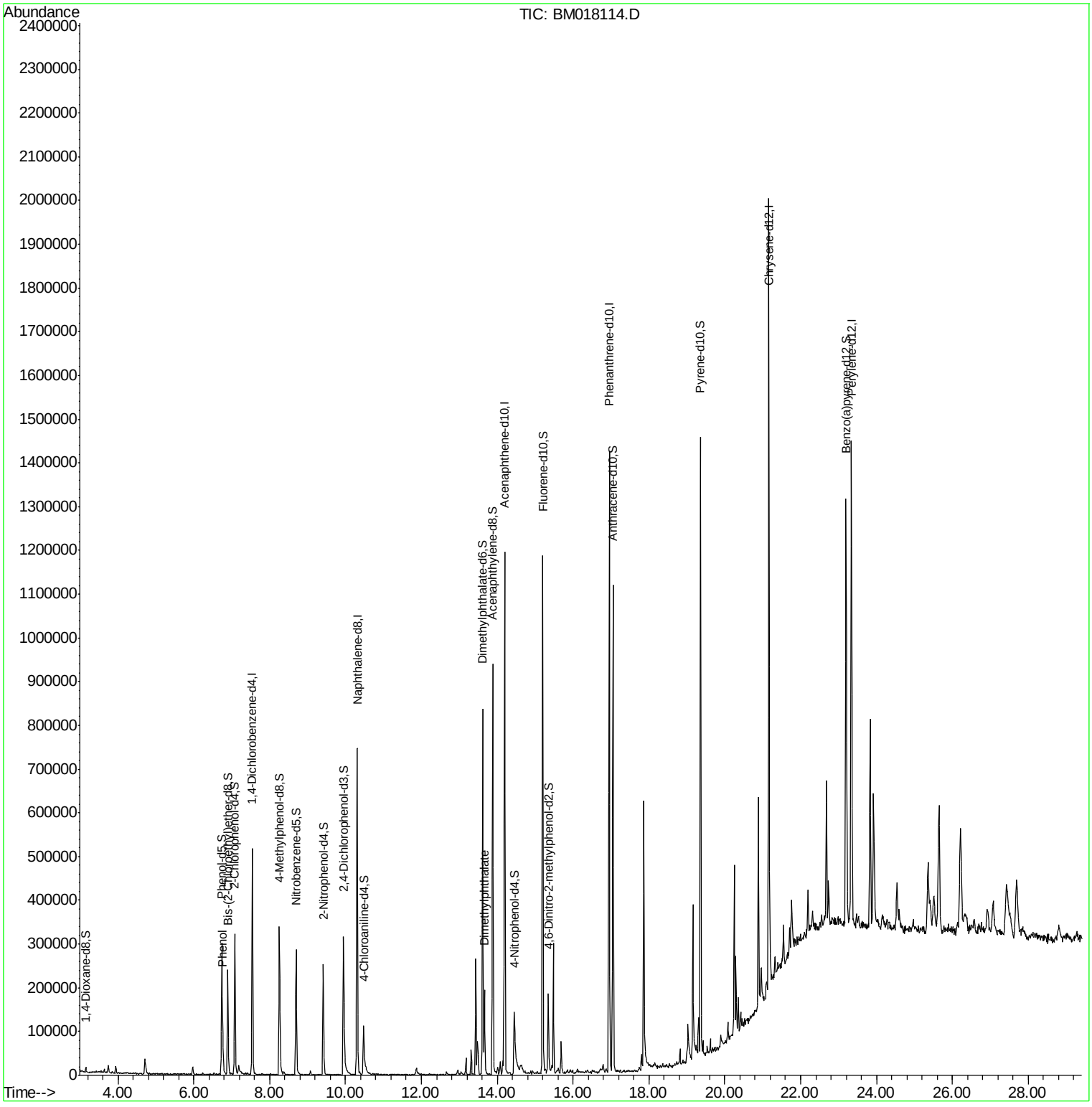
Quantitation Report (LSC Reviewed)

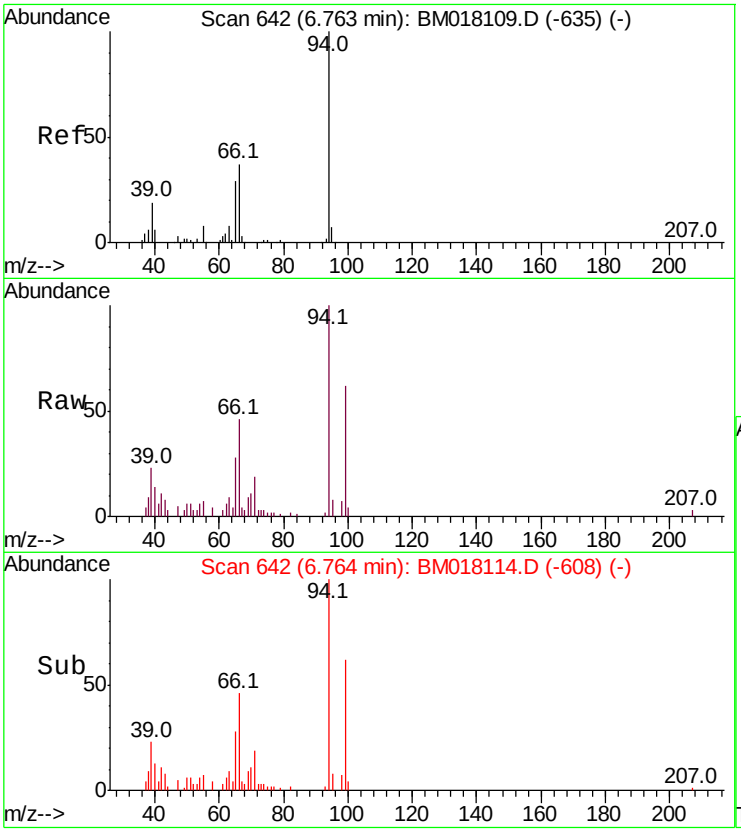
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 13 06:57:46 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:58 PM

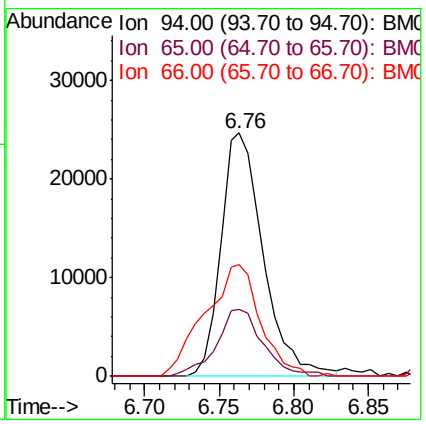




#6
Phenol
Concen: 3.802 ng/ul
RT: 6.76 min Scan# 642
Delta R.T. 0.00 min
Lab File: BM018114.D
Acq: 13 Dec 2018 04:07

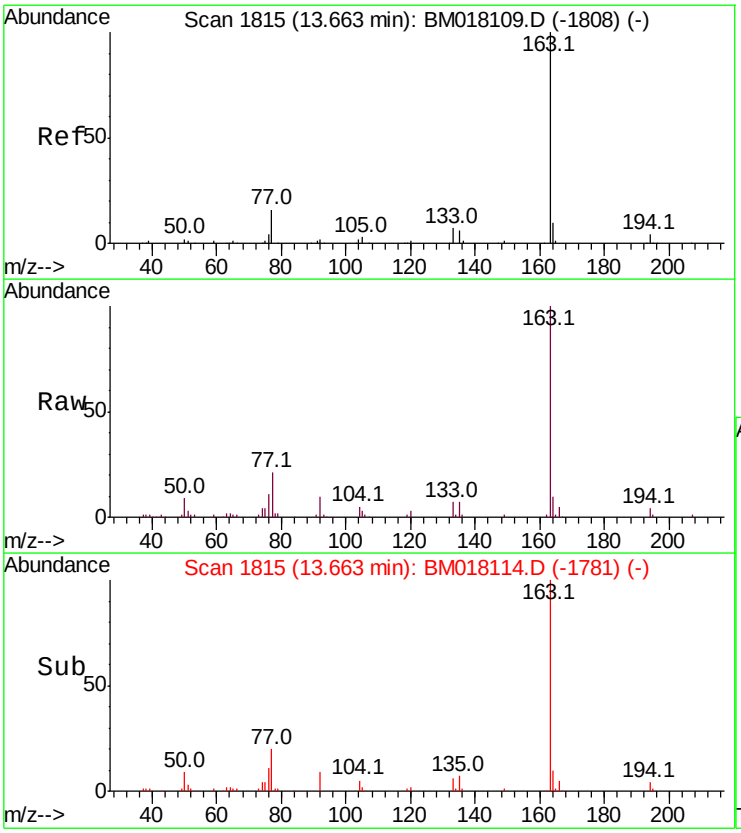
Tgt Ion: 94 Resp: 48877

Ion	Ratio	Lower	Upper
94	100		
65	27.6	24.7	37.1
66	46.0	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9E66

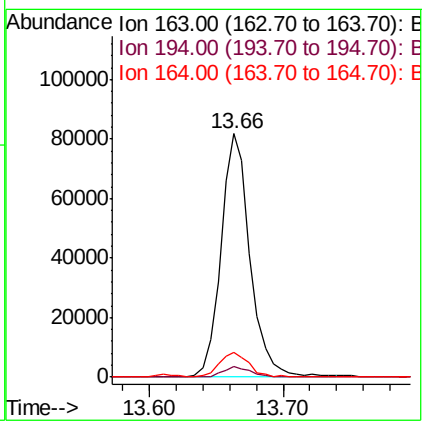
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:58 PM



#44
Dimethylphthalate
Concen: 3.816 ng/ul
RT: 13.66 min Scan# 1815
Delta R.T. 0.00 min
Lab File: BM018114.D
Acq: 13 Dec 2018 04:07

Tgt Ion:163 Resp: 124539

Ion	Ratio	Lower	Upper
163	100		
194	4.4	3.4	5.0
164	10.2	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:58 PM

Quant Time: Dec 13 06:57:46 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	141001	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	649758	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	388205	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	812211	20.00	ng/ul	0.00
77) Chrysene-d12	21.16	240	856212	20.00	ng/ul	0.00
85) Perylene-d12	23.33	264	783233	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	7212	2.34	ng/uL	0.00
5) Phenol-d5	6.73	99	196724	15.28	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.89	67	109264	14.07	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	161373	16.02	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	143548	13.64	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	80210	16.07	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	88568	15.49	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	156370	14.36	ng/ul	0.00
29) 4-Chloroaniline-d4	10.48	131	101455	10.86	ng/ul	0.01
43) Dimethylphthalate-d6	13.62	166	571940	16.98	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	678909	16.65	ng/ul	0.00
51) 4-Nitrophenol-d4	14.45	143	75626m	12.35	ng/ul	0.02
57) Fluorene-d10	15.20	176	493151	16.95	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	42383	7.30	ng/ul	0.00
70) Anthracene-d10	17.05	188	628659	15.55	ng/ul	0.00
78) Pyrene-d10	19.36	212	708238	17.09	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	686931	16.17	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	48877	3.802	ng/ul	95
44) Dimethylphthalate	13.66	163	124539	3.816	ng/ul	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E66

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.152	24	28	31	rBV	13596	16923	0.69%	0.050%
2	3.552	92	96	99	rVB3	4357	6556	0.27%	0.019%
3	3.640	108	111	114	rBV3	8602	10351	0.42%	0.030%
4	3.746	125	129	135	rVB3	16025	27417	1.12%	0.081%
5	3.940	157	162	169	rVB3	16537	26762	1.09%	0.079%
6	4.711	288	293	304	rBV3	34042	69844	2.85%	0.205%
7	5.975	503	508	514	rVB2	17166	27336	1.11%	0.080%
8	6.734	629	637	650	rBV2	300150	663190	27.04%	1.951%
9	6.893	658	664	675	rVB	238206	381959	15.57%	1.124%
10	7.081	689	696	706	rBV	322186	539233	21.99%	1.586%
11	7.187	709	714	723	rVV2	19908	43936	1.79%	0.129%
12	7.540	768	774	782	rBV	516639	839359	34.22%	2.469%
13	8.258	890	896	909	rBV	339335	627846	25.60%	1.847%
14	8.369	911	915	919	rVB3	5292	7954	0.32%	0.023%
15	8.699	964	971	980	rBV	285817	499718	20.38%	1.470%
16	9.081	1031	1036	1041	rVB3	8945	13801	0.56%	0.041%
17	9.410	1086	1092	1105	rBV	252711	431435	17.59%	1.269%
18	9.946	1177	1183	1201	rBV	317761	697086	28.42%	2.051%
19	10.310	1236	1245	1252	rBV	747036	1290613	52.62%	3.797%
20	10.475	1264	1273	1284	rBV2	111630	295048	12.03%	0.868%
21	11.869	1505	1510	1515	rBV2	15736	30667	1.25%	0.090%
22	12.663	1640	1645	1652	rVB3	7549	10494	0.43%	0.031%
23	12.957	1689	1695	1701	rBV6	10671	19541	0.80%	0.057%
24	13.045	1706	1710	1715	rVV4	6241	8615	0.35%	0.025%
25	13.175	1725	1732	1737	rVB3	39309	59380	2.42%	0.175%
26	13.316	1750	1756	1760	rVB5	57504	89257	3.64%	0.263%
27	13.440	1771	1777	1781	rBV	266104	386437	15.76%	1.137%
28	13.487	1781	1785	1793	rVB3	75981	133602	5.45%	0.393%
29	13.616	1799	1807	1811	rBV	835640	1199716	48.92%	3.530%
30	13.663	1811	1815	1824	rVB	189337	294620	12.01%	0.867%
31	13.881	1845	1852	1863	rBV	937950	1430665	58.33%	4.209%
32	14.010	1869	1874	1880	rVB6	15093	31478	1.28%	0.093%
33	14.081	1880	1886	1892	rBV4	28040	38696	1.58%	0.114%
34	14.145	1892	1897	1899	rBV3	29826	40933	1.67%	0.120%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E66

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	14.192	1899	1905	1913	rVV2	1191876	1834549	74.80%	5.397%
36	14.245	1913	1914	1919	rVB5	6188	7056	0.29%	0.021%
37	14.451	1941	1949	1969	rBV2	142769	459610	18.74%	1.352%
38	14.610	1972	1976	1977	rBV4	10182	13682	0.56%	0.040%
39	14.887	2022	2023	2027	rVB3	7235	7662	0.31%	0.023%
40	14.939	2031	2032	2037	rVV3	7327	6743	0.27%	0.020%
41	15.051	2046	2051	2056	rVV3	5451	11886	0.48%	0.035%
42	15.198	2069	2076	2084	rBV	1183565	1811195	73.85%	5.328%
43	15.345	2096	2101	2108	rBV	181337	301825	12.31%	0.888%
44	15.439	2113	2117	2119	rVV5	18237	29363	1.20%	0.086%
45	15.481	2119	2124	2133	rVV	298068	406986	16.59%	1.197%
46	15.586	2139	2142	2143	rVV3	7352	8976	0.37%	0.026%
47	15.616	2143	2147	2150	rVV4	12069	16955	0.69%	0.050%
48	15.686	2153	2159	2169	rVB2	74390	126113	5.14%	0.371%
49	15.845	2183	2186	2194	rVV6	9626	16688	0.68%	0.049%
50	15.928	2196	2200	2201	rVV3	8070	9976	0.41%	0.029%
51	15.951	2201	2204	2205	rVV2	6958	7629	0.31%	0.022%
52	15.986	2208	2210	2215	rVB3	9211	10308	0.42%	0.030%
53	16.086	2223	2227	2229	rBV3	4612	6955	0.28%	0.020%
54	16.116	2229	2232	2235	rVV3	10465	14211	0.58%	0.042%
55	16.151	2235	2238	2243	rVB5	5591	9433	0.38%	0.028%
56	16.381	2273	2277	2286	rVB6	6504	14637	0.60%	0.043%
57	16.510	2294	2299	2301	rBV4	7517	9697	0.40%	0.029%
58	16.722	2327	2335	2337	rBV7	8648	18523	0.76%	0.054%
59	16.792	2342	2347	2354	rVB6	19009	38858	1.58%	0.114%
60	16.863	2357	2359	2362	rBV3	6580	7709	0.31%	0.023%
61	16.951	2367	2374	2381	rVV2	1421239	2005223	81.76%	5.899%
62	17.051	2385	2391	2403	rVB	1113071	1627449	66.36%	4.788%
63	17.251	2420	2425	2429	rVB5	5995	9143	0.37%	0.027%
64	17.739	2503	2508	2514	rBV7	10600	22421	0.91%	0.066%
65	17.804	2514	2519	2523	rBV3	38367	58705	2.39%	0.173%
66	17.863	2524	2529	2541	rBV	604917	879033	35.84%	2.586%
67	18.298	2599	2603	2605	rBV4	6270	8974	0.37%	0.026%
68	18.357	2608	2613	2617	rBV7	10003	16308	0.66%	0.048%
69	18.533	2640	2643	2644	rBV3	9740	8709	0.36%	0.026%
70	18.622	2655	2658	2659	rBV3	5956	6666	0.27%	0.020%
71	18.733	2675	2677	2680	rBV3	7303	7291	0.30%	0.021%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E66

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

72	18.816	2688	2691	2695	rVB3	33780	43322	1.77%	0.127%
73	18.892	2700	2704	2707	rBV6	9353	11783	0.48%	0.035%
74	19.004	2718	2723	2725	rBV4	50414	79202	3.23%	0.233%
75	19.033	2725	2728	2731	rVV4	56093	70967	2.89%	0.209%
76	19.157	2744	2749	2761	rBV	352713	570833	23.28%	1.679%
77	19.304	2770	2774	2778	rBV3	82751	97789	3.99%	0.288%
78	19.357	2778	2783	2791	rVV2	1410455	1909882	77.87%	5.619%
79	19.422	2791	2794	2801	rVB5	32055	41582	1.70%	0.122%
80	19.533	2811	2813	2818	rVB6	15917	17872	0.73%	0.053%
81	19.616	2824	2827	2832	rVB6	33641	40679	1.66%	0.120%
82	19.680	2835	2838	2840	rBV4	11255	13597	0.55%	0.040%
83	19.892	2871	2874	2877	rBV5	26485	39012	1.59%	0.115%
84	20.080	2902	2906	2910	rBV5	36624	42576	1.74%	0.125%
85	20.245	2929	2934	2938	rBV2	390387	522193	21.29%	1.536%
86	20.286	2938	2941	2948	rVV3	174941	295848	12.06%	0.870%
87	20.357	2950	2953	2958	rVB3	79222	90068	3.67%	0.265%
88	20.416	2961	2963	2967	rVB4	31864	36497	1.49%	0.107%
89	20.886	3039	3043	3050	rBV	470474	620748	25.31%	1.826%
90	20.963	3053	3056	3061	rVB2	66977	96775	3.95%	0.285%
91	21.163	3085	3090	3101	rBV	1804643	2452534	100.00%	7.215%
92	21.545	3153	3155	3162	rVB8	89778	117150	4.78%	0.345%
93	21.751	3187	3190	3191	rBV3	65498	71241	2.90%	0.210%
94	22.192	3263	3265	3270	rVB3	93906	104812	4.27%	0.308%
95	22.680	3344	3348	3353	rVB	314732	432428	17.63%	1.272%
96	23.198	3430	3436	3448	rBV	971018	1919362	78.26%	5.647%
97	23.333	3453	3459	3467	rVB2	1096899	2054553	83.77%	6.044%
98	23.833	3539	3544	3551	rVB	467709	768971	31.35%	2.262%
99	23.921	3554	3559	3568	rVB2	291780	652590	26.61%	1.920%
100	26.215	3943	3949	3962	rVB2	213817	628402	25.62%	1.849%

Sum of corrected areas: 33990883

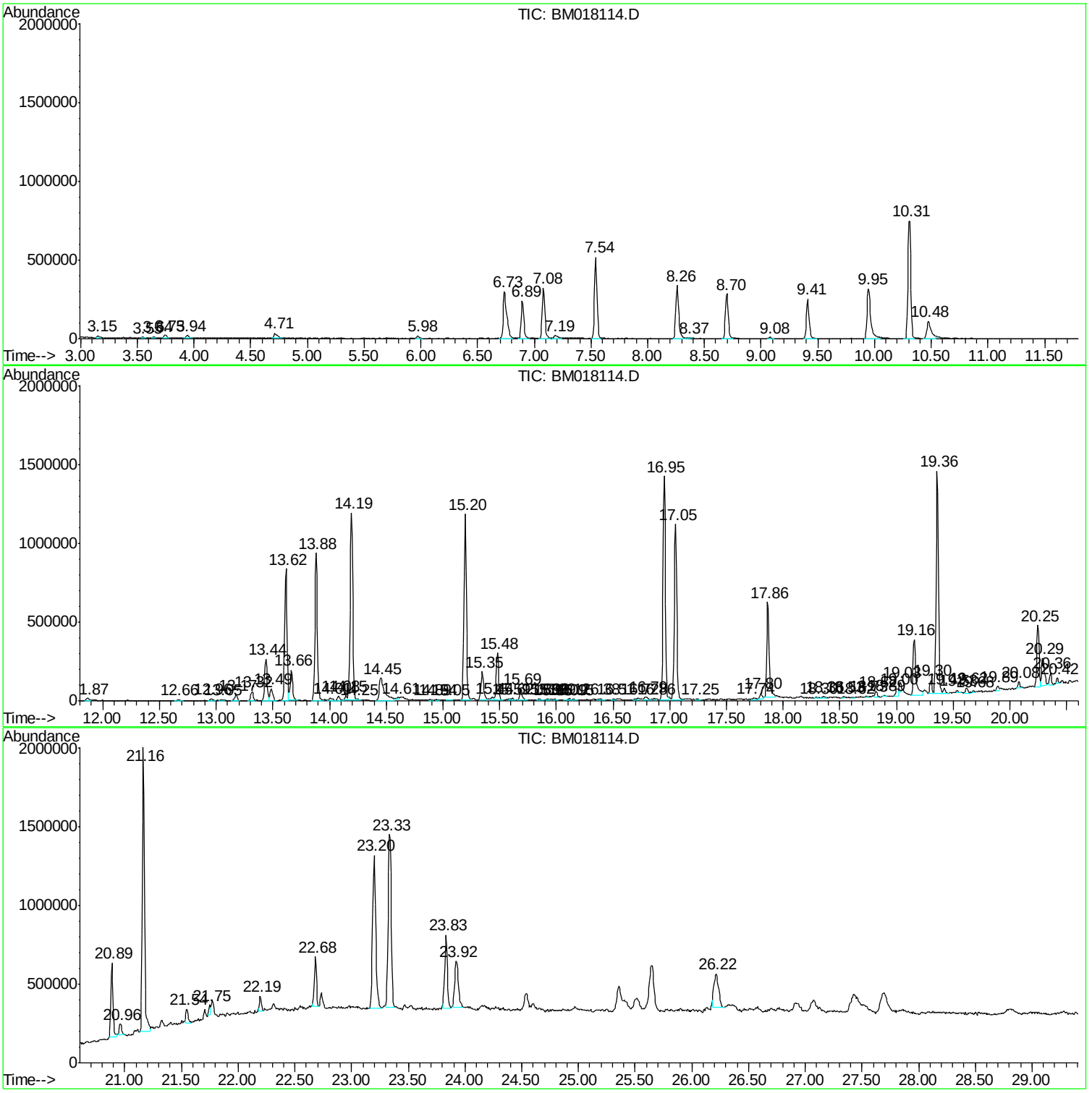
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E66

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E66

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

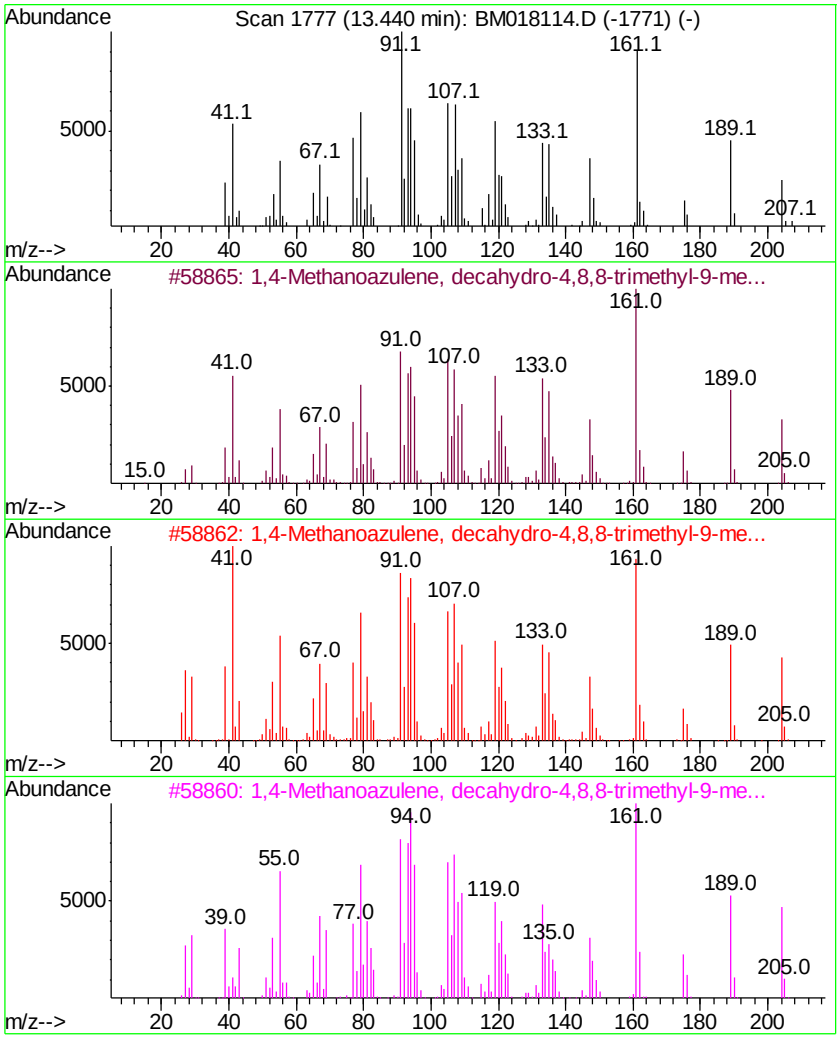
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

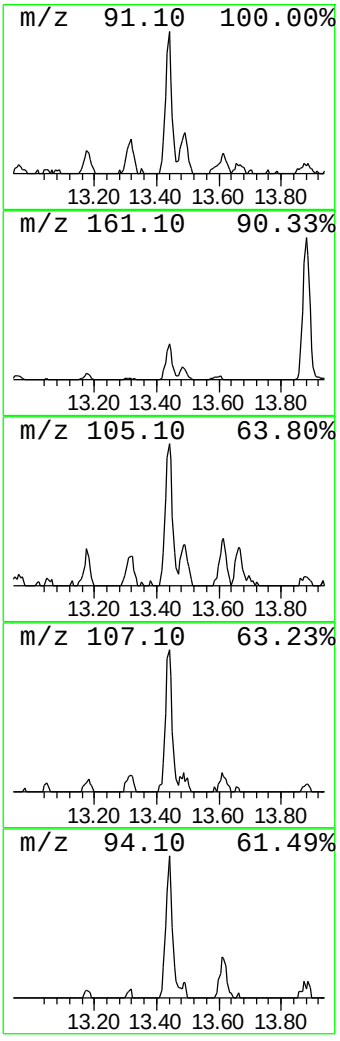
****

Peak Number 1 1,4-Methanoazulene, decahyd... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.44	4.21 ng/ul	386437	Acenaphthene-d10	14.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	96
2	1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	96
3	1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	96
4	1H-Cyclopropⁿ[e]azulene, decahydr...	204	C15H24	000489-39-4	91
5	Longifolene-(V4)	204	C15H24	061262-67-7	86





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E66

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

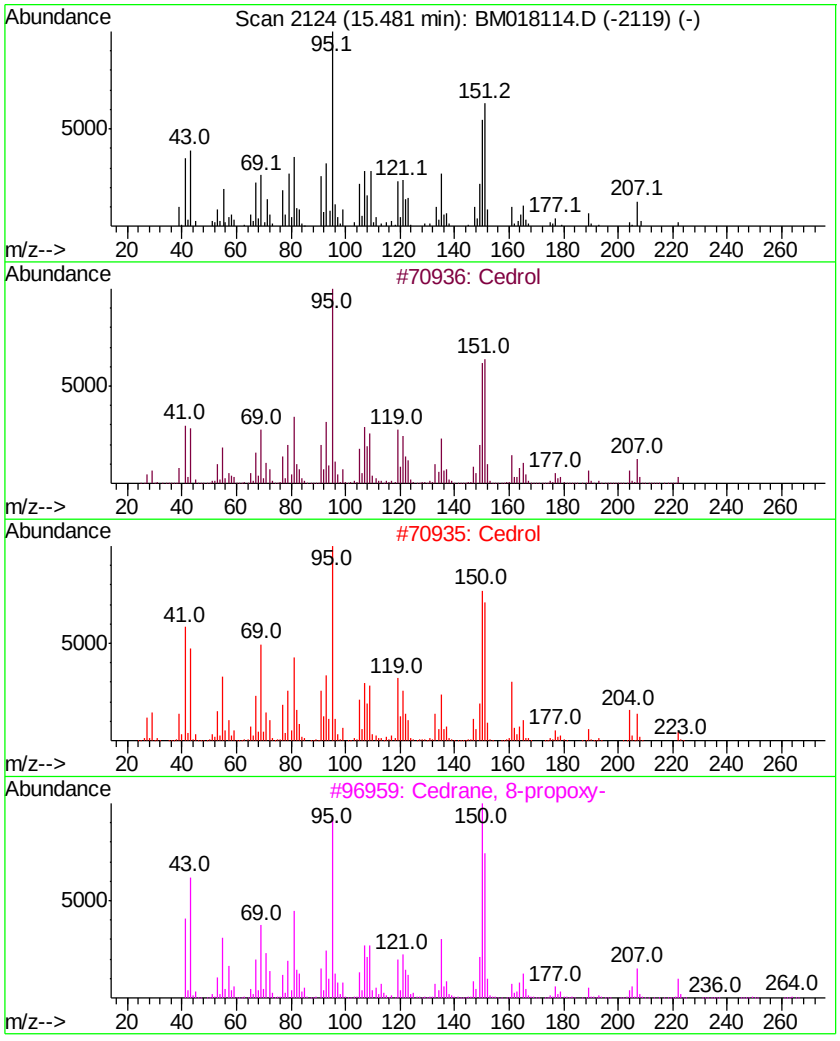
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

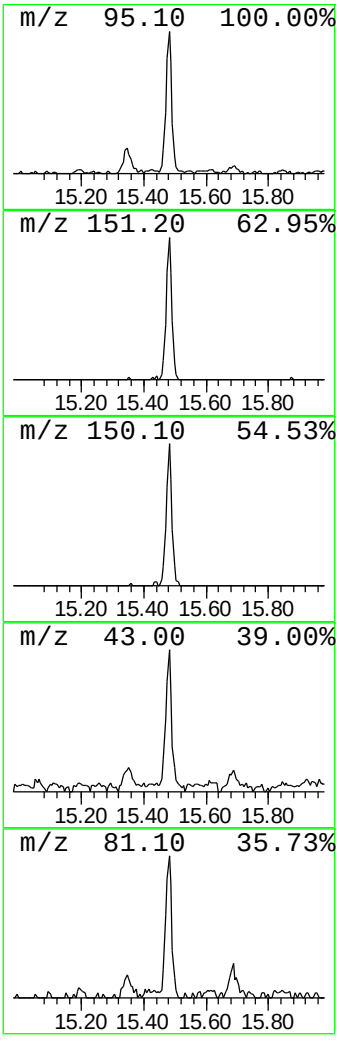
****

Peak Number 2 Cedrol Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.48	4.44 ng/ul	406986	Acenaphthene-d10	14.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cedrol	222	C15H26O	000077-53-2	93
2	Cedrol	222	C15H26O	000077-53-2	93
3	Cedrane, 8-propoxy-	264	C18H32O	019870-75-8	72
4	Cedrol	222	C15H26O	000077-53-2	72
5	Epicedrol	222	C15H26O	1000156-22-8	68





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E66

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

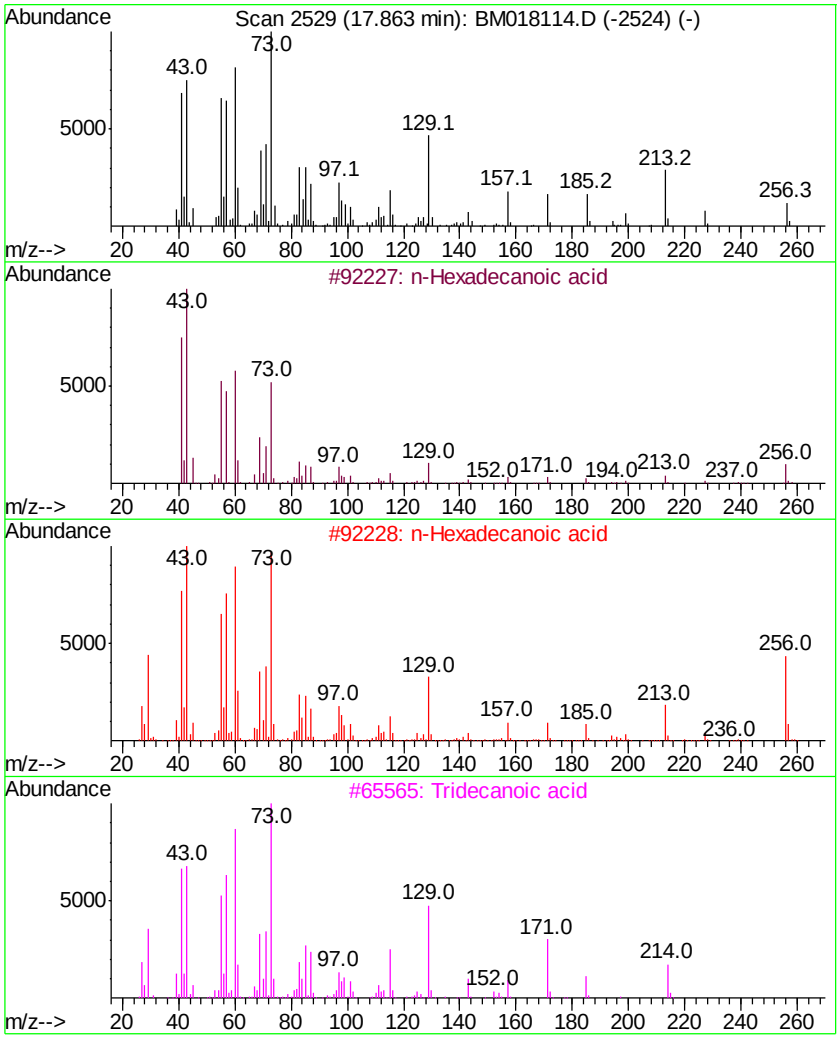
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

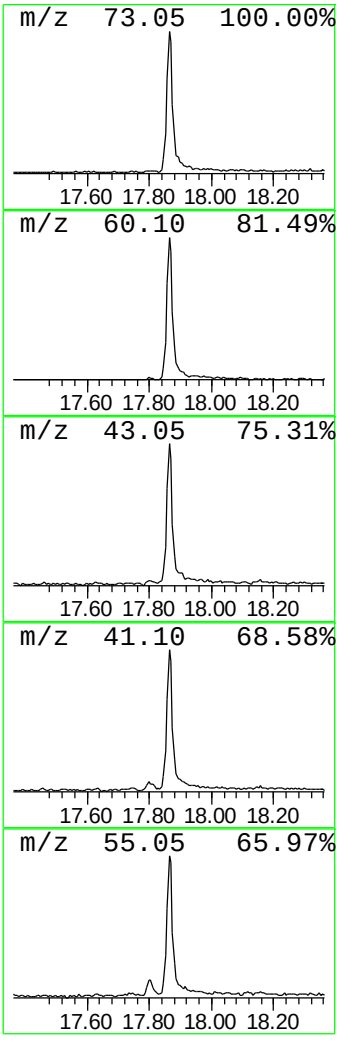
****

Peak Number 3 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.86	8.77 ng/ul	879033	Phenanthrene-d10	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
3	Tridecanoic acid	214	C13H26O2	000638-53-9	93
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	91
5	Tridecanoic acid	214	C13H26O2	000638-53-9	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E66

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

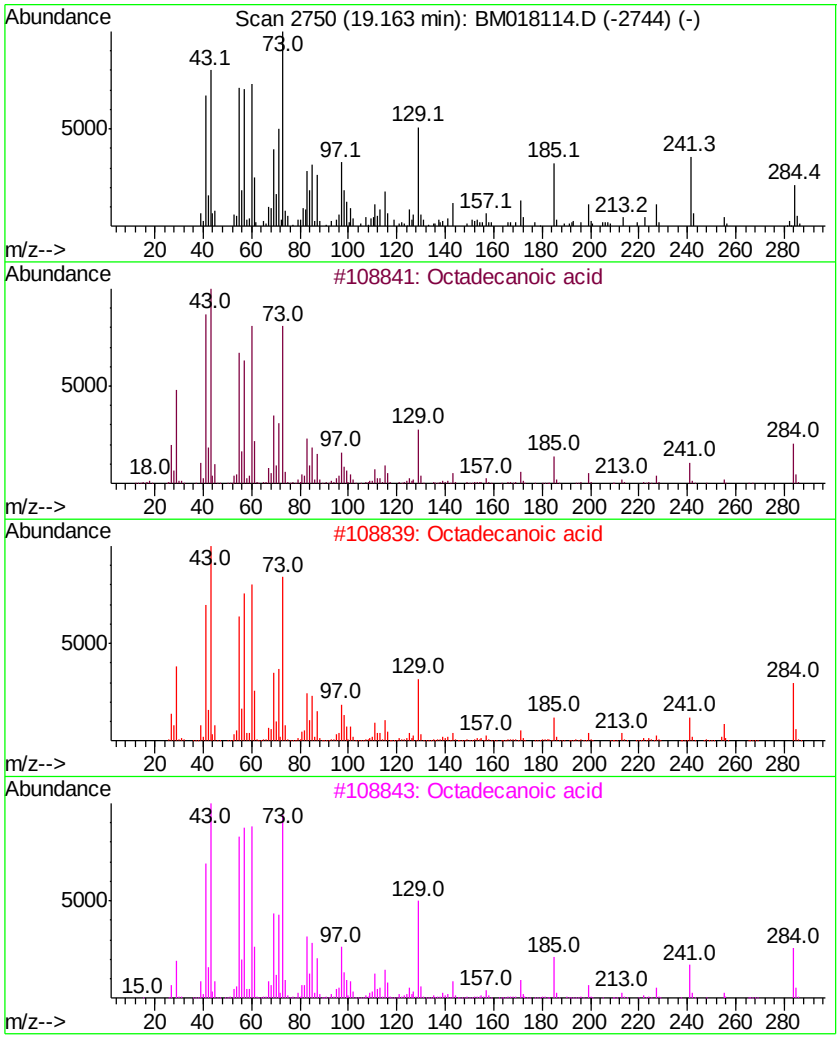
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

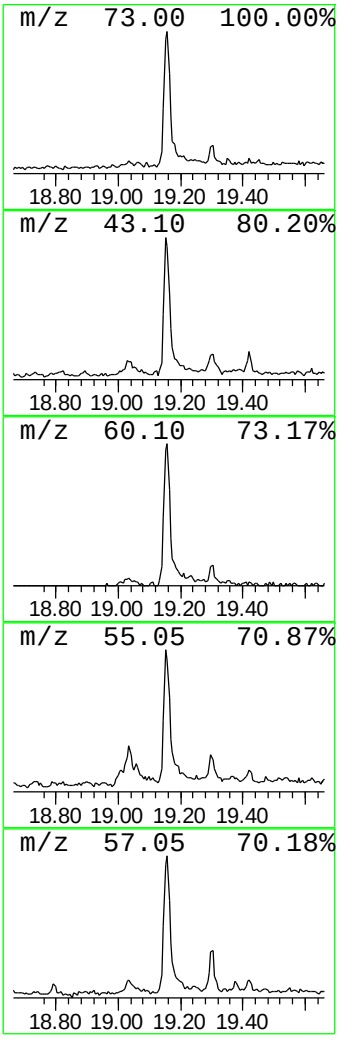
****

Peak Number 4 Octadecanoic acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.16	4.66 ng/ul	570833	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	97
2	Octadecanoic acid	284	C18H36O2	000057-11-4	94
3	Octadecanoic acid	284	C18H36O2	000057-11-4	90
4	n-Decanoic acid	172	C10H20O2	000334-48-5	83
5	Octadecanoic acid	284	C18H36O2	000057-11-4	80





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E66

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

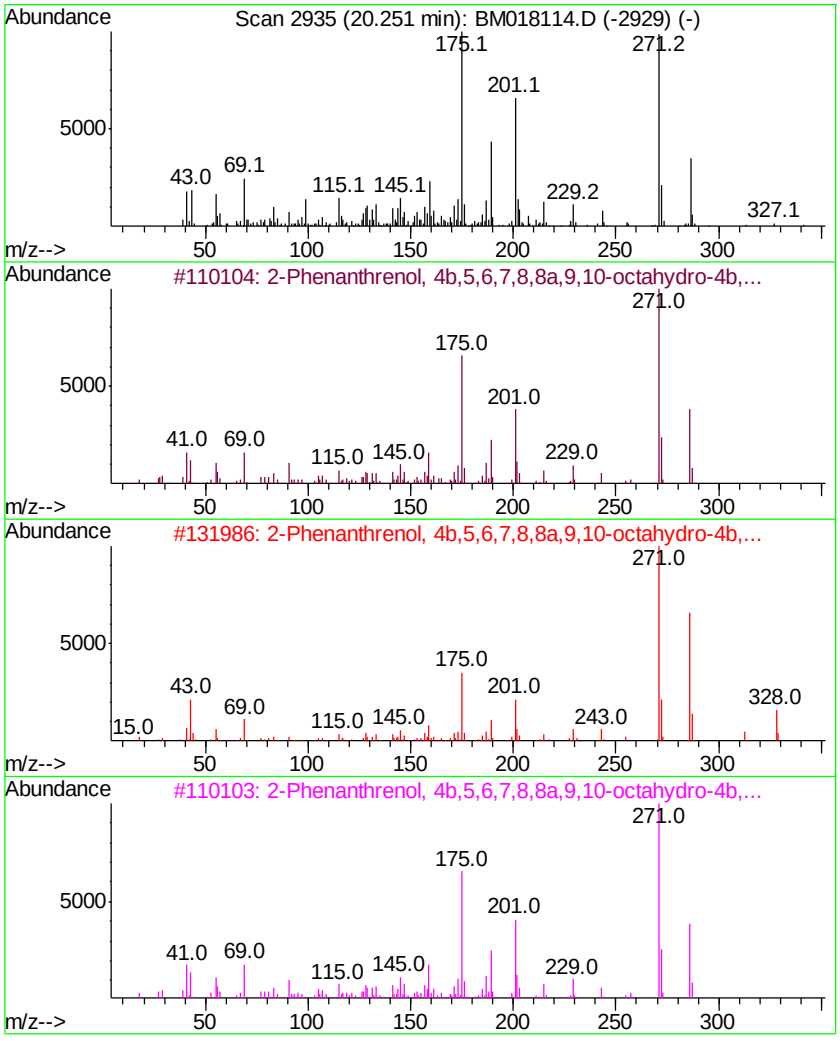
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

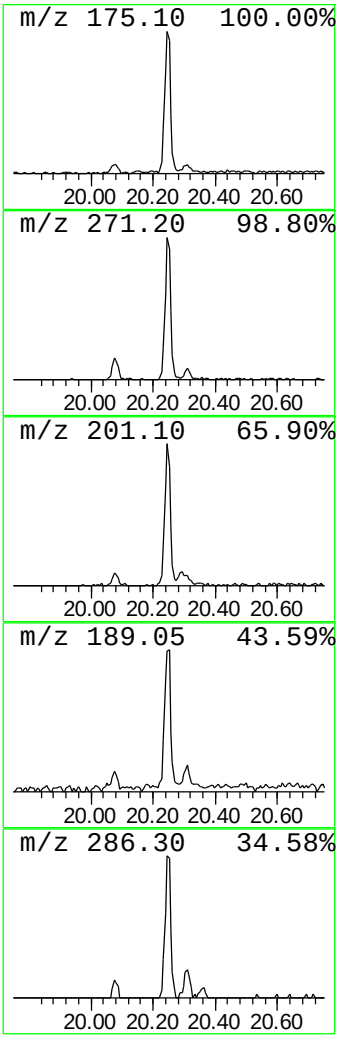
****

Peak Number 5 2-Phenanthrenol, 4b,5,6,7,8... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.25	4.26 ng/ul	522193	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Phenanthrenol, 4b,5,6,7,8,8a,9...	286	C20H30O	000511-15-9	95
2	2-Phenanthrenol, 4b,5,6,7,8,8a,9...	328	C22H32O2	015340-82-6	81
3	2-Phenanthrenol, 4b,5,6,7,8,8a,9...	286	C20H30O	000511-15-9	46
4	Propionic acid, 3,3,3-trifluoro-...	330	C15H13F3O3S	1000276-91-1	38
5	Naphthalene, 1,2,3,4-tetrahydro-...	244	C18H28	029577-17-1	25





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E66

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

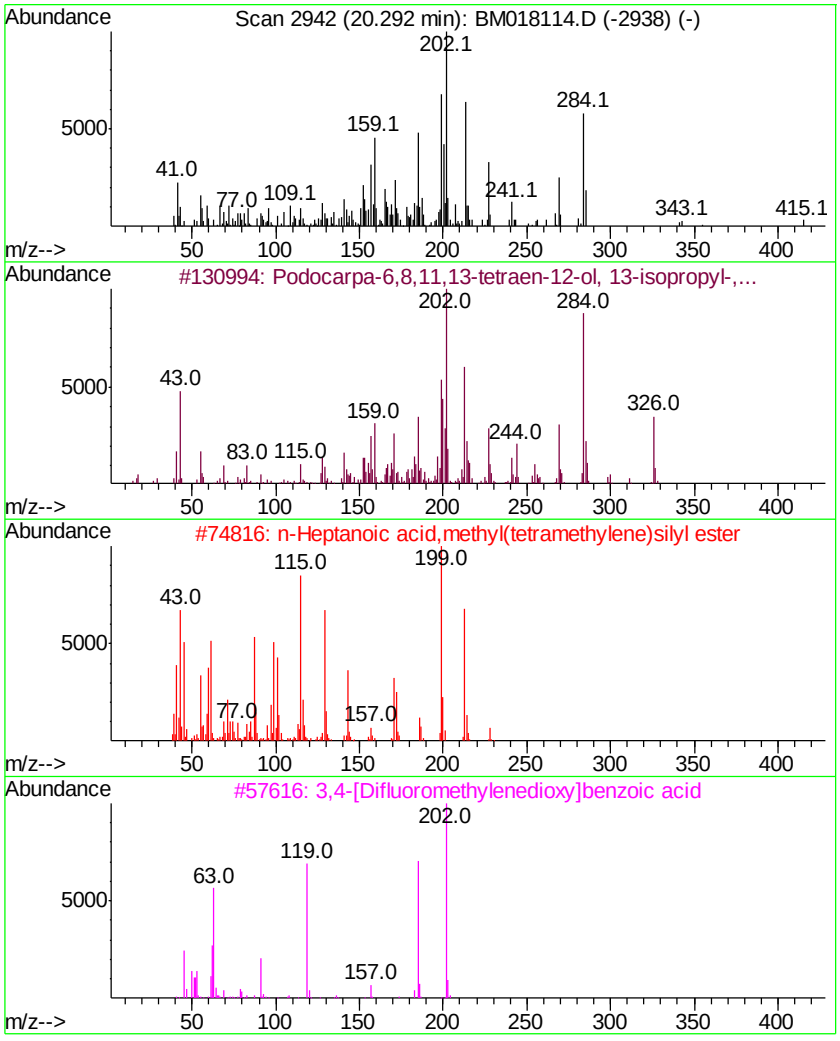
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

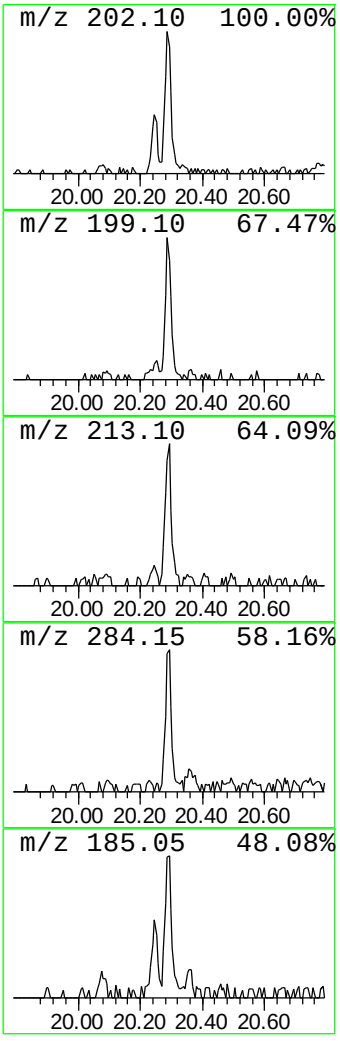
****

Peak Number 6 Podocarpa-6,8,11,13-tetraen... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.29	2.41 ng/ul	295848	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Podocarpa-6,8,11,13-tetraen-12-o...	326	C22H30O2	022160-86-7	83
2	n-Heptanoic acid,methyl(tetramet...	228	C12H24O2Si	1000217-03-6	38
3	3,4-[Difluoromethylenedioxy]benz...	202	C8H4F2O4	000656-46-2	25
4	Oxadiazolo[3,4-a]pyridazino[4,3-...	202	C10H10N4O	1000260-59-4	22
5	Silane, ethyl(iodomethyl)dimethyl-	228	C5H13ISi	018157-41-0	22





Library Search Compound Report

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Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E66

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

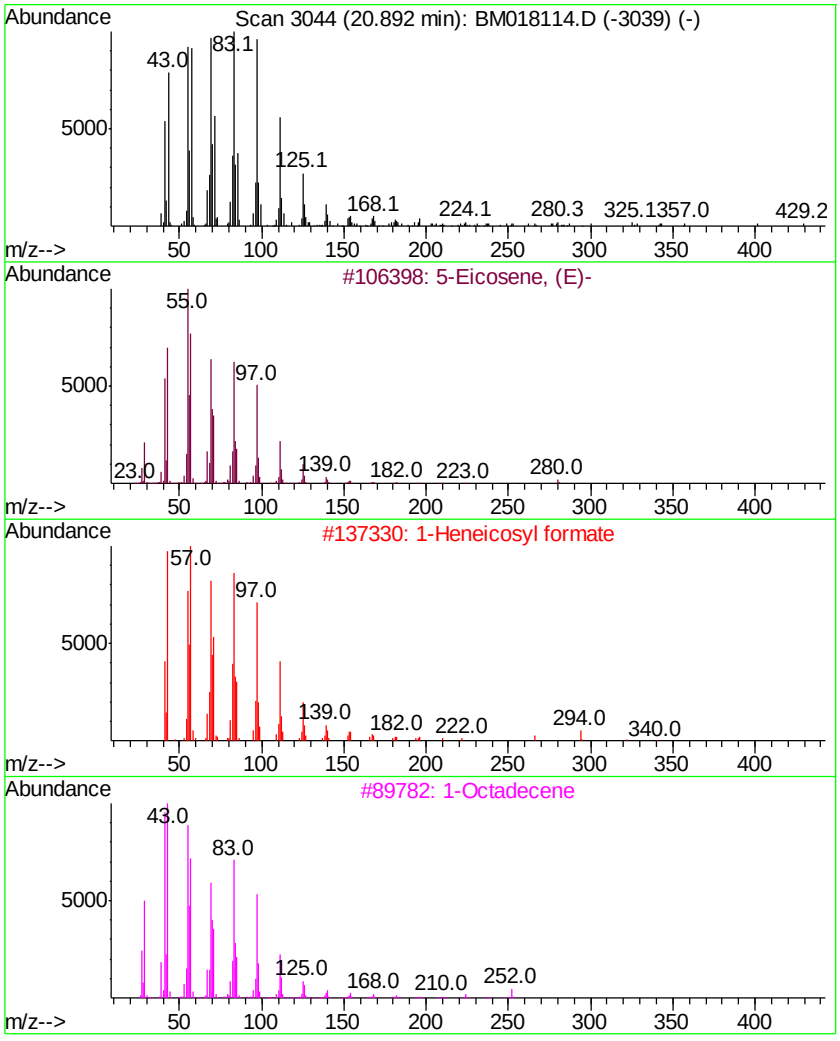
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

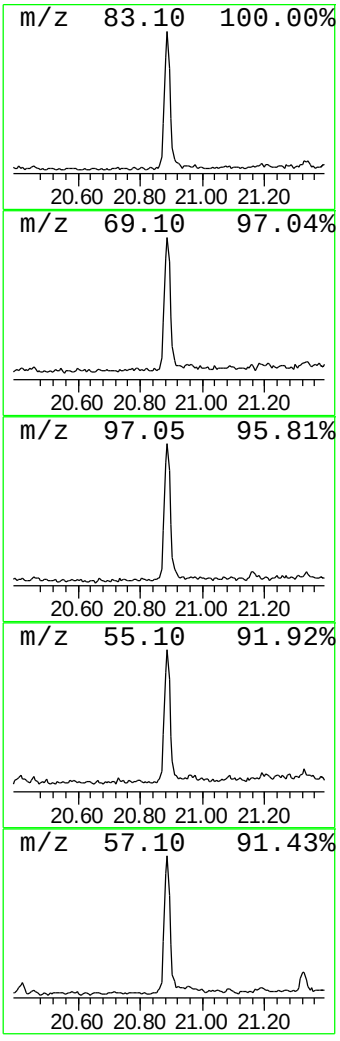
****

Peak Number 7 (DEL) Alkane: Cyclic20.89 Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	5.06 ng/ul	620748	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Eicosene, (E)-	280	C20H40	074685-30-6	98
2	1-Heneicosyl formate	340	C22H44O2	077899-03-7	94
3	1-Octadecene	252	C18H36	000112-88-9	93
4	9-Nonadecene	266	C19H38	031035-07-1	93
5	3-Eicosene, (E)-	280	C20H40	074685-33-9	91





Library Search Compound Report

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Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E66

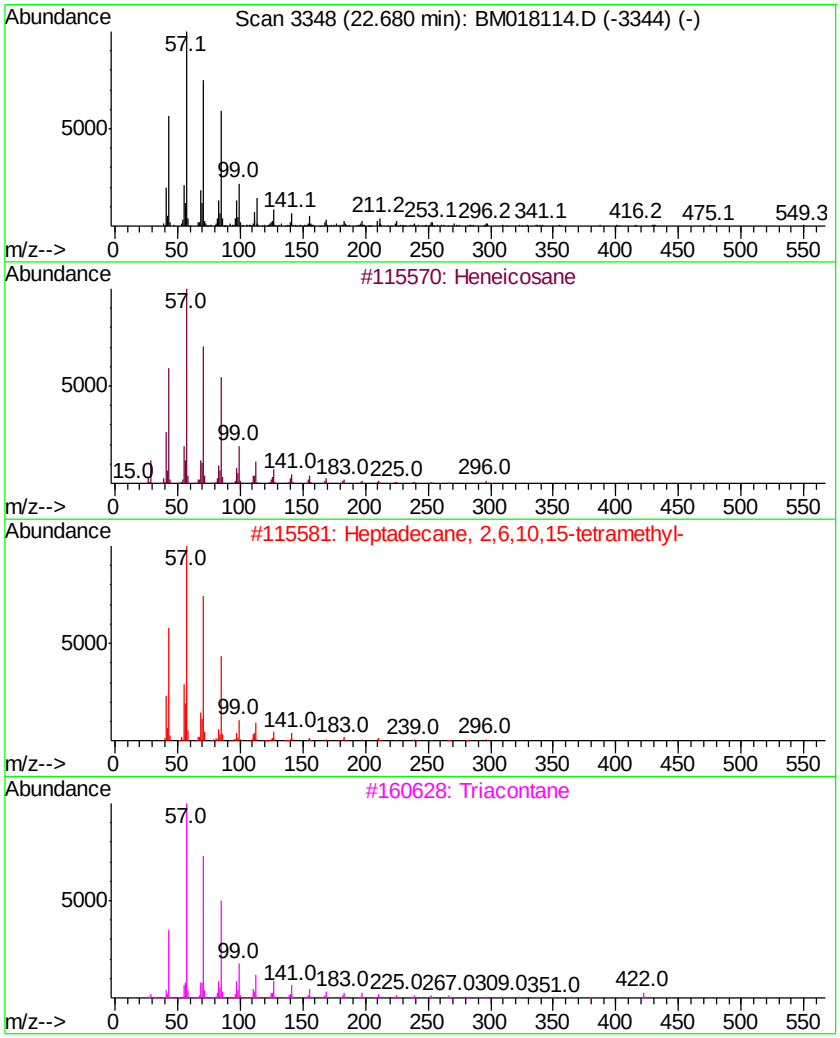
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

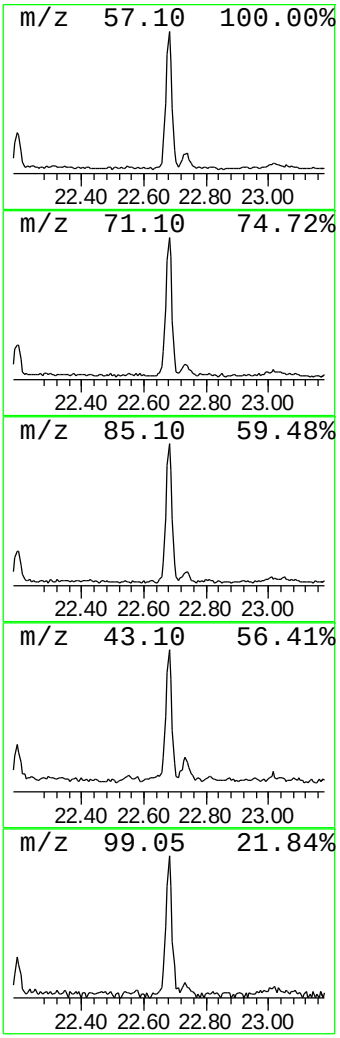
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 8 (DEL) Alkane: Straight-Chai... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.68	4.21 ng/ul	432428	Perylene-d12	23.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	94
2	Heptadecane, 2,6,10,15-tetramethyl-	296	C21H44	054833-48-6	91
3	Triacontane	422	C30H62	000638-68-6	91
4	Eicosane, 7-hexyl-	366	C26H54	055333-99-8	90
5	Tridecanol, 2-ethyl-2-methyl-	242	C16H34O	1000115-66-1	90





Library Search Compound Report

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Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E66

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

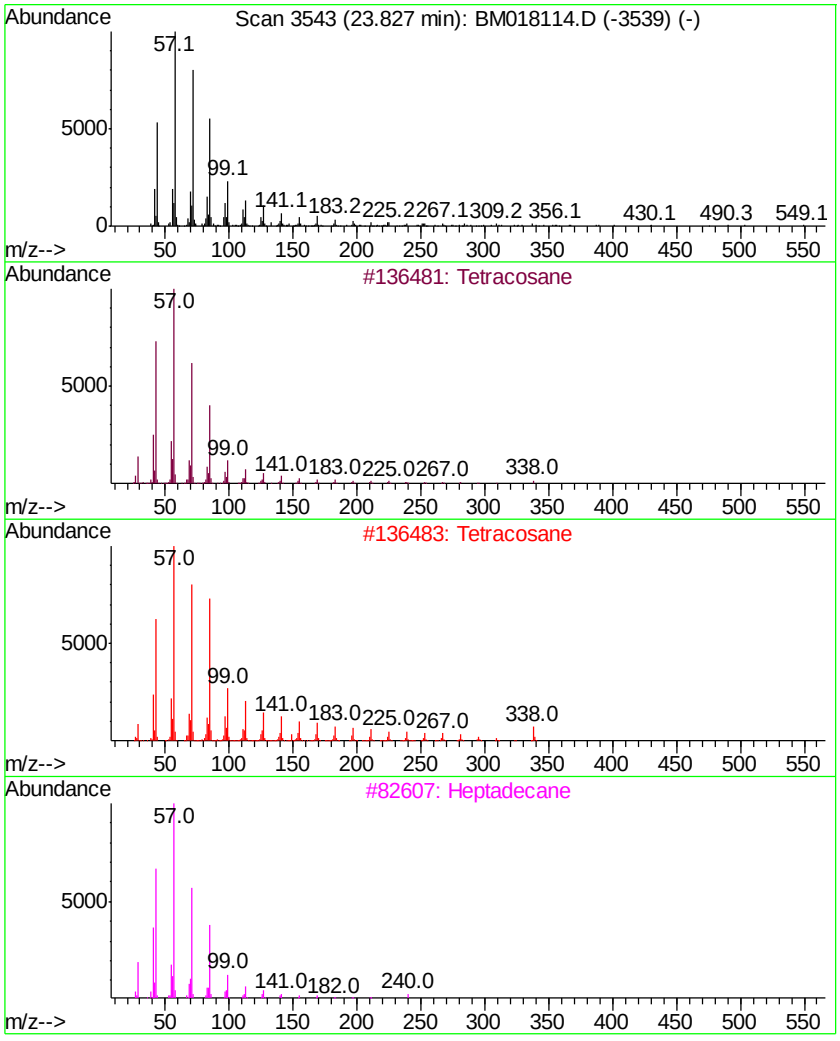
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

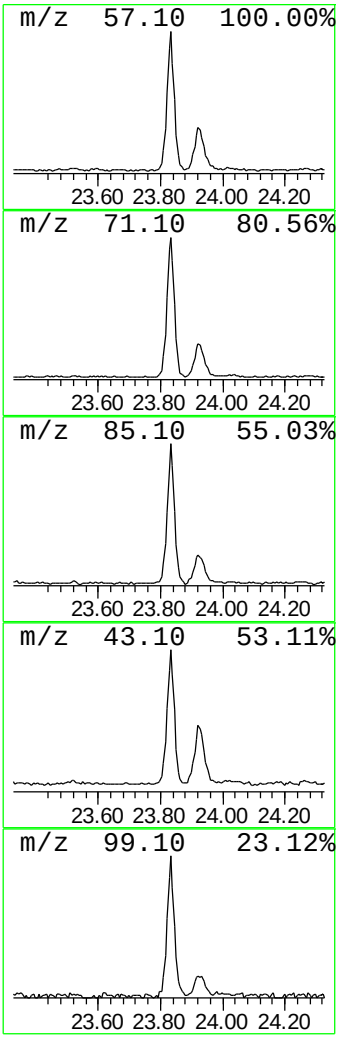
****

Peak Number 9 (DEL) Alkane: Straight-Chai... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.83	7.49 ng/ul	768971	Perylene-d12	23.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetracosane	338	C24H50	000646-31-1	95
2	Tetracosane	338	C24H50	000646-31-1	94
3	Heptadecane	240	C17H36	000629-78-7	93
4	Triacontane	422	C30H62	000638-68-6	91
5	Heneicosane	296	C21H44	000629-94-7	91





Library Search Compound Report

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Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E66

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

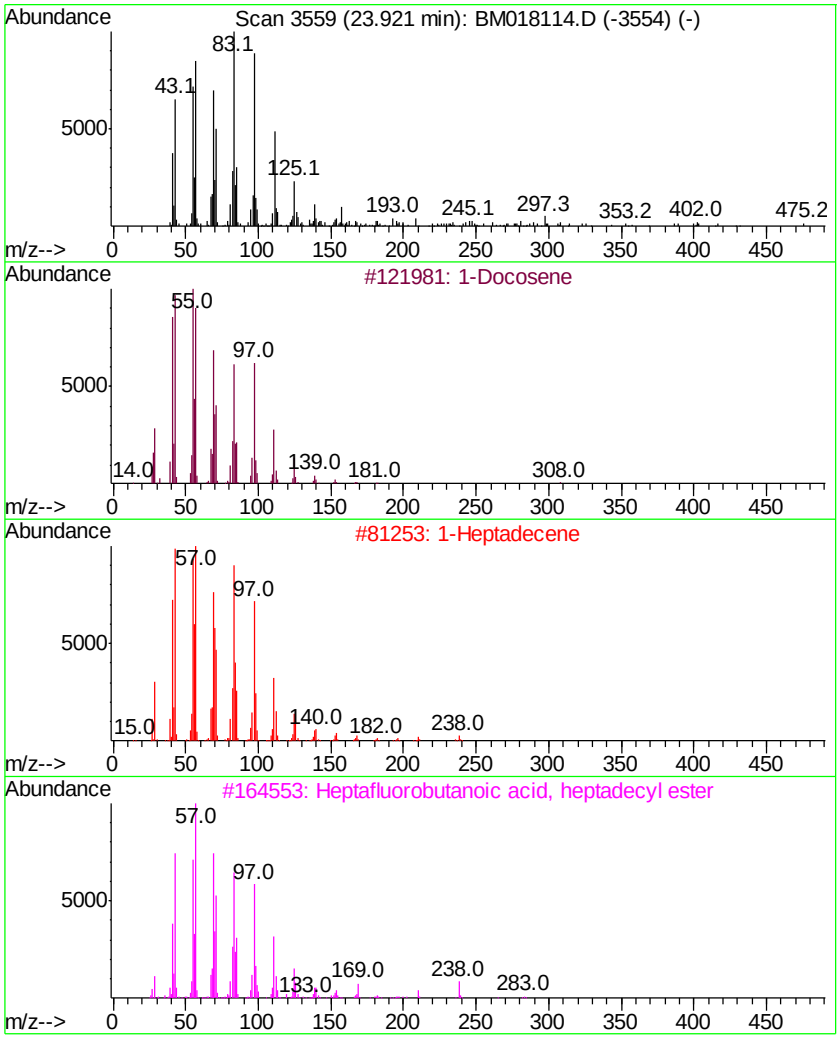
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

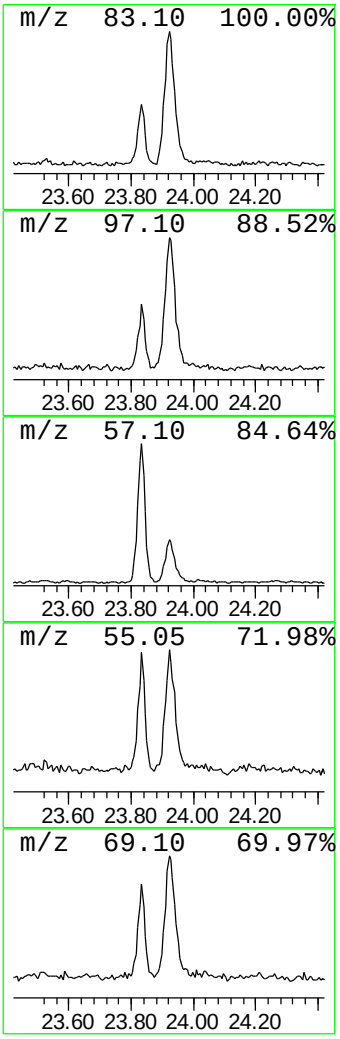
****

Peak Number 10 (DEL) Alkane: Cyclic23.92 Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.92	6.35 ng/ul	652590	Perylene-d12	23.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Docosene	308	C22H44	001599-67-3	90
2	1-Heptadecene	238	C17H34	006765-39-5	87
3	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	53
4	Pentafluoropropionic acid, hepta...	402	C20H35F5O2	1000283-04-2	53
5	17-Pentatriacontene	491	C35H70	006971-40-0	49





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Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E66

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

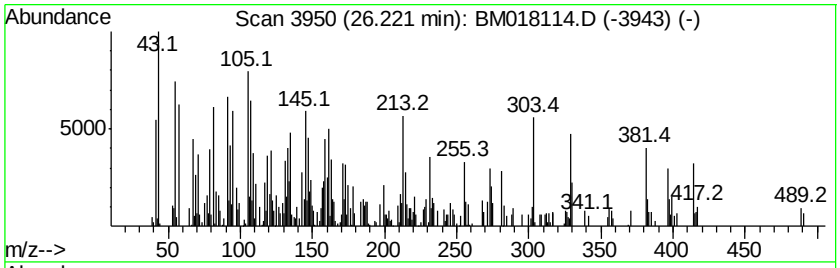
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

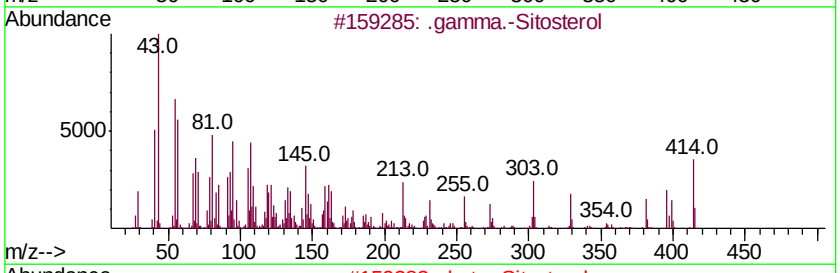
****

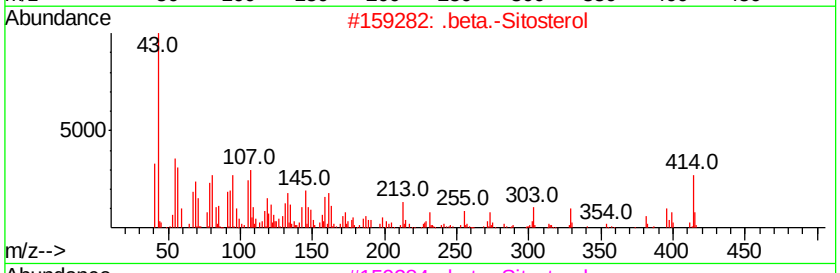
Peak Number 11 .gamma.-Sitosterol Concentration Rank 4

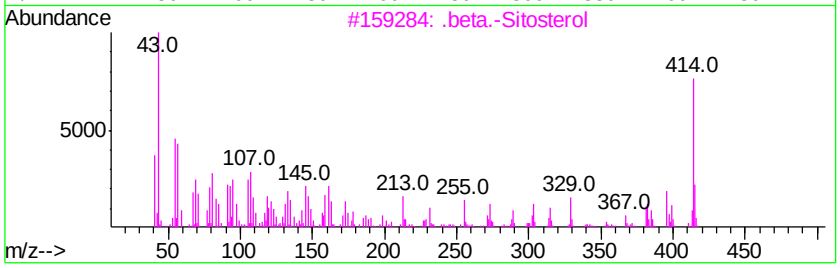
R.T.	EstConc	Area	Relative to ISTD	R.T.
26.22	6.12 ng/ul	628402	Perylene-d12	23.33

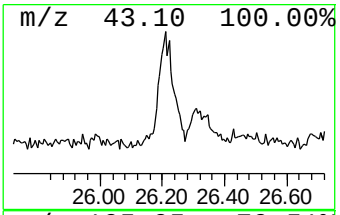
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.gamma.-Sitosterol	414	C29H50O	000083-47-6	99
2	.beta.-Sitosterol	414	C29H50O	000083-46-5	86
3	.beta.-Sitosterol	414	C29H50O	000083-46-5	55
4	.beta.-Sitosterol	414	C29H50O	000083-46-5	35
5	5-Cholesten-3.beta.-acetoxy-24-t...	460	C29H48O2S	1000253-09-1	14

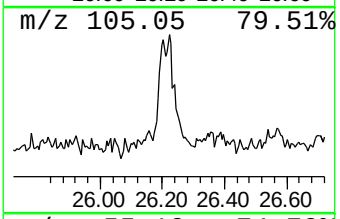


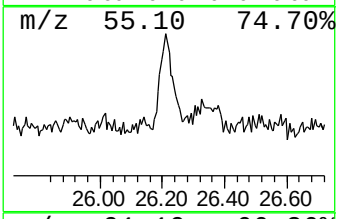


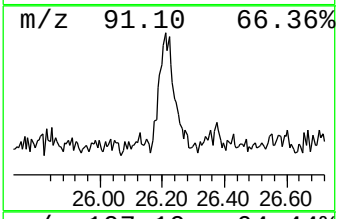


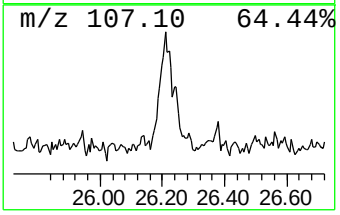












Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E66

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
1,4-Methanoazulen...	13.44	4.2	ng/ul	386437	3	14.19	1834550	20.0
Cedrol	15.48	4.4	ng/ul	406986	3	14.19	1834550	20.0
n-Hexadecanoic acid	17.86	8.8	ng/ul	879033	4	16.95	2005220	20.0
Octadecanoic acid	19.16	4.7	ng/ul	570833	5	21.16	2452530	20.0
2-Phenanthrenol, ...	20.25	4.3	ng/ul	522193	5	21.16	2452530	20.0
Podocarpa-6,8,11,...	20.29	2.4	ng/ul	295848	5	21.16	2452530	20.0
(DEL) Alkane: Cyc...	20.89	5.1	ng/ul	620748	5	21.16	2452530	20.0
(DEL) Alkane: Str...	22.68	4.2	ng/ul	432428	6	23.33	2054550	20.0
(DEL) Alkane: Str...	23.83	7.5	ng/ul	768971	6	23.33	2054550	20.0
(DEL) Alkane: Cyc...	23.92	6.3	ng/ul	652590	6	23.33	2054550	20.0
.gamma.-Sitosterol	26.22	6.1	ng/ul	628402	6	23.33	2054550	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

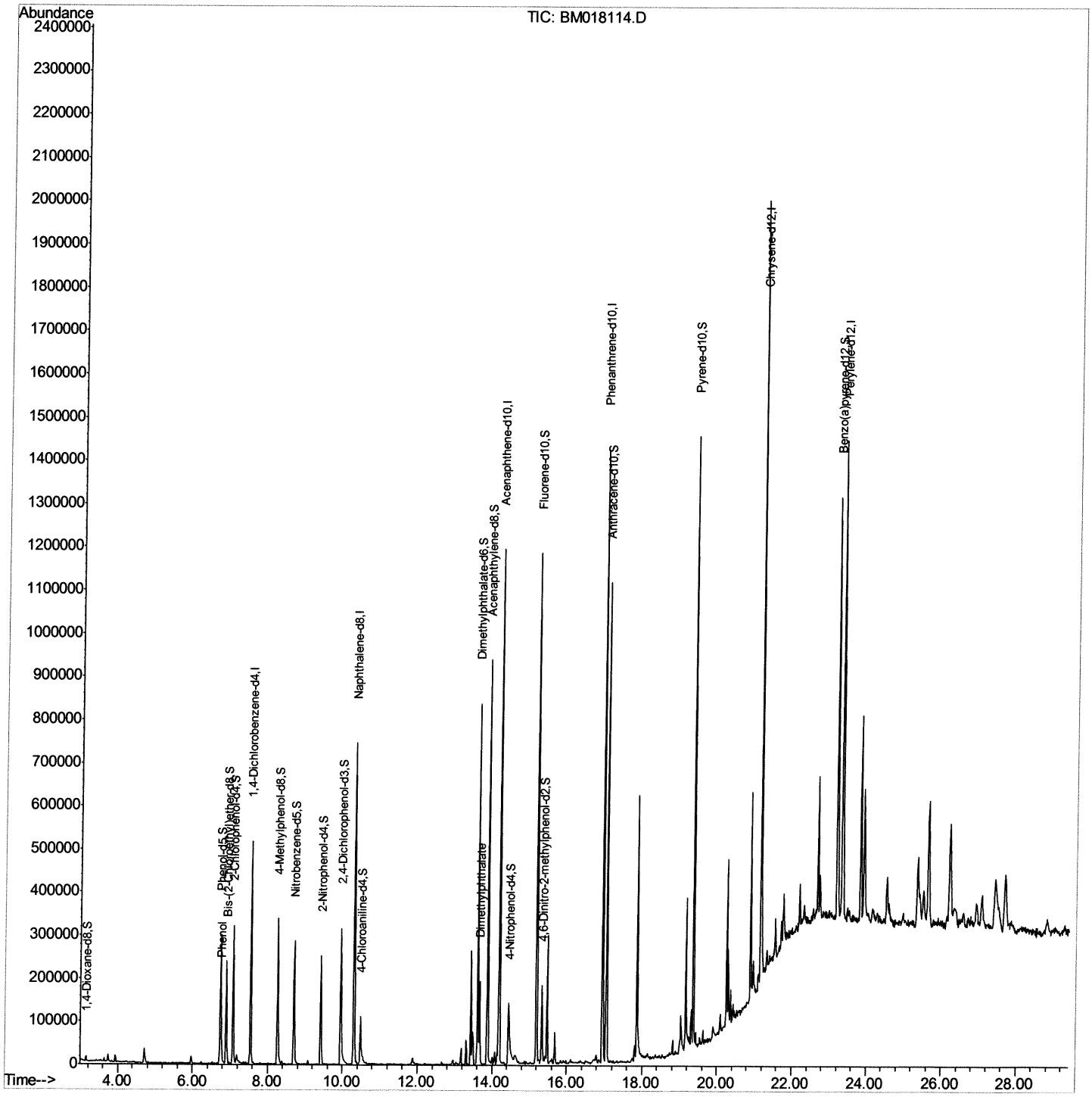
Quantitation Report (QT Reviewed)

Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 13 06:57:46 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:58 PM



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Quantitation Report (Qedit)

Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 13 06:43:26 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
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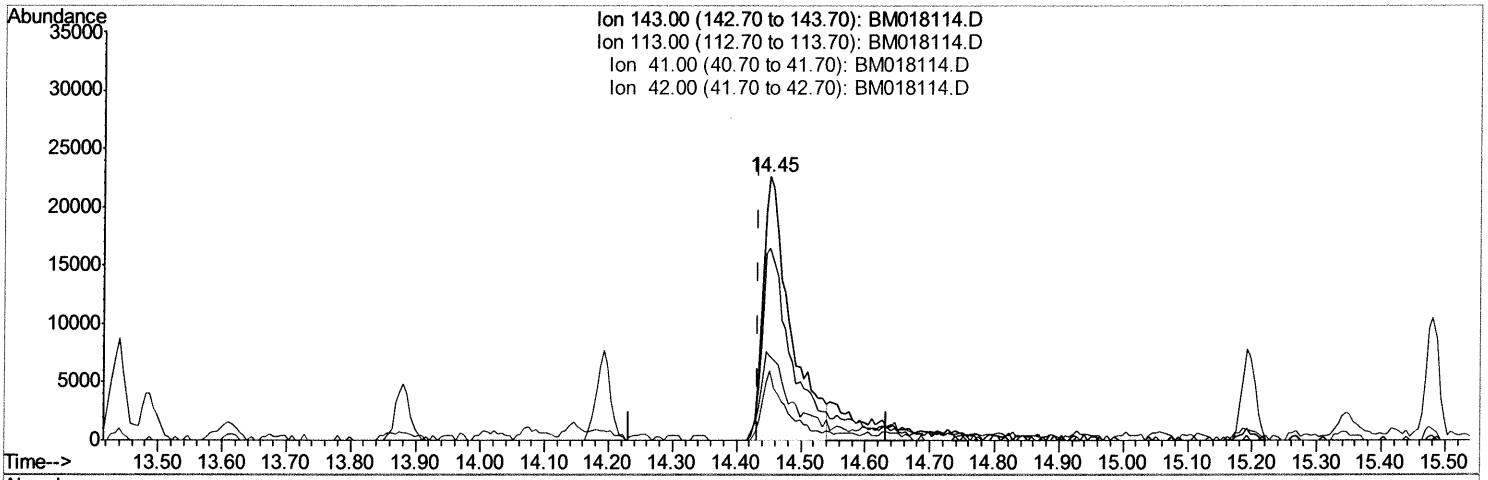
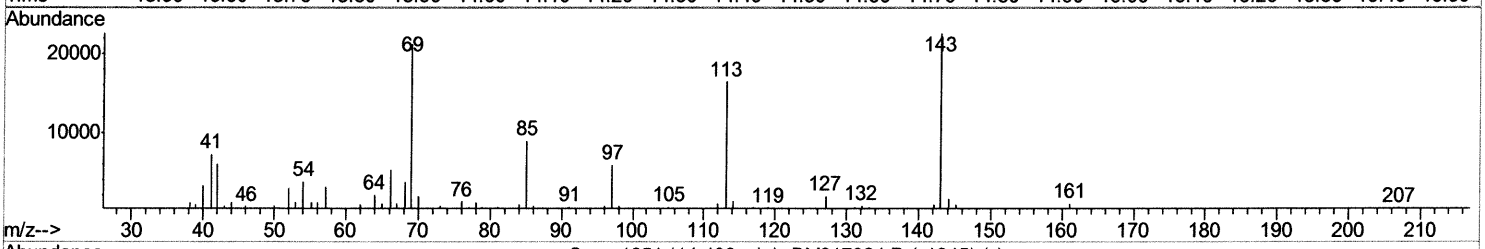
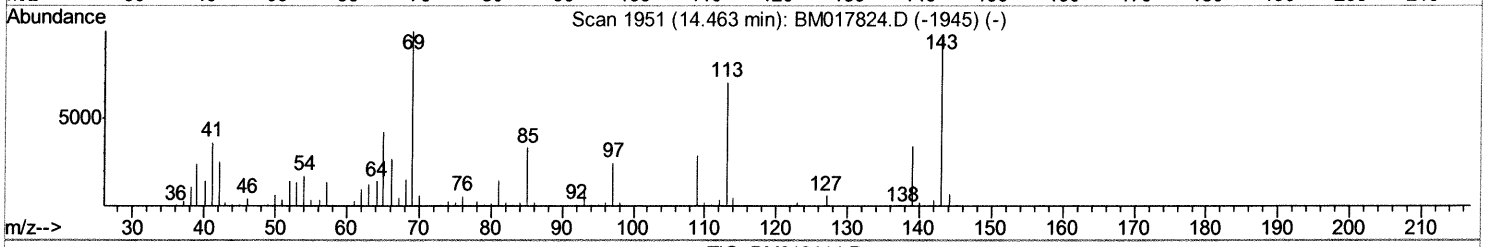
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:58 PM







TIC: BM018114.D

(51) 4-Nitrophenol-d4 (S)

14.451min (+0.018) 10.94ng/ul

response 67001

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	72.72
41.00	40.10	31.76#
42.00	26.80	26.16

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (Qedit)

Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 13 06:43:26 2018
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Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

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BNA_M
ClientSampleId :
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Manual Integrations APPROVED
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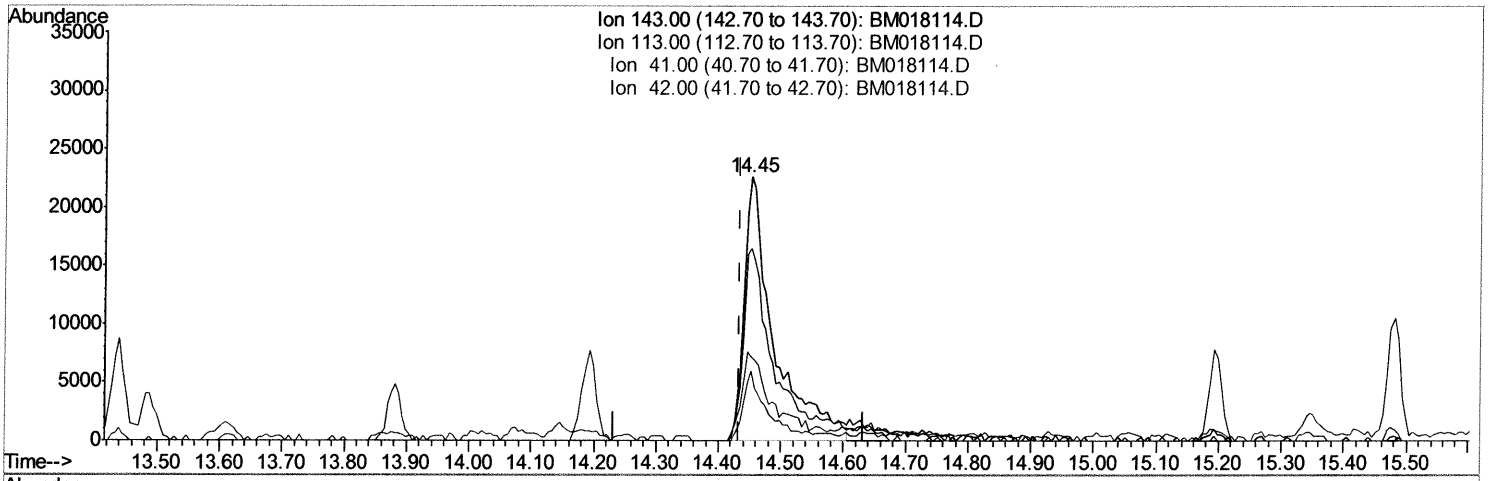
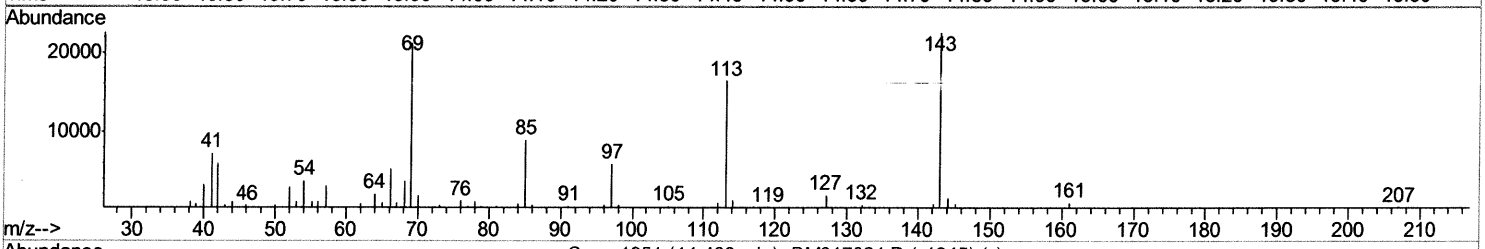
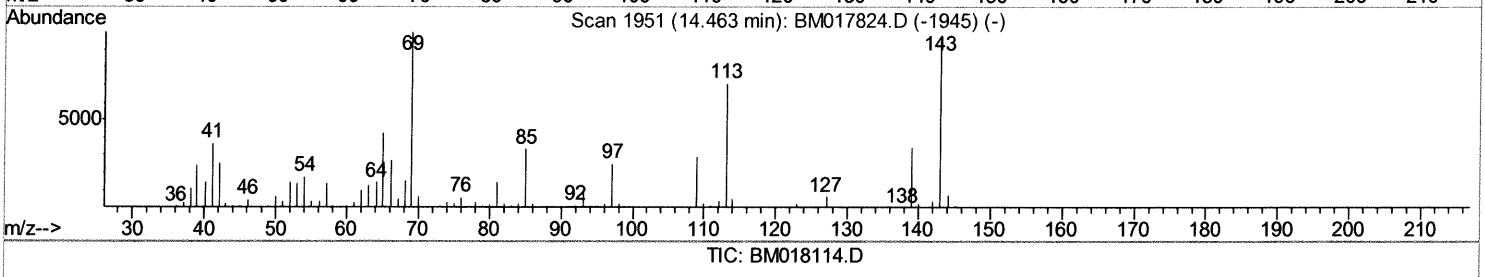
12/13/2018 6:16:58 PM







TIC: BM018114.D

(51) 4-Nitrophenol-d4 (S)

14.451min (+0.018) 12.35ng/ul m > SJ 12/13/18

response 75626

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	72.72
41.00	40.10	31.76#
42.00	26.80	26.16

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018114.D
Acq On : 13 Dec 2018 04:07
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 13 06:57:46 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9E66

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:58 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	141001	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	649758	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	388205	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	812211	20.00	ng/ul	0.00
77) Chrysene-d12	21.16	240	856212	20.00	ng/ul	0.00
85) Perylene-d12	23.33	264	783233	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	7212	2.34	ng/uL	0.00
5) Phenol-d5	6.73	99	196724	15.28	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.89	67	109264	14.07	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	161373	16.02	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	143548	13.64	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	80210	16.07	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	88568	15.49	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	156370	14.36	ng/ul	0.00
29) 4-Chloroaniline-d4	10.48	131	101455	10.86	ng/ul	0.01
43) Dimethylphthalate-d6	13.62	166	571940	16.98	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	678909	16.65	ng/ul	0.00
51) 4-Nitrophenol-d4	14.45	143	75626m	12.35	ng/ul	0.02
57) Fluorene-d10	15.20	176	493151	16.95	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	42383	7.30	ng/ul	0.00
70) Anthracene-d10	17.05	188	628659	15.55	ng/ul	0.00
78) Pyrene-d10	19.36	212	708238	17.09	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	686931	16.17	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	48877	3.802	ng/ul	95
44) Dimethylphthalate	13.66	163	124539	3.816	ng/ul	100

SJ 12/13/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E67

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-04
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018113.D
% Solids : 88.5
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	75	U
100-52-7	Benzaldehyde	370	U
108-95-2	Phenol	100	J
111-44-4	Bis(2-Chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	190	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2-oxybis(1-Chloropropane)	370	U
98-86-2	Acetophenone	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	190	U
67-72-1	Hexachloroethane	190	U
98-95-3	Nitrobenzene	190	U
78-59-1	Isophorone	190	U
88-75-5	2-Nitrophenol	190	U
105-67-9	2,4-Dimethylphenol	190	U
111-91-1	Bis(2-Chloroethoxy)methane	190	U
120-83-2	2,4-Dichlorophenol	190	U
91-20-3	Naphthalene	190	U
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	190	U
105-60-2	Caprolactam	370	U
59-50-7	4-Chloro-3-methylphenol	190	U
91-57-6	2-Methylnaphthalene	190	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E67

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-04
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018113.D
% Solids : 88.5
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	190	U
92-52-4	1,1-Biphenyl	190	U
91-58-7	2-Chloronaphthalene	190	U
88-74-4	2-Nitroaniline	190	U
131-11-3	Dimethylphthalate	110	J
606-20-2	2,6-Dinitrotoluene	190	U
208-96-8	Acenaphthylene	190	U
99-09-2	3-Nitroaniline	370	U
83-32-9	Acenaphthene	190	U
51-28-5	2,4-Dinitrophenol	370	U
100-02-7	4-Nitrophenol	370	U
132-64-9	Dibenzofuran	190	U
121-14-2	2,4-Dinitrotoluene	190	U
84-66-2	Diethylphthalate	190	U
86-73-7	Fluorene	190	U
7005-72-3	4-Chlorophenyl-phenylether	190	U
100-01-6	4-Nitroaniline	370	U
534-52-1	4,6-Dinitro-2-methylphenol	370	U
86-30-6	N-Nitrosodiphenylamine	190	U
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U
101-55-3	4-Bromophenyl-phenylether	190	U
118-74-1	Hexachlorobenzene	190	U
1912-24-9	Atrazine	370	U
87-86-5	Pentachlorophenol	370	U
85-01-8	Phenanthrene	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E67

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-04
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018113.D
% Solids : 88.5
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	190	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	190	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	190	U
85-68-7	Butylbenzylphthalate	190	U
91-94-1	3,3-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	190	U
218-01-9	Chrysene	190	U
117-81-7	Bis(2-ethylhexyl)phthalate	190	U
117-84-0	Di-n-octyl phthalate	370	U
205-99-2	Benzo(b)fluoranthene	190	U
207-08-9	Benzo(k)fluoranthene	190	U
50-32-8	Benzo(a)pyrene	190	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	U
53-70-3	Dibenzo(a,h)anthracene	190	U
191-24-2	Benzo(g,h,i)perylene	190	U
58-90-2	2,3,4,6-Tetrachlorophenol	190	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E67

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-04
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018113.D
% Solids : 88.5
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/13/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000057-10-3	n-Hexadecanoic acid	17.86	130	JN
2	000057-11-4	Octadecanoic acid	19.16	81	JN
3	E966796	Total Alkanes	N/A	0.0	

EPA-designated Registry Number.

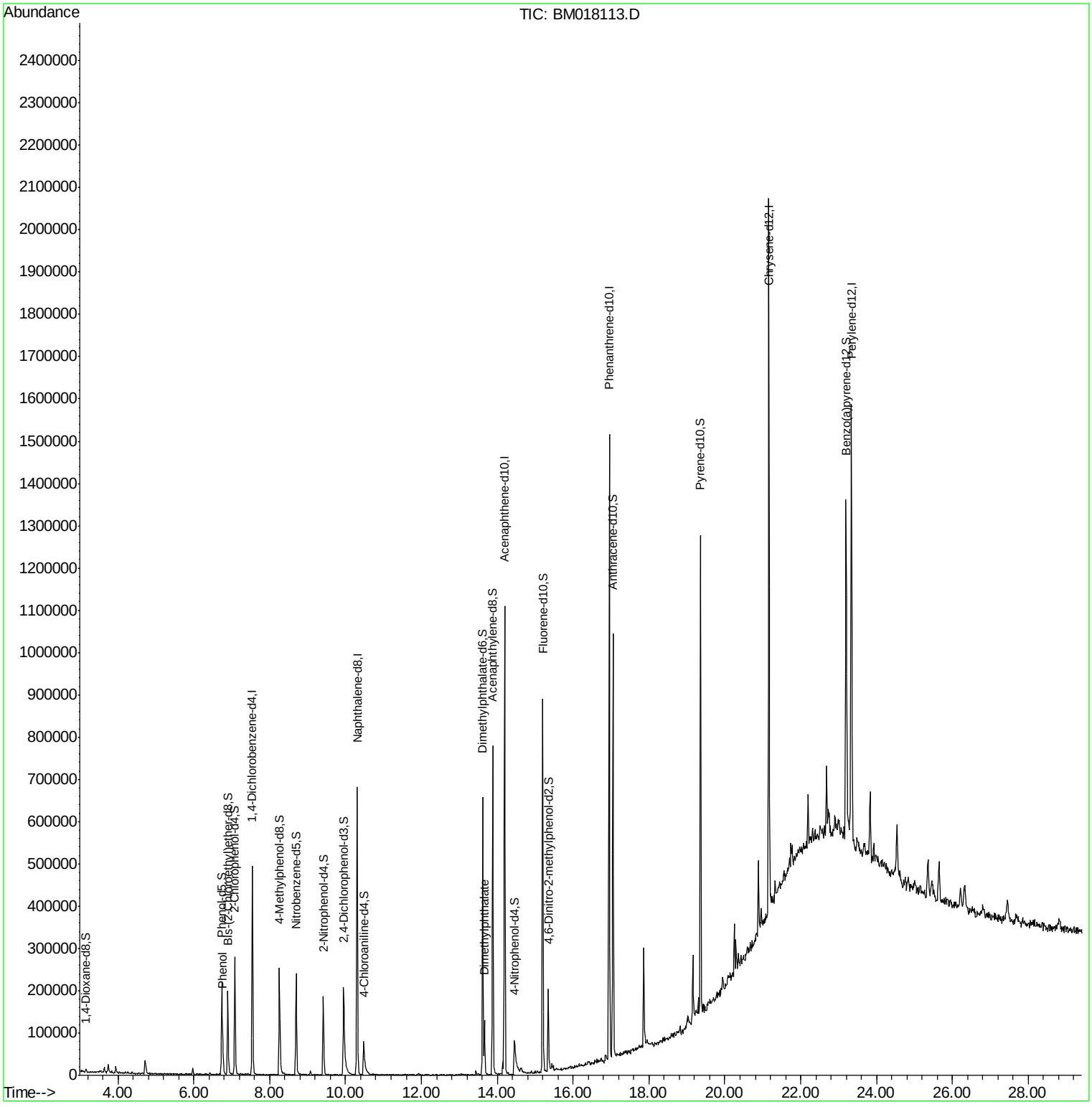
Quantitation Report (LSC Reviewed)

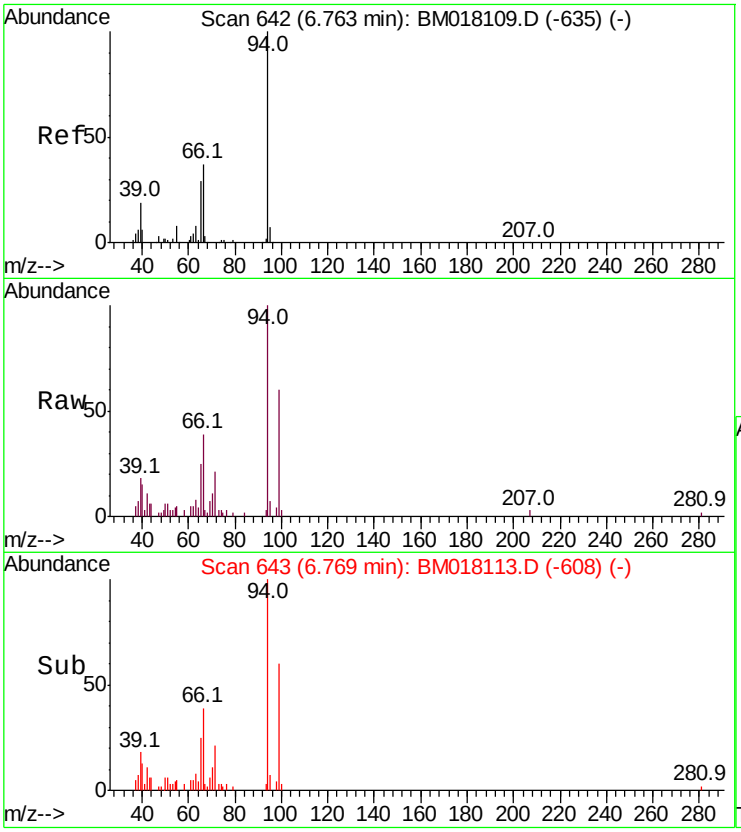
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 13 06:56:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:57 PM





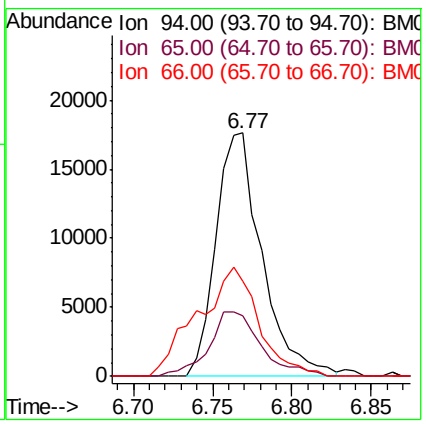
#6
Phenol
Concen: 2.724 ng/ul
RT: 6.77 min Scan# 643
Delta R.T. 0.01 min
Lab File: BM018113.D
Acq: 13 Dec 2018 03:31

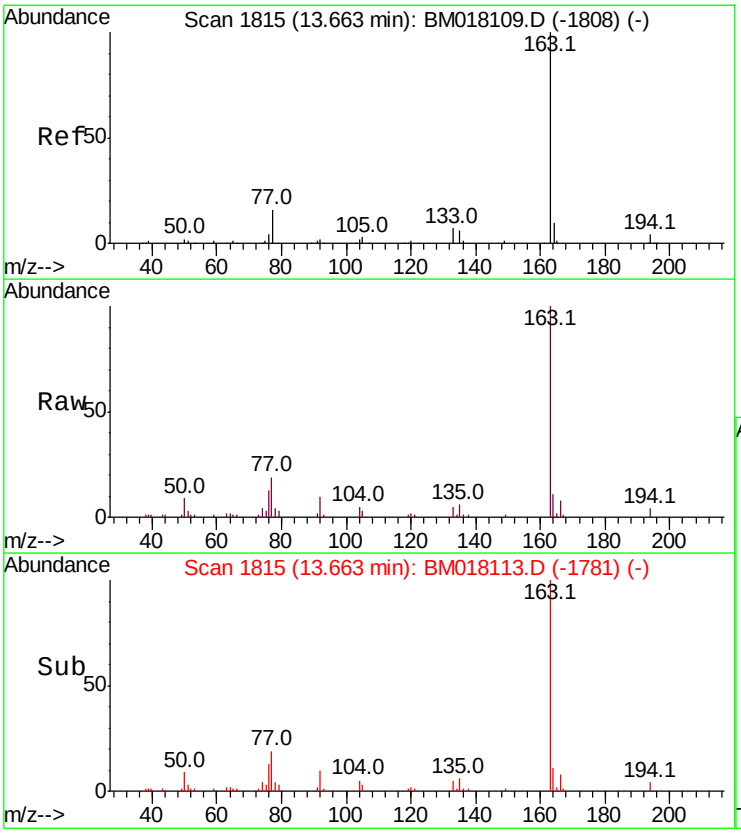
Tgt Ion: 94 Resp: 35495

Ion	Ratio	Lower	Upper
94	100		
65	24.7	24.7	37.1#
66	39.1	34.6	51.8

Instrument :
BNA_M
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:57 PM

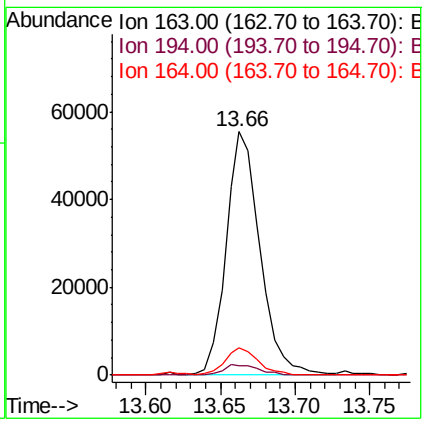




#44
Dimethylphthalate
Concen: 2.811 ng/ul
RT: 13.66 min Scan# 1815
Delta R.T. 0.00 min
Lab File: BM018113.D
Acq: 13 Dec 2018 03:31

Tgt Ion:163 Resp: 88225

Ion	Ratio	Lower	Upper
163	100		
194	3.8	3.4	5.0
164	11.1	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:57 PM

Quant Time: Dec 13 06:56:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	142946	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	588265	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	373377	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	826434	20.00	ng/ul	0.00
77) Chrysene-d12	21.16	240	820461	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	721713	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	5488m	1.76	ng/uL	0.00
5) Phenol-d5	6.73	99	155215	11.89	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.89	67	91630	11.64	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	134952	13.21	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	117657	11.03	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	63071	13.96	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	69856	13.49	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	122882m	12.47	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	83132	9.83	ng/ul	0.01
43) Dimethylphthalate-d6	13.62	166	446736	13.79	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	544423	13.89	ng/ul	0.00
51) 4-Nitrophenol-d4	14.46	143	54302m	9.22	ng/ul	0.02
57) Fluorene-d10	15.20	176	382781	13.68	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	48111	8.14	ng/ul	0.00
70) Anthracene-d10	17.05	188	561288	13.64	ng/ul	0.00
78) Pyrene-d10	19.36	212	592382	14.92	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	543690	13.89	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.77	94	35495	2.724	ng/ul#	92
44) Dimethylphthalate	13.66	163	88225	2.811	ng/ul	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E67

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.157	23	29	34	rVB3	10133	18740	0.85%	0.079%
2	3.263	45	47	49	rBV3	3171	3108	0.14%	0.013%
3	3.340	58	60	64	rBV3	2745	3914	0.18%	0.016%
4	3.469	77	82	86	rBV3	3340	8004	0.36%	0.034%
5	3.516	86	90	93	rVV5	3346	4681	0.21%	0.020%
6	3.640	107	111	116	rBV2	12542	17195	0.78%	0.072%
7	3.746	123	129	135	rBV	18281	26896	1.22%	0.113%
8	3.904	152	156	158	rBV3	2053	3073	0.14%	0.013%
9	3.946	158	163	168	rVV3	16433	26301	1.19%	0.111%
10	3.993	168	171	174	rVB2	3669	4123	0.19%	0.017%
11	4.199	202	206	210	rBV6	5245	7365	0.33%	0.031%
12	4.369	233	235	238	rBV3	4143	4410	0.20%	0.019%
13	4.434	244	246	251	rVB3	2321	3489	0.16%	0.015%
14	4.598	271	274	279	rBV3	2680	5019	0.23%	0.021%
15	4.710	289	293	296	rBV	32069	50005	2.26%	0.211%
16	4.881	319	322	326	rBV3	2641	3562	0.16%	0.015%
17	5.369	400	405	407	rVB2	2434	3097	0.14%	0.013%
18	5.498	424	427	432	rBV4	1580	2989	0.14%	0.013%
19	5.775	473	474	479	rVB4	2193	2930	0.13%	0.012%
20	5.975	504	508	513	rVB3	14336	21718	0.98%	0.091%
21	6.422	578	584	588	rVB3	4271	7753	0.35%	0.033%
22	6.604	612	615	618	rBV2	2542	2929	0.13%	0.012%
23	6.740	631	638	651	rVV2	218476	511908	23.15%	2.156%
24	6.892	657	664	678	rBV	198442	335302	15.17%	1.412%
25	7.081	690	696	706	rBV	276658	456752	20.66%	1.923%
26	7.540	768	774	784	rBV	494118	824662	37.30%	3.472%
27	8.257	890	896	912	rBV	252489	496327	22.45%	2.090%
28	8.369	913	915	920	rVB3	3358	5429	0.25%	0.023%
29	8.698	964	971	985	rBV	239567	424772	19.21%	1.789%
30	8.981	1018	1019	1023	rBV	2415	2736	0.12%	0.012%
31	9.081	1030	1036	1041	rVB2	10524	13643	0.62%	0.057%
32	9.334	1074	1079	1082	rVB2	1586	3307	0.15%	0.014%
33	9.410	1086	1092	1106	rVV	184501	327492	14.81%	1.379%
34	9.951	1178	1184	1204	rBV	206636	518937	23.47%	2.185%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E67

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	10.310	1237	1245	1258	rBV	679847	1156161	52.29%	4.868%
36	10.475	1267	1273	1293	rBV	79389	246014	11.13%	1.036%
37	11.557	1452	1457	1462	rBV2	1403	3344	0.15%	0.014%
38	11.922	1514	1519	1526	rBV4	3324	7113	0.32%	0.030%
39	13.045	1707	1710	1713	rBV2	4122	4245	0.19%	0.018%
40	13.439	1769	1777	1781	rBV4	10281	14807	0.67%	0.062%
41	13.492	1781	1786	1789	rBV4	2806	4670	0.21%	0.020%
42	13.616	1801	1807	1812	rBV	656555	917635	41.50%	3.864%
43	13.663	1812	1815	1826	rVV2	129691	206102	9.32%	0.868%
44	13.733	1826	1827	1832	rVB3	2504	3233	0.15%	0.014%
45	13.880	1845	1852	1863	rBV	777794	1134891	51.33%	4.779%
46	14.080	1884	1886	1889	rBV2	2288	2910	0.13%	0.012%
47	14.145	1893	1897	1899	rBV2	31008	39603	1.79%	0.167%
48	14.192	1899	1905	1917	rVB2	1106373	1736342	78.53%	7.311%
49	14.457	1944	1950	1961	rBV4	81132	254827	11.53%	1.073%
50	14.539	1963	1964	1973	rVV4	16193	36086	1.63%	0.152%
51	14.610	1973	1976	1977	rVV2	13183	13972	0.63%	0.059%
52	14.639	1980	1981	1985	rVV2	13549	14845	0.67%	0.063%
53	14.692	1988	1990	1991	rVV2	3660	2710	0.12%	0.011%
54	14.721	1991	1995	1999	rVB4	3410	6360	0.29%	0.027%
55	14.821	2010	2012	2015	rVB3	3012	2953	0.13%	0.012%
56	14.898	2021	2025	2029	rBV5	5177	4648	0.21%	0.020%
57	14.968	2035	2037	2039	rVB	4043	3075	0.14%	0.013%
58	15.004	2039	2043	2046	rBV5	6233	10273	0.46%	0.043%
59	15.057	2046	2052	2055	rVV4	5985	10422	0.47%	0.044%
60	15.198	2069	2076	2085	rVV	884776	1402028	63.41%	5.904%
61	15.263	2085	2087	2090	rVB2	6603	7042	0.32%	0.030%
62	15.345	2096	2101	2110	rBV	195770	318940	14.43%	1.343%
63	15.439	2113	2117	2120	rVV4	16656	27959	1.26%	0.118%
64	15.480	2122	2124	2127	rVV3	12362	14686	0.66%	0.062%
65	15.521	2130	2131	2134	rBV3	3647	3341	0.15%	0.014%
66	15.568	2136	2139	2141	rVB4	3613	4092	0.19%	0.017%
67	15.686	2157	2159	2163	rVB5	5729	7698	0.35%	0.032%
68	15.757	2168	2171	2172	rBV3	5300	4256	0.19%	0.018%
69	15.868	2189	2190	2193	rBV3	3770	4219	0.19%	0.018%
70	15.927	2198	2200	2201	rVV2	4098	3170	0.14%	0.013%
71	15.980	2207	2209	2213	rVB5	6175	7104	0.32%	0.030%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E67

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

72	16.015	2213	2215	2217	rBV3	3043	2945	0.13%	0.012%
73	16.045	2217	2220	2221	rBV2	6271	4587	0.21%	0.019%
74	16.074	2223	2225	2228	rVV4	3435	3647	0.16%	0.015%
75	16.098	2228	2229	2231	rVV2	4416	3978	0.18%	0.017%
76	16.157	2235	2239	2242	rVV6	9169	14103	0.64%	0.059%
77	16.210	2246	2248	2251	rVV4	4772	3446	0.16%	0.015%
78	16.280	2258	2260	2262	rBV3	3636	3829	0.17%	0.016%
79	16.333	2266	2269	2271	rVV4	6853	6539	0.30%	0.028%
80	16.386	2276	2278	2281	rBV3	7046	10795	0.49%	0.045%
81	16.451	2288	2289	2292	rBV3	6376	7335	0.33%	0.031%
82	16.568	2307	2309	2312	rBV4	10793	10947	0.50%	0.046%
83	16.633	2318	2320	2321	rBV2	9923	4811	0.22%	0.020%
84	16.668	2324	2326	2328	rVV3	5837	3899	0.18%	0.016%
85	16.821	2351	2352	2353	rBV	6151	4292	0.19%	0.018%
86	16.851	2356	2357	2358	rBV	14142	9105	0.41%	0.038%
87	16.951	2368	2374	2381	rBV	1479116	2051577	92.79%	8.639%
88	17.051	2385	2391	2399	rBV	1001754	1445208	65.36%	6.085%
89	17.439	2455	2457	2459	rBV3	9568	8333	0.38%	0.035%
90	17.527	2470	2472	2473	rBV2	10893	7053	0.32%	0.030%
91	17.862	2525	2529	2538	rBV2	231691	361922	16.37%	1.524%
92	19.156	2745	2749	2757	rBV2	154409	239767	10.84%	1.010%
93	19.303	2771	2774	2777	rVB3	40079	43796	1.98%	0.184%
94	19.356	2778	2783	2791	rVV2	1129777	1565606	70.81%	6.592%
95	20.245	2931	2934	2938	rBV2	110485	131211	5.93%	0.552%
96	20.292	2939	2942	2949	rVB8	70817	110117	4.98%	0.464%
97	20.886	3040	3043	3050	rVB4	157974	193160	8.74%	0.813%
98	21.162	3085	3090	3096	rBV2	1684374	2211007	100.00%	9.310%
99	23.197	3431	3436	3445	rBV	783841	1543142	69.79%	6.498%
100	23.338	3454	3460	3468	rVB	1035864	1948239	88.12%	8.204%

Sum of corrected areas: 23748740

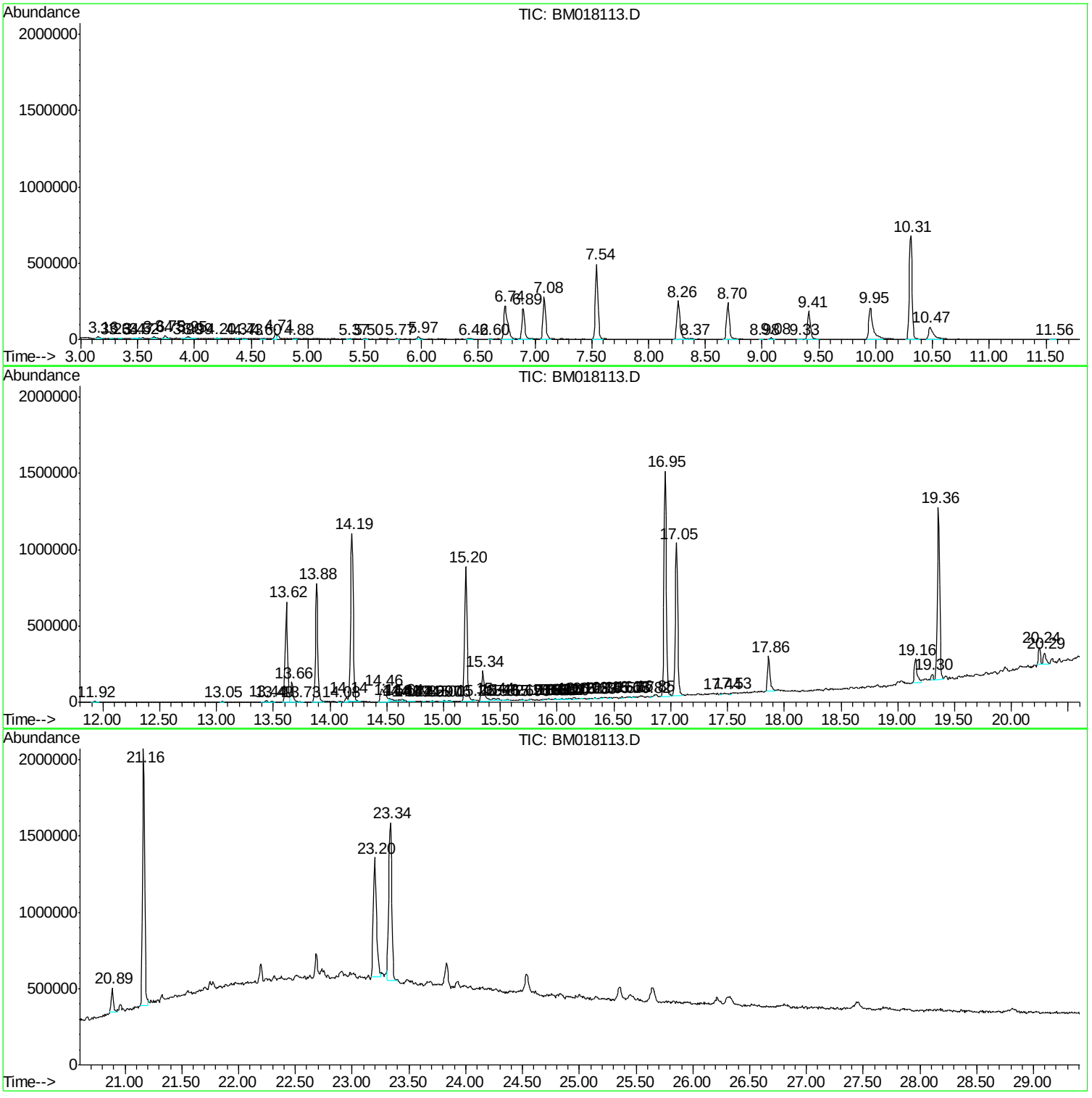
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E67

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E67

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

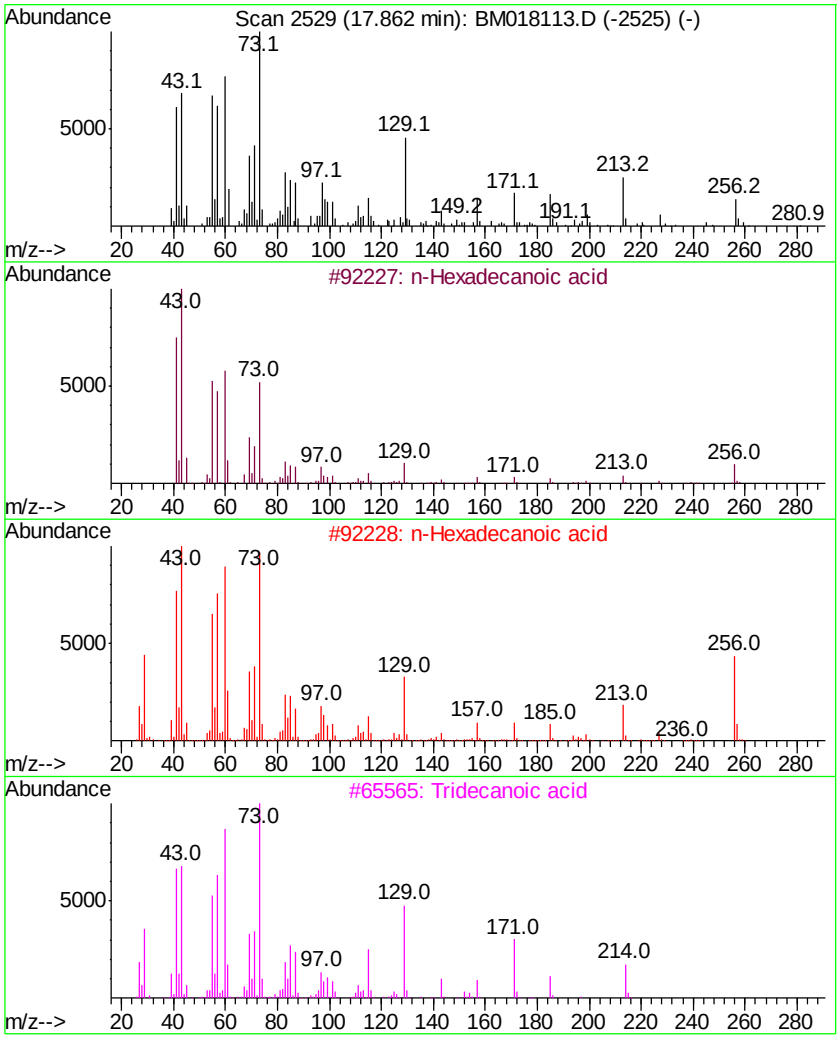
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

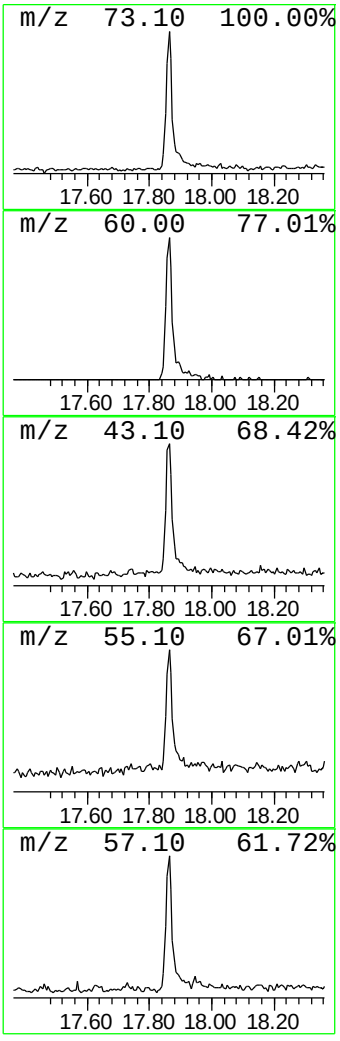
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.86	3.53 ng/ul	361922	Phenanthrene-d10	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
3	Tridecanoic acid	214	C13H26O2	000638-53-9	80
4	n-Decanoic acid	172	C10H20O2	000334-48-5	76
5	Tridecanoic acid	214	C13H26O2	000638-53-9	76





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E67

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

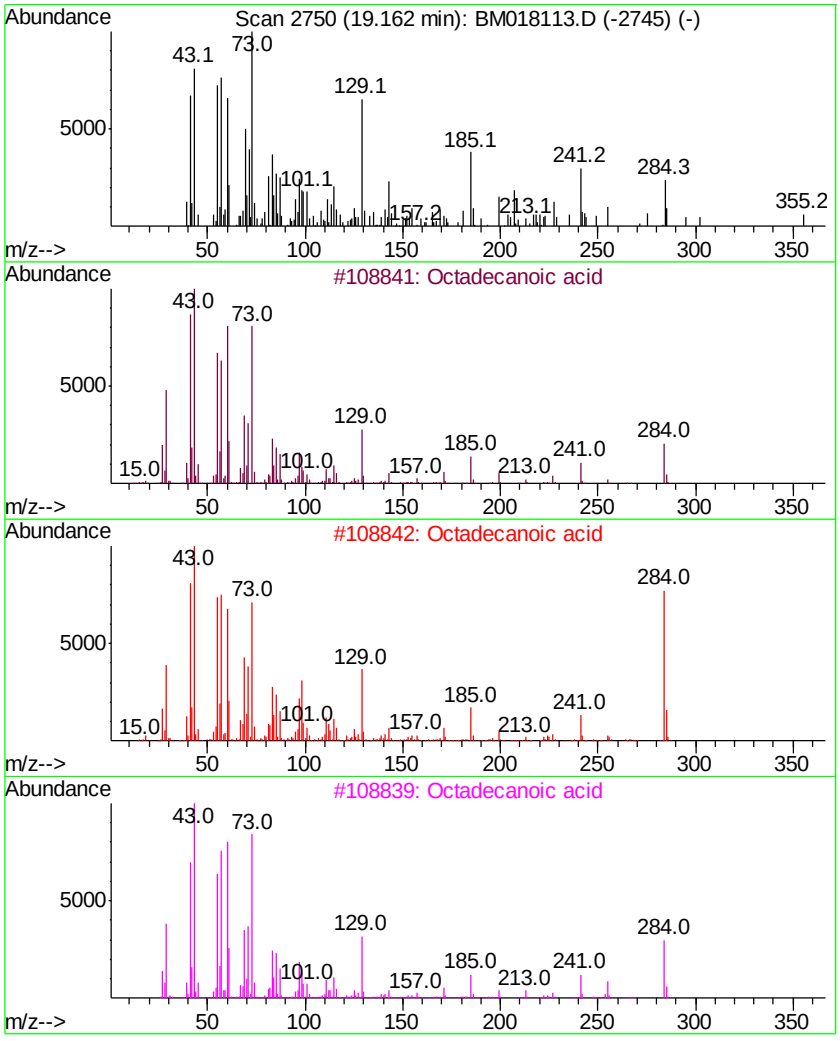
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

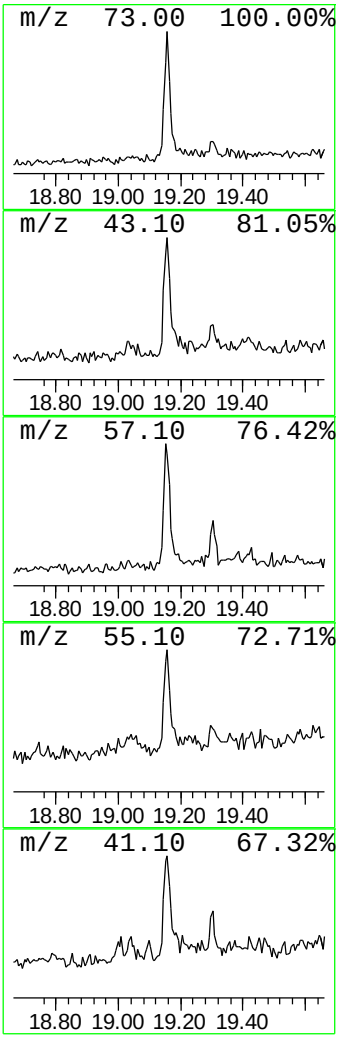
****

Peak Number 2 Octadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.16	2.17 ng/ul	239767	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	95
2	Octadecanoic acid	284	C18H36O2	000057-11-4	94
3	Octadecanoic acid	284	C18H36O2	000057-11-4	93
4	Octadecanoic acid	284	C18H36O2	000057-11-4	91
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	70





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E67

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	17.86	3.5	ng/ul	361922	4	16.95	2051580	20.0
Octadecanoic acid	19.16	2.2	ng/ul	239767	5	21.16	2211010	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

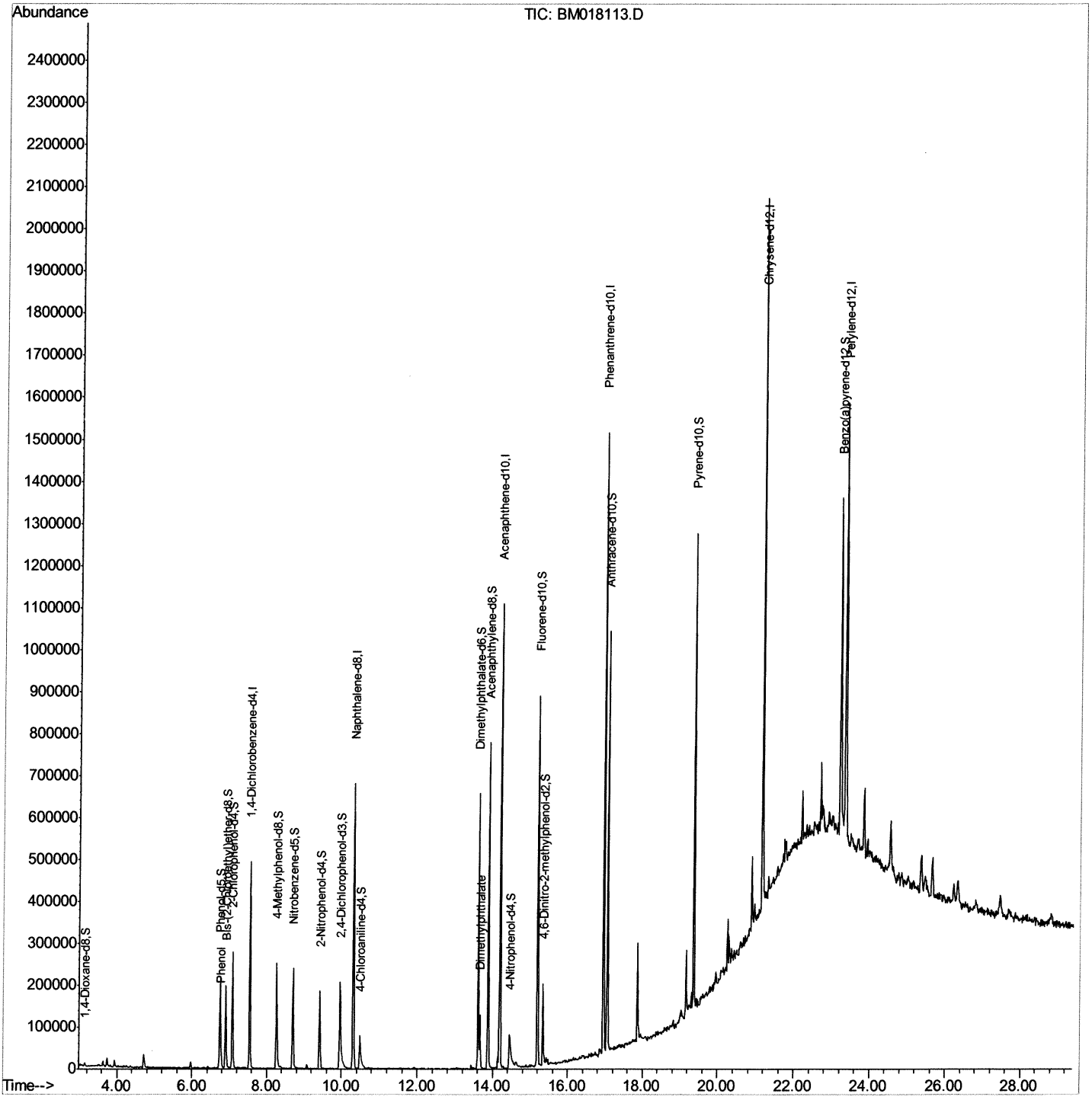
Quantitation Report (QT Reviewed)

Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 13 06:56:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:57 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

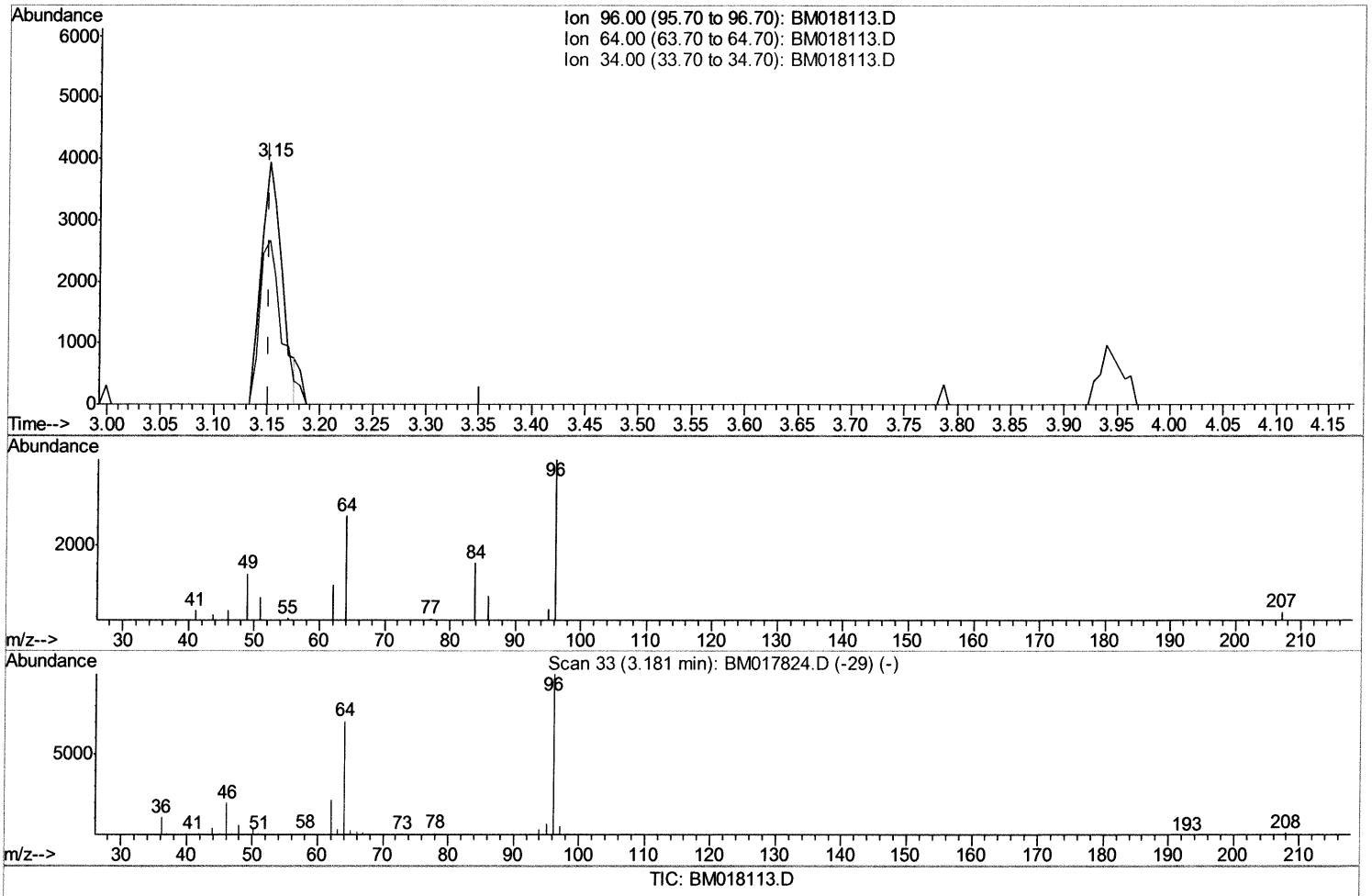
Quantitation Report (Qedit)

Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 13 06:43:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:57 PM



TIC: BM018113.D

(3) 1,4-Dioxane-d8 (S)

3.152min (+0.000) 1.69ng/uL

response 5288

Ion	Exp%	Act%
96.00	100	100
64.00	68.40	67.78
34.00	0.00	0.00
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

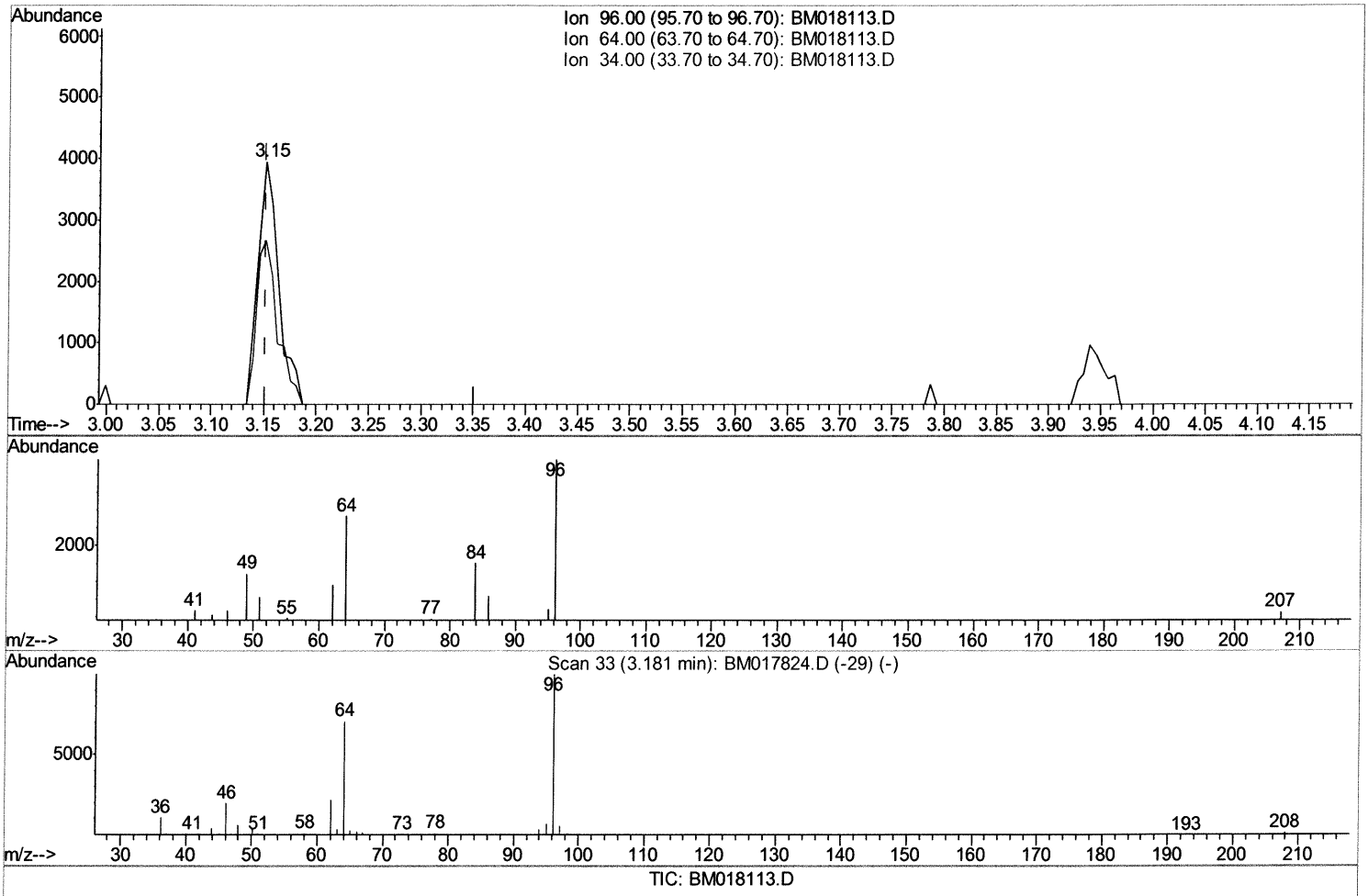
Quantitation Report (Qedit)

Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 13 06:43:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:57 PM



TIC: BM018113.D

(3) 1,4-Dioxane-d8 (S)

3.152min (+0.000) 1.76ng/uL m SD 12/13/18

response 5488

Ion	Exp%	Act%
96.00	100	100
64.00	68.40	67.78
34.00	0.00	0.00
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

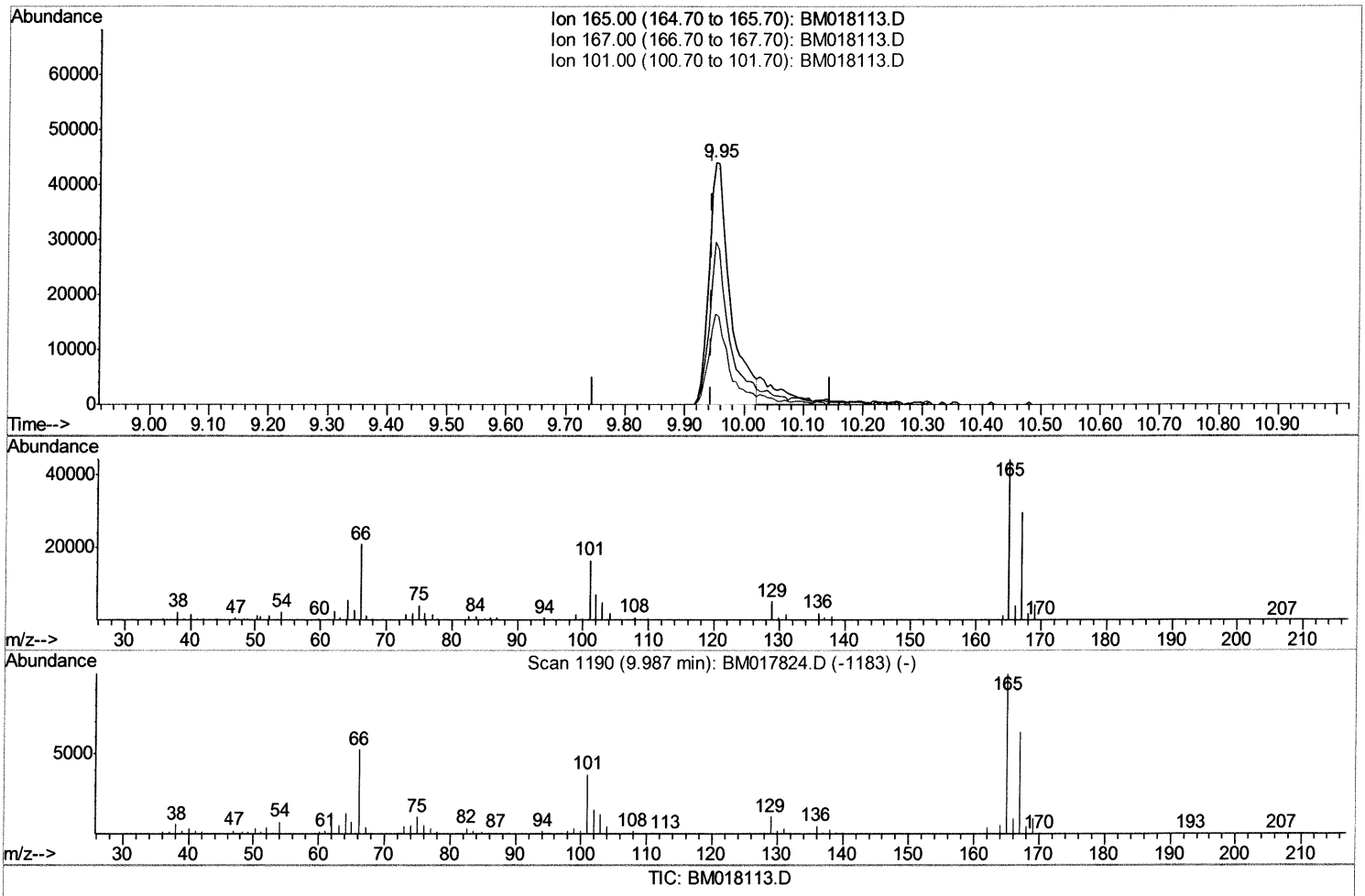
Quantitation Report (Qedit)

Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 13 06:43:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:57 PM



TIC: BM018113.D

(26) 2,4-Dichlorophenol-d3 (S)

9.951min (+0.006) 11.11ng/ul

response 109546

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	67.14
101.00	34.80	37.50
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

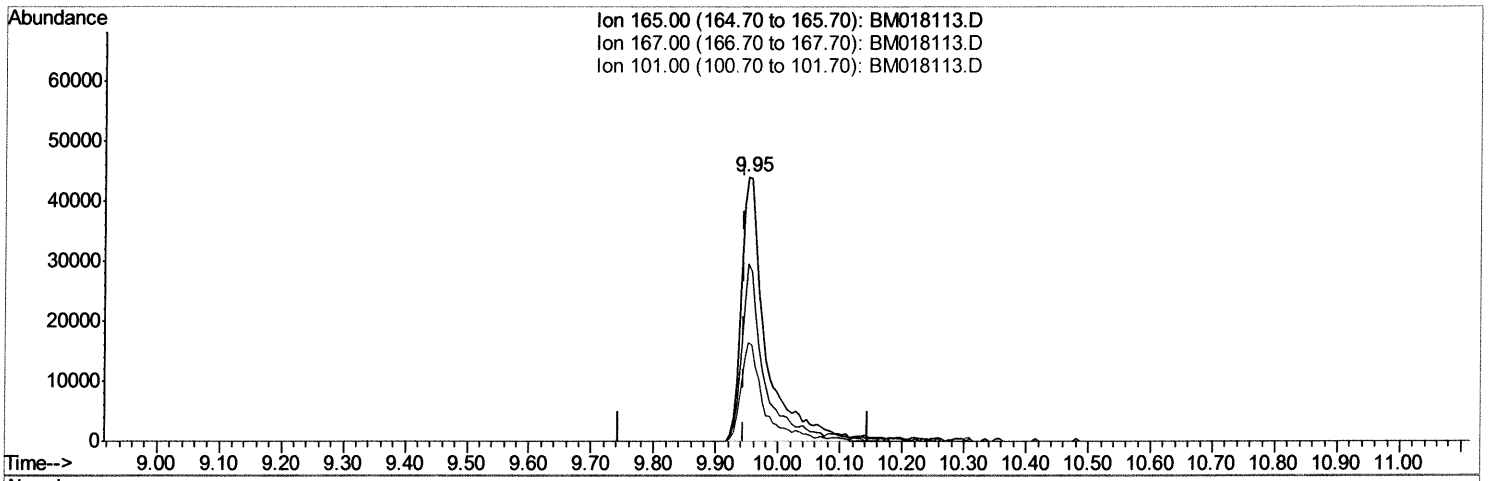
Quantitation Report (Qedit)

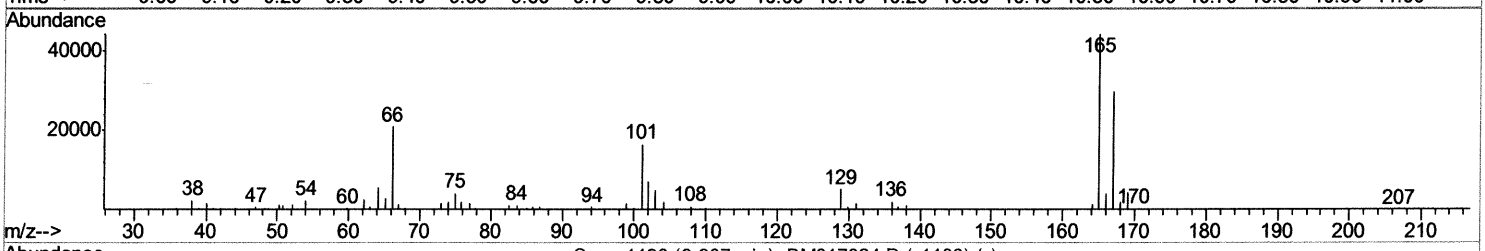
Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

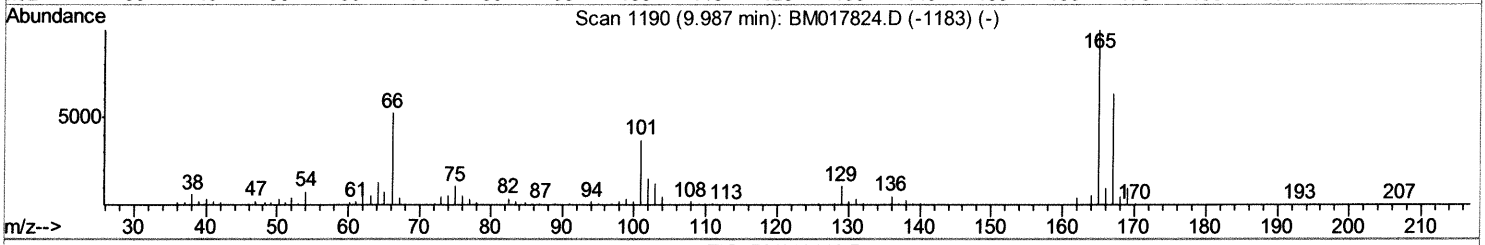
Quant Time: Dec 13 06:43:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:57 PM







TIC: BM018113.D

(26) 2,4-Dichlorophenol-d3 (S)

9.951min (+0.006) 12.47ng/ul m SJ 12/13/18

response 122882

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	67.14
101.00	34.80	37.50
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

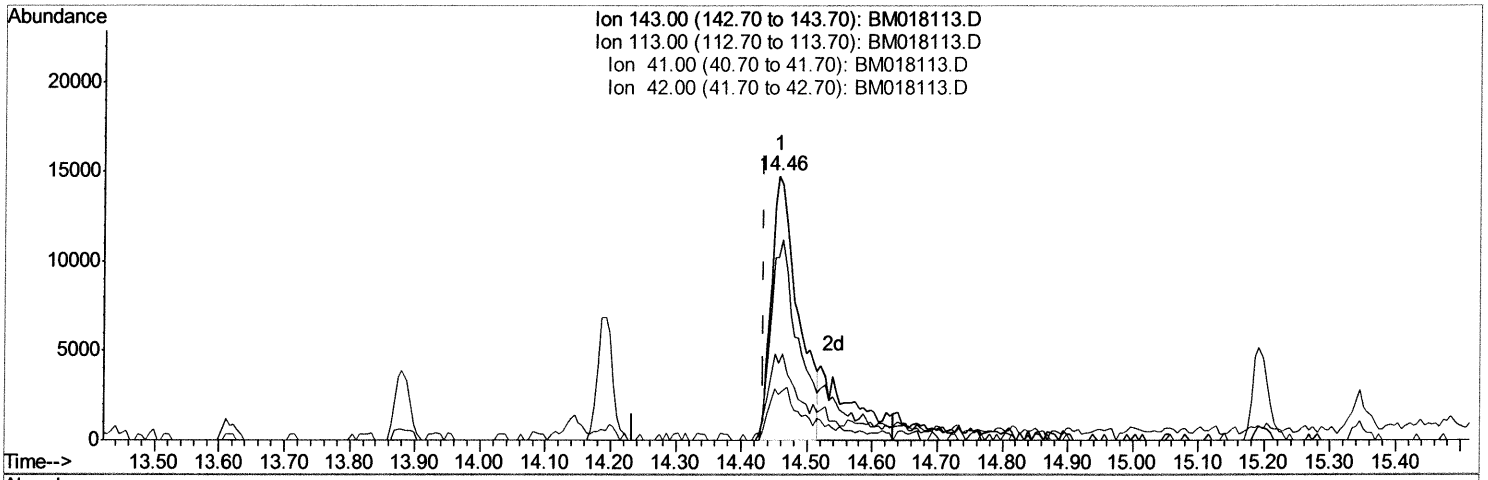
Quantitation Report (Qedit)

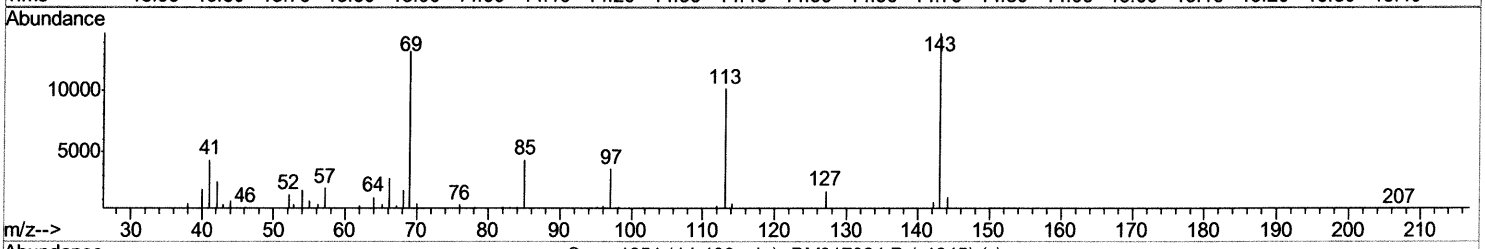
Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

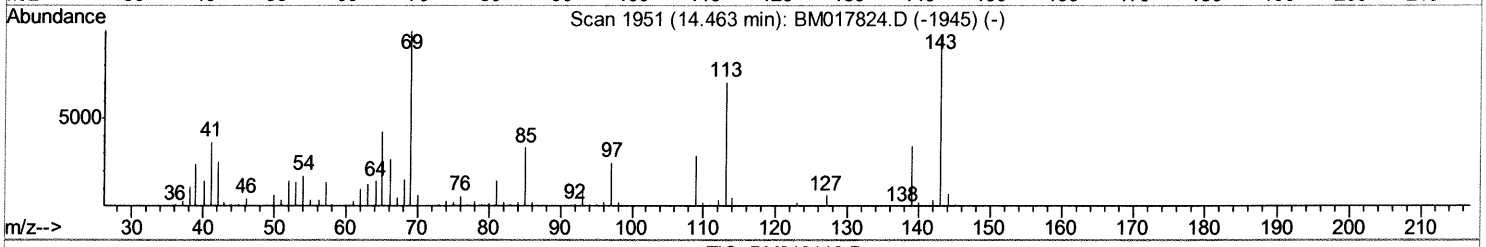
Quant Time: Dec 13 06:43:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:57 PM







TIC: BM018113.D

(51) 4-Nitrophenol-d4 (S)

14.457min (+0.024) 7.06ng/ul

response 41596

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	69.15
41.00	40.10	29.25#
42.00	26.80	17.22#

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

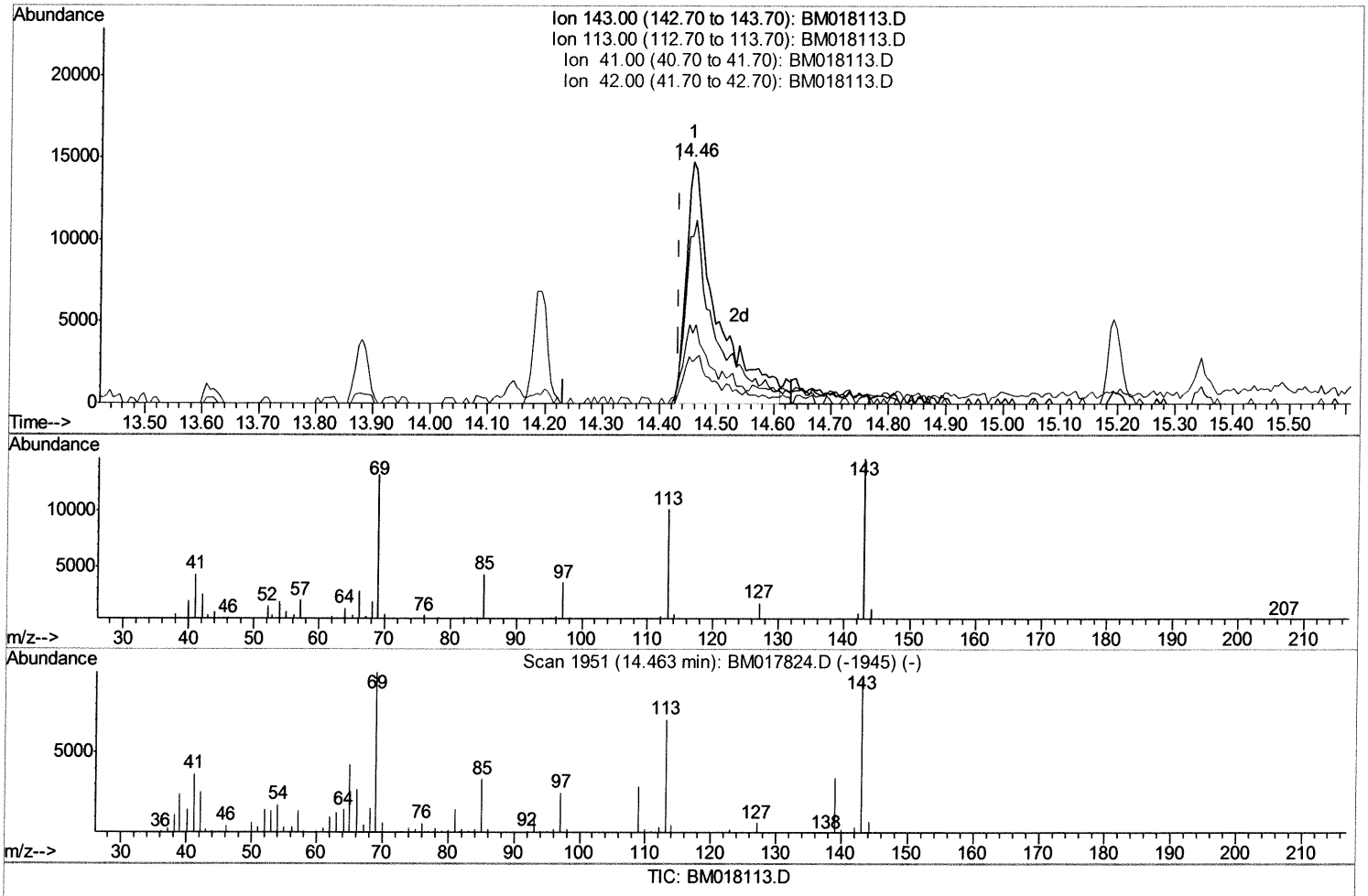
Quantitation Report (Qedit)

Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 13 06:43:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:57 PM



TIC: BM018113.D

(51) 4-Nitrophenol-d4 (S)

14.457min (+0.024) 9.22ng/ul m) SJ 12/13/18

response 54302

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	69.15
41.00	40.10	29.25#
42.00	26.80	17.22#

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018113.D
Acq On : 13 Dec 2018 03:31
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 13 06:56:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9E67

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:57 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	142946	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	588265	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	373377	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	826434	20.00	ng/ul	0.00
77) Chrysene-d12	21.16	240	820461	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	721713	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	5488m	1.76	ng/uL	0.00
5) Phenol-d5	6.73	99	155215	11.89	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.89	67	91630	11.64	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	134952	13.21	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	117657	11.03	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	63071	13.96	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	69856	13.49	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	122882m	12.47	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	83132	9.83	ng/ul	0.01
43) Dimethylphthalate-d6	13.62	166	446736	13.79	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	544423	13.89	ng/ul	0.00
51) 4-Nitrophenol-d4	14.46	143	54302m	9.22	ng/ul	0.02
57) Fluorene-d10	15.20	176	382781	13.68	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	48111	8.14	ng/ul	0.00
70) Anthracene-d10	17.05	188	561288	13.64	ng/ul	0.00
78) Pyrene-d10	19.36	212	592382	14.92	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	543690	13.89	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.77	94	35495	2.724	ng/ul#	92
44) Dimethylphthalate	13.66	163	88225	2.811	ng/ul	98

SJ 12/13/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E68

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-19
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018110.D
% Solids : 91
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	74	U
100-52-7	Benzaldehyde	360	U
108-95-2	Phenol	140	J
111-44-4	Bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	190	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2-oxybis(1-Chloropropane)	360	U
98-86-2	Acetophenone	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	190	U
67-72-1	Hexachloroethane	190	U
98-95-3	Nitrobenzene	190	U
78-59-1	Isophorone	190	U
88-75-5	2-Nitrophenol	190	U
105-67-9	2,4-Dimethylphenol	190	U
111-91-1	Bis(2-Chloroethoxy)methane	190	U
120-83-2	2,4-Dichlorophenol	190	U
91-20-3	Naphthalene	190	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	190	U
105-60-2	Caprolactam	360	U
59-50-7	4-Chloro-3-methylphenol	190	U
91-57-6	2-Methylnaphthalene	190	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E68

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-19
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018110.D
% Solids : 91
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	190	U
92-52-4	1,1-Biphenyl	190	U
91-58-7	2-Chloronaphthalene	190	U
88-74-4	2-Nitroaniline	190	U
131-11-3	Dimethylphthalate	230	
606-20-2	2,6-Dinitrotoluene	190	U
208-96-8	Acenaphthylene	190	U
99-09-2	3-Nitroaniline	360	U
83-32-9	Acenaphthene	190	U
51-28-5	2,4-Dinitrophenol	360	U
100-02-7	4-Nitrophenol	360	U
132-64-9	Dibenzofuran	190	U
121-14-2	2,4-Dinitrotoluene	190	U
84-66-2	Diethylphthalate	190	U
86-73-7	Fluorene	190	U
7005-72-3	4-Chlorophenyl-phenylether	190	U
100-01-6	4-Nitroaniline	360	U
534-52-1	4,6-Dinitro-2-methylphenol	360	U
86-30-6	N-Nitrosodiphenylamine	190	U
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U
101-55-3	4-Bromophenyl-phenylether	190	U
118-74-1	Hexachlorobenzene	190	U
1912-24-9	Atrazine	360	U
87-86-5	Pentachlorophenol	360	U
85-01-8	Phenanthrene	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E68

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-19
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018110.D
% Solids : 91
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	190	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	190	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	190	U
85-68-7	Butylbenzylphthalate	190	U
91-94-1	3,3-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	190	U
218-01-9	Chrysene	190	U
117-81-7	Bis(2-ethylhexyl)phthalate	190	U
117-84-0	Di-n-octyl phthalate	360	U
205-99-2	Benzo(b)fluoranthene	190	U
207-08-9	Benzo(k)fluoranthene	190	U
50-32-8	Benzo(a)pyrene	190	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	U
53-70-3	Dibenzo(a,h)anthracene	190	U
191-24-2	Benzo(g,h,i)perylene	190	U
58-90-2	2,3,4,6-Tetrachlorophenol	190	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E68

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-19
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018110.D
% Solids : 91
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/13/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000111-90-0	Ethanol, 2-(2-ethoxyethoxy)-	7.17	85	JN
2	000469-61-4	1H-3a,7-Methanoazulene, 2,3,4,7,8,	13.49	140	JN
3	000057-10-3	n-Hexadecanoic acid	17.86	280	JN
4	000057-11-4	Octadecanoic acid	19.16	95	JN
5	1000282-97-3	Heptafluorobutanoic acid, heptadec	20.89	120	JN
6	002571-81-5	Azuleno[4,5-b]furan-2,9-dione, dec	21.55	120	JN
7	000489-83-8	Guaia-3,9-diene	25.65	860	JN
8	E966796	Total Alkanes	N/A	990	

EPA-designated Registry Number.

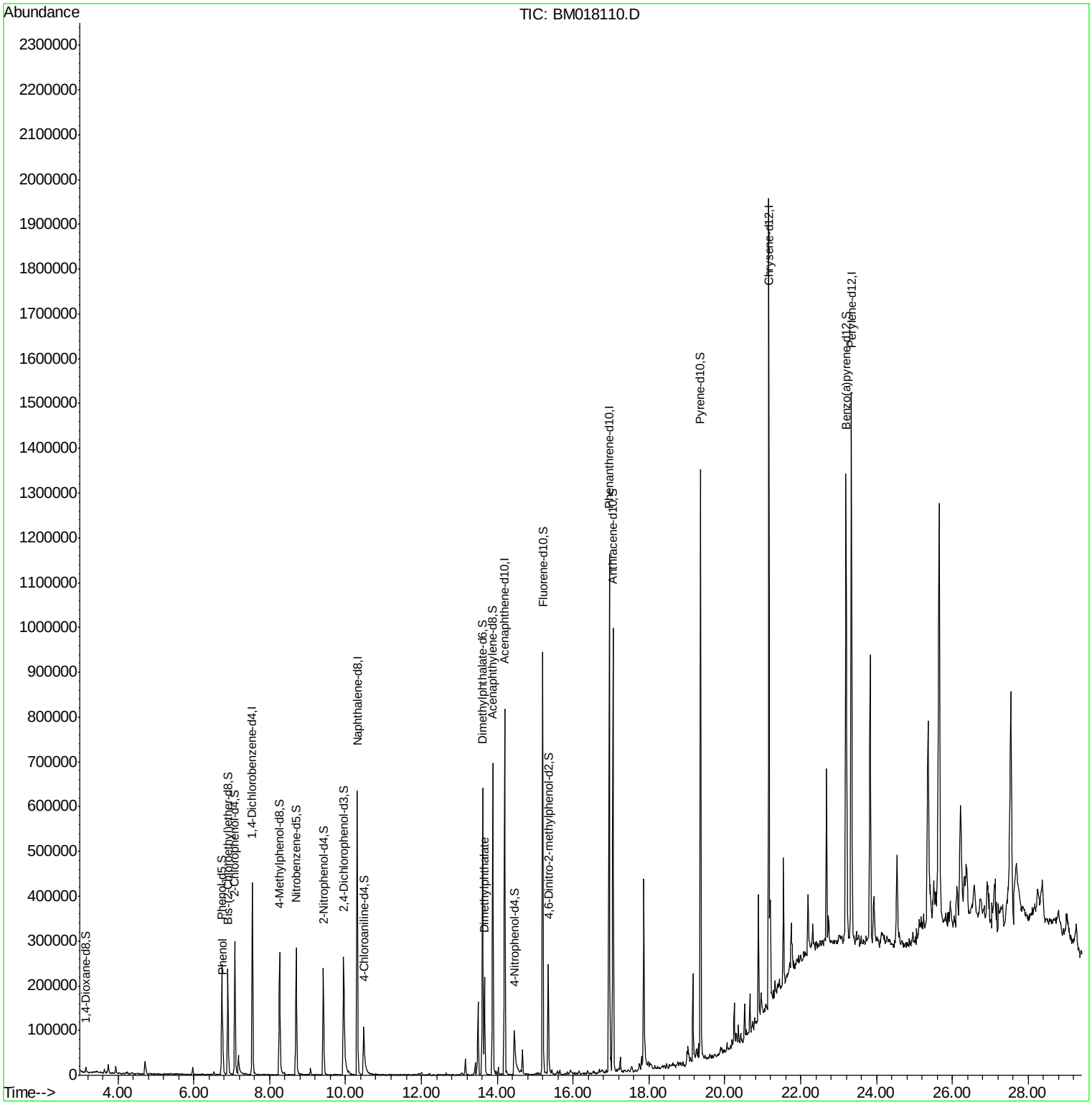
Quantitation Report (LSC Reviewed)

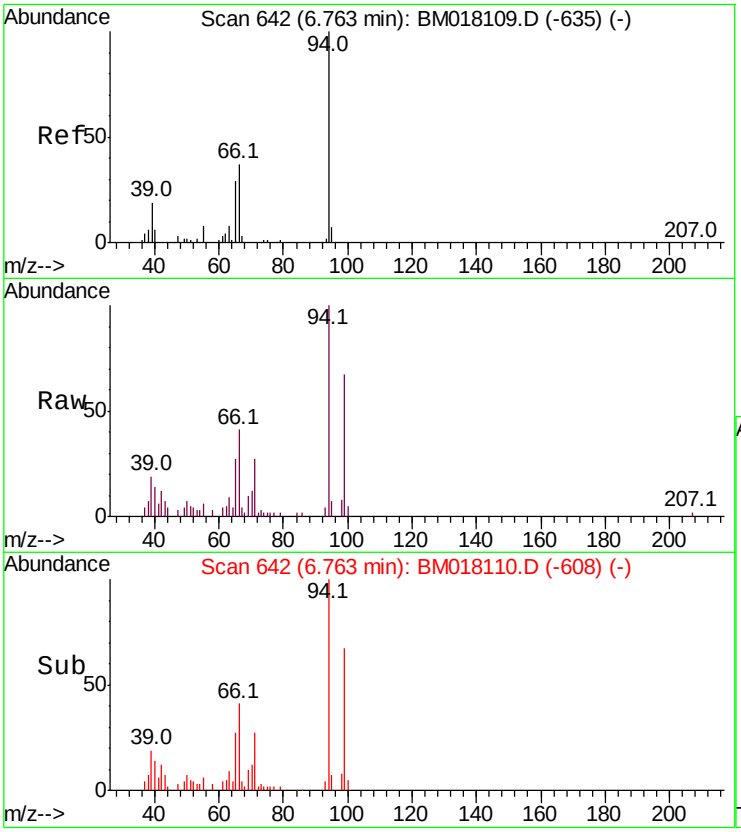
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 13 03:44:31 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:29 PM

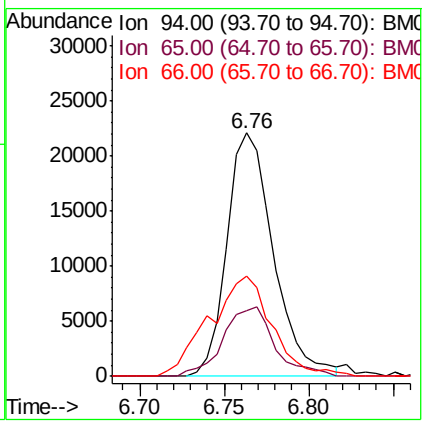




#6
Phenol
Concen: 3.865 ng/ul
RT: 6.76 min Scan# 642
Delta R.T. 0.00 min
Lab File: BM018110.D
Acq: 13 Dec 2018 01:43

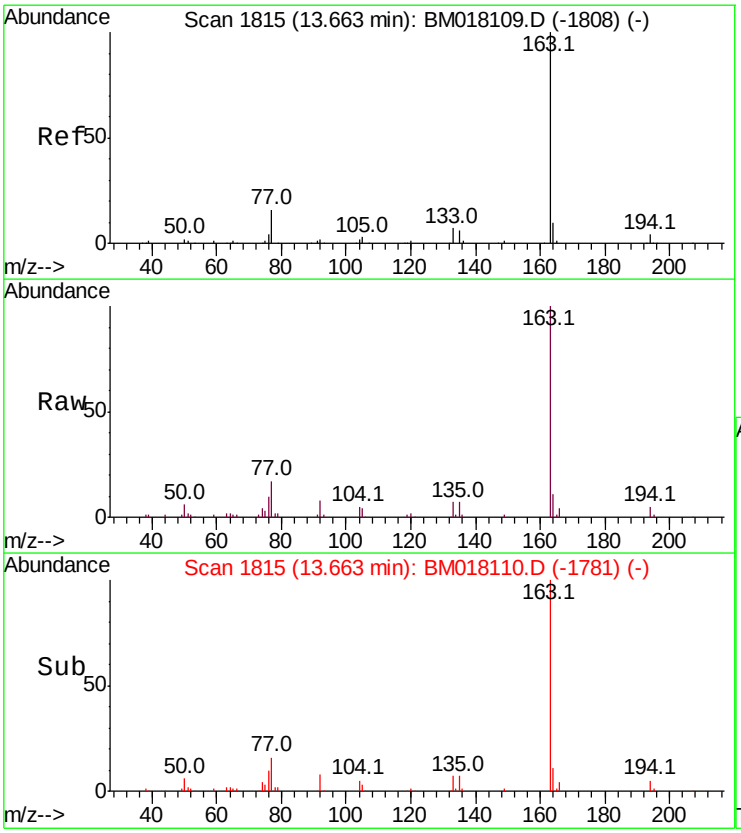
Tgt Ion: 94 Resp: 42434

Ion	Ratio	Lower	Upper
94	100		
65	27.1	24.7	37.1
66	41.0	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9E68

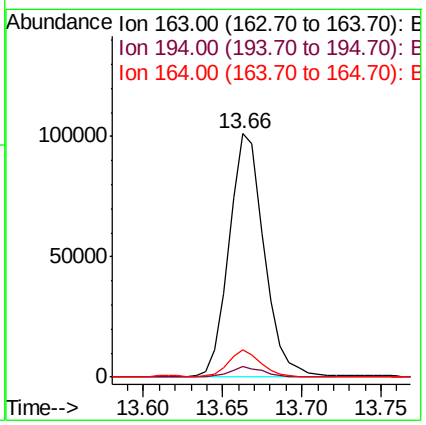
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:29 PM



#44
Dimethylphthalate
Concen: 6.415 ng/ul
RT: 13.66 min Scan# 1815
Delta R.T. 0.00 min
Lab File: BM018110.D
Acq: 13 Dec 2018 01:43

Tgt Ion:163 Resp: 155308

Ion	Ratio	Lower	Upper
163	100		
194	4.5	3.4	5.0
164	11.2	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:29 PM

Quant Time: Dec 13 03:44:31 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	120419	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	541193	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	288011	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	672840	20.00	ng/ul	0.00
77) Chrysene-d12	21.16	240	831077	20.00	ng/ul	0.00
85) Perylene-d12	23.33	264	834132	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	6952	2.64	ng/uL	0.00
5) Phenol-d5	6.74	99	159939	14.54	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	104558	15.77	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	146354	17.01	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	121055	13.47	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	74355	17.89	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	86319	18.12	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	142135m	15.68	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	103310	13.28	ng/ul	0.01
43) Dimethylphthalate-d6	13.62	166	454000	18.17	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	512680	16.95	ng/ul	0.00
51) 4-Nitrophenol-d4	14.46	143	58287m	12.83	ng/ul	0.02
57) Fluorene-d10	15.20	176	392006	18.17	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	67231	13.98	ng/ul	0.00
70) Anthracene-d10	17.05	188	582008	17.37	ng/ul	0.00
78) Pyrene-d10	19.36	212	666576	16.58	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	744842	16.46	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	42434	3.865	ng/ul	95
44) Dimethylphthalate	13.66	163	155308	6.415	ng/ul	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E68

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.152	24	28	34	rBV	13047	19458	0.76%	0.059%
2	3.640	107	111	116	rBV3	8555	11739	0.46%	0.036%
3	3.746	124	129	136	rVV	18802	30082	1.17%	0.092%
4	3.946	158	163	169	rVB4	17076	27053	1.05%	0.082%
5	4.199	201	206	211	rBV4	4122	9283	0.36%	0.028%
6	4.710	289	293	305	rVB2	28348	57988	2.26%	0.176%
7	5.975	502	508	514	rVB	16917	23734	0.93%	0.072%
8	6.534	599	603	606	rBV3	5793	7915	0.31%	0.024%
9	6.740	631	638	654	rBV2	247251	546711	21.32%	1.663%
10	6.898	657	665	673	rBV	236223	379535	14.80%	1.154%
11	7.081	689	696	708	rBV	297506	499073	19.46%	1.518%
12	7.175	708	712	725	rBV	41452	82549	3.22%	0.251%
13	7.540	768	774	783	rBV	428402	709400	27.66%	2.158%
14	8.263	887	897	911	rBV	273524	516030	20.12%	1.570%
15	8.698	962	971	983	rBV	285113	499831	19.49%	1.520%
16	9.081	1030	1036	1042	rVB3	15381	21951	0.86%	0.067%
17	9.410	1086	1092	1101	rBV	238976	432942	16.88%	1.317%
18	9.951	1177	1184	1204	rBV2	265047	637587	24.86%	1.939%
19	10.086	1204	1207	1213	rVB3	6360	12399	0.48%	0.038%
20	10.310	1238	1245	1256	rBV	634928	1081390	42.17%	3.289%
21	10.480	1267	1274	1290	rBV2	108258	312876	12.20%	0.952%
22	11.927	1515	1520	1526	rBV3	3970	10071	0.39%	0.031%
23	11.998	1526	1532	1541	rVB5	5709	13281	0.52%	0.040%
24	13.074	1712	1715	1720	rVV2	6250	9092	0.35%	0.028%
25	13.157	1724	1729	1736	rBV3	35577	54611	2.13%	0.166%
26	13.416	1767	1773	1777	rBV3	27645	33962	1.32%	0.103%
27	13.492	1777	1786	1795	rVB	163707	252723	9.85%	0.769%
28	13.616	1799	1807	1812	rVV	639753	1031730	40.23%	3.138%
29	13.663	1812	1815	1827	rVB	217577	324075	12.64%	0.986%
30	13.880	1845	1852	1864	rBV	696923	1044232	40.72%	3.176%
31	13.969	1864	1867	1871	rVV2	9363	12369	0.48%	0.038%
32	14.027	1873	1877	1882	rVV2	18409	25194	0.98%	0.077%
33	14.192	1899	1905	1912	rBV2	816865	1279566	49.89%	3.892%
34	14.245	1912	1914	1918	rVB3	7150	8504	0.33%	0.026%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E68

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	14.451	1944	1949	1960	rBV3	98098	278823	10.87%	0.848%
36	14.621	1974	1978	1980	rBV3	5426	7843	0.31%	0.024%
37	14.668	1982	1986	1991	rVB3	53086	74707	2.91%	0.227%
38	15.045	2046	2050	2052	rVV2	5730	7635	0.30%	0.023%
39	15.198	2069	2076	2085	rVV	944646	1425289	55.58%	4.335%
40	15.268	2085	2088	2091	rVV2	6456	10229	0.40%	0.031%
41	15.345	2095	2101	2114	rVV	247243	422725	16.48%	1.286%
42	15.439	2114	2117	2120	rVV2	11226	17182	0.67%	0.052%
43	15.586	2139	2142	2146	rVV4	8417	11391	0.44%	0.035%
44	15.645	2149	2152	2159	rVB4	11073	15126	0.59%	0.046%
45	15.839	2181	2185	2188	rVB2	7343	9197	0.36%	0.028%
46	15.927	2196	2200	2202	rBV3	7851	10159	0.40%	0.031%
47	16.533	2300	2303	2306	rVV4	6373	8919	0.35%	0.027%
48	16.686	2324	2329	2331	rBV2	11266	12993	0.51%	0.040%
49	16.768	2341	2343	2349	rVB6	6095	9270	0.36%	0.028%
50	16.951	2368	2374	2379	rBV2	1157654	1636862	63.83%	4.979%
51	16.992	2379	2381	2385	rVV	32524	41044	1.60%	0.125%
52	17.051	2385	2391	2404	rVB	990529	1499270	58.46%	4.560%
53	17.215	2414	2419	2420	rVV4	7503	12176	0.47%	0.037%
54	17.245	2420	2424	2429	rVB5	33812	49885	1.95%	0.152%
55	17.362	2439	2444	2447	rBV7	6088	10754	0.42%	0.033%
56	17.457	2456	2460	2465	rBV7	5949	8444	0.33%	0.026%
57	17.545	2469	2475	2484	rVB7	13399	34908	1.36%	0.106%
58	17.645	2484	2492	2493	rBV8	5237	10501	0.41%	0.032%
59	17.745	2503	2509	2514	rBV8	17065	33127	1.29%	0.101%
60	17.804	2514	2519	2522	rBV5	32621	43969	1.71%	0.134%
61	17.862	2522	2529	2545	rVV2	419219	636696	24.83%	1.937%
62	17.986	2546	2550	2553	rVB4	13642	20009	0.78%	0.061%
63	18.021	2553	2556	2559	rBV4	10466	14736	0.57%	0.045%
64	18.156	2575	2579	2582	rBV5	8293	11295	0.44%	0.034%
65	18.468	2626	2632	2636	rBV8	11542	20038	0.78%	0.061%
66	18.668	2664	2666	2671	rVB6	6086	8522	0.33%	0.026%
67	18.756	2679	2681	2685	rVB5	10325	11771	0.46%	0.036%
68	18.798	2685	2688	2690	rBV3	7829	9321	0.36%	0.028%
69	18.898	2702	2705	2709	rVB6	9886	14119	0.55%	0.043%
70	19.003	2718	2723	2725	rBV3	30915	47361	1.85%	0.144%
71	19.033	2725	2728	2730	rVB4	18990	21084	0.82%	0.064%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E68

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

72	19.098	2736	2739	2742	rVB5	9983	10703	0.42%	0.033%
73	19.156	2745	2749	2758	rBV	196989	300183	11.70%	0.913%
74	19.256	2762	2766	2771	rVV7	21393	38089	1.49%	0.116%
75	19.303	2771	2774	2777	rVB2	32511	32821	1.28%	0.100%
76	19.356	2777	2783	2792	rBV	1314993	1793048	69.92%	5.454%
77	19.598	2822	2824	2828	rVB4	8867	11077	0.43%	0.034%
78	19.892	2872	2874	2876	rBV3	11235	8392	0.33%	0.026%
79	20.050	2898	2901	2905	rBV4	19890	30396	1.19%	0.092%
80	20.192	2922	2925	2929	rBV	18515	27067	1.06%	0.082%
81	20.245	2930	2934	2939	rBV7	90435	122380	4.77%	0.372%
82	20.286	2939	2941	2942	rBV2	17544	14136	0.55%	0.043%
83	20.356	2950	2953	2956	rVB4	38307	40854	1.59%	0.124%
84	20.527	2978	2982	2986	rBV	75554	99058	3.86%	0.301%
85	20.656	3000	3004	3011	rBV7	87610	119641	4.67%	0.364%
86	20.886	3039	3043	3049	rBV	284675	393457	15.34%	1.197%
87	20.956	3052	3055	3065	rVB	49465	109654	4.28%	0.334%
88	21.162	3085	3090	3094	rBV	1800974	2317605	90.37%	7.050%
89	21.197	3094	3096	3101	rVB3	276409	310754	12.12%	0.945%
90	21.550	3151	3156	3163	rBV2	281416	376311	14.67%	1.145%
91	21.750	3187	3190	3192	rBV	95341	116056	4.53%	0.353%
92	22.197	3263	3266	3270	rVB3	112144	132626	5.17%	0.403%
93	22.680	3344	3348	3353	rVB	378505	488482	19.05%	1.486%
94	23.197	3430	3436	3448	rVB	1037574	2136759	83.32%	6.500%
95	23.333	3453	3459	3468	rVB2	1217845	2188045	85.32%	6.656%
96	23.833	3538	3544	3554	rVB	643226	1192416	46.50%	3.627%
97	24.533	3660	3663	3671	rVB2	182745	360358	14.05%	1.096%
98	25.356	3797	3803	3811	rBV2	397209	919956	35.87%	2.798%
99	25.650	3844	3853	3868	rVB3	927069	2564604	100.00%	7.801%
100	27.209	4116	4118	4122	rBV2	59405	84306	3.29%	0.256%

Sum of corrected areas: 32875550

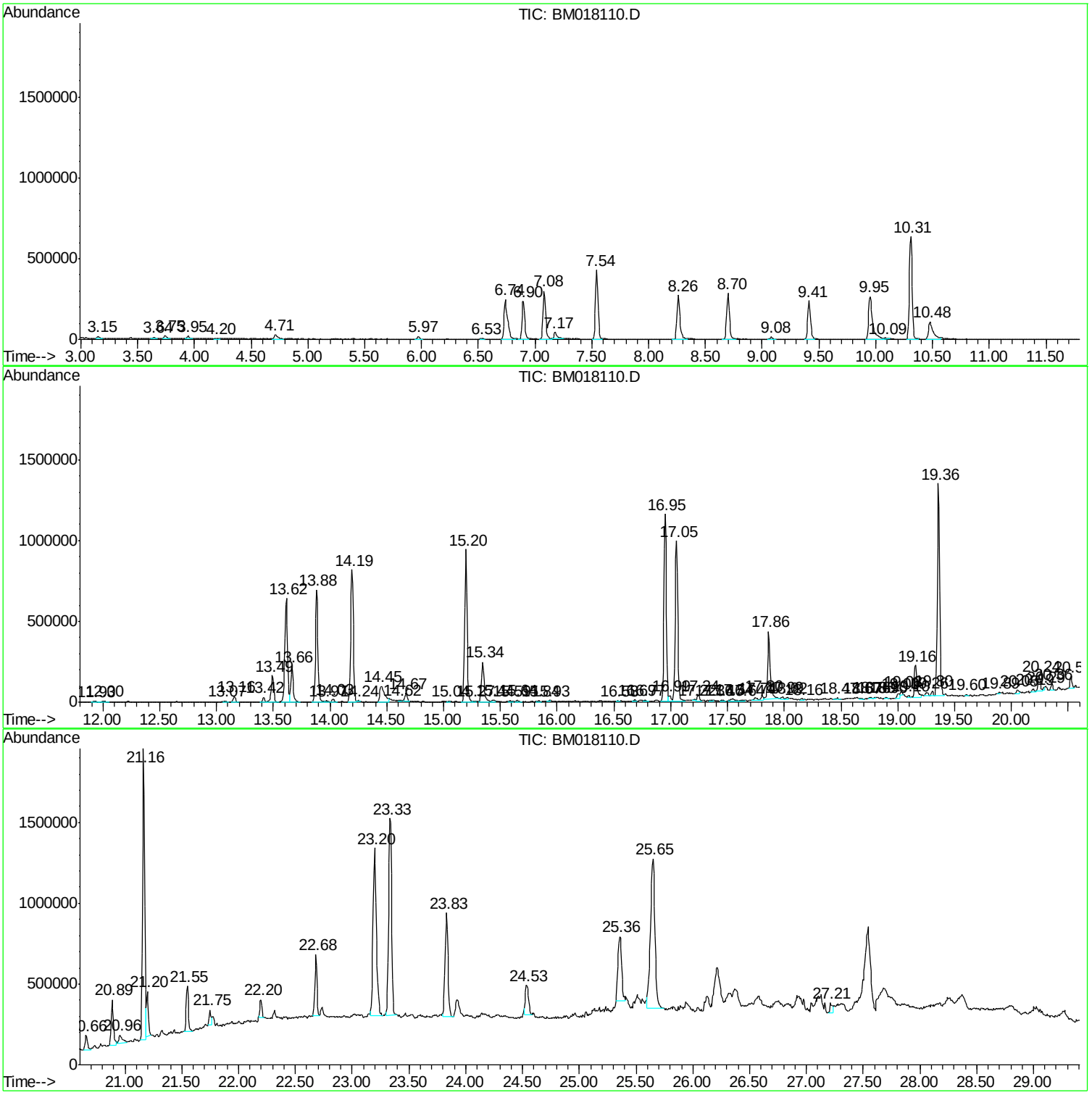
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E68

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E68

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

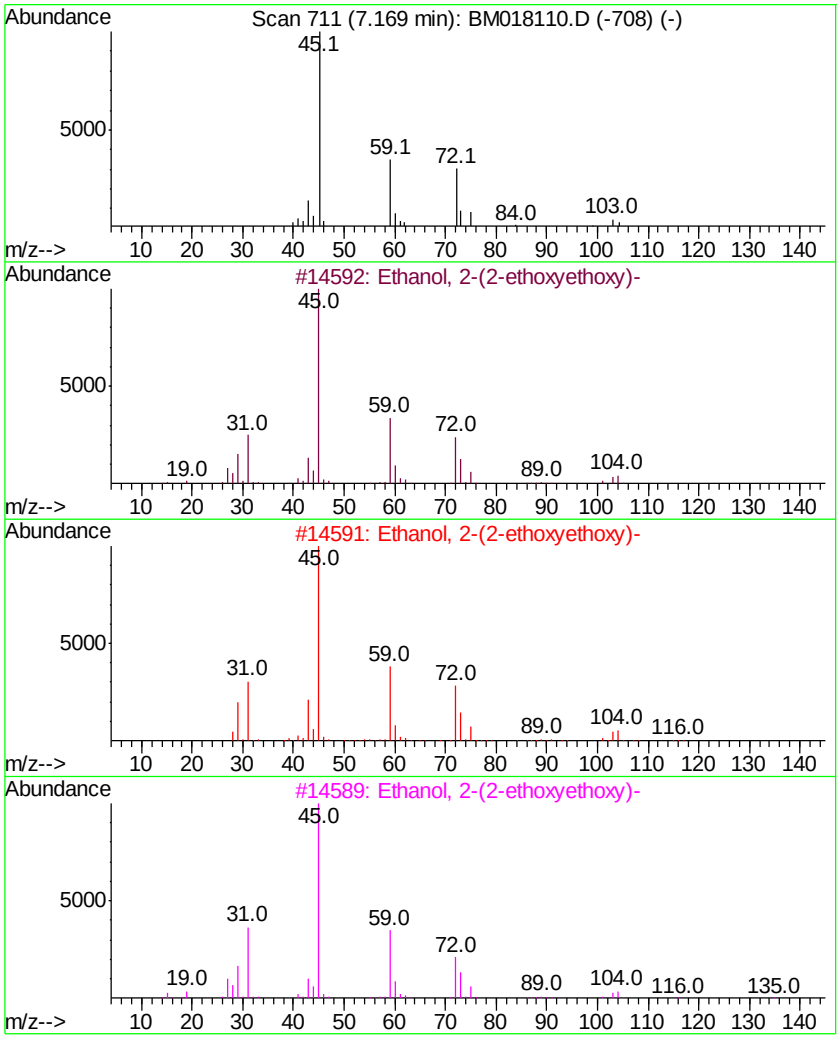
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

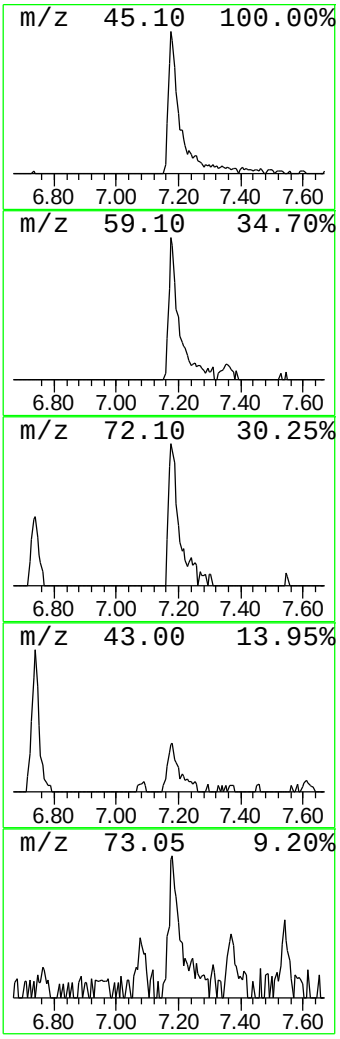
****

Peak Number 1 Ethanol, 2-(2-ethoxyethoxy)- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.17	2.33 ng/ul	82549	1,4-Dichlorobenzene-d4	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethanol, 2-(2-ethoxyethoxy)-	134	C6H14O3	000111-90-0	90
2	Ethanol, 2-(2-ethoxyethoxy)-	134	C6H14O3	000111-90-0	83
3	Ethanol, 2-(2-ethoxyethoxy)-	134	C6H14O3	000111-90-0	83
4	Ethanol, 2-(2-ethoxyethoxy)-	134	C6H14O3	000111-90-0	74
5	Ethane, 1,1'-oxybis[2-ethoxy-]	162	C8H18O3	000112-36-7	64





Library Search Compound Report

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Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E68

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

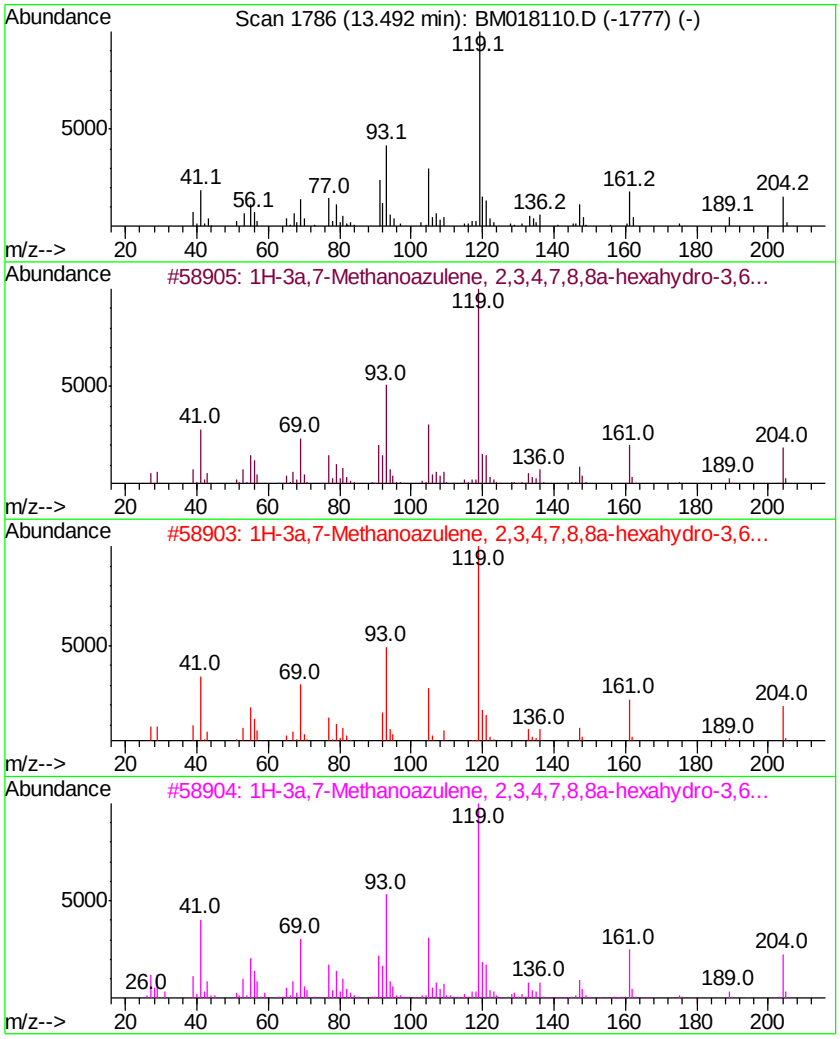
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

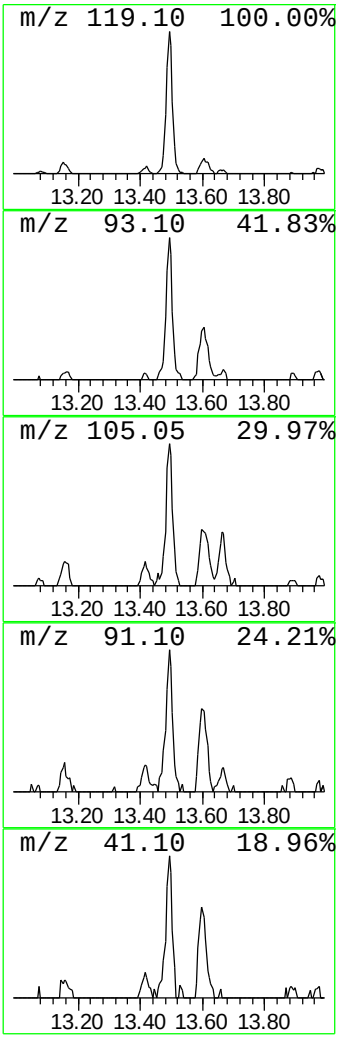
****

Peak Number 2 1H-3a,7-Methanoazulene, 2,3... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.49	3.95 ng/ul	252723	Acenaphthene-d10	14.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-3a,7-Methanoazulene, 2,3,4,7,...	204	C15H24	000469-61-4	99
2	1H-3a,7-Methanoazulene, 2,3,4,7,...	204	C15H24	000469-61-4	98
3	1H-3a,7-Methanoazulene, 2,3,4,7,...	204	C15H24	000469-61-4	97
4	Di-epi-.alpha.-cedrene	204	C15H24	1000156-13-3	91
5	1H-3a,7-Methanoazulene, 2,3,4,7,...	204	C15H24	000469-61-4	90





Library Search Compound Report

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Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E68

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

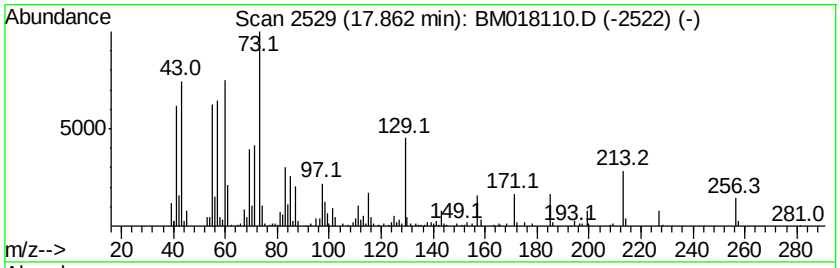
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

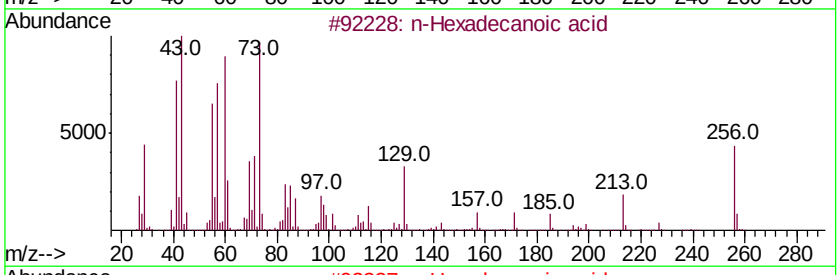
****

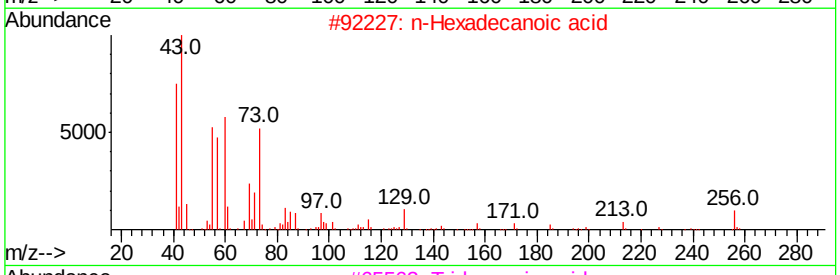
Peak Number 3 n-Hexadecanoic acid Concentration Rank 4

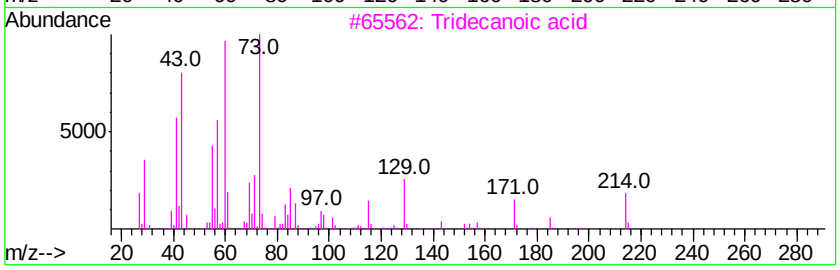
R.T.	EstConc	Area	Relative to ISTD	R.T.
17.86	7.78 ng/ul	636696	Phenanthrene-d10	16.95

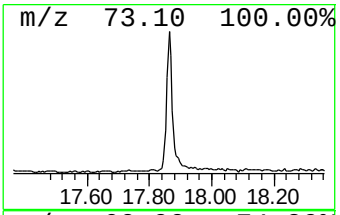
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	95
3	Tridecanoic acid	214	C13H26O2	000638-53-9	89
4	n-Decanoic acid	172	C10H20O2	000334-48-5	76
5	Tetradecanoic acid	228	C14H28O2	000544-63-8	76

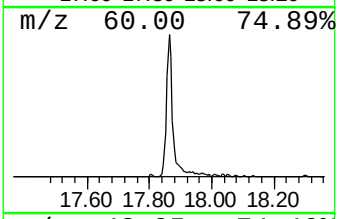


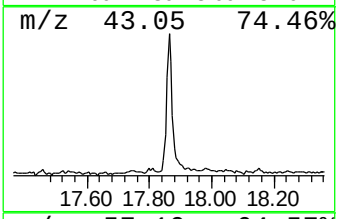


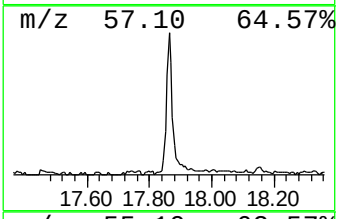


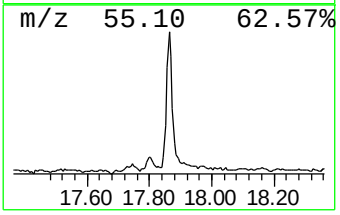












Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E68

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

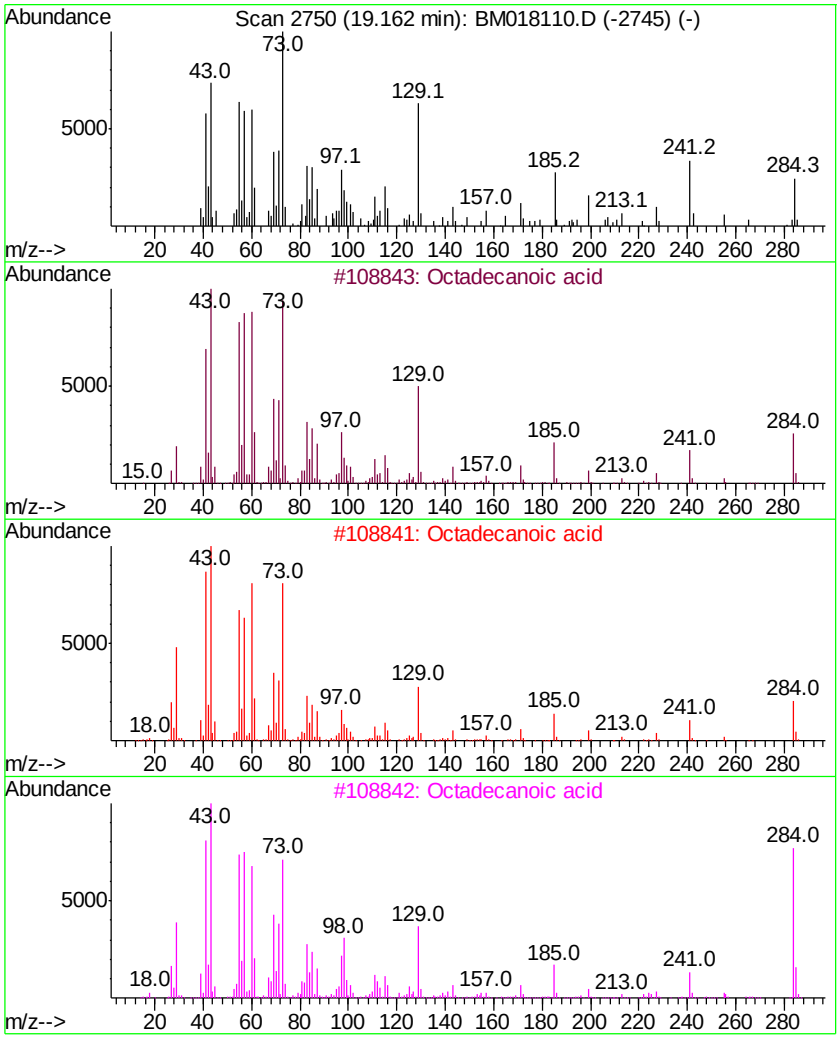
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

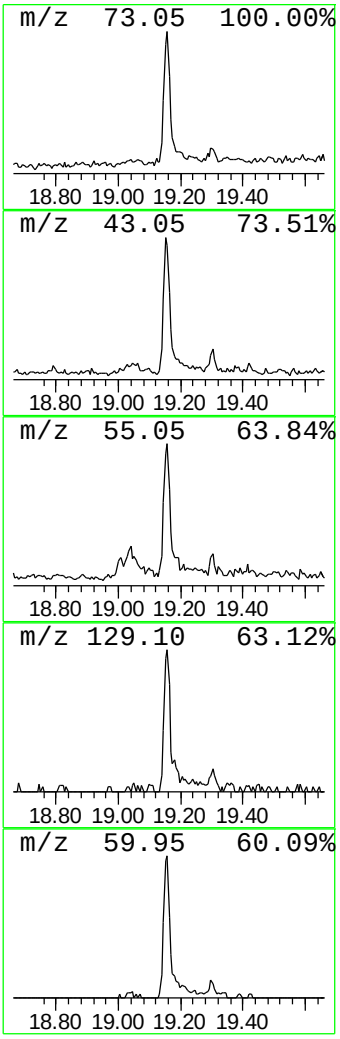
****

Peak Number 4 Octadecanoic acid Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.16	2.59 ng/ul	300183	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Octadecanoic acid	284	C18H36O2	000057-11-4	97
3	Octadecanoic acid	284	C18H36O2	000057-11-4	94
4	Octadecanoic acid	284	C18H36O2	000057-11-4	93
5	Octadecanoic acid, 2-(2-hydroxye...	372	C22H44O4	000106-11-6	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E68

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

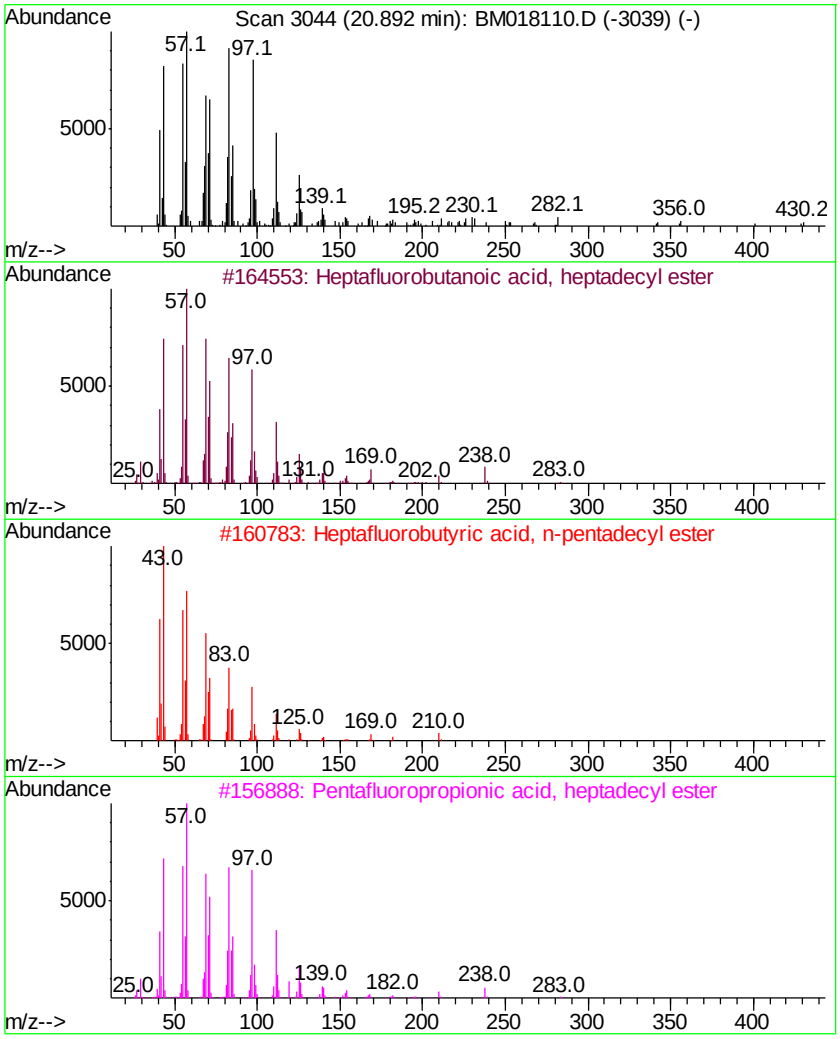
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

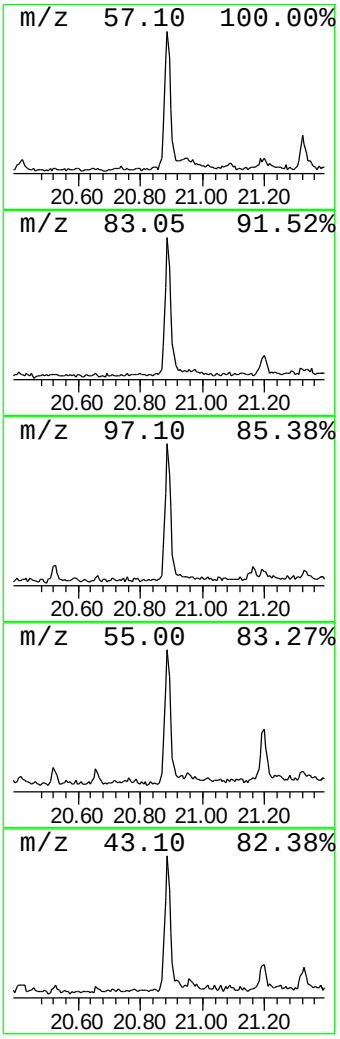
****

Peak Number 5 Heptafluorobutanoic acid, h... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	3.40 ng/ul	393457	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	93
2	Heptafluorobutyric acid, n-penta...	424	C19H31F7O2	1000216-79-3	90
3	Pentafluoropropionic acid, hepta...	402	C20H35F5O2	1000283-04-2	90
4	1-Octadecene	252	C18H36	000112-88-9	89
5	Trichloroacetic acid, pentadecyl...	372	C17H31Cl3O2	074339-53-0	87





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E68

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

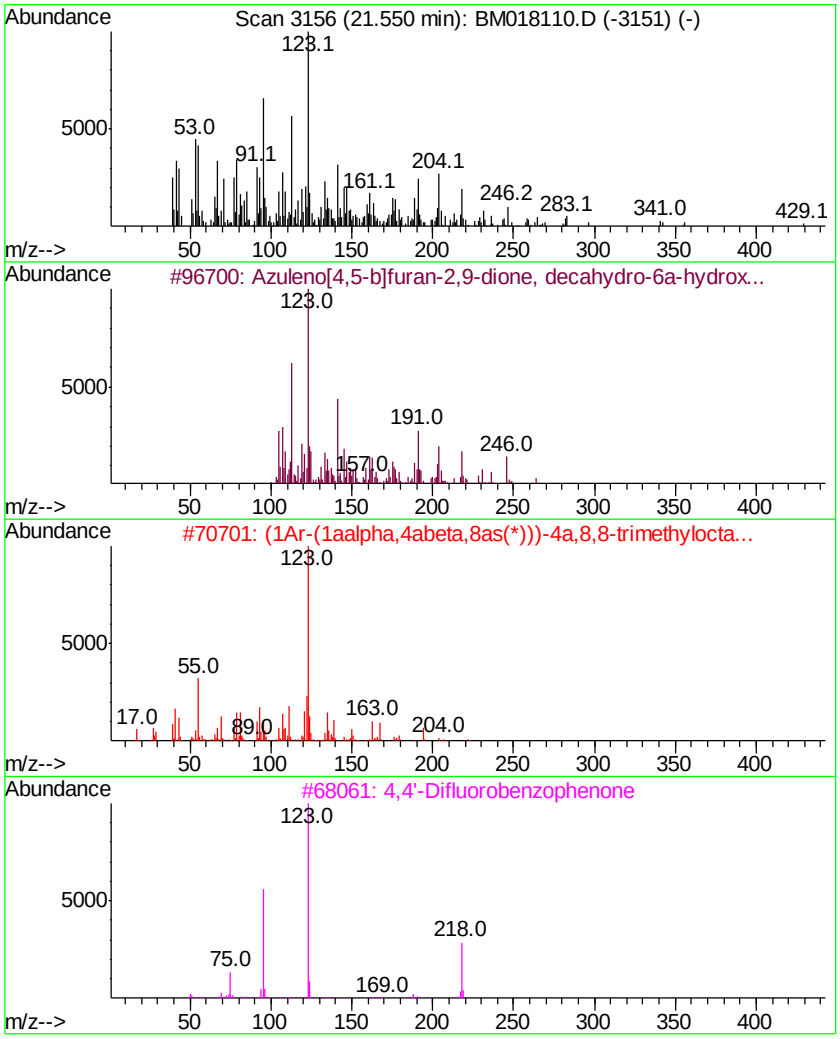
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

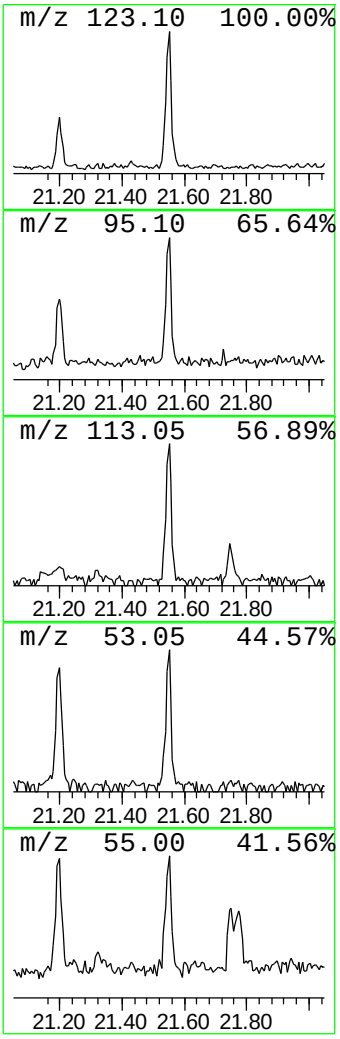
****

Peak Number 6 Azuleno[4,5-b]furan-2,9-dio... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.55	3.25 ng/ul	376311	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Azuleno[4,5-b]furan-2,9-dione, d...	264	C15H20O4	002571-81-5	70
2	(1Ar-(1aalpha,4abeta,8as(*)))-4a...	222	C13H18O3	1000242-02-8	25
3	4,4'-Difluorobenzophenone	218	C13H8F2O	000345-92-6	18
4	1,1'-Bis(cyclooct-2-en-4-one)	246	C16H22O2	1000155-36-1	15
5	Benzamide, 2-fluoro-N-(4-methoxy...	245	C14H12FNO2	212209-96-6	14





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Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E68

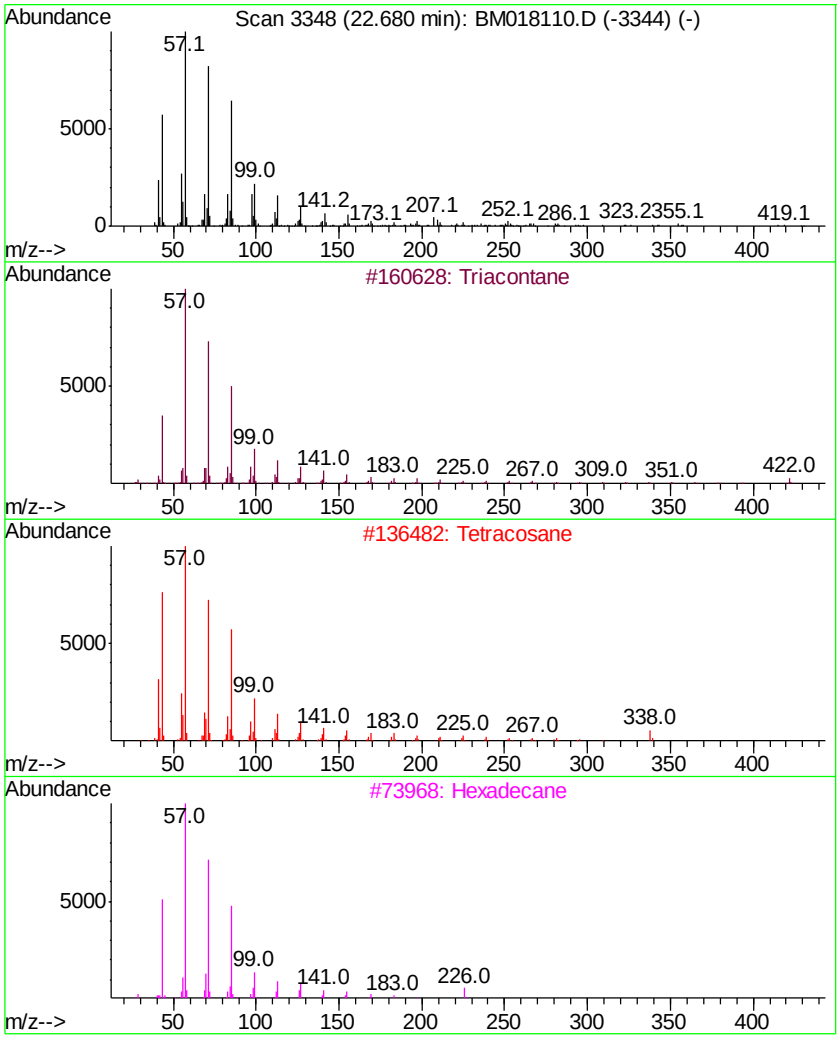
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

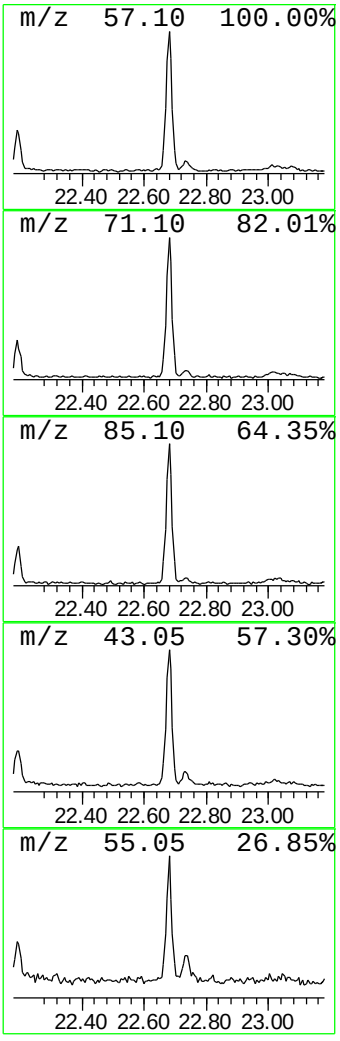
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 7 (DEL) Alkane: Straight-Chai... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.68	4.47 ng/ul	488482	Perylene-d12	23.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Triacontane	422	C30H62	000638-68-6	91
2	Tetracosane	338	C24H50	000646-31-1	90
3	Hexadecane	226	C16H34	000544-76-3	87
4	Eicosane	282	C20H42	000112-95-8	87
5	Heneicosane	296	C21H44	000629-94-7	87





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E68

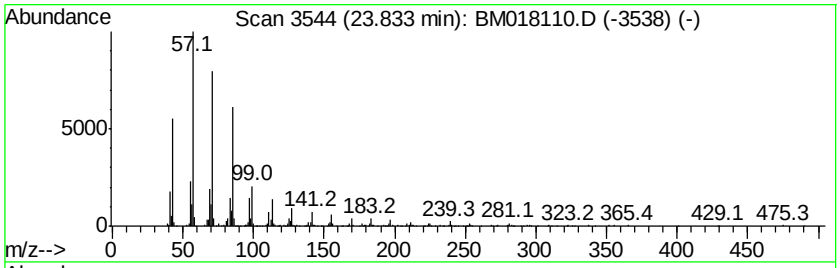
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

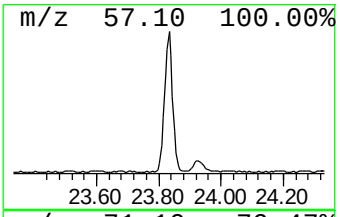
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

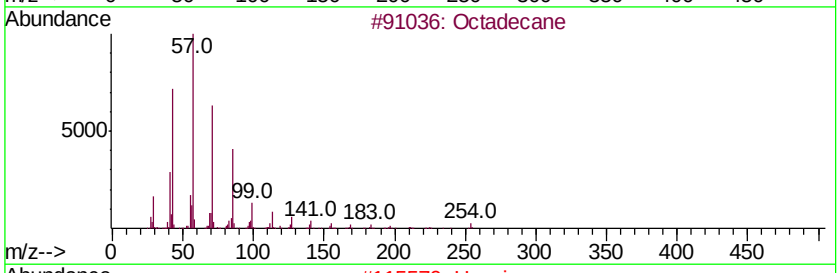
****
Peak Number 8 (DEL) Alkane: Straight-Chai... Concentration Rank 2

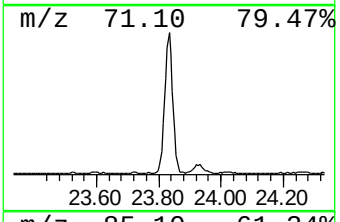
R.T.	EstConc	Area	Relative to ISTD	R.T.
23.83	10.90 ng/ul	1192420	Perylene-d12	23.33

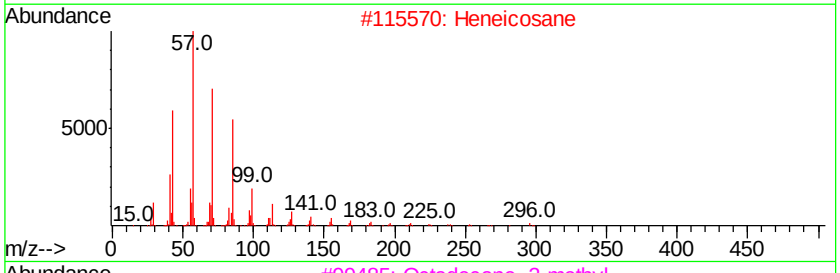
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	93
2	Heneicosane	296	C21H44	000629-94-7	91
3	Octadecane, 2-methyl-	268	C19H40	001560-88-9	91
4	Triacontane	422	C30H62	000638-68-6	91
5	Docosane, 11-butyl-	366	C26H54	013475-76-8	91

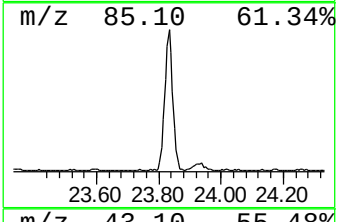


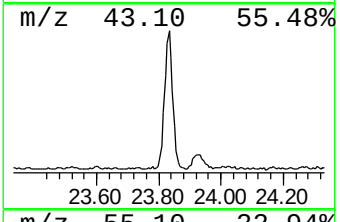


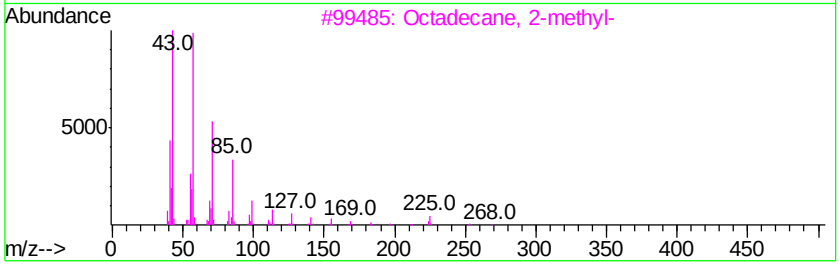


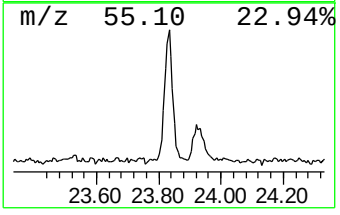












Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E68

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

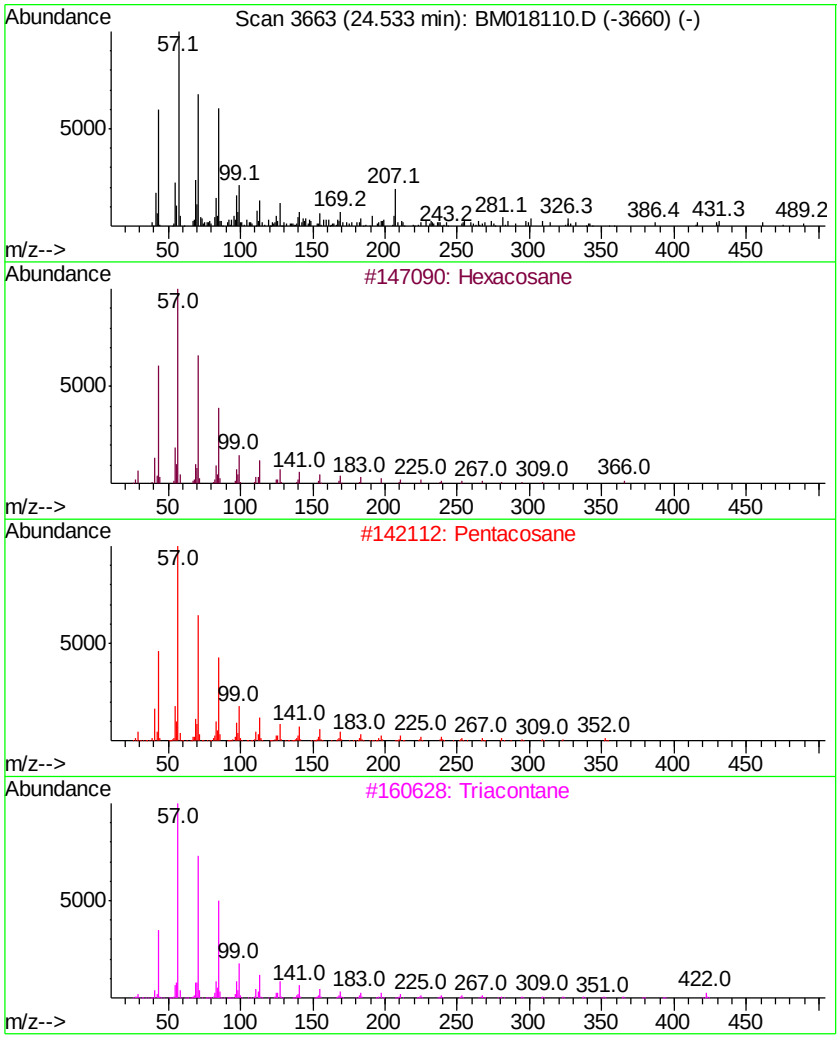
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

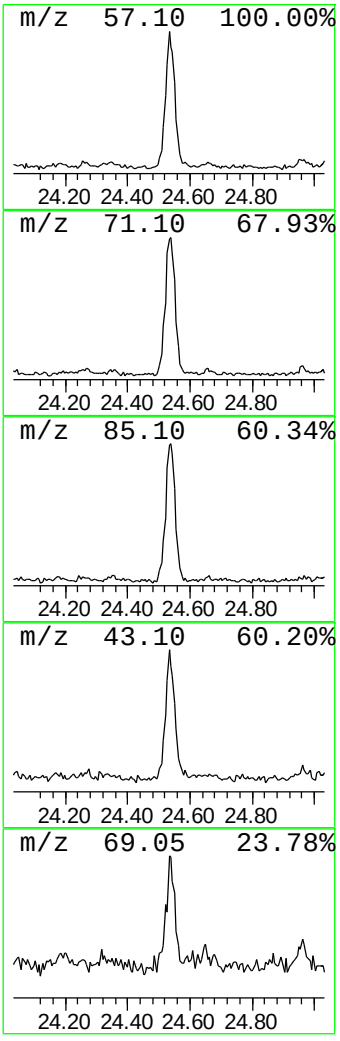
****

Peak Number 9 (DEL) Alkane: Straight-Chai... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.53	3.29 ng/ul	360358	Perylene-d12	23.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexacosane	366	C26H54	000630-01-3	70
2	Pentacosane	352	C25H52	000629-99-2	70
3	Triacontane	422	C30H62	000638-68-6	70
4	Tridecanol, 2-ethyl-2-methyl-	242	C16H34O	1000115-66-1	62
5	Docosane	310	C22H46	000629-97-0	62





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E68

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

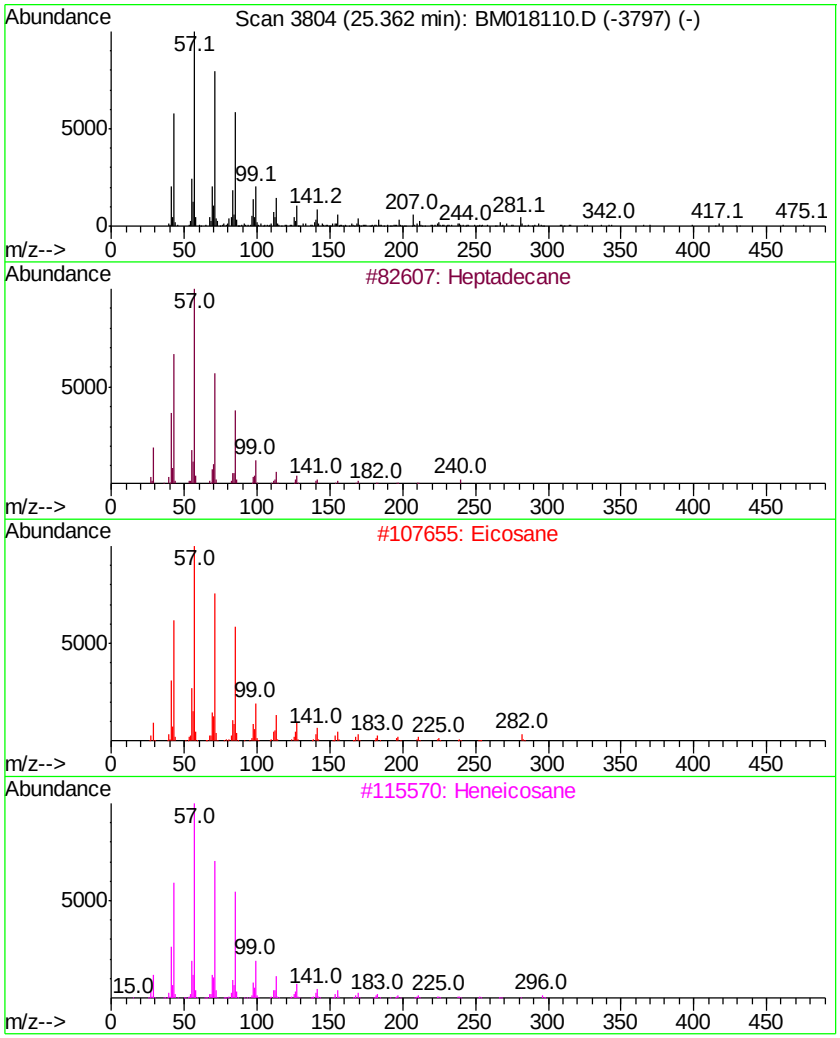
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

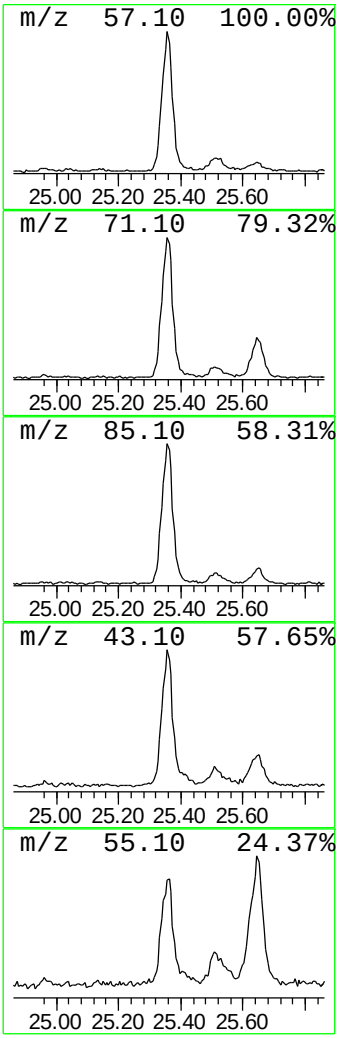
****

Peak Number 10 (DEL) Alkane: Straight-Chai... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.36	8.41 ng/ul	919956	Perylene-d12	23.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptadecane	240	C17H36	000629-78-7	93
2	Eicosane	282	C20H42	000112-95-8	90
3	Heneicosane	296	C21H44	000629-94-7	90
4	Docosane, 11-butyl-	366	C26H54	013475-76-8	87
5	Heptadecane, 9-octyl-	352	C25H52	007225-64-1	87





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E68

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

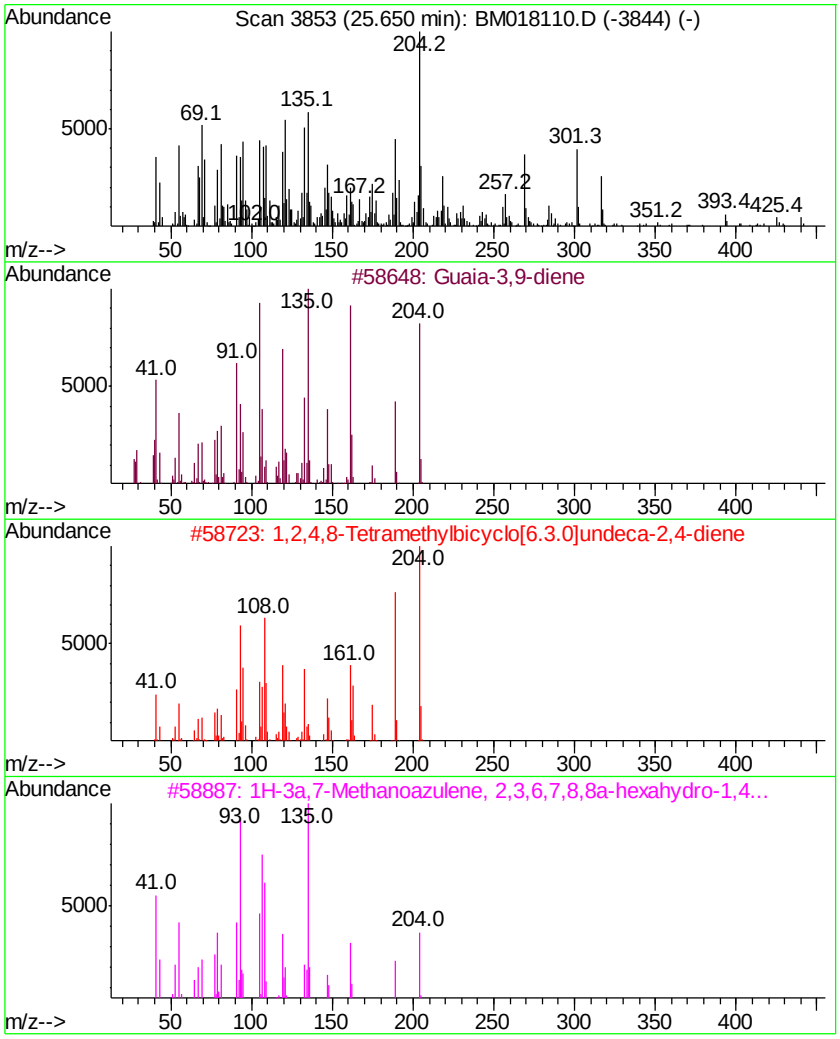
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

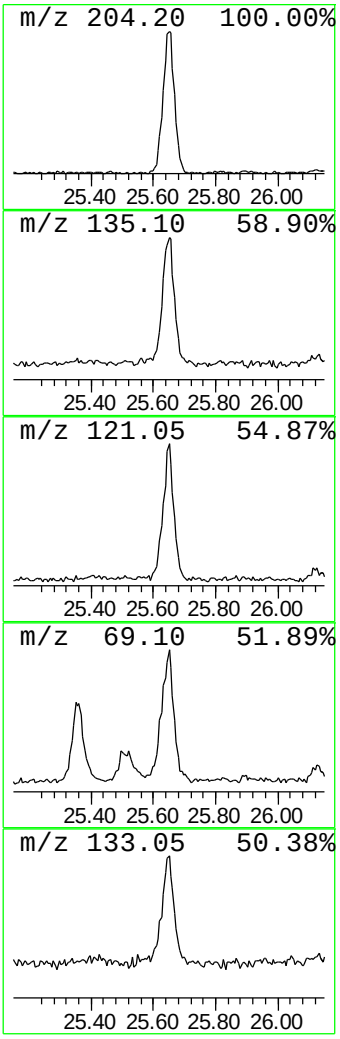
****

Peak Number 11 Guaia-3,9-diene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.65	23.44 ng/ul	2564600	Perylene-d12	23.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Guaia-3,9-diene	204	C15H24	000489-83-8	55
2	1,2,4,8-Tetramethylbicyclo[6.3.0...	204	C15H24	137235-51-9	49
3	1H-3a,7-Methanoazulene, 2,3,6,7,...	204	C15H24	000560-32-7	46
4	Farnesyl bromide	284	C15H25Br	006874-67-5	45
5	2H-Cyclopentacyclooctene, 4,5,6,...	204	C15H24	1000221-85-8	43





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E68

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Ethanol, 2-(2-eth...	7.17	2.3	ng/ul	82549	1	7.54	709400	20.0
1H-3a,7-Methanoaz...	13.49	4.0	ng/ul	252723	3	14.19	1279570	20.0
n-Hexadecanoic acid	17.86	7.8	ng/ul	636696	4	16.95	1636860	20.0
Octadecanoic acid	19.16	2.6	ng/ul	300183	5	21.16	2317610	20.0
Heptafluorobutano...	20.89	3.4	ng/ul	393457	5	21.16	2317610	20.0
Azuleno[4,5-b]fur...	21.55	3.3	ng/ul	376311	5	21.16	2317610	20.0
(DEL) Alkane: Str...	22.68	4.5	ng/ul	488482	6	23.33	2188050	20.0
(DEL) Alkane: Str...	23.83	10.9	ng/ul	1192420	6	23.33	2188050	20.0
(DEL) Alkane: Str...	24.53	3.3	ng/ul	360358	6	23.33	2188050	20.0
(DEL) Alkane: Str...	25.36	8.4	ng/ul	919956	6	23.33	2188050	20.0
Guaia-3,9-diene	25.65	23.4	ng/ul	2564600	6	23.33	2188050	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

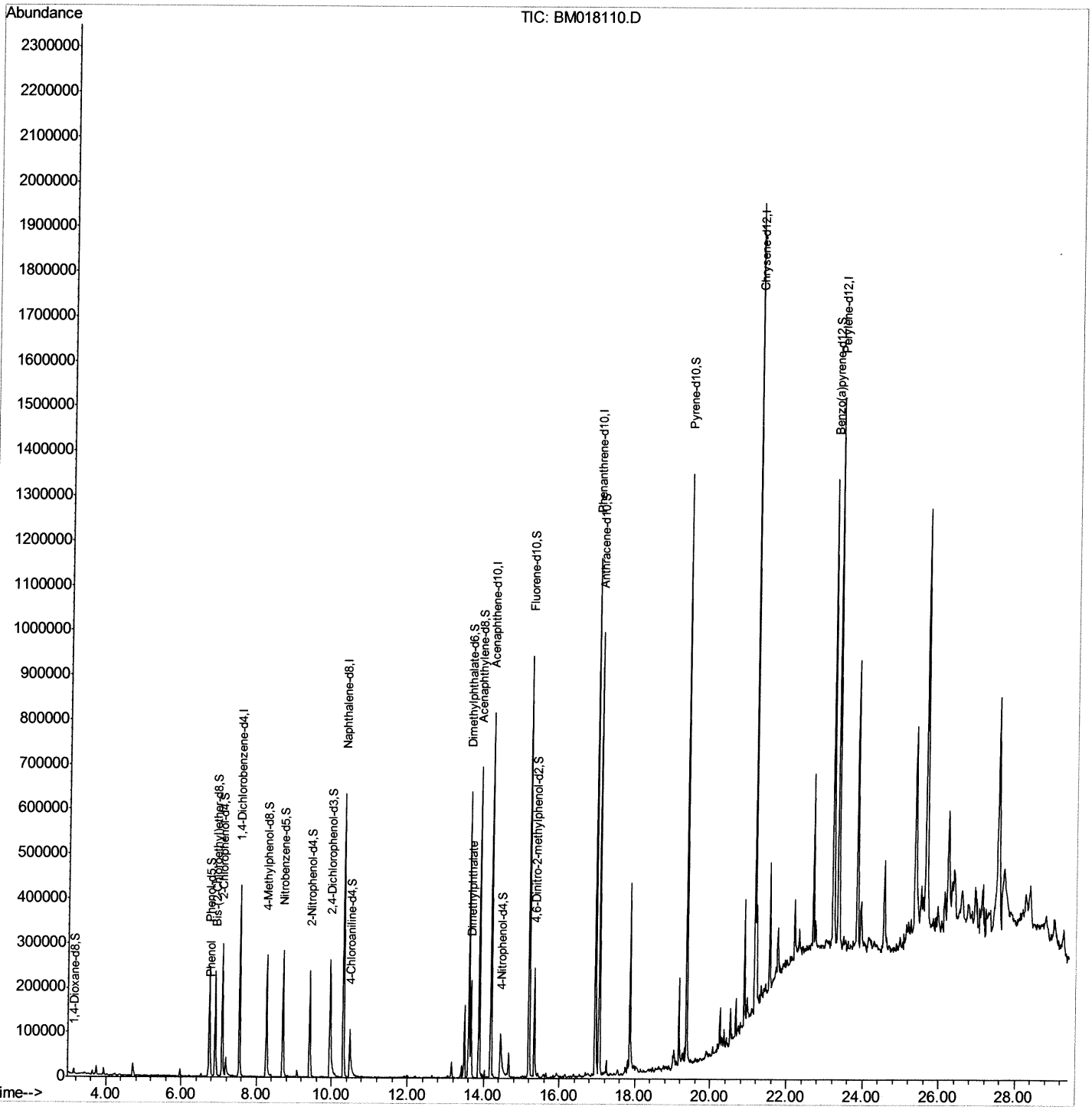
Quantitation Report (QT Reviewed)

Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 13 03:44:31 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:29 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

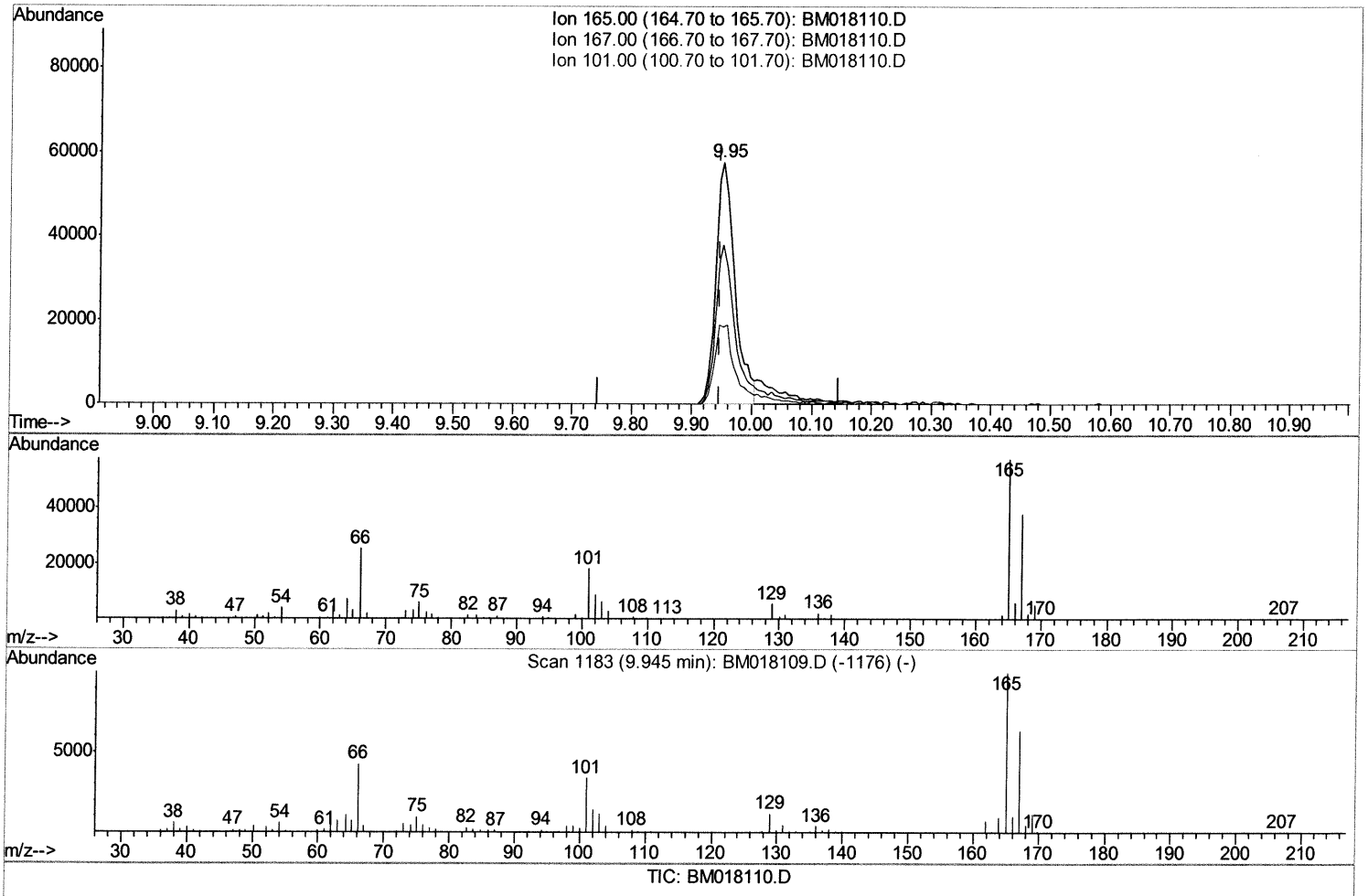
Quantitation Report (Qedit)

Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 13 03:42:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:29 PM



TIC: BM018110.D

(26) 2,4-Dichlorophenol-d3 (S)

9.951min (+0.006) 13.92ng/ul

response 126213

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	65.96
101.00	34.80	31.68
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

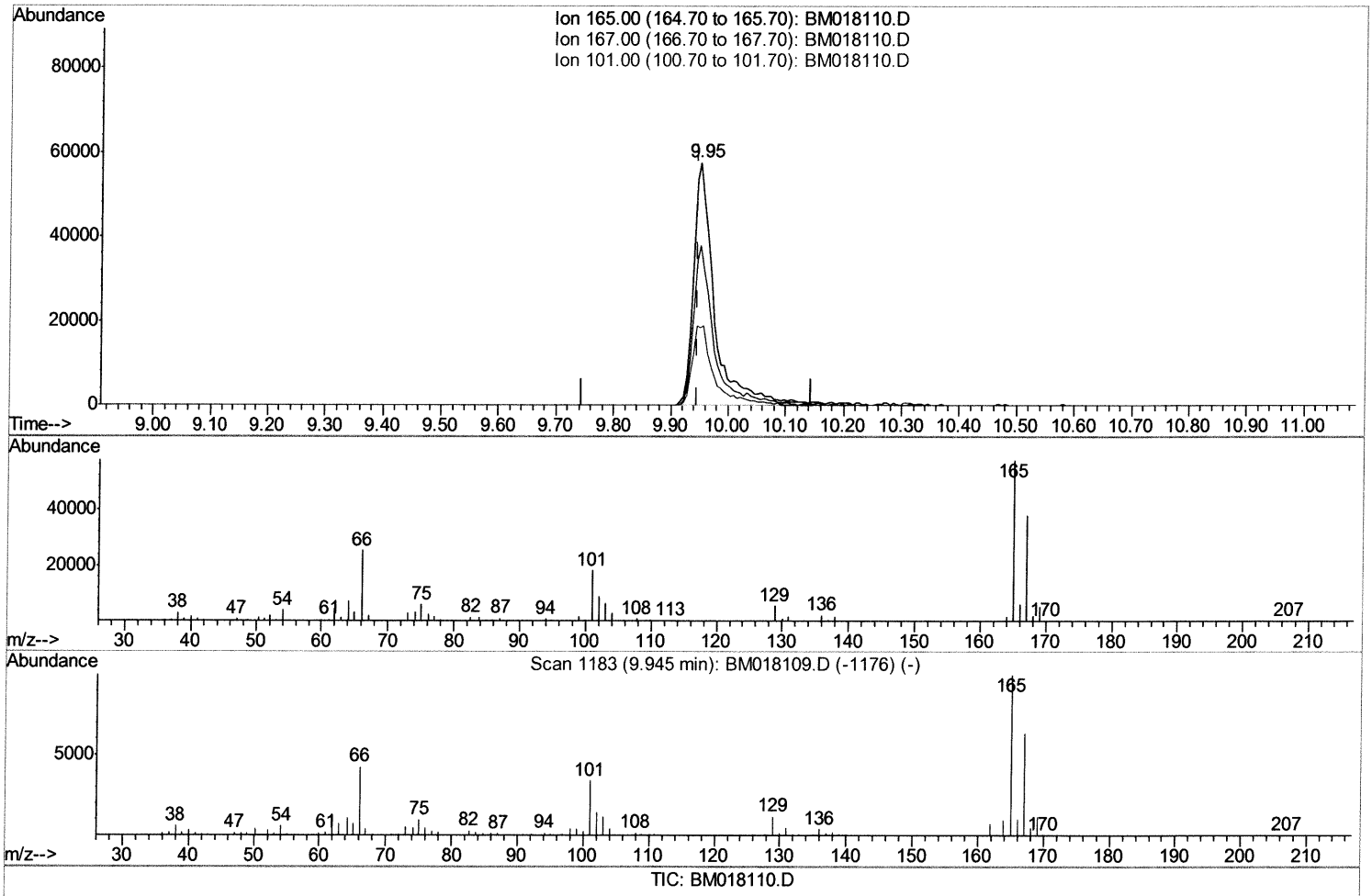
Quantitation Report (Qedit)

Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 13 03:42:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:29 PM



TIC: BM018110.D

(26) 2,4-Dichlorophenol-d3 (S)

9.951min (+0.006) 15.68ng/ul m) SJ 12/13/18

response 142135

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	65.96
101.00	34.80	31.68
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

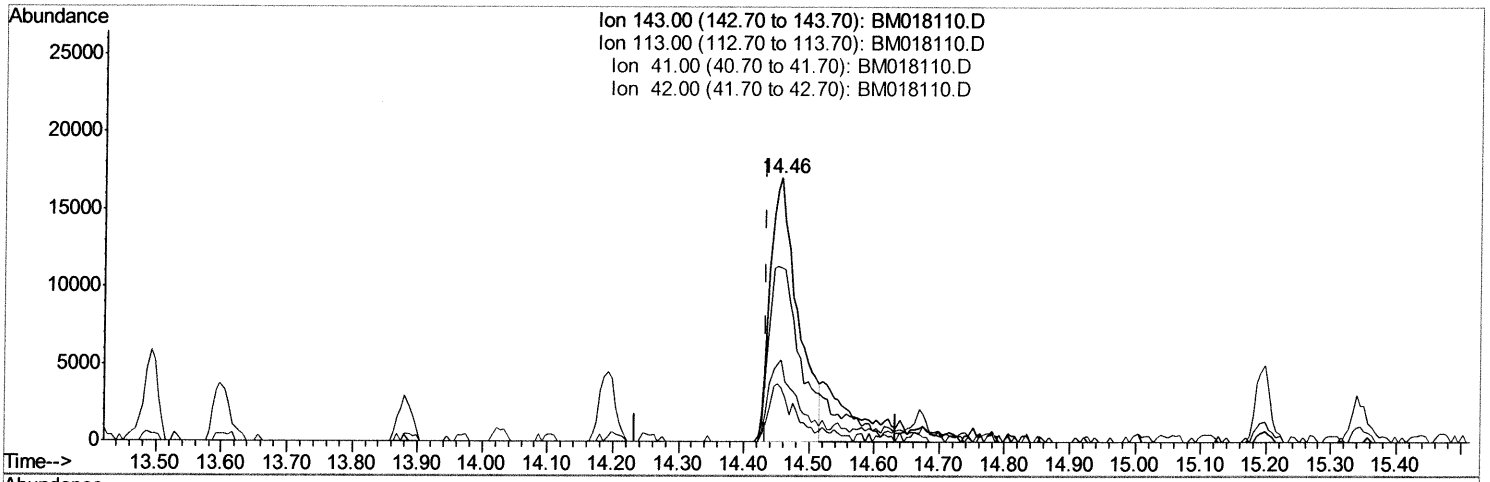
Quantitation Report (Qedit)

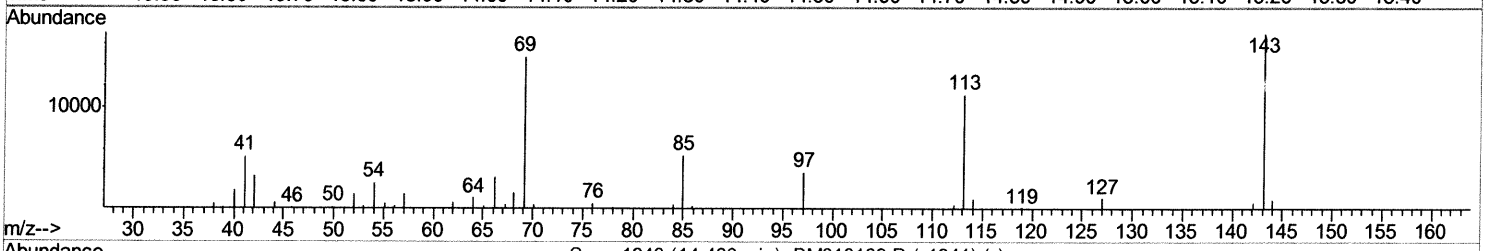
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

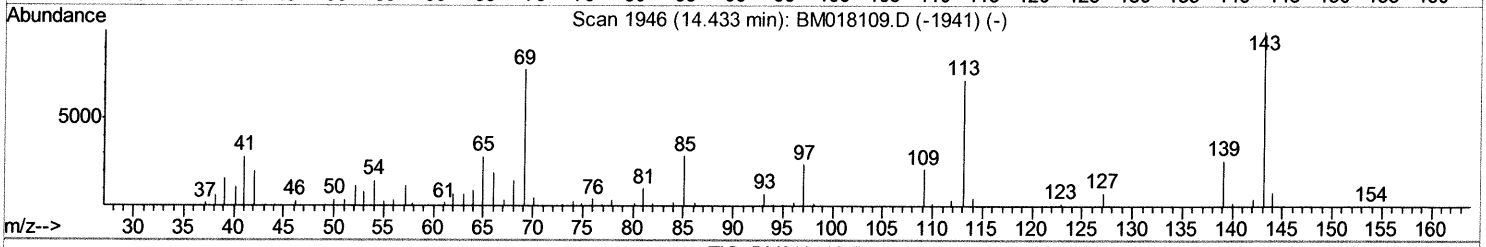
Quant Time: Dec 13 03:42:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:29 PM







TIC: BM018110.D

(51) 4-Nitrophenol-d4 (S)

14.457min (+0.024) 10.95ng/ul

response 49751

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	65.79
41.00	40.10	31.12#
42.00	26.80	20.26#

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

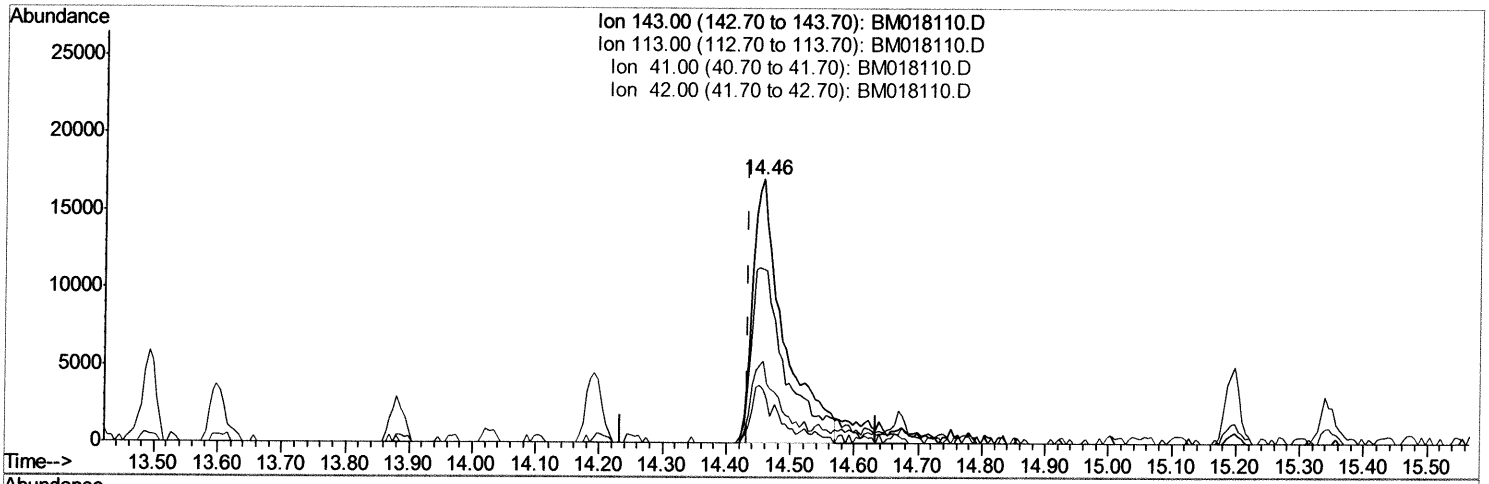
Quantitation Report (Qedit)

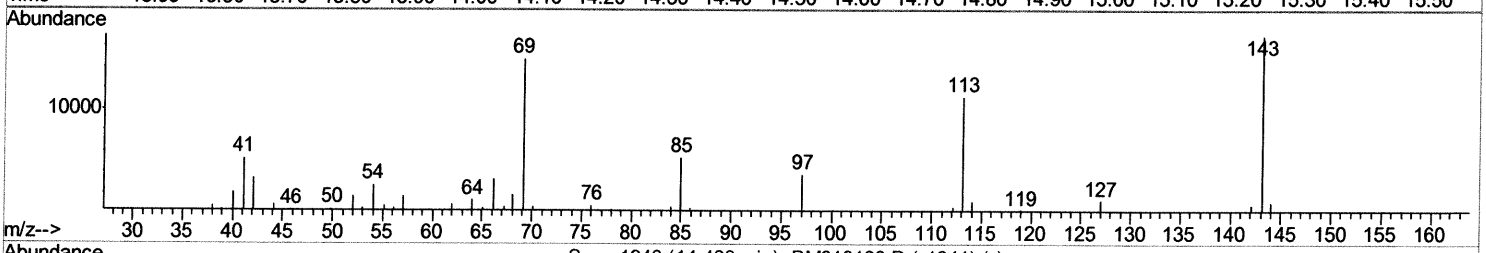
Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

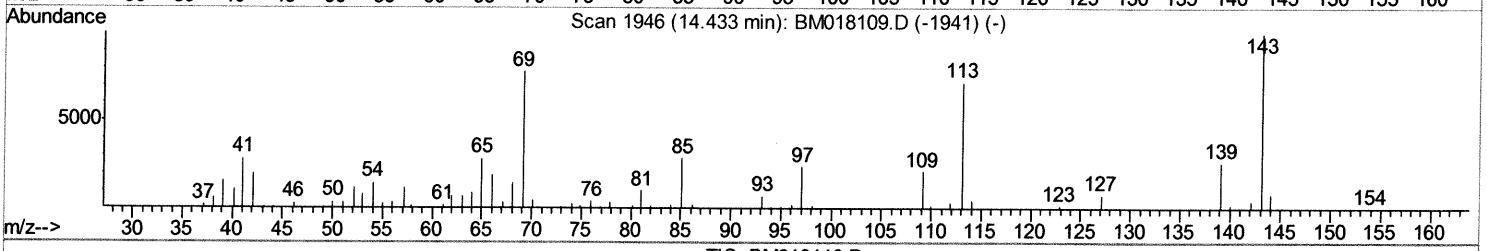
Quant Time: Dec 13 03:42:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:29 PM







TIC: BM018110.D

(51) 4-Nitrophenol-d4 (S)

14.457min (+0.024) 12.83ng/ul m > SJ 12/13/18

response 58287

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	65.79
41.00	40.10	31.12#
42.00	26.80	20.26#

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018110.D
Acq On : 13 Dec 2018 01:43
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 13 03:44:31 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9E68

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:29 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	120419	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	541193	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	288011	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	672840	20.00	ng/ul	0.00
77) Chrysene-d12	21.16	240	831077	20.00	ng/ul	0.00
85) Perylene-d12	23.33	264	834132	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	6952	2.64	ng/uL	0.00
5) Phenol-d5	6.74	99	159939	14.54	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	104558	15.77	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	146354	17.01	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	121055	13.47	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	74355	17.89	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	86319	18.12	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	142135m	15.68	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	103310	13.28	ng/ul	0.01
43) Dimethylphthalate-d6	13.62	166	454000	18.17	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	512680	16.95	ng/ul	0.00
51) 4-Nitrophenol-d4	14.46	143	58287m	12.83	ng/ul	0.02
57) Fluorene-d10	15.20	176	392006	18.17	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	67231	13.98	ng/ul	0.00
70) Anthracene-d10	17.05	188	582008	17.37	ng/ul	0.00
78) Pyrene-d10	19.36	212	666576	16.58	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	744842	16.46	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	42434	3.865	ng/ul	95
44) Dimethylphthalate	13.66	163	155308	6.415	ng/ul	98

SJ 12/13/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E69

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-20
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018111.D
% Solids : 90.2
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	74	U
100-52-7	Benzaldehyde	360	U
108-95-2	Phenol	150	J
111-44-4	Bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	190	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2-oxybis(1-Chloropropane)	360	U
98-86-2	Acetophenone	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	190	U
67-72-1	Hexachloroethane	190	U
98-95-3	Nitrobenzene	190	U
78-59-1	Isophorone	190	U
88-75-5	2-Nitrophenol	190	U
105-67-9	2,4-Dimethylphenol	190	U
111-91-1	Bis(2-Chloroethoxy)methane	190	U
120-83-2	2,4-Dichlorophenol	190	U
91-20-3	Naphthalene	190	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	190	U
105-60-2	Caprolactam	360	U
59-50-7	4-Chloro-3-methylphenol	190	U
91-57-6	2-Methylnaphthalene	190	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E69

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-20
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018111.D
% Solids : 90.2
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	190	U
92-52-4	1,1-Biphenyl	190	U
91-58-7	2-Chloronaphthalene	190	U
88-74-4	2-Nitroaniline	190	U
131-11-3	Dimethylphthalate	240	
606-20-2	2,6-Dinitrotoluene	190	U
208-96-8	Acenaphthylene	190	U
99-09-2	3-Nitroaniline	360	U
83-32-9	Acenaphthene	190	U
51-28-5	2,4-Dinitrophenol	360	U
100-02-7	4-Nitrophenol	360	U
132-64-9	Dibenzofuran	190	U
121-14-2	2,4-Dinitrotoluene	190	U
84-66-2	Diethylphthalate	190	U
86-73-7	Fluorene	190	U
7005-72-3	4-Chlorophenyl-phenylether	190	U
100-01-6	4-Nitroaniline	360	U
534-52-1	4,6-Dinitro-2-methylphenol	360	U
86-30-6	N-Nitrosodiphenylamine	190	U
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U
101-55-3	4-Bromophenyl-phenylether	190	U
118-74-1	Hexachlorobenzene	190	U
1912-24-9	Atrazine	360	U
87-86-5	Pentachlorophenol	360	U
85-01-8	Phenanthrene	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E69

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-20
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018111.D
% Solids : 90.2
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	190	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	190	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	190	U
85-68-7	Butylbenzylphthalate	190	U
91-94-1	3,3-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	190	U
218-01-9	Chrysene	190	U
117-81-7	Bis(2-ethylhexyl)phthalate	190	U
117-84-0	Di-n-octyl phthalate	360	U
205-99-2	Benzo(b)fluoranthene	190	U
207-08-9	Benzo(k)fluoranthene	190	U
50-32-8	Benzo(a)pyrene	190	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	U
53-70-3	Dibenzo(a,h)anthracene	190	U
191-24-2	Benzo(g,h,i)perylene	190	U
58-90-2	2,3,4,6-Tetrachlorophenol	190	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E69

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-20
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018111.D
% Solids : 90.2
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/13/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000057-10-3	n-Hexadecanoic acid	17.86	200	JN
2	000057-11-4	Octadecanoic acid	19.16	79	JN
3	1000193-60-8	1,1,4a-Trimethyl-5,6-dimethylenede	25.65	270	JN
4	E966796	Total Alkanes	N/A	300	

EPA-designated Registry Number.

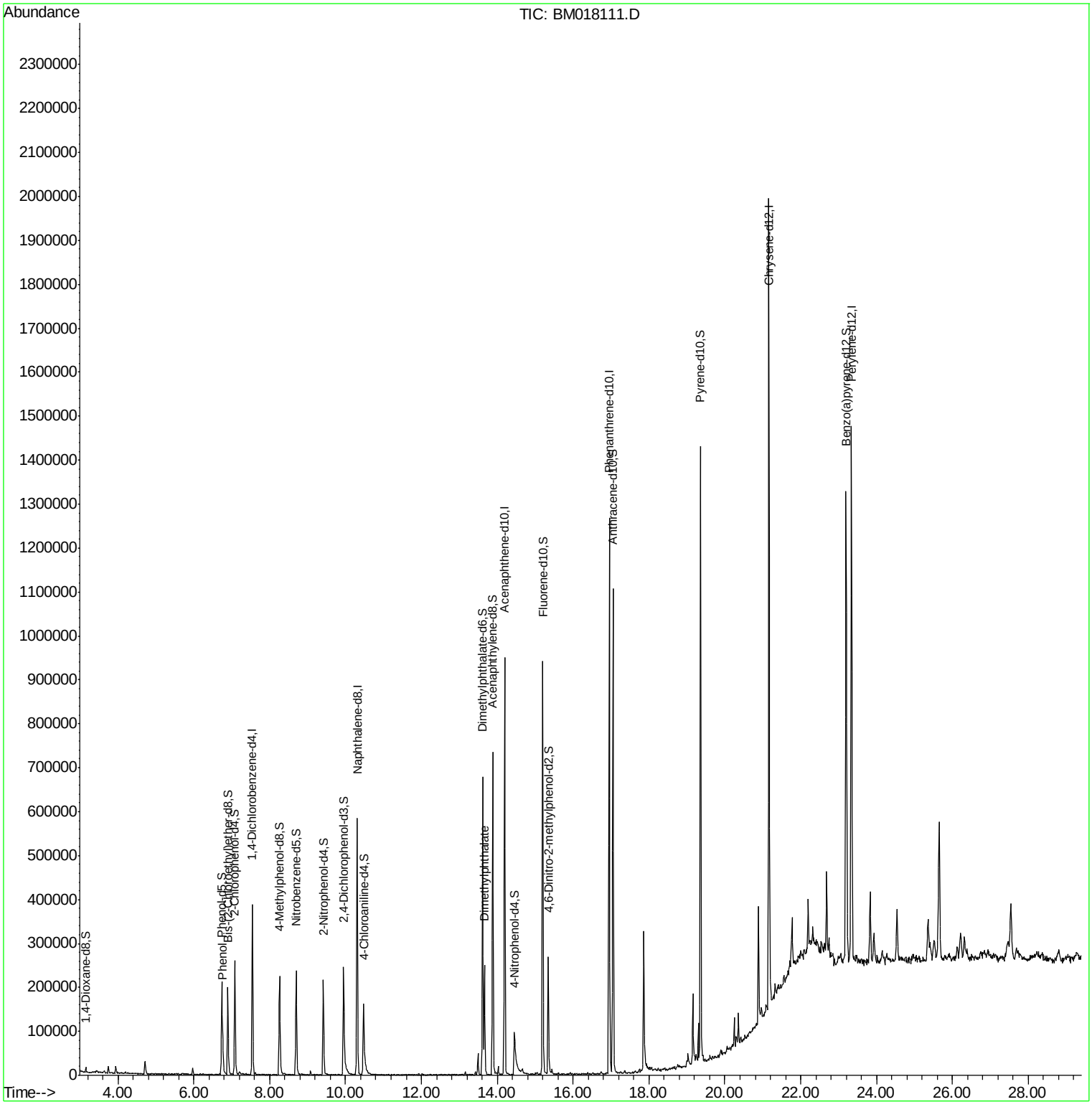
Quantitation Report (LSC Reviewed)

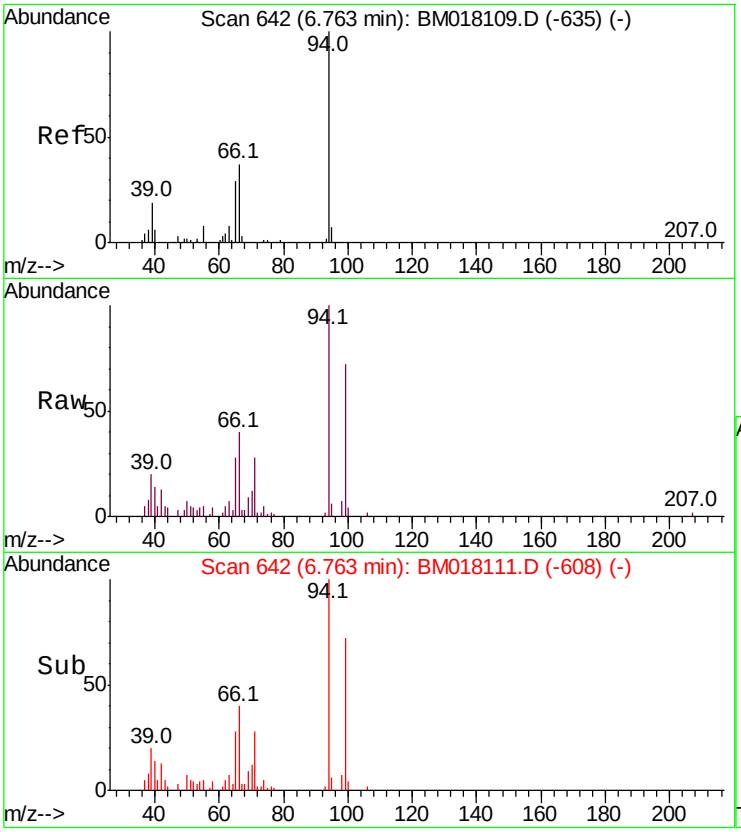
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 13 03:53:14 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:53 PM

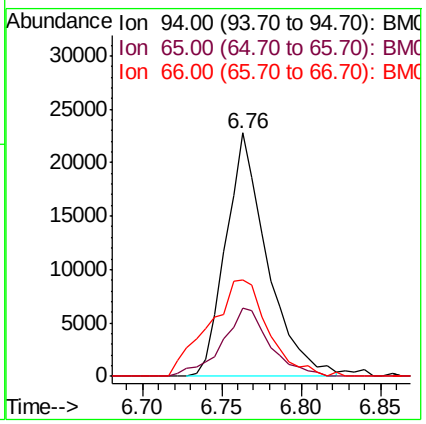




#6
Phenol
Concen: 4.080 ng/ul
RT: 6.76 min Scan# 642
Delta R.T. 0.00 min
Lab File: BM018111.D
Acq: 13 Dec 2018 02:19

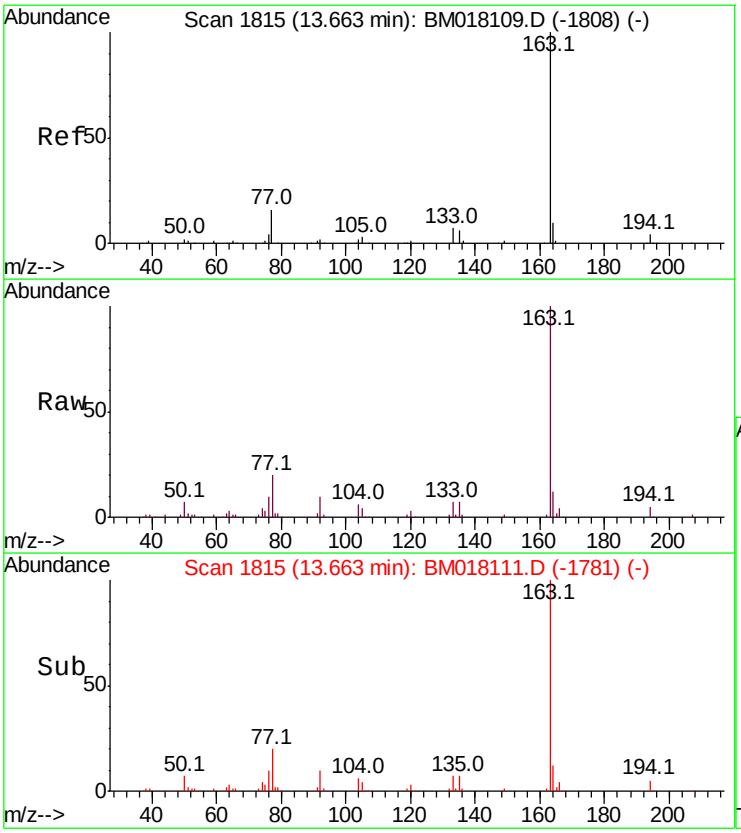
Tgt Ion: 94 Resp: 41250

Ion	Ratio	Lower	Upper
94	100		
65	27.9	24.7	37.1
66	39.6	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9E69

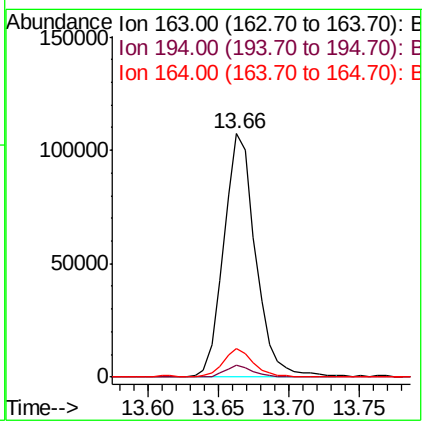
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:53 PM



#44
Dimethylphthalate
Concen: 6.452 ng/ul
RT: 13.66 min Scan# 1815
Delta R.T. 0.00 min
Lab File: BM018111.D
Acq: 13 Dec 2018 02:19

Tgt Ion:163 Resp: 168009

Ion	Ratio	Lower	Upper
163	100		
194	4.7	3.4	5.0
164	11.6	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:53 PM

Quant Time: Dec 13 03:53:14 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	110911	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	505499	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	309753	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	729580	20.00	ng/ul	0.00
77) Chrysene-d12	21.16	240	894463	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	851666	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	5933m	2.45	ng/uL	0.00
5) Phenol-d5	6.73	99	146809	14.49	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	93000	15.23	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	129384	16.32	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	104909	12.68	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	65916	16.98	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	74497	16.74	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	126024m	14.88	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	140796	19.37	ng/ul	0.01
43) Dimethylphthalate-d6	13.62	166	482621	17.96	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	539314	16.58	ng/ul	0.00
51) 4-Nitrophenol-d4	14.46	143	58353m	11.94	ng/ul	0.02
57) Fluorene-d10	15.20	176	405629	17.48	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	64060	12.28	ng/ul	0.00
70) Anthracene-d10	17.05	188	616196	16.96	ng/ul	0.00
78) Pyrene-d10	19.36	212	722907	16.70	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	771149	16.70	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	41250	4.080	ng/ul	95
44) Dimethylphthalate	13.66	163	168009	6.452	ng/ul	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E69

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.081	14	16	18	rVB3	3294	2743	0.11%	0.010%
2	3.105	18	20	22	rVV4	2693	3106	0.12%	0.011%
3	3.152	24	28	33	rVB4	12548	17564	0.70%	0.064%
4	3.428	72	75	77	rBV2	3288	4150	0.17%	0.015%
5	3.640	108	111	118	rVB4	5057	9220	0.37%	0.034%
6	3.746	124	129	137	rVB2	15667	22840	0.91%	0.084%
7	3.940	157	162	168	rBV3	17055	24702	0.99%	0.090%
8	4.710	288	293	296	rBV	28859	41191	1.65%	0.151%
9	5.581	439	441	444	rVB2	2654	2899	0.12%	0.011%
10	5.781	473	475	479	rBV2	2337	3117	0.12%	0.011%
11	5.810	479	480	485	rVB4	1977	2833	0.11%	0.010%
12	5.969	501	507	514	rVB2	14792	24917	1.00%	0.091%
13	6.151	534	538	539	rBV2	2361	2879	0.12%	0.011%
14	6.740	632	638	654	rBV2	210999	513933	20.56%	1.880%
15	6.893	659	664	677	rVV	199135	336852	13.48%	1.232%
16	7.004	681	683	687	rVB4	2104	2973	0.12%	0.011%
17	7.081	690	696	707	rBV	259806	445049	17.81%	1.628%
18	7.198	713	716	723	rBV5	5722	12943	0.52%	0.047%
19	7.369	742	745	748	rVB3	2385	3213	0.13%	0.012%
20	7.487	762	765	767	rBV3	2149	2749	0.11%	0.010%
21	7.540	767	774	783	rVV	387581	657647	26.31%	2.406%
22	7.616	783	787	790	rVV3	6613	9939	0.40%	0.036%
23	8.263	890	897	911	rBV	225318	444137	17.77%	1.625%
24	8.375	911	916	923	rVB5	3603	8680	0.35%	0.032%
25	8.698	964	971	985	rBV2	237244	439654	17.59%	1.608%
26	8.787	985	986	990	rVV2	2190	2764	0.11%	0.010%
27	9.081	1031	1036	1041	rVB2	9274	14663	0.59%	0.054%
28	9.410	1084	1092	1107	rBV	216815	392137	15.69%	1.435%
29	9.951	1178	1184	1198	rBV	244957	521026	20.85%	1.906%
30	10.310	1238	1245	1262	rVB	584146	1007709	40.32%	3.686%
31	10.475	1264	1273	1295	rBV	160772	455279	18.22%	1.666%
32	10.610	1295	1296	1302	rVB3	3083	3201	0.13%	0.012%
33	11.933	1518	1521	1526	rBV3	3739	6853	0.27%	0.025%
34	12.016	1530	1535	1539	rVB	2760	4974	0.20%	0.018%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E69

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	13.151	1726	1728	1733	rVB3	7078	8792	0.35%	0.032%
36	13.416	1770	1773	1778	rBV3	6959	10060	0.40%	0.037%
37	13.492	1781	1786	1794	rVB2	48961	69493	2.78%	0.254%
38	13.616	1800	1807	1811	rBV	678225	1020667	40.84%	3.734%
39	13.663	1811	1815	1826	rVV	249373	397653	15.91%	1.455%
40	13.880	1846	1852	1863	rBV	731963	1118657	44.76%	4.092%
41	14.027	1873	1877	1882	rVB2	19672	23057	0.92%	0.084%
42	14.192	1897	1905	1915	rBV2	950060	1442385	57.71%	5.277%
43	14.457	1944	1950	1965	rBV2	95902	304953	12.20%	1.116%
44	14.598	1972	1974	1975	rVB	4626	2860	0.11%	0.010%
45	14.669	1983	1986	1990	rVB5	9624	13477	0.54%	0.049%
46	14.933	2029	2031	2036	rBV2	2356	3116	0.12%	0.011%
47	15.004	2036	2043	2046	rBV4	4361	5278	0.21%	0.019%
48	15.198	2069	2076	2089	rBV	939563	1488662	59.57%	5.446%
49	15.345	2095	2101	2112	rBV	266515	434169	17.37%	1.588%
50	15.439	2113	2117	2122	rVB3	12385	18196	0.73%	0.067%
51	15.610	2145	2146	2152	rVB3	3468	4741	0.19%	0.017%
52	15.927	2195	2200	2202	rVB4	3563	4686	0.19%	0.017%
53	16.392	2274	2279	2280	rBV3	3577	5035	0.20%	0.018%
54	16.515	2295	2300	2302	rBV2	3441	5412	0.22%	0.020%
55	16.739	2336	2338	2343	rVB2	4395	4736	0.19%	0.017%
56	16.868	2358	2360	2361	rBV2	3939	3138	0.13%	0.011%
57	16.951	2368	2374	2380	rBV2	1264957	1803945	72.18%	6.599%
58	17.051	2385	2391	2405	rVV2	1103382	1614052	64.58%	5.905%
59	17.145	2405	2407	2412	rVB5	4057	5736	0.23%	0.021%
60	17.362	2440	2444	2449	rVB6	6743	10152	0.41%	0.037%
61	17.551	2470	2476	2478	rBV4	4055	7390	0.30%	0.027%
62	17.633	2488	2490	2494	rVB2	4653	3931	0.16%	0.014%
63	17.739	2504	2508	2509	rBV2	7660	9484	0.38%	0.035%
64	17.810	2516	2520	2522	rBV4	6283	9730	0.39%	0.036%
65	17.862	2522	2529	2540	rBV2	318600	500910	20.04%	1.832%
66	17.974	2547	2548	2552	rVB2	5888	5627	0.23%	0.021%
67	18.015	2552	2555	2556	rVV3	5741	6467	0.26%	0.024%
68	18.033	2556	2558	2559	rVV2	6781	4891	0.20%	0.018%
69	18.068	2561	2564	2569	rVB5	8070	11176	0.45%	0.041%
70	18.298	2601	2603	2605	rVB2	5569	4286	0.17%	0.016%
71	18.333	2605	2609	2611	rBV5	5298	9005	0.36%	0.033%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E69

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

72	18.368	2613	2615	2617	rVV3	5048	4283	0.17%	0.016%
73	18.409	2620	2622	2624	rVV3	5166	5257	0.21%	0.019%
74	18.451	2627	2629	2632	rBV3	3569	5293	0.21%	0.019%
75	18.509	2636	2639	2640	rBV3	3139	2874	0.11%	0.011%
76	18.633	2658	2660	2665	rVB6	4784	6603	0.26%	0.024%
77	18.674	2665	2667	2671	rVB5	7013	9552	0.38%	0.035%
78	18.721	2671	2675	2676	rBV3	3934	6163	0.25%	0.023%
79	18.762	2679	2682	2685	rVB5	6762	7042	0.28%	0.026%
80	18.792	2685	2687	2690	rBV4	5709	5439	0.22%	0.020%
81	18.998	2718	2722	2725	rBV4	18623	31668	1.27%	0.116%
82	19.033	2725	2728	2738	rVB8	28148	50628	2.03%	0.185%
83	19.156	2744	2749	2760	rBV2	160009	267343	10.70%	0.978%
84	19.245	2762	2764	2770	rVV3	15539	20172	0.81%	0.074%
85	19.304	2770	2774	2777	rVV	85663	95994	3.84%	0.351%
86	19.356	2777	2783	2793	rVV2	1393709	1971737	78.89%	7.213%
87	19.604	2823	2825	2827	rBV3	10542	7361	0.29%	0.027%
88	19.898	2871	2875	2877	rBV6	11543	12172	0.49%	0.045%
89	20.062	2898	2903	2904	rBV5	12674	16740	0.67%	0.061%
90	20.245	2931	2934	2939	rVB3	67503	82217	3.29%	0.301%
91	20.292	2939	2942	2944	rBV3	23418	35404	1.42%	0.130%
92	20.362	2950	2954	2957	rVB2	67534	71482	2.86%	0.261%
93	20.886	3039	3043	3051	rBV	265030	402632	16.11%	1.473%
94	21.162	3085	3090	3096	rBV	1840110	2499211	100.00%	9.143%
95	22.197	3263	3266	3270	rBV2	102318	121347	4.86%	0.444%
96	22.686	3345	3349	3354	rVB	180556	253662	10.15%	0.928%
97	23.197	3430	3436	3448	rVB	1072282	2139138	85.59%	7.826%
98	23.339	3453	3460	3469	rVB	1214134	2242183	89.72%	8.202%
99	23.833	3540	3544	3553	rVB2	158220	287830	11.52%	1.053%
100	25.650	3847	3853	3866	rVB6	313640	829432	33.19%	3.034%

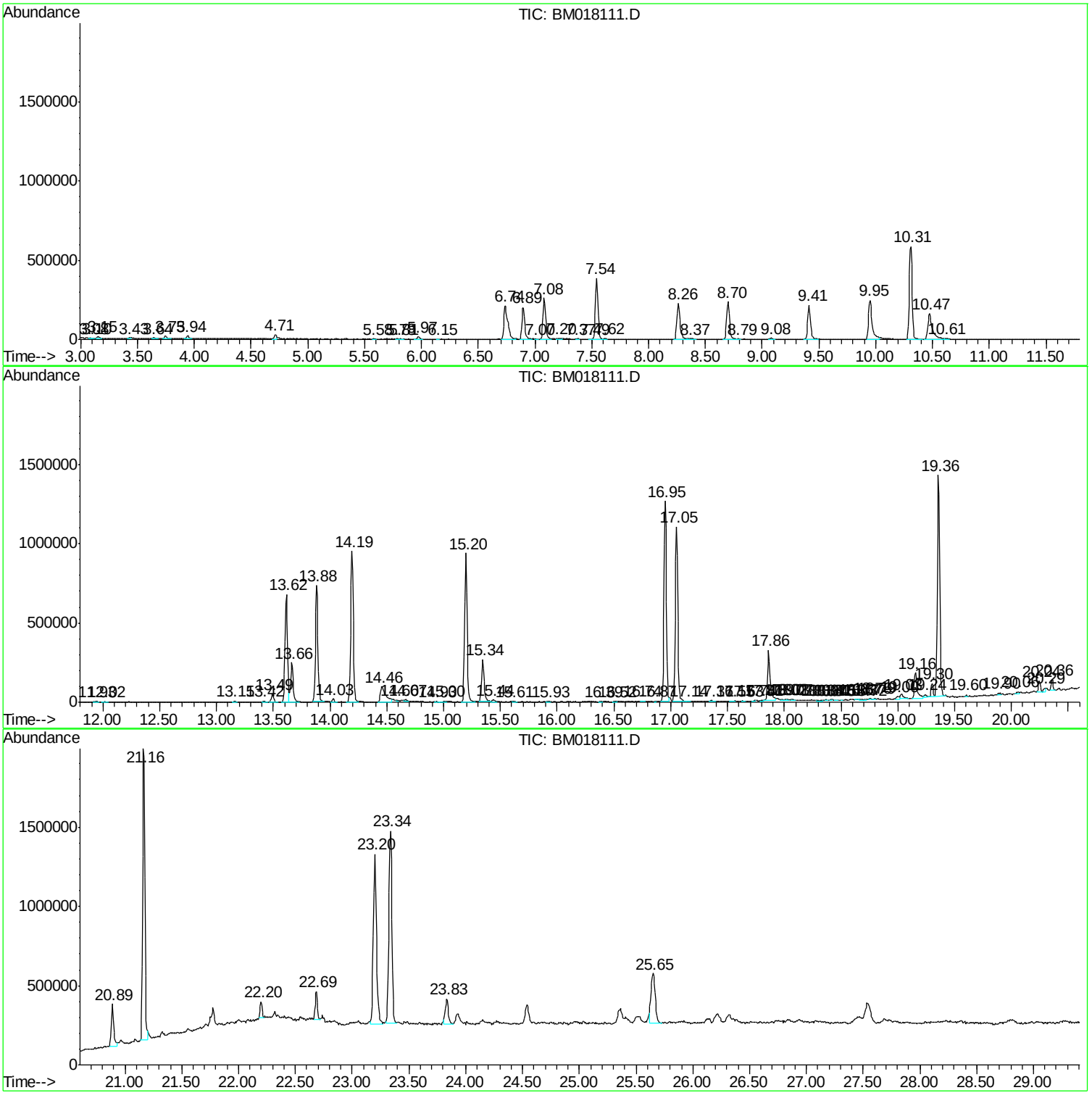
Sum of corrected areas: 27335400

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E69

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E69

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

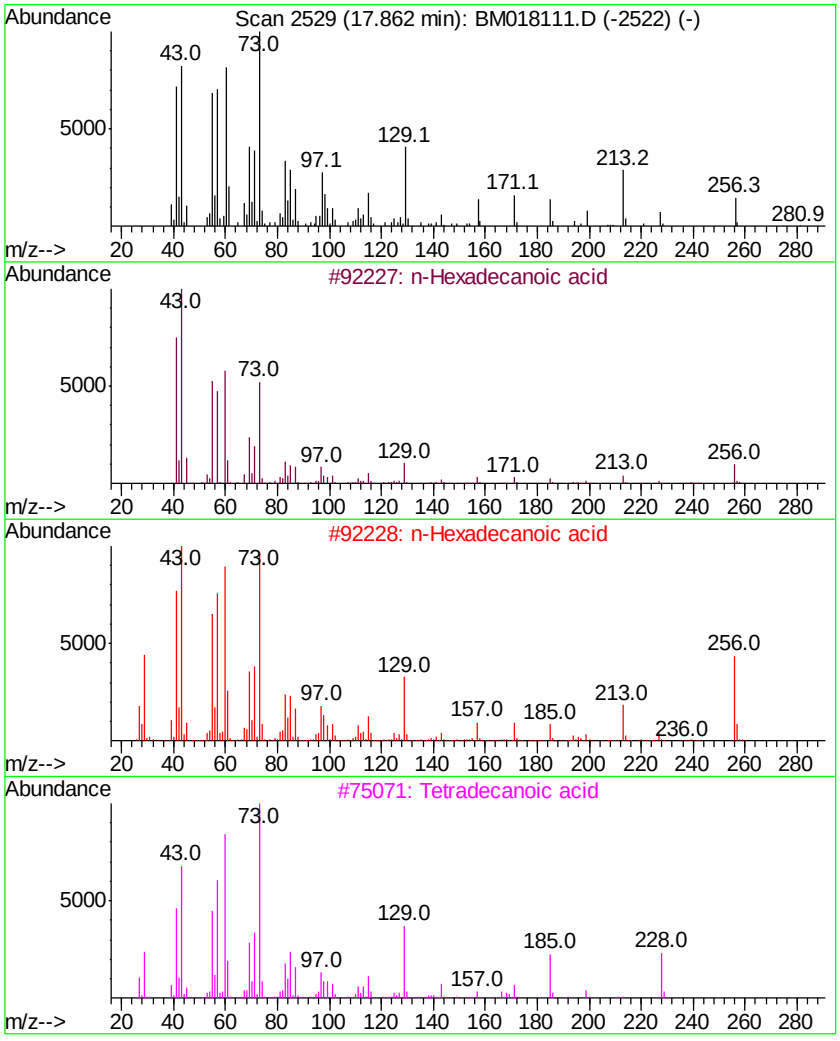
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

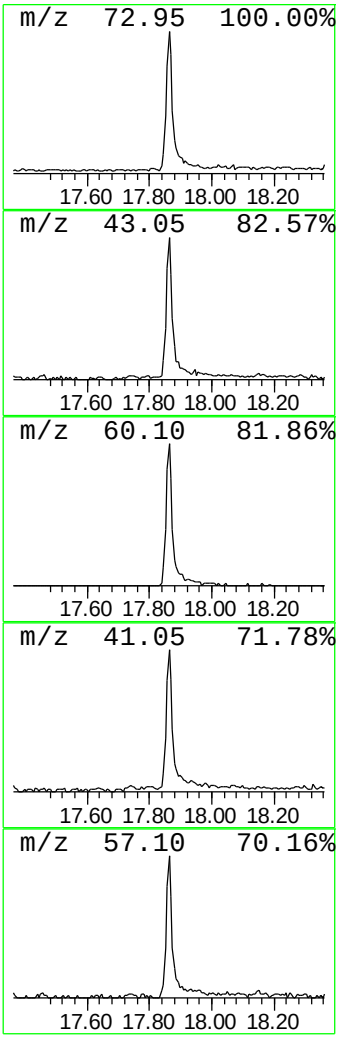
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.86	5.55 ng/ul	500910	Phenanthrene-d10	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	97
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	95
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	93
4	Tridecanoic acid	214	C13H26O2	000638-53-9	76
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	72





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E69

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

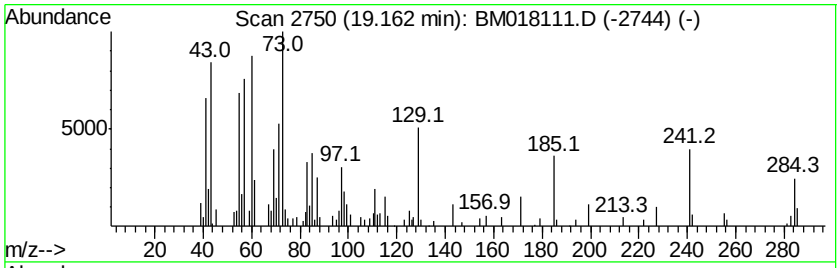
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

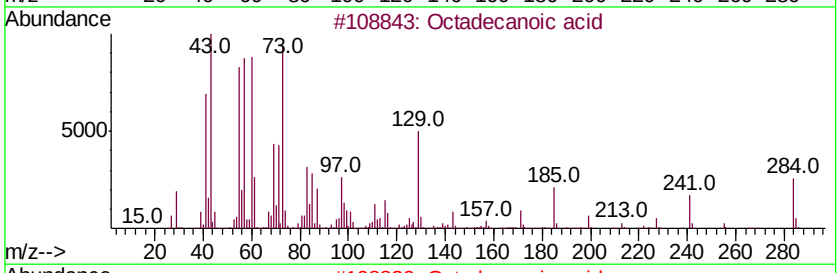
****

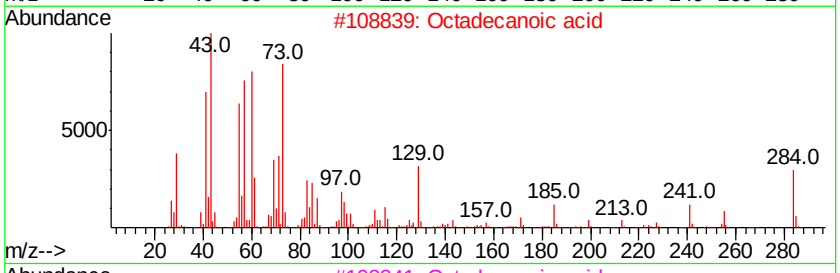
Peak Number 2 Octadecanoic acid Concentration Rank 6

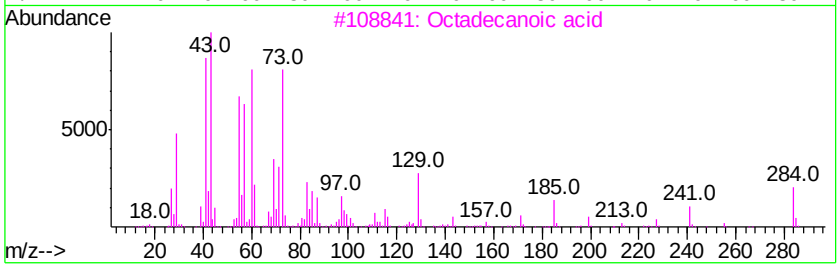
R.T.	EstConc	Area	Relative to ISTD	R.T.
19.16	2.14 ng/ul	267343	Chrysene-d12	21.16

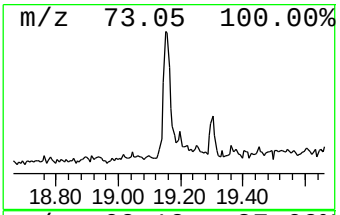
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	97
2	Octadecanoic acid	284	C18H36O2	000057-11-4	96
3	Octadecanoic acid	284	C18H36O2	000057-11-4	95
4	Octadecanoic acid	284	C18H36O2	000057-11-4	76
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	64

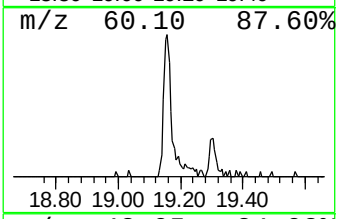


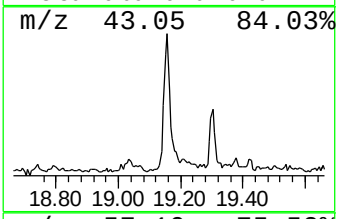


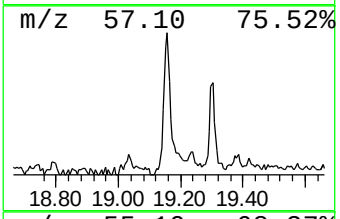


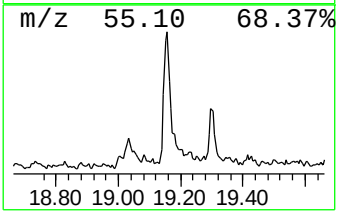












Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E69

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

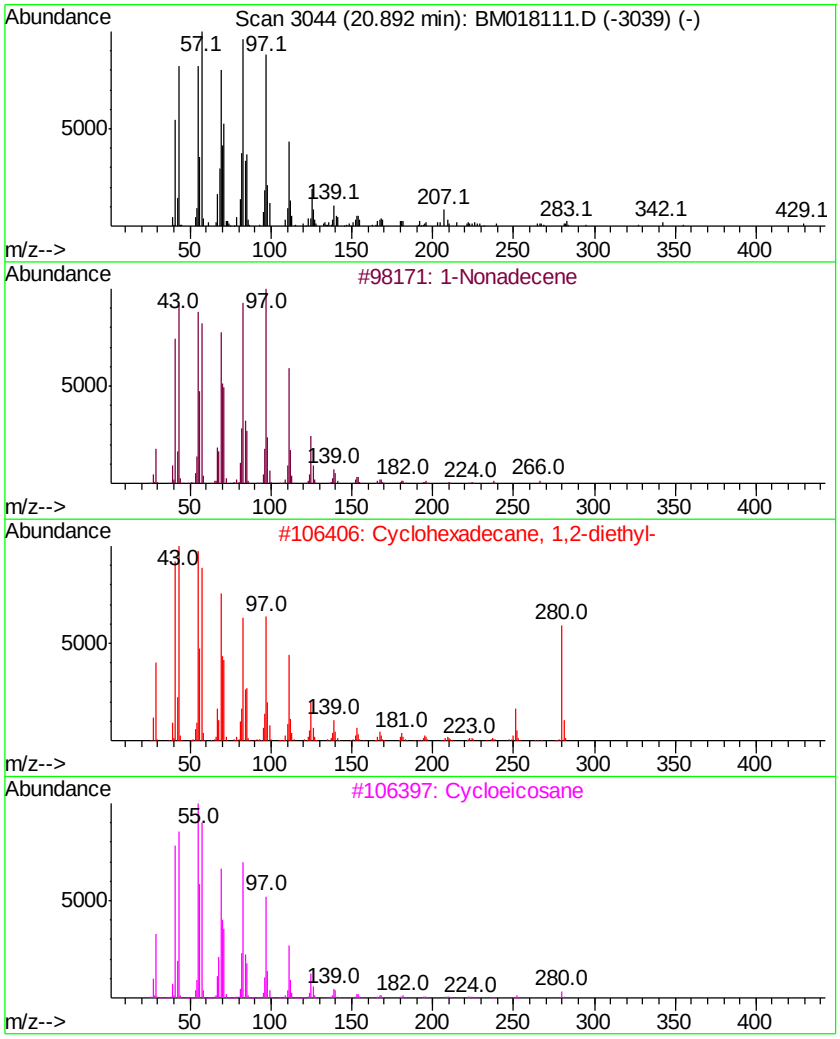
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

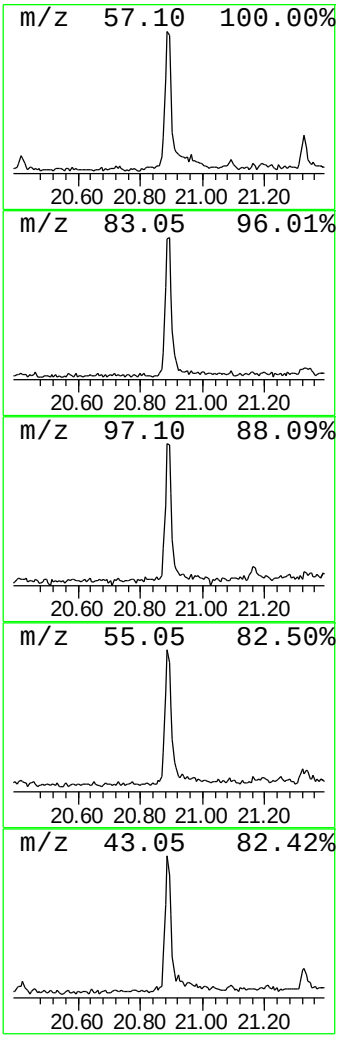
****

Peak Number 3 (DEL) Alkane: Cyclic20.89 Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	3.22 ng/ul	402632	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Nonadecene	266	C19H38	018435-45-5	99
2	Cyclohexadecane, 1,2-diethyl-	280	C20H40	1000155-85-3	98
3	Cycloeicosane	280	C20H40	000296-56-0	95
4	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	94
5	1-Octadecene	252	C18H36	000112-88-9	93





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E69

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

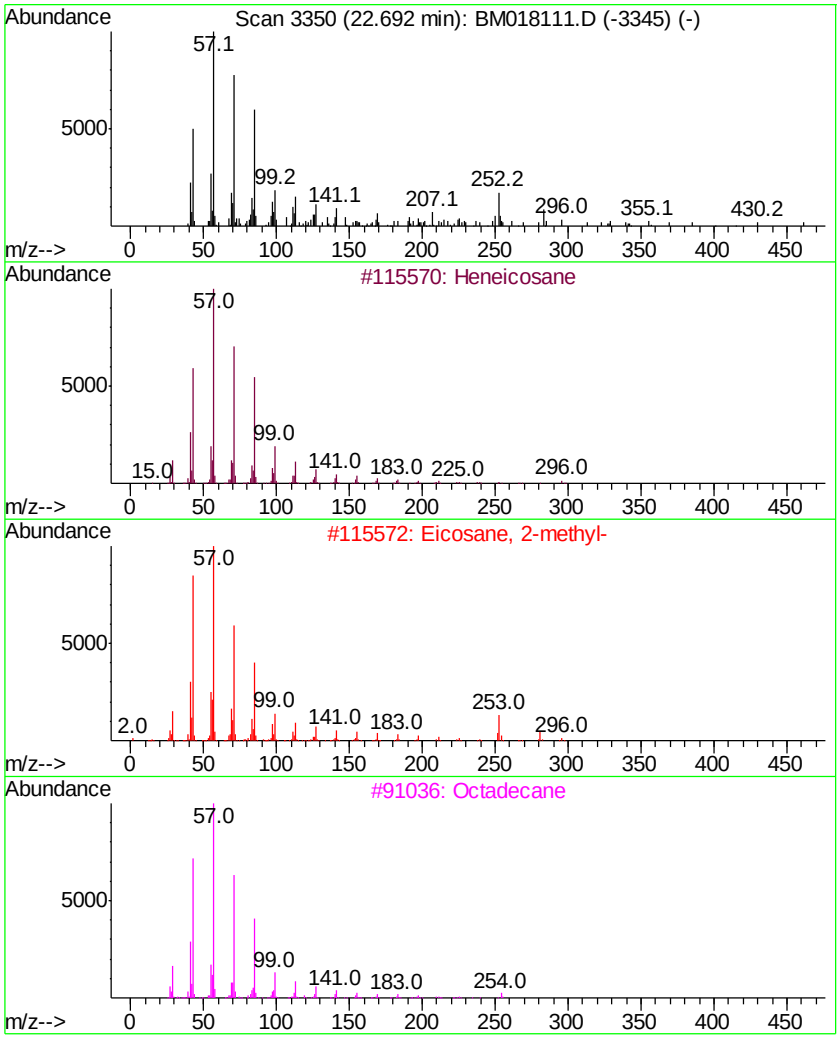
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

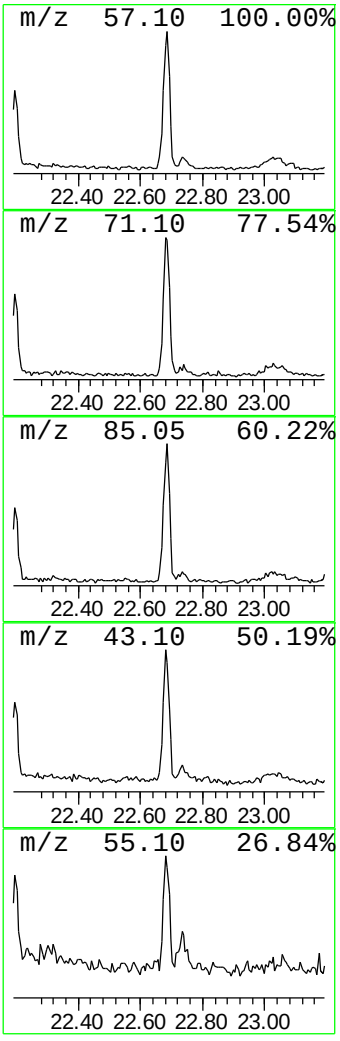
****

Peak Number 4 (DEL) Alkane: Straight-Chai... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.69	2.26 ng/ul	253662	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	99
2	Eicosane, 2-methyl-	296	C21H44	001560-84-5	93
3	Octadecane	254	C18H38	000593-45-3	93
4	Octadecane	254	C18H38	000593-45-3	91
5	Triacontane	422	C30H62	000638-68-6	87





Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E69

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

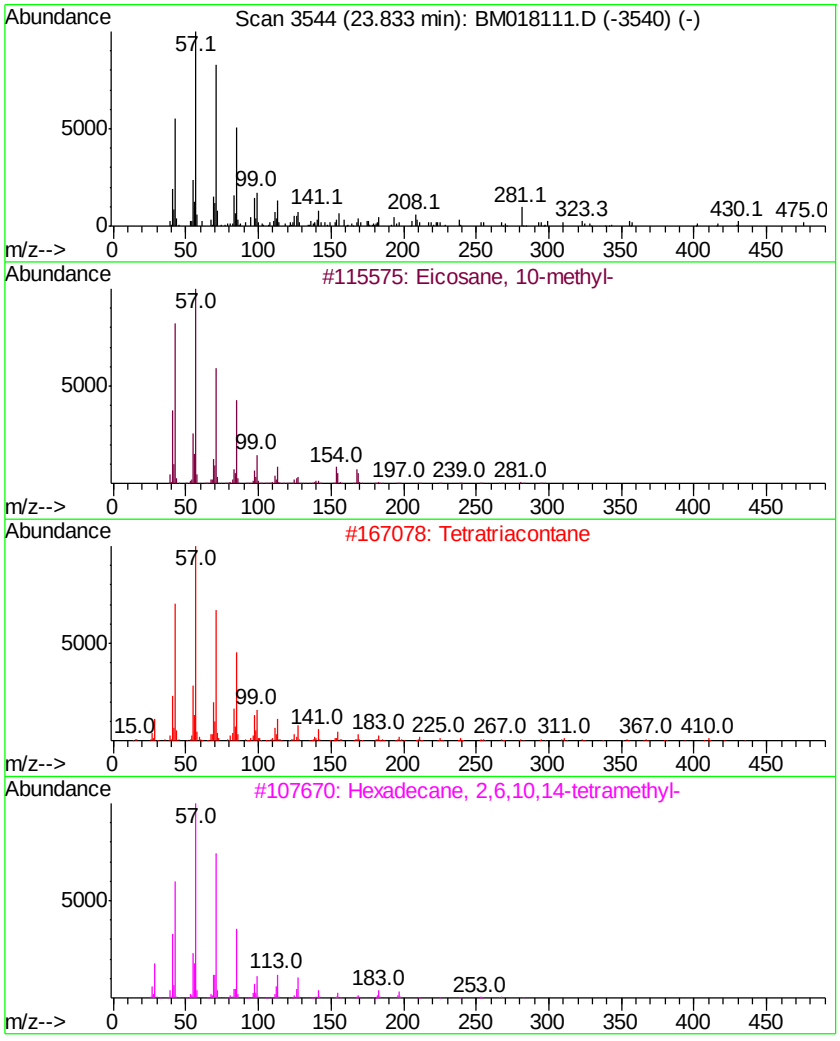
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

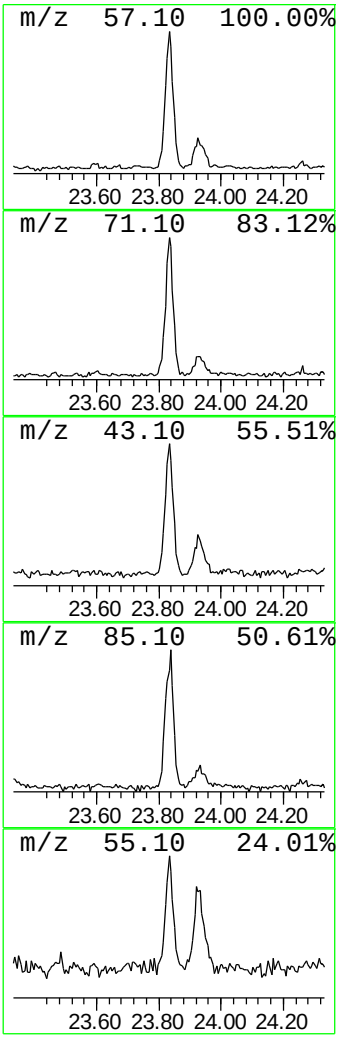
****

Peak Number 5 (DEL) Alkane: Straight-Chai... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.83	2.57 ng/ul	287830	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane, 10-methyl-	296	C21H44	054833-23-7	91
2	Tetratriacontane	479	C34H70	014167-59-0	87
3	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	87
4	Nonacosane	408	C29H60	000630-03-5	87
5	Octadecane, 3-ethyl-5-(2-ethylbu...	366	C26H54	055282-12-7	86





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E69

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

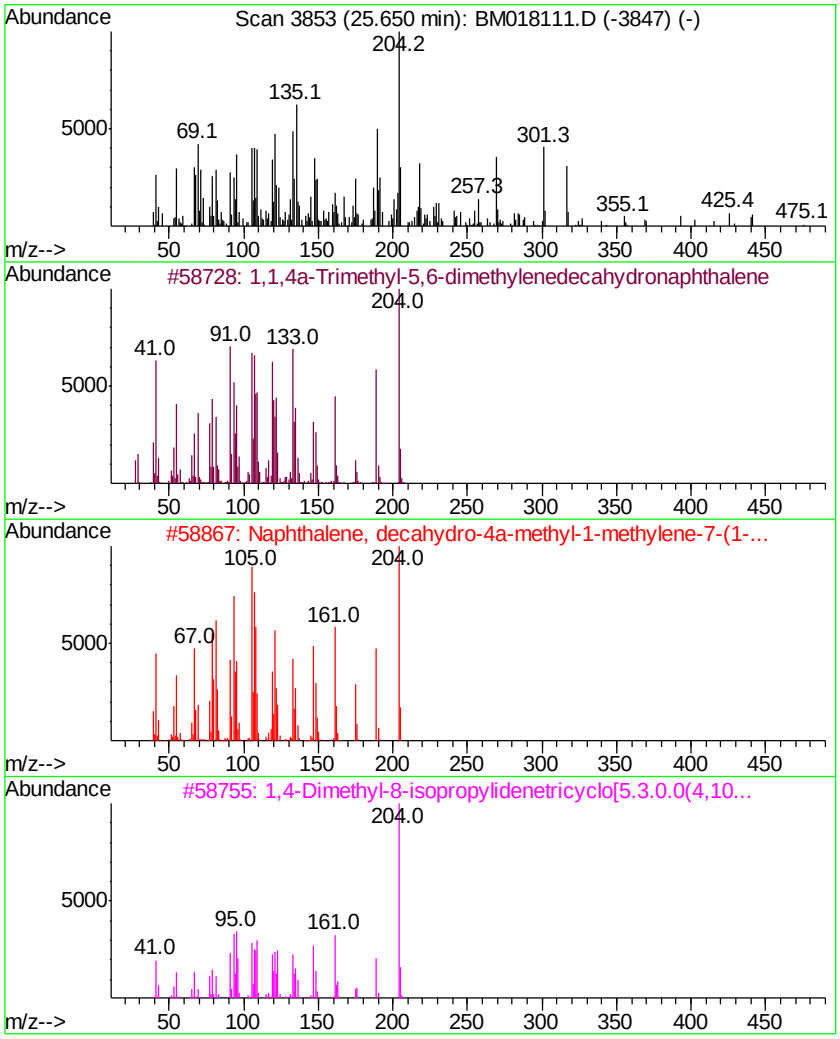
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

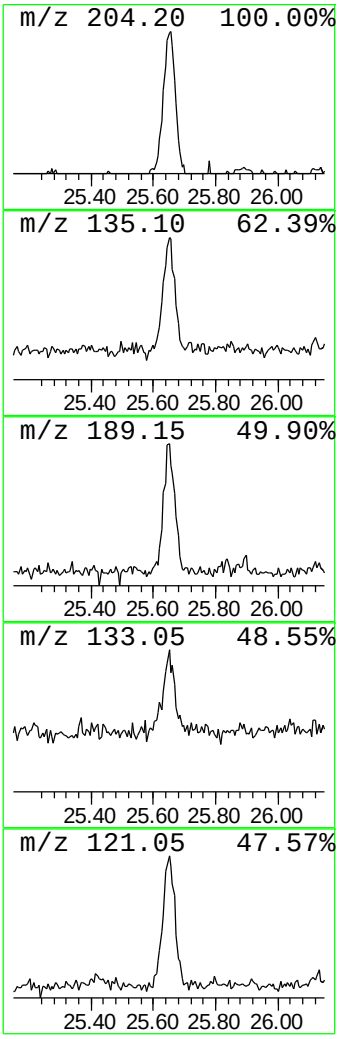
****

Peak Number 6 1,1,4a-Trimethyl-5,6-dimeth... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.65	7.40 ng/ul	829432	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1,4a-Trimethyl-5,6-dimethylene...	204	C15H24	1000193-60-8	52
2	Naphthalene, decahydro-4a-methyl...	204	C15H24	017066-67-0	49
3	1,4-Dimethyl-8-isopropylidenetri...	204	C15H24	1000140-07-7	49
4	Guaia-3,9-diene	204	C15H24	000489-83-8	43
5	2,5,5,8a-Tetramethyl-6,7,8,8a-te...	204	C14H20O	124957-09-1	38





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E69

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	17.86	5.5	ng/ul	500910	4	16.95	1803950	20.0
Octadecanoic acid	19.16	2.1	ng/ul	267343	5	21.16	2499210	20.0
(DEL) Alkane: Cyc...	20.89	3.2	ng/ul	402632	5	21.16	2499210	20.0
(DEL) Alkane: Str...	22.69	2.3	ng/ul	253662	6	23.34	2242180	20.0
(DEL) Alkane: Str...	23.83	2.6	ng/ul	287830	6	23.34	2242180	20.0
1,1,4a-Trimethyl-...	25.65	7.4	ng/ul	829432	6	23.34	2242180	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

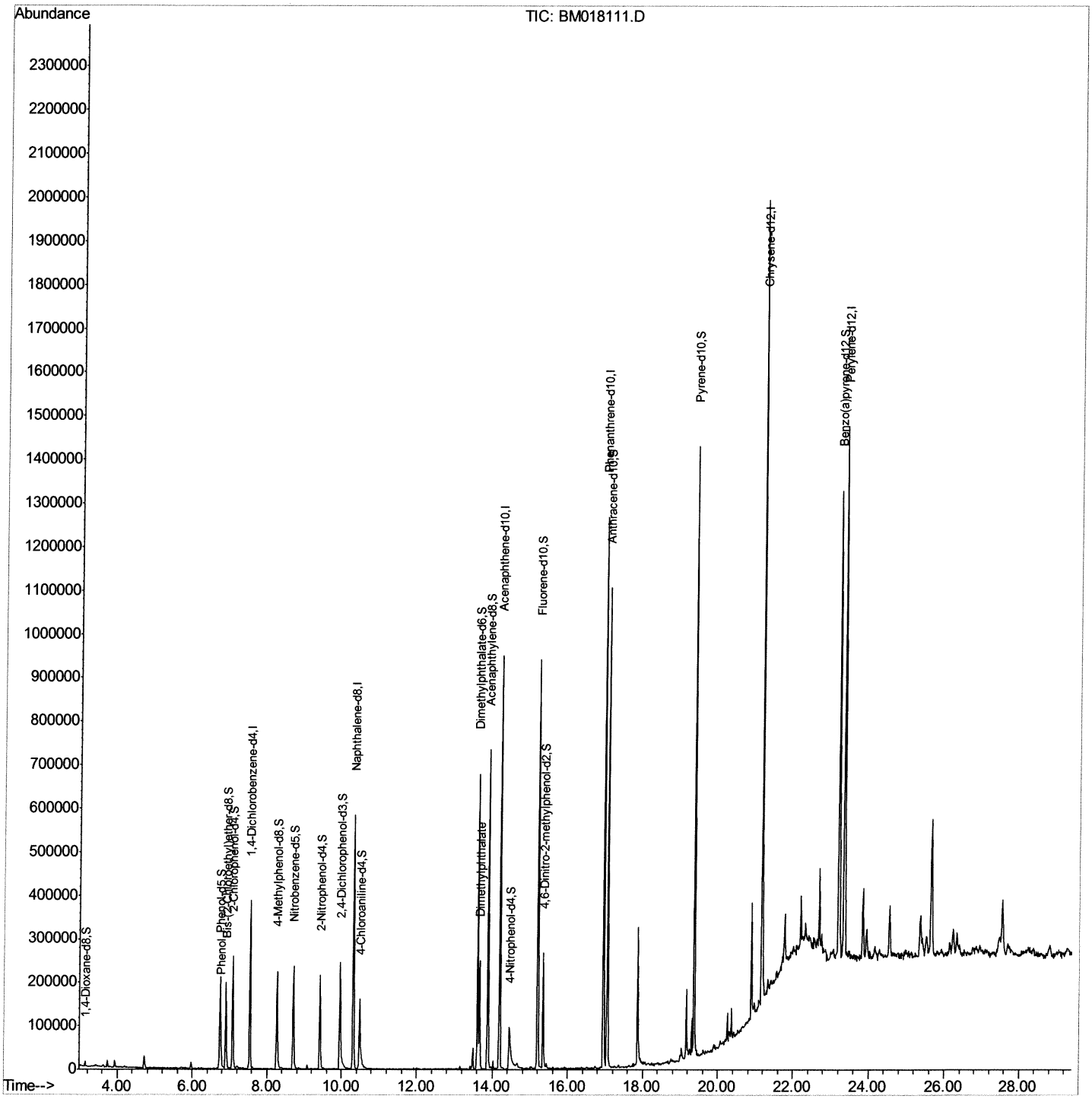
Quantitation Report (QT Reviewed)

Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 13 03:53:14 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:53 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

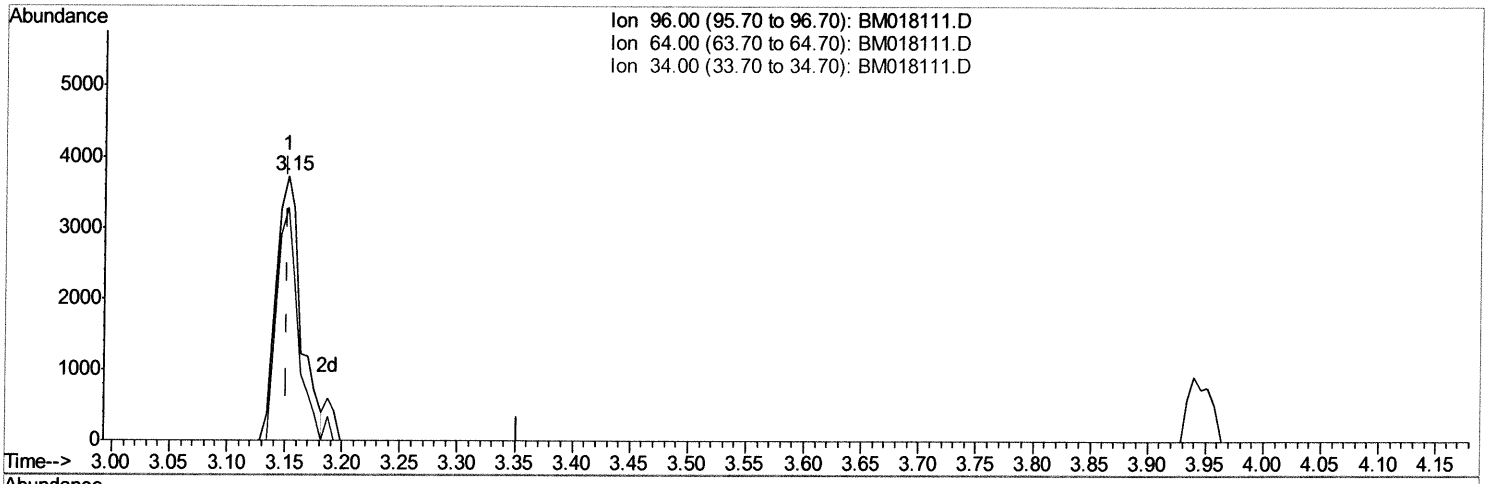
Quantitation Report (Qedit)

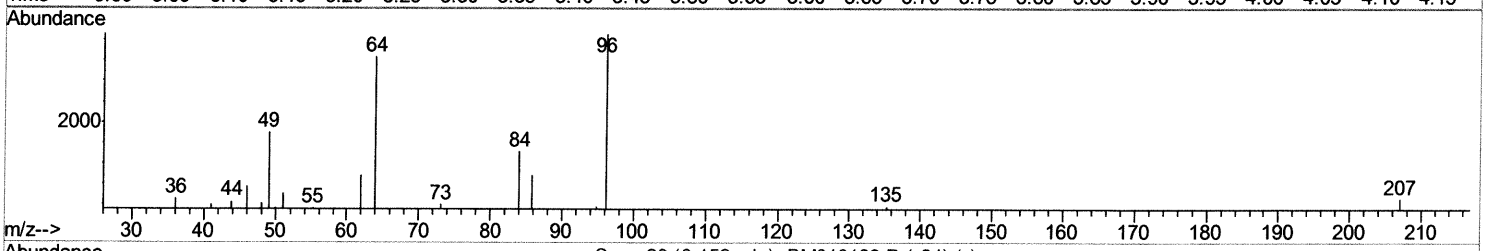
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

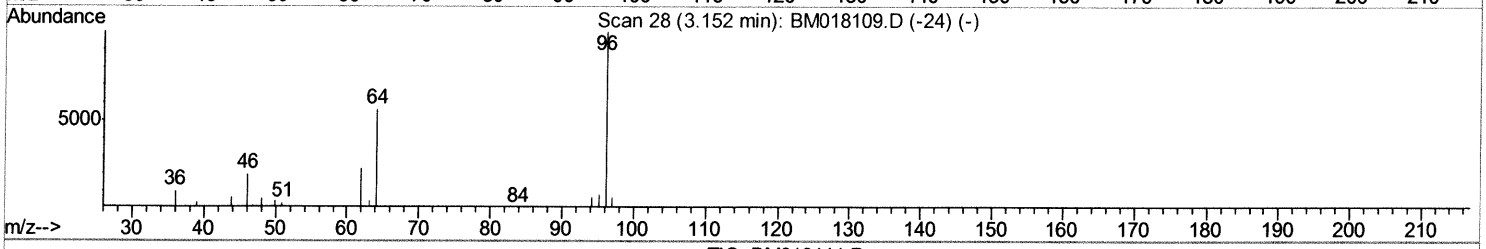
Quant Time: Dec 13 03:42:58 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:53 PM







TIC: BM018111.D

(3) 1,4-Dioxane-d8 (S)

3.152min (+0.000) 2.30ng/uL

response 5575

Ion	Exp%	Act%
96.00	100	100
64.00	68.40	88.34#
34.00	0.00	0.00
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

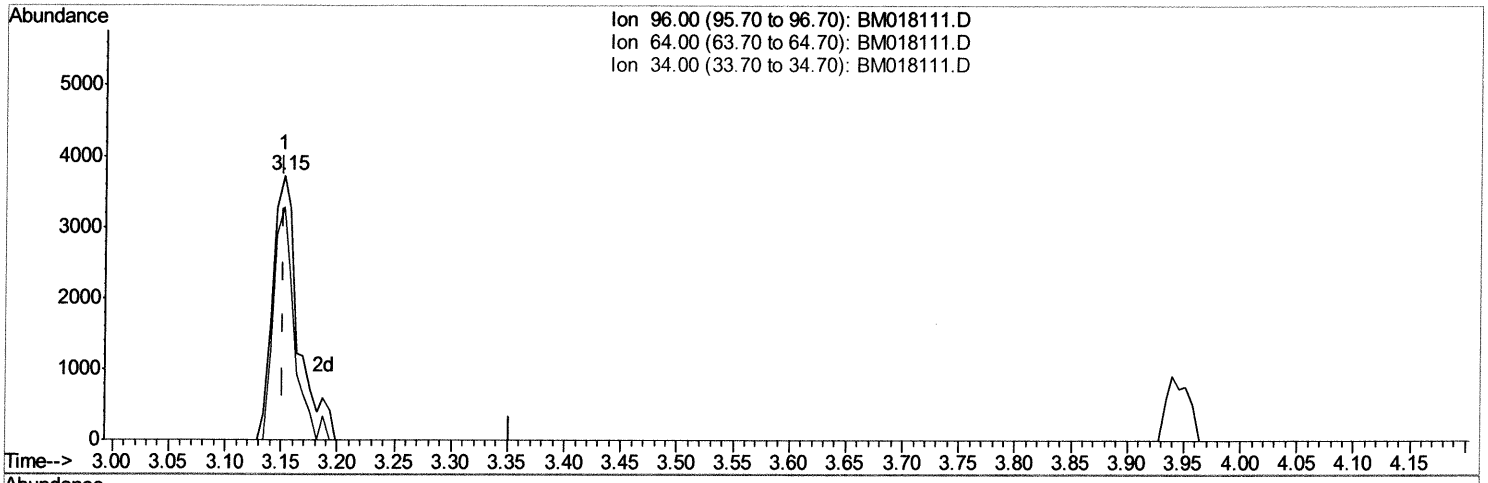
Quantitation Report (Qedit)

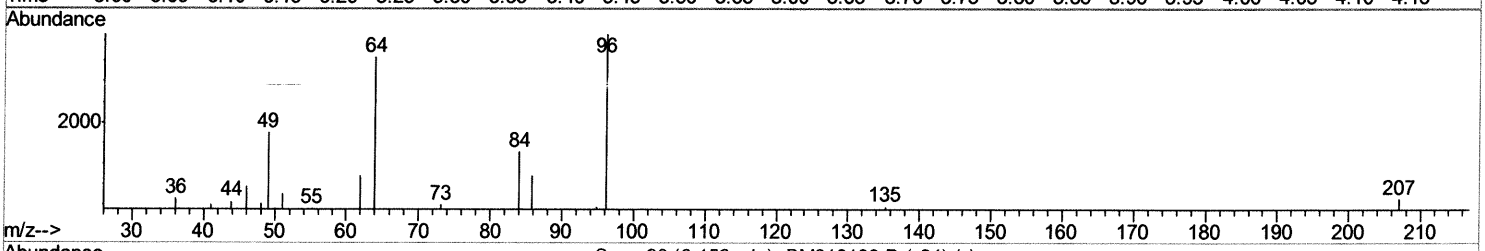
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

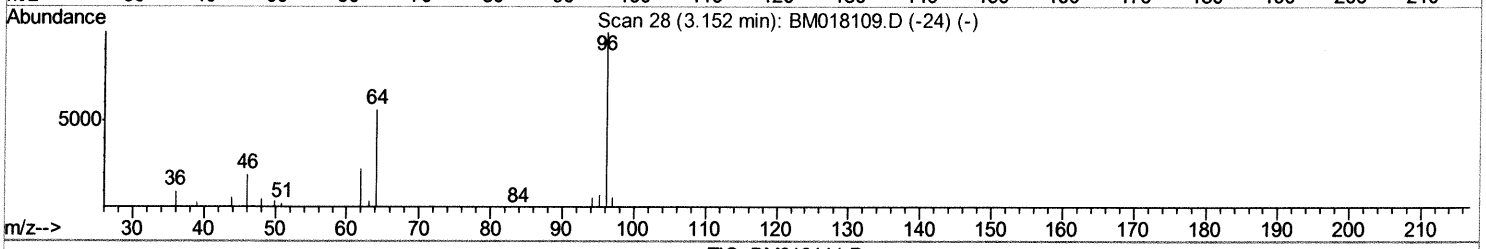
Quant Time: Dec 13 03:42:58 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:53 PM







TIC: BM018111.D

(3) 1,4-Dioxane-d8 (S)

3.152min (+0.000) 2.45ng/uL m SJ 12/13/18

response 5933

Ion	Exp%	Act%
96.00	100	100
64.00	68.40	88.34#
34.00	0.00	0.00
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

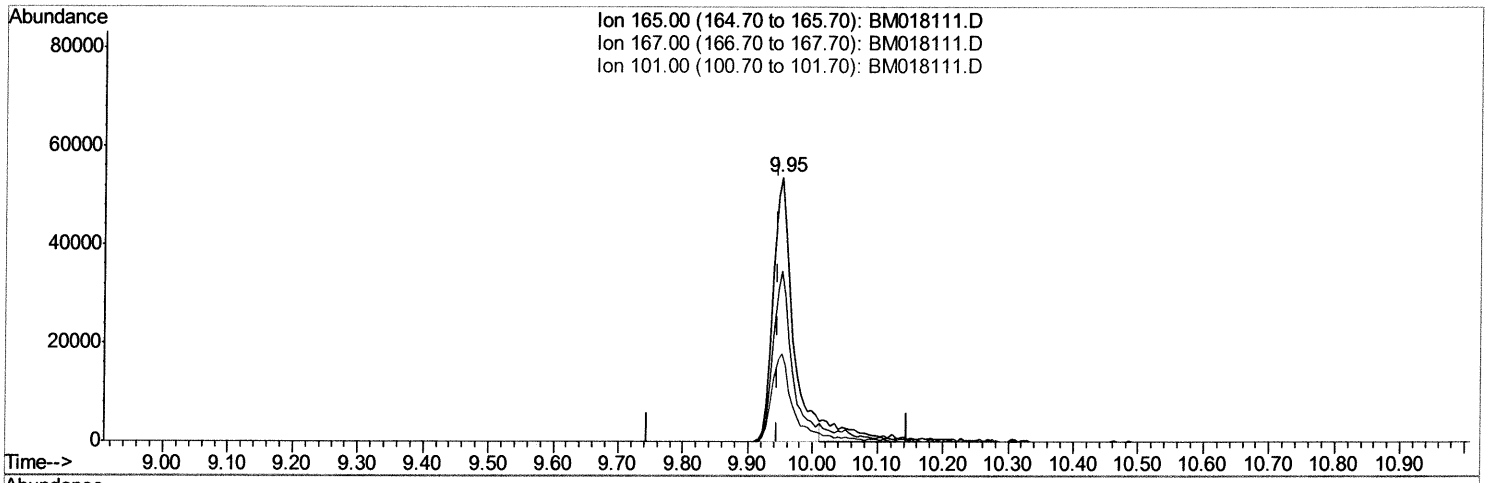
Quantitation Report (Qedit)

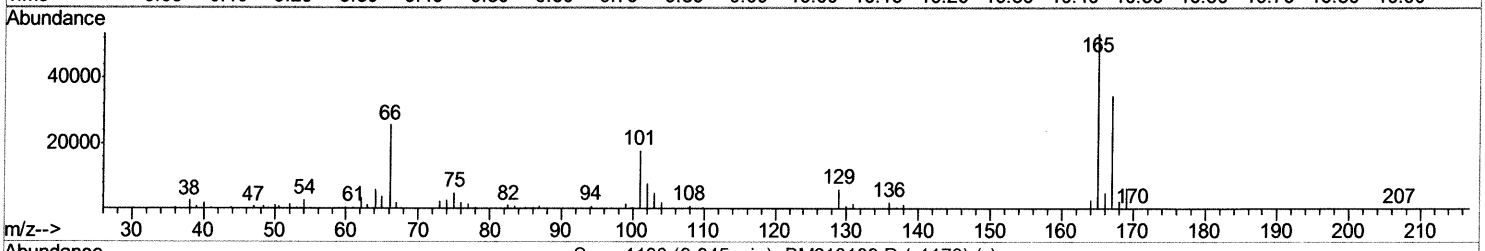
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

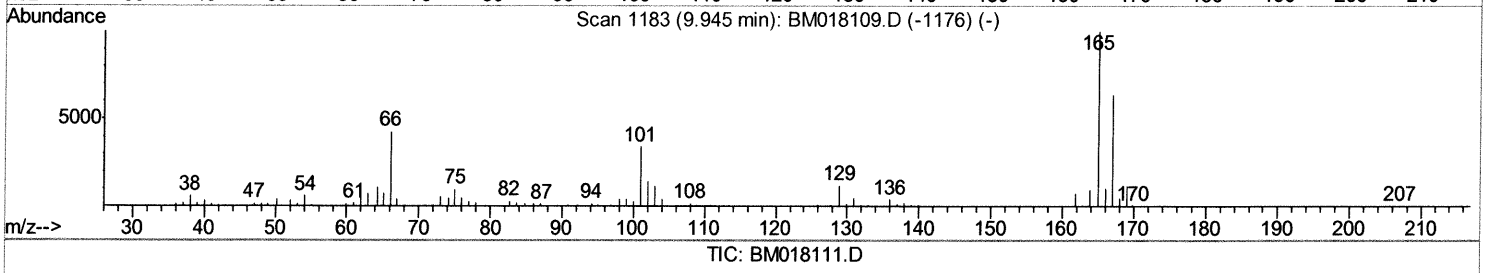
Quant Time: Dec 13 03:42:58 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:53 PM







TIC: BM018111.D

(26) 2,4-Dichlorophenol-d3 (S)

9.951min (+0.006) 13.18ng/ul

response 111629

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	64.52
101.00	34.80	33.29
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

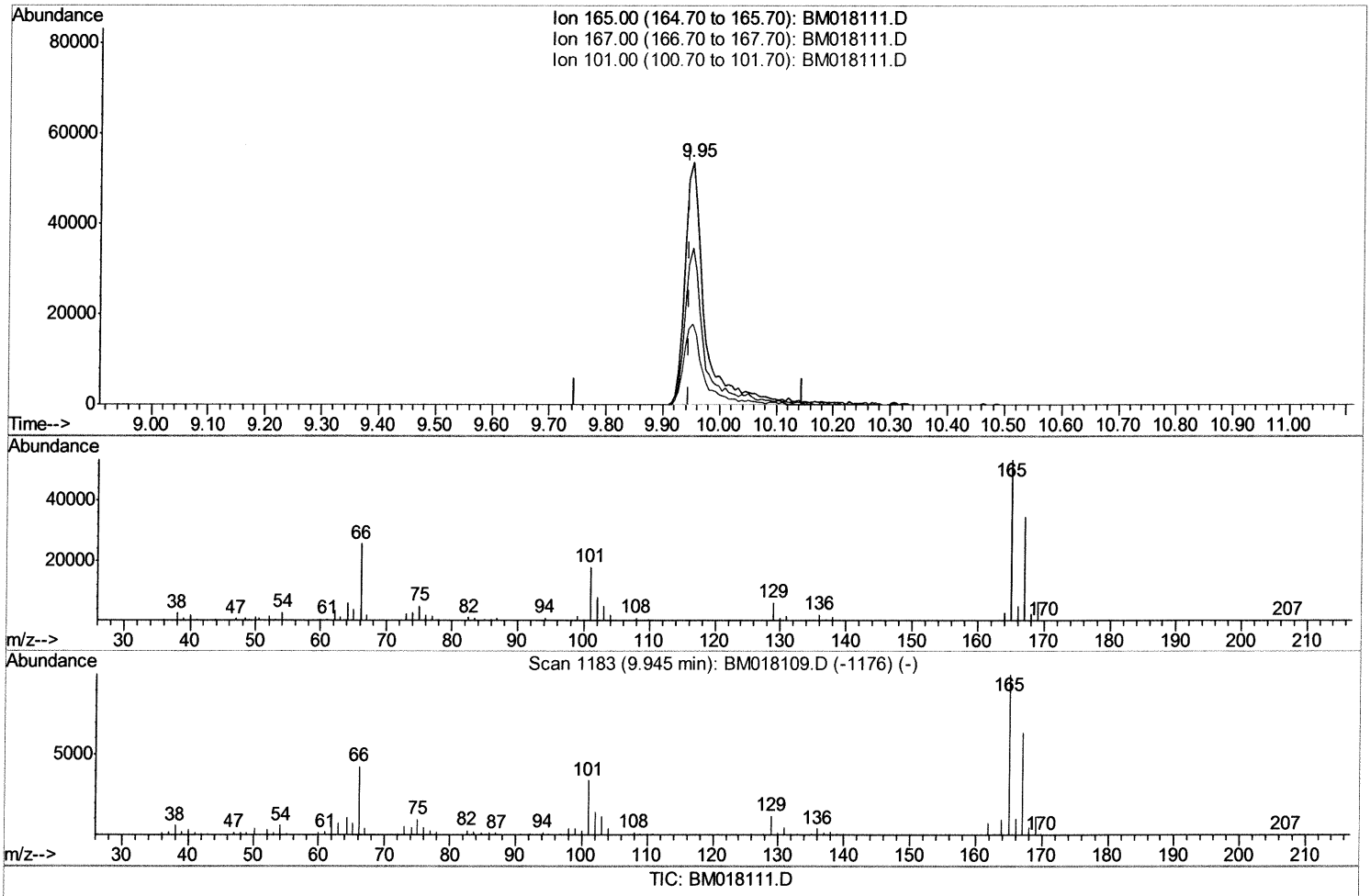
Quantitation Report (Qedit)

Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 13 03:42:58 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:53 PM



TIC: BM018111.D

(26) 2,4-Dichlorophenol-d3 (S)

9.951min (+0.006) 14.88ng/ul m) SJ 12/13/18

response 126024

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	64.52
101.00	34.80	33.29
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

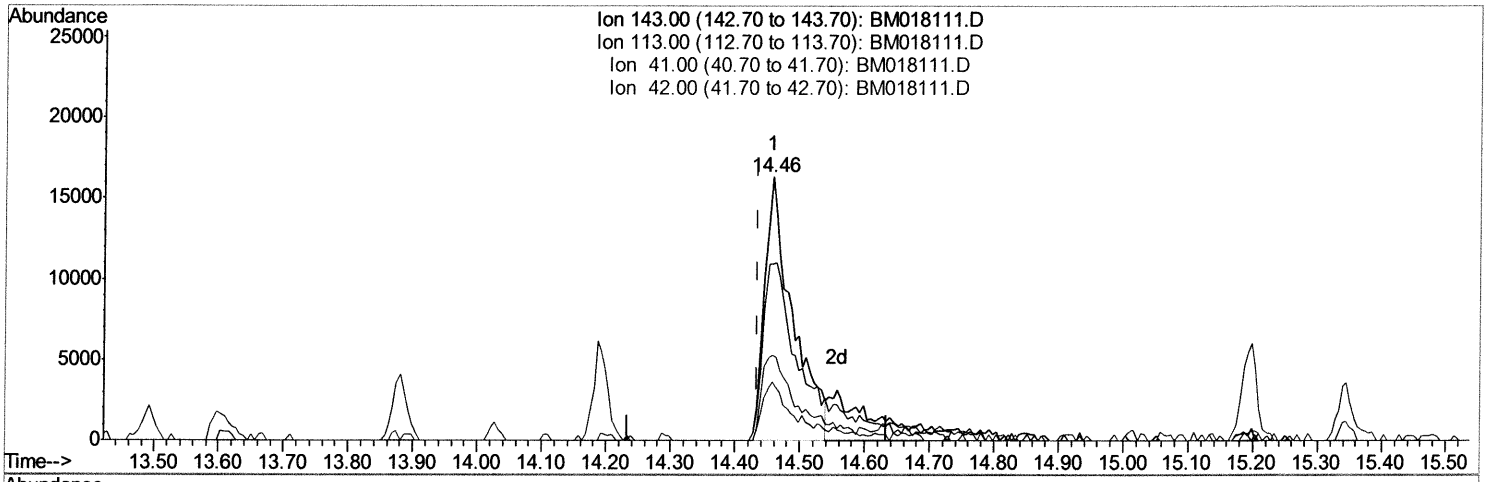
Quantitation Report (Qedit)

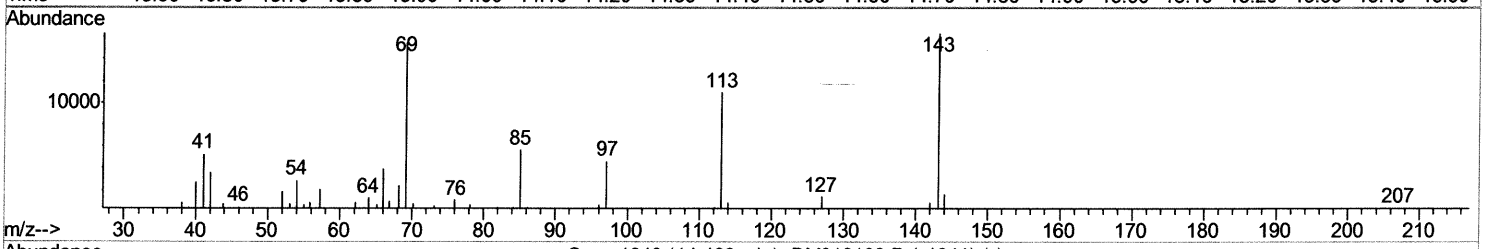
Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

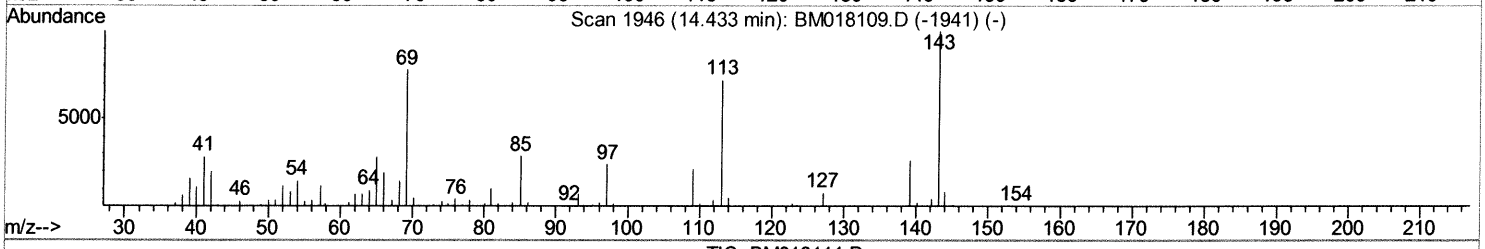
Quant Time: Dec 13 03:42:58 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:53 PM







TIC: BM018111.D

(51) 4-Nitrophenol-d4 (S)

14.457min (+0.024) 10.05ng/ul

response 49103

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	67.02
41.00	40.10	32.28
42.00	26.80	22.42

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

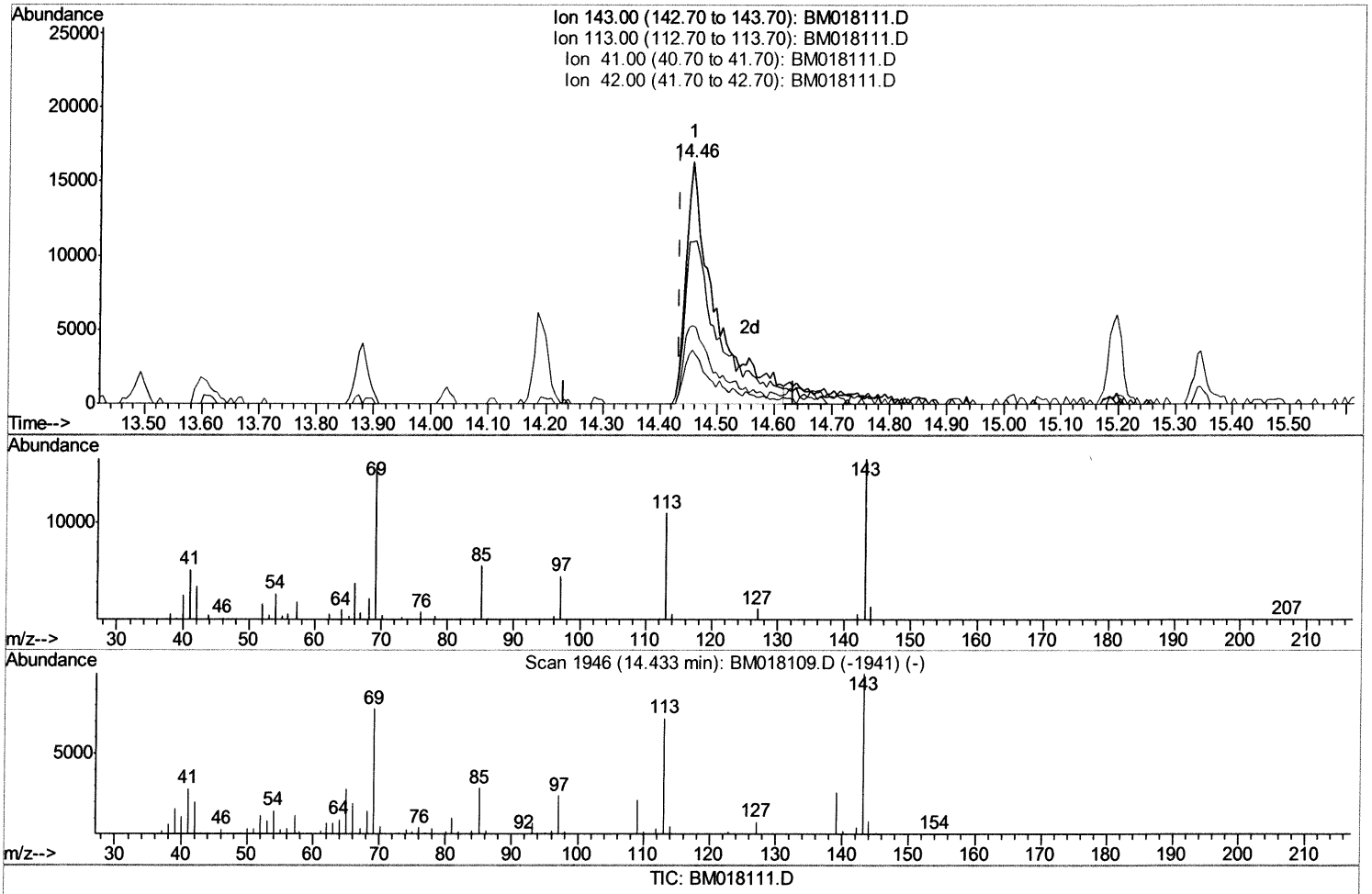
Quantitation Report (Qedit)

Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 13 03:42:58 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:53 PM



TIC: BM018111.D

(51) 4-Nitrophenol-d4 (S)

14.457min (+0.024) 11.94ng/ul m) SJ 12/13/18

response 58353

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	67.02
41.00	40.10	32.28
42.00	26.80	22.42

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018111.D
Acq On : 13 Dec 2018 02:19
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 13 03:53:14 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9E69

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:53 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	110911	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	505499	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	309753	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	729580	20.00	ng/ul	0.00
77) Chrysene-d12	21.16	240	894463	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	851666	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	5933m	2.45	ng/uL	0.00
5) Phenol-d5	6.73	99	146809	14.49	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	93000	15.23	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	129384	16.32	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	104909	12.68	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	65916	16.98	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	74497	16.74	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	126024m	14.88	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	140796	19.37	ng/ul	0.01
43) Dimethylphthalate-d6	13.62	166	482621	17.96	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	539314	16.58	ng/ul	0.00
51) 4-Nitrophenol-d4	14.46	143	58353m	11.94	ng/ul	0.02
57) Fluorene-d10	15.20	176	405629	17.48	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	64060	12.28	ng/ul	0.00
70) Anthracene-d10	17.05	188	616196	16.96	ng/ul	0.00
78) Pyrene-d10	19.36	212	722907	16.70	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	771149	16.70	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	41250	4.080	ng/ul	95
44) Dimethylphthalate	13.66	163	168009	6.452	ng/ul	97

SJ 12/13/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E74

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-05
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018095.D
% Solids : 88.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	75	U
100-52-7	Benzaldehyde	370	U
108-95-2	Phenol	110	J
111-44-4	Bis(2-Chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	190	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2-oxybis(1-Chloropropane)	370	U
98-86-2	Acetophenone	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	190	U
67-72-1	Hexachloroethane	190	U
98-95-3	Nitrobenzene	190	U
78-59-1	Isophorone	190	U
88-75-5	2-Nitrophenol	190	U
105-67-9	2,4-Dimethylphenol	190	U
111-91-1	Bis(2-Chloroethoxy)methane	190	U
120-83-2	2,4-Dichlorophenol	190	U
91-20-3	Naphthalene	190	U
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	190	U
105-60-2	Caprolactam	370	U
59-50-7	4-Chloro-3-methylphenol	190	U
91-57-6	2-Methylnaphthalene	190	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E74

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-05
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018095.D
% Solids : 88.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	190	U
92-52-4	1,1-Biphenyl	190	U
91-58-7	2-Chloronaphthalene	190	U
88-74-4	2-Nitroaniline	190	U
131-11-3	Dimethylphthalate	170	J
606-20-2	2,6-Dinitrotoluene	190	U
208-96-8	Acenaphthylene	190	U
99-09-2	3-Nitroaniline	370	U
83-32-9	Acenaphthene	190	U
51-28-5	2,4-Dinitrophenol	370	U
100-02-7	4-Nitrophenol	370	U
132-64-9	Dibenzofuran	190	U
121-14-2	2,4-Dinitrotoluene	190	U
84-66-2	Diethylphthalate	190	U
86-73-7	Fluorene	190	U
7005-72-3	4-Chlorophenyl-phenylether	190	U
100-01-6	4-Nitroaniline	370	U
534-52-1	4,6-Dinitro-2-methylphenol	370	U
86-30-6	N-Nitrosodiphenylamine	190	U
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U
101-55-3	4-Bromophenyl-phenylether	190	U
118-74-1	Hexachlorobenzene	190	U
1912-24-9	Atrazine	370	U
87-86-5	Pentachlorophenol	370	U
85-01-8	Phenanthrene	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E74

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-05
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018095.D
% Solids : 88.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	190	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	190	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	190	U
85-68-7	Butylbenzylphthalate	190	U
91-94-1	3,3-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	190	U
218-01-9	Chrysene	190	U
117-81-7	Bis(2-ethylhexyl)phthalate	190	U
117-84-0	Di-n-octyl phthalate	370	U
205-99-2	Benzo(b)fluoranthene	190	U
207-08-9	Benzo(k)fluoranthene	190	U
50-32-8	Benzo(a)pyrene	190	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	U
53-70-3	Dibenzo(a,h)anthracene	190	U
191-24-2	Benzo(g,h,i)perylene	190	U
58-90-2	2,3,4,6-Tetrachlorophenol	190	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E74

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-05
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018095.D
% Solids : 88.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/12/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000475-20-7	1,4-Methanoazulene, decahydro-4,8,	13.45	91	JN
2	000057-10-3	n-Hexadecanoic acid	17.87	370	JN
3	000057-11-4	Octadecanoic acid	19.16	120	JN
4	000511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,1	20.25	260	JN
5	000489-40-7	1H-Cycloprop[e]azulene, 1a,2,3,4,4	25.66	330	JN
6	000083-47-6	.gamma.-Sitosterol	26.23	140	JN
7	E966796	Total Alkanes	N/A	740	

EPA-designated Registry Number.

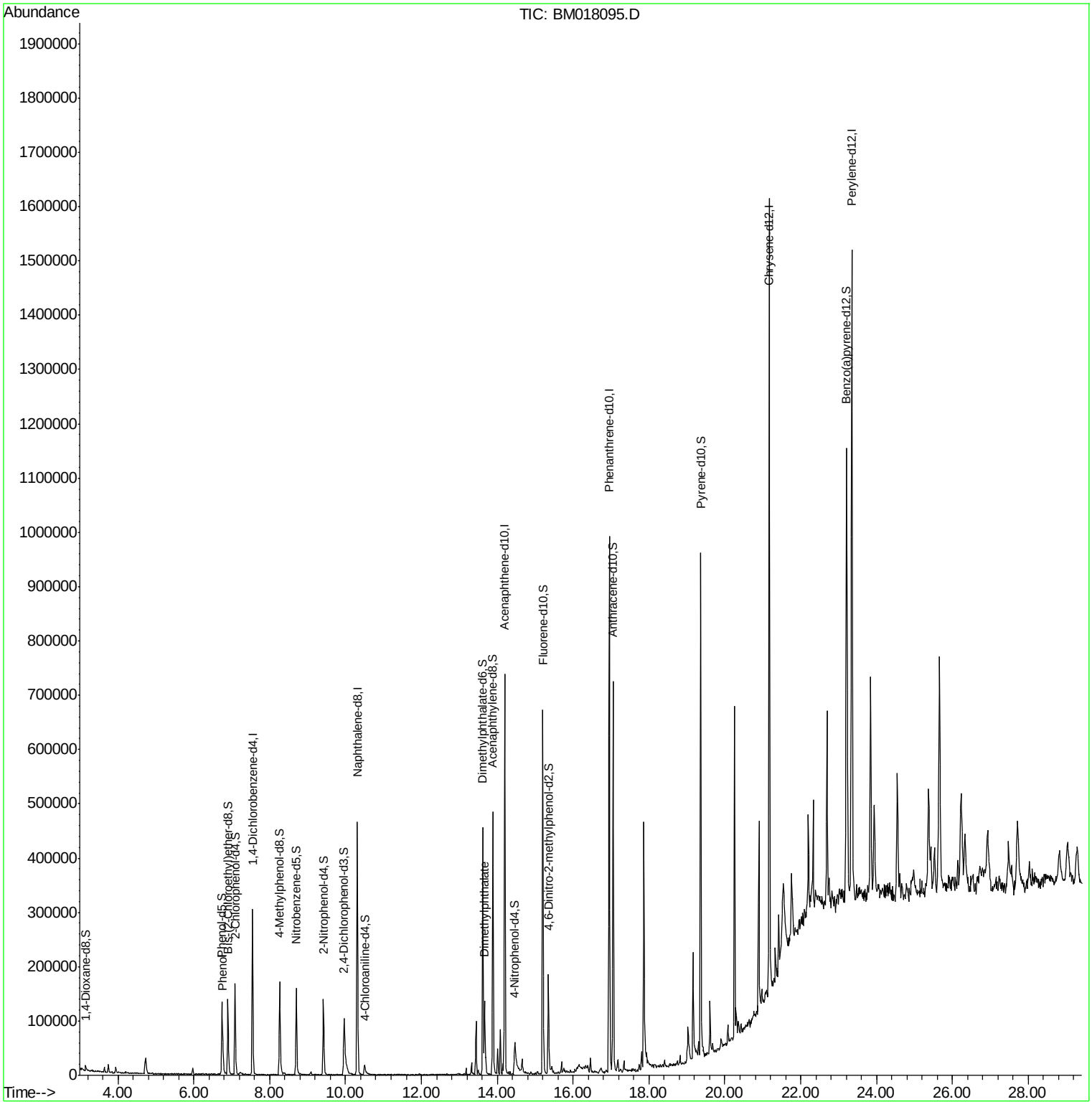
Quantitation Report (LSC Reviewed)

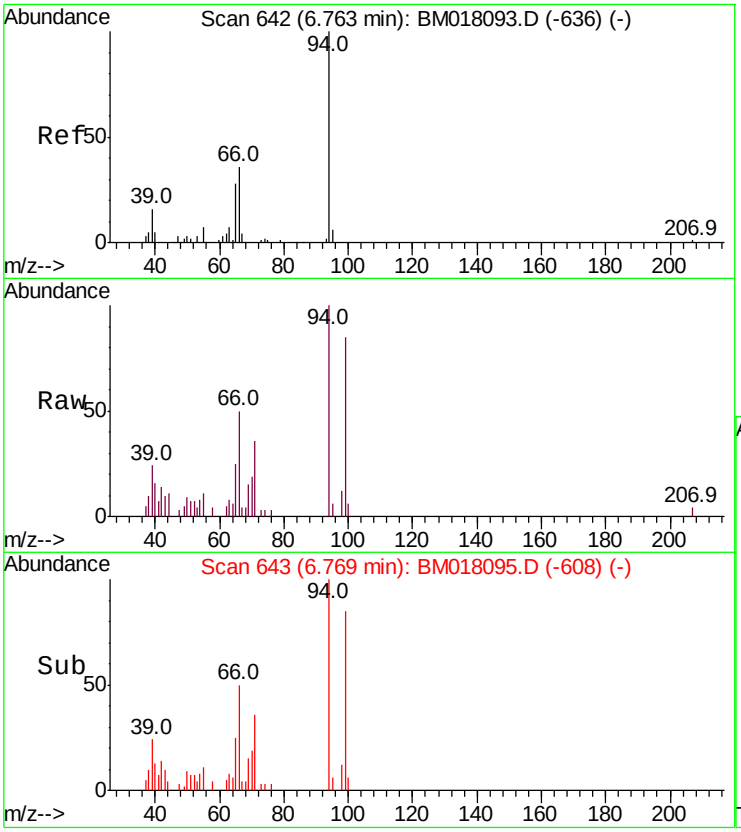
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 13 02:54:08 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E74

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:01 PM

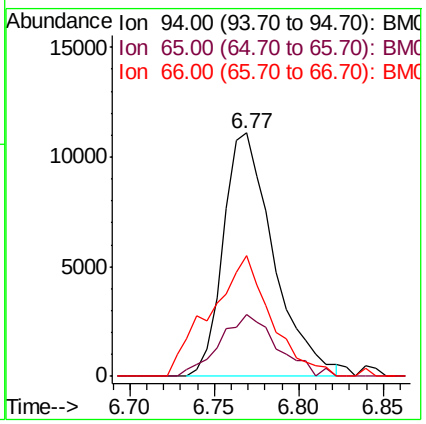




#6
Phenol
Concen: 2.847 ng/ul
RT: 6.77 min Scan# 643
Delta R.T. 0.01 min
Lab File: BM018095.D
Acq: 12 Dec 2018 16:38

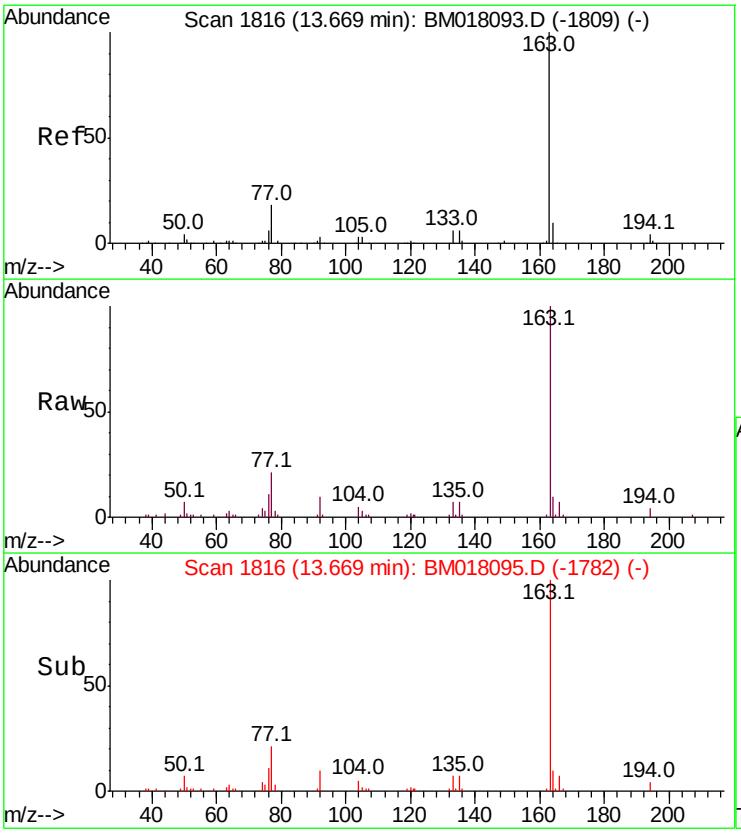
Tgt Ion: 94 Resp: 22982

Ion	Ratio	Lower	Upper
94	100		
65	25.4	24.7	37.1
66	49.5	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9E74

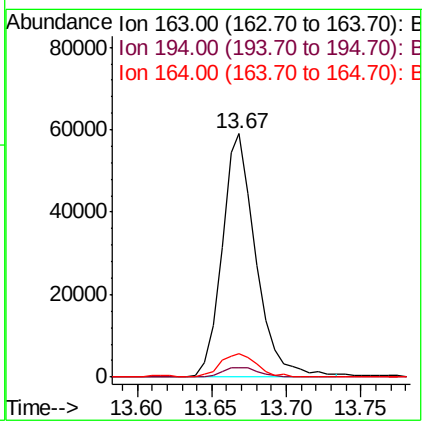
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:01 PM



#44
Dimethylphthalate
Concen: 4.456 ng/ul
RT: 13.67 min Scan# 1816
Delta R.T. -0.00 min
Lab File: BM018095.D
Acq: 12 Dec 2018 16:38

Tgt Ion:163 Resp: 93814

Ion	Ratio	Lower	Upper
163	100		
194	3.7	3.4	5.0
164	9.8	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9E74

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:01 PM

Quant Time: Dec 13 02:54:08 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	88555	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	412360	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	250423	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.96	188	586204	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	736047	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	848706	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	5684	2.94	ng/uL	0.00
5) Phenol-d5	6.74	99	99009	12.24	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	64888	13.31	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	86499	13.67	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	78337	11.85	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	44253	13.97	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	50761	13.99	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.96	165	80614m	11.67	ng/ul	0.02
29) 4-Chloroaniline-d4	10.50	131	26018m	4.39	ng/ul	0.03
43) Dimethylphthalate-d6	13.62	166	342894	15.78	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	355938	13.54	ng/ul	0.00
51) 4-Nitrophenol-d4	14.46	143	38124m	9.65	ng/ul	0.02
57) Fluorene-d10	15.20	176	278820	14.86	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	44012	10.50	ng/ul	0.00
70) Anthracene-d10	17.05	188	405636	13.90	ng/ul	0.00
78) Pyrene-d10	19.36	212	462121	12.98	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	570237	12.39	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.77	94	22982	2.847	ng/ul	90
44) Dimethylphthalate	13.67	163	93814	4.456	ng/ul	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E74

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.146	26	27	32	rBV3	9270	12301	0.51%	0.048%
2	3.640	109	111	117	rVB3	10156	13759	0.57%	0.053%
3	3.746	125	129	135	rVB	14783	21522	0.89%	0.083%
4	3.946	159	163	171	rVB3	11330	17082	0.71%	0.066%
5	4.716	289	294	295	rBV	21739	27682	1.15%	0.107%
6	4.734	295	297	302	rVV2	28770	40260	1.67%	0.156%
7	5.975	501	508	515	rVB4	11659	18369	0.76%	0.071%
8	6.740	632	638	652	rBV2	132644	315882	13.12%	1.223%
9	6.898	659	665	677	rBV	138913	226837	9.42%	0.878%
10	7.087	691	697	709	rBV	167088	291222	12.10%	1.127%
11	7.228	715	721	723	rBV3	3064	5023	0.21%	0.019%
12	7.545	768	775	784	rBV	304765	506822	21.06%	1.961%
13	8.263	891	897	912	rBV	171374	328196	13.64%	1.270%
14	8.704	964	972	981	rBV	159583	285675	11.87%	1.106%
15	9.086	1032	1037	1041	rVB3	6153	9797	0.41%	0.038%
16	9.416	1085	1093	1106	rBV	140090	247751	10.29%	0.959%
17	9.963	1179	1186	1206	rVV2	105145	335077	13.92%	1.297%
18	10.104	1209	1210	1214	rVV4	4153	5716	0.24%	0.022%
19	10.139	1214	1216	1220	rVV3	2549	4413	0.18%	0.017%
20	10.310	1239	1245	1256	rBV	465549	805815	33.48%	3.119%
21	10.504	1272	1278	1285	rBV3	16963	47929	1.99%	0.185%
22	10.551	1285	1286	1289	rVV	4220	4516	0.19%	0.017%
23	11.945	1516	1523	1531	rVB3	1998	5247	0.22%	0.020%
24	12.957	1690	1695	1700	rVV2	3176	4715	0.20%	0.018%
25	13.180	1729	1733	1738	rVB4	12670	14689	0.61%	0.057%
26	13.321	1750	1757	1761	rBV5	23286	29410	1.22%	0.114%
27	13.357	1761	1763	1770	rVV4	4155	5163	0.21%	0.020%
28	13.445	1771	1778	1783	rVV2	99386	144020	5.98%	0.557%
29	13.498	1783	1787	1790	rVV3	8794	13157	0.55%	0.051%
30	13.616	1802	1807	1812	rBV	455133	698968	29.04%	2.705%
31	13.669	1812	1816	1820	rVB	108721	157846	6.56%	0.611%
32	13.886	1847	1853	1865	rBV	483248	744612	30.94%	2.882%
33	14.010	1869	1874	1881	rVV2	47008	69862	2.90%	0.270%
34	14.080	1881	1886	1893	rVV	83095	114236	4.75%	0.442%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E74

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	14.145	1893	1897	1900	rVV3	19724	25386	1.05%	0.098%
36	14.198	1900	1906	1918	rVV3	737035	1180783	49.06%	4.570%
37	14.333	1927	1929	1931	rVV2	4879	5589	0.23%	0.022%
38	14.463	1943	1951	1969	rBV3	59260	227026	9.43%	0.879%
39	14.621	1975	1978	1979	rBV4	4916	4133	0.17%	0.016%
40	14.657	1979	1984	1992	rVB7	25743	50754	2.11%	0.196%
41	14.816	2009	2011	2016	rVB4	3107	4087	0.17%	0.016%
42	14.892	2019	2024	2029	rVB2	4744	6615	0.27%	0.026%
43	15.045	2047	2050	2052	rBV2	5274	7318	0.30%	0.028%
44	15.198	2069	2076	2086	rBV	672203	1029874	42.79%	3.986%
45	15.268	2086	2088	2093	rVB2	4100	4291	0.18%	0.017%
46	15.351	2096	2102	2110	rBV	182104	303370	12.60%	1.174%
47	15.480	2121	2124	2129	rVB5	6092	8979	0.37%	0.035%
48	15.692	2153	2160	2164	rVV4	20715	33779	1.40%	0.131%
49	15.757	2168	2171	2173	rVV3	8874	10491	0.44%	0.041%
50	15.827	2178	2183	2187	rVV5	3986	6875	0.29%	0.027%
51	15.927	2196	2200	2204	rBV4	5713	7673	0.32%	0.030%
52	16.051	2219	2221	2222	rBV	5676	4300	0.18%	0.017%
53	16.162	2237	2240	2241	rVB3	5533	5569	0.23%	0.022%
54	16.333	2266	2269	2272	rBV3	6031	8248	0.34%	0.032%
55	16.386	2275	2278	2285	rVB7	11947	20788	0.86%	0.080%
56	16.457	2285	2290	2295	rVB2	26843	38264	1.59%	0.148%
57	16.686	2326	2329	2330	rBV2	4080	4138	0.17%	0.016%
58	16.739	2330	2338	2342	rVV8	8865	24971	1.04%	0.097%
59	16.868	2356	2360	2361	rBV2	5603	6501	0.27%	0.025%
60	16.957	2368	2375	2381	rBV2	985899	1444225	60.00%	5.589%
61	17.051	2386	2391	2405	rVV2	718706	1045366	43.43%	4.046%
62	17.186	2405	2414	2419	rVB7	22745	54371	2.26%	0.210%
63	17.339	2435	2440	2447	rBV6	20496	40626	1.69%	0.157%
64	17.639	2487	2491	2493	rVB5	4614	4749	0.20%	0.018%
65	17.739	2503	2508	2515	rBV9	14277	30199	1.25%	0.117%
66	17.804	2515	2519	2523	rBV2	34242	47300	1.97%	0.183%
67	17.868	2524	2530	2540	rBV	450482	711239	29.55%	2.753%
68	17.939	2540	2542	2545	rVB2	19775	19161	0.80%	0.074%
69	18.156	2576	2579	2583	rVB5	4998	6900	0.29%	0.027%
70	18.298	2601	2603	2606	rVB4	6264	5213	0.22%	0.020%
71	18.362	2610	2614	2619	rBV6	5485	8525	0.35%	0.033%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E74

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

72	18.409	2619	2622	2627	rBV5	13465	20112	0.84%	0.078%
73	18.539	2641	2644	2645	rBV3	5273	5041	0.21%	0.020%
74	18.821	2690	2692	2696	rVB4	17141	17333	0.72%	0.067%
75	19.003	2718	2723	2725	rBV4	30315	43759	1.82%	0.169%
76	19.033	2725	2728	2731	rVV3	42380	57061	2.37%	0.221%
77	19.156	2745	2749	2762	rBV	196858	356024	14.79%	1.378%
78	19.309	2771	2775	2778	rVB3	26361	29514	1.23%	0.114%
79	19.362	2778	2784	2792	rBV	924862	1284604	53.37%	4.972%
80	19.480	2802	2804	2806	rBV3	5897	5373	0.22%	0.021%
81	19.609	2821	2826	2833	rBV	96882	141438	5.88%	0.547%
82	19.903	2872	2876	2883	rBV10	18461	43526	1.81%	0.168%
83	20.080	2903	2906	2912	rVB3	29536	40193	1.67%	0.156%
84	20.250	2931	2935	2940	rBV	608099	760135	31.58%	2.942%
85	20.292	2940	2942	2949	rVV6	51040	98262	4.08%	0.380%
86	20.362	2952	2954	2961	rVB6	22575	29636	1.23%	0.115%
87	20.897	3040	3045	3050	rBV	351670	493595	20.51%	1.910%
88	21.168	3086	3091	3103	rBV	1468415	2145476	89.14%	8.303%
89	21.333	3116	3119	3124	rBV3	55106	76468	3.18%	0.296%
90	21.421	3131	3134	3137	rBV2	101043	120049	4.99%	0.465%
91	21.756	3188	3191	3195	rBV2	111685	180386	7.49%	0.698%
92	22.203	3264	3267	3272	rVB2	169182	223049	9.27%	0.863%
93	22.327	3285	3288	3292	rVB	191704	235970	9.80%	0.913%
94	22.691	3346	3350	3355	rVB	340470	448246	18.62%	1.735%
95	23.209	3432	3438	3450	rBV2	822163	1912264	79.45%	7.401%
96	23.344	3455	3461	3477	rVB2	1197097	2406849	100.00%	9.315%
97	23.844	3541	3546	3554	rVB	391629	727768	30.24%	2.817%
98	24.550	3662	3666	3672	rVB2	210200	400148	16.63%	1.549%
99	25.662	3849	3855	3867	rVB3	414343	1058081	43.96%	4.095%
100	26.232	3946	3952	3962	rVB3	150643	457118	18.99%	1.769%

Sum of corrected areas: 25838725

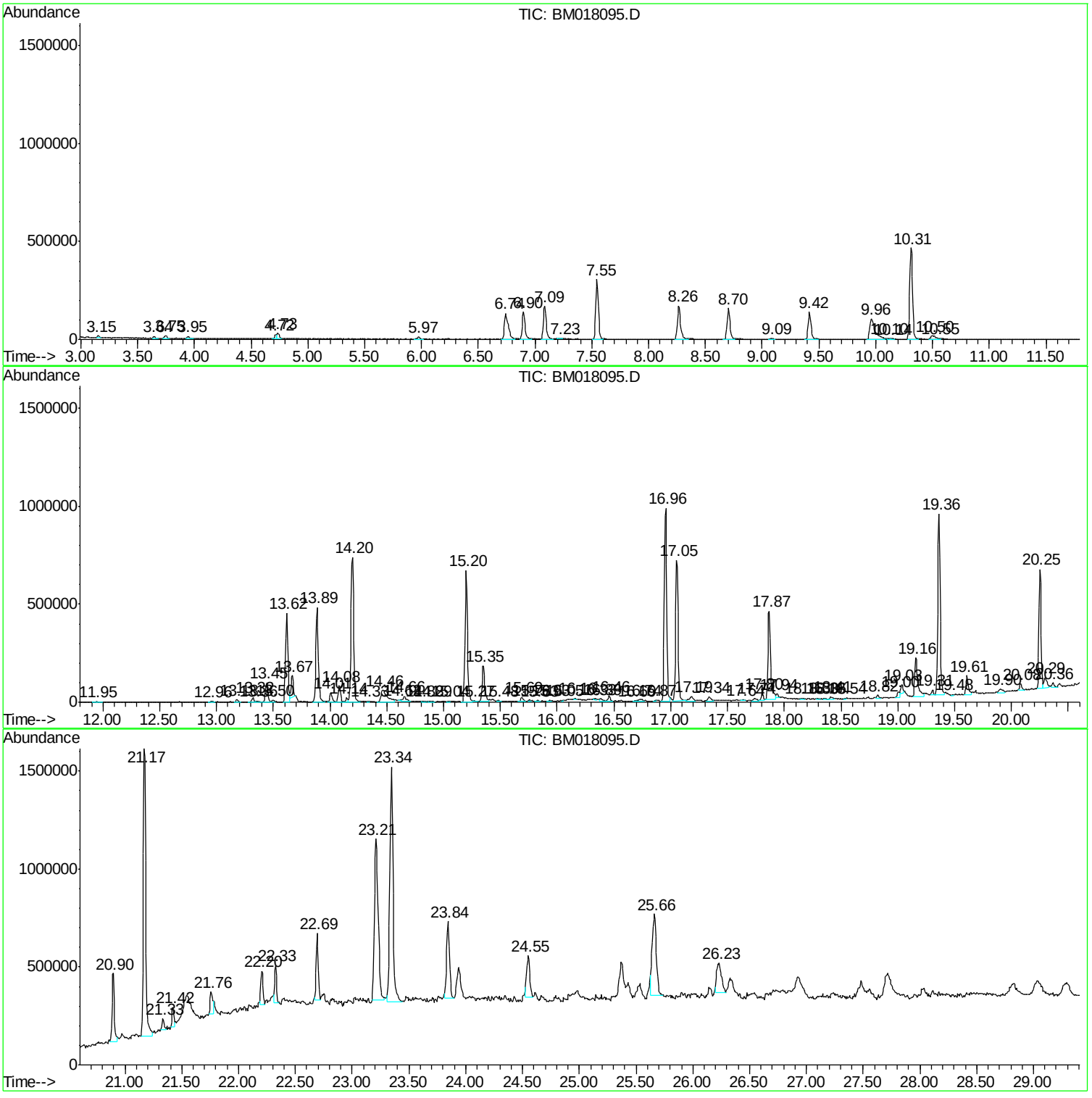
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E74

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E74

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

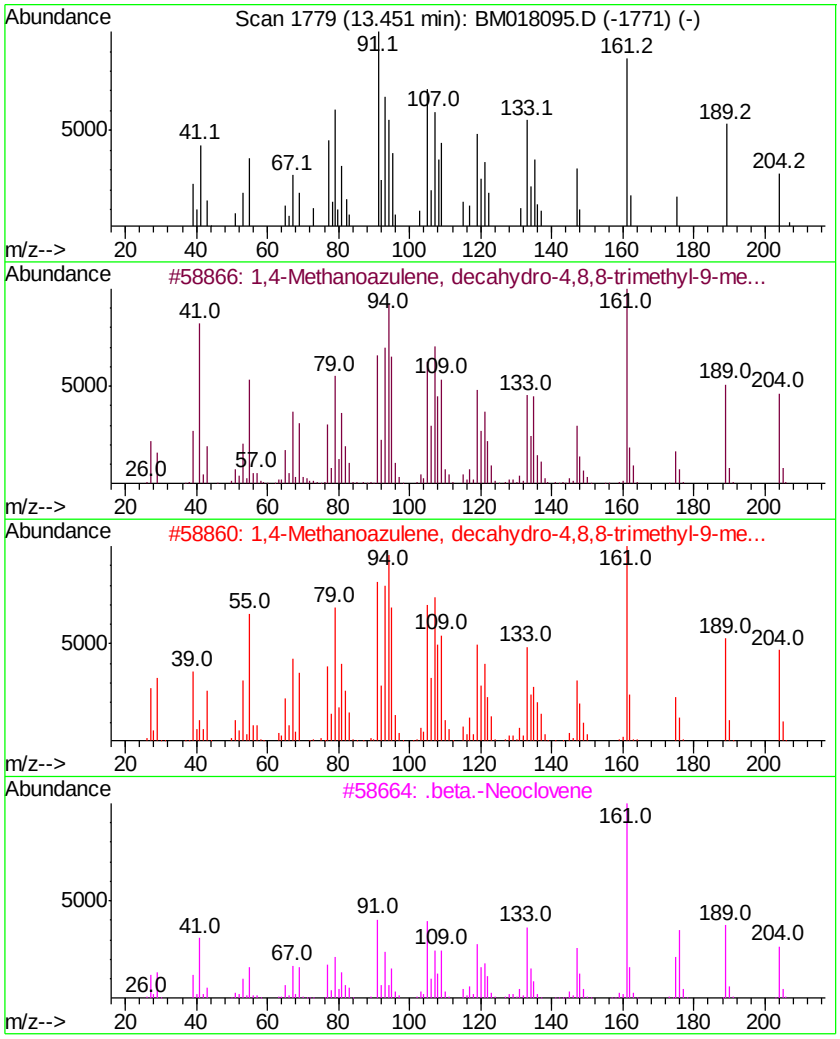
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

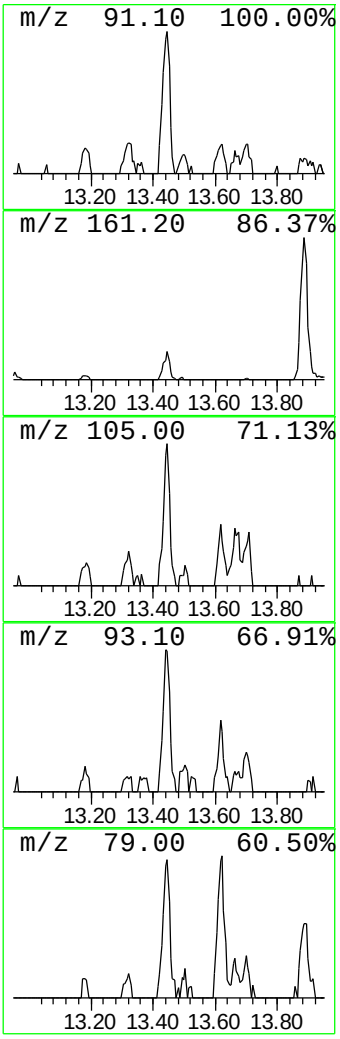
****

Peak Number 1 1,4-Methanoazulene, decahyd... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.45	2.44 ng/ul	144020	Acenaphthene-d10	14.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	91
2	1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	91
3	.beta.-Neoclovene	204	C15H24	056684-96-9	78
4	Longifolene-I2	204	C15H24	1000162-76-7	78
5	Aromadendrene	204	C15H24	109119-91-7	64





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E74

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

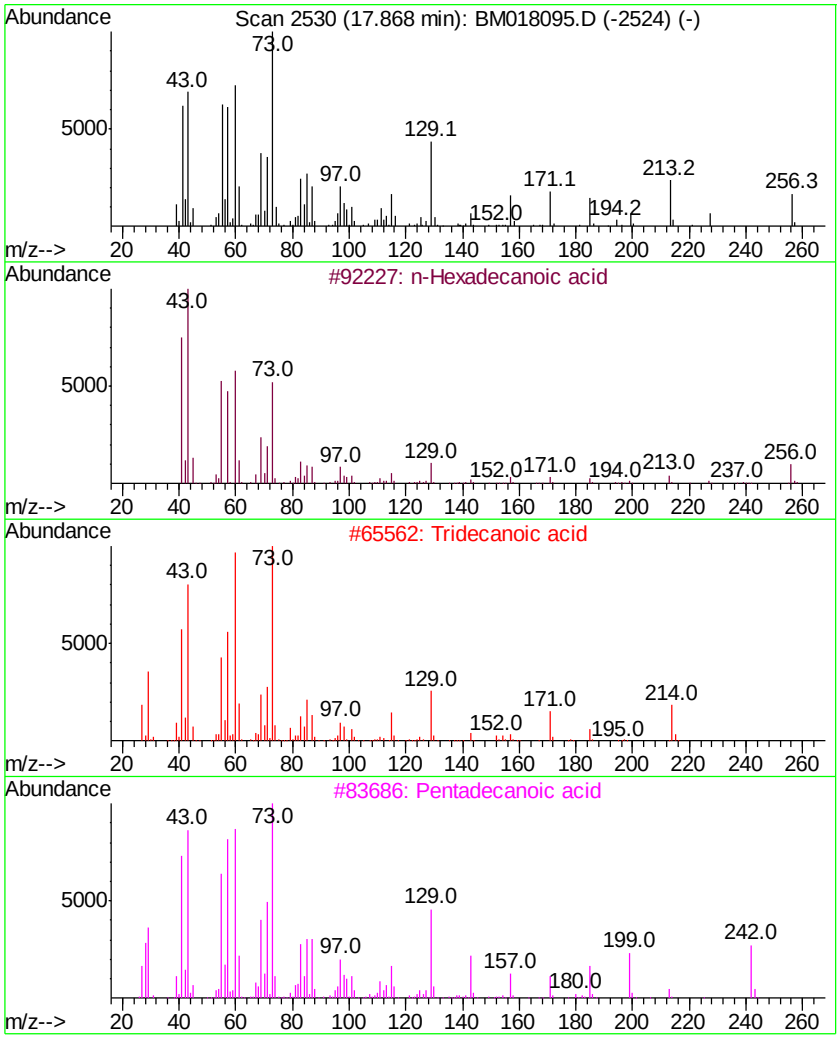
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

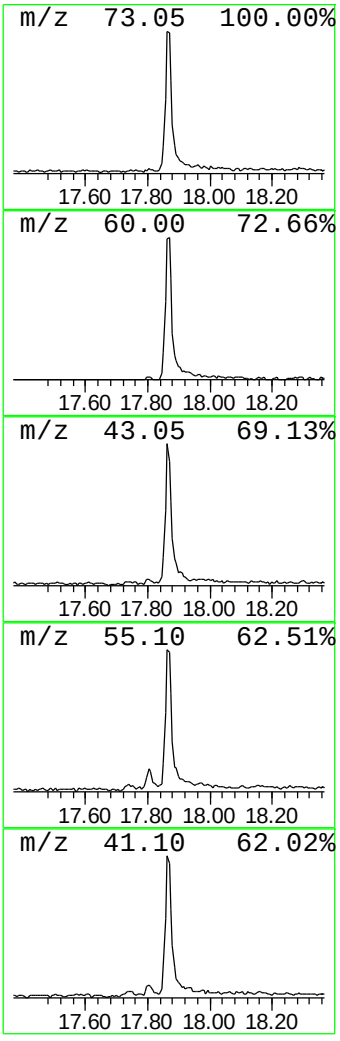
****

Peak Number 2 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.87	9.85 ng/ul	711239	Phenanthrene-d10	16.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	Tridecanoic acid	214	C13H26O2	000638-53-9	86
3	Pentadecanoic acid	242	C15H30O2	001002-84-2	74
4	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	70
5	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	70





Library Search Compound Report

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Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E74

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

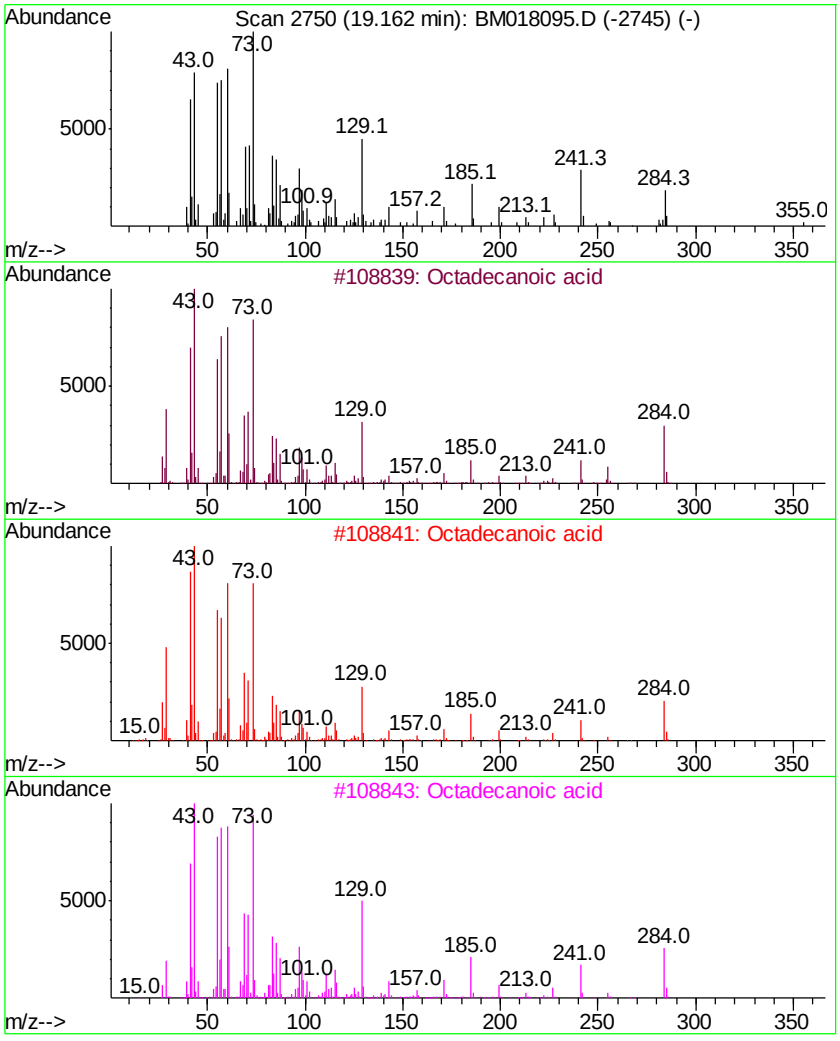
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

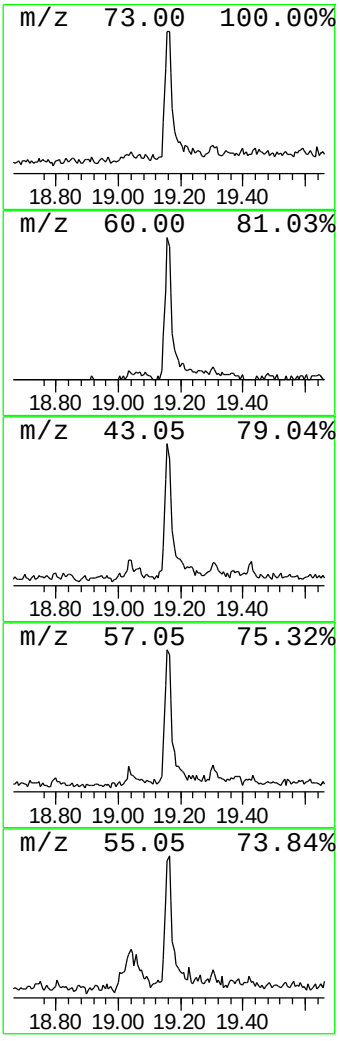
****

Peak Number 3 Octadecanoic acid Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.16	3.32 ng/ul	356024	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	94
2	Octadecanoic acid	284	C18H36O2	000057-11-4	93
3	Octadecanoic acid	284	C18H36O2	000057-11-4	92
4	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	90
5	Octadecanoic acid	284	C18H36O2	000057-11-4	86





Library Search Compound Report

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Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E74

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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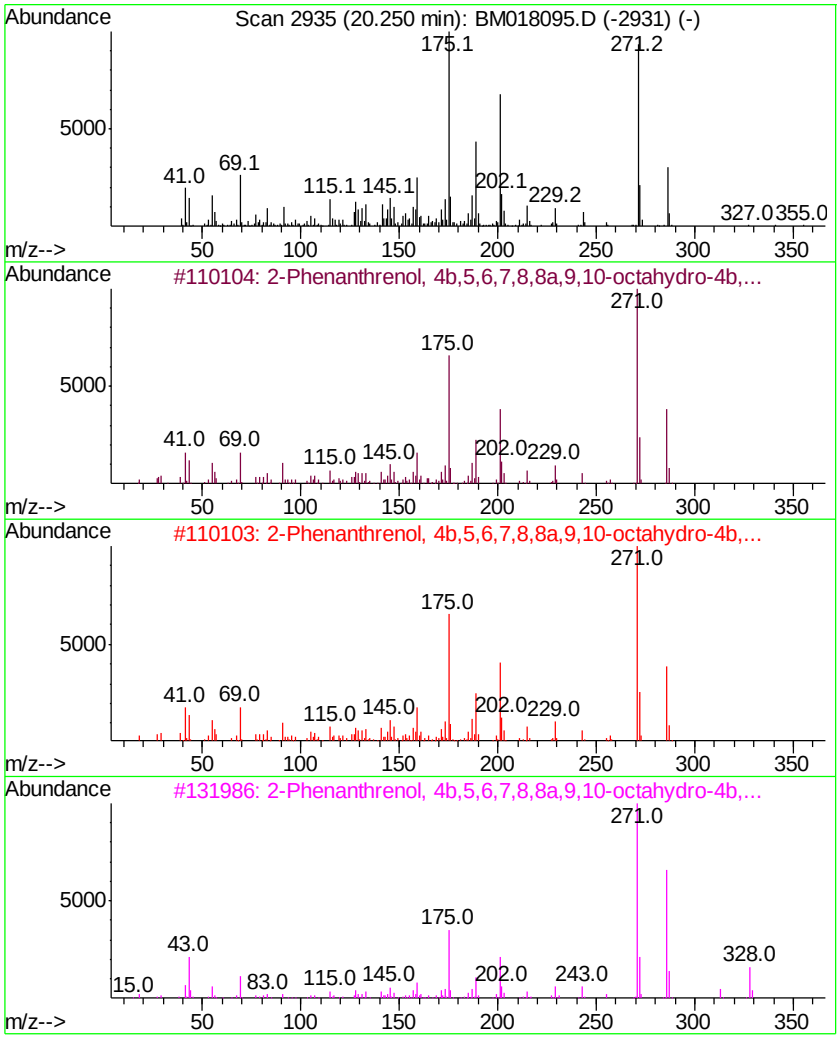
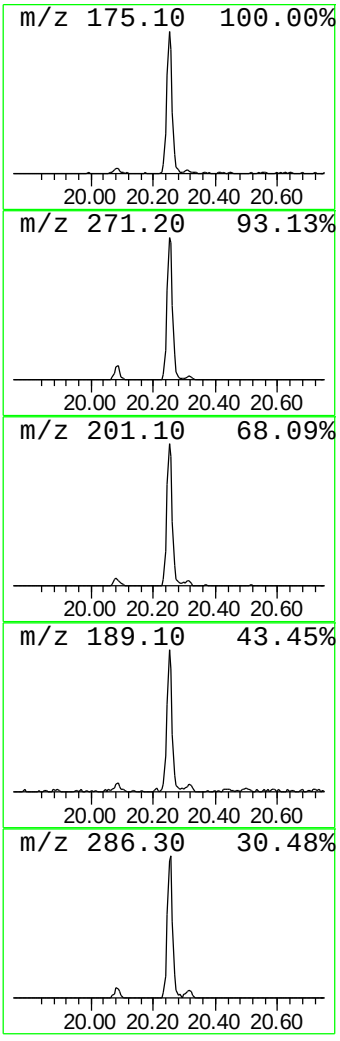
Peak Number 4 2-Phenanthrenol, 4b,5,6,7,8... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.25	7.09 ng/ul	760135	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Phenanthrenol, 4b,5,6,7,8,8a,9...	286	C20H30O	000511-15-9	97
2	2-Phenanthrenol, 4b,5,6,7,8,8a,9...	286	C20H30O	000511-15-9	96
3	2-Phenanthrenol, 4b,5,6,7,8,8a,9...	328	C22H32O2	015340-82-6	80
4	5-Androstene, 4,4-dimethyl-	286	C21H34	1000194-15-4	43
5	Pyrrolidine, 1-[5-(1,3-benzodiox...	271	C16H17NO3	025924-78-1	27





Library Search Compound Report

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Misc :
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Instrument : BNA_M
ClientSampleId : F9E74

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Quant Title : SVOA CALIBRATION

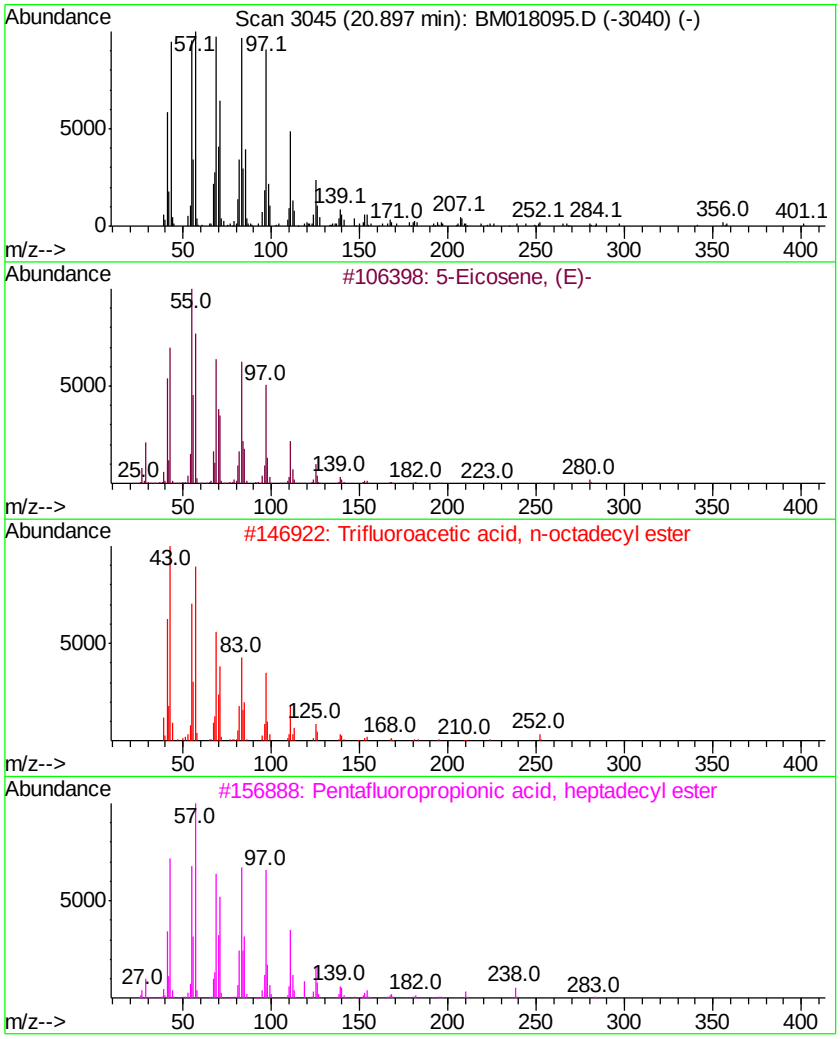
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

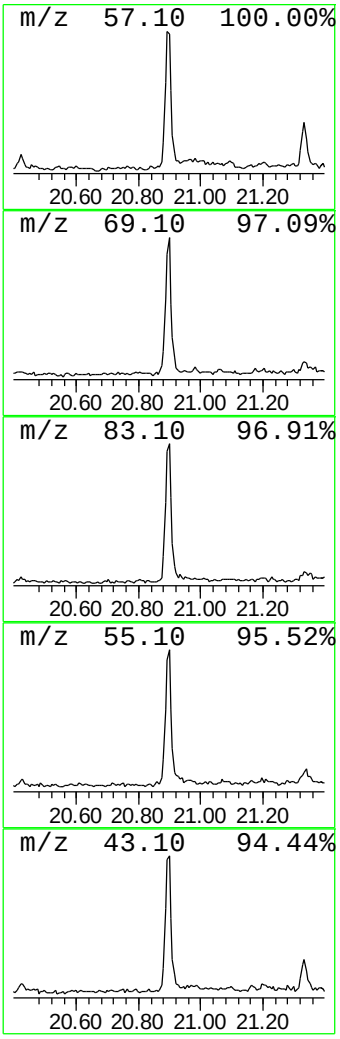
****

Peak Number 5 (DEL) Alkane: Cyclic20.90 Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.90	4.60 ng/ul	493595	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Eicosene, (E)-	280	C20H40	074685-30-6	93
2	Trifluoroacetic acid, n-octadecy...	366	C20H37F3O2	079392-43-1	91
3	Pentafluoropropionic acid, hepta...	402	C20H35F5O2	1000283-04-2	90
4	Heptafluorobutyric acid, n-penta...	424	C19H31F7O2	1000216-79-3	87
5	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	87





Library Search Compound Report

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Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E74

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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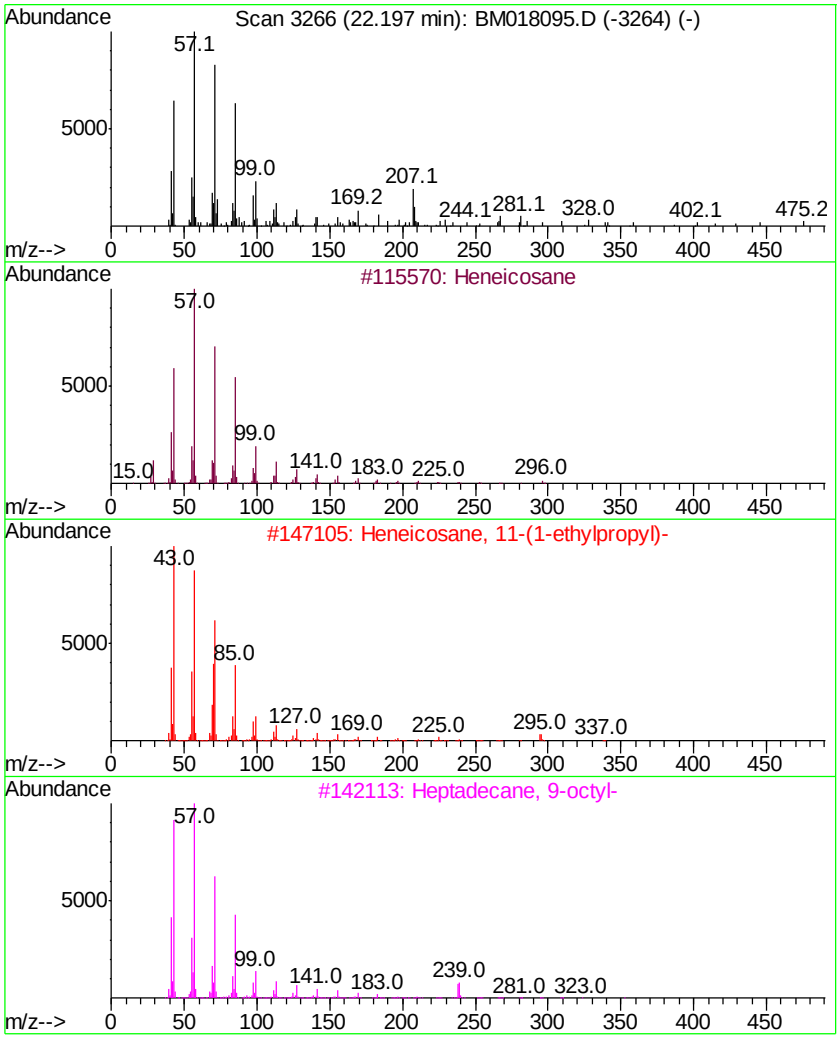
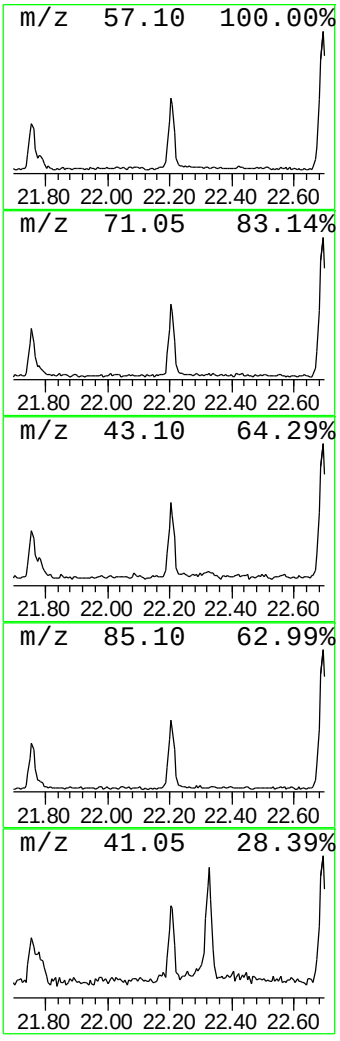
Peak Number 6 (DEL) Alkane: Straight-Chai... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.20	2.08 ng/ul	223049	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	96
2	Heneicosane, 11-(1-ethylpropyl)-	366	C26H54	055282-11-6	91
3	Heptadecane, 9-octyl-	352	C25H52	007225-64-1	91
4	Tetratriacontane	479	C34H70	014167-59-0	91
5	Pentacosane	352	C25H52	000629-99-2	91





Library Search Compound Report

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Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E74

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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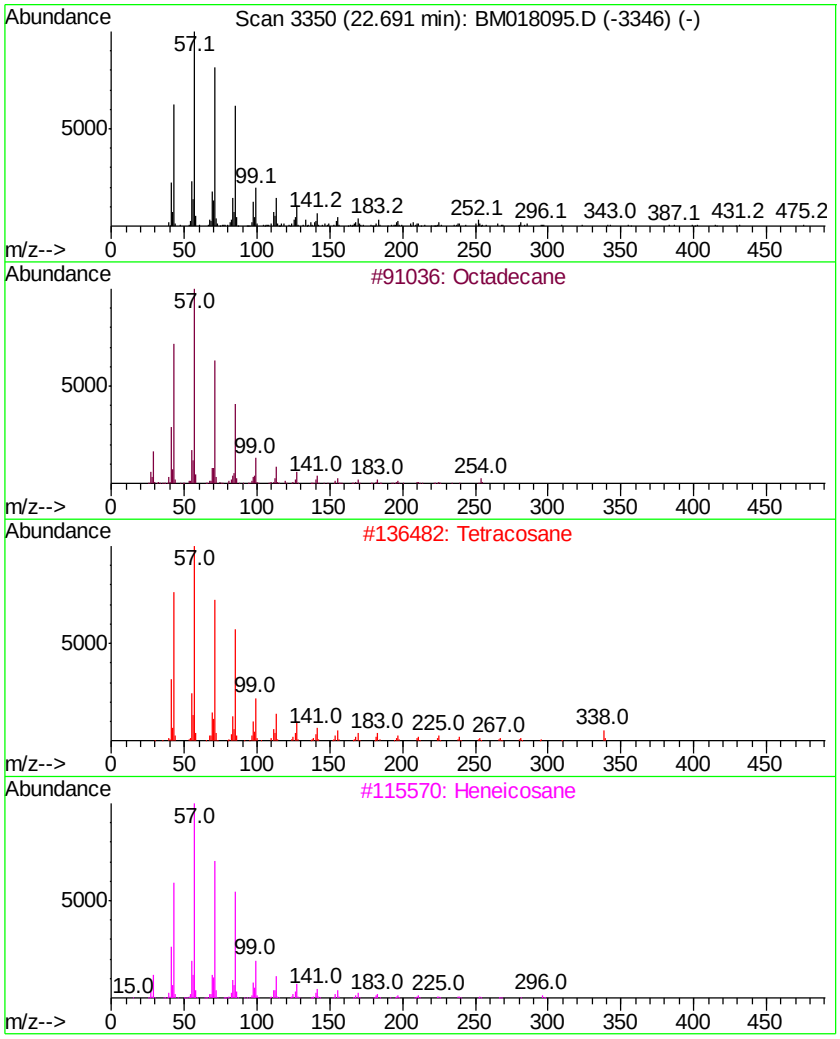
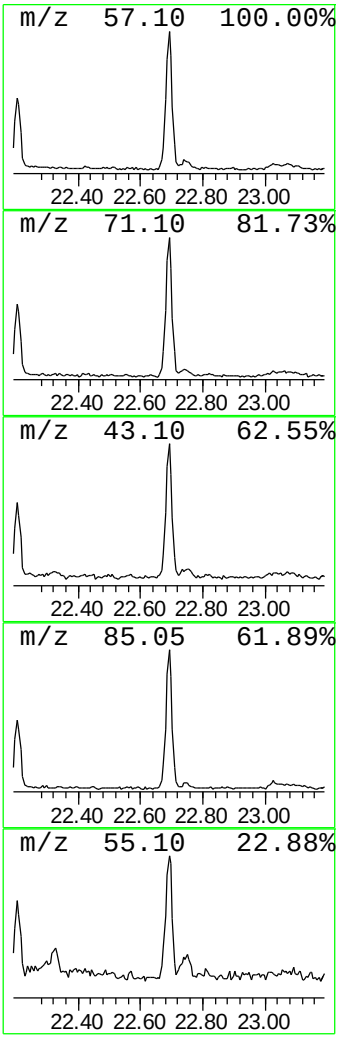
Peak Number 7 (DEL) Alkane: Straight-Chai... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.69	3.72 ng/ul	448246	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	93
2	Tetracosane	338	C24H50	000646-31-1	91
3	Heneicosane	296	C21H44	000629-94-7	91
4	Heptadecane, 9-octyl-	352	C25H52	007225-64-1	91
5	Triacontane	422	C30H62	000638-68-6	91





Library Search Compound Report

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Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E74

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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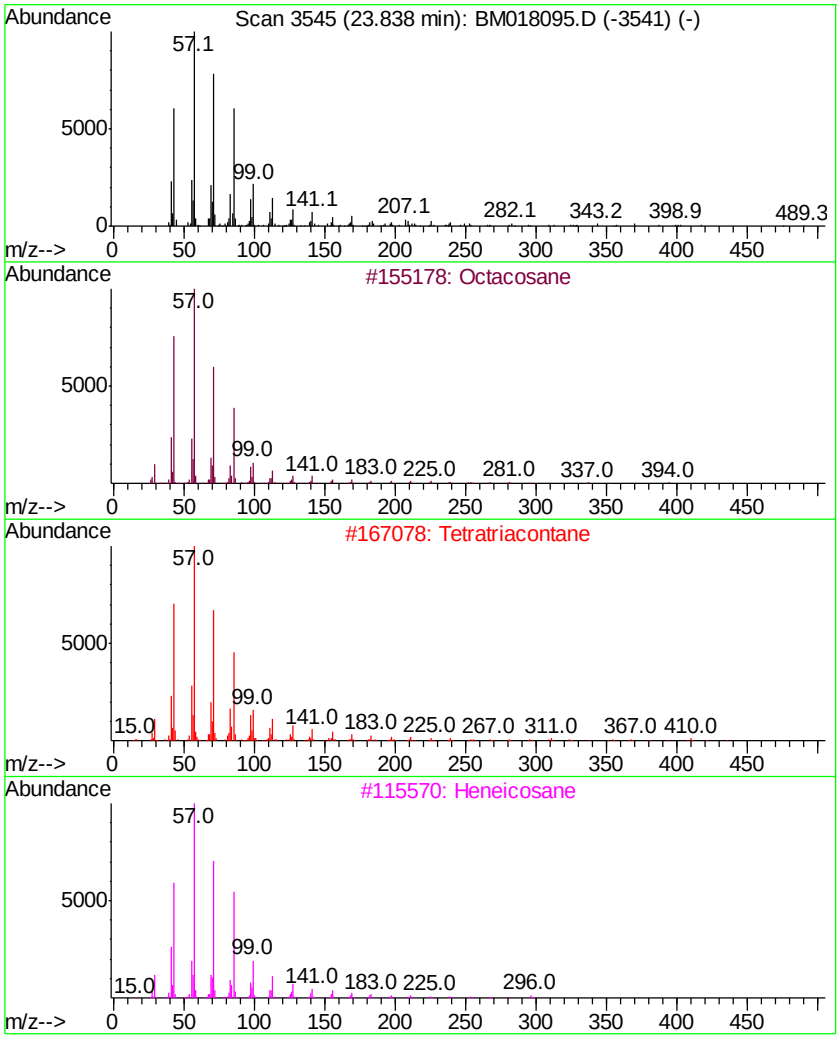
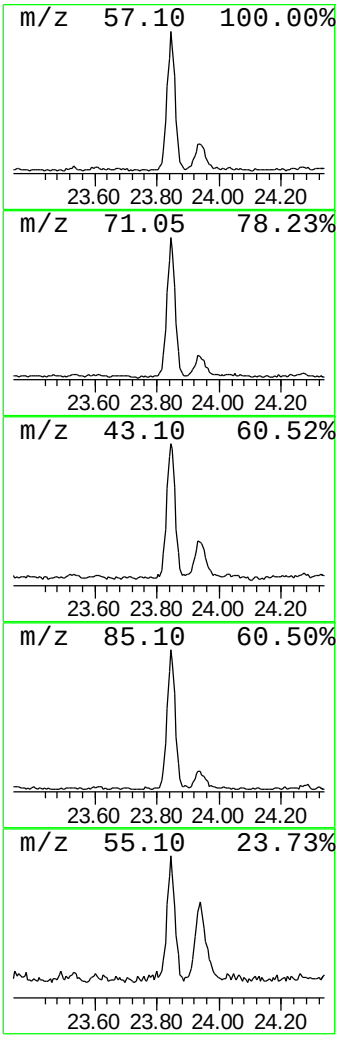
Peak Number 8 (DEL) Alkane: Straight-Chai... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.84	6.05 ng/ul	727768	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octacosane	394	C28H58	000630-02-4	91
2	Tetratriacontane	479	C34H70	014167-59-0	91
3	Heneicosane	296	C21H44	000629-94-7	91
4	Nonacosane	408	C29H60	000630-03-5	91
5	Heneicosane, 11-decyl-	437	C31H64	055320-06-4	91





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Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E74

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

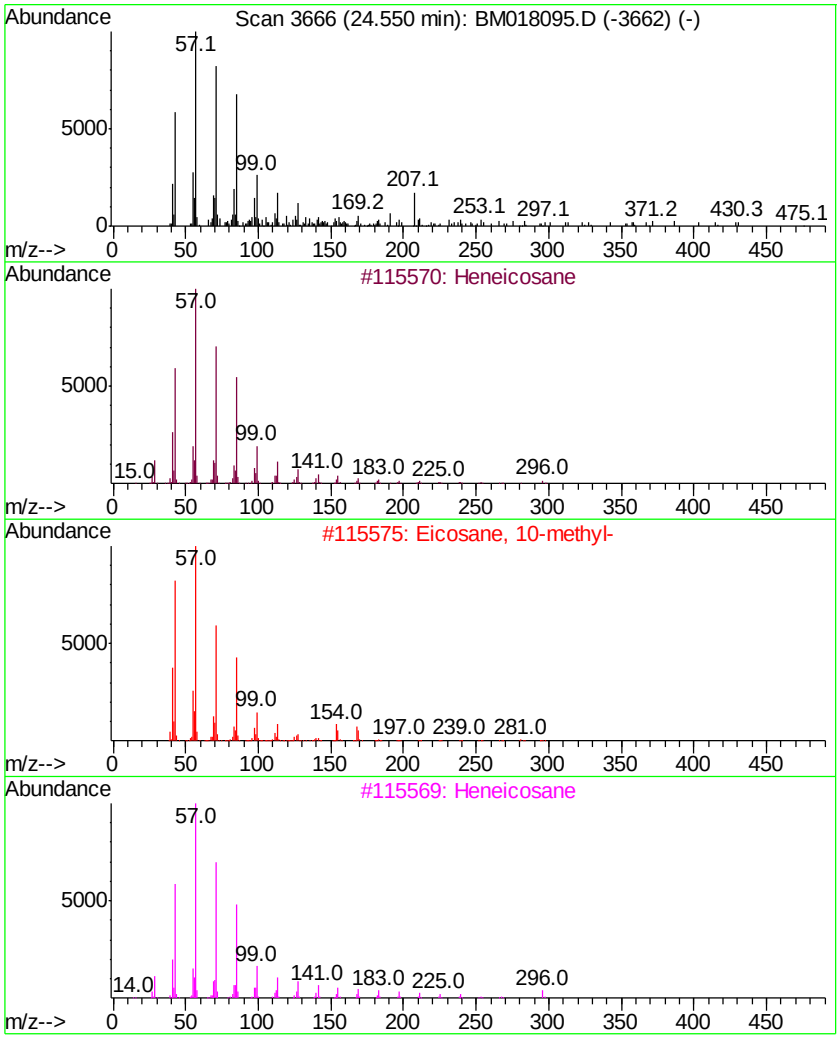
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

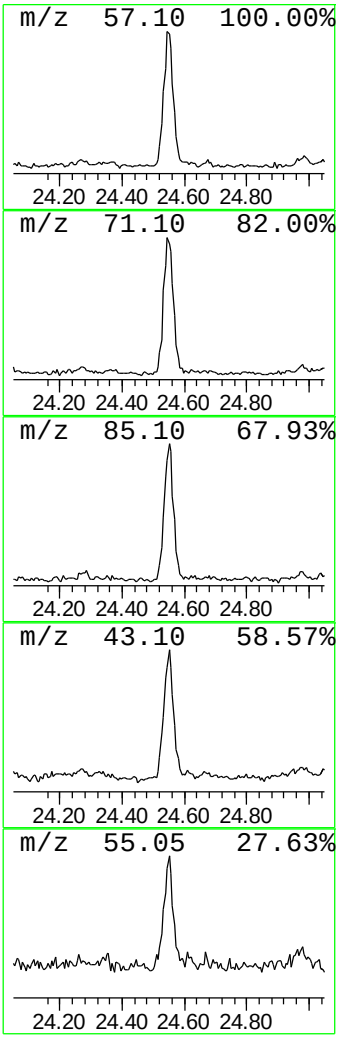
****

Peak Number 9 (DEL) Alkane: Straight-Chai... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.55	3.33 ng/ul	400148	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	90
2	Eicosane, 10-methyl-	296	C21H44	054833-23-7	90
3	Heneicosane	296	C21H44	000629-94-7	87
4	Heptadecane	240	C17H36	000629-78-7	87
5	Pentadecane, 8-hexyl-	296	C21H44	013475-75-7	83





Library Search Compound Report

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Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E74

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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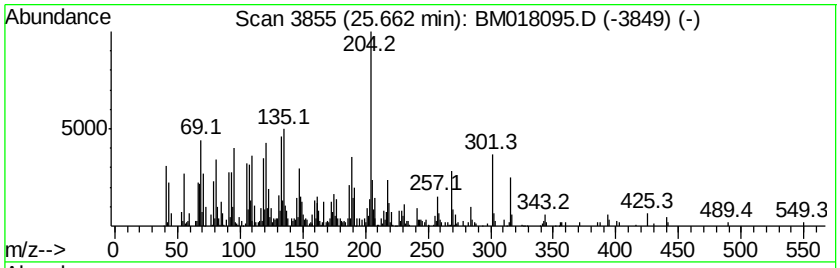
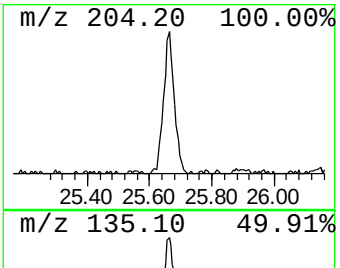
Peak Number 10 1H-Cycloprop[e]azulene, 1a,... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.66	8.79 ng/ul	1058080	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Cycloprop[e]azulene, 1a,2,3,4...	204	C15H24	000489-40-7	64
2	1,2,4,8-Tetramethylbicyclo[6.3.0...	204	C15H24	137235-51-9	53
3	1,4-Dimethyl-8-isopropylidenetri...	204	C15H24	1000140-07-7	49
4	2,5,5,8a-Tetramethyl-6,7,8,8a-te...	204	C14H20O	124957-09-1	45
5	2H-Cyclopentacyclooctene, 4,5,6,...	204	C15H24	1000221-85-8	38





Library Search Compound Report

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Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E74

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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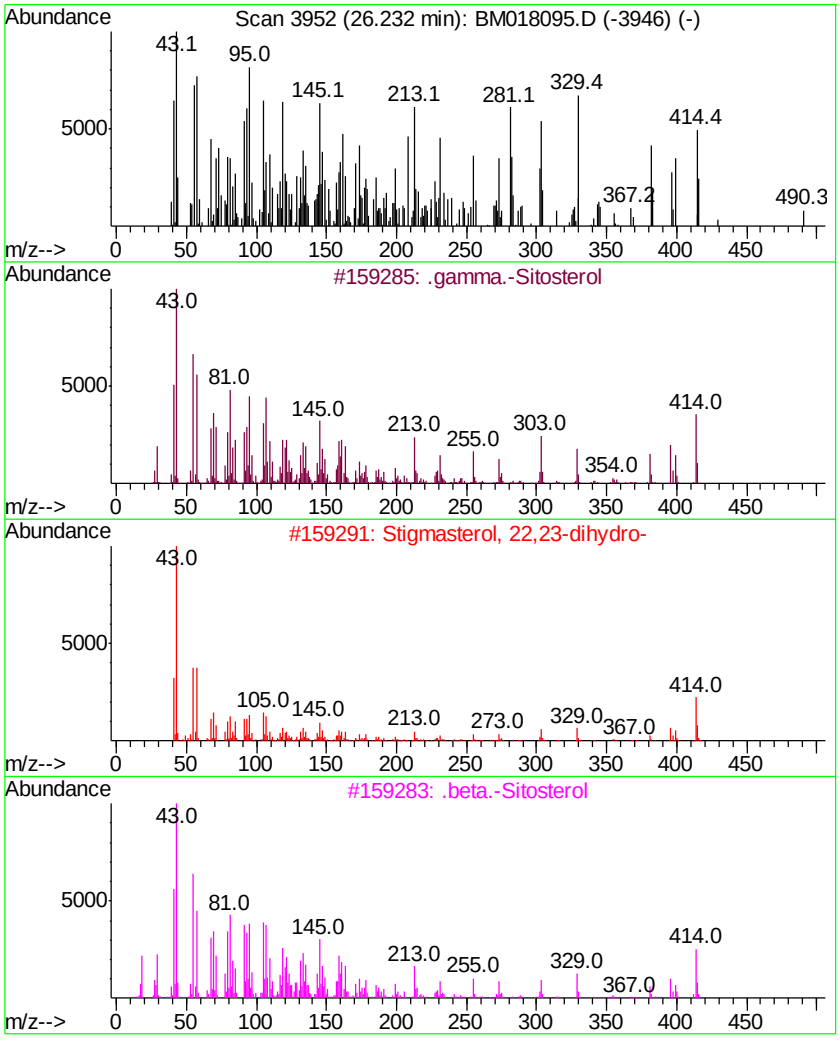
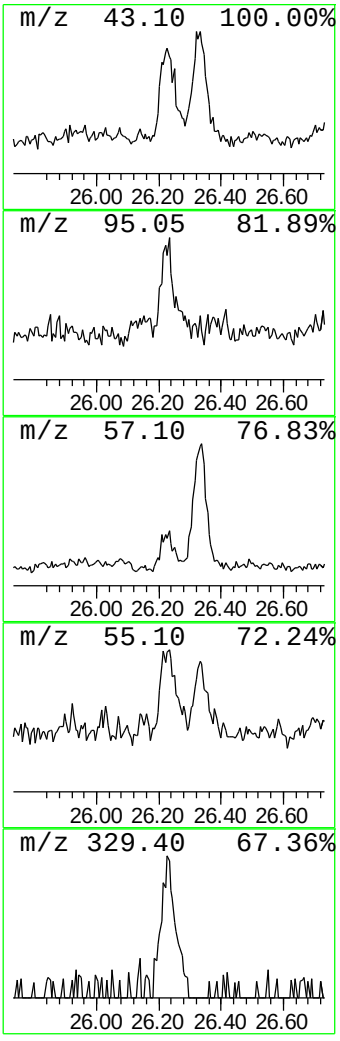
Peak Number 11 .gamma.-Sitosterol Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.23	3.80 ng/ul	457118	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.gamma.-Sitosterol	414	C29H50O	000083-47-6	83
2	Stigmasterol, 22,23-dihydro-	414	C29H50O	1000214-20-7	55
3	.beta.-Sitosterol	414	C29H50O	000083-46-5	43
4	.beta.-Sitosterol	414	C29H50O	000083-46-5	38
5	.gamma.-Sitosterol	414	C29H50O	000083-47-6	25





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E74

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
1,4-Methanoazulen...	13.45	2.4	ng/ul	144020	3	14.19	1180780	20.0
n-Hexadecanoic acid	17.87	9.8	ng/ul	711239	4	16.96	1444230	20.0
Octadecanoic acid	19.16	3.3	ng/ul	356024	5	21.17	2145480	20.0
2-Phenanthrenol, ...	20.25	7.1	ng/ul	760135	5	21.17	2145480	20.0
(DEL) Alkane: Cyc...	20.90	4.6	ng/ul	493595	5	21.17	2145480	20.0
(DEL) Alkane: Str...	22.20	2.1	ng/ul	223049	5	21.17	2145480	20.0
(DEL) Alkane: Str...	22.69	3.7	ng/ul	448246	6	23.34	2406850	20.0
(DEL) Alkane: Str...	23.84	6.0	ng/ul	727768	6	23.34	2406850	20.0
(DEL) Alkane: Str...	24.55	3.3	ng/ul	400148	6	23.34	2406850	20.0
1H-Cycloprop[e]az...	25.66	8.8	ng/ul	1058080	6	23.34	2406850	20.0
.gamma.-Sitosterol	26.23	3.8	ng/ul	457118	6	23.34	2406850	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 13 02:54:08 2018
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Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
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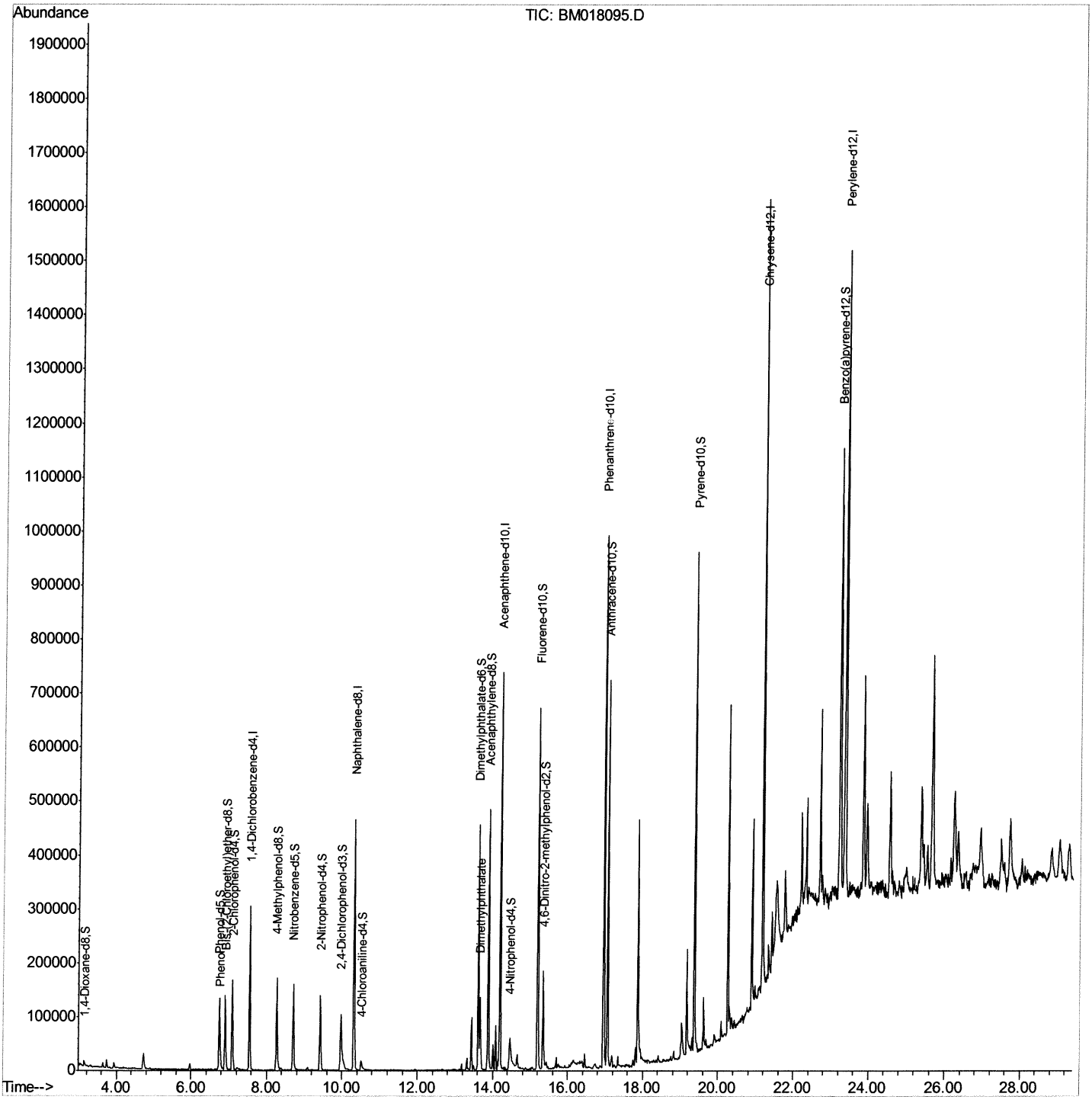
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:01 PM



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Quantitation Report (Qedit)

Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

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Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
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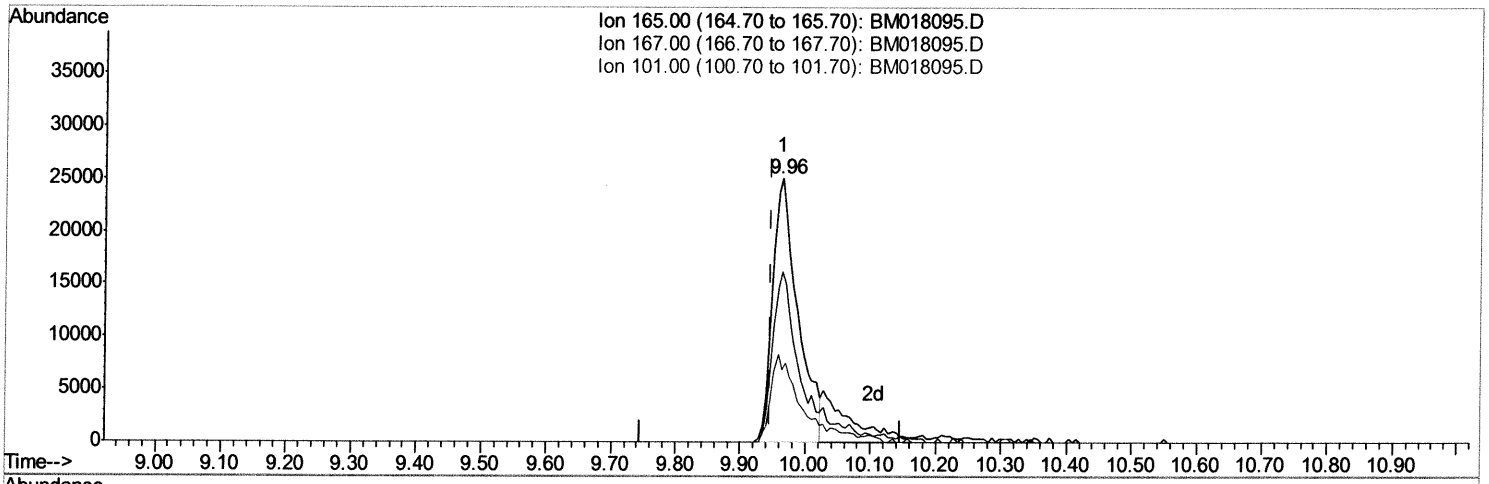
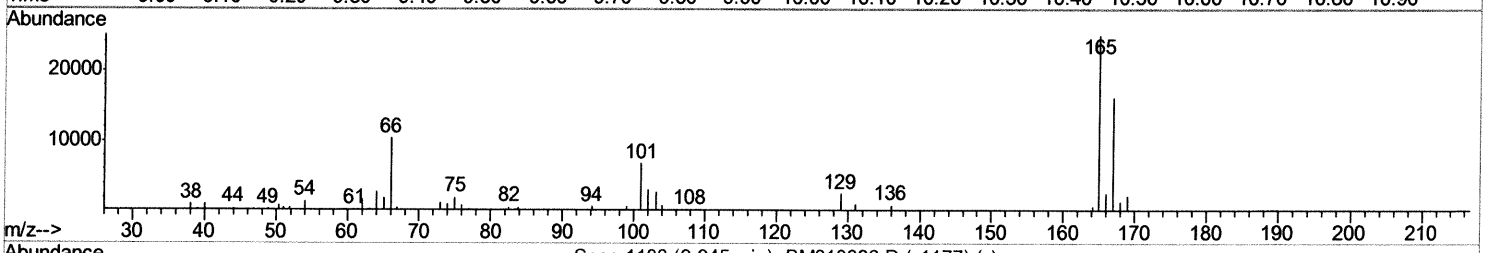
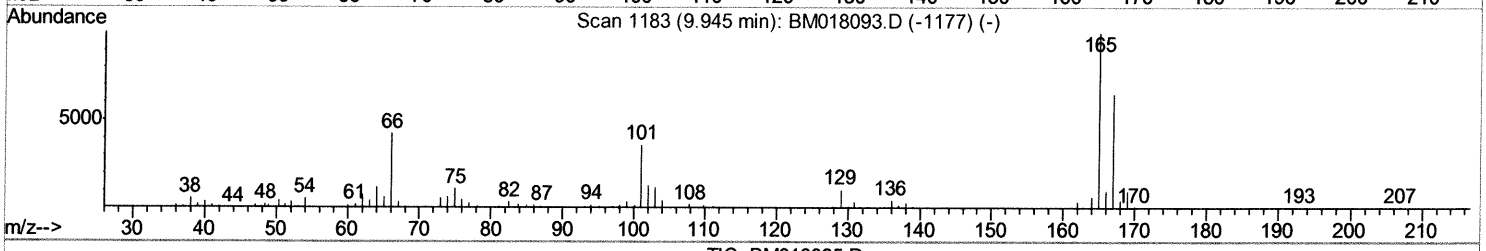
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:01 PM







TIC: BM018095.D

(26) 2,4-Dichlorophenol-d3 (S)

9.963min (+0.018) 9.75ng/ul

response 67355

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	64.64
101.00	34.80	27.33#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

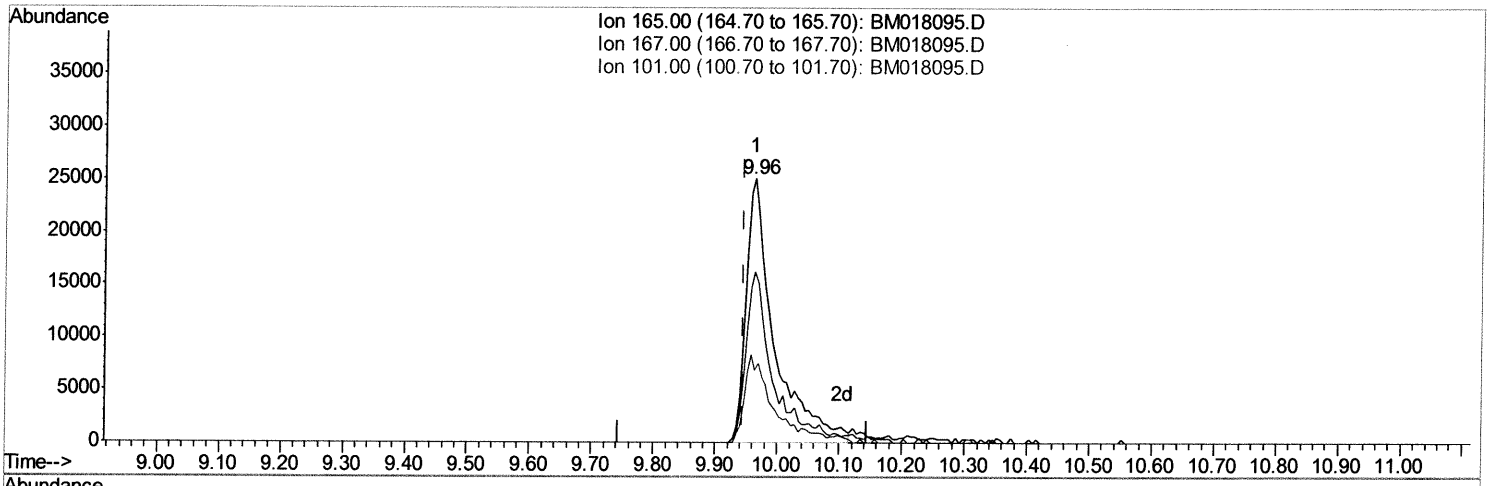
Quantitation Report (Qedit)

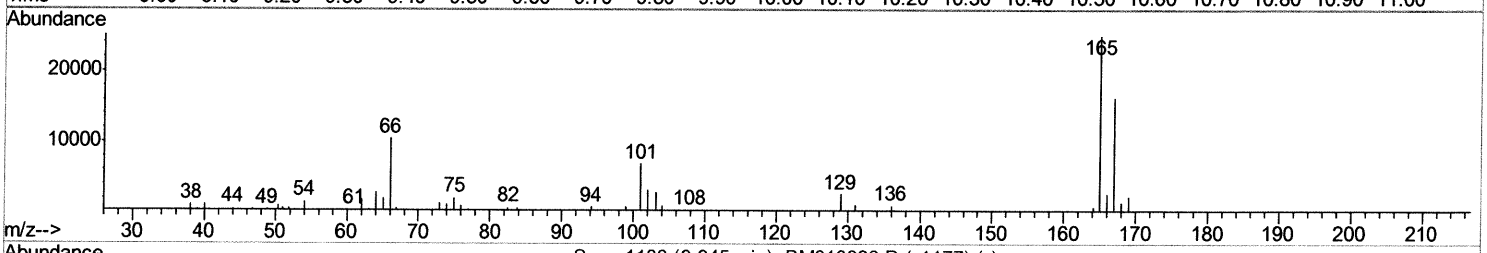
Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

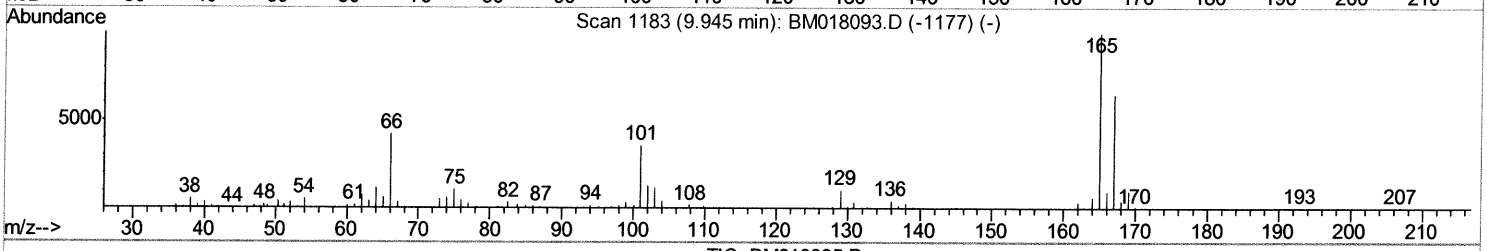
Quant Time: Dec 13 02:40:57 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E74

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:01 PM







TIC: BM018095.D

(26) 2,4-Dichlorophenol-d3 (S)

9.963min (+0.018) 11.67ng/ul m> SJ 12/13/18

response 80614

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	64.64
101.00	34.80	27.33#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

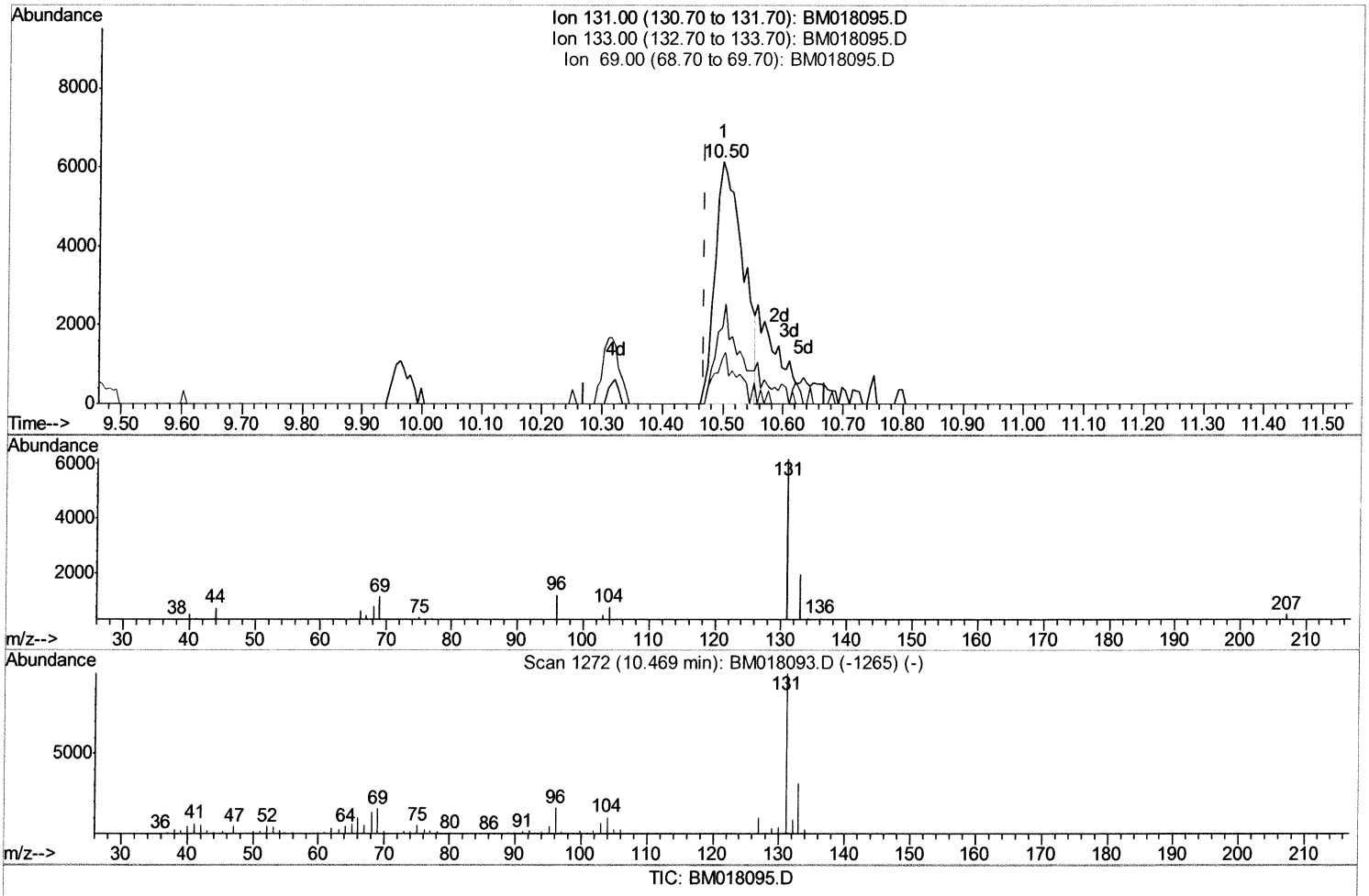
Quantitation Report (Qedit)

Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 13 02:40:57 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E74

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:01 PM



TIC: BM018095.D

(29) 4-Chloroaniline-d4 (S)

10.498min (+0.029) 3.30ng/ul

response 19540

Ion	Exp%	Act%
131.00	100	100
133.00	32.40	31.48
69.00	18.90	18.59
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

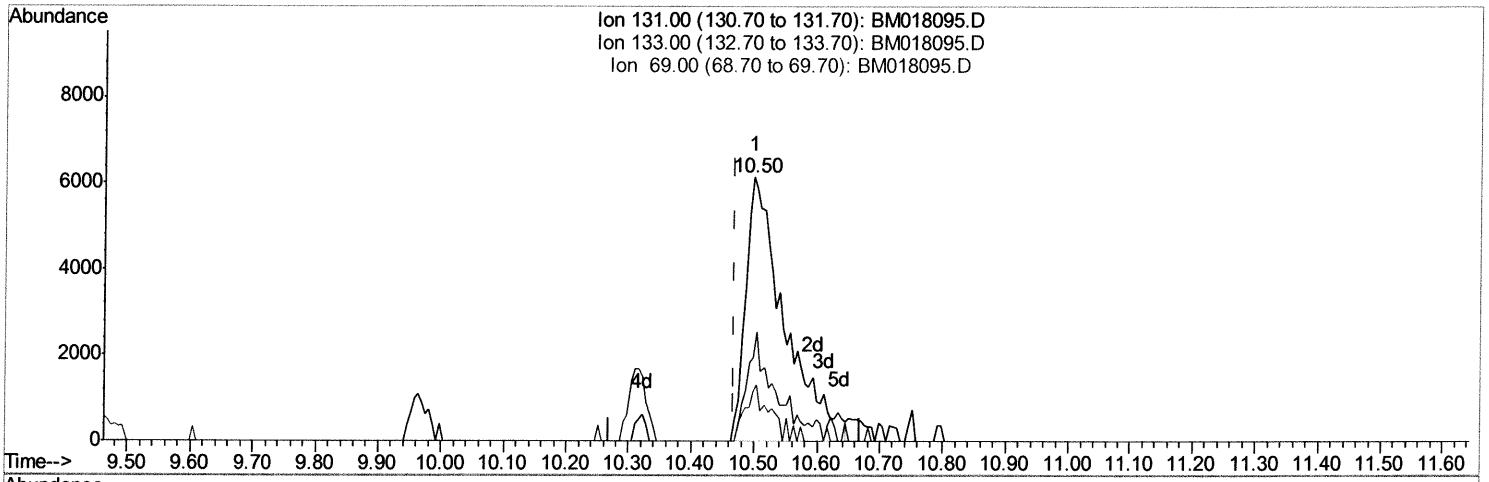
Quantitation Report (Qedit)

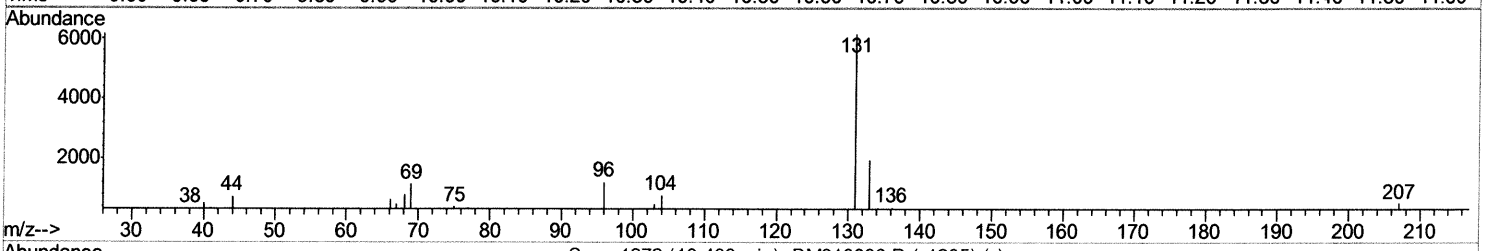
Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

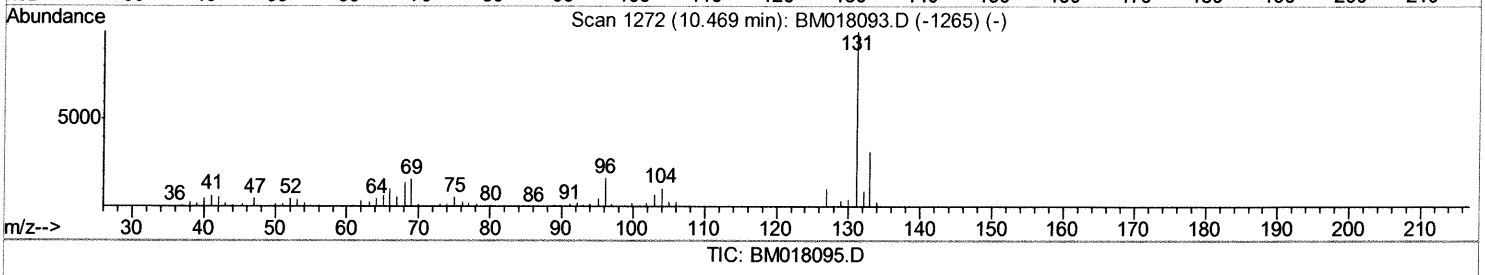
Quant Time: Dec 13 02:40:57 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E74

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:01 PM







TIC: BM018095.D

(29) 4-Chloroaniline-d4 (S)

10.498min (+0.029) 4.39ng/ul m) SJ 12/13/18

response 26018

Ion	Exp%	Act%
131.00	100	100
133.00	32.40	31.48
69.00	18.90	18.59
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

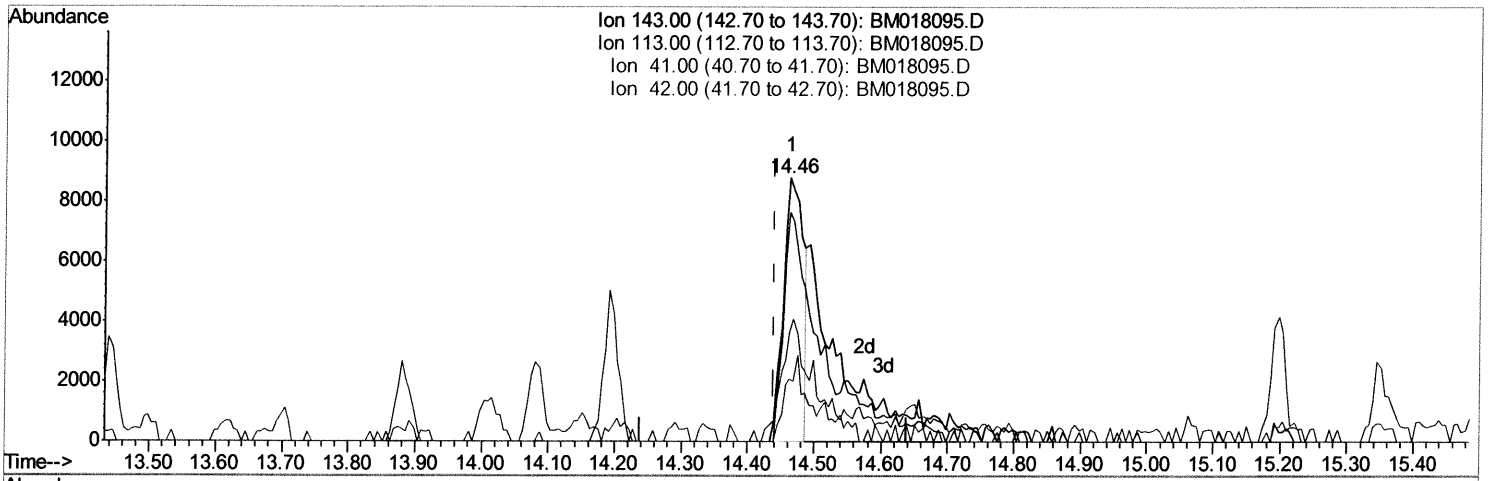
Quantitation Report (Qedit)

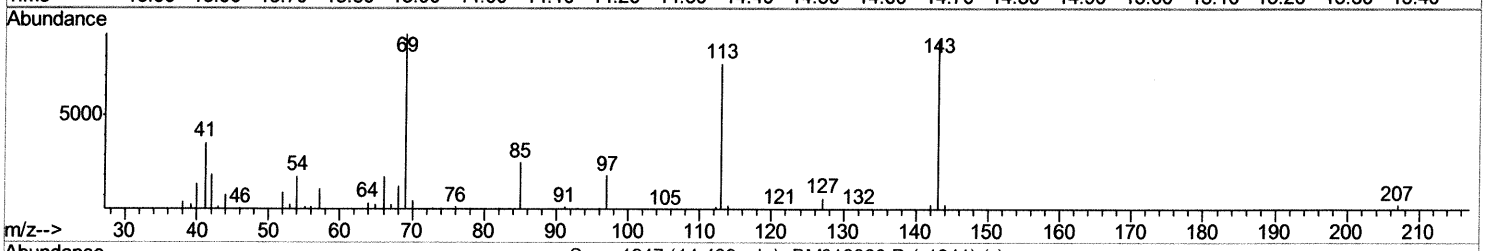
Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

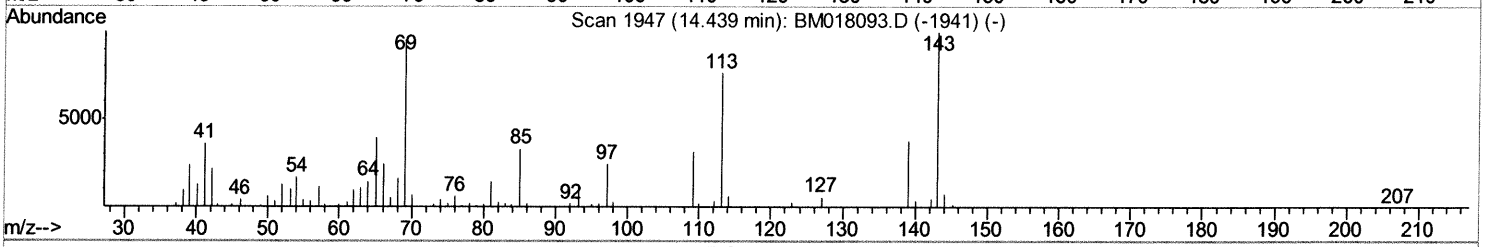
Quant Time: Dec 13 02:40:57 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E74

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:01 PM







TIC: BM018095.D

(51) 4-Nitrophenol-d4 (S)

14.463min (+0.023) 4.67ng/ul

response 18448

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	86.82
41.00	40.10	41.38
42.00	26.80	23.47

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

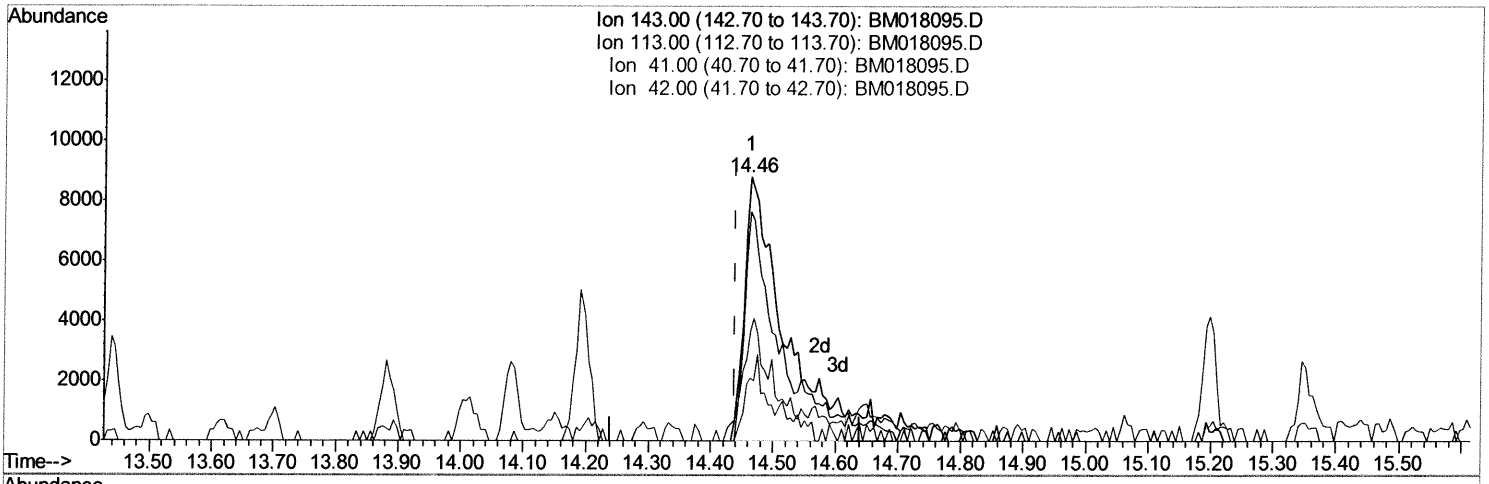
Quantitation Report (Qedit)

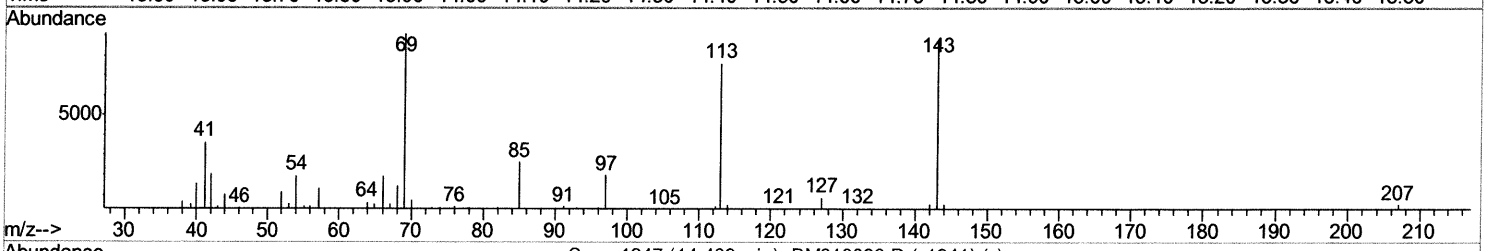
Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

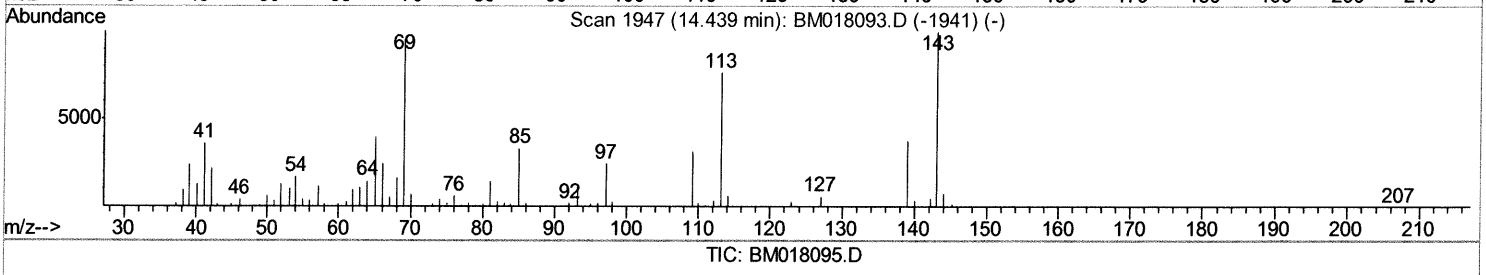
Quant Time: Dec 13 02:40:57 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E74

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:01 PM







TIC: BM018095.D

(51) 4-Nitrophenol-d4 (S)

14.463min (+0.023) 9.65ng/ul m) SJ 12/13/18

response 38124

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	86.82
41.00	40.10	41.38
42.00	26.80	23.47

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018095.D
Acq On : 12 Dec 2018 16:38
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 13 02:54:08 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9E74

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:01 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	88555	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	412360	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	250423	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.96	188	586204	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	736047	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	848706	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	5684	2.94	ng/uL	0.00
5) Phenol-d5	6.74	99	99009	12.24	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	64888	13.31	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	86499	13.67	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	78337	11.85	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	44253	13.97	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	50761	13.99	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.96	165	80614m	11.67	ng/ul	0.02
29) 4-Chloroaniline-d4	10.50	131	26018m	4.39	ng/ul	0.03
43) Dimethylphthalate-d6	13.62	166	342894	15.78	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	355938	13.54	ng/ul	0.00
51) 4-Nitrophenol-d4	14.46	143	38124m	9.65	ng/ul	0.02
57) Fluorene-d10	15.20	176	278820	14.86	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	44012	10.50	ng/ul	0.00
70) Anthracene-d10	17.05	188	405636	13.90	ng/ul	0.00
78) Pyrene-d10	19.36	212	462121	12.98	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	570237	12.39	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.77	94	22982	2.847	ng/ul	90
44) Dimethylphthalate	13.67	163	93814	4.456	ng/ul	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SJ 12/13/18

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E75

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-06
Sample wt/vol : 30.2 (g/mL): g
Lab File ID : BM018096.D
% Solids : 87.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	76	U
100-52-7	Benzaldehyde	370	U
108-95-2	Phenol	120	J
111-44-4	Bis(2-Chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	190	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2-oxybis(1-Chloropropane)	370	U
98-86-2	Acetophenone	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	190	U
67-72-1	Hexachloroethane	190	U
98-95-3	Nitrobenzene	190	U
78-59-1	Isophorone	190	U
88-75-5	2-Nitrophenol	190	U
105-67-9	2,4-Dimethylphenol	190	U
111-91-1	Bis(2-Chloroethoxy)methane	190	U
120-83-2	2,4-Dichlorophenol	190	U
91-20-3	Naphthalene	190	U
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	190	U
105-60-2	Caprolactam	370	U
59-50-7	4-Chloro-3-methylphenol	190	U
91-57-6	2-Methylnaphthalene	190	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E75

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-06
Sample wt/vol : 30.2 (g/mL): g
Lab File ID : BM018096.D
% Solids : 87.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	190	U
92-52-4	1,1-Biphenyl	190	U
91-58-7	2-Chloronaphthalene	190	U
88-74-4	2-Nitroaniline	190	U
131-11-3	Dimethylphthalate	130	J
606-20-2	2,6-Dinitrotoluene	190	U
208-96-8	Acenaphthylene	190	U
99-09-2	3-Nitroaniline	370	U
83-32-9	Acenaphthene	190	U
51-28-5	2,4-Dinitrophenol	370	U
100-02-7	4-Nitrophenol	370	U
132-64-9	Dibenzofuran	190	U
121-14-2	2,4-Dinitrotoluene	190	U
84-66-2	Diethylphthalate	190	U
86-73-7	Fluorene	190	U
7005-72-3	4-Chlorophenyl-phenylether	190	U
100-01-6	4-Nitroaniline	370	U
534-52-1	4,6-Dinitro-2-methylphenol	370	U
86-30-6	N-Nitrosodiphenylamine	190	U
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U
101-55-3	4-Bromophenyl-phenylether	190	U
118-74-1	Hexachlorobenzene	190	U
1912-24-9	Atrazine	370	U
87-86-5	Pentachlorophenol	370	U
85-01-8	Phenanthrene	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E75

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-06
Sample wt/vol : 30.2 (g/mL): g
Lab File ID : BM018096.D
% Solids : 87.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	190	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	190	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	190	U
85-68-7	Butylbenzylphthalate	190	U
91-94-1	3,3-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	190	U
218-01-9	Chrysene	190	U
117-81-7	Bis(2-ethylhexyl)phthalate	190	U
117-84-0	Di-n-octyl phthalate	370	U
205-99-2	Benzo(b)fluoranthene	190	U
207-08-9	Benzo(k)fluoranthene	190	U
50-32-8	Benzo(a)pyrene	190	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	U
53-70-3	Dibenzo(a,h)anthracene	190	U
191-24-2	Benzo(g,h,i)perylene	190	U
58-90-2	2,3,4,6-Tetrachlorophenol	190	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E75

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-06
Sample wt/vol : 30.2 (g/mL): g
Lab File ID : BM018096.D
% Solids : 87.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/12/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000057-10-3	n-Hexadecanoic acid	17.86	280	JN
2		unknown-01	19.03	88	J
3	000057-11-4	Octadecanoic acid	19.16	110	JN
4	000111-06-8	Hexadecanoic acid, butyl ester	19.3	120	JN
5	000511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,1	20.25	93	JN
6	000123-95-5	Octadecanoic acid, butyl ester	20.36	96	JN
7	E966796	Total Alkanes	N/A	410	

EPA-designated Registry Number.

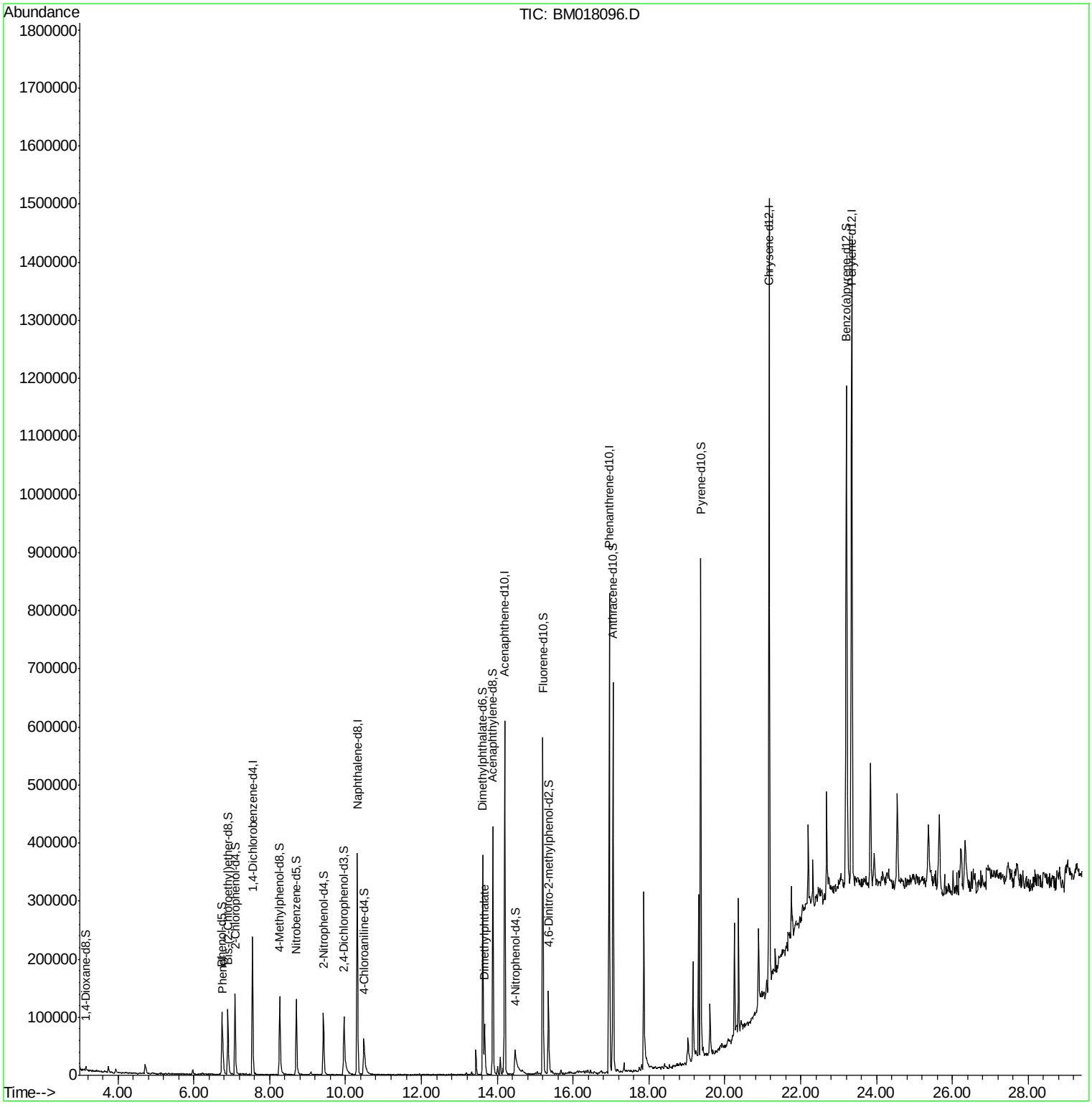
Quantitation Report (LSC Reviewed)

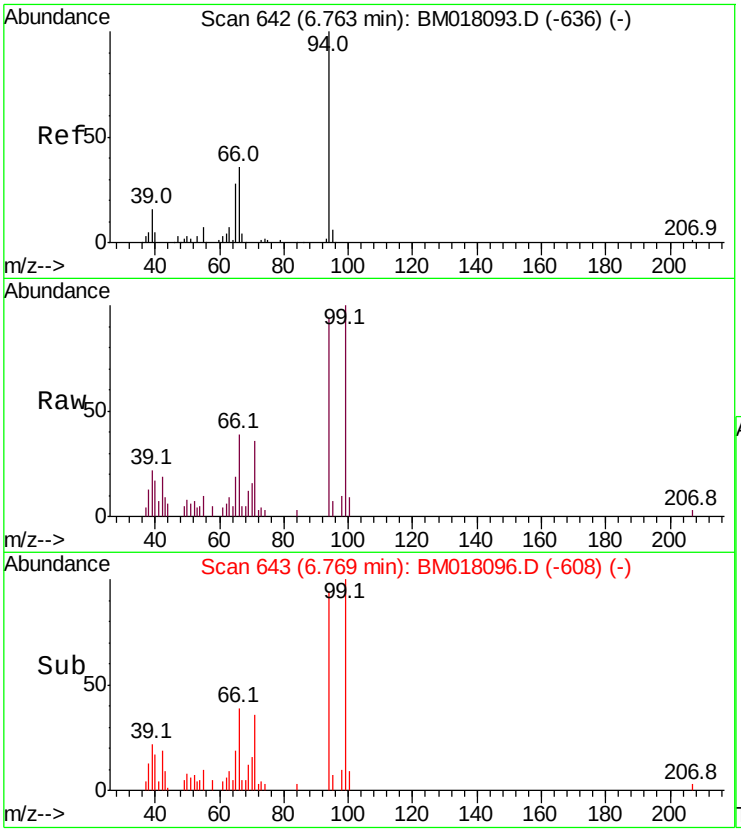
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 13 02:56:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E75

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:03 PM

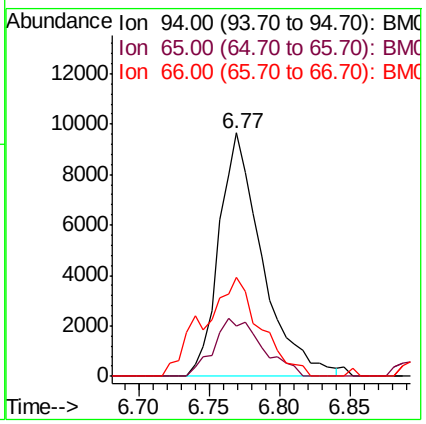




#6
Phenol
Concen: 3.239 ng/ul
RT: 6.77 min Scan# 643
Delta R.T. 0.01 min
Lab File: BM018096.D
Acq: 12 Dec 2018 17:15

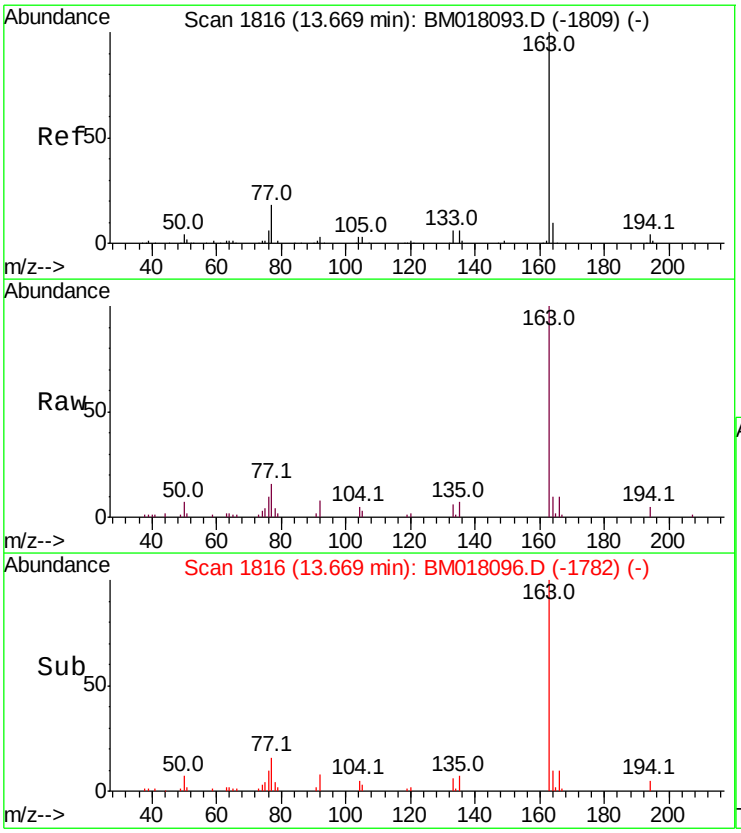
Tgt Ion: 94 Resp: 20561

Ion	Ratio	Lower	Upper
94	100		
65	20.6	24.7	37.1#
66	40.9	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9E75

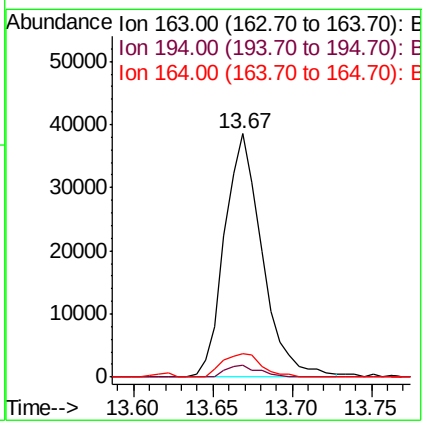
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:03 PM



#44
Dimethylphthalate
Concen: 3.534 ng/ul
RT: 13.67 min Scan# 1816
Delta R.T. 0.00 min
Lab File: BM018096.D
Acq: 12 Dec 2018 17:15

Tgt Ion:163 Resp: 63438

Ion	Ratio	Lower	Upper
163	100		
194	5.0	3.4	5.0
164	9.8	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9E75

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:03 PM

Quant Time: Dec 13 02:56:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	69642	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	334345	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	213541	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.96	188	513096	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	665542	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	796372	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	3854	2.53	ng/uL	0.00
5) Phenol-d5	6.74	99	84393	13.27	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	53009	13.82	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	73505	14.77	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	62946	12.11	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	36724	14.30	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	41719	14.18	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.96	165	66165m	11.81	ng/ul	0.02
29) 4-Chloroaniline-d4	10.48	131	63122	13.13	ng/ul	0.01
43) Dimethylphthalate-d6	13.62	166	289006	15.60	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	324688	14.48	ng/ul	0.00
51) 4-Nitrophenol-d4	14.48	143	31336m	9.30	ng/ul	0.04
57) Fluorene-d10	15.20	176	244152	15.26	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	36770	10.02	ng/ul	0.00
70) Anthracene-d10	17.05	188	393517	15.40	ng/ul	0.00
78) Pyrene-d10	19.36	212	452517	14.05	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	621829	14.40	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.77	94	20561	3.239	ng/ul#	90
44) Dimethylphthalate	13.67	163	63438	3.534	ng/ul	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E75

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.046	9	10	13	rBV2	3377	2844	0.14%	0.014%
2	3.075	13	15	19	rVV3	2600	3355	0.16%	0.017%
3	3.152	24	28	34	rBV5	8063	10267	0.50%	0.052%
4	3.440	73	77	80	rVV4	2447	3819	0.19%	0.019%
5	3.746	124	129	136	rVB2	11357	19029	0.93%	0.097%
6	3.916	153	158	159	rBV3	2539	3974	0.19%	0.020%
7	3.940	159	162	166	rBV2	7204	9543	0.46%	0.048%
8	4.205	201	207	208	rBV3	1648	2961	0.14%	0.015%
9	4.716	285	294	305	rBV2	16973	40501	1.97%	0.206%
10	5.928	495	500	501	rBV2	2013	3051	0.15%	0.015%
11	5.975	504	508	514	rVB3	8523	12627	0.61%	0.064%
12	6.234	546	552	553	rBV4	3120	3708	0.18%	0.019%
13	6.740	632	638	653	rBV3	108310	274385	13.36%	1.392%
14	6.834	653	654	658	rVB3	2105	2739	0.13%	0.014%
15	6.899	658	665	675	rBV	111441	188891	9.20%	0.959%
16	7.087	691	697	711	rBV	138445	241471	11.76%	1.225%
17	7.234	717	722	723	rBV2	2774	3661	0.18%	0.019%
18	7.546	769	775	786	rVV	238706	406096	19.78%	2.061%
19	7.622	786	788	795	rVB4	2934	3713	0.18%	0.019%
20	8.263	890	897	915	rBV	135147	278877	13.58%	1.415%
21	8.704	966	972	984	rBV	130920	238912	11.63%	1.212%
22	9.087	1032	1037	1041	rBV5	5295	9109	0.44%	0.046%
23	9.416	1085	1093	1108	rBV	107500	207742	10.12%	1.054%
24	9.963	1179	1186	1205	rBV	99880	264846	12.90%	1.344%
25	10.116	1209	1212	1213	rVV2	2855	3339	0.16%	0.017%
26	10.310	1239	1245	1255	rBV	381442	654933	31.89%	3.324%
27	10.481	1267	1274	1294	rBV4	62384	194085	9.45%	0.985%
28	11.551	1451	1456	1459	rBV2	1521	2885	0.14%	0.015%
29	13.186	1730	1734	1739	rVB	3303	3753	0.18%	0.019%
30	13.322	1751	1757	1760	rBV4	5787	6268	0.31%	0.032%
31	13.439	1773	1777	1782	rBV2	42901	57549	2.80%	0.292%
32	13.616	1800	1807	1812	rBV	378014	573982	27.95%	2.913%
33	13.669	1812	1816	1825	rVB	85471	158489	7.72%	0.804%
34	13.886	1846	1853	1869	rBV	426935	657809	32.03%	3.338%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E75

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	14.010	1871	1874	1877	rVB2	13407	15463	0.75%	0.078%
36	14.080	1882	1886	1891	rBV3	29921	39483	1.92%	0.200%
37	14.145	1893	1897	1900	rBV2	10660	12000	0.58%	0.061%
38	14.198	1900	1906	1915	rVB2	606435	964645	46.98%	4.895%
39	14.475	1944	1953	1966	rBV3	42159	157575	7.67%	0.800%
40	14.663	1979	1985	1987	rBV5	2424	4544	0.22%	0.023%
41	15.004	2039	2043	2047	rVV4	2183	3231	0.16%	0.016%
42	15.051	2047	2051	2056	rVB4	3779	6887	0.34%	0.035%
43	15.198	2069	2076	2088	rBV	580094	903128	43.98%	4.583%
44	15.351	2096	2102	2113	rBV	142763	249684	12.16%	1.267%
45	15.445	2113	2118	2122	rVV4	6240	14281	0.70%	0.072%
46	15.480	2122	2124	2128	rVB2	3062	4353	0.21%	0.022%
47	15.686	2157	2159	2166	rVB2	7828	10324	0.50%	0.052%
48	15.886	2189	2193	2194	rVB3	2733	3209	0.16%	0.016%
49	16.098	2225	2229	2230	rBV4	3897	4640	0.23%	0.024%
50	16.157	2235	2239	2242	rBV3	3547	3718	0.18%	0.019%
51	16.339	2268	2270	2273	rVV2	4805	4599	0.22%	0.023%
52	16.386	2274	2278	2286	rVV4	5519	10283	0.50%	0.052%
53	16.457	2286	2290	2294	rVB3	6862	10595	0.52%	0.054%
54	16.733	2330	2337	2338	rBV4	3697	6548	0.32%	0.033%
55	16.886	2359	2363	2366	rVB2	3199	4400	0.21%	0.022%
56	16.951	2368	2374	2386	rBV	827218	1276201	62.15%	6.477%
57	17.051	2386	2391	2403	rVV2	670953	1018048	49.58%	5.166%
58	17.157	2406	2409	2411	rVV4	4706	6239	0.30%	0.032%
59	17.192	2413	2415	2420	rVB4	4326	4701	0.23%	0.024%
60	17.245	2422	2424	2426	rBV2	3062	3164	0.15%	0.016%
61	17.339	2433	2440	2446	rBV6	18239	31299	1.52%	0.159%
62	17.410	2450	2452	2454	rVB3	3291	2649	0.13%	0.013%
63	17.468	2460	2462	2465	rVB4	3630	2905	0.14%	0.015%
64	17.645	2490	2492	2494	rVB2	4637	2766	0.13%	0.014%
65	17.663	2494	2495	2499	rBV2	3126	3192	0.16%	0.016%
66	17.739	2504	2508	2515	rBV7	8054	15801	0.77%	0.080%
67	17.804	2515	2519	2523	rBV5	11867	16383	0.80%	0.083%
68	17.863	2525	2529	2539	rBV	305313	481052	23.43%	2.441%
69	18.121	2569	2573	2574	rVB3	4093	4017	0.20%	0.020%
70	18.145	2574	2577	2578	rBV3	4196	3823	0.19%	0.019%
71	18.163	2578	2580	2582	rBV3	3026	2647	0.13%	0.013%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E75

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

72	18.298	2601	2603	2605	rVB3	4284	3466	0.17%	0.018%
73	18.321	2605	2607	2608	rBV2	3176	2635	0.13%	0.013%
74	18.363	2613	2614	2617	rVB2	3643	2627	0.13%	0.013%
75	18.410	2619	2622	2627	rBV4	8090	12988	0.63%	0.066%
76	18.498	2634	2637	2639	rBV4	2772	2685	0.13%	0.014%
77	18.539	2642	2644	2645	rBV	6605	4470	0.22%	0.023%
78	18.633	2657	2660	2661	rBV3	6176	6579	0.32%	0.033%
79	18.710	2670	2673	2675	rBV4	3827	4093	0.20%	0.021%
80	18.733	2675	2677	2680	rVV4	4501	5309	0.26%	0.027%
81	18.763	2680	2682	2685	rVB4	3726	2847	0.14%	0.014%
82	18.874	2699	2701	2702	rBV2	3684	2802	0.14%	0.014%
83	19.033	2718	2728	2740	rBV8	46822	149439	7.28%	0.758%
84	19.157	2744	2749	2758	rBV2	171698	274632	13.37%	1.394%
85	19.304	2770	2774	2779	rBV	278550	303785	14.79%	1.542%
86	19.363	2779	2784	2792	rBV2	855389	1249395	60.84%	6.341%
87	19.610	2822	2826	2832	rBV	86522	124853	6.08%	0.634%
88	19.686	2837	2839	2844	rVB6	7661	9750	0.47%	0.049%
89	20.251	2931	2935	2940	rBV	192602	233879	11.39%	1.187%
90	20.362	2950	2954	2960	rVB	229941	242759	11.82%	1.232%
91	20.421	2962	2964	2966	rBV3	14582	11970	0.58%	0.061%
92	20.892	3040	3044	3050	rBV3	125930	190997	9.30%	0.969%
93	21.168	3086	3091	3101	rBV	1364400	1903366	92.69%	9.659%
94	21.756	3188	3191	3195	rBV3	90012	124861	6.08%	0.634%
95	22.203	3264	3267	3271	rVB	126913	145172	7.07%	0.737%
96	22.686	3346	3349	3355	rBV2	166760	231490	11.27%	1.175%
97	23.209	3431	3438	3448	rBV	856683	1869654	91.05%	9.488%
98	23.345	3455	3461	3469	rVB2	1096038	2053486	100.00%	10.421%
99	23.845	3541	3546	3553	rVB	210401	403234	19.64%	2.046%
100	24.550	3662	3666	3672	rVB2	152493	273910	13.34%	1.390%

Sum of corrected areas: 19704823

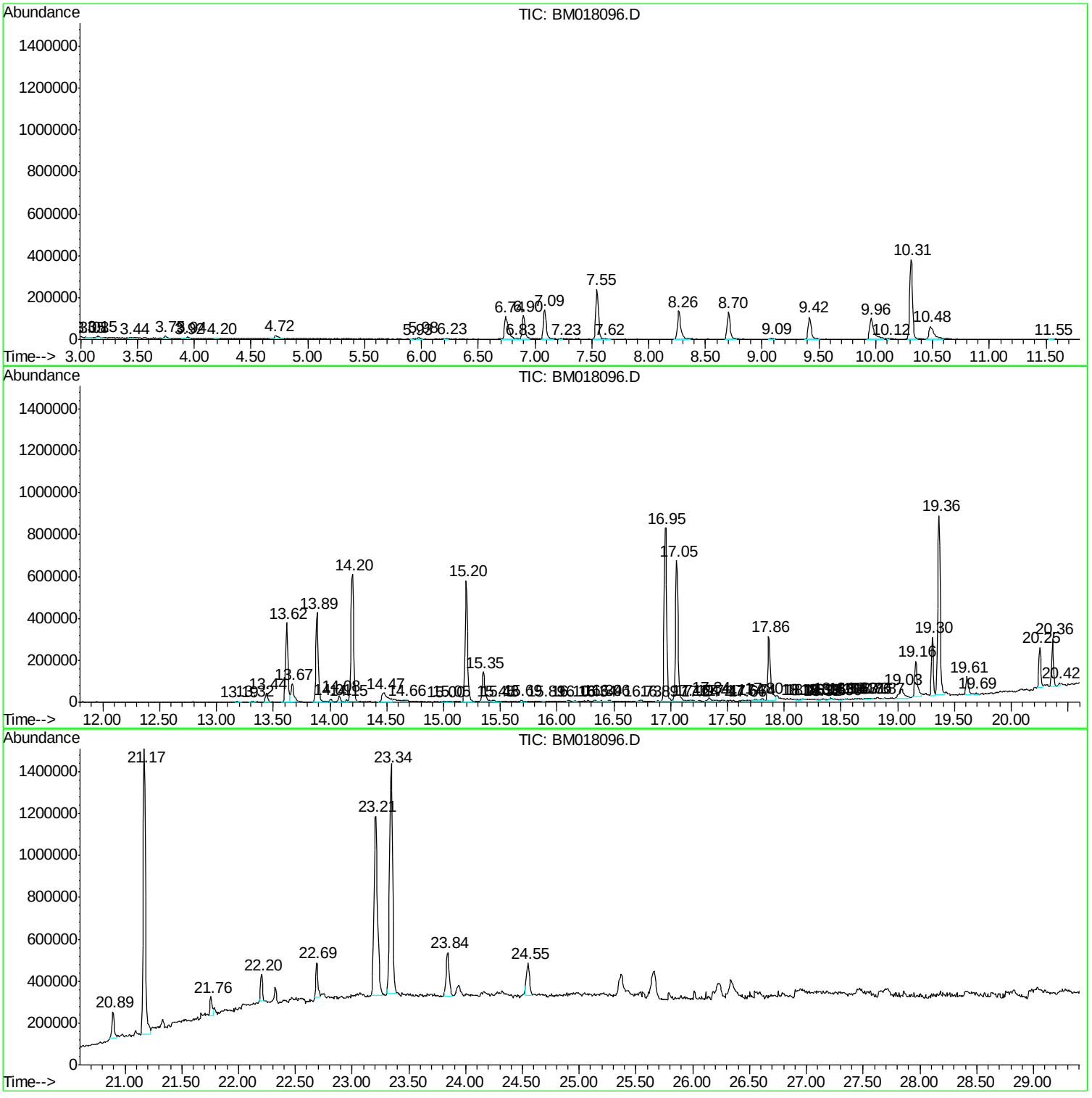
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E75

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E75

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

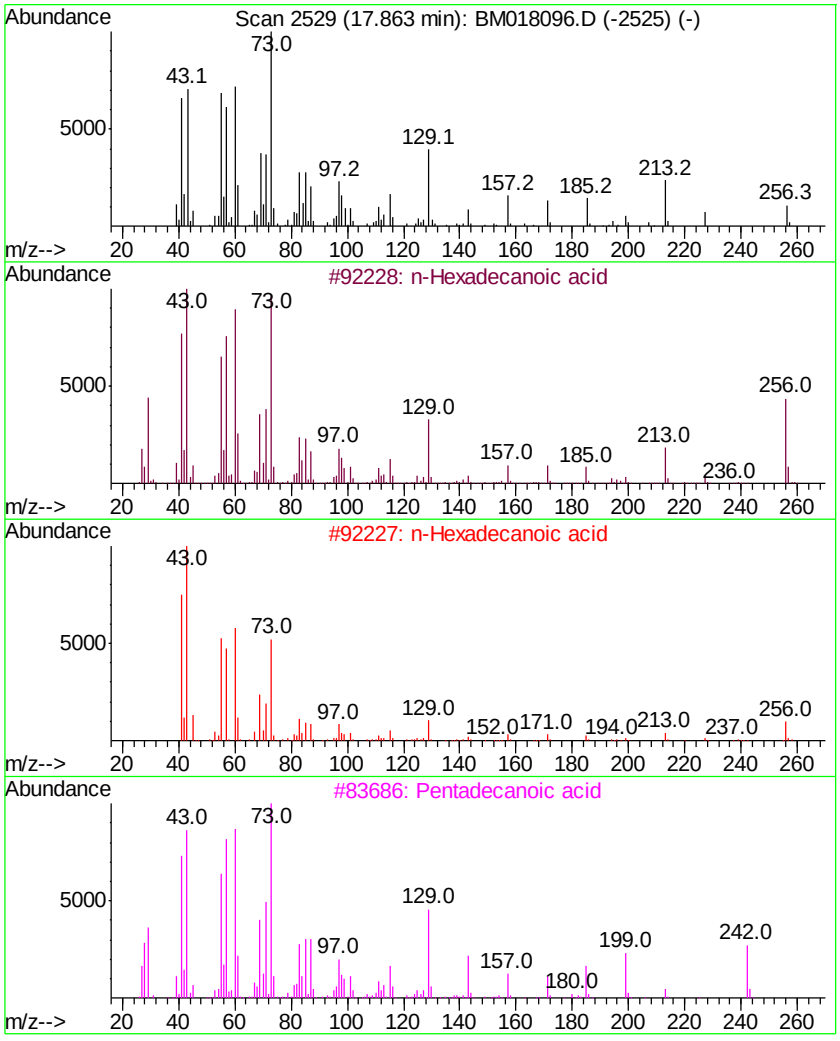
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

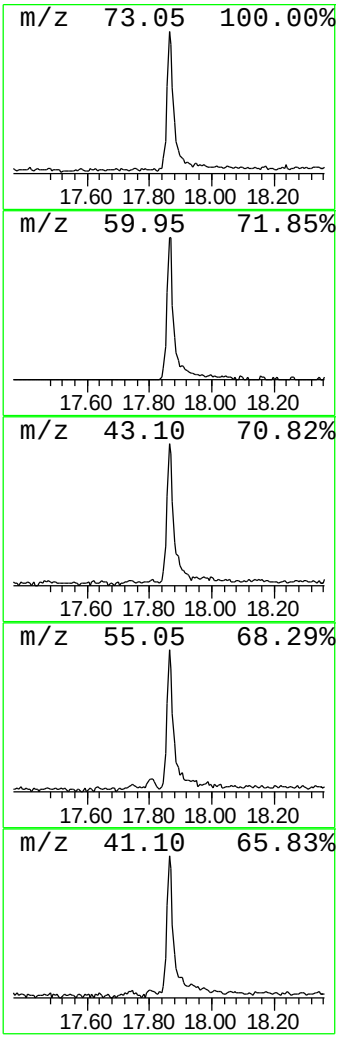
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.86	7.54 ng/ul	481052	Phenanthrene-d10	16.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	95
3	Pentadecanoic acid	242	C15H30O2	001002-84-2	81
4	Tridecanoic acid	214	C13H26O2	000638-53-9	81
5	Tridecanoic acid	214	C13H26O2	000638-53-9	70





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E75

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

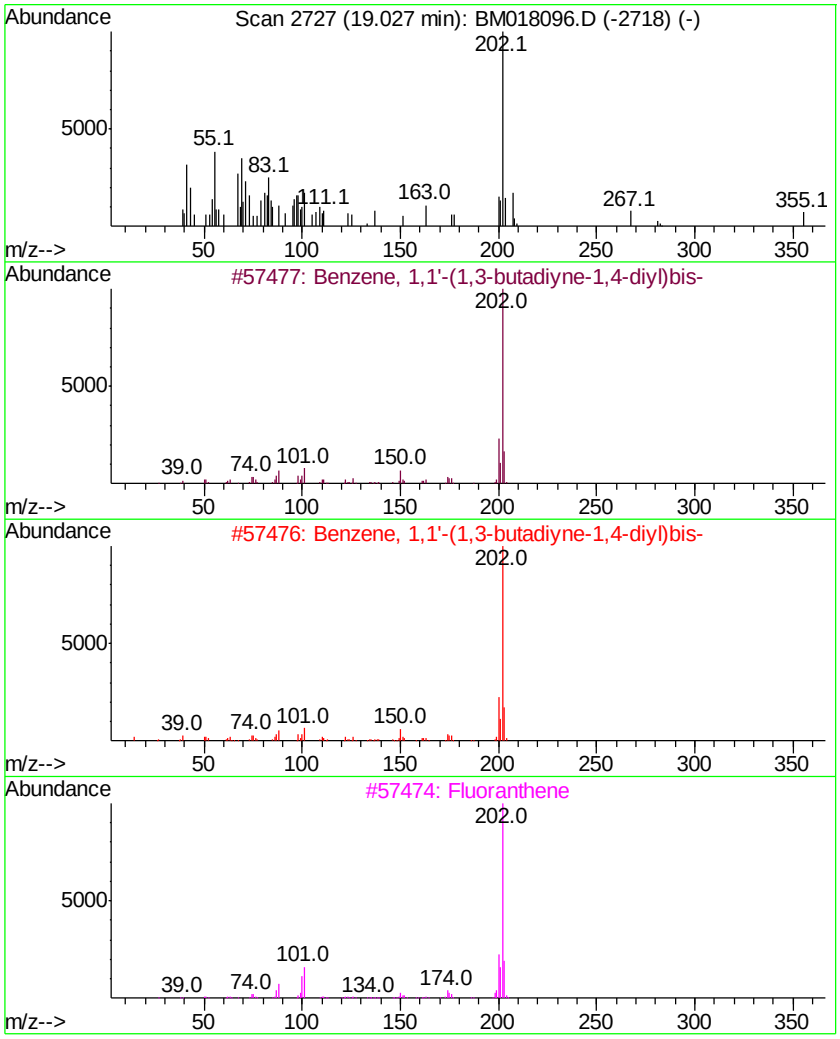
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

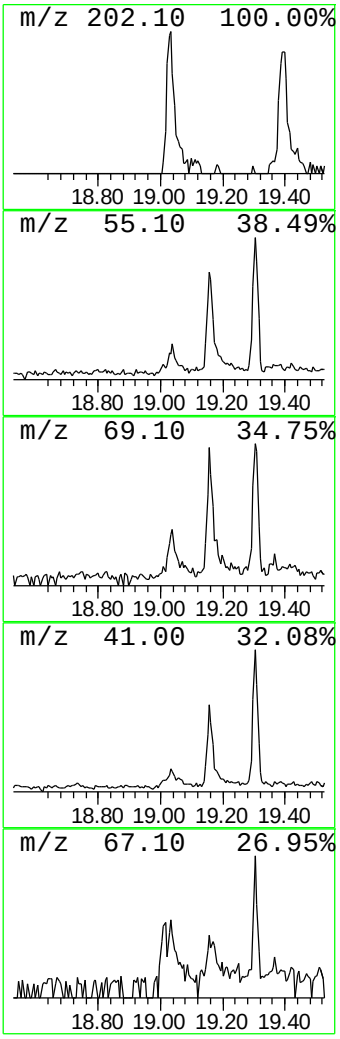
****

Peak Number 2 unknown-01 Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.03	2.34 ng/ul	149439	Phenanthrene-d10	16.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,1'-(1,3-butadiyne-1,4...	202	C16H10	000886-66-8	43
2	Benzene, 1,1'-(1,3-butadiyne-1,4...	202	C16H10	000886-66-8	43
3	Fluoranthene	202	C16H10	000206-44-0	43
4	Pyrene	202	C16H10	000129-00-0	43
5	Benzene, 1,1'-(1,3-butadiyne-1,4...	202	C16H10	000886-66-8	43





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E75

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

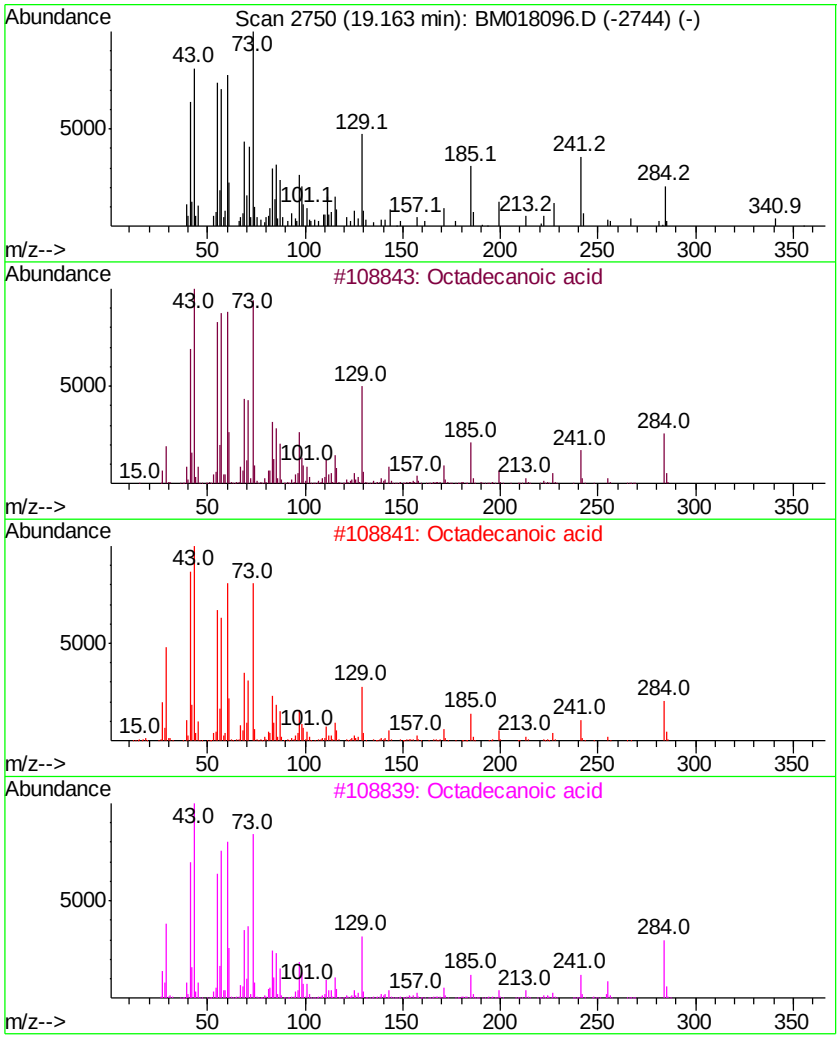
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

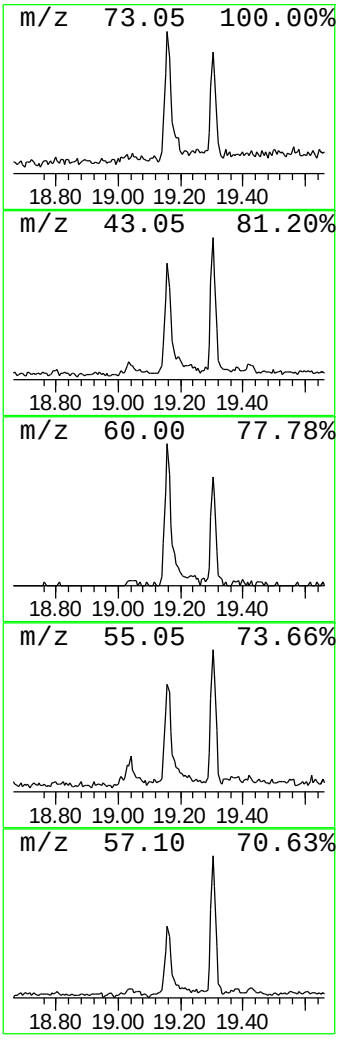
****

Peak Number 3 Octadecanoic acid Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.16	2.89 ng/ul	274632	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Octadecanoic acid	284	C18H36O2	000057-11-4	98
3	Octadecanoic acid	284	C18H36O2	000057-11-4	97
4	Octadecanoic acid	284	C18H36O2	000057-11-4	93
5	Tetradecanoic acid	228	C14H28O2	000544-63-8	90





Library Search Compound Report

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Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E75

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

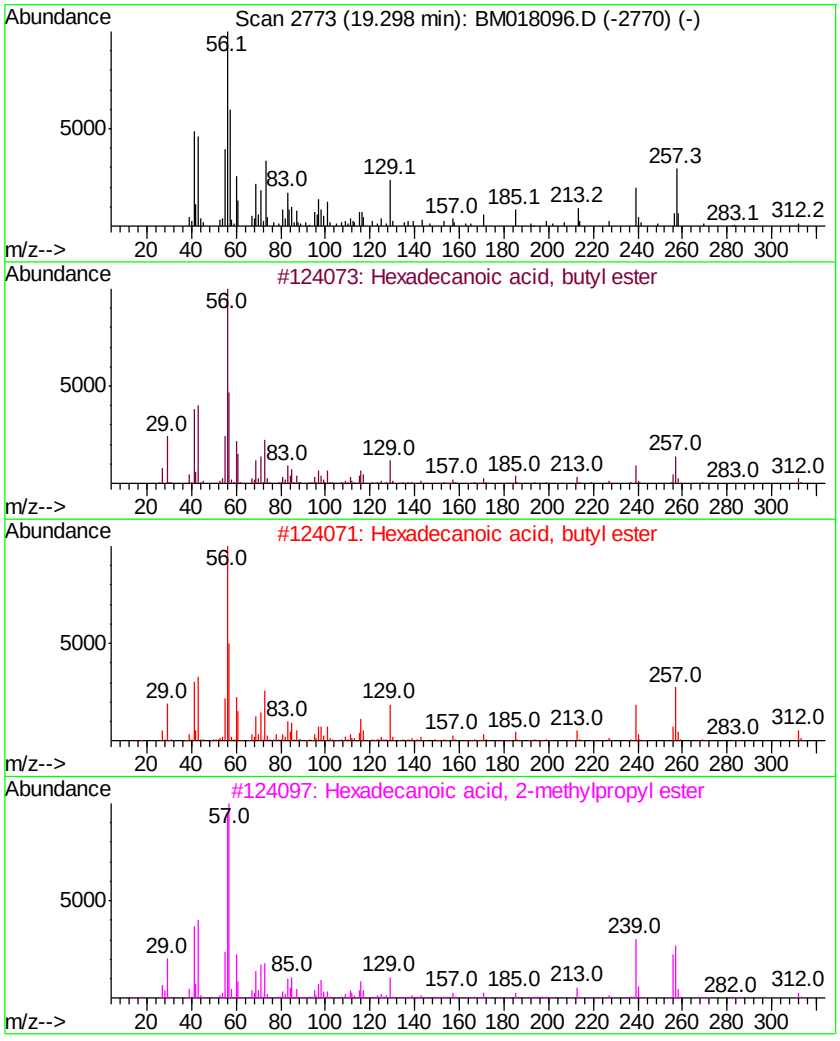
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

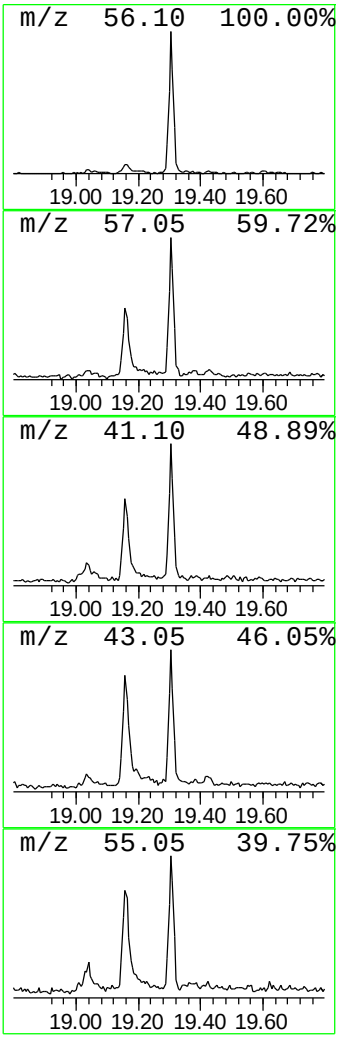
****

Peak Number 4 Hexadecanoic acid, butyl ester Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.30	3.19 ng/ul	303785	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	96
2	Hexadecanoic acid, butyl ester	312	C20H40O2	000111-06-8	94
3	Hexadecanoic acid, 2-methylpropy...	312	C20H40O2	000110-34-9	70
4	Hexadecanoic acid, 1,1-dimethyle...	312	C20H40O2	031158-91-5	58
5	Nipecotic acid	129	C6H11NO2	000498-95-3	43





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Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E75

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

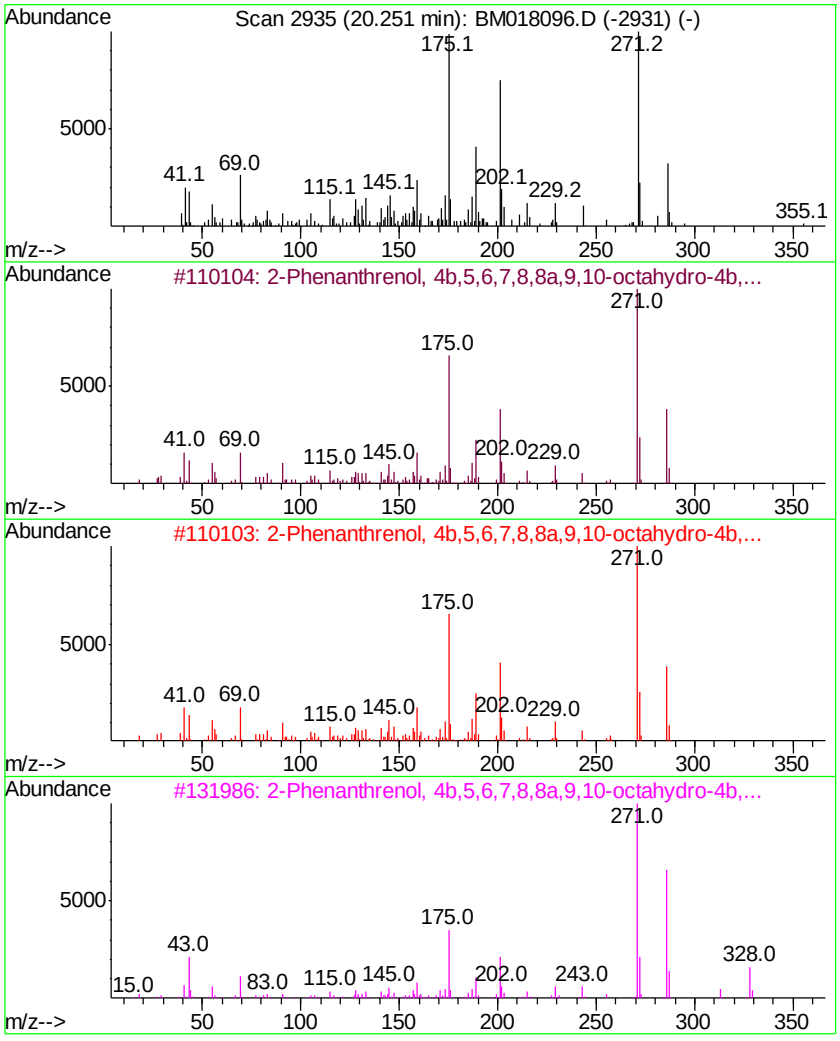
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

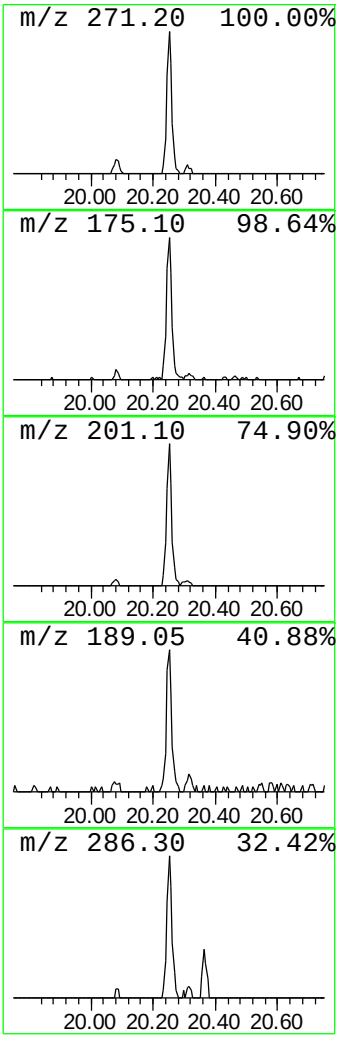
****

Peak Number 5 2-Phenanthrenol, 4b,5,6,7,8... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.25	2.46 ng/ul	233879	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Phenanthrenol, 4b,5,6,7,8,8a,9...	286	C20H30O	000511-15-9	96
2	2-Phenanthrenol, 4b,5,6,7,8,8a,9...	286	C20H30O	000511-15-9	93
3	2-Phenanthrenol, 4b,5,6,7,8,8a,9...	328	C22H32O2	015340-82-6	74
4	Pyrrolidine, 1-[5-(1,3-benzodiox...	271	C16H17NO3	025924-78-1	38
5	6-Methoxy-8-[6-aminohexylamino]l...	287	C17H25N3O	074509-57-2	20





Library Search Compound Report

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Acq On : 12 Dec 2018 17:15
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Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E75

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

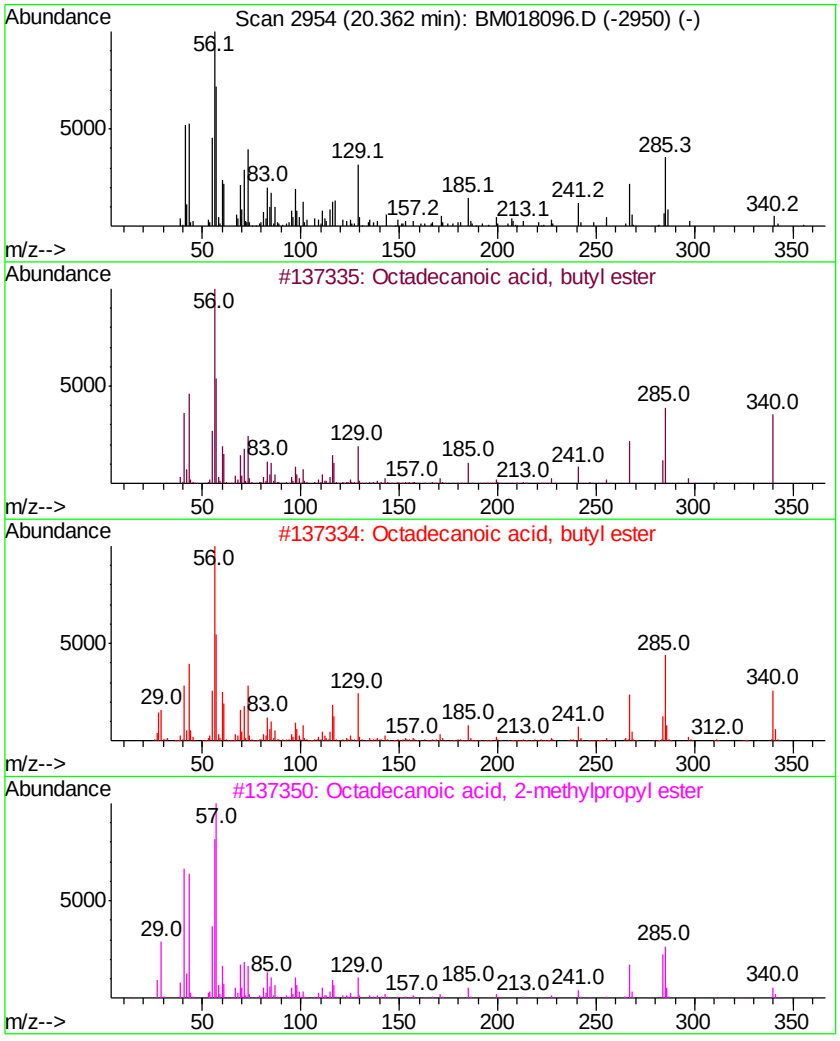
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

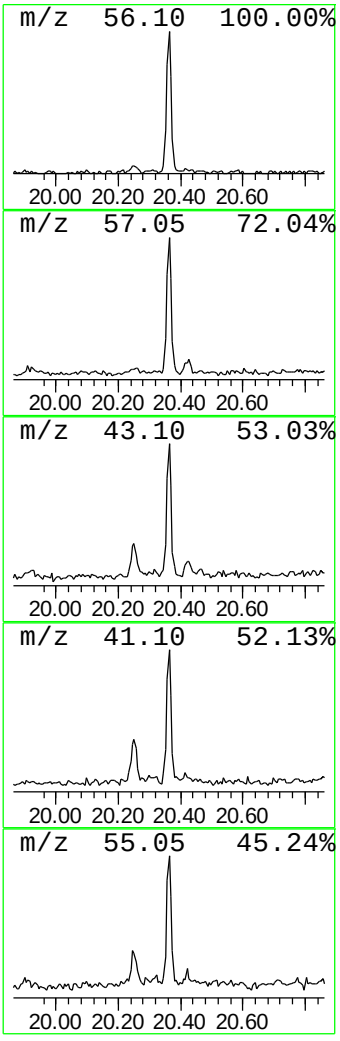
****

Peak Number 6 Octadecanoic acid, butyl ester Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.36	2.55 ng/ul	242759	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	93
2	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	93
3	Octadecanoic acid, 2-methylpropy...	340	C22H44O2	000646-13-9	76
4	Octadecanoic acid, butyl ester	340	C22H44O2	000123-95-5	48
5	n-Butyl myristate	284	C18H36O2	000110-36-1	43





Library Search Compound Report

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Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E75

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

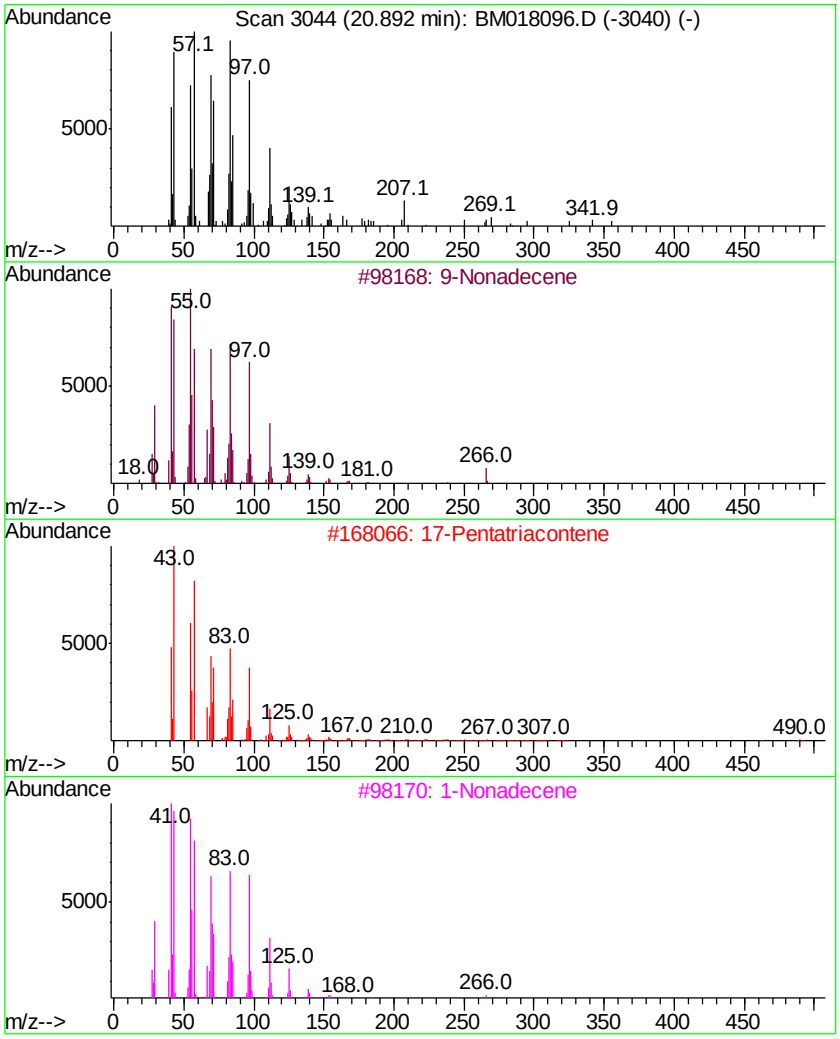
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

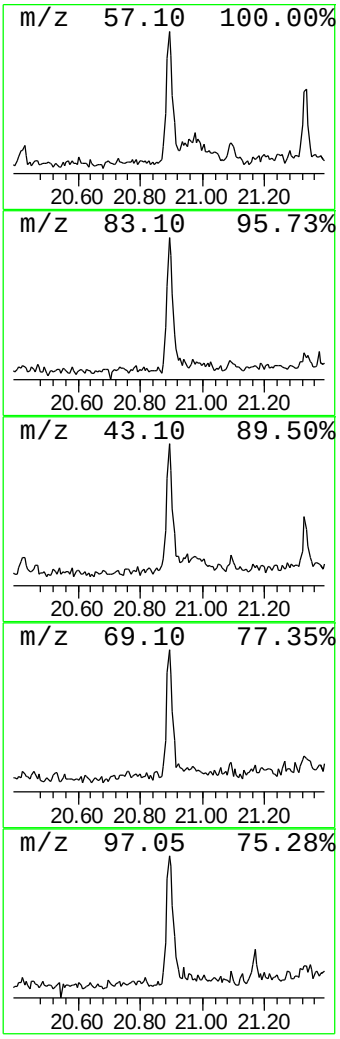
****

Peak Number 7 (DEL) Alkane: Cyclic20.89 Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	2.01 ng/ul	190997	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Nonadecene	266	C19H38	031035-07-1	91
2	17-Pentatriacontene	491	C35H70	006971-40-0	91
3	1-Nonadecene	266	C19H38	018435-45-5	86
4	1-Nonadecene	266	C19H38	018435-45-5	83
5	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	81





Library Search Compound Report

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Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E75

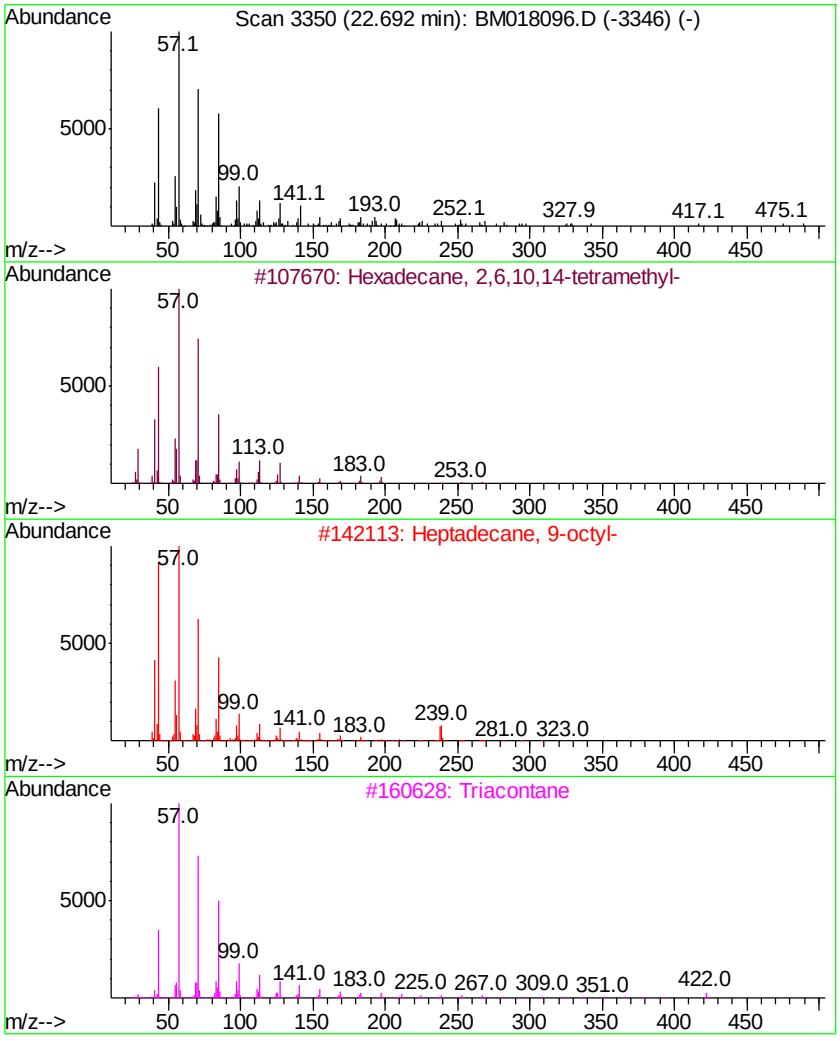
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

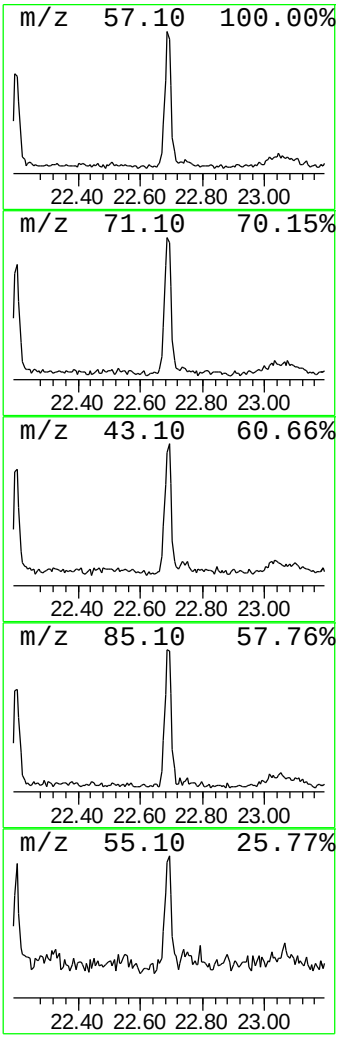
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 8 (DEL) Alkane: Straight-Chai... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.69	2.25 ng/ul	231490	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	91
2	Heptadecane, 9-octyl-	352	C25H52	007225-64-1	87
3	Triacontane	422	C30H62	000638-68-6	87
4	Nonacosane	408	C29H60	000630-03-5	87
5	Heptacosane	380	C27H56	000593-49-7	87





Library Search Compound Report

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Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E75

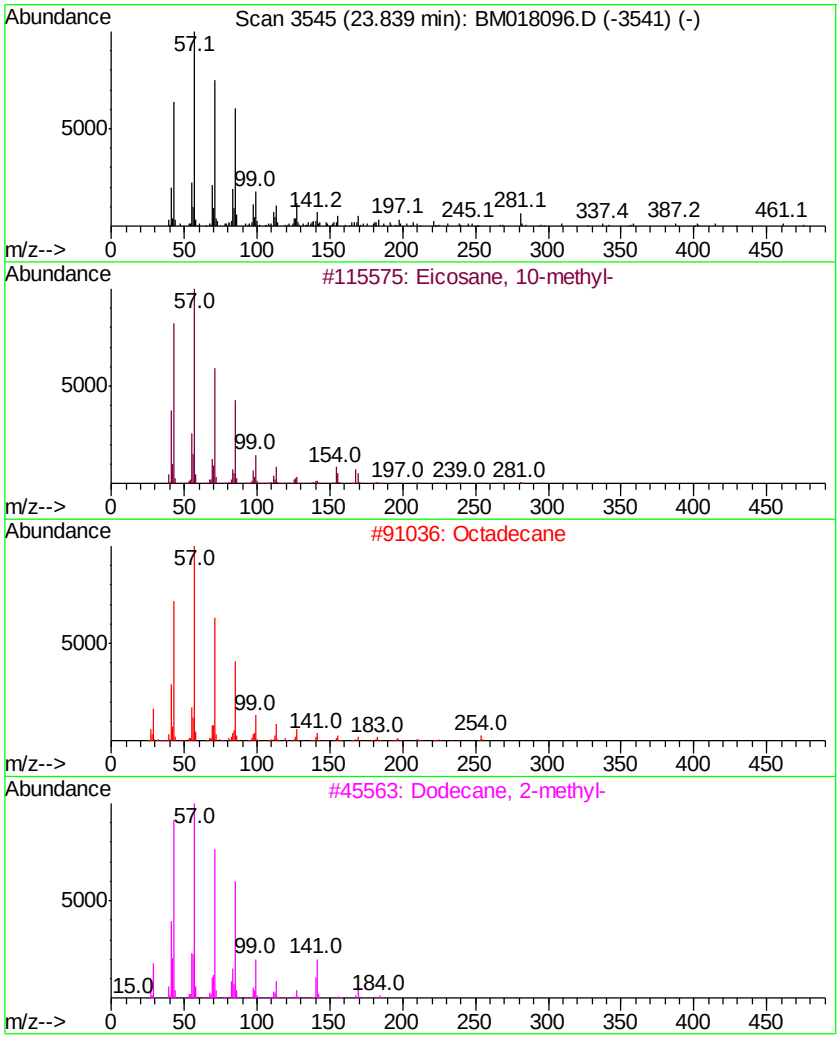
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

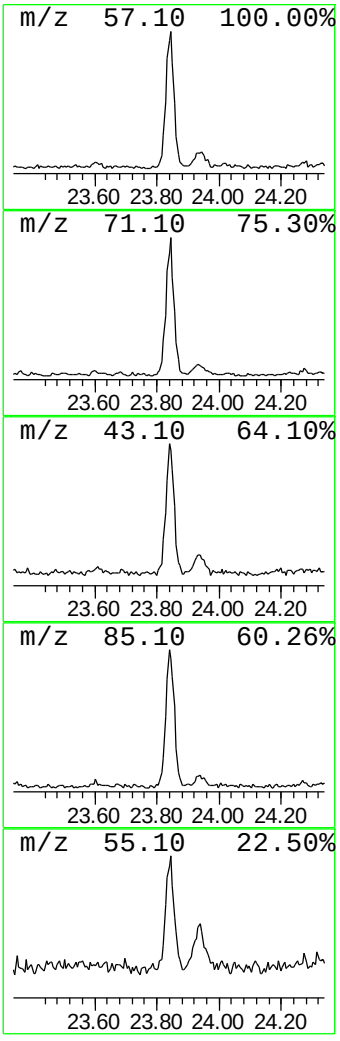
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 9 (DEL) Alkane: Straight-Chai... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.84	3.93 ng/ul	403234	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane, 10-methyl-	296	C21H44	054833-23-7	94
2	Octadecane	254	C18H38	000593-45-3	93
3	Dodecane, 2-methyl-	184	C13H28	001560-97-0	91
4	Heneicosane	296	C21H44	000629-94-7	91
5	Heptadecane, 8-methyl-	254	C18H38	013287-23-5	91





Library Search Compound Report

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Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E75

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

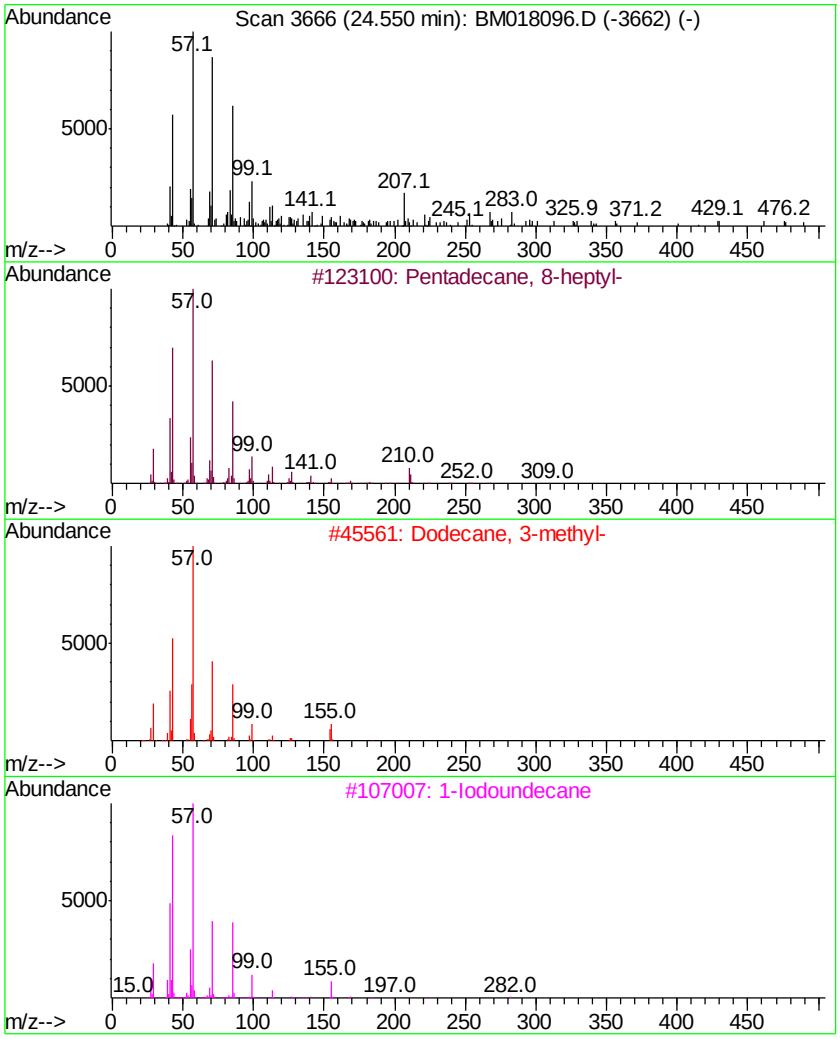
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

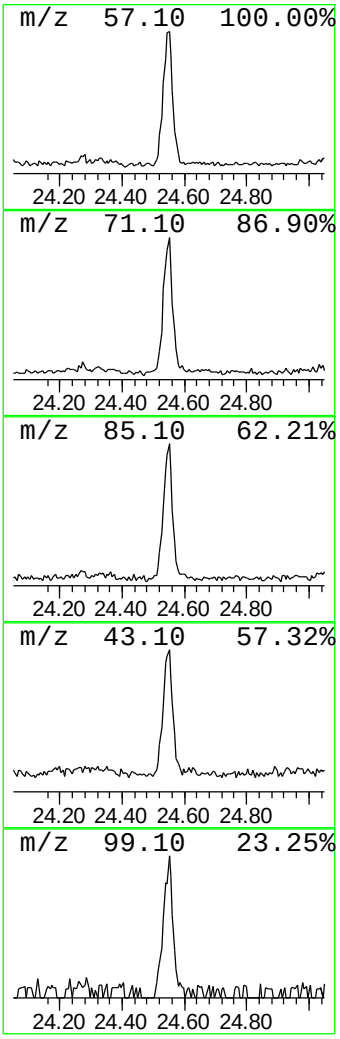
****

Peak Number 10 (DEL) Alkane: Straight-Chai... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.55	2.67 ng/ul	273910	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecane, 8-heptyl-	310	C22H46	071005-15-7	80
2	Dodecane, 3-methyl-	184	C13H28	017312-57-1	80
3	1-Iodoundecane	282	C11H23I	004282-44-4	80
4	Tetracosane, 11-decyl-	479	C34H70	055429-84-0	72
5	Docosane, 7-hexyl-	394	C28H58	055373-86-9	64





Tentatively Identified Compound (LSC) summary

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Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E75

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	17.86	7.5	ng/ul	481052	4	16.96	1276200	20.0
unknown-01	19.03	2.3	ng/ul	149439	4	16.96	1276200	20.0
Octadecanoic acid	19.16	2.9	ng/ul	274632	5	21.17	1903370	20.0
Hexadecanoic acid...	19.30	3.2	ng/ul	303785	5	21.17	1903370	20.0
2-Phenanthrenol, ...	20.25	2.5	ng/ul	233879	5	21.17	1903370	20.0
Octadecanoic acid...	20.36	2.5	ng/ul	242759	5	21.17	1903370	20.0
(DEL) Alkane: Cyc...	20.89	2.0	ng/ul	190997	5	21.17	1903370	20.0
(DEL) Alkane: Str...	22.69	2.3	ng/ul	231490	6	23.34	2053490	20.0
(DEL) Alkane: Str...	23.84	3.9	ng/ul	403234	6	23.34	2053490	20.0
(DEL) Alkane: Str...	24.55	2.7	ng/ul	273910	6	23.34	2053490	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 13 02:56:40 2018
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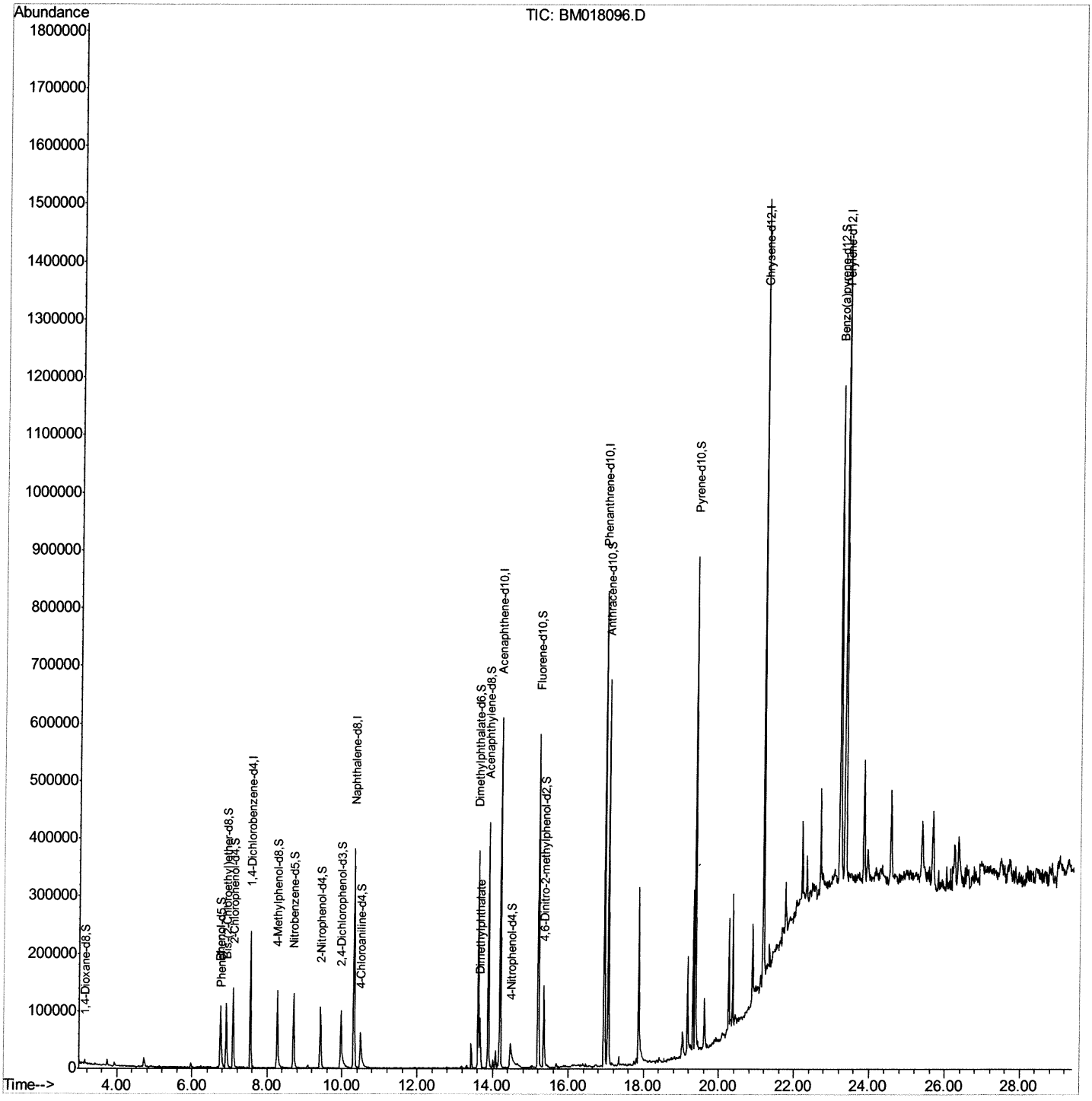
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E75

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:03 PM



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Quantitation Report (Qedit)

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Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 13 02:41:04 2018
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Quant Title : SVOA CALIBRATION
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Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
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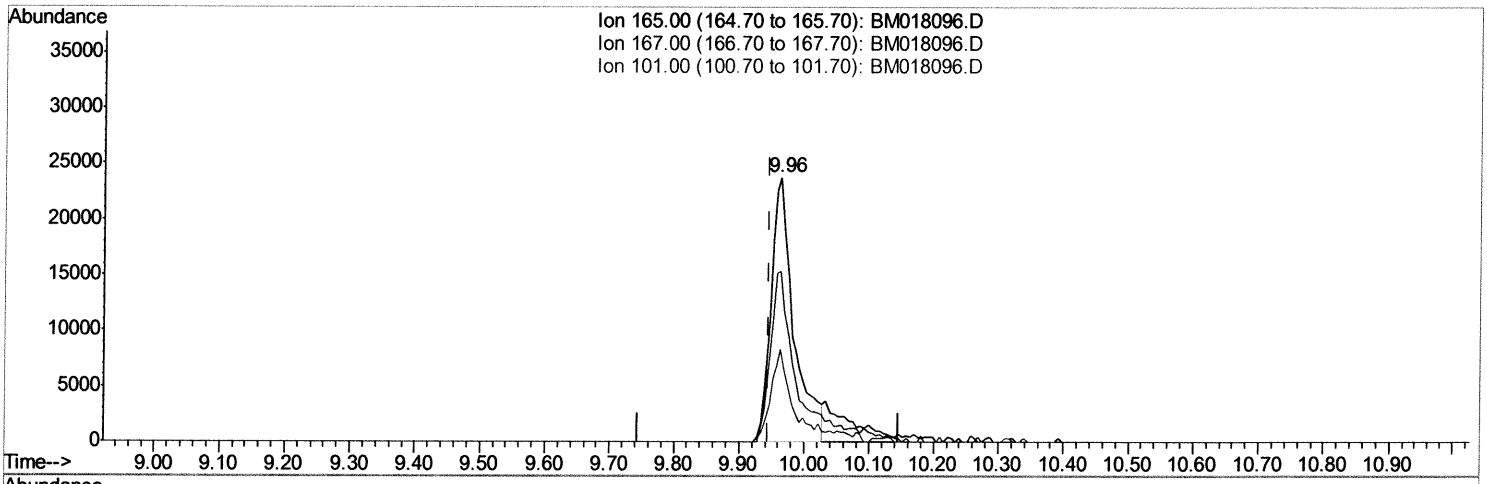
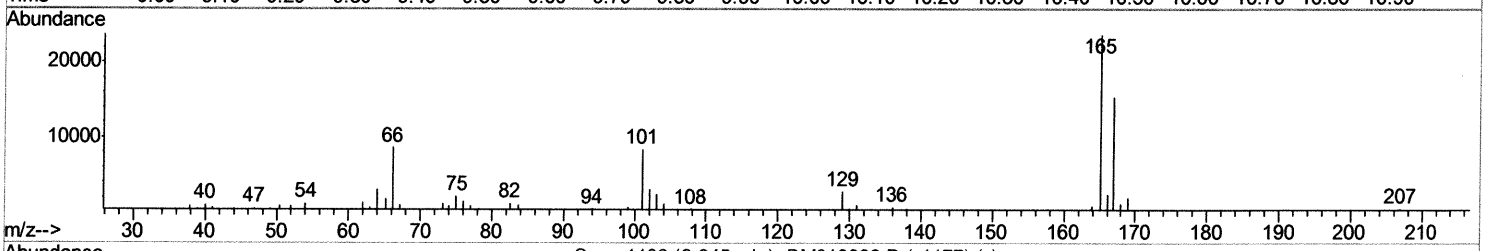
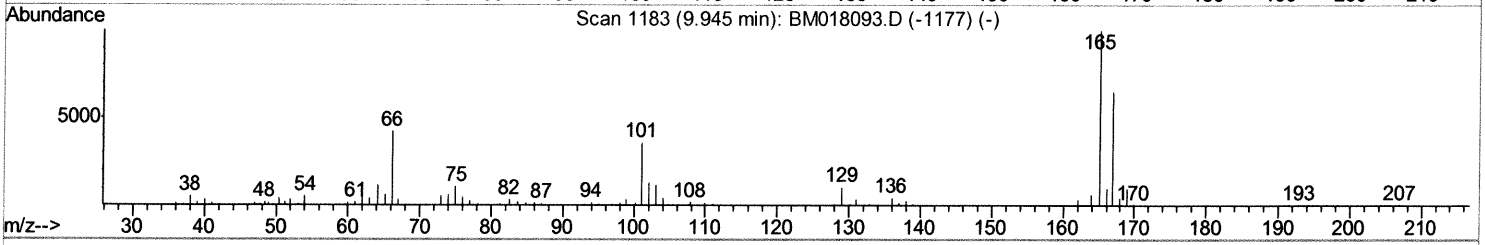
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:03 PM







TIC: BM018096.D

(26) 2,4-Dichlorophenol-d3 (S)

9.963min (+0.018) 10.36ng/ul

response 58027

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	64.67
101.00	34.80	35.17
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (Qedit)

Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 13 02:41:04 2018
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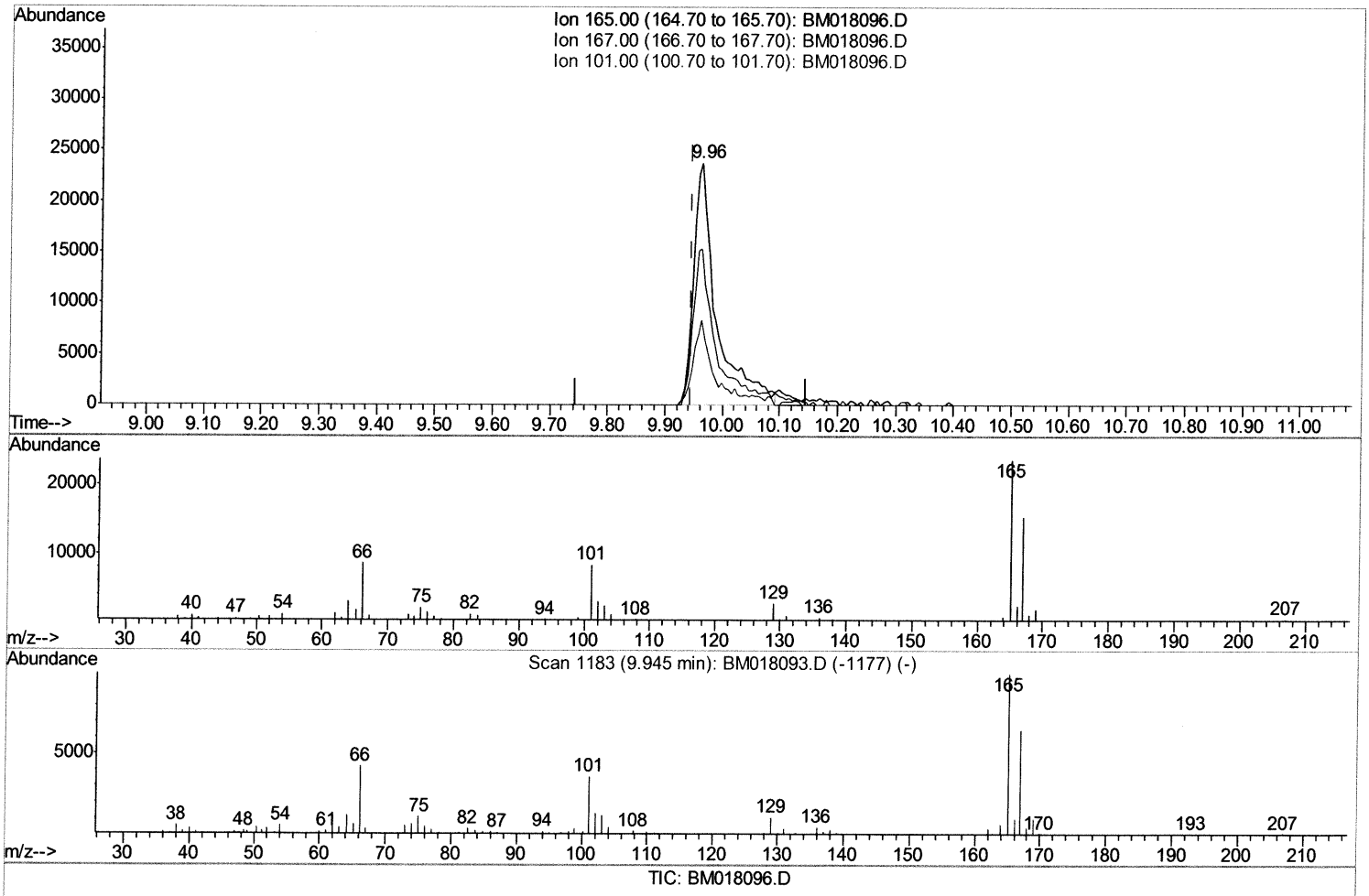
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E75

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:03 PM



TIC: BM018096.D

(26) 2,4-Dichlorophenol-d3 (S)

9.963min (+0.018) 11.81ng/ul m > SJ 12/13/18

response 66165

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	64.67
101.00	34.80	35.17
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

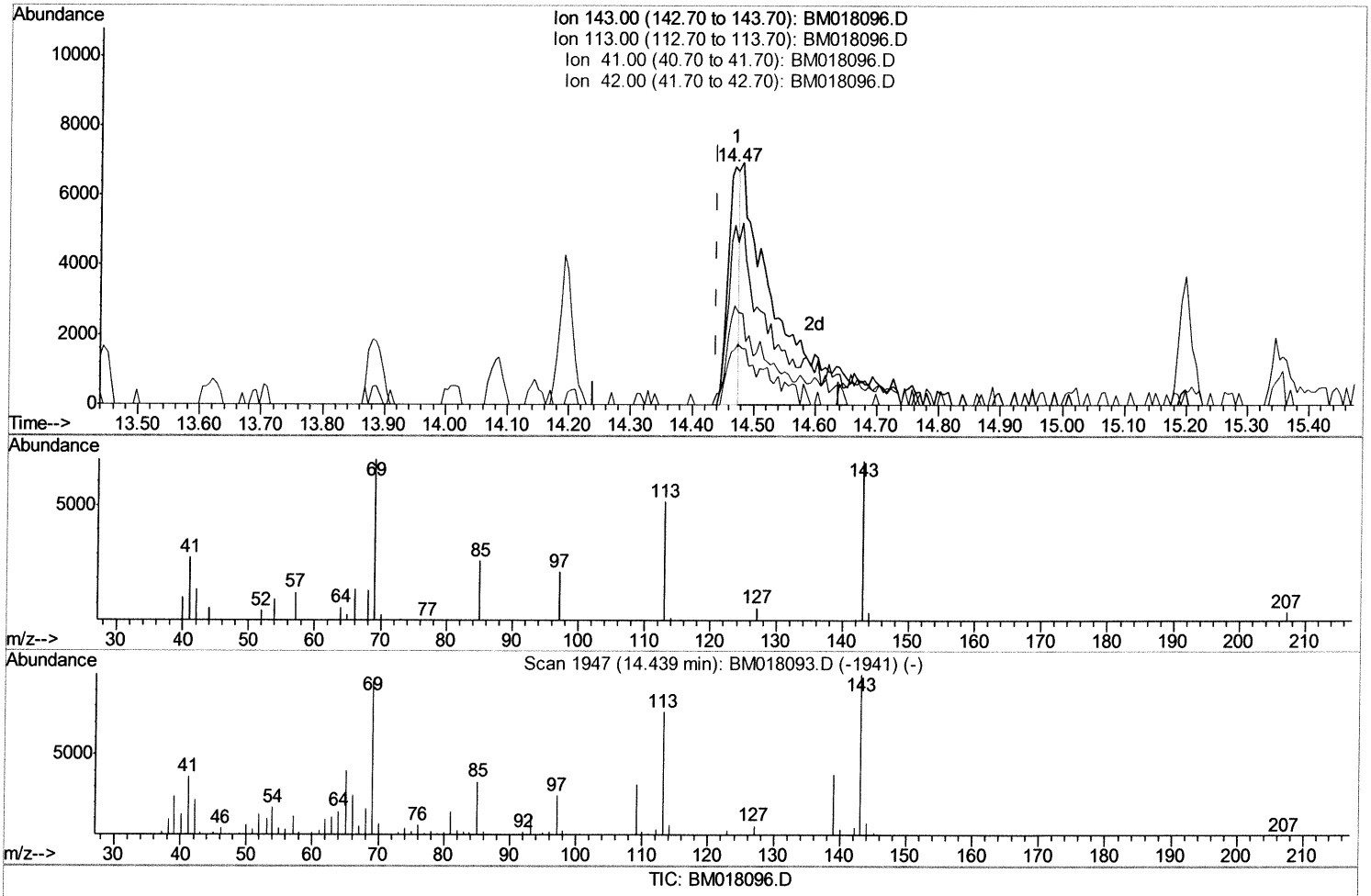
Quantitation Report (Qedit)

Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 13 02:41:04 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E75

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:03 PM



TIC: BM018096.D

(51) 4-Nitrophenol-d4 (S)

14.469min (+0.029) 2.82ng/ul

response 9485

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	75.46
41.00	40.10	41.77
42.00	26.80	23.14

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

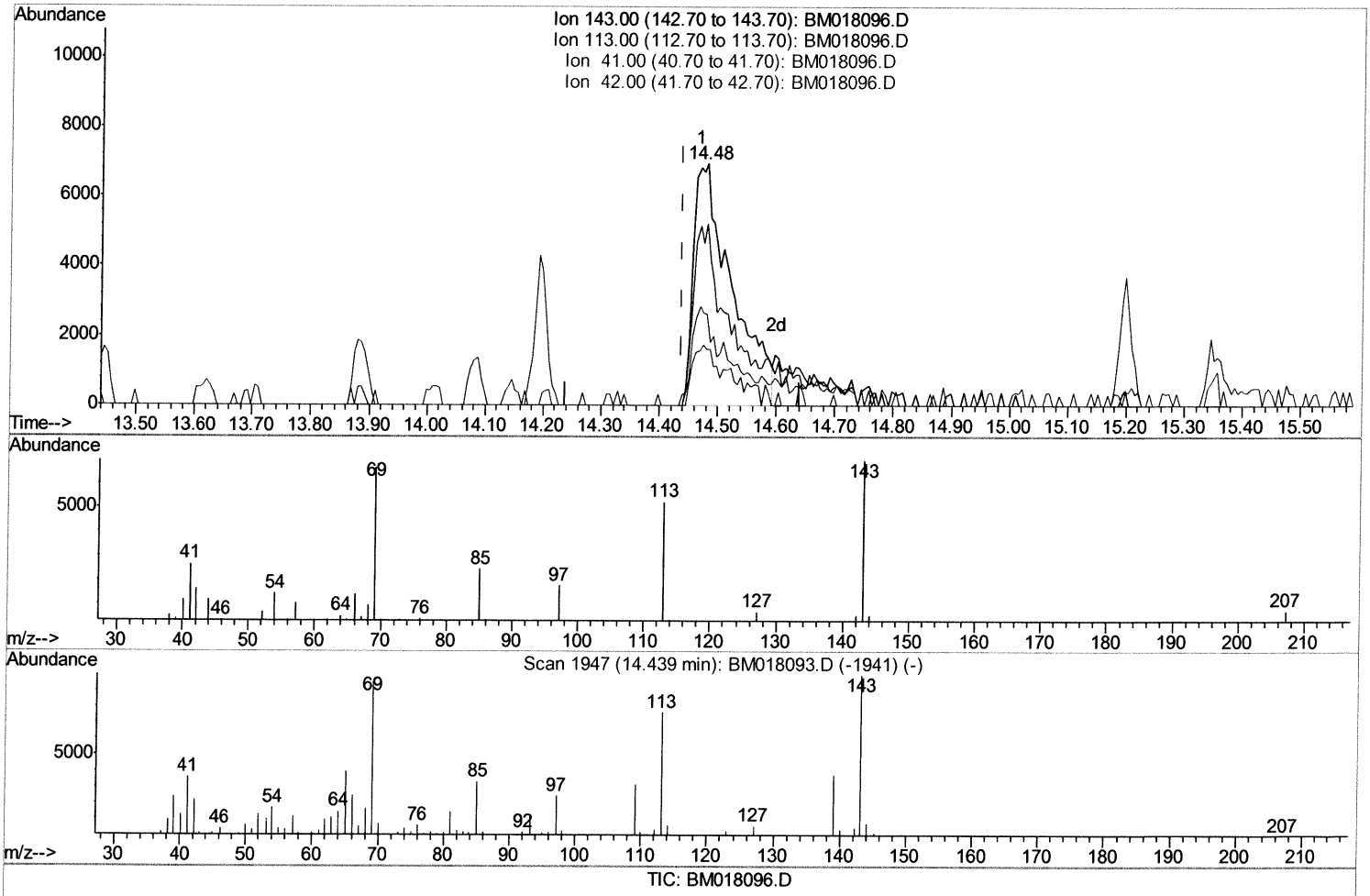
Quantitation Report (Qedit)

Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 13 02:41:04 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E75

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:03 PM



TIC: BM018096.D

(51) 4-Nitrophenol-d4 (S)

14.480min (+0.041) 9.30ng/ul m > 50 12/13/18

response 31336

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	75.14
41.00	40.10	37.89
42.00	26.80	23.08

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018096.D
Acq On : 12 Dec 2018 17:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 13 02:56:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9E75

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:03 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	69642	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	334345	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	213541	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.96	188	513096	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	665542	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	796372	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	3854	2.53	ng/uL	0.00
5) Phenol-d5	6.74	99	84393	13.27	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	53009	13.82	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	73505	14.77	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	62946	12.11	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	36724	14.30	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	41719	14.18	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.96	165	66165m	11.81	ng/ul	0.02
29) 4-Chloroaniline-d4	10.48	131	63122	13.13	ng/ul	0.01
43) Dimethylphthalate-d6	13.62	166	289006	15.60	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	324688	14.48	ng/ul	0.00
51) 4-Nitrophenol-d4	14.48	143	31336m	9.30	ng/ul	0.04
57) Fluorene-d10	15.20	176	244152	15.26	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	36770	10.02	ng/ul	0.00
70) Anthracene-d10	17.05	188	393517	15.40	ng/ul	0.00
78) Pyrene-d10	19.36	212	452517	14.05	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	621829	14.40	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.77	94	20561	3.239	ng/ul#	90
44) Dimethylphthalate	13.67	163	63438	3.534	ng/ul	99

SJ 12/13/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E80

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-07
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018097.D
% Solids : 91.2
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	73	U
100-52-7	Benzaldehyde	360	U
108-95-2	Phenol	120	J
111-44-4	Bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	190	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2-oxybis(1-Chloropropane)	360	U
98-86-2	Acetophenone	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	190	U
67-72-1	Hexachloroethane	190	U
98-95-3	Nitrobenzene	190	U
78-59-1	Isophorone	190	U
88-75-5	2-Nitrophenol	190	U
105-67-9	2,4-Dimethylphenol	190	U
111-91-1	Bis(2-Chloroethoxy)methane	190	U
120-83-2	2,4-Dichlorophenol	190	U
91-20-3	Naphthalene	190	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	190	U
105-60-2	Caprolactam	360	U
59-50-7	4-Chloro-3-methylphenol	190	U
91-57-6	2-Methylnaphthalene	190	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E80

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-07
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018097.D
% Solids : 91.2
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	190	U
92-52-4	1,1-Biphenyl	190	U
91-58-7	2-Chloronaphthalene	190	U
88-74-4	2-Nitroaniline	190	U
131-11-3	Dimethylphthalate	220	
606-20-2	2,6-Dinitrotoluene	190	U
208-96-8	Acenaphthylene	190	U
99-09-2	3-Nitroaniline	360	U
83-32-9	Acenaphthene	190	U
51-28-5	2,4-Dinitrophenol	360	U
100-02-7	4-Nitrophenol	360	U
132-64-9	Dibenzofuran	190	U
121-14-2	2,4-Dinitrotoluene	190	U
84-66-2	Diethylphthalate	190	U
86-73-7	Fluorene	190	U
7005-72-3	4-Chlorophenyl-phenylether	190	U
100-01-6	4-Nitroaniline	360	U
534-52-1	4,6-Dinitro-2-methylphenol	360	U
86-30-6	N-Nitrosodiphenylamine	190	U
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U
101-55-3	4-Bromophenyl-phenylether	190	U
118-74-1	Hexachlorobenzene	190	U
1912-24-9	Atrazine	360	U
87-86-5	Pentachlorophenol	360	U
85-01-8	Phenanthrene	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E80

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-07
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018097.D
% Solids : 91.2
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	190	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	190	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	190	U
85-68-7	Butylbenzylphthalate	190	U
91-94-1	3,3-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	190	U
218-01-9	Chrysene	190	U
117-81-7	Bis(2-ethylhexyl)phthalate	190	U
117-84-0	Di-n-octyl phthalate	360	U
205-99-2	Benzo(b)fluoranthene	190	U
207-08-9	Benzo(k)fluoranthene	190	U
50-32-8	Benzo(a)pyrene	190	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	U
53-70-3	Dibenzo(a,h)anthracene	190	U
191-24-2	Benzo(g,h,i)perylene	190	U
58-90-2	2,3,4,6-Tetrachlorophenol	190	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9E80

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-07
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018097.D
% Solids : 91.2
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/12/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000057-10-3	n-Hexadecanoic acid	17.86	220	JN
2	000057-11-4	Octadecanoic acid	19.16	81	JN
3	E966796	Total Alkanes	N/A	1000	

EPA-designated Registry Number.

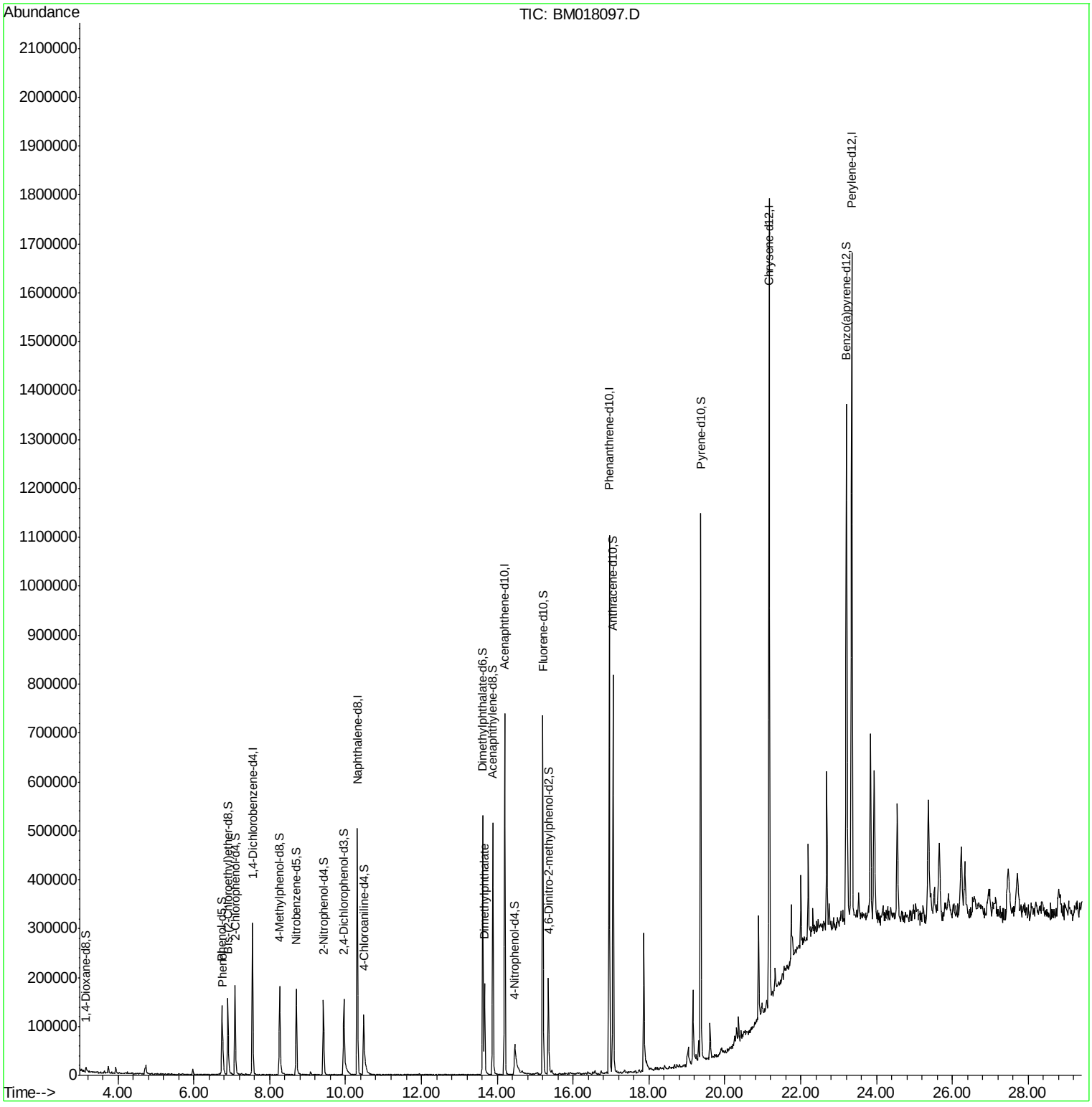
Quantitation Report (LSC Reviewed)

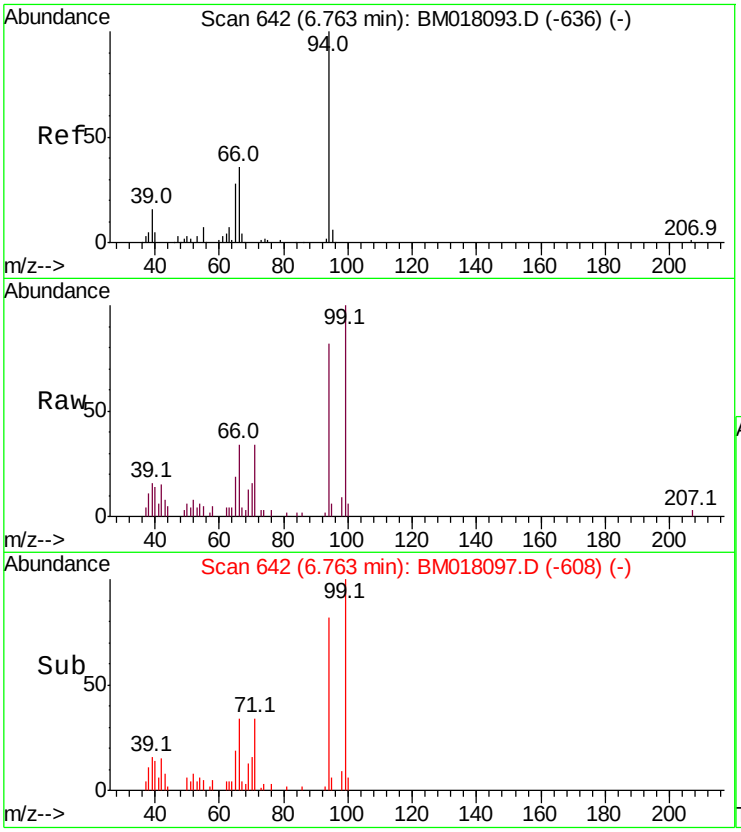
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 13 02:59:17 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E80

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:05 PM





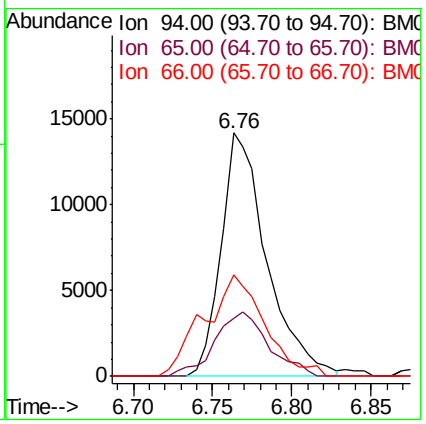
#6
Phenol
Concen: 3.418 ng/ul
RT: 6.76 min Scan# 642
Delta R.T. -0.00 min
Lab File: BM018097.D
Acq: 12 Dec 2018 17:51

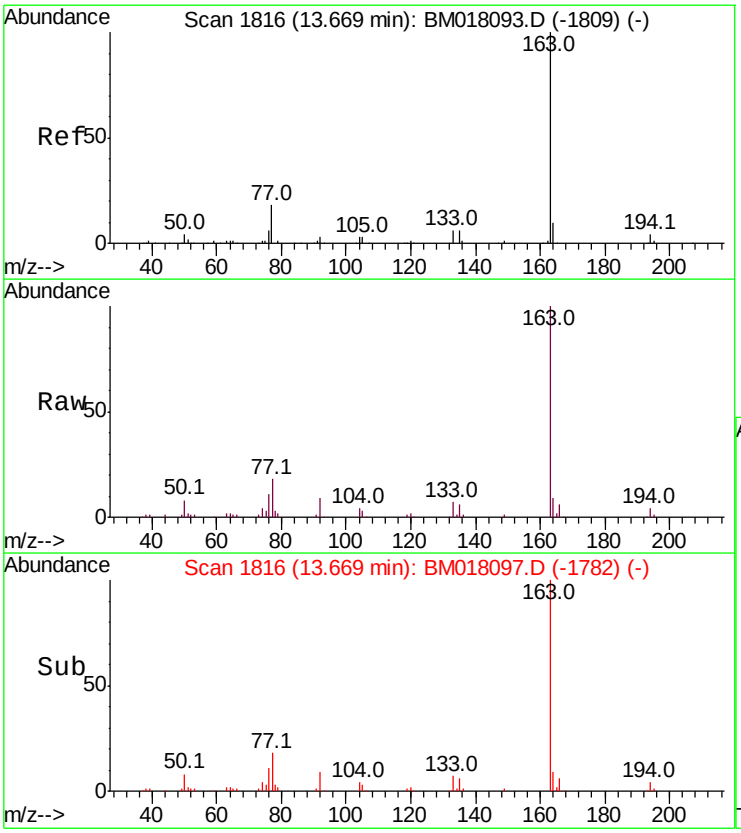
Tgt Ion: 94 Resp: 28360

Ion	Ratio	Lower	Upper
94	100		
65	23.8	24.7	37.1#
66	41.4	34.6	51.8

Instrument :
BNA_M
ClientSampleId :
F9E80

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:05 PM

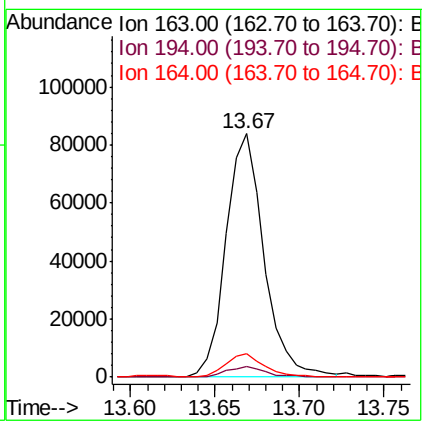




#44
Dimethylphthalate
Concen: 6.048 ng/ul
RT: 13.67 min Scan# 1816
Delta R.T. -0.00 min
Lab File: BM018097.D
Acq: 12 Dec 2018 17:51

Tgt Ion:163 Resp: 131221

Ion	Ratio	Lower	Upper
163	100		
194	4.1	3.4	5.0
164	9.4	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9E80

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:05 PM

Quant Time: Dec 13 02:59:17 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	91018	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	421555	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	258104	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	635282	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	815737	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	928131	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	6018	3.03	ng/uL	0.00
5) Phenol-d5	6.74	99	106844	12.85	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	73051	14.57	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	96340	14.81	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	82414	12.13	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	48666	15.03	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	56593	15.25	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	91766m	12.99	ng/ul	0.00
29) 4-Chloroaniline-d4	10.48	131	117898m	19.45	ng/ul	0.01
43) Dimethylphthalate-d6	13.62	166	396444	17.70	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	395153	14.58	ng/ul	0.00
51) 4-Nitrophenol-d4	14.47	143	43411m	10.66	ng/ul	0.03
57) Fluorene-d10	15.20	176	314215	16.25	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	51287	11.29	ng/ul	0.00
70) Anthracene-d10	17.05	188	484886	15.33	ng/ul	0.00
78) Pyrene-d10	19.36	212	571280	14.47	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	728047	14.46	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	28360	3.418	ng/ul#	93
44) Dimethylphthalate	13.67	163	131221	6.048	ng/ul	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E80

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.046	8	10	13	rVB4	3994	3669	0.15%	0.014%
2	3.116	20	22	24	rVB3	3458	2648	0.11%	0.010%
3	3.152	24	28	35	rBV4	11106	19362	0.77%	0.076%
4	3.422	72	74	76	rBV3	2631	2785	0.11%	0.011%
5	3.640	107	111	112	rBV3	4690	4237	0.17%	0.017%
6	3.746	124	129	135	rVV2	14423	23072	0.92%	0.090%
7	3.940	158	162	169	rBV5	13547	20962	0.83%	0.082%
8	4.193	200	205	208	rBV3	2048	3205	0.13%	0.013%
9	4.252	211	215	217	rVB4	3151	3542	0.14%	0.014%
10	4.452	244	249	253	rVB4	1966	2920	0.12%	0.011%
11	4.716	290	294	296	rBV	14208	21445	0.85%	0.084%
12	4.734	296	297	302	rVB	15936	17182	0.68%	0.067%
13	5.975	503	508	513	rVB2	11239	16065	0.64%	0.063%
14	6.740	631	638	652	rBV3	140457	355513	14.14%	1.394%
15	6.898	659	665	676	rBV	155292	259113	10.31%	1.016%
16	7.087	691	697	709	rBV	183137	328776	13.08%	1.290%
17	7.545	768	775	786	rBV	310150	527926	21.00%	2.071%
18	7.622	786	788	791	rVB3	3038	2767	0.11%	0.011%
19	8.263	889	897	911	rBV2	181435	353909	14.08%	1.388%
20	8.381	915	917	921	rVB4	2447	3140	0.12%	0.012%
21	8.704	963	972	984	rBV	176566	322370	12.82%	1.264%
22	9.081	1029	1036	1041	rBV2	6920	11153	0.44%	0.044%
23	9.416	1085	1093	1105	rBV	154481	281383	11.19%	1.104%
24	9.957	1179	1185	1207	rBV2	154677	370012	14.72%	1.451%
25	10.310	1238	1245	1256	rBV	503569	830217	33.03%	3.256%
26	10.475	1267	1273	1295	rBV	121871	352811	14.04%	1.384%
27	13.616	1801	1807	1812	rBV	530269	800818	31.86%	3.141%
28	13.669	1812	1816	1827	rVB	184198	295940	11.77%	1.161%
29	13.886	1846	1853	1863	rBV	514797	802554	31.93%	3.148%
30	13.951	1863	1864	1869	rVB2	2897	3277	0.13%	0.013%
31	14.198	1898	1906	1917	rBV2	737701	1182875	47.06%	4.640%
32	14.463	1944	1951	1966	rBV3	63396	223882	8.91%	0.878%
33	14.610	1974	1976	1978	rVB2	2985	2706	0.11%	0.011%
34	14.733	1992	1997	2000	rVB4	2570	3598	0.14%	0.014%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E80

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	15.004	2039	2043	2047	rBV4	2484	4303	0.17%	0.017%
36	15.045	2047	2050	2052	rVV	4440	5313	0.21%	0.021%
37	15.198	2070	2076	2089	rBV	732790	1149882	45.75%	4.510%
38	15.351	2096	2102	2114	rBV	196615	336679	13.39%	1.321%
39	15.445	2114	2118	2124	rVB3	7392	12203	0.49%	0.048%
40	15.774	2172	2174	2179	rVB3	2612	3240	0.13%	0.013%
41	15.880	2189	2192	2195	rBV3	2867	2894	0.12%	0.011%
42	15.927	2195	2200	2204	rBV3	2754	4989	0.20%	0.020%
43	16.057	2218	2222	2225	rVB2	2031	2695	0.11%	0.011%
44	16.110	2225	2231	2235	rBV4	3974	8137	0.32%	0.032%
45	16.386	2276	2278	2281	rBV4	4431	5022	0.20%	0.020%
46	16.515	2296	2300	2303	rBV4	4606	7756	0.31%	0.030%
47	16.574	2305	2310	2315	rVB5	6069	8295	0.33%	0.033%
48	16.745	2333	2339	2343	rBV3	6881	12715	0.51%	0.050%
49	16.845	2353	2356	2358	rBV2	2115	2711	0.11%	0.011%
50	16.957	2369	2375	2381	rBV	1099978	1561815	62.13%	6.126%
51	17.051	2385	2391	2403	rVV2	814063	1264856	50.32%	4.961%
52	17.157	2406	2409	2411	rVV4	4564	5166	0.21%	0.020%
53	17.198	2415	2416	2419	rVB2	3591	3049	0.12%	0.012%
54	17.227	2419	2421	2423	rBV3	2315	2749	0.11%	0.011%
55	17.257	2423	2426	2429	rVB3	3516	4558	0.18%	0.018%
56	17.304	2429	2434	2435	rBV2	2988	3209	0.13%	0.013%
57	17.321	2435	2437	2440	rBV2	3439	4071	0.16%	0.016%
58	17.357	2440	2443	2448	rVB5	5909	9192	0.37%	0.036%
59	17.457	2457	2460	2463	rBV4	4932	7215	0.29%	0.028%
60	17.592	2482	2483	2487	rBV2	2379	3155	0.13%	0.012%
61	17.633	2487	2490	2495	rVB4	4977	9973	0.40%	0.039%
62	17.745	2503	2509	2510	rBV3	6226	10154	0.40%	0.040%
63	17.809	2517	2520	2522	rBV3	5347	6157	0.24%	0.024%
64	17.862	2524	2529	2540	rBV	283630	468637	18.64%	1.838%
65	17.933	2540	2541	2549	rVB2	14190	19532	0.78%	0.077%
66	18.057	2561	2562	2564	rVB2	3952	2777	0.11%	0.011%
67	18.080	2564	2566	2571	rVB4	3635	3998	0.16%	0.016%
68	18.162	2578	2580	2583	rVB3	5360	3953	0.16%	0.016%
69	18.186	2583	2584	2587	rBV3	3390	3115	0.12%	0.012%
70	18.227	2590	2591	2594	rBV3	4032	3493	0.14%	0.014%
71	18.298	2599	2603	2607	rBV4	5628	8489	0.34%	0.033%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E80

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

72	18.409	2618	2622	2626	rBV6	9074	15976	0.64%	0.063%
73	18.545	2642	2645	2646	rBV3	3251	2610	0.10%	0.010%
74	18.598	2653	2654	2657	rBV3	3997	4888	0.19%	0.019%
75	18.674	2664	2667	2672	rBV6	8350	12352	0.49%	0.048%
76	18.892	2700	2704	2706	rBV3	4765	5878	0.23%	0.023%
77	19.039	2718	2729	2732	rBV7	41303	114868	4.57%	0.451%
78	19.156	2744	2749	2756	rBV	152266	252254	10.04%	0.989%
79	19.303	2771	2774	2778	rBV5	36585	41818	1.66%	0.164%
80	19.362	2778	2784	2792	rVV	1111146	1536741	61.14%	6.028%
81	19.609	2822	2826	2830	rBV	68793	93630	3.72%	0.367%
82	19.780	2853	2855	2858	rBV4	6218	4807	0.19%	0.019%
83	19.898	2872	2875	2877	rBV4	11335	14310	0.57%	0.056%
84	20.039	2897	2899	2901	rBV3	8684	8022	0.32%	0.031%
85	20.256	2934	2936	2940	rBV5	14042	13684	0.54%	0.054%
86	20.309	2943	2945	2949	rVV4	29529	44191	1.76%	0.173%
87	20.362	2951	2954	2959	rVB4	50894	62301	2.48%	0.244%
88	20.892	3040	3044	3053	rBV3	213742	326953	13.01%	1.282%
89	21.168	3086	3091	3101	rBV	1643657	2281080	90.75%	8.947%
90	21.327	3116	3118	3124	rVB5	40612	52196	2.08%	0.205%
91	21.756	3188	3191	3193	rBV2	111539	125315	4.99%	0.492%
92	22.009	3231	3234	3238	rVB2	133345	153194	6.09%	0.601%
93	22.203	3263	3267	3275	rBV	194648	268526	10.68%	1.053%
94	22.686	3346	3349	3355	rVB	313021	419170	16.68%	1.644%
95	23.203	3431	3437	3451	rBV	1057168	2311122	91.94%	9.065%
96	23.344	3455	3461	3473	rVB	1357249	2513661	100.00%	9.859%
97	23.844	3540	3546	3554	rVB	378478	721594	28.71%	2.830%
98	23.938	3556	3562	3572	rVB3	303510	712462	28.34%	2.794%
99	24.544	3660	3665	3675	rVB3	235486	490181	19.50%	1.923%
100	25.368	3800	3805	3814	rVB2	199418	459581	18.28%	1.803%

Sum of corrected areas: 25495346

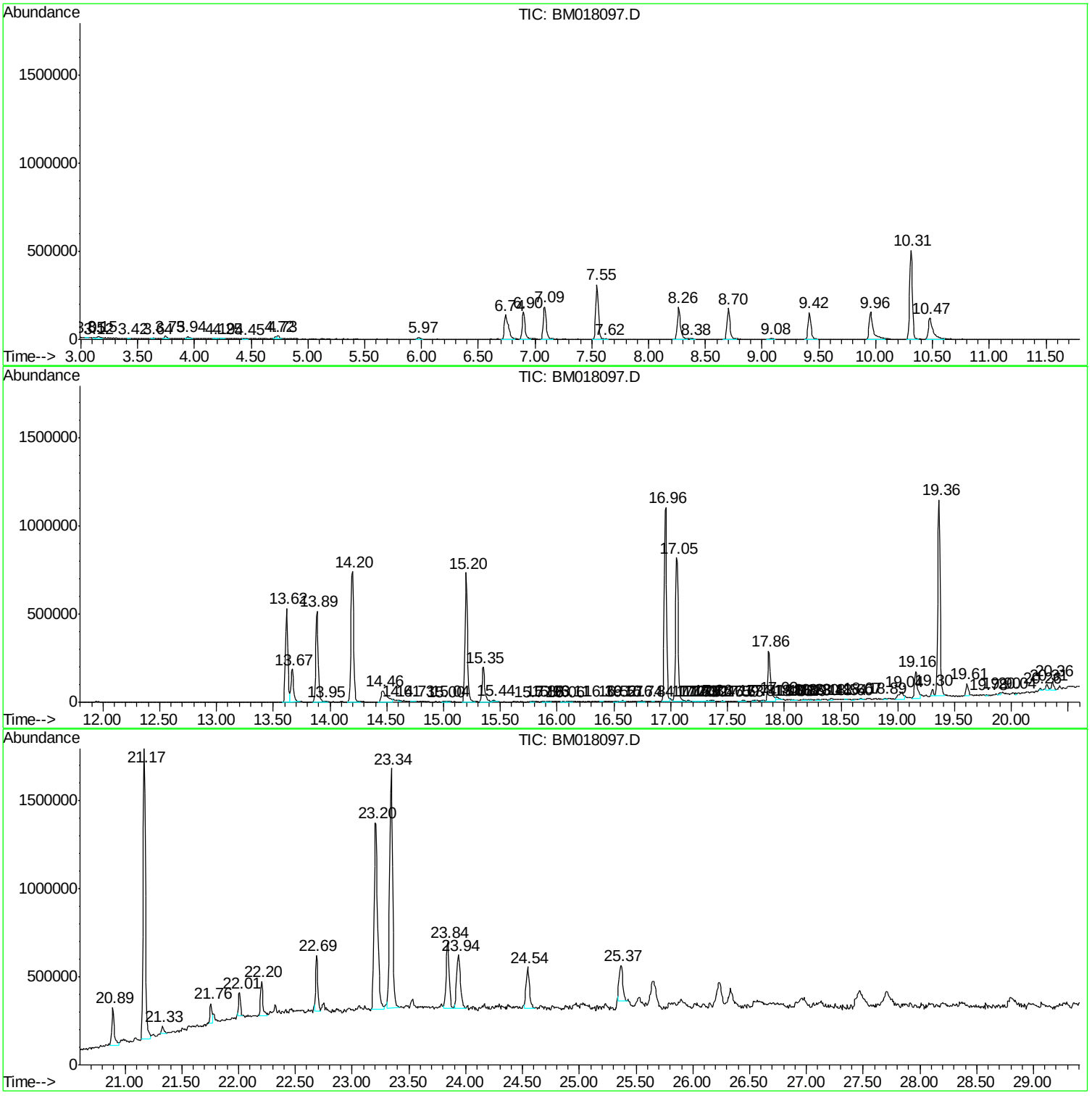
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E80

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E80

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

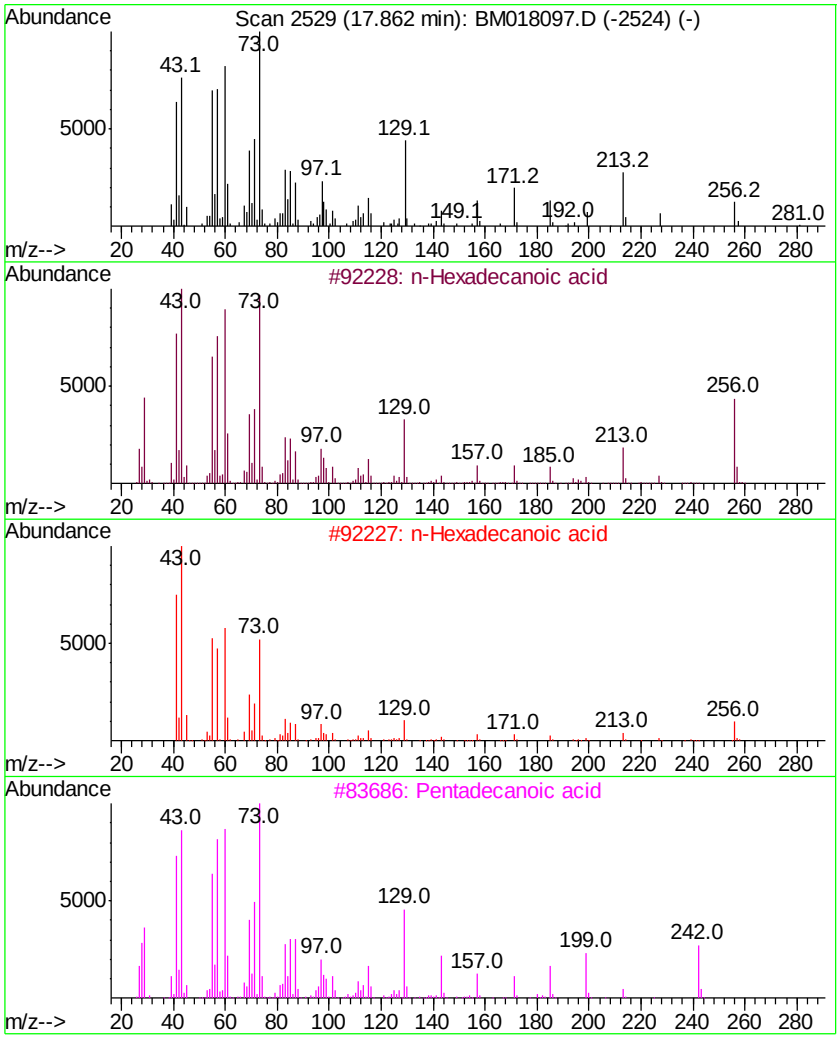
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

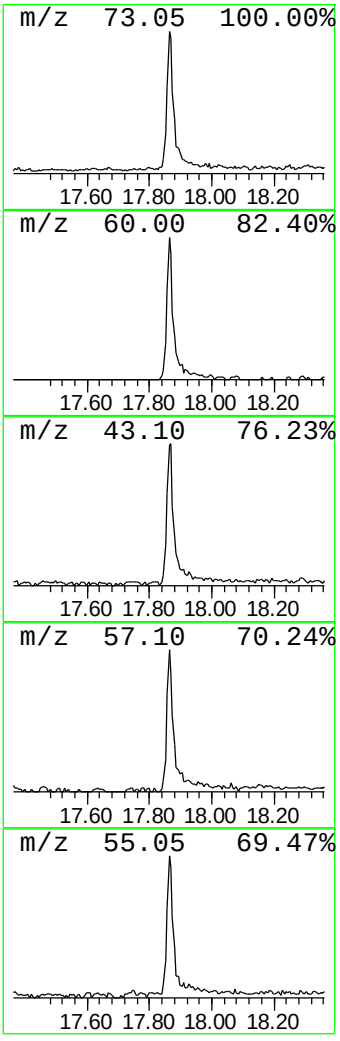
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.86	6.00 ng/ul	468637	Phenanthrene-d10	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	93
3	Pentadecanoic acid	242	C15H30O2	001002-84-2	83
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	80
5	Tridecanoic acid	214	C13H26O2	000638-53-9	76





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E80

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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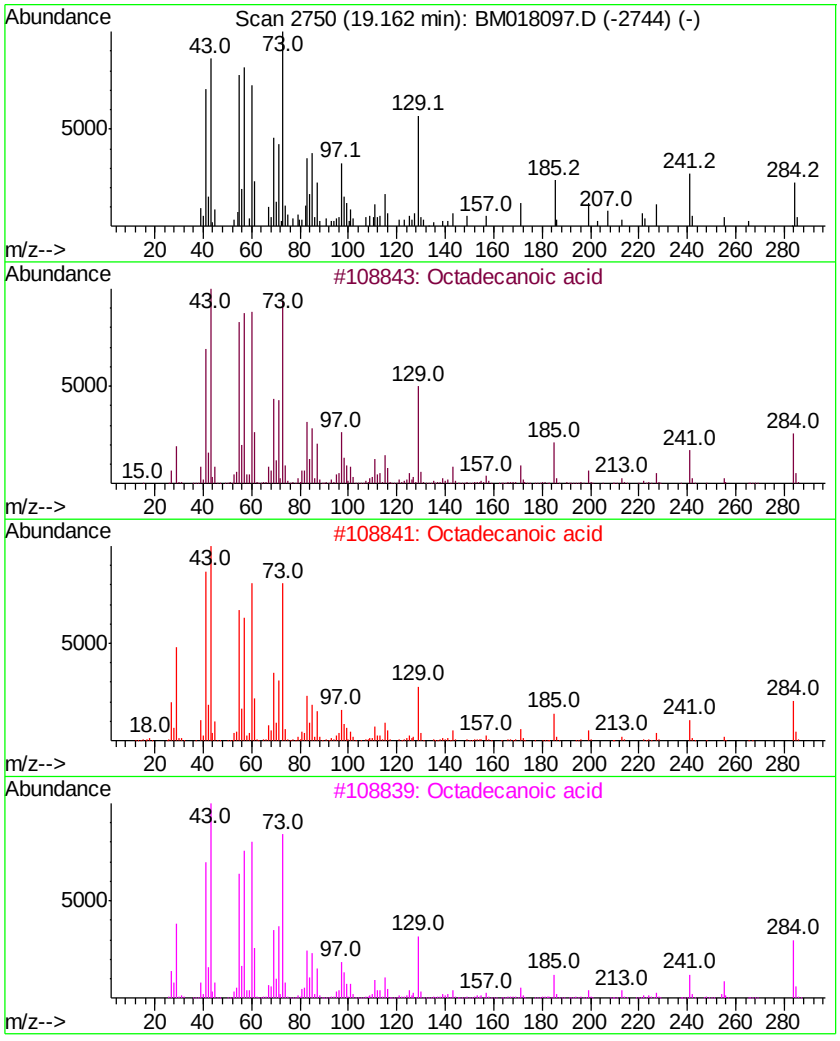
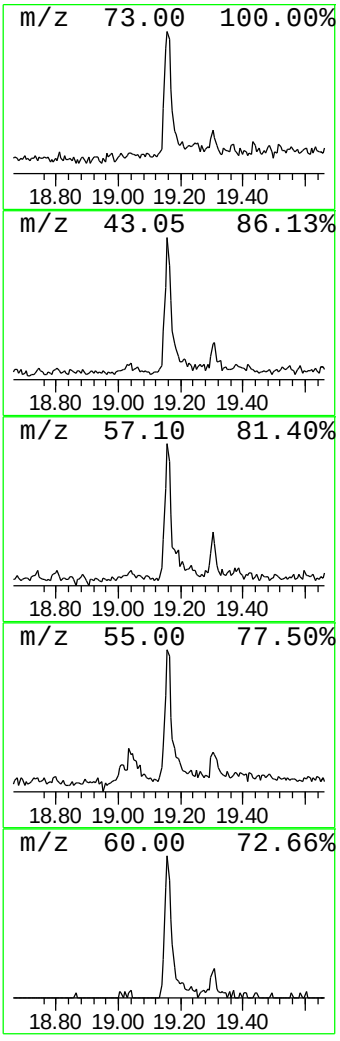
Peak Number 2 Octadecanoic acid Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.16	2.21 ng/ul	252254	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	97
2	Octadecanoic acid	284	C18H36O2	000057-11-4	95
3	Octadecanoic acid	284	C18H36O2	000057-11-4	93
4	Octadecanoic acid	284	C18H36O2	000057-11-4	91
5	Octadecanoic acid, 2-(2-hydroxye...	372	C22H44O4	000106-11-6	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E80

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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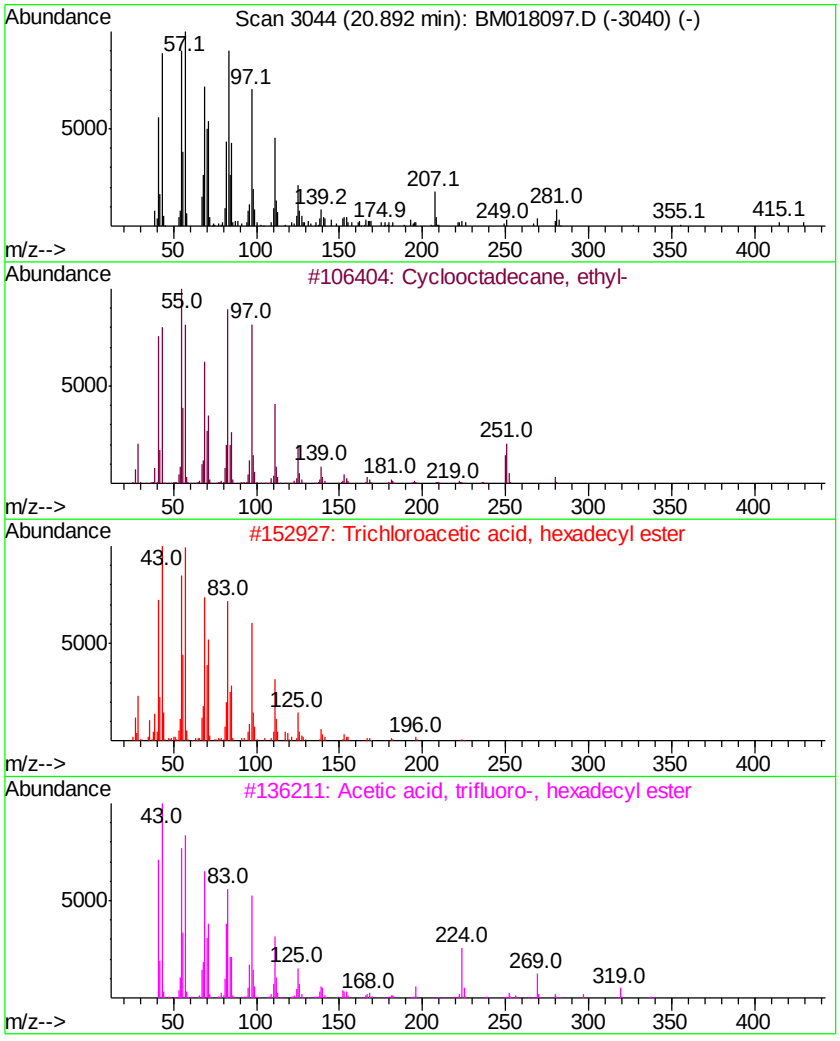
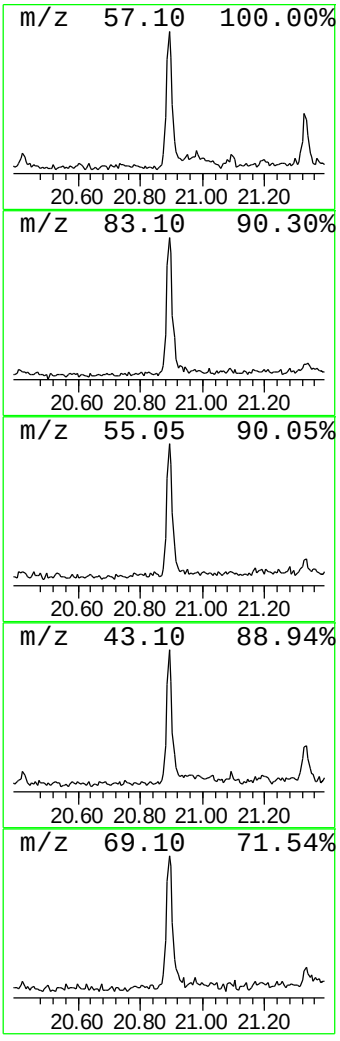
Peak Number 3 (DEL) Alkane: Cyclic20.89 Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	2.87 ng/ul	326953	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclooctadecane, ethyl-	280	C20H40	1000151-22-5	93
2	Trichloroacetic acid, hexadecyl ...	386	C18H33Cl3O2	074339-54-1	91
3	Acetic acid, trifluoro-, hexadec...	338	C18H33F3O2	006222-03-3	91
4	1-Eicosene	280	C20H40	003452-07-1	90
5	Trichloroacetic acid, pentadecyl...	372	C17H31Cl3O2	074339-53-0	90





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E80

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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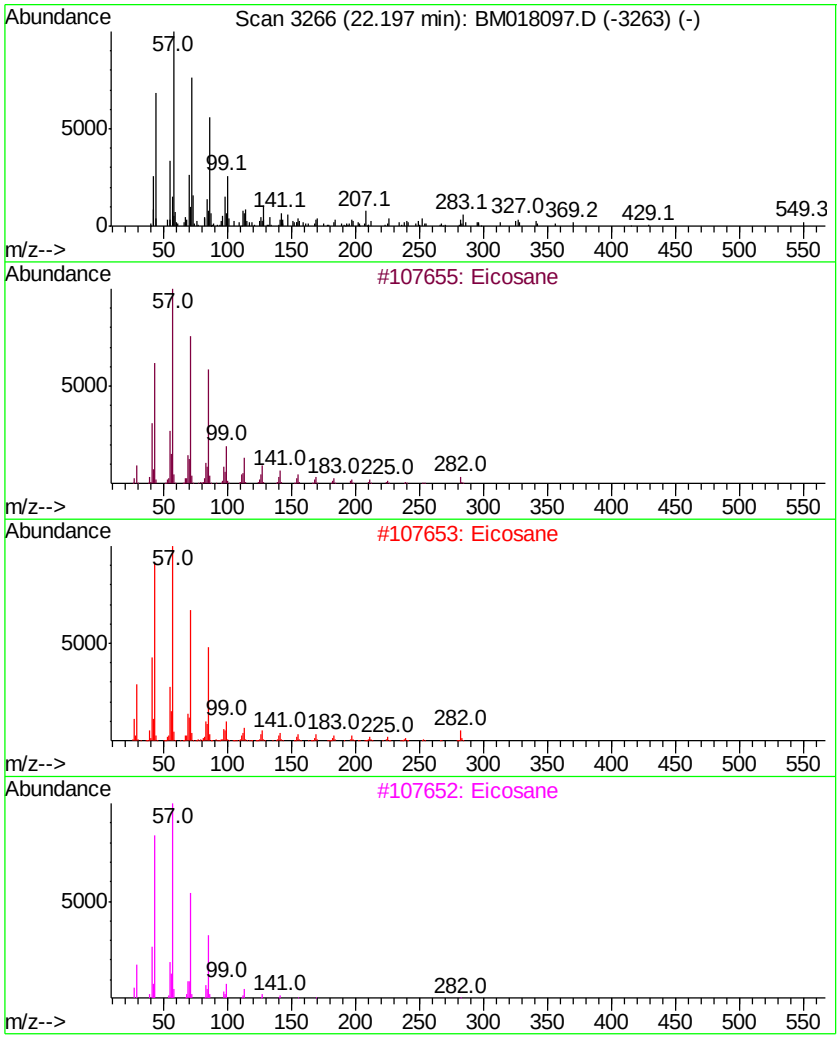
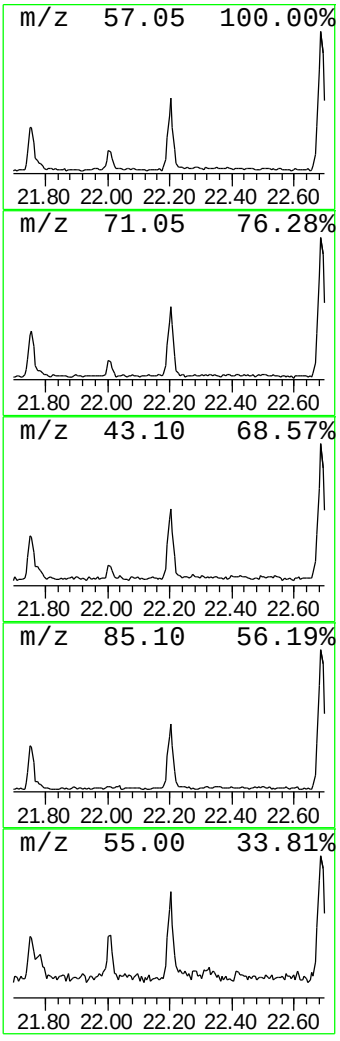
Peak Number 4 (DEL) Alkane: Straight-Chai... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.20	2.35 ng/ul	268526	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	98
2	Eicosane	282	C20H42	000112-95-8	95
3	Eicosane	282	C20H42	000112-95-8	95
4	Heneicosane	296	C21H44	000629-94-7	93
5	Tetratriacontane	479	C34H70	014167-59-0	87





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E80

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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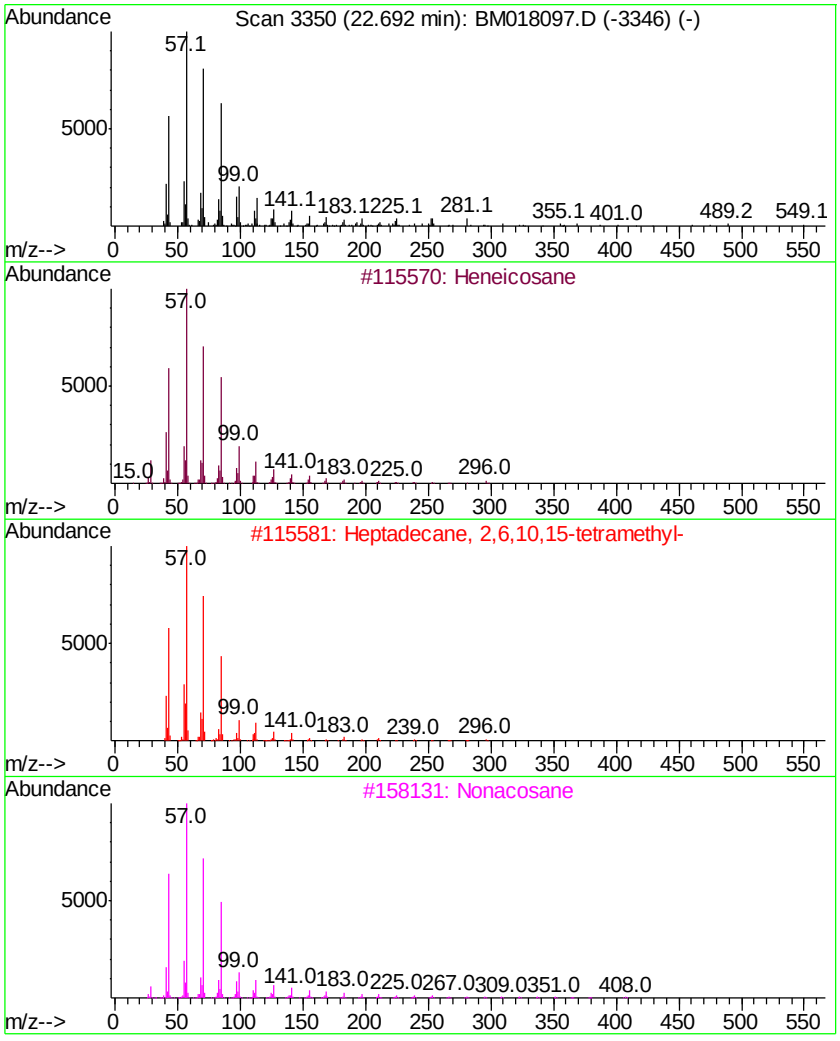
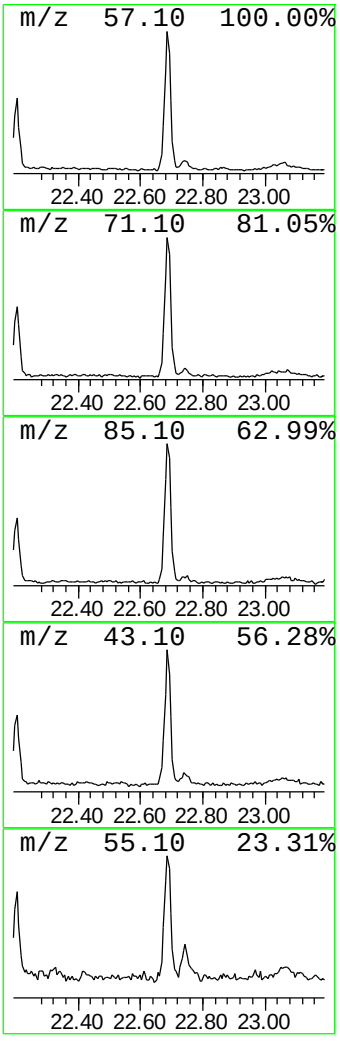
Peak Number 5 (DEL) Alkane: Straight-Chai... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.69	3.34 ng/ul	419170	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	97
2	Heptadecane, 2,6,10,15-tetramethyl-	296	C21H44	054833-48-6	93
3	Nonacosane	408	C29H60	000630-03-5	91
4	Octacosane	394	C28H58	000630-02-4	91
5	Triacontane	422	C30H62	000638-68-6	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E80

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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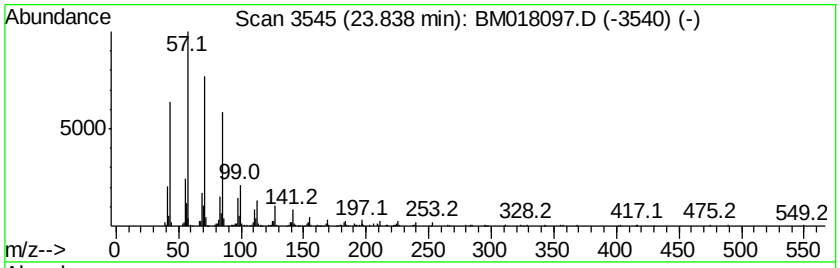
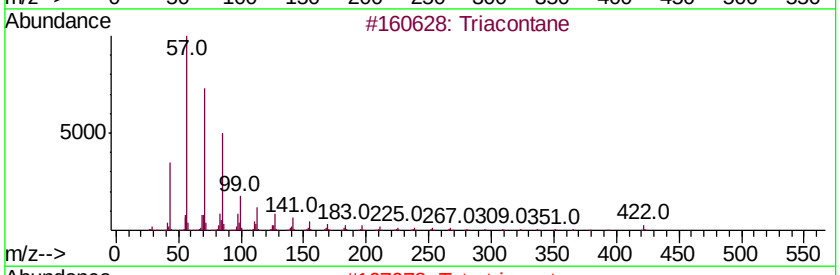
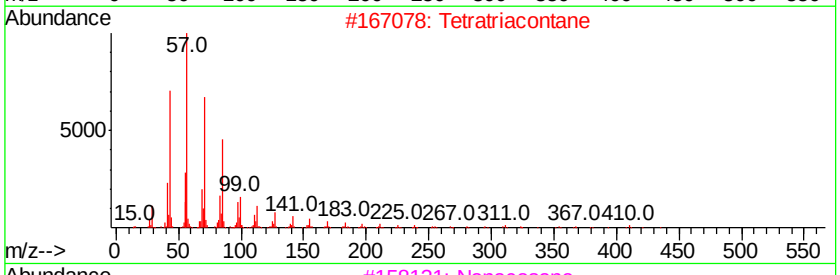
Peak Number 6 (DEL) Alkane: Straight-Chai... Concentration Rank 2

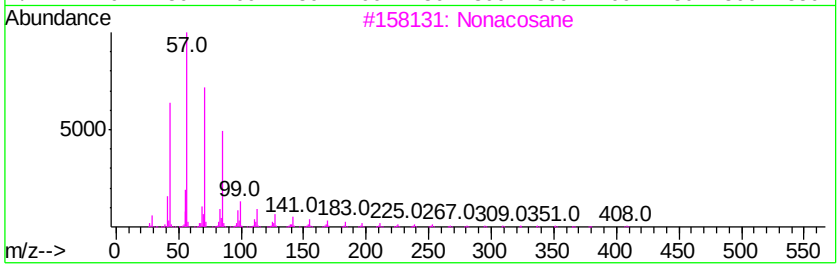
R.T.	EstConc	Area	Relative to ISTD	R.T.
23.84	5.74 ng/ul	721594	Perylene-d12	23.34

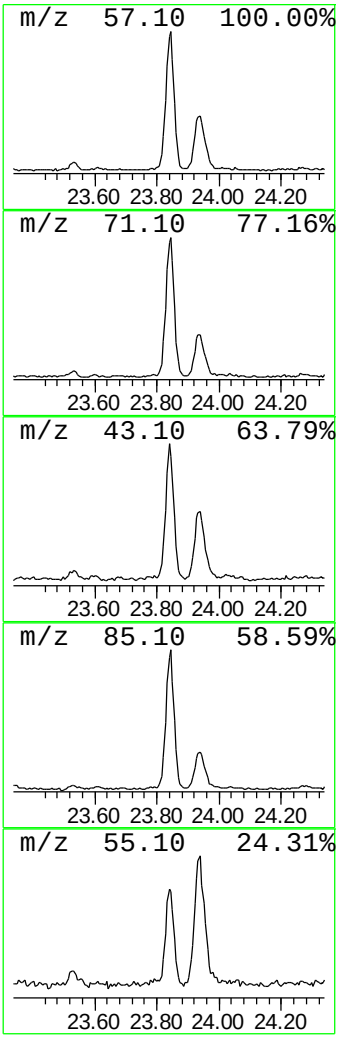
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Triacontane	422	C30H62	000638-68-6	91
2	Tetratriacontane	479	C34H70	014167-59-0	91
3	Nonacosane	408	C29H60	000630-03-5	91
4	Heneicosane	296	C21H44	000629-94-7	91
5	Pentacosane	352	C25H52	000629-99-2	91











Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E80

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

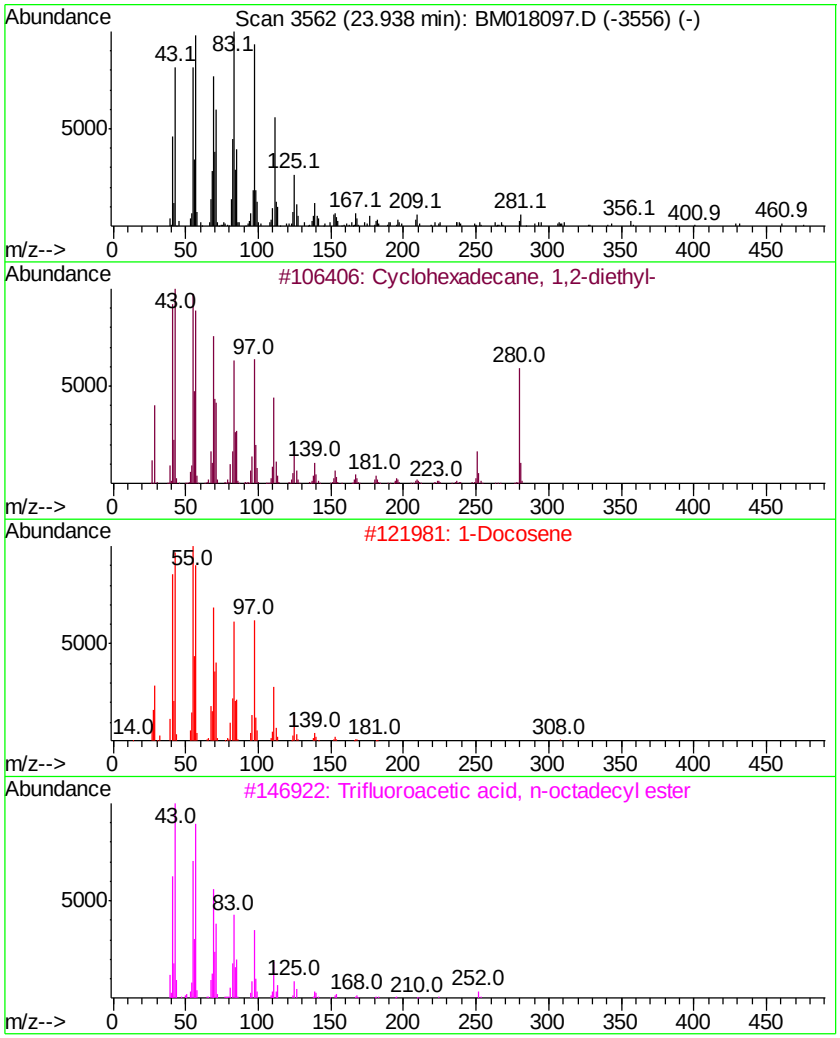
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

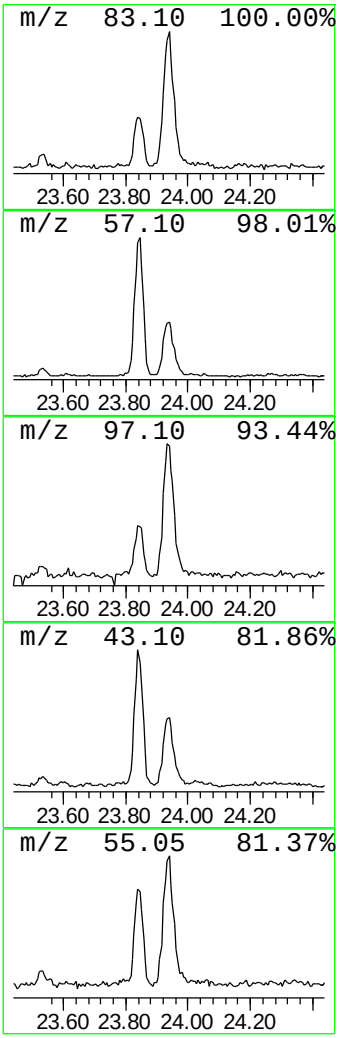
****

Peak Number 7 (DEL) Alkane: Cyclic23.94 Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.94	5.67 ng/ul	712462	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexadecane, 1,2-diethyl-	280	C20H40	1000155-85-3	95
2	1-Docosene	308	C22H44	001599-67-3	93
3	Trifluoroacetic acid, n-octadecv...	366	C20H37F3O2	079392-43-1	91
4	1-Octadecanol	270	C18H38O	000112-92-5	87
5	Cyclodocosane, ethyl-	336	C24H48	1000151-22-6	87





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E80

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

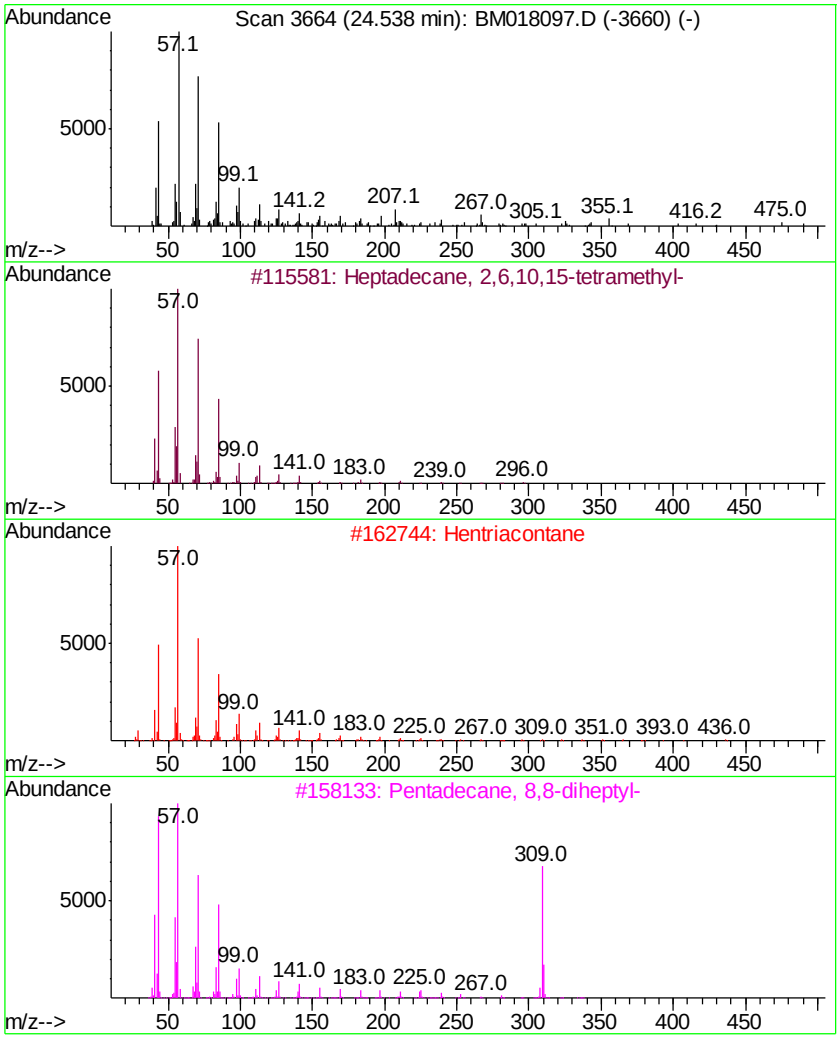
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

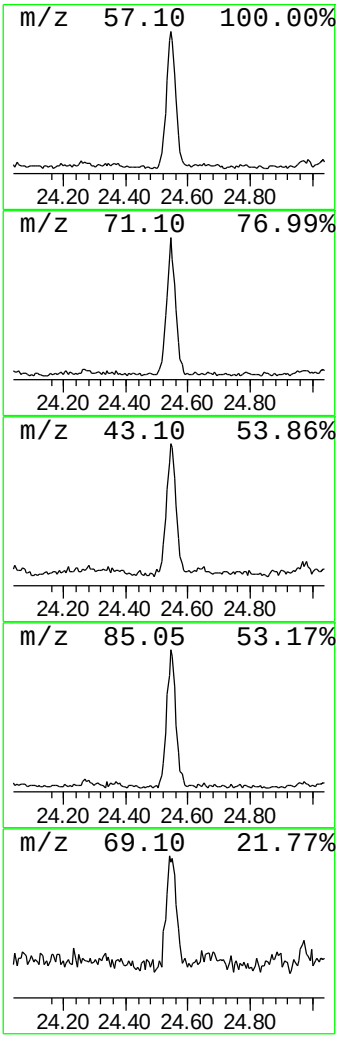
****

Peak Number 8 (DEL) Alkane: Straight-Chai... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.54	3.90 ng/ul	490181	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptadecane, 2,6,10,15-tetramethyl-	296	C21H44	054833-48-6	90
2	Hentriacontane	437	C31H64	000630-04-6	83
3	Pentadecane, 8,8-diheptyl-	408	C29H60	055268-72-9	83
4	Pentadecane, 8-heptyl-	310	C22H46	071005-15-7	83
5	Hexacosane	366	C26H54	000630-01-3	80





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E80

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

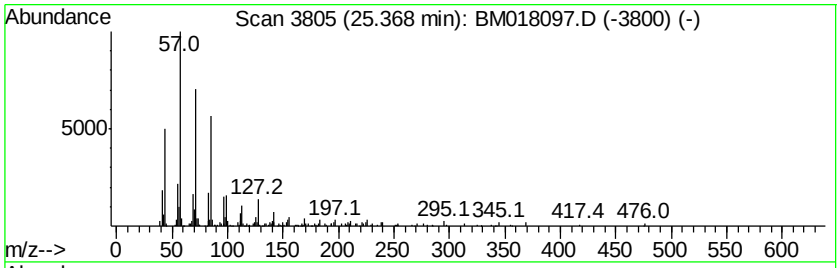
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

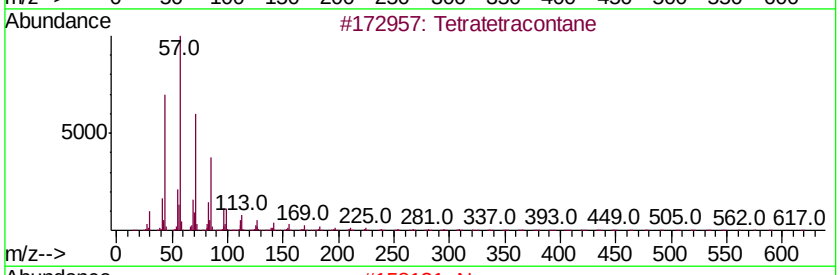
****

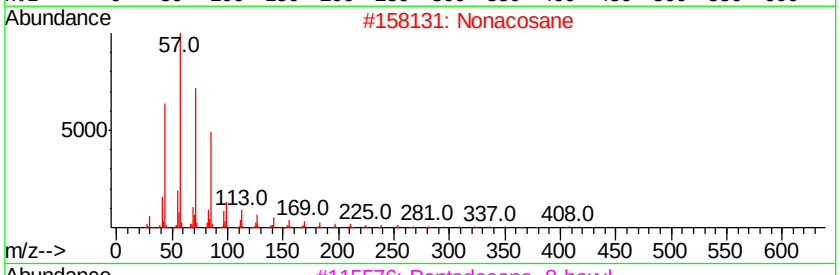
Peak Number 9 (DEL) Alkane: Straight-Chai... Concentration Rank 5

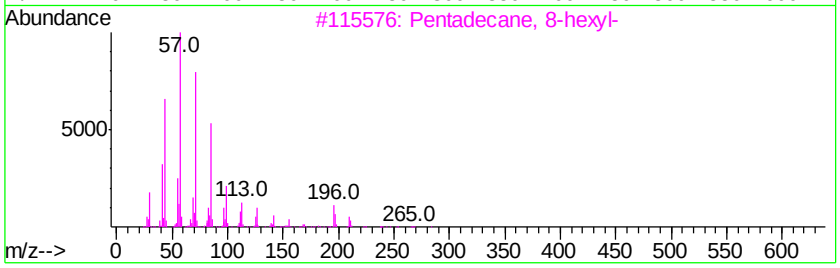
R.T.	EstConc	Area	Relative to ISTD	R.T.
25.37	3.66 ng/ul	459581	Perylene-d12	23.34

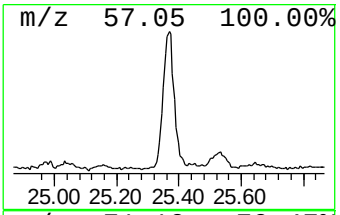
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetratetracontane	619	C44H90	007098-22-8	91
2	Nonacosane	408	C29H60	000630-03-5	91
3	Pentadecane, 8-hexyl-	296	C21H44	013475-75-7	91
4	Tetratetracontane	619	C44H90	007098-22-8	90
5	Docosane, 11-decyl-	451	C32H66	055401-55-3	90

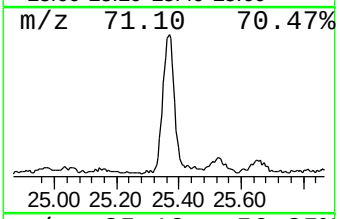


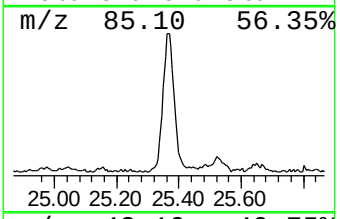


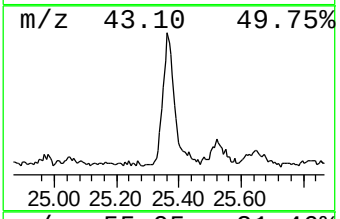


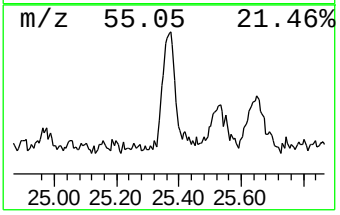












Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9E80

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	17.86	6.0	ng/ul	468637	4	16.95	1561820	20.0
Octadecanoic acid	19.16	2.2	ng/ul	252254	5	21.17	2281080	20.0
(DEL) Alkane: Cyc...	20.89	2.9	ng/ul	326953	5	21.17	2281080	20.0
(DEL) Alkane: Str...	22.20	2.4	ng/ul	268526	5	21.17	2281080	20.0
(DEL) Alkane: Str...	22.69	3.3	ng/ul	419170	6	23.34	2513660	20.0
(DEL) Alkane: Str...	23.84	5.7	ng/ul	721594	6	23.34	2513660	20.0
(DEL) Alkane: Cyc...	23.94	5.7	ng/ul	712462	6	23.34	2513660	20.0
(DEL) Alkane: Str...	24.54	3.9	ng/ul	490181	6	23.34	2513660	20.0
(DEL) Alkane: Str...	25.37	3.7	ng/ul	459581	6	23.34	2513660	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

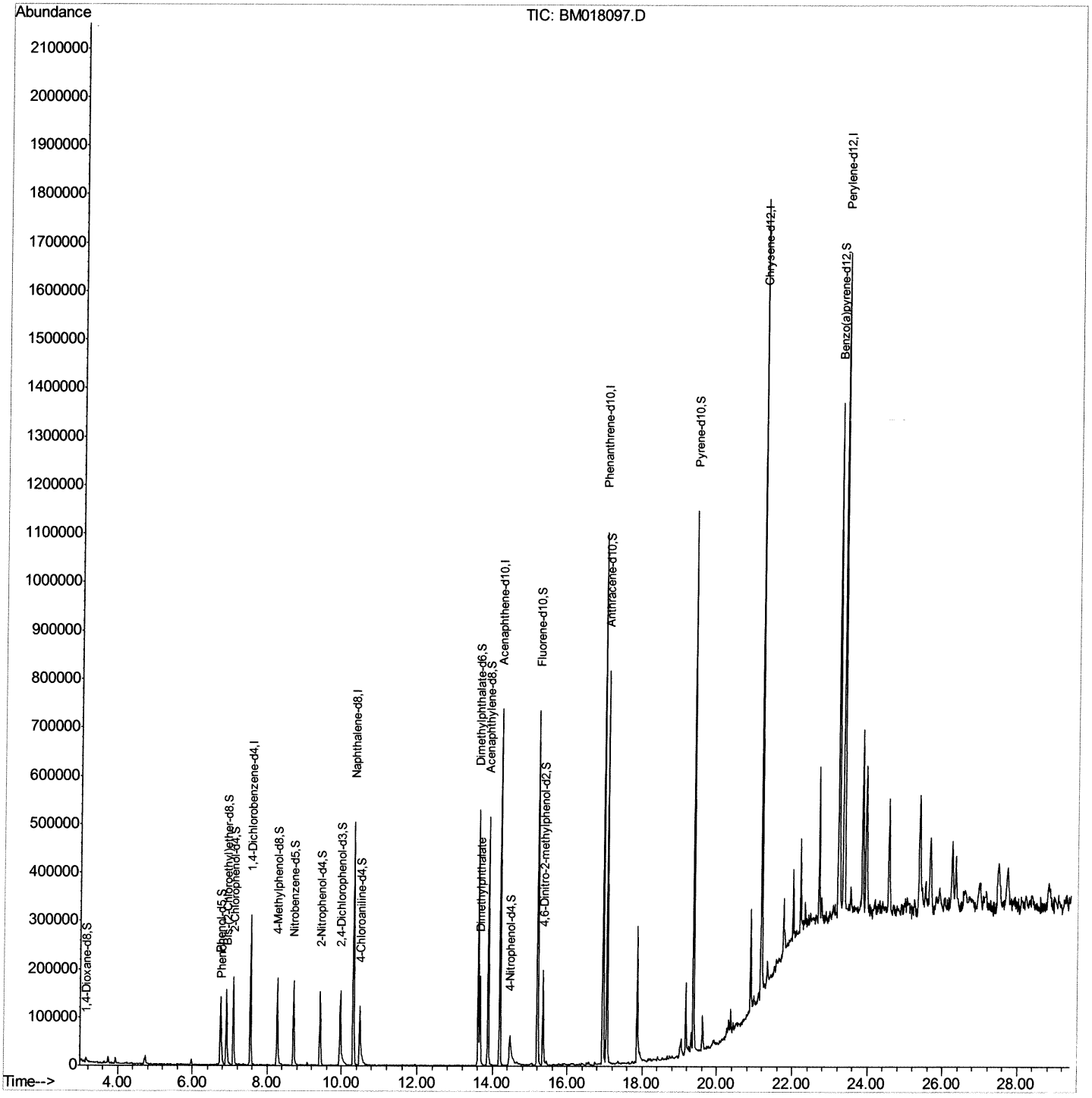
Quantitation Report (QT Reviewed)

Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 13 02:59:17 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E80

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:05 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

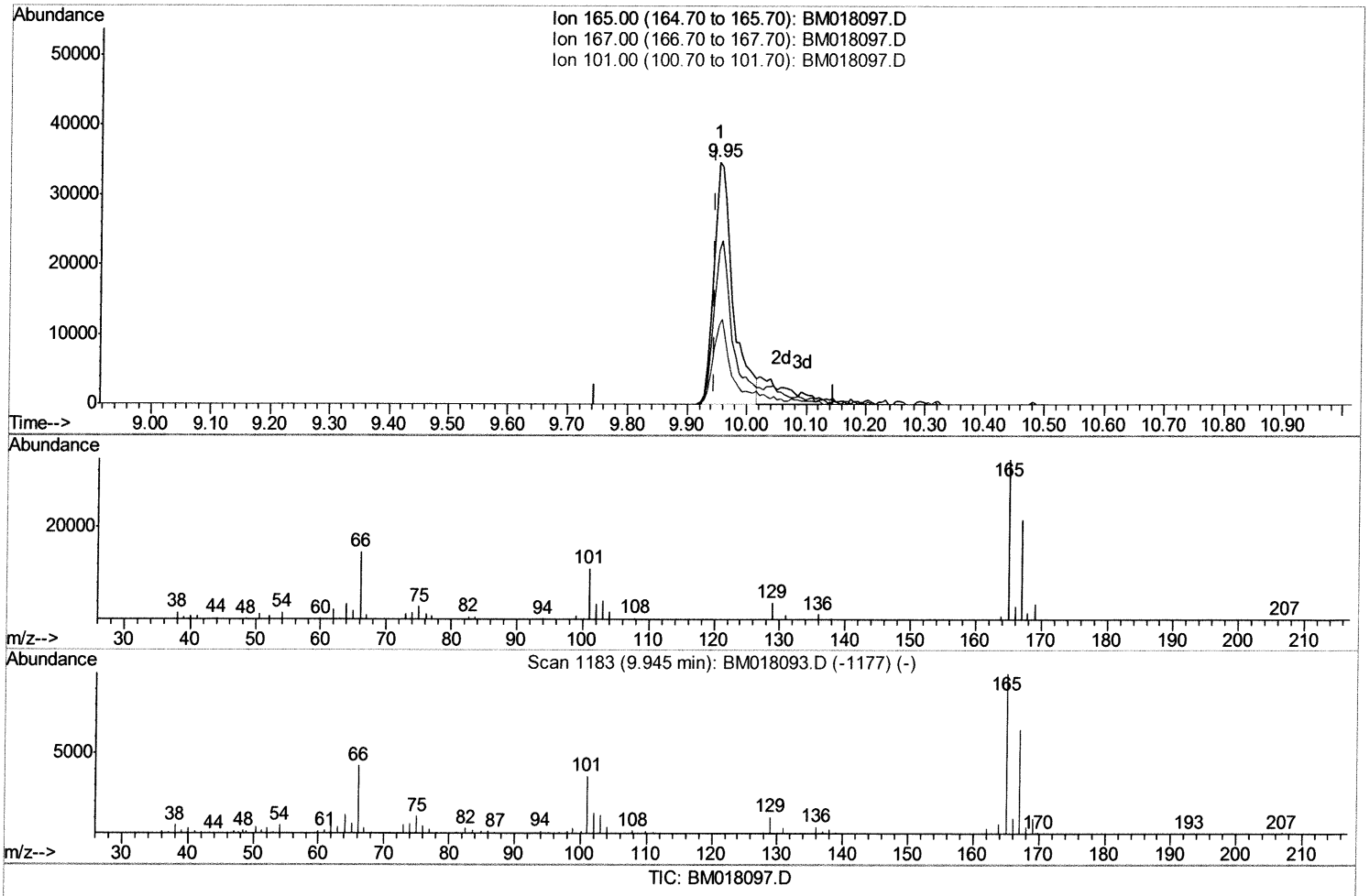
Quantitation Report (Qedit)

Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 13 02:41:11 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E80

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:05 PM



TIC: BM018097.D

(26) 2,4-Dichlorophenol-d3 (S)

9.951min (+0.006) 11.05ng/ul

response 78070

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	63.03
101.00	34.80	32.39
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

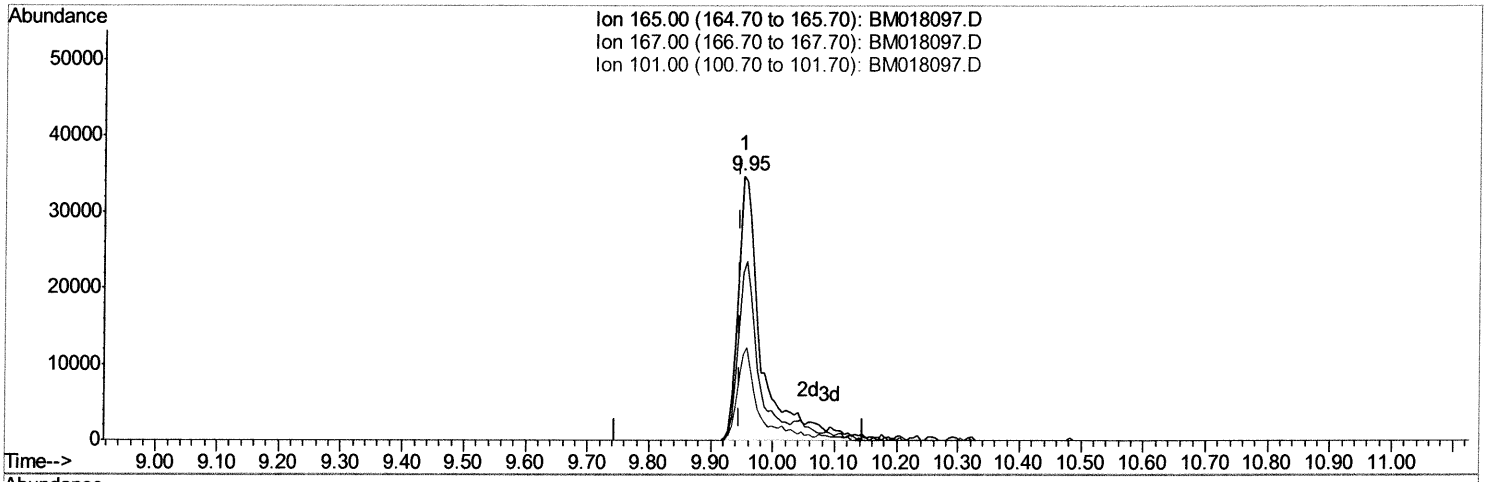
Quantitation Report (Qedit)

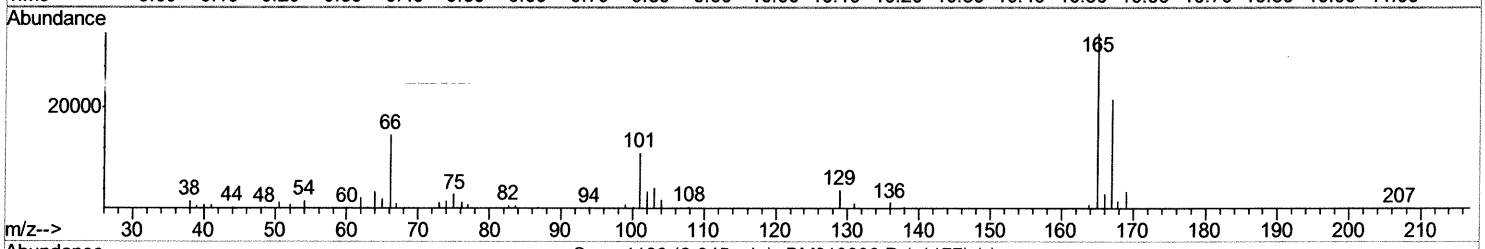
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

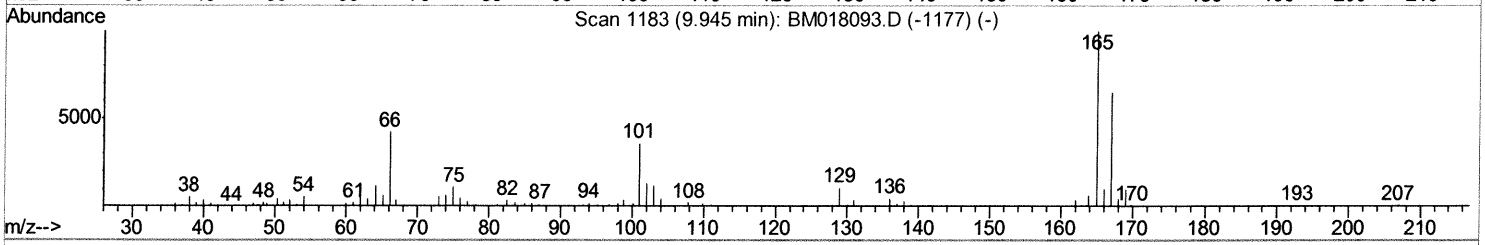
Quant Time: Dec 13 02:41:11 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E80

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:05 PM







TIC: BM018097.D

(26) 2,4-Dichlorophenol-d3 (S)

9.951min (+0.006) 12.99ng/ul m > SJ 12/13/18

response 91766

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	63.03
101.00	34.80	32.39
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

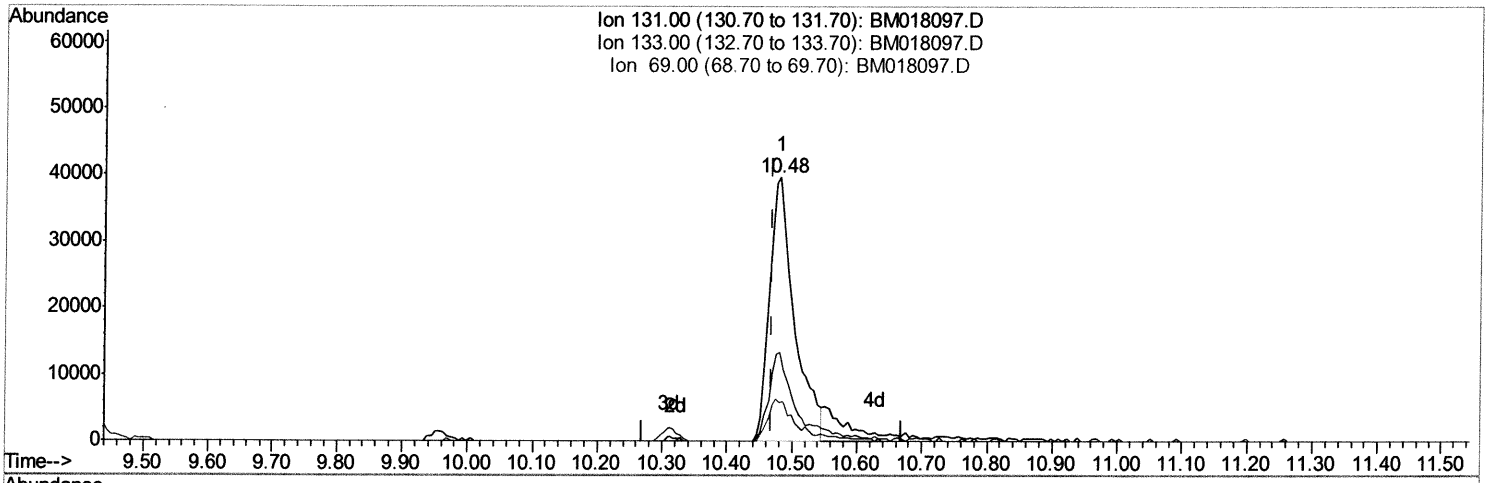
Quantitation Report (Qedit)

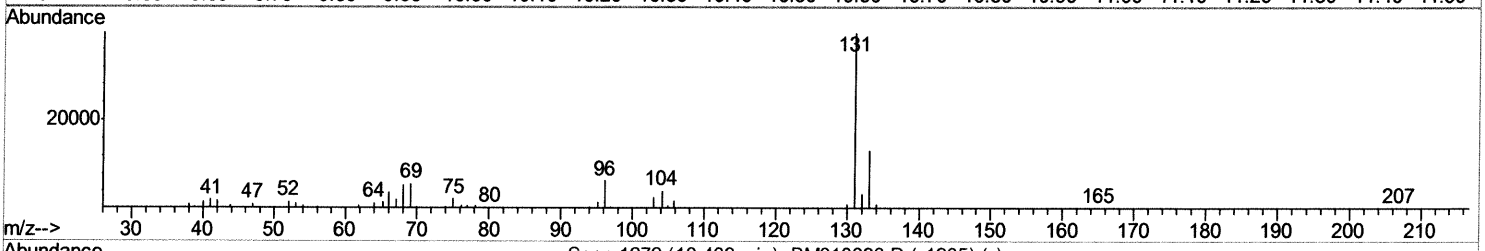
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

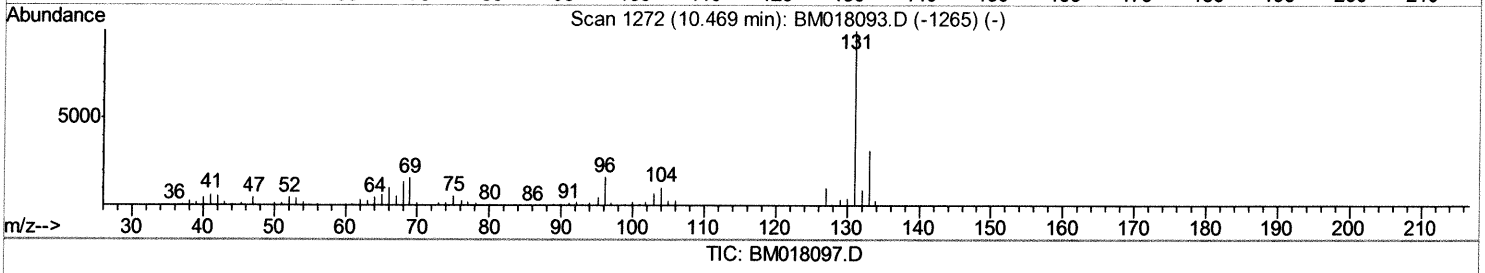
Quant Time: Dec 13 02:41:11 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E80

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:05 PM







TIC: BM018097.D

(29) 4-Chloroaniline-d4 (S)

10.481min (+0.012) 17.55ng/ul

response 106350

Ion	Exp%	Act%
131.00	100	100
133.00	32.40	33.57
69.00	18.90	14.50#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

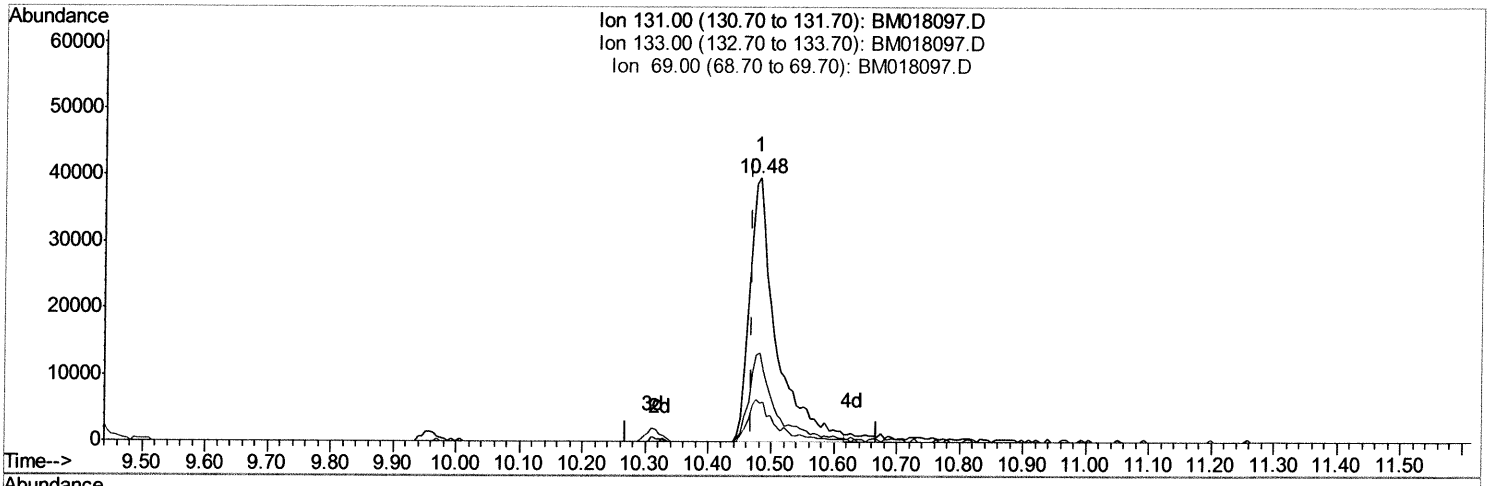
Quantitation Report (Qedit)

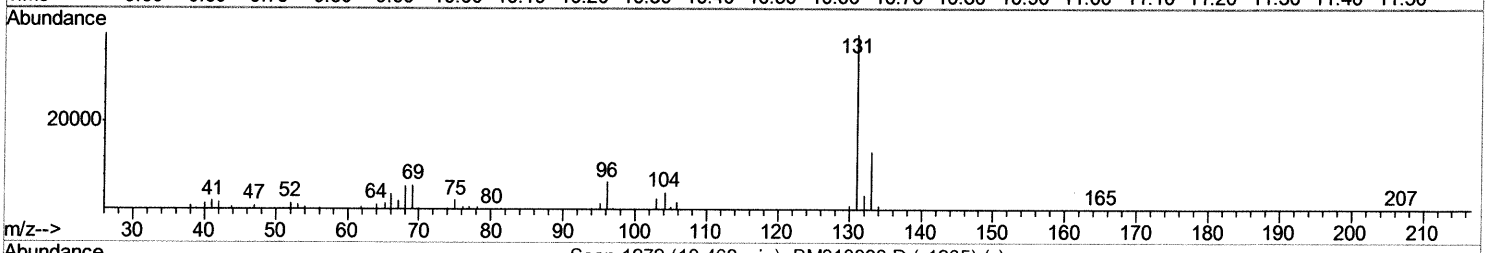
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

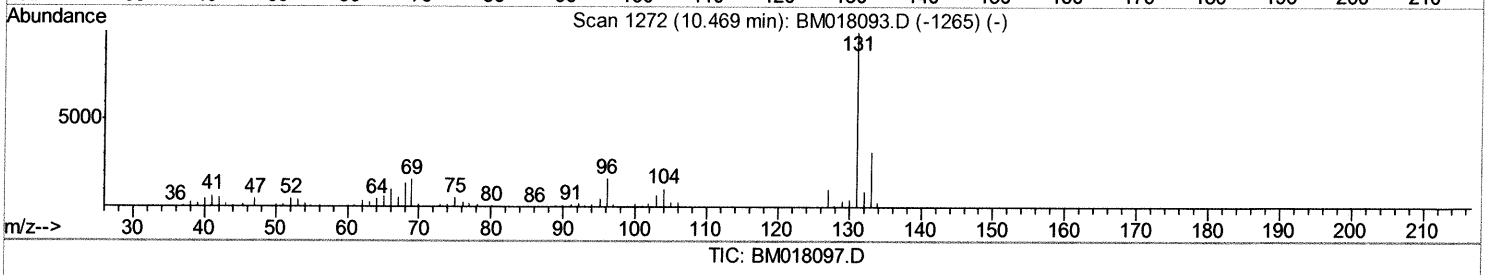
Quant Time: Dec 13 02:41:11 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E80

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:05 PM







TIC: BM018097.D

(29) 4-Chloroaniline-d4 (S)

10.481min (+0.012) 19.45ng/ul m SJ 12/13/18

response 117898

Ion	Exp%	Act%
131.00	100	100
133.00	32.40	33.57
69.00	18.90	14.50#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

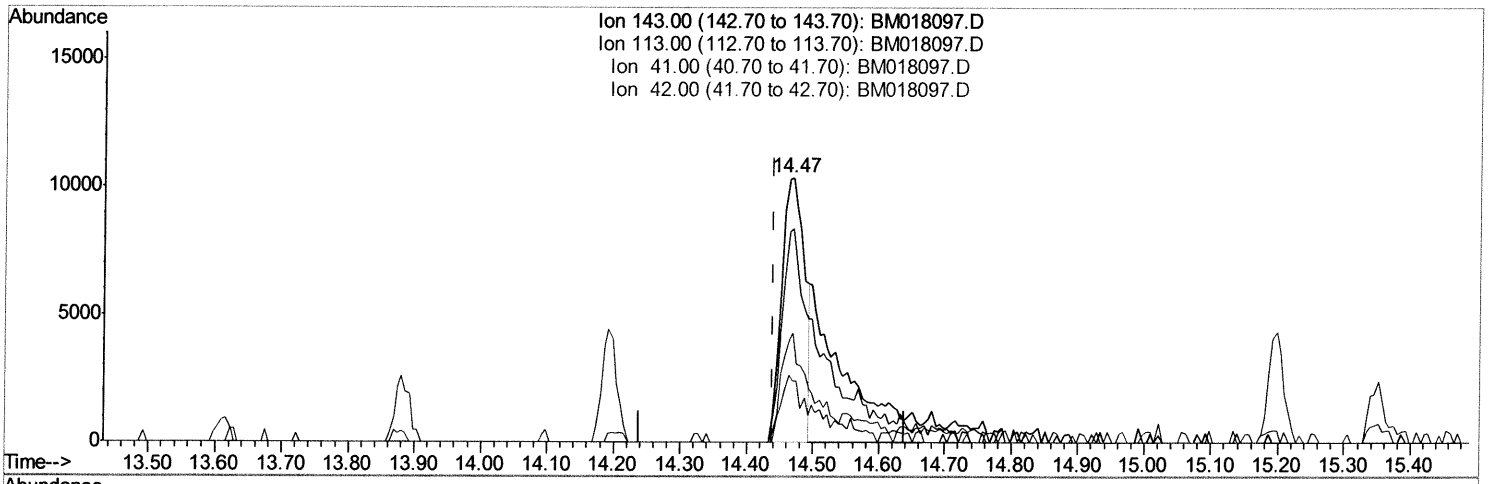
Quantitation Report (Qedit)

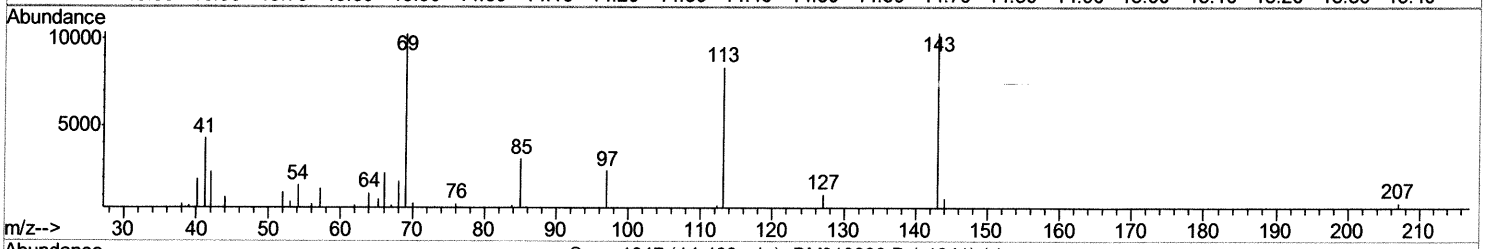
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

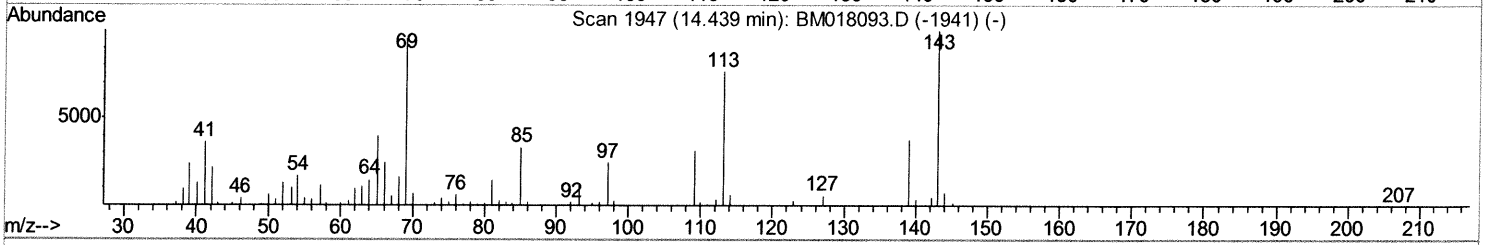
Quant Time: Dec 13 02:41:11 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E80

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:05 PM







TIC: BM018097.D

(51) 4-Nitrophenol-d4 (S)

14.469min (+0.029) 6.06ng/ul

response 24669

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	80.89
41.00	40.10	41.35
42.00	26.80	23.18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

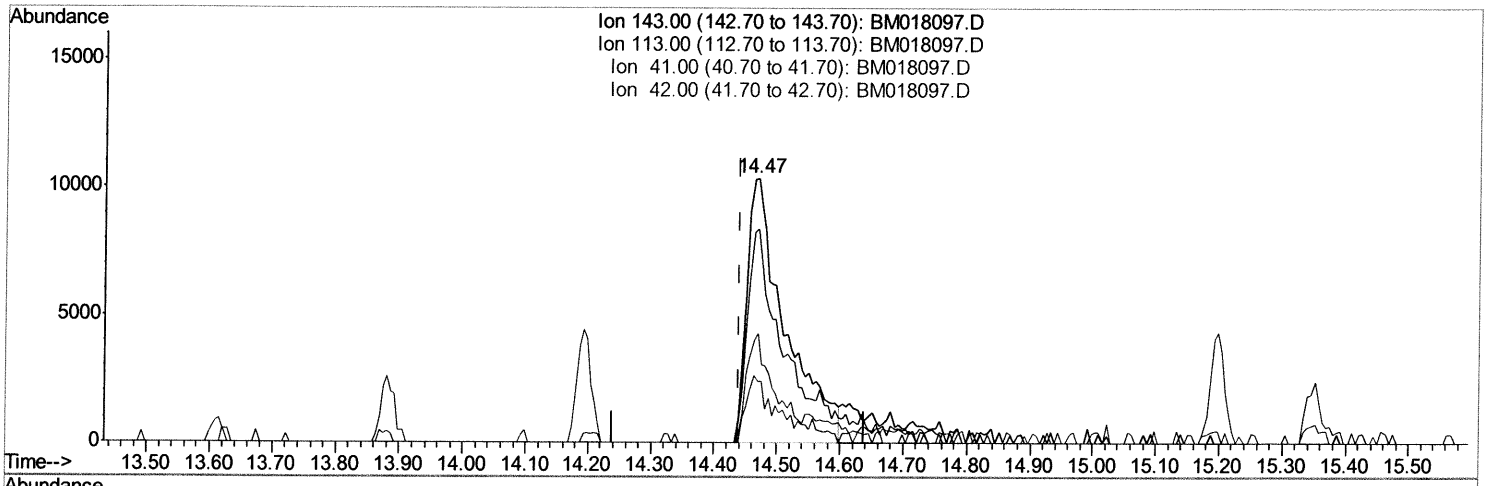
Quantitation Report (Qedit)

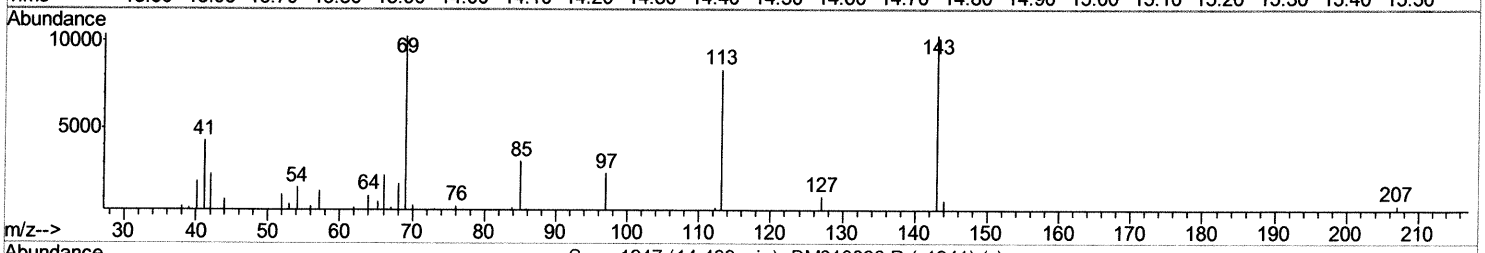
Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

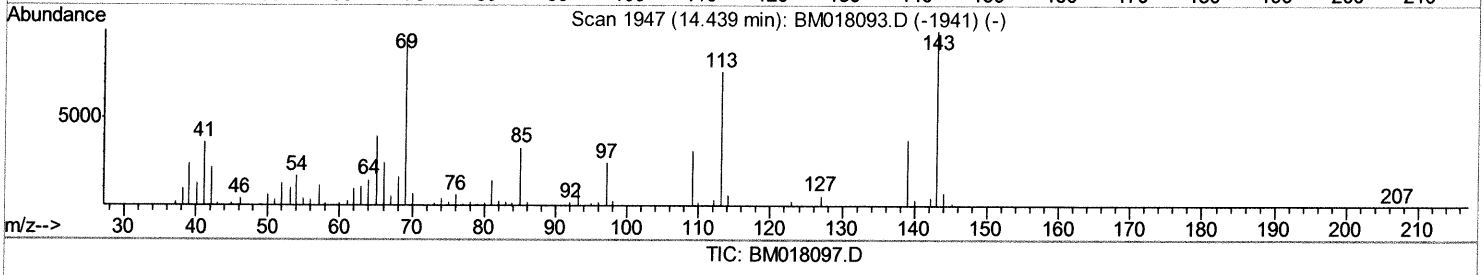
Quant Time: Dec 13 02:41:11 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9E80

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:05 PM







TIC: BM018097.D

(51) 4-Nitrophenol-d4 (S)

14.469min (+0.029) 10.66ng/ul m ? SJ 12/13/18

response 43411

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	80.89
41.00	40.10	41.35
42.00	26.80	23.18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018097.D
Acq On : 12 Dec 2018 17:51
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 13 02:59:17 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9E80

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:05 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	91018	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	421555	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	258104	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	635282	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	815737	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	928131	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	6018	3.03	ng/uL	0.00
5) Phenol-d5	6.74	99	106844	12.85	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	73051	14.57	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	96340	14.81	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	82414	12.13	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	48666	15.03	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	56593	15.25	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	91766m	12.99	ng/ul	0.00
29) 4-Chloroaniline-d4	10.48	131	117898m	19.45	ng/ul	0.01
43) Dimethylphthalate-d6	13.62	166	396444	17.70	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	395153	14.58	ng/ul	0.00
51) 4-Nitrophenol-d4	14.47	143	43411m	10.66	ng/ul	0.03
57) Fluorene-d10	15.20	176	314215	16.25	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	51287	11.29	ng/ul	0.00
70) Anthracene-d10	17.05	188	484886	15.33	ng/ul	0.00
78) Pyrene-d10	19.36	212	571280	14.47	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	728047	14.46	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	28360	3.418	ng/ul#	93
44) Dimethylphthalate	13.67	163	131221	6.048	ng/ul	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SJ 12/13/18

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9F33

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-08
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018112.D
% Solids : 88.8
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	75	U
100-52-7	Benzaldehyde	370	U
108-95-2	Phenol	140	J
111-44-4	Bis(2-Chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	190	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2-oxybis(1-Chloropropane)	370	U
98-86-2	Acetophenone	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	190	U
67-72-1	Hexachloroethane	190	U
98-95-3	Nitrobenzene	190	U
78-59-1	Isophorone	190	U
88-75-5	2-Nitrophenol	190	U
105-67-9	2,4-Dimethylphenol	190	U
111-91-1	Bis(2-Chloroethoxy)methane	190	U
120-83-2	2,4-Dichlorophenol	190	U
91-20-3	Naphthalene	190	U
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	190	U
105-60-2	Caprolactam	370	U
59-50-7	4-Chloro-3-methylphenol	190	U
91-57-6	2-Methylnaphthalene	190	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9F33

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-08
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018112.D
% Solids : 88.8
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	190	U
92-52-4	1,1-Biphenyl	190	U
91-58-7	2-Chloronaphthalene	190	U
88-74-4	2-Nitroaniline	190	U
131-11-3	Dimethylphthalate	230	
606-20-2	2,6-Dinitrotoluene	190	U
208-96-8	Acenaphthylene	190	U
99-09-2	3-Nitroaniline	370	U
83-32-9	Acenaphthene	190	U
51-28-5	2,4-Dinitrophenol	370	U
100-02-7	4-Nitrophenol	370	U
132-64-9	Dibenzofuran	190	U
121-14-2	2,4-Dinitrotoluene	190	U
84-66-2	Diethylphthalate	190	U
86-73-7	Fluorene	190	U
7005-72-3	4-Chlorophenyl-phenylether	190	U
100-01-6	4-Nitroaniline	370	U
534-52-1	4,6-Dinitro-2-methylphenol	370	U
86-30-6	N-Nitrosodiphenylamine	190	U
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U
101-55-3	4-Bromophenyl-phenylether	190	U
118-74-1	Hexachlorobenzene	190	U
1912-24-9	Atrazine	370	U
87-86-5	Pentachlorophenol	370	U
85-01-8	Phenanthrene	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9F33

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-08
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018112.D
% Solids : 88.8
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	190	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	190	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	190	U
85-68-7	Butylbenzylphthalate	190	U
91-94-1	3,3-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	190	U
218-01-9	Chrysene	190	U
117-81-7	Bis(2-ethylhexyl)phthalate	190	U
117-84-0	Di-n-octyl phthalate	370	U
205-99-2	Benzo(b)fluoranthene	190	U
207-08-9	Benzo(k)fluoranthene	190	U
50-32-8	Benzo(a)pyrene	190	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	U
53-70-3	Dibenzo(a,h)anthracene	190	U
191-24-2	Benzo(g,h,i)perylene	190	U
58-90-2	2,3,4,6-Tetrachlorophenol	190	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9F33

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-08
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018112.D
% Solids : 88.8
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/13/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000475-20-7	1,4-Methanoazulene, decahydro-4,8,	13.44	120	JN
2	000057-10-3	n-Hexadecanoic acid	17.86	210	JN
3		unknown-01	19.16	75	J
4	000511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,1	20.24	210	JN
5		unknown-02	20.29	81	J
6	000506-52-5	1-Hexacosanol	23.92	120	JN
7	E966796	Total Alkanes	N/A	540	

EPA-designated Registry Number.

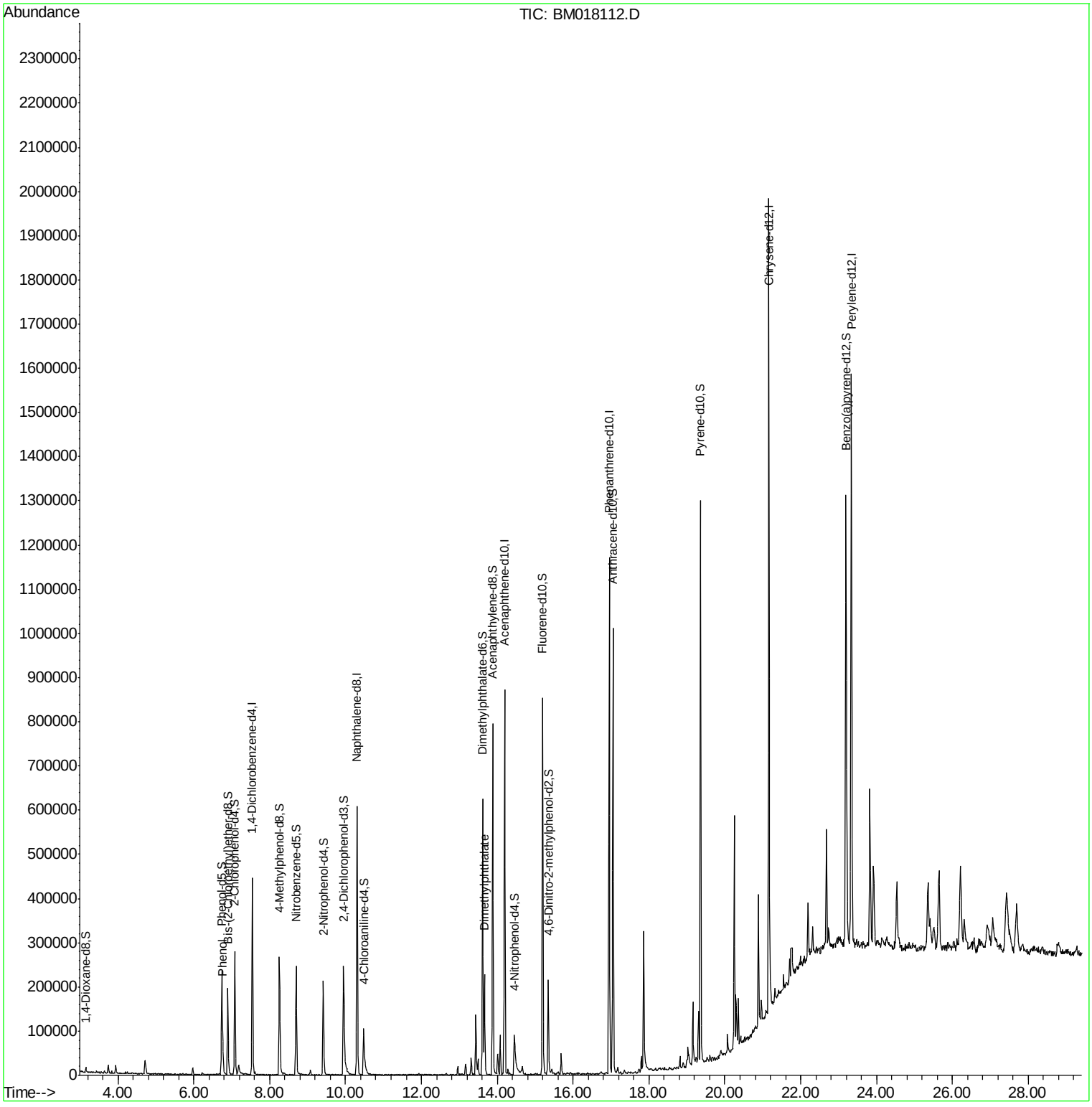
Quantitation Report (LSC Reviewed)

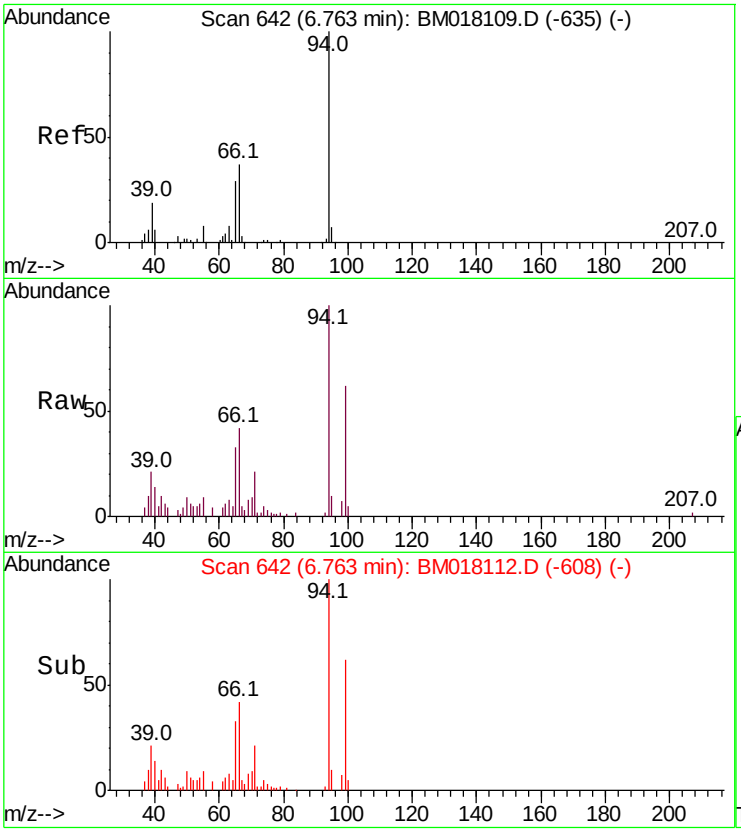
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 13 03:56:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:55 PM

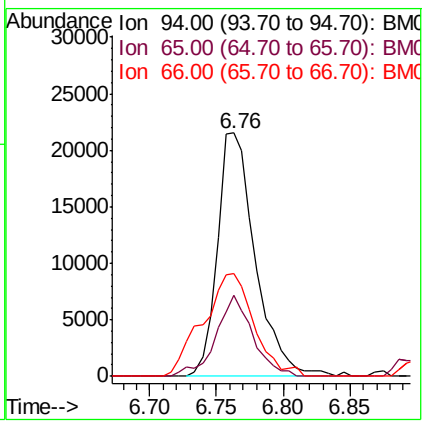




#6
Phenol
Concen: 3.787 ng/ul
RT: 6.76 min Scan# 642
Delta R.T. 0.00 min
Lab File: BM018112.D
Acq: 13 Dec 2018 02:55

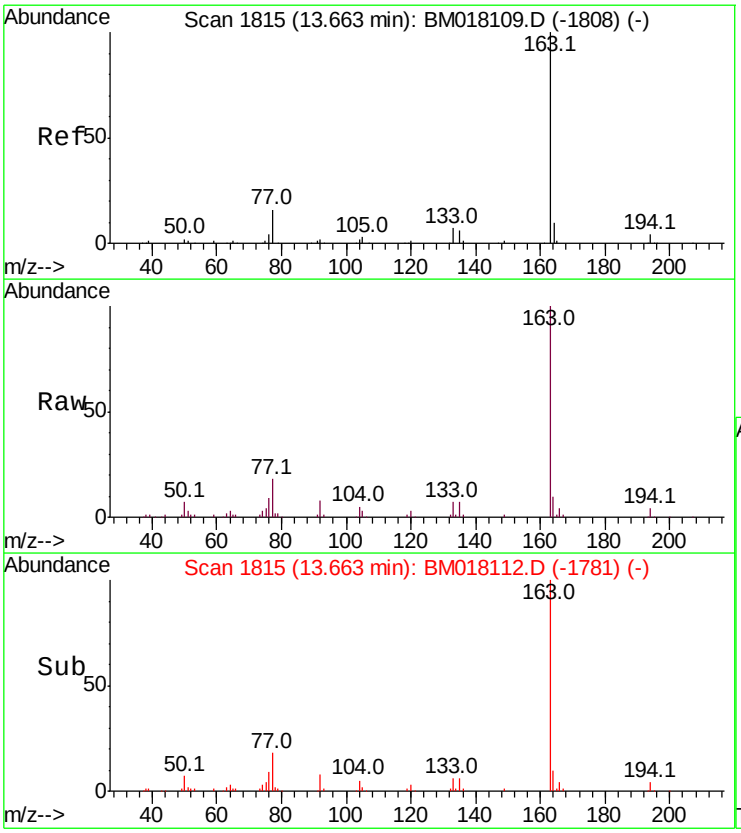
Tgt Ion: 94 Resp: 42961

Ion	Ratio	Lower	Upper
94	100		
65	33.2	24.7	37.1
66	42.2	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9F33

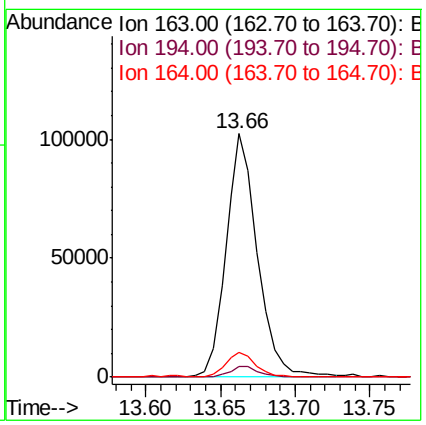
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:55 PM



#44
Dimethylphthalate
Concen: 6.035 ng/ul
RT: 13.66 min Scan# 1815
Delta R.T. 0.00 min
Lab File: BM018112.D
Acq: 13 Dec 2018 02:55

Tgt Ion:163 Resp: 150587

Ion	Ratio	Lower	Upper
163	100		
194	4.2	3.4	5.0
164	10.2	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:55 PM

Quant Time: Dec 13 03:56:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	124457	20.00	ng/ul	0.00
18) Naphthalene-d8	10.30	136	529544	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	296825	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	697888	20.00	ng/ul	0.00
77) Chrysene-d12	21.16	240	850909	20.00	ng/ul	0.00
85) Perylene-d12	23.33	264	877377	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	6253m	2.30	ng/uL	0.00
5) Phenol-d5	6.73	99	159626	14.04	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.89	67	87940	12.83	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	139610	15.70	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	115491	12.44	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	68784	16.91	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	75666	16.24	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	133460	15.04	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	101570	13.34	ng/ul	0.01
43) Dimethylphthalate-d6	13.62	166	466039	18.09	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	534812	17.16	ng/ul	0.00
51) 4-Nitrophenol-d4	14.46	143	54143m	11.56	ng/ul	0.02
57) Fluorene-d10	15.19	176	368083	16.55	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	55011	11.03	ng/ul	0.00
70) Anthracene-d10	17.05	188	560911	16.14	ng/ul	0.00
78) Pyrene-d10	19.36	212	653186	15.86	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	737737	15.50	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	42961	3.787	ng/ul	97
44) Dimethylphthalate	13.66	163	150587	6.035	ng/ul	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F33

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.152	24	28	34	rBV2	12256	18273	0.78%	0.065%
2	3.434	75	76	80	rVB3	4412	3989	0.17%	0.014%
3	3.646	107	112	115	rBV6	4990	8370	0.36%	0.030%
4	3.740	124	128	135	rVB2	17713	30376	1.30%	0.108%
5	3.840	142	145	149	rVB4	4780	4427	0.19%	0.016%
6	3.940	158	162	168	rVB4	18680	27224	1.17%	0.097%
7	4.716	289	294	304	rVB2	29555	67510	2.89%	0.239%
8	5.975	503	508	512	rBV	14888	20845	0.89%	0.074%
9	6.222	546	550	556	rVB5	4916	7706	0.33%	0.027%
10	6.740	632	638	652	rBV2	235064	543697	23.28%	1.927%
11	6.898	658	665	675	rBV	194779	325046	13.92%	1.152%
12	7.081	688	696	706	rBV	280358	460652	19.72%	1.633%
13	7.181	709	713	721	rVV2	20871	46429	1.99%	0.165%
14	7.539	767	774	782	rBV	445195	723785	30.99%	2.566%
15	7.610	783	786	790	rVB3	5699	7204	0.31%	0.026%
16	8.257	890	896	908	rBV2	267775	496171	21.24%	1.759%
17	8.375	913	916	921	rVB3	5556	7900	0.34%	0.028%
18	8.698	963	971	980	rBV	246750	432397	18.51%	1.533%
19	9.081	1031	1036	1040	rVB	12539	18316	0.78%	0.065%
20	9.410	1085	1092	1101	rBV	214499	377447	16.16%	1.338%
21	9.951	1177	1184	1198	rBV	245572	573672	24.56%	2.034%
22	10.304	1237	1244	1256	rBV	608209	1036383	44.37%	3.674%
23	10.475	1267	1273	1296	rBV2	104358	307875	13.18%	1.091%
24	11.933	1518	1521	1526	rVB3	2880	5744	0.25%	0.020%
25	12.657	1641	1644	1648	rVB3	3462	5543	0.24%	0.020%
26	12.957	1689	1695	1700	rBV3	19428	28184	1.21%	0.100%
27	13.074	1713	1715	1721	rVB2	2696	3670	0.16%	0.013%
28	13.157	1724	1729	1730	rBV2	24960	26713	1.14%	0.095%
29	13.316	1750	1756	1761	rBV4	39149	57852	2.48%	0.205%
30	13.368	1761	1765	1767	rBV3	3074	3737	0.16%	0.013%
31	13.439	1770	1777	1783	rBV2	136355	217672	9.32%	0.772%
32	13.492	1783	1786	1793	rVB2	36012	47529	2.03%	0.168%
33	13.616	1799	1807	1812	rBV	624634	982170	42.05%	3.482%
34	13.663	1812	1815	1824	rVB	224796	322943	13.83%	1.145%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F33

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	13.880	1846	1852	1864	rBV	794941	1086814	46.53%	3.853%
36	14.010	1869	1874	1881	rVV6	45114	88852	3.80%	0.315%
37	14.080	1881	1886	1894	rVB	90204	124186	5.32%	0.440%
38	14.145	1894	1897	1899	rBV2	5310	7348	0.31%	0.026%
39	14.192	1899	1905	1915	rVV2	868163	1335083	57.16%	4.733%
40	14.286	1918	1921	1925	rVB3	13208	14870	0.64%	0.053%
41	14.333	1925	1929	1933	rVB3	5839	8283	0.35%	0.029%
42	14.451	1944	1949	1971	rBV3	91367	305704	13.09%	1.084%
43	14.657	1978	1984	1992	rVB8	17399	41732	1.79%	0.148%
44	14.757	1999	2001	2006	rVB3	2559	4023	0.17%	0.014%
45	15.051	2046	2051	2055	rVB3	4136	7980	0.34%	0.028%
46	15.192	2069	2075	2088	rBV	853203	1315690	56.33%	4.664%
47	15.345	2096	2101	2111	rBV	213911	342342	14.66%	1.214%
48	15.439	2111	2117	2121	rVV5	10969	20343	0.87%	0.072%
49	15.480	2121	2124	2127	rVB2	3652	3716	0.16%	0.013%
50	15.615	2144	2147	2151	rVB4	4915	5532	0.24%	0.020%
51	15.686	2154	2159	2165	rBV2	46899	71821	3.08%	0.255%
52	15.845	2180	2186	2188	rBV4	5228	7465	0.32%	0.026%
53	15.921	2195	2199	2203	rBV5	3535	6024	0.26%	0.021%
54	16.098	2223	2229	2230	rBV2	4190	4977	0.21%	0.018%
55	16.151	2236	2238	2242	rVB2	3981	3894	0.17%	0.014%
56	16.380	2274	2277	2279	rBV2	3162	4069	0.17%	0.014%
57	16.733	2331	2337	2338	rVV4	4936	7450	0.32%	0.026%
58	16.768	2342	2343	2350	rVB3	2601	4033	0.17%	0.014%
59	16.874	2354	2361	2366	rBV4	4478	8124	0.35%	0.029%
60	16.951	2368	2374	2380	rBV2	1167285	1688915	72.31%	5.987%
61	17.051	2385	2391	2404	rVV	1007223	1428344	61.16%	5.063%
62	17.145	2405	2407	2409	rVV3	6343	6922	0.30%	0.025%
63	17.174	2409	2412	2419	rVV4	13249	22597	0.97%	0.080%
64	17.251	2422	2425	2428	rBV2	4675	6616	0.28%	0.023%
65	17.356	2439	2443	2449	rVB5	7820	14751	0.63%	0.052%
66	17.739	2506	2508	2513	rVB4	7364	9476	0.41%	0.034%
67	17.804	2515	2519	2522	rBV3	36946	50778	2.17%	0.180%
68	17.862	2524	2529	2542	rVV	310728	475984	20.38%	1.687%
69	18.180	2582	2583	2587	rVB2	5625	3862	0.17%	0.014%
70	18.356	2608	2613	2615	rBV6	5881	7694	0.33%	0.027%
71	18.409	2620	2622	2625	rBV4	5801	5377	0.23%	0.019%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F33

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

72	18.662	2662	2665	2666	rBV2	6351	6114	0.26%	0.022%
73	18.739	2673	2678	2679	rBV4	5546	8578	0.37%	0.030%
74	18.821	2684	2692	2697	rVV6	27987	40939	1.75%	0.145%
75	18.892	2701	2704	2707	rBV5	11166	13837	0.59%	0.049%
76	19.003	2718	2723	2724	rBV2	24863	30652	1.31%	0.109%
77	19.033	2724	2728	2730	rVV4	28715	37927	1.62%	0.134%
78	19.156	2744	2749	2760	rBV	144646	234741	10.05%	0.832%
79	19.250	2762	2765	2769	rVV5	13939	20461	0.88%	0.073%
80	19.303	2769	2774	2778	rVV	116829	135060	5.78%	0.479%
81	19.356	2778	2783	2792	rVB	1266931	1743913	74.67%	6.182%
82	19.539	2810	2814	2817	rBV6	9289	13539	0.58%	0.048%
83	19.603	2821	2825	2830	rBV2	13657	22217	0.95%	0.079%
84	19.721	2843	2845	2846	rBV2	8437	4669	0.20%	0.017%
85	19.768	2851	2853	2857	rBV5	6109	10640	0.46%	0.038%
86	19.892	2872	2874	2877	rBV4	9729	12866	0.55%	0.046%
87	20.074	2902	2905	2912	rVB2	40699	54723	2.34%	0.194%
88	20.245	2929	2934	2938	rBV	528198	665082	28.48%	2.358%
89	20.292	2938	2942	2949	rVV3	117167	251916	10.79%	0.893%
90	20.356	2950	2953	2957	rVB3	104931	121073	5.18%	0.429%
91	20.886	3038	3043	3050	rBV3	301840	429543	18.39%	1.523%
92	21.162	3085	3090	3095	rBV	1841607	2335603	100.00%	8.279%
93	21.744	3187	3189	3192	rBV3	50819	74042	3.17%	0.262%
94	22.191	3262	3265	3271	rBV2	111595	150173	6.43%	0.532%
95	22.680	3344	3348	3353	rVB	258064	361281	15.47%	1.281%
96	23.197	3430	3436	3447	rVB	1011398	2070788	88.66%	7.341%
97	23.333	3453	3459	3469	rVB	1286245	2322149	99.42%	8.232%
98	23.827	3539	3543	3552	rVB	348229	619356	26.52%	2.195%
99	23.921	3555	3559	3567	rVB6	170993	366116	15.68%	1.298%
100	24.532	3659	3663	3671	rVB2	129441	253291	10.84%	0.898%

Sum of corrected areas: 28210411

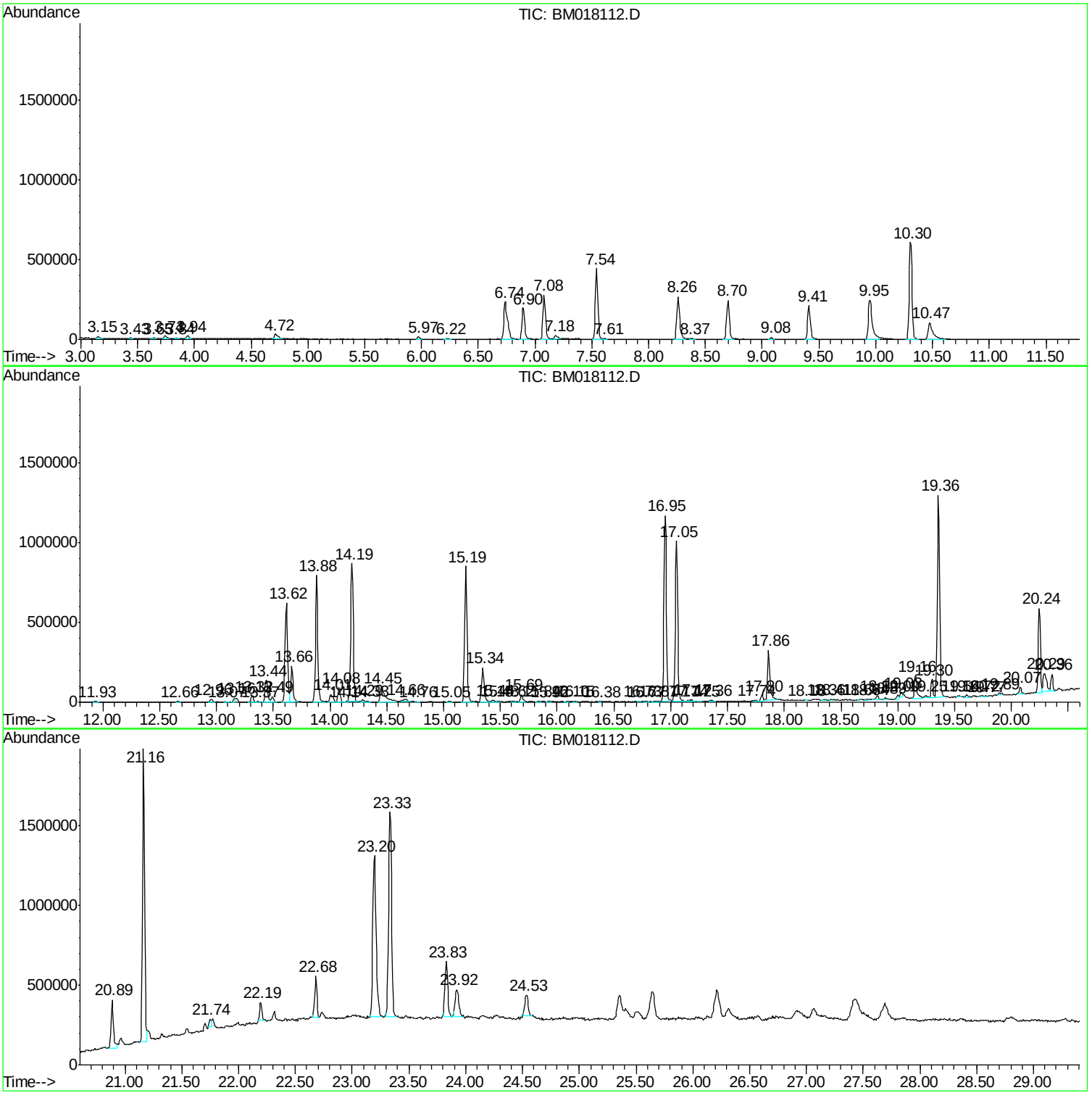
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F33

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F33

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

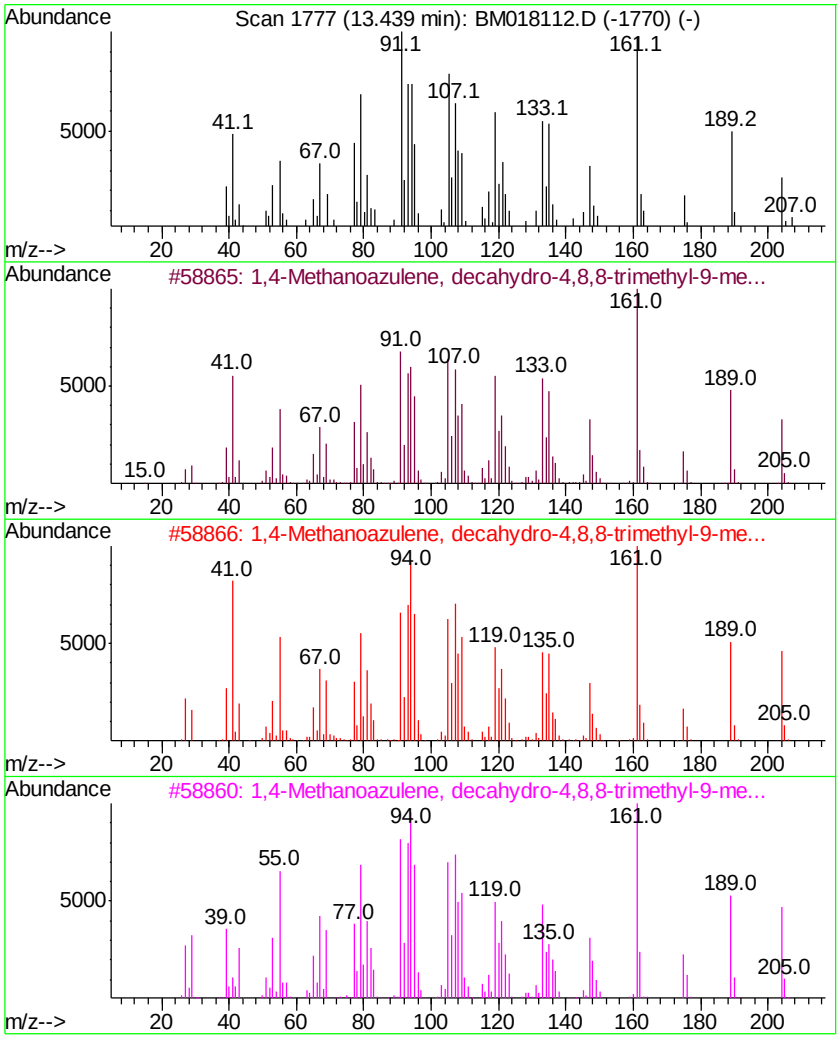
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

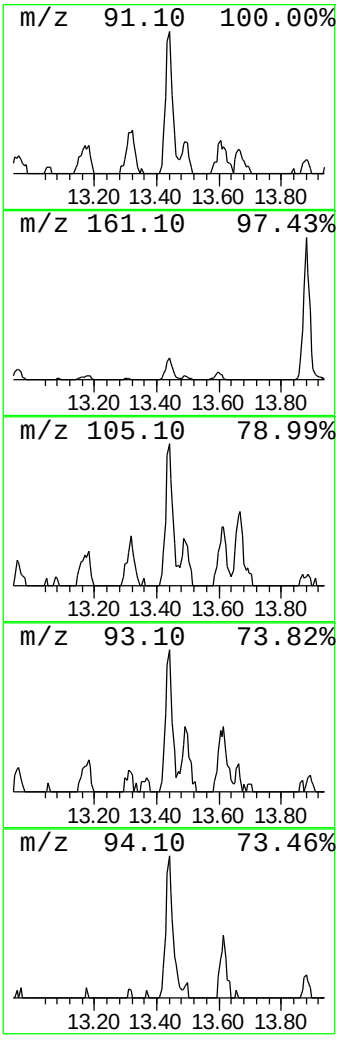
****

Peak Number 1 1,4-Methanoazulene, decahyd... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.44	3.26 ng/ul	217672	Acenaphthene-d10	14.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	99
2	1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	99
3	1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	93
4	1H-Cyclopropⁿ[e]azulene, decahydr...	204	C15H24	000489-39-4	78
5	Caryophyllene-(I1)	204	C15H24	1000158-18-5	64





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F33

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

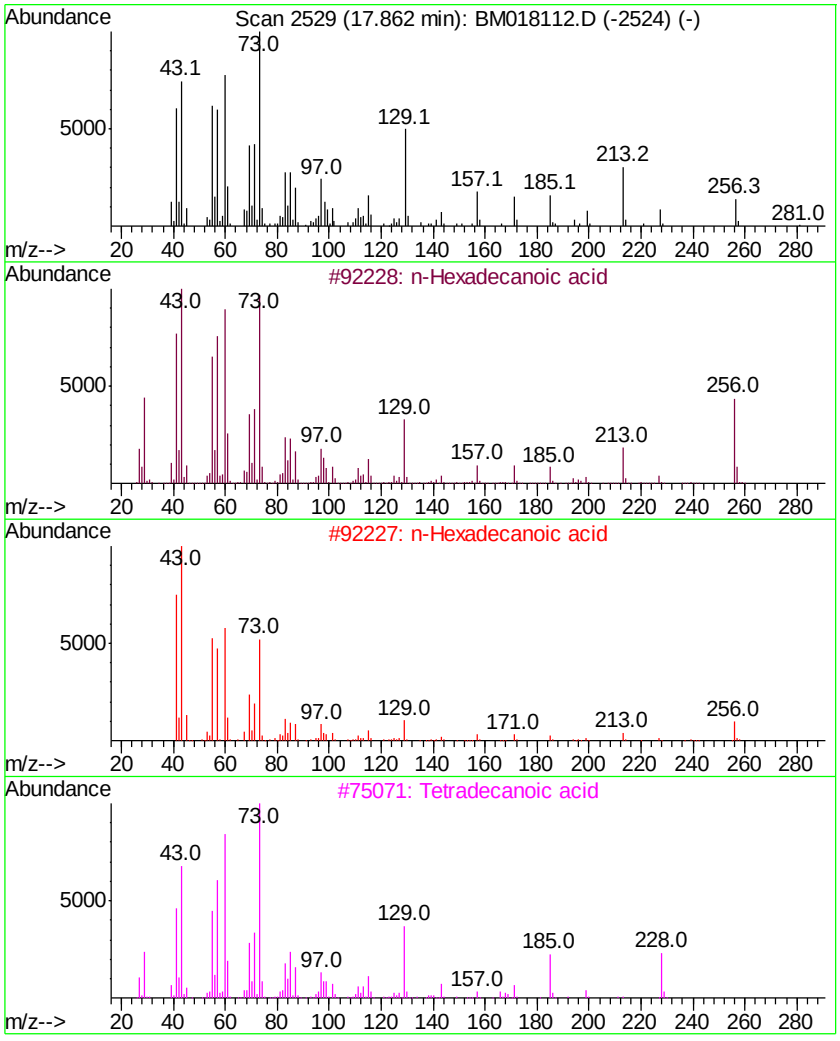
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

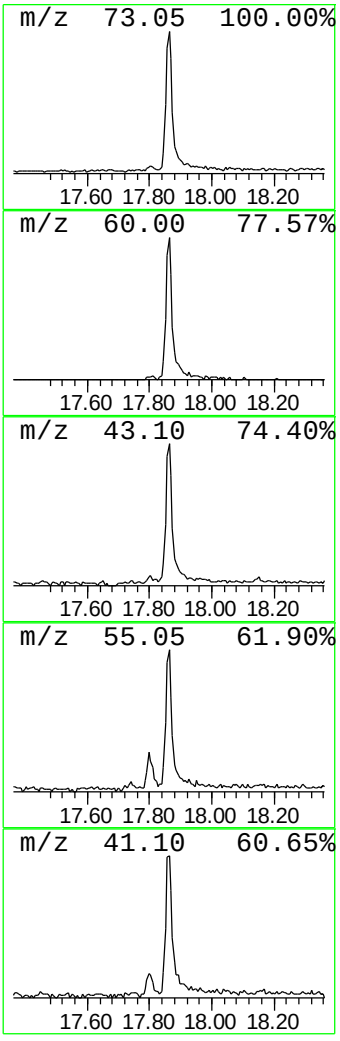
****

Peak Number 2 n-Hexadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.86	5.64 ng/ul	475984	Phenanthrene-d10	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	91
4	n-Decanoic acid	172	C10H20O2	000334-48-5	76
5	Tridecanoic acid	214	C13H26O2	000638-53-9	74





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F33

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

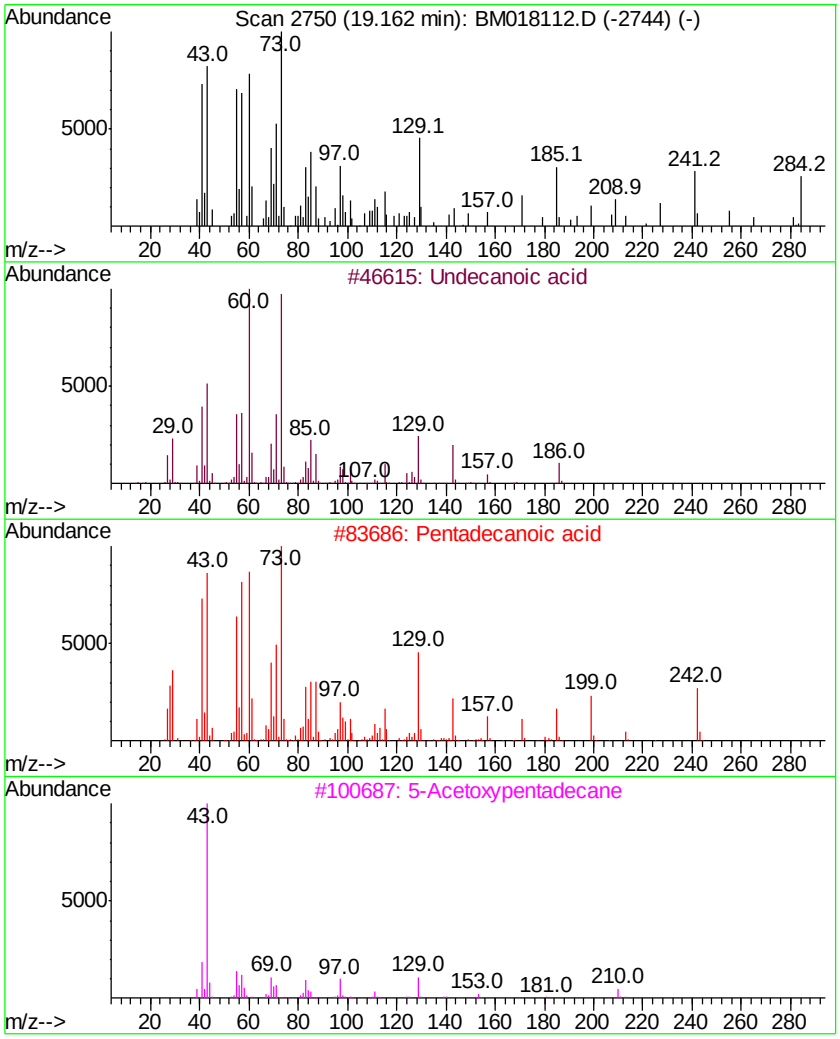
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

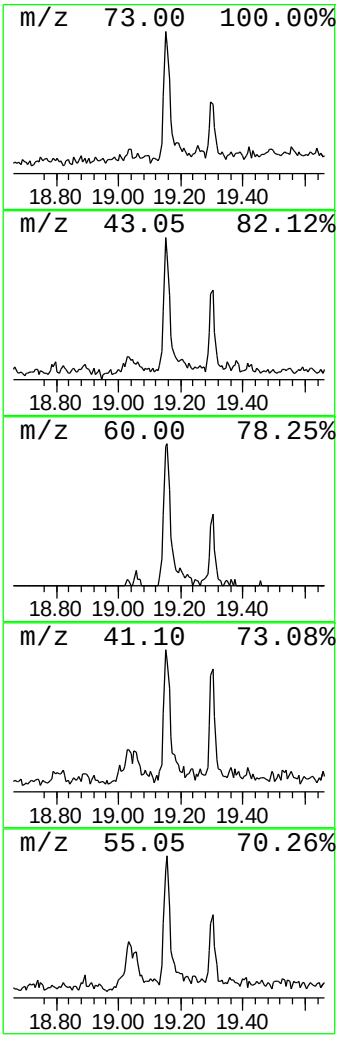
****

Peak Number 3 unknown-01 Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.16	2.01 ng/ul	234741	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecanoic acid	186	C11H22O2	000112-37-8	49
2	Pentadecanoic acid	242	C15H30O2	001002-84-2	46
3	5-Acetoxypentadecane	270	C17H34O2	1000245-62-3	30
4	Undecanoic acid	186	C11H22O2	000112-37-8	25
5	Cyclopentane, 1,1,3-trimethyl-	112	C8H16	004516-69-2	25





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F33

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

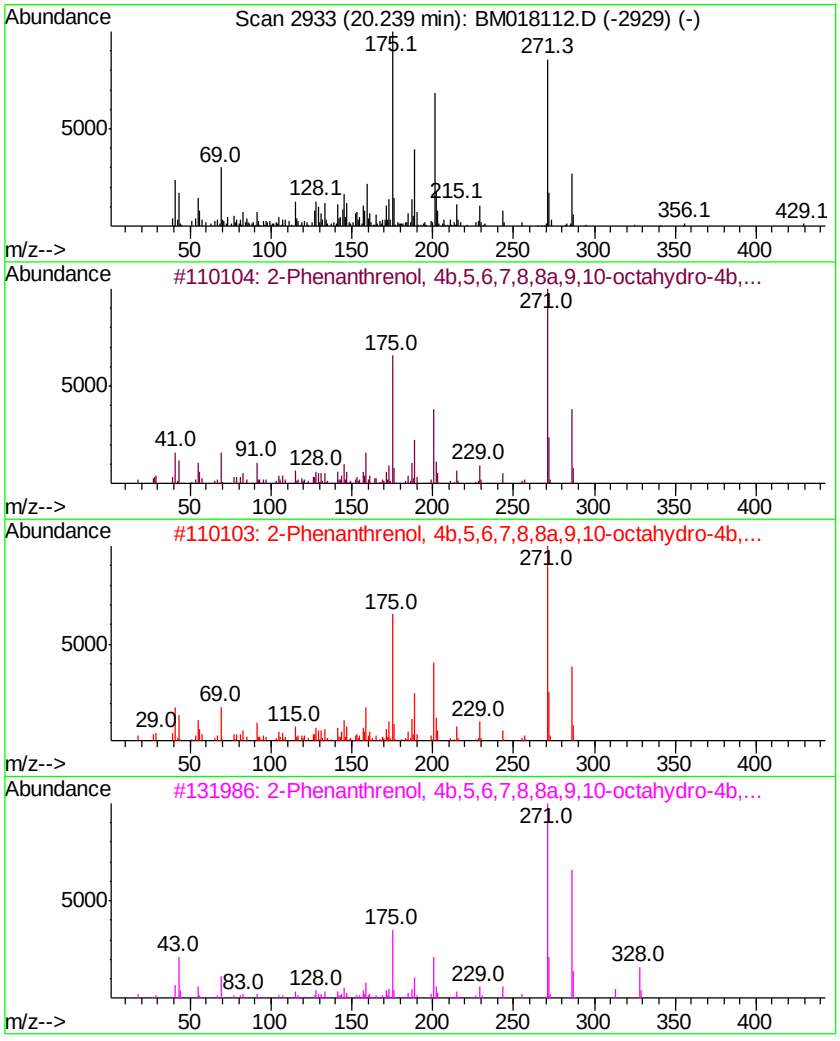
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

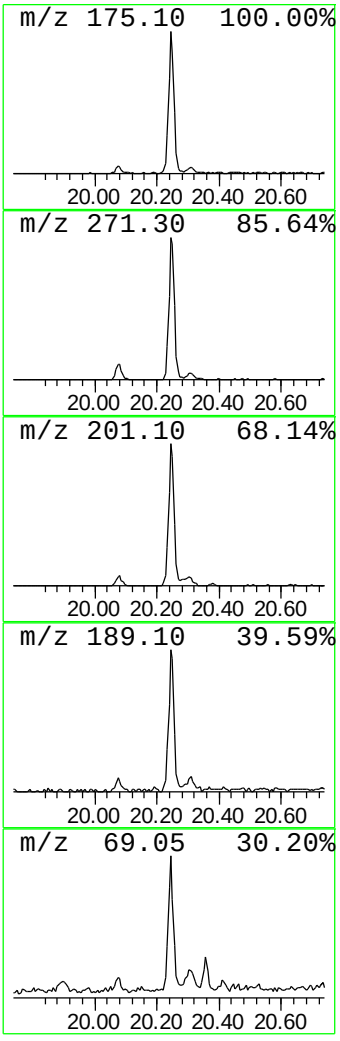
****

Peak Number 4 2-Phenanthrenol, 4b,5,6,7,8... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.24	5.70 ng/ul	665082	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Phenanthrenol, 4b,5,6,7,8,8a,9...	286	C20H30O	000511-15-9	97
2	2-Phenanthrenol, 4b,5,6,7,8,8a,9...	286	C20H30O	000511-15-9	95
3	2-Phenanthrenol, 4b,5,6,7,8,8a,9...	328	C22H32O2	015340-82-6	87
4	13-Isopropylpodocarpen-12-ol-20-al	300	C20H28O2	024035-37-8	32
5	1-Methyl-3-phenyl-4-azafluorenone	271	C19H13NO	069751-55-9	22





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F33

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

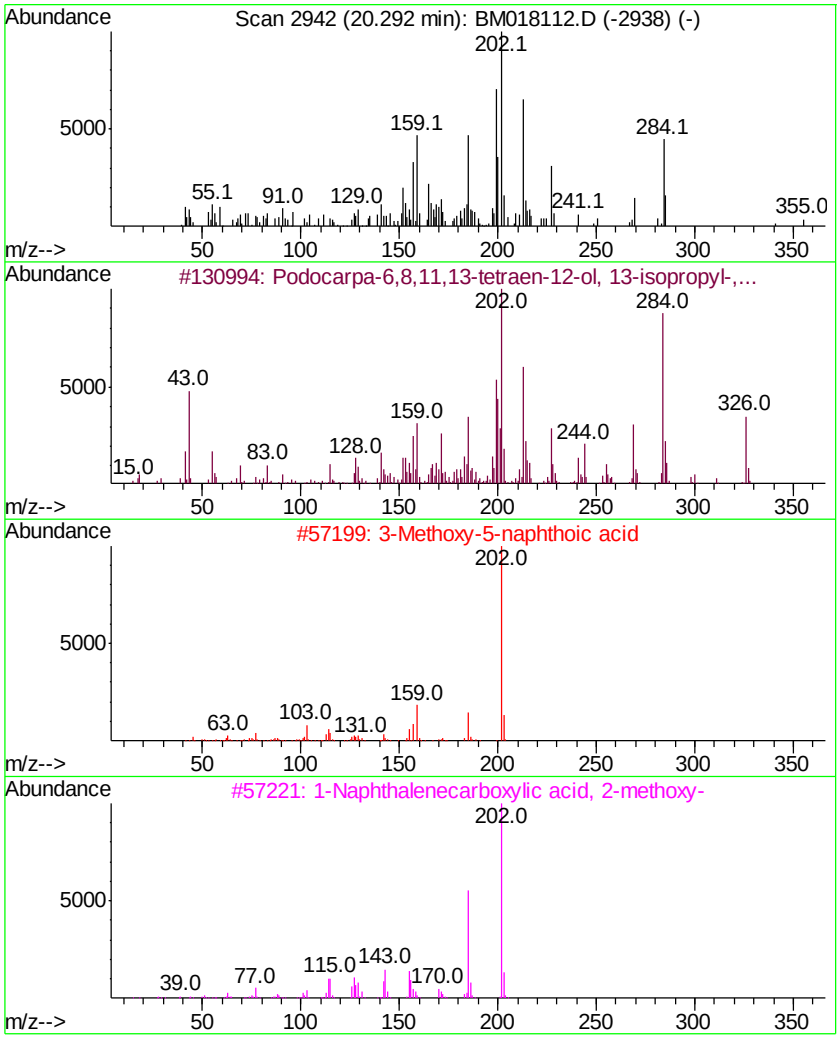
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

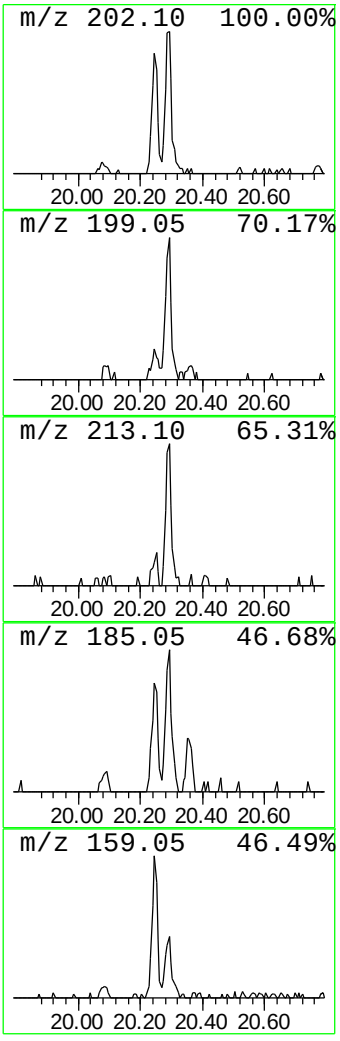
****

Peak Number 5 unknown-02 Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.29	2.16 ng/ul	251916	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Podocarpa-6,8,11,13-tetraen-12-o...	326	C22H30O2	022160-86-7	43
2	3-Methoxy-5-naphthoic acid	202	C12H10O3	007498-58-0	30
3	1-Naphthalenecarboxylic acid, 2-...	202	C12H10O3	000947-62-6	25
4	Oxadiazolo[3,4-a]pyridazino[4,3-...	202	C10H10N4O	1000260-59-4	25
5	1-Naphthalenecarboxylic acid, 2-...	202	C12H10O3	000947-62-6	25





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F33

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

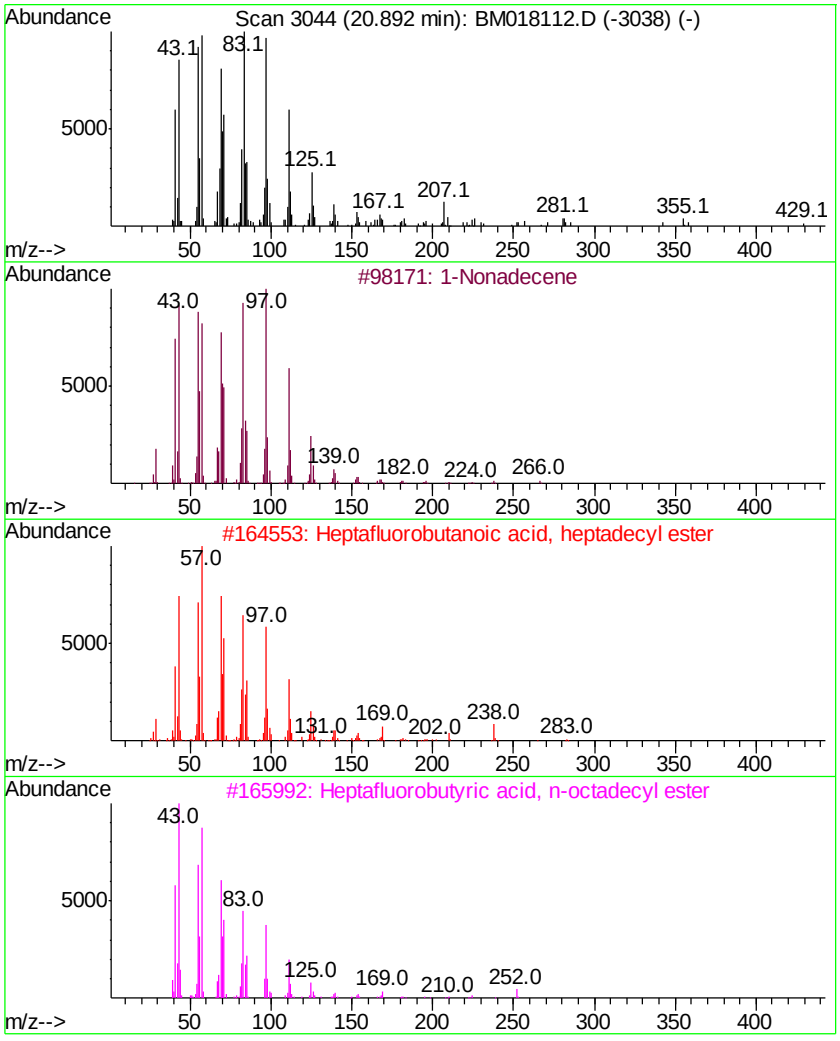
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

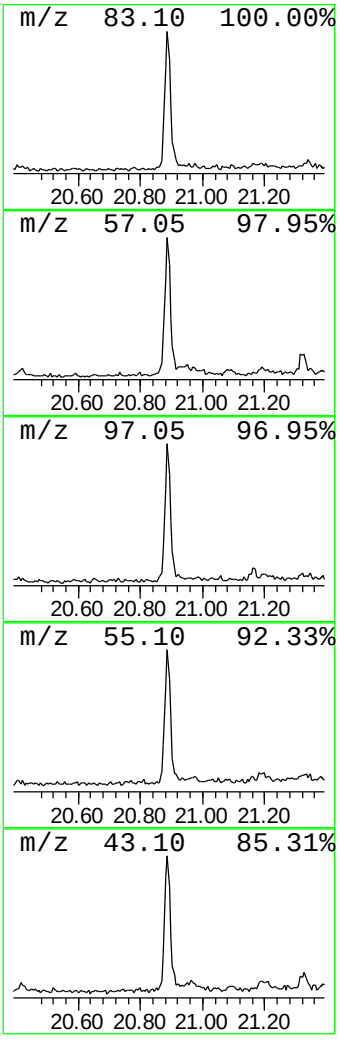
****

Peak Number 6 (DEL) Alkane: Cyclic20.89 Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	3.68 ng/ul	429543	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Nonadecene	266	C19H38	018435-45-5	95
2	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	93
3	Heptafluorobutyric acid, n-octad...	466	C22H37F7O2	000400-57-7	91
4	Heptafluorobutyric acid, n-penta...	424	C19H31F7O2	1000216-79-3	91
5	Trifluoroacetic acid, n-heptadec...	324	C17H31F3O2	1000216-79-2	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F33

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

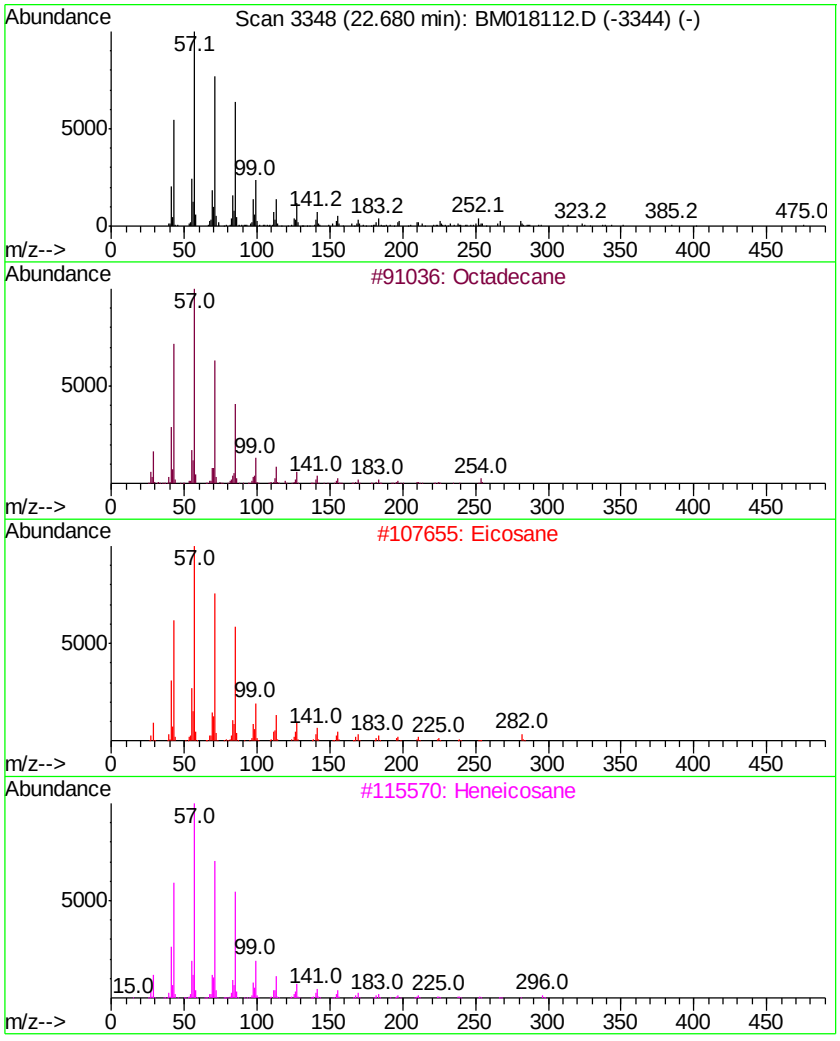
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

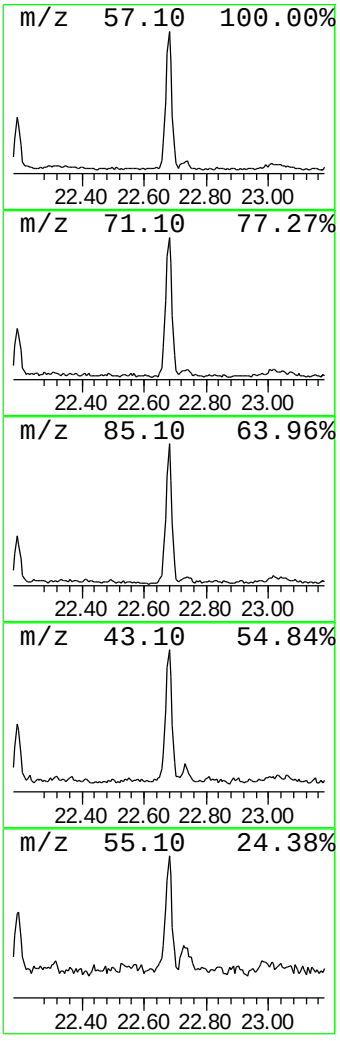
****

Peak Number 7 (DEL) Alkane: Straight-Chai... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.68	3.11 ng/ul	361281	Perylene-d12	23.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	97
2	Eicosane	282	C20H42	000112-95-8	95
3	Heneicosane	296	C21H44	000629-94-7	91
4	Docosane, 11-butyl-	366	C26H54	013475-76-8	91
5	Heptadecane	240	C17H36	000629-78-7	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F33

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

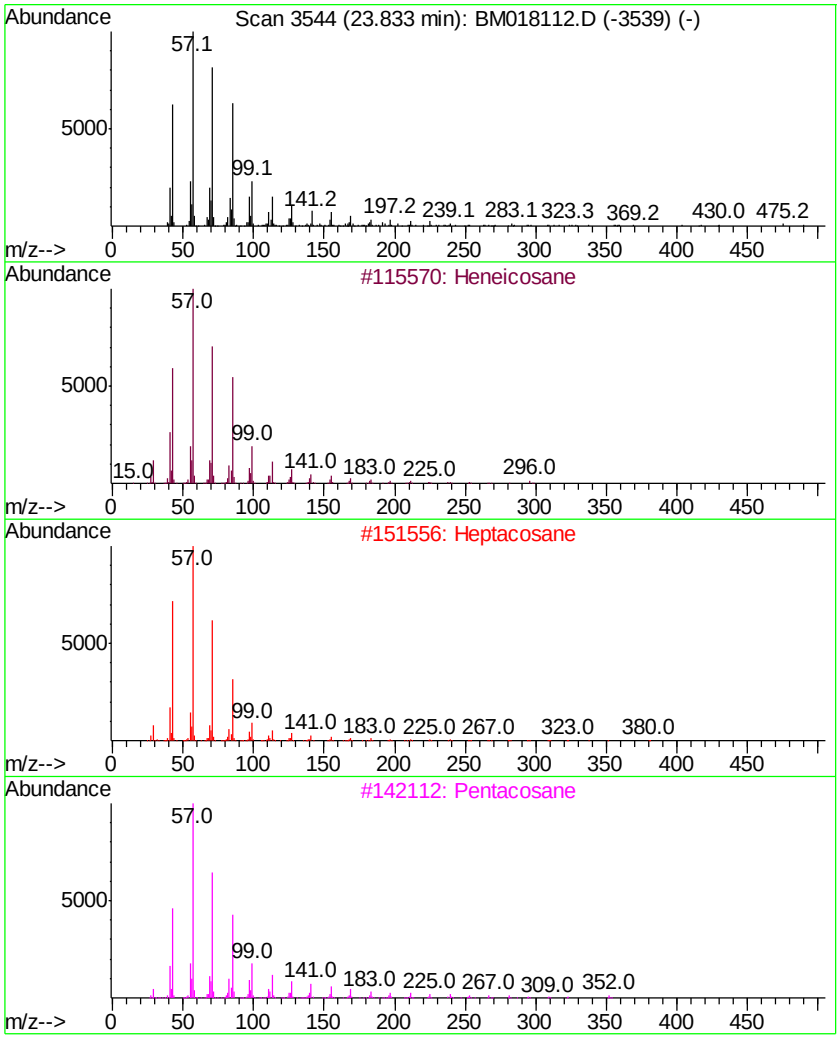
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

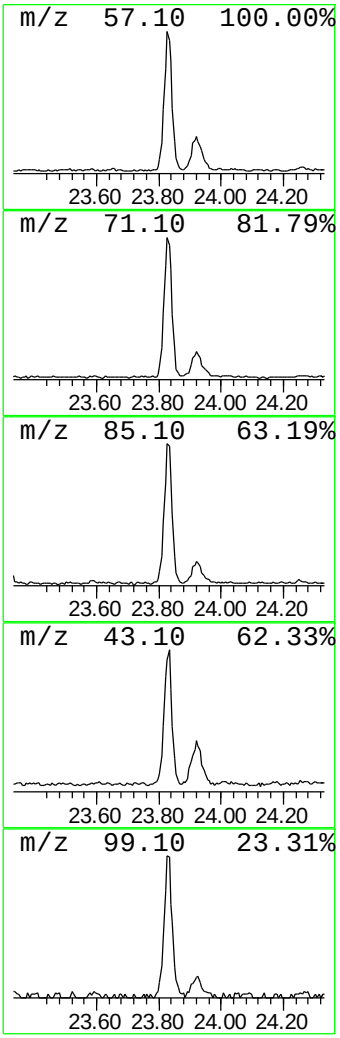
****

Peak Number 8 (DEL) Alkane: Straight-Chai... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.83	5.33 ng/ul	619356	Perylene-d12	23.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	97
2	Heptacosane	380	C27H56	000593-49-7	91
3	Pentacosane	352	C25H52	000629-99-2	91
4	Triacontane	422	C30H62	000638-68-6	91
5	Dodecane, 1-iodo-	296	C12H25I	004292-19-7	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F33

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

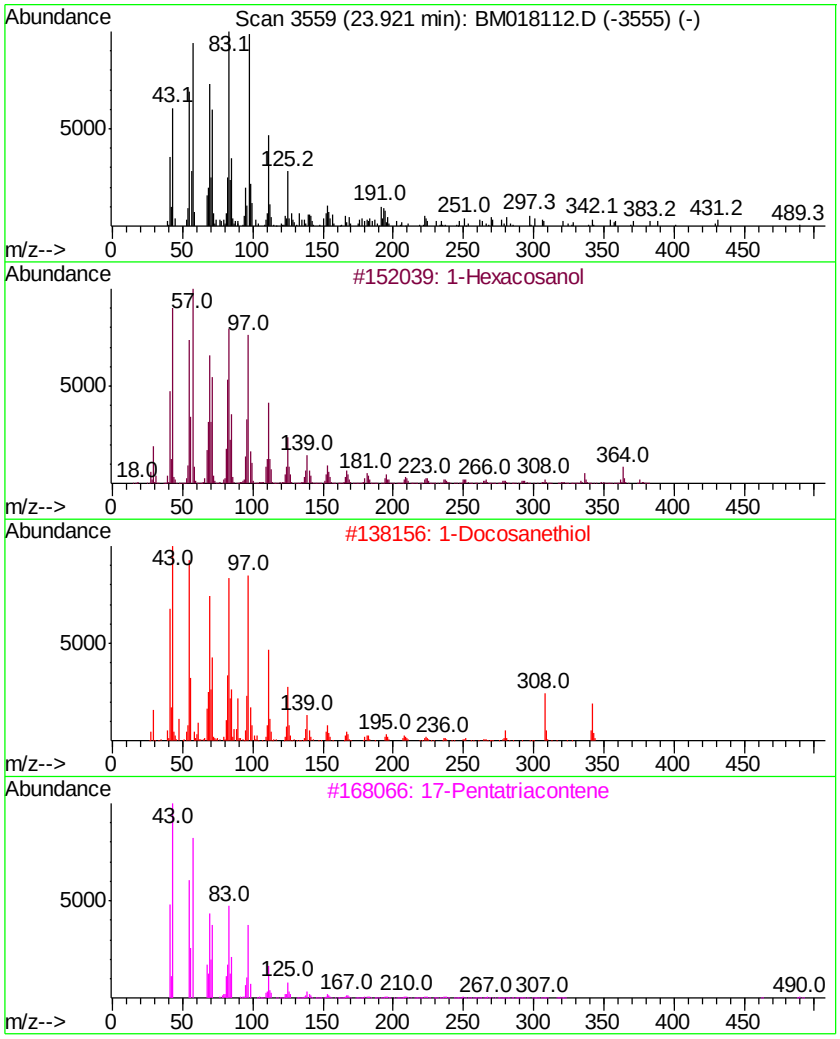
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

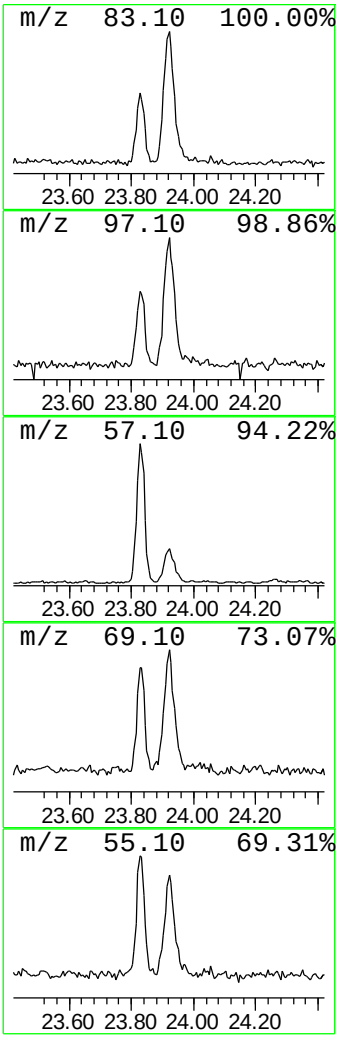
****

Peak Number 9 1-Hexacosanol Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.92	3.15 ng/ul	366116	Perylene-d12	23.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Hexacosanol	382	C26H54O	000506-52-5	90
2	1-Docosanethiol	342	C22H46S	007773-83-3	86
3	17-Pentatriacontene	491	C35H70	006971-40-0	86
4	Cyclooctadecane, ethyl-	280	C20H40	1000151-22-5	86
5	1-Nonadecene	266	C19H38	018435-45-5	62





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F33

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

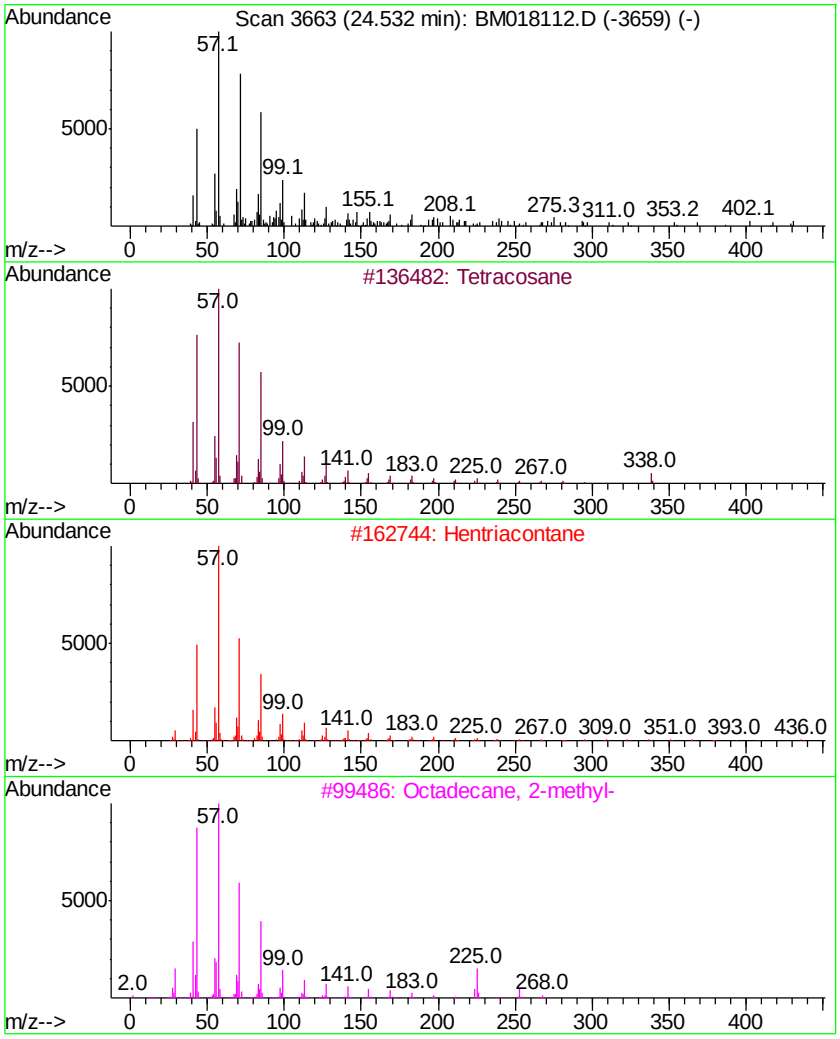
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

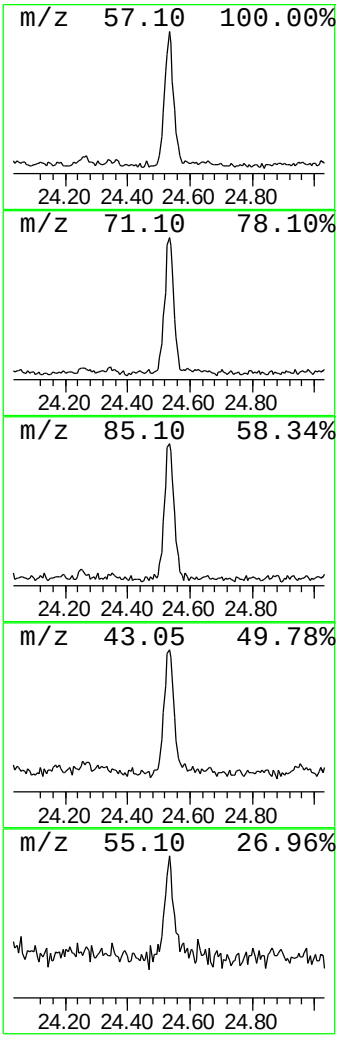
****

Peak Number 10 (DEL) Alkane: Straight-Chai... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.53	2.18 ng/ul	253291	Perylene-d12	23.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetracosane	338	C24H50	000646-31-1	83
2	Hentriacontane	437	C31H64	000630-04-6	83
3	Octadecane, 2-methyl-	268	C19H40	001560-88-9	81
4	Octadecane, 1-iodo-	380	C18H37I	000629-93-6	80
5	Tetradecane, 3-methyl-	212	C15H32	018435-22-8	80





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F33

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
1,4-Methanoazulen...	13.44	3.3	ng/ul	217672	3	14.19	1335080	20.0
n-Hexadecanoic acid	17.86	5.6	ng/ul	475984	4	16.95	1688920	20.0
unknown-01	19.16	2.0	ng/ul	234741	5	21.16	2335600	20.0
2-Phenanthrenol, ...	20.24	5.7	ng/ul	665082	5	21.16	2335600	20.0
unknown-02	20.29	2.2	ng/ul	251916	5	21.16	2335600	20.0
(DEL) Alkane: Cyc...	20.89	3.7	ng/ul	429543	5	21.16	2335600	20.0
(DEL) Alkane: Str...	22.68	3.1	ng/ul	361281	6	23.33	2322150	20.0
(DEL) Alkane: Str...	23.83	5.3	ng/ul	619356	6	23.33	2322150	20.0
1-Hexacosanol	23.92	3.1	ng/ul	366116	6	23.33	2322150	20.0
(DEL) Alkane: Str...	24.53	2.2	ng/ul	253291	6	23.33	2322150	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

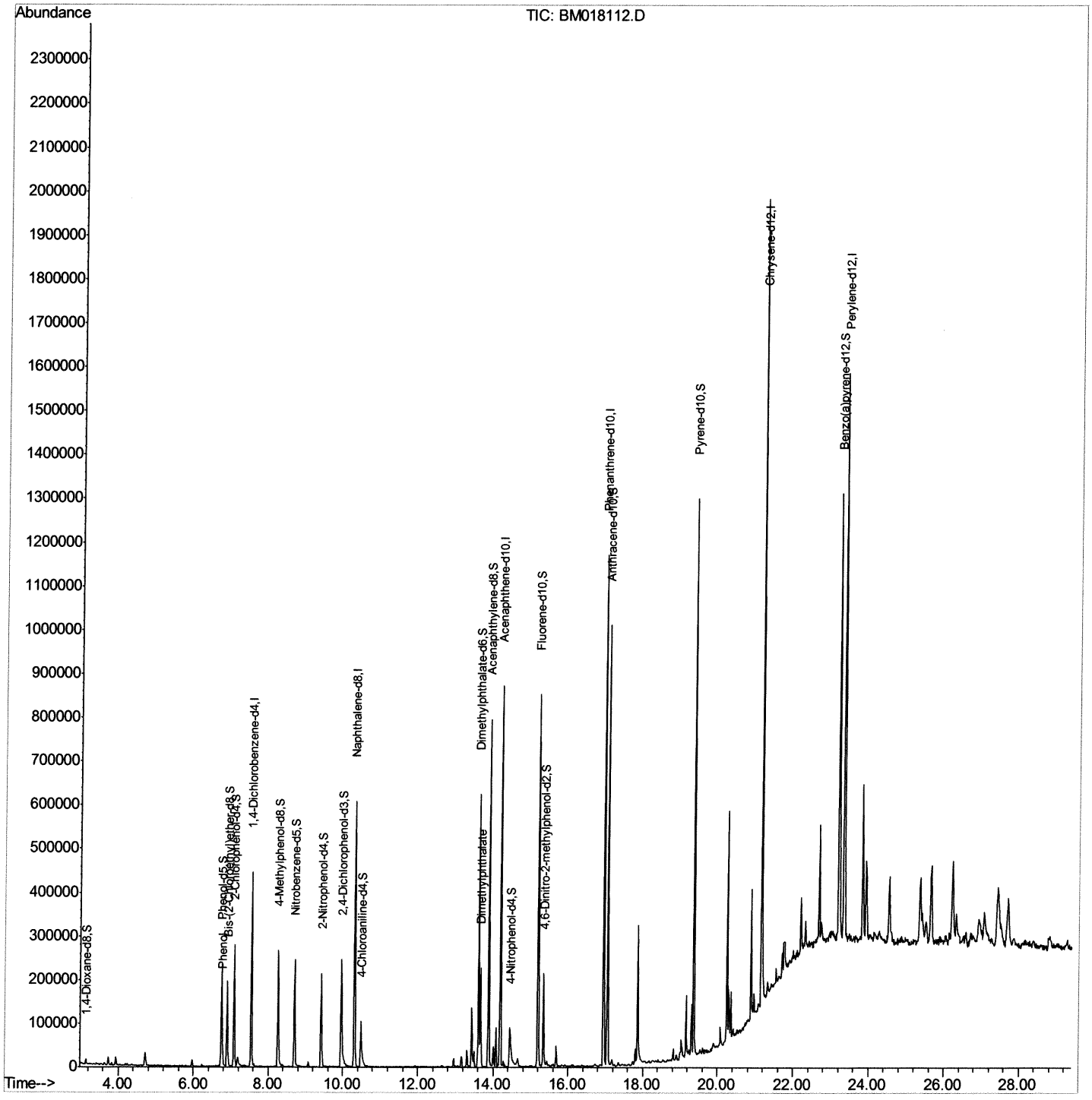
Quantitation Report (QT Reviewed)

Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 13 03:56:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:55 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

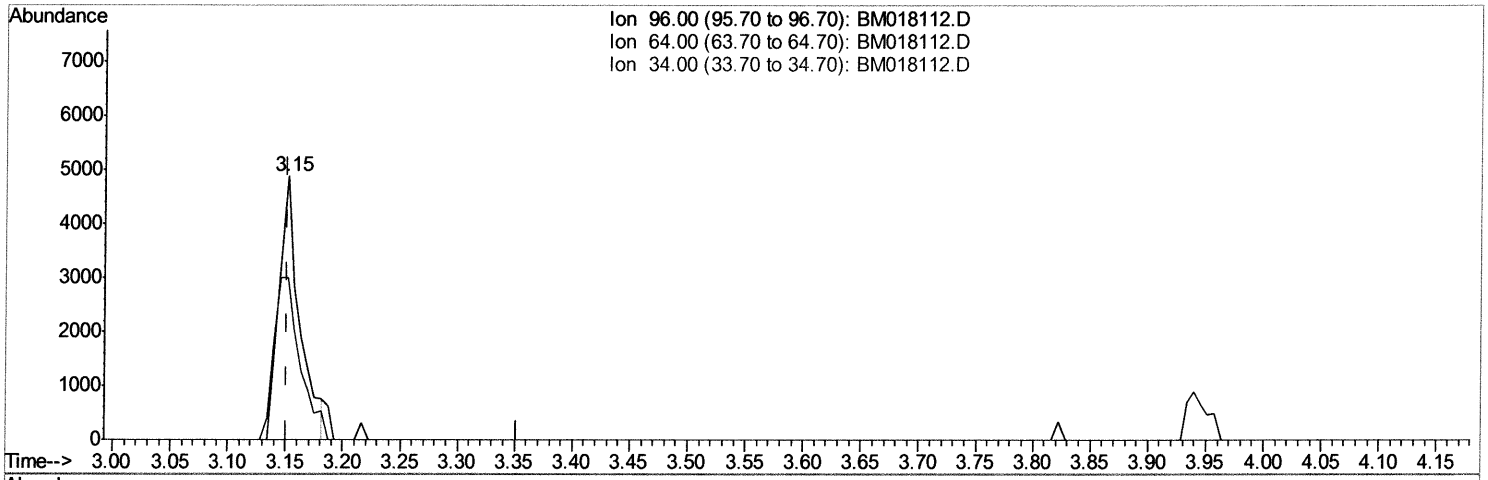
Quantitation Report (Qedit)

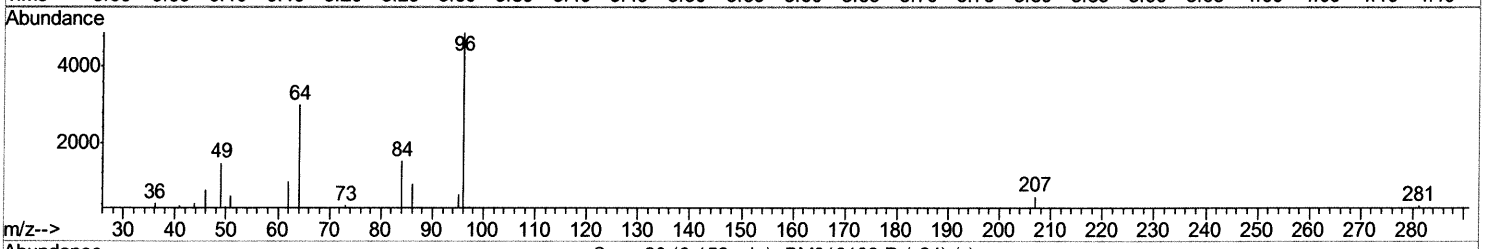
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

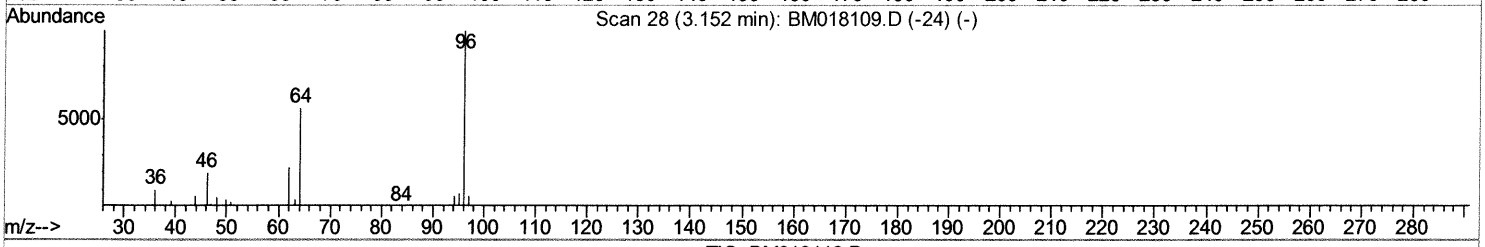
Quant Time: Dec 13 03:43:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:55 PM







TIC: BM018112.D

(3) 1,4-Dioxane-d8 (S)

3.152min (0.000) 2.22ng/uL

response 6035

Ion	Exp%	Act%
96.00	100	100
64.00	68.40	61.36
34.00	0.00	0.00
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

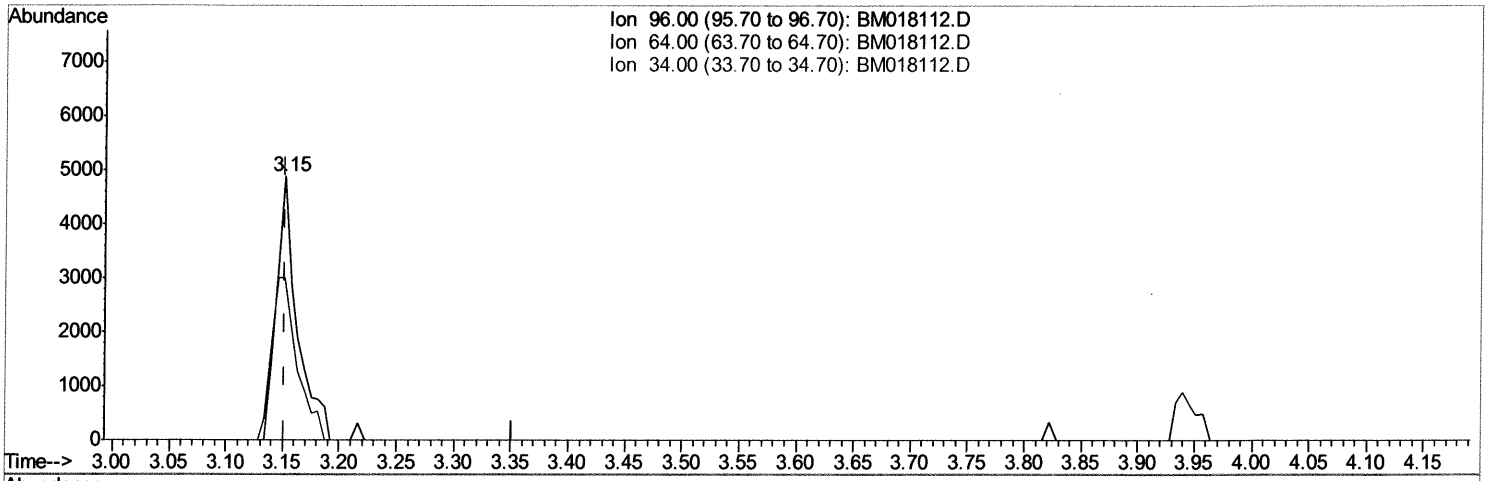
Quantitation Report (Qedit)

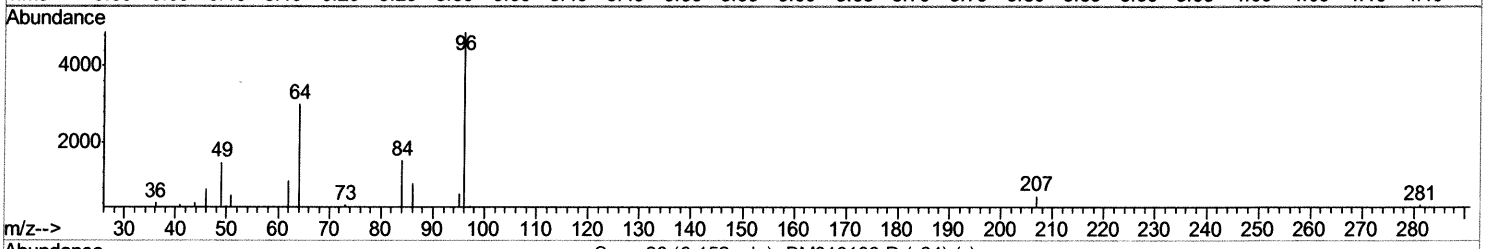
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

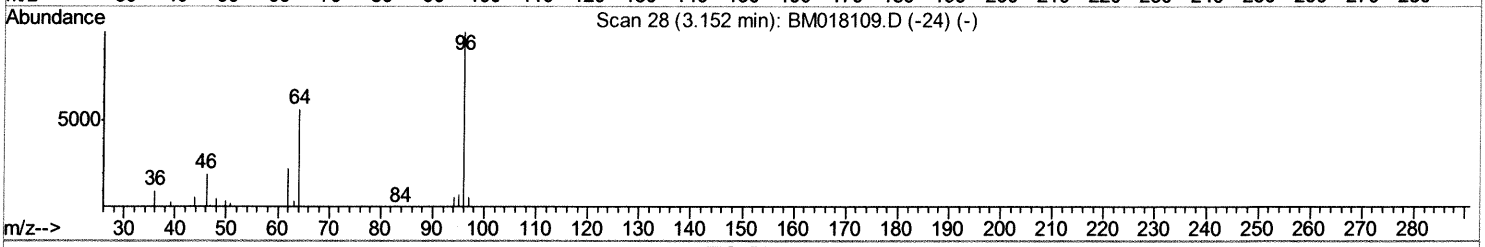
Quant Time: Dec 13 03:43:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:55 PM







TIC: BM018112.D

(3) 1,4-Dioxane-d8 (S)

3.152min (0.000) 2.30ng/uL m) SJ 12/13/18

response 6253

Ion	Exp%	Act%
96.00	100	100
64.00	68.40	61.36
34.00	0.00	0.00
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

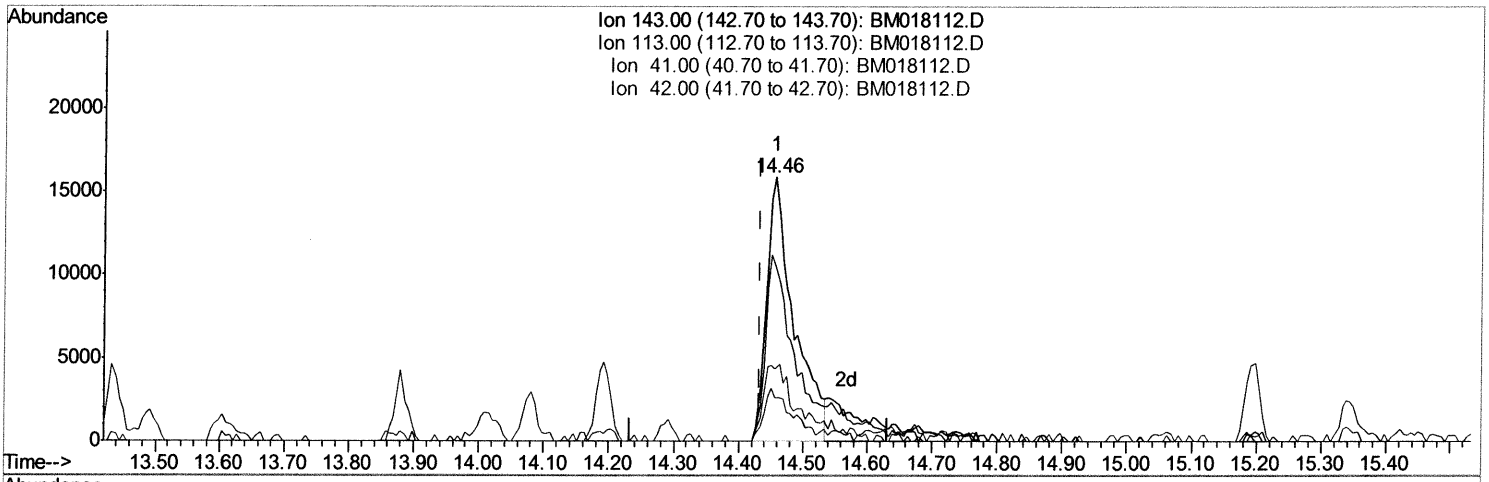
Quantitation Report (Qedit)

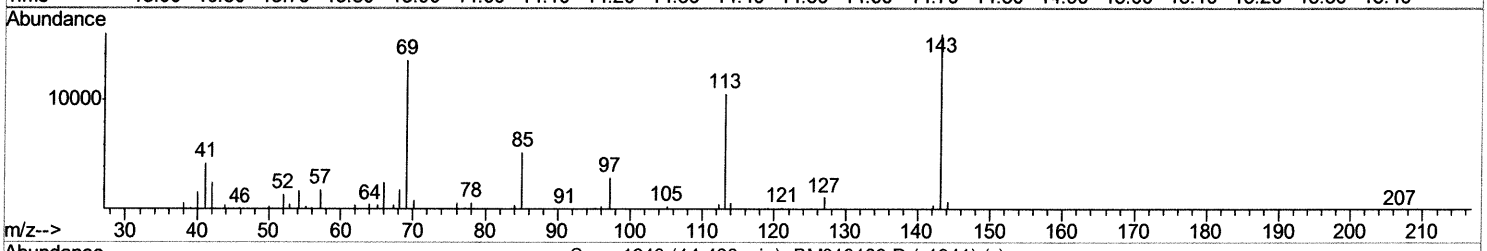
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

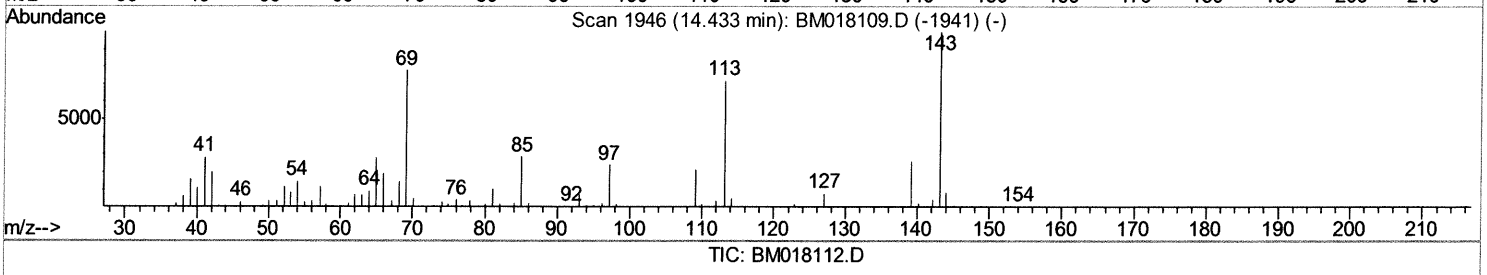
Quant Time: Dec 13 03:43:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:55 PM







TIC: BM018112.D

(51) 4-Nitrophenol-d4 (S)

14.457min (+0.024) 9.98ng/ul

response 46730

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	66.58
41.00	40.10	27.49#
42.00	26.80	16.58#

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

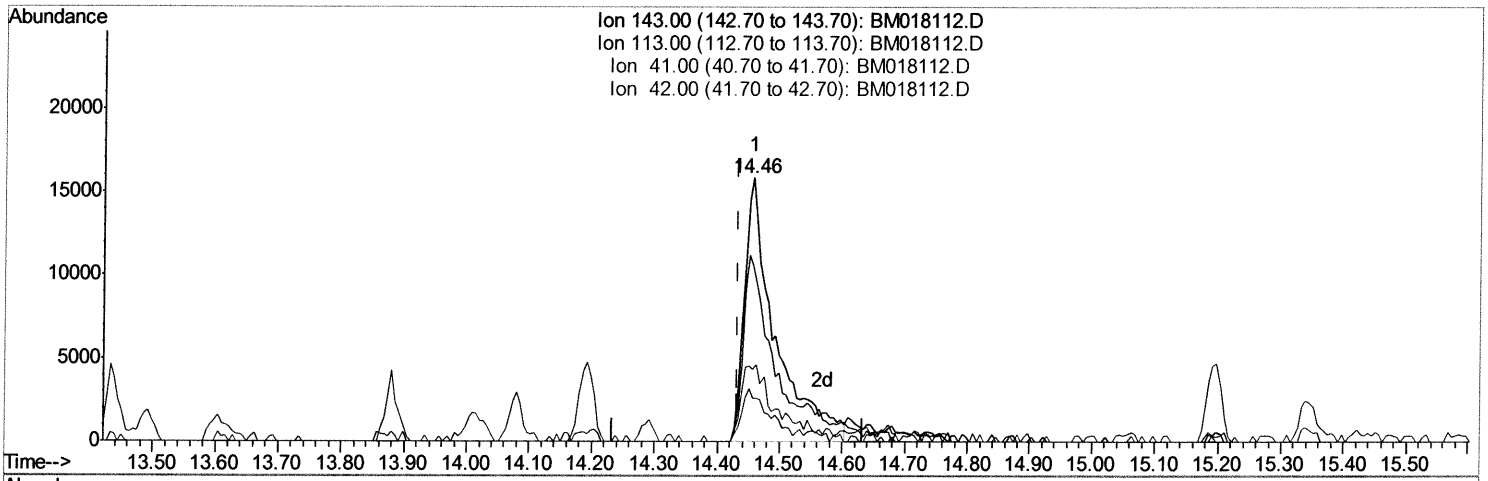
Quantitation Report (Qedit)

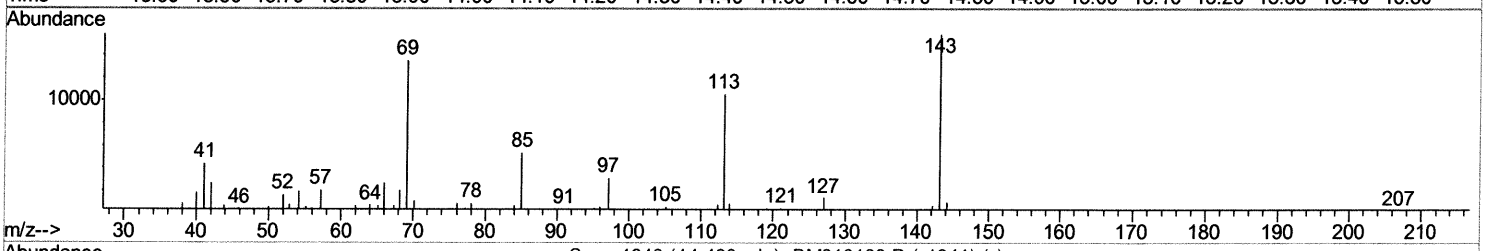
Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

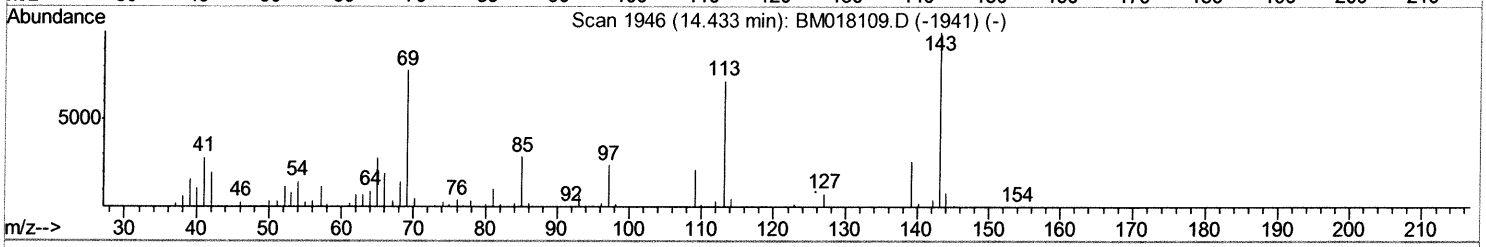
Quant Time: Dec 13 03:43:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:55 PM







TIC: BM018112.D

(51) 4-Nitrophenol-d4 (S)

14.457min (+0.024) 11.56ng/ul m > SJ 12/13/18

response 54143

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	66.58
41.00	40.10	27.49#
42.00	26.80	16.58#

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018112.D
Acq On : 13 Dec 2018 02:55
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 13 03:56:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9F33

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:55 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	124457	20.00	ng/ul	0.00
18) Naphthalene-d8	10.30	136	529544	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	296825	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	697888	20.00	ng/ul	0.00
77) Chrysene-d12	21.16	240	850909	20.00	ng/ul	0.00
85) Perylene-d12	23.33	264	877377	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	6253m)	2.30	ng/uL	0.00
5) Phenol-d5	6.73	99	159626	14.04	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.89	67	87940	12.83	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	139610	15.70	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	115491	12.44	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	68784	16.91	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	75666	16.24	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	133460	15.04	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	101570	13.34	ng/ul	0.01
43) Dimethylphthalate-d6	13.62	166	466039	18.09	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	534812	17.16	ng/ul	0.00
51) 4-Nitrophenol-d4	14.46	143	54143m)	11.56	ng/ul	0.02
57) Fluorene-d10	15.19	176	368083	16.55	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	55011	11.03	ng/ul	0.00
70) Anthracene-d10	17.05	188	560911	16.14	ng/ul	0.00
78) Pyrene-d10	19.36	212	653186	15.86	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	737737	15.50	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	42961	3.787	ng/ul	97
44) Dimethylphthalate	13.66	163	150587	6.035	ng/ul	100

SJ 12/13/18

SJ 12/13/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9F34

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-15
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018106.D
% Solids : 90.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	74	U
100-52-7	Benzaldehyde	360	U
108-95-2	Phenol	170	J
111-44-4	Bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	190	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2-oxybis(1-Chloropropane)	360	U
98-86-2	Acetophenone	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	190	U
67-72-1	Hexachloroethane	190	U
98-95-3	Nitrobenzene	190	U
78-59-1	Isophorone	190	U
88-75-5	2-Nitrophenol	190	U
105-67-9	2,4-Dimethylphenol	190	U
111-91-1	Bis(2-Chloroethoxy)methane	190	U
120-83-2	2,4-Dichlorophenol	190	U
91-20-3	Naphthalene	190	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	190	U
105-60-2	Caprolactam	360	U
59-50-7	4-Chloro-3-methylphenol	190	U
91-57-6	2-Methylnaphthalene	190	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9F34

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-15
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018106.D
% Solids : 90.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	190	U
92-52-4	1,1-Biphenyl	190	U
91-58-7	2-Chloronaphthalene	190	U
88-74-4	2-Nitroaniline	190	U
131-11-3	Dimethylphthalate	250	
606-20-2	2,6-Dinitrotoluene	190	U
208-96-8	Acenaphthylene	190	U
99-09-2	3-Nitroaniline	360	U
83-32-9	Acenaphthene	190	U
51-28-5	2,4-Dinitrophenol	360	U
100-02-7	4-Nitrophenol	360	U
132-64-9	Dibenzofuran	190	U
121-14-2	2,4-Dinitrotoluene	190	U
84-66-2	Diethylphthalate	190	U
86-73-7	Fluorene	190	U
7005-72-3	4-Chlorophenyl-phenylether	190	U
100-01-6	4-Nitroaniline	360	U
534-52-1	4,6-Dinitro-2-methylphenol	360	U
86-30-6	N-Nitrosodiphenylamine	190	U
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U
101-55-3	4-Bromophenyl-phenylether	190	U
118-74-1	Hexachlorobenzene	190	U
1912-24-9	Atrazine	360	U
87-86-5	Pentachlorophenol	360	U
85-01-8	Phenanthrene	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9F34

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-15
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018106.D
% Solids : 90.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/12/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	190	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	190	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	190	U
85-68-7	Butylbenzylphthalate	190	U
91-94-1	3,3-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	190	U
218-01-9	Chrysene	190	U
117-81-7	Bis(2-ethylhexyl)phthalate	190	U
117-84-0	Di-n-octyl phthalate	360	U
205-99-2	Benzo(b)fluoranthene	190	U
207-08-9	Benzo(k)fluoranthene	190	U
50-32-8	Benzo(a)pyrene	190	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	U
53-70-3	Dibenzo(a,h)anthracene	190	U
191-24-2	Benzo(g,h,i)perylene	190	U
58-90-2	2,3,4,6-Tetrachlorophenol	190	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9F34

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-15
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BM018106.D
% Solids : 90.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/12/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000057-10-3	n-Hexadecanoic acid	17.86	180	JN
2	074339-53-0	Trichloroacetic acid, pentadecyl e	20.89	92	JN
3	000489-83-8	Guaia-3,9-diene	25.64	130	JN
4	E966796	Total Alkanes	N/A	280	

EPA-designated Registry Number.

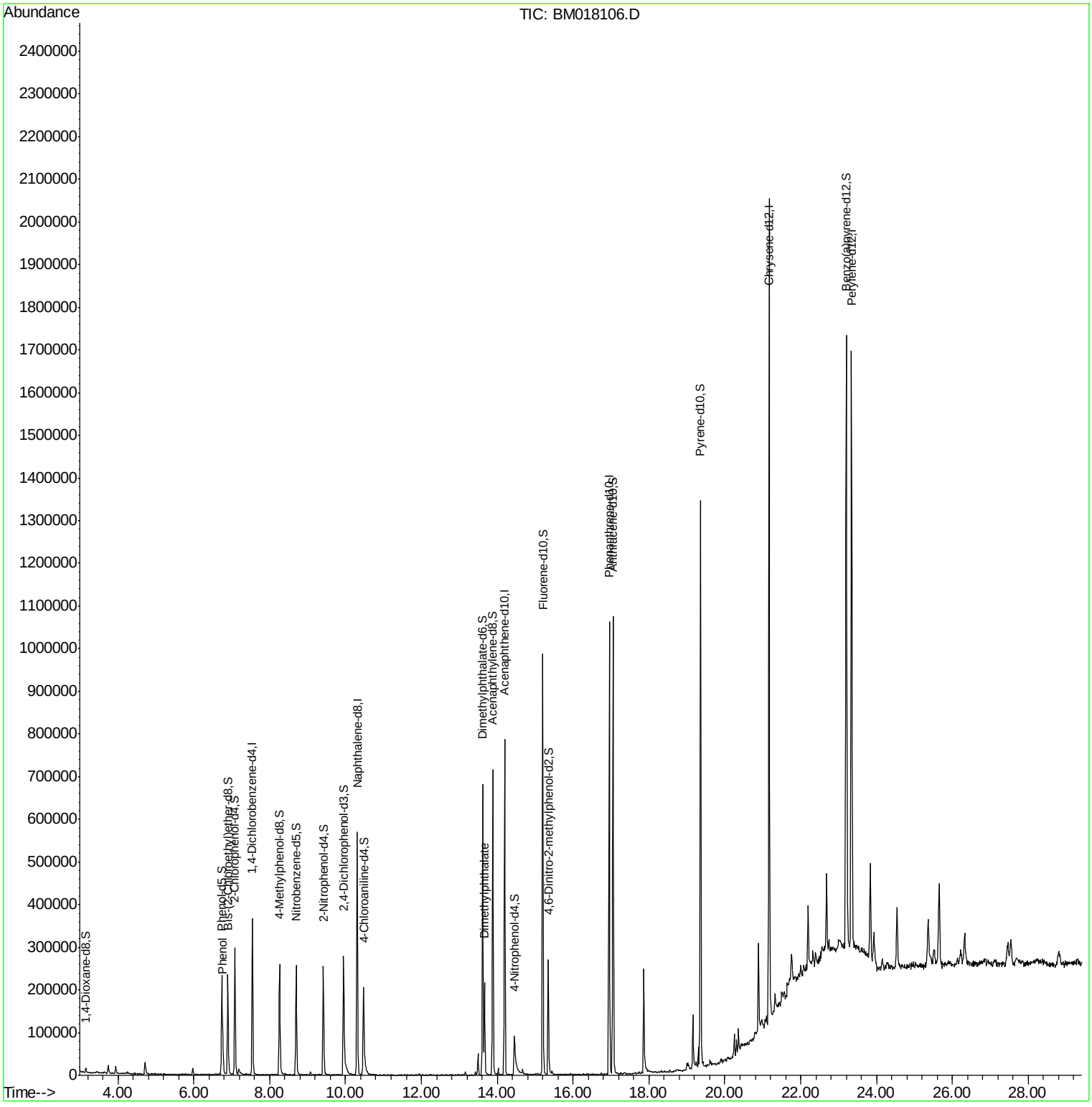
Quantitation Report (LSC Reviewed)

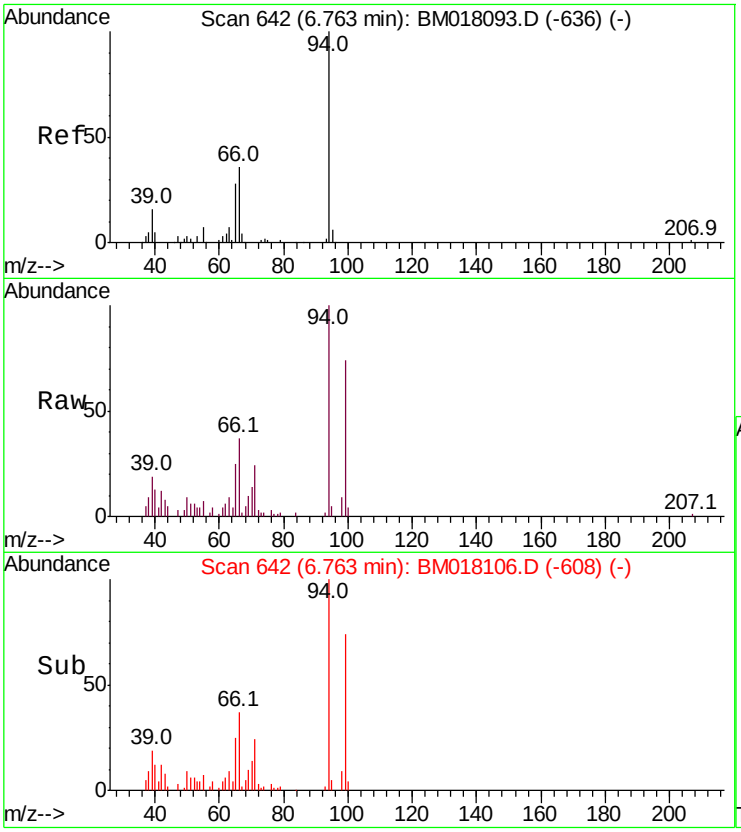
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 13 03:30:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:21 PM

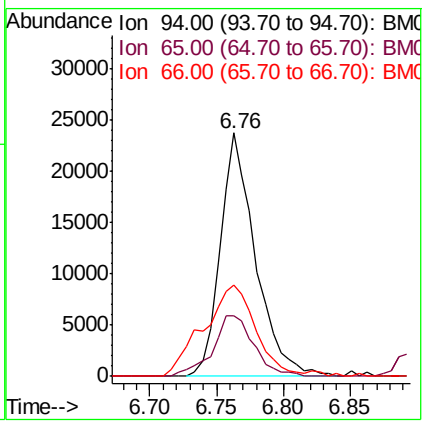




#6
Phenol
Concen: 4.569 ng/ul
RT: 6.76 min Scan# 642
Delta R.T. -0.00 min
Lab File: BM018106.D
Acq: 12 Dec 2018 23:16

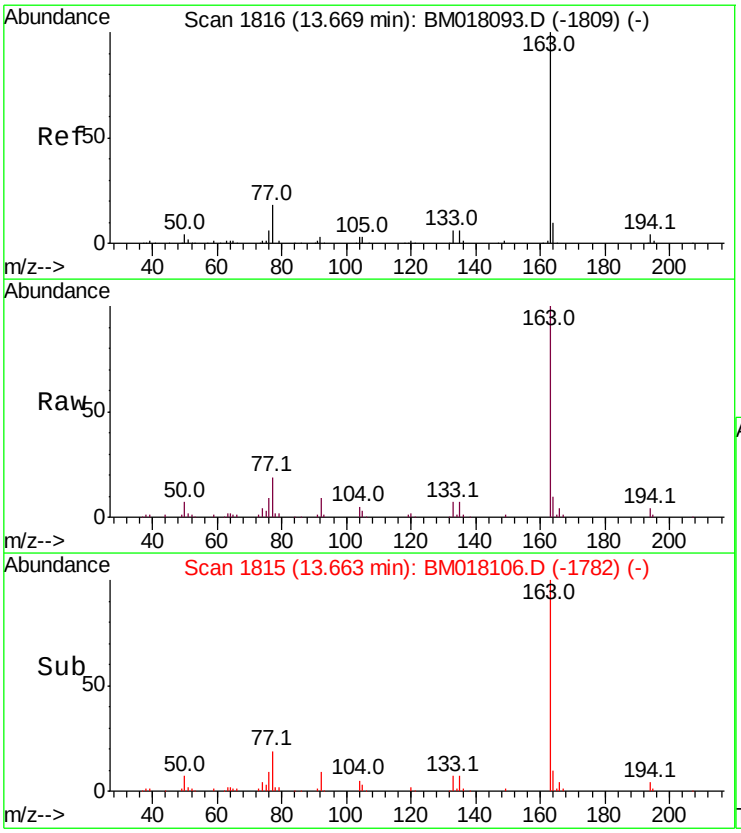
Tgt Ion: 94 Resp: 43663

Ion	Ratio	Lower	Upper
94	100		
65	25.0	24.7	37.1
66	37.4	34.6	51.8



Instrument :
BNA_M
ClientSampleId :
F9F34

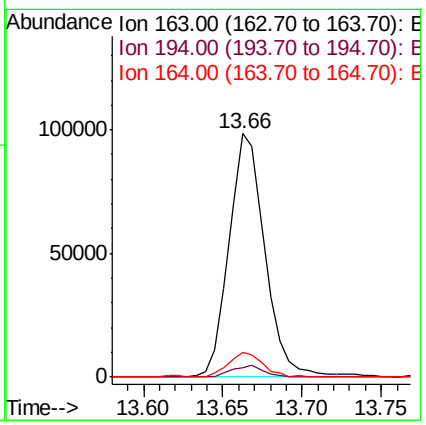
Manual Integrations APPROVED
Sohil
12/13/2018 6:16:21 PM



#44
Dimethylphthalate
Concen: 6.872 ng/ul
RT: 13.66 min Scan# 1815
Delta R.T. -0.01 min
Lab File: BM018106.D
Acq: 12 Dec 2018 23:16

Tgt Ion:163 Resp: 154276

Ion	Ratio	Lower	Upper
163	100		
194	4.0	3.4	5.0
164	10.1	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:21 PM

Quant Time: Dec 13 03:30:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	104834	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	485051	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	267057	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	621836	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	857798	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	969297	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	6694	2.92	ng/uL	0.00
5) Phenol-d5	6.73	99	165995	17.34	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.89	67	109174	18.91	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	149625	19.97	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	113535	14.51	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	72803	19.54	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	88528	20.74	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	143106m	17.61	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	170950	24.51	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	502043	21.67	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	540624	19.28	ng/ul	0.00
51) 4-Nitrophenol-d4	14.45	143	60680m	14.40	ng/ul	0.01
57) Fluorene-d10	15.20	176	416598	20.82	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	72225	16.25	ng/ul	0.00
70) Anthracene-d10	17.05	188	629515	20.33	ng/ul	0.00
78) Pyrene-d10	19.36	212	701936	16.91	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	1002925	19.08	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	43663	4.569	ng/ul	90
44) Dimethylphthalate	13.66	163	154276	6.872	ng/ul	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F34

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.151	24	28	36	rBV2	12250	20673	0.73%	0.075%
2	3.440	72	77	81	rBV4	3184	6259	0.22%	0.023%
3	3.646	109	112	119	rVB5	4198	7047	0.25%	0.026%
4	3.746	123	129	137	rVB2	18604	30986	1.10%	0.113%
5	3.940	159	162	169	rVB2	17103	25717	0.91%	0.094%
6	4.251	211	215	216	rVB3	3292	2940	0.10%	0.011%
7	4.710	288	293	296	rBV	28314	42974	1.53%	0.156%
8	5.975	504	508	513	rVV	16020	22196	0.79%	0.081%
9	6.092	521	528	531	rVB3	2208	5080	0.18%	0.018%
10	6.681	622	628	630	rVB4	1932	3493	0.12%	0.013%
11	6.739	631	638	651	rBV2	232341	562419	19.98%	2.047%
12	6.898	658	665	680	rVB	233684	392466	13.94%	1.428%
13	7.081	689	696	707	rBV	298371	507396	18.03%	1.846%
14	7.186	710	714	722	rBV3	11664	25681	0.91%	0.093%
15	7.539	768	774	783	rBV	366650	613562	21.80%	2.233%
16	8.263	890	897	912	rBV	260416	482953	17.16%	1.757%
17	8.698	964	971	980	rBV	256640	450641	16.01%	1.640%
18	9.080	1031	1036	1040	rVB	8712	12201	0.43%	0.044%
19	9.410	1086	1092	1103	rBV	254320	454989	16.17%	1.656%
20	9.480	1103	1104	1111	rVB4	3315	5060	0.18%	0.018%
21	9.951	1176	1184	1205	rBV	280146	624953	22.20%	2.274%
22	10.086	1205	1207	1212	rVB4	3327	4473	0.16%	0.016%
23	10.192	1222	1225	1229	rVB2	2577	4347	0.15%	0.016%
24	10.310	1238	1245	1256	rVV	568712	957163	34.01%	3.483%
25	10.475	1266	1273	1297	rVV	203899	519590	18.46%	1.891%
26	10.622	1297	1298	1305	rVB2	3148	4407	0.16%	0.016%
27	11.939	1518	1522	1528	rVB2	4325	7170	0.25%	0.026%
28	13.157	1725	1729	1733	rBV3	7576	7528	0.27%	0.027%
29	13.416	1769	1773	1776	rVB3	7256	8003	0.28%	0.029%
30	13.492	1779	1786	1792	rVB2	51021	74359	2.64%	0.271%
31	13.615	1800	1807	1812	rBV	682786	1052298	37.39%	3.829%
32	13.663	1812	1815	1825	rVB	214963	325166	11.55%	1.183%
33	13.880	1846	1852	1865	rBV	716538	1086662	38.61%	3.954%
34	13.974	1865	1868	1873	rVV3	3689	6292	0.22%	0.023%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F34

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	14.027	1873	1877	1881	rVB4	17328	22299	0.79%	0.081%
36	14.192	1898	1905	1919	rBV2	786774	1187214	42.18%	4.320%
37	14.451	1942	1949	1966	rBV2	91202	294361	10.46%	1.071%
38	14.592	1972	1973	1980	rVV5	3091	4148	0.15%	0.015%
39	14.674	1983	1987	1992	rVB5	10791	15357	0.55%	0.056%
40	15.045	2046	2050	2051	rBV	2810	3114	0.11%	0.011%
41	15.198	2070	2076	2087	rBV	986025	1468400	52.17%	5.343%
42	15.345	2095	2101	2115	rBV	269993	443103	15.74%	1.612%
43	15.445	2115	2118	2125	rVV4	10260	15381	0.55%	0.056%
44	15.921	2198	2199	2204	rVB2	2573	2957	0.11%	0.011%
45	16.739	2333	2338	2344	rBV3	4433	8022	0.29%	0.029%
46	16.951	2368	2374	2385	rBV2	1060568	1505680	53.50%	5.479%
47	17.051	2385	2391	2401	rBV	1071237	1569903	55.78%	5.713%
48	17.251	2422	2425	2430	rBV4	3206	4452	0.16%	0.016%
49	17.362	2438	2444	2449	rVB4	3732	7077	0.25%	0.026%
50	17.456	2457	2460	2463	rBV3	2419	3144	0.11%	0.011%
51	17.745	2505	2509	2512	rBV3	4346	6488	0.23%	0.024%
52	17.803	2517	2519	2521	rBV2	3626	3555	0.13%	0.013%
53	17.862	2524	2529	2539	rBV2	244440	378579	13.45%	1.378%
54	17.980	2546	2549	2553	rVB5	4743	4844	0.17%	0.018%
55	18.074	2561	2565	2568	rVB6	3291	4910	0.17%	0.018%
56	18.156	2576	2579	2580	rBV3	3175	3466	0.12%	0.013%
57	18.174	2580	2582	2585	rVB3	3497	3120	0.11%	0.011%
58	18.245	2591	2594	2595	rBV3	3041	3004	0.11%	0.011%
59	18.286	2599	2601	2605	rBV4	2259	2955	0.10%	0.011%
60	18.545	2642	2645	2647	rBV3	5120	4833	0.17%	0.018%
61	18.656	2661	2664	2665	rBV3	3248	3506	0.12%	0.013%
62	18.739	2675	2678	2679	rVV2	2884	3512	0.12%	0.013%
63	18.950	2712	2714	2717	rBV3	3275	4450	0.16%	0.016%
64	19.003	2718	2723	2725	rBV4	16113	25616	0.91%	0.093%
65	19.033	2725	2728	2731	rVB4	9620	14003	0.50%	0.051%
66	19.156	2744	2749	2758	rBV	127325	203792	7.24%	0.742%
67	19.250	2762	2765	2767	rVV3	11132	12130	0.43%	0.044%
68	19.303	2770	2774	2778	rBV3	48289	58218	2.07%	0.212%
69	19.356	2778	2783	2791	rVV2	1320499	1864768	66.25%	6.786%
70	19.609	2824	2826	2828	rBV2	9039	8862	0.31%	0.032%
71	19.656	2832	2834	2835	rVB2	5489	3584	0.13%	0.013%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F34

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

72	19.903	2872	2876	2877	rBV4	8027	9932	0.35%	0.036%
73	19.962	2883	2886	2887	rBV3	6191	7335	0.26%	0.027%
74	20.250	2931	2935	2939	rBV2	51170	62785	2.23%	0.228%
75	20.292	2940	2942	2943	rBV2	17708	13491	0.48%	0.049%
76	20.309	2943	2945	2948	rVB4	30263	24280	0.86%	0.088%
77	20.362	2951	2954	2959	rVV3	48830	57821	2.05%	0.210%
78	20.421	2961	2964	2968	rBV6	14320	25555	0.91%	0.093%
79	20.886	3039	3043	3050	rBV2	203991	313522	11.14%	1.141%
80	21.056	3070	3072	3074	rBV3	20623	21070	0.75%	0.077%
81	21.168	3085	3091	3101	rBV	1932511	2494964	88.64%	9.079%
82	22.197	3263	3266	3271	rVB2	126382	167500	5.95%	0.610%
83	22.685	3345	3349	3355	rVB	179165	264938	9.41%	0.964%
84	23.203	3430	3437	3448	rBV	1430955	2814618	100.00%	10.242%
85	23.338	3454	3460	3468	rVB	1391551	2530250	89.90%	9.207%
86	23.838	3540	3545	3552	rVB	230950	445758	15.84%	1.622%
87	24.538	3660	3664	3670	rVB2	135324	258247	9.18%	0.940%
88	25.644	3849	3852	3861	rVB6	190817	438490	15.58%	1.596%

Sum of corrected areas: 27480507

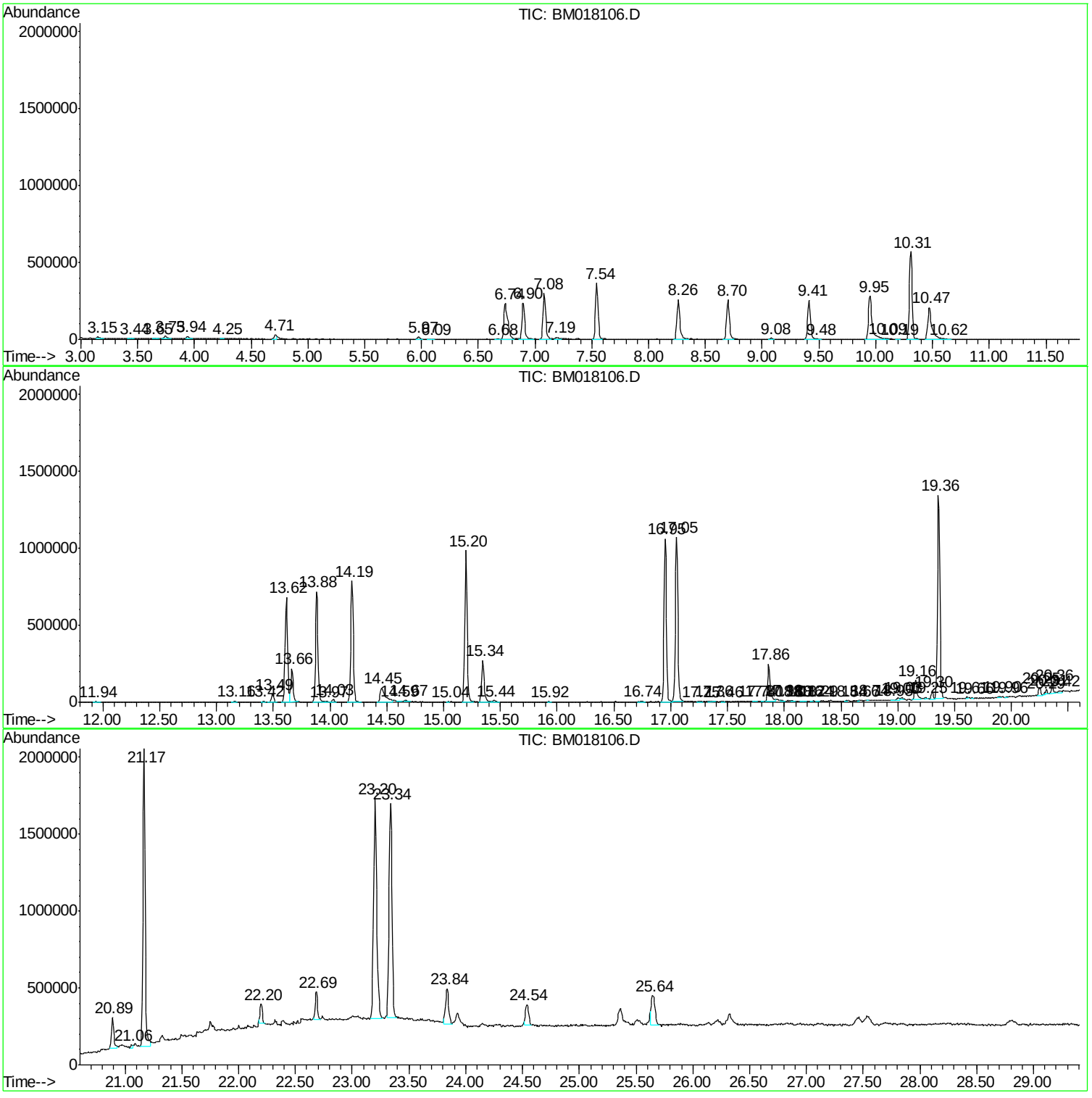
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F34

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F34

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

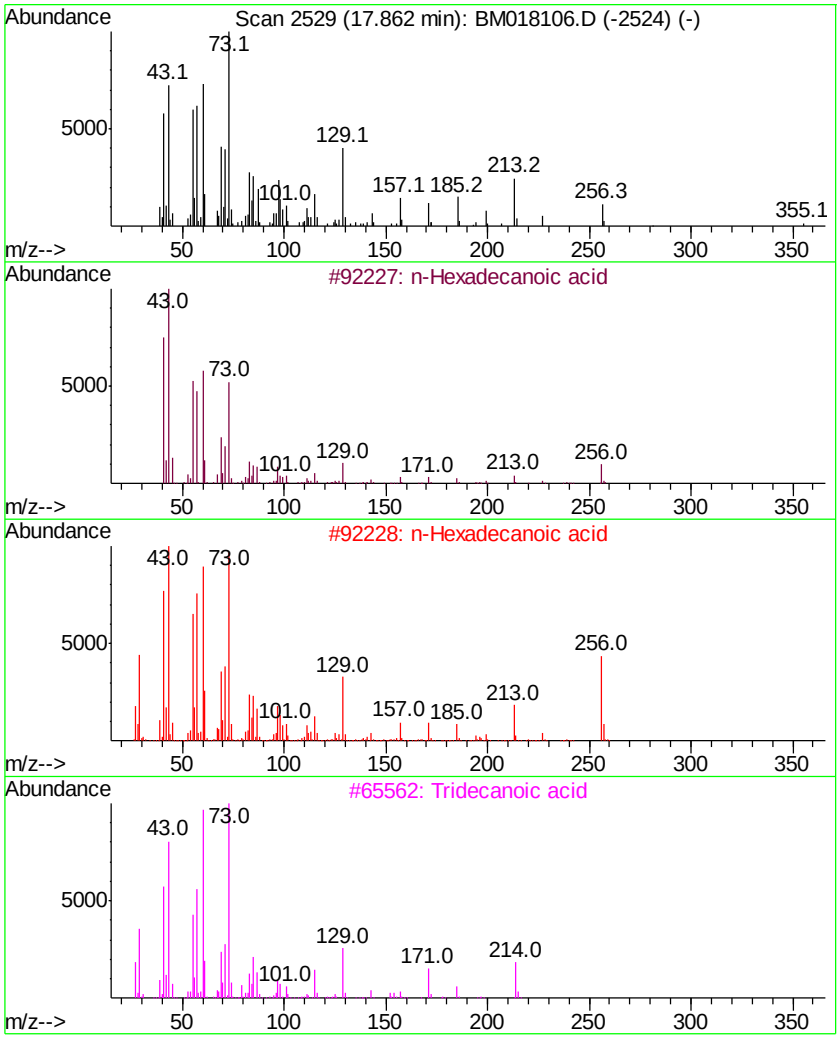
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

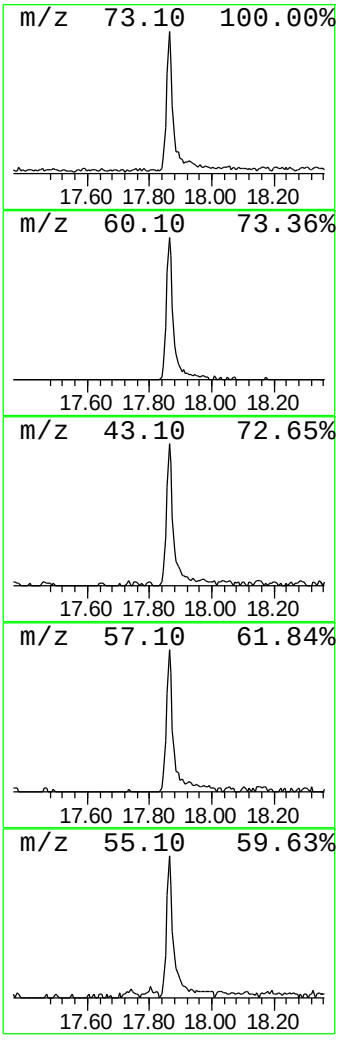
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.86	5.03 ng/ul	378579	Phenanthrene-d10	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
3	Tridecanoic acid	214	C13H26O2	000638-53-9	91
4	n-Decanoic acid	172	C10H20O2	000334-48-5	76
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	74





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F34

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

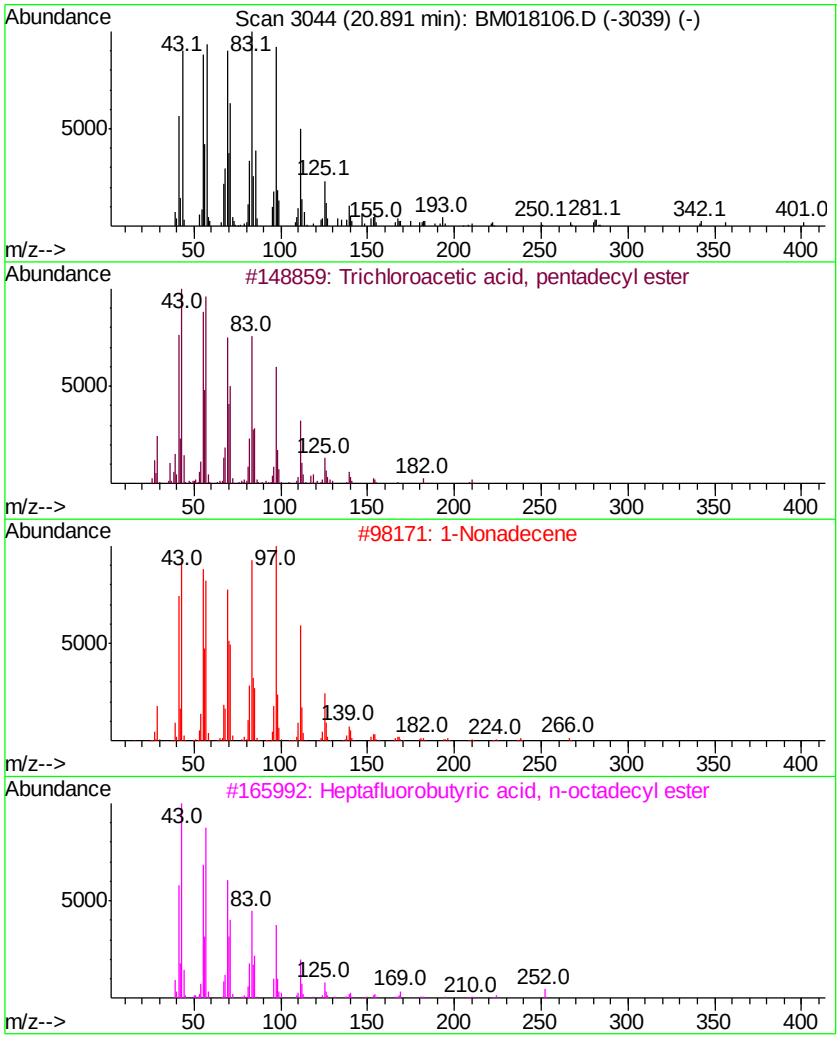
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

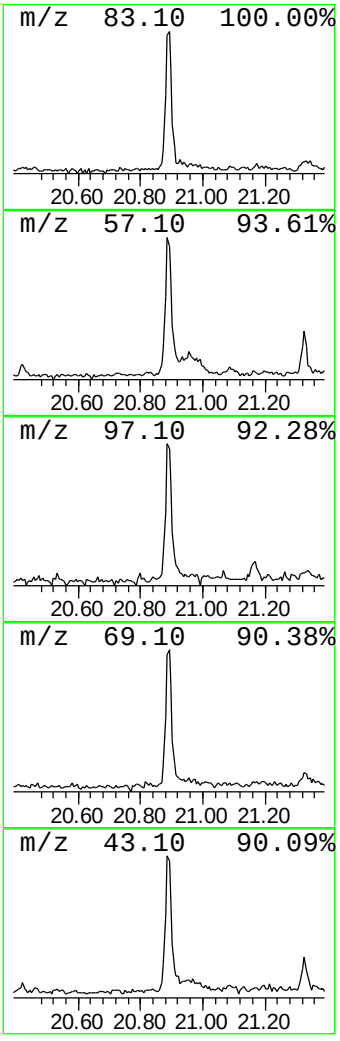
****

Peak Number 2 Trichloroacetic acid, penta... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	2.51 ng/ul	313522	Chrysene-d12	21.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Trichloroacetic acid, pentadecyl...	372	C17H31Cl3O2	074339-53-0	91
2	1-Nonadecene	266	C19H38	018435-45-5	91
3	Heptafluorobutyric acid, n-octad...	466	C22H37F7O2	000400-57-7	90
4	Pentafluoropropionic acid, hepta...	402	C20H35F5O2	1000283-04-2	90
5	1-Heneicosyl formate	340	C22H44O2	077899-03-7	90





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F34

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

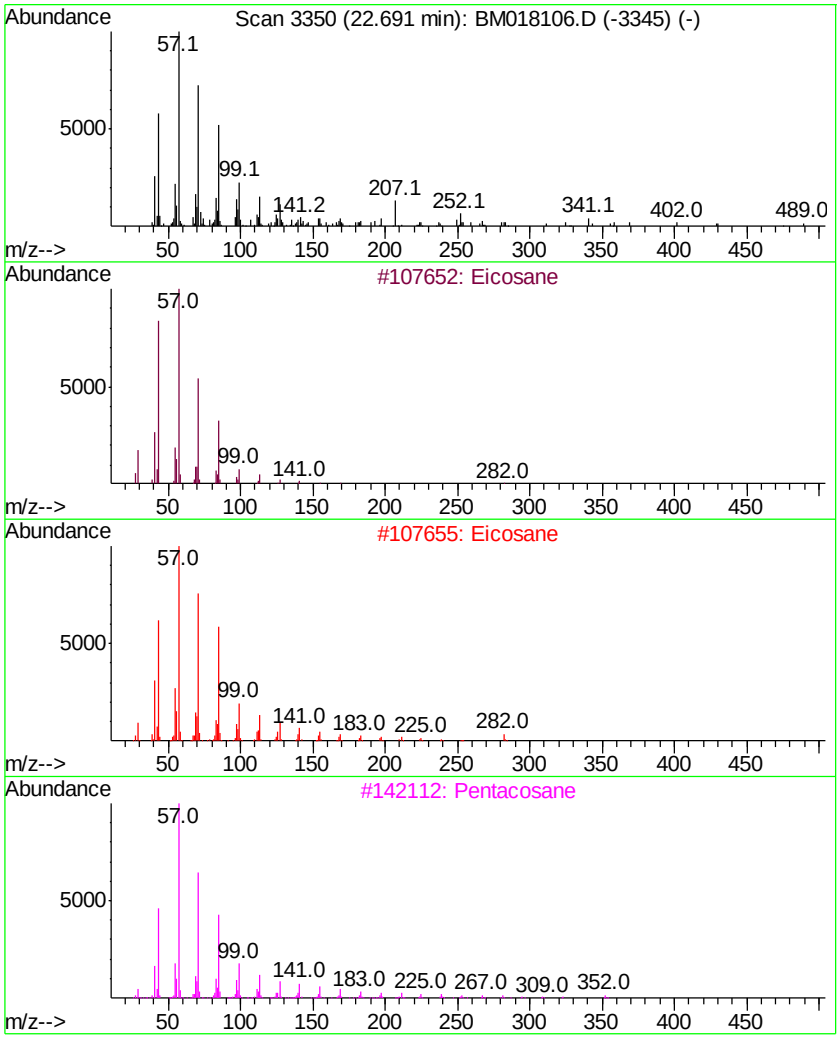
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

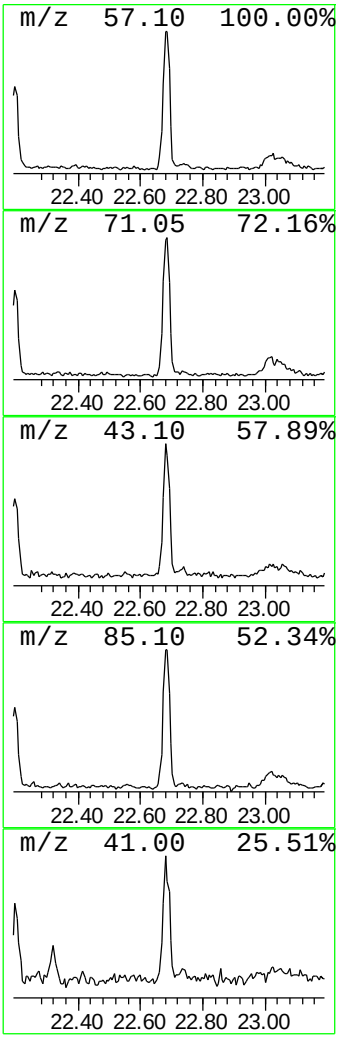
****

Peak Number 3 (DEL) Alkane: Straight-Chai... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.69	2.09 ng/ul	264938	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	96
2	Eicosane	282	C20H42	000112-95-8	91
3	Pentacosane	352	C25H52	000629-99-2	90
4	Hexacosane	366	C26H54	000630-01-3	90
5	Heptadecane, 8-methyl-	254	C18H38	013287-23-5	90





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F34

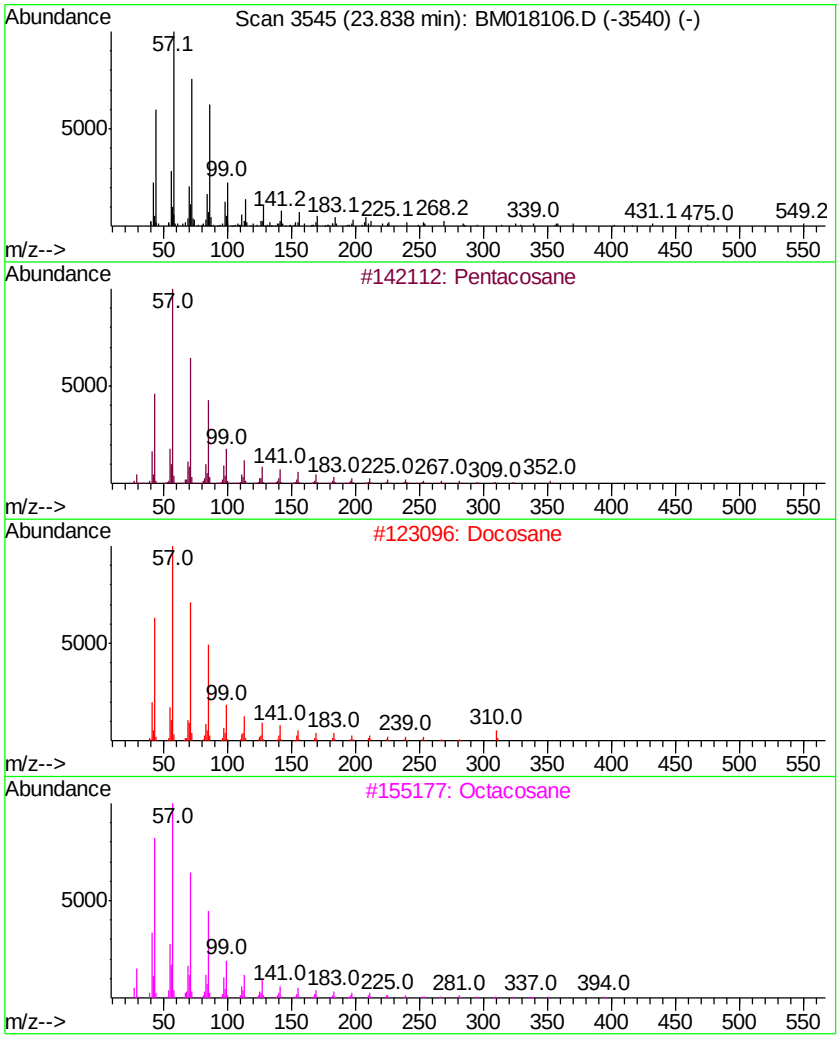
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

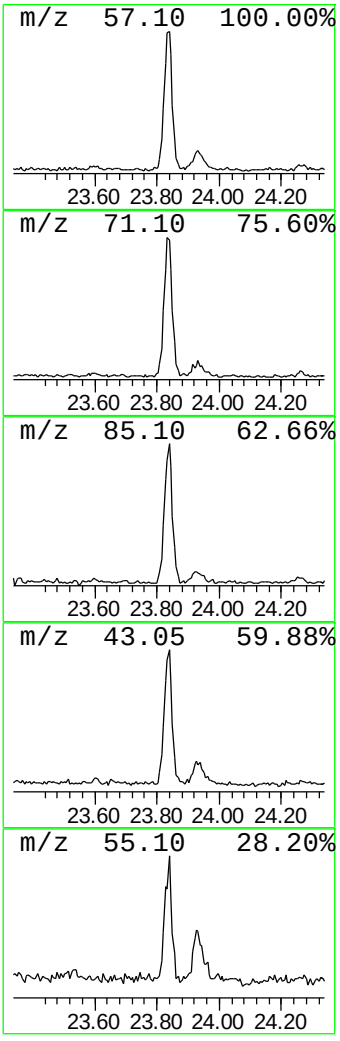
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 4 (DEL) Alkane: Straight-Chai... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.84	3.52 ng/ul	445758	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentacosane	352	C25H52	000629-99-2	91
2	Docosane	310	C22H46	000629-97-0	91
3	Octacosane	394	C28H58	000630-02-4	91
4	Triacontane	422	C30H62	000638-68-6	91
5	Heptacosane	380	C27H56	000593-49-7	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F34

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

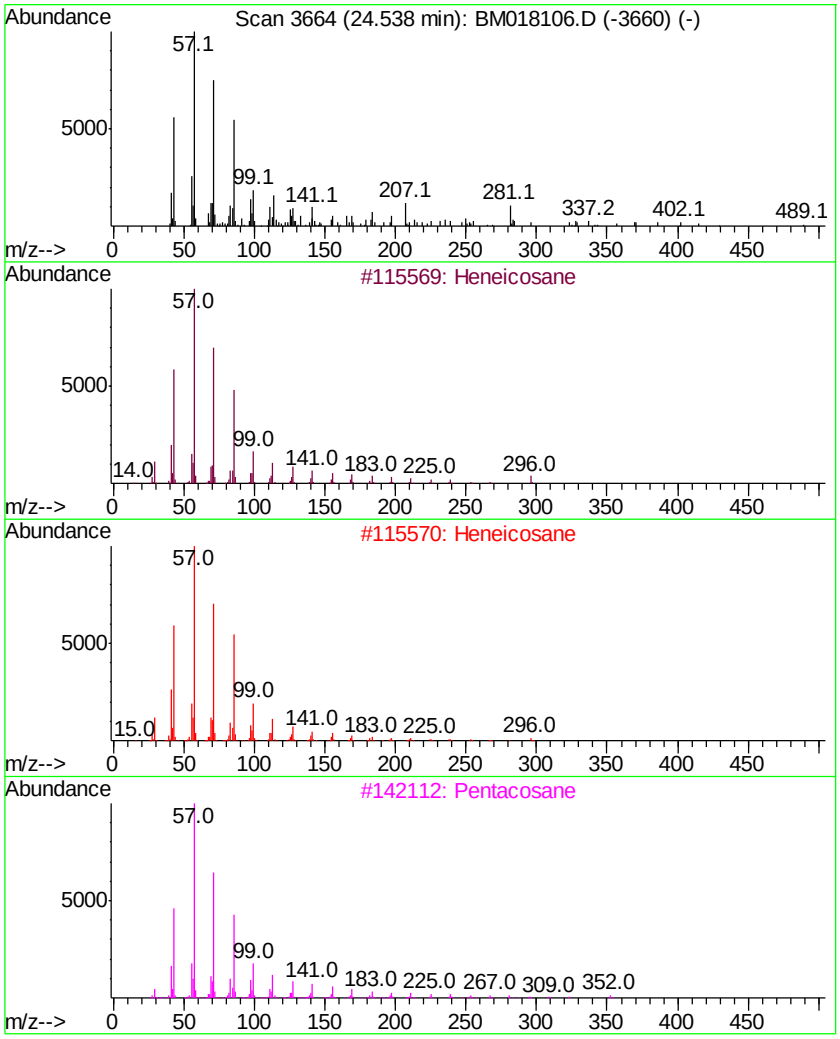
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

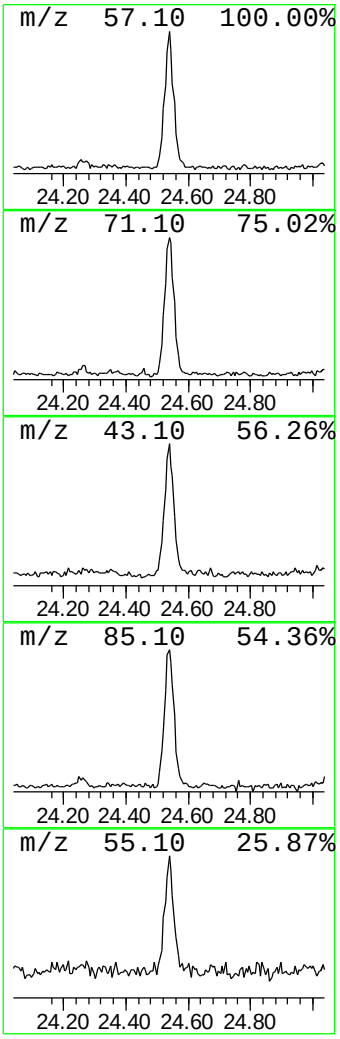
****

Peak Number 5 (DEL) Alkane: Straight-Chai... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.54	2.04 ng/ul	258247	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	97
2	Heneicosane	296	C21H44	000629-94-7	97
3	Pentacosane	352	C25H52	000629-99-2	87
4	Tetracosane	338	C24H50	000646-31-1	87
5	Hexacosane	366	C26H54	000630-01-3	87





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F34

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

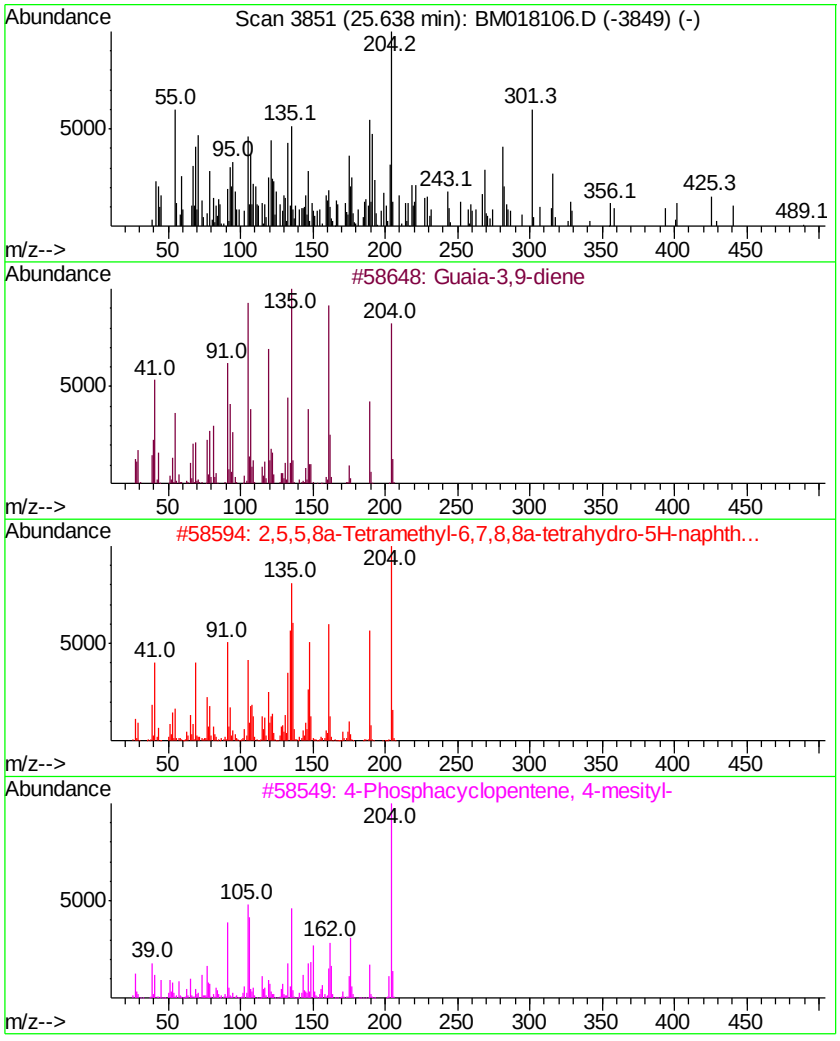
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

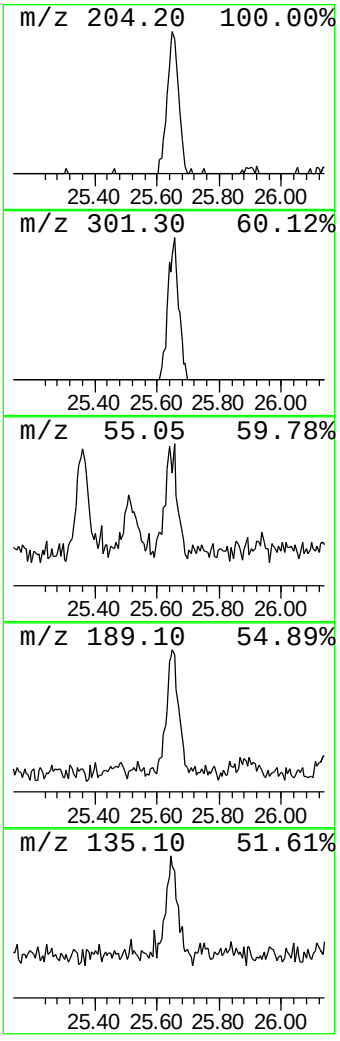
****

Peak Number 6 Guaia-3,9-diene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.64	3.47 ng/ul	438490	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Guaia-3,9-diene	204	C15H24	000489-83-8	78
2	2,5,5,8a-Tetramethyl-6,7,8,8a-te...	204	C14H20O	124957-09-1	60
3	4-Phosphacyclopentene, 4-mesityl-	204	C13H17P	214605-01-3	43
4	Naphthalene, 1,2,3,5,6,7,8,8a-oc...	204	C15H24	004630-07-3	41
5	Pyridine-3-carbonitrile, 5-allyl...	204	C11H12N2S	186337-14-4	38





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F34

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	17.86	5.0	ng/ul	378579	4	16.95	1505680	20.0
Trichloroacetic a...	20.89	2.5	ng/ul	313522	5	21.17	2494960	20.0
(DEL) Alkane: Str...	22.69	2.1	ng/ul	264938	6	23.34	2530250	20.0
(DEL) Alkane: Str...	23.84	3.5	ng/ul	445758	6	23.34	2530250	20.0
(DEL) Alkane: Str...	24.54	2.0	ng/ul	258247	6	23.34	2530250	20.0
Guaia-3,9-diene	25.64	3.5	ng/ul	438490	6	23.34	2530250	20.0

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

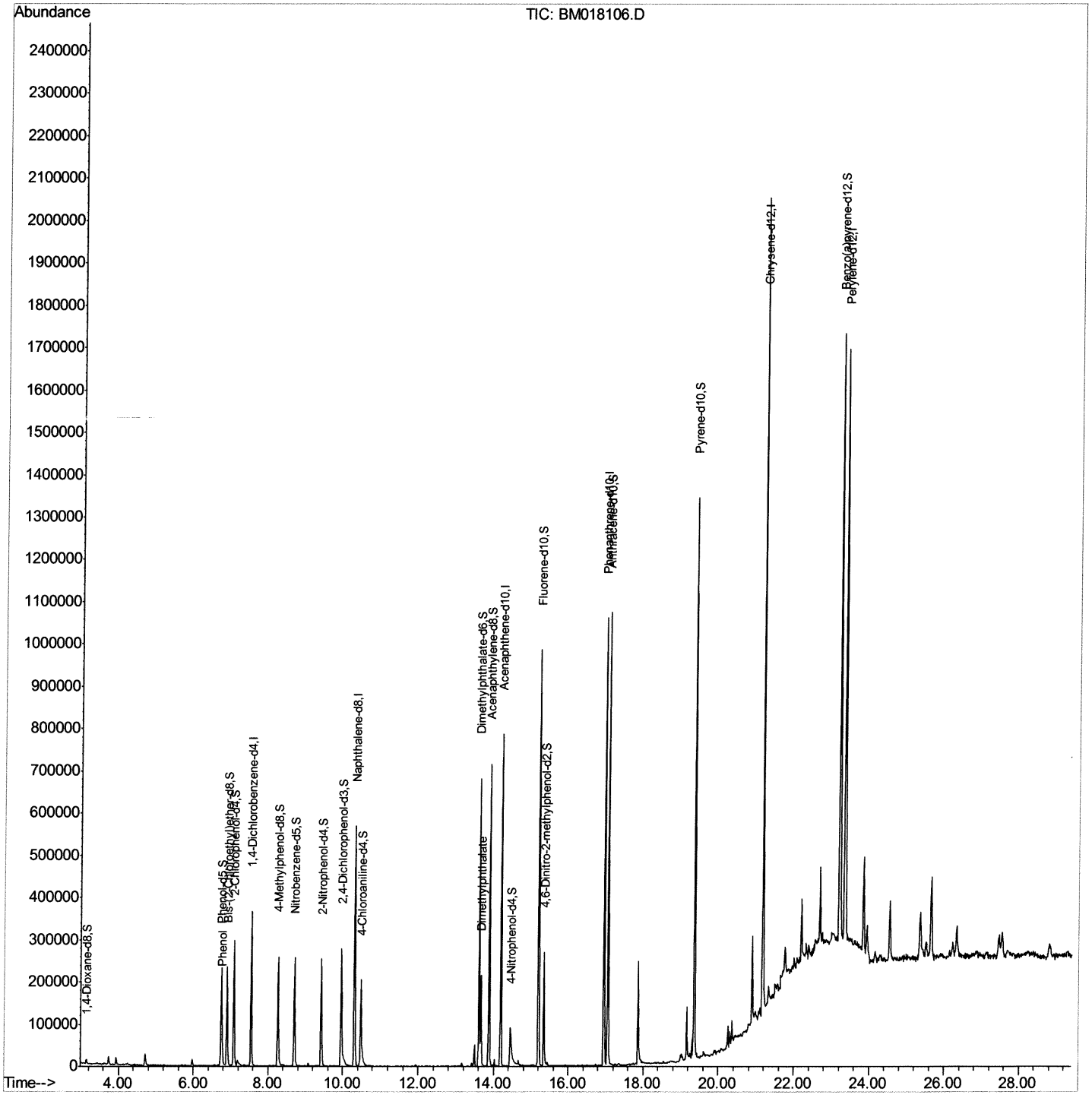
Quantitation Report (QT Reviewed)

Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 13 03:30:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:21 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (Qedit)

Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 13 02:42:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
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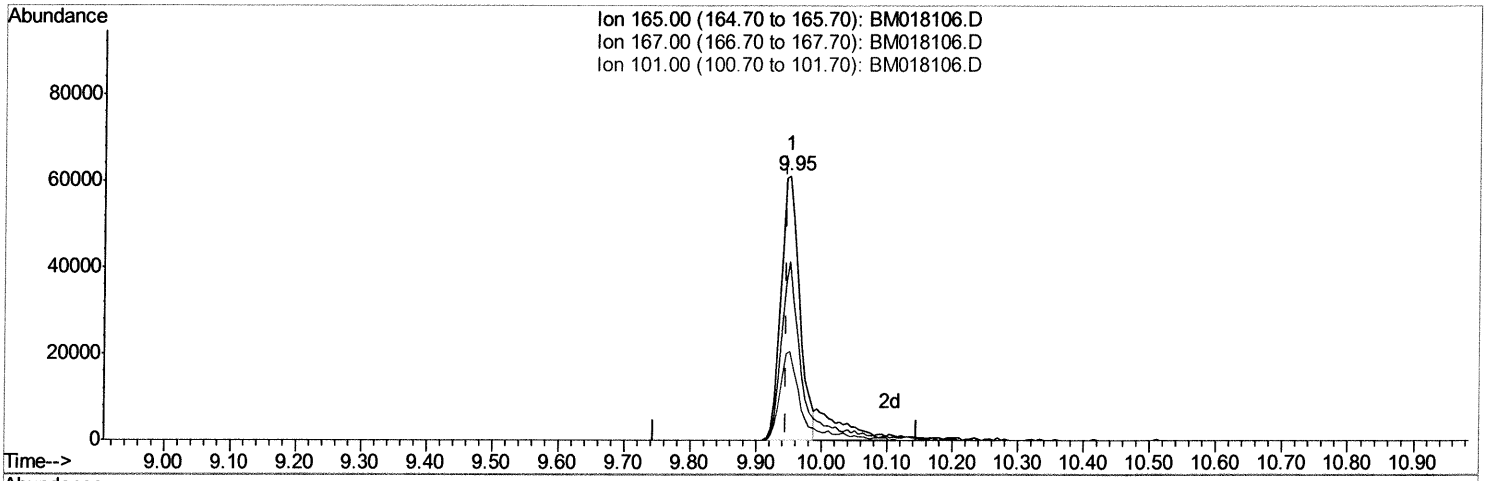
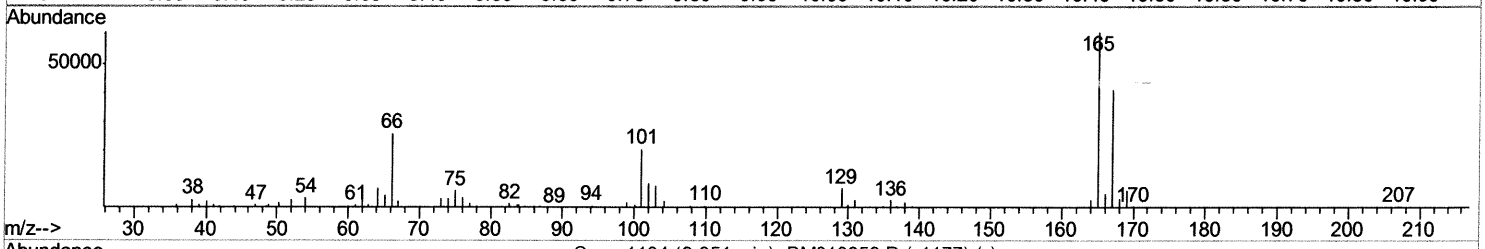
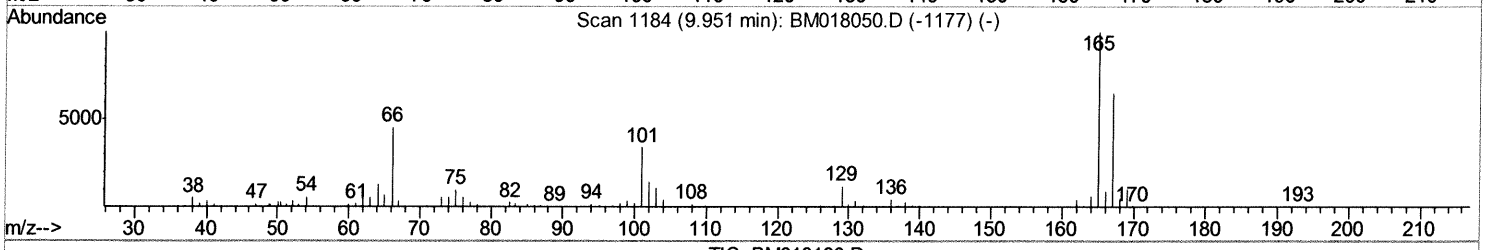
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:21 PM







TIC: BM018106.D

(26) 2,4-Dichlorophenol-d3 (S)

9.951min (+0.006) 14.80ng/ul

response 120290

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	67.56
101.00	34.80	33.47
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

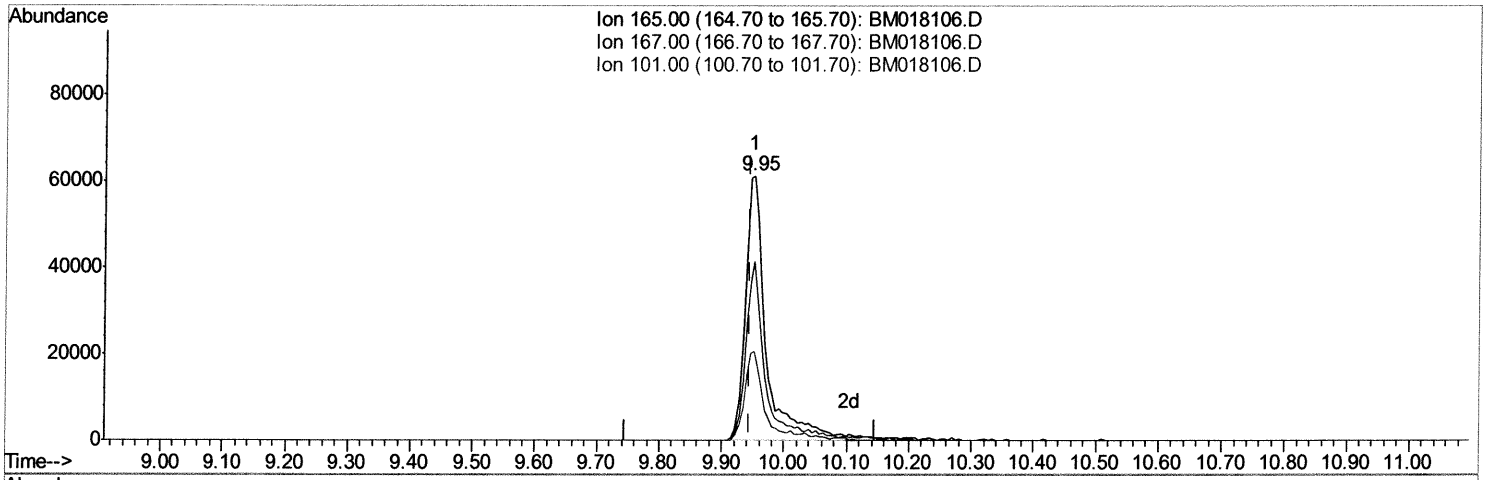
Quantitation Report (Qedit)

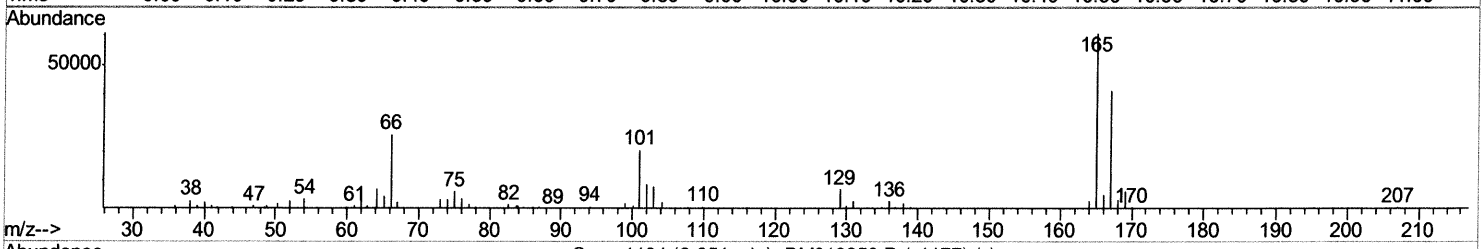
Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

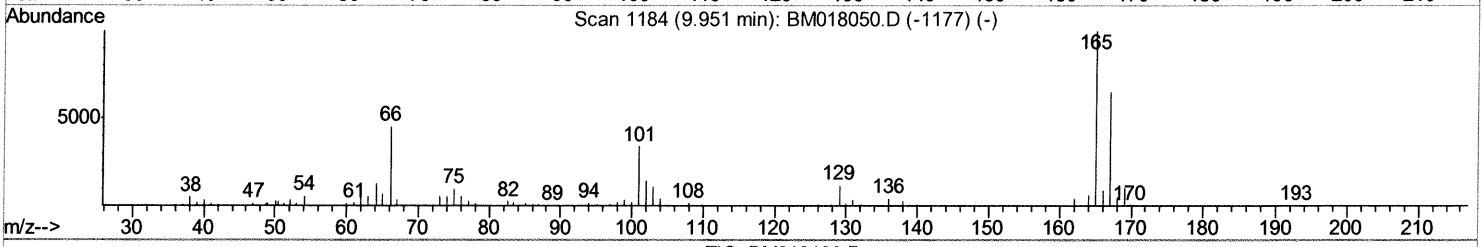
Quant Time: Dec 13 02:42:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:21 PM







TIC: BM018106.D

(26) 2,4-Dichlorophenol-d3 (S)

9.951min (+0.006) 17.61ng/ul m > SJ 12/13/18

response 143106

Ion	Exp%	Act%
165.00	100	100
167.00	65.50	67.56
101.00	34.80	33.47
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

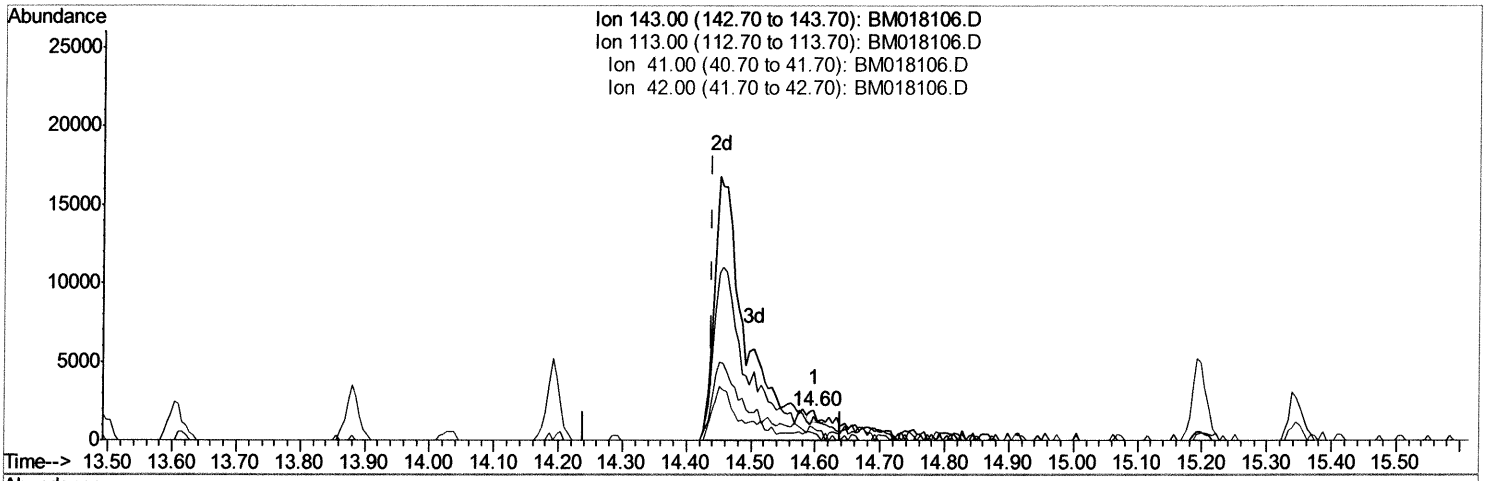
Quantitation Report (Qedit)

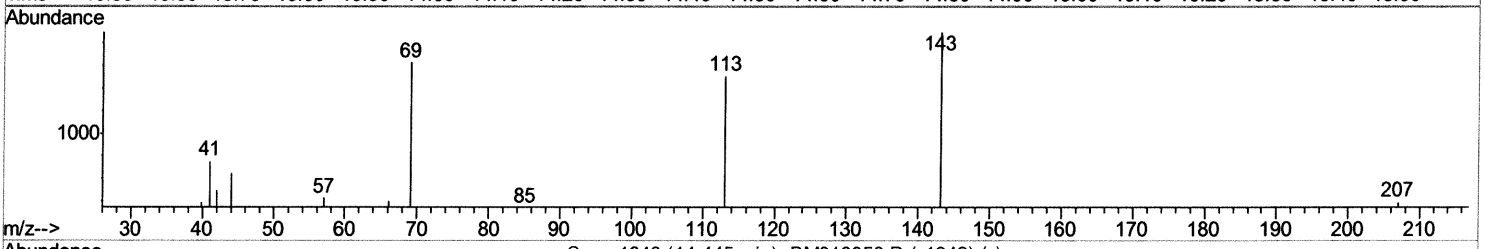
Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

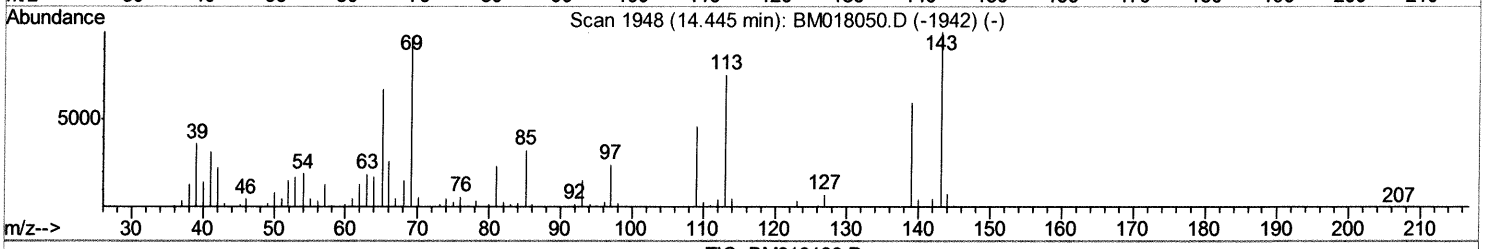
Quant Time: Dec 13 02:42:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:21 PM







TIC: BM018106.D

(51) 4-Nitrophenol-d4 (S)

14.598min (+0.159) 0.15ng/ul

response 611

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	79.47
41.00	40.10	39.74
42.00	26.80	25.95

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

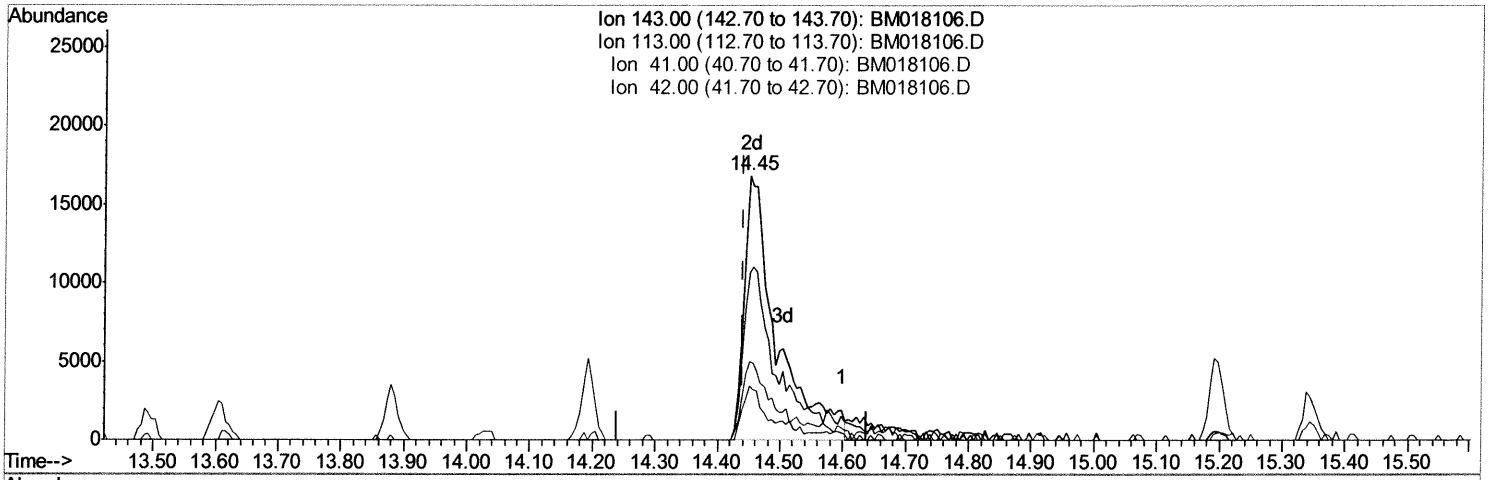
Quantitation Report (Qedit)

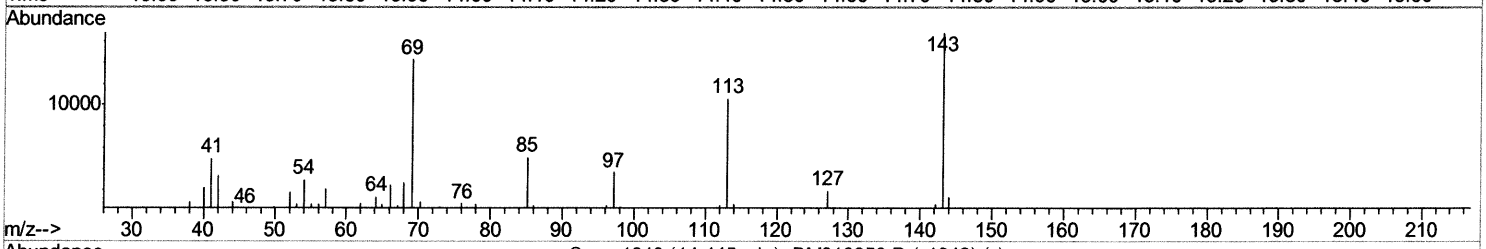
Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

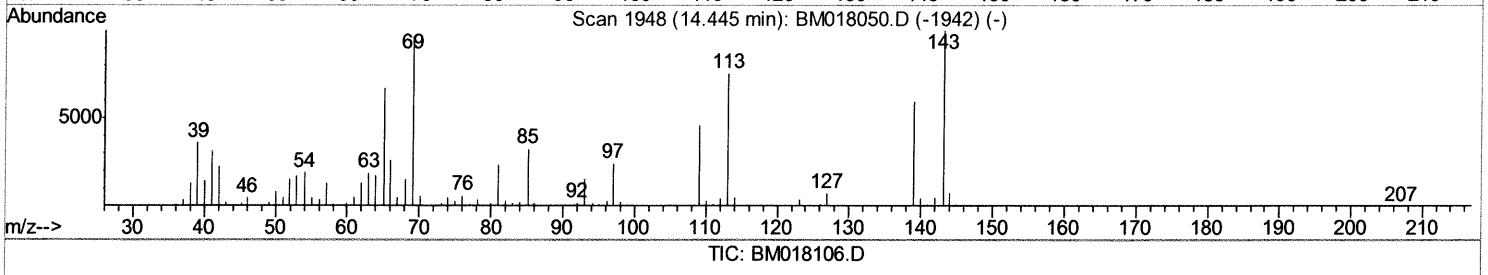
Quant Time: Dec 13 02:42:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:21 PM







TIC: BM018106.D

(51) 4-Nitrophenol-d4 (S)

14.451min (+0.011) 14.40ng/ul m SJ 12/13/18

response 60680

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	63.11#
41.00	40.10	29.65#
42.00	26.80	20.40#

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018106.D
Acq On : 12 Dec 2018 23:16
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 13 03:30:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : F9F34

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:21 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	104834	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	485051	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	267057	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	621836	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	857798	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	969297	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	6694	2.92	ng/uL	0.00
5) Phenol-d5	6.73	99	165995	17.34	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.89	67	109174	18.91	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	149625	19.97	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	113535	14.51	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	72803	19.54	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	88528	20.74	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	143106m	17.61	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	170950	24.51	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	502043	21.67	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	540624	19.28	ng/ul	0.00
51) 4-Nitrophenol-d4	14.45	143	60680m	14.40	ng/ul	0.01
57) Fluorene-d10	15.20	176	416598	20.82	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	72225	16.25	ng/ul	0.00
70) Anthracene-d10	17.05	188	629515	20.33	ng/ul	0.00
78) Pyrene-d10	19.36	212	701936	16.91	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	1002925	19.08	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	43663	4.569	ng/ul	90
44) Dimethylphthalate	13.66	163	154276	6.872	ng/ul	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SJ 12/13/18

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9F35

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-16
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018115.D
% Solids : 90.6
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	74	U
100-52-7	Benzaldehyde	360	U
108-95-2	Phenol	170	J
111-44-4	Bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	190	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2-oxybis(1-Chloropropane)	360	U
98-86-2	Acetophenone	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	190	U
67-72-1	Hexachloroethane	190	U
98-95-3	Nitrobenzene	190	U
78-59-1	Isophorone	190	U
88-75-5	2-Nitrophenol	190	U
105-67-9	2,4-Dimethylphenol	190	U
111-91-1	Bis(2-Chloroethoxy)methane	190	U
120-83-2	2,4-Dichlorophenol	190	U
91-20-3	Naphthalene	190	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	190	U
105-60-2	Caprolactam	360	U
59-50-7	4-Chloro-3-methylphenol	190	U
91-57-6	2-Methylnaphthalene	190	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9F35

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-16
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018115.D
% Solids : 90.6
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	190	U
92-52-4	1,1-Biphenyl	190	U
91-58-7	2-Chloronaphthalene	190	U
88-74-4	2-Nitroaniline	190	U
131-11-3	Dimethylphthalate	250	
606-20-2	2,6-Dinitrotoluene	190	U
208-96-8	Acenaphthylene	190	U
99-09-2	3-Nitroaniline	360	U
83-32-9	Acenaphthene	190	U
51-28-5	2,4-Dinitrophenol	360	U
100-02-7	4-Nitrophenol	360	U
132-64-9	Dibenzofuran	190	U
121-14-2	2,4-Dinitrotoluene	190	U
84-66-2	Diethylphthalate	190	U
86-73-7	Fluorene	190	U
7005-72-3	4-Chlorophenyl-phenylether	190	U
100-01-6	4-Nitroaniline	360	U
534-52-1	4,6-Dinitro-2-methylphenol	360	U
86-30-6	N-Nitrosodiphenylamine	190	U
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U
101-55-3	4-Bromophenyl-phenylether	190	U
118-74-1	Hexachlorobenzene	190	U
1912-24-9	Atrazine	360	U
87-86-5	Pentachlorophenol	360	U
85-01-8	Phenanthrene	190	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9F35

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-16
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018115.D
% Solids : 90.6
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/13/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	190	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	190	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	190	U
85-68-7	Butylbenzylphthalate	190	U
91-94-1	3,3-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	190	U
218-01-9	Chrysene	190	U
117-81-7	Bis(2-ethylhexyl)phthalate	190	U
117-84-0	Di-n-octyl phthalate	360	U
205-99-2	Benzo(b)fluoranthene	190	U
207-08-9	Benzo(k)fluoranthene	190	U
50-32-8	Benzo(a)pyrene	190	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	U
53-70-3	Dibenzo(a,h)anthracene	190	U
191-24-2	Benzo(g,h,i)perylene	190	U
58-90-2	2,3,4,6-Tetrachlorophenol	190	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F9F35

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-16
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018115.D
% Solids : 90.6
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/13/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	000057-10-3	n-Hexadecanoic acid	17.86	310	JN
2	000057-11-4	Octadecanoic acid	19.16	180	JN
3	1000282-97-3	Heptafluorobutanoic acid, heptadec	20.89	180	JN
4	002571-81-5	Azuleno[4,5-b]furan-2,9-dione, dec	21.55	120	JN
5	1000140-07-7	1,4-Dimethyl-8-isopropylidenetricy	25.65	980	JN
6	E966796	Total Alkanes	N/A	750	

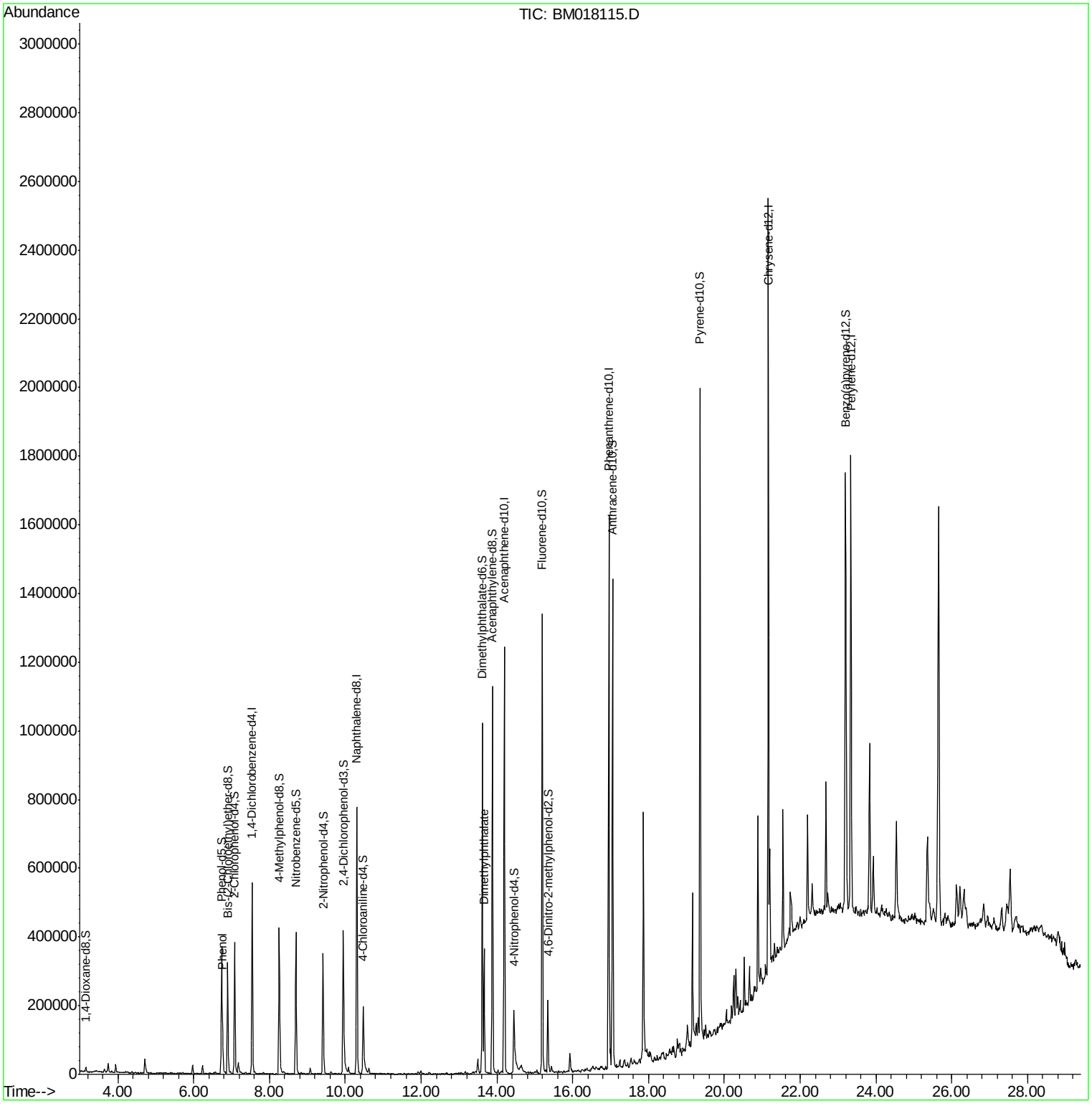
EPA-designated Registry Number.

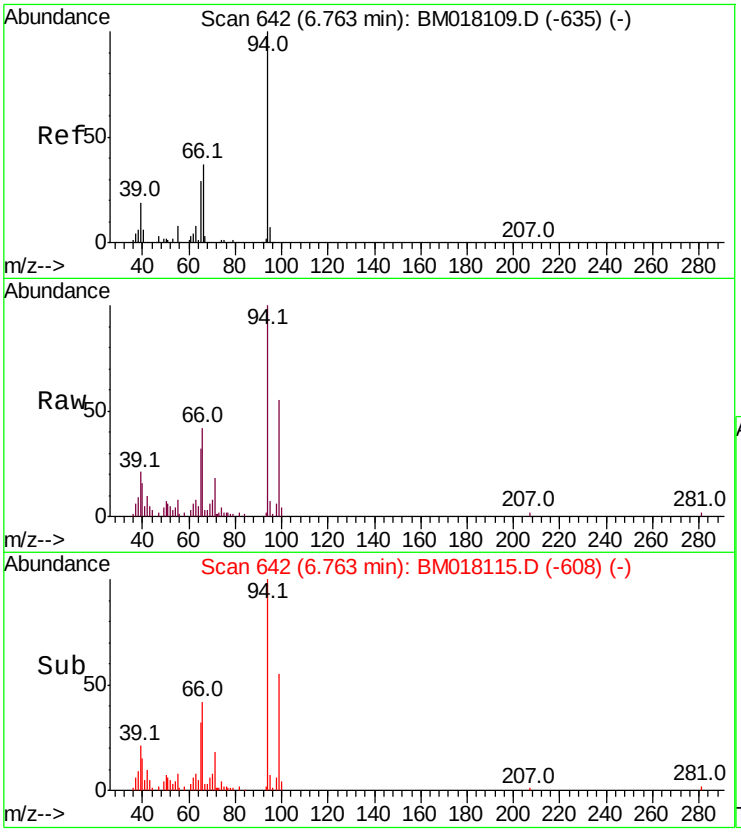
Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018115.D
Acq On : 13 Dec 2018 04:43
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
F9F35

Quant Time: Dec 13 06:43:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration



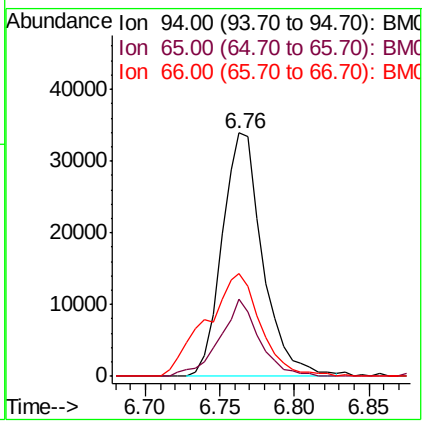


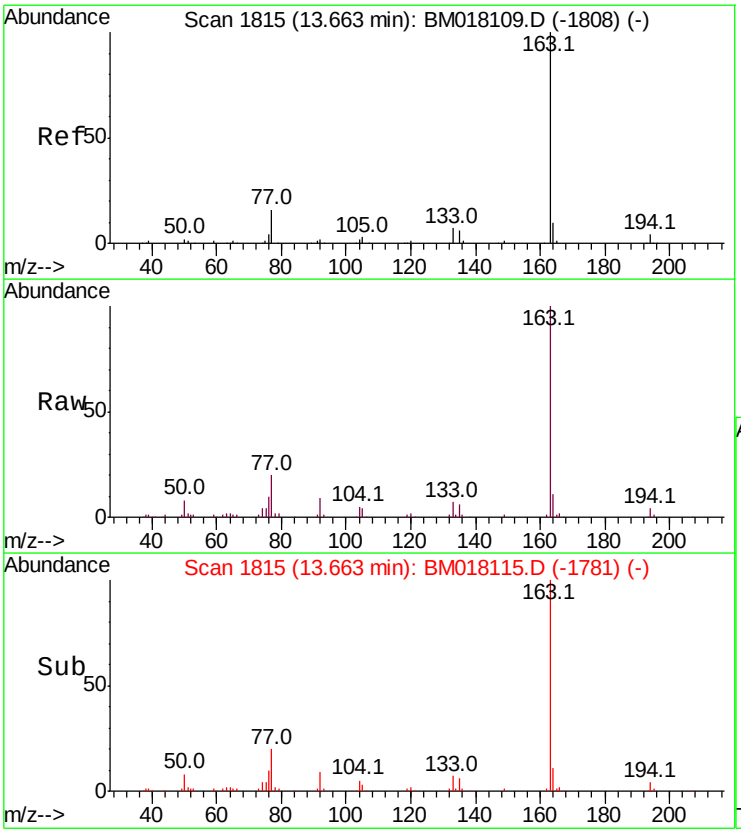
#6
Phenol
Concen: 4.621 ng/ul
RT: 6.76 min Scan# 642
Delta R.T. 0.00 min
Lab File: BM018115.D
Acq: 13 Dec 2018 04:43

Instrument :
BNA_M
ClientSampleId :
F9F35

Tgt Ion: 94 Resp: 64264

Ion	Ratio	Lower	Upper
94	100		
65	32.0	24.7	37.1
66	42.4	34.6	51.8

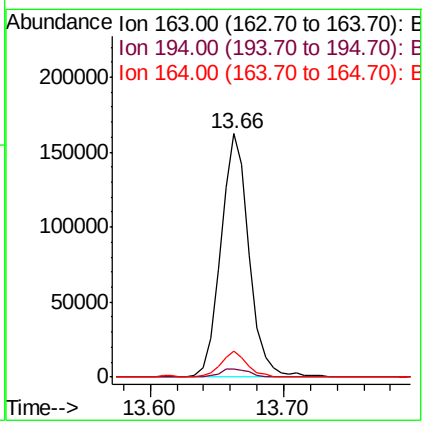




#44
Dimethylphthalate
Concen: 6.881 ng/ul
RT: 13.66 min Scan# 1815
Delta R.T. 0.00 min
Lab File: BM018115.D
Acq: 13 Dec 2018 04:43

Tgt Ion:163 Resp: 240593

Ion	Ratio	Lower	Upper
163	100		
194	3.5	3.4	5.0
164	10.6	8.1	12.1



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018115.D
Acq On : 13 Dec 2018 04:43
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F35

Quant Time: Dec 13 06:43:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 03:40:23 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	152554	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	669638	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	415958	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	915047	20.00	ng/ul	0.00
77) Chrysene-d12	21.16	240	1021952	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	901991	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	9593	2.88	ng/uL	0.00
5) Phenol-d5	6.73	99	235517	16.90	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.89	67	140928	16.77	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	191819	17.60	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	179494	15.77	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	105144	20.44	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	119949	20.35	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	196576	17.52	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	158881	16.50	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	690489	19.13	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	801217	18.34	ng/ul	0.00
51) 4-Nitrophenol-d4	14.45	143	81851	12.47	ng/ul	0.02
57) Fluorene-d10	15.20	176	543536	17.44	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	52018	7.95	ng/ul	0.00
70) Anthracene-d10	17.05	188	788857	17.32	ng/ul	0.00
78) Pyrene-d10	19.36	212	969642	19.61	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	885158	18.09	ng/ul	0.00
Target Compounds						Qvalue
6) Phenol	6.76	94	64264	4.621	ng/ul	98
44) Dimethylphthalate	13.66	163	240593	6.881	ng/ul	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018115.D
Acq On : 13 Dec 2018 04:43
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F35

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.152	24	28	36	rVB	17064	27835	0.89%	0.065%
2	3.640	107	111	115	rBV4	10009	15872	0.51%	0.037%
3	3.746	121	129	135	rVB2	24338	40998	1.32%	0.095%
4	3.840	141	145	150	rBV3	5696	10340	0.33%	0.024%
5	3.940	158	162	167	rBV	23311	35337	1.14%	0.082%
6	4.710	289	293	302	rBV2	42790	78045	2.51%	0.181%
7	5.975	502	508	516	rVB	24362	37383	1.20%	0.087%
8	6.228	547	551	557	rVB2	26279	40566	1.30%	0.094%
9	6.734	630	637	651	rBV2	371115	840609	27.01%	1.954%
10	6.892	658	664	674	rBV	321179	503523	16.18%	1.171%
11	6.969	674	677	684	rVB4	6048	9104	0.29%	0.021%
12	7.081	689	696	707	rBV	381933	632430	20.32%	1.470%
13	7.181	707	713	721	rBV	30220	60369	1.94%	0.140%
14	7.540	768	774	783	rBV	556135	891112	28.63%	2.072%
15	7.610	783	786	791	rVB4	6173	10056	0.32%	0.023%
16	8.257	888	896	909	rVV	428040	773117	24.84%	1.797%
17	8.369	911	915	922	rVB4	7439	15913	0.51%	0.037%
18	8.698	963	971	982	rBV	413839	694236	22.30%	1.614%
19	9.081	1030	1036	1041	rVB2	17387	26559	0.85%	0.062%
20	9.410	1081	1092	1108	rBV	351056	615952	19.79%	1.432%
21	9.945	1176	1183	1202	rBV	416767	881241	28.31%	2.049%
22	10.081	1202	1206	1216	rVB3	18560	37414	1.20%	0.087%
23	10.304	1237	1244	1252	rBV	776441	1324171	42.54%	3.079%
24	10.469	1265	1272	1291	rBV	196690	492537	15.82%	1.145%
25	10.628	1294	1299	1304	rVB6	14653	24535	0.79%	0.057%
26	11.998	1526	1532	1545	rVB	10085	23926	0.77%	0.056%
27	13.157	1724	1729	1732	rBV5	7901	11023	0.35%	0.026%
28	13.492	1780	1786	1794	rVV4	43842	82851	2.66%	0.193%
29	13.557	1794	1797	1800	rVV3	7201	10722	0.34%	0.025%
30	13.616	1800	1807	1811	rVV	1021720	1472714	47.31%	3.424%
31	13.663	1811	1815	1823	rVV	364119	544514	17.49%	1.266%
32	13.880	1845	1852	1866	rBV	1127051	1685757	54.16%	3.919%
33	14.027	1872	1877	1882	rVB6	12516	21485	0.69%	0.050%
34	14.098	1884	1889	1891	rVV4	6030	8885	0.29%	0.021%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018115.D
Acq On : 13 Dec 2018 04:43
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F35

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	14.133	1891	1895	1899	rVV3	8863	15324	0.49%	0.036%
36	14.192	1899	1905	1913	rVV2	1243221	1952090	62.72%	4.538%
37	14.245	1913	1914	1918	rVV3	10150	12806	0.41%	0.030%
38	14.451	1938	1949	1967	rBV	183764	535763	17.21%	1.246%
39	15.051	2049	2051	2059	rVB5	9411	11535	0.37%	0.027%
40	15.192	2069	2075	2086	rBV	1335440	1994674	64.08%	4.637%
41	15.345	2096	2101	2110	rBV	209812	336804	10.82%	0.783%
42	15.439	2113	2117	2121	rBV6	17272	21993	0.71%	0.051%
43	15.621	2144	2148	2151	rBV3	6453	9724	0.31%	0.023%
44	15.774	2171	2174	2176	rVV4	6459	8498	0.27%	0.020%
45	15.927	2195	2200	2207	rVV3	56074	108433	3.48%	0.252%
46	15.974	2207	2208	2211	rVB2	10864	9016	0.29%	0.021%
47	16.380	2273	2277	2279	rVV4	7096	8448	0.27%	0.020%
48	16.498	2292	2297	2298	rBV5	7918	12217	0.39%	0.028%
49	16.533	2298	2303	2306	rBV6	10222	15710	0.50%	0.037%
50	16.727	2331	2336	2337	rBV5	8152	10882	0.35%	0.025%
51	16.874	2357	2361	2364	rVB6	11240	14423	0.46%	0.034%
52	16.951	2368	2374	2379	rVV	1613803	2319405	74.52%	5.392%
53	16.992	2379	2381	2385	rVV	59133	78025	2.51%	0.181%
54	17.051	2385	2391	2403	rVV2	1423858	2091968	67.21%	4.864%
55	17.151	2403	2408	2410	rVB6	10134	14764	0.47%	0.034%
56	17.245	2420	2424	2427	rVB5	20457	27126	0.87%	0.063%
57	17.351	2439	2442	2443	rBV3	16042	16100	0.52%	0.037%
58	17.368	2443	2445	2449	rVB5	20306	22395	0.72%	0.052%
59	17.451	2457	2459	2464	rVB6	14769	17563	0.56%	0.041%
60	17.533	2466	2473	2481	rBV6	27200	83967	2.70%	0.195%
61	17.627	2484	2489	2491	rBV6	11061	12888	0.41%	0.030%
62	17.745	2506	2509	2510	rBV3	9415	10845	0.35%	0.025%
63	17.804	2515	2519	2520	rBV4	15257	18398	0.59%	0.043%
64	17.833	2521	2524	2525	rBV2	25036	25847	0.83%	0.060%
65	17.862	2525	2529	2538	rVB2	699621	980184	31.49%	2.279%
66	18.021	2552	2556	2559	rVV4	16980	26998	0.87%	0.063%
67	18.051	2559	2561	2569	rVB5	26715	51817	1.66%	0.120%
68	18.151	2574	2578	2582	rBV6	15810	28024	0.90%	0.065%
69	18.233	2590	2592	2596	rVB5	15696	14114	0.45%	0.033%
70	18.345	2607	2611	2613	rBV4	19466	31232	1.00%	0.073%
71	18.468	2630	2632	2635	rBV3	17165	19375	0.62%	0.045%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018115.D
Acq On : 13 Dec 2018 04:43
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F35

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

72	18.668	2665	2666	2671	rVB4	34147	40448	1.30%	0.094%
73	18.709	2671	2673	2675	rBV3	8461	9878	0.32%	0.023%
74	18.762	2678	2682	2685	rVV3	38756	48288	1.55%	0.112%
75	18.892	2701	2704	2705	rBV3	17490	18584	0.60%	0.043%
76	18.998	2719	2722	2723	rBV	22049	21141	0.68%	0.049%
77	19.033	2724	2728	2735	rVB8	64468	129321	4.15%	0.301%
78	19.156	2744	2749	2759	rBV2	447788	699700	22.48%	1.627%
79	19.251	2762	2765	2766	rBV2	29454	35957	1.16%	0.084%
80	19.303	2771	2774	2778	rVV4	73475	120855	3.88%	0.281%
81	19.356	2778	2783	2798	rVB2	1898838	2835685	91.10%	6.593%
82	19.509	2806	2809	2814	rVB6	41395	56917	1.83%	0.132%
83	20.050	2898	2901	2904	rBV	39918	50626	1.63%	0.118%
84	20.192	2922	2925	2928	rBV2	42542	54968	1.77%	0.128%
85	20.245	2929	2934	2938	rBV4	123348	185856	5.97%	0.432%
86	20.309	2939	2945	2947	rBV2	123068	197435	6.34%	0.459%
87	20.527	2978	2982	2985	rBV	151908	187932	6.04%	0.437%
88	20.662	3001	3005	3009	rVB6	102474	138502	4.45%	0.322%
89	20.886	3039	3043	3052	rBV	502530	709004	22.78%	1.648%
90	21.162	3085	3090	3094	rBV	2259883	2899728	93.16%	6.742%
91	21.197	3094	3096	3101	rVB2	328688	373026	11.98%	0.867%
92	21.550	3152	3156	3160	rVB	394822	485278	15.59%	1.128%
93	21.744	3187	3189	3192	rBV2	113529	141524	4.55%	0.329%
94	22.197	3262	3266	3271	rBV2	305786	431110	13.85%	1.002%
95	22.680	3344	3348	3353	rVB	367152	501736	16.12%	1.166%
96	23.197	3430	3436	3448	rVB	1273336	2723327	87.49%	6.331%
97	23.338	3454	3460	3467	rVB	1317617	2328759	74.82%	5.414%
98	23.833	3539	3544	3552	rVB	495591	901769	28.97%	2.097%
99	24.538	3660	3664	3678	rVB2	285621	622411	20.00%	1.447%
100	25.650	3846	3853	3865	rVB2	1219362	3112609	100.00%	7.236%

Sum of corrected areas: 43012880

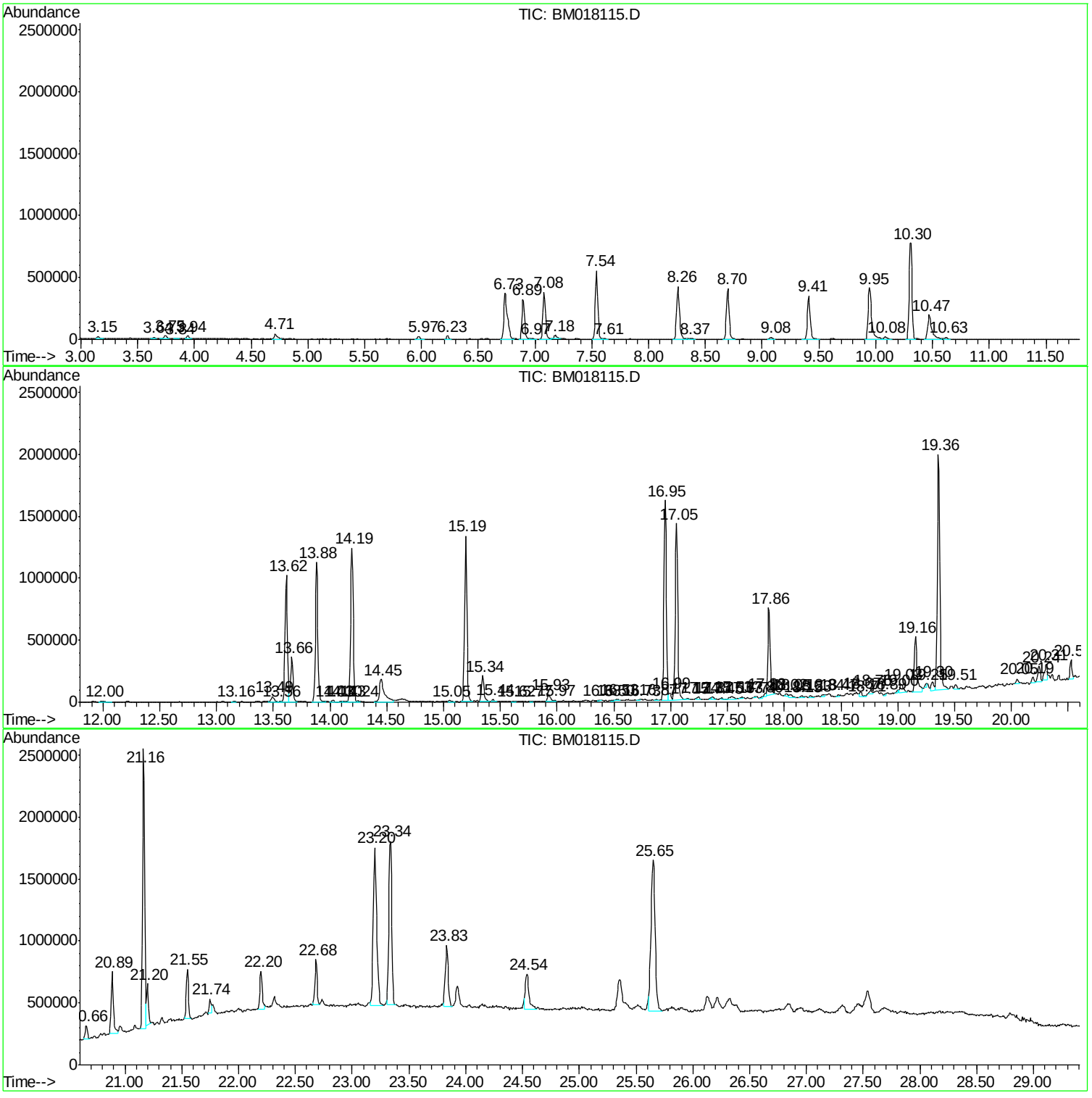
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018115.D
Acq On : 13 Dec 2018 04:43
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F35

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018115.D
Acq On : 13 Dec 2018 04:43
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F35

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

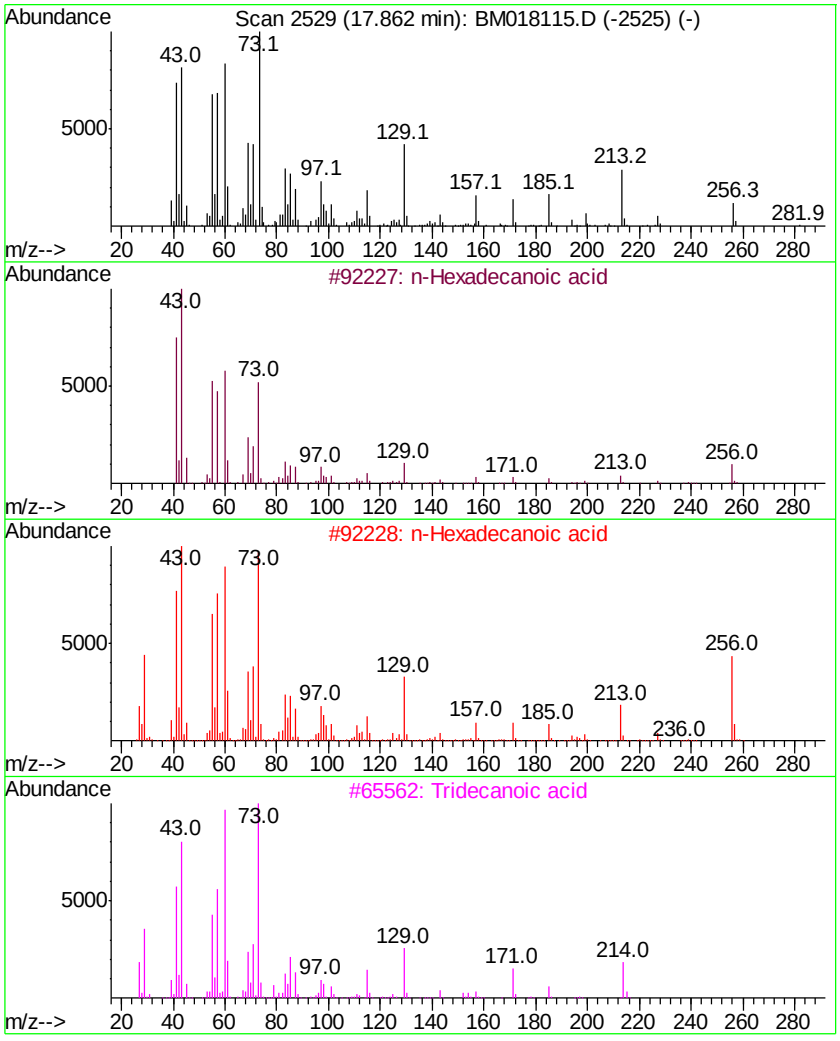
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

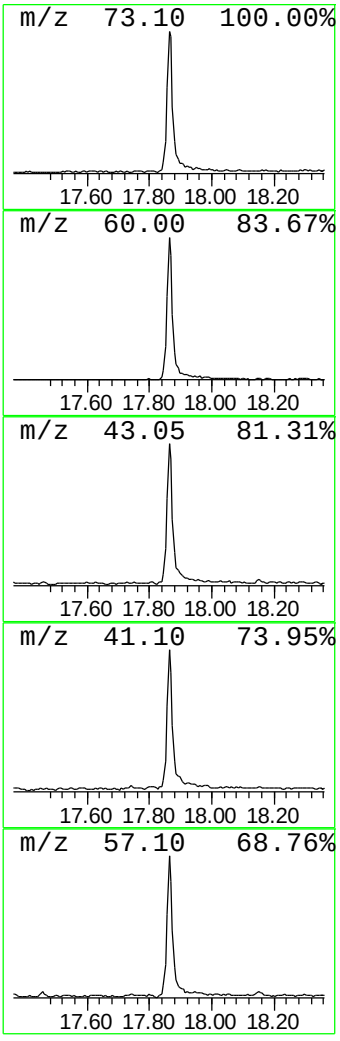
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.86	8.45 ng/ul	980184	Phenanthrene-d10	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	95
3	Tridecanoic acid	214	C13H26O2	000638-53-9	95
4	Tridecanoic acid	214	C13H26O2	000638-53-9	94
5	Tetradecanoic acid	228	C14H28O2	000544-63-8	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018115.D
Acq On : 13 Dec 2018 04:43
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F35

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

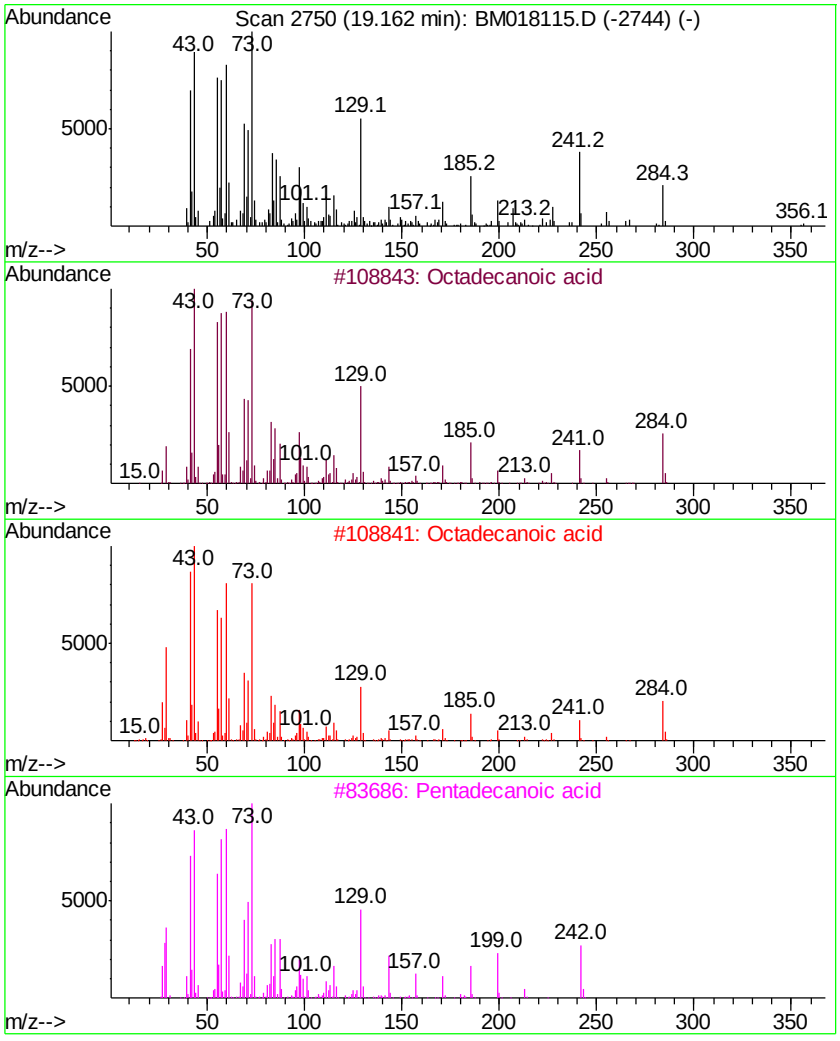
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

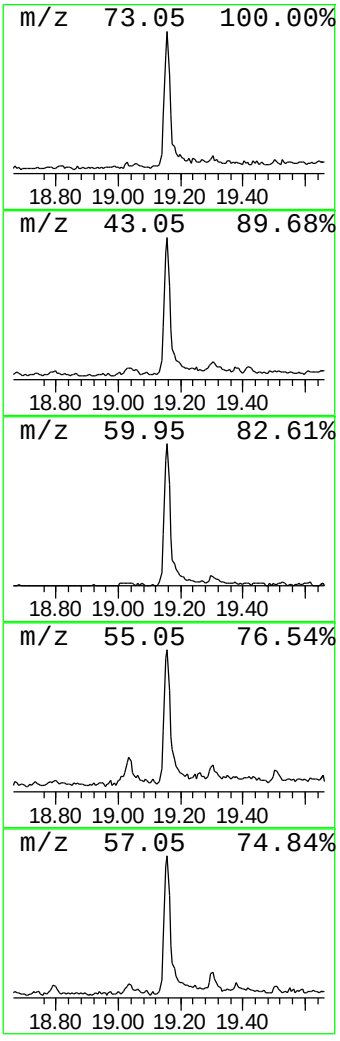
****

Peak Number 2 Octadecanoic acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.16	4.83 ng/ul	699700	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Octadecanoic acid	284	C18H36O2	000057-11-4	98
3	Pentadecanoic acid	242	C15H30O2	001002-84-2	90
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	74
5	Octadecanoic acid	284	C18H36O2	000057-11-4	72





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018115.D
Acq On : 13 Dec 2018 04:43
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F35

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

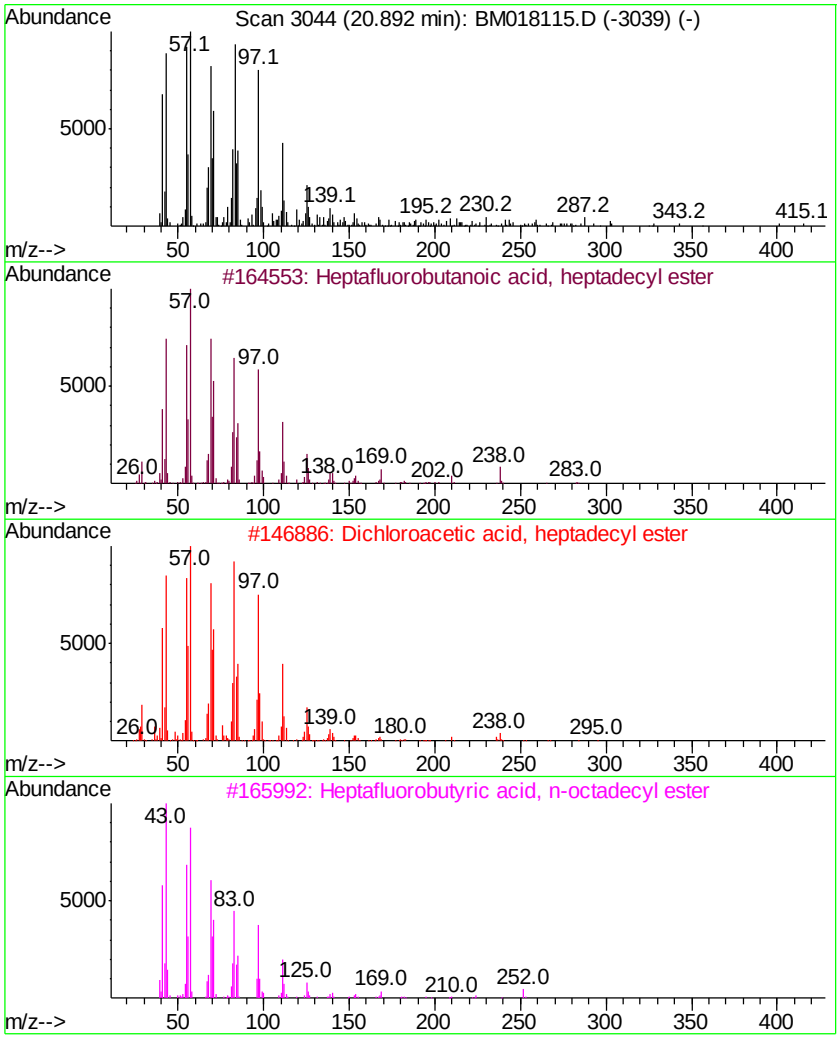
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

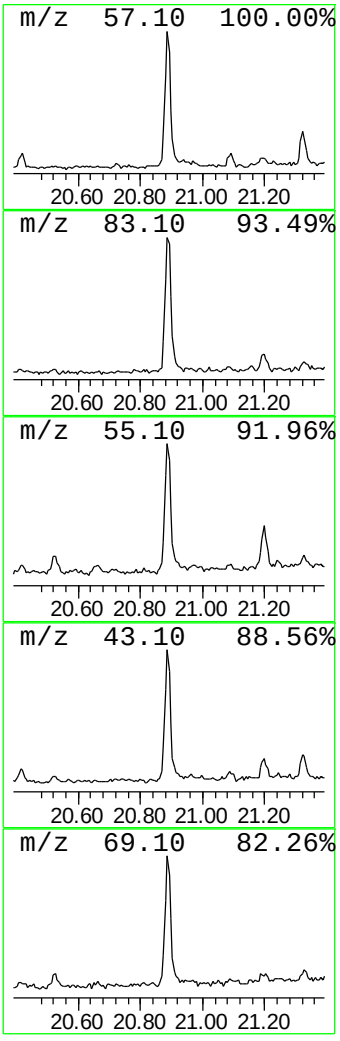
****

Peak Number 3 Heptafluorobutanoic acid, h... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	4.89 ng/ul	709004	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	94
2	Dichloroacetic acid, heptadecyl ...	366	C19H36Cl2O2	1000282-98-2	94
3	Heptafluorobutyric acid, n-octad...	466	C22H37F7O2	000400-57-7	91
4	Trifluoroacetic acid, n-octadecy...	366	C20H37F3O2	079392-43-1	91
5	Heptafluorobutyric acid, n-penta...	424	C19H31F7O2	1000216-79-3	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018115.D
Acq On : 13 Dec 2018 04:43
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F35

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

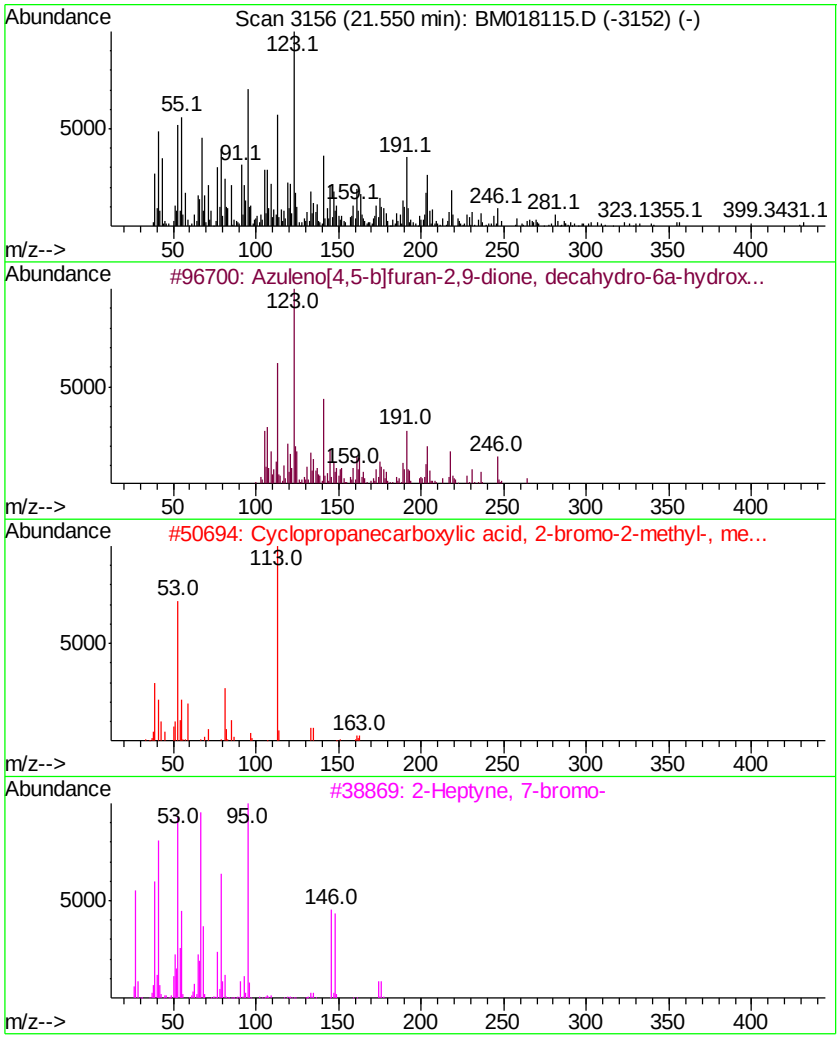
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

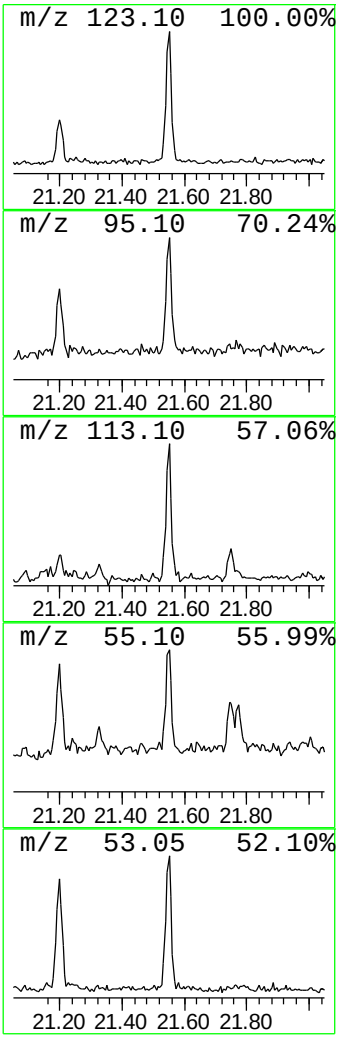
****

Peak Number 4 Azuleno[4,5-b]furan-2,9-dio... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.55	3.35 ng/ul	485278	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Azuleno[4,5-b]furan-2,9-dione, d...	264	C15H20O4	002571-81-5	91
2	Cyclopropanecarboxylic acid, 2-b...	192	C6H9BrO2	1000267-45-9	43
3	2-Heptyne, 7-bromo-	174	C7H11Br	231620-79-4	41
4	1-Butyne, 3-methyl-	68	C5H8	000598-23-2	25
5	3-Fluorobenzoic acid, hexyl ester	224	C13H17FO2	1000279-00-8	25





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018115.D
Acq On : 13 Dec 2018 04:43
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F35

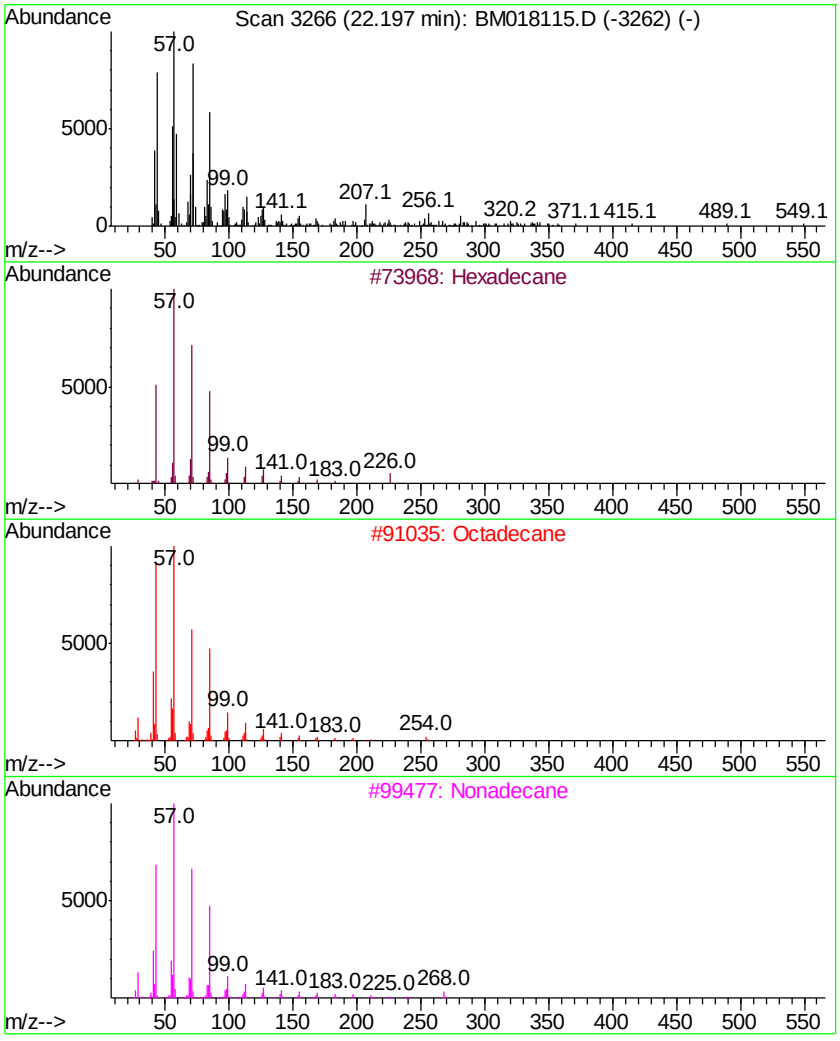
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

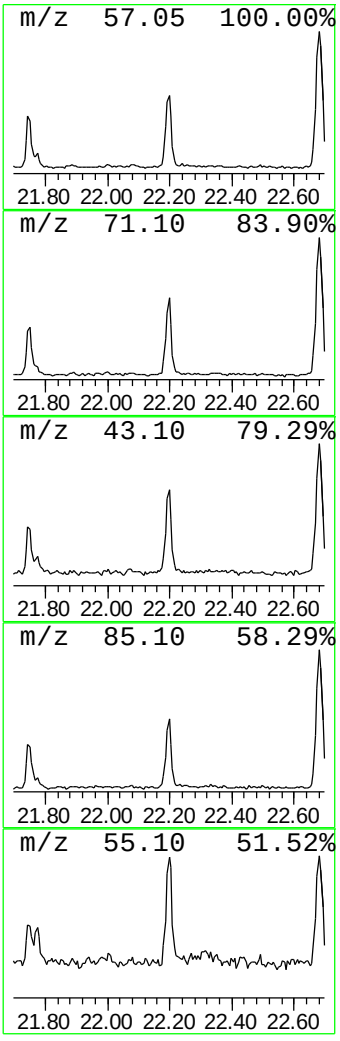
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 (DEL) Alkane: Straight-Chai... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.20	2.97 ng/ul	431110	Chrysene-d12	21.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane	226	C16H34	000544-76-3	92
2	Octadecane	254	C18H38	000593-45-3	91
3	Nonadecane	268	C19H40	000629-92-5	78
4	Hexadecane	226	C16H34	000544-76-3	78
5	Heptadecane	240	C17H36	000629-78-7	70





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018115.D
Acq On : 13 Dec 2018 04:43
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F35

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

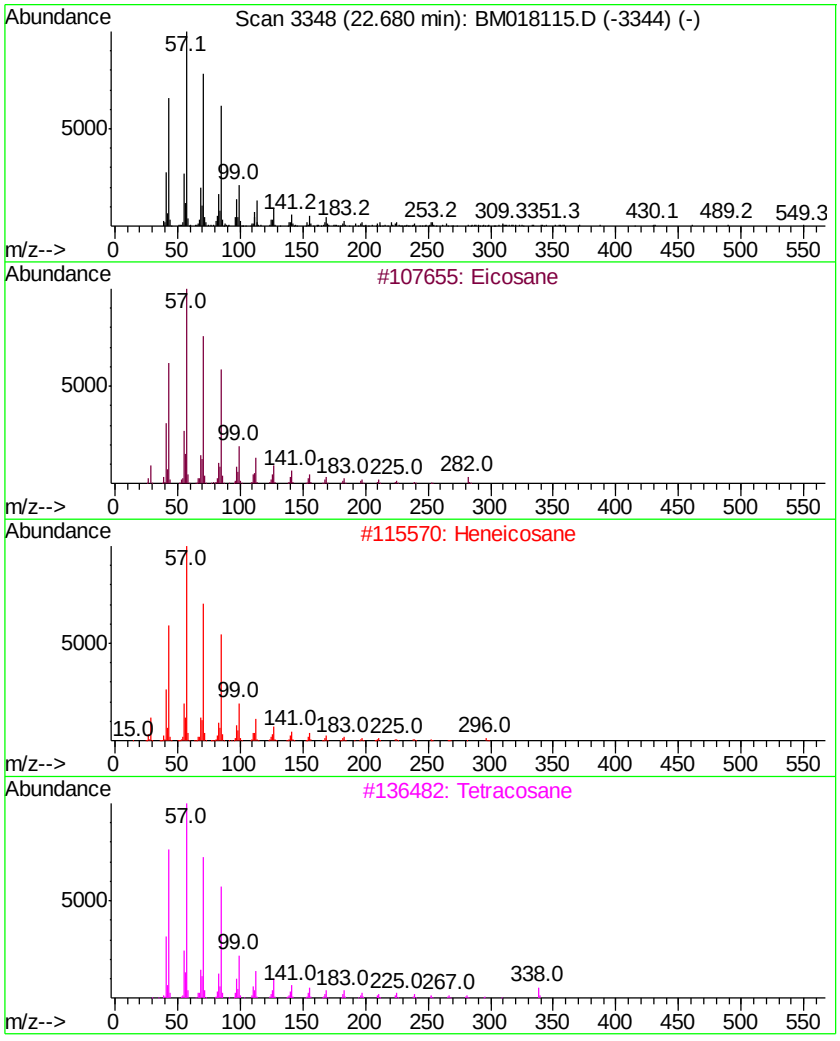
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

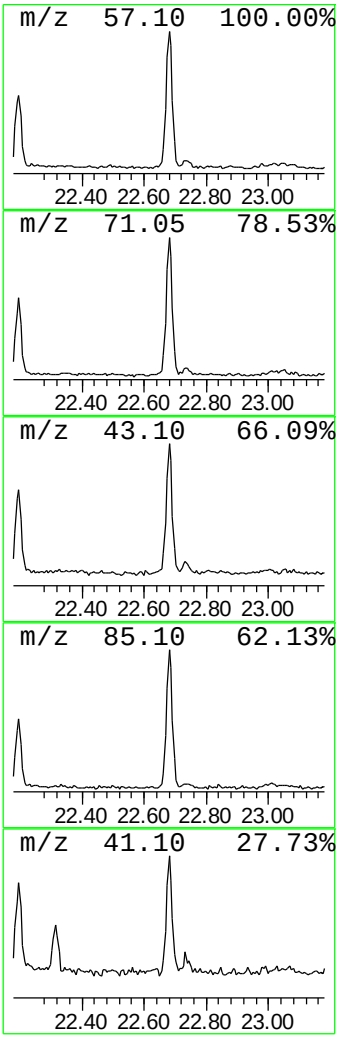
****

Peak Number 6 (DEL) Alkane: Straight-Chai... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.68	4.31 ng/ul	501736	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	91
2	Heneicosane	296	C21H44	000629-94-7	91
3	Tetracosane	338	C24H50	000646-31-1	91
4	Triacontane	422	C30H62	000638-68-6	91
5	Octacosane	394	C28H58	000630-02-4	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018115.D
Acq On : 13 Dec 2018 04:43
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F35

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

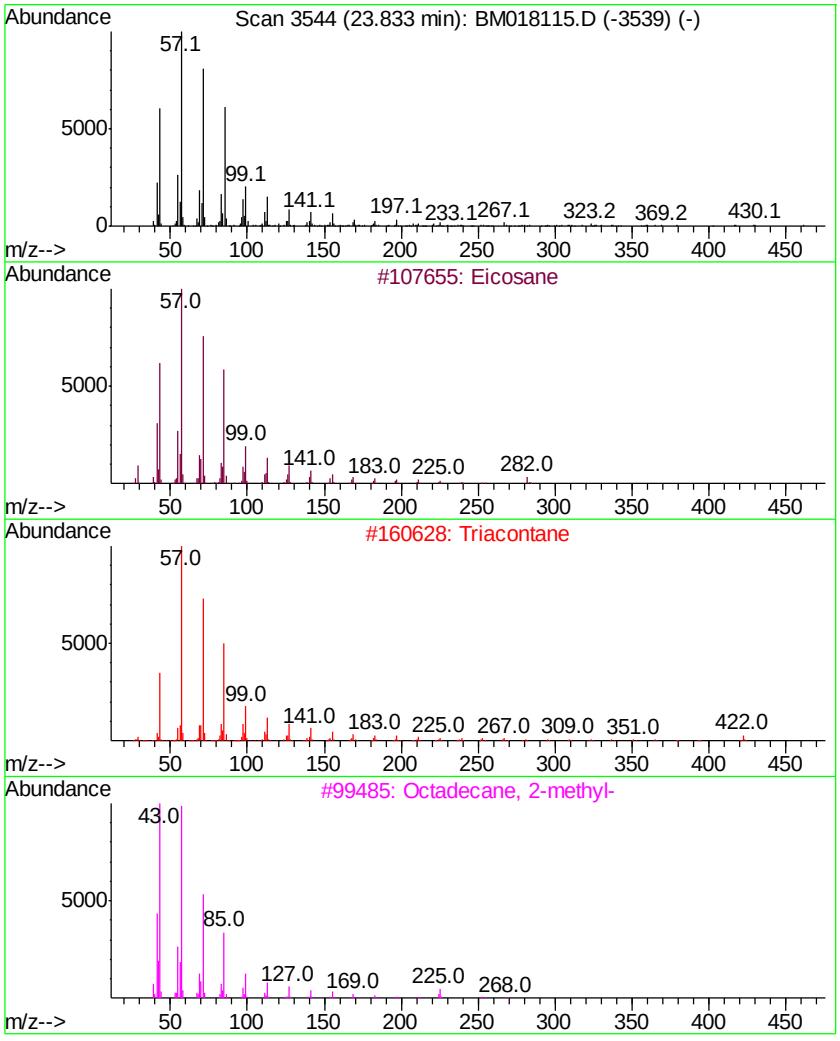
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

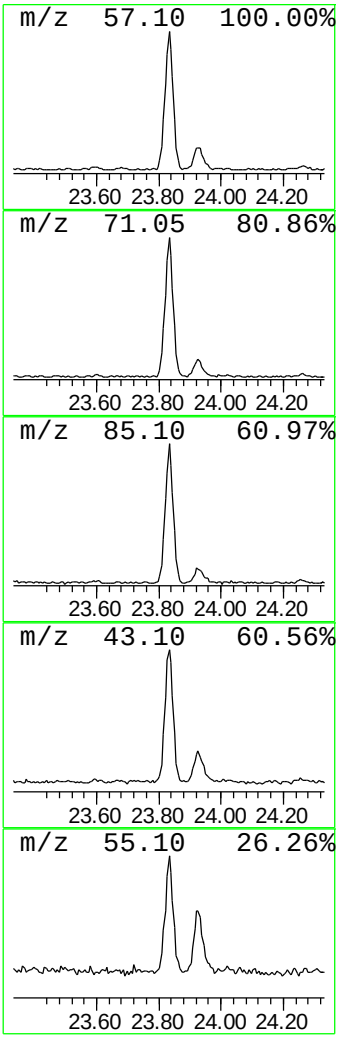
****

Peak Number 7 (DEL) Alkane: Straight-Chai... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.83	7.74 ng/ul	901769	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	91
2	Triacontane	422	C30H62	000638-68-6	91
3	Octadecane, 2-methyl-	268	C19H40	001560-88-9	91
4	Heneicosane	296	C21H44	000629-94-7	91
5	Docosane, 11-butyl-	366	C26H54	013475-76-8	91





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Data File : BM018115.D
Acq On : 13 Dec 2018 04:43
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F35

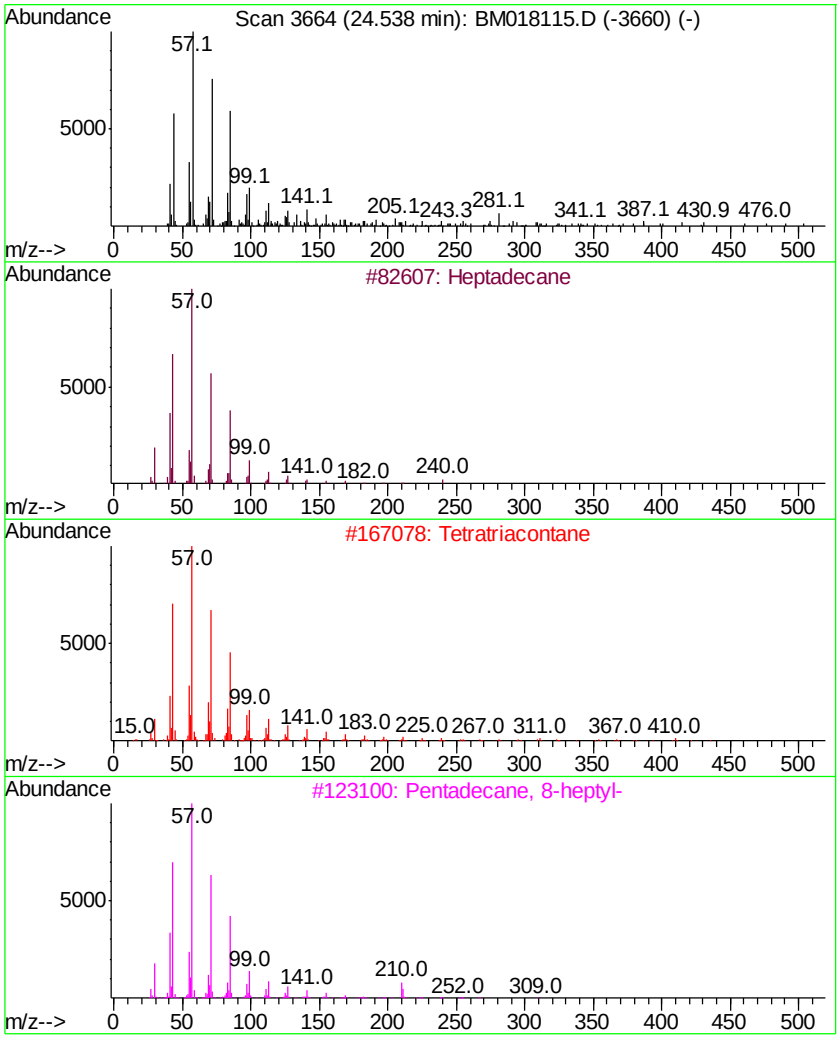
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

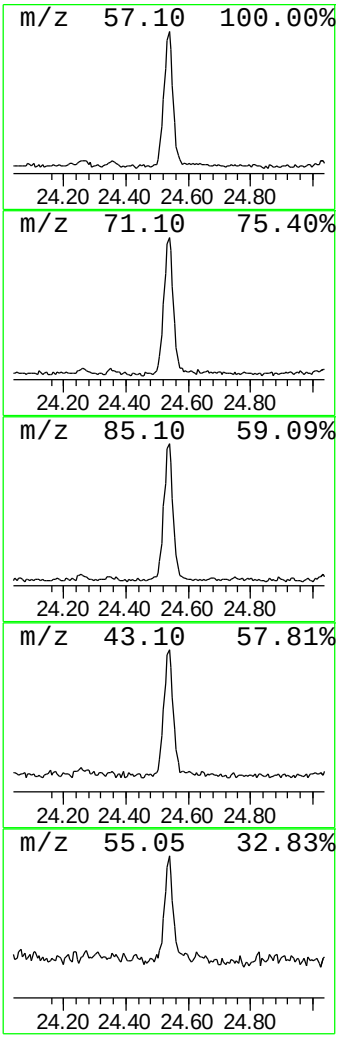
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 8 (DEL) Alkane: Straight-Chai... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.54	5.35 ng/ul	622411	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptadecane	240	C17H36	000629-78-7	91
2	Tetratriacontane	479	C34H70	014167-59-0	87
3	Pentadecane, 8-heptyl-	310	C22H46	071005-15-7	83
4	Heneicosane	296	C21H44	000629-94-7	83
5	Methoxyacetic acid, 4-hexadecyl ...	314	C19H38O3	1000282-99-0	83





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018115.D
Acq On : 13 Dec 2018 04:43
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F35

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

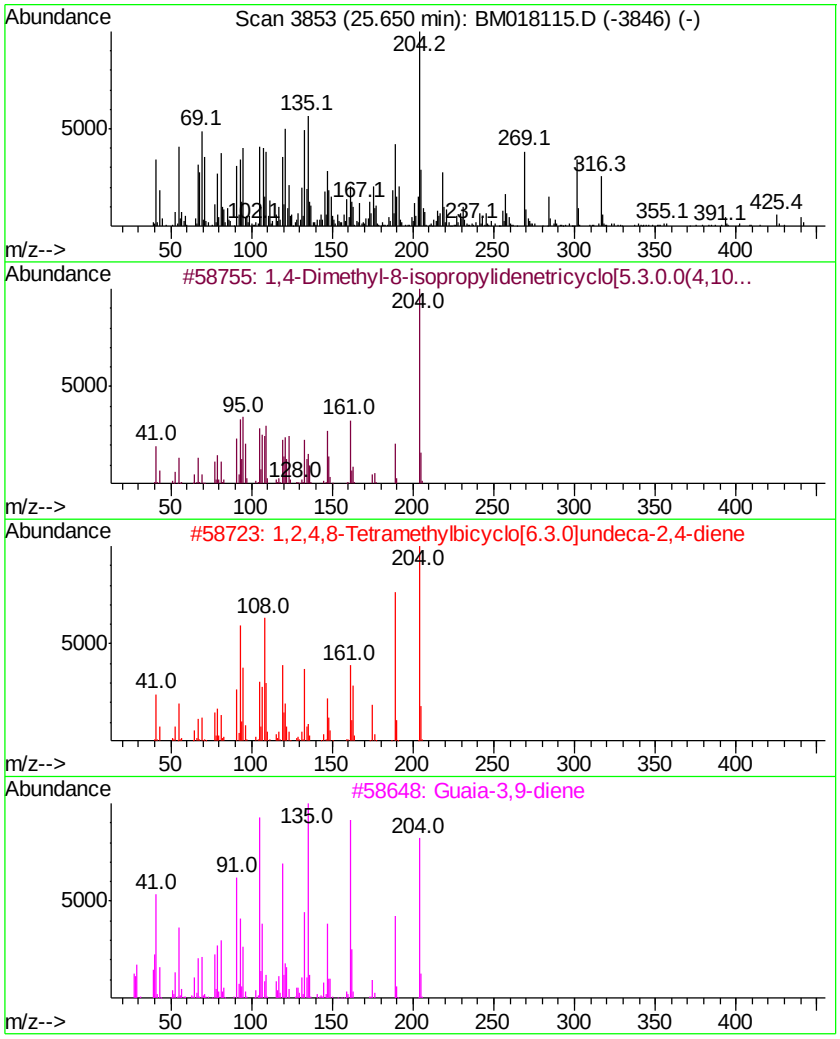
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

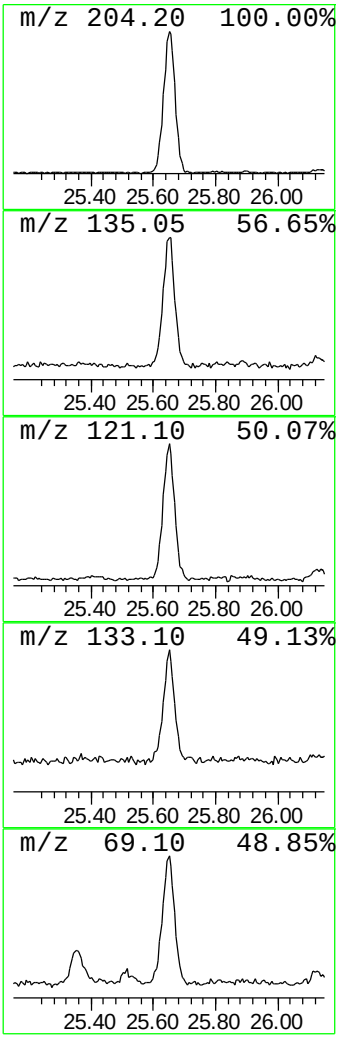
****

Peak Number 9 1,4-Dimethyl-8-isopropylide... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.65	26.73 ng/ul	3112610	Perylene-d12	23.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Dimethyl-8-isopropylidenetri...	204	C15H24	1000140-07-7	52
2	1,2,4,8-Tetramethylbicyclo[6.3.0...	204	C15H24	137235-51-9	49
3	Guaia-3,9-diene	204	C15H24	000489-83-8	43
4	1,1,4a-Trimethyl-5,6-dimethylene...	204	C15H24	1000193-60-8	43
5	Cyclopropene, 1,3-dimethyl-2,3-b...	204	C7H6F6	054932-73-9	30





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\
Data File : BM018115.D
Acq On : 13 Dec 2018 04:43
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : F9F35

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic acid	17.86	8.4	ng/ul	980184	4	16.95	2319410	20.0
Octadecanoic acid	19.16	4.8	ng/ul	699700	5	21.16	2899730	20.0
Heptafluorobutano...	20.89	4.9	ng/ul	709004	5	21.16	2899730	20.0
Azuleno[4,5-b]fur...	21.55	3.4	ng/ul	485278	5	21.16	2899730	20.0
(DEL) Alkane: Str...	22.20	3.0	ng/ul	431110	5	21.16	2899730	20.0
(DEL) Alkane: Str...	22.68	4.3	ng/ul	501736	6	23.34	2328760	20.0
(DEL) Alkane: Str...	23.83	7.7	ng/ul	901769	6	23.34	2328760	20.0
(DEL) Alkane: Str...	24.54	5.3	ng/ul	622411	6	23.34	2328760	20.0
1,4-Dimethyl-8-is...	25.65	26.7	ng/ul	3112610	6	23.34	2328760	20.0

FORM 6A-OR
GC/MS INITIAL CALIBRATION DATA

Lab Name: Chemtech Consulting Group | Contract: EPW14030

Lab Code: CHM | Case No.: 48019 | MA No.: | SDG No.: F9E54

Analytical Method : SVOA | Level :

Instrument ID: BNA_M | Calibration Date(s): 11/19/2018 11/19/2018

GC Column: ZB-GR | ID: 0.25 (mm) | Calibration Time(s): 18:26 21:26

Length : 30 (m)

Heated Purge: (Y/N) | Purge Volume : (mL)

LAB FILE ID: RRF005 =BM017688.D RRF010= BM017689.D RRF020 =BM017690.D
RRF040 =BM017691.D RRF080= BM017692.D RRF160 =BM017693.D

ANALYTE	RRF005	RRF010	RRF020	RRF040	RRF080	RRF160	$\overline{RRF}$	% RSD
1,4-Dioxane	0.527	0.470	0.453	0.448	0.435		0.466	7.7
Benzaldehyde		0.348	0.347	0.341	0.372	0.295	0.341	8.2
Phenol		1.705	1.732	1.850	1.883	1.946	1.823	5.6
Bis(2-Chloroethyl)ether		1.380	1.354	1.417	1.392	1.422	1.393	2.0
2-Chlorophenol	1.348	1.400	1.420	1.463	1.507		1.428	4.2
2-Methylphenol		1.301	1.326	1.414	1.432	1.481	1.391	5.4
2,2-oxybis(1-Chloropropane)		1.656	1.616	1.658	1.631	1.656	1.643	1.1
Acetophenone		2.319	2.231	2.332	2.364	2.385	2.326	2.5
4-Methylphenol		1.428	1.440	1.539	1.534	1.575	1.503	4.3
N-Nitroso-di-n-propylamine	1.155	1.200	1.205	1.252	1.255		1.213	3.4
Hexachloroethane	0.578	0.567	0.568	0.589	0.593		0.579	2.1
Nitrobenzene	0.379	0.386	0.380	0.391	0.391		0.386	1.5
Isophorone	0.684	0.708	0.715	0.734	0.745		0.717	3.3
2-Nitrophenol	0.162	0.178	0.185	0.191	0.199		0.183	7.8
2,4-Dimethylphenol	0.364	0.383	0.380	0.391	0.396		0.383	3.2
Bis(2-Chloroethoxy)methane	0.429	0.444	0.436	0.440	0.446		0.439	1.5
2,4-Dichlorophenol	0.286	0.311	0.319	0.330	0.336		0.316	6.2
Naphthalene	1.033	1.055	1.027	1.041	1.054		1.042	1.2
4-Chloroaniline		0.274	0.299	0.307	0.304	0.282	0.293	5.0
Hexachlorobutadiene	0.210	0.211	0.209	0.209	0.212		0.210	0.8
Caprolactam		0.093	0.103	0.107	0.111	0.109	0.105	6.9
4-Chloro-3-methylphenol	0.337	0.354	0.354	0.373	0.378		0.359	4.6
2-Methylnaphthalene	0.764	0.779	0.767	0.779	0.801		0.778	1.8
Hexachlorocyclopentadiene		0.382	0.399	0.430	0.458	0.482	0.430	9.6
2,4,6-Trichlorophenol	0.414	0.418	0.431	0.449	0.456		0.434	4.3
2,4,5-Trichlorophenol	0.450	0.436	0.462	0.478	0.493		0.464	4.9
1,1-Biphenyl	1.684	1.642	1.613	1.630	1.662		1.646	1.7
2-Chloronaphthalene	1.293	1.299	1.263	1.286	1.299		1.288	1.2
2-Nitroaniline	0.328	0.357	0.377	0.401	0.413		0.375	9.1
Dimethylphthalate	1.672	1.717	1.656	1.685	1.676		1.681	1.3
2,6-Dinitrotoluene	0.281	0.312	0.334	0.357	0.368		0.330	10.6
Acenaphthylene	1.907	1.953	1.944	1.995	2.008		1.961	2.1
3-Nitroaniline		0.275	0.306	0.338	0.336	0.322	0.315	8.2

FORM 6A-OR
GC/MS INITIAL CALIBRATION DATA

Lab Name: Chemtech Consulting Group | Contract: EPW14030

Lab Code: CHM | Case No.: 48019 | MA No.: | SDG No.: F9E54

Analytical Method : SVOA | Level :

Instrument ID: BNA_M | Calibration Date(s): 11/19/2018 11/19/2018

GC Column: ZB-GR | ID: 0.25 (mm) | Calibration Time(s): 18:26 21:26

Length : 30 (m)

Heated Purge: (Y/N) | Purge Volume : (mL)

LAB FILE ID: RRF005 =BM017688.D RRF010= BM017689.D RRF020 =BM017690.D
RRF040 =BM017691.D RRF080= BM017692.D RRF160 =BM017693.D

ANALYTE	RRF005	RRF010	RRF020	RRF040	RRF080	RRF160	$\overline{RRF}$	% RSD
Acenaphthene	1.410	1.414	1.395	1.425	1.424		1.414	0.9
2,4-Dinitrophenol		0.163	0.200	0.231	0.254	0.272	0.224	19.3
4-Nitrophenol		0.238	0.254	0.266	0.272	0.268	0.260	5.3
Dibenzofuran	2.014	2.022	1.977	1.984	2.004		2.000	1.0
2,4-Dinitrotoluene	0.437	0.488	0.506	0.531	0.540		0.500	8.3
Diethylphthalate	1.722	1.753	1.715	1.729	1.741		1.732	0.9
Fluorene	1.664	1.680	1.647	1.668	1.681		1.668	0.8
4-Chlorophenyl-phenylether	0.871	0.857	0.845	0.852	0.858		0.857	1.1
4-Nitroaniline		0.293	0.324	0.362	0.386	0.387	0.350	11.7
4,6-Dinitro-2-methylphenol		0.129	0.139	0.149	0.158	0.162	0.147	9.1
N-Nitrosodiphenylamine	0.587	0.611	0.617	0.625	0.638		0.616	3.1
4-Bromophenyl-phenylether	0.221	0.224	0.227	0.232	0.239		0.229	3.0
1,2,4,5-Tetrachlorobenzene	0.671	0.665	0.655	0.666	0.680		0.667	1.4
Hexachlorobenzene	0.250	0.251	0.252	0.257	0.260		0.254	1.8
Atrazine		0.218	0.224	0.231	0.238	0.231	0.228	3.3
Pentachlorophenol		0.138	0.147	0.159	0.170	0.175	0.158	9.8
Phenanthrene	1.136	1.150	1.133	1.147	1.152		1.144	0.7
Anthracene	1.138	1.167	1.161	1.185	1.197		1.170	1.9
Carbazole		1.018	1.015	1.043	1.059	1.019	1.031	1.9
Di-n-butylphthalate	1.245	1.283	1.296	1.337	1.351		1.302	3.3
Fluoranthene		1.385	1.373	1.375	1.385	1.208	1.345	5.7
Pyrene	1.182	1.199	1.199	1.232	1.259		1.214	2.6
Butylbenzylphthalate	0.465	0.495	0.519	0.540	0.577		0.519	8.2
3,3-Dichlorobenzidine		0.361	0.403	0.438	0.443	0.414	0.412	8.0
Benzo(a)anthracene	1.238	1.265	1.231	1.236	1.233		1.241	1.1
Chrysene	1.164	1.187	1.142	1.157	1.151		1.160	1.5
Bis(2-ethylhexyl)phthalate	0.689	0.732	0.769	0.811	0.842		0.769	7.9
Di-n-octyl phthalate		1.207	1.297	1.431	1.598	1.471	1.401	10.9
Benzo(b)fluoranthene	1.160	1.221	1.202	1.298	1.335		1.243	5.8
Benzo(k)fluoranthene	1.182	1.191	1.214	1.218	1.236		1.208	1.8
Benzo(a)pyrene	1.156	1.174	1.167	1.190	1.208		1.179	1.7
Indeno(1,2,3-cd)pyrene	1.286	1.307	1.236	1.224	1.192		1.249	3.8
Dibenzo(a,h)anthracene	1.082	1.104	1.038	1.034	1.015		1.055	3.5

FORM 6A-OR
GC/MS INITIAL CALIBRATION DATA

Lab Name: Chemtech Consulting Group | Contract: EPW14030

Lab Code: CHM | Case No.: 48019 | MA No.: | SDG No.: F9E54

Analytical Method : SVOA | Level :

Instrument ID: BNA_M | Calibration Date(s): 11/19/2018 11/19/2018

GC Column: ZB-GR | ID: 0.25 (mm) | Calibration Time(s): 18:26 21:26

Length : 30 (m)

Heated Purge: (Y/N) | Purge Volume : (mL)

LAB FILE ID: RRF005 =BM017688.D RRF010= BM017689.D RRF020 =BM017690.D
RRF040 =BM017691.D RRF080= BM017692.D RRF160 =BM017693.D

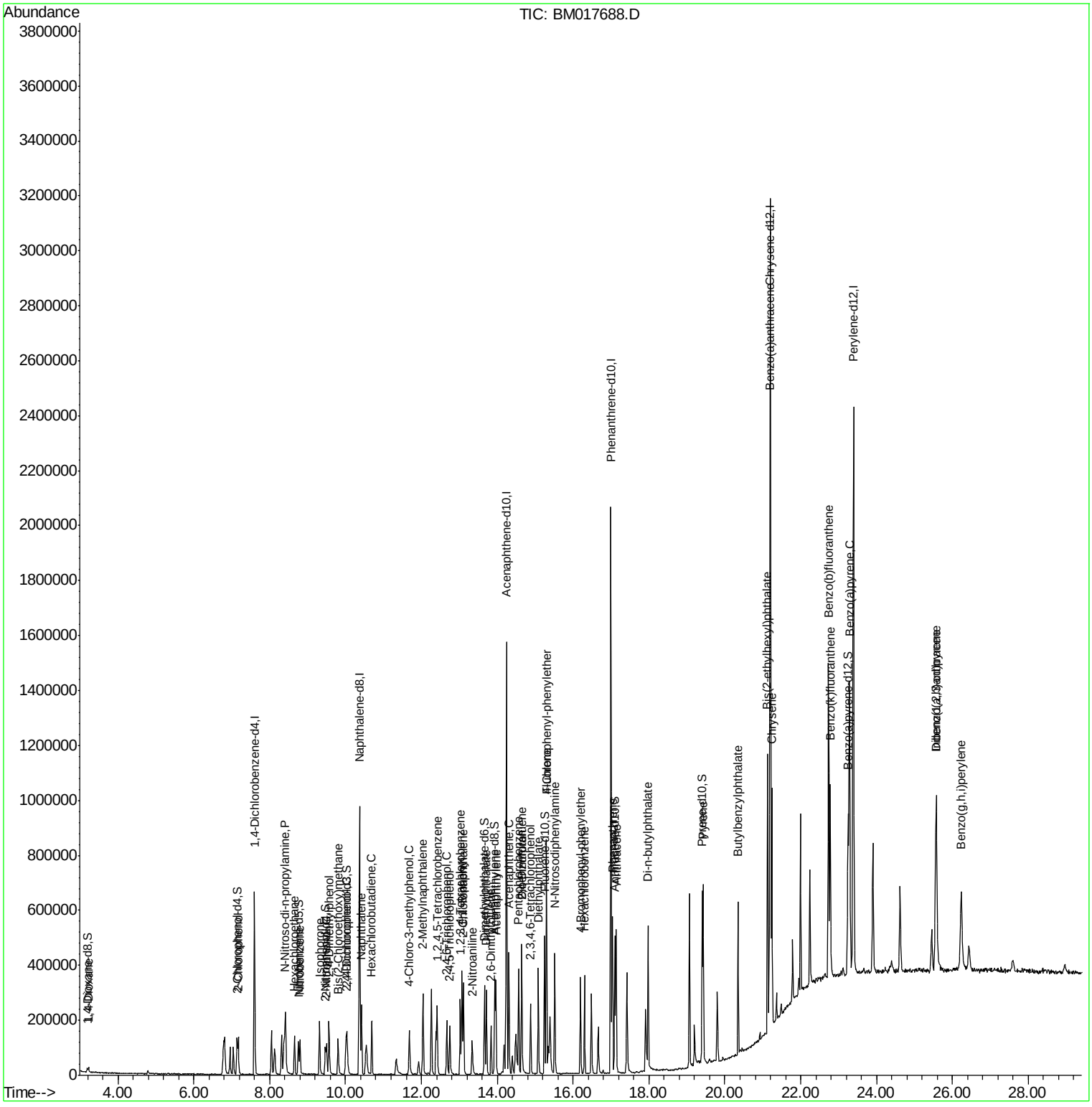
ANALYTE	RRF005	RRF010	RRF020	RRF040	RRF080	RRF160	$\overline{RRF}$	% RSD
Benzo(g,h,i)perylene	1.059	1.061	0.989	0.981	0.958		1.010	4.7
2,3,4,6-Tetrachlorophenol	0.404	0.419	0.424	0.442	0.450		0.428	4.3
1,4-Dioxane-d8	0.459	0.447	0.425	0.438	0.416		0.437	3.9
Phenol-d5		1.714	1.716	1.849	1.885	1.969	1.827	6.1
Bis-(2-Chloroethyl)ether-d8		1.099	1.072	1.112	1.104	1.120	1.101	1.7
2-Chlorophenol-d4	1.352	1.387	1.406	1.480	1.522		1.429	4.9
4-Methylphenol-d8		1.411	1.432	1.518	1.528	1.574	1.492	4.6
Nitrobenzene-d5	0.140	0.148	0.154	0.160	0.166		0.154	6.7
2-Nitrophenol-d4	0.153	0.173	0.175	0.185	0.194		0.176	8.7
2,4-Dichlorophenol-d3	0.312	0.322	0.335	0.348	0.358		0.335	5.6
4-Chloroaniline-d4		0.269	0.292	0.303	0.299	0.275	0.288	5.2
Dimethylphthalate-d6	1.746	1.742	1.714	1.738	1.738		1.735	0.7
Acenaphthylene-d8	2.002	2.080	2.097	2.149	2.173		2.100	3.2
4-Nitrophenol-d4		0.267	0.306	0.326	0.337	0.341	0.316	9.6
Fluorene-d10	1.527	1.515	1.476	1.485	1.488		1.499	1.4
4,6-Dinitro-2-methylphenol-d2		0.120	0.134	0.145	0.154	0.162	0.143	11.7
Anthracene-d10	0.978	0.994	0.985	1.005	1.018		0.996	1.6
Pyrene-d10	0.929	0.956	0.954	0.982	1.018		0.968	3.5
Benzo(a)pyrene-d12	1.031	1.069	1.080	1.114	1.129		1.085	3.6

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017688.D
Acq On : 19 Nov 2018 18:26
Operator : MJ/SJ
Sample : SSTD00551
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTD00551

Quant Time: Nov 20 00:35:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017688.D
Acq On : 19 Nov 2018 18:26
Operator : MJ/SJ
Sample : SSTD00551
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : SSTD00551

Quant Time: Nov 20 00:35:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.60	152	176678	20.00	ng/ul	0.00
18) Naphthalene-d8	10.37	136	790275	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.24	164	482425	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.00	188	1147627	20.00	ng/ul	0.00
77) Chrysene-d12	21.20	240	1375884	20.00	ng/ul	0.00
85) Perylene-d12	23.39	264	1468112	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.19	96	8105	1.78	ng/uL	0.00
5) Phenol-d5	0.00	99	0d	0.00	ng/ul	
7) Bis-(2-Chloroethyl)ether-d	0.00	67	0d	0.00	ng/ul	
9) 2-Chlorophenol-d4	7.14	132	59695	4.88	ng/ul	0.00
13) 4-Methylphenol-d8	0.00	113	0d	0.00	ng/ul	
19) Nitrobenzene-d5	8.76	128	27610	4.72	ng/ul	0.00
22) 2-Nitrophenol-d4	9.47	143	30275	4.79	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	10.01	165	61644	5.11	ng/ul	0.01
29) 4-Chloroaniline-d4	0.00	131	0d	0.00	ng/ul	
43) Dimethylphthalate-d6	13.66	166	210540	5.66	ng/ul	0.00
46) Acenaphthylene-d8	13.93	160	241468	4.94	ng/ul	0.00
51) 4-Nitrophenol-d4	0.00	143	0d	0.00	ng/ul	
57) Fluorene-d10	15.24	176	184219	5.44	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	0.00	200	0d	0.00	ng/ul	
70) Anthracene-d10	17.10	188	280517	5.14	ng/ul	0.00
78) Pyrene-d10	19.40	212	319667	4.45	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.25	264	378474	4.78	ng/ul	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.22	88	9307	1.919	ng/uL	94
10) 2-Chlorophenol	7.17	128	59560	4.794	ng/ul	95
15) N-Nitroso-di-n-propylamine	8.40	70	51007	5.650	ng/ul	98
17) Hexachloroethane	8.66	117	25535	5.088	ng/ul	97
20) Nitrobenzene	8.80	77	74938	4.838	ng/ul	99
21) Isophorone	9.32	82	135169	5.486	ng/ul	99
23) 2-Nitrophenol	9.50	139	31980	4.758	ng/ul	95
24) 2,4-Dimethylphenol	9.56	107	71849	4.897	ng/ul	98
25) Bis(2-Chloroethoxy)methane	9.80	93	84848	5.492	ng/ul	94
27) 2,4-Dichlorophenol	10.03	162	56530	4.762	ng/ul	99
28) Naphthalene	10.42	128	204052	4.951	ng/ul	98
31) Hexachlorobutadiene	10.69	225	41434	5.173	ng/ul	95
33) 4-Chloro-3-methylphenol	11.68	107	66627	5.370	ng/ul	93
34) 2-Methylnaphthalene	12.05	142	150988	5.306	ng/ul	97
36) 1,2,4,5-Tetrachlorobenzene	12.42	216	80960	4.848	ng/ul	97
38) 2,4,6-Trichlorophenol	12.67	196	49932	5.153	ng/ul	98
39) 2,4,5-Trichlorophenol	12.75	196	54309	5.035	ng/ul	93
40) 1,1'-Biphenyl	13.07	154	203148	5.093	ng/ul	99
41) 2-Chloronaphthalene	13.11	162	155985	4.882	ng/ul	98
42) 2-Nitroaniline	13.34	65	39502	4.588	ng/ul	95
44) Dimethylphthalate	13.71	163	201674	5.511	ng/ul	99
45) 2,6-Dinitrotoluene	13.84	165	33900	4.826	ng/ul	93
47) Acenaphthylene	13.96	152	229983	4.955	ng/ul	99

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017688.D
Acq On : 19 Nov 2018 18:26
Operator : MJ/SJ
Sample : SSTD00551
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : SSTD00551

Quant Time: Nov 20 00:35:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Acenaphthene	14.31	153	170096	4.963	ng/ul	98
53) Dibenzofuran	14.65	168	242931	5.117	ng/ul	100
54) 2,4-Dinitrotoluene	14.64	165	52646	5.114	ng/ul	88
55) 2,3,4,6-Tetrachlorophenol	14.88	232	48683	5.487	ng/ul	95
56) Diethylphthalate	15.09	149	207656	6.075	ng/ul	97
58) Fluorene	15.30	166	200741	5.293	ng/ul	99
59) 4-Chlorophenyl-phenylether	15.30	204	105080	5.624	ng/ul	98
64) N-Nitrosodiphenylamine	15.52	169	168356	4.835	ng/ul	96
65) 4-Bromophenyl-phenylether	16.20	248	63531	5.202	ng/ul	96
66) Hexachlorobenzene	16.30	284	71595	4.942	ng/ul	98
69) Phenanthrene	17.04	178	325875	4.921	ng/ul	98
71) Anthracene	17.13	178	326589	4.945	ng/ul	99
72) 1,2,3,4-Tetrachlorobenzene	13.03	216	81052	4.378	ng/uL	98
73) Pentachlorobenzene	14.56	250	81492	4.580	ng/uL	96
75) Di-n-butylphthalate	17.98	149	357086	6.901	ng/ul	99
79) Pyrene	19.43	202	406565	4.412	ng/ul	97
80) Butylbenzylphthalate	20.35	149	159924	6.365	ng/ul	97
82) Benzo(a)anthracene	21.19	228	425840	5.148	ng/ul	99
83) Bis(2-ethylhexyl)phthalate	21.13	149	237147	7.588	ng/ul	98
84) Chrysene	21.24	228	400382	4.868	ng/ul	98
87) Benzo(b)fluoranthene	22.74	252	425871	4.741	ng/ul	99
88) Benzo(k)fluoranthene	22.78	252	433803	4.849	ng/ul	99
90) Benzo(a)pyrene	23.29	252	424152	4.861	ng/ul	99
91) Indeno(1,2,3-cd)pyrene	25.56	276	472068	5.365	ng/ul	97
92) Dibenzo(a,h)anthracene	25.58	278	397161	5.430	ng/ul	98
93) Benzo(g,h,i)perylene	26.24	276	388641	5.107	ng/ul	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

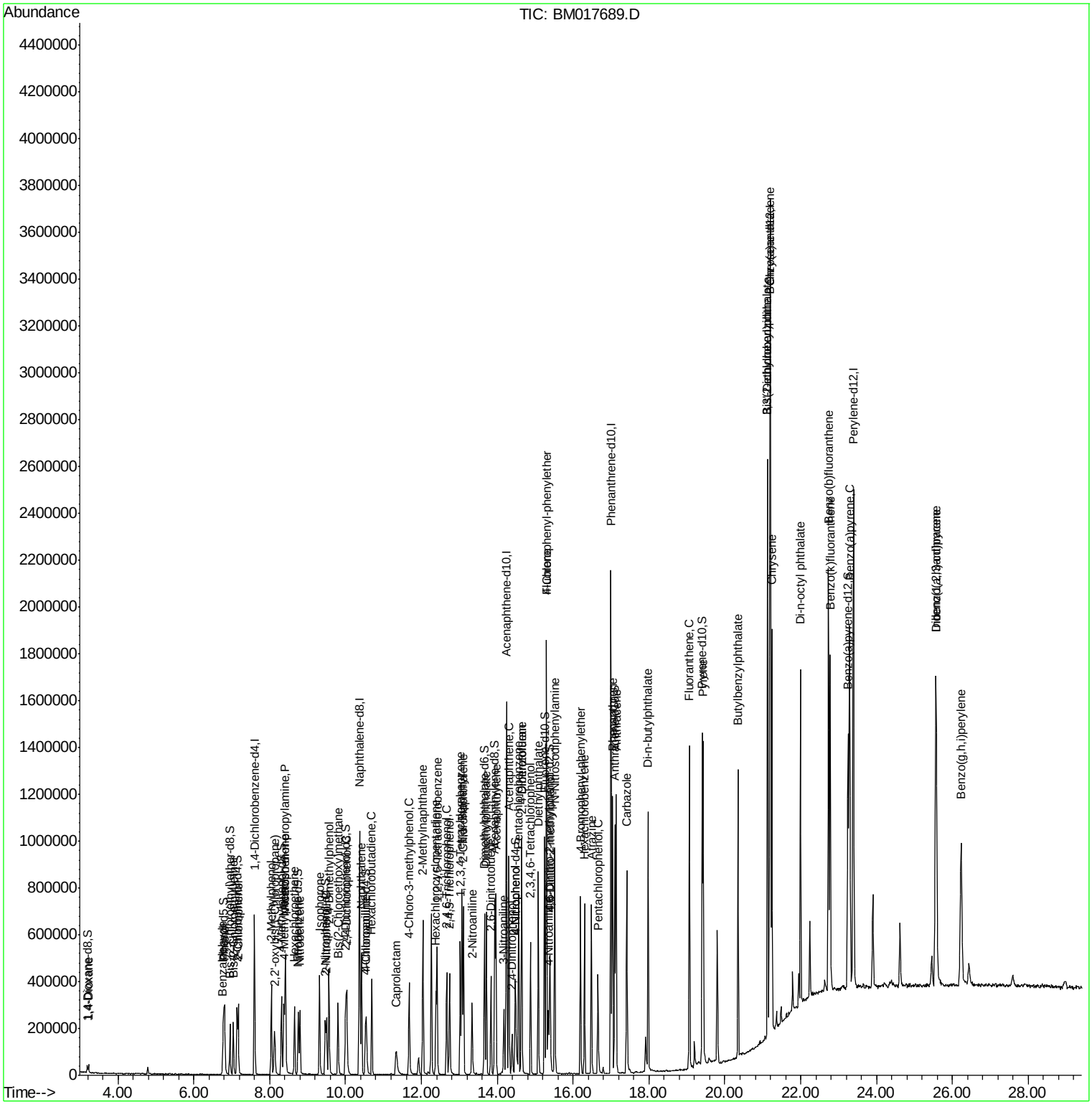
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017689.D
Acq On : 19 Nov 2018 19:02
Operator : MJ/SJ
Sample : SSTD01052
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 20 00:44:17 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD01052

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:22 PM



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017689.D
Acq On : 19 Nov 2018 19:02
Operator : MJ/SJ
Sample : SSTD01052
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : SSTD01052

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:22 PM

Quant Time: Nov 20 00:44:17 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.60	152	181878	20.00	ng/ul	0.00
18) Naphthalene-d8	10.37	136	816619	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.24	164	508394	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.00	188	1204997	20.00	ng/ul	0.00
77) Chrysene-d12	21.20	240	1430591	20.00	ng/ul	0.00
85) Perylene-d12	23.39	264	1475801	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.19	96	16267	3.48	ng/uL	0.00
5) Phenol-d5	6.79	99	155843	9.24	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.95	67	99965	10.49	ng/ul	0.00
9) 2-Chlorophenol-d4	7.14	132	126136	10.01	ng/ul	0.00
13) 4-Methylphenol-d8	8.31	113	128290	9.90	ng/ul	0.00
19) Nitrobenzene-d5	8.75	128	60553	10.02	ng/ul	0.00
22) 2-Nitrophenol-d4	9.47	143	70561	10.80	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	10.00	165	131559	10.55	ng/ul	0.00
29) 4-Chloroaniline-d4	10.53	131	109709	10.10	ng/ul	0.00
43) Dimethylphthalate-d6	13.66	166	442738	11.29	ng/ul	0.00
46) Acenaphthylene-d8	13.93	160	528735	10.27	ng/ul	0.00
51) 4-Nitrophenol-d4	14.47	143	67996	9.59	ng/ul	0.00
57) Fluorene-d10	15.24	176	385105	10.78	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.38	200	72136	9.42	ng/ul	0.00
70) Anthracene-d10	17.10	188	598903	10.45	ng/ul	0.00
78) Pyrene-d10	19.40	212	683604	9.15	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.25	264	789144	9.92	ng/ul	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.22	88	17083	3.422	ng/uL#	86
4) Benzaldehyde	6.76	77	31668m	9.889	ng/ul	
6) Phenol	6.81	94	155055	9.141	ng/ul	97
8) Bis(2-Chloroethyl)ether	7.04	93	125466	10.412	ng/ul	99
10) 2-Chlorophenol	7.17	128	127359	9.958	ng/ul	97
11) 2-Methylphenol	8.05	108	118355	9.696	ng/ul	98
12) 2,2'-oxybis(1-Chloropropan	8.13	45	150631	11.155	ng/ul	96
14) Acetophenone	8.42	105	210896	10.582	ng/ul	98
15) N-Nitroso-di-n-propylamine	8.40	70	109085	11.739	ng/ul	98
16) 4-Methylphenol	8.37	108	129889	9.861	ng/ul	97
17) Hexachloroethane	8.66	117	51521	9.972	ng/ul	90
20) Nitrobenzene	8.80	77	157578	9.845	ng/ul	97
21) Isophorone	9.32	82	289286	11.363	ng/ul	100
23) 2-Nitrophenol	9.50	139	72660	10.462	ng/ul	99
24) 2,4-Dimethylphenol	9.56	107	156551	10.325	ng/ul	97
25) Bis(2-Chloroethoxy)methane	9.80	93	181162	11.347	ng/ul	99
27) 2,4-Dichlorophenol	10.03	162	126948	10.349	ng/ul	96
28) Naphthalene	10.42	128	430645	10.113	ng/ul	100
30) 4-Chloroaniline	10.55	127	111848	10.025	ng/ul	98
31) Hexachlorobutadiene	10.70	225	86343	10.433	ng/ul	98
32) Caprolactam	11.34	113	38053m	10.169	ng/ul	
33) 4-Chloro-3-methylphenol	11.67	107	144569	11.276	ng/ul	97
34) 2-Methylnaphthalene	12.04	142	317986	10.813	ng/ul	99

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017689.D
Acq On : 19 Nov 2018 19:02
Operator : MJ/SJ
Sample : SSTD01052
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTD01052

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:22 PM

Quant Time: Nov 20 00:44:17 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.42	216	169073	9.607	ng/ul	98
37) Hexachlorocyclopentadiene	12.39	237	97039	9.817	ng/ul	98
38) 2,4,6-Trichlorophenol	12.67	196	106209	10.400	ng/ul	94
39) 2,4,5-Trichlorophenol	12.74	196	110809	9.749	ng/ul	99
40) 1,1'-Biphenyl	13.07	154	417501	9.932	ng/ul	98
41) 2-Chloronaphthalene	13.11	162	330244	9.808	ng/ul	99
42) 2-Nitroaniline	13.33	65	90671	9.994	ng/ul	98
44) Dimethylphthalate	13.71	163	436481	11.318	ng/ul	100
45) 2,6-Dinitrotoluene	13.84	165	79282	10.710	ng/ul	95
47) Acenaphthylene	13.96	152	496467	10.150	ng/ul	99
48) 3-Nitroaniline	14.17	138	69790	9.207	ng/ul	98
49) Acenaphthene	14.31	153	359378	9.950	ng/ul	98
50) 2,4-Dinitrophenol	14.39	184	41526	9.295	ng/ul	99
52) 4-Nitrophenol	14.49	109	60545	9.532	ng/ul	95
53) Dibenzofuran	14.64	168	513981	10.273	ng/ul	99
54) 2,4-Dinitrotoluene	14.63	165	123926	11.422	ng/ul	93
55) 2,3,4,6-Tetrachlorophenol	14.88	232	106425	11.381	ng/ul	100
56) Diethylphthalate	15.09	149	445729	12.374	ng/ul	98
58) Fluorene	15.30	166	426967	10.683	ng/ul	98
59) 4-Chlorophenyl-phenylether	15.30	204	217860	11.065	ng/ul	99
60) 4-Nitroaniline	15.34	138	74397	9.017	ng/ul	94
63) 4,6-Dinitro-2-methylphenol	15.40	198	77738	9.740	ng/ul	91
64) N-Nitrosodiphenylamine	15.52	169	368175	10.069	ng/ul	97
65) 4-Bromophenyl-phenylether	16.20	248	134687	10.504	ng/ul	95
66) Hexachlorobenzene	16.30	284	151278	9.945	ng/ul	93
67) Atrazine	16.48	200	131202	11.226	ng/ul	99
68) Pentachlorophenol	16.66	266	83300	10.152	ng/ul	96
69) Phenanthrene	17.04	178	692572	9.962	ng/ul	98
71) Anthracene	17.13	178	702991	10.137	ng/ul	99
72) 1,2,3,4-Tetrachlorobenzene	13.03	216	169393	8.714	ng/uL	98
73) Pentachlorobenzene	14.56	250	172812	9.249	ng/uL	97
74) Carbazole	17.42	167	613226	9.823	ng/ul	100
75) Di-n-butylphthalate	17.98	149	773021	14.227	ng/ul	99
76) Fluoranthene	19.07	202	834200	10.717	ng/ul	98
79) Pyrene	19.43	202	857404	8.948	ng/ul	99
80) Butylbenzylphthalate	20.35	149	353858	13.546	ng/ul	98
81) 3,3'-Dichlorobenzidine	21.13	252	257985	9.986	ng/ul	99
82) Benzo(a)anthracene	21.19	228	905110	10.524	ng/ul	99
83) Bis(2-ethylhexyl)phthalate	21.13	149	523368	16.106	ng/ul	99
84) Chrysene	21.24	228	848705	9.925	ng/ul	98
86) Di-n-octyl phthalate	21.99	149	890377	13.928	ng/ul	100
87) Benzo(b)fluoranthene	22.73	252	900607	9.975	ng/ul	98
88) Benzo(k)fluoranthene	22.78	252	879086	9.775	ng/ul	99
90) Benzo(a)pyrene	23.29	252	866056	9.875	ng/ul	99
91) Indeno(1,2,3-cd)pyrene	25.56	276	964554	10.905	ng/ul	99
92) Dibenzo(a,h)anthracene	25.57	278	814526	11.078	ng/ul	99
93) Benzo(g,h,i)perylene	26.23	276	783059	10.237	ng/ul	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

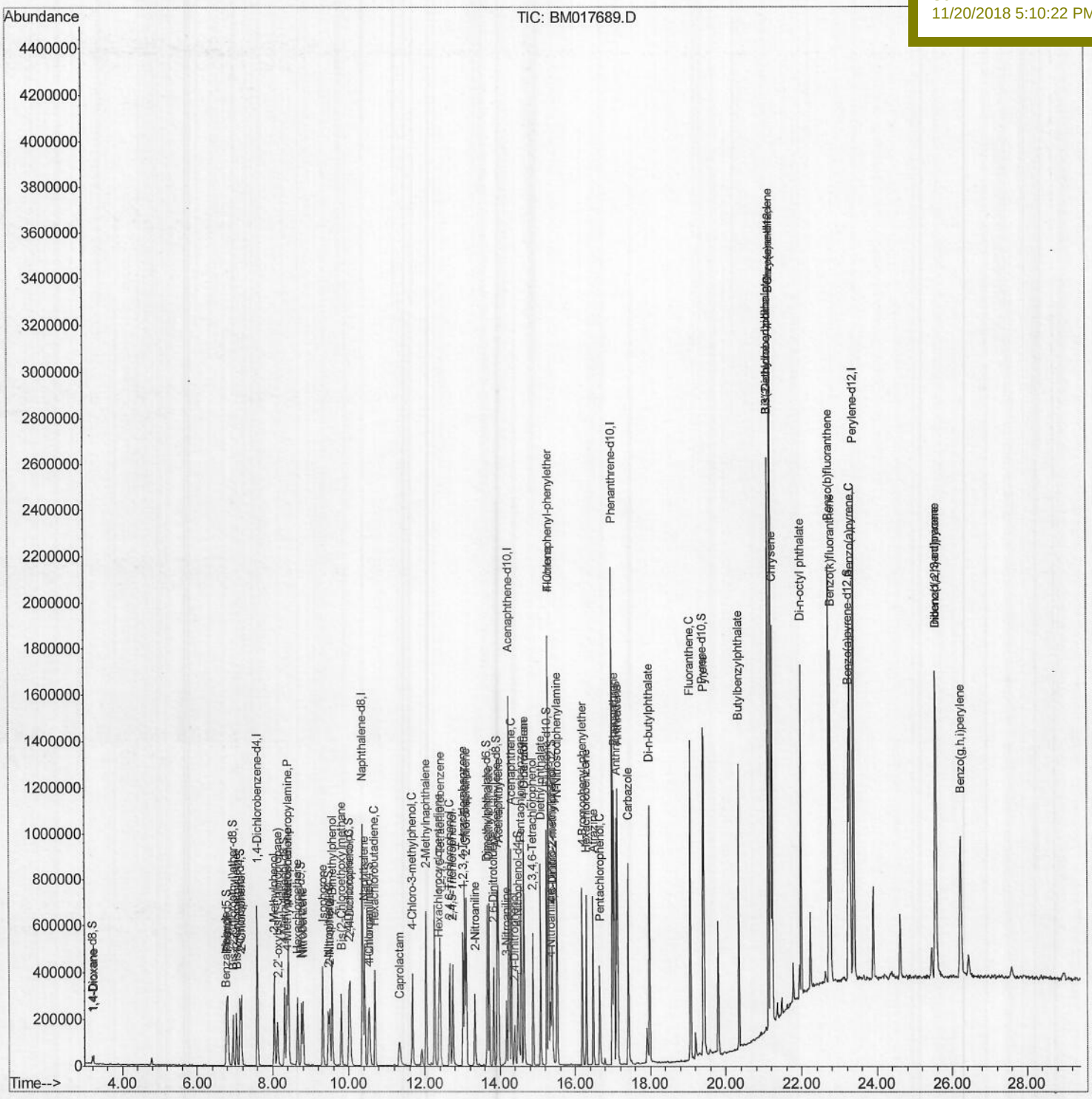
Quantitation Report (QT Reviewed)

Data File : BM017689.D
Acq On : 19 Nov 2018 19:02
Operator : MJ/SJ
Sample : SSTD01052
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 20 00:44:17 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD01052

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:22 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

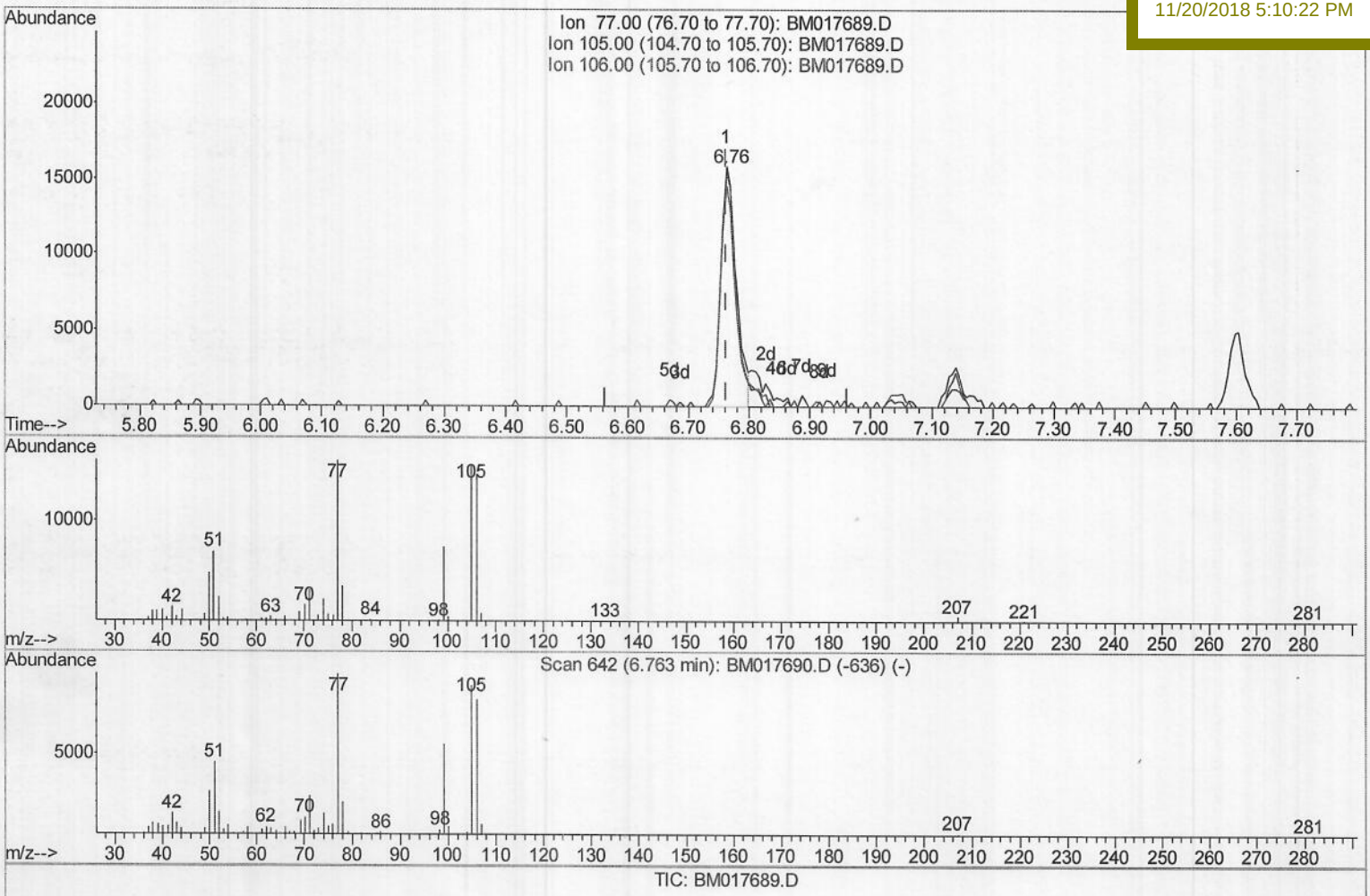
Quantitation Report (Qedit)

Data File : BM017689.D
Acq On : 19 Nov 2018 19:02
Operator : MJ/SJ
Sample : SSTD01052
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 20 00:23:52 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD01052

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:22 PM



TIC: BM017689.D

(4) Benzaldehyde

6.763min (-0.000) 8.72ng/ul

response 27938

Ion	Exp%	Act%
77.00	100	100
105.00	93.00	97.07
106.00	84.30	91.93
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

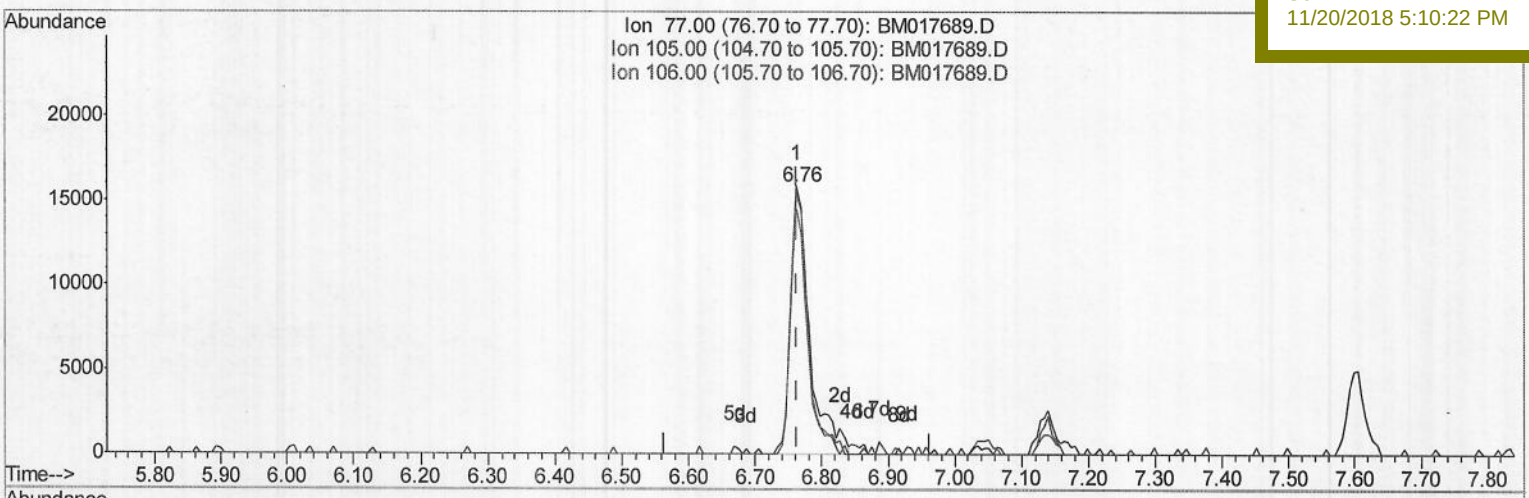
Quantitation Report (Qedit)

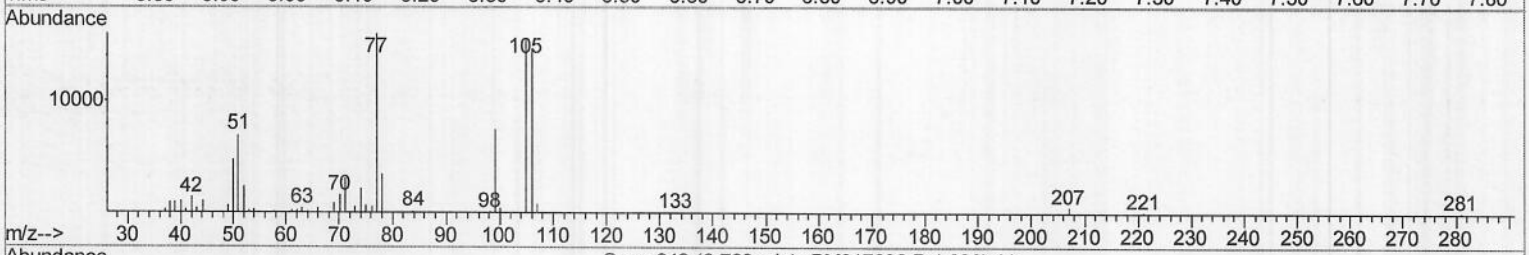
Data File : BM017689.D
Acq On : 19 Nov 2018 19:02
Operator : MJ/SJ
Sample : SSTD01052
Misc :
ALS Vial : 3 Sample Multiplier: 1

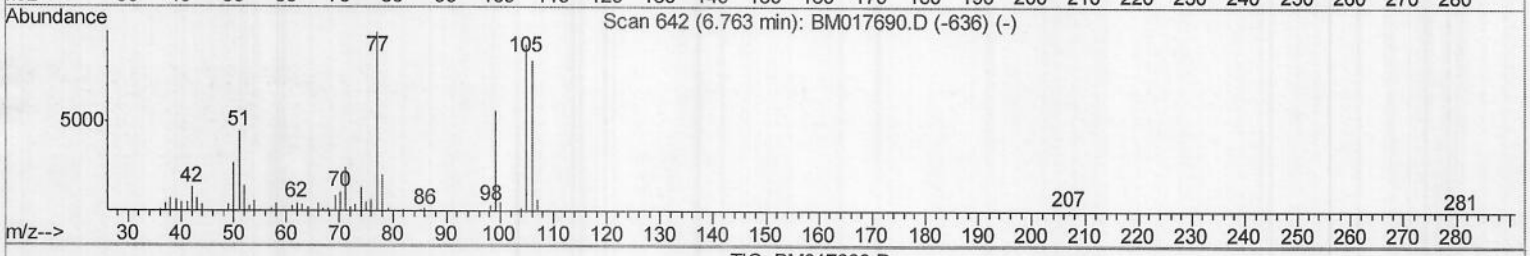
Quant Time: Nov 20 00:23:52 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD01052

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:22 PM







TIC: BM017689.D

(4) Benzaldehyde

6.763min (-0.000) 9.89ng/ul m

response 31668

SJ 11/20/18

Ion	Exp%	Act%
77.00	100	100
105.00	93.00	97.07
106.00	84.30	91.93
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

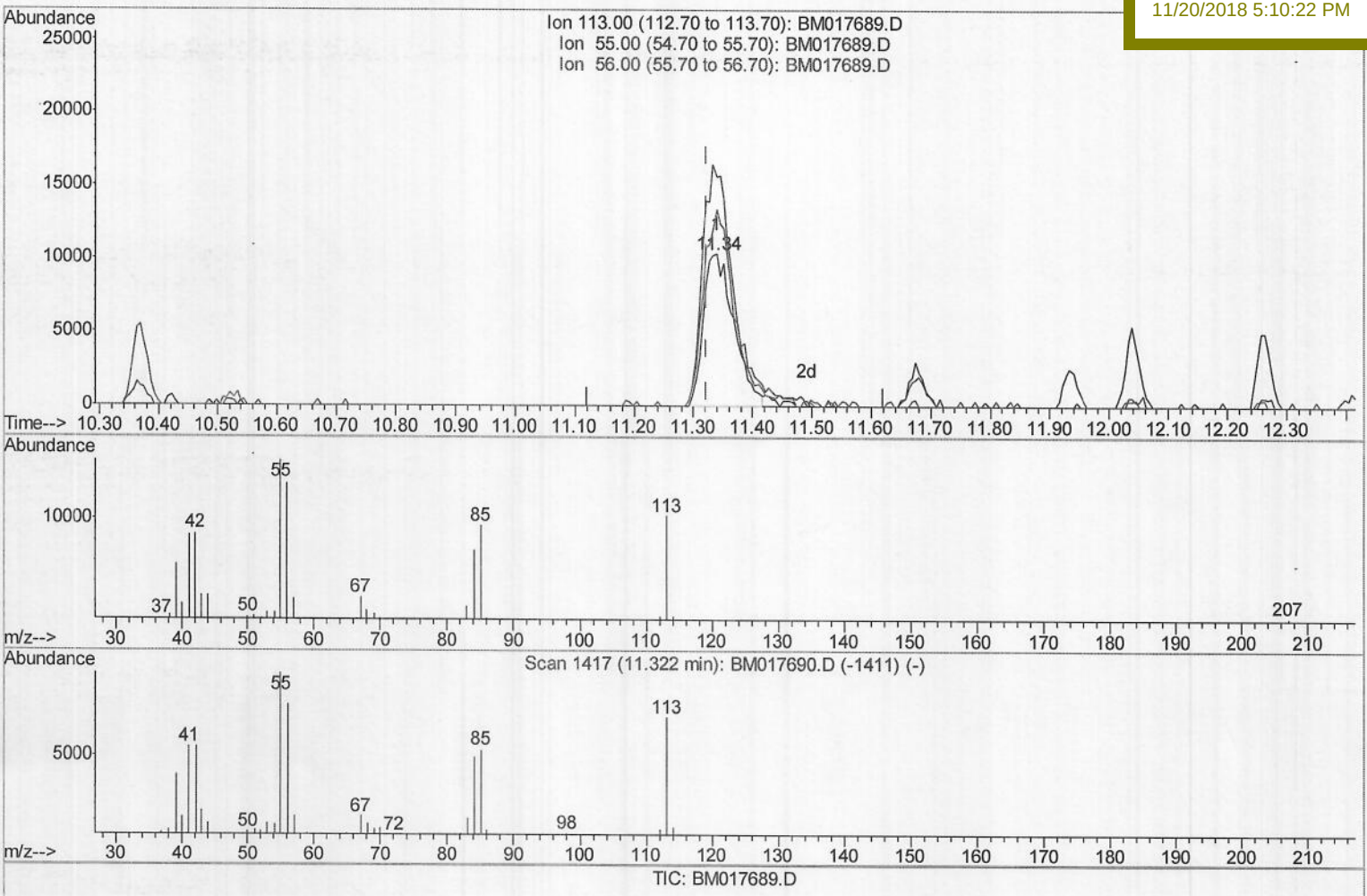
Quantitation Report (Qedit)

Data File : BM017689.D
Acq On : 19 Nov 2018 19:02
Operator : MJ/SJ
Sample : SSTD01052
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 20 00:23:52 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD01052

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:22 PM



TIC: BM017689.D

(32) Caprolactam

11.339min (+0.018) 9.94ng/ul

response 37213

Ion	Exp%	Act%
113.00	100	100
55.00	138.30	150.59
56.00	110.30	129.10
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

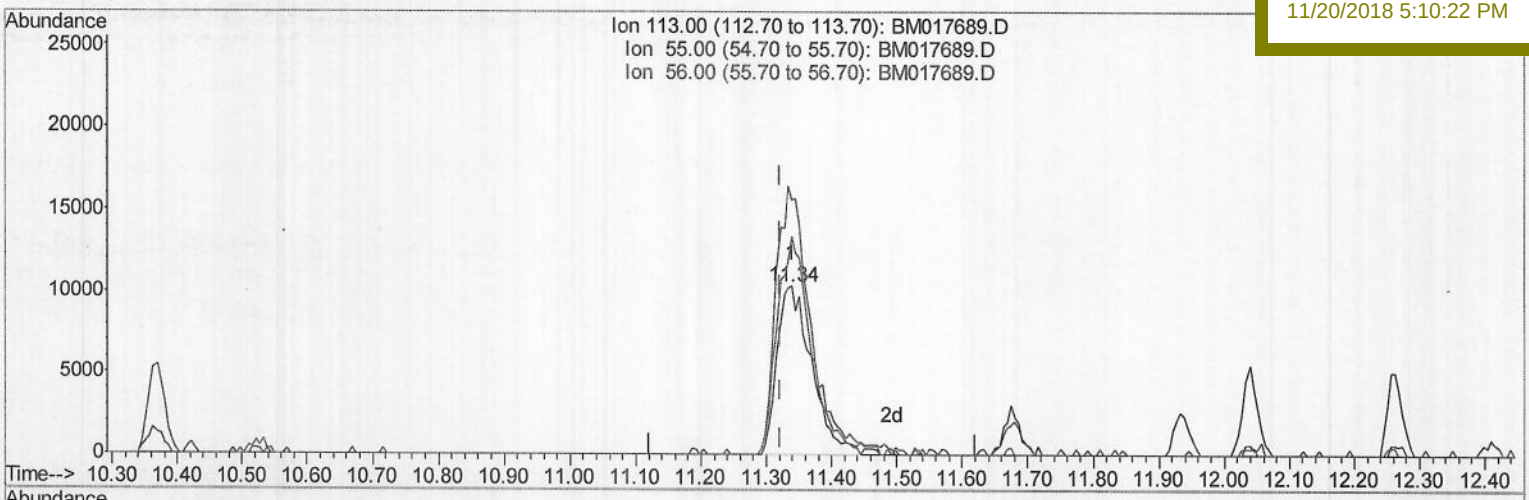
Quantitation Report (Qedit)

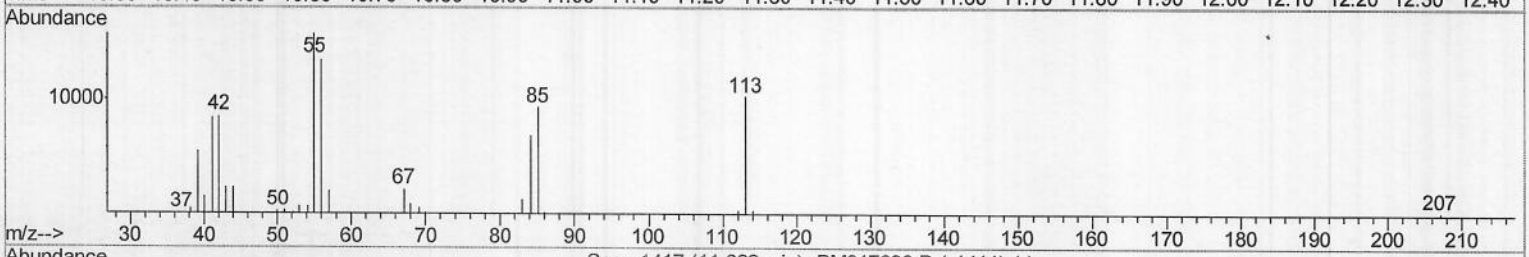
Data File : BM017689.D
Acq On : 19 Nov 2018 19:02
Operator : MJ/SJ
Sample : SSTD01052
Misc :
ALS Vial : 3 Sample Multiplier: 1

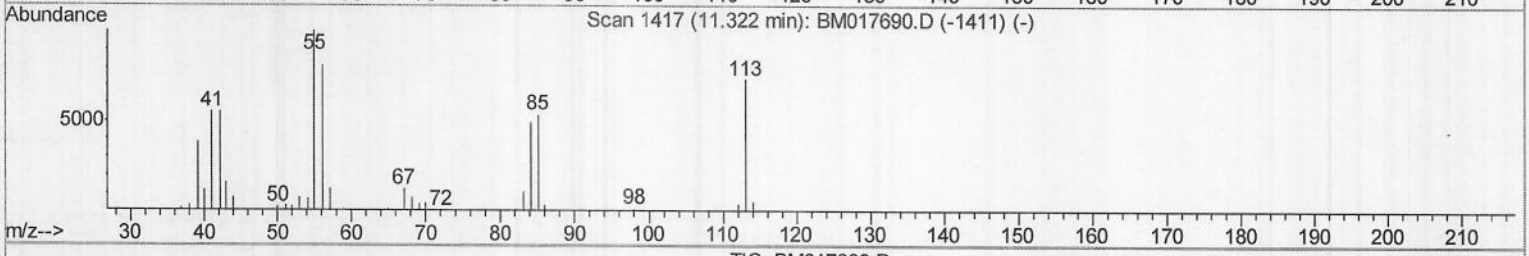
Quant Time: Nov 20 00:23:52 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD01052

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:22 PM







TIC: BM017689.D

(32) Caprolactam

11.339min (+0.018) 10.17ng/ul m

response 38053

SJ 11/20/18

Ion	Exp%	Act%
113.00	100	100
55.00	138.30	150.59
56.00	110.30	129.10
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

Quantitation Report (QT Reviewed)

Data File : BM017689.D
Acq On : 19 Nov 2018 19:02
Operator : MJ/SJ
Sample : SSTD01052
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 20 00:44:17 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : SSTD01052

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:22 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.60	152	181878	20.00	ng/ul	0.00
18) Naphthalene-d8	10.37	136	816619	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.24	164	508394	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.00	188	1204997	20.00	ng/ul	0.00
77) Chrysene-d12	21.20	240	1430591	20.00	ng/ul	0.00
85) Perylene-d12	23.39	264	1475801	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.19	96	16267	3.48	ng/uL	0.00
5) Phenol-d5	6.79	99	155843	9.24	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.95	67	99965	10.49	ng/ul	0.00
9) 2-Chlorophenol-d4	7.14	132	126136	10.01	ng/ul	0.00
13) 4-Methylphenol-d8	8.31	113	128290	9.90	ng/ul	0.00
19) Nitrobenzene-d5	8.75	128	60553	10.02	ng/ul	0.00
22) 2-Nitrophenol-d4	9.47	143	70561	10.80	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	10.00	165	131559	10.55	ng/ul	0.00
29) 4-Chloroaniline-d4	10.53	131	109709	10.10	ng/ul	0.00
43) Dimethylphthalate-d6	13.66	166	442738	11.29	ng/ul	0.00
46) Acenaphthylene-d8	13.93	160	528735	10.27	ng/ul	0.00
51) 4-Nitrophenol-d4	14.47	143	67996	9.59	ng/ul	0.00
57) Fluorene-d10	15.24	176	385105	10.78	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.38	200	72136	9.42	ng/ul	0.00
70) Anthracene-d10	17.10	188	598903	10.45	ng/ul	0.00
78) Pyrene-d10	19.40	212	683604	9.15	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.25	264	789144	9.92	ng/ul	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.22	88	17083	3.422	ng/uL#	86
4) Benzaldehyde	6.76	77	31668m	9.889	ng/ul	
6) Phenol	6.81	94	155055	9.141	ng/ul	97
8) Bis(2-Chloroethyl)ether	7.04	93	125466	10.412	ng/ul	99
10) 2-Chlorophenol	7.17	128	127359	9.958	ng/ul	97
11) 2-Methylphenol	8.05	108	118355	9.696	ng/ul	98
12) 2,2'-oxybis(1-Chloropropan	8.13	45	150631	11.155	ng/ul	96
14) Acetophenone	8.42	105	210896	10.582	ng/ul	98
15) N-Nitroso-di-n-propylamine	8.40	70	109085	11.739	ng/ul	98
16) 4-Methylphenol	8.37	108	129889	9.861	ng/ul	97
17) Hexachloroethane	8.66	117	51521	9.972	ng/ul	90
20) Nitrobenzene	8.80	77	157578	9.845	ng/ul	97
21) Isophorone	9.32	82	289286	11.363	ng/ul	100
23) 2-Nitrophenol	9.50	139	72660	10.462	ng/ul	99
24) 2,4-Dimethylphenol	9.56	107	156551	10.325	ng/ul	97
25) Bis(2-Chloroethoxy)methane	9.80	93	181162	11.347	ng/ul	99
27) 2,4-Dichlorophenol	10.03	162	126948	10.349	ng/ul	96
28) Naphthalene	10.42	128	430645	10.113	ng/ul	100
30) 4-Chloroaniline	10.55	127	111848	10.025	ng/ul	98
31) Hexachlorobutadiene	10.70	225	86343	10.433	ng/ul	98
32) Caprolactam	11.34	113	38053m	10.169	ng/ul	
33) 4-Chloro-3-methylphenol	11.67	107	144569	11.276	ng/ul	97
34) 2-Methylnaphthalene	12.04	142	317986	10.813	ng/ul	99

SJ 11/20/18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

Quantitation Report (QT Reviewed)

Data File : BM017689.D
Acq On : 19 Nov 2018 19:02
Operator : MJ/SJ
Sample : SSTD01052
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 20 00:44:17 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : SSTD01052

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:22 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.42	216	169073	9.607	ng/ul	98
37) Hexachlorocyclopentadiene	12.39	237	97039	9.817	ng/ul	98
38) 2,4,6-Trichlorophenol	12.67	196	106209	10.400	ng/ul	94
39) 2,4,5-Trichlorophenol	12.74	196	110809	9.749	ng/ul	99
40) 1,1'-Biphenyl	13.07	154	417501	9.932	ng/ul	98
41) 2-Chloronaphthalene	13.11	162	330244	9.808	ng/ul	99
42) 2-Nitroaniline	13.33	65	90671	9.994	ng/ul	98
44) Dimethylphthalate	13.71	163	436481	11.318	ng/ul	100
45) 2,6-Dinitrotoluene	13.84	165	79282	10.710	ng/ul	95
47) Acenaphthylene	13.96	152	496467	10.150	ng/ul	99
48) 3-Nitroaniline	14.17	138	69790	9.207	ng/ul	98
49) Acenaphthene	14.31	153	359378	9.950	ng/ul	98
50) 2,4-Dinitrophenol	14.39	184	41526	9.295	ng/ul	99
52) 4-Nitrophenol	14.49	109	60545	9.532	ng/ul	95
53) Dibenzofuran	14.64	168	513981	10.273	ng/ul	99
54) 2,4-Dinitrotoluene	14.63	165	123926	11.422	ng/ul	93
55) 2,3,4,6-Tetrachlorophenol	14.88	232	106425	11.381	ng/ul	100
56) Diethylphthalate	15.09	149	445729	12.374	ng/ul	98
58) Fluorene	15.30	166	426967	10.683	ng/ul	98
59) 4-Chlorophenyl-phenylether	15.30	204	217860	11.065	ng/ul	99
60) 4-Nitroaniline	15.34	138	74397	9.017	ng/ul	94
63) 4,6-Dinitro-2-methylphenol	15.40	198	77738	9.740	ng/ul	91
64) N-Nitrosodiphenylamine	15.52	169	368175	10.069	ng/ul	97
65) 4-Bromophenyl-phenylether	16.20	248	134687	10.504	ng/ul	95
66) Hexachlorobenzene	16.30	284	151278	9.945	ng/ul	93
67) Atrazine	16.48	200	131202	11.226	ng/ul	99
68) Pentachlorophenol	16.66	266	83300	10.152	ng/ul	96
69) Phenanthrene	17.04	178	692572	9.962	ng/ul	98
71) Anthracene	17.13	178	702991	10.137	ng/ul	99
72) 1,2,3,4-Tetrachlorobenzene	13.03	216	169393	8.714	ng/uL	98
73) Pentachlorobenzene	14.56	250	172812	9.249	ng/uL	97
74) Carbazole	17.42	167	613226	9.823	ng/ul	100
75) Di-n-butylphthalate	17.98	149	773021	14.227	ng/ul	99
76) Fluoranthene	19.07	202	834200	10.717	ng/ul	98
79) Pyrene	19.43	202	857404	8.948	ng/ul	99
80) Butylbenzylphthalate	20.35	149	353858	13.546	ng/ul	98
81) 3,3'-Dichlorobenzidine	21.13	252	257985	9.986	ng/ul	99
82) Benzo(a)anthracene	21.19	228	905110	10.524	ng/ul	99
83) Bis(2-ethylhexyl)phthalate	21.13	149	523368	16.106	ng/ul	99
84) Chrysene	21.24	228	848705	9.925	ng/ul	98
86) Di-n-octyl phthalate	21.99	149	890377	13.928	ng/ul	100
87) Benzo(b)fluoranthene	22.73	252	900607	9.975	ng/ul	98
88) Benzo(k)fluoranthene	22.78	252	879086	9.775	ng/ul	99
90) Benzo(a)pyrene	23.29	252	866056	9.875	ng/ul	99
91) Indeno(1,2,3-cd)pyrene	25.56	276	964554	10.905	ng/ul	99
92) Dibenzo(a,h)anthracene	25.57	278	814526	11.078	ng/ul	99
93) Benzo(g,h,i)perylene	26.23	276	783059	10.237	ng/ul	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

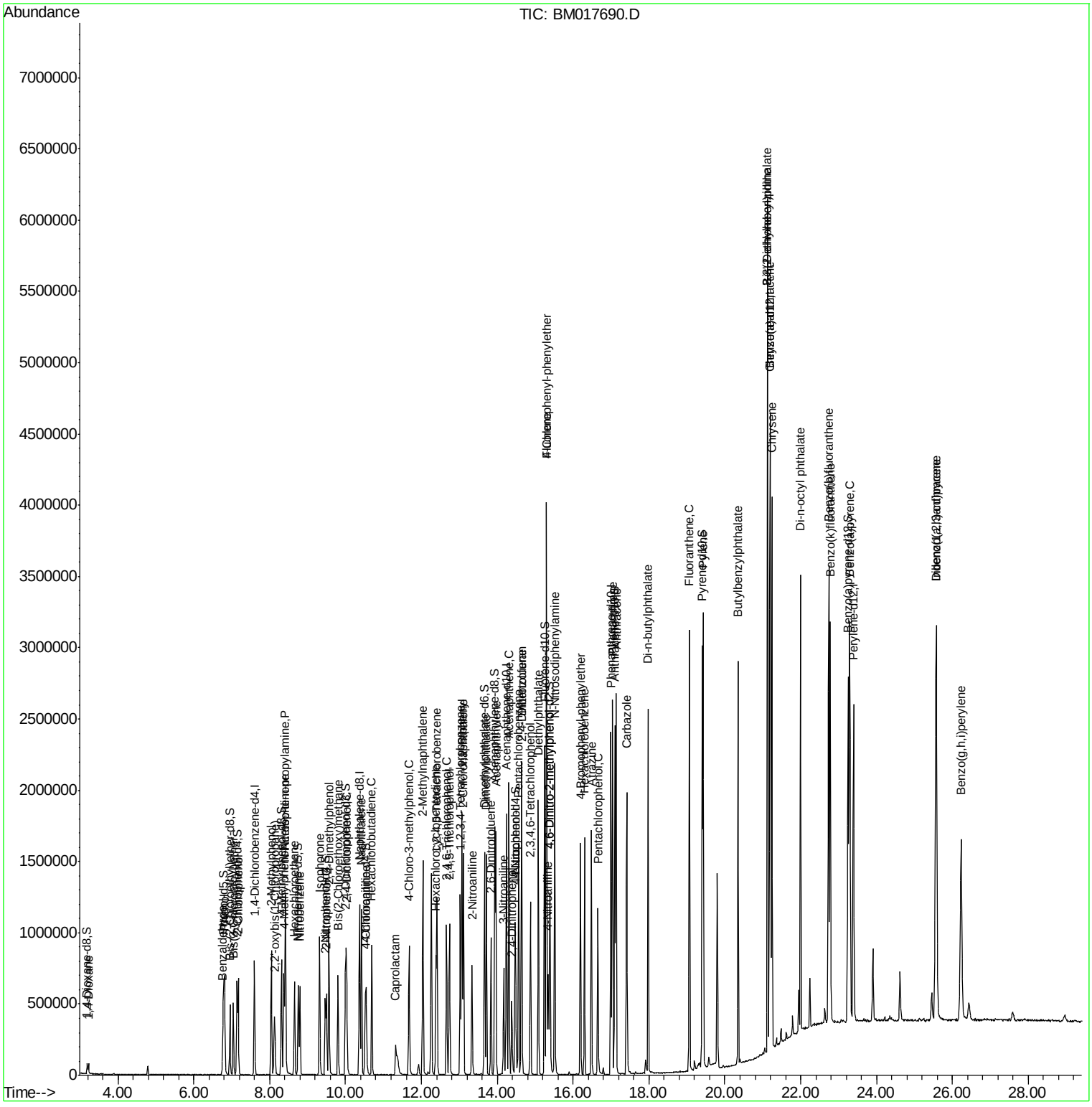
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017690.D
Acq On : 19 Nov 2018 19:38
Operator : MJ/SJ
Sample : SSTD02053
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 20 00:47:08 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02053

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:24 PM



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017690.D
Acq On : 19 Nov 2018 19:38
Operator : MJ/SJ
Sample : SSTD02053
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTD02053

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:24 PM

Quant Time: Nov 20 00:47:08 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.60	152	204514	20.00	ng/ul	0.00
18) Naphthalene-d8	10.37	136	925685	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.25	164	573806	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.00	188	1341561	20.00	ng/ul	0.00
77) Chrysene-d12	21.20	240	1571668	20.00	ng/ul	0.00
85) Perylene-d12	23.39	264	1533861	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.19	96	34787	6.61	ng/uL	0.00
5) Phenol-d5	6.79	99	350941	18.50	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.95	67	219261	20.46	ng/ul	0.00
9) 2-Chlorophenol-d4	7.13	132	287491	20.29	ng/ul	0.00
13) 4-Methylphenol-d8	8.31	113	292767	20.08	ng/ul	0.00
19) Nitrobenzene-d5	8.75	128	142398	20.78	ng/ul	0.00
22) 2-Nitrophenol-d4	9.47	143	162035	21.89	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	10.00	165	310441	21.96	ng/ul	0.00
29) 4-Chloroaniline-d4	10.52	131	270046	21.92	ng/ul	0.00
43) Dimethylphthalate-d6	13.66	166	983259	22.22	ng/ul	0.00
46) Acenaphthylene-d8	13.93	160	1203042	20.70	ng/ul	0.00
51) 4-Nitrophenol-d4	14.47	143	175523	21.94	ng/ul	0.00
57) Fluorene-d10	15.24	176	847011	21.01	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.38	200	179426	21.04	ng/ul	0.00
70) Anthracene-d10	17.10	188	1320888	20.70	ng/ul	0.00
78) Pyrene-d10	19.40	212	1498967	18.26	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.25	264	1656104	20.03	ng/ul	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.22	88	37018	6.594	ng/uL	100
4) Benzaldehyde	6.76	77	70875	19.684	ng/ul	100
6) Phenol	6.81	94	354225	18.572	ng/ul	100
8) Bis(2-Chloroethyl)ether	7.04	93	276926	20.437	ng/ul	100
10) 2-Chlorophenol	7.17	128	290401	20.193	ng/ul	100
11) 2-Methylphenol	8.05	108	271176	19.757	ng/ul	100
12) 2,2'-oxybis(1-Chloropropan	8.13	45	330595	21.772	ng/ul	100
14) Acetophenone	8.42	105	456337	20.364	ng/ul	100
15) N-Nitroso-di-n-propylamine	8.40	70	246418	23.582	ng/ul	100
16) 4-Methylphenol	8.37	108	294453	19.881	ng/ul	100
17) Hexachloroethane	8.66	117	116123	19.988	ng/ul	100
20) Nitrobenzene	8.79	77	351777	19.389	ng/ul	100
21) Isophorone	9.32	82	662137	22.943	ng/ul	100
23) 2-Nitrophenol	9.50	139	171691	21.809	ng/ul	100
24) 2,4-Dimethylphenol	9.56	107	351304	20.440	ng/ul	100
25) Bis(2-Chloroethoxy)methane	9.80	93	403508	22.296	ng/ul	100
27) 2,4-Dichlorophenol	10.03	162	295399	21.243	ng/ul	100
28) Naphthalene	10.42	128	950804	19.697	ng/ul	100
30) 4-Chloroaniline	10.55	127	276857	21.890	ng/ul	100
31) Hexachlorobutadiene	10.70	225	193129	20.586	ng/ul	100
32) Caprolactam	11.32	113	94891m	22.371	ng/ul	
33) 4-Chloro-3-methylphenol	11.67	107	327570	22.539	ng/ul	100
34) 2-Methylnaphthalene	12.04	142	709724	21.291	ng/ul	100

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017690.D
Acq On : 19 Nov 2018 19:38
Operator : MJ/SJ
Sample : SSTD02053
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTD02053

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:24 PM

Quant Time: Nov 20 00:47:08 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.42	216	375667	18.913	ng/ul	100
37) Hexachlorocyclopentadiene	12.39	237	229029	20.529	ng/ul	100
38) 2,4,6-Trichlorophenol	12.66	196	247482	21.472	ng/ul	100
39) 2,4,5-Trichlorophenol	12.74	196	264974	20.654	ng/ul	100
40) 1,1'-Biphenyl	13.07	154	925750	19.513	ng/ul	100
41) 2-Chloronaphthalene	13.11	162	724500	19.064	ng/ul	100
42) 2-Nitroaniline	13.33	65	216401	21.134	ng/ul	100
44) Dimethylphthalate	13.72	163	950100	21.828	ng/ul	100
45) 2,6-Dinitrotoluene	13.84	165	191738	22.948	ng/ul	100
47) Acenaphthylene	13.96	152	1115561	20.208	ng/ul	100
48) 3-Nitroaniline	14.17	138	175766	20.545	ng/ul	100
49) Acenaphthene	14.31	153	800465	19.635	ng/ul	100
50) 2,4-Dinitrophenol	14.38	184	114769	22.761	ng/ul	100
52) 4-Nitrophenol	14.49	109	145499	20.295	ng/ul	100
53) Dibenzofuran	14.64	168	1134507	20.091	ng/ul	100
54) 2,4-Dinitrotoluene	14.63	165	290090	23.690	ng/ul	100
55) 2,3,4,6-Tetrachlorophenol	14.88	232	243389	23.061	ng/ul	100
56) Diethylphthalate	15.09	149	983964	24.202	ng/ul	100
58) Fluorene	15.30	166	945163	20.953	ng/ul	100
59) 4-Chlorophenyl-phenylether	15.30	204	485106	21.829	ng/ul	100
60) 4-Nitroaniline	15.34	138	186105	19.984	ng/ul	100
63) 4,6-Dinitro-2-methylphenol	15.39	198	186977	21.041	ng/ul	100
64) N-Nitrosodiphenylamine	15.52	169	827761	20.334	ng/ul	100
65) 4-Bromophenyl-phenylether	16.20	248	304846	21.354	ng/ul	100
66) Hexachlorobenzene	16.30	284	337958	19.956	ng/ul	100
67) Atrazine	16.48	200	301060	23.137	ng/ul	100
68) Pentachlorophenol	16.65	266	197358	21.604	ng/ul	100
69) Phenanthrene	17.04	178	1520516	19.644	ng/ul	100
71) Anthracene	17.13	178	1557873	20.178	ng/ul	100
72) 1,2,3,4-Tetrachlorobenzene	13.03	216	373673	17.266	ng/uL	100
73) Pentachlorobenzene	14.56	250	386123	18.563	ng/uL	100
74) Carbazole	17.42	167	1361302	19.587	ng/ul	100
75) Di-n-butylphthalate	17.98	149	1739311	28.753	ng/ul	100
76) Fluoranthene	19.07	202	1842525	21.262	ng/ul	100
79) Pyrene	19.43	202	1884035	17.898	ng/ul	100
80) Butylbenzylphthalate	20.34	149	816233	28.441	ng/ul	100
81) 3,3'-Dichlorobenzidine	21.13	252	633769	22.329	ng/ul	100
82) Benzo(a)anthracene	21.19	228	1934823	20.477	ng/ul	100
83) Bis(2-ethylhexyl)phthalate	21.13	149	1209097	33.869	ng/ul	100
84) Chrysene	21.24	228	1794985	19.107	ng/ul	100
86) Di-n-octyl phthalate	22.00	149	1989666	29.946	ng/ul	100
87) Benzo(b)fluoranthene	22.74	252	1843958	19.650	ng/ul	100
88) Benzo(k)fluoranthene	22.78	252	1861838	19.919	ng/ul	100
90) Benzo(a)pyrene	23.30	252	1790081	19.637	ng/ul	100
91) Indeno(1,2,3-cd)pyrene	25.57	276	1896263	20.627	ng/ul	100
92) Dibenzo(a,h)anthracene	25.58	278	1592682	20.842	ng/ul	100
93) Benzo(g,h,i)perylene	26.23	276	1516660	19.077	ng/ul	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

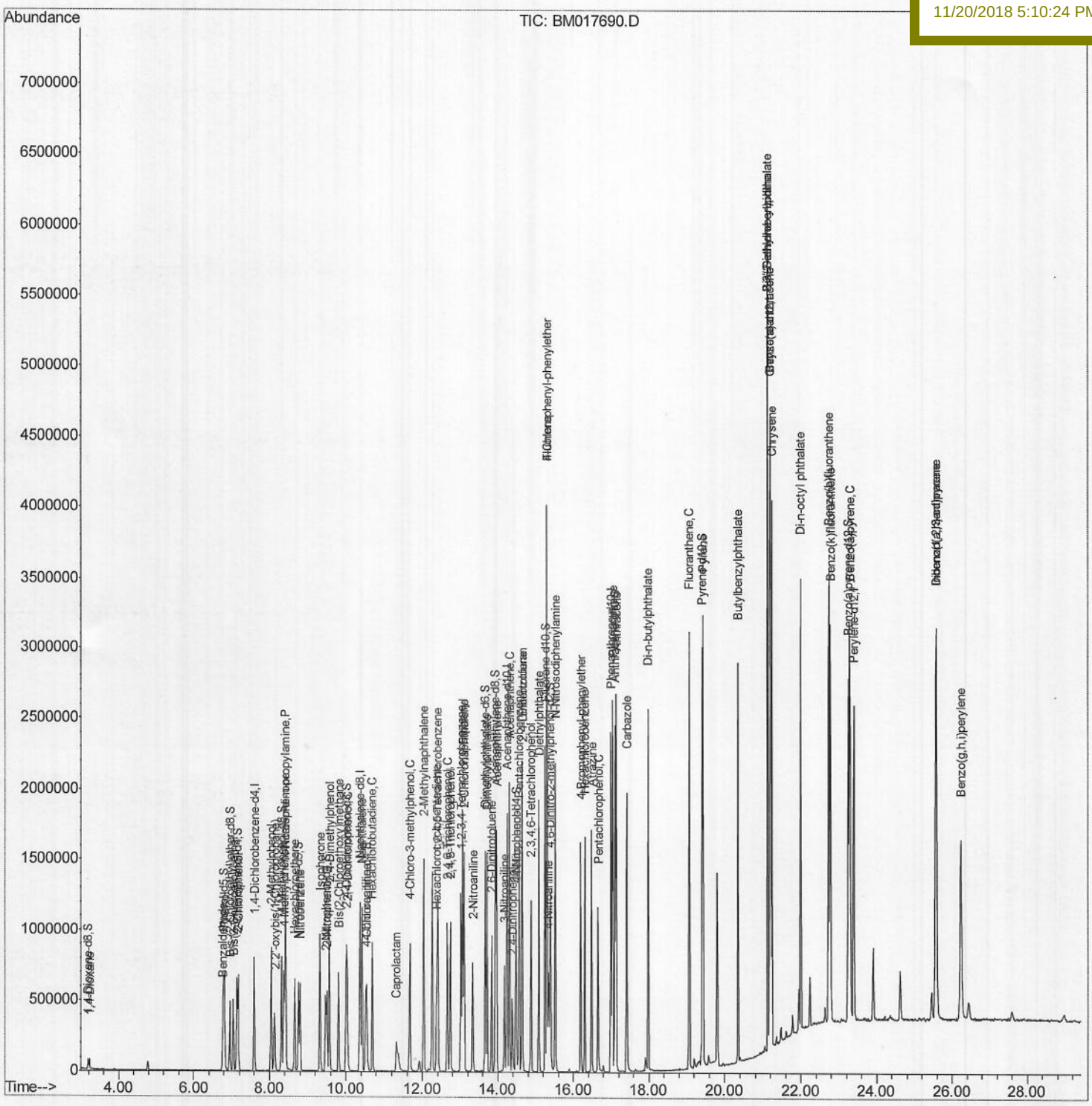
Quantitation Report (QT Reviewed)

Data File : BM017690.D
Acq On : 19 Nov 2018 19:38
Operator : MJ/SJ
Sample : SSTD02053
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 20 00:47:08 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02053

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:24 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

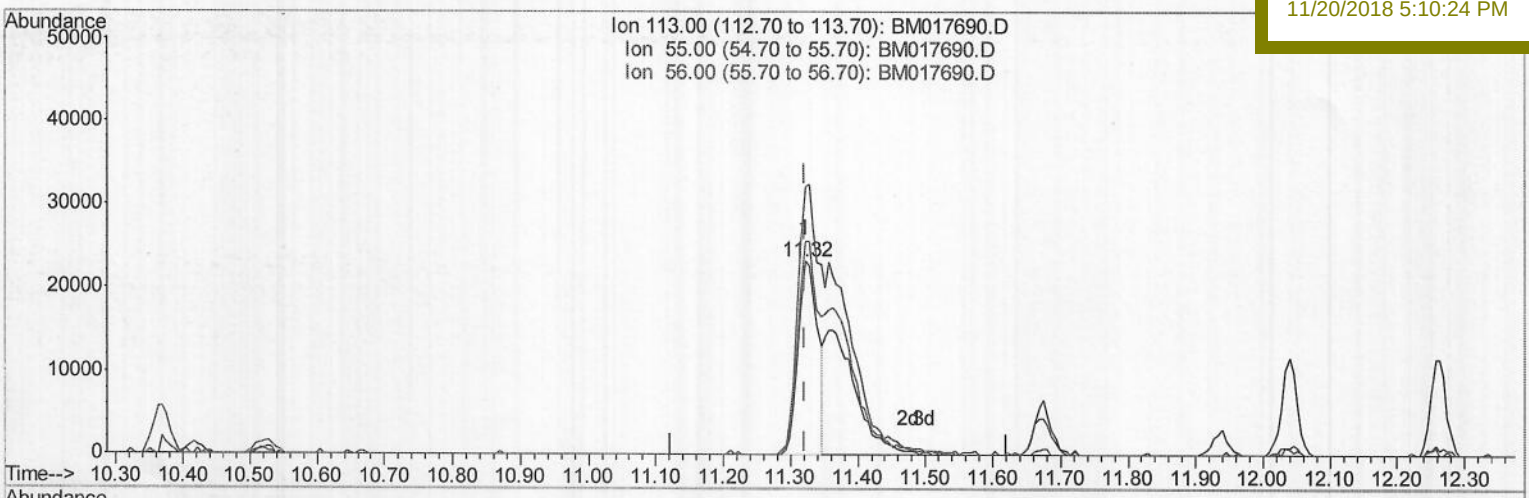
Quantitation Report (Qedit)

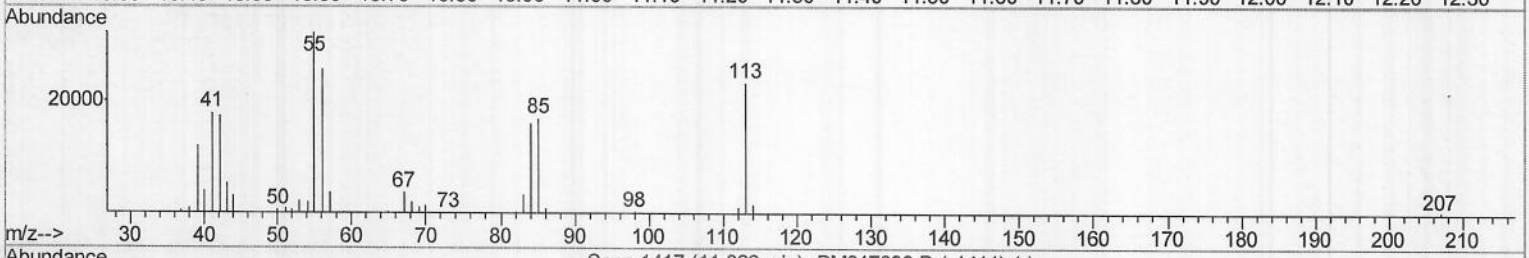
Data File : BM017690.D
Acq On : 19 Nov 2018 19:38
Operator : MJ/SJ
Sample : SSTD02053
Misc :
ALS Vial : 4 Sample Multiplier: 1

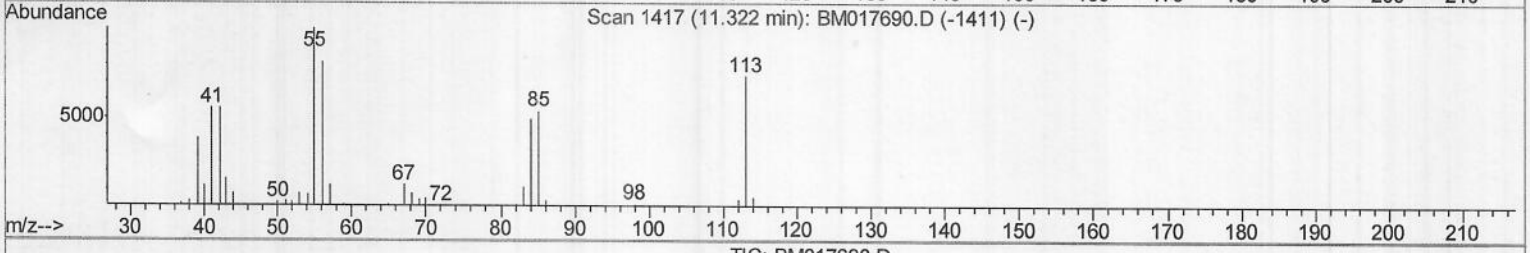
Quant Time: Nov 20 00:24:24 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02053

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:24 PM







TIC: BM017690.D

(32) Caprolactam

11.322min (0.000) 10.87ng/ul

response 46106

Ion	Exp%	Act%
113.00	100	100
55.00	138.30	138.34
56.00	110.30	110.28
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

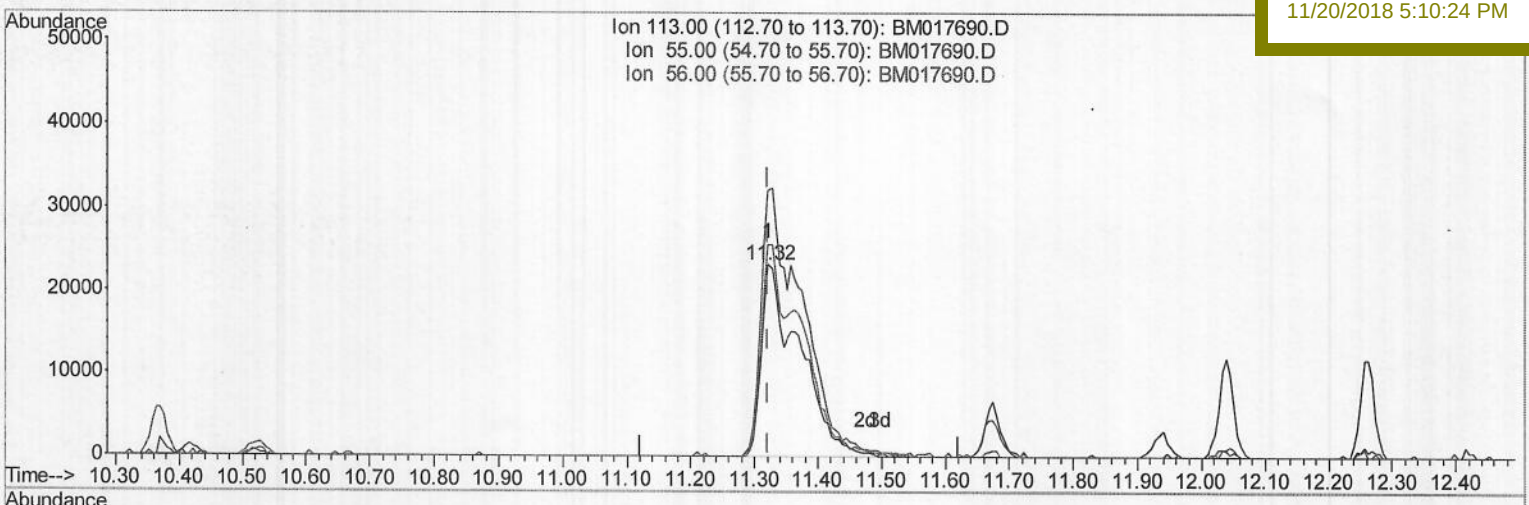
Quantitation Report (Qedit)

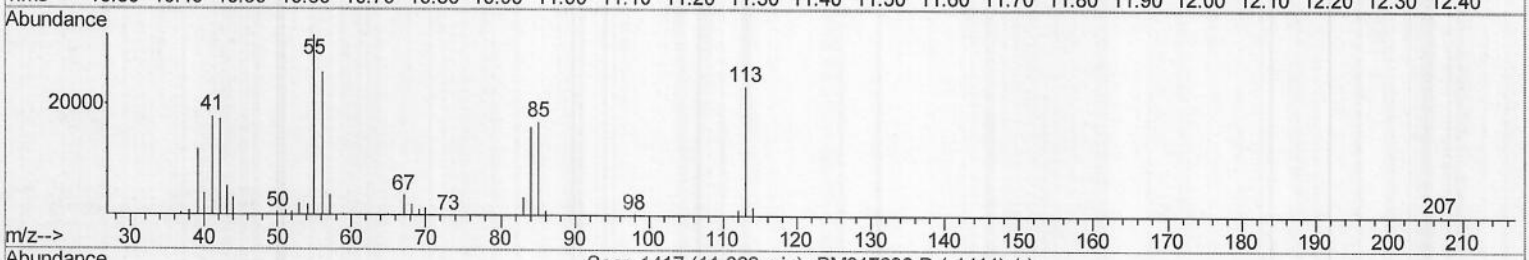
Data File : BM017690.D
Acq On : 19 Nov 2018 19:38
Operator : MJ/SJ
Sample : SSTD02053
Misc :
ALS Vial : 4 Sample Multiplier: 1

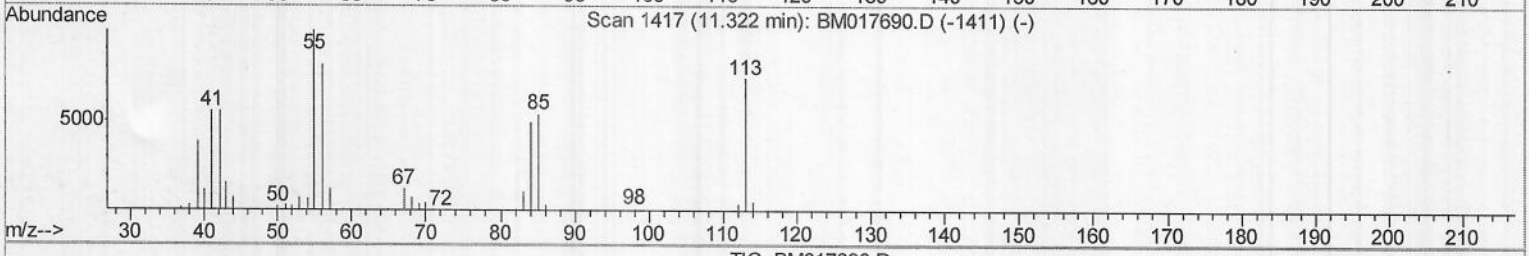
Quant Time: Nov 20 00:24:24 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02053

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:24 PM







TIC: BM017690.D

(32) Caprolactam

11.322min (0.000) 22.37ng/ul m

response 94891

SJ 11/20/18

Ion	Exp%	Act%
113.00	100	100
55.00	138.30	138.34
56.00	110.30	110.28
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

Quantitation Report (QT Reviewed)

Data File : BM017690.D
Acq On : 19 Nov 2018 19:38
Operator : MJ/SJ
Sample : SSTD02053
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 20 00:47:08 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : SSTD02053

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:24 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.60	152	204514	20.00	ng/ul	0.00
18) Naphthalene-d8	10.37	136	925685	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.25	164	573806	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.00	188	1341561	20.00	ng/ul	0.00
77) Chrysene-d12	21.20	240	1571668	20.00	ng/ul	0.00
85) Perylene-d12	23.39	264	1533861	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.19	96	34787	6.61	ng/uL	0.00
5) Phenol-d5	6.79	99	350941	18.50	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.95	67	219261	20.46	ng/ul	0.00
9) 2-Chlorophenol-d4	7.13	132	287491	20.29	ng/ul	0.00
13) 4-Methylphenol-d8	8.31	113	292767	20.08	ng/ul	0.00
19) Nitrobenzene-d5	8.75	128	142398	20.78	ng/ul	0.00
22) 2-Nitrophenol-d4	9.47	143	162035	21.89	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	10.00	165	310441	21.96	ng/ul	0.00
29) 4-Chloroaniline-d4	10.52	131	270046	21.92	ng/ul	0.00
43) Dimethylphthalate-d6	13.66	166	983259	22.22	ng/ul	0.00
46) Acenaphthylene-d8	13.93	160	1203042	20.70	ng/ul	0.00
51) 4-Nitrophenol-d4	14.47	143	175523	21.94	ng/ul	0.00
57) Fluorene-d10	15.24	176	847011	21.01	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.38	200	179426	21.04	ng/ul	0.00
70) Anthracene-d10	17.10	188	1320888	20.70	ng/ul	0.00
78) Pyrene-d10	19.40	212	1498967	18.26	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.25	264	1656104	20.03	ng/ul	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.22	88	37018	6.594	ng/uL	100
4) Benzaldehyde	6.76	77	70875	19.684	ng/ul	100
6) Phenol	6.81	94	354225	18.572	ng/ul	100
8) Bis(2-Chloroethyl)ether	7.04	93	276926	20.437	ng/ul	100
10) 2-Chlorophenol	7.17	128	290401	20.193	ng/ul	100
11) 2-Methylphenol	8.05	108	271176	19.757	ng/ul	100
12) 2,2'-oxybis(1-Chloropropan	8.13	45	330595	21.772	ng/ul	100
14) Acetophenone	8.42	105	456337	20.364	ng/ul	100
15) N-Nitroso-di-n-propylamine	8.40	70	246418	23.582	ng/ul	100
16) 4-Methylphenol	8.37	108	294453	19.881	ng/ul	100
17) Hexachloroethane	8.66	117	116123	19.988	ng/ul	100
20) Nitrobenzene	8.79	77	351777	19.389	ng/ul	100
21) Isophorone	9.32	82	662137	22.943	ng/ul	100
23) 2-Nitrophenol	9.50	139	171691	21.809	ng/ul	100
24) 2,4-Dimethylphenol	9.56	107	351304	20.440	ng/ul	100
25) Bis(2-Chloroethoxy)methane	9.80	93	403508	22.296	ng/ul	100
27) 2,4-Dichlorophenol	10.03	162	295399	21.243	ng/ul	100
28) Naphthalene	10.42	128	950804	19.697	ng/ul	100
30) 4-Chloroaniline	10.55	127	276857	21.890	ng/ul	100
31) Hexachlorobutadiene	10.70	225	193129	20.586	ng/ul	100
32) Caprolactam	11.32	113	94891m	22.371	ng/ul	
33) 4-Chloro-3-methylphenol	11.67	107	327570	22.539	ng/ul	100
34) 2-Methylnaphthalene	12.04	142	709724	21.291	ng/ul	100

SJ 11/20/18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

Quantitation Report (QT Reviewed)

Data File : BM017690.D
Acq On : 19 Nov 2018 19:38
Operator : MJ/SJ
Sample : SSTD02053
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 20 00:47:08 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02053

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:24 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.42	216	375667	18.913	ng/ul	100
37) Hexachlorocyclopentadiene	12.39	237	229029	20.529	ng/ul	100
38) 2,4,6-Trichlorophenol	12.66	196	247482	21.472	ng/ul	100
39) 2,4,5-Trichlorophenol	12.74	196	264974	20.654	ng/ul	100
40) 1,1'-Biphenyl	13.07	154	925750	19.513	ng/ul	100
41) 2-Chloronaphthalene	13.11	162	724500	19.064	ng/ul	100
42) 2-Nitroaniline	13.33	65	216401	21.134	ng/ul	100
44) Dimethylphthalate	13.72	163	950100	21.828	ng/ul	100
45) 2,6-Dinitrotoluene	13.84	165	191738	22.948	ng/ul	100
47) Acenaphthylene	13.96	152	1115561	20.208	ng/ul	100
48) 3-Nitroaniline	14.17	138	175766	20.545	ng/ul	100
49) Acenaphthene	14.31	153	800465	19.635	ng/ul	100
50) 2,4-Dinitrophenol	14.38	184	114769	22.761	ng/ul	100
52) 4-Nitrophenol	14.49	109	145499	20.295	ng/ul	100
53) Dibenzofuran	14.64	168	1134507	20.091	ng/ul	100
54) 2,4-Dinitrotoluene	14.63	165	290090	23.690	ng/ul	100
55) 2,3,4,6-Tetrachlorophenol	14.88	232	243389	23.061	ng/ul	100
56) Diethylphthalate	15.09	149	983964	24.202	ng/ul	100
58) Fluorene	15.30	166	945163	20.953	ng/ul	100
59) 4-Chlorophenyl-phenylether	15.30	204	485106	21.829	ng/ul	100
60) 4-Nitroaniline	15.34	138	186105	19.984	ng/ul	100
63) 4,6-Dinitro-2-methylphenol	15.39	198	186977	21.041	ng/ul	100
64) N-Nitrosodiphenylamine	15.52	169	827761	20.334	ng/ul	100
65) 4-Bromophenyl-phenylether	16.20	248	304846	21.354	ng/ul	100
66) Hexachlorobenzene	16.30	284	337958	19.956	ng/ul	100
67) Atrazine	16.48	200	301060	23.137	ng/ul	100
68) Pentachlorophenol	16.65	266	197358	21.604	ng/ul	100
69) Phenanthrene	17.04	178	1520516	19.644	ng/ul	100
71) Anthracene	17.13	178	1557873	20.178	ng/ul	100
72) 1,2,3,4-Tetrachlorobenzene	13.03	216	373673	17.266	ng/uL	100
73) Pentachlorobenzene	14.56	250	386123	18.563	ng/uL	100
74) Carbazole	17.42	167	1361302	19.587	ng/ul	100
75) Di-n-butylphthalate	17.98	149	1739311	28.753	ng/ul	100
76) Fluoranthene	19.07	202	1842525	21.262	ng/ul	100
79) Pyrene	19.43	202	1884035	17.898	ng/ul	100
80) Butylbenzylphthalate	20.34	149	816233	28.441	ng/ul	100
81) 3,3'-Dichlorobenzidine	21.13	252	633769	22.329	ng/ul	100
82) Benzo(a)anthracene	21.19	228	1934823	20.477	ng/ul	100
83) Bis(2-ethylhexyl)phthalate	21.13	149	1209097	33.869	ng/ul	100
84) Chrysene	21.24	228	1794985	19.107	ng/ul	100
86) Di-n-octyl phthalate	22.00	149	1989666	29.946	ng/ul	100
87) Benzo(b)fluoranthene	22.74	252	1843958	19.650	ng/ul	100
88) Benzo(k)fluoranthene	22.78	252	1861838	19.919	ng/ul	100
90) Benzo(a)pyrene	23.30	252	1790081	19.637	ng/ul	100
91) Indeno(1,2,3-cd)pyrene	25.57	276	1896263	20.627	ng/ul	100
92) Dibenzo(a,h)anthracene	25.58	278	1592682	20.842	ng/ul	100
93) Benzo(g,h,i)perylene	26.23	276	1516660	19.077	ng/ul	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

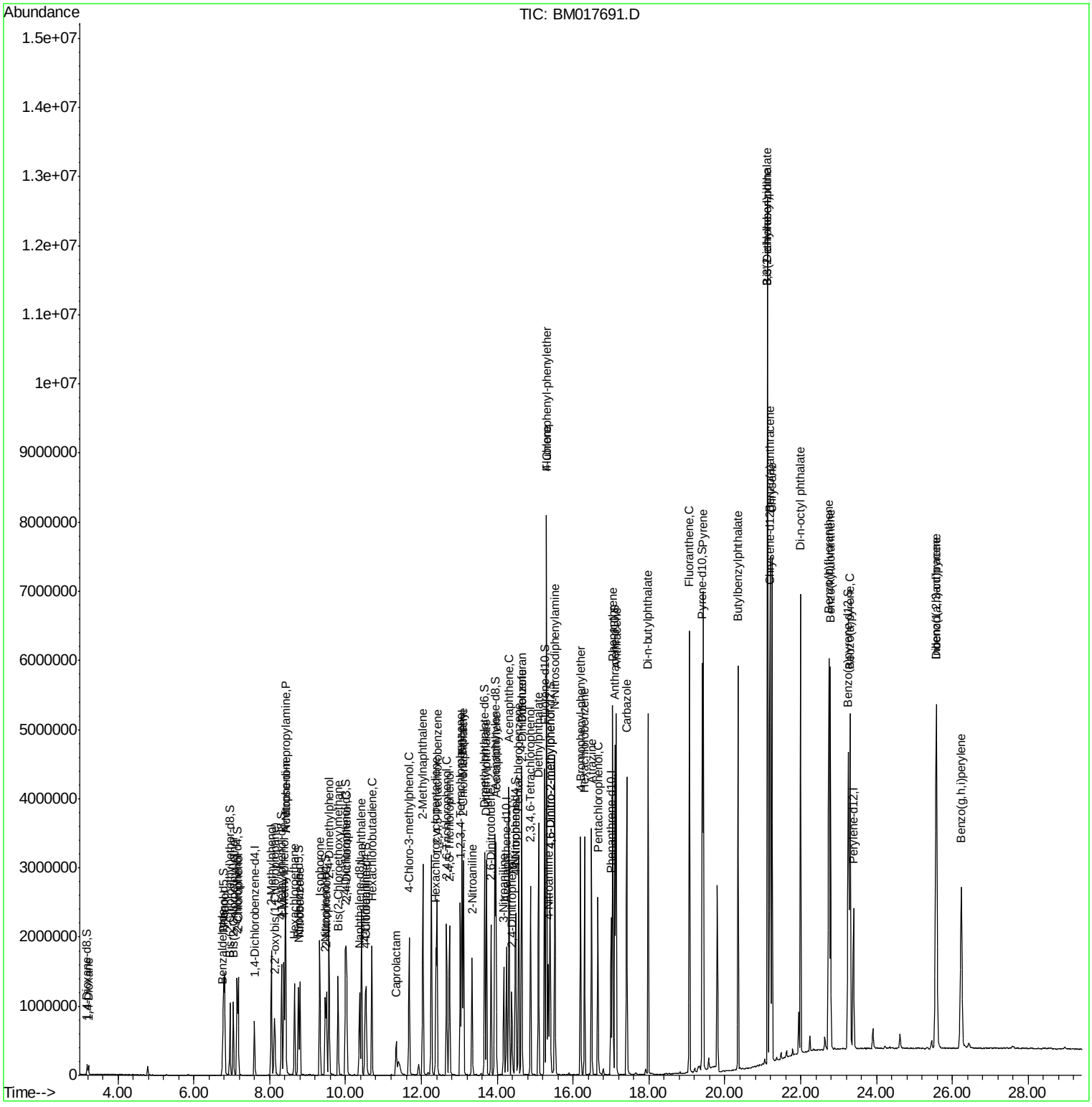
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017691.D
Acq On : 19 Nov 2018 20:14
Operator : MJ/SJ
Sample : SSTD04054
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 20 00:50:25 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD04054

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:26 PM



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017691.D
Acq On : 19 Nov 2018 20:14
Operator : MJ/SJ
Sample : SSTD04054
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTD04054

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:26 PM

Quant Time: Nov 20 00:50:25 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.60	152	200252	20.00	ng/ul	0.00
18) Naphthalene-d8	10.37	136	925401	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.24	164	572805	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.00	188	1332110	20.00	ng/ul	0.00
77) Chrysene-d12	21.20	240	1531864	20.00	ng/ul	0.00
85) Perylene-d12	23.39	264	1436152	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.19	96	70123	13.62	ng/uL	0.00
5) Phenol-d5	6.79	99	740715	39.87	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.95	67	445307	42.44	ng/ul	0.00
9) 2-Chlorophenol-d4	7.14	132	592633	42.72	ng/ul	0.00
13) 4-Methylphenol-d8	8.32	113	608064	42.60	ng/ul	0.00
19) Nitrobenzene-d5	8.76	128	296302	43.25	ng/ul	0.00
22) 2-Nitrophenol-d4	9.47	143	342915	46.33	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	10.00	165	643830	45.56	ng/ul	0.00
29) 4-Chloroaniline-d4	10.52	131	560898	45.55	ng/ul	0.00
43) Dimethylphthalate-d6	13.67	166	1990915	45.06	ng/ul	0.00
46) Acenaphthylene-d8	13.94	160	2462208	42.45	ng/ul	0.00
51) 4-Nitrophenol-d4	14.47	143	373388	46.76	ng/ul	0.00
57) Fluorene-d10	15.24	176	1701795	42.29	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.39	200	386268	45.62	ng/ul	0.00
70) Anthracene-d10	17.10	188	2676448	42.24	ng/ul	0.00
78) Pyrene-d10	19.40	212	3009812	37.61	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.26	264	3200719	41.34	ng/ul	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.22	88	71725	13.049	ng/uL	91
4) Benzaldehyde	6.76	77	136551	38.730	ng/ul	93
6) Phenol	6.81	94	740984	39.677	ng/ul	99
8) Bis(2-Chloroethyl)ether	7.04	93	567356	42.762	ng/ul	99
10) 2-Chlorophenol	7.17	128	586038	41.618	ng/ul	99
11) 2-Methylphenol	8.05	108	566475	42.151	ng/ul	99
12) 2,2'-oxybis(1-Chloropropan	8.13	45	663850	44.650	ng/ul	99
14) Acetophenone	8.42	105	933924	42.563	ng/ul	98
15) N-Nitroso-di-n-propylamine	8.42	70	501340	48.999	ng/ul	99
16) 4-Methylphenol	8.37	108	616396	42.503	ng/ul	99
17) Hexachloroethane	8.66	117	236096	41.504	ng/ul	95
20) Nitrobenzene	8.80	77	724071	39.921	ng/ul	98
21) Isophorone	9.32	82	1358089	47.073	ng/ul	100
23) 2-Nitrophenol	9.50	139	354300	45.019	ng/ul	97
24) 2,4-Dimethylphenol	9.56	107	722999	42.079	ng/ul	97
25) Bis(2-Chloroethoxy)methane	9.80	93	813839	44.983	ng/ul	99
27) 2,4-Dichlorophenol	10.03	162	609870	43.872	ng/ul	100
28) Naphthalene	10.42	128	1927228	39.936	ng/ul	99
30) 4-Chloroaniline	10.55	127	569068	45.008	ng/ul	98
31) Hexachlorobutadiene	10.70	225	386098	41.168	ng/ul	97
32) Caprolactam	11.34	113	198938m	46.915	ng/ul	
33) 4-Chloro-3-methylphenol	11.67	107	691024	47.562	ng/ul	98
34) 2-Methylnaphthalene	12.04	142	1442156	43.277	ng/ul	100

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017691.D
Acq On : 19 Nov 2018 20:14
Operator : MJ/SJ
Sample : SSTD04054
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTD04054

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:26 PM

Quant Time: Nov 20 00:50:25 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.42	216	762856	38.472	ng/ul	99
37) Hexachlorocyclopentadiene	12.39	237	493013	44.269	ng/ul	99
38) 2,4,6-Trichlorophenol	12.67	196	514858	44.748	ng/ul	99
39) 2,4,5-Trichlorophenol	12.74	196	547339	42.739	ng/ul	99
40) 1,1'-Biphenyl	13.07	154	1867215	39.426	ng/ul	99
41) 2-Chloronaphthalene	13.11	162	1472851	38.823	ng/ul	100
42) 2-Nitroaniline	13.33	65	459707	44.973	ng/ul	98
44) Dimethylphthalate	13.72	163	1930308	44.426	ng/ul	100
45) 2,6-Dinitrotoluene	13.84	165	408538	48.982	ng/ul	99
47) Acenaphthylene	13.96	152	2285517	41.473	ng/ul	100
48) 3-Nitroaniline	14.17	138	386684	45.277	ng/ul	92
49) Acenaphthene	14.31	153	1632494	40.115	ng/ul	99
50) 2,4-Dinitrophenol	14.38	184	264843	52.615	ng/ul	100
52) 4-Nitrophenol	14.49	109	304644	42.567	ng/ul	97
53) Dibenzofuran	14.65	168	2272874	40.321	ng/ul	100
54) 2,4-Dinitrotoluene	14.63	165	608364	49.768	ng/ul	98
55) 2,3,4,6-Tetrachlorophenol	14.88	232	505941	48.022	ng/ul	99
56) Diethylphthalate	15.09	149	1981004	48.811	ng/ul	99
58) Fluorene	15.30	166	1911178	42.442	ng/ul	99
59) 4-Chlorophenyl-phenylether	15.30	204	976555	44.020	ng/ul	97
60) 4-Nitroaniline	15.34	138	414447	44.581	ng/ul	99
63) 4,6-Dinitro-2-methylphenol	15.40	198	395674	44.842	ng/ul	94
64) N-Nitrosodiphenylamine	15.52	169	1666343	41.224	ng/ul	98
65) 4-Bromophenyl-phenylether	16.20	248	617570	43.566	ng/ul	96
66) Hexachlorobenzene	16.30	284	685339	40.755	ng/ul	98
67) Atrazine	16.49	200	616509	47.717	ng/ul	99
68) Pentachlorophenol	16.65	266	424775	46.829	ng/ul	99
69) Phenanthrene	17.04	178	3057116	39.776	ng/ul	99
71) Anthracene	17.14	178	3156716	41.177	ng/ul	99
72) 1,2,3,4-Tetrachlorobenzene	13.03	216	756590	35.207	ng/uL	98
73) Pentachlorobenzene	14.57	250	777518	37.644	ng/uL	99
74) Carbazole	17.42	167	2780051	40.284	ng/ul	100
75) Di-n-butylphthalate	17.98	149	3562242	59.306	ng/ul	100
76) Fluoranthene	19.07	202	3664487	42.587	ng/ul	99
79) Pyrene	19.43	202	3773519	36.778	ng/ul	98
80) Butylbenzylphthalate	20.35	149	1653141	59.100	ng/ul	97
81) 3,3'-Dichlorobenzidine	21.13	252	1341308	48.486	ng/ul	99
82) Benzo(a)anthracene	21.19	228	3785238	41.101	ng/ul	99
83) Bis(2-ethylhexyl)phthalate	21.13	149	2485689	71.439	ng/ul	100
84) Chrysene	21.24	228	3546061	38.728	ng/ul	99
86) Di-n-octyl phthalate	22.00	149	4111341	66.089	ng/ul	100
87) Benzo(b)fluoranthene	22.74	252	3729479	42.446	ng/ul	99
88) Benzo(k)fluoranthene	22.79	252	3498956	39.981	ng/ul	100
90) Benzo(a)pyrene	23.30	252	3418499	40.053	ng/ul	99
91) Indeno(1,2,3-cd)pyrene	25.57	276	3515871	40.846	ng/ul	98
92) Dibenzo(a,h)anthracene	25.58	278	2969779	41.507	ng/ul	99
93) Benzo(g,h,i)perylene	26.23	276	2818536	37.864	ng/ul	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

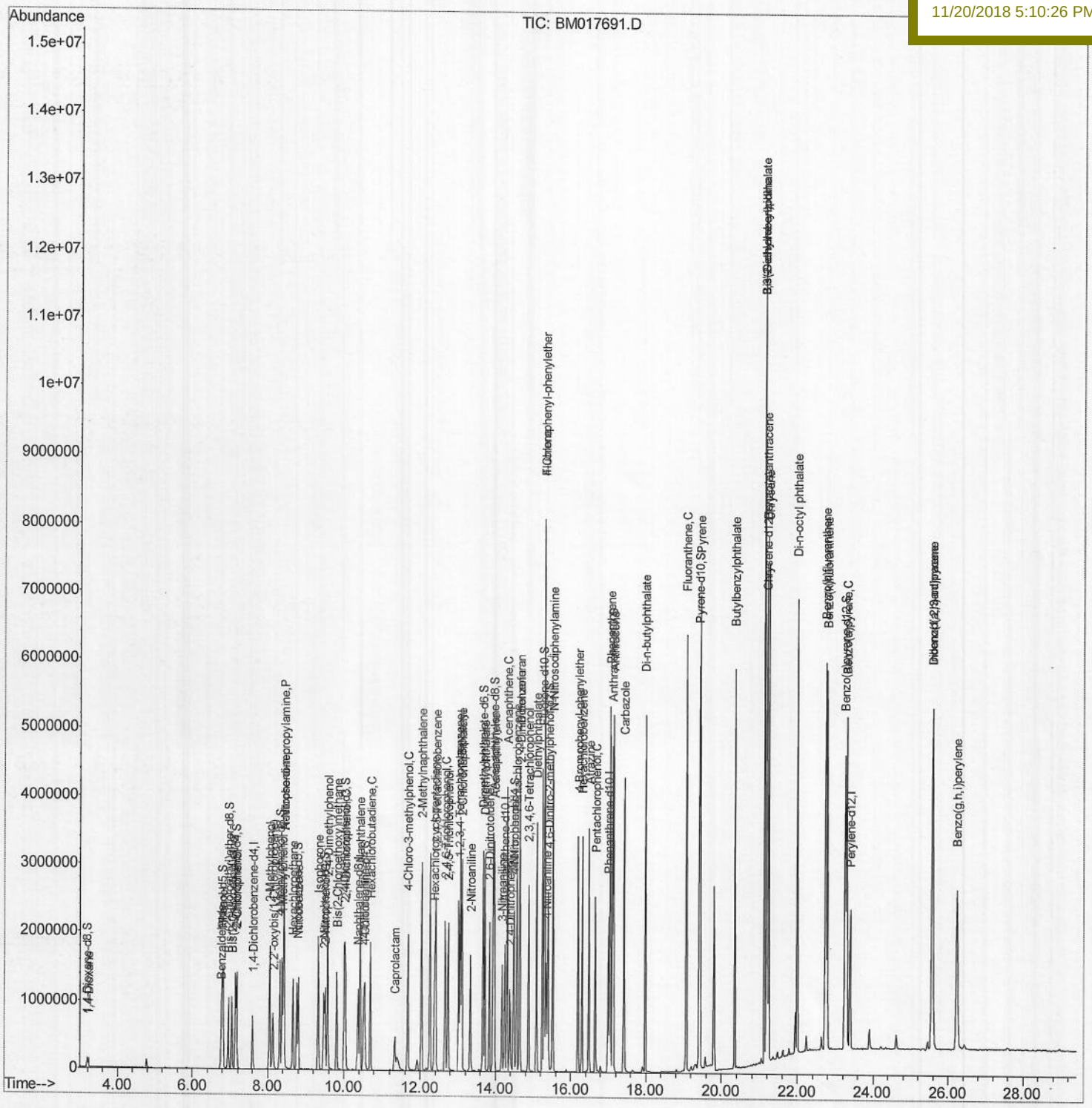
Quantitation Report (QT Reviewed)

Data File : BM017691.D
Acq On : 19 Nov 2018 20:14
Operator : MJ/SJ
Sample : SSTD04054
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 20 00:50:25 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD04054

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:26 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

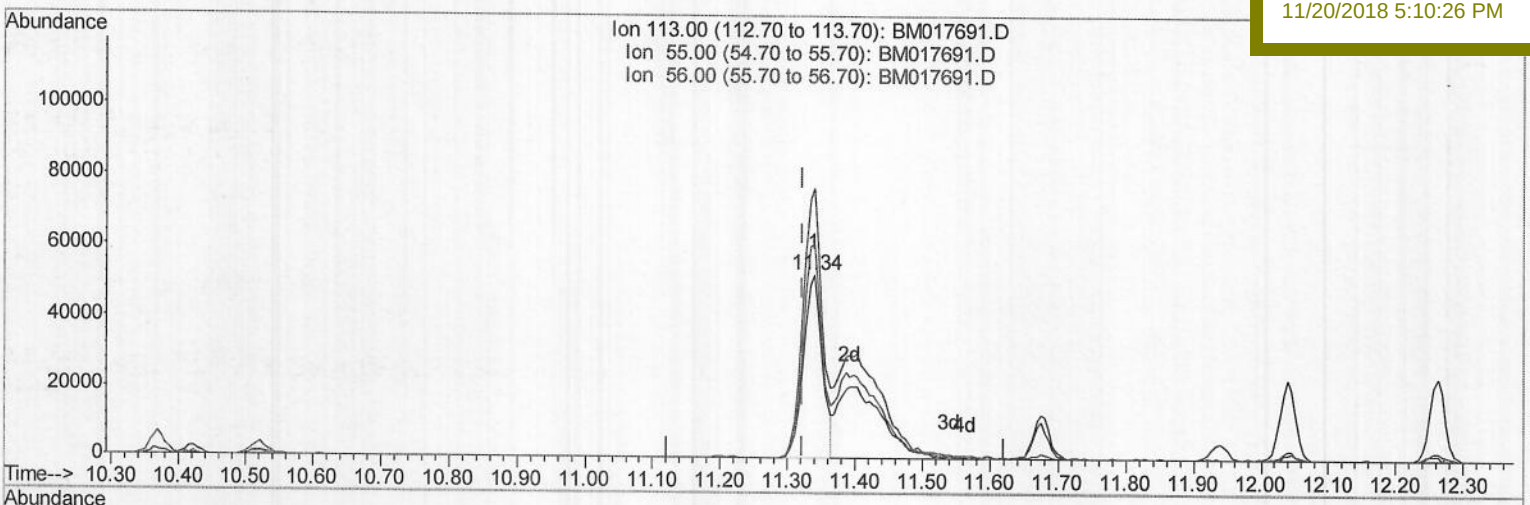
Quantitation Report (Qedit)

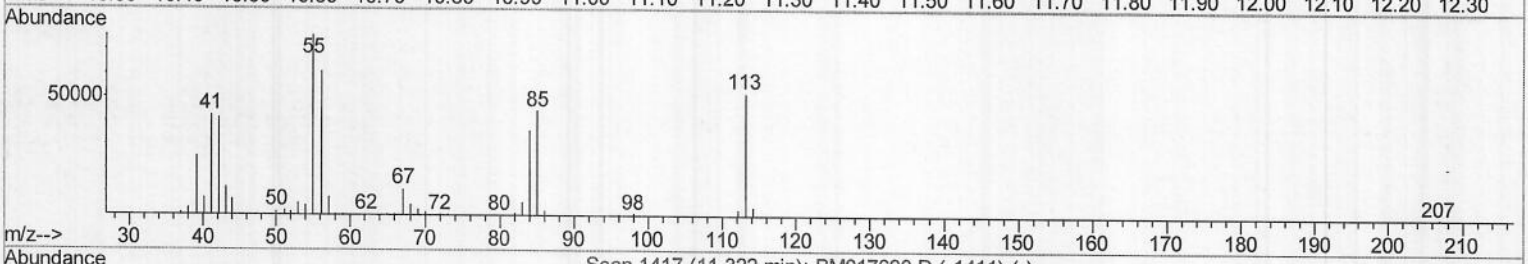
Data File : BM017691.D
Acq On : 19 Nov 2018 20:14
Operator : MJ/SJ
Sample : SSTD04054
Misc :
ALS Vial : 5 Sample Multiplier: 1

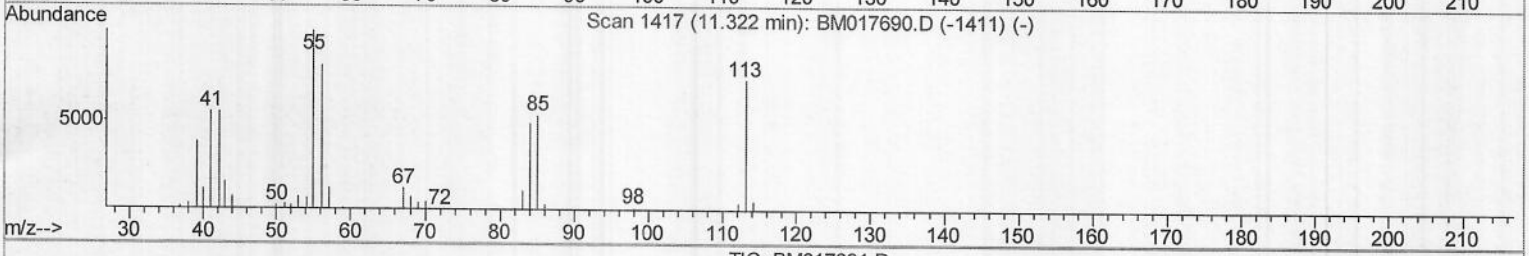
Quant Time: Nov 20 00:24:57 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD04054

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:26 PM







TIC: BM017691.D

(32) Caprolactam

11.339min (+0.017) 24.04ng/ul

response 101947

Ion	Exp%	Act%
113.00	100	100
55.00	138.30	146.45
56.00	110.30	116.49
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

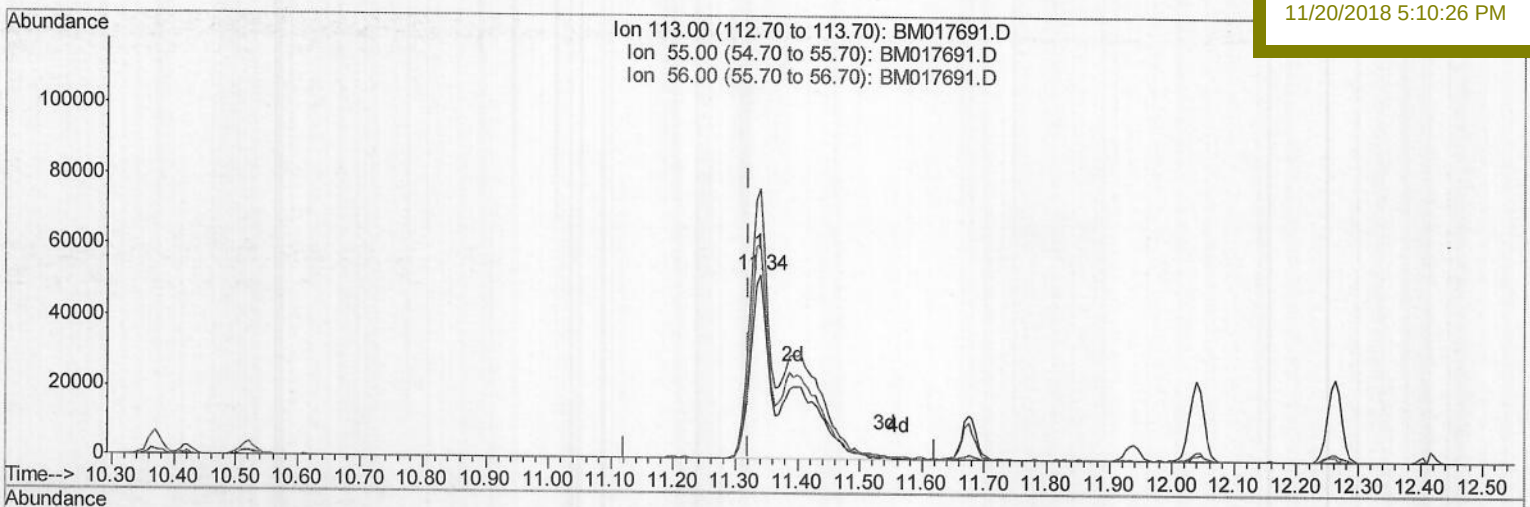
Quantitation Report (Qedit)

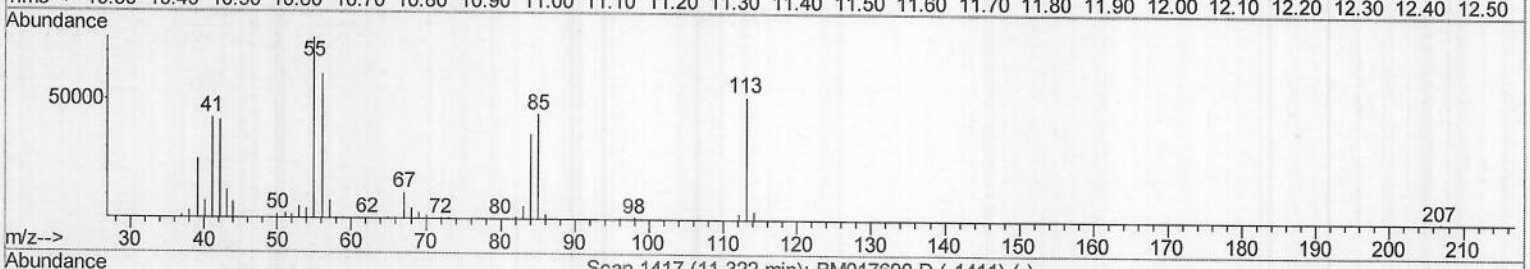
Data File : BM017691.D
Acq On : 19 Nov 2018 20:14
Operator : MJ/SJ
Sample : SSTD04054
Misc :
ALS Vial : 5 Sample Multiplier: 1

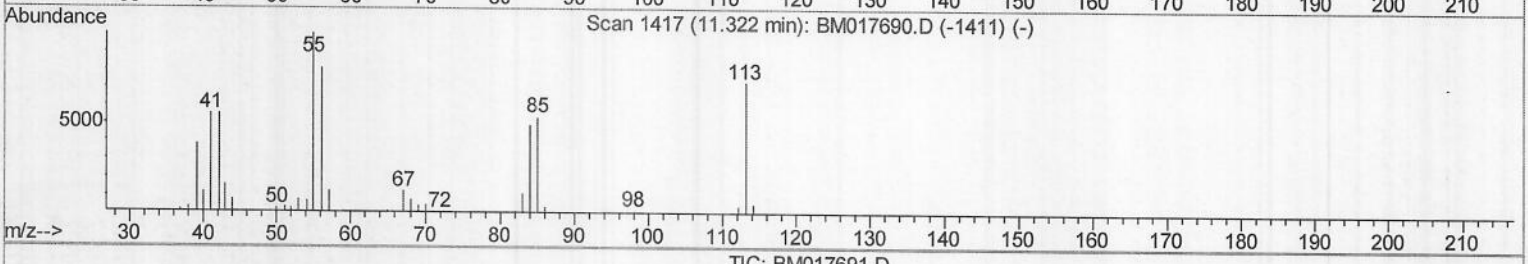
Quant Time: Nov 20 00:24:57 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD04054

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:26 PM







TIC: BM017691.D

(32) Caprolactam

11.339min (+0.017) 46.91ng/ul m SJ

response 198938 11/20/18

Ion	Exp%	Act%
113.00	100	100
55.00	138.30	146.45
56.00	110.30	116.49
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

Quantitation Report (QT Reviewed)

Data File : BM017691.D
Acq On : 19 Nov 2018 20:14
Operator : MJ/SJ
Sample : SSTD04054
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 20 00:50:25 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : SSTD04054

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:26 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.60	152	200252	20.00	ng/ul	0.00
18) Naphthalene-d8	10.37	136	925401	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.24	164	572805	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.00	188	1332110	20.00	ng/ul	0.00
77) Chrysene-d12	21.20	240	1531864	20.00	ng/ul	0.00
85) Perylene-d12	23.39	264	1436152	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.19	96	70123	13.62	ng/uL	0.00
5) Phenol-d5	6.79	99	740715	39.87	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.95	67	445307	42.44	ng/ul	0.00
9) 2-Chlorophenol-d4	7.14	132	592633	42.72	ng/ul	0.00
13) 4-Methylphenol-d8	8.32	113	608064	42.60	ng/ul	0.00
19) Nitrobenzene-d5	8.76	128	296302	43.25	ng/ul	0.00
22) 2-Nitrophenol-d4	9.47	143	342915	46.33	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	10.00	165	643830	45.56	ng/ul	0.00
29) 4-Chloroaniline-d4	10.52	131	560898	45.55	ng/ul	0.00
43) Dimethylphthalate-d6	13.67	166	1990915	45.06	ng/ul	0.00
46) Acenaphthylene-d8	13.94	160	2462208	42.45	ng/ul	0.00
51) 4-Nitrophenol-d4	14.47	143	373388	46.76	ng/ul	0.00
57) Fluorene-d10	15.24	176	1701795	42.29	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.39	200	386268	45.62	ng/ul	0.00
70) Anthracene-d10	17.10	188	2676448	42.24	ng/ul	0.00
78) Pyrene-d10	19.40	212	3009812	37.61	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.26	264	3200719	41.34	ng/ul	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.22	88	71725	13.049	ng/uL	91
4) Benzaldehyde	6.76	77	136551	38.730	ng/ul	93
6) Phenol	6.81	94	740984	39.677	ng/ul	99
8) Bis(2-Chloroethyl)ether	7.04	93	567356	42.762	ng/ul	99
10) 2-Chlorophenol	7.17	128	586038	41.618	ng/ul	99
11) 2-Methylphenol	8.05	108	566475	42.151	ng/ul	99
12) 2,2'-oxybis(1-Chloropropan	8.13	45	663850	44.650	ng/ul	99
14) Acetophenone	8.42	105	933924	42.563	ng/ul	98
15) N-Nitroso-di-n-propylamine	8.42	70	501340	48.999	ng/ul	99
16) 4-Methylphenol	8.37	108	616396	42.503	ng/ul	99
17) Hexachloroethane	8.66	117	236096	41.504	ng/ul	95
20) Nitrobenzene	8.80	77	724071	39.921	ng/ul	98
21) Isophorone	9.32	82	1358089	47.073	ng/ul	100
23) 2-Nitrophenol	9.50	139	354300	45.019	ng/ul	97
24) 2,4-Dimethylphenol	9.56	107	722999	42.079	ng/ul	97
25) Bis(2-Chloroethoxy)methane	9.80	93	813839	44.983	ng/ul	99
27) 2,4-Dichlorophenol	10.03	162	609870	43.872	ng/ul	100
28) Naphthalene	10.42	128	1927228	39.936	ng/ul	99
30) 4-Chloroaniline	10.55	127	569068	45.008	ng/ul	98
31) Hexachlorobutadiene	10.70	225	386098	41.168	ng/ul	97
32) Caprolactam	11.34	113	198938m	46.915	ng/ul	
33) 4-Chloro-3-methylphenol	11.67	107	691024	47.562	ng/ul	98
34) 2-Methylnaphthalene	12.04	142	1442156	43.277	ng/ul	100

SJ 11/20/18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

Quantitation Report (QT Reviewed)

Data File : BM017691.D
Acq On : 19 Nov 2018 20:14
Operator : MJ/SJ
Sample : SSTD04054
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 20 00:50:25 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD04054

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:26 PM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.42	216	762856	38.472 ng/ul	99
37) Hexachlorocyclopentadiene	12.39	237	493013	44.269 ng/ul	99
38) 2,4,6-Trichlorophenol	12.67	196	514858	44.748 ng/ul	99
39) 2,4,5-Trichlorophenol	12.74	196	547339	42.739 ng/ul	99
40) 1,1'-Biphenyl	13.07	154	1867215	39.426 ng/ul	99
41) 2-Chloronaphthalene	13.11	162	1472851	38.823 ng/ul	100
42) 2-Nitroaniline	13.33	65	459707	44.973 ng/ul	98
44) Dimethylphthalate	13.72	163	1930308	44.426 ng/ul	100
45) 2,6-Dinitrotoluene	13.84	165	408538	48.982 ng/ul	99
47) Acenaphthylene	13.96	152	2285517	41.473 ng/ul	100
48) 3-Nitroaniline	14.17	138	386684	45.277 ng/ul	92
49) Acenaphthene	14.31	153	1632494	40.115 ng/ul	99
50) 2,4-Dinitrophenol	14.38	184	264843	52.615 ng/ul	100
52) 4-Nitrophenol	14.49	109	304644	42.567 ng/ul	97
53) Dibenzofuran	14.65	168	2272874	40.321 ng/ul	100
54) 2,4-Dinitrotoluene	14.63	165	608364	49.768 ng/ul	98
55) 2,3,4,6-Tetrachlorophenol	14.88	232	505941	48.022 ng/ul	99
56) Diethylphthalate	15.09	149	1981004	48.811 ng/ul	99
58) Fluorene	15.30	166	1911178	42.442 ng/ul	99
59) 4-Chlorophenyl-phenylether	15.30	204	976555	44.020 ng/ul	97
60) 4-Nitroaniline	15.34	138	414447	44.581 ng/ul	99
63) 4,6-Dinitro-2-methylphenol	15.40	198	395674	44.842 ng/ul	94
64) N-Nitrosodiphenylamine	15.52	169	1666343	41.224 ng/ul	98
65) 4-Bromophenyl-phenylether	16.20	248	617570	43.566 ng/ul	96
66) Hexachlorobenzene	16.30	284	685339	40.755 ng/ul	98
67) Atrazine	16.49	200	616509	47.717 ng/ul	99
68) Pentachlorophenol	16.65	266	424775	46.829 ng/ul	99
69) Phenanthrene	17.04	178	3057116	39.776 ng/ul	99
71) Anthracene	17.14	178	3156716	41.177 ng/ul	99
72) 1,2,3,4-Tetrachlorobenzene	13.03	216	756590	35.207 ng/uL	98
73) Pentachlorobenzene	14.57	250	777518	37.644 ng/uL	99
74) Carbazole	17.42	167	2780051	40.284 ng/ul	100
75) Di-n-butylphthalate	17.98	149	3562242	59.306 ng/ul	100
76) Fluoranthene	19.07	202	3664487	42.587 ng/ul	99
79) Pyrene	19.43	202	3773519	36.778 ng/ul	98
80) Butylbenzylphthalate	20.35	149	1653141	59.100 ng/ul	97
81) 3,3'-Dichlorobenzidine	21.13	252	1341308	48.486 ng/ul	99
82) Benzo(a)anthracene	21.19	228	3785238	41.101 ng/ul	99
83) Bis(2-ethylhexyl)phthalate	21.13	149	2485689	71.439 ng/ul	100
84) Chrysene	21.24	228	3546061	38.728 ng/ul	99
86) Di-n-octyl phthalate	22.00	149	4111341	66.089 ng/ul	100
87) Benzo(b)fluoranthene	22.74	252	3729479	42.446 ng/ul	99
88) Benzo(k)fluoranthene	22.79	252	3498956	39.981 ng/ul	100
90) Benzo(a)pyrene	23.30	252	3418499	40.053 ng/ul	99
91) Indeno(1,2,3-cd)pyrene	25.57	276	3515871	40.846 ng/ul	98
92) Dibenzo(a,h)anthracene	25.58	278	2969779	41.507 ng/ul	99
93) Benzo(g,h,i)perylene	26.23	276	2818536	37.864 ng/ul	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

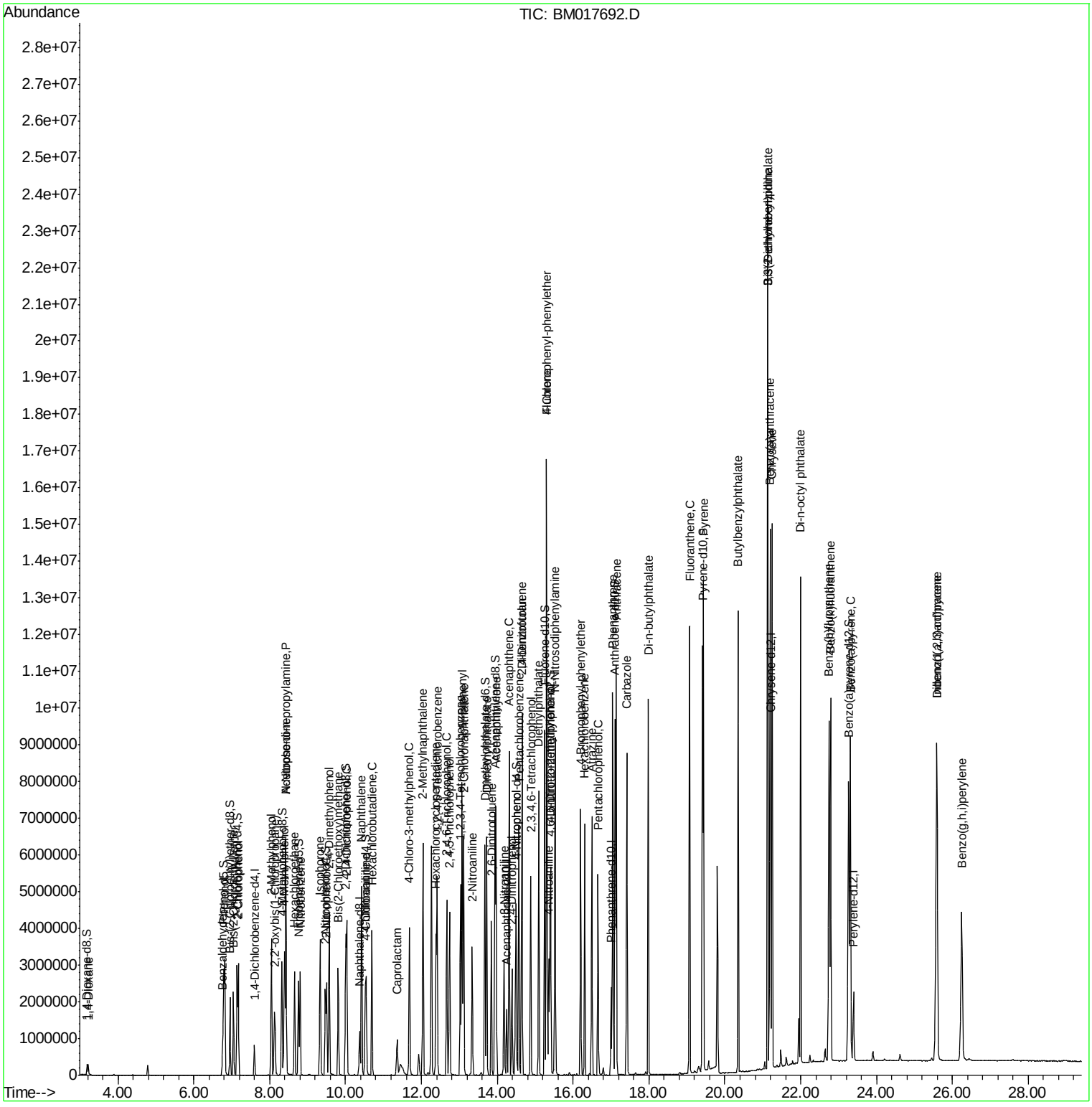
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017692.D
Acq On : 19 Nov 2018 20:50
Operator : MJ/SJ
Sample : SSTD08055
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 20 00:52:30 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD08055

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:28 PM



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017692.D
Acq On : 19 Nov 2018 20:50
Operator : MJ/SJ
Sample : SSTD08055
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTD08055

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:28 PM

Quant Time: Nov 20 00:52:30 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.60	152	211382	20.00	ng/ul	0.00
18) Naphthalene-d8	10.37	136	957054	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.24	164	592856	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.00	188	1359042	20.00	ng/ul	0.00
77) Chrysene-d12	21.21	240	1502594	20.00	ng/ul	0.00
85) Perylene-d12	23.39	264	1273450	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.19	96	140717	25.89	ng/uL	0.00
5) Phenol-d5	6.79	99	1593802	81.27	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.95	67	933274	84.27	ng/ul	0.00
9) 2-Chlorophenol-d4	7.14	132	1287011	87.88	ng/ul	0.00
13) 4-Methylphenol-d8	8.32	113	1291821	85.73	ng/ul	0.01
19) Nitrobenzene-d5	8.76	128	635890	89.75	ng/ul	0.00
22) 2-Nitrophenol-d4	9.47	143	741734	96.91	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	10.00	165	1370319	93.77	ng/ul	0.00
29) 4-Chloroaniline-d4	10.52	131	1144463	89.86	ng/ul	0.00
43) Dimethylphthalate-d6	13.67	166	4121731	90.13	ng/ul	0.01
46) Acenaphthylene-d8	13.94	160	5152569	85.82	ng/ul	0.00
51) 4-Nitrophenol-d4	14.49	143	798743	96.65	ng/ul	0.02
57) Fluorene-d10	15.25	176	3529800	84.75	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.39	200	839595	97.19	ng/ul	0.01
70) Anthracene-d10	17.10	188	5532788	85.59	ng/ul	0.00
78) Pyrene-d10	19.41	212	6116564	77.92	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.26	264	5749929	83.74	ng/ul	0.01
Target Compounds						Qvalue
2) 1,4-Dioxane	3.22	88	146980	25.332	ng/uL#	91
4) Benzaldehyde	6.76	77	314366	84.470	ng/ul	96
6) Phenol	6.82	94	1591999	80.757	ng/ul	97
8) Bis(2-Chloroethyl)ether	7.05	93	1177075	84.045	ng/ul	98
10) 2-Chlorophenol	7.17	128	1274627	85.752	ng/ul	99
11) 2-Methylphenol	8.05	108	1211128	85.374	ng/ul	99
12) 2,2'-oxybis(1-Chloropropan	8.13	45	1378872	87.859	ng/ul	99
14) Acetophenone	8.43	105	1999189	86.315	ng/ul	98
15) N-Nitroso-di-n-propylamine	8.43	70	1061551	98.288	ng/ul	100
16) 4-Methylphenol	8.39	108	1296729	84.707	ng/ul	98
17) Hexachloroethane	8.66	117	501209	83.470	ng/ul	97
20) Nitrobenzene	8.80	77	1498459	79.885	ng/ul	95
21) Isophorone	9.33	82	2851018	95.551	ng/ul	100
23) 2-Nitrophenol	9.50	139	762539	93.686	ng/ul	98
24) 2,4-Dimethylphenol	9.57	107	1516350	85.334	ng/ul	98
25) Bis(2-Chloroethoxy)methane	9.81	93	1707069	91.234	ng/ul	100
27) 2,4-Dichlorophenol	10.03	162	1287424	89.550	ng/ul	98
28) Naphthalene	10.42	128	4035861	80.865	ng/ul	99
30) 4-Chloroaniline	10.55	127	1165528	89.133	ng/ul	98
31) Hexachlorobutadiene	10.70	225	812357	83.754	ng/ul	98
32) Caprolactam	11.36	113	426382m	97.226	ng/ul	
33) 4-Chloro-3-methylphenol	11.68	107	1447548	96.337	ng/ul	99
34) 2-Methylnaphthalene	12.04	142	3064585	88.922	ng/ul	99

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017692.D
Acq On : 19 Nov 2018 20:50
Operator : MJ/SJ
Sample : SSTD08055
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 20 00:52:30 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD08055

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:28 PM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.42	216	1611913	78.542 ng/ul	99
37) Hexachlorocyclopentadiene	12.39	237	1087173	94.320 ng/ul	97
38) 2,4,6-Trichlorophenol	12.67	196	1081415	90.810 ng/ul	97
39) 2,4,5-Trichlorophenol	12.74	196	1170273	88.290 ng/ul	99
40) 1,1'-Biphenyl	13.07	154	3940899	80.397 ng/ul	100
41) 2-Chloronaphthalene	13.12	162	3079483	78.427 ng/ul	100
42) 2-Nitroaniline	13.34	65	978300	92.470 ng/ul	99
44) Dimethylphthalate	13.72	163	3975152	88.393 ng/ul	100
45) 2,6-Dinitrotoluene	13.85	165	872875	101.114 ng/ul	95
47) Acenaphthylene	13.97	152	4761875	83.486 ng/ul	100
48) 3-Nitroaniline	14.18	138	796036	90.056 ng/ul	92
49) Acenaphthene	14.32	153	3376526	80.165 ng/ul	100
50) 2,4-Dinitrophenol	14.39	184	602058	115.562 ng/ul	99
52) 4-Nitrophenol	14.50	109	645233	87.108 ng/ul	97
53) Dibenzofuran	14.65	168	4753108	81.469 ng/ul	100
54) 2,4-Dinitrotoluene	14.64	165	1281553	101.294 ng/ul	100
55) 2,3,4,6-Tetrachlorophenol	14.89	232	1067976	97.941 ng/ul	97
56) Diethylphthalate	15.10	149	4127567	98.261 ng/ul	99
58) Fluorene	15.31	166	3986353	85.531 ng/ul	99
59) 4-Chlorophenyl-phenylether	15.30	204	2034977	88.627 ng/ul	98
60) 4-Nitroaniline	15.36	138	915619	95.160 ng/ul	96
63) 4,6-Dinitro-2-methylphenol	15.41	198	858399	95.356 ng/ul#	88
64) N-Nitrosodiphenylamine	15.53	169	3470847	84.165 ng/ul	97
65) 4-Bromophenyl-phenylether	16.20	248	1297476	89.716 ng/ul	96
66) Hexachlorobenzene	16.30	284	1415360	82.499 ng/ul	96
67) Atrazine	16.49	200	1292944	98.089 ng/ul	98
68) Pentachlorophenol	16.66	266	925723	100.033 ng/ul	98
69) Phenanthrene	17.05	178	6264581	79.892 ng/ul	99
71) Anthracene	17.14	178	6507688	83.205 ng/ul	99
72) 1,2,3,4-Tetrachlorobenzene	13.03	216	1581836	72.151 ng/uL	98
73) Pentachlorobenzene	14.57	250	1625097	77.120 ng/uL	98
74) Carbazole	17.42	167	5754353	81.730 ng/ul	99
75) Di-n-butylphthalate	17.99	149	7345663	119.871 ng/ul	99
76) Fluoranthene	19.07	202	7529944	85.776 ng/ul	99
79) Pyrene	19.44	202	7569391	75.211 ng/ul	96
80) Butylbenzylphthalate	20.35	149	3468925	126.430 ng/ul	99
81) 3,3'-Dichlorobenzidine	21.13	252	2659862	98.022 ng/ul	100
82) Benzo(a)anthracene	21.19	228	7408227	82.008 ng/ul	99
83) Bis(2-ethylhexyl)phthalate	21.13	149	5060662	148.277 ng/ul	98
84) Chrysene	21.24	228	6916391	77.009 ng/ul	100
86) Di-n-octyl phthalate	22.00	149	8138822	147.546 ng/ul	100
87) Benzo(b)fluoranthene	22.74	252	6797721	87.251 ng/ul	98
88) Benzo(k)fluoranthene	22.79	252	6295588	81.127 ng/ul	98
90) Benzo(a)pyrene	23.31	252	6154035	81.316 ng/ul	99
91) Indeno(1,2,3-cd)pyrene	25.59	276	6072696	79.564 ng/ul	97
92) Dibenzo(a,h)anthracene	25.60	278	5171188	81.509 ng/ul	99
93) Benzo(g,h,i)perylene	26.24	276	4878599	73.911 ng/ul	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

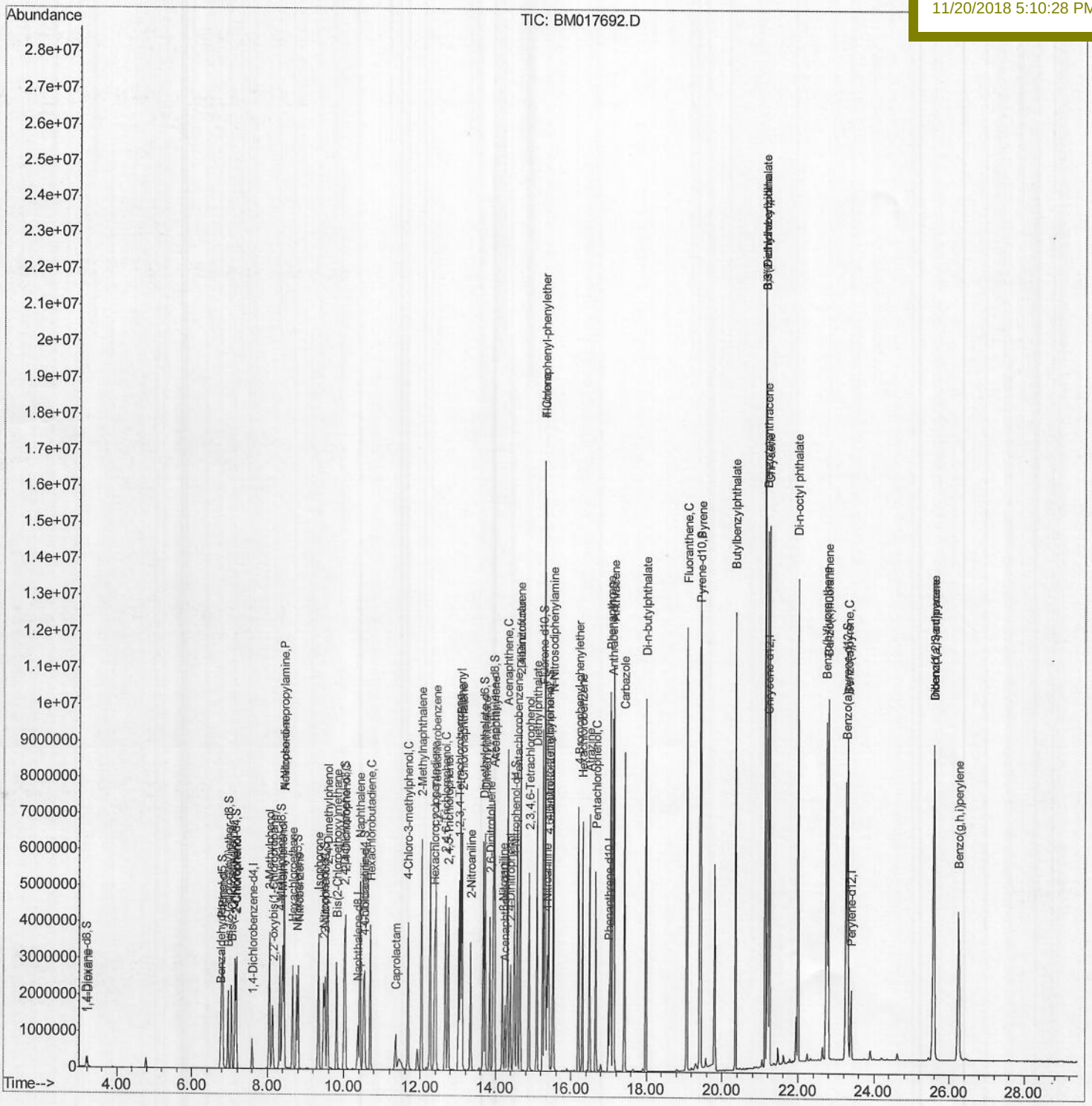
Quantitation Report (QT Reviewed)

Data File : BM017692.D
Acq On : 19 Nov 2018 20:50
Operator : MJ/SJ
Sample : SSTD08055
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 20 00:52:30 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD08055

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:28 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

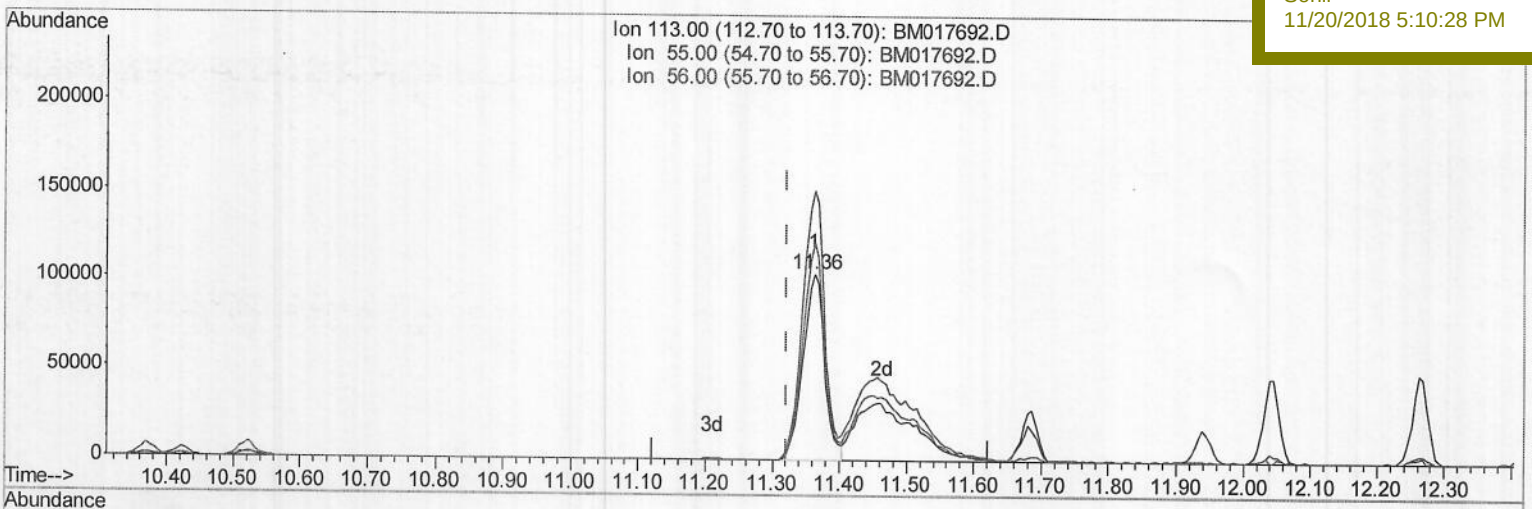
Quantitation Report (Qedit)

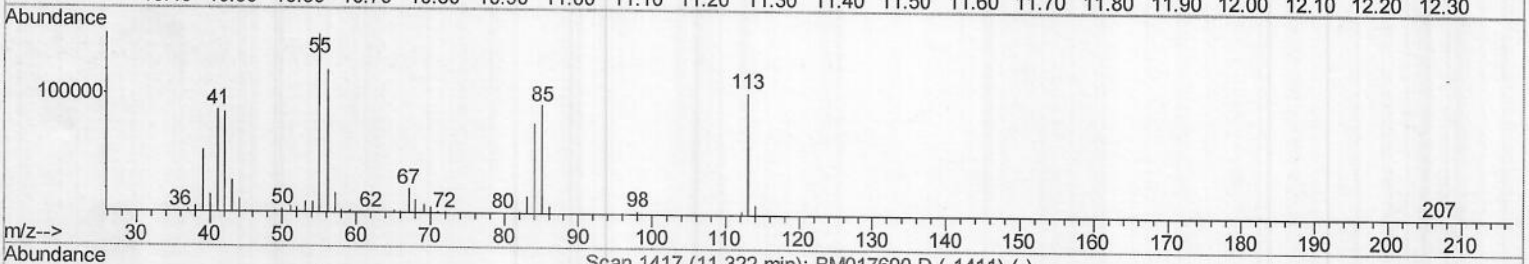
Data File : BM017692.D
Acq On : 19 Nov 2018 20:50
Operator : MJ/SJ
Sample : SSTD08055
Misc :
ALS Vial : 6 Sample Multiplier: 1

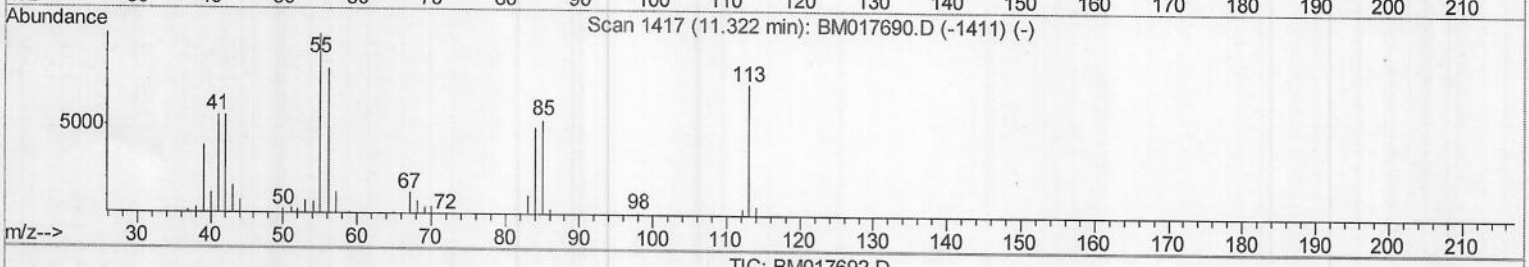
Quant Time: Nov 20 00:25:24 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD08055

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:28 PM







TIC: BM017692.D

(32) Caprolactam

11.363min (+0.041) 52.85ng/ul

response 231752

Ion	Exp%	Act%
113.00	100	100
55.00	138.30	145.68
56.00	110.30	116.93
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

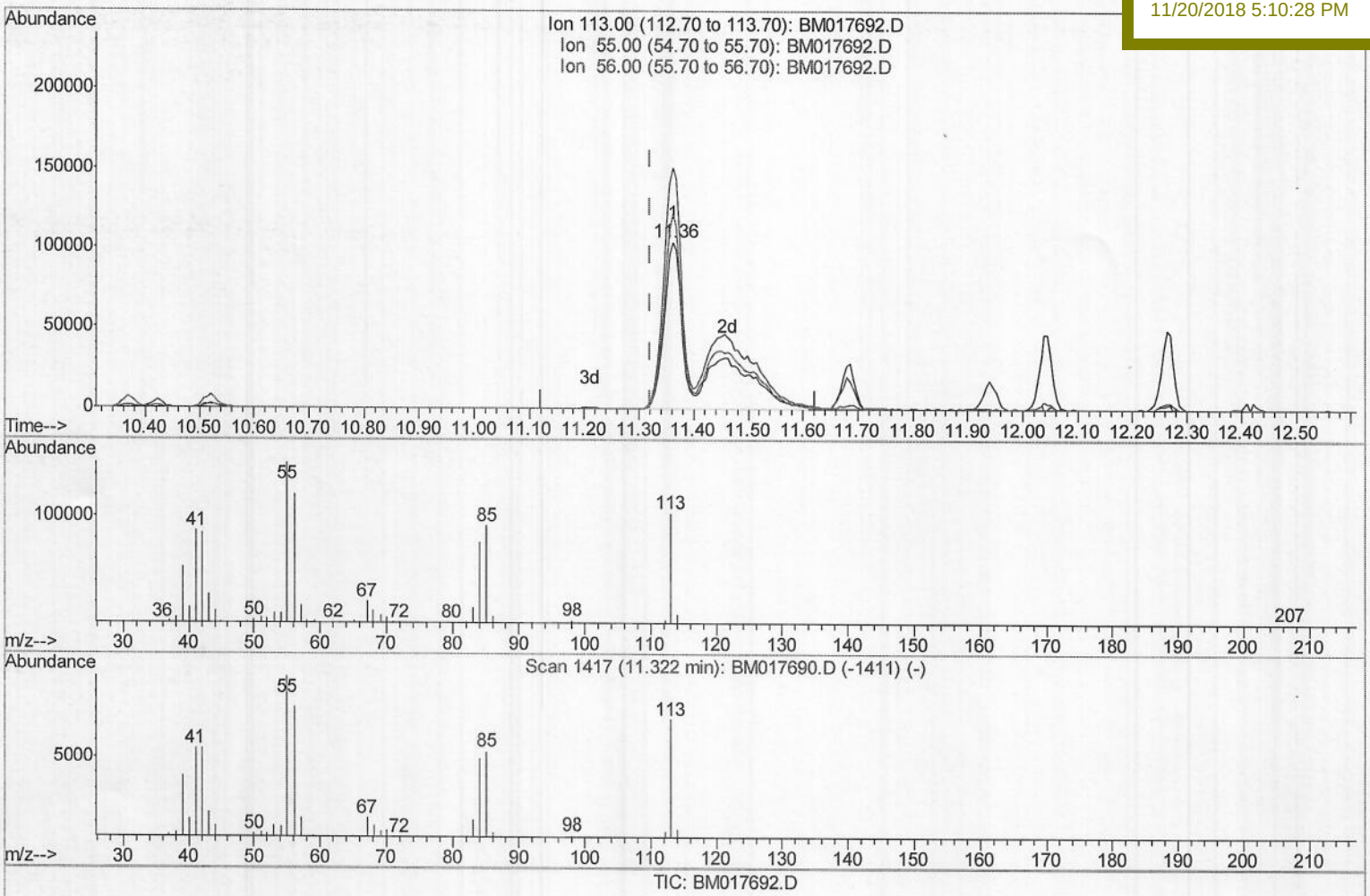
Quantitation Report (Qedit)

Data File : BM017692.D
Acq On : 19 Nov 2018 20:50
Operator : MJ/SJ
Sample : SSTD08055
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 20 00:25:24 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD08055

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:28 PM



TIC: BM017692.D

(32) Caprolactam

11.363min (+0.041) 97.23ng/ul m

response 426382

SJ 11/20/18

Ion	Exp%	Act%
113.00	100	100
55.00	138.30	145.68
56.00	110.30	116.93
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

Quantitation Report (QT Reviewed)

Data File : BM017692.D
Acq On : 19 Nov 2018 20:50
Operator : MJ/SJ
Sample : SSTD08055
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 20 00:52:30 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : SSTD08055

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:28 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.60	152	211382	20.00	ng/ul	0.00
18) Naphthalene-d8	10.37	136	957054	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.24	164	592856	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.00	188	1359042	20.00	ng/ul	0.00
77) Chrysene-d12	21.21	240	1502594	20.00	ng/ul	0.00
85) Perylene-d12	23.39	264	1273450	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.19	96	140717	25.89	ng/uL	0.00
5) Phenol-d5	6.79	99	1593802	81.27	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.95	67	933274	84.27	ng/ul	0.00
9) 2-Chlorophenol-d4	7.14	132	1287011	87.88	ng/ul	0.00
13) 4-Methylphenol-d8	8.32	113	1291821	85.73	ng/ul	0.01
19) Nitrobenzene-d5	8.76	128	635890	89.75	ng/ul	0.00
22) 2-Nitrophenol-d4	9.47	143	741734	96.91	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	10.00	165	1370319	93.77	ng/ul	0.00
29) 4-Chloroaniline-d4	10.52	131	1144463	89.86	ng/ul	0.00
43) Dimethylphthalate-d6	13.67	166	4121731	90.13	ng/ul	0.01
46) Acenaphthylene-d8	13.94	160	5152569	85.82	ng/ul	0.00
51) 4-Nitrophenol-d4	14.49	143	798743	96.65	ng/ul	0.02
57) Fluorene-d10	15.25	176	3529800	84.75	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.39	200	839595	97.19	ng/ul	0.01
70) Anthracene-d10	17.10	188	5532788	85.59	ng/ul	0.00
78) Pyrene-d10	19.41	212	6116564	77.92	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.26	264	5749929	83.74	ng/ul	0.01
Target Compounds						Qvalue
2) 1,4-Dioxane	3.22	88	146980	25.332	ng/uL#	91
4) Benzaldehyde	6.76	77	314366	84.470	ng/ul	96
6) Phenol	6.82	94	1591999	80.757	ng/ul	97
8) Bis(2-Chloroethyl)ether	7.05	93	1177075	84.045	ng/ul	98
10) 2-Chlorophenol	7.17	128	1274627	85.752	ng/ul	99
11) 2-Methylphenol	8.05	108	1211128	85.374	ng/ul	99
12) 2,2'-oxybis(1-Chloropropan	8.13	45	1378872	87.859	ng/ul	99
14) Acetophenone	8.43	105	1999189	86.315	ng/ul	98
15) N-Nitroso-di-n-propylamine	8.43	70	1061551	98.288	ng/ul	100
16) 4-Methylphenol	8.39	108	1296729	84.707	ng/ul	98
17) Hexachloroethane	8.66	117	501209	83.470	ng/ul	97
20) Nitrobenzene	8.80	77	1498459	79.885	ng/ul	95
21) Isophorone	9.33	82	2851018	95.551	ng/ul	100
23) 2-Nitrophenol	9.50	139	762539	93.686	ng/ul	98
24) 2,4-Dimethylphenol	9.57	107	1516350	85.334	ng/ul	98
25) Bis(2-Chloroethoxy)methane	9.81	93	1707069	91.234	ng/ul	100
27) 2,4-Dichlorophenol	10.03	162	1287424	89.550	ng/ul	98
28) Naphthalene	10.42	128	4035861	80.865	ng/ul	99
30) 4-Chloroaniline	10.55	127	1165528	89.133	ng/ul	98
31) Hexachlorobutadiene	10.70	225	812357	83.754	ng/ul	98
32) Caprolactam	11.36	113	426382m	97.226	ng/ul	
33) 4-Chloro-3-methylphenol	11.68	107	1447548	96.337	ng/ul	99
34) 2-Methylnaphthalene	12.04	142	3064585	88.922	ng/ul	99

SJ 11/20/18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

Quantitation Report (QT Reviewed)

Data File : BM017692.D
Acq On : 19 Nov 2018 20:50
Operator : MJ/SJ
Sample : SSTD08055
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 20 00:52:30 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD08055

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:28 PM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.42	216	1611913	78.542 ng/ul	99
37) Hexachlorocyclopentadiene	12.39	237	1087173	94.320 ng/ul	97
38) 2,4,6-Trichlorophenol	12.67	196	1081415	90.810 ng/ul	97
39) 2,4,5-Trichlorophenol	12.74	196	1170273	88.290 ng/ul	99
40) 1,1'-Biphenyl	13.07	154	3940899	80.397 ng/ul	100
41) 2-Chloronaphthalene	13.12	162	3079483	78.427 ng/ul	100
42) 2-Nitroaniline	13.34	65	978300	92.470 ng/ul	99
44) Dimethylphthalate	13.72	163	3975152	88.393 ng/ul	100
45) 2,6-Dinitrotoluene	13.85	165	872875	101.114 ng/ul	95
47) Acenaphthylene	13.97	152	4761875	83.486 ng/ul	100
48) 3-Nitroaniline	14.18	138	796036	90.056 ng/ul	92
49) Acenaphthene	14.32	153	3376526	80.165 ng/ul	100
50) 2,4-Dinitrophenol	14.39	184	602058	115.562 ng/ul	99
52) 4-Nitrophenol	14.50	109	645233	87.108 ng/ul	97
53) Dibenzofuran	14.65	168	4753108	81.469 ng/ul	100
54) 2,4-Dinitrotoluene	14.64	165	1281553	101.294 ng/ul	100
55) 2,3,4,6-Tetrachlorophenol	14.89	232	1067976	97.941 ng/ul	97
56) Diethylphthalate	15.10	149	4127567	98.261 ng/ul	99
58) Fluorene	15.31	166	3986353	85.531 ng/ul	99
59) 4-Chlorophenyl-phenylether	15.30	204	2034977	88.627 ng/ul	98
60) 4-Nitroaniline	15.36	138	915619	95.160 ng/ul	96
63) 4,6-Dinitro-2-methylphenol	15.41	198	858399	95.356 ng/ul#	88
64) N-Nitrosodiphenylamine	15.53	169	3470847	84.165 ng/ul	97
65) 4-Bromophenyl-phenylether	16.20	248	1297476	89.716 ng/ul	96
66) Hexachlorobenzene	16.30	284	1415360	82.499 ng/ul	96
67) Atrazine	16.49	200	1292944	98.089 ng/ul	98
68) Pentachlorophenol	16.66	266	925723	100.033 ng/ul	98
69) Phenanthrene	17.05	178	6264581	79.892 ng/ul	99
71) Anthracene	17.14	178	6507688	83.205 ng/ul	99
72) 1,2,3,4-Tetrachlorobenzene	13.03	216	1581836	72.151 ng/uL	98
73) Pentachlorobenzene	14.57	250	1625097	77.120 ng/uL	98
74) Carbazole	17.42	167	5754353	81.730 ng/ul	99
75) Di-n-butylphthalate	17.99	149	7345663	119.871 ng/ul	99
76) Fluoranthene	19.07	202	7529944	85.776 ng/ul	99
79) Pyrene	19.44	202	7569391	75.211 ng/ul	96
80) Butylbenzylphthalate	20.35	149	3468925	126.430 ng/ul	99
81) 3,3'-Dichlorobenzidine	21.13	252	2659862	98.022 ng/ul	100
82) Benzo(a)anthracene	21.19	228	7408227	82.008 ng/ul	99
83) Bis(2-ethylhexyl)phthalate	21.13	149	5060662	148.277 ng/ul	98
84) Chrysene	21.24	228	6916391	77.009 ng/ul	100
86) Di-n-octyl phthalate	22.00	149	8138822	147.546 ng/ul	100
87) Benzo(b)fluoranthene	22.74	252	6797721	87.251 ng/ul	98
88) Benzo(k)fluoranthene	22.79	252	6295588	81.127 ng/ul	98
90) Benzo(a)pyrene	23.31	252	6154035	81.316 ng/ul	99
91) Indeno(1,2,3-cd)pyrene	25.59	276	6072696	79.564 ng/ul	97
92) Dibenzo(a,h)anthracene	25.60	278	5171188	81.509 ng/ul	99
93) Benzo(g,h,i)perylene	26.24	276	4878599	73.911 ng/ul	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

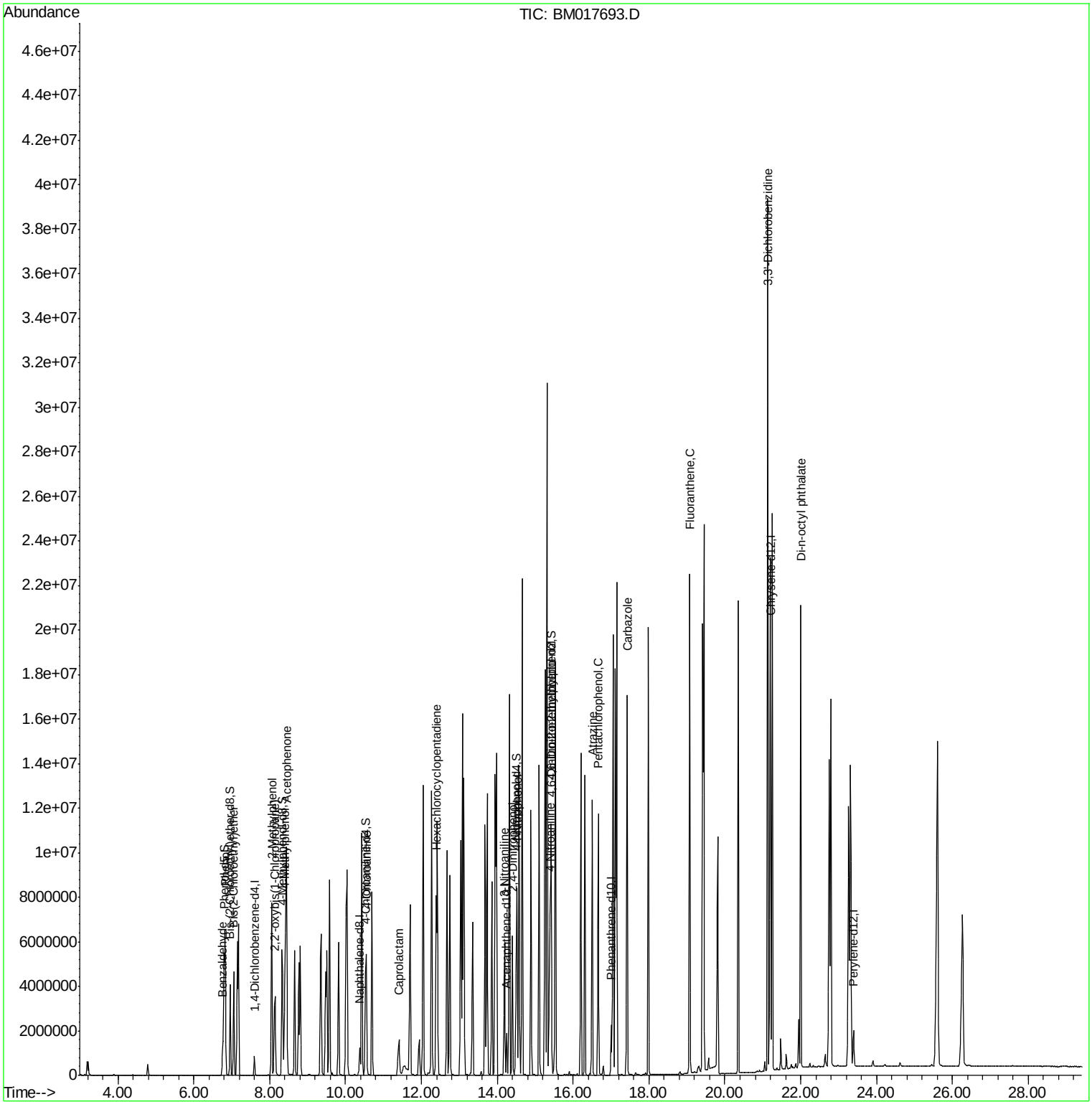
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017693.D
Acq On : 19 Nov 2018 21:26
Operator : MJ/SJ
Sample : SSTD16056
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 20 01:00:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD16056

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:30 PM



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017693.D
Acq On : 19 Nov 2018 21:26
Operator : MJ/SJ
Sample : SSTD16056
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : SSTD16056

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:30 PM

Quant Time: Nov 20 01:00:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.60	152	218147	20.00	ng/ul	0.00
18) Naphthalene-d8	10.37	136	1016792	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.25	164	616074	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.00	188	1398837	20.00	ng/ul	0.00
77) Chrysene-d12	21.21	240	1323720	20.00	ng/ul	0.00
85) Perylene-d12	23.40	264	1036817	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	0.00	96	0d	0.00	ng/uL	
5) Phenol-d5	6.80	99	3436225	169.78	ng/ul	0.02
7) Bis-(2-Chloroethyl)ether-d	6.96	67	1954925	171.05	ng/ul	0.00
9) 2-Chlorophenol-d4	0.00	132	0d	0.00	ng/ul	
13) 4-Methylphenol-d8	8.33	113	2746504	176.62	ng/ul	0.02
19) Nitrobenzene-d5	0.00	128	0d	0.00	ng/ul	
22) 2-Nitrophenol-d4	0.00	143	0d	0.00	ng/ul	
26) 2,4-Dichlorophenol-d3	0.00	165	0d	0.00	ng/ul	
29) 4-Chloroaniline-d4	10.53	131	2240141	165.56	ng/ul	0.00
43) Dimethylphthalate-d6	0.00	166	0d	0.00	ng/ul	
46) Acenaphthylene-d8	0.00	160	0d	0.00	ng/ul	
51) 4-Nitrophenol-d4	14.51	143	1682648	195.94	ng/ul	0.04
57) Fluorene-d10	0.00	176	0d	0.00	ng/ul	
62) 4,6-Dinitro-2-methylphenol	15.41	200	1812499	203.84	ng/ul	0.03
70) Anthracene-d10	0.00	188	0d	0.00	ng/ul	
78) Pyrene-d10	0.00	212	0d	0.00	ng/ul	
89) Benzo(a)pyrene-d12	0.00	264	0d	0.00	ng/ul	
Target Compounds						Qvalue
4) Benzaldehyde	6.76	77	515640	134.255	ng/ul	94
6) Phenol	6.83	94	3396386	166.946	ng/ul	96
8) Bis(2-Chloroethyl)ether	7.05	93	2481968	171.720	ng/ul	98
11) 2-Methylphenol	8.06	108	2584709	176.549	ng/ul	97
12) 2,2'-oxybis(1-Chloropropan	8.14	45	2889696	178.416	ng/ul	99
14) Acetophenone	8.44	105	4161713	174.109	ng/ul	99
16) 4-Methylphenol	8.41	108	2749150	174.016	ng/ul	95
30) 4-Chloroaniline	10.55	127	2293392	165.082	ng/ul	97
32) Caprolactam	11.41	113	885096m	189.967	ng/ul	
37) Hexachlorocyclopentadiene	12.39	237	2376176	198.380	ng/ul	98
48) 3-Nitroaniline	14.19	138	1585681	172.628	ng/ul	94
50) 2,4-Dinitrophenol	14.40	184	1338172	247.176	ng/ul	97
52) 4-Nitrophenol	14.53	109	1319732	171.452	ng/ul	96
60) 4-Nitroaniline	15.39	138	1907181	190.743	ng/ul	98
63) 4,6-Dinitro-2-methylphenol	15.43	198	1811980	195.559	ng/ul#	87
67) Atrazine	16.50	200	2580508	190.200	ng/ul	99
68) Pentachlorophenol	16.66	266	1959585	205.727	ng/ul	98
74) Carbazole	17.43	167	11399984	157.310	ng/ul	98
76) Fluoranthene	19.07	202	13516102	149.586	ng/ul#	92
81) 3,3'-Dichlorobenzidine	21.14	252	4387277	183.530	ng/ul	99
86) Di-n-octyl phthalate	22.00	149	12202139	271.696	ng/ul	100

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017693.D
Acq On : 19 Nov 2018 21:26
Operator : MJ/SJ
Sample : SSTD16056
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 20 01:00:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD16056

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:30 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

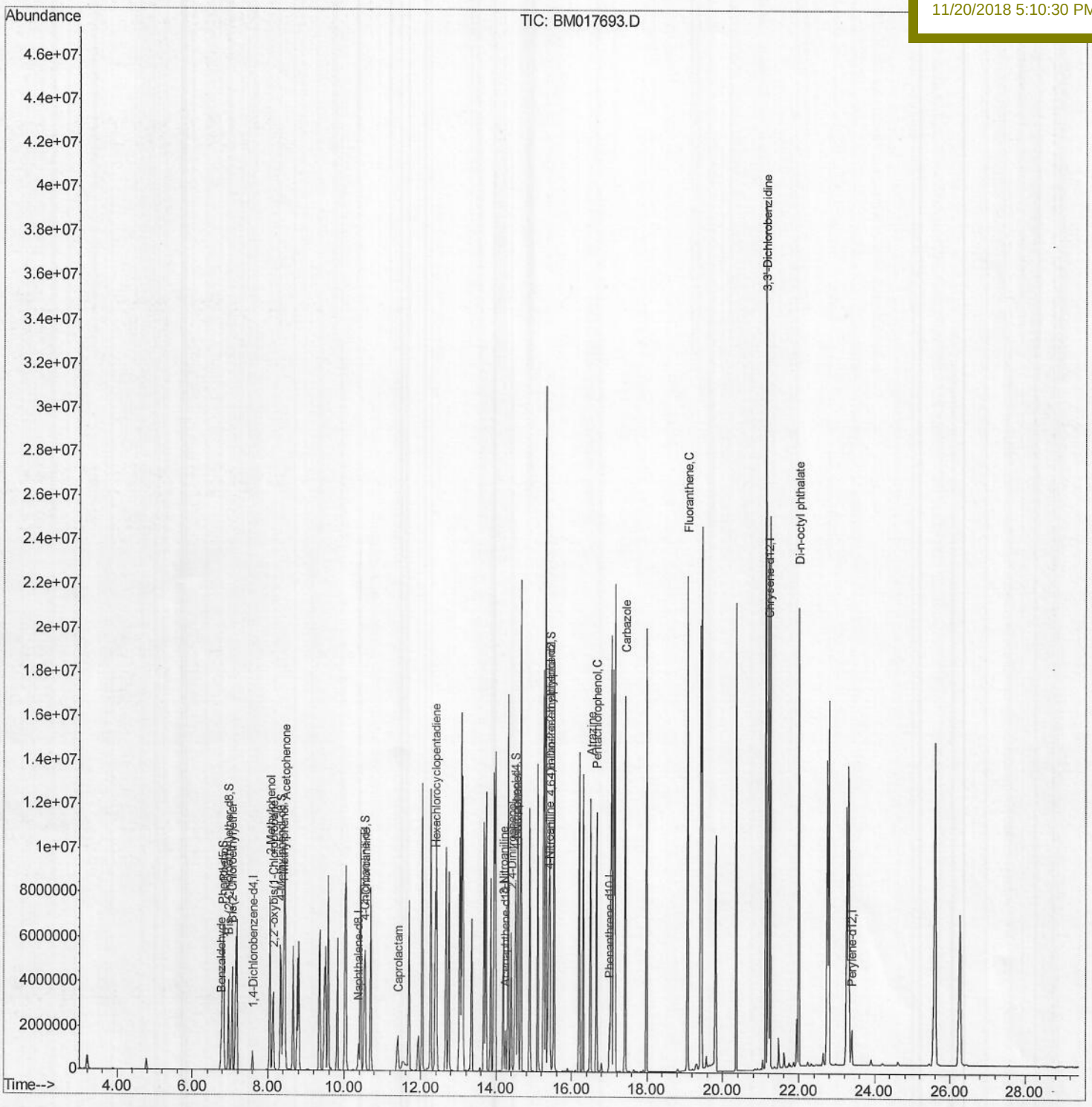
Quantitation Report (QT Reviewed)

Data File : BM017693.D
Acq On : 19 Nov 2018 21:26
Operator : MJ/SJ
Sample : SSTD16056
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 20 01:00:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD16056

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:30 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

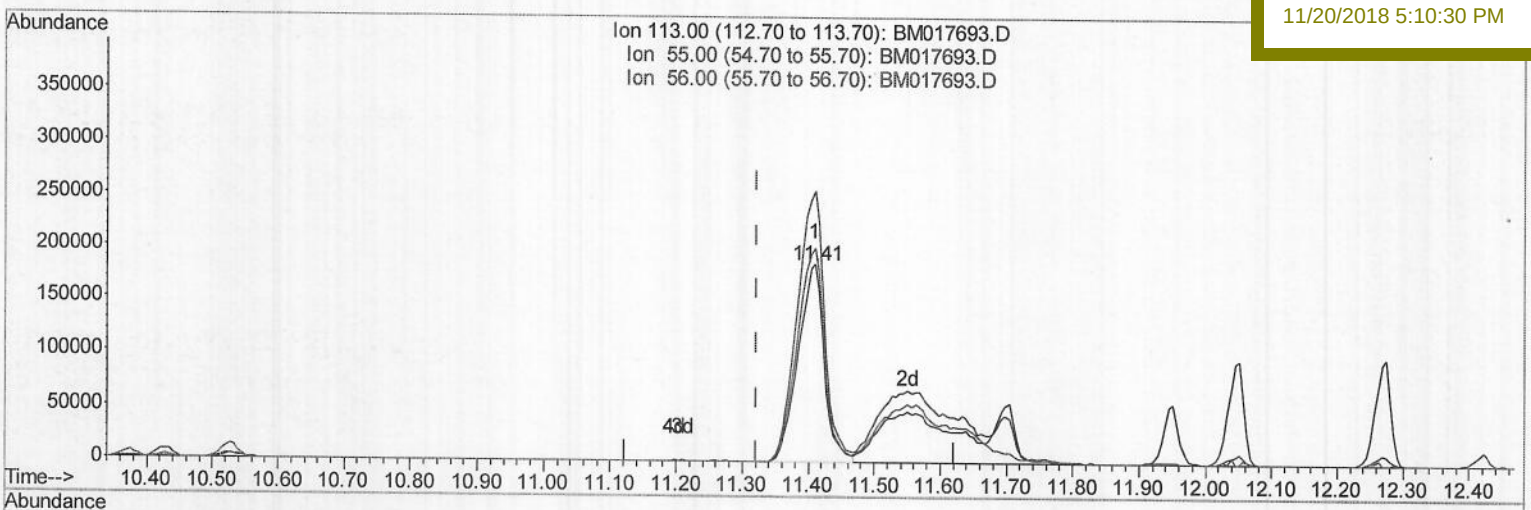
Quantitation Report (Qedit)

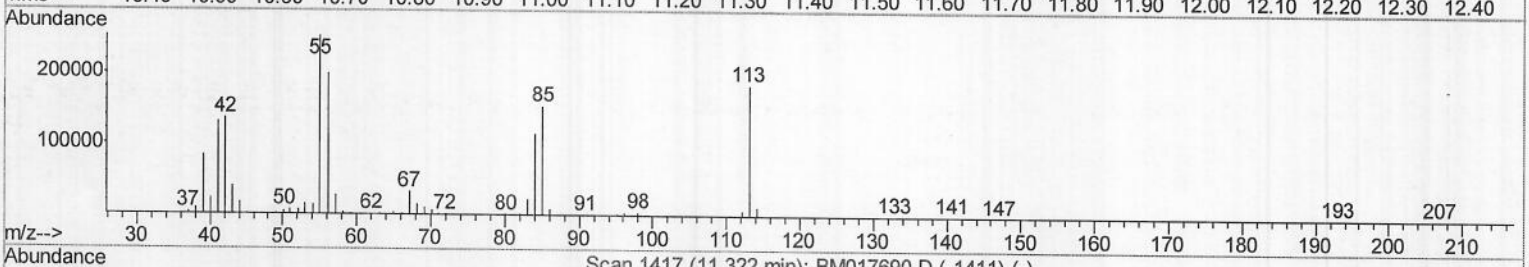
Data File : BM017693.D
Acq On : 19 Nov 2018 21:26
Operator : MJ/SJ
Sample : SSTD16056
Misc :
ALS Vial : 7 Sample Multiplier: 1

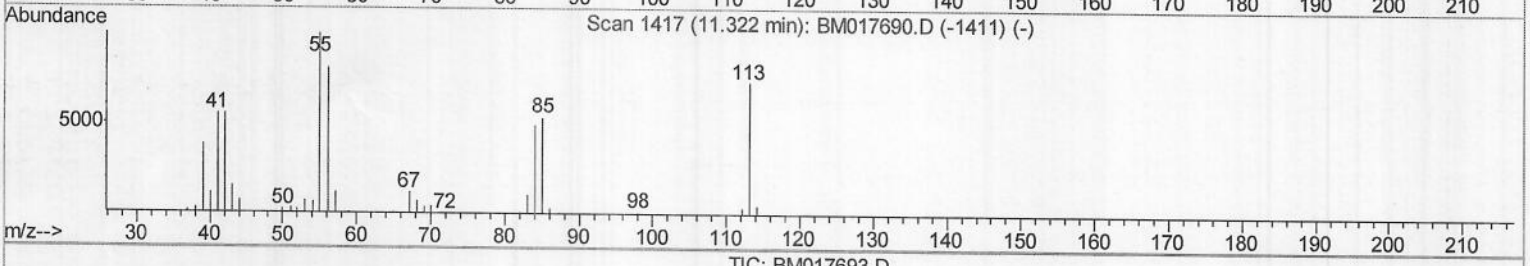
Quant Time: Nov 20 00:25:56 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD16056

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:30 PM







TIC: BM017693.D

(32) Caprolactam

11.410min (+0.088) 109.19ng/ul

response 508728

Ion	Exp%	Act%
113.00	100	100
55.00	138.30	137.64
56.00	110.30	108.08
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

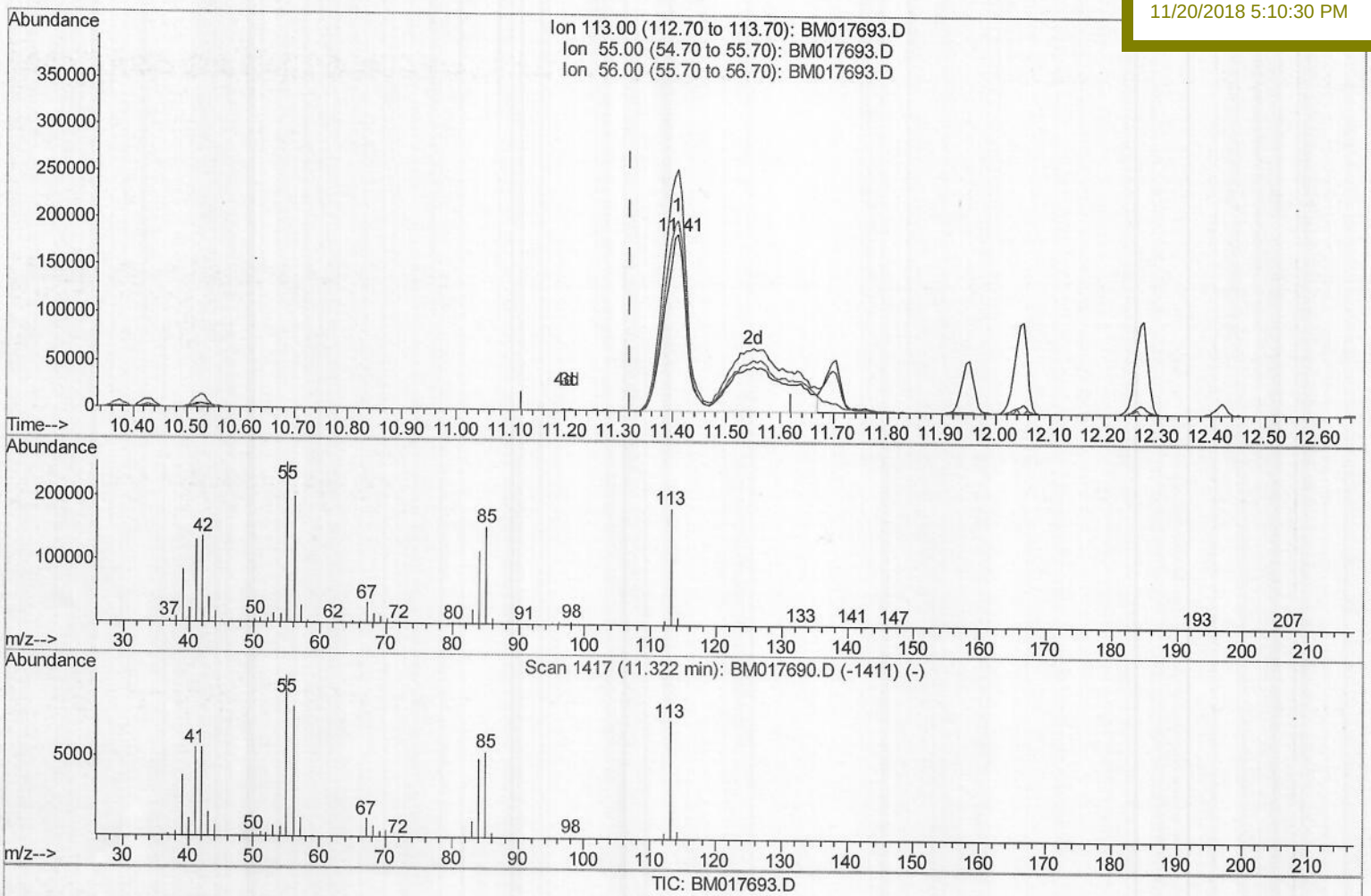
Quantitation Report (Qedit)

Data File : BM017693.D
Acq On : 19 Nov 2018 21:26
Operator : MJ/SJ
Sample : SSTD16056
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 20 00:25:56 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD16056

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:30 PM



TIC: BM017693.D

(32) Caprolactam

11.410min (+0.088) 189.97ng/ul m

response 885096

SJ
11/20/18

Ion	Exp%	Act%
113.00	100	100
55.00	138.30	137.64
56.00	110.30	108.08
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

Quantitation Report (QT Reviewed)

Data File : BM017693.D
Acq On : 19 Nov 2018 21:26
Operator : MJ/SJ
Sample : SSTD16056
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 20 01:00:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD16056

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:30 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.60	152	218147	20.00	ng/ul	0.00
18) Naphthalene-d8	10.37	136	1016792	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.25	164	616074	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.00	188	1398837	20.00	ng/ul	0.00
77) Chrysene-d12	21.21	240	1323720	20.00	ng/ul	0.00
85) Perylene-d12	23.40	264	1036817	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	0.00	96	0d	0.00	ng/uL	
5) Phenol-d5	6.80	99	3436225	169.78	ng/ul	0.02
7) Bis-(2-Chloroethyl)ether-d	6.96	67	1954925	171.05	ng/ul	0.00
9) 2-Chlorophenol-d4	0.00	132	0d	0.00	ng/ul	
13) 4-Methylphenol-d8	8.33	113	2746504	176.62	ng/ul	0.02
19) Nitrobenzene-d5	0.00	128	0d	0.00	ng/ul	
22) 2-Nitrophenol-d4	0.00	143	0d	0.00	ng/ul	
26) 2,4-Dichlorophenol-d3	0.00	165	0d	0.00	ng/ul	
29) 4-Chloroaniline-d4	10.53	131	2240141	165.56	ng/ul	0.00
43) Dimethylphthalate-d6	0.00	166	0d	0.00	ng/ul	
46) Acenaphthylene-d8	0.00	160	0d	0.00	ng/ul	
51) 4-Nitrophenol-d4	14.51	143	1682648	195.94	ng/ul	0.04
57) Fluorene-d10	0.00	176	0d	0.00	ng/ul	
62) 4,6-Dinitro-2-methylphenol	15.41	200	1812499	203.84	ng/ul	0.03
70) Anthracene-d10	0.00	188	0d	0.00	ng/ul	
78) Pyrene-d10	0.00	212	0d	0.00	ng/ul	
89) Benzo(a)pyrene-d12	0.00	264	0d	0.00	ng/ul	
Target Compounds						Qvalue
4) Benzaldehyde	6.76	77	515640	134.255	ng/ul	94
6) Phenol	6.83	94	3396386	166.946	ng/ul	96
8) Bis(2-Chloroethyl)ether	7.05	93	2481968	171.720	ng/ul	98
11) 2-Methylphenol	8.06	108	2584709	176.549	ng/ul	97
12) 2,2'-oxybis(1-Chloropropan	8.14	45	2889696	178.416	ng/ul	99
14) Acetophenone	8.44	105	4161713	174.109	ng/ul	99
16) 4-Methylphenol	8.41	108	2749150	174.016	ng/ul	95
30) 4-Chloroaniline	10.55	127	2293392	165.082	ng/ul	97
32) Caprolactam	11.41	113	885096m	189.967	ng/ul	
37) Hexachlorocyclopentadiene	12.39	237	2376176	198.380	ng/ul	98
48) 3-Nitroaniline	14.19	138	1585681	172.628	ng/ul	94
50) 2,4-Dinitrophenol	14.40	184	1338172	247.176	ng/ul	97
52) 4-Nitrophenol	14.53	109	1319732	171.452	ng/ul	96
60) 4-Nitroaniline	15.39	138	1907181	190.743	ng/ul	98
63) 4,6-Dinitro-2-methylphenol	15.43	198	1811980	195.559	ng/ul#	87
67) Atrazine	16.50	200	2580508	190.200	ng/ul	99
68) Pentachlorophenol	16.66	266	1959585	205.727	ng/ul	98
74) Carbazole	17.43	167	11399984	157.310	ng/ul	98
76) Fluoranthene	19.07	202	13516102	149.586	ng/ul#	92
81) 3,3'-Dichlorobenzidine	21.14	252	4387277	183.530	ng/ul	99
86) Di-n-octyl phthalate	22.00	149	12202139	271.696	ng/ul	100

SJ 11/20/18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

Quantitation Report (QT Reviewed)

Data File : BM017693.D
Acq On : 19 Nov 2018 21:26
Operator : MJ/SJ
Sample : SSTD16056
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 20 01:00:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 00:20:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
BNA_M
ClientSampleId :
SSTD16056

Manual Integrations APPROVED

Sohil
11/20/2018 5:10:30 PM

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 11/19/2018 Time: 22:02

Lab File ID: BM017694.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SICV57 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
1,4-Dioxane	0.466	0.462	0.01	-0.8	± 40.0
Benzaldehyde	0.341	0.346	0.10	1.5	± 40.0
Phenol	1.823	1.763	0.08	-3.3	± 20.0
Bis(2-Chloroethyl)ether	1.393	1.383	0.10	-0.7	± 20.0
2-Chlorophenol	1.428	1.426	0.20	-0.1	± 20.0
2-Methylphenol	1.391	1.355	0.01	-2.6	± 20.0
2,2-oxybis(1-Chloropropane)	1.643	1.661	0.01	1.0	± 25.0
Acetophenone	2.326	2.310	0.06	-0.7	± 20.0
4-Methylphenol	1.503	1.474	0.01	-1.9	± 20.0
N-Nitroso-di-n-propylamine	1.213	1.215	0.08	0.1	± 25.0
Hexachloroethane	0.579	0.568	0.10	-1.9	± 20.0
Nitrobenzene	0.386	0.381	0.09	-1.1	± 20.0
Isophorone	0.717	0.715	0.10	-0.4	± 20.0
2-Nitrophenol	0.183	0.188	0.06	2.8	± 20.0
2,4-Dimethylphenol	0.383	0.386	0.05	0.9	± 25.0
Bis(2-Chloroethoxy)methane	0.439	0.438	0.08	-0.2	± 20.0
2,4-Dichlorophenol	0.316	0.320	0.06	1.3	± 20.0
Naphthalene	1.042	1.042	0.20	0.0	± 20.0
4-Chloroaniline	0.293	0.297	0.01	1.1	± 40.0
Hexachlorobutadiene	0.210	0.205	0.04	-2.2	± 20.0
Caprolactam	0.105	0.106	0.01	1.1	± 30.0
4-Chloro-3-methylphenol	0.359	0.363	0.04	0.9	± 20.0
2-Methylnaphthalene	0.778	0.779	0.10	0.1	± 20.0
Hexachlorocyclopentadiene	0.430	0.401	0.01	-6.8	± 40.0
2,4,6-Trichlorophenol	0.434	0.437	0.09	0.7	± 20.0
2,4,5-Trichlorophenol	0.464	0.465	0.10	0.1	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 11/19/2018 Time: 22:02

Lab File ID: BM017694.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SICV57 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
1,1-Biphenyl	1.646	1.672	0.20	1.6	± 20.0
2-Chloronaphthalene	1.288	1.283	0.30	-0.4	± 20.0
2-Nitroaniline	0.375	0.379	0.06	1.2	± 25.0
Dimethylphthalate	1.681	1.692	0.30	0.7	± 20.0
2,6-Dinitrotoluene	0.330	0.341	0.08	3.3	± 20.0
Acenaphthylene	1.961	1.990	0.40	1.4	± 20.0
3-Nitroaniline	0.315	0.320	0.01	1.5	± 25.0
Acenaphthene	1.414	1.417	0.20	0.2	± 20.0
2,4-Dinitrophenol	0.224	0.208	0.01	-7.0	± 50.0
4-Nitrophenol	0.260	0.251	0.01	-3.1	± 40.0
Dibenzofuran	2.000	2.002	0.30	0.1	± 20.0
2,4-Dinitrotoluene	0.500	0.517	0.07	3.4	± 20.0
Diethylphthalate	1.732	1.743	0.30	0.6	± 20.0
Fluorene	1.668	1.658	0.20	-0.6	± 20.0
4-Chlorophenyl-phenylether	0.857	0.847	0.10	-1.2	± 20.0
4-Nitroaniline	0.350	0.323	0.01	-7.7	± 40.0
4,6-Dinitro-2-methylphenol	0.147	0.142	0.01	-3.9	± 30.0
N-Nitrosodiphenylamine	0.616	0.621	0.10	0.8	± 20.0
4-Bromophenyl-phenylether	0.229	0.228	0.07	-0.1	± 20.0
1,2,4,5-Tetrachlorobenzene	0.667	0.675	0.10	1.2	± 20.0
Hexachlorobenzene	0.254	0.256	0.05	0.7	± 20.0
Atrazine	0.228	0.226	0.01	-1.2	± 25.0
Pentachlorophenol	0.158	0.149	0.01	-5.5	± 40.0
Phenanthrene	1.144	1.149	0.20	0.5	± 20.0
Anthracene	1.170	1.178	0.20	0.7	± 20.0
Carbazole	1.031	1.030	0.05	0.0	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 11/19/2018 Time: 22:02

Lab File ID: BM017694.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SICV57 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Di-n-butylphthalate	1.302	1.298	0.50	-0.3	± 20.0
Fluoranthene	1.345	1.377	0.10	2.4	± 20.0
Pyrene	1.214	1.203	0.40	-0.9	± 25.0
Butylbenzylphthalate	0.519	0.519	0.10	-0.1	± 25.0
3,3-Dichlorobenzidine	0.412	0.411	0.01	-0.1	± 40.0
Benzo(a)anthracene	1.241	1.248	0.30	0.6	± 20.0
Chrysene	1.160	1.183	0.20	2.0	± 20.0
Bis(2-ethylhexyl)phthalate	0.769	0.770	0.20	0.2	± 25.0
Di-n-octyl phthalate	1.401	1.320	0.01	-5.8	± 40.0
Benzo(b)fluoranthene	1.243	1.241	0.01	-0.2	± 25.0
Benzo(k)fluoranthene	1.208	1.224	0.01	1.3	± 25.0
Benzo(a)pyrene	1.179	1.190	0.01	0.9	± 20.0
Indeno(1,2,3-cd)pyrene	1.249	1.265	0.01	1.2	± 25.0
Dibenzo(a,h)anthracene	1.055	1.071	0.01	1.5	± 25.0
Benzo(g,h,i)perylene	1.010	1.026	0.01	1.6	± 30.0
2,3,4,6-Tetrachlorophenol	0.428	0.435	0.04	1.8	± 20.0
1,4-Dioxane-d8	0.437	0.443	0.01	1.5	± 25.0
Phenol-d5	1.827	1.774	0.01	-2.9	± 25.0
Bis-(2-Chloroethyl)ether-d8	1.101	1.079	0.10	-2.1	± 20.0
2-Chlorophenol-d4	1.429	1.440	0.20	0.7	± 20.0
4-Methylphenol-d8	1.492	1.482	0.01	-0.7	± 20.0
Nitrobenzene-d5	0.154	0.157	0.05	2.5	± 20.0
2-Nitrophenol-d4	0.176	0.177	0.05	0.7	± 20.0
2,4-Dichlorophenol-d3	0.335	0.336	0.06	0.2	± 20.0
4-Chloroaniline-d4	0.288	0.295	0.01	2.7	± 40.0
Dimethylphthalate-d6	1.735	1.763	0.30	1.6	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 11/19/2018 Time: 22:02

Lab File ID: BM017694.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SICV57 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Acenaphthylene-d8	2.100	2.133	0.40	1.6	± 20.0
4-Nitrophenol-d4	0.316	0.309	0.01	-2.1	± 40.0
Fluorene-d10	1.499	1.494	0.10	-0.3	± 20.0
4,6-Dinitro-2-methylphenol-d2	0.143	0.137	0.01	-3.9	± 30.0
Anthracene-d10	0.996	0.999	0.30	0.3	± 20.0
Pyrene-d10	0.968	0.970	0.30	0.2	± 25.0
Benzo(a)pyrene-d12	1.085	1.099	0.01	1.3	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/08/2018 Time: 11:10

Lab File ID: BM018012.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02084 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
1,4-Dioxane	0.466	0.473	0.01	1.4	± 40.0
Benzaldehyde	0.341	0.253	0.10	-25.6	± 40.0
Phenol	1.823	1.480	0.08	-18.8	± 20.0
Bis(2-Chloroethyl)ether	1.393	1.192	0.10	-14.4	± 20.0
2-Chlorophenol	1.428	1.308	0.20	-8.4	± 20.0
2-Methylphenol	1.391	1.158	0.01	-16.7	± 20.0
2,2-oxybis(1-Chloropropane)	1.643	1.297	0.01	-21.0	± 25.0
Acetophenone	2.326	1.871	0.06	-19.6	± 20.0
4-Methylphenol	1.503	1.209	0.01	-19.6	± 20.0
N-Nitroso-di-n-propylamine	1.213	0.922	0.08	-24.0	± 25.0
Hexachloroethane	0.579	0.544	0.10	-6.0	± 20.0
Nitrobenzene	0.386	0.338	0.09	-12.4	± 20.0
Isophorone	0.717	0.606	0.10	-15.6	± 20.0
2-Nitrophenol	0.183	0.168	0.06	-8.4	± 20.0
2,4-Dimethylphenol	0.383	0.336	0.05	-12.2	± 25.0
Bis(2-Chloroethoxy)methane	0.439	0.385	0.08	-12.2	± 20.0
2,4-Dichlorophenol	0.316	0.293	0.06	-7.5	± 20.0
Naphthalene	1.042	0.978	0.20	-6.1	± 20.0
4-Chloroaniline	0.293	0.262	0.01	-10.7	± 40.0
Hexachlorobutadiene	0.210	0.202	0.04	-4.0	± 20.0
Caprolactam	0.105	0.075	0.01	-28.0	± 30.0
4-Chloro-3-methylphenol	0.359	0.294	0.04	-18.3	± 20.0
2-Methylnaphthalene	0.778	0.679	0.10	-12.7	± 20.0
Hexachlorocyclopentadiene	0.430	0.322	0.01	-25.1	± 40.0
2,4,6-Trichlorophenol	0.434	0.406	0.09	-6.4	± 20.0
2,4,5-Trichlorophenol	0.464	0.435	0.10	-6.2	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/08/2018 Time: 11:10

Lab File ID: BM018012.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02084 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
1,1-Biphenyl	1.646	1.612	0.20	-2.1	± 20.0
2-Chloronaphthalene	1.288	1.251	0.30	-2.8	± 20.0
2-Nitroaniline	0.375	0.319	0.06	-14.8	± 25.0
Dimethylphthalate	1.681	1.508	0.30	-10.3	± 20.0
2,6-Dinitrotoluene	0.330	0.301	0.08	-8.8	± 20.0
Acenaphthylene	1.961	1.866	0.40	-4.9	± 20.0
3-Nitroaniline	0.315	0.264	0.01	-16.4	± 25.0
Acenaphthene	1.414	1.319	0.20	-6.7	± 20.0
2,4-Dinitrophenol	0.224	0.121	0.01	-46.2	± 50.0
4-Nitrophenol	0.260	0.160	0.01	-38.2	± 40.0
Dibenzofuran	2.000	1.829	0.30	-8.6	± 20.0
2,4-Dinitrotoluene	0.500	0.427	0.07	-14.6	± 20.0
Diethylphthalate	1.732	1.502	0.30	-13.3	± 20.0
Fluorene	1.668	1.496	0.20	-10.3	± 20.0
4-Chlorophenyl-phenylether	0.857	0.777	0.10	-9.3	± 20.0
4-Nitroaniline	0.350	0.250	0.01	-28.8	± 40.0
4,6-Dinitro-2-methylphenol	0.147	0.114	0.01	-22.5	± 30.0
N-Nitrosodiphenylamine	0.616	0.613	0.10	-0.5	± 20.0
4-Bromophenyl-phenylether	0.229	0.225	0.07	-1.7	± 20.0
1,2,4,5-Tetrachlorobenzene	0.667	0.671	0.10	0.6	± 20.0
Hexachlorobenzene	0.254	0.249	0.05	-2.1	± 20.0
Atrazine	0.228	0.204	0.01	-10.8	± 25.0
Pentachlorophenol	0.158	0.134	0.01	-15.3	± 40.0
Phenanthrene	1.144	1.086	0.20	-5.1	± 20.0
Anthracene	1.170	1.111	0.20	-5.0	± 20.0
Carbazole	1.031	0.923	0.05	-10.5	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/08/2018 Time: 11:10

Lab File ID: BM018012.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02084 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Di-n-butylphthalate	1.302	1.158	0.50	-11.1	± 20.0
Fluoranthene	1.345	1.221	0.10	-9.2	± 20.0
Pyrene	1.214	1.231	0.40	1.4	± 25.0
Butylbenzylphthalate	0.519	0.490	0.10	-5.7	± 25.0
3,3-Dichlorobenzidine	0.412	0.351	0.01	-14.7	± 40.0
Benzo(a)anthracene	1.241	1.159	0.30	-6.6	± 20.0
Chrysene	1.160	1.107	0.20	-4.6	± 20.0
Bis(2-ethylhexyl)phthalate	0.769	0.715	0.20	-7.0	± 25.0
Di-n-octyl phthalate	1.401	1.209	0.01	-13.7	± 40.0
Benzo(b)fluoranthene	1.243	1.169	0.01	-6.0	± 25.0
Benzo(k)fluoranthene	1.208	1.132	0.01	-6.3	± 25.0
Benzo(a)pyrene	1.179	1.098	0.01	-6.9	± 20.0
Indeno(1,2,3-cd)pyrene	1.249	1.246	0.01	-0.2	± 25.0
Dibenzo(a,h)anthracene	1.055	1.048	0.01	-0.6	± 25.0
Benzo(g,h,i)perylene	1.010	1.028	0.01	1.8	± 30.0
2,3,4,6-Tetrachlorophenol	0.428	0.378	0.04	-11.7	± 20.0
1,4-Dioxane-d8	0.437	0.437	0.01	0.1	± 25.0
Phenol-d5	1.827	1.495	0.01	-18.2	± 25.0
Bis-(2-Chloroethyl)ether-d8	1.101	0.890	0.10	-19.2	± 20.0
2-Chlorophenol-d4	1.429	1.335	0.20	-6.6	± 20.0
4-Methylphenol-d8	1.492	1.201	0.01	-19.5	± 20.0
Nitrobenzene-d5	0.154	0.145	0.05	-5.6	± 20.0
2-Nitrophenol-d4	0.176	0.158	0.05	-10.1	± 20.0
2,4-Dichlorophenol-d3	0.335	0.298	0.06	-11.1	± 20.0
4-Chloroaniline-d4	0.288	0.251	0.01	-12.6	± 40.0
Dimethylphthalate-d6	1.735	1.563	0.30	-10.0	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/08/2018 Time: 11:10

Lab File ID: BM018012.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02084 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Acenaphthylene-d8	2.100	1.965	0.40	-6.4	± 20.0
4-Nitrophenol-d4	0.316	0.195	0.01	-38.3	± 40.0
Fluorene-d10	1.499	1.349	0.10	-10.0	± 20.0
4,6-Dinitro-2-methylphenol-d2	0.143	0.113	0.01	-21.2	± 30.0
Anthracene-d10	0.996	0.941	0.30	-5.5	± 20.0
Pyrene-d10	0.968	0.972	0.30	0.5	± 25.0
Benzo(a)pyrene-d12	1.085	1.011	0.01	-6.8	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/08/2018 Time: 17:53

Lab File ID: BM018023.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02085 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
1,4-Dioxane	0.466	0.456	0.01	-2.2	± 50.0
Benzaldehyde	0.341	0.262	0.10	-23.1	± 50.0
Phenol	1.823	1.444	0.08	-20.8	± 25.0
Bis(2-Chloroethyl)ether	1.393	1.166	0.10	-16.3	± 25.0
2-Chlorophenol	1.428	1.268	0.20	-11.2	± 25.0
2-Methylphenol	1.391	1.089	0.01	-21.7	± 25.0
2,2-oxybis(1-Chloropropane)	1.643	1.234	0.01	-24.9	± 50.0
Acetophenone	2.326	1.719	0.06	-26.1	± 25.0
4-Methylphenol	1.503	1.129	0.01	-24.9	± 25.0
N-Nitroso-di-n-propylamine	1.213	0.842	0.08	-30.6	± 25.0
Hexachloroethane	0.579	0.524	0.10	-9.6	± 25.0
Nitrobenzene	0.386	0.335	0.09	-13.1	± 25.0
Isophorone	0.717	0.584	0.10	-18.6	± 25.0
2-Nitrophenol	0.183	0.170	0.06	-7.2	± 25.0
2,4-Dimethylphenol	0.383	0.332	0.05	-13.1	± 50.0
Bis(2-Chloroethoxy)methane	0.439	0.374	0.08	-14.8	± 25.0
2,4-Dichlorophenol	0.316	0.287	0.06	-9.4	± 25.0
Naphthalene	1.042	0.986	0.20	-5.4	± 25.0
4-Chloroaniline	0.293	0.250	0.01	-14.7	± 50.0
Hexachlorobutadiene	0.210	0.204	0.04	-3.0	± 25.0
Caprolactam	0.105	0.069	0.01	-33.9	± 50.0
4-Chloro-3-methylphenol	0.359	0.281	0.04	-21.8	± 25.0
2-Methylnaphthalene	0.778	0.678	0.10	-12.9	± 25.0
Hexachlorocyclopentadiene	0.430	0.329	0.01	-23.4	± 50.0
2,4,6-Trichlorophenol	0.434	0.409	0.09	-5.7	± 25.0
2,4,5-Trichlorophenol	0.464	0.427	0.10	-8.0	± 25.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/08/2018 Time: 17:53

Lab File ID: BM018023.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02085 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
1,1-Biphenyl	1.646	1.606	0.20	-2.4	± 25.0
2-Chloronaphthalene	1.288	1.284	0.30	-0.3	± 25.0
2-Nitroaniline	0.375	0.300	0.06	-20.1	± 25.0
Dimethylphthalate	1.681	1.504	0.30	-10.5	± 25.0
2,6-Dinitrotoluene	0.330	0.292	0.08	-11.6	± 25.0
Acenaphthylene	1.961	1.871	0.40	-4.6	± 25.0
3-Nitroaniline	0.315	0.255	0.01	-18.9	± 50.0
Acenaphthene	1.414	1.337	0.20	-5.4	± 25.0
2,4-Dinitrophenol	0.224	0.122	0.01	-45.4	± 50.0
4-Nitrophenol	0.260	0.160	0.01	-38.5	± 50.0
Dibenzofuran	2.000	1.844	0.30	-7.8	± 25.0
2,4-Dinitrotoluene	0.500	0.431	0.07	-13.9	± 25.0
Diethylphthalate	1.732	1.471	0.30	-15.1	± 25.0
Fluorene	1.668	1.489	0.20	-10.8	± 25.0
4-Chlorophenyl-phenylether	0.857	0.768	0.10	-10.4	± 25.0
4-Nitroaniline	0.350	0.221	0.01	-36.9	± 50.0
4,6-Dinitro-2-methylphenol	0.147	0.118	0.01	-20.0	± 50.0
N-Nitrosodiphenylamine	0.616	0.603	0.10	-2.1	± 25.0
4-Bromophenyl-phenylether	0.229	0.225	0.07	-1.6	± 25.0
1,2,4,5-Tetrachlorobenzene	0.667	0.689	0.10	3.2	± 25.0
Hexachlorobenzene	0.254	0.250	0.05	-1.7	± 25.0
Atrazine	0.228	0.204	0.01	-10.6	± 50.0
Pentachlorophenol	0.158	0.129	0.01	-18.5	± 50.0
Phenanthrene	1.144	1.099	0.20	-3.9	± 25.0
Anthracene	1.170	1.125	0.20	-3.9	± 25.0
Carbazole	1.031	0.922	0.05	-10.6	± 25.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/08/2018 Time: 17:53

Lab File ID: BM018023.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02085 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Di-n-butylphthalate	1.302	1.114	0.50	-14.5	± 25.0
Fluoranthene	1.345	1.223	0.10	-9.1	± 25.0
Pyrene	1.214	1.153	0.40	-5.0	± 50.0
Butylbenzylphthalate	0.519	0.443	0.10	-14.6	± 50.0
3,3-Dichlorobenzidine	0.412	0.354	0.01	-13.9	± 50.0
Benzo(a)anthracene	1.241	1.151	0.30	-7.2	± 25.0
Chrysene	1.160	1.102	0.20	-5.0	± 50.0
Bis(2-ethylhexyl)phthalate	0.769	0.650	0.20	-15.4	± 50.0
Di-n-octyl phthalate	1.401	1.066	0.01	-23.9	± 50.0
Benzo(b)fluoranthene	1.243	1.111	0.01	-10.6	± 50.0
Benzo(k)fluoranthene	1.208	1.101	0.01	-8.9	± 50.0
Benzo(a)pyrene	1.179	1.083	0.01	-8.2	± 50.0
Indeno(1,2,3-cd)pyrene	1.249	1.319	0.01	5.6	± 50.0
Dibenzo(a,h)anthracene	1.055	1.086	0.01	2.9	± 50.0
Benzo(g,h,i)perylene	1.010	1.085	0.01	7.5	± 50.0
2,3,4,6-Tetrachlorophenol	0.428	0.365	0.04	-14.7	± 50.0
1,4-Dioxane-d8	0.437	0.440	0.01	0.6	± 50.0
Phenol-d5	1.827	1.445	0.01	-20.9	± 25.0
Bis-(2-Chloroethyl)ether-d8	1.101	0.897	0.10	-18.5	± 25.0
2-Chlorophenol-d4	1.429	1.299	0.20	-9.1	± 25.0
4-Methylphenol-d8	1.492	1.117	0.01	-25.1	± 25.0
Nitrobenzene-d5	0.154	0.147	0.05	-4.1	± 25.0
2-Nitrophenol-d4	0.176	0.158	0.05	-10.3	± 25.0
2,4-Dichlorophenol-d3	0.335	0.301	0.06	-10.1	± 25.0
4-Chloroaniline-d4	0.288	0.244	0.01	-15.3	± 50.0
Dimethylphthalate-d6	1.735	1.519	0.30	-12.5	± 25.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/08/2018 Time: 17:53

Lab File ID: BM018023.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02085 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Acenaphthylene-d8	2.100	1.982	0.40	-5.6	± 25.0
4-Nitrophenol-d4	0.316	0.201	0.01	-36.3	± 50.0
Fluorene-d10	1.499	1.341	0.10	-10.5	± 25.0
4,6-Dinitro-2-methylphenol-d2	0.143	0.107	0.01	-25.2	± 50.0
Anthracene-d10	0.996	0.950	0.30	-4.5	± 25.0
Pyrene-d10	0.968	0.914	0.30	-5.6	± 50.0
Benzo(a)pyrene-d12	1.085	0.995	0.01	-8.3	± 50.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/12/2018 Time: 15:26

Lab File ID: BM018093.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02093 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
1,4-Dioxane	0.466	0.425	0.01	-8.8	± 40.0
Benzaldehyde	0.341	0.296	0.10	-13.0	± 40.0
Phenol	1.823	1.732	0.08	-5.0	± 20.0
Bis(2-Chloroethyl)ether	1.393	1.272	0.10	-8.7	± 20.0
2-Chlorophenol	1.428	1.447	0.20	1.4	± 20.0
2-Methylphenol	1.391	1.370	0.01	-1.5	± 20.0
2,2-oxybis(1-Chloropropane)	1.643	1.436	0.01	-12.6	± 25.0
Acetophenone	2.326	2.257	0.06	-3.0	± 20.0
4-Methylphenol	1.503	1.501	0.01	-0.1	± 20.0
N-Nitroso-di-n-propylamine	1.213	1.135	0.08	-6.4	± 25.0
Hexachloroethane	0.579	0.562	0.10	-2.9	± 20.0
Nitrobenzene	0.386	0.335	0.09	-13.1	± 20.0
Isophorone	0.717	0.676	0.10	-5.8	± 20.0
2-Nitrophenol	0.183	0.189	0.06	3.0	± 20.0
2,4-Dimethylphenol	0.383	0.366	0.05	-4.3	± 25.0
Bis(2-Chloroethoxy)methane	0.439	0.410	0.08	-6.7	± 20.0
2,4-Dichlorophenol	0.316	0.315	0.06	-0.3	± 20.0
Naphthalene	1.042	1.031	0.20	-1.0	± 20.0
4-Chloroaniline	0.293	0.305	0.01	4.0	± 40.0
Hexachlorobutadiene	0.210	0.193	0.04	-8.4	± 20.0
Caprolactam	0.105	0.117	0.01	11.9	± 30.0
4-Chloro-3-methylphenol	0.359	0.365	0.04	1.6	± 20.0
2-Methylnaphthalene	0.778	0.776	0.10	-0.2	± 20.0
Hexachlorocyclopentadiene	0.430	0.266	0.01	-38.3	± 40.0
2,4,6-Trichlorophenol	0.434	0.429	0.09	-1.0	± 20.0
2,4,5-Trichlorophenol	0.464	0.457	0.10	-1.5	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/12/2018 Time: 15:26

Lab File ID: BM018093.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02093 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
1,1-Biphenyl	1.646	1.588	0.20	-3.5	± 20.0
2-Chloronaphthalene	1.288	1.236	0.30	-4.0	± 20.0
2-Nitroaniline	0.375	0.353	0.06	-5.8	± 25.0
Dimethylphthalate	1.681	1.664	0.30	-1.0	± 20.0
2,6-Dinitrotoluene	0.330	0.344	0.08	4.3	± 20.0
Acenaphthylene	1.961	1.960	0.40	-0.1	± 20.0
3-Nitroaniline	0.315	0.328	0.01	4.0	± 25.0
Acenaphthene	1.414	1.366	0.20	-3.4	± 20.0
2,4-Dinitrophenol	0.224	0.211	0.01	-5.9	± 50.0
4-Nitrophenol	0.260	0.222	0.01	-14.4	± 40.0
Dibenzofuran	2.000	1.935	0.30	-3.3	± 20.0
2,4-Dinitrotoluene	0.500	0.523	0.07	4.5	± 20.0
Diethylphthalate	1.732	1.706	0.30	-1.5	± 20.0
Fluorene	1.668	1.624	0.20	-2.6	± 20.0
4-Chlorophenyl-phenylether	0.857	0.794	0.10	-7.4	± 20.0
4-Nitroaniline	0.350	0.359	0.01	2.6	± 40.0
4,6-Dinitro-2-methylphenol	0.147	0.138	0.01	-6.5	± 30.0
N-Nitrosodiphenylamine	0.616	0.615	0.10	-0.1	± 20.0
4-Bromophenyl-phenylether	0.229	0.225	0.07	-1.4	± 20.0
1,2,4,5-Tetrachlorobenzene	0.667	0.627	0.10	-6.1	± 20.0
Hexachlorobenzene	0.254	0.247	0.05	-2.8	± 20.0
Atrazine	0.228	0.231	0.01	1.1	± 25.0
Pentachlorophenol	0.158	0.155	0.01	-2.2	± 40.0
Phenanthrene	1.144	1.136	0.20	-0.7	± 20.0
Anthracene	1.170	1.185	0.20	1.3	± 20.0
Carbazole	1.031	1.066	0.05	3.4	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/12/2018 Time: 15:26

Lab File ID: BM018093.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02093 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Di-n-butylphthalate	1.302	1.348	0.50	3.5	± 20.0
Fluoranthene	1.345	1.412	0.10	4.9	± 20.0
Pyrene	1.214	1.151	0.40	-5.2	± 25.0
Butylbenzylphthalate	0.519	0.527	0.10	1.5	± 25.0
3,3-Dichlorobenzidine	0.412	0.417	0.01	1.3	± 40.0
Benzo(a)anthracene	1.241	1.218	0.30	-1.8	± 20.0
Chrysene	1.160	1.156	0.20	-0.3	± 20.0
Bis(2-ethylhexyl)phthalate	0.769	0.797	0.20	3.7	± 25.0
Di-n-octyl phthalate	1.401	1.282	0.01	-8.5	± 40.0
Benzo(b)fluoranthene	1.243	1.189	0.01	-4.3	± 25.0
Benzo(k)fluoranthene	1.208	1.129	0.01	-6.5	± 25.0
Benzo(a)pyrene	1.179	1.150	0.01	-2.5	± 20.0
Indeno(1,2,3-cd)pyrene	1.249	1.415	0.01	13.3	± 25.0
Dibenzo(a,h)anthracene	1.055	1.171	0.01	11.0	± 25.0
Benzo(g,h,i)perylene	1.010	1.189	0.01	17.8	± 30.0
2,3,4,6-Tetrachlorophenol	0.428	0.430	0.04	0.5	± 20.0
1,4-Dioxane-d8	0.437	0.377	0.01	-13.7	± 25.0
Phenol-d5	1.827	1.761	0.01	-3.6	± 25.0
Bis-(2-Chloroethyl)ether-d8	1.101	0.958	0.10	-13.0	± 20.0
2-Chlorophenol-d4	1.429	1.446	0.20	1.2	± 20.0
4-Methylphenol-d8	1.492	1.481	0.01	-0.8	± 20.0
Nitrobenzene-d5	0.154	0.153	0.05	-0.2	± 20.0
2-Nitrophenol-d4	0.176	0.177	0.05	0.6	± 20.0
2,4-Dichlorophenol-d3	0.335	0.326	0.06	-2.7	± 20.0
4-Chloroaniline-d4	0.288	0.297	0.01	3.4	± 40.0
Dimethylphthalate-d6	1.735	1.733	0.30	-0.2	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/12/2018 Time: 15:26

Lab File ID: BM018093.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02093 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{\text{RRF}}$	RRF020	MIN RRF	%D	MAX %D
Acenaphthylene-d8	2.100	2.100	0.40	0.0	± 20.0
4-Nitrophenol-d4	0.316	0.286	0.01	-9.3	± 40.0
Fluorene-d10	1.499	1.457	0.10	-2.7	± 20.0
4,6-Dinitro-2-methylphenol-d2	0.143	0.136	0.01	-5.0	± 30.0
Anthracene-d10	0.996	1.001	0.30	0.5	± 20.0
Pyrene-d10	0.968	0.906	0.30	-6.4	± 25.0
Benzo(a)pyrene-d12	1.085	1.069	0.01	-1.4	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/13/2018 Time: 01:04

Lab File ID: BM018109.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02094 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
1,4-Dioxane	0.466	0.341	0.01	-26.8	± 40.0
Benzaldehyde	0.341	0.296	0.10	-13.0	± 40.0
Phenol	1.823	1.717	0.08	-5.8	± 20.0
Bis(2-Chloroethyl)ether	1.393	1.323	0.10	-5.0	± 20.0
2-Chlorophenol	1.428	1.447	0.20	1.4	± 20.0
2-Methylphenol	1.391	1.399	0.01	0.5	± 20.0
2,2-oxybis(1-Chloropropane)	1.643	1.488	0.01	-9.5	± 25.0
Acetophenone	2.326	2.252	0.06	-3.2	± 20.0
4-Methylphenol	1.503	1.535	0.01	2.1	± 20.0
N-Nitroso-di-n-propylamine	1.213	1.150	0.08	-5.2	± 25.0
Hexachloroethane	0.579	0.555	0.10	-4.1	± 20.0
Nitrobenzene	0.386	0.345	0.09	-10.5	± 20.0
Isophorone	0.717	0.674	0.10	-6.1	± 20.0
2-Nitrophenol	0.183	0.185	0.06	1.2	± 20.0
2,4-Dimethylphenol	0.383	0.370	0.05	-3.3	± 25.0
Bis(2-Chloroethoxy)methane	0.439	0.409	0.08	-6.8	± 20.0
2,4-Dichlorophenol	0.316	0.313	0.06	-1.0	± 20.0
Naphthalene	1.042	1.029	0.20	-1.3	± 20.0
4-Chloroaniline	0.293	0.306	0.01	4.2	± 40.0
Hexachlorobutadiene	0.210	0.194	0.04	-7.4	± 20.0
Caprolactam	0.105	0.108	0.01	3.6	± 30.0
4-Chloro-3-methylphenol	0.359	0.348	0.04	-3.0	± 20.0
2-Methylnaphthalene	0.778	0.763	0.10	-2.0	± 20.0
Hexachlorocyclopentadiene	0.430	0.440	0.01	2.3	± 40.0
2,4,6-Trichlorophenol	0.434	0.457	0.09	5.5	± 20.0
2,4,5-Trichlorophenol	0.464	0.469	0.10	1.0	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/13/2018 Time: 01:04

Lab File ID: BM018109.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02094 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
1,1-Biphenyl	1.646	1.655	0.20	0.5	± 20.0
2-Chloronaphthalene	1.288	1.276	0.30	-1.0	± 20.0
2-Nitroaniline	0.375	0.313	0.06	-16.6	± 25.0
Dimethylphthalate	1.681	1.597	0.30	-5.0	± 20.0
2,6-Dinitrotoluene	0.330	0.337	0.08	2.0	± 20.0
Acenaphthylene	1.961	1.912	0.40	-2.5	± 20.0
3-Nitroaniline	0.315	0.320	0.01	1.6	± 25.0
Acenaphthene	1.414	1.342	0.20	-5.1	± 20.0
2,4-Dinitrophenol	0.224	0.184	0.01	-17.7	± 50.0
4-Nitrophenol	0.260	0.198	0.01	-23.8	± 40.0
Dibenzofuran	2.000	1.925	0.30	-3.7	± 20.0
2,4-Dinitrotoluene	0.500	0.494	0.07	-1.2	± 20.0
Diethylphthalate	1.732	1.614	0.30	-6.8	± 20.0
Fluorene	1.668	1.586	0.20	-4.9	± 20.0
4-Chlorophenyl-phenylether	0.857	0.805	0.10	-6.0	± 20.0
4-Nitroaniline	0.350	0.327	0.01	-6.8	± 40.0
4,6-Dinitro-2-methylphenol	0.147	0.129	0.01	-12.2	± 30.0
N-Nitrosodiphenylamine	0.616	0.609	0.10	-1.2	± 20.0
4-Bromophenyl-phenylether	0.229	0.221	0.07	-3.3	± 20.0
1,2,4,5-Tetrachlorobenzene	0.667	0.723	0.10	8.4	± 20.0
Hexachlorobenzene	0.254	0.252	0.05	-0.7	± 20.0
Atrazine	0.228	0.218	0.01	-4.5	± 25.0
Pentachlorophenol	0.158	0.145	0.01	-8.2	± 40.0
Phenanthrene	1.144	1.115	0.20	-2.5	± 20.0
Anthracene	1.170	1.146	0.20	-2.0	± 20.0
Carbazole	1.031	1.021	0.05	-0.9	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/13/2018 Time: 01:04

Lab File ID: BM018109.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02094 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Di-n-butylphthalate	1.302	1.238	0.50	-5.0	± 20.0
Fluoranthene	1.345	1.341	0.10	-0.3	± 20.0
Pyrene	1.214	1.139	0.40	-6.2	± 25.0
Butylbenzylphthalate	0.519	0.494	0.10	-4.8	± 25.0
3,3-Dichlorobenzidine	0.412	0.410	0.01	-0.5	± 40.0
Benzo(a)anthracene	1.241	1.187	0.30	-4.3	± 20.0
Chrysene	1.160	1.135	0.20	-2.2	± 20.0
Bis(2-ethylhexyl)phthalate	0.769	0.727	0.20	-5.5	± 25.0
Di-n-octyl phthalate	1.401	1.208	0.01	-13.7	± 40.0
Benzo(b)fluoranthene	1.243	1.152	0.01	-7.3	± 25.0
Benzo(k)fluoranthene	1.208	1.172	0.01	-3.0	± 25.0
Benzo(a)pyrene	1.179	1.182	0.01	0.3	± 20.0
Indeno(1,2,3-cd)pyrene	1.249	1.361	0.01	9.0	± 25.0
Dibenzo(a,h)anthracene	1.055	1.149	0.01	9.0	± 25.0
Benzo(g,h,i)perylene	1.010	1.112	0.01	10.2	± 30.0
2,3,4,6-Tetrachlorophenol	0.428	0.416	0.04	-2.7	± 20.0
1,4-Dioxane-d8	0.437	0.327	0.01	-25.3	± 25.0
Phenol-d5	1.827	1.776	0.01	-2.7	± 25.0
Bis-(2-Chloroethyl)ether-d8	1.101	0.980	0.10	-11.0	± 20.0
2-Chlorophenol-d4	1.429	1.446	0.20	1.2	± 20.0
4-Methylphenol-d8	1.492	1.495	0.01	0.2	± 20.0
Nitrobenzene-d5	0.154	0.151	0.05	-1.9	± 20.0
2-Nitrophenol-d4	0.176	0.177	0.05	0.5	± 20.0
2,4-Dichlorophenol-d3	0.335	0.326	0.06	-2.8	± 20.0
4-Chloroaniline-d4	0.288	0.293	0.01	1.8	± 40.0
Dimethylphthalate-d6	1.735	1.663	0.30	-4.2	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/13/2018 Time: 01:04

Lab File ID: BM018109.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02094 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Acenaphthylene-d8	2.100	2.063	0.40	-1.8	± 20.0
4-Nitrophenol-d4	0.316	0.268	0.01	-15.2	± 40.0
Fluorene-d10	1.499	1.437	0.10	-4.1	± 20.0
4,6-Dinitro-2-methylphenol-d2	0.143	0.128	0.01	-10.4	± 30.0
Anthracene-d10	0.996	0.968	0.30	-2.8	± 20.0
Pyrene-d10	0.968	0.905	0.30	-6.5	± 25.0
Benzo(a)pyrene-d12	1.085	1.076	0.01	-0.8	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/13/2018 Time: 10:43

Lab File ID: BM018124.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02095 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
1,4-Dioxane	0.466	0.370	0.01	-20.7	± 50.0
Benzaldehyde	0.341	0.335	0.10	-1.8	± 50.0
Phenol	1.823	1.787	0.08	-2.0	± 25.0
Bis(2-Chloroethyl)ether	1.393	1.360	0.10	-2.3	± 25.0
2-Chlorophenol	1.428	1.469	0.20	2.9	± 25.0
2-Methylphenol	1.391	1.447	0.01	4.0	± 25.0
2,2-oxybis(1-Chloropropane)	1.643	1.510	0.01	-8.1	± 50.0
Acetophenone	2.326	2.412	0.06	3.7	± 25.0
4-Methylphenol	1.503	1.587	0.01	5.6	± 25.0
N-Nitroso-di-n-propylamine	1.213	1.236	0.08	1.9	± 25.0
Hexachloroethane	0.579	0.580	0.10	0.1	± 25.0
Nitrobenzene	0.386	0.340	0.09	-11.9	± 25.0
Isophorone	0.717	0.724	0.10	1.0	± 25.0
2-Nitrophenol	0.183	0.194	0.06	5.7	± 25.0
2,4-Dimethylphenol	0.383	0.383	0.05	0.1	± 50.0
Bis(2-Chloroethoxy)methane	0.439	0.412	0.08	-6.2	± 25.0
2,4-Dichlorophenol	0.316	0.314	0.06	-0.8	± 25.0
Naphthalene	1.042	1.016	0.20	-2.5	± 25.0
4-Chloroaniline	0.293	0.303	0.01	3.3	± 50.0
Hexachlorobutadiene	0.210	0.188	0.04	-10.4	± 25.0
Caprolactam	0.105	0.126	0.01	20.6	± 50.0
4-Chloro-3-methylphenol	0.359	0.381	0.04	5.9	± 25.0
2-Methylnaphthalene	0.778	0.778	0.10	0.0	± 25.0
Hexachlorocyclopentadiene	0.430	0.232	0.01	-46.1	± 50.0
2,4,6-Trichlorophenol	0.434	0.432	0.09	-0.3	± 25.0
2,4,5-Trichlorophenol	0.464	0.475	0.10	2.4	± 25.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/13/2018 Time: 10:43

Lab File ID: BM018124.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02095 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
1,1-Biphenyl	1.646	1.614	0.20	-2.0	± 25.0
2-Chloronaphthalene	1.288	1.212	0.30	-5.9	± 25.0
2-Nitroaniline	0.375	0.367	0.06	-2.1	± 25.0
Dimethylphthalate	1.681	1.694	0.30	0.7	± 25.0
2,6-Dinitrotoluene	0.330	0.359	0.08	8.7	± 25.0
Acenaphthylene	1.961	1.986	0.40	1.3	± 25.0
3-Nitroaniline	0.315	0.334	0.01	6.0	± 50.0
Acenaphthene	1.414	1.389	0.20	-1.8	± 25.0
2,4-Dinitrophenol	0.224	0.201	0.01	-10.1	± 50.0
4-Nitrophenol	0.260	0.216	0.01	-16.7	± 50.0
Dibenzofuran	2.000	1.960	0.30	-2.0	± 25.0
2,4-Dinitrotoluene	0.500	0.548	0.07	9.5	± 25.0
Diethylphthalate	1.732	1.759	0.30	1.5	± 25.0
Fluorene	1.668	1.655	0.20	-0.8	± 25.0
4-Chlorophenyl-phenylether	0.857	0.811	0.10	-5.4	± 25.0
4-Nitroaniline	0.350	0.333	0.01	-4.8	± 50.0
4,6-Dinitro-2-methylphenol	0.147	0.137	0.01	-7.1	± 50.0
N-Nitrosodiphenylamine	0.616	0.617	0.10	0.2	± 25.0
4-Bromophenyl-phenylether	0.229	0.222	0.07	-2.7	± 25.0
1,2,4,5-Tetrachlorobenzene	0.667	0.632	0.10	-5.3	± 25.0
Hexachlorobenzene	0.254	0.250	0.05	-1.4	± 25.0
Atrazine	0.228	0.232	0.01	1.4	± 50.0
Pentachlorophenol	0.158	0.141	0.01	-10.9	± 50.0
Phenanthrene	1.144	1.121	0.20	-2.0	± 25.0
Anthracene	1.170	1.155	0.20	-1.3	± 25.0
Carbazole	1.031	1.068	0.05	3.7	± 25.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/13/2018 Time: 10:43

Lab File ID: BM018124.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02095 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Di-n-butylphthalate	1.302	1.364	0.50	4.7	± 25.0
Fluoranthene	1.345	1.405	0.10	4.4	± 25.0
Pyrene	1.214	1.124	0.40	-7.4	± 50.0
Butylbenzylphthalate	0.519	0.535	0.10	3.1	± 50.0
3,3-Dichlorobenzidine	0.412	0.419	0.01	1.7	± 50.0
Benzo(a)anthracene	1.241	1.222	0.30	-1.5	± 25.0
Chrysene	1.160	1.156	0.20	-0.4	± 50.0
Bis(2-ethylhexyl)phthalate	0.769	0.806	0.20	4.9	± 50.0
Di-n-octyl phthalate	1.401	1.242	0.01	-11.4	± 50.0
Benzo(b)fluoranthene	1.243	1.139	0.01	-8.4	± 50.0
Benzo(k)fluoranthene	1.208	1.104	0.01	-8.6	± 50.0
Benzo(a)pyrene	1.179	1.130	0.01	-4.2	± 50.0
Indeno(1,2,3-cd)pyrene	1.249	1.444	0.01	15.6	± 50.0
Dibenzo(a,h)anthracene	1.055	1.207	0.01	14.5	± 50.0
Benzo(g,h,i)perylene	1.010	1.209	0.01	19.7	± 50.0
2,3,4,6-Tetrachlorophenol	0.428	0.429	0.04	0.2	± 50.0
1,4-Dioxane-d8	0.437	0.326	0.01	-25.4	± 50.0
Phenol-d5	1.827	1.833	0.01	0.4	± 25.0
Bis-(2-Chloroethyl)ether-d8	1.101	1.020	0.10	-7.4	± 25.0
2-Chlorophenol-d4	1.429	1.499	0.20	4.9	± 25.0
4-Methylphenol-d8	1.492	1.563	0.01	4.7	± 25.0
Nitrobenzene-d5	0.154	0.161	0.05	4.9	± 25.0
2-Nitrophenol-d4	0.176	0.188	0.05	6.9	± 25.0
2,4-Dichlorophenol-d3	0.335	0.341	0.06	1.8	± 25.0
4-Chloroaniline-d4	0.288	0.303	0.01	5.3	± 50.0
Dimethylphthalate-d6	1.735	1.785	0.30	2.9	± 25.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA Level:

Instrument ID: BNA_M Date Analyzed: 12/13/2018 Time: 10:43

Lab File ID: BM018124.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD02095 Init. Calib Time(s): 18:26 21:26

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Acenaphthylene-d8	2.100	2.103	0.40	0.1	± 25.0
4-Nitrophenol-d4	0.316	0.273	0.01	-13.5	± 50.0
Fluorene-d10	1.499	1.486	0.10	-0.9	± 25.0
4,6-Dinitro-2-methylphenol-d2	0.143	0.137	0.01	-4.3	± 50.0
Anthracene-d10	0.996	0.985	0.30	-1.1	± 25.0
Pyrene-d10	0.968	0.895	0.30	-7.6	± 50.0
Benzo(a)pyrene-d12	1.085	1.059	0.01	-2.4	± 50.0

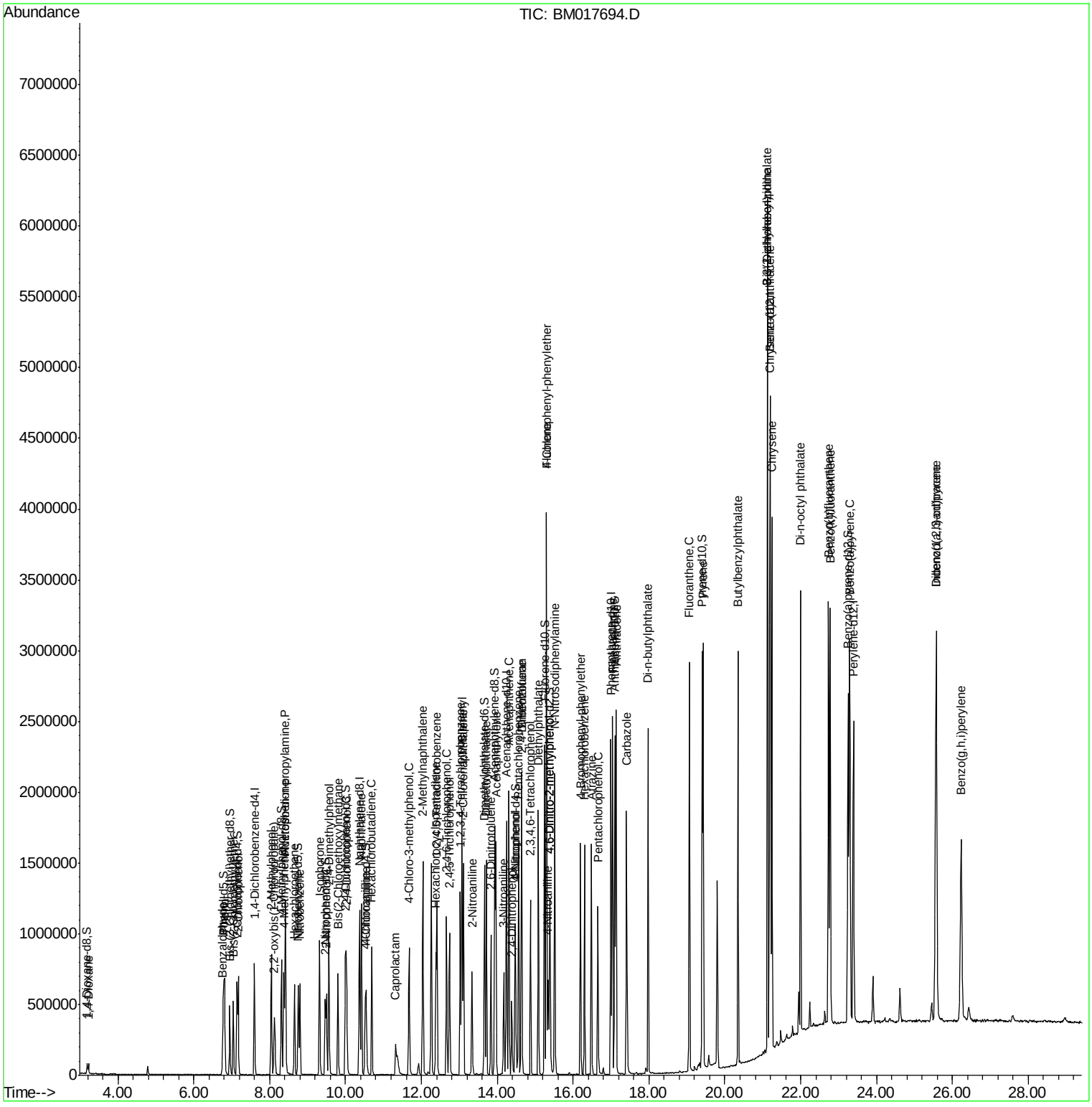
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017694.D
Acq On : 19 Nov 2018 22:02
Operator : MJ/SJ
Sample : SSTDICV020
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 20 01:17:56 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 01:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SICV57

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:32 PM



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Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017694.D
Acq On : 19 Nov 2018 22:02
Operator : MJ/SJ
Sample : SSTDICV020
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SICV57

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:32 PM

Quant Time: Nov 20 01:17:56 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 01:04:58 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.60	152	202013	20.00	ng/ul	0.00
18) Naphthalene-d8	10.37	136	919583	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.24	164	560834	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.00	188	1320441	20.00	ng/ul	0.00
77) Chrysene-d12	21.20	240	1537487	20.00	ng/ul	0.00
85) Perylene-d12	23.39	264	1505974	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.19	96	35831	8.12	ng/uL	0.00
5) Phenol-d5	6.78	99	358424	19.43	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.95	67	217910	19.59	ng/ul	0.00
9) 2-Chlorophenol-d4	7.13	132	290828	20.15	ng/ul	0.00
13) 4-Methylphenol-d8	8.31	113	299378	19.86	ng/ul	0.00
19) Nitrobenzene-d5	8.75	128	144745	20.49	ng/ul	0.00
22) 2-Nitrophenol-d4	9.47	143	162926	20.13	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	10.00	165	308761	20.04	ng/ul	0.00
29) 4-Chloroaniline-d4	10.52	131	271686	20.55	ng/ul	0.00
43) Dimethylphthalate-d6	13.66	166	988761	20.32	ng/ul	0.00
46) Acenaphthylene-d8	13.93	160	1196438	20.32	ng/ul	0.00
51) 4-Nitrophenol-d4	14.47	143	173309	19.59	ng/ul	0.00
57) Fluorene-d10	15.24	176	838150	19.95	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.38	200	181372	19.21	ng/ul	0.00
70) Anthracene-d10	17.10	188	1318913	20.06	ng/ul	0.00
78) Pyrene-d10	19.40	212	1490668	20.04	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.25	264	1654641	20.26	ng/ul	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.22	88	37361	7.933	ng/uL	95
4) Benzaldehyde	6.76	77	69842	20.301	ng/ul	88
6) Phenol	6.81	94	356072	19.335	ng/ul	97
8) Bis(2-Chloroethyl)ether	7.04	93	279380	19.857	ng/ul	99
10) 2-Chlorophenol	7.17	128	288037	19.971	ng/ul	98
11) 2-Methylphenol	8.05	108	273664	19.477	ng/ul	97
12) 2,2'-oxybis(1-Chloropropan	8.12	45	335447	20.208	ng/ul	98
14) Acetophenone	8.42	105	466670	19.861	ng/ul	99
15) N-Nitroso-di-n-propylamine	8.40	70	245449	20.028	ng/ul	100
16) 4-Methylphenol	8.37	108	297826	19.615	ng/ul	97
17) Hexachloroethane	8.66	117	114781	19.628	ng/ul	90
20) Nitrobenzene	8.79	77	350591	19.775	ng/ul	99
21) Isophorone	9.32	82	657241	19.928	ng/ul	100
23) 2-Nitrophenol	9.50	139	173105	20.552	ng/ul	97
24) 2,4-Dimethylphenol	9.56	107	355128	20.184	ng/ul	98
25) Bis(2-Chloroethoxy)methane	9.80	93	402852	19.961	ng/ul	100
27) 2,4-Dichlorophenol	10.02	162	294616	20.252	ng/ul	97
28) Naphthalene	10.42	128	958122	19.998	ng/ul	100
30) 4-Chloroaniline	10.55	127	272710	20.217	ng/ul	98
31) Hexachlorobutadiene	10.69	225	188885	19.550	ng/ul	96
32) Caprolactam	11.33	113	97327m	20.222	ng/ul	
33) 4-Chloro-3-methylphenol	11.67	107	333358	20.177	ng/ul	98
34) 2-Methylnaphthalene	12.04	142	716209	20.024	ng/ul	98

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM111918\
Data File : BM017694.D
Acq On : 19 Nov 2018 22:02
Operator : MJ/SJ
Sample : SSTDICV020
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SICV57

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:32 PM

Quant Time: Nov 20 01:17:56 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 01:04:58 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.41	216	378832	20.244	ng/ul	98
37) Hexachlorocyclopentadiene	12.39	237	224877	18.634	ng/ul	100
38) 2,4,6-Trichlorophenol	12.66	196	244902	20.137	ng/ul	95
39) 2,4,5-Trichlorophenol	12.74	196	260508	20.028	ng/ul	98
40) 1,1'-Biphenyl	13.07	154	937745	20.312	ng/ul	99
41) 2-Chloronaphthalene	13.11	162	719364	19.919	ng/ul	99
42) 2-Nitroaniline	13.33	65	212813	20.236	ng/ul	97
44) Dimethylphthalate	13.72	163	949206	20.134	ng/ul	100
45) 2,6-Dinitrotoluene	13.83	165	191480	20.669	ng/ul	100
47) Acenaphthylene	13.96	152	1115972	20.290	ng/ul	100
48) 3-Nitroaniline	14.17	138	179477	20.308	ng/ul	99
49) Acenaphthene	14.31	153	794668	20.047	ng/ul	99
50) 2,4-Dinitrophenol	14.38	184	116863	18.606	ng/ul	98
52) 4-Nitrophenol	14.48	109	140984	19.374	ng/ul	98
53) Dibenzofuran	14.64	168	1123067	20.022	ng/ul	99
54) 2,4-Dinitrotoluene	14.63	165	290082	20.681	ng/ul	97
55) 2,3,4,6-Tetrachlorophenol	14.88	232	244153	20.357	ng/ul	98
56) Diethylphthalate	15.09	149	977493	20.127	ng/ul	99
58) Fluorene	15.30	166	930118	19.884	ng/ul	100
59) 4-Chlorophenyl-phenylether	15.30	204	474950	19.767	ng/ul	99
60) 4-Nitroaniline	15.34	138	181425	18.466	ng/ul	94
63) 4,6-Dinitro-2-methylphenol	15.39	198	187011	19.224	ng/ul	97
64) N-Nitrosodiphenylamine	15.52	169	819446	20.157	ng/ul	99
65) 4-Bromophenyl-phenylether	16.20	248	301416	19.976	ng/ul	96
66) Hexachlorobenzene	16.30	284	337723	20.137	ng/ul	98
67) Atrazine	16.48	200	297884	19.754	ng/ul	98
68) Pentachlorophenol	16.65	266	197155	18.895	ng/ul	98
69) Phenanthrene	17.04	178	1517570	20.097	ng/ul	99
71) Anthracene	17.13	178	1554967	20.136	ng/ul	99
72) 1,2,3,4-Tetrachlorobenzene	13.03	216	373750	19.973	ng/uL	99
73) Pentachlorobenzene	14.56	250	381984	19.958	ng/uL	98
74) Carbazole	17.41	167	1360616	19.996	ng/ul	99
75) Di-n-butylphthalate	17.98	149	1714210	19.934	ng/ul	100
76) Fluoranthene	19.07	202	1818773	20.478	ng/ul	99
79) Pyrene	19.43	202	1849924	19.821	ng/ul	99
80) Butylbenzylphthalate	20.34	149	797674	19.987	ng/ul	97
81) 3,3'-Dichlorobenzidine	21.13	252	632216	19.975	ng/ul	99
82) Benzo(a)anthracene	21.19	228	1919337	20.127	ng/ul	99
83) Bis(2-ethylhexyl)phthalate	21.13	149	1183756	20.031	ng/ul	99
84) Chrysene	21.24	228	1819478	20.401	ng/ul	99
86) Di-n-octyl phthalate	22.00	149	1987583	18.843	ng/ul	100
87) Benzo(b)fluoranthene	22.74	252	1868165	19.957	ng/ul	100
88) Benzo(k)fluoranthene	22.78	252	1843713	20.265	ng/ul	99
90) Benzo(a)pyrene	23.30	252	1791440	20.180	ng/ul	99
91) Indeno(1,2,3-cd)pyrene	25.57	276	1904590	20.248	ng/ul	99
92) Dibenzo(a,h)anthracene	25.58	278	1612598	20.306	ng/ul	100
93) Benzo(g,h,i)perylene	26.23	276	1544751	20.320	ng/ul	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

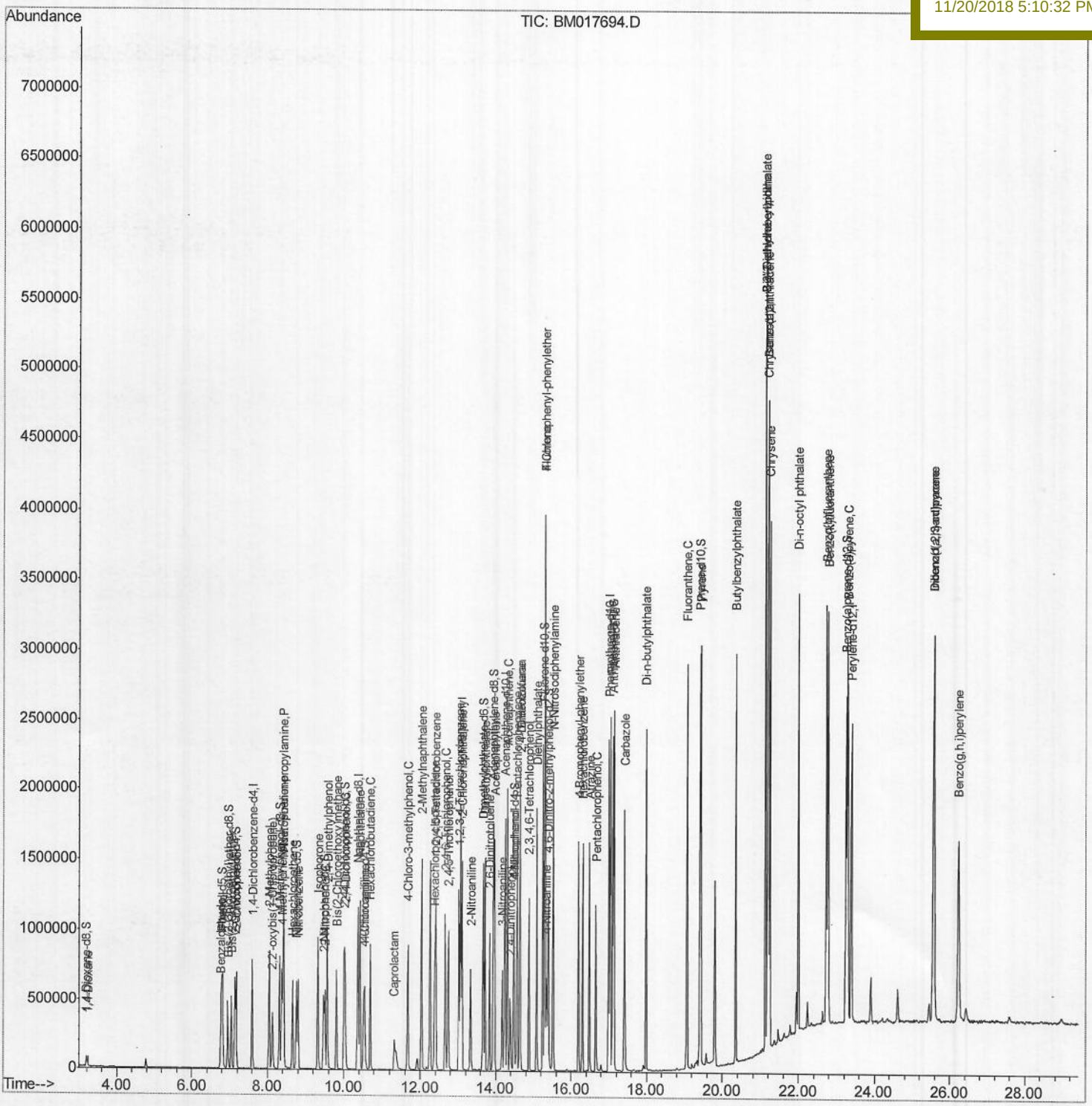
Quantitation Report (QT Reviewed)

Data File : BM017694.D
Acq On : 19 Nov 2018 22:02
Operator : MJ/SJ
Sample : SSTDICV020
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 20 01:17:56 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 01:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SICV57

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:32 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

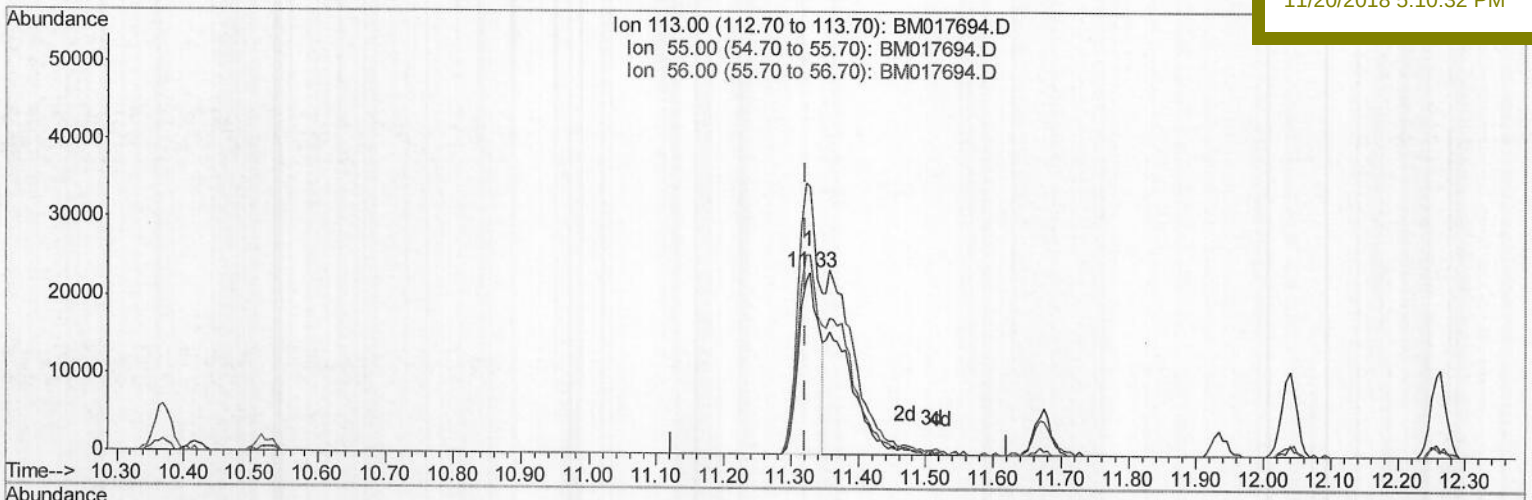
Quantitation Report (Qedit)

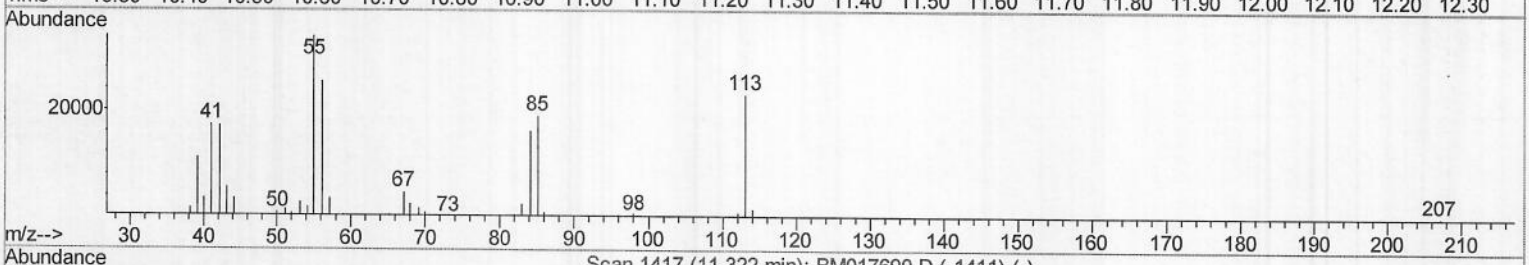
Data File : BM017694.D
Acq On : 19 Nov 2018 22:02
Operator : MJ/SJ
Sample : SSTDICV020
Misc :
ALS Vial : 8 Sample Multiplier: 1

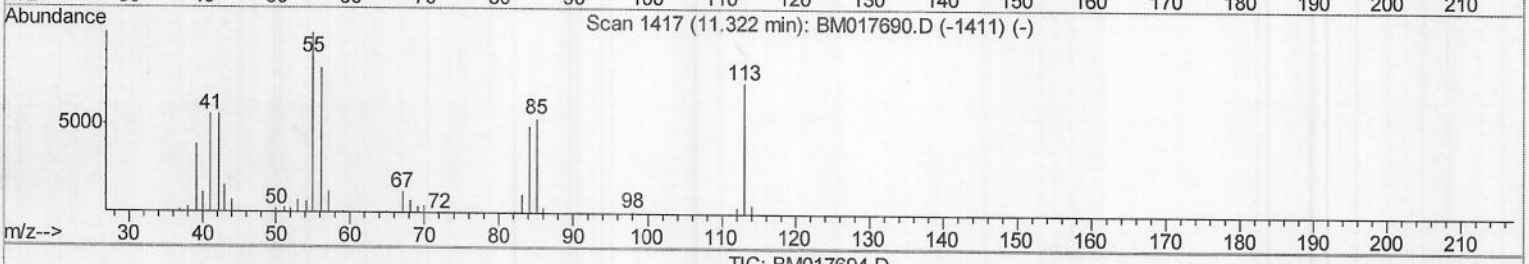
Quant Time: Nov 20 01:14:48 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 01:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SICV57

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:32 PM







TIC: BM017694.D

(32) Caprolactam

11.327min (+0.006) 9.98ng/ul

response 48038

Ion	Exp%	Act%
113.00	100	100
55.00	138.30	146.18
56.00	110.30	109.36
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

Quantitation Report (Qedit)

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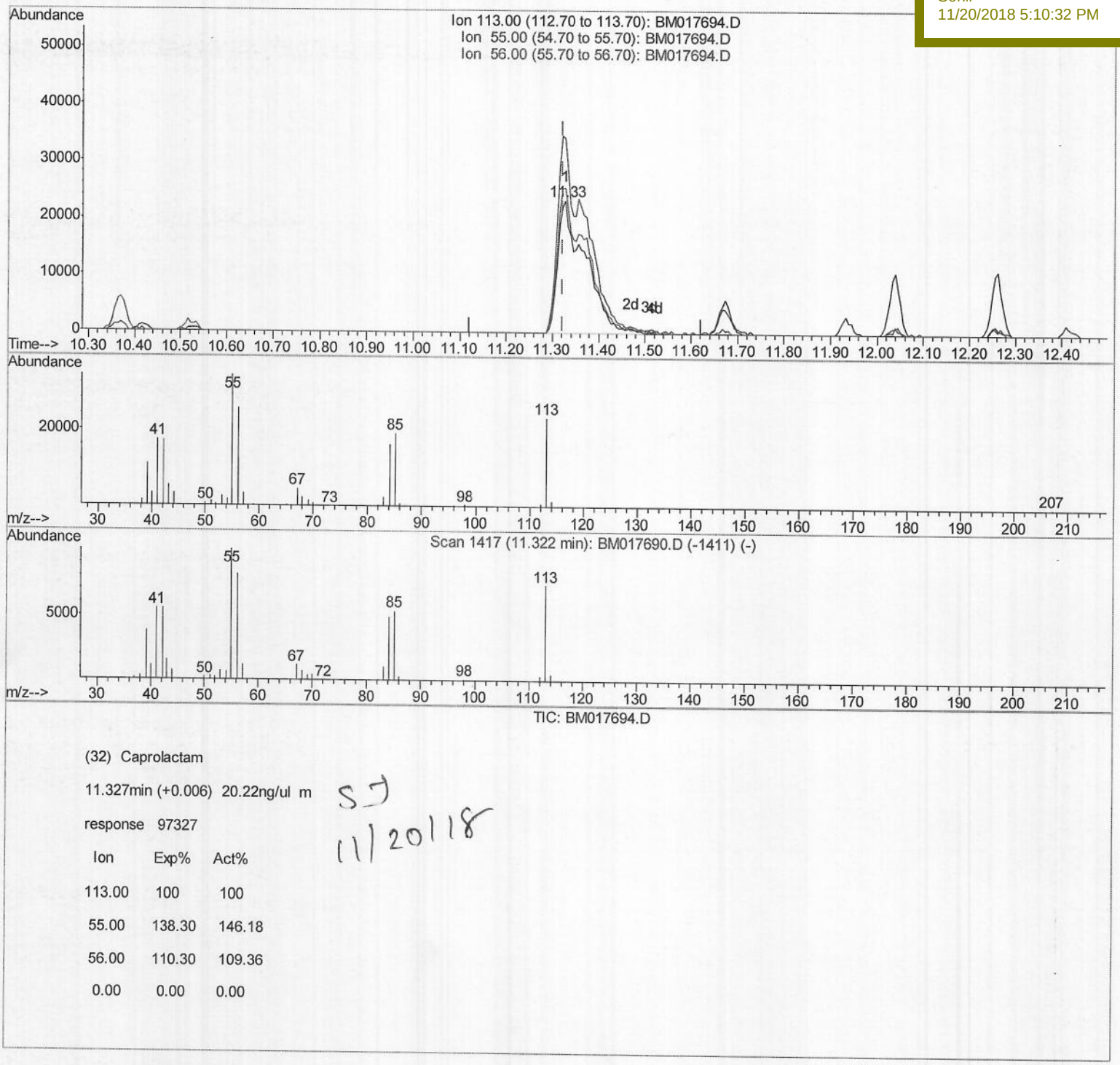
Manual Integrations APPROVED
Sohil
11/20/2018 5:10:32 PM



(32) Caprolactam

11.327min (+0.006) 20.22ng/ul m

response 97327

SJ 11/20/18

Ion	Exp%	Act%
113.00	100	100
55.00	138.30	146.18
56.00	110.30	109.36
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

Quantitation Report (QT Reviewed)

Data File : BM017694.D
Acq On : 19 Nov 2018 22:02
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QLast Update : Tue Nov 20 01:04:58 2018
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Instrument :
BNA_M
ClientSampleId :
SICV57

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:32 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.60	152	202013	20.00	ng/ul	0.00
18) Naphthalene-d8	10.37	136	919583	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.24	164	560834	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.00	188	1320441	20.00	ng/ul	0.00
77) Chrysene-d12	21.20	240	1537487	20.00	ng/ul	0.00
85) Perylene-d12	23.39	264	1505974	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.19	96	35831	8.12	ng/uL	0.00
5) Phenol-d5	6.78	99	358424	19.43	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.95	67	217910	19.59	ng/ul	0.00
9) 2-Chlorophenol-d4	7.13	132	290828	20.15	ng/ul	0.00
13) 4-Methylphenol-d8	8.31	113	299378	19.86	ng/ul	0.00
19) Nitrobenzene-d5	8.75	128	144745	20.49	ng/ul	0.00
22) 2-Nitrophenol-d4	9.47	143	162926	20.13	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	10.00	165	308761	20.04	ng/ul	0.00
29) 4-Chloroaniline-d4	10.52	131	271686	20.55	ng/ul	0.00
43) Dimethylphthalate-d6	13.66	166	988761	20.32	ng/ul	0.00
46) Acenaphthylene-d8	13.93	160	1196438	20.32	ng/ul	0.00
51) 4-Nitrophenol-d4	14.47	143	173309	19.59	ng/ul	0.00
57) Fluorene-d10	15.24	176	838150	19.95	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.38	200	181372	19.21	ng/ul	0.00
70) Anthracene-d10	17.10	188	1318913	20.06	ng/ul	0.00
78) Pyrene-d10	19.40	212	1490668	20.04	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.25	264	1654641	20.26	ng/ul	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.22	88	37361	7.933	ng/uL	95
4) Benzaldehyde	6.76	77	69842	20.301	ng/ul	88
6) Phenol	6.81	94	356072	19.335	ng/ul	97
8) Bis(2-Chloroethyl)ether	7.04	93	279380	19.857	ng/ul	99
10) 2-Chlorophenol	7.17	128	288037	19.971	ng/ul	98
11) 2-Methylphenol	8.05	108	273664	19.477	ng/ul	97
12) 2,2'-oxybis(1-Chloropropan	8.12	45	335447	20.208	ng/ul	98
14) Acetophenone	8.42	105	466670	19.861	ng/ul	99
15) N-Nitroso-di-n-propylamine	8.40	70	245449	20.028	ng/ul	100
16) 4-Methylphenol	8.37	108	297826	19.615	ng/ul	97
17) Hexachloroethane	8.66	117	114781	19.628	ng/ul	90
20) Nitrobenzene	8.79	77	350591	19.775	ng/ul	99
21) Isophorone	9.32	82	657241	19.928	ng/ul	100
23) 2-Nitrophenol	9.50	139	173105	20.552	ng/ul	97
24) 2,4-Dimethylphenol	9.56	107	355128	20.184	ng/ul	98
25) Bis(2-Chloroethoxy)methane	9.80	93	402852	19.961	ng/ul	100
27) 2,4-Dichlorophenol	10.02	162	294616	20.252	ng/ul	97
28) Naphthalene	10.42	128	958122	19.998	ng/ul	100
30) 4-Chloroaniline	10.55	127	272710	20.217	ng/ul	98
31) Hexachlorobutadiene	10.69	225	188885	19.550	ng/ul	96
32) Caprolactam	11.33	113	97327m	20.222	ng/ul	
33) 4-Chloro-3-methylphenol	11.67	107	333358	20.177	ng/ul	98
34) 2-Methylnaphthalene	12.04	142	716209	20.024	ng/ul	98

SJ 11/20/18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM111918\

Quantitation Report (QT Reviewed)

Data File : BM017694.D
Acq On : 19 Nov 2018 22:02
Operator : MJ/SJ
Sample : SSTDICV020
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 20 01:17:56 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Nov 20 01:04:58 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : SICV57

Manual Integrations APPROVED
Sohil
11/20/2018 5:10:32 PM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.41	216	378832	20.244 ng/ul	98
37) Hexachlorocyclopentadiene	12.39	237	224877	18.634 ng/ul	100
38) 2,4,6-Trichlorophenol	12.66	196	244902	20.137 ng/ul	95
39) 2,4,5-Trichlorophenol	12.74	196	260508	20.028 ng/ul	98
40) 1,1'-Biphenyl	13.07	154	937745	20.312 ng/ul	99
41) 2-Chloronaphthalene	13.11	162	719364	19.919 ng/ul	99
42) 2-Nitroaniline	13.33	65	212813	20.236 ng/ul	97
44) Dimethylphthalate	13.72	163	949206	20.134 ng/ul	100
45) 2,6-Dinitrotoluene	13.83	165	191480	20.669 ng/ul	100
47) Acenaphthylene	13.96	152	1115972	20.290 ng/ul	100
48) 3-Nitroaniline	14.17	138	179477	20.308 ng/ul	99
49) Acenaphthene	14.31	153	794668	20.047 ng/ul	99
50) 2,4-Dinitrophenol	14.38	184	116863	18.606 ng/ul	98
52) 4-Nitrophenol	14.48	109	140984	19.374 ng/ul	98
53) Dibenzofuran	14.64	168	1123067	20.022 ng/ul	99
54) 2,4-Dinitrotoluene	14.63	165	290082	20.681 ng/ul	97
55) 2,3,4,6-Tetrachlorophenol	14.88	232	244153	20.357 ng/ul	98
56) Diethylphthalate	15.09	149	977493	20.127 ng/ul	99
58) Fluorene	15.30	166	930118	19.884 ng/ul	100
59) 4-Chlorophenyl-phenylether	15.30	204	474950	19.767 ng/ul	99
60) 4-Nitroaniline	15.34	138	181425	18.466 ng/ul	94
63) 4,6-Dinitro-2-methylphenol	15.39	198	187011	19.224 ng/ul	97
64) N-Nitrosodiphenylamine	15.52	169	819446	20.157 ng/ul	99
65) 4-Bromophenyl-phenylether	16.20	248	301416	19.976 ng/ul	96
66) Hexachlorobenzene	16.30	284	337723	20.137 ng/ul	98
67) Atrazine	16.48	200	297884	19.754 ng/ul	98
68) Pentachlorophenol	16.65	266	197155	18.895 ng/ul	98
69) Phenanthrene	17.04	178	1517570	20.097 ng/ul	99
71) Anthracene	17.13	178	1554967	20.136 ng/ul	99
72) 1,2,3,4-Tetrachlorobenzene	13.03	216	373750	19.973 ng/uL	99
73) Pentachlorobenzene	14.56	250	381984	19.958 ng/uL	98
74) Carbazole	17.41	167	1360616	19.996 ng/ul	99
75) Di-n-butylphthalate	17.98	149	1714210	19.934 ng/ul	100
76) Fluoranthene	19.07	202	1818773	20.478 ng/ul	99
79) Pyrene	19.43	202	1849924	19.821 ng/ul	99
80) Butylbenzylphthalate	20.34	149	797674	19.987 ng/ul	97
81) 3,3'-Dichlorobenzidine	21.13	252	632216	19.975 ng/ul	99
82) Benzo(a)anthracene	21.19	228	1919337	20.127 ng/ul	99
83) Bis(2-ethylhexyl)phthalate	21.13	149	1183756	20.031 ng/ul	99
84) Chrysene	21.24	228	1819478	20.401 ng/ul	99
86) Di-n-octyl phthalate	22.00	149	1987583	18.843 ng/ul	100
87) Benzo(b)fluoranthene	22.74	252	1868165	19.957 ng/ul	100
88) Benzo(k)fluoranthene	22.78	252	1843713	20.265 ng/ul	99
90) Benzo(a)pyrene	23.30	252	1791440	20.180 ng/ul	99
91) Indeno(1,2,3-cd)pyrene	25.57	276	1904590	20.248 ng/ul	99
92) Dibenzo(a,h)anthracene	25.58	278	1612598	20.306 ng/ul	100
93) Benzo(g,h,i)perylene	26.23	276	1544751	20.320 ng/ul	100

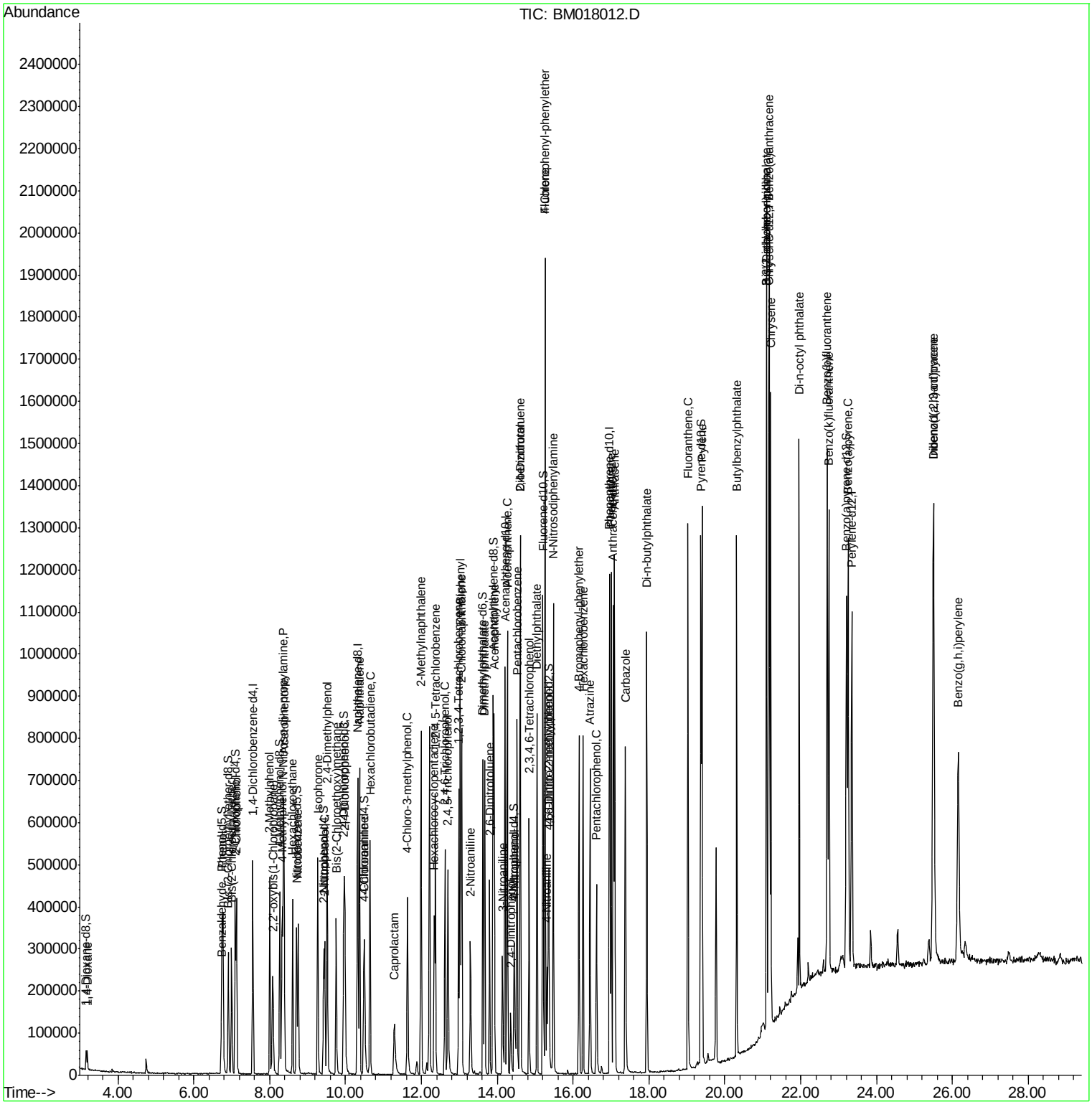
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018012.D
Acq On : 08 Dec 2018 11:10
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTD02084

Quant Time: Dec 10 03:39:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Dec 07 22:20:53 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018012.D
Acq On : 08 Dec 2018 11:10
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : SSTD02084

Quant Time: Dec 10 03:39:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Dec 07 22:20:53 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.56	152	143132	20.00	ng/ul	0.00
18) Naphthalene-d8	10.32	136	588517	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.20	164	314676	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.96	188	664966	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	676580	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	645458	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.16	96	25035	8.01	ng/uL	0.00
5) Phenol-d5	6.75	99	213930	16.37	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.91	67	127374	16.16	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	191052	18.68	ng/ul	0.00
13) 4-Methylphenol-d8	8.27	113	171869	16.09	ng/ul	0.00
19) Nitrobenzene-d5	8.71	128	85345	18.88	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	93127	17.98	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	175299	17.78	ng/ul	0.00
29) 4-Chloroaniline-d4	10.48	131	147846	17.47	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	491737	18.01	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	618464	18.72	ng/ul	0.00
51) 4-Nitrophenol-d4	14.44	143	61255	12.34	ng/ul	0.00
57) Fluorene-d10	15.20	176	424526	18.01	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	74926	15.76	ng/ul	0.00
70) Anthracene-d10	17.06	188	625475	18.89	ng/ul	0.00
78) Pyrene-d10	19.37	212	657883	20.09	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	652512	18.64	ng/ul	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.19	88	27059	8.109	ng/uL	95
4) Benzaldehyde	6.72	77	36250	14.872	ng/ul	91
6) Phenol	6.77	94	211877	16.238	ng/ul	92
8) Bis(2-Chloroethyl)ether	7.00	93	170582	17.112	ng/ul	95
10) 2-Chlorophenol	7.12	128	187233	18.322	ng/ul	96
11) 2-Methylphenol	8.00	108	165763	16.651	ng/ul	100
12) 2,2'-oxybis(1-Chloropropan	8.09	45	185710	15.790	ng/ul	96
14) Acetophenone	8.37	105	267833	16.088	ng/ul	98
15) N-Nitroso-di-n-propylamine	8.36	70	131952	15.196	ng/ul	99
16) 4-Methylphenol	8.33	108	172981	16.079	ng/ul	99
17) Hexachloroethane	8.60	117	77859	18.792	ng/ul	92
20) Nitrobenzene	8.75	77	198723	17.515	ng/ul	94
21) Isophorone	9.27	82	356465	16.888	ng/ul	99
23) 2-Nitrophenol	9.45	139	98700	18.311	ng/ul	94
24) 2,4-Dimethylphenol	9.52	107	197753	17.562	ng/ul	97
25) Bis(2-Chloroethoxy)methane	9.76	93	226713	17.553	ng/ul	99
27) 2,4-Dichlorophenol	9.98	162	172272	18.504	ng/ul	98
28) Naphthalene	10.37	128	575693	18.775	ng/ul	99
30) 4-Chloroaniline	10.50	127	154117	17.852	ng/ul	97
31) Hexachlorobutadiene	10.65	225	118732	19.203	ng/ul	98
32) Caprolactam	11.29	113	44349	14.398	ng/ul	96
33) 4-Chloro-3-methylphenol	11.63	107	172870	16.349	ng/ul	99
34) 2-Methylnaphthalene	11.99	142	399712	17.462	ng/ul	97

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018012.D
Acq On : 08 Dec 2018 11:10
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : SSTD02084

Quant Time: Dec 10 03:39:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Dec 07 22:20:53 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.37	216	211273	20.122 ng/ul	98
37) Hexachlorocyclopentadiene	12.33	237	101412	14.977 ng/ul	97
38) 2,4,6-Trichlorophenol	12.62	196	127747	18.720 ng/ul	99
39) 2,4,5-Trichlorophenol	12.70	196	136933	18.763 ng/ul	97
40) 1,1'-Biphenyl	13.03	154	507160	19.579 ng/ul	99
41) 2-Chloronaphthalene	13.06	162	393720	19.430 ng/ul	99
42) 2-Nitroaniline	13.29	65	100535	17.038 ng/ul	99
44) Dimethylphthalate	13.67	163	474588	17.941 ng/ul	99
45) 2,6-Dinitrotoluene	13.80	165	94781	18.235 ng/ul	99
47) Acenaphthylene	13.92	152	587118	19.025 ng/ul	98
48) 3-Nitroaniline	14.14	138	82935	16.725 ng/ul	89
49) Acenaphthene	14.27	153	415127	18.665 ng/ul	99
50) 2,4-Dinitrophenol	14.36	184	37949	10.768 ng/ul	93
52) 4-Nitrophenol	14.46	109	50493	12.367 ng/ul	94
53) Dibenzofuran	14.60	168	575508	18.286 ng/ul	99
54) 2,4-Dinitrotoluene	14.60	165	134408	17.078 ng/ul#	94
55) 2,3,4,6-Tetrachlorophenol	14.84	232	118794	17.653 ng/ul	98
56) Diethylphthalate	15.04	149	472528	17.340 ng/ul	100
58) Fluorene	15.26	166	470757	17.937 ng/ul	99
59) 4-Chlorophenyl-phenylether	15.26	204	244530	18.138 ng/ul	97
60) 4-Nitroaniline	15.31	138	78542	14.248 ng/ul	98
63) 4,6-Dinitro-2-methylphenol	15.36	198	75916	15.496 ng/ul	95
64) N-Nitrosodiphenylamine	15.48	169	407355	19.897 ng/ul	97
65) 4-Bromophenyl-phenylether	16.16	248	149320	19.651 ng/ul	96
66) Hexachlorobenzene	16.26	284	165297	19.571 ng/ul	98
67) Atrazine	16.44	200	135411	17.831 ng/ul	98
68) Pentachlorophenol	16.62	266	89027	16.943 ng/ul	96
69) Phenanthrene	17.00	178	722078	18.989 ng/ul	99
71) Anthracene	17.09	178	738598	18.992 ng/ul	99
72) 1,2,3,4-Tetrachlorobenzene	12.99	216	202034	21.439 ng/uL	97
73) Pentachlorobenzene	14.52	250	199627	20.712 ng/uL	98
74) Carbazole	17.38	167	613471	17.903 ng/ul	98
75) Di-n-butylphthalate	17.94	149	769741	17.775 ng/ul	99
76) Fluoranthene	19.03	202	812080	18.156 ng/ul	98
79) Pyrene	19.40	202	832633	20.273 ng/ul	99
80) Butylbenzylphthalate	20.32	149	331225	18.860 ng/ul	96
81) 3,3'-Dichlorobenzidine	21.10	252	237510	17.053 ng/ul	97
82) Benzo(a)anthracene	21.16	228	783854	18.679 ng/ul	99
83) Bis(2-ethylhexyl)phthalate	21.10	149	483942	18.609 ng/ul	100
84) Chrysene	21.21	228	749059	19.086 ng/ul	99
86) Di-n-octyl phthalate	21.96	149	780412	17.263 ng/ul	100
87) Benzo(b)fluoranthene	22.70	252	754559	18.807 ng/ul	100
88) Benzo(k)fluoranthene	22.74	252	730704	18.739 ng/ul	99
90) Benzo(a)pyrene	23.25	252	708762	18.628 ng/ul	100
91) Indeno(1,2,3-cd)pyrene	25.50	276	804436	19.954 ng/ul	99
92) Dibenzo(a,h)anthracene	25.51	278	676604	19.878 ng/ul	98
93) Benzo(g,h,i)perylene	26.16	276	663455	20.363 ng/ul	98

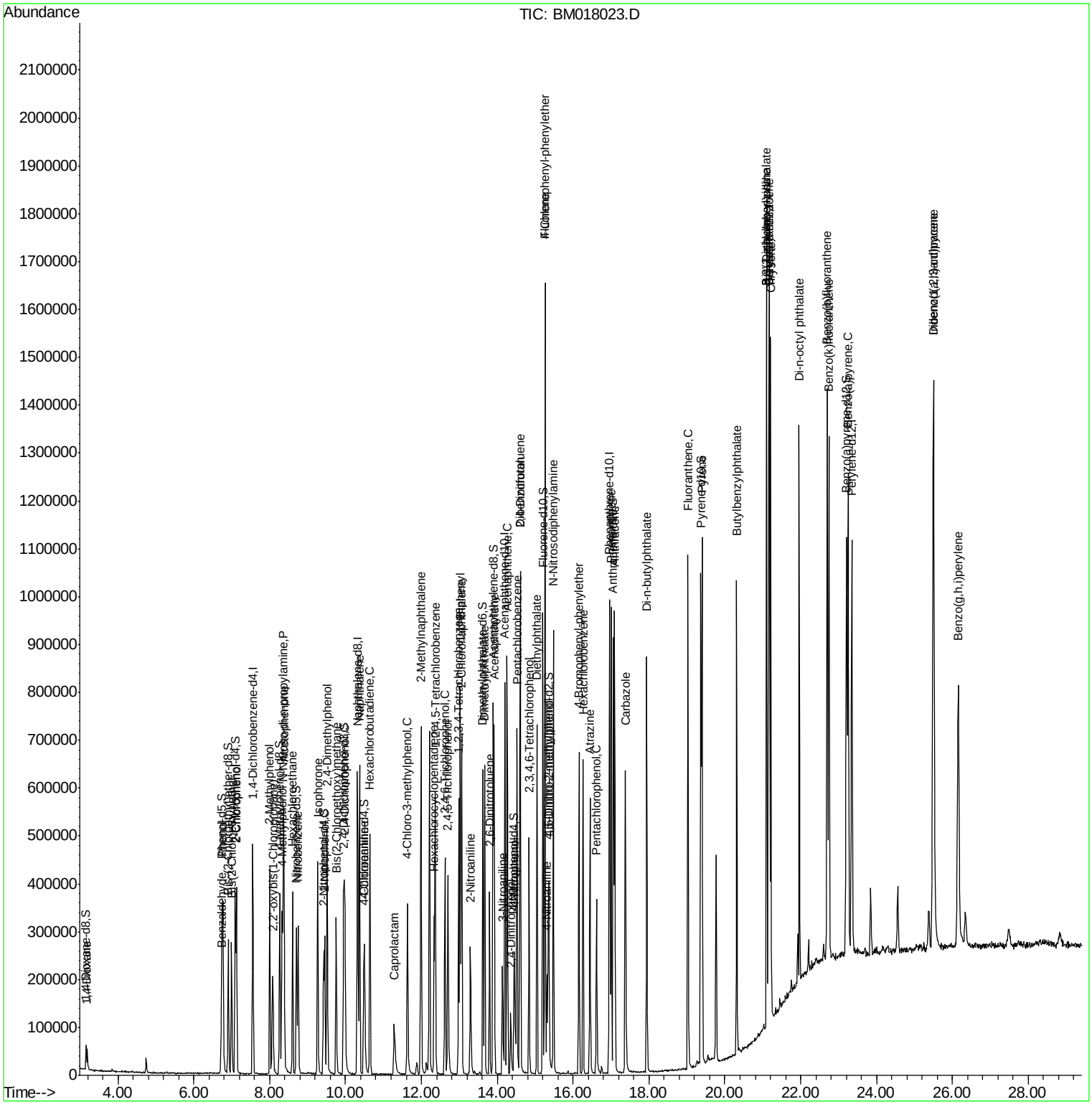
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018023.D
Acq On : 08 Dec 2018 17:53
Operator : JU/SJ
Sample : SSTDCCC020EC
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : SSTD02085

Quant Time: Dec 10 03:40:14 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Dec 07 22:20:53 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018023.D
Acq On : 08 Dec 2018 17:53
Operator : JU/SJ
Sample : SSTDCCC020EC
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : SSTD02085

Quant Time: Dec 10 03:40:14 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Dec 07 22:20:53 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	134272	20.00	ng/ul	0.00
18) Naphthalene-d8	10.32	136	522852	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.20	164	268259	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.96	188	555998	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	612441	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	637671	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.16	96	23607	8.05	ng/uL	0.00
5) Phenol-d5	6.75	99	194088	15.83	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	120482	16.29	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	174361	18.17	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	150013	14.97	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	77026	19.18	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	82586	17.95	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	157503	17.98	ng/ul	0.00
29) 4-Chloroaniline-d4	10.48	131	127401	16.95	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	407445	17.50	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	531691	18.87	ng/ul	0.00
51) 4-Nitrophenol-d4	14.44	143	53882	12.73	ng/ul	0.00
57) Fluorene-d10	15.20	176	359680	17.90	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	59429	14.95	ng/ul	0.00
70) Anthracene-d10	17.06	188	528464	19.09	ng/ul	0.00
78) Pyrene-d10	19.36	212	559748	18.89	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	634433	18.34	ng/ul	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.19	88	24498	7.826	ng/uL	96
4) Benzaldehyde	6.72	77	35183	15.386	ng/ul	94
6) Phenol	6.77	94	193908	15.841	ng/ul	94
8) Bis(2-Chloroethyl)ether	7.00	93	156612	16.747	ng/ul	95
10) 2-Chlorophenol	7.12	128	170209	17.755	ng/ul	97
11) 2-Methylphenol	8.00	108	146205	15.655	ng/ul	99
12) 2,2'-oxybis(1-Chloropropan	8.08	45	165670	15.016	ng/ul	99
14) Acetophenone	8.37	105	230789	14.777	ng/ul	97
15) N-Nitroso-di-n-propylamine	8.36	70	113120	13.887	ng/ul	97
16) 4-Methylphenol	8.33	108	151530	15.015	ng/ul	98
17) Hexachloroethane	8.60	117	70309	18.089	ng/ul	93
20) Nitrobenzene	8.75	77	175138	17.375	ng/ul	93
21) Isophorone	9.27	82	305352	16.284	ng/ul	99
23) 2-Nitrophenol	9.45	139	88908	18.566	ng/ul	92
24) 2,4-Dimethylphenol	9.52	107	173800	17.373	ng/ul	98
25) Bis(2-Chloroethoxy)methane	9.75	93	195432	17.031	ng/ul	97
27) 2,4-Dichlorophenol	9.98	162	149945	18.128	ng/ul	98
28) Naphthalene	10.37	128	515347	18.918	ng/ul	99
30) 4-Chloroaniline	10.50	127	130802	17.055	ng/ul	99
31) Hexachlorobutadiene	10.65	225	106619	19.409	ng/ul	99
32) Caprolactam	11.28	113	36175	13.219	ng/ul	95
33) 4-Chloro-3-methylphenol	11.63	107	146879	15.636	ng/ul	98
34) 2-Methylnaphthalene	11.99	142	354245	17.420	ng/ul	97

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018023.D
Acq On : 08 Dec 2018 17:53
Operator : JU/SJ
Sample : SSTDCCC020EC
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : SSTD02085

Quant Time: Dec 10 03:40:14 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Dec 07 22:20:53 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.37	216	184752	20.640 ng/ul	98
37) Hexachlorocyclopentadiene	12.33	237	88376	15.310 ng/ul	96
38) 2,4,6-Trichlorophenol	12.62	196	109767	18.869 ng/ul	98
39) 2,4,5-Trichlorophenol	12.70	196	114432	18.393 ng/ul	100
40) 1,1'-Biphenyl	13.03	154	430915	19.514 ng/ul	99
41) 2-Chloronaphthalene	13.06	162	344311	19.932 ng/ul	98
42) 2-Nitroaniline	13.29	65	80427	15.988 ng/ul	99
44) Dimethylphthalate	13.67	163	403563	17.896 ng/ul	99
45) 2,6-Dinitrotoluene	13.80	165	78303	17.671 ng/ul	99
47) Acenaphthylene	13.92	152	501902	19.077 ng/ul	98
48) 3-Nitroaniline	14.13	138	68524	16.210 ng/ul	95
49) Acenaphthene	14.27	153	358587	18.912 ng/ul	99
50) 2,4-Dinitrophenol	14.36	184	32797	10.916 ng/ul	94
52) 4-Nitrophenol	14.46	109	42823	12.303 ng/ul	96
53) Dibenzofuran	14.60	168	494794	18.441 ng/ul	99
54) 2,4-Dinitrotoluene	14.60	165	115589	17.228 ng/ul	95
55) 2,3,4,6-Tetrachlorophenol	14.84	232	97922	17.070 ng/ul#	99
56) Diethylphthalate	15.04	149	394671	16.989 ng/ul	99
58) Fluorene	15.26	166	399314	17.847 ng/ul	99
59) 4-Chlorophenyl-phenylether	15.26	204	205946	17.919 ng/ul	96
60) 4-Nitroaniline	15.31	138	59290	12.616 ng/ul	97
63) 4,6-Dinitro-2-methylphenol	15.36	198	65573	16.008 ng/ul#	91
64) N-Nitrosodiphenylamine	15.48	169	335262	19.585 ng/ul	98
65) 4-Bromophenyl-phenylether	16.16	248	125052	19.683 ng/ul	97
66) Hexachlorobenzene	16.26	284	138838	19.660 ng/ul	98
67) Atrazine	16.44	200	113496	17.875 ng/ul	99
68) Pentachlorophenol	16.62	266	71618	16.301 ng/ul	93
69) Phenanthrene	17.00	178	611029	19.218 ng/ul	98
71) Anthracene	17.09	178	625260	19.229 ng/ul	98
72) 1,2,3,4-Tetrachlorobenzene	12.99	216	177029	22.467 ng/uL	98
73) Pentachlorobenzene	14.52	250	169929	21.086 ng/uL	98
74) Carbazole	17.38	167	512441	17.885 ng/ul	99
75) Di-n-butylphthalate	17.94	149	619401	17.106 ng/ul	99
76) Fluoranthene	19.03	202	679800	18.177 ng/ul	99
79) Pyrene	19.40	202	706191	18.995 ng/ul	99
80) Butylbenzylphthalate	20.32	149	271425	17.074 ng/ul	98
81) 3,3'-Dichlorobenzidine	21.10	252	217073	17.218 ng/ul	99
82) Benzo(a)anthracene	21.16	228	705145	18.563 ng/ul	99
83) Bis(2-ethylhexyl)phthalate	21.10	149	398325	16.921 ng/ul	100
84) Chrysene	21.21	228	674962	18.999 ng/ul	98
86) Di-n-octyl phthalate	21.96	149	680027	15.226 ng/ul	100
87) Benzo(b)fluoranthene	22.70	252	708612	17.877 ng/ul	98
88) Benzo(k)fluoranthene	22.74	252	701976	18.222 ng/ul	100
90) Benzo(a)pyrene	23.25	252	690302	18.365 ng/ul	99
91) Indeno(1,2,3-cd)pyrene	25.50	276	841392	21.126 ng/ul	99
92) Dibenzo(a,h)anthracene	25.51	278	692273	20.587 ng/ul	99
93) Benzo(g,h,i)perylene	26.16	276	692150	21.503 ng/ul	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

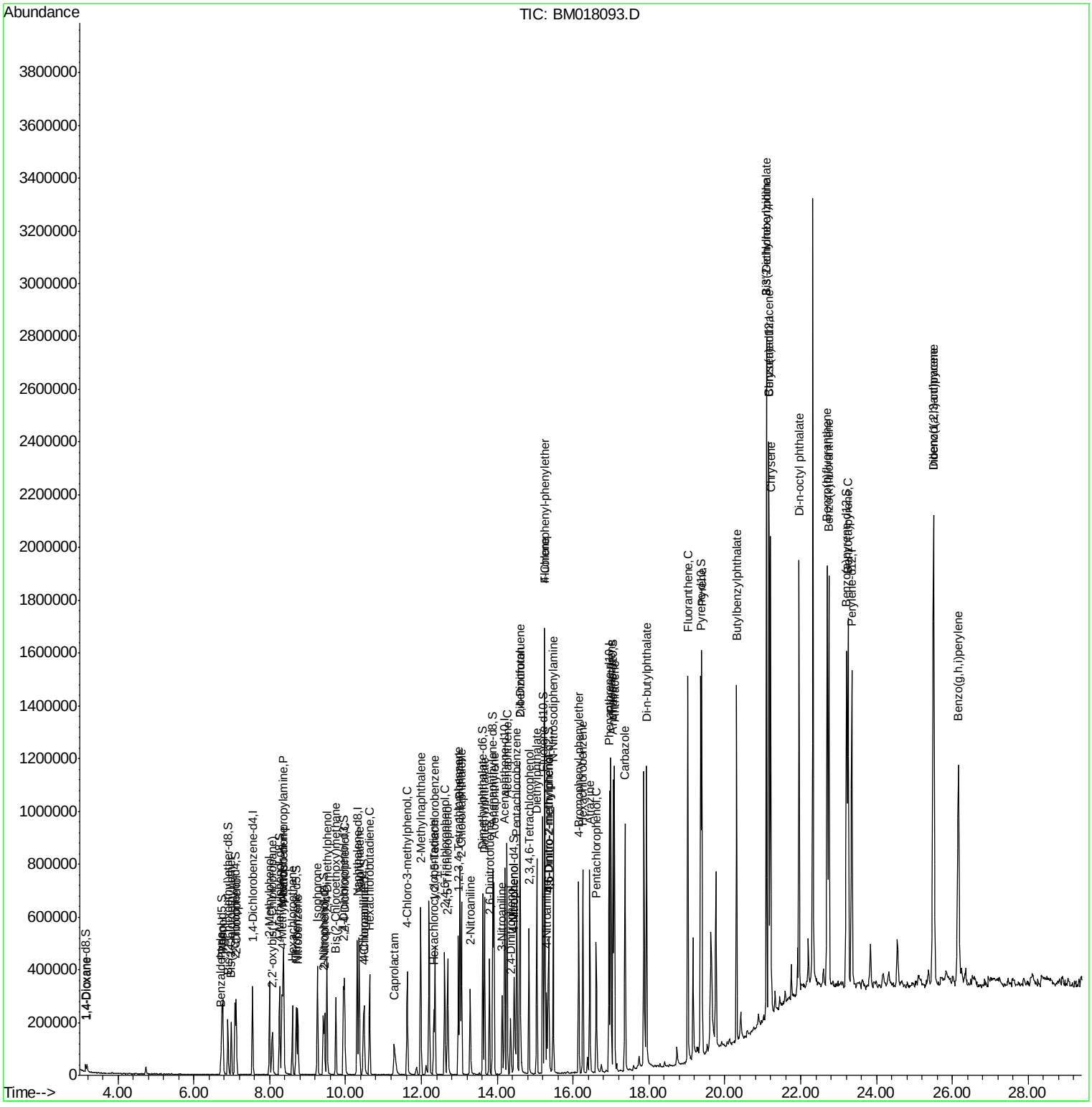
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018093.D
Acq On : 12 Dec 2018 15:26
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 02:08:37 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Wed Dec 12 06:24:35 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02093

Manual Integrations APPROVED
Sohil
12/13/2018 6:15:58 PM



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018093.D
Acq On : 12 Dec 2018 15:26
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTD02093

Manual Integrations APPROVED
Sohil
12/13/2018 6:15:58 PM

Quant Time: Dec 13 02:08:37 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Wed Dec 12 06:24:35 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	89795	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	419634	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	260163	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.96	188	608961	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	765114	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	828724	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	13539	6.90	ng/uL	0.00
5) Phenol-d5	6.74	99	158093	19.28	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	86055	17.40	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	129816	20.23	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	132994	19.85	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	64318	19.96	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	74345	20.13	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	136868	19.47	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	124833	20.69	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	450752	19.97	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	546258	20.00	ng/ul	0.00
51) 4-Nitrophenol-d4	14.44	143	74480	18.15	ng/ul	0.00
57) Fluorene-d10	15.20	176	379163	19.45	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	82713	19.00	ng/ul	0.00
70) Anthracene-d10	17.06	188	609340	20.10	ng/ul	0.00
78) Pyrene-d10	19.36	212	693149	18.72	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	886294	19.72	ng/ul	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.18	88	15279	7.299	ng/uL	90
4) Benzaldehyde	6.71	77	26623	17.410	ng/ul#	84
6) Phenol	6.76	94	155540	19.001	ng/ul	94
8) Bis(2-Chloroethyl)ether	6.99	93	114226	18.265	ng/ul	95
10) 2-Chlorophenol	7.12	128	129959	20.271	ng/ul	94
11) 2-Methylphenol	7.99	108	122983	19.691	ng/ul	93
12) 2,2'-oxybis(1-Chloropropan	8.07	45	128923	17.473	ng/ul	97
14) Acetophenone	8.37	105	202636	19.401	ng/ul	93
15) N-Nitroso-di-n-propylamine	8.35	70	101937	18.713	ng/ul	94
16) 4-Methylphenol	8.33	108	134808	19.974	ng/ul	88
17) Hexachloroethane	8.60	117	50490	19.424	ng/ul	96
20) Nitrobenzene	8.75	77	140529	17.371	ng/ul	92
21) Isophorone	9.26	82	283514	18.838	ng/ul	96
23) 2-Nitrophenol	9.45	139	79203	20.607	ng/ul#	88
24) 2,4-Dimethylphenol	9.51	107	153676	19.140	ng/ul	96
25) Bis(2-Chloroethoxy)methane	9.75	93	171857	18.660	ng/ul	99
27) 2,4-Dichlorophenol	9.97	162	132388	19.943	ng/ul	97
28) Naphthalene	10.36	128	432829	19.797	ng/ul	98
30) 4-Chloroaniline	10.49	127	128073	20.806	ng/ul	100
31) Hexachlorobutadiene	10.63	225	80807	18.329	ng/ul	97
32) Caprolactam	11.29	113	49141m	22.375	ng/ul	
33) 4-Chloro-3-methylphenol	11.63	107	153147	20.313	ng/ul	96
34) 2-Methylnaphthalene	11.99	142	325815	19.962	ng/ul	97

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018093.D
Acq On : 12 Dec 2018 15:26
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTD02093

Manual Integrations APPROVED
Sohil
12/13/2018 6:15:58 PM

Quant Time: Dec 13 02:08:37 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Wed Dec 12 06:24:35 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.36	216	163095	18.788	ng/ul	99
37) Hexachlorocyclopentadiene	12.33	237	69118	12.346	ng/ul	97
38) 2,4,6-Trichlorophenol	12.62	196	111675	19.794	ng/ul	99
39) 2,4,5-Trichlorophenol	12.69	196	118829	19.694	ng/ul	95
40) 1,1'-Biphenyl	13.02	154	413263	19.297	ng/ul	98
41) 2-Chloronaphthalene	13.06	162	321497	19.191	ng/ul	97
42) 2-Nitroaniline	13.29	65	91865	18.831	ng/ul	96
44) Dimethylphthalate	13.67	163	432858	19.792	ng/ul	99
45) 2,6-Dinitrotoluene	13.79	165	89624	20.855	ng/ul	93
47) Acenaphthylene	13.92	152	509877	19.984	ng/ul	99
48) 3-Nitroaniline	14.13	138	85272	20.800	ng/ul	85
49) Acenaphthene	14.26	153	355424	19.329	ng/ul	98
50) 2,4-Dinitrophenol	14.35	184	54831	18.818	ng/ul	93
52) 4-Nitrophenol	14.45	109	57820	17.128	ng/ul	93
53) Dibenzofuran	14.60	168	503288	19.342	ng/ul	100
54) 2,4-Dinitrotoluene	14.59	165	135943	20.893	ng/ul	94
55) 2,3,4,6-Tetrachlorophenol	14.83	232	111872	20.108	ng/ul	98
56) Diethylphthalate	15.04	149	443872	19.702	ng/ul	98
58) Fluorene	15.26	166	422596	19.475	ng/ul	100
59) 4-Chlorophenyl-phenylether	15.25	204	206472	18.524	ng/ul	99
60) 4-Nitroaniline	15.30	138	93490	20.513	ng/ul	97
63) 4,6-Dinitro-2-methylphenol	15.36	198	83872	18.695	ng/ul#	86
64) N-Nitrosodiphenylamine	15.47	169	374516	19.975	ng/ul	98
65) 4-Bromophenyl-phenylether	16.15	248	137191	19.715	ng/ul	94
66) Hexachlorobenzene	16.26	284	150378	19.442	ng/ul	97
67) Atrazine	16.44	200	140662	20.226	ng/ul	96
68) Pentachlorophenol	16.62	266	94163	19.568	ng/ul	95
69) Phenanthrene	17.00	178	691785	19.865	ng/ul	98
71) Anthracene	17.09	178	721524	20.260	ng/ul	98
72) 1,2,3,4-Tetrachlorobenzene	12.98	216	159962	18.536	ng/uL	99
73) Pentachlorobenzene	14.52	250	170601	19.328	ng/uL	100
74) Carbazole	17.37	167	649044	20.683	ng/ul	98
75) Di-n-butylphthalate	17.94	149	820676	20.694	ng/ul	99
76) Fluoranthene	19.03	202	859551	20.985	ng/ul	99
79) Pyrene	19.39	202	880711	18.962	ng/ul	99
80) Butylbenzylphthalate	20.32	149	403323	20.308	ng/ul	90
81) 3,3'-Dichlorobenzidine	21.10	252	319160	20.264	ng/ul	99
82) Benzo(a)anthracene	21.16	228	931709	19.633	ng/ul	97
83) Bis(2-ethylhexyl)phthalate	21.09	149	610098	20.745	ng/ul	98
84) Chrysene	21.21	228	884826	19.936	ng/ul	99
86) Di-n-octyl phthalate	21.96	149	1062691	18.308	ng/ul	100
87) Benzo(b)fluoranthene	22.70	252	985627	19.134	ng/ul	99
88) Benzo(k)fluoranthene	22.74	252	935848	18.693	ng/ul	99
90) Benzo(a)pyrene	23.25	252	952992	19.508	ng/ul	99
91) Indeno(1,2,3-cd)pyrene	25.50	276	1172643	22.655	ng/ul	99
92) Dibenzo(a,h)anthracene	25.51	278	970562	22.209	ng/ul	98
93) Benzo(g,h,i)perylene	26.16	276	985422	23.556	ng/ul	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

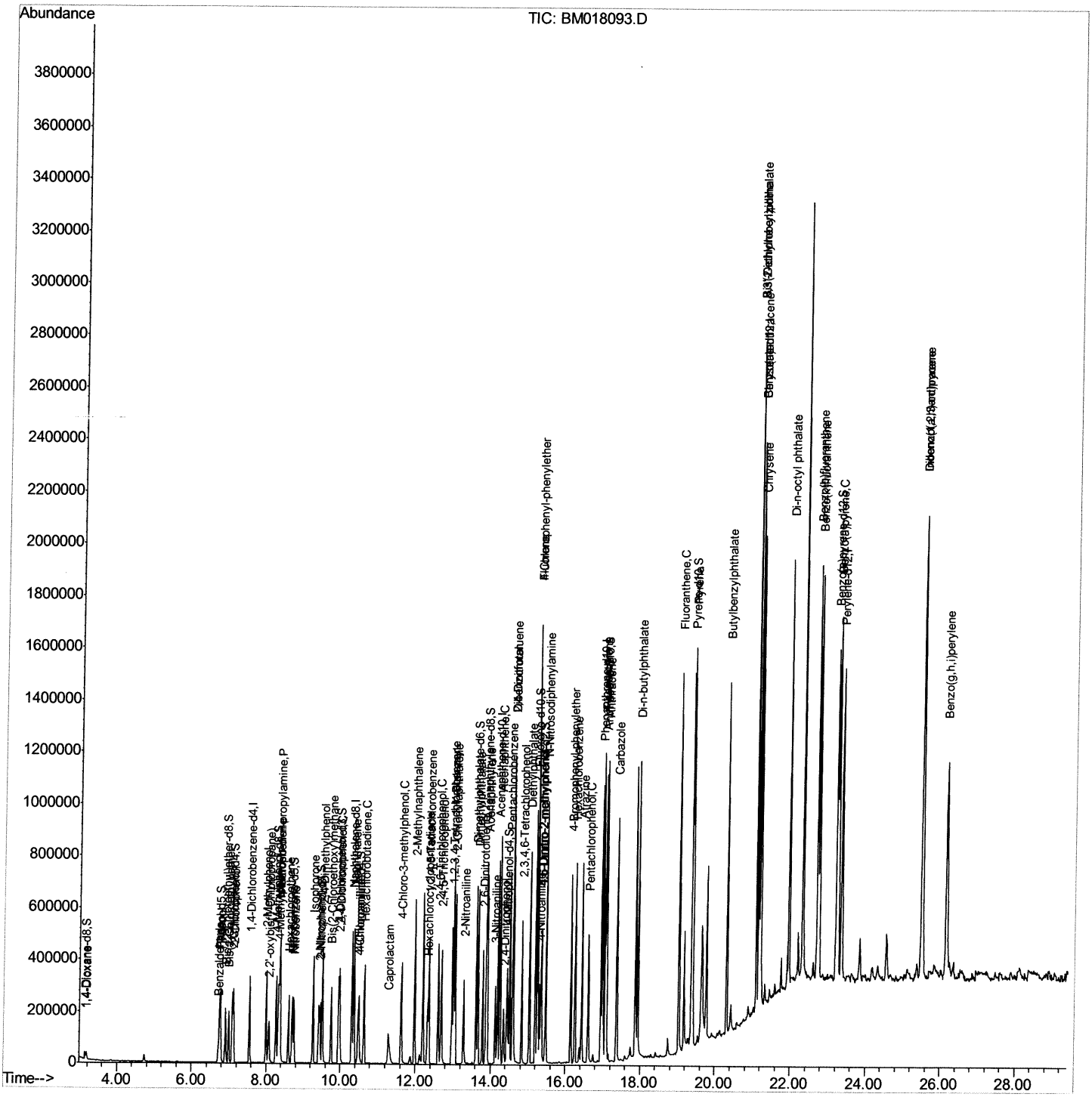
Quantitation Report (QT Reviewed)

Data File : BM018093.D
Acq On : 12 Dec 2018 15:26
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 02:08:37 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Wed Dec 12 06:24:35 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02093

Manual Integrations APPROVED
Sohil
12/13/2018 6:15:58 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

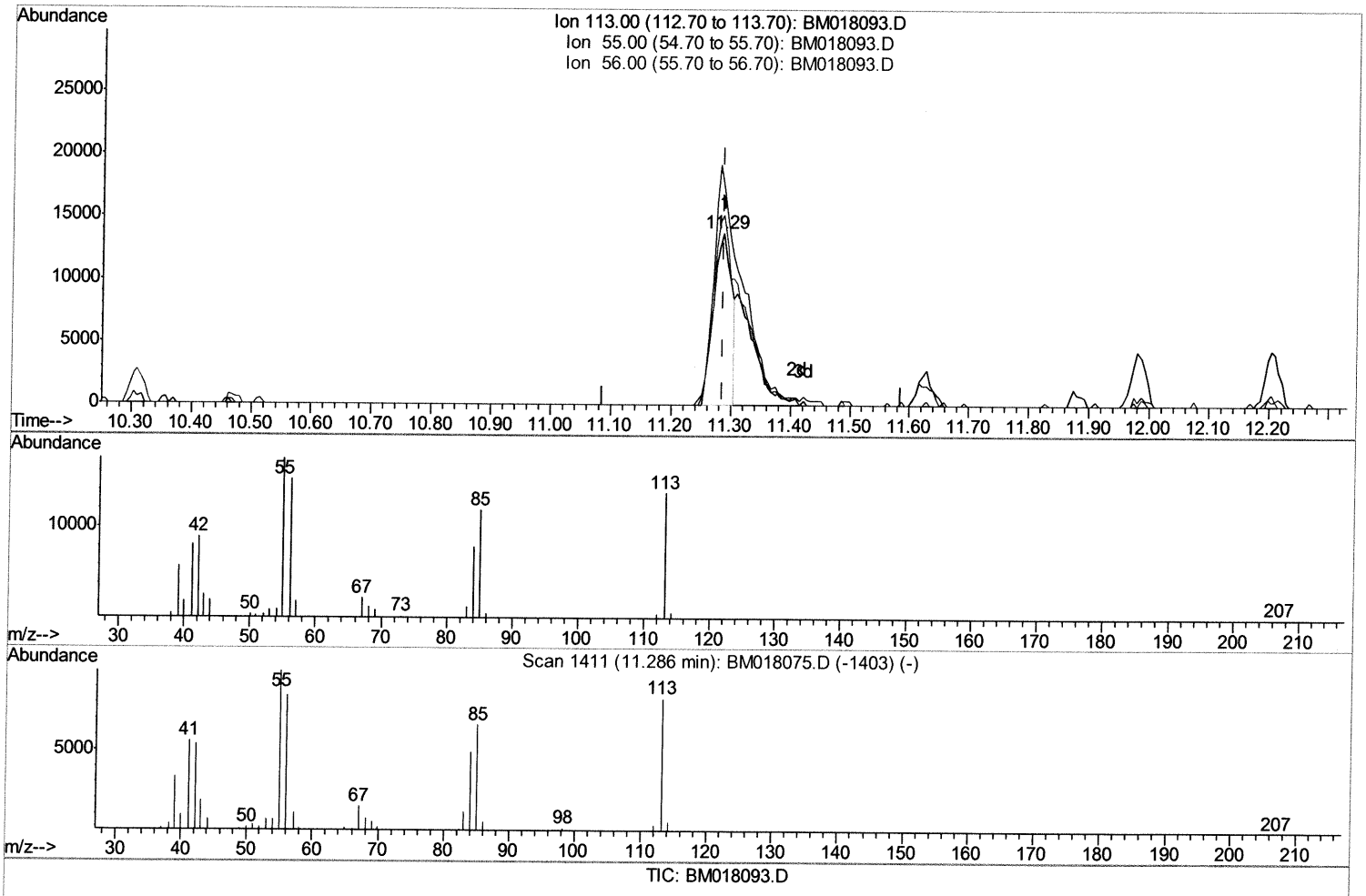
Quantitation Report (Qedit)

Data File : BM018093.D
Acq On : 12 Dec 2018 15:26
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 02:07:22 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Wed Dec 12 06:24:35 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02093

Manual Integrations APPROVED
Sohil
12/13/2018 6:15:58 PM



TIC: BM018093.D

(32) Caprolactam

11.286min (+0.000) 13.17ng/ul

response 28919

Ion	Exp%	Act%
113.00	100	100
55.00	138.30	126.81
56.00	110.30	110.39
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

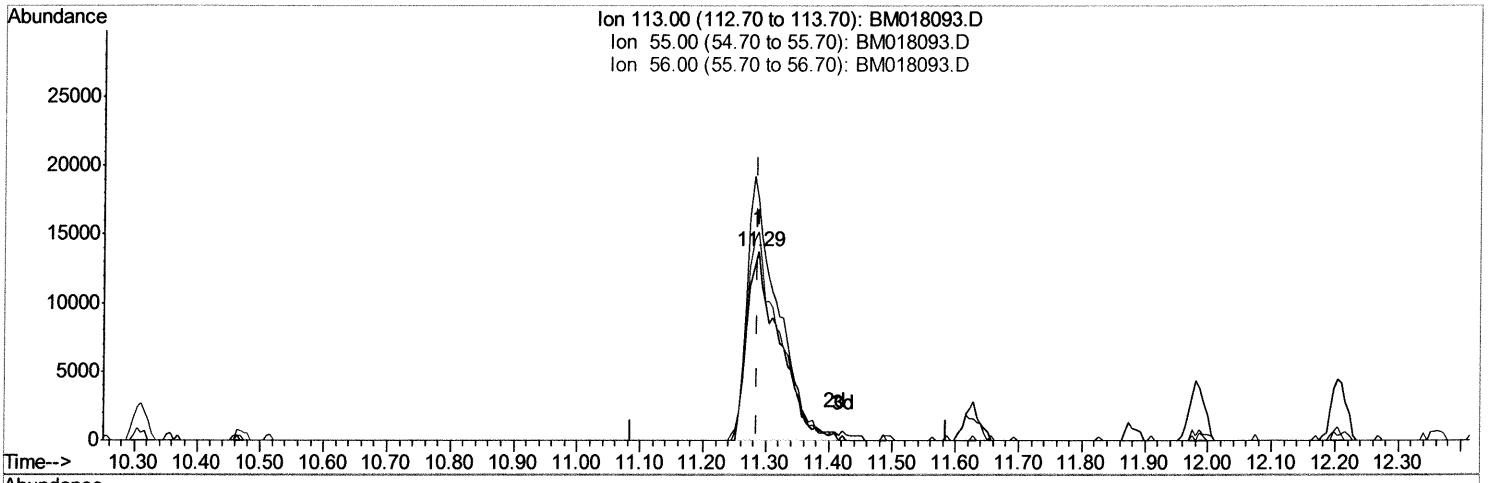
Quantitation Report (Qedit)

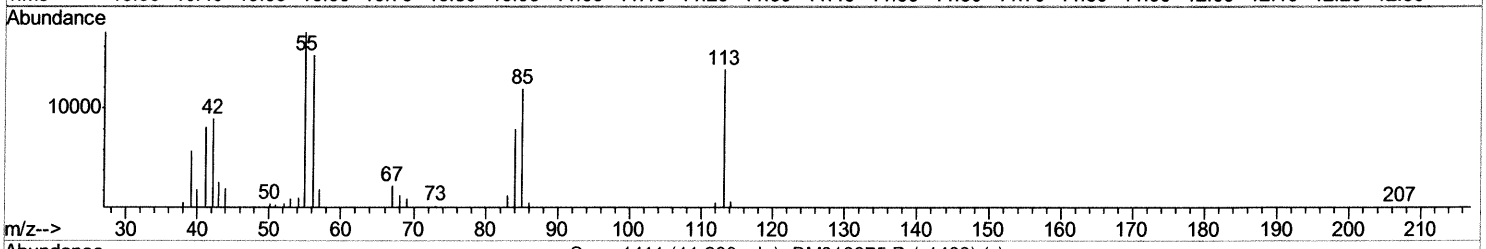
Data File : BM018093.D
Acq On : 12 Dec 2018 15:26
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

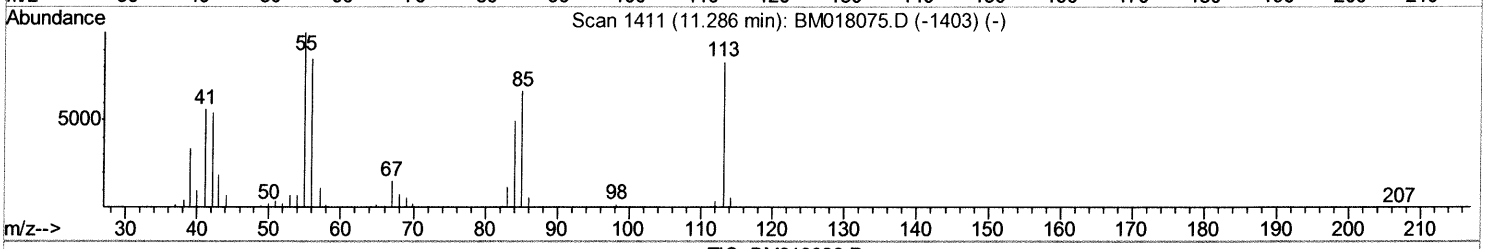
Quant Time: Dec 13 02:07:22 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Wed Dec 12 06:24:35 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02093

Manual Integrations APPROVED
Sohil
12/13/2018 6:15:58 PM







TIC: BM018093.D

(32) Caprolactam

11.286min (+0.000) 22.37ng/ul m > SJ 12/13/18

response 49141

Ion	Exp%	Act%
113.00	100	100
55.00	138.30	126.81
56.00	110.30	110.39
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018093.D
Acq On : 12 Dec 2018 15:26
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 02:08:37 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Wed Dec 12 06:24:35 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : SSTD02093

Manual Integrations APPROVED
Sohil
12/13/2018 6:15:58 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	89795	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	419634	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	260163	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.96	188	608961	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	765114	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	828724	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	13539	6.90	ng/uL	0.00
5) Phenol-d5	6.74	99	158093	19.28	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	86055	17.40	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	129816	20.23	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	132994	19.85	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	64318	19.96	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	74345	20.13	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	136868	19.47	ng/ul	0.00
29) 4-Chloroaniline-d4	10.47	131	124833	20.69	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	450752	19.97	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	546258	20.00	ng/ul	0.00
51) 4-Nitrophenol-d4	14.44	143	74480	18.15	ng/ul	0.00
57) Fluorene-d10	15.20	176	379163	19.45	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	82713	19.00	ng/ul	0.00
70) Anthracene-d10	17.06	188	609340	20.10	ng/ul	0.00
78) Pyrene-d10	19.36	212	693149	18.72	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	886294	19.72	ng/ul	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.18	88	15279	7.299	ng/uL	90
4) Benzaldehyde	6.71	77	26623	17.410	ng/ul#	84
6) Phenol	6.76	94	155540	19.001	ng/ul	94
8) Bis(2-Chloroethyl)ether	6.99	93	114226	18.265	ng/ul	95
10) 2-Chlorophenol	7.12	128	129959	20.271	ng/ul	94
11) 2-Methylphenol	7.99	108	122983	19.691	ng/ul	93
12) 2,2'-oxybis(1-Chloropropan	8.07	45	128923	17.473	ng/ul	97
14) Acetophenone	8.37	105	202636	19.401	ng/ul	93
15) N-Nitroso-di-n-propylamine	8.35	70	101937	18.713	ng/ul	94
16) 4-Methylphenol	8.33	108	134808	19.974	ng/ul	88
17) Hexachloroethane	8.60	117	50490	19.424	ng/ul	96
20) Nitrobenzene	8.75	77	140529	17.371	ng/ul	92
21) Isophorone	9.26	82	283514	18.838	ng/ul	96
23) 2-Nitrophenol	9.45	139	79203	20.607	ng/ul#	88
24) 2,4-Dimethylphenol	9.51	107	153676	19.140	ng/ul	96
25) Bis(2-Chloroethoxy)methane	9.75	93	171857	18.660	ng/ul	99
27) 2,4-Dichlorophenol	9.97	162	132388	19.943	ng/ul	97
28) Naphthalene	10.36	128	432829	19.797	ng/ul	98
30) 4-Chloroaniline	10.49	127	128073	20.806	ng/ul	100
31) Hexachlorobutadiene	10.63	225	80807	18.329	ng/ul	97
32) Caprolactam	11.29	113	49141m	22.375	ng/ul	
33) 4-Chloro-3-methylphenol	11.63	107	153147	20.313	ng/ul	96
34) 2-Methylnaphthalene	11.99	142	325815	19.962	ng/ul	97

SJ 12/13/18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018093.D
Acq On : 12 Dec 2018 15:26
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 02:08:37 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Wed Dec 12 06:24:35 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : SSTD02093

Manual Integrations APPROVED
Sohil
12/13/2018 6:15:58 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.36	216	163095	18.788	ng/ul	99
37) Hexachlorocyclopentadiene	12.33	237	69118	12.346	ng/ul	97
38) 2,4,6-Trichlorophenol	12.62	196	111675	19.794	ng/ul	99
39) 2,4,5-Trichlorophenol	12.69	196	118829	19.694	ng/ul	95
40) 1,1'-Biphenyl	13.02	154	413263	19.297	ng/ul	98
41) 2-Chloronaphthalene	13.06	162	321497	19.191	ng/ul	97
42) 2-Nitroaniline	13.29	65	91865	18.831	ng/ul	96
44) Dimethylphthalate	13.67	163	432858	19.792	ng/ul	99
45) 2,6-Dinitrotoluene	13.79	165	89624	20.855	ng/ul	93
47) Acenaphthylene	13.92	152	509877	19.984	ng/ul	99
48) 3-Nitroaniline	14.13	138	85272	20.800	ng/ul	85
49) Acenaphthene	14.26	153	355424	19.329	ng/ul	98
50) 2,4-Dinitrophenol	14.35	184	54831	18.818	ng/ul	93
52) 4-Nitrophenol	14.45	109	57820	17.128	ng/ul	93
53) Dibenzofuran	14.60	168	503288	19.342	ng/ul	100
54) 2,4-Dinitrotoluene	14.59	165	135943	20.893	ng/ul	94
55) 2,3,4,6-Tetrachlorophenol	14.83	232	111872	20.108	ng/ul	98
56) Diethylphthalate	15.04	149	443872	19.702	ng/ul	98
58) Fluorene	15.26	166	422596	19.475	ng/ul	100
59) 4-Chlorophenyl-phenylether	15.25	204	206472	18.524	ng/ul	99
60) 4-Nitroaniline	15.30	138	93490	20.513	ng/ul	97
63) 4,6-Dinitro-2-methylphenol	15.36	198	83872	18.695	ng/ul#	86
64) N-Nitrosodiphenylamine	15.47	169	374516	19.975	ng/ul	98
65) 4-Bromophenyl-phenylether	16.15	248	137191	19.715	ng/ul	94
66) Hexachlorobenzene	16.26	284	150378	19.442	ng/ul	97
67) Atrazine	16.44	200	140662	20.226	ng/ul	96
68) Pentachlorophenol	16.62	266	94163	19.568	ng/ul	95
69) Phenanthrene	17.00	178	691785	19.865	ng/ul	98
71) Anthracene	17.09	178	721524	20.260	ng/ul	98
72) 1,2,3,4-Tetrachlorobenzene	12.98	216	159962	18.536	ng/uL	99
73) Pentachlorobenzene	14.52	250	170601	19.328	ng/uL	100
74) Carbazole	17.37	167	649044	20.683	ng/ul	98
75) Di-n-butylphthalate	17.94	149	820676	20.694	ng/ul	99
76) Fluoranthene	19.03	202	859551	20.985	ng/ul	99
79) Pyrene	19.39	202	880711	18.962	ng/ul	99
80) Butylbenzylphthalate	20.32	149	403323	20.308	ng/ul	90
81) 3,3'-Dichlorobenzidine	21.10	252	319160	20.264	ng/ul	99
82) Benzo(a)anthracene	21.16	228	931709	19.633	ng/ul	97
83) Bis(2-ethylhexyl)phthalate	21.09	149	610098	20.745	ng/ul	98
84) Chrysene	21.21	228	884826	19.936	ng/ul	99
86) Di-n-octyl phthalate	21.96	149	1062691	18.308	ng/ul	100
87) Benzo(b)fluoranthene	22.70	252	985627	19.134	ng/ul	99
88) Benzo(k)fluoranthene	22.74	252	935848	18.693	ng/ul	99
90) Benzo(a)pyrene	23.25	252	952992	19.508	ng/ul	99
91) Indeno(1,2,3-cd)pyrene	25.50	276	1172643	22.655	ng/ul	99
92) Dibenzo(a,h)anthracene	25.51	278	970562	22.209	ng/ul	98
93) Benzo(g,h,i)perylene	26.16	276	985422	23.556	ng/ul	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

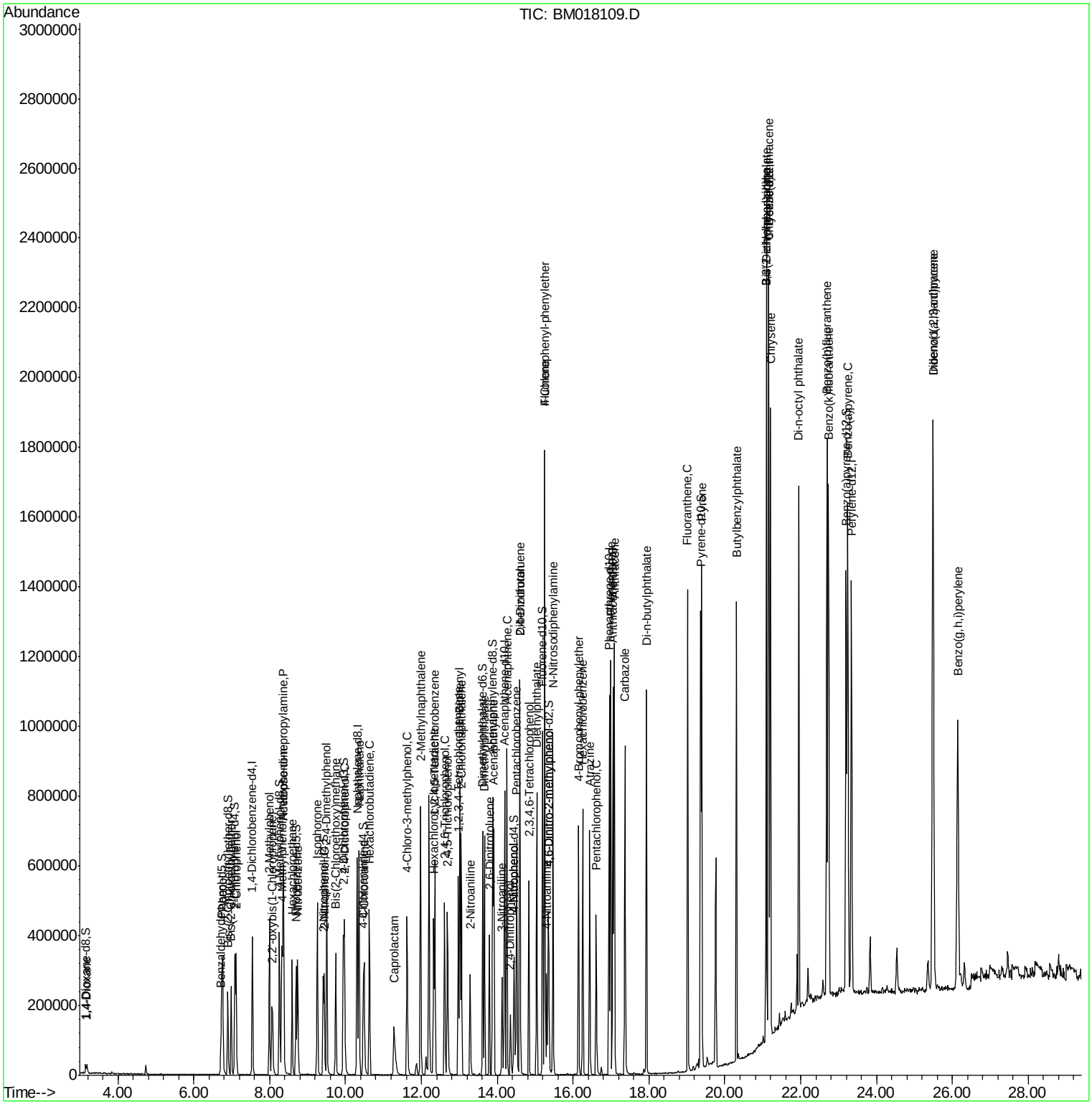
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018109.D
Acq On : 13 Dec 2018 01:04
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 03:40:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02094

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:27 PM



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018109.D
Acq On : 13 Dec 2018 01:04
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTD02094

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:27 PM

Quant Time: Dec 13 03:40:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	107624	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	516210	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	274974	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	638176	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	772824	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	830240	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	14060	5.98	ng/uL	0.00
5) Phenol-d5	6.73	99	191191	19.45	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	105467	17.79	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	155641	20.24	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	160883	20.03	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	77828	19.63	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	91334	20.10	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	168077	19.43	ng/ul	0.00
29) 4-Chloroaniline-d4	10.46	131	151140	20.36	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	457168	19.16	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	567141	19.64	ng/ul	0.00
51) 4-Nitrophenol-d4	14.43	143	73600	16.97	ng/ul	0.00
57) Fluorene-d10	15.19	176	395099	19.18	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	81758	17.92	ng/ul	0.00
70) Anthracene-d10	17.05	188	617586	19.44	ng/ul	0.00
78) Pyrene-d10	19.36	212	699513	18.71	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	893466	19.84	ng/ul	-0.01
Target Compounds						Qvalue
2) 1,4-Dioxane	3.18	88	14696m	5.857	ng/uL	
4) Benzaldehyde	6.71	77	31891	17.400	ng/ul#	84
6) Phenol	6.76	94	184837	18.839	ng/ul	95
8) Bis(2-Chloroethyl)ether	6.99	93	142348	18.991	ng/ul	97
10) 2-Chlorophenol	7.11	128	155785	20.274	ng/ul	96
11) 2-Methylphenol	7.99	108	150519	20.108	ng/ul	100
12) 2,2'-oxybis(1-Chloropropan	8.07	45	160150m	18.109	ng/ul	
14) Acetophenone	8.36	105	242399	19.364	ng/ul	98
15) N-Nitroso-di-n-propylamine	8.35	70	123778	18.958	ng/ul#	92
16) 4-Methylphenol	8.32	108	165232	20.427	ng/ul	98
17) Hexachloroethane	8.59	117	59752	19.179	ng/ul	93
20) Nitrobenzene	8.74	77	178153	17.901	ng/ul	94
21) Isophorone	9.26	82	347760	18.784	ng/ul	98
23) 2-Nitrophenol	9.44	139	95656	20.232	ng/ul	91
24) 2,4-Dimethylphenol	9.50	107	191052	19.344	ng/ul	98
25) Bis(2-Chloroethoxy)methane	9.74	93	211279	18.649	ng/ul	99
27) 2,4-Dichlorophenol	9.97	162	161755	19.808	ng/ul	98
28) Naphthalene	10.36	128	531020	19.744	ng/ul	98
30) 4-Chloroaniline	10.49	127	157853	20.846	ng/ul	97
31) Hexachlorobutadiene	10.63	225	100394	18.511	ng/ul	98
32) Caprolactam	11.27	113	55999	20.727	ng/ul	93
33) 4-Chloro-3-methylphenol	11.62	107	179844	19.391	ng/ul	99
34) 2-Methylnaphthalene	11.98	142	393689	19.608	ng/ul	99

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018109.D
Acq On : 13 Dec 2018 01:04
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTD02094

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:27 PM

Quant Time: Dec 13 03:40:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.36	216	198834	21.671 ng/ul	97
37) Hexachlorocyclopentadiene	12.32	237	121023	20.454 ng/ul	97
38) 2,4,6-Trichlorophenol	12.62	196	125777	21.093 ng/ul	96
39) 2,4,5-Trichlorophenol	12.69	196	128886	20.210 ng/ul	98
40) 1,1'-Biphenyl	13.02	154	454956	20.099 ng/ul	99
41) 2-Chloronaphthalene	13.05	162	350757	19.809 ng/ul	98
42) 2-Nitroaniline	13.29	65	86048m	16.688 ng/ul	
44) Dimethylphthalate	13.66	163	439080	18.995 ng/ul	100
45) 2,6-Dinitrotoluene	13.79	165	92616	20.391 ng/ul#	82
47) Acenaphthylene	13.91	152	525735	19.495 ng/ul	98
48) 3-Nitroaniline	14.13	138	88065	20.324 ng/ul#	84
49) Acenaphthene	14.26	153	368971	18.985 ng/ul	98
50) 2,4-Dinitrophenol	14.35	184	50717m	16.469 ng/ul	
52) 4-Nitrophenol	14.45	109	54368m	15.238 ng/ul	
53) Dibenzofuran	14.60	168	529461	19.252 ng/ul	97
54) 2,4-Dinitrotoluene	14.59	165	135856	19.755 ng/ul#	97
55) 2,3,4,6-Tetrachlorophenol	14.83	232	114398	19.455 ng/ul	98
56) Diethylphthalate	15.04	149	443827	18.639 ng/ul	97
58) Fluorene	15.25	166	436029	19.012 ng/ul	99
59) 4-Chlorophenyl-phenylether	15.25	204	221372	18.791 ng/ul	99
60) 4-Nitroaniline	15.30	138	89832	18.648 ng/ul	87
63) 4,6-Dinitro-2-methylphenol	15.36	198	82590	17.566 ng/ul#	90
64) N-Nitrosodiphenylamine	15.47	169	388433	19.769 ng/ul	99
65) 4-Bromophenyl-phenylether	16.14	248	141079	19.346 ng/ul	97
66) Hexachlorobenzene	16.25	284	160986	19.861 ng/ul	95
67) Atrazine	16.44	200	139147	19.093 ng/ul	96
68) Pentachlorophenol	16.61	266	92618	18.366 ng/ul	96
69) Phenanthrene	16.99	178	711872	19.506 ng/ul	99
71) Anthracene	17.09	178	731309	19.594 ng/ul	98
72) 1,2,3,4-Tetrachlorobenzene	12.97	216	180794	19.991 ng/uL	97
73) Pentachlorobenzene	14.52	250	179153	19.368 ng/uL	97
74) Carbazole	17.37	167	651501	19.810 ng/ul	99
75) Di-n-butylphthalate	17.93	149	790032	19.009 ng/ul	99
76) Fluoranthene	19.02	202	855697	19.934 ng/ul	100
79) Pyrene	19.39	202	879941	18.756 ng/ul	97
80) Butylbenzylphthalate	20.31	149	381889	19.037 ng/ul	92
81) 3,3'-Dichlorobenzidine	21.09	252	316556	19.898 ng/ul	98
82) Benzo(a)anthracene	21.15	228	917131	19.133 ng/ul	99
83) Bis(2-ethylhexyl)phthalate	21.09	149	561558	18.904 ng/ul	98
84) Chrysene	21.20	228	877173	19.567 ng/ul	98
86) Di-n-octyl phthalate	21.95	149	1003107	17.250 ng/ul	100
87) Benzo(b)fluoranthene	22.69	252	956521	18.535 ng/ul	97
88) Benzo(k)fluoranthene	22.73	252	973335	19.406 ng/ul	99
90) Benzo(a)pyrene	23.24	252	981287	20.051 ng/ul	100
91) Indeno(1,2,3-cd)pyrene	25.49	276	1130164	21.794 ng/ul	99
92) Dibenzo(a,h)anthracene	25.50	278	954123	21.793 ng/ul	99
93) Benzo(g,h,i)perylene	26.14	276	923521	22.036 ng/ul	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

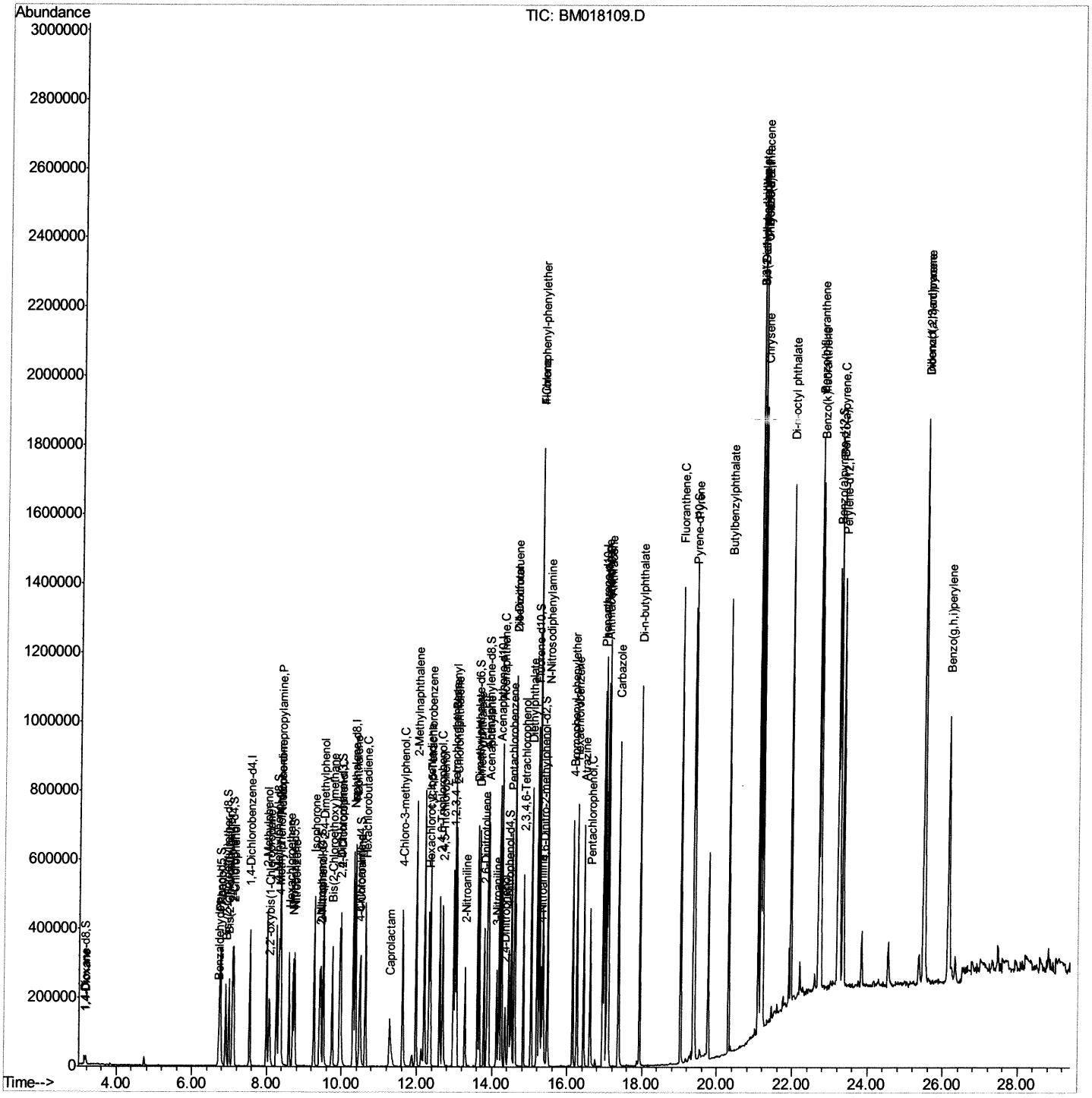
Quantitation Report (QT Reviewed)

Data File : BM018109.D
Acq On : 13 Dec 2018 01:04
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 03:40:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02094

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:27 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

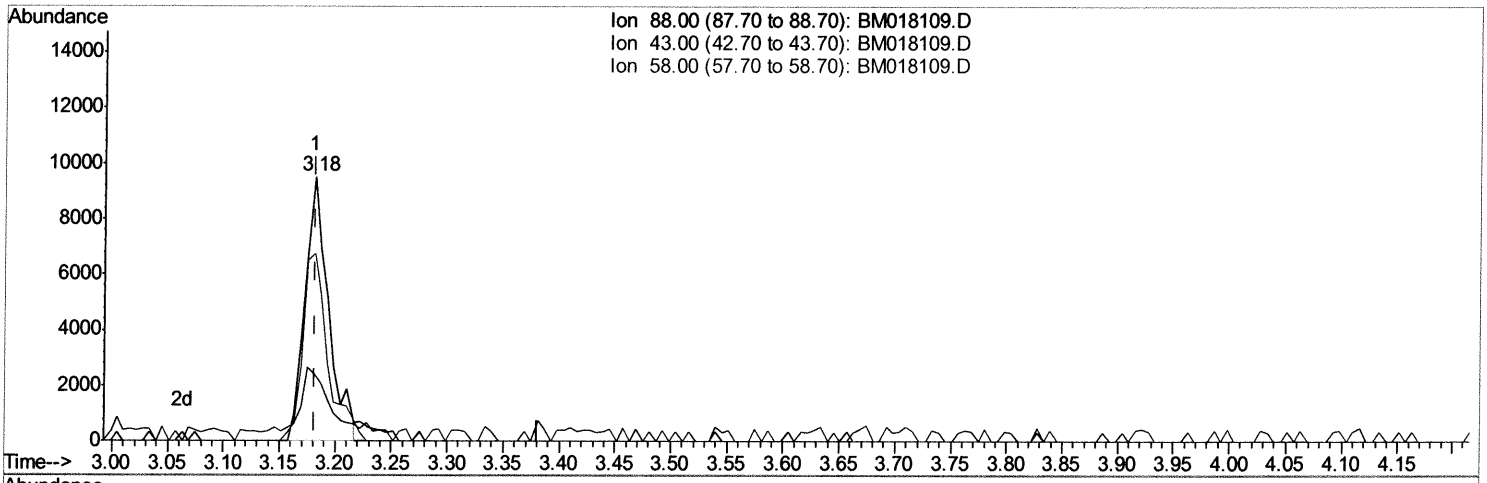
Quantitation Report (Qedit)

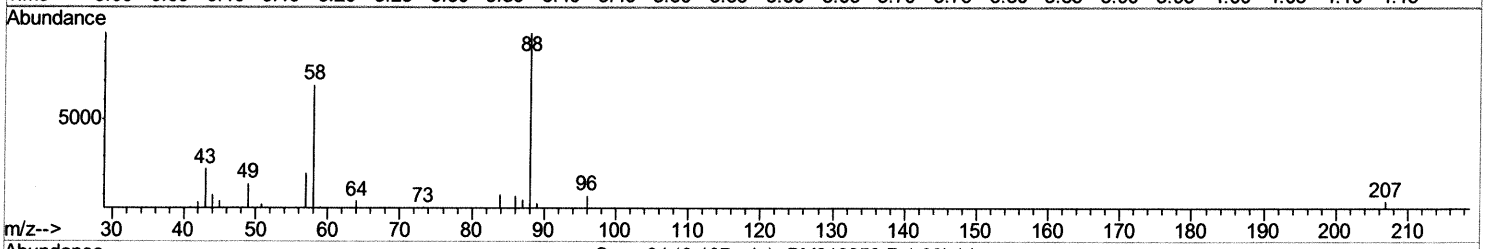
Data File : BM018109.D
Acq On : 13 Dec 2018 01:04
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

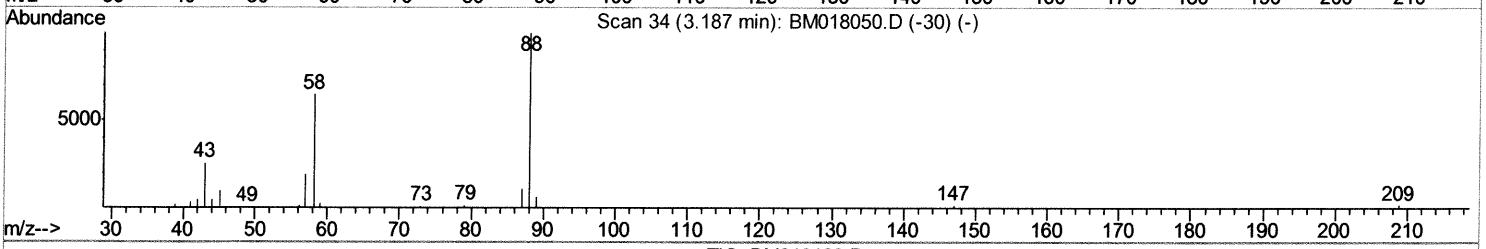
Quant Time: Dec 13 02:42:38 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02094

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:27 PM







TIC: BM018109.D

(2) 1,4-Dioxane

3.181min (-0.000) 5.53ng/uL

response 13863

Ion	Exp%	Act%
88.00	100	100
43.00	34.20	24.89#
58.00	62.80	71.01
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

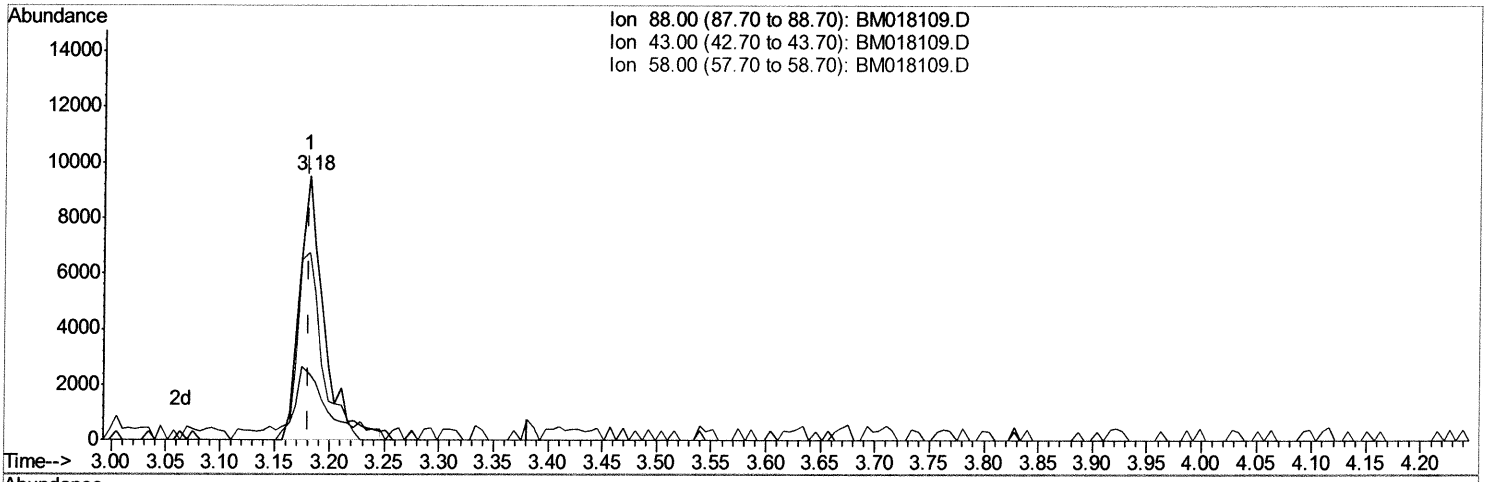
Quantitation Report (Qedit)

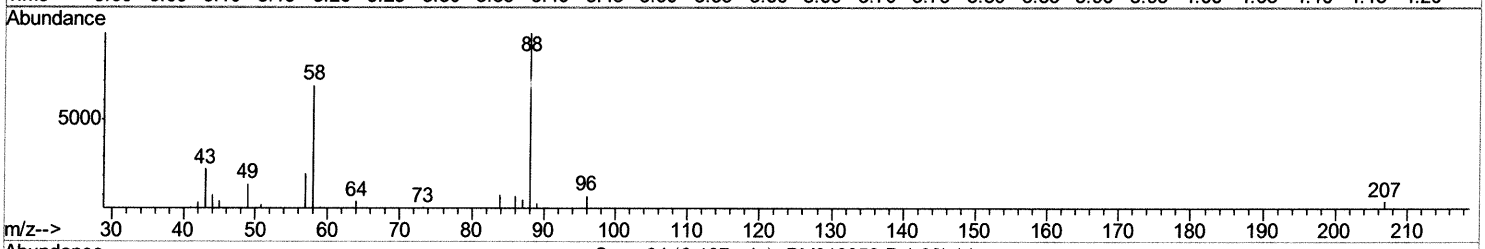
Data File : BM018109.D
Acq On : 13 Dec 2018 01:04
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

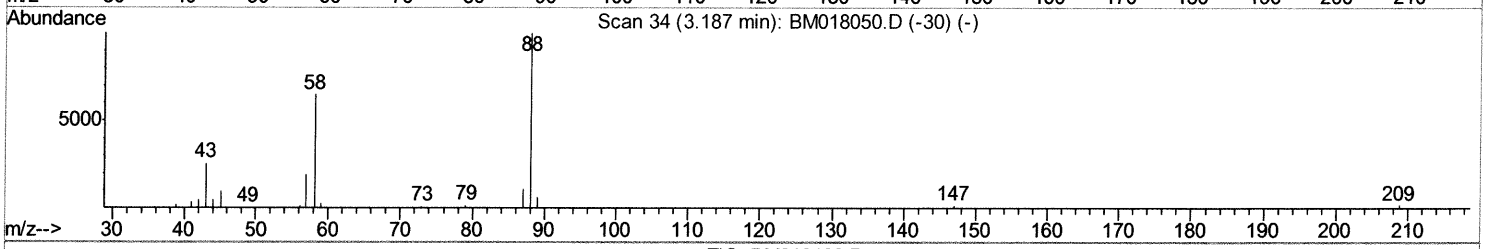
Quant Time: Dec 13 02:42:38 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02094

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:27 PM







TIC: BM018109.D

(2) 1,4-Dioxane

3.181min (-0.000) 5.86ng/uL m SJ 12/13/18

response 14696

Ion	Exp%	Act%
88.00	100	100
43.00	34.20	24.89#
58.00	62.80	71.01
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

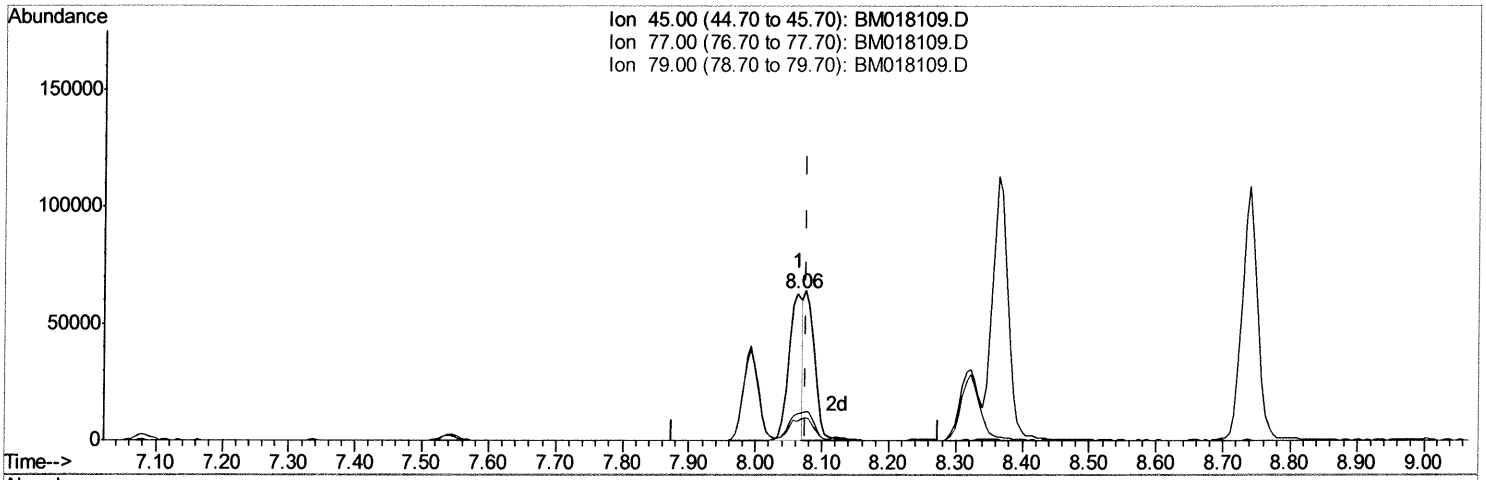
Quantitation Report (Qedit)

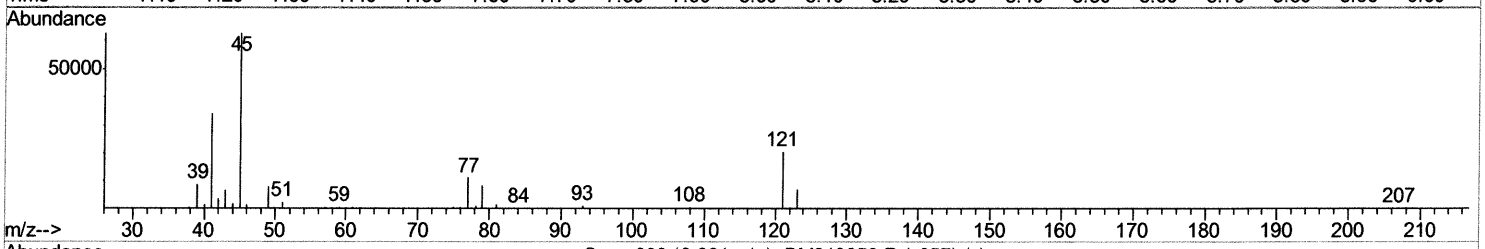
Data File : BM018109.D
Acq On : 13 Dec 2018 01:04
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

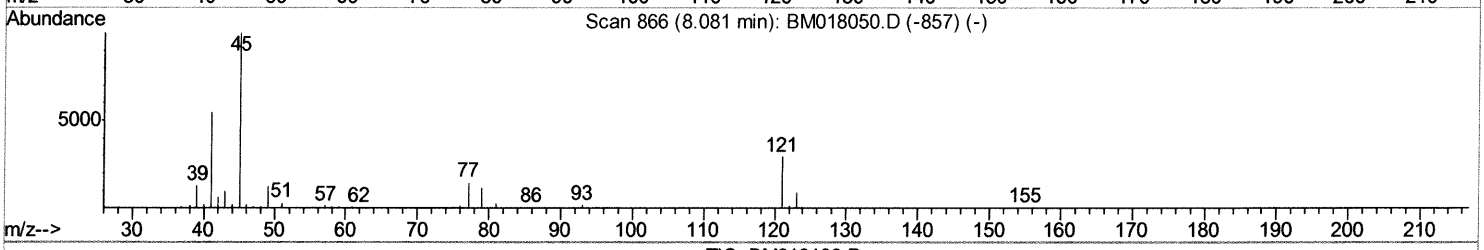
Quant Time: Dec 13 02:42:38 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02094

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:27 PM







TIC: BM018109.D

(12) 2,2'-oxybis(1-Chloropropane)

8.063min (-0.012) 10.18ng/ul

response 90042

Ion	Exp%	Act%
45.00	100	100
77.00	19.10	18.10
79.00	14.20	13.29
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

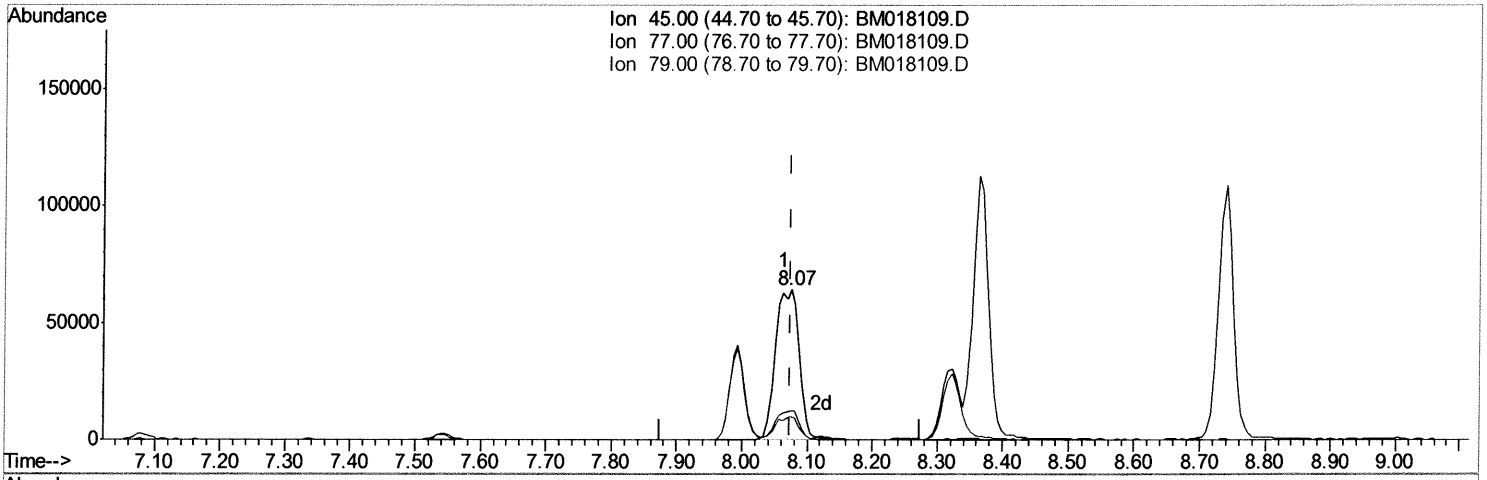
Quantitation Report (Qedit)

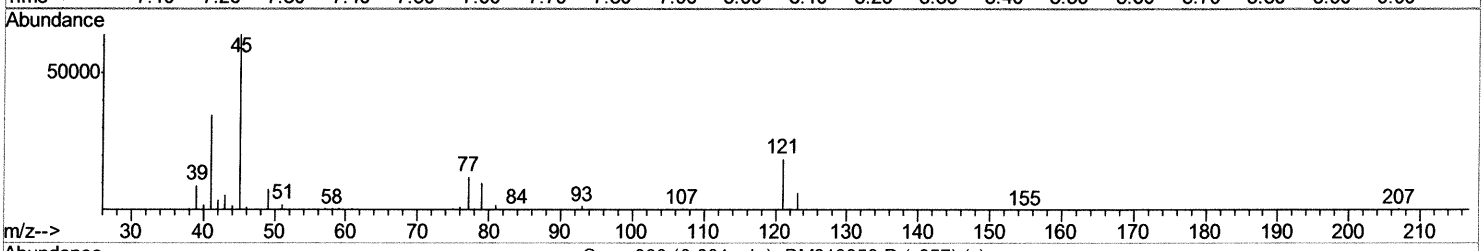
Data File : BM018109.D
Acq On : 13 Dec 2018 01:04
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

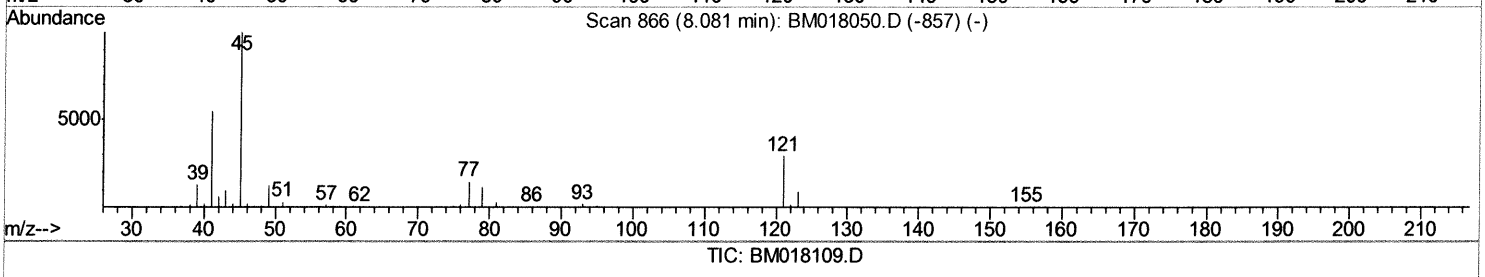
Quant Time: Dec 13 02:42:38 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02094

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:27 PM







TIC: BM018109.D

(12) 2,2'-oxybis(1-Chloropropane)

8.075min (-0.000) 18.11ng/ul m SJ 12/13/18

response 160150

Ion	Exp%	Act%
45.00	100	100
77.00	19.10	19.08
79.00	14.20	15.17
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

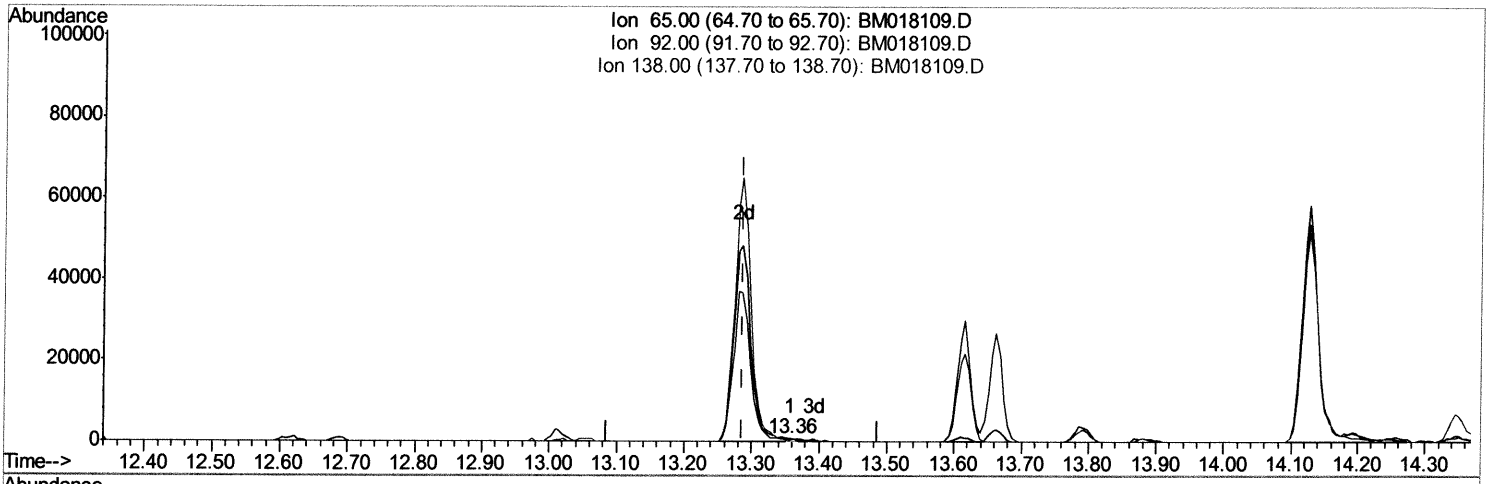
Quantitation Report (Qedit)

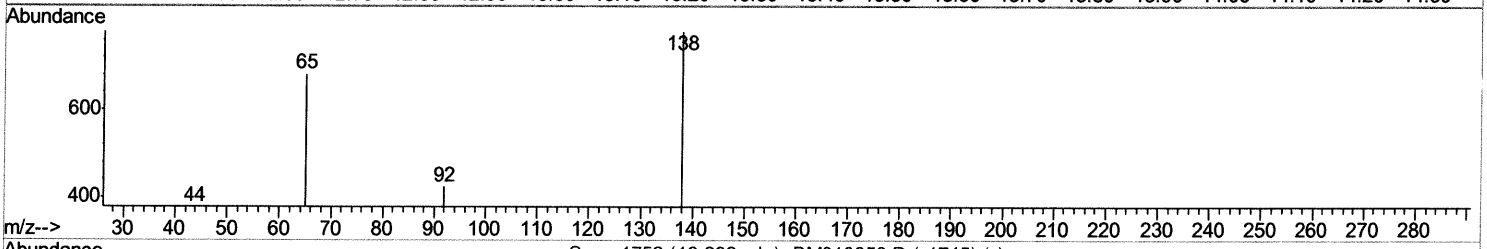
Data File : BM018109.D
Acq On : 13 Dec 2018 01:04
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

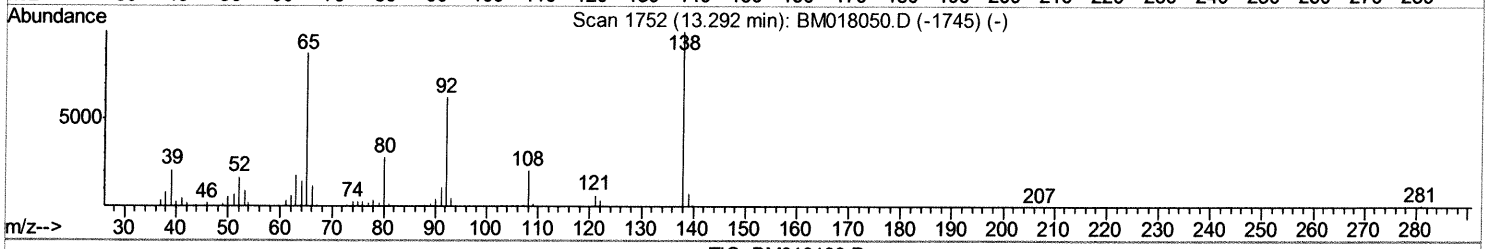
Quant Time: Dec 13 02:42:38 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02094

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:27 PM







TIC: BM018109.D

(42) 2-Nitroaniline

13.357min (+0.070) 0.08ng/ul

response 414

Ion	Exp%	Act%
65.00	100	100
92.00	70.40	62.21
138.00	106.70	114.41
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (Qedit)

Data File : BM018109.D
Acq On : 13 Dec 2018 01:04
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 02:42:38 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02094

Manual Integrations APPROVED
Sohil
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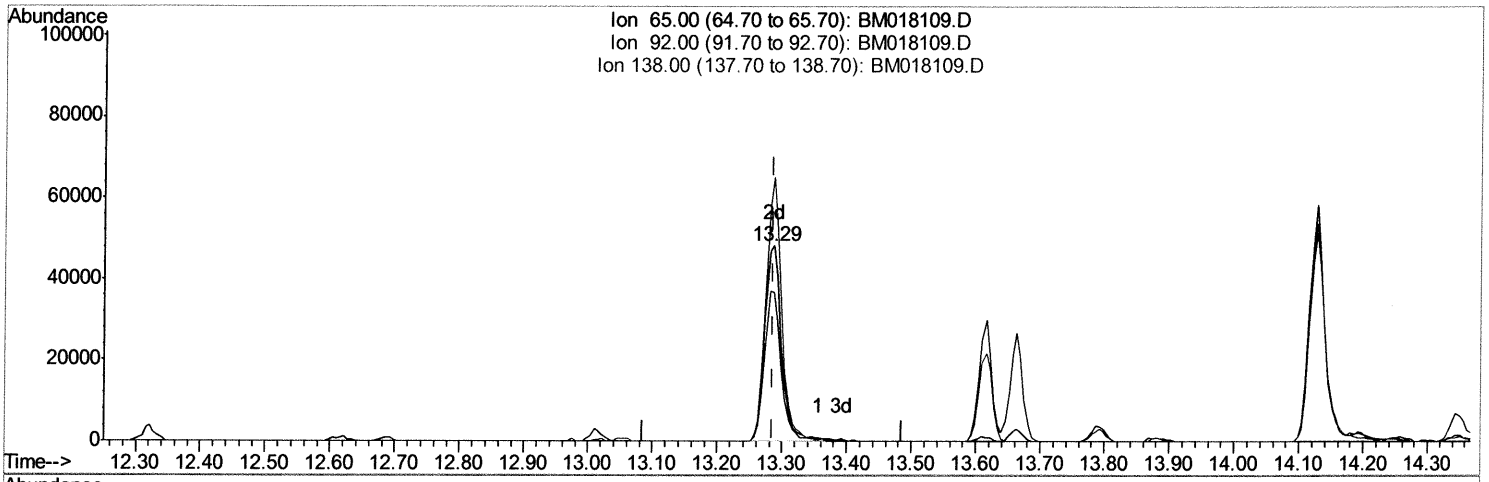

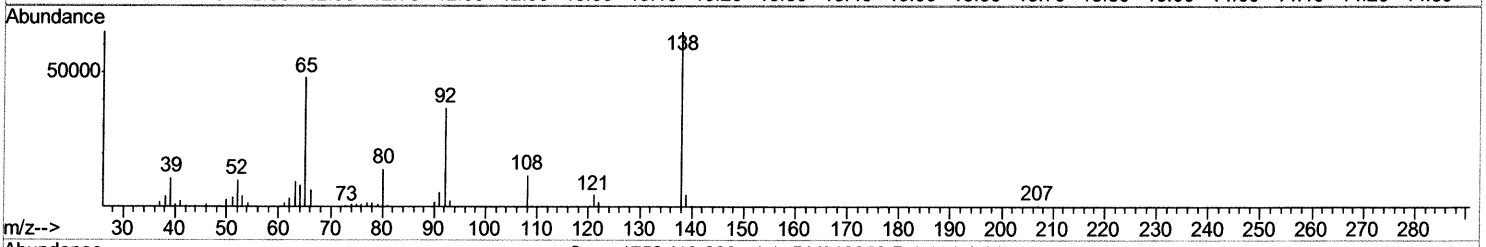

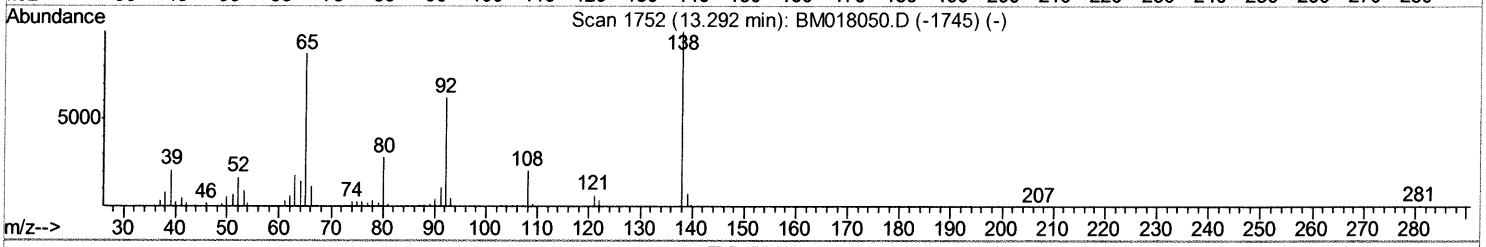

TIC: BM018109.D

(42) 2-Nitroaniline

13.286min (-0.000) 16.69ng/ul m SJ 12/13/18

response 86048

Ion	Exp%	Act%
65.00	100	100
92.00	70.40	76.46
138.00	106.70	135.28#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (Qedit)

Data File : BM018109.D
Acq On : 13 Dec 2018 01:04
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 02:42:38 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02094

Manual Integrations APPROVED
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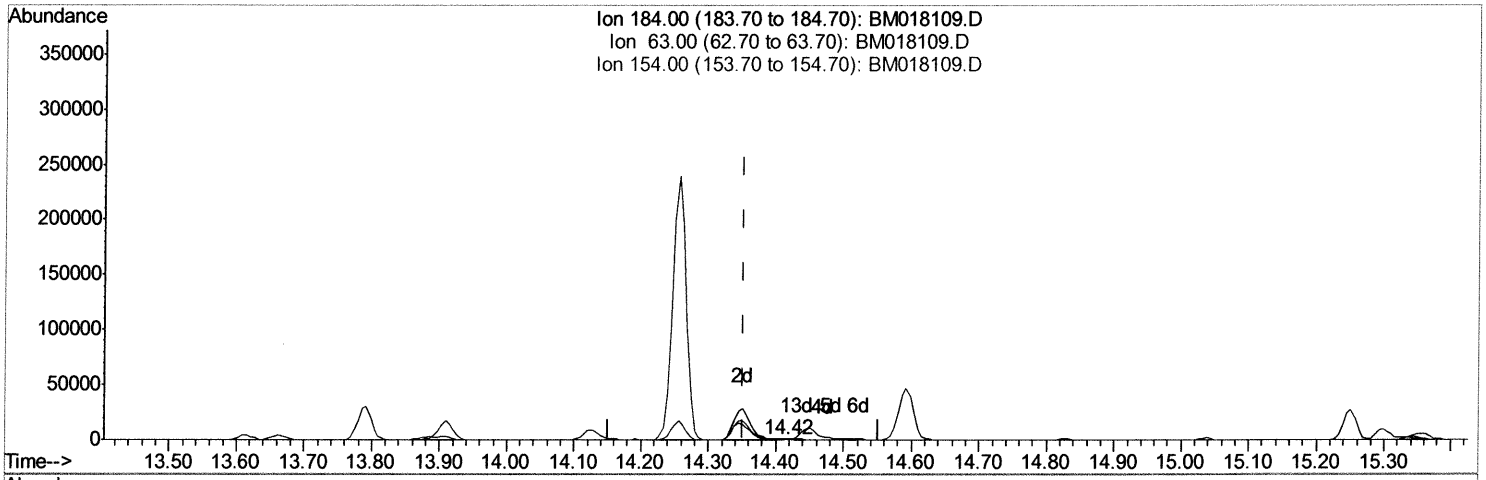

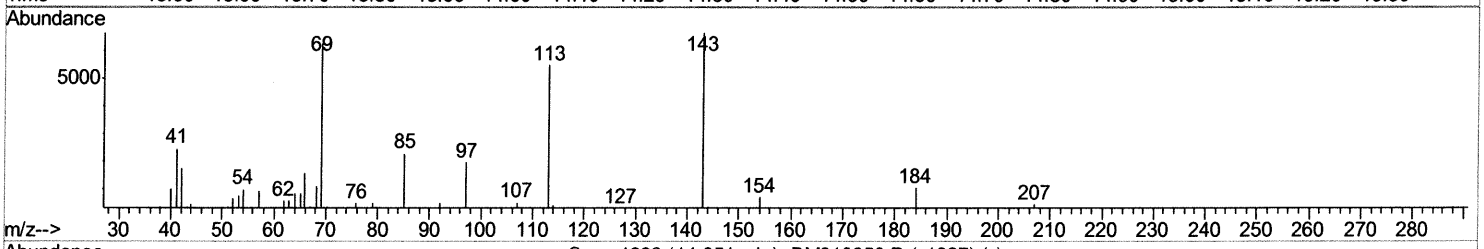

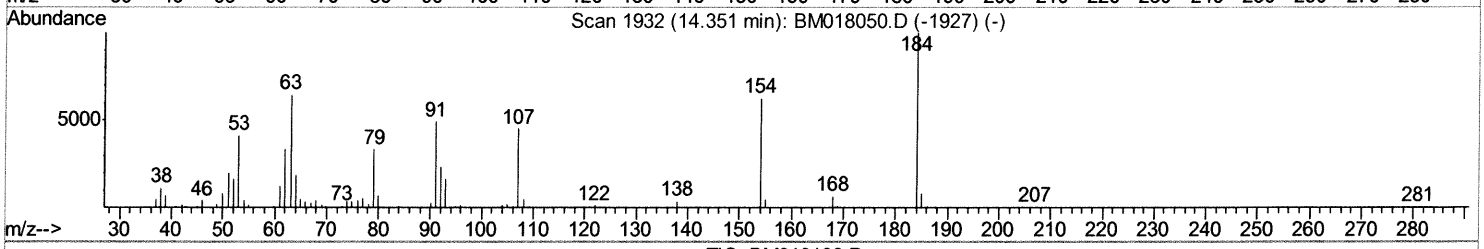

TIC: BM018109.D

(50) 2,4-Dinitrophenol

14.416min (+0.065) 0.21ng/ul

response 659

Ion	Exp%	Act%
184.00	100	100
63.00	68.00	57.29
154.00	63.90	67.68
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (Qedit)

Data File : BM018109.D
Acq On : 13 Dec 2018 01:04
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 02:42:38 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02094

Manual Integrations APPROVED
Sohil
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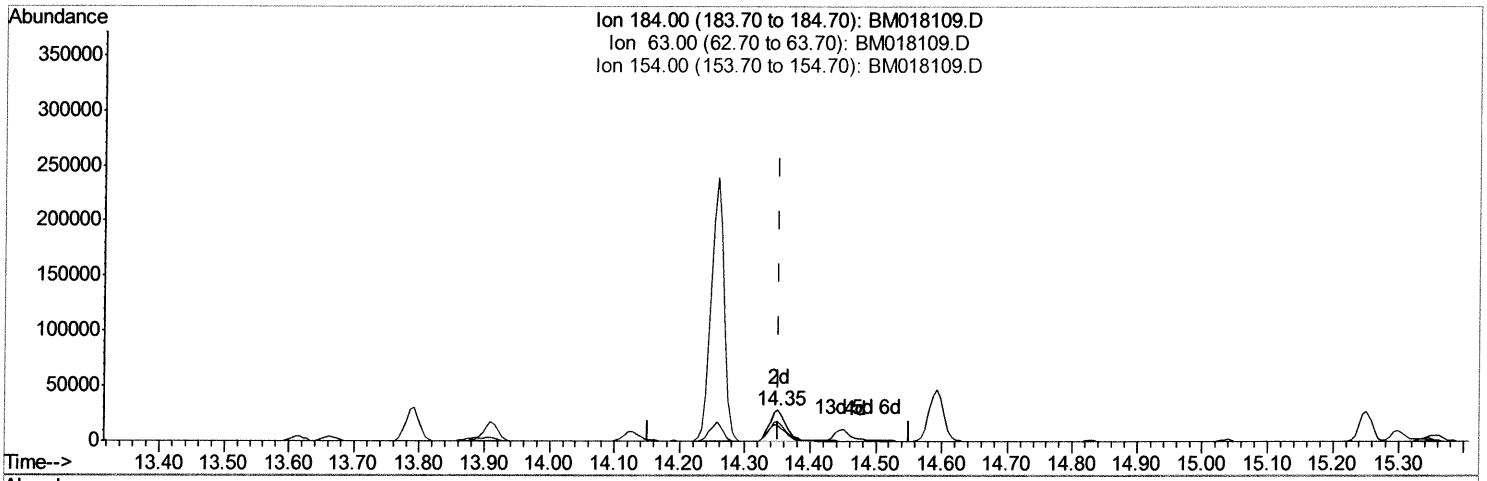

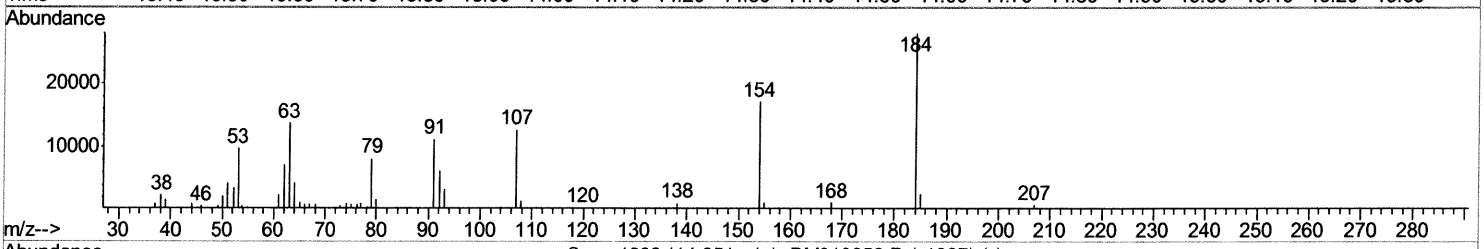

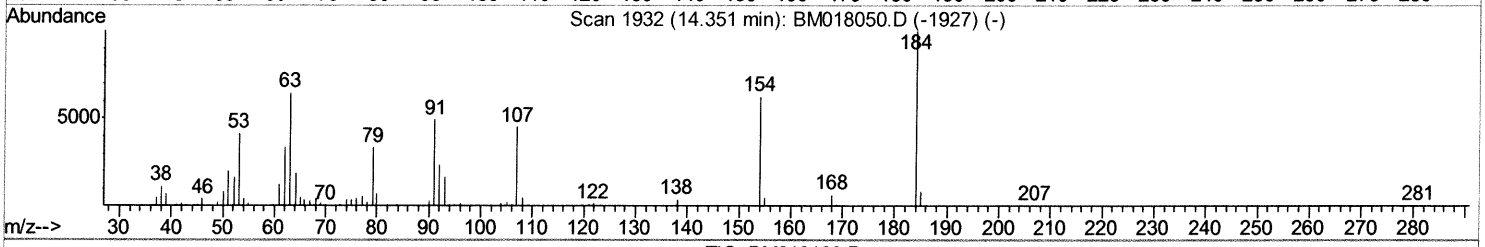

TIC: BM018109.D

(50) 2,4-Dinitrophenol

14.351min (-0.000) 16.47ng/ul m SJ 12/13/18

response 50717

Ion	Exp%	Act%
184.00	100	100
63.00	68.00	49.07#
154.00	63.90	61.43
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (Qedit)

Data File : BM018109.D
Acq On : 13 Dec 2018 01:04
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 02:42:38 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02094

Manual Integrations APPROVED
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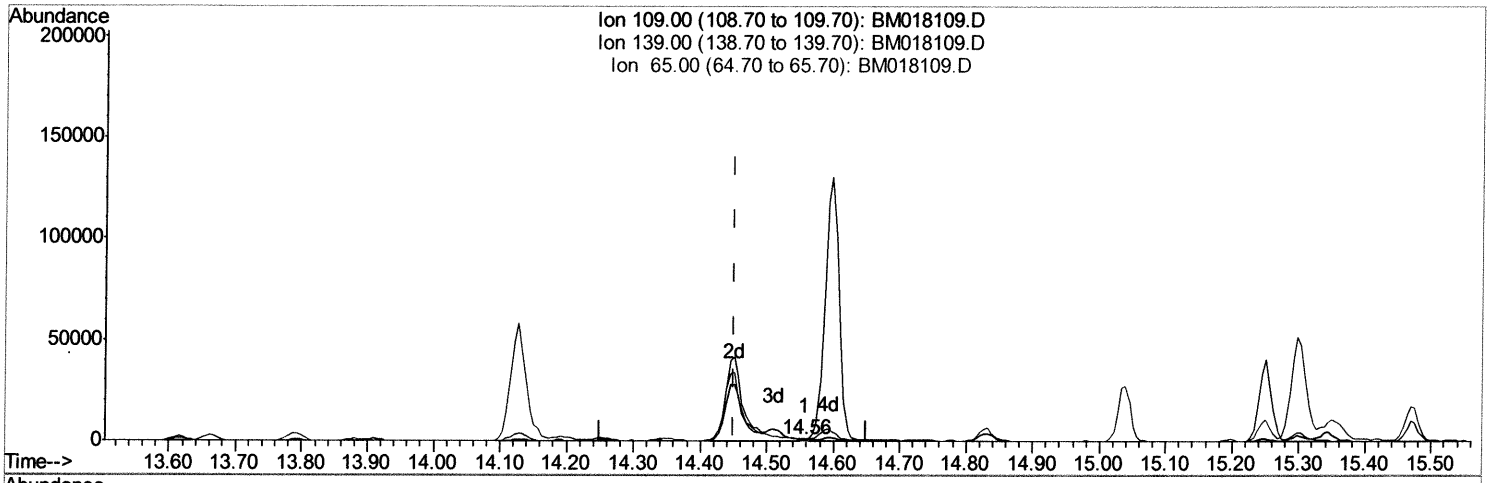
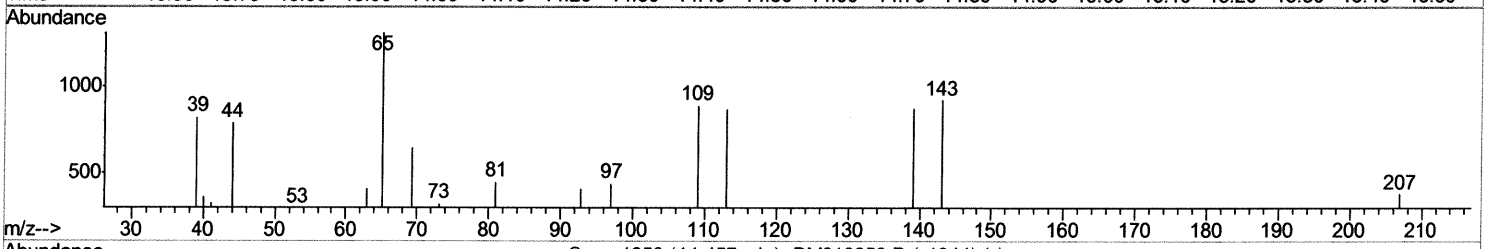
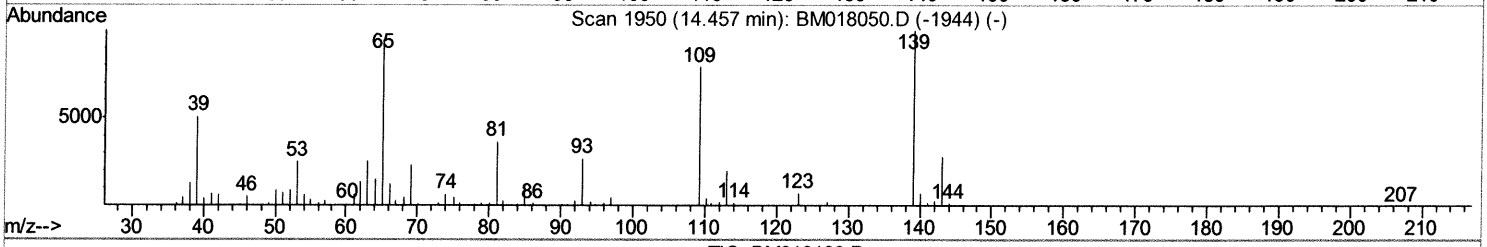






TIC: BM018109.D

(52) 4-Nitrophenol

14.557min (+0.106) 0.10ng/ul

response 346

Ion	Exp%	Act%
109.00	100	100
139.00	121.70	98.31
65.00	130.60	147.46
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

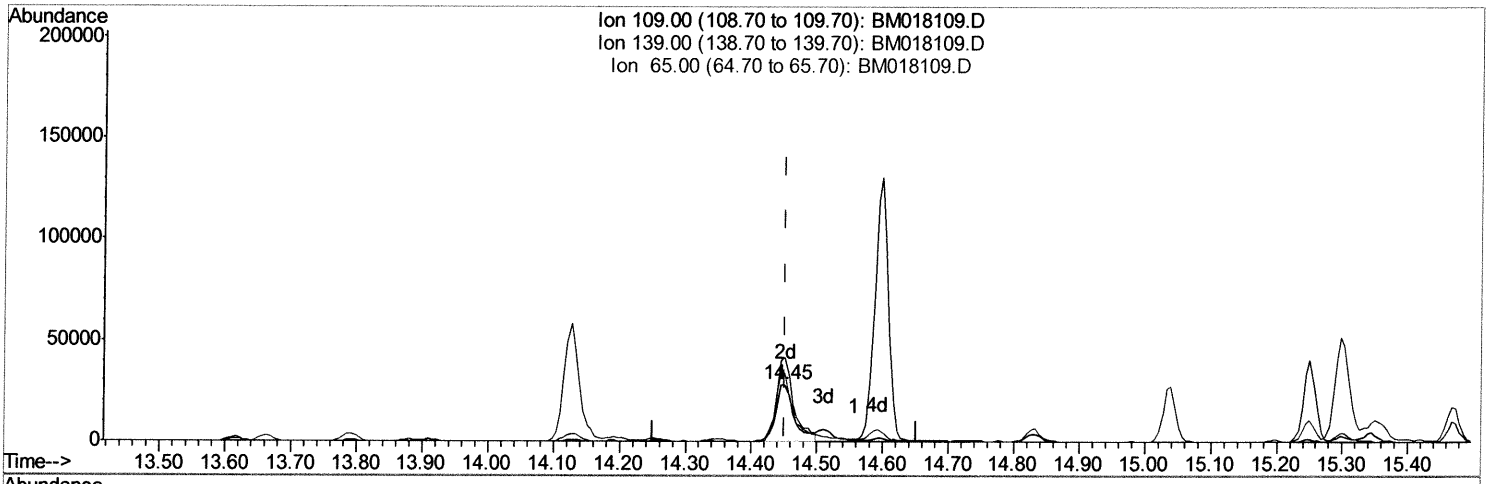
Quantitation Report (Qedit)

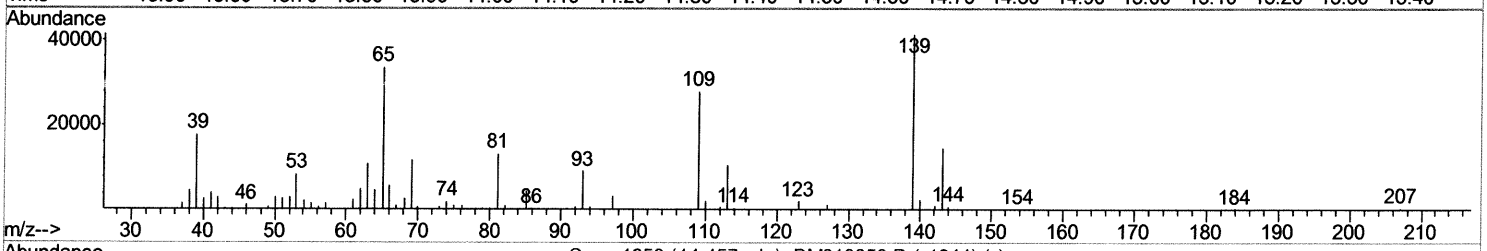
Data File : BM018109.D
Acq On : 13 Dec 2018 01:04
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

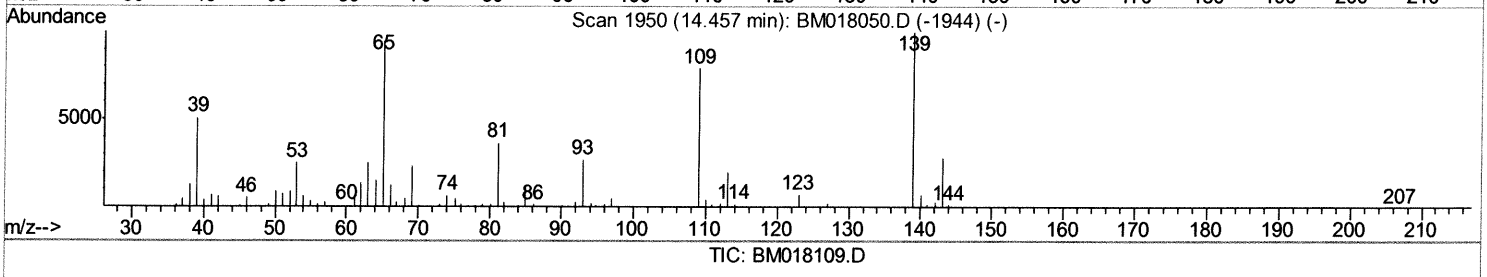
Quant Time: Dec 13 02:42:38 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02094

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:27 PM







TIC: BM018109.D

(52) 4-Nitrophenol

14.451min (-0.000) 15.24ng/ul m > SJ 12/13/18

response 54368

Ion	Exp%	Act%
109.00	100	100
139.00	121.70	147.74#
65.00	130.60	119.67
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018109.D
Acq On : 13 Dec 2018 01:04
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 03:40:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : SSTD02094

Manual Integrations APPROVED
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12/13/2018 6:16:27 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	107624	20.00	ng/ul	0.00
18) Naphthalene-d8	10.31	136	516210	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.19	164	274974	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.95	188	638176	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	772824	20.00	ng/ul	0.00
85) Perylene-d12	23.34	264	830240	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	14060	5.98	ng/uL	0.00
5) Phenol-d5	6.73	99	191191	19.45	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	105467	17.79	ng/ul	0.00
9) 2-Chlorophenol-d4	7.08	132	155641	20.24	ng/ul	0.00
13) 4-Methylphenol-d8	8.26	113	160883	20.03	ng/ul	0.00
19) Nitrobenzene-d5	8.70	128	77828	19.63	ng/ul	0.00
22) 2-Nitrophenol-d4	9.41	143	91334	20.10	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.95	165	168077	19.43	ng/ul	0.00
29) 4-Chloroaniline-d4	10.46	131	151140	20.36	ng/ul	0.00
43) Dimethylphthalate-d6	13.62	166	457168	19.16	ng/ul	0.00
46) Acenaphthylene-d8	13.88	160	567141	19.64	ng/ul	0.00
51) 4-Nitrophenol-d4	14.43	143	73600	16.97	ng/ul	0.00
57) Fluorene-d10	15.19	176	395099	19.18	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.34	200	81758	17.92	ng/ul	0.00
70) Anthracene-d10	17.05	188	617586	19.44	ng/ul	0.00
78) Pyrene-d10	19.36	212	699513	18.71	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.20	264	893466	19.84	ng/ul	-0.01
Target Compounds						Qvalue
2) 1,4-Dioxane	3.18	88	14696m	5.857	ng/uL	
4) Benzaldehyde	6.71	77	31891	17.400	ng/ul#	84
6) Phenol	6.76	94	184837	18.839	ng/ul	95
8) Bis(2-Chloroethyl)ether	6.99	93	142348	18.991	ng/ul	97
10) 2-Chlorophenol	7.11	128	155785	20.274	ng/ul	96
11) 2-Methylphenol	7.99	108	150519	20.108	ng/ul	100
12) 2,2'-oxybis(1-Chloropropan	8.07	45	160150m	18.109	ng/ul	
14) Acetophenone	8.36	105	242399	19.364	ng/ul	98
15) N-Nitroso-di-n-propylamine	8.35	70	123778	18.958	ng/ul#	92
16) 4-Methylphenol	8.32	108	165232	20.427	ng/ul	98
17) Hexachloroethane	8.59	117	59752	19.179	ng/ul	93
20) Nitrobenzene	8.74	77	178153	17.901	ng/ul	94
21) Isophorone	9.26	82	347760	18.784	ng/ul	98
23) 2-Nitrophenol	9.44	139	95656	20.232	ng/ul	91
24) 2,4-Dimethylphenol	9.50	107	191052	19.344	ng/ul	98
25) Bis(2-Chloroethoxy)methane	9.74	93	211279	18.649	ng/ul	99
27) 2,4-Dichlorophenol	9.97	162	161755	19.808	ng/ul	98
28) Naphthalene	10.36	128	531020	19.744	ng/ul	98
30) 4-Chloroaniline	10.49	127	157853	20.846	ng/ul	97
31) Hexachlorobutadiene	10.63	225	100394	18.511	ng/ul	98
32) Caprolactam	11.27	113	55999	20.727	ng/ul	93
33) 4-Chloro-3-methylphenol	11.62	107	179844	19.391	ng/ul	99
34) 2-Methylnaphthalene	11.98	142	393689	19.608	ng/ul	99

SJ 12/13/18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM121218\

Quantitation Report (QT Reviewed)

Data File : BM018109.D
Acq On : 13 Dec 2018 01:04
Operator : JU/SJ
Sample : SSTDCCC020
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 03:40:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 02:37:40 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : SSTD02094

Manual Integrations APPROVED
Sohil
12/13/2018 6:16:27 PM

SJ 12/13/18

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.36	216	198834	21.671 ng/ul	97
37) Hexachlorocyclopentadiene	12.32	237	121023	20.454 ng/ul	97
38) 2,4,6-Trichlorophenol	12.62	196	125777	21.093 ng/ul	96
39) 2,4,5-Trichlorophenol	12.69	196	128886	20.210 ng/ul	98
40) 1,1'-Biphenyl	13.02	154	454956	20.099 ng/ul	99
41) 2-Chloronaphthalene	13.05	162	350757	19.809 ng/ul	98
42) 2-Nitroaniline	13.29	65	86048m	16.688 ng/ul	
44) Dimethylphthalate	13.66	163	439080	18.995 ng/ul	100
45) 2,6-Dinitrotoluene	13.79	165	92616	20.391 ng/ul#	82
47) Acenaphthylene	13.91	152	525735	19.495 ng/ul	98
48) 3-Nitroaniline	14.13	138	88065	20.324 ng/ul#	84
49) Acenaphthene	14.26	153	368971	18.985 ng/ul	98
50) 2,4-Dinitrophenol	14.35	184	50717m	16.469 ng/ul	
52) 4-Nitrophenol	14.45	109	54368m	15.238 ng/ul	
53) Dibenzofuran	14.60	168	529461	19.252 ng/ul	97
54) 2,4-Dinitrotoluene	14.59	165	135856	19.755 ng/ul#	97
55) 2,3,4,6-Tetrachlorophenol	14.83	232	114398	19.455 ng/ul	98
56) Diethylphthalate	15.04	149	443827	18.639 ng/ul	97
58) Fluorene	15.25	166	436029	19.012 ng/ul	99
59) 4-Chlorophenyl-phenylether	15.25	204	221372	18.791 ng/ul	99
60) 4-Nitroaniline	15.30	138	89832	18.648 ng/ul	87
63) 4,6-Dinitro-2-methylphenol	15.36	198	82590	17.566 ng/ul#	90
64) N-Nitrosodiphenylamine	15.47	169	388433	19.769 ng/ul	99
65) 4-Bromophenyl-phenylether	16.14	248	141079	19.346 ng/ul	97
66) Hexachlorobenzene	16.25	284	160986	19.861 ng/ul	95
67) Atrazine	16.44	200	139147	19.093 ng/ul	96
68) Pentachlorophenol	16.61	266	92618	18.366 ng/ul	96
69) Phenanthrene	16.99	178	711872	19.506 ng/ul	99
71) Anthracene	17.09	178	731309	19.594 ng/ul	98
72) 1,2,3,4-Tetrachlorobenzene	12.97	216	180794	19.991 ng/uL	97
73) Pentachlorobenzene	14.52	250	179153	19.368 ng/uL	97
74) Carbazole	17.37	167	651501	19.810 ng/ul	99
75) Di-n-butylphthalate	17.93	149	790032	19.009 ng/ul	99
76) Fluoranthene	19.02	202	855697	19.934 ng/ul	100
79) Pyrene	19.39	202	879941	18.756 ng/ul	97
80) Butylbenzylphthalate	20.31	149	381889	19.037 ng/ul	92
81) 3,3'-Dichlorobenzidine	21.09	252	316556	19.898 ng/ul	98
82) Benzo(a)anthracene	21.15	228	917131	19.133 ng/ul	99
83) Bis(2-ethylhexyl)phthalate	21.09	149	561558	18.904 ng/ul	98
84) Chrysene	21.20	228	877173	19.567 ng/ul	98
86) Di-n-octyl phthalate	21.95	149	1003107	17.250 ng/ul	100
87) Benzo(b)fluoranthene	22.69	252	956521	18.535 ng/ul	97
88) Benzo(k)fluoranthene	22.73	252	973335	19.406 ng/ul	99
90) Benzo(a)pyrene	23.24	252	981287	20.051 ng/ul	100
91) Indeno(1,2,3-cd)pyrene	25.49	276	1130164	21.794 ng/ul	99
92) Dibenzo(a,h)anthracene	25.50	278	954123	21.793 ng/ul	99
93) Benzo(g,h,i)perylene	26.14	276	923521	22.036 ng/ul	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

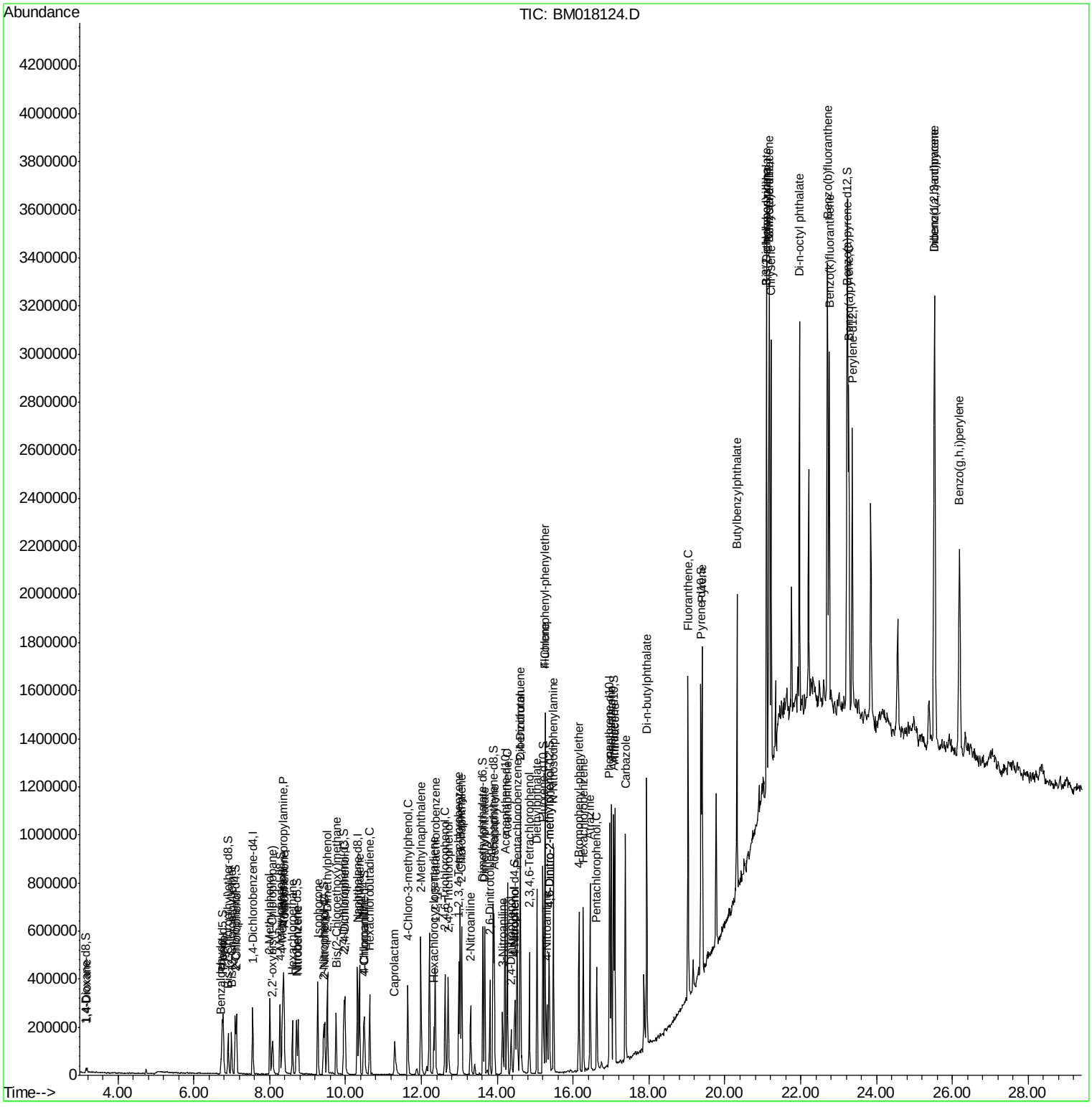
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018124.D
Acq On : 13 Dec 2018 10:43
Operator : JU/SJ
Sample : SSTDCCC020EC
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 11:23:42 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 06:49:34 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02095

Manual Integrations APPROVED
Sohil
12/13/2018 6:17:13 PM



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018124.D
Acq On : 13 Dec 2018 10:43
Operator : JU/SJ
Sample : SSTDCCC020EC
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SSTD02095

Manual Integrations APPROVED
Sohil
12/13/2018 6:17:13 PM

Quant Time: Dec 13 11:23:42 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 06:49:34 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	74973	20.00	ng/ul	0.01
18) Naphthalene-d8	10.32	136	367338	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.20	164	233098	20.00	ng/ul	0.01
61) Phenanthrene-d10	16.96	188	559243	20.00	ng/ul	0.01
77) Chrysene-d12	21.18	240	711208	20.00	ng/ul	0.01
85) Perylene-d12	23.36	264	844486	20.00	ng/ul	0.02
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	9782	5.97	ng/uL	0.00
5) Phenol-d5	6.75	99	137450	20.07	ng/ul	0.02
7) Bis-(2-Chloroethyl)ether-d	6.90	67	76444	18.51	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	112421	20.98	ng/ul	0.01
13) 4-Methylphenol-d8	8.27	113	117198	20.95	ng/ul	0.02
19) Nitrobenzene-d5	8.71	128	59169	20.97	ng/ul	0.01
22) 2-Nitrophenol-d4	9.42	143	69118	21.38	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.96	165	125311	20.36	ng/ul	0.01
29) 4-Chloroaniline-d4	10.47	131	111250	21.06	ng/ul	0.01
43) Dimethylphthalate-d6	13.62	166	416186	20.58	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	490193	20.03	ng/ul	0.01
51) 4-Nitrophenol-d4	14.46	143	63625	17.30	ng/ul	0.02
57) Fluorene-d10	15.20	176	346303	19.83	ng/ul	0.01
62) 4,6-Dinitro-2-methylphenol	15.36	200	76515	19.14	ng/ul	0.02
70) Anthracene-d10	17.06	188	550859	19.78	ng/ul	0.01
78) Pyrene-d10	19.37	212	636197	18.49	ng/ul	0.01
89) Benzo(a)pyrene-d12	23.23	264	894185	19.52	ng/ul	0.03
Target Compounds						Qvalue
2) 1,4-Dioxane	3.18	88	11094m	6.347	ng/uL	
4) Benzaldehyde	6.72	77	25081	19.644	ng/ul	95
6) Phenol	6.78	94	133969	19.601	ng/ul	93
8) Bis(2-Chloroethyl)ether	7.00	93	101992	19.533	ng/ul	94
10) 2-Chlorophenol	7.12	128	110165	20.581	ng/ul	95
11) 2-Methylphenol	8.00	108	108509	20.809	ng/ul	100
12) 2,2'-oxybis(1-Chloropropan	8.08	45	113237	18.381	ng/ul	97
14) Acetophenone	8.37	105	180806	20.734	ng/ul	94
15) N-Nitroso-di-n-propylamine	8.36	70	92657	20.372	ng/ul	96
16) 4-Methylphenol	8.33	108	118999	21.118	ng/ul	97
17) Hexachloroethane	8.60	117	43465	20.027	ng/ul	97
20) Nitrobenzene	8.75	77	124788	17.621	ng/ul#	89
21) Isophorone	9.27	82	266087	20.197	ng/ul	98
23) 2-Nitrophenol	9.45	139	71096	21.131	ng/ul	89
24) 2,4-Dimethylphenol	9.52	107	140777	20.030	ng/ul	99
25) Bis(2-Chloroethoxy)methane	9.75	93	151252	18.761	ng/ul	97
27) 2,4-Dichlorophenol	9.99	162	115250	19.832	ng/ul	96
28) Naphthalene	10.37	128	373124	19.495	ng/ul	98
30) 4-Chloroaniline	10.50	127	111302	20.656	ng/ul	99
31) Hexachlorobutadiene	10.63	225	69145	17.916	ng/ul	96
32) Caprolactam	11.30	113	46368	24.118	ng/ul	94
33) 4-Chloro-3-methylphenol	11.64	107	139832	21.187	ng/ul	98
34) 2-Methylnaphthalene	11.99	142	285869	20.008	ng/ul	95

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018124.D
Acq On : 13 Dec 2018 10:43
Operator : JU/SJ
Sample : SSTDCCC020EC
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 11:23:42 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 06:49:34 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02095

Manual Integrations APPROVED
Sohil
12/13/2018 6:17:13 PM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.37	216	147281	18.936 ng/ul	99
37) Hexachlorocyclopentadiene	12.33	237	54052	10.776 ng/ul	98
38) 2,4,6-Trichlorophenol	12.63	196	100809	19.943 ng/ul	97
39) 2,4,5-Trichlorophenol	12.70	196	110692	20.475 ng/ul	97
40) 1,1'-Biphenyl	13.02	154	376116	19.601 ng/ul	99
41) 2-Chloronaphthalene	13.06	162	282628	18.829 ng/ul	97
42) 2-Nitroaniline	13.29	65	85583	19.580 ng/ul	92
44) Dimethylphthalate	13.67	163	394765	20.146 ng/ul	99
45) 2,6-Dinitrotoluene	13.80	165	83690	21.736 ng/ul	96
47) Acenaphthylene	13.92	152	463037	20.255 ng/ul	100
48) 3-Nitroaniline	14.14	138	77859	21.197 ng/ul	95
49) Acenaphthene	14.27	153	323714	19.648 ng/ul	98
50) 2,4-Dinitrophenol	14.36	184	46916	17.972 ng/ul	96
52) 4-Nitrophenol	14.47	109	50413	16.668 ng/ul	95
53) Dibenzofuran	14.60	168	456894	19.598 ng/ul	99
54) 2,4-Dinitrotoluene	14.60	165	127707	21.906 ng/ul	93
55) 2,3,4,6-Tetrachlorophenol	14.84	232	99936	20.048 ng/ul	95
56) Diethylphthalate	15.04	149	409941	20.308 ng/ul	99
58) Fluorene	15.26	166	385666	19.837 ng/ul	97
59) 4-Chlorophenyl-phenylether	15.26	204	189000	18.925 ng/ul	99
60) 4-Nitroaniline	15.31	138	77730	19.035 ng/ul	94
63) 4,6-Dinitro-2-methylphenol	15.37	198	76514	18.571 ng/ul	95
64) N-Nitrosodiphenylamine	15.48	169	345068	20.041 ng/ul	98
65) 4-Bromophenyl-phenylether	16.16	248	124350	19.459 ng/ul	96
66) Hexachlorobenzene	16.27	284	140074	19.720 ng/ul	97
67) Atrazine	16.44	200	129572	20.288 ng/ul	99
68) Pentachlorophenol	16.62	266	78771	17.825 ng/ul	94
69) Phenanthrene	17.00	178	626897	19.602 ng/ul	99
71) Anthracene	17.10	178	645659	19.741 ng/ul	99
72) 1,2,3,4-Tetrachlorobenzene	12.99	216	144922	18.286 ng/uL	98
73) Pentachlorobenzene	14.53	250	155039	19.126 ng/uL	99
74) Carbazole	17.38	167	597480	20.732 ng/ul	99
75) Di-n-butylphthalate	17.94	149	762907	20.947 ng/ul	99
76) Fluoranthene	19.03	202	785711	20.887 ng/ul	99
79) Pyrene	19.40	202	799239	18.512 ng/ul	99
80) Butylbenzylphthalate	20.32	149	380628	20.618 ng/ul	94
81) 3,3'-Dichlorobenzidine	21.10	252	297921	20.349 ng/ul	99
82) Benzo(a)anthracene	21.16	228	868798	19.695 ng/ul	99
83) Bis(2-ethylhexyl)phthalate	21.10	149	573264	20.970 ng/ul	100
84) Chrysene	21.22	228	822073	19.926 ng/ul	99
86) Di-n-octyl phthalate	21.97	149	1048478	17.726 ng/ul	100
87) Benzo(b)fluoranthene	22.71	252	961914m	18.325 ng/ul	
88) Benzo(k)fluoranthene	22.76	252	932319	18.275 ng/ul	99
90) Benzo(a)pyrene	23.27	252	954023	19.165 ng/ul	97
91) Indeno(1,2,3-cd)pyrene	25.53	276	1219689	23.124 ng/ul	99
92) Dibenzo(a,h)anthracene	25.53	278	1019366	22.890 ng/ul	99
93) Benzo(g,h,i)perylene	26.19	276	1020632	23.942 ng/ul	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

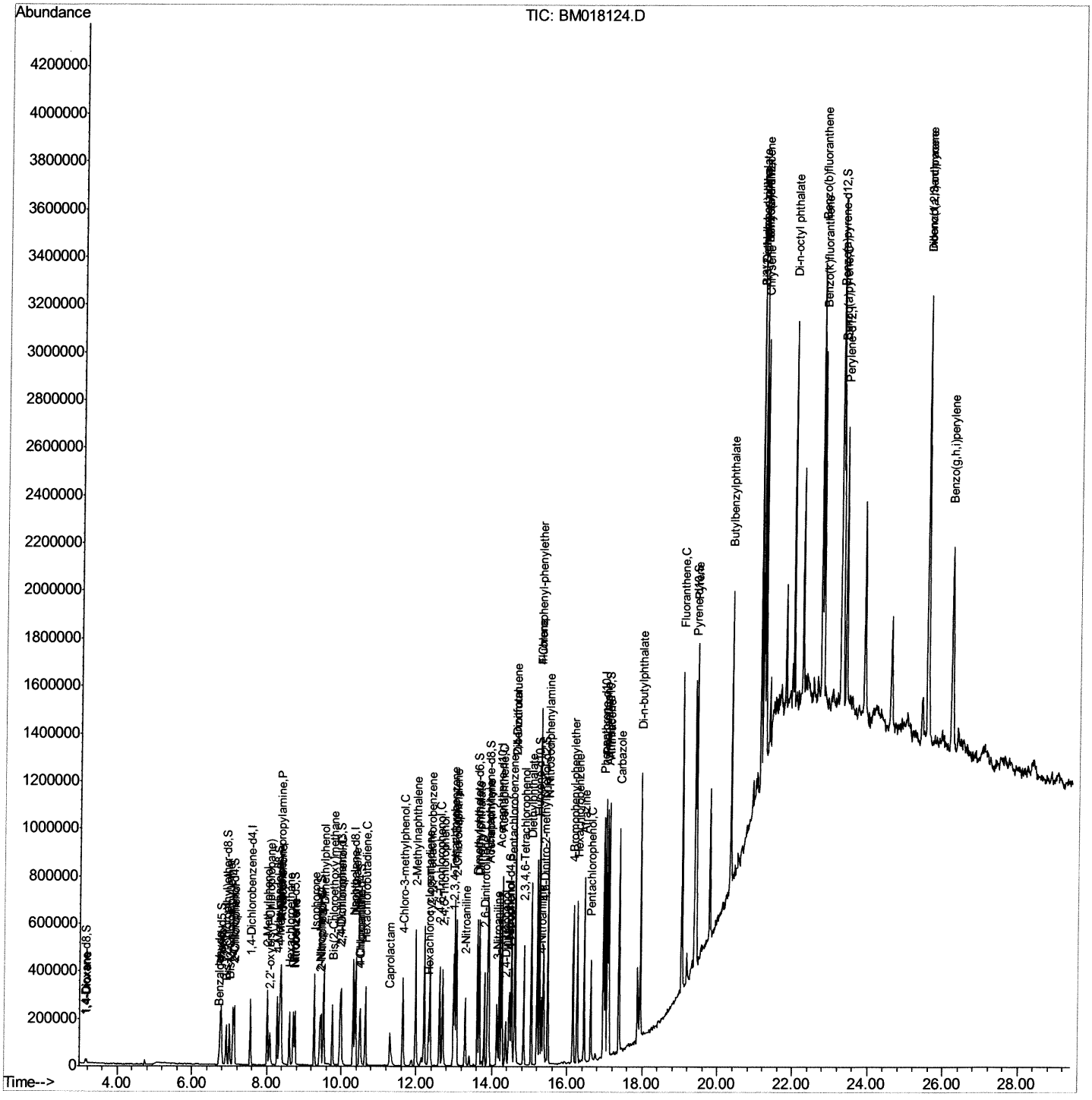
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018124.D
Acq On : 13 Dec 2018 10:43
Operator : JU/SJ
Sample : SSTDCCC020EC
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 11:23:42 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 06:49:34 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02095

Manual Integrations APPROVED
Sohil
12/13/2018 6:17:13 PM



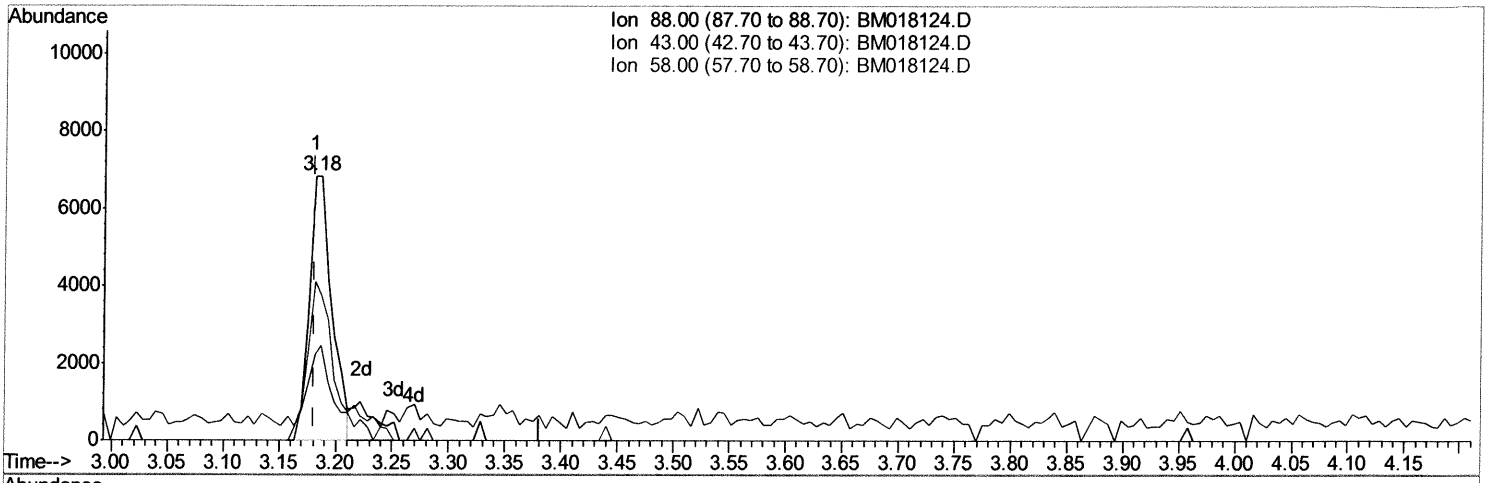
Quantitation Report (Qedit)

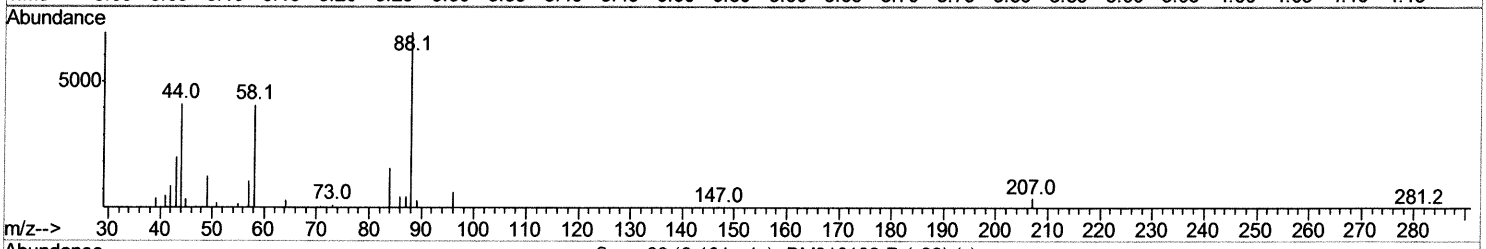
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018124.D
Acq On : 13 Dec 2018 10:43
Operator : JU/SJ
Sample : SSTDCCC020EC
Misc :
ALS Vial : 2 Sample Multiplier: 1

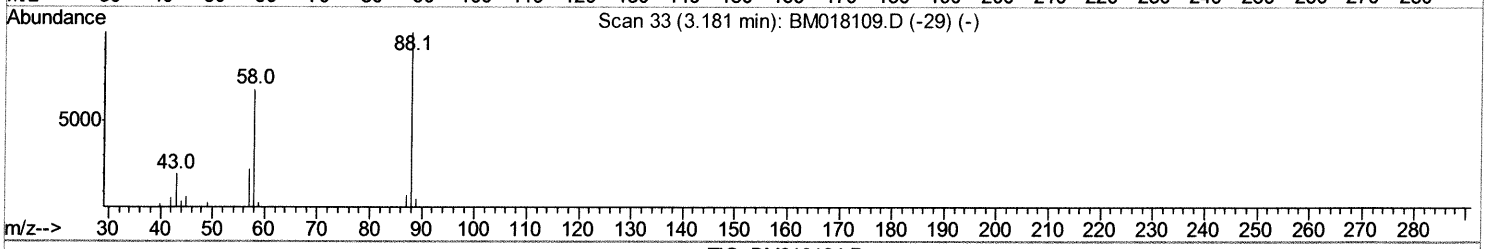
Quant Time: Dec 13 11:17:06 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 06:49:34 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02095

Manual Integrations APPROVED
Sohil
12/13/2018 6:17:13 PM







TIC: BM018124.D

(2) 1,4-Dioxane

3.181min (+0.000) 5.47ng/uL

response 9553

Ion	Exp%	Act%
88.00	100	100
43.00	34.20	32.19
58.00	62.80	60.18
0.00	0.00	0.00

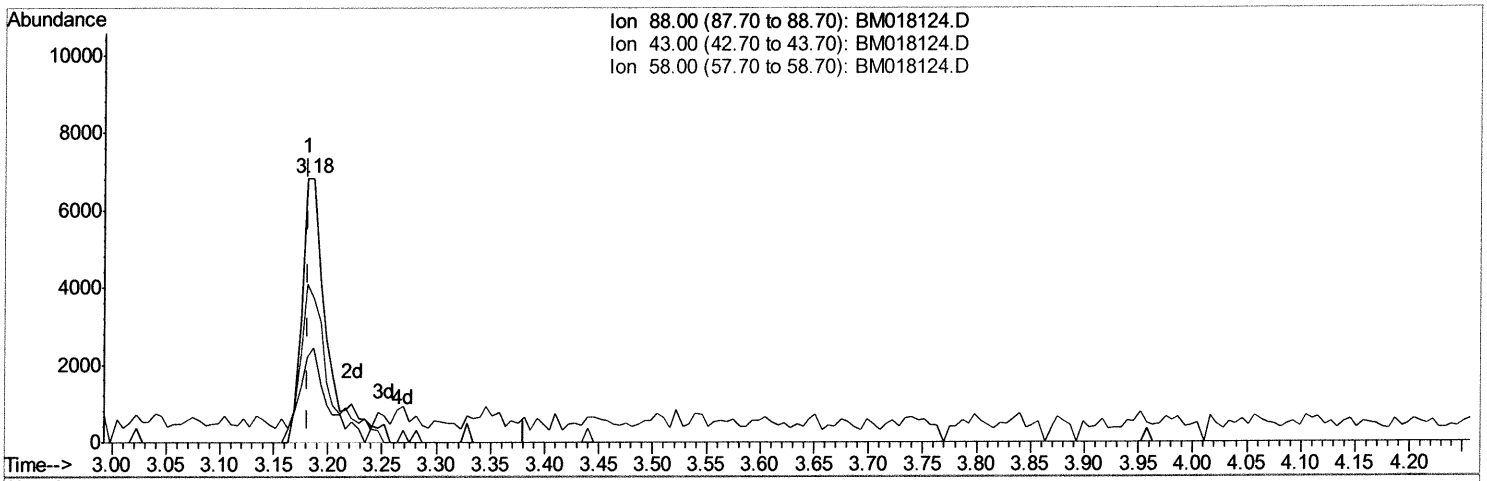
Quantitation Report (Qedit)

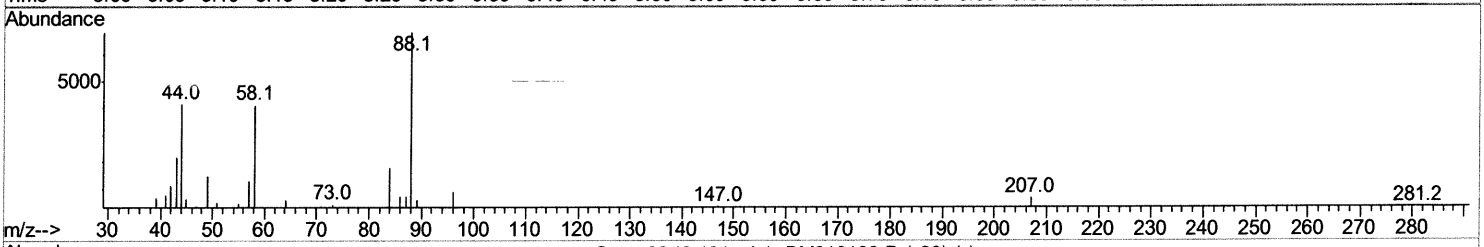
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018124.D
Acq On : 13 Dec 2018 10:43
Operator : JU/SJ
Sample : SSTDCCC020EC
Misc :
ALS Vial : 2 Sample Multiplier: 1

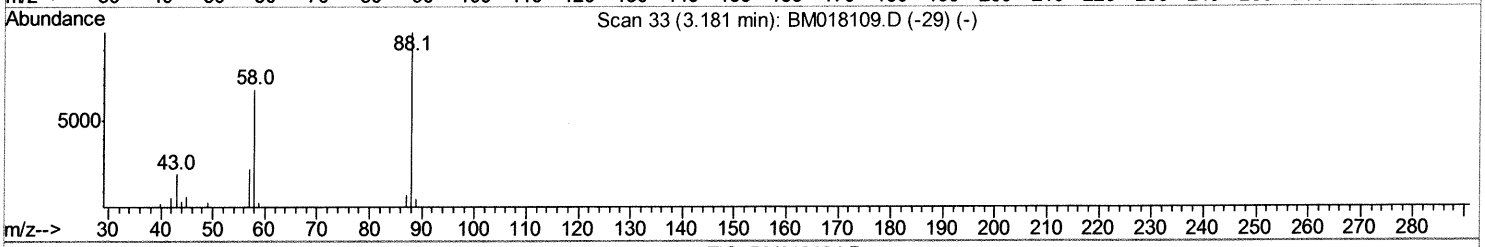
Quant Time: Dec 13 11:17:06 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 06:49:34 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02095

Manual Integrations APPROVED
Sohil
12/13/2018 6:17:13 PM







TIC: BM018124.D

(2) 1,4-Dioxane

3.181min (+0.000) 6.35ng/uL m SJ 12/13/18

response 11094

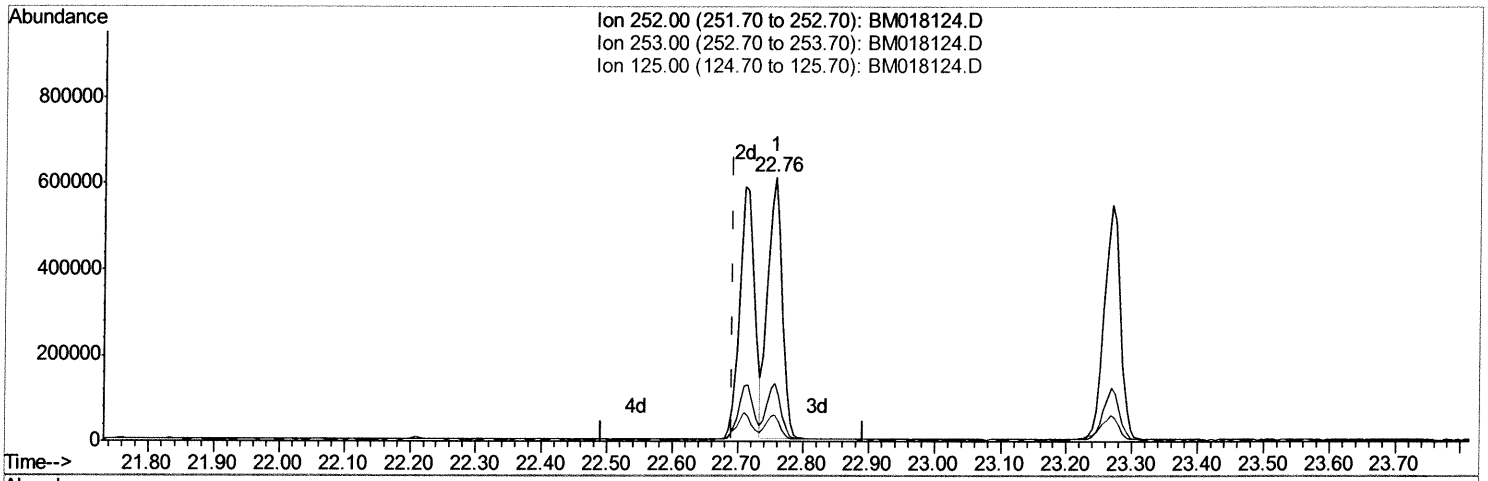
Ion	Exp%	Act%
88.00	100	100
43.00	34.20	32.19
58.00	62.80	60.18
0.00	0.00	0.00

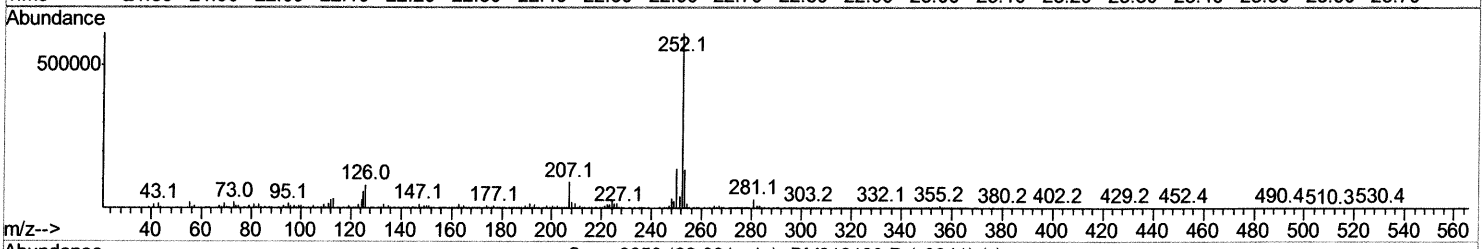
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018124.D
Acq On : 13 Dec 2018 10:43
Operator : JU/SJ
Sample : SSTDCCC020EC
Misc :
ALS Vial : 2 Sample Multiplier: 1

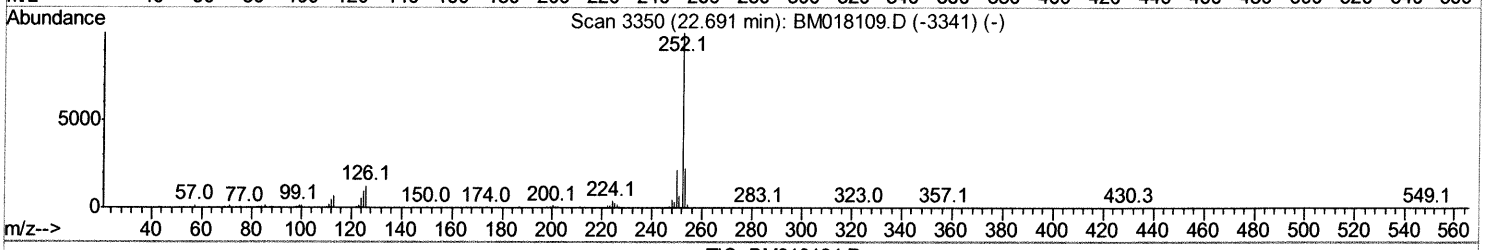
Quant Time: Dec 13 11:17:06 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 06:49:34 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02095

Manual Integrations APPROVED
Sohil
12/13/2018 6:17:13 PM







TIC: BM018124.D

(87) Benzo(b)fluoranthene

22.756min (+0.065) 17.75ng/ul

response 931911

Ion	Exp%	Act%
252.00	100	100
253.00	21.20	21.99
125.00	9.10	9.86
0.00	0.00	0.00

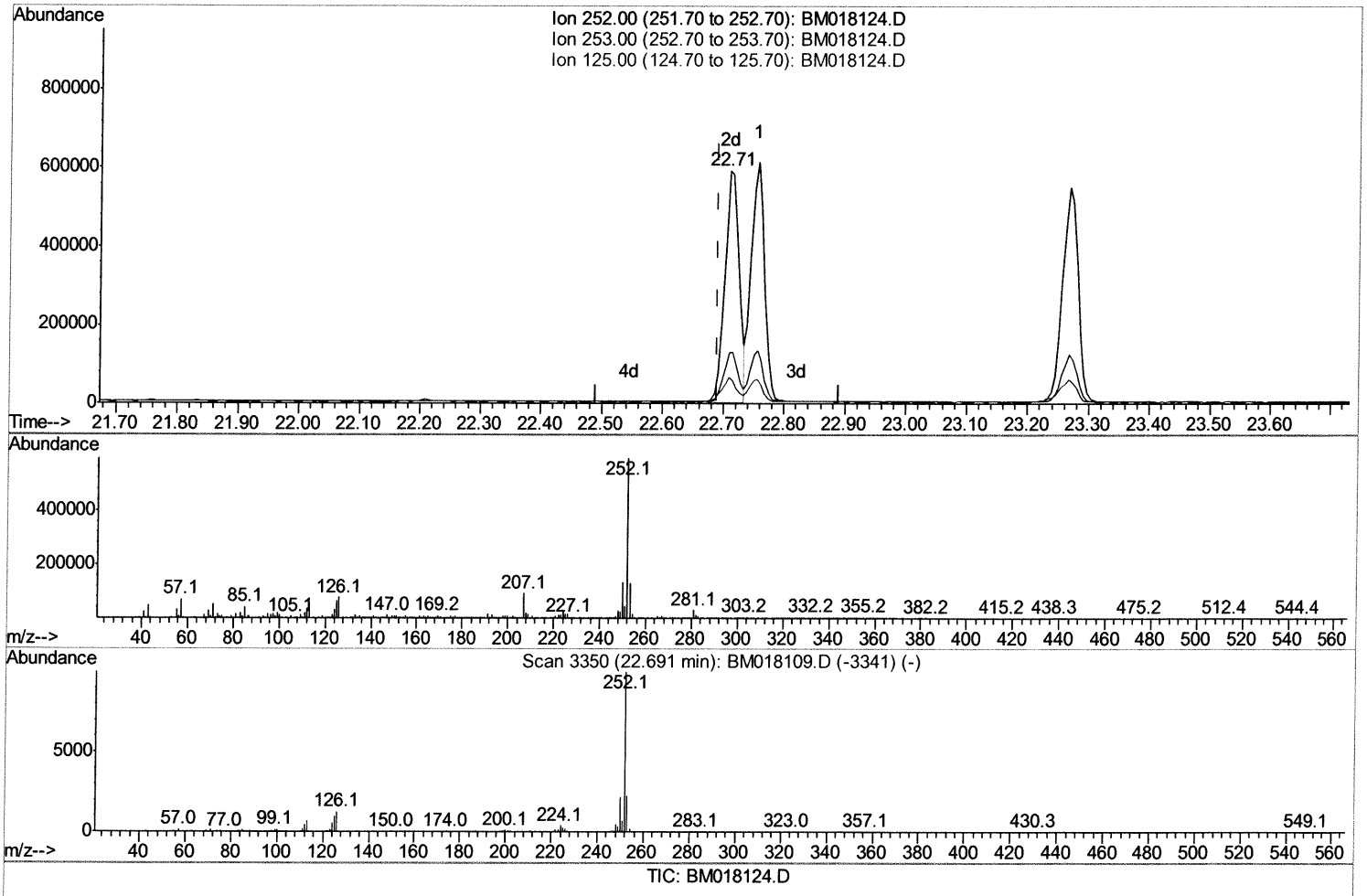
Quantitation Report (Qedit)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018124.D
Acq On : 13 Dec 2018 10:43
Operator : JU/SJ
Sample : SSTDCCC020EC
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 11:17:06 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 06:49:34 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SSTD02095

Manual Integrations APPROVED
Sohil
12/13/2018 6:17:13 PM



TIC: BM018124.D

(87) Benzo(b)fluoranthene

22.709min (+0.018) 18.32ng/ul m SJ 12/13/18

response 961914

Ion	Exp%	Act%
252.00	100	100
253.00	21.20	21.87
125.00	9.10	11.22#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018124.D
Acq On : 13 Dec 2018 10:43
Operator : JU/SJ
Sample : SSTDCCC020EC
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 11:23:42 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 06:49:34 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : SSTD02095

Manual Integrations APPROVED
Sohil
12/13/2018 6:17:13 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	74973	20.00	ng/ul	0.01
18) Naphthalene-d8	10.32	136	367338	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.20	164	233098	20.00	ng/ul	0.01
61) Phenanthrene-d10	16.96	188	559243	20.00	ng/ul	0.01
77) Chrysene-d12	21.18	240	711208	20.00	ng/ul	0.01
85) Perylene-d12	23.36	264	844486	20.00	ng/ul	0.02
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.15	96	9782	5.97	ng/uL	0.00
5) Phenol-d5	6.75	99	137450	20.07	ng/ul	0.02
7) Bis-(2-Chloroethyl)ether-d	6.90	67	76444	18.51	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	112421	20.98	ng/ul	0.01
13) 4-Methylphenol-d8	8.27	113	117198	20.95	ng/ul	0.02
19) Nitrobenzene-d5	8.71	128	59169	20.97	ng/ul	0.01
22) 2-Nitrophenol-d4	9.42	143	69118	21.38	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.96	165	125311	20.36	ng/ul	0.01
29) 4-Chloroaniline-d4	10.47	131	111250	21.06	ng/ul	0.01
43) Dimethylphthalate-d6	13.62	166	416186	20.58	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	490193	20.03	ng/ul	0.01
51) 4-Nitrophenol-d4	14.46	143	63625	17.30	ng/ul	0.02
57) Fluorene-d10	15.20	176	346303	19.83	ng/ul	0.01
62) 4,6-Dinitro-2-methylphenol	15.36	200	76515	19.14	ng/ul	0.02
70) Anthracene-d10	17.06	188	550859	19.78	ng/ul	0.01
78) Pyrene-d10	19.37	212	636197	18.49	ng/ul	0.01
89) Benzo(a)pyrene-d12	23.23	264	894185	19.52	ng/ul	0.03
Target Compounds						Qvalue
2) 1,4-Dioxane	3.18	88	11094m>	6.347	ng/uL	
4) Benzaldehyde	6.72	77	25081	19.644	ng/ul	95
6) Phenol	6.78	94	133969	19.601	ng/ul	93
8) Bis(2-Chloroethyl)ether	7.00	93	101992	19.533	ng/ul	94
10) 2-Chlorophenol	7.12	128	110165	20.581	ng/ul	95
11) 2-Methylphenol	8.00	108	108509	20.809	ng/ul	100
12) 2,2'-oxybis(1-Chloropropan	8.08	45	113237	18.381	ng/ul	97
14) Acetophenone	8.37	105	180806	20.734	ng/ul	94
15) N-Nitroso-di-n-propylamine	8.36	70	92657	20.372	ng/ul	96
16) 4-Methylphenol	8.33	108	118999	21.118	ng/ul	97
17) Hexachloroethane	8.60	117	43465	20.027	ng/ul	97
20) Nitrobenzene	8.75	77	124788	17.621	ng/ul#	89
21) Isophorone	9.27	82	266087	20.197	ng/ul	98
23) 2-Nitrophenol	9.45	139	71096	21.131	ng/ul	89
24) 2,4-Dimethylphenol	9.52	107	140777	20.030	ng/ul	99
25) Bis(2-Chloroethoxy)methane	9.75	93	151252	18.761	ng/ul	97
27) 2,4-Dichlorophenol	9.99	162	115250	19.832	ng/ul	96
28) Naphthalene	10.37	128	373124	19.495	ng/ul	98
30) 4-Chloroaniline	10.50	127	111302	20.656	ng/ul	99
31) Hexachlorobutadiene	10.63	225	69145	17.916	ng/ul	96
32) Caprolactam	11.30	113	46368	24.118	ng/ul	94
33) 4-Chloro-3-methylphenol	11.64	107	139832	21.187	ng/ul	98
34) 2-Methylnaphthalene	11.99	142	285869	20.008	ng/ul	95

SJ 12/13/18

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM121218\
Data File : BM018124.D
Acq On : 13 Dec 2018 10:43
Operator : JU/SJ
Sample : SSTDCCC020EC
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 13 11:23:42 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 13 06:49:34 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : SSTD02095

Manual Integrations APPROVED
Sohil
12/13/2018 6:17:13 PM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	12.37	216	147281	18.936 ng/ul	99
37) Hexachlorocyclopentadiene	12.33	237	54052	10.776 ng/ul	98
38) 2,4,6-Trichlorophenol	12.63	196	100809	19.943 ng/ul	97
39) 2,4,5-Trichlorophenol	12.70	196	110692	20.475 ng/ul	97
40) 1,1'-Biphenyl	13.02	154	376116	19.601 ng/ul	99
41) 2-Chloronaphthalene	13.06	162	282628	18.829 ng/ul	97
42) 2-Nitroaniline	13.29	65	85583	19.580 ng/ul	92
44) Dimethylphthalate	13.67	163	394765	20.146 ng/ul	99
45) 2,6-Dinitrotoluene	13.80	165	83690	21.736 ng/ul	96
47) Acenaphthylene	13.92	152	463037	20.255 ng/ul	100
48) 3-Nitroaniline	14.14	138	77859	21.197 ng/ul	95
49) Acenaphthene	14.27	153	323714	19.648 ng/ul	98
50) 2,4-Dinitrophenol	14.36	184	46916	17.972 ng/ul	96
52) 4-Nitrophenol	14.47	109	50413	16.668 ng/ul	95
53) Dibenzofuran	14.60	168	456894	19.598 ng/ul	99
54) 2,4-Dinitrotoluene	14.60	165	127707	21.906 ng/ul	93
55) 2,3,4,6-Tetrachlorophenol	14.84	232	99936	20.048 ng/ul	95
56) Diethylphthalate	15.04	149	409941	20.308 ng/ul	99
58) Fluorene	15.26	166	385666	19.837 ng/ul	97
59) 4-Chlorophenyl-phenylether	15.26	204	189000	18.925 ng/ul	99
60) 4-Nitroaniline	15.31	138	77730	19.035 ng/ul	94
63) 4,6-Dinitro-2-methylphenol	15.37	198	76514	18.571 ng/ul	95
64) N-Nitrosodiphenylamine	15.48	169	345068	20.041 ng/ul	98
65) 4-Bromophenyl-phenylether	16.16	248	124350	19.459 ng/ul	96
66) Hexachlorobenzene	16.27	284	140074	19.720 ng/ul	97
67) Atrazine	16.44	200	129572	20.288 ng/ul	99
68) Pentachlorophenol	16.62	266	78771	17.825 ng/ul	94
69) Phenanthrene	17.00	178	626897	19.602 ng/ul	99
71) Anthracene	17.10	178	645659	19.741 ng/ul	99
72) 1,2,3,4-Tetrachlorobenzene	12.99	216	144922	18.286 ng/uL	98
73) Pentachlorobenzene	14.53	250	155039	19.126 ng/uL	99
74) Carbazole	17.38	167	597480	20.732 ng/ul	99
75) Di-n-butylphthalate	17.94	149	762907	20.947 ng/ul	99
76) Fluoranthene	19.03	202	785711	20.887 ng/ul	99
79) Pyrene	19.40	202	799239	18.512 ng/ul	99
80) Butylbenzylphthalate	20.32	149	380628	20.618 ng/ul	94
81) 3,3'-Dichlorobenzidine	21.10	252	297921	20.349 ng/ul	99
82) Benzo(a)anthracene	21.16	228	868798	19.695 ng/ul	99
83) Bis(2-ethylhexyl)phthalate	21.10	149	573264	20.970 ng/ul	100
84) Chrysene	21.22	228	822073	19.926 ng/ul	99
86) Di-n-octyl phthalate	21.97	149	1048478	17.726 ng/ul	100
87) Benzo(b)fluoranthene	22.71	252	961914m	18.325 ng/ul	
88) Benzo(k)fluoranthene	22.76	252	932319	18.275 ng/ul	99
90) Benzo(a)pyrene	23.27	252	954023	19.165 ng/ul	97
91) Indeno(1,2,3-cd)pyrene	25.53	276	1219689	23.124 ng/ul	99
92) Dibenzo(a,h)anthracene	25.53	278	1019366	22.890 ng/ul	99
93) Benzo(g,h,i)perylene	26.19	276	1020632	23.942 ng/ul	97

SJ 12/13/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

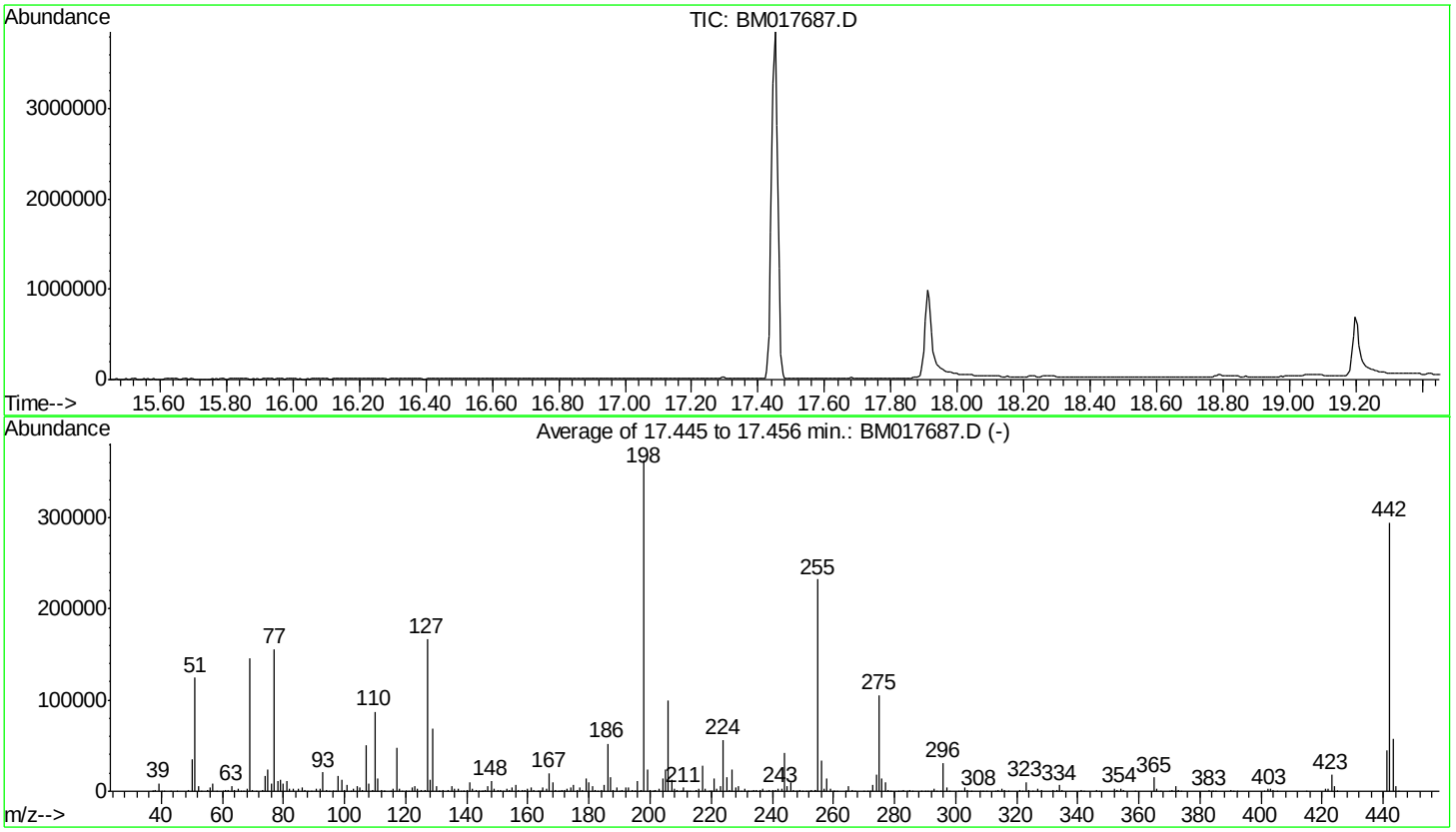
DFTPP

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM111918\
Data File : BM017687.D
Acq On : 19 Nov 2018 17:50
Operator : MJ/SJ
Sample : DFTPP64
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : DFTPP64

Integration File: LSCINT.P

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION
Last Update : Tue Nov 20 01:04:58 2018



AutoFind: Scans 2458, 2459, 2460; Background Corrected with Scan 2452

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	34.2	124098	PASS
68	69	0.00	2	2.0	2935	PASS
69	198	0.00	100	40.2	145712	PASS
70	69	0.00	2	0.7	994	PASS
127	198	10	80	46.1	167354	PASS
197	198	0.00	2	0.6	2036	PASS
198	198	100	100	100.0	362858	PASS
199	198	5	9	6.6	23885	PASS
275	198	10	60	29.1	105682	PASS
365	198	1	100	4.2	15171	PASS
441	198	0.01	100	12.5	45224	PASS
442	198	50	100	81.1	294336	PASS
443	442	15	24	19.7	57904	PASS

Scan 2452 (17.409 min): BM017687.D
DFTPP64

m/z	Abundance
39.00	334.0
40.00	587.0
41.00	482.0
42.20	396.0
43.00	847.0
44.00	3771.0
45.00	407.0
55.20	427.0
57.00	564.0
69.20	330.0
71.20	553.0
73.00	1160.0
84.00	360.0
132.90	440.0
193.00	341.0
207.00	1513.0
208.10	334.0
280.80	431.0

Instrument :
BNA_M
ClientSampleId :
DFTPP64

Scan 2458 (17.445 min): BM017687.D
DFTPP64

m/z	Abundance
37.00	929.0
38.00	2242.0
39.10	10944.0
40.00	949.0
41.10	806.0
43.10	1088.0
44.00	3464.0
45.00	385.0
48.90	1397.0
50.00	38944.0
51.00	139712.0
52.10	7692.0
53.00	348.0
55.00	1236.0
56.00	4997.0
57.00	10768.0
60.00	559.0
61.10	1945.0
62.00	2257.0
63.00	5945.0
64.00	969.0
65.00	2205.0
65.90	318.0
67.10	413.0
68.10	3010.0
69.00	162368.0
70.00	1255.0
71.00	646.0
73.00	2601.0
74.00	16936.0
75.00	26240.0
76.10	8406.0
77.10	172992.0
78.10	12635.0
79.00	14116.0
80.00	9738.0
81.00	12326.0
82.00	3339.0
83.00	2809.0
83.90	452.0
85.00	2588.0
86.00	3781.0
87.00	1717.0
88.00	823.0
90.90	3029.0
91.90	3459.0
93.00	22472.0
94.10	1444.0
95.10	309.0
96.00	988.0
97.20	540.0
98.00	17088.0
99.00	13705.0
100.00	1236.0
101.00	7080.0
101.90	431.0
103.00	3056.0
104.00	5459.0
105.00	4062.0
106.00	1010.0
107.00	56152.0
108.00	8303.0
109.20	2013.0
110.00	92872.0
111.00	14732.0
112.00	1828.0
113.00	664.0
115.00	371.0
116.00	3331.0
117.00	50552.0
118.00	3447.0
118.90	508.0
119.90	653.0
121.00	415.0
122.00	3805.0
123.00	5751.0
124.00	2287.0
125.00	1920.0
126.20	1039.0
127.00	176448.0
128.00	14082.0
129.00	72472.0
130.00	6010.0
130.90	850.0
132.00	1109.0
134.00	1859.0
135.00	6307.0
136.00	2456.0
137.10	3190.0
137.90	616.0
138.70	333.0

Instrument :
BNA_M
ClientSampleId :
DFTPP64

139.10	516.0
140.00	1091.0
141.00	9586.0
142.00	3302.0
143.00	2248.0
143.90	447.0
144.90	362.0
146.10	1546.0
147.00	5223.0
148.00	11518.0
149.00	2081.0
150.00	865.0
151.00	1119.0
151.80	746.0
153.00	2649.0
154.00	2160.0
155.00	5528.0
156.00	7387.0
156.90	1525.0
158.00	2204.0
159.00	969.0
160.00	2874.0
161.00	4749.0
162.10	1073.0
164.10	533.0
165.00	3504.0
166.00	2732.0
167.00	20640.0
168.00	11383.0
169.00	1544.0
170.30	509.0
170.90	554.0
172.00	1986.0
173.00	2211.0
174.00	4297.0
175.00	7555.0
176.00	1633.0
177.10	3561.0
178.00	1137.0
179.00	14641.0
180.00	10381.0
181.00	5150.0
182.00	1147.0
183.90	1382.0
185.00	6706.0
186.00	54032.0
187.00	15411.0
188.10	1505.0
189.00	3796.0
189.90	755.0
191.00	2087.0
191.90	3980.0
193.00	5018.0
194.00	1314.0
194.90	590.0
196.00	10845.0
197.10	1679.0
198.00	364096.0
199.00	24208.0
200.10	1325.0
201.30	997.0
201.60	984.0
203.00	2667.0
204.10	13804.0
205.00	24096.0
206.00	98400.0
207.10	13999.0
208.00	3824.0
208.90	1300.0
211.00	4226.0
211.80	881.0
213.00	335.0
215.00	1416.0
216.00	2356.0
217.00	27680.0
218.00	3251.0
220.10	529.0
221.10	13231.0
221.80	2808.0
223.00	5485.0
224.00	55504.0
225.00	14319.0
226.00	1766.0
227.00	24368.0
228.00	4038.0
229.00	4942.0
230.00	600.0
231.00	2161.0
232.10	355.0
233.00	570.0
234.10	1505.0
235.00	1860.0
236.00	1647.0
237.00	2924.0
238.00	559.0

Instrument :
BNA_M
ClientSampleId :
DFTPP64

239.00	1060.0
240.00	870.0
241.00	1140.0
242.00	2094.0
243.10	3274.0
244.00	40600.0
245.00	5637.0
246.00	8323.0
247.00	1879.0
248.10	371.0
249.00	1282.0
250.00	339.0
250.90	519.0
251.90	768.0
253.00	981.0
253.90	1448.0
254.10	1446.0
255.00	217216.0
256.00	33072.0
257.00	3387.0
258.00	14643.0
259.00	2145.0
259.80	348.0
260.20	374.0
260.90	517.0
263.90	300.0
265.00	6326.0
266.10	802.0
266.90	371.0
271.00	497.0
272.10	634.0
273.00	7238.0
274.00	17800.0
275.00	98712.0
276.00	13200.0
277.00	9019.0
278.00	1696.0
281.10	484.0
283.10	877.0
284.00	789.0
285.00	1459.0
285.90	437.0
288.90	535.0
290.00	301.0
293.00	2007.0
294.00	723.0
295.00	695.0
296.00	29592.0
297.00	4719.0
297.90	319.0
301.00	422.0
301.90	340.0
303.00	3356.0
304.10	800.0
305.00	460.0
307.90	606.0
314.00	1037.0
315.00	2746.0
316.10	1677.0
317.10	308.0
321.00	1157.0
322.00	572.0
323.00	9120.0
324.10	1565.0
326.90	1647.0
328.00	778.0
332.00	673.0
333.10	726.0
334.10	5356.0
335.10	1788.0
341.10	1308.0
342.10	317.0
346.10	1910.0
352.00	2209.0
353.00	1725.0
354.10	3109.0
354.90	1137.0
365.00	11767.0
366.00	1970.0
371.10	515.0
372.00	4553.0
373.00	1412.0
383.10	1379.0
383.90	330.0
385.00	396.0
390.10	638.0
391.00	376.0
402.00	1932.0
403.00	2131.0
404.00	895.0
405.10	457.0
421.00	2013.0
422.10	2170.0
423.00	13126.0
424.10	4932.0

Instrument :
BNA_M
ClientSampleId :
DFTPP64

424.90	1037.0
441.10	35296.0
442.10	227264.0
443.10	45120.0
444.00	3717.0

Instrument :
BNA_M
ClientSampleId :
DFTPP64

Scan 2459 (17.451 min): BM017687.D
DFTPP64

Instrument :
BNA_M
ClientSampleId :
DFTPP64

m/z	Abundance
36.90	898.0
38.10	2077.0
39.10	10893.0
39.90	1153.0
41.10	858.0
43.00	1475.0
44.00	2656.0
45.00	358.0
49.00	1361.0
50.00	40472.0
51.00	139648.0
52.00	6679.0
53.00	368.0
54.90	1216.0
56.00	4625.0
57.00	9951.0
57.90	676.0
60.00	374.0
61.00	1995.0
62.00	2082.0
63.00	6476.0
63.90	1022.0
65.10	3246.0
67.00	412.0
68.10	3447.0
69.00	166208.0
70.00	1020.0
71.10	664.0
73.00	2640.0
74.00	19080.0
75.00	27008.0
76.10	8663.0
77.10	179072.0
78.10	12813.0
79.00	14363.0
80.00	9748.0
81.00	14186.0
82.00	2714.0
83.00	2976.0
84.00	447.0
85.00	2549.0
86.00	4474.0
87.00	1747.0
87.90	751.0
91.00	3297.0
92.00	4033.0
93.00	24936.0
93.90	1590.0
95.10	697.0
96.00	833.0
97.10	438.0
98.00	18920.0
99.00	15094.0
100.00	1179.0
101.00	7373.0
101.80	447.0
103.00	2670.0
104.00	5790.0
105.00	4734.0
106.10	1518.0
107.00	57608.0
108.00	9312.0
109.10	1588.0
110.00	101576.0
111.00	15581.0
112.00	2343.0
112.80	829.0
115.10	326.0
116.00	3622.0
117.00	55608.0
117.90	3429.0
119.00	540.0
120.10	624.0
122.00	3816.0
123.00	6068.0
124.00	2604.0
125.00	2781.0
126.10	1375.0
127.00	195712.0
128.00	14572.0
129.00	79952.0
130.00	6192.0
131.10	1492.0
132.00	632.0
133.00	478.0
133.90	2768.0
135.00	6049.0
136.00	2876.0
137.00	3379.0
138.00	713.0
139.00	598.0

140.10	1337.0
141.00	11181.0
142.00	3154.0
143.00	2226.0
144.10	492.0
145.10	599.0
146.00	1871.0
147.00	6156.0
148.00	13412.0
149.00	2959.0
150.10	954.0
151.00	1509.0
151.80	604.0
153.00	4235.0
154.00	2457.0
155.00	5652.0
156.00	7926.0
156.90	2002.0
157.90	2279.0
159.00	1676.0
160.00	3362.0
161.00	5370.0
161.90	1685.0
163.10	404.0
163.80	622.0
165.00	4522.0
166.00	3303.0
167.00	22568.0
168.00	11778.0
169.10	2075.0
169.90	928.0
171.00	1232.0
172.00	1981.0
173.00	2724.0
173.90	5370.0
175.00	8289.0
176.00	2210.0
177.00	4573.0
178.00	1488.0
179.00	16286.0
180.00	12300.0
181.00	5806.0
182.10	947.0
183.00	694.0
183.90	1443.0
185.00	7734.0
186.00	59968.0
187.00	17576.0
188.00	1917.0
189.00	4197.0
189.90	864.0
191.00	2338.0
192.00	5786.0
193.00	5834.0
194.00	1180.0
195.10	660.0
196.00	12936.0
197.10	2651.0
198.00	418496.0
199.00	27408.0
199.90	2275.0
200.80	689.0
201.60	1370.0
203.00	3059.0
204.00	16672.0
205.00	26424.0
206.00	113304.0
207.10	16600.0
208.00	4064.0
209.00	1435.0
210.10	1852.0
211.10	4396.0
212.00	1020.0
213.10	383.0
215.00	1190.0
216.00	2553.0
217.00	33592.0
218.00	3807.0
219.10	342.0
221.00	17368.0
221.90	3989.0
223.00	6836.0
224.00	64744.0
225.00	16856.0
226.00	1746.0
227.00	28592.0
228.00	4349.0
229.00	5844.0
230.00	898.0
231.00	2784.0
231.80	332.0
233.00	479.0
234.00	2223.0
234.90	1721.0
236.00	1330.0

Instrument :
BNA_M
ClientSampleId :
DFTPP64

237.00	3076.0
237.90	700.0
239.00	1387.0
240.00	1110.0
241.00	1449.0
242.00	3540.0
243.00	3402.0
244.10	52072.0
245.00	5869.0
246.00	10471.0
246.90	1805.0
247.80	303.0
249.00	1633.0
250.00	356.0
250.90	541.0
251.90	561.0
252.90	1179.0
254.10	1795.0
255.00	272832.0
256.00	39640.0
257.00	3770.0
258.00	16314.0
259.00	2652.0
260.00	475.0
261.00	472.0
264.10	451.0
265.00	6389.0
266.00	1393.0
269.90	309.0
271.10	419.0
272.10	521.0
273.00	8406.0
274.00	21600.0
275.00	123776.0
276.00	16325.0
277.00	12146.0
278.00	2353.0
278.90	551.0
283.00	1266.0
284.00	736.0
285.00	1649.0
288.90	711.0
290.10	373.0
292.10	449.0
292.90	2867.0
293.90	744.0
294.90	470.0
295.10	479.0
296.00	35160.0
297.00	5175.0
298.00	430.0
301.00	531.0
302.00	513.0
303.00	4634.0
304.00	1155.0
307.90	628.0
309.90	479.0
313.90	1444.0
314.90	3164.0
316.00	1857.0
321.00	1470.0
321.80	563.0
323.00	12276.0
324.00	2751.0
325.00	325.0
327.00	3260.0
328.00	1220.0
332.10	1035.0
333.00	975.0
334.00	7323.0
335.00	1839.0
341.00	1296.0
341.90	354.0
346.00	2489.0
346.90	726.0
352.10	3952.0
353.00	2597.0
354.10	3786.0
355.00	1251.0
358.80	332.0
365.00	19192.0
366.00	2391.0
366.90	434.0
370.00	473.0
371.00	1028.0
372.00	6638.0
373.00	1420.0
373.90	324.0
382.90	1453.0
384.10	705.0
390.10	1022.0
391.00	474.0
392.00	359.0
401.10	435.0
402.10	2483.0

Instrument :
BNA_M
ClientSampleId :
DFTPP64

402.90	2943.0
404.00	1734.0
405.00	325.0
421.00	3371.0
421.90	2919.0
423.00	21368.0
424.10	7052.0
425.10	1124.0
441.10	51776.0
442.10	350336.0
443.10	71416.0
444.10	6977.0
444.80	362.0

Instrument :
BNA_M
ClientSampleId :
DFTPP64

Scan 2460 (17.456 min): BM017687.D
DFTPP64

m/z	Abundance
37.20	424.0
38.10	1509.0
39.00	6289.0
40.00	999.0
41.00	738.0
43.00	911.0
44.00	3472.0
45.00	565.0
49.10	1060.0
50.00	24992.0
51.00	92936.0
52.10	4506.0
53.10	381.0
55.00	1392.0
56.00	3367.0
57.00	7665.0
57.90	440.0
60.00	492.0
61.00	1544.0
62.00	1353.0
63.00	4456.0
64.00	534.0
65.00	1863.0
67.10	388.0
68.00	2350.0
69.00	109552.0
70.10	709.0
71.00	579.0
73.00	2492.0
74.00	12777.0
75.00	16984.0
76.10	6752.0
77.10	116160.0
78.10	7651.0
79.00	8904.0
80.00	7067.0
81.00	8615.0
82.00	2129.0
83.00	2422.0
85.00	2263.0
86.00	2748.0
87.00	1139.0
88.00	312.0
88.90	355.0
91.00	2494.0
92.00	2170.0
93.00	15607.0
93.90	1127.0
95.00	369.0
96.20	901.0
97.20	446.0
98.00	12989.0
99.00	9500.0
99.90	690.0
101.10	4650.0
103.00	1789.0
104.00	3706.0
104.90	3069.0
105.90	837.0
107.00	39008.0
108.00	5838.0
109.00	1248.0
110.00	66456.0
111.00	11002.0
111.90	1005.0
113.10	425.0
116.00	2480.0
117.00	38392.0
118.00	3356.0
119.00	412.0
120.10	355.0
121.10	429.0
122.00	3147.0
123.00	4146.0
124.00	1792.0
125.10	1336.0
127.00	129904.0
128.00	8967.0
129.00	53232.0
130.00	4145.0
131.00	747.0
132.00	659.0
134.00	1242.0
135.00	4740.0
136.00	1756.0
137.00	2699.0
138.00	708.0
138.90	472.0
139.90	786.0
141.00	7521.0
142.00	1868.0

Instrument :
BNA_M
ClientSampleId :
DFTPP64

143.00	1819.0
143.90	437.0
144.90	628.0
146.00	1709.0
147.00	4172.0
148.00	9109.0
149.00	2173.0
149.90	731.0
151.00	946.0
151.90	624.0
152.90	1913.0
154.00	1542.0
155.00	3673.0
156.00	5501.0
156.90	1511.0
158.00	1227.0
158.90	1082.0
160.00	3053.0
161.00	3952.0
162.10	914.0
163.00	414.0
164.30	404.0
165.00	2839.0
166.00	2274.0
167.00	16332.0
168.00	7549.0
169.10	1215.0
169.80	352.0
171.00	698.0
171.90	1876.0
173.00	2164.0
174.00	3413.0
175.10	5699.0
176.10	1479.0
176.90	2862.0
178.00	1155.0
179.00	11288.0
180.00	8572.0
181.00	4123.0
182.00	864.0
183.90	939.0
185.00	6165.0
186.00	42632.0
187.00	11993.0
187.90	1560.0
189.00	2828.0
189.80	488.0
190.90	1469.0
191.90	3568.0
193.00	4183.0
194.00	866.0
194.90	558.0
196.00	9440.0
196.80	1434.0
197.10	1779.0
198.00	305984.0
199.00	20040.0
200.00	1675.0
201.60	1371.0
203.00	2101.0
204.00	12701.0
205.00	20304.0
206.00	85328.0
207.10	12062.0
208.00	3708.0
209.10	1081.0
210.30	1365.0
211.00	2929.0
211.80	1164.0
213.00	311.0
215.00	1125.0
216.00	2383.0
217.00	24128.0
218.00	2418.0
219.10	307.0
219.80	307.0
221.00	10848.0
221.90	2843.0
223.00	4960.0
224.00	48592.0
225.00	14252.0
225.90	1207.0
227.00	19648.0
228.00	3140.0
229.00	4586.0
229.90	516.0
231.10	2035.0
232.00	377.0
233.00	485.0
234.00	1279.0
235.00	2001.0
235.90	1054.0
237.00	2136.0
238.00	360.0
238.90	958.0

Instrument :
BNA_M
ClientSampleId :
DFTPP64

240.00	830.0
241.00	1055.0
242.00	2692.0
243.00	2840.0
244.10	34624.0
245.00	5557.0
246.00	9095.0
246.90	2045.0
247.90	352.0
249.00	1862.0
249.90	327.0
251.00	325.0
252.00	414.0
253.00	808.0
253.90	1185.0
254.20	1268.0
255.00	206656.0
256.00	30160.0
257.00	2922.0
258.00	11561.0
259.00	2139.0
260.10	334.0
260.90	531.0
263.90	384.0
265.00	5438.0
266.10	1066.0
270.90	666.0
272.00	415.0
273.00	6403.0
274.00	17336.0
275.00	94560.0
276.00	12622.0
277.00	8907.0
278.00	1636.0
278.90	519.0
281.10	606.0
281.90	389.0
282.90	947.0
284.10	609.0
285.00	1588.0
285.90	551.0
288.90	369.0
289.90	405.0
291.00	418.0
292.00	406.0
293.10	1636.0
293.90	507.0
295.00	498.0
296.00	29384.0
297.00	3871.0
301.00	394.0
302.00	508.0
303.00	3233.0
304.00	1049.0
307.70	445.0
309.00	305.0
310.00	487.0
313.10	357.0
313.90	951.0
315.00	3002.0
316.00	1690.0
320.90	785.0
321.90	545.0
323.10	8688.0
324.00	1659.0
327.00	2330.0
328.00	834.0
332.00	912.0
332.90	1318.0
334.10	6845.0
334.90	1325.0
341.00	1348.0
346.00	1980.0
346.90	370.0
352.00	3104.0
353.00	1964.0
354.10	3258.0
355.00	690.0
365.00	14554.0
366.00	2425.0
367.00	302.0
370.90	813.0
372.10	5050.0
373.10	1327.0
383.00	1176.0
383.90	391.0
389.90	651.0
390.90	535.0
392.00	424.0
402.00	2126.0
403.10	3257.0
404.00	1172.0
415.00	459.0
421.00	2444.0
422.00	2522.0

Instrument :
BNA_M
ClientSampleId :
DFTPP64

423.00	19496.0
424.10	5286.0
425.00	683.0
441.10	48600.0
442.10	305408.0
443.10	57176.0
444.10	4681.0

Instrument :
BNA_M
ClientSampleId :
DFTPP64

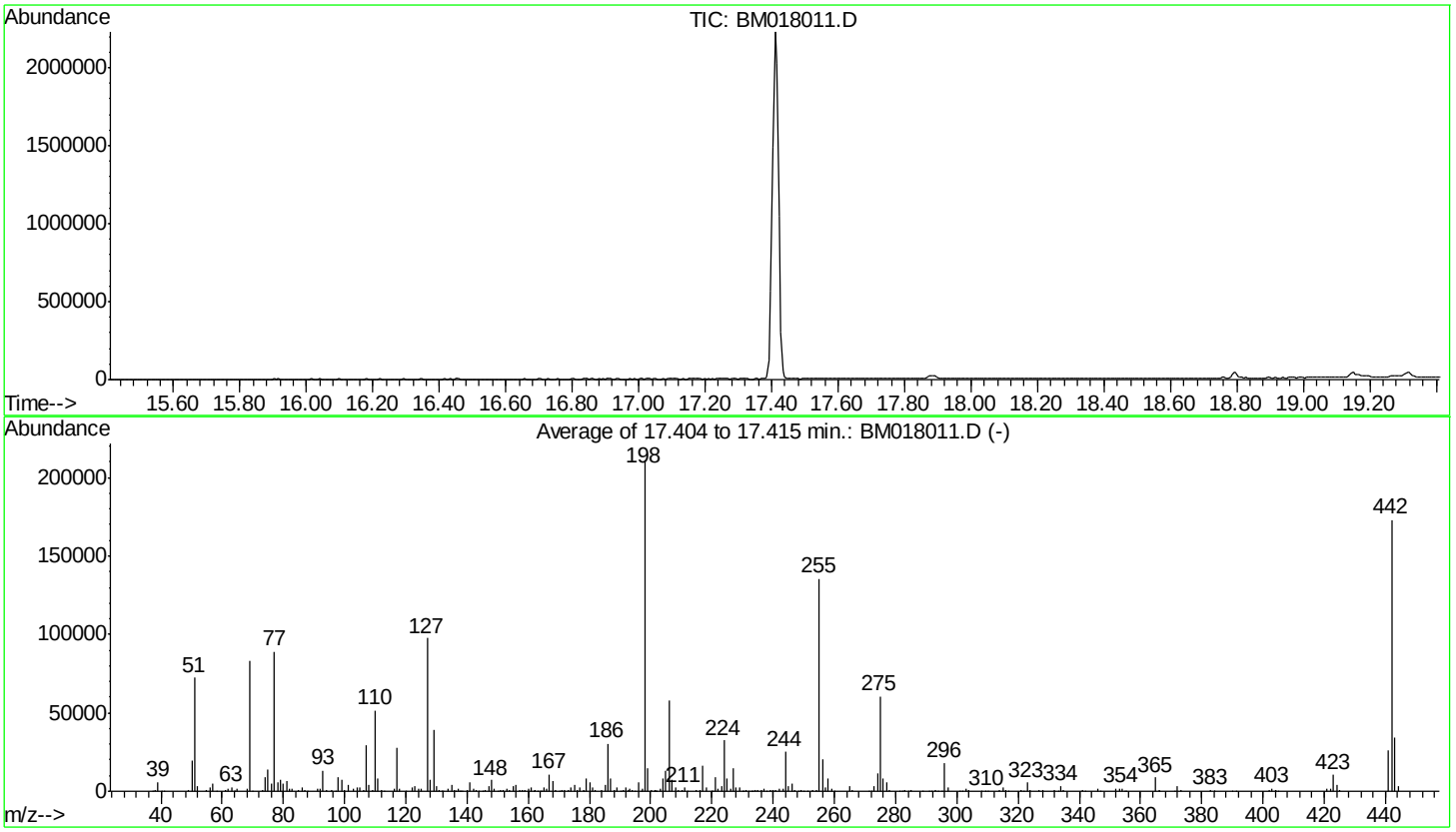
DFTPP

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM120818\
Data File : BM018011.D
Acq On : 08 Dec 2018 10:33
Operator : JU/SJ
Sample : DFTPP74
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : DFTPP74

Integration File: LSCINT.P

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION
Last Update : Mon Dec 10 03:53:59 2018



AutoFind: Scans 2451, 2452, 2453; Background Corrected with Scan 2446

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	34.2	72210	PASS
68	69	0.00	2	2.0	1695	PASS
69	198	0.00	100	39.3	83056	PASS
70	69	0.00	2	0.5	386	PASS
127	198	10	80	46.2	97557	PASS
197	198	0.00	2	0.6	1333	PASS
198	198	100	100	100.0	211178	PASS
199	198	5	9	6.8	14348	PASS
275	198	10	60	28.6	60370	PASS
365	198	1	100	4.1	8676	PASS
441	198	0.01	100	12.3	26063	PASS
442	198	50	100	82.0	173213	PASS
443	442	15	24	19.6	33997	PASS

Scan 2446 (17.374 min): BM018011.D
DFTPP74

m/z	Abundance
40.10	466.0
44.10	1447.0
73.10	665.0
84.00	384.0
133.00	313.0
191.00	374.0
192.90	374.0
207.10	1603.0
207.90	325.0
281.20	335.0

Instrument :
BNA_M
ClientSampleId :
DFTPP74

Scan 2451 (17.404 min): BM018011.D
DFTPP74

m/z	Abundance
37.10	338.0
37.90	871.0
39.10	4782.0
40.00	779.0
44.00	1338.0
49.10	687.0
50.00	18336.0
51.00	65464.0
52.00	2969.0
55.00	506.0
56.10	2172.0
57.00	4368.0
61.00	1190.0
62.00	1273.0
63.10	2680.0
63.90	506.0
65.00	1286.0
68.10	1687.0
69.00	73112.0
69.90	314.0
73.00	1054.0
74.10	7953.0
75.00	12631.0
76.10	3832.0
77.00	77976.0
78.00	6096.0
79.00	6297.0
80.00	4520.0
81.00	6274.0
82.00	1339.0
83.00	1269.0
84.00	524.0
85.00	695.0
86.00	1881.0
86.90	944.0
91.00	1164.0
91.90	1759.0
93.00	11295.0
94.00	565.0
96.00	650.0
98.00	8506.0
99.00	6657.0
100.00	578.0
101.00	3739.0
103.00	842.0
103.90	2070.0
105.00	2075.0
106.00	704.0
107.00	23992.0
108.00	3456.0
109.00	708.0
110.00	42592.0
111.00	7709.0
112.10	732.0
116.00	1667.0
117.00	22368.0
118.00	1463.0
122.00	1826.0
123.00	3036.0
124.00	1415.0
124.90	1220.0
127.00	83080.0
128.00	5689.0
129.00	31496.0
130.00	2667.0
131.00	639.0
133.90	1053.0
134.90	3164.0
135.90	1171.0
137.00	1747.0
137.70	359.0
140.00	518.0
141.00	5627.0
141.90	1627.0
143.00	1008.0
145.00	432.0
145.90	1113.0
147.00	2464.0
148.00	6366.0
149.00	1581.0
150.00	301.0
151.00	656.0
151.90	411.0
153.10	1263.0
154.00	1078.0
155.00	2533.0
156.00	3724.0
157.00	920.0
157.90	851.0
159.00	711.0
160.00	1224.0

Instrument :
BNA_M
ClientSampleId :
DFTPP74

Instrument :
BNA_M
ClientSampleId :
DFTPP74

161.00	2060.0
161.90	544.0
162.90	312.0
163.90	408.0
165.00	1902.0
166.00	1301.0
167.00	8741.0
168.00	5507.0
169.00	709.0
170.10	321.0
170.80	352.0
172.00	1169.0
173.00	1001.0
174.00	1789.0
175.10	3315.0
176.00	945.0
176.90	2375.0
177.90	779.0
179.00	6010.0
180.00	5353.0
181.00	2244.0
181.90	488.0
183.90	355.0
185.00	2929.0
186.00	24104.0
187.00	6461.0
187.90	923.0
189.00	2185.0
191.00	841.0
191.90	1704.0
192.90	3026.0
194.00	456.0
194.90	516.0
196.00	4378.0
197.10	1321.0
198.00	165376.0
199.00	11150.0
200.10	962.0
201.50	517.0
202.00	471.0
203.00	1339.0
204.00	5880.0
205.00	9475.0
206.00	46080.0
207.10	7984.0
208.00	2282.0
209.00	676.0
210.10	582.0
211.00	1842.0
212.00	507.0
215.00	860.0
216.10	892.0
217.00	12927.0
218.00	1649.0
221.00	6790.0
221.70	1369.0
223.00	2644.0
224.00	24672.0
225.00	5862.0
226.00	1418.0
227.00	11277.0
227.90	2032.0
229.00	2041.0
230.00	406.0
231.00	650.0
234.00	776.0
234.90	888.0
236.10	511.0
237.10	1549.0
239.90	576.0
241.00	757.0
242.10	1453.0
243.10	1465.0
244.00	17304.0
245.00	2733.0
246.00	3864.0
246.90	683.0
249.00	600.0
254.10	768.0
255.00	101824.0
256.00	16134.0
257.10	2044.0
258.10	5626.0
258.90	1435.0
265.00	2739.0
265.90	441.0
273.00	2606.0
274.00	7684.0
275.00	43272.0
276.00	6276.0
277.00	4154.0
277.90	826.0
281.10	697.0
283.10	464.0
284.00	301.0

285.00	558.0
291.90	389.0
292.90	934.0
294.90	496.0
296.00	12315.0
297.10	2037.0
303.00	1587.0
314.10	574.0
315.00	1792.0
316.00	768.0
320.90	516.0
323.10	3907.0
324.00	782.0
327.00	936.0
328.00	466.0
332.10	303.0
334.00	1860.0
334.90	561.0
341.10	502.0
346.00	868.0
352.00	1165.0
353.00	823.0
353.90	1285.0
354.90	409.0
365.00	5695.0
365.90	961.0
372.10	2200.0
382.90	758.0
402.00	780.0
403.00	871.0
403.90	393.0
421.00	939.0
422.00	1159.0
423.00	6940.0
424.00	2547.0
425.00	519.0
441.10	15903.0
442.10	99288.0
443.10	21128.0
444.10	1680.0

Instrument :
BNA_M
ClientSampleId :
DFTPP74

Scan 2452 (17.410 min): BM018011.D
DFTPP74

Instrument :
BNA_M
ClientSampleId :
DFTPP74

m/z	Abundance
38.00	870.0
39.10	7275.0
40.00	657.0
44.00	1280.0
49.00	491.0
50.00	23600.0
51.10	84200.0
52.00	3746.0
55.00	387.0
56.00	2534.0
57.00	5488.0
58.10	436.0
61.00	1403.0
62.10	1800.0
63.00	3004.0
64.10	649.0
65.00	1515.0
68.10	1687.0
69.00	99080.0
69.90	314.0
73.00	1590.0
74.00	10564.0
75.00	15730.0
76.10	5547.0
77.00	105792.0
78.10	7174.0
79.00	8644.0
80.00	5967.0
81.00	8848.0
82.10	2039.0
82.90	1864.0
84.90	1264.0
86.00	2854.0
87.00	854.0
88.00	313.0
91.00	1586.0
92.00	2422.0
93.00	15773.0
94.00	1027.0
95.90	544.0
98.00	10521.0
99.00	8799.0
100.00	700.0
101.00	4515.0
103.10	1674.0
104.00	3109.0
104.90	2167.0
106.10	800.0
107.00	34520.0
108.00	4897.0
110.00	62816.0
111.00	9676.0
111.90	969.0
116.10	2163.0
117.00	31928.0
118.00	2558.0
120.00	597.0
122.00	2538.0
123.00	3279.0
124.00	1622.0
124.90	1423.0
127.00	114432.0
128.00	10048.0
129.00	47464.0
130.00	4050.0
131.00	865.0
131.90	351.0
132.20	384.0
132.90	423.0
134.00	1957.0
135.00	4266.0
135.90	1735.0
137.00	2479.0
138.20	361.0
140.10	789.0
141.00	7102.0
142.00	2092.0
143.00	1229.0
145.10	313.0
145.90	1312.0
146.90	3928.0
148.00	8281.0
148.90	1126.0
149.90	361.0
151.00	559.0
151.80	416.0
153.00	1648.0
153.90	1529.0
155.00	3292.0
156.00	5072.0
157.00	1333.0

157.90	1209.0
158.90	648.0
160.00	2229.0
161.00	3228.0
162.10	758.0
162.80	302.0
164.90	2296.0
166.00	1857.0
167.00	13016.0
168.00	7399.0
169.00	966.0
169.90	518.0
170.90	518.0
172.00	1175.0
173.00	1158.0
174.00	3040.0
175.00	5376.0
175.90	1159.0
176.90	2816.0
178.10	1011.0
179.00	9980.0
180.00	6692.0
181.00	2851.0
181.90	422.0
183.90	829.0
185.00	4328.0
186.00	34776.0
187.00	10252.0
188.00	925.0
189.00	2155.0
190.00	304.0
191.00	1483.0
192.00	2844.0
193.10	3277.0
193.90	803.0
196.00	6916.0
196.70	1060.0
197.10	1053.0
198.00	246592.0
199.00	17904.0
200.00	1273.0
201.30	1357.0
203.10	1922.0
204.10	9705.0
205.00	14999.0
206.00	68592.0
207.00	10214.0
208.10	2627.0
209.10	1068.0
210.10	1219.0
210.90	2337.0
214.90	753.0
215.90	1274.0
217.00	18040.0
218.00	2556.0
220.00	476.0
221.00	10754.0
221.80	3101.0
223.00	3720.0
224.00	36904.0
225.00	10003.0
226.00	1562.0
227.00	16512.0
228.00	2315.0
229.00	3282.0
229.80	306.0
230.20	347.0
230.90	1358.0
231.90	367.0
232.90	345.0
233.90	1217.0
235.00	1334.0
235.90	976.0
237.00	2344.0
237.90	353.0
239.00	740.0
240.00	514.0
240.90	807.0
242.00	2010.0
243.10	1998.0
244.00	30512.0
245.00	3717.0
246.00	5851.0
247.00	1149.0
248.20	338.0
249.00	952.0
250.10	409.0
251.10	401.0
252.90	617.0
254.10	1352.0
255.00	154496.0
256.00	21784.0
257.00	2135.0
258.00	9750.0
259.00	1140.0

Instrument :
BNA_M
ClientSampleId :
DFTPP74

265.00	4357.0
266.00	780.0
271.10	339.0
272.00	331.0
273.00	3749.0
274.00	13766.0
275.00	71808.0
276.00	8714.0
277.00	6058.0
277.90	898.0
281.10	585.0
281.90	617.0
283.00	793.0
284.00	475.0
285.10	1133.0
289.00	302.0
290.90	382.0
293.00	1461.0
293.90	538.0
295.00	366.0
296.00	21536.0
297.00	3083.0
300.90	301.0
303.10	1898.0
304.10	741.0
307.90	423.0
309.90	349.0
314.00	1277.0
315.00	2470.0
316.00	1125.0
316.90	463.0
321.00	929.0
323.10	6301.0
323.90	1143.0
327.00	1147.0
327.90	794.0
331.90	728.0
333.00	529.0
334.00	4782.0
334.90	1111.0
341.00	876.0
342.00	395.0
346.00	1235.0
346.90	330.0
352.10	1359.0
353.00	1376.0
354.00	2243.0
355.10	636.0
365.00	10055.0
366.10	1231.0
371.10	633.0
372.10	3186.0
373.00	719.0
383.00	1043.0
383.90	370.0
391.10	303.0
402.00	1305.0
403.00	1764.0
404.10	961.0
404.90	342.0
421.00	1500.0
422.10	1505.0
423.00	12599.0
424.00	4690.0
425.00	948.0
441.00	28688.0
442.10	195648.0
443.10	37288.0
444.10	3455.0

Instrument :
BNA_M
ClientSampleId :
DFTPP74

Scan 2453 (17.415 min): BM018011.D
DFTPP74

Instrument :
BNA_M
ClientSampleId :
DFTPP74

m/z	Abundance
38.10	744.0
39.10	5778.0
40.00	682.0
41.10	339.0
44.00	1397.0
49.00	793.0
50.10	17464.0
51.00	66968.0
52.00	3479.0
55.00	481.0
56.00	2276.0
57.00	4502.0
61.00	793.0
62.10	1055.0
63.00	2909.0
64.00	372.0
65.00	1205.0
68.10	1711.0
69.00	76976.0
70.00	530.0
73.00	1341.0
74.00	8339.0
75.00	12647.0
76.00	4789.0
77.10	84056.0
78.00	5084.0
79.00	6129.0
80.00	4920.0
81.00	5431.0
82.00	1313.0
83.00	1236.0
84.00	361.0
85.00	817.0
86.00	1882.0
87.10	888.0
88.00	301.0
91.00	1487.0
92.10	1836.0
93.00	12200.0
94.10	650.0
95.90	596.0
97.10	356.0
98.00	9115.0
99.00	7049.0
100.00	438.0
101.00	3091.0
103.00	1500.0
103.90	2398.0
105.00	2237.0
106.00	833.0
107.00	29224.0
108.00	4100.0
108.90	802.0
110.00	49304.0
111.00	7870.0
112.00	1226.0
113.00	492.0
116.00	1846.0
117.00	28864.0
118.00	1667.0
119.90	351.0
121.90	2177.0
123.00	3491.0
124.00	1393.0
124.80	1271.0
127.00	95160.0
128.00	7121.0
129.00	38968.0
130.00	3019.0
130.90	766.0
132.10	363.0
132.90	370.0
133.90	1444.0
134.90	3792.0
136.10	1176.0
137.10	1714.0
137.90	573.0
139.90	329.0
141.00	5572.0
142.00	1855.0
143.00	1232.0
144.00	452.0
146.00	1212.0
146.90	3041.0
148.00	6873.0
149.00	1807.0
150.10	479.0
151.10	828.0
152.00	507.0
153.00	1865.0
154.00	1062.0

Instrument :
BNA_M
ClientSampleId :
DFTPP74

155.00	3678.0
156.00	3963.0
157.00	958.0
157.90	970.0
159.00	680.0
160.00	2004.0
160.90	2511.0
162.10	834.0
164.10	442.0
165.00	2370.0
166.00	1856.0
167.00	11000.0
168.00	6293.0
168.90	1018.0
169.80	440.0
170.90	473.0
171.90	1123.0
172.90	1440.0
174.00	2589.0
175.10	4054.0
176.10	1084.0
176.90	1960.0
178.10	574.0
179.00	8835.0
180.00	6259.0
181.10	2590.0
182.00	499.0
183.90	575.0
185.10	3922.0
186.00	31784.0
187.00	8311.0
188.00	1141.0
189.00	2056.0
190.10	325.0
191.10	1257.0
192.00	2836.0
193.00	2881.0
194.00	878.0
196.00	5394.0
197.10	1626.0
198.00	221568.0
198.90	13991.0
200.10	1015.0
200.90	603.0
201.60	1070.0
203.00	1790.0
204.00	8355.0
205.00	14638.0
206.00	59256.0
207.00	9925.0
208.00	2955.0
209.00	793.0
210.00	856.0
211.00	2509.0
212.00	512.0
215.00	695.0
215.90	1564.0
217.00	17400.0
218.00	2302.0
220.30	428.0
221.00	9340.0
223.00	3348.0
224.00	35128.0
225.00	7826.0
225.90	1327.0
227.00	15983.0
228.00	2488.0
229.00	3229.0
230.00	432.0
231.00	1373.0
231.90	305.0
233.10	501.0
233.90	1464.0
235.00	1207.0
236.00	599.0
237.00	1868.0
239.00	800.0
240.00	342.0
241.00	1092.0
242.00	1785.0
243.10	1740.0
244.10	27776.0
245.00	3608.0
246.00	5979.0
247.00	1090.0
248.00	404.0
249.00	1117.0
251.00	400.0
253.00	727.0
254.20	1183.0
255.00	149888.0
256.00	22728.0
257.00	2097.0
258.00	9664.0
258.90	1597.0

259.90	438.0
265.00	3987.0
265.90	669.0
271.90	482.0
273.00	4422.0
274.00	11869.0
275.00	66032.0
276.00	8494.0
277.00	5903.0
278.00	1016.0
281.00	659.0
283.00	694.0
284.00	314.0
285.00	1257.0
293.00	1270.0
295.00	416.0
296.00	20320.0
297.00	3182.0
300.80	397.0
301.90	374.0
303.10	2134.0
303.90	637.0
308.00	408.0
309.10	336.0
310.00	569.0
314.10	1110.0
315.00	2488.0
316.00	1347.0
321.00	833.0
322.00	423.0
323.00	6171.0
324.00	1317.0
327.00	1346.0
328.00	790.0
331.80	356.0
333.00	557.0
334.00	3987.0
335.00	975.0
341.00	891.0
346.00	1804.0
352.10	2195.0
353.00	1935.0
354.00	2404.0
355.10	561.0
365.00	10280.0
366.00	1583.0
370.90	599.0
372.00	4219.0
373.10	982.0
382.90	1177.0
384.10	395.0
390.00	731.0
390.90	350.0
402.00	1540.0
403.00	2610.0
404.00	873.0
405.00	413.0
421.00	2173.0
422.00	1860.0
423.00	12169.0
424.00	4467.0
425.00	383.0
441.10	33600.0
442.10	224704.0
443.10	43576.0
444.00	3916.0

Instrument :
BNA_M
ClientSampleId :
DFTPP74

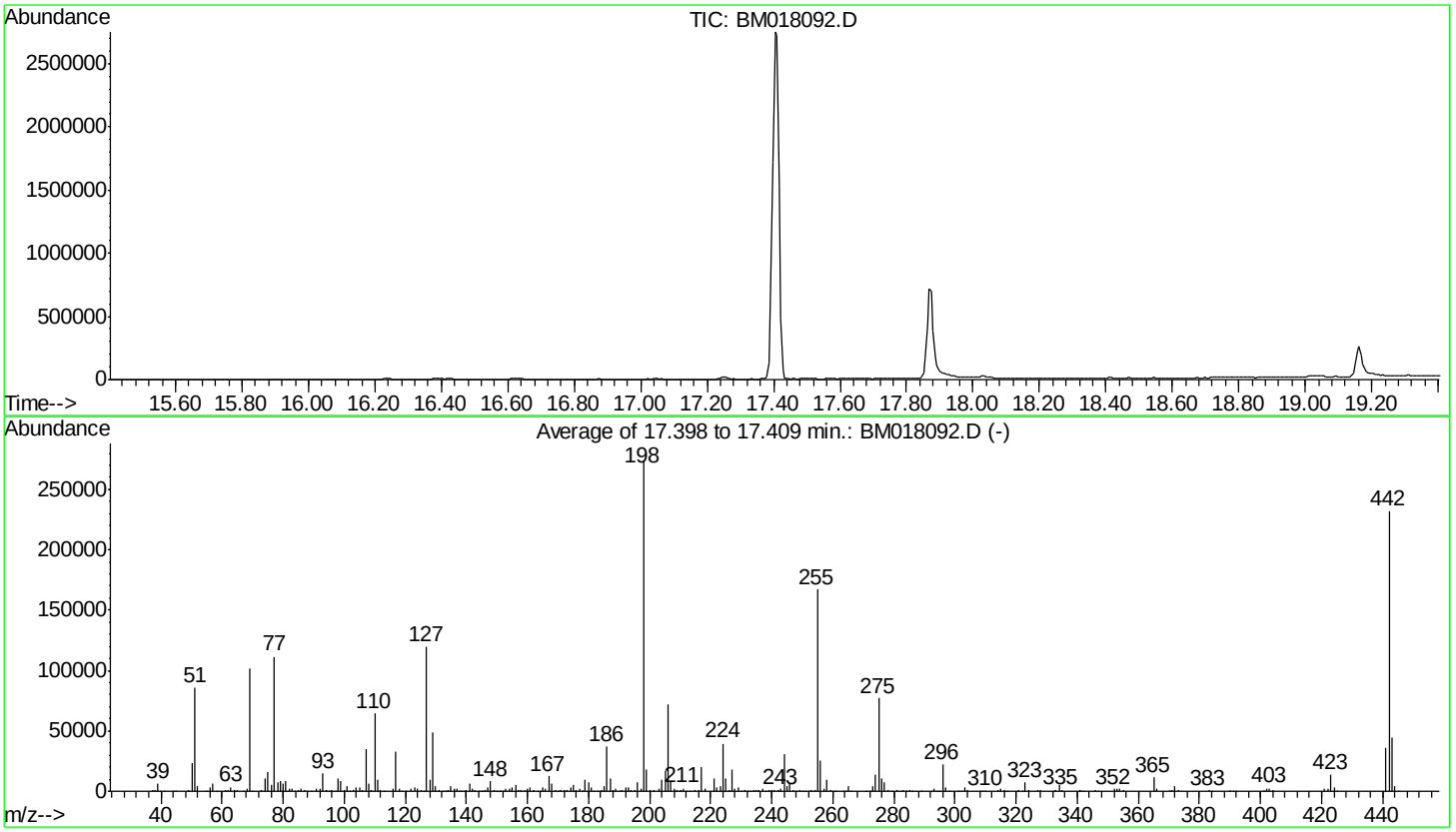
DFTPP

Data Path : Z:\svoasrv\HPCHEM1\BNA_M\Data\BM121218\
Data File : BM018092.D
Acq On : 12 Dec 2018 14:08
Operator : JU/SJ
Sample : DFTPP77
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
DFTPP77

Integration File: LSCINT.P

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION
Last Update : Thu Dec 13 06:49:34 2018



AutoFind: Scans 2450, 2451, 2452; Background Corrected with Scan 2445

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	31.3	85725	PASS
68	69	0.00	2	1.7	1705	PASS
69	198	0.00	100	37.1	101720	PASS
70	69	0.00	2	0.6	575	PASS
127	198	10	80	43.6	119512	PASS
197	198	0.00	2	0.8	2137	PASS
198	198	100	100	100.0	274282	PASS
199	198	5	9	6.7	18302	PASS
275	198	10	60	28.1	77053	PASS
365	198	1	100	4.1	11380	PASS
441	198	0.01	100	13.0	35640	PASS
442	198	50	100	84.6	232072	PASS
443	442	15	24	19.1	44418	PASS

Scan 2445 (17.368 min): BM018092.D
DFTPP77

m/z	Abundance
39.90	371.0
41.00	317.0
42.90	347.0
44.00	1257.0
55.10	318.0
73.10	611.0
193.00	301.0
207.00	1638.0
208.00	416.0
281.20	471.0

Instrument :
BNA_M
ClientSampleId :
DFTPP77

Scan 2450 (17.398 min): BM018092.D
DFTPP77

m/z	Abundance
37.00	488.0
38.10	1092.0
39.10	5063.0
40.10	678.0
40.90	304.0
43.90	1374.0
49.00	802.0
50.10	19888.0
51.10	74872.0
52.10	4060.0
55.10	823.0
56.00	1956.0
57.00	4997.0
58.00	337.0
61.00	1286.0
62.00	1038.0
63.00	3509.0
63.90	489.0
65.00	1354.0
67.00	304.0
69.00	83392.0
70.00	466.0
73.00	1752.0
74.10	9041.0
75.00	14461.0
76.10	4680.0
77.10	94888.0
78.10	7547.0
79.00	7444.0
80.00	5142.0
81.00	6619.0
82.00	1910.0
83.10	1375.0
83.90	334.0
85.00	1317.0
86.00	1999.0
87.10	801.0
91.00	1721.0
92.00	1968.0
93.00	11403.0
93.90	632.0
96.00	494.0
98.00	7620.0
99.00	7310.0
100.00	564.0
101.00	3718.0
102.90	1283.0
103.90	2242.0
105.00	2326.0
105.90	807.0
107.00	27544.0
108.00	5238.0
109.10	1021.0
110.00	50392.0
111.00	7570.0
111.90	818.0
112.90	416.0
116.00	1798.0
117.00	25688.0
118.00	2021.0
122.00	2308.0
123.00	3161.0
124.00	1440.0
125.00	1291.0
126.20	957.0
127.00	94184.0
128.00	8377.0
129.00	38528.0
130.00	3220.0
131.00	669.0
132.20	375.0
134.00	1032.0
135.00	3395.0
136.10	1366.0
137.00	1523.0
139.00	317.0
140.10	528.0
141.00	5575.0
142.00	1247.0
142.90	1109.0
144.10	342.0
145.10	313.0
146.00	896.0
147.00	2476.0
148.00	6104.0
149.00	1168.0
150.00	438.0
151.20	390.0
152.10	636.0
153.00	1572.0
154.00	1408.0

Instrument :
BNA_M
ClientSampleId :
DFTPP77

155.00	2765.0
156.10	4182.0
157.10	964.0
158.00	991.0
159.00	661.0
159.90	1198.0
161.00	2272.0
161.70	412.0
165.00	1943.0
166.00	1251.0
167.00	9782.0
168.00	5964.0
169.00	788.0
170.20	478.0
171.00	652.0
172.00	798.0
173.00	1357.0
174.00	2577.0
175.00	4239.0
176.00	918.0
177.00	2434.0
178.00	869.0
179.00	8203.0
180.00	5251.0
181.00	2381.0
181.90	420.0
184.10	713.0
185.10	3298.0
186.00	26040.0
187.00	7787.0
188.00	995.0
188.90	1730.0
189.90	401.0
191.00	1158.0
192.00	1971.0
193.10	2885.0
194.10	492.0
195.10	387.0
196.00	5088.0
197.10	1733.0
198.00	195264.0
199.00	14163.0
200.10	854.0
201.40	739.0
203.00	1662.0
204.00	7334.0
205.10	12678.0
206.10	53584.0
207.00	7899.0
208.00	2502.0
209.00	776.0
210.40	1048.0
211.00	1843.0
215.10	640.0
216.00	1252.0
217.00	12985.0
218.00	1504.0
221.10	5945.0
221.80	2647.0
223.00	2978.0
224.00	26104.0
225.00	7523.0
226.00	629.0
227.00	13160.0
228.00	1890.0
229.00	2005.0
229.90	324.0
231.10	1156.0
232.90	370.0
234.10	791.0
235.00	841.0
235.90	362.0
237.00	827.0
238.00	316.0
239.00	651.0
240.10	463.0
240.90	876.0
241.90	1485.0
243.10	1207.0
244.10	21304.0
245.10	3083.0
246.00	4921.0
247.00	955.0
249.00	728.0
253.00	534.0
255.00	111368.0
256.00	18360.0
257.10	1388.0
258.00	6146.0
259.10	1018.0
265.00	2643.0
273.00	3664.0
274.00	9391.0
275.00	51312.0
276.10	7646.0

Instrument :
BNA_M
ClientSampleId :
DFTPP77

277.00	4766.0
278.00	1237.0
280.90	391.0
283.00	519.0
283.90	322.0
285.10	886.0
293.10	1120.0
294.00	424.0
295.00	385.0
296.00	14068.0
297.10	2054.0
303.10	1673.0
303.90	488.0
314.00	785.0
315.10	1140.0
316.00	1041.0
320.90	356.0
322.10	308.0
323.00	4698.0
324.00	994.0
327.00	888.0
328.00	523.0
331.90	303.0
333.00	510.0
334.10	3085.0
335.00	575.0
340.90	562.0
345.90	798.0
352.10	1324.0
353.00	1155.0
354.10	1341.0
355.10	447.0
365.00	6932.0
366.00	876.0
371.10	384.0
372.10	2095.0
373.10	489.0
383.00	537.0
389.90	419.0
402.00	1378.0
403.00	1468.0
403.90	548.0
421.10	951.0
422.10	1580.0
423.10	7443.0
424.10	2069.0
441.10	18392.0
442.10	121368.0
443.10	26032.0
444.00	2363.0

Instrument :
BNA_M
ClientSampleId :
DFTPP77

Scan 2451 (17.404 min): BM018092.D
DFTPP77

Instrument :
BNA_M
ClientSampleId :
DFTPP77

m/z	Abundance
37.10	694.0
38.00	1422.0
39.10	7823.0
39.90	591.0
41.00	329.0
44.00	1328.0
44.90	305.0
49.20	1111.0
50.10	27832.0
51.10	97872.0
52.10	5168.0
55.00	634.0
56.00	3965.0
57.00	7042.0
61.00	1459.0
62.00	1675.0
63.00	4053.0
64.00	717.0
65.10	1999.0
68.10	2697.0
69.00	120776.0
70.00	610.0
73.10	1912.0
74.00	12854.0
75.10	18008.0
76.10	7386.0
77.10	131200.0
78.10	8239.0
79.00	10180.0
80.00	7682.0
81.00	10397.0
82.00	2123.0
82.90	2015.0
84.90	1754.0
85.90	2880.0
87.00	1251.0
88.00	443.0
89.00	325.0
91.00	2125.0
92.00	3276.0
93.00	18008.0
94.10	971.0
95.20	513.0
96.10	828.0
97.00	362.0
98.00	13231.0
99.00	10240.0
100.10	964.0
101.00	5352.0
102.00	436.0
102.90	1655.0
104.00	3718.0
105.00	3174.0
106.00	924.0
107.00	39048.0
108.10	6687.0
109.00	1134.0
110.00	72576.0
111.00	11463.0
112.00	1237.0
112.90	358.0
116.00	2464.0
117.00	37368.0
118.00	2946.0
118.90	300.0
120.00	437.0
122.10	3086.0
123.00	3839.0
124.00	2171.0
125.00	1775.0
127.00	137920.0
128.00	10089.0
129.00	56296.0
130.00	5561.0
131.00	844.0
132.20	605.0
133.00	311.0
134.00	2070.0
135.00	5224.0
136.00	2332.0
137.00	2279.0
137.80	528.0
139.10	442.0
140.00	599.0
141.00	7222.0
142.00	2841.0
142.90	1391.0
144.00	458.0
144.80	554.0
146.10	1240.0
147.00	3883.0

148.00	9033.0
149.00	1754.0
150.10	514.0
151.10	1029.0
153.00	2610.0
153.90	1939.0
155.00	4339.0
156.10	6181.0
157.00	1142.0
158.00	1684.0
158.90	819.0
160.00	2413.0
161.00	3123.0
162.00	1223.0
163.10	581.0
165.00	3070.0
166.00	2003.0
167.00	14947.0
168.00	7456.0
169.10	1051.0
170.10	394.0
171.10	779.0
171.90	1220.0
173.00	1944.0
174.00	3438.0
175.00	6203.0
176.00	1361.0
177.00	2979.0
177.80	838.0
179.00	11179.0
180.00	8510.0
181.00	3817.0
181.80	463.0
183.00	462.0
184.00	1113.0
185.00	5334.0
186.00	43064.0
187.10	12260.0
187.90	1372.0
189.00	3199.0
189.90	541.0
191.00	1218.0
192.00	3785.0
193.10	4952.0
194.00	862.0
195.00	878.0
196.00	8408.0
197.10	2350.0
198.00	314752.0
199.00	21504.0
200.00	1773.0
201.40	1413.0
203.00	2276.0
204.10	10414.0
205.00	18720.0
206.10	81184.0
207.10	12481.0
208.00	3343.0
209.00	1199.0
210.00	1750.0
211.00	2806.0
211.70	972.0
214.90	1127.0
216.00	1495.0
217.00	23472.0
218.00	2948.0
221.00	13497.0
221.90	2713.0
223.00	4320.0
224.10	46696.0
225.10	12236.0
226.00	1619.0
227.00	19864.0
228.00	3236.0
229.00	4659.0
229.90	905.0
231.00	1710.0
233.00	402.0
234.00	1272.0
234.90	819.0
235.90	1063.0
237.00	2480.0
239.00	1042.0
240.00	790.0
240.90	1325.0
242.10	2373.0
243.10	2690.0
244.10	35592.0
245.10	4904.0
246.00	7863.0
246.90	1416.0
247.90	559.0
248.90	1240.0
250.80	403.0
252.10	435.0

Instrument :
BNA_M
ClientSampleId :
DFTPP77

253.10	747.0
254.20	1638.0
255.00	195072.0
256.00	28544.0
257.00	2253.0
258.00	11023.0
259.00	1837.0
260.00	324.0
260.90	355.0
263.20	324.0
265.00	5254.0
266.00	597.0
271.00	621.0
272.00	554.0
273.00	4888.0
274.00	15490.0
275.00	87104.0
276.00	12687.0
277.00	8864.0
278.00	1400.0
281.00	783.0
282.90	909.0
283.90	467.0
285.00	1213.0
293.00	1553.0
294.00	458.0
295.10	607.0
296.00	24480.0
297.00	4180.0
301.00	470.0
302.00	485.0
303.00	2760.0
304.00	782.0
308.00	474.0
308.90	394.0
310.10	390.0
314.10	1668.0
315.00	3273.0
316.00	1972.0
317.00	340.0
320.90	834.0
321.90	834.0
323.10	8275.0
324.10	1542.0
327.00	1777.0
328.00	927.0
332.00	469.0
333.00	784.0
334.10	5670.0
335.00	1582.0
341.20	880.0
346.00	1970.0
346.90	461.0
352.10	1910.0
353.10	1476.0
354.00	2527.0
355.10	736.0
365.00	12792.0
366.10	2019.0
370.00	335.0
371.00	900.0
372.00	4429.0
373.00	1179.0
383.10	1211.0
384.00	381.0
390.10	444.0
391.10	417.0
400.90	340.0
402.00	2317.0
403.00	2951.0
404.00	926.0
421.00	1929.0
422.00	2549.0
423.10	14918.0
424.00	3875.0
425.00	550.0
441.10	40592.0
442.10	256640.0
443.10	48776.0
444.10	4896.0

Instrument :
BNA_M
ClientSampleId :
DFTPP77

Scan 2452 (17.409 min): BM018092.D
DFTPP77

Instrument :
BNA_M
ClientSampleId :
DFTPP77

m/z	Abundance
37.10	565.0
38.10	1337.0
39.00	6199.0
40.00	442.0
41.00	361.0
43.10	467.0
43.90	1556.0
49.10	964.0
50.10	23288.0
51.10	84432.0
52.10	3568.0
55.00	811.0
55.90	2378.0
57.00	6676.0
58.00	363.0
61.00	1143.0
62.00	1276.0
63.00	3572.0
64.00	656.0
65.10	1368.0
68.10	2419.0
69.00	100992.0
70.00	650.0
73.10	1586.0
74.00	10824.0
75.00	16520.0
76.10	5432.0
77.10	108216.0
78.10	8003.0
79.00	8677.0
80.00	6406.0
81.00	8387.0
82.00	2537.0
83.10	2430.0
85.00	1418.0
86.00	2778.0
86.90	1111.0
87.90	402.0
91.00	1911.0
92.10	2696.0
93.00	14665.0
94.00	842.0
95.00	312.0
96.00	882.0
96.90	357.0
98.00	12261.0
99.00	8539.0
99.90	969.0
101.00	4269.0
101.90	308.0
103.00	1849.0
104.00	3367.0
105.00	2615.0
107.00	37168.0
108.00	5715.0
109.00	1483.0
110.00	70312.0
111.00	10740.0
112.00	1089.0
113.00	394.0
116.00	2476.0
117.00	34744.0
118.00	2255.0
119.00	431.0
120.10	472.0
122.00	2461.0
123.00	4097.0
124.00	1654.0
125.00	1781.0
127.00	126432.0
128.00	10019.0
129.00	51544.0
130.00	4827.0
130.90	1045.0
133.00	454.0
134.00	1623.0
135.00	4821.0
136.10	1737.0
137.00	2195.0
138.20	341.0
139.00	302.0
140.00	646.0
141.00	7897.0
142.00	1998.0
143.00	1949.0
144.10	650.0
144.90	369.0
146.00	1281.0
147.00	3875.0
148.00	9274.0
149.00	1459.0

Instrument :
BNA_M
ClientSampleId :
DFTPP77

149.90	611.0
150.90	724.0
152.00	608.0
153.00	2487.0
154.00	1664.0
155.00	3550.0
156.00	5658.0
157.00	1494.0
158.00	1266.0
159.00	921.0
160.10	2555.0
161.00	3575.0
161.90	878.0
163.10	344.0
164.00	553.0
165.00	3782.0
166.00	2345.0
167.00	12451.0
168.00	6659.0
169.10	987.0
169.90	314.0
170.90	419.0
171.90	1609.0
173.00	1403.0
174.00	3123.0
175.10	4557.0
176.10	2179.0
177.00	2552.0
178.10	1261.0
179.00	10669.0
180.00	7360.0
181.00	3353.0
182.00	593.0
184.00	1246.0
185.00	5513.0
186.00	41656.0
187.00	13102.0
188.00	1322.0
189.00	2844.0
191.00	1454.0
192.00	3591.0
193.10	4271.0
194.00	830.0
195.00	547.0
196.00	7367.0
197.10	2328.0
198.00	312832.0
199.00	19240.0
200.00	1536.0
201.50	1664.0
203.00	2698.0
204.00	11224.0
205.00	19200.0
206.10	81640.0
207.00	10836.0
208.00	3119.0
209.00	1329.0
210.40	1386.0
211.10	2923.0
213.10	303.0
215.00	1303.0
216.10	1954.0
217.00	22600.0
218.00	2576.0
221.00	12188.0
221.80	2849.0
223.00	4879.0
224.10	44752.0
225.10	10957.0
226.10	1240.0
227.00	20752.0
228.00	2649.0
229.00	3998.0
229.90	304.0
231.00	1936.0
231.90	319.0
233.90	1347.0
235.00	1214.0
235.90	1011.0
237.00	1702.0
239.00	929.0
239.90	1167.0
241.00	1000.0
242.00	2468.0
243.00	2480.0
244.10	36440.0
245.10	4280.0
246.00	7277.0
247.00	1621.0
247.90	369.0
249.00	1691.0
249.90	561.0
250.90	373.0
252.10	369.0
253.00	607.0

254.20	2118.0
255.00	194624.0
256.00	29728.0
257.00	2484.0
258.00	11111.0
259.00	1812.0
264.10	400.0
264.90	4381.0
266.00	701.0
272.10	577.0
273.10	5604.0
274.00	16186.0
275.00	92744.0
276.10	12186.0
277.00	8099.0
278.00	1415.0
279.20	389.0
281.00	648.0
282.10	626.0
283.00	987.0
284.10	665.0
285.10	1504.0
286.00	425.0
289.10	323.0
292.10	453.0
293.00	2409.0
294.10	501.0
294.90	576.0
296.00	27864.0
297.00	3232.0
298.00	365.0
301.00	555.0
302.00	390.0
303.00	3639.0
304.00	889.0
309.90	558.0
314.10	1327.0
315.00	3454.0
316.00	1678.0
316.90	348.0
321.00	933.0
321.90	512.0
323.00	9293.0
324.10	1328.0
327.00	1808.0
327.90	779.0
331.90	488.0
332.80	598.0
334.10	6452.0
335.00	1937.0
341.00	1188.0
342.00	362.0
346.00	1950.0
346.90	403.0
352.10	3109.0
353.00	2368.0
354.00	2731.0
355.10	813.0
365.00	14416.0
366.00	2078.0
370.20	303.0
371.10	900.0
372.10	5591.0
373.10	1431.0
383.00	1219.0
383.90	333.0
390.00	597.0
390.90	495.0
391.90	418.0
401.10	361.0
402.10	1992.0
403.10	3103.0
404.00	1085.0
421.00	2265.0
422.00	2766.0
423.10	18064.0
424.10	4666.0
425.10	471.0
441.10	47936.0
442.10	318208.0
443.10	58448.0
444.10	5899.0
445.00	356.0

Instrument :
BNA_M
ClientSampleId :
DFTPP77

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
SBLK49

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : PB115349BL
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018022.D
% Solids : 100
Date Received :
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/08/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
123-91-1	1,4-Dioxane	67	U
100-52-7	Benzaldehyde	330	U
108-95-2	Phenol	330	U
111-44-4	Bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	170	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2-oxybis(1-Chloropropane)	330	U
98-86-2	Acetophenone	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	170	U
67-72-1	Hexachloroethane	170	U
98-95-3	Nitrobenzene	170	U
78-59-1	Isophorone	170	U
88-75-5	2-Nitrophenol	170	U
105-67-9	2,4-Dimethylphenol	170	U
111-91-1	Bis(2-Chloroethoxy)methane	170	U
120-83-2	2,4-Dichlorophenol	170	U
91-20-3	Naphthalene	170	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	170	U
105-60-2	Caprolactam	330	U
59-50-7	4-Chloro-3-methylphenol	170	U
91-57-6	2-Methylnaphthalene	170	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	170	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
SBLK49

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : PB115349BL
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018022.D
% Solids : 100
Date Received :
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/08/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
95-95-4	2,4,5-Trichlorophenol	170	U
92-52-4	1,1-Biphenyl	170	U
91-58-7	2-Chloronaphthalene	170	U
88-74-4	2-Nitroaniline	170	U
131-11-3	Dimethylphthalate	170	U
606-20-2	2,6-Dinitrotoluene	170	U
208-96-8	Acenaphthylene	170	U
99-09-2	3-Nitroaniline	330	U
83-32-9	Acenaphthene	170	U
51-28-5	2,4-Dinitrophenol	330	U
100-02-7	4-Nitrophenol	330	U
132-64-9	Dibenzofuran	170	U
121-14-2	2,4-Dinitrotoluene	170	U
84-66-2	Diethylphthalate	170	U
86-73-7	Fluorene	170	U
7005-72-3	4-Chlorophenyl-phenylether	170	U
100-01-6	4-Nitroaniline	330	U
534-52-1	4,6-Dinitro-2-methylphenol	330	U
86-30-6	N-Nitrosodiphenylamine	170	U
95-94-3	1,2,4,5-Tetrachlorobenzene	170	U
101-55-3	4-Bromophenyl-phenylether	170	U
118-74-1	Hexachlorobenzene	170	U
1912-24-9	Atrazine	330	U
87-86-5	Pentachlorophenol	330	U
85-01-8	Phenanthrene	170	U

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
SBLK49

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : PB115349BL
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018022.D
% Solids : 100
Date Received :
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/08/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
120-12-7	Anthracene	170	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	170	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	170	U
85-68-7	Butylbenzylphthalate	170	U
91-94-1	3,3-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	170	U
218-01-9	Chrysene	170	U
117-81-7	Bis(2-ethylhexyl)phthalate	170	U
117-84-0	Di-n-octyl phthalate	330	U
205-99-2	Benzo(b)fluoranthene	170	U
207-08-9	Benzo(k)fluoranthene	170	U
50-32-8	Benzo(a)pyrene	170	U
193-39-5	Indeno(1,2,3-cd)pyrene	170	U
53-70-3	Dibenzo(a,h)anthracene	170	U
191-24-2	Benzo(g,h,i)perylene	170	U
58-90-2	2,3,4,6-Tetrachlorophenol	170	U

FORM 1B-OR
ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK49

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA
Level : LOW
Matrix : Soil
Lab Sample ID : PB115349BL
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BM018022.D
% Solids : 100
Date Received :
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
Extract Concentrated : (Y / N) Y
Date Analyzed : 12/08/2018
Soil Aliquot (VOA) : (µL)
Extract Volume : 500 (µL)
Heated Purge : (Y / N)
Extraction Type : SOXH
Purge Volume : (mL)
Injection Volume : 1.0 (µL)
Cleanup Types : GPC
pH : Dilution Factor : 1.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg
Cleanup Factor : 2.0

	CAS NO.	ANALYTE	RT	EST. CONC.	Q
1	E966796	Total Alkanes	N/A	100	

EPA-designated Registry Number.

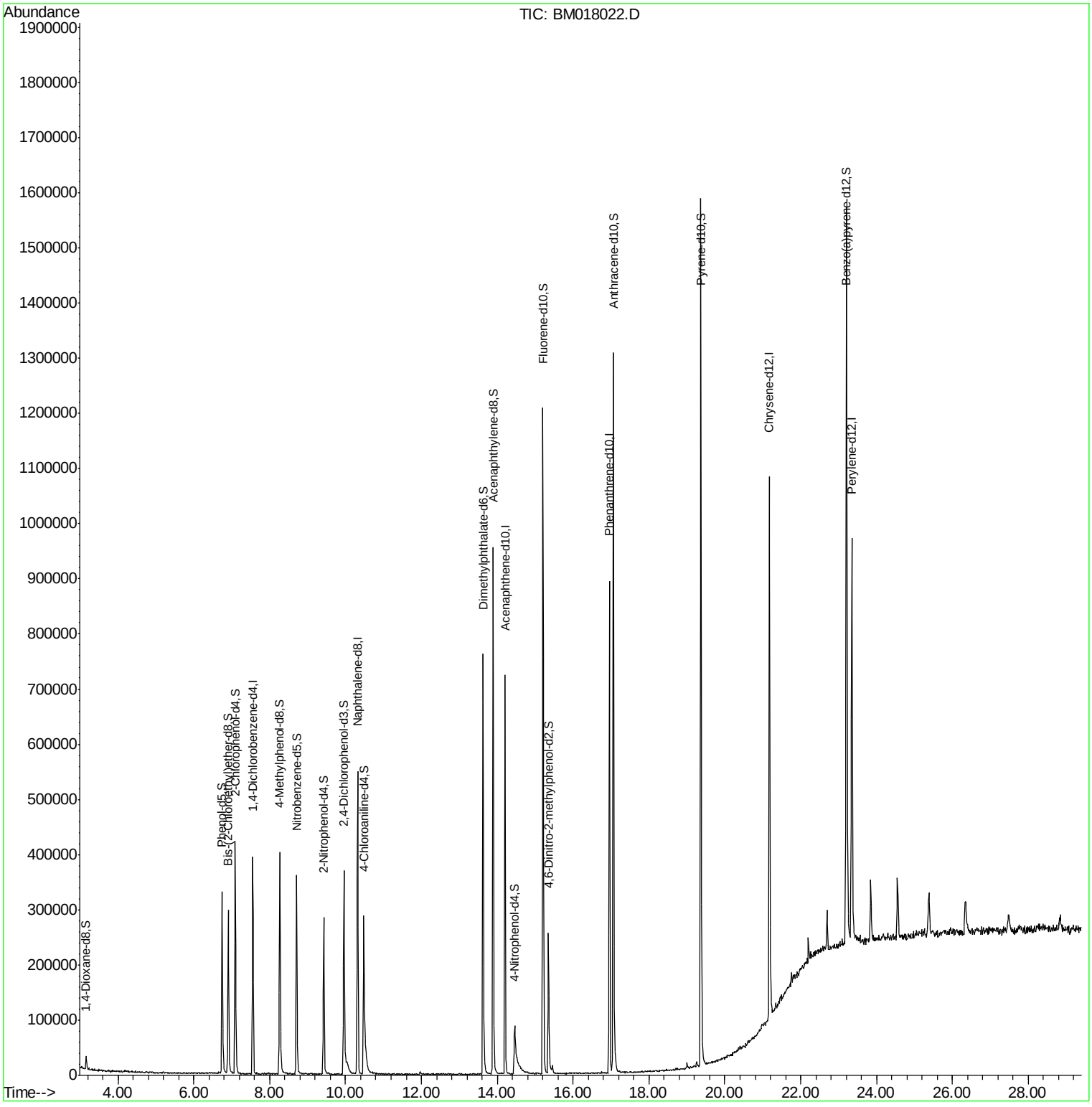
Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018022.D
Acq On : 08 Dec 2018 17:16
Operator : JU/SJ
Sample : PB115349BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 10 04:57:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Dec 10 03:53:59 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SBLK49

Manual Integrations APPROVED
Sohil
12/11/2018 8:46:54 AM



Quantitation Report (LSC Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018022.D
Acq On : 08 Dec 2018 17:16
Operator : JU/SJ
Sample : PB115349BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SBLK49

Manual Integrations APPROVED
Sohil
12/11/2018 8:46:54 AM

Quant Time: Dec 10 04:57:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Dec 10 03:53:59 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.56	152	119755	20.00	ng/ul	0.00
18) Naphthalene-d8	10.32	136	467621	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.20	164	247753	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.96	188	531099	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	560210	20.00	ng/ul	0.00
85) Perylene-d12	23.35	264	574723	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.16	96	14754	5.64	ng/uL	0.00
5) Phenol-d5	6.75	99	239744	21.92	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	6.90	67	141995	21.53	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	210583	24.61	ng/ul	0.00
13) 4-Methylphenol-d8	8.27	113	185830	20.80	ng/ul	0.00
19) Nitrobenzene-d5	8.71	128	93421	26.01	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	100015	24.30	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.96	165	163429	20.86	ng/ul	0.00
29) 4-Chloroaniline-d4	10.48	131	242632	36.09	ng/ul	0.00
43) Dimethylphthalate-d6	13.63	166	601662	27.99	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	705498	27.12	ng/ul	0.00
51) 4-Nitrophenol-d4	14.47	143	63856m	16.34	ng/ul	0.03
57) Fluorene-d10	15.20	176	511294	27.54	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	64934	17.10	ng/ul	0.00
70) Anthracene-d10	17.06	188	810425	30.65	ng/ul	0.00
78) Pyrene-d10	19.37	212	879923	32.46	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	954609	30.63	ng/ul	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018022.D
Acq On : 08 Dec 2018 17:16
Operator : JU/SJ
Sample : PB115349BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : SBLK49

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.157	26	29	39	rVB	25455	41751	1.64%	0.165%
2	3.299	51	53	58	rVV3	2928	3470	0.14%	0.014%
3	3.357	61	63	65	rBV3	2452	2882	0.11%	0.011%
4	3.493	85	86	88	rBV2	3930	2557	0.10%	0.010%
5	3.610	102	106	109	rBV5	2182	3488	0.14%	0.014%
6	3.816	139	141	143	rBV3	3187	3375	0.13%	0.013%
7	3.863	147	149	153	rVV4	3675	5350	0.21%	0.021%
8	4.246	210	214	217	rVB3	2630	3338	0.13%	0.013%
9	5.757	469	471	477	rBV4	2124	3774	0.15%	0.015%
10	6.687	626	629	632	rVB3	2205	2691	0.11%	0.011%
11	6.745	632	639	657	rBV	329675	646624	25.35%	2.557%
12	6.904	661	666	677	rBV	295479	503368	19.73%	1.990%
13	7.092	691	698	713	rBV	421098	718117	28.15%	2.840%
14	7.192	713	715	719	rVV3	2513	3051	0.12%	0.012%
15	7.551	769	776	787	rBV	394597	682962	26.77%	2.701%
16	8.016	853	855	858	rVB2	2255	2589	0.10%	0.010%
17	8.063	858	863	866	rBV2	1909	2735	0.11%	0.011%
18	8.269	890	898	913	rVV2	402608	791309	31.02%	3.129%
19	8.463	928	931	932	rVB3	2849	2680	0.11%	0.011%
20	8.498	932	937	939	rVB3	2149	3126	0.12%	0.012%
21	8.710	964	973	982	rBV	360399	624384	24.48%	2.469%
22	9.422	1085	1094	1109	rBV	285333	530884	20.81%	2.099%
23	9.616	1122	1127	1129	rBV	1550	2876	0.11%	0.011%
24	9.957	1179	1185	1196	rBV	368755	709057	27.79%	2.804%
25	10.322	1239	1247	1255	rBV	549059	927065	36.34%	3.666%
26	10.480	1267	1274	1296	rBV	286587	768204	30.11%	3.038%
27	10.951	1350	1354	1357	rBV2	1636	2633	0.10%	0.010%
28	11.969	1522	1527	1533	rBV4	5026	10061	0.39%	0.040%
29	13.627	1802	1809	1824	rVV	761464	1256361	49.25%	4.968%
30	13.892	1845	1854	1865	rBV	955356	1459163	57.20%	5.770%
31	14.204	1901	1907	1918	rBV2	722594	1134555	44.47%	4.486%
32	14.463	1944	1951	1972	rBV3	87398	344381	13.50%	1.362%
33	14.686	1987	1989	1993	rVB3	2800	2744	0.11%	0.011%
34	15.051	2049	2051	2057	rVB2	3042	4006	0.16%	0.016%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018022.D
Acq On : 08 Dec 2018 17:16
Operator : JU/SJ
Sample : PB115349BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : SBLK49

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0.1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Title : SVOA CALIBRATION

35	15.204	2071	2077	2094	rVV	1208325	1893027	74.20%	7.486%
36	15.351	2096	2102	2113	rVV	255593	441762	17.32%	1.747%
37	15.457	2116	2120	2125	rVV5	14763	24661	0.97%	0.098%
38	16.745	2338	2339	2342	rVB2	2754	2644	0.10%	0.010%
39	16.962	2369	2376	2385	rVV2	892399	1319754	51.73%	5.219%
40	17.062	2386	2393	2409	rVV	1305035	2090810	81.96%	8.268%
41	17.192	2413	2415	2418	rVV4	3351	3499	0.14%	0.014%
42	17.486	2461	2465	2468	rBV4	2356	3931	0.15%	0.016%
43	19.003	2720	2723	2727	rBV3	9449	11323	0.44%	0.045%
44	19.256	2763	2766	2773	rBV5	9864	19713	0.77%	0.078%
45	19.368	2779	2785	2800	rBV	1571040	2377785	93.21%	9.403%
46	20.544	2984	2985	2988	rBV3	9230	7847	0.31%	0.031%
47	21.174	3087	3092	3105	rBV	983723	1570019	61.54%	6.208%
48	22.203	3265	3267	3275	rBV4	40209	54375	2.13%	0.215%
49	23.209	3431	3438	3449	rBV	1329653	2551086	100.00%	10.088%
50	23.350	3455	3462	3474	rBV2	721074	1483767	58.16%	5.867%
51	24.550	3663	3666	3675	rVB	108885	227194	8.91%	0.898%

Sum of corrected areas: 25288808

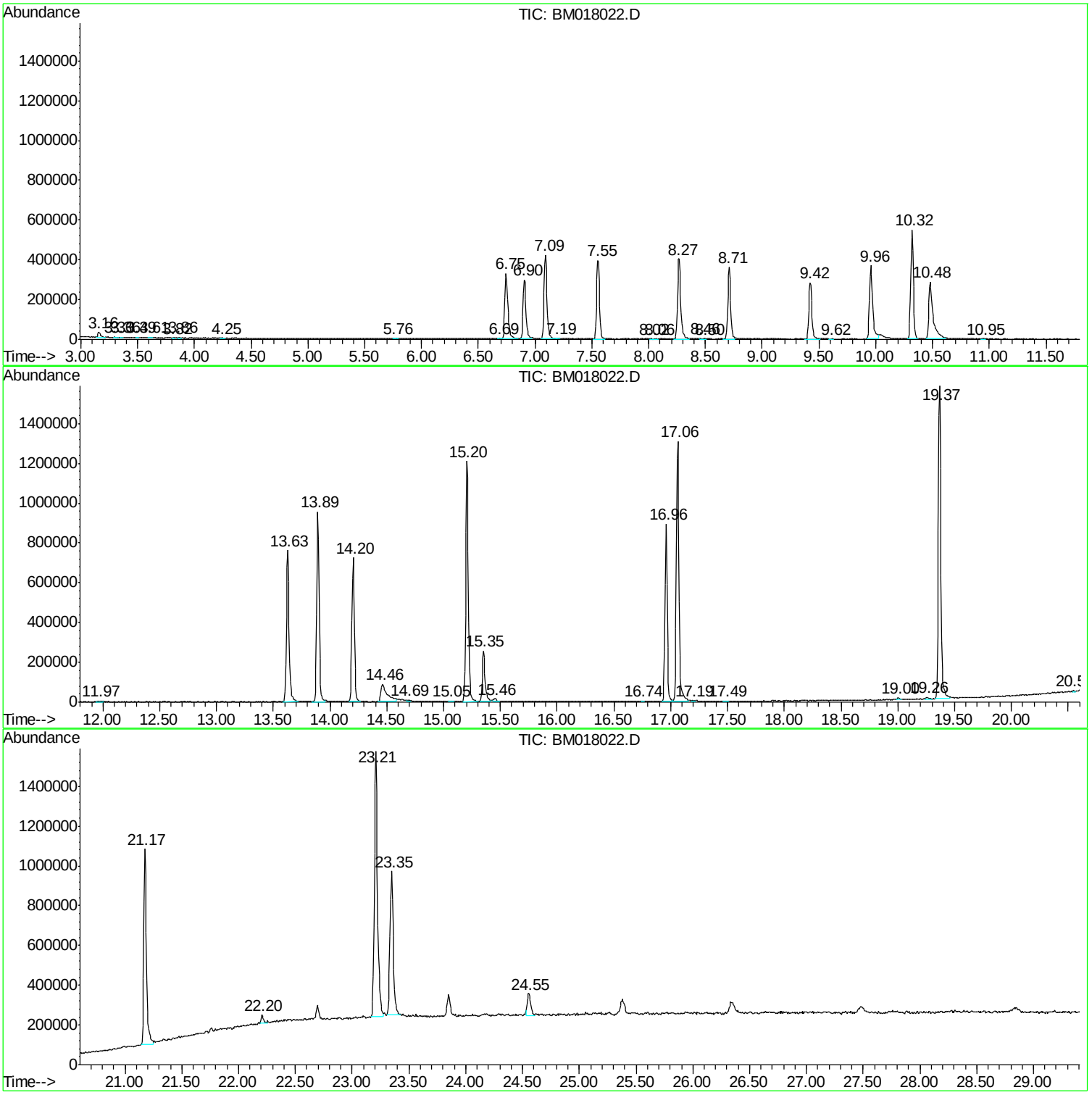
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018022.D
Acq On : 08 Dec 2018 17:16
Operator : JU/SJ
Sample : PB115349BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : SBLK49

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120818\
Data File : BM018022.D
Acq On : 08 Dec 2018 17:16
Operator : JU/SJ
Sample : PB115349BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : SBLK49

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

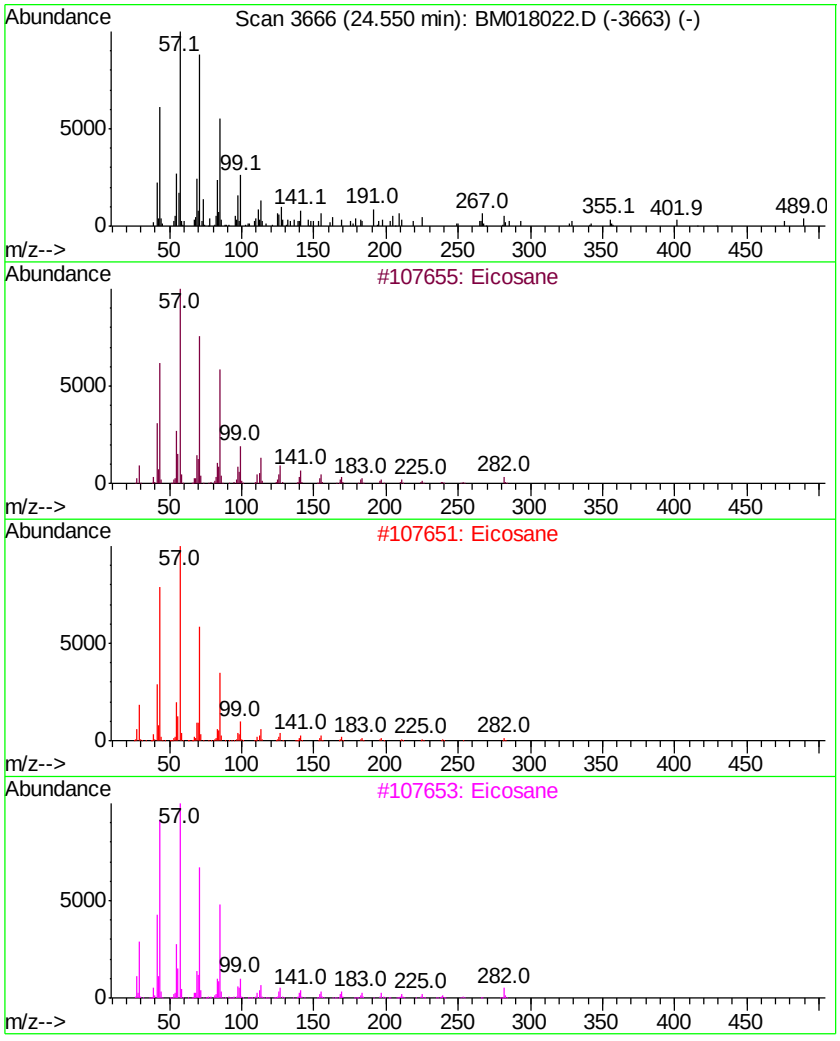
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

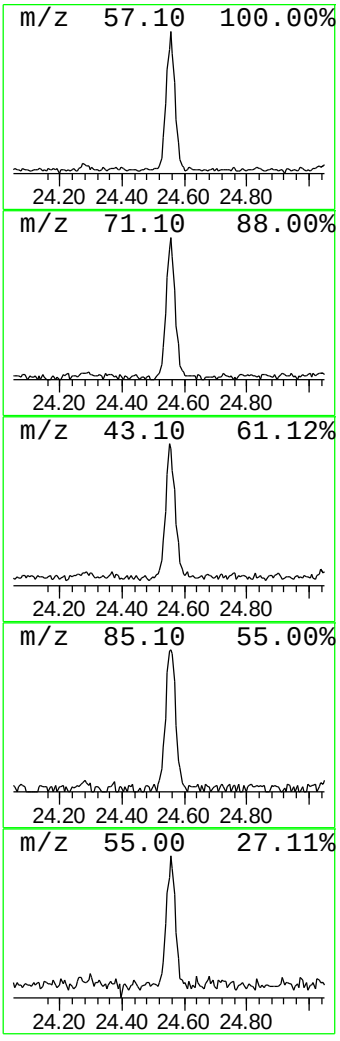
****

Peak Number 1 (DEL) Alkane: Straight-Chai... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.55	3.06 ng/ul	227194	Perylene-d12	23.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	91
2	Eicosane	282	C20H42	000112-95-8	87
3	Eicosane	282	C20H42	000112-95-8	83
4	Tetratriacontane	479	C34H70	014167-59-0	80
5	Tetracosane, 11-decyl-	479	C34H70	055429-84-0	80





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM120818\
Data File : BM018022.D
Acq On : 08 Dec 2018 17:16
Operator : JU/SJ
Sample : PB115349BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : SBLK49

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
(DEL) Alkane: Str...	24.55	3.1	ng/ul	227194	6	23.35	1483770	20.0

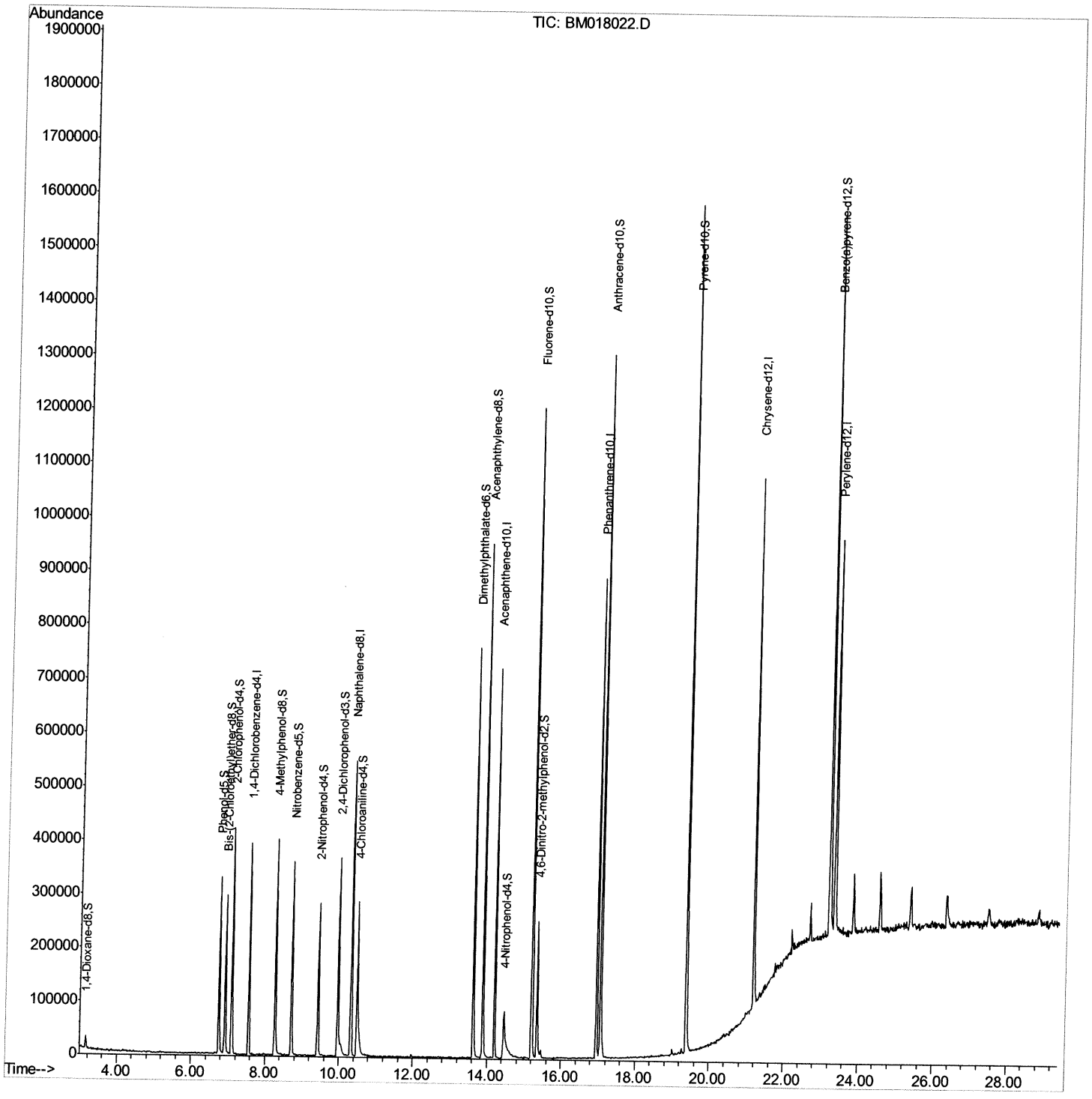
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM120818\
Data File : BM018022.D
Acq On : 08 Dec 2018 17:16
Operator : JU/SJ
Sample : PB115349BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 10 04:57:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Dec 10 03:53:59 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SBLK49

Manual Integrations APPROVED
Sohil
12/11/2018 8:46:54 AM



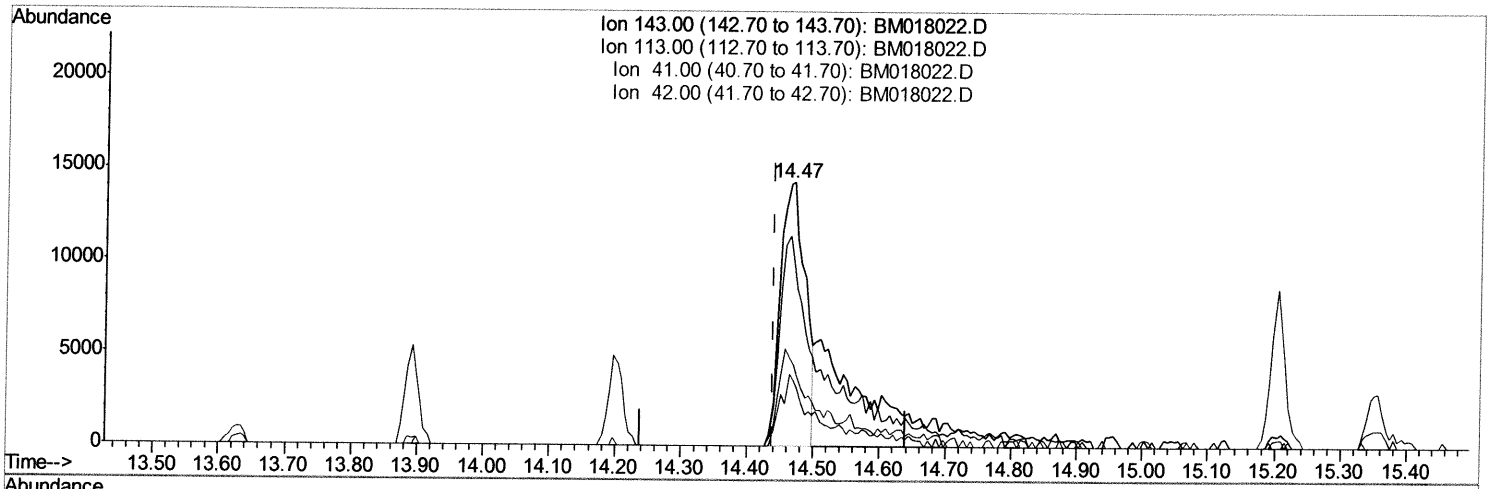
Quantitation Report (Qedit)

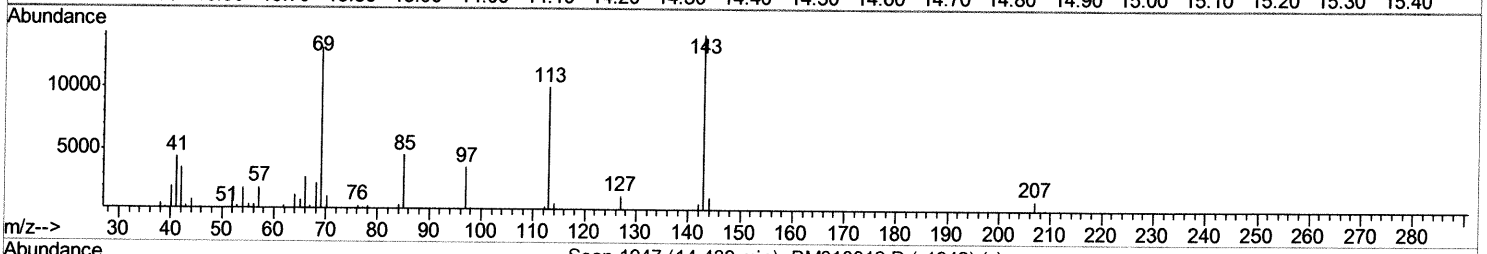
Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM120818\
Data File : BM018022.D
Acq On : 08 Dec 2018 17:16
Operator : JU/SJ
Sample : PB115349BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

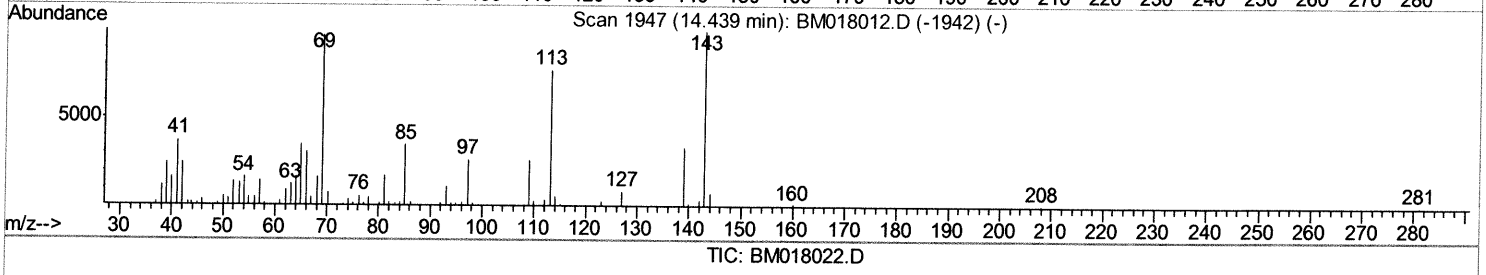
Quant Time: Dec 10 03:57:15 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Dec 10 03:53:59 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SBLK49

Manual Integrations APPROVED
Sohil
12/11/2018 8:46:54 AM







TIC: BM018022.D

(51) 4-Nitrophenol-d4 (S)

14.468min (+0.029) 9.52ng/ul

response 37221

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	70.21
41.00	40.10	30.85#
42.00	26.80	24.97

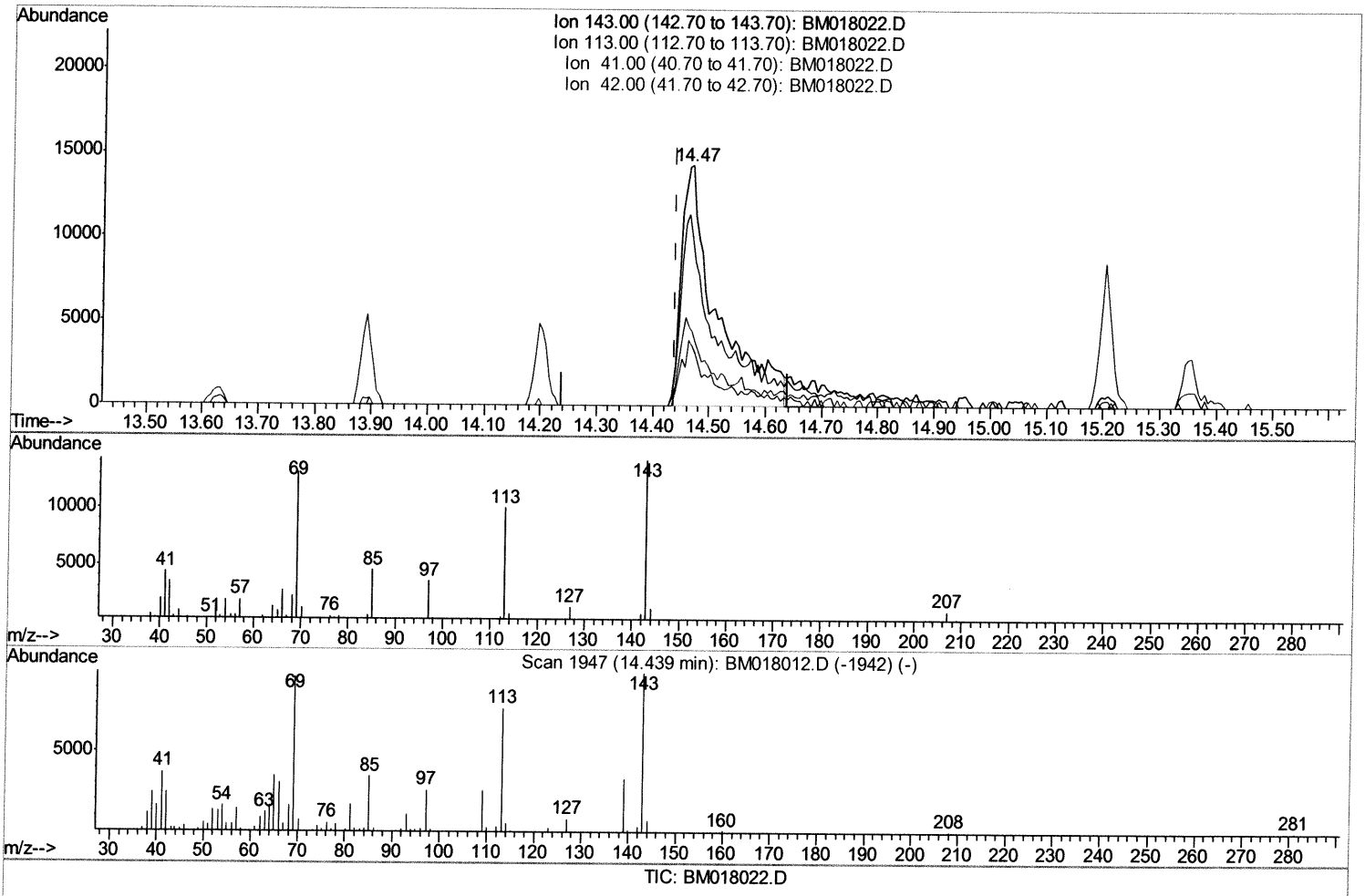
Quantitation Report (Qedit)

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM120818\
Data File : BM018022.D
Acq On : 08 Dec 2018 17:16
Operator : JU/SJ
Sample : PB115349BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 10 03:57:15 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Dec 10 03:53:59 2018
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
SBLK49

Manual Integrations APPROVED
Sohil
12/11/2018 8:46:54 AM



TIC: BM018022.D

(51) 4-Nitrophenol-d4 (S)

14.468min (+0.029) 16.34ng/ul m SJ 12/11/18

response 63856

Ion	Exp%	Act%
143.00	100	100
113.00	79.10	70.21
41.00	40.10	30.85#
42.00	26.80	24.97

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM120818\
Data File : BM018022.D
Acq On : 08 Dec 2018 17:16
Operator : JU/SJ
Sample : PB115349BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 10 04:57:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Dec 10 03:53:59 2018
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : SBLK49

Manual Integrations APPROVED
Sohil
12/11/2018 8:46:54 AM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.56	152	119755	20.00	ng/ul	0.00
18) Naphthalene-d8	10.32	136	467621	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.20	164	247753	20.00	ng/ul	0.00
61) Phenanthrene-d10	16.96	188	531099	20.00	ng/ul	0.00
77) Chrysene-d12	21.17	240	560210	20.00	ng/ul	0.00
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System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.16	96	14754	5.64	ng/uL	0.00
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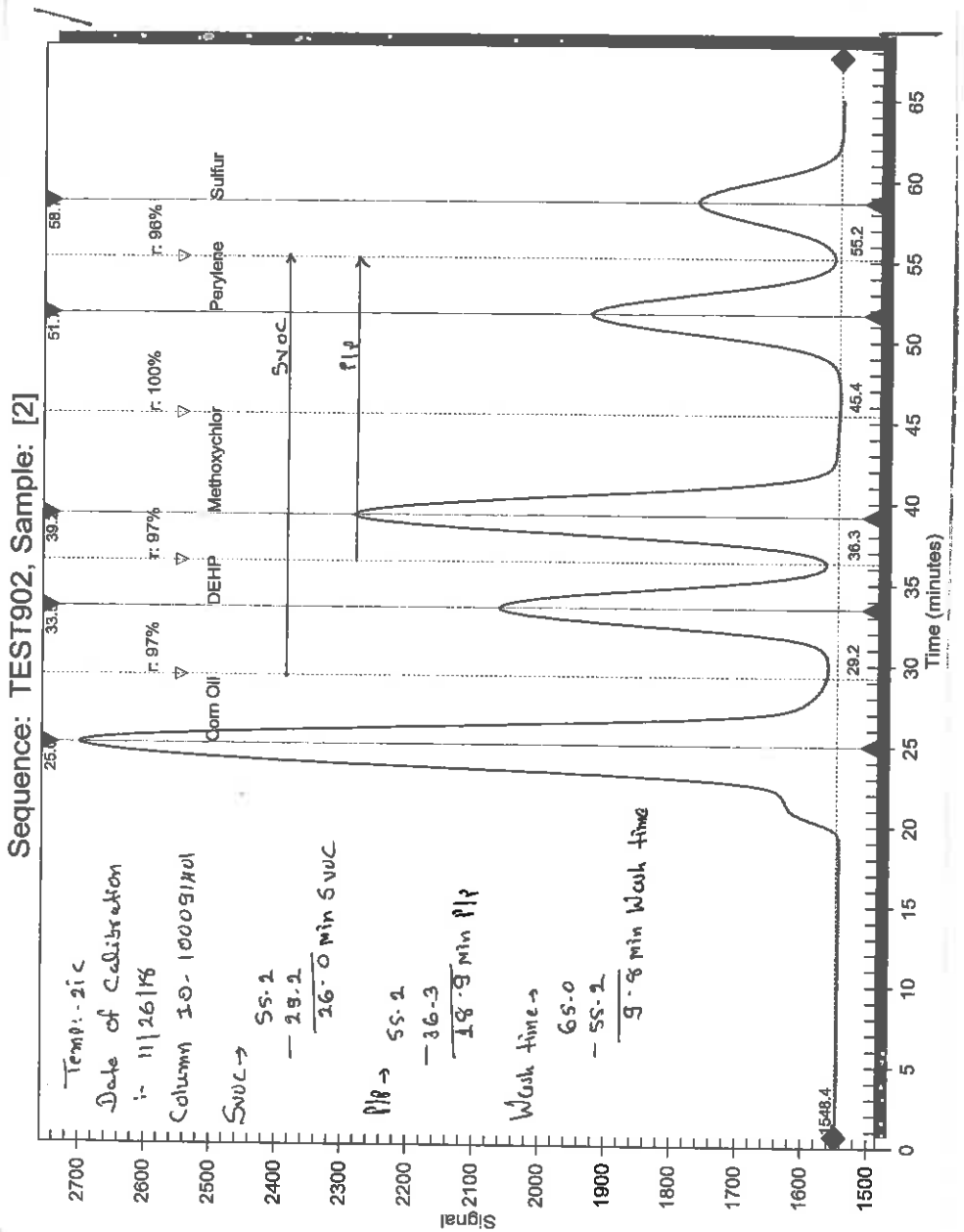
7) Bis-(2-Chloroethyl)ether-d	6.90	67	141995	21.53	ng/ul	0.00
9) 2-Chlorophenol-d4	7.09	132	210583	24.61	ng/ul	0.00
13) 4-Methylphenol-d8	8.27	113	185830	20.80	ng/ul	0.00
19) Nitrobenzene-d5	8.71	128	93421	26.01	ng/ul	0.00
22) 2-Nitrophenol-d4	9.42	143	100015	24.30	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	9.96	165	163429	20.86	ng/ul	0.00
29) 4-Chloroaniline-d4	10.48	131	242632	36.09	ng/ul	0.00
43) Dimethylphthalate-d6	13.63	166	601662	27.99	ng/ul	0.00
46) Acenaphthylene-d8	13.89	160	705498	27.12	ng/ul	0.00
51) 4-Nitrophenol-d4	14.47	143	63856m	16.34	ng/ul	0.03
57) Fluorene-d10	15.20	176	511294	27.54	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.35	200	64934	17.10	ng/ul	0.00
70) Anthracene-d10	17.06	188	810425	30.65	ng/ul	0.00
78) Pyrene-d10	19.37	212	879923	32.46	ng/ul	0.00
89) Benzo(a)pyrene-d12	23.21	264	954609	30.63	ng/ul	0.00

SJ 12/11/18

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed



CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900 www.chemtech.net

Daily Analysis Runlog

J2 SCIENTIFIC ACCUPREP GPC System GPC/1

Start Date: 11/26/18 End Date: 12/02/18 Analyst [illegible] Review By: [illegible]

STD. Name	STD REF. #:	Check Standard	Data File and Date	Reagent
GPC Calibration	EP 1907	BNA Blank Check		Methylene Chloride
Pest Check Std	PP 14143 2.0ML	Pesticide Blank Check		Reagent Reference
PCB Check Std	PP 14651 1.0ML	Pesticide Check		E. 2555
CALIB. DATE:	11/26/18	PCB Check		

	Port #	Sample ID	Volume Collected	GPC Date	BNA	PEST	Comments
	1	Column Cleaned	–	11/26/18	–	–	
	2	GPC Calibration	–		–	–	
	1	J 6063-07 Pest SPK	55	11/26/18	–	✓	J 6063-BN/PCB/1
	2	J 6063-06 Pest BLK	55		–	✓	
	3	J 6063-09 PCB SPK	55		–	✓	
	4	J 6063-08 PCB BLK	55		–	✓	
	5	J 6063-05 BLK BN	75		✓	–	

11/26

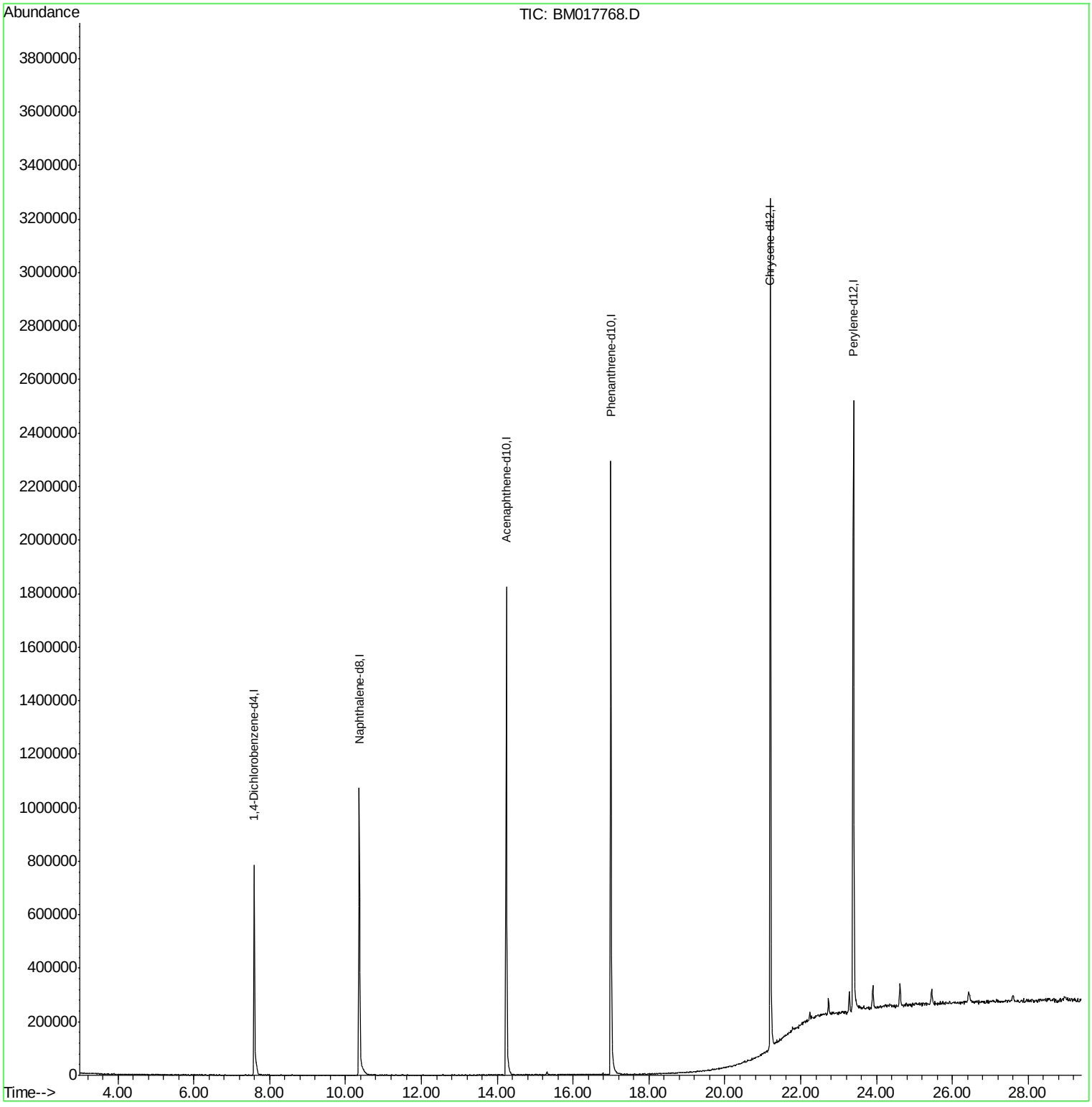
Doc Control # A3041189

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM112818\
Data File : BM017768.D
Acq On : 28 Nov 2018 12:04
Operator : JU/SJ
Sample : J6063-05
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SVOC-GPC-BLANK

Quant Time: Nov 28 12:41:21 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Nov 23 21:57:24 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM112818\
Data File : BM017768.D
Acq On : 28 Nov 2018 12:04
Operator : JU/SJ
Sample : J6063-05
Misc :
ALS Vial : 3 Sample Multiplier: 1

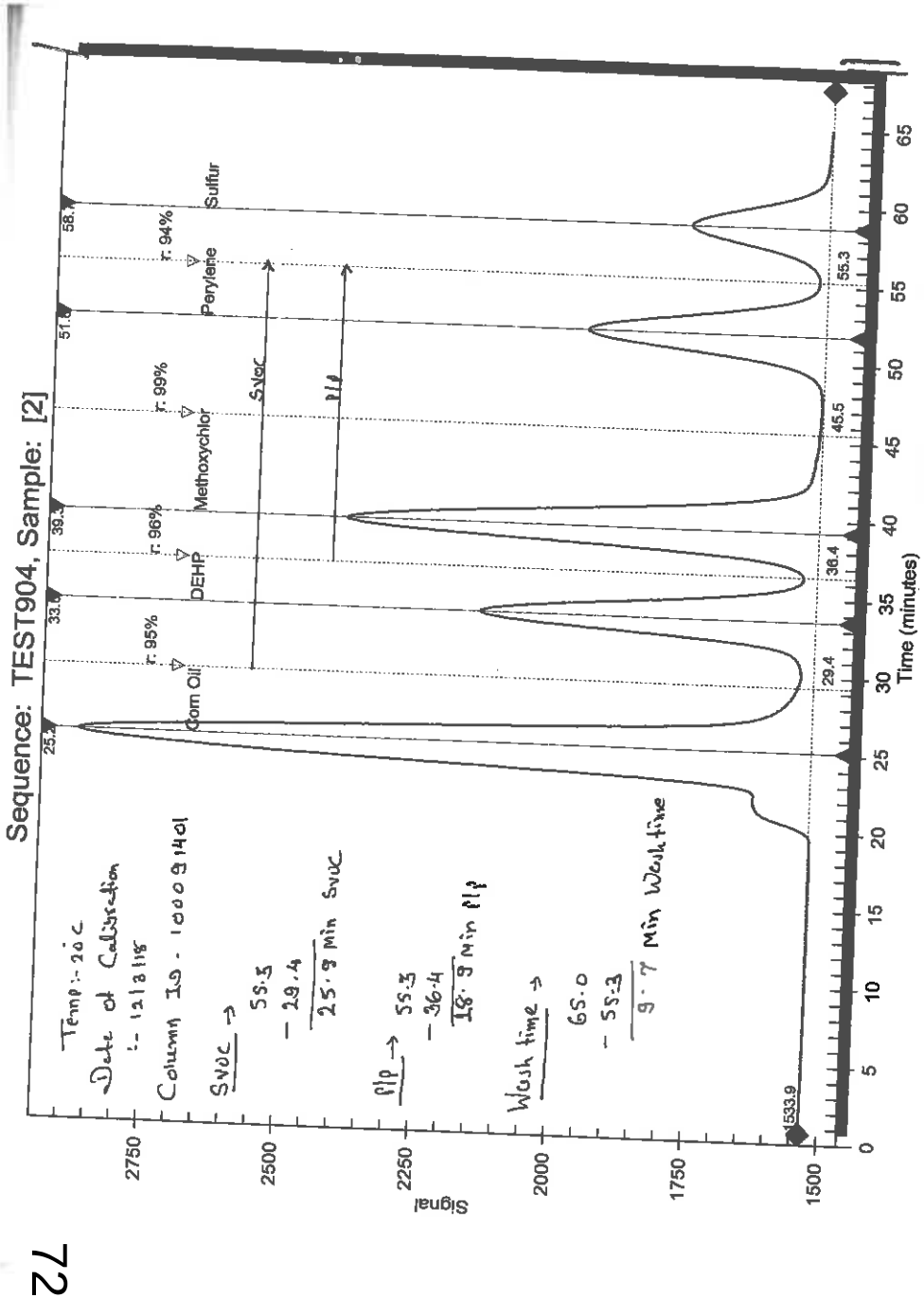
Instrument : BNA_M
ClientSampleId : SVOC-GPC-BLANK

Quant Time: Nov 28 12:41:21 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Nov 23 21:57:24 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.59	152	232333	20.00	ng/ul	0.00
18) Naphthalene-d8	10.36	136	986207	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.24	164	644238	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.00	188	1496467	20.00	ng/ul	0.00
77) Chrysene-d12	21.20	240	1648628	20.00	ng/ul	0.00
85) Perylene-d12	23.39	264	1702115	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	0.00	96	0	0.00	ng/uL	
5) Phenol-d5	0.00	99	0	0.00	ng/ul	
7) Bis-(2-Chloroethyl)ether-d	0.00	67	0	0.00	ng/ul	
9) 2-Chlorophenol-d4	0.00	132	0	0.00	ng/ul	
13) 4-Methylphenol-d8	0.00	113	0	0.00	ng/ul	
19) Nitrobenzene-d5	0.00	128	0	0.00	ng/ul	
22) 2-Nitrophenol-d4	0.00	143	0	0.00	ng/ul	
26) 2,4-Dichlorophenol-d3	0.00	165	0	0.00	ng/ul	
29) 4-Chloroaniline-d4	0.00	131	0d	0.00	ng/ul	
43) Dimethylphthalate-d6	0.00	166	0	0.00	ng/ul	
46) Acenaphthylene-d8	0.00	160	0	0.00	ng/ul	
51) 4-Nitrophenol-d4	0.00	143	0	0.00	ng/ul	
57) Fluorene-d10	0.00	176	0d	0.00	ng/ul	
62) 4,6-Dinitro-2-methylphenol	0.00	200	0	0.00	ng/ul	
70) Anthracene-d10	0.00	188	0d	0.00	ng/ul	
78) Pyrene-d10	0.00	212	0	0.00	ng/ul	
89) Benzo(a)pyrene-d12	0.00	264	0d	0.00	ng/ul	

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed



726

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908) 789-8900 www.chemtech.net

Daily Analysis Runlog

J2 SCIENTIFIC ACCUPREP GPC System GPC/1

Start Date: 12/03/18 End Date: 12/03/18 Analyst RE|AP Review By:

STD. Name	STD REF. #:	Check Standard	Data File and Date	Reagent
GPC Calibration	E# 1907	BNA Blank Check		Methylene Chloride
Pest Check Std	PP 141143 2.0 mL	Pesticide Blank Check		Reagent Reference #
PCB Check Std	PP 141651 1.0 mL	Pesticide Check		E 2560
CALIB. DATE:	12/3/18	PCB Check		

	Port #	Sample ID	Volume Collected	GPC Date	BNA	PEST	Comments
	1	Column Cleaned	–	12/3/18	–	–	
	2	GPC Calibration	–	1	–	–	
	1	J 6203-07 Pest Stk	55	12/3/18	–	✓	J Pest, PCB, B
	2	J 6203-06 Pest Blk	55	1	–	✓	
	3	J 6203-09 PCB Stk	55	1	–	✓	
	4	J 6203-08 PCB Blk	55	1	–	✓	
	5	J 6203-05 Blk Bal	75	1	✓	—	

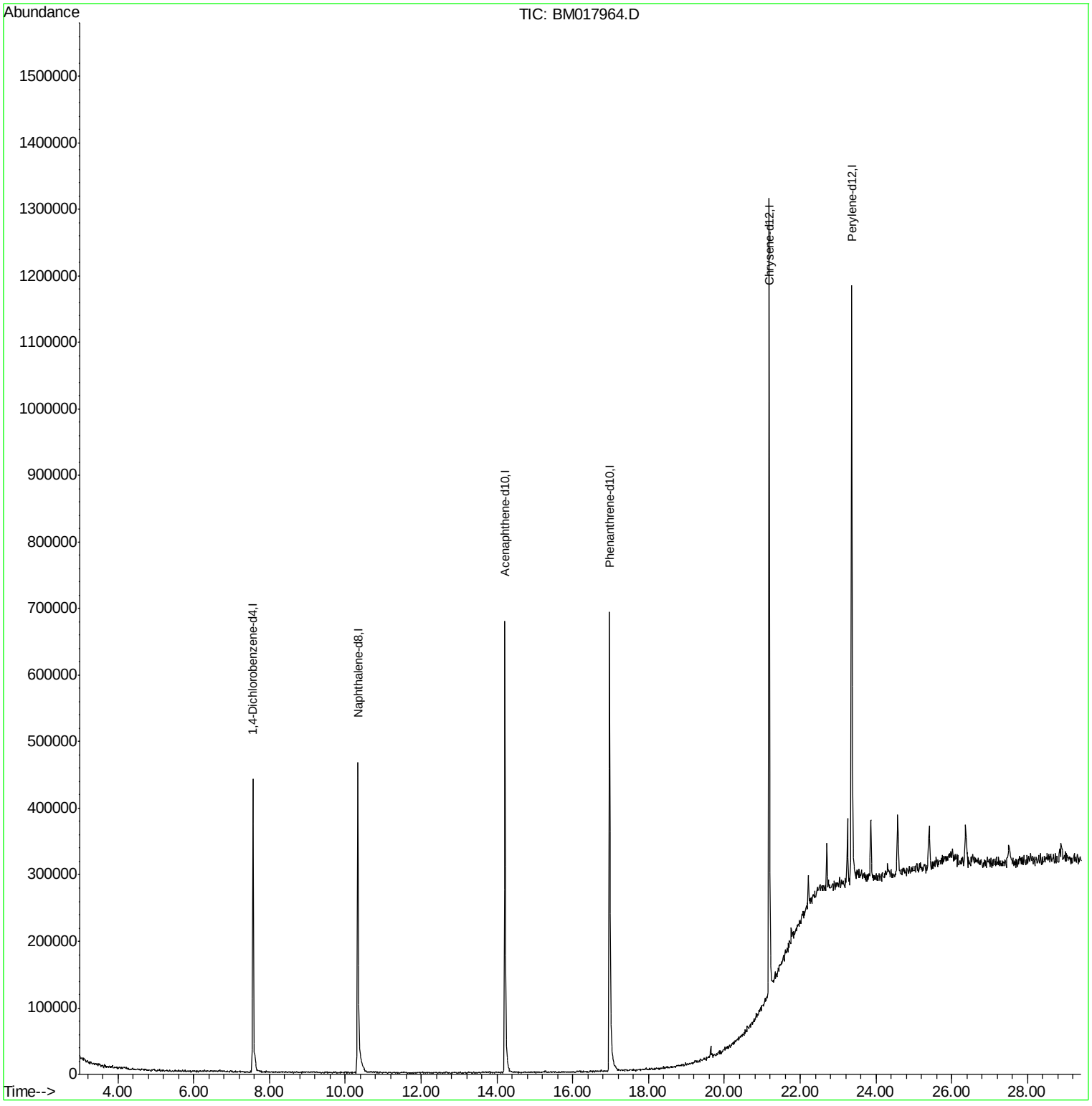
12/3

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120718\
Data File : BM017964.D
Acq On : 06 Dec 2018 13:08
Operator : JU/SJ
Sample : J6203-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SVOC-GPC-BLANK

Quant Time: Dec 06 14:13:20 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 06 13:33:35 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120718\
Data File : BM017964.D
Acq On : 06 Dec 2018 13:08
Operator : JU/SJ
Sample : J6203-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : SVOC-GPC-BLANK

Quant Time: Dec 06 14:13:20 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 06 13:33:35 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.56	152	132911	20.00	ng/ul	-0.02
18) Naphthalene-d8	10.33	136	510778	20.00	ng/ul	-0.02
35) Acenaphthene-d10	14.21	164	277491	20.00	ng/ul	-0.02
61) Phenanthrene-d10	16.97	188	559972	20.00	ng/ul	-0.01
77) Chrysene-d12	21.18	240	645973	20.00	ng/ul	-0.01
85) Perylene-d12	23.36	264	708238	20.00	ng/ul	-0.01
System Monitoring Compounds						
3) 1,4-Dioxane-d8	0.00	96	0d	0.00	ng/uL	
5) Phenol-d5	0.00	99	0	0.00	ng/ul	
7) Bis-(2-Chloroethyl)ether-d	0.00	67	0	0.00	ng/ul	
9) 2-Chlorophenol-d4	0.00	132	0	0.00	ng/ul	
13) 4-Methylphenol-d8	0.00	113	0	0.00	ng/ul	
19) Nitrobenzene-d5	0.00	128	0	0.00	ng/ul	
22) 2-Nitrophenol-d4	0.00	143	0	0.00	ng/ul	
26) 2,4-Dichlorophenol-d3	0.00	165	0	0.00	ng/ul	
29) 4-Chloroaniline-d4	0.00	131	0d	0.00	ng/ul	
43) Dimethylphthalate-d6	0.00	166	0	0.00	ng/ul	
46) Acenaphthylene-d8	0.00	160	0	0.00	ng/ul	
51) 4-Nitrophenol-d4	0.00	143	0	0.00	ng/ul	
57) Fluorene-d10	0.00	176	0d	0.00	ng/ul	
62) 4,6-Dinitro-2-methylphenol	0.00	200	0	0.00	ng/ul	
70) Anthracene-d10	0.00	188	0d	0.00	ng/ul	
78) Pyrene-d10	0.00	212	0	0.00	ng/ul	
89) Benzo(a)pyrene-d12	0.00	264	0d	0.00	ng/ul	

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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EXTRACTION LOGPAGE

PB115349

SOP ID:	MSOM02.4-Sample Prep-1				
Clean Up SOP #:	GPC Cleanup			**Extraction Start Date :**	12/05/2018
Matrix :	Solid			**Extraction Start Time :**	08:15
Weigh By:	RJ	**Extraction By:**	RS	**Extraction End Date :**	12/06/2018
Balance check:	HP	**Filter By:**	RS	**Extraction End Time :**	12:55
Balance ID:	EX-SC-1	**pH Meter ID:**	N/A	**Concentration By:**	HP
pH Strip Lot#:	N/A	**Hood ID:**	3,7	**Supervisor By :**	rajesh

Extraction Method: ☐ Seperatory Funne ☐ Continious Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☑ Soxhlet

Standared Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
N/A	N/A	N/A	N/A
Surrogate	0.5ML	80/16/0.8 PPM	SP4559
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
MeCl2/Acetone/1:1	N/A	EP1898
Baked Na2SO4	N/A	EP1897
Methylene Chloride	N/A	E2560
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

GPC PROJECT J6203 & J6063

KD Bath ID:	W. BATH-1	**Envap ID:**	NE.VAP-2
KD Bath Temperature:	60.0 °C	**Envap Temperature:**	40 °C
Received Date/Time:	12/6/18	**Received By:**	JL
Delivered Date/Time:	12/6/18 13:00	**Delivered By:**	RP

CHEMTECH

EXTRACTION LOGPAGE

PrepBatch ID : PB115349

Analytical Method: MSOM02.4-Sample Prep-1

Concentration Date: 12/06/2018

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol.(mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB115349BL	SBLK49	SVOC-TCL BNA -20	30.01		RUPESH	ritesh	0.5			U7-1
J6227-01	F9E64	SVOC-TCL BNA -20	30.07		RUPESH	ritesh	0.5	A		2
J6227-02	F9E65	SVOC-TCL BNA -20	30.12		RUPESH	ritesh	0.5	A		3
J6227-03	F9E66	SVOC-TCL BNA -20	30.16		RUPESH	ritesh	0.5	A	BROWN	4
J6227-04	F9E67	SVOC-TCL BNA -20	30.06		RUPESH	ritesh	0.5	A	BLACK	5
J6227-05	F9E74	SVOC-TCL BNA -20	30.11		RUPESH	ritesh	0.5	A	YELLOW	6
J6227-06	F9E75	SVOC-TCL BNA -20	30.15		RUPESH	ritesh	0.5	A	YELLOW	U3-1
J6227-07	F9E80	SVOC-TCL BNA -20	30.05		RUPESH	ritesh	0.5	A	YELLOW	2
J6227-08	F9F33	SVOC-TCL BNA -20	30.10		RUPESH	ritesh	0.5	A	BROWN	3
J6227-09	F9E54	SVOC-TCL BNA -20	30.14		RUPESH	ritesh	0.5	A	L.YELLOW	4
J6227-10	F9E55	SVOC-TCL BNA -20	30.04		RUPESH	ritesh	0.5	A		5
J6227-11	F9E56	SVOC-TCL BNA -20	30.09		RUPESH	ritesh	0.5	A	L.YELLOW	6
J6227-12	F9E57	SVOC-TCL BNA -20	30.13		RUPESH	ritesh	0.5	A		U4-1
J6227-13	F9E60	SVOC-TCL BNA -20	30.03		RUPESH	ritesh	0.5	A	YELLOW	2
J6227-14	F9E61	SVOC-TCL BNA -20	30.08		RUPESH	ritesh	0.5	A		3
J6227-15	F9F34	SVOC-TCL BNA -20	30.12		RUPESH	ritesh	0.5	A	YELLOW	4
J6227-16	F9F35	SVOC-TCL BNA -20	30.02		RUPESH	ritesh	0.5	A	BROWN	5
J6227-17	F9E62	SVOC-TCL BNA -20	30.07		RUPESH	ritesh	0.5	A	YELLOW	6
J6227-18	F9E63	SVOC-TCL BNA -20	30.11		RUPESH	ritesh	0.5	A		U5-1
J6227-19	F9E68	SVOC-TCL BNA -20	30.01		RUPESH	ritesh	0.5	A	BROWN	2
J6227-20	F9E69	SVOC-TCL BNA -20	30.06		RUPESH	ritesh	0.5	A	D.YELLOW	3

* Extracts relinquished on the same date as received.

12/6

Daily Maintenance Runlog For J2 SCIENTIFIC ACCUPREP GPC System

	Analyst Initial	Performed
1.	RS 12/5	Filling Meelz
2.		
3		
4		
5		

Daily Analysis Runlog

J2 SCIENTIFIC ACCUPREP GPC System GPC/1

Start Date: 12/03/18 End Date: 12/09/18 Analyst RP/AG Review By: W

STD. Name	STD REF. #:	Check Standard	Data File and Date	Reagent
GPC Calibration	EP1907	BNA Blank Check		Methylene Chloride
Pest Check Std	PP14743 2.0ML	Pesticide Blank Check		Reagent Reference #
PCB Check Std	PP14651 1.0ML	Pesticide Check		E2560
CALIB. DATE:	12/3/18	PCB Check		

Port #	Sample ID	Volume Collected	GPC Date	BNA	PEST	Comments
1	J6227-01 BN	75	12/5/18	✓	—	J6227 BN
2	-02	75		✓	—	
3	-03	75		✓	—	
4	-04	75		✓	—	
5	-05	75		✓	—	
6	-06	75		✓	—	
7	-07	75		✓	—	
8	-08	75		✓	—	
9	-09	75		✓	—	
10	-10	75		✓	—	
11	-11	75		✓	—	
12	-12	75		✓	—	
13	-13	75	12/6/18	✓	—	
14	-14	75		✓	—	
15	-15	75		✓	—	
16	-16	75		✓	—	
17	-17	75		✓	—	
18	-18	75		✓	—	
19	-19	75		✓	—	
20	-20	75		✓	—	
21	BLK BN PB115350	75				

12/5

CHEMTECH

PERCENT SOLID

Supervisor: apatel
Analyst: jignesh
Date: 12/6/2018

OVENTEMP IN Celsius(°C): 108
Time IN: 16:05
In Date: 12/04/2018
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M Oven-1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 07:40
Out Date: 12/05/2018
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M Sc-1

QC: LB99571

Lab ID	Client Sample ID	Dish#	Dish Wt(g) (A)	Dish + Sample Wt(g) (B)	Dish + Dry Sample Wt(g) (C)	% Solid
J6227-01	F9E64	1	1.14	9.95	8.64	85.1
J6227-02	F9E65	2	1.16	9.56	8.44	86.7
J6227-03	F9E66	3	1.18	9.97	9.21	91.4
J6227-04	F9E67	4	1.19	9.7	8.72	88.5
J6227-05	F9E74	5	1.14	9.88	8.91	88.9
J6227-06	F9E75	6	1.13	9.83	8.78	87.9
J6227-07	F9E80	7	1.14	9.77	9.01	91.2
J6227-08	F9F33	8	1.18	9.74	8.78	88.8
J6227-09	F9E54	9	1.1	9.85	8.79	87.9
J6227-10	F9E55	10	1.18	9.69	8.39	84.7
J6227-11	F9E56	11	1.19	9.85	8.7	86.7
J6227-12	F9E57	12	1.17	9.52	8.36	86.1
J6227-13	F9E60	13	1.14	9.57	7.93	80.5
J6227-14	F9E61	14	1.1	9.78	8.41	84.2
J6227-15	F9F34	15	1.13	9.63	8.84	90.7
J6227-16	F9F35	16	1.18	9.82	9.01	90.6
J6227-17	F9E62	17	1.13	9.53	8.51	87.9
J6227-18	F9E63	18	1.19	9.89	8.79	87.4
J6227-19	F9E68	19	1.2	9.83	9.05	91.0
J6227-20	F9E69	20	1.17	9.62	8.79	90.2

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

1B99571

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-j6227 WorkList ID : 119918 Date : 12/4/2018 3:06:44 PM

Due Date	Matrix	Sample	Test	Preservative	Customer	Storage Location	Customer Sample	Collect Date	Method
12/13/2018	Solid	J6227-01	Percent Solids	Cool 4 deg C	USEP04	R32	F9E64	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-02	Percent Solids	Cool 4 deg C	USEP04	R32	F9E65	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-03	Percent Solids	Cool 4 deg C	USEP04	R32	F9E66	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-04	Percent Solids	Cool 4 deg C	USEP04	R32	F9E67	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-05	Percent Solids	Cool 4 deg C	USEP04	R32	F9E74	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-06	Percent Solids	Cool 4 deg C	USEP04	R32	F9E75	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-07	Percent Solids	Cool 4 deg C	USEP04	R32	F9E80	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-08	Percent Solids	Cool 4 deg C	USEP04	R32	F9F33	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-09	Percent Solids	Cool 4 deg C	USEP04	R32	F9E54	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-10	Percent Solids	Cool 4 deg C	USEP04	R32	F9E55	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-11	Percent Solids	Cool 4 deg C	USEP04	R32	F9E56	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-12	Percent Solids	Cool 4 deg C	USEP04	R32	F9E57	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-13	Percent Solids	Cool 4 deg C	USEP04	R32	F9E60	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-14	Percent Solids	Cool 4 deg C	USEP04	R32	F9E61	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-15	Percent Solids	Cool 4 deg C	USEP04	R32	F9F34	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-16	Percent Solids	Cool 4 deg C	USEP04	R32	F9F35	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-17	Percent Solids	Cool 4 deg C	USEP04	R32	F9E62	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-18	Percent Solids	Cool 4 deg C	USEP04	R32	F9E63	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-19	Percent Solids	Cool 4 deg C	USEP04	R32	F9E68	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-20	Percent Solids	Cool 4 deg C	USEP04	R32	F9E69	12/03/2018	Chemtech -SO

733

Date/Time 12.04.18 3:15 PM
Received by: JP
Relinquished by: CP

Date/Time 12.04.18 4:00 PM
Received by: CP
Relinquished by: JP

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Prep Standard - Chemical Standard Summary

Order ID : J6227

Test : SVOC-TCL BNA -20

Prepbatch ID : PB115349,

Sequence ID/Qc Batch ID: BM120818,BM121218,BM111918

Standard ID :
EP1897,EP1898,SP4489,SP4531,SP4532,SP4533,SP4534,SP4535,SP4536,SP4537,SP4538,SP4539,SP4559,

Chemical ID :
10ul/1000ul
sample,E2510,E2519,E2529,E2534,E2536,E2560,H1316,S4706,S5303,S5307,S5317,S5414,S5415,S6173,S6177,S6327,S6424,S6430,S6438,S6540,S6564,S6567,S6747,S6749,S6750,S6751,S6752,S6753,S6754,S6792,S6834,S6901,S6909,S7056,S7063,S7087,S7159,

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
256	BAKED SODIUM SULPHATE	EP1897	10/25/2018	02/19/2019	Rajesh

FROM 4000.000ml of E2519 = Final Quantity: 4000.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2017	1:1 ACETONE/METHYLENE CHLORIDE	EP1898	10/25/2018	04/18/2019	Rajesh

FROM 8000.000ml of E2534 + 8000.000ml of E2536 = Final Quantity: 16000.000 ml

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2564	50 ng/ul DFTPP	SP4489	09/10/2018	02/28/2019	Jabed

FROM 0.200ml of S6327 + 9.800ml of E2510 = Final Quantity: 10.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2575	som02.1 stock 200 ppm	SP4531	10/19/2018	02/28/2019	Jabed

FROM 0.200ml of E2529 + 0.200ml of S5307 + 0.200ml of S5414 + 0.200ml of S6424 + 0.200ml of S6567 + 0.500ml of S5317 + 0.500ml of S6177 + 0.500ml of S6747 + 0.500ml of S6834 + 1.000ml of S6173 + 1.000ml of S6430 = Final Quantity: 5.000 ml

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2581	SOM02.1-SSTD160	SP4532	10/19/2018	02/28/2019	Jabed

FROM 0.010ml of S6792 + 0.200ml of E2529 + 0.800ml of SP4531 = Final Quantity: 1.010 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2580	SOM02.1-SSTD080	SP4533	10/19/2018	02/28/2019	Jabed

FROM 0.010ml of S6792 + 0.600ml of E2529 + 0.400ml of SP4531 = Final Quantity: 1.010 ml

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2579	SOM02.1-SSTD040	SP4534	10/19/2018	02/28/2019	Jabed

FROM 0.010ml of S6792 + 0.800ml of E2529 + 0.200ml of SP4531 = Final Quantity: 1.010 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2578	SOM02.1-SSTD020	SP4535	10/19/2018	02/28/2019	Jabed

FROM 0.010ml of S6792 + 0.900ml of E2529 + 0.100ml of SP4531 = Final Quantity: 1.010 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2577	SOM02.1-SSTD010	SP4536	10/19/2018	02/28/2019	Jabed

FROM 0.010ml of S6792 + 0.950ml of E2529 + 0.050ml of SP4531 = Final Quantity: 1.010 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2576	SOM02.1-SSTD005	SP4537	10/19/2018	02/28/2019	Jabed

FROM 0.010ml of S6792 + 0.975ml of E2529 + 0.025ml of SP4531 = Final Quantity: 1.010 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3499	SOM-STOCK ICV 200 ppm	SP4538	10/19/2018	03/28/2019	Jabed

FROM 0.080ml of S4706 + 0.080ml of S5303 + 0.080ml of S6540 + 0.080ml of S6564 + 0.200ml of S6438 + 0.280ml of E2529 + 0.400ml of S6901 + 0.400ml of S7087 + 0.400ml of S7159 = Final Quantity: 2.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3500	SOM-ICV 20 ppm	SP4539	10/19/2018	03/28/2019	Jabed

FROM 0.010ml of S6792 + 0.900ml of E2529 + 0.100ml of SP4538 = Final Quantity: 1.010 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3616	SOM Surrogates 80/16/0.8 ppm	SP4559	10/31/2018	02/28/2019	Jabed

FROM 0.080ml of S6909 + 0.600ml of S5414 + 1.000ml of S5415 + 1.250ml of S6749 + 1.250ml of S6750 + 1.250ml of S6751 + 1.250ml of S6754 + 1.500ml of S6752 + 1.500ml of S6753 + 190.320ml of H1316 = Final Quantity: 200.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	0000207558	02/28/2019	08/31/2018 / Rajesh	08/31/2018 / Rajesh	E2510

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	/ Sodium sulfate (anhyhdrous)	743502	02/19/2019	08/20/2018 / Rajesh	08/13/2018 / Rajesh	E2519

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	0000211047	04/08/2019	10/09/2018 / Rajesh	10/08/2018 / Rajesh	E2529

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	0000196204	02/05/2021	10/23/2018 /	10/18/2018 / Rajesh	E2534

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	0000211047	04/18/2019	10/19/2018 / Rajesh	10/15/2018 / Rajesh	E2536

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	0000214356	06/02/2019	12/03/2018 / rajesh	11/26/2018 / rajesh	E2560

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9093-03 / Methanol, HPLC (cs/4x4L)	0000119840	08/16/2020	02/23/2016 / umangi	01/22/2016 / UMANGI	H1316

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	98495 / Pentachlorobenzene, 5000 ug/mL, in MeCl2	061115	06/11/2020	03/28/2017 / Sohil	08/31/2015 / umangi	S4706

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	98496 / 1,2,3,4-Tetrachlorobenzene, 5000 ug/mL, in MeCl2	061115	06/11/2020	08/08/2016 / UMANGI	07/01/2016 / UMANGI	S5303

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	98496 / 1,2,3,4-Tetrachlorobenzene, 5000 ug/mL, in MeCl2	063016	06/11/2020	10/12/2018 / Jabed	07/01/2016 / UMANGI	S5307

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	90494 / 1-Methylnaphthalene, 2000 ug/mL, in methylene chloride	062216	07/03/2019	10/12/2018 / Jabed	07/01/2016 / UMANGI	S5317

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30614 / 1,4-Dioxane-D8 Standard	A0117024	02/28/2019	10/12/2018 / Jabed	06/27/2016 / umangi	S5414

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30614 / 1,4-Dioxane-D8 Standard	A0117024	02/28/2019	10/31/2018 / Jabed	06/27/2016 / umangi	S5415

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32208 / atrazine, 1,000 µg/mL in acetone, 1 mL/ampul	A0130330	04/30/2021	08/13/2018 / Jabed	10/19/2017 / Jagrut	S6173

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	33017 / Benzaldehyde, 2000 ug/ml	A0128835	03/31/2019	10/12/2018 / Jabed	10/19/2017 / Jagrut	S6177

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31001 / SV Tuning Compound Standard, 2500 ug/ml,	A0131451	10/31/2020	01/29/2018 / Jagrut	12/18/2017 / Jagrut	S6327

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	98495 / Pentachlorobenzene, 5000 ug/mL, in MeCl2	063016	06/30/2021	10/12/2018 / Jabed	02/01/2018 / Sohil	S6424

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31900 / SOM01.1 Mega Mix, 500-1000 ug/ml	A0134696	07/31/2019	10/12/2018 / Jabed	02/06/2018 / Sohil	S6430

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0132291	08/20/2021	05/07/2018 / Jabed	02/22/2018 / Jabed	S6438

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30614 / 1,4-Dioxane-D8 Standard	A0134839	02/28/2021	07/02/2018 / Jabed	04/04/2018 / Jabed	S6540

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0131219	09/30/2022	09/17/2018 / Jabed	04/04/2018 / Jabed	S6564

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0131219	03/28/2019	10/12/2018 / Jabed	04/04/2018 / Jabed	S6567

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	09/21/2018 / Jabed	05/24/2018 / Jabed	S6747

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6749

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6750

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6751

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6752

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6753

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6754

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 1mL	A0136809	03/31/2024	09/27/2018 / Jagrut	05/31/2018 / Sohil	S6792

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31833 / caprolactam, 2,000 µg/mL in methylene chloride, 1 mL/ampul	A0138507	06/30/2020	10/12/2018 / Jabed	06/07/2018 / Sohil	S6834

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]	A0132384	03/28/2019	10/12/2018 / Jabed	06/14/2018 / Jabed	S6901

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM	A0137718	04/30/2024	07/02/2018 / Jabed	06/22/2018 / Sohil	S6909

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 1mL	A0139548	06/30/2024	11/16/2018 / Jagrut	09/06/2018 / Sohil	S7056

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 1mL	A0139548	06/30/2024	12/07/2018 / Jagrut	09/06/2018 / Sohil	S7063

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at $85 per ampul if requested - contact ARM with Request] [CS 4978-2]	A0141109	08/31/2020	10/12/2018 / Jabed	11/28/2017 / Sohil	S7087

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at $100 per ampul if requested - contact ARM with Request] [CS 4978-1]	A0141282	03/28/2019	10/12/2018 / Jabed	09/14/2018 / Sohil	S7159

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31853 **Lot No.:** A0131219

Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2022 **Storage:** 0°C or colder

S6541
10
S6570
M.U.
04/04/2018

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight:volume)	Expanded Uncertainty (95% C.L., K=2)		
1	1,4-Dioxane	2,000.0 µg/mL	+/- 11.7371	µg/mL	Gravimetric
	CAS # 123-91-1 (Lot SHBH5677)		+/- 42.8500	µg/mL	Unstressed
	Purity 99%		+/- 44.0940	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

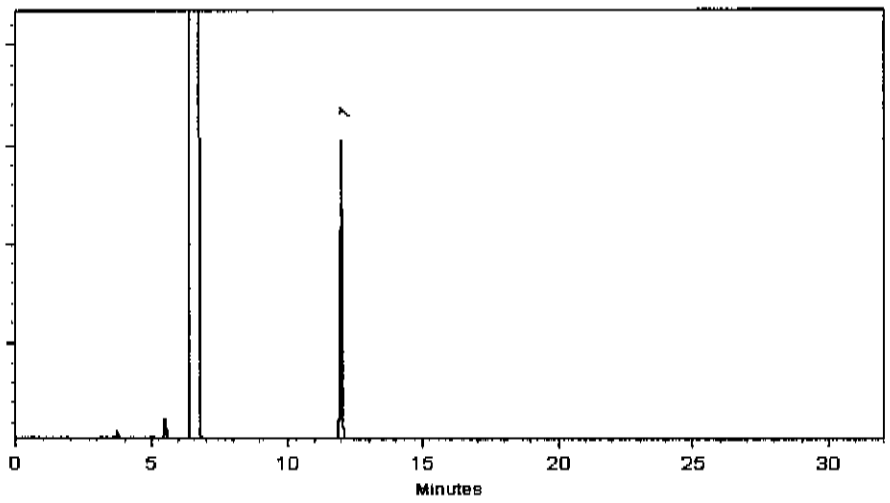
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cydnel L. Cruz - Mix Technician

Date Mixed: 29-Sep-2017 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 03-Oct-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value If the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31850 **Lot No.:** A0132384

S6877
10
S6906 M.U.
06/14/18

Description : 8270 MegaMix®

8270 MegaMix® 500-1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2019 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.: K=2)	
1	Pyridine **CAS #** 110-86-1 (Lot SHBC7174V) **Purity** 99%	1,002.4 µg/mL	+/- 5.8277 µg/mL +/- 30.3193 µg/mL +/- 30.3193 µg/mL	Gravimetric Unstressed Stressed
2	N-Nitrosodimethylamine **CAS #** 62-75-9 (Lot 170310JLM) **Purity** 99%	1,003.3 µg/mL	+/- 5.8333 µg/mL +/- 30.3480 µg/mL +/- 30.3480 µg/mL	Gravimetric Unstressed Stressed
3	Aniline **CAS #** 62-53-3 (Lot K22Z462) **Purity** 99%	1,003.2 µg/mL	+/- 5.8324 µg/mL +/- 30.3435 µg/mL +/- 30.3435 µg/mL	Gravimetric Unstressed Stressed
4	2-Chlorophenol **CAS #** 95-57-8 (Lot STBF2690V) **Purity** 99%	1,000.3 µg/mL	+/- 5.8155 µg/mL +/- 30.2558 µg/mL +/- 30.2558 µg/mL	Gravimetric Unstressed Stressed
5	Phenol **CAS #** 108-95-2 (Lot SHBF1351V) **Purity** 99%	1,000.6 µg/mL	+/- 5.8176 µg/mL +/- 30.2663 µg/mL +/- 30.2663 µg/mL	Gravimetric Unstressed Stressed
6	Bis(2-chloroethyl)ether **CAS #** 111-44-4 (Lot 45296HKV) **Purity** 99%	1,001.8 µg/mL	+/- 5.8243 µg/mL +/- 30.3011 µg/mL +/- 30.3011 µg/mL	Gravimetric Unstressed Stressed
7	1,3-Dichlorobenzene **CAS #** 541-73-1 (Lot BCBM5751V) **Purity** 99%	1,001.5 µg/mL	+/- 5.8228 µg/mL +/- 30.2936 µg/mL +/- 30.2936 µg/mL	Gravimetric Unstressed Stressed

8	1,4-Dichlorobenzene		1,001.5	µg/mL	+/-	5.8225	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS1350V)			+/-	30.2921	µg/mL	Unstressed
	Purity 99%				+/-	30.2921	µg/mL	Stressed
9	1,2-Dichlorobenzene		1,002.4	µg/mL	+/-	5.8280	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBD7331V)			+/-	30.3208	µg/mL	Unstressed
	Purity 99%				+/-	30.3208	µg/mL	Stressed
10	Benzyl alcohol		1,000.3	µg/mL	+/-	5.8158	µg/mL	Gravimetric
	CAS # 100-51-6	(Lot SHBC1850V)			+/-	30.2573	µg/mL	Unstressed
	Purity 99%				+/-	30.2573	µg/mL	Stressed
11	2,2'-oxybis(1-chloropropane)		998.5	µg/mL	+/-	5.8052	µg/mL	Gravimetric
	CAS # 108-60-1	(Lot 5710100)			+/-	30.2019	µg/mL	Unstressed
	Purity 97%				+/-	30.2019	µg/mL	Stressed
12	2-Methylphenol (o-cresol)		1,006.2	µg/mL	+/-	5.8501	µg/mL	Gravimetric
	CAS # 95-48-7	(Lot SHBC1479V)			+/-	30.4357	µg/mL	Unstressed
	Purity 99%				+/-	30.4357	µg/mL	Stressed
13	Hexachloroethane		1,003.2	µg/mL	+/-	5.8324	µg/mL	Gravimetric
	CAS # 67-72-1	(Lot 4H3SF)			+/-	30.3435	µg/mL	Unstressed
	Purity 99%				+/-	30.3435	µg/mL	Stressed
14	N-Nitroso-di-n-propylamine		1,001.6	µg/mL	+/-	5.8234	µg/mL	Gravimetric
	CAS # 621-64-7	(Lot NOPCF)			+/-	30.2966	µg/mL	Unstressed
	Purity 99%				+/-	30.2966	µg/mL	Stressed
15	4-Methylphenol (p-cresol)		503.5	µg/mL	+/-	2.9274	µg/mL	Gravimetric
	CAS # 106-44-5	(Lot 49396APV)			+/-	15.2300	µg/mL	Unstressed
	Purity 99%				+/-	15.2300	µg/mL	Stressed
16	3-Methylphenol (m-cresol)		501.0	µg/mL	+/-	2.9129	µg/mL	Gravimetric
	CAS # 108-39-4	(Lot SHBD0627V)			+/-	15.1543	µg/mL	Unstressed
	Purity 99%				+/-	15.1543	µg/mL	Stressed
17	Nitrobenzene		1,001.9	µg/mL	+/-	5.8248	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBF2348V)			+/-	30.3042	µg/mL	Unstressed
	Purity 99%				+/-	30.3042	µg/mL	Stressed
18	Isophorone		1,000.8	µg/mL	+/-	5.8189	µg/mL	Gravimetric
	CAS # 78-59-1	(Lot MKBG2442V)			+/-	30.2731	µg/mL	Unstressed
	Purity 98%				+/-	30.2731	µg/mL	Stressed
19	2-Nitrophenol		1,003.9	µg/mL	+/-	5.8368	µg/mL	Gravimetric
	CAS # 88-75-5	(Lot BCBH7602V)			+/-	30.3662	µg/mL	Unstressed
	Purity 99%				+/-	30.3662	µg/mL	Stressed
20	2,4-Dimethylphenol		1,001.6	µg/mL	+/-	5.8231	µg/mL	Gravimetric
	CAS # 105-67-9	(Lot 10165155)			+/-	30.2951	µg/mL	Unstressed
	Purity 99%				+/-	30.2951	µg/mL	Stressed
21	Bis(2-chloroethoxy)methane		1,001.3	µg/mL	+/-	5.8214	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 4621000)			+/-	30.2860	µg/mL	Unstressed
	Purity 99%				+/-	30.2860	µg/mL	Stressed
22	2,4-Dichlorophenol		1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBH1617V)			+/-	30.2512	µg/mL	Unstressed
	Purity 99%				+/-	30.2512	µg/mL	Stressed
23	1,2,4-Trichlorobenzene		1,003.6	µg/mL	+/-	5.8350	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ0905)			+/-	30.3571	µg/mL	Unstressed
	Purity 99%				+/-	30.3571	µg/mL	Stressed

24	Naphthalene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBW2603V)			+/-	30.2482	µg/mL	Unstressed
	Purity 99%				+/-	30.2482	µg/mL	Stressed
25	4-Chloroaniline		1,004.1	µg/mL	+/-	5.8379	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot BCBJ1580V)			+/-	30.3722	µg/mL	Unstressed
	Purity 99%				+/-	30.3722	µg/mL	Stressed
26	Hexachlorobutadiene		1,004.3	µg/mL	+/-	5.8388	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	30.3767	µg/mL	Unstressed
	Purity 99%				+/-	30.3767	µg/mL	Stressed
27	2-Methylnaphthalene		1,000.9	µg/mL	+/-	5.8192	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot STBF0201V)			+/-	30.2746	µg/mL	Unstressed
	Purity 95%				+/-	30.2746	µg/mL	Stressed
28	4-Chloro-3-methylphenol		1,004.2	µg/mL	+/-	5.8385	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC7309V)			+/-	30.3752	µg/mL	Unstressed
	Purity 99%				+/-	30.3752	µg/mL	Stressed
29	1-Methylnaphthalene		1,004.5	µg/mL	+/-	5.8402	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 523400-9)			+/-	30.3843	µg/mL	Unstressed
	Purity 98%				+/-	30.3843	µg/mL	Stressed
30	Hexachlorocyclopentadiene		1,001.0	µg/mL	+/-	5.8196	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 0012015)			+/-	30.2769	µg/mL	Unstressed
	Purity 99%				+/-	30.2769	µg/mL	Stressed
31	2,4,6-Trichlorophenol		1,002.5	µg/mL	+/-	5.8283	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot STBF3742V)			+/-	30.3223	µg/mL	Unstressed
	Purity 99%				+/-	30.3223	µg/mL	Stressed
32	2,4,5-Trichlorophenol		1,004.2	µg/mL	+/-	5.8385	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHN01)			+/-	30.3752	µg/mL	Unstressed
	Purity 99%				+/-	30.3752	µg/mL	Stressed
33	2-Chloronaphthalene		1,001.3	µg/mL	+/-	5.8214	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot AJ2UI)			+/-	30.2860	µg/mL	Unstressed
	Purity 99%				+/-	30.2860	µg/mL	Stressed
34	2-Nitroaniline		1,004.6	µg/mL	+/-	5.8405	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBK7597V)			+/-	30.3858	µg/mL	Unstressed
	Purity 99%				+/-	30.3858	µg/mL	Stressed
35	1,4-Dinitrobenzene		1,004.3	µg/mL	+/-	5.8391	µg/mL	Gravimetric
	CAS # 100-25-4	(Lot STBF8844V)			+/-	30.3783	µg/mL	Unstressed
	Purity 99%				+/-	30.3783	µg/mL	Stressed
36	Acenaphthylene		1,004.9	µg/mL	+/-	5.8424	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot O03R)			+/-	30.3955	µg/mL	Unstressed
	Purity 97%				+/-	30.3955	µg/mL	Stressed
37	1,3-Dinitrobenzene		1,004.1	µg/mL	+/-	5.8379	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBB1436V)			+/-	30.3722	µg/mL	Unstressed
	Purity 99%				+/-	30.3722	µg/mL	Stressed
38	Dimethylphthalate		1,005.6	µg/mL	+/-	5.8466	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)			+/-	30.4176	µg/mL	Unstressed
	Purity 99%				+/-	30.4176	µg/mL	Stressed
39	2,6-Dinitrotoluene		1,001.1	µg/mL	+/-	5.8202	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot BCBB8606V)			+/-	30.2800	µg/mL	Unstressed
	Purity 99%				+/-	30.2800	µg/mL	Stressed

40	1,2-Dinitrobenzene		1,003.7	µg/mL	+/-	5.8356	µg/mL	Gravimetric
	CAS # 528-29-0	(Lot MKBW2921V)			+/-	30.3601	µg/mL	Unstressed
	Purity 99%				+/-	30.3601	µg/mL	Stressed
41	Acenaphthene		1,003.2	µg/mL	+/-	5.8324	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKCC8329)			+/-	30.3435	µg/mL	Unstressed
	Purity 99%				+/-	30.3435	µg/mL	Stressed
42	3-Nitroaniline		1,002.4	µg/mL	+/-	5.8280	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot 12836338V)			+/-	30.3208	µg/mL	Unstressed
	Purity 99%				+/-	30.3208	µg/mL	Stressed
43	2,4-Dinitrophenol		1,003.7	µg/mL	+/-	5.8353	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot STBF9439V)			+/-	30.3586	µg/mL	Unstressed
	Purity 99%				+/-	30.3586	µg/mL	Stressed
44	Dibenzofuran		1,004.3	µg/mL	+/-	5.8391	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBW2691V)			+/-	30.3783	µg/mL	Unstressed
	Purity 99%				+/-	30.3783	µg/mL	Stressed
45	2,4-Dinitrotoluene		1,003.8	µg/mL	+/-	5.8359	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/-	30.3616	µg/mL	Unstressed
	Purity 99%				+/-	30.3616	µg/mL	Stressed
46	4-Nitrophenol		1,004.3	µg/mL	+/-	5.8391	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKBV0501V)			+/-	30.3783	µg/mL	Unstressed
	Purity 99%				+/-	30.3783	µg/mL	Stressed
47	2,3,4,6-Tetrachlorophenol		1,001.6	µg/mL	+/-	5.8231	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot B17W01051)			+/-	30.2951	µg/mL	Unstressed
	Purity 99%				+/-	30.2951	µg/mL	Stressed
48	2,3,5,6-Tetrachlorophenol		1,002.4	µg/mL	+/-	5.8277	µg/mL	Gravimetric
	CAS # 935-95-5	(Lot 012016)			+/-	30.3193	µg/mL	Unstressed
	Purity 99%				+/-	30.3193	µg/mL	Stressed
49	Fluorene		1,005.6	µg/mL	+/-	5.8466	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 10193329)			+/-	30.4176	µg/mL	Unstressed
	Purity 99%				+/-	30.4176	µg/mL	Stressed
50	4-Chlorophenyl phenyl ether		1,001.7	µg/mL	+/-	5.8237	µg/mL	Gravimetric
	CAS # 7005-72-3	(Lot MKBW2403V)			+/-	30.2981	µg/mL	Unstressed
	Purity 99%				+/-	30.2981	µg/mL	Stressed
51	Diethylphthalate		1,001.5	µg/mL	+/-	5.8228	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot MKBV9622V)			+/-	30.2936	µg/mL	Unstressed
	Purity 99%				+/-	30.2936	µg/mL	Stressed
52	4-Nitroaniline		1,001.5	µg/mL	+/-	5.8229	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot BCBG4702V)			+/-	30.2939	µg/mL	Unstressed
	Purity 98%				+/-	30.2939	µg/mL	Stressed
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		1,003.7	µg/mL	+/-	5.8356	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot LC22071V)			+/-	30.3601	µg/mL	Unstressed
	Purity 99%				+/-	30.3601	µg/mL	Stressed
54	Diphenylamine		1,001.2	µg/mL	+/-	5.8208	µg/mL	Gravimetric
	CAS # 122-39-4	(Lot MKBN8295V)			+/-	30.2830	µg/mL	Unstressed
	Purity 99%				+/-	30.2830	µg/mL	Stressed
55	Azobenzene		1,001.3	µg/mL	+/-	5.8218	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot BCBS6535V)			+/-	30.2885	µg/mL	Unstressed
	Purity 97%				+/-	30.2885	µg/mL	Stressed

56	4-Bromophenyl phenyl ether		1,000.5	µg/mL	+/-	5.8172	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	30.2643	µg/mL	Unstressed
	Purity 98%				+/-	30.2643	µg/mL	Stressed
57	Hexachlorobenzene		1,004.3	µg/mL	+/-	5.8388	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot LC25401V)			+/-	30.3767	µg/mL	Unstressed
	Purity 99%				+/-	30.3767	µg/mL	Stressed
58	Pentachlorophenol		1,003.5	µg/mL	+/-	5.8341	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 170717KJA)			+/-	30.3525	µg/mL	Unstressed
	Purity 99%				+/-	30.3525	µg/mL	Stressed
59	Phenanthrene		1,003.7	µg/mL	+/-	5.8356	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKCB1762V)			+/-	30.3601	µg/mL	Unstressed
	Purity 99%				+/-	30.3601	µg/mL	Stressed
60	Anthracene		1,001.4	µg/mL	+/-	5.8219	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKBR2268V)			+/-	30.2890	µg/mL	Unstressed
	Purity 99%				+/-	30.2890	µg/mL	Stressed
61	Carbazole		1,002.5	µg/mL	+/-	5.8286	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot 5945900)			+/-	30.3238	µg/mL	Unstressed
	Purity 99%				+/-	30.3238	µg/mL	Stressed
62	Di-n-butylphthalate		1,001.6	µg/mL	+/-	5.8231	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKBT0244V)			+/-	30.2951	µg/mL	Unstressed
	Purity 99%				+/-	30.2951	µg/mL	Stressed
63	Fluoranthene		1,001.6	µg/mL	+/-	5.8232	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKBQ6360V)			+/-	30.2954	µg/mL	Unstressed
	Purity 98%				+/-	30.2954	µg/mL	Stressed
64	Pyrene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCBR9108V)			+/-	30.2482	µg/mL	Unstressed
	Purity 99%				+/-	30.2482	µg/mL	Stressed
65	Benzyl butyl phthalate		1,000.6	µg/mL	+/-	5.8175	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot MKBZ4553V)			+/-	30.2657	µg/mL	Unstressed
	Purity 98%				+/-	30.2657	µg/mL	Stressed
66	Bis(2-ethylhexyl)adipate		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 103-23-1	(Lot MKBT7308V)			+/-	30.2482	µg/mL	Unstressed
	Purity 99%				+/-	30.2482	µg/mL	Stressed
67	Benz(a)anthracene		1,004.9	µg/mL	+/-	5.8423	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot ER031412-01)			+/-	30.3949	µg/mL	Unstressed
	Purity 99%				+/-	30.3949	µg/mL	Stressed
68	Chrysene		1,001.8	µg/mL	+/-	5.8243	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot 012015)			+/-	30.3011	µg/mL	Unstressed
	Purity 99%				+/-	30.3011	µg/mL	Stressed
69	Bis(2-ethylhexyl)phthalate		1,003.7	µg/mL	+/-	5.8356	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBZ3868V)			+/-	30.3601	µg/mL	Unstressed
	Purity 99%				+/-	30.3601	µg/mL	Stressed
70	Di-n-octyl phthalate		1,001.8	µg/mL	+/-	5.8246	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 5699100)			+/-	30.3026	µg/mL	Unstressed
	Purity 99%				+/-	30.3026	µg/mL	Stressed
71	Benzo(b)fluoranthene		1,000.7	µg/mL	+/-	5.8182	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot ER03101401)			+/-	30.2694	µg/mL	Unstressed
	Purity 99%				+/-	30.2694	µg/mL	Stressed

72	Benzo(k)fluoranthene		1,005.0	µg/mL	+/-	5.8432	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot 012012K)			+/-	30.3994	µg/mL	Unstressed
	Purity 99%				+/-	30.3994	µg/mL	Stressed
73	Benzo(a)pyrene		1,001.4	µg/mL	+/-	5.8219	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	30.2890	µg/mL	Unstressed
	Purity 99%				+/-	30.2890	µg/mL	Stressed
74	Indeno(1,2,3-cd)pyrene		1,002.6	µg/mL	+/-	5.8289	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	30.3253	µg/mL	Unstressed
	Purity 99%				+/-	30.3253	µg/mL	Stressed
75	Dibenz(a,h)anthracene		1,002.1	µg/mL	+/-	5.8263	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	30.3117	µg/mL	Unstressed
	Purity 99%				+/-	30.3117	µg/mL	Stressed
76	Benzo(g,h,i)perylene		1,002.5	µg/mL	+/-	5.8283	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER05121401)			+/-	30.3223	µg/mL	Unstressed
	Purity 99%				+/-	30.3223	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

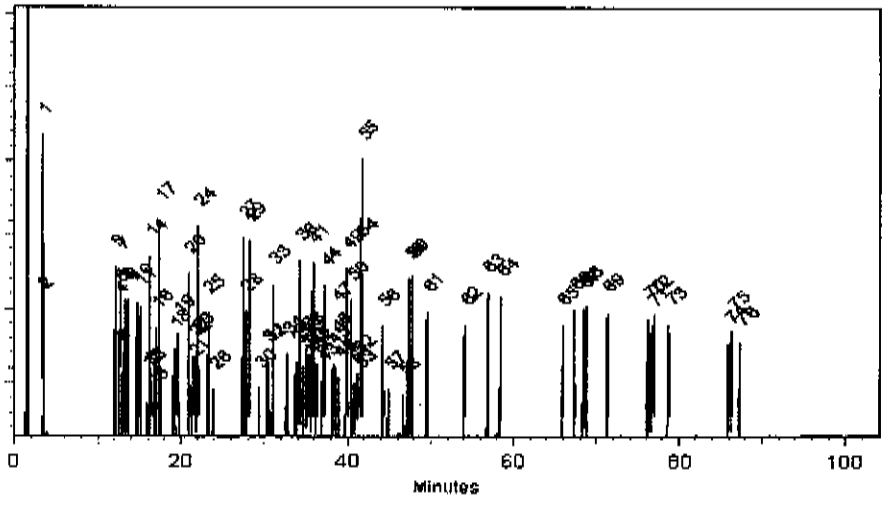
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician **Date Mixed:** 13-Nov-2017 **Balance:** B345965662

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Dec-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

S6526
10
S6540
M.V.
04/04/2018

Catalog No. : 30614 **Lot No.:** A0134839

Description : 1,4-dioxane-d8 Standard

1,4-dioxane-d8 Standard 2000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.I., K=2)		
1	1,4-Dioxane-d8	2,008.7 µg/mL	+/- 11.7880	µg/mL	Gravimetric
	CAS # 17647-74-4 (Lot 1-19942)		+/- 43.0356	µg/mL	Unstressed
	Purity 99%		+/- 44.2850	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

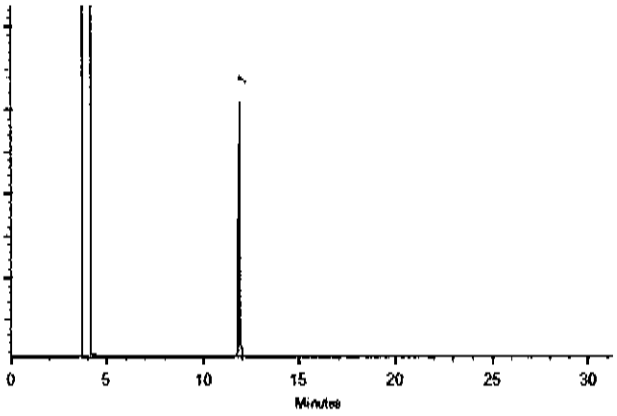
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Matt Fragassi - Mix Technician

Date Mixed: 01-Feb-2018 **Balance:** 1128342314

Jennifer Alderson - Operations Tech-Area 80

Date Passed: 06-Feb-2018

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31810 **Lot No.:** A0135095

Description : OLC03.2 SVOA Deuterated Monitoring Compounds Mix

OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL/ampul, Methylene Chloride, 2000µg/mL

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2021 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

S6731 to S6760
M.U. 05/30/2018

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Phenol-d5 **CAS #** 4165-62-2 (Lot X-479) **Purity** 99%	2,016.7 µg/mL	+/- 11.8349 µg/mL +/- 58.8751 µg/mL +/- 71.4341 µg/mL	Gravimetric Unstressed Stressed
2	bis(2-Chloroethyl) ether-d8 **CAS #** 93952-02-4 (Lot I-15074) **Purity** 98%	2,013.6 µg/mL	+/- 11.8168 µg/mL +/- 58.7848 µg/mL +/- 71.3245 µg/mL	Gravimetric Unstressed Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-28977) **Purity** 99%	2,012.7 µg/mL	+/- 11.8115 µg/mL +/- 58.7583 µg/mL +/- 71.2924 µg/mL	Gravimetric Unstressed Stressed
4	4-Methylphenol-d8 **CAS #** 190780-66-6 (Lot W-519) **Purity** 99%	2,003.3 µg/mL	+/- 11.7567 µg/mL +/- 58.4858 µg/mL +/- 70.9618 µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-25462) **Purity** 99%	2,006.0 µg/mL	+/- 11.7723 µg/mL +/- 58.5637 µg/mL +/- 71.0562 µg/mL	Gravimetric Unstressed Stressed
6	2-Nitrophenol-d4 **CAS #** 93951-78-1 (Lot H-151) **Purity** 99%	2,014.7 µg/mL	+/- 11.8232 µg/mL +/- 58.8167 µg/mL +/- 71.3632 µg/mL	Gravimetric Unstressed Stressed
7	2,4-Dichlorophenol-d3 **CAS #** 93951-74-7 (Lot AB-210) **Purity** 98%	2,004.4 µg/mL	+/- 11.7631 µg/mL +/- 58.5177 µg/mL +/- 71.0005 µg/mL	Gravimetric Unstressed Stressed

8	4-Chloroaniline-d4 **CAS #** 191656-33-4 **Purity** 99%	(Lot C-190)	2,010.0	µg/mL	+/- 11.7958 +/- 58.6804 +/- 71.1979	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Dimethylphthalate-d6 **CAS #** 85448-30-2 **Purity** 99%	(Lot X-477)	2,014.7	µg/mL	+/- 11.8232 +/- 58.8167 +/- 71.3632	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acenaphthylene-d8 **CAS #** 93951-97-4 **Purity** 99%	(Lot AB-282)	2,002.7	µg/mL	+/- 11.7528 +/- 58.4664 +/- 70.9382	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	4-Nitrophenol-d4 **CAS #** 93951-79-2 **Purity** 99%	(Lot P-141)	2,011.3	µg/mL	+/- 11.8036 +/- 58.7194 +/- 71.2452	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Fluorene-d10 **CAS #** 81103-79-9 **Purity** 98%	(Lot M149P29)	2,012.3	µg/mL	+/- 11.8091 +/- 58.7466 +/- 71.2782	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	4,6-Dinitro-2-methylphenol-d2 **CAS #** 93951-76-9 **Purity** 99%	(Lot AB-322)	2,004.0	µg/mL	+/- 11.7606 +/- 58.5053 +/- 70.9854	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Anthracene-d10 **CAS #** 1719-06-8 **Purity** 99%	(Lot PR-20576)	2,016.0	µg/mL	+/- 11.8310 +/- 58.8556 +/- 71.4105	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Pyrene-d10 **CAS #** 1718-52-1 **Purity** 98%	(Lot PR-14089)	2,014.9	µg/mL	+/- 11.8244 +/- 58.8229 +/- 71.3708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Benzo(a)pyrene-d12 **CAS #** 63466-71-7 **Purity** 99%	(Lot PR-28576)	2,010.7	µg/mL	+/- 11.7997 +/- 58.6999 +/- 71.2215	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

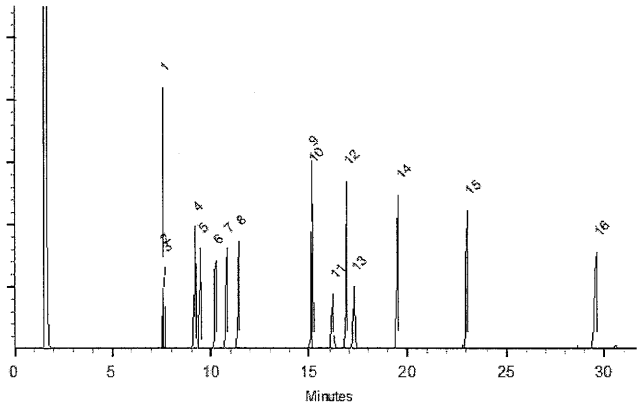
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Alice Brooks

Alice Brooks - Mix Technician

Date Mixed: 12-Feb-2018 **Balance:** B442140311

Justine Albertson

Justine Albertson - Operations Tech-ARM QC

Date Passed: 16-Feb-2018

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

SJ 5/31/18

Catalog No. : 31206 **Lot No.:** A0136809

From: 56791
to: 56820

Description : SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2024 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dichlorobenzene-d4	2,006.9 µg/mL	+/- 11.6683	µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 90.3920	µg/mL	Unstressed
	Purity 99%		+/- 100.3011	µg/mL	Stressed
2	Naphthalene-d8	2,011.0 µg/mL	+/- 11.6921	µg/mL	Gravimetric
	CAS # 1146-65-2 (Lot M-1452)		+/- 90.5766	µg/mL	Unstressed
	Purity 99%		+/- 100.5060	µg/mL	Stressed
3	Acenaphthene-d10	2,007.9 µg/mL	+/- 11.6741	µg/mL	Gravimetric
	CAS # 15067-26-2 (Lot PR-25444)		+/- 90.4370	µg/mL	Unstressed
	Purity 99%		+/- 100.3510	µg/mL	Stressed
4	Phenanthrene-d10	2,016.8 µg/mL	+/- 11.7258	µg/mL	Gravimetric
	CAS # 1517-22-2 (Lot PR-23065)		+/- 90.8379	µg/mL	Unstressed
	Purity 99%		+/- 100.7958	µg/mL	Stressed
5	Chrysene-d12	2,011.3 µg/mL	+/- 11.6939	µg/mL	Gravimetric
	CAS # 1719-03-5 (Lot PR-27952)		+/- 90.5902	µg/mL	Unstressed
	Purity 99%		+/- 100.5210	µg/mL	Stressed
6	Perylene-d12	2,019.3 µg/mL	+/- 11.7404	µg/mL	Gravimetric
	CAS # 1520-96-3 (Lot PR-24113)		+/- 90.9505	µg/mL	Unstressed
	Purity 99%		+/- 100.9208	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

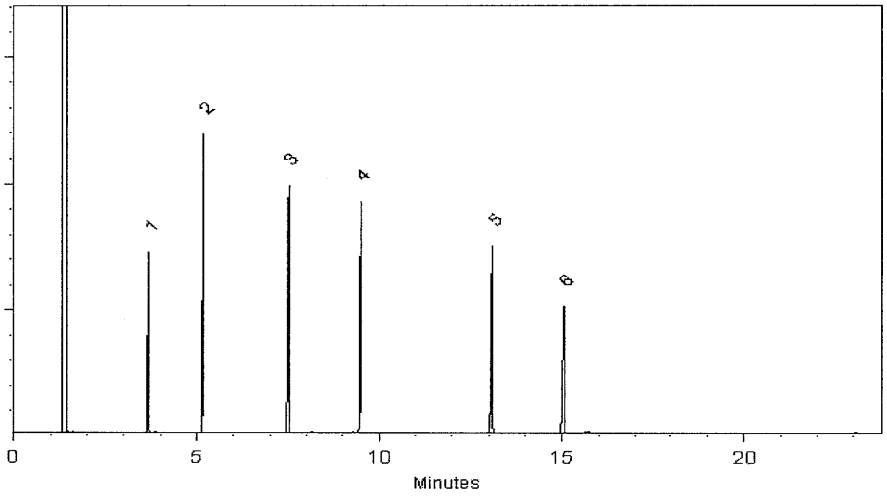
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 03-Apr-2018 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 05-Apr-2018

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 33913 **Lot No.:** A0137718

S6909
S6910
S6911

Description : SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2024 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

SJ
6/22/18

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Methylnaphthalene-d10	2,001.1 µg/mL	+/- 11.7436	µg/mL	Gravimetric
	CAS # 7297-45-2 (Lot AC-257)		+/- 90.1453	µg/mL	Unstressed
	Purity 97%		+/- 100.0244	µg/mL	Stressed
2	Fluoranthene-d10	2,009.0 µg/mL	+/- 11.7899	µg/mL	Gravimetric
	CAS # 93951-69-0 (Lot PR-20668)		+/- 90.5008	µg/mL	Unstressed
	Purity 98%		+/- 100.4188	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

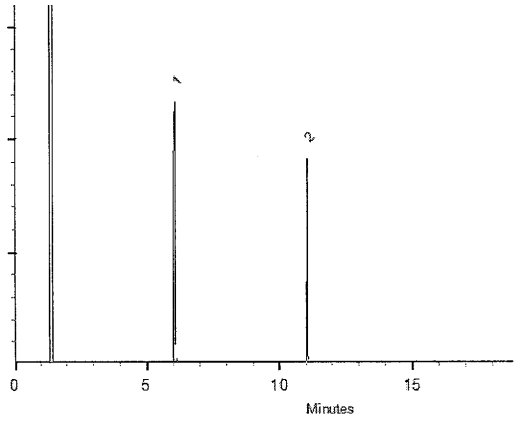
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Alice Brooks

Alice Brooks - Mix Technician

Date Mixed: 02-May-2018 **Balance:** 1128360905

Justine Albertson

Justine Albertson - Operations Tech-ARM QC

Date Passed: 03-May-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Testing Laboratory
Certificate #3222.02

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31833 **Lot No.:** A0138507

Description : Epsilon-Caprolactam Standard

Epsilon-caprolactam Std 2000µg/mL, Methylene Chloride(Methanol free), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2020 **Storage:** 10°C or colder

S6830
S6831
S6832
S6833
S6834

SJ
6/7/18

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	epsilon-Caprolactam	2,012.0 µg/mL	+/- 18.7105	µg/mL	Gravimetric
	CAS # 105-60-2 (Lot I16X016)		+/- 28.1375	µg/mL	Unstressed
	Purity 99%		+/- 40.9686	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

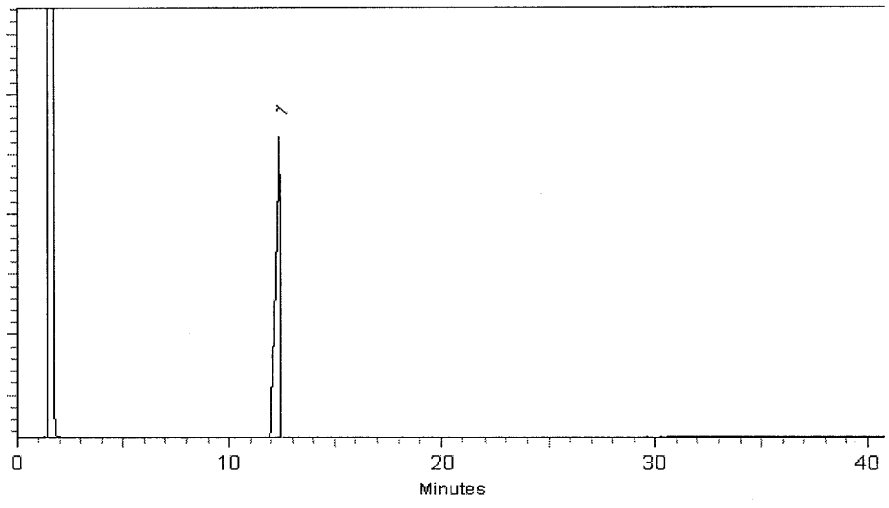
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kyle Retorick - Op. Technician I

Date Mixed: 01-Jun-2018 **Balance:** 1128353505

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 04-Jun-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

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774

CERTIFIED WEIGHT REPORT

Part Number:	**98496**	**Solvent(s):**	**Lot#**	
Lot Number:	061115	Methylene chloride	72062	
Description:	1,2,3,4-Tetrachlorobenzene			
Expiration Date:	061120			
Recommended Storage:	Refrigerate (4 °C)			
Nominal Concentration (µg/mL):	5000			
NIST Test ID#:	822-275872-11	5E-05	Balance Uncertainty	
Weight(s) shown below were combined and diluted to (mL):		10.0	0.002	Flask Uncertainty

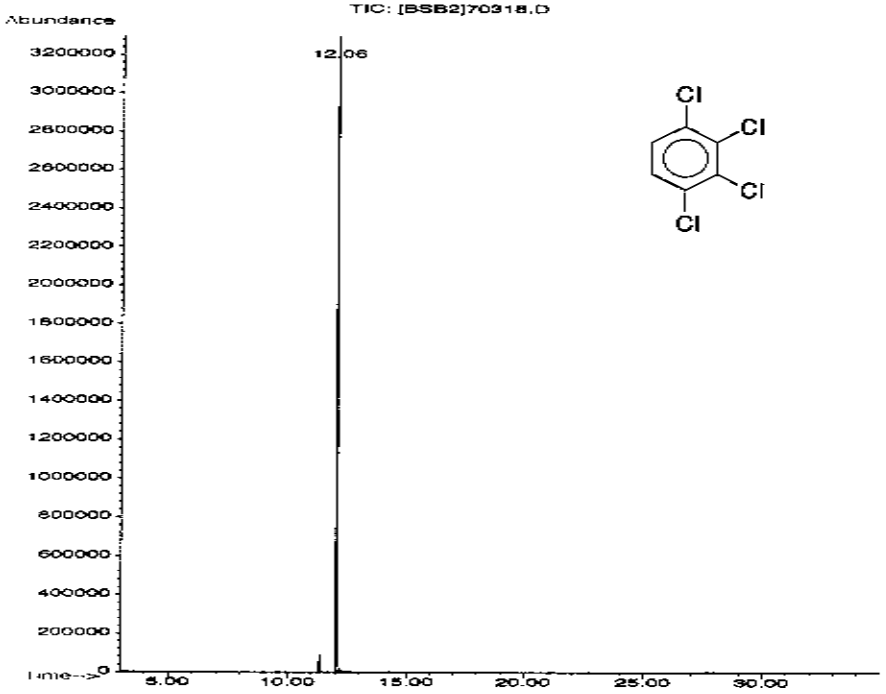
g 5303 } um
S5304 }

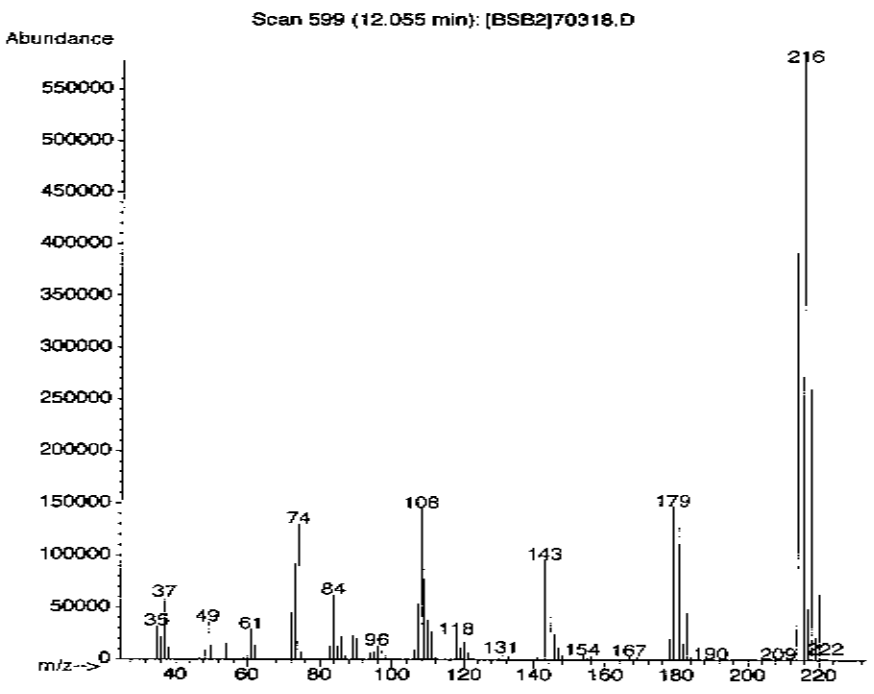
Paul Barron 061115
Formulated By: Paul Barron DATE

Pedro Rentas 061115
Reviewed By: Pedro L. Rentas DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,2,3,4-Tetrachlorobenzene	318	FBW01	5000	97.3	0.2	0.05138	0.05142	5004.0	22.8	634-66-2	N/A	ort-rat 1167mg/kg

Method GC8MSD-3.M: Column: (30m X 0.25mm ID X 0.25µm film thickness), Temp 1 = 50°C (1min.), Temp 2 = 300°C (4 min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 300°C. Analysis performed by Nicole Poisson.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
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- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

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Certified Reference Material CRM

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775

CERTIFIED WEIGHT REPORT

Part Number:	90494	**Solvent(s):**	**Lot#**
Lot Number:	062216	Methylene chloride	76782
Description:	1-Methylnaphthalene		
Expiration Date:	062221		
Recommended Storage:	Refrigerate (4 °C)		
Nominal Concentration (µg/mL):	2000		
NIST Test ID#:	822-275872-11	5E-05 Balance Uncertainty	
Weight(s) shown below were combined and diluted to (mL):	100.0	0.003 Flask Uncertainty	

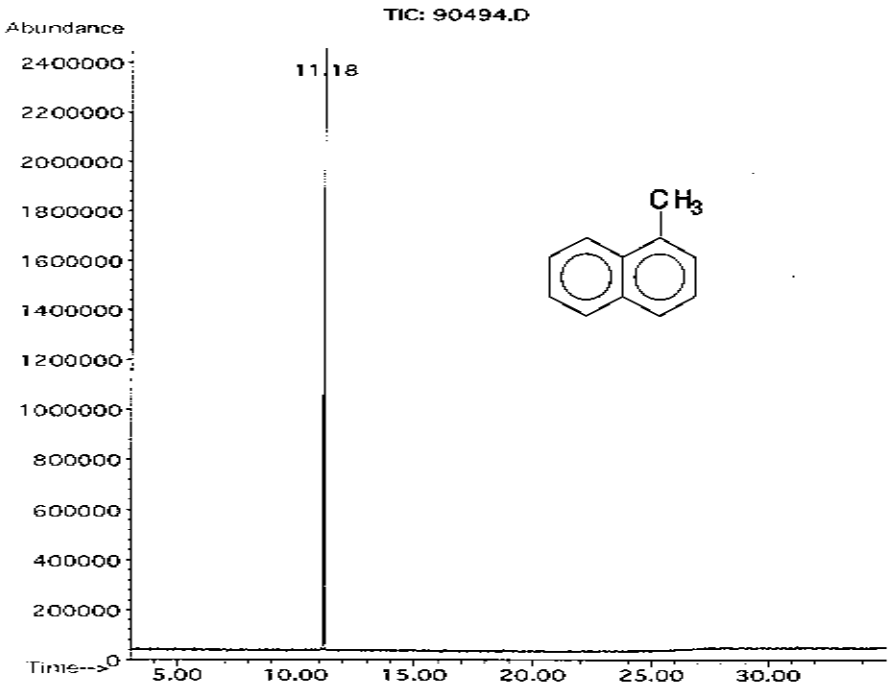
S5311 to S5317 } um

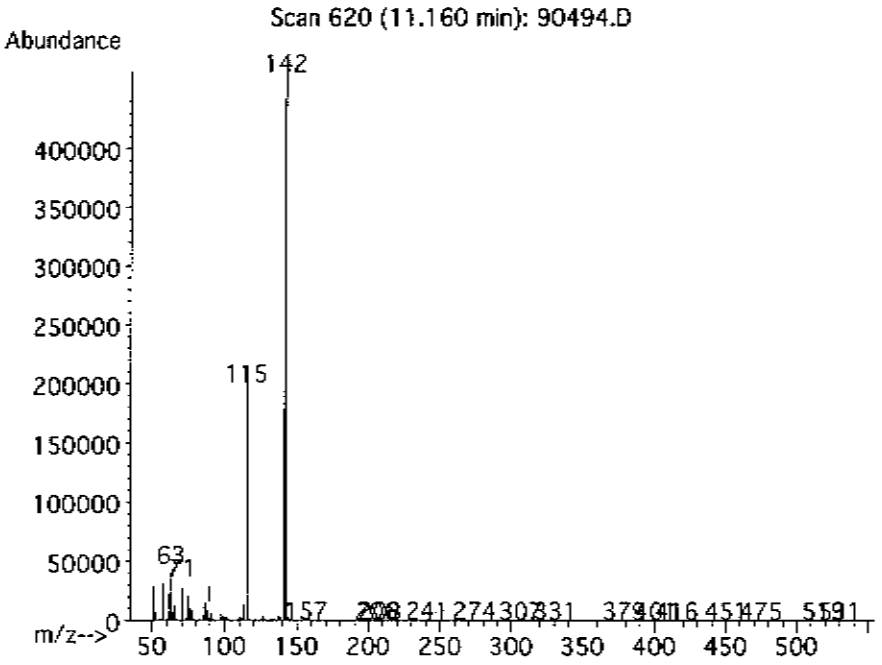
Formulated By: Bryan Njeba 062216 DATE

Reviewed By: Pedro L. Rentas 062216 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1-Methylnaphthalene	313	04413BX	2000	98	0.2	0.20410	0.20450	2003.9	8.2	90-12-0	N/A	ori-rat 1840mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Gina McLane.





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CERTIFIED WEIGHT REPORT

			Solvent(s):	Lot#
Part Number:	**98495**		Methylene chloride	76782
Lot Number:	063016			
Description:	Pentachlorobenzene			
Expiration Date:	063021			
Recommended Storage:	Refrigerate (4 °C)			
Nominal Concentration (µg/mL):	5000			
NIST Test ID#:	822-275872-11	5E-05	Balance Uncertainty	
Weight(s) shown below were combined and diluted to (mL):		25.0	0.001	Flask Uncertainty

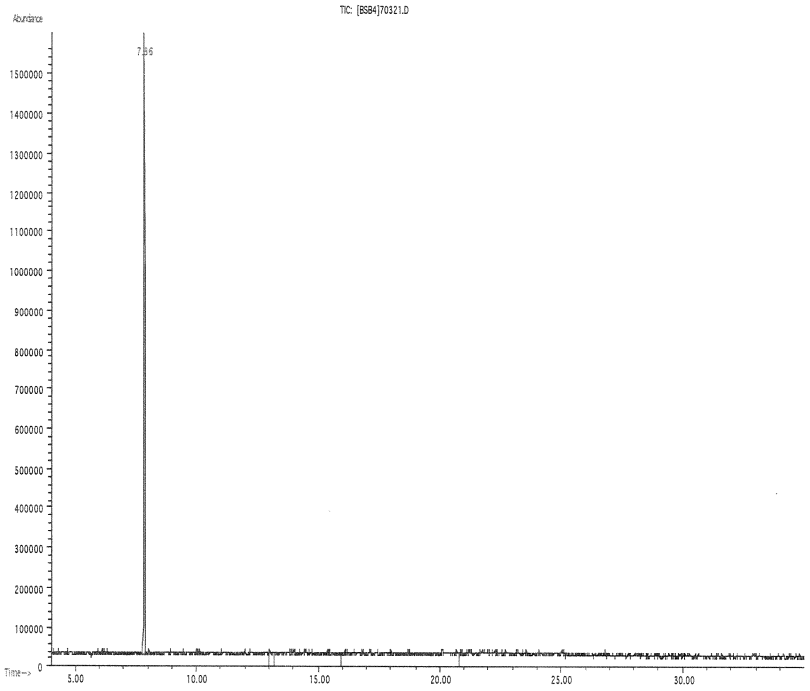
SJ 2/1/18
56424, 56425, 56426, 56427

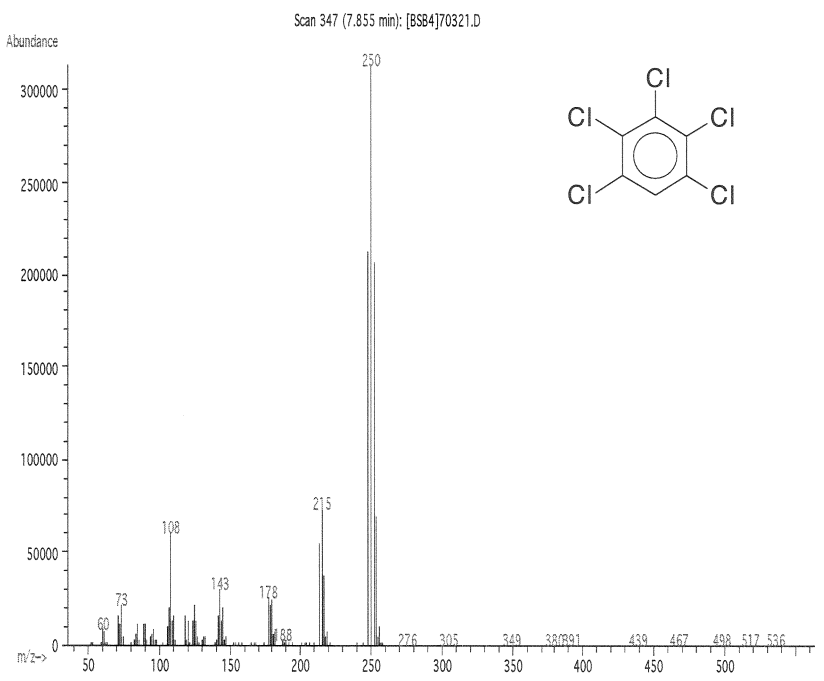
Gabriel Helland 063016
Formulated By: Gabriel Helland DATE

Pedro Rentas 063016
Reviewed By: Pedro L. Rentas DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Pentachlorobenzene	321	2705100	5000	99.5	0.5	0.12562	0.12578	5006.6	50.5	608-93-5	N/A	orl-rat 1080mg/kg

Method GC7MSD-1.M: Column: SPB-608 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Candice Warren.





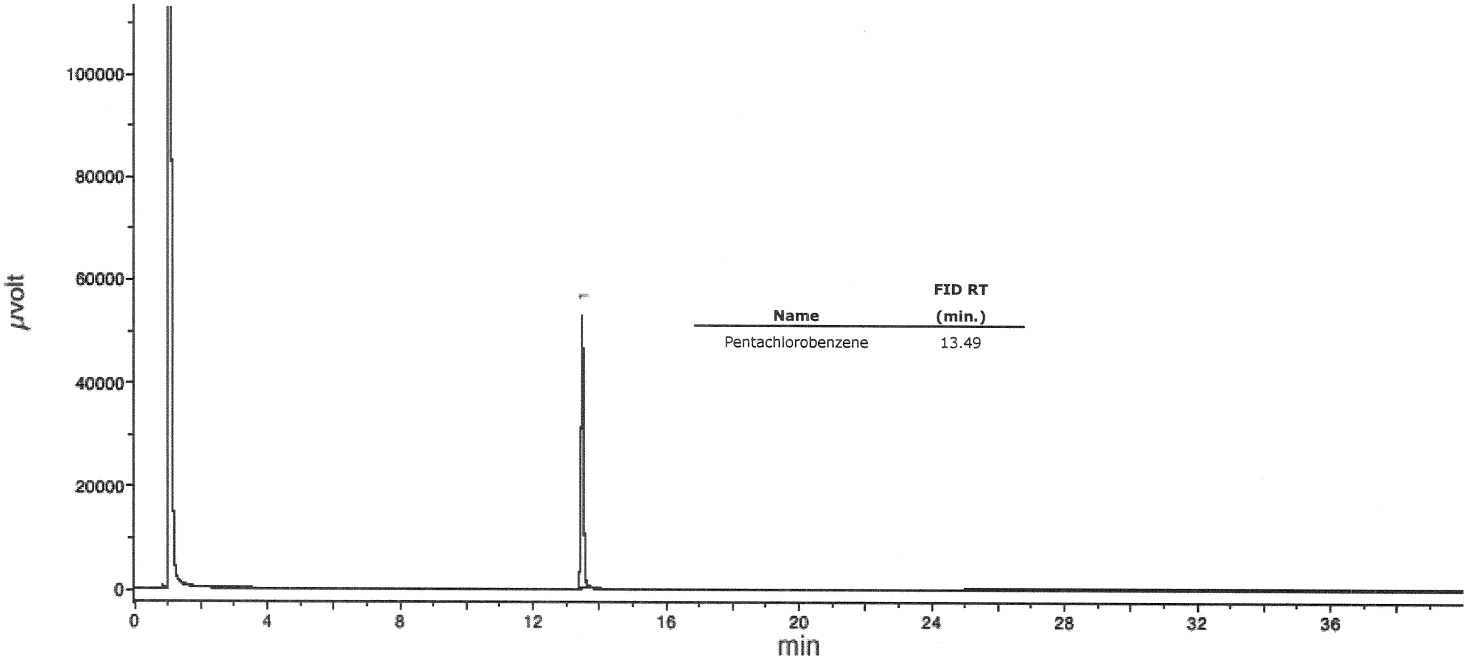
776

- **The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.**
- **Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).**
- **Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.**
- **All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.**
- **Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).**

Run 10, "P98495 L063016 [5000µg/mL in MeCl2]"

Run Length: 40.00 min, 23998 points at 10 points/second.
Created: Thu, Jun 30, 2016 at 11:36:41 PM.
Sampled: Sequence "063016-GC9M2", Method "GC9-M2".
Analyzed using Method "GC9-M2".

Comments
GC9-M2 Analysis by Candice Warren
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates; Total Flow = 300 ml/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) =360 mLOven Temp 1 = 50°C (1 min).
Rate = 10°C/min, Oven Temp 2 = 300°C (14 min), Total Run Time = 40 Minutes. Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = eDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 uL, Range = 6



777

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877

CERTIFIED WEIGHT REPORT

Part Number: 98496
Lot Number: 063016
Description: 1,2,3,4-Tetrachlorobenzene

Expiration Date: 063021
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 822-275872-11 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty

Solvent(s): **Lot#**
Methylene chloride 76782

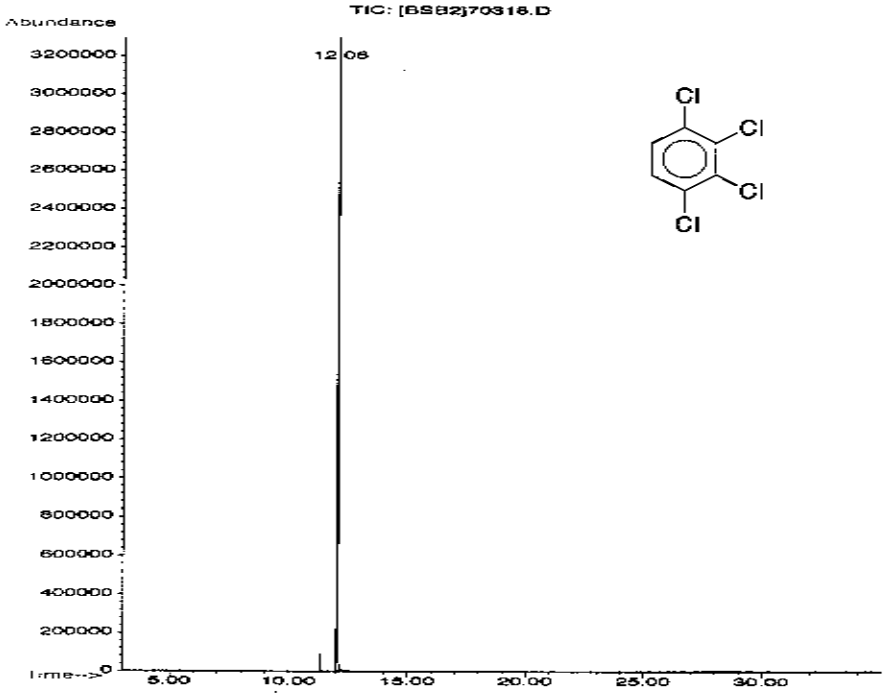
55305
55306 } UM
55307

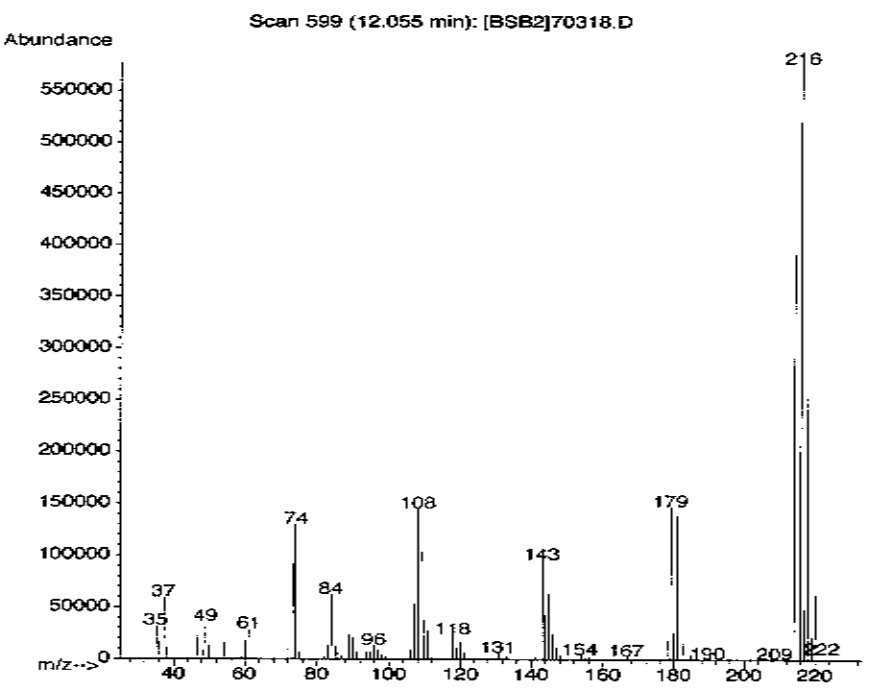
Gabriel Helland 063016
Formulated By: Gabriel Helland DATE

Pedro Rentas 063016
Reviewed By: Pedro L. Rentas DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,2,3,4-Tetrachlorobenzene	318	FBW01	5000	97.3	0.2	0.12846	0.12869	5009.1	21.0	634-66-2	N/A	orl-rat 1167mg/kg

Method GC8MSD-3.M: Column: (30m X 0.25mm ID X 0.25µm film thickness), Temp 1 = 50°C (1min.), Temp 2 = 300°C (4 min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 300°C. Analysis performed by Nicole Poisson.





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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30614 **Lot No.:** A0117024

Description : 1,4-dioxane-d8 Standard

1,4-dioxane-d8 Standard 2000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2019 **Storage:** 0°C or colder

S5395
1 } um
S5424

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.: K=2)		
1	1,4-Dioxane-d8	2,003.6 µg/mL	+/- 11.7582	µg/mL	Gravimetric
	CAS # 17647-74-4 (Lot I-19239)		+/- 42.9271	µg/mL	Unstressed
	Purity 99%		+/- 44.1733	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

Recd. JAH 10/19/17

ACCREDITED
ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32208 **Lot No.:** A0130330

S 6170 to S 6174
JAH

Description : Atrazine Standard

Atrazine Standard 1000 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2021 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Atrazine	1,008.0 µg/mL	+/- 5.9872	µg/mL	Gravimetric
	CAS # 1912-24-9 (Lot P7XPN)		+/- 45.9229	µg/mL	Unstressed
	Purity 99%		+/- 66.2995	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

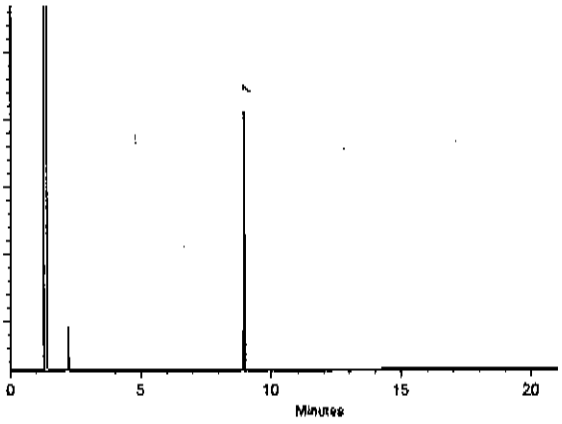
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cydnei L. Crust - Mix Technician

Date Mixed: 29-Aug-2017 **Balance:** 1128360905

Operations Tech-ARM QC

Date Passed: 30-Aug-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

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Received 12/18/17

12/18/17

Catalog No. : 31001 **Lot No.:** A0131451

Description : SV Tuning Compound Standard

Tuning Std Decafluorotriphenylphosphine 2500µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2020 **Storage:** 10°C or colder

S6327

S6328

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.I., K=2)		
1	DFTPP (Decafluorotriphenylphosphine)	2,516.0 µg/mL	+/- 14.9443	µg/mL	Gravimetric
	CAS # 5074-71-5 (Lot Q15B005)		+/- 113.3634	µg/mL	Unstressed
	Purity 99%		+/- 125.7821	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

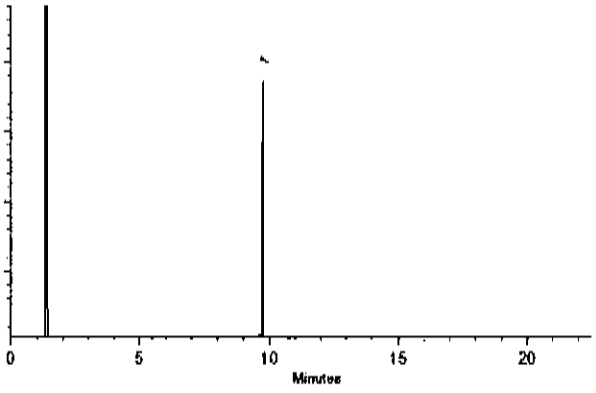
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Relish - Mix Technician

Date Mixed: 09-Oct-2017 **Balance:** B345965662

Date Passed: 10-Oct-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31810 **Lot No.:** A0132291

Description : OLC03.2 SVOA Deuterated Monitoring Compounds Mix

OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL/ampul, Methylene Chloride, 2000µg/mL

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2021 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

S6434 - S6448
09/21/18

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Phenol-d5 **CAS #** 4165-62-2 (Lot X-479) **Purity** 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL +/- 58.6221 µg/mL +/- 71.1271 µg/mL	Gravimetric Unstressed Stressed
2	bis(2-Chloroethyl) ether-d8 **CAS #** 93952-02-4 (Lot X-485) **Purity** 98%	2,013.9 µg/mL	+/- 11.8187 µg/mL +/- 58.7943 µg/mL +/- 71.3361 µg/mL	Gravimetric Unstressed Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-28977) **Purity** 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL +/- 58.6221 µg/mL +/- 71.1271 µg/mL	Gravimetric Unstressed Stressed
4	4-Methylphenol-d8 **CAS #** 190780-66-6 (Lot W-519) **Purity** 99%	2,010.0 µg/mL	+/- 11.7958 µg/mL +/- 58.6804 µg/mL +/- 71.1979 µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-25462) **Purity** 99%	2,009.0 µg/mL	+/- 11.7899 µg/mL +/- 58.6513 µg/mL +/- 71.1625 µg/mL	Gravimetric Unstressed Stressed
6	2-Nitrophenol-d4 **CAS #** 93951-78-1 (Lot H-151) **Purity** 99%	2,009.0 µg/mL	+/- 11.7899 µg/mL +/- 58.6513 µg/mL +/- 71.1625 µg/mL	Gravimetric Unstressed Stressed
7	2,4-Dichlorophenol-d3 **CAS #** 93951-74-7 (Lot AB-210) **Purity** 98%	2,012.9 µg/mL	+/- 11.8129 µg/mL +/- 58.7657 µg/mL +/- 71.3014 µg/mL	Gravimetric Unstressed Stressed

8	4-Chloroaniline-d4		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 191656-33-4	(Lot C-190)			+/-	58.6804	µg/mL	Unstressed
	Purity 99%				+/-	71.1979	µg/mL	Stressed
9	Dimethylphthalate-d6		2,011.0	µg/mL	+/-	11.8017	µg/mL	Gravimetric
	CAS # 85448-30-2	(Lot X-477)			+/-	58.7096	µg/mL	Unstressed
	Purity 99%				+/-	71.2334	µg/mL	Stressed
10	Acenaphthylene-d8		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 93951-97-4	(Lot CD-117)			+/-	58.6804	µg/mL	Unstressed
	Purity 99%				+/-	71.1979	µg/mL	Stressed
11	4-Nitrophenol-d4		2,018.8	µg/mL	+/-	11.8474	µg/mL	Gravimetric
	CAS # 93951-79-2	(Lot P141P53)			+/-	58.9374	µg/mL	Unstressed
	Purity 98%				+/-	71.5096	µg/mL	Stressed
12	Fluorene-d10		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 81103-79-9	(Lot M-149)			+/-	58.6804	µg/mL	Unstressed
	Purity 99%				+/-	71.1979	µg/mL	Stressed
13	4,6-Dinitro-2-methylphenol-d2		2,012.0	µg/mL	+/-	11.8075	µg/mL	Gravimetric
	CAS # 93951-76-9	(Lot AB-322)			+/-	58.7388	µg/mL	Unstressed
	Purity 99%				+/-	71.2688	µg/mL	Stressed
14	Anthracene-d10		2,008.0	µg/mL	+/-	11.7841	µg/mL	Gravimetric
	CAS # 1719-06-8	(Lot PR-20576)			+/-	58.6221	µg/mL	Unstressed
	Purity 99%				+/-	71.1271	µg/mL	Stressed
15	Pyrene-d10		2,011.9	µg/mL	+/-	11.8072	µg/mL	Gravimetric
	CAS # 1718-52-1	(Lot PR-14089)			+/-	58.7371	µg/mL	Unstressed
	Purity 98%				+/-	71.2667	µg/mL	Stressed
16	Benzo(a)pyrene-d12		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 63466-71-7	(Lot PR-28576)			+/-	58.6804	µg/mL	Unstressed
	Purity 99%				+/-	71.1979	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

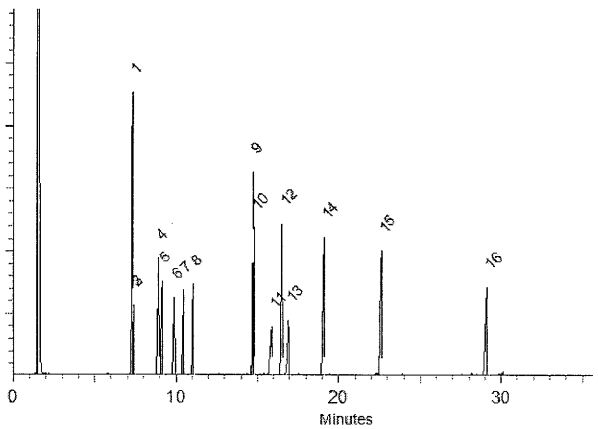
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cheryl Graham - Mix Technician

Date Mixed: 09-Nov-2017 **Balance:** B442140311

Justine Albertson - Operations Tech-ARM QC

Date Passed: 13-Nov-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

SJ
2/6/18

56428, 56429, 56430
56431, 56432

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31900 **Lot No.:** A0134696

Description : OLM 01.1 Revised SV MegaMix

OLM 01.1 Revised SV MegaMix 500-1000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2019 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Phenol		1,004.8 µg/mL	+/- 6.7163 µg/mL		Gravimetric
	CAS # 108-95-2	(Lot SHBF1351V)		+/- 12.4597 µg/mL		Unstressed
	Purity 99%			+/- 19.4003 µg/mL		Stressed
2	Bis(2-chloroethyl)ether		1,005.4 µg/mL	+/- 6.7209 µg/mL		Gravimetric
	CAS # 111-44-4	(Lot SHBD4430V)		+/- 12.4682 µg/mL		Unstressed
	Purity 99%			+/- 19.4135 µg/mL		Stressed
3	2-Chlorophenol		1,004.6 µg/mL	+/- 6.7155 µg/mL		Gravimetric
	CAS # 95-57-8	(Lot STBF2690V)		+/- 12.4581 µg/mL		Unstressed
	Purity 99%			+/- 19.3978 µg/mL		Stressed
4	2,2'-oxybis(1-chloropropane)		1,010.0 µg/mL	+/- 6.7511 µg/mL		Gravimetric
	CAS # 108-60-1	(Lot 5922200)		+/- 12.5242 µg/mL		Unstressed
	Purity 98%			+/- 19.5007 µg/mL		Stressed
5	2-Methylphenol (o-cresol)		1,009.1 µg/mL	+/- 6.7452 µg/mL		Gravimetric
	CAS # 95-48-7	(Lot SHBC1479V)		+/- 12.5132 µg/mL		Unstressed
	Purity 99%			+/- 19.4835 µg/mL		Stressed
6	Acetophenone		1,002.0 µg/mL	+/- 5.9516 µg/mL		Gravimetric
	CAS # 98-86-2	(Lot MKBR7156V)		+/- 12.0397 µg/mL		Unstressed
	Purity 99%			+/- 19.1016 µg/mL		Stressed
7	Hexachloroethane		1,001.4 µg/mL	+/- 6.6938 µg/mL		Gravimetric
	CAS # 67-72-1	(Lot 4H3SF)		+/- 12.4178 µg/mL		Unstressed
	Purity 99%			+/- 19.3351 µg/mL		Stressed

8	N-Nitroso-di-n-propylamine **CAS #** 621-64-7 **Purity** 99%	(Lot NOPCF)	1,001.0	µg/mL	+/- 6.7387 +/- 12.4388 +/- 19.3443	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	4-Methylphenol (p-cresol) **CAS #** 106-44-5 **Purity** 99%	(Lot 49396APV)	503.2	µg/mL	+/- 3.3695 +/- 6.2431 +/- 9.7179	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	3-Methylphenol (m-cresol) **CAS #** 108-39-4 **Purity** 99%	(Lot 04627KA)	501.0	µg/mL	+/- 3.3548 +/- 6.2160 +/- 9.6756	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot SHBG5577V)	1,008.6	µg/mL	+/- 6.7422 +/- 12.5077 +/- 19.4751	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Isophorone **CAS #** 78-59-1 **Purity** 98%	(Lot MKBG2442V)	1,009.8	µg/mL	+/- 6.7503 +/- 12.5227 +/- 19.4983	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	2-Nitrophenol **CAS #** 88-75-5 **Purity** 99%	(Lot BCBH7602V)	1,004.6	µg/mL	+/- 6.7151 +/- 12.4574 +/- 19.3966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	2,4-Dimethylphenol **CAS #** 105-67-9 **Purity** 99%	(Lot 10165155)	1,002.4	µg/mL	+/- 6.7005 +/- 12.4302 +/- 19.3544	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Bis(2-chloroethoxy)methane **CAS #** 111-91-1 **Purity** 99%	(Lot 5670100)	1,007.4	µg/mL	+/- 6.7343 +/- 12.4930 +/- 19.4521	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	2,4-Dichlorophenol **CAS #** 120-83-2 **Purity** 99%	(Lot BCBJ8113V)	1,008.6	µg/mL	+/- 6.7418 +/- 12.5070 +/- 19.4739	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBW2603V)	1,004.4	µg/mL	+/- 6.7138 +/- 12.4550 +/- 19.3930	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	4-Chloroaniline **CAS #** 106-47-8 **Purity** 99%	(Lot BCBJ1580V)	1,002.0	µg/mL	+/- 6.7455 +/- 12.4513 +/- 19.3637	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 99%	(Lot J31X013)	1,003.3	µg/mL	+/- 6.7067 +/- 12.4419 +/- 19.3725	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	2-Methylnaphthalene **CAS #** 91-57-6 **Purity** 95%	(Lot STBF0201V)	1,000.4	µg/mL	+/- 6.7344 +/- 12.4308 +/- 19.3318	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	4-Chloro-3-methylphenol **CAS #** 59-50-7 **Purity** 99%	(Lot STBC7309V)	1,007.0	µg/mL	+/- 6.7314 +/- 12.4876 +/- 19.4437	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	1,2,4,5-Tetrachlorobenzene **CAS #** 95-94-3 **Purity** 99%	(Lot MKBW7717V)	1,001.0	µg/mL	+/- 6.7387 +/- 12.4388 +/- 19.3443	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	Hexachlorocyclopentadiene **CAS #** 77-47-4 **Purity** 99%	(Lot 0012015)	1,007.6	µg/mL	+/- 6.7355 +/- 12.4953 +/- 19.4558	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	2,4,6-Trichlorophenol		1,005.9	µg/mL	+/- 6.7243	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot MKBL4698V)			+/- 12.4744	µg/mL	Unstressed
	Purity 99%				+/- 19.4232	µg/mL	Stressed
25	2,4,5-Trichlorophenol		1,002.6	µg/mL	+/- 6.7017	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHM01)			+/- 12.4326	µg/mL	Unstressed
	Purity 99%				+/- 19.3580	µg/mL	Stressed
26	2-Chloronaphthalene		1,008.2	µg/mL	+/- 6.7393	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot AJ2UI)			+/- 12.5023	µg/mL	Unstressed
	Purity 99%				+/- 19.4666	µg/mL	Stressed
27	Biphenyl		1,000.0	µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot MKBV9808V)			+/- 12.0157	µg/mL	Unstressed
	Purity 99%				+/- 19.0635	µg/mL	Stressed
28	2-Nitroaniline		1,002.0	µg/mL	+/- 6.7455	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBK7597V)			+/- 12.4513	µg/mL	Unstressed
	Purity 99%				+/- 19.3637	µg/mL	Stressed
29	Acenaphthylene		1,004.4	µg/mL	+/- 6.7138	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot L18Q)			+/- 12.4551	µg/mL	Unstressed
	Purity 98%				+/- 19.3931	µg/mL	Stressed
30	Dimethylphthalate		1,008.1	µg/mL	+/- 6.7385	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)			+/- 12.5008	µg/mL	Unstressed
	Purity 99%				+/- 19.4642	µg/mL	Stressed
31	2,6-Dinitrotoluene		1,008.8	µg/mL	+/- 6.7431	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot BCBB8606V)			+/- 12.5093	µg/mL	Unstressed
	Purity 99%				+/- 19.4775	µg/mL	Stressed
32	Acenaphthene		1,009.1	µg/mL	+/- 6.7452	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKBW9515V)			+/- 12.5132	µg/mL	Unstressed
	Purity 99%				+/- 19.4835	µg/mL	Stressed
33	3-Nitroaniline		1,001.5	µg/mL	+/- 6.7421	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot MKBX1283V)			+/- 12.4451	µg/mL	Unstressed
	Purity 99%				+/- 19.3540	µg/mL	Stressed
34	2,4-Dinitrophenol		1,002.1	µg/mL	+/- 6.6984	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot STBF9439V)			+/- 12.4264	µg/mL	Unstressed
	Purity 99%				+/- 19.3484	µg/mL	Stressed
35	Dibenzofuran		1,004.0	µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBW2691V)			+/- 12.0637	µg/mL	Unstressed
	Purity 99%				+/- 19.1397	µg/mL	Stressed
36	2,4-Dinitrotoluene		1,003.1	µg/mL	+/- 6.7051	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/- 12.4388	µg/mL	Unstressed
	Purity 99%				+/- 19.3677	µg/mL	Stressed
37	4-Nitrophenol		1,007.3	µg/mL	+/- 6.7330	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKBP6945V)			+/- 12.4907	µg/mL	Unstressed
	Purity 99%				+/- 19.4485	µg/mL	Stressed
38	2,3,4,6-Tetrachlorophenol		1,000.0	µg/mL	+/- 6.7320	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot B17W03081)			+/- 12.4264	µg/mL	Unstressed
	Purity 99%				+/- 19.3250	µg/mL	Stressed
39	Fluorene		1,003.6	µg/mL	+/- 6.7088	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 10193329)			+/- 12.4457	µg/mL	Unstressed
	Purity 99%				+/- 19.3785	µg/mL	Stressed

40	4-Chlorophenyl phenyl ether **CAS #** 7005-72-3 **Purity** 99%	(Lot MKBX5225V)	1,009.2	µg/mL	+/- 6.7460 +/- 12.5147 +/- 19.4859	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	Diethylphthalate **CAS #** 84-66-2 **Purity** 99%	(Lot MKBV9622V)	1,004.6	µg/mL	+/- 6.7155 +/- 12.4581 +/- 19.3978	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	4-Nitroaniline **CAS #** 100-01-6 **Purity** 98%	(Lot BCBG4702V)	1,000.1	µg/mL	+/- 6.7326 +/- 12.4275 +/- 19.3267	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) **CAS #** 534-52-1 **Purity** 98%	(Lot LC22071V)	1,004.9	µg/mL	+/- 6.7172 +/- 12.4612 +/- 19.4027	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	Diphenylamine **CAS #** 122-39-4 **Purity** 99%	(Lot MKBN8295V)	1,002.5	µg/mL	+/- 6.7488 +/- 12.4575 +/- 19.3733	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	4-Bromophenyl phenyl ether **CAS #** 101-55-3 **Purity** 98%	(Lot STBB9729V)	1,007.6	µg/mL	+/- 6.7351 +/- 12.4946 +/- 19.4546	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	Hexachlorobenzene **CAS #** 118-74-1 **Purity** 99%	(Lot LC24211V)	1,009.8	µg/mL	+/- 6.7502 +/- 12.5225 +/- 19.4980	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	Pentachlorophenol **CAS #** 87-86-5 **Purity** 99%	(Lot 170306KJA)	1,002.9	µg/mL	+/- 6.7042 +/- 12.4372 +/- 19.3653	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Phenanthrene **CAS #** 85-01-8 **Purity** 99%	(Lot MKCB1762V)	1,007.1	µg/mL	+/- 6.7318 +/- 12.4884 +/- 19.4449	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Anthracene **CAS #** 120-12-7 **Purity** 99%	(Lot MKBV7759V)	1,003.6	µg/mL	+/- 6.7088 +/- 12.4457 +/- 19.3785	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Carbazole **CAS #** 86-74-8 **Purity** 99%	(Lot 5945900)	1,001.5	µg/mL	+/- 6.7421 +/- 12.4451 +/- 19.3540	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Di-n-butylphthalate **CAS #** 84-74-2 **Purity** 99%	(Lot MKBT0244V)	1,005.3	µg/mL	+/- 6.7201 +/- 12.4667 +/- 19.4111	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Fluoranthene **CAS #** 206-44-0 **Purity** 98%	(Lot MKBQ6360V)	1,009.3	µg/mL	+/- 6.7466 +/- 12.5158 +/- 19.4877	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	Pyrene **CAS #** 129-00-0 **Purity** 99%	(Lot BCBR9108V)	1,003.1	µg/mL	+/- 6.7055 +/- 12.4395 +/- 19.3689	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	Benzyl butyl phthalate **CAS #** 85-68-7 **Purity** 98%	(Lot MKBZ4553V)	1,003.6	µg/mL	+/- 6.7085 +/- 12.4452 +/- 19.3777	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	Benz(a)anthracene **CAS #** 56-55-3 **Purity** 99%	(Lot ER031412-01)	1,008.7	µg/mL	+/- 6.7427 +/- 12.5085 +/- 19.4763	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Chrysene		1,004.5	µg/mL	+/-	6.7147	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot 012015)			+/-	12.4566	µg/mL	Unstressed
	Purity 99%				+/-	19.3954	µg/mL	Stressed
57	3,3'-Dichlorobenzidine		1,001.5	µg/mL	+/-	6.7421	µg/mL	Gravimetric
	CAS # 91-94-1	(Lot 170112KJA)			+/-	12.4451	µg/mL	Unstressed
	Purity 99%				+/-	19.3540	µg/mL	Stressed
58	Bis(2-ethylhexyl)phthalate		1,009.9	µg/mL	+/-	6.7510	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBZ3868V)			+/-	12.5240	µg/mL	Unstressed
	Purity 99%				+/-	19.5004	µg/mL	Stressed
59	Di-n-octyl phthalate		1,007.7	µg/mL	+/-	6.7360	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 5555000)			+/-	12.4961	µg/mL	Unstressed
	Purity 99%				+/-	19.4570	µg/mL	Stressed
60	Benzo(b)fluoranthene		1,003.9	µg/mL	+/-	6.7105	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot ER03101401)			+/-	12.4488	µg/mL	Unstressed
	Purity 99%				+/-	19.3834	µg/mL	Stressed
61	Benzo(k)fluoranthene		1,003.8	µg/mL	+/-	6.7096	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot 012012K)			+/-	12.4473	µg/mL	Unstressed
	Purity 99%				+/-	19.3809	µg/mL	Stressed
62	Benzo(a)pyrene		1,003.1	µg/mL	+/-	6.7051	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	12.4388	µg/mL	Unstressed
	Purity 99%				+/-	19.3677	µg/mL	Stressed
63	Indeno(1,2,3-cd)pyrene		1,009.3	µg/mL	+/-	6.7468	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	12.5163	µg/mL	Unstressed
	Purity 99%				+/-	19.4883	µg/mL	Stressed
64	Dibenz(a,h)anthracene		1,002.1	µg/mL	+/-	6.6988	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	12.4271	µg/mL	Unstressed
	Purity 99%				+/-	19.3496	µg/mL	Stressed
65	Benzo(g,h,i)perylene		1,006.2	µg/mL	+/-	6.7259	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER05121401)			+/-	12.4775	µg/mL	Unstressed
	Purity 99%				+/-	19.4280	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

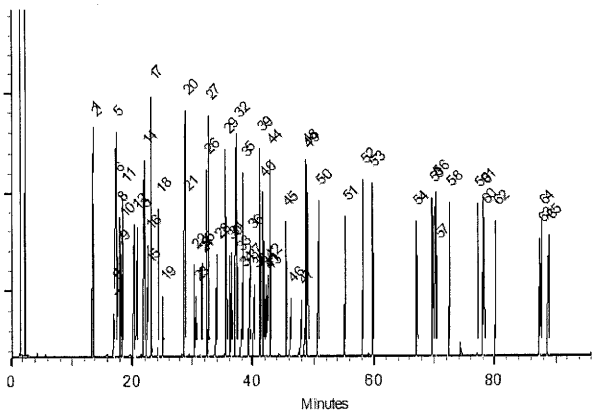
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Date Mixed: 30-Jan-2018 **Balance:** 1122030677

Justine Albertson - Operations Tech-ARM QC

Date Passed: 01-Feb-2018

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

PCI SCIENTIFIC SUPPLY, INC.
41 PLYMOUTH STREET
FAIRFIELD, NJ 07004
P# (973) 244-9002
F# (973) 244-9448

E 2519

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na_2SO_4
SPECIFICATION NUMBER :	6399	RELEASE DATE:	NOV/30/2017
LOT NUMBER :	743502		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na_2SO_4)	Min. 99.0 %	99.4 %
pH of a 5% solution at 25°C	5.2 - 9.2	5.8
Insoluble matter	Max. 0.01 %	0.007 %
Loss on ignition	Max. 0.5 %	0.1 %
Chloride (Cl)	Max. 0.001 %	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO_4)	Max. 0.001 %	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001 %	<0.001 %
Calcium (Ca)	Max. 0.01 %	0.001 %
Magnesium (Mg)	Max. 0.005 %	0.0002 %
Potassium (K)	Max. 0.008 %	0.002 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreing matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1 %	0.0 %
Retained on US Standard No. 60 sieve	Min. 94 %	98.1 %
Through US Standard No. 60 sieve	Max. 5 %	1.8 %
Through US Standard No. 100 sieve	Max. 10 %	0.0 %

QC: PhC Irma Belmares

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Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

SJ 9/6/14

Catalog No. : 31206 **Lot No.:** A0139548

Description : SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

S7047 to S7076

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2024 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	2,002.3 µg/mL	+/- 11.6415 µg/mL +/- 90.1848 µg/mL +/- 100.0712 µg/mL	Gravimetric Unstressed Stressed
2	Naphthalene-d8 **CAS #** 1146-65-2 (Lot M-1452) **Purity** 99%	2,001.2 µg/mL	+/- 11.6351 µg/mL +/- 90.1352 µg/mL +/- 100.0162 µg/mL	Gravimetric Unstressed Stressed
3	Acenaphthene-d10 **CAS #** 15067-26-2 (Lot PR-25444) **Purity** 99%	2,001.2 µg/mL	+/- 11.6351 µg/mL +/- 90.1352 µg/mL +/- 100.0162 µg/mL	Gravimetric Unstressed Stressed
4	Phenanthrene-d10 **CAS #** 1517-22-2 (Lot PR-23065) **Purity** 99%	2,000.5 µg/mL	+/- 11.6311 µg/mL +/- 90.1037 µg/mL +/- 99.9812 µg/mL	Gravimetric Unstressed Stressed
5	Chrysene-d12 **CAS #** 1719-03-5 (Lot PR-28823) **Purity** 99%	2,003.3 µg/mL	+/- 11.6474 µg/mL +/- 90.2298 µg/mL +/- 100.1211 µg/mL	Gravimetric Unstressed Stressed
6	Perylene-d12 **CAS #** 1520-96-3 (Lot PR-24113) **Purity** 99%	2,002.8 µg/mL	+/- 11.6445 µg/mL +/- 90.2073 µg/mL +/- 100.0962 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

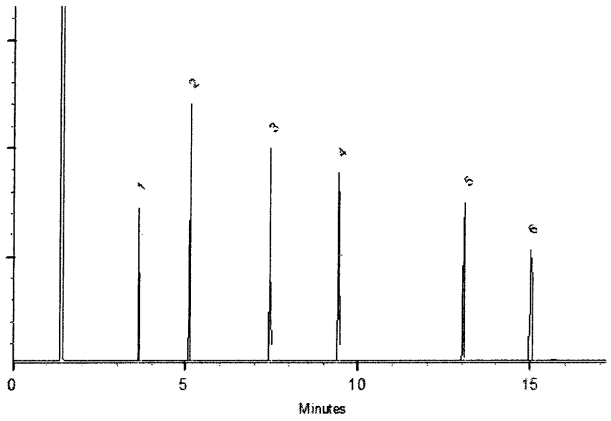
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dustin J Lidgett
Dustin Lidgett - Mix Technician

Date Mixed: 11-Jul-2018 **Balance:** 1128353505

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 16-Jul-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate

A2LA ACCREDITED
ISO 17034 Accredited
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Certificate #3222.01

ilac-MRA

A2LA ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555224 **Lot No.:** A0141109 From: 57083 to: 57142

Description : Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2020 **Storage:** 10°C or colder

SJ 9/14/17

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,2,4,5-Tetrachlorobenzene **CAS #** 95-94-3 (Lot MKBW7717V) **Purity** 99%	1,002.0 µg/mL	+/- 5.951576 µg/mL +/- 32.142836 µg/mL +/- 37.357828 µg/mL	Gravimetric Unstressed Stressed
2	Acetophenone **CAS #** 98-86-2 (Lot STBG8586) **Purity** 99%	1,003.0 µg/mL	+/- 5.957516 µg/mL +/- 32.174914 µg/mL +/- 37.395111 µg/mL	Gravimetric Unstressed Stressed
3	Benzaldehyde **CAS #** 100-52-7 (Lot SHBG8690V) **Purity** 99%	1,002.0 µg/mL	+/- 5.951576 µg/mL +/- 32.142836 µg/mL +/- 37.357828 µg/mL	Gravimetric Unstressed Stressed
4	Benzoic acid **CAS #** 65-85-0 (Lot MKCC9722) **Purity** 99%	1,001.0 µg/mL	+/- 5.945637 µg/mL +/- 32.110757 µg/mL +/- 37.320545 µg/mL	Gravimetric Unstressed Stressed
5	Biphenyl **CAS #** 92-52-4 (Lot MKBV9808V) **Purity** 99%	1,000.0 µg/mL	+/- 5.939697 µg/mL +/- 32.078678 µg/mL +/- 37.283262 µg/mL	Gravimetric Unstressed Stressed

800

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

F. Joseph Tallon - Mix Technician

Date Mixed: 29-Aug-2018 **Balance:** B442140311

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate

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Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555223 **Lot No.:** A0141282 From 57143 to 57172

Description : Custom 8270 Plus Standard #1

Custom 8270 Plus Standard #1 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2020 **Storage:** 10°C or colder

Handling: This product is photosensitive.

SJ 9/14/18

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	3,3'-Dichlorobenzidine **CAS #** 91-94-1 (Lot 070518JACG) **Purity** 99%	1,010.0 µg/mL	+/- 5.9991 µg/mL +/- 46.4105 µg/mL +/- 47.5978 µg/mL	Gravimetric Unstressed Stressed
2	Atrazine **CAS #** 1912-24-9 (Lot 77P7D) **Purity** 99%	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 45.9510 µg/mL +/- 47.1265 µg/mL	Gravimetric Unstressed Stressed
3	Benzidine **CAS #** 92-87-5 (Lot 180810JACG) **Purity** 99%	1,008.0 µg/mL	+/- 5.9872 µg/mL +/- 46.3186 µg/mL +/- 47.5035 µg/mL	Gravimetric Unstressed Stressed
4	epsilon-Caprolactam **CAS #** 105-60-2 (Lot I16X016) **Purity** 99%	1,008.0 µg/mL	+/- 5.9872 µg/mL +/- 46.3186 µg/mL +/- 47.5035 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Brandon Reish - Mix Technician

Date Mixed: 05-Sep-2018 **Balance:** B345965662

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

J.T.Baker® | avantor™

Material No.: 9266-A4
Batch No.: 0000207558
Manufactured Date: 2018/08/03
Expiration Date: 2019/11/02
Revision No: 1

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	3
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0000 ppm	0.2000
Titrable Acid (µeq/g)	<= 0.3	< 0.1
Chloride (Cl)	<= 10 ppm	< 5
Water (by KF, coulometric)	<= 0.02 %	0.01

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E 2510

ISO
Phillipsburg, NJ 9001:2015, FSSC 22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2008
Selangor, Malaysia 9001:2008
Dehradun, India 9001:2015, 14001:2015, 13485:2016
Mumbai, India 9001:2015
Panoli, India 9001:2015

James T Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.573.2600
Avantor Performance Materials, LLC.
3477 Corporate Parkway. Center Valley, PA 18034. U.S.A. Phone: 610.573.2600 . Fax: 610.573.2610

806

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

J.T.Baker® | avantor

Material No.: 9266-A4
Batch No.: 0000211047
Manufactured Date: 2018/09/11
Expiration Date: 2019/12/11
Revision No: 1

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0000 ppm	0.2000
Titrable Acid (µeq/g)	<= 0.3	< 0.1
Chloride (Cl)	<= 10 ppm	< 5
Water (by KF, coulometric)	<= 0.02 %	< 0.01

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E 2529

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

807

Acetone
ULTRA RESI-ANALYZED
For Organic Residue Analysis

J.T.Baker® | avantor

Material No.: 9254-03
Batch No.: 0000196204
Manufactured Date: 2018/02/06
Expiration Date: 2021/02/05
Revision No: 1

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected for water)	>= 99.4 %	99.8
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0000 ppm	0.3000
Substances Reducing Permanganate	Passes Test	PT
Titrable Acid (µeq/g)	<= 0.3	0.3
Titrable Base (µeq/g)	<= 0.6	< 0.1
Water (H_2O)	<= 0.5 %	0.2
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	2
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E 2534

ISO
Phillipsburg, NJ 9001:2008, 14001:2004, FSSC 22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Deventer, The Netherlands 9001:2008, 14001:2004, 13485:2003
Gliwice, Poland 9001:2008, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2008
Panoli, India 9001:2008

James Ethier
Jamie Ethier
Vice President Global Quality

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808

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

J.T.Baker | avantor

Material No.: 9266-A4
Batch No.: 0000211047
Manufactured Date: 2018/09/11
Expiration Date: 2019/12/11
Revision No: 1

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0000 ppm	0.2000
Titrable Acid (µeq/g)	<= 0.3	< 0.1
Chloride (Cl)	<= 10 ppm	< 5
Water (by KF, coulometric)	<= 0.02 %	< 0.01

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E 2536

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India 9001:2015, 17025:2005
Pandi, India 9001:2015

James T Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

809

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

J.T.Baker® | avantor

Material No.: 9266-A4
Batch No.: 0000214356
Manufactured Date: 2018/10/23
Expiration Date: 2020/01/22
Revision No: 1

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	3
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0000 ppm	0.2000
Titrable Acid (µeq/g)	<= 0.3	< 0.1
Chloride (Cl)	<= 10 ppm	< 5
Water (by KF, coulometric)	<= 0.02 %	< 0.01

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E 2560

ISO
Phillipsburg, NJ 9001:2015, FSSC 22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

James T Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

CHEMTECH

STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2564	50 ng/ul DFTPP	SP4489	09/10/2018	02/28/2019	Jabed

FROM 0.200ml of S6327 + 9.800ml of E2510 = Final Quantity: 10.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2575	som02.1 stock 200 ppm	SP4531	10/19/2018	02/28/2019	Jabed

FROM 0.200ml of E2529 + 0.200ml of S5307 + 0.200ml of S5414 + 0.200ml of S6424 + 0.200ml of S6567 + 0.500ml of S5317 + 0.500ml of S6177 + 0.500ml of S6747 + 0.500ml of S6834 + 1.000ml of S6173 + 1.000ml of S6430 = Final Quantity: 5.000 ml

CHEMTECH

STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2581	SOM02.1-SSTD160	SP4532	10/19/2018	02/28/2019	Jabed

FROM 0.010ml of S6792 + 0.200ml of E2529 + 0.800ml of SP4531 = Final Quantity: 1.010 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2580	SOM02.1-SSTD080	SP4533	10/19/2018	02/28/2019	Jabed

FROM 0.010ml of S6792 + 0.600ml of E2529 + 0.400ml of SP4531 = Final Quantity: 1.010 ml

CHEMTECH

STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2579	SOM02.1-SSTD040	SP4534	10/19/2018	02/28/2019	Jabed

FROM 0.010ml of S6792 + 0.800ml of E2529 + 0.200ml of SP4531 = Final Quantity: 1.010 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2578	SOM02.1-SSTD020	SP4535	10/19/2018	02/28/2019	Jabed

FROM 0.010ml of S6792 + 0.900ml of E2529 + 0.100ml of SP4531 = Final Quantity: 1.010 ml

CHEMTECH

STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2577	SOM02.1-SSTD010	SP4536	10/19/2018	02/28/2019	Jabed

FROM 0.010ml of S6792 + 0.950ml of E2529 + 0.050ml of SP4531 = Final Quantity: 1.010 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2576	SOM02.1-SSTD005	SP4537	10/19/2018	02/28/2019	Jabed

FROM 0.010ml of S6792 + 0.975ml of E2529 + 0.025ml of SP4531 = Final Quantity: 1.010 ml

CHEMTECH

STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3499	SOM-STOCK ICV 200 ppm	SP4538	10/19/2018	03/28/2019	Jabed

FROM 0.080ml of S4706 + 0.080ml of S5303 + 0.080ml of S6540 + 0.080ml of S6564 + 0.200ml of S6438 + 0.280ml of E2529 + 0.400ml of S6901 + 0.400ml of S7087 + 0.400ml of S7159 = Final Quantity: 2.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3500	SOM-ICV 20 ppm	SP4539	10/19/2018	03/28/2019	Jabed

FROM 0.010ml of S6792 + 0.900ml of E2529 + 0.100ml of SP4538 = Final Quantity: 1.010 ml

CHEMTECH

STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3616	SOM Surrogates 80/16/0.8 ppm	SP4559	10/31/2018	02/28/2019	Jabed

FROM 0.080ml of S6909 + 0.600ml of S5414 + 1.000ml of S5415 + 1.250ml of S6749 + 1.250ml of S6750 + 1.250ml of S6751 + 1.250ml of S6754 + 1.500ml of S6752 + 1.500ml of S6753 + 190.320ml of H1316 =
Final Quantity: 200.000 ml

CHEMTECH

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	0000207558	02/28/2019	08/31/2018 / Rajesh	08/31/2018 / Rajesh	E2510

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	/ Sodium sulfate (anhyhdrous)	743502	02/19/2019	08/20/2018 / Rajesh	08/13/2018 / Rajesh	E2519

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	0000211047	04/08/2019	10/09/2018 / Rajesh	10/08/2018 / Rajesh	E2529

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	0000196204	02/05/2021	10/23/2018 /	10/18/2018 / Rajesh	E2534

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	0000211047	04/18/2019	10/19/2018 / Rajesh	10/15/2018 / Rajesh	E2536

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	0000214356	06/02/2019	12/03/2018 / rajesh	11/26/2018 / rajesh	E2560

CHEMTECH

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9093-03 / Methanol, HPLC (cs/4x4L)	0000119840	08/16/2020	02/23/2016 / umangi	01/22/2016 / UMANGI	H1316

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	98495 / Pentachlorobenzene, 5000 ug/mL, in MeCl2	061115	06/11/2020	03/28/2017 / Sohil	08/31/2015 / umangi	S4706

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	98496 / 1,2,3,4-Tetrachlorobenzene, 5000 ug/mL, in MeCl2	061115	06/11/2020	08/08/2016 / UMANGI	07/01/2016 / UMANGI	S5303

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	98496 / 1,2,3,4-Tetrachlorobenzene, 5000 ug/mL, in MeCl2	063016	06/11/2020	10/12/2018 / Jabed	07/01/2016 / UMANGI	S5307

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	90494 / 1-Methylnaphthalene, 2000 ug/mL, in methylene chloride	062216	07/03/2019	10/12/2018 / Jabed	07/01/2016 / UMANGI	S5317

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30614 / 1,4-Dioxane-D8 Standard	A0117024	02/28/2019	10/12/2018 / Jabed	06/27/2016 / umangi	S5414

CHEMTECH

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30614 / 1,4-Dioxane-D8 Standard	A0117024	02/28/2019	10/31/2018 / Jabed	06/27/2016 / umangi	S5415

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32208 / atrazine, 1,000 µg/mL in acetone, 1 mL/ampul	A0130330	04/30/2021	08/13/2018 / Jabed	10/19/2017 / Jagrut	S6173

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	33017 / Benzaldehyde, 2000 ug/ml	A0128835	03/31/2019	10/12/2018 / Jabed	10/19/2017 / Jagrut	S6177

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31001 / SV Tuning Compound Standard, 2500 ug/ml,	A0131451	10/31/2020	01/29/2018 / Jagrut	12/18/2017 / Jagrut	S6327

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	98495 / Pentachlorobenzene, 5000 ug/mL, in MeCl2	063016	06/30/2021	10/12/2018 / Jabed	02/01/2018 / Sohil	S6424

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31900 / SOM01.1 Mega Mix, 500-1000 ug/ml	A0134696	07/31/2019	10/12/2018 / Jabed	02/06/2018 / Sohil	S6430

CHEMTECH

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0132291	08/20/2021	05/07/2018 / Jabed	02/22/2018 / Jabed	S6438

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30614 / 1,4-Dioxane-D8 Standard	A0134839	02/28/2021	07/02/2018 / Jabed	04/04/2018 / Jabed	S6540

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0131219	09/30/2022	09/17/2018 / Jabed	04/04/2018 / Jabed	S6564

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0131219	03/28/2019	10/12/2018 / Jabed	04/04/2018 / Jabed	S6567

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	09/21/2018 / Jabed	05/24/2018 / Jabed	S6747

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6749

CHEMTECH

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6750

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6751

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6752

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6753

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6754

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 1mL	A0136809	03/31/2024	09/27/2018 / Jagrut	05/31/2018 / Sohil	S6792

CHEMTECH

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31833 / caprolactam, 2,000 µg/mL in methylene chloride, 1 mL/ampul	A0138507	06/30/2020	10/12/2018 / Jabed	06/07/2018 / Sohil	S6834

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]	A0132384	03/28/2019	10/12/2018 / Jabed	06/14/2018 / Jabed	S6901

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM	A0137718	04/30/2024	07/02/2018 / Jabed	06/22/2018 / Sohil	S6909

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 1mL	A0139548	06/30/2024	12/07/2018 / Jagrut	09/06/2018 / Sohil	S7063

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at $85 per ampul if requested - contact ARM with Request] [CS 4978-2]	A0141109	08/31/2020	10/12/2018 / Jabed	11/28/2017 / Sohil	S7087

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at $100 per ampul if requested - contact ARM with Request] [CS 4978-1]	A0141282	03/28/2019	10/12/2018 / Jabed	09/14/2018 / Sohil	S7159

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31853 **Lot No.:** A0131219

Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2022 **Storage:** 0°C or colder

S6541
10
S6570
M.U.
04/04/2018

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight:volume)	Expanded Uncertainty (95% C.L., K=2)		
1	1,4-Dioxane	2,000.0 µg/mL	+/- 11.7371	µg/mL	Gravimetric
	CAS # 123-91-1 (Lot SHBH5677)		+/- 42.8500	µg/mL	Unstressed
	Purity 99%		+/- 44.0940	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

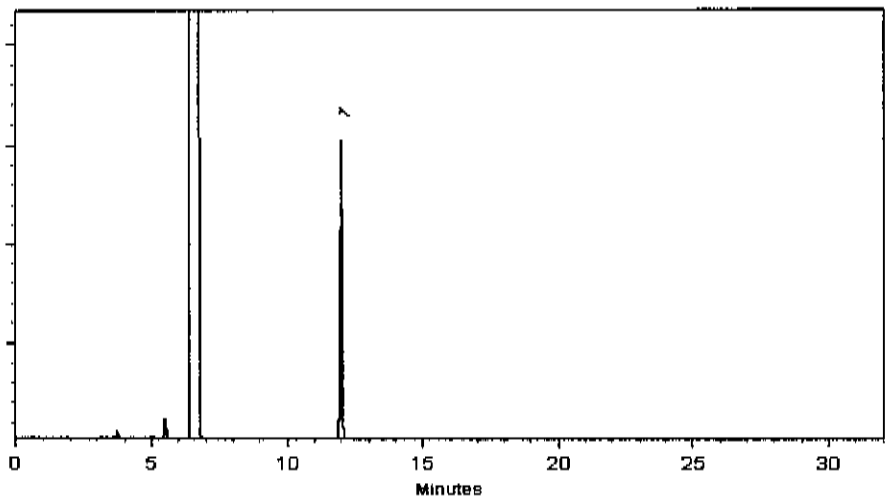
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cydnel L. Cruz
Cydnel L. Cruz - Mix Technician

Date Mixed: 29-Sep-2017 **Balance:** B442140311

Jennifer Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 03-Oct-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value If the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

S6877
10
S6906 M.U.
06/14/18

Catalog No. : 31850 **Lot No.:** A0132384

Description : 8270 MegaMix®

8270 MegaMix® 500-1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2019 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.: K=2)		
1	Pyridine		1,002.4 µg/mL		+/- 5.8277 µg/mL		Gravimetric
	CAS # 110-86-1	(Lot SHBC7174V)			+/- 30.3193 µg/mL		Unstressed
	Purity 99%				+/- 30.3193 µg/mL		Stressed
2	N-Nitrosodimethylamine		1,003.3 µg/mL		+/- 5.8333 µg/mL		Gravimetric
	CAS # 62-75-9	(Lot 170310JLM)			+/- 30.3480 µg/mL		Unstressed
	Purity 99%				+/- 30.3480 µg/mL		Stressed
3	Aniline		1,003.2 µg/mL		+/- 5.8324 µg/mL		Gravimetric
	CAS # 62-53-3	(Lot K22Z462)			+/- 30.3435 µg/mL		Unstressed
	Purity 99%				+/- 30.3435 µg/mL		Stressed
4	2-Chlorophenol		1,000.3 µg/mL		+/- 5.8155 µg/mL		Gravimetric
	CAS # 95-57-8	(Lot STBF2690V)			+/- 30.2558 µg/mL		Unstressed
	Purity 99%				+/- 30.2558 µg/mL		Stressed
5	Phenol		1,000.6 µg/mL		+/- 5.8176 µg/mL		Gravimetric
	CAS # 108-95-2	(Lot SHBF1351V)			+/- 30.2663 µg/mL		Unstressed
	Purity 99%				+/- 30.2663 µg/mL		Stressed
6	Bis(2-chloroethyl)ether		1,001.8 µg/mL		+/- 5.8243 µg/mL		Gravimetric
	CAS # 111-44-4	(Lot 45296HKV)			+/- 30.3011 µg/mL		Unstressed
	Purity 99%				+/- 30.3011 µg/mL		Stressed
7	1,3-Dichlorobenzene		1,001.5 µg/mL		+/- 5.8228 µg/mL		Gravimetric
	CAS # 541-73-1	(Lot BCBM5751V)			+/- 30.2936 µg/mL		Unstressed
	Purity 99%				+/- 30.2936 µg/mL		Stressed

8	1,4-Dichlorobenzene		1,001.5	µg/mL	+/-	5.8225	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS1350V)			+/-	30.2921	µg/mL	Unstressed
	Purity 99%				+/-	30.2921	µg/mL	Stressed
9	1,2-Dichlorobenzene		1,002.4	µg/mL	+/-	5.8280	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBD7331V)			+/-	30.3208	µg/mL	Unstressed
	Purity 99%				+/-	30.3208	µg/mL	Stressed
10	Benzyl alcohol		1,000.3	µg/mL	+/-	5.8158	µg/mL	Gravimetric
	CAS # 100-51-6	(Lot SHBC1850V)			+/-	30.2573	µg/mL	Unstressed
	Purity 99%				+/-	30.2573	µg/mL	Stressed
11	2,2'-oxybis(1-chloropropane)		998.5	µg/mL	+/-	5.8052	µg/mL	Gravimetric
	CAS # 108-60-1	(Lot 5710100)			+/-	30.2019	µg/mL	Unstressed
	Purity 97%				+/-	30.2019	µg/mL	Stressed
12	2-Methylphenol (o-cresol)		1,006.2	µg/mL	+/-	5.8501	µg/mL	Gravimetric
	CAS # 95-48-7	(Lot SHBC1479V)			+/-	30.4357	µg/mL	Unstressed
	Purity 99%				+/-	30.4357	µg/mL	Stressed
13	Hexachloroethane		1,003.2	µg/mL	+/-	5.8324	µg/mL	Gravimetric
	CAS # 67-72-1	(Lot 4H3SF)			+/-	30.3435	µg/mL	Unstressed
	Purity 99%				+/-	30.3435	µg/mL	Stressed
14	N-Nitroso-di-n-propylamine		1,001.6	µg/mL	+/-	5.8234	µg/mL	Gravimetric
	CAS # 621-64-7	(Lot NOPCF)			+/-	30.2966	µg/mL	Unstressed
	Purity 99%				+/-	30.2966	µg/mL	Stressed
15	4-Methylphenol (p-cresol)		503.5	µg/mL	+/-	2.9274	µg/mL	Gravimetric
	CAS # 106-44-5	(Lot 49396APV)			+/-	15.2300	µg/mL	Unstressed
	Purity 99%				+/-	15.2300	µg/mL	Stressed
16	3-Methylphenol (m-cresol)		501.0	µg/mL	+/-	2.9129	µg/mL	Gravimetric
	CAS # 108-39-4	(Lot SHBD0627V)			+/-	15.1543	µg/mL	Unstressed
	Purity 99%				+/-	15.1543	µg/mL	Stressed
17	Nitrobenzene		1,001.9	µg/mL	+/-	5.8248	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBF2348V)			+/-	30.3042	µg/mL	Unstressed
	Purity 99%				+/-	30.3042	µg/mL	Stressed
18	Isophorone		1,000.8	µg/mL	+/-	5.8189	µg/mL	Gravimetric
	CAS # 78-59-1	(Lot MKBG2442V)			+/-	30.2731	µg/mL	Unstressed
	Purity 98%				+/-	30.2731	µg/mL	Stressed
19	2-Nitrophenol		1,003.9	µg/mL	+/-	5.8368	µg/mL	Gravimetric
	CAS # 88-75-5	(Lot BCBH7602V)			+/-	30.3662	µg/mL	Unstressed
	Purity 99%				+/-	30.3662	µg/mL	Stressed
20	2,4-Dimethylphenol		1,001.6	µg/mL	+/-	5.8231	µg/mL	Gravimetric
	CAS # 105-67-9	(Lot 10165155)			+/-	30.2951	µg/mL	Unstressed
	Purity 99%				+/-	30.2951	µg/mL	Stressed
21	Bis(2-chloroethoxy)methane		1,001.3	µg/mL	+/-	5.8214	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 4621000)			+/-	30.2860	µg/mL	Unstressed
	Purity 99%				+/-	30.2860	µg/mL	Stressed
22	2,4-Dichlorophenol		1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBH1617V)			+/-	30.2512	µg/mL	Unstressed
	Purity 99%				+/-	30.2512	µg/mL	Stressed
23	1,2,4-Trichlorobenzene		1,003.6	µg/mL	+/-	5.8350	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ0905)			+/-	30.3571	µg/mL	Unstressed
	Purity 99%				+/-	30.3571	µg/mL	Stressed

24	Naphthalene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBW2603V)			+/-	30.2482	µg/mL	Unstressed
	Purity 99%				+/-	30.2482	µg/mL	Stressed
25	4-Chloroaniline		1,004.1	µg/mL	+/-	5.8379	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot BCBJ1580V)			+/-	30.3722	µg/mL	Unstressed
	Purity 99%				+/-	30.3722	µg/mL	Stressed
26	Hexachlorobutadiene		1,004.3	µg/mL	+/-	5.8388	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	30.3767	µg/mL	Unstressed
	Purity 99%				+/-	30.3767	µg/mL	Stressed
27	2-Methylnaphthalene		1,000.9	µg/mL	+/-	5.8192	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot STBF0201V)			+/-	30.2746	µg/mL	Unstressed
	Purity 95%				+/-	30.2746	µg/mL	Stressed
28	4-Chloro-3-methylphenol		1,004.2	µg/mL	+/-	5.8385	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC7309V)			+/-	30.3752	µg/mL	Unstressed
	Purity 99%				+/-	30.3752	µg/mL	Stressed
29	1-Methylnaphthalene		1,004.5	µg/mL	+/-	5.8402	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 523400-9)			+/-	30.3843	µg/mL	Unstressed
	Purity 98%				+/-	30.3843	µg/mL	Stressed
30	Hexachlorocyclopentadiene		1,001.0	µg/mL	+/-	5.8196	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 0012015)			+/-	30.2769	µg/mL	Unstressed
	Purity 99%				+/-	30.2769	µg/mL	Stressed
31	2,4,6-Trichlorophenol		1,002.5	µg/mL	+/-	5.8283	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot STBF3742V)			+/-	30.3223	µg/mL	Unstressed
	Purity 99%				+/-	30.3223	µg/mL	Stressed
32	2,4,5-Trichlorophenol		1,004.2	µg/mL	+/-	5.8385	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHN01)			+/-	30.3752	µg/mL	Unstressed
	Purity 99%				+/-	30.3752	µg/mL	Stressed
33	2-Chloronaphthalene		1,001.3	µg/mL	+/-	5.8214	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot AJ2UI)			+/-	30.2860	µg/mL	Unstressed
	Purity 99%				+/-	30.2860	µg/mL	Stressed
34	2-Nitroaniline		1,004.6	µg/mL	+/-	5.8405	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBK7597V)			+/-	30.3858	µg/mL	Unstressed
	Purity 99%				+/-	30.3858	µg/mL	Stressed
35	1,4-Dinitrobenzene		1,004.3	µg/mL	+/-	5.8391	µg/mL	Gravimetric
	CAS # 100-25-4	(Lot STBF8844V)			+/-	30.3783	µg/mL	Unstressed
	Purity 99%				+/-	30.3783	µg/mL	Stressed
36	Acenaphthylene		1,004.9	µg/mL	+/-	5.8424	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot O03R)			+/-	30.3955	µg/mL	Unstressed
	Purity 97%				+/-	30.3955	µg/mL	Stressed
37	1,3-Dinitrobenzene		1,004.1	µg/mL	+/-	5.8379	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBB1436V)			+/-	30.3722	µg/mL	Unstressed
	Purity 99%				+/-	30.3722	µg/mL	Stressed
38	Dimethylphthalate		1,005.6	µg/mL	+/-	5.8466	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)			+/-	30.4176	µg/mL	Unstressed
	Purity 99%				+/-	30.4176	µg/mL	Stressed
39	2,6-Dinitrotoluene		1,001.1	µg/mL	+/-	5.8202	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot BCBB8606V)			+/-	30.2800	µg/mL	Unstressed
	Purity 99%				+/-	30.2800	µg/mL	Stressed

40	1,2-Dinitrobenzene		1,003.7	µg/mL	+/-	5.8356	µg/mL	Gravimetric
	CAS # 528-29-0	(Lot MKBW2921V)			+/-	30.3601	µg/mL	Unstressed
	Purity 99%				+/-	30.3601	µg/mL	Stressed
41	Acenaphthene		1,003.2	µg/mL	+/-	5.8324	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKCC8329)			+/-	30.3435	µg/mL	Unstressed
	Purity 99%				+/-	30.3435	µg/mL	Stressed
42	3-Nitroaniline		1,002.4	µg/mL	+/-	5.8280	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot 12836338V)			+/-	30.3208	µg/mL	Unstressed
	Purity 99%				+/-	30.3208	µg/mL	Stressed
43	2,4-Dinitrophenol		1,003.7	µg/mL	+/-	5.8353	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot STBF9439V)			+/-	30.3586	µg/mL	Unstressed
	Purity 99%				+/-	30.3586	µg/mL	Stressed
44	Dibenzofuran		1,004.3	µg/mL	+/-	5.8391	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBW2691V)			+/-	30.3783	µg/mL	Unstressed
	Purity 99%				+/-	30.3783	µg/mL	Stressed
45	2,4-Dinitrotoluene		1,003.8	µg/mL	+/-	5.8359	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/-	30.3616	µg/mL	Unstressed
	Purity 99%				+/-	30.3616	µg/mL	Stressed
46	4-Nitrophenol		1,004.3	µg/mL	+/-	5.8391	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKBV0501V)			+/-	30.3783	µg/mL	Unstressed
	Purity 99%				+/-	30.3783	µg/mL	Stressed
47	2,3,4,6-Tetrachlorophenol		1,001.6	µg/mL	+/-	5.8231	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot B17W01051)			+/-	30.2951	µg/mL	Unstressed
	Purity 99%				+/-	30.2951	µg/mL	Stressed
48	2,3,5,6-Tetrachlorophenol		1,002.4	µg/mL	+/-	5.8277	µg/mL	Gravimetric
	CAS # 935-95-5	(Lot 012016)			+/-	30.3193	µg/mL	Unstressed
	Purity 99%				+/-	30.3193	µg/mL	Stressed
49	Fluorene		1,005.6	µg/mL	+/-	5.8466	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 10193329)			+/-	30.4176	µg/mL	Unstressed
	Purity 99%				+/-	30.4176	µg/mL	Stressed
50	4-Chlorophenyl phenyl ether		1,001.7	µg/mL	+/-	5.8237	µg/mL	Gravimetric
	CAS # 7005-72-3	(Lot MKBW2403V)			+/-	30.2981	µg/mL	Unstressed
	Purity 99%				+/-	30.2981	µg/mL	Stressed
51	Diethylphthalate		1,001.5	µg/mL	+/-	5.8228	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot MKBV9622V)			+/-	30.2936	µg/mL	Unstressed
	Purity 99%				+/-	30.2936	µg/mL	Stressed
52	4-Nitroaniline		1,001.5	µg/mL	+/-	5.8229	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot BCBG4702V)			+/-	30.2939	µg/mL	Unstressed
	Purity 98%				+/-	30.2939	µg/mL	Stressed
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		1,003.7	µg/mL	+/-	5.8356	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot LC22071V)			+/-	30.3601	µg/mL	Unstressed
	Purity 99%				+/-	30.3601	µg/mL	Stressed
54	Diphenylamine		1,001.2	µg/mL	+/-	5.8208	µg/mL	Gravimetric
	CAS # 122-39-4	(Lot MKBN8295V)			+/-	30.2830	µg/mL	Unstressed
	Purity 99%				+/-	30.2830	µg/mL	Stressed
55	Azobenzene		1,001.3	µg/mL	+/-	5.8218	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot BCBS6535V)			+/-	30.2885	µg/mL	Unstressed
	Purity 97%				+/-	30.2885	µg/mL	Stressed

56	4-Bromophenyl phenyl ether		1,000.5	µg/mL	+/-	5.8172	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	30.2643	µg/mL	Unstressed
	Purity 98%				+/-	30.2643	µg/mL	Stressed
57	Hexachlorobenzene		1,004.3	µg/mL	+/-	5.8388	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot LC25401V)			+/-	30.3767	µg/mL	Unstressed
	Purity 99%				+/-	30.3767	µg/mL	Stressed
58	Pentachlorophenol		1,003.5	µg/mL	+/-	5.8341	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 170717KJA)			+/-	30.3525	µg/mL	Unstressed
	Purity 99%				+/-	30.3525	µg/mL	Stressed
59	Phenanthrene		1,003.7	µg/mL	+/-	5.8356	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKCB1762V)			+/-	30.3601	µg/mL	Unstressed
	Purity 99%				+/-	30.3601	µg/mL	Stressed
60	Anthracene		1,001.4	µg/mL	+/-	5.8219	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKBR2268V)			+/-	30.2890	µg/mL	Unstressed
	Purity 99%				+/-	30.2890	µg/mL	Stressed
61	Carbazole		1,002.5	µg/mL	+/-	5.8286	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot 5945900)			+/-	30.3238	µg/mL	Unstressed
	Purity 99%				+/-	30.3238	µg/mL	Stressed
62	Di-n-butylphthalate		1,001.6	µg/mL	+/-	5.8231	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKBT0244V)			+/-	30.2951	µg/mL	Unstressed
	Purity 99%				+/-	30.2951	µg/mL	Stressed
63	Fluoranthene		1,001.6	µg/mL	+/-	5.8232	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKBQ6360V)			+/-	30.2954	µg/mL	Unstressed
	Purity 98%				+/-	30.2954	µg/mL	Stressed
64	Pyrene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCBR9108V)			+/-	30.2482	µg/mL	Unstressed
	Purity 99%				+/-	30.2482	µg/mL	Stressed
65	Benzyl butyl phthalate		1,000.6	µg/mL	+/-	5.8175	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot MKBZ4553V)			+/-	30.2657	µg/mL	Unstressed
	Purity 98%				+/-	30.2657	µg/mL	Stressed
66	Bis(2-ethylhexyl)adipate		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 103-23-1	(Lot MKBT7308V)			+/-	30.2482	µg/mL	Unstressed
	Purity 99%				+/-	30.2482	µg/mL	Stressed
67	Benz(a)anthracene		1,004.9	µg/mL	+/-	5.8423	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot ER031412-01)			+/-	30.3949	µg/mL	Unstressed
	Purity 99%				+/-	30.3949	µg/mL	Stressed
68	Chrysene		1,001.8	µg/mL	+/-	5.8243	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot 012015)			+/-	30.3011	µg/mL	Unstressed
	Purity 99%				+/-	30.3011	µg/mL	Stressed
69	Bis(2-ethylhexyl)phthalate		1,003.7	µg/mL	+/-	5.8356	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBZ3868V)			+/-	30.3601	µg/mL	Unstressed
	Purity 99%				+/-	30.3601	µg/mL	Stressed
70	Di-n-octyl phthalate		1,001.8	µg/mL	+/-	5.8246	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 5699100)			+/-	30.3026	µg/mL	Unstressed
	Purity 99%				+/-	30.3026	µg/mL	Stressed
71	Benzo(b)fluoranthene		1,000.7	µg/mL	+/-	5.8182	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot ER03101401)			+/-	30.2694	µg/mL	Unstressed
	Purity 99%				+/-	30.2694	µg/mL	Stressed

72	Benzo(k)fluoranthene		1,005.0	µg/mL	+/-	5.8432	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot 012012K)			+/-	30.3994	µg/mL	Unstressed
	Purity 99%				+/-	30.3994	µg/mL	Stressed
73	Benzo(a)pyrene		1,001.4	µg/mL	+/-	5.8219	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	30.2890	µg/mL	Unstressed
	Purity 99%				+/-	30.2890	µg/mL	Stressed
74	Indeno(1,2,3-cd)pyrene		1,002.6	µg/mL	+/-	5.8289	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	30.3253	µg/mL	Unstressed
	Purity 99%				+/-	30.3253	µg/mL	Stressed
75	Dibenz(a,h)anthracene		1,002.1	µg/mL	+/-	5.8263	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	30.3117	µg/mL	Unstressed
	Purity 99%				+/-	30.3117	µg/mL	Stressed
76	Benzo(g,h,i)perylene		1,002.5	µg/mL	+/-	5.8283	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER05121401)			+/-	30.3223	µg/mL	Unstressed
	Purity 99%				+/-	30.3223	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

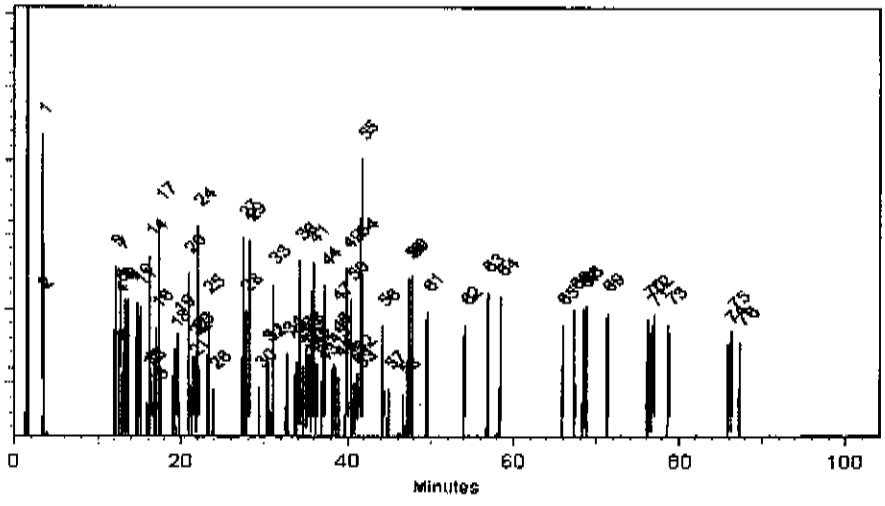
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician **Date Mixed:** 13-Nov-2017 **Balance:** B345965662

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Dec-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

S6526
10
S6540
M.V.
04/04/2018

Catalog No. : 30614 **Lot No.:** A0134839

Description : 1,4-dioxane-d8 Standard

1,4-dioxane-d8 Standard 2000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.I., K=2)		
1	1,4-Dioxane-d8	2,008.7 µg/mL	+/- 11.7880	µg/mL	Gravimetric
	CAS # 17647-74-4 (Lot 1-19942)		+/- 43.0356	µg/mL	Unstressed
	Purity 99%		+/- 44.2850	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

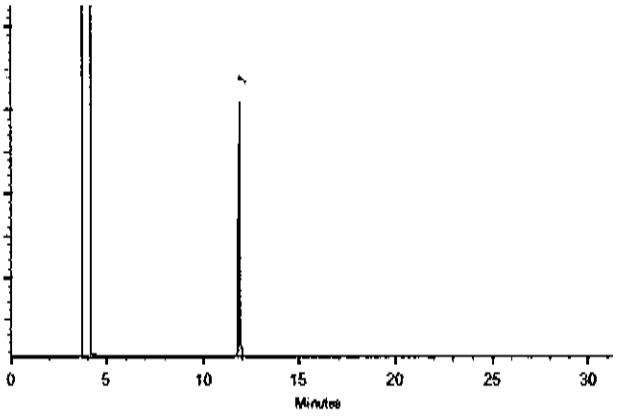
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Matt Fragassi - Mix Technician

Date Mixed: 01-Feb-2018 **Balance:** 1128342314

Jennifer Alderson - Operations Tech-Area 80

Date Passed: 06-Feb-2018

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31810 **Lot No.:** A0135095

Description : OLC03.2 SVOA Deuterated Monitoring Compounds Mix

OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL/ampul, Methylene Chloride, 2000µg/mL

S6731 to S6760

M.U. 05/30/2018

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2021 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Phenol-d5 **CAS #** 4165-62-2 (Lot X-479) **Purity** 99%	2,016.7 µg/mL	+/- 11.8349 µg/mL +/- 58.8751 µg/mL +/- 71.4341 µg/mL	Gravimetric Unstressed Stressed
2	bis(2-Chloroethyl) ether-d8 **CAS #** 93952-02-4 (Lot I-15074) **Purity** 98%	2,013.6 µg/mL	+/- 11.8168 µg/mL +/- 58.7848 µg/mL +/- 71.3245 µg/mL	Gravimetric Unstressed Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-28977) **Purity** 99%	2,012.7 µg/mL	+/- 11.8115 µg/mL +/- 58.7583 µg/mL +/- 71.2924 µg/mL	Gravimetric Unstressed Stressed
4	4-Methylphenol-d8 **CAS #** 190780-66-6 (Lot W-519) **Purity** 99%	2,003.3 µg/mL	+/- 11.7567 µg/mL +/- 58.4858 µg/mL +/- 70.9618 µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-25462) **Purity** 99%	2,006.0 µg/mL	+/- 11.7723 µg/mL +/- 58.5637 µg/mL +/- 71.0562 µg/mL	Gravimetric Unstressed Stressed
6	2-Nitrophenol-d4 **CAS #** 93951-78-1 (Lot H-151) **Purity** 99%	2,014.7 µg/mL	+/- 11.8232 µg/mL +/- 58.8167 µg/mL +/- 71.3632 µg/mL	Gravimetric Unstressed Stressed
7	2,4-Dichlorophenol-d3 **CAS #** 93951-74-7 (Lot AB-210) **Purity** 98%	2,004.4 µg/mL	+/- 11.7631 µg/mL +/- 58.5177 µg/mL +/- 71.0005 µg/mL	Gravimetric Unstressed Stressed

8	4-Chloroaniline-d4 **CAS #** 191656-33-4 **Purity** 99%	(Lot C-190)	2,010.0	µg/mL	+/- 11.7958 +/- 58.6804 +/- 71.1979	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Dimethylphthalate-d6 **CAS #** 85448-30-2 **Purity** 99%	(Lot X-477)	2,014.7	µg/mL	+/- 11.8232 +/- 58.8167 +/- 71.3632	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acenaphthylene-d8 **CAS #** 93951-97-4 **Purity** 99%	(Lot AB-282)	2,002.7	µg/mL	+/- 11.7528 +/- 58.4664 +/- 70.9382	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	4-Nitrophenol-d4 **CAS #** 93951-79-2 **Purity** 99%	(Lot P-141)	2,011.3	µg/mL	+/- 11.8036 +/- 58.7194 +/- 71.2452	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Fluorene-d10 **CAS #** 81103-79-9 **Purity** 98%	(Lot M149P29)	2,012.3	µg/mL	+/- 11.8091 +/- 58.7466 +/- 71.2782	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	4,6-Dinitro-2-methylphenol-d2 **CAS #** 93951-76-9 **Purity** 99%	(Lot AB-322)	2,004.0	µg/mL	+/- 11.7606 +/- 58.5053 +/- 70.9854	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Anthracene-d10 **CAS #** 1719-06-8 **Purity** 99%	(Lot PR-20576)	2,016.0	µg/mL	+/- 11.8310 +/- 58.8556 +/- 71.4105	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Pyrene-d10 **CAS #** 1718-52-1 **Purity** 98%	(Lot PR-14089)	2,014.9	µg/mL	+/- 11.8244 +/- 58.8229 +/- 71.3708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Benzo(a)pyrene-d12 **CAS #** 63466-71-7 **Purity** 99%	(Lot PR-28576)	2,010.7	µg/mL	+/- 11.7997 +/- 58.6999 +/- 71.2215	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

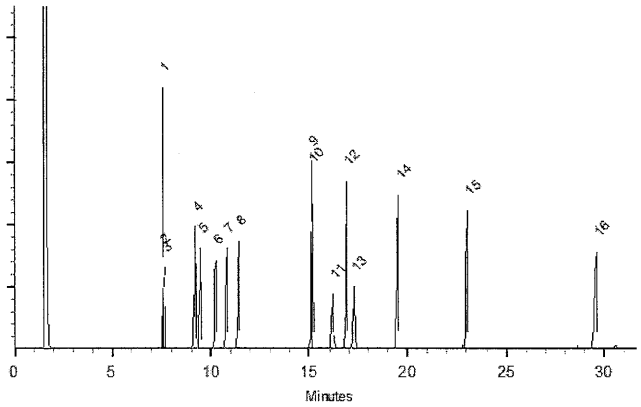
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Alice Brooks - Mix Technician

Date Mixed: 12-Feb-2018 **Balance:** B442140311

Justine Albertson - Operations Tech-ARM QC

Date Passed: 16-Feb-2018

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

SJ 5/31/18

Catalog No. : 31206 **Lot No.:** A0136809

From: 56791
to: 56820

Description : SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2024 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dichlorobenzene-d4	2,006.9 µg/mL	+/- 11.6683	µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 90.3920	µg/mL	Unstressed
	Purity 99%		+/- 100.3011	µg/mL	Stressed
2	Naphthalene-d8	2,011.0 µg/mL	+/- 11.6921	µg/mL	Gravimetric
	CAS # 1146-65-2 (Lot M-1452)		+/- 90.5766	µg/mL	Unstressed
	Purity 99%		+/- 100.5060	µg/mL	Stressed
3	Acenaphthene-d10	2,007.9 µg/mL	+/- 11.6741	µg/mL	Gravimetric
	CAS # 15067-26-2 (Lot PR-25444)		+/- 90.4370	µg/mL	Unstressed
	Purity 99%		+/- 100.3510	µg/mL	Stressed
4	Phenanthrene-d10	2,016.8 µg/mL	+/- 11.7258	µg/mL	Gravimetric
	CAS # 1517-22-2 (Lot PR-23065)		+/- 90.8379	µg/mL	Unstressed
	Purity 99%		+/- 100.7958	µg/mL	Stressed
5	Chrysene-d12	2,011.3 µg/mL	+/- 11.6939	µg/mL	Gravimetric
	CAS # 1719-03-5 (Lot PR-27952)		+/- 90.5902	µg/mL	Unstressed
	Purity 99%		+/- 100.5210	µg/mL	Stressed
6	Perylene-d12	2,019.3 µg/mL	+/- 11.7404	µg/mL	Gravimetric
	CAS # 1520-96-3 (Lot PR-24113)		+/- 90.9505	µg/mL	Unstressed
	Purity 99%		+/- 100.9208	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

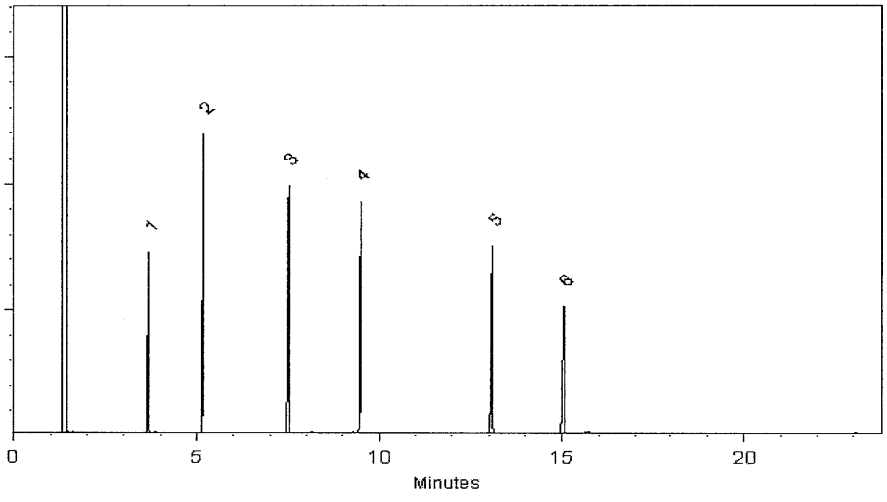
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 03-Apr-2018 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 05-Apr-2018

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

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S6909
S6910
S6911

SJ
6/22/18

Catalog No. : 33913 **Lot No.:** A0137718

Description : SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2024 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Methylnaphthalene-d10	2,001.1 µg/mL	+/- 11.7436	µg/mL	Gravimetric
	CAS # 7297-45-2 (Lot AC-257)		+/- 90.1453	µg/mL	Unstressed
	Purity 97%		+/- 100.0244	µg/mL	Stressed
2	Fluoranthene-d10	2,009.0 µg/mL	+/- 11.7899	µg/mL	Gravimetric
	CAS # 93951-69-0 (Lot PR-20668)		+/- 90.5008	µg/mL	Unstressed
	Purity 98%		+/- 100.4188	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

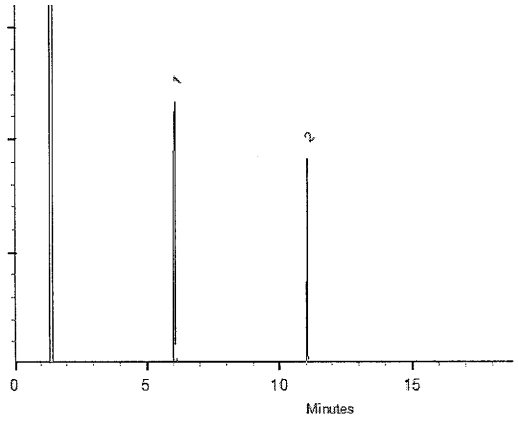
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Alice Brooks

Alice Brooks - Mix Technician

Date Mixed: 02-May-2018 **Balance:** 1128360905

Justine Albertson

Justine Albertson - Operations Tech-ARM QC

Date Passed: 03-May-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31833 **Lot No.:** A0138507

Description : Epsilon-Caprolactam Standard

Epsilon-caprolactam Std 2000µg/mL, Methylene Chloride(Methanol free), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2020 **Storage:** 10°C or colder

S6830
S6831
S6832
S6833
S6834

93

6/7/18

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	epsilon-Caprolactam	2,012.0 µg/mL	+/- 18.7105 µg/mL	Gravimetric
	CAS # 105-60-2 (Lot I16X016)		+/- 28.1375 µg/mL	Unstressed
	Purity 99%		+/- 40.9686 µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

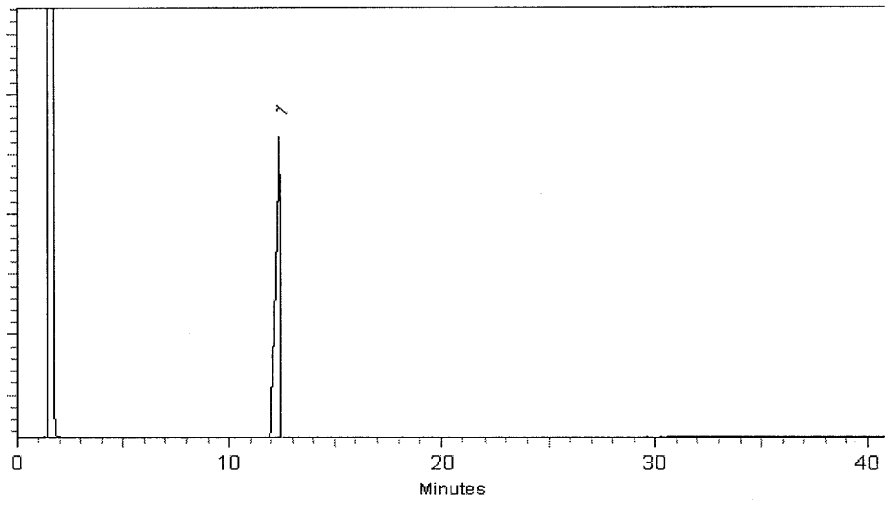
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kyle Retorick - Op. Technician I

Date Mixed: 01-Jun-2018 **Balance:** 1128353505

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 04-Jun-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ISO 9001 QS Registered
ISO 17025-34-35-43 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part Number:	**98496**	**Solvent(s):**	**Lot#**
Lot Number:	061115	Methylene chloride	72062
Description:	1,2,3,4-Tetrachlorobenzene		
Expiration Date:	061120		
Recommended Storage:	Refrigerate (4 °C)		
Nominal Concentration (µg/mL):	5000		
NIST Test ID#:	822-275872-11	5E-05 Balance Uncertainty	
Weight(s) shown below were combined and diluted to (mL):	10.0	0.002 Flask Uncertainty	

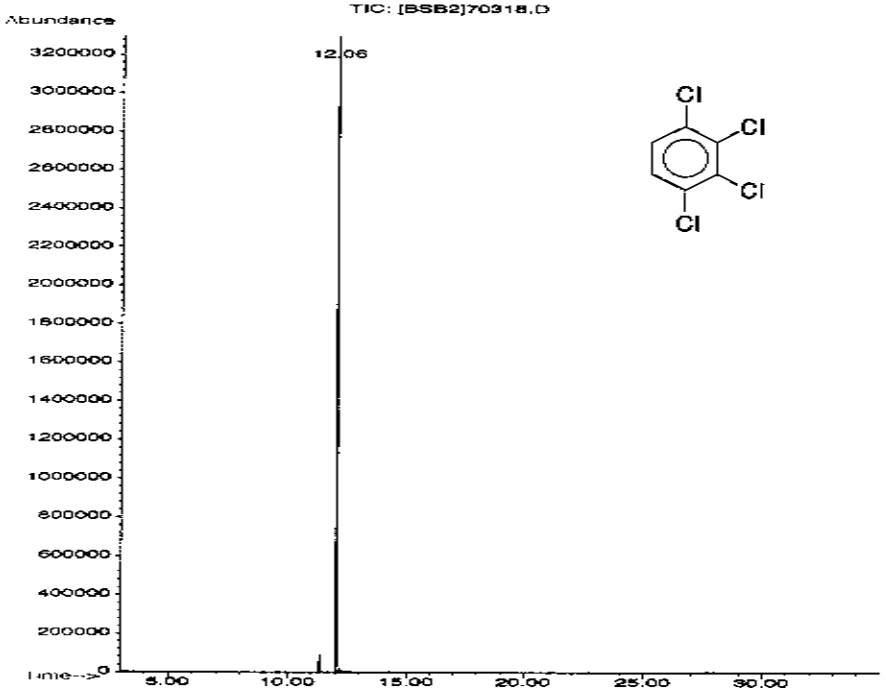
g 5303 } um
S5304 }

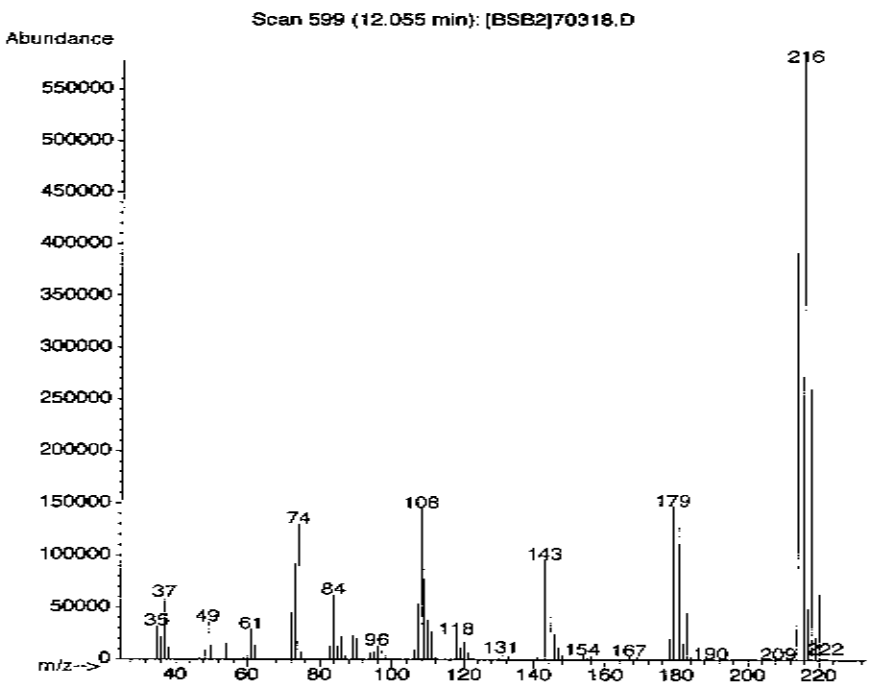
Paul Barron 061115
Formulated By: Paul Barron DATE

Pedro Rentas 061115
Reviewed By: Pedro L. Rentas DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,2,3,4-Tetrachlorobenzene	318	FBW01	5000	97.3	0.2	0.05138	0.05142	5004.0	22.8	634-66-2	N/A	orl-rat 1167mg/kg

Method GC8MSD-3.M: Column: (30m X 0.25mm ID X 0.25µm film thickness), Temp 1 = 50°C (1min.), Temp 2 = 300°C (4 min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 300°C. Analysis performed by Nicole Poisson.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

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Certified Reference Material CRM

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ISO 17025-34-35-43 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part Number:	90494
Lot Number:	062216
Description:	1-Methylnaphthalene
Expiration Date:	062221
Recommended Storage:	Refrigerate (4 °C)
Nominal Concentration (µg/mL):	2000
NIST Test ID#:	822-275872-11

Solvent(s):	**Lot#**
Methylene chloride	76782

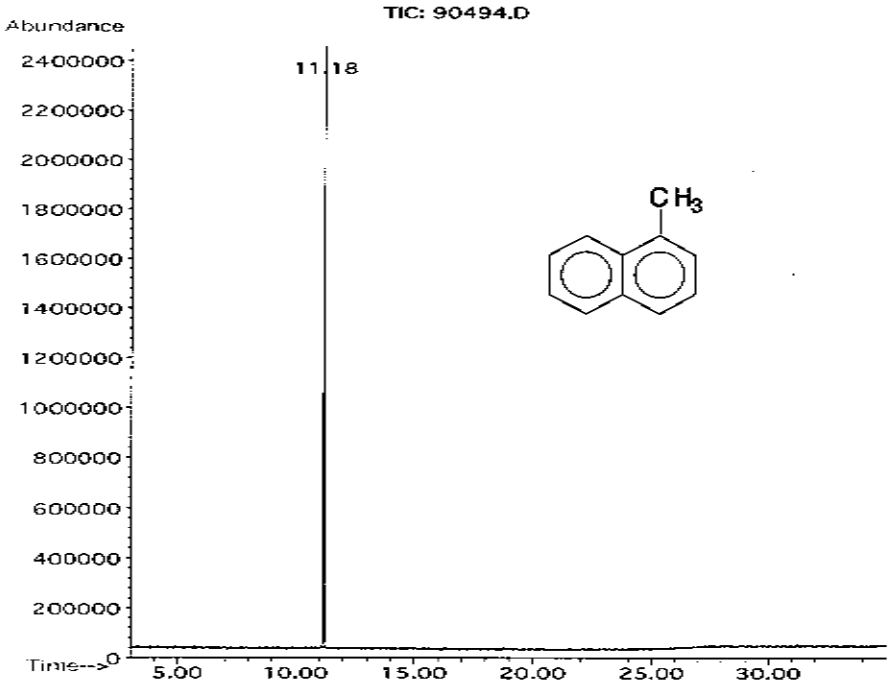
S5311 to S5317 } um

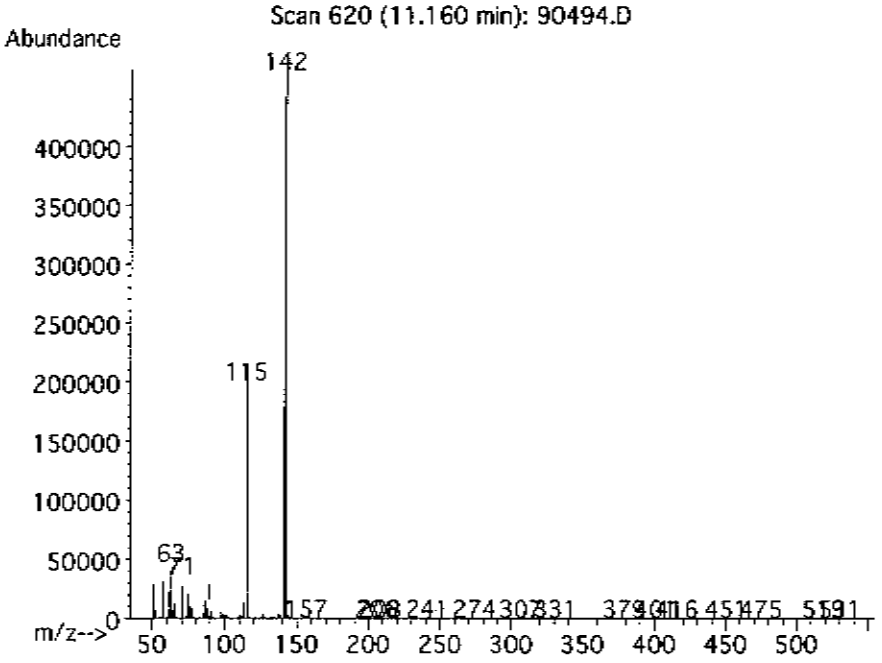
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.003 Flask Uncertainty

Formulated By:	Bryan Njeba	062216 DATE
Reviewed By:	Pedro L. Rentas	062216 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1-Methylnaphthalene	313	04413BX	2000	98	0.2	0.20410	0.20450	2003.9	8.2	90-12-0	N/A	orl-rat 1840mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Gina McLane.





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- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

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CERTIFIED WEIGHT REPORT

Part Number: 98495
Lot Number: 063016
Description: Pentachlorobenzene

Expiration Date: 063021
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 822-275872-11

Solvent(s):	Lot#
Methylene chloride	76782

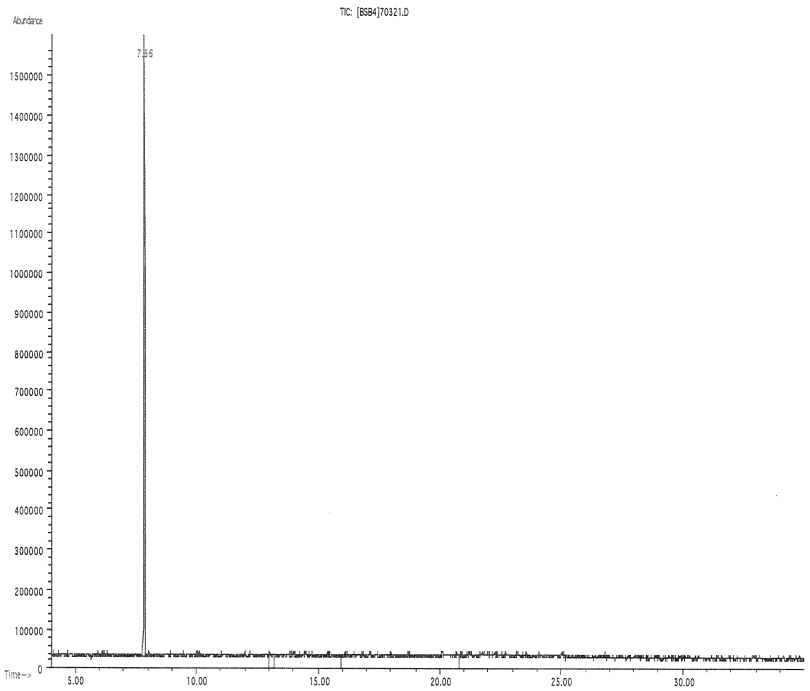
SJ 2/1/18
56424, 56425, 56426, 56427

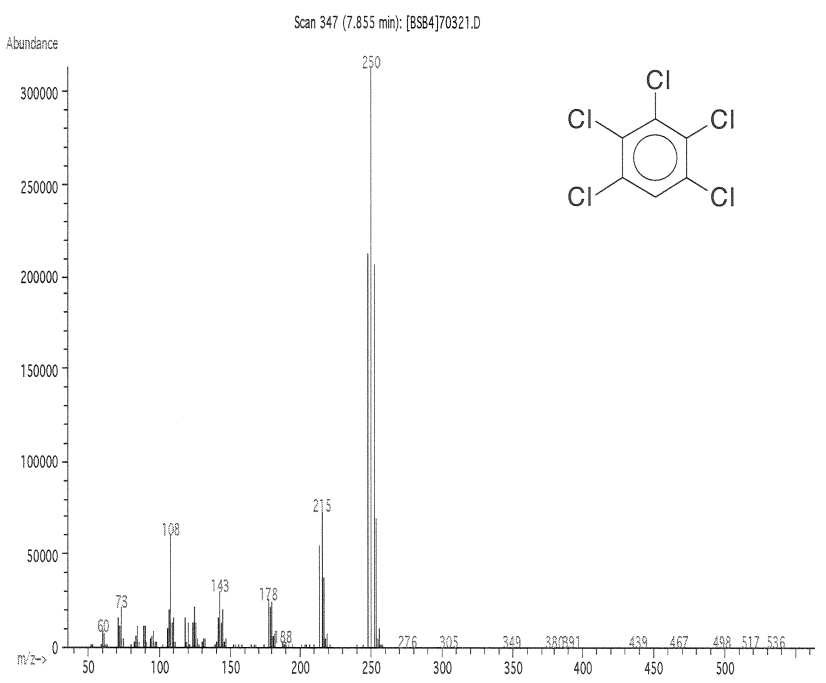
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty

Gabriel Helland	063016
Formulated By: Gabriel Helland	DATE
Pedro Rentas	063016
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Pentachlorobenzene	321	2705100	5000	99.5	0.5	0.12562	0.12578	5006.6	50.5	608-93-5	N/A	orl-rat 1080mg/kg

Method GC7MSD-1.M: Column: SPB-608 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Candice Warren.



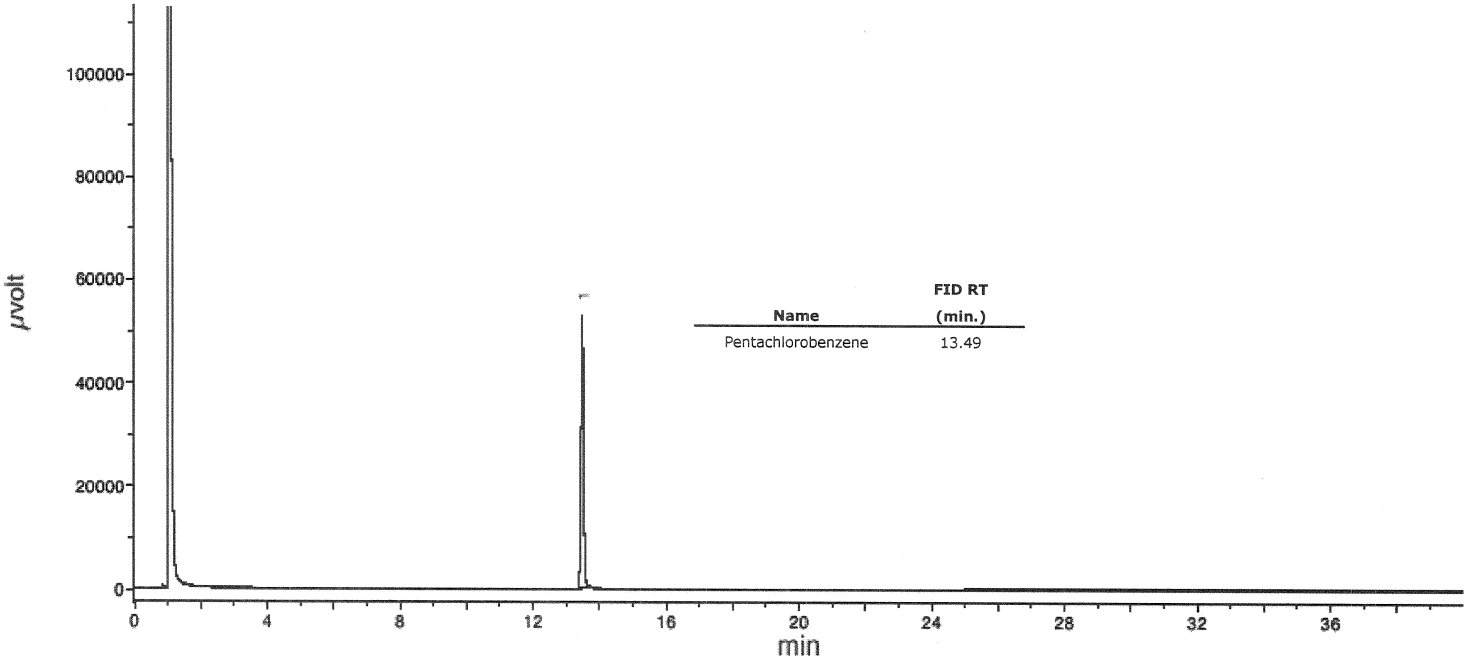


- **The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.**
- **Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).**
- **Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.**
- **All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.**
- **Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).**

Run 10, "P98495 L063016 [5000µg/mL in MeCl2]"

Run Length: 40.00 min, 23998 points at 10 points/second.
Created: Thu, Jun 30, 2016 at 11:36:41 PM.
Sampled: Sequence "063016-GC9M2", Method "GC9-M2".
Analyzed using Method "GC9-M2".

Comments
GC9-M2 Analysis by Candice Warren
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates; Total Flow = 300 ml/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) =360 mLOven Temp 1 = 50°C (1 min).
Rate = 10°C/min, Oven Temp 2 = 300°C (14 min), Total Run Time = 40 Minutes. Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = eDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 uL, Range = 6



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Analytical Reference Material ARM

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CERTIFIED WEIGHT REPORT

Part Number: 98496
Lot Number: 063016
Description: 1,2,3,4-Tetrachlorobenzene

Solvent(s): **Lot#**
Methylene chloride 76782

Expiration Date: 063021
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 822-275872-11 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty

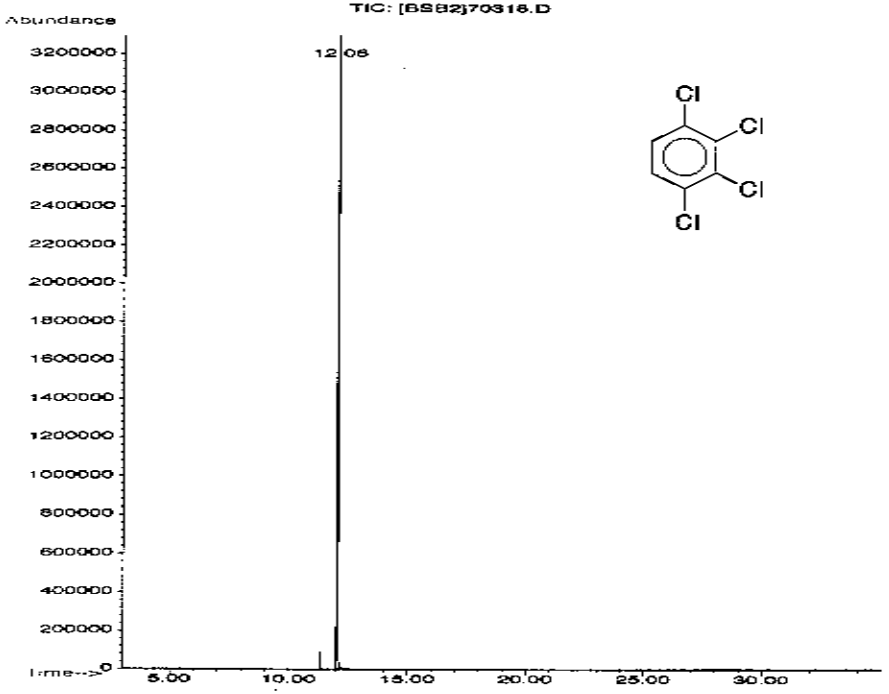
55305
55306 } UM
55307

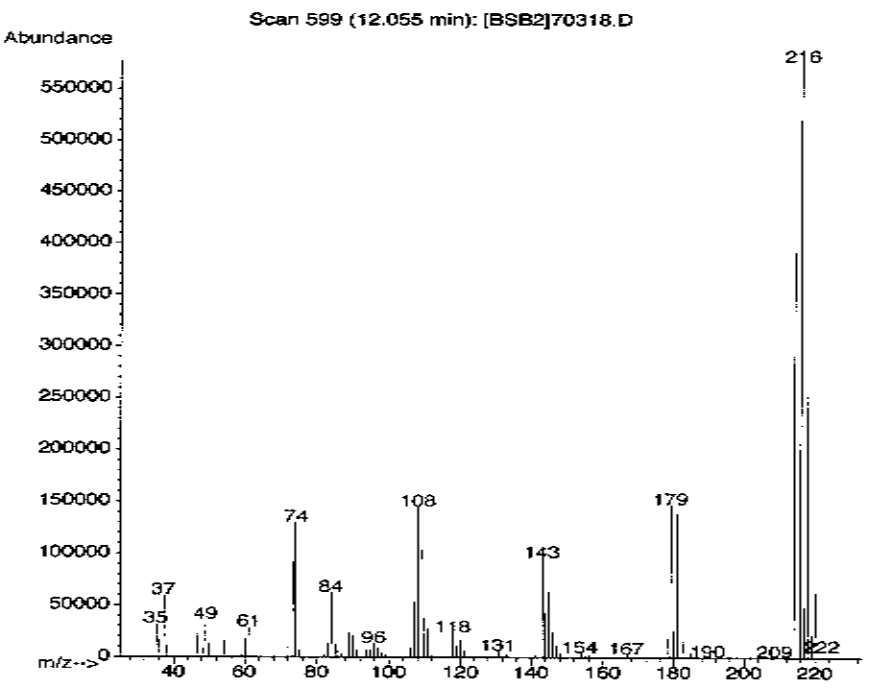
Gabriel Helland 063016
Formulated By: Gabriel Helland DATE

Pedro Rentas 063016
Reviewed By: Pedro L. Rentas DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,2,3,4-Tetrachlorobenzene	318	FBW01	5000	97.3	0.2	0.12846	0.12869	5009.1	21.0	634-66-2	N/A	orl-rat 1167mg/kg

Method GC8MSD-3.M: Column: (30m X 0.25mm ID X 0.25µm film thickness), Temp 1 = 50°C (1min.), Temp 2 = 300°C (4 min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 300°C. Analysis performed by Nicole Poisson.





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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30614 **Lot No.:** A0117024

Description : 1,4-dioxane-d8 Standard

1,4-dioxane-d8 Standard 2000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2019 **Storage:** 0°C or colder

S5395
1 } um
S5424

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.: K=2)	
1	1,4-Dioxane-d8	2,003.6 µg/mL	+/- 11.7582 µg/mL	Gravimetric
	CAS # 17647-74-4 (Lot I-19239)		+/- 42.9271 µg/mL	Unstressed
	Purity 99%		+/- 44.1733 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

Recd. JAH 10/19/17

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ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32208 **Lot No.:** A0130330

S 6170 to S 6174
JAH

Description : Atrazine Standard

Atrazine Standard 1000 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2021 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Atrazine	1,008.0 µg/mL	+/- 5.9872	µg/mL	Gravimetric
	CAS # 1912-24-9 (Lot P7XPN)		+/- 45.9229	µg/mL	Unstressed
	Purity 99%		+/- 66.2995	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

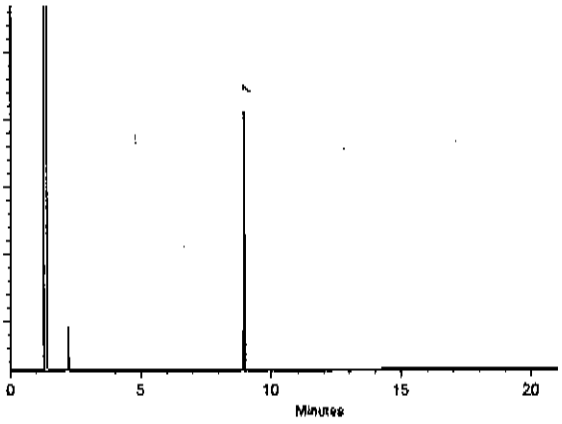
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cydnei L. Crust - Mix Technician

Date Mixed: 29-Aug-2017 **Balance:** 1128360905

Operations Tech-ARM QC

Date Passed: 30-Aug-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Received 12/18/17

12/18/17

Catalog No. : 31001 **Lot No.:** A0131451

Description : SV Tuning Compound Standard

Tuning Std Decafluorotriphenylphosphine 2500µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2020 **Storage:** 10°C or colder

S6327

S6328

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.I., K=2)		
1	DFTPP (Decafluorotriphenylphosphine)	2,516.0 µg/mL	+/- 14.9443	µg/mL	Gravimetric
	CAS # 5074-71-5 (Lot Q15B005)		+/- 113.3634	µg/mL	Unstressed
	Purity 99%		+/- 125.7821	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

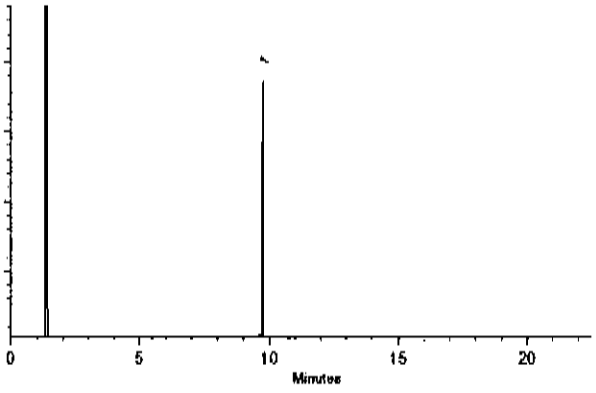
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Relish - Mix Technician

Date Mixed: 09-Oct-2017 **Balance:** B345965662

Date Passed: 10-Oct-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31810 **Lot No.:** A0132291

Description : OLC03.2 SVOA Deuterated Monitoring Compounds Mix

OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL/ampul, Methylene Chloride, 2000µg/mL

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2021 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

S6434 - S6448
09/21/18

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Phenol-d5	2,008.0 µg/mL	+/- 11.7841 µg/mL	Gravimetric
	CAS # 4165-62-2 (Lot X-479)		+/- 58.6221 µg/mL	Unstressed
	Purity 99%		+/- 71.1271 µg/mL	Stressed
2	bis(2-Chloroethyl) ether-d8	2,013.9 µg/mL	+/- 11.8187 µg/mL	Gravimetric
	CAS # 93952-02-4 (Lot X-485)		+/- 58.7943 µg/mL	Unstressed
	Purity 98%		+/- 71.3361 µg/mL	Stressed
3	2-Chlorophenol-d4	2,008.0 µg/mL	+/- 11.7841 µg/mL	Gravimetric
	CAS # 93951-73-6 (Lot PR-28977)		+/- 58.6221 µg/mL	Unstressed
	Purity 99%		+/- 71.1271 µg/mL	Stressed
4	4-Methylphenol-d8	2,010.0 µg/mL	+/- 11.7958 µg/mL	Gravimetric
	CAS # 190780-66-6 (Lot W-519)		+/- 58.6804 µg/mL	Unstressed
	Purity 99%		+/- 71.1979 µg/mL	Stressed
5	Nitrobenzene-d5	2,009.0 µg/mL	+/- 11.7899 µg/mL	Gravimetric
	CAS # 4165-60-0 (Lot PR-25462)		+/- 58.6513 µg/mL	Unstressed
	Purity 99%		+/- 71.1625 µg/mL	Stressed
6	2-Nitrophenol-d4	2,009.0 µg/mL	+/- 11.7899 µg/mL	Gravimetric
	CAS # 93951-78-1 (Lot H-151)		+/- 58.6513 µg/mL	Unstressed
	Purity 99%		+/- 71.1625 µg/mL	Stressed
7	2,4-Dichlorophenol-d3	2,012.9 µg/mL	+/- 11.8129 µg/mL	Gravimetric
	CAS # 93951-74-7 (Lot AB-210)		+/- 58.7657 µg/mL	Unstressed
	Purity 98%		+/- 71.3014 µg/mL	Stressed

8	4-Chloroaniline-d4		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 191656-33-4	(Lot C-190)			+/-	58.6804	µg/mL	Unstressed
	Purity 99%				+/-	71.1979	µg/mL	Stressed
9	Dimethylphthalate-d6		2,011.0	µg/mL	+/-	11.8017	µg/mL	Gravimetric
	CAS # 85448-30-2	(Lot X-477)			+/-	58.7096	µg/mL	Unstressed
	Purity 99%				+/-	71.2334	µg/mL	Stressed
10	Acenaphthylene-d8		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 93951-97-4	(Lot CD-117)			+/-	58.6804	µg/mL	Unstressed
	Purity 99%				+/-	71.1979	µg/mL	Stressed
11	4-Nitrophenol-d4		2,018.8	µg/mL	+/-	11.8474	µg/mL	Gravimetric
	CAS # 93951-79-2	(Lot P141P53)			+/-	58.9374	µg/mL	Unstressed
	Purity 98%				+/-	71.5096	µg/mL	Stressed
12	Fluorene-d10		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 81103-79-9	(Lot M-149)			+/-	58.6804	µg/mL	Unstressed
	Purity 99%				+/-	71.1979	µg/mL	Stressed
13	4,6-Dinitro-2-methylphenol-d2		2,012.0	µg/mL	+/-	11.8075	µg/mL	Gravimetric
	CAS # 93951-76-9	(Lot AB-322)			+/-	58.7388	µg/mL	Unstressed
	Purity 99%				+/-	71.2688	µg/mL	Stressed
14	Anthracene-d10		2,008.0	µg/mL	+/-	11.7841	µg/mL	Gravimetric
	CAS # 1719-06-8	(Lot PR-20576)			+/-	58.6221	µg/mL	Unstressed
	Purity 99%				+/-	71.1271	µg/mL	Stressed
15	Pyrene-d10		2,011.9	µg/mL	+/-	11.8072	µg/mL	Gravimetric
	CAS # 1718-52-1	(Lot PR-14089)			+/-	58.7371	µg/mL	Unstressed
	Purity 98%				+/-	71.2667	µg/mL	Stressed
16	Benzo(a)pyrene-d12		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 63466-71-7	(Lot PR-28576)			+/-	58.6804	µg/mL	Unstressed
	Purity 99%				+/-	71.1979	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

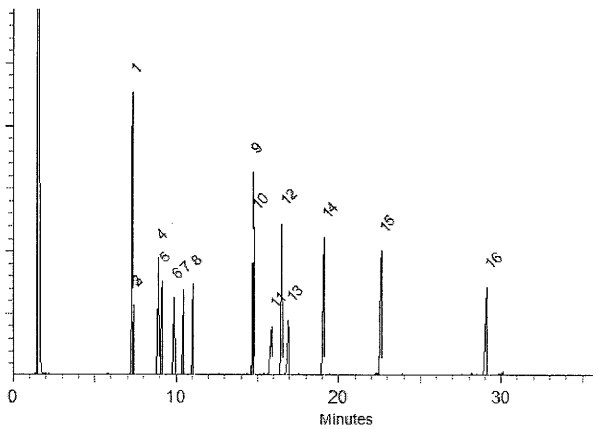
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cheryl Graham - Mix Technician

Date Mixed: 09-Nov-2017 **Balance:** B442140311

Justine Albertson - Operations Tech-ARM QC

Date Passed: 13-Nov-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

SJ
2/6/18

56428, 56429, 56430
56431, 56432

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31900 **Lot No.:** A0134696

Description : OLM 01.1 Revised SV MegaMix

OLM 01.1 Revised SV MegaMix 500-1000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2019 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Phenol		1,004.8 µg/mL	+/- 6.7163 µg/mL		Gravimetric
	CAS # 108-95-2	(Lot SHBF1351V)		+/- 12.4597 µg/mL		Unstressed
	Purity 99%			+/- 19.4003 µg/mL		Stressed
2	Bis(2-chloroethyl)ether		1,005.4 µg/mL	+/- 6.7209 µg/mL		Gravimetric
	CAS # 111-44-4	(Lot SHBD4430V)		+/- 12.4682 µg/mL		Unstressed
	Purity 99%			+/- 19.4135 µg/mL		Stressed
3	2-Chlorophenol		1,004.6 µg/mL	+/- 6.7155 µg/mL		Gravimetric
	CAS # 95-57-8	(Lot STBF2690V)		+/- 12.4581 µg/mL		Unstressed
	Purity 99%			+/- 19.3978 µg/mL		Stressed
4	2,2'-oxybis(1-chloropropane)		1,010.0 µg/mL	+/- 6.7511 µg/mL		Gravimetric
	CAS # 108-60-1	(Lot 5922200)		+/- 12.5242 µg/mL		Unstressed
	Purity 98%			+/- 19.5007 µg/mL		Stressed
5	2-Methylphenol (o-cresol)		1,009.1 µg/mL	+/- 6.7452 µg/mL		Gravimetric
	CAS # 95-48-7	(Lot SHBC1479V)		+/- 12.5132 µg/mL		Unstressed
	Purity 99%			+/- 19.4835 µg/mL		Stressed
6	Acetophenone		1,002.0 µg/mL	+/- 5.9516 µg/mL		Gravimetric
	CAS # 98-86-2	(Lot MKBR7156V)		+/- 12.0397 µg/mL		Unstressed
	Purity 99%			+/- 19.1016 µg/mL		Stressed
7	Hexachloroethane		1,001.4 µg/mL	+/- 6.6938 µg/mL		Gravimetric
	CAS # 67-72-1	(Lot 4H3SF)		+/- 12.4178 µg/mL		Unstressed
	Purity 99%			+/- 19.3351 µg/mL		Stressed

8	N-Nitroso-di-n-propylamine **CAS #** 621-64-7 **Purity** 99%	(Lot NOPCF)	1,001.0	µg/mL	+/- 6.7387 +/- 12.4388 +/- 19.3443	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	4-Methylphenol (p-cresol) **CAS #** 106-44-5 **Purity** 99%	(Lot 49396APV)	503.2	µg/mL	+/- 3.3695 +/- 6.2431 +/- 9.7179	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	3-Methylphenol (m-cresol) **CAS #** 108-39-4 **Purity** 99%	(Lot 04627KA)	501.0	µg/mL	+/- 3.3548 +/- 6.2160 +/- 9.6756	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot SHBG5577V)	1,008.6	µg/mL	+/- 6.7422 +/- 12.5077 +/- 19.4751	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Isophorone **CAS #** 78-59-1 **Purity** 98%	(Lot MKBG2442V)	1,009.8	µg/mL	+/- 6.7503 +/- 12.5227 +/- 19.4983	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	2-Nitrophenol **CAS #** 88-75-5 **Purity** 99%	(Lot BCBH7602V)	1,004.6	µg/mL	+/- 6.7151 +/- 12.4574 +/- 19.3966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	2,4-Dimethylphenol **CAS #** 105-67-9 **Purity** 99%	(Lot 10165155)	1,002.4	µg/mL	+/- 6.7005 +/- 12.4302 +/- 19.3544	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Bis(2-chloroethoxy)methane **CAS #** 111-91-1 **Purity** 99%	(Lot 5670100)	1,007.4	µg/mL	+/- 6.7343 +/- 12.4930 +/- 19.4521	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	2,4-Dichlorophenol **CAS #** 120-83-2 **Purity** 99%	(Lot BCBJ8113V)	1,008.6	µg/mL	+/- 6.7418 +/- 12.5070 +/- 19.4739	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBW2603V)	1,004.4	µg/mL	+/- 6.7138 +/- 12.4550 +/- 19.3930	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	4-Chloroaniline **CAS #** 106-47-8 **Purity** 99%	(Lot BCBJ1580V)	1,002.0	µg/mL	+/- 6.7455 +/- 12.4513 +/- 19.3637	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 99%	(Lot J31X013)	1,003.3	µg/mL	+/- 6.7067 +/- 12.4419 +/- 19.3725	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	2-Methylnaphthalene **CAS #** 91-57-6 **Purity** 95%	(Lot STBF0201V)	1,000.4	µg/mL	+/- 6.7344 +/- 12.4308 +/- 19.3318	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	4-Chloro-3-methylphenol **CAS #** 59-50-7 **Purity** 99%	(Lot STBC7309V)	1,007.0	µg/mL	+/- 6.7314 +/- 12.4876 +/- 19.4437	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	1,2,4,5-Tetrachlorobenzene **CAS #** 95-94-3 **Purity** 99%	(Lot MKBW7717V)	1,001.0	µg/mL	+/- 6.7387 +/- 12.4388 +/- 19.3443	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	Hexachlorocyclopentadiene **CAS #** 77-47-4 **Purity** 99%	(Lot 0012015)	1,007.6	µg/mL	+/- 6.7355 +/- 12.4953 +/- 19.4558	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	2,4,6-Trichlorophenol		1,005.9 µg/mL	+/-	6.7243	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot MKBL4698V)		+/-	12.4744	µg/mL	Unstressed
	Purity 99%			+/-	19.4232	µg/mL	Stressed
25	2,4,5-Trichlorophenol		1,002.6 µg/mL	+/-	6.7017	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHM01)		+/-	12.4326	µg/mL	Unstressed
	Purity 99%			+/-	19.3580	µg/mL	Stressed
26	2-Chloronaphthalene		1,008.2 µg/mL	+/-	6.7393	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot AJ2UI)		+/-	12.5023	µg/mL	Unstressed
	Purity 99%			+/-	19.4666	µg/mL	Stressed
27	Biphenyl		1,000.0 µg/mL	+/-	5.9397	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot MKBV9808V)		+/-	12.0157	µg/mL	Unstressed
	Purity 99%			+/-	19.0635	µg/mL	Stressed
28	2-Nitroaniline		1,002.0 µg/mL	+/-	6.7455	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBK7597V)		+/-	12.4513	µg/mL	Unstressed
	Purity 99%			+/-	19.3637	µg/mL	Stressed
29	Acenaphthylene		1,004.4 µg/mL	+/-	6.7138	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot L18Q)		+/-	12.4551	µg/mL	Unstressed
	Purity 98%			+/-	19.3931	µg/mL	Stressed
30	Dimethylphthalate		1,008.1 µg/mL	+/-	6.7385	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)		+/-	12.5008	µg/mL	Unstressed
	Purity 99%			+/-	19.4642	µg/mL	Stressed
31	2,6-Dinitrotoluene		1,008.8 µg/mL	+/-	6.7431	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot BCBB8606V)		+/-	12.5093	µg/mL	Unstressed
	Purity 99%			+/-	19.4775	µg/mL	Stressed
32	Acenaphthene		1,009.1 µg/mL	+/-	6.7452	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKBW9515V)		+/-	12.5132	µg/mL	Unstressed
	Purity 99%			+/-	19.4835	µg/mL	Stressed
33	3-Nitroaniline		1,001.5 µg/mL	+/-	6.7421	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot MKBX1283V)		+/-	12.4451	µg/mL	Unstressed
	Purity 99%			+/-	19.3540	µg/mL	Stressed
34	2,4-Dinitrophenol		1,002.1 µg/mL	+/-	6.6984	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot STBF9439V)		+/-	12.4264	µg/mL	Unstressed
	Purity 99%			+/-	19.3484	µg/mL	Stressed
35	Dibenzofuran		1,004.0 µg/mL	+/-	5.9635	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBW2691V)		+/-	12.0637	µg/mL	Unstressed
	Purity 99%			+/-	19.1397	µg/mL	Stressed
36	2,4-Dinitrotoluene		1,003.1 µg/mL	+/-	6.7051	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)		+/-	12.4388	µg/mL	Unstressed
	Purity 99%			+/-	19.3677	µg/mL	Stressed
37	4-Nitrophenol		1,007.3 µg/mL	+/-	6.7330	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKBP6945V)		+/-	12.4907	µg/mL	Unstressed
	Purity 99%			+/-	19.4485	µg/mL	Stressed
38	2,3,4,6-Tetrachlorophenol		1,000.0 µg/mL	+/-	6.7320	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot B17W03081)		+/-	12.4264	µg/mL	Unstressed
	Purity 99%			+/-	19.3250	µg/mL	Stressed
39	Fluorene		1,003.6 µg/mL	+/-	6.7088	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 10193329)		+/-	12.4457	µg/mL	Unstressed
	Purity 99%			+/-	19.3785	µg/mL	Stressed

40	4-Chlorophenyl phenyl ether **CAS #** 7005-72-3 **Purity** 99%	(Lot MKBX5225V)	1,009.2	µg/mL	+/- 6.7460 +/- 12.5147 +/- 19.4859	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	Diethylphthalate **CAS #** 84-66-2 **Purity** 99%	(Lot MKBV9622V)	1,004.6	µg/mL	+/- 6.7155 +/- 12.4581 +/- 19.3978	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	4-Nitroaniline **CAS #** 100-01-6 **Purity** 98%	(Lot BCBG4702V)	1,000.1	µg/mL	+/- 6.7326 +/- 12.4275 +/- 19.3267	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) **CAS #** 534-52-1 **Purity** 98%	(Lot LC22071V)	1,004.9	µg/mL	+/- 6.7172 +/- 12.4612 +/- 19.4027	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	Diphenylamine **CAS #** 122-39-4 **Purity** 99%	(Lot MKBN8295V)	1,002.5	µg/mL	+/- 6.7488 +/- 12.4575 +/- 19.3733	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	4-Bromophenyl phenyl ether **CAS #** 101-55-3 **Purity** 98%	(Lot STBB9729V)	1,007.6	µg/mL	+/- 6.7351 +/- 12.4946 +/- 19.4546	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	Hexachlorobenzene **CAS #** 118-74-1 **Purity** 99%	(Lot LC24211V)	1,009.8	µg/mL	+/- 6.7502 +/- 12.5225 +/- 19.4980	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	Pentachlorophenol **CAS #** 87-86-5 **Purity** 99%	(Lot 170306KJA)	1,002.9	µg/mL	+/- 6.7042 +/- 12.4372 +/- 19.3653	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Phenanthrene **CAS #** 85-01-8 **Purity** 99%	(Lot MKCB1762V)	1,007.1	µg/mL	+/- 6.7318 +/- 12.4884 +/- 19.4449	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Anthracene **CAS #** 120-12-7 **Purity** 99%	(Lot MKBV7759V)	1,003.6	µg/mL	+/- 6.7088 +/- 12.4457 +/- 19.3785	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Carbazole **CAS #** 86-74-8 **Purity** 99%	(Lot 5945900)	1,001.5	µg/mL	+/- 6.7421 +/- 12.4451 +/- 19.3540	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Di-n-butylphthalate **CAS #** 84-74-2 **Purity** 99%	(Lot MKBT0244V)	1,005.3	µg/mL	+/- 6.7201 +/- 12.4667 +/- 19.4111	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Fluoranthene **CAS #** 206-44-0 **Purity** 98%	(Lot MKBQ6360V)	1,009.3	µg/mL	+/- 6.7466 +/- 12.5158 +/- 19.4877	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	Pyrene **CAS #** 129-00-0 **Purity** 99%	(Lot BCBR9108V)	1,003.1	µg/mL	+/- 6.7055 +/- 12.4395 +/- 19.3689	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	Benzyl butyl phthalate **CAS #** 85-68-7 **Purity** 98%	(Lot MKBZ4553V)	1,003.6	µg/mL	+/- 6.7085 +/- 12.4452 +/- 19.3777	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	Benz(a)anthracene **CAS #** 56-55-3 **Purity** 99%	(Lot ER031412-01)	1,008.7	µg/mL	+/- 6.7427 +/- 12.5085 +/- 19.4763	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Chrysene		1,004.5	µg/mL	+/-	6.7147	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot 012015)			+/-	12.4566	µg/mL	Unstressed
	Purity 99%				+/-	19.3954	µg/mL	Stressed
57	3,3'-Dichlorobenzidine		1,001.5	µg/mL	+/-	6.7421	µg/mL	Gravimetric
	CAS # 91-94-1	(Lot 170112KJA)			+/-	12.4451	µg/mL	Unstressed
	Purity 99%				+/-	19.3540	µg/mL	Stressed
58	Bis(2-ethylhexyl)phthalate		1,009.9	µg/mL	+/-	6.7510	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBZ3868V)			+/-	12.5240	µg/mL	Unstressed
	Purity 99%				+/-	19.5004	µg/mL	Stressed
59	Di-n-octyl phthalate		1,007.7	µg/mL	+/-	6.7360	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 5555000)			+/-	12.4961	µg/mL	Unstressed
	Purity 99%				+/-	19.4570	µg/mL	Stressed
60	Benzo(b)fluoranthene		1,003.9	µg/mL	+/-	6.7105	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot ER03101401)			+/-	12.4488	µg/mL	Unstressed
	Purity 99%				+/-	19.3834	µg/mL	Stressed
61	Benzo(k)fluoranthene		1,003.8	µg/mL	+/-	6.7096	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot 012012K)			+/-	12.4473	µg/mL	Unstressed
	Purity 99%				+/-	19.3809	µg/mL	Stressed
62	Benzo(a)pyrene		1,003.1	µg/mL	+/-	6.7051	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	12.4388	µg/mL	Unstressed
	Purity 99%				+/-	19.3677	µg/mL	Stressed
63	Indeno(1,2,3-cd)pyrene		1,009.3	µg/mL	+/-	6.7468	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	12.5163	µg/mL	Unstressed
	Purity 99%				+/-	19.4883	µg/mL	Stressed
64	Dibenz(a,h)anthracene		1,002.1	µg/mL	+/-	6.6988	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	12.4271	µg/mL	Unstressed
	Purity 99%				+/-	19.3496	µg/mL	Stressed
65	Benzo(g,h,i)perylene		1,006.2	µg/mL	+/-	6.7259	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER05121401)			+/-	12.4775	µg/mL	Unstressed
	Purity 99%				+/-	19.4280	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

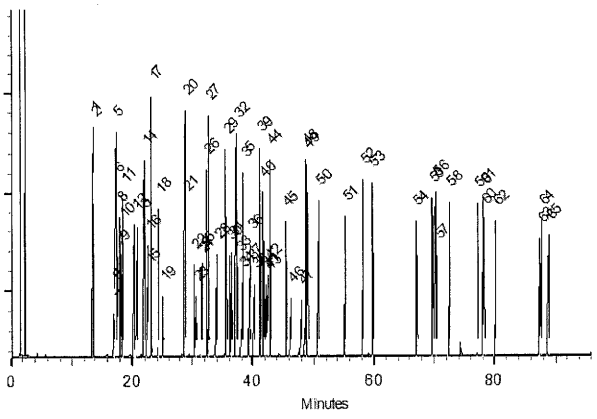
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Date Mixed: 30-Jan-2018 **Balance:** 1122030677

Justine Albertson - Operations Tech-ARM QC

Date Passed: 01-Feb-2018

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

PCI SCIENTIFIC SUPPLY, INC.
41 PLYMOUTH STREET
FAIRFIELD, NJ 07004
P# (973) 244-9002
F# (973) 244-9448

E 2519

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na_2SO_4
SPECIFICATION NUMBER :	6399	RELEASE DATE:	NOV/30/2017
LOT NUMBER :	743502		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na_2SO_4)	Min. 99.0 %	99.4 %
pH of a 5% solution at 25°C	5.2 - 9.2	5.8
Insoluble matter	Max. 0.01 %	0.007 %
Loss on ignition	Max. 0.5 %	0.1 %
Chloride (Cl)	Max. 0.001 %	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO_4)	Max. 0.001 %	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001 %	<0.001 %
Calcium (Ca)	Max. 0.01 %	0.001 %
Magnesium (Mg)	Max. 0.005 %	0.0002 %
Potassium (K)	Max. 0.008 %	0.002 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreing matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1 %	0.0 %
Retained on US Standard No. 60 sieve	Min. 94 %	98.1 %
Through US Standard No. 60 sieve	Max. 5 %	1.8 %
Through US Standard No. 100 sieve	Max. 10 %	0.0 %

QC: PhC Irma Belmares

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110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

SJ 9/6/14

Catalog No. : 31206 **Lot No.:** A0139548

Description : SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

S7047 to S7076

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2024 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	2,002.3 µg/mL	+/- 11.6415 µg/mL +/- 90.1848 µg/mL +/- 100.0712 µg/mL	Gravimetric Unstressed Stressed
2	Naphthalene-d8 **CAS #** 1146-65-2 (Lot M-1452) **Purity** 99%	2,001.2 µg/mL	+/- 11.6351 µg/mL +/- 90.1352 µg/mL +/- 100.0162 µg/mL	Gravimetric Unstressed Stressed
3	Acenaphthene-d10 **CAS #** 15067-26-2 (Lot PR-25444) **Purity** 99%	2,001.2 µg/mL	+/- 11.6351 µg/mL +/- 90.1352 µg/mL +/- 100.0162 µg/mL	Gravimetric Unstressed Stressed
4	Phenanthrene-d10 **CAS #** 1517-22-2 (Lot PR-23065) **Purity** 99%	2,000.5 µg/mL	+/- 11.6311 µg/mL +/- 90.1037 µg/mL +/- 99.9812 µg/mL	Gravimetric Unstressed Stressed
5	Chrysene-d12 **CAS #** 1719-03-5 (Lot PR-28823) **Purity** 99%	2,003.3 µg/mL	+/- 11.6474 µg/mL +/- 90.2298 µg/mL +/- 100.1211 µg/mL	Gravimetric Unstressed Stressed
6	Perylene-d12 **CAS #** 1520-96-3 (Lot PR-24113) **Purity** 99%	2,002.8 µg/mL	+/- 11.6445 µg/mL +/- 90.2073 µg/mL +/- 100.0962 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

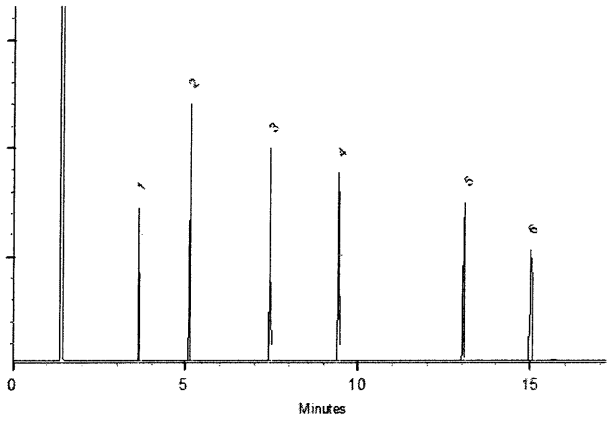
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dustin J Lidgett
Dustin Lidgett - Mix Technician

Date Mixed: 11-Jul-2018 **Balance:** 1128353505

Justine Albertson - Operations Tech-ARM QC

Date Passed: 16-Jul-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555224 **Lot No.:** A0141109 From: 57083 to: 57142

Description : Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2020 **Storage:** 10°C or colder

57
9/14/17

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,2,4,5-Tetrachlorobenzene **CAS #** 95-94-3 (Lot MKBW7717V) **Purity** 99%	1,002.0 µg/mL	+/- 5.951576 µg/mL +/- 32.142836 µg/mL +/- 37.357828 µg/mL	Gravimetric Unstressed Stressed
2	Acetophenone **CAS #** 98-86-2 (Lot STBG8586) **Purity** 99%	1,003.0 µg/mL	+/- 5.957516 µg/mL +/- 32.174914 µg/mL +/- 37.395111 µg/mL	Gravimetric Unstressed Stressed
3	Benzaldehyde **CAS #** 100-52-7 (Lot SHBG8690V) **Purity** 99%	1,002.0 µg/mL	+/- 5.951576 µg/mL +/- 32.142836 µg/mL +/- 37.357828 µg/mL	Gravimetric Unstressed Stressed
4	Benzoic acid **CAS #** 65-85-0 (Lot MKCC9722) **Purity** 99%	1,001.0 µg/mL	+/- 5.945637 µg/mL +/- 32.110757 µg/mL +/- 37.320545 µg/mL	Gravimetric Unstressed Stressed
5	Biphenyl **CAS #** 92-52-4 (Lot MKBV9808V) **Purity** 99%	1,000.0 µg/mL	+/- 5.939697 µg/mL +/- 32.078678 µg/mL +/- 37.283262 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

F. Joseph Tallon - Mix Technician

Date Mixed: 29-Aug-2018 **Balance:** B442140311

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555223 **Lot No.:** A0141282 From 57143 to 57172

Description : Custom 8270 Plus Standard #1

Custom 8270 Plus Standard #1 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2020 **Storage:** 10°C or colder

Handling: This product is photosensitive.

SJ 9/14/18

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	3,3'-Dichlorobenzidine **CAS #** 91-94-1 (Lot 070518JACG) **Purity** 99%	1,010.0 µg/mL	+/- 5.9991 µg/mL +/- 46.4105 µg/mL +/- 47.5978 µg/mL	Gravimetric Unstressed Stressed
2	Atrazine **CAS #** 1912-24-9 (Lot 77P7D) **Purity** 99%	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 45.9510 µg/mL +/- 47.1265 µg/mL	Gravimetric Unstressed Stressed
3	Benzidine **CAS #** 92-87-5 (Lot 180810JACG) **Purity** 99%	1,008.0 µg/mL	+/- 5.9872 µg/mL +/- 46.3186 µg/mL +/- 47.5035 µg/mL	Gravimetric Unstressed Stressed
4	epsilon-Caprolactam **CAS #** 105-60-2 (Lot I16X016) **Purity** 99%	1,008.0 µg/mL	+/- 5.9872 µg/mL +/- 46.3186 µg/mL +/- 47.5035 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Brandon Reish - Mix Technician

Date Mixed: 05-Sep-2018 **Balance:** B345965662

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

J.T.Baker® | avantor™

Material No.: 9266-A4
Batch No.: 0000207558
Manufactured Date: 2018/08/03
Expiration Date: 2019/11/02
Revision No: 1

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	3
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0000 ppm	0.2000
Titrable Acid (µeq/g)	<= 0.3	< 0.1
Chloride (Cl)	<= 10 ppm	< 5
Water (by KF, coulometric)	<= 0.02 %	0.01

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E 2510

ISO
Phillipsburg, NJ 9001:2015, FSSC 22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2008
Selangor, Malaysia 9001:2008
Dehradun, India 9001:2015, 14001:2015, 13485:2016
Mumbai, India 9001:2015
Panoli, India 9001:2015

James T Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.573.2600
Avantor Performance Materials, LLC.
3477 Corporate Parkway. Center Valley, PA 18034. U.S.A. Phone: 610.573.2600 . Fax: 610.573.2610

880

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

J.T.Baker® | avantor

Material No.: 9266-A4
Batch No.: 0000211047
Manufactured Date: 2018/09/11
Expiration Date: 2019/12/11
Revision No: 1

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0000 ppm	0.2000
Titrable Acid (µeq/g)	<= 0.3	< 0.1
Chloride (Cl)	<= 10 ppm	< 5
Water (by KF, coulometric)	<= 0.02 %	< 0.01

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E 2529

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

881

Acetone
ULTRA RESI-ANALYZED
For Organic Residue Analysis

J.T.Baker® | avantor

Material No.: 9254-03
Batch No.: 0000196204
Manufactured Date: 2018/02/06
Expiration Date: 2021/02/05
Revision No: 1

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected for water)	>= 99.4 %	99.8
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0000 ppm	0.3000
Substances Reducing Permanganate	Passes Test	PT
Titrable Acid (µeq/g)	<= 0.3	0.3
Titrable Base (µeq/g)	<= 0.6	< 0.1
Water (H_2O)	<= 0.5 %	0.2
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	2
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E 2534

ISO
Phillipsburg, NJ 9001:2008, 14001:2004, FSSC 22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Deventer, The Netherlands 9001:2008, 14001:2004, 13485:2003
Gliwice, Poland 9001:2008, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2008
Panoli, India 9001:2008

James Ethier
Jamie Ethier
Vice President Global Quality

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Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

J.T.Baker | avantor

Material No.: 9266-A4
Batch No.: 0000211047
Manufactured Date: 2018/09/11
Expiration Date: 2019/12/11
Revision No: 1

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0000 ppm	0.2000
Titrable Acid (µeq/g)	<= 0.3	< 0.1
Chloride (Cl)	<= 10 ppm	< 5
Water (by KF, coulometric)	<= 0.02 %	< 0.01

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E 2536

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India 9001:2015, 17025:2005
Pandi, India 9001:2015

James Ethier
Jamie Ethier
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For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
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883

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

J.T.Baker® | avantor

Material No.: 9266-A4
Batch No.: 0000214356
Manufactured Date: 2018/10/23
Expiration Date: 2020/01/22
Revision No: 1

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	3
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0000 ppm	0.2000
Titrable Acid (µeq/g)	<= 0.3	< 0.1
Chloride (Cl)	<= 10 ppm	< 5
Water (by KF, coulometric)	<= 0.02 %	< 0.01

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E 2560

ISO
Phillipsburg, NJ 9001:2015, FSSC 22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

James T Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

884

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QCBatch ID # BM111918

Review By	Jagrut	Review On	11/20/2018 5:09:56 PM		
Supervise By	Sohil	Supervise On	11/20/2018 5:10:45 PM		
SubDirectory	BM111918	HP Acquire Method	BNA_M	HP Processing Method	BM111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4531,SP4532,SP4533,SP4534,SP4535,SP4536,SP4537
CCC	SP4535
Internal Standard/PEM	S7056,10ul/1000ul sample
ICV/I.BLK	SP4538,SP4539

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP64	BM017687.D	19 Nov 2018 17:50	MJ/SJ	Ok
2	SSTD00551	BM017688.D	19 Nov 2018 18:26	MJ/SJ	Ok
3	SSTD01052	BM017689.D	19 Nov 2018 19:02	MJ/SJ	Ok,M
4	SSTD02053	BM017690.D	19 Nov 2018 19:38	MJ/SJ	Ok,M
5	SSTD04054	BM017691.D	19 Nov 2018 20:14	MJ/SJ	Ok,M
6	SSTD08055	BM017692.D	19 Nov 2018 20:50	MJ/SJ	Ok,M
7	SSTD16056	BM017693.D	19 Nov 2018 21:26	MJ/SJ	Ok,M
8	SSTDICV020	BM017694.D	19 Nov 2018 22:02	MJ/SJ	Ok,M
9	J5984-10	BM017695.D	19 Nov 2018 22:38	MJ/SJ	Ok
10	J5984-05	BM017696.D	19 Nov 2018 23:14	MJ/SJ	Ok,M
11	SSTDCCC020EC	BM017697.D	19 Nov 2018 23:50	MJ/SJ	Ok,M

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Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QCBatch ID # BM120818

Review By	Jagrut	Review On	12/10/2018 9:35:04 AM		
Supervise By	Sohil	Supervise On	12/11/2018 8:47:05 AM		
SubDirectory	BM120818	HP Acquire Method	BNA_M	HP Processing Method	BM111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4531,SP4532,SP4533,SP4534,SP4535,SP4536,SP4537
CCC	SP4535
Internal Standard/PEM	S7063,10ul/1000ul sample
ICV/I.BLK	SP4538,SP4539

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP74	BM018011.D	08 Dec 2018 10:33	JU/SJ	Ok
2	SSTDCCC020	BM018012.D	08 Dec 2018 11:10	JU/SJ	Ok
3	J6227-01	BM018013.D	08 Dec 2018 11:46	JU/SJ	Ok,M
4	J6077-01	BM018014.D	08 Dec 2018 12:23	JU/SJ	Ok,M
5	J6077-02	BM018015.D	08 Dec 2018 12:59	JU/SJ	Ok,M
6	J6077-03	BM018016.D	08 Dec 2018 13:36	JU/SJ	Ok,M
7	J6077-05	BM018017.D	08 Dec 2018 14:12	JU/SJ	Ok,M
8	J6077-06	BM018018.D	08 Dec 2018 14:49	JU/SJ	Ok,M
9	J6077-07	BM018019.D	08 Dec 2018 15:26	JU/SJ	Ok,M
10	J6077-10	BM018020.D	08 Dec 2018 16:02	JU/SJ	Ok,M
11	PB115265BL	BM018021.D	08 Dec 2018 16:39	JU/SJ	Ok,M
12	PB115349BL	BM018022.D	08 Dec 2018 17:16	JU/SJ	Ok,M
13	SSTDCCC020EC	BM018023.D	08 Dec 2018 17:53	JU/SJ	Ok

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Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QCBatch ID # BM121218

Review By	Jagrut	Review On	12/13/2018 6:15:37 PM		
Supervise By	Sohil	Supervise On	12/13/2018 6:17:27 PM		
SubDirectory	BM121218	HP Acquire Method	BNA_M	HP Processing Method	BM111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4531,SP4532,SP4533,SP4534,SP4535,SP4536,SP4537
CCC	SP4535
Internal Standard/PEM	S7063,10ul/1000ul sample
ICV/I.BLK	SP4538,SP4539

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP77	BM018092.D	12 Dec 2018 14:08	JU/SJ	Ok
2	SSTDCCC020	BM018093.D	12 Dec 2018 15:26	JU/SJ	Ok,M
3	J6227-02	BM018094.D	12 Dec 2018 16:02	JU/SJ	Ok,M
4	J6227-05	BM018095.D	12 Dec 2018 16:38	JU/SJ	Ok,M
5	J6227-06	BM018096.D	12 Dec 2018 17:15	JU/SJ	Ok,M
6	J6227-07	BM018097.D	12 Dec 2018 17:51	JU/SJ	Ok,M
7	J6227-09	BM018098.D	12 Dec 2018 18:27	JU/SJ	Ok,M
8	J6227-10	BM018099.D	12 Dec 2018 19:03	JU/SJ	Ok,M
9	J6227-11	BM018100.D	12 Dec 2018 19:40	JU/SJ	Ok,M
10	J6227-12	BM018101.D	12 Dec 2018 20:16	JU/SJ	Ok,M
11	J6227-13	BM018102.D	12 Dec 2018 20:52	JU/SJ	Ok,M
12	J6227-14	BM018103.D	12 Dec 2018 21:28	JU/SJ	Ok,M
13	J6227-17	BM018104.D	12 Dec 2018 22:04	JU/SJ	Ok,M
14	J6227-18	BM018105.D	12 Dec 2018 22:40	JU/SJ	Ok,M
15	J6227-15	BM018106.D	12 Dec 2018 23:16	JU/SJ	Ok,M
16	PB115442BL	BM018107.D	12 Dec 2018 23:52	JU/SJ	Ok,M
17	J6236-01	BM018108.D	13 Dec 2018 00:28	JU/SJ	Ok,M
18	SSTDCCC020	BM018109.D	13 Dec 2018 01:04	JU/SJ	Ok,M
19	J6227-19	BM018110.D	13 Dec 2018 01:43	JU/SJ	Ok,M
20	J6227-20	BM018111.D	13 Dec 2018 02:19	JU/SJ	Ok,M
21	J6227-08	BM018112.D	13 Dec 2018 02:55	JU/SJ	Ok,M
22	J6227-04	BM018113.D	13 Dec 2018 03:31	JU/SJ	Ok,M
23	J6227-03	BM018114.D	13 Dec 2018 04:07	JU/SJ	Ok,M
24	J6227-16	BM018115.D	13 Dec 2018 04:43	JU/SJ	Ok
25	J6236-10	BM018116.D	13 Dec 2018 05:19	JU/SJ	Ok,M
26	J6236-06	BM018117.D	13 Dec 2018 05:55	JU/SJ	Ok

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Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QCBatch ID # BM121218

Review By	Jagrut	Review On	12/13/2018 6:15:37 PM		
Supervise By	Sohil	Supervise On	12/13/2018 6:17:27 PM		
SubDirectory	BM121218	HP Acquire Method	BNA_M	HP Processing Method	BM111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4531,SP4532,SP4533,SP4534,SP4535,SP4536,SP4537
CCC	SP4535
Internal Standard/PEM	S7063,10ul/1000ul sample
ICV/I.BLK	SP4538,SP4539

27	J6236-02	BM018118.D	13 Dec 2018 06:31	JU/SJ	Ok,M
28	J6171-11	BM018119.D	13 Dec 2018 07:07	JU/SJ	Not Ok
29	J6171-16	BM018120.D	13 Dec 2018 07:43	JU/SJ	Not Ok
30	J6171-15	BM018121.D	13 Dec 2018 08:55	JU/SJ	Ok,M
31	J6171-11	BM018122.D	13 Dec 2018 09:31	JU/SJ	Ok,M
32	J6171-16	BM018123.D	13 Dec 2018 10:07	JU/SJ	Ok,M
33	SSTDCCC020EC	BM018124.D	13 Dec 2018 10:43	JU/SJ	Ok,M

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Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QCBatch ID # BM111918

Review By	Jagrut	Review On	11/20/2018 5:09:56 PM		
Supervise By	Sohil	Supervise On	11/20/2018 5:10:45 PM		
SubDirectory	BM111918	HP Acquire Method	BNA_M	HP Processing Method	BM111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4531,SP4532,SP4533,SP4534,SP4535,SP4536,SP4537
CCC	SP4535
Internal Standard/PEM	S7056,10ul/1000ul sample
ICV/I.BLK	SP4538,SP4539

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP64	DFTPP64	BM017687.D	19 Nov 2018 17:50		MJ/SJ	Ok
2	SSTD00551	SSTD00551	BM017688.D	19 Nov 2018 18:26		MJ/SJ	Ok
3	SSTD01052	SSTD01052	BM017689.D	19 Nov 2018 19:02		MJ/SJ	Ok,M
4	SSTD02053	SSTD02053	BM017690.D	19 Nov 2018 19:38		MJ/SJ	Ok,M
5	SSTD04054	SSTD04054	BM017691.D	19 Nov 2018 20:14		MJ/SJ	Ok,M
6	SSTD08055	SSTD08055	BM017692.D	19 Nov 2018 20:50		MJ/SJ	Ok,M
7	SSTD16056	SSTD16056	BM017693.D	19 Nov 2018 21:26		MJ/SJ	Ok,M
8	SSTDICV020	SICV57	BM017694.D	19 Nov 2018 22:02		MJ/SJ	Ok,M
9	J5984-10	SVOC-GPC2-BLANK	BM017695.D	19 Nov 2018 22:38		MJ/SJ	Ok
10	J5984-05	SVOC-GPC-BLANK	BM017696.D	19 Nov 2018 23:14		MJ/SJ	Ok,M
11	SSTDCCC020EC	SSTD02058	BM017697.D	19 Nov 2018 23:50		MJ/SJ	Ok,M

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Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QCBatch ID # BM120818

Review By	Jagrut	Review On	12/10/2018 9:35:04 AM		
Supervise By	Sohil	Supervise On	12/11/2018 8:47:05 AM		
SubDirectory	BM120818	HP Acquire Method	BNA_M	HP Processing Method	BM111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4531,SP4532,SP4533,SP4534,SP4535,SP4536,SP4537
CCC	SP4535
Internal Standard/PEM	S7063,10ul/1000ul sample
ICV/I.BLK	SP4538,SP4539

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP74	DFTPP74	BM018011.D	08 Dec 2018 10:33		JU/SJ	Ok
2	SSTDCCC020	SSTD02084	BM018012.D	08 Dec 2018 11:10		JU/SJ	Ok
3	J6227-01	F9E64	BM018013.D	08 Dec 2018 11:46		JU/SJ	Ok,M
4	J6077-01	F9Y35	BM018014.D	08 Dec 2018 12:23		JU/SJ	Ok,M
5	J6077-02	F9Y36	BM018015.D	08 Dec 2018 12:59		JU/SJ	Ok,M
6	J6077-03	F9Y42	BM018016.D	08 Dec 2018 13:36		JU/SJ	Ok,M
7	J6077-05	F9Y38	BM018017.D	08 Dec 2018 14:12		JU/SJ	Ok,M
8	J6077-06	F9Y41	BM018018.D	08 Dec 2018 14:49		JU/SJ	Ok,M
9	J6077-07	F9Y39	BM018019.D	08 Dec 2018 15:26		JU/SJ	Ok,M
10	J6077-10	F9Y44	BM018020.D	08 Dec 2018 16:02		JU/SJ	Ok,M
11	PB115265BL	SBLK65	BM018021.D	08 Dec 2018 16:39		JU/SJ	Ok,M
12	PB115349BL	SBLK49	BM018022.D	08 Dec 2018 17:16		JU/SJ	Ok,M
13	SSTDCCC020EC	SSTD02085	BM018023.D	08 Dec 2018 17:53		JU/SJ	Ok

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QCBatch ID # BM121218

Review By	Jagrut	Review On	12/13/2018 6:15:37 PM		
Supervise By	Sohil	Supervise On	12/13/2018 6:17:27 PM		
SubDirectory	BM121218	HP Acquire Method	BNA_M	HP Processing Method	BM111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4531,SP4532,SP4533,SP4534,SP4535,SP4536,SP4537
CCC	SP4535
Internal Standard/PEM	S7063,10ul/1000ul sample
ICV/I.BLK	SP4538,SP4539

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP77	DFTPP77	BM018092.D	12 Dec 2018 14:08		JU/SJ	Ok
2	SSTDCCC020	SSTD02093	BM018093.D	12 Dec 2018 15:26		JU/SJ	Ok,M
3	J6227-02	F9E65	BM018094.D	12 Dec 2018 16:02		JU/SJ	Ok,M
4	J6227-05	F9E74	BM018095.D	12 Dec 2018 16:38		JU/SJ	Ok,M
5	J6227-06	F9E75	BM018096.D	12 Dec 2018 17:15		JU/SJ	Ok,M
6	J6227-07	F9E80	BM018097.D	12 Dec 2018 17:51		JU/SJ	Ok,M
7	J6227-09	F9E54	BM018098.D	12 Dec 2018 18:27		JU/SJ	Ok,M
8	J6227-10	F9E55	BM018099.D	12 Dec 2018 19:03		JU/SJ	Ok,M
9	J6227-11	F9E56	BM018100.D	12 Dec 2018 19:40		JU/SJ	Ok,M
10	J6227-12	F9E57	BM018101.D	12 Dec 2018 20:16		JU/SJ	Ok,M
11	J6227-13	F9E60	BM018102.D	12 Dec 2018 20:52		JU/SJ	Ok,M
12	J6227-14	F9E61	BM018103.D	12 Dec 2018 21:28		JU/SJ	Ok,M
13	J6227-17	F9E62	BM018104.D	12 Dec 2018 22:04		JU/SJ	Ok,M
14	J6227-18	F9E63	BM018105.D	12 Dec 2018 22:40		JU/SJ	Ok,M
15	J6227-15	F9F34	BM018106.D	12 Dec 2018 23:16		JU/SJ	Ok,M
16	PB115442BL	SBLK42	BM018107.D	12 Dec 2018 23:52		JU/SJ	Ok,M
17	J6236-01	F9E83	BM018108.D	13 Dec 2018 00:28		JU/SJ	Ok,M
18	SSTDCCC020	SSTD02094	BM018109.D	13 Dec 2018 01:04		JU/SJ	Ok,M
19	J6227-19	F9E68	BM018110.D	13 Dec 2018 01:43		JU/SJ	Ok,M
20	J6227-20	F9E69	BM018111.D	13 Dec 2018 02:19		JU/SJ	Ok,M
21	J6227-08	F9F33	BM018112.D	13 Dec 2018 02:55		JU/SJ	Ok,M

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Instrument ID: BNA_M

Daily Analysis Runlog For Sequence/QCBatch ID # BM121218

Review By	Jagrut	Review On	12/13/2018 6:15:37 PM		
Supervise By	Sohil	Supervise On	12/13/2018 6:17:27 PM		
SubDirectory	BM121218	HP Acquire Method	BNA_M	HP Processing Method	BM111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4531,SP4532,SP4533,SP4534,SP4535,SP4536,SP4537
CCC	SP4535
Internal Standard/PEM	S7063,10ul/1000ul sample
ICV/I.BLK	SP4538,SP4539

22	J6227-04	F9E67	BM018113.D	13 Dec 2018 03:31		JU/SJ	Ok,M
23	J6227-03	F9E66	BM018114.D	13 Dec 2018 04:07		JU/SJ	Ok,M
24	J6227-16	F9F35	BM018115.D	13 Dec 2018 04:43		JU/SJ	Ok
25	J6236-10	F9E20	BM018116.D	13 Dec 2018 05:19		JU/SJ	Ok,M
26	J6236-06	F9E16	BM018117.D	13 Dec 2018 05:55		JU/SJ	Ok
27	J6236-02	F9E98	BM018118.D	13 Dec 2018 06:31		JU/SJ	Ok,M
28	J6171-11	F9Y15	BM018119.D	13 Dec 2018 07:07	Need straight run.	JU/SJ	Not Ok
29	J6171-16	F9Y26	BM018120.D	13 Dec 2018 07:43	Need straight run.	JU/SJ	Not Ok
30	J6171-15	F9Y25	BM018121.D	13 Dec 2018 08:55		JU/SJ	Ok,M
31	J6171-11	F9Y15	BM018122.D	13 Dec 2018 09:31		JU/SJ	Ok,M
32	J6171-16	F9Y26	BM018123.D	13 Dec 2018 10:07		JU/SJ	Ok,M
33	SSTDCCC020EC	SSTD02095	BM018124.D	13 Dec 2018 10:43		JU/SJ	Ok,M

FORM 2A-OR
DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name : Chemtech Consulting Group Contract: EPW14030

Lab Code : CHM Case No.: 48019 MA No.: _____ SDG No.: F9E54

Analytical Method : SVOA SIM Level : Low

Matrix : Soil

EPA Sample No .	DMC1 (FLN)	DMC2 (2MN)	DMC3	DMC4	DMC5	DMC6	DMC7	DMC8	DMC9
F9E54	40	43							
F9E55	77	80							
F9E56	43	45							
F9E57	71	75							
F9E60	41	41							
F9E61	62	65							
F9E62	35	36							
F9E63	72	75							
F9E64	44	47							
F9E65	44	46							
F9E66	53	49							
F9E67	44	40							
F9E68	53	50							
F9E69	50	47							
F9E74	32	34							
F9E75	37	39							
F9E80	39	41							
F9F33	49	45							
F9F34	60	57							
F9F35	59	53							
SBLK50	72	71							

	QC LIMITS
DMC1 (FLN) = Fluoranthene-d10 (SIM)	(30-130)
DMC2 (2MN) = 2-Methylnapthalene-d10 (SIM)	(20-140)

FORM 2B-OR
DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name : Chemtech Consulting Group Contract : EPW14030
Lab Code : CHM Case No.: 48019 MA No.: _____ SDG No.: F9E54
Analytical Method : SVOA SIM Level : Low
Matrix : Soil

EPA Sample No .	DMC10	DMC11	DMC12	DMC13	DMC14	DMC15	DMC16	DMC17	Tot Out
F9E54									0
F9E55									0
F9E56									0
F9E57									0
F9E60									0
F9E61									0
F9E62									0
F9E63									0
F9E64									0
F9E65									0
F9E66									0
F9E67									0
F9E68									0
F9E69									0
F9E74									0
F9E75									0
F9E80									0
F9F33									0
F9F34									0
F9F35									0
SBLK50									0

EPA SAMPLE NO.

SBLK50

FORM 4-OR
METHOD BLANK SUMMARY

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : _____ sdg no.: F9E54
Analytical Method: SVOA SIM
Level : Low
Matrix : Soil
Lab Sample ID: PB115350BL
Instrument ID: BNA_N
Lab File ID : BN003742.D
Extraction Type : SOXH
Date Extracted : 12/05/2018
GC Column ( ) : ZB-GR ID : 0.25 (mm)
Date Analyzed : 12/06/2018
GC Column ( ) : _____ ID : _____ (mm)
Time Analyzed : 21:45
Heated Purge: (Y/N) _____ Cleanup(Y/N): Y
Cleanup Types : GPC

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE / TIME ANALYZED
F9E64	J6227-01	BN003741.D	12/06/2018 21:09
F9E65	J6227-02	BN003744.D	12/07/2018 00:05
F9E74	J6227-05	BN003745.D	12/07/2018 00:40
F9E75	J6227-06	BN003746.D	12/07/2018 01:15
F9E80	J6227-07	BN003747.D	12/07/2018 01:50
F9E54	J6227-09	BN003748.D	12/07/2018 02:25
F9E55	J6227-10	BN003749.D	12/07/2018 03:00
F9E56	J6227-11	BN003750.D	12/07/2018 03:35
F9E57	J6227-12	BN003751.D	12/07/2018 04:09
F9E60	J6227-13	BN003752.D	12/07/2018 04:44
F9E61	J6227-14	BN003753.D	12/07/2018 05:19
F9E62	J6227-17	BN003754.D	12/07/2018 05:54
F9E63	J6227-18	BN003755.D	12/07/2018 06:29
F9F34	J6227-15	BN003951.D	12/15/2018 10:24
F9E66	J6227-03	BN003954.D	12/15/2018 12:09
F9E67	J6227-04	BN003956.D	12/15/2018 13:20
F9F33	J6227-08	BN003958.D	12/15/2018 14:31
F9F35	J6227-16	BN003960.D	12/15/2018 15:42
F9E68	J6227-19	BN003962.D	12/15/2018 16:52
F9E69	J6227-20	BN003965.D	12/15/2018 19:14

FORM 5-OR
GC/MS INSTRUMENT PERFORMANCE CHECK

EPA SAMPLE NO.
DFTPP54

Lab Name : Chemtech Consulting Group Contract : EPW14030
Lab Code: CHM Case No.: 48019 MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM Lab File ID : BN003588.D
Instrument ID: BNA_N BFB / DFTPP : DFTPP
GC Column : ZB-GR ID : 0.25 (mm)
Injection Date : 11/19/2018 Injection Time : 11:40

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	25.4	
68	Less than 2.0% of mass 69	0.6(1.9)	1
69	Present	28.8	
70	Less than 2.0% of mass 69	0.1(0.5)	1
127	10.0 - 80.0% of mass 198	41.1	
197	Less than 2.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0 - 60.0% of mass 198	30.4	
365	Greater than 1% of mass 198	3.5	
441	Present, but less than mass 443	12.6	
442	Greater than 50.0% of mass 198	80	
443	15.0 - 24.0% of mass 442	15.5(19.4)	2

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTD0.161	SSTD0.161	BN003589.D	11/19/2018	12:15
SSTD0.262	SSTD0.262	BN003590.D	11/19/2018	12:50
SSTD0.463	SSTD0.463	BN003591.D	11/19/2018	13:25
SSTD0.864	SSTD0.864	BN003592.D	11/19/2018	14:00
SSTD1.665	SSTD1.665	BN003593.D	11/19/2018	14:35
SSTD3.266	SSTD3.266	BN003594.D	11/19/2018	15:10
SICV67	SSTDICV0.4	BN003595.D	11/19/2018	15:45

FORM 5-OR
GC/MS INSTRUMENT PERFORMANCE CHECK

EPA SAMPLE NO.
DFTPP62

Lab Name : Chemtech Consulting Group Contract : EPW14030
Lab Code: CHM Case No.: 48019 MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM Lab File ID : BN003729.D
Instrument ID: BNA_N BFB / DFTPP : DFTPP
GC Column : ZB-GR ID : 0.25 (mm)
Injection Date : 12/06/2018 Injection Time : 13:57

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	27.3	
68	Less than 2.0% of mass 69	0.6(1.9)	1
69	Present	31.2	
70	Less than 2.0% of mass 69	0.1(0.4)	1
127	10.0 - 80.0% of mass 198	43.1	
197	Less than 2.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0 - 60.0% of mass 198	30.8	
365	Greater than 1% of mass 198	3.9	
441	Present, but less than mass 443	13.2	
442	Greater than 50.0% of mass 198	85	
443	15.0 - 24.0% of mass 442	16.6(19.5)	2

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTD0.489	SSTDCCC0.4	BN003730.D	12/06/2018	14:32
F9E64	J6227-01	BN003741.D	12/06/2018	21:09
SBLK50	PB115350BL	BN003742.D	12/06/2018	21:45
SSTD0.490	SSTDCCC0.4	BN003743.D	12/06/2018	22:20
F9E65	J6227-02	BN003744.D	12/07/2018	00:05
F9E74	J6227-05	BN003745.D	12/07/2018	00:40
F9E75	J6227-06	BN003746.D	12/07/2018	01:15
F9E80	J6227-07	BN003747.D	12/07/2018	01:50
F9E54	J6227-09	BN003748.D	12/07/2018	02:25
F9E55	J6227-10	BN003749.D	12/07/2018	03:00
F9E56	J6227-11	BN003750.D	12/07/2018	03:35
F9E57	J6227-12	BN003751.D	12/07/2018	04:09
F9E60	J6227-13	BN003752.D	12/07/2018	04:44
F9E61	J6227-14	BN003753.D	12/07/2018	05:19
F9E62	J6227-17	BN003754.D	12/07/2018	05:54
F9E63	J6227-18	BN003755.D	12/07/2018	06:29
SSTD0.491	SSTDCCC0.4EC	BN003756.D	12/07/2018	07:04

FORM 5-OR
GC/MS INSTRUMENT PERFORMANCE CHECK

EPA SAMPLE NO.
DFTPP69

Lab Name : Chemtech Consulting Group Contract : EPW14030
Lab Code: CHM Case No.: 48019 MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM Lab File ID : BN003949.D
Instrument ID: BNA_N BFB / DFTPP : DFTPP
GC Column : ZB-GR ID : 0.25 (mm)
Injection Date : 12/15/2018 Injection Time : 08:31

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	30.4	
68	Less than 2.0% of mass 69	0.6(1.9)	1
69	Present	34	
70	Less than 2.0% of mass 69	0.0(0.0)	1
127	10.0 - 80.0% of mass 198	44.7	
197	Less than 2.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100	
199	5.0 to 9.0% of mass 198	6.9	
275	10.0 - 60.0% of mass 198	30.3	
365	Greater than 1% of mass 198	3.9	
441	Present, but less than mass 443	13.4	
442	Greater than 50.0% of mass 198	85	
443	15.0 - 24.0% of mass 442	16.5(19.4)	2

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTD0.417	SSTDCCC0.4	BN003950.D	12/15/2018	09:48
F9F34	J6227-15	BN003951.D	12/15/2018	10:24
F9E66	J6227-03	BN003954.D	12/15/2018	12:09
F9E67	J6227-04	BN003956.D	12/15/2018	13:20
F9F33	J6227-08	BN003958.D	12/15/2018	14:31
F9F35	J6227-16	BN003960.D	12/15/2018	15:42
F9E68	J6227-19	BN003962.D	12/15/2018	16:52
SSTD0.418	SSTDCCC0.4	BN003964.D	12/15/2018	18:38
F9E69	J6227-20	BN003965.D	12/15/2018	19:14
SSTD0.419	SSTDCCC0.4	BN003980.D	12/16/2018	04:44

FORM 8A-OR
INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Chemtech Consulting Group | Contract: EPW14030
Lab Code: CHM | Case No.: 48019 | MA No.: | SDG No.: F9E54
Analytical Method: SVOA SIM | Level : LOW
EPA Sample No. : SSTD0.489 | Lab File ID (Standard) : BN003730.D
Instrument ID : BNA_N | Init.Calib.Date(s): 11/19/2018
GC Column : ZB-GR | ID: 0.25 (mm) | Date Analyzed : 12/06/2018
Heated Purge: | Time Analyzed : 14:32

	IS1 (DCB) AREA	RT	IS2 (NPT) AREA	RT	IS3 (ANT) AREA	RT
12 HOUR STD	7212	7.84	29029	10.63	15158	14.47
UPPER LIMIT	14424	8.34	58058	11.13	30316	14.97
LOWER LIMIT	3606	7.34	14514.5	10.13	7579	13.97
EPA SAMPLE NO.						
F9E64	5614	7.84	23235	10.63	12462	14.47
SBLK50	4597	7.84	19064	10.63	10696	14.47

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

FORM 8A-OR
INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Chemtech Consulting Group | Contract: EPW14030
Lab Code: CHM | Case No.: 48019 | MA No.: | SDG No.: F9E54
Analytical Method: SVOA SIM | Level : LOW
EPA Sample No. : SSTD0.489 | Lab File ID (Standard) : BN003730.D
Instrument ID : BNA_N | Init.Calib.Date(s): 11/19/2018
GC Column : ZB-GR | ID: 0.25 (mm) | Date Analyzed : 12/06/2018
Heated Purge: | Time Analyzed : 14:32

	IS4 (PHN) AREA	RT	IS5 (CRY) AREA	RT	IS6 (PRY) AREA	RT
12 HOUR STD	33873	17.21	32378	21.40	29382	23.71
UPPER LIMIT	67746	17.71	64756	21.90	58764	24.21
LOWER LIMIT	16936.5	16.71	16189	20.90	14691	23.21
EPA SAMPLE NO.						
F9E64	27596	17.21	22686	21.40	18273	23.71
SBLK50	22939	17.21	19266	21.40	15287	23.71

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

FORM 8A-OR
INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Chemtech Consulting Group | Contract: EPW14030
Lab Code: CHM | Case No.: 48019 | MA No.: | SDG No.: F9E54
Analytical Method: SVOA SIM | Level : LOW
EPA Sample No. : SSTD0.490 | Lab File ID (Standard) : BN003743.D
Instrument ID : BNA_N | Init.Calib.Date(s): 11/19/2018
GC Column : ZB-GR | ID: 0.25 (mm) | Date Analyzed : 12/06/2018
Heated Purge: | Time Analyzed : 22:20

	IS1 (DCB) AREA	RT	IS2 (NPT) AREA	RT	IS3 (ANT) AREA	RT
12 HOUR STD	4862	7.84	19350	10.63	9811	14.47
UPPER LIMIT	9724	8.34	38700	11.13	19622	14.97
LOWER LIMIT	2431	7.34	9675	10.13	4905.5	13.97
EPA SAMPLE NO.						
F9E61	5854	7.84	24192	10.63	13320	14.47
F9E62	6244	7.84	25662	10.63	13672	14.47
F9E63	5385	7.84	22379	10.63	12364	14.47
F9E65	5623	7.84	22974	10.63	12219	14.47
F9E74	5958	7.84	24426	10.63	13077	14.47
F9E75	5576	7.84	23102	10.63	12525	14.47
F9E80	5780	7.84	23721	10.63	12704	14.47
F9E54	5417	7.84	22528	10.63	12125	14.47
F9E55	5538	7.84	22965	10.63	12823	14.47
F9E56	5564	7.84	22838	10.63	12185	14.47
F9E57	5667	7.84	23501	10.63	13064	14.47
F9E60	5726	7.84	23662	10.63	12654	14.47

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

FORM 8A-OR
INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Chemtech Consulting Group | Contract: EPW14030
Lab Code: CHM | Case No.: 48019 | MA No.: | SDG No.: F9E54
Analytical Method: SVOA SIM | Level : LOW
EPA Sample No. : SSTD0.490 | Lab File ID (Standard) : BN003743.D
Instrument ID : BNA_N | Init.Calib.Date(s): 11/19/2018
GC Column : ZB-GR | ID: 0.25 (mm) | Date Analyzed : 12/06/2018
Heated Purge: | Time Analyzed : 22:20

	IS4 (PHN) AREA	RT	IS5 (CRY) AREA	RT	IS6 (PRY) AREA	RT
12 HOUR STD	21427	17.22	18368	21.40	15568	23.71
UPPER LIMIT	42854	17.72	36736	21.90	31136	24.21
LOWER LIMIT	10713.5	16.72	9184	20.90	7784	23.21
EPA SAMPLE NO.						
F9E61	28804	17.21	24900	21.39	19580	23.70
F9E62	30213	17.21	25329	21.39	19006	23.70
F9E63	26488	17.21	22461	21.39	16926	23.70
F9E65	26434	17.21	21109	21.39	15742	23.70
F9E74	28060	17.21	21602	21.39	20863	23.70
F9E75	27078	17.21	22361	21.39	17516	23.70
F9E80	27834	17.21	22548	21.39	17031	23.70
F9E54	26845	17.21	22996	21.39	17798	23.70
F9E55	27422	17.21	23253	21.39	17729	23.70
F9E56	25903	17.21	20030	21.39	15079	23.70
F9E57	27819	17.21	22949	21.39	16829	23.70
F9E60	27784	17.21	22354	21.39	17249	23.70

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

FORM 8A-OR
INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Chemtech Consulting Group | Contract: EPW14030
Lab Code: CHM | Case No.: 48019 | MA No.: | SDG No.: F9E54
Analytical Method: SVOA SIM | Level : LOW
EPA Sample No. : SSTD0.417 | Lab File ID (Standard) : BN003950.D
Instrument ID : BNA_N | Init.Calib.Date(s): 11/19/2018
GC Column : ZB-GR | ID: 0.25 (mm) | Date Analyzed : 12/15/2018
Heated Purge: | Time Analyzed : 09:48

	IS1 (DCB) AREA	RT	IS2 (NPT) AREA	RT	IS3 (ANT) AREA	RT
12 HOUR STD	2264	7.83	10864	10.63	6266	14.47
UPPER LIMIT	4528	8.33	21728	11.13	12532	14.97
LOWER LIMIT	1132	7.33	5432	10.13	3133	13.97
EPA SAMPLE NO.						
F9F34	2284	7.84	10618	10.63	6240	14.47
F9E66	1764	7.84	8928	10.63	5379	14.47
F9E67	2004	7.84	9654	10.63	5826	14.47
F9F33	1778	7.84	8864	10.63	5432	14.47
F9F35	1809	7.84	8997	10.63	5471	14.47
F9E68	1933	7.84	9507	10.63	5804	14.47

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

FORM 8A-OR
INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Chemtech Consulting Group | Contract: EPW14030
Lab Code: CHM | Case No.: 48019 | MA No.: | SDG No.: F9E54
Analytical Method: SVOA SIM | Level : LOW
EPA Sample No. : SSTD0.417 | Lab File ID (Standard) : BN003950.D
Instrument ID : BNA_N | Init.Calib.Date(s): 11/19/2018
GC Column : ZB-GR | ID: 0.25 (mm) | Date Analyzed : 12/15/2018
Heated Purge: | Time Analyzed : 09:48

	IS4 (PHN) AREA	RT	IS5 (CRY) AREA	RT	IS6 (PRY) AREA	RT
12 HOUR STD	15201	17.21	19004	21.40	16479	23.72
UPPER LIMIT	30402	17.71	38008	21.90	32958	24.22
LOWER LIMIT	7600.5	16.71	9502	20.90	8239.5	23.22
EPA SAMPLE NO.						
F9F34	15111	17.21	18090	21.40	16672	23.71
F9E66	13588	17.21	17161	21.40	15425	23.71
F9E67	14527	17.21	17976	21.40	16348	23.71
F9F33	13431	17.22	17371	21.40	15893	23.71
F9F35	13810	17.21	17775	21.40	16182	23.71
F9E68	14428	17.21	17949	21.40	16616	23.72

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

FORM 8A-OR
INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Chemtech Consulting Group Contract: EPW14030
Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54
Analytical Method: SVOA SIM Level : LOW
EPA Sample No. : SSTD0.418 Lab File ID (Standard) : BN003964.D
Instrument ID : BNA_N Init.Calib.Date(s): 11/19/2018
GC Column : ZB-GR ID: 0.25 (mm) Date Analyzed : 12/15/2018
Heated Purge: Time Analyzed : 18:38

	IS1 (DCB) AREA	RT	IS2 (NPT) AREA	RT	IS3 (ANT) AREA	RT
12 HOUR STD	1929	7.84	9849	10.63	5818	14.47
UPPER LIMIT	3858	8.34	19698	11.13	11636	14.97
LOWER LIMIT	964.5	7.34	4924.5	10.13	2909	13.97
EPA SAMPLE NO.						
F9E69	2173	7.84	10579	10.63	6313	14.47

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

FORM 8A-OR
INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Chemtech Consulting Group | Contract: EPW14030
Lab Code: CHM | Case No.: 48019 | MA No.: | SDG No.: F9E54
Analytical Method: SVOA SIM | Level : LOW
EPA Sample No. : SSTD0.418 | Lab File ID (Standard) : BN003964.D
Instrument ID : BNA_N | Init.Calib.Date(s): 11/19/2018
GC Column : ZB-GR | ID: 0.25 (mm) | Date Analyzed : 12/15/2018
Heated Purge: | Time Analyzed : 18:38

	IS4 (PHN) AREA	RT	IS5 (CRY) AREA	RT	IS6 (PRY) AREA	RT
12 HOUR STD	14457	17.22	18093	21.40	15964	23.72
UPPER LIMIT	28914	17.72	36186	21.90	31928	24.22
LOWER LIMIT	7228.5	16.72	9046.5	20.90	7982	23.22
EPA SAMPLE NO.						
F9E69	15409	17.21	18733	21.40	16015	23.71

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E54

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-09
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BN003748.D
% Solids : 87.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/07/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	3.7	U
91-57-6	2-Methylnaphthalene	3.7	U
208-96-8	Acenaphthylene	3.7	U
83-32-9	Acenaphthene	3.7	U
86-73-7	Fluorene	3.7	U
87-86-5	Pentachlorophenol	7.6	U
85-01-8	Phenanthrene	3.7	U
120-12-7	Anthracene	3.7	U
206-44-0	Fluoranthene	3.7	U
129-00-0	Pyrene	0.94	J
56-55-3	Benzo(a)anthracene	3.7	U
218-01-9	Chrysene	1.1	J
205-99-2	Benzo(b)fluoranthene	0.83	J
207-08-9	Benzo(k)fluoranthene	3.7	U
50-32-8	Benzo(a)pyrene	3.7	U
193-39-5	Indeno(1,2,3-cd)pyrene	3.7	U
53-70-3	Dibenzo(a,h)anthracene	3.7	U
191-24-2	Benzo(g,h,i)perylene	3.7	U

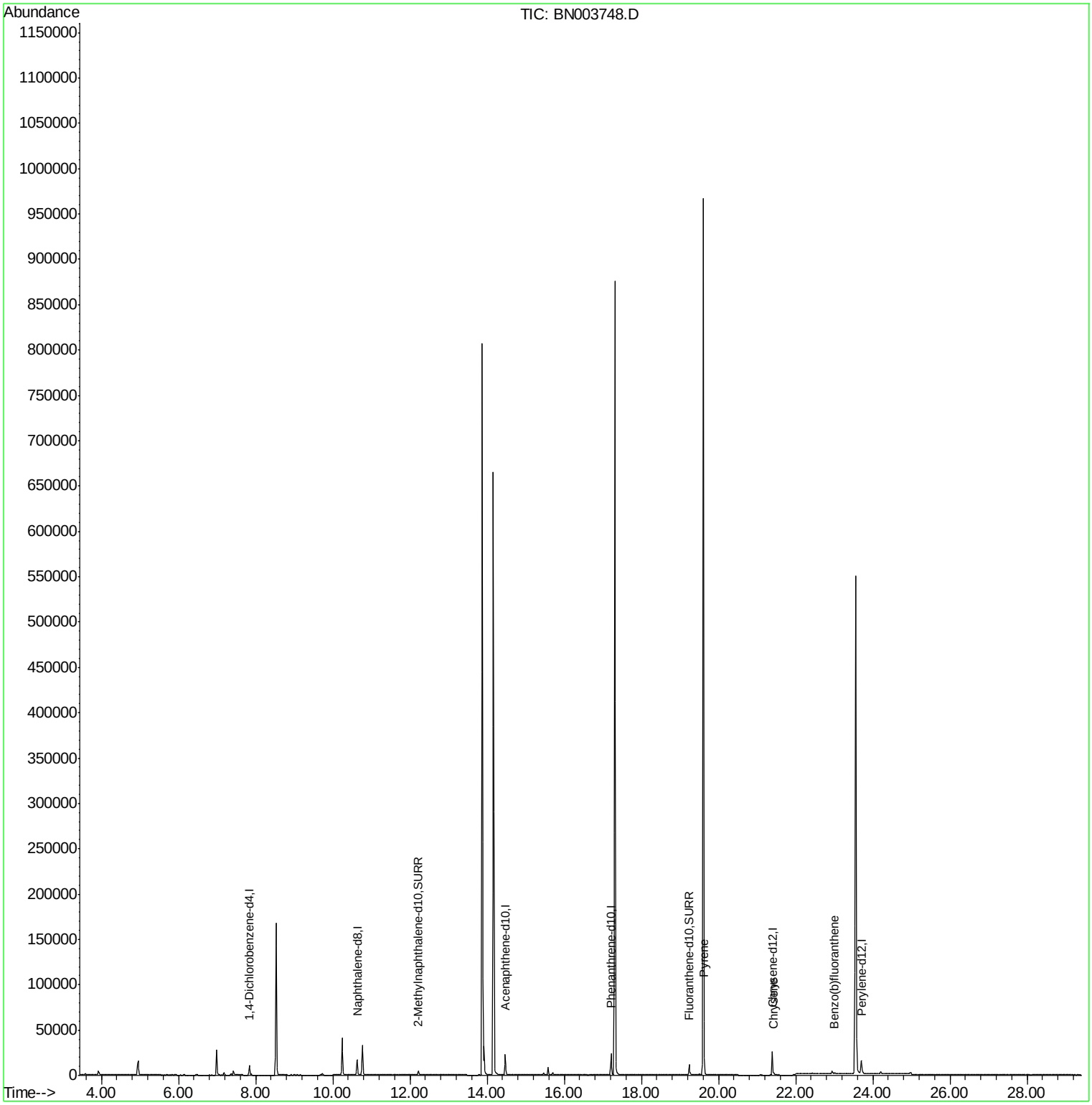
Quantitation Report (QT Reviewed)

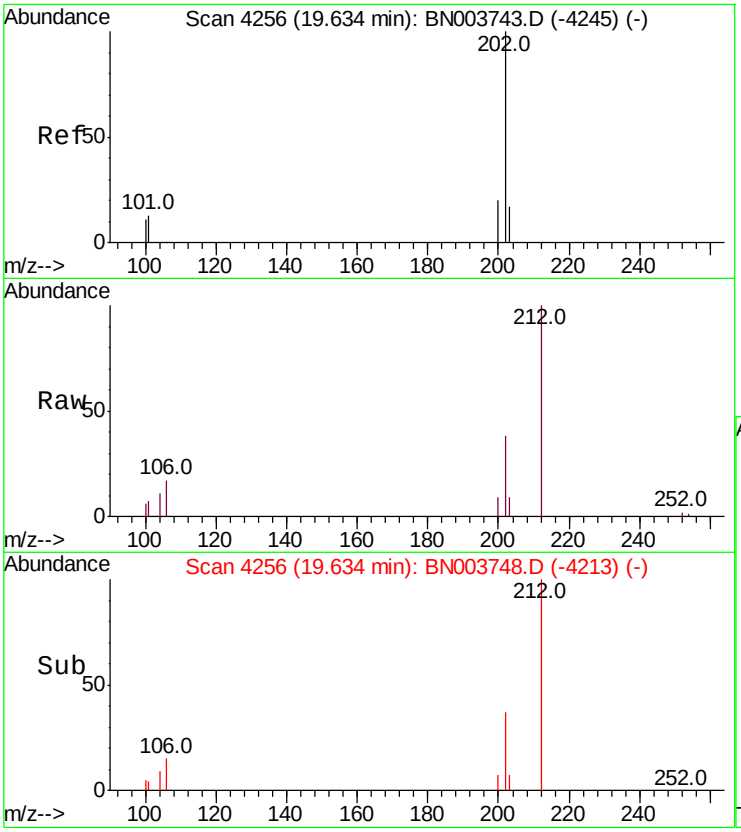
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003748.D
Acq On : 07 Dec 2018 02:25
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 07 04:49:35 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E54

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:49 PM





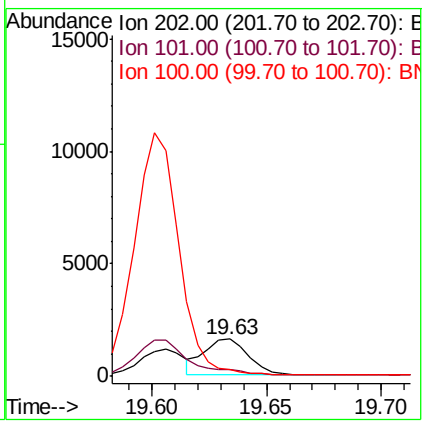
#17
Pyrene
Concen: 0.025 ng/ul
RT: 19.63 min Scan# 4256
Delta R.T. -0.00 min
Lab File: BN003748.D
Acq: 07 Dec 2018 02:25

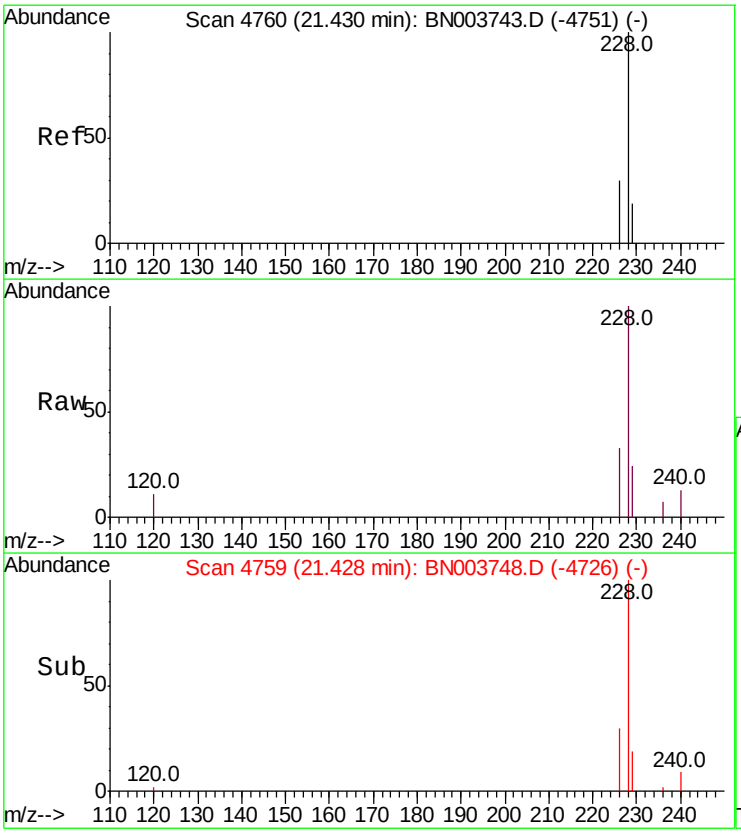
Tgt Ion:202 Resp: 2098

Ion	Ratio	Lower	Upper
202	100		
101	17.5	10.3	15.5#
100	16.9	8.5	12.7#

Instrument :
BNA_N
ClientSampleId :
F9E54

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:49 PM

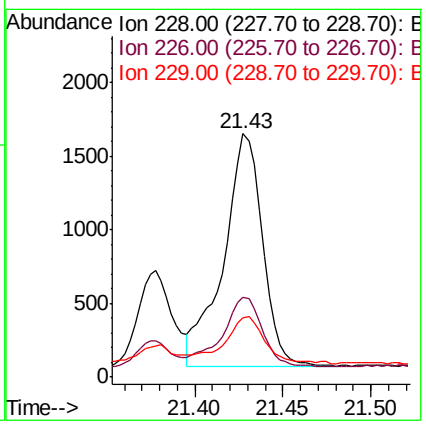


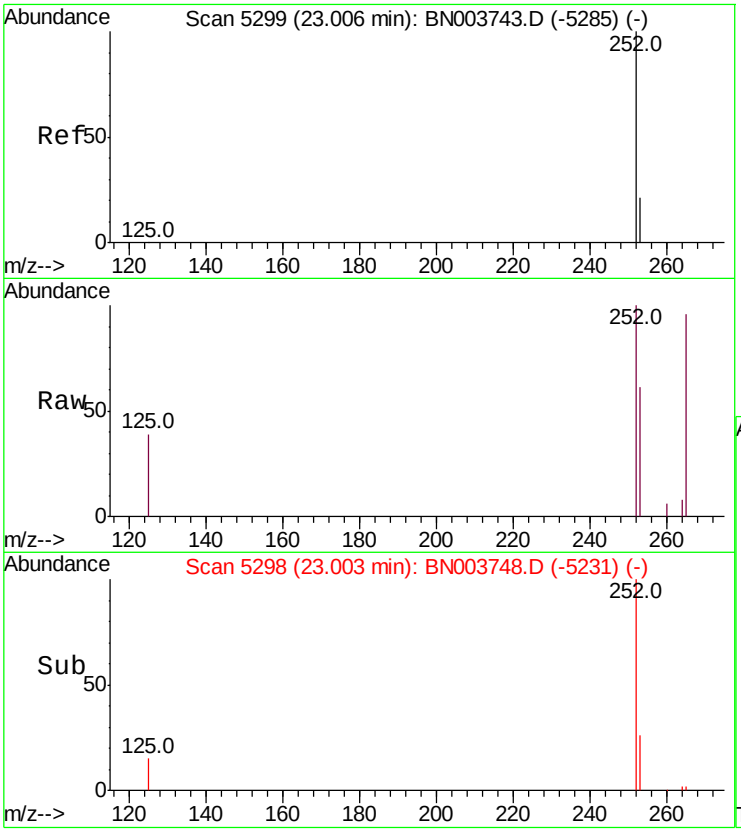


#19
Chrysene
Concen: 0.029 ng/ul
RT: 21.43 min Scan# 4759
Delta R.T. -0.00 min
Lab File: BN003748.D
Acq: 07 Dec 2018 02:25

Tgt Ion:228 Resp: 2388

Ion	Ratio	Lower	Upper
228	100		
226	32.9	24.0	36.0
229	24.5	15.7	23.5#

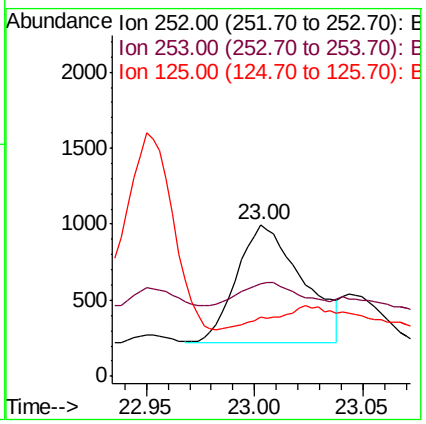




#21
Benzo(b)fluoranthene
Concen: 0.022 ng/ul m
RT: 23.00 min Scan# 5298
Delta R.T. -0.00 min
Lab File: BN003748.D
Acq: 07 Dec 2018 02:25

Tgt Ion:252 Resp: 1617

Ion	Ratio	Lower	Upper
252	100		
253	60.8	0.0	46.0#
125	38.8	0.0	22.4#



Instrument :
BNA_N
ClientSampleId :
F9E54

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:49 PM

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003748.D
Acq On : 07 Dec 2018 02:25
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9E54

Manual Integrations APPROVED
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Quant Time: Dec 07 04:49:35 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5417	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	22528	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12125	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	26845m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	22996m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	17798m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.21	152	5879	0.17	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	12511m	0.16	ng/ul	0.00
Target Compounds						Qvalue
17) Pyrene	19.63	202	2098	0.025	ng/ul#	86
19) Chrysene	21.43	228	2388	0.029	ng/ul#	93
21) Benzo(b)fluoranthene	23.00	252	1617m	0.022	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003748.D
Acq On : 07 Dec 2018 02:25
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 07 04:49:35 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E54

Manual Integrations APPROVED
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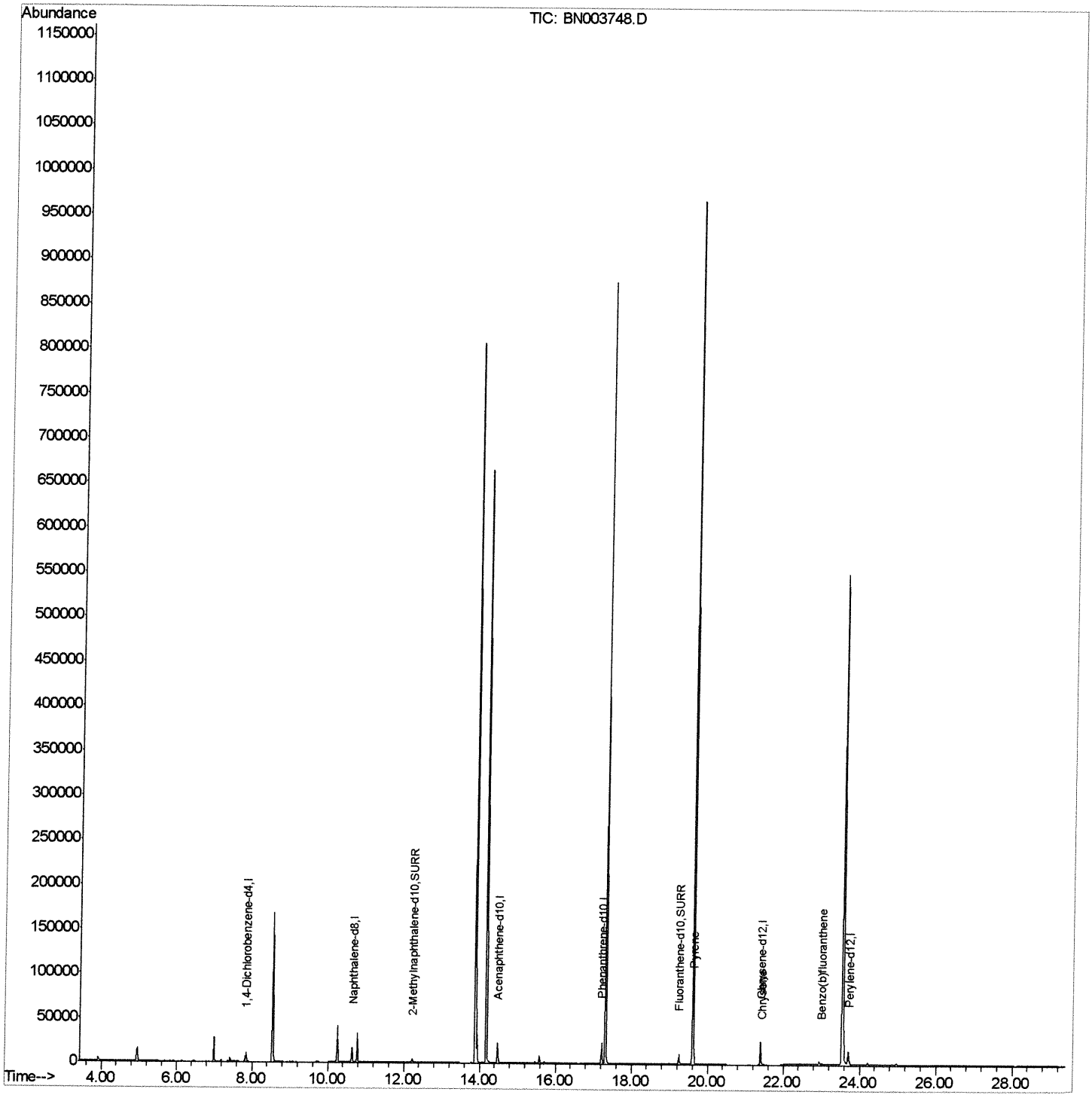

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003748.D
Acq On : 07 Dec 2018 02:25
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 07 04:12:46 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E54

Manual Integrations APPROVED
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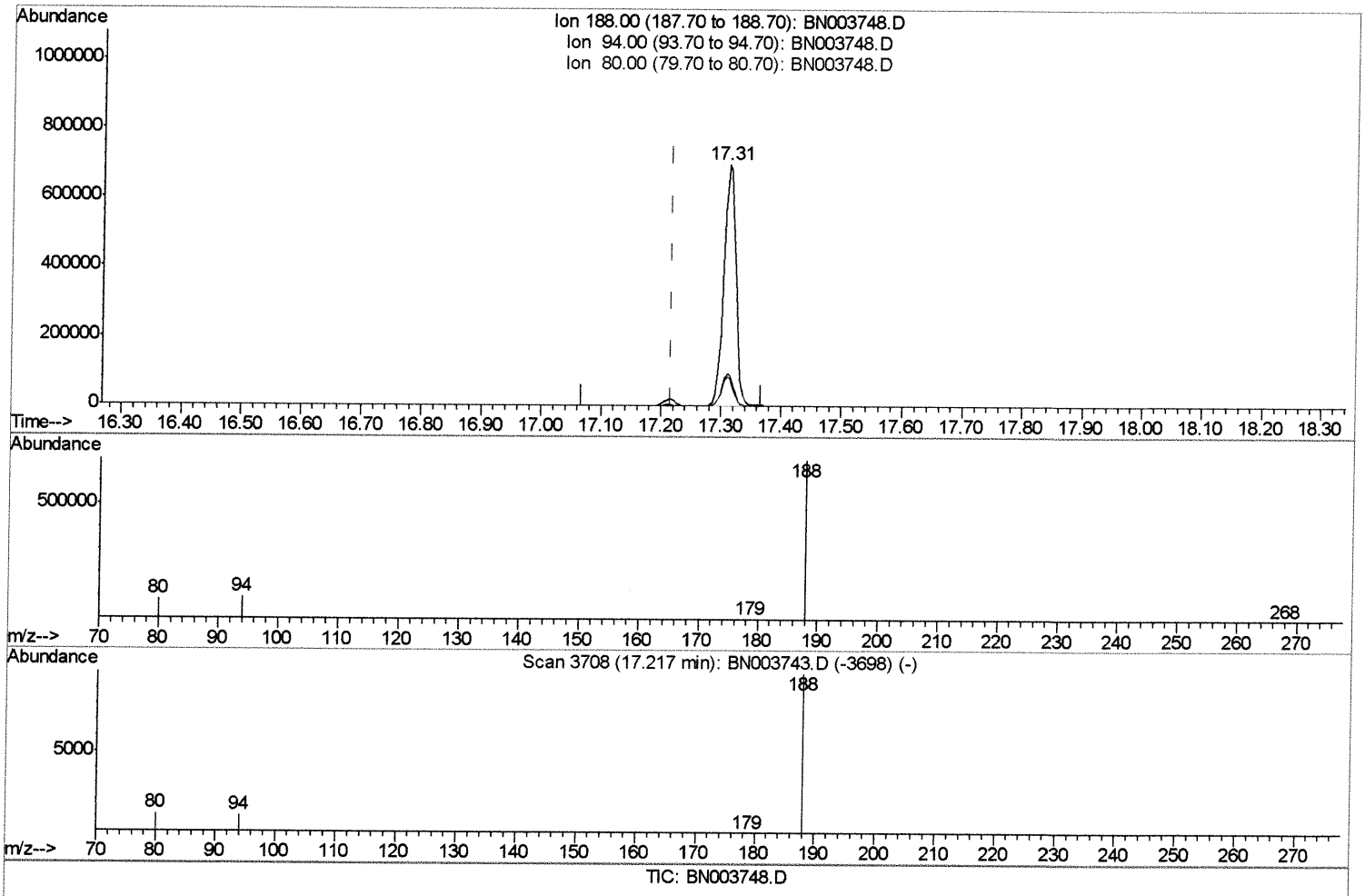


TIC: BN003748.D

(10) Phenanthrene-d10 (I)

17.310min (+0.093) 0.40ng/ul

response 969392

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	13.58#
80.00	11.60	12.18
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

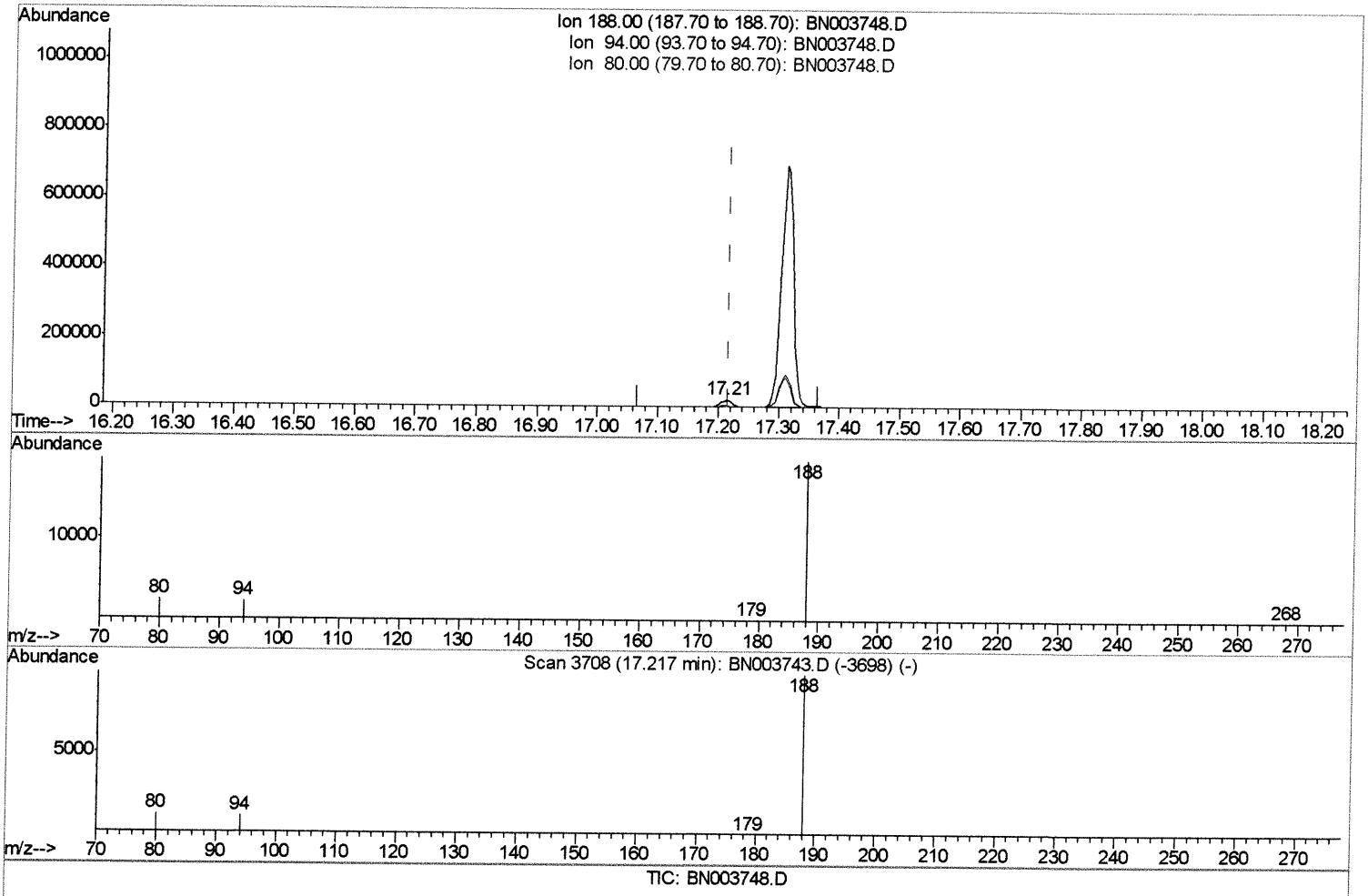
Quantitation Report (Qedit)

Data File : BN003748.D
Acq On : 07 Dec 2018 02:25
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 07 04:12:46 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E54

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:49 PM



(10) Phenanthrene-d10 (I)

17.213min (-0.004) 0.40ng/ul m > SJ 12/11/18

response 26845

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	11.35
80.00	11.60	12.23
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003748.D
Acq On : 07 Dec 2018 02:25
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 07 04:47:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E54

Manual Integrations APPROVED
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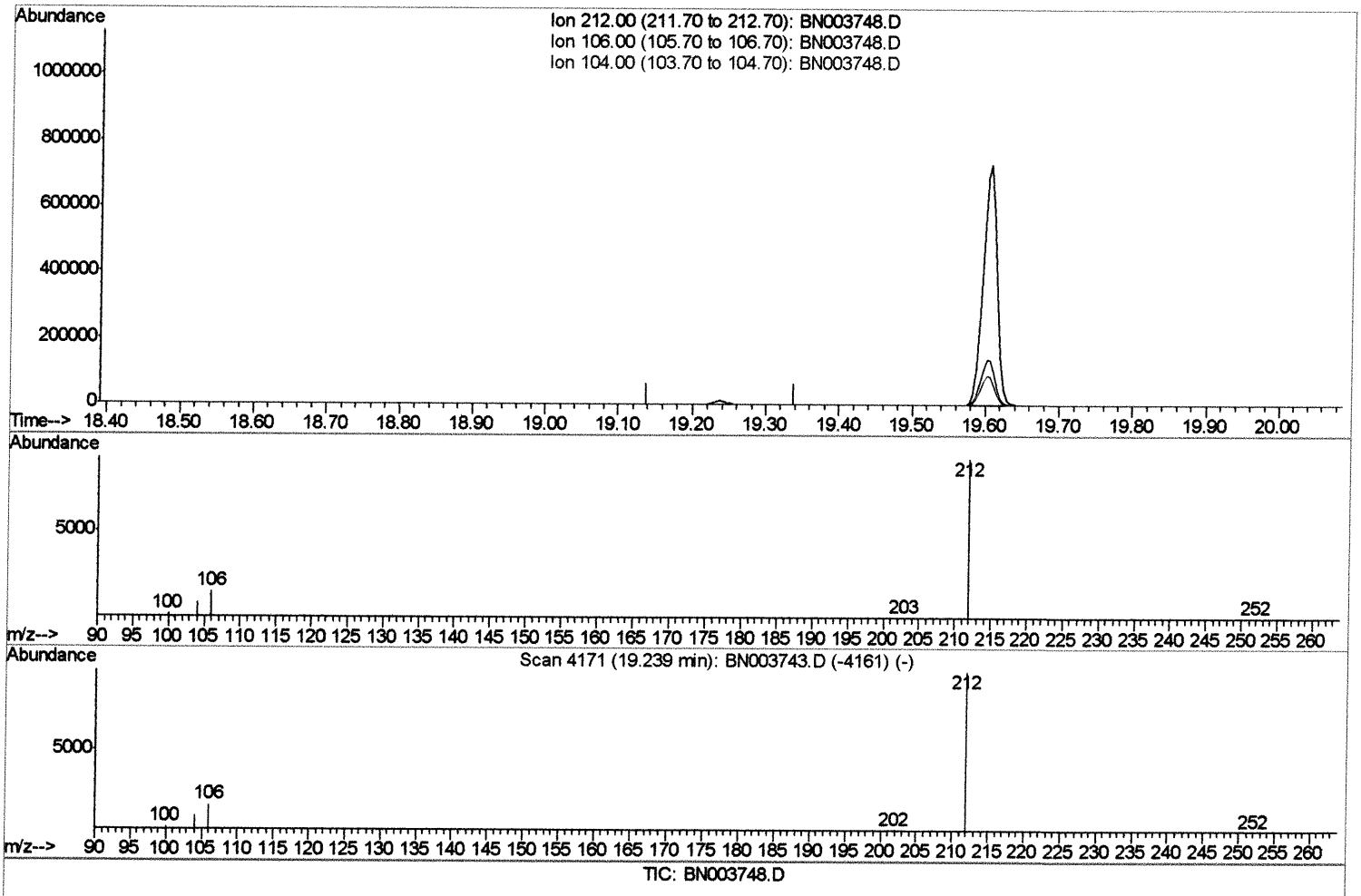

TIC: BN003748.D

(14) Fluoranthene-d10 (SURR)

19.239min (-19.239) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003748.D
Acq On : 07 Dec 2018 02:25
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 07 04:47:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E54

Manual Integrations APPROVED
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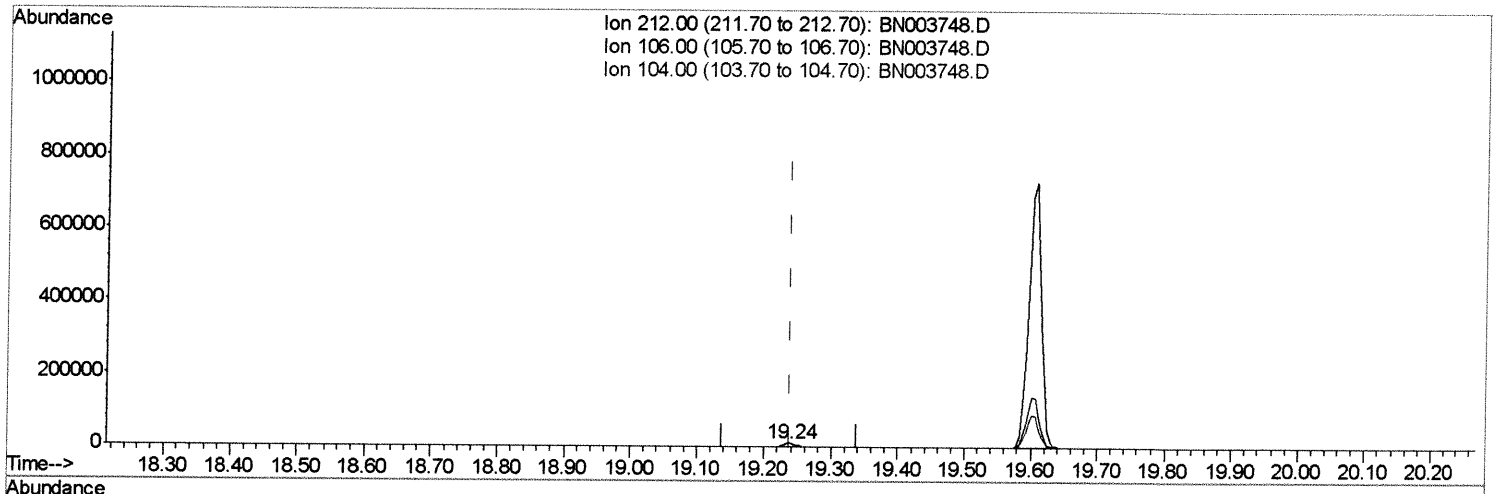
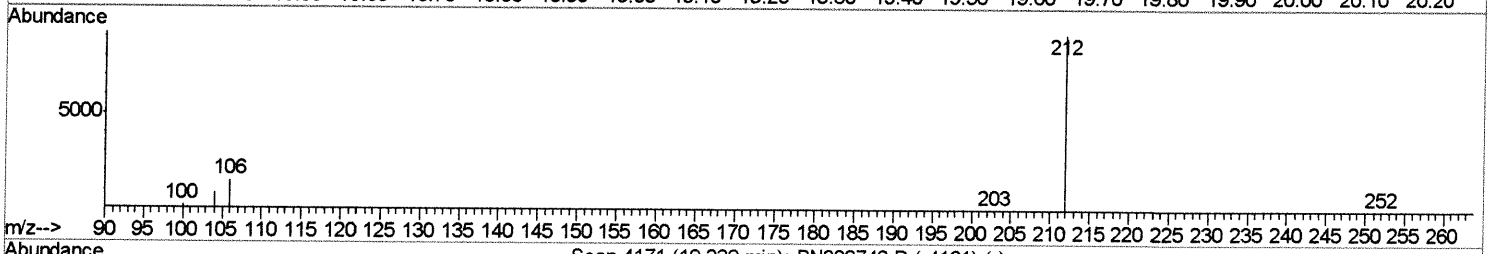
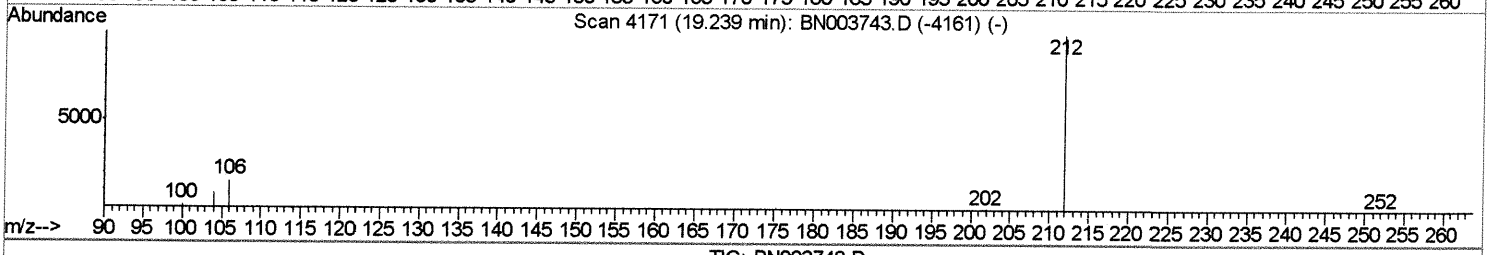






TIC: BN003748.D

(14) Fluoranthene-d10 (SURR)

19.239min (-0.000) 0.16ng/ul m > SJ 12/11/18

response 12511

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

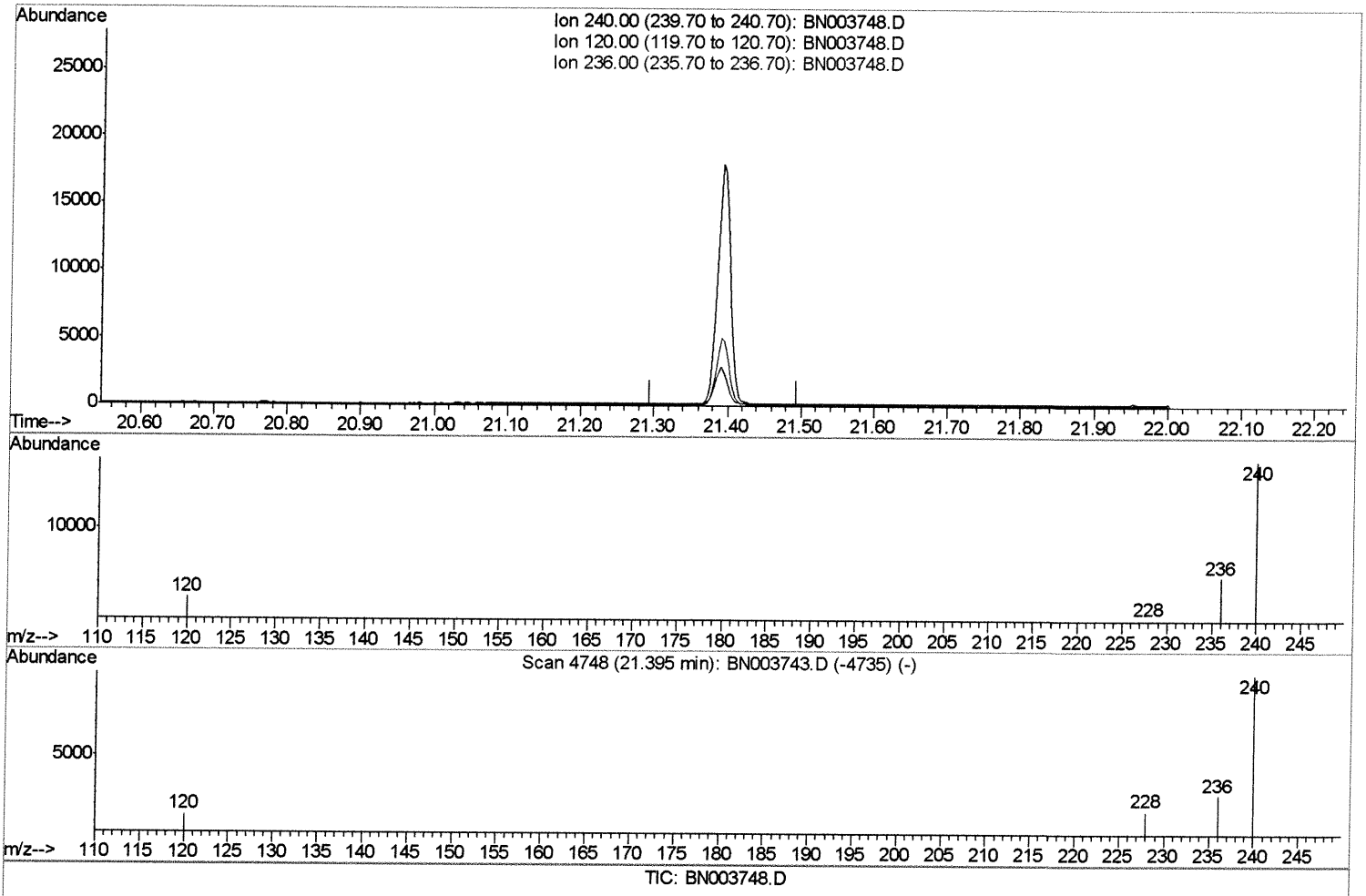
Quantitation Report (Qedit)

Data File : BN003748.D
Acq On : 07 Dec 2018 02:25
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 07 04:47:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E54

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:49 PM



TIC: BN003748.D

(16) Chrysene-d12 (I)

21.395min (-21.395) 0.00ng/ul

response 0

Ion	Exp%	Act%
240.00	100	0.00
120.00	14.00	0.00#
236.00	27.60	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003748.D
Acq On : 07 Dec 2018 02:25
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 07 04:47:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E54

Manual Integrations APPROVED
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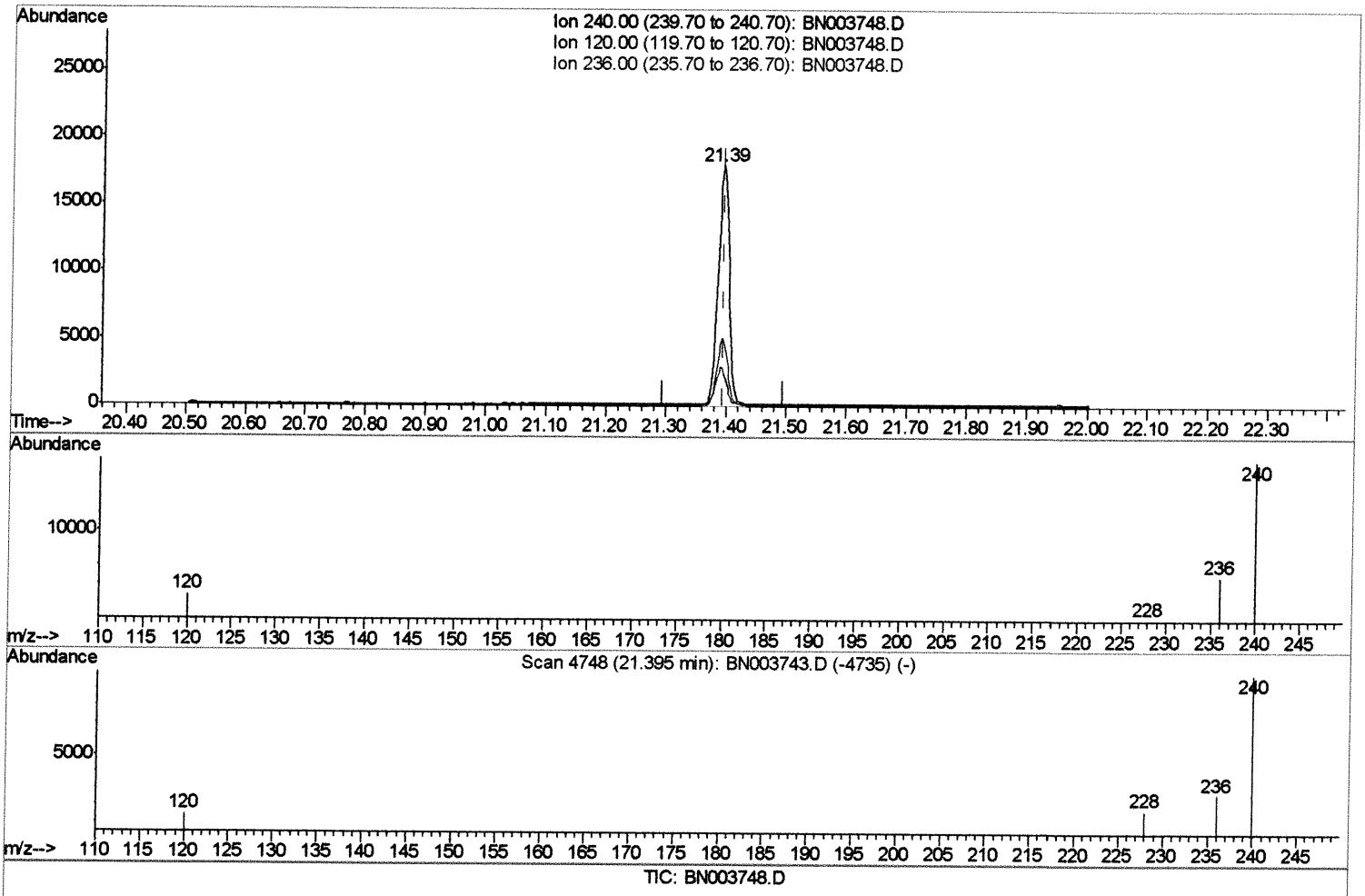

TIC: BN003748.D

(16) Chrysene-d12 (I)

21.392min (-0.003) 0.40ng/ul m

response 22996

SJ 12/11/18

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	15.73
236.00	27.60	28.09
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003748.D
Acq On : 07 Dec 2018 02:25
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 07 04:48:26 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E54

Manual Integrations APPROVED
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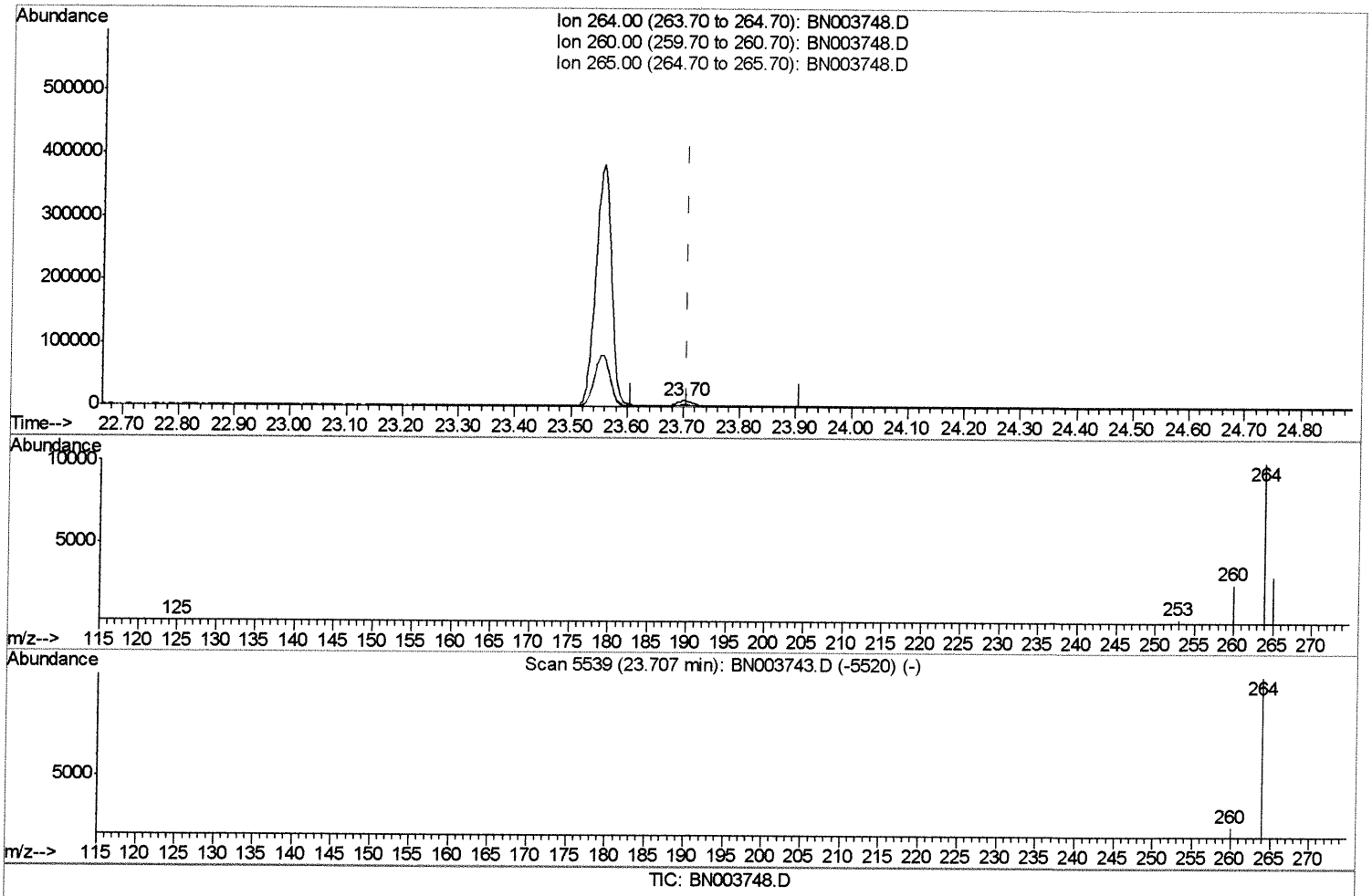

TIC: BN003748.D

(20) Perylene-d12 (I)

23.702min (-0.006) 0.40ng/ul

response 21402

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.02
265.00	33.50	30.38
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003748.D
Acq On : 07 Dec 2018 02:25
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 07 04:48:26 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E54

Manual Integrations APPROVED
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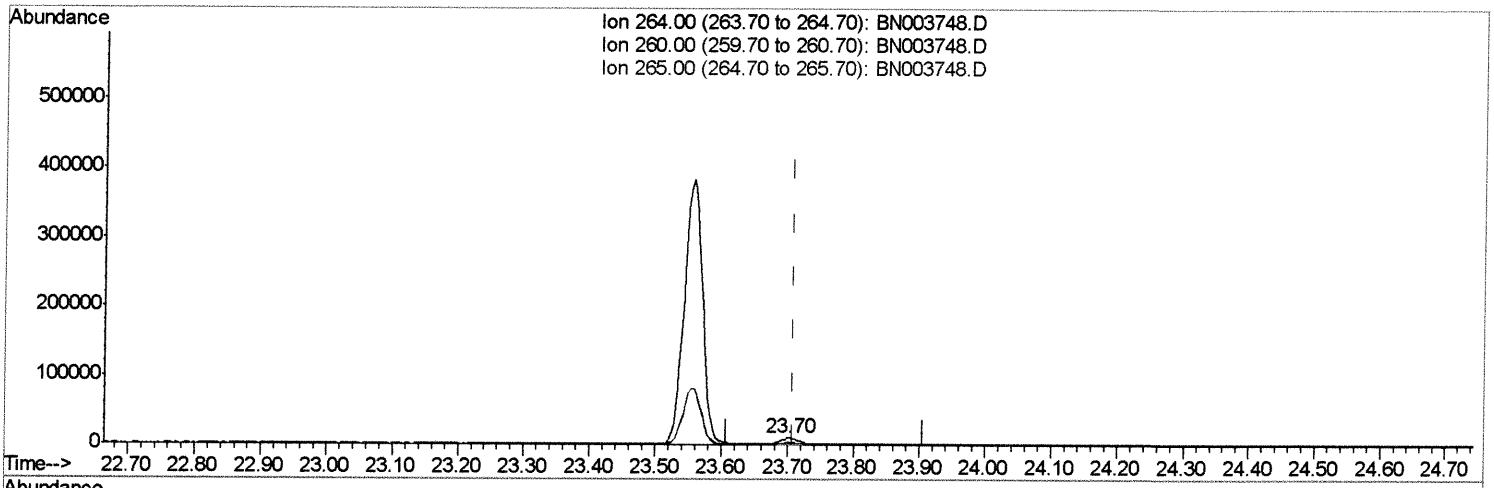

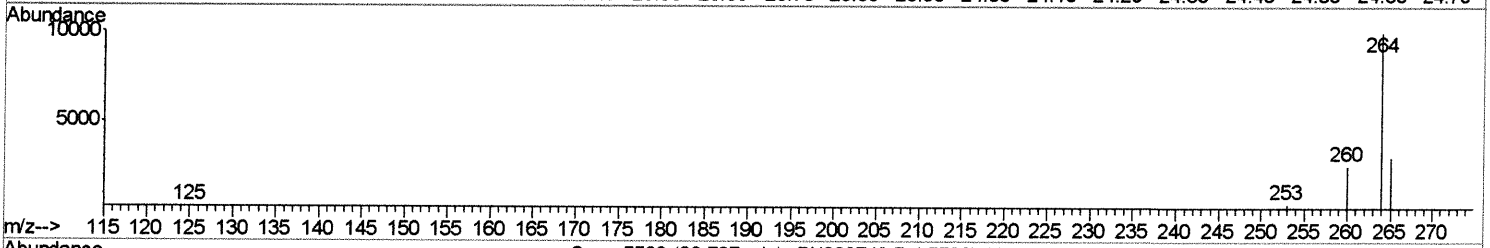

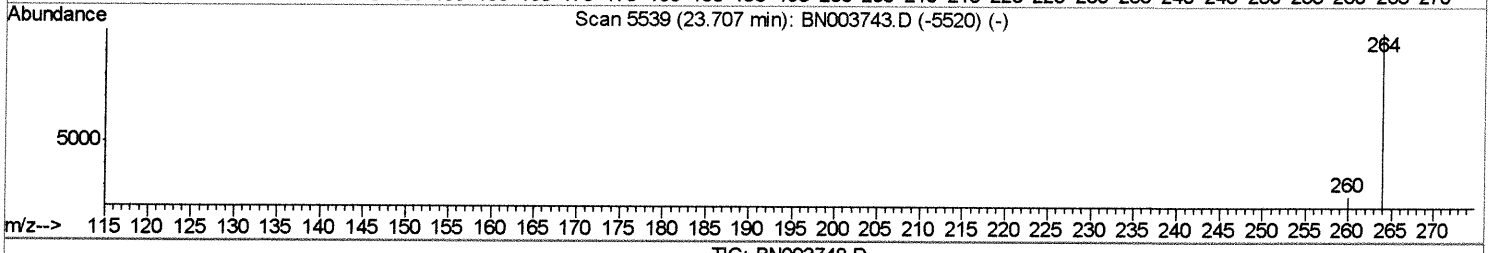

TIC: BN003748.D

(20) Perylene-d12 (I)

23.702min (-0.006) 0.40ng/ul m > SJ 12/11/18

response 17798

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.02
265.00	33.50	30.38
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003748.D
Acq On : 07 Dec 2018 02:25
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 07 04:48:55 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E54

Manual Integrations APPROVED
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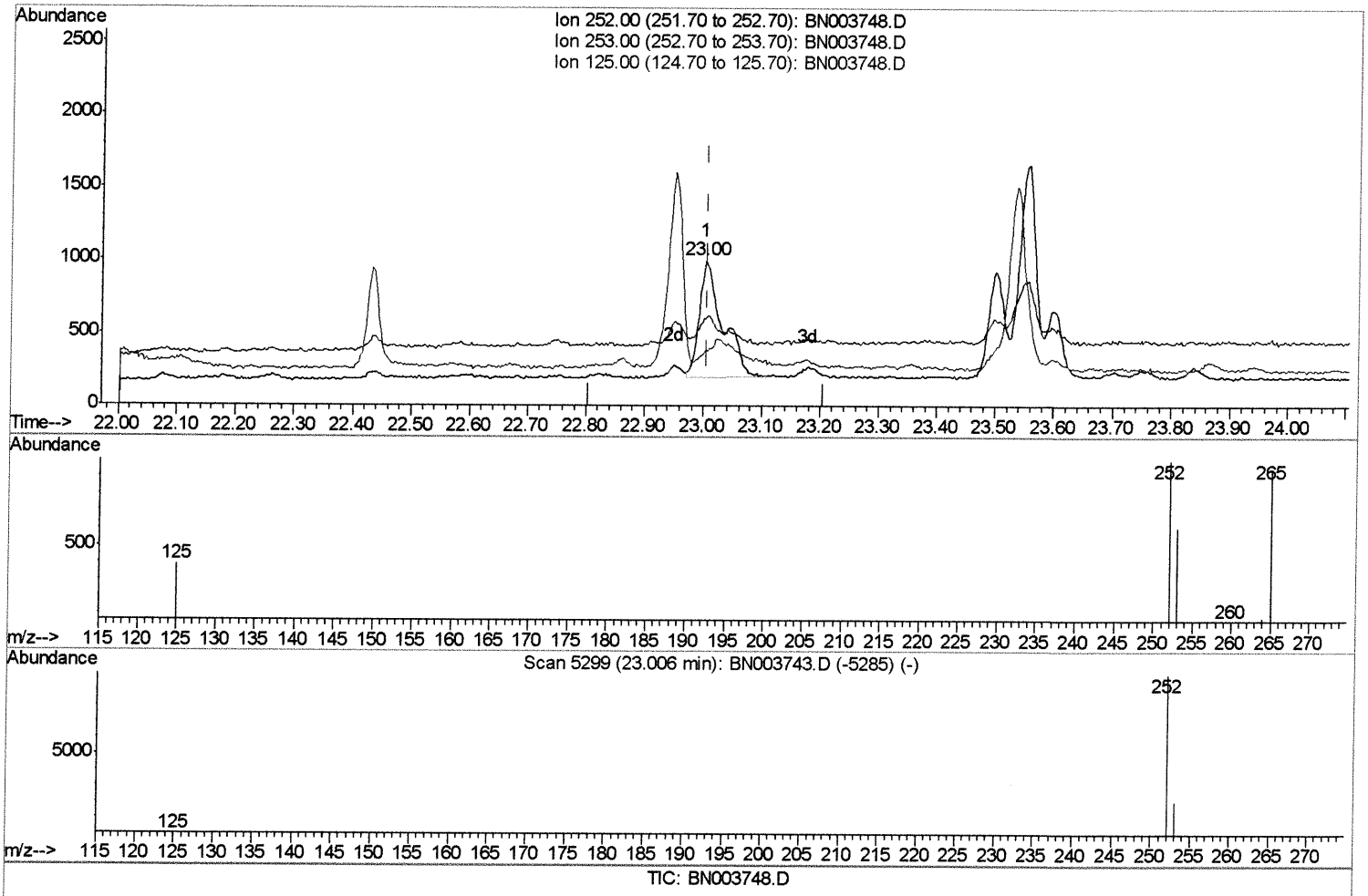
12/10/2018 12:20:49 PM



TIC: BN003748.D

(21) Benzo(b)fluoranthene

23.003min (-0.003) 0.03ng/ul

response 2194

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	60.84#
125.00	11.20	38.76#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

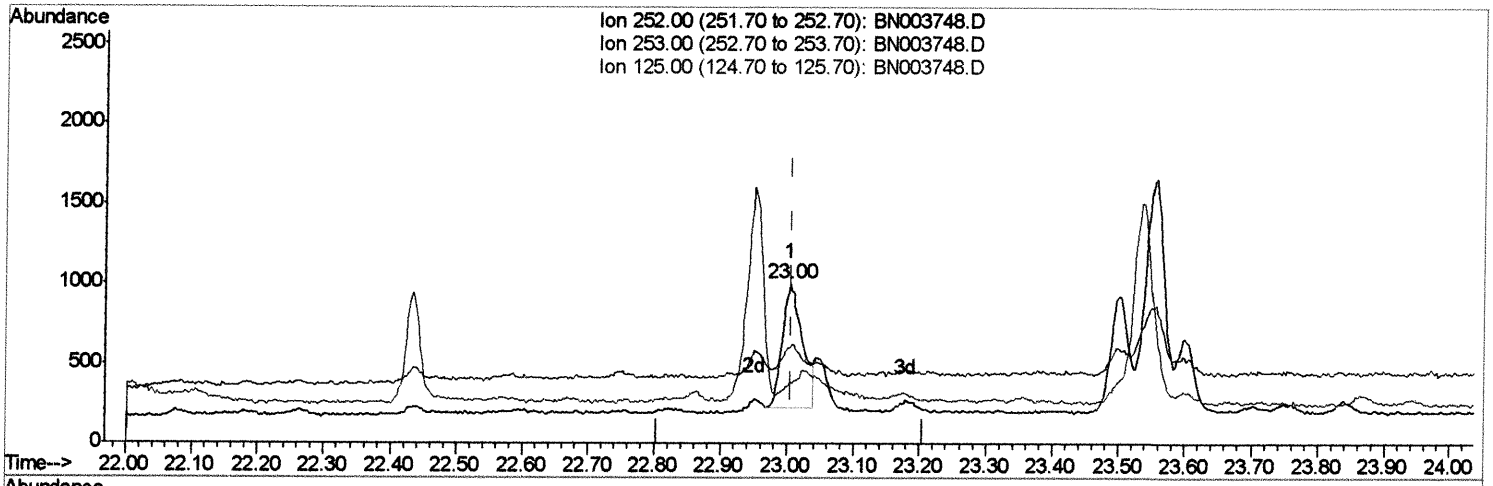
Quantitation Report (Qedit)

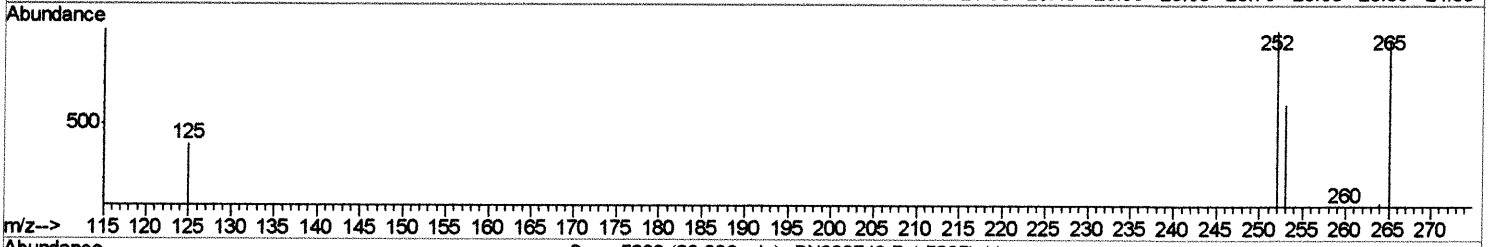
Data File : BN003748.D
Acq On : 07 Dec 2018 02:25
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 19 Sample Multiplier: 1

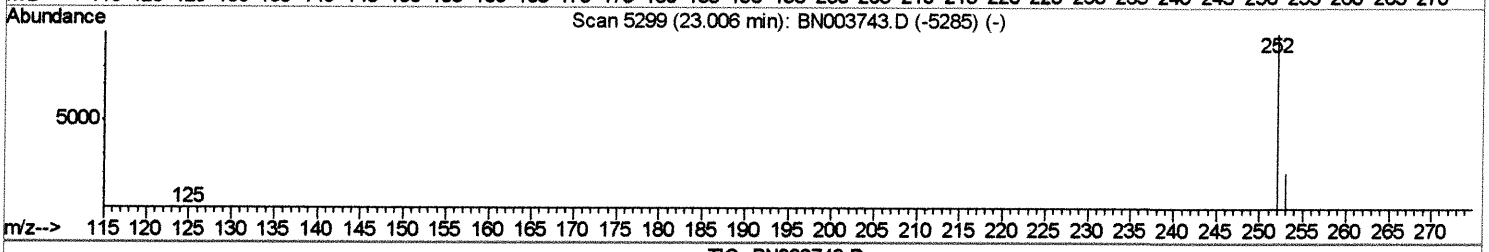
Quant Time: Dec 07 04:48:55 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E54

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:49 PM







TIC: BN003748.D

(21) Benzo(b)fluoranthene

23.003min (-0.003) 0.02ng/ul m > SJ 12/11/18

response 1617

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	60.84#
125.00	11.20	38.76#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003748.D
Acq On : 07 Dec 2018 02:25
Operator : JU/SJ
Sample : J6227-09
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 07 04:49:35 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument : BNA_N
ClientSampleId : F9E54

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:49 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5417	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	22528	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12125	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	26845m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	22996m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	17798m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.21	152	5879	0.17	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	12511m	0.16	ng/ul	0.00
Target Compounds						Qvalue
17) Pyrene	19.63	202	2098	0.025	ng/ul#	86
19) Chrysene	21.43	228	2388	0.029	ng/ul#	93
21) Benzo(b)fluoranthene	23.00	252	1617m	0.022	ng/ul	

SJ 12/11/18

SJ 12/11/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E55

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-10
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BN003749.D
% Solids : 84.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/07/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	3.9	U
91-57-6	2-Methylnaphthalene	3.9	U
208-96-8	Acenaphthylene	3.9	U
83-32-9	Acenaphthene	3.9	U
86-73-7	Fluorene	3.9	U
87-86-5	Pentachlorophenol	7.9	U
85-01-8	Phenanthrene	3.9	U
120-12-7	Anthracene	3.9	U
206-44-0	Fluoranthene	3.9	U
129-00-0	Pyrene	3.9	U
56-55-3	Benzo(a)anthracene	3.9	U
218-01-9	Chrysene	0.83	J
205-99-2	Benzo(b)fluoranthene	3.9	U
207-08-9	Benzo(k)fluoranthene	3.9	U
50-32-8	Benzo(a)pyrene	3.9	U
193-39-5	Indeno(1,2,3-cd)pyrene	3.9	U
53-70-3	Dibenzo(a,h)anthracene	3.9	U
191-24-2	Benzo(g,h,i)perylene	3.9	U

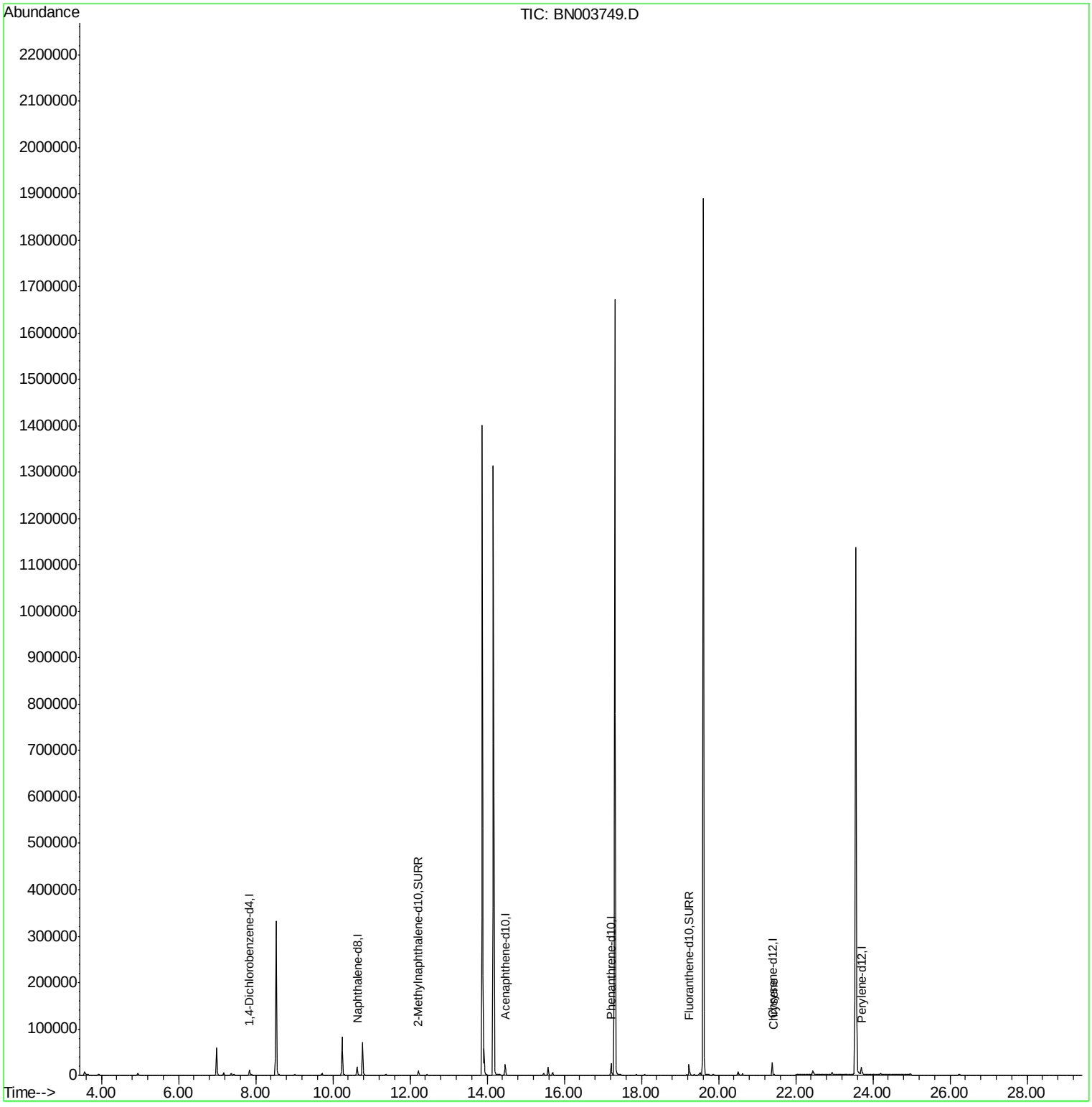
Quantitation Report (QT Reviewed)

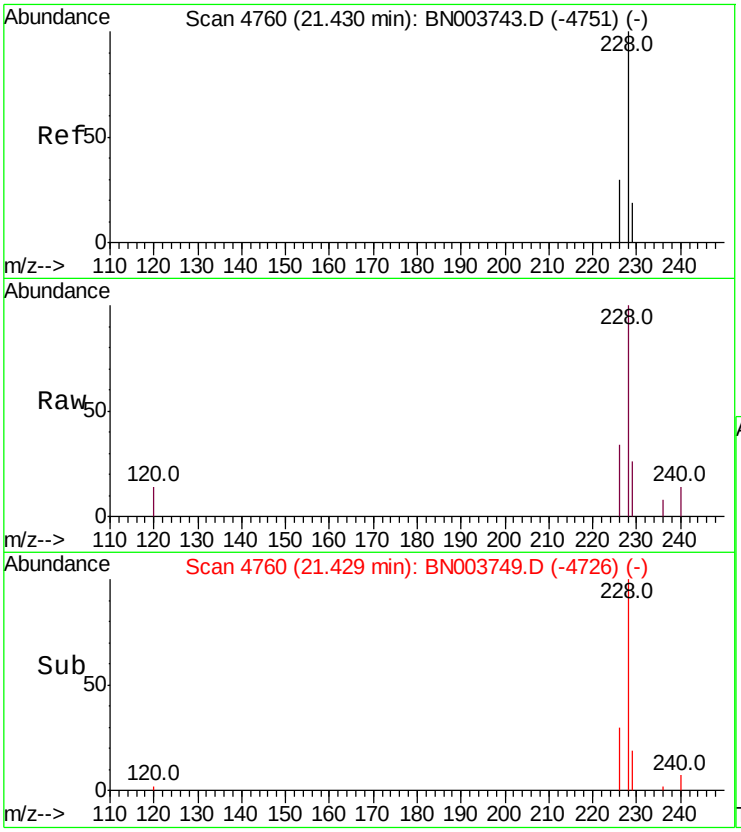
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003749.D
Acq On : 07 Dec 2018 03:00
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 07 04:55:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E55

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:52 PM

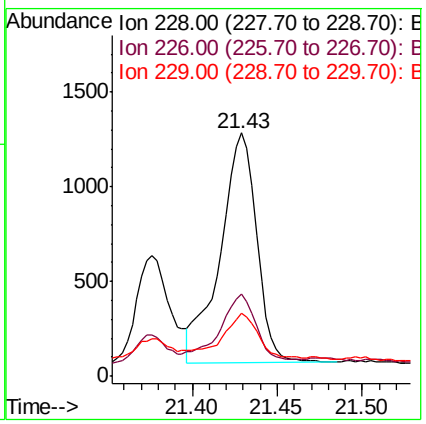




#19
Chrysene
Concen: 0.021 ng/ul
RT: 21.43 min Scan# 4760
Delta R.T. -0.00 min
Lab File: BN003749.D
Acq: 07 Dec 2018 03:00

Tgt Ion:228 Resp: 1794

Ion	Ratio	Lower	Upper
228	100		
226	33.7	24.0	36.0
229	26.1	15.7	23.5#



Instrument :
BNA_N
ClientSampleId :
F9E55

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:52 PM

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003749.D
Acq On : 07 Dec 2018 03:00
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9E55

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:52 PM

Quant Time: Dec 07 04:55:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5538	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	22965	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12823	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	27422m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	23253m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	17729m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	11320	0.32	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	24621m	0.31	ng/ul	0.00
Target Compounds						Qvalue
19) Chrysene	21.43	228	1794	0.021	ng/ul#	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

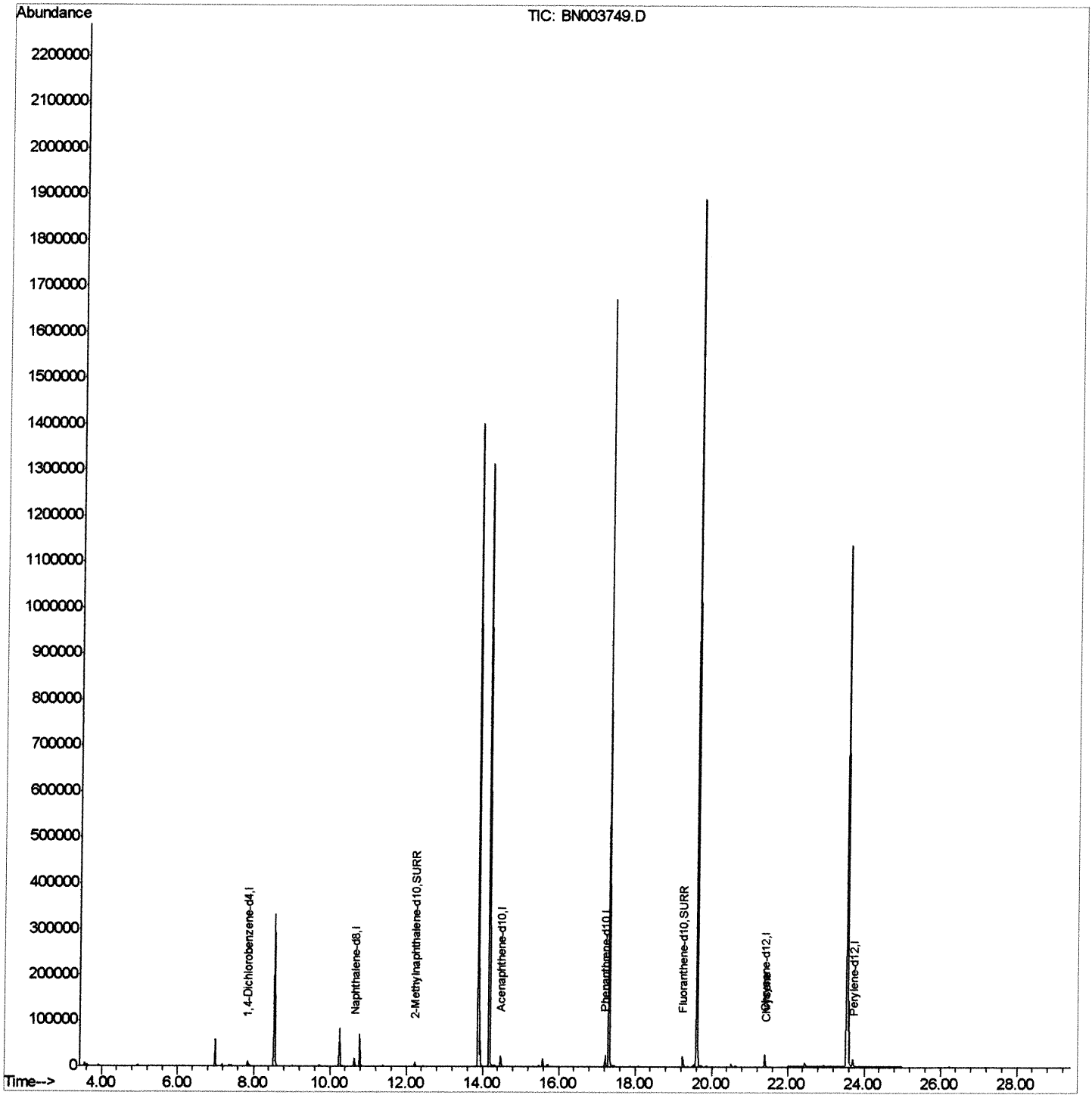
Quantitation Report (QT Reviewed)

Data File : BN003749.D
Acq On : 07 Dec 2018 03:00
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 07 04:55:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E55

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:52 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

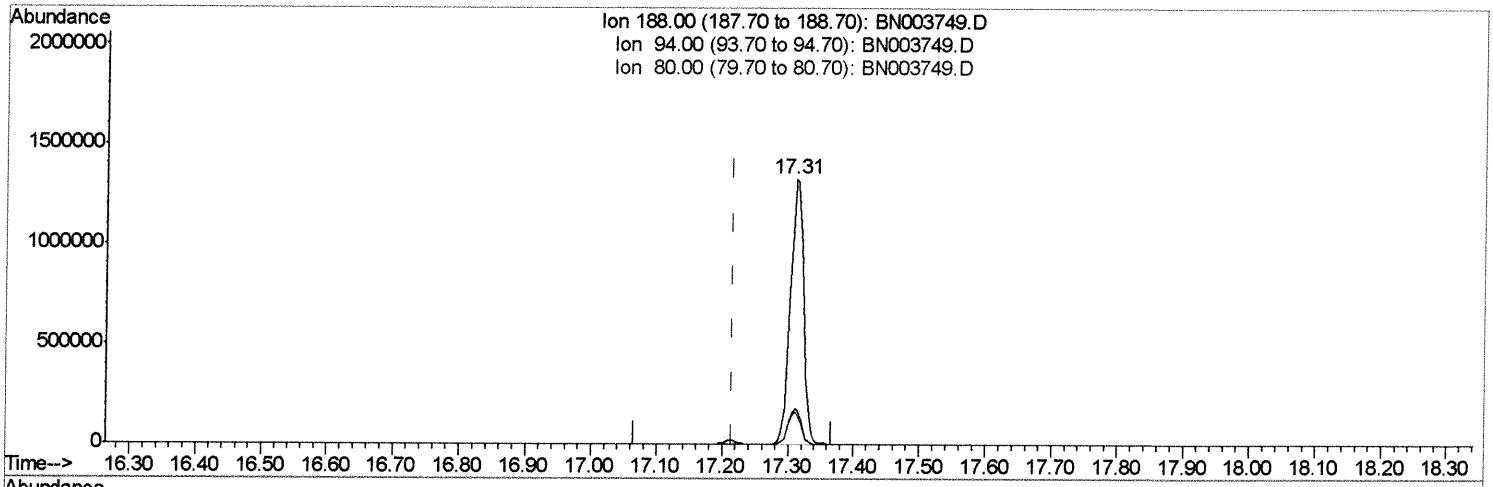
Quantitation Report (Qedit)

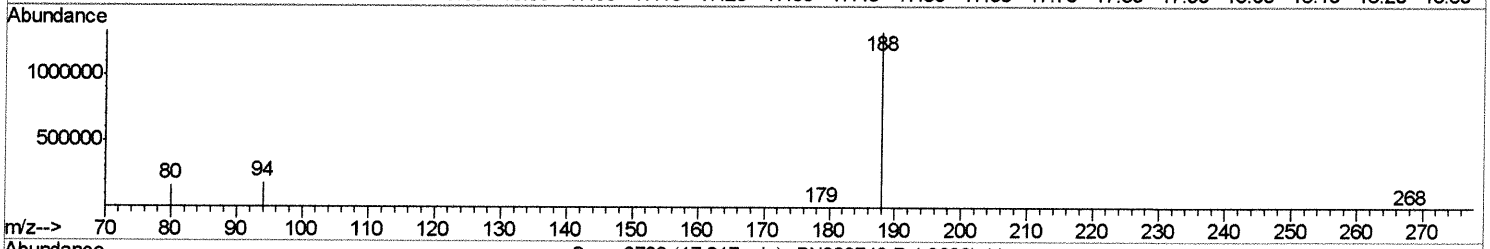
Data File : BN003749.D
Acq On : 07 Dec 2018 03:00
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 20 Sample Multiplier: 1

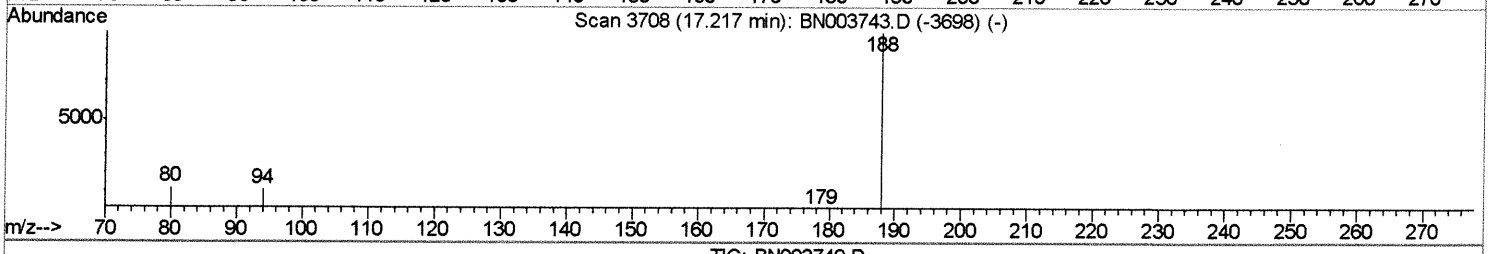
Quant Time: Dec 07 04:12:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E55

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:52 PM







TIC: BN003749.D

(10) Phenanthrene-d10 (I)

17.310min (+0.093) 0.40ng/ul

response 1851432

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	13.79#
80.00	11.60	12.44
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

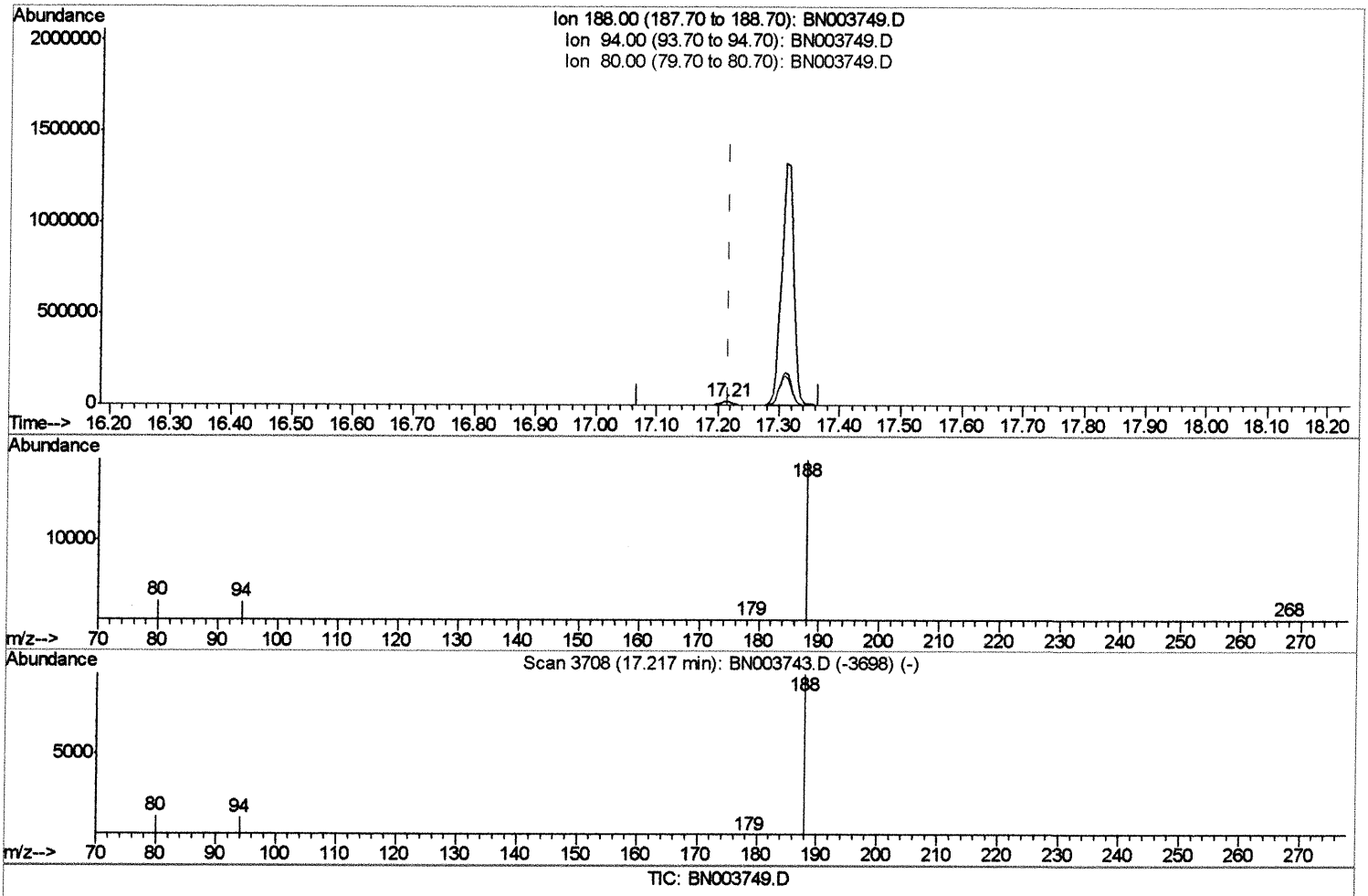
Quantitation Report (Qedit)

Data File : BN003749.D
Acq On : 07 Dec 2018 03:00
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 07 04:12:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E55

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:52 PM



TIC: BN003749.D

(10) Phenanthrene-d10 (I)

17.213min (-0.004) 0.40ng/ul m

response 27422

SJ 12/11/18

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	11.22
80.00	11.60	12.04
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

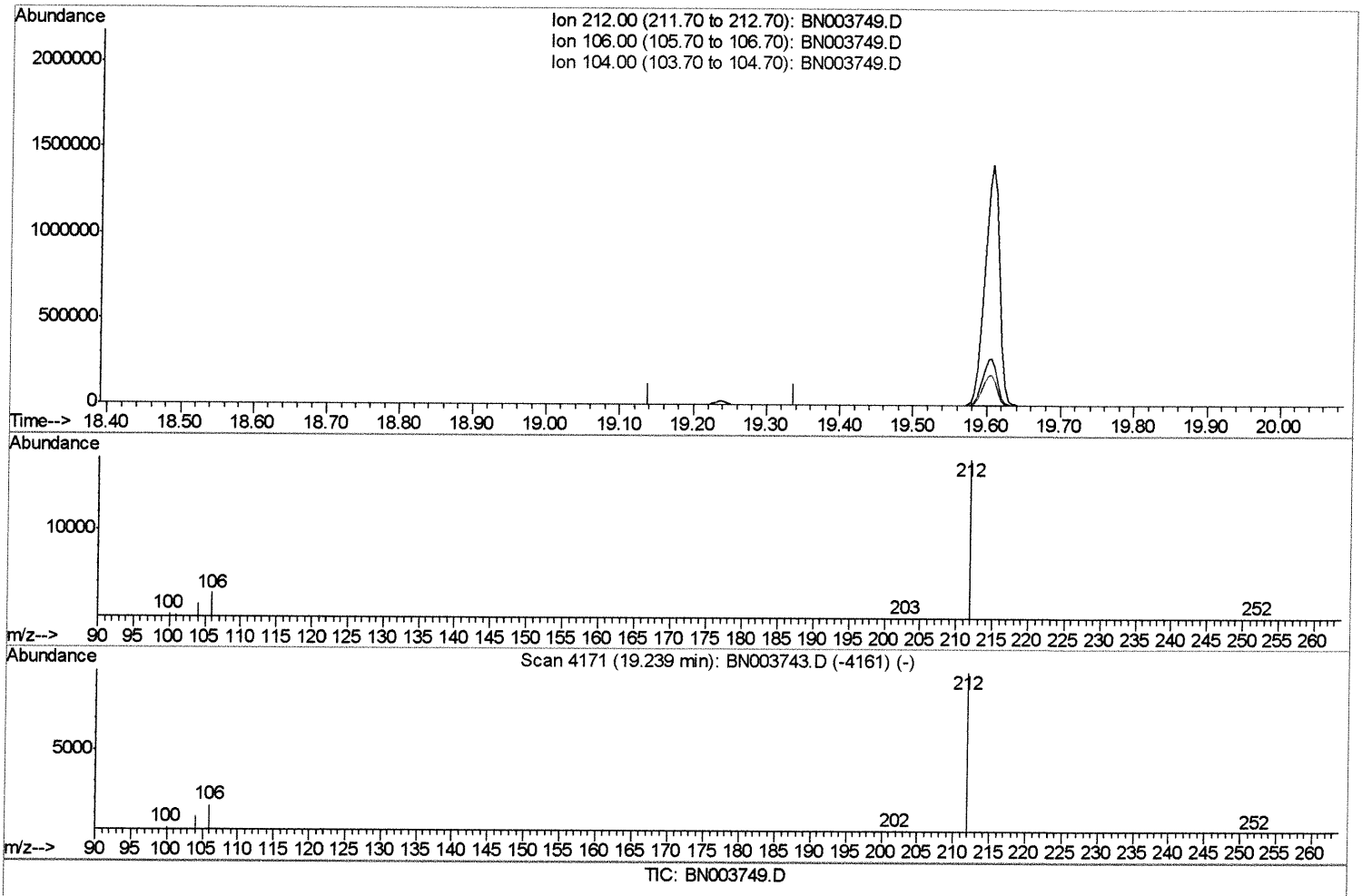
Quantitation Report (Qedit)

Data File : BN003749.D
Acq On : 07 Dec 2018 03:00
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 07 04:53:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E55

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:52 PM



(14) Fluoranthene-d10 (SURR)

19.239min (-19.239) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

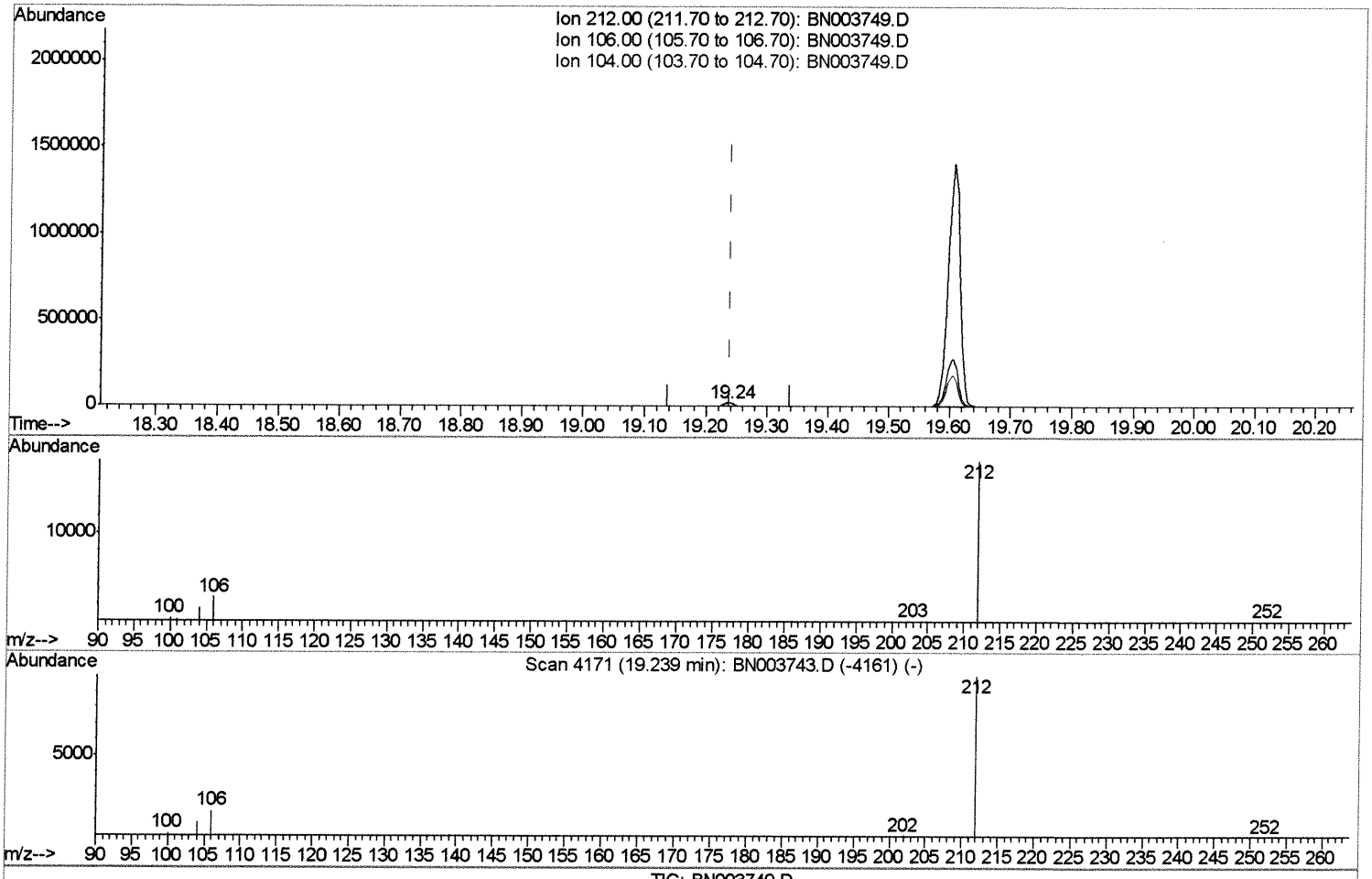
Quantitation Report (Qedit)

Data File : BN003749.D
Acq On : 07 Dec 2018 03:00
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 07 04:53:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E55

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:52 PM



TIC: BN003749.D

(14) Fluoranthene-d10 (SURR)

19.239min (+0.000) 0.31ng/ul m

response 24621

SJ 12/11/18

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

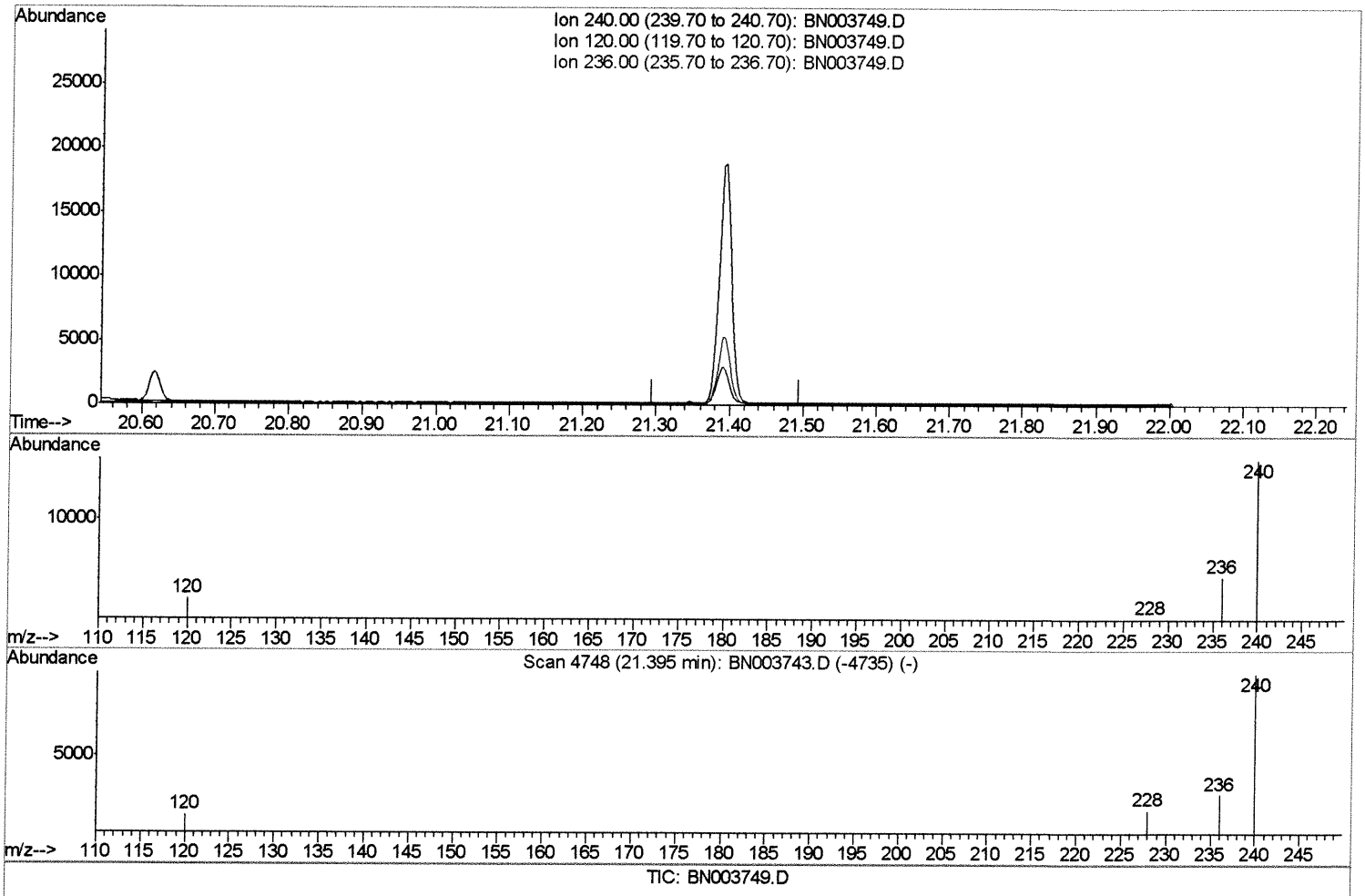
Quantitation Report (Qedit)

Data File : BN003749.D
Acq On : 07 Dec 2018 03:00
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 07 04:53:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E55

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:52 PM



TIC: BN003749.D

(16) Chrysene-d12 (I)

21.395min (-21.395) 0.00ng/ul

response 0

Ion	Exp%	Act%
240.00	100	0.00
120.00	14.00	0.00#
236.00	27.60	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

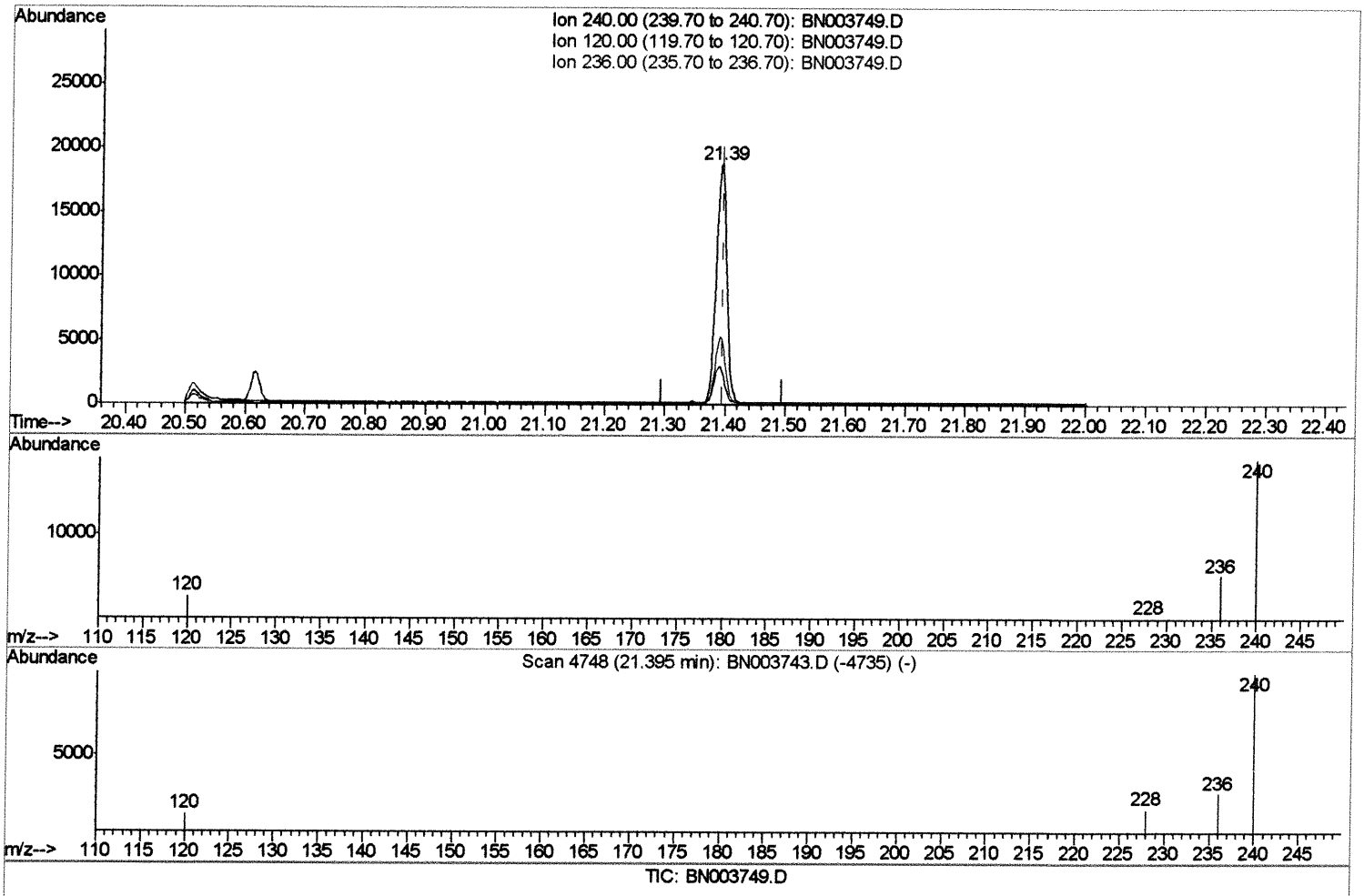
Quantitation Report (Qedit)

Data File : BN003749.D
Acq On : 07 Dec 2018 03:00
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 07 04:53:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E55

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:52 PM



TIC: BN003749.D

(16) Chrysene-d12 (I)

21.394min (-0.002) 0.40ng/ul m

response 23253

SJ 12/11/18

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	14.34
236.00	27.60	27.74
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

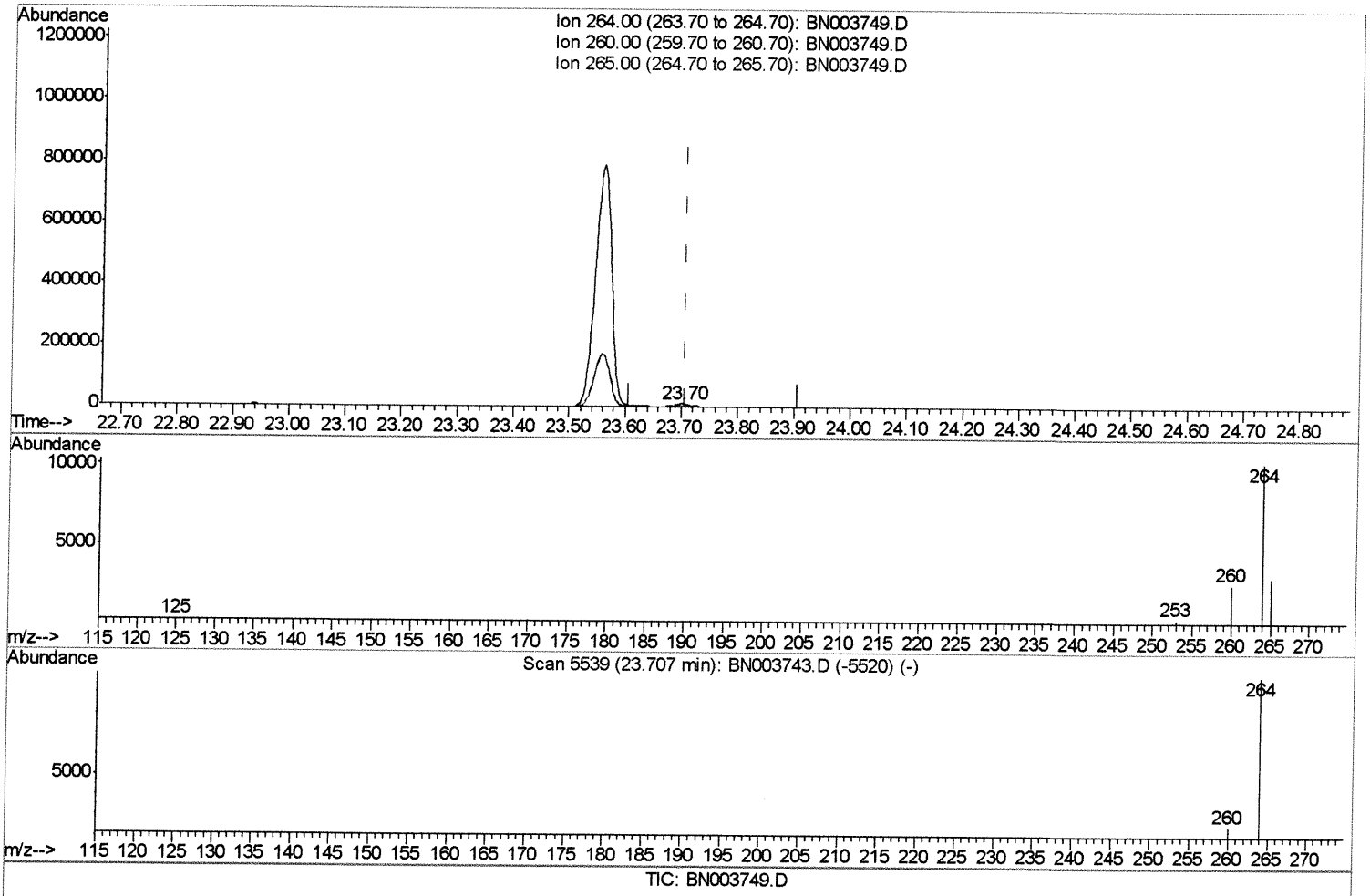
Quantitation Report (Qedit)

Data File : BN003749.D
Acq On : 07 Dec 2018 03:00
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 07 04:54:01 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E55

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:52 PM



(20) Perylene-d12 (I)

23.703min (-0.004) 0.40ng/ul

response 22878

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	25.77
265.00	33.50	29.81
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

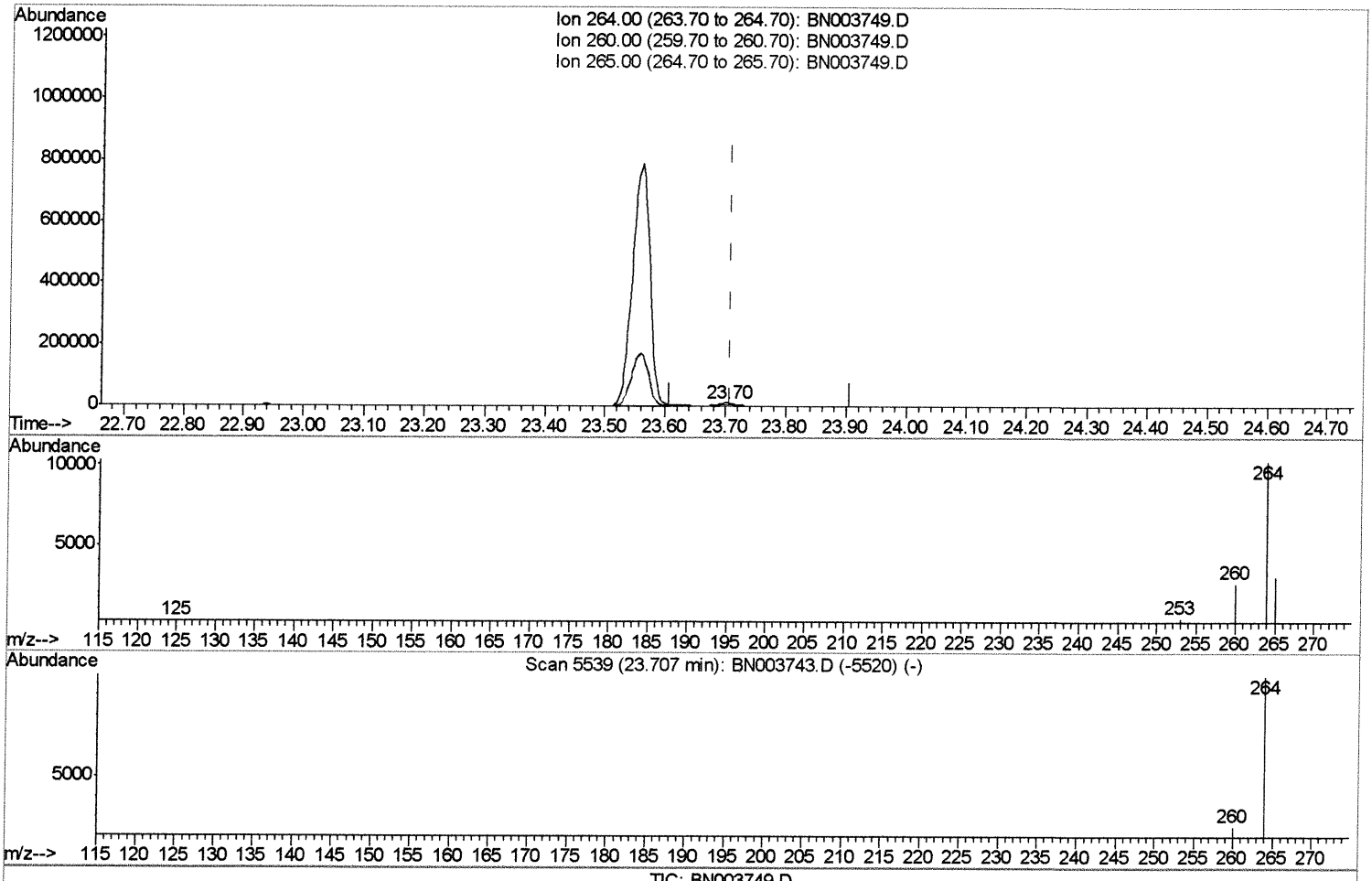
Quantitation Report (Qedit)

Data File : BN003749.D
Acq On : 07 Dec 2018 03:00
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 07 04:54:01 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E55

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:52 PM



(20) Perylene-d12 (I)

23.703min (-0.004) 0.40ng/ul m > SJ 12/11/18

response 17729

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	25.77
265.00	33.50	29.81
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003749.D
Acq On : 07 Dec 2018 03:00
Operator : JU/SJ
Sample : J6227-10
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 07 04:55:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5538	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	22965	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12823	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	27422m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	23253m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	17729m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	11320	0.32	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	24621m	0.31	ng/ul	0.00
Target Compounds						Qvalue
19) Chrysene	21.43	228	1794	0.021	ng/ul#	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
BNA_N
ClientSampleId :
F9E55

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:52 PM

SJ
12/11/18

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E56

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-11
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BN003750.D
% Solids : 86.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/07/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	3.8	U
91-57-6	2-Methylnaphthalene	3.8	U
208-96-8	Acenaphthylene	3.8	U
83-32-9	Acenaphthene	3.8	U
86-73-7	Fluorene	3.8	U
87-86-5	Pentachlorophenol	7.7	U
85-01-8	Phenanthrene	3.8	U
120-12-7	Anthracene	3.8	U
206-44-0	Fluoranthene	0.92	J
129-00-0	Pyrene	1.2	J
56-55-3	Benzo(a)anthracene	3.8	U
218-01-9	Chrysene	3.8	U
205-99-2	Benzo(b)fluoranthene	0.92	J
207-08-9	Benzo(k)fluoranthene	3.8	U
50-32-8	Benzo(a)pyrene	3.8	U
193-39-5	Indeno(1,2,3-cd)pyrene	3.8	U
53-70-3	Dibenzo(a,h)anthracene	3.8	U
191-24-2	Benzo(g,h,i)perylene	3.8	U

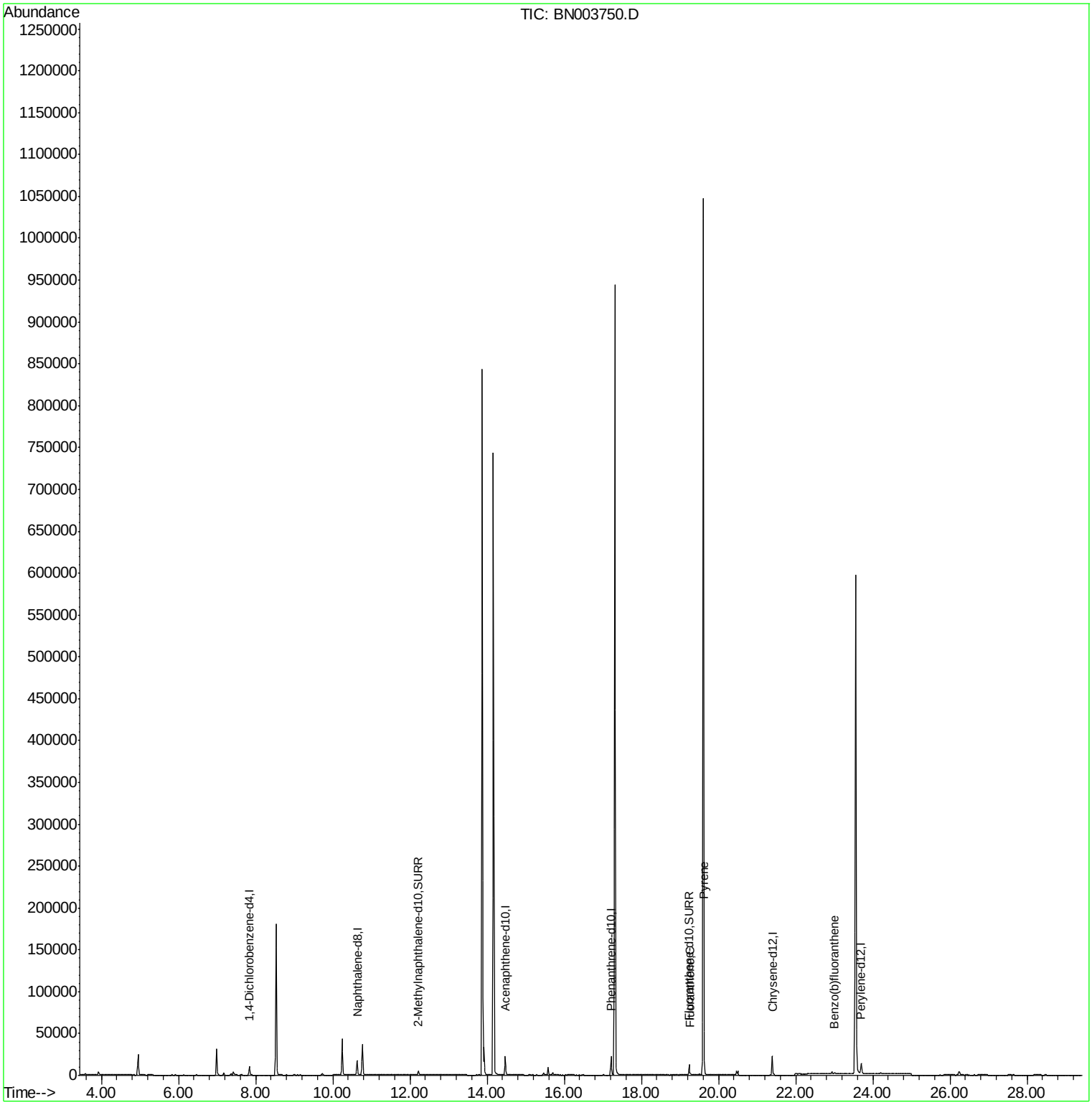
Quantitation Report (QT Reviewed)

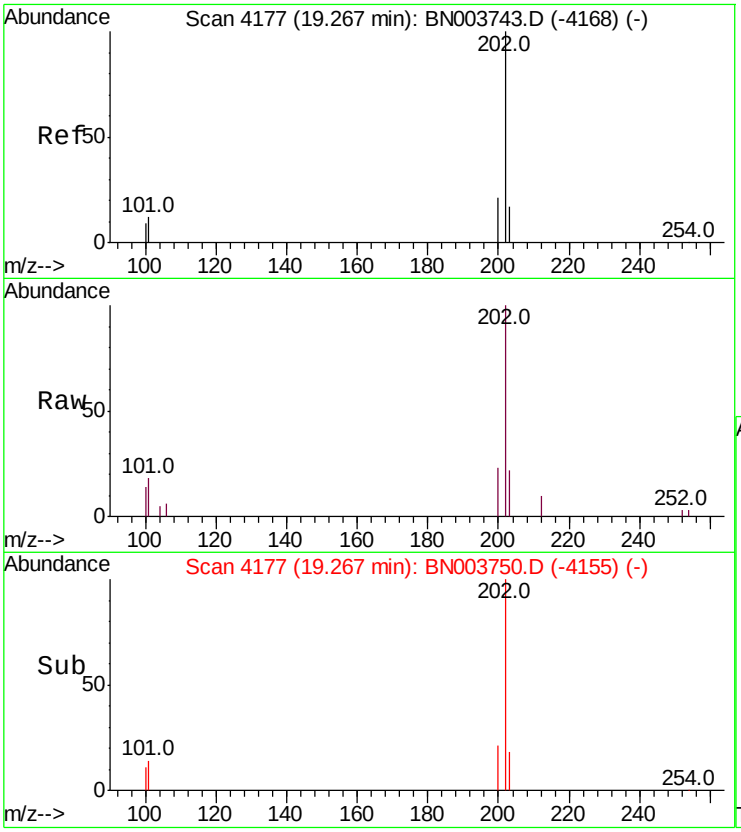
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003750.D
Acq On : 07 Dec 2018 03:35
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 07 05:41:03 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:55 PM





#15
Fluoranthene
Concen: 0.024 ng/ul m
RT: 19.27 min Scan# 4177
Delta R.T. 0.00 min
Lab File: BN003750.D
Acq: 07 Dec 2018 03:35

Tgt Ion:202 Resp: 2439

Ion	Ratio	Lower	Upper
202	100		
101	17.9	0.0	30.7
100	14.3	0.0	28.1

Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
mohammad
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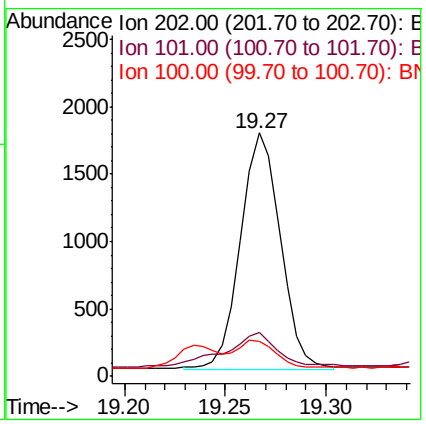
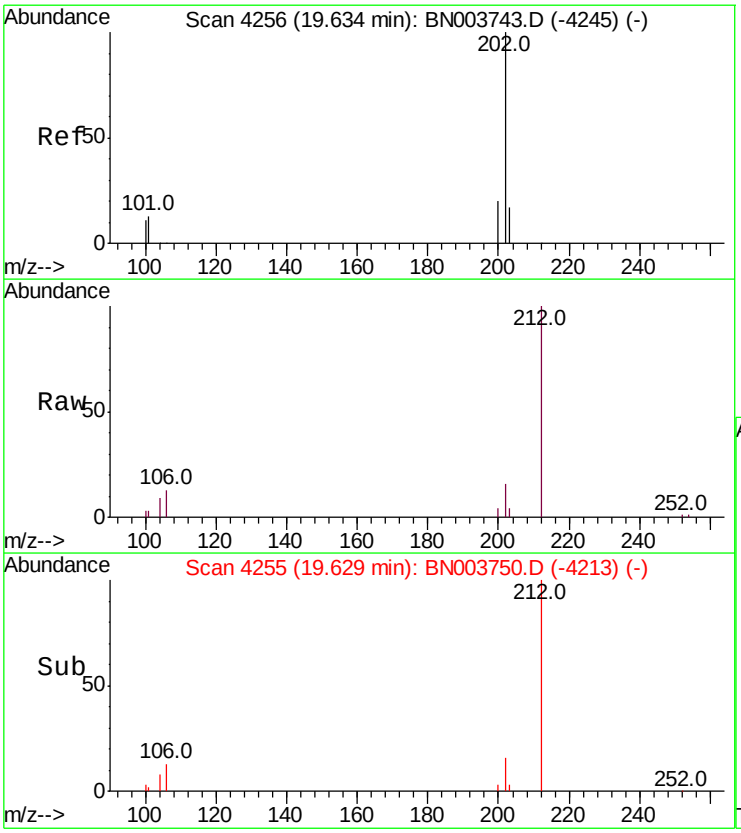
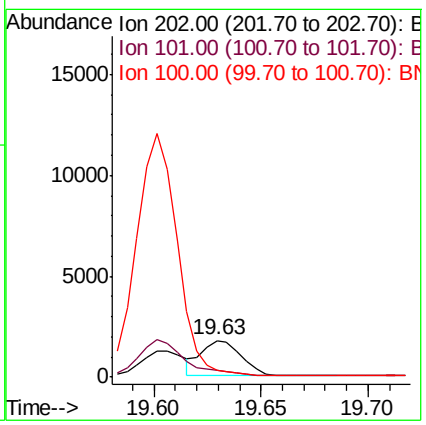


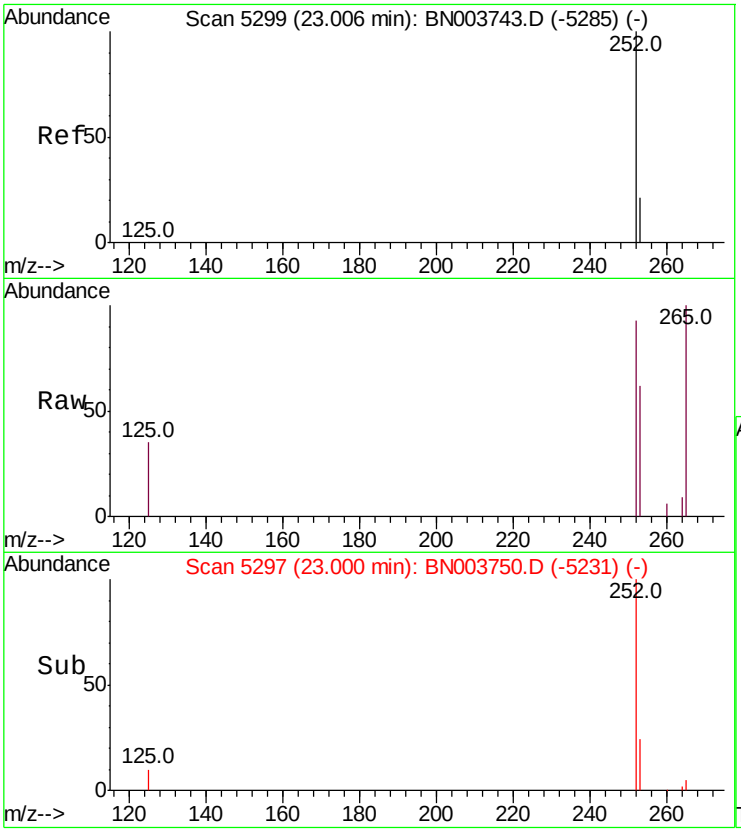


#17
Pyrene
Concen: 0.031 ng/ul
RT: 19.63 min Scan# 4255
Delta R.T. -0.00 min
Lab File: BN003750.D
Acq: 07 Dec 2018 03:35

Tgt Ion:202 Resp: 2257

Ion	Ratio	Lower	Upper
202	100		
101	19.2	10.3	15.5#
100	19.9	8.5	12.7#

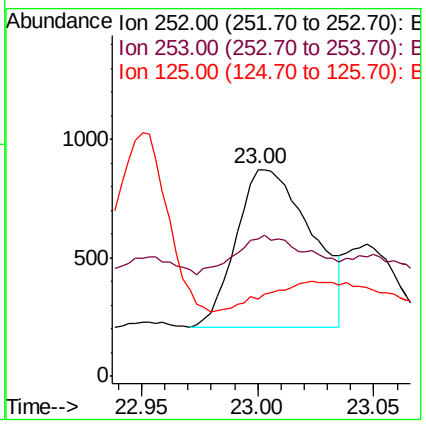




#21
Benzo(b)fluoranthene
Concen: 0.024 ng/ul m
RT: 23.00 min Scan# 5297
Delta R.T. -0.01 min
Lab File: BN003750.D
Acq: 07 Dec 2018 03:35

Tgt Ion:252 Resp: 1521

Ion	Ratio	Lower	Upper
252	100		
253	66.4	0.0	46.0#
125	37.2	0.0	22.4#



Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:55 PM

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003750.D
Acq On : 07 Dec 2018 03:35
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
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Quant Time: Dec 07 05:41:03 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5564	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	22838	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12185	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	25903m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	20030m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	15079m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	6270	0.18	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	12858m	0.17	ng/ul	0.00
Target Compounds						Qvalue
15) Fluoranthene	19.27	202	2439m	0.024	ng/ul	
17) Pyrene	19.63	202	2257	0.031	ng/ul#	80
21) Benzo(b)fluoranthene	23.00	252	1521m	0.024	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003750.D
Acq On : 07 Dec 2018 03:35
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 07 05:41:03 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
mohammad
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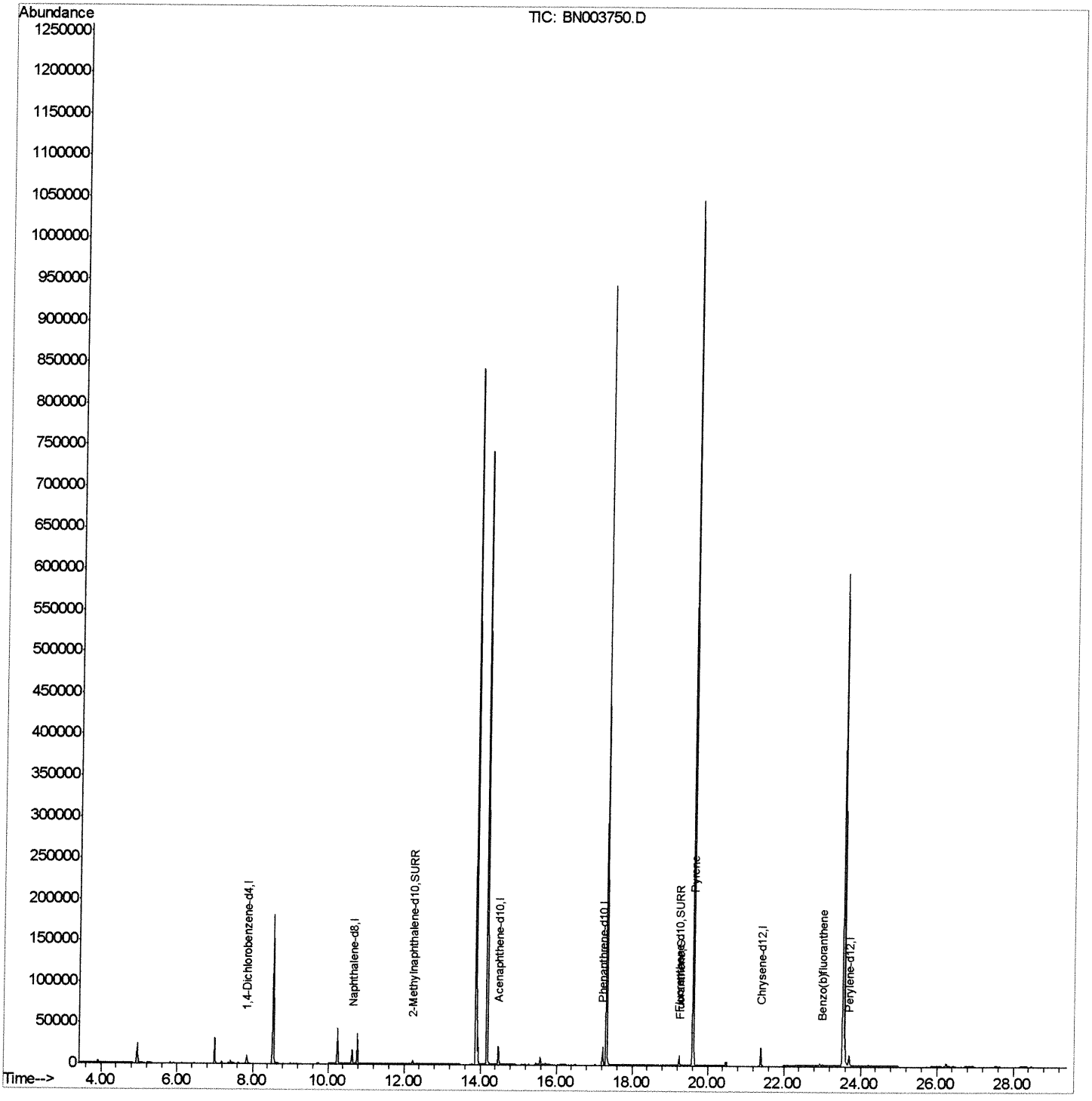

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003750.D
Acq On : 07 Dec 2018 03:35
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 07 04:12:56 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
mohammad
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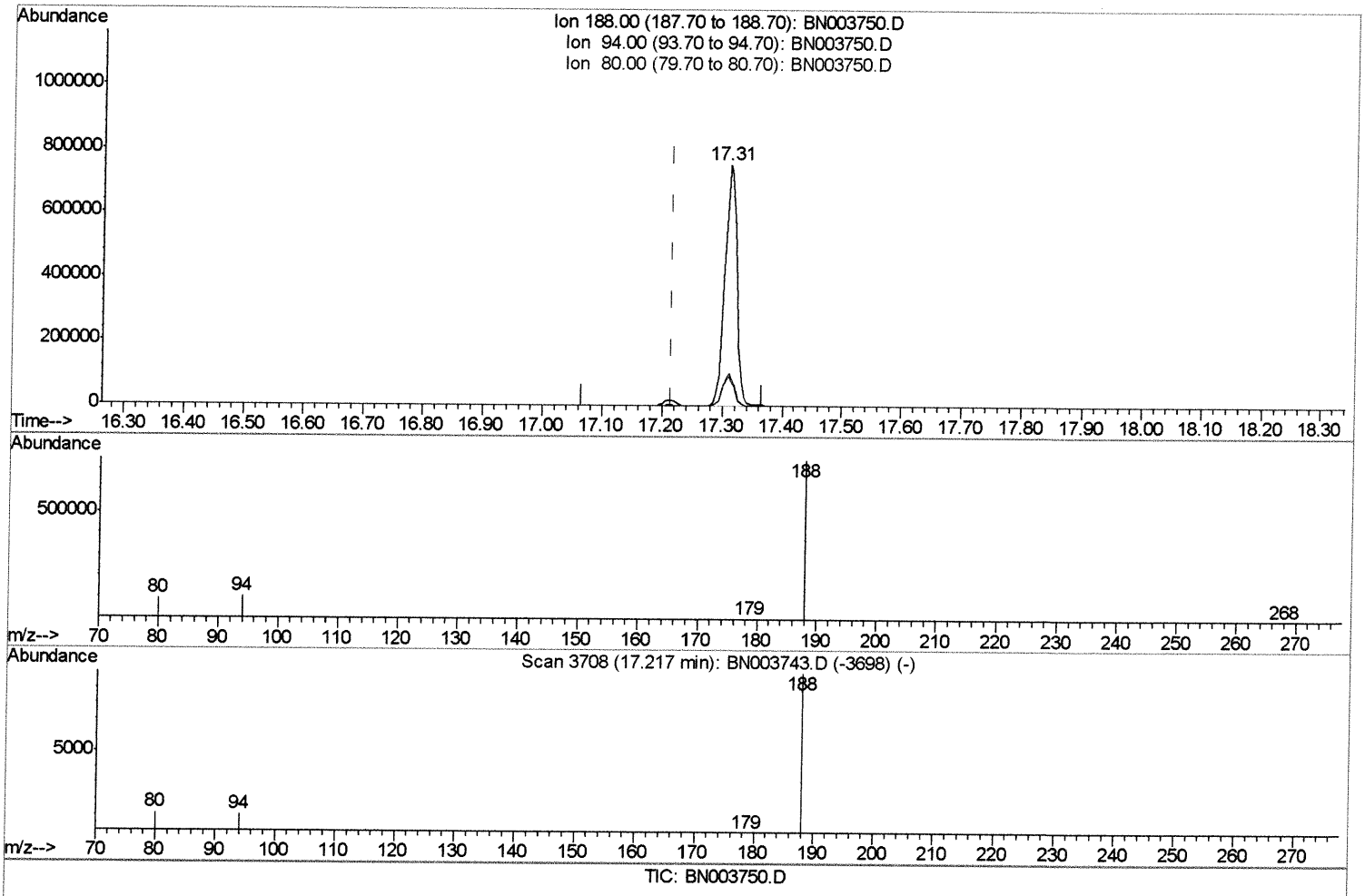

TIC: BN003750.D

(10) Phenanthrene-d10 (I)

17.310min (+0.093) 0.40ng/ul

response 1038247

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	13.47#
80.00	11.60	12.12
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003750.D
Acq On : 07 Dec 2018 03:35
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 07 04:12:56 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
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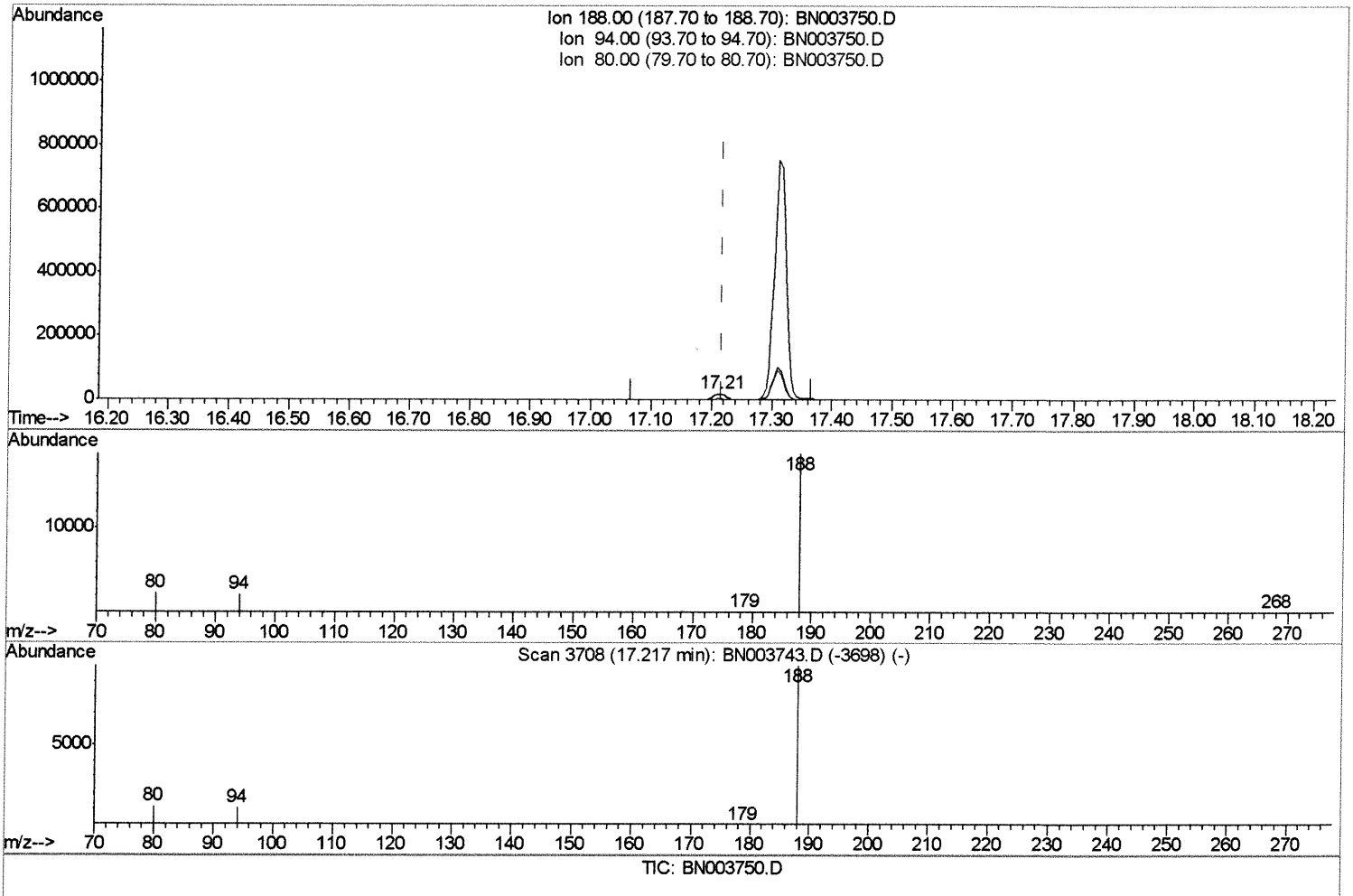


TIC: BN003750.D

(10) Phenanthrene-d10 (I)

17.213min (-0.004) 0.40ng/ul m

response 25903

SJ 12/11/18

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	11.22
80.00	11.60	12.46
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

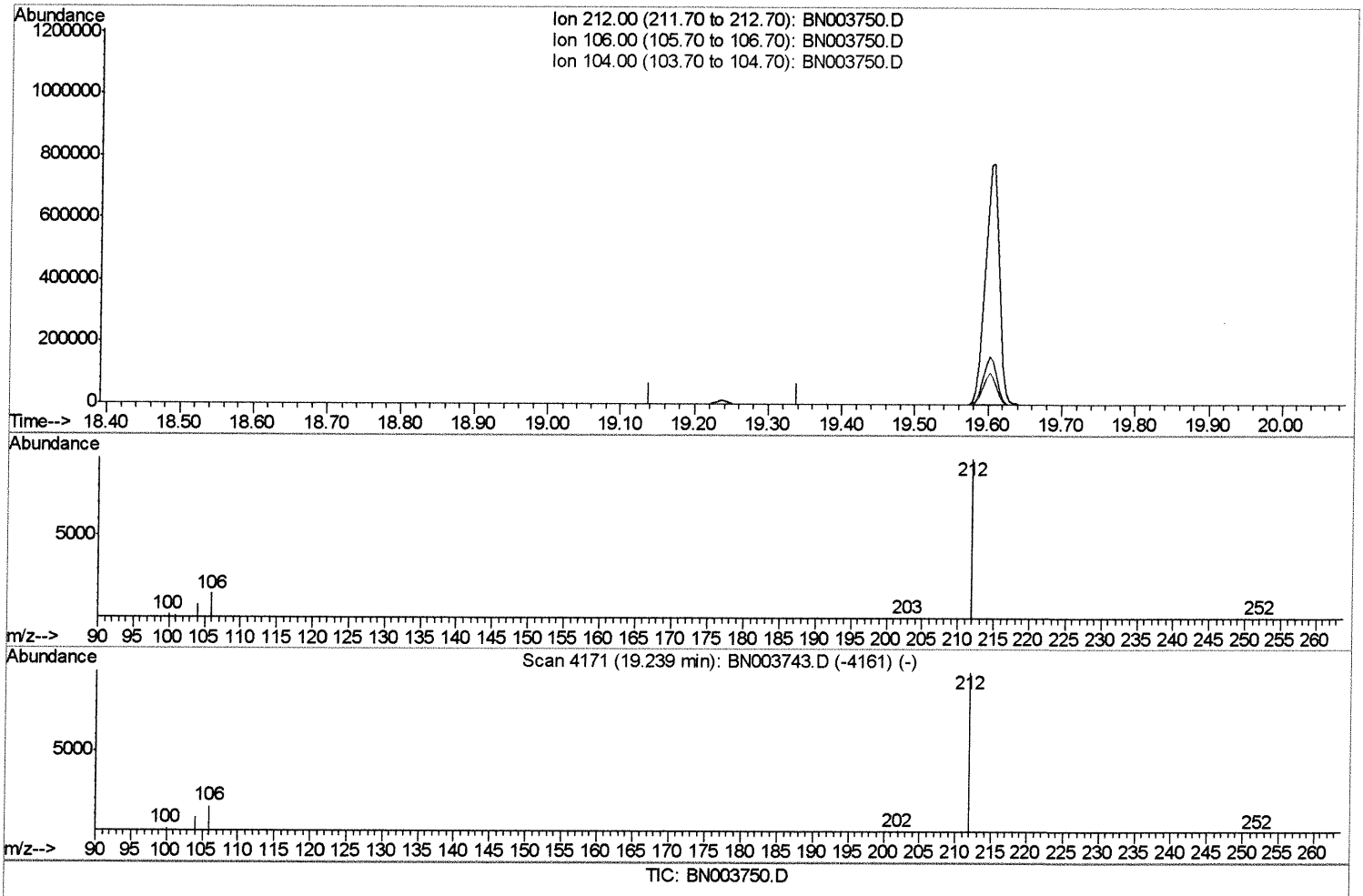
Quantitation Report (Qedit)

Data File : BN003750.D
Acq On : 07 Dec 2018 03:35
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 07 05:08:54 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:55 PM



TIC: BN003750.D

(14) Fluoranthene-d10 (SURR)

19.239min (-19.239) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003750.D
Acq On : 07 Dec 2018 03:35
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 07 05:08:54 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
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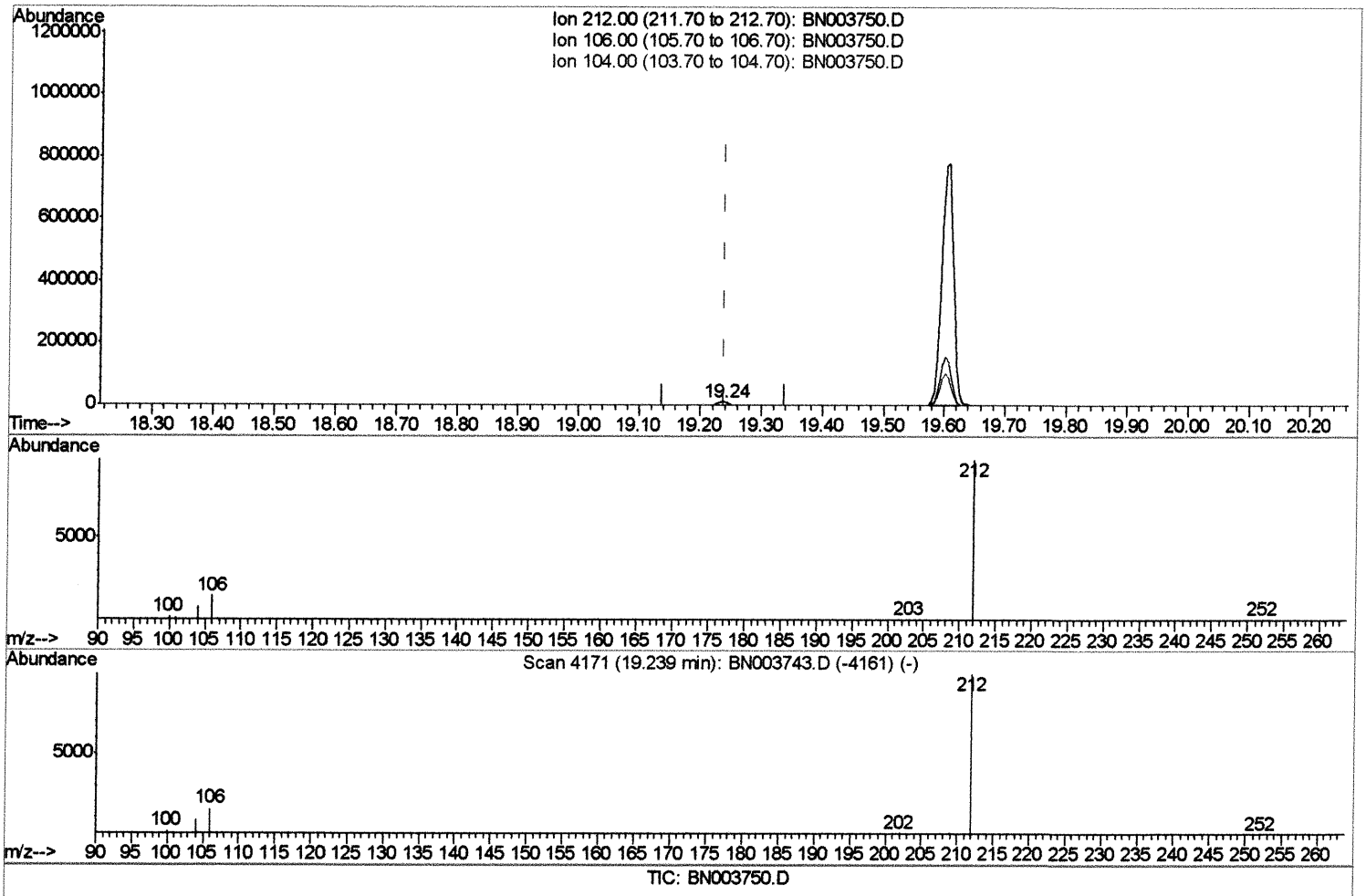

TIC: BN003750.D

(14) Fluoranthene-d10 (SURR)

19.239min (+0.000) 0.17ng/ul m > SJ 12/11/18

response 12858

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003750.D
Acq On : 07 Dec 2018 03:35
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 07 05:08:54 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
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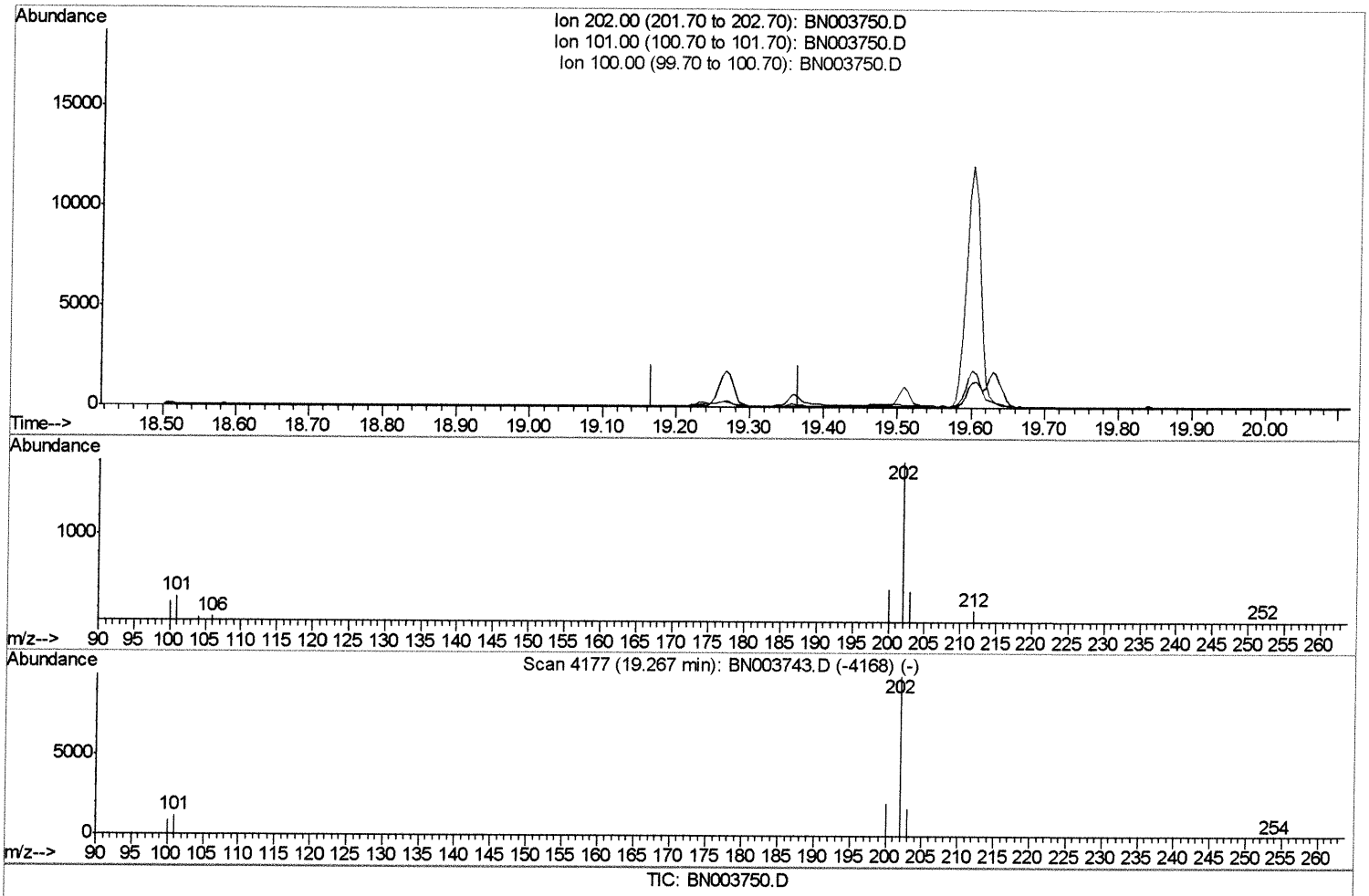
12/10/2018 12:20:55 PM



TIC: BN003750.D

(15) Fluoranthene (C)

19.267min (-19.267) 0.00ng/ul

response 0

Ion	Exp%	Act%
202.00	100	0.00
101.00	10.70	0.00
100.00	8.10	0.00
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003750.D
Acq On : 07 Dec 2018 03:35
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 07 05:08:54 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
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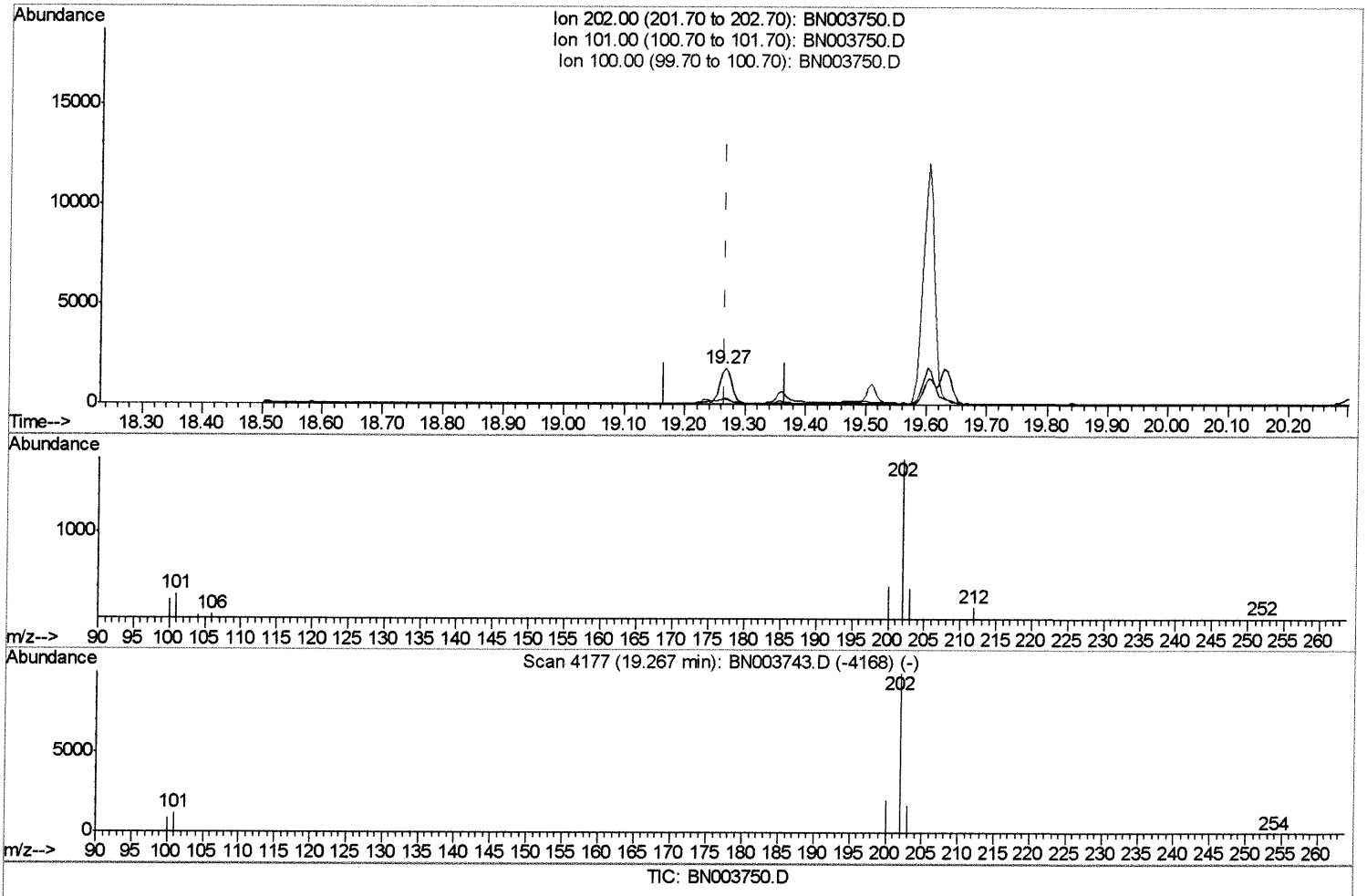

TIC: BN003750.D

(15) Fluoranthene (C)

19.267min (+0.000) 0.02ng/ul m

response 2439

> SJ 12/11/18

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	17.94
100.00	8.10	14.34
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003750.D
Acq On : 07 Dec 2018 03:35
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 07 05:08:54 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
mohammad
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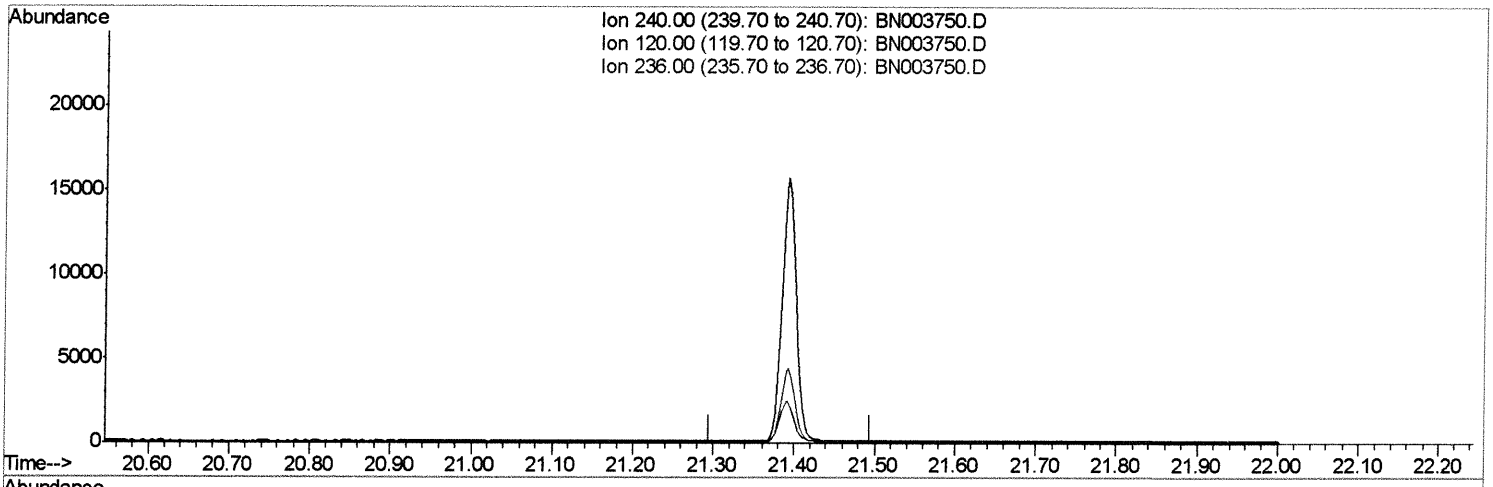

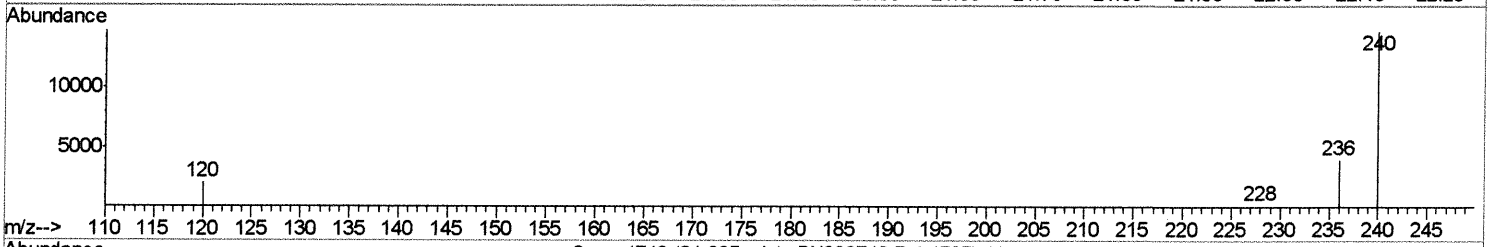

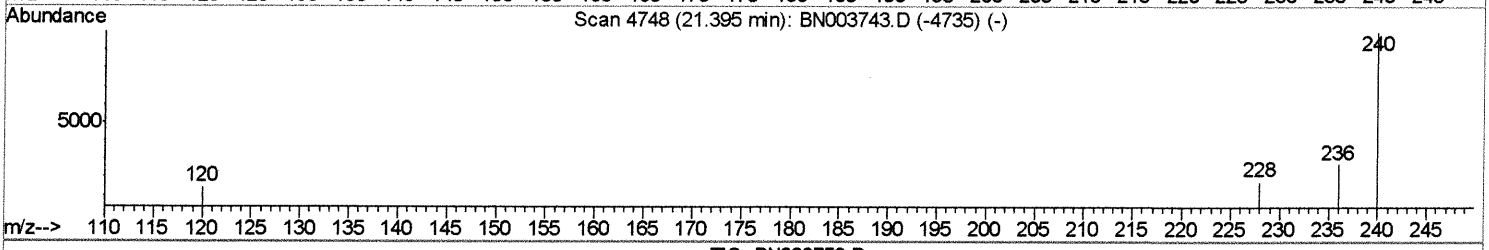

TIC: BN003750.D

(16) Chrysene-d12 (I)

21.395min (-21.395) 0.00ng/ul

response 0

Ion	Exp%	Act%
240.00	100	0.00
120.00	14.00	0.00#
236.00	27.60	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003750.D
Acq On : 07 Dec 2018 03:35
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 07 05:08:54 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
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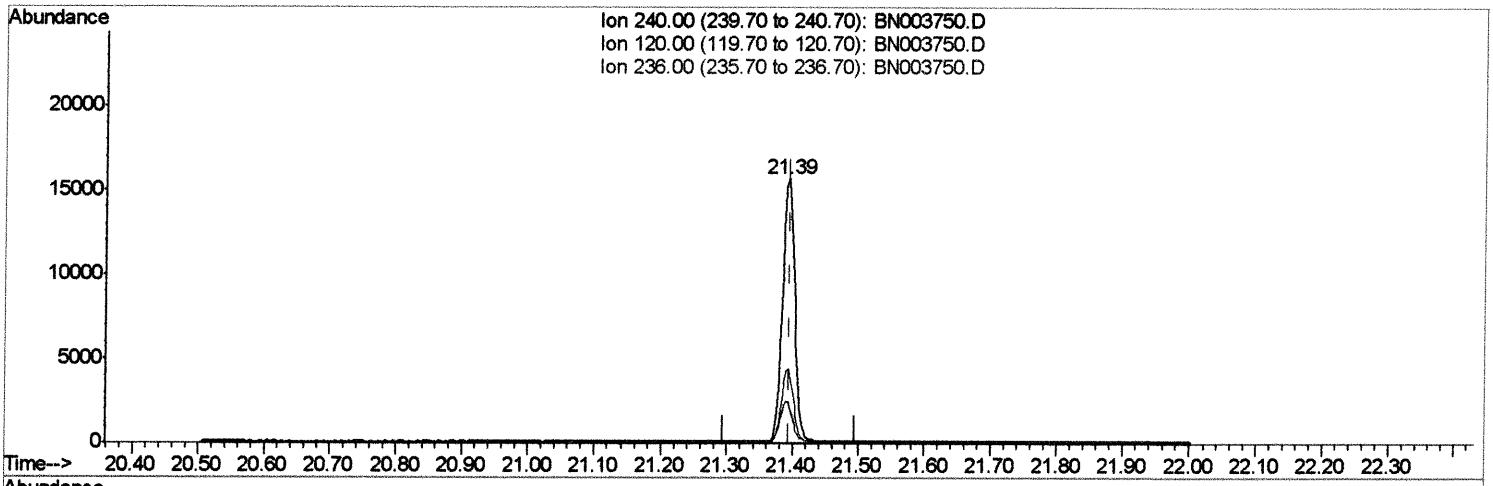

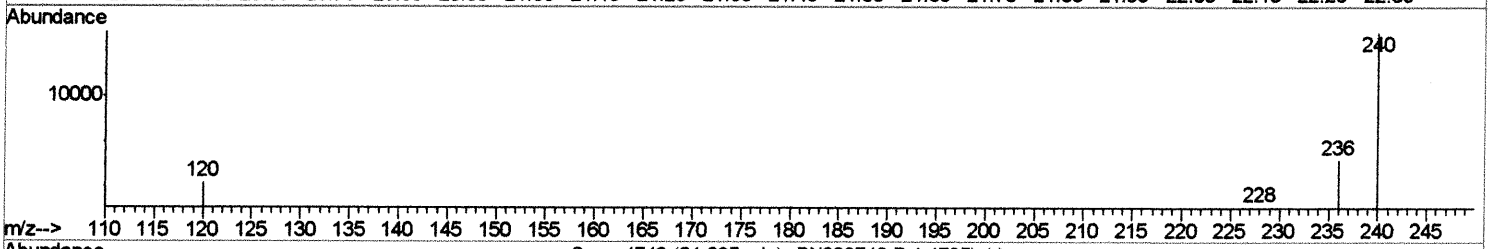

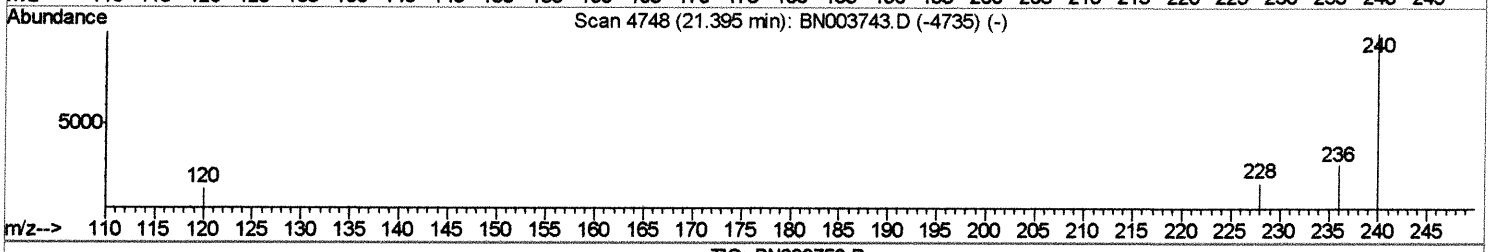

TIC: BN003750.D

(16) Chrysene-d12 (I)

21.393min (-0.003) 0.40ng/ul m

response 20030

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	15.26
236.00	27.60	28.02
0.00	0.00	0.00

> SJ 12/11/18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003750.D
Acq On : 07 Dec 2018 03:35
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 07 05:09:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
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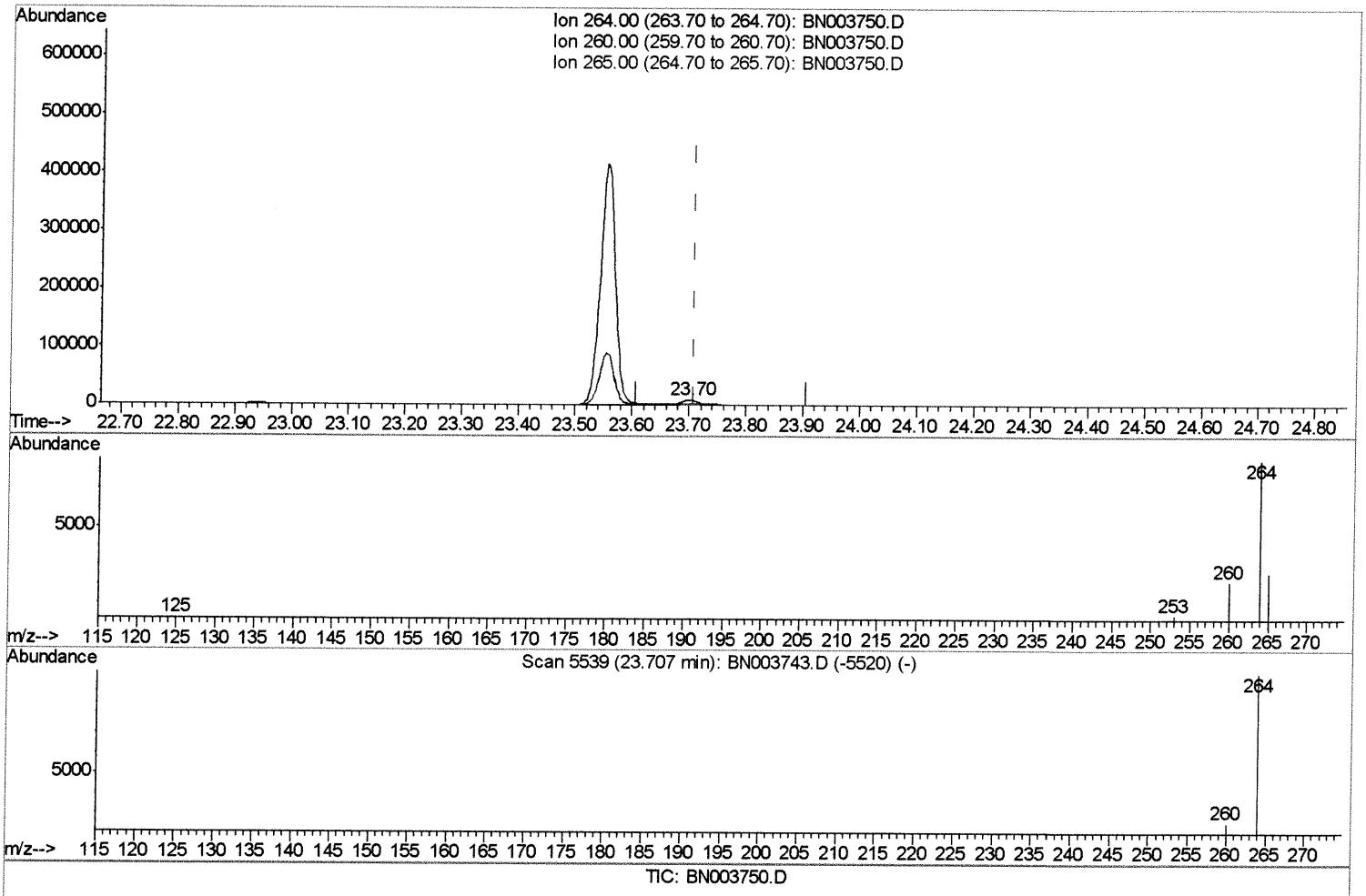
12/10/2018 12:20:55 PM



TIC: BN003750.D

(20) Perylene-d12 (I)

23.702min (-0.006) 0.40ng/ul

response 18271

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	25.66
265.00	33.50	31.32
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

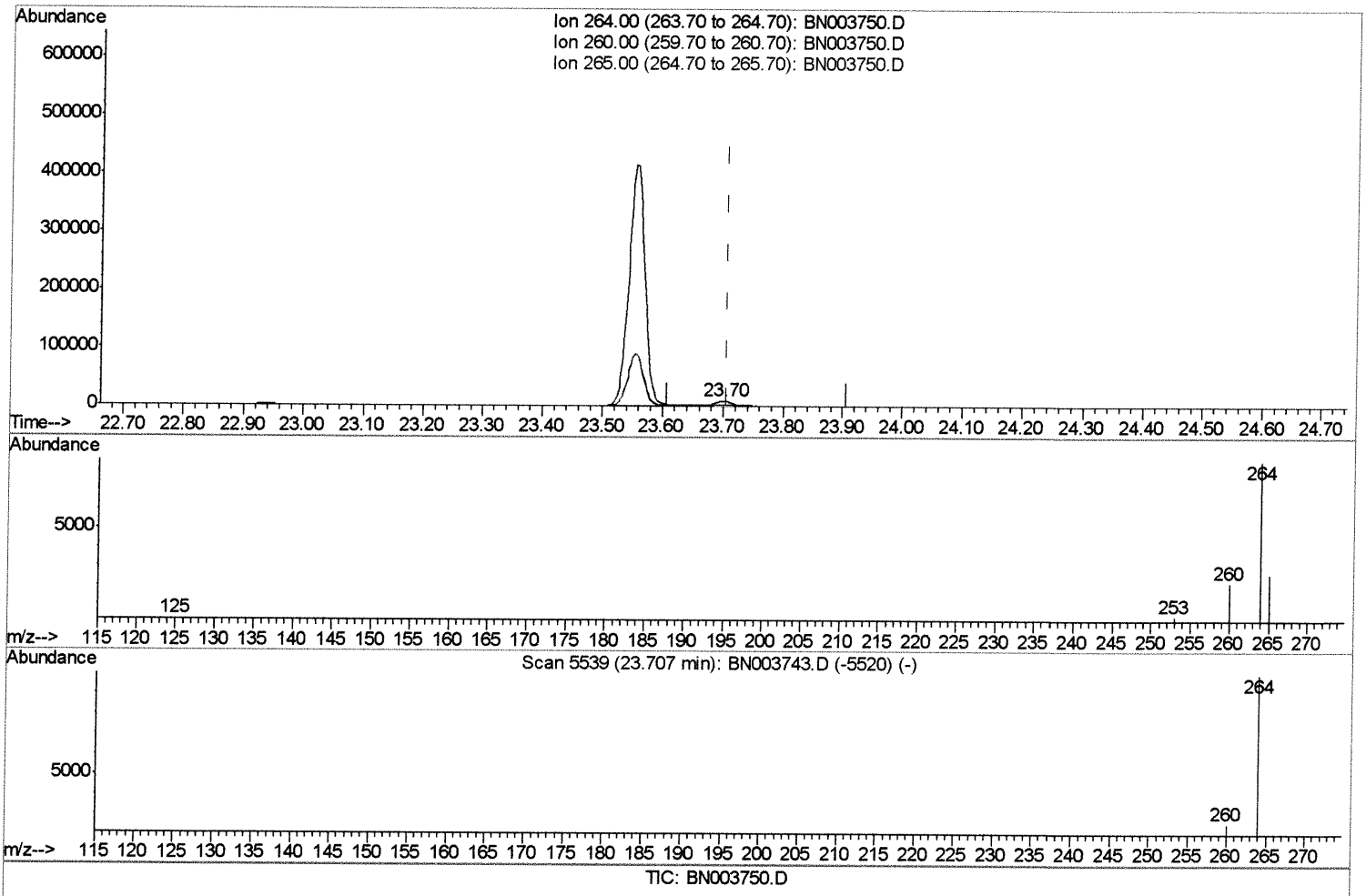
Quantitation Report (Qedit)

Data File : BN003750.D
Acq On : 07 Dec 2018 03:35
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 07 05:09:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:55 PM



(20) Perylene-d12 (I)

23.702min (-0.006) 0.40ng/ul m

response 15079

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	25.66
265.00	33.50	31.32
0.00	0.00	0.00

SJ 12/11/18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

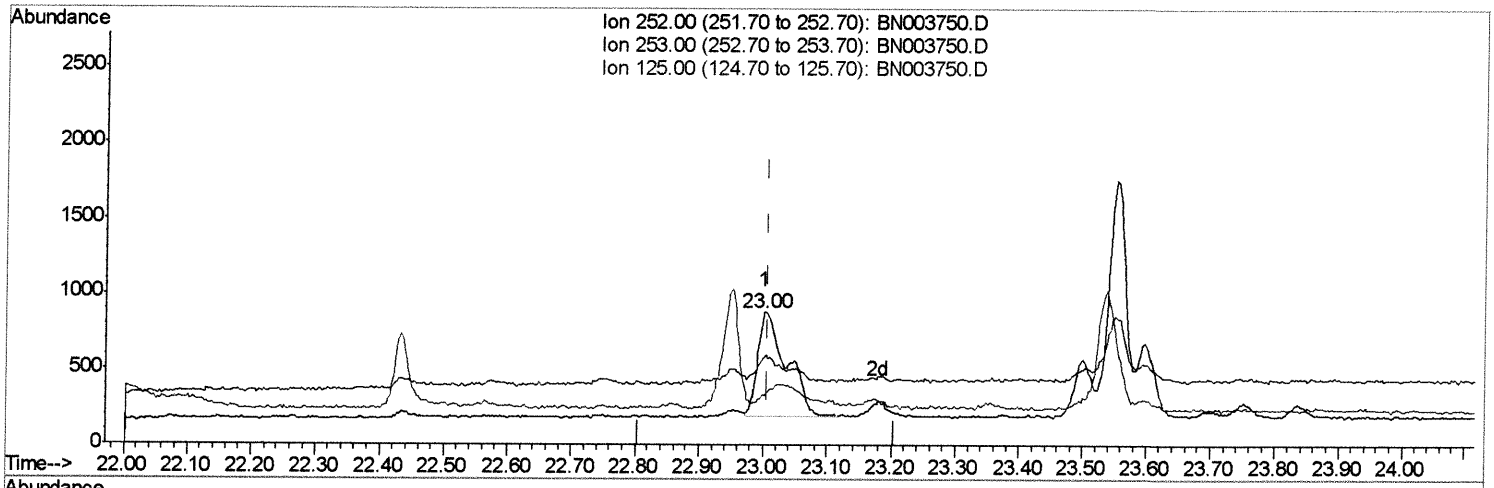
Quantitation Report (Qedit)

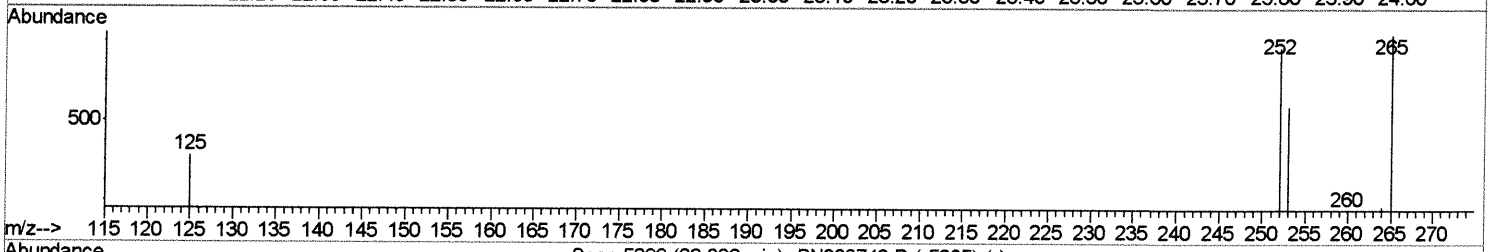
Data File : BN003750.D
Acq On : 07 Dec 2018 03:35
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 21 Sample Multiplier: 1

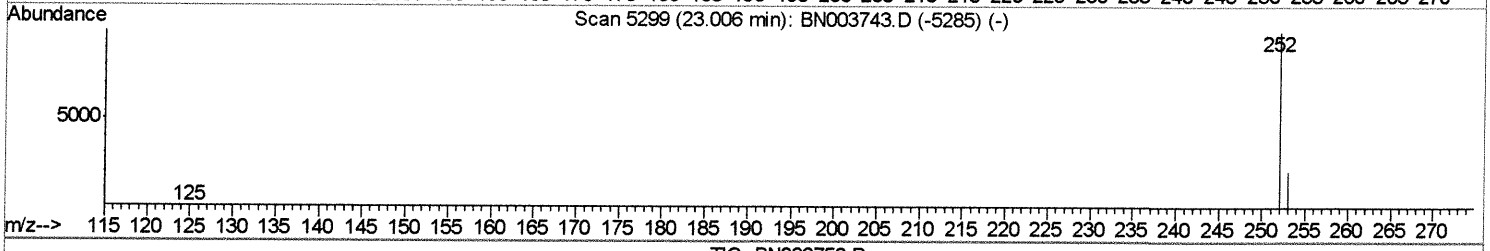
Quant Time: Dec 07 05:40:31 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:55 PM







TIC: BN003750.D

(21) Benzo(b)fluoranthene

23.000min (-0.006) 0.03ng/ul

response 2155

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	66.36#
125.00	11.20	37.19#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

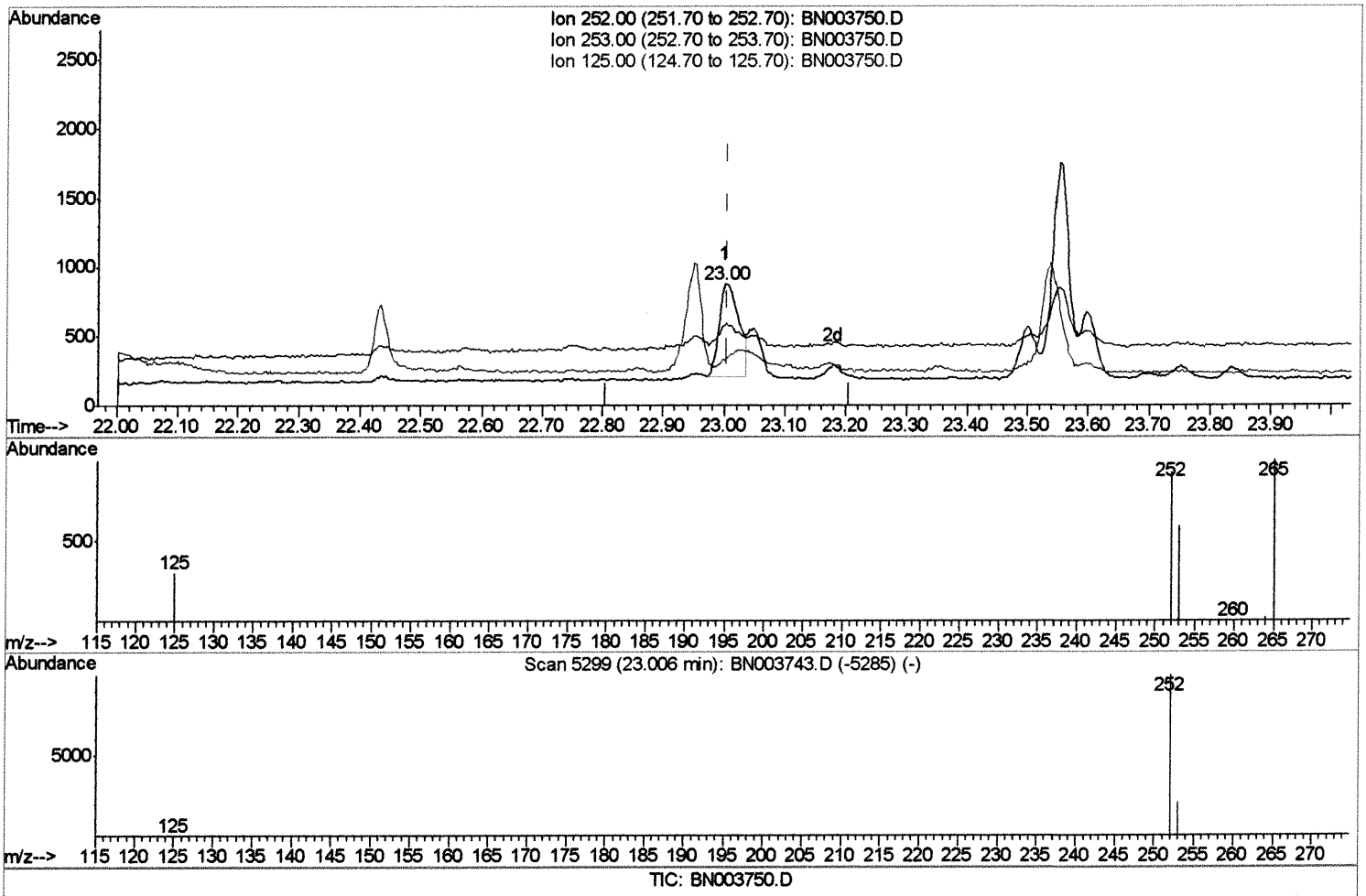
Quantitation Report (Qedit)

Data File : BN003750.D
Acq On : 07 Dec 2018 03:35
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 07 05:40:31 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E56

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:55 PM



TIC: BN003750.D

(21) Benzo(b)fluoranthene

23.000min (-0.006) 0.02ng/ul m

response 1521

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	66.36#
125.00	11.20	37.19#
0.00	0.00	0.00

7 SJ 12/11/18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003750.D
Acq On : 07 Dec 2018 03:35
Operator : JU/SJ
Sample : J6227-11
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 07 05:41:03 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument : BNA_N
ClientSampleId : F9E56

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:55 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5564	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	22838	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12185	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	25903m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	20030m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	15079m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	6270	0.18	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	12858m	0.17	ng/ul	0.00
Target Compounds						Qvalue
15) Fluoranthene	19.27	202	2439m	0.024	ng/ul	
17) Pyrene	19.63	202	2257	0.031	ng/ul#	80
21) Benzo(b)fluoranthene	23.00	252	1521m	0.024	ng/ul	

SJ 12/11/18

SJ 12/11/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E57

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-12
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BN003751.D
% Solids : 86.1
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/07/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	3.8	U
91-57-6	2-Methylnaphthalene	3.8	U
208-96-8	Acenaphthylene	3.8	U
83-32-9	Acenaphthene	3.8	U
86-73-7	Fluorene	3.8	U
87-86-5	Pentachlorophenol	7.8	U
85-01-8	Phenanthrene	3.8	U
120-12-7	Anthracene	3.8	U
206-44-0	Fluoranthene	3.8	U
129-00-0	Pyrene	3.8	U
56-55-3	Benzo(a)anthracene	3.8	U
218-01-9	Chrysene	3.8	U
205-99-2	Benzo(b)fluoranthene	3.8	U
207-08-9	Benzo(k)fluoranthene	3.8	U
50-32-8	Benzo(a)pyrene	3.8	U
193-39-5	Indeno(1,2,3-cd)pyrene	3.8	U
53-70-3	Dibenzo(a,h)anthracene	3.8	U
191-24-2	Benzo(g,h,i)perylene	3.8	U

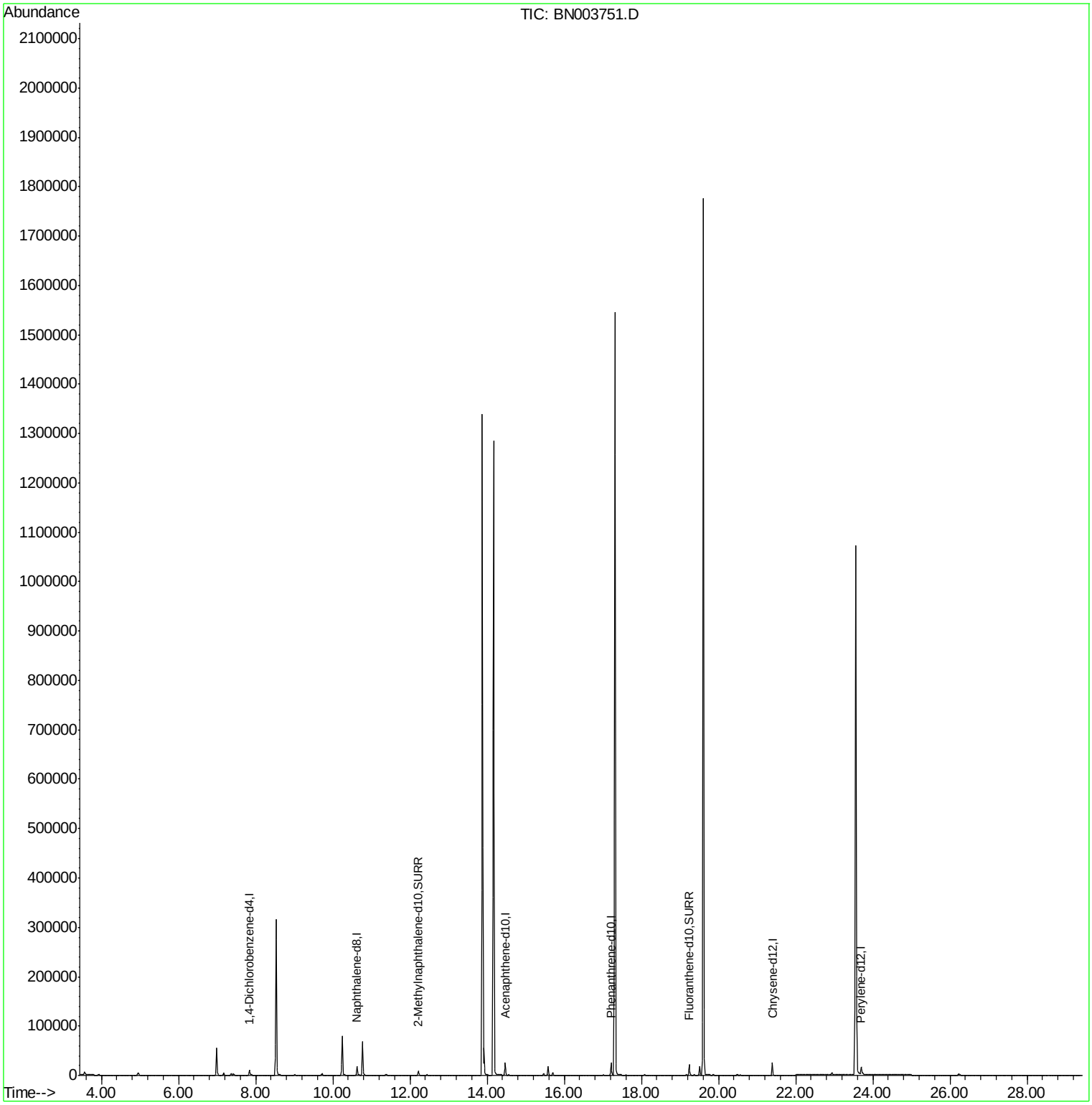
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003751.D
Acq On : 07 Dec 2018 04:09
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 07 06:08:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E57

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:58 PM



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003751.D
Acq On : 07 Dec 2018 04:09
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9E57

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:58 PM

Quant Time: Dec 07 06:08:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5667	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	23501	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	13064	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	27819m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	22949m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	16829m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	10889	0.30	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	23146m	0.28	ng/ul	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

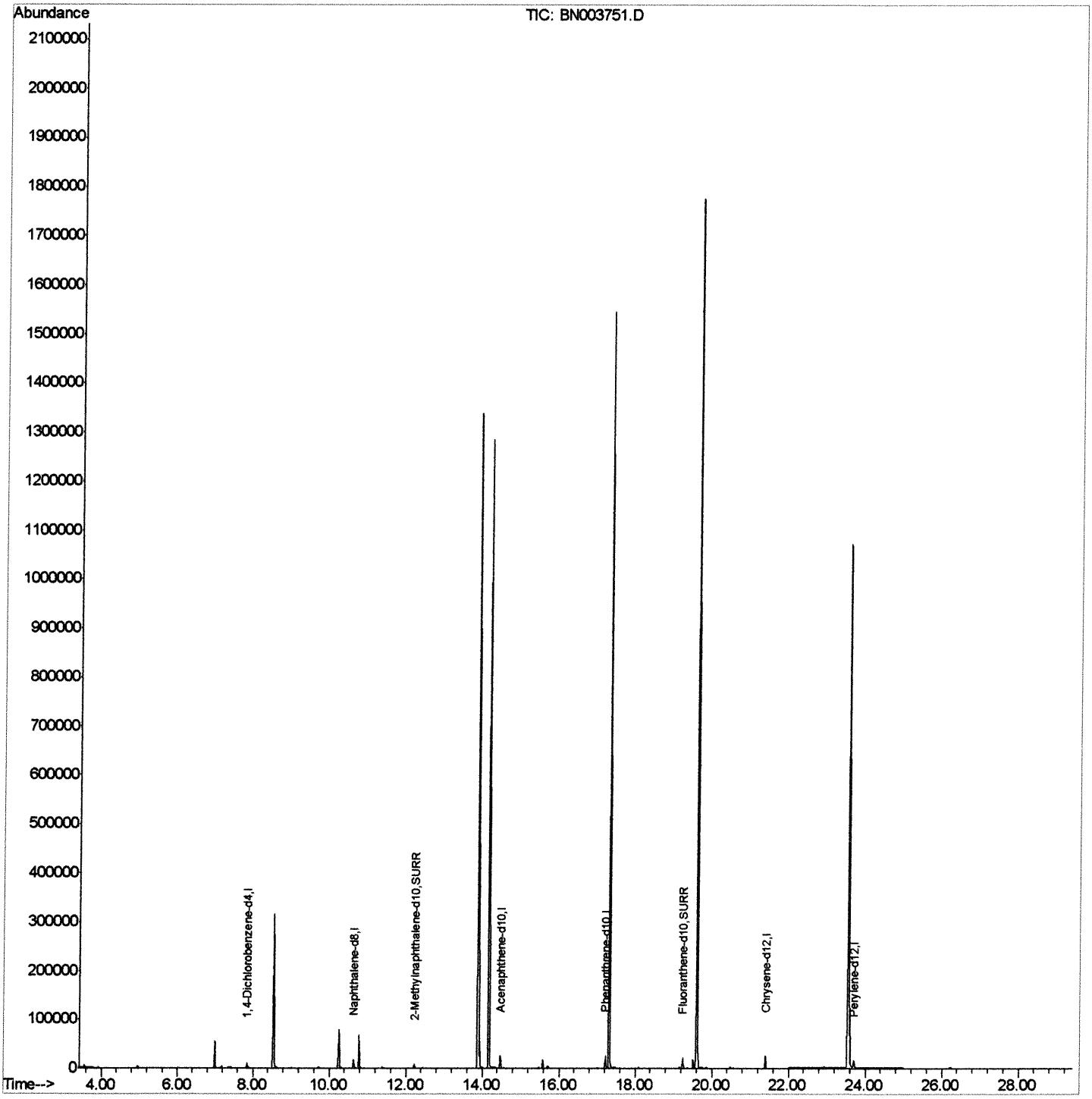
Quantitation Report (QT Reviewed)

Data File : BN003751.D
Acq On : 07 Dec 2018 04:09
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 07 06:08:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E57

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:58 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

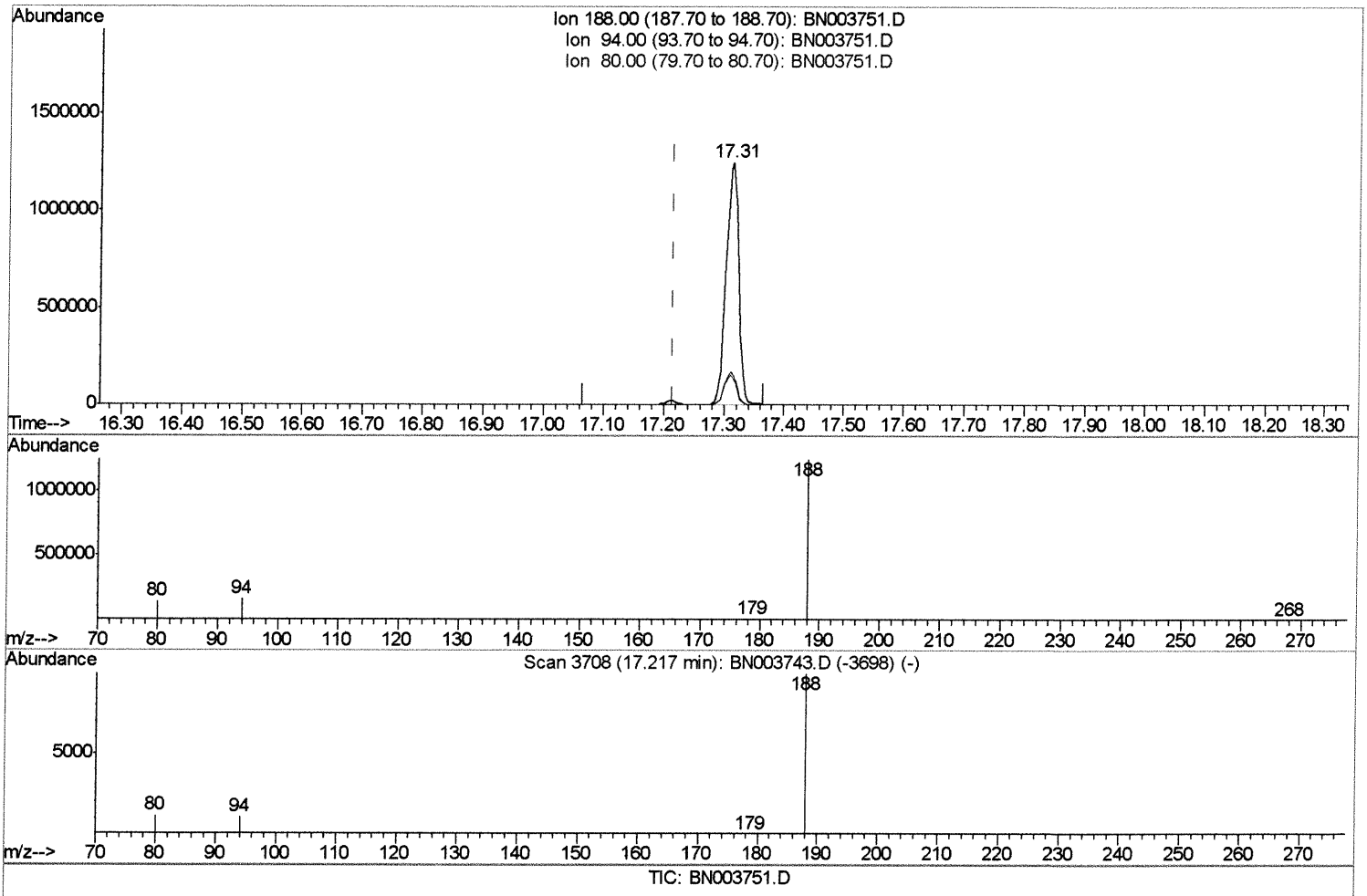
Quantitation Report (Qedit)

Data File : BN003751.D
Acq On : 07 Dec 2018 04:09
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 07 06:06:35 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E57

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:58 PM



TIC: BN003751.D

(10) Phenanthrene-d10 (I)

17.314min (+0.097) 0.40ng/ul

response 1797173

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	12.76#
80.00	11.60	11.24
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

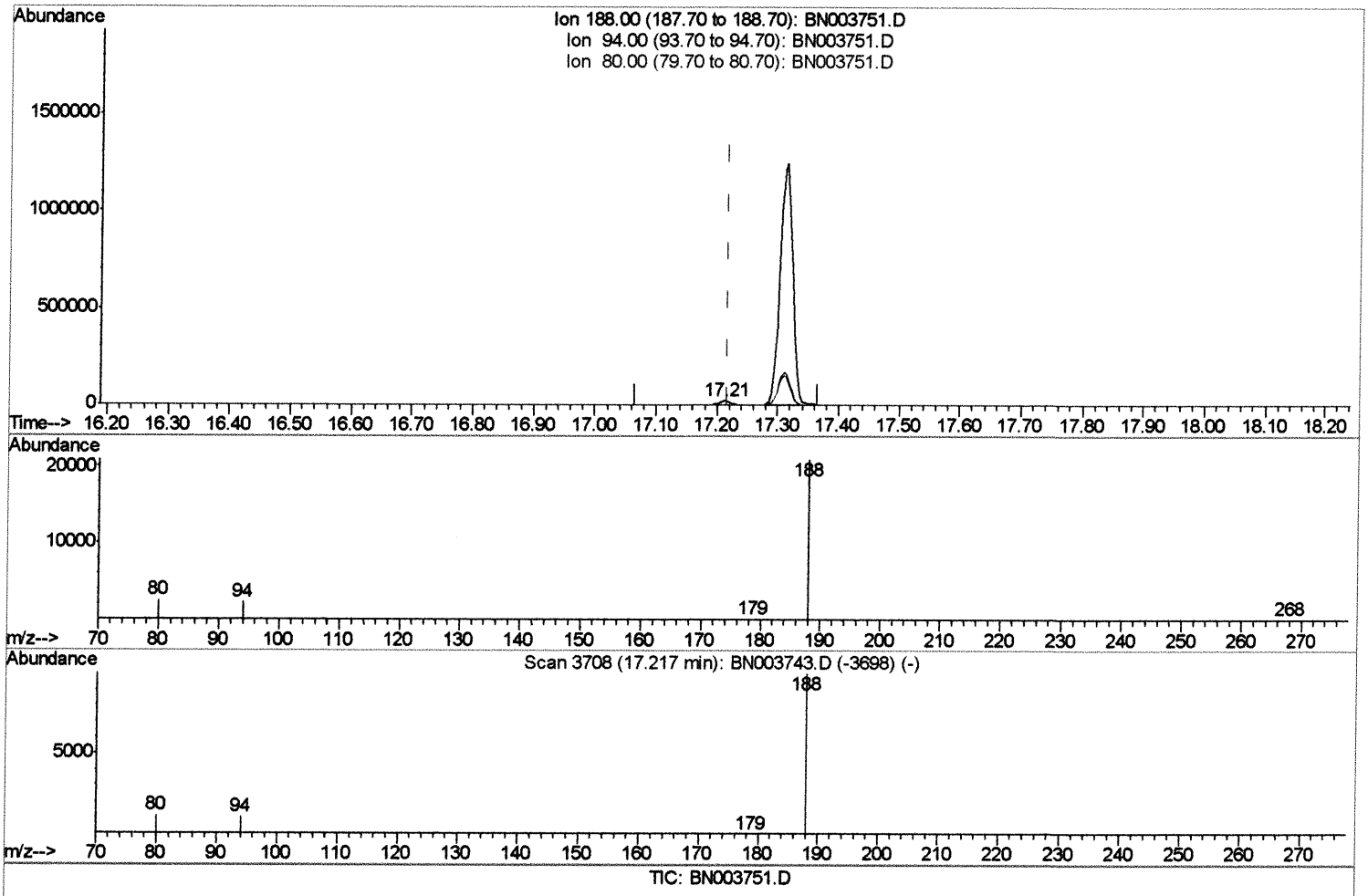
Quantitation Report (Qedit)

Data File : BN003751.D
Acq On : 07 Dec 2018 04:09
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 07 06:06:35 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E57

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:58 PM



TIC: BN003751.D

(10) Phenanthrene-d10 (I)

17.213min (-0.004) 0.40ng/ul m

response 27819

SJ 12/11/18

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	11.01
80.00	11.60	12.03
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

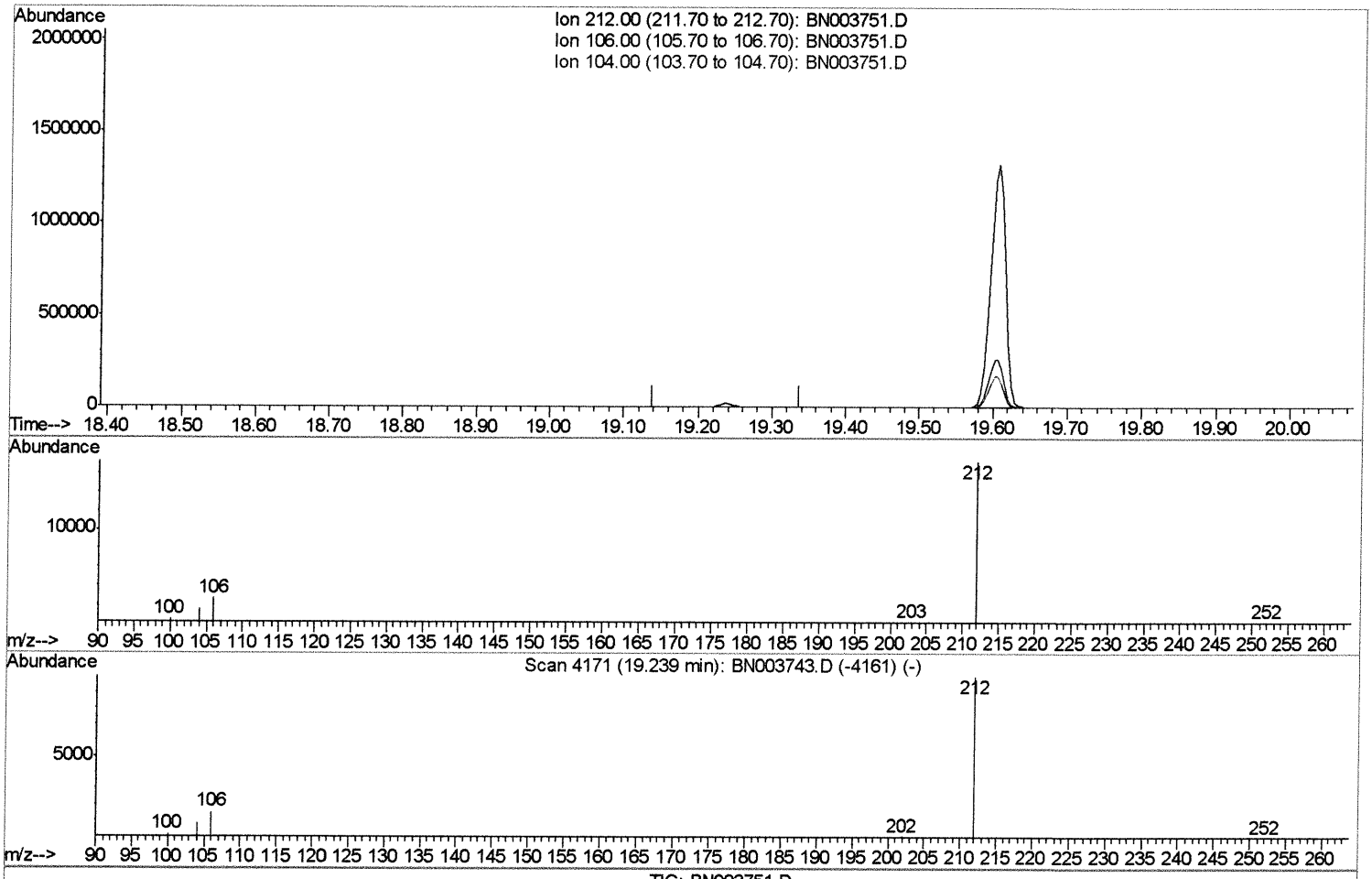
Quantitation Report (Qedit)

Data File : BN003751.D
Acq On : 07 Dec 2018 04:09
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 07 06:07:13 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E57

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:58 PM



TIC: BN003751.D

(14) Fluoranthene-d10 (SURR)

19.239min (-19.239) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

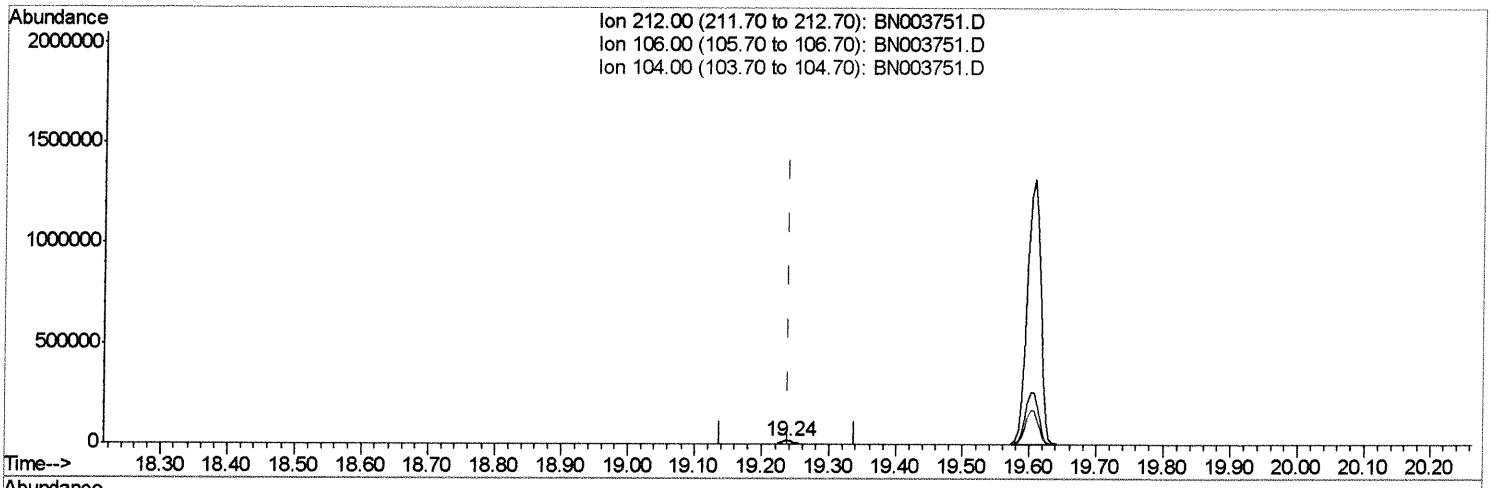
Quantitation Report (Qedit)

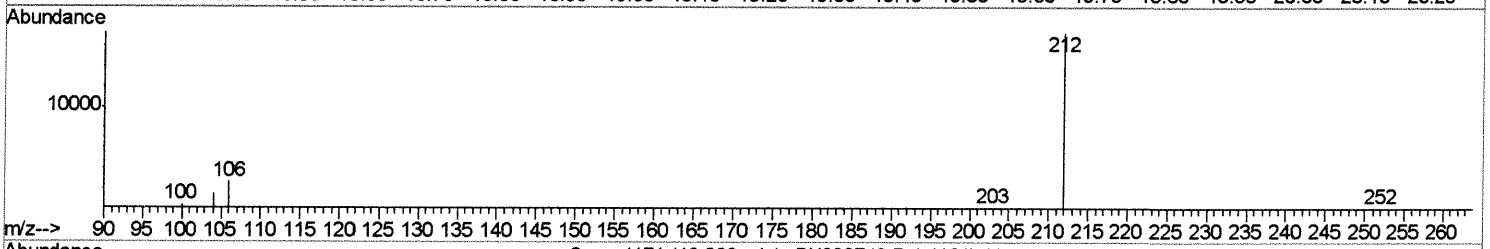
Data File : BN003751.D
Acq On : 07 Dec 2018 04:09
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

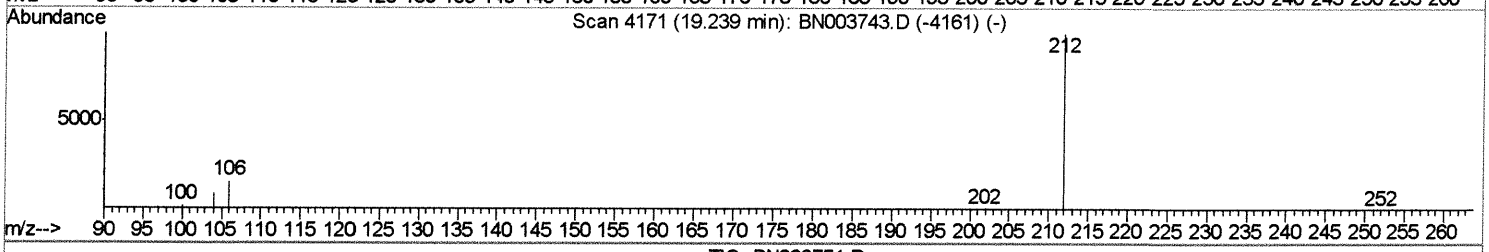
Quant Time: Dec 07 06:07:13 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E57

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:58 PM







TIC: BN003751.D

(14) Fluoranthene-d10 (SURR)

19.239min (+0.000) 0.28ng/ul m

response 23146

> SJ 12/11/18

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

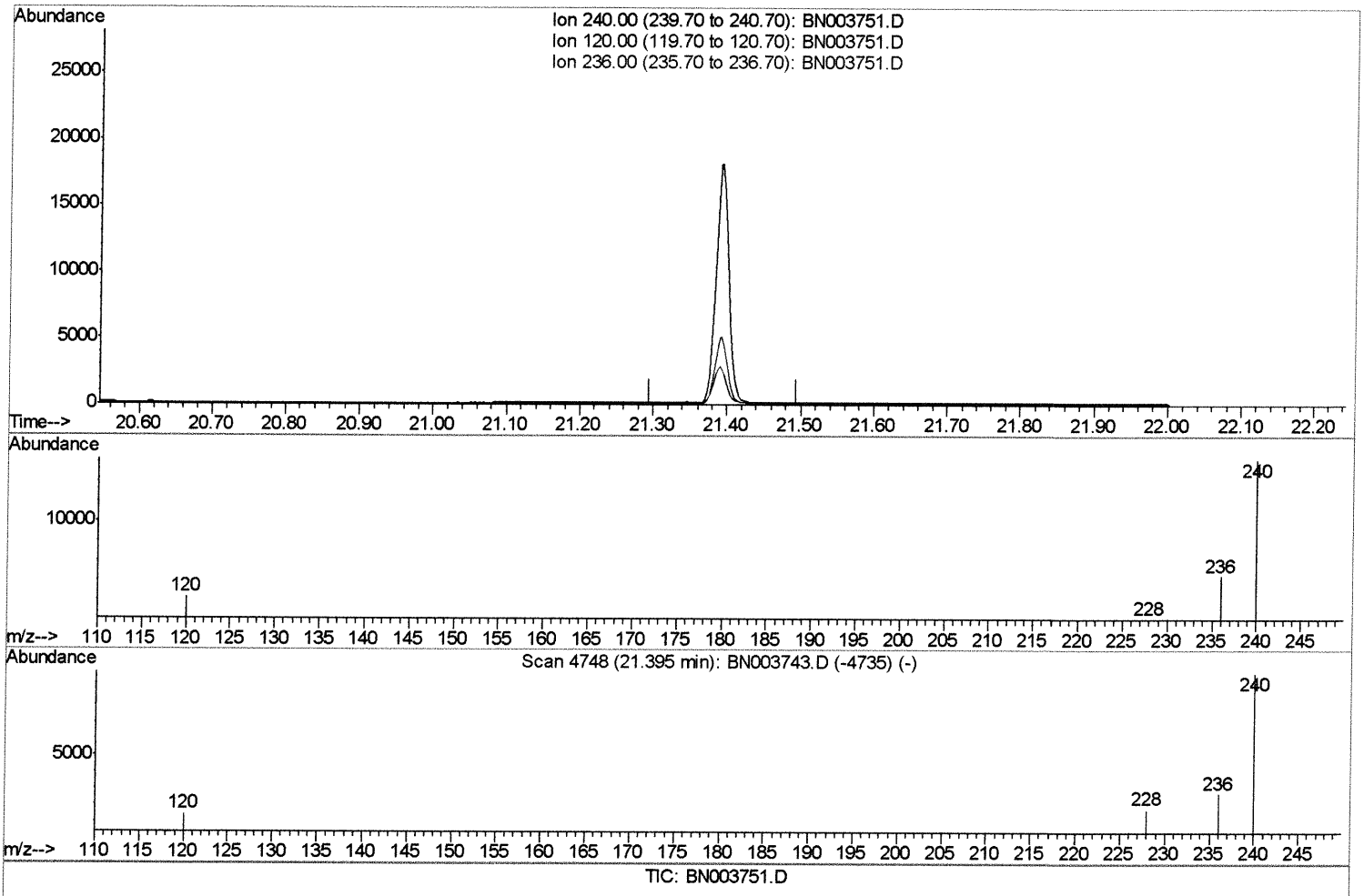
Quantitation Report (Qedit)

Data File : BN003751.D
Acq On : 07 Dec 2018 04:09
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 07 06:07:13 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E57

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:58 PM



TIC: BN003751.D

(16) Chrysene-d12 (I)

21.395min (-21.395) 0.00ng/ul

response 0

Ion	Exp%	Act%
240.00	100	0.00
120.00	14.00	0.00#
236.00	27.60	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

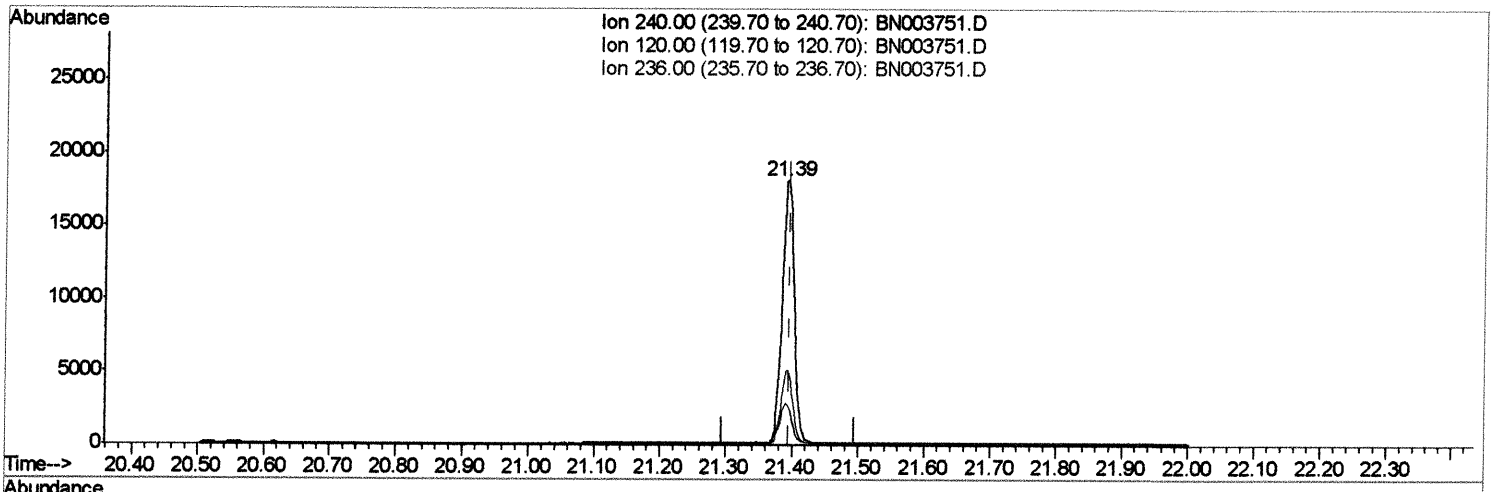
Quantitation Report (Qedit)

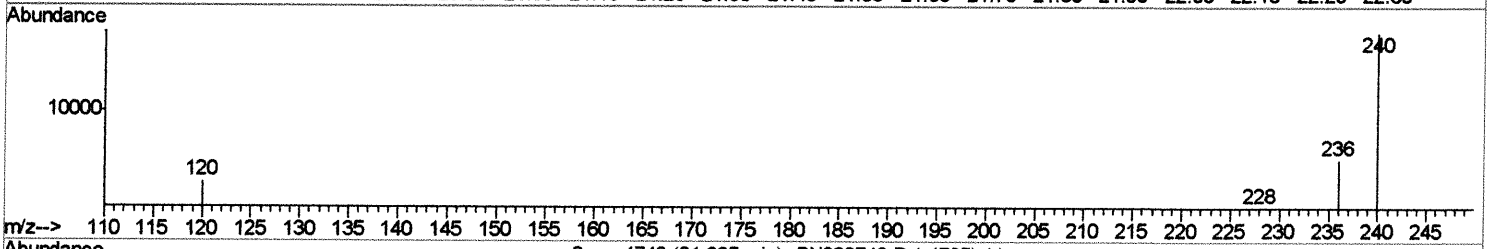
Data File : BN003751.D
Acq On : 07 Dec 2018 04:09
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

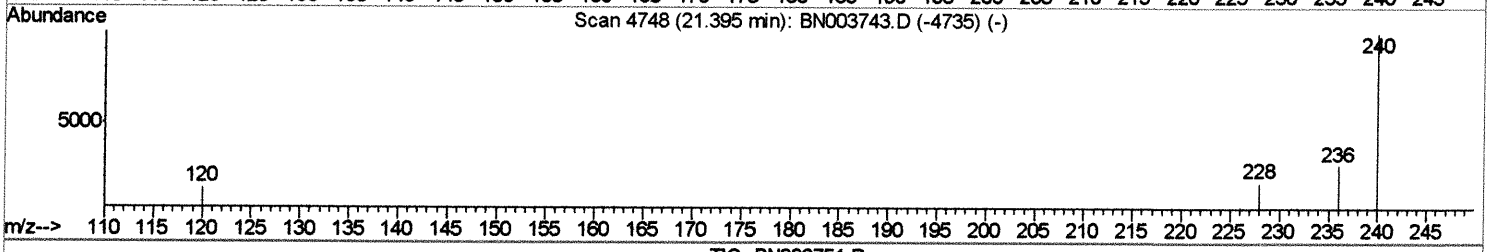
Quant Time: Dec 07 06:07:13 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument : BNA_N
ClientSampleId : F9E57

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:58 PM







TIC: BN003751.D

(16) Chrysene-d12 (I)

21.393min (-0.003) 0.40ng/ul m

response 22949

> SJ 12/11/18

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	15.01
236.00	27.60	28.01
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

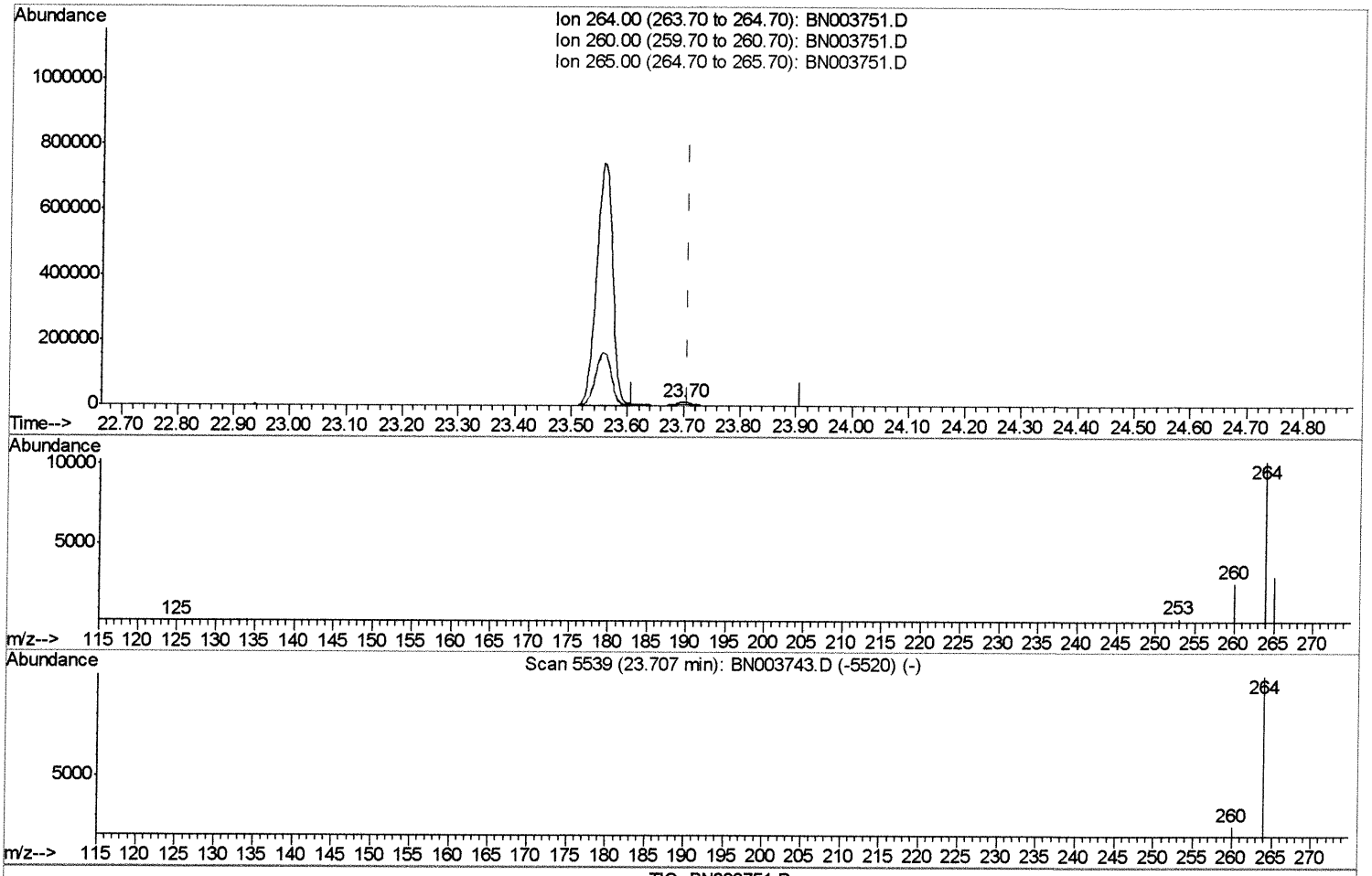
Quantitation Report (Qedit)

Data File : BN003751.D
Acq On : 07 Dec 2018 04:09
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 07 06:07:47 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E57

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:58 PM



TIC: BN003751.D

(20) Perylene-d12 (I)

23.699min (-0.009) 0.40ng/ul

response 22117

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	25.76
265.00	33.50	30.03
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

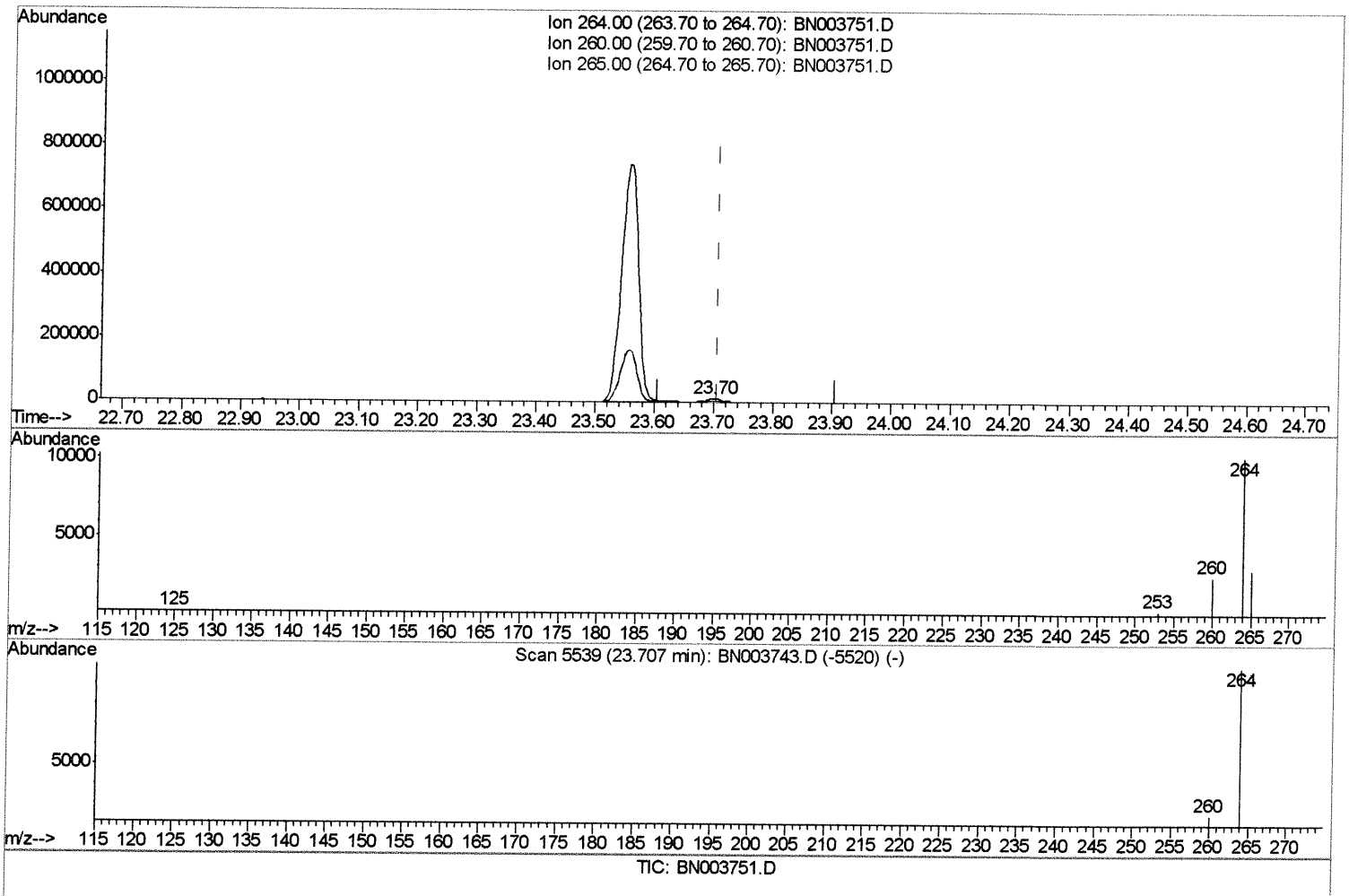
Quantitation Report (Qedit)

Data File : BN003751.D
Acq On : 07 Dec 2018 04:09
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 07 06:07:47 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E57

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:58 PM



(20) Perylene-d12 (I)

23.699min (-0.009) 0.40ng/ul m

response 16829

> SJ 12/11/18

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	25.76
265.00	33.50	30.03
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003751.D
Acq On : 07 Dec 2018 04:09
Operator : JU/SJ
Sample : J6227-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 07 06:08:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E57

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:58 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5667	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	23501	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	13064	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	27819m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	22949m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	16829m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	10889	0.30	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	23146m	0.28	ng/ul	0.00
Target Compounds						Qvalue

SJ 12/11/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E60

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-13
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BN003752.D
% Solids : 80.5
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/07/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	4.1	U
91-57-6	2-Methylnaphthalene	4.1	U
208-96-8	Acenaphthylene	4.1	U
83-32-9	Acenaphthene	4.1	U
86-73-7	Fluorene	4.1	U
87-86-5	Pentachlorophenol	8.3	U
85-01-8	Phenanthrene	1.4	J
120-12-7	Anthracene	4.1	U
206-44-0	Fluoranthene	4.1	U
129-00-0	Pyrene	1.7	J
56-55-3	Benzo(a)anthracene	0.91	J
218-01-9	Chrysene	1.3	J
205-99-2	Benzo(b)fluoranthene	0.95	J
207-08-9	Benzo(k)fluoranthene	4.1	U
50-32-8	Benzo(a)pyrene	4.1	U
193-39-5	Indeno(1,2,3-cd)pyrene	4.1	U
53-70-3	Dibenzo(a,h)anthracene	4.1	U
191-24-2	Benzo(g,h,i)perylene	4.1	U

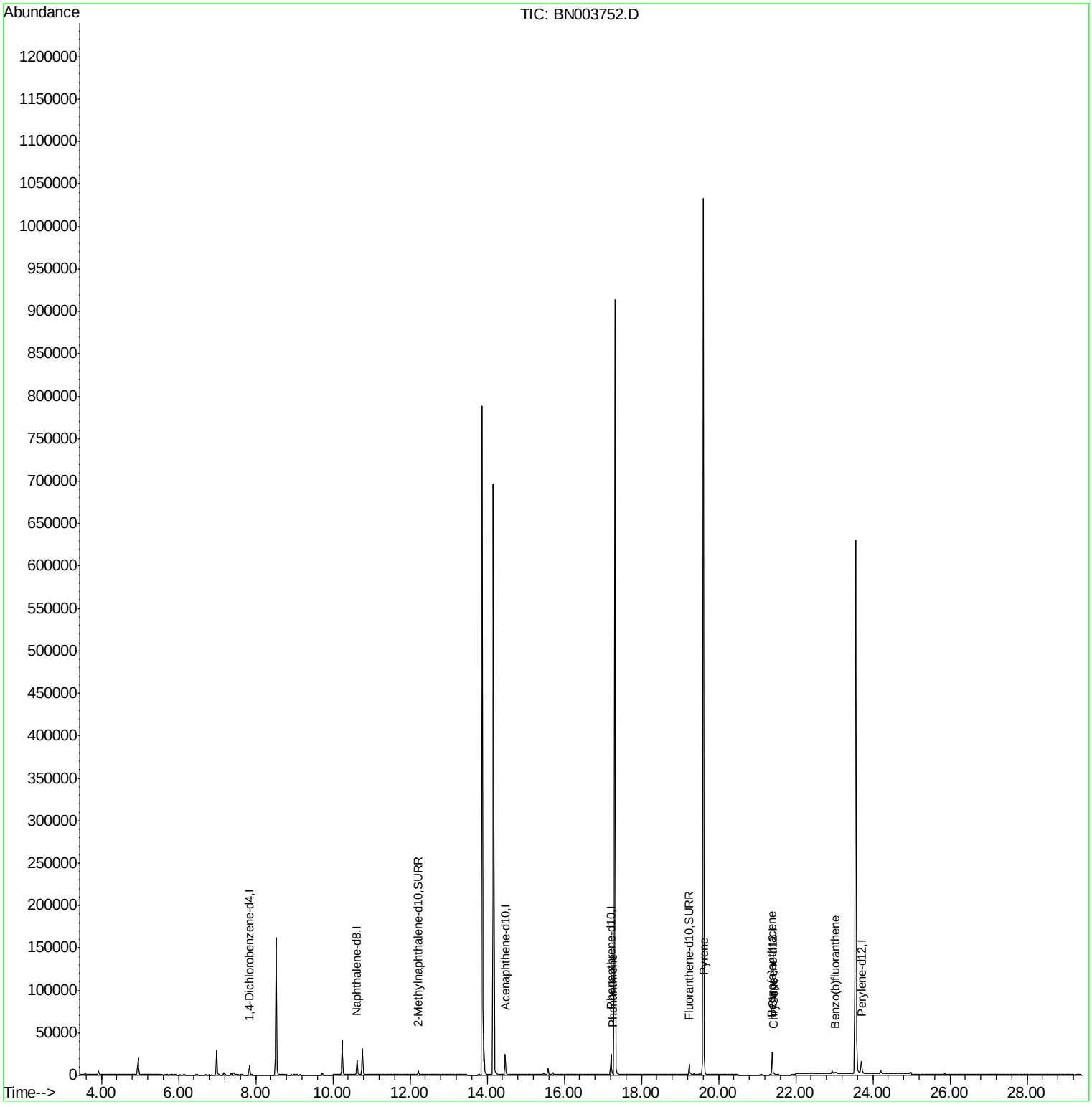
Quantitation Report (QT Reviewed)

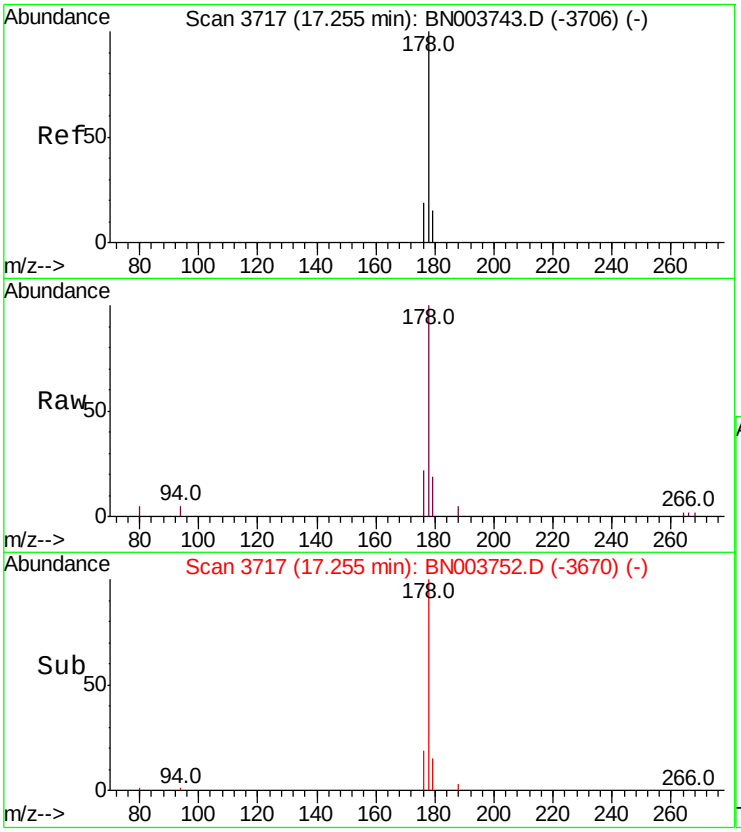
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003752.D
Acq On : 07 Dec 2018 04:44
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 07 06:11:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E60

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM





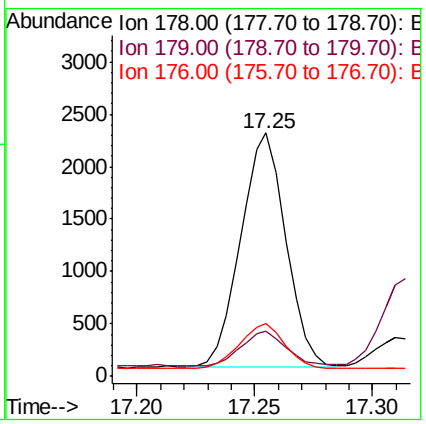
#12
Phenanthrene
Concen: 0.033 ng/ul
RT: 17.25 min Scan# 3717
Delta R.T. 0.00 min
Lab File: BN003752.D
Acq: 07 Dec 2018 04:44

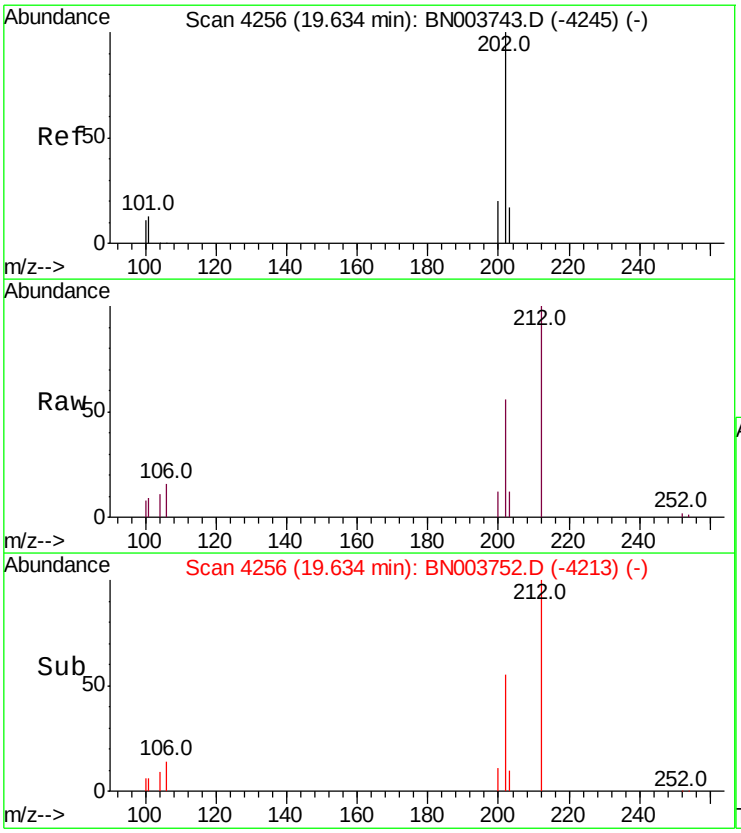
Tgt Ion:178 Resp: 2980

Ion	Ratio	Lower	Upper
178	100		
179	18.6	12.5	18.7
176	21.6	15.0	22.4

Instrument :
BNA_N
ClientSampleId :
F9E60

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM

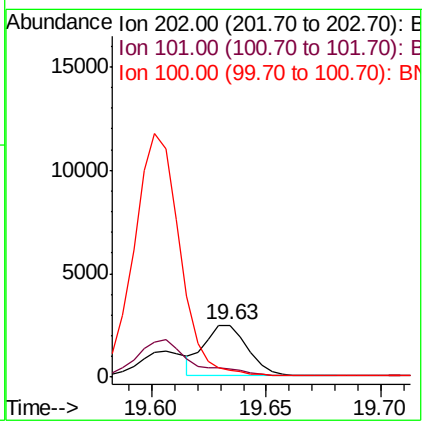


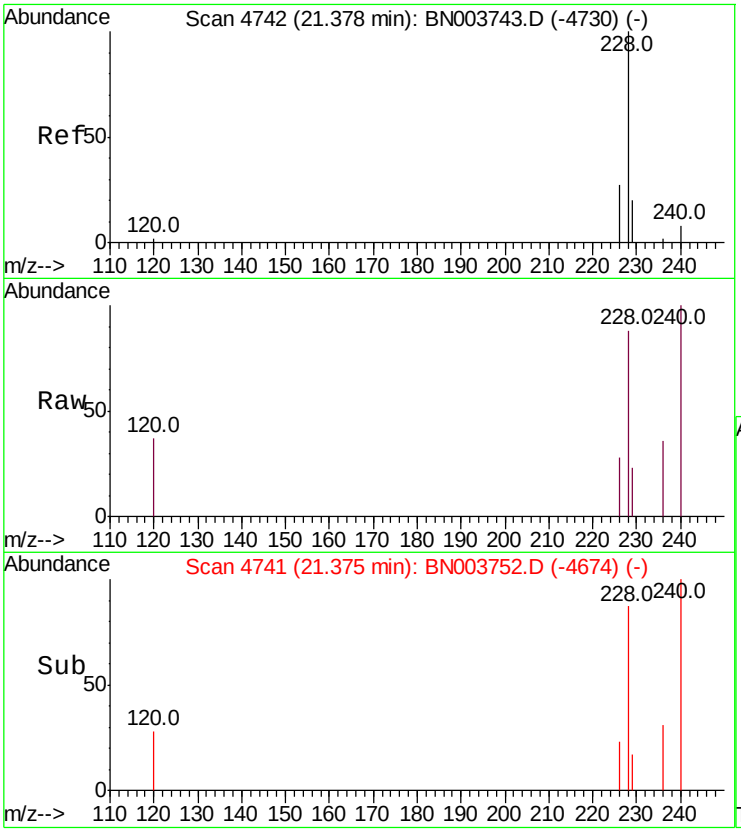


#17
Pyrene
Concen: 0.040 ng/ul
RT: 19.63 min Scan# 4256
Delta R.T. 0.00 min
Lab File: BN003752.D
Acq: 07 Dec 2018 04:44

Tgt Ion:202 Resp: 3193

Ion	Ratio	Lower	Upper
202	100		
101	16.5	10.3	15.5#
100	14.1	8.5	12.7#

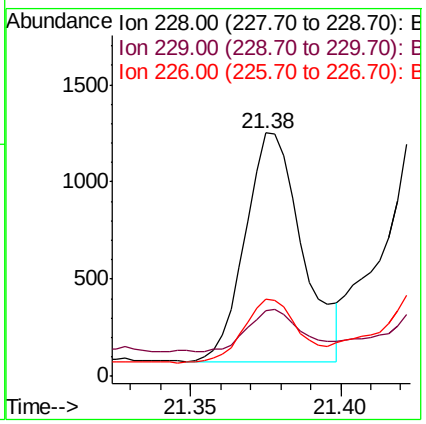




#18
Benzo(a)anthracene
Concen: 0.022 ng/ul
RT: 21.38 min Scan# 4741
Delta R.T. -0.00 min
Lab File: BN003752.D
Acq: 07 Dec 2018 04:44

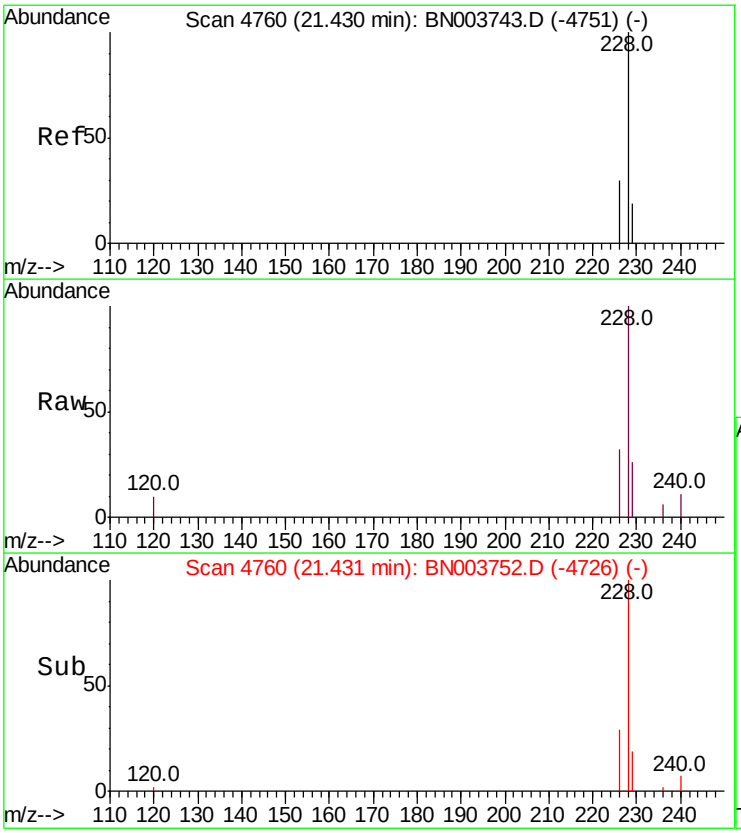
Tgt Ion:228 Resp: 1550

Ion	Ratio	Lower	Upper
228	100		
229	26.7	15.6	23.4#
226	31.4	21.1	31.7



Instrument :
BNA_N
ClientSampleId :
F9E60

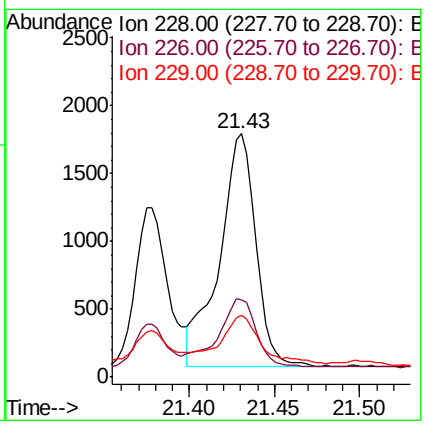
Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM

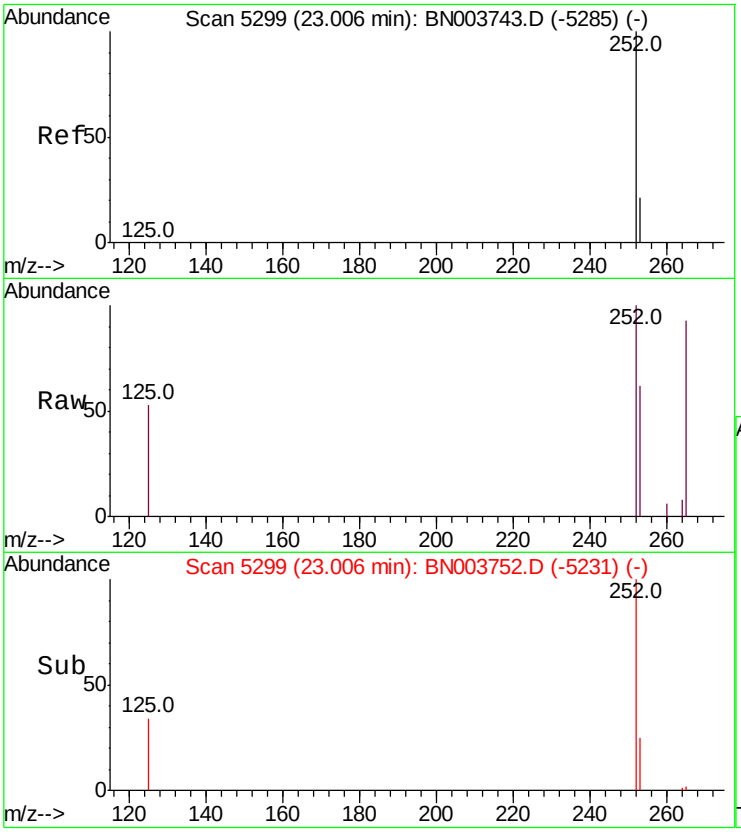


#19
Chrysene
Concen: 0.031 ng/ul
RT: 21.43 min Scan# 4760
Delta R.T. 0.00 min
Lab File: BN003752.D
Acq: 07 Dec 2018 04:44

Tgt Ion:228 Resp: 2543

Ion	Ratio	Lower	Upper
228	100		
226	31.8	24.0	36.0
229	25.6	15.7	23.5#

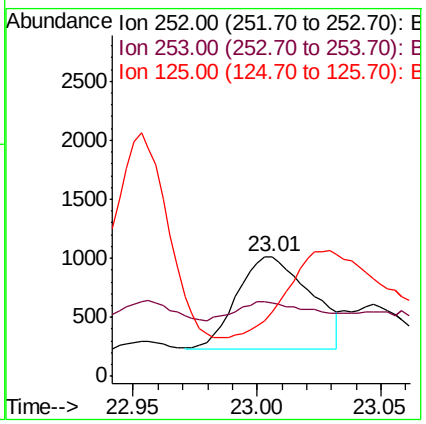




#21
Benzo(b)fluoranthene
Concen: 0.023 ng/ul m
RT: 23.01 min Scan# 5299
Delta R.T. 0.00 min
Lab File: BN003752.D
Acq: 07 Dec 2018 04:44

Tgt Ion:252 Resp: 1628

Ion	Ratio	Lower	Upper
252	100		
253	61.7	0.0	46.0#
125	53.2	0.0	22.4#



Instrument :
BNA_N
ClientSampleId :
F9E60

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003752.D
Acq On : 07 Dec 2018 04:44
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9E60

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM

Quant Time: Dec 07 06:11:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5726	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	23662	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12654	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	27784m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	22354m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	17249m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	5921	0.16	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	13134m	0.16	ng/ul	0.00
Target Compounds						Qvalue
12) Phenanthrene	17.25	178	2980	0.033	ng/ul	93
17) Pyrene	19.63	202	3193	0.040	ng/ul#	91
18) Benzo(a)anthracene	21.38	228	1550	0.022	ng/ul#	88
19) Chrysene	21.43	228	2543	0.031	ng/ul#	93
21) Benzo(b)fluoranthene	23.01	252	1628m	0.023	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

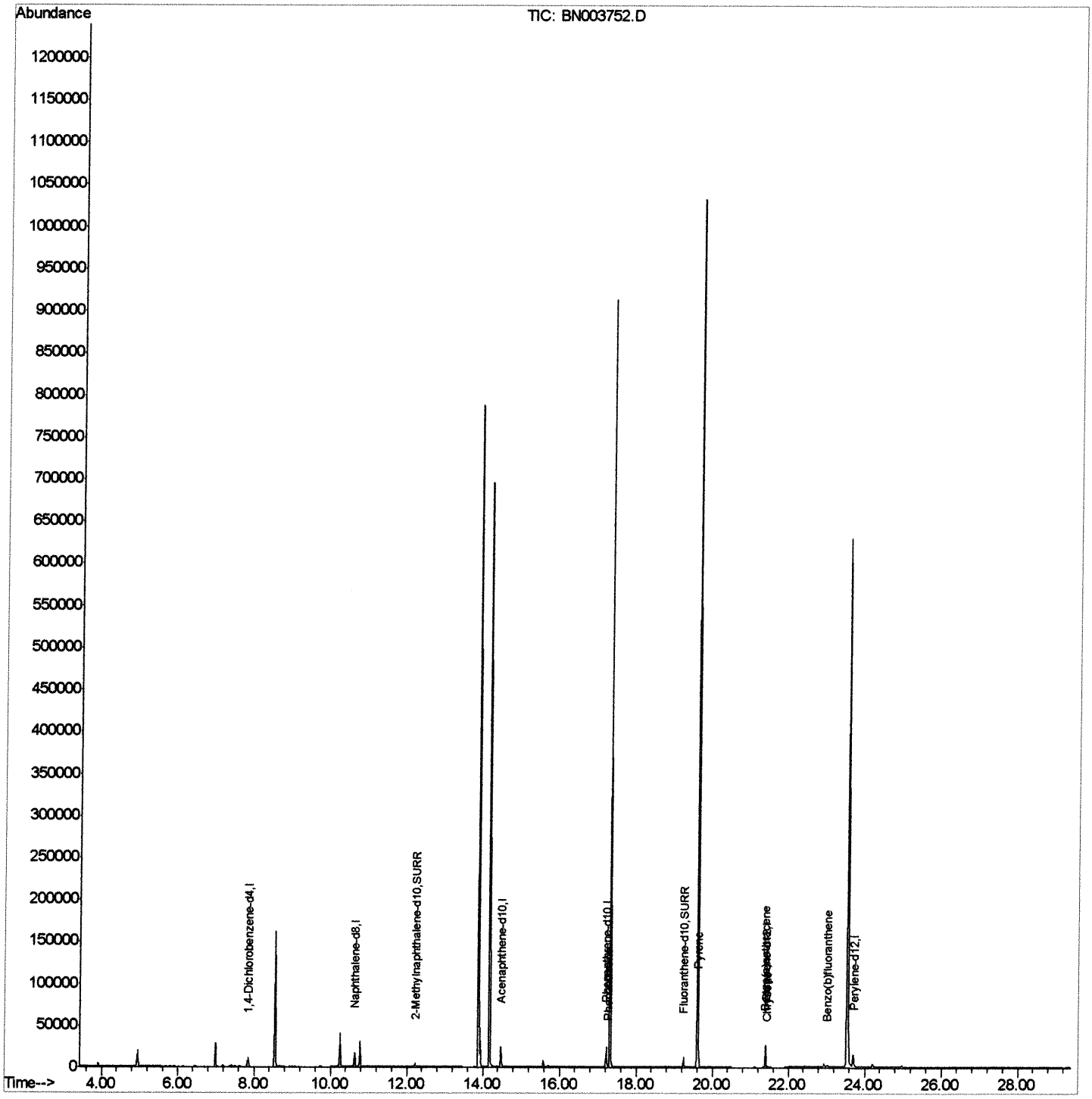
Quantitation Report (QT Reviewed)

Data File : BN003752.D
Acq On : 07 Dec 2018 04:44
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 07 06:11:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E60

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

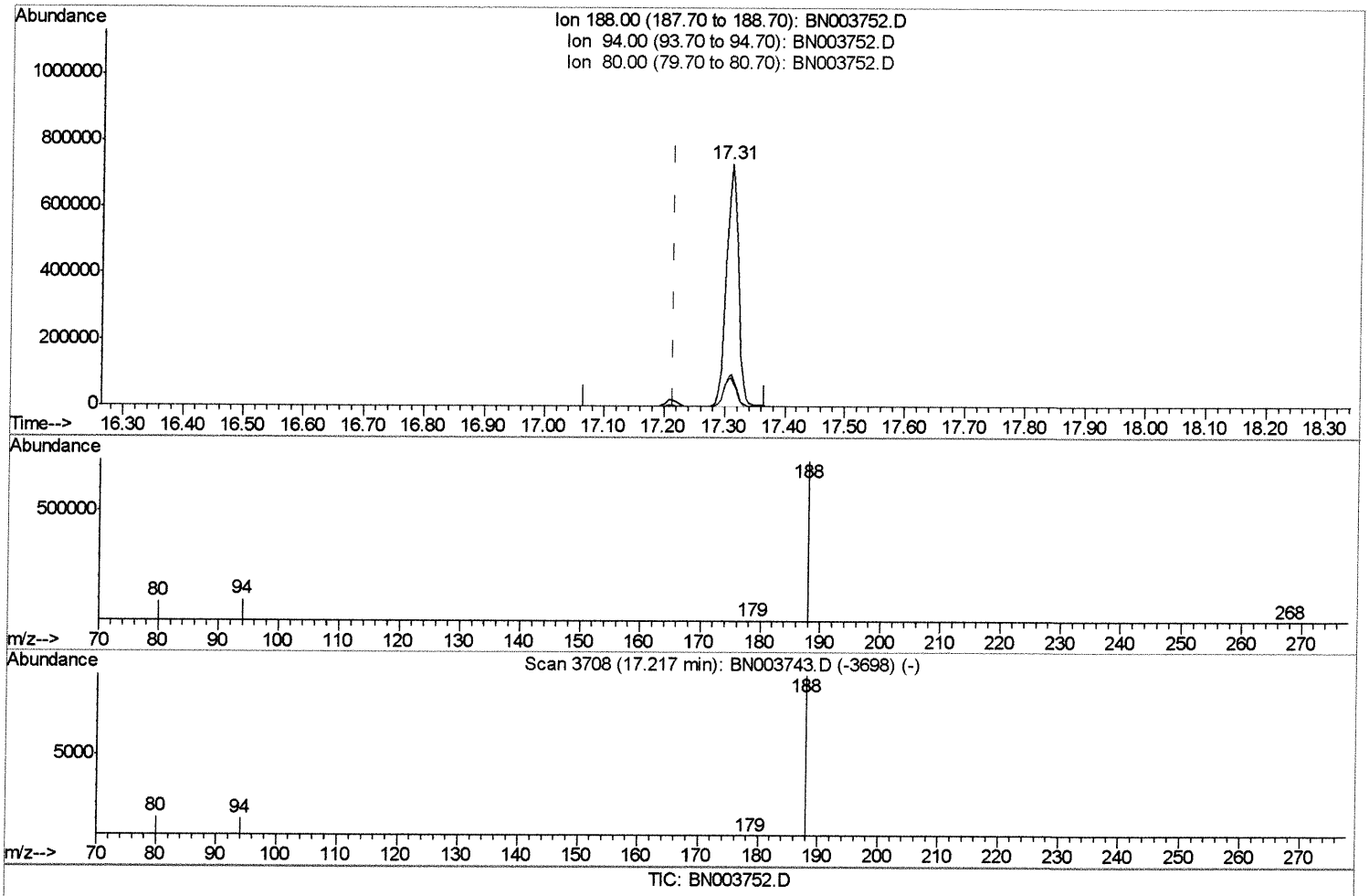
Quantitation Report (Qedit)

Data File : BN003752.D
Acq On : 07 Dec 2018 04:44
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 07 06:06:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E60

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM



TIC: BN003752.D

(10) Phenanthrene-d10 (I)

17.310min (+0.093) 0.40ng/ul

response 996884

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	13.21#
80.00	11.60	11.82
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

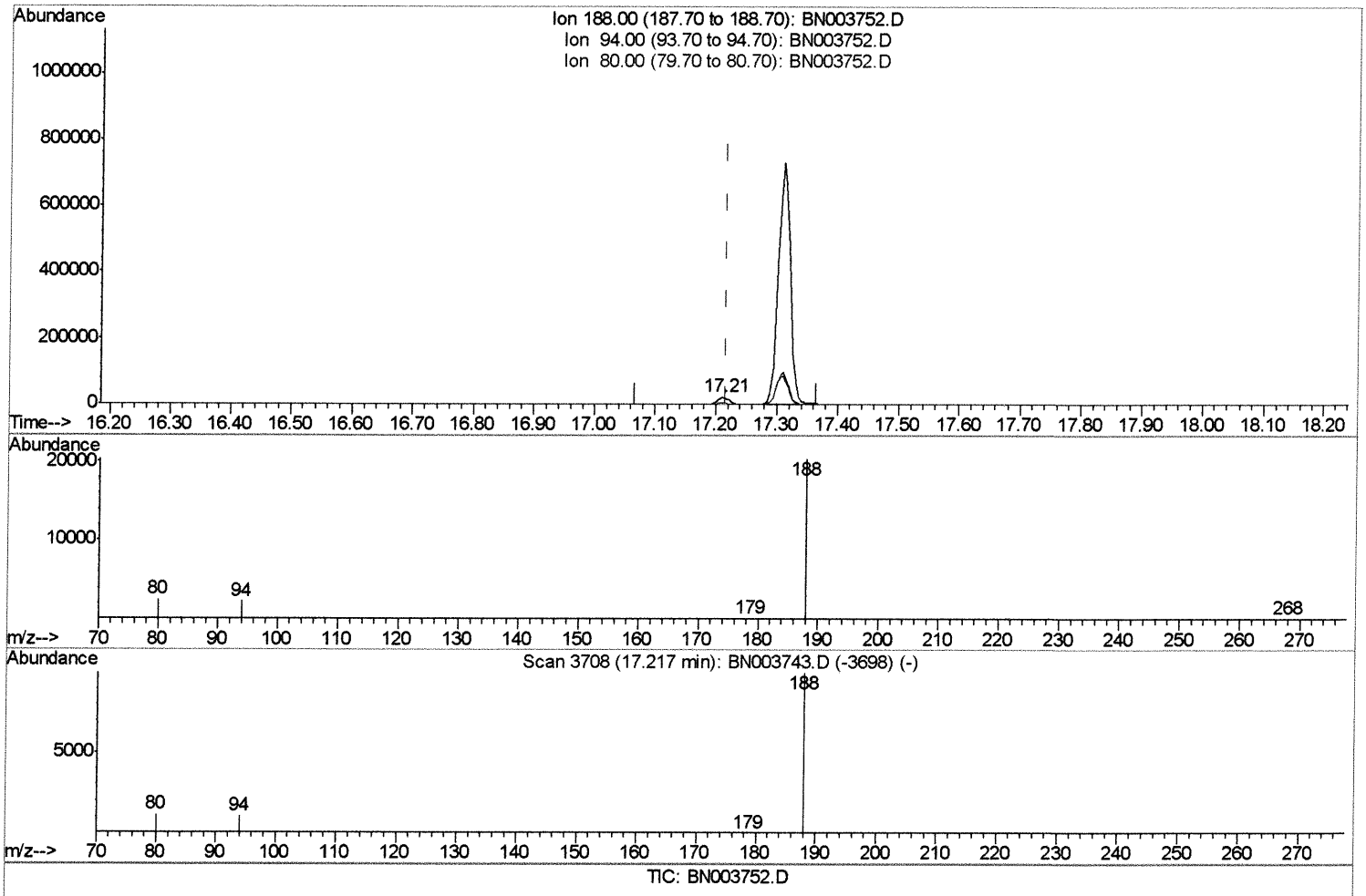
Quantitation Report (Qedit)

Data File : BN003752.D
Acq On : 07 Dec 2018 04:44
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 07 06:06:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E60

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM



TIC: BN003752.D

(10) Phenanthrene-d10 (I)

17.213min (-0.004) 0.40ng/ul m

response 27784

SJ 12/11/18

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	10.95
80.00	11.60	12.10
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

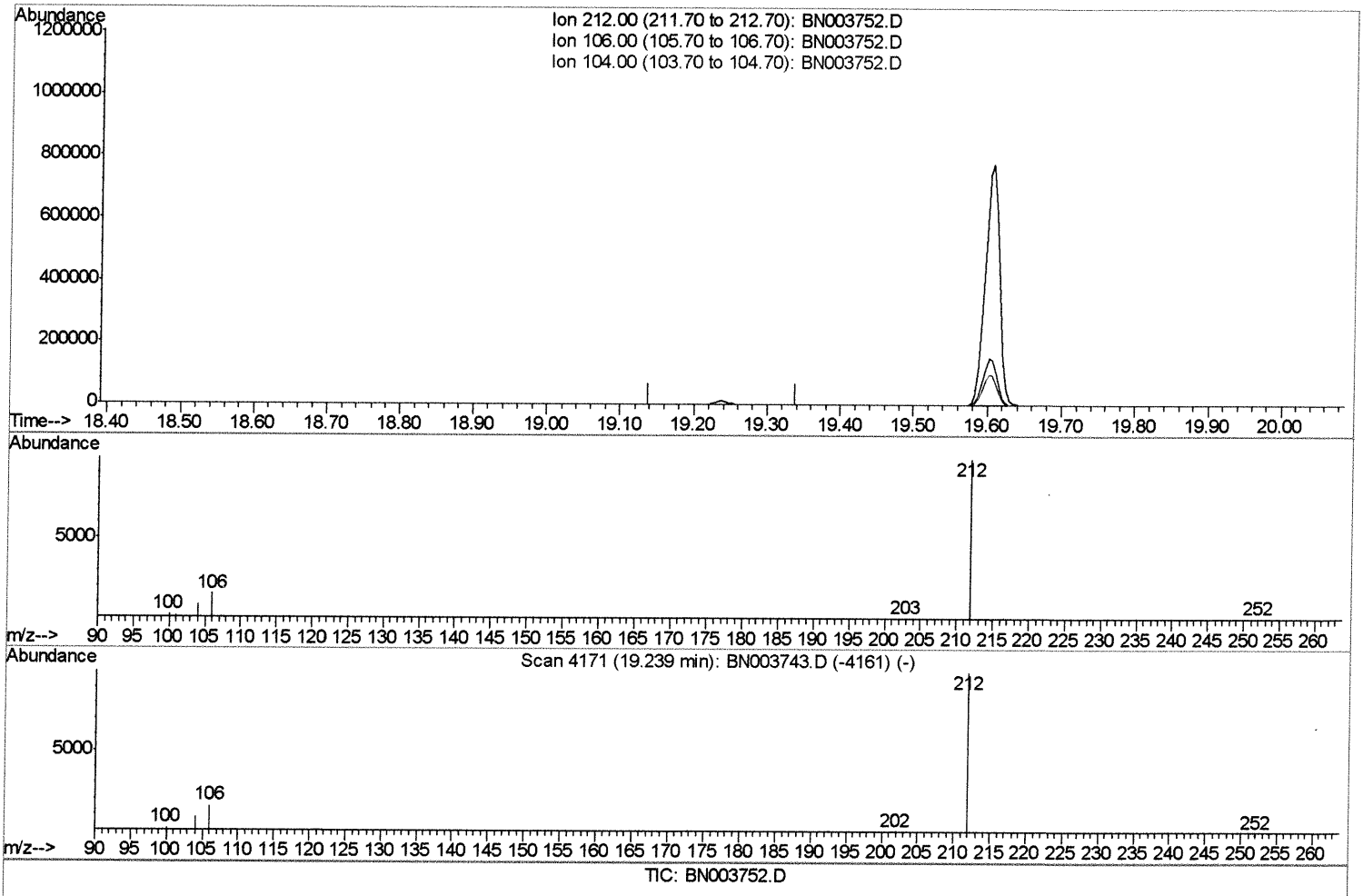
Quantitation Report (Qedit)

Data File : BN003752.D
Acq On : 07 Dec 2018 04:44
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 07 06:09:19 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E60

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM



TIC: BN003752.D

(14) Fluoranthene-d10 (SURR)

19.239min (-19.239) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

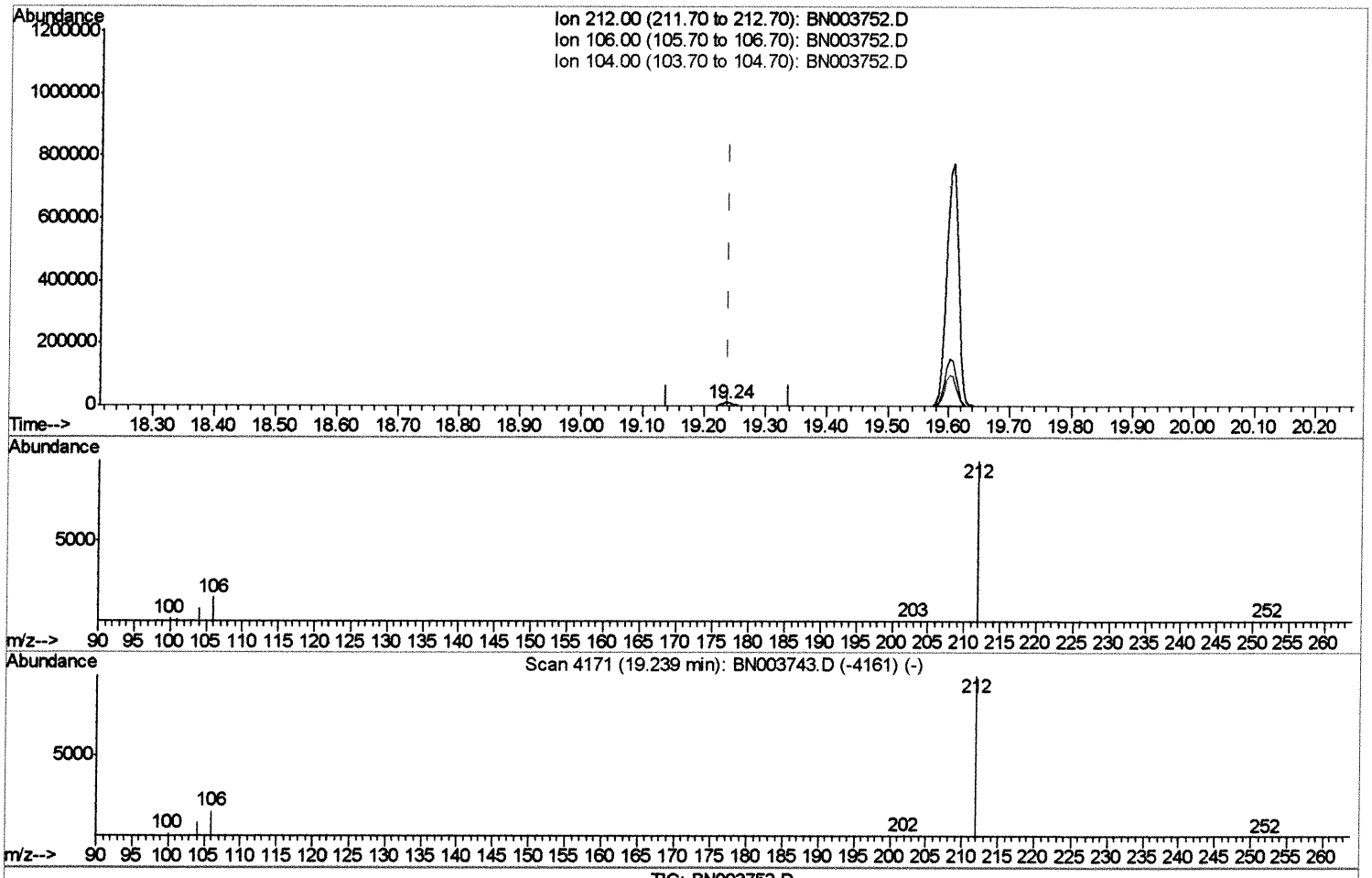
Quantitation Report (Qedit)

Data File : BN003752.D
Acq On : 07 Dec 2018 04:44
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 07 06:09:19 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E60

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM



TIC: BN003752.D

(14) Fluoranthene-d10 (SURR)

19.239min (+0.000) 0.16ng/ul m

response 13134

SJ 12/11/18

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

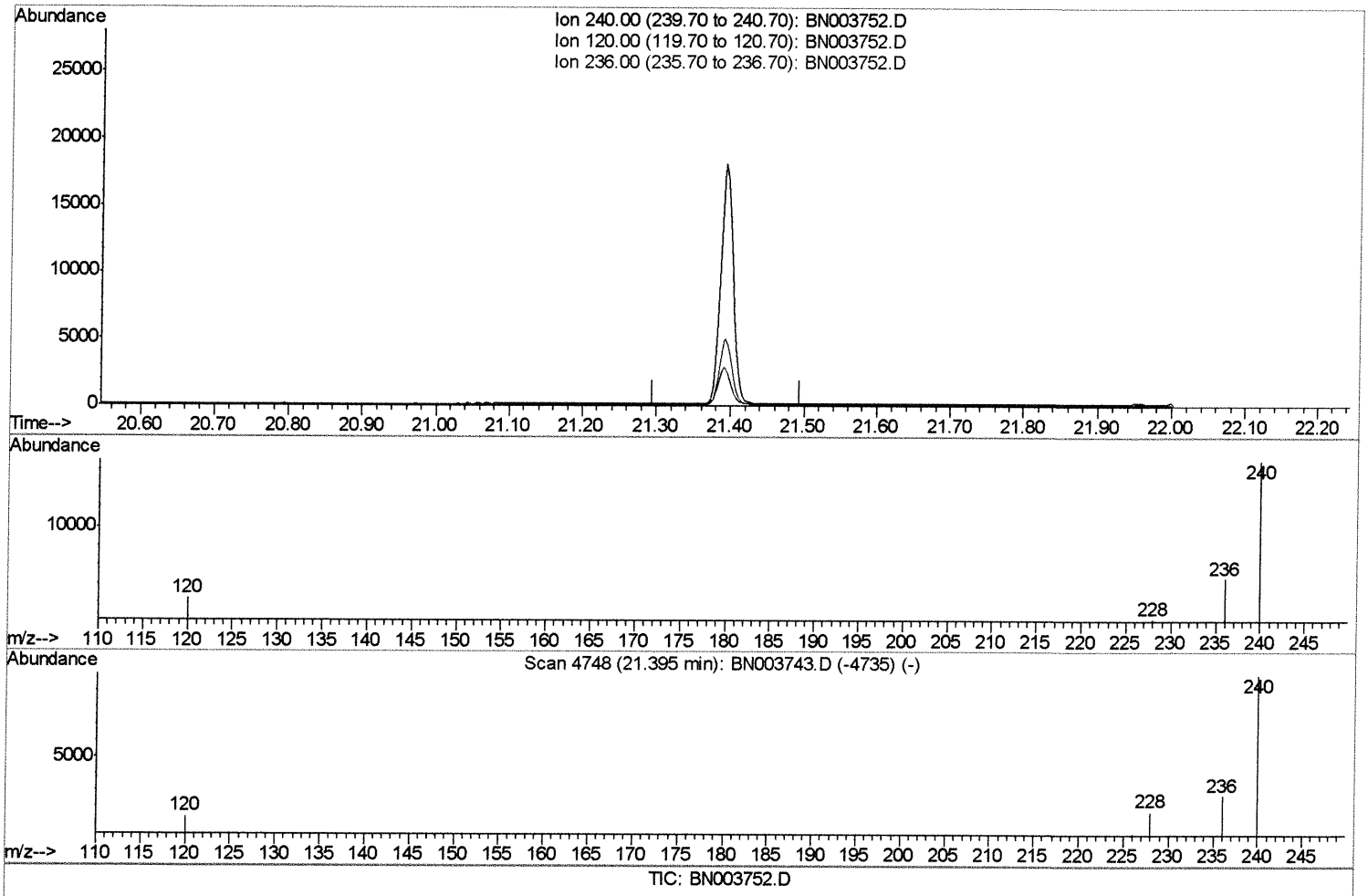
Quantitation Report (Qedit)

Data File : BN003752.D
Acq On : 07 Dec 2018 04:44
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 07 06:09:19 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E60

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM



TIC: BN003752.D

(16) Chrysene-d12 (I)

21.395min (-21.395) 0.00ng/ul

response 0

Ion	Exp%	Act%
240.00	100	0.00
120.00	14.00	0.00#
236.00	27.60	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

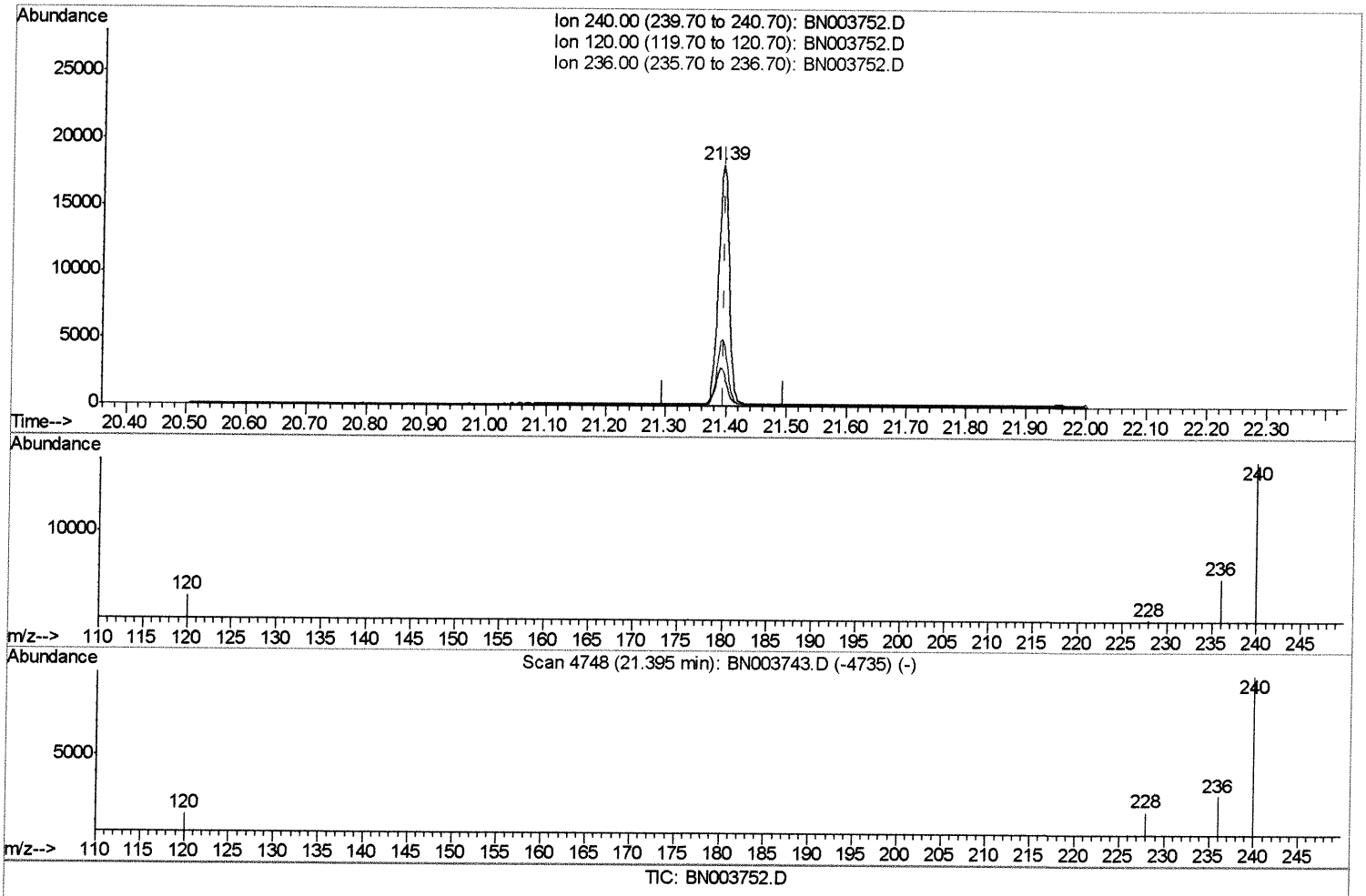
Quantitation Report (Qedit)

Data File : BN003752.D
Acq On : 07 Dec 2018 04:44
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 07 06:09:19 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E60

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM



TIC: BN003752.D

(16) Chrysene-d12 (I)

21.393min (-0.003) 0.40ng/ul m

response 22354

SJ 12/11/18

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	15.42
236.00	27.60	27.73
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

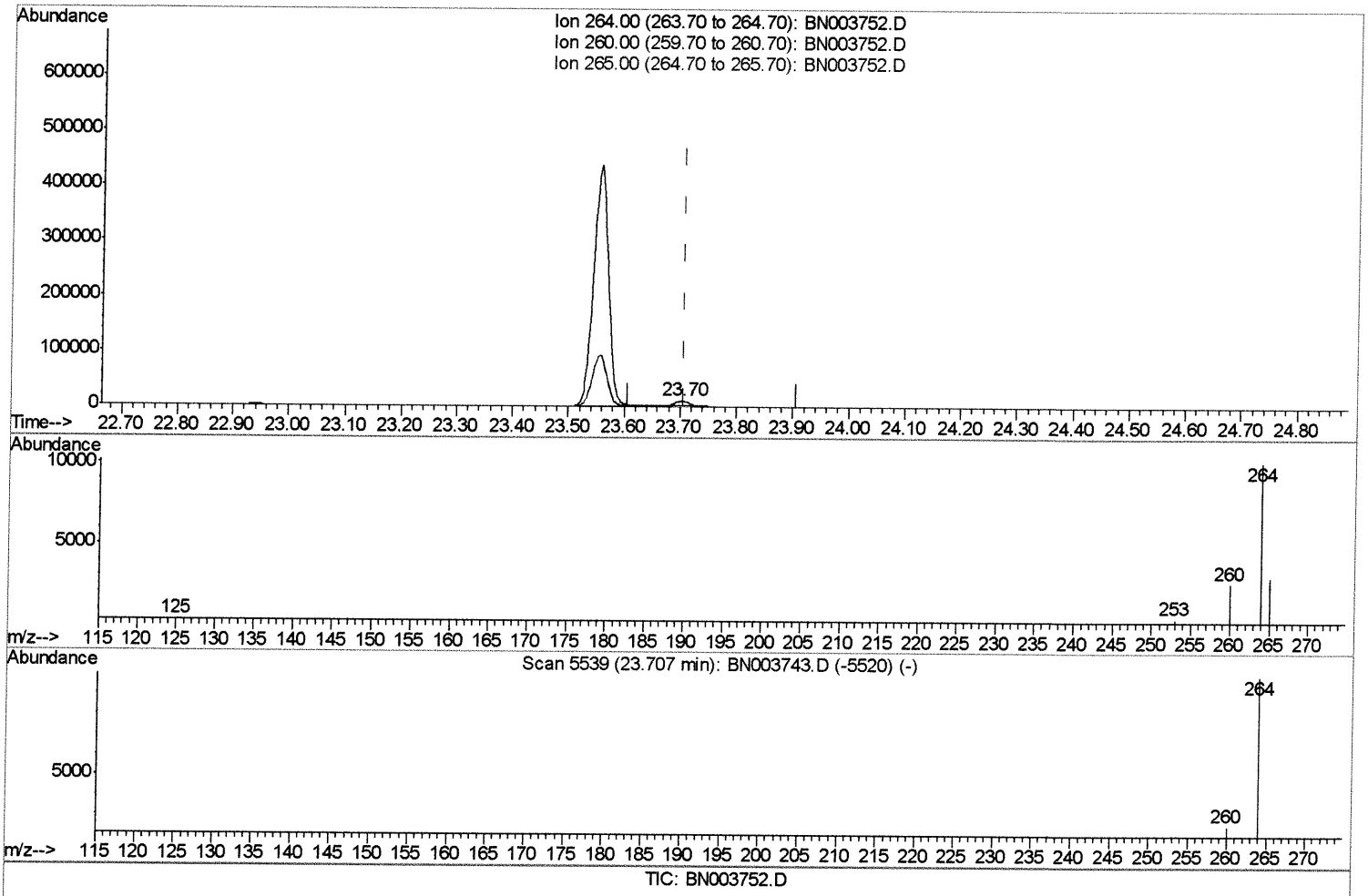
Quantitation Report (Qedit)

Data File : BN003752.D
Acq On : 07 Dec 2018 04:44
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 07 06:10:43 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E60

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM



(20) Perylene-d12 (I)

23.705min (-0.003) 0.40ng/ul

response 20826

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.22
265.00	33.50	29.98
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

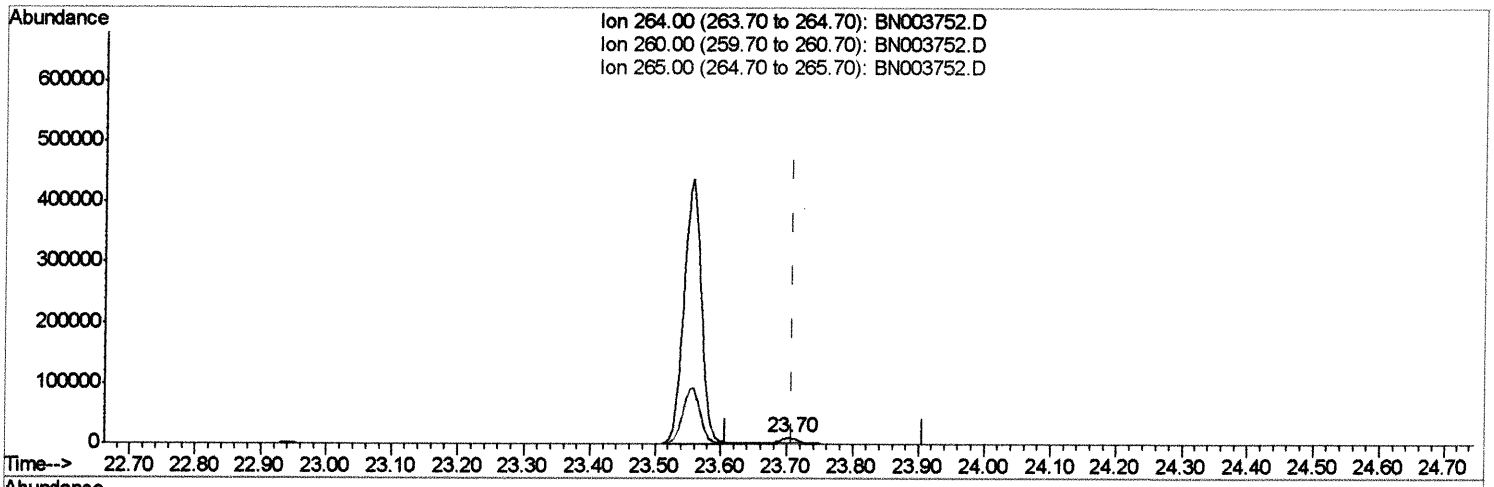
Quantitation Report (Qedit)

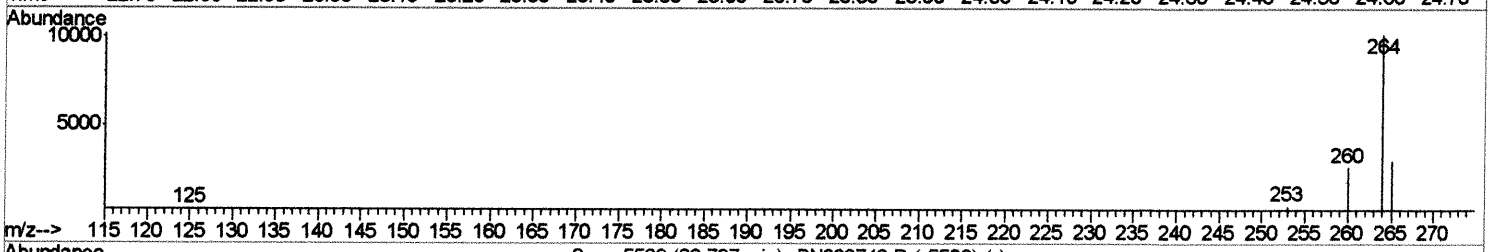
Data File : BN003752.D
Acq On : 07 Dec 2018 04:44
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 23 Sample Multiplier: 1

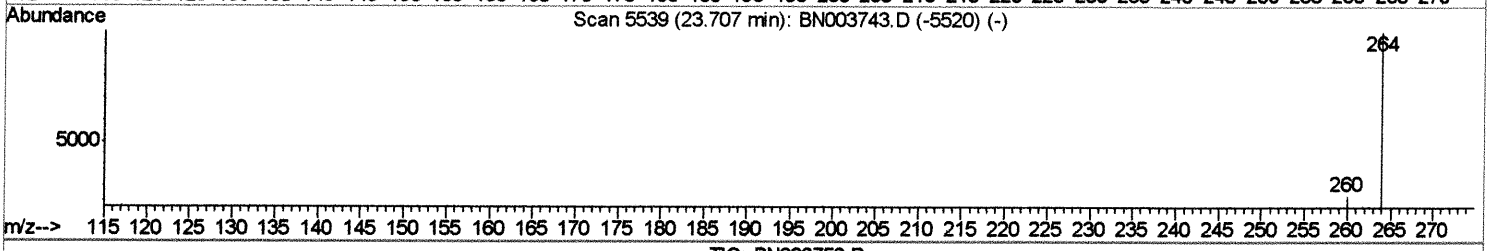
Quant Time: Dec 07 06:10:43 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E60

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM







TIC: BN003752.D

(20) Perylene-d12 (I)

23.705min (-0.003) 0.40ng/ul m

response 17249

> SJ 12/11/18

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.22
265.00	33.50	29.98
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

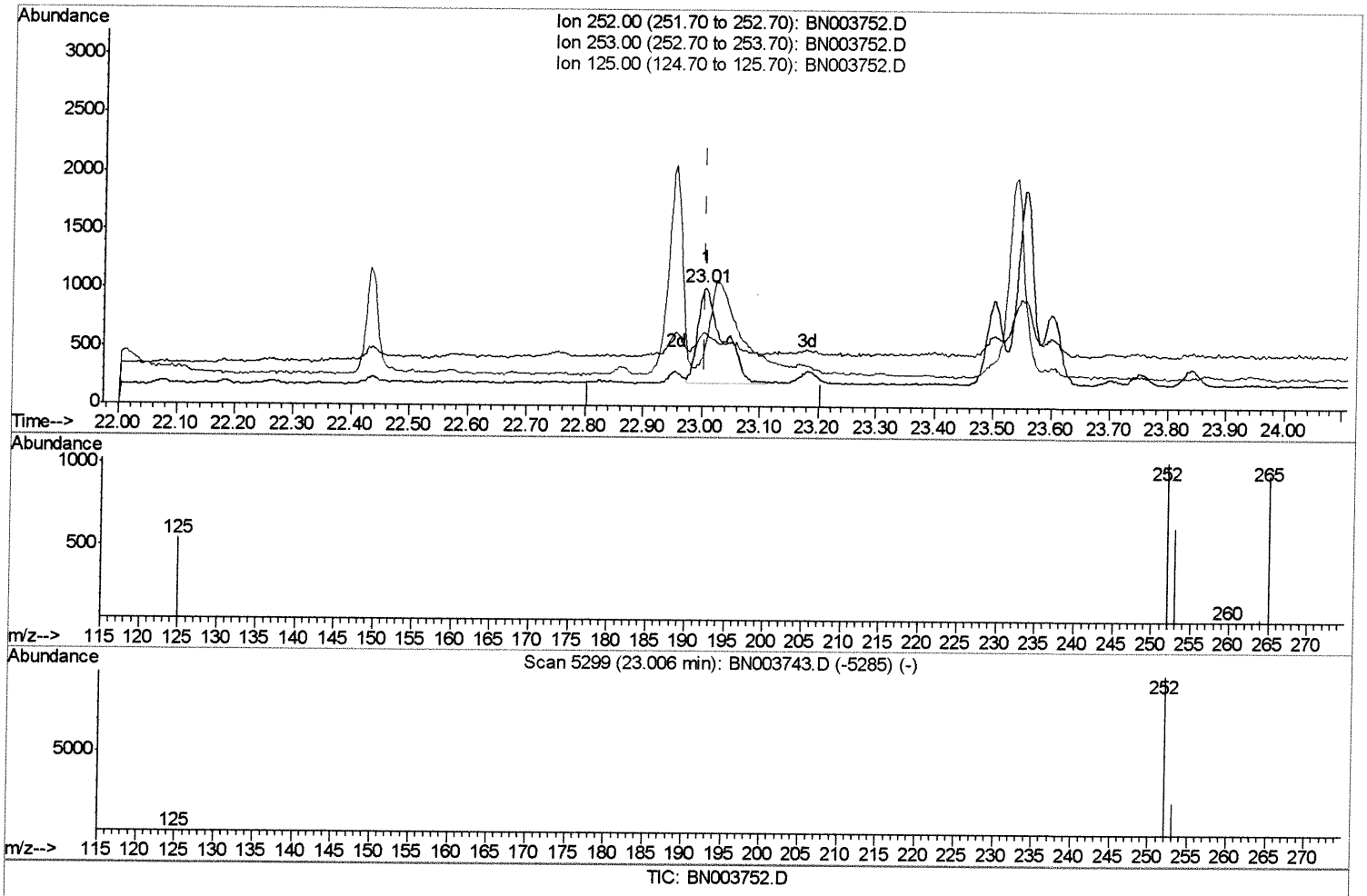
Quantitation Report (Qedit)

Data File : BN003752.D
Acq On : 07 Dec 2018 04:44
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 07 06:11:07 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E60

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM



TIC: BN003752.D

(21) Benzo(b)fluoranthene

23.006min (+0.000) 0.03ng/ul

response 2440

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	61.65#
125.00	11.20	53.20#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

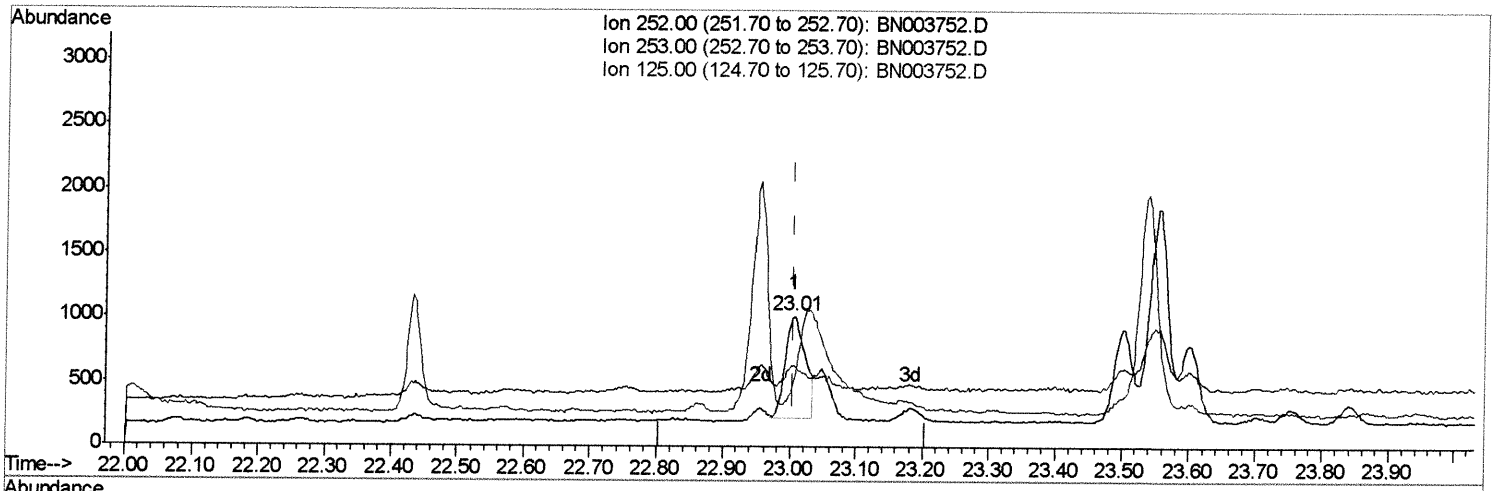
Quantitation Report (Qedit)

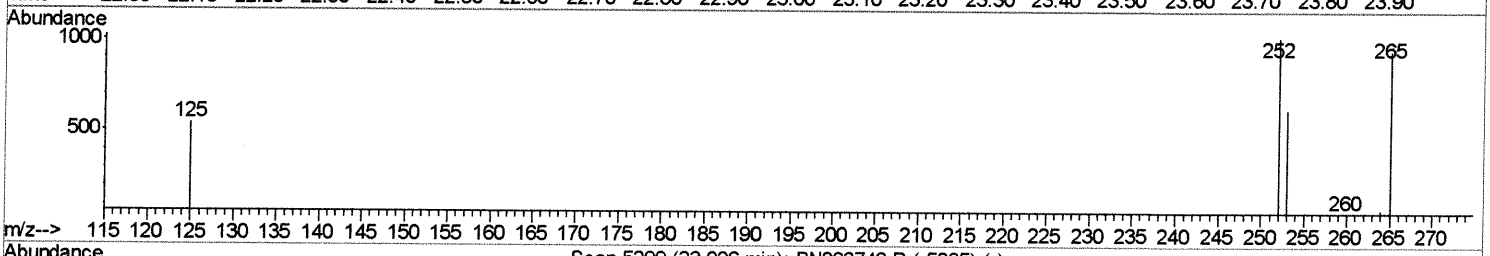
Data File : BN003752.D
Acq On : 07 Dec 2018 04:44
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 23 Sample Multiplier: 1

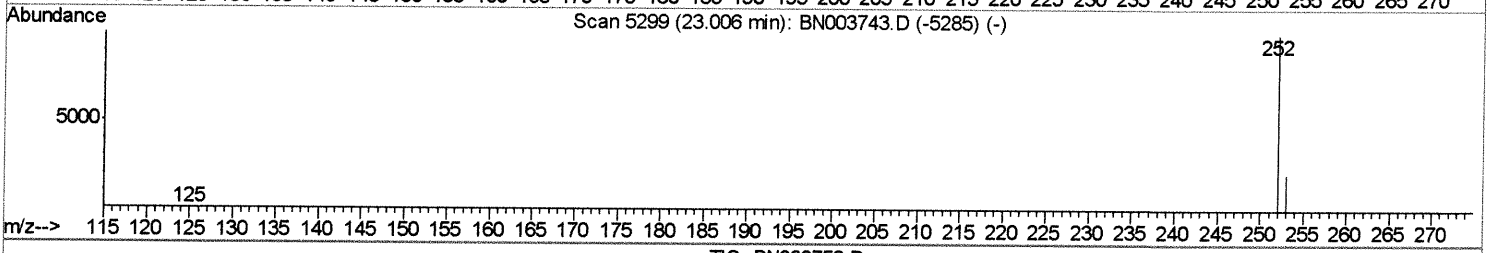
Quant Time: Dec 07 06:11:07 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E60

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM







TIC: BN003752.D

(21) Benzo(b)fluoranthene

23.006min (+0.000) 0.02ng/ul m

response 1628

> SJ 12/11/18

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	61.65#
125.00	11.20	53.20#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003752.D
Acq On : 07 Dec 2018 04:44
Operator : JU/SJ
Sample : J6227-13
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 07 06:11:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5726	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	23662	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12654	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	27784m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	22354m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	17249m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	5921	0.16	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	13134m	0.16	ng/ul	0.00
Target Compounds						Qvalue
12) Phenanthrene	17.25	178	2980	0.033	ng/ul	93
17) Pyrene	19.63	202	3193	0.040	ng/ul#	91
18) Benzo(a)anthracene	21.38	228	1550	0.022	ng/ul#	88
19) Chrysene	21.43	228	2543	0.031	ng/ul#	93
21) Benzo(b)fluoranthene	23.01	252	1628m	0.023	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
BNA_N
ClientSampleId :
F9E60

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:00 PM

SJ 12/11/18

SJ 12/11/18

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E61

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-14
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BN003753.D
% Solids : 84.2
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/07/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	3.9	U
91-57-6	2-Methylnaphthalene	3.9	U
208-96-8	Acenaphthylene	3.9	U
83-32-9	Acenaphthene	3.9	U
86-73-7	Fluorene	3.9	U
87-86-5	Pentachlorophenol	7.9	U
85-01-8	Phenanthrene	3.9	U
120-12-7	Anthracene	3.9	U
206-44-0	Fluoranthene	3.9	U
129-00-0	Pyrene	3.9	U
56-55-3	Benzo(a)anthracene	3.9	U
218-01-9	Chrysene	3.9	U
205-99-2	Benzo(b)fluoranthene	3.9	U
207-08-9	Benzo(k)fluoranthene	3.9	U
50-32-8	Benzo(a)pyrene	3.9	U
193-39-5	Indeno(1,2,3-cd)pyrene	3.9	U
53-70-3	Dibenzo(a,h)anthracene	3.9	U
191-24-2	Benzo(g,h,i)perylene	3.9	U

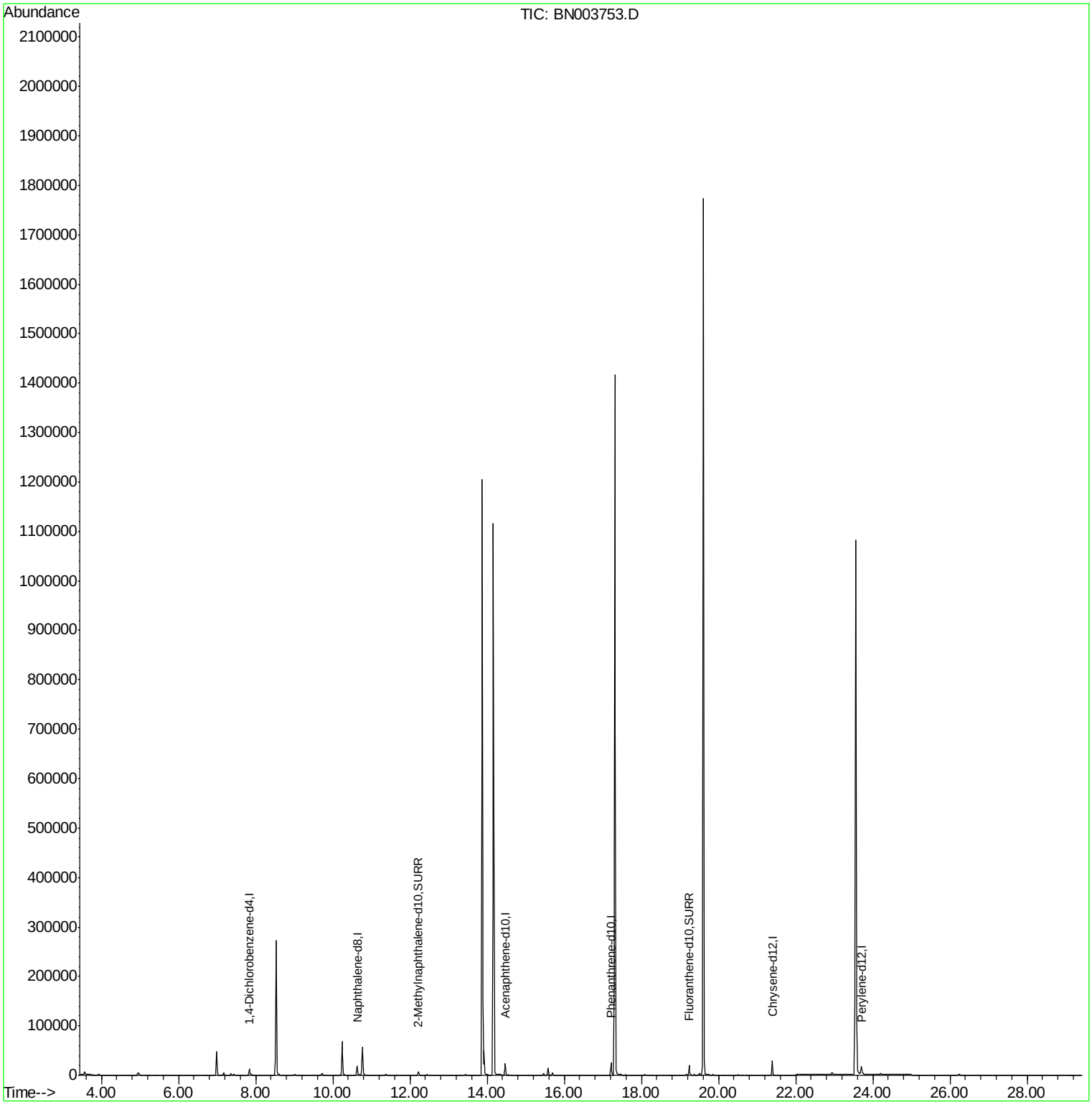
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003753.D
Acq On : 07 Dec 2018 05:19
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 07 06:13:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E61

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:04 PM



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003753.D
Acq On : 07 Dec 2018 05:19
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9E61

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:04 PM

Quant Time: Dec 07 06:13:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5854	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	24192	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	13320	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	28804m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	24900m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	19580m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	9653	0.26	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	20922m	0.25	ng/ul	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

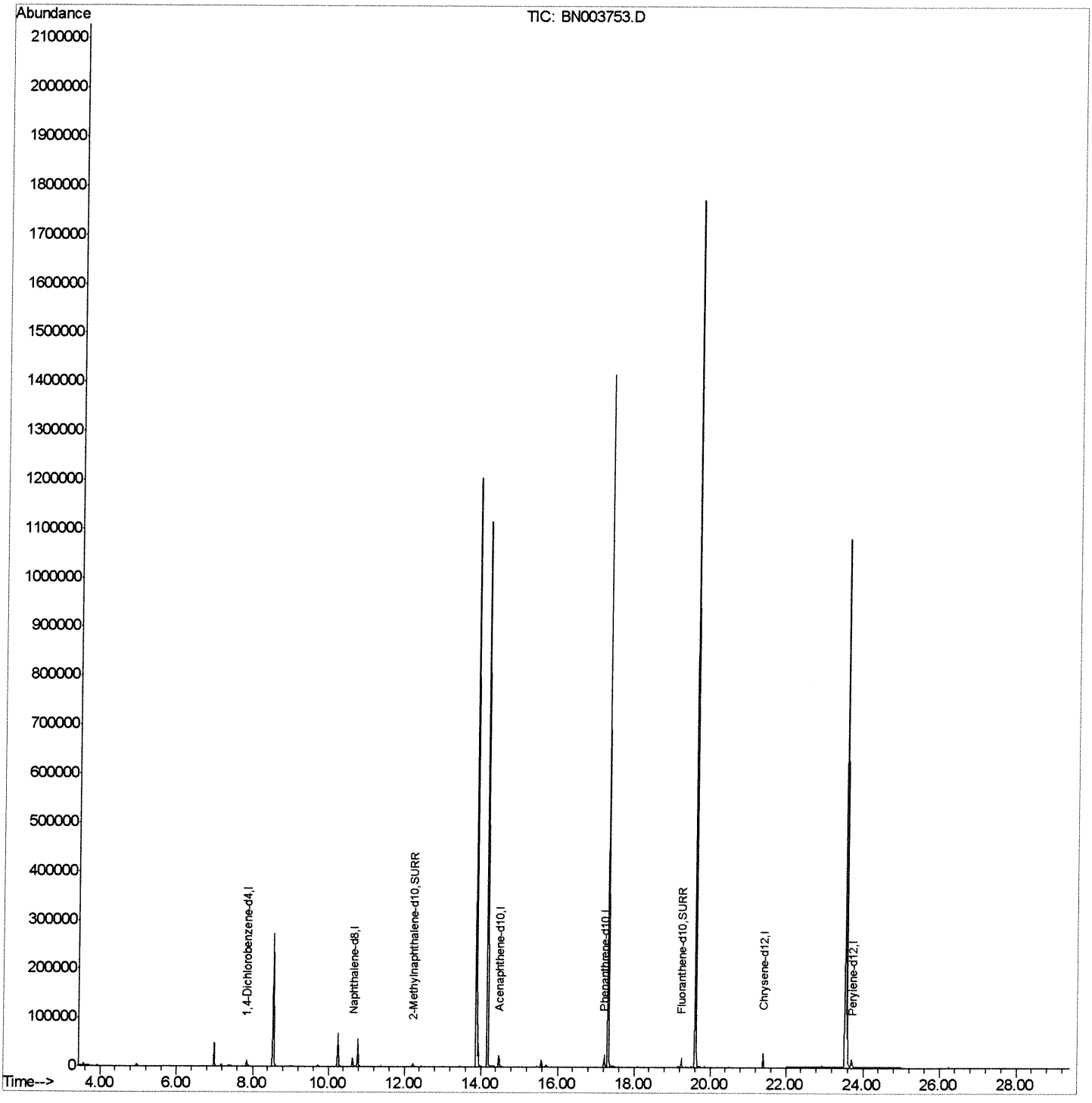
Quantitation Report (QT Reviewed)

Data File : BN003753.D
Acq On : 07 Dec 2018 05:19
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 07 06:13:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E61

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:04 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

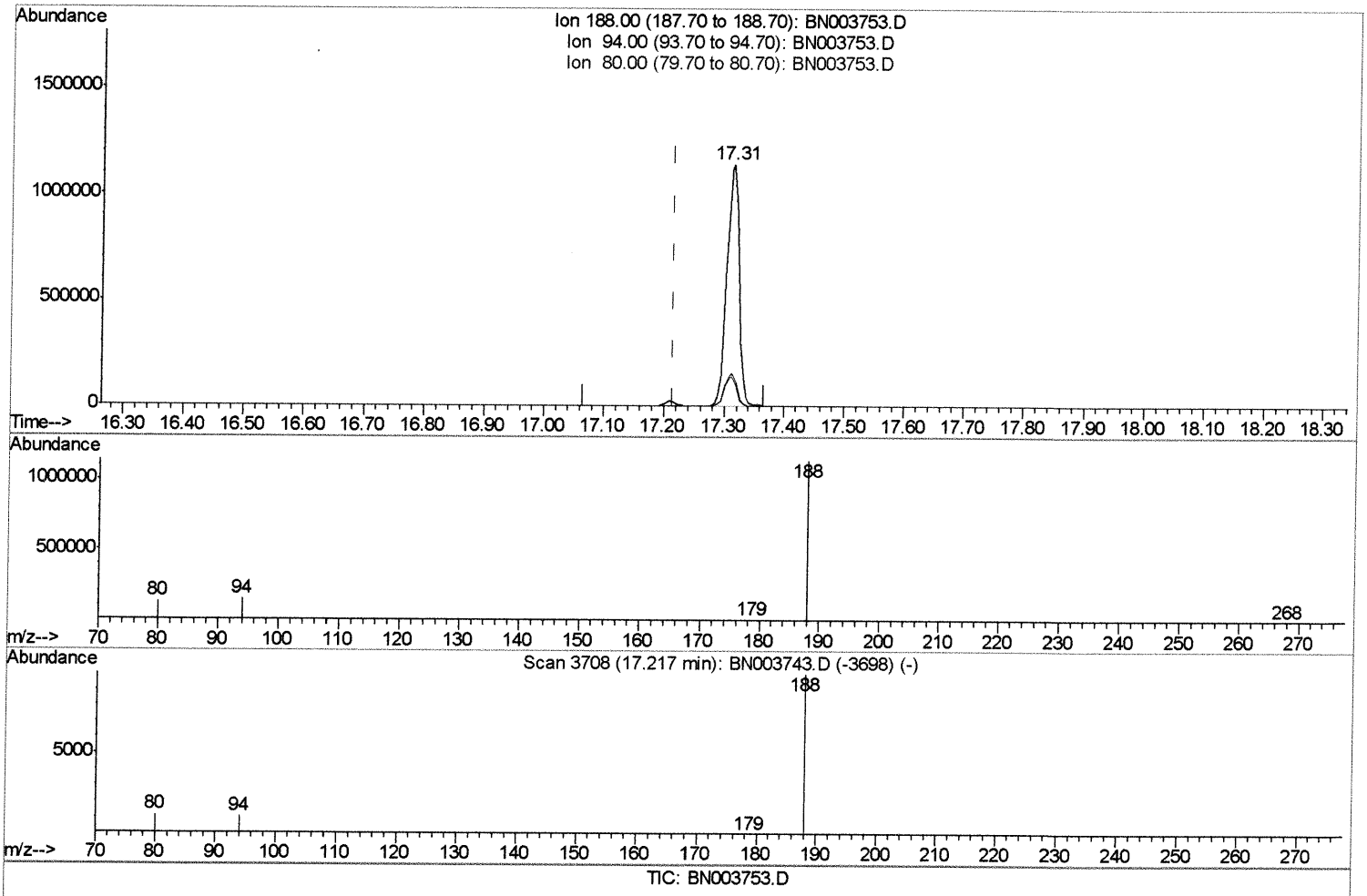
Quantitation Report (Qedit)

Data File : BN003753.D
Acq On : 07 Dec 2018 05:19
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 07 06:06:45 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E61

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:04 PM



TIC: BN003753.D

(10) Phenanthrene-d10 (I)

17.314min (+0.097) 0.40ng/ul

response 1608062

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	12.85#
80.00	11.60	11.28
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

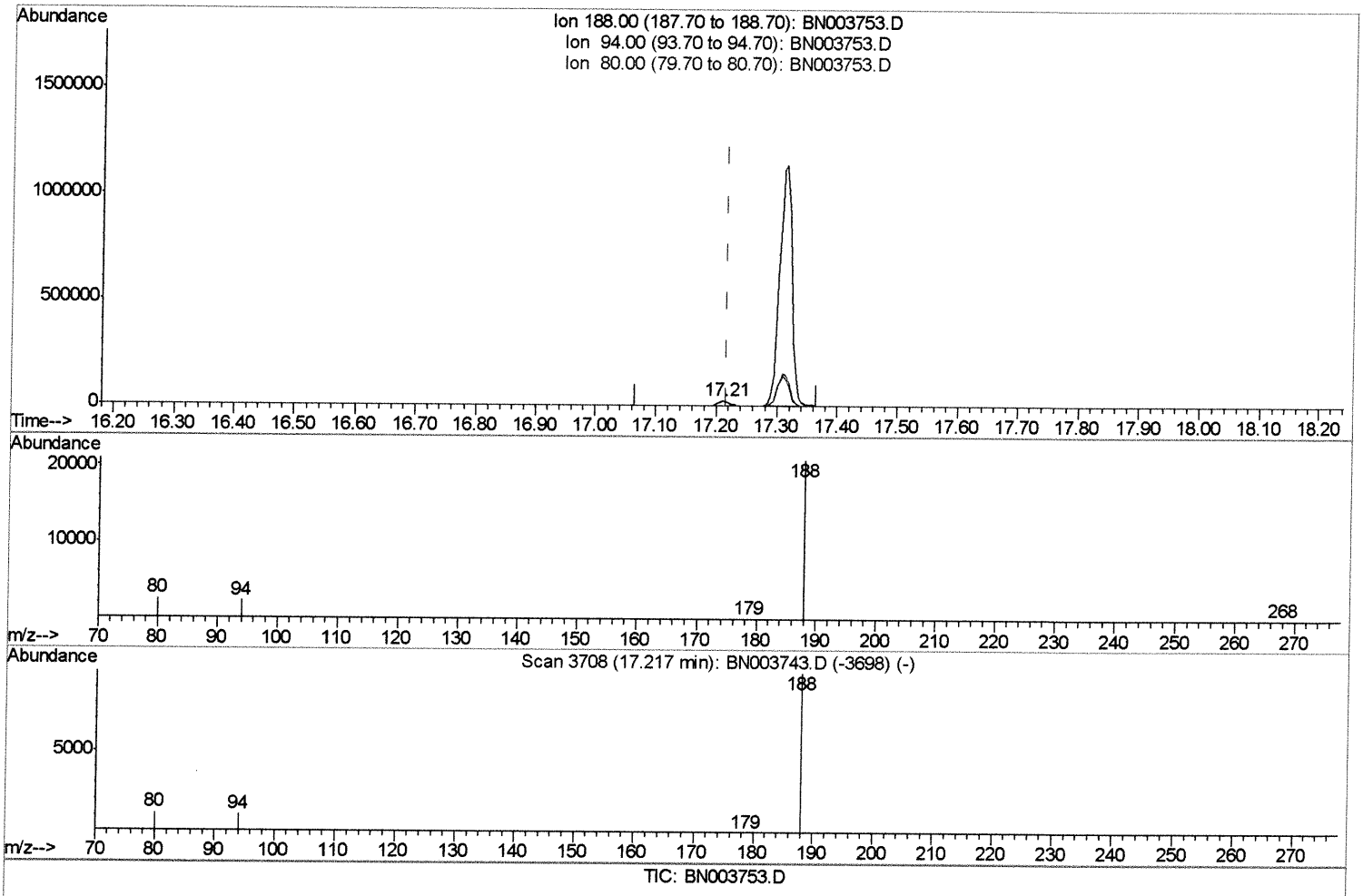
Quantitation Report (Qedit)

Data File : BN003753.D
Acq On : 07 Dec 2018 05:19
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 07 06:06:45 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E61

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:04 PM



TIC: BN003753.D

(10) Phenanthrene-d10 (I)

17.213min (-0.004) 0.40ng/ul m > SJ 12/11/18

response 28804

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	11.07
80.00	11.60	12.10
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

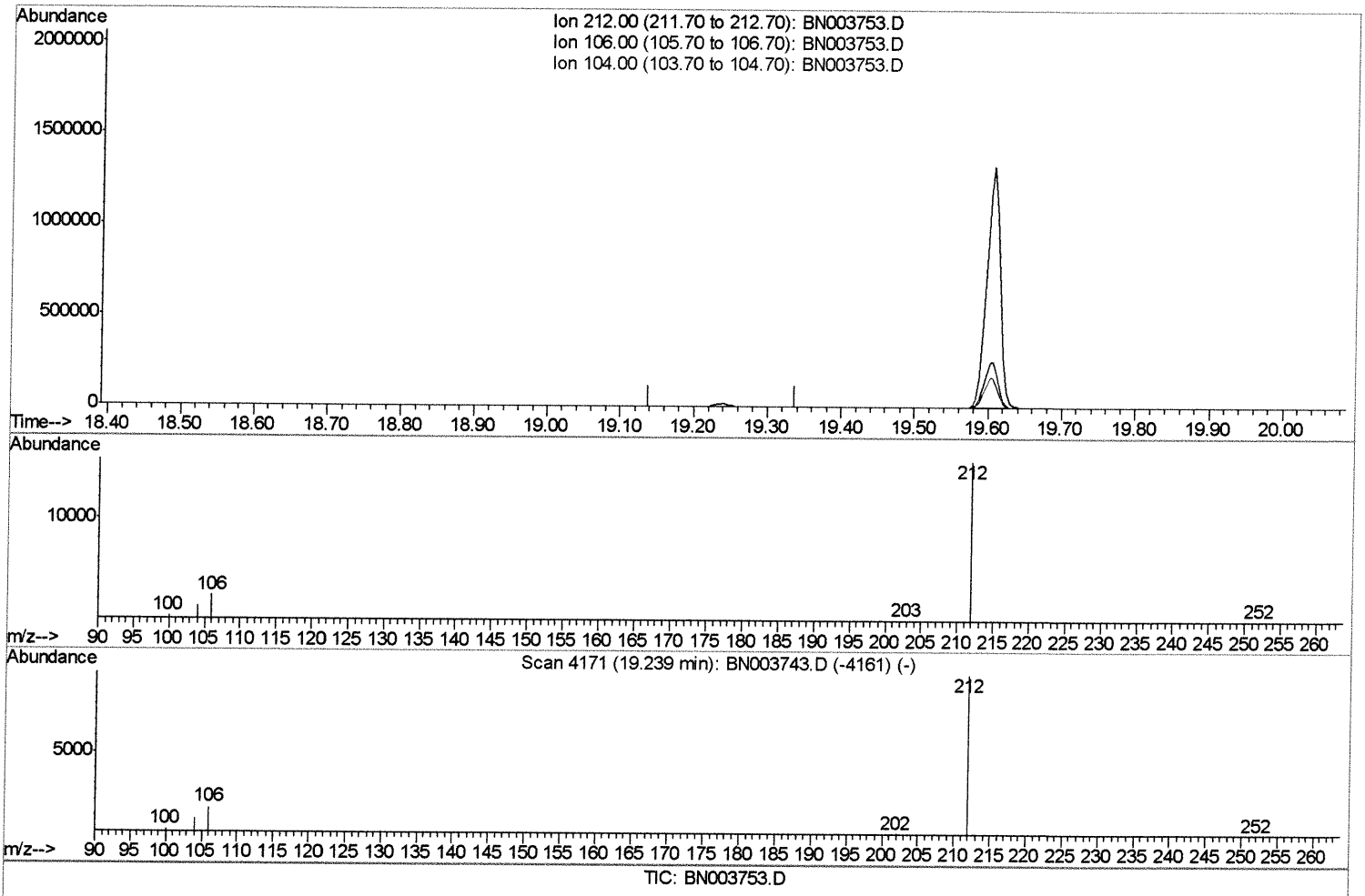
Quantitation Report (Qedit)

Data File : BN003753.D
Acq On : 07 Dec 2018 05:19
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 07 06:12:21 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E61

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:04 PM



TIC: BN003753.D

(14) Fluoranthene-d10 (SURR)

19.239min (-19.239) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

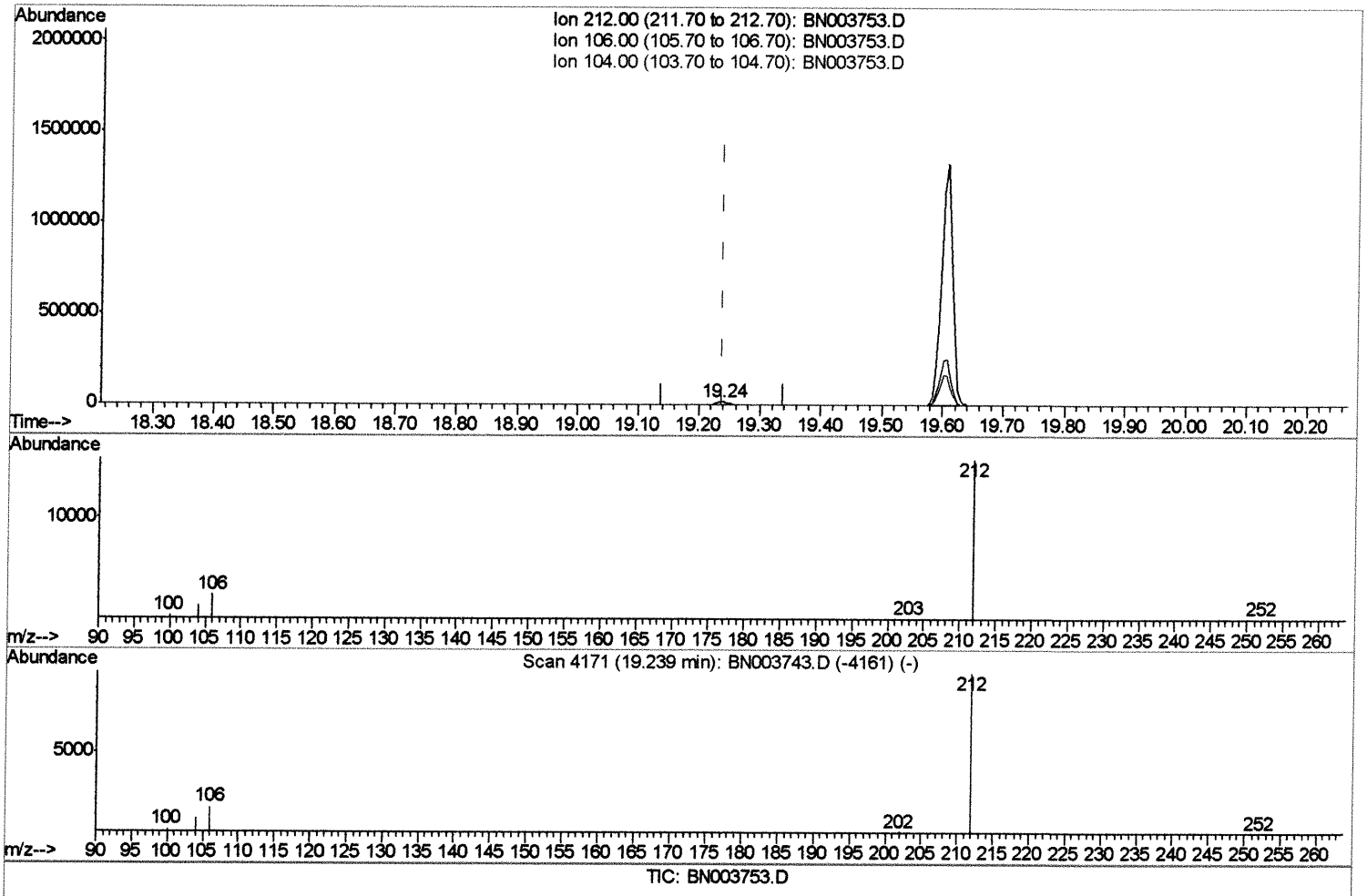
Quantitation Report (Qedit)

Data File : BN003753.D
Acq On : 07 Dec 2018 05:19
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 07 06:12:21 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E61

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:04 PM



TIC: BN003753.D

(14) Fluoranthene-d10 (SURR)

19.239min (+0.000) 0.25ng/ul m

response 20922

> SJ 12/11/18

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

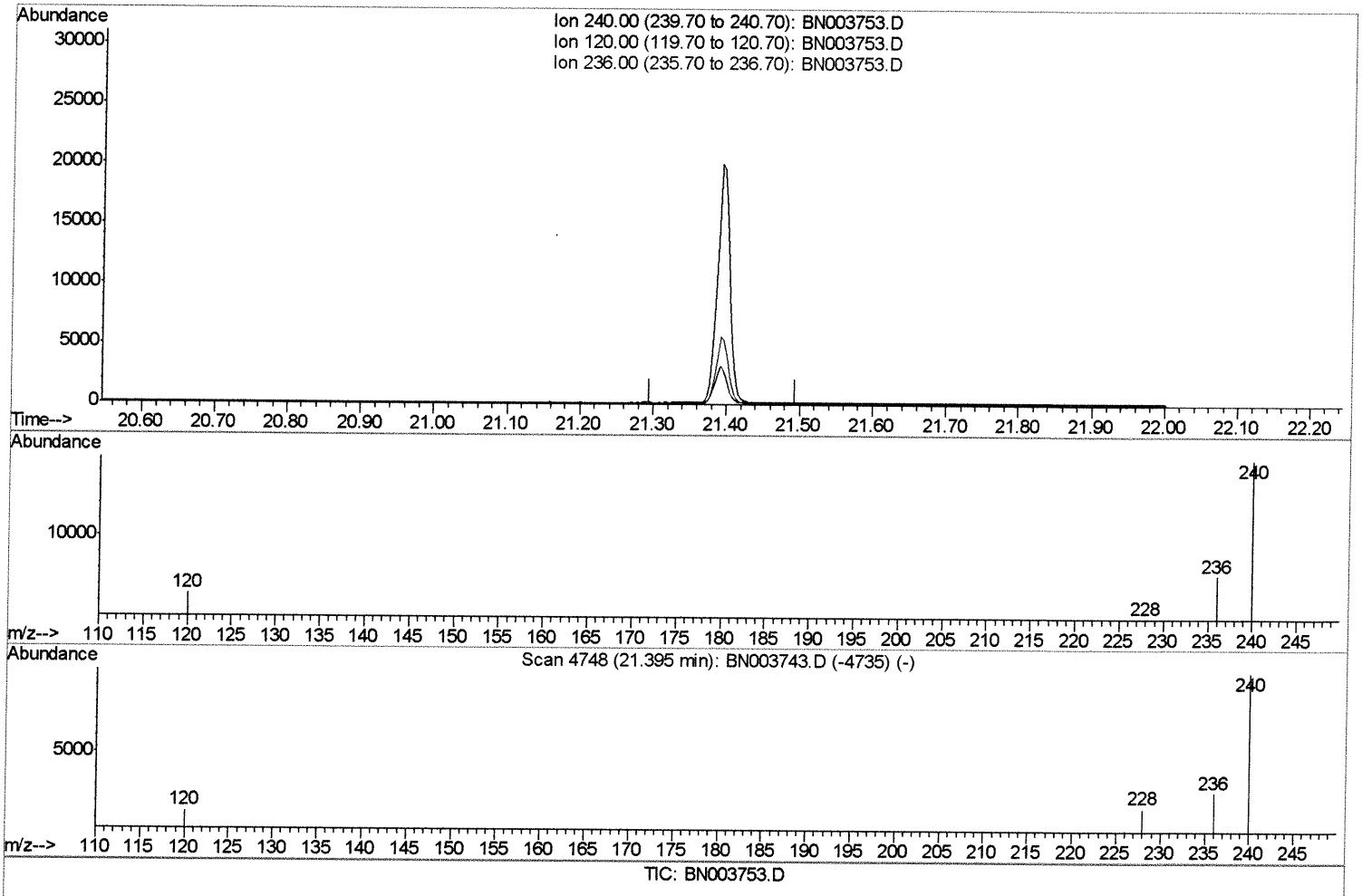
Quantitation Report (Qedit)

Data File : BN003753.D
Acq On : 07 Dec 2018 05:19
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 07 06:12:21 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E61

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:04 PM



TIC: BN003753.D

(16) Chrysene-d12 (I)

21.395min (-21.395) 0.00ng/ul

response 0

Ion	Exp%	Act%
240.00	100	0.00
120.00	14.00	0.00#
236.00	27.60	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

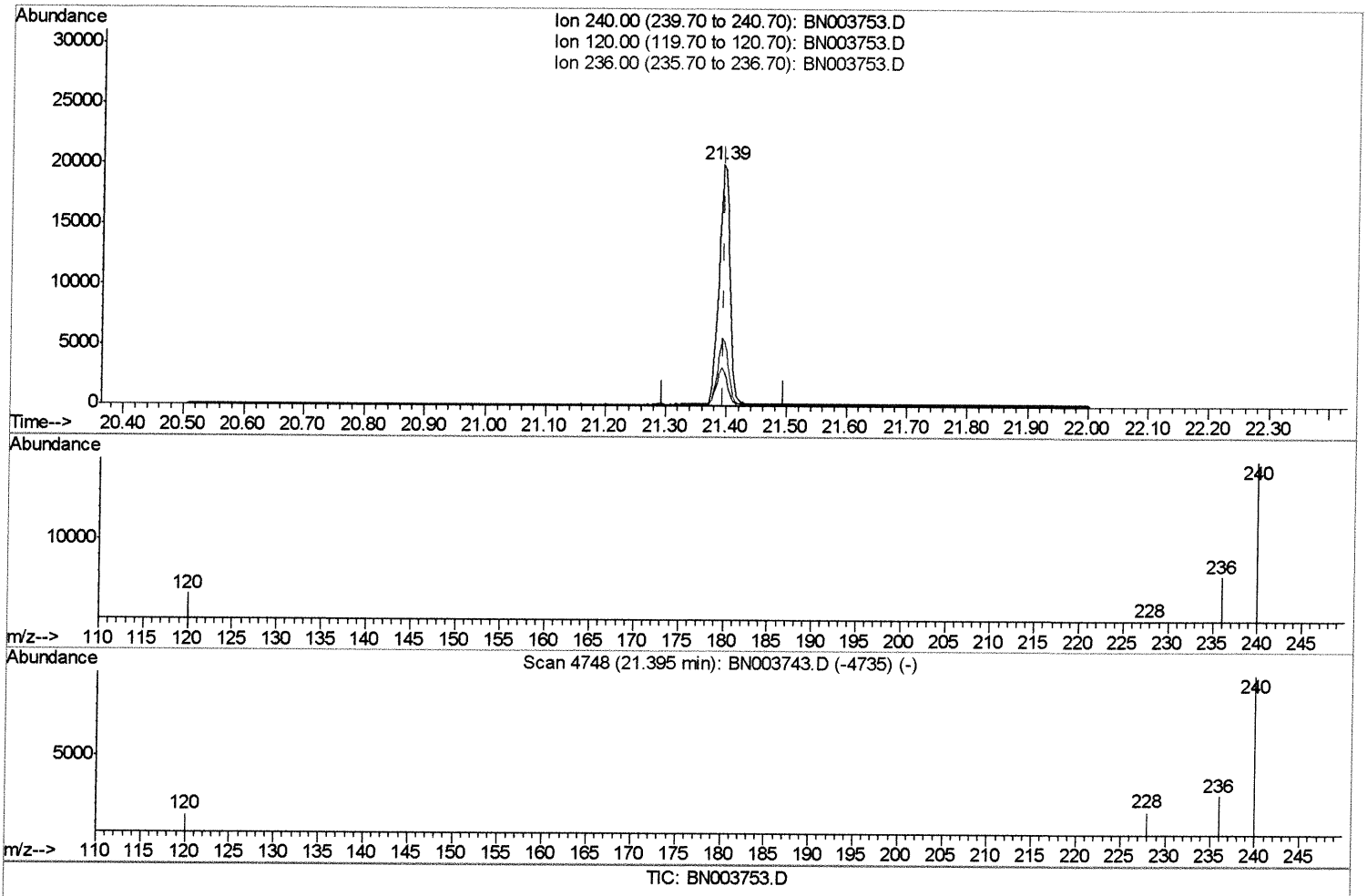
Quantitation Report (Qedit)

Data File : BN003753.D
Acq On : 07 Dec 2018 05:19
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 07 06:12:21 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E61

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:04 PM



TIC: BN003753.D

(16) Chrysene-d12 (I)

21.393min (-0.003) 0.40ng/ul m

response 24900

SJ 12/11/18

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	15.91
236.00	27.60	28.14
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

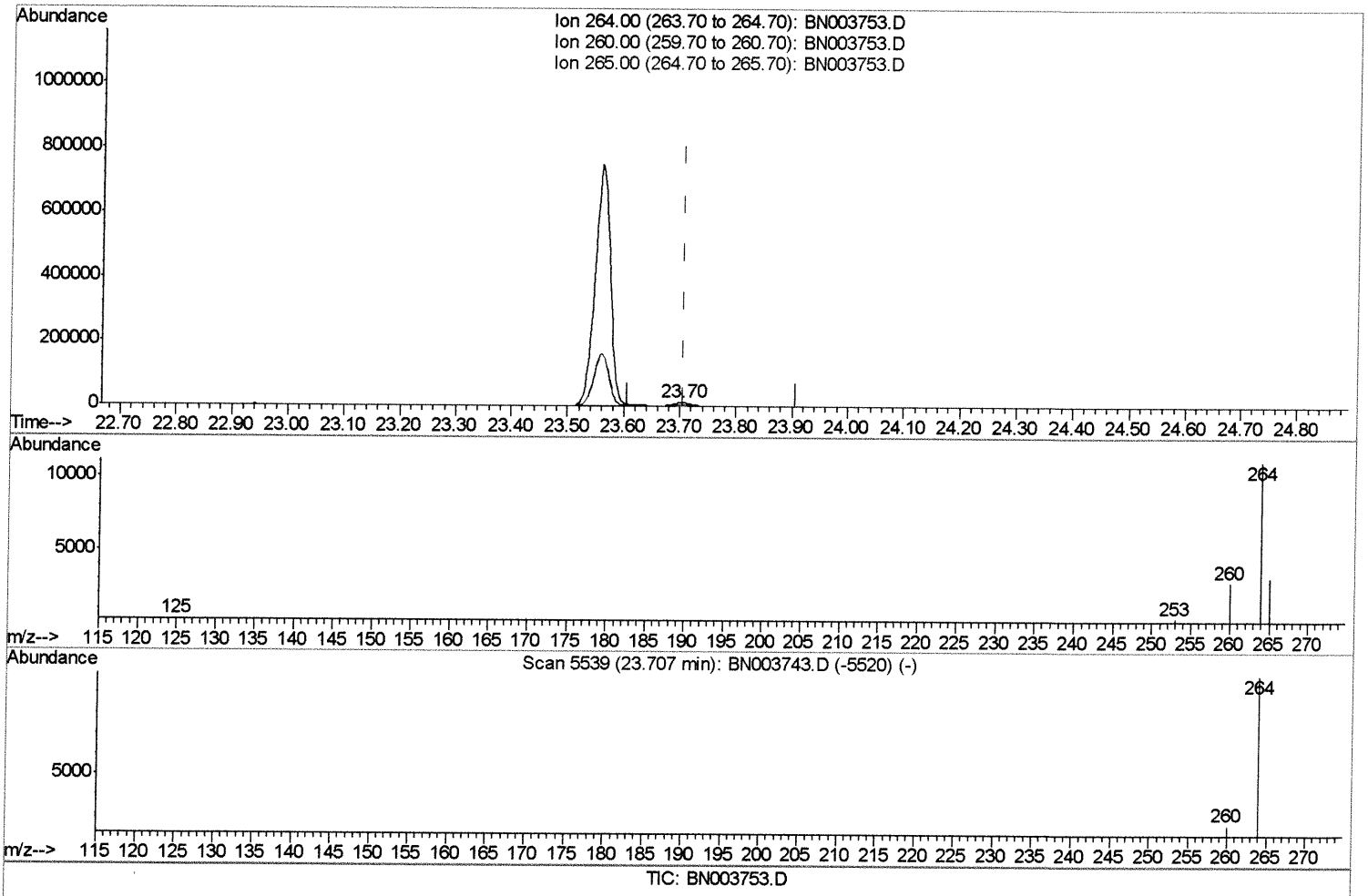
Quantitation Report (Qedit)

Data File : BN003753.D
Acq On : 07 Dec 2018 05:19
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 07 06:12:55 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E61

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:04 PM



(20) Perylene-d12 (I)

23.702min (-0.006) 0.40ng/ul

response 24265

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.12
265.00	33.50	28.93
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

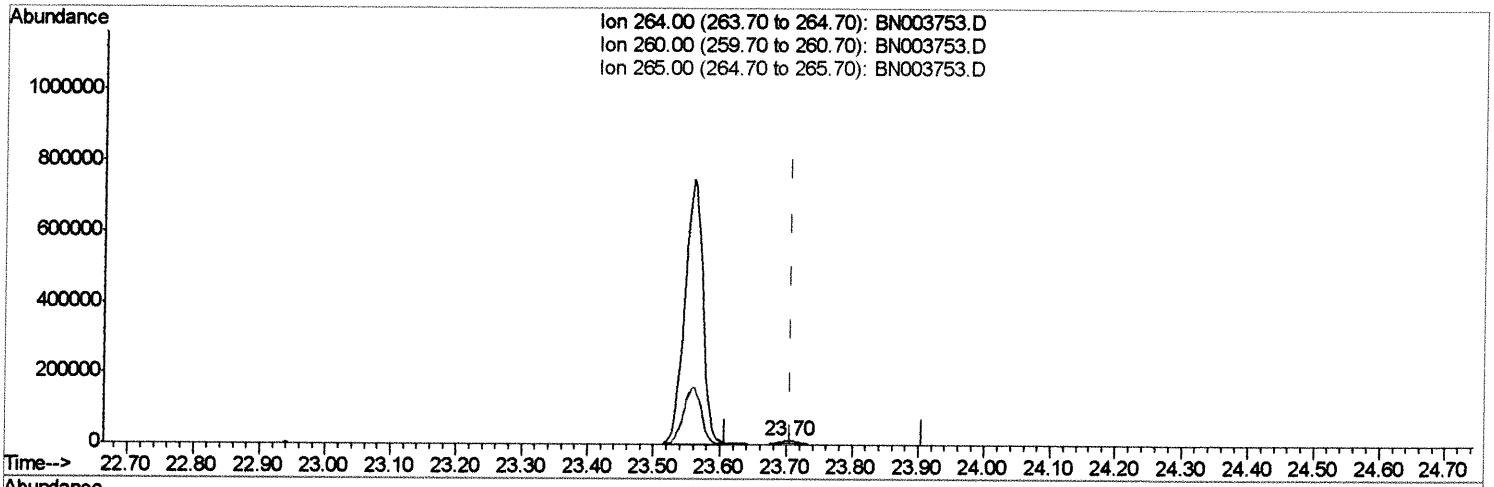
Quantitation Report (Qedit)

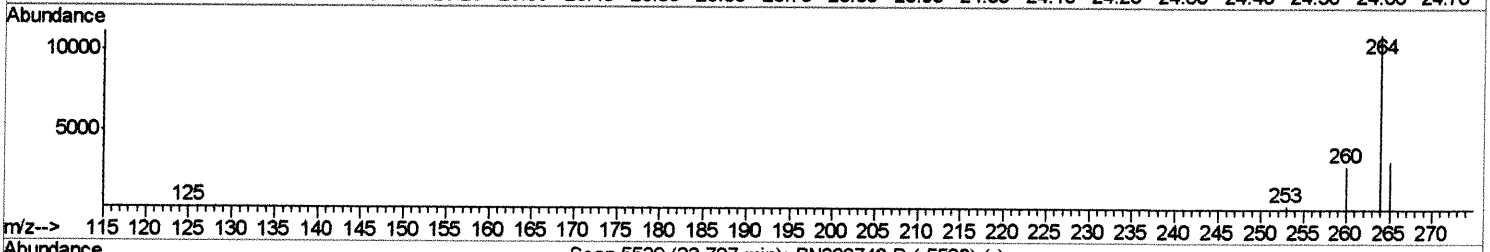
Data File : BN003753.D
Acq On : 07 Dec 2018 05:19
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 24 Sample Multiplier: 1

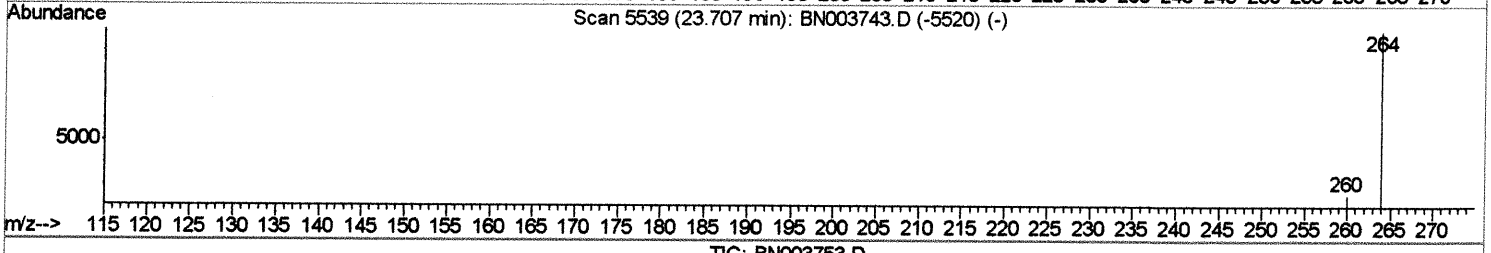
Quant Time: Dec 07 06:12:55 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E61

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:04 PM







(20) Perylene-d12 (I)

23.702min (-0.006) 0.40ng/ul m

response 19580

> SJ 12/11/18

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.12
265.00	33.50	28.93
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003753.D
Acq On : 07 Dec 2018 05:19
Operator : JU/SJ
Sample : J6227-14
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 07 06:13:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5854	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	24192	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	13320	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	28804m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	24900m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	19580m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	9653	0.26	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	20922m	0.25	ng/ul	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
BNA_N
ClientSampleId :
F9E61

Manual Integrations APPROVED
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12/10/2018 12:21:04 PM

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12/11/18

1000

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E62

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-17
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BN003754.D
% Solids : 87.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/07/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	0.79	J
91-57-6	2-Methylnaphthalene	1.8	J
208-96-8	Acenaphthylene	3.7	U
83-32-9	Acenaphthene	3.7	U
86-73-7	Fluorene	3.7	U
87-86-5	Pentachlorophenol	7.6	U
85-01-8	Phenanthrene	16	
120-12-7	Anthracene	0.98	J
206-44-0	Fluoranthene	2.8	J
129-00-0	Pyrene	16	
56-55-3	Benzo(a)anthracene	7.7	
218-01-9	Chrysene	13	
205-99-2	Benzo(b)fluoranthene	3.5	J
207-08-9	Benzo(k)fluoranthene	0.83	J
50-32-8	Benzo(a)pyrene	4.5	
193-39-5	Indeno(1,2,3-cd)pyrene	1.5	J
53-70-3	Dibenzo(a,h)anthracene	1.5	J
191-24-2	Benzo(g,h,i)perylene	3.3	J

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003754.D
Acq On : 07 Dec 2018 05:54
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 07 08:09:58 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E62

Manual Integrations APPROVED
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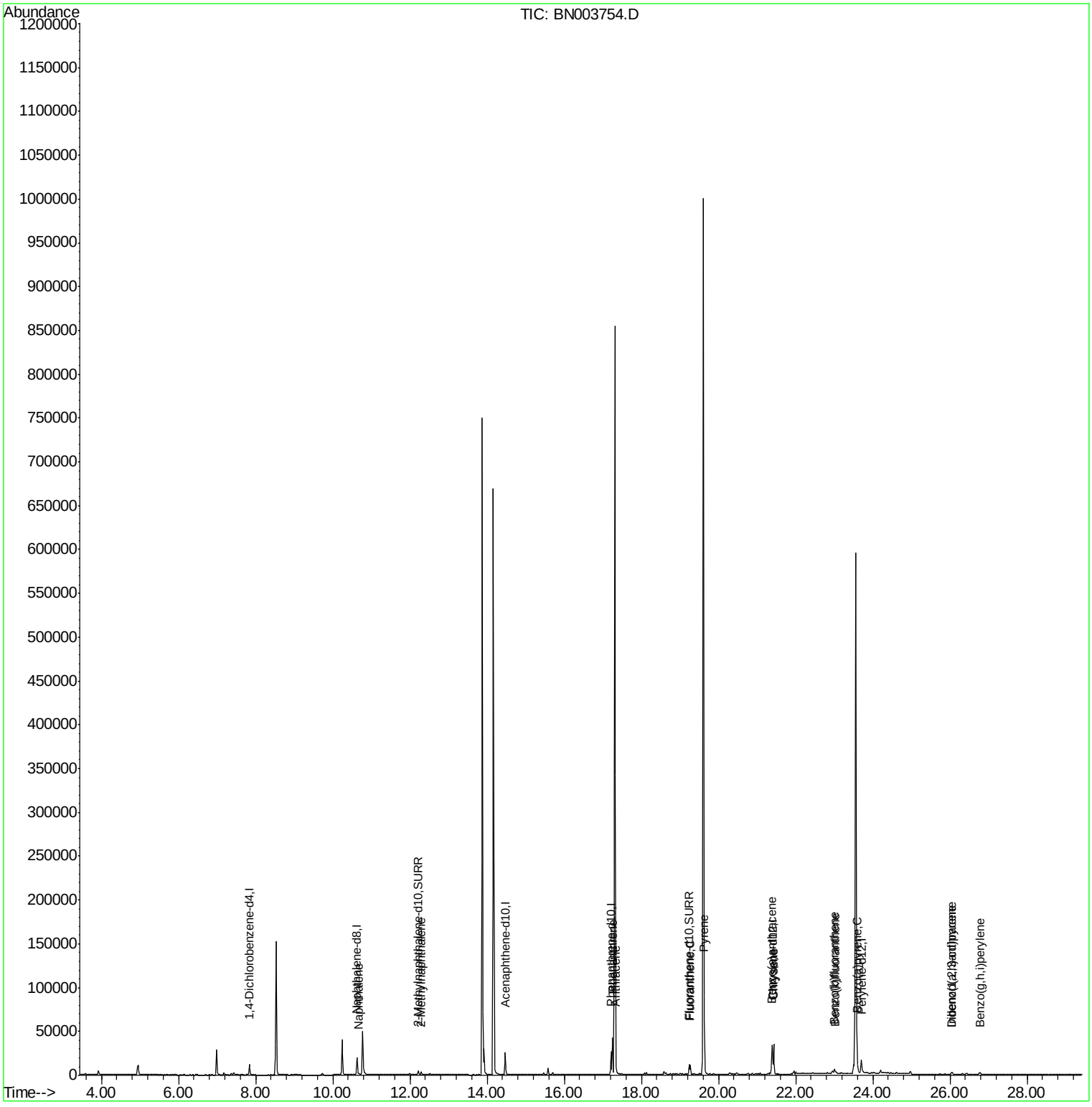

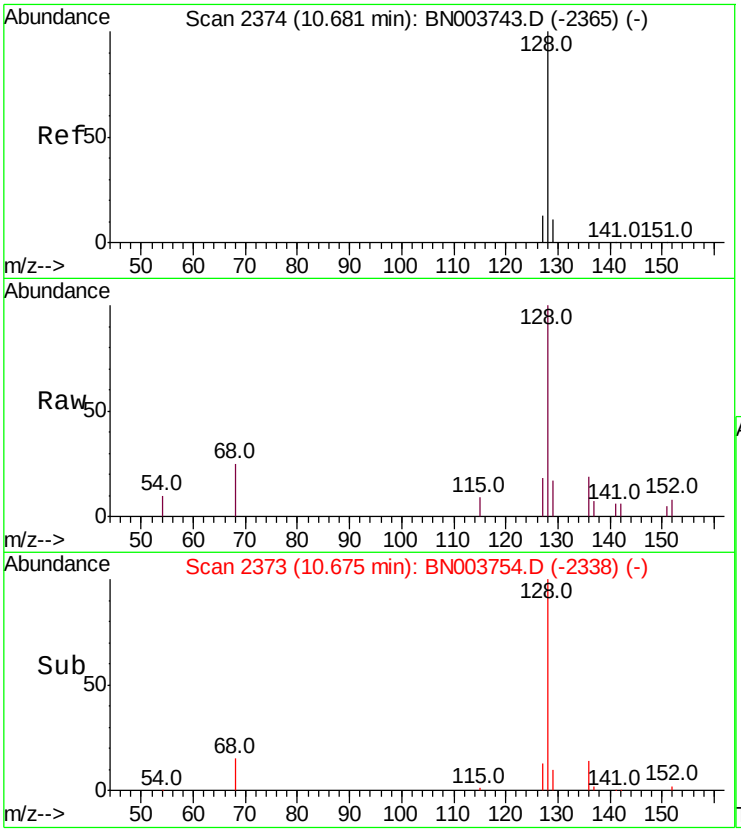

#3
Naphthalene
Concen: 0.021 ng/ul
RT: 10.68 min Scan# 2373
Delta R.T. -0.01 min
Lab File: BN003754.D
Acq: 07 Dec 2018 05:54

Tgt Ion:128 Resp: 1537

Ion	Ratio	Lower	Upper
128	100		
129	17.0	9.0	13.6#
127	17.8	10.5	15.7#

Instrument :
BNA_N
ClientSampleId :
F9E62

Manual Integrations APPROVED
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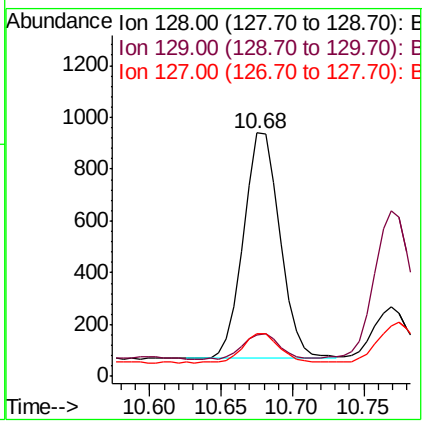
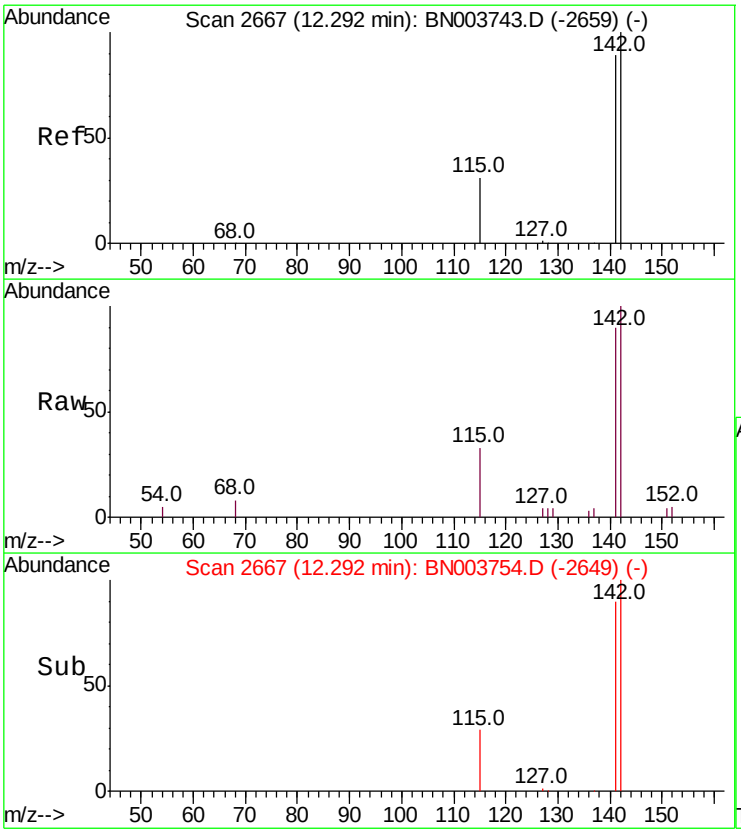
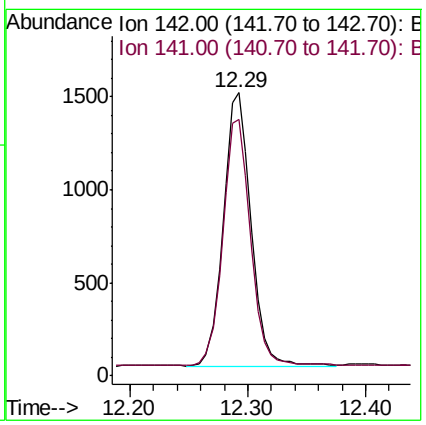


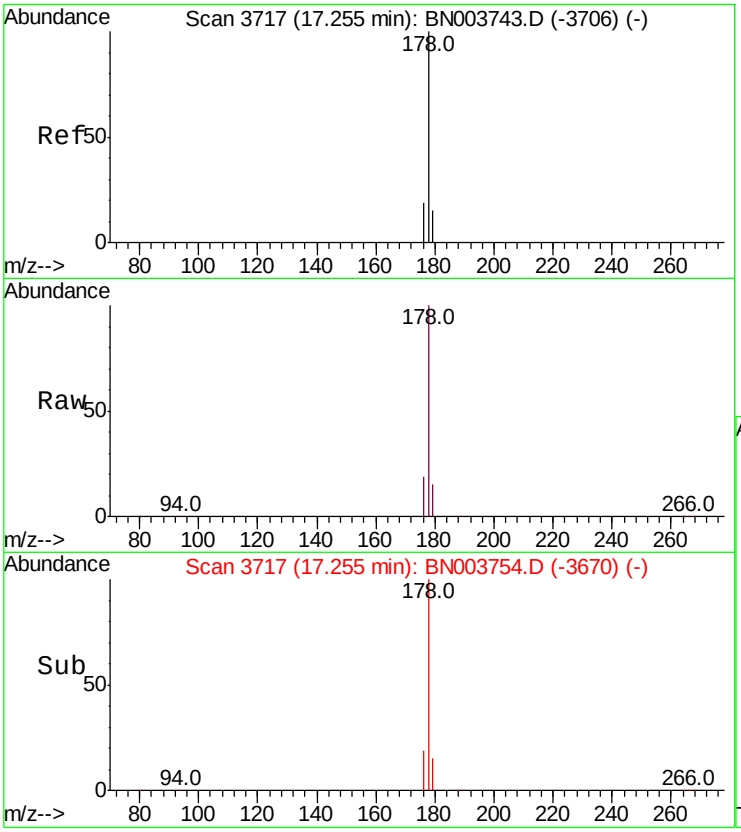


#5
2-Methylnaphthalene
Concen: 0.048 ng/ul
RT: 12.29 min Scan# 2667
Delta R.T. 0.00 min
Lab File: BN003754.D
Acq: 07 Dec 2018 05:54

Tgt Ion:142 Resp: 2407

Ion	Ratio	Lower	Upper
142	100		
141	90.9	71.5	107.3

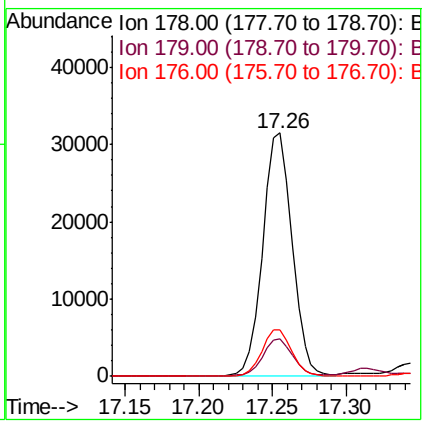




#12
Phenanthrene
Concen: 0.436 ng/ul
RT: 17.26 min Scan# 3717
Delta R.T. 0.00 min
Lab File: BN003754.D
Acq: 07 Dec 2018 05:54

Tgt Ion:178 Resp: 43256

Ion	Ratio	Lower	Upper
178	100		
179	15.3	12.5	18.7
176	19.0	15.0	22.4



Instrument :
BNA_N
ClientSampleId :
F9E62

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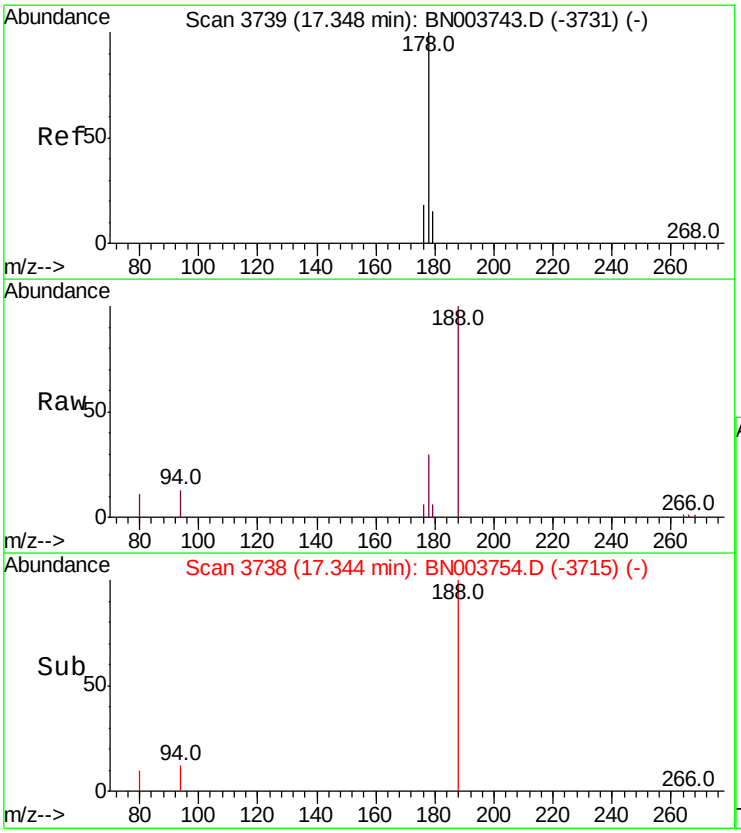
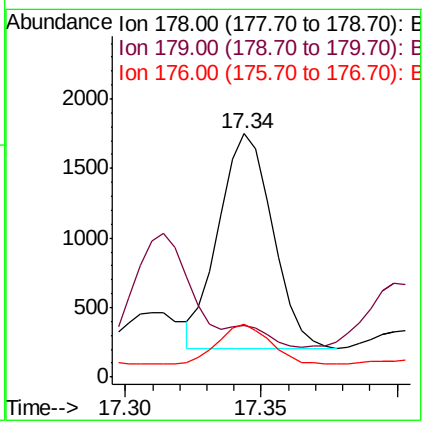
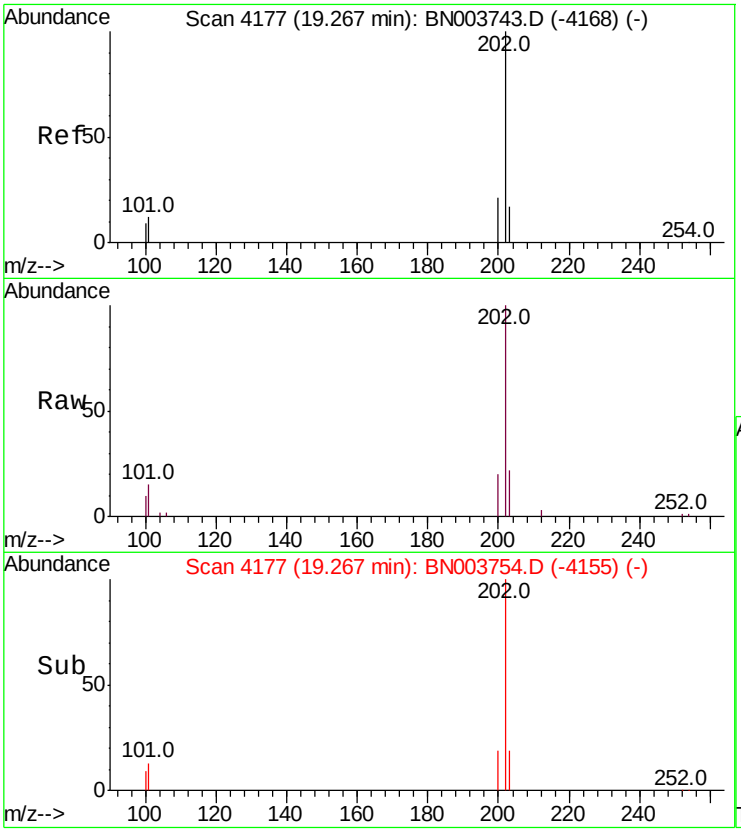


#13
Anthracene
Concen: 0.026 ng/ul
RT: 17.34 min Scan# 3738
Delta R.T. -0.00 min
Lab File: BN003754.D
Acq: 07 Dec 2018 05:54

Tgt Ion:178 Resp: 2123

Ion	Ratio	Lower	Upper
178	100		
179	21.4	12.3	18.5#
176	21.5	14.8	22.2





#15
Fluoranthene
Concen: 0.075 ng/ul
RT: 19.27 min Scan# 4177
Delta R.T. 0.00 min
Lab File: BN003754.D
Acq: 07 Dec 2018 05:54

Tgt Ion:202 Resp: 8730

Ion	Ratio	Lower	Upper
202	100		
101	14.7	0.0	30.7
100	10.3	0.0	28.1

Instrument :
BNA_N
ClientSampleId :
F9E62

Manual Integrations APPROVED
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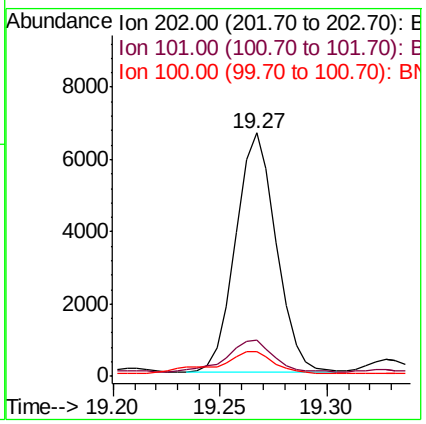
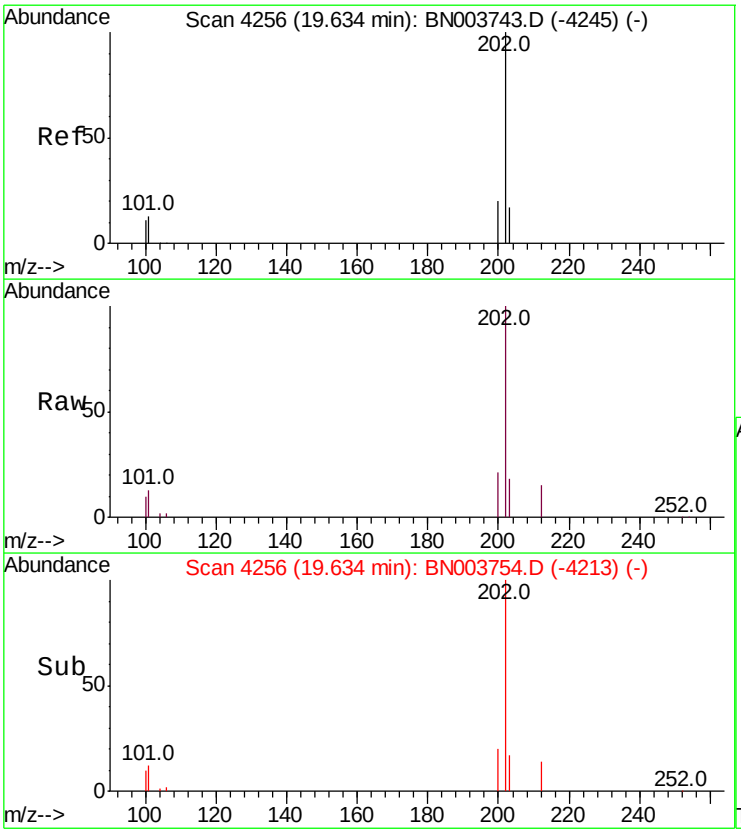
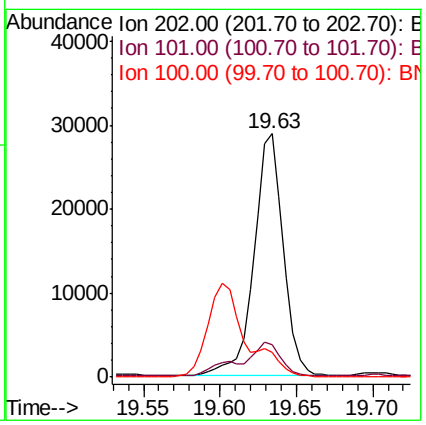


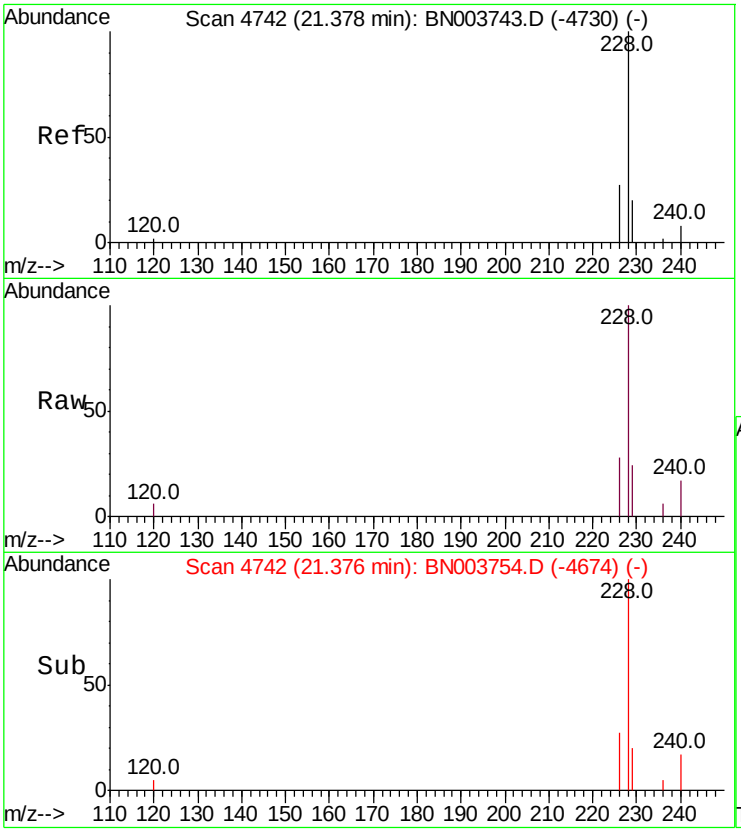


#17
Pyrene
Concen: 0.425 ng/ul
RT: 19.63 min Scan# 4256
Delta R.T. 0.00 min
Lab File: BN003754.D
Acq: 07 Dec 2018 05:54

Tgt Ion:202 Resp: 38593

Ion	Ratio	Lower	Upper
202	100		
101	13.1	10.3	15.5
100	10.3	8.5	12.7

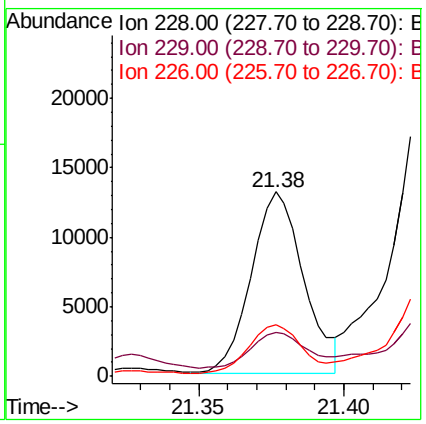




#18
Benzo(a)anthracene
Concen: 0.205 ng/ul m
RT: 21.38 min Scan# 4742
Delta R.T. -0.00 min
Lab File: BN003754.D
Acq: 07 Dec 2018 05:54

Tgt Ion:228 Resp: 16393

Ion	Ratio	Lower	Upper
228	100		
229	24.0	15.6	23.4#
226	28.3	21.1	31.7



Instrument :
BNA_N
ClientSampleId :
F9E62

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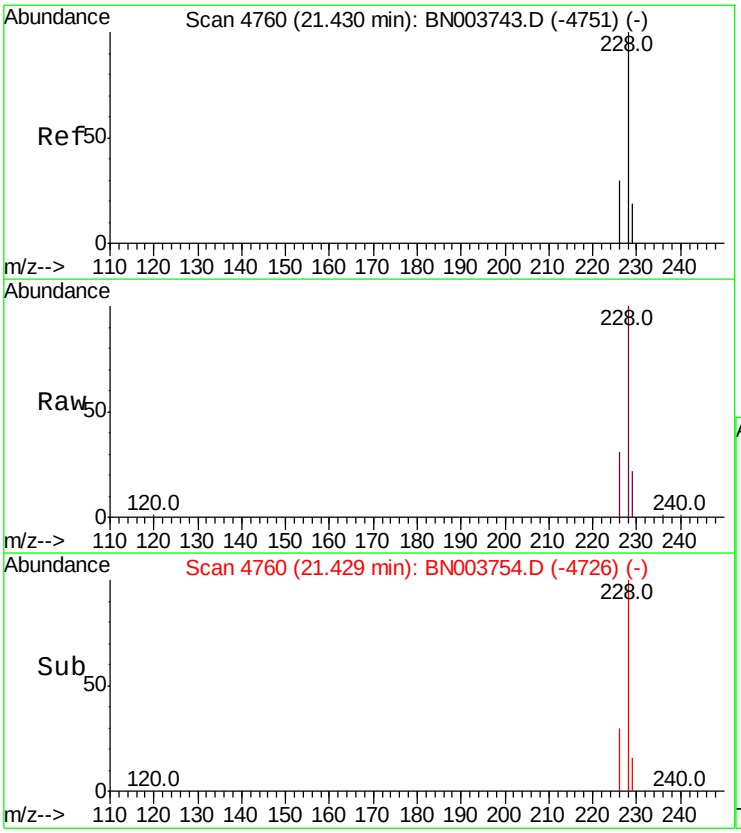
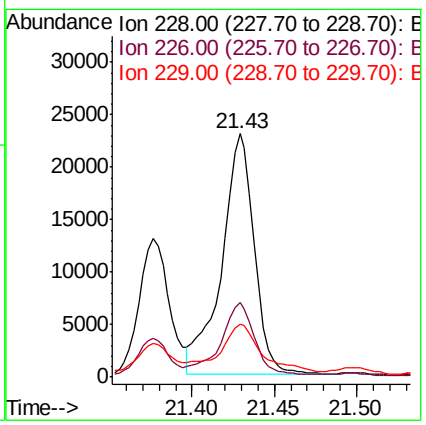
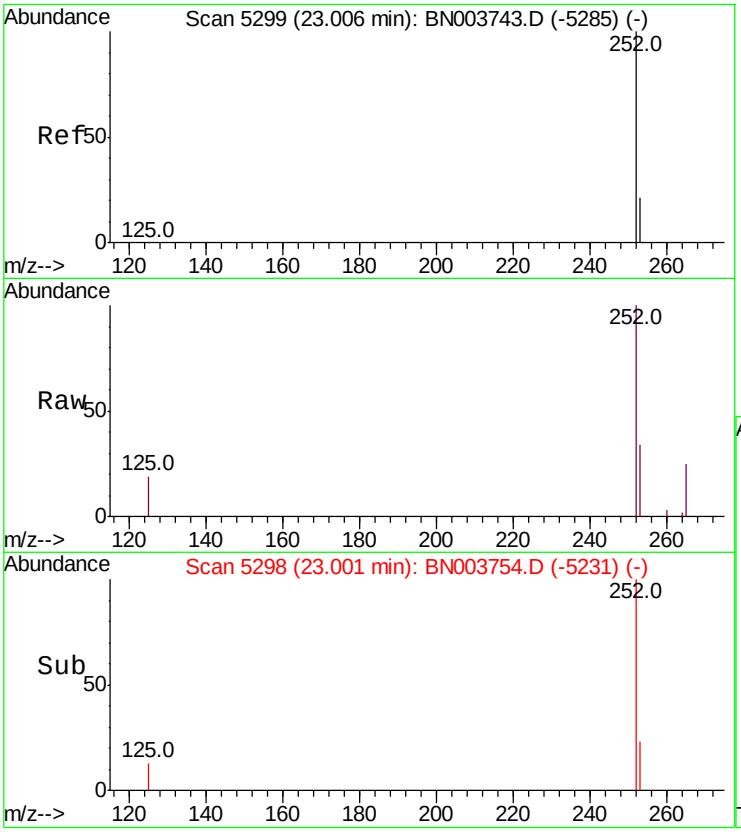


#19
Chrysene
Concen: 0.342 ng/ul
RT: 21.43 min Scan# 4760
Delta R.T. -0.00 min
Lab File: BN003754.D
Acq: 07 Dec 2018 05:54

Tgt Ion:228 Resp: 31317

Ion	Ratio	Lower	Upper
228	100		
226	30.7	24.0	36.0
229	21.8	15.7	23.5

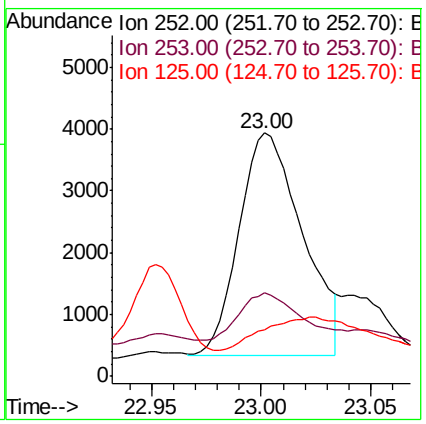




#21
Benzo(b)fluoranthene
Concen: 0.093 ng/ul m
RT: 23.00 min Scan# 5298
Delta R.T. -0.00 min
Lab File: BN003754.D
Acq: 07 Dec 2018 05:54

Tgt Ion:252 Resp: 7302

Ion	Ratio	Lower	Upper
252	100		
253	34.4	0.0	46.0
125	19.2	0.0	22.4



Instrument :
BNA_N
ClientSampleId :
F9E62

Manual Integrations APPROVED
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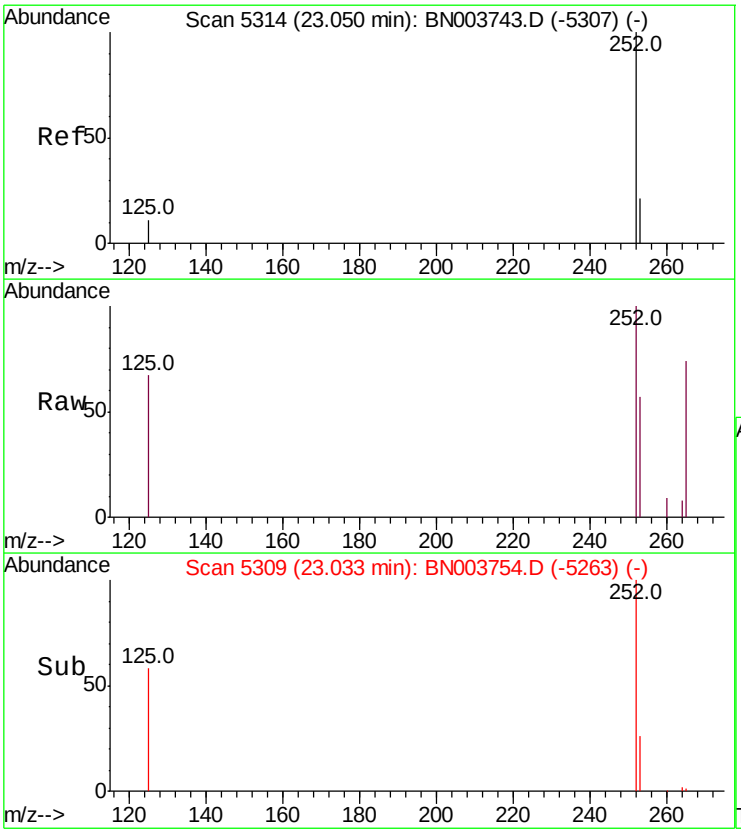
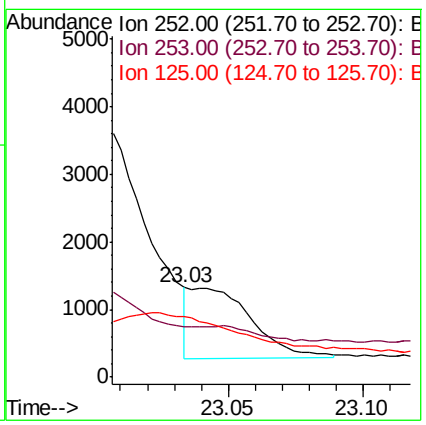
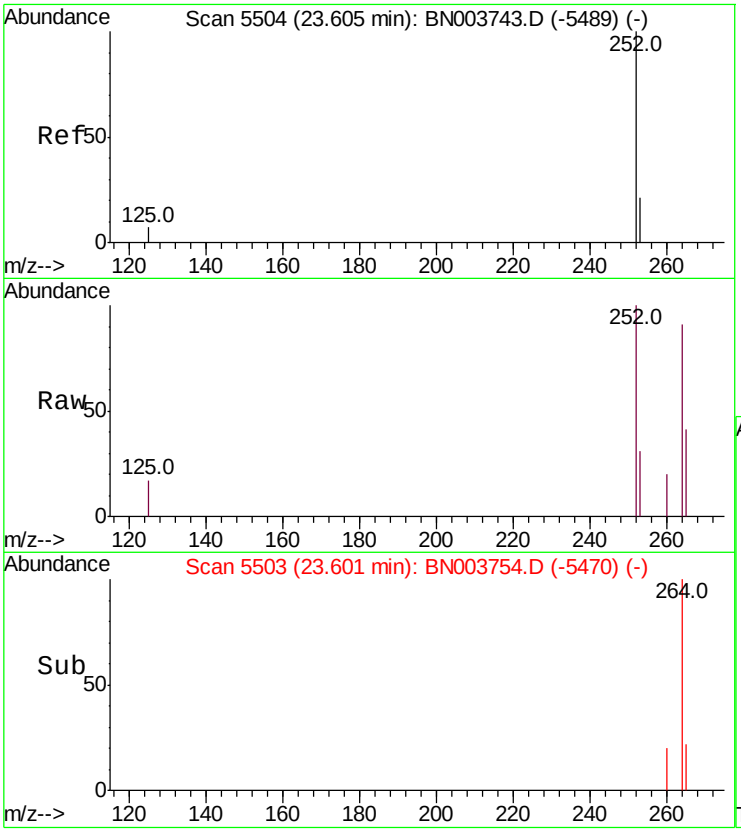


#22
Benzo(k)fluoranthene
Concen: 0.022 ng/ul m
RT: 23.03 min Scan# 5309
Delta R.T. -0.02 min
Lab File: BN003754.D
Acq: 07 Dec 2018 05:54

Tgt Ion:252 Resp: 1681

Ion	Ratio	Lower	Upper
252	100		
253	56.6	18.5	27.7#
125	67.4	9.0	13.6#





#23
Benzo(a)pyrene
Concen: 0.118 ng/ul
RT: 23.60 min Scan# 5503
Delta R.T. -0.00 min
Lab File: BN003754.D
Acq: 07 Dec 2018 05:54

Tgt Ion:252 Resp: 8025

Ion	Ratio	Lower	Upper
252	100		
253	31.0	19.0	28.4#
125	17.4	10.2	15.4#

Instrument :
BNA_N
ClientSampleId :
F9E62

Manual Integrations APPROVED
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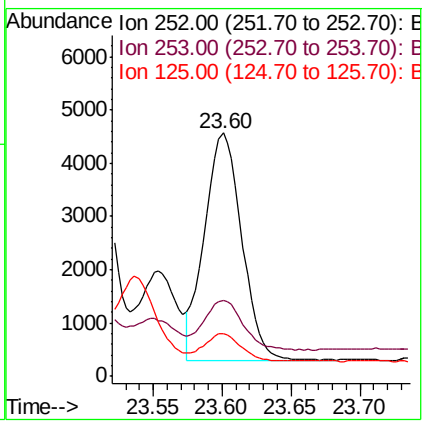
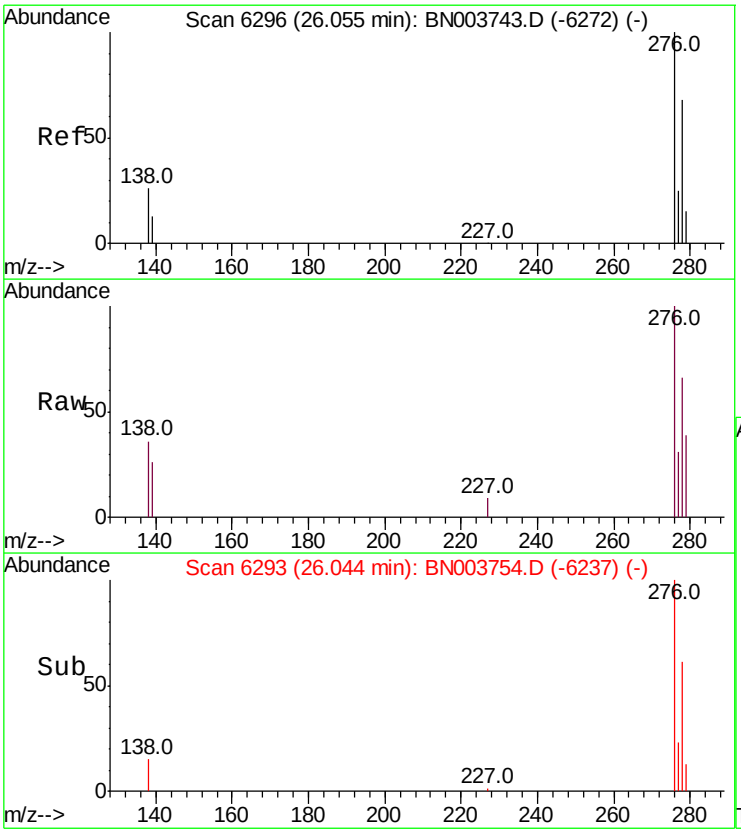
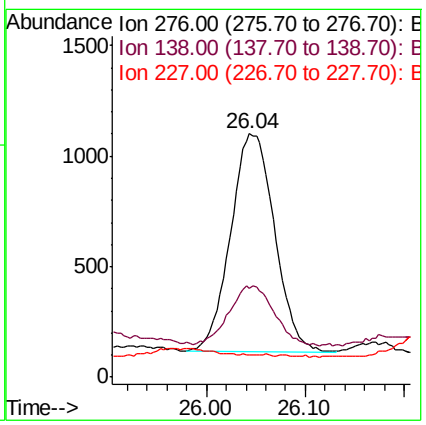


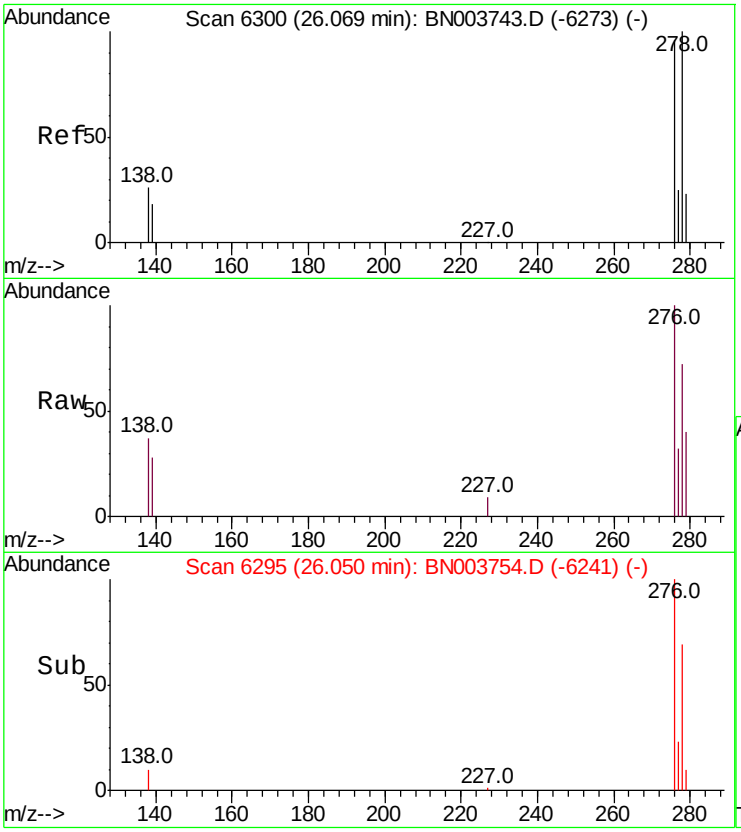


#24
Indeno(1,2,3-cd)pyrene
Concen: 0.039 ng/ul
RT: 26.04 min Scan# 6293
Delta R.T. -0.01 min
Lab File: BN003754.D
Acq: 07 Dec 2018 05:54

Tgt Ion:276 Resp: 3071

Ion	Ratio	Lower	Upper
276	100		
138	28.3	20.3	30.5
227	0.0	0.2	0.2#





#25
Dibenzo(a,h)anthracene
Concen: 0.040 ng/ul
RT: 26.05 min Scan# 6295
Delta R.T. -0.02 min
Lab File: BN003754.D
Acq: 07 Dec 2018 05:54

Tgt Ion:278 Resp: 2523

Ion	Ratio	Lower	Upper
278	100		
139	38.8	14.2	21.4#
279	54.8	19.8	29.6#

Instrument :
BNA_N
ClientSampleId :
F9E62

Manual Integrations APPROVED
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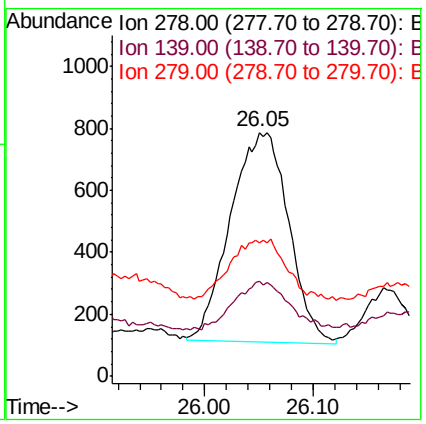
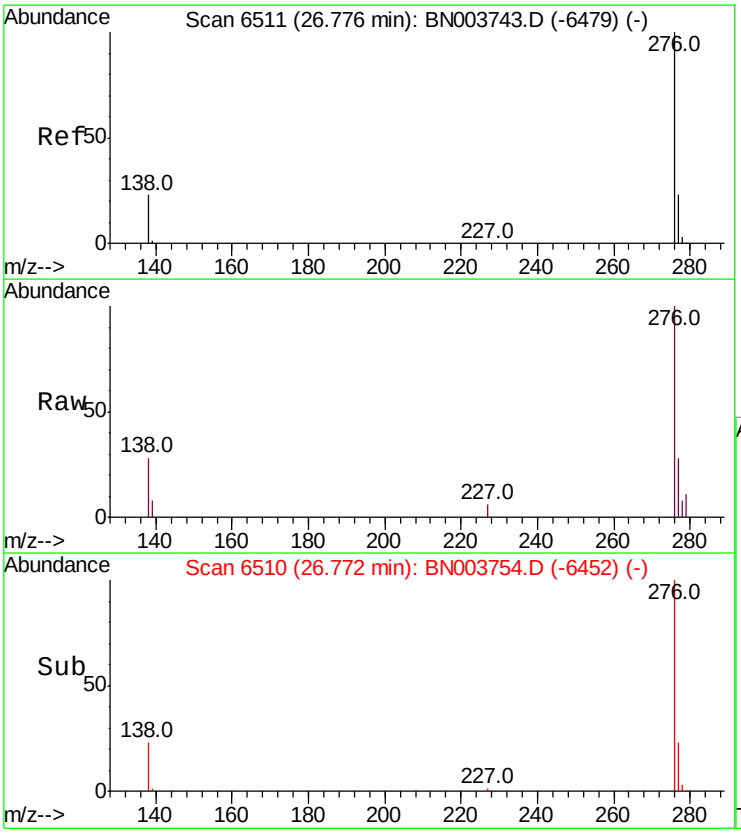
12/10/2018 12:21:06 PM

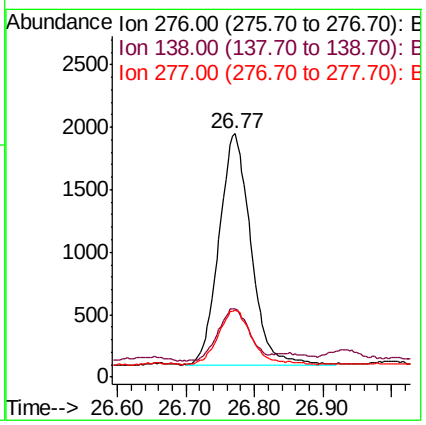




#26
Benzo(g,h,i)perylene
Concen: 0.088 ng/ul
RT: 26.77 min Scan# 6510
Delta R.T. -0.00 min
Lab File: BN003754.D
Acq: 07 Dec 2018 05:54

Tgt Ion:276 Resp: 5991

Ion	Ratio	Lower	Upper
276	100		
138	28.3	17.7	26.5#
277	27.7	19.3	28.9



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003754.D
Acq On : 07 Dec 2018 05:54
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9E62

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:06 PM

Quant Time: Dec 07 08:09:58 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	6244	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	25662	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	13672	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	30213	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	25329	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	19006m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	5656	0.14	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	12426	0.14	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.68	128	1537	0.021	ng/ul#	87
5) 2-Methylnaphthalene	12.29	142	2407	0.048	ng/ul	98
12) Phenanthrene	17.26	178	43256	0.436	ng/ul	99
13) Anthracene	17.34	178	2123	0.026	ng/ul#	90
15) Fluoranthene	19.27	202	8730	0.075	ng/ul	91
17) Pyrene	19.63	202	38593	0.425	ng/ul	99
18) Benzo(a)anthracene	21.38	228	16393m	0.205	ng/ul	
19) Chrysene	21.43	228	31317	0.342	ng/ul	97
21) Benzo(b)fluoranthene	23.00	252	7302m	0.093	ng/ul	
22) Benzo(k)fluoranthene	23.03	252	1681m	0.022	ng/ul	
23) Benzo(a)pyrene	23.60	252	8025	0.118	ng/ul#	86
24) Indeno(1,2,3-cd)pyrene	26.04	276	3071	0.039	ng/ul#	94
25) Dibenzo(a,h)anthracene	26.05	278	2523	0.040	ng/ul#	45
26) Benzo(g,h,i)perylene	26.77	276	5991	0.088	ng/ul#	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

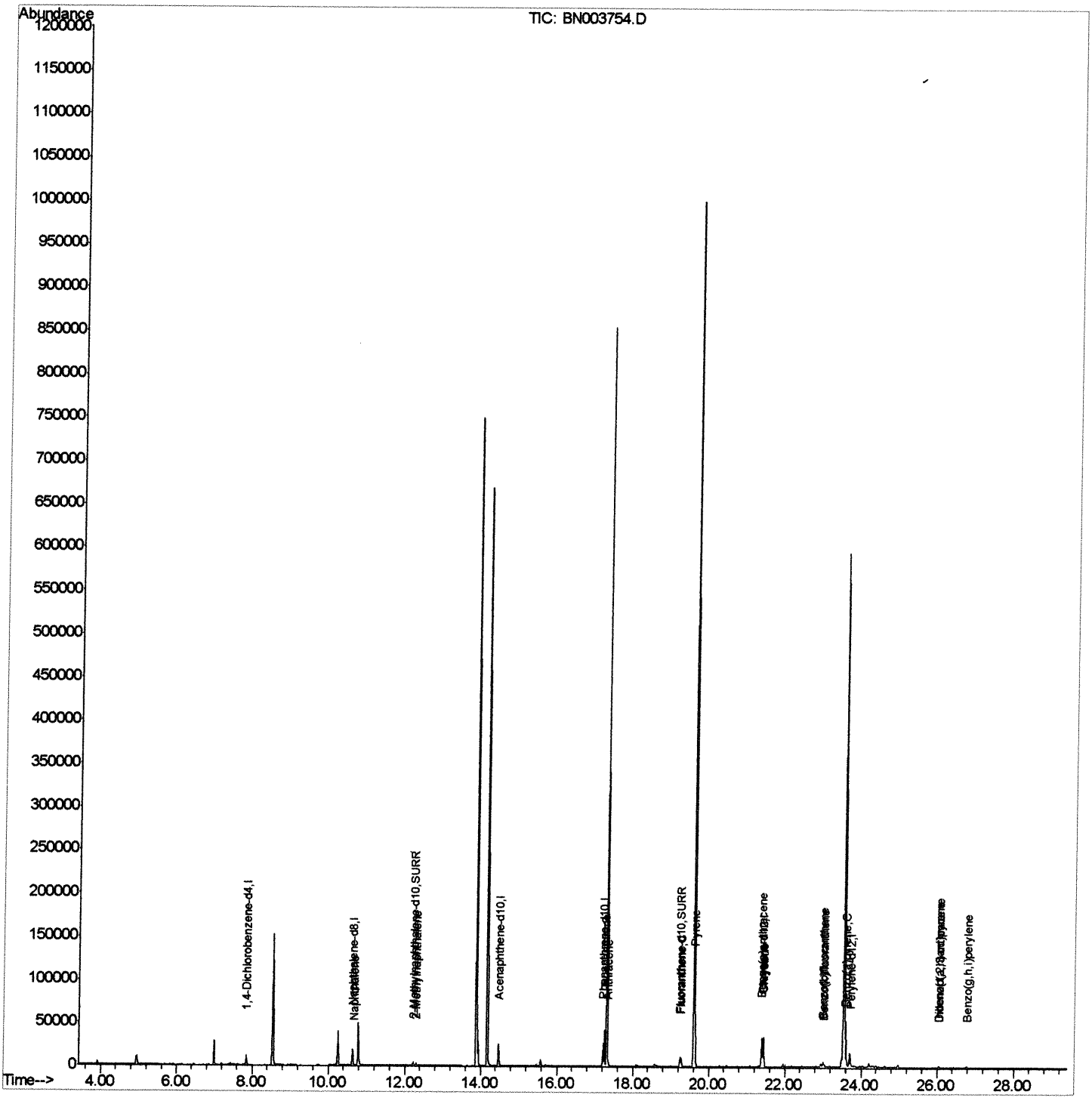
Quantitation Report (QT Reviewed)

Data File : BN003754.D
Acq On : 07 Dec 2018 05:54
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 07 08:09:58 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E62

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:06 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

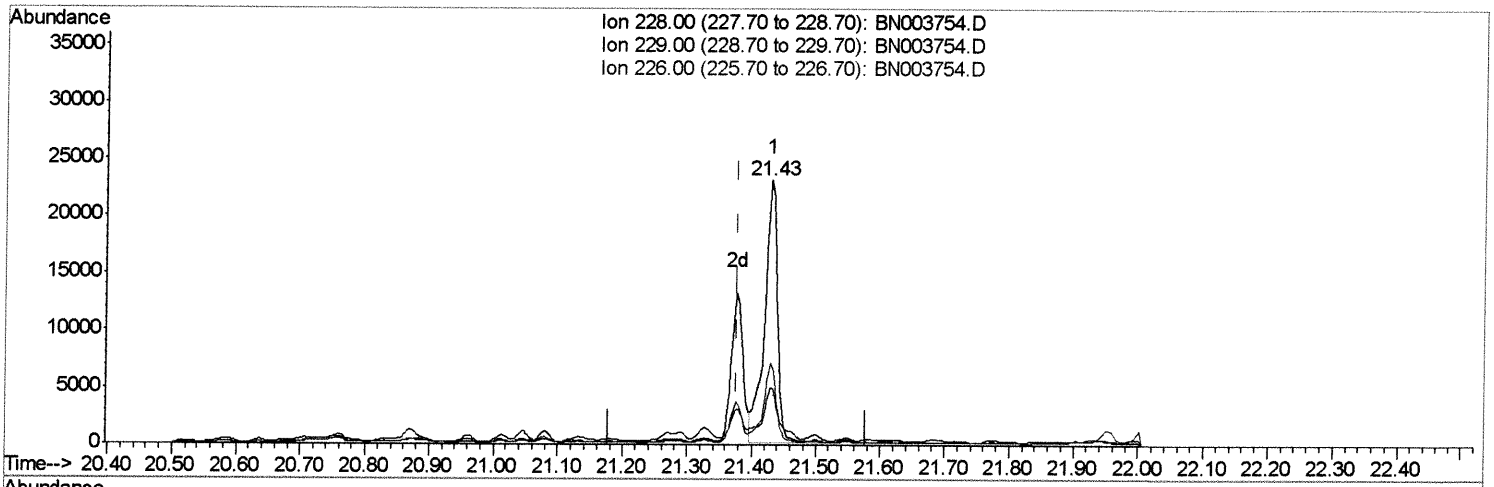
Quantitation Report (Qedit)

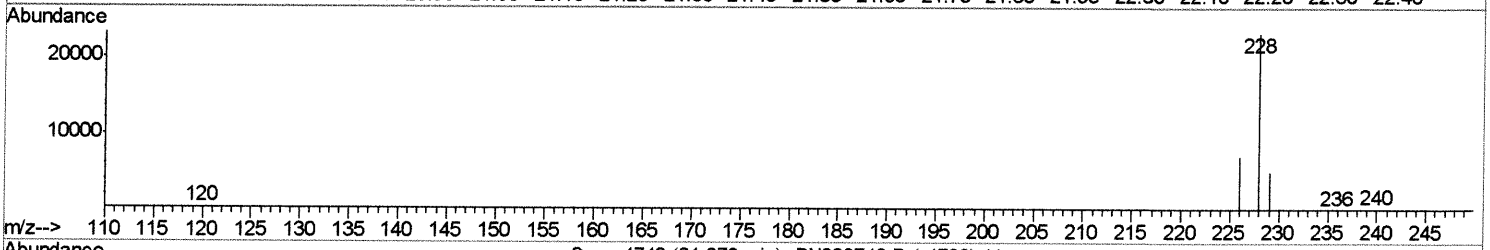
Data File : BN003754.D
Acq On : 07 Dec 2018 05:54
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 25 Sample Multiplier: 1

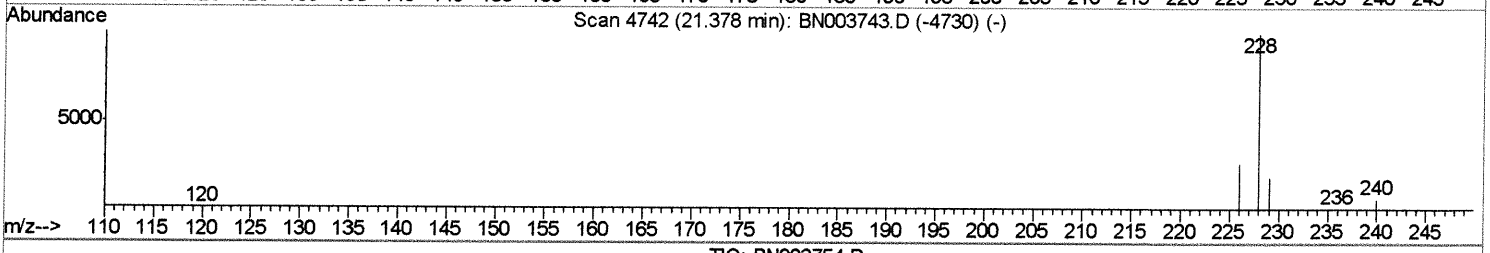
Quant Time: Dec 07 08:06:01 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E62

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:06 PM







TIC: BN003754.D

(18) Benzo(a)anthracene

21.429min (+0.051) 0.40ng/ul

response 32197

Ion	Exp%	Act%
228.00	100	100
229.00	19.50	21.78
226.00	26.40	30.70
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

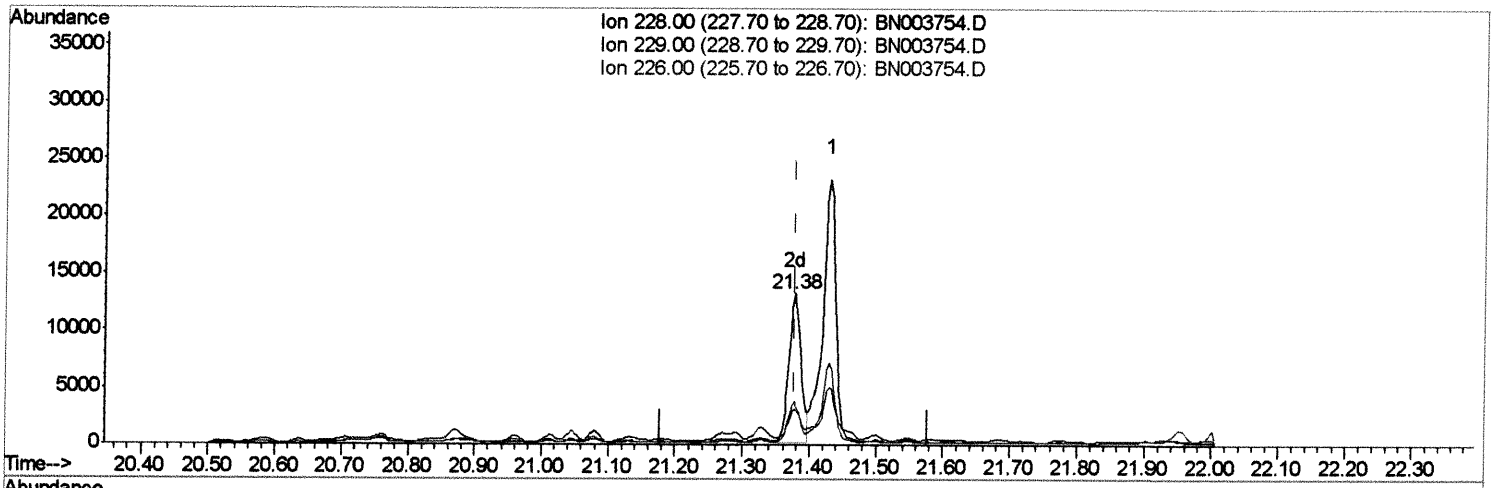
Quantitation Report (Qedit)

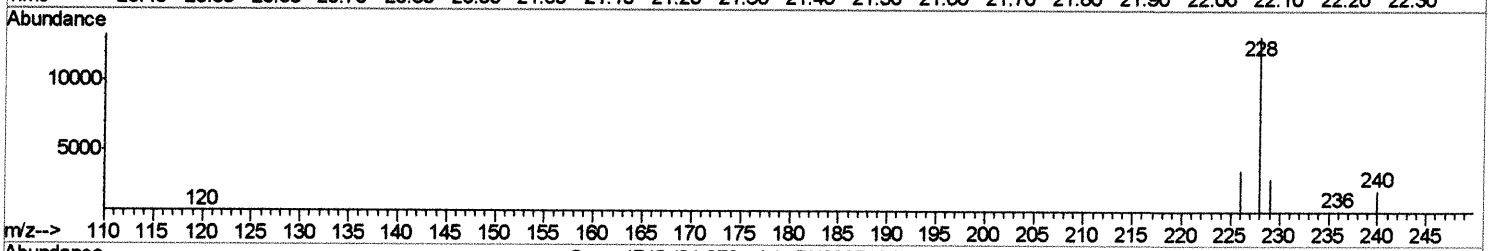
Data File : BN003754.D
Acq On : 07 Dec 2018 05:54
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 25 Sample Multiplier: 1

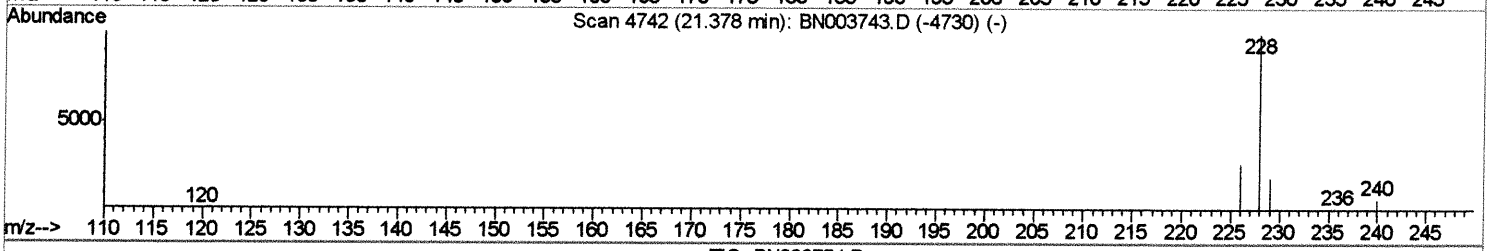
Quant Time: Dec 07 08:06:01 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E62

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:06 PM







TIC: BN003754.D

(18) Benzo(a)anthracene

21.376min (-0.002) 0.20ng/ul m

response 16393

SJ 12/11/18

Ion	Exp%	Act%
228.00	100	100
229.00	19.50	24.00#
226.00	26.40	28.29
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

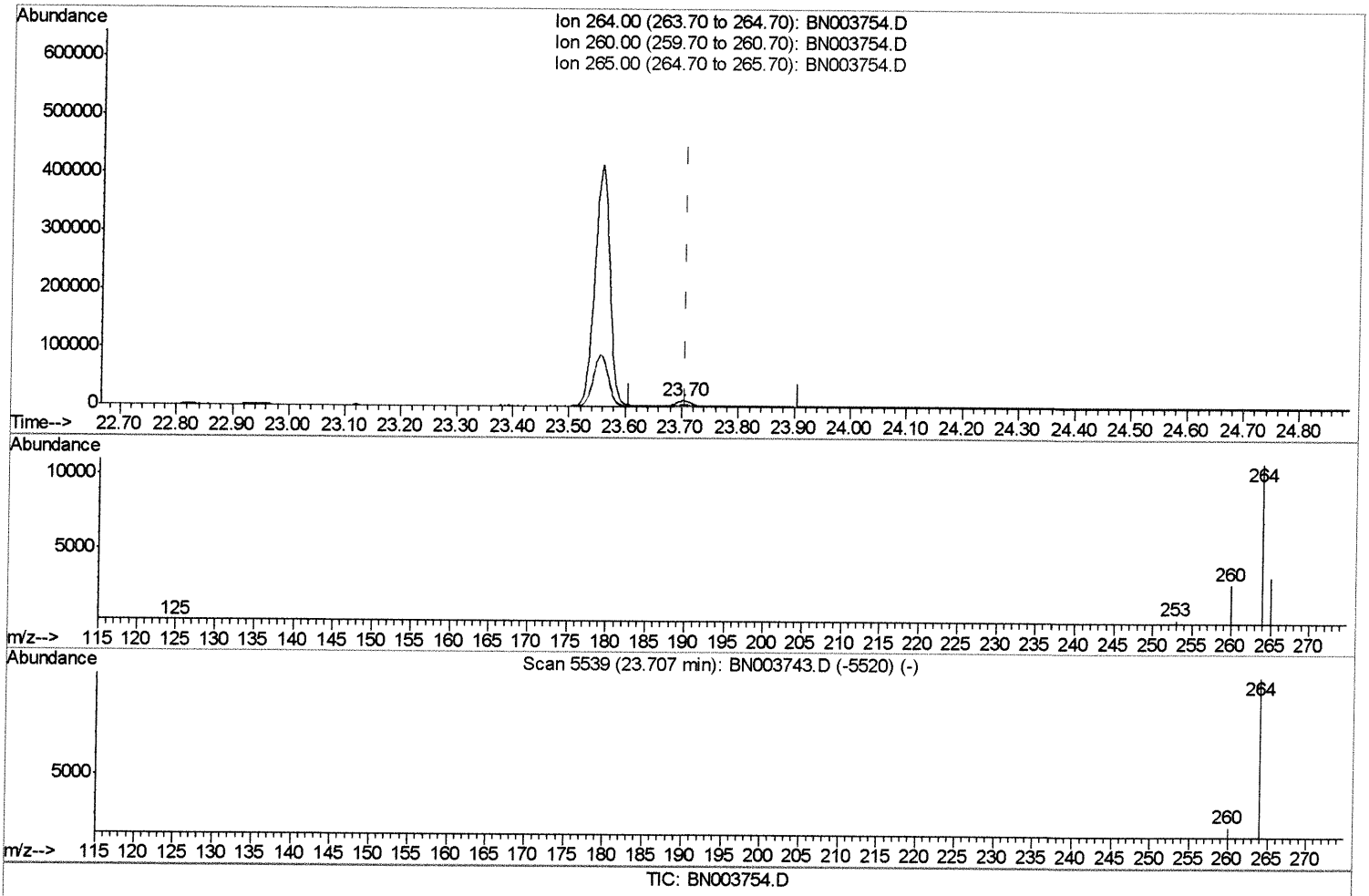
Quantitation Report (Qedit)

Data File : BN003754.D
Acq On : 07 Dec 2018 05:54
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 07 08:06:01 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E62

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:06 PM



TIC: BN003754.D

(20) Perylene-d12 (I)

23.703min (-0.004) 0.40ng/ul

response 23156

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.54
265.00	33.50	30.64
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

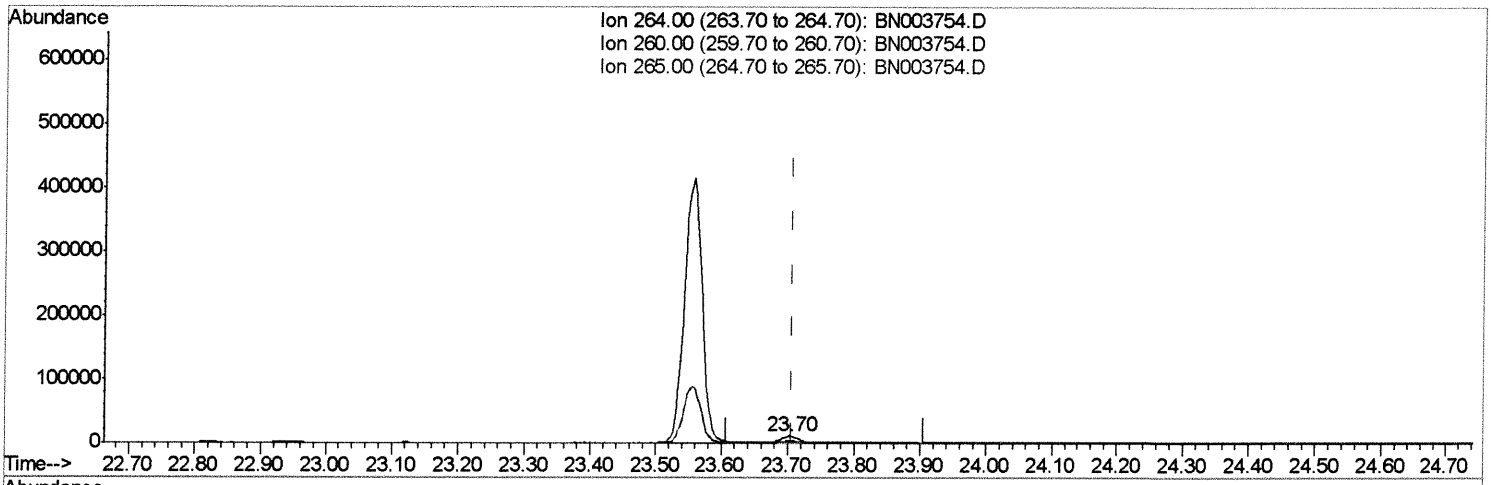
Quantitation Report (Qedit)

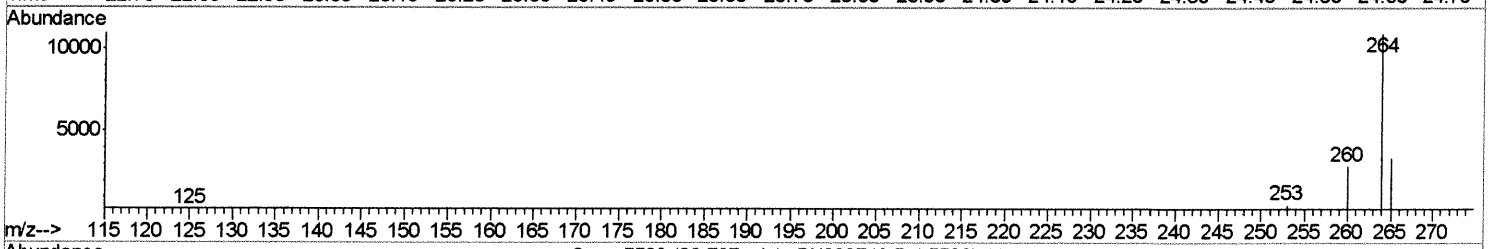
Data File : BN003754.D
Acq On : 07 Dec 2018 05:54
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 25 Sample Multiplier: 1

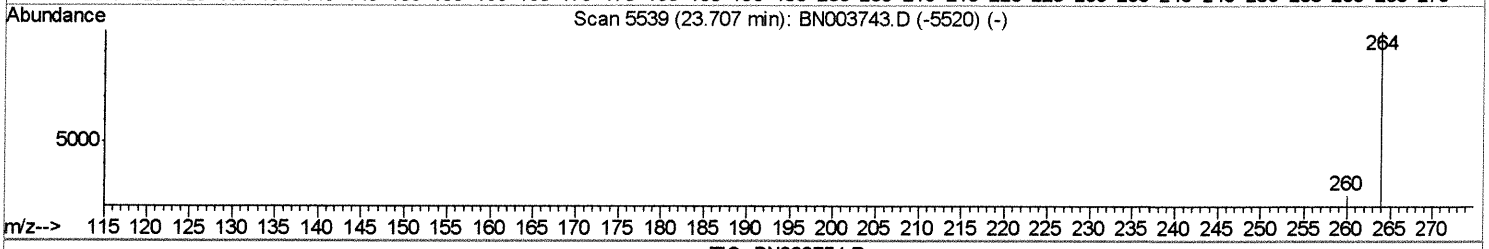
Quant Time: Dec 07 08:06:01 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E62

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:06 PM







TIC: BN003754.D

(20) Perylene-d12 (I)

23.703min (-0.004) 0.40ng/ul m

response 19006

SJ 12/11/18

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.54
265.00	33.50	30.64
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

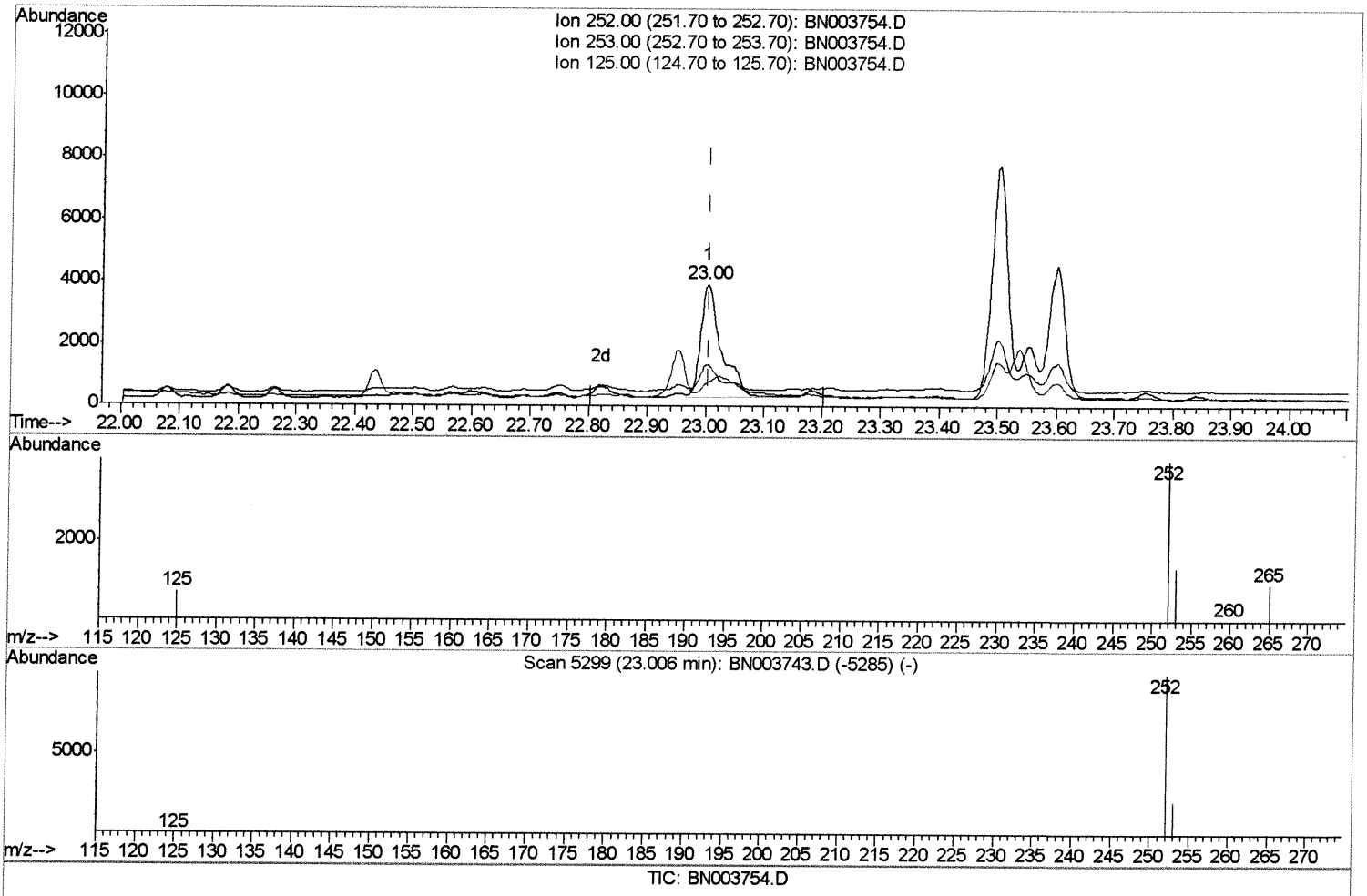
Quantitation Report (Qedit)

Data File : BN003754.D
Acq On : 07 Dec 2018 05:54
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 07 08:09:00 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E62

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:06 PM



TIC: BN003754.D

(21) Benzo(b)fluoranthene

23.001min (-0.004) 0.11ng/ul

response 9019

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	34.40
125.00	11.20	19.17
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

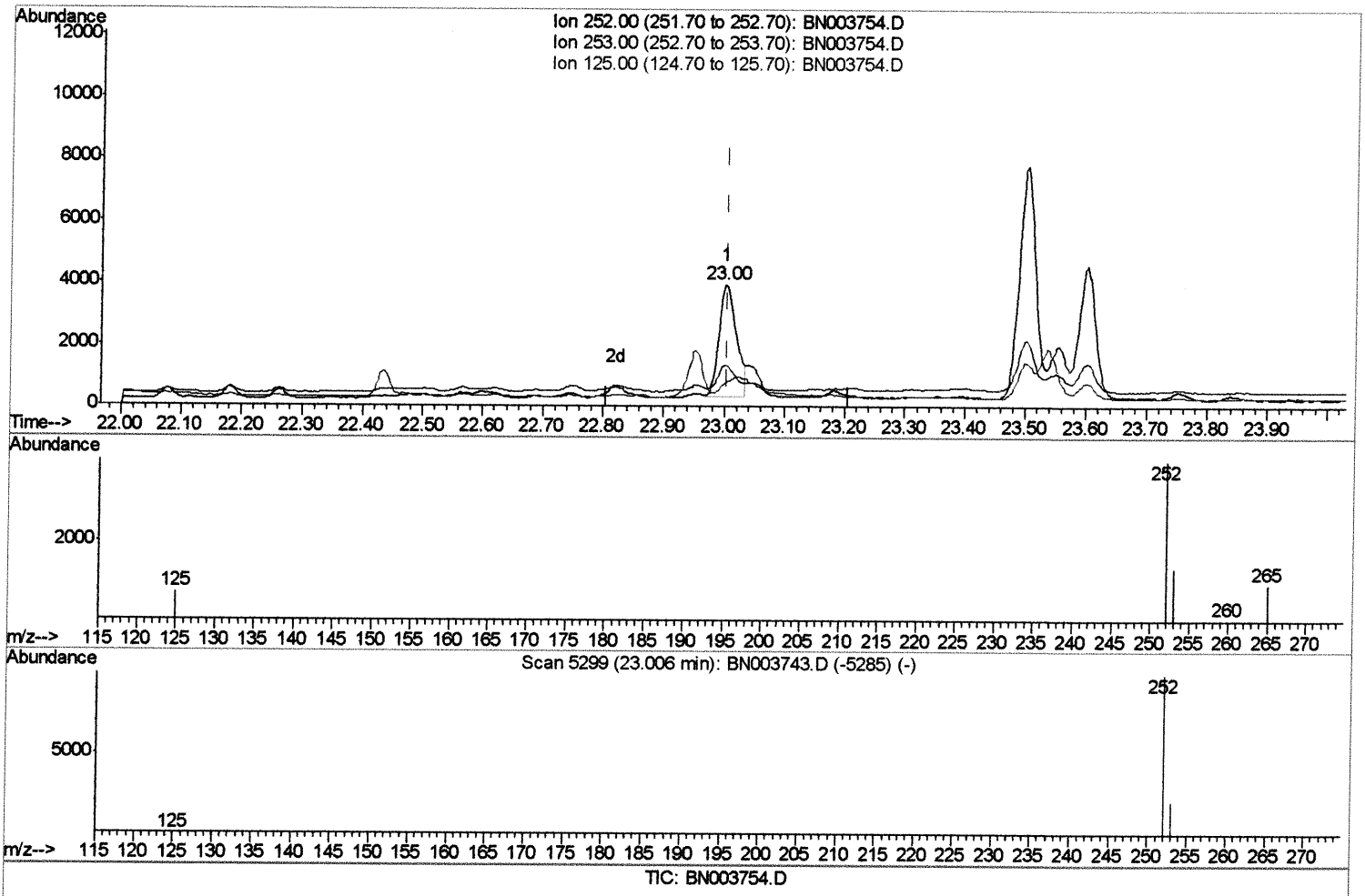
Quantitation Report (Qedit)

Data File : BN003754.D
Acq On : 07 Dec 2018 05:54
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 07 08:09:00 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E62

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:06 PM



TIC: BN003754.D

(21) Benzo(b)fluoranthene

23.001min (-0.004) 0.09ng/ul m > SJ 12/11/18

response 7302

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	34.40
125.00	11.20	19.17
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

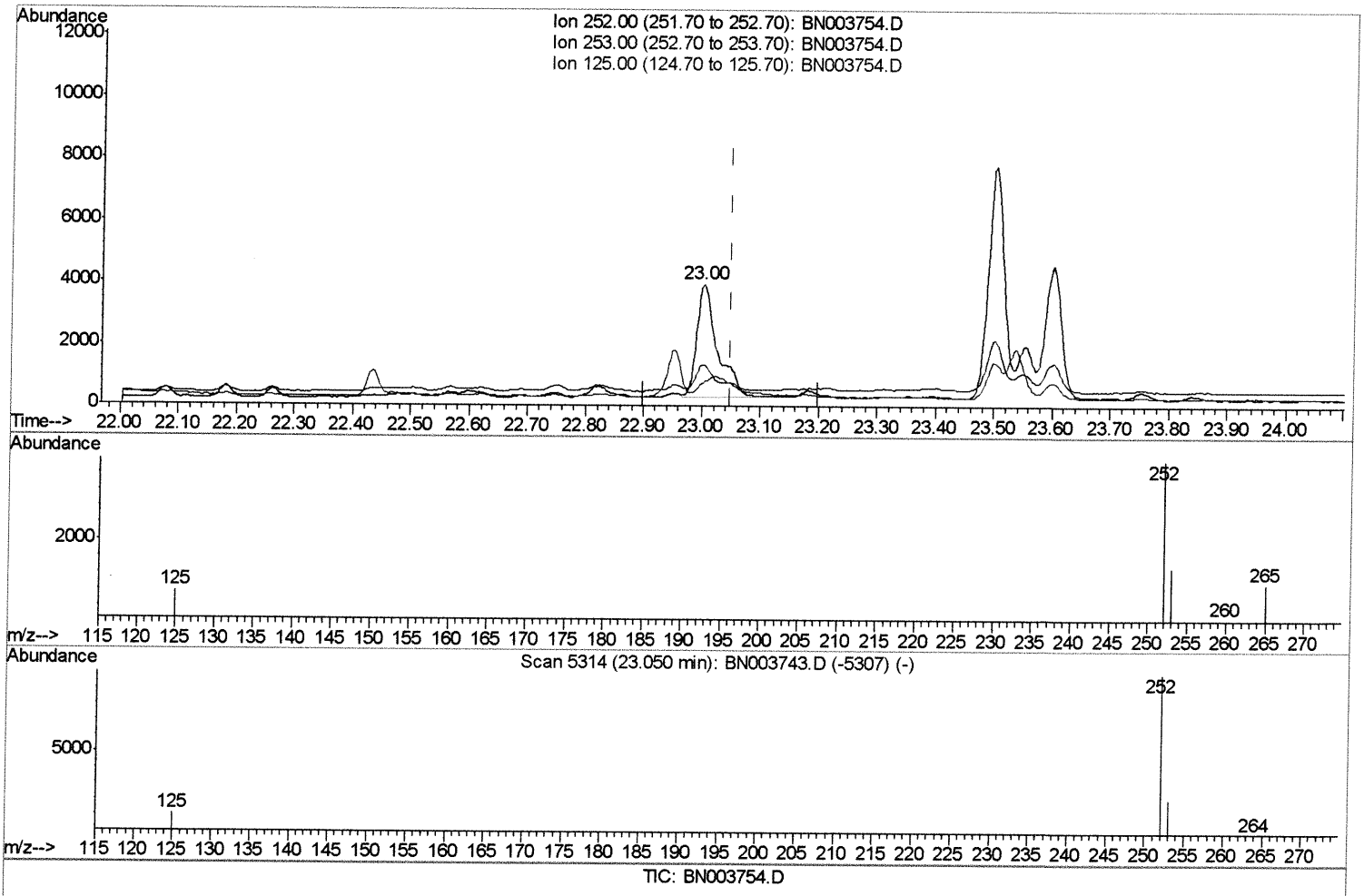
Quantitation Report (Qedit)

Data File : BN003754.D
Acq On : 07 Dec 2018 05:54
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 07 08:09:19 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E62

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:06 PM



TIC: BN003754.D

(22) Benzo(k)fluoranthene

23.001min (-0.048) 0.12ng/ul

response 9019

Ion	Exp%	Act%
252.00	100	100
253.00	23.10	34.40#
125.00	11.30	19.17#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

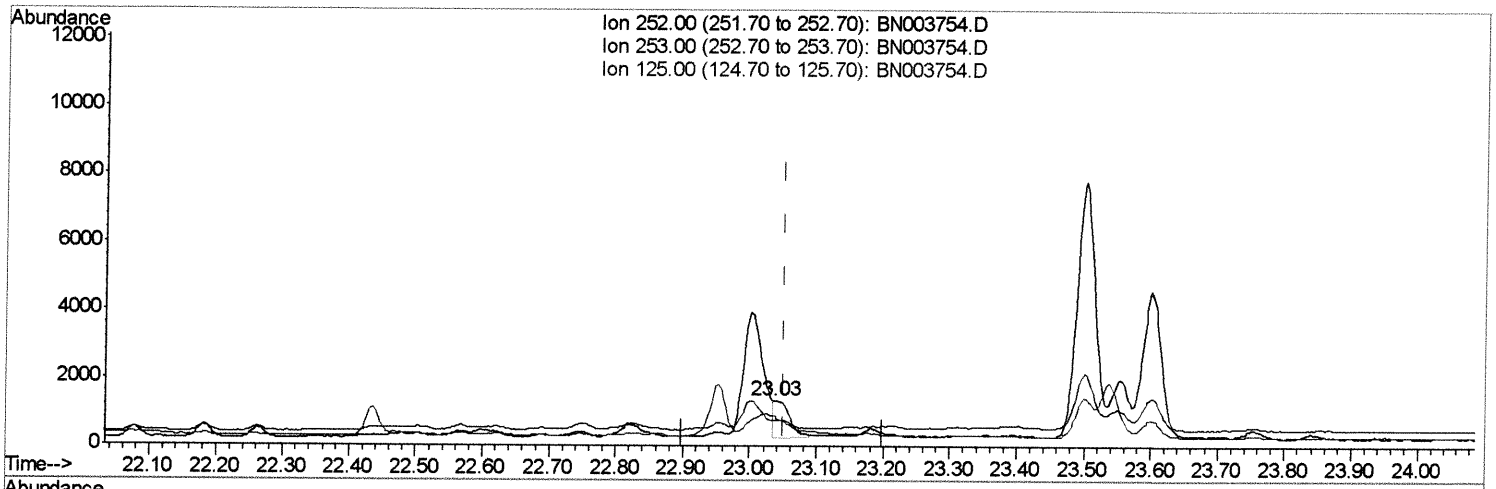
Quantitation Report (Qedit)

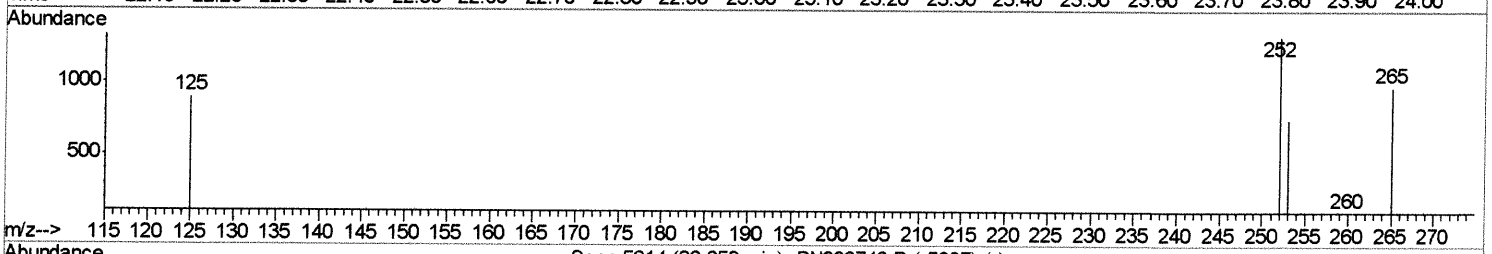
Data File : BN003754.D
Acq On : 07 Dec 2018 05:54
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 25 Sample Multiplier: 1

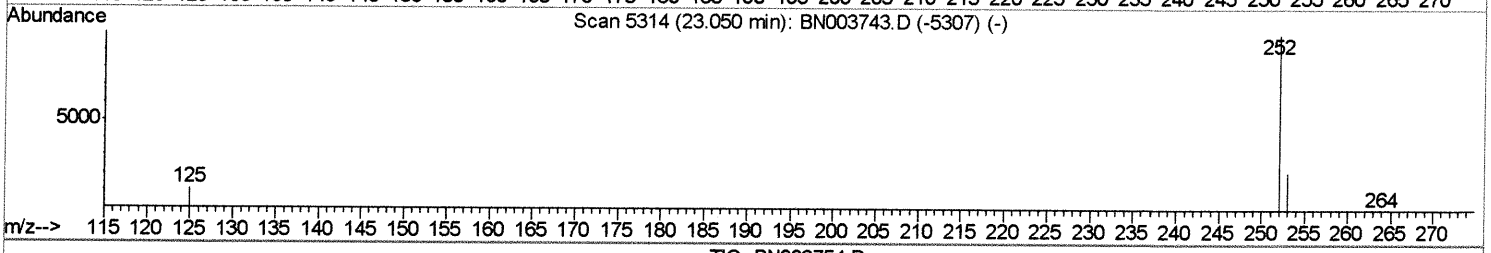
Quant Time: Dec 07 08:09:19 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E62

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:06 PM







TIC: BN003754.D

(22) Benzo(k)fluoranthene

23.033min (-0.016) 0.02ng/ul m

response 1681

Ion	Exp%	Act%
252.00	100	100
253.00	23.10	56.63#
125.00	11.30	67.39#
0.00	0.00	0.00

SJ 12/11/18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003754.D
Acq On : 07 Dec 2018 05:54
Operator : JU/SJ
Sample : J6227-17
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 07 08:09:58 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument : BNA_N
ClientSampleId : F9E62

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:06 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	6244	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	25662	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	13672	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	30213	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	25329	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	19006m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	5656	0.14	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	12426	0.14	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.68	128	1537	0.021	ng/ul#	87
5) 2-Methylnaphthalene	12.29	142	2407	0.048	ng/ul	98
12) Phenanthrene	17.26	178	43256	0.436	ng/ul	99
13) Anthracene	17.34	178	2123	0.026	ng/ul#	90
15) Fluoranthene	19.27	202	8730	0.075	ng/ul	91
17) Pyrene	19.63	202	38593	0.425	ng/ul	99
18) Benzo(a)anthracene	21.38	228	16393m	0.205	ng/ul	
19) Chrysene	21.43	228	31317	0.342	ng/ul	97
21) Benzo(b)fluoranthene	23.00	252	7302m	0.093	ng/ul	
22) Benzo(k)fluoranthene	23.03	252	1681m	0.022	ng/ul	
23) Benzo(a)pyrene	23.60	252	8025	0.118	ng/ul#	86
24) Indeno(1,2,3-cd)pyrene	26.04	276	3071	0.039	ng/ul#	94
25) Dibenzo(a,h)anthracene	26.05	278	2523	0.040	ng/ul#	45
26) Benzo(g,h,i)perylene	26.77	276	5991	0.088	ng/ul#	90

SJ 12/11/18

SJ 12/11/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E63

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-18
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BN003755.D
% Solids : 87.4
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/07/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	3.8	U
91-57-6	2-Methylnaphthalene	3.8	U
208-96-8	Acenaphthylene	3.8	U
83-32-9	Acenaphthene	3.8	U
86-73-7	Fluorene	3.8	U
87-86-5	Pentachlorophenol	7.6	U
85-01-8	Phenanthrene	1.6	J
120-12-7	Anthracene	3.8	U
206-44-0	Fluoranthene	3.8	U
129-00-0	Pyrene	1.4	J
56-55-3	Benzo(a)anthracene	3.8	U
218-01-9	Chrysene	1.2	J
205-99-2	Benzo(b)fluoranthene	3.8	U
207-08-9	Benzo(k)fluoranthene	3.8	U
50-32-8	Benzo(a)pyrene	3.8	U
193-39-5	Indeno(1,2,3-cd)pyrene	3.8	U
53-70-3	Dibenzo(a,h)anthracene	3.8	U
191-24-2	Benzo(g,h,i)perylene	3.8	U

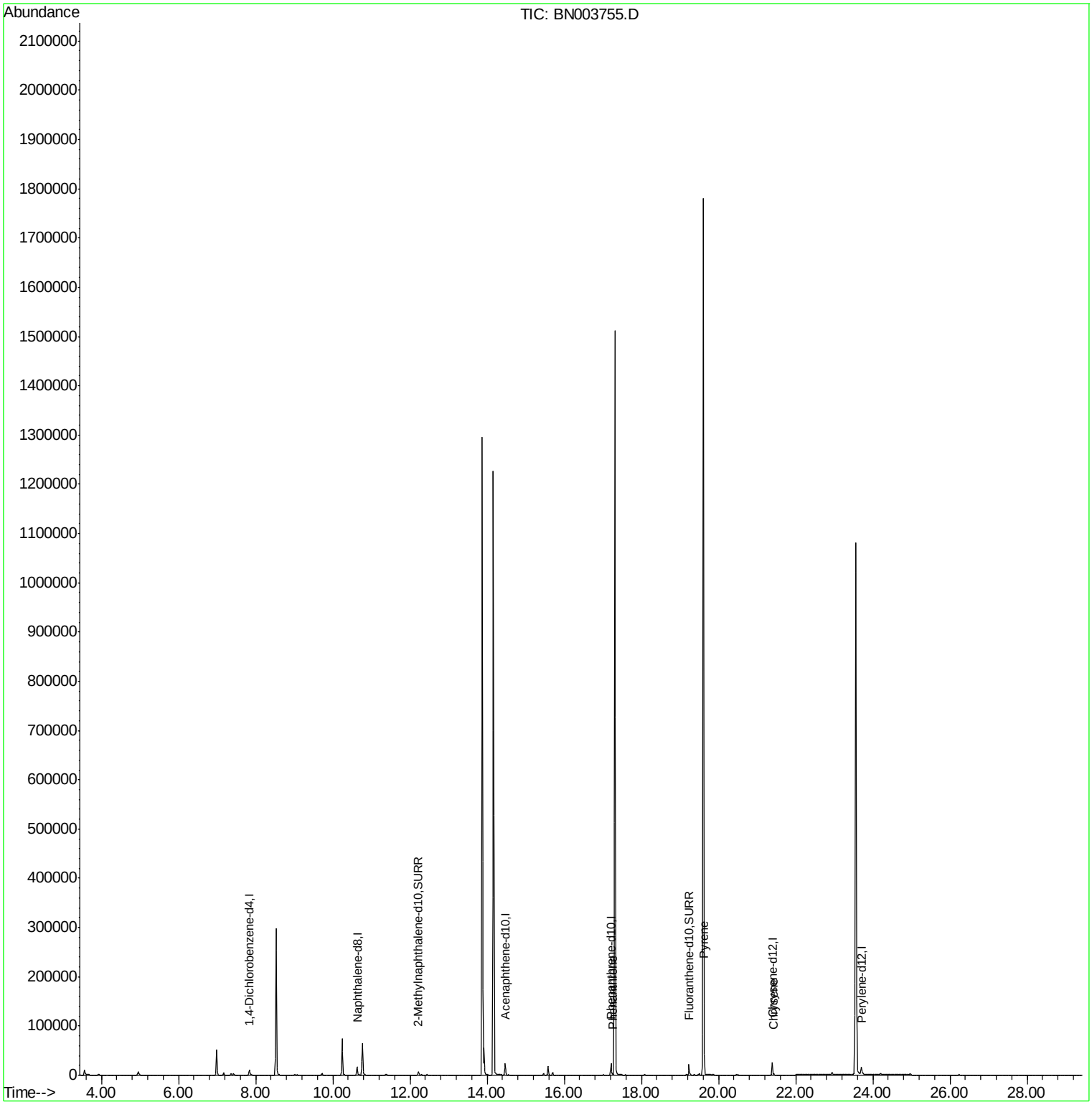
Quantitation Report (QT Reviewed)

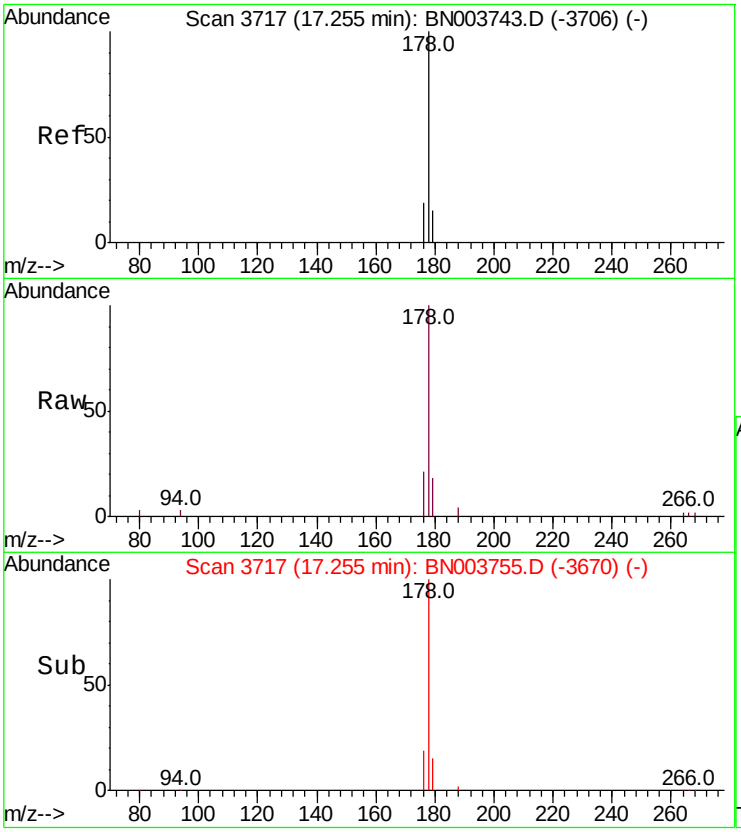
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003755.D
Acq On : 07 Dec 2018 06:29
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 07 08:11:56 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E63

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:10 PM





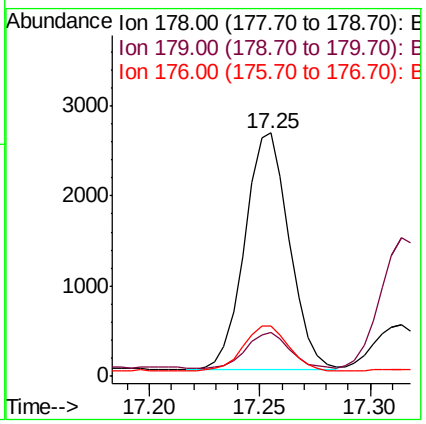
#12
Phenanthrene
Concen: 0.042 ng/ul
RT: 17.25 min Scan# 3717
Delta R.T. -0.00 min
Lab File: BN003755.D
Acq: 07 Dec 2018 06:29

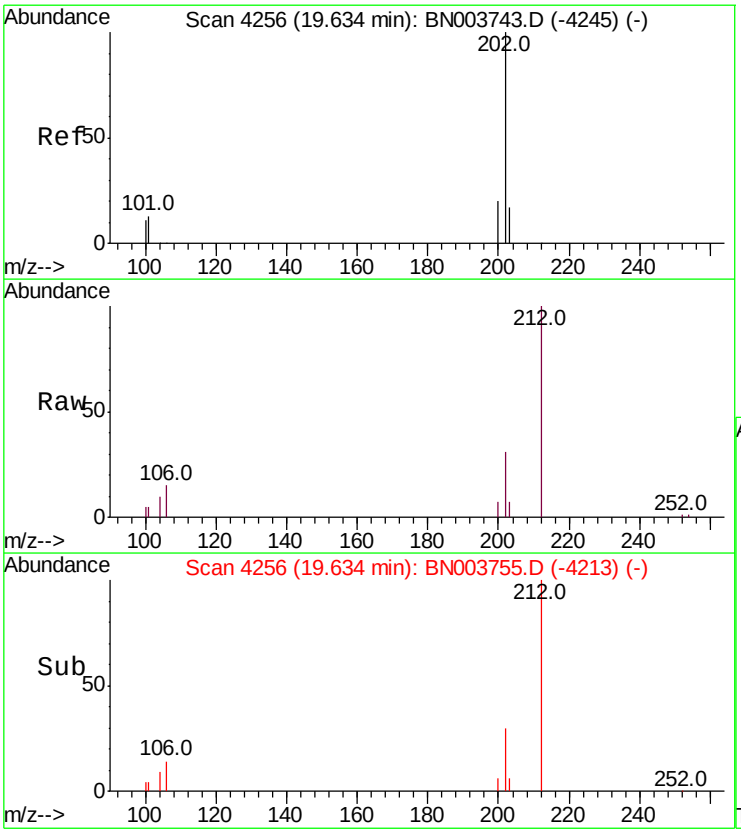
Tgt Ion:178 Resp: 3667

Ion	Ratio	Lower	Upper
178	100		
179	17.9	12.5	18.7
176	20.6	15.0	22.4

Instrument :
BNA_N
ClientSampleId :
F9E63

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:10 PM

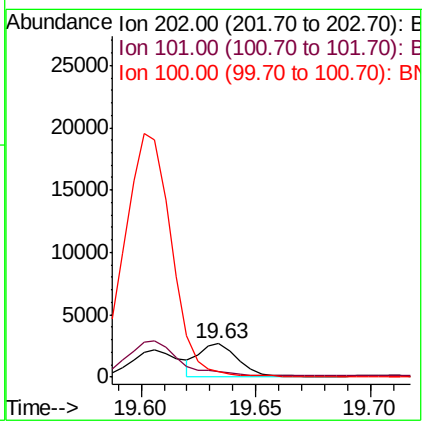


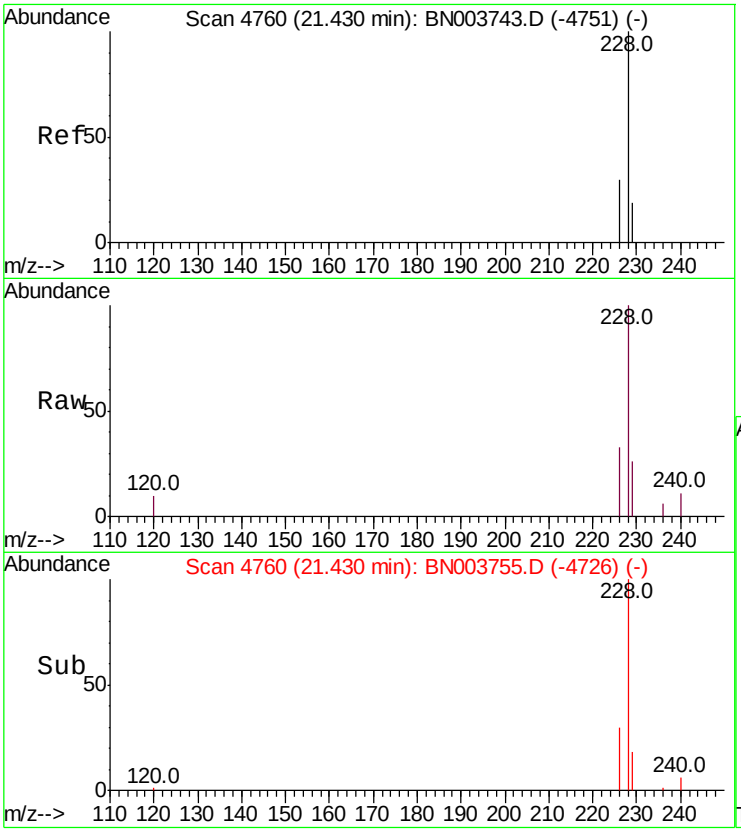


#17
Pyrene
Concen: 0.037 ng/ul
RT: 19.63 min Scan# 4256
Delta R.T. 0.00 min
Lab File: BN003755.D
Acq: 07 Dec 2018 06:29

Tgt Ion:202 Resp: 3007

Ion	Ratio	Lower	Upper
202	100		
101	17.0	10.3	15.5#
100	15.1	8.5	12.7#

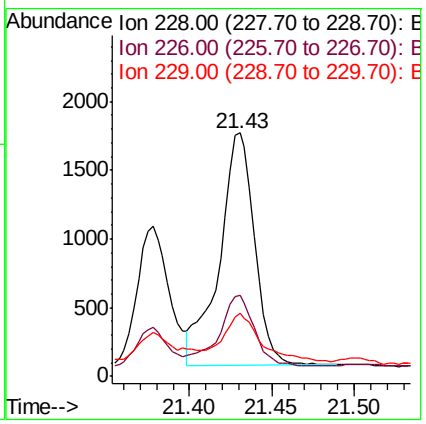




#19
Chrysene
Concen: 0.031 ng/ul
RT: 21.43 min Scan# 4760
Delta R.T. 0.00 min
Lab File: BN003755.D
Acq: 07 Dec 2018 06:29

Tgt Ion:228 Resp: 2508

Ion	Ratio	Lower	Upper
228	100		
226	33.1	24.0	36.0
229	26.1	15.7	23.5#



Instrument :
BNA_N
ClientSampleId :
F9E63

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:10 PM

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003755.D
Acq On : 07 Dec 2018 06:29
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9E63

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:10 PM

Quant Time: Dec 07 08:11:56 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5385	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	22379	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12364	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	26488m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	22461m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	16926m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	10364	0.30	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	22431m	0.29	ng/ul	0.00
Target Compounds						Qvalue
12) Phenanthrene	17.25	178	3667	0.042	ng/ul	95
17) Pyrene	19.63	202	3007	0.037	ng/ul#	89
19) Chrysene	21.43	228	2508	0.031	ng/ul#	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

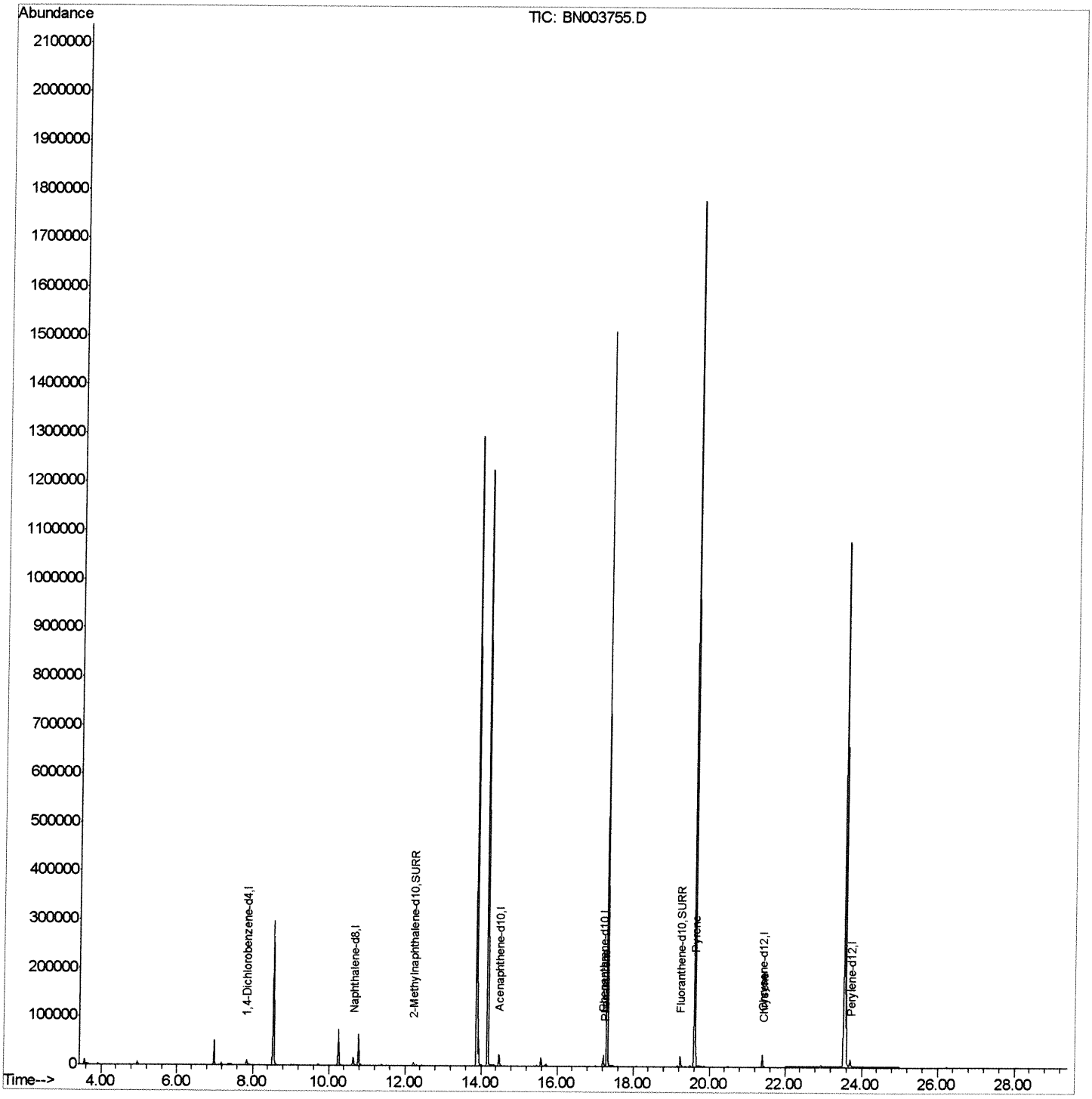
Quantitation Report (QT Reviewed)

Data File : BN003755.D
Acq On : 07 Dec 2018 06:29
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 07 08:11:56 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E63

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:10 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

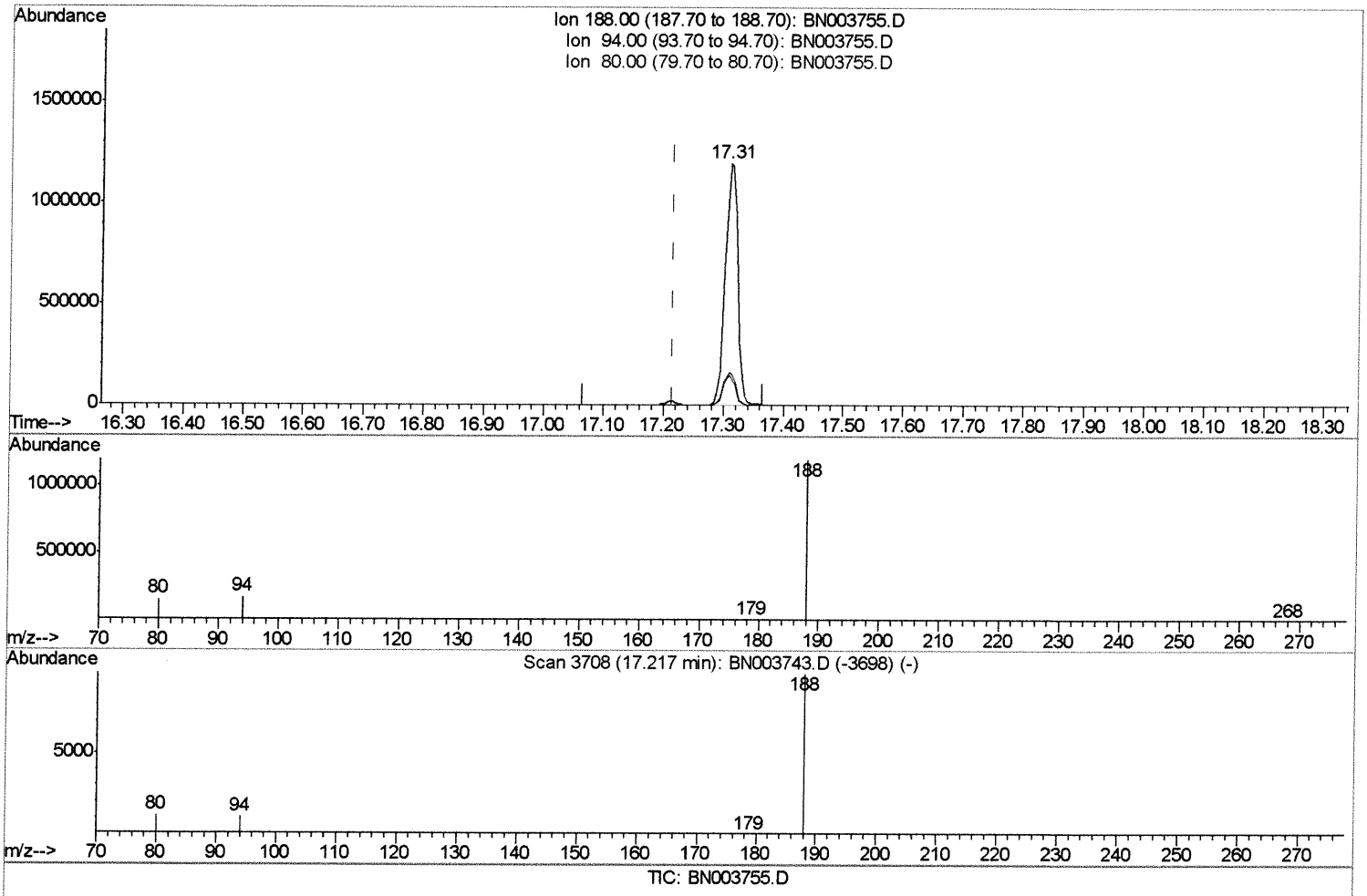
Quantitation Report (Qedit)

Data File : BN003755.D
Acq On : 07 Dec 2018 06:29
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 07 08:06:10 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E63

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:10 PM



TIC: BN003755.D

(10) Phenanthrene-d10 (I)

17.310min (+0.093) 0.40ng/ul

response 1724369

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	13.74#
80.00	11.60	12.38
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003755.D
Acq On : 07 Dec 2018 06:29
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 07 08:06:10 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E63

Manual Integrations APPROVED
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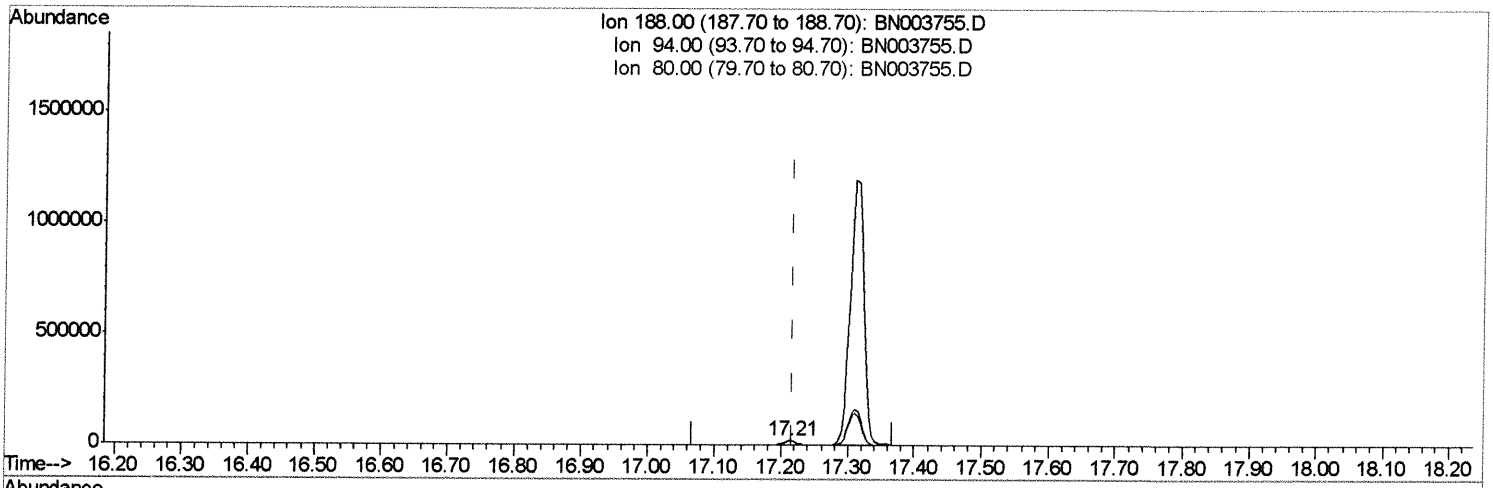
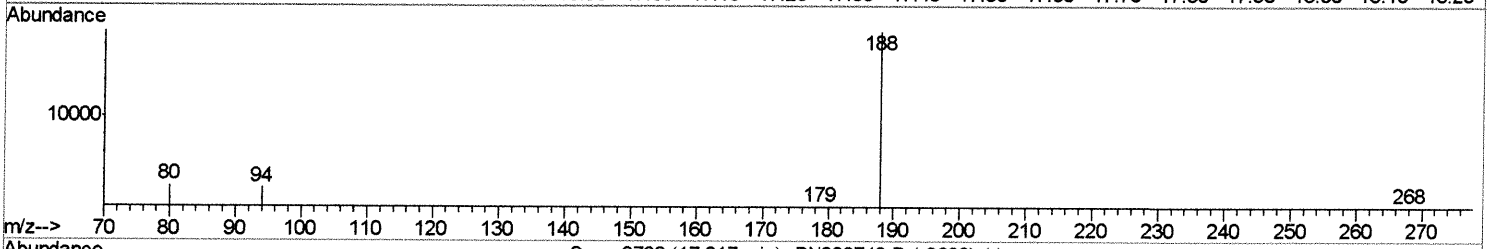
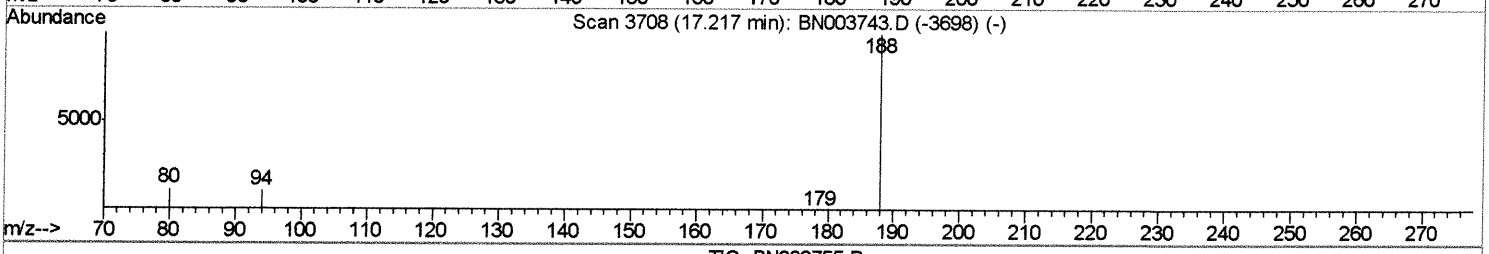
12/10/2018 12:21:10 PM







TIC: BN003755.D

(10) Phenanthrene-d10 (I)

17.213min (-0.004) 0.40ng/ul m > SJ 12/11/18

response 26488

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	10.93
80.00	11.60	11.87
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

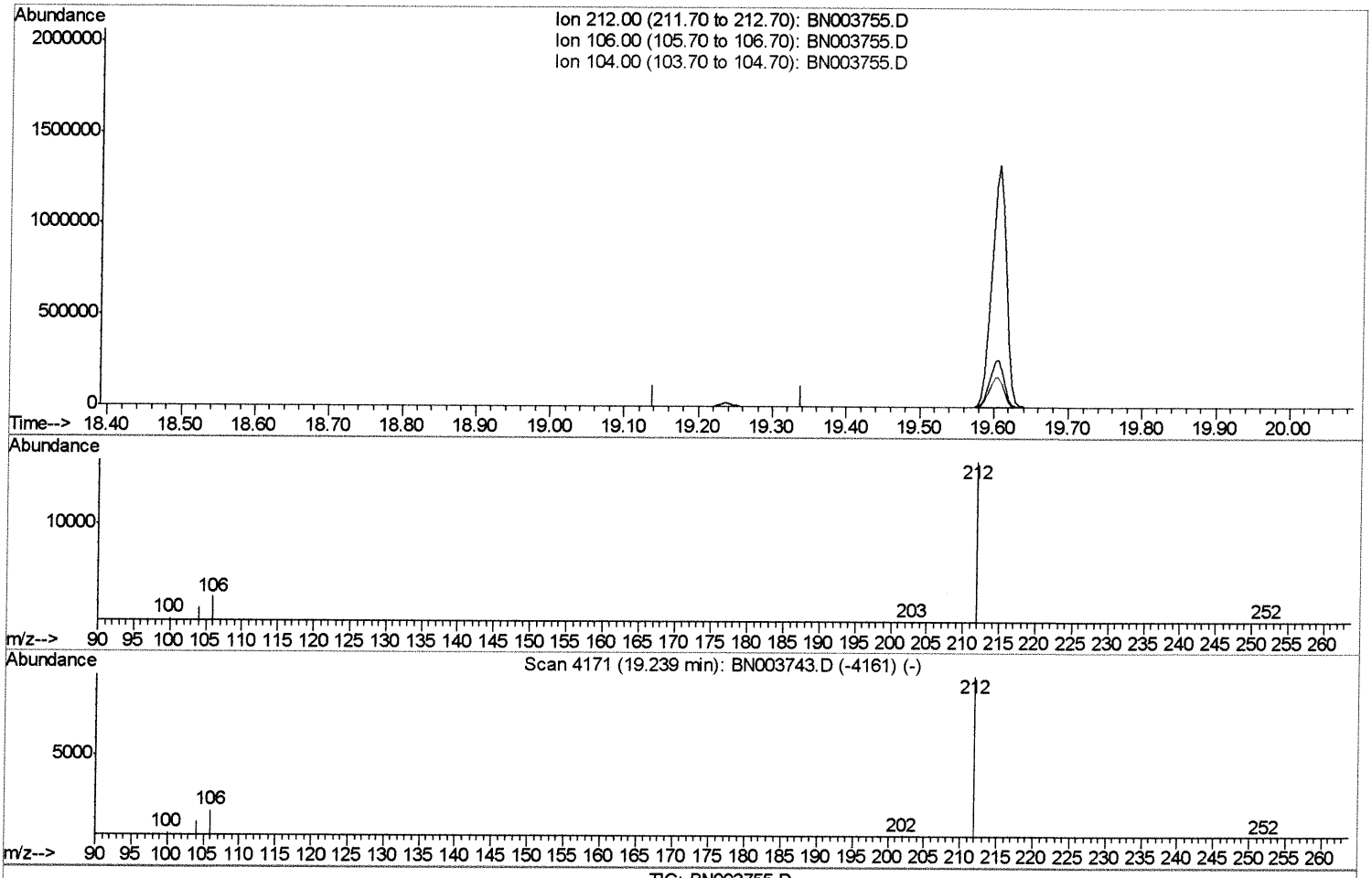
Quantitation Report (Qedit)

Data File : BN003755.D
Acq On : 07 Dec 2018 06:29
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 07 08:10:32 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E63

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:10 PM



TIC: BN003755.D

(14) Fluoranthene-d10 (SURR)

19.239min (-19.239) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

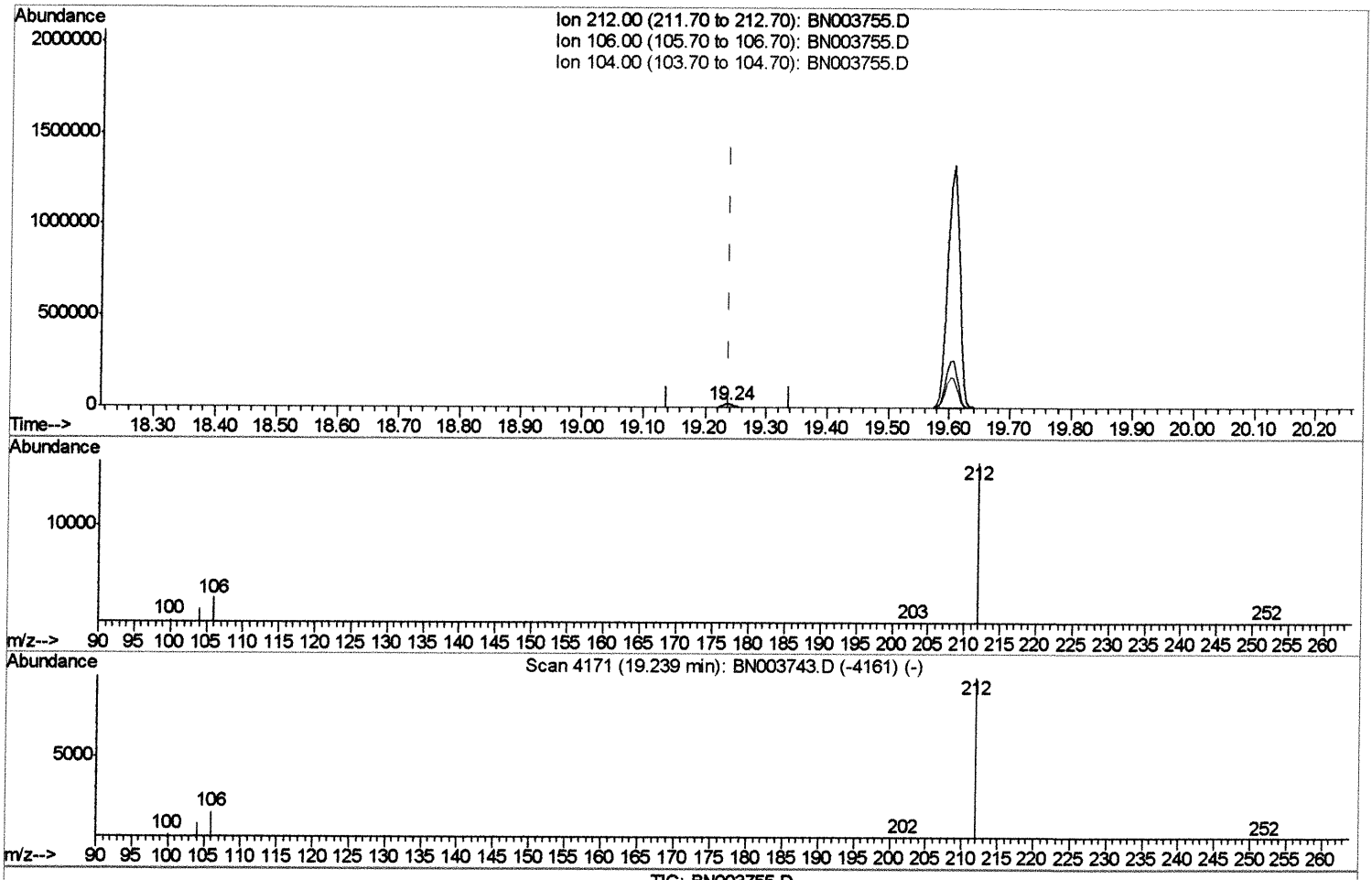
Quantitation Report (Qedit)

Data File : BN003755.D
Acq On : 07 Dec 2018 06:29
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 07 08:10:32 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E63

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:10 PM



TIC: BN003755.D

(14) Fluoranthene-d10 (SURR)

19.239min (-0.000) 0.29ng/ul m

response 22431

> 57
12/11/18

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

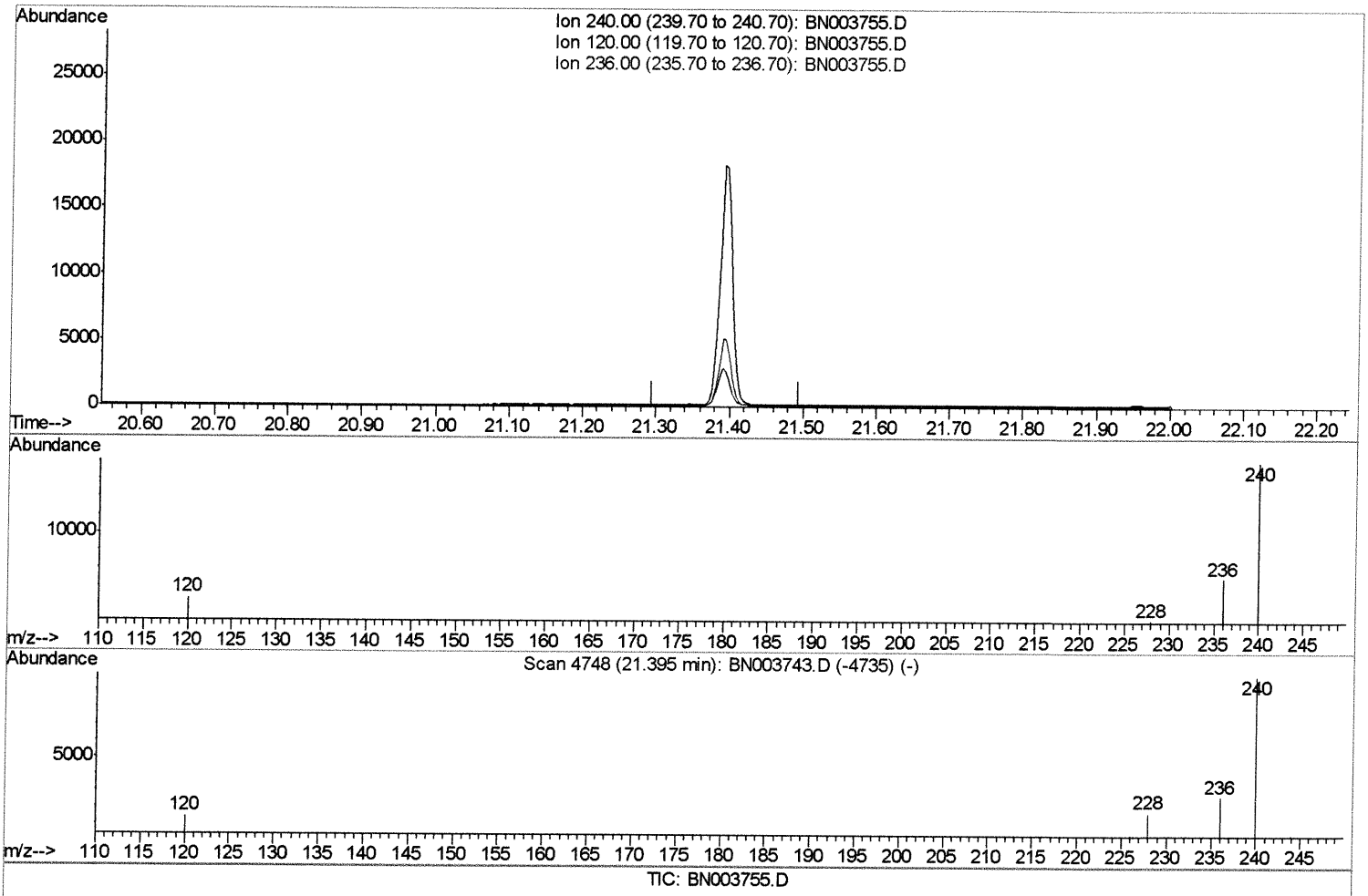
Quantitation Report (Qedit)

Data File : BN003755.D
Acq On : 07 Dec 2018 06:29
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 07 08:10:32 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E63

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:10 PM



(16) Chrysene-d12 (I)

21.395min (-21.395) 0.00ng/ul

response 0

Ion	Exp%	Act%
240.00	100	0.00
120.00	14.00	0.00#
236.00	27.60	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

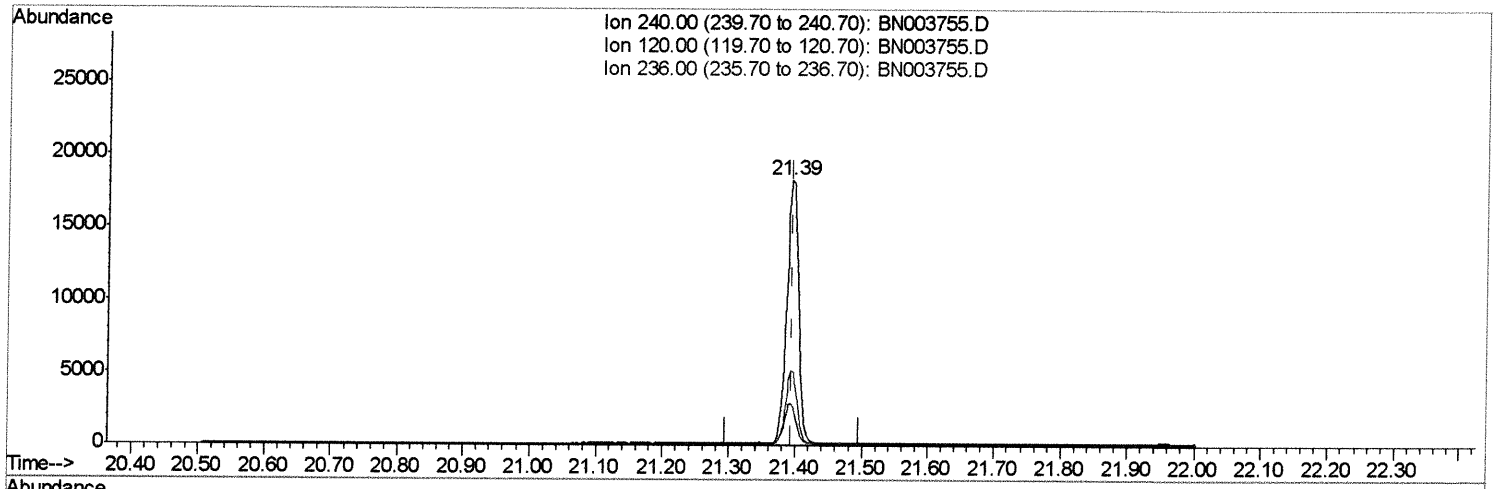
Quantitation Report (Qedit)

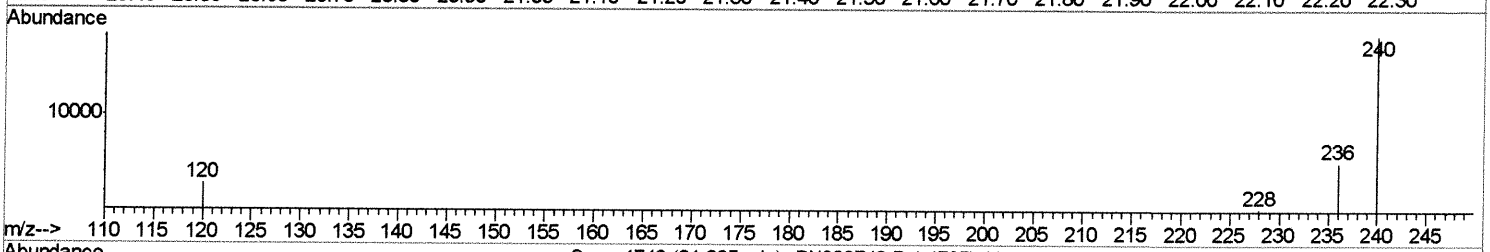
Data File : BN003755.D
Acq On : 07 Dec 2018 06:29
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 26 Sample Multiplier: 1

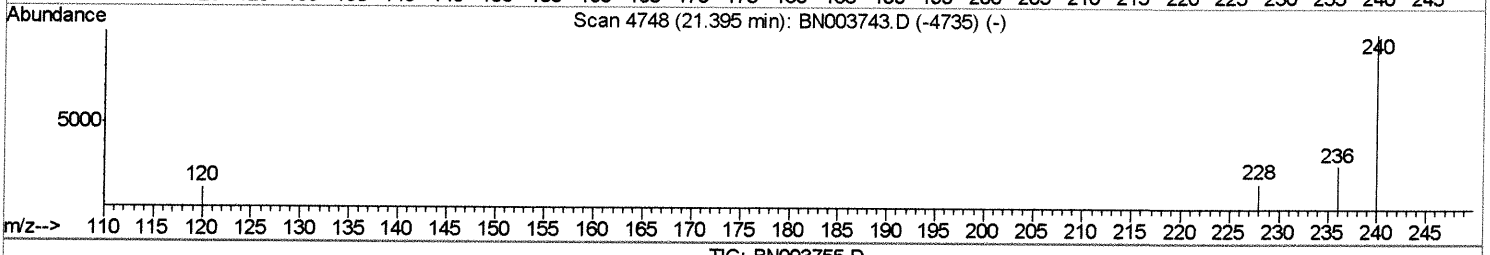
Quant Time: Dec 07 08:10:32 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E63

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:10 PM







TIC: BN003755.D

(16) Chrysene-d12 (I)

21.393min (-0.003) 0.40ng/ul m

response 22461

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	15.76
236.00	27.60	28.10
0.00	0.00	0.00

SJ 12/11/18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

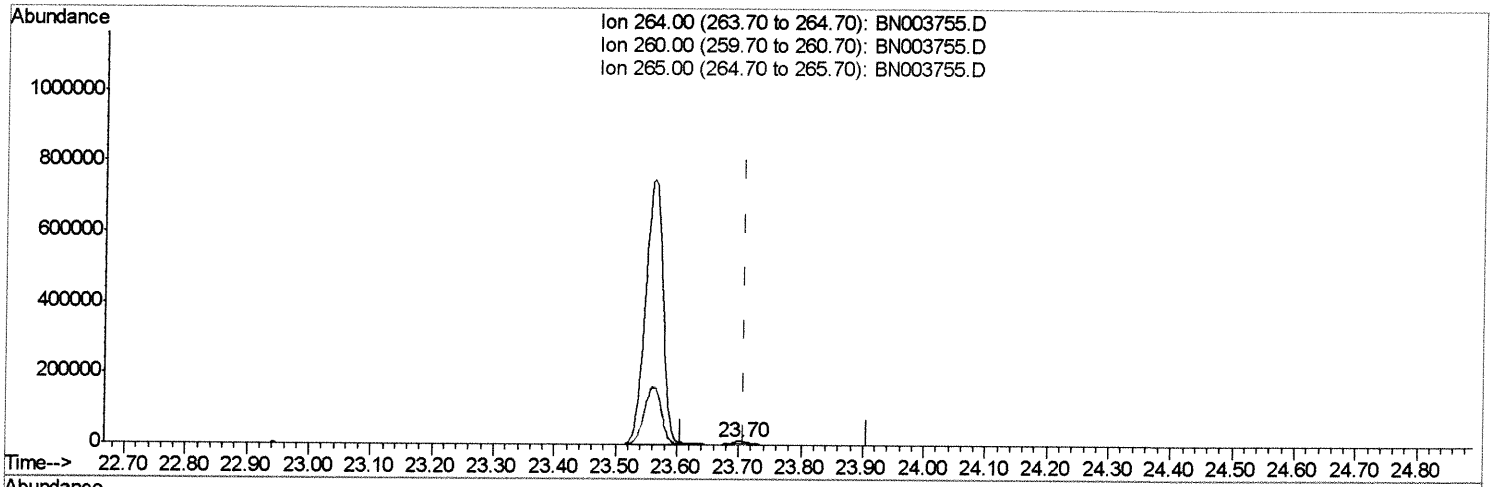
Quantitation Report (Qedit)

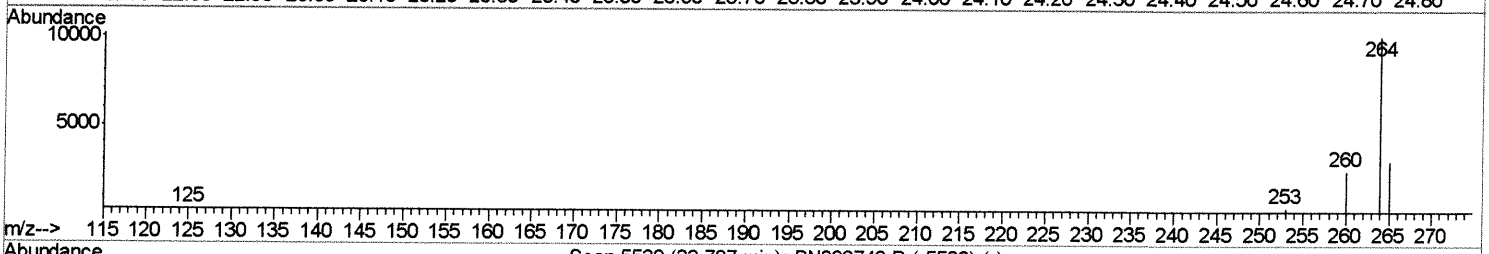
Data File : BN003755.D
Acq On : 07 Dec 2018 06:29
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 26 Sample Multiplier: 1

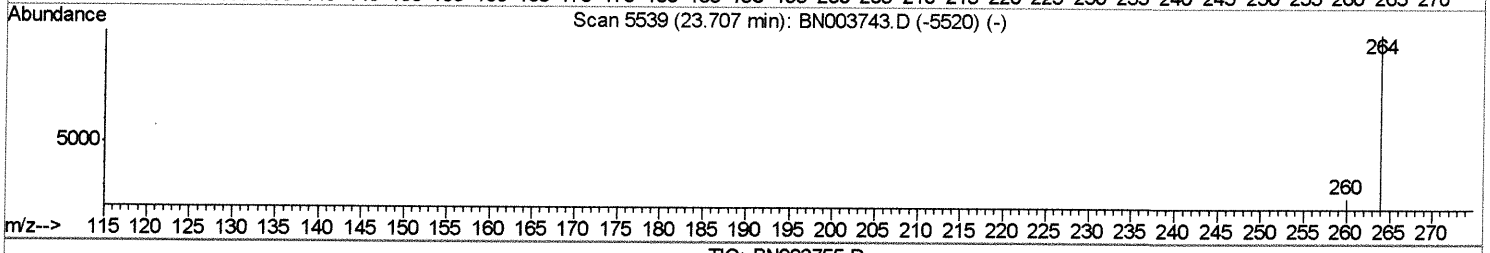
Quant Time: Dec 07 08:11:11 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E63

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:10 PM







TIC: BN003755.D

(20) Perylene-d12 (I)

23.705min (-0.003) 0.40ng/ul

response 22134

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	25.48
265.00	33.50	30.40
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

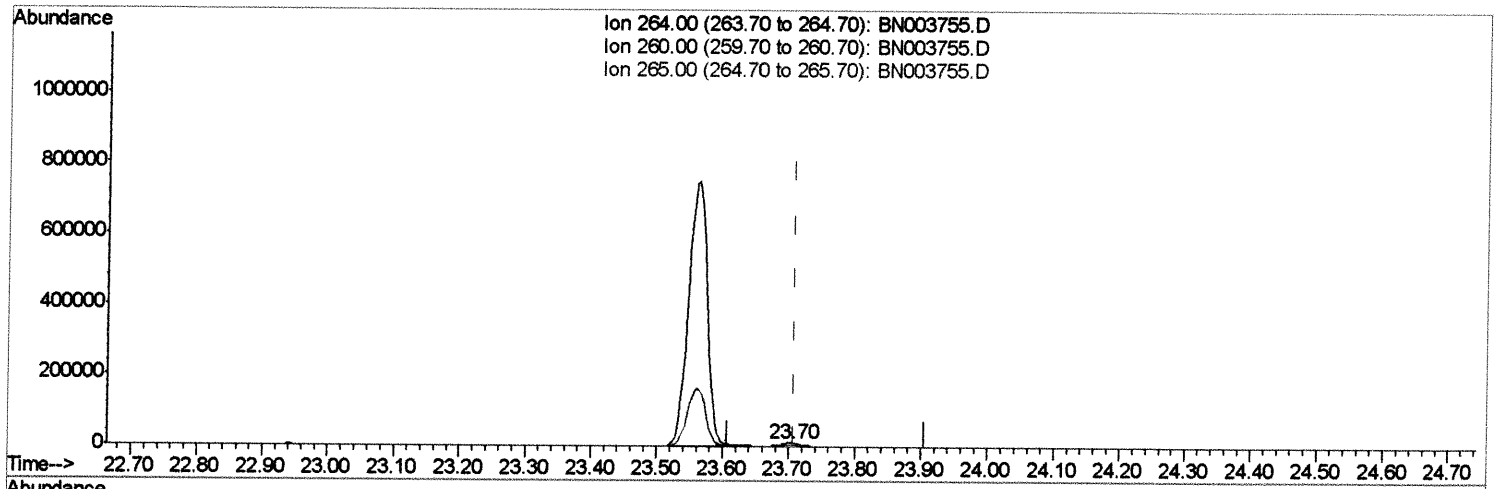
Quantitation Report (Qedit)

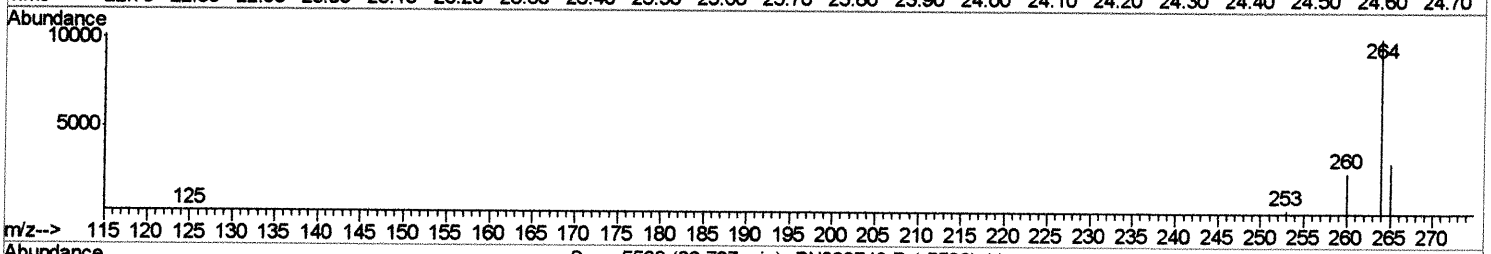
Data File : BN003755.D
Acq On : 07 Dec 2018 06:29
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 26 Sample Multiplier: 1

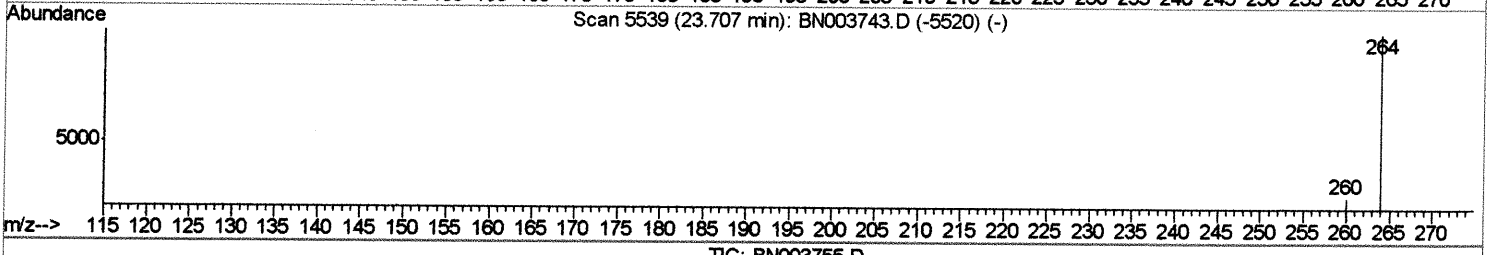
Quant Time: Dec 07 08:11:11 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E63

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:10 PM







(20) Perylene-d12 (I)

23.705min (-0.003) 0.40ng/ul m

response 16926

SJ 12/11/18

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	25.48
265.00	33.50	30.40
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003755.D
Acq On : 07 Dec 2018 06:29
Operator : JU/SJ
Sample : J6227-18
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 07 08:11:56 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5385	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	22379	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12364	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	26488m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	22461m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	16926m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	10364	0.30	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	22431m	0.29	ng/ul	0.00
Target Compounds						Qvalue
12) Phenanthrene	17.25	178	3667	0.042	ng/ul	95
17) Pyrene	19.63	202	3007	0.037	ng/ul#	89
19) Chrysene	21.43	228	2508	0.031	ng/ul#	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
BNA_N
ClientSampleId :
F9E63

Manual Integrations APPROVED
mohammad
12/10/2018 12:21:10 PM

SJ
12/11/18

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E64

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-01
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BN003741.D
% Solids : 85.1
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/06/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	3.9	U
91-57-6	2-Methylnaphthalene	3.9	U
208-96-8	Acenaphthylene	3.9	U
83-32-9	Acenaphthene	3.9	U
86-73-7	Fluorene	3.9	U
87-86-5	Pentachlorophenol	7.8	U
85-01-8	Phenanthrene	3.9	U
120-12-7	Anthracene	3.9	U
206-44-0	Fluoranthene	3.9	U
129-00-0	Pyrene	3.9	U
56-55-3	Benzo(a)anthracene	3.9	U
218-01-9	Chrysene	3.9	U
205-99-2	Benzo(b)fluoranthene	3.9	U
207-08-9	Benzo(k)fluoranthene	3.9	U
50-32-8	Benzo(a)pyrene	3.9	U
193-39-5	Indeno(1,2,3-cd)pyrene	3.9	U
53-70-3	Dibenzo(a,h)anthracene	3.9	U
191-24-2	Benzo(g,h,i)perylene	3.9	U

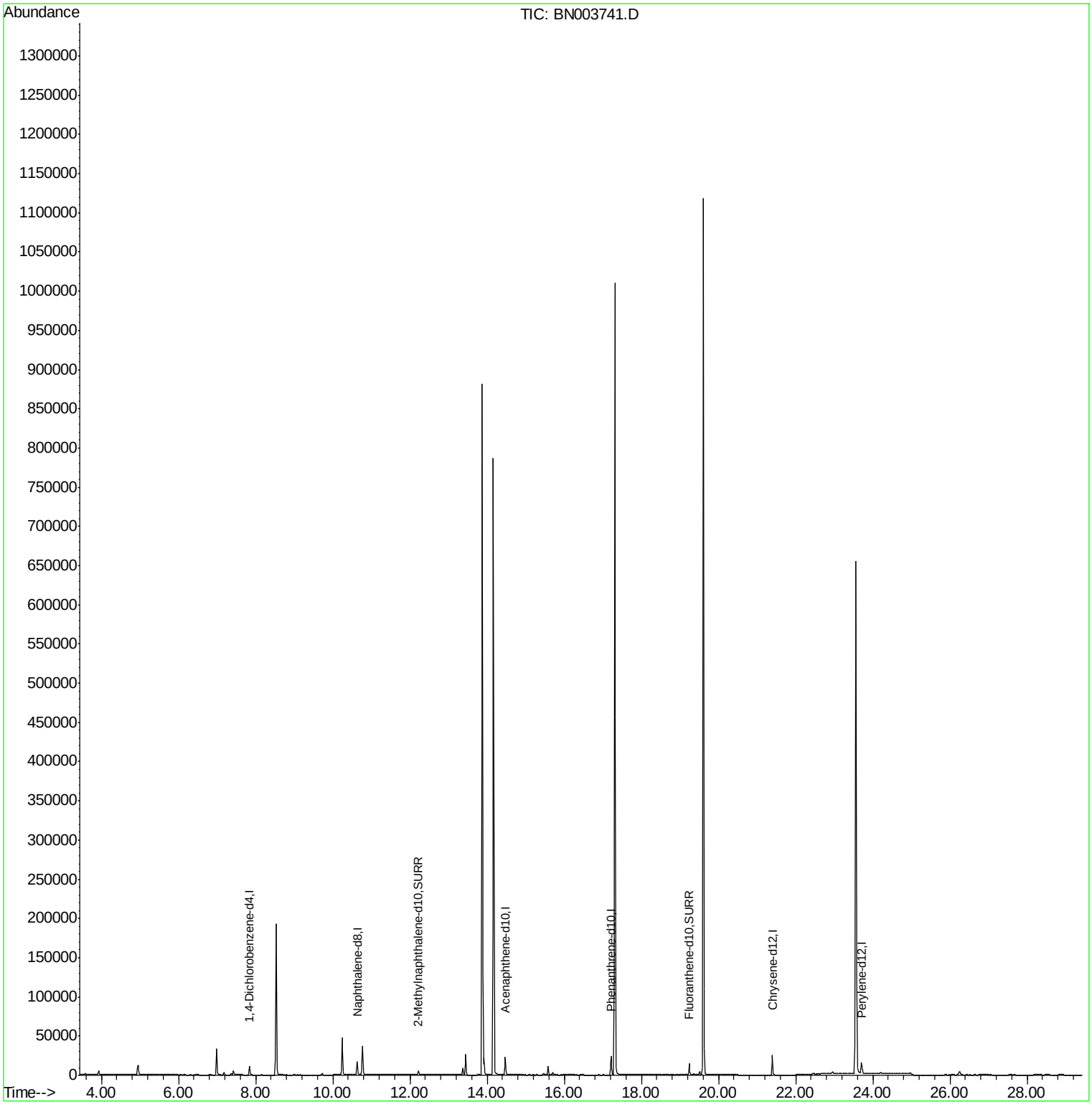
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003741.D
Acq On : 06 Dec 2018 21:09
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 07 04:02:01 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E64

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:31 PM



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003741.D
Acq On : 06 Dec 2018 21:09
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9E64

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:31 PM

Quant Time: Dec 07 04:02:01 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5614	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	23235	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12462	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	27596m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	22686m	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	18273m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	6663	0.19	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	14288m	0.18	ng/ul	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

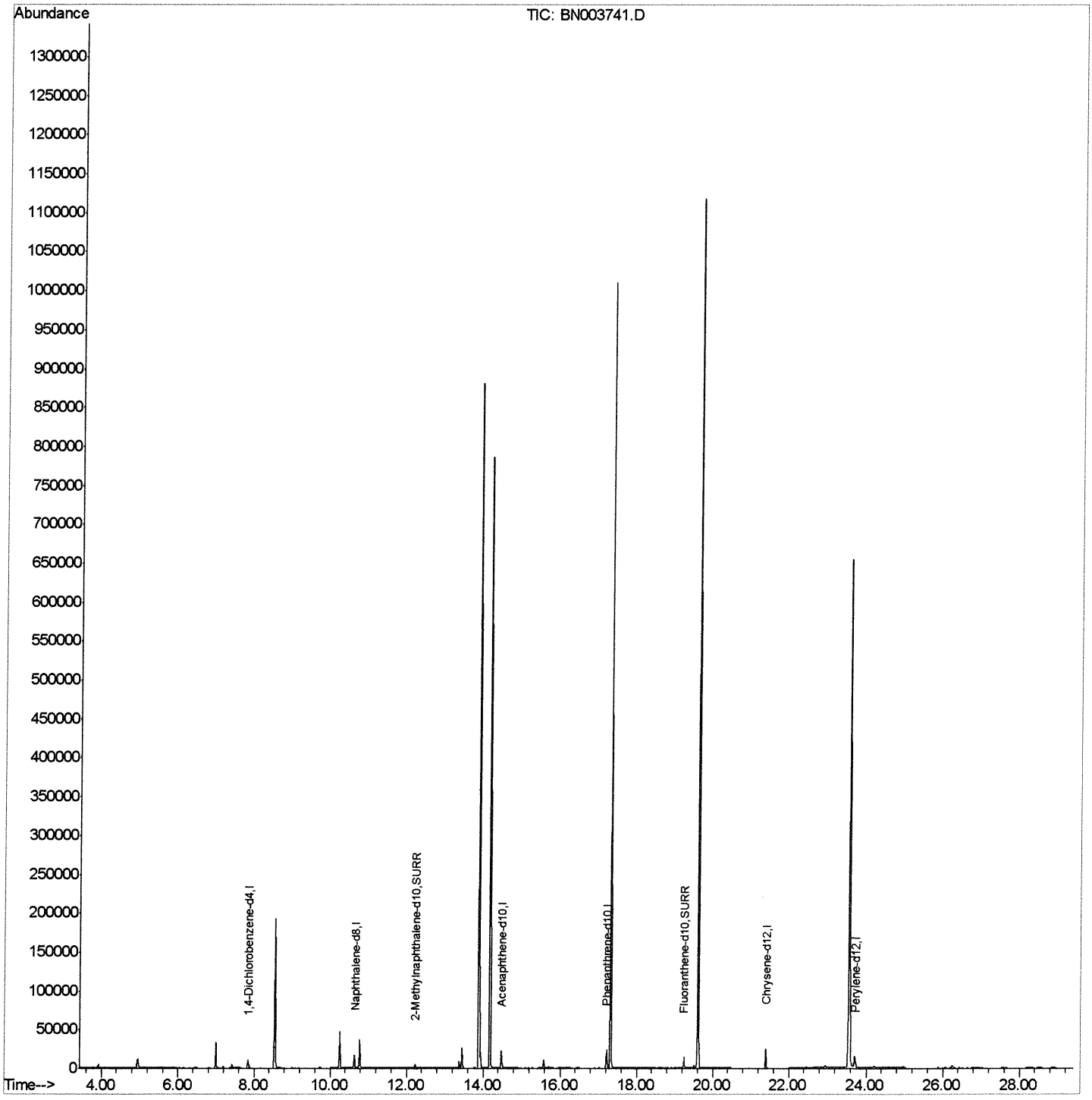
Quantitation Report (QT Reviewed)

Data File : BN003741.D
Acq On : 06 Dec 2018 21:09
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 07 04:02:01 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E64

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:31 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

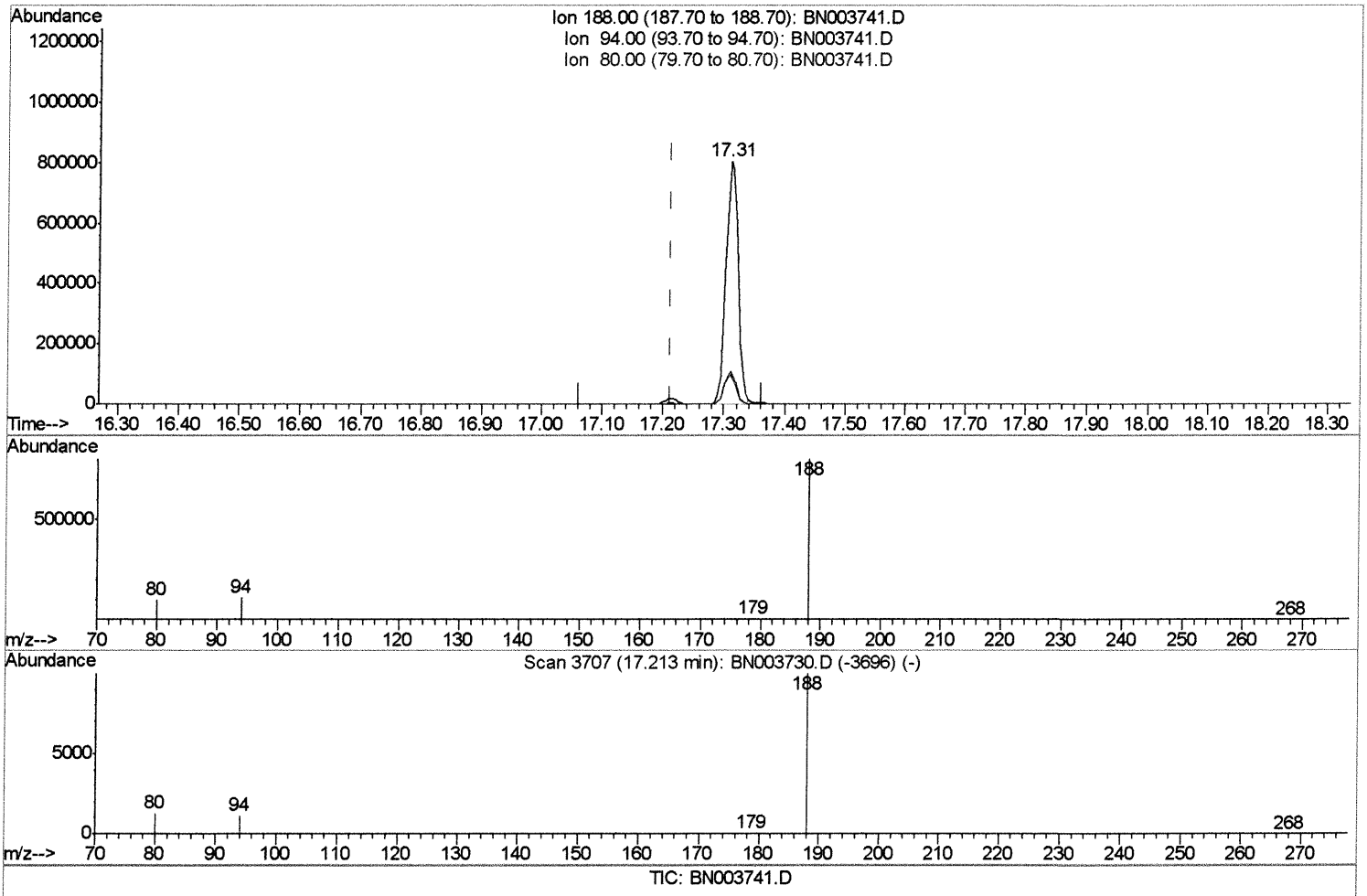
Quantitation Report (Qedit)

Data File : BN003741.D
Acq On : 06 Dec 2018 21:09
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 07 03:20:43 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E64

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:31 PM



TIC: BN003741.D

(10) Phenanthrene-d10 (I)

17.310min (+0.097) 0.40ng/ul

response 1111188

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	13.46#
80.00	11.60	12.17
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

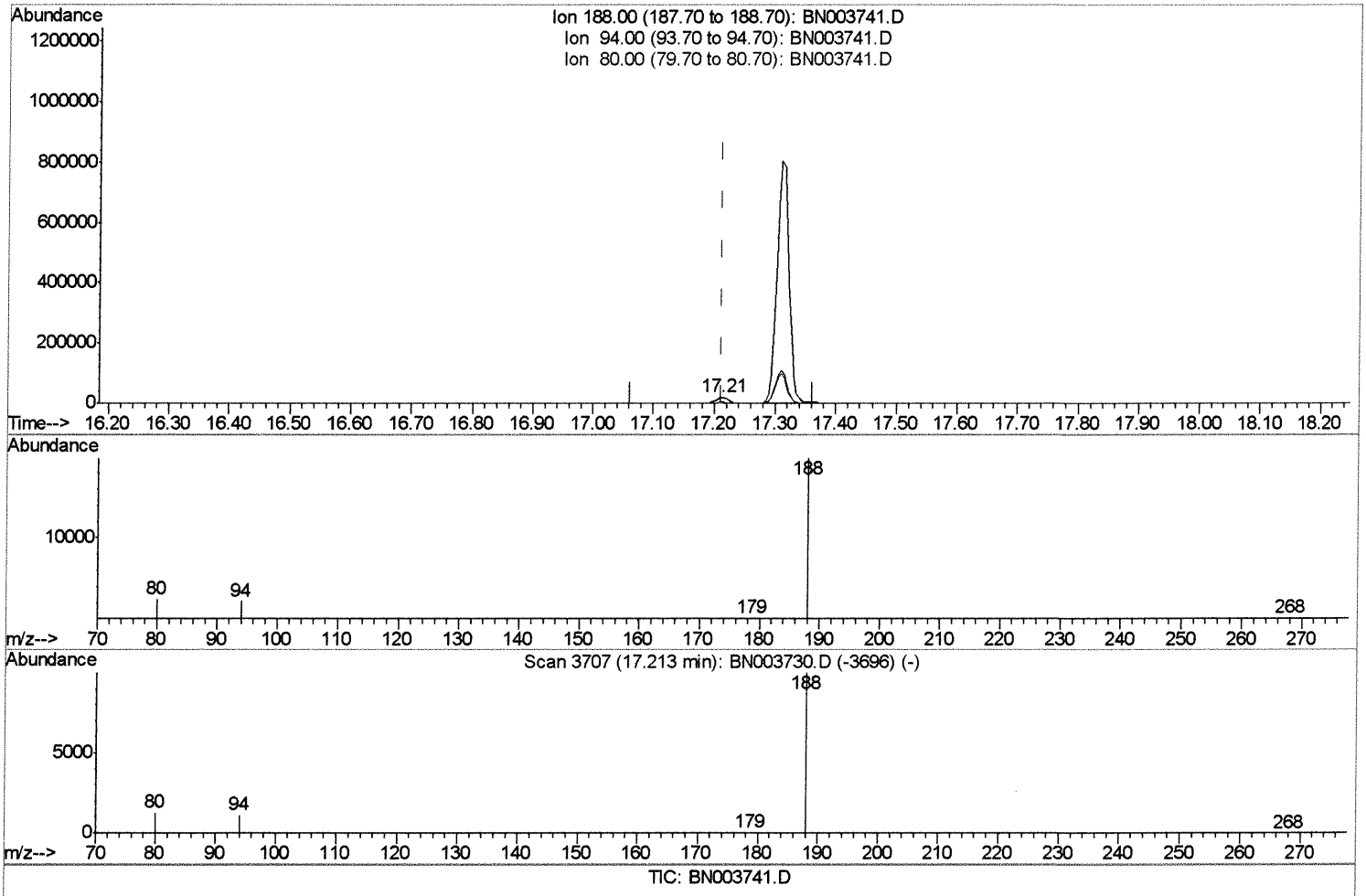
Quantitation Report (Qedit)

Data File : BN003741.D
Acq On : 06 Dec 2018 21:09
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 07 03:20:43 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E64

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:31 PM



TIC: BN003741.D

(10) Phenanthrene-d10 (I)

17.213min (-0.000) 0.40ng/ul m) SJ 12/11/18

response 27596

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	11.13
80.00	11.60	12.44
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

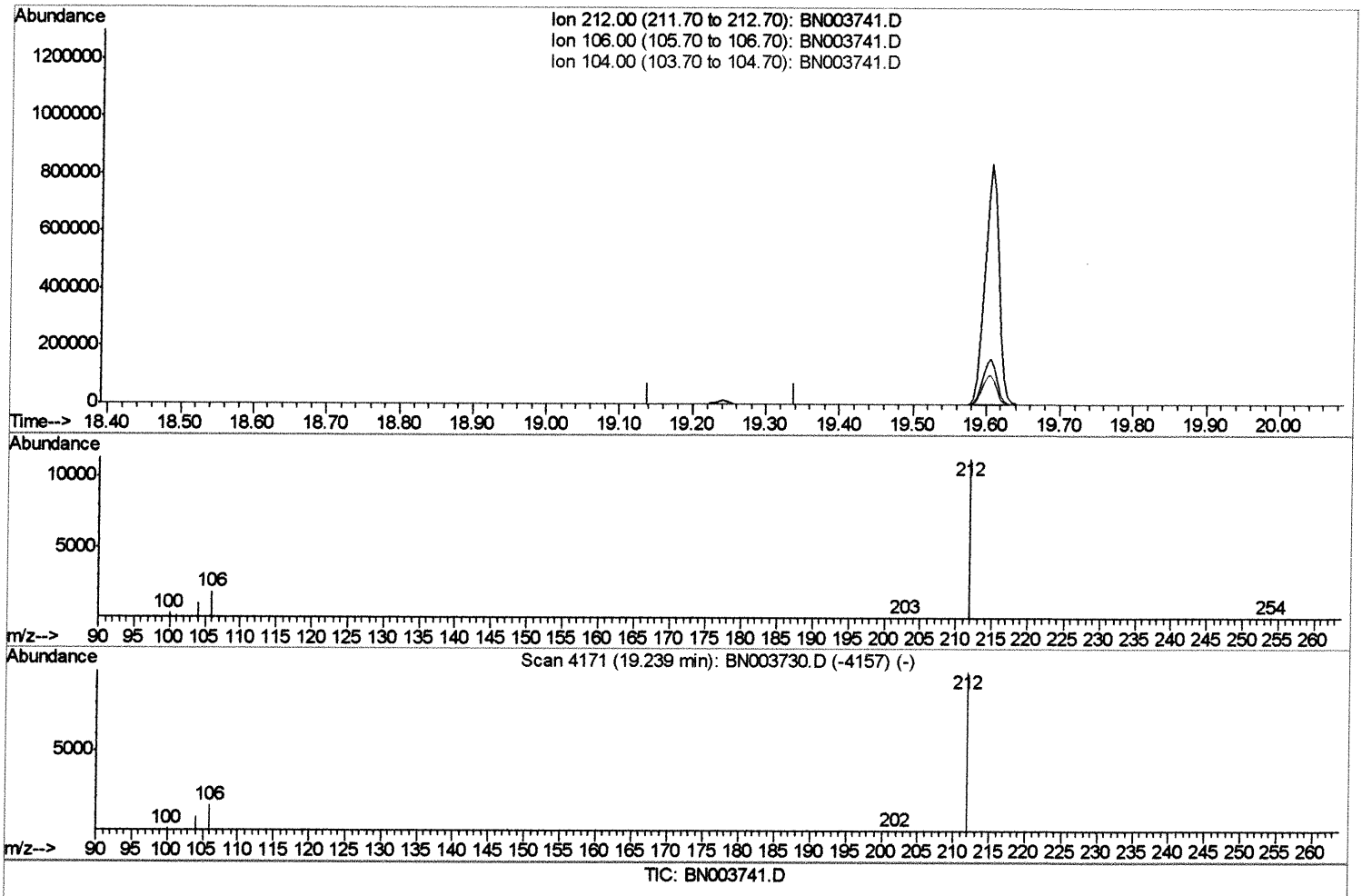
Quantitation Report (Qedit)

Data File : BN003741.D
Acq On : 06 Dec 2018 21:09
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 07 04:00:01 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E64

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:31 PM



TIC: BN003741.D

(14) Fluoranthene-d10 (SURR)

19.239min (-19.239) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

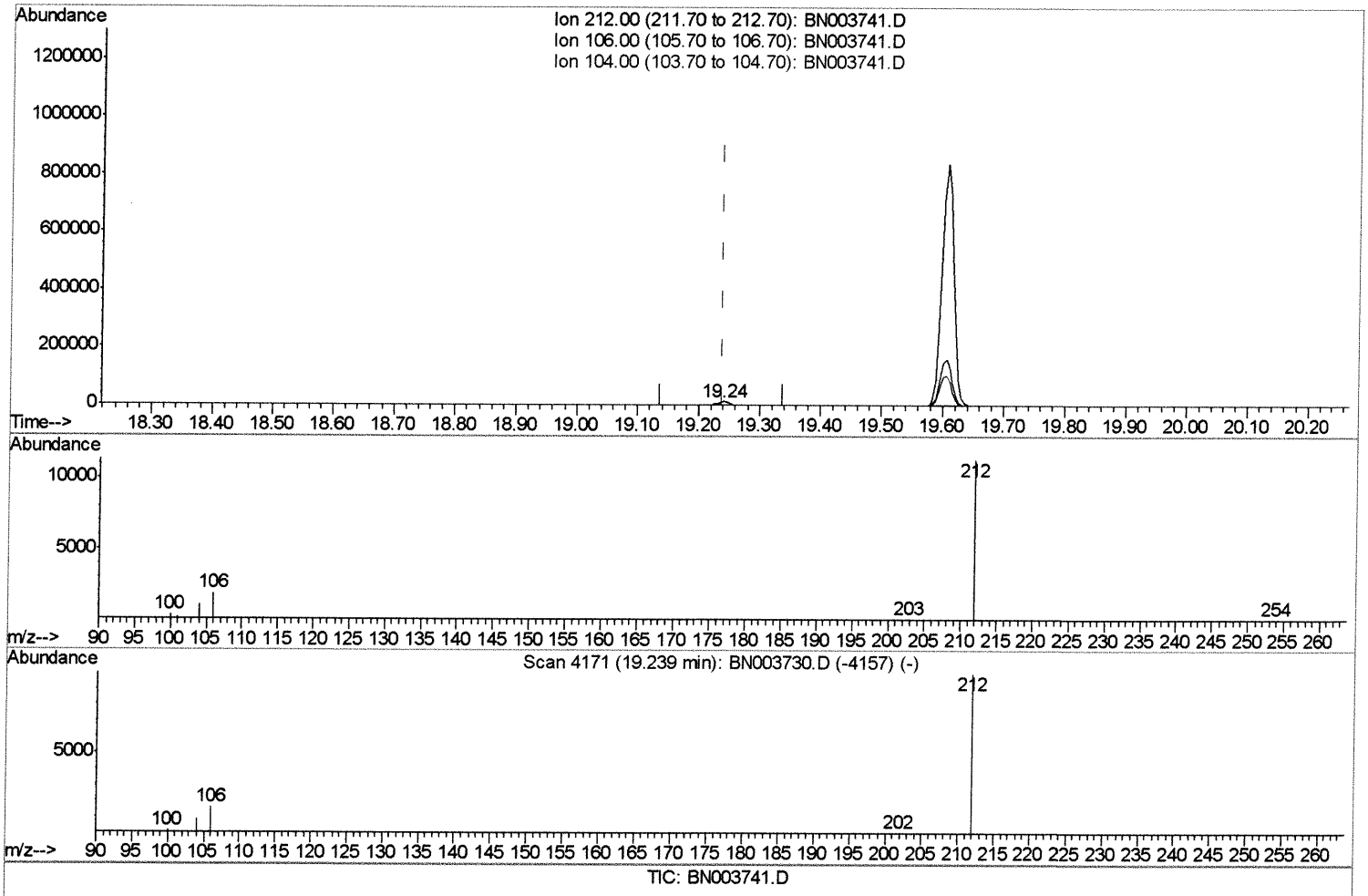
Quantitation Report (Qedit)

Data File : BN003741.D
Acq On : 06 Dec 2018 21:09
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 07 04:00:01 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E64

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:31 PM



TIC: BN003741.D

(14) Fluoranthene-d10 (SURR)

19.239min (-0.000) 0.18ng/ul m > SJ 12/11/18

response 14288

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

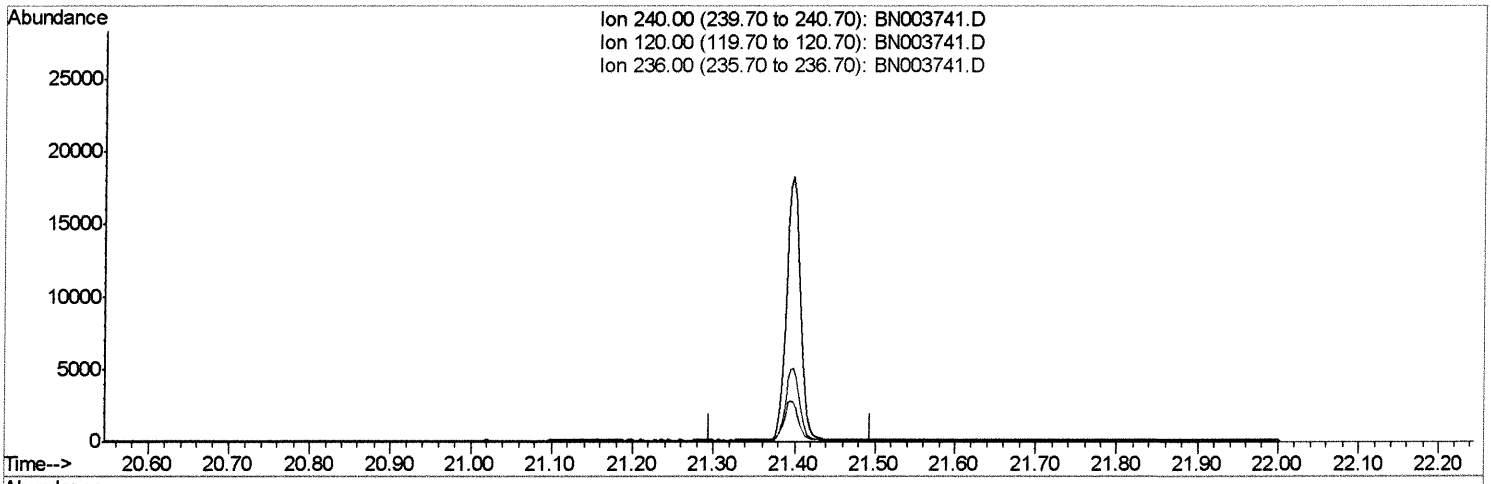
Quantitation Report (Qedit)

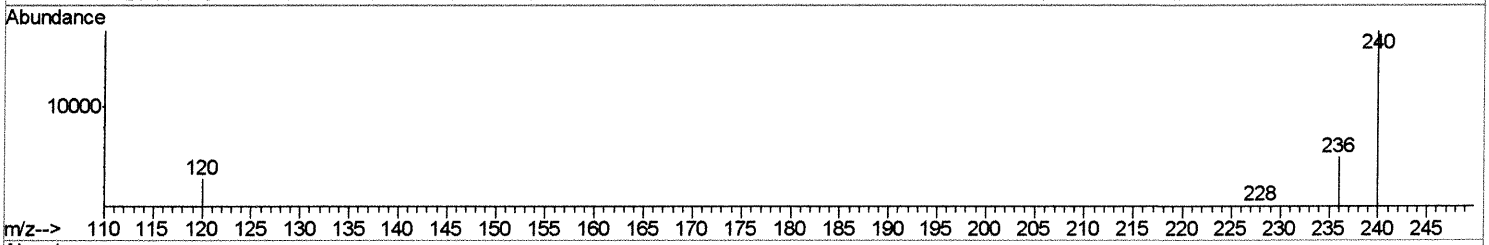
Data File : BN003741.D
Acq On : 06 Dec 2018 21:09
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 13 Sample Multiplier: 1

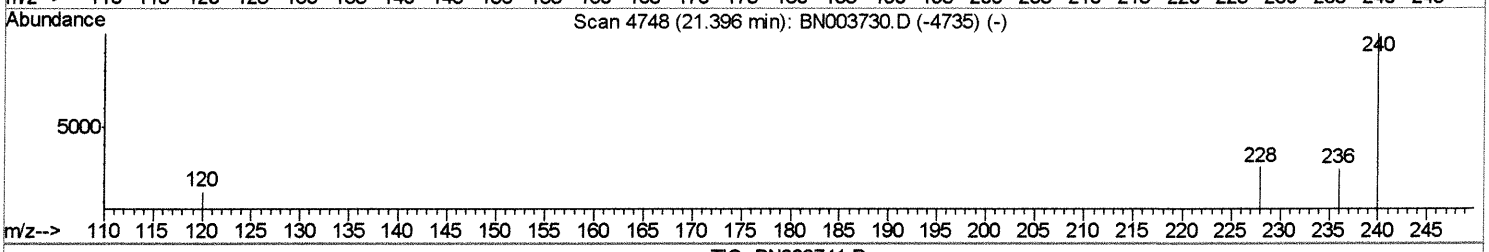
Quant Time: Dec 07 04:00:01 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E64

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:31 PM







TIC: BN003741.D

(16) Chrysene-d12 (I)

21.396min (-21.396) 0.00ng/ul

response 0

Ion	Exp%	Act%
240.00	100	0.00
120.00	14.00	0.00#
236.00	27.60	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

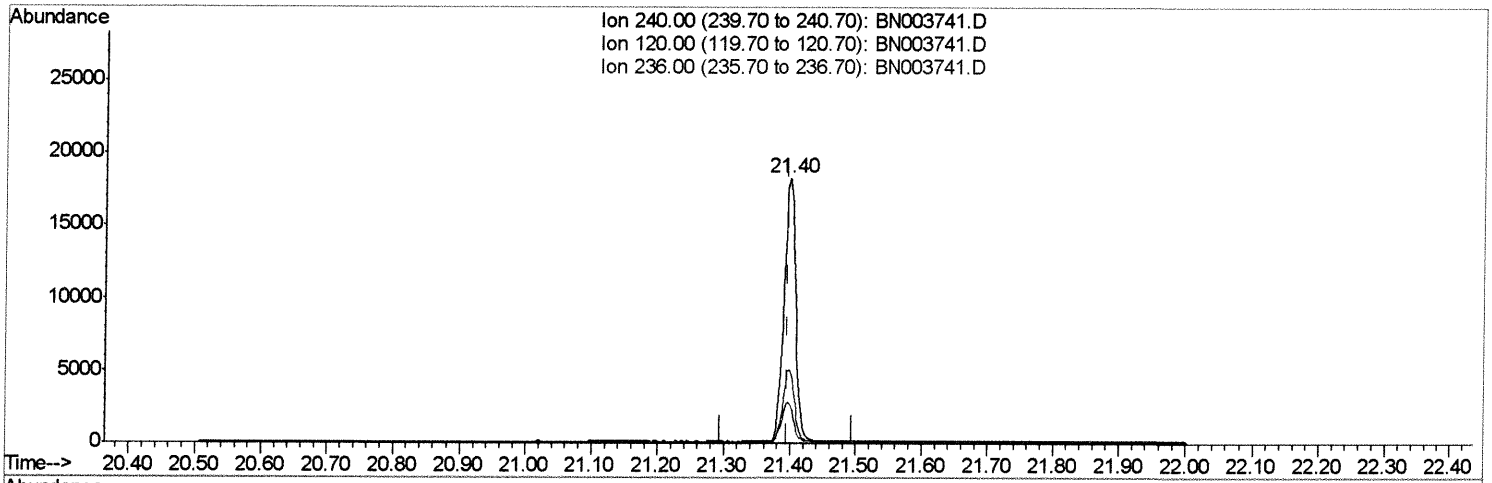
Quantitation Report (Qedit)

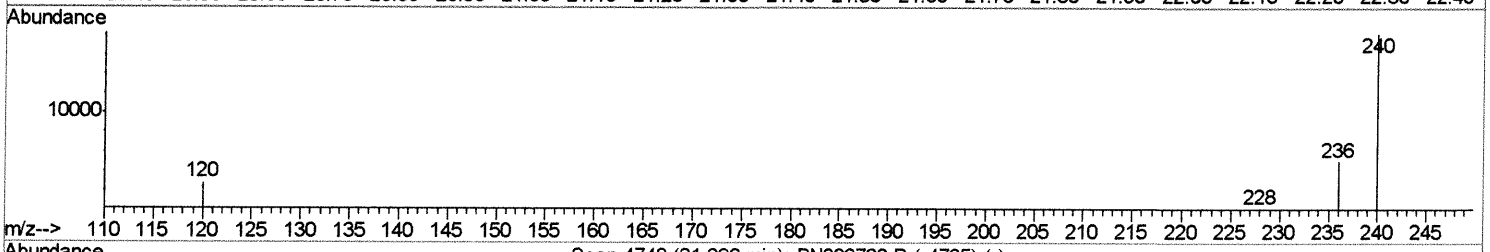
Data File : BN003741.D
Acq On : 06 Dec 2018 21:09
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 13 Sample Multiplier: 1

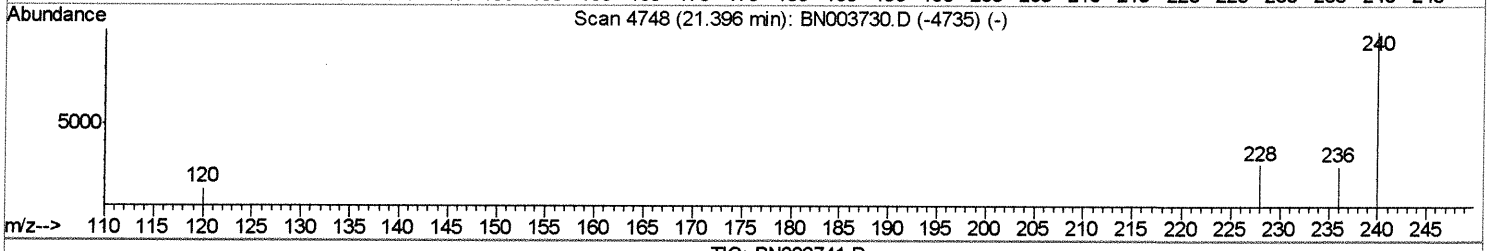
Quant Time: Dec 07 04:00:01 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E64

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:31 PM







TIC: BN003741.D

(16) Chrysene-d12 (I)

21.398min (+0.003) 0.40ng/ul m > SJ 12/11/18

response 22686

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	14.98
236.00	27.60	27.69
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

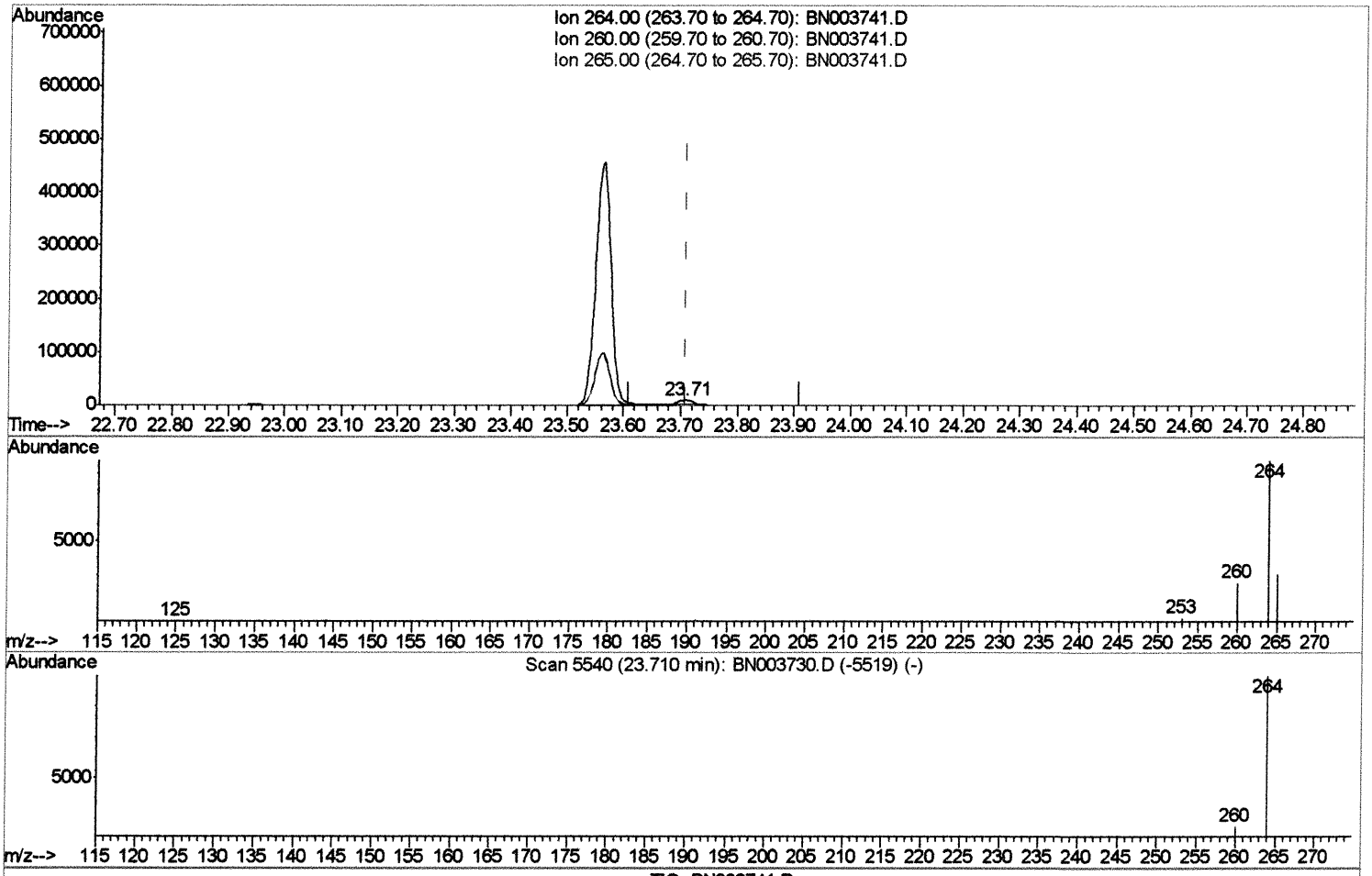
Quantitation Report (Qedit)

Data File : BN003741.D
Acq On : 06 Dec 2018 21:09
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 07 04:00:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E64

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:31 PM



(20) Perylene-d12 (I)

23.710min (-0.000) 0.40ng/ul

response 21440

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.03
265.00	33.50	30.84
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

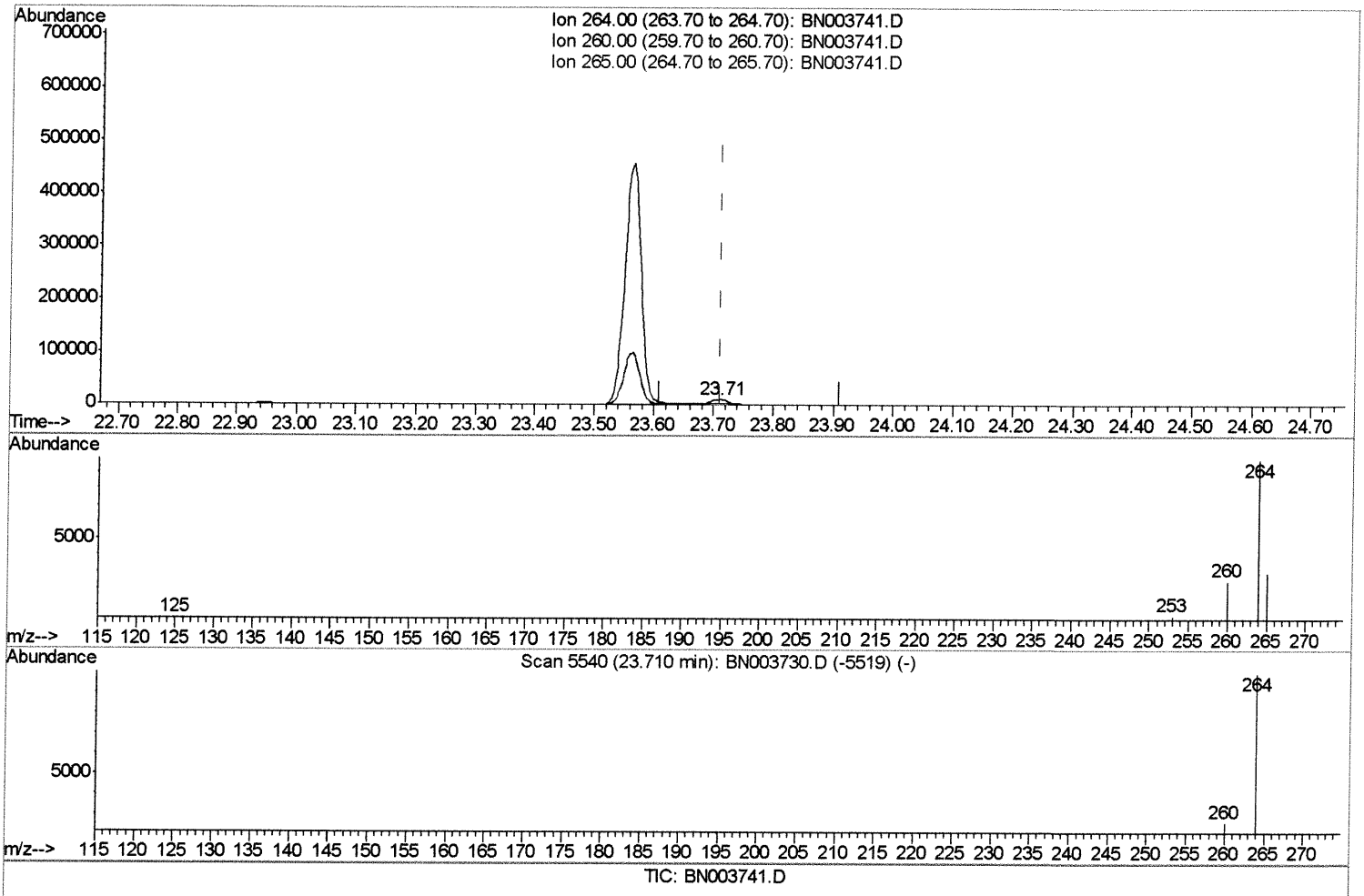
Quantitation Report (Qedit)

Data File : BN003741.D
Acq On : 06 Dec 2018 21:09
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 07 04:00:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E64

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:31 PM



(20) Perylene-d12 (I)

23.710min (-0.000) 0.40ng/ul m) SJ 12/11/18

response 18273

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.03
265.00	33.50	30.84
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003741.D
Acq On : 06 Dec 2018 21:09
Operator : JU/SJ
Sample : J6227-01
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 07 04:02:01 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument : BNA_N
ClientSampleId : F9E64

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:31 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	
1) 1,4-Dichlorobenzene-d4	7.84	152	5614	0.40	ng/ul	0.00	
2) Naphthalene-d8	10.63	136	23235	0.40	ng/ul	0.00	
6) Acenaphthene-d10	14.47	164	12462	0.40	ng/ul	0.00	
10) Phenanthrene-d10	17.21	188	27596m	0.40	ng/ul	0.00	SJ 12/11/18
16) Chrysene-d12	21.40	240	22686m	0.40	ng/ul	0.00	
20) Perylene-d12	23.71	264	18273m	0.40	ng/ul	0.00	
System Monitoring Compounds							
4) 2-Methylnaphthalene-d10	12.22	152	6663	0.19	ng/ul	0.00	SJ 12/11/18
14) Fluoranthene-d10	19.24	212	14288m	0.18	ng/ul	0.00	

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E65

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-02
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BN003744.D
% Solids : 86.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/07/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	3.8	U
91-57-6	2-Methylnaphthalene	3.8	U
208-96-8	Acenaphthylene	3.8	U
83-32-9	Acenaphthene	3.8	U
86-73-7	Fluorene	3.8	U
87-86-5	Pentachlorophenol	7.7	U
85-01-8	Phenanthrene	3.8	U
120-12-7	Anthracene	3.8	U
206-44-0	Fluoranthene	0.80	J
129-00-0	Pyrene	3.8	U
56-55-3	Benzo(a)anthracene	3.8	U
218-01-9	Chrysene	3.8	U
205-99-2	Benzo(b)fluoranthene	3.8	U
207-08-9	Benzo(k)fluoranthene	3.8	U
50-32-8	Benzo(a)pyrene	3.8	U
193-39-5	Indeno(1,2,3-cd)pyrene	3.8	U
53-70-3	Dibenzo(a,h)anthracene	3.8	U
191-24-2	Benzo(g,h,i)perylene	3.8	U

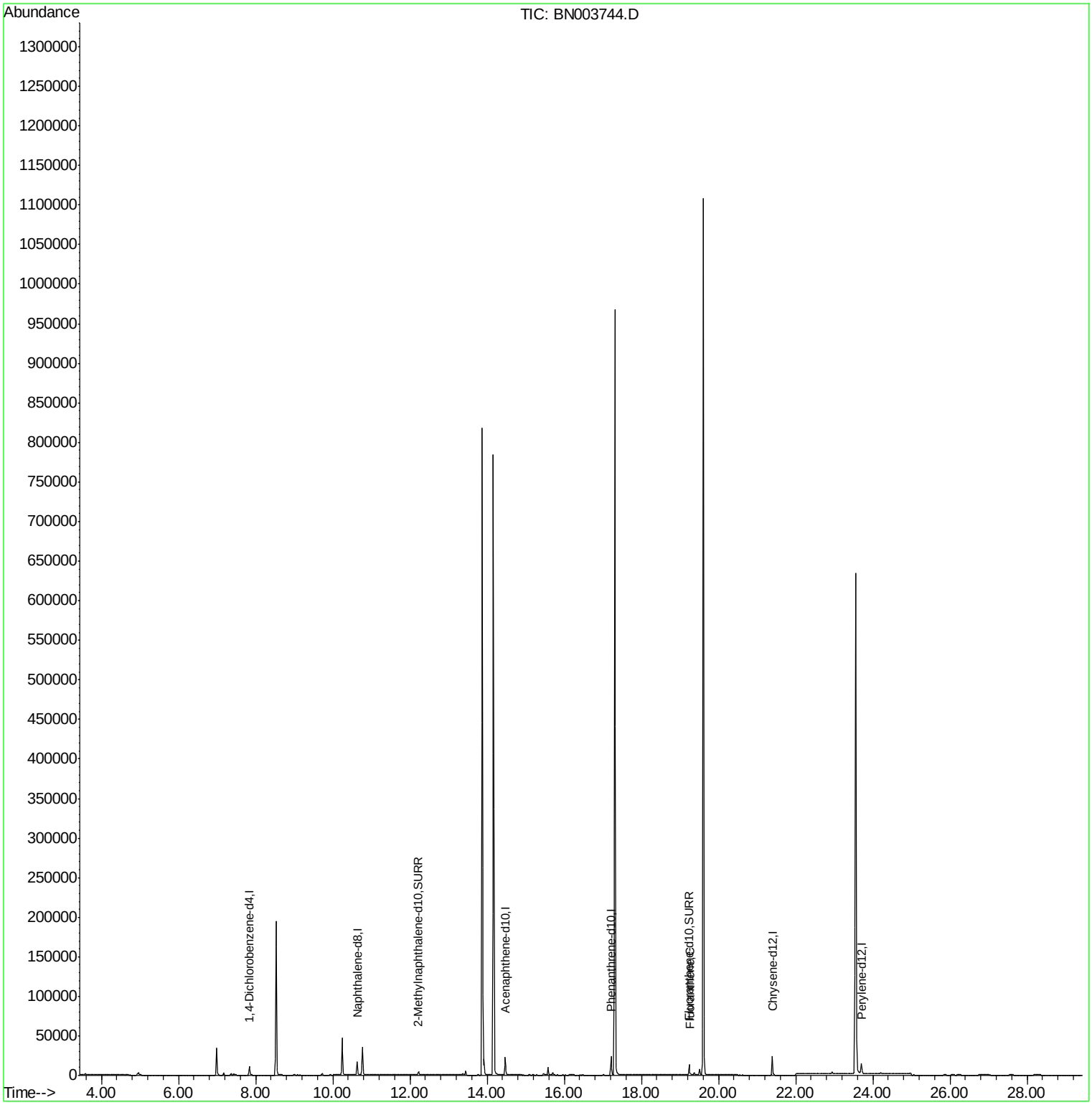
Quantitation Report (QT Reviewed)

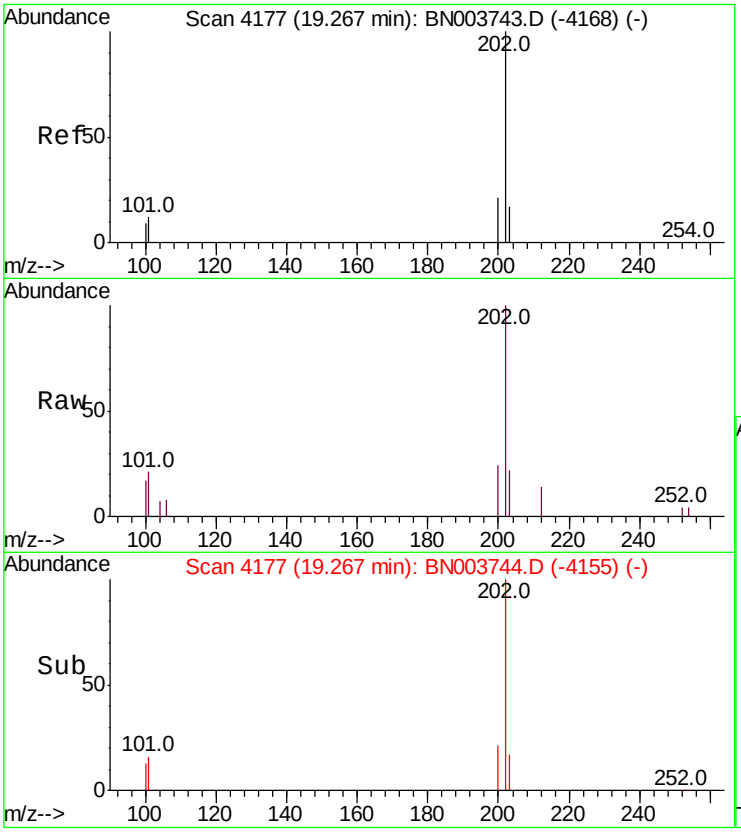
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003744.D
Acq On : 07 Dec 2018 00:05
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 07 04:18:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E65

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:37 PM

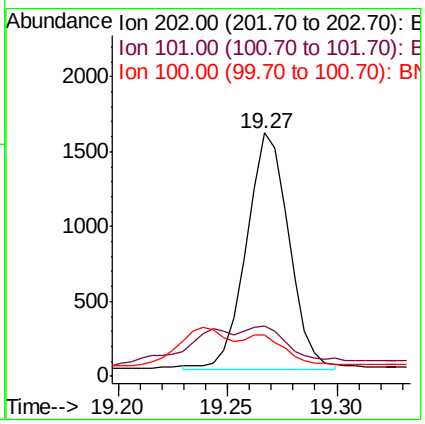




#15
Fluoranthene
Concen: 0.021 ng/ul m
RT: 19.27 min Scan# 4177
Delta R.T. 0.00 min
Lab File: BN003744.D
Acq: 07 Dec 2018 00:05

Tgt Ion:202 Resp: 2137

Ion	Ratio	Lower	Upper
202	100		
101	20.5	0.0	30.7
100	17.1	0.0	28.1



Instrument :
BNA_N
ClientSampleId :
F9E65

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:37 PM

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003744.D
Acq On : 07 Dec 2018 00:05
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9E65

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:37 PM

Quant Time: Dec 07 04:18:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5623	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	22974	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12219	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	26434m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	21109m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	15742m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	6456	0.18	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	13547m	0.18	ng/ul	0.00
Target Compounds						Qvalue
15) Fluoranthene	19.27	202	2137m	0.021	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

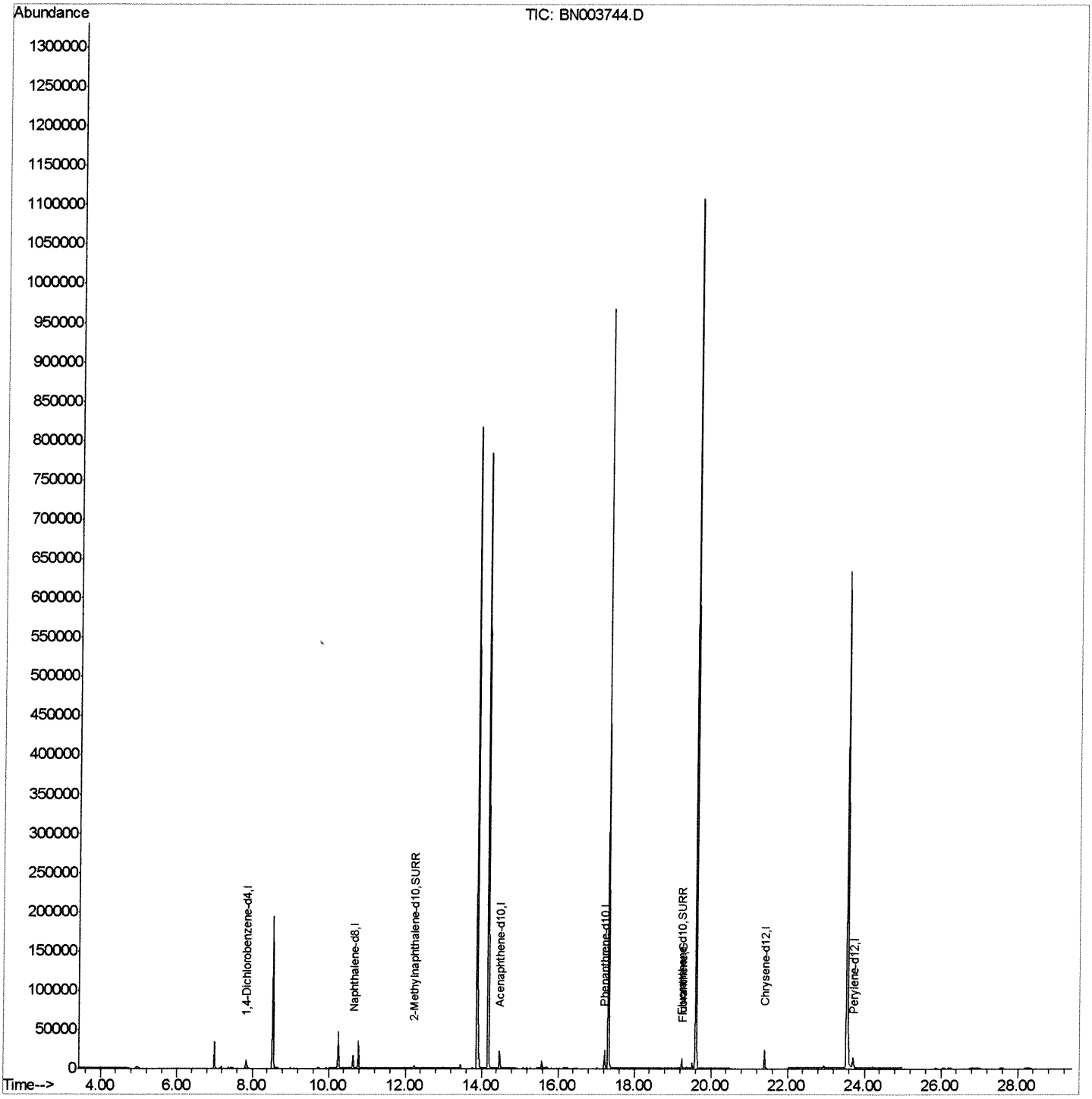
Quantitation Report (QT Reviewed)

Data File : BN003744.D
Acq On : 07 Dec 2018 00:05
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 07 04:18:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E65

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:37 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

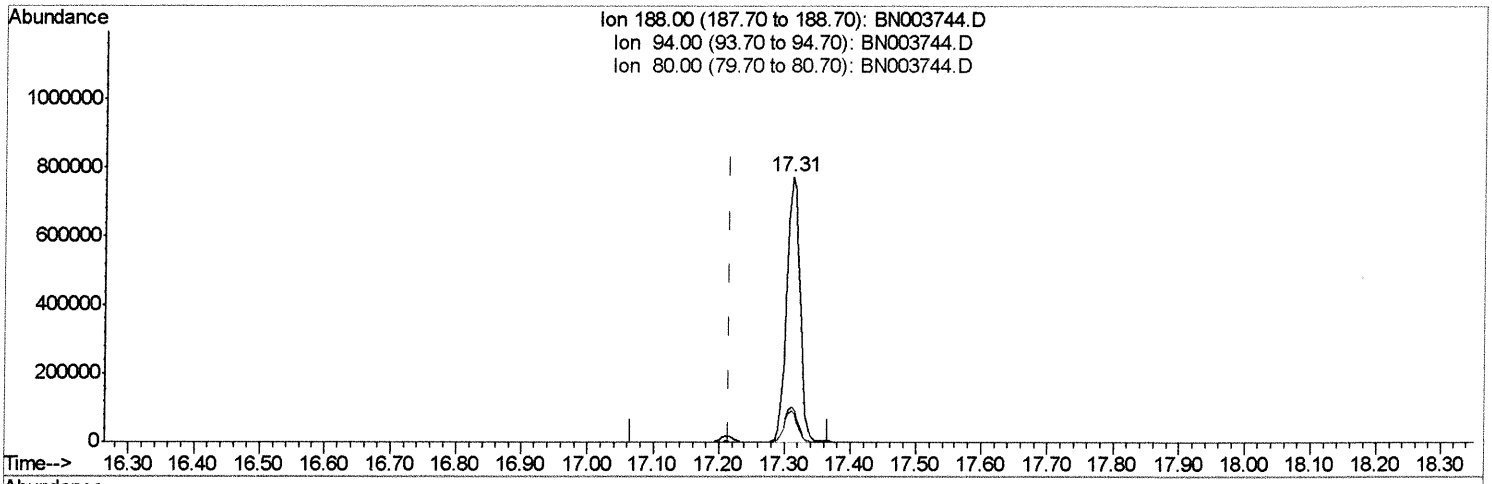
Quantitation Report (Qedit)

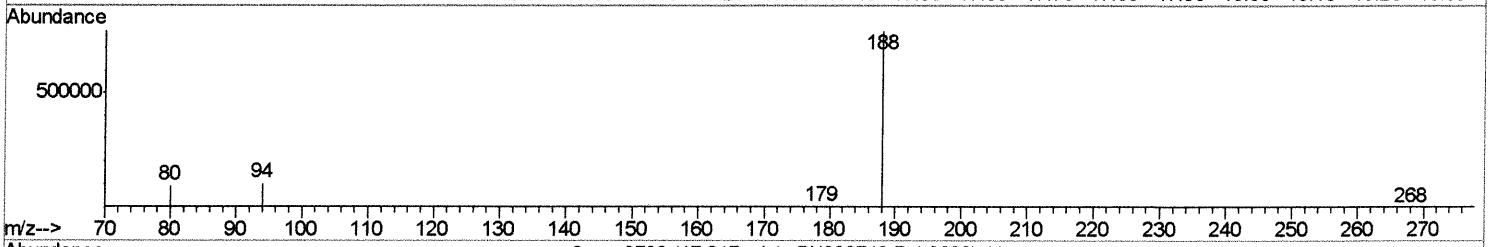
Data File : BN003744.D
Acq On : 07 Dec 2018 00:05
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

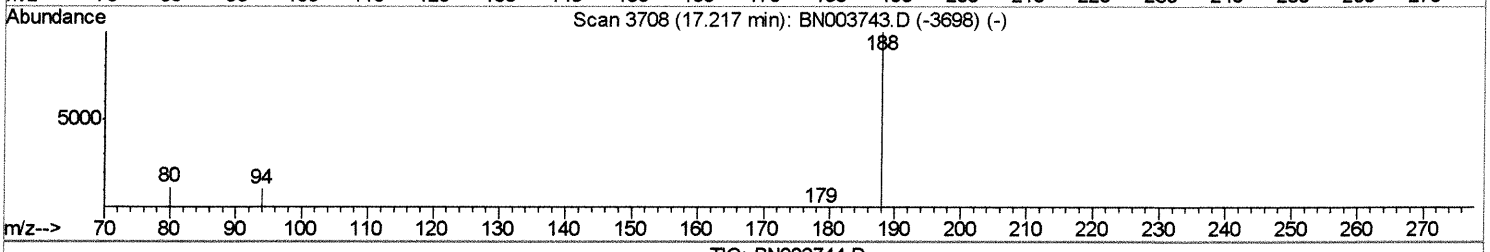
Quant Time: Dec 07 04:12:25 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E65

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:37 PM







TIC: BN003744.D

(10) Phenanthrene-d10 (I)

17.310min (+0.093) 0.40ng/ul

response 1072008

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	13.32#
80.00	11.60	11.97
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

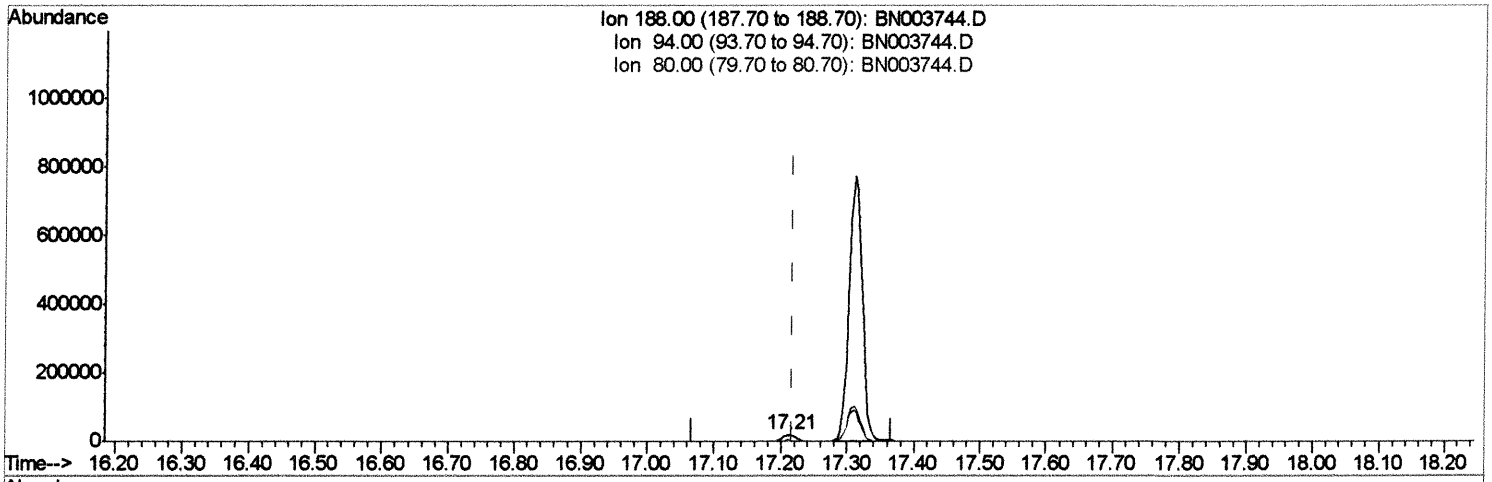
Quantitation Report (Qedit)

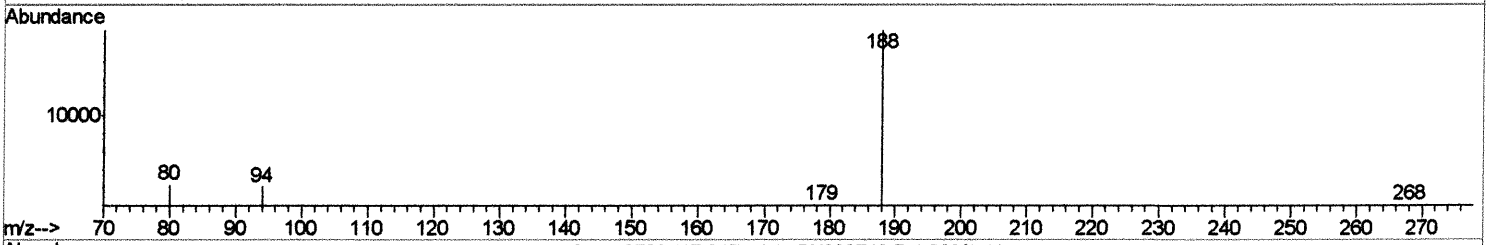
Data File : BN003744.D
Acq On : 07 Dec 2018 00:05
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

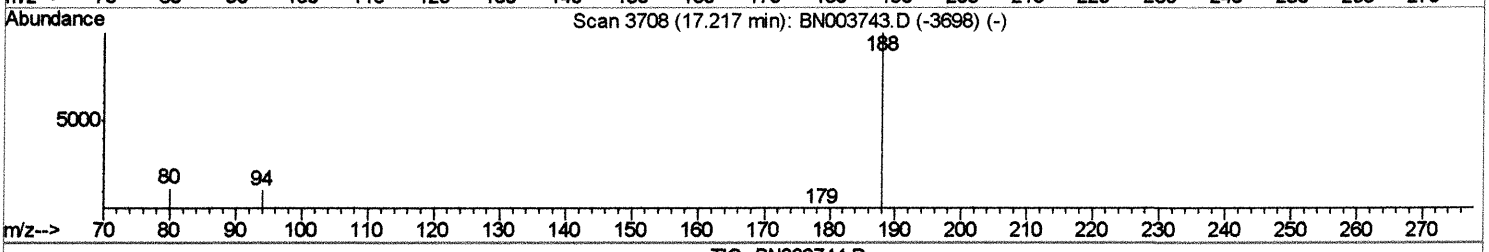
Quant Time: Dec 07 04:12:25 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E65

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:37 PM







TIC: BN003744.D

(10) Phenanthrene-d10 (I)

17.213min (-0.004) 0.40ng/ul m SJ 12/11/18

response 26434

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	10.92
80.00	11.60	11.86
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

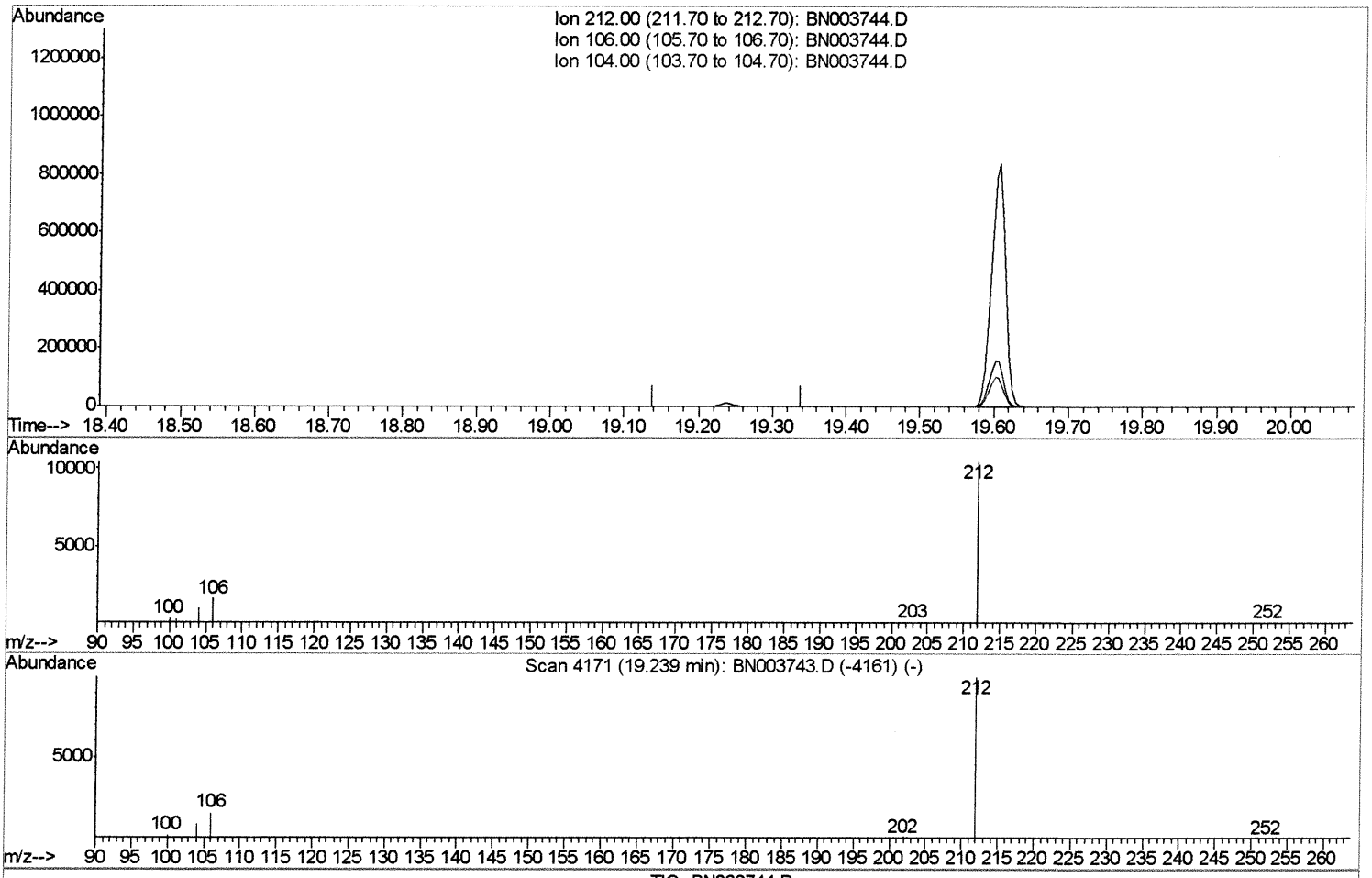
Quantitation Report (Qedit)

Data File : BN003744.D
Acq On : 07 Dec 2018 00:05
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 07 04:16:52 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E65

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:37 PM



TIC: BN003744.D

(14) Fluoranthene-d10 (SURR)

19.239min (-19.239) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

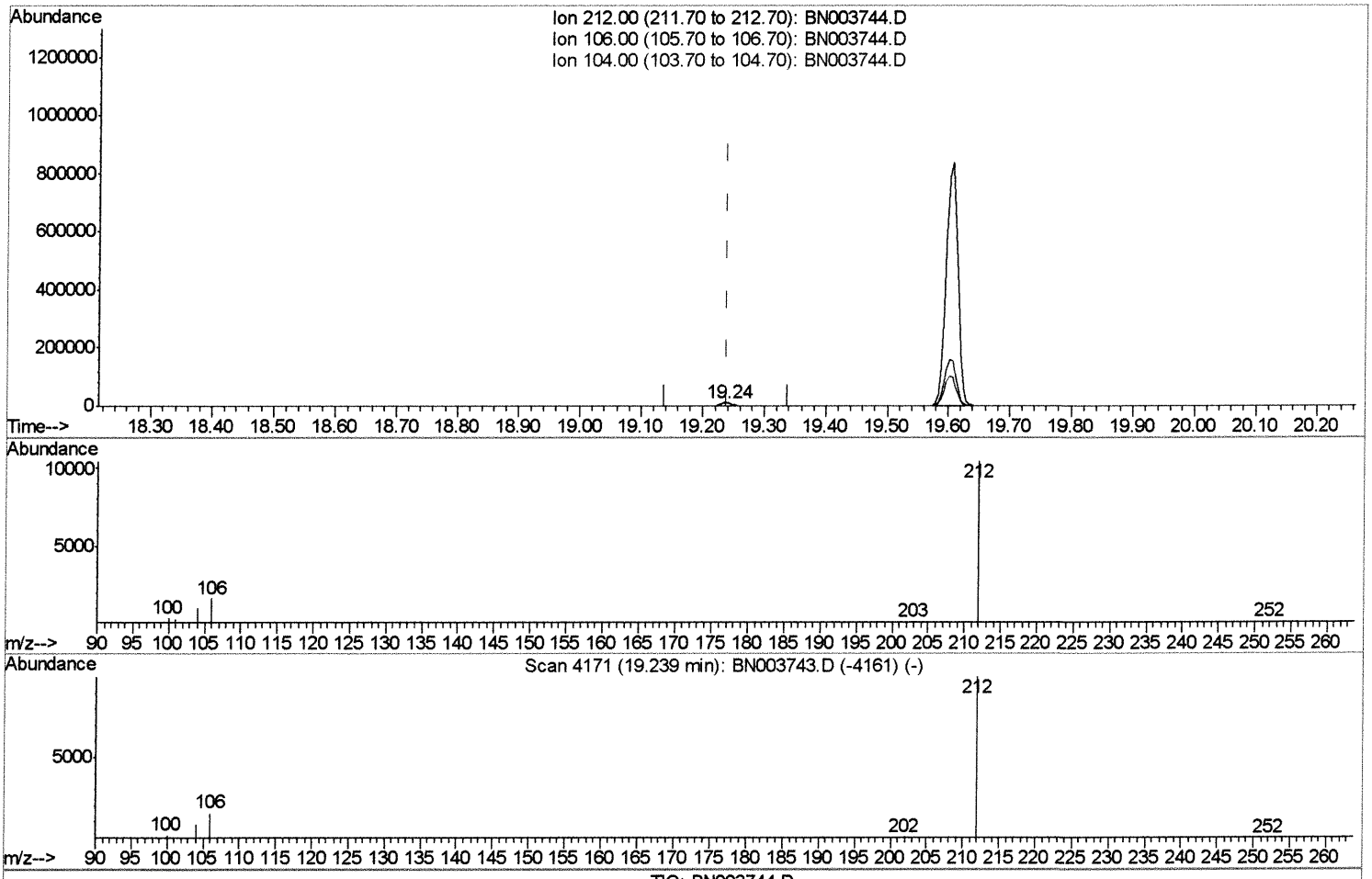
Quantitation Report (Qedit)

Data File : BN003744.D
Acq On : 07 Dec 2018 00:05
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 07 04:16:52 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E65

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:37 PM



TIC: BN003744.D

(14) Fluoranthene-d10 (SURR)

19.239min (+0.000) 0.18ng/ul m

response 13547

SJ 12/11/18

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

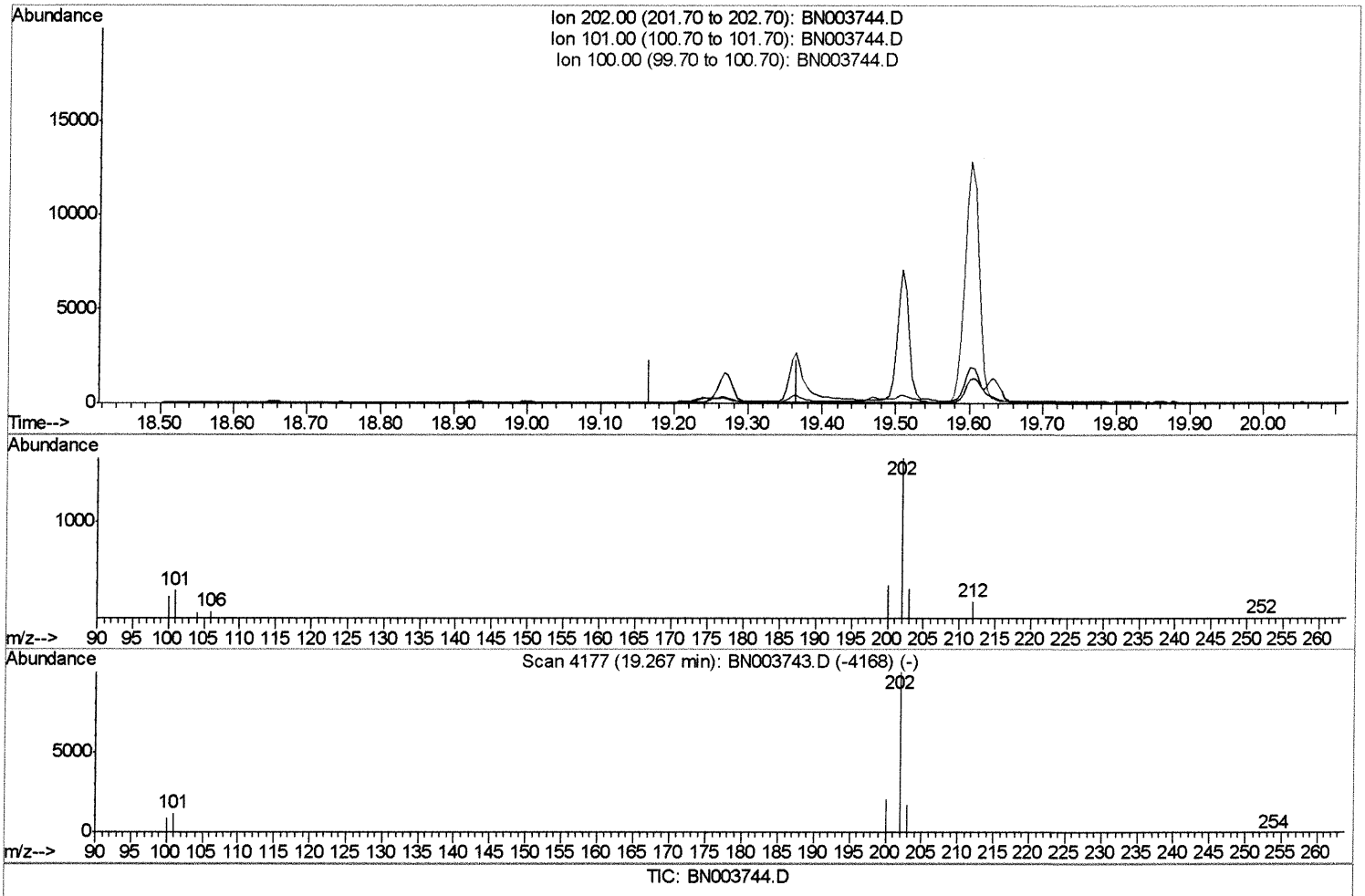
Quantitation Report (Qedit)

Data File : BN003744.D
Acq On : 07 Dec 2018 00:05
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 07 04:16:52 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E65

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:37 PM



TIC: BN003744.D

(15) Fluoranthene (C)

19.267min (-19.267) 0.00ng/ul

response 0

Ion	Exp%	Act%
202.00	100	0.00
101.00	10.70	0.00
100.00	8.10	0.00
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

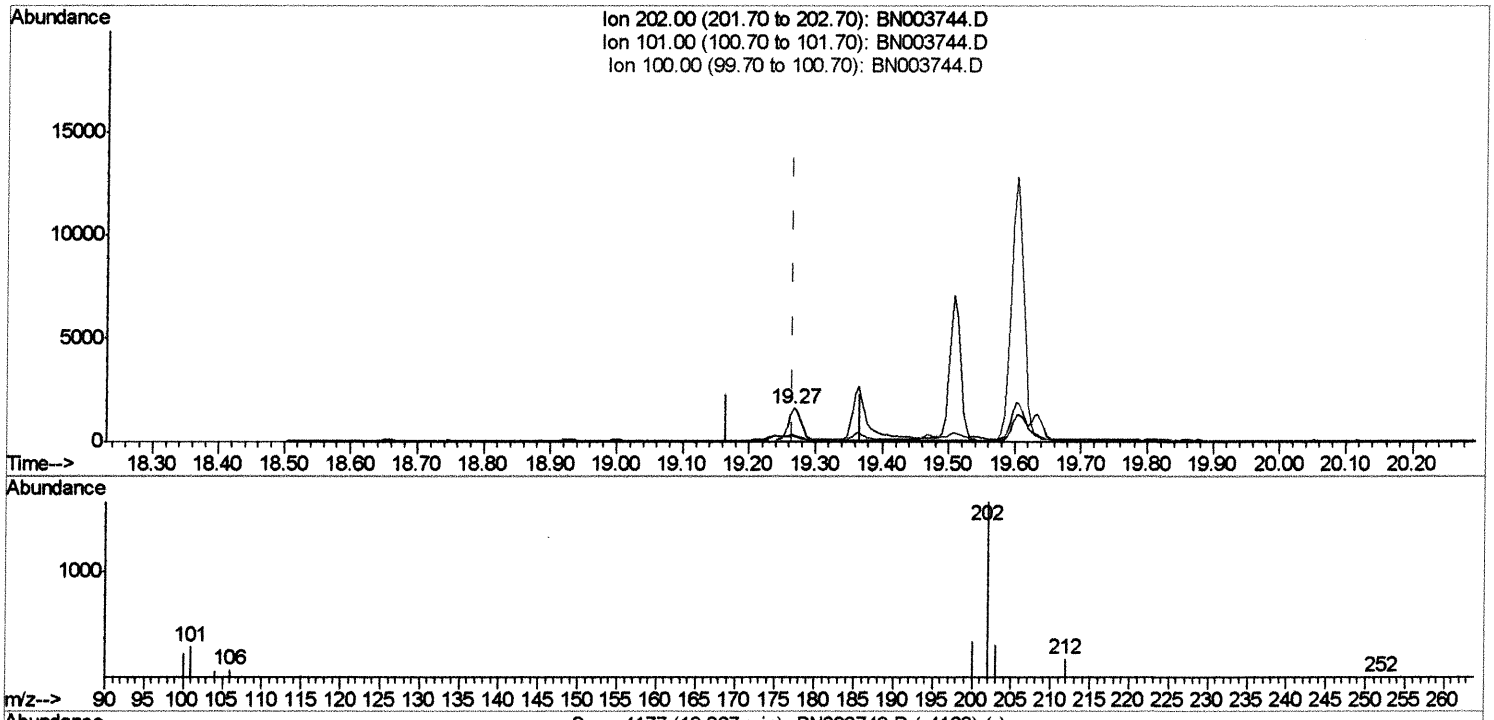
Quantitation Report (Qedit)

Data File : BN003744.D
Acq On : 07 Dec 2018 00:05
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 07 04:16:52 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E65

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:37 PM



TIC: BN003744.D

(15) Fluoranthene (C)

19.267min (+0.000) 0.02ng/ul m

response 2137

SJ 12/11/18

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	20.54
100.00	8.10	17.10
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

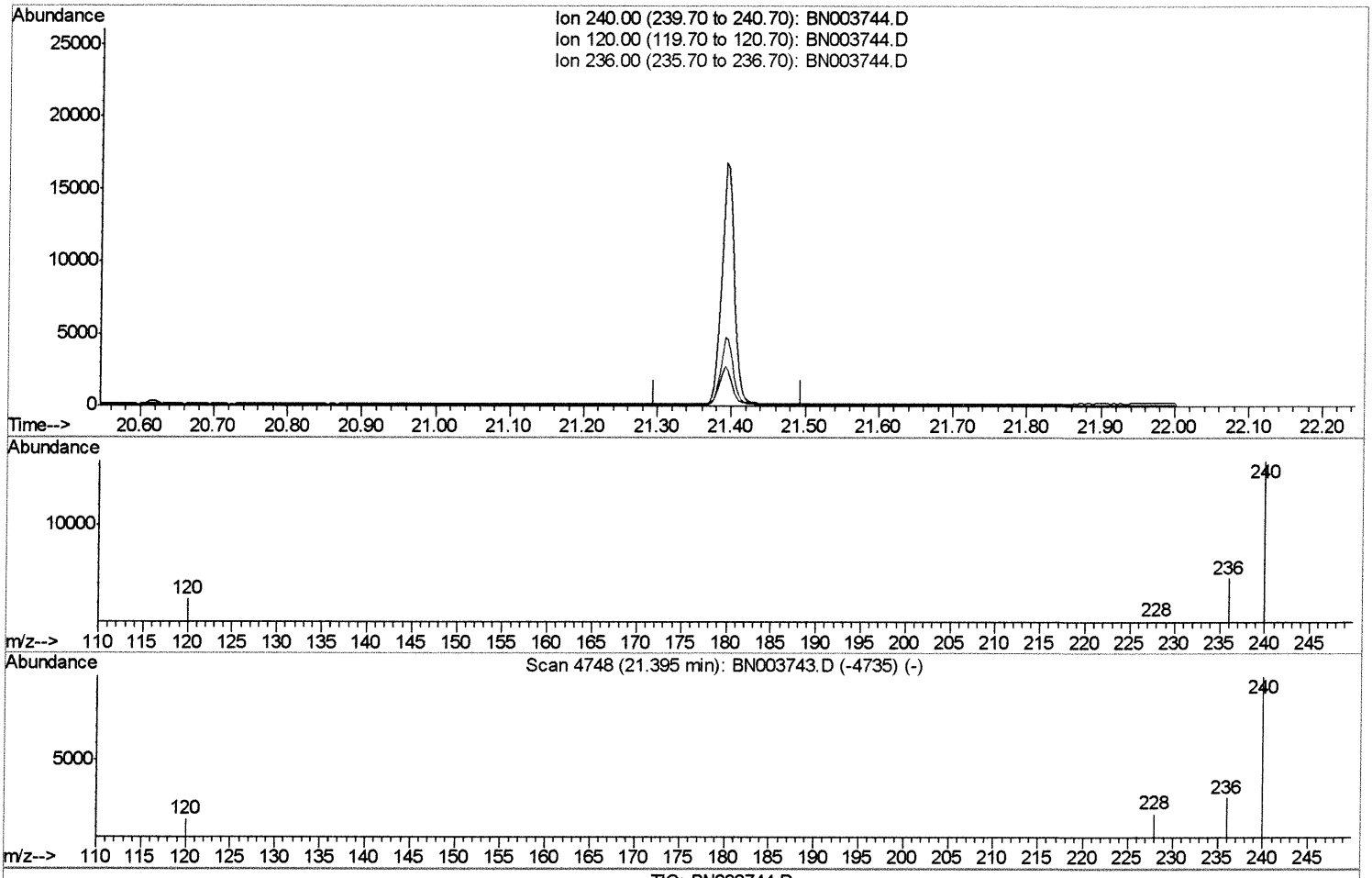
Quantitation Report (Qedit)

Data File : BN003744.D
Acq On : 07 Dec 2018 00:05
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 07 04:16:52 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E65

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:37 PM



TIC: BN003744.D

(16) Chrysene-d12 (I)

21.395min (-21.395) 0.00ng/ul

response 0

Ion	Exp%	Act%
240.00	100	0.00
120.00	14.00	0.00#
236.00	27.60	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

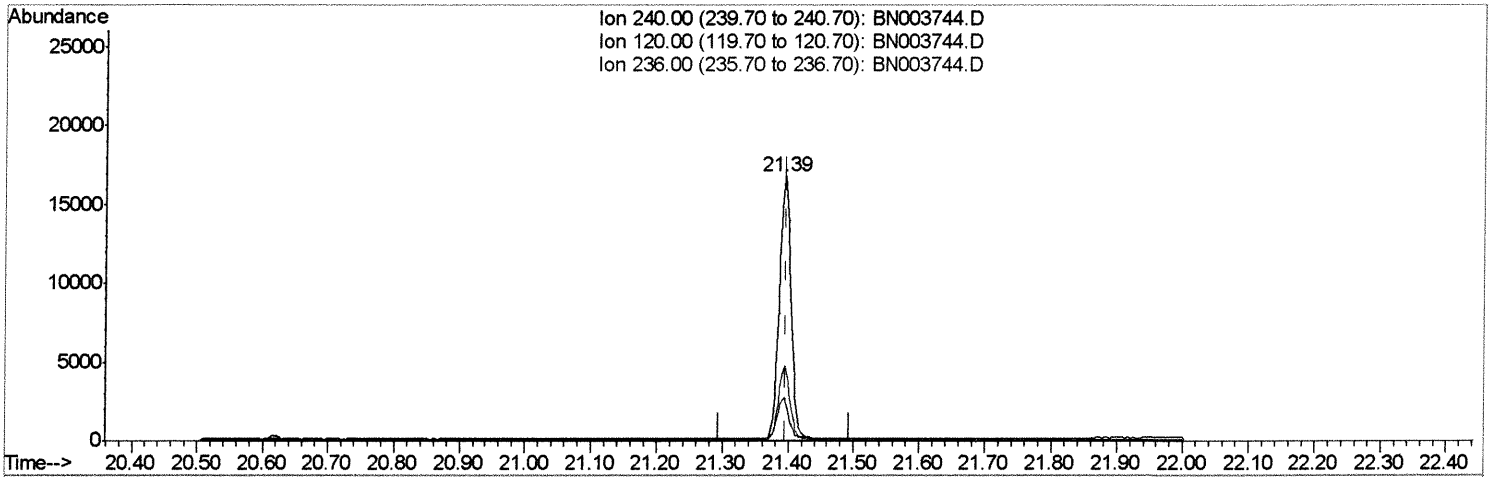
Quantitation Report (Qedit)

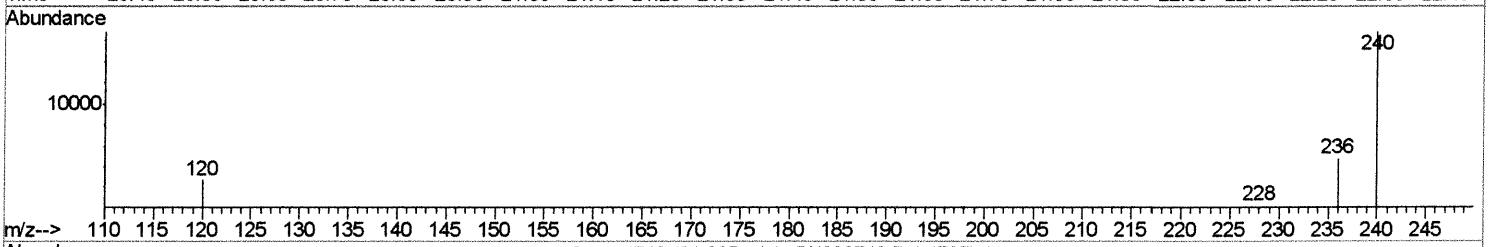
Data File : BN003744.D
Acq On : 07 Dec 2018 00:05
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

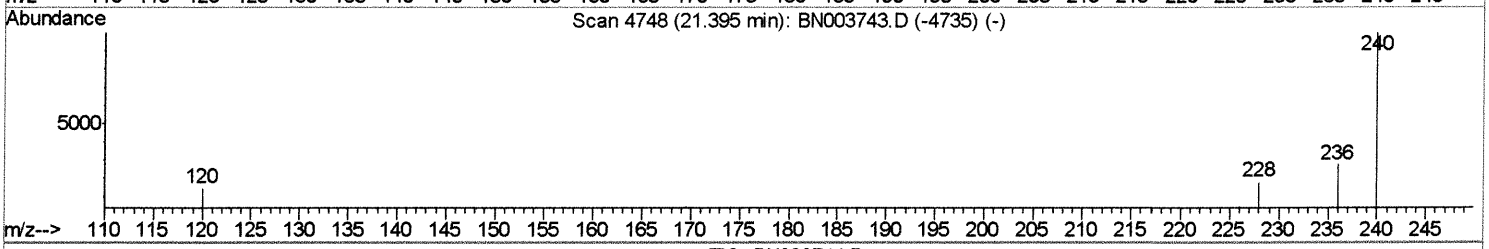
Quant Time: Dec 07 04:16:52 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E65

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:37 PM







TIC: BN003744.D

(16) Chrysene-d12 (I)

21.393min (-0.003) 0.40ng/ul m

response 21109

SJ 12/11/18

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	16.22
236.00	27.60	28.05
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

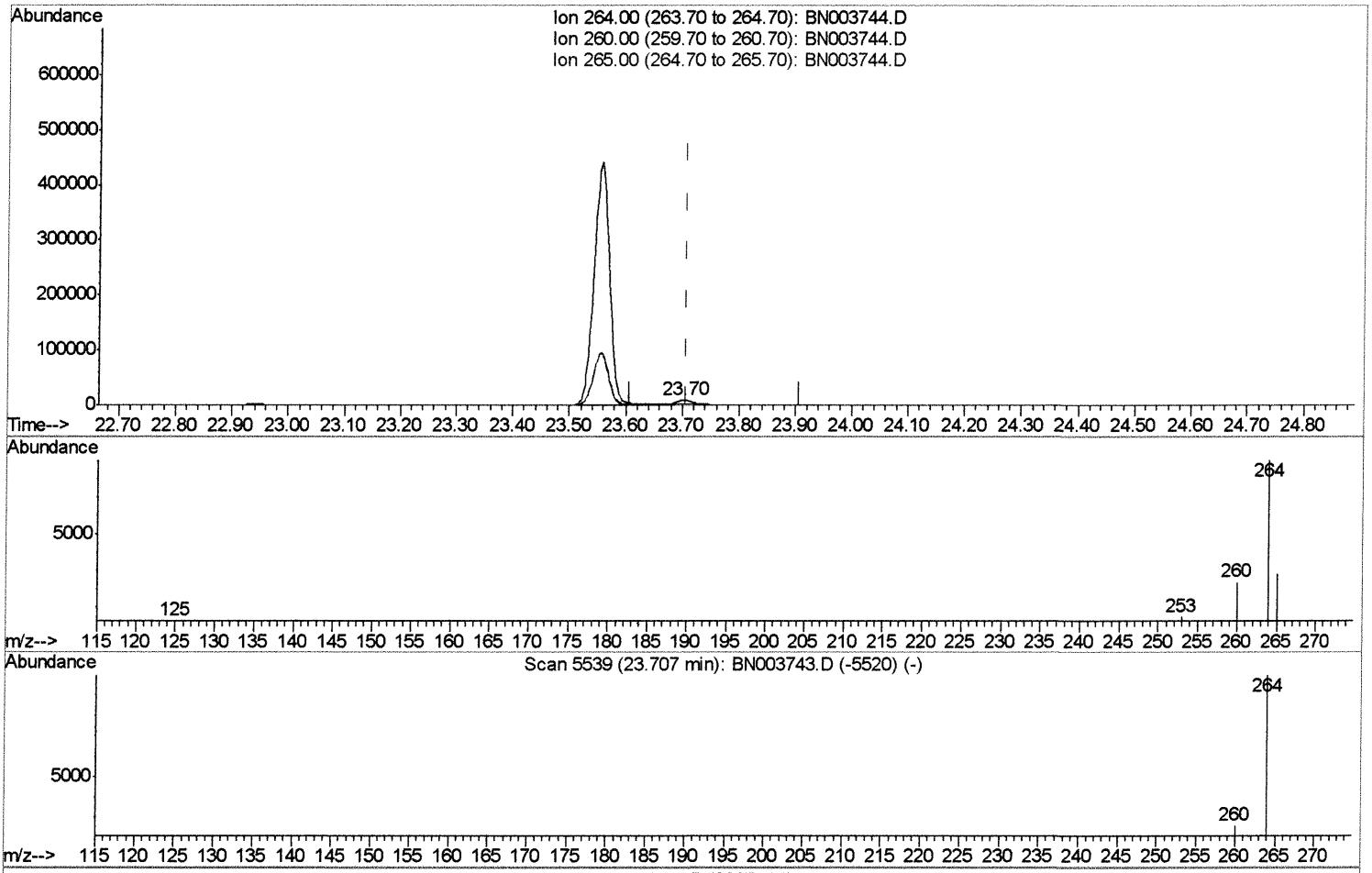
Quantitation Report (Qedit)

Data File : BN003744.D
Acq On : 07 Dec 2018 00:05
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 07 04:17:49 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E65

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:37 PM



TIC: BN003744.D

(20) Perylene-d12 (I)

23.702min (-0.006) 0.40ng/ul

response 19788

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.03
265.00	33.50	30.97
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

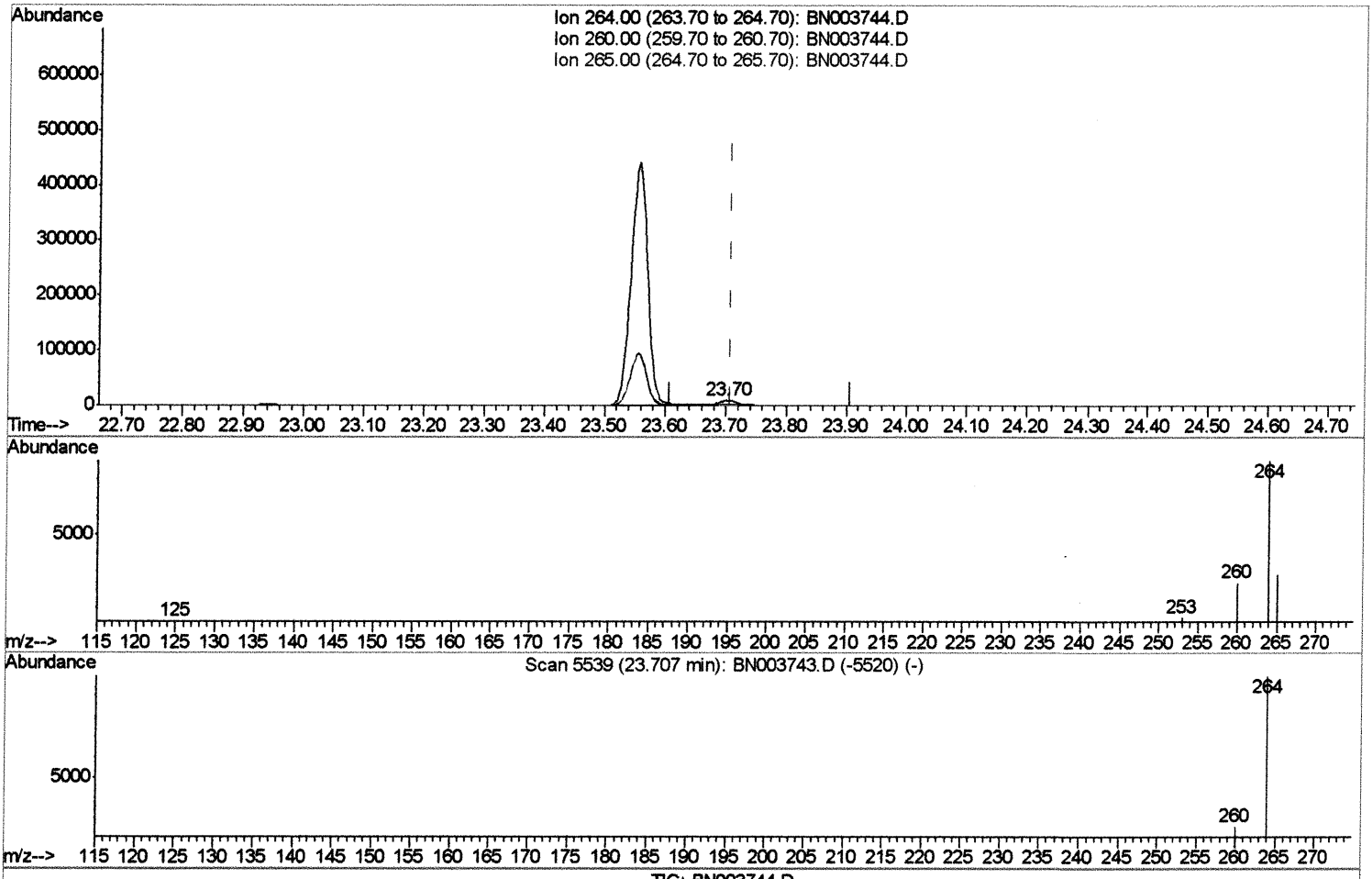
Quantitation Report (Qedit)

Data File : BN003744.D
Acq On : 07 Dec 2018 00:05
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 07 04:17:49 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E65

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:37 PM



TIC: BN003744.D

(20) Perylene-d12 (I)

23.702min (-0.006) 0.40ng/ul m

response 15742

> SJ 12/11/18

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.03
265.00	33.50	30.97
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003744.D
Acq On : 07 Dec 2018 00:05
Operator : JU/SJ
Sample : J6227-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 07 04:18:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5623	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	22974	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12219	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	26434m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	21109m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	15742m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	6456	0.18	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	13547m	0.18	ng/ul	0.00
Target Compounds						Qvalue
15) Fluoranthene	19.27	202	2137m	0.021	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
BNA_N
ClientSampleId :
F9E65

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:37 PM

SJ
12/11/18

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E66

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-03
Sample wt/vol : 30.2 (g/mL): g
Lab File ID : BN003954.D
% Solids : 91.4
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/15/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	1.6	J
91-57-6	2-Methylnaphthalene	4.0	
208-96-8	Acenaphthylene	3.6	U
83-32-9	Acenaphthene	3.6	U
86-73-7	Fluorene	3.6	U
87-86-5	Pentachlorophenol	7.3	U
85-01-8	Phenanthrene	4.9	
120-12-7	Anthracene	1.0	J
206-44-0	Fluoranthene	3.4	J
129-00-0	Pyrene	5.6	
56-55-3	Benzo(a)anthracene	2.7	J
218-01-9	Chrysene	3.4	J
205-99-2	Benzo(b)fluoranthene	3.7	
207-08-9	Benzo(k)fluoranthene	1.3	J
50-32-8	Benzo(a)pyrene	3.0	J
193-39-5	Indeno(1,2,3-cd)pyrene	2.1	J
53-70-3	Dibenzo(a,h)anthracene	3.6	U
191-24-2	Benzo(g,h,i)perylene	3.1	J

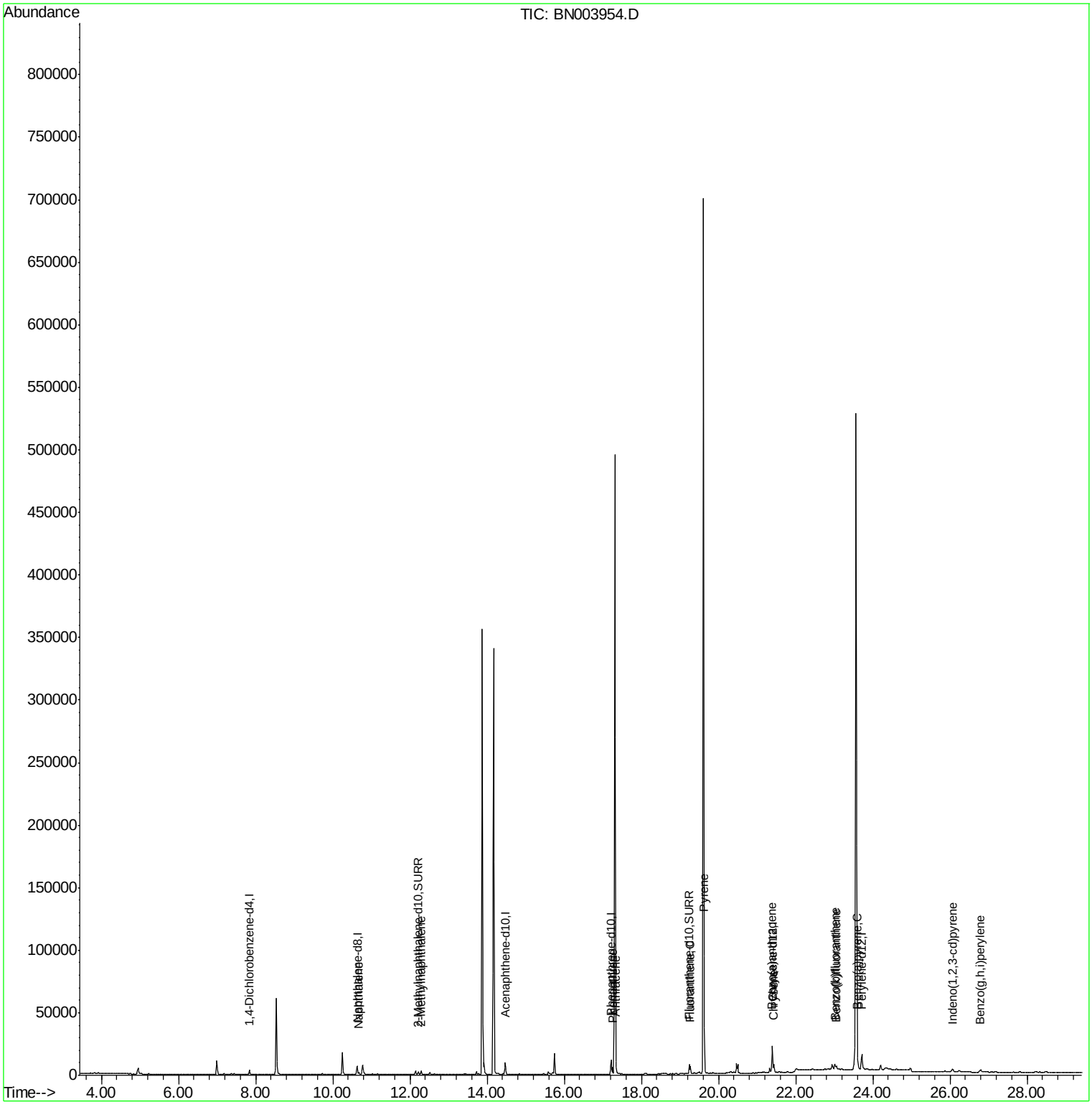
Quantitation Report (QT Reviewed)

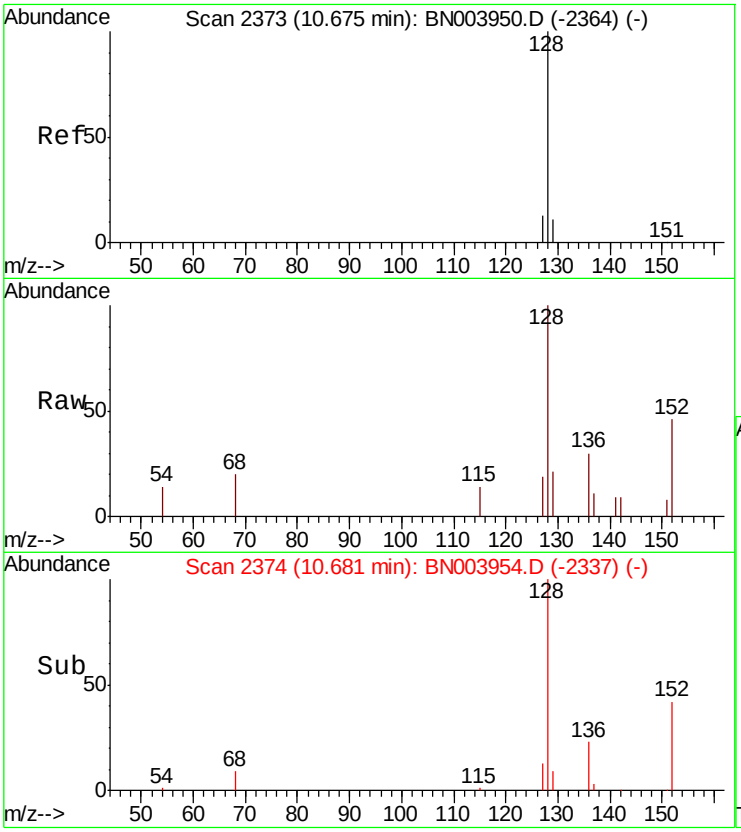
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 15 22:32:13 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM





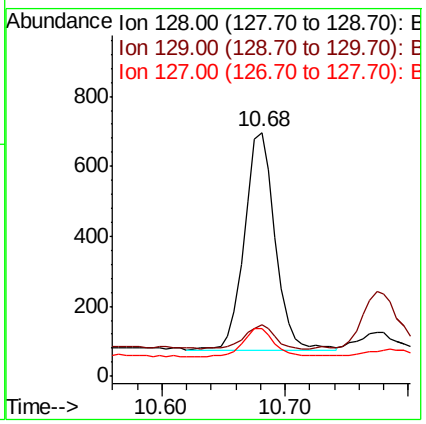
#3
Naphthalene
Concen: 0.043 ng/ul
RT: 10.68 min Scan# 2374
Delta R.T. 0.01 min
Lab File: BN003954.D
Acq: 15 Dec 2018 12:09

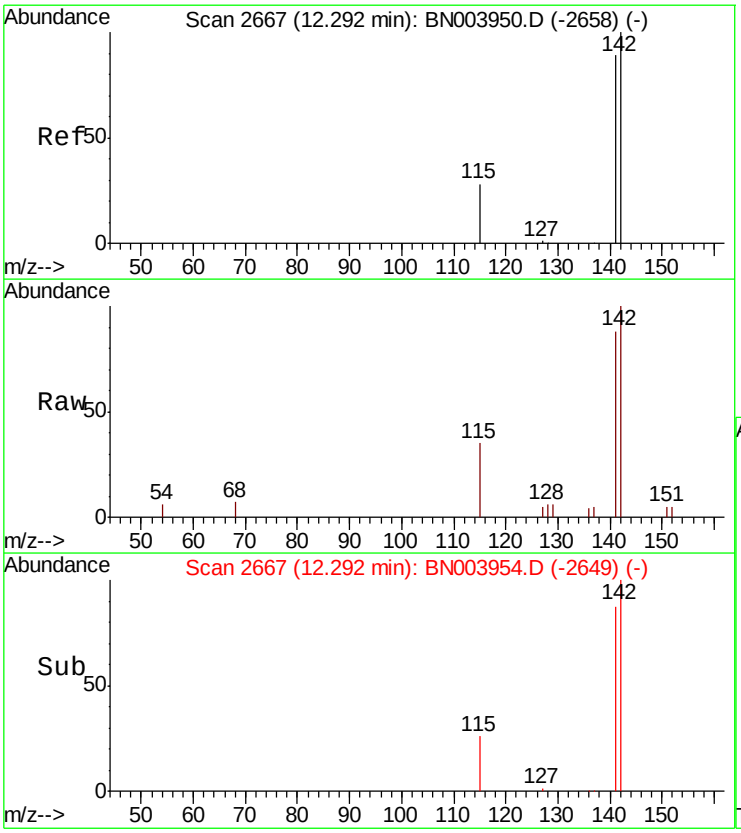
Tgt Ion:128 Resp: 1067

Ion	Ratio	Lower	Upper
128	100		
129	21.3	9.0	13.6#
127	19.4	10.5	15.7#

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM

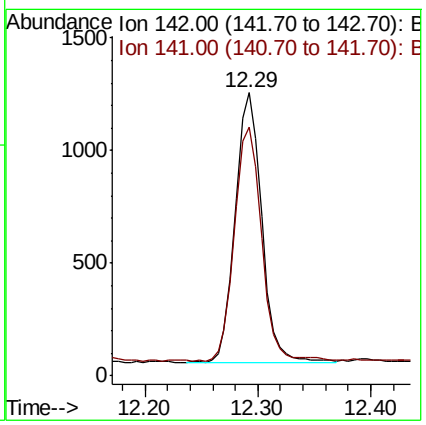


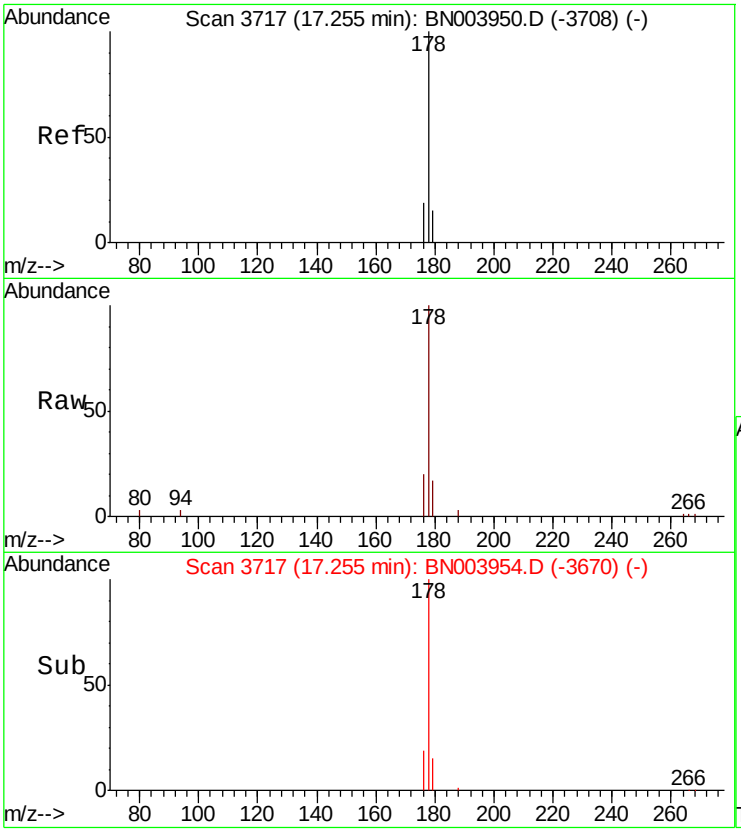


#5
2-Methylnaphthalene
Concen: 0.111 ng/ul
RT: 12.29 min Scan# 2667
Delta R.T. -0.00 min
Lab File: BN003954.D
Acq: 15 Dec 2018 12:09

Tgt Ion:142 Resp: 1941

Ion	Ratio	Lower	Upper
142	100		
141	88.7	71.5	107.3

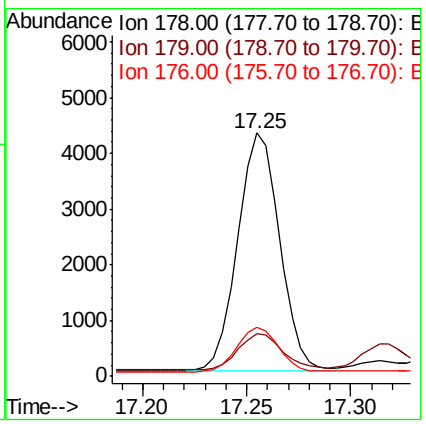




#12
Phenanthrene
Concen: 0.134 ng/ul
RT: 17.25 min Scan# 3717
Delta R.T. -0.00 min
Lab File: BN003954.D
Acq: 15 Dec 2018 12:09

Tgt Ion:178 Resp: 5964

Ion	Ratio	Lower	Upper
178	100		
179	17.5	12.5	18.7
176	20.1	15.0	22.4



Instrument :
BNA_N
ClientSampleId :
F9E66

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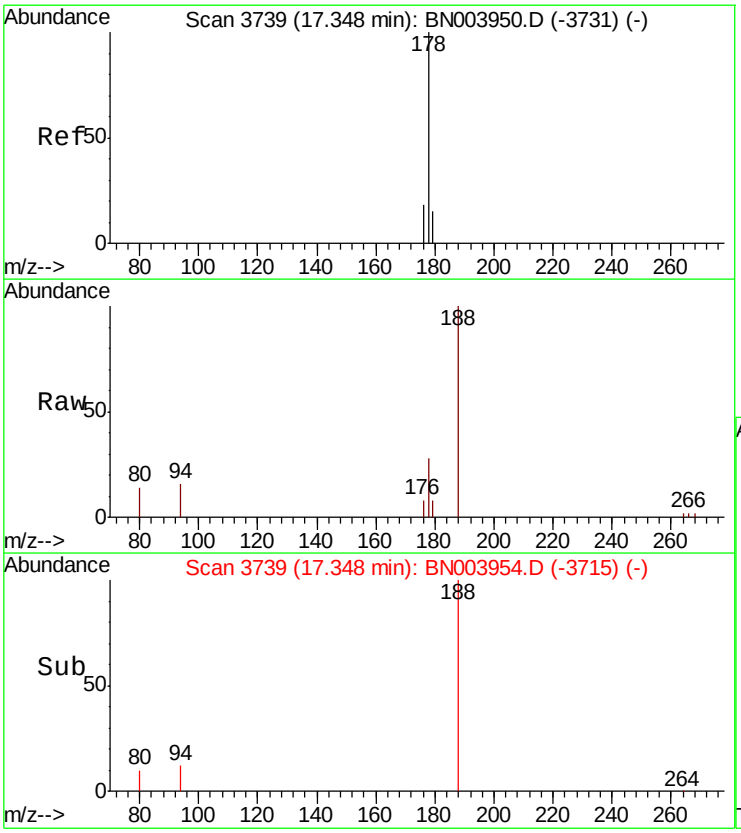
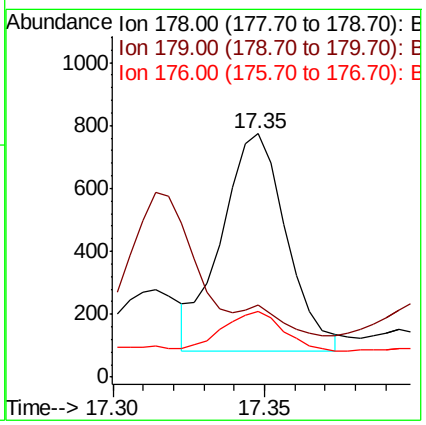
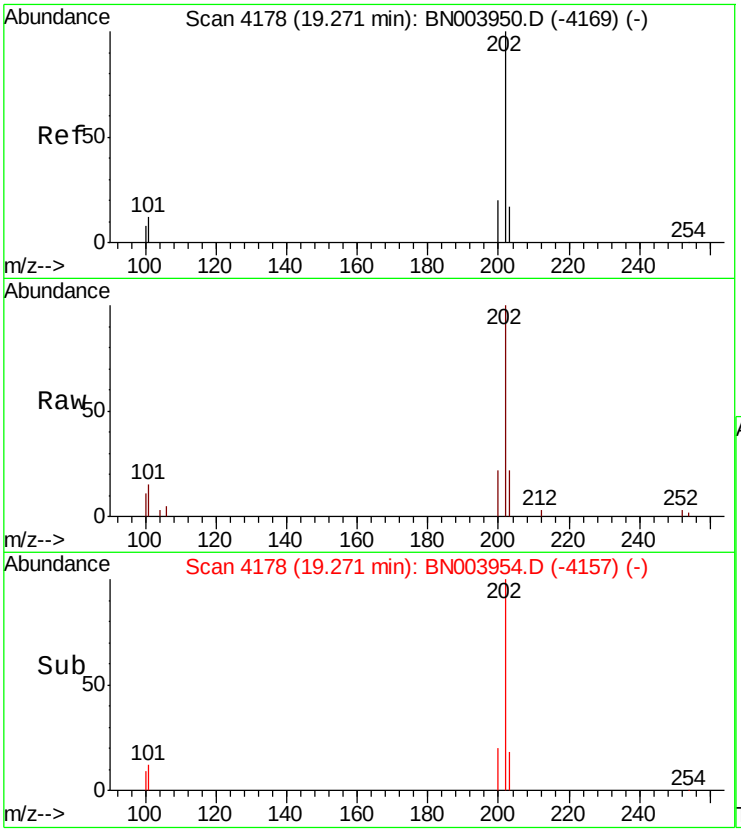


#13
Anthracene
Concen: 0.028 ng/ul m
RT: 17.35 min Scan# 3739
Delta R.T. -0.00 min
Lab File: BN003954.D
Acq: 15 Dec 2018 12:09

Tgt Ion:178 Resp: 1026

Ion	Ratio	Lower	Upper
178	100		
179	29.5	12.3	18.5#
176	27.0	14.8	22.2#

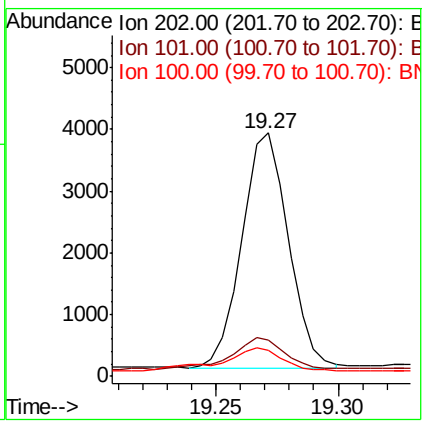




#15
Fluoranthene
Concen: 0.095 ng/ul m
RT: 19.27 min Scan# 4178
Delta R.T. -0.00 min
Lab File: BN003954.D
Acq: 15 Dec 2018 12:09

Tgt Ion:202 Resp: 5009

Ion	Ratio	Lower	Upper
202	100		
101	14.8	0.0	30.7
100	10.8	0.0	28.1



Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
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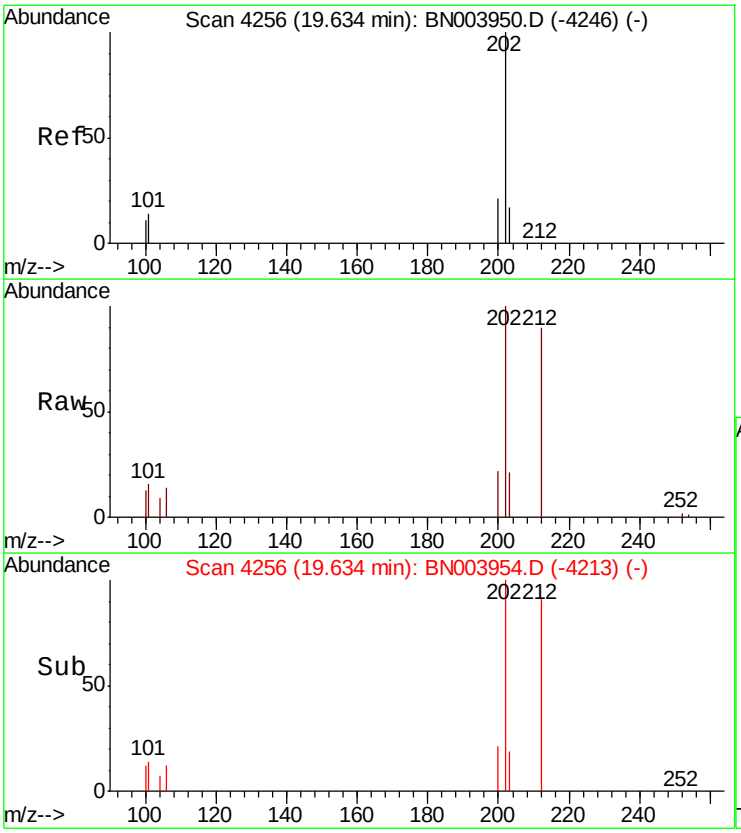
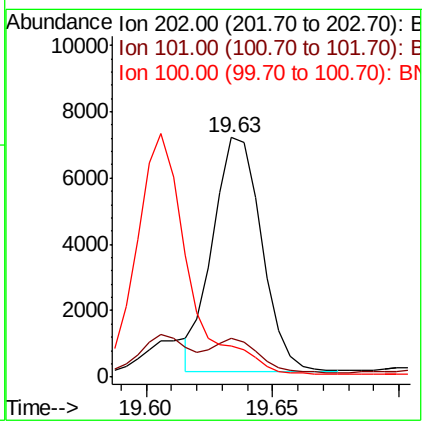
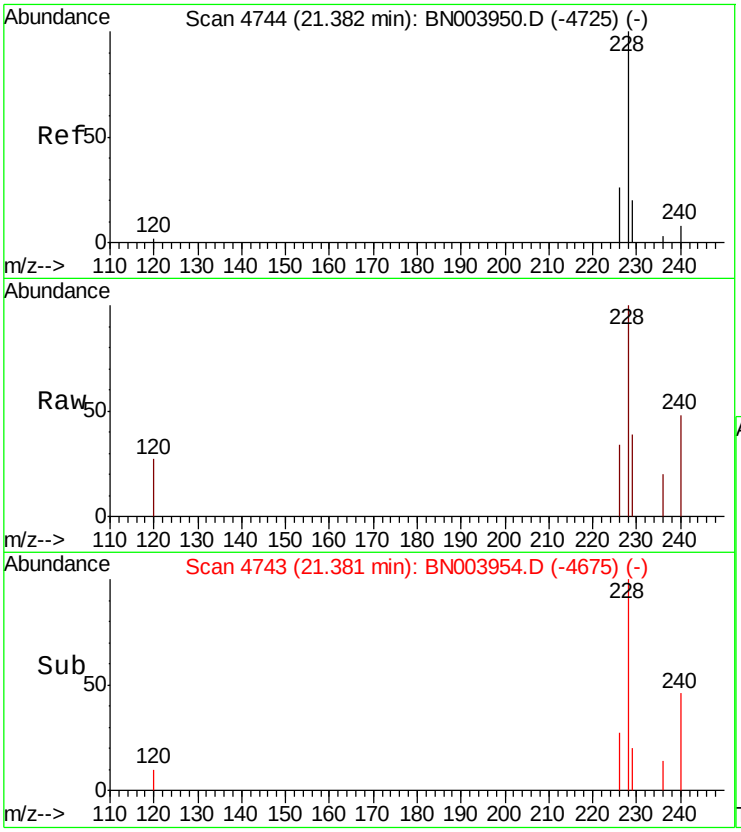


#17
Pyrene
Concen: 0.155 ng/ul m
RT: 19.63 min Scan# 4256
Delta R.T. -0.00 min
Lab File: BN003954.D
Acq: 15 Dec 2018 12:09

Tgt Ion:202 Resp: 9528

Ion	Ratio	Lower	Upper
202	100		
101	16.2	10.3	15.5#
100	13.1	8.5	12.7#





#18
Benzo(a)anthracene
Concen: 0.074 ng/ul m
RT: 21.38 min Scan# 4743
Delta R.T. -0.00 min
Lab File: BN003954.D
Acq: 15 Dec 2018 12:09

Tgt Ion:228 Resp: 4036

Ion	Ratio	Lower	Upper
228	100		
229	39.1	15.6	23.4#
226	33.7	21.1	31.7#

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
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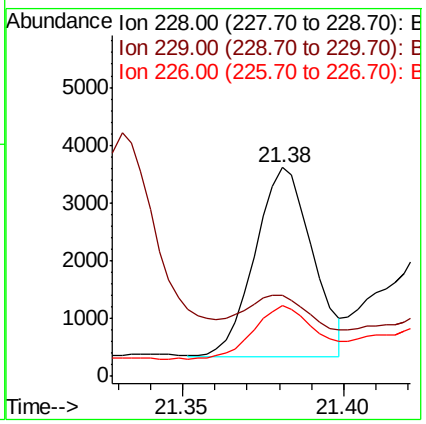
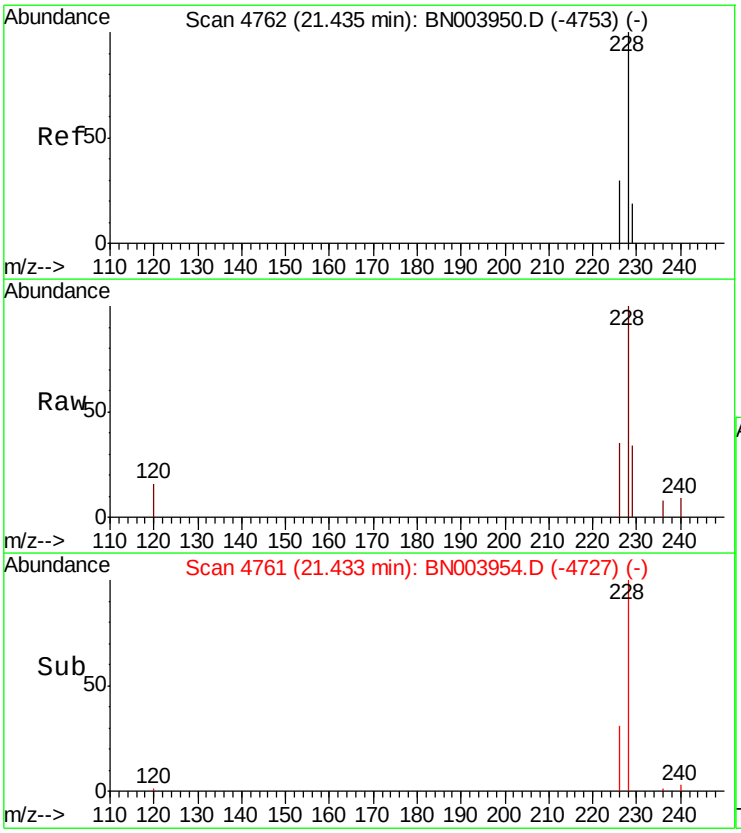
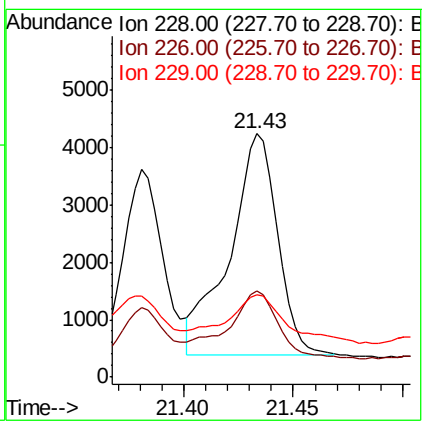


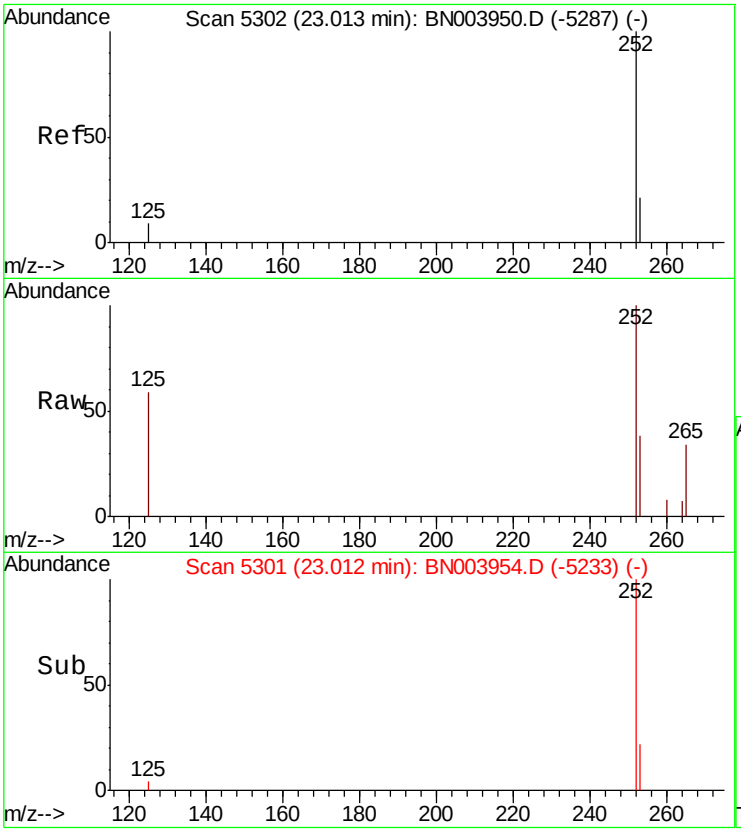


#19
Chrysene
Concen: 0.094 ng/ul m
RT: 21.43 min Scan# 4761
Delta R.T. -0.00 min
Lab File: BN003954.D
Acq: 15 Dec 2018 12:09

Tgt Ion:228 Resp: 5857

Ion	Ratio	Lower	Upper
228	100		
226	35.4	24.0	36.0
229	33.7	15.7	23.5#





#21
Benzo(b)fluoranthene
Concen: 0.102 ng/ul m
RT: 23.01 min Scan# 5301
Delta R.T. -0.00 min
Lab File: BN003954.D
Acq: 15 Dec 2018 12:09

Tgt Ion:252 Resp: 6540

Ion	Ratio	Lower	Upper
252	100		
253	38.3	0.0	46.0
125	59.4	0.0	22.4#

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
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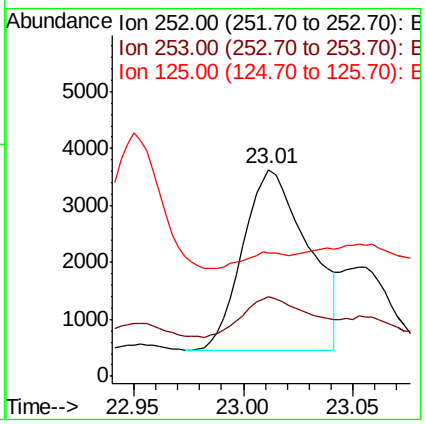
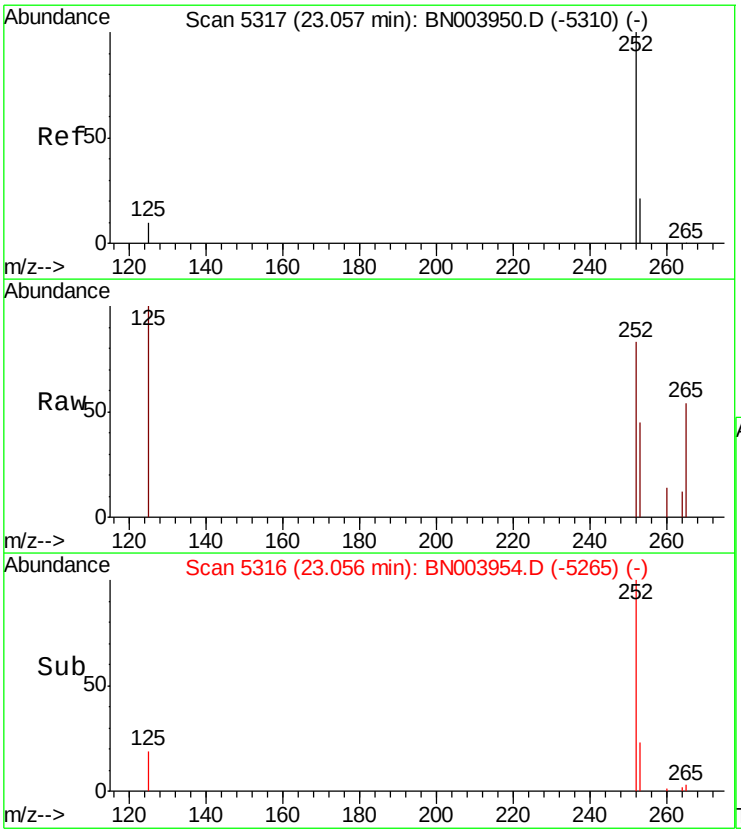
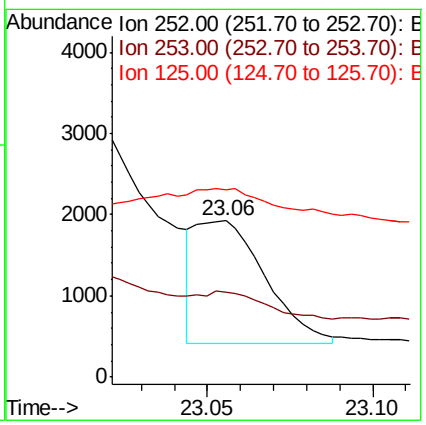


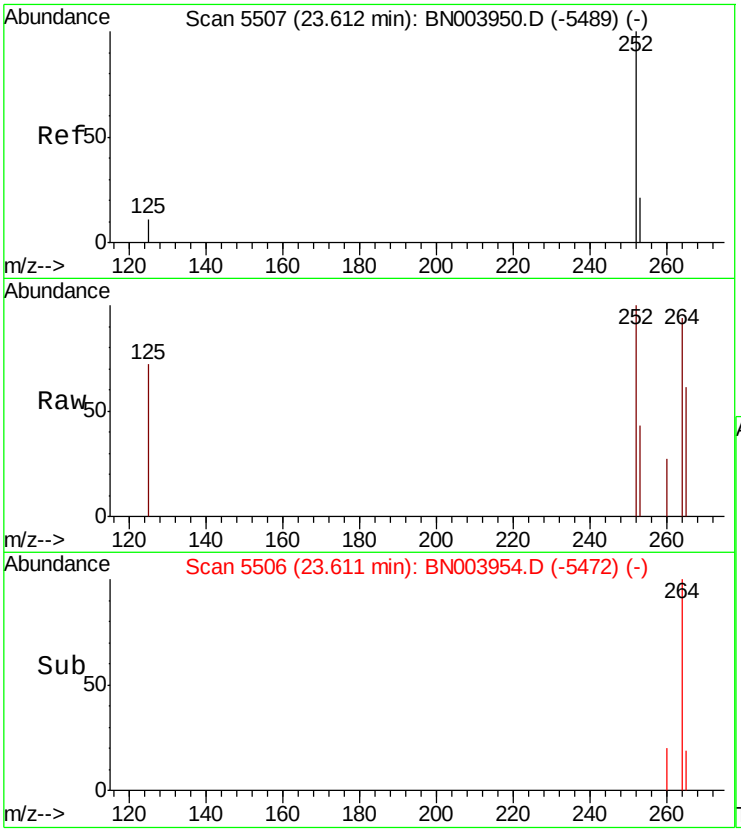


#22
Benzo(k)fluoranthene
Concen: 0.035 ng/ul m
RT: 23.06 min Scan# 5316
Delta R.T. -0.00 min
Lab File: BN003954.D
Acq: 15 Dec 2018 12:09

Tgt Ion:252 Resp: 2199

Ion	Ratio	Lower	Upper
252	100		
253	54.4	18.5	27.7#
125	120.1	9.0	13.6#





#23
Benzo(a)pyrene
Concen: 0.082 ng/ul m
RT: 23.61 min Scan# 5506
Delta R.T. -0.00 min
Lab File: BN003954.D
Acq: 15 Dec 2018 12:09

Tgt Ion:252 Resp: 4523

Ion	Ratio	Lower	Upper
252	100		
253	42.9	19.0	28.4#
125	72.0	10.2	15.4#

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
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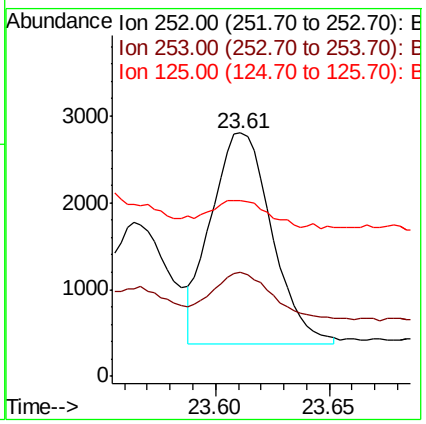
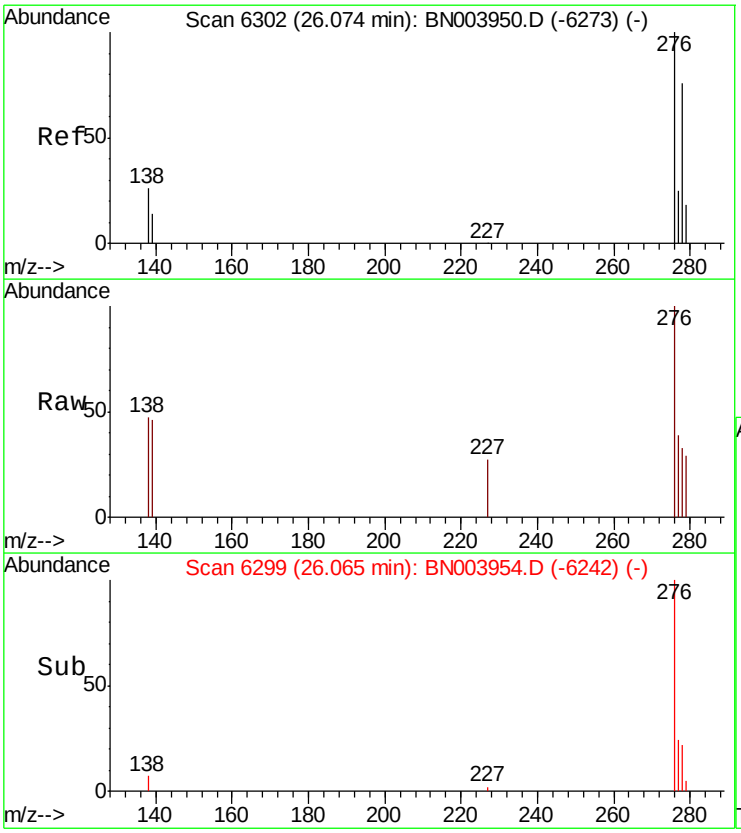
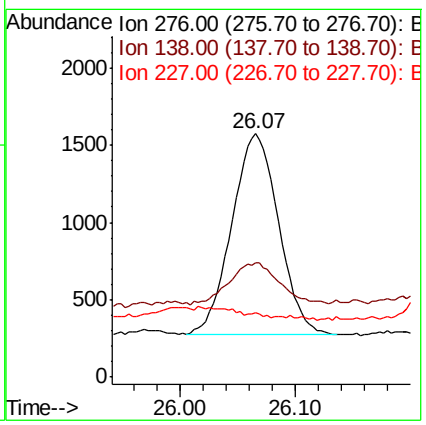


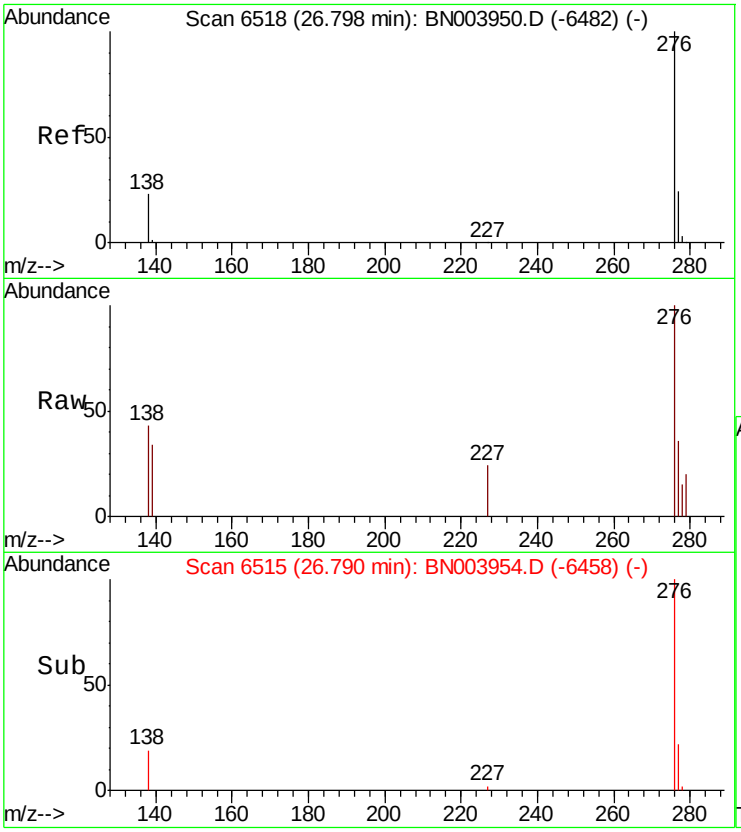


#24
Indeno(1,2,3-cd)pyrene
Concen: 0.058 ng/ul m
RT: 26.07 min Scan# 6299
Delta R.T. -0.01 min
Lab File: BN003954.D
Acq: 15 Dec 2018 12:09

Tgt Ion:276 Resp: 3688

Ion	Ratio	Lower	Upper
276	100		
138	0.6	20.3	30.5#
227	0.0	0.2	0.2#

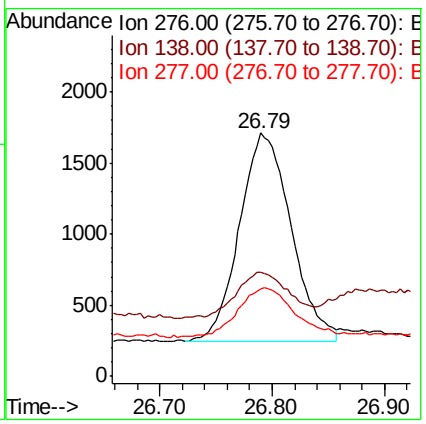




#26
Benzo(g,h,i)perylene
Concen: 0.085 ng/ul m
RT: 26.79 min Scan# 6515
Delta R.T. -0.01 min
Lab File: BN003954.D
Acq: 15 Dec 2018 12:09

Tgt Ion:276 Resp: 4707

Ion	Ratio	Lower	Upper
276	100		
138	42.5	17.7	26.5#
277	36.2	19.3	28.9#



Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
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12/17/2018 4:23:47 PM

Quant Time: Dec 15 22:32:13 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	1764	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	8928	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	5379	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	13588m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	17161m	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	15425m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	2684	0.20	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	8422m	0.21	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.68	128	1067	0.043	ng/ul#	79
5) 2-Methylnaphthalene	12.29	142	1941	0.111	ng/ul	99
12) Phenanthrene	17.25	178	5964	0.134	ng/ul	96
13) Anthracene	17.35	178	1026m	0.028	ng/ul	
15) Fluoranthene	19.27	202	5009m	0.095	ng/ul	
17) Pyrene	19.63	202	9528m	0.155	ng/ul	
18) Benzo(a)anthracene	21.38	228	4036m	0.074	ng/ul	
19) Chrysene	21.43	228	5857m	0.094	ng/ul	
21) Benzo(b)fluoranthene	23.01	252	6540m	0.102	ng/ul	
22) Benzo(k)fluoranthene	23.06	252	2199m	0.035	ng/ul	
23) Benzo(a)pyrene	23.61	252	4523m	0.082	ng/ul	
24) Indeno(1,2,3-cd)pyrene	26.07	276	3688m	0.058	ng/ul	
26) Benzo(g,h,i)perylene	26.79	276	4707m	0.085	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

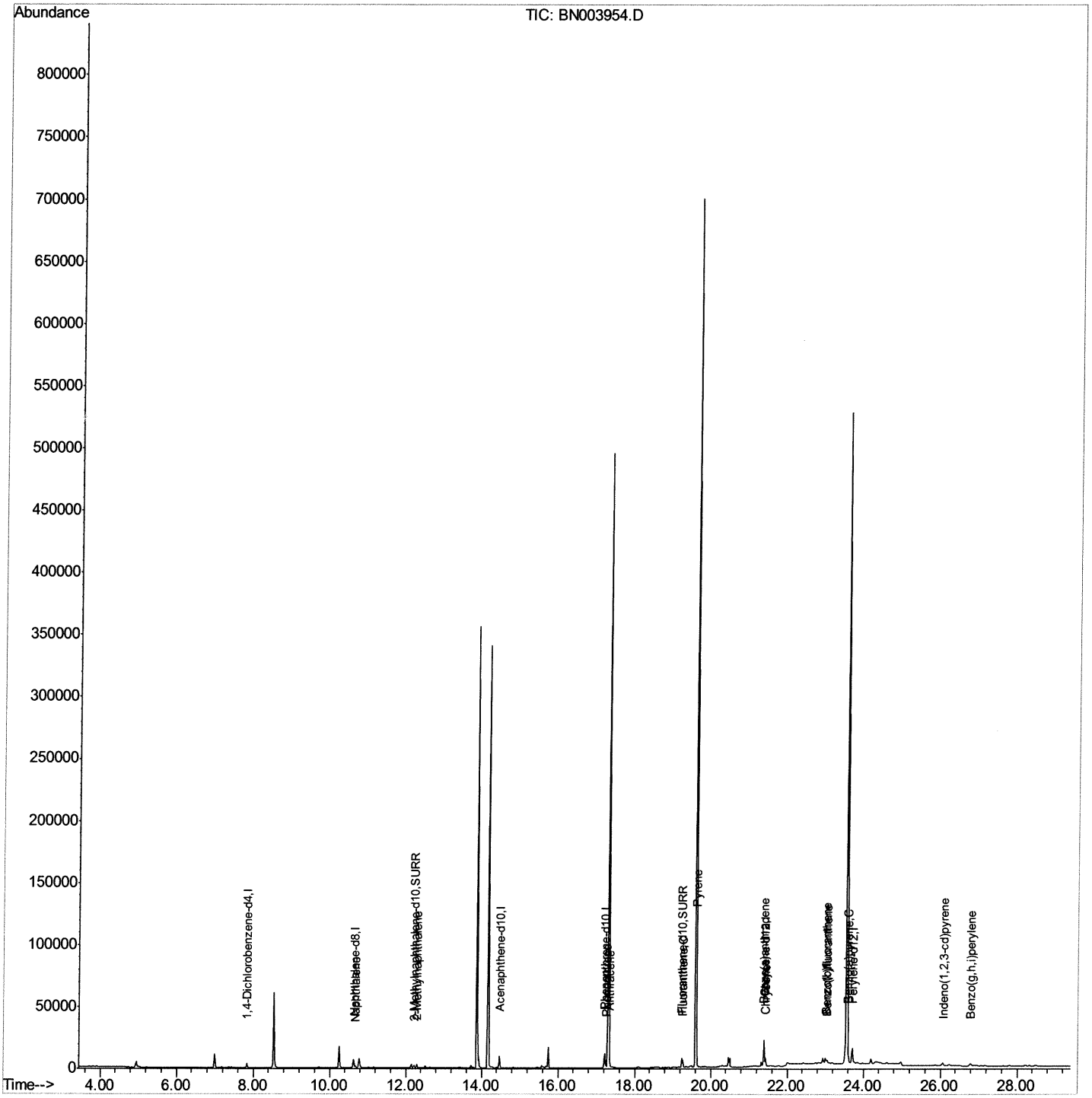
Quantitation Report (QT Reviewed)

Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 15 22:32:13 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

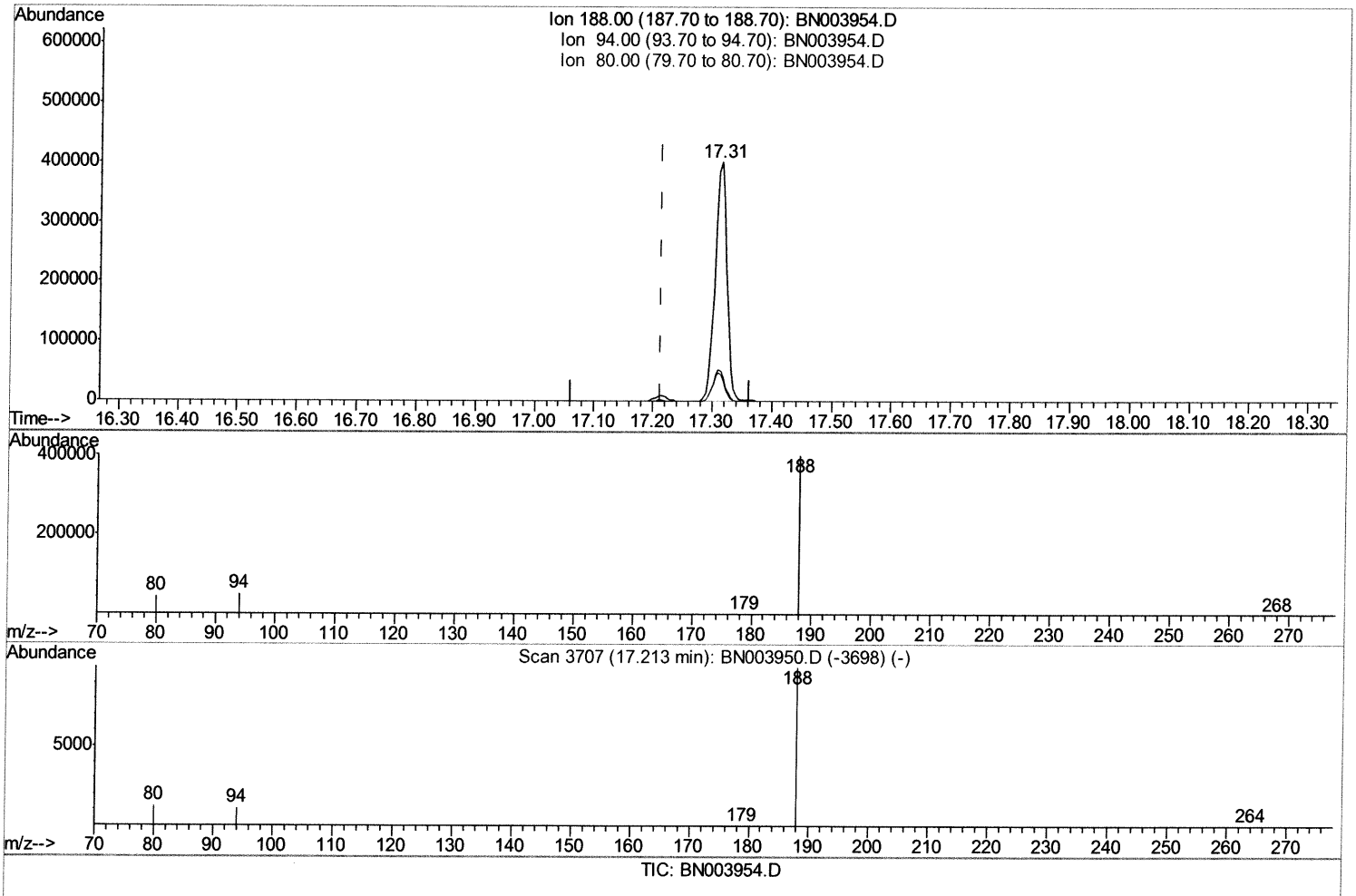
Quantitation Report (Qedit)

Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 15 22:01:35 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM



TIC: BN003954.D

(10) Phenanthrene-d10 (I)

17.314min (+0.101) 0.40ng/ul

response 551541

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	12.40
80.00	11.60	10.99
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

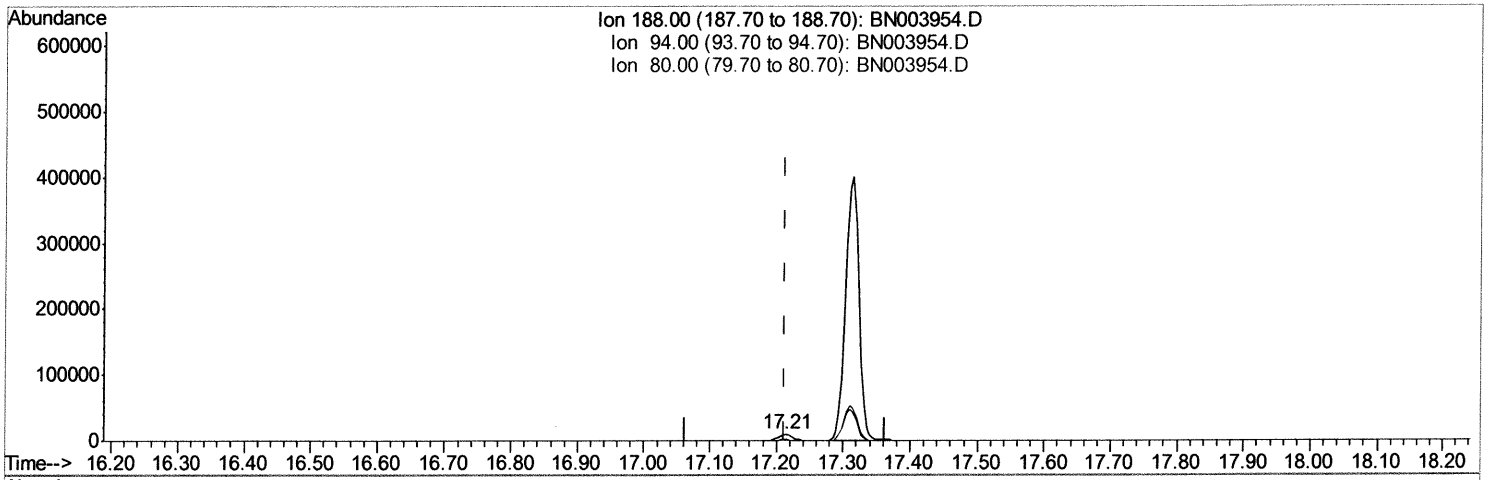
Quantitation Report (Qedit)

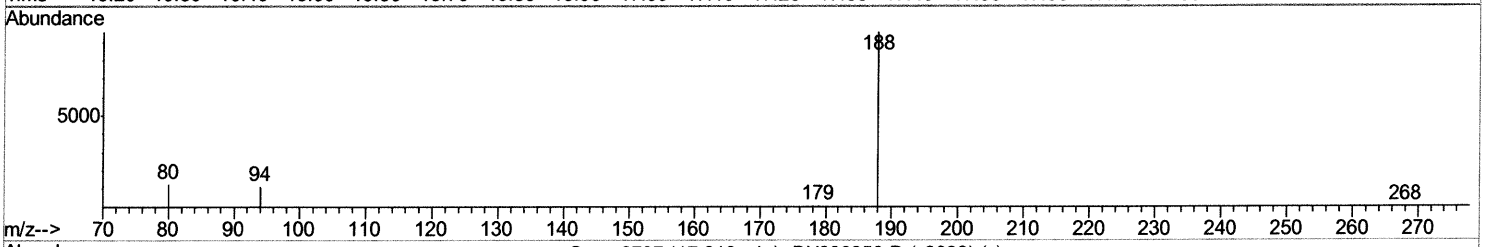
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

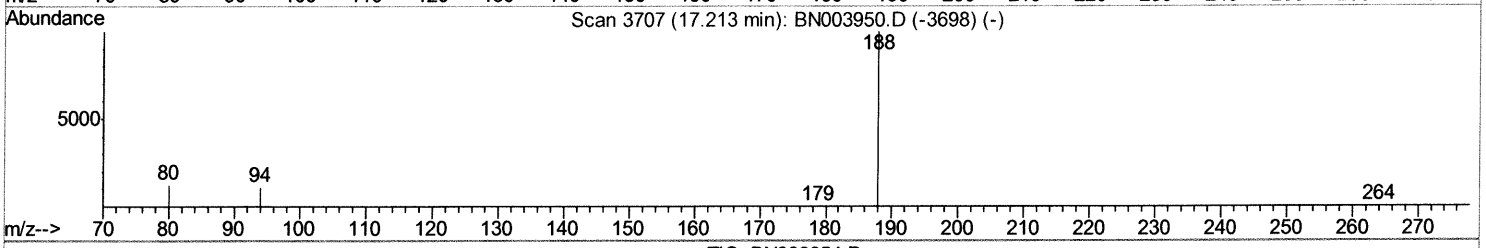
Quant Time: Dec 15 22:01:35 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(10) Phenanthrene-d10 (I)

17.213min (-0.000) 0.40ng/ul m) SJ 12/17/18

response 13588

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	12.44
80.00	11.60	13.52
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

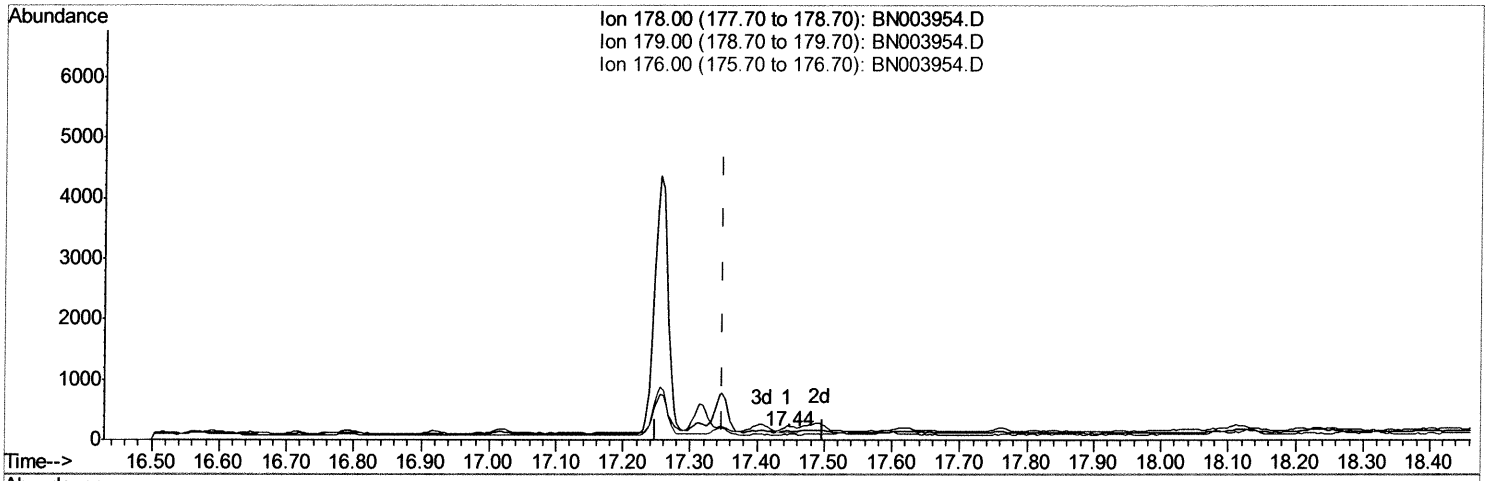
Quantitation Report (Qedit)

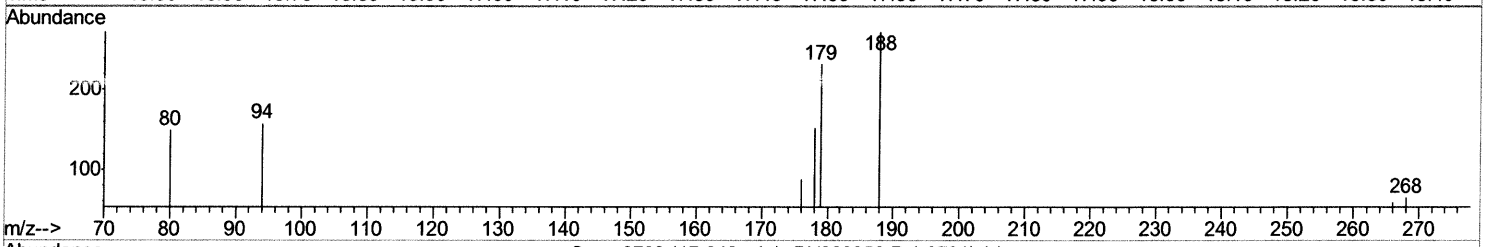
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

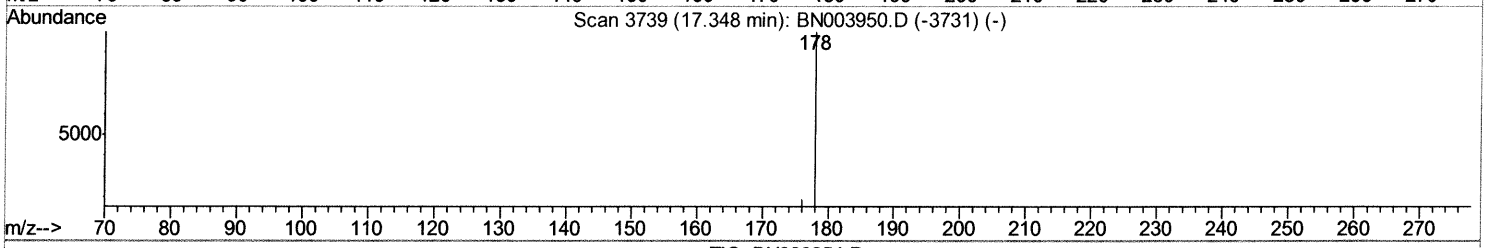
Quant Time: Dec 15 22:28:12 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(13) Anthracene

17.445min (+0.097) 0.00ng/ul

response 49

Ion	Exp%	Act%
178.00	100	100
179.00	15.40	152.63#
176.00	18.50	57.24#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

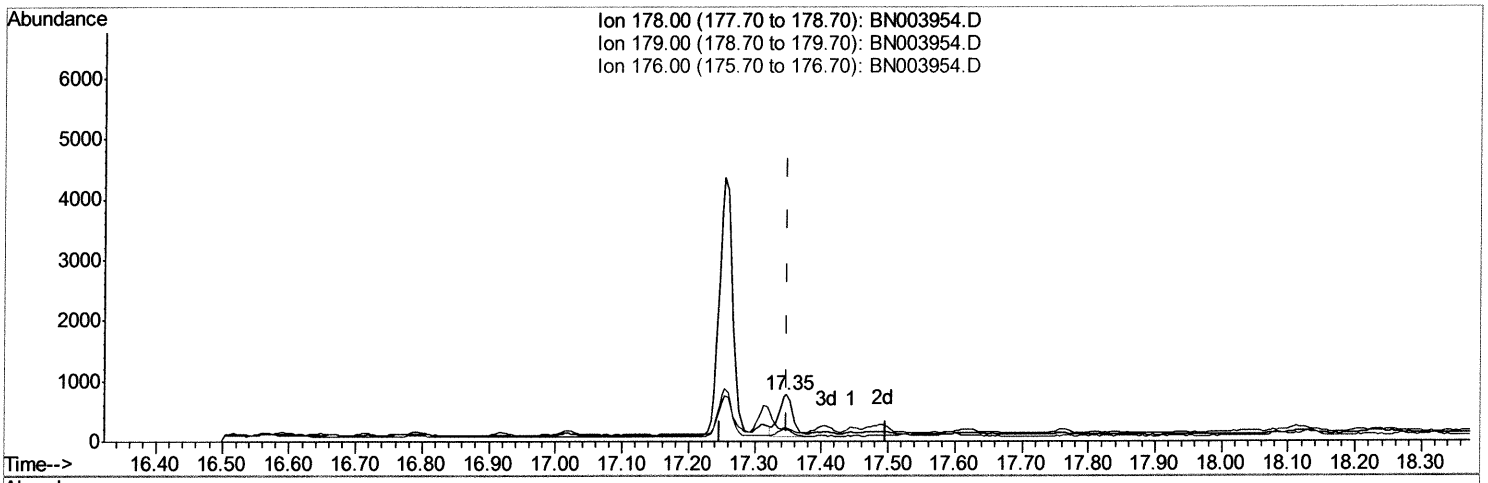
Quantitation Report (Qedit)

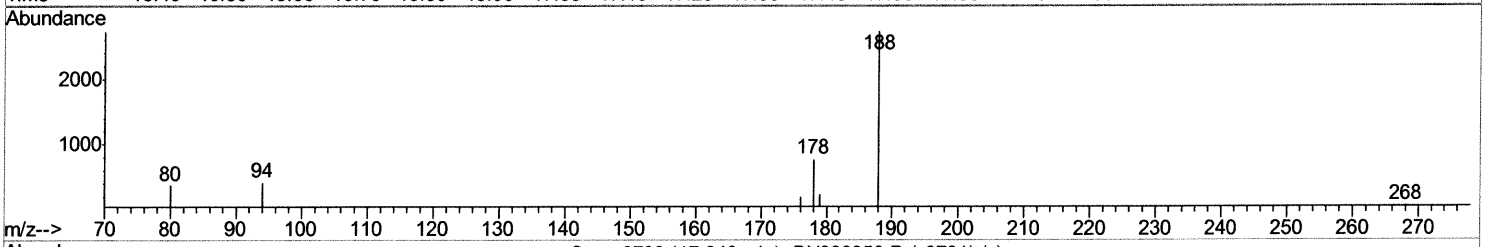
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

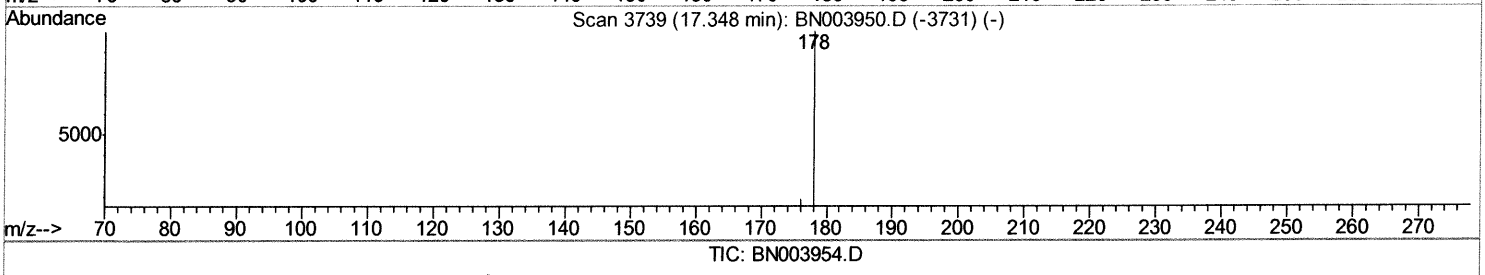
Quant Time: Dec 15 22:28:12 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(13) Anthracene

17.348min (-0.000) 0.03ng/ul m > SJ 12/19/18

response 1026

Ion	Exp%	Act%
178.00	100	100
179.00	15.40	29.46#
176.00	18.50	27.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

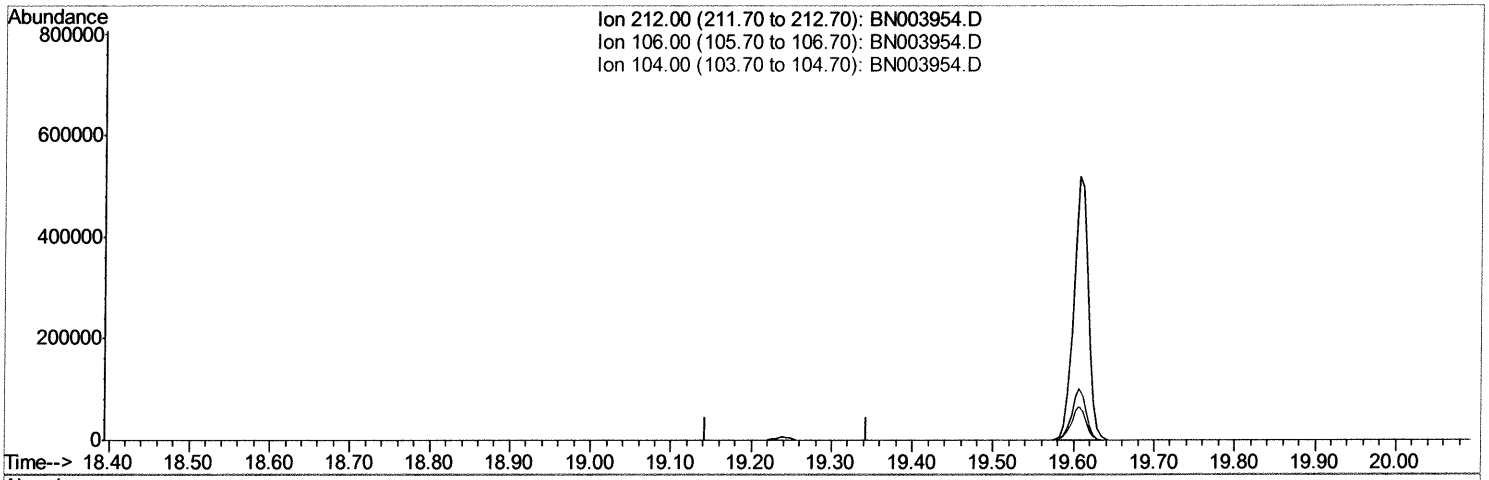
Quantitation Report (Qedit)

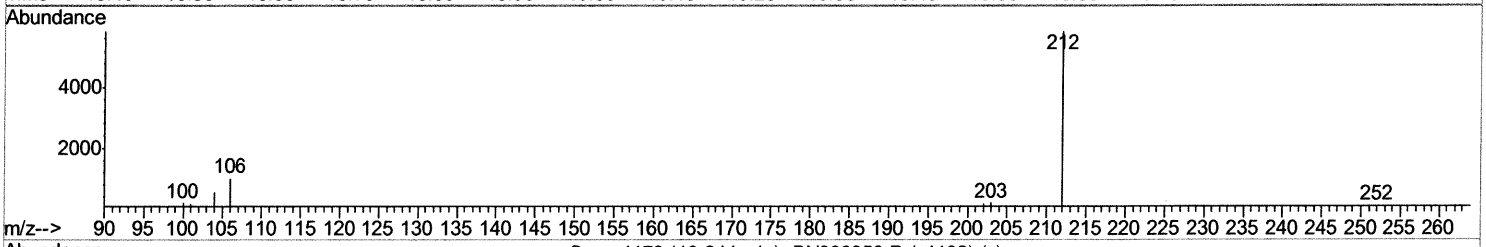
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

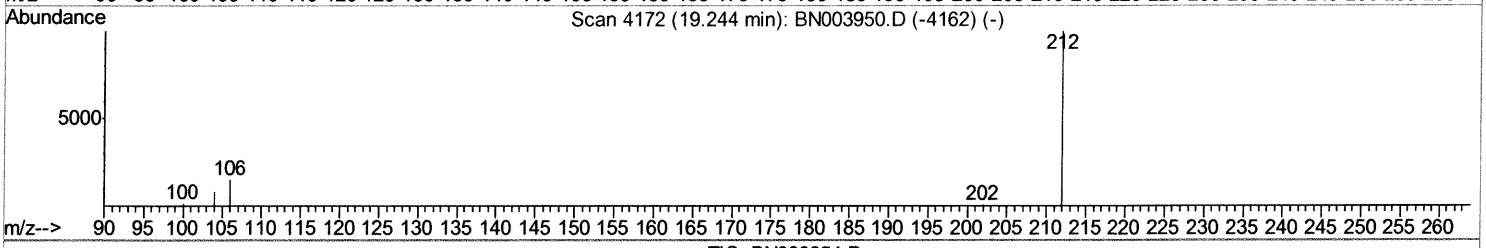
Quant Time: Dec 15 22:28:12 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(14) Fluoranthene-d10 (SURR)

19.244min (-19.244) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

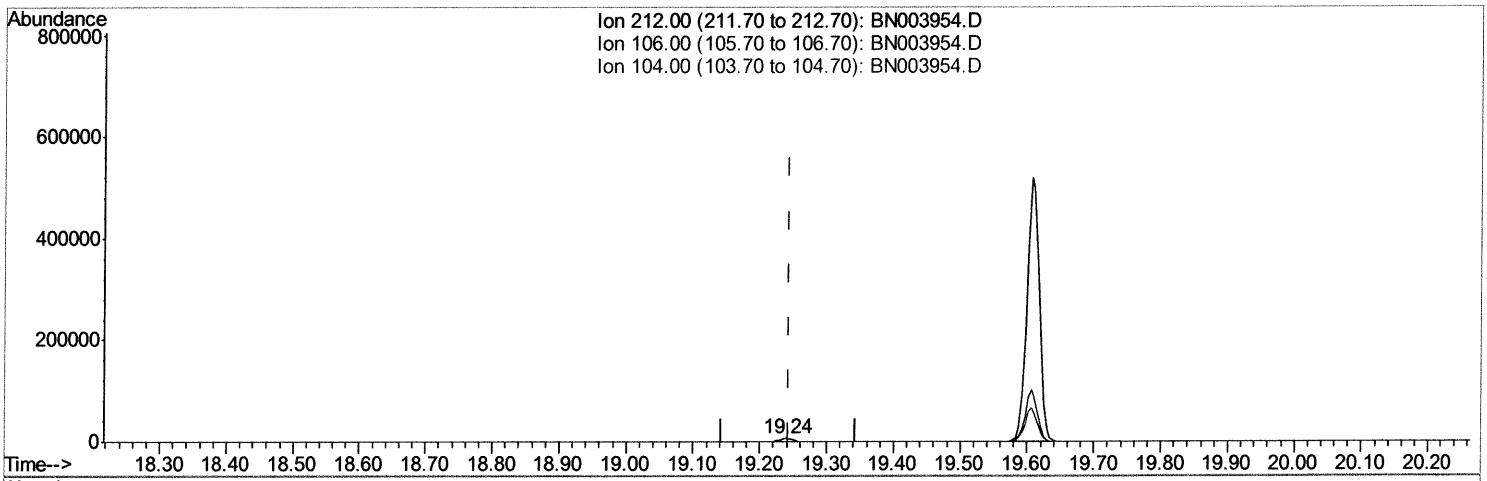
Quantitation Report (Qedit)

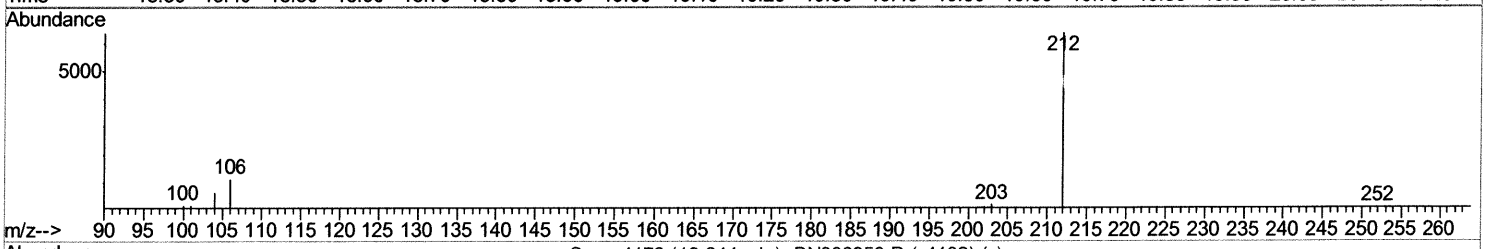
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

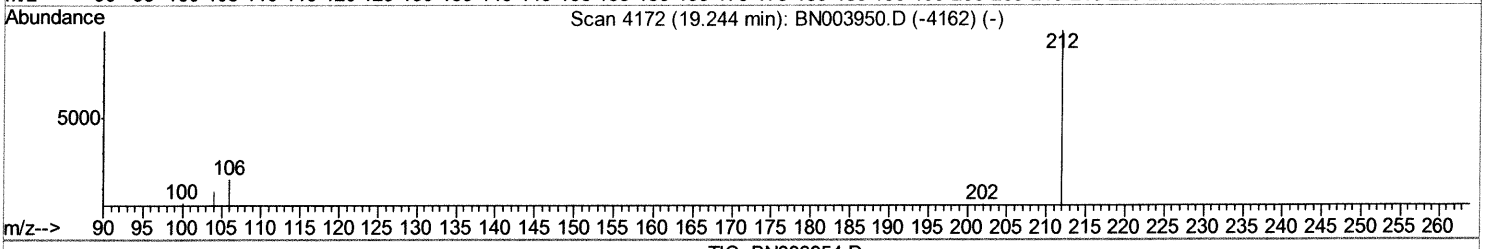
Quant Time: Dec 15 22:28:12 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(14) Fluoranthene-d10 (SURR)

19.239min (-0.005) 0.21ng/ul m > SJ 12/19/18

response 8422

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

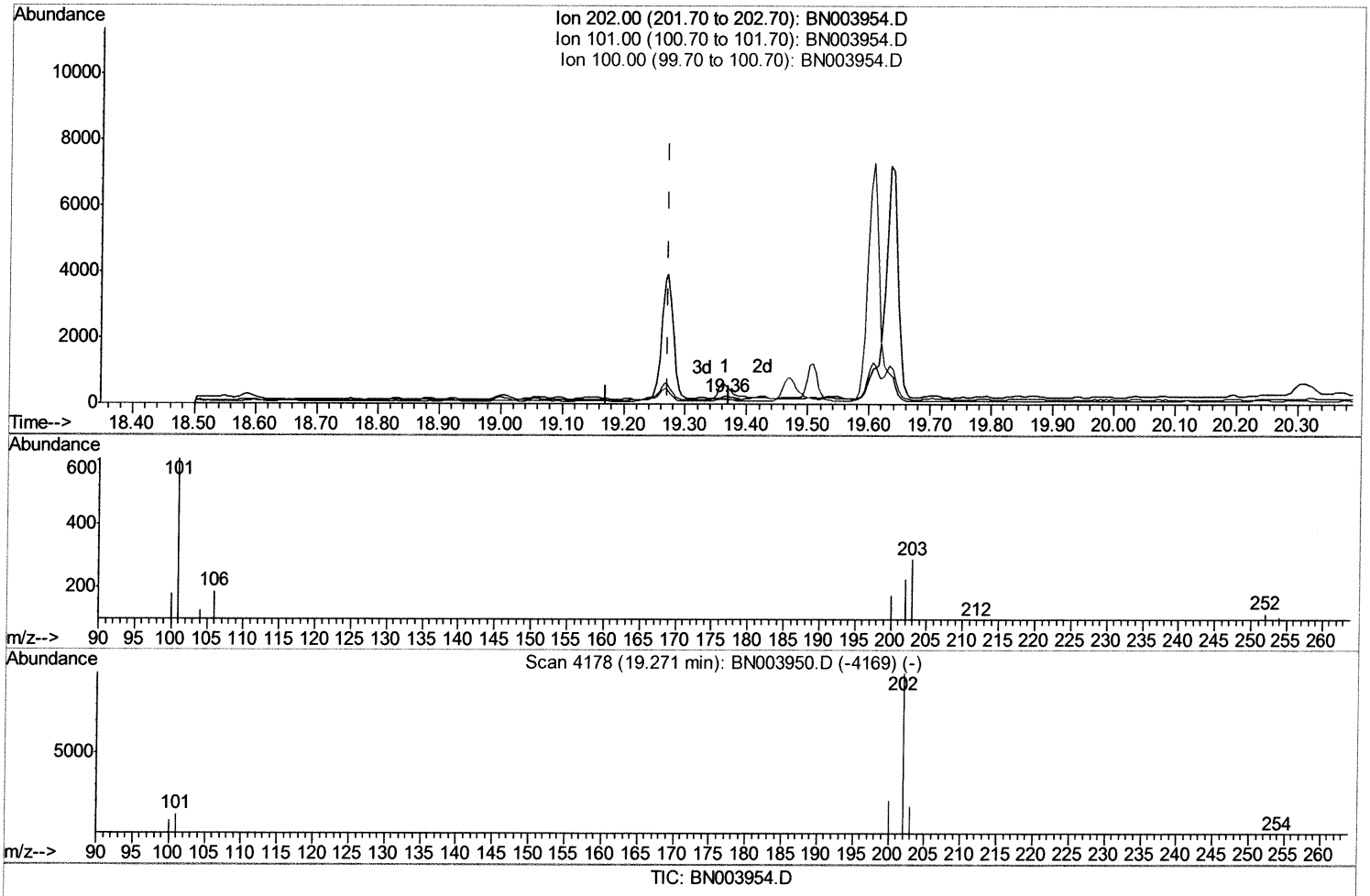
Quantitation Report (Qedit)

Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 15 22:28:12 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM



TIC: BN003954.D

(15) Fluoranthene (C)

19.364min (+0.093) 0.00ng/ul

response 102

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	266.67#
100.00	8.10	78.51#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

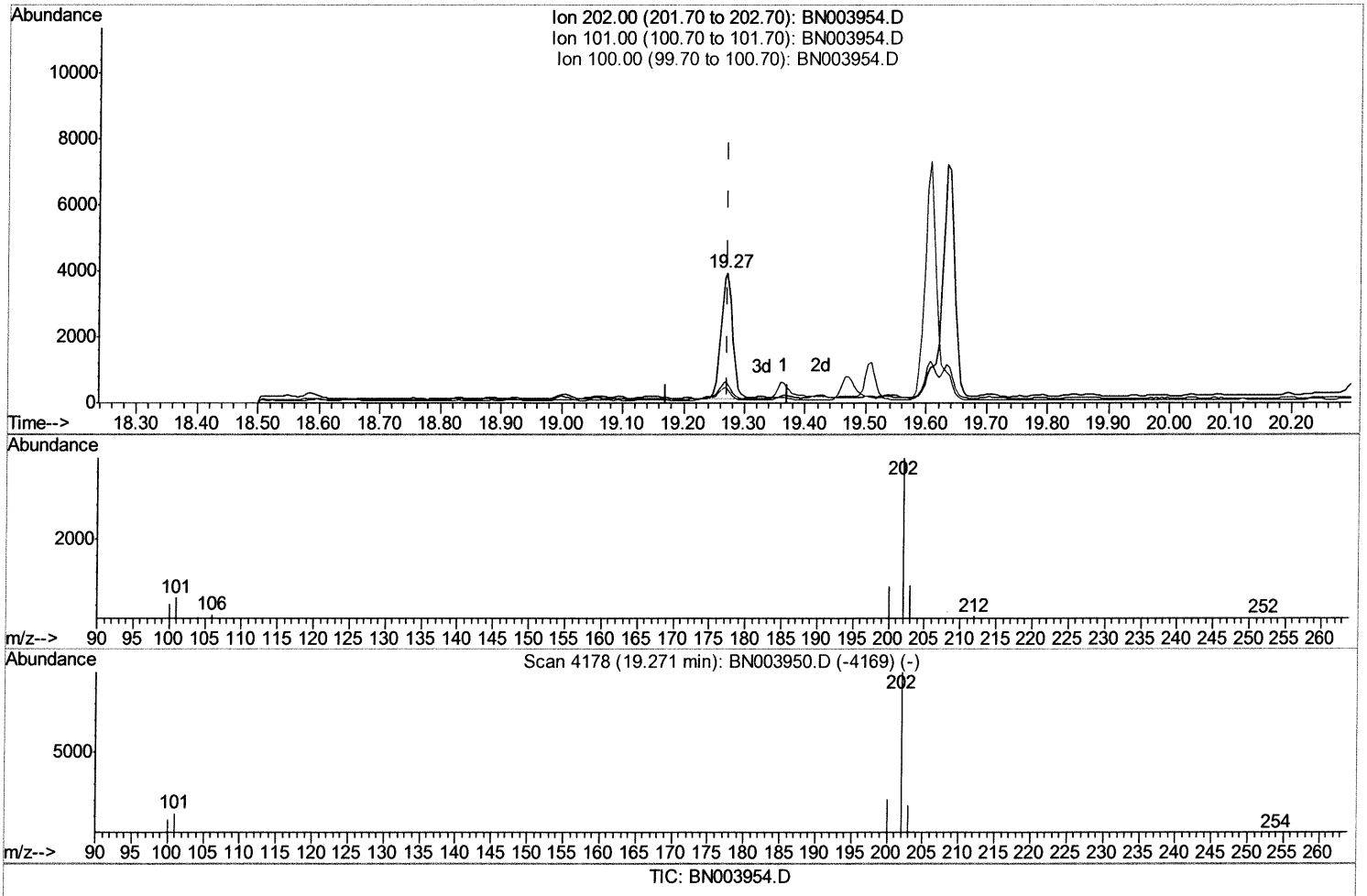
Quantitation Report (Qedit)

Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 15 22:28:12 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM



TIC: BN003954.D

(15) Fluoranthene (C)

19.271min (-0.000) 0.10ng/ul m SJ 12/17/18

response 5009

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	14.83
100.00	8.10	10.80
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

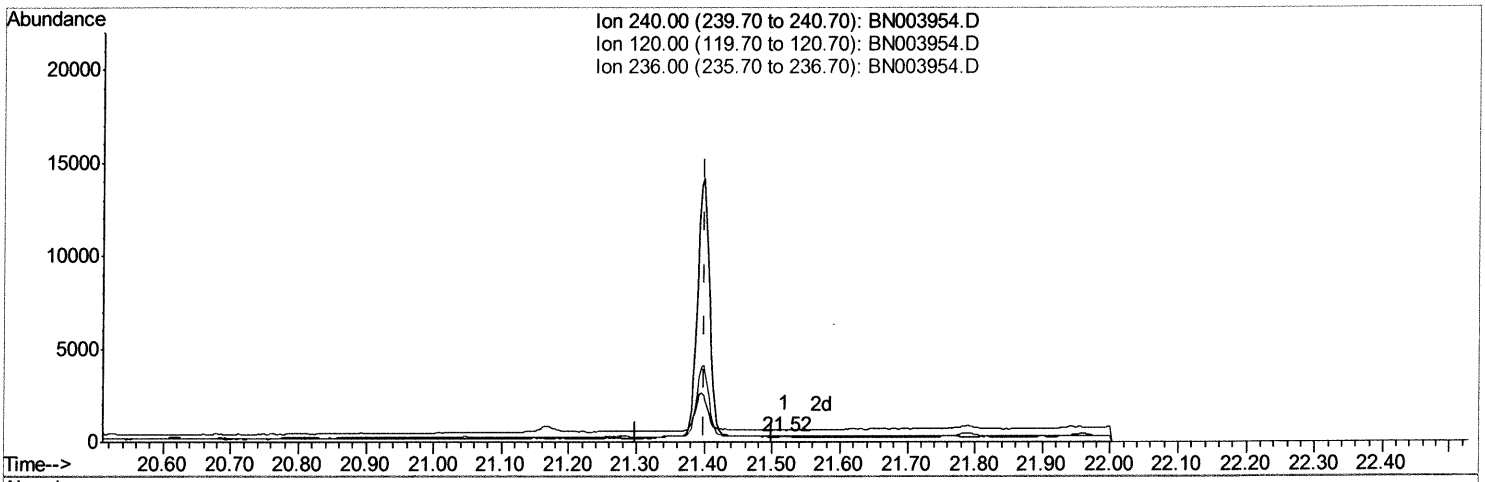
Quantitation Report (Qedit)

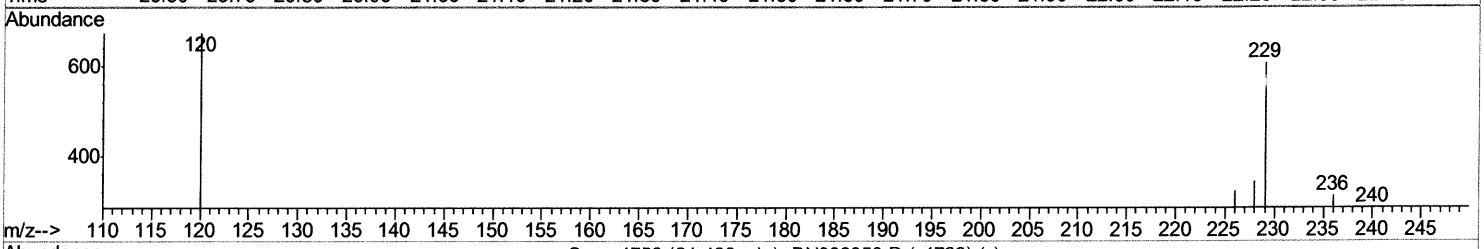
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

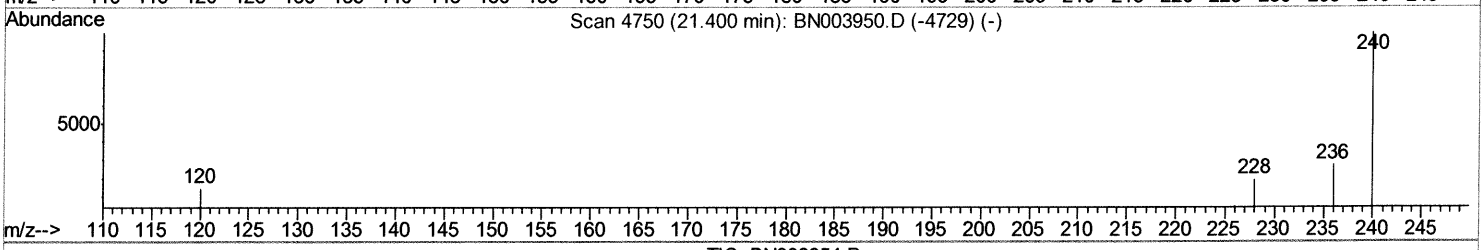
Quant Time: Dec 15 22:28:12 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(16) Chrysene-d12 (I)

21.518min (+0.118) 0.40ng/ul

response 17

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	237.19#
236.00	27.60	109.12#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

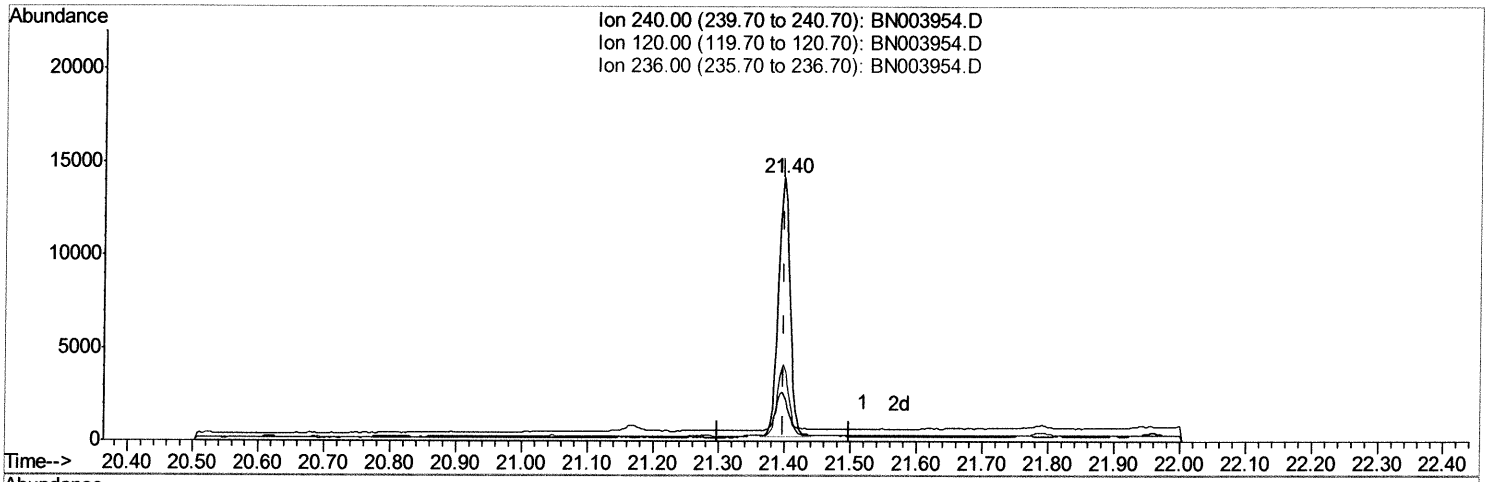
Quantitation Report (Qedit)

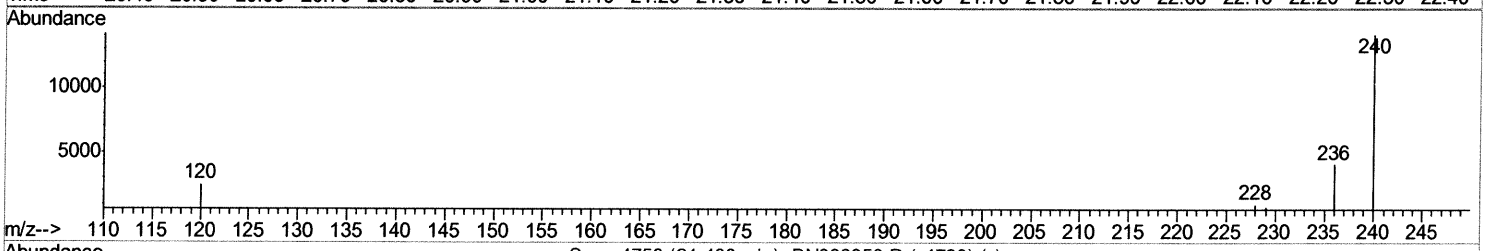
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

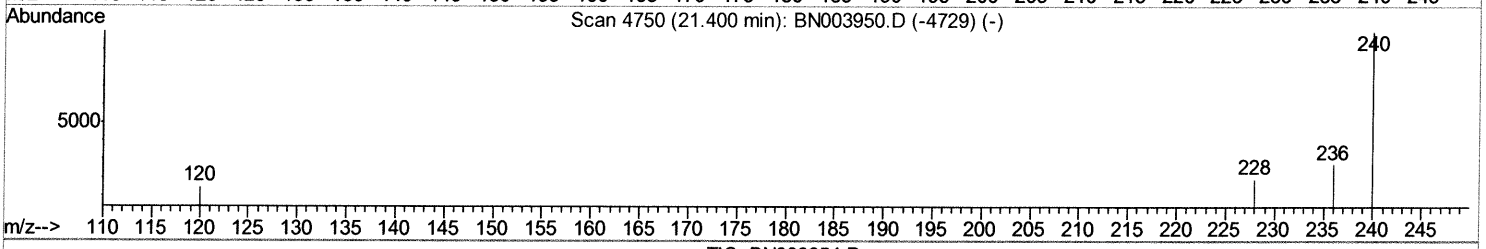
Quant Time: Dec 15 22:28:12 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(16) Chrysene-d12 (I)

21.398min (-0.001) 0.40ng/ul m > SJ 12/17/18

response 17161

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	17.65#
236.00	27.60	29.15
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

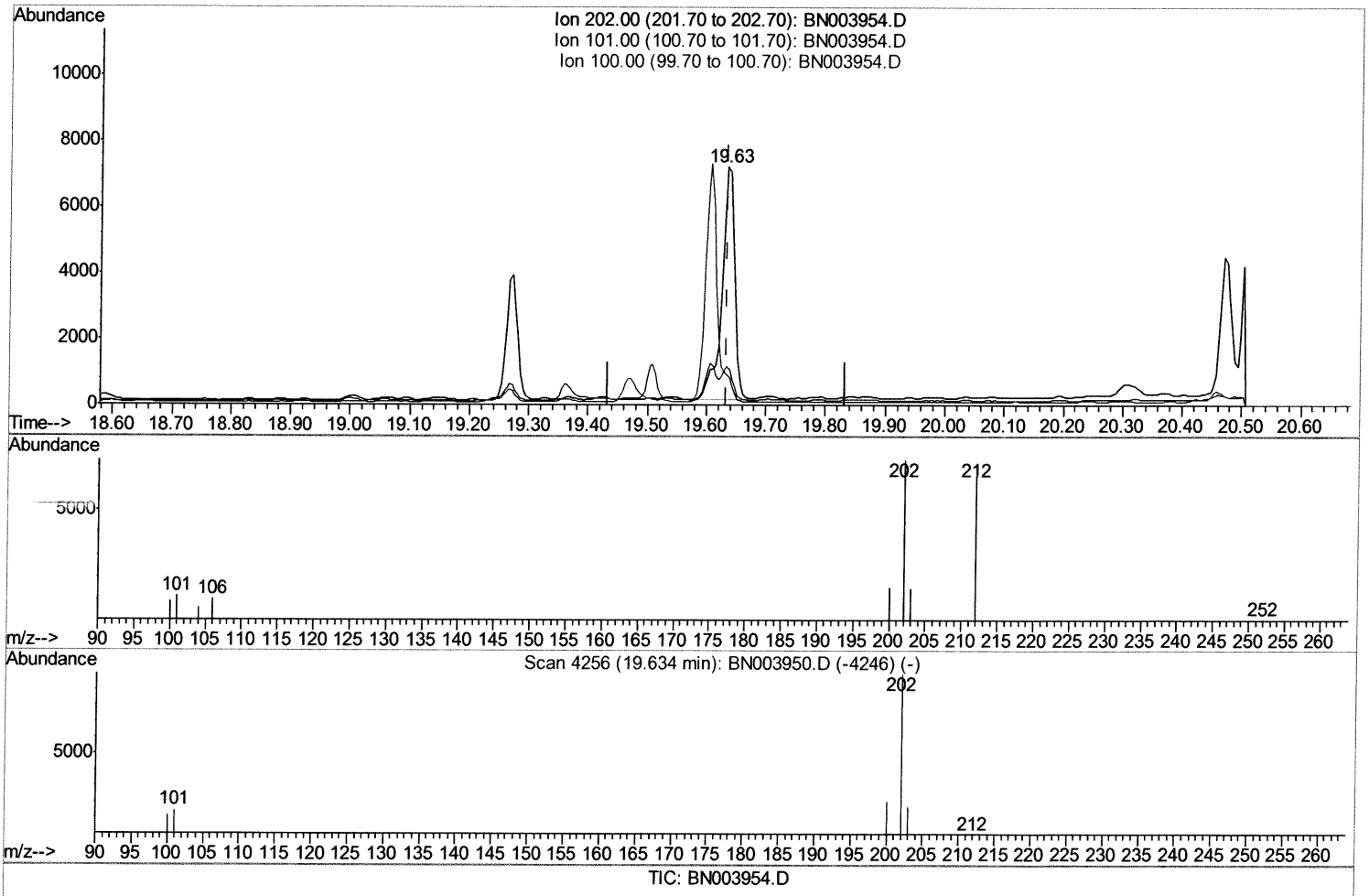
Quantitation Report (Qedit)

Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 15 22:29:16 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM



TIC: BN003954.D

(17) Pyrene

19.634min (-0.000) 0.17ng/ul

response 10648

Ion	Exp%	Act%
202.00	100	100
101.00	12.90	16.17#
100.00	10.60	13.11#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

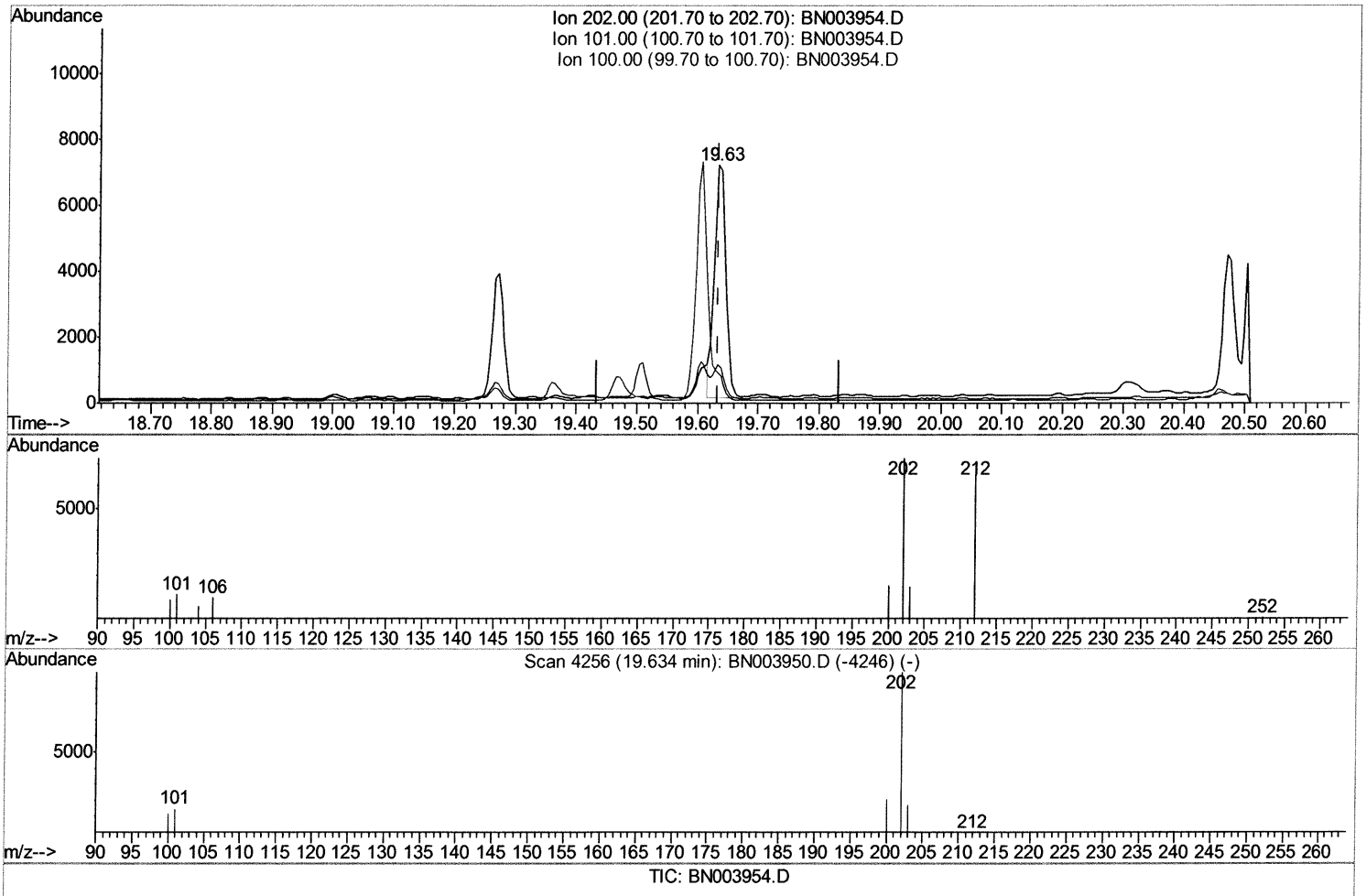
Quantitation Report (Qedit)

Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 15 22:29:16 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM



TIC: BN003954.D

(17) Pyrene

19.634min (-0.000) 0.15ng/ul m > SJ 12/19/18

response 9528

Ion	Exp%	Act%
202.00	100	100
101.00	12.90	16.17#
100.00	10.60	13.11#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

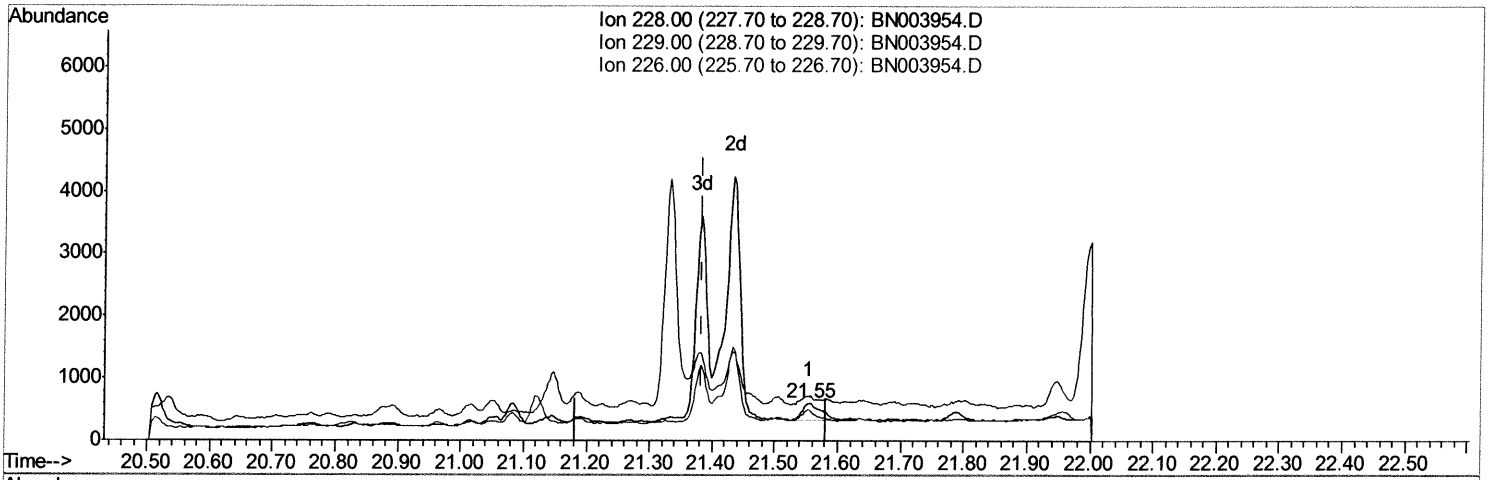
Quantitation Report (Qedit)

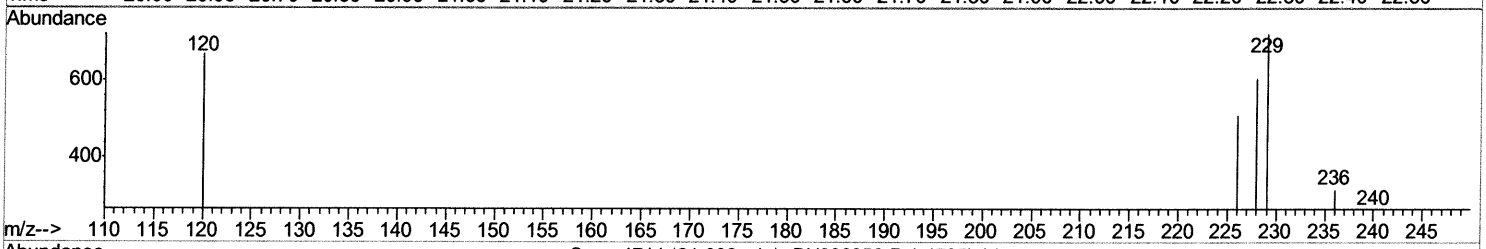
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

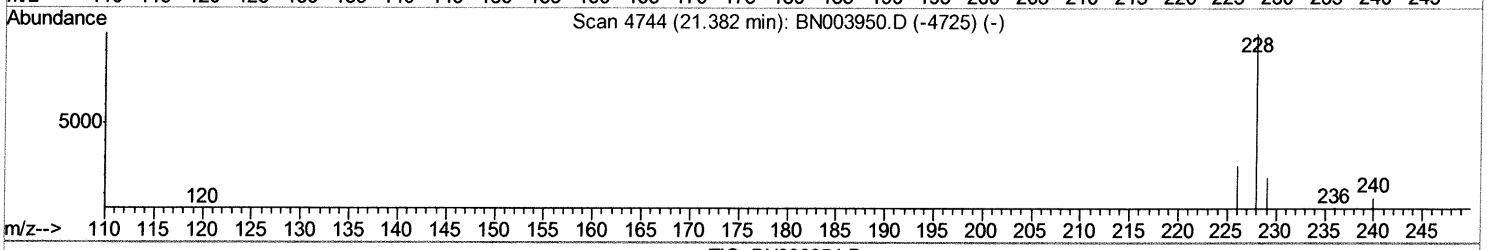
Quant Time: Dec 15 22:29:16 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(18) Benzo(a)anthracene

21.553min (+0.171) 0.01ng/ul

response 533

Ion	Exp%	Act%
228.00	100	100
229.00	19.50	118.91#
226.00	26.40	83.88#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

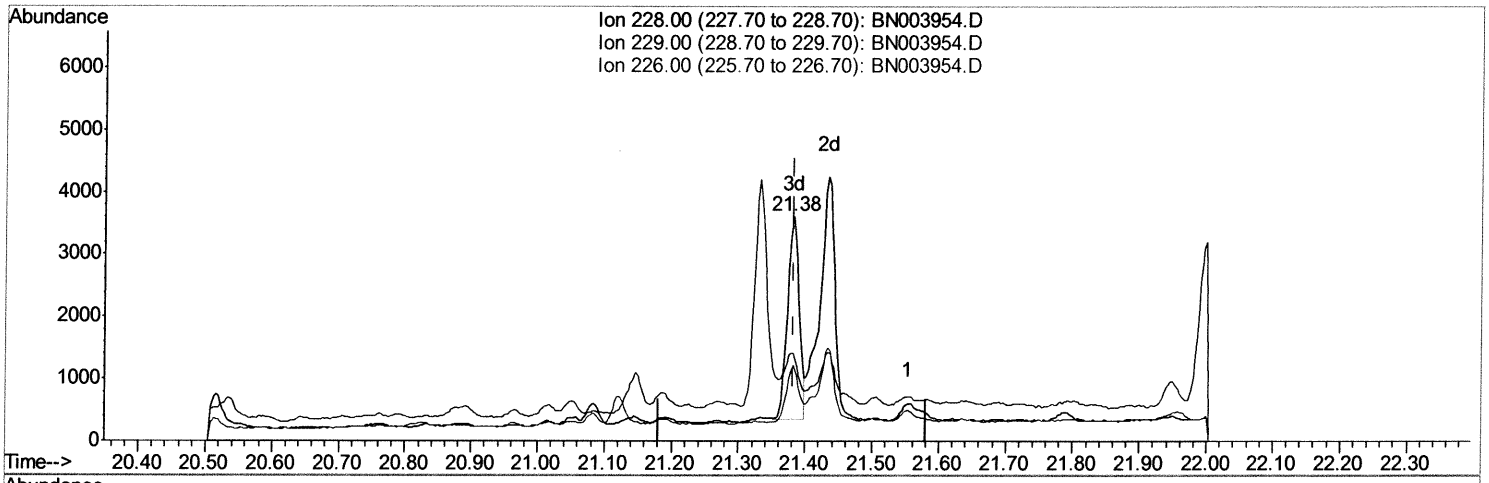
Quantitation Report (Qedit)

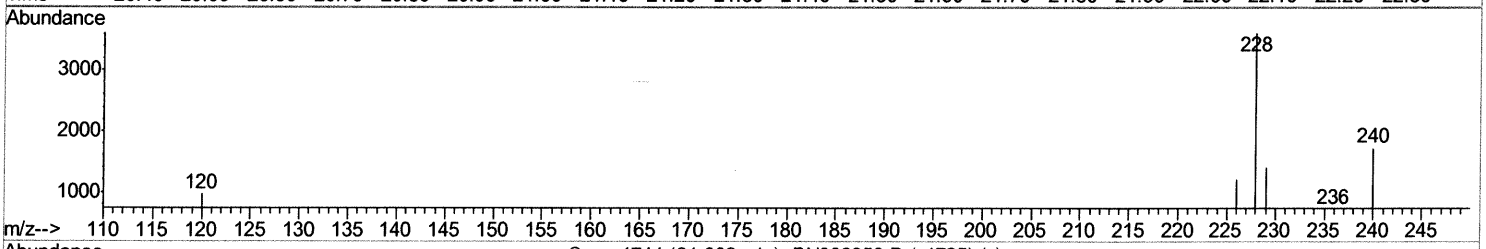
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

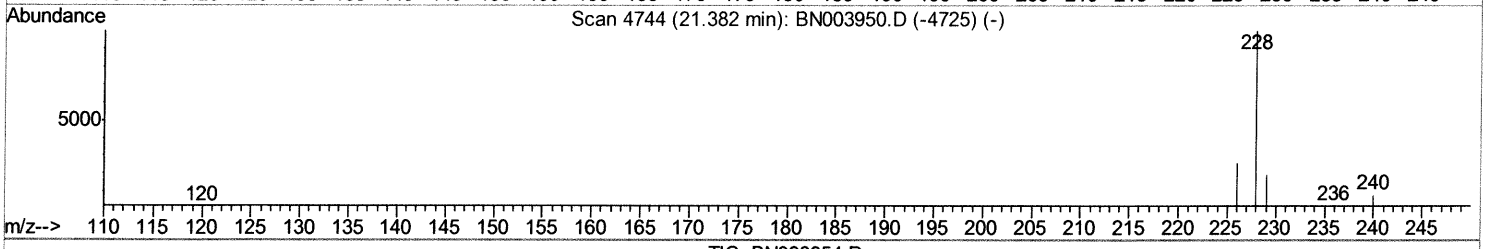
Quant Time: Dec 15 22:29:16 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(18) Benzo(a)anthracene

21.381min (-0.001) 0.07ng/ul m > SJ 12/17/18

response 4036

Ion	Exp%	Act%
228.00	100	100
229.00	19.50	39.10#
226.00	26.40	33.70#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

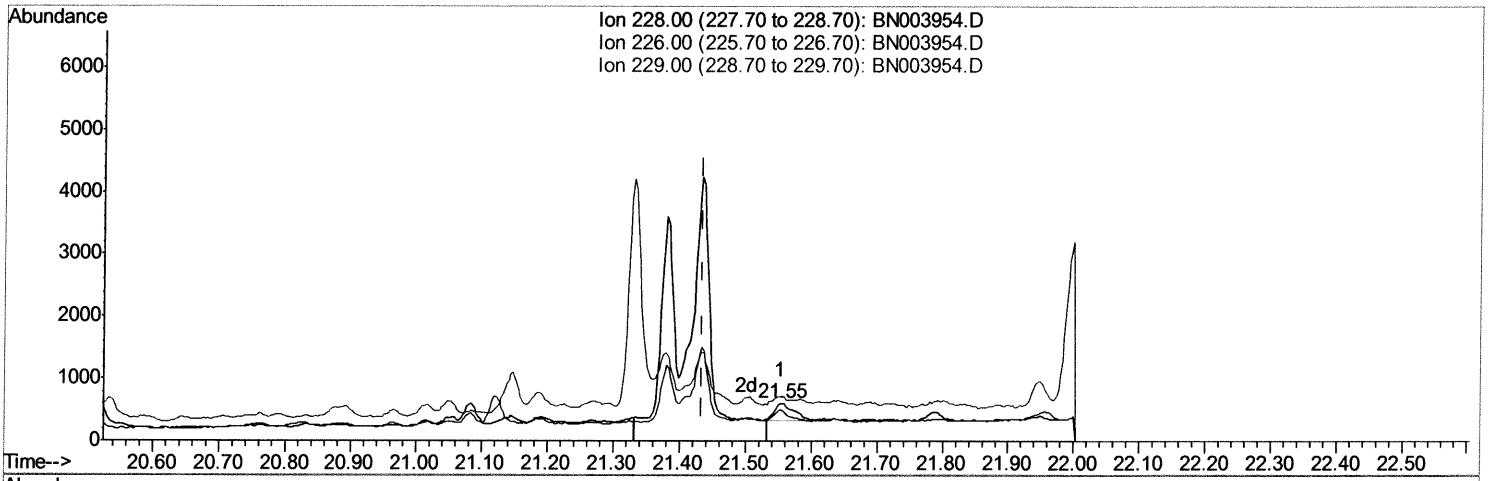
Quantitation Report (Qedit)

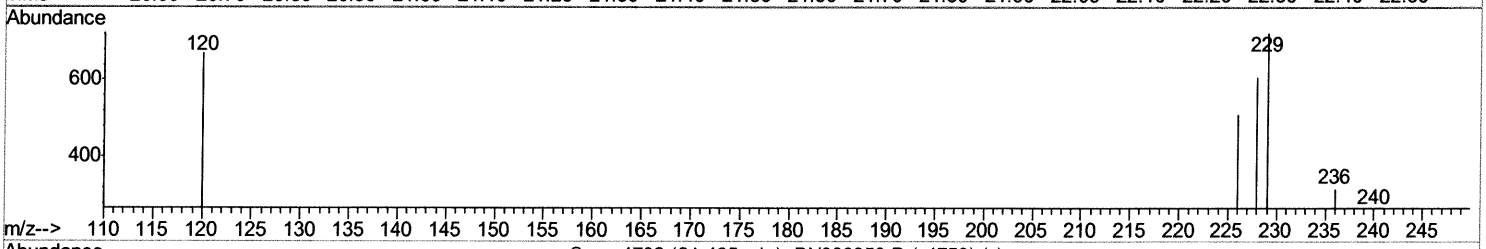
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

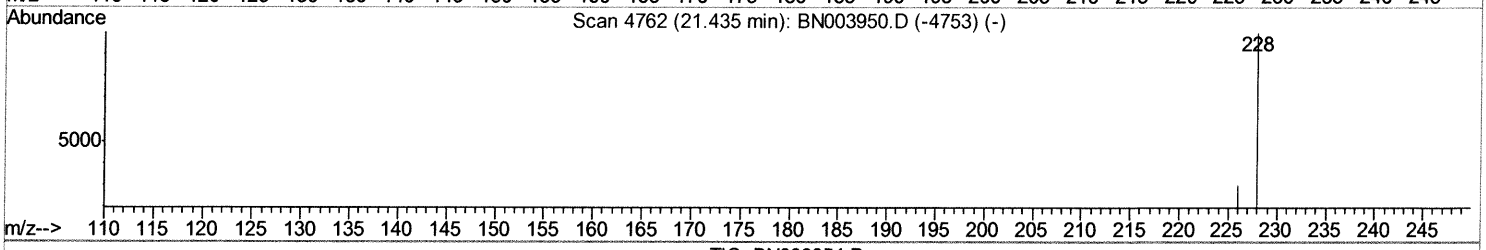
Quant Time: Dec 15 22:29:16 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(19) Chrysene

21.553min (+0.118) 0.01ng/ul

response 582

Ion	Exp%	Act%
228.00	100	100
226.00	30.00	83.88#
229.00	19.60	118.91#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

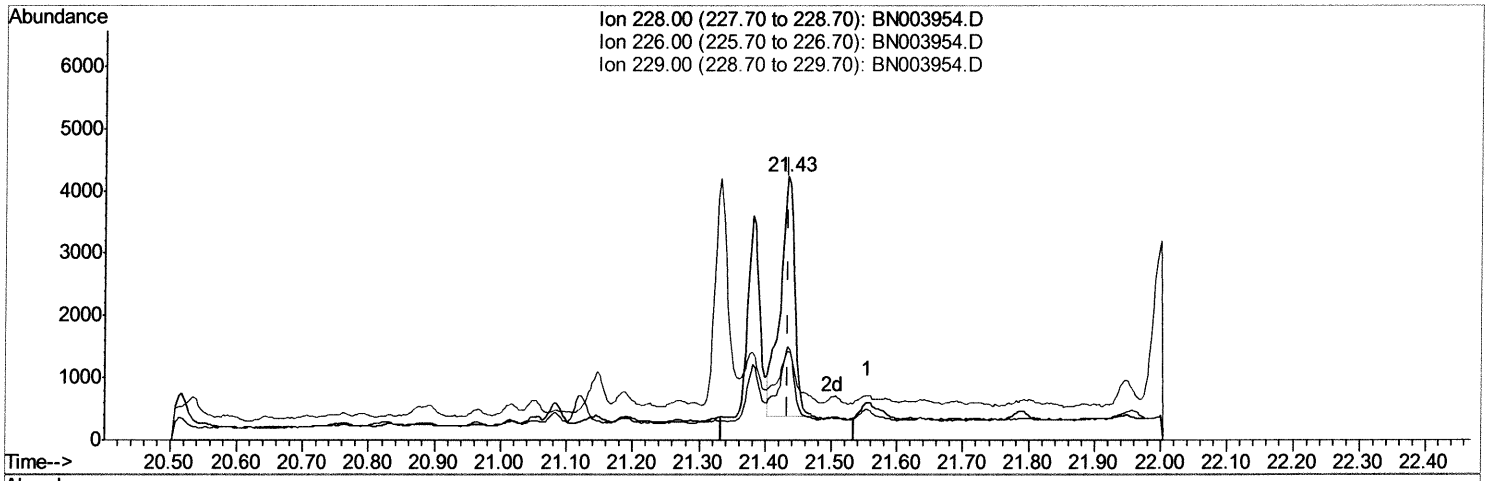
Quantitation Report (Qedit)

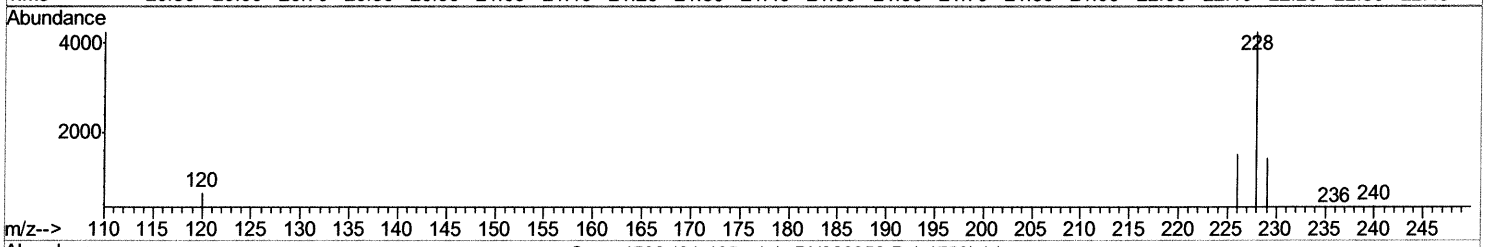
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

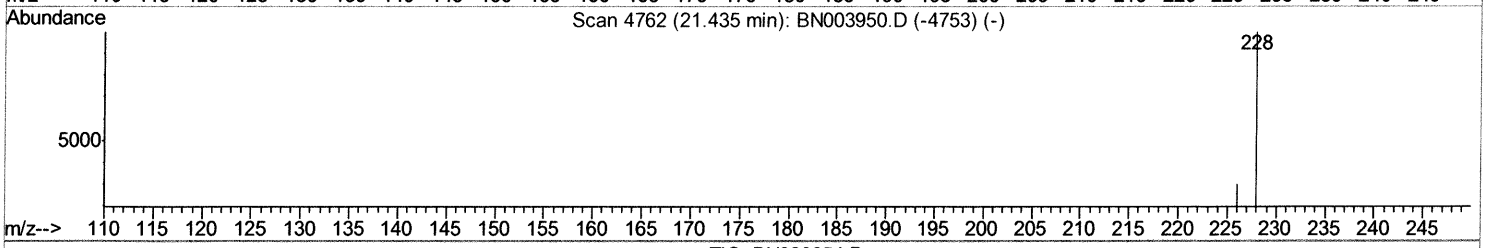
Quant Time: Dec 15 22:29:16 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(19) Chrysene

21.433min (-0.001) 0.09ng/ul m SD 12/17/18

response 5857

Ion	Exp%	Act%
228.00	100	100
226.00	30.00	35.38
229.00	19.60	33.73#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

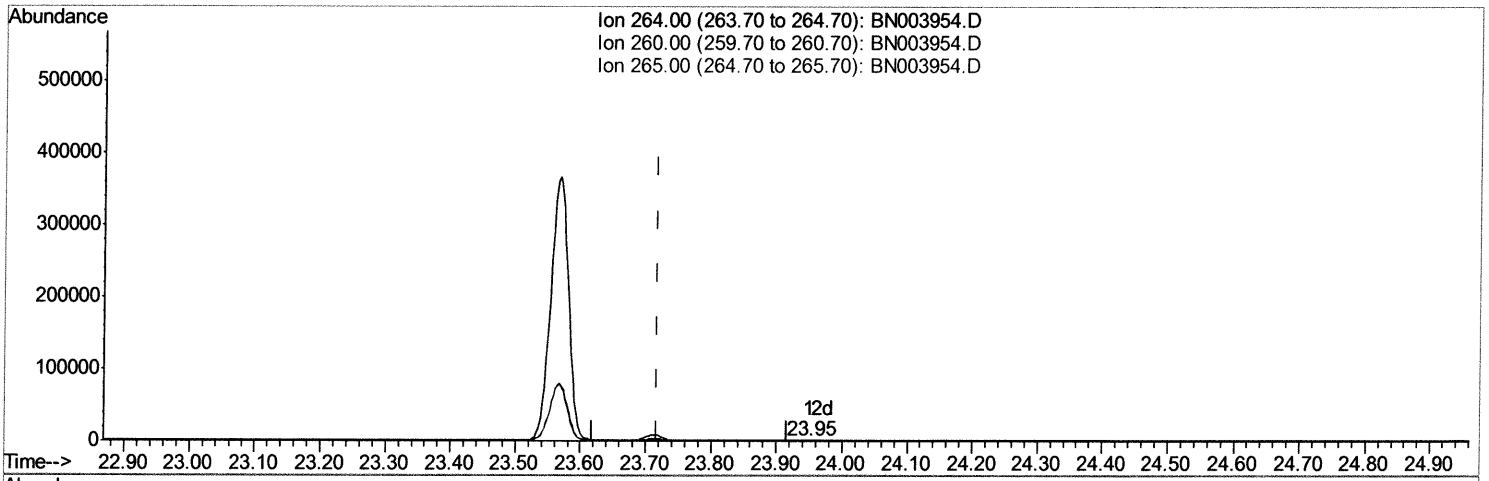
Quantitation Report (Qedit)

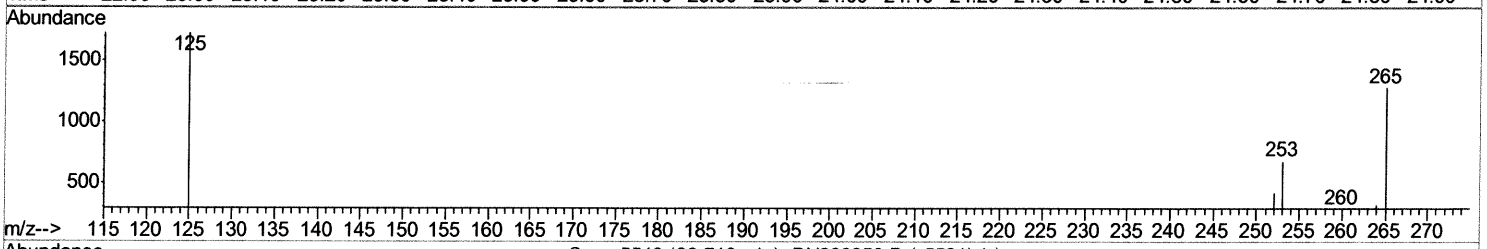
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

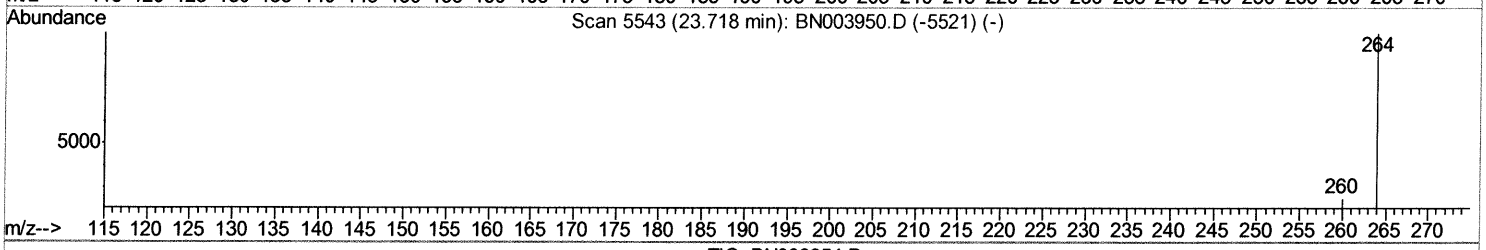
Quant Time: Dec 15 22:29:16 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(20) Perylene-d12 (I)

23.950min (+0.233) 0.40ng/ul

response 12

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	91.22#
265.00	33.50	403.13#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

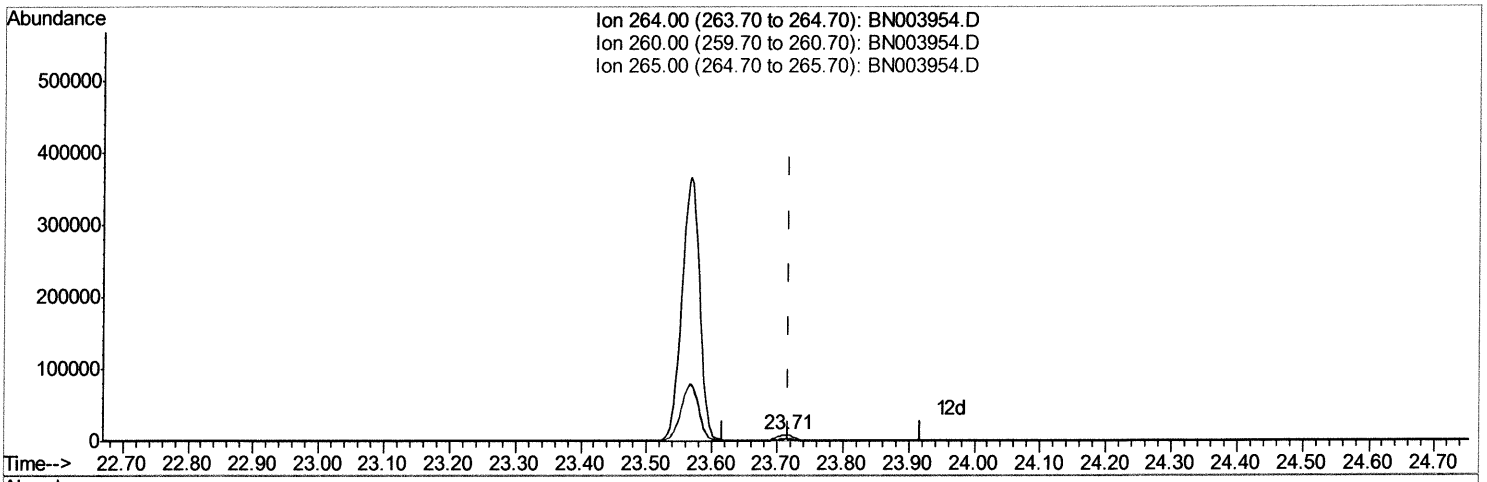
Quantitation Report (Qedit)

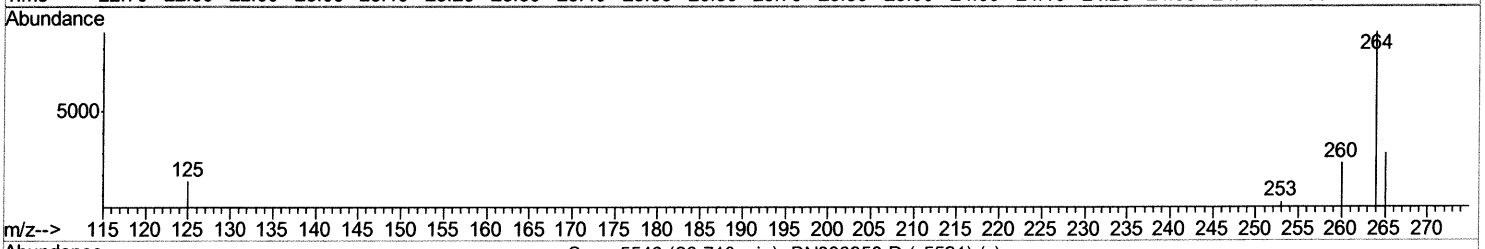
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

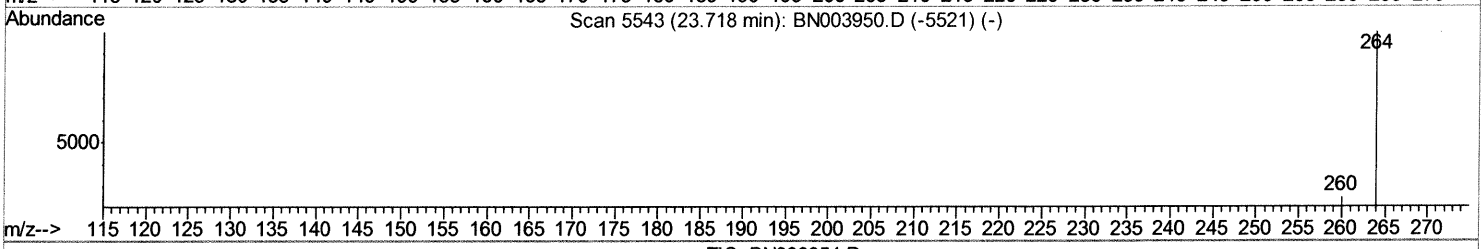
Quant Time: Dec 15 22:29:16 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(20) Perylene-d12 (I)

23.713min (-0.004) 0.40ng/ul m > SJ 12/17/18

response 15425

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	29.12
265.00	33.50	34.19
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (Qedit)

Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 15 22:30:44 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
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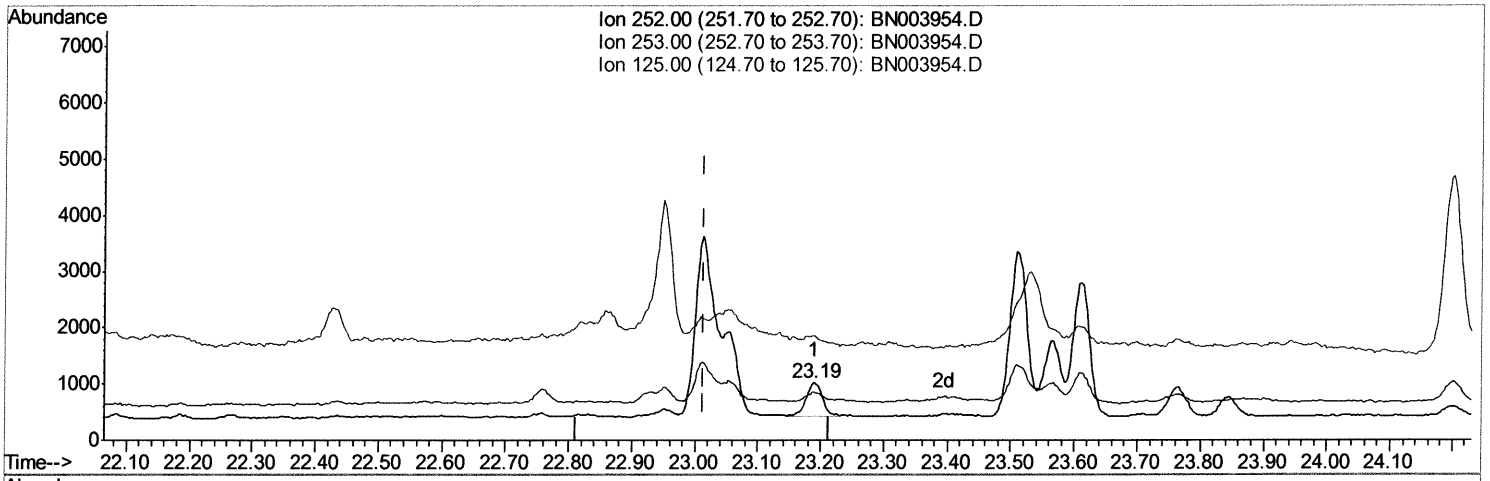
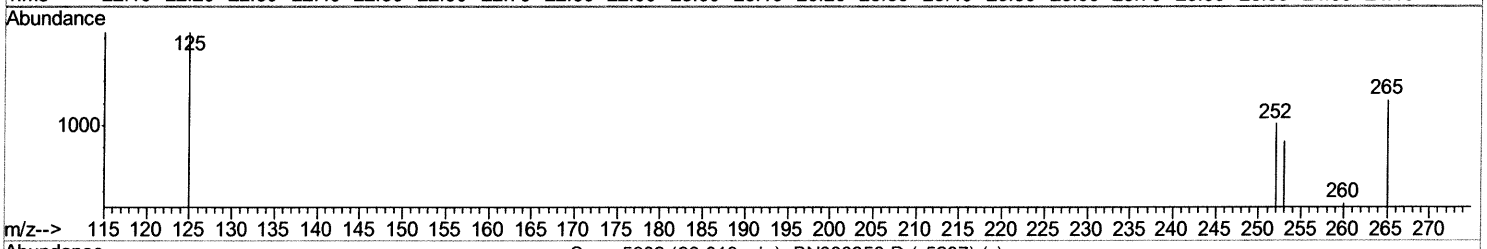
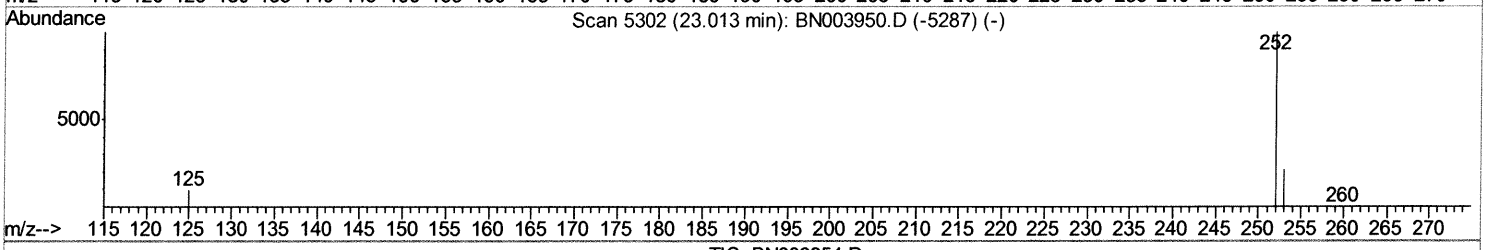
12/17/2018 4:23:47 PM







TIC: BN003954.D

(21) Benzo(b)fluoranthene

23.190min (+0.177) 0.02ng/ul

response 1008

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	83.74#
125.00	11.20	181.19#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

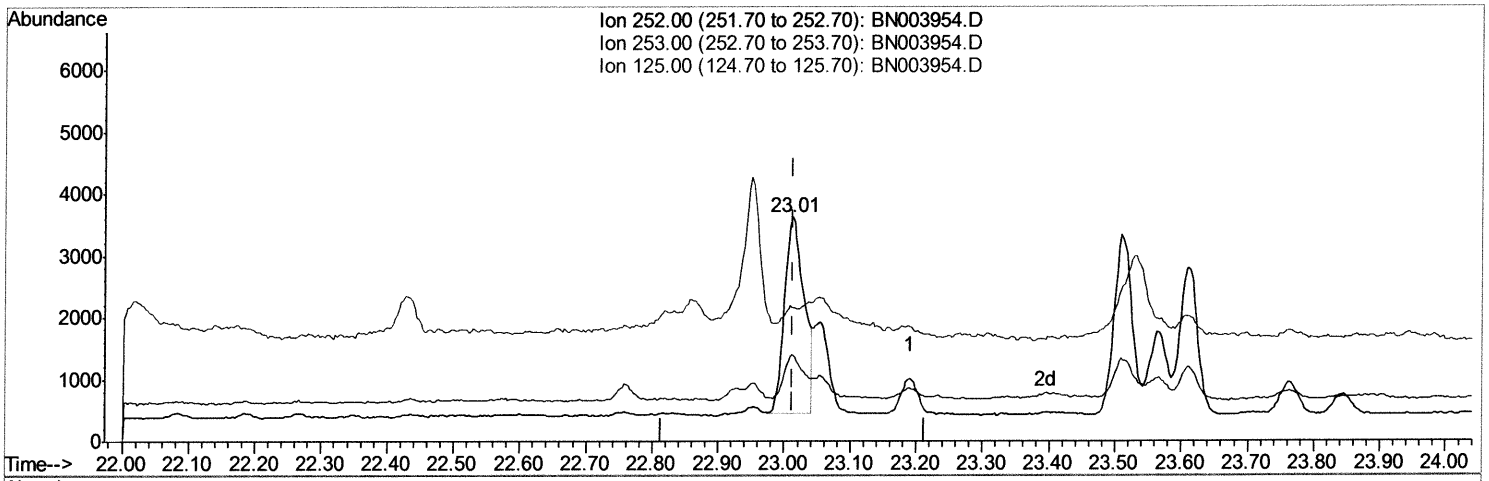
Quantitation Report (Qedit)

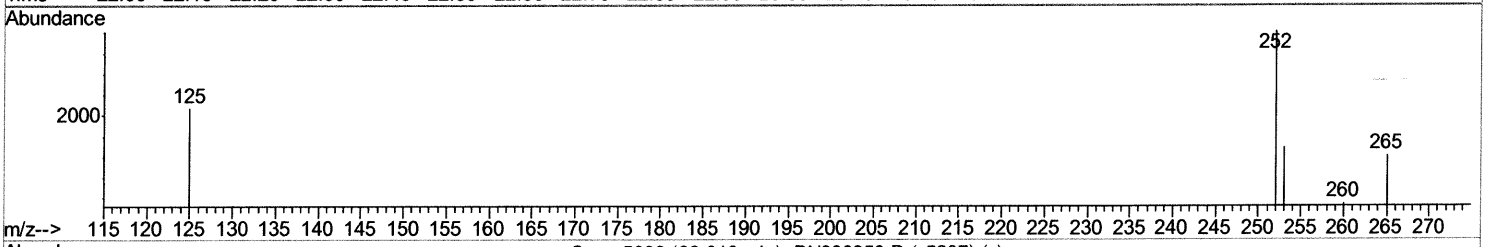
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

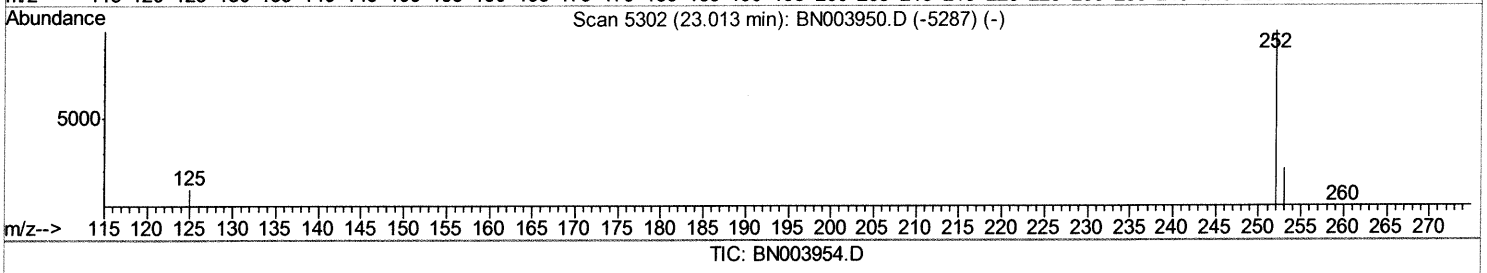
Quant Time: Dec 15 22:30:44 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(21) Benzo(b)fluoranthene

23.012min (-0.001) 0.10ng/ul m SJ 12/17/18

response 6540

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	38.34
125.00	11.20	59.43#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

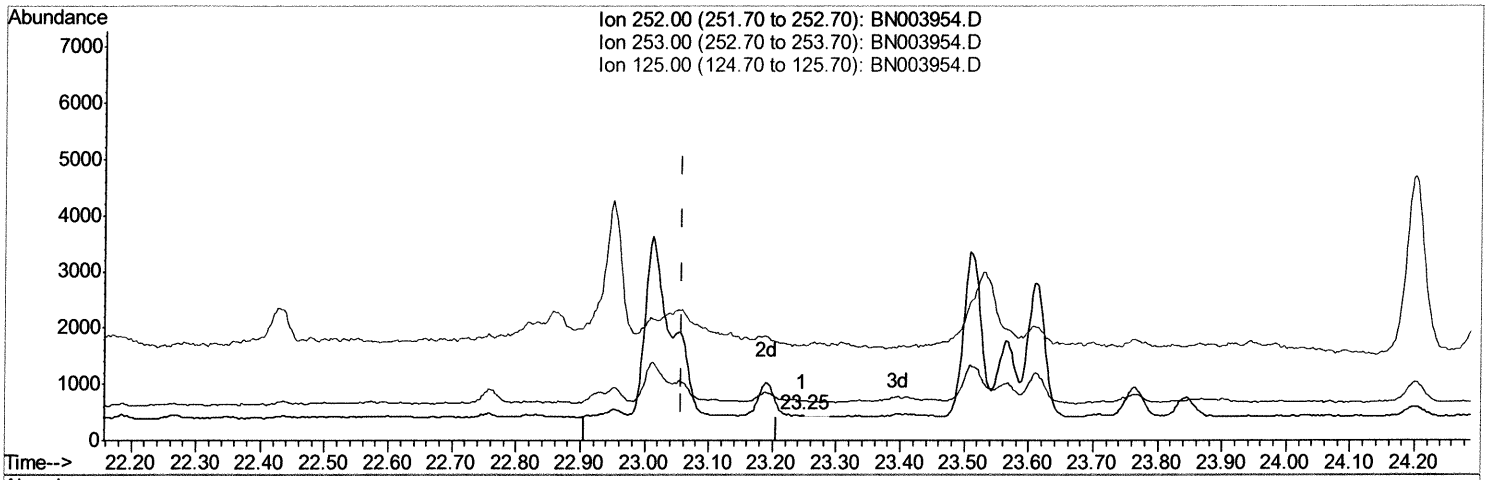
Quantitation Report (Qedit)

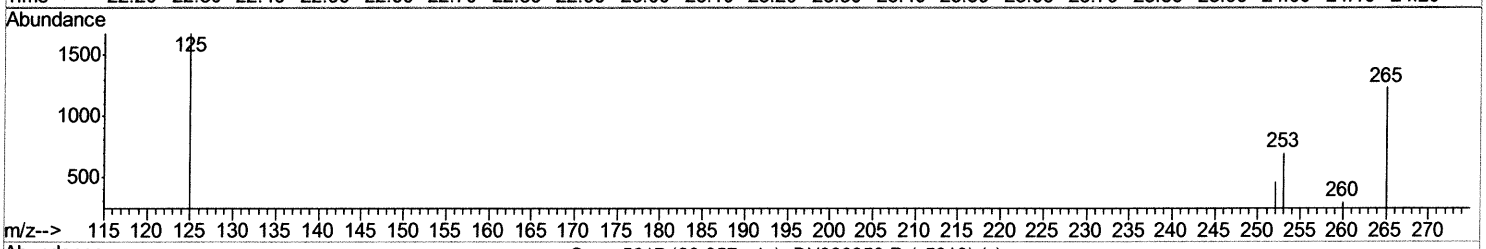
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

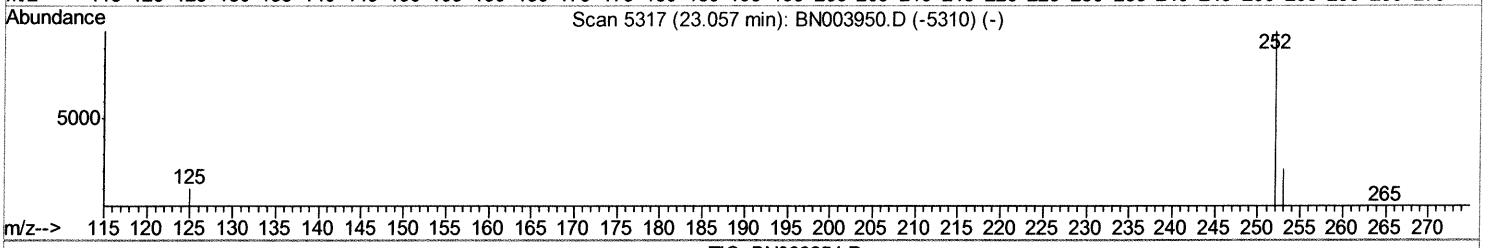
Quant Time: Dec 15 22:30:44 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(22) Benzo(k)fluoranthene

23.246min (+0.189) 0.00ng/ul

response 32

Ion	Exp%	Act%
252.00	100	100
253.00	23.10	153.85#
125.00	11.30	369.67#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

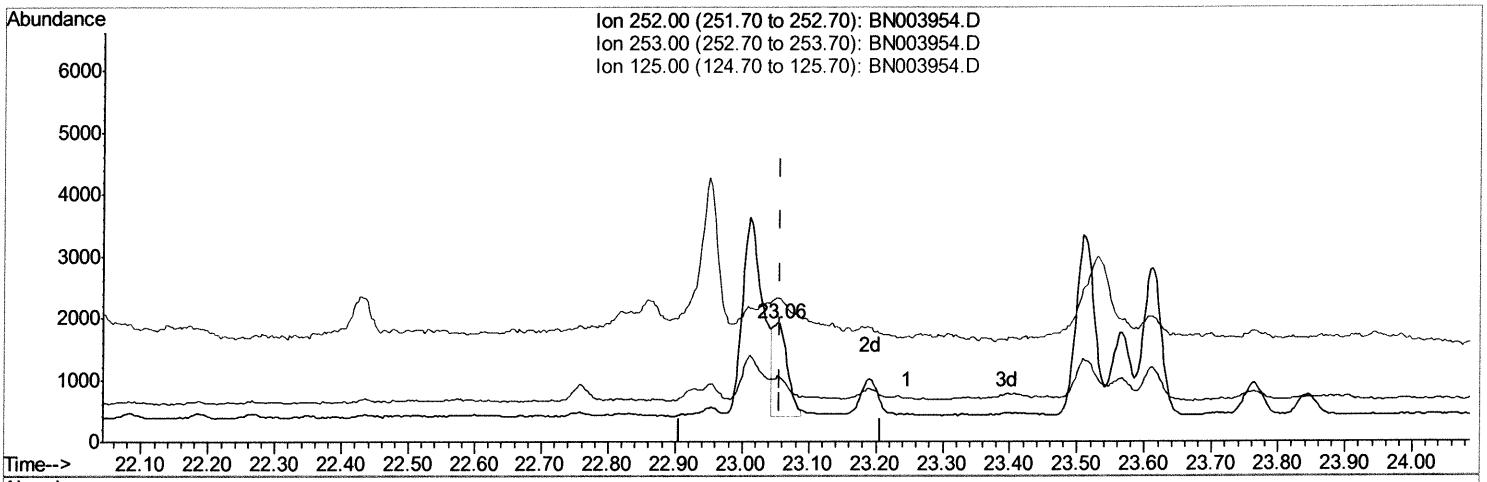
Quantitation Report (Qedit)

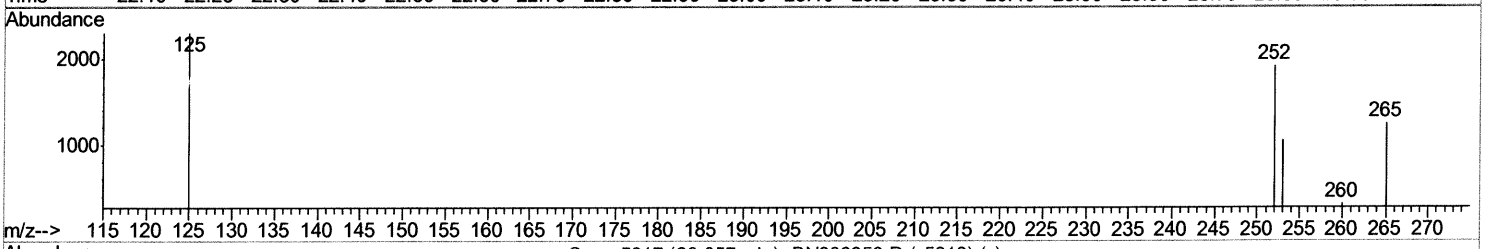
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

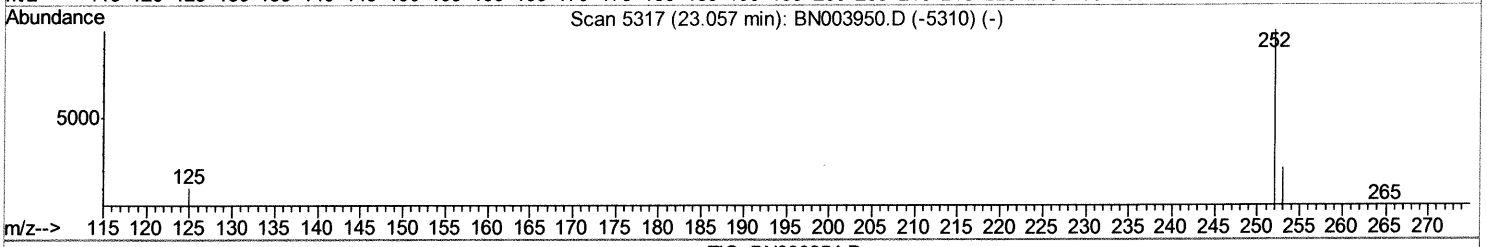
Quant Time: Dec 15 22:30:44 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(22) Benzo(k)fluoranthene

23.056min (-0.001) 0.04ng/ul m SJ 12/17/18

response 2199

Ion	Exp%	Act%
252.00	100	100
253.00	23.10	54.42#
125.00	11.30	120.11#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

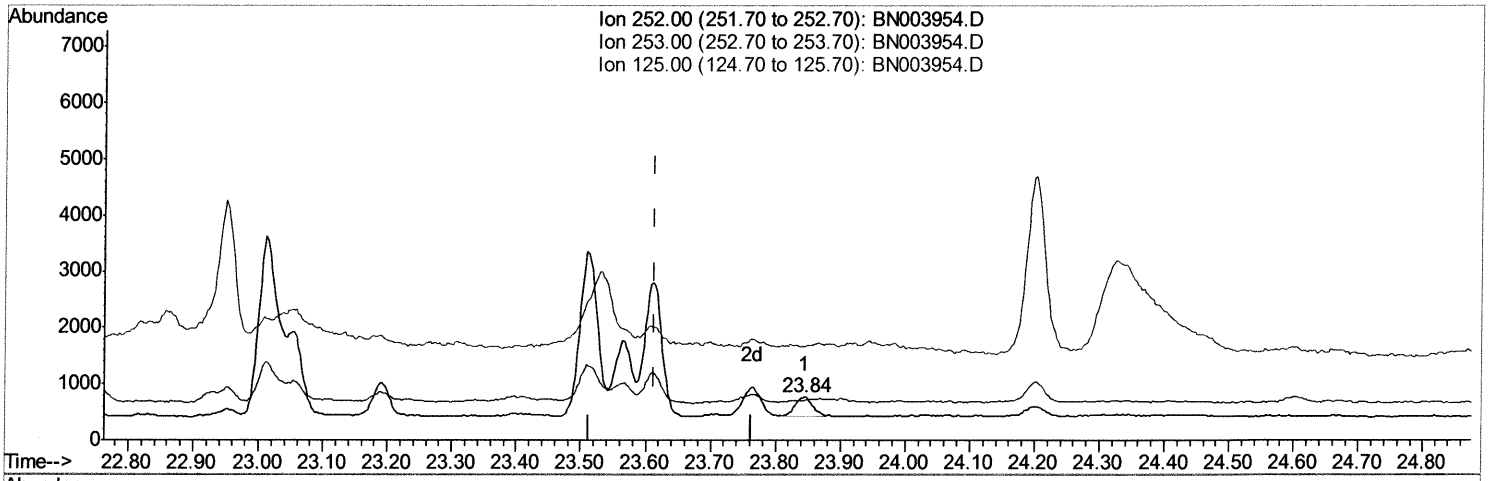
Quantitation Report (Qedit)

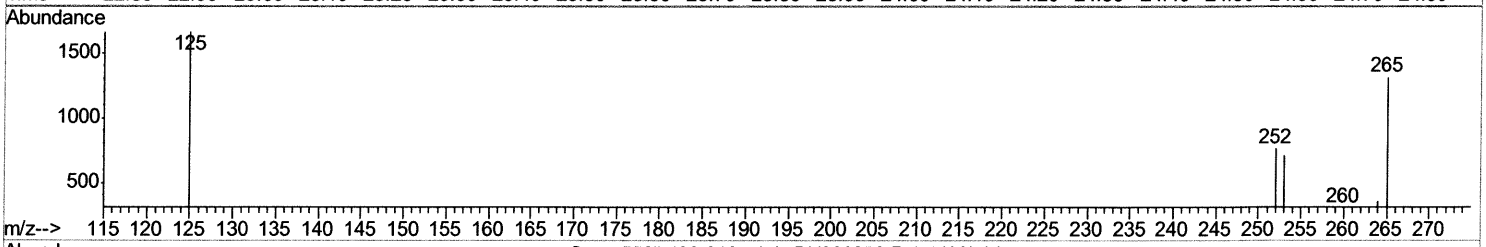
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

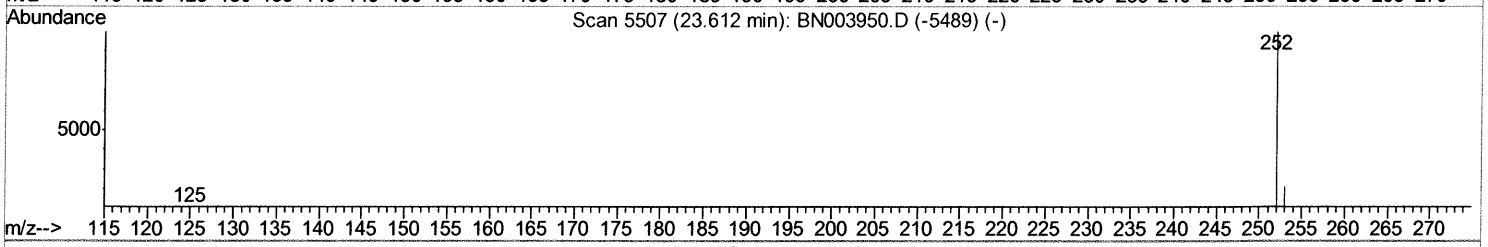
Quant Time: Dec 15 22:30:44 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(23) Benzo(a)pyrene (C)

23.845min (+0.233) 0.01ng/ul

response 623

Ion	Exp%	Act%
252.00	100	100
253.00	23.70	93.55#
125.00	12.80	218.68#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

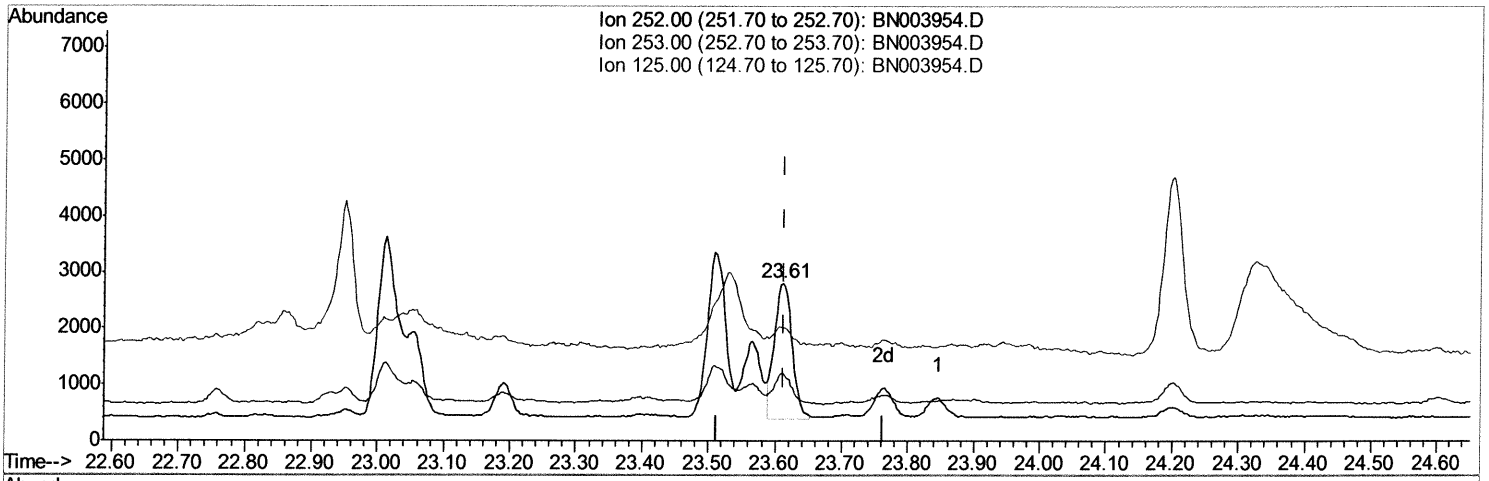
Quantitation Report (Qedit)

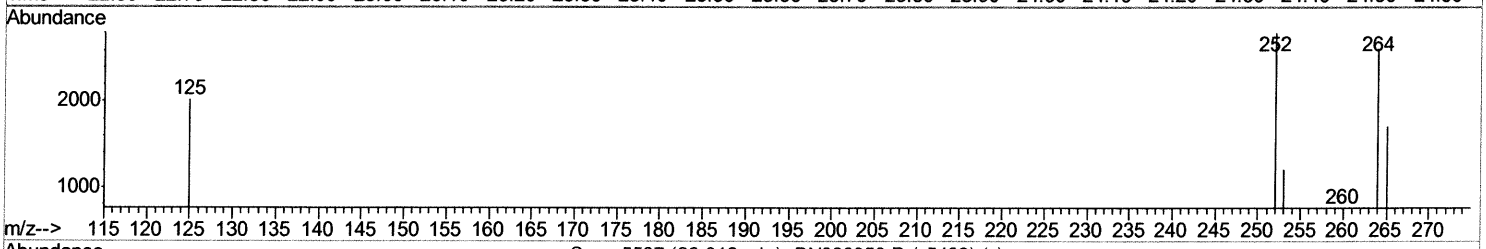
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

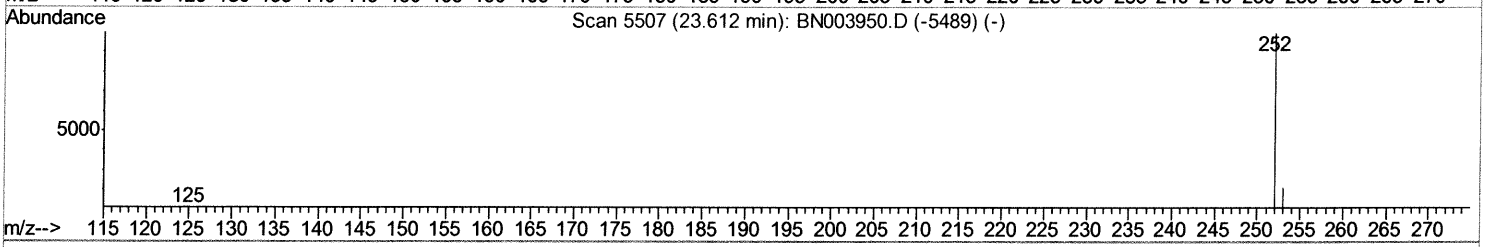
Quant Time: Dec 15 22:30:44 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(23) Benzo(a)pyrene (C)

23.611min (-0.001) 0.08ng/ul m SJ 12/19/18

response 4523

Ion	Exp%	Act%
252.00	100	100
253.00	23.70	42.90#
125.00	12.80	71.97#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

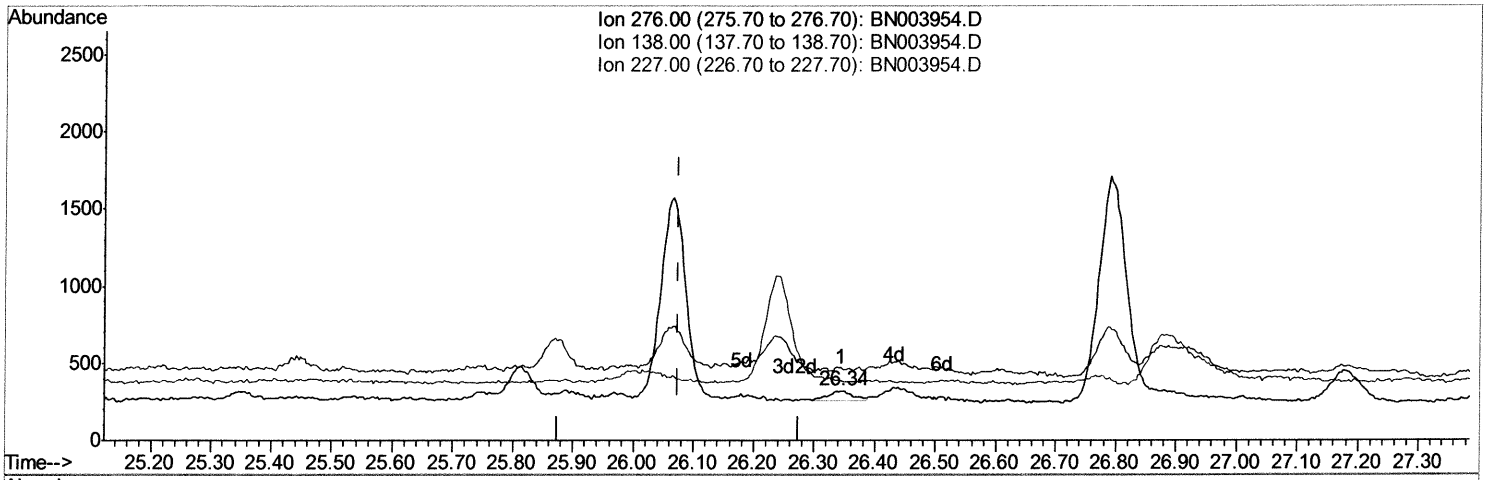
Quantitation Report (Qedit)

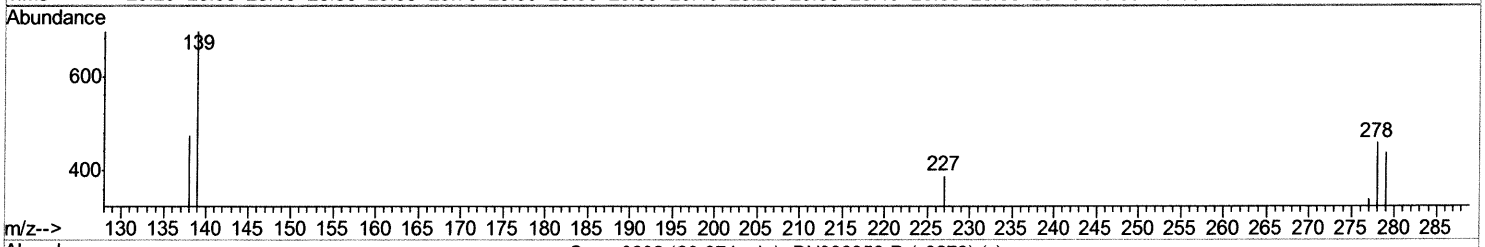
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

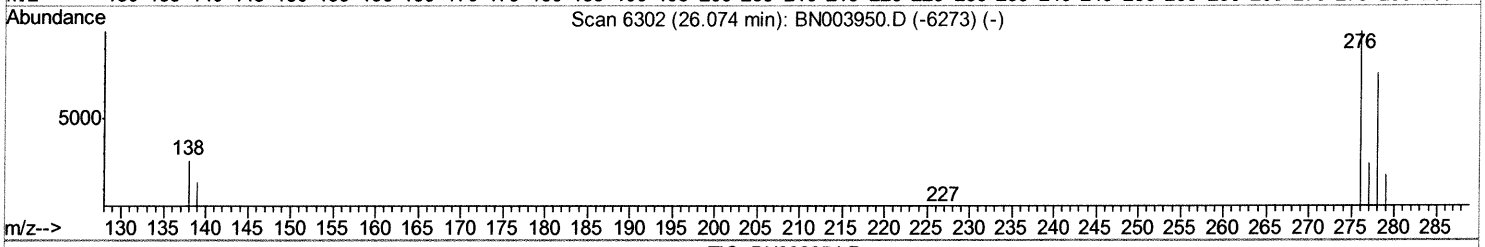
Quant Time: Dec 15 22:30:44 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

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

26.344min (+0.270) 0.00ng/ul

response 174

Ion	Exp%	Act%
276.00	100	100
138.00	25.40	13.22#
227.00	0.20	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

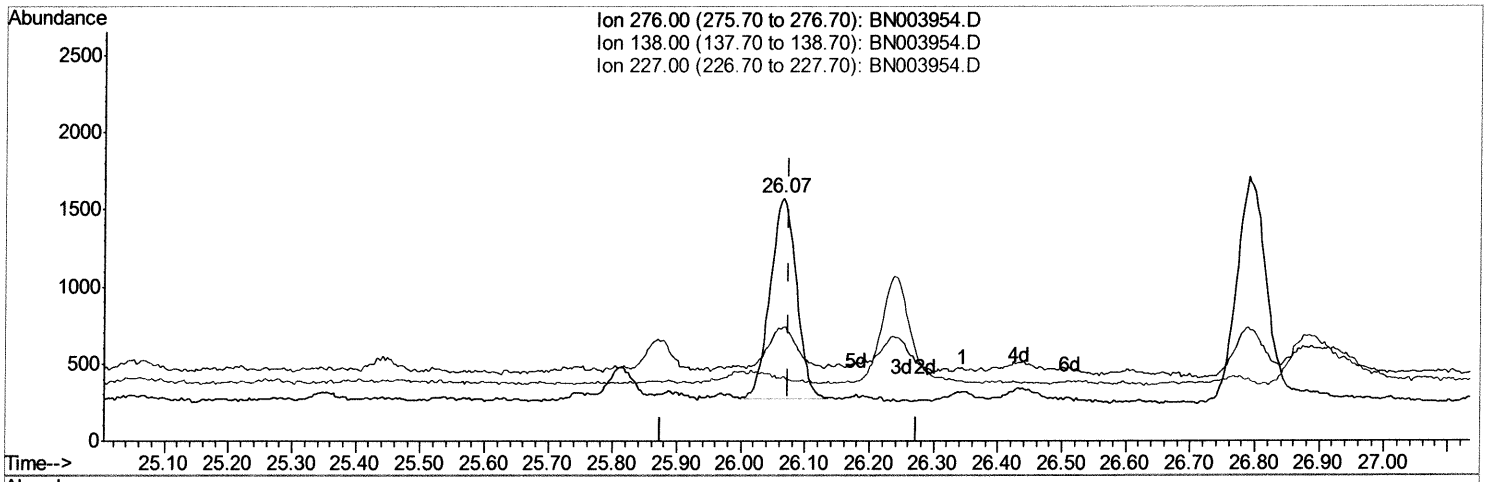
Quantitation Report (Qedit)

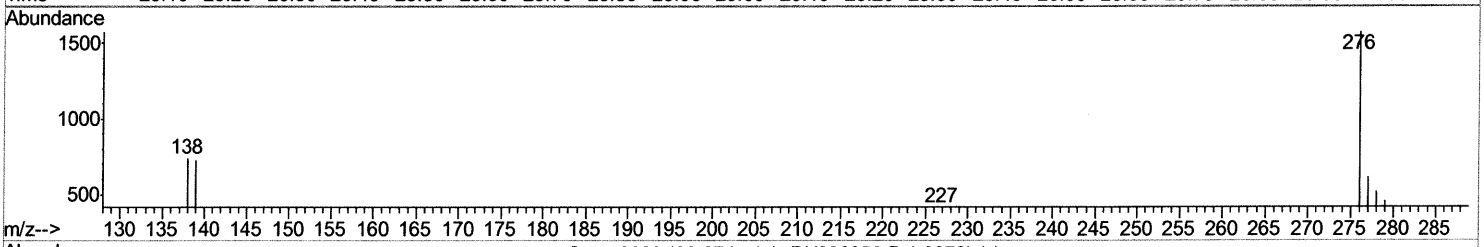
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

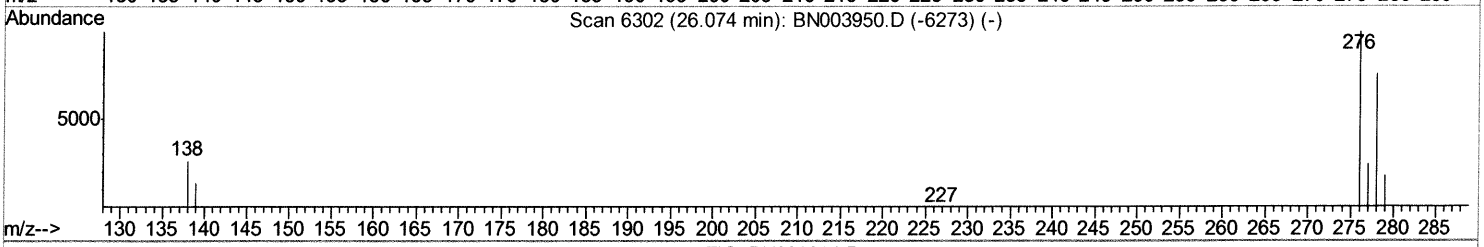
Quant Time: Dec 15 22:30:44 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

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

26.065min (-0.008) 0.06ng/ul m SD 12/17/18

response 3688

Ion	Exp%	Act%
276.00	100	100
138.00	25.40	0.62#
227.00	0.20	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

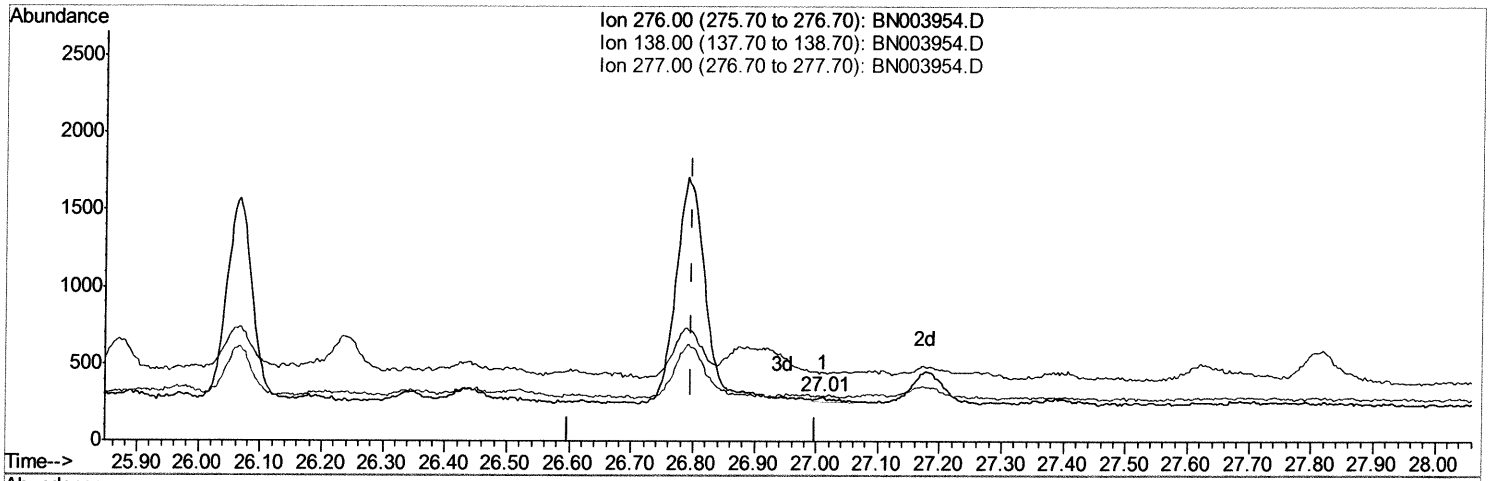
Quantitation Report (Qedit)

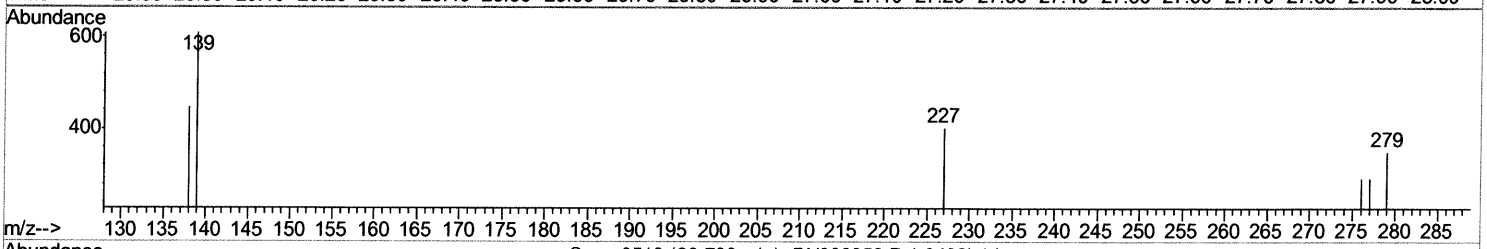
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

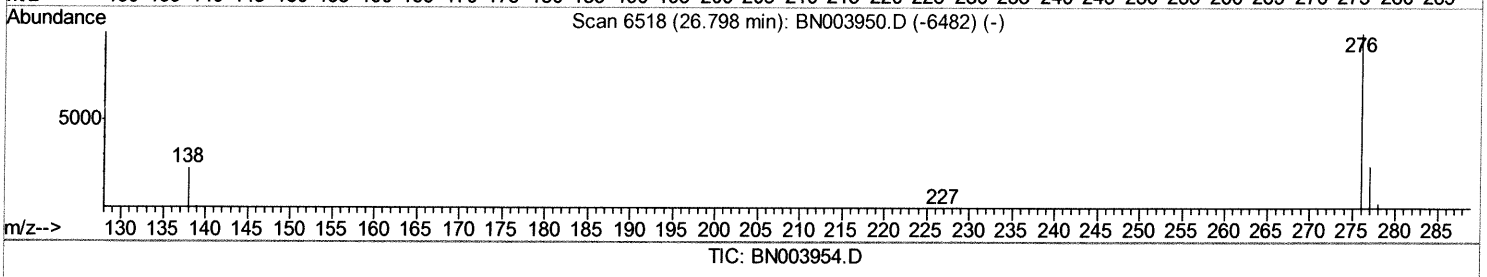
Quant Time: Dec 15 22:30:44 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







(26) Benzo(g,h,i)perylene

27.011min (+0.213) 0.00ng/ul

response 58

Ion	Exp%	Act%
276.00	100	100
138.00	22.10	152.40#
277.00	24.10	100.34#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

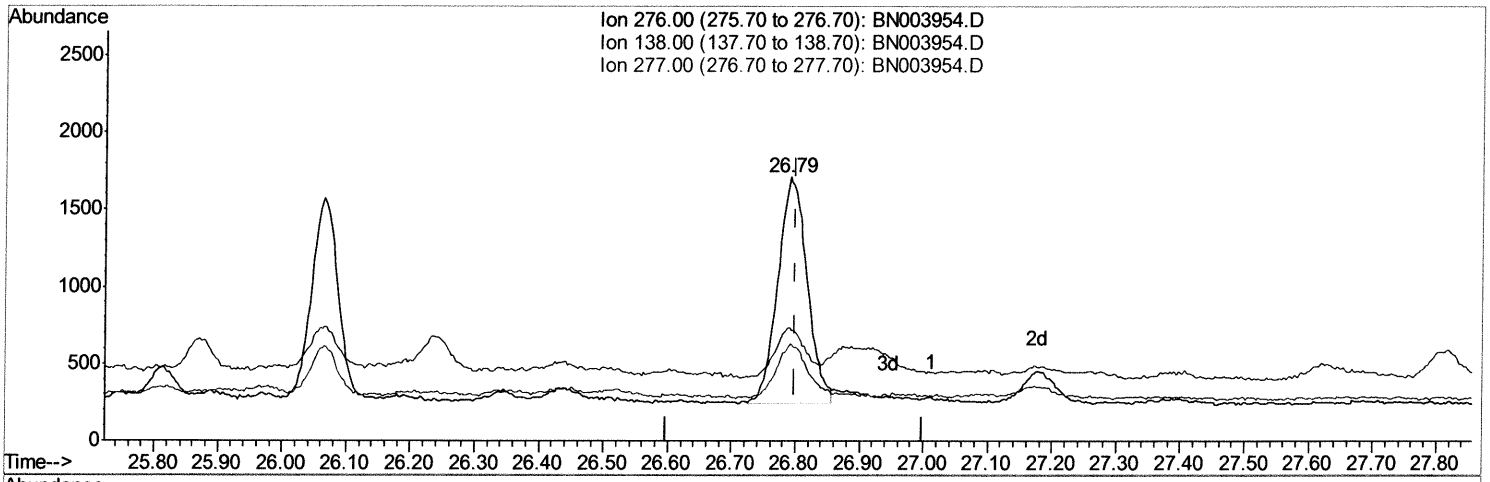
Quantitation Report (Qedit)

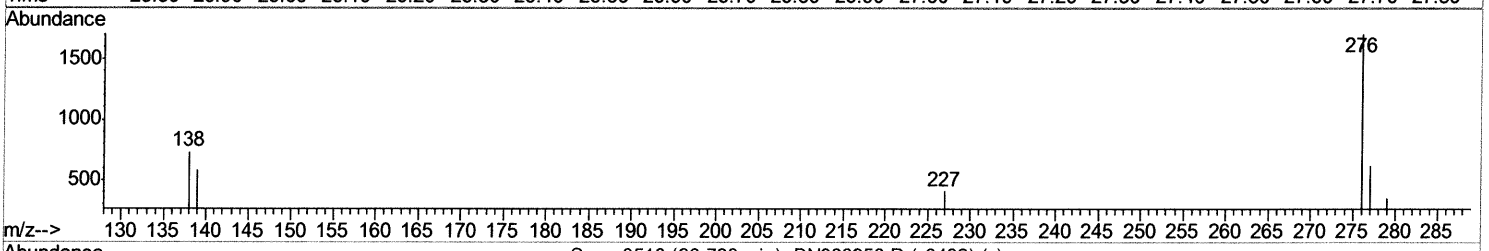
Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

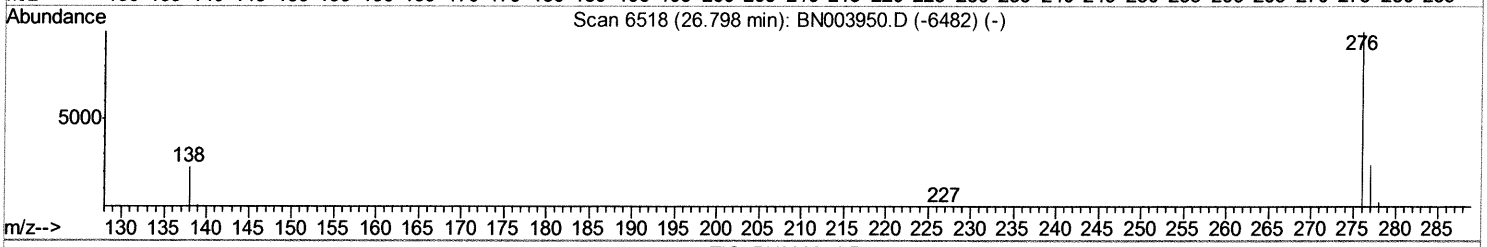
Quant Time: Dec 15 22:30:44 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM







TIC: BN003954.D

(26) Benzo(g,h,i)perylene

26.790min (-0.008) 0.09ng/ul m

SJ 12/19/18

response 4707

Ion	Exp%	Act%
276.00	100	100
138.00	22.10	42.52#
277.00	24.10	36.16#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (QT Reviewed)

Data File : BN003954.D
Acq On : 15 Dec 2018 12:09
Operator : JU/SJ
Sample : J6227-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 15 22:32:13 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument : BNA_N
ClientSampleId : F9E66

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:47 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	1764	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	8928	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	5379	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	13588m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	17161m	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	15425m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	2684	0.20	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	8422m	0.21	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.68	128	1067	0.043	ng/ul#	79
5) 2-Methylnaphthalene	12.29	142	1941	0.111	ng/ul	99
12) Phenanthrene	17.25	178	5964	0.134	ng/ul	96
13) Anthracene	17.35	178	1026m	0.028	ng/ul	
15) Fluoranthene	19.27	202	5009m	0.095	ng/ul	
17) Pyrene	19.63	202	9528m	0.155	ng/ul	
18) Benzo(a)anthracene	21.38	228	4036m	0.074	ng/ul	
19) Chrysene	21.43	228	5857m	0.094	ng/ul	
21) Benzo(b)fluoranthene	23.01	252	6540m	0.102	ng/ul	
22) Benzo(k)fluoranthene	23.06	252	2199m	0.035	ng/ul	
23) Benzo(a)pyrene	23.61	252	4523m	0.082	ng/ul	
24) Indeno(1,2,3-cd)pyrene	26.07	276	3688m	0.058	ng/ul	
26) Benzo(g,h,i)perylene	26.79	276	4707m	0.085	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SJ
12/17/18

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E67

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-04
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BN003956.D
% Solids : 88.5
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/15/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	3.7	U
91-57-6	2-Methylnaphthalene	3.7	U
208-96-8	Acenaphthylene	3.7	U
83-32-9	Acenaphthene	3.7	U
86-73-7	Fluorene	3.7	U
87-86-5	Pentachlorophenol	7.5	U
85-01-8	Phenanthrene	1.1	J
120-12-7	Anthracene	3.7	U
206-44-0	Fluoranthene	1.2	J
129-00-0	Pyrene	1.2	J
56-55-3	Benzo(a)anthracene	0.83	J
218-01-9	Chrysene	3.7	U
205-99-2	Benzo(b)fluoranthene	3.7	U
207-08-9	Benzo(k)fluoranthene	3.7	U
50-32-8	Benzo(a)pyrene	3.7	U
193-39-5	Indeno(1,2,3-cd)pyrene	3.7	U
53-70-3	Dibenzo(a,h)anthracene	3.7	U
191-24-2	Benzo(g,h,i)perylene	3.7	U

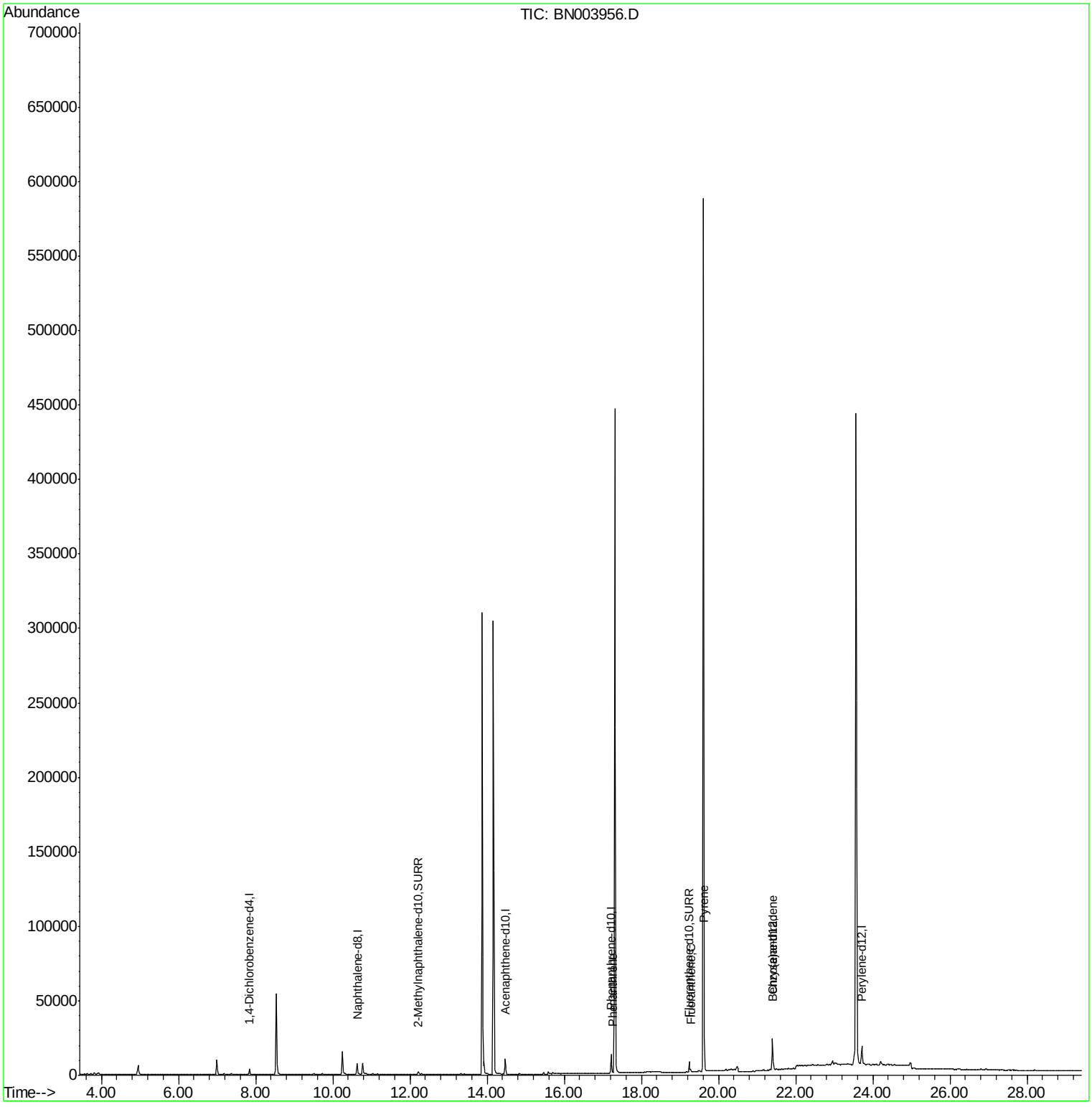
Quantitation Report (QT Reviewed)

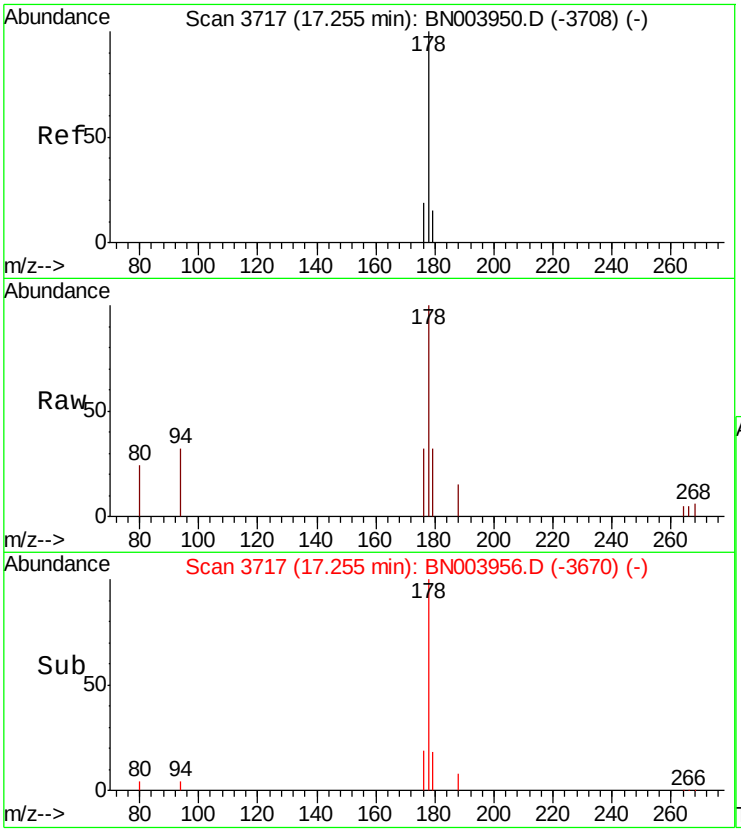
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 15 22:37:14 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM





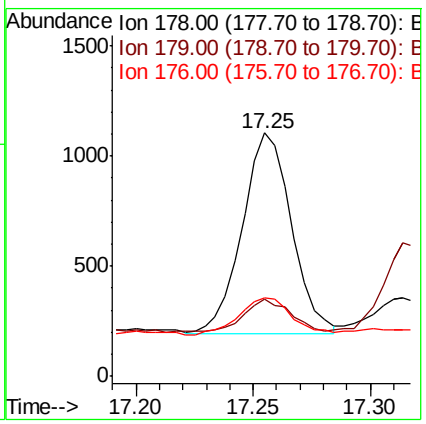
#12
Phenanthrene
Concen: 0.028 ng/ul m
RT: 17.25 min Scan# 3717
Delta R.T. -0.00 min
Lab File: BN003956.D
Acq: 15 Dec 2018 13:20

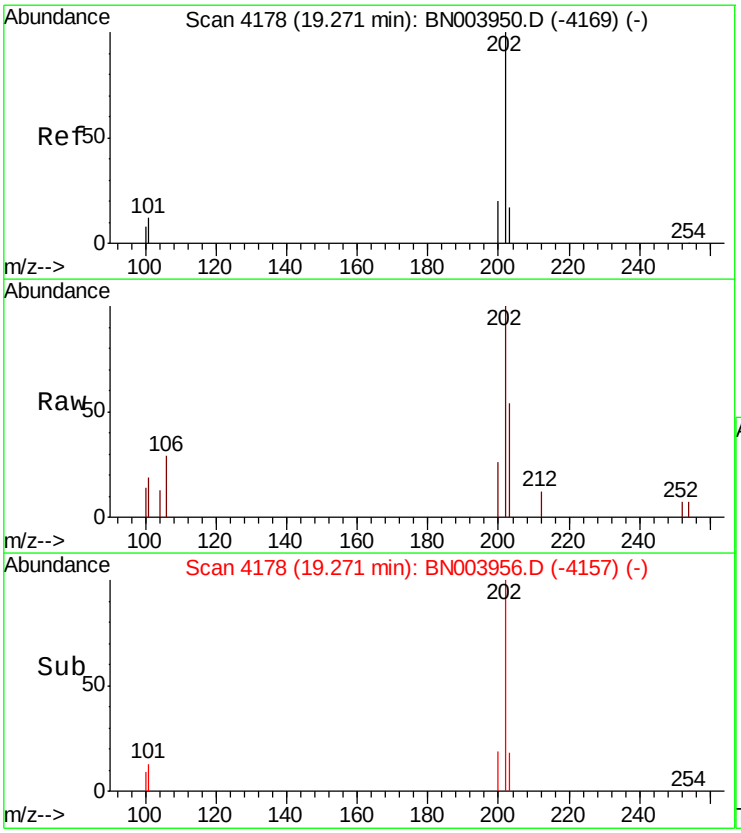
Tgt Ion:178 Resp: 1322

Ion	Ratio	Lower	Upper
178	100		
179	31.6	12.5	18.7#
176	32.3	15.0	22.4#

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM

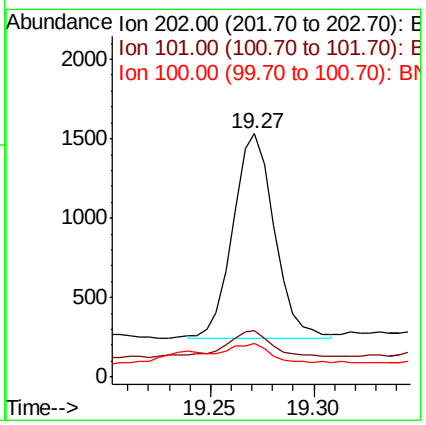


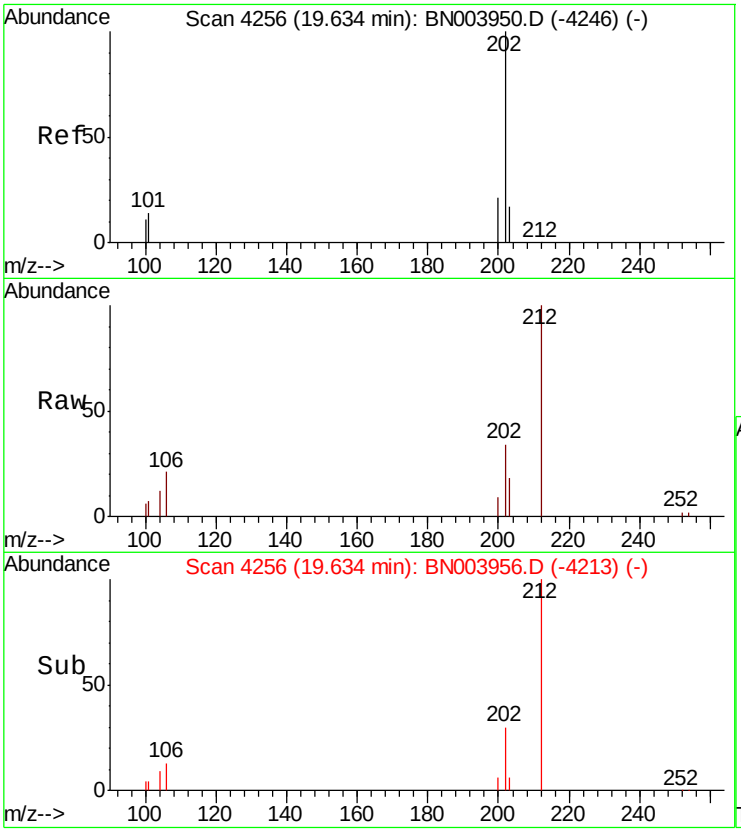


#15
Fluoranthene
Concen: 0.032 ng/ul m
RT: 19.27 min Scan# 4178
Delta R.T. -0.00 min
Lab File: BN003956.D
Acq: 15 Dec 2018 13:20

Tgt Ion:202 Resp: 1797

Ion	Ratio	Lower	Upper
202	100		
101	18.9	0.0	30.7
100	13.7	0.0	28.1





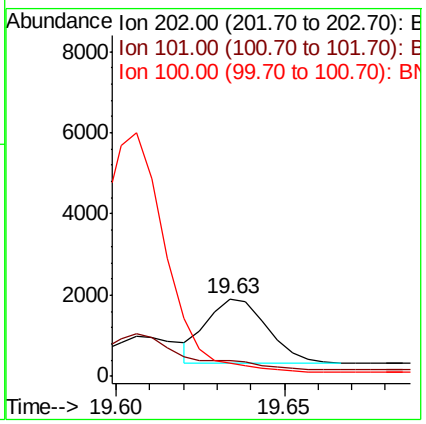
#17
Pyrene
Concen: 0.031 ng/ul m
RT: 19.63 min Scan# 4256
Delta R.T. -0.00 min
Lab File: BN003956.D
Acq: 15 Dec 2018 13:20

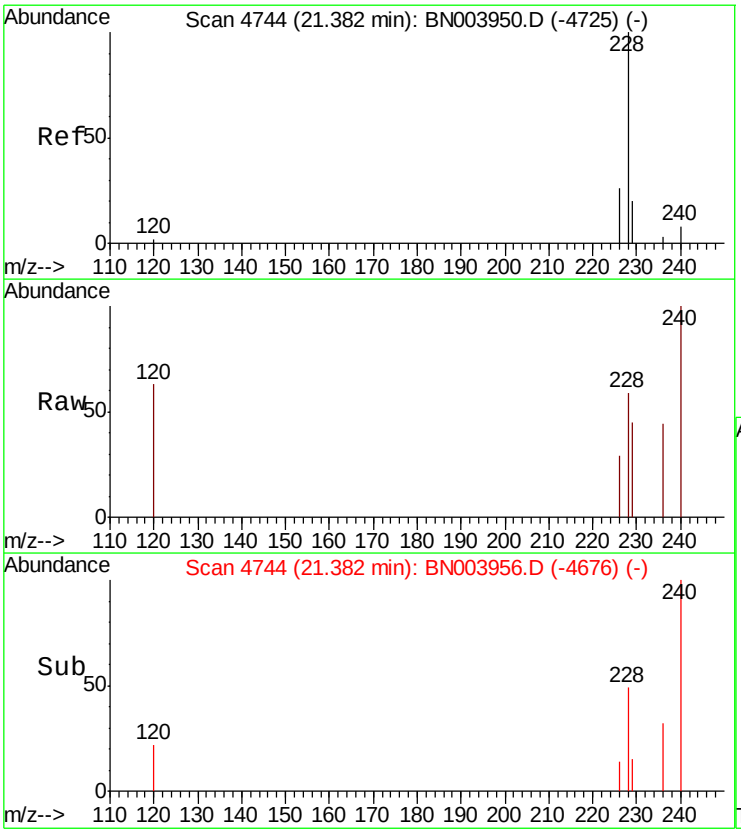
Tgt Ion:202 Resp: 2000

Ion	Ratio	Lower	Upper
202	100		
101	20.9	10.3	15.5#
100	17.3	8.5	12.7#

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM

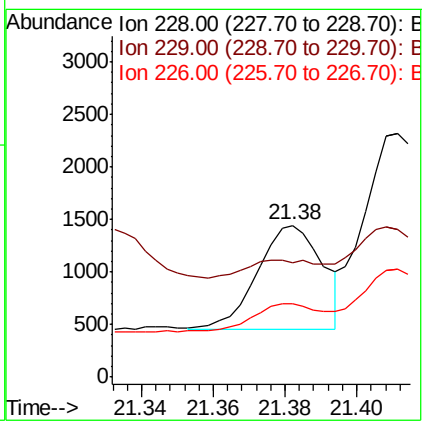




#18
Benzo(a)anthracene
Concen: 0.022 ng/ul m
RT: 21.38 min Scan# 4744
Delta R.T. -0.00 min
Lab File: BN003956.D
Acq: 15 Dec 2018 13:20

Tgt Ion:228 Resp: 1256

Ion	Ratio	Lower	Upper
228	100		
229	75.3	15.6	23.4#
226	48.0	21.1	31.7#



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM

Quant Time: Dec 15 22:37:14 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	2004	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	9654	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	5826	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	14527m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	17976m	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	16348m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	2381	0.16	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	7557m	0.18	ng/ul	0.00
Target Compounds						Qvalue
12) Phenanthrene	17.25	178	1322m	0.028	ng/ul	
15) Fluoranthene	19.27	202	1797m	0.032	ng/ul	
17) Pyrene	19.63	202	2000m	0.031	ng/ul	
18) Benzo(a)anthracene	21.38	228	1256m	0.022	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

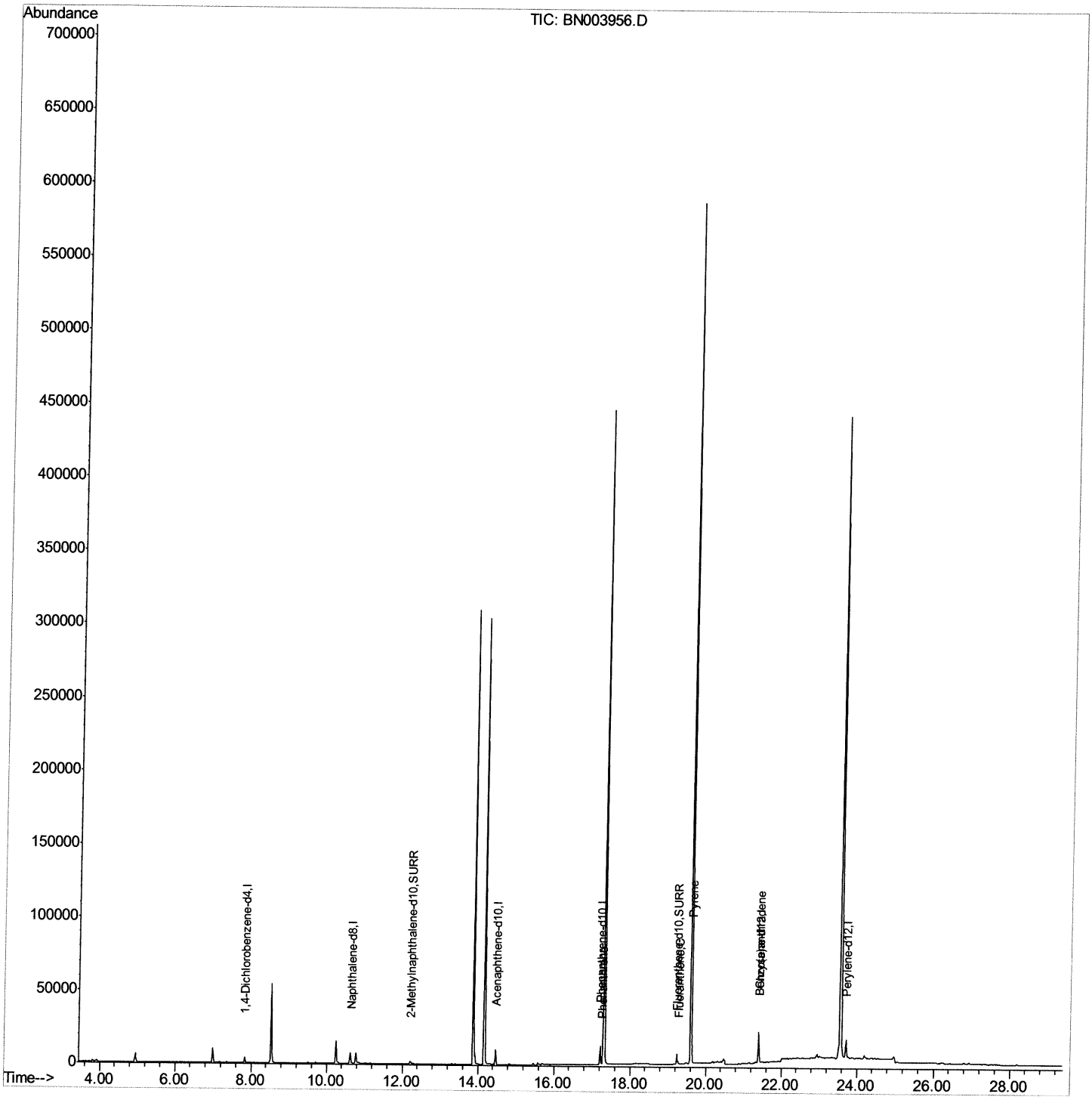
Quantitation Report (QT Reviewed)

Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 15 22:37:14 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

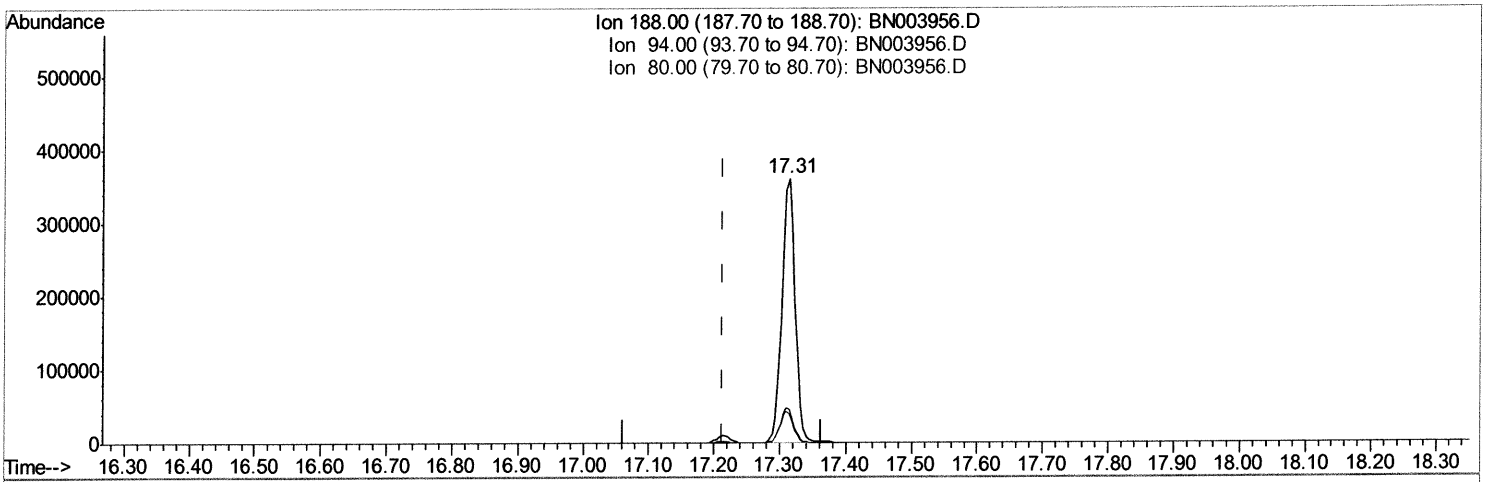
Quantitation Report (Qedit)

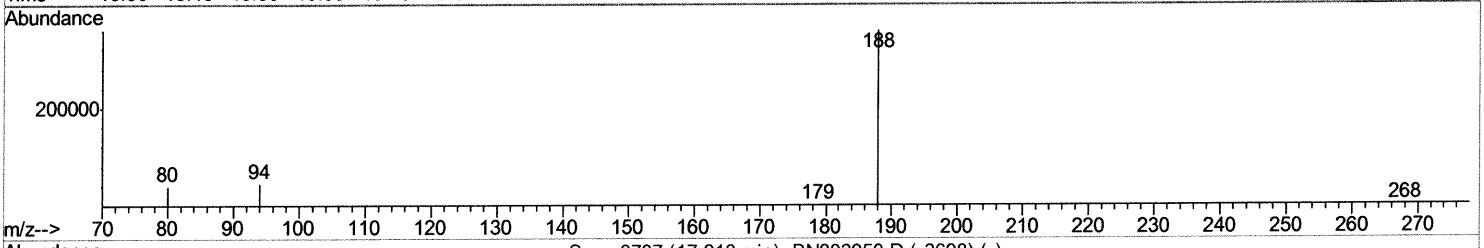
Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

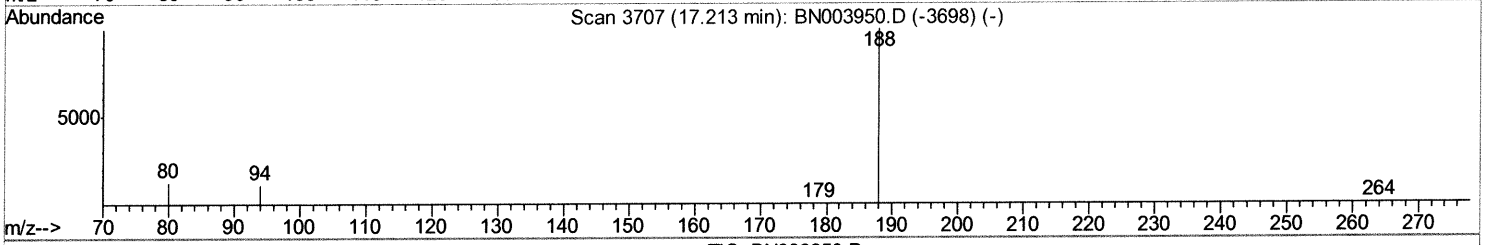
Quant Time: Dec 15 22:01:53 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM







TIC: BN003956.D

(10) Phenanthrene-d10 (I)

17.314min (+0.101) 0.40ng/ul

response 490269

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	12.57#
80.00	11.60	11.14
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

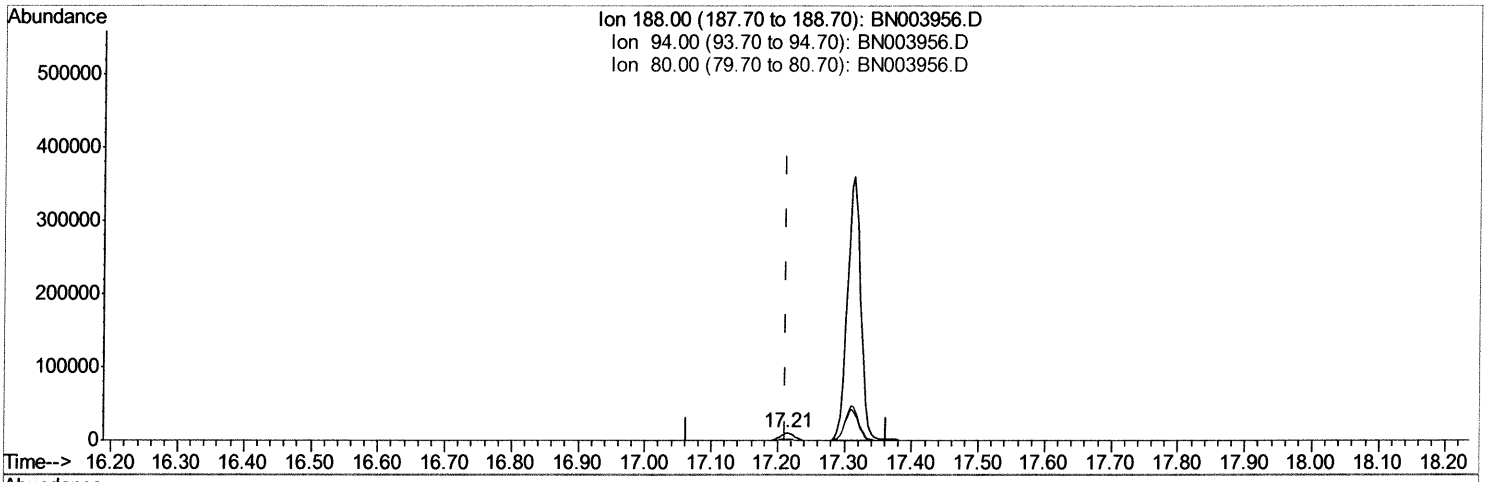
Quantitation Report (Qedit)

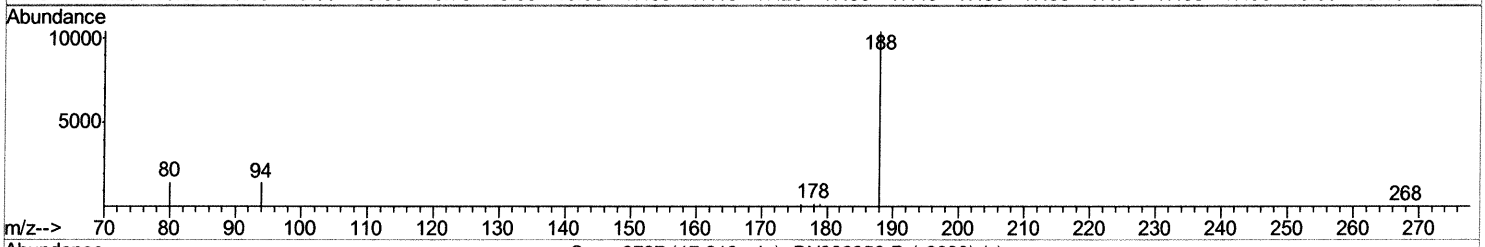
Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

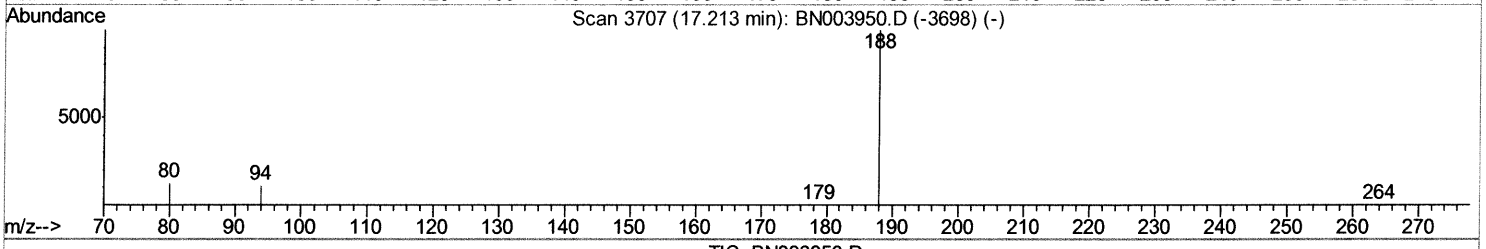
Quant Time: Dec 15 22:01:53 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM







TIC: BN003956.D

(10) Phenanthrene-d10 (I)

17.213min (-0.000) 0.40ng/ul m SJ 12/17/18

response 14527

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	14.10#
80.00	11.60	14.44#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

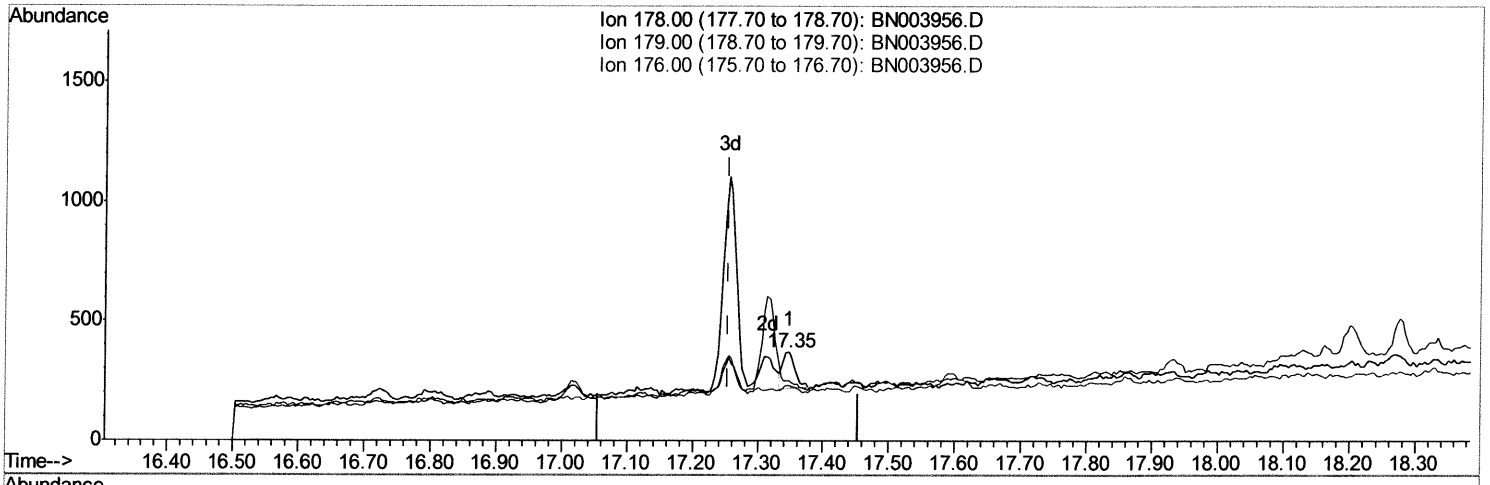
Quantitation Report (Qedit)

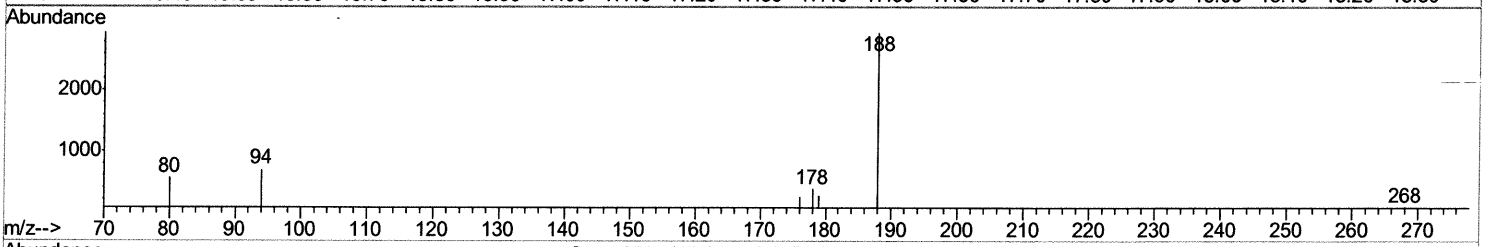
Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

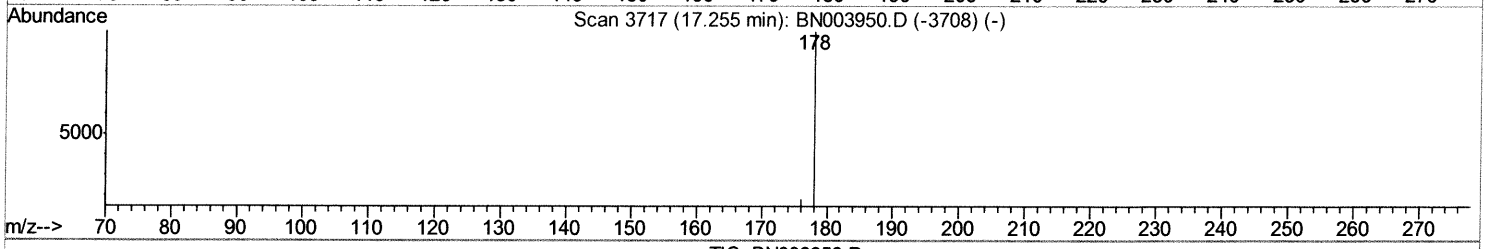
Quant Time: Dec 15 22:34:15 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM







TIC: BN003956.D

(12) Phenanthrene

17.348min (+0.093) 0.00ng/ul

response 209

Ion	Exp%	Act%
178.00	100	100
179.00	15.60	68.38#
176.00	18.70	62.70#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

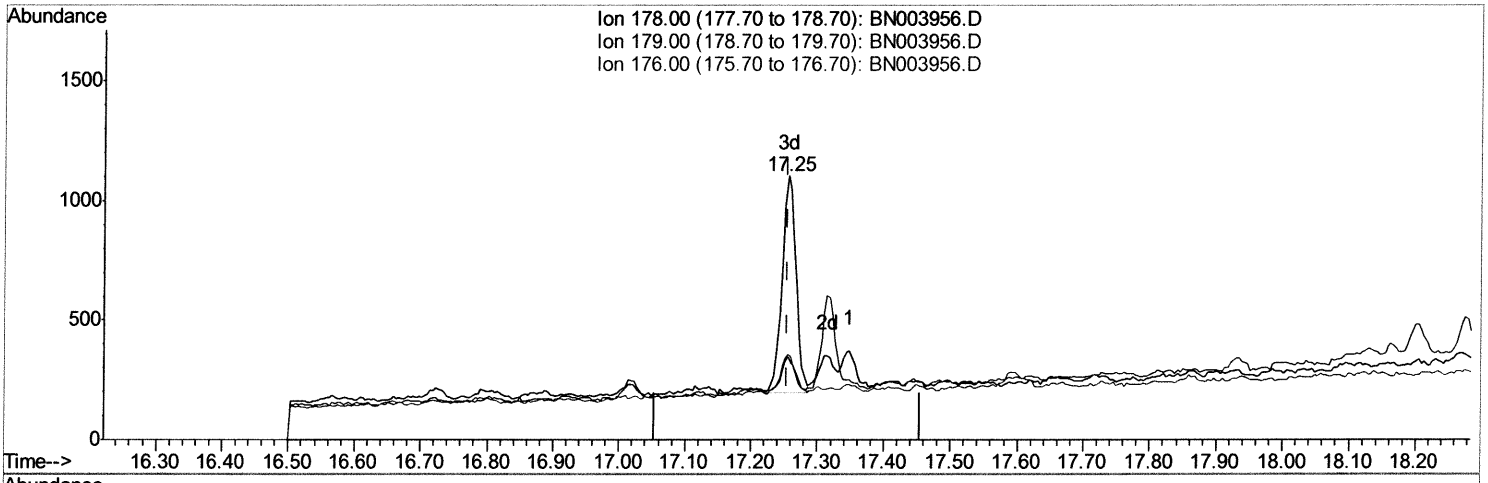
Quantitation Report (Qedit)

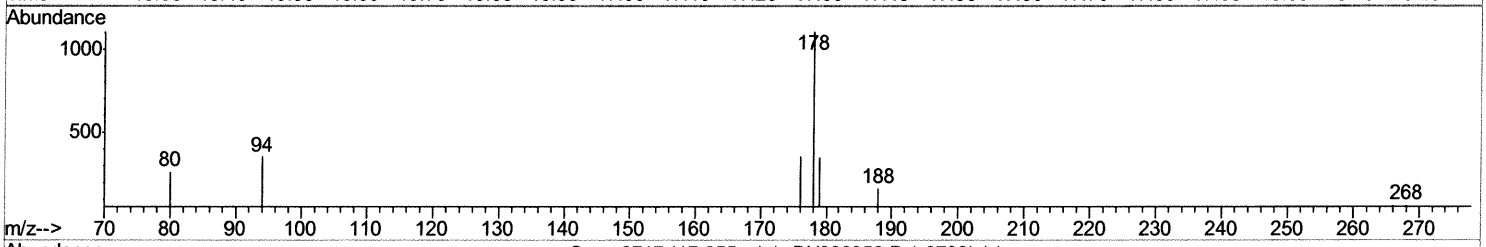
Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

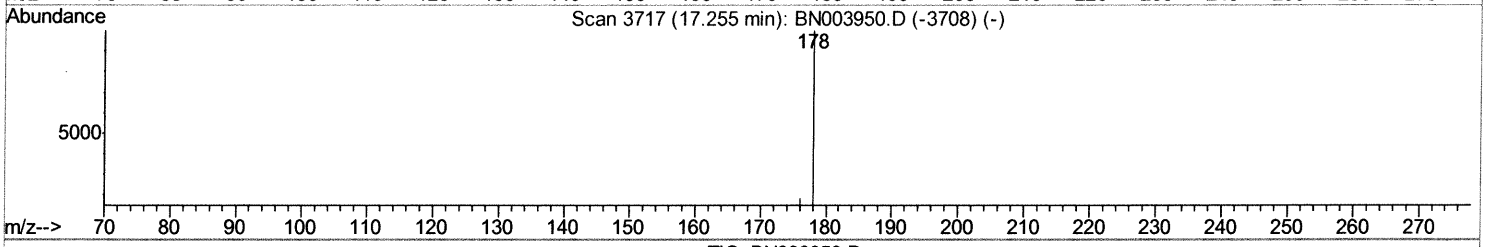
Quant Time: Dec 15 22:34:15 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM







TIC: BN003956.D

(12) Phenanthrene

17.255min (-0.000) 0.03ng/ul m SJ 12/17/18

response 1322

Ion	Exp%	Act%
178.00	100	100
179.00	15.60	31.58#
176.00	18.70	32.31#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

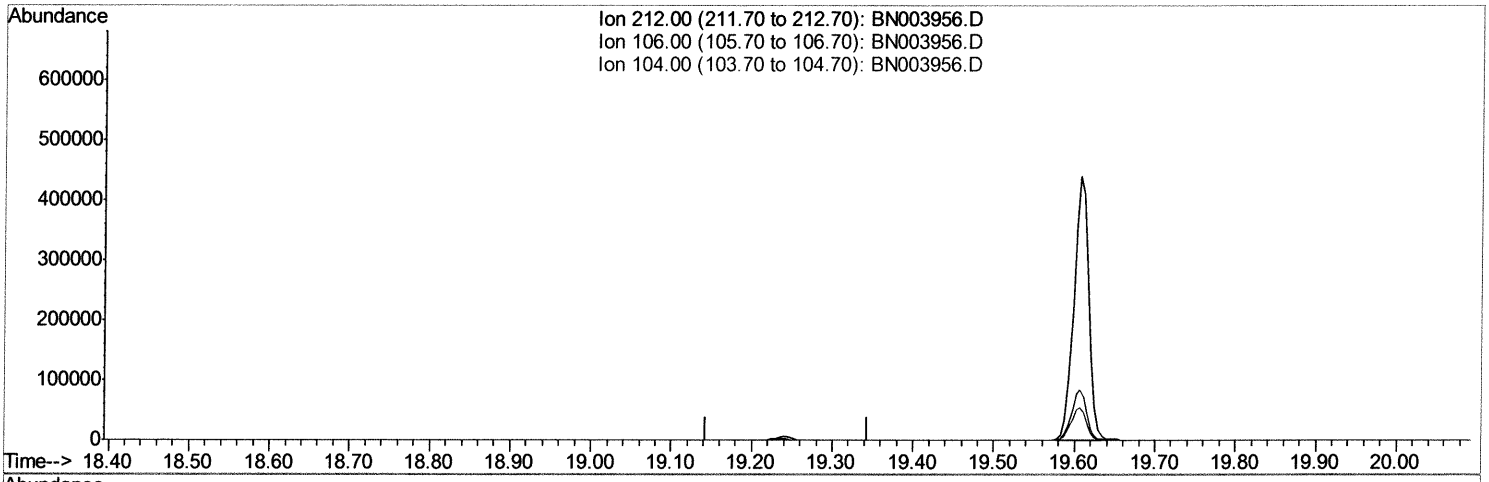
Quantitation Report (Qedit)

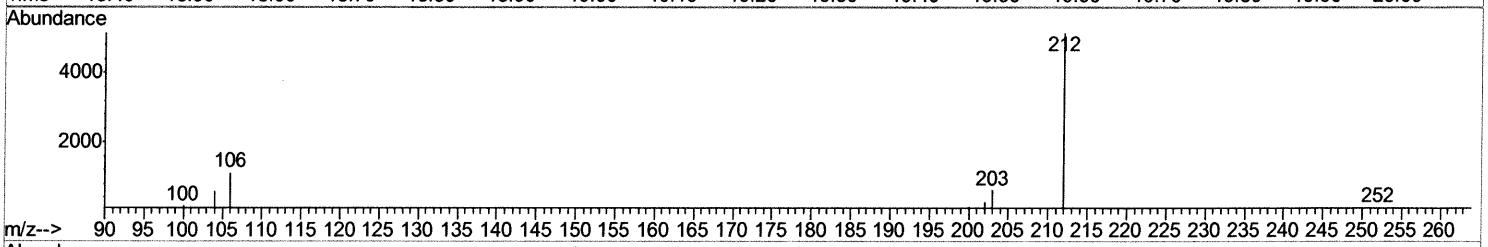
Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

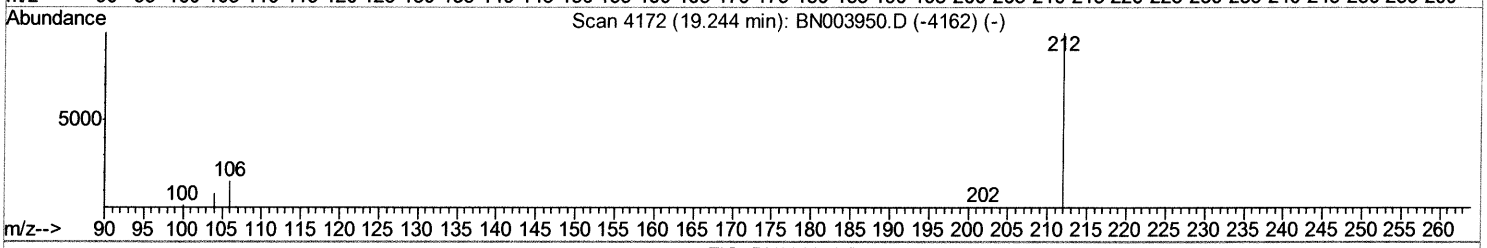
Quant Time: Dec 15 22:34:15 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM







TIC: BN003956.D

(14) Fluoranthene-d10 (SURR)

19.244min (-19.244) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

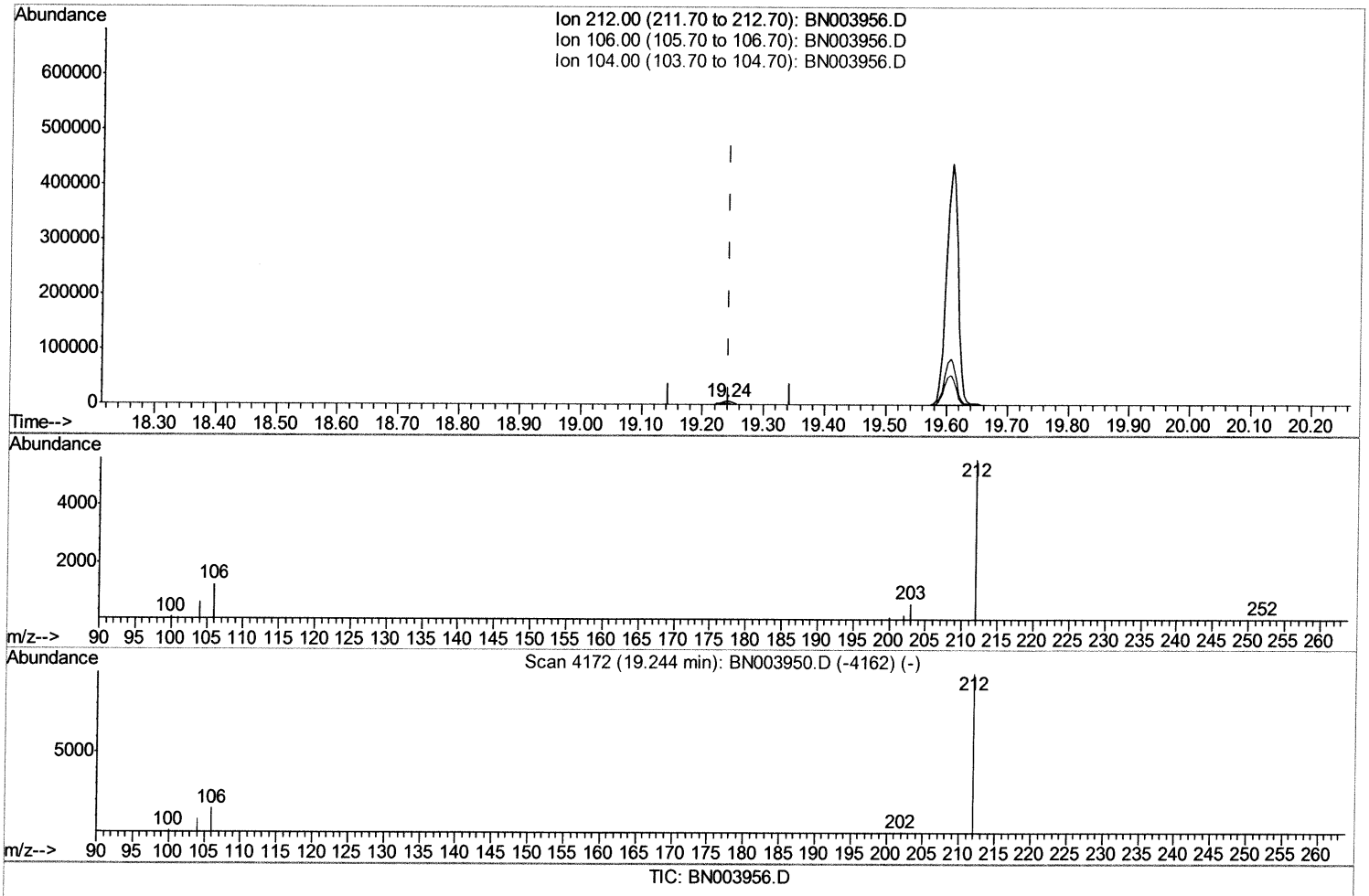
Quantitation Report (Qedit)

Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 15 22:34:15 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM



TIC: BN003956.D

(14) Fluoranthene-d10 (SURR)

19.239min (-0.005) 0.18ng/ul m SJ 12/17/18

response 7557

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

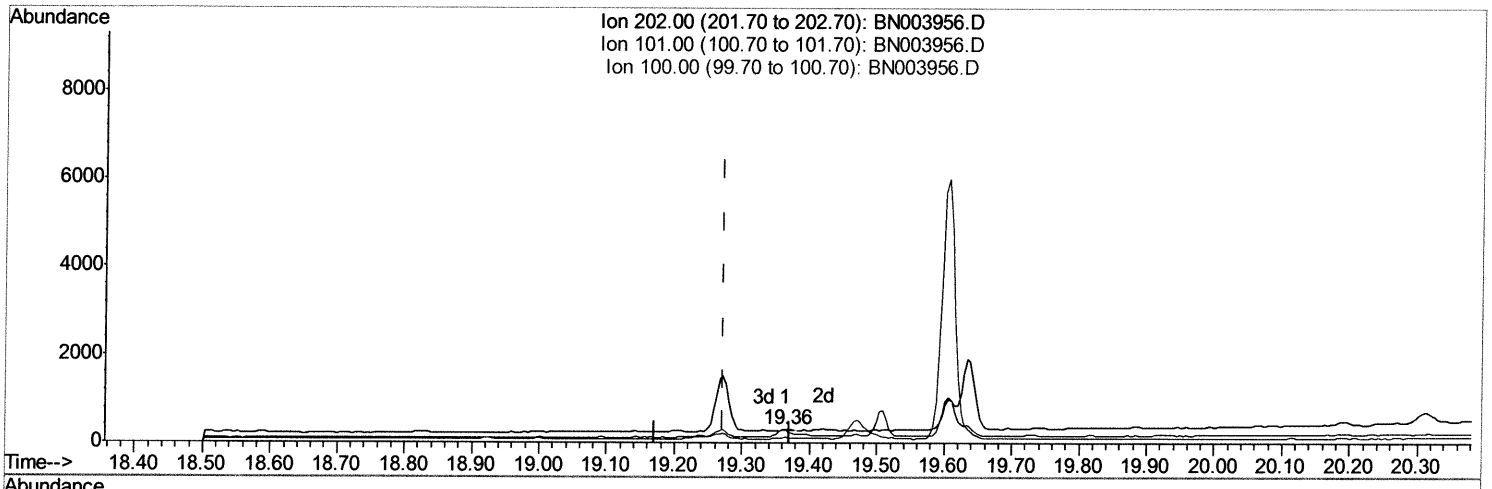
Quantitation Report (Qedit)

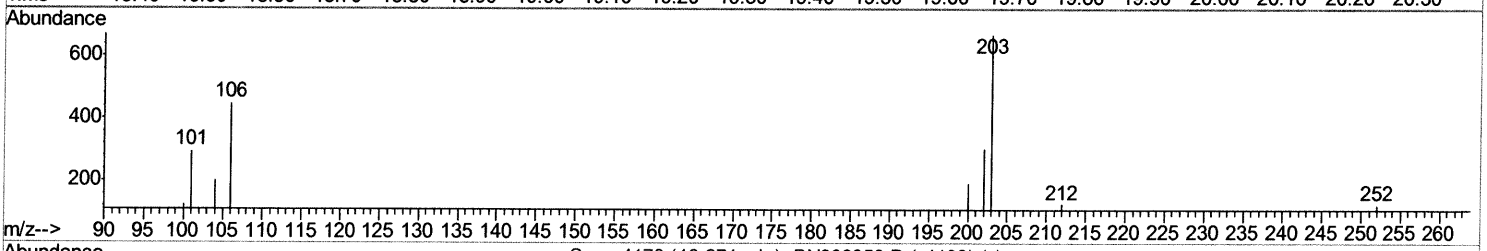
Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

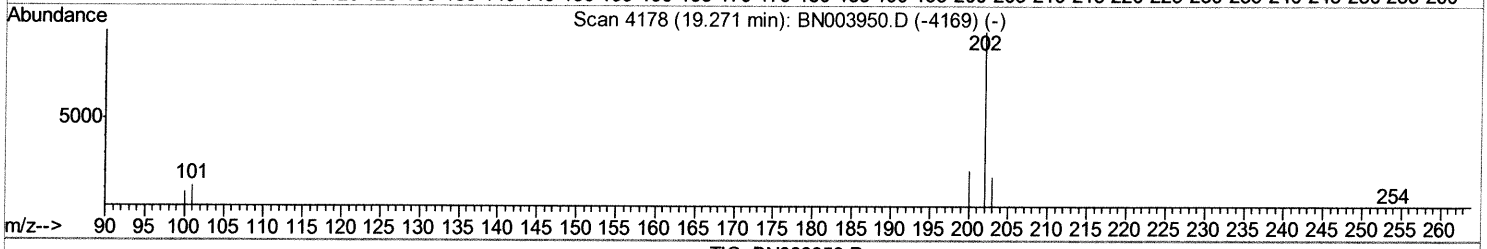
Quant Time: Dec 15 22:34:15 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM







TIC: BN003956.D

(15) Fluoranthene (C)

19.364min (+0.093) 0.00ng/ul

response 33

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	95.75#
100.00	8.10	40.52#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

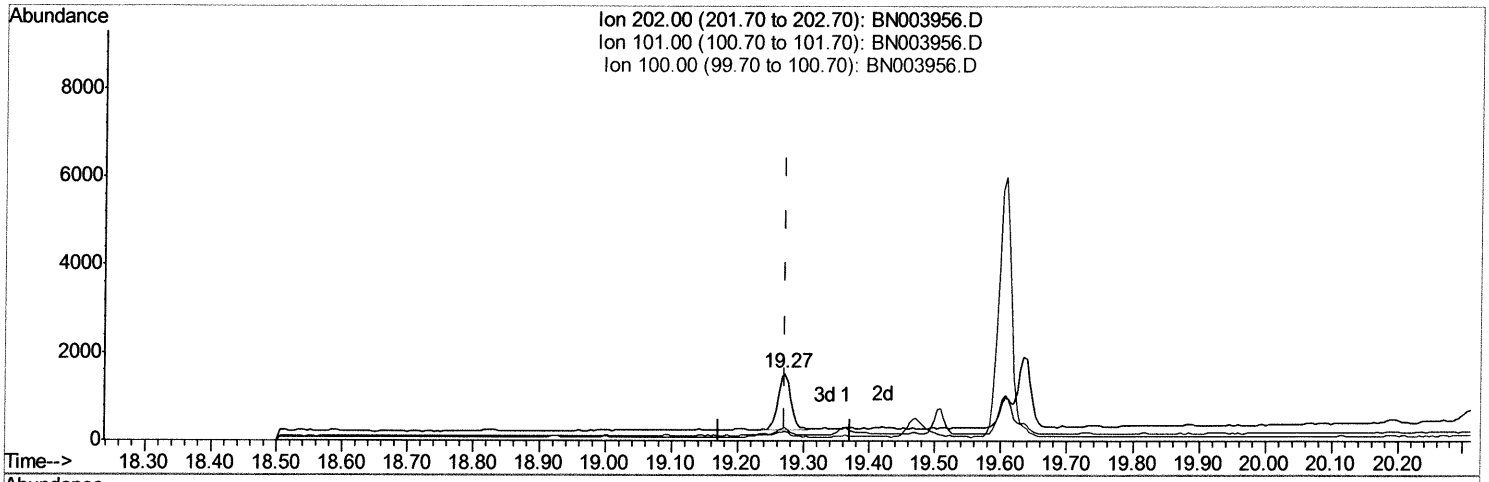
Quantitation Report (Qedit)

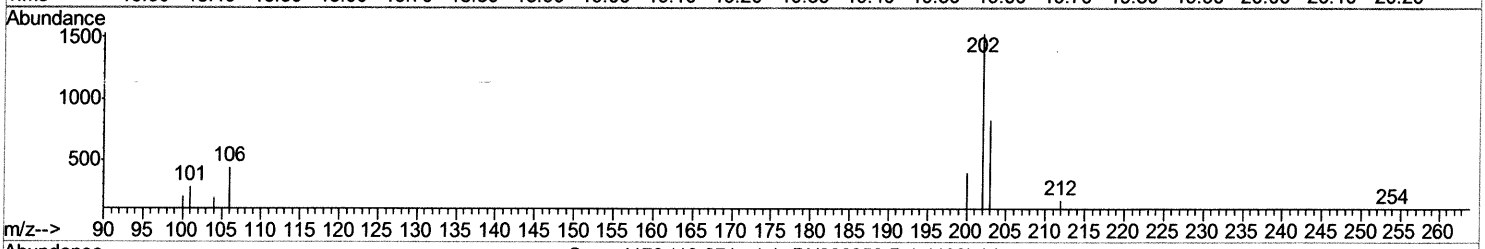
Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

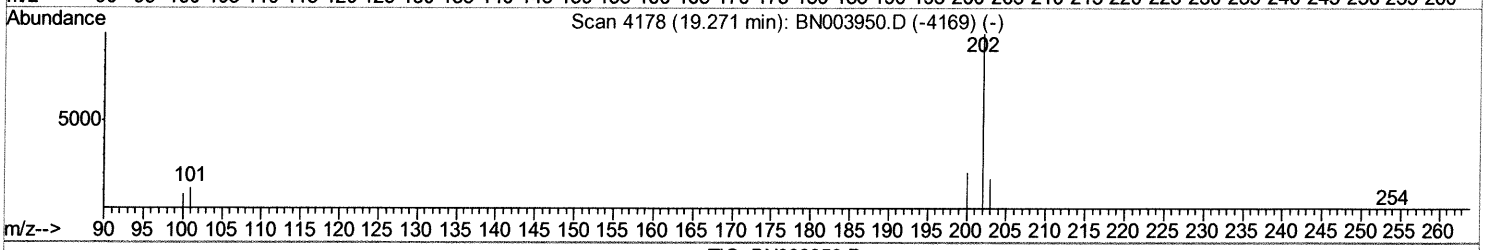
Quant Time: Dec 15 22:34:15 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM







TIC: BN003956.D

(15) Fluoranthene (C)

19.271min (-0.000) 0.03ng/ul m SJ 12/19/18

response 1797

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	18.86
100.00	8.10	13.71
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

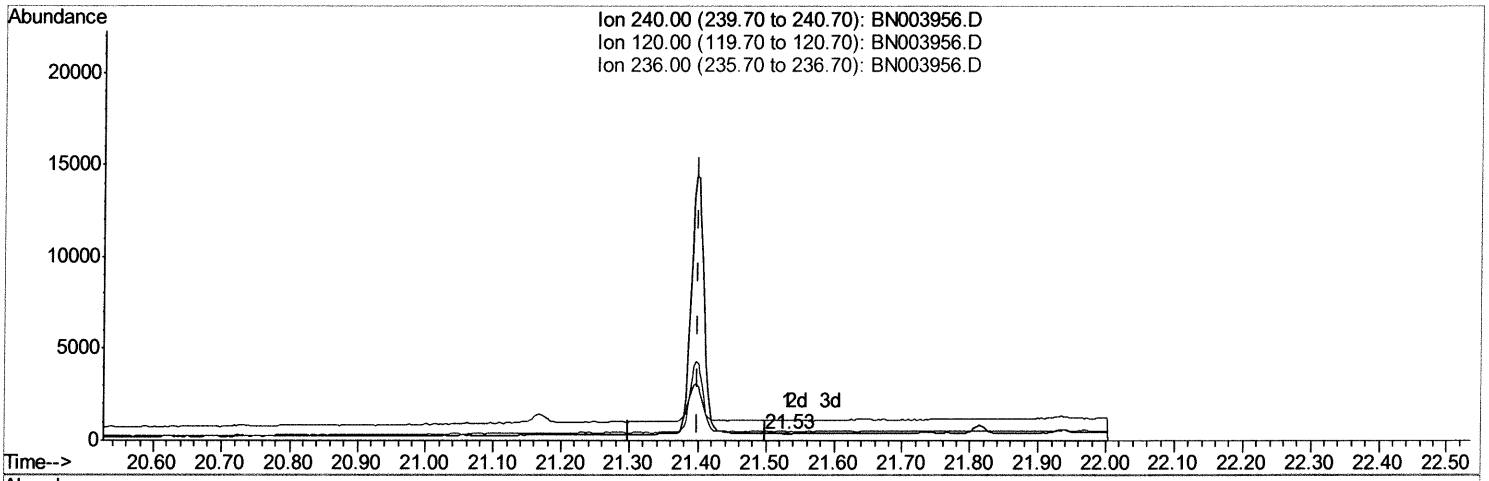
Quantitation Report (Qedit)

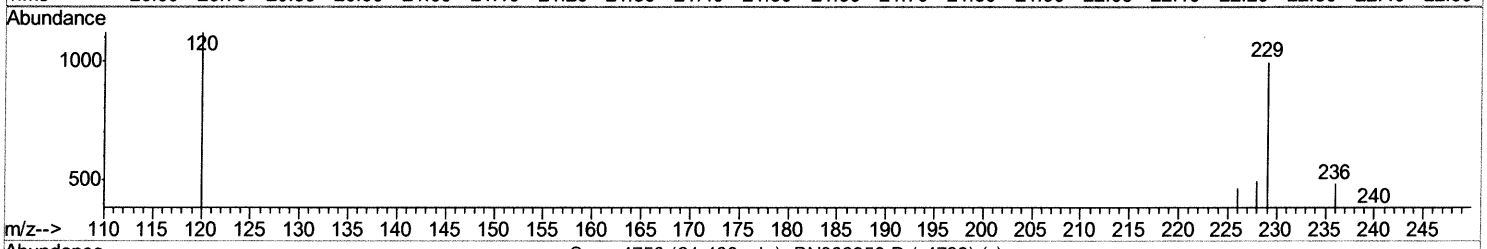
Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

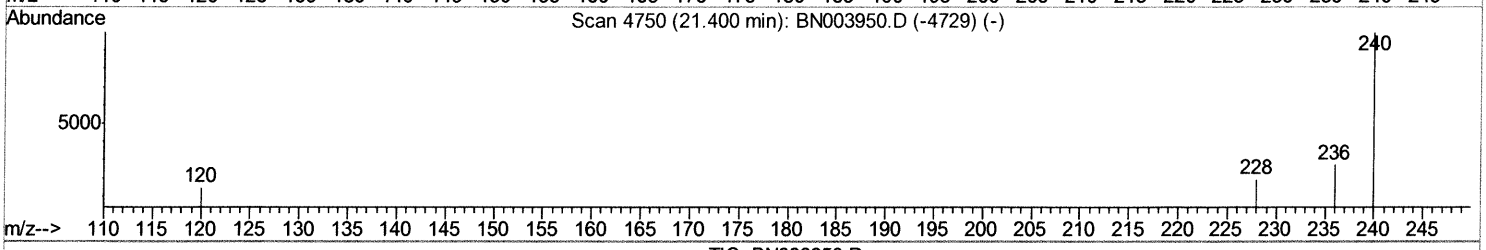
Quant Time: Dec 15 22:34:15 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM







TIC: BN003956.D

(16) Chrysene-d12 (I)

21.531min (+0.131) 0.40ng/ul

response 13

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	289.64#
236.00	27.60	125.65#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

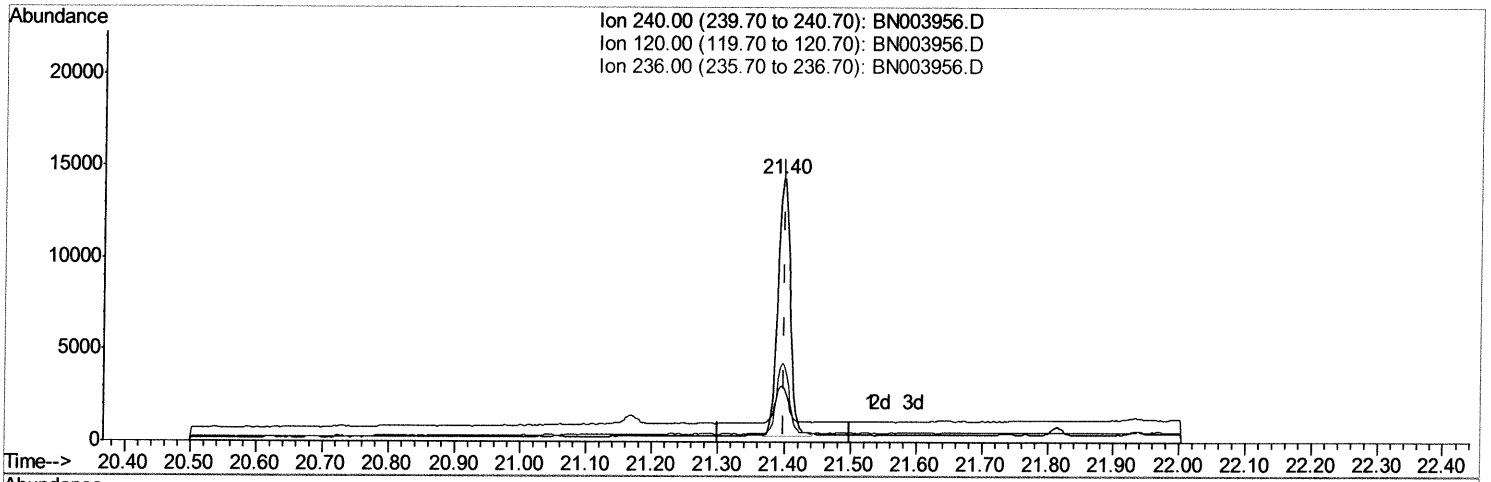
Quantitation Report (Qedit)

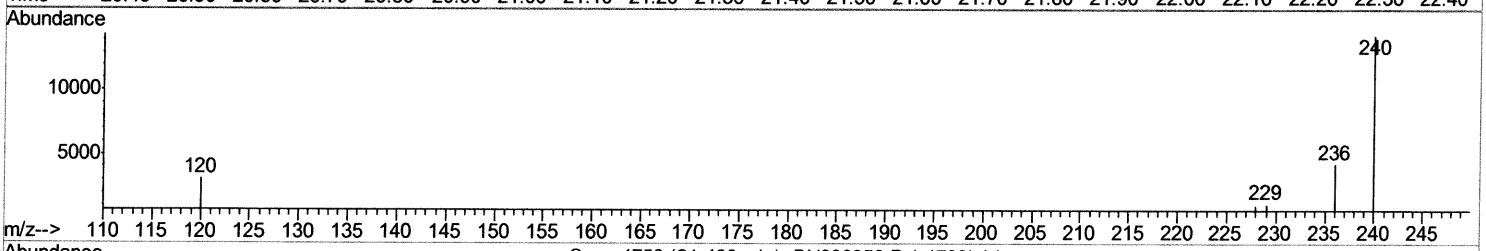
Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

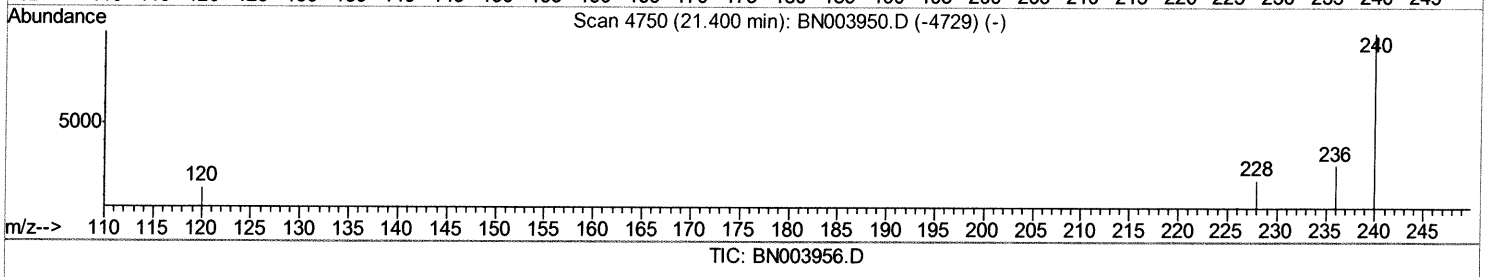
Quant Time: Dec 15 22:34:15 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM







TIC: BN003956.D

(16) Chrysene-d12 (I)

21.397min (-0.003) 0.40ng/ul m

SJ 12/17/18

response 17976

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	21.50#
236.00	27.60	29.87
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

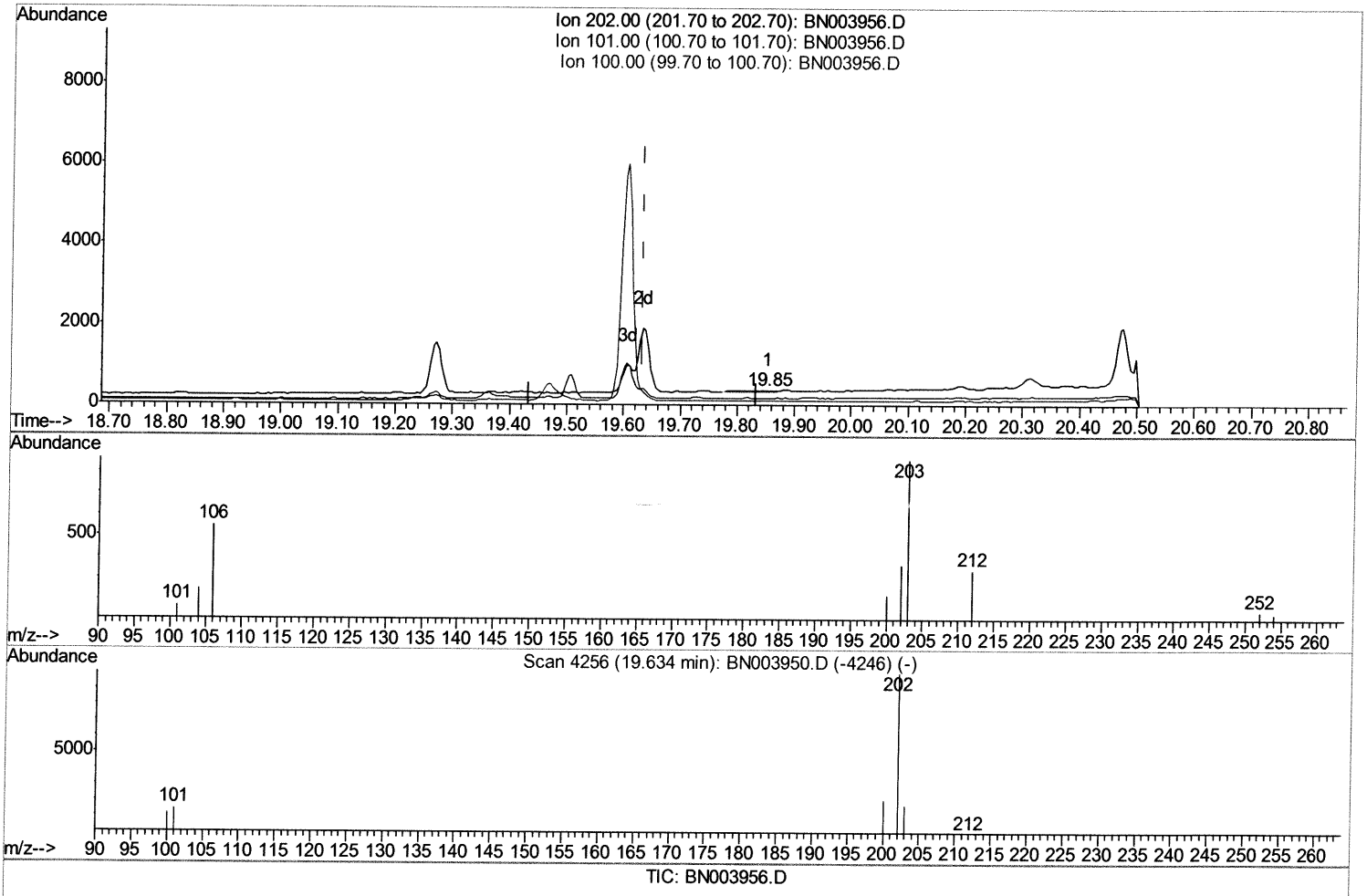
Quantitation Report (Qedit)

Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 15 22:35:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM



TIC: BN003956.D

(17) Pyrene

19.852min (+0.218) 0.00ng/ul

response 178

Ion	Exp%	Act%
202.00	100	100
101.00	12.90	47.55#
100.00	10.60	30.43#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

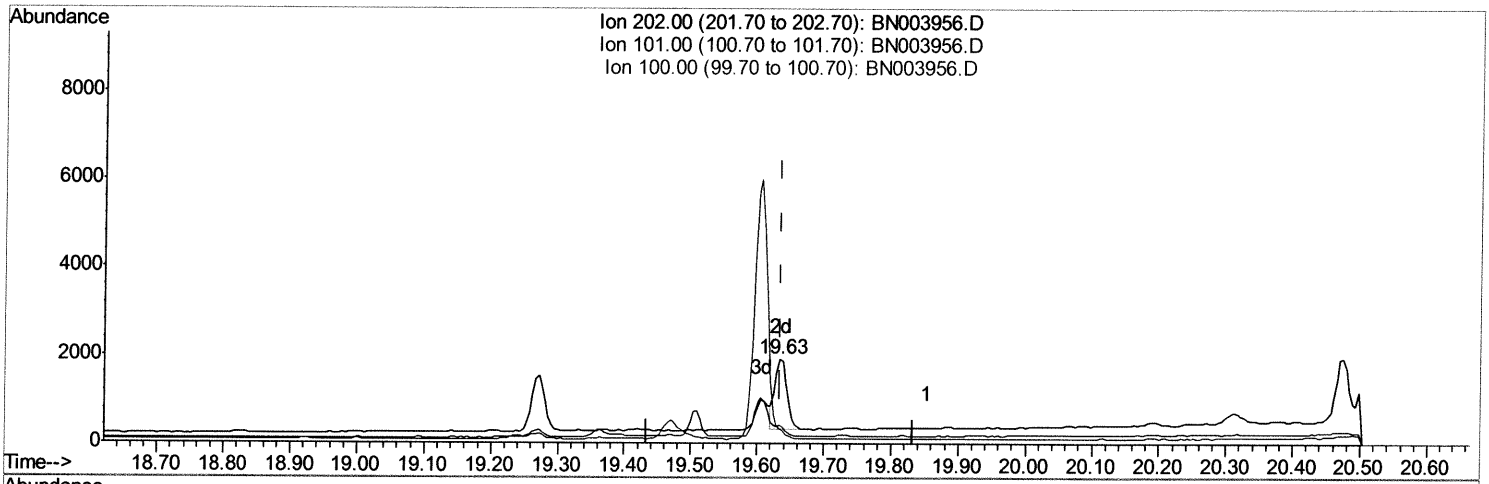
Quantitation Report (Qedit)

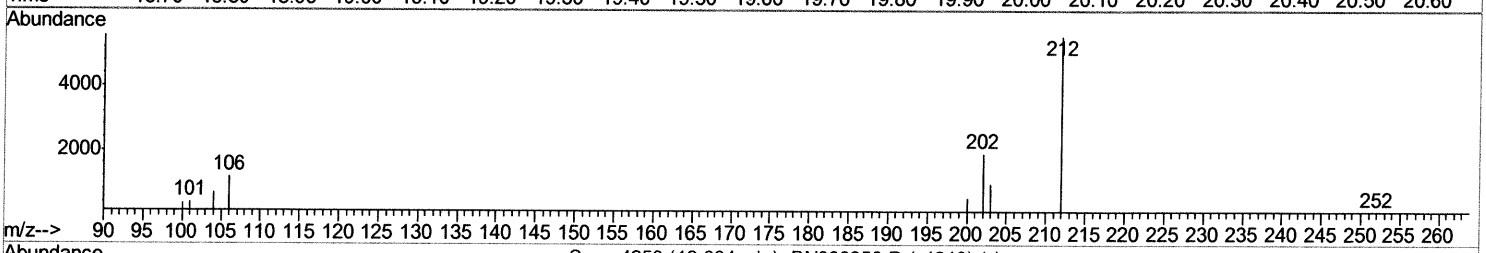
Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

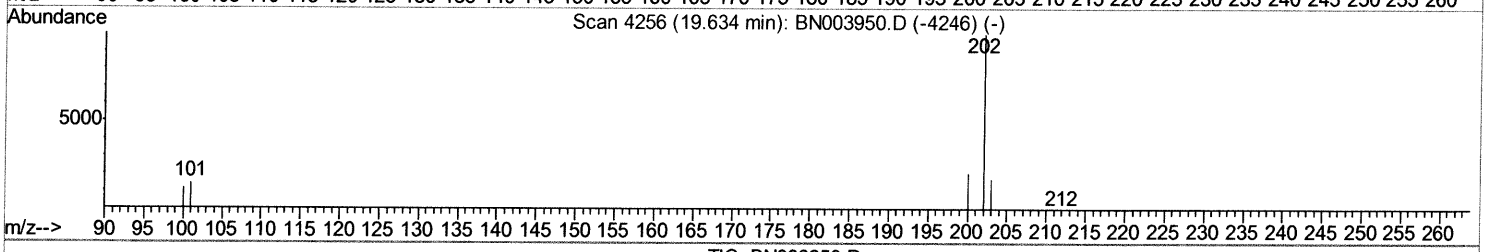
Quant Time: Dec 15 22:35:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM







TIC: BN003956.D

(17) Pyrene

19.634min (-0.000) 0.03ng/ul m SJ 12/17/18

response 2000

Ion	Exp%	Act%
202.00	100	100
101.00	12.90	20.86#
100.00	10.60	17.25#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

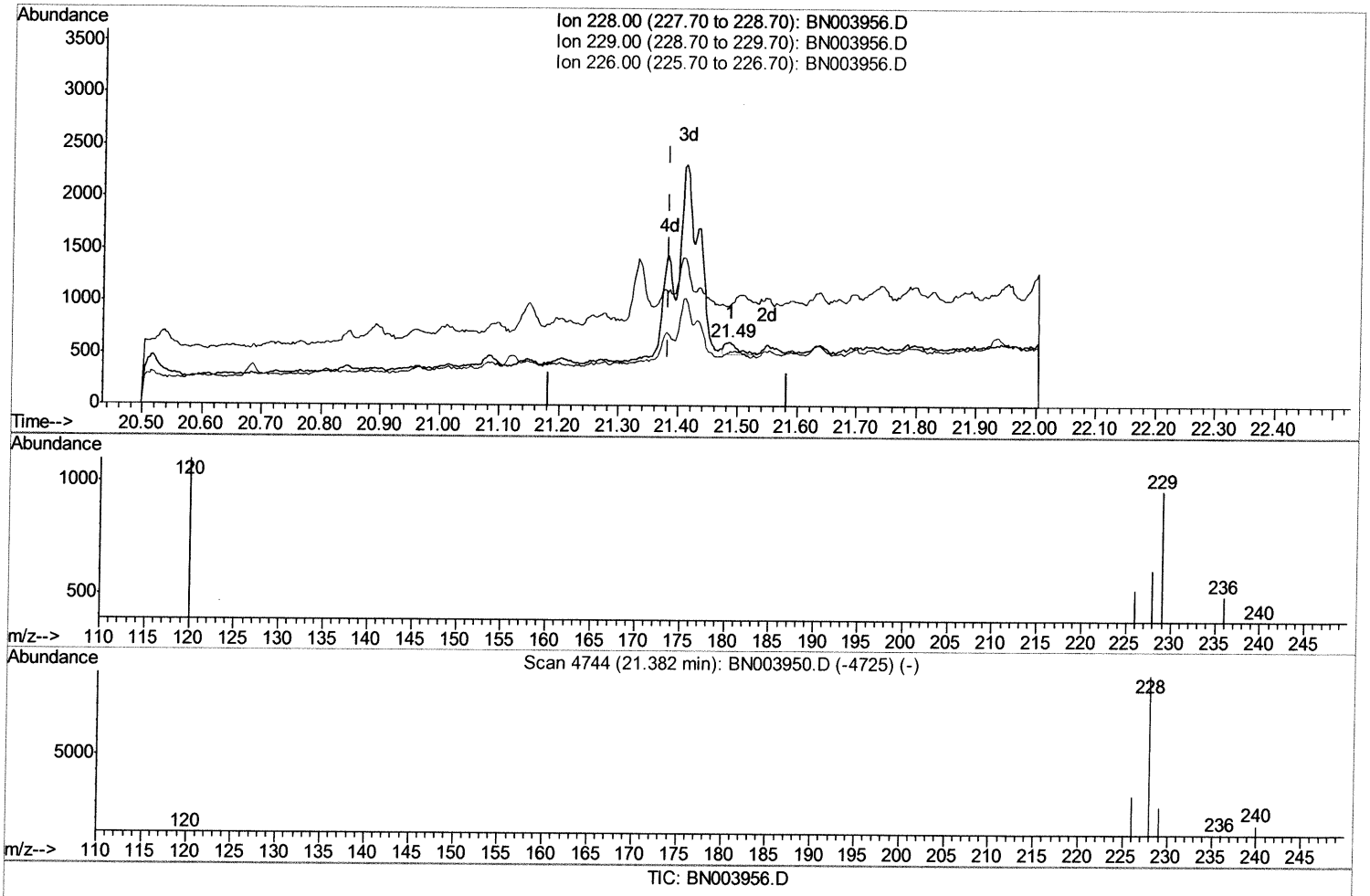
Quantitation Report (Qedit)

Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 15 22:35:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM



TIC: BN003956.D

(18) Benzo(a)anthracene

21.487min (+0.105) 0.00ng/ul

response 182

Ion	Exp%	Act%
228.00	100	100
229.00	19.50	157.17#
226.00	26.40	86.16#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

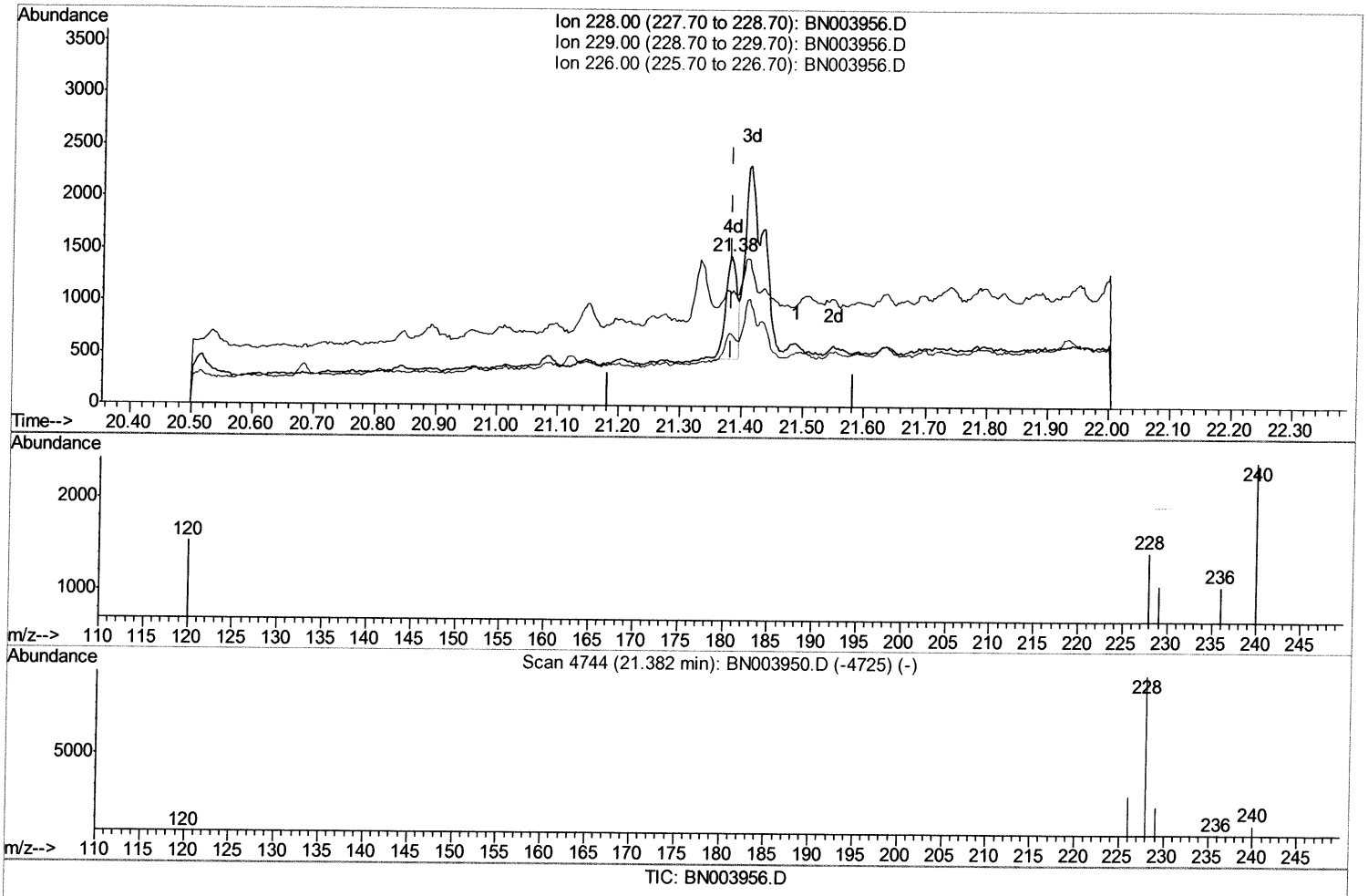
Quantitation Report (Qedit)

Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 15 22:35:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM



TIC: BN003956.D

(18) Benzo(a)anthracene

21.382min (-0.000) 0.02ng/ul m SD 12/17/18

response 1256

Ion	Exp%	Act%
228.00	100	100
229.00	19.50	75.35#
226.00	26.40	47.99#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

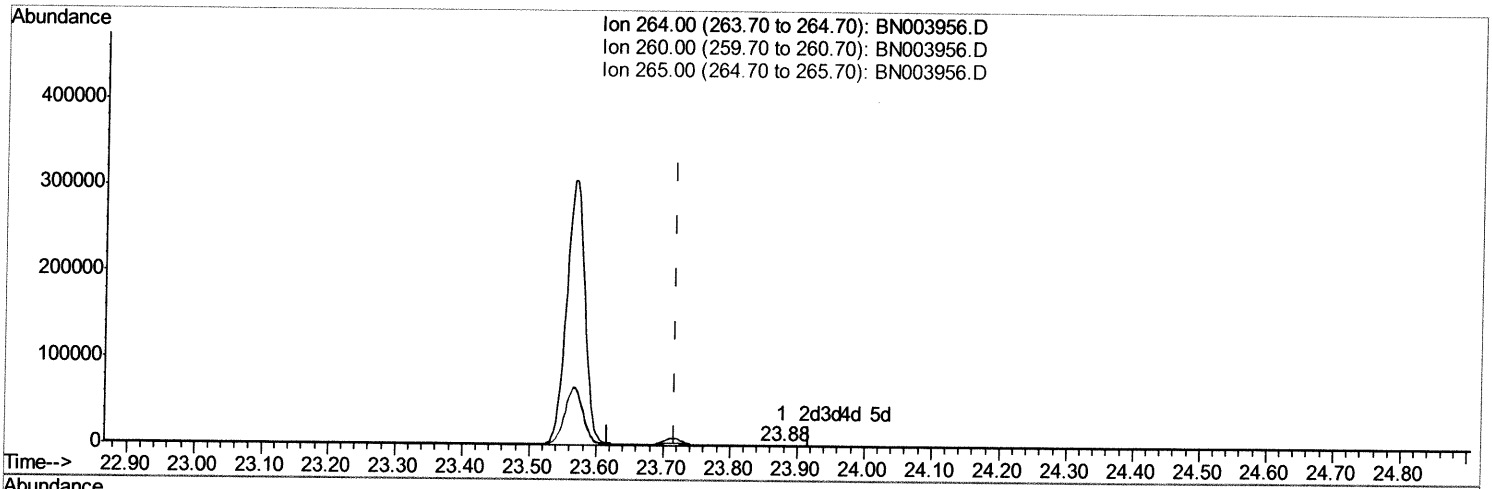
Quantitation Report (Qedit)

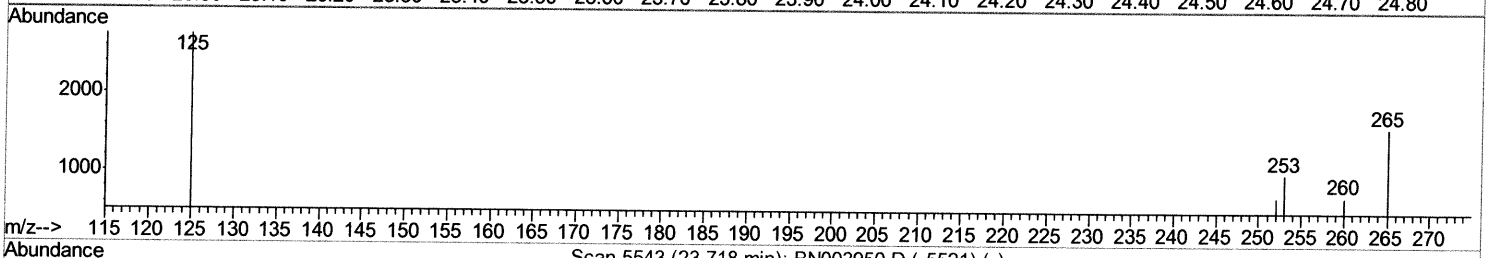
Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

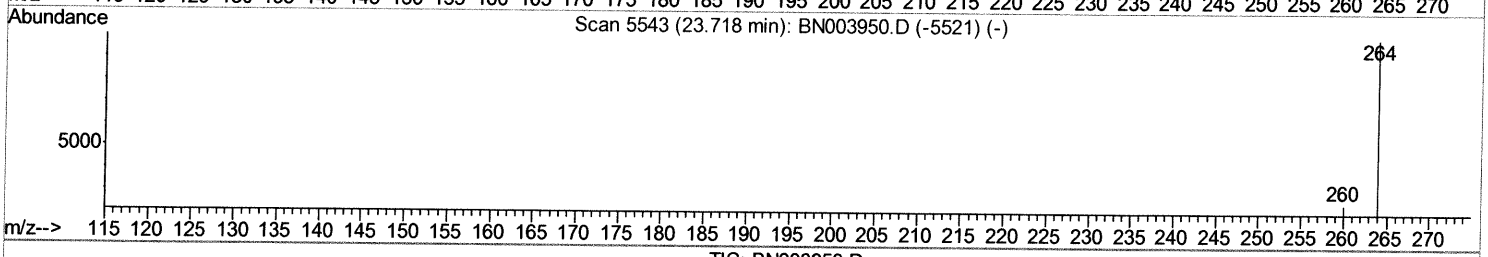
Quant Time: Dec 15 22:35:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM







TIC: BN003956.D

(20) Perylene-d12 (I)

23.878min (+0.161) 0.40ng/ul

response 32

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	140.47#
265.00	33.50	313.75#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

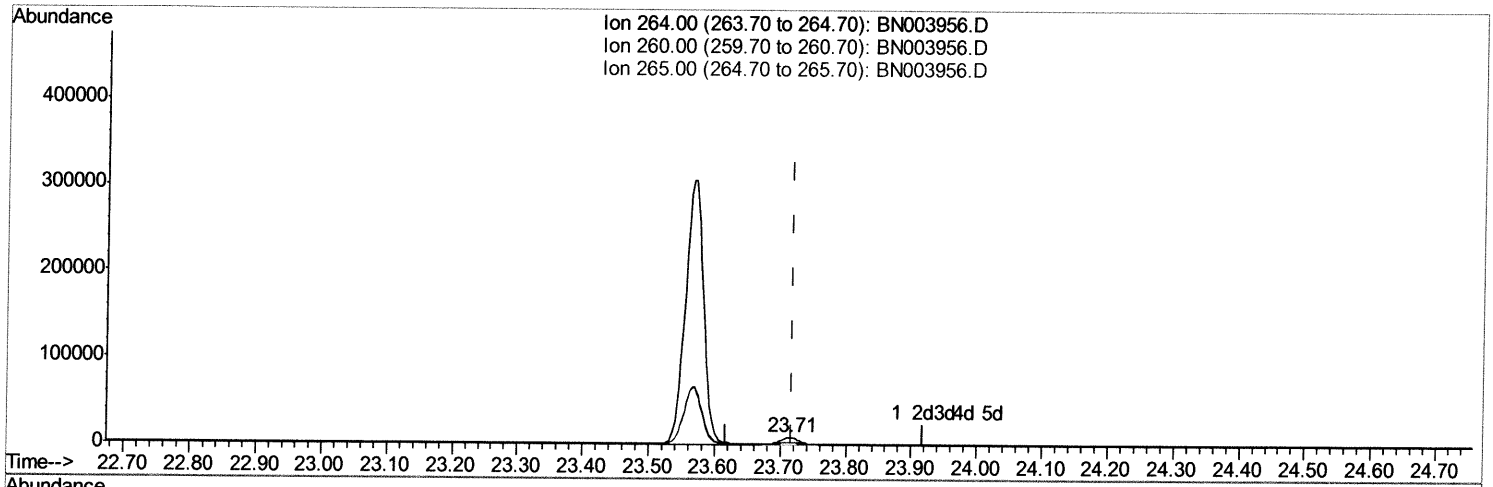
Quantitation Report (Qedit)

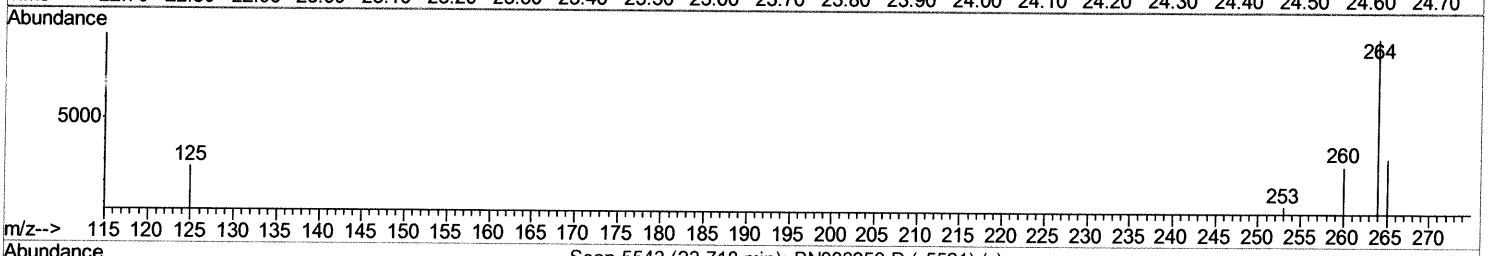
Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

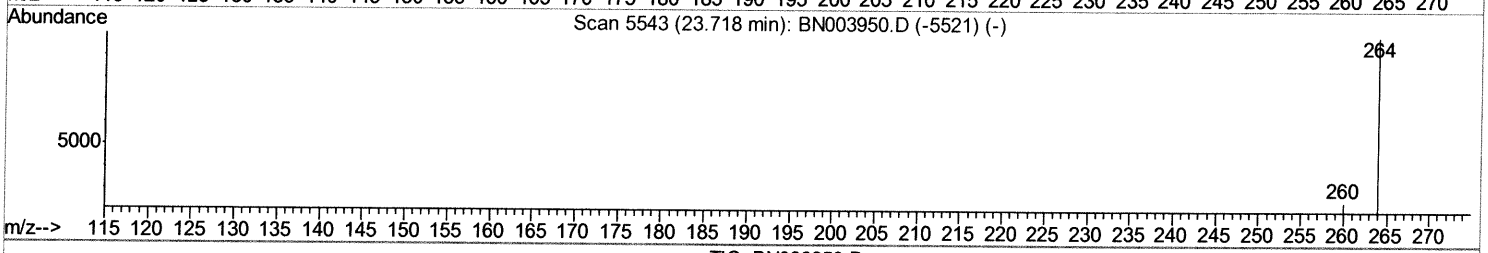
Quant Time: Dec 15 22:35:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:50 PM







TIC: BN003956.D

(20) Perylene-d12 (I)

23.715min (-0.003) 0.40ng/ul m SJ 12/19/18

response 16348

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	32.37#
265.00	33.50	36.90
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (QT Reviewed)

Data File : BN003956.D
Acq On : 15 Dec 2018 13:20
Operator : JU/SJ
Sample : J6227-04
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 15 22:37:14 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	2004	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	9654	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	5826	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	14527m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	17976m	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	16348m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	2381	0.16	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	7557m	0.18	ng/ul	0.00
Target Compounds						Qvalue
12) Phenanthrene	17.25	178	1322m	0.028	ng/ul	
15) Fluoranthene	19.27	202	1797m	0.032	ng/ul	
17) Pyrene	19.63	202	2000m	0.031	ng/ul	
18) Benzo(a)anthracene	21.38	228	1256m	0.022	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SJ
12/19/18

Instrument :
BNA_N
ClientSampleId :
F9E67

Manual Integrations APPROVED
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12/17/2018 4:23:50 PM

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E68

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-19
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BN003962.D
% Solids : 91
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/15/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	3.4	J
91-57-6	2-Methylnaphthalene	9.9	
208-96-8	Acenaphthylene	3.6	U
83-32-9	Acenaphthene	3.6	U
86-73-7	Fluorene	3.6	U
87-86-5	Pentachlorophenol	7.4	U
85-01-8	Phenanthrene	14	
120-12-7	Anthracene	3.3	J
206-44-0	Fluoranthene	3.2	J
129-00-0	Pyrene	14	
56-55-3	Benzo(a)anthracene	6.0	
218-01-9	Chrysene	10	
205-99-2	Benzo(b)fluoranthene	2.9	J
207-08-9	Benzo(k)fluoranthene	3.6	U
50-32-8	Benzo(a)pyrene	3.5	J
193-39-5	Indeno(1,2,3-cd)pyrene	2.1	J
53-70-3	Dibenzo(a,h)anthracene	3.6	U
191-24-2	Benzo(g,h,i)perylene	5.3	

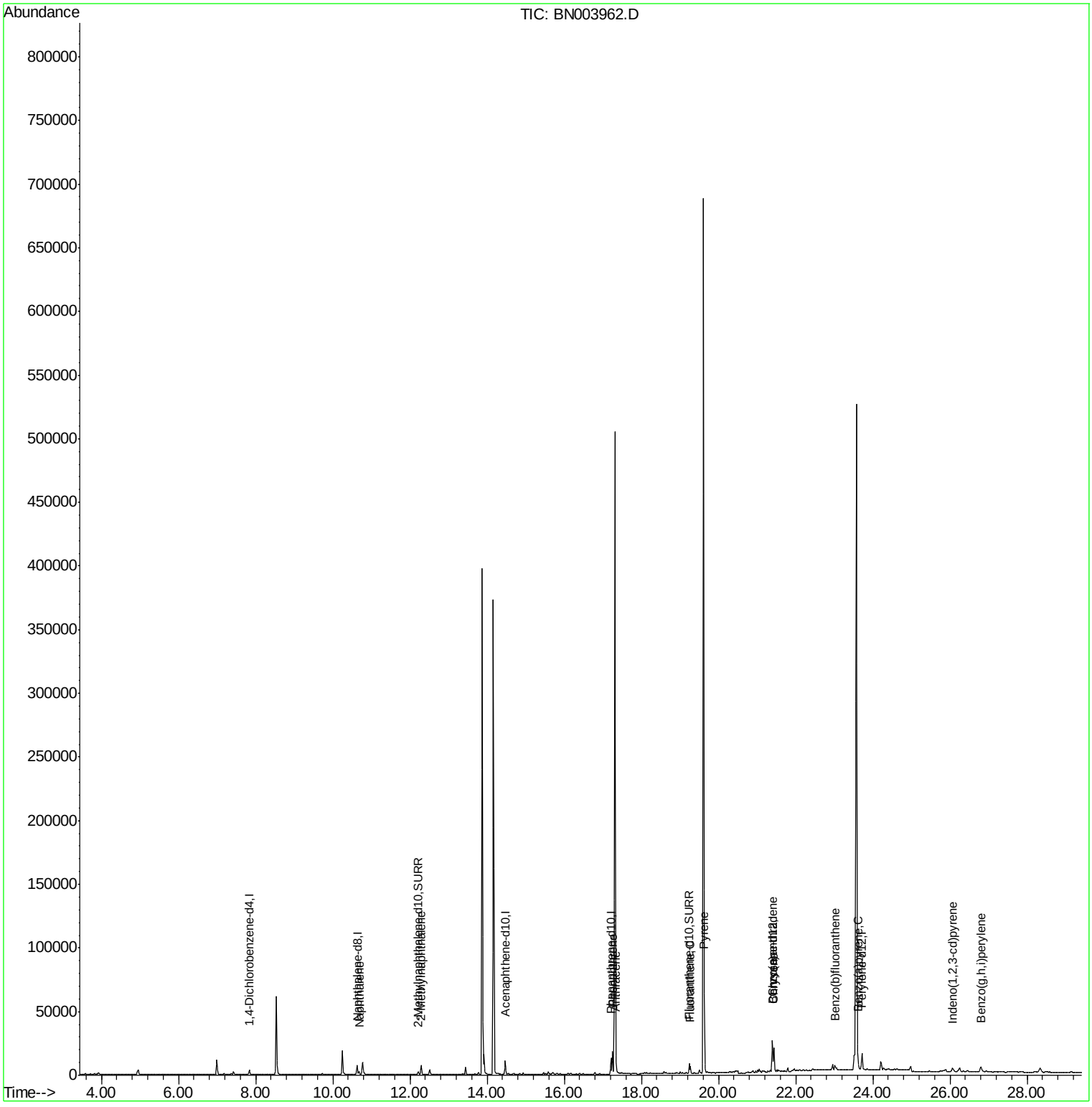
Quantitation Report (QT Reviewed)

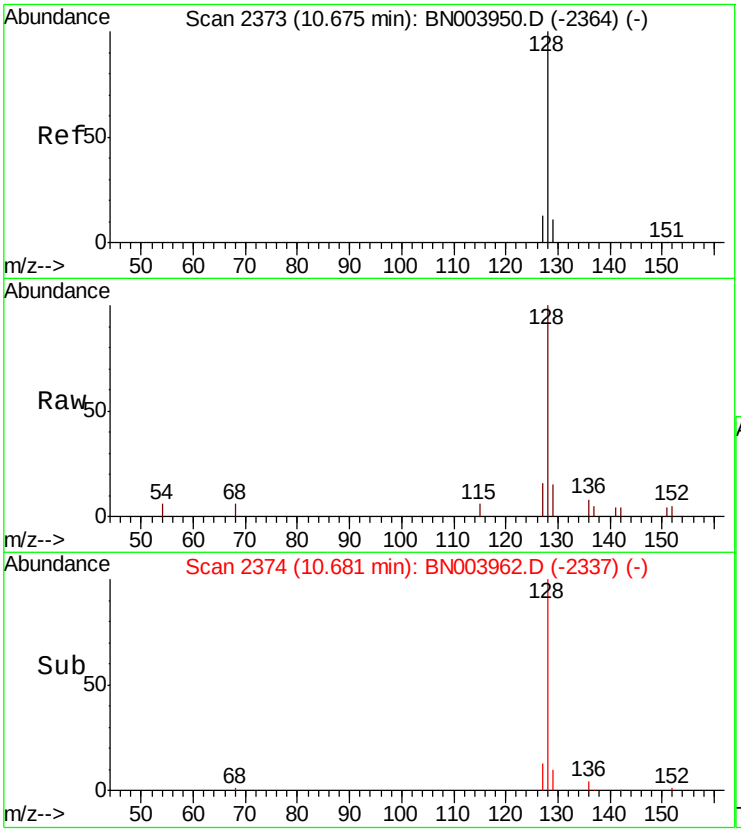
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 15 23:04:37 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM





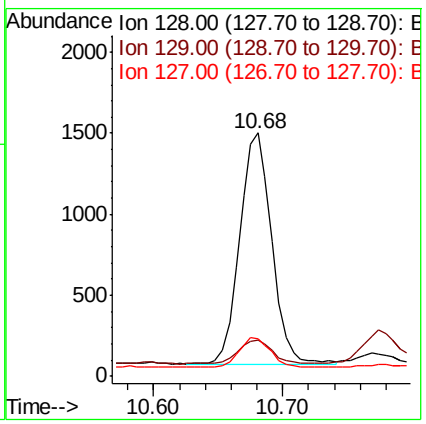
#3
Naphthalene
Concen: 0.092 ng/ul
RT: 10.68 min Scan# 2374
Delta R.T. 0.01 min
Lab File: BN003962.D
Acq: 15 Dec 2018 16:52

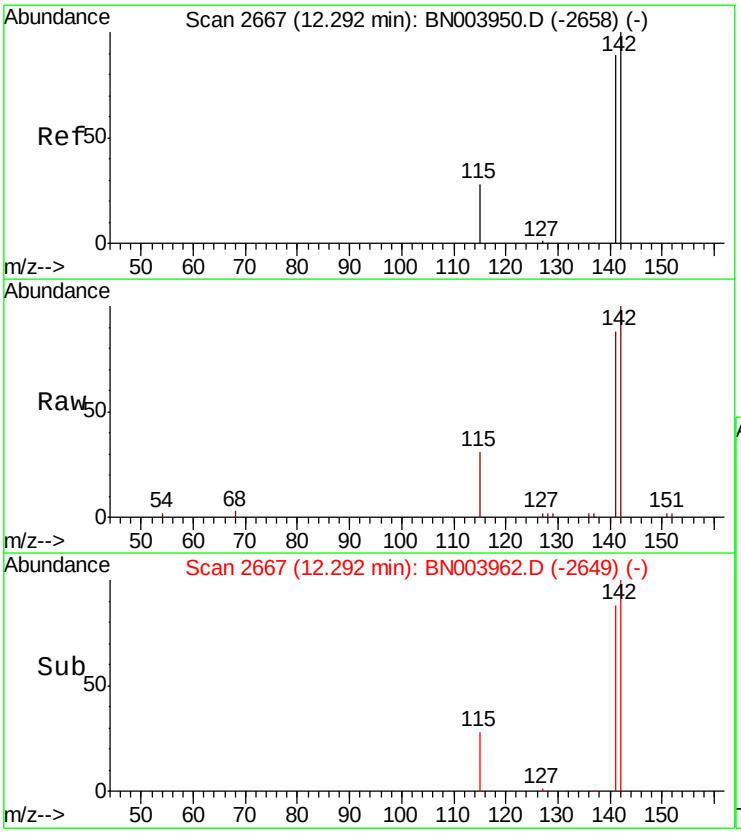
Tgt Ion:128 Resp: 2450

Ion	Ratio	Lower	Upper
128	100		
129	15.1	9.0	13.6#
127	15.6	10.5	15.7

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM

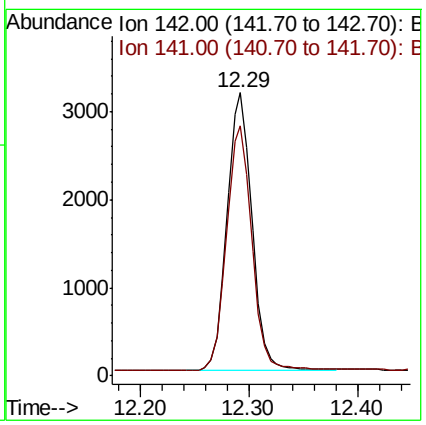


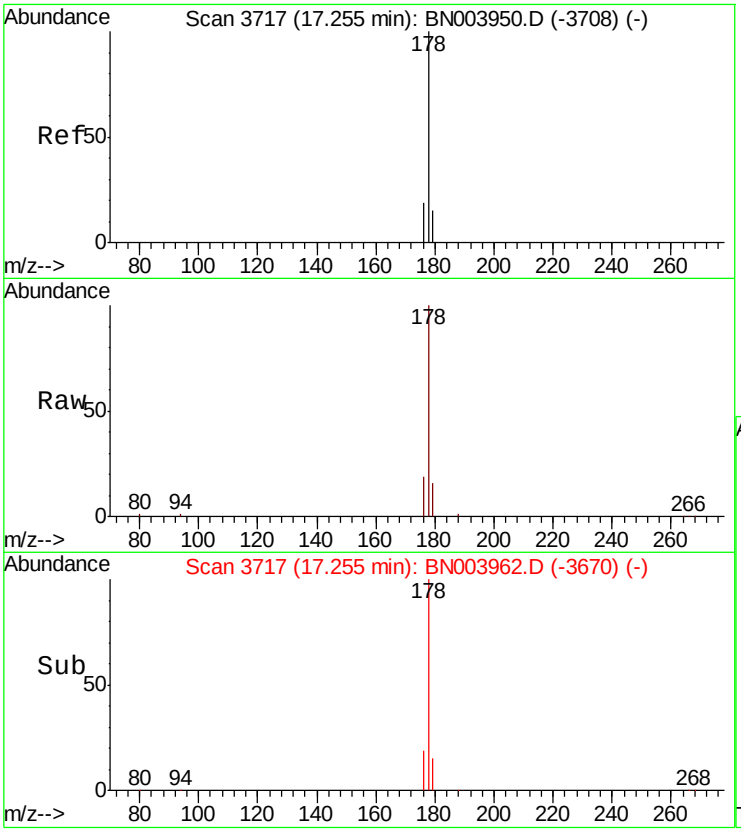


#5
2-Methylnaphthalene
Concen: 0.271 ng/ul
RT: 12.29 min Scan# 2667
Delta R.T. -0.00 min
Lab File: BN003962.D
Acq: 15 Dec 2018 16:52

Tgt Ion:142 Resp: 5057

Ion	Ratio	Lower	Upper
142	100		
141	89.4	71.5	107.3

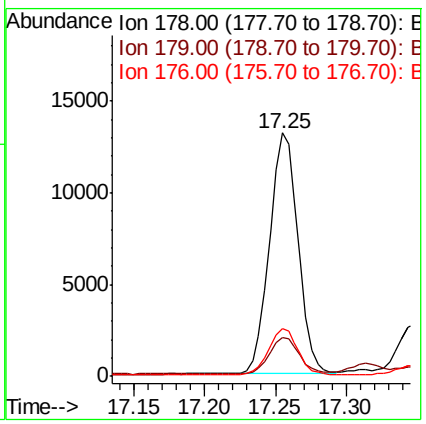




#12
Phenanthrene
Concen: 0.394 ng/ul
RT: 17.25 min Scan# 3717
Delta R.T. -0.00 min
Lab File: BN003962.D
Acq: 15 Dec 2018 16:52

Tgt Ion:178 Resp: 18672

Ion	Ratio	Lower	Upper
178	100		
179	15.9	12.5	18.7
176	19.5	15.0	22.4



Instrument :
BNA_N
ClientSampleId :
F9E68

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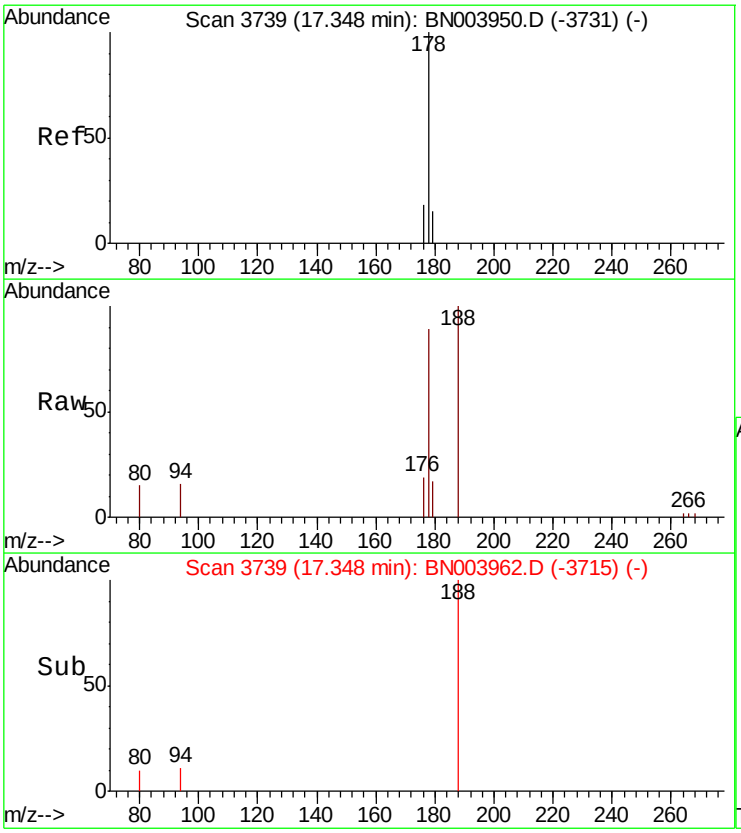
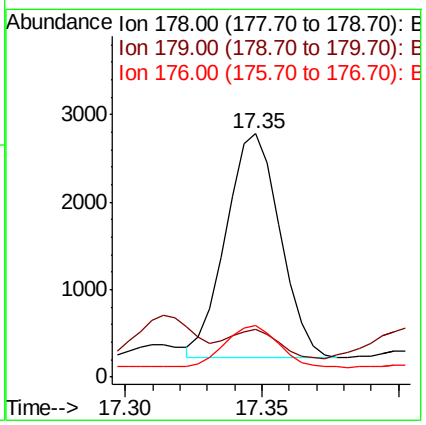
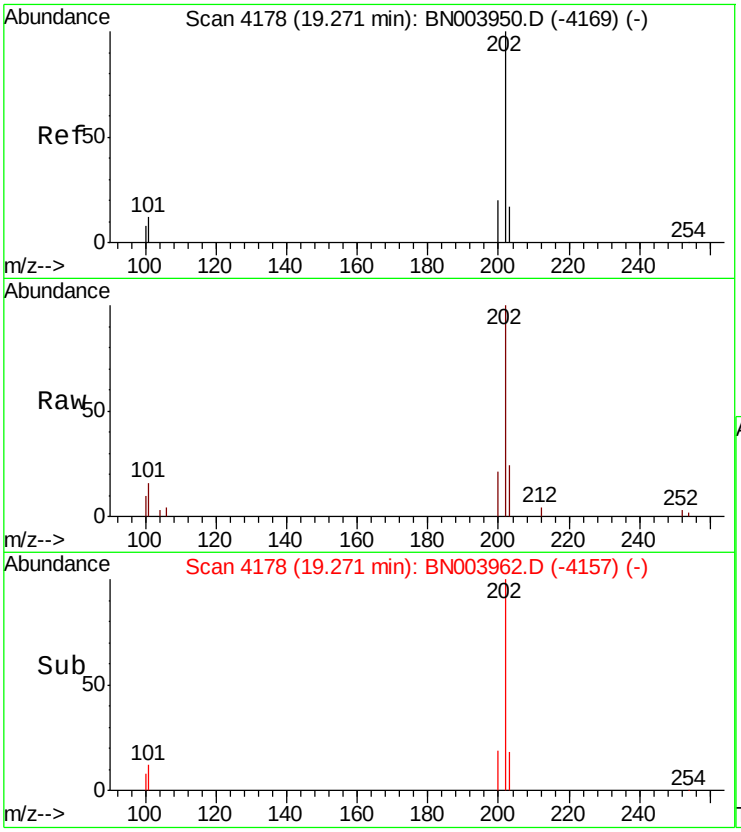


#13
Anthracene
Concen: 0.091 ng/ul m
RT: 17.35 min Scan# 3739
Delta R.T. -0.00 min
Lab File: BN003962.D
Acq: 15 Dec 2018 16:52

Tgt Ion:178 Resp: 3544

Ion	Ratio	Lower	Upper
178	100		
179	19.4	12.3	18.5#
176	21.0	14.8	22.2

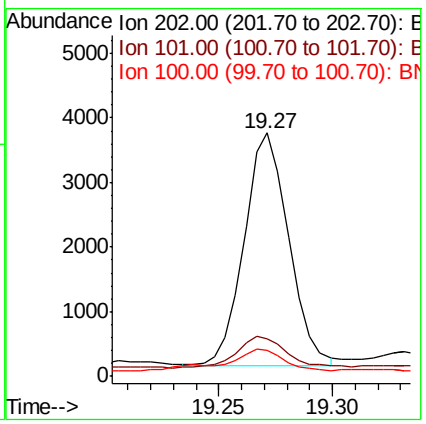




#15
Fluoranthene
Concen: 0.088 ng/ul m
RT: 19.27 min Scan# 4178
Delta R.T. -0.00 min
Lab File: BN003962.D
Acq: 15 Dec 2018 16:52

Tgt Ion:202 Resp: 4922

Ion	Ratio	Lower	Upper
202	100		
101	15.6	0.0	30.7
100	10.4	0.0	28.1



Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
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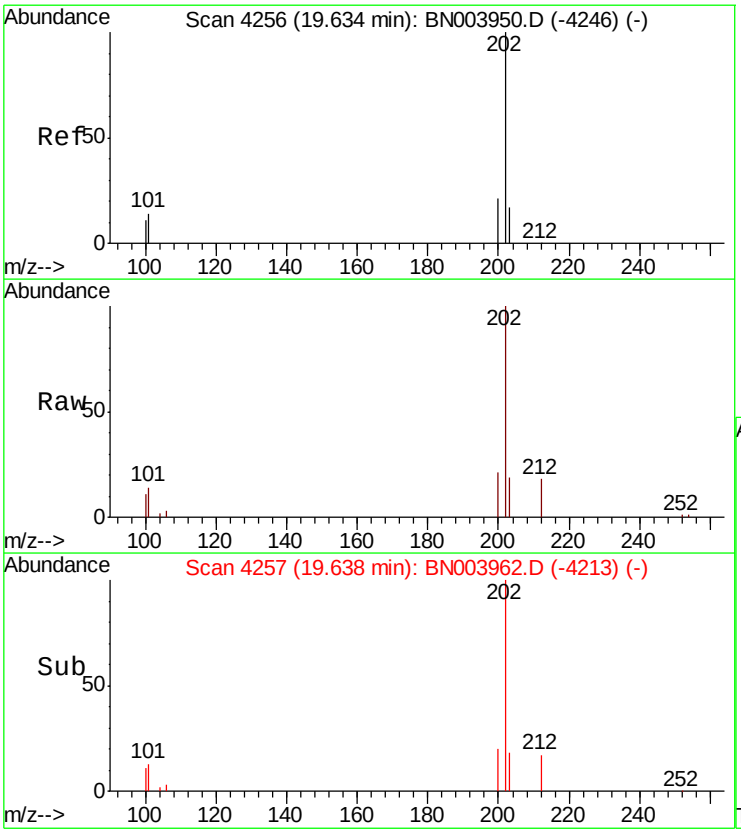
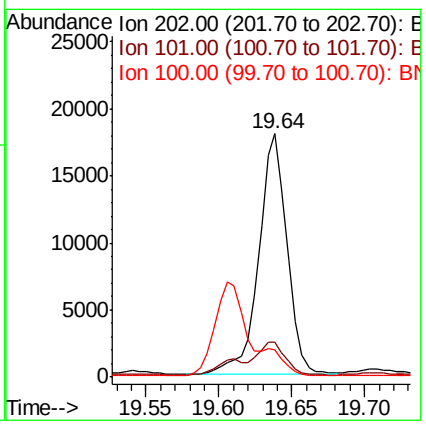
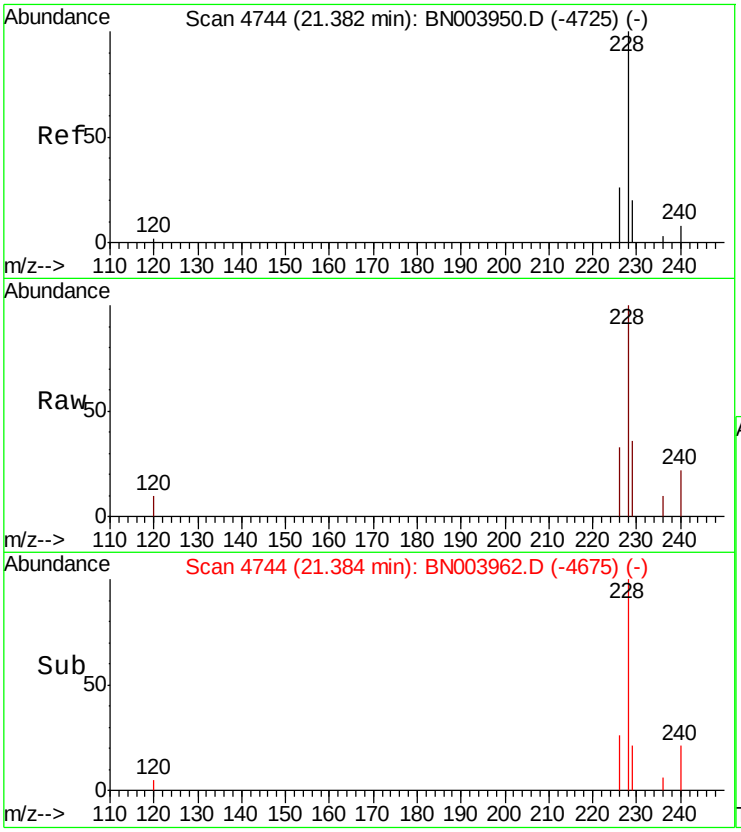


#17
Pyrene
Concen: 0.375 ng/ul
RT: 19.64 min Scan# 4257
Delta R.T. 0.00 min
Lab File: BN003962.D
Acq: 15 Dec 2018 16:52

Tgt Ion:202 Resp: 24173

Ion	Ratio	Lower	Upper
202	100		
101	14.2	10.3	15.5
100	11.0	8.5	12.7





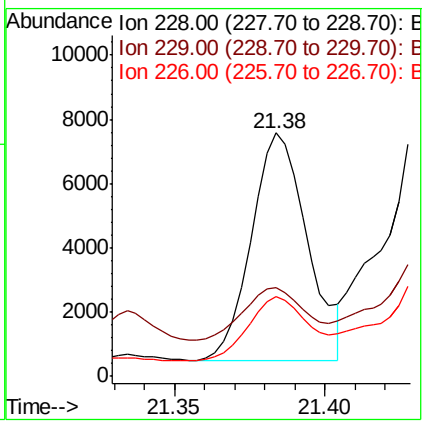
#18
Benzo(a)anthracene
Concen: 0.163 ng/ul m
RT: 21.38 min Scan# 4744
Delta R.T. 0.00 min
Lab File: BN003962.D
Acq: 15 Dec 2018 16:52

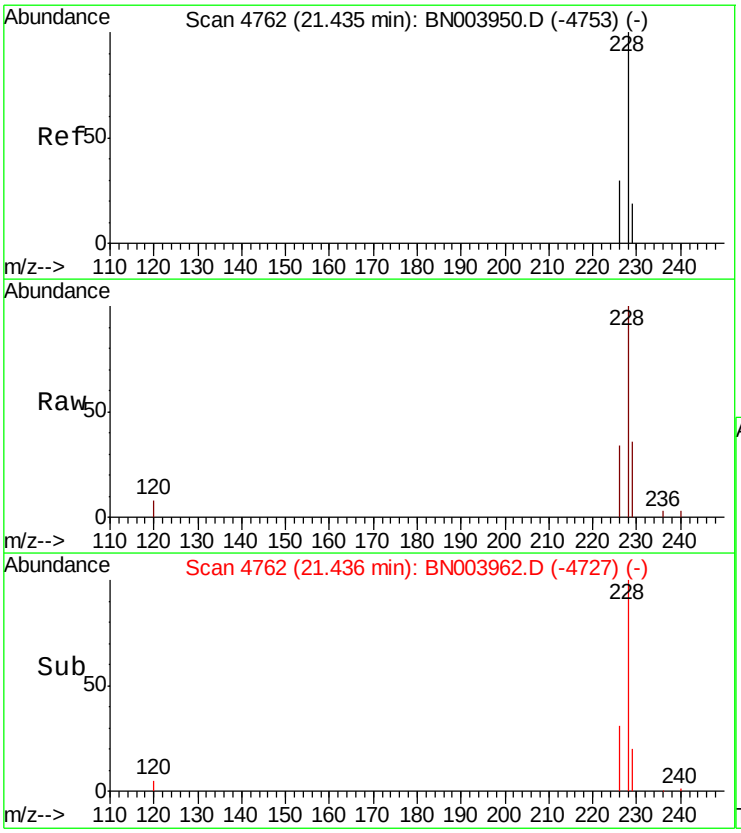
Tgt Ion:228 Resp: 9224

Ion	Ratio	Lower	Upper
228	100		
229	36.5	15.6	23.4#
226	33.0	21.1	31.7#

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM

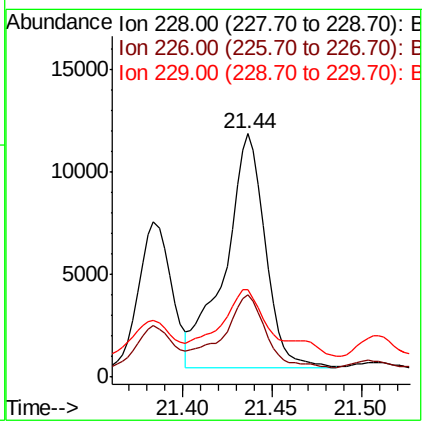


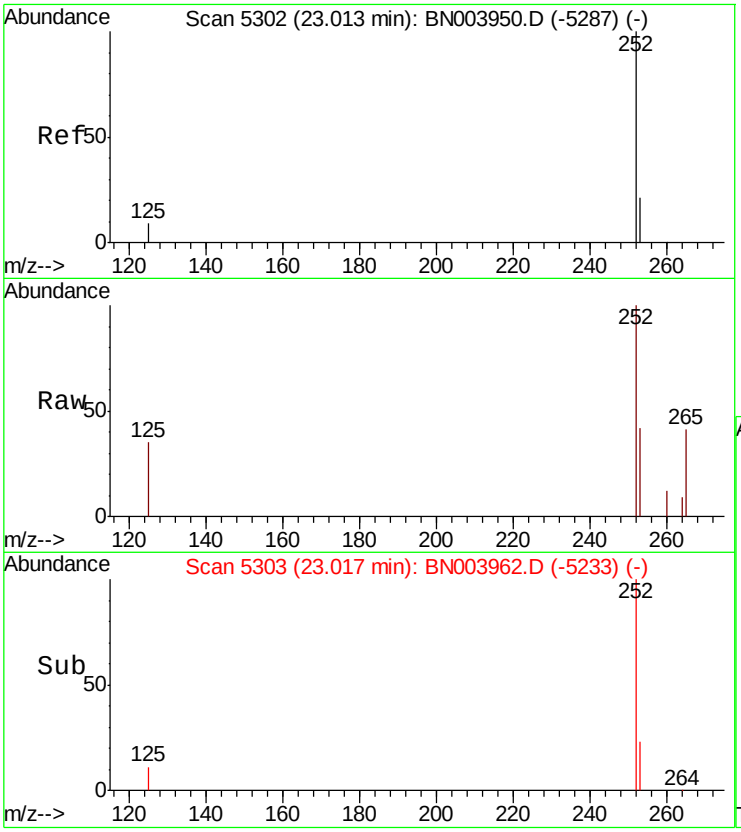


#19
Chrysene
Concen: 0.280 ng/ul m
RT: 21.44 min Scan# 4762
Delta R.T. 0.00 min
Lab File: BN003962.D
Acq: 15 Dec 2018 16:52

Tgt Ion:228 Resp: 18147

Ion	Ratio	Lower	Upper
228	100		
226	33.7	24.0	36.0
229	35.7	15.7	23.5#





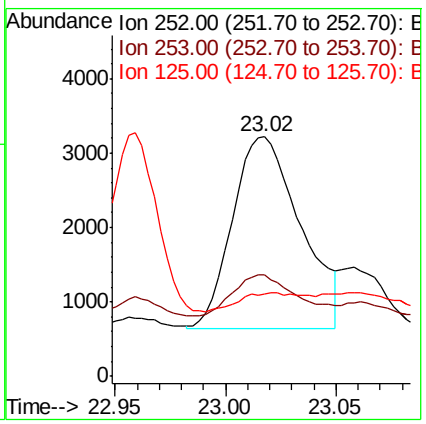
#21
Benzo(b)fluoranthene
Concen: 0.080 ng/ul m
RT: 23.02 min Scan# 5303
Delta R.T. 0.00 min
Lab File: BN003962.D
Acq: 15 Dec 2018 16:52

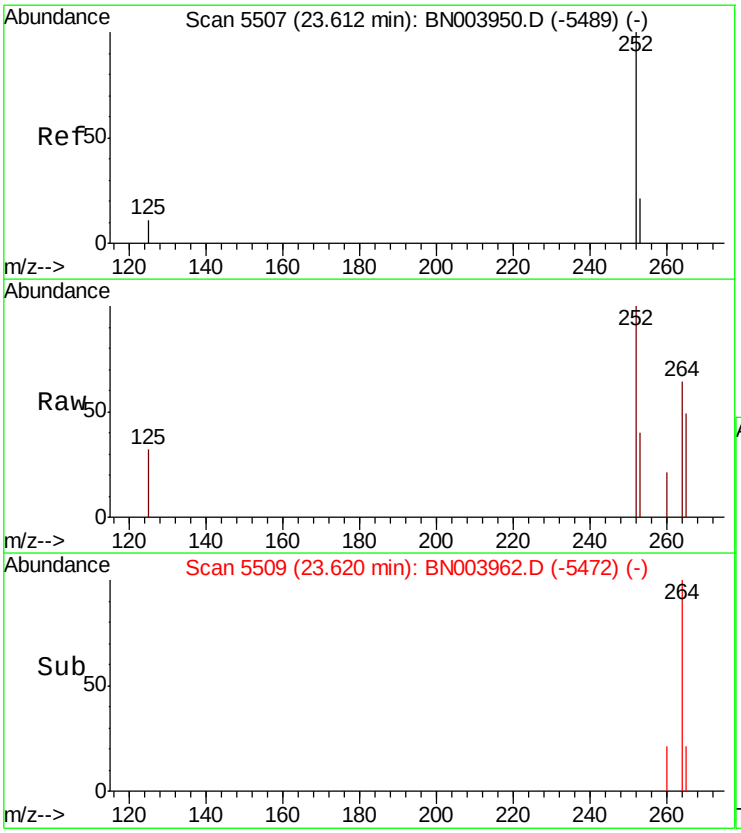
Tgt Ion:252 Resp: 5530

Ion	Ratio	Lower	Upper
252	100		
253	42.2	0.0	46.0
125	34.6	0.0	22.4#

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM

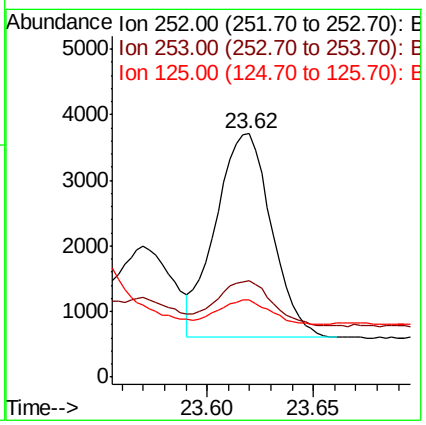


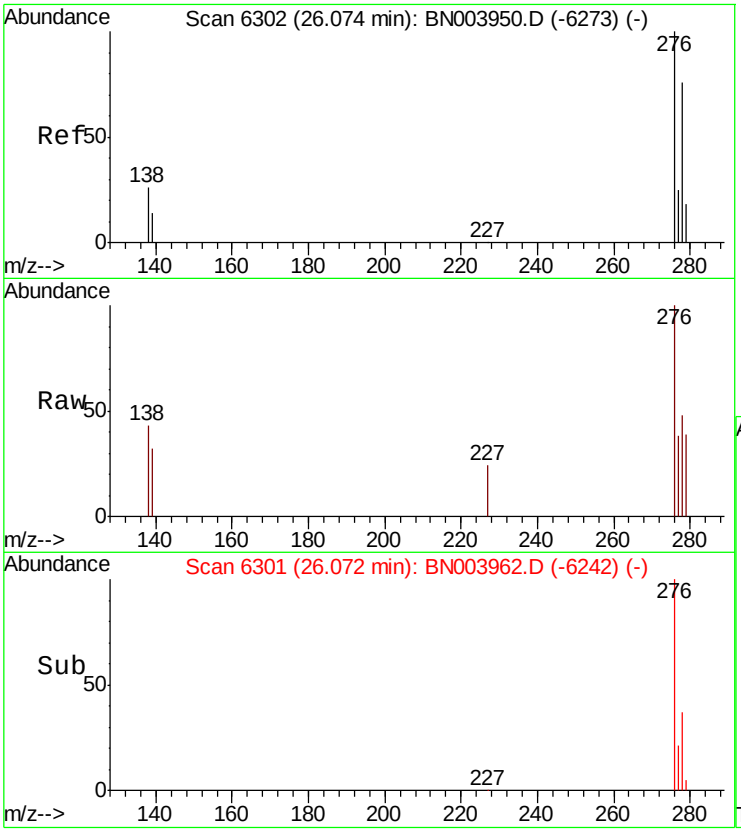


#23
Benzo(a)pyrene
Concen: 0.096 ng/ul
RT: 23.62 min Scan# 5509
Delta R.T. 0.01 min
Lab File: BN003962.D
Acq: 15 Dec 2018 16:52

Tgt Ion:252 Resp: 5692

Ion	Ratio	Lower	Upper
252	100		
253	39.9	19.0	28.4#
125	31.5	10.2	15.4#





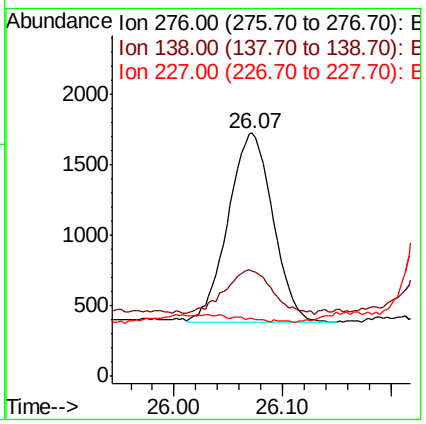
#24
Indeno(1,2,3-cd)pyrene
Concen: 0.057 ng/ul
RT: 26.07 min Scan# 6301
Delta R.T. -0.00 min
Lab File: BN003962.D
Acq: 15 Dec 2018 16:52

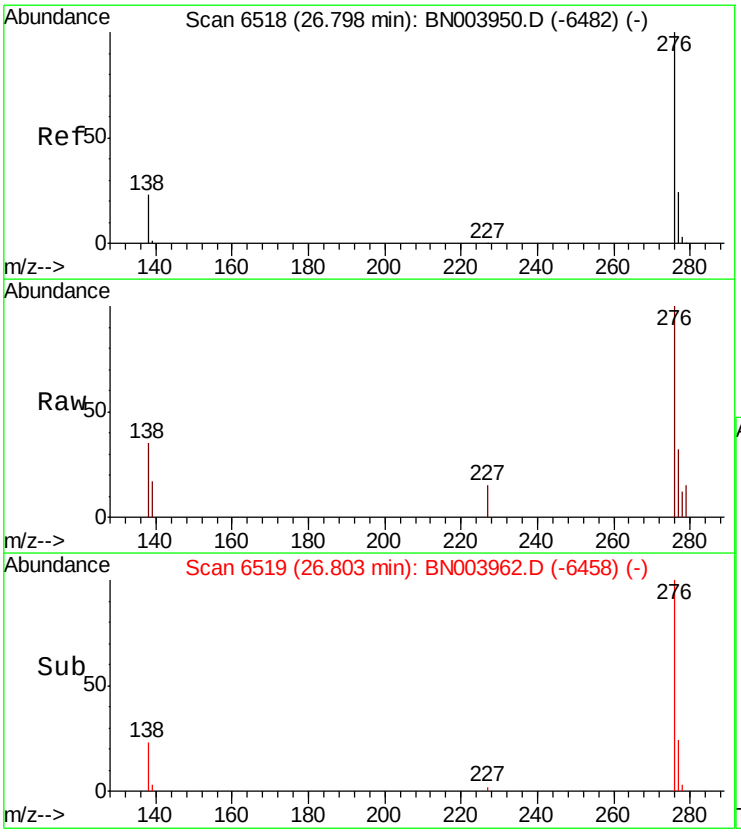
Tgt Ion:276 Resp: 3876

Ion	Ratio	Lower	Upper
276	100		
138	24.3	20.3	30.5
227	0.0	0.2	0.2#

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM

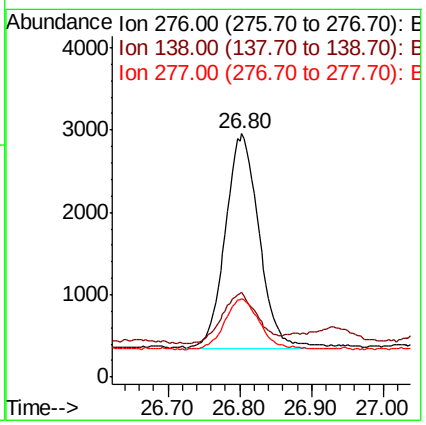




#26
Benzo(g,h,i)perylene
Concen: 0.144 ng/ul
RT: 26.80 min Scan# 6519
Delta R.T. 0.00 min
Lab File: BN003962.D
Acq: 15 Dec 2018 16:52

Tgt Ion:276 Resp: 8513

Ion	Ratio	Lower	Upper
276	100		
138	34.6	17.7	26.5#
277	32.4	19.3	28.9#



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM

Quant Time: Dec 15 23:04:37 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	1933	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	9507	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	5804	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	14428m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	17949m	0.40	ng/ul	0.00
20) Perylene-d12	23.72	264	16616m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	2928	0.20	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	8918m	0.21	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.68	128	2450	0.092	ng/ul#	92
5) 2-Methylnaphthalene	12.29	142	5057	0.271	ng/ul	100
12) Phenanthrene	17.25	178	18672	0.394	ng/ul	99
13) Anthracene	17.35	178	3544m	0.091	ng/ul	
15) Fluoranthene	19.27	202	4922m	0.088	ng/ul	
17) Pyrene	19.64	202	24173	0.375	ng/ul	98
18) Benzo(a)anthracene	21.38	228	9224m	0.163	ng/ul	
19) Chrysene	21.44	228	18147m	0.280	ng/ul	
21) Benzo(b)fluoranthene	23.02	252	5530m	0.080	ng/ul	
23) Benzo(a)pyrene	23.62	252	5692	0.096	ng/ul#	62
24) Indeno(1,2,3-cd)pyrene	26.07	276	3876	0.057	ng/ul#	98
26) Benzo(g,h,i)perylene	26.80	276	8513	0.144	ng/ul#	79

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

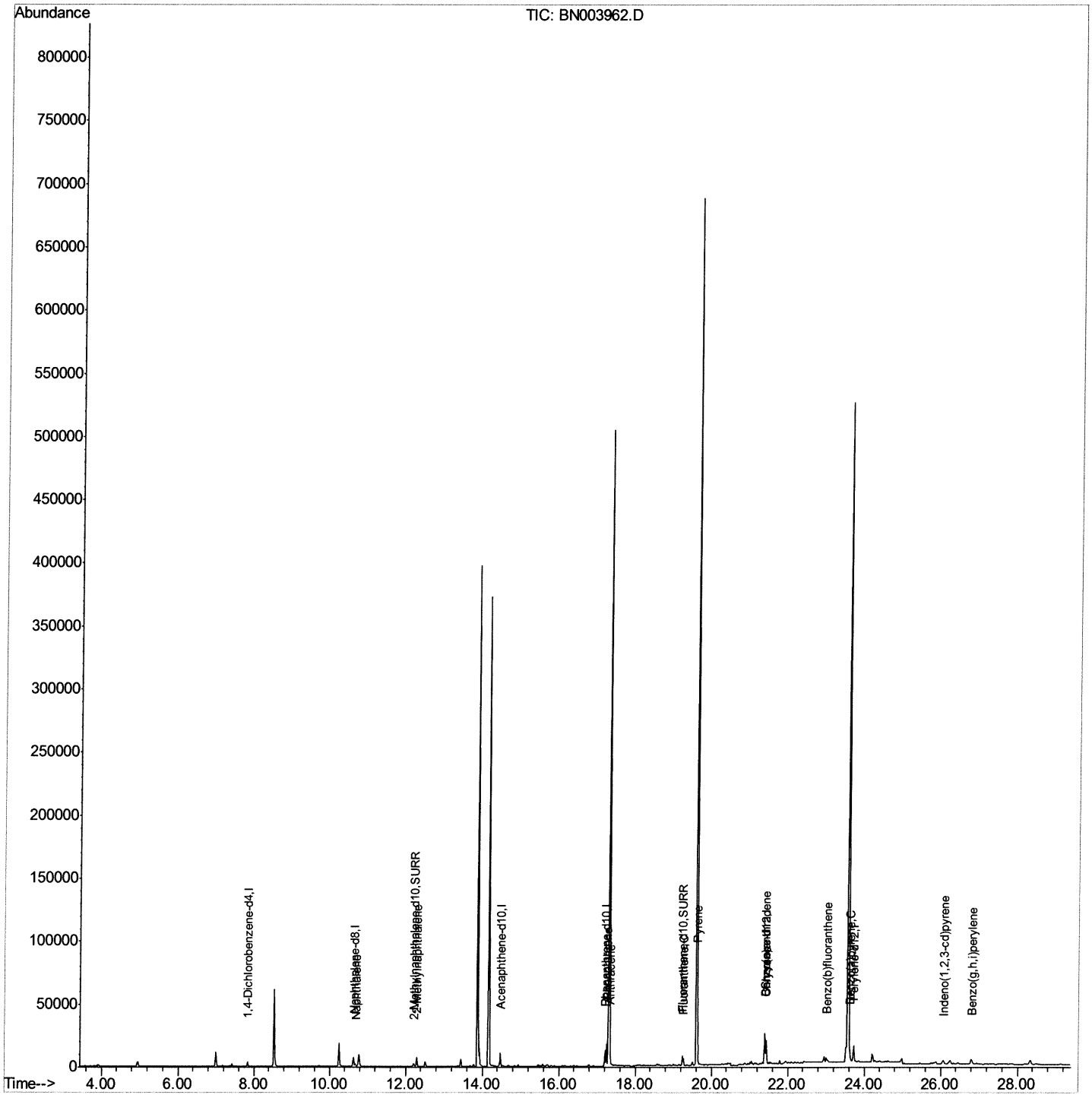
Quantitation Report (QT Reviewed)

Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 15 23:04:37 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

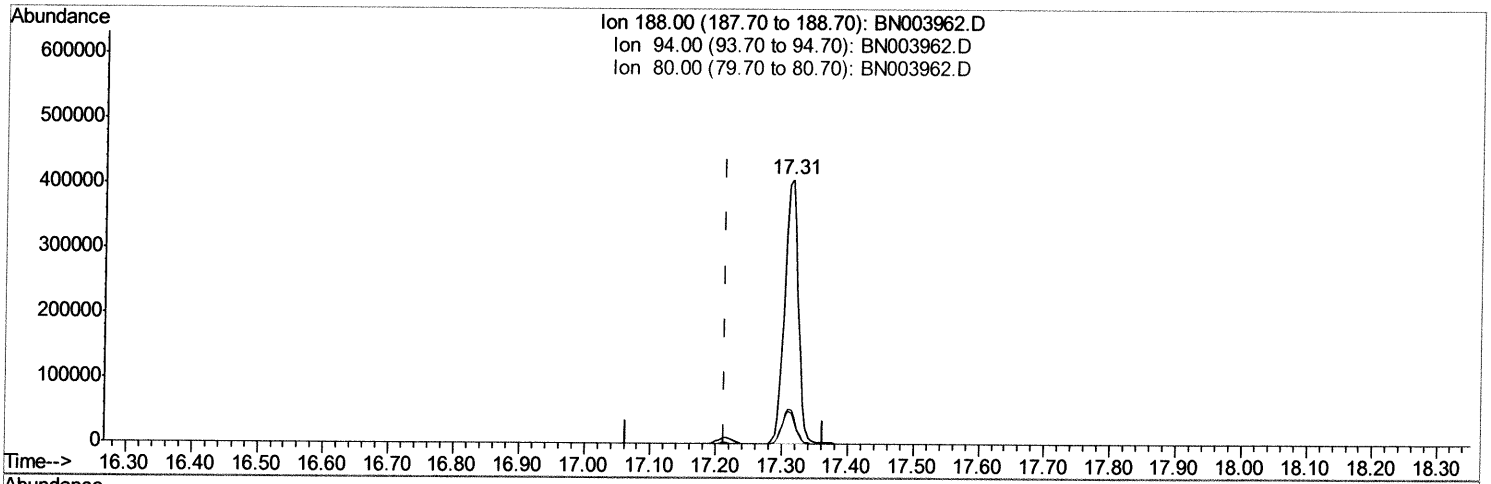
Quantitation Report (Qedit)

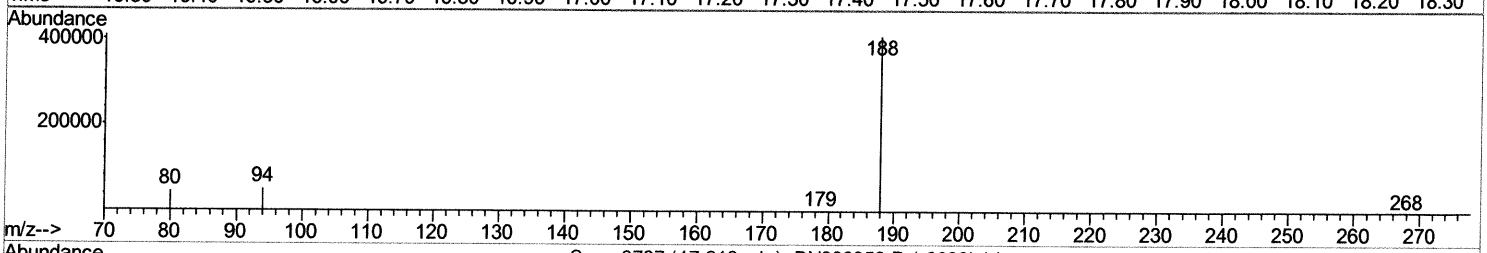
Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

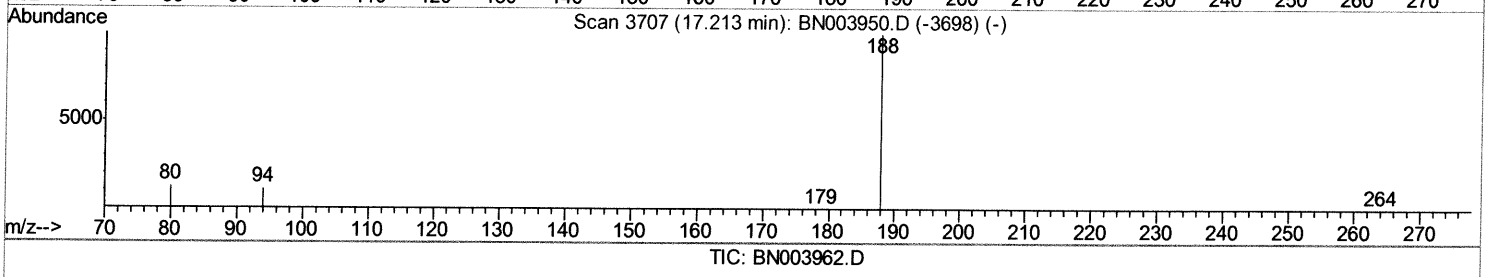
Quant Time: Dec 15 22:02:42 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM







TIC: BN003962.D

(10) Phenanthrene-d10 (I)

17.314min (+0.101) 0.40ng/ul

response 577666

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	12.57#
80.00	11.60	11.16
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

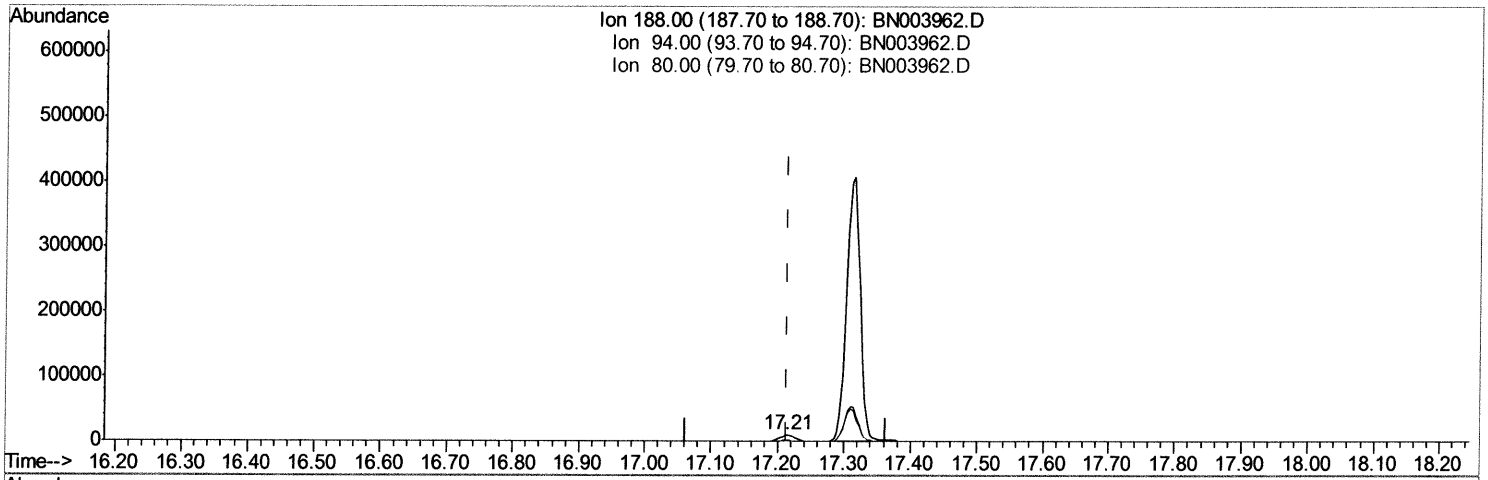
Quantitation Report (Qedit)

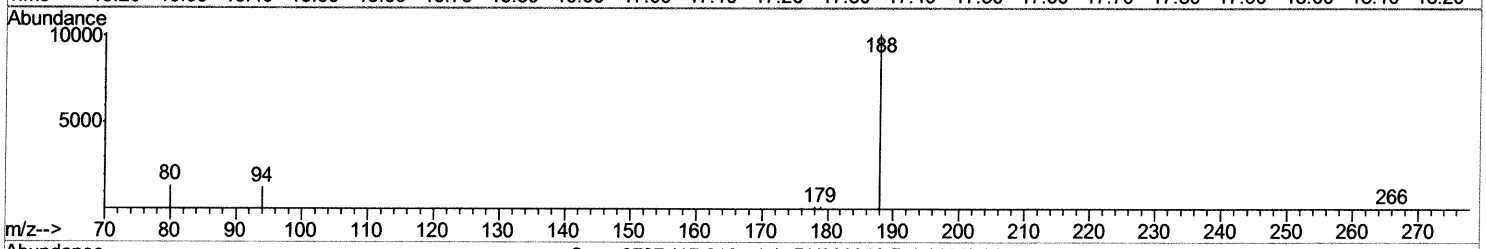
Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

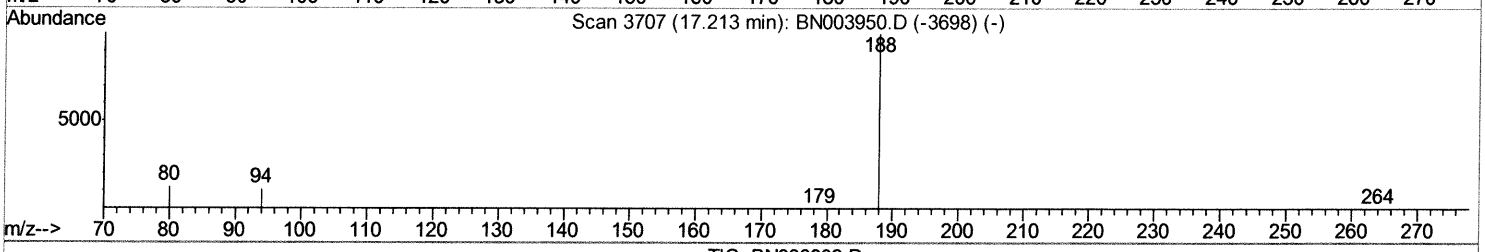
Quant Time: Dec 15 22:02:42 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM







TIC: BN003962.D

(10) Phenanthrene-d10 (I)

17.213min (-0.000) 0.40ng/ul m SJ 12/17/18

response 14428

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	12.69#
80.00	11.60	13.80
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

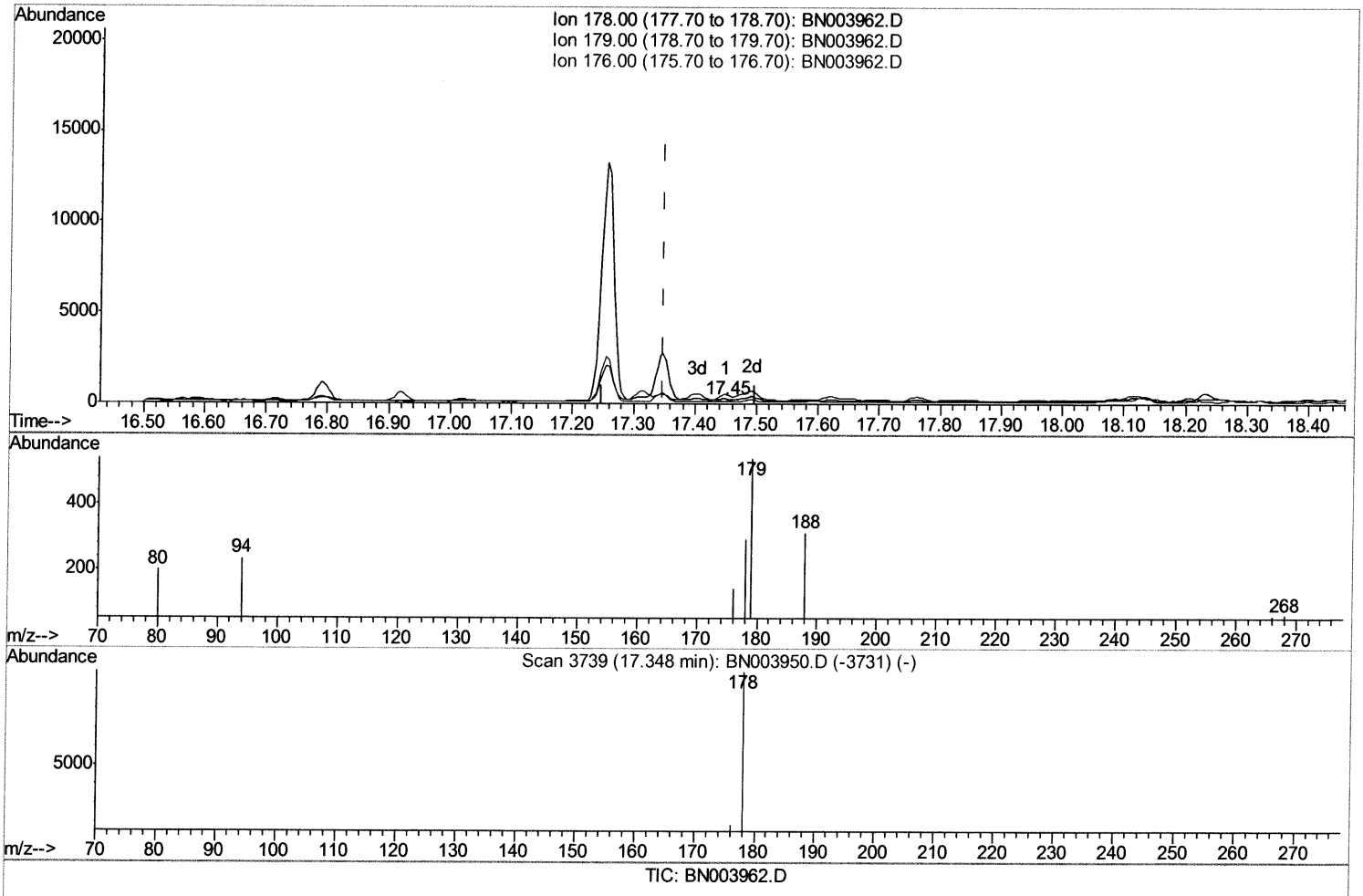
Quantitation Report (Qedit)

Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 15 22:02:42 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM



TIC: BN003962.D

(13) Anthracene

17.449min (+0.101) 0.00ng/ul

response 140

Ion	Exp%	Act%
178.00	100	100
179.00	15.40	185.57#
176.00	18.50	48.45#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

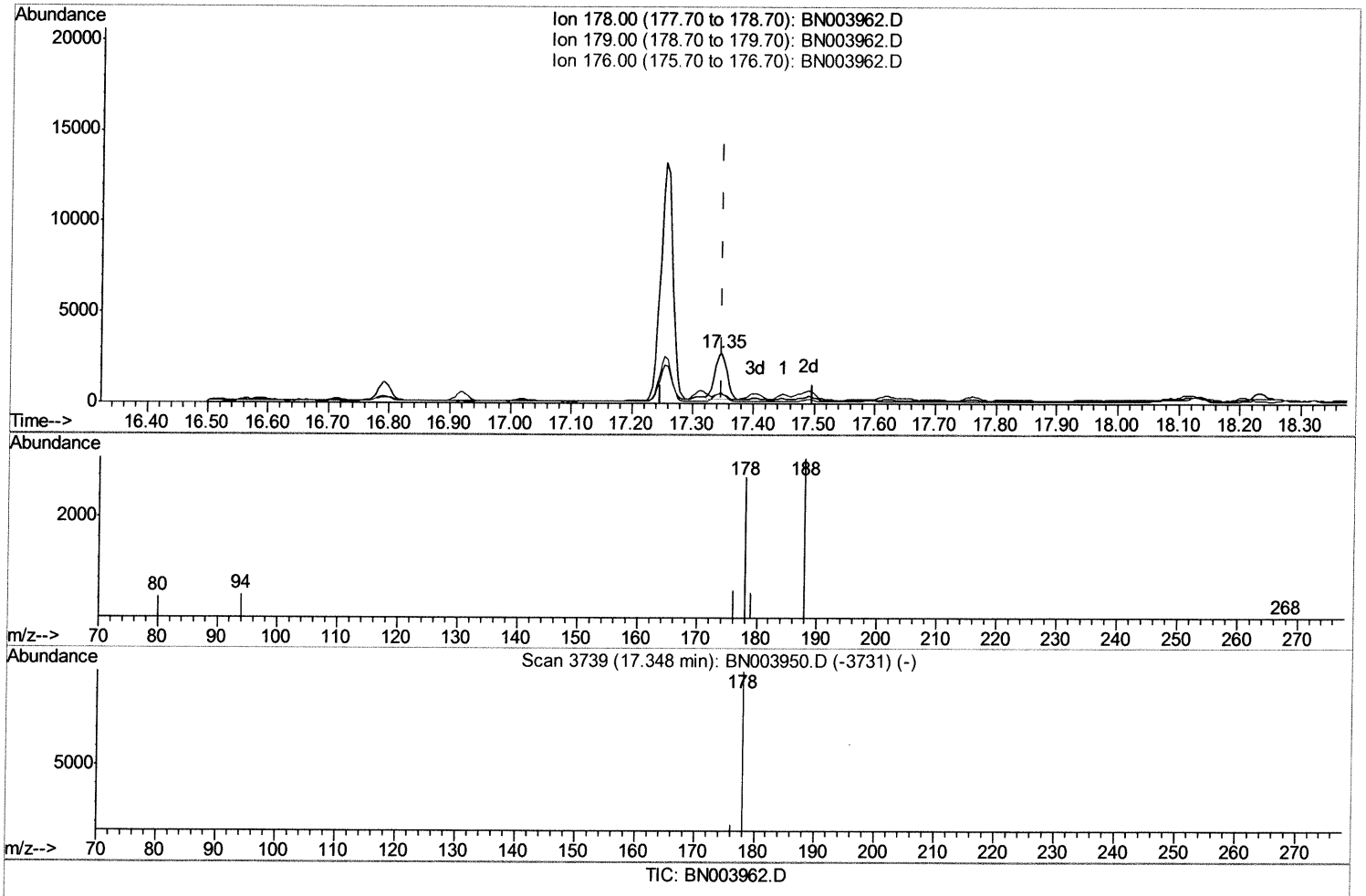
Quantitation Report (Qedit)

Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 15 22:02:42 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM



TIC: BN003962.D

(13) Anthracene

17.348min (-0.000) 0.09ng/ul m SJ 12/17/18

response 3544

Ion	Exp%	Act%
178.00	100	100
179.00	15.40	19.36#
176.00	18.50	21.05
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

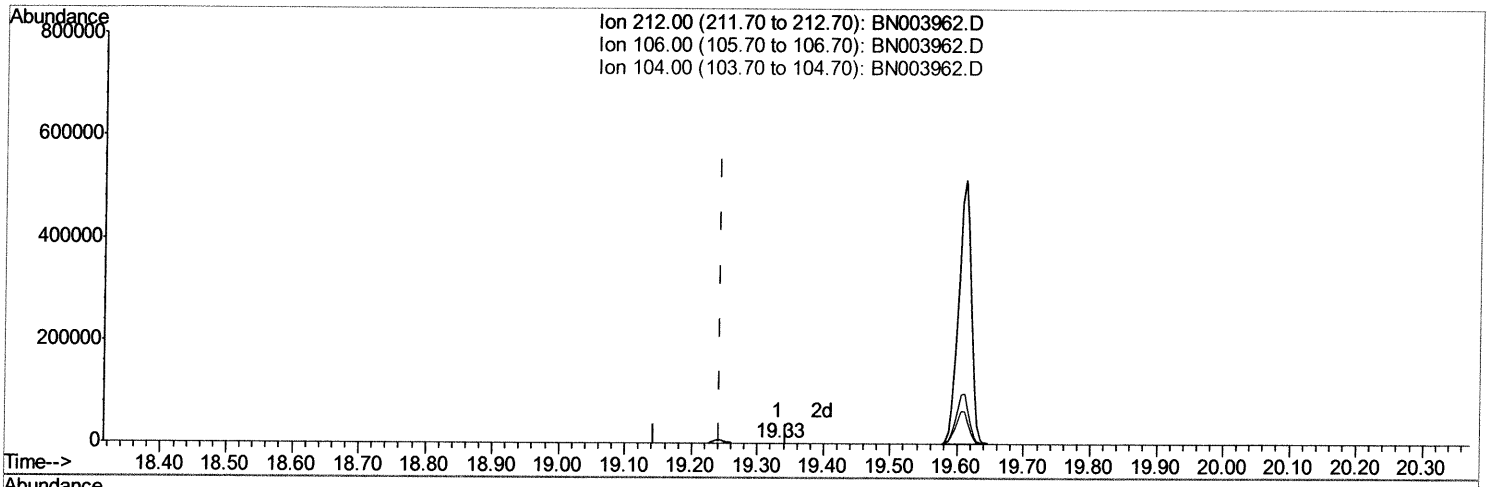
Quantitation Report (Qedit)

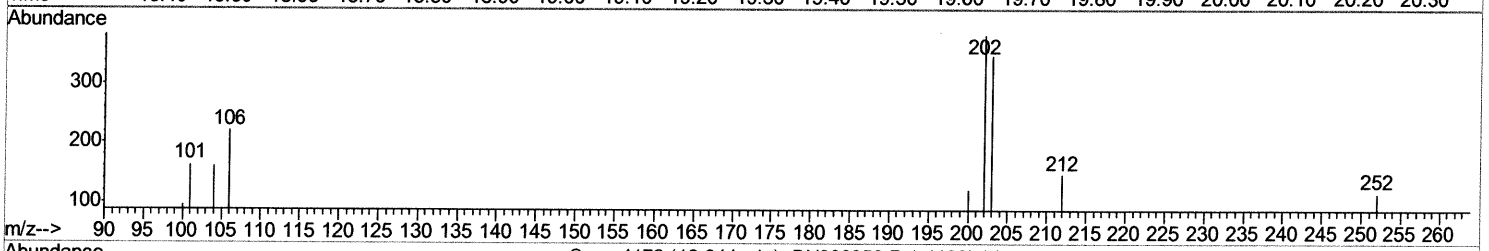
Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

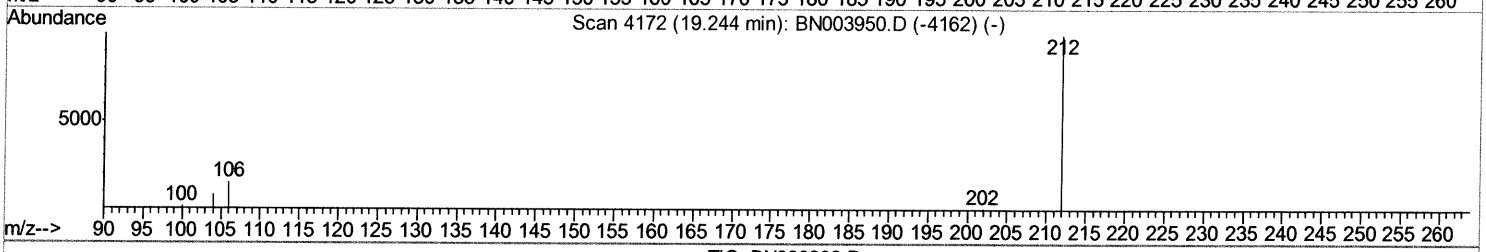
Quant Time: Dec 15 22:02:42 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM







TIC: BN003962.D

(14) Fluoranthene-d10 (SURR)

19.332min (+0.088) 0.00ng/ul

response 81

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	102.47#
104.00	8.00	87.65#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

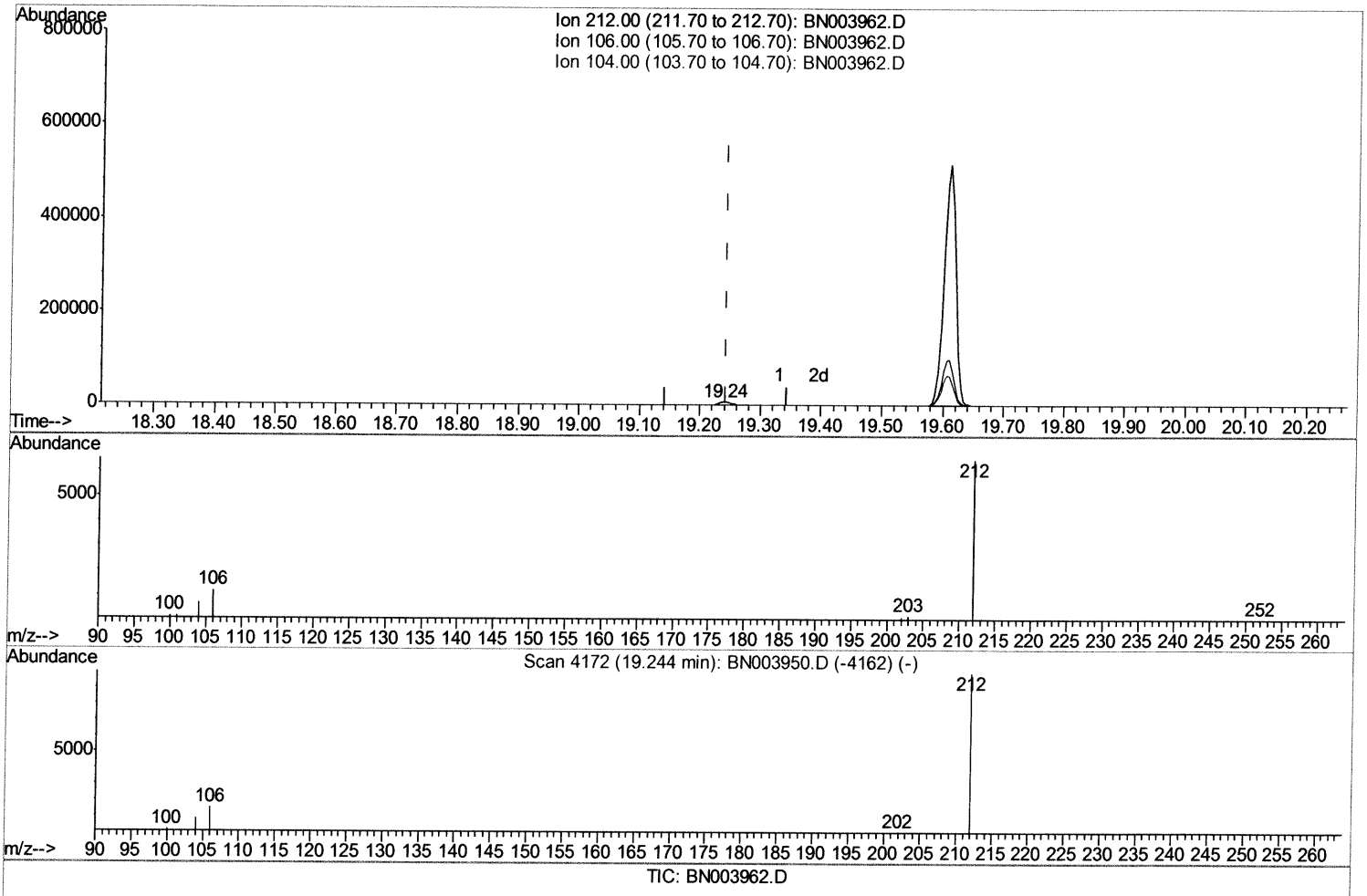
Quantitation Report (Qedit)

Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 15 22:02:42 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM



(14) Fluoranthene-d10 (SURR)

19.239min (-0.005) 0.21ng/ul m SJ 12/17/18

response 8918

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.93#
104.00	8.00	0.80#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

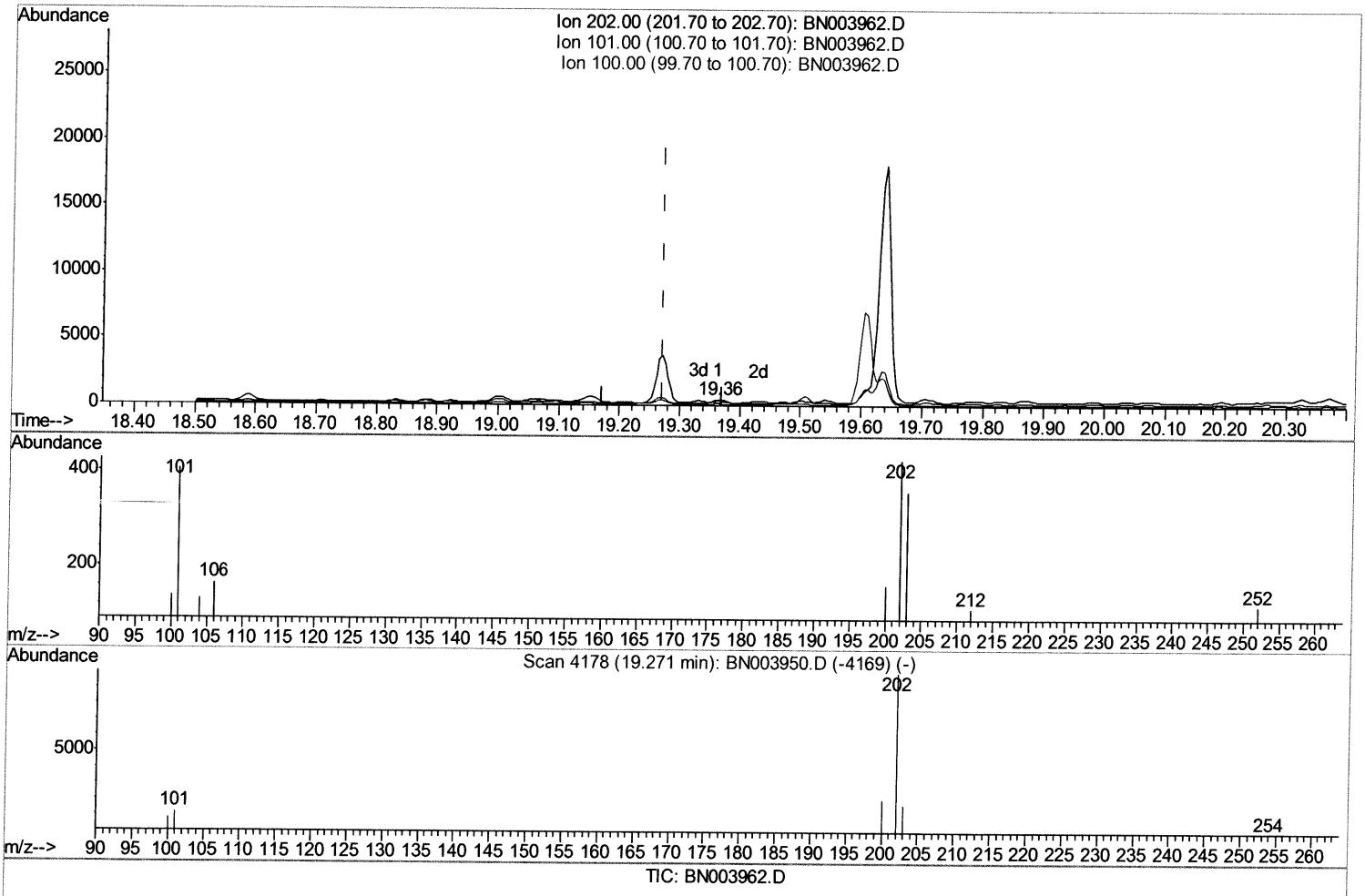
Quantitation Report (Qedit)

Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 15 22:02:42 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM



TIC: BN003962.D

(15) Fluoranthene (C)

19.364min (+0.093) 0.00ng/ul

response 275

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	95.31#
100.00	8.10	32.63#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

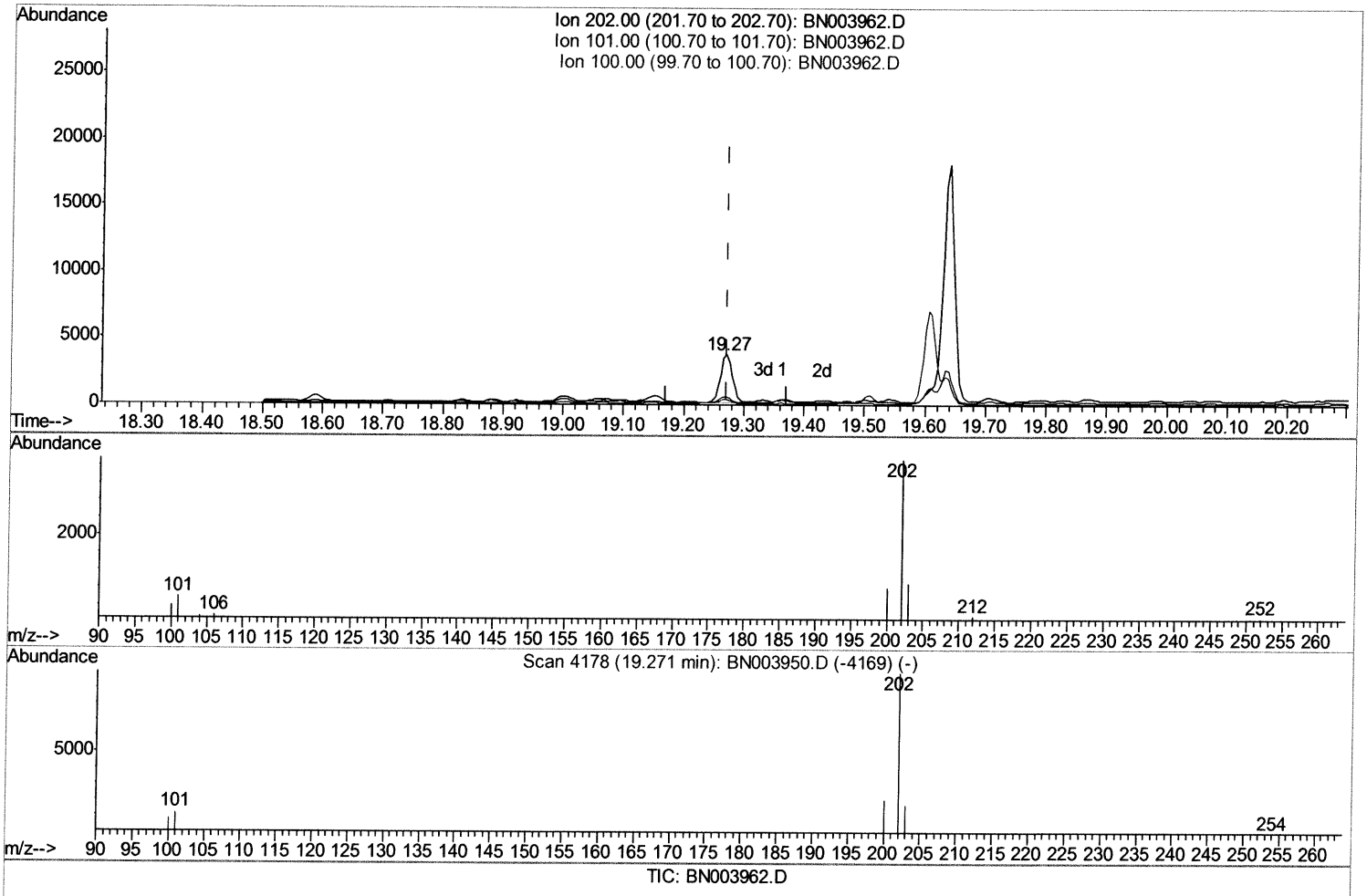
Quantitation Report (Qedit)

Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 15 22:02:42 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM



TIC: BN003962.D

(15) Fluoranthene (C)

19.271min (-0.000) 0.09ng/ul m SJ 12/17/18

response 4922

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	15.57
100.00	8.10	10.43
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

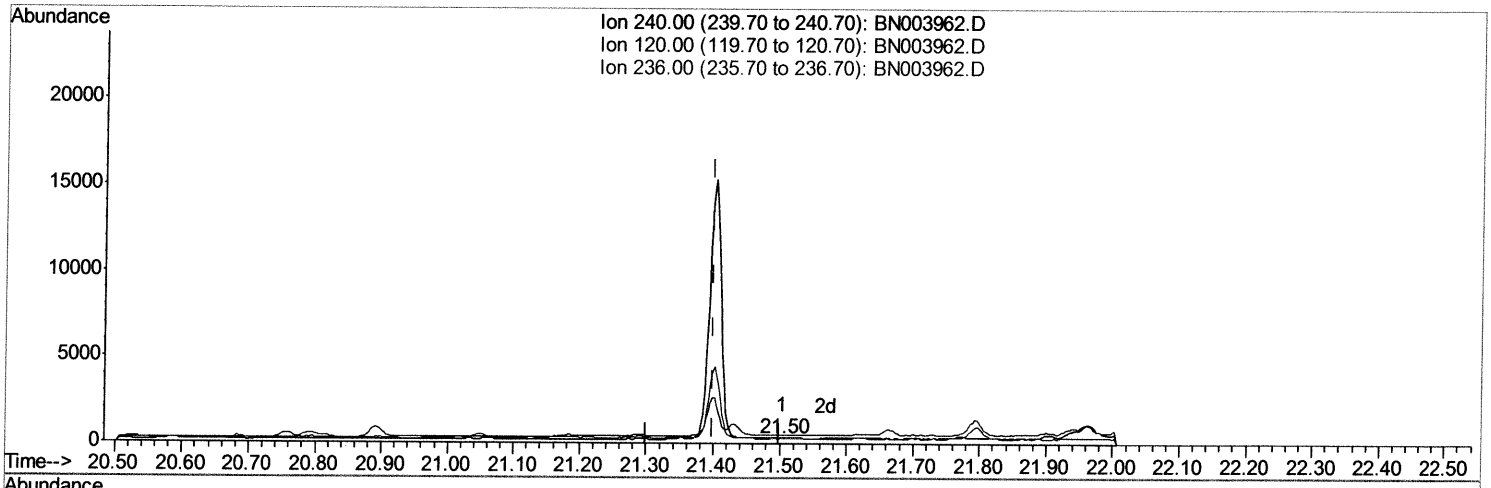
Quantitation Report (Qedit)

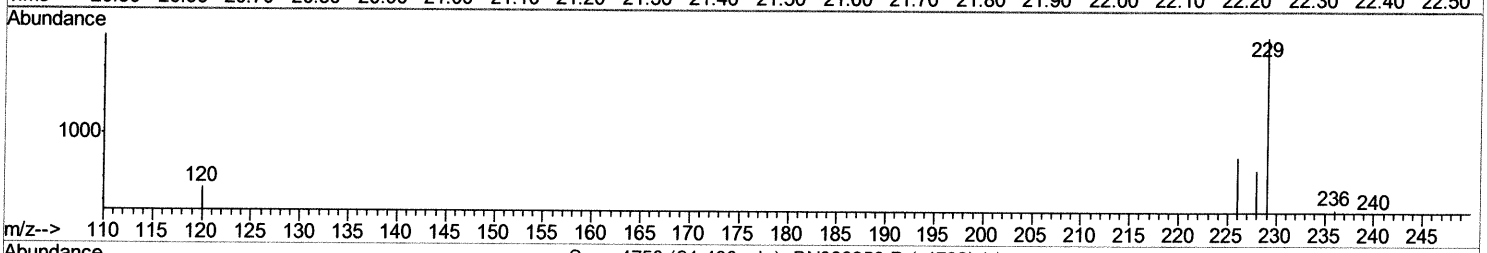
Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

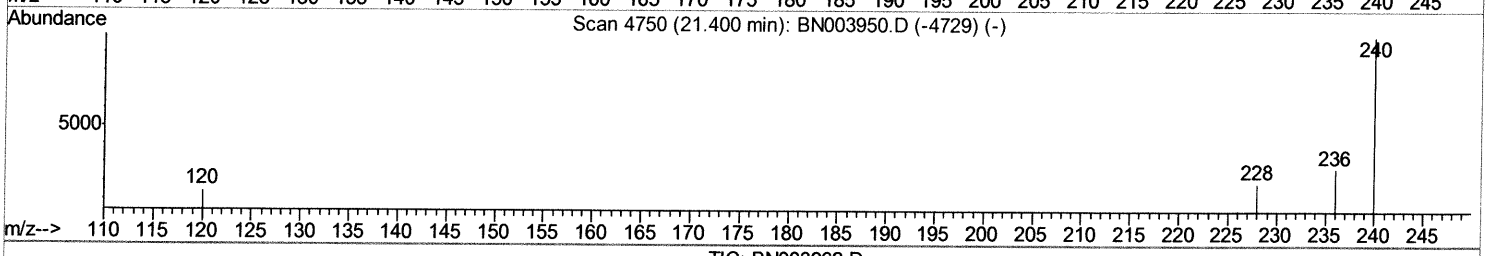
Quant Time: Dec 15 22:02:42 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM







TIC: BN003962.D

(16) Chrysene-d12 (I)

21.503min (+0.104) 0.40ng/ul

response 59

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	165.18#
236.00	27.60	107.03#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (Qedit)

Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 15 22:02:42 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
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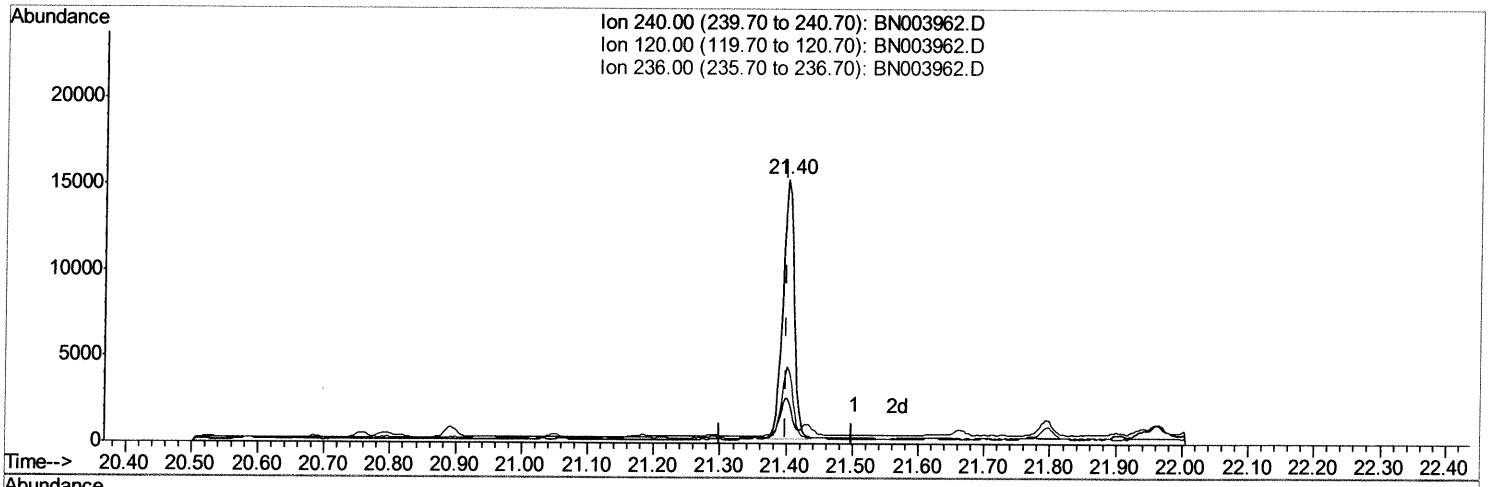
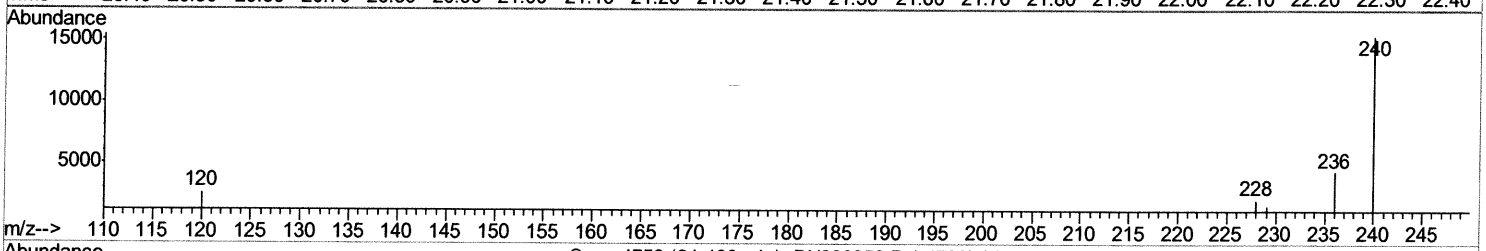
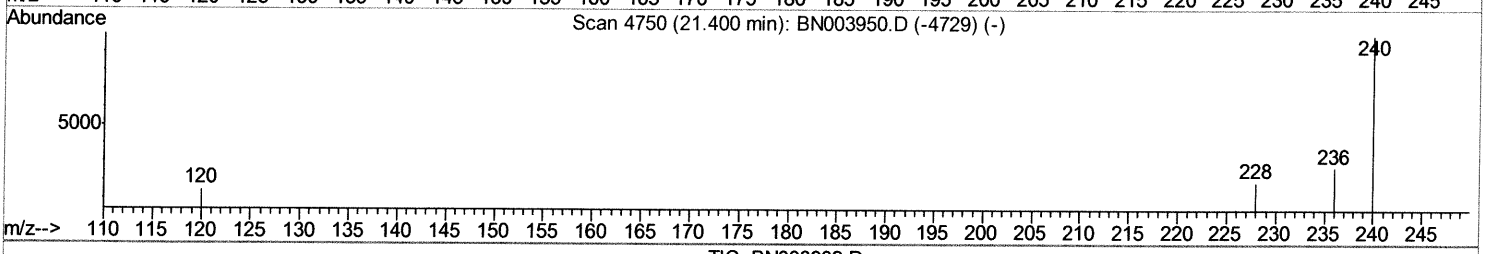
Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM







TIC: BN003962.D

(16) Chrysene-d12 (I)

21.401min (+0.002) 0.40ng/ul m SD 12/17/18

response 17949

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	17.14#
236.00	27.60	29.03
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

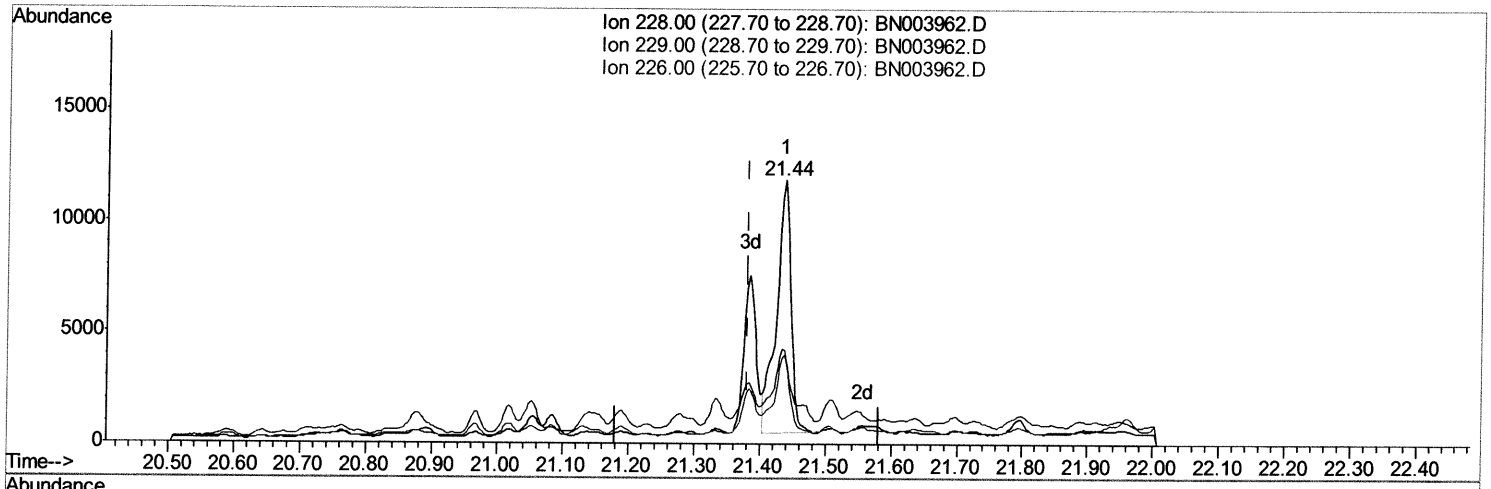
Quantitation Report (Qedit)

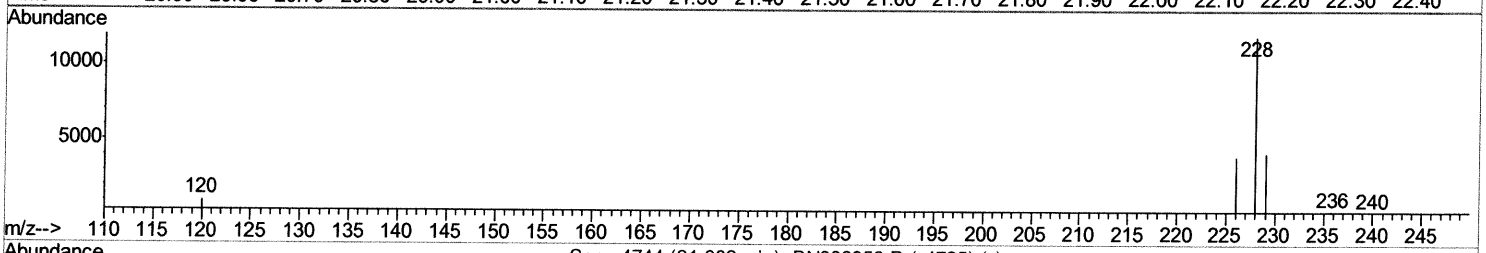
Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

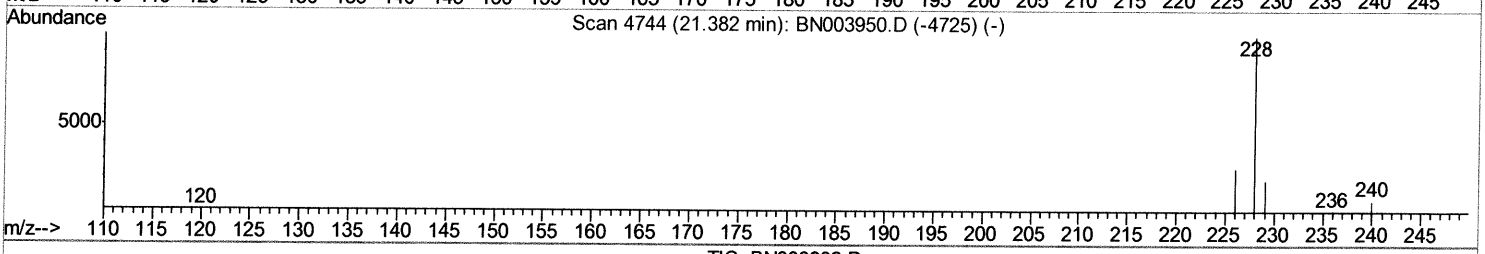
Quant Time: Dec 15 23:00:45 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM







TIC: BN003962.D

(18) Benzo(a)anthracene

21.436min (+0.054) 0.31ng/ul

response 17488

Ion	Exp%	Act%
228.00	100	100
229.00	19.50	35.69#
226.00	26.40	33.65#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (Qedit)

Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 15 23:00:45 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
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Instrument :
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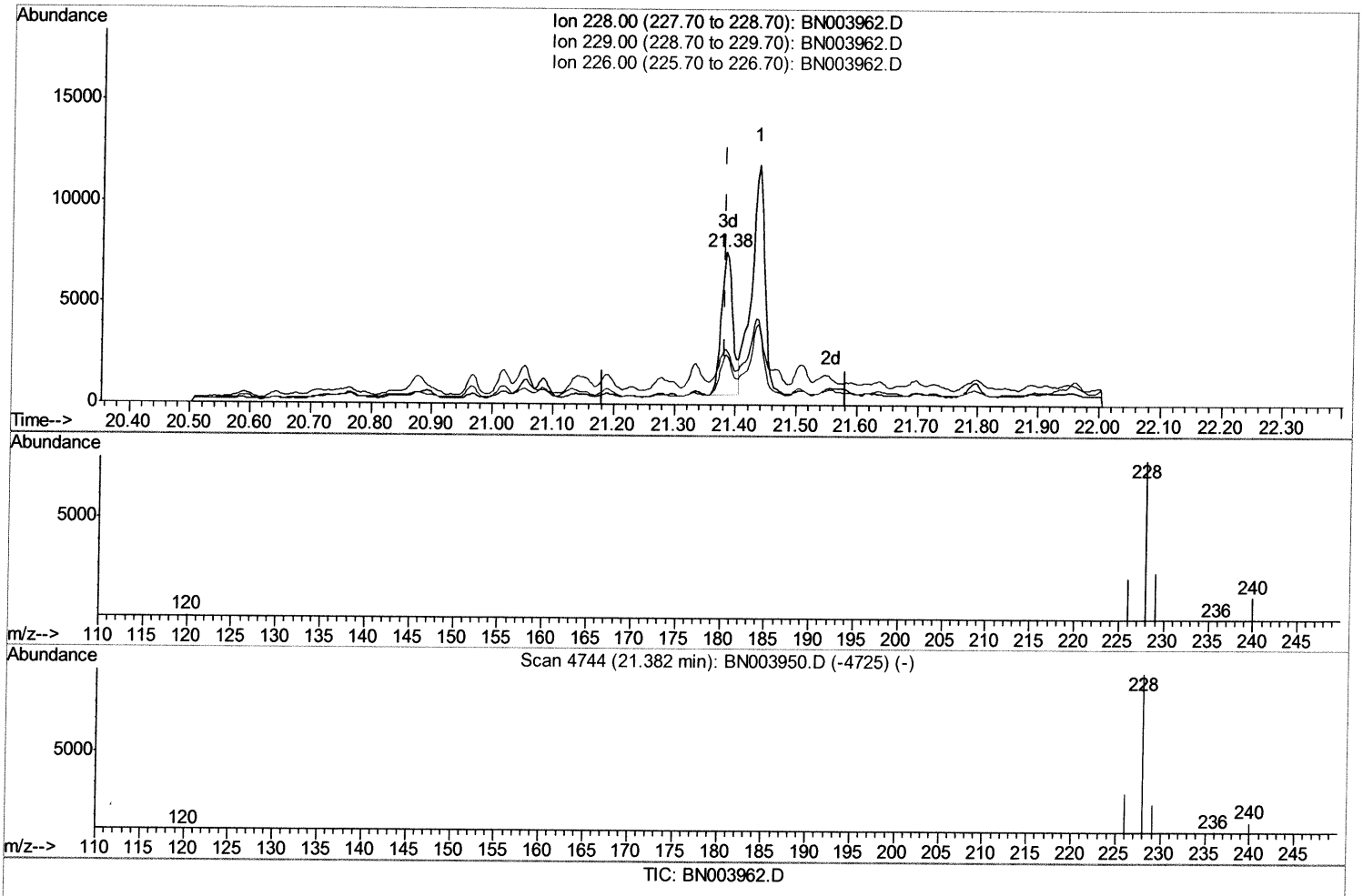
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM



(18) Benzo(a)anthracene

21.384min (+0.002) 0.16ng/ul m SJ 12/17/18

response 9224

Ion	Exp%	Act%
228.00	100	100
229.00	19.50	36.49#
226.00	26.40	33.01#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

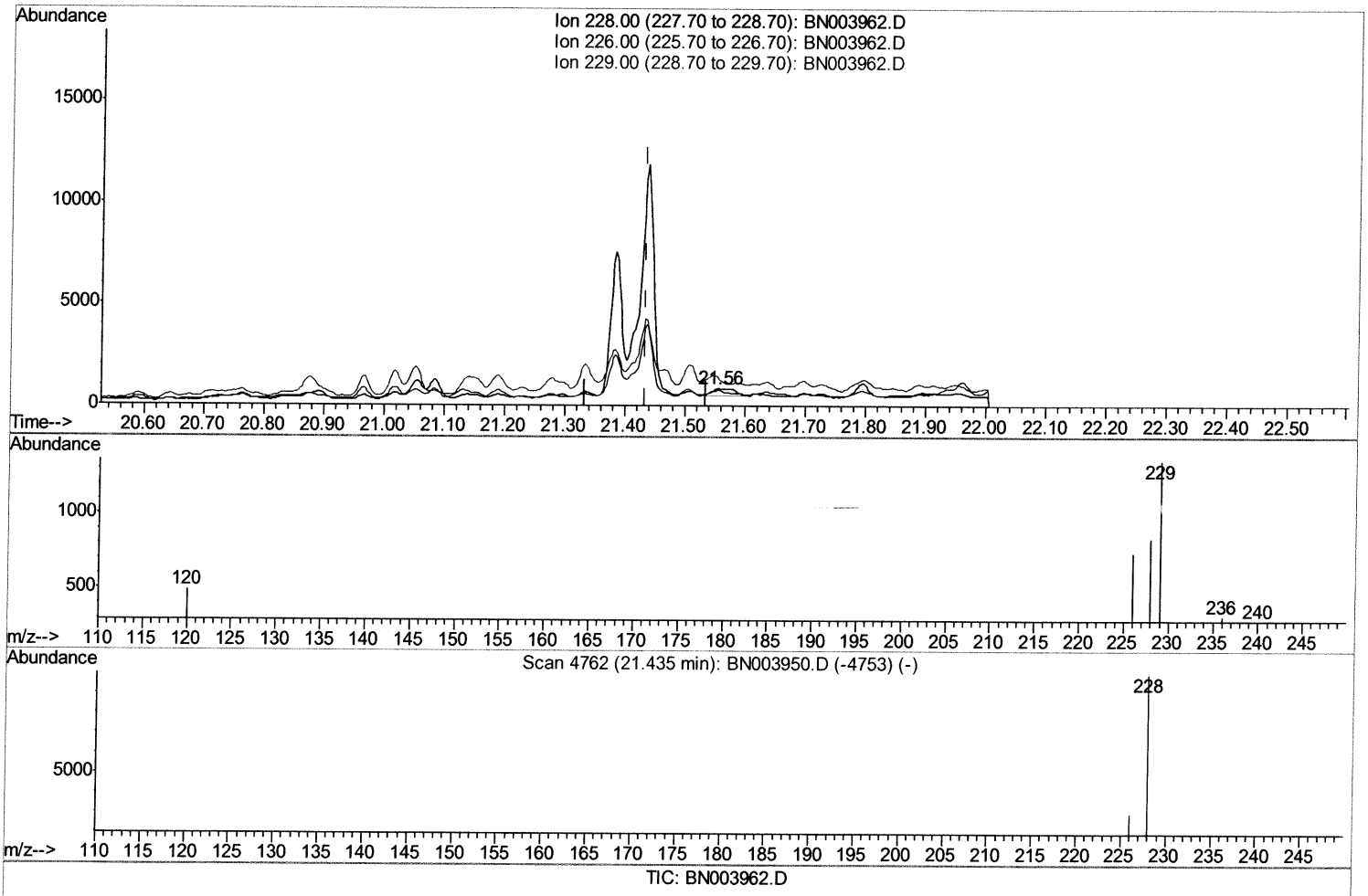
Quantitation Report (Qedit)

Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 15 23:00:45 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM



(19) Chrysene

21.556min (+0.121) 0.01ng/ul

response 973

Ion	Exp%	Act%
228.00	100	100
226.00	30.00	88.93#
229.00	19.60	162.02#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

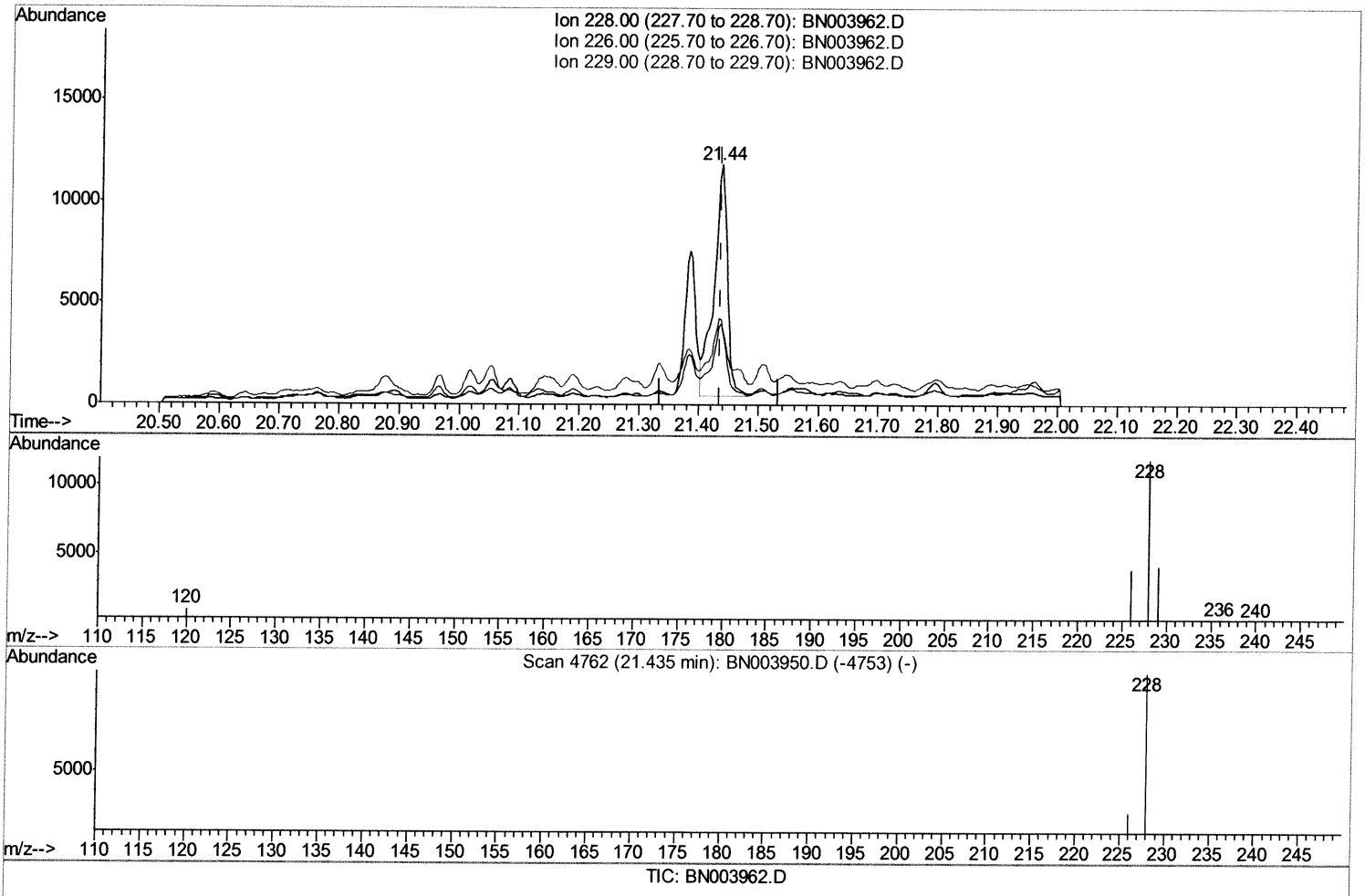
Quantitation Report (Qedit)

Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 15 23:00:45 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM



TIC: BN003962.D

(19) Chrysene

21.436min (+0.002) 0.28ng/ul m SJ 12/17/18

response 18147

Ion	Exp%	Act%
228.00	100	100
226.00	30.00	33.65
229.00	19.60	35.69#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

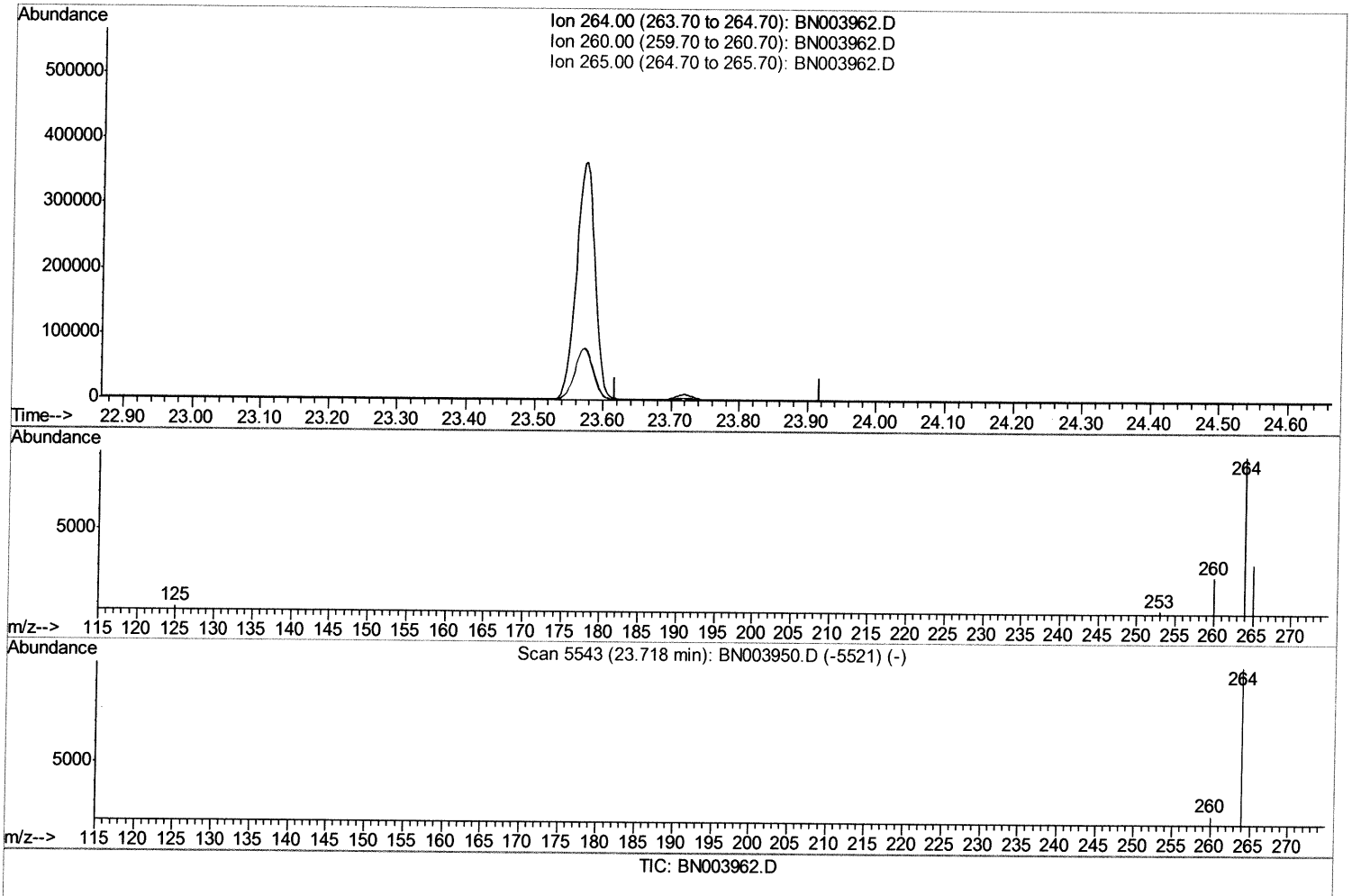
Quantitation Report (Qedit)

Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 15 23:00:45 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM



TIC: BN003962.D

(20) Perylene-d12 (I)

23.718min (-23.718) 0.00ng/ul

response 0

Ion	Exp%	Act%
264.00	100	0.00
260.00	26.20	0.00#
265.00	33.50	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

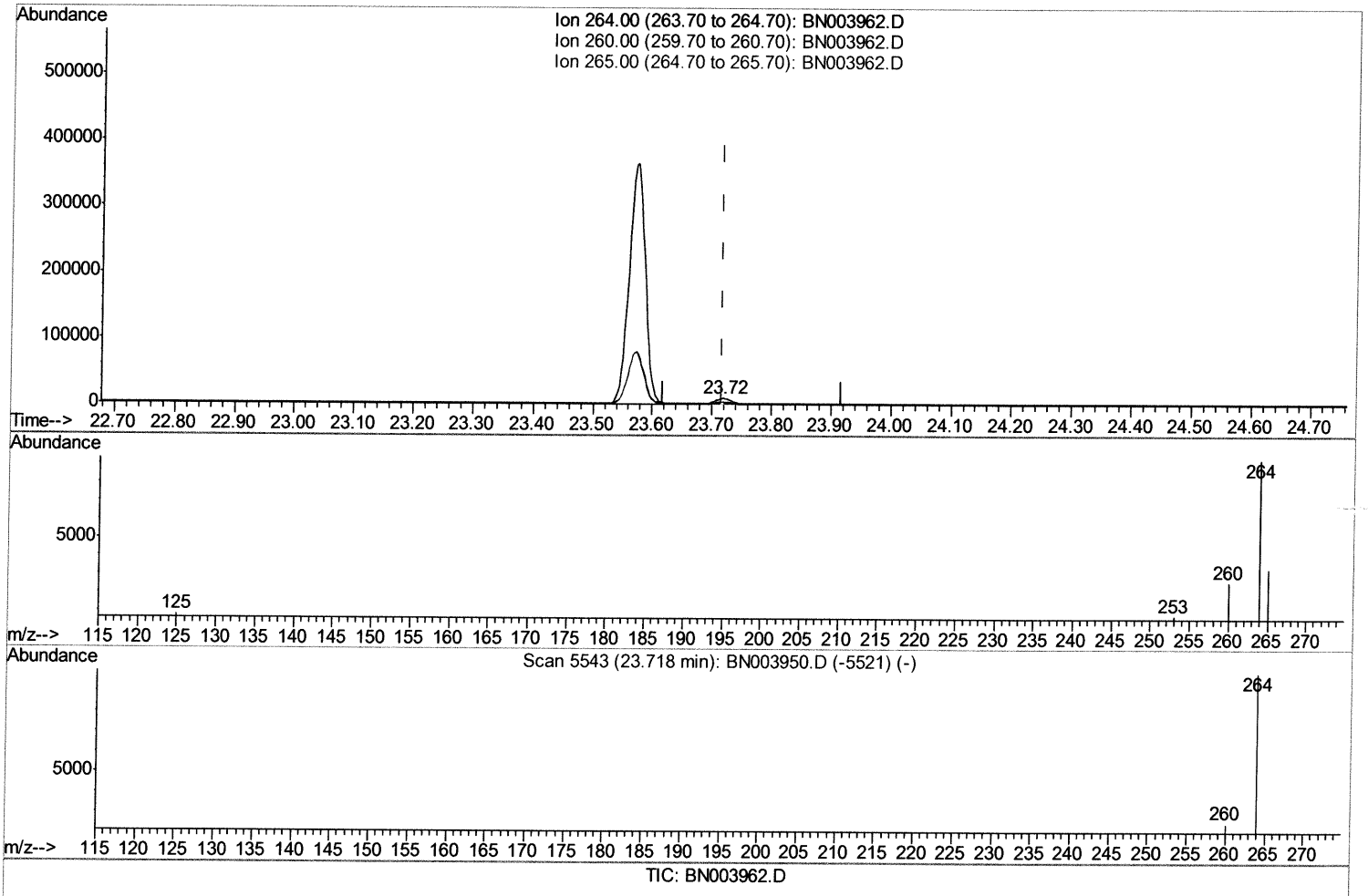
Quantitation Report (Qedit)

Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 15 23:00:45 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM



(20) Perylene-d12 (I)

23.719min (+0.002) 0.40ng/ul m SJ 12/17/18

response 16616

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	28.41
265.00	33.50	35.88
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

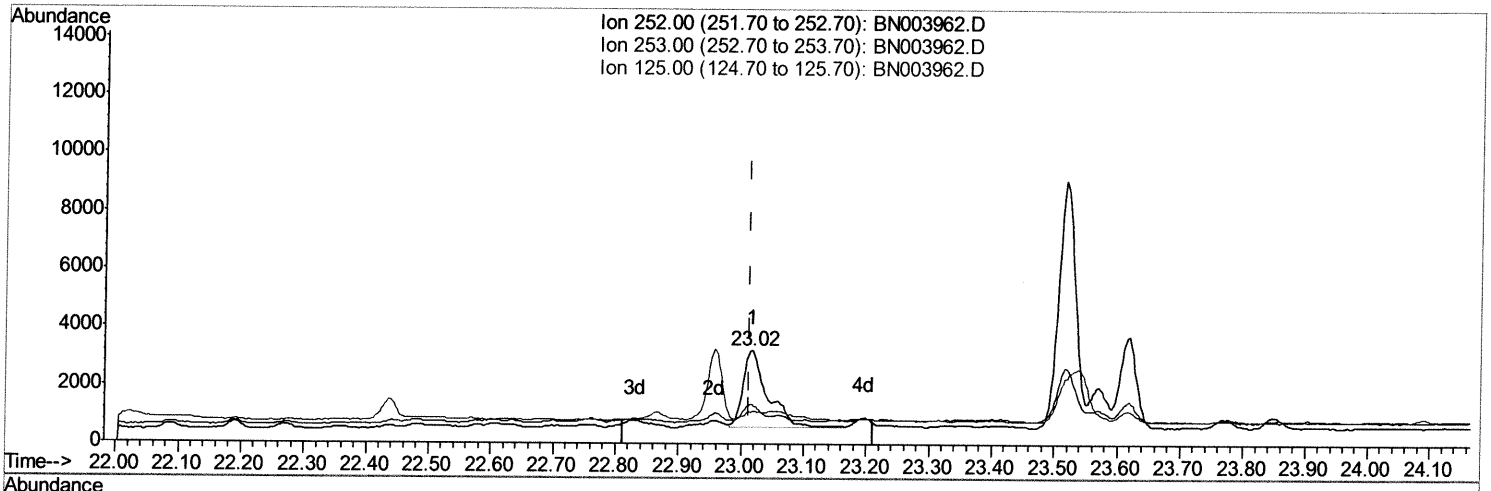
Quantitation Report (Qedit)

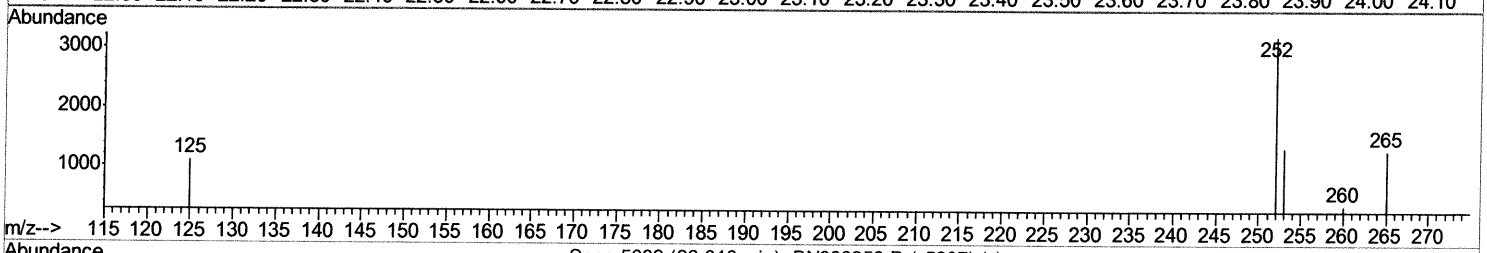
Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

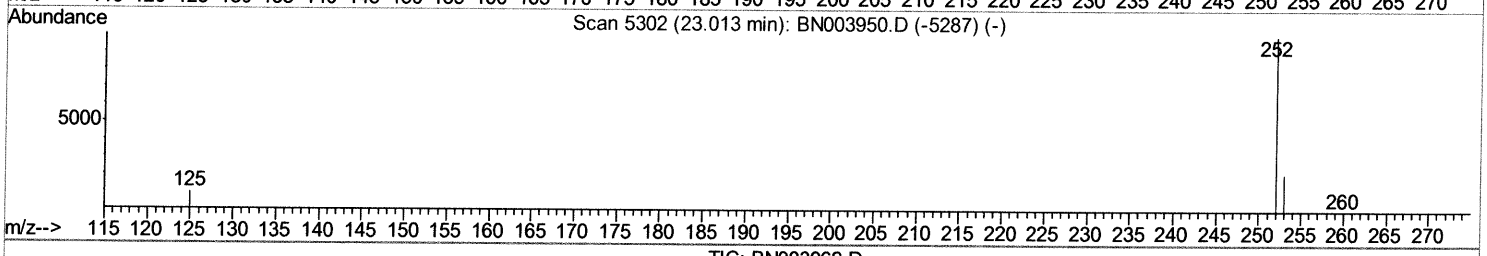
Quant Time: Dec 15 23:02:26 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM







TIC: BN003962.D

(21) Benzo(b)fluoranthene

23.017min (+0.004) 0.10ng/ul

response 7119

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	42.23
125.00	11.20	34.56#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

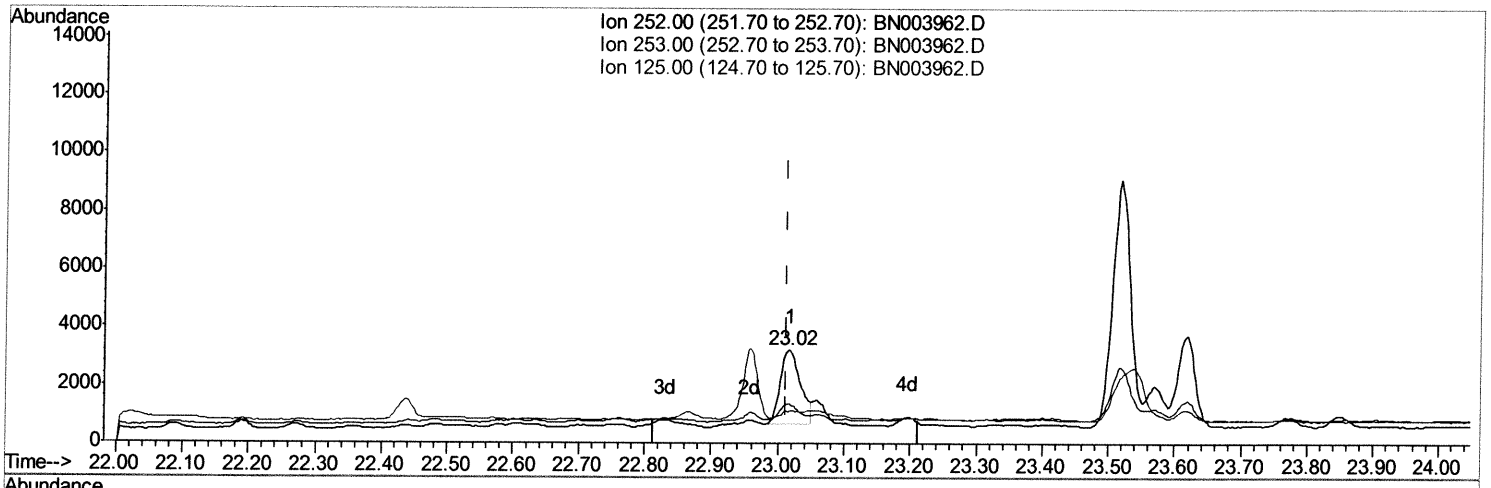
Quantitation Report (Qedit)

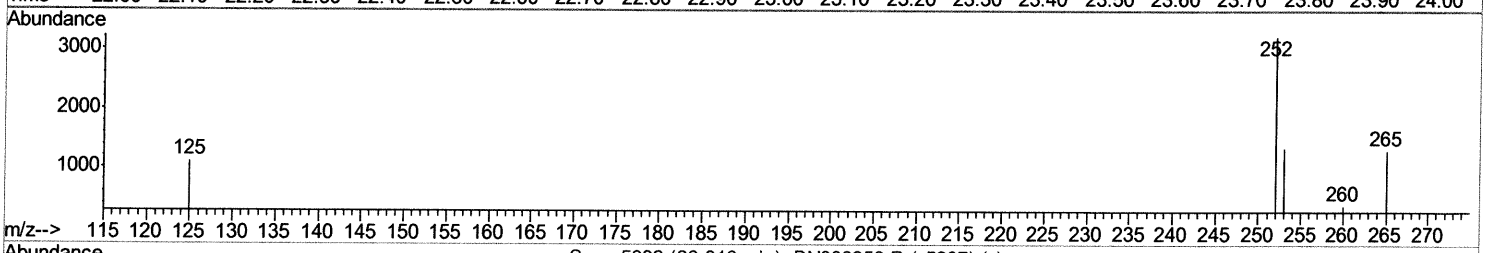
Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

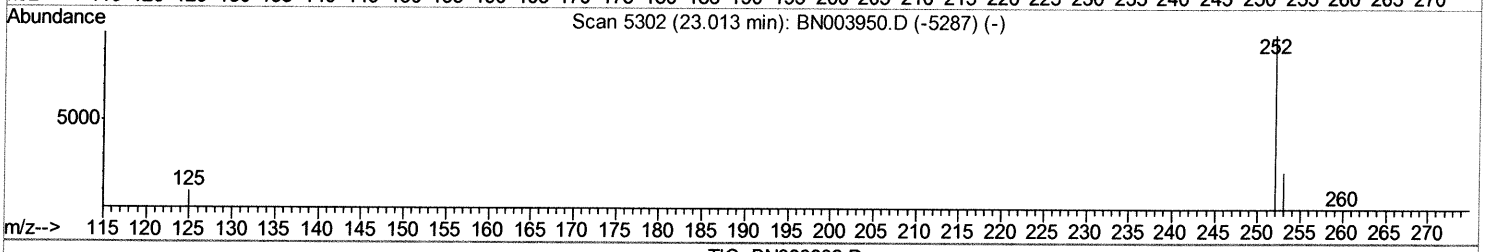
Quant Time: Dec 15 23:02:26 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM







TIC: BN003962.D

(21) Benzo(b)fluoranthene

23.017min (+0.004) 0.08ng/ul m SJ 12/17/18

response 5530

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	42.23
125.00	11.20	34.56#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (QT Reviewed)

Data File : BN003962.D
Acq On : 15 Dec 2018 16:52
Operator : JU/SJ
Sample : J6227-19
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 15 23:04:37 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	1933	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	9507	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	5804	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	14428m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	17949m	0.40	ng/ul	0.00
20) Perylene-d12	23.72	264	16616m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	2928	0.20	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	8918m	0.21	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.68	128	2450	0.092	ng/ul#	92
5) 2-Methylnaphthalene	12.29	142	5057	0.271	ng/ul	100
12) Phenanthrene	17.25	178	18672	0.394	ng/ul	99
13) Anthracene	17.35	178	3544m	0.091	ng/ul	
15) Fluoranthene	19.27	202	4922m	0.088	ng/ul	
17) Pyrene	19.64	202	24173	0.375	ng/ul	98
18) Benzo(a)anthracene	21.38	228	9224m	0.163	ng/ul	
19) Chrysene	21.44	228	18147m	0.280	ng/ul	
21) Benzo(b)fluoranthene	23.02	252	5530m	0.080	ng/ul	
23) Benzo(a)pyrene	23.62	252	5692	0.096	ng/ul#	62
24) Indeno(1,2,3-cd)pyrene	26.07	276	3876	0.057	ng/ul#	98
26) Benzo(g,h,i)perylene	26.80	276	8513	0.144	ng/ul#	79

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SJ
12/17/18

Instrument :
BNA_N
ClientSampleId :
F9E68

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:54 PM

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E69

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-20
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BN003965.D
% Solids : 90.2
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/15/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	1.5	J
91-57-6	2-Methylnaphthalene	4.5	
208-96-8	Acenaphthylene	3.6	U
83-32-9	Acenaphthene	3.6	U
86-73-7	Fluorene	3.6	U
87-86-5	Pentachlorophenol	7.4	U
85-01-8	Phenanthrene	9.8	
120-12-7	Anthracene	1.9	J
206-44-0	Fluoranthene	2.5	J
129-00-0	Pyrene	8.6	
56-55-3	Benzo(a)anthracene	4.8	
218-01-9	Chrysene	7.3	
205-99-2	Benzo(b)fluoranthene	2.5	J
207-08-9	Benzo(k)fluoranthene	0.92	J
50-32-8	Benzo(a)pyrene	2.7	J
193-39-5	Indeno(1,2,3-cd)pyrene	1.5	J
53-70-3	Dibenzo(a,h)anthracene	1.2	J
191-24-2	Benzo(g,h,i)perylene	2.9	J

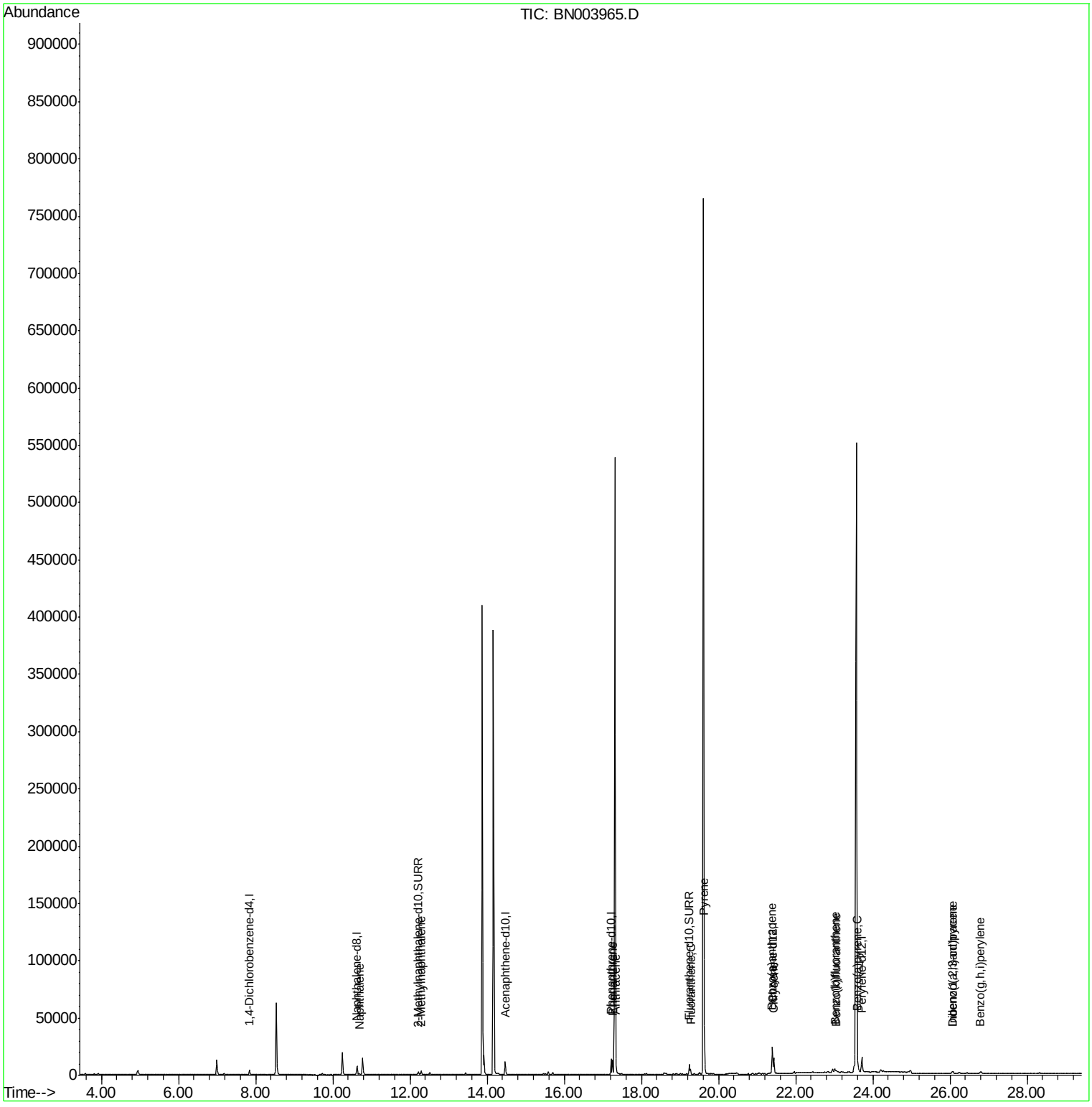
Quantitation Report (QT Reviewed)

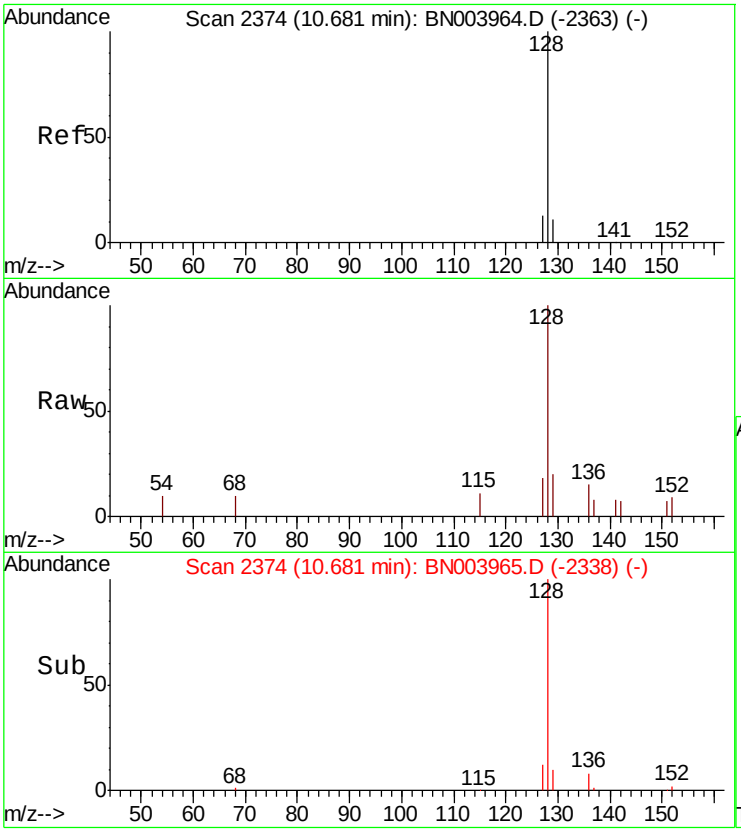
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 15 23:12:29 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM





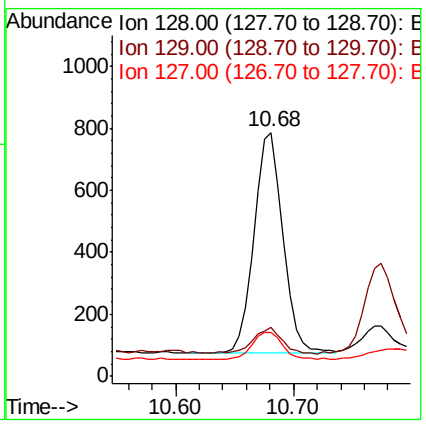
#3
Naphthalene
Concen: 0.041 ng/ul
RT: 10.68 min Scan# 2374
Delta R.T. 0.00 min
Lab File: BN003965.D
Acq: 15 Dec 2018 19:14

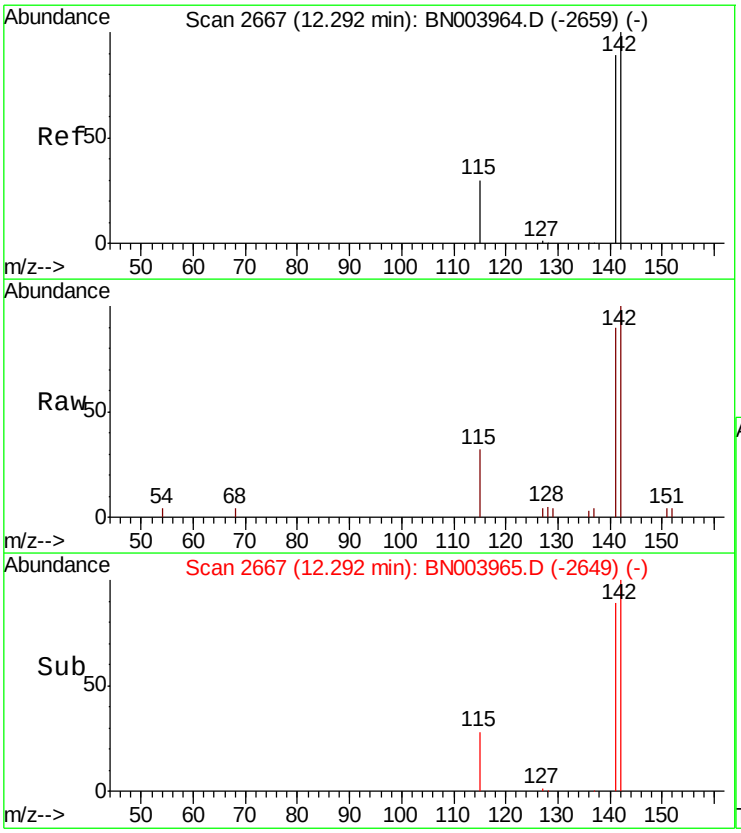
Tgt Ion:128 Resp: 1227

Ion	Ratio	Lower	Upper
128	100		
129	20.0	9.0	13.6#
127	18.2	10.5	15.7#

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM

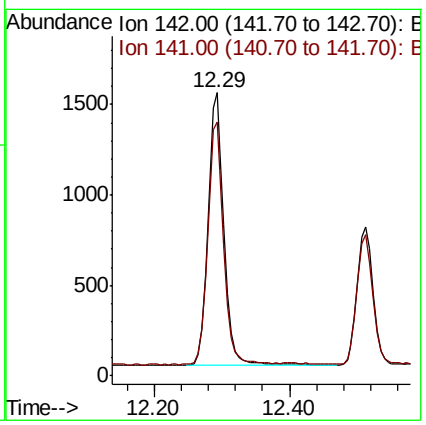


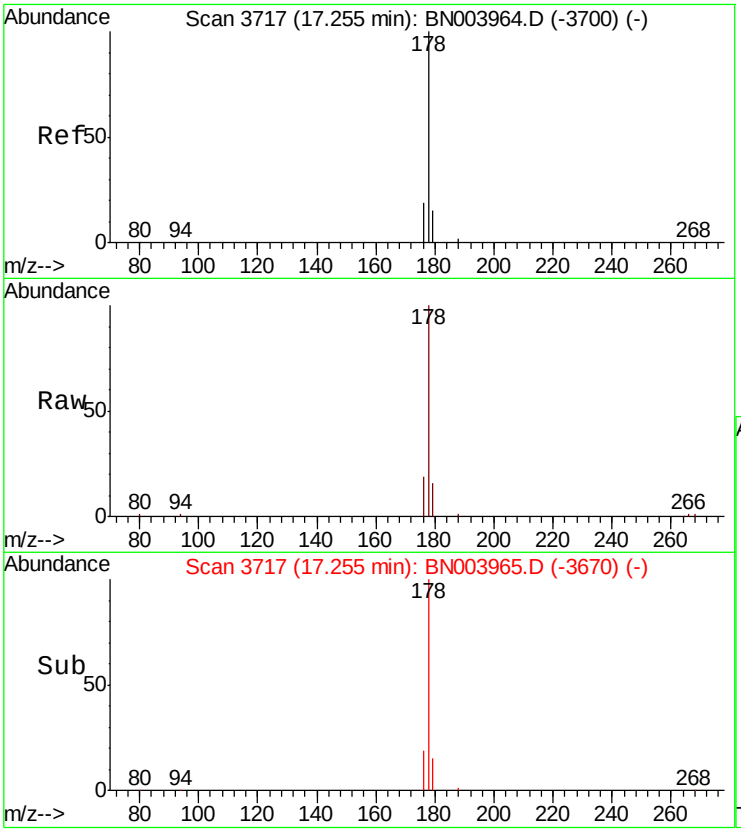


#5
2-Methylnaphthalene
Concen: 0.121 ng/ul
RT: 12.29 min Scan# 2667
Delta R.T. 0.00 min
Lab File: BN003965.D
Acq: 15 Dec 2018 19:14

Tgt Ion:142 Resp: 2511

Ion	Ratio	Lower	Upper
142	100		
141	88.8	71.5	107.3

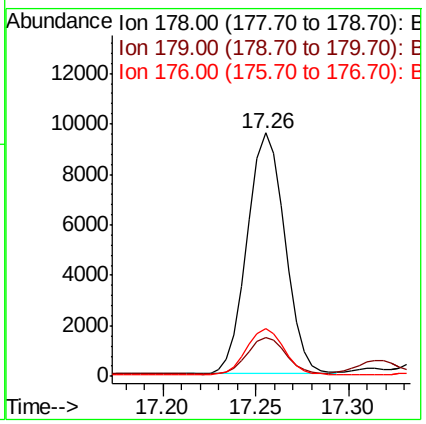




#12
Phenanthrene
Concen: 0.266 ng/ul
RT: 17.26 min Scan# 3717
Delta R.T. 0.00 min
Lab File: BN003965.D
Acq: 15 Dec 2018 19:14

Tgt Ion:178 Resp: 13430

Ion	Ratio	Lower	Upper
178	100		
179	15.9	12.5	18.7
176	19.5	15.0	22.4



Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
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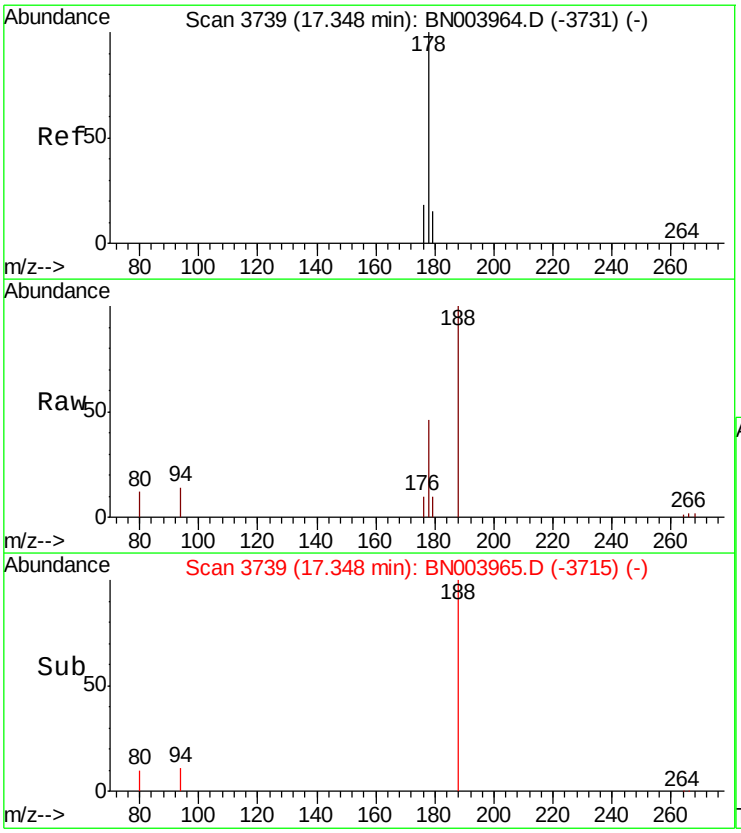
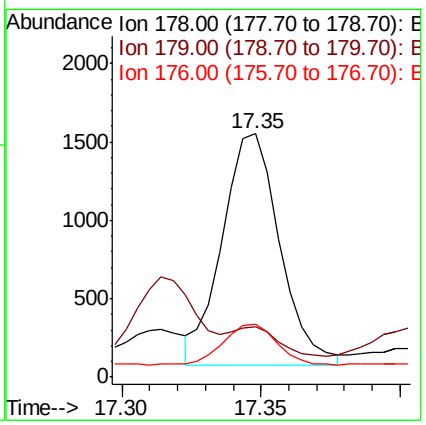
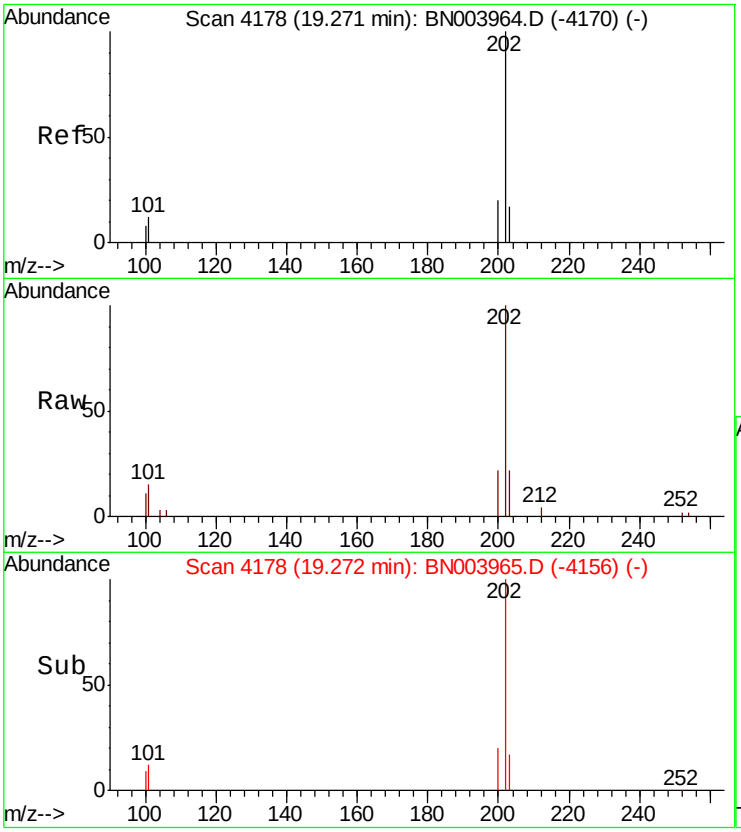


#13
Anthracene
Concen: 0.052 ng/ul m
RT: 17.35 min Scan# 3739
Delta R.T. 0.00 min
Lab File: BN003965.D
Acq: 15 Dec 2018 19:14

Tgt Ion:178 Resp: 2142

Ion	Ratio	Lower	Upper
178	100		
179	20.7	12.3	18.5#
176	21.6	14.8	22.2

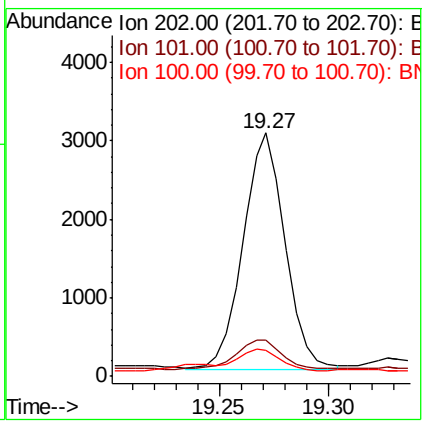




#15
Fluoranthene
Concen: 0.068 ng/ul m
RT: 19.27 min Scan# 4178
Delta R.T. 0.00 min
Lab File: BN003965.D
Acq: 15 Dec 2018 19:14

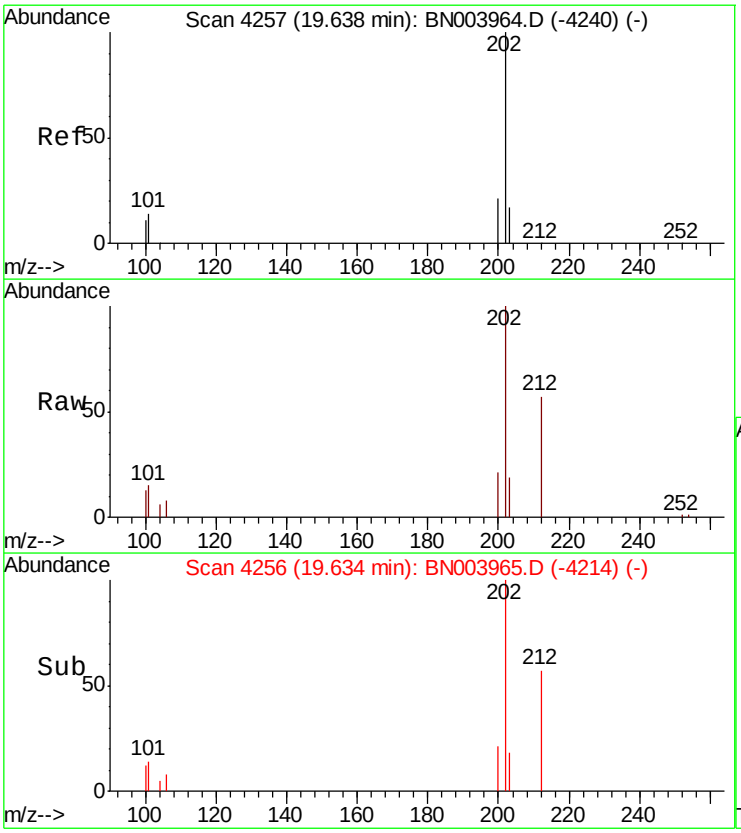
Tgt Ion:202 Resp: 4049

Ion	Ratio	Lower	Upper
202	100		
101	14.7	0.0	30.7
100	10.5	0.0	28.1



Instrument :
BNA_N
ClientSampleId :
F9E69

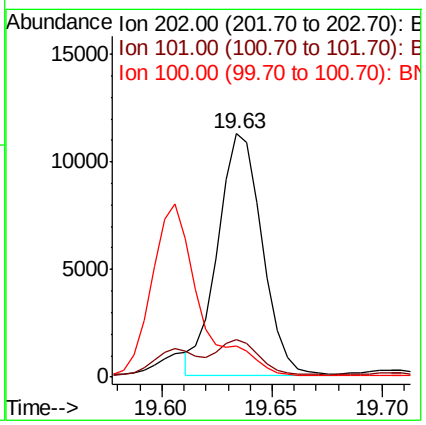
Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM

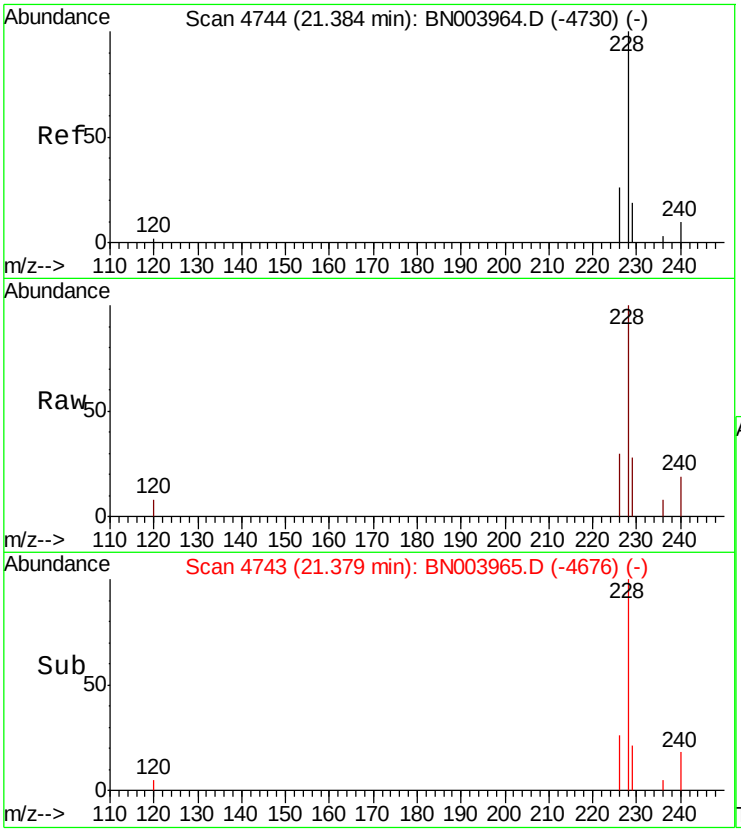


#17
Pyrene
Concen: 0.234 ng/ul m
RT: 19.63 min Scan# 4256
Delta R.T. -0.00 min
Lab File: BN003965.D
Acq: 15 Dec 2018 19:14

Tgt Ion:202 Resp: 15733

Ion	Ratio	Lower	Upper
202	100		
101	15.2	10.3	15.5
100	12.5	8.5	12.7





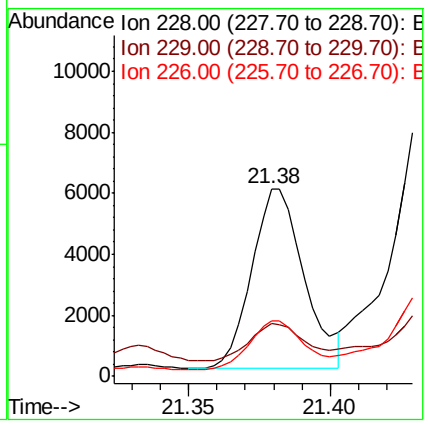
#18
Benzo(a)anthracene
Concen: 0.129 ng/ul
RT: 21.38 min Scan# 4743
Delta R.T. -0.00 min
Lab File: BN003965.D
Acq: 15 Dec 2018 19:14

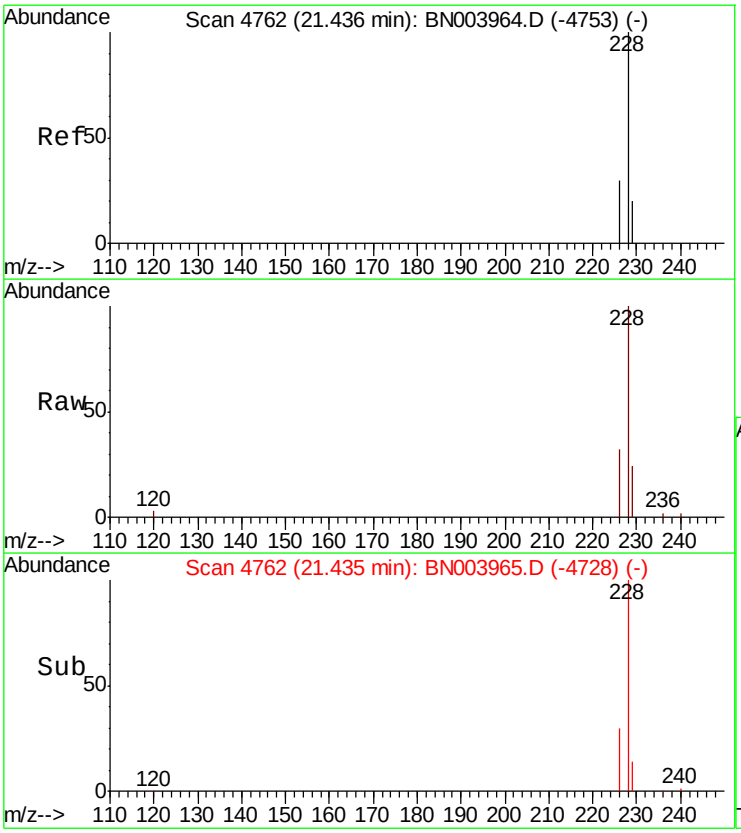
Tgt Ion:228 Resp: 7616

Ion	Ratio	Lower	Upper
228	100		
229	28.4	15.6	23.4#
226	29.9	21.1	31.7

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM

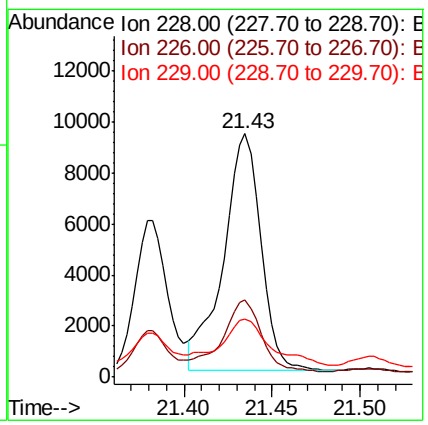


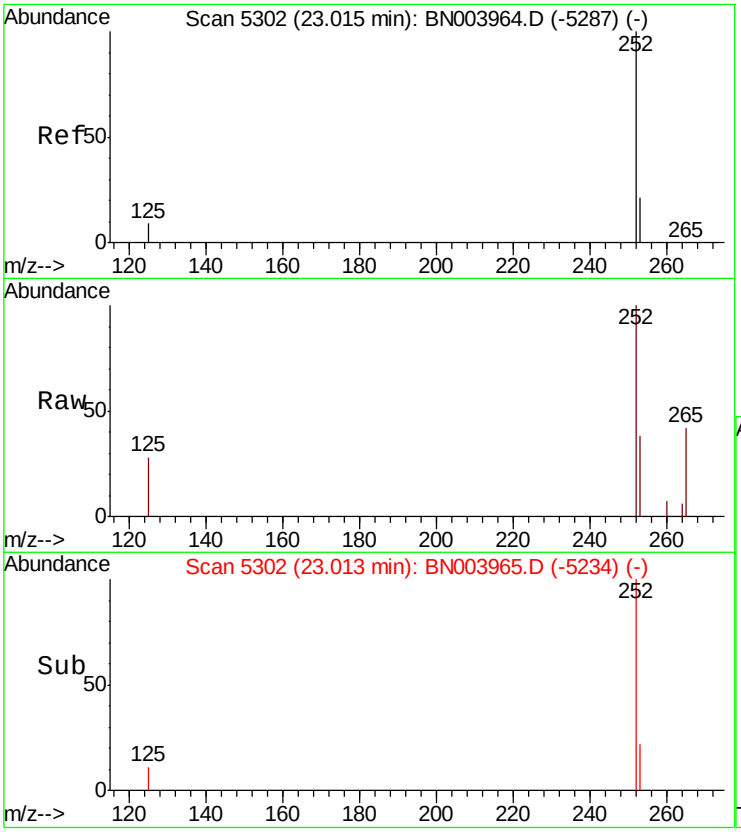


#19
Chrysene
Concen: 0.198 ng/ul
RT: 21.43 min Scan# 4762
Delta R.T. -0.00 min
Lab File: BN003965.D
Acq: 15 Dec 2018 19:14

Tgt Ion:228 Resp: 13438

Ion	Ratio	Lower	Upper
228	100		
226	31.6	24.0	36.0
229	23.8	15.7	23.5#





#21
Benzo(b)fluoranthene
Concen: 0.067 ng/ul m
RT: 23.01 min Scan# 5302
Delta R.T. -0.00 min
Lab File: BN003965.D
Acq: 15 Dec 2018 19:14

Tgt Ion:252 Resp: 4439

Ion	Ratio	Lower	Upper
252	100		
253	37.9	0.0	46.0
125	28.2	0.0	22.4#

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
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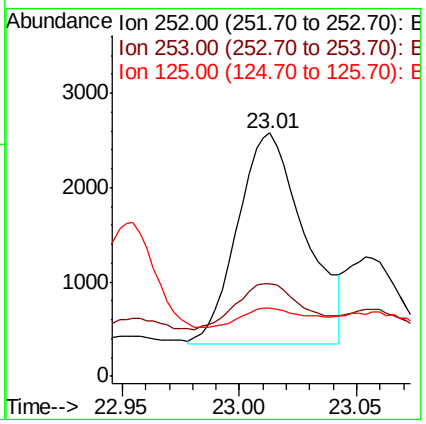
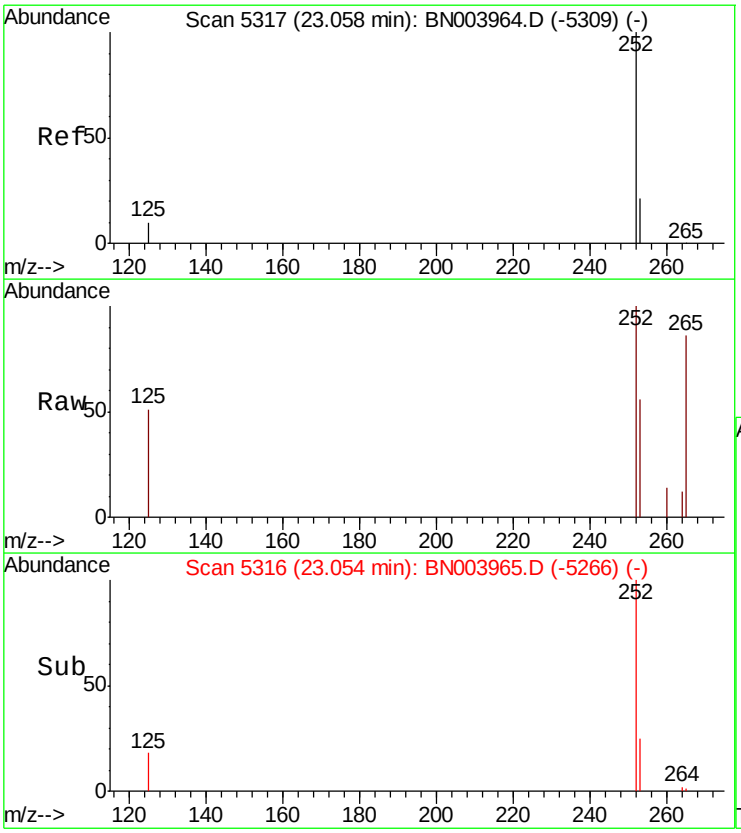
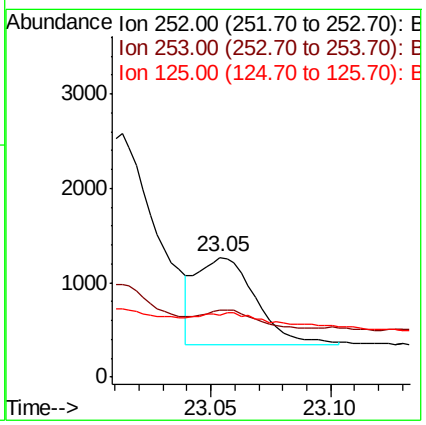


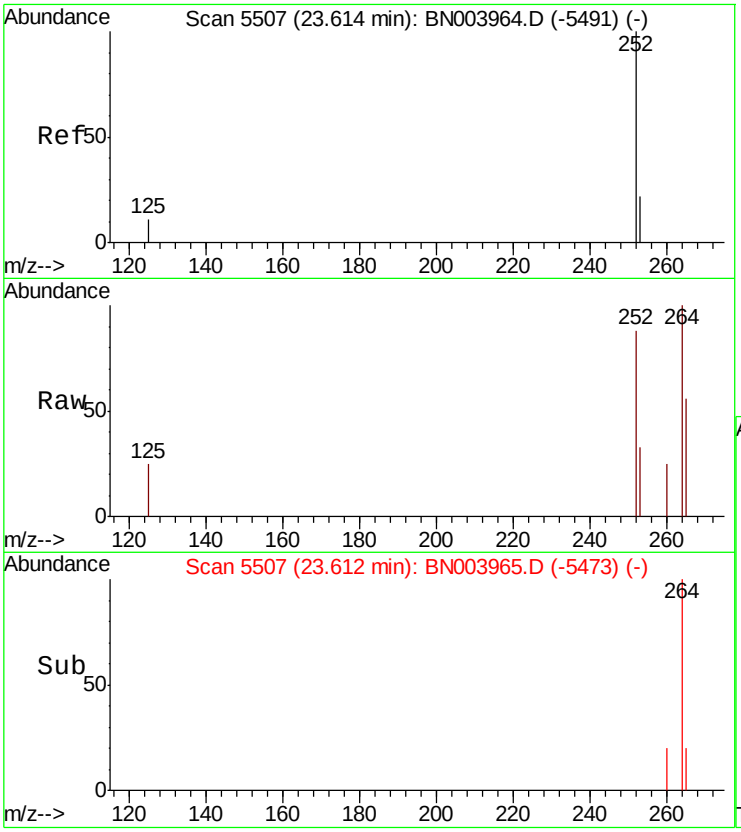


#22
Benzo(k)fluoranthene
Concen: 0.025 ng/ul m
RT: 23.05 min Scan# 5316
Delta R.T. -0.00 min
Lab File: BN003965.D
Acq: 15 Dec 2018 19:14

Tgt Ion:252 Resp: 1603

Ion	Ratio	Lower	Upper
252	100		
253	56.3	18.5	27.7#
125	51.2	9.0	13.6#





#23
Benzo(a)pyrene
Concen: 0.074 ng/ul
RT: 23.61 min Scan# 5507
Delta R.T. -0.00 min
Lab File: BN003965.D
Acq: 15 Dec 2018 19:14

Tgt Ion:252 Resp: 4255

Ion	Ratio	Lower	Upper
252	100		
253	37.6	19.0	28.4#
125	28.3	10.2	15.4#

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
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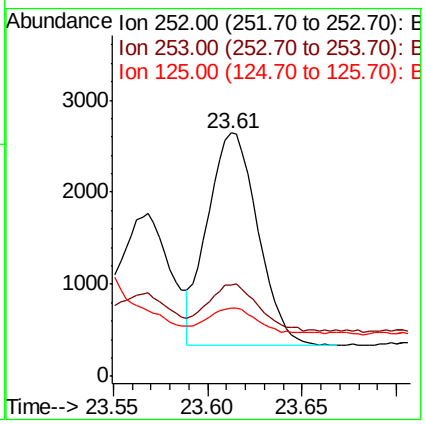
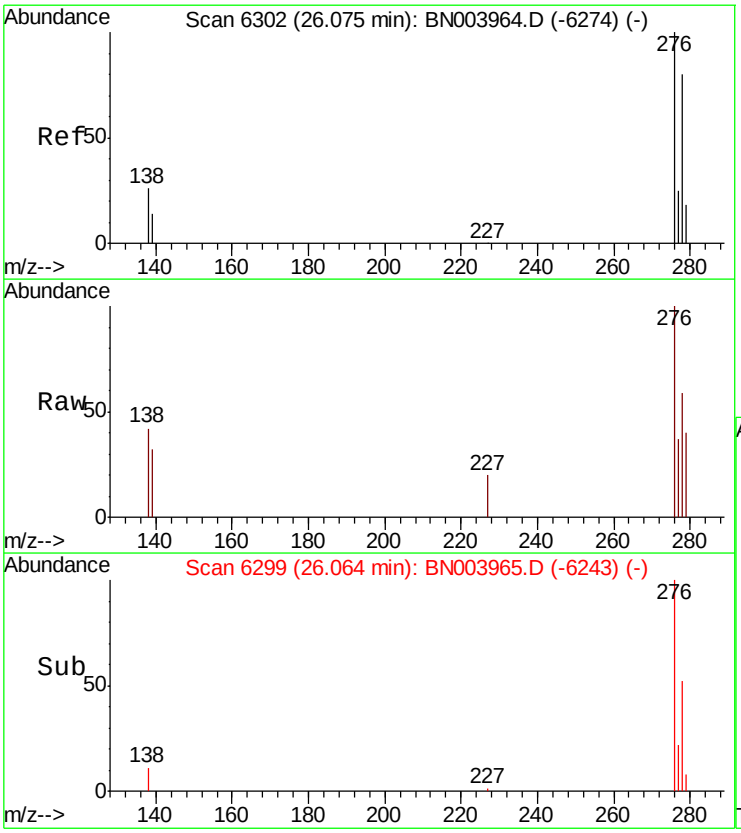
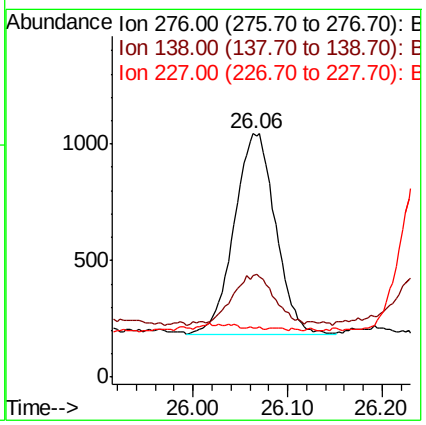


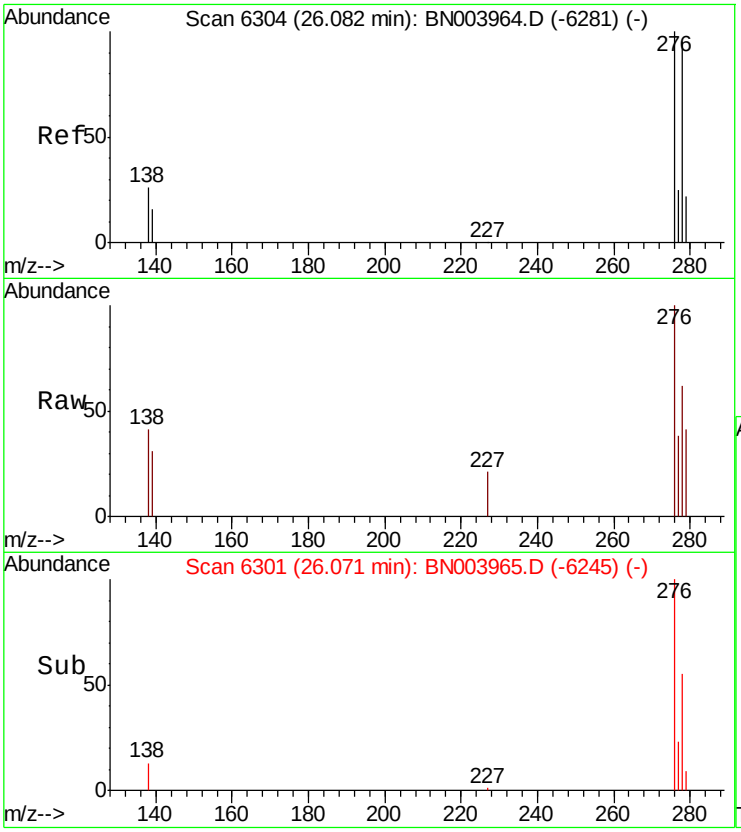


#24
Indeno(1,2,3-cd)pyrene
Concen: 0.040 ng/ul
RT: 26.06 min Scan# 6299
Delta R.T. -0.01 min
Lab File: BN003965.D
Acq: 15 Dec 2018 19:14

Tgt Ion:276 Resp: 2618

Ion	Ratio	Lower	Upper
276	100		
138	26.1	20.3	30.5
227	0.0	0.2	0.2#





#25
Dibenzo(a,h)anthracene
Concen: 0.032 ng/ul
RT: 26.07 min Scan# 6301
Delta R.T. -0.01 min
Lab File: BN003965.D
Acq: 15 Dec 2018 19:14

Tgt Ion:278 Resp: 1720

Ion	Ratio	Lower	Upper
278	100		
139	49.7	14.2	21.4#
279	67.0	19.8	29.6#

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
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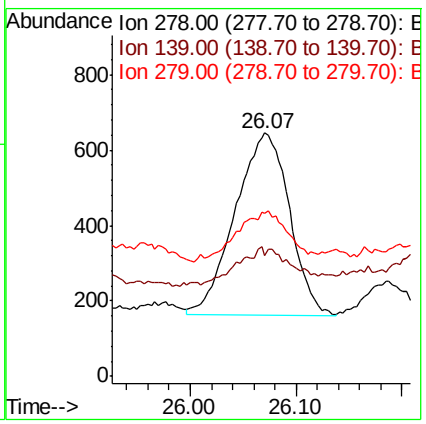
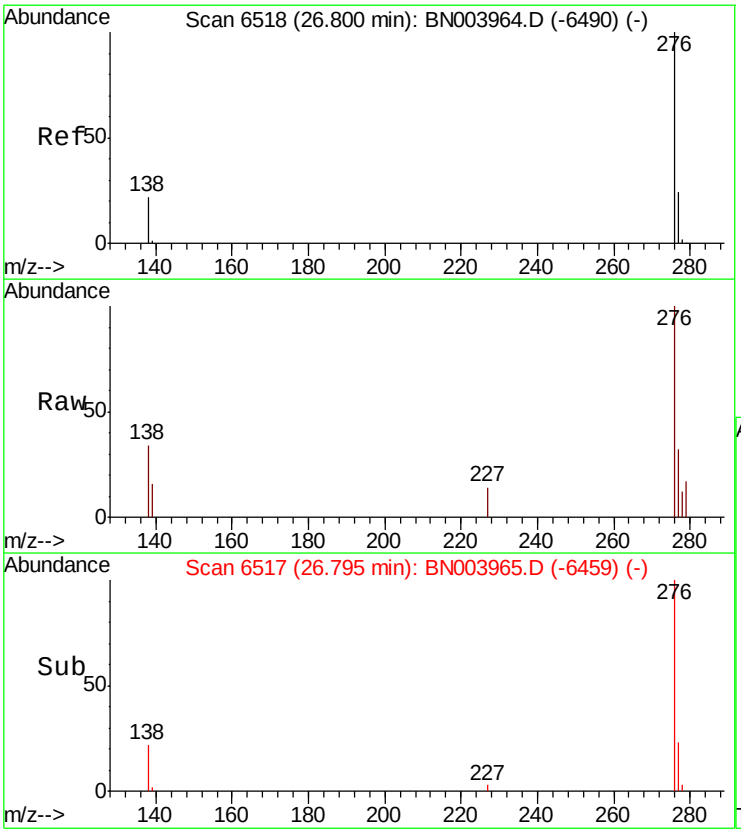
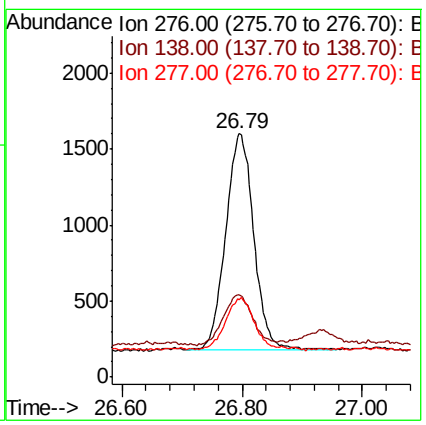




#26
Benzo(g,h,i)perylene
Concen: 0.080 ng/ul
RT: 26.79 min Scan# 6517
Delta R.T. -0.00 min
Lab File: BN003965.D
Acq: 15 Dec 2018 19:14

Tgt Ion:276 Resp: 4578

Ion	Ratio	Lower	Upper
276	100		
138	33.8	17.7	26.5#
277	31.6	19.3	28.9#



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
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12/17/2018 4:23:55 PM

Quant Time: Dec 15 23:12:29 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	2173	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	10579	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	6313	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	15409m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	18733m	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	16015m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	3077	0.19	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	9125m	0.20	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.68	128	1227	0.041	ng/ul#	83
5) 2-Methylnaphthalene	12.29	142	2511	0.121	ng/ul	99
12) Phenanthrene	17.26	178	13430	0.266	ng/ul	99
13) Anthracene	17.35	178	2142m	0.052	ng/ul	
15) Fluoranthene	19.27	202	4049m	0.068	ng/ul	
17) Pyrene	19.63	202	15733m	0.234	ng/ul	
18) Benzo(a)anthracene	21.38	228	7616	0.129	ng/ul#	88
19) Chrysene	21.43	228	13438	0.198	ng/ul#	95
21) Benzo(b)fluoranthene	23.01	252	4439m	0.067	ng/ul	
22) Benzo(k)fluoranthene	23.05	252	1603m	0.025	ng/ul	
23) Benzo(a)pyrene	23.61	252	4255	0.074	ng/ul#	68
24) Indeno(1,2,3-cd)pyrene	26.06	276	2618	0.040	ng/ul#	99
25) Dibenzo(a,h)anthracene	26.07	278	1720	0.032	ng/ul#	20
26) Benzo(g,h,i)perylene	26.79	276	4578	0.080	ng/ul#	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

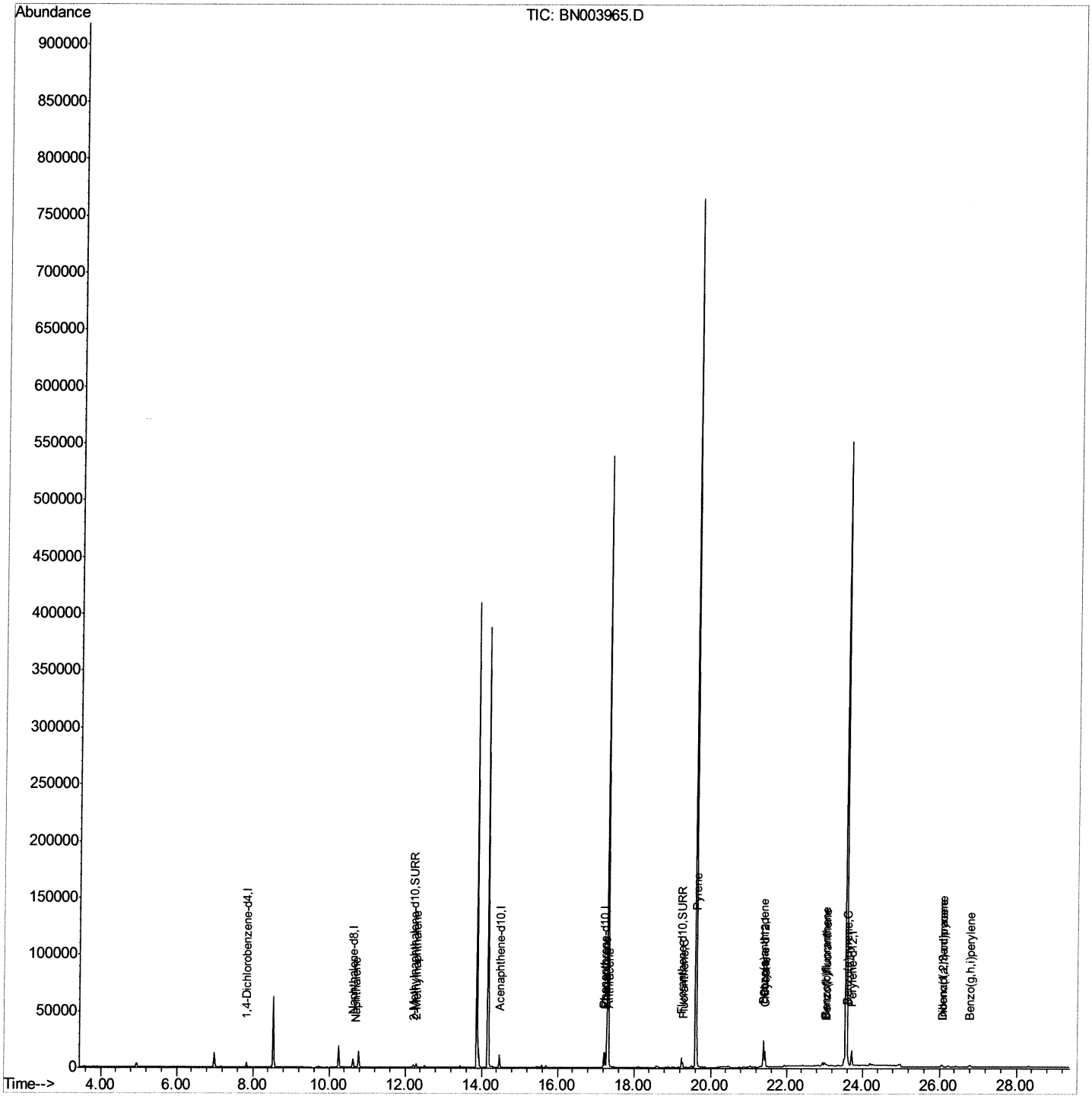
Quantitation Report (QT Reviewed)

Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 15 23:12:29 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

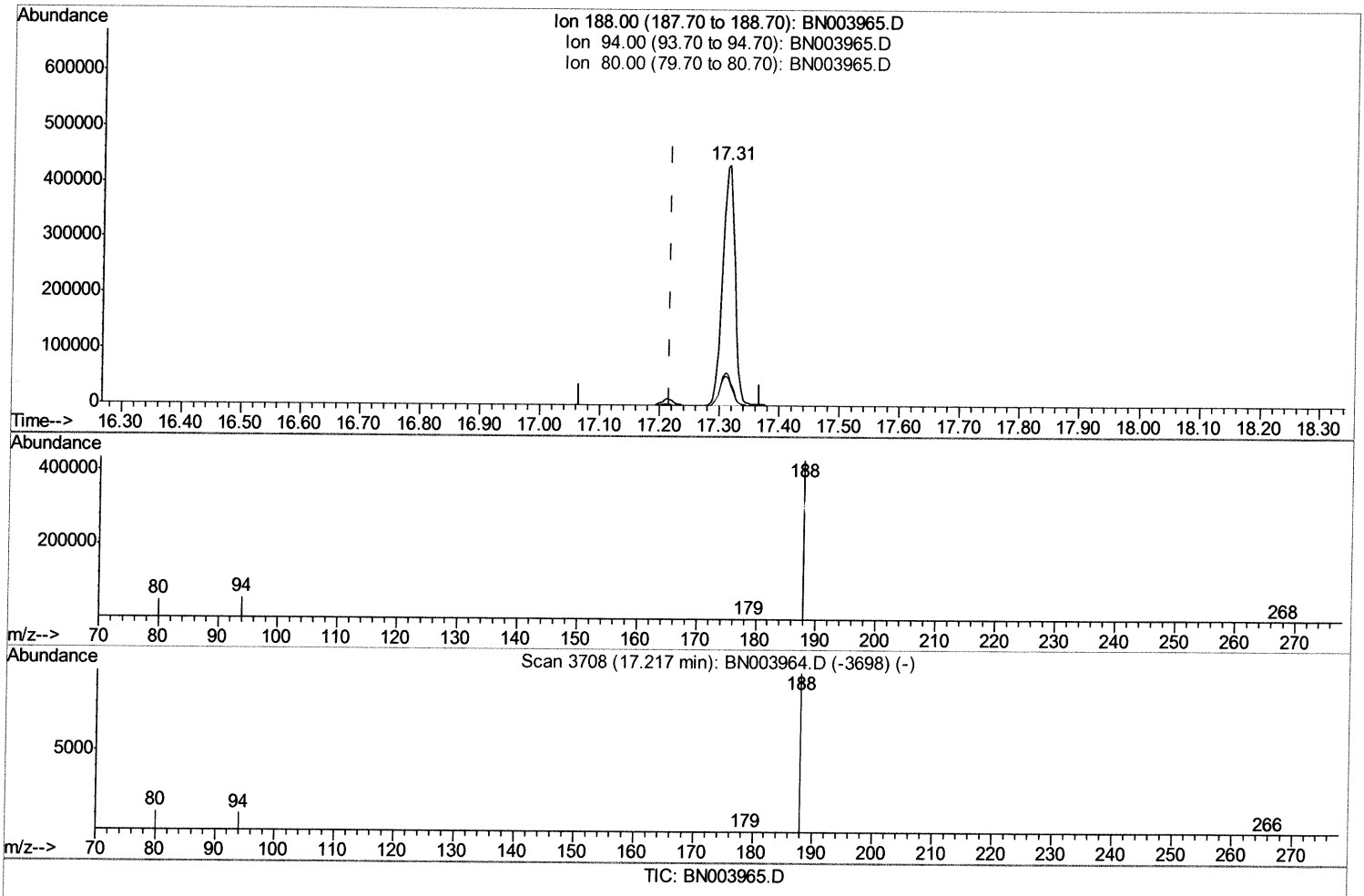
Quantitation Report (Qedit)

Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 15 23:07:31 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM



TIC: BN003965.D

(10) Phenanthrene-d10 (I)

17.314min (+0.097) 0.40ng/ul

response 611870

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	12.66#
80.00	11.60	11.32
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

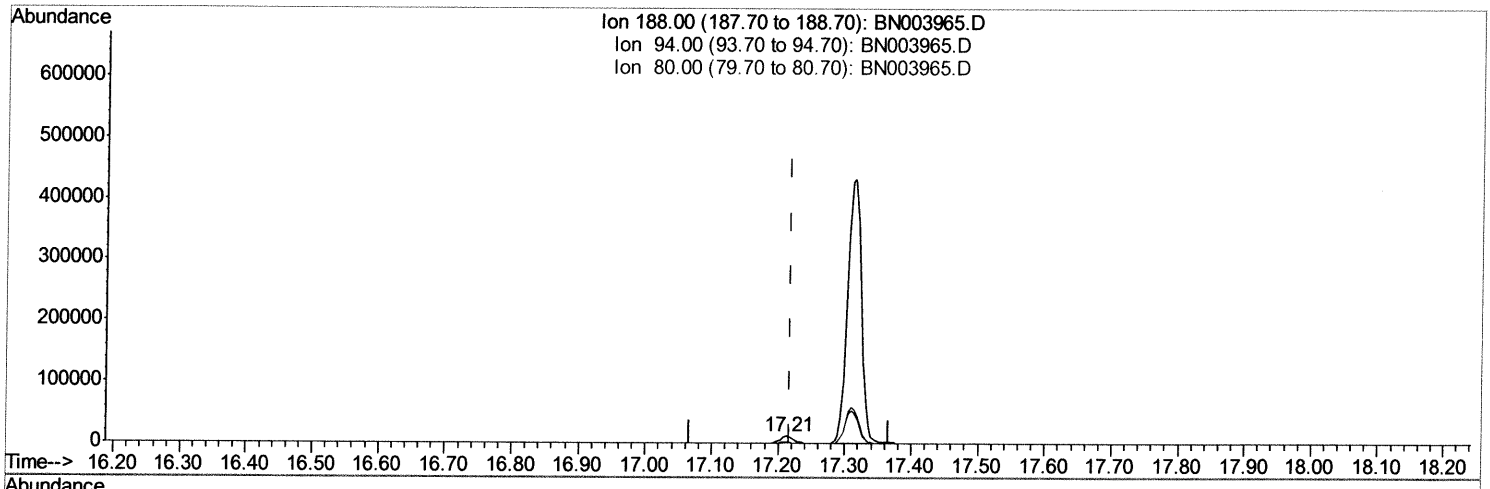
Quantitation Report (Qedit)

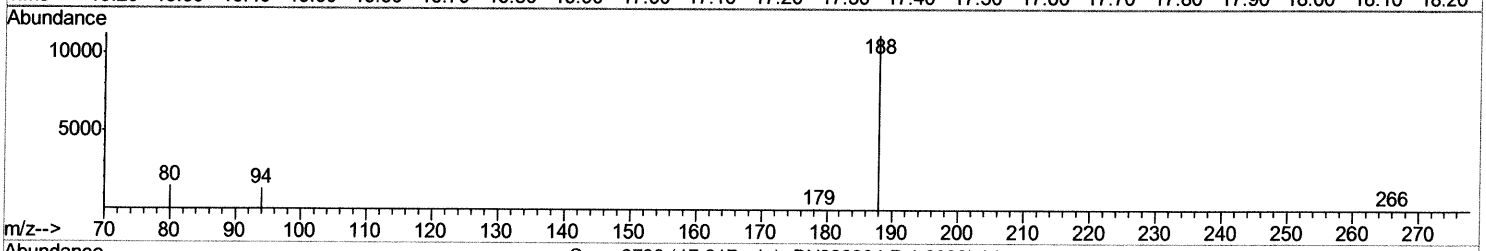
Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

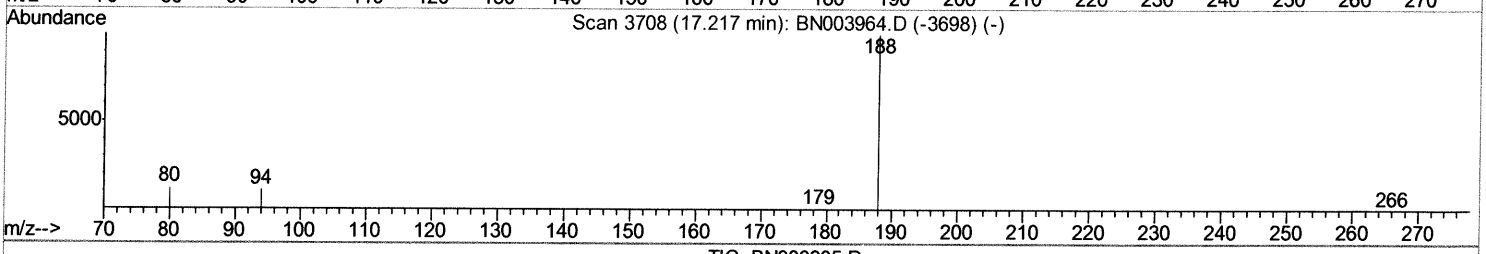
Quant Time: Dec 15 23:07:31 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM







TIC: BN003965.D

(10) Phenanthrene-d10 (I)

17.213min (-0.004) 0.40ng/ul m SJ 12/17/18

response 15409

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	11.87
80.00	11.60	13.25
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (Qedit)

Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 15 23:09:36 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
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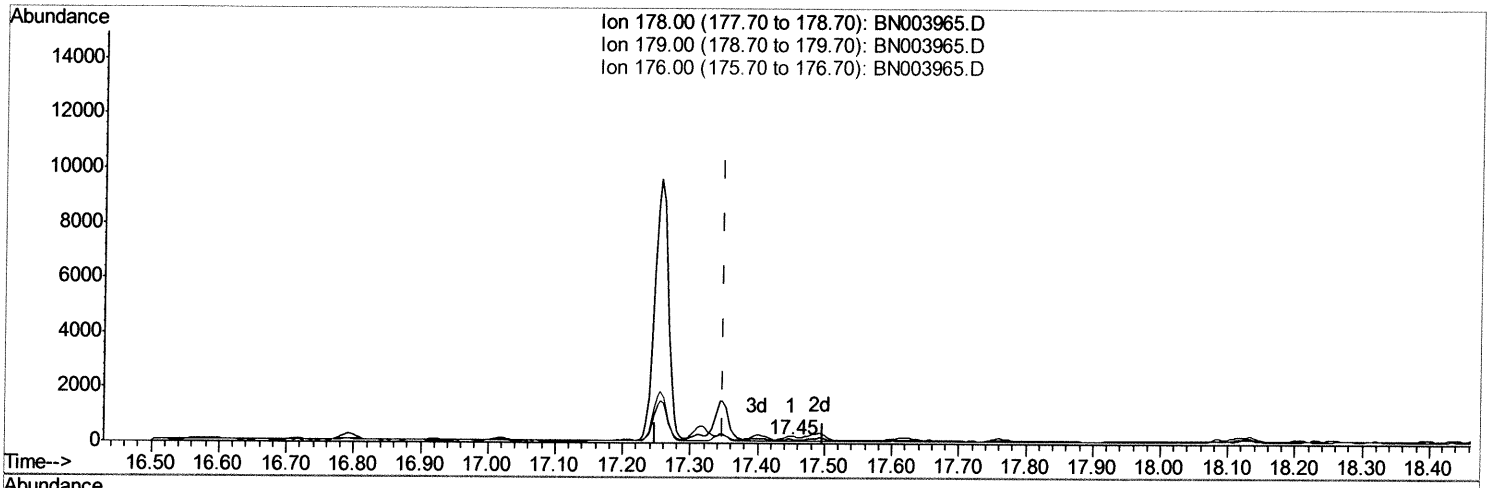

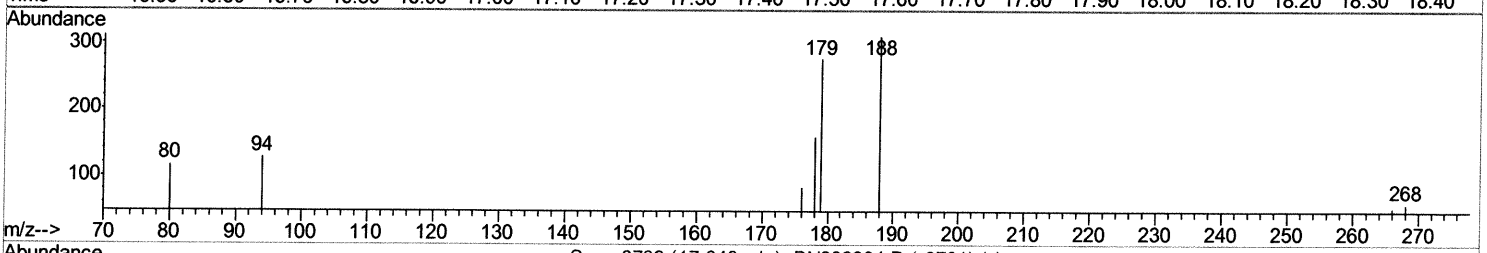

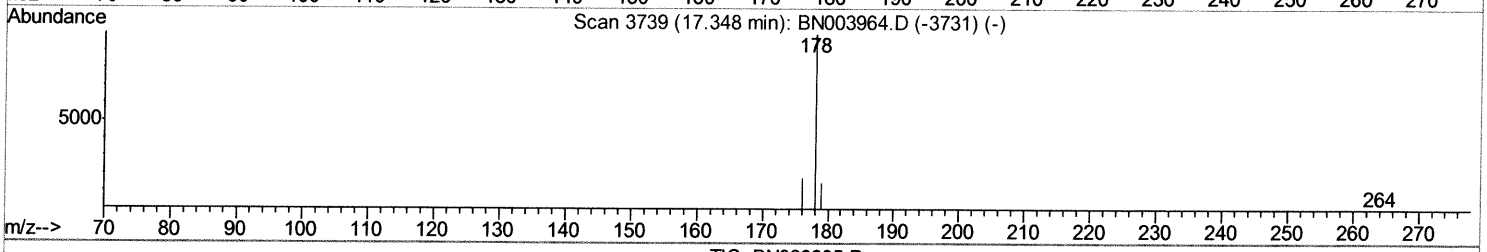

TIC: BN003965.D

(13) Anthracene

17.449min (+0.102) 0.00ng/ul

response 63

Ion	Exp%	Act%
178.00	100	100
179.00	15.40	172.96#
176.00	18.50	52.20#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (Qedit)

Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 15 23:09:36 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
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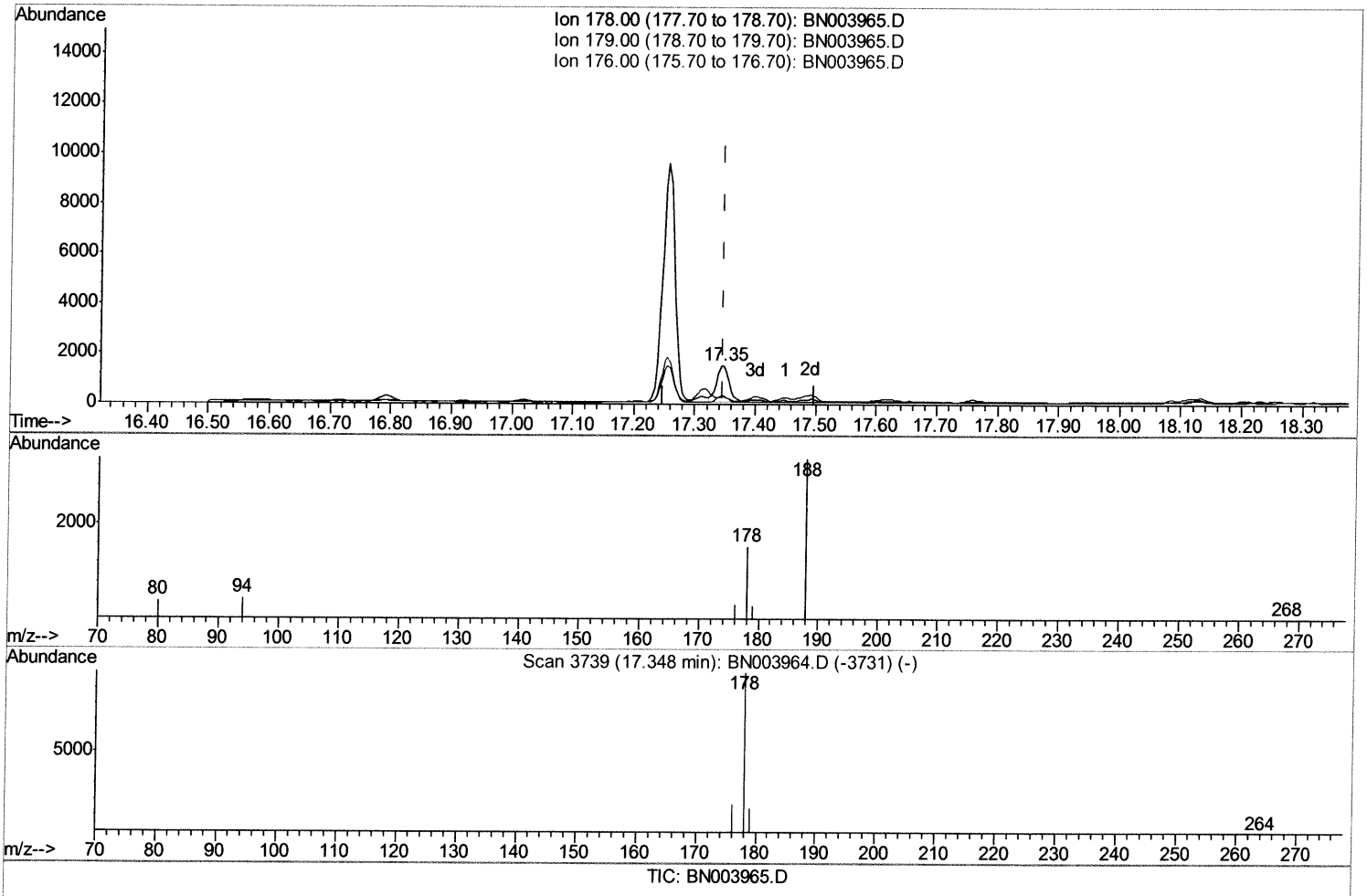

(13) Anthracene

17.348min (+0.000) 0.05ng/ul m SJ 12/17/18

response 2142

Ion	Exp%	Act%
178.00	100	100
179.00	15.40	20.73#
176.00	18.50	21.57
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (Qedit)

Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 15 23:09:36 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
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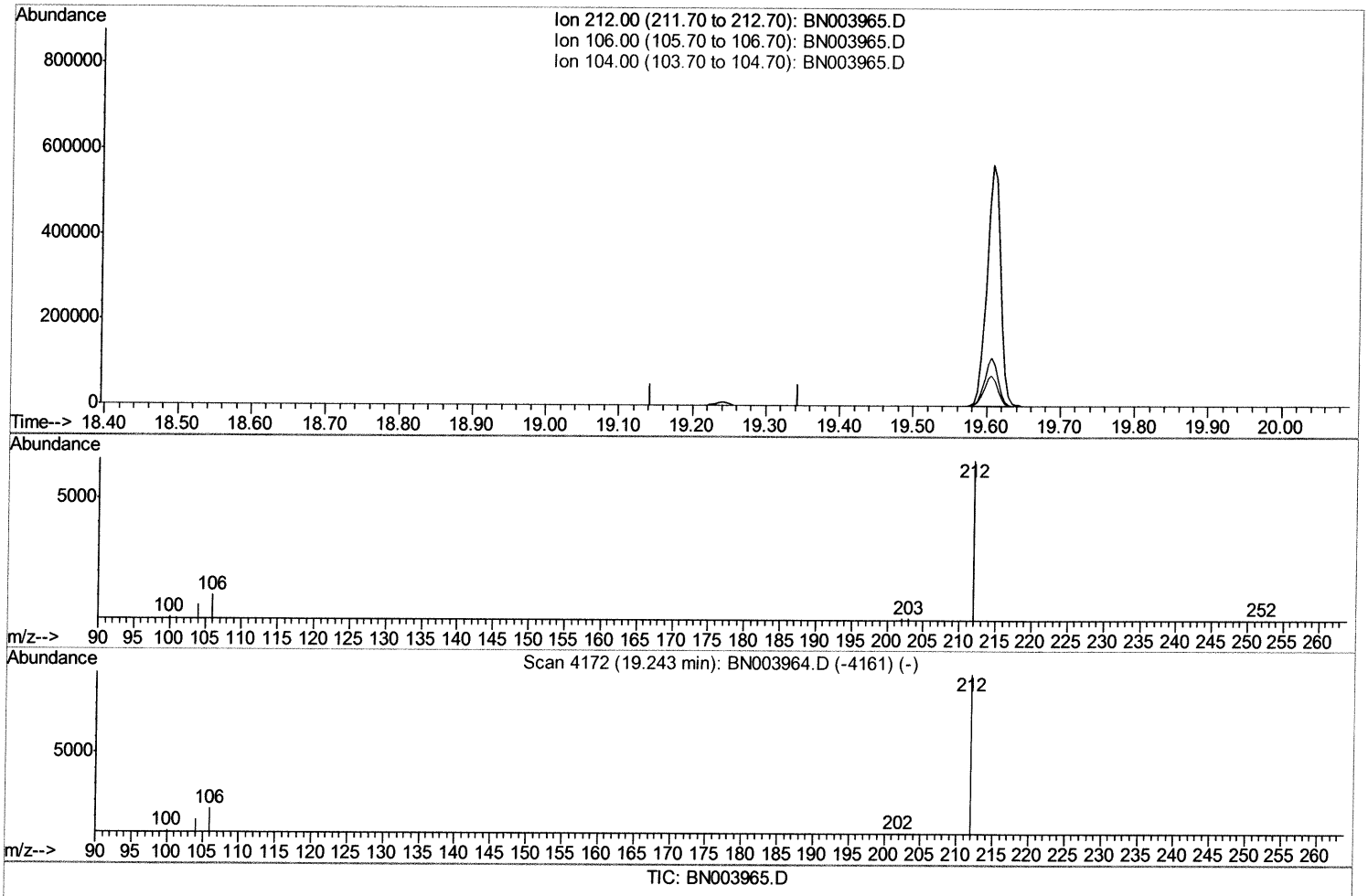


(14) Fluoranthene-d10 (SURR)

19.243min (-19.243) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

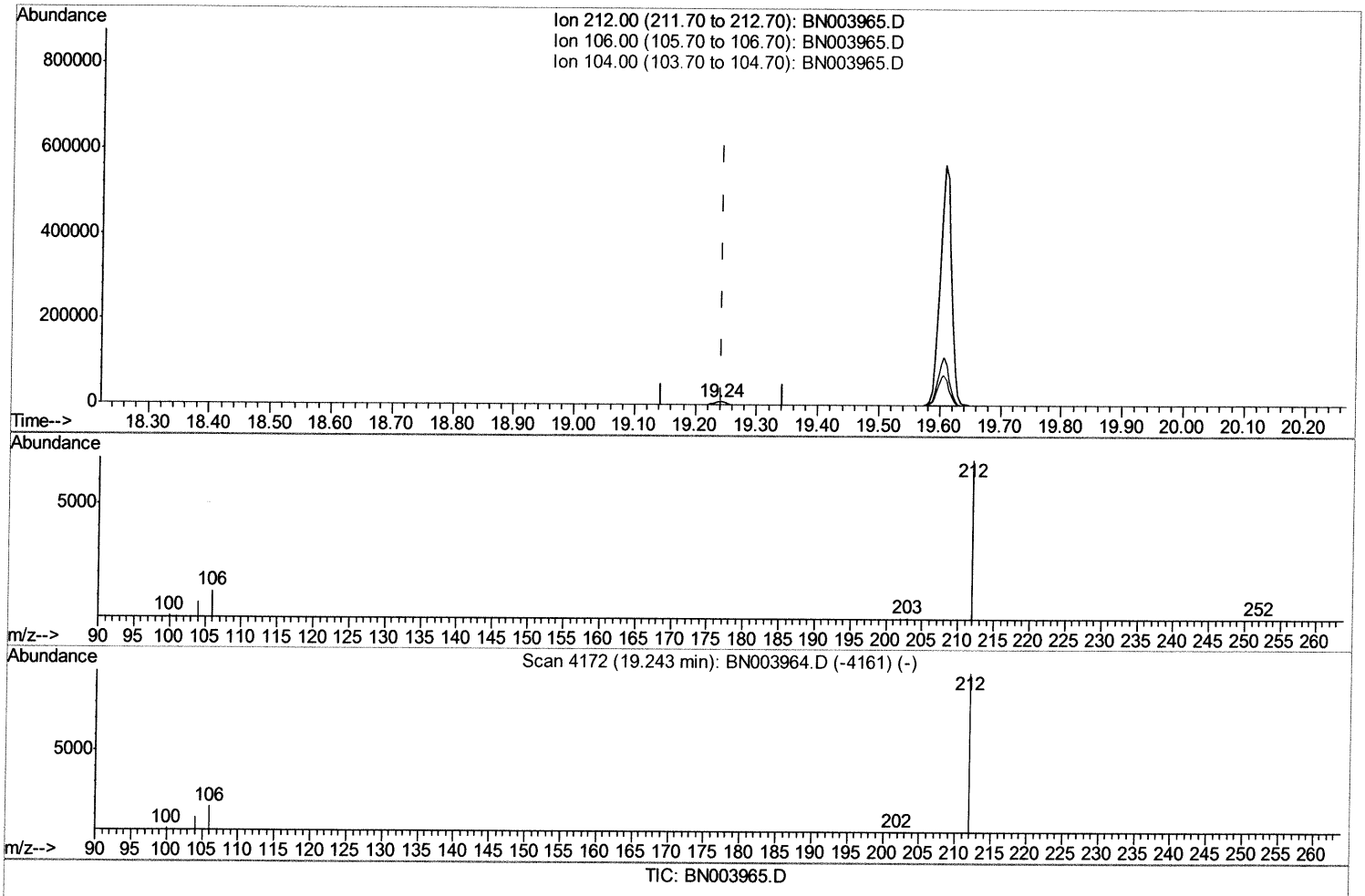
Quantitation Report (Qedit)

Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 15 23:09:36 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM



TIC: BN003965.D

(14) Fluoranthene-d10 (SURR)

19.239min (-0.004) 0.20ng/ul m SJ 12/19/18

response 9125

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

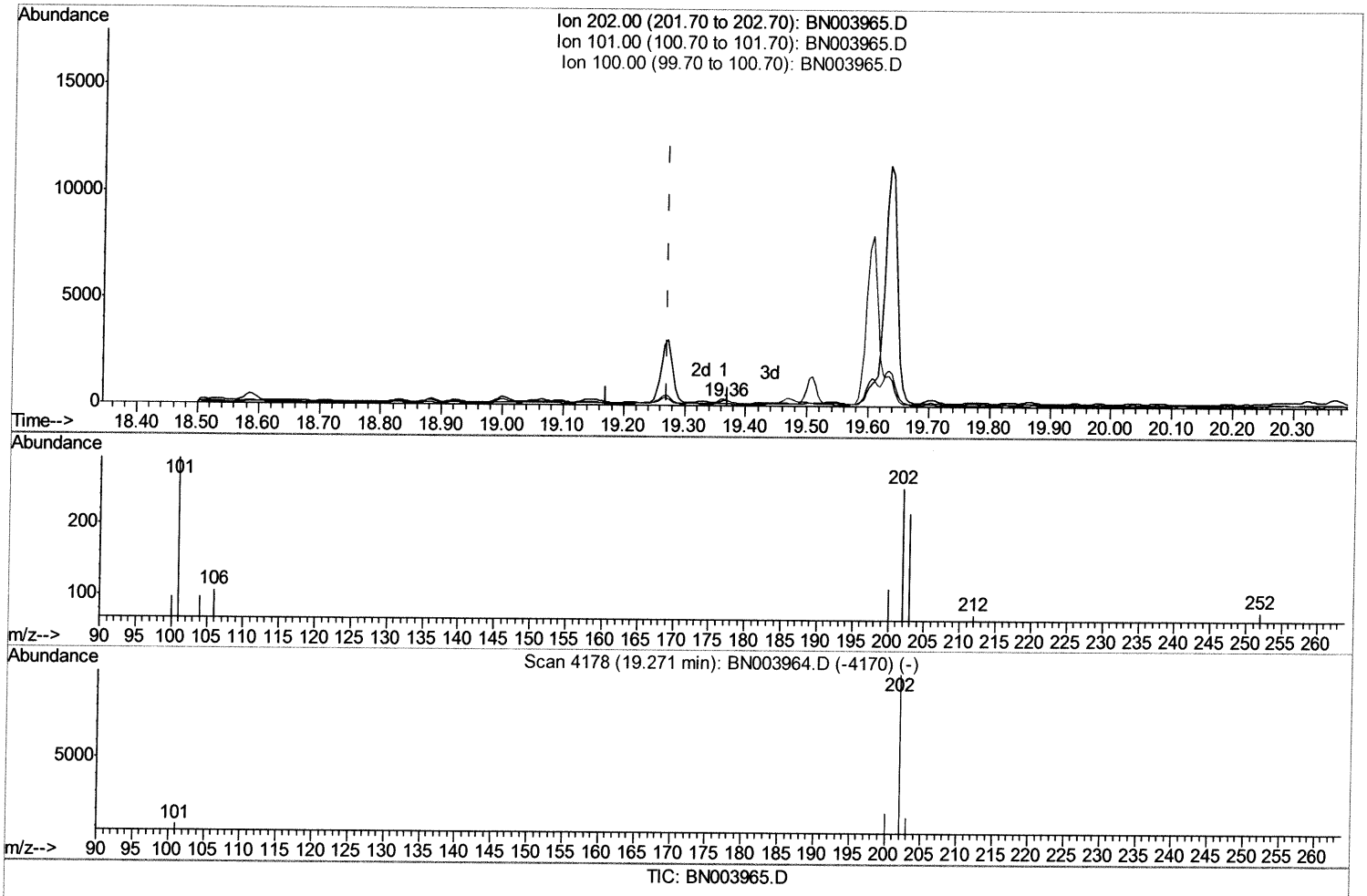
Quantitation Report (Qedit)

Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 15 23:09:36 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM



TIC: BN003965.D

(15) Fluoranthene (C)

19.364min (+0.093) 0.00ng/ul

response 177

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	114.90#
100.00	8.10	37.65#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

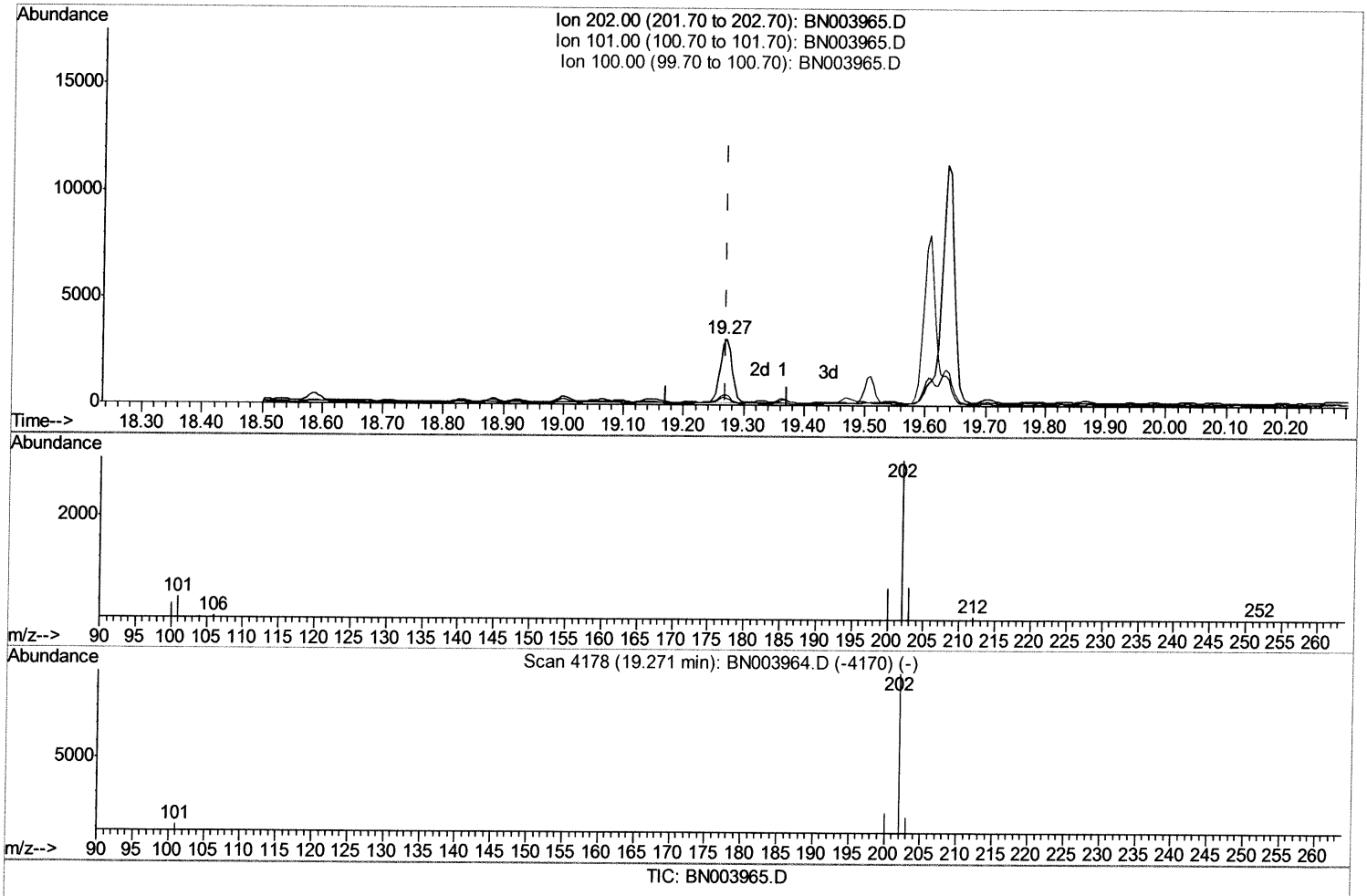
Quantitation Report (Qedit)

Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 15 23:09:36 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM



(15) Fluoranthene (C)

19.272min (+0.000) 0.07ng/ul m SJ 12/17/18

response 4049

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	14.66
100.00	8.10	10.54
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

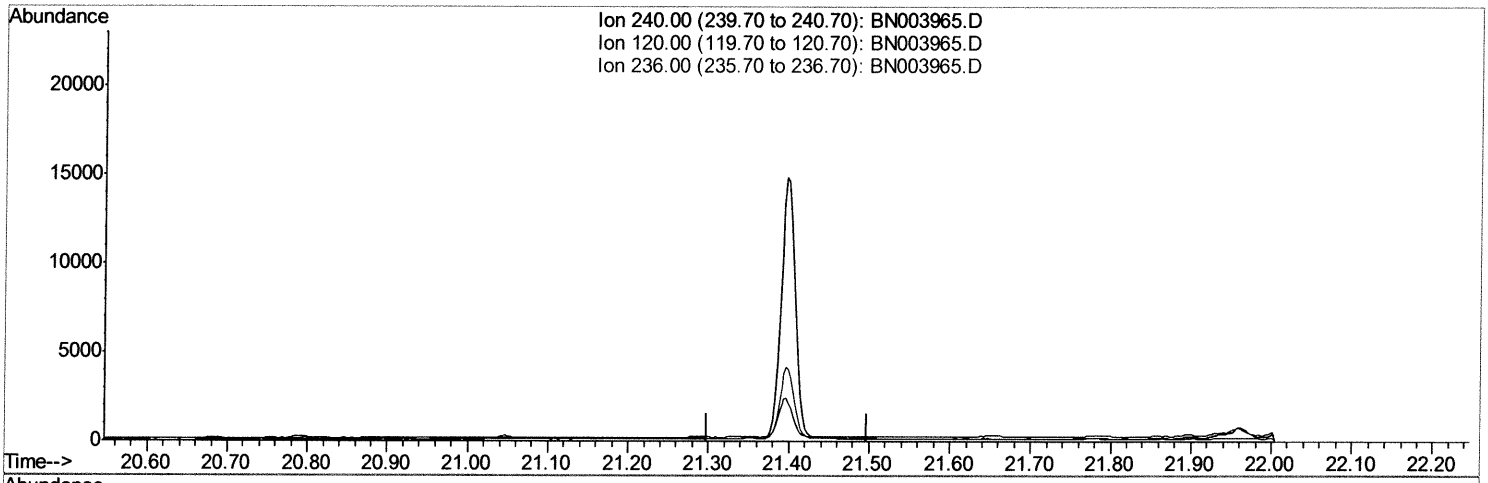
Quantitation Report (Qedit)

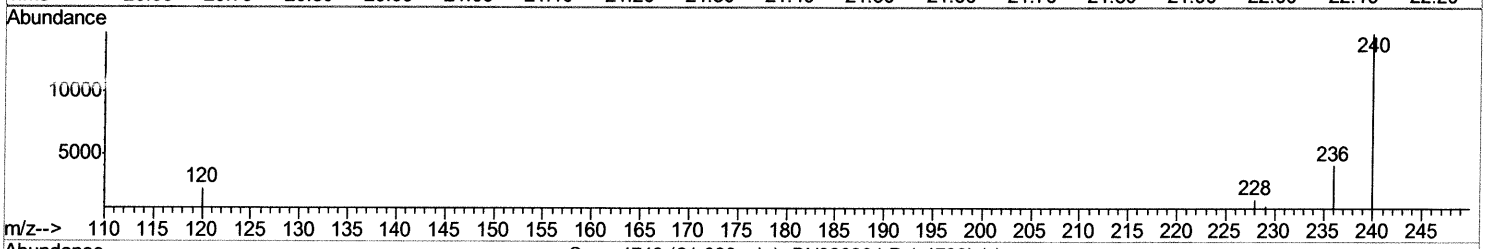
Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

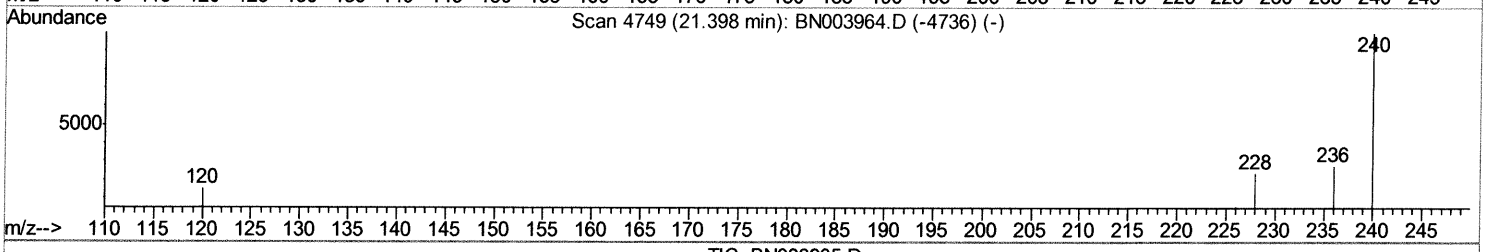
Quant Time: Dec 15 23:09:36 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM







TIC: BN003965.D

(16) Chrysene-d12 (I)

21.398min (-21.398) 0.00ng/ul

response 0

Ion	Exp%	Act%
240.00	100	0.00
120.00	14.00	0.00#
236.00	27.60	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

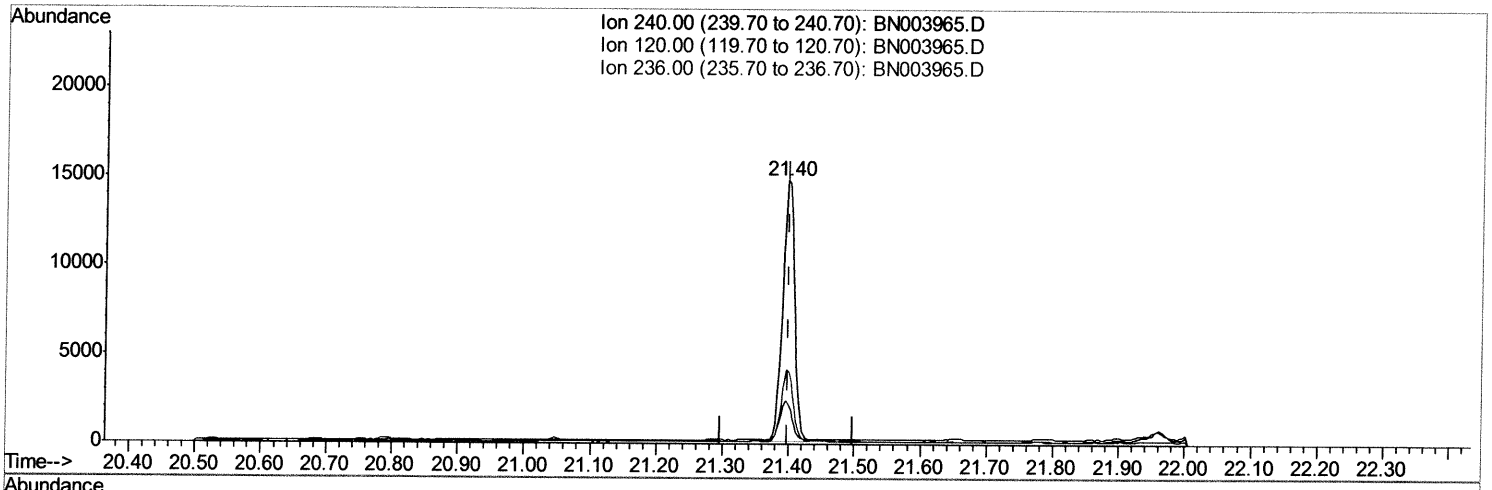
Quantitation Report (Qedit)

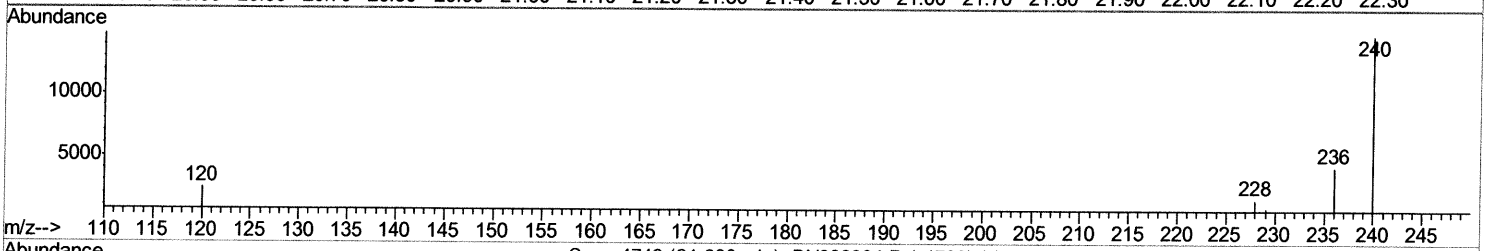
Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

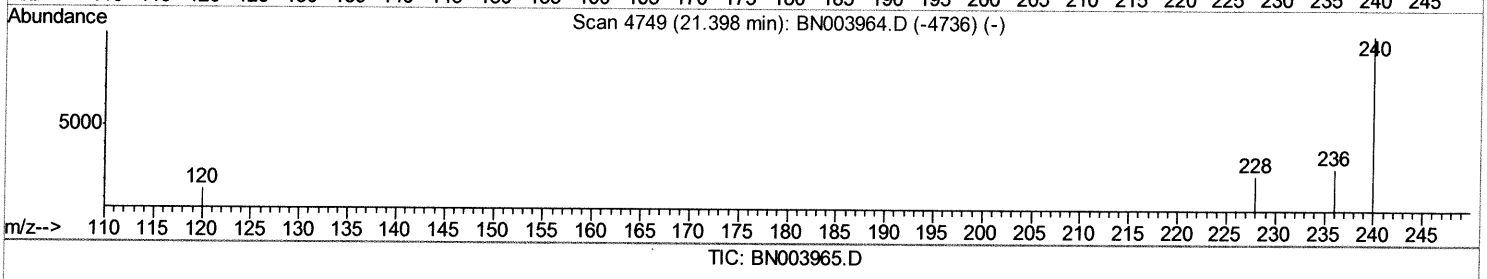
Quant Time: Dec 15 23:09:36 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM







TIC: BN003965.D

(16) Chrysene-d12 (I)

21.397min (-0.002) 0.40ng/ul m SJ 12/17/18

response 18733

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	16.37
236.00	27.60	28.26
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

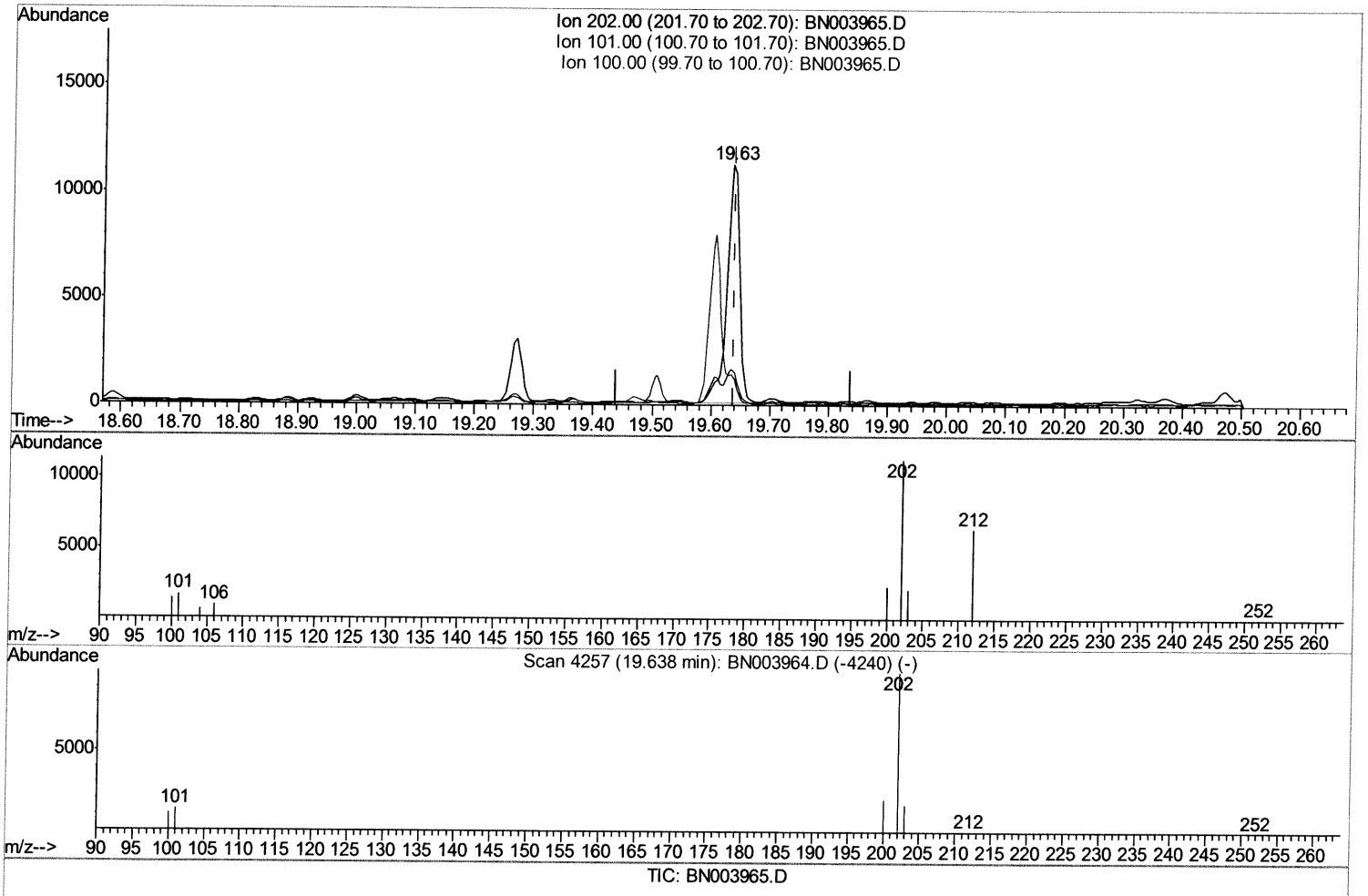
Quantitation Report (Qedit)

Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 15 23:10:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM



TIC: BN003965.D

(17) Pyrene

19.634min (-0.004) 0.25ng/ul

response 16586

Ion	Exp%	Act%
202.00	100	100
101.00	12.90	15.21
100.00	10.60	12.55
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

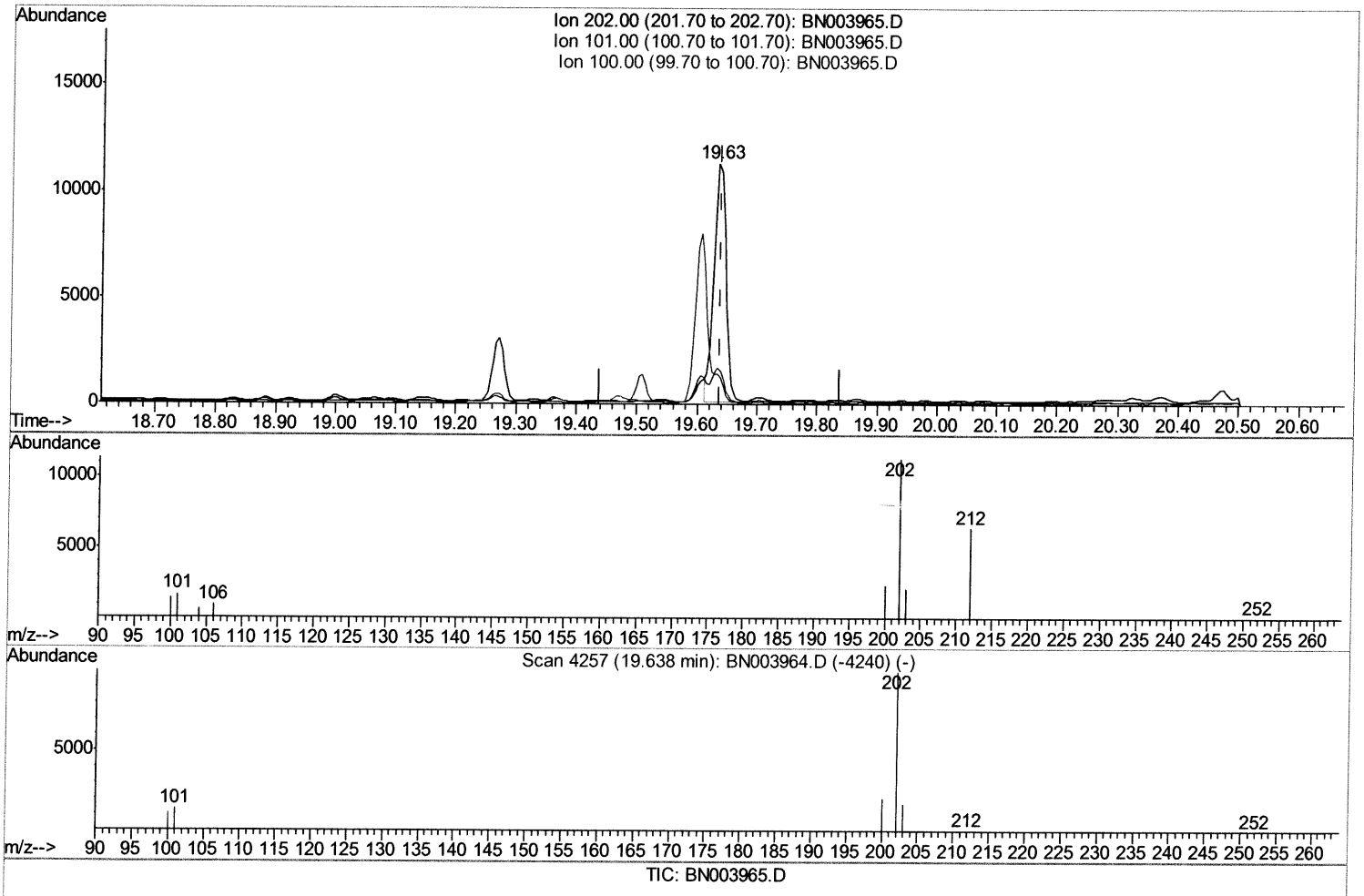
Quantitation Report (Qedit)

Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 15 23:10:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM



TIC: BN003965.D

(17) Pyrene

19.634min (-0.004) 0.23ng/ul m SJ 12/19/18

response 15733

Ion	Exp%	Act%
202.00	100	100
101.00	12.90	15.21
100.00	10.60	12.55
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

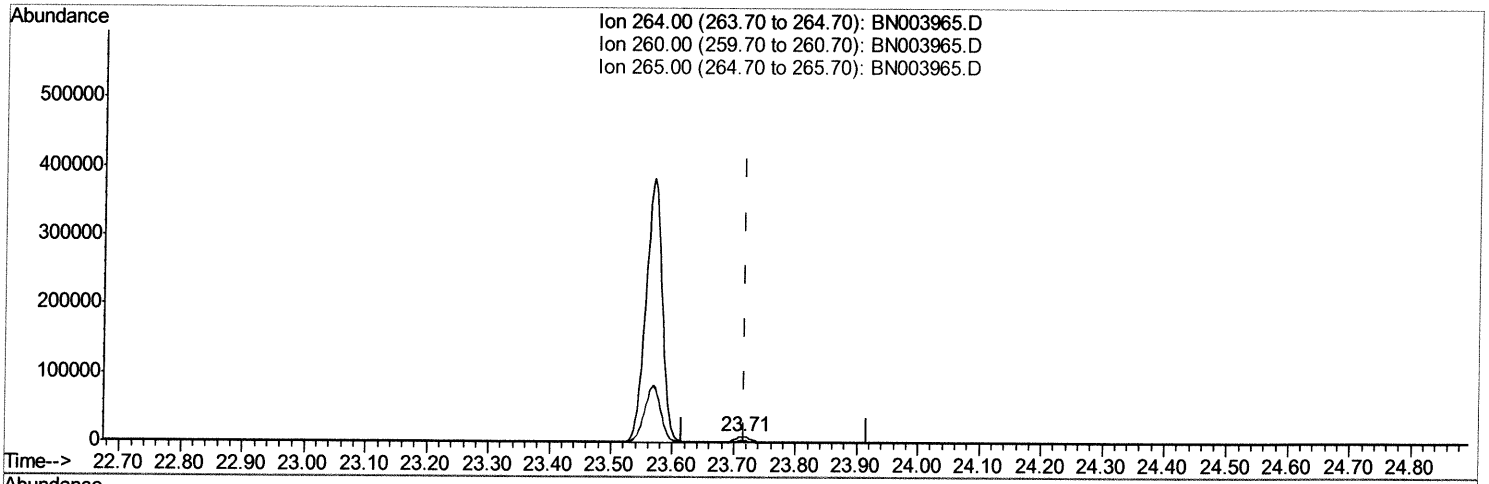
Quantitation Report (Qedit)

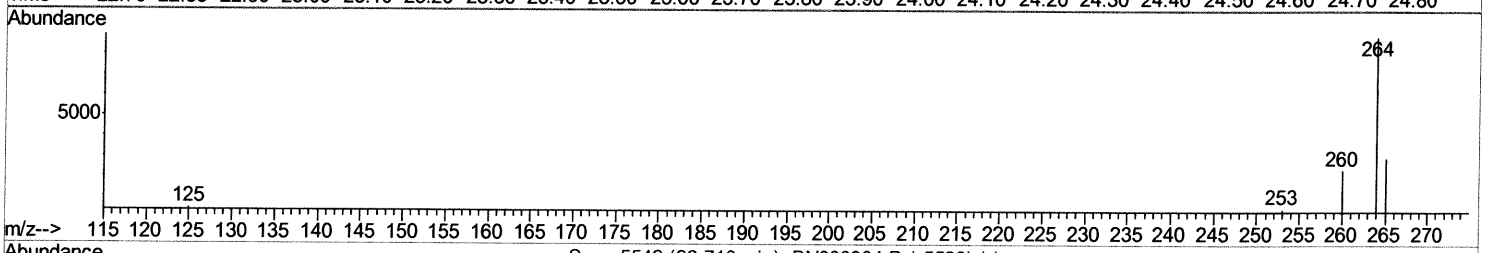
Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

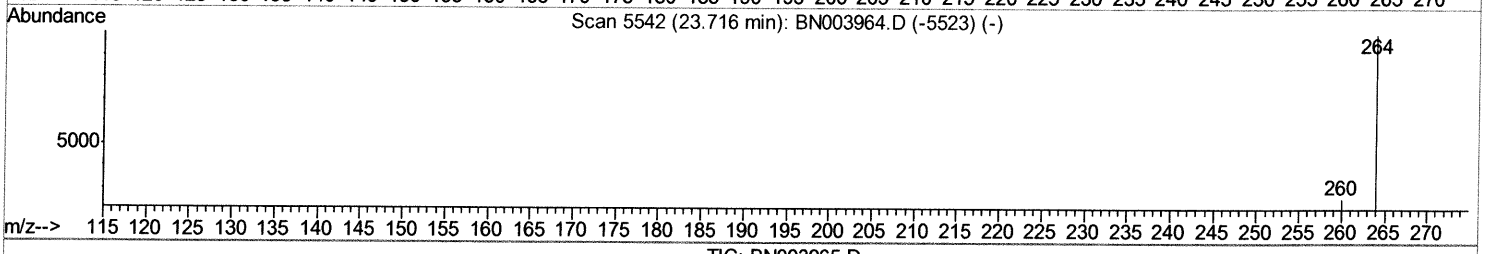
Quant Time: Dec 15 23:10:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM







TIC: BN003965.D

(20) Perylene-d12 (I)

23.715min (-0.002) 0.40ng/ul

response 18010

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.92
265.00	33.50	33.46
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

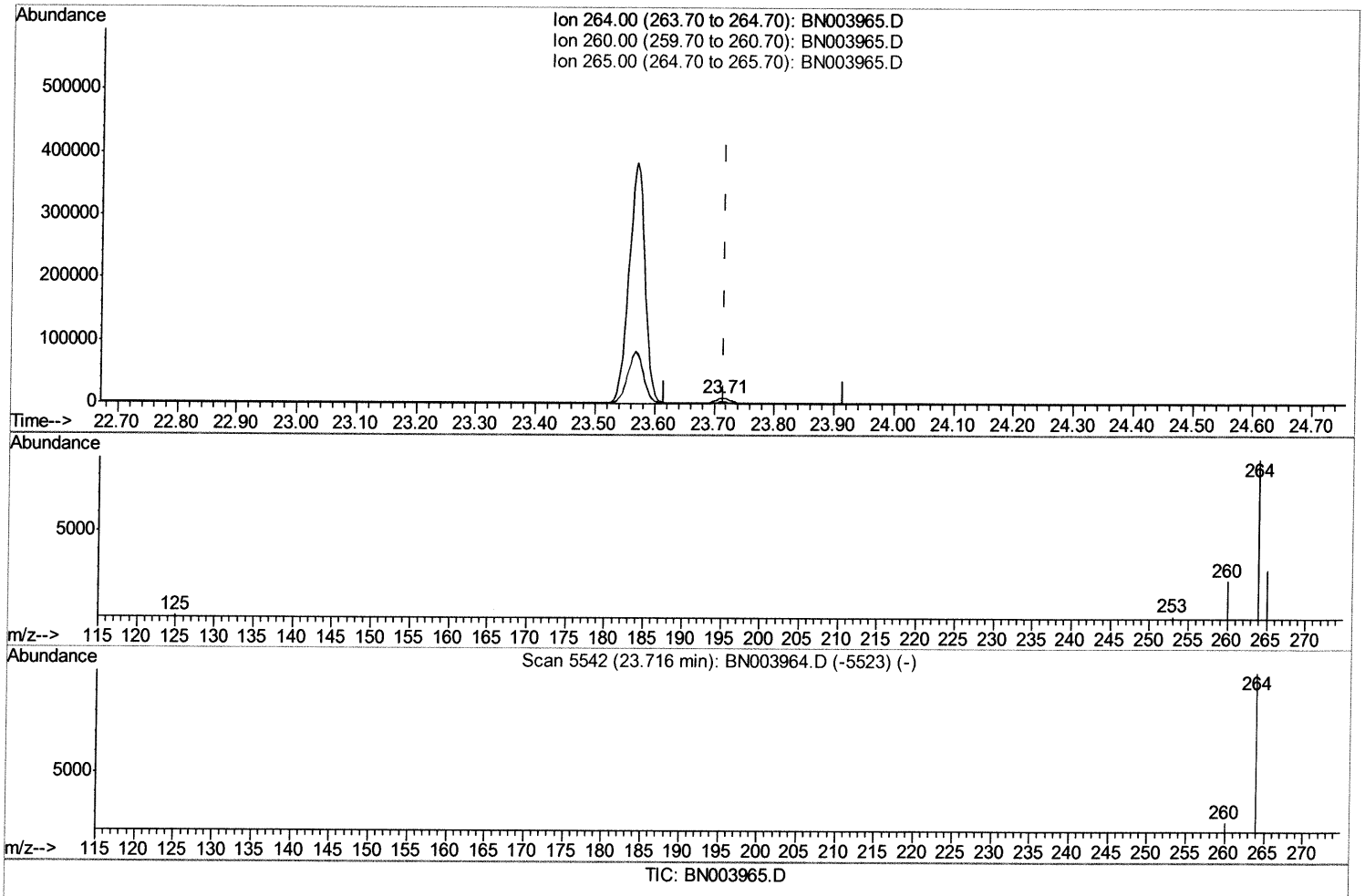
Quantitation Report (Qedit)

Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 15 23:10:50 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM



(20) Perylene-d12 (I)

23.715min (-0.002) 0.40ng/ul m SJ 12/17/18

response 16015

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.92
265.00	33.50	33.46
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

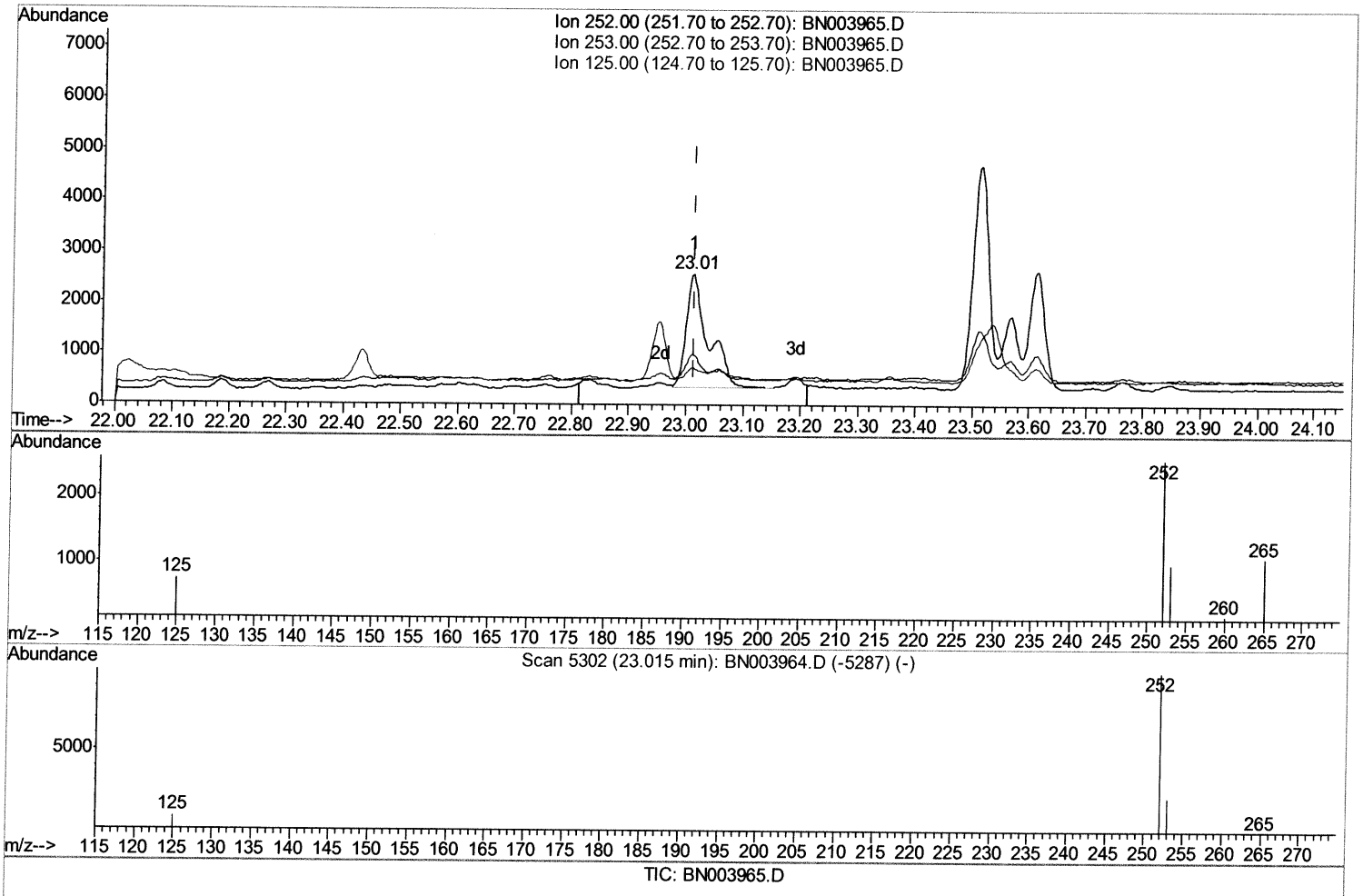
Quantitation Report (Qedit)

Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 15 23:11:47 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM



TIC: BN003965.D

(21) Benzo(b)fluoranthene

23.013min (-0.002) 0.09ng/ul

response 5934

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	37.93
125.00	11.20	28.24#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

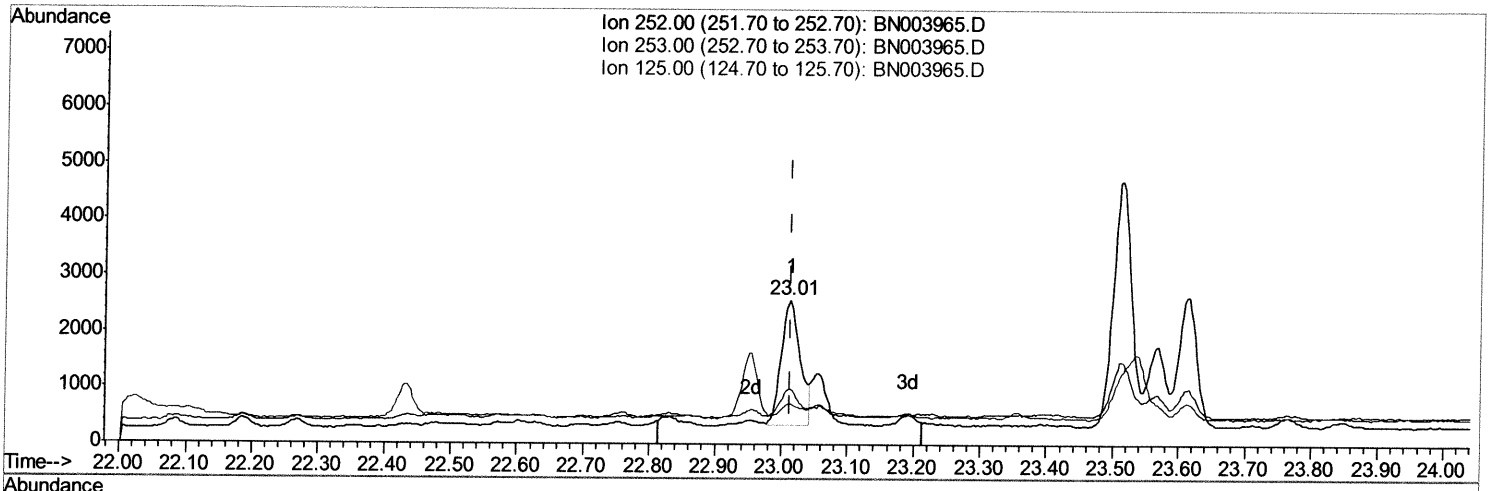
Quantitation Report (Qedit)

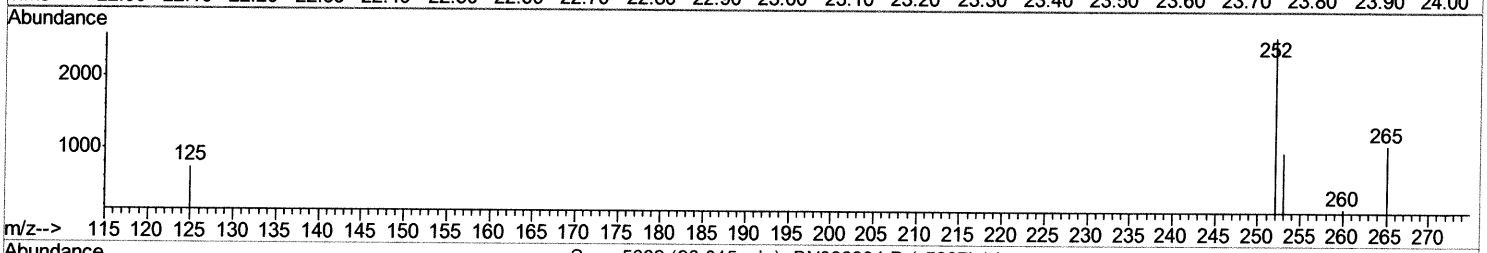
Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

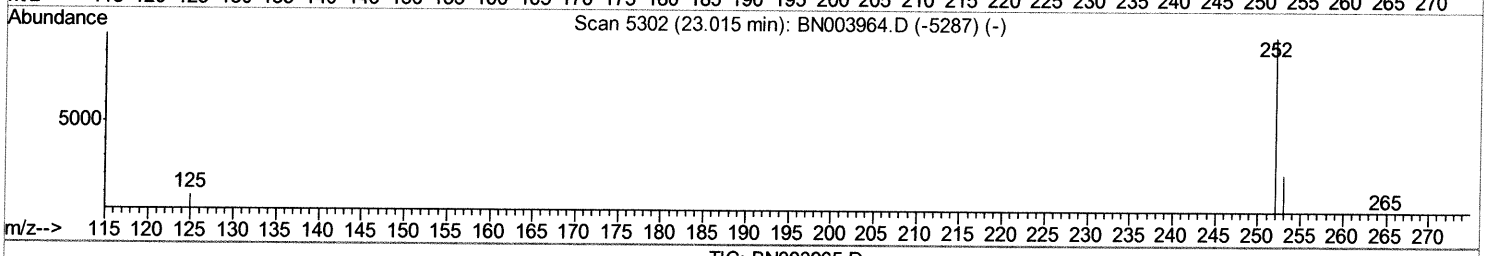
Quant Time: Dec 15 23:11:47 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM







TIC: BN003965.D

(21) Benzo(b)fluoranthene

23.013min (-0.002) 0.07ng/ul m SJ 12/19/18

response 4439

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	37.93
125.00	11.20	28.24#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

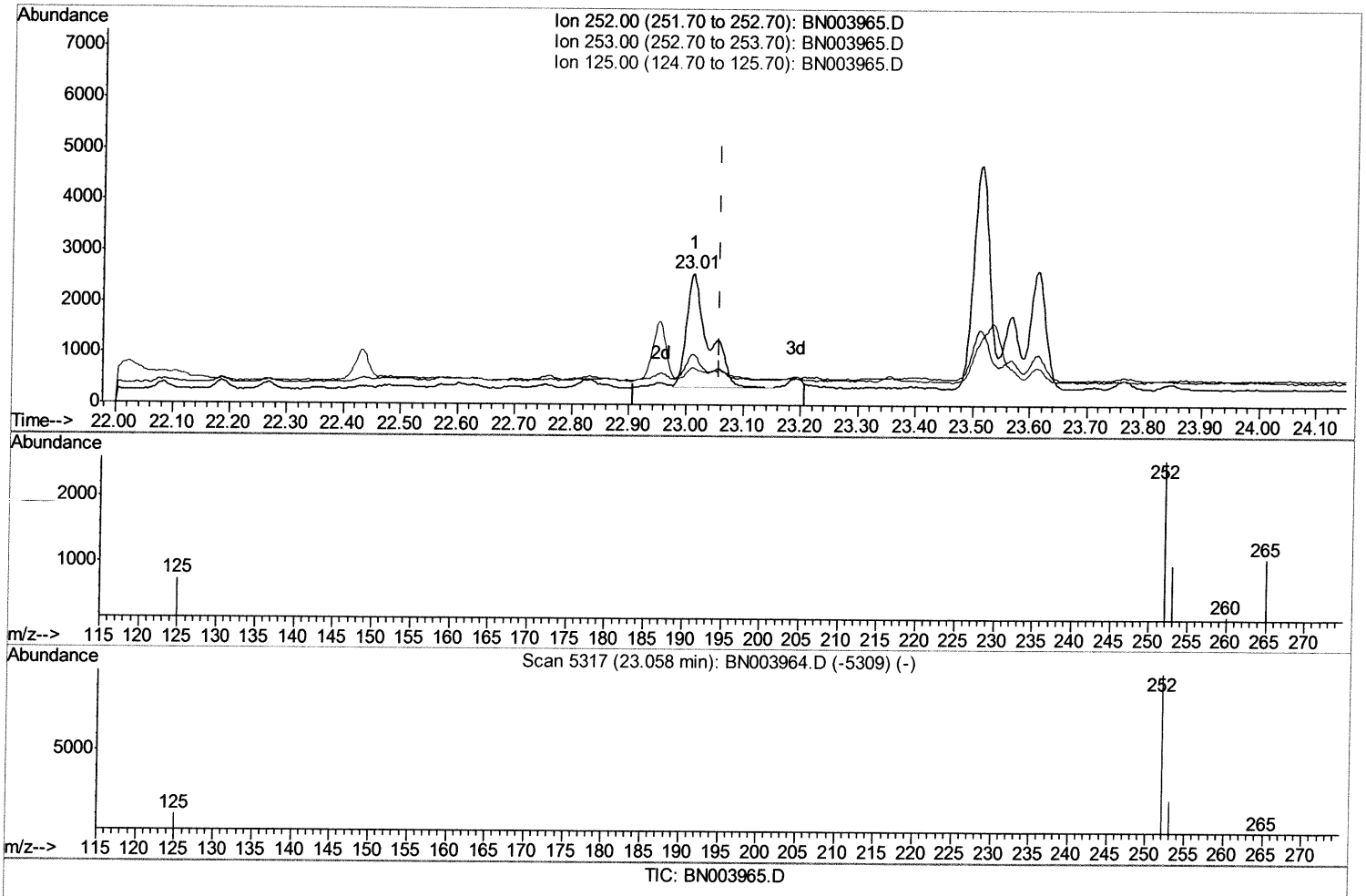
Quantitation Report (Qedit)

Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 15 23:11:47 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM



TIC: BN003965.D

(22) Benzo(k)fluoranthene

23.013min (-0.045) 0.09ng/ul

response 5934

Ion	Exp%	Act%
252.00	100	100
253.00	23.10	37.93#
125.00	11.30	28.24#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

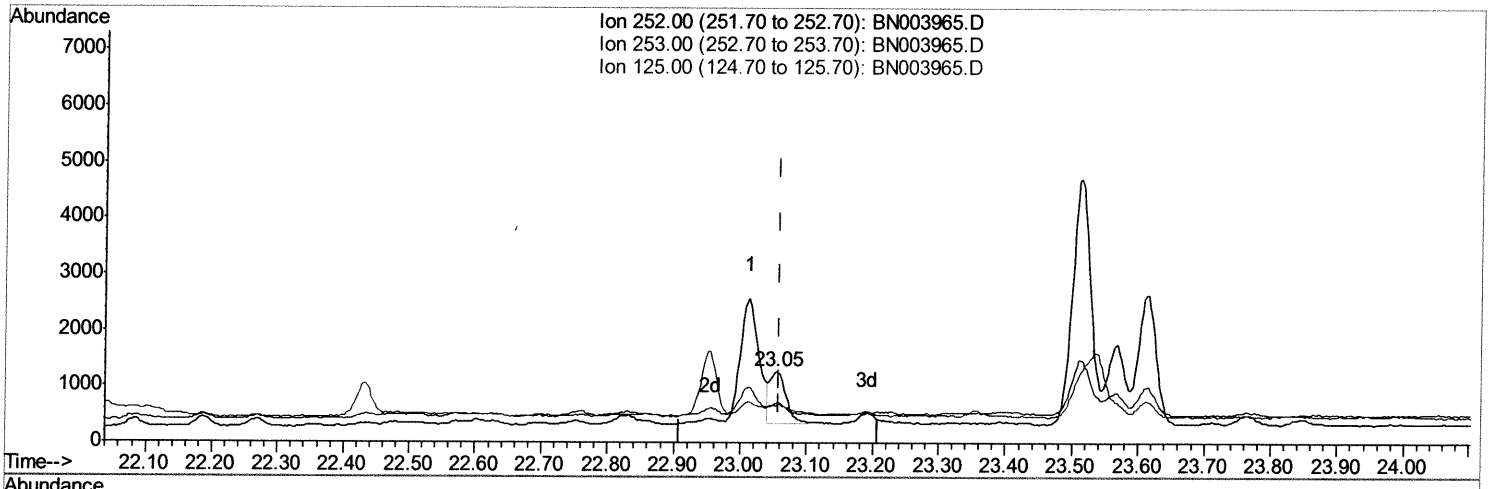
Quantitation Report (Qedit)

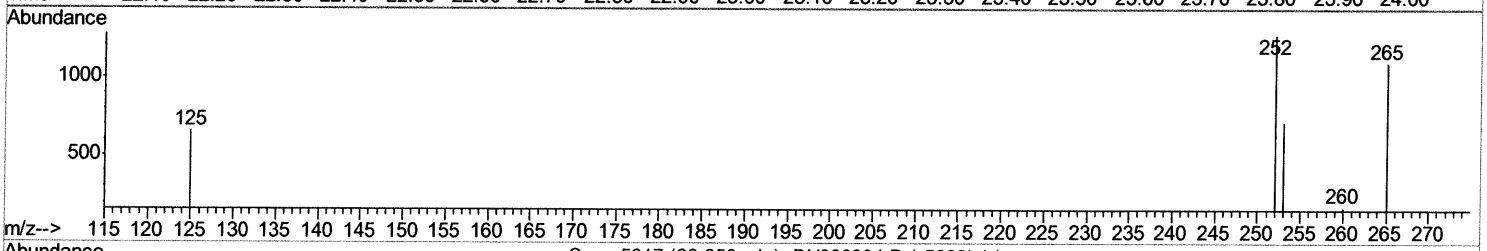
Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

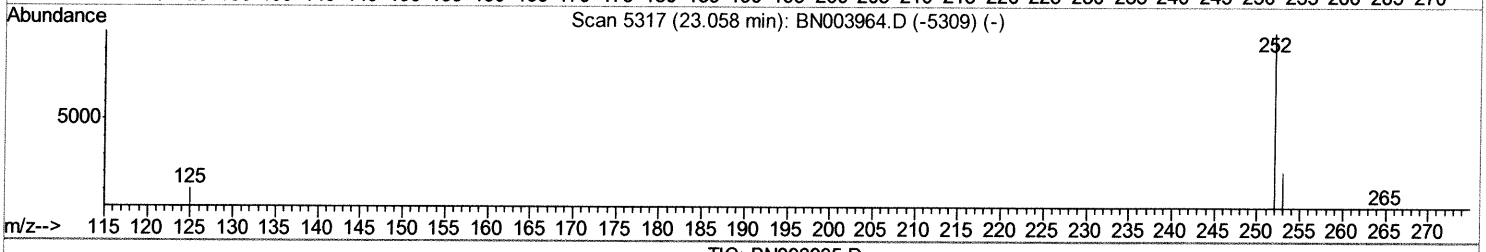
Quant Time: Dec 15 23:11:47 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:55 PM







TIC: BN003965.D

(22) Benzo(k)fluoranthene

23.054min (-0.004) 0.02ng/ul m SJ 12/17/18

response 1603

Ion	Exp%	Act%
252.00	100	100
253.00	23.10	56.25#
125.00	11.30	51.22#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (QT Reviewed)

Data File : BN003965.D
Acq On : 15 Dec 2018 19:14
Operator : JU/SJ
Sample : J6227-20
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 15 23:12:29 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	2173	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	10579	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	6313	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	15409m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	18733m	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	16015m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	3077	0.19	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	9125m	0.20	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.68	128	1227	0.041	ng/ul#	83
5) 2-Methylnaphthalene	12.29	142	2511	0.121	ng/ul	99
12) Phenanthrene	17.26	178	13430	0.266	ng/ul	99
13) Anthracene	17.35	178	2142m	0.052	ng/ul	
15) Fluoranthene	19.27	202	4049m	0.068	ng/ul	
17) Pyrene	19.63	202	15733m	0.234	ng/ul	
18) Benzo(a)anthracene	21.38	228	7616	0.129	ng/ul#	88
19) Chrysene	21.43	228	13438	0.198	ng/ul#	95
21) Benzo(b)fluoranthene	23.01	252	4439m	0.067	ng/ul	
22) Benzo(k)fluoranthene	23.05	252	1603m	0.025	ng/ul	
23) Benzo(a)pyrene	23.61	252	4255	0.074	ng/ul#	68
24) Indeno(1,2,3-cd)pyrene	26.06	276	2618	0.040	ng/ul#	99
25) Dibenzo(a,h)anthracene	26.07	278	1720	0.032	ng/ul#	20
26) Benzo(g,h,i)perylene	26.79	276	4578	0.080	ng/ul#	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SJ
12/17/18

Instrument :
BNA_N
ClientSampleId :
F9E69

Manual Integrations APPROVED
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12/17/2018 4:23:55 PM

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E74

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-05
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BN003745.D
% Solids : 88.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/07/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	3.7	U
91-57-6	2-Methylnaphthalene	3.7	U
208-96-8	Acenaphthylene	3.7	U
83-32-9	Acenaphthene	3.7	U
86-73-7	Fluorene	3.7	U
87-86-5	Pentachlorophenol	7.5	U
85-01-8	Phenanthrene	4.4	
120-12-7	Anthracene	3.7	U
206-44-0	Fluoranthene	3.3	J
129-00-0	Pyrene	5.0	
56-55-3	Benzo(a)anthracene	3.1	J
218-01-9	Chrysene	3.9	
205-99-2	Benzo(b)fluoranthene	3.7	
207-08-9	Benzo(k)fluoranthene	1.3	J
50-32-8	Benzo(a)pyrene	2.1	J
193-39-5	Indeno(1,2,3-cd)pyrene	1.4	J
53-70-3	Dibenzo(a,h)anthracene	3.7	U
191-24-2	Benzo(g,h,i)perylene	1.3	J

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003745.D
Acq On : 07 Dec 2018 00:40
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 07 04:32:49 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E74

Manual Integrations APPROVED
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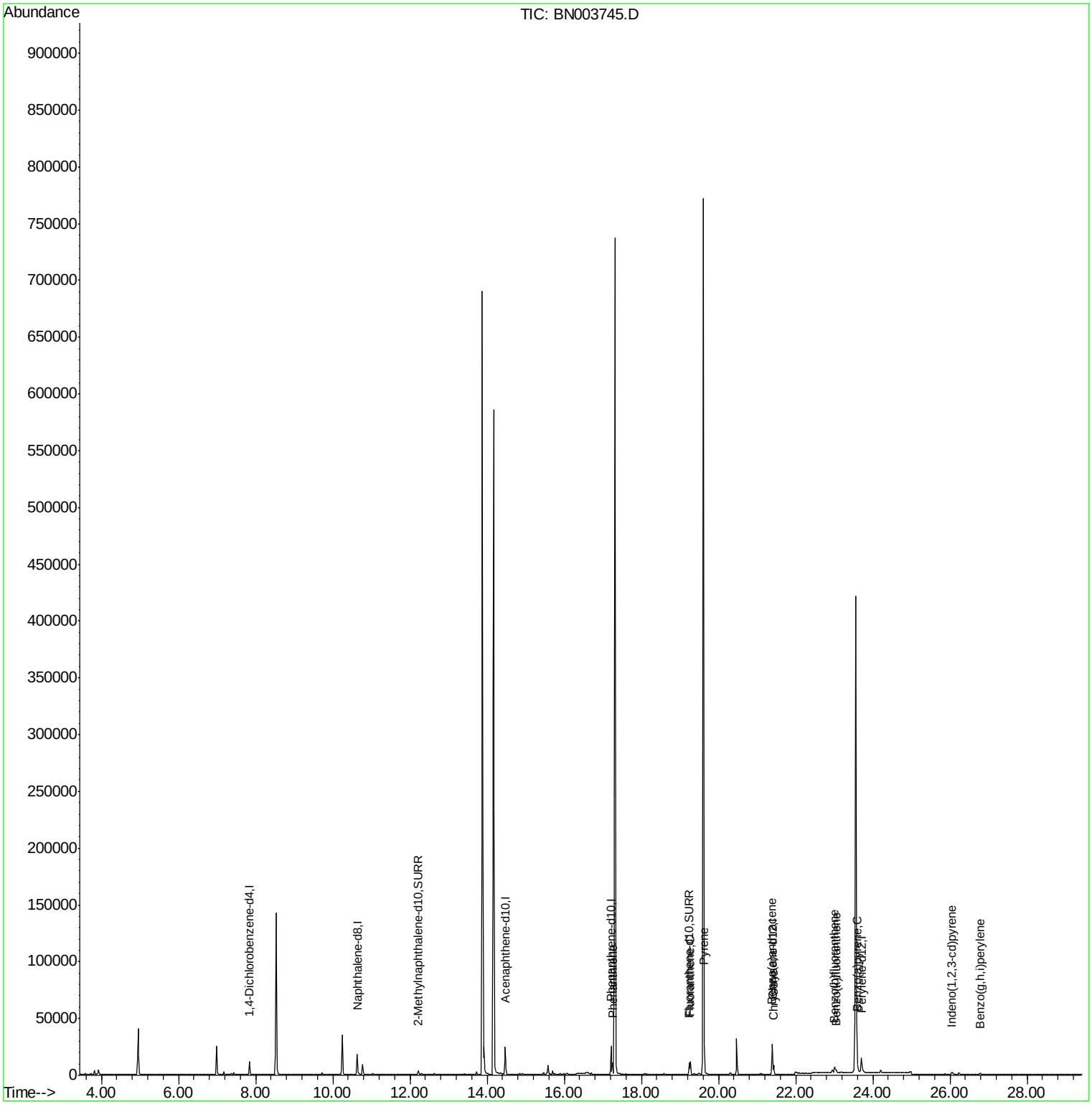
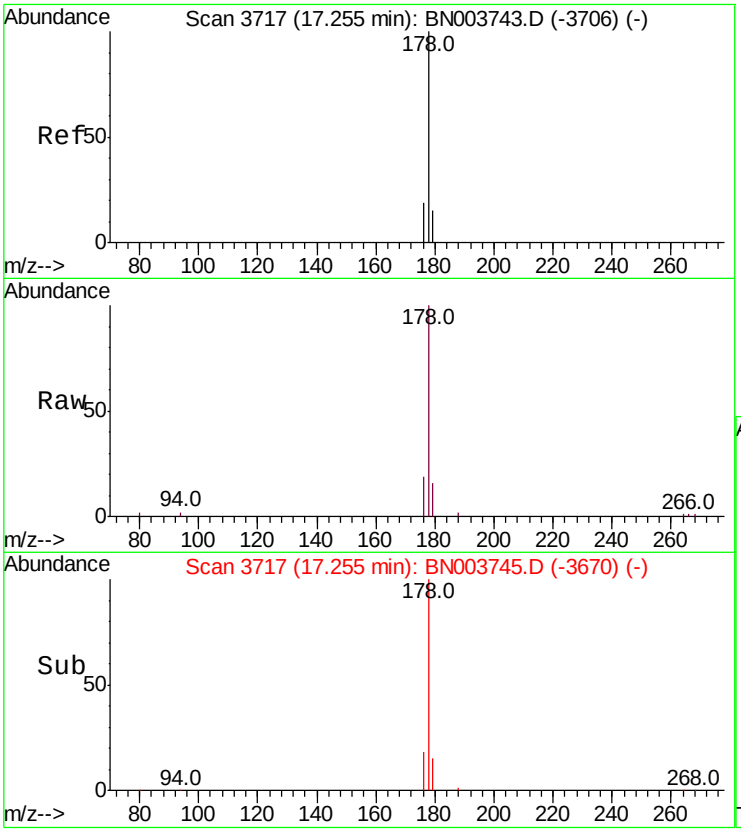
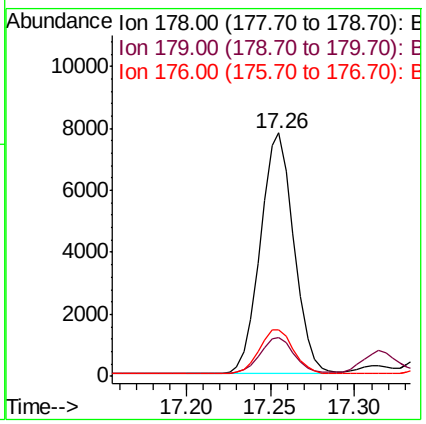




#12
Phenanthrene
Concen: 0.117 ng/ul
RT: 17.26 min Scan# 3717
Delta R.T. 0.00 min
Lab File: BN003745.D
Acq: 07 Dec 2018 00:40

Tgt Ion:178 Resp: 10762

Ion	Ratio	Lower	Upper
178	100		
179	16.1	12.5	18.7
176	19.3	15.0	22.4



Instrument :
BNA_N
ClientSampleId :
F9E74

Manual Integrations APPROVED
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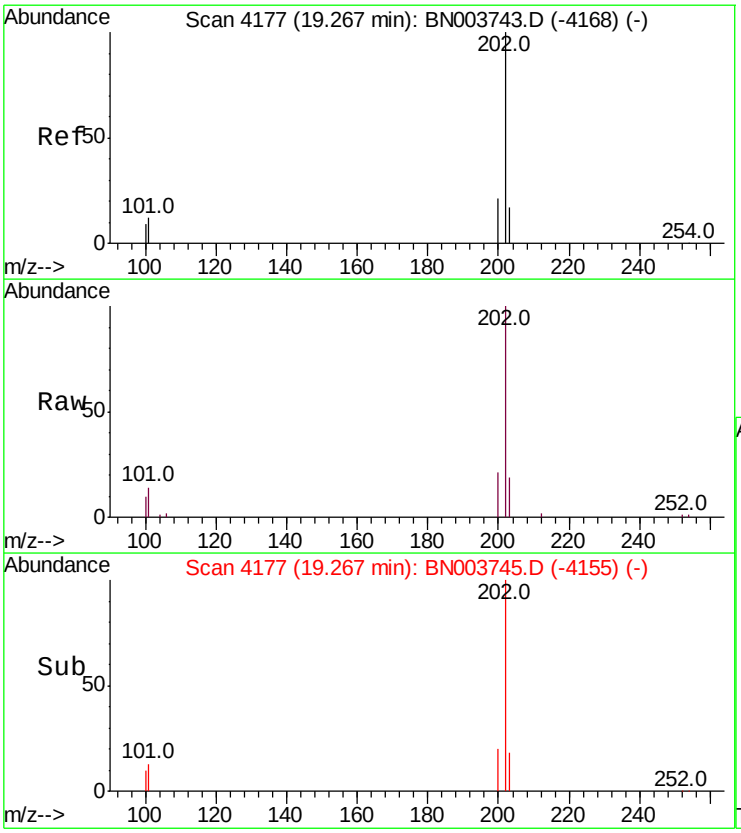
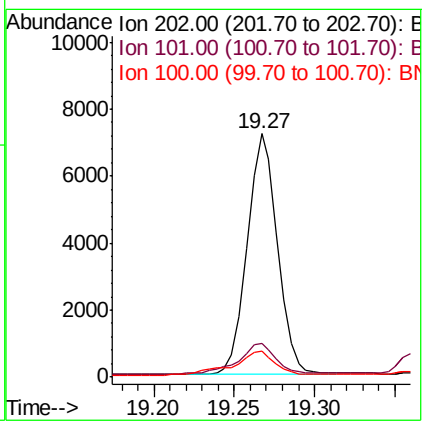
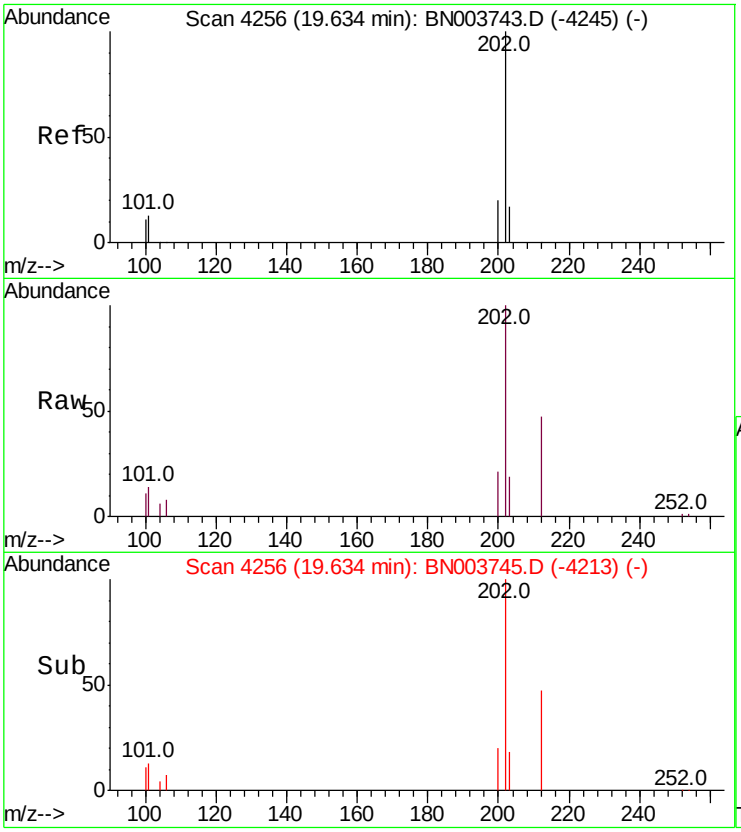


#15
Fluoranthene
Concen: 0.087 ng/ul
RT: 19.27 min Scan# 4177
Delta R.T. 0.00 min
Lab File: BN003745.D
Acq: 07 Dec 2018 00:40

Tgt Ion:202 Resp: 9469

Ion	Ratio	Lower	Upper
202	100		
101	13.8	0.0	30.7
100	10.5	0.0	28.1

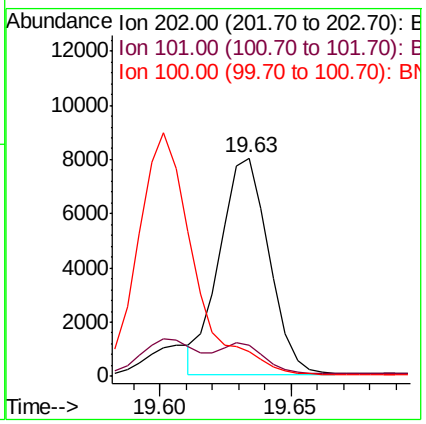




#17
Pyrene
Concen: 0.135 ng/ul m
RT: 19.63 min Scan# 4256
Delta R.T. 0.00 min
Lab File: BN003745.D
Acq: 07 Dec 2018 00:40

Tgt Ion:202 Resp: 10478

Ion	Ratio	Lower	Upper
202	100		
101	14.3	10.3	15.5
100	11.4	8.5	12.7



Instrument :
BNA_N
ClientSampleId :
F9E74

Manual Integrations APPROVED
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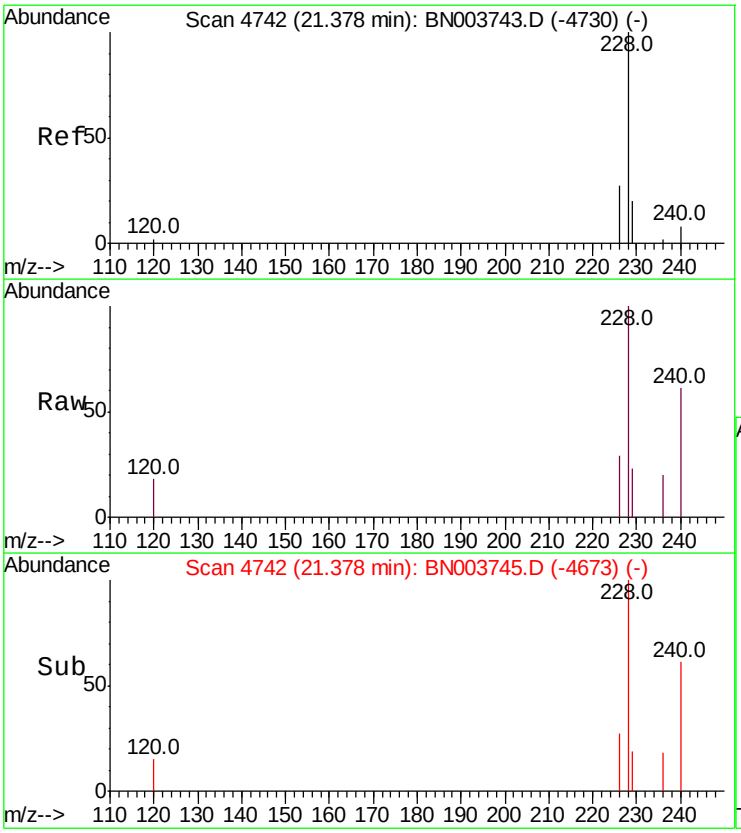
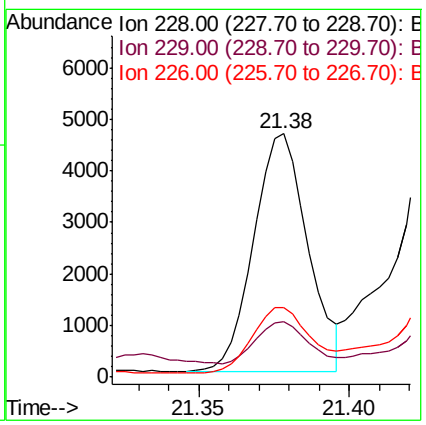
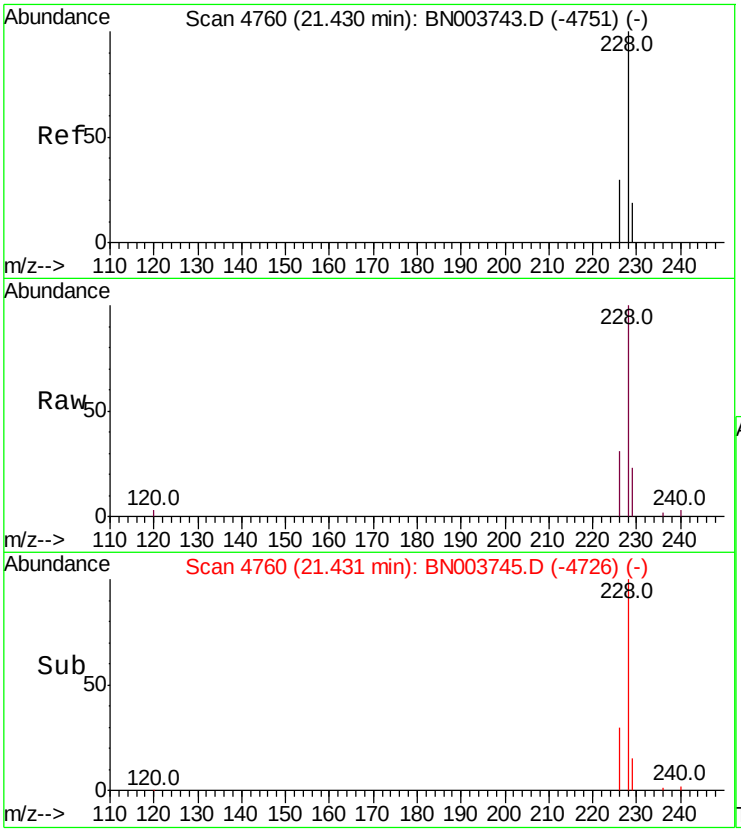


#18
Benzo(a)anthracene
Concen: 0.084 ng/ul
RT: 21.38 min Scan# 4742
Delta R.T. 0.00 min
Lab File: BN003745.D
Acq: 07 Dec 2018 00:40

Tgt Ion:228 Resp: 5765

Ion	Ratio	Lower	Upper
228	100		
229	22.8	15.6	23.4
226	28.5	21.1	31.7





#19
Chrysene
Concen: 0.105 ng/ul
RT: 21.43 min Scan# 4760
Delta R.T. 0.00 min
Lab File: BN003745.D
Acq: 07 Dec 2018 00:40

Tgt Ion:228 Resp: 8234

Ion	Ratio	Lower	Upper
228	100		
226	30.7	24.0	36.0
229	22.8	15.7	23.5

Instrument :
BNA_N
ClientSampleId :
F9E74

Manual Integrations APPROVED
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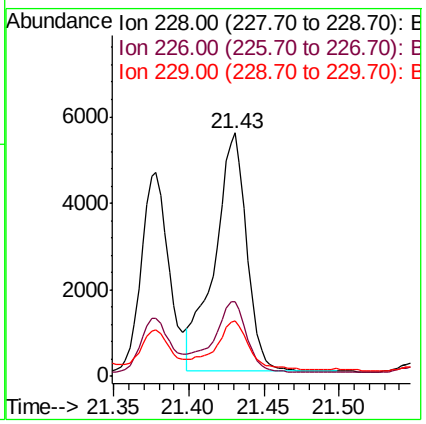
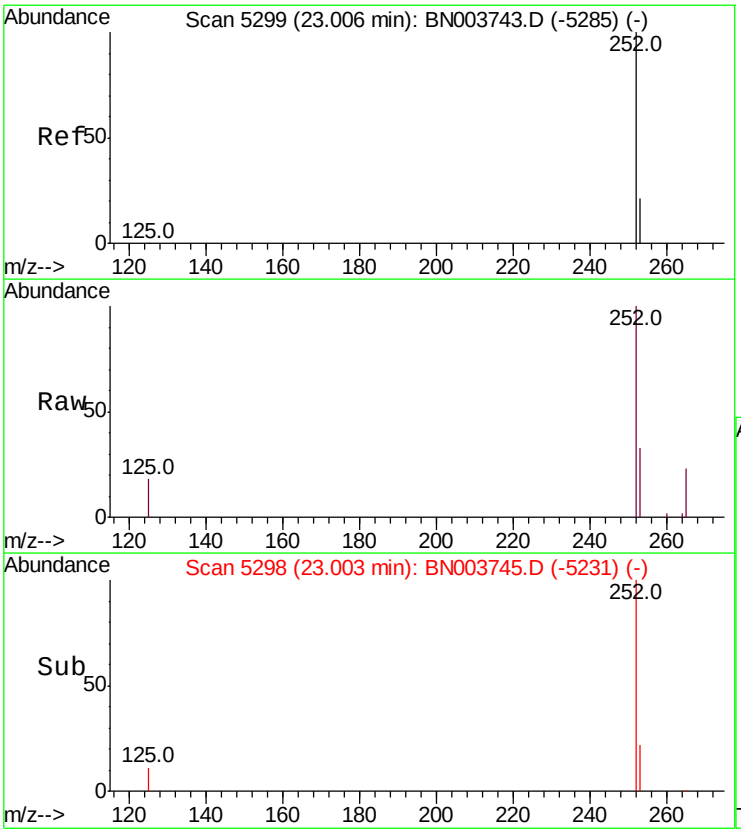
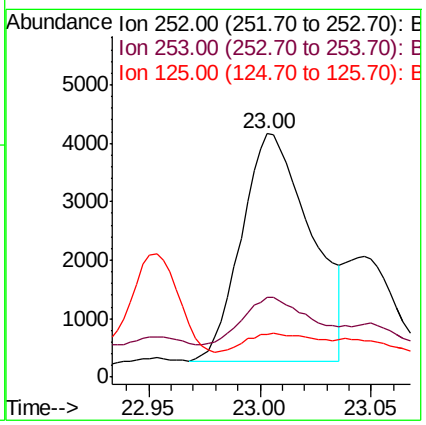


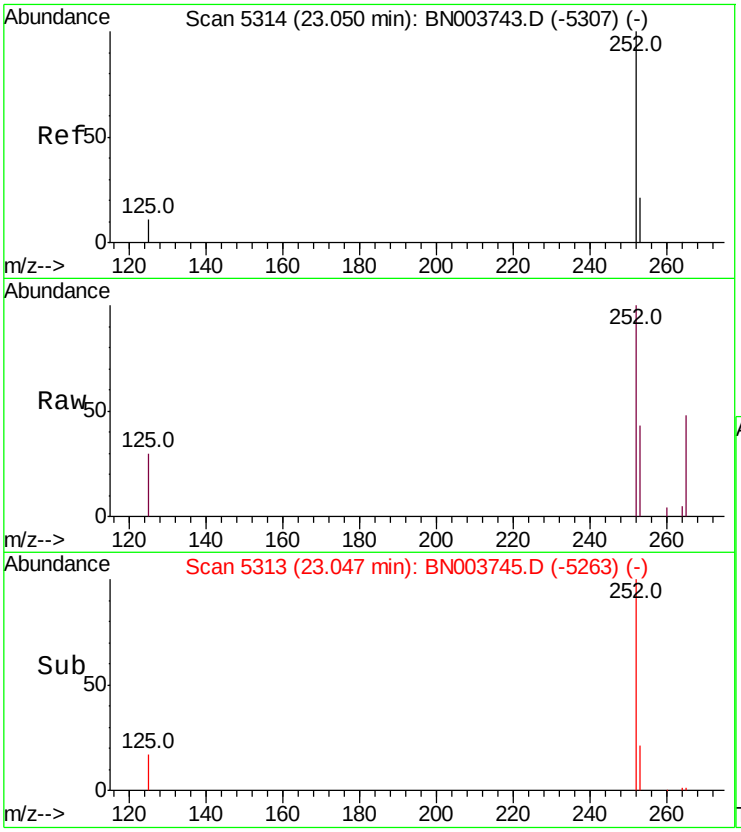


#21
Benzo(b)fluoranthene
Concen: 0.098 ng/ul m
RT: 23.00 min Scan# 5298
Delta R.T. -0.00 min
Lab File: BN003745.D
Acq: 07 Dec 2018 00:40

Tgt Ion:252 Resp: 8476

Ion	Ratio	Lower	Upper
252	100		
253	32.8	0.0	46.0
125	17.7	0.0	22.4

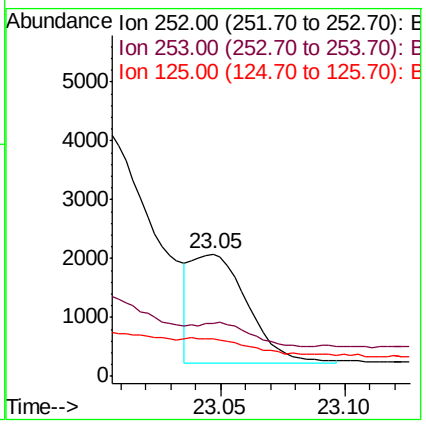




#22
Benzo(k)fluoranthene
Concen: 0.035 ng/ul m
RT: 23.05 min Scan# 5313
Delta R.T. -0.00 min
Lab File: BN003745.D
Acq: 07 Dec 2018 00:40

Tgt Ion:252 Resp: 2935

Ion	Ratio	Lower	Upper
252	100		
253	43.4	18.5	27.7#
125	30.4	9.0	13.6#



Instrument :
BNA_N
ClientSampleId :
F9E74

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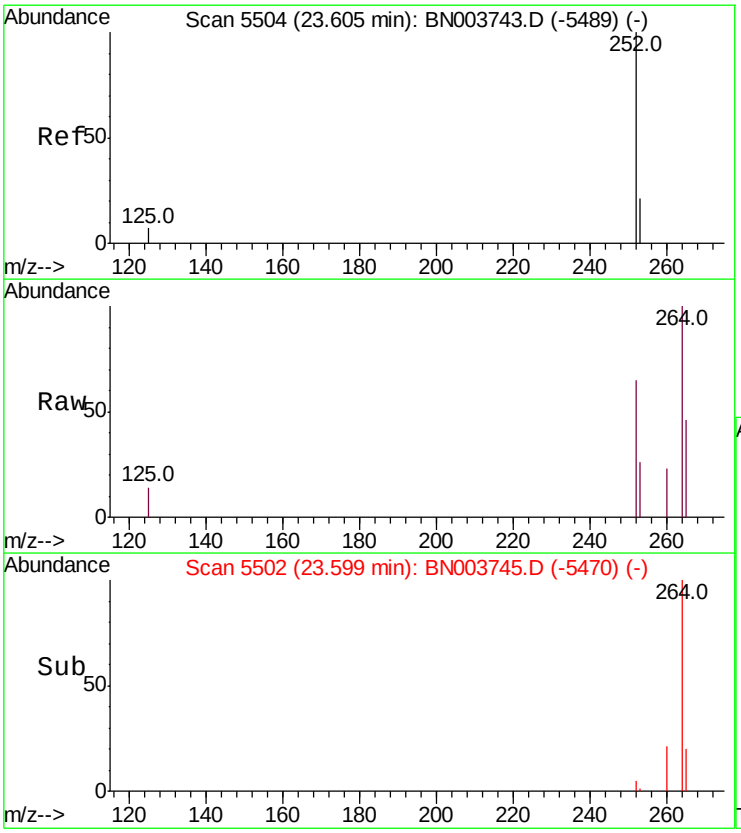
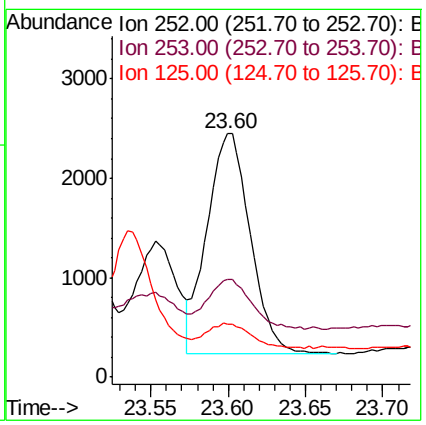
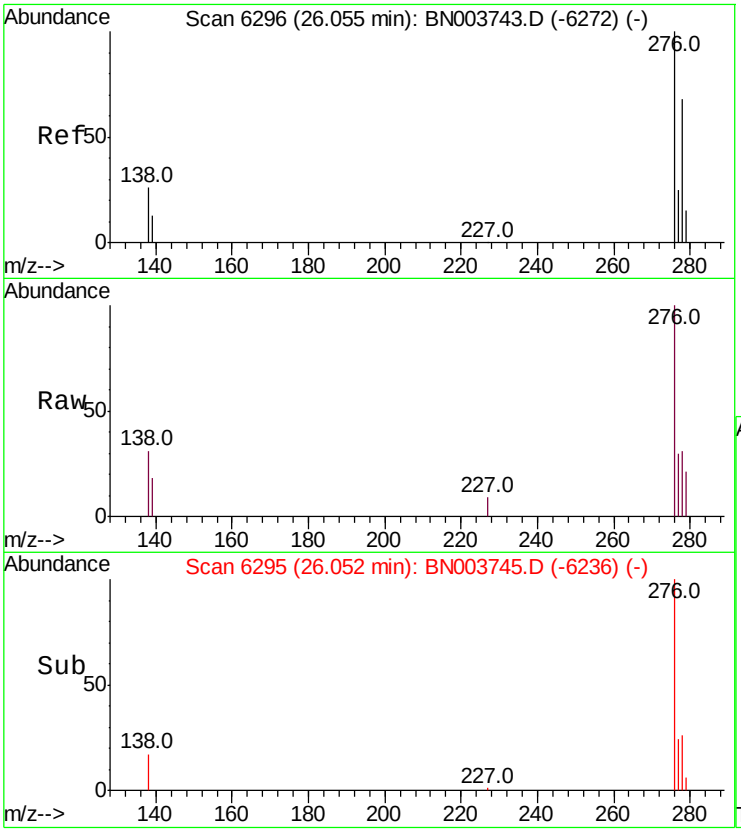


#23
Benzo(a)pyrene
Concen: 0.057 ng/ul
RT: 23.60 min Scan# 5502
Delta R.T. -0.01 min
Lab File: BN003745.D
Acq: 07 Dec 2018 00:40

Tgt Ion:252 Resp: 4297

Ion	Ratio	Lower	Upper
252	100		
253	40.2	19.0	28.4#
125	21.7	10.2	15.4#





#24
Indeno(1,2,3-cd)pyrene
Concen: 0.038 ng/ul
RT: 26.05 min Scan# 6295
Delta R.T. -0.00 min
Lab File: BN003745.D
Acq: 07 Dec 2018 00:40

Tgt Ion:276 Resp: 3226

Ion	Ratio	Lower	Upper
276	100		
138	24.6	20.3	30.5
227	0.0	0.2	0.2#

Instrument :
BNA_N
ClientSampleId :
F9E74

Manual Integrations APPROVED
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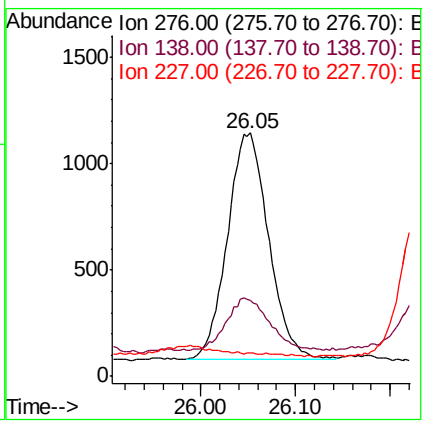
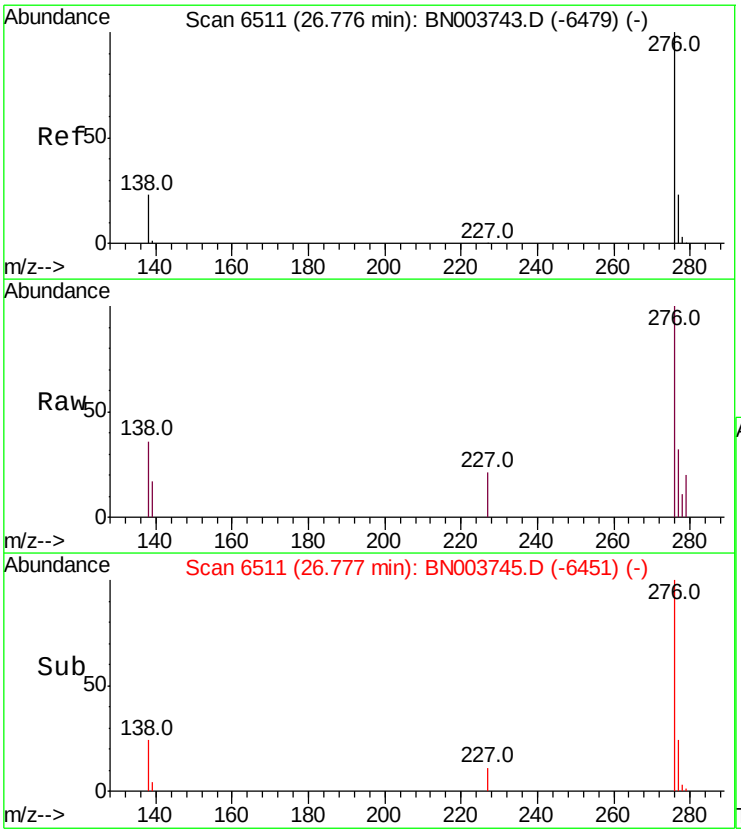
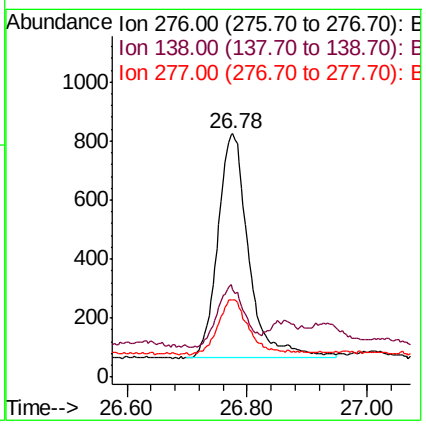




#26
Benzo(g,h,i)perylene
Concen: 0.036 ng/ul
RT: 26.78 min Scan# 6511
Delta R.T. 0.00 min
Lab File: BN003745.D
Acq: 07 Dec 2018 00:40

Tgt Ion:276 Resp: 2701

Ion	Ratio	Lower	Upper
276	100		
138	35.8	17.7	26.5#
277	31.8	19.3	28.9#



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003745.D
Acq On : 07 Dec 2018 00:40
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9E74

Manual Integrations APPROVED
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12/10/2018 12:20:40 PM

Quant Time: Dec 07 04:32:49 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5958	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	24426	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	13077	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	28060	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	21602	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	20863	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	5124	0.14	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	10408	0.13	ng/ul	0.00
Target Compounds						Qvalue
12) Phenanthrene	17.26	178	10762	0.117	ng/ul	99
15) Fluoranthene	19.27	202	9469	0.087	ng/ul	92
17) Pyrene	19.63	202	10478m	0.135	ng/ul	
18) Benzo(a)anthracene	21.38	228	5765	0.084	ng/ul	95
19) Chrysene	21.43	228	8234	0.105	ng/ul	96
21) Benzo(b)fluoranthene	23.00	252	8476m	0.098	ng/ul	
22) Benzo(k)fluoranthene	23.05	252	2935m	0.035	ng/ul	
23) Benzo(a)pyrene	23.60	252	4297	0.057	ng/ul#	70
24) Indeno(1,2,3-cd)pyrene	26.05	276	3226	0.038	ng/ul#	98
26) Benzo(g,h,i)perylene	26.78	276	2701	0.036	ng/ul#	78

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003745.D
Acq On : 07 Dec 2018 00:40
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 07 04:32:49 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E74

Manual Integrations APPROVED
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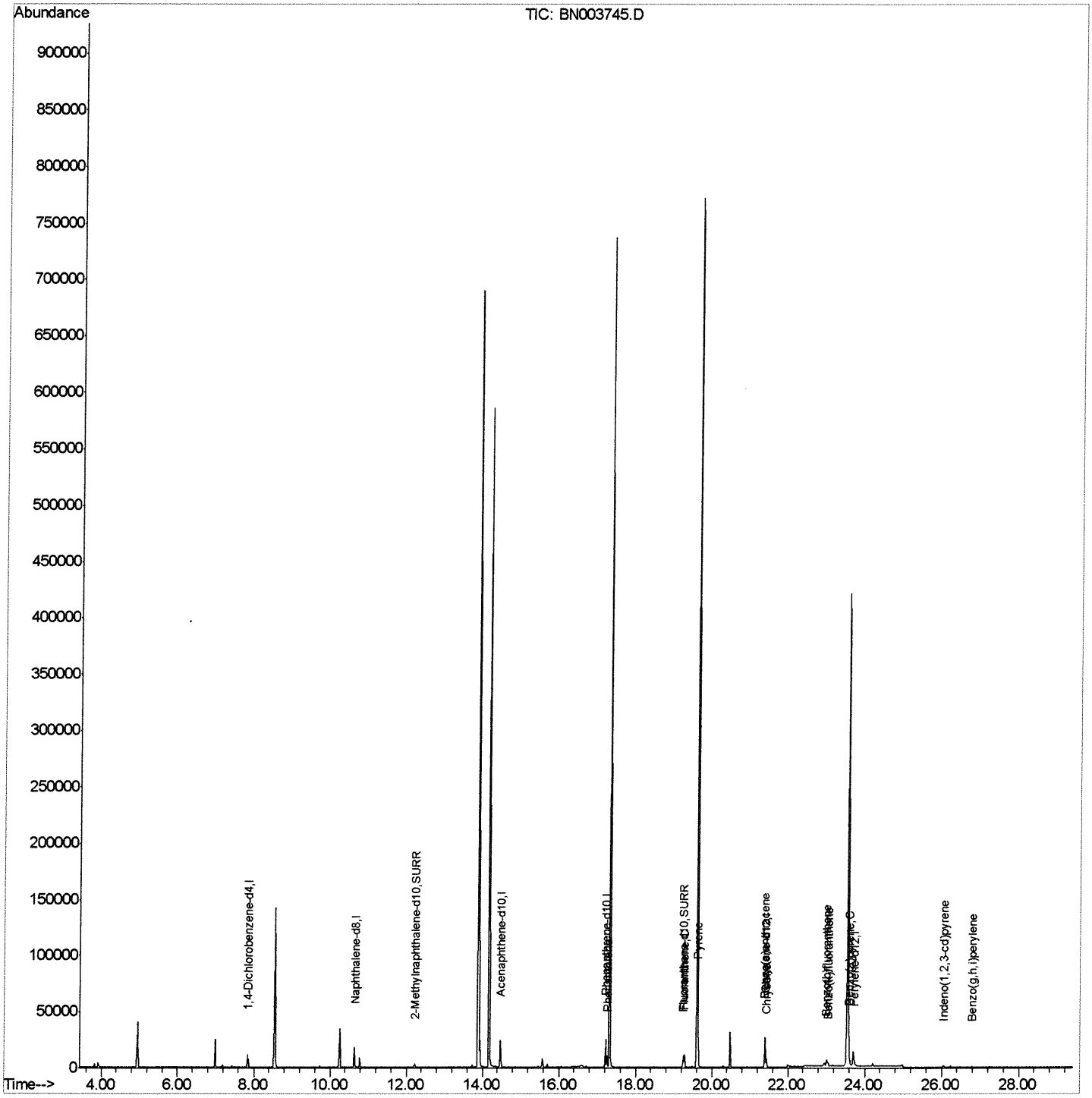

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003745.D
Acq On : 07 Dec 2018 00:40
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 07 04:12:28 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E74

Manual Integrations APPROVED
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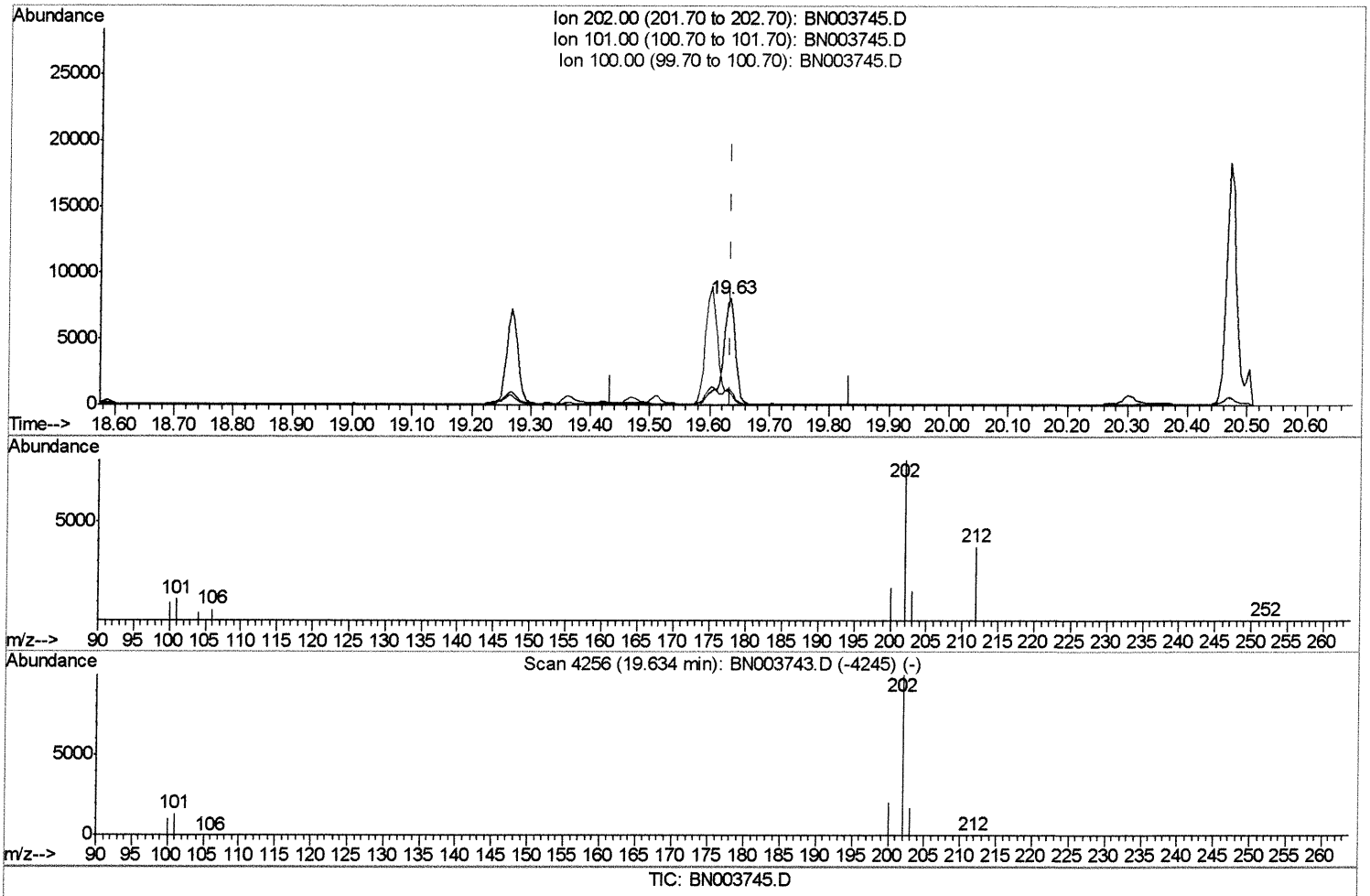
12/10/2018 12:20:40 PM



TIC: BN003745.D

(17) Pyrene

19.634min (+0.000) 0.15ng/ul

response 11754

Ion	Exp%	Act%
202.00	100	100
101.00	12.90	14.31
100.00	10.60	11.42
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003745.D
Acq On : 07 Dec 2018 00:40
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 07 04:12:28 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E74

Manual Integrations APPROVED
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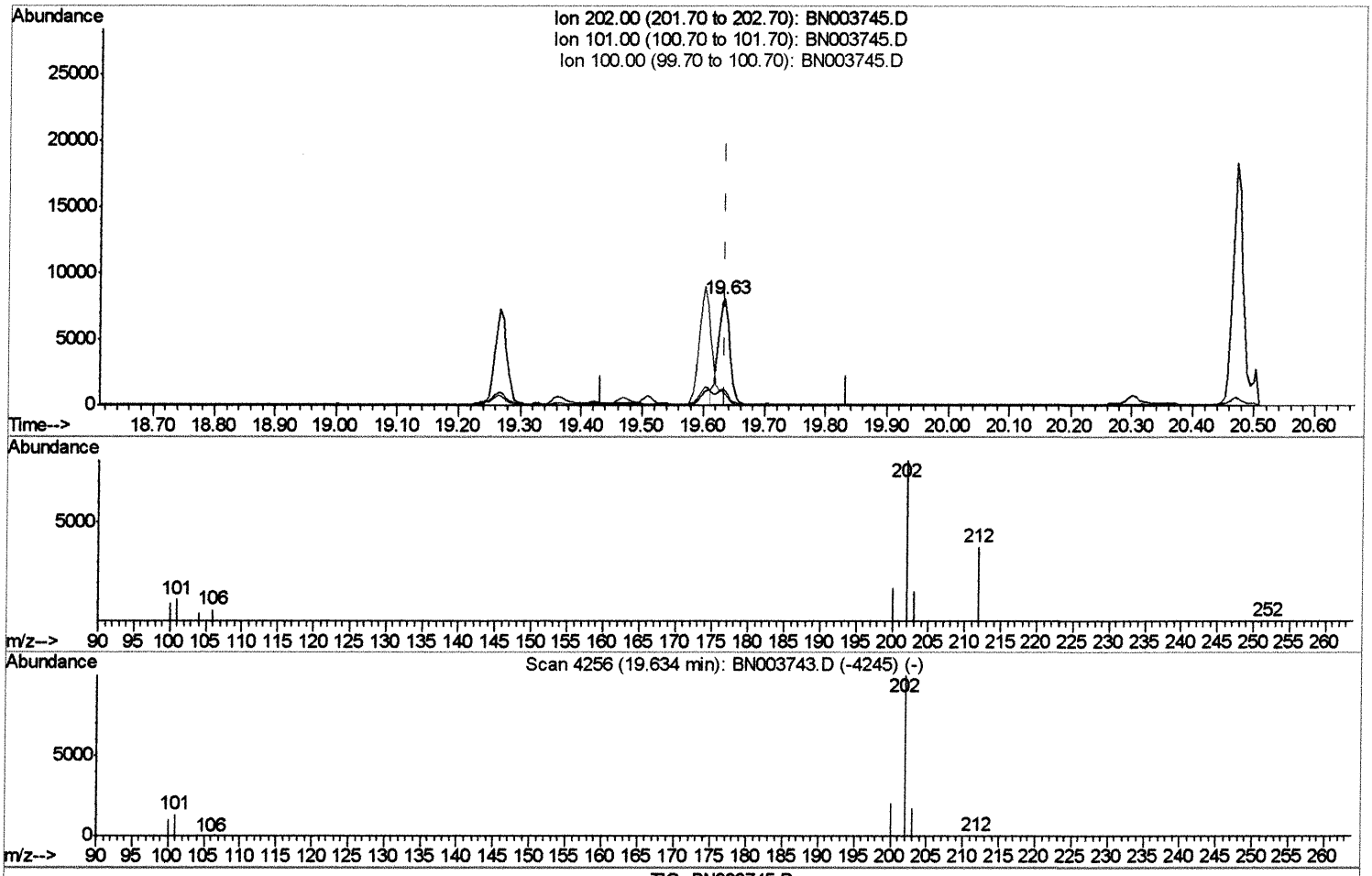
12/10/2018 12:20:40 PM



TIC: BN003745.D

(17) Pyrene

19.634min (+0.000) 0.14ng/ul m > SJ 12/11/18

response 10478

Ion	Exp%	Act%
202.00	100	100
101.00	12.90	14.31
100.00	10.60	11.42
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003745.D
Acq On : 07 Dec 2018 00:40
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 07 04:12:28 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E74

Manual Integrations APPROVED
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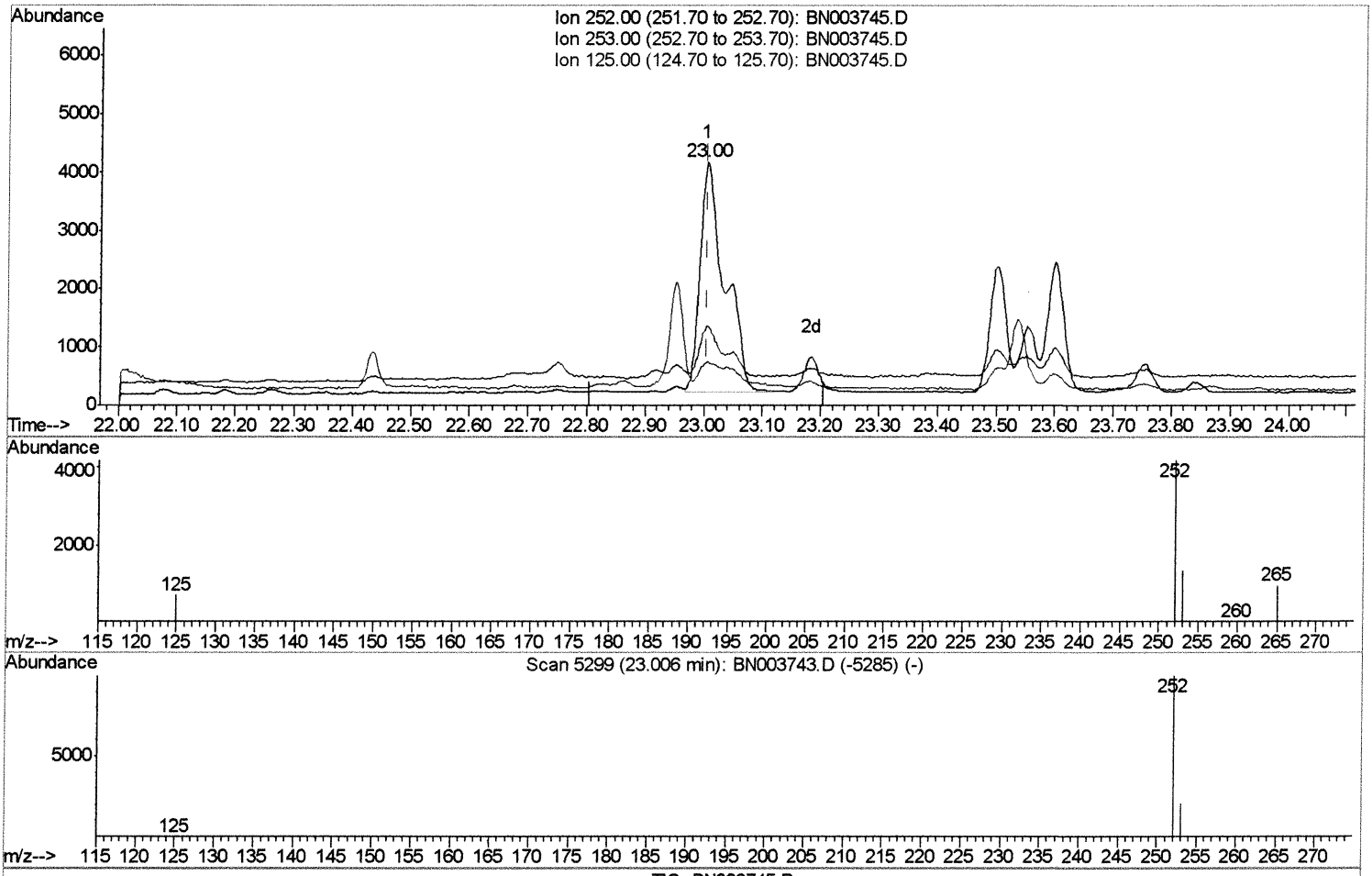

TIC: BN003745.D

(21) Benzo(b)fluoranthene

23.003min (-0.003) 0.13ng/ul

response 11467

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	32.77
125.00	11.20	17.71
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003745.D
Acq On : 07 Dec 2018 00:40
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 07 04:12:28 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E74

Manual Integrations APPROVED
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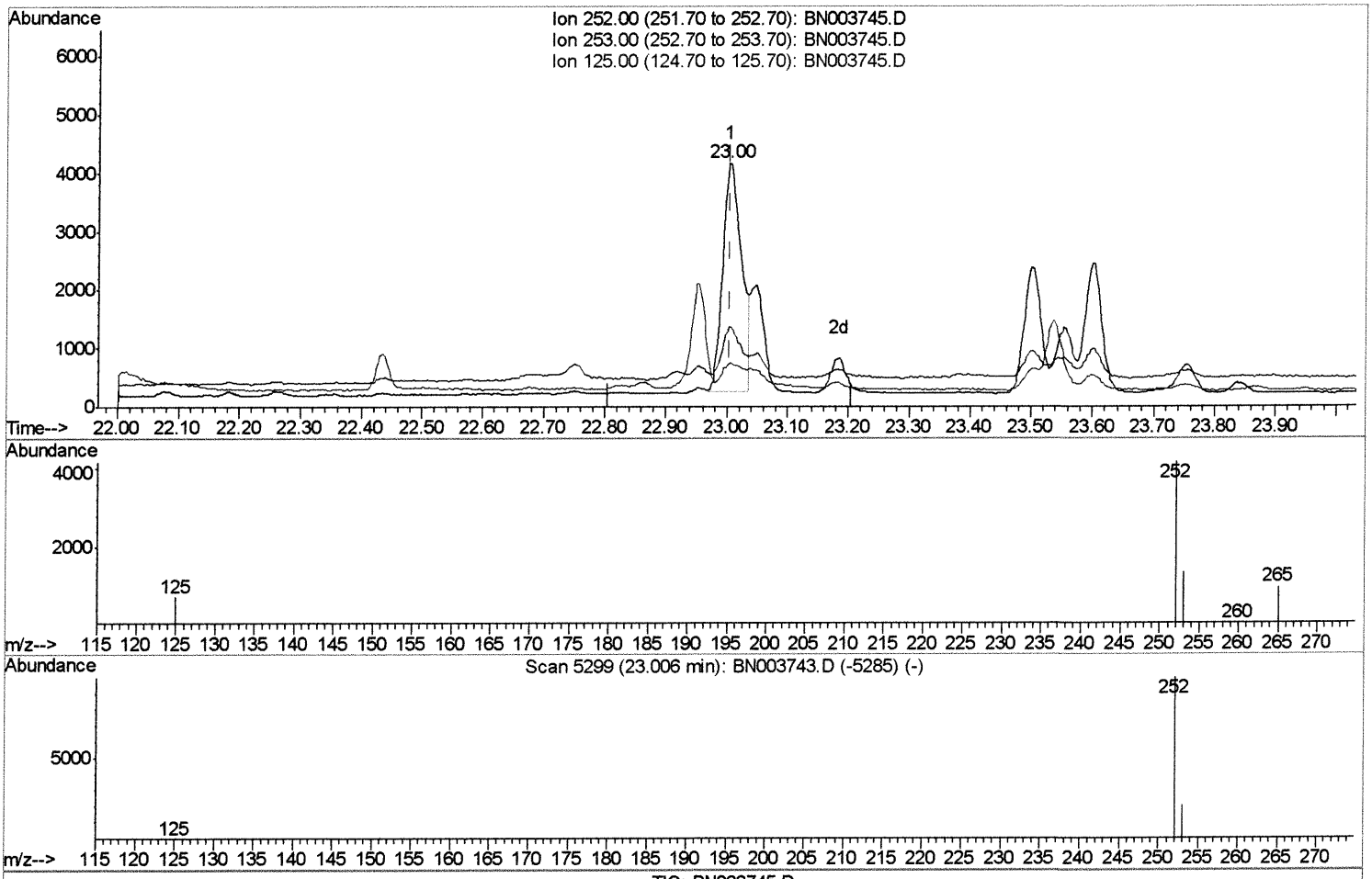


TIC: BN003745.D

(21) Benzo(b)fluoranthene

23.003min (-0.003) 0.10ng/ul m

response 8476

SJ 12/11/18

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	32.77
125.00	11.20	17.71
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

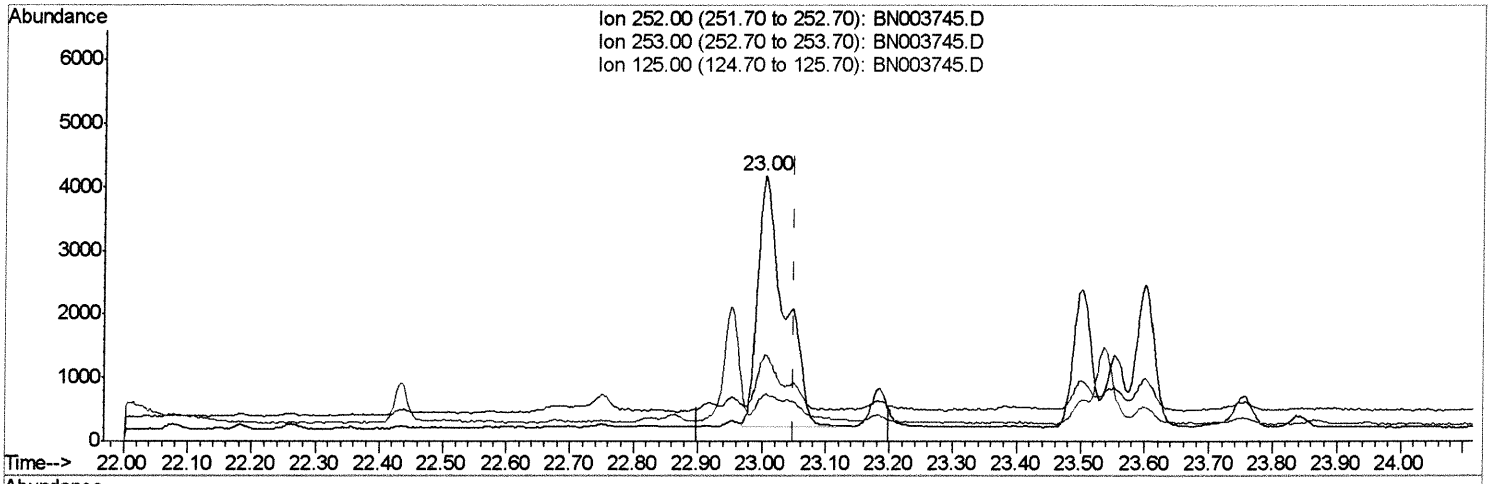
Quantitation Report (Qedit)

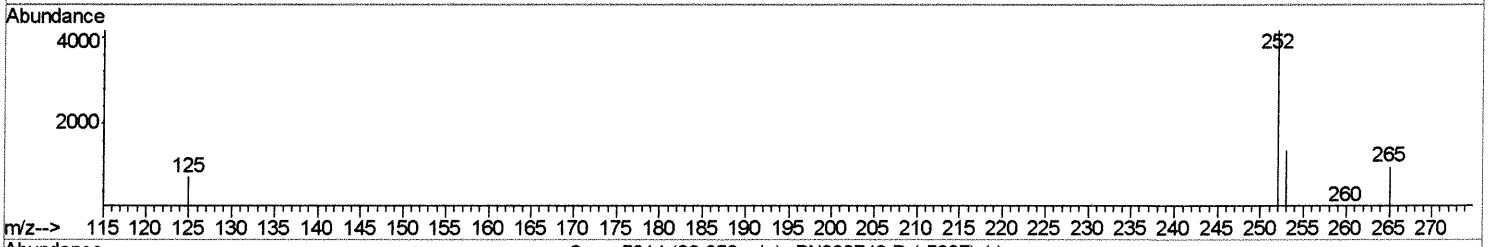
Data File : BN003745.D
Acq On : 07 Dec 2018 00:40
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 16 Sample Multiplier: 1

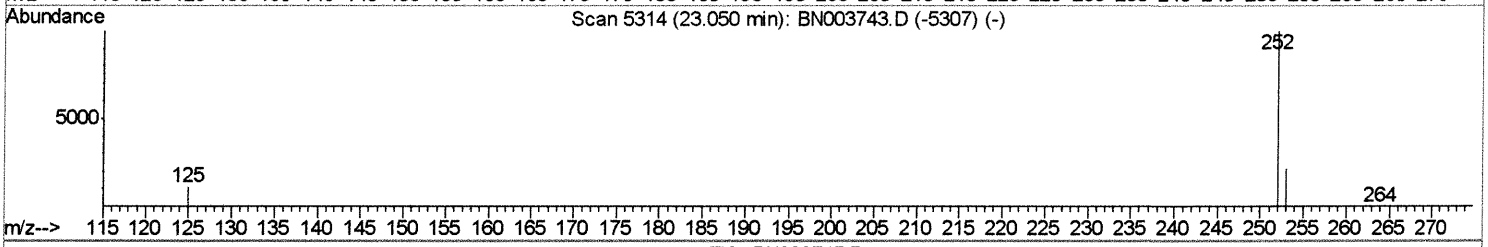
Quant Time: Dec 07 04:12:28 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E74

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:40 PM







TIC: BN003745.D

(22) Benzo(k)fluoranthene

23.003min (-0.047) 0.14ng/ul

response 11467

Ion	Exp%	Act%
252.00	100	100
253.00	23.10	32.77#
125.00	11.30	17.71#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

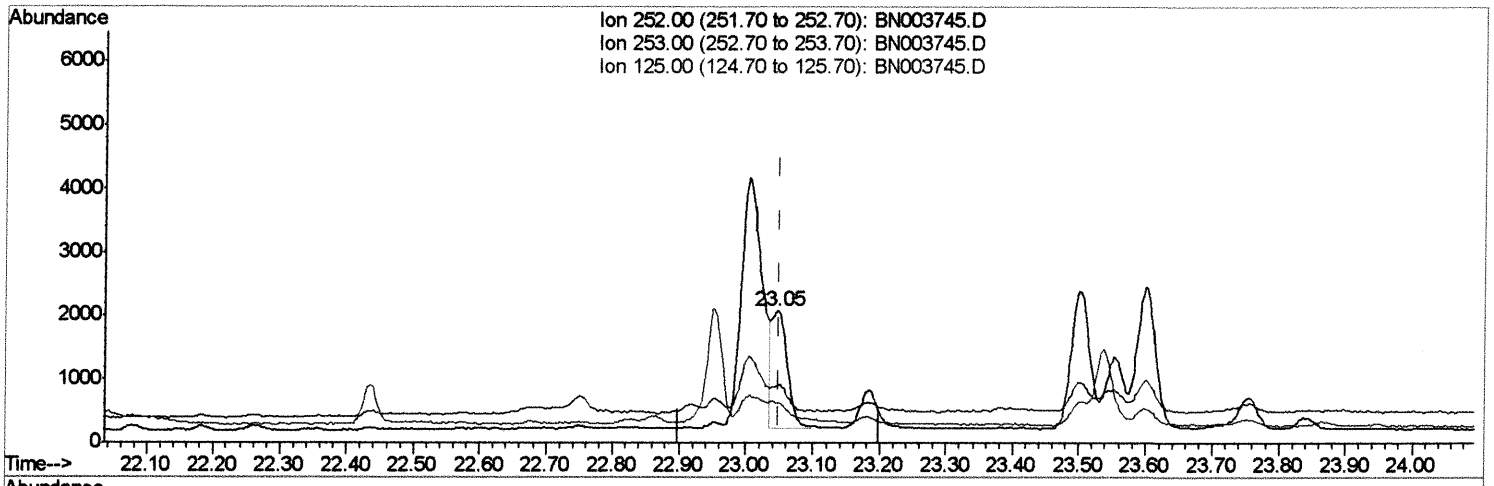
Quantitation Report (Qedit)

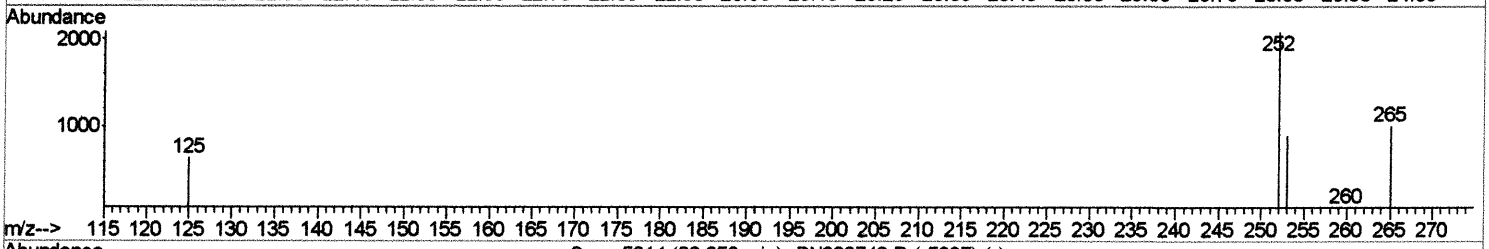
Data File : BN003745.D
Acq On : 07 Dec 2018 00:40
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 16 Sample Multiplier: 1

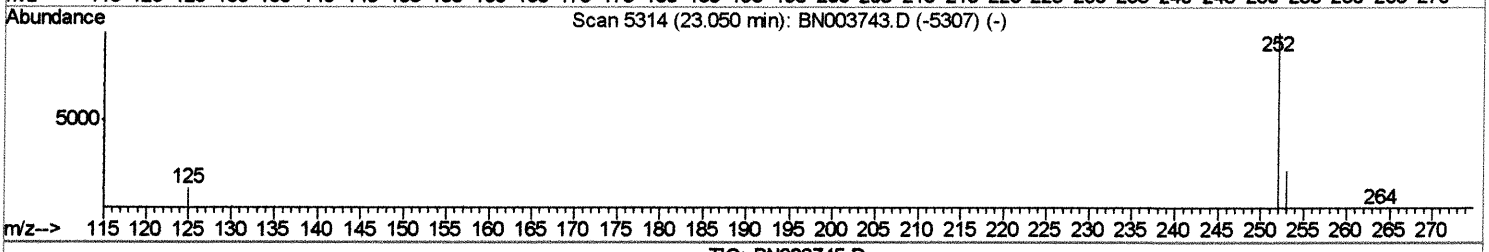
Quant Time: Dec 07 04:12:28 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E74

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:40 PM







TIC: BN003745.D

(22) Benzo(k)fluoranthene

23.047min (-0.003) 0.03ng/ul m > SJ 12/11/18

response 2935

Ion	Exp%	Act%
252.00	100	100
253.00	23.10	43.40#
125.00	11.30	30.39#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003745.D
Acq On : 07 Dec 2018 00:40
Operator : JU/SJ
Sample : J6227-05
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 07 04:32:49 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument : BNA_N
ClientSampleId : F9E74

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:40 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5958	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	24426	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	13077	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	28060	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	21602	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	20863	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	5124	0.14	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	10408	0.13	ng/ul	0.00
Target Compounds						Qvalue
12) Phenanthrene	17.26	178	10762	0.117	ng/ul	99
15) Fluoranthene	19.27	202	9469	0.087	ng/ul	92
17) Pyrene	19.63	202	10478m	0.135	ng/ul	
18) Benzo(a)anthracene	21.38	228	5765	0.084	ng/ul	95
19) Chrysene	21.43	228	8234	0.105	ng/ul	96
21) Benzo(b)fluoranthene	23.00	252	8476m	0.098	ng/ul	
22) Benzo(k)fluoranthene	23.05	252	2935m	0.035	ng/ul	
23) Benzo(a)pyrene	23.60	252	4297	0.057	ng/ul#	70
24) Indeno(1,2,3-cd)pyrene	26.05	276	3226	0.038	ng/ul#	98
26) Benzo(g,h,i)perylene	26.78	276	2701	0.036	ng/ul#	78

SJ 12/11/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E75

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-06
Sample wt/vol : 30.2 (g/mL): g
Lab File ID : BN003746.D
% Solids : 87.9
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/07/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	3.7	U
91-57-6	2-Methylnaphthalene	3.7	U
208-96-8	Acenaphthylene	3.7	U
83-32-9	Acenaphthene	3.7	U
86-73-7	Fluorene	3.7	U
87-86-5	Pentachlorophenol	7.6	U
85-01-8	Phenanthrene	0.94	J
120-12-7	Anthracene	3.7	U
206-44-0	Fluoranthene	0.94	J
129-00-0	Pyrene	1.4	J
56-55-3	Benzo(a)anthracene	0.83	J
218-01-9	Chrysene	1.1	J
205-99-2	Benzo(b)fluoranthene	1.3	J
207-08-9	Benzo(k)fluoranthene	3.7	U
50-32-8	Benzo(a)pyrene	3.7	U
193-39-5	Indeno(1,2,3-cd)pyrene	3.7	U
53-70-3	Dibenzo(a,h)anthracene	3.7	U
191-24-2	Benzo(g,h,i)perylene	3.7	U

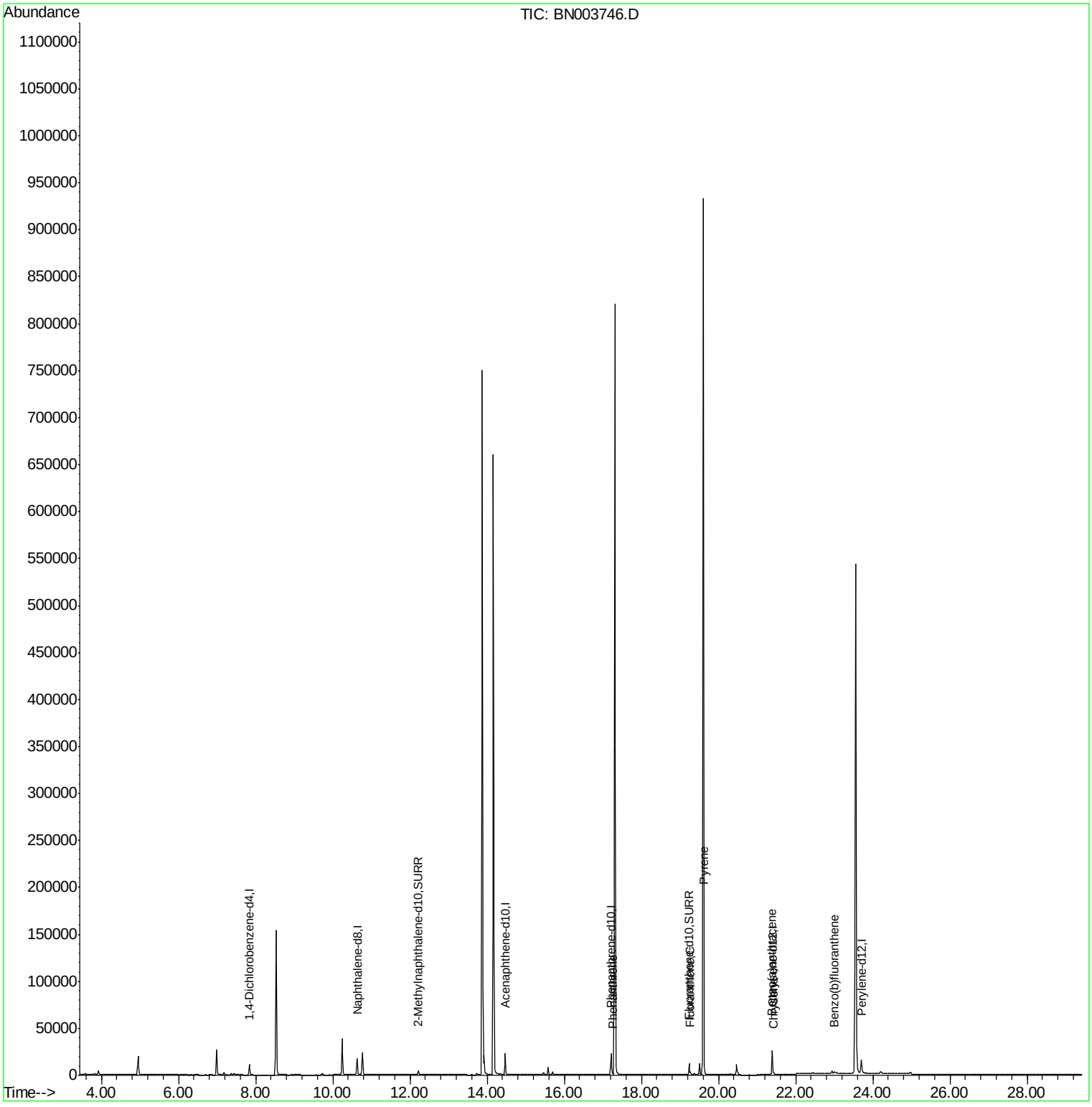
Quantitation Report (QT Reviewed)

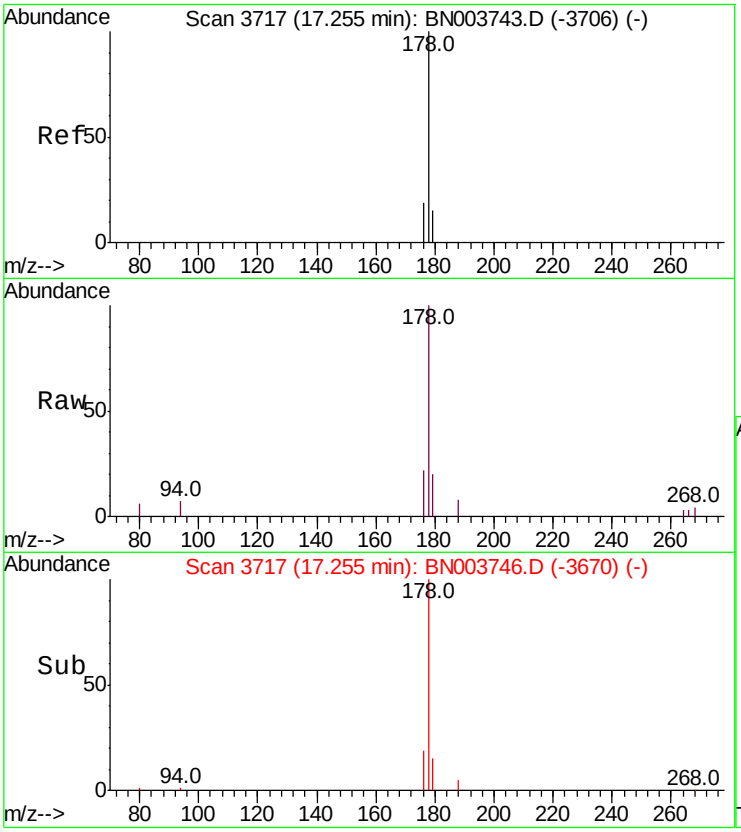
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 07 04:39:04 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM

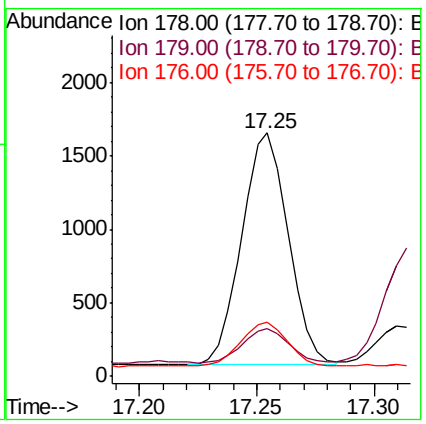




#12
Phenanthrene
Concen: 0.025 ng/ul m
RT: 17.25 min Scan# 3717
Delta R.T. -0.00 min
Lab File: BN003746.D
Acq: 07 Dec 2018 01:15

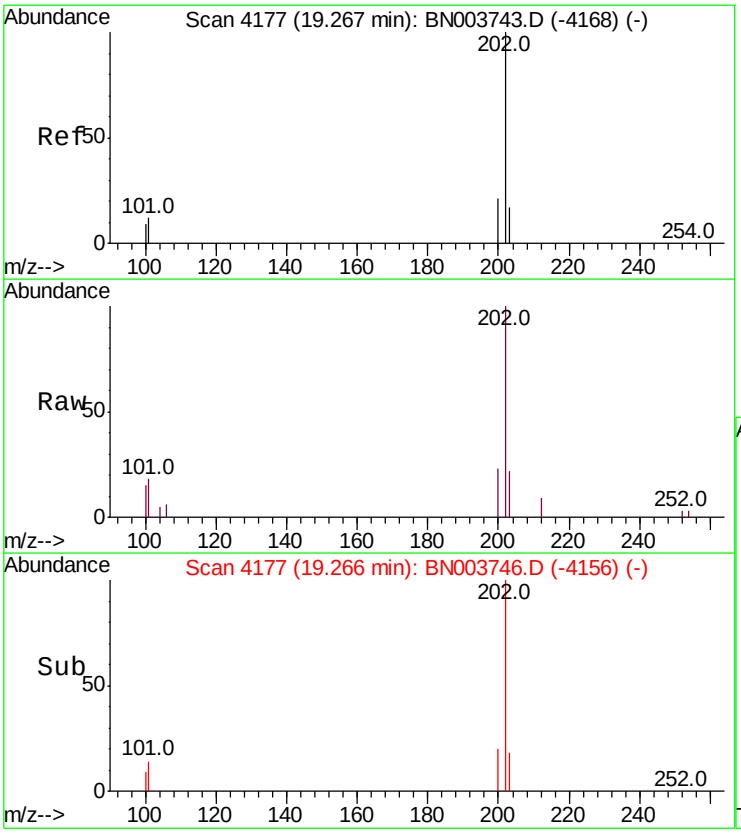
Tgt Ion:178 Resp: 2186

Ion	Ratio	Lower	Upper
178	100		
179	19.6	12.5	18.7#
176	22.4	15.0	22.4



Instrument :
BNA_N
ClientSampleId :
F9E75

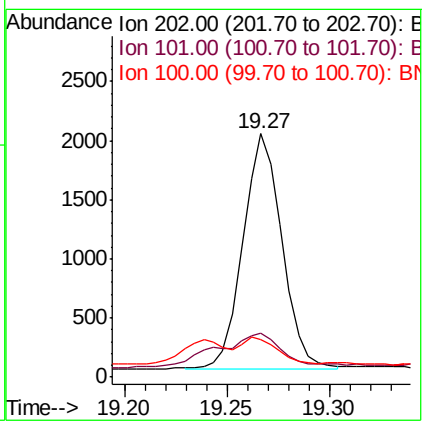
Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM

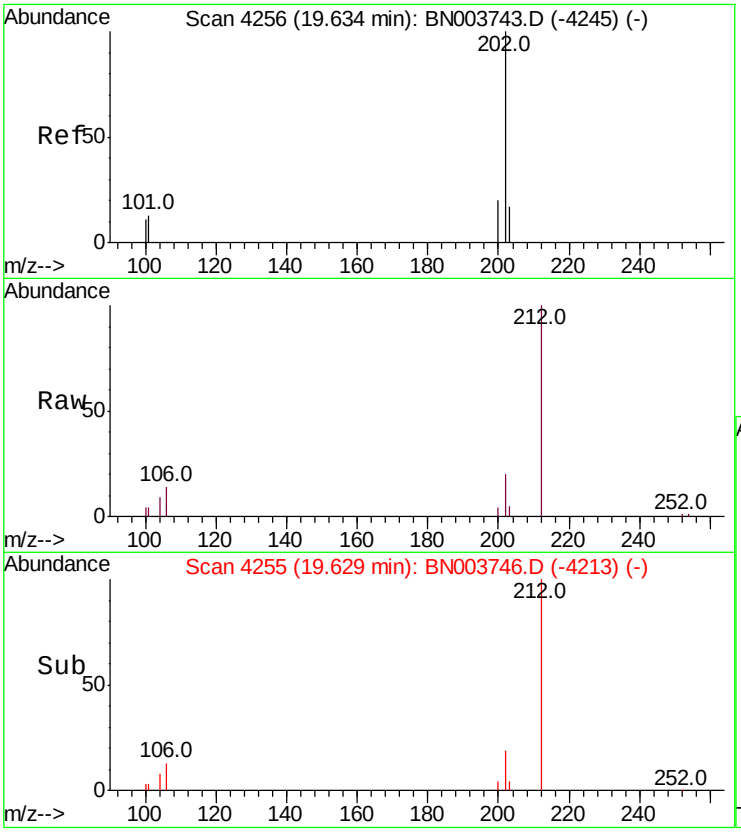


#15
Fluoranthene
Concen: 0.025 ng/ul m
RT: 19.27 min Scan# 4177
Delta R.T. -0.00 min
Lab File: BN003746.D
Acq: 07 Dec 2018 01:15

Tgt Ion:202 Resp: 2622

Ion	Ratio	Lower	Upper
202	100		
101	18.2	0.0	30.7
100	15.5	0.0	28.1





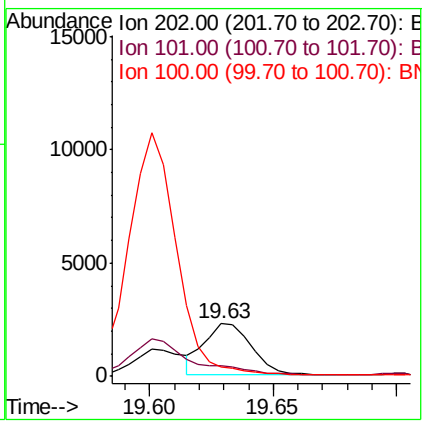
#17
Pyrene
Concen: 0.037 ng/ul
RT: 19.63 min Scan# 4255
Delta R.T. -0.00 min
Lab File: BN003746.D
Acq: 07 Dec 2018 01:15

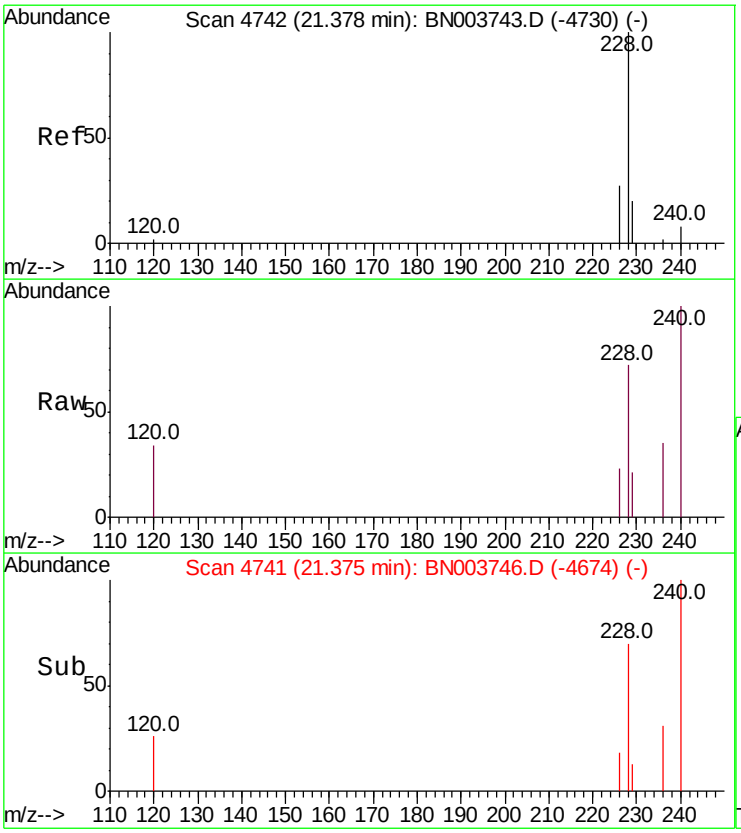
Tgt Ion:202 Resp: 2955

Ion	Ratio	Lower	Upper
202	100		
101	19.6	10.3	15.5#
100	18.7	8.5	12.7#

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM

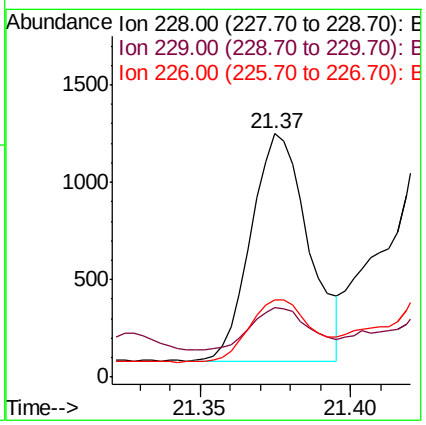


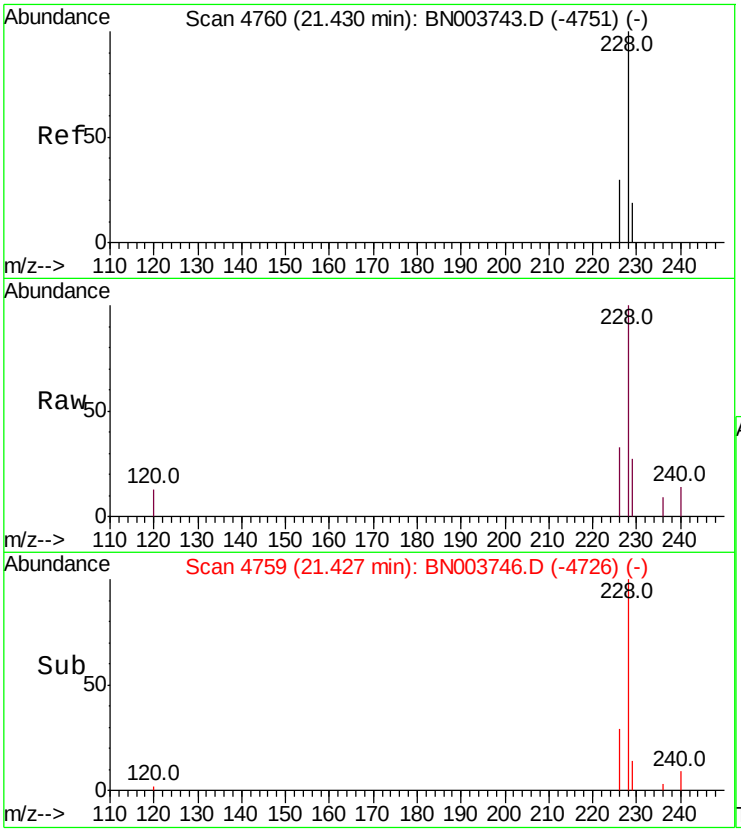


#18
Benzo(a)anthracene
Concen: 0.022 ng/ul
RT: 21.37 min Scan# 4741
Delta R.T. -0.00 min
Lab File: BN003746.D
Acq: 07 Dec 2018 01:15

Tgt Ion:228 Resp: 1552

Ion	Ratio	Lower	Upper
228	100		
229	28.6	15.6	23.4#
226	31.8	21.1	31.7#





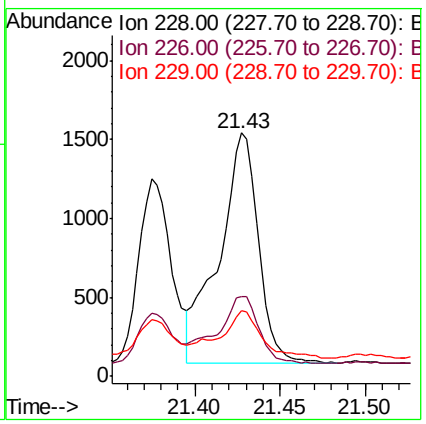
#19
Chrysene
Concen: 0.029 ng/ul
RT: 21.43 min Scan# 4759
Delta R.T. -0.00 min
Lab File: BN003746.D
Acq: 07 Dec 2018 01:15

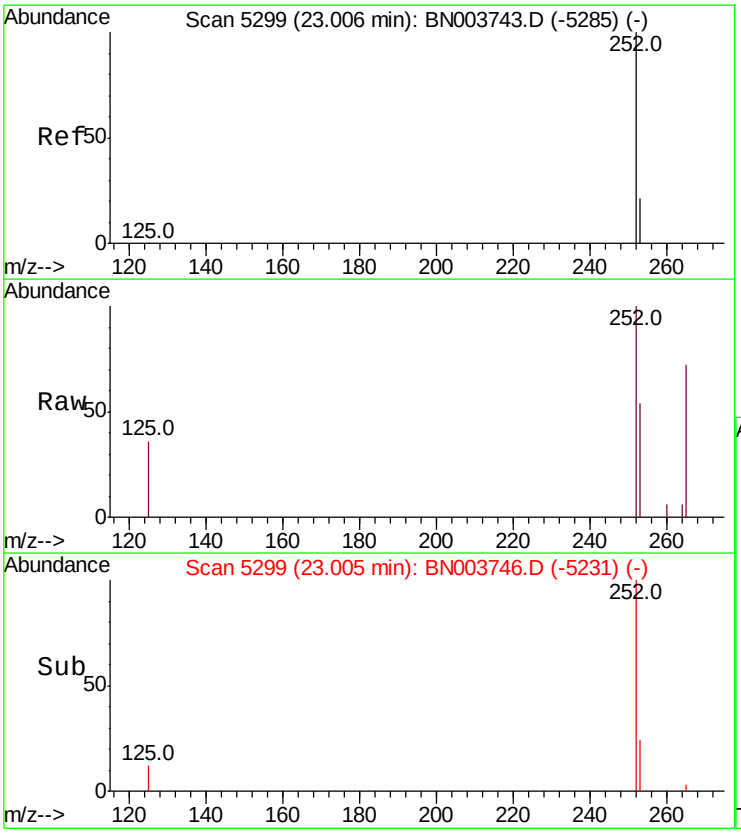
Tgt Ion:228 Resp: 2322

Ion	Ratio	Lower	Upper
228	100		
226	32.9	24.0	36.0
229	27.0	15.7	23.5#

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM

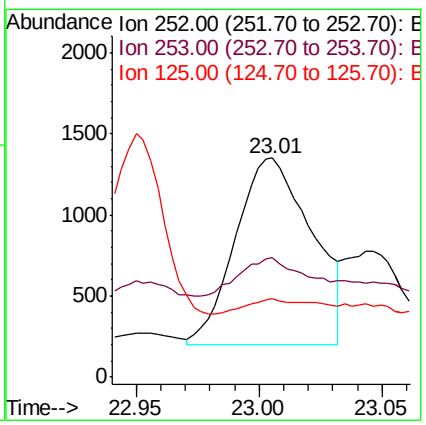




#21
Benzo(b)fluoranthene
Concen: 0.034 ng/ul m
RT: 23.01 min Scan# 5299
Delta R.T. -0.00 min
Lab File: BN003746.D
Acq: 07 Dec 2018 01:15

Tgt Ion:252 Resp: 2488

Ion	Ratio	Lower	Upper
252	100		
253	54.4	0.0	46.0#
125	35.9	0.0	22.4#



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM

Quant Time: Dec 07 04:39:04 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5576	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	23102	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12525	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	27078m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	22361m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	17516m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	5518	0.16	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	11763m	0.15	ng/ul	0.00
Target Compounds						Qvalue
12) Phenanthrene	17.25	178	2186m	0.025	ng/ul	
15) Fluoranthene	19.27	202	2622m	0.025	ng/ul	
17) Pyrene	19.63	202	2955	0.037	ng/ul#	81
18) Benzo(a)anthracene	21.37	228	1552	0.022	ng/ul#	85
19) Chrysene	21.43	228	2322	0.029	ng/ul#	90
21) Benzo(b)fluoranthene	23.01	252	2488m	0.034	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

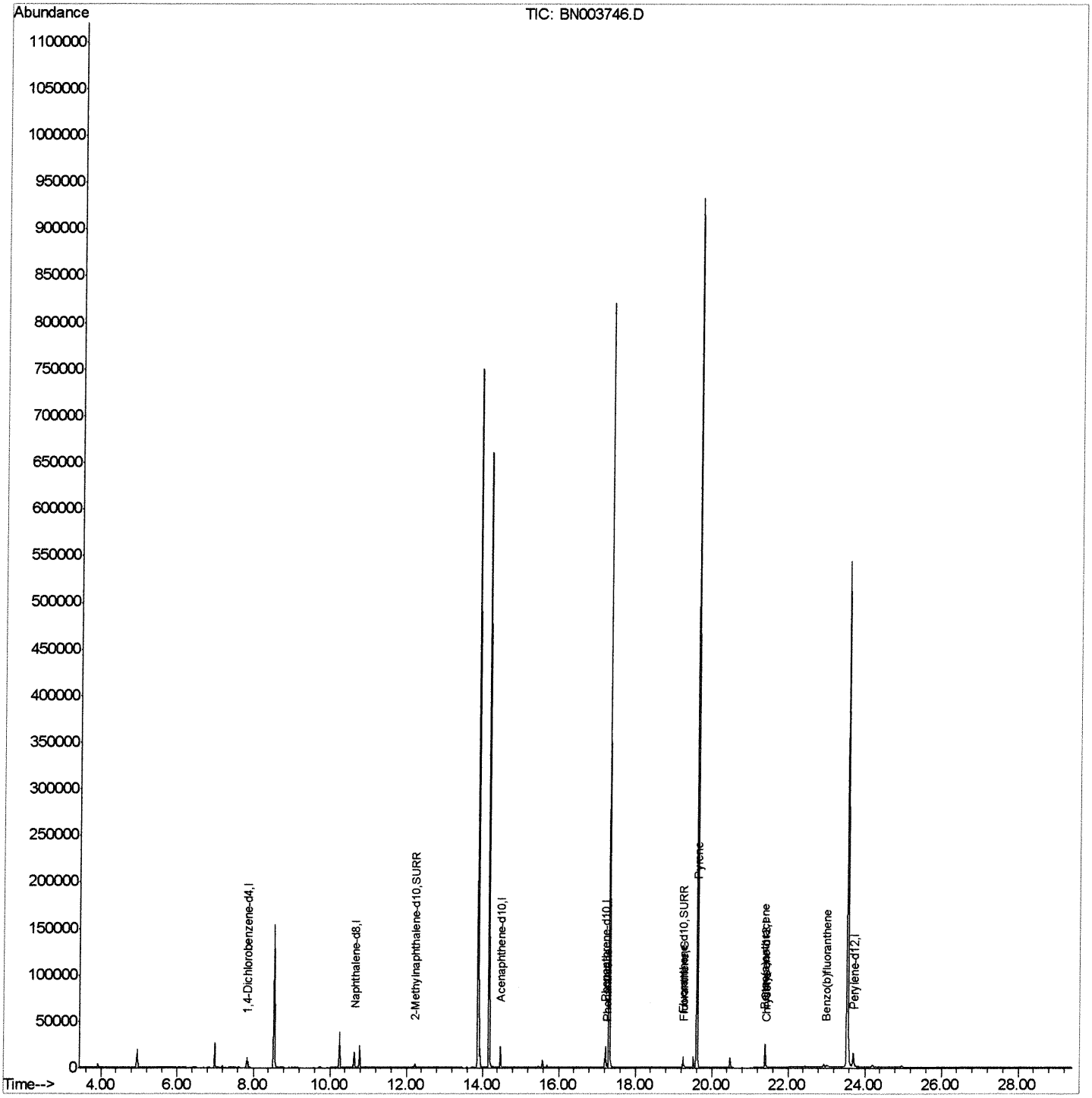
Quantitation Report (QT Reviewed)

Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 07 04:39:04 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

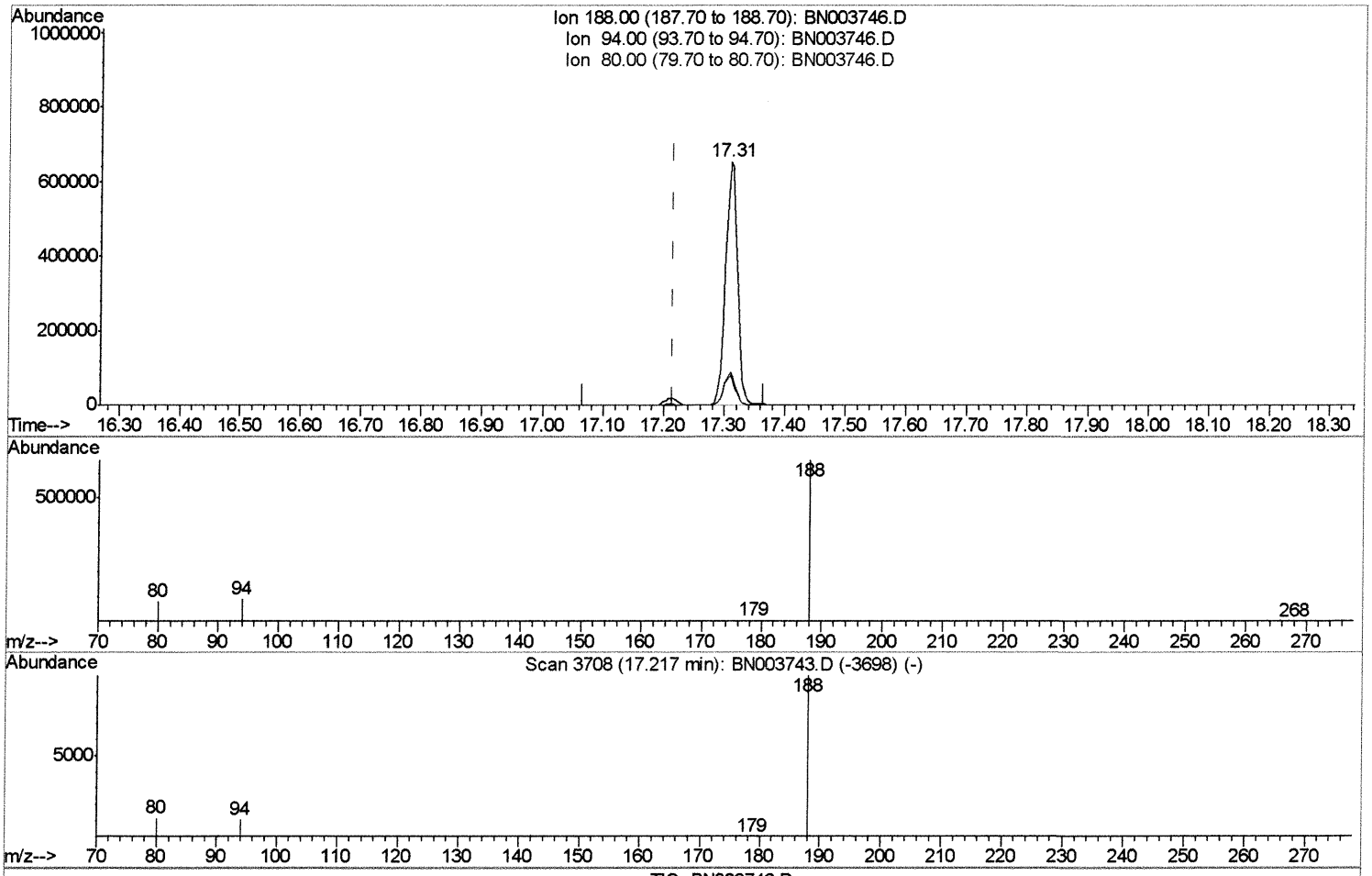
Quantitation Report (Qedit)

Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 07 04:12:35 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM



TIC: BN003746.D

(10) Phenanthrene-d10 (I)

17.309min (+0.093) 0.40ng/ul

response 914872

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	13.45#
80.00	11.60	12.13
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

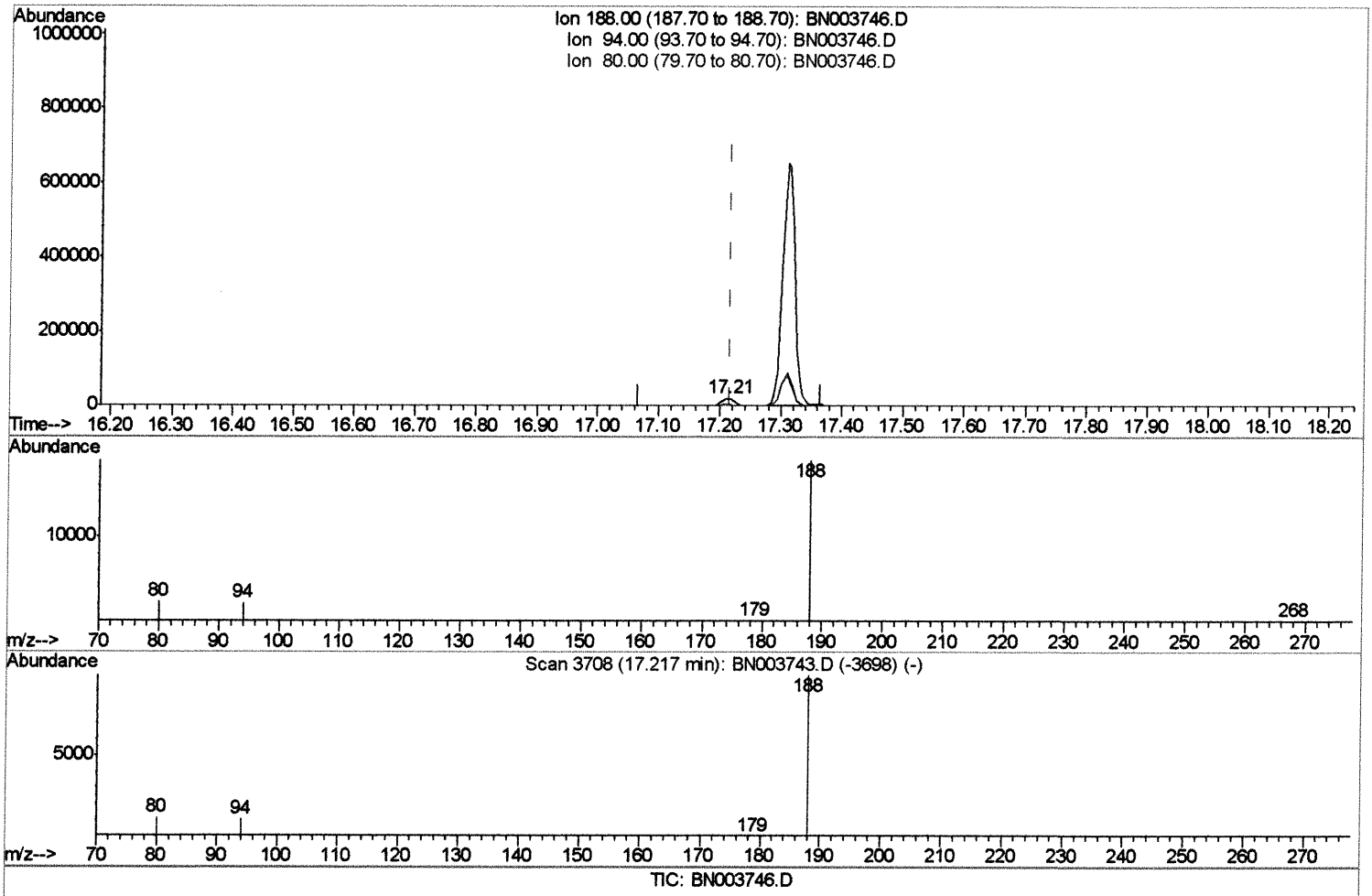
Quantitation Report (Qedit)

Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 07 04:12:35 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM



TIC: BN003746.D

(10) Phenanthrene-d10 (I)

17.212min (-0.005) 0.40ng/ul m

response 27078

SJ 12/11/18

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	11.34
80.00	11.60	12.23
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

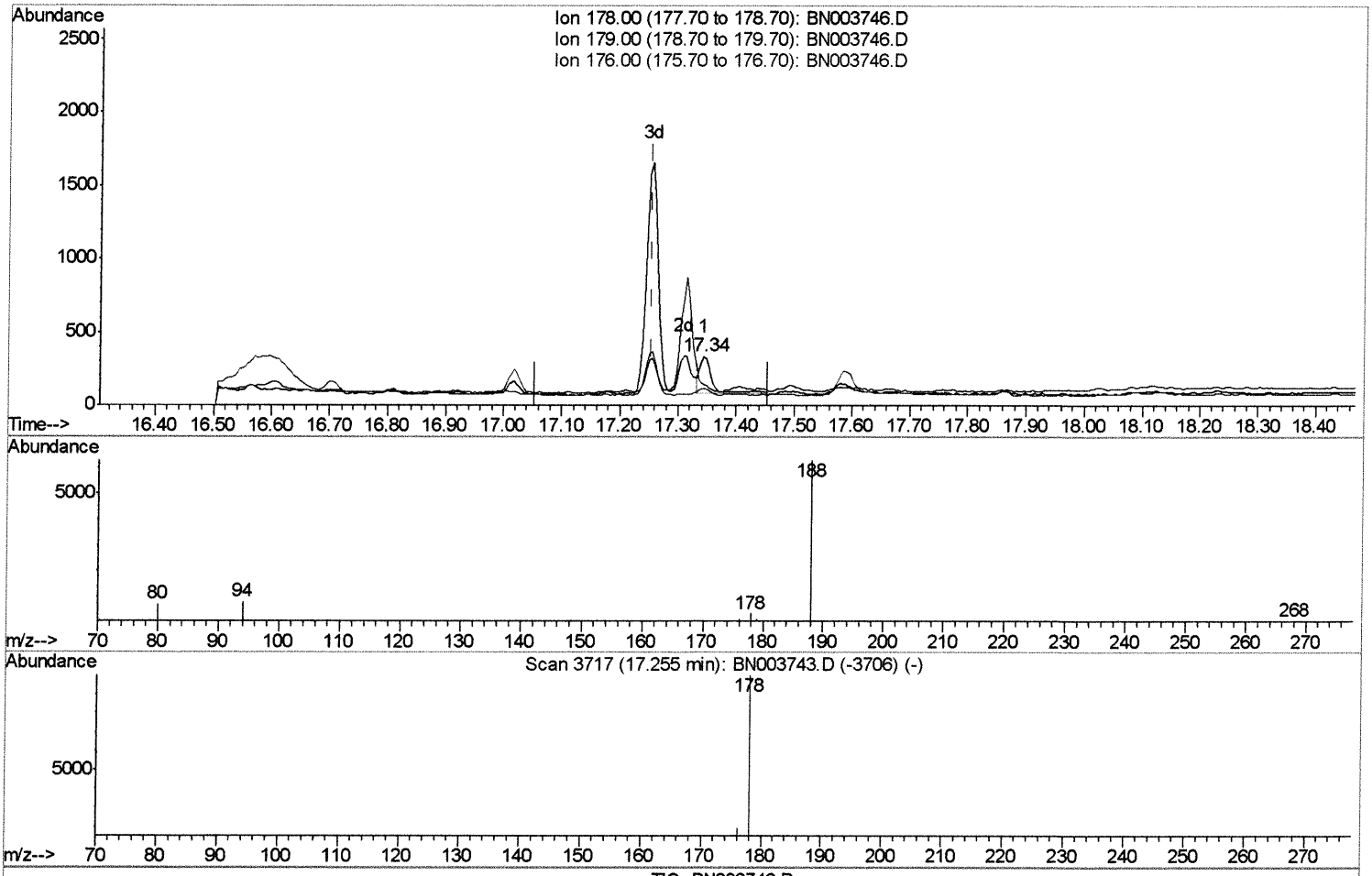
Quantitation Report (Qedit)

Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 07 04:33:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM



TIC: BN003746.D

(12) Phenanthrene

17.343min (+0.088) 0.00ng/ul

response 393

Ion	Exp%	Act%
178.00	100	100
179.00	15.60	43.67#
176.00	18.70	34.64#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

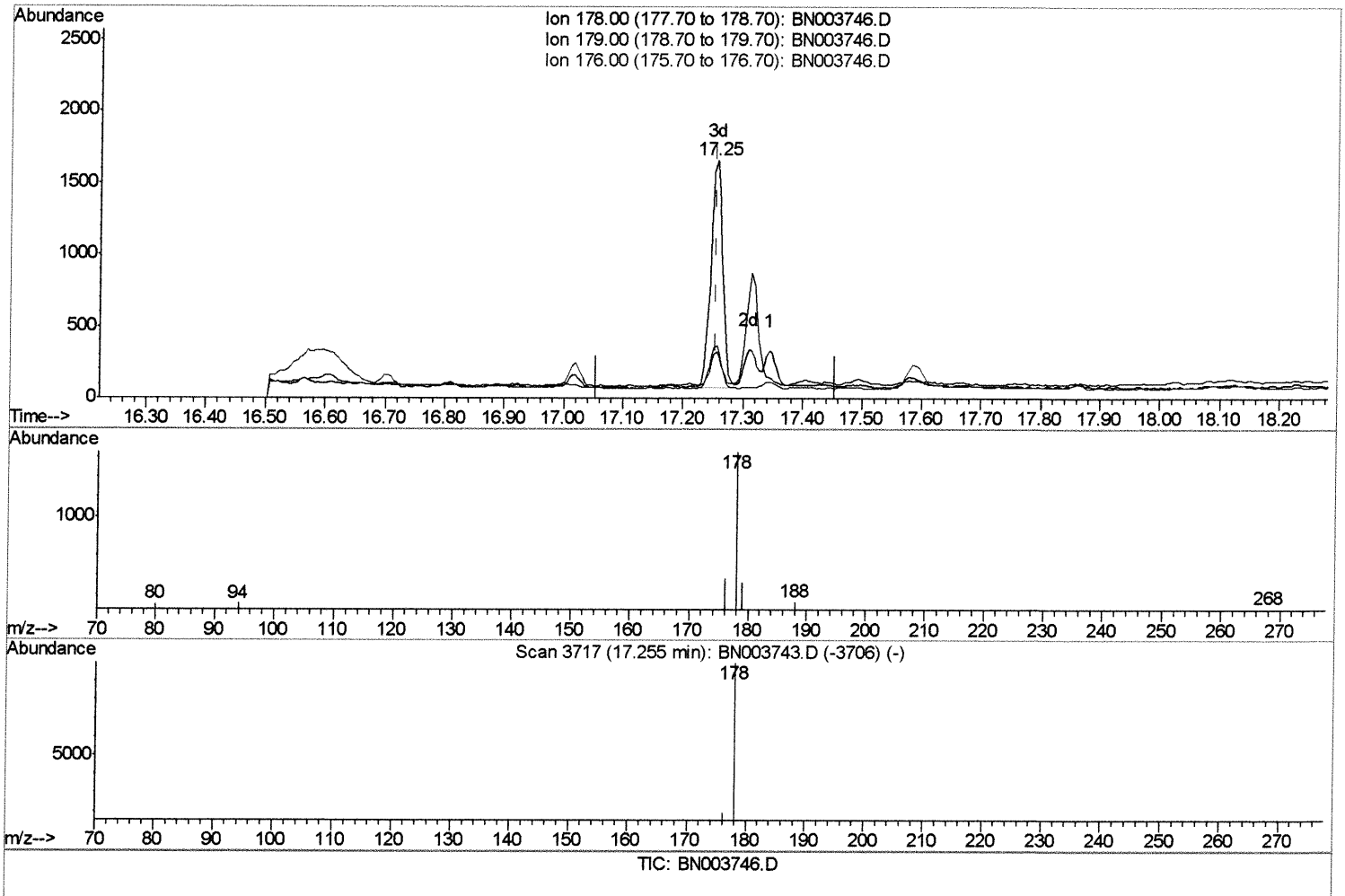
Quantitation Report (Qedit)

Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 07 04:33:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM



TIC: BN003746.D

(12) Phenanthrene

17.255min (-0.000) 0.02ng/ul m > SJ 12/11/18

response 2186

Ion	Exp%	Act%
178.00	100	100
179.00	15.60	19.55#
176.00	18.70	22.39
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

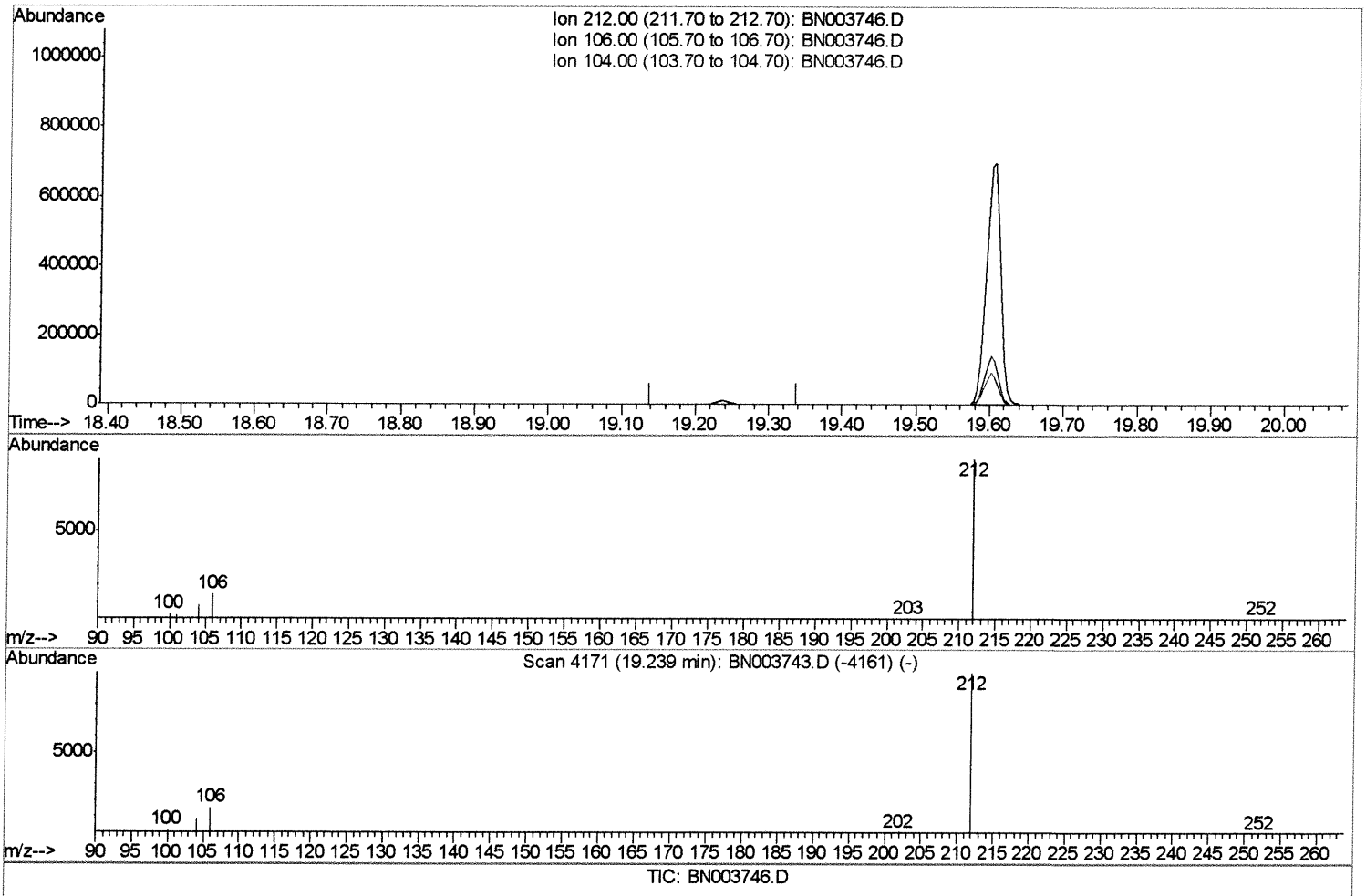
Quantitation Report (Qedit)

Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 07 04:34:00 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM



(14) Fluoranthene-d10 (SURR)

19.239min (-19.239) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

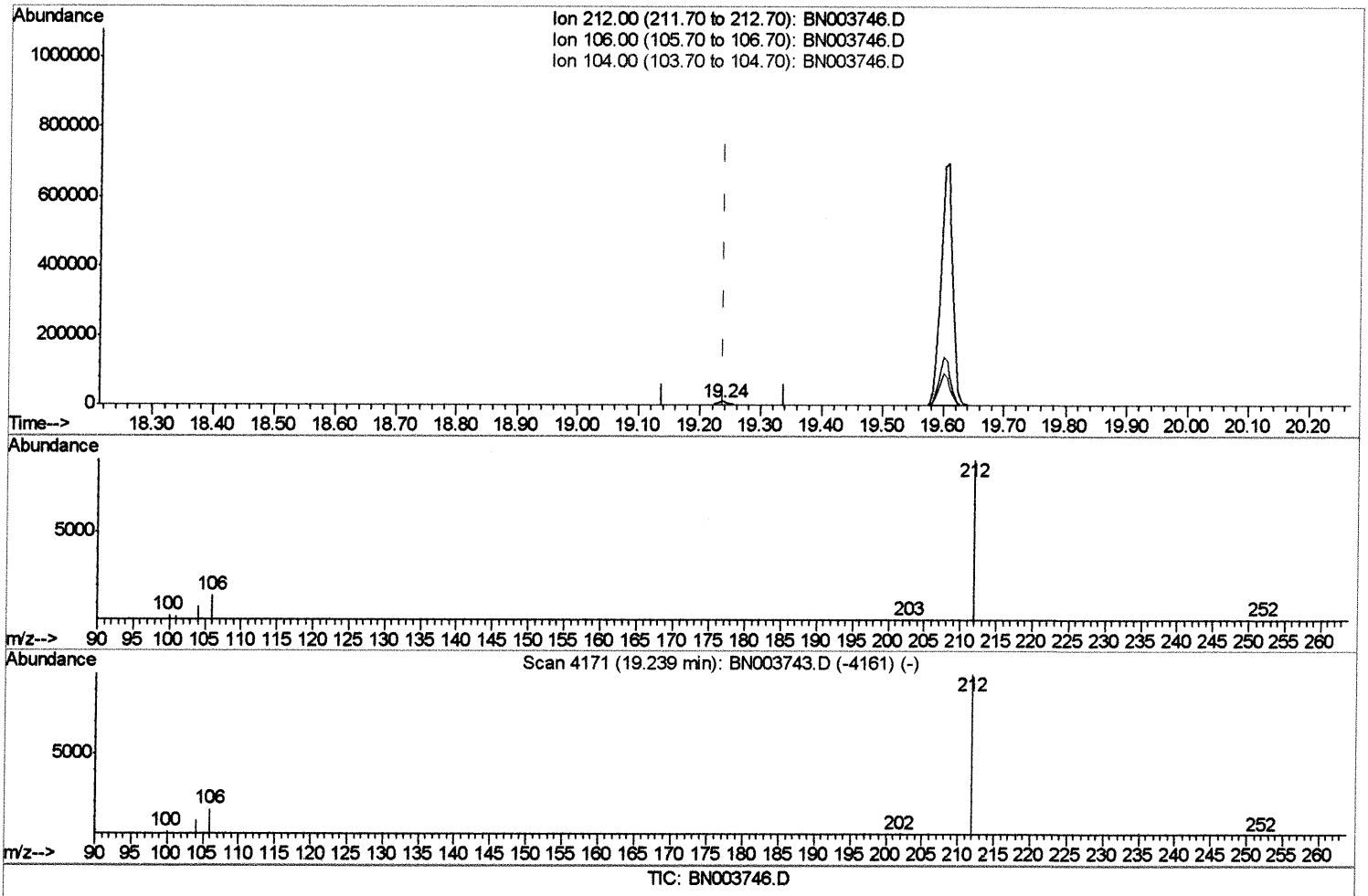
Quantitation Report (Qedit)

Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 07 04:34:00 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM



TIC: BN003746.D

(14) Fluoranthene-d10 (SURR)

19.238min (-0.000) 0.15ng/ul m SJ 12/11/18

response 11763

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

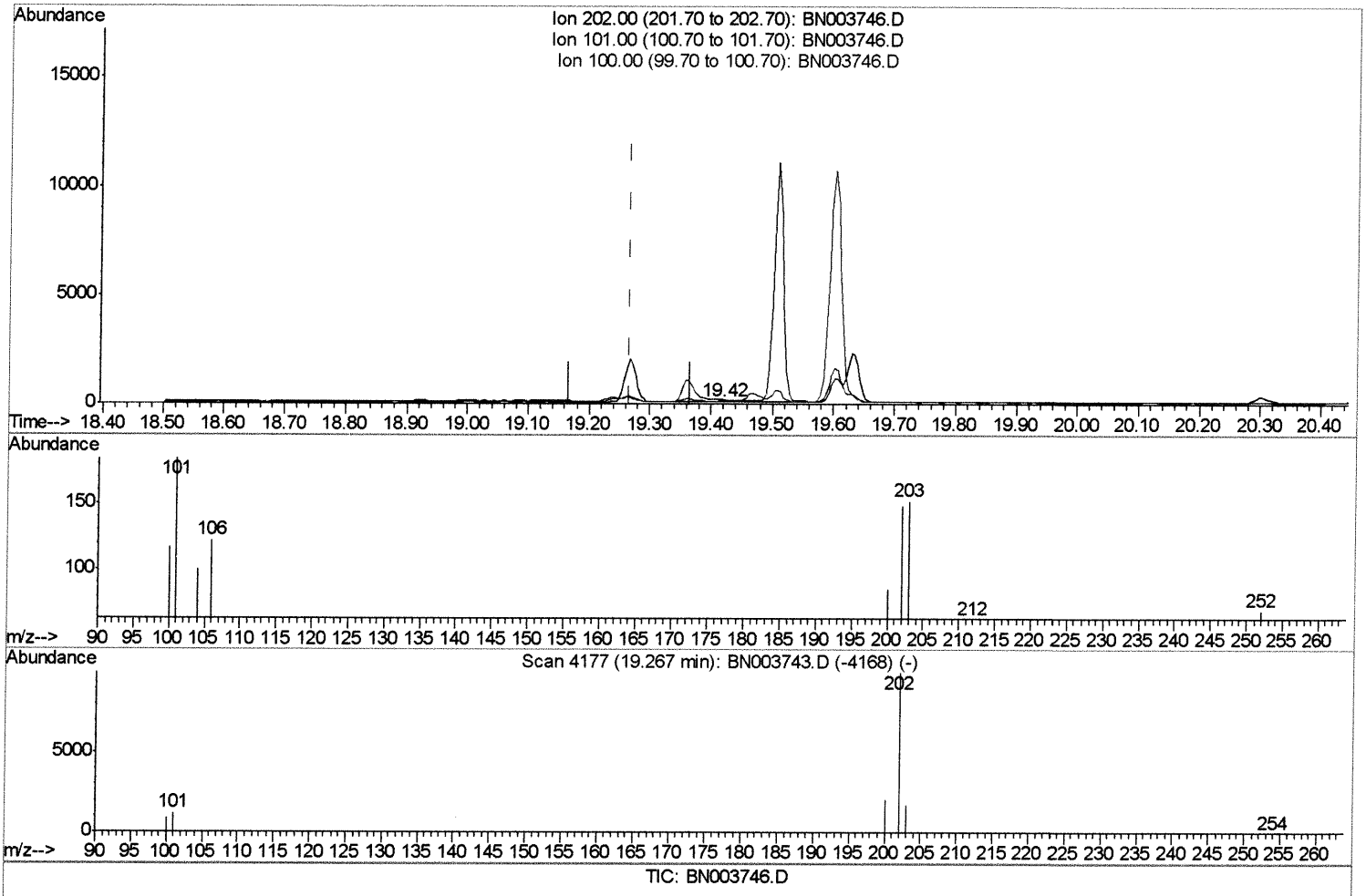
Quantitation Report (Qedit)

Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 07 04:34:00 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM



TIC: BN003746.D

(15) Fluoranthene (C)

19.420min (+0.153) 0.00ng/ul

response 79

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	124.32#
100.00	8.10	79.05#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

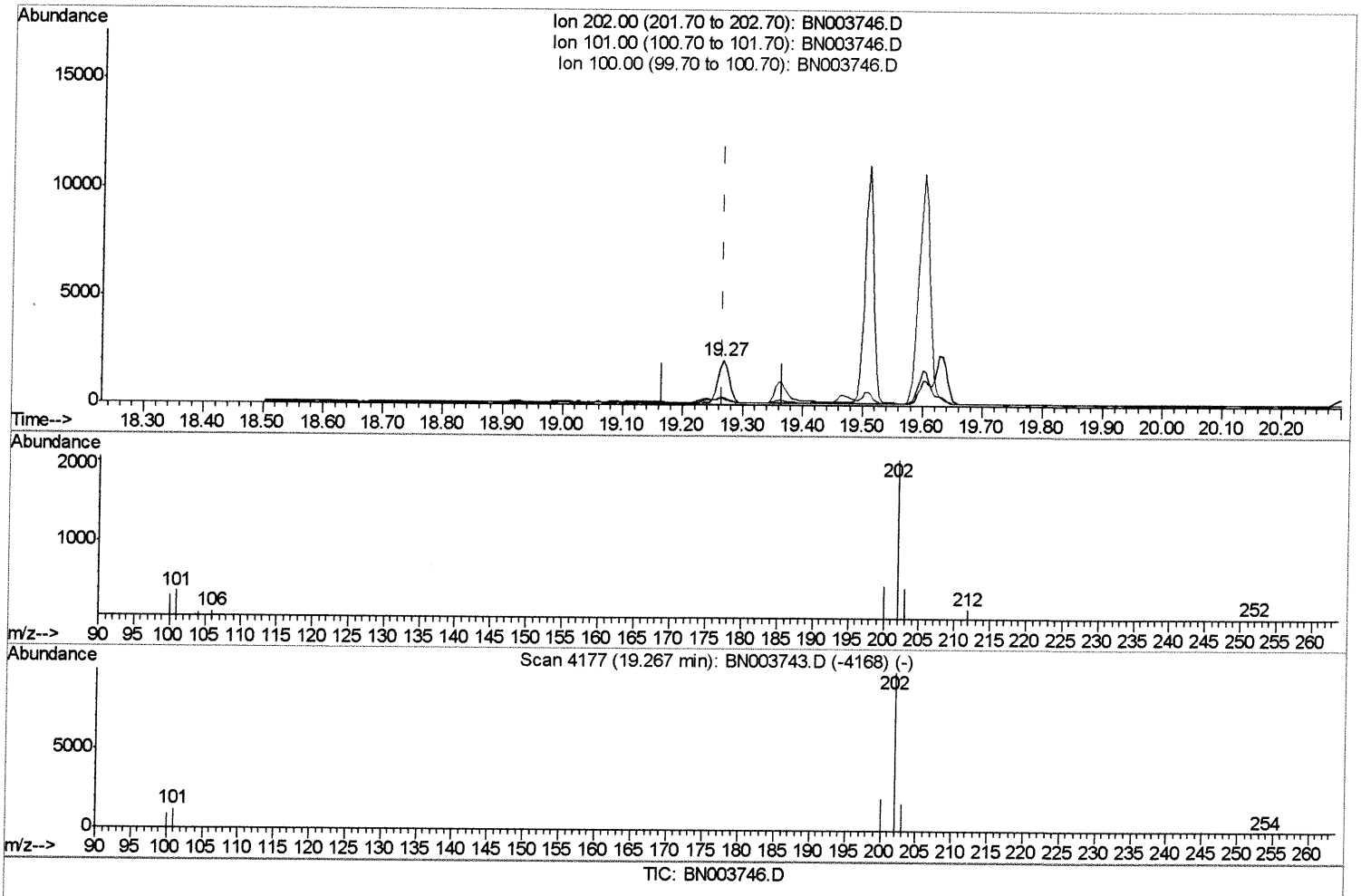
Quantitation Report (Qedit)

Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 07 04:34:00 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM



TIC: BN003746.D

(15) Fluoranthene (C)

19.266min (-0.000) 0.02ng/ul m

response 2622

SJ 12/11/18

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	18.16
100.00	8.10	15.49
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

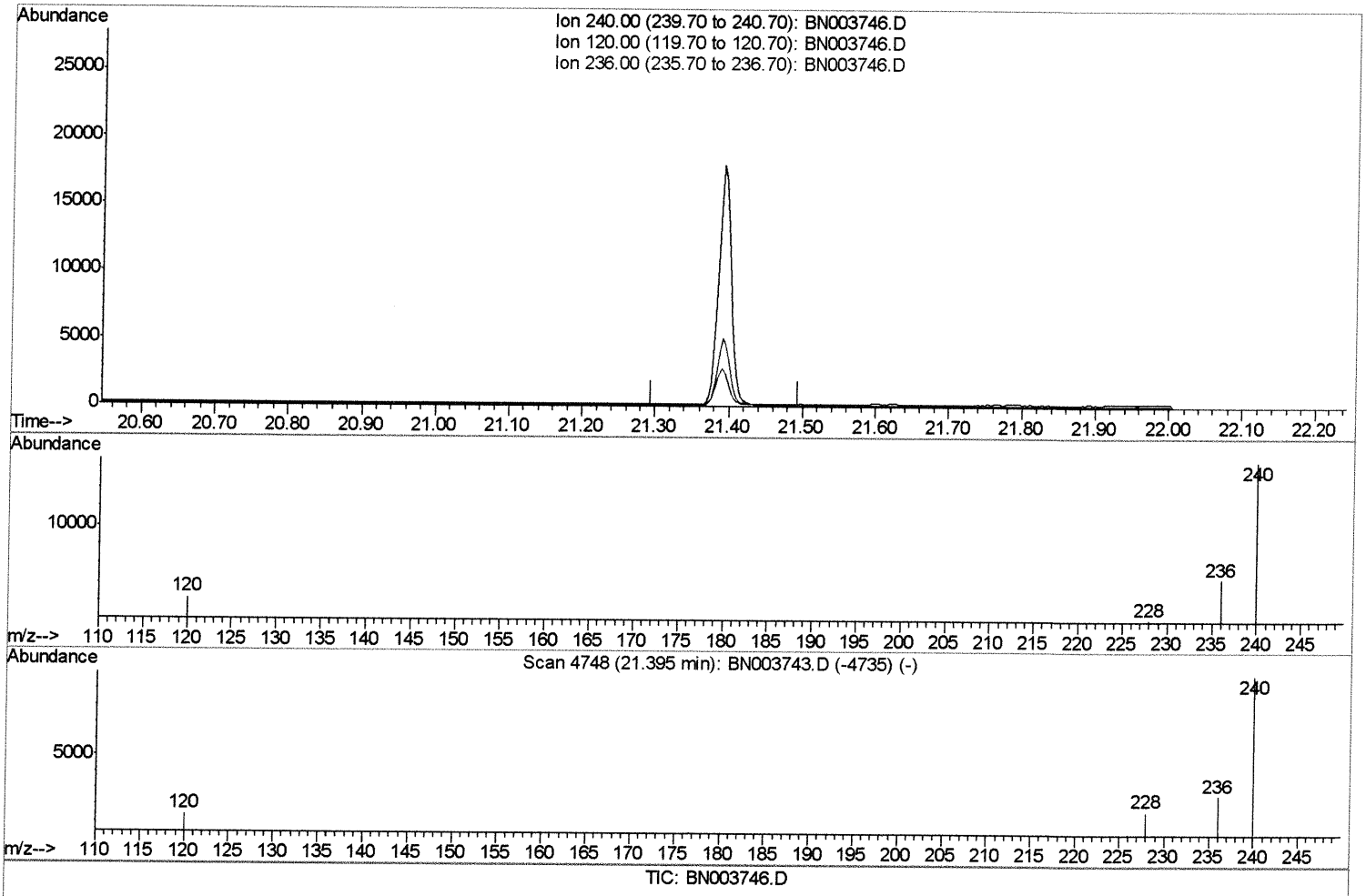
Quantitation Report (Qedit)

Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 07 04:34:00 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM



TIC: BN003746.D

(16) Chrysene-d12 (I)

21.395min (-21.395) 0.00ng/ul

response 0

Ion	Exp%	Act%
240.00	100	0.00
120.00	14.00	0.00#
236.00	27.60	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

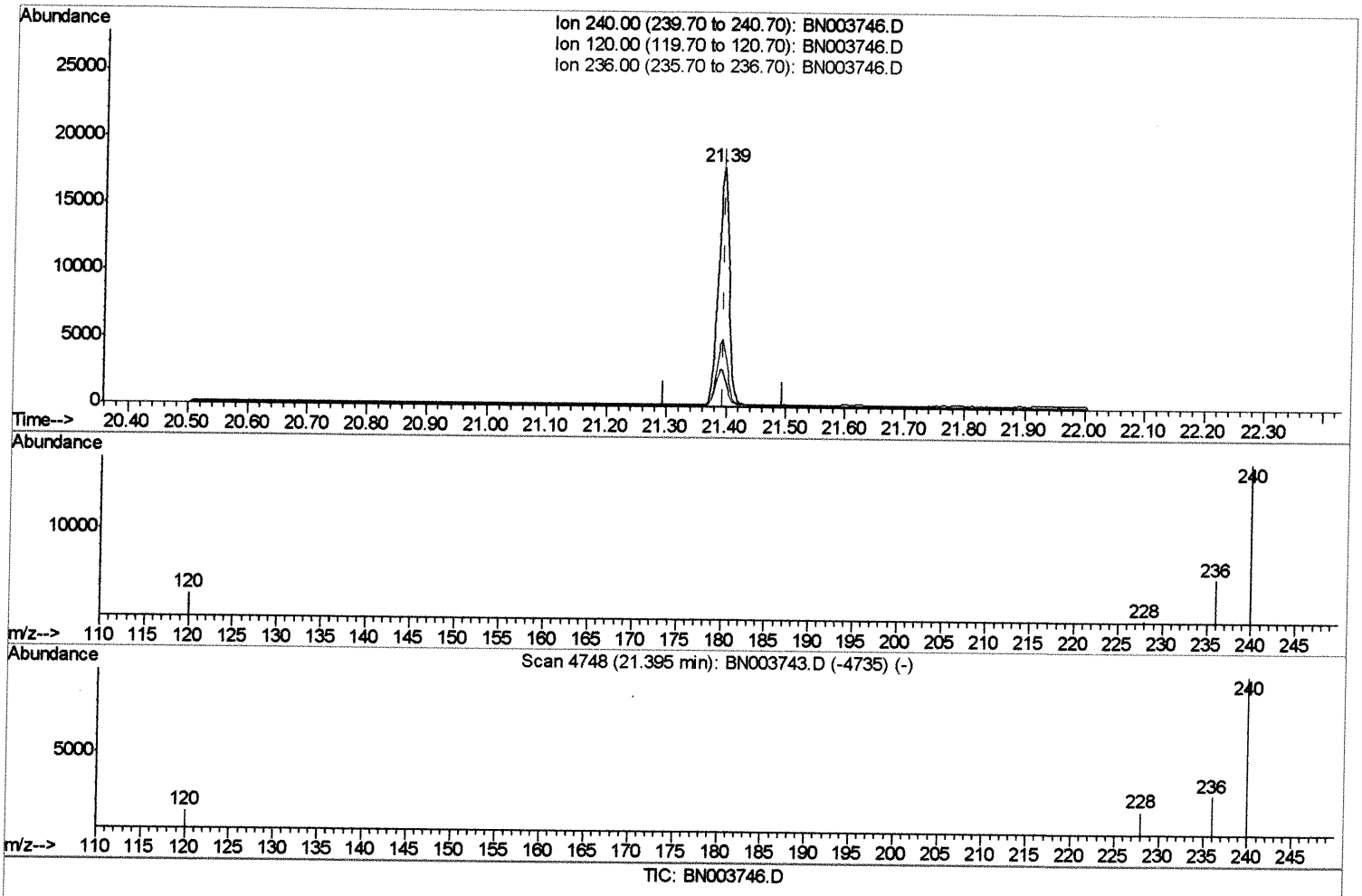
Quantitation Report (Qedit)

Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 07 04:34:00 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM



TIC: BN003746.D

(16) Chrysene-d12 (I)

21.392min (-0.003) 0.40ng/ul m

response 22361

SJ 12/11/18

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	15.53
236.00	27.60	28.03
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

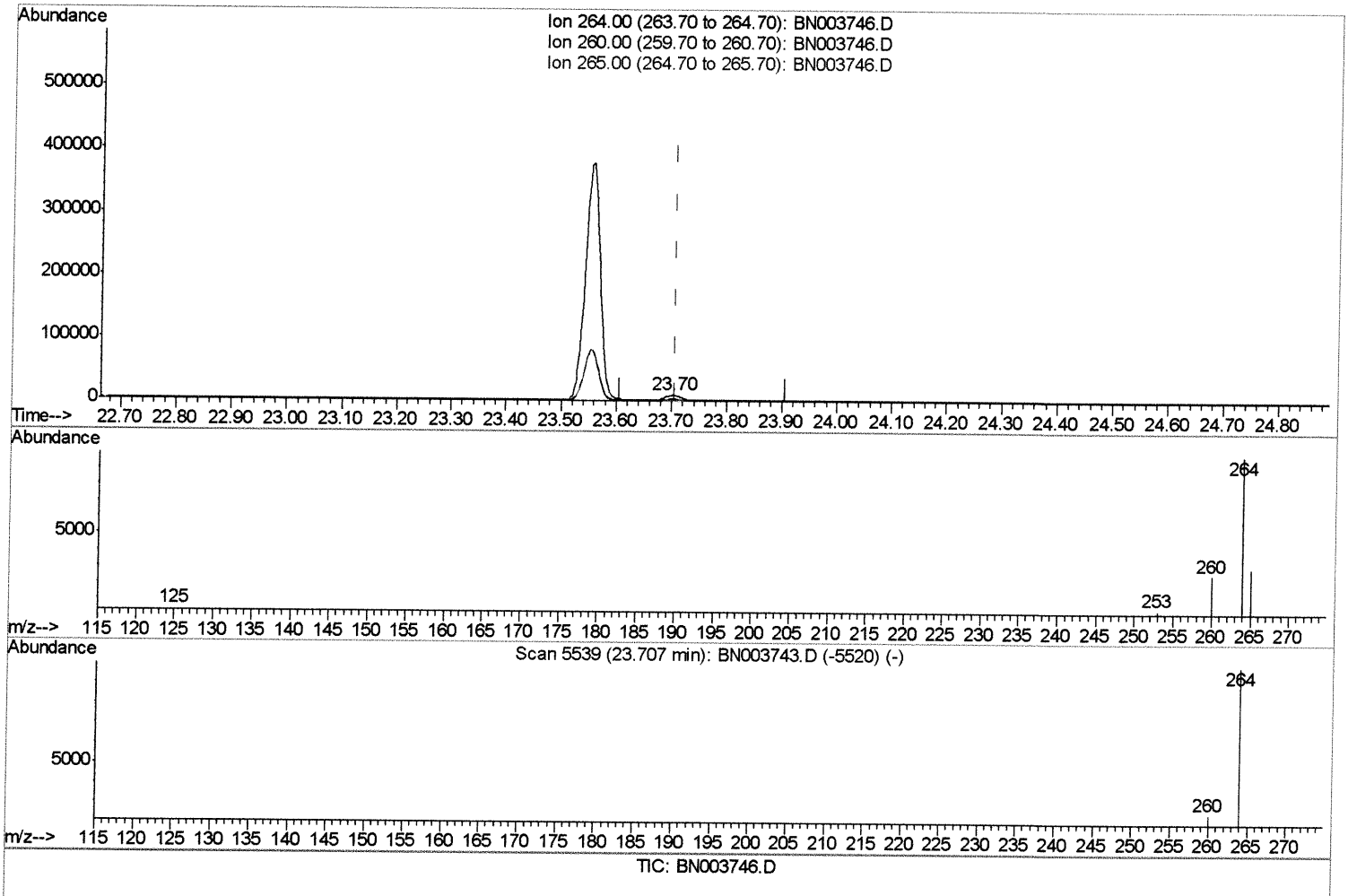
Quantitation Report (Qedit)

Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 07 04:34:56 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM



(20) Perylene-d12 (I)

23.701min (-0.006) 0.40ng/ul

response 21171

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.34
265.00	33.50	30.47
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

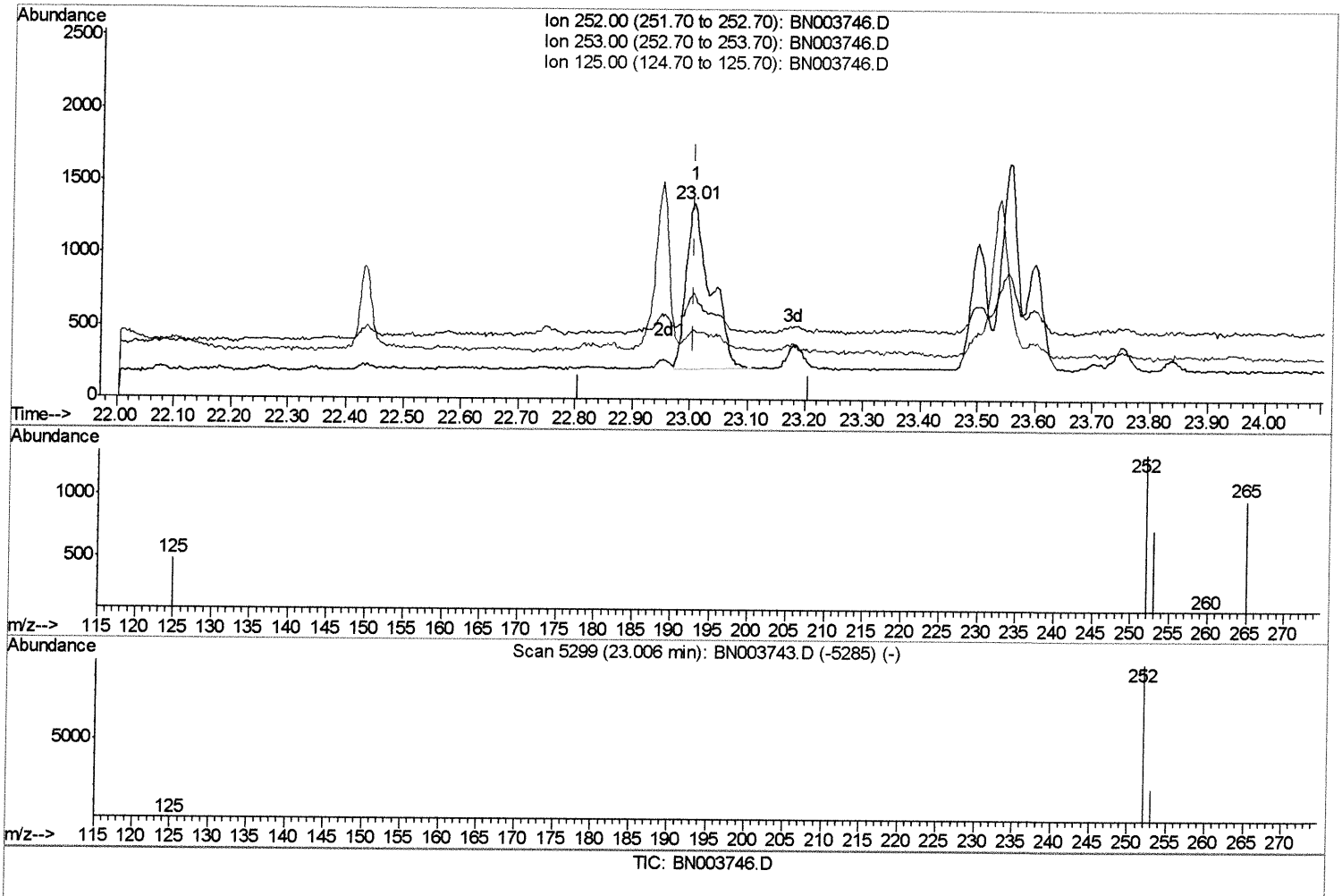
Quantitation Report (Qedit)

Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 07 04:35:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM



TIC: BN003746.D

(21) Benzo(b)fluoranthene

23.005min (-0.000) 0.05ng/ul

response 3381

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	54.38#
125.00	11.20	35.91#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

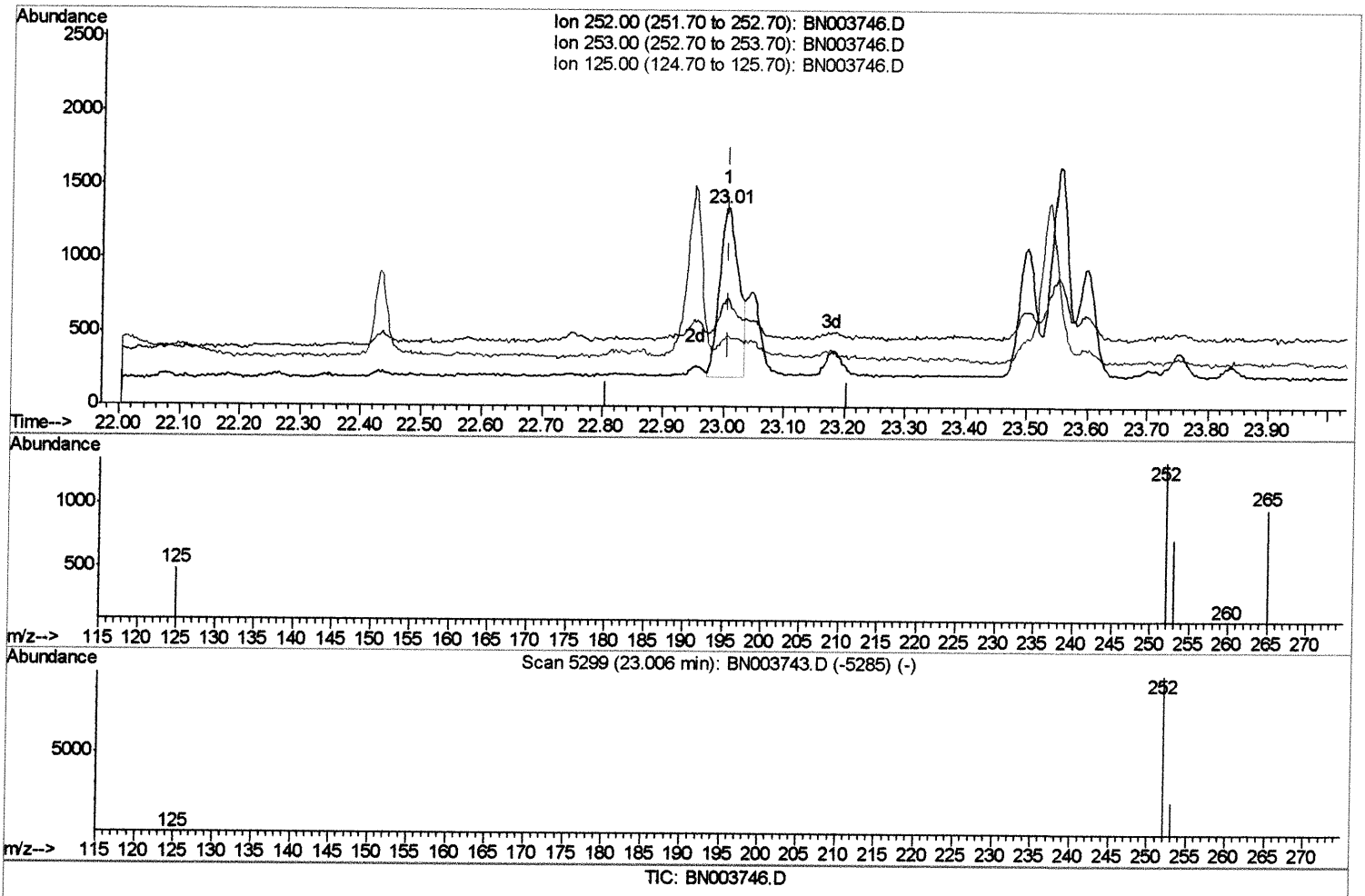
Quantitation Report (Qedit)

Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 07 04:35:23 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM



TIC: BN003746.D

(21) Benzo(b)fluoranthene

23.005min (-0.000) 0.03ng/ul m

response 2488

SJ 12/11/18

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	54.38#
125.00	11.20	35.91#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003746.D
Acq On : 07 Dec 2018 01:15
Operator : JU/SJ
Sample : J6227-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 07 04:39:04 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument : BNA_N
ClientSampleId : F9E75

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:43 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5576	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	23102	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12525	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	27078m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	22361m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	17516m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	5518	0.16	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	11763m	0.15	ng/ul	0.00
Target Compounds						Qvalue
12) Phenanthrene	17.25	178	2186m	0.025	ng/ul	
15) Fluoranthene	19.27	202	2622m	0.025	ng/ul	
17) Pyrene	19.63	202	2955	0.037	ng/ul#	81
18) Benzo(a)anthracene	21.37	228	1552	0.022	ng/ul#	85
19) Chrysene	21.43	228	2322	0.029	ng/ul#	90
21) Benzo(b)fluoranthene	23.01	252	2488m	0.034	ng/ul	

SJ 12/11/18

SJ 12/11/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9E80

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-07
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BN003747.D
% Solids : 91.2
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/07/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	3.6	U
91-57-6	2-Methylnaphthalene	1.3	J
208-96-8	Acenaphthylene	3.6	U
83-32-9	Acenaphthene	3.6	U
86-73-7	Fluorene	3.6	U
87-86-5	Pentachlorophenol	7.3	U
85-01-8	Phenanthrene	2.5	J
120-12-7	Anthracene	3.6	U
206-44-0	Fluoranthene	2.5	J
129-00-0	Pyrene	3.4	J
56-55-3	Benzo(a)anthracene	1.8	J
218-01-9	Chrysene	2.3	J
205-99-2	Benzo(b)fluoranthene	2.4	J
207-08-9	Benzo(k)fluoranthene	0.84	J
50-32-8	Benzo(a)pyrene	1.4	J
193-39-5	Indeno(1,2,3-cd)pyrene	0.91	J
53-70-3	Dibenzo(a,h)anthracene	3.6	U
191-24-2	Benzo(g,h,i)perylene	1.0	J

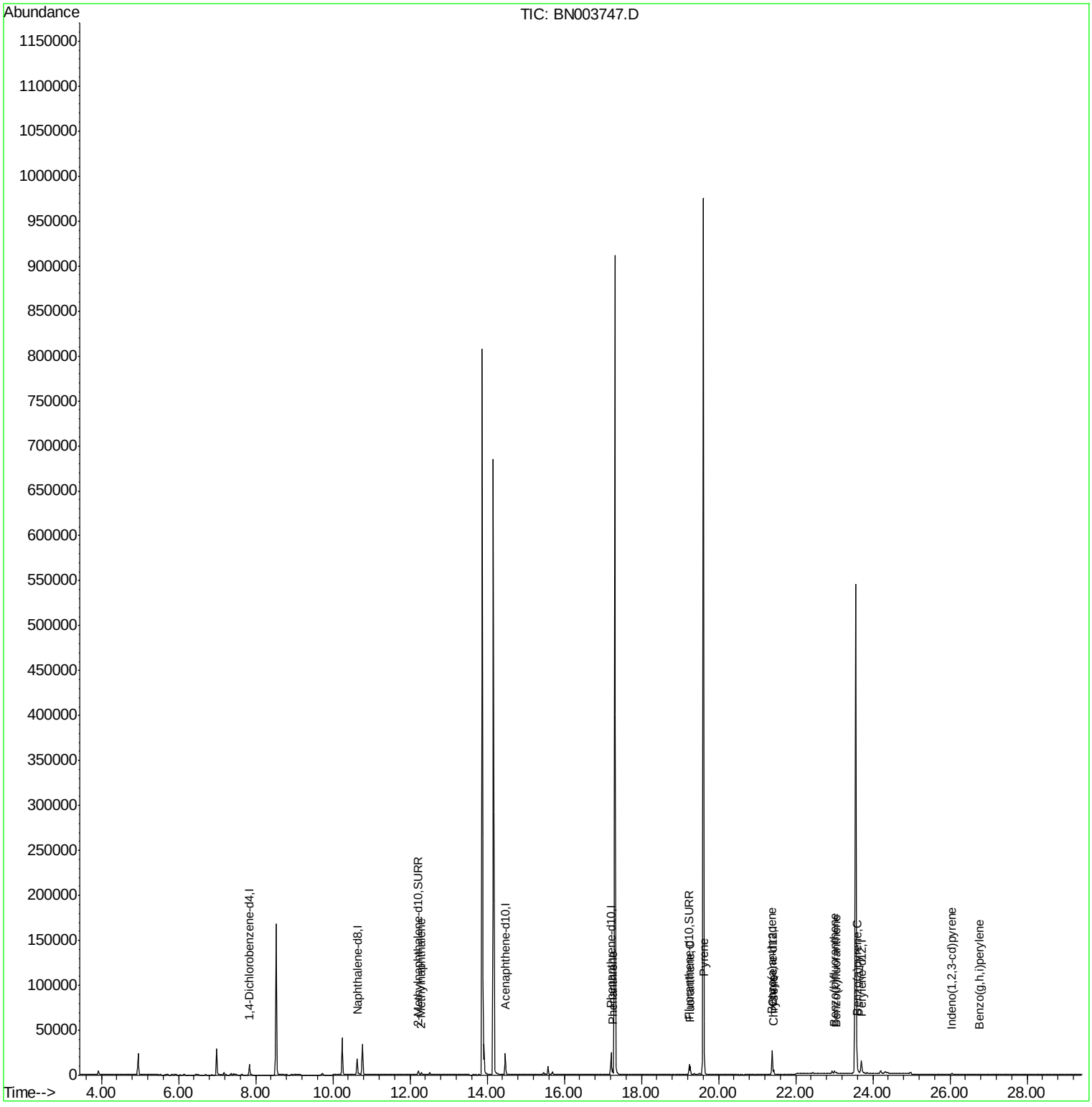
Quantitation Report (QT Reviewed)

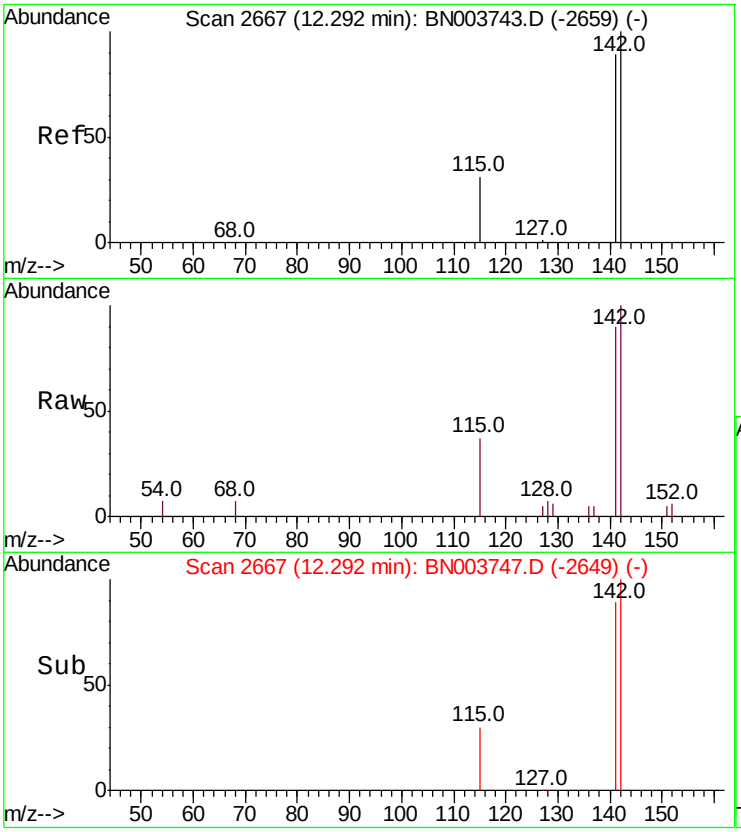
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 07 04:44:28 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:45 PM





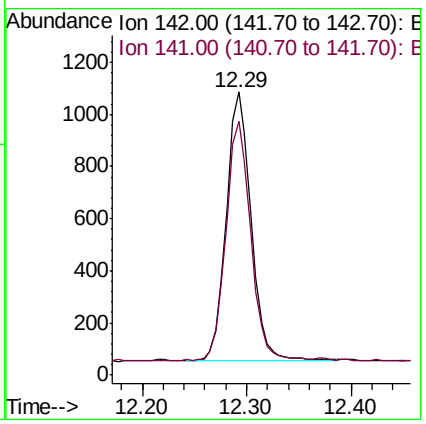
#5
2-Methylnaphthalene
Concen: 0.036 ng/ul
RT: 12.29 min Scan# 2667
Delta R.T. 0.00 min
Lab File: BN003747.D
Acq: 07 Dec 2018 01:50

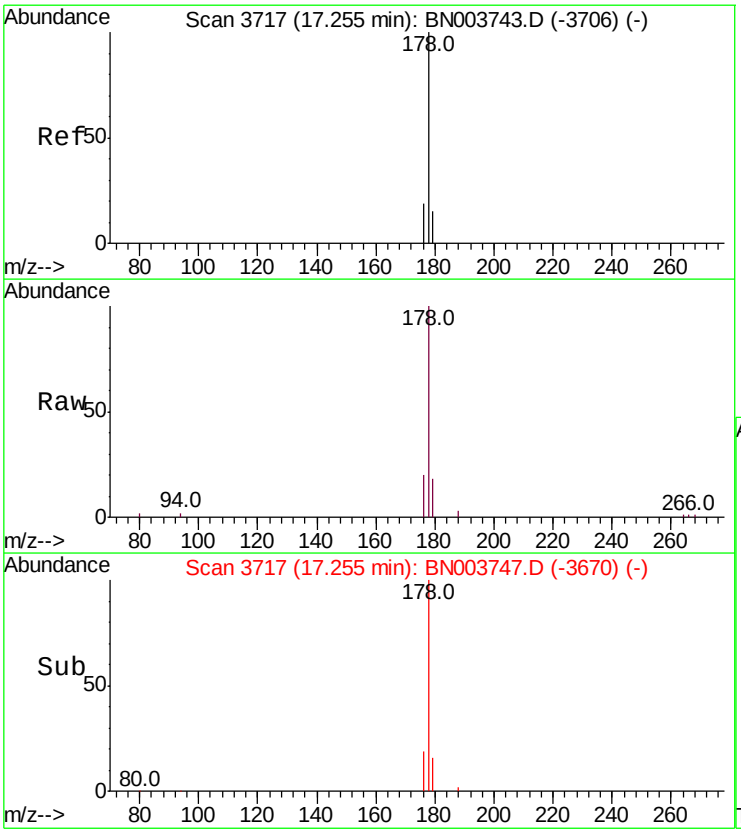
Tgt Ion:142 Resp: 1691

Ion	Ratio	Lower	Upper
142	100		
141	89.8	71.5	107.3

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:45 PM

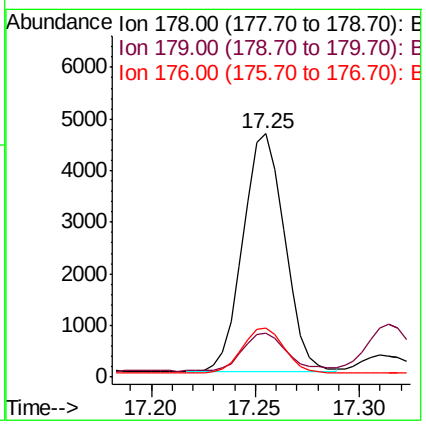


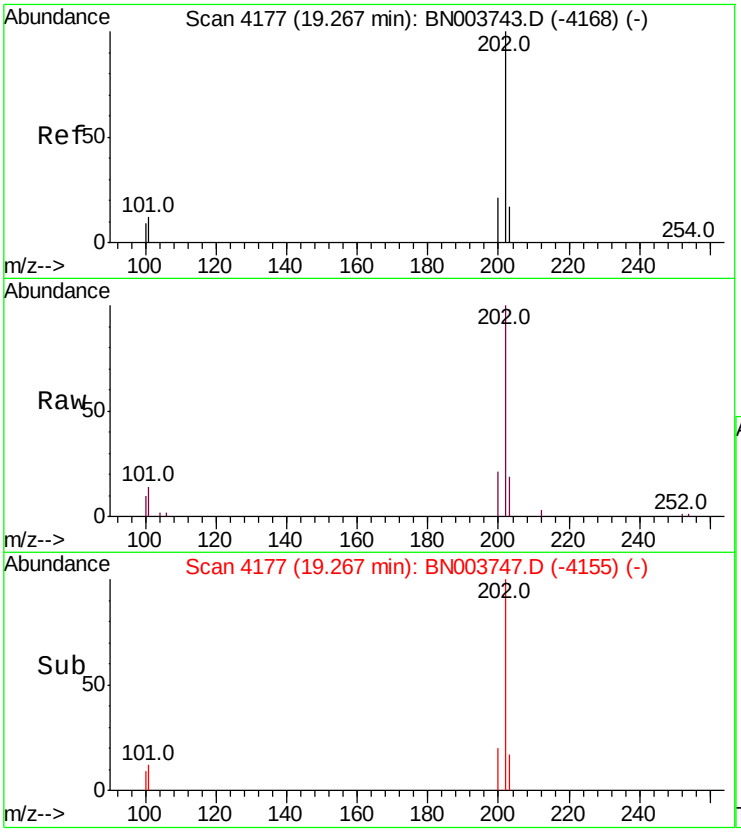


#12
Phenanthrene
Concen: 0.070 ng/ul
RT: 17.25 min Scan# 3717
Delta R.T. 0.00 min
Lab File: BN003747.D
Acq: 07 Dec 2018 01:50

Tgt Ion:178 Resp: 6437

Ion	Ratio	Lower	Upper
178	100		
179	18.3	12.5	18.7
176	20.3	15.0	22.4

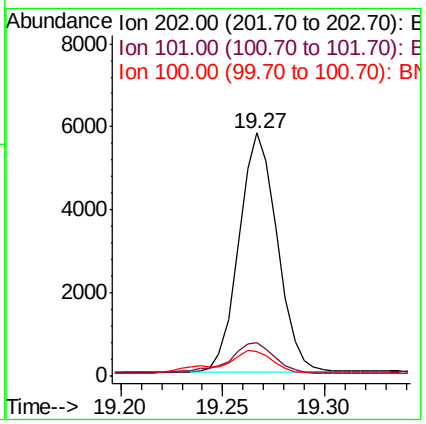




#15
Fluoranthene
Concen: 0.070 ng/ul m
RT: 19.27 min Scan# 4177
Delta R.T. 0.00 min
Lab File: BN003747.D
Acq: 07 Dec 2018 01:50

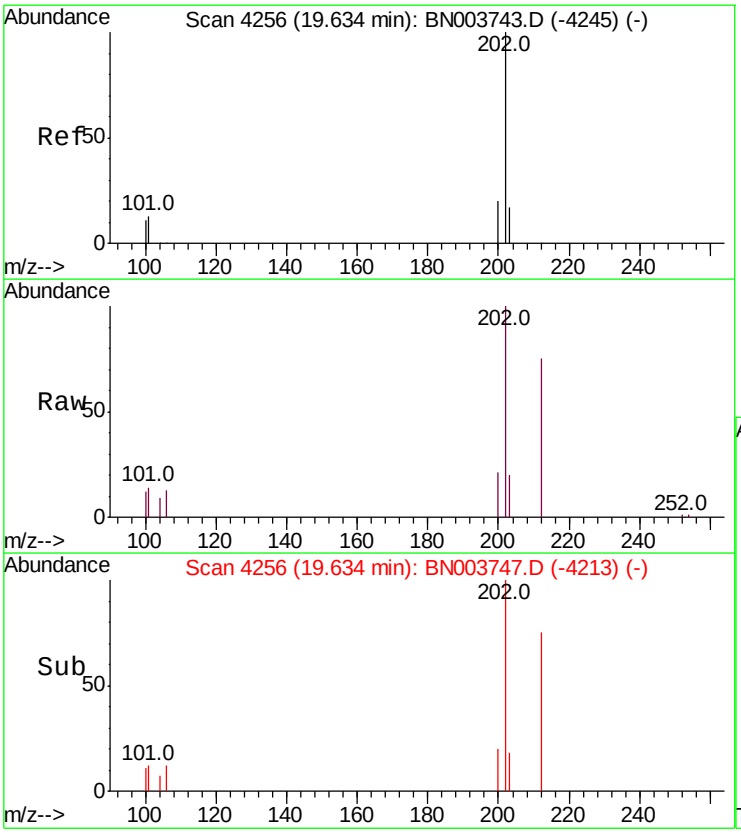
Tgt Ion:202 Resp: 7558

Ion	Ratio	Lower	Upper
202	100		
101	13.9	0.0	30.7
100	10.1	0.0	28.1



Instrument :
BNA_N
ClientSampleId :
F9E80

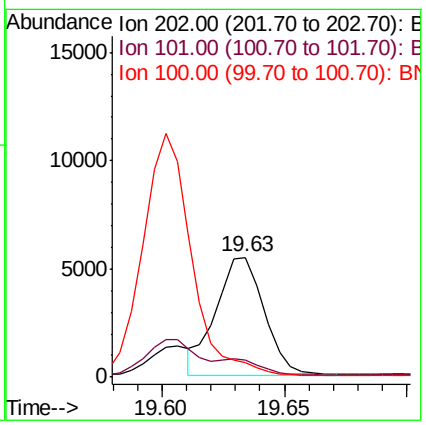
Manual Integrations APPROVED
mohammad
12/10/2018 12:20:45 PM

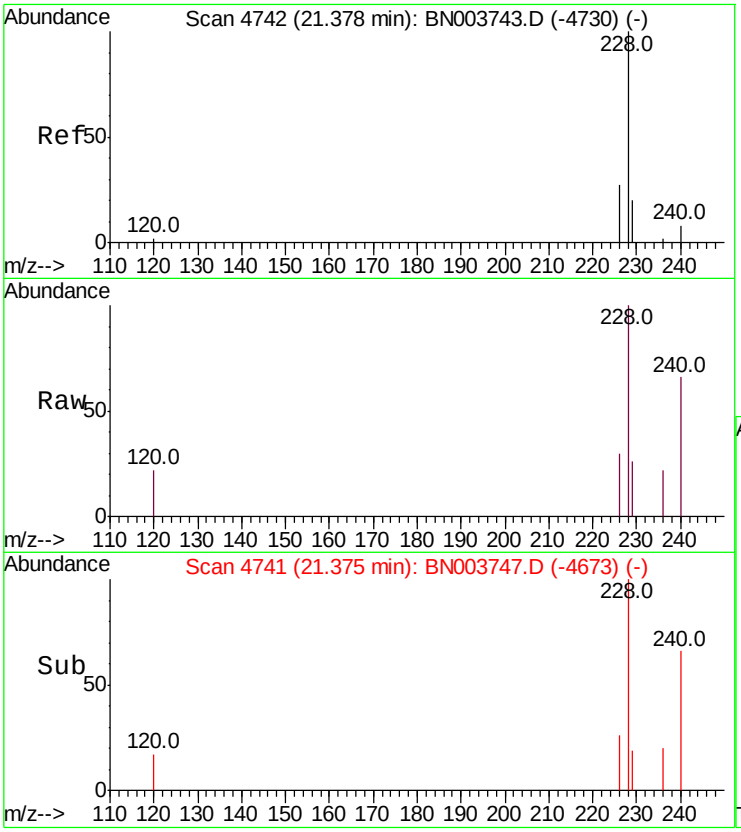


#17
Pyrene
Concen: 0.092 ng/ul m
RT: 19.63 min Scan# 4256
Delta R.T. 0.00 min
Lab File: BN003747.D
Acq: 07 Dec 2018 01:50

Tgt Ion:202 Resp: 7406

Ion	Ratio	Lower	Upper
202	100		
101	14.4	10.3	15.5
100	11.9	8.5	12.7





#18
Benzo(a)anthracene
Concen: 0.049 ng/ul
RT: 21.38 min Scan# 4741
Delta R.T. -0.00 min
Lab File: BN003747.D
Acq: 07 Dec 2018 01:50

Instrument :
BNA_N
ClientSampleId :
F9E80

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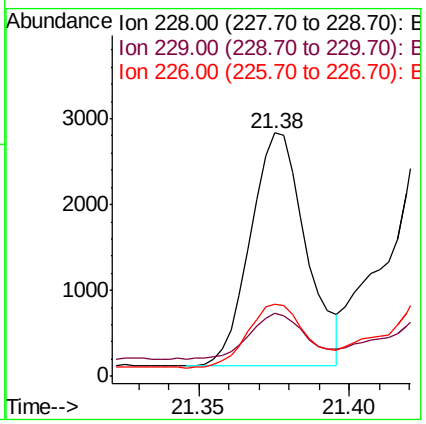
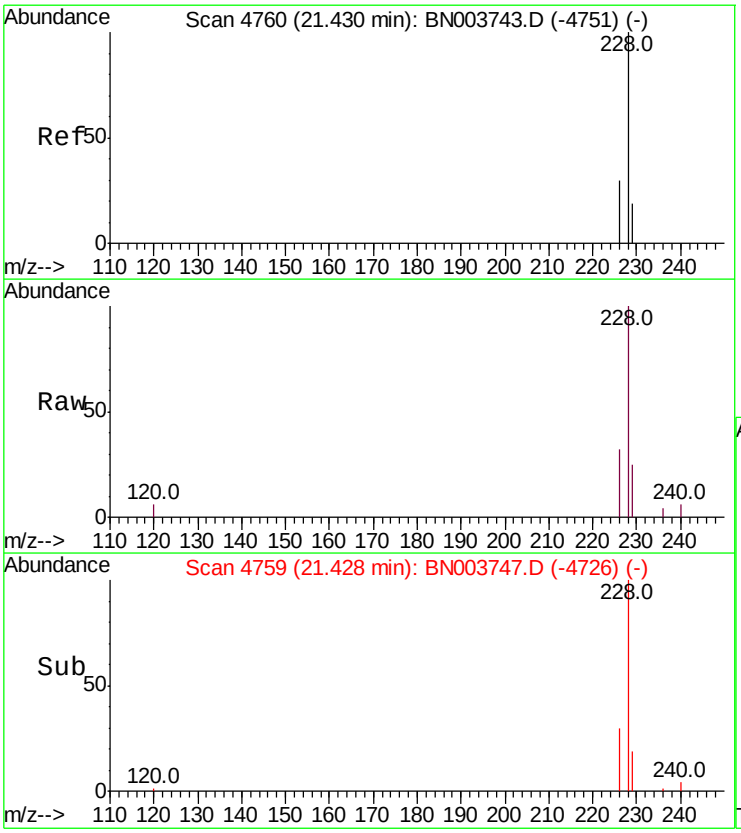
Tgt Ion:228 Resp: 3483

Ion	Ratio	Lower	Upper
228	100		
229	25.8	15.6	23.4#
226	29.7	21.1	31.7

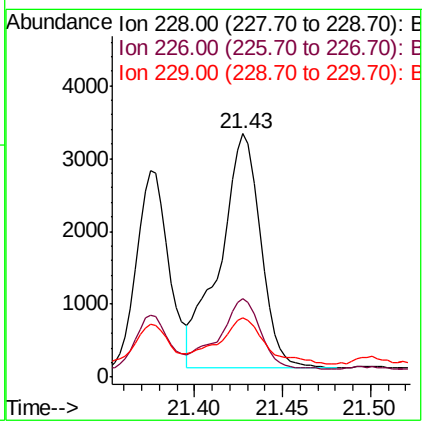


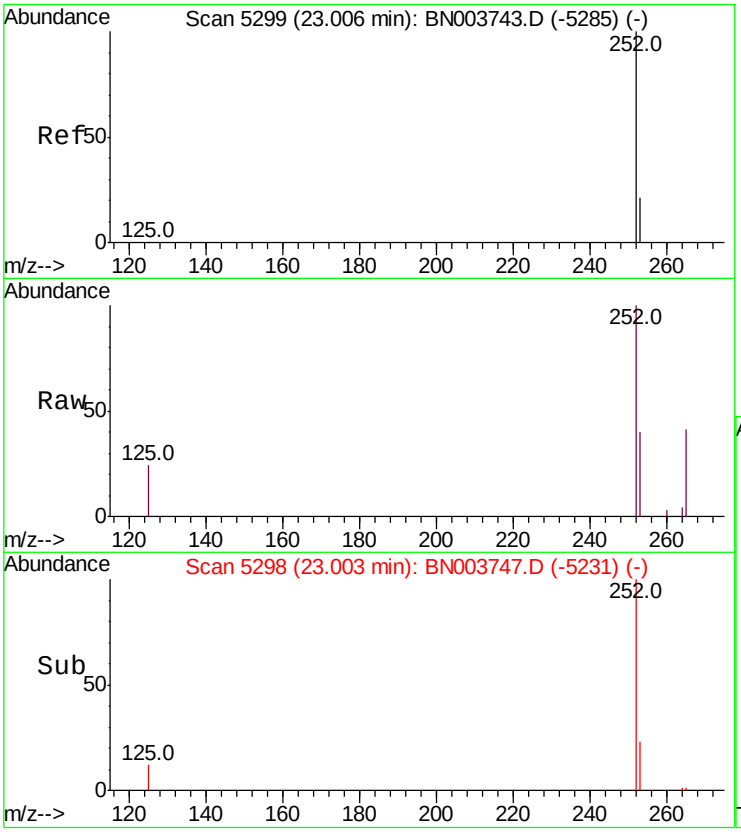


#19
Chrysene
Concen: 0.063 ng/ul
RT: 21.43 min Scan# 4759
Delta R.T. -0.00 min
Lab File: BN003747.D
Acq: 07 Dec 2018 01:50

Tgt Ion:228 Resp: 5102

Ion	Ratio	Lower	Upper
228	100		
226	32.1	24.0	36.0
229	24.6	15.7	23.5#





#21
Benzo(b)fluoranthene
Concen: 0.067 ng/ul m
RT: 23.00 min Scan# 5298
Delta R.T. -0.00 min
Lab File: BN003747.D
Acq: 07 Dec 2018 01:50

Tgt Ion:252 Resp: 4689

Ion	Ratio	Lower	Upper
252	100		
253	40.5	0.0	46.0
125	23.8	0.0	22.4#

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
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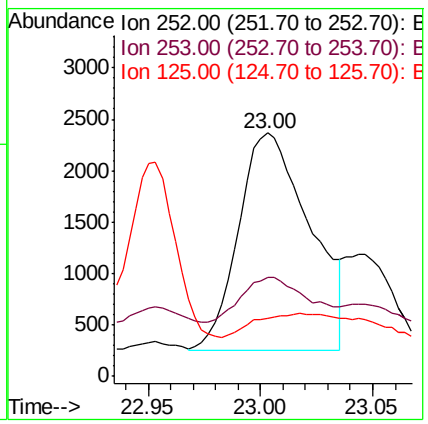
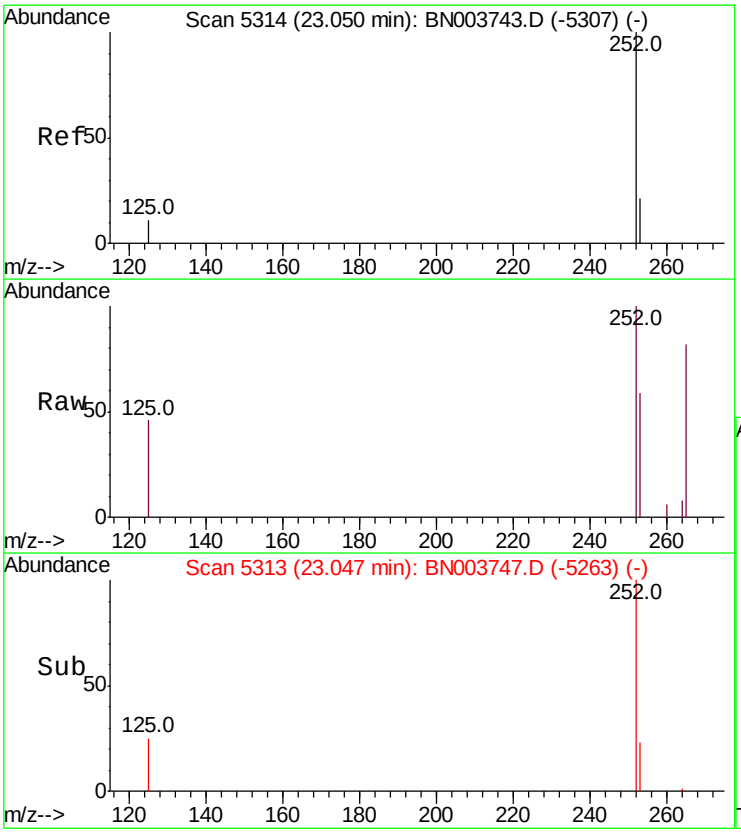
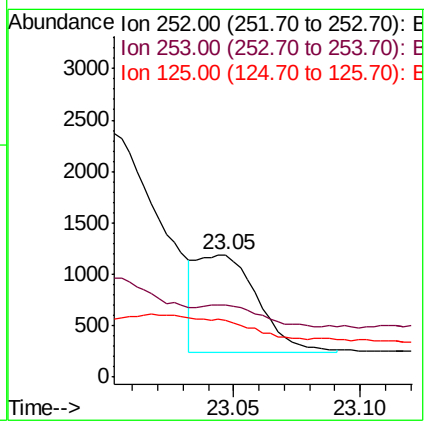


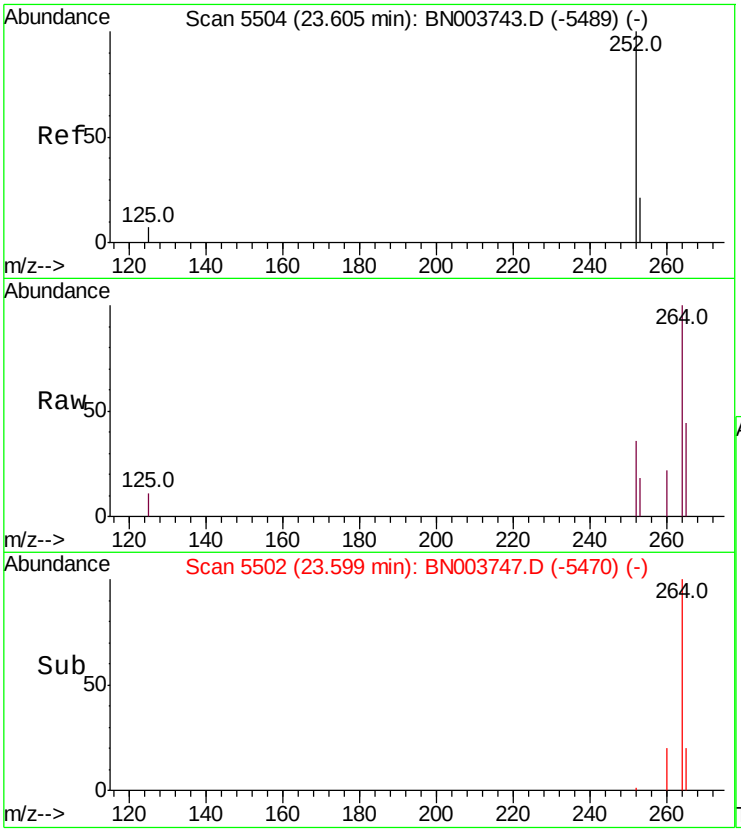


#22
Benzo(k)fluoranthene
Concen: 0.023 ng/ul m
RT: 23.05 min Scan# 5313
Delta R.T. -0.00 min
Lab File: BN003747.D
Acq: 07 Dec 2018 01:50

Tgt Ion:252 Resp: 1603

Ion	Ratio	Lower	Upper
252	100		
253	59.1	18.5	27.7#
125	46.4	9.0	13.6#





#23
Benzo(a)pyrene
Concen: 0.038 ng/ul
RT: 23.60 min Scan# 5502
Delta R.T. -0.01 min
Lab File: BN003747.D
Acq: 07 Dec 2018 01:50

Tgt Ion:252 Resp: 2288

Ion	Ratio	Lower	Upper
252	100		
253	50.4	19.0	28.4#
125	30.4	10.2	15.4#

Instrument :
BNA_N
ClientSampleId :
F9E80

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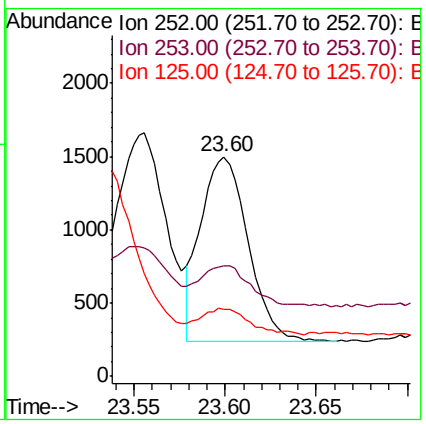
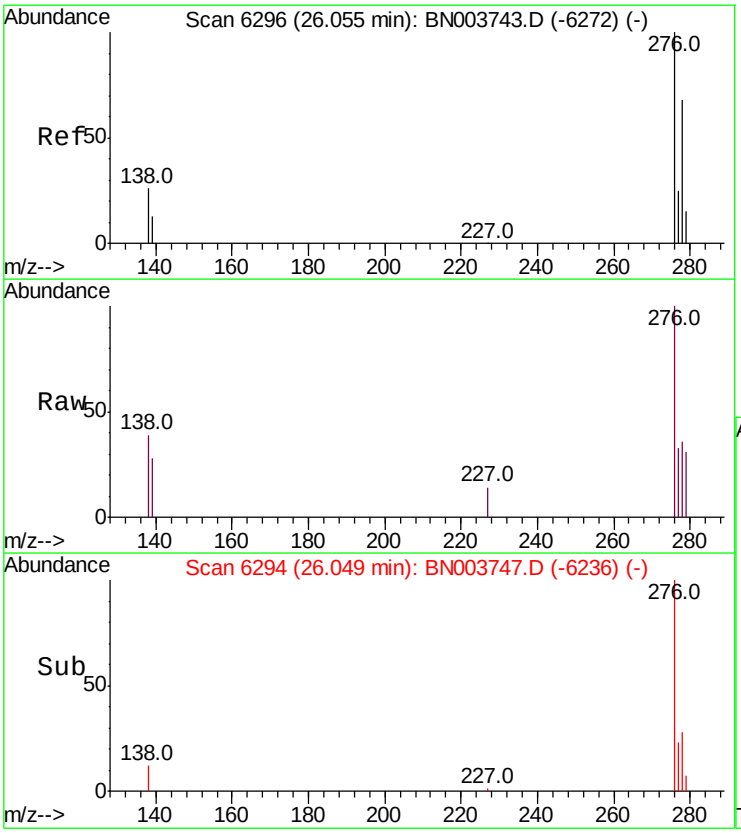
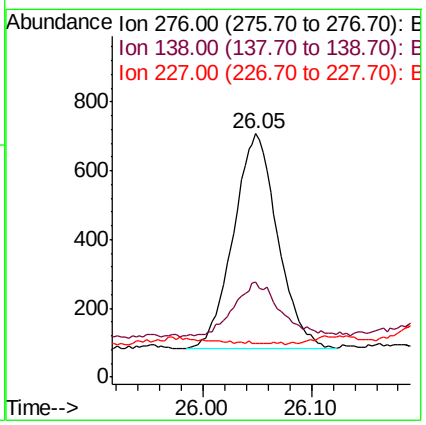


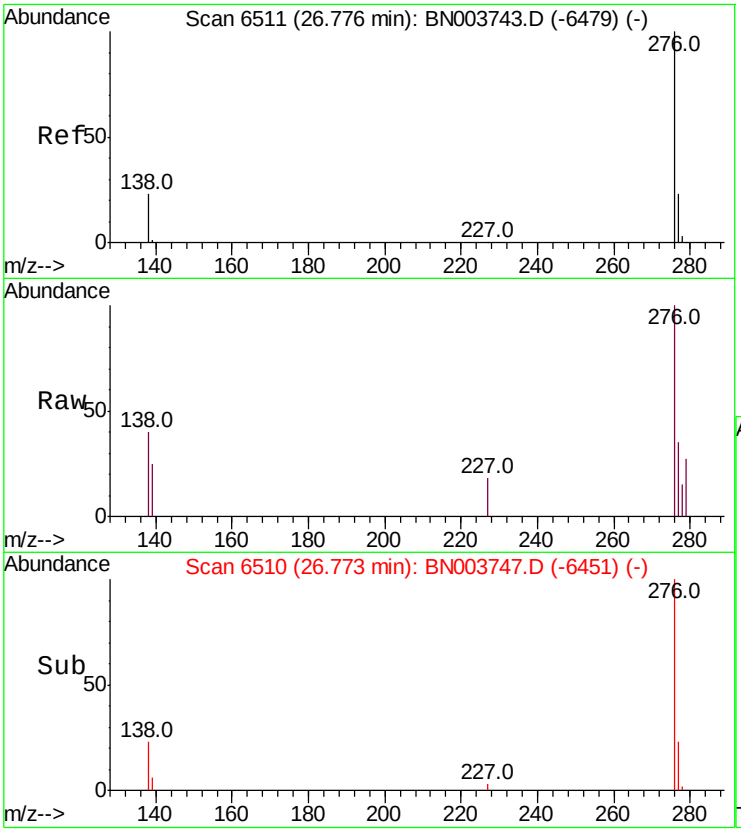


#24
Indeno(1,2,3-cd)pyrene
Concen: 0.025 ng/ul
RT: 26.05 min Scan# 6294
Delta R.T. -0.01 min
Lab File: BN003747.D
Acq: 07 Dec 2018 01:50

Tgt Ion:276 Resp: 1767

Ion	Ratio	Lower	Upper
276	100		
138	26.0	20.3	30.5
227	0.0	0.2	0.2#

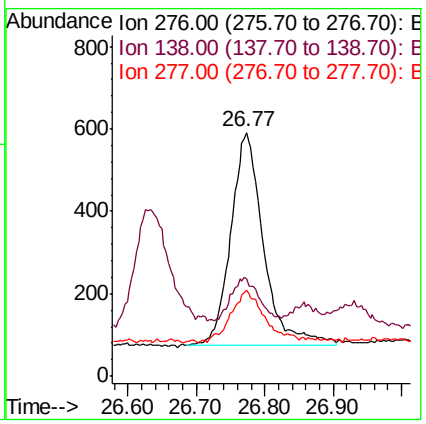




#26
Benzo(g,h,i)perylene
Concen: 0.028 ng/ul
RT: 26.77 min Scan# 6510
Delta R.T. -0.00 min
Lab File: BN003747.D
Acq: 07 Dec 2018 01:50

Tgt Ion:276 Resp: 1716

Ion	Ratio	Lower	Upper
276	100		
138	40.1	17.7	26.5#
277	35.2	19.3	28.9#



Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
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Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : F9E80

Manual Integrations APPROVED
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Quant Time: Dec 07 04:44:28 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5780	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	23721	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12704	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	27834m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	22548m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	17031m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	6003	0.16	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	12702m	0.16	ng/ul	0.00
Target Compounds						Qvalue
5) 2-Methylnaphthalene	12.29	142	1691	0.036	ng/ul	100
12) Phenanthrene	17.25	178	6437	0.070	ng/ul	95
15) Fluoranthene	19.27	202	7558m	0.070	ng/ul	
17) Pyrene	19.63	202	7406m	0.092	ng/ul	
18) Benzo(a)anthracene	21.38	228	3483	0.049	ng/ul#	90
19) Chrysene	21.43	228	5102	0.063	ng/ul#	93
21) Benzo(b)fluoranthene	23.00	252	4689m	0.067	ng/ul	
22) Benzo(k)fluoranthene	23.05	252	1603m	0.023	ng/ul	
23) Benzo(a)pyrene	23.60	252	2288	0.038	ng/ul#	49
24) Indeno(1,2,3-cd)pyrene	26.05	276	1767	0.025	ng/ul#	99
26) Benzo(g,h,i)perylene	26.77	276	1716	0.028	ng/ul#	70

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 07 04:44:28 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
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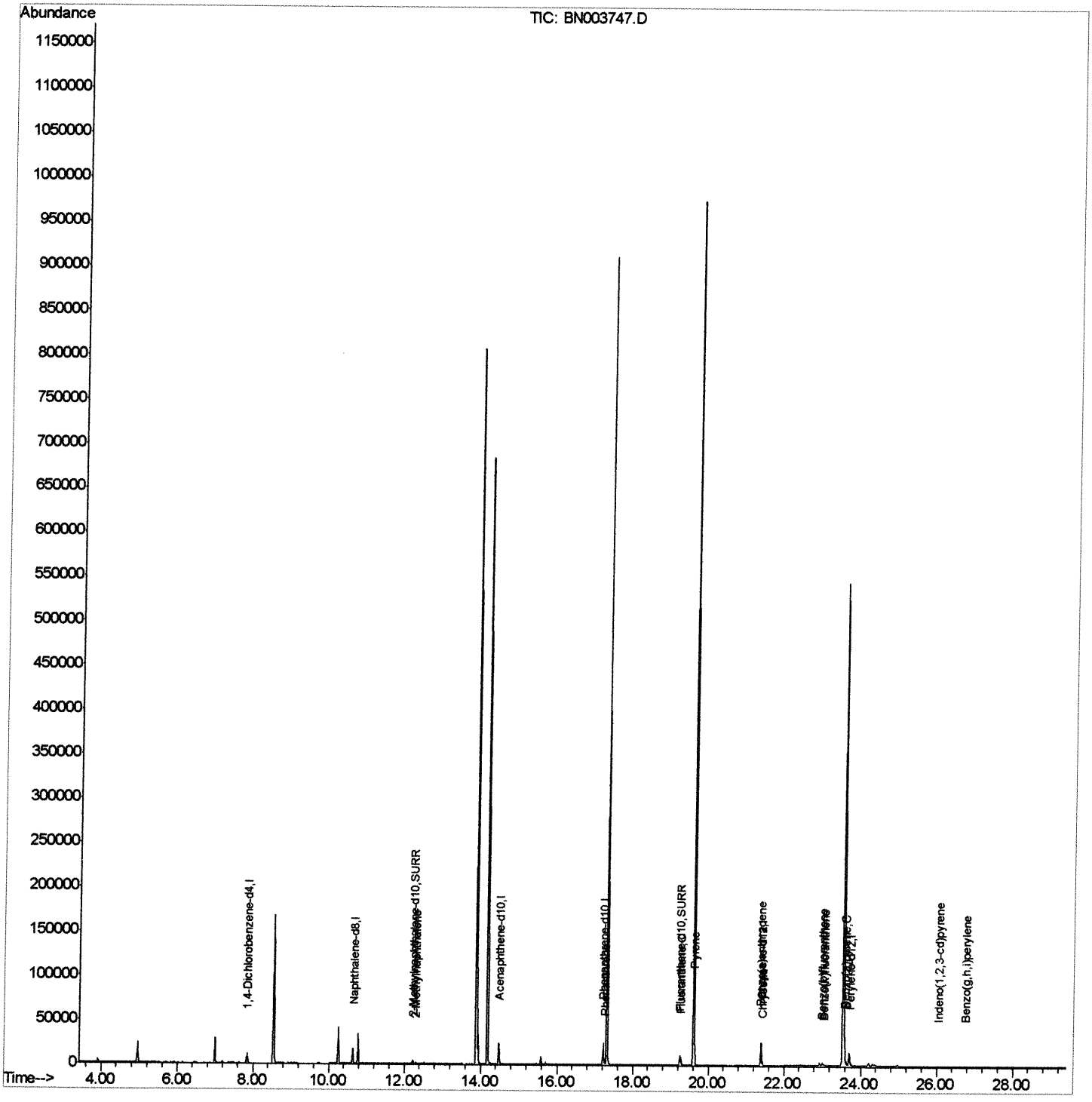

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 07 04:12:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
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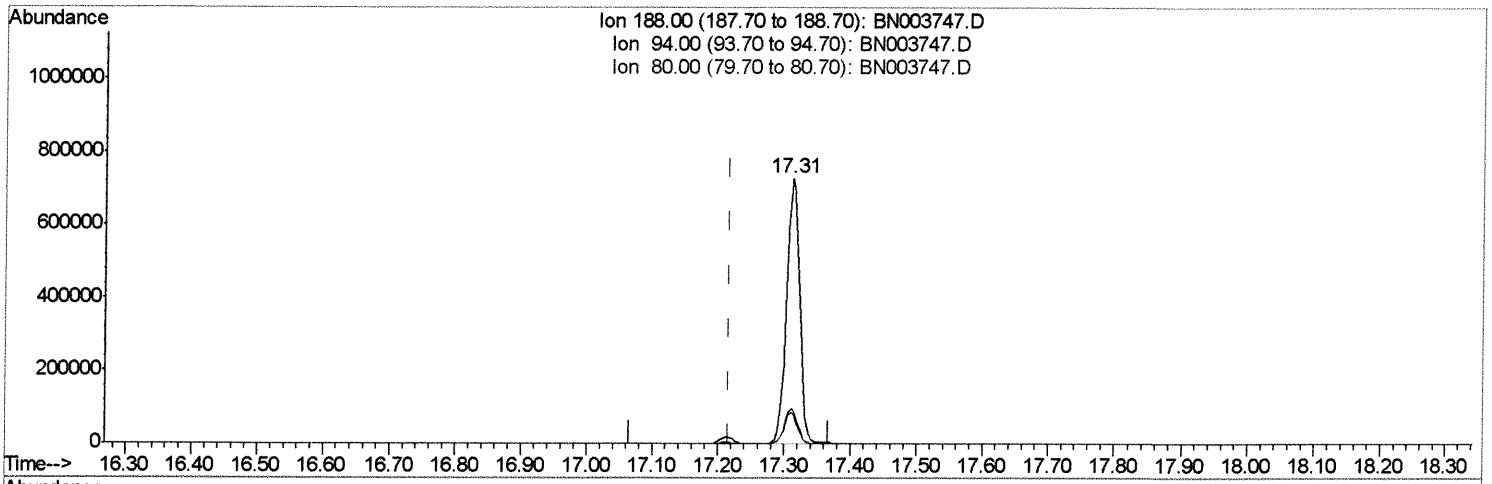

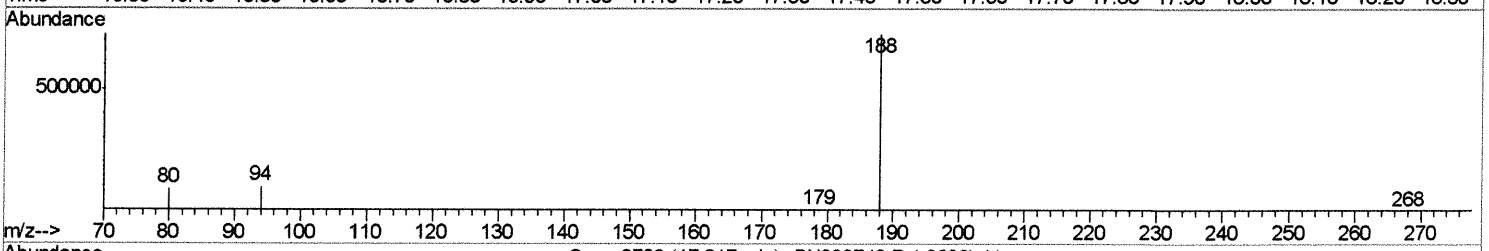

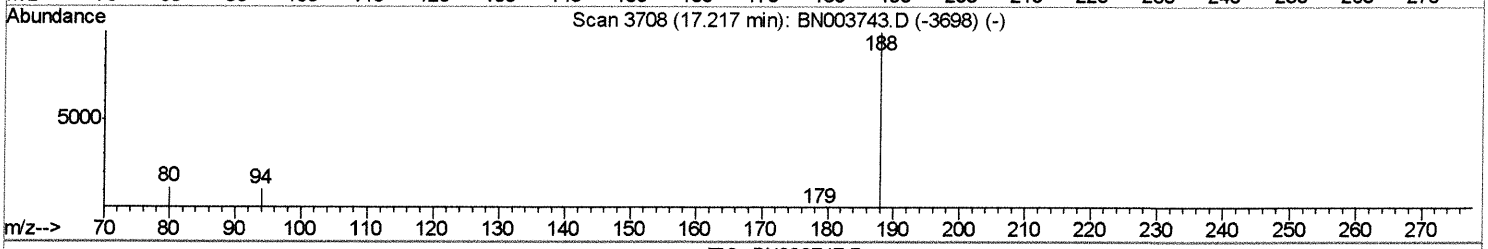

TIC: BN003747.D

(10) Phenanthrene-d10 (I)

17.310min (+0.093) 0.40ng/ul

response 992944

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	13.37#
80.00	11.60	12.01
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 07 04:12:40 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
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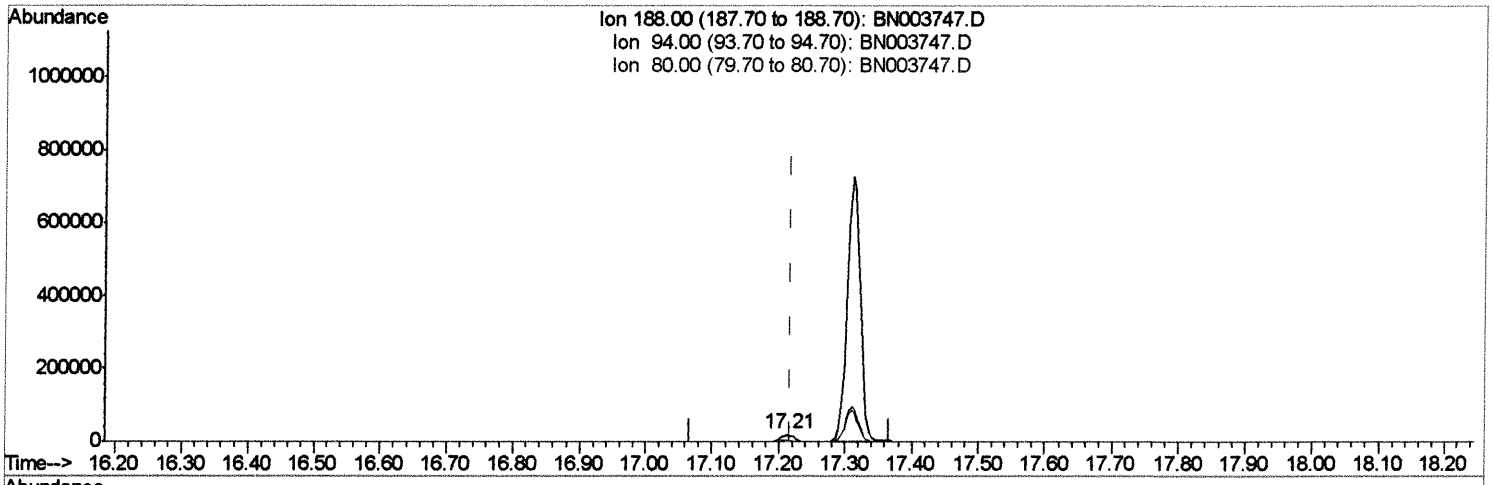
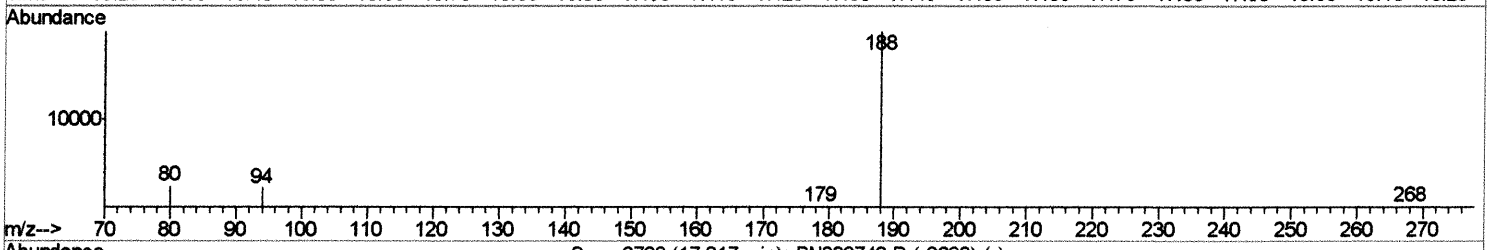
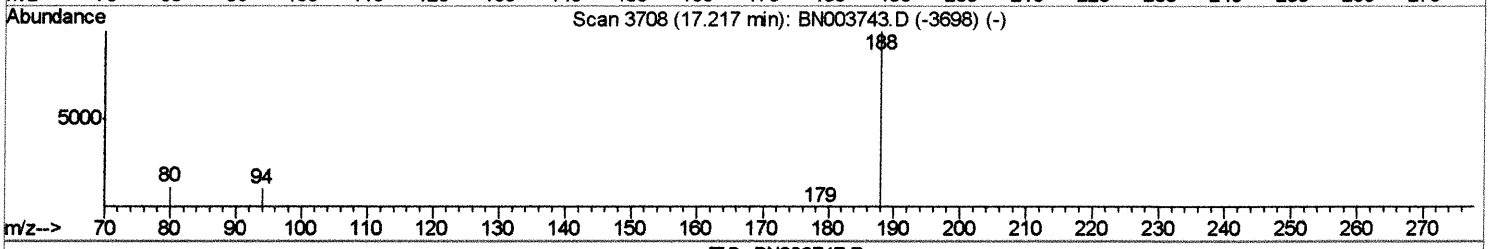
12/10/2018 12:20:45 PM







TIC: BN003747.D

(10) Phenanthrene-d10 (I)

17.213min (-0.004) 0.40ng/ul m > SJ 12/11/18

response 27834

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	11.14
80.00	11.60	12.07
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 07 04:41:58 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
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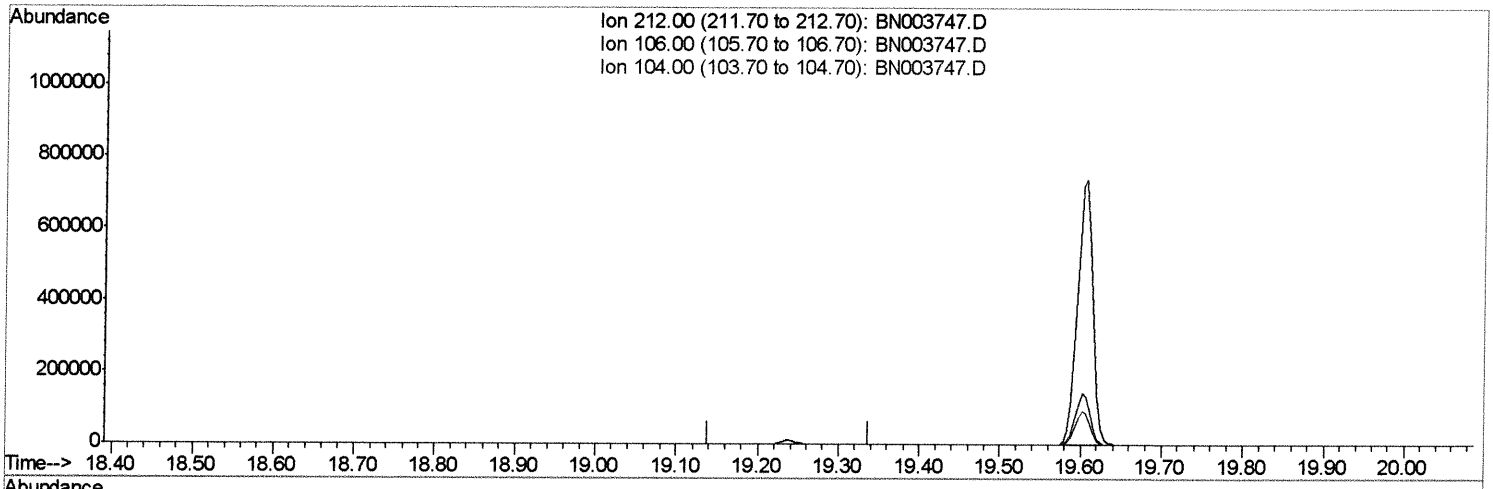

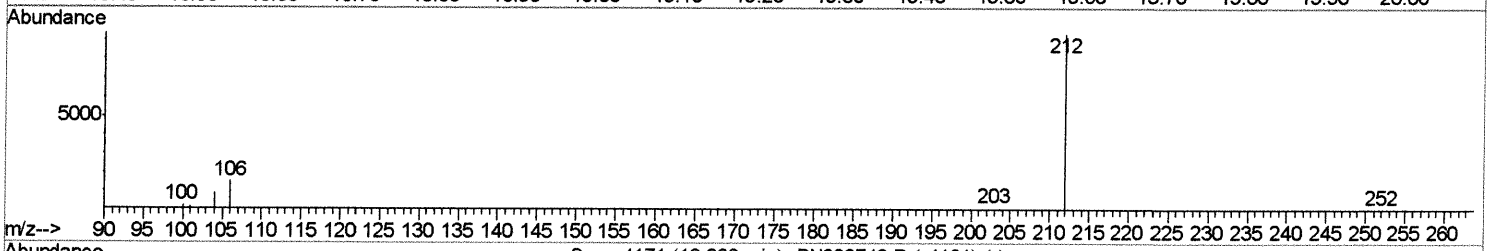

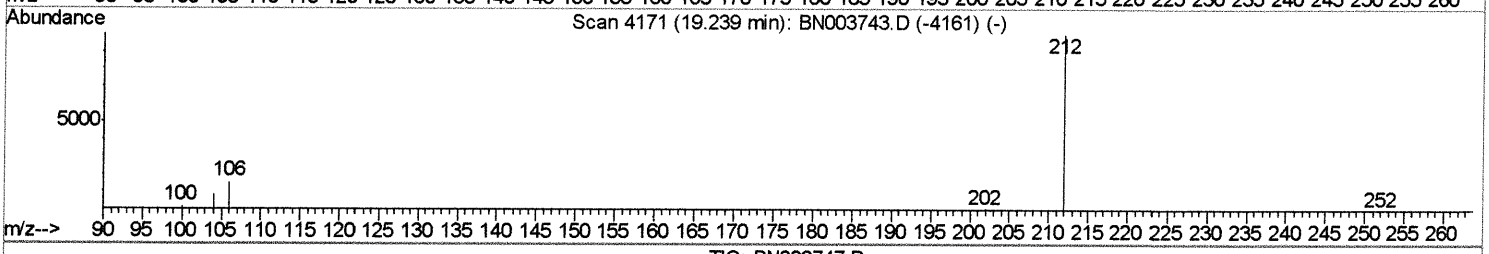

TIC: BN003747.D

(14) Fluoranthene-d10 (SURR)

19.239min (-19.239) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 07 04:41:58 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
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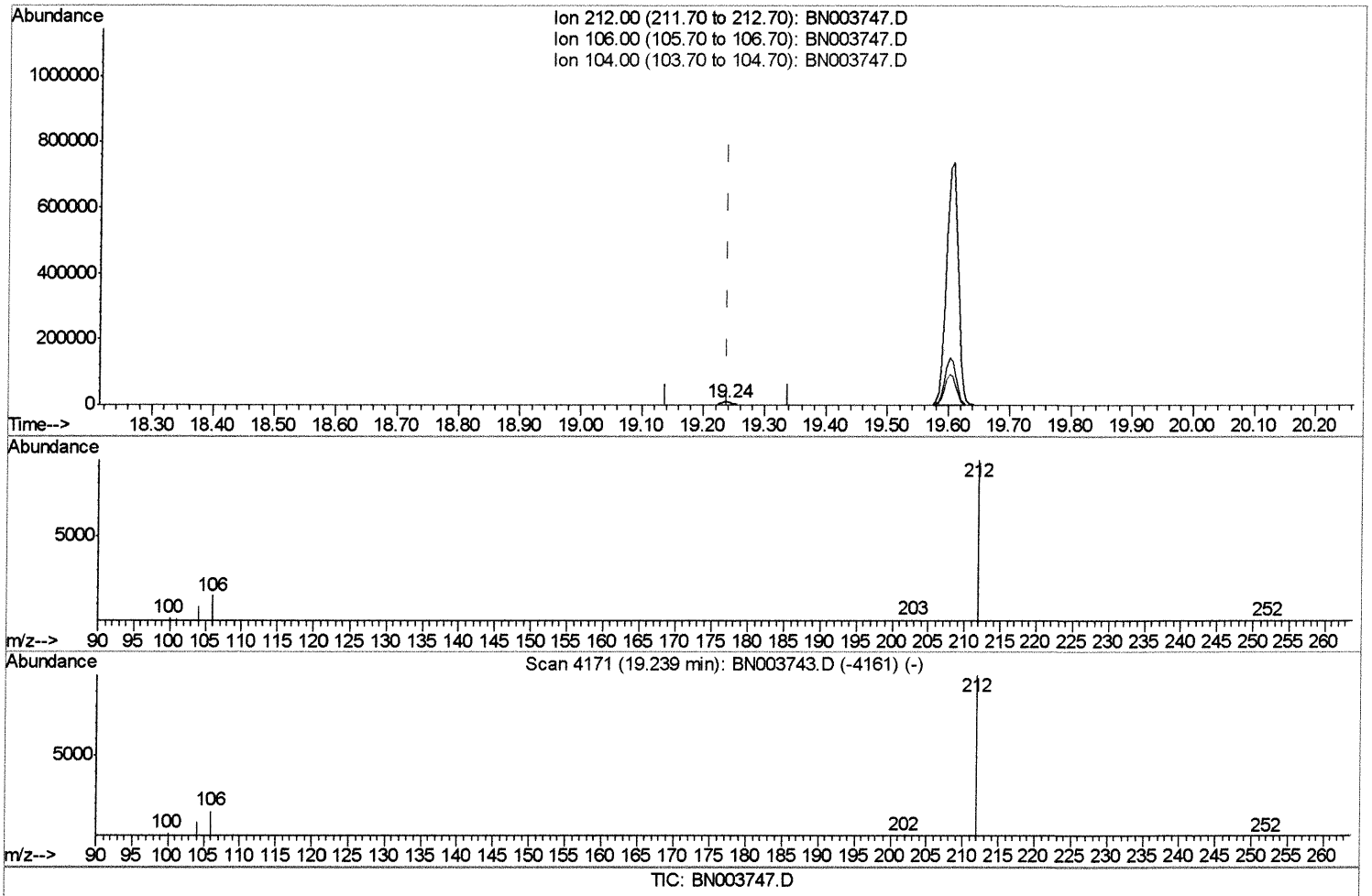

TIC: BN003747.D

(14) Fluoranthene-d10 (SURR)

19.239min (+0.000) 0.16ng/ul m > SJ 12/11/18

response 12702

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 07 04:41:58 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
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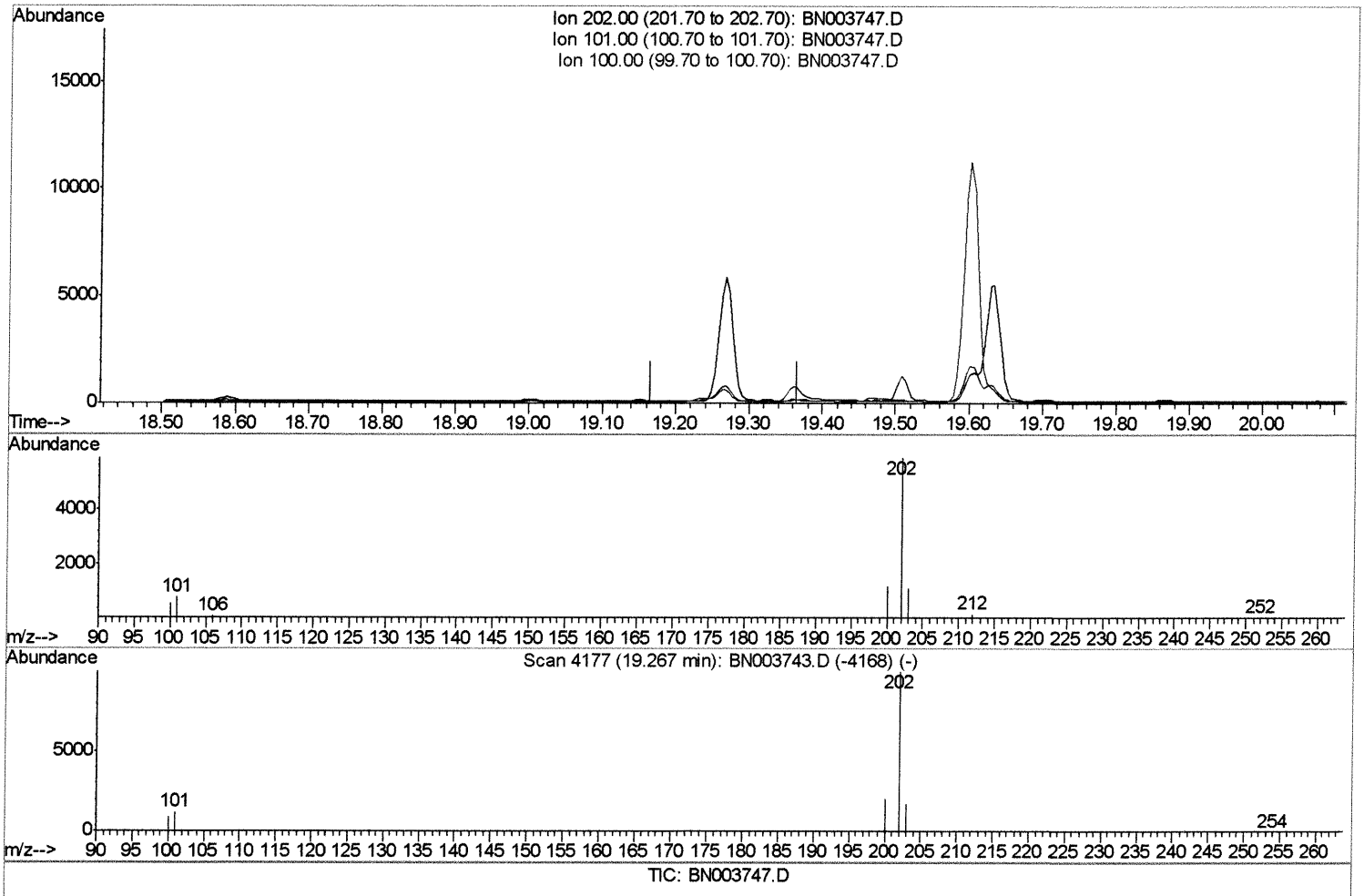

TIC: BN003747.D

(15) Fluoranthene (C)

19.267min (-19.267) 0.00ng/ul

response 0

Ion	Exp%	Act%
202.00	100	0.00
101.00	10.70	0.00
100.00	8.10	0.00
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (Qedit)

Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 07 04:41:58 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
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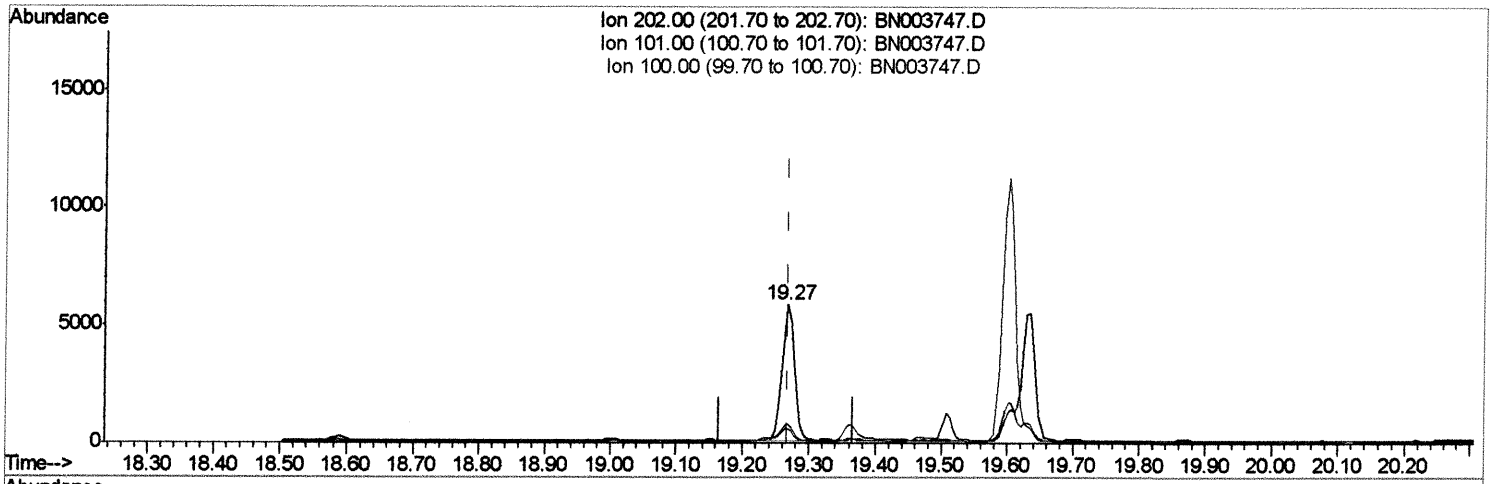
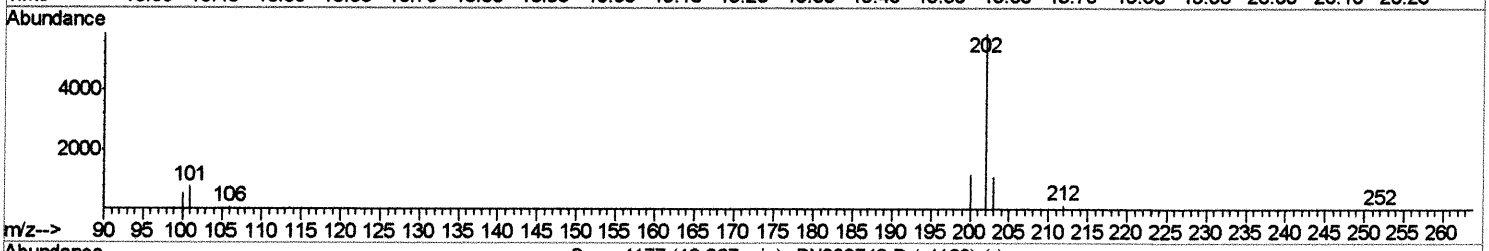
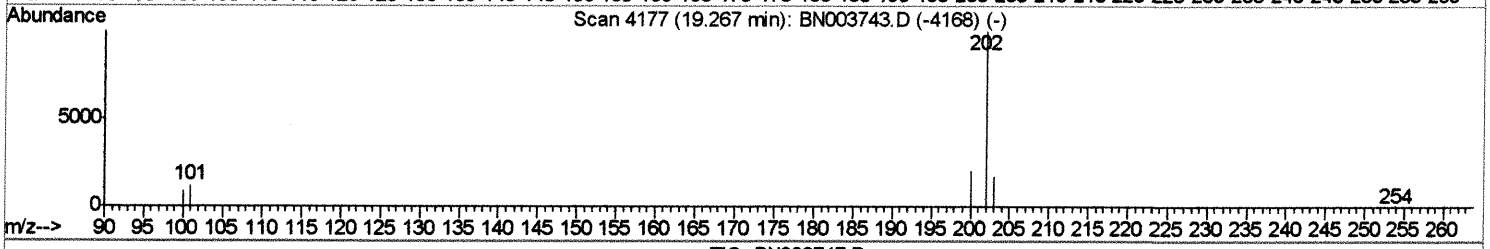
12/10/2018 12:20:45 PM







TIC: BN003747.D

(15) Fluoranthene (C)

19.267min (+0.000) 0.07ng/ul m

response 7558

> SJ 12/11/18

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	13.91
100.00	8.10	10.11
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

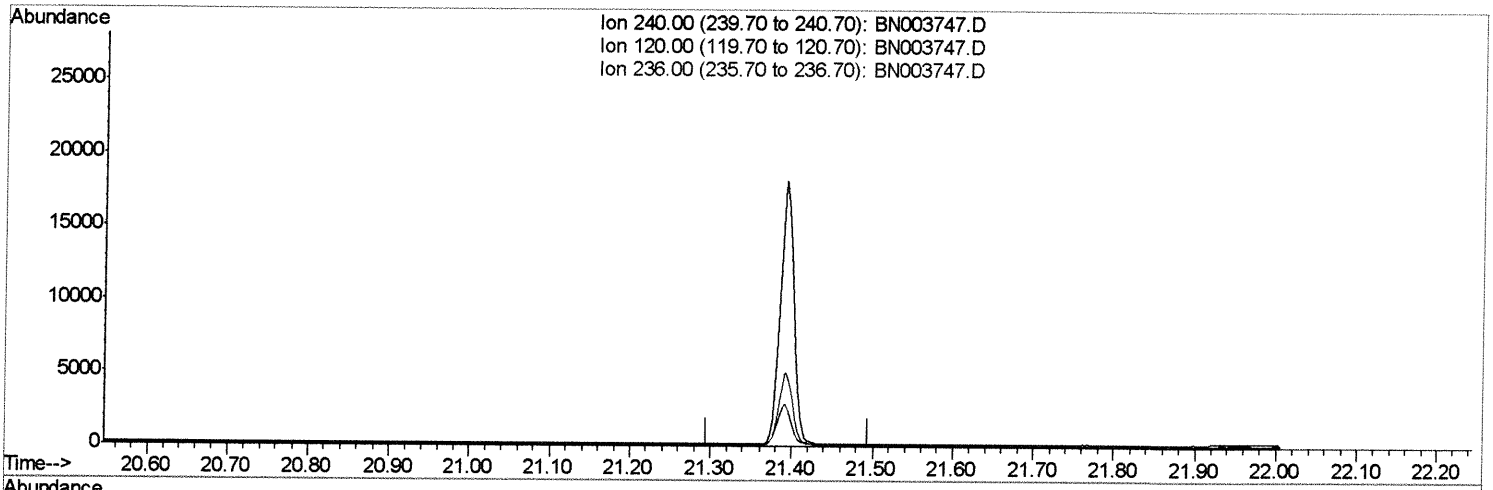
Quantitation Report (Qedit)

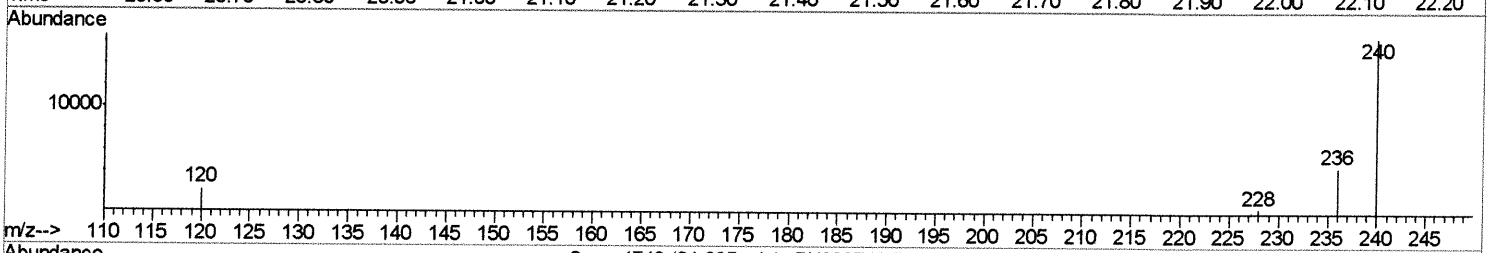
Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

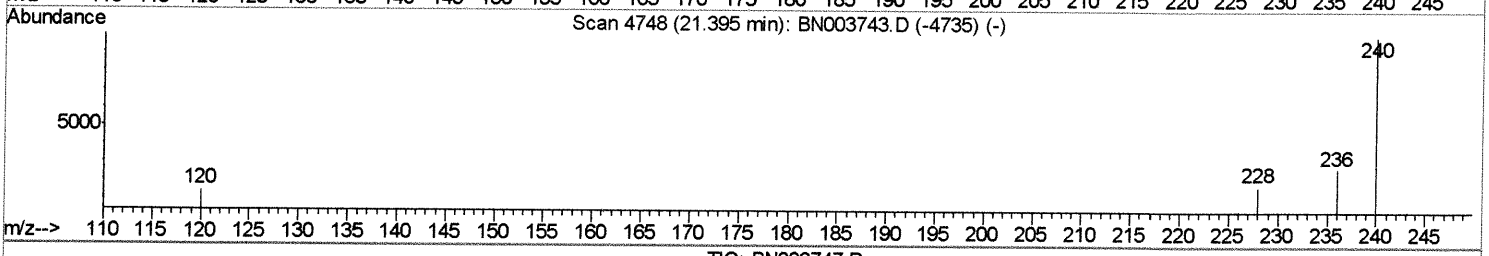
Quant Time: Dec 07 04:41:58 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:45 PM







TIC: BN003747.D

(16) Chrysene-d12 (I)

21.395min (-21.395) 0.00ng/ul

response 0

Ion	Exp%	Act%
240.00	100	0.00
120.00	14.00	0.00#
236.00	27.60	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

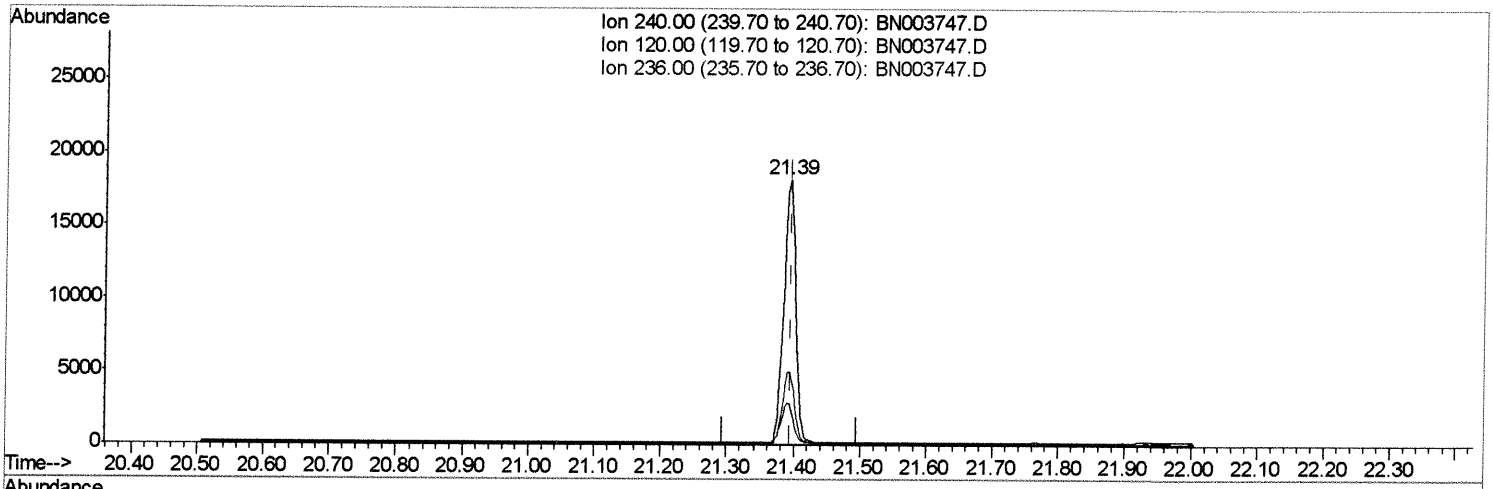
Quantitation Report (Qedit)

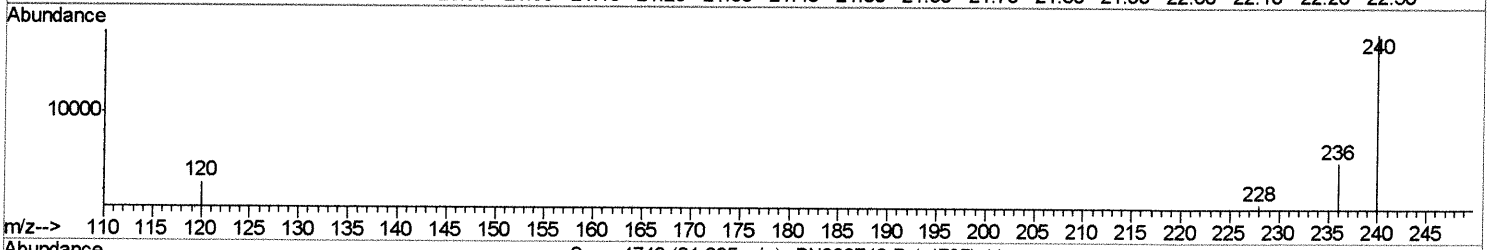
Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

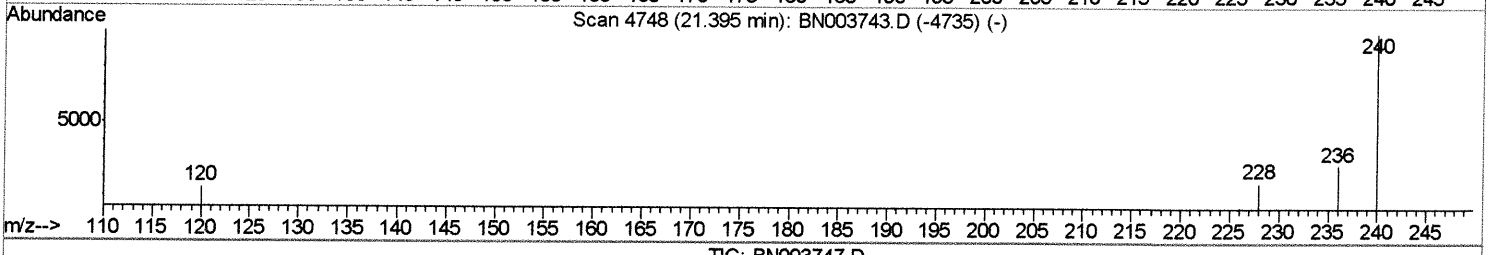
Quant Time: Dec 07 04:41:58 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:45 PM







TIC: BN003747.D

(16) Chrysene-d12 (I)

21.393min (-0.003) 0.40ng/ul m

response 22548

> SJ 12/11/18

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	15.41
236.00	27.60	27.88
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

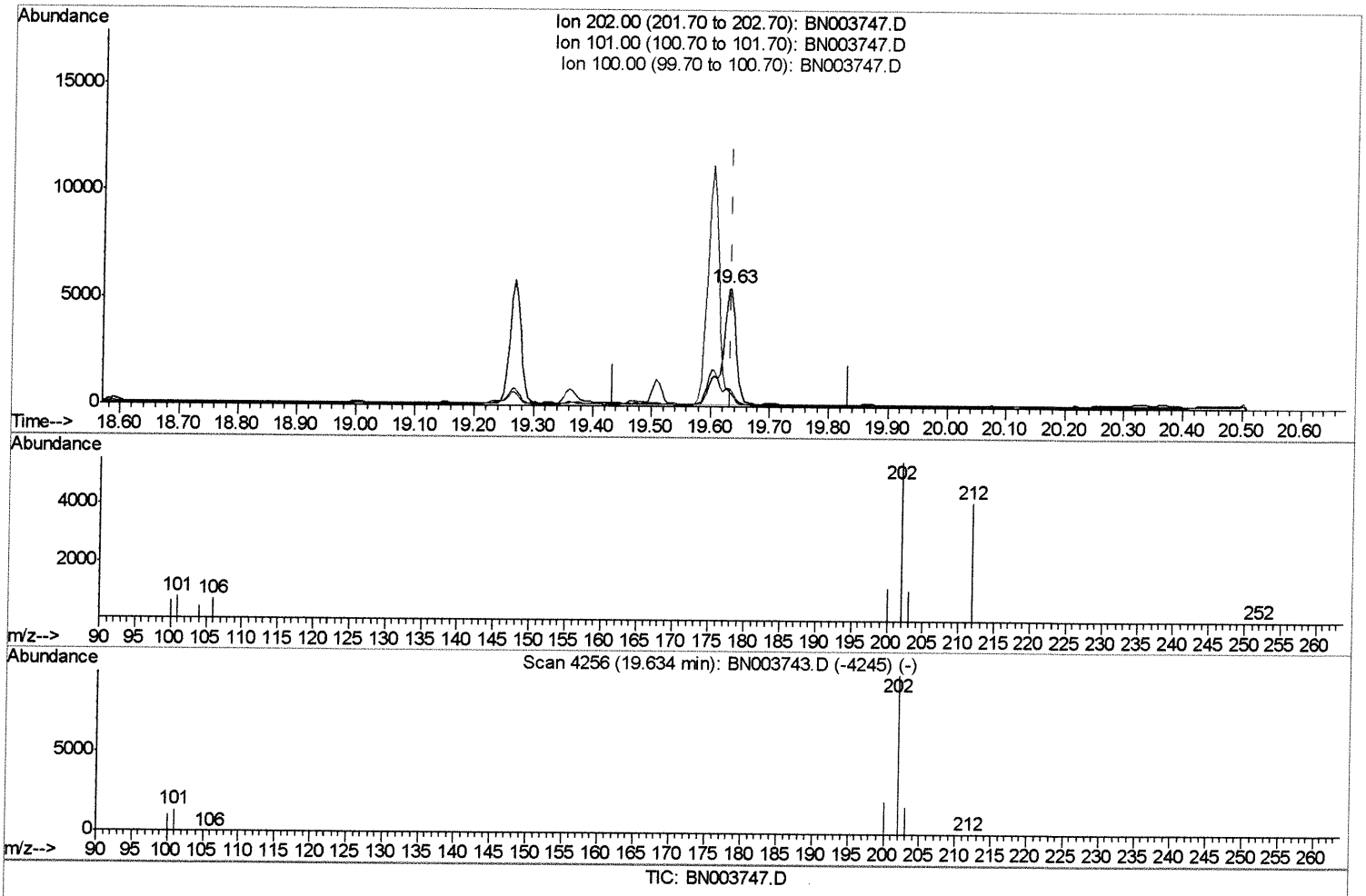
Quantitation Report (Qedit)

Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 07 04:43:04 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:45 PM



TIC: BN003747.D

(17) Pyrene

19.634min (+0.000) 0.11ng/ul

response 8934

Ion	Exp%	Act%
202.00	100	100
101.00	12.90	14.40
100.00	10.60	11.94
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

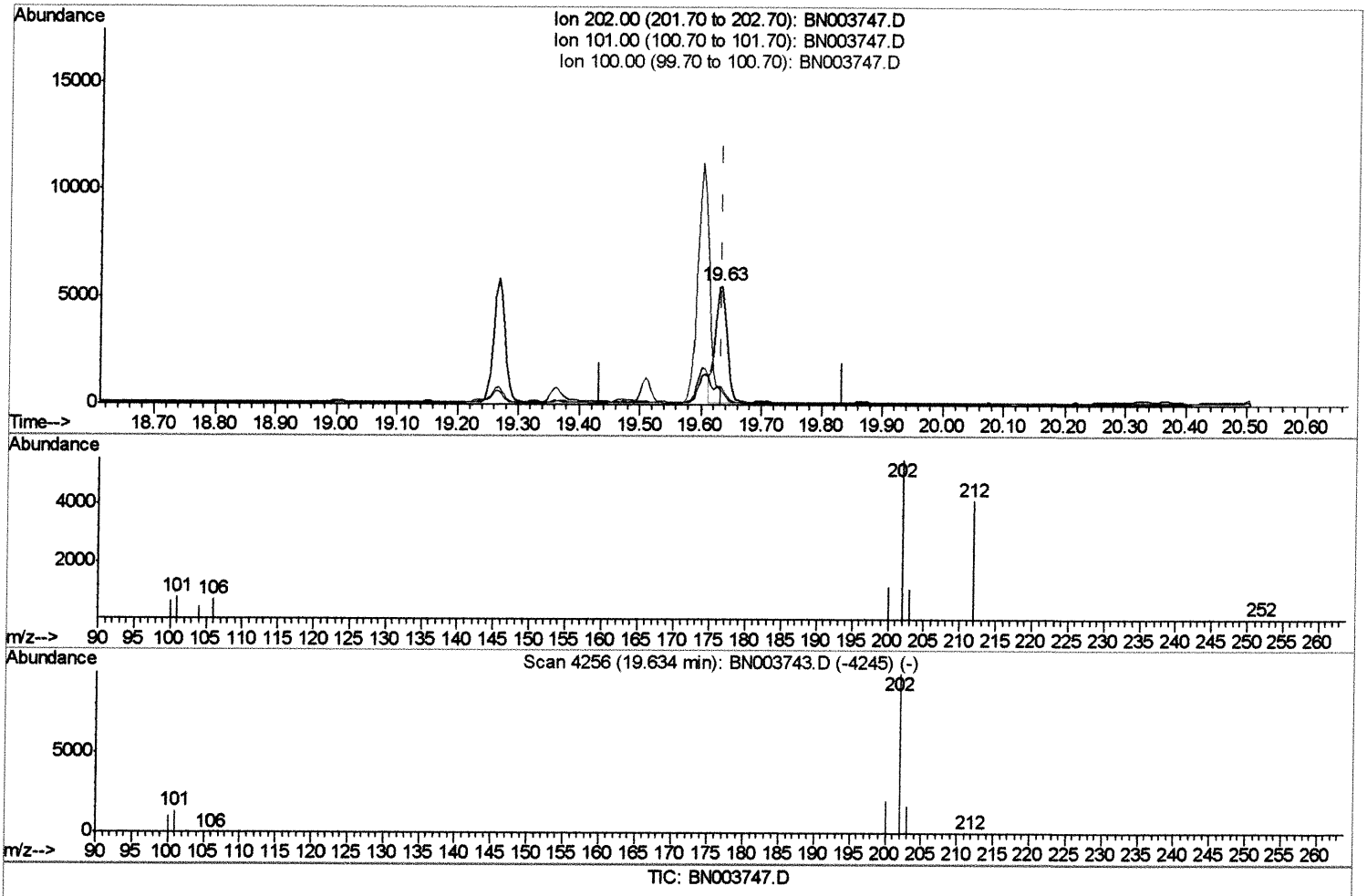
Quantitation Report (Qedit)

Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 07 04:43:04 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:45 PM



TIC: BN003747.D

(17) Pyrene

19.634min (+0.000) 0.09ng/ul m > SJ 12/11/18

response 7406

Ion	Exp%	Act%
202.00	100	100
101.00	12.90	14.40
100.00	10.60	11.94
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

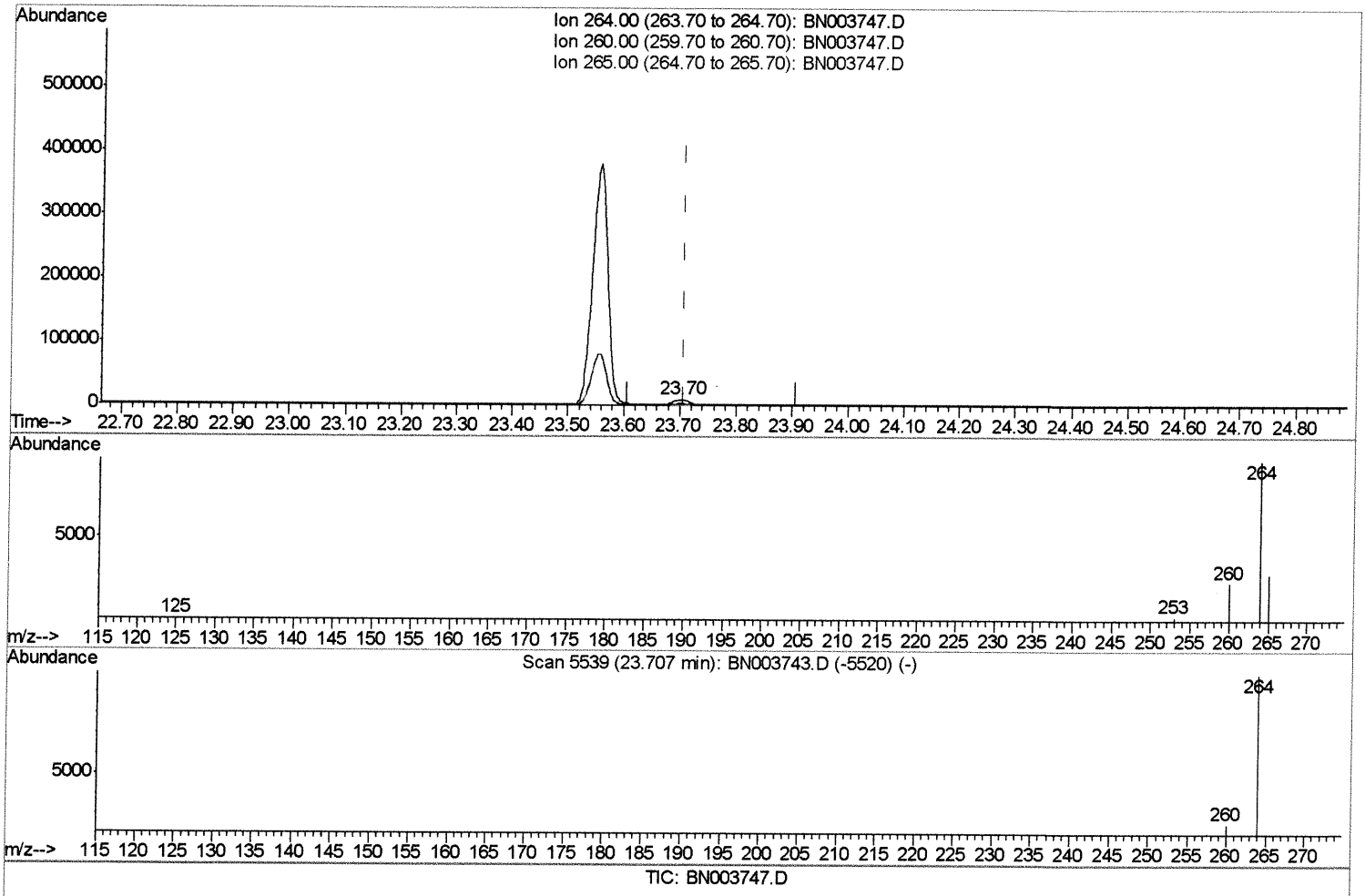
Quantitation Report (Qedit)

Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 07 04:43:04 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:45 PM



(20) Perylene-d12 (I)

23.702min (-0.006) 0.40ng/ul

response 20466

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.00
265.00	33.50	30.95
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

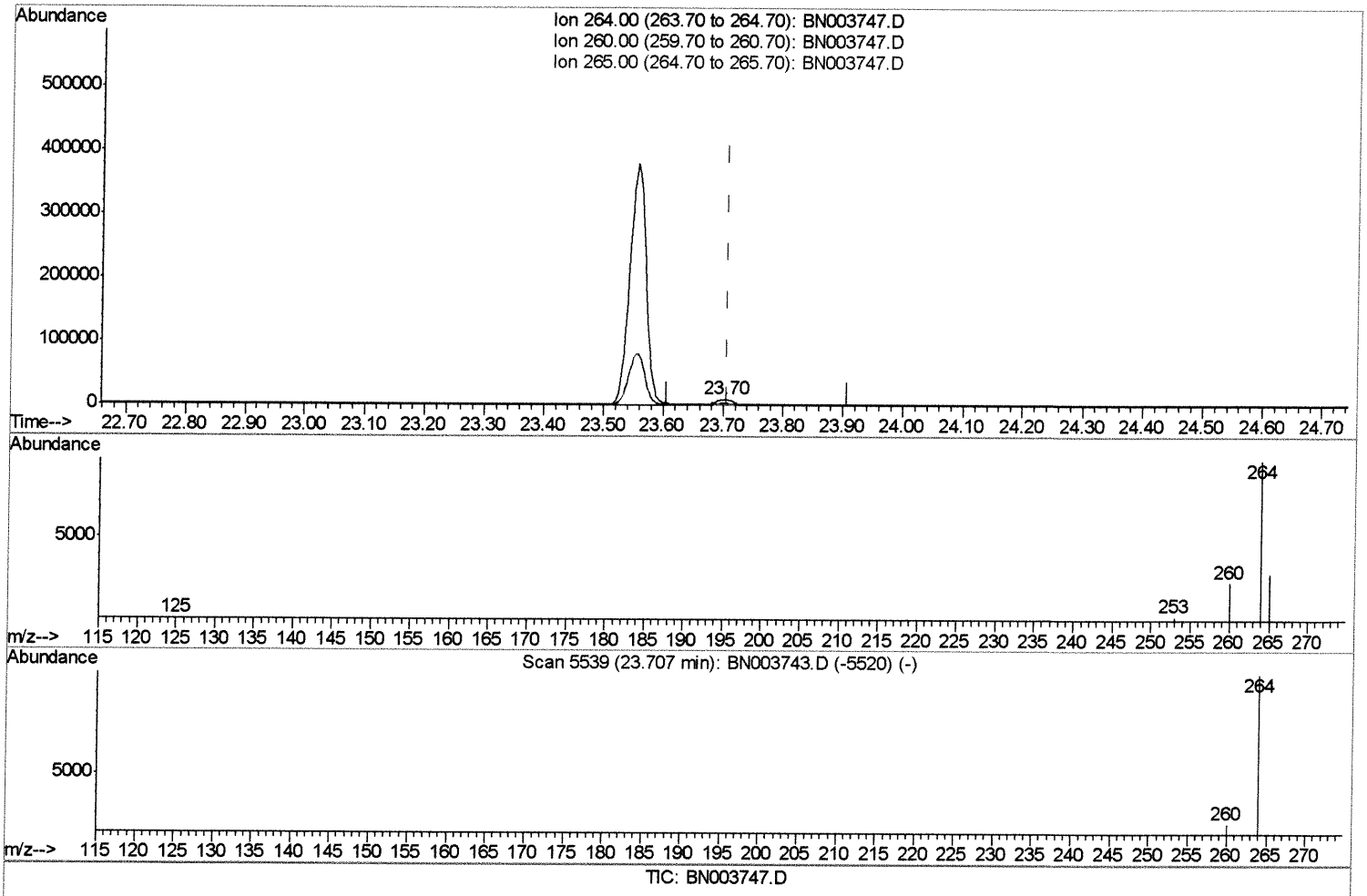
Quantitation Report (Qedit)

Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 07 04:43:04 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:45 PM



(20) Perylene-d12 (I)

23.702min (-0.006) 0.40ng/ul m > SJ 12/11/18

response 17031

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.00
265.00	33.50	30.95
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

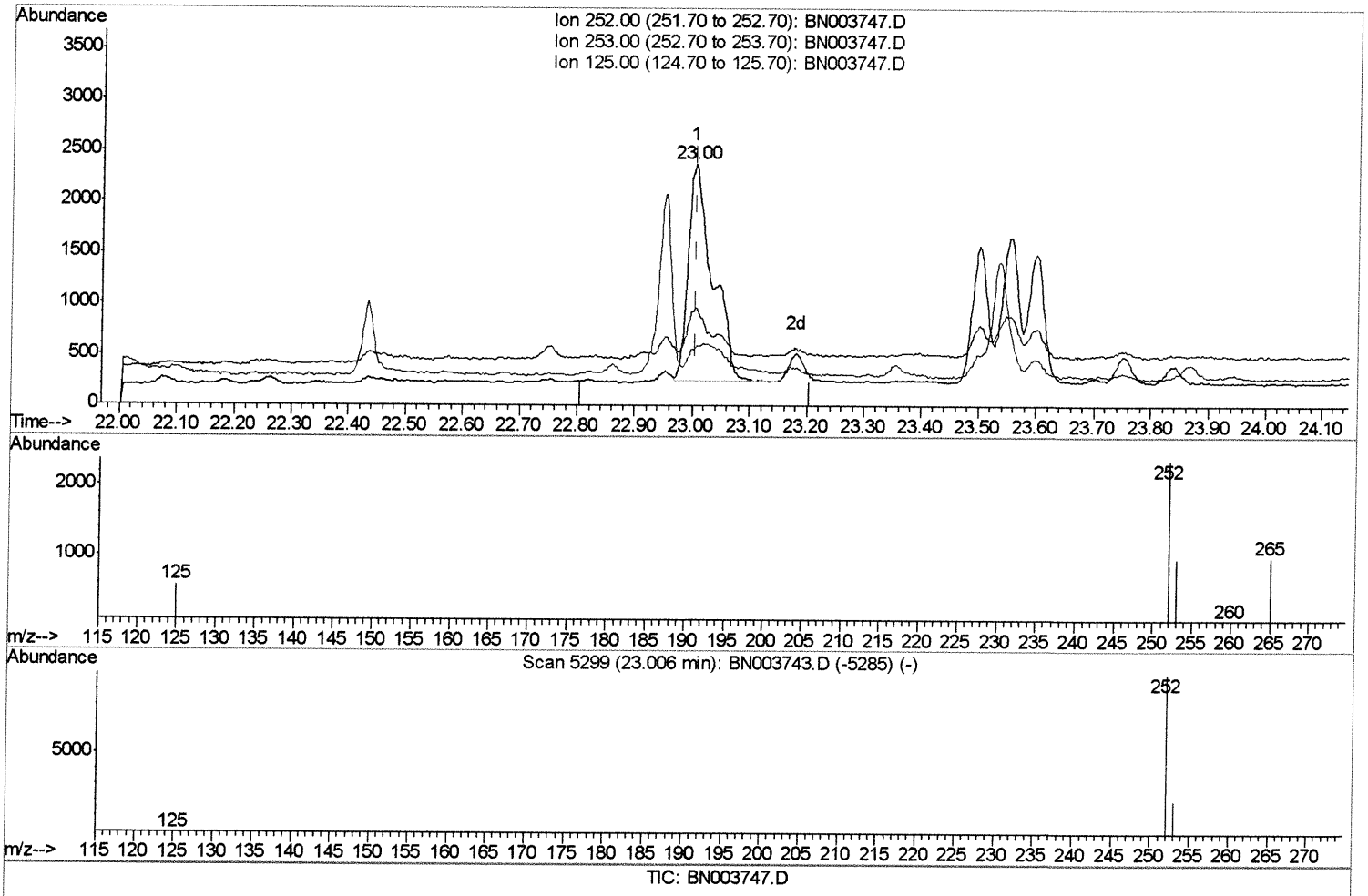
Quantitation Report (Qedit)

Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 07 04:43:46 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:45 PM



TIC: BN003747.D

(21) Benzo(b)fluoranthene

23.003min (-0.003) 0.09ng/ul

response 6183

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	40.50
125.00	11.20	23.82#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

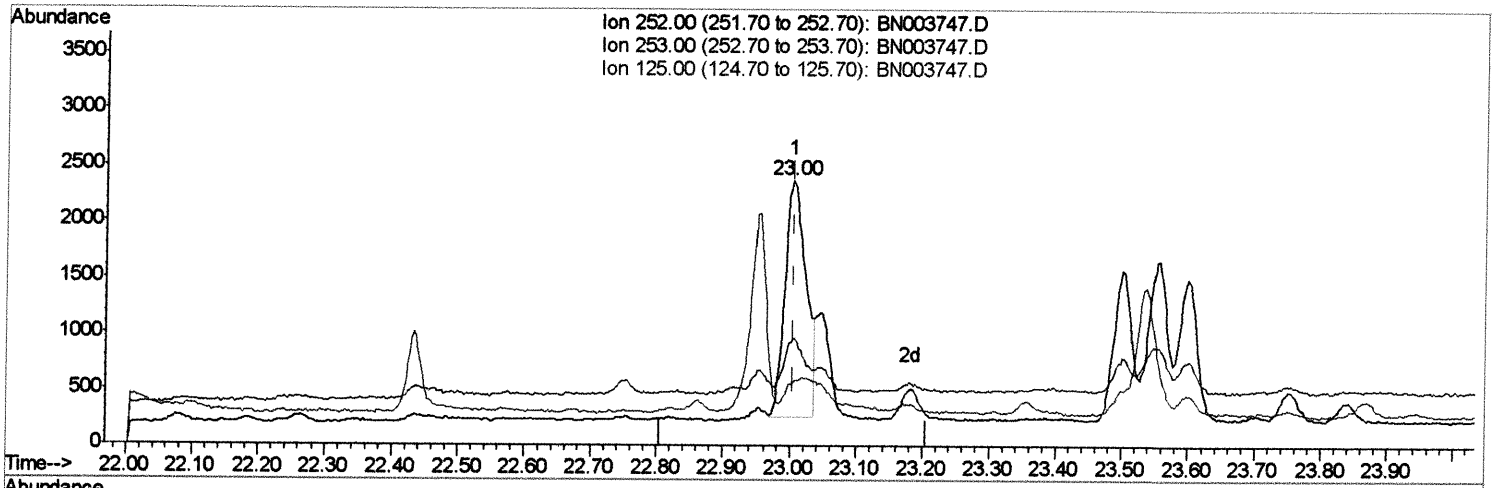
Quantitation Report (Qedit)

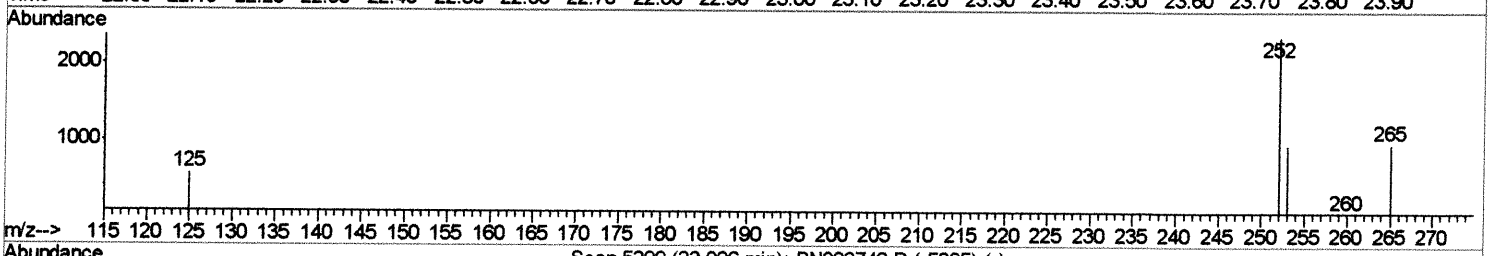
Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

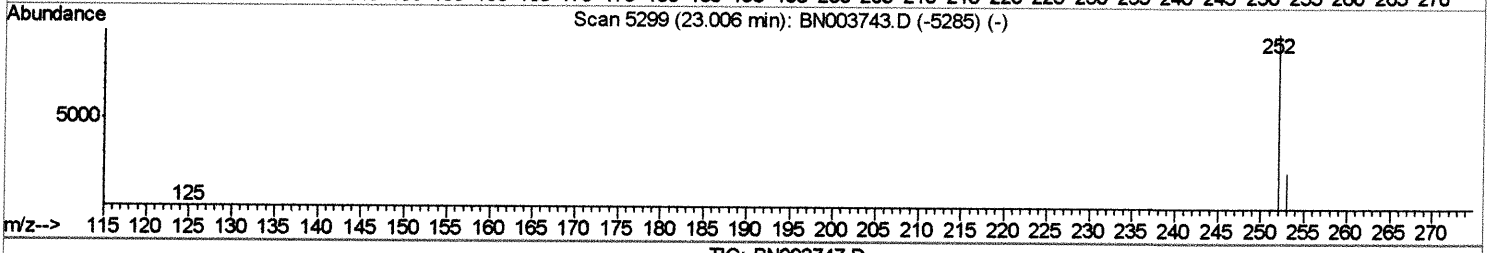
Quant Time: Dec 07 04:43:46 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:45 PM







TIC: BN003747.D

(21) Benzo(b)fluoranthene

23.003min (-0.003) 0.07ng/ul m

response 4689

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	40.50
125.00	11.20	23.82#
0.00	0.00	0.00

SJ 12/11/18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

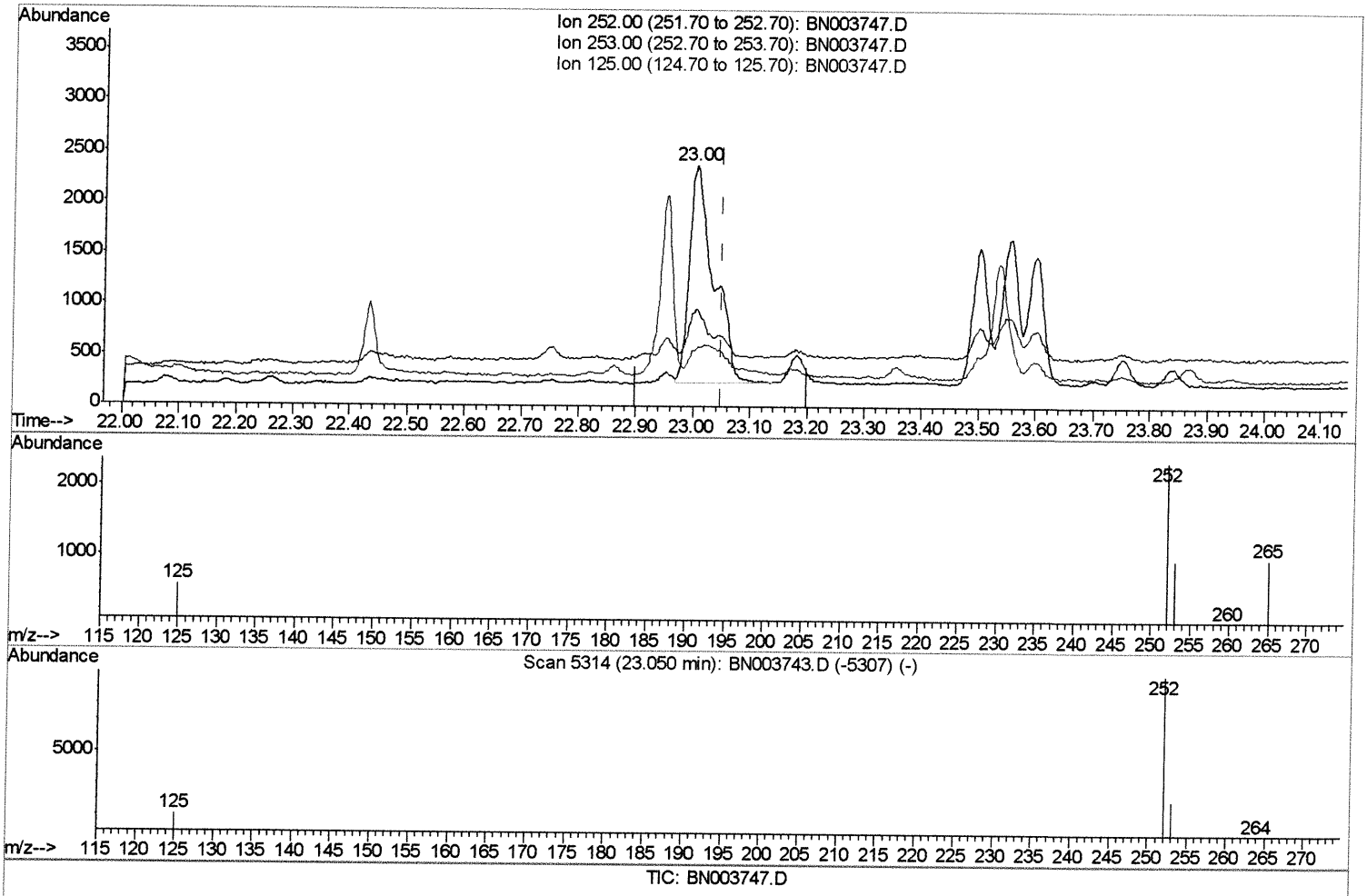
Quantitation Report (Qedit)

Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 07 04:43:46 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:45 PM



TIC: BN003747.D

(22) Benzo(k)fluoranthene

23.003min (-0.047) 0.09ng/ul

response 6210

Ion	Exp%	Act%
252.00	100	100
253.00	23.10	40.50#
125.00	11.30	23.82#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

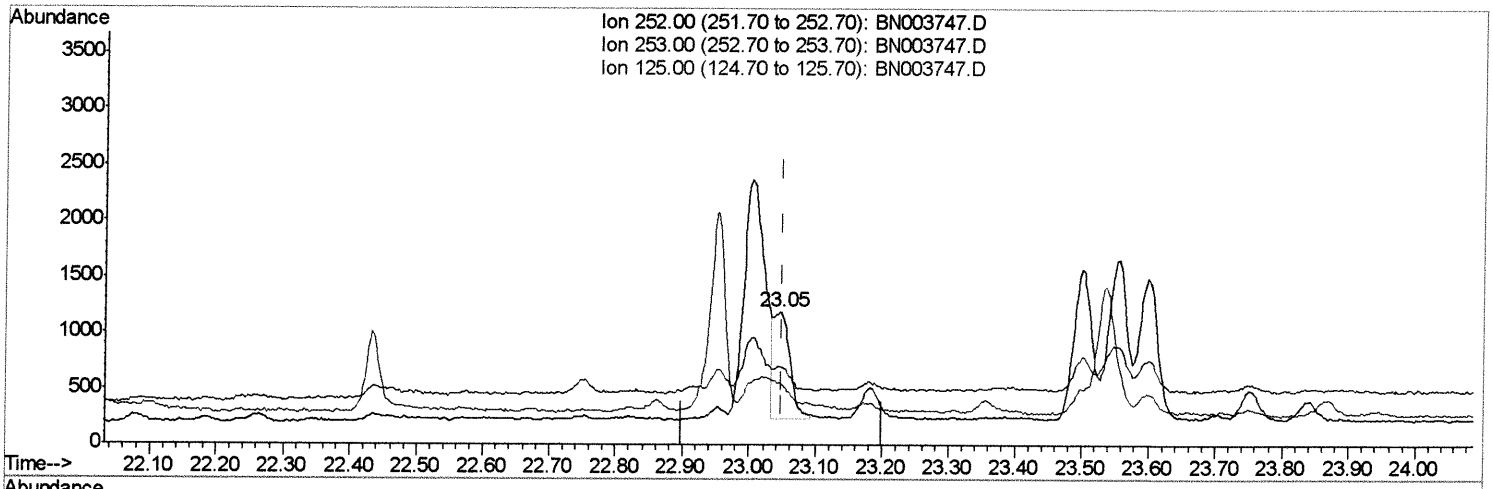
Quantitation Report (Qedit)

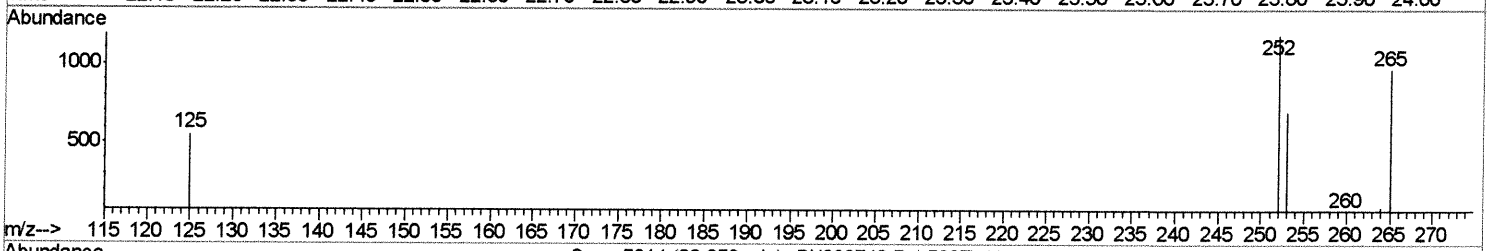
Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

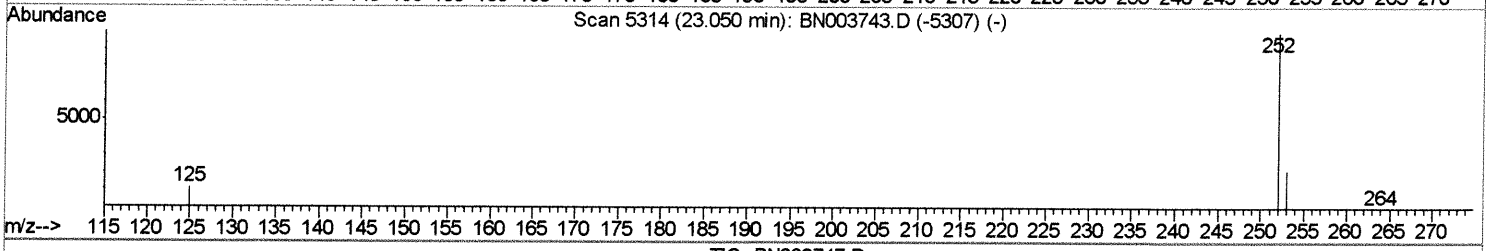
Quant Time: Dec 07 04:43:46 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:45 PM







TIC: BN003747.D

(22) Benzo(k)fluoranthene

23.047min (-0.003) 0.02ng/ul m

response 1603

Ion	Exp%	Act%
252.00	100	100
253.00	23.10	59.14#
125.00	11.30	46.42#
0.00	0.00	0.00

> SJ 12/11/18

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003747.D
Acq On : 07 Dec 2018 01:50
Operator : JU/SJ
Sample : J6227-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 07 04:44:28 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5780	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	23721	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	12704	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	27834m	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	22548m	0.40	ng/ul	0.00
20) Perylene-d12	23.70	264	17031m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	6003	0.16	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	12702m	0.16	ng/ul	0.00
Target Compounds						Qvalue
5) 2-Methylnaphthalene	12.29	142	1691	0.036	ng/ul	100
12) Phenanthrene	17.25	178	6437	0.070	ng/ul	95
15) Fluoranthene	19.27	202	7558m	0.070	ng/ul	
17) Pyrene	19.63	202	7406m	0.092	ng/ul	
18) Benzo(a)anthracene	21.38	228	3483	0.049	ng/ul#	90
19) Chrysene	21.43	228	5102	0.063	ng/ul#	93
21) Benzo(b)fluoranthene	23.00	252	4689m	0.067	ng/ul	
22) Benzo(k)fluoranthene	23.05	252	1603m	0.023	ng/ul	
23) Benzo(a)pyrene	23.60	252	2288	0.038	ng/ul#	49
24) Indeno(1,2,3-cd)pyrene	26.05	276	1767	0.025	ng/ul#	99
26) Benzo(g,h,i)perylene	26.77	276	1716	0.028	ng/ul#	70

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
BNA_N
ClientSampleId :
F9E80

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:45 PM

SJ
12/11/18

SJ
12/11/18

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9F33

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-08
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BN003958.D
% Solids : 88.8
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/15/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	3.7	U
91-57-6	2-Methylnaphthalene	1.8	J
208-96-8	Acenaphthylene	3.7	U
83-32-9	Acenaphthene	3.7	U
86-73-7	Fluorene	3.7	U
87-86-5	Pentachlorophenol	7.5	U
85-01-8	Phenanthrene	3.2	J
120-12-7	Anthracene	1.1	J
206-44-0	Fluoranthene	4.0	
129-00-0	Pyrene	5.1	
56-55-3	Benzo(a)anthracene	2.8	J
218-01-9	Chrysene	3.4	J
205-99-2	Benzo(b)fluoranthene	3.4	J
207-08-9	Benzo(k)fluoranthene	1.2	J
50-32-8	Benzo(a)pyrene	2.5	J
193-39-5	Indeno(1,2,3-cd)pyrene	1.5	J
53-70-3	Dibenzo(a,h)anthracene	3.7	U
191-24-2	Benzo(g,h,i)perylene	2.1	J

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:48:16 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

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Sohil
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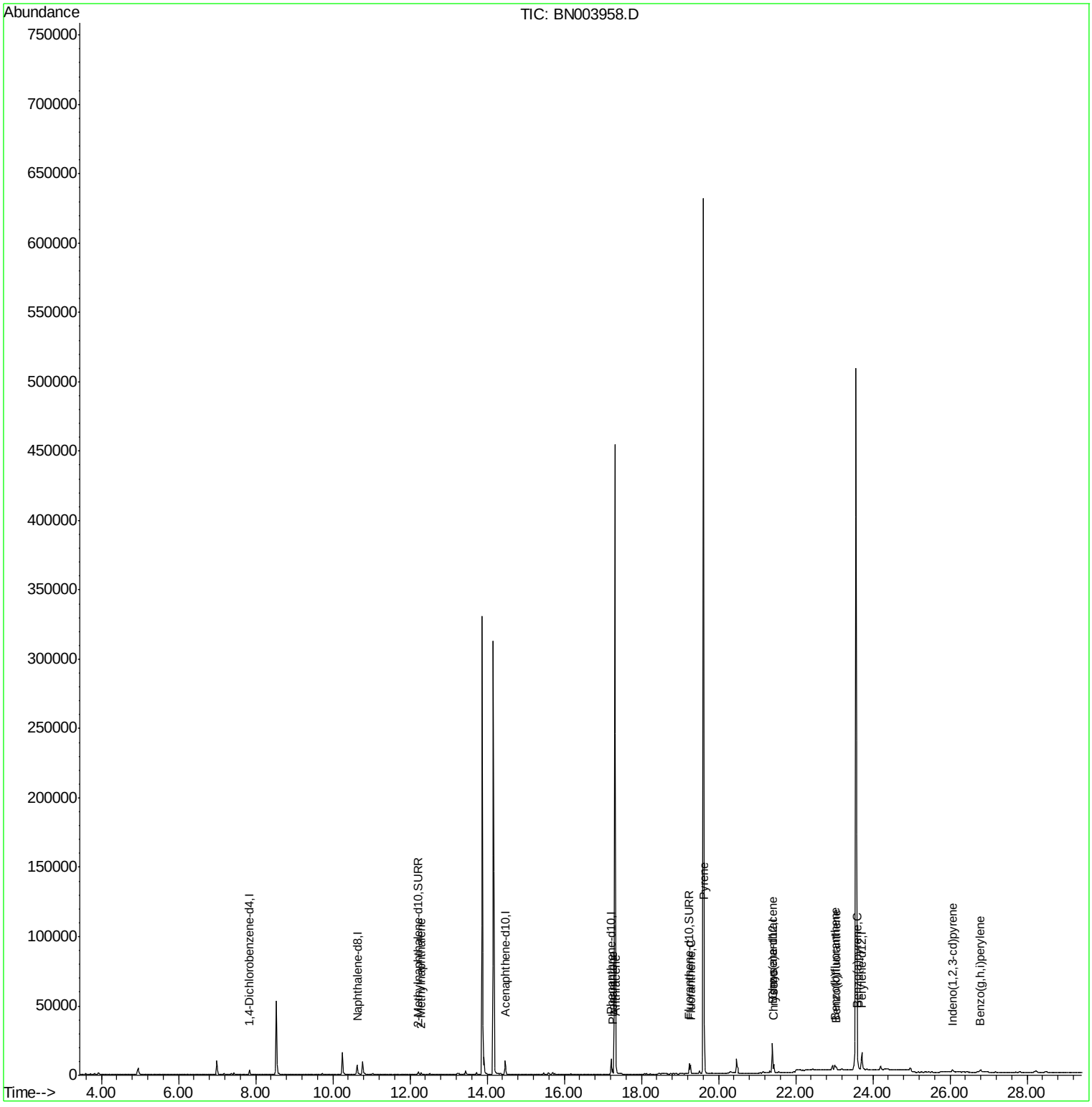

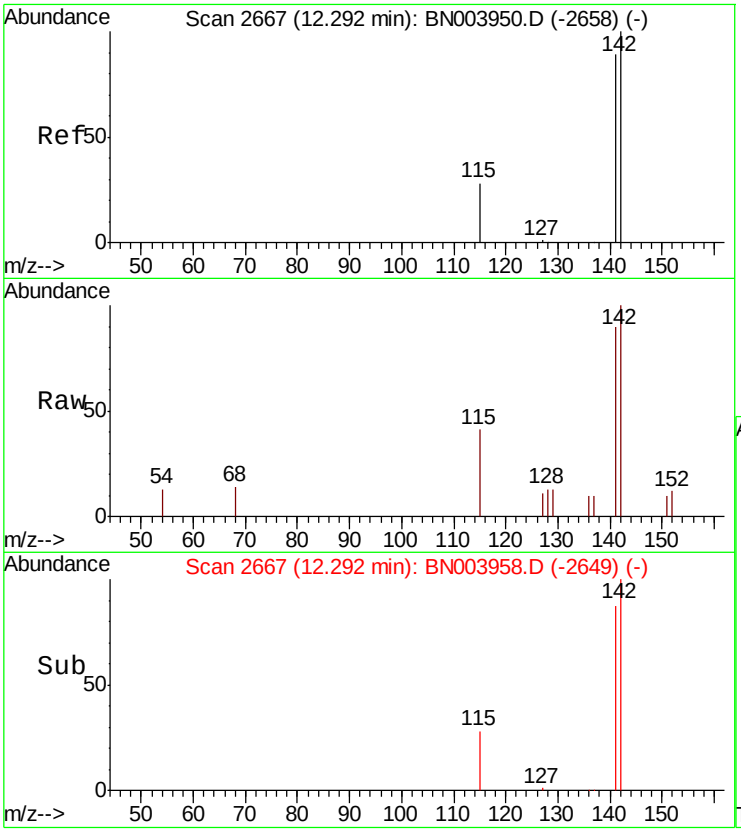

#5
2-Methylnaphthalene
Concen: 0.047 ng/ul
RT: 12.29 min Scan# 2667
Delta R.T. -0.00 min
Lab File: BN003958.D
Acq: 15 Dec 2018 14:31

Tgt Ion:142 Resp: 814

Ion	Ratio	Lower	Upper
142	100		
141	89.8	71.5	107.3

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
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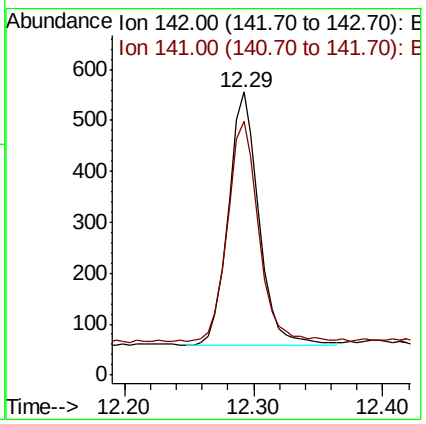
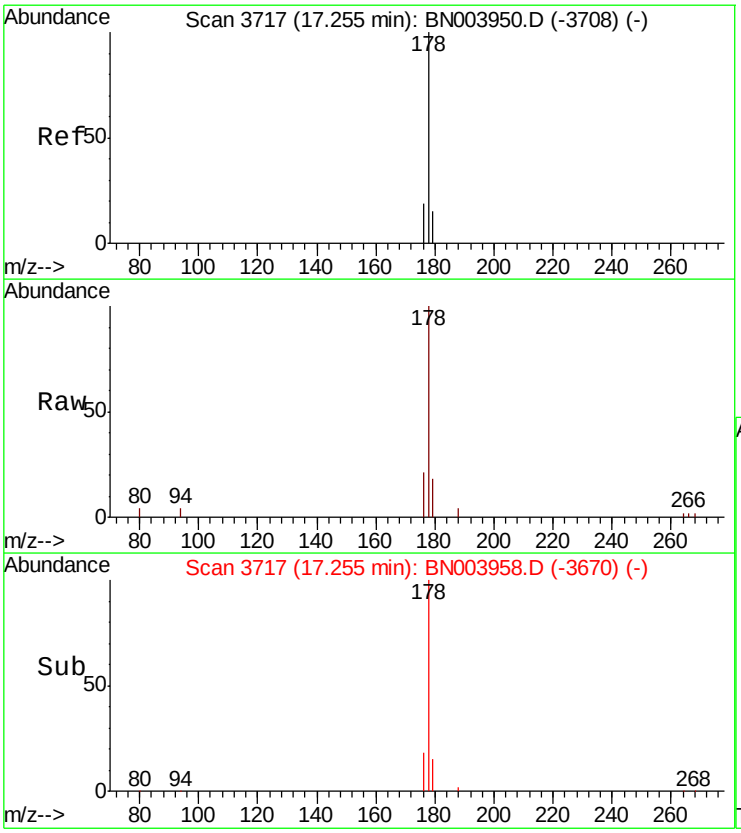
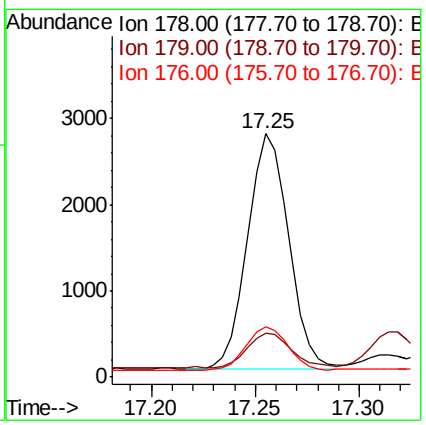


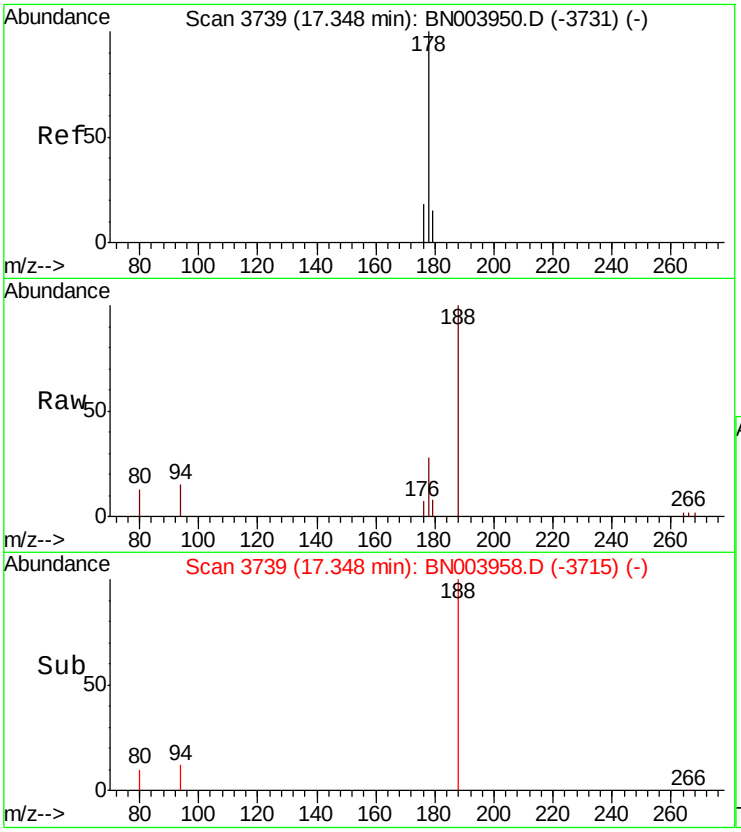


#12
Phenanthrene
Concen: 0.085 ng/ul
RT: 17.25 min Scan# 3717
Delta R.T. -0.00 min
Lab File: BN003958.D
Acq: 15 Dec 2018 14:31

Tgt Ion:178 Resp: 3750

Ion	Ratio	Lower	Upper
178	100		
179	18.3	12.5	18.7
176	20.7	15.0	22.4





#13
Anthracene
Concen: 0.029 ng/ul m
RT: 17.35 min Scan# 3739
Delta R.T. -0.00 min
Lab File: BN003958.D
Acq: 15 Dec 2018 14:31

Tgt Ion:178 Resp: 1035

Ion	Ratio	Lower	Upper
178	100		
179	27.1	12.3	18.5#
176	25.9	14.8	22.2#

Instrument :
BNA_N
ClientSampleId :
F9F33

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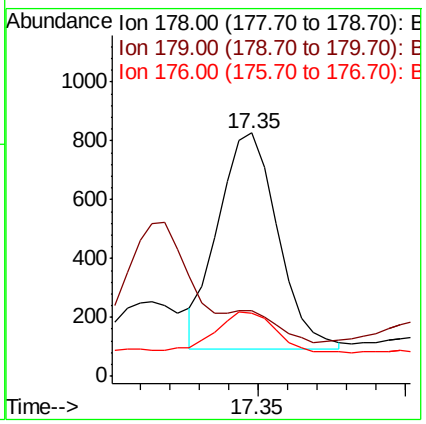
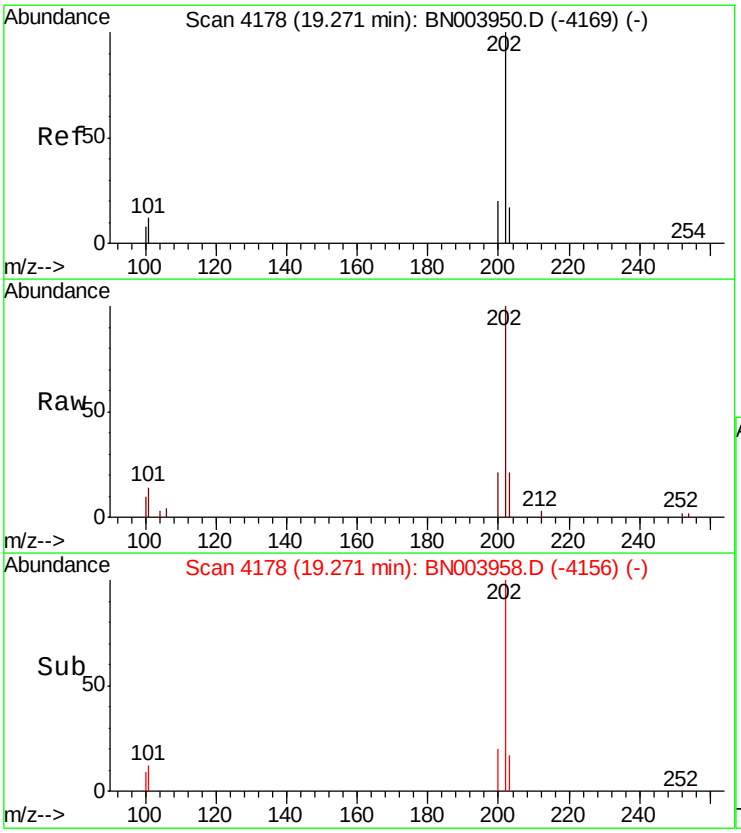
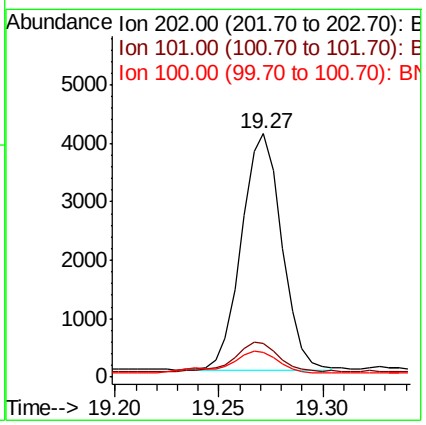


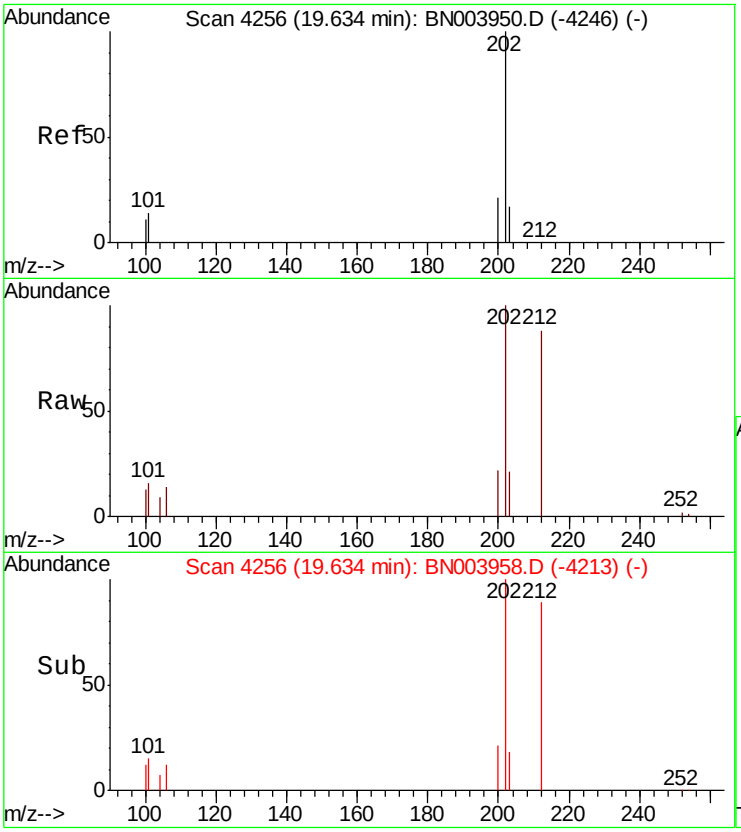


#15
Fluoranthene
Concen: 0.106 ng/ul m
RT: 19.27 min Scan# 4178
Delta R.T. -0.00 min
Lab File: BN003958.D
Acq: 15 Dec 2018 14:31

Tgt Ion:202 Resp: 5492

Ion	Ratio	Lower	Upper
202	100		
101	14.0	0.0	30.7
100	10.2	0.0	28.1





#17
Pyrene
Concen: 0.137 ng/ul m
RT: 19.63 min Scan# 4256
Delta R.T. -0.00 min
Lab File: BN003958.D
Acq: 15 Dec 2018 14:31

Tgt Ion:202 Resp: 8555

Ion	Ratio	Lower	Upper
202	100		
101	16.0	10.3	15.5#
100	13.2	8.5	12.7#

Instrument :
BNA_N
ClientSampleId :
F9F33

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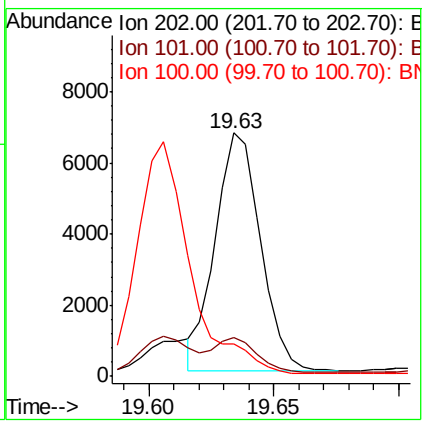
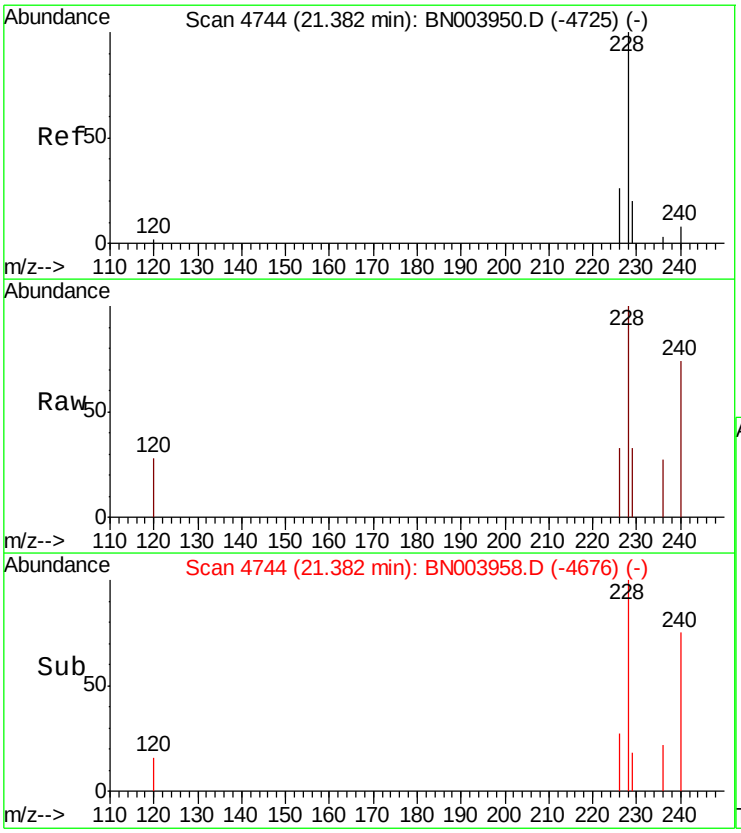
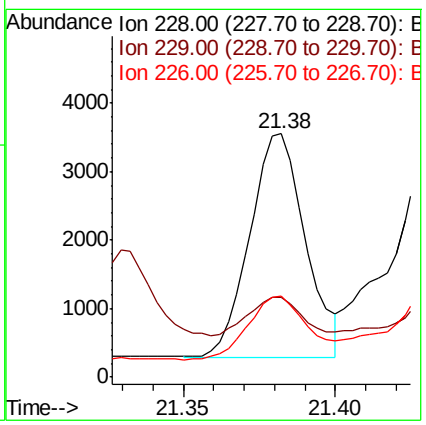


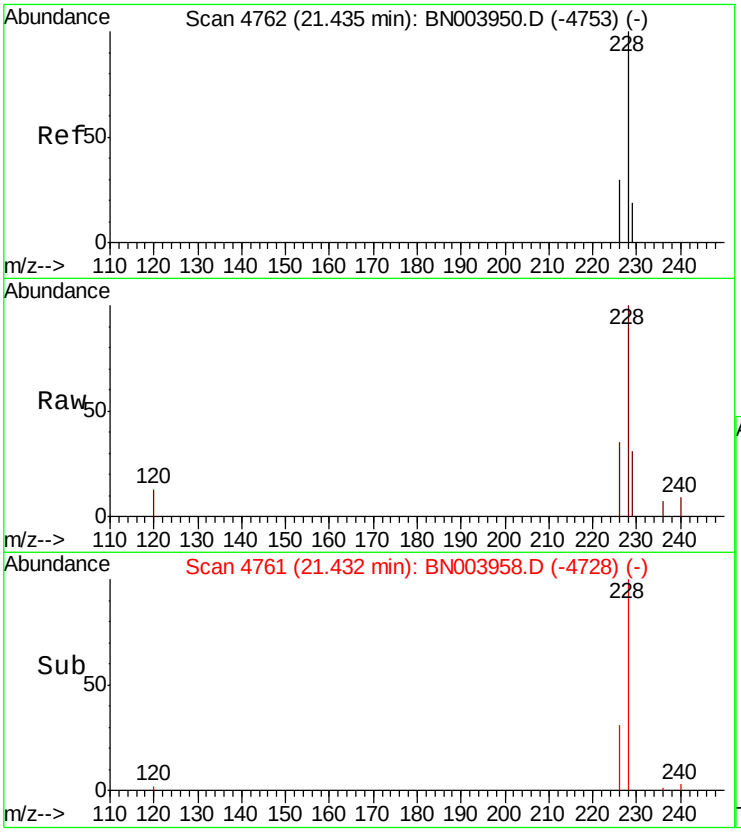


#18
Benzo(a)anthracene
Concen: 0.075 ng/ul m
RT: 21.38 min Scan# 4744
Delta R.T. -0.00 min
Lab File: BN003958.D
Acq: 15 Dec 2018 14:31

Tgt Ion:228 Resp: 4127

Ion	Ratio	Lower	Upper
228	100		
229	32.8	15.6	23.4#
226	33.1	21.1	31.7#

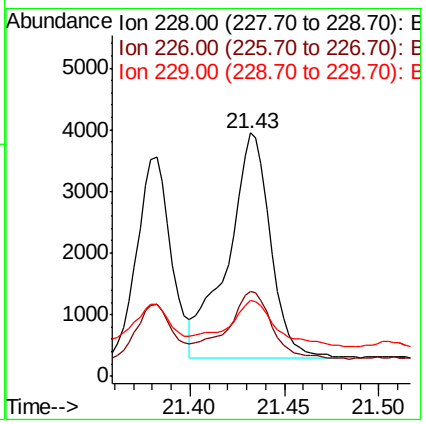




#19
Chrysene
Concen: 0.091 ng/ul m
RT: 21.43 min Scan# 4761
Delta R.T. -0.00 min
Lab File: BN003958.D
Acq: 15 Dec 2018 14:31

Tgt Ion:228 Resp: 5699

Ion	Ratio	Lower	Upper
228	100		
226	35.1	24.0	36.0
229	31.0	15.7	23.5#



Instrument :
BNA_N
ClientSampleId :
F9F33

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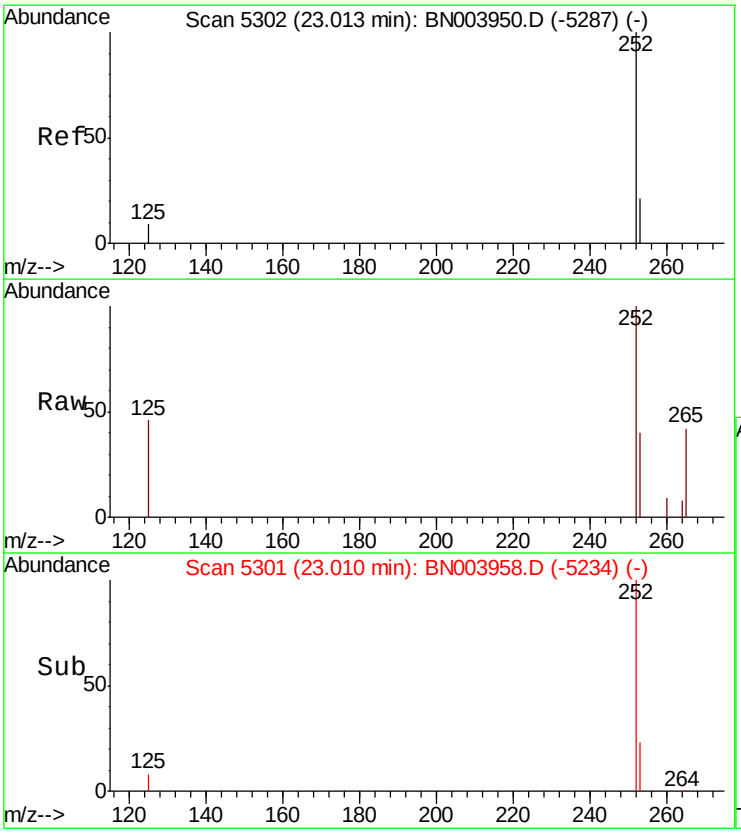
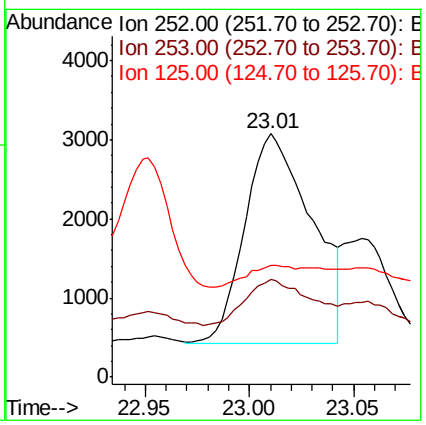
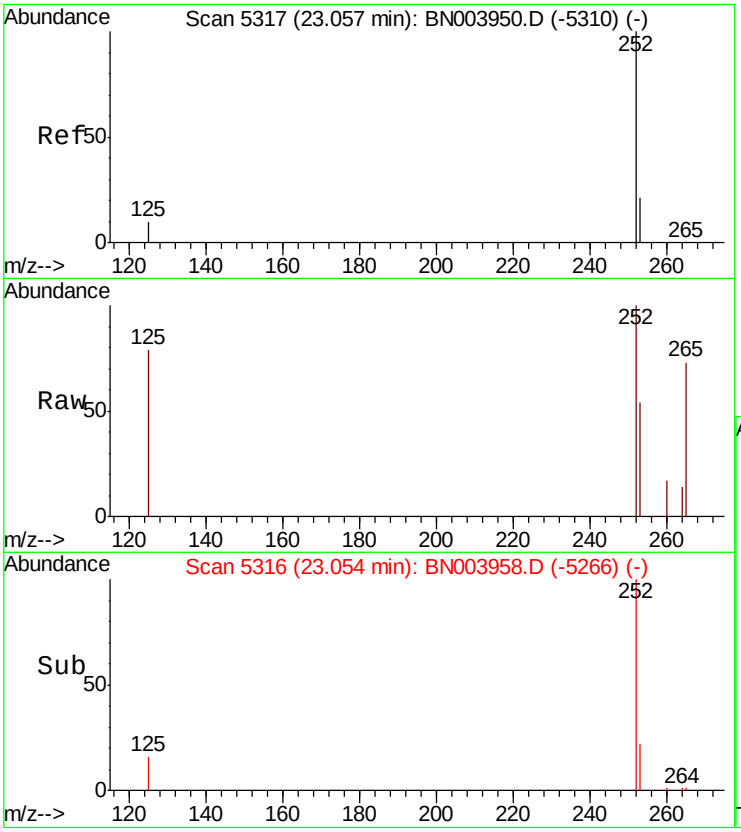


#21
Benzo(b)fluoranthene
Concen: 0.090 ng/ul m
RT: 23.01 min Scan# 5301
Delta R.T. -0.00 min
Lab File: BN003958.D
Acq: 15 Dec 2018 14:31

Tgt Ion:252 Resp: 5909

Ion	Ratio	Lower	Upper
252	100		
253	40.1	0.0	46.0
125	45.7	0.0	22.4#





#22
Benzo(k)fluoranthene
Concen: 0.032 ng/ul m
RT: 23.05 min Scan# 5316
Delta R.T. -0.00 min
Lab File: BN003958.D
Acq: 15 Dec 2018 14:31

Tgt Ion:252 Resp: 2055

Ion	Ratio	Lower	Upper
252	100		
253	54.3	18.5	27.7#
125	78.7	9.0	13.6#

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
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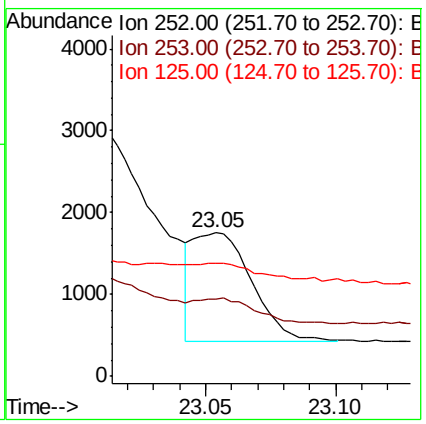
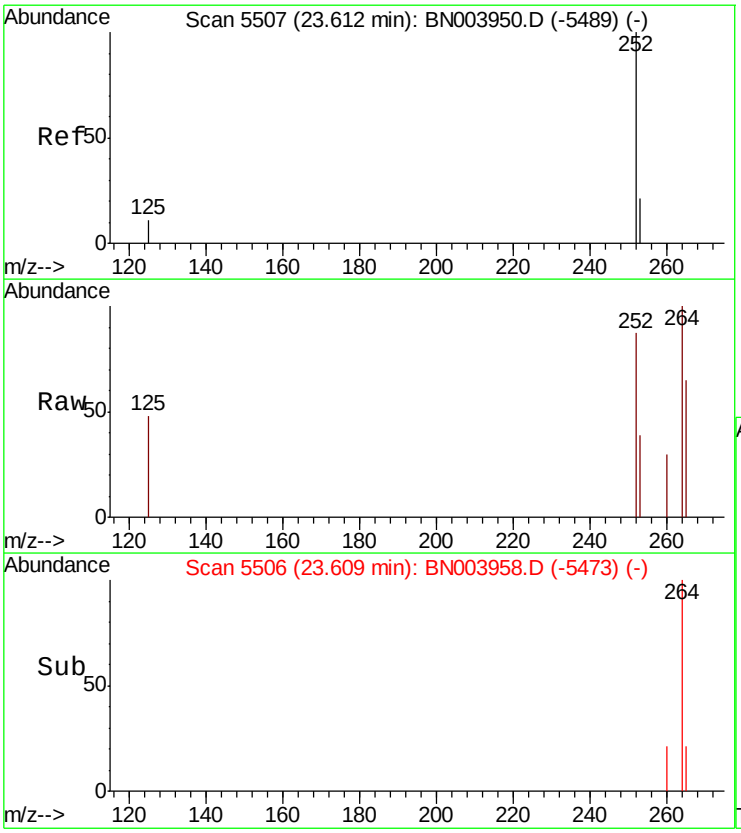
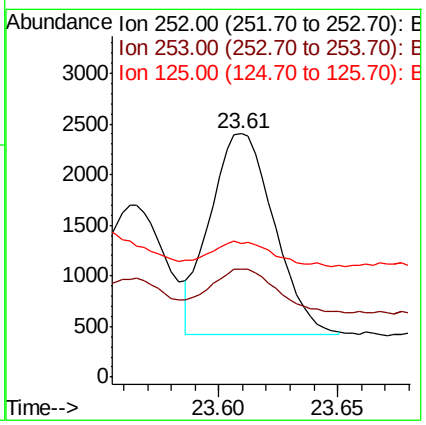


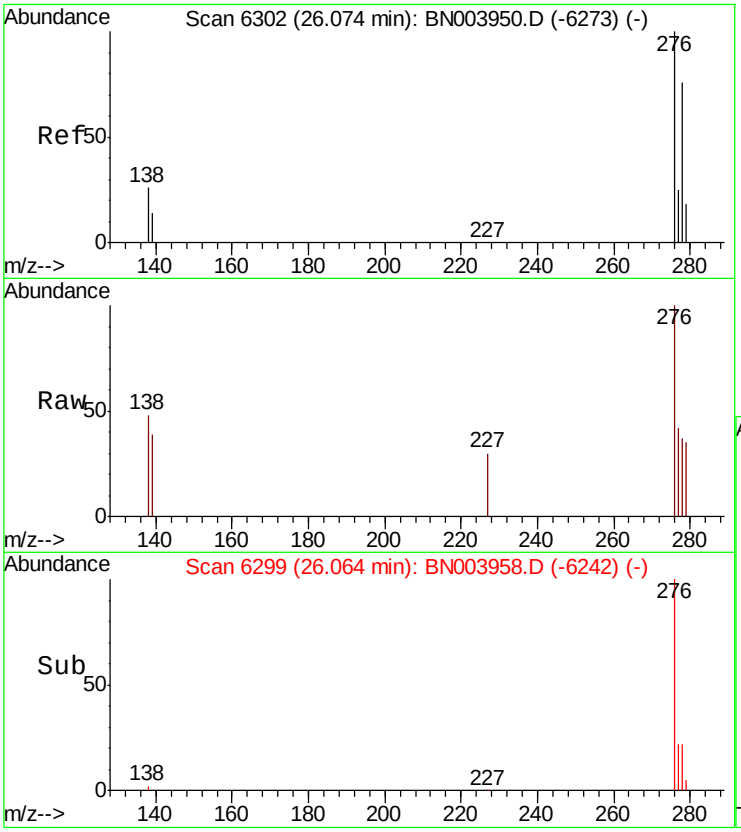


#23
Benzo(a)pyrene
Concen: 0.066 ng/ul m
RT: 23.61 min Scan# 5506
Delta R.T. -0.00 min
Lab File: BN003958.D
Acq: 15 Dec 2018 14:31

Tgt Ion:252 Resp: 3741

Ion	Ratio	Lower	Upper
252	100		
253	44.5	19.0	28.4#
125	54.9	10.2	15.4#





#24
Indeno(1,2,3-cd)pyrene
Concen: 0.041 ng/ul m
RT: 26.06 min Scan# 6299
Delta R.T. -0.01 min
Lab File: BN003958.D
Acq: 15 Dec 2018 14:31

Tgt Ion:276 Resp: 2662

Ion	Ratio	Lower	Upper
276	100		
138	0.0	20.3	30.5#
227	0.0	0.2	0.2#

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
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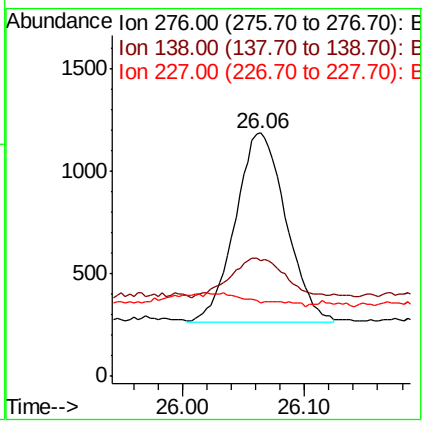
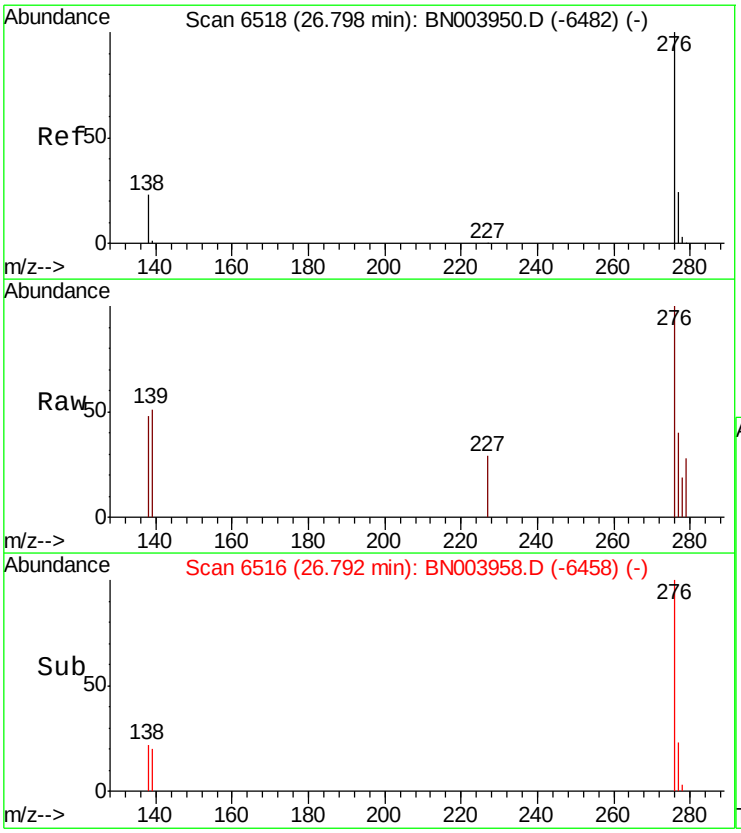
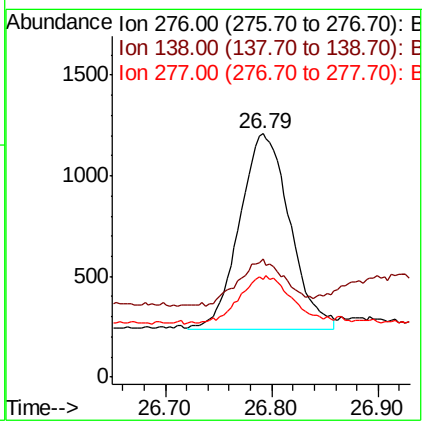




#26
Benzo(g,h,i)perylene
Concen: 0.056 ng/ul m
RT: 26.79 min Scan# 6516
Delta R.T. -0.01 min
Lab File: BN003958.D
Acq: 15 Dec 2018 14:31

Tgt Ion:276 Resp: 3186

Ion	Ratio	Lower	Upper
276	100		
138	48.3	17.7	26.5#
277	40.4	19.3	28.9#



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
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Quant Time: Dec 15 22:48:16 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	1778	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	8864	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	5432	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.22	188	13431m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	17371m	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	15893m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	2435	0.18	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	7619m	0.19	ng/ul	0.00
Target Compounds						Qvalue
5) 2-Methylnaphthalene	12.29	142	814	0.047	ng/ul	100
12) Phenanthrene	17.25	178	3750	0.085	ng/ul	95
13) Anthracene	17.35	178	1035m	0.029	ng/ul	
15) Fluoranthene	19.27	202	5492m	0.106	ng/ul	
17) Pyrene	19.63	202	8555m	0.137	ng/ul	
18) Benzo(a)anthracene	21.38	228	4127m	0.075	ng/ul	
19) Chrysene	21.43	228	5699m	0.091	ng/ul	
21) Benzo(b)fluoranthene	23.01	252	5909m	0.090	ng/ul	
22) Benzo(k)fluoranthene	23.05	252	2055m	0.032	ng/ul	
23) Benzo(a)pyrene	23.61	252	3741m	0.066	ng/ul	
24) Indeno(1,2,3-cd)pyrene	26.06	276	2662m	0.041	ng/ul	
26) Benzo(g,h,i)perylene	26.79	276	3186m	0.056	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (QT Reviewed)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:48:16 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
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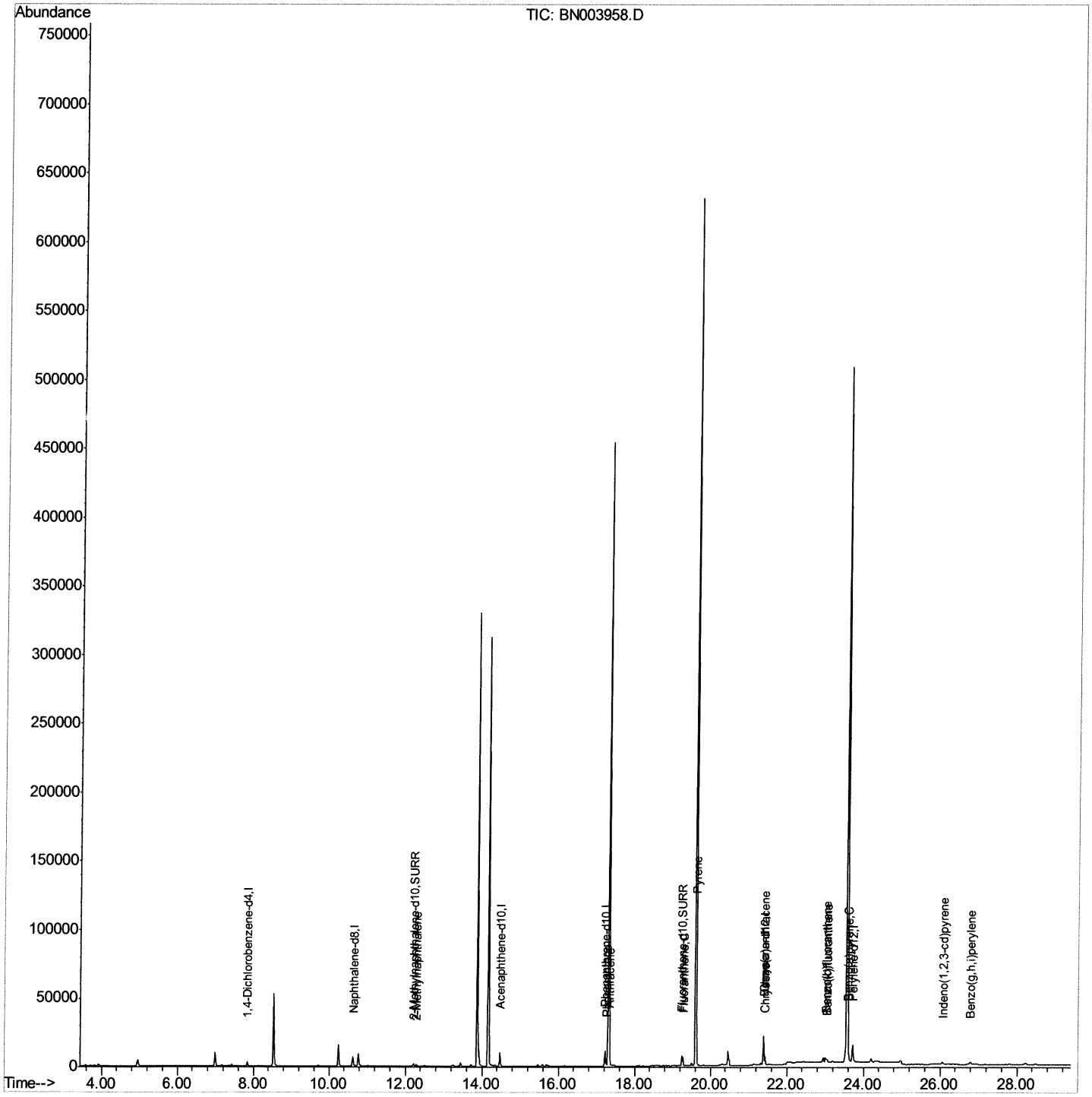

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:02:07 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
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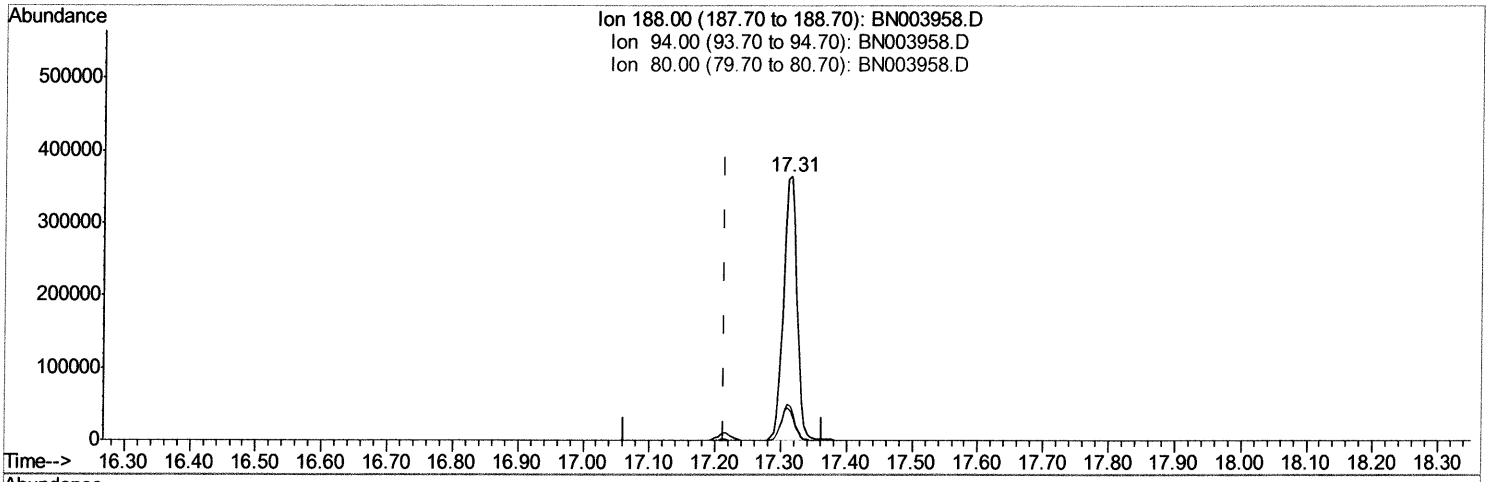

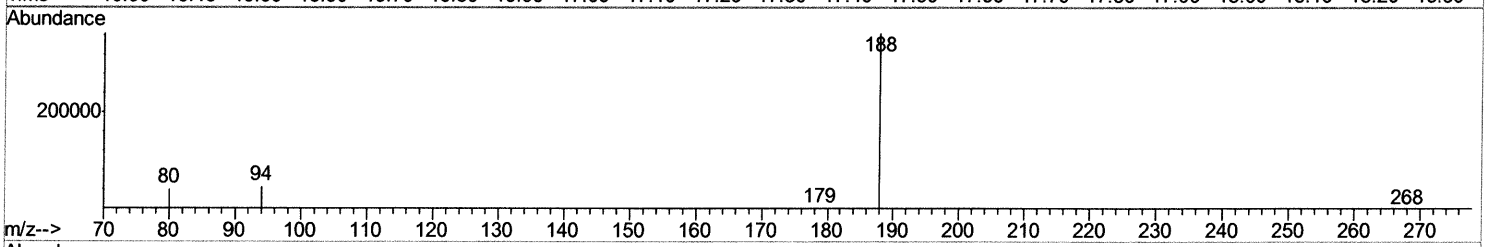

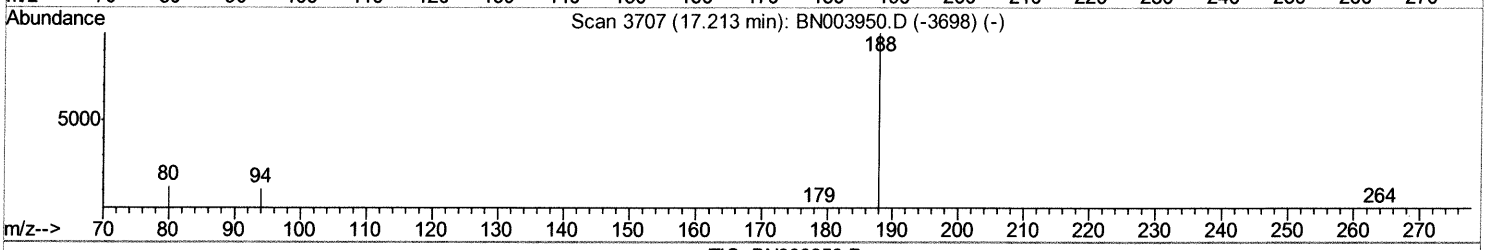

TIC: BN003958.D

(10) Phenanthrene-d10 (I)

17.314min (+0.101) 0.40ng/ul

response 511226

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	12.53#
80.00	11.60	11.13
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:02:07 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
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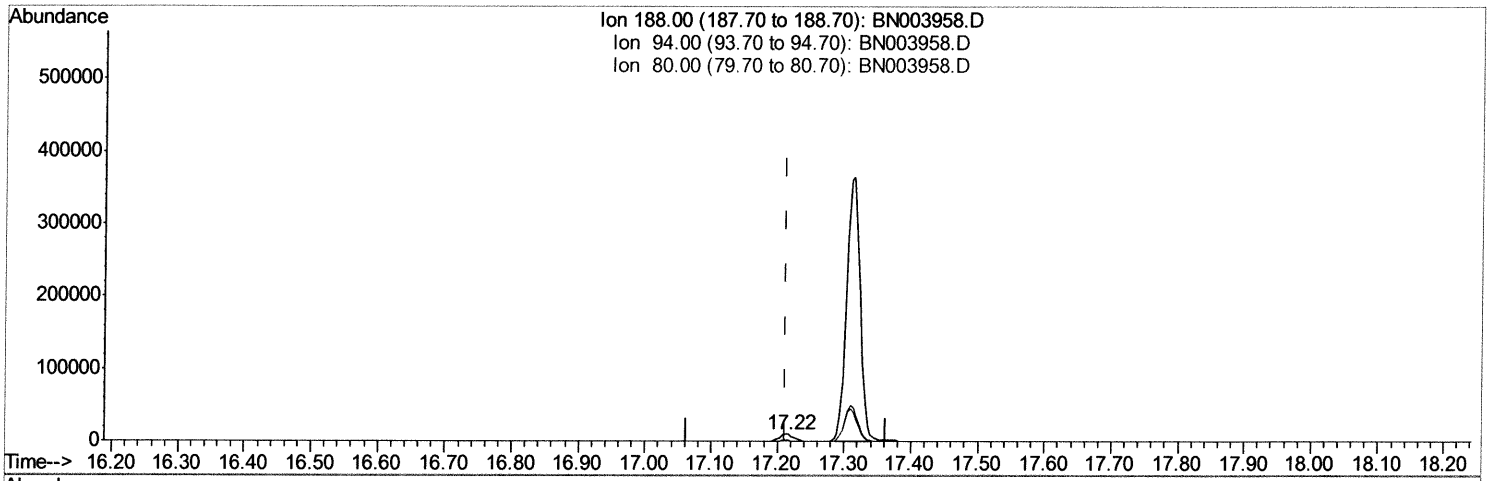
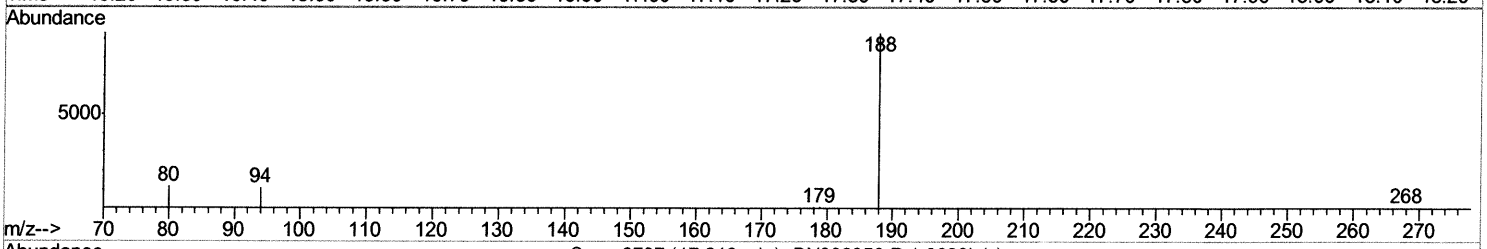
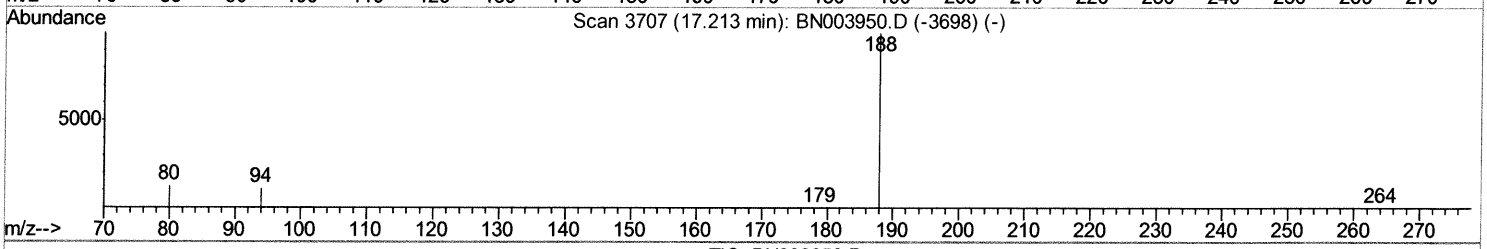
12/17/2018 4:23:51 PM







TIC: BN003958.D

(10) Phenanthrene-d10 (I)

17.217min (+0.004) 0.40ng/ul m > SJ 12/12/18

response 13431

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	12.07
80.00	11.60	12.57
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

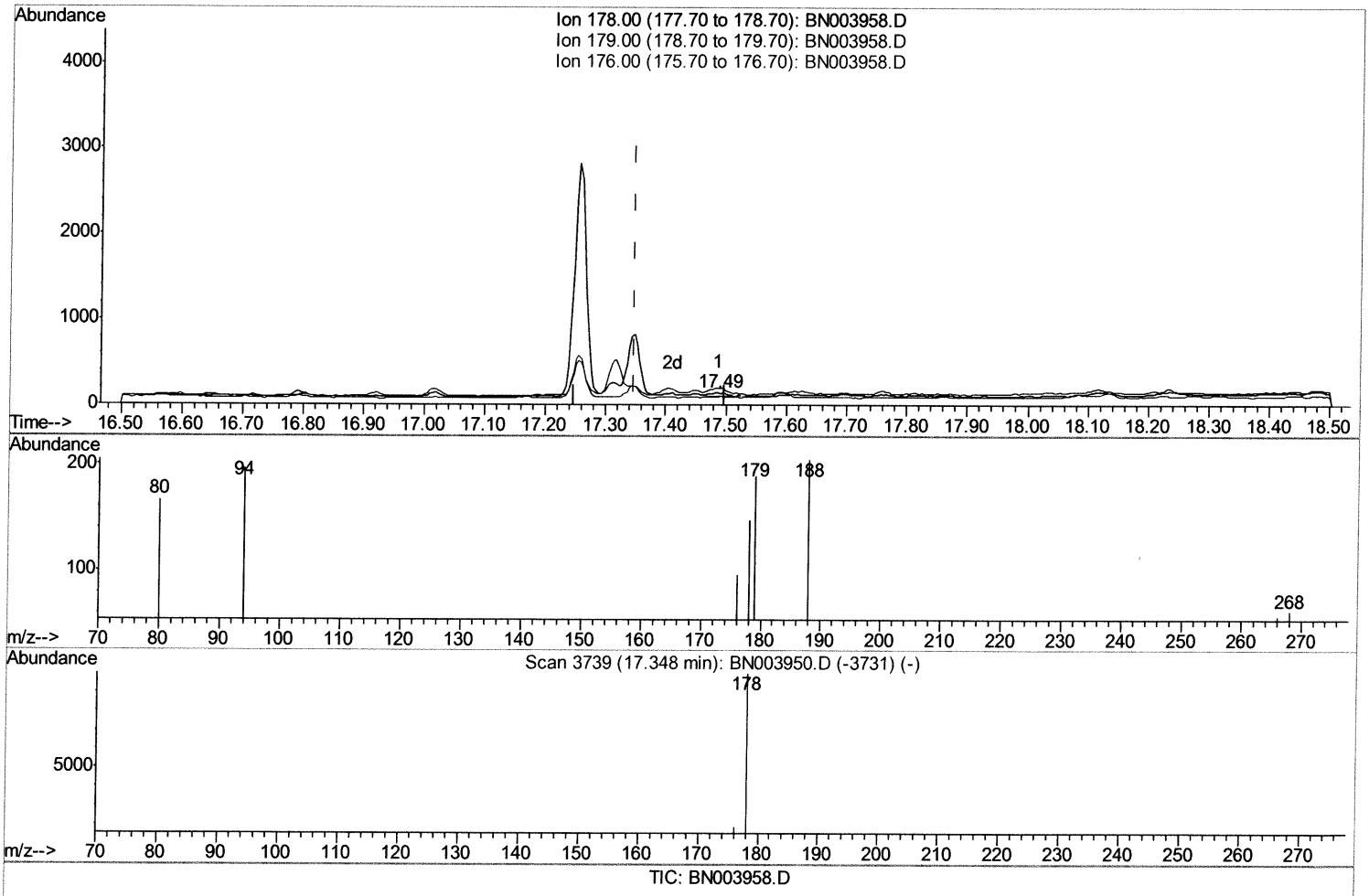
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:40:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



TIC: BN003958.D

(13) Anthracene

17.487min (+0.139) 0.00ng/ul

response 92

Ion	Exp%	Act%
178.00	100	100
179.00	15.40	127.70#
176.00	18.50	64.86#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

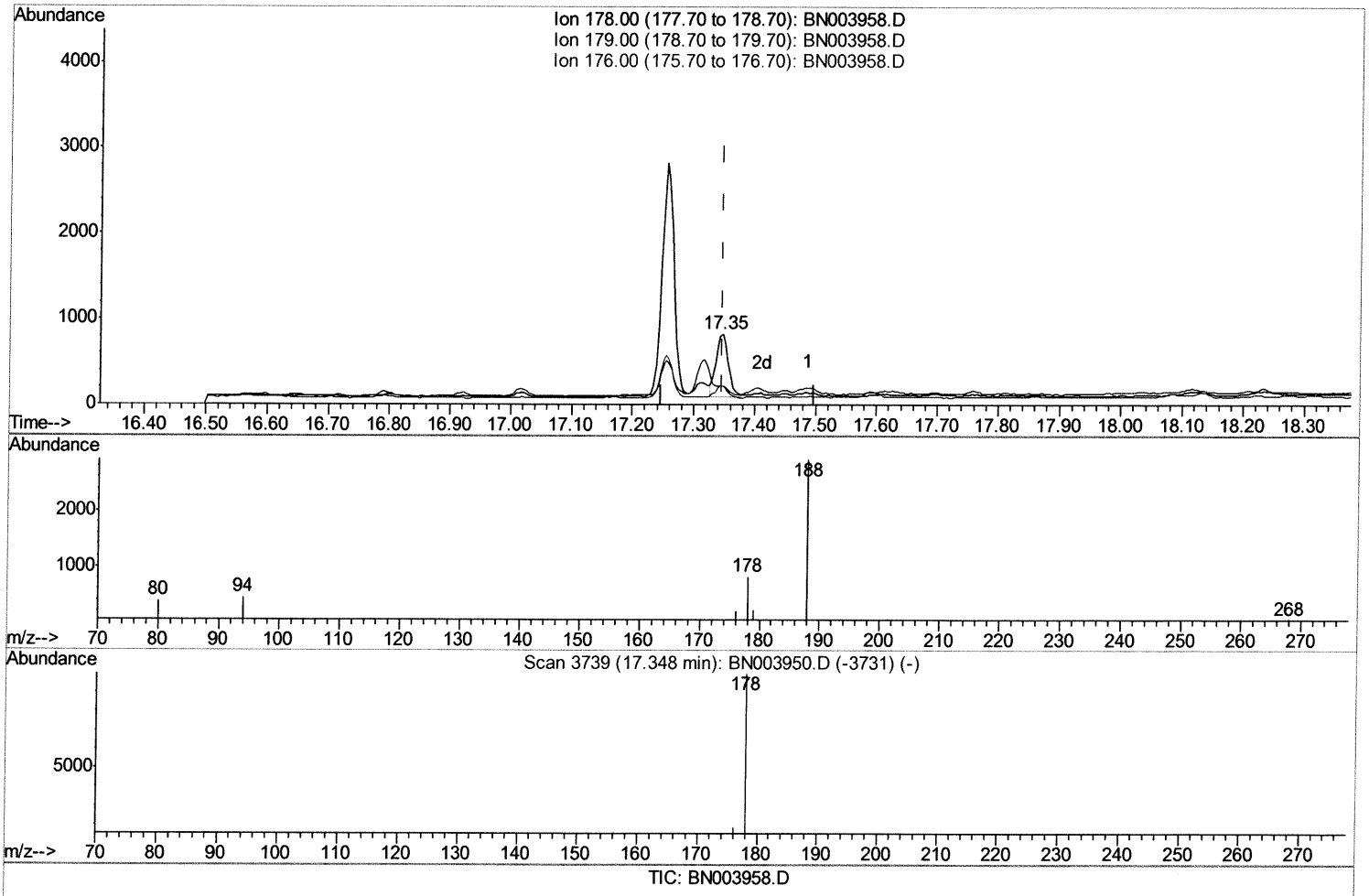
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:40:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



TIC: BN003958.D

(13) Anthracene

17.348min (-0.000) 0.03ng/ul m > SJ 12/17/18

response 1035

Ion	Exp%	Act%
178.00	100	100
179.00	15.40	27.09#
176.00	18.50	25.88#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

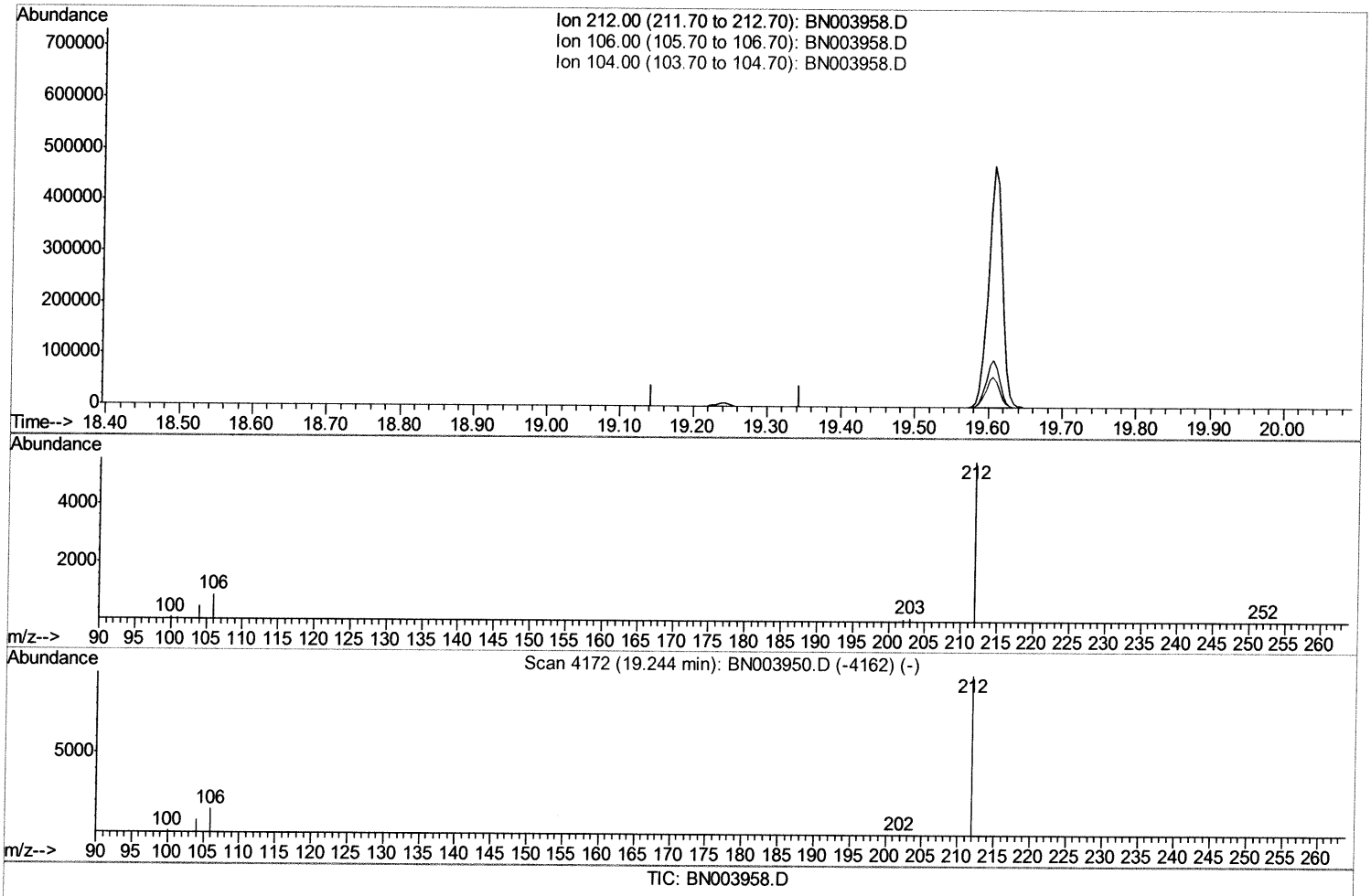
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:40:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



(14) Fluoranthene-d10 (SURR)

19.244min (-19.244) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

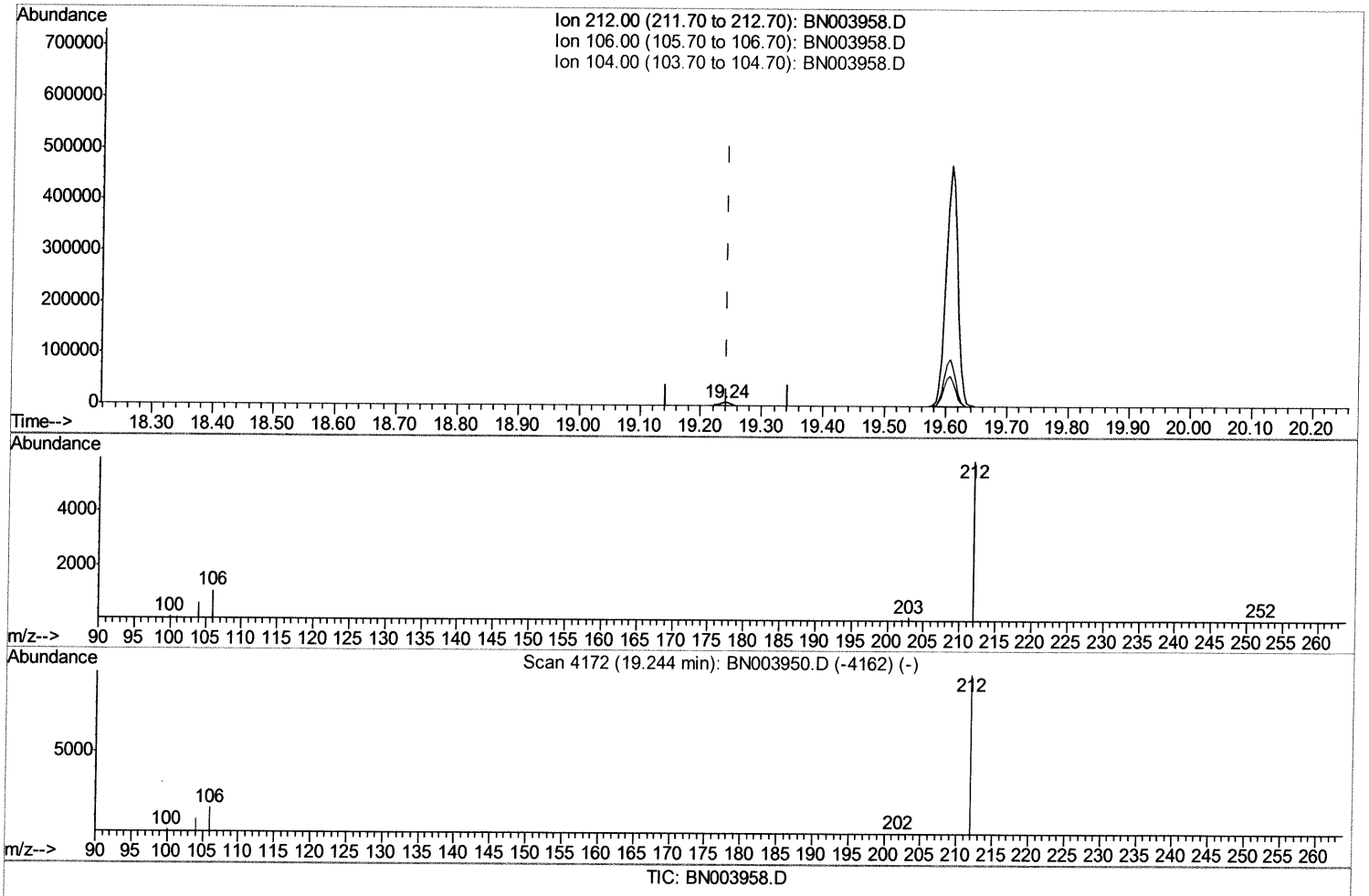
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:40:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



(14) Fluoranthene-d10 (SURR)

19.239min (-0.005) 0.19ng/ul m? SJ 12/17/18

response 7619

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

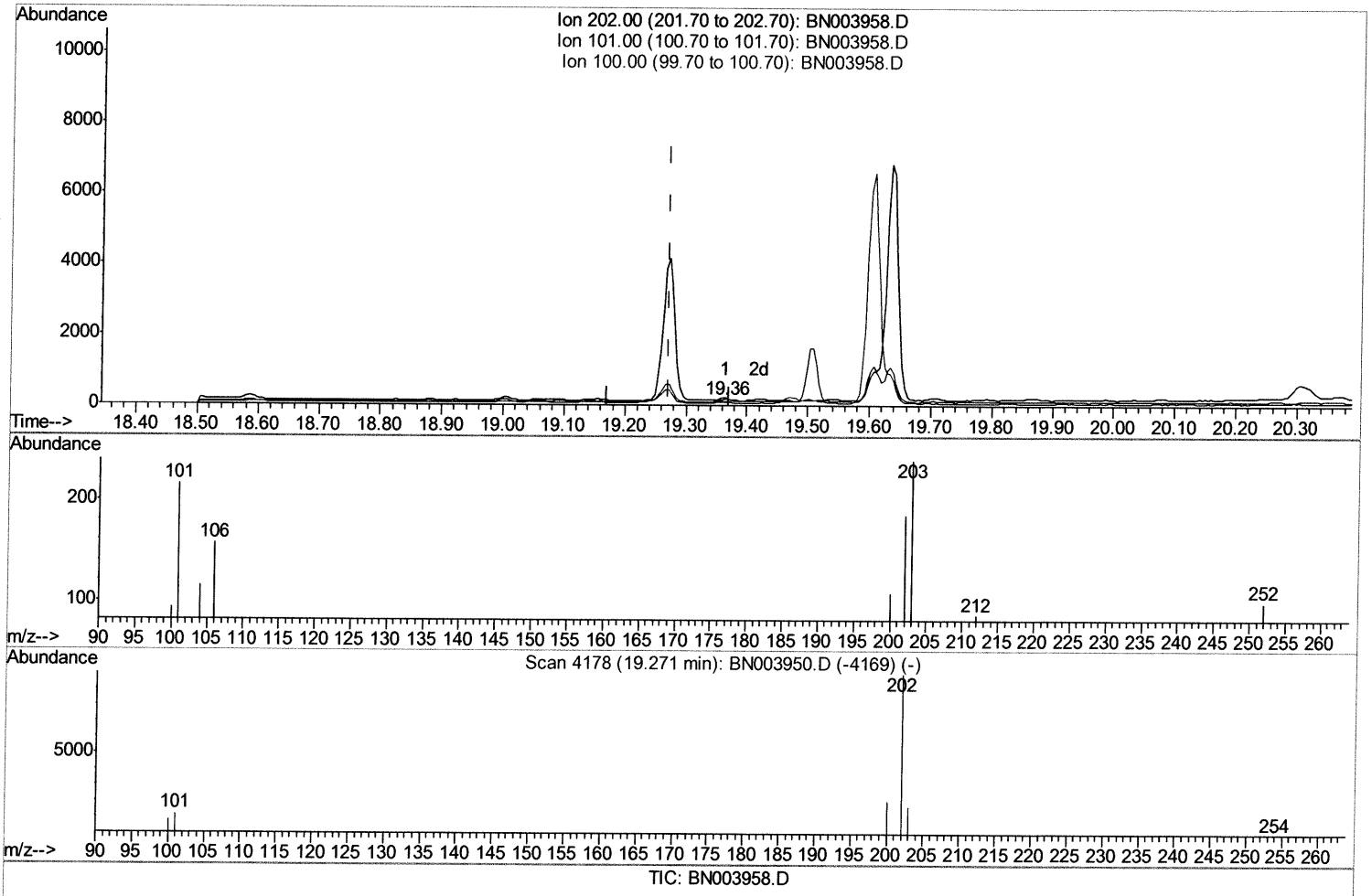
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:40:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



TIC: BN003958.D

(15) Fluoranthene (C)

19.364min (+0.093) 0.00ng/ul

response 65

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	116.13#
100.00	8.10	50.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

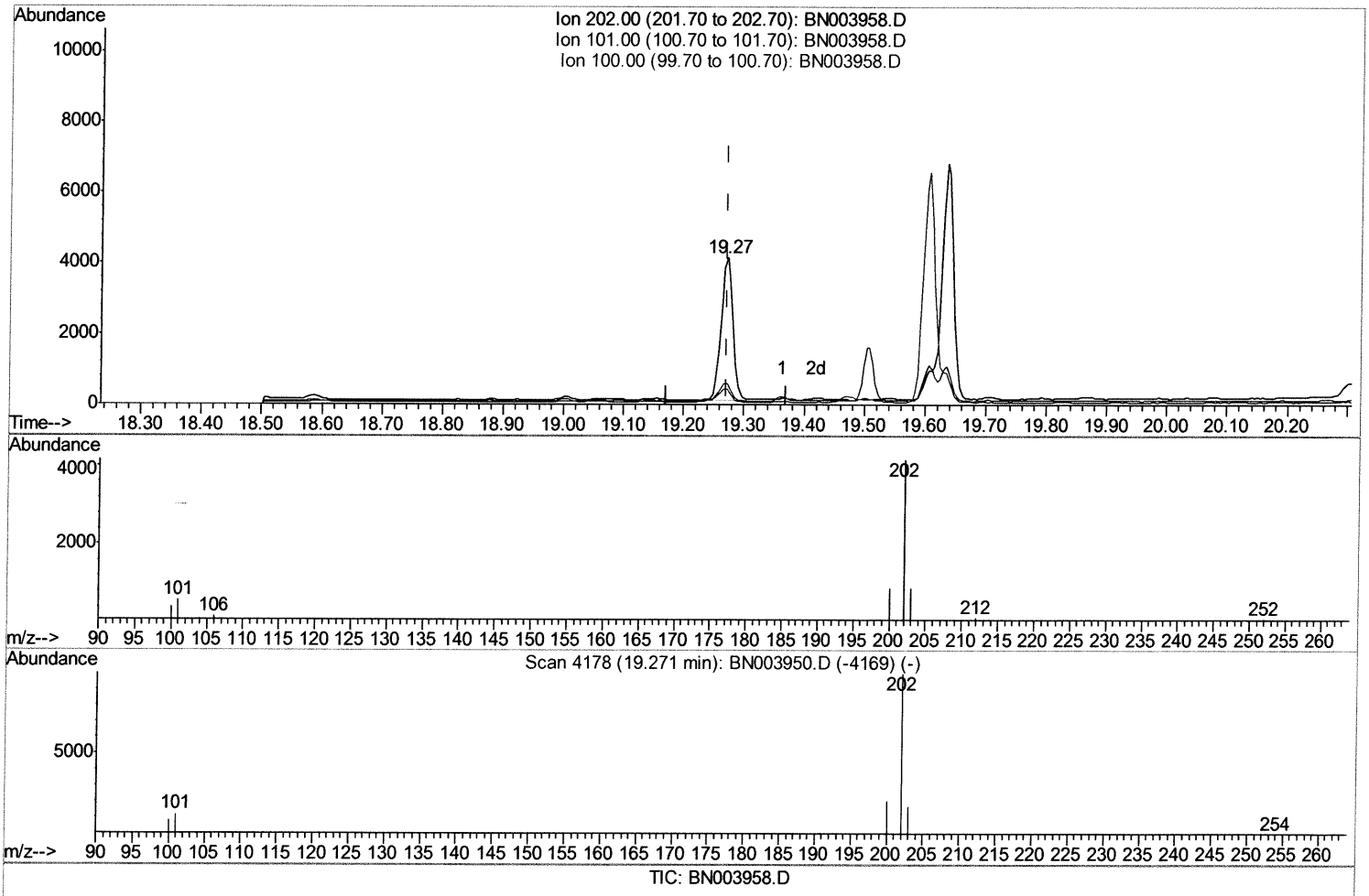
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:40:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



TIC: BN003958.D

(15) Fluoranthene (C)

19.271min (-0.000) 0.11ng/ul m SJ 12/17/18

response 5492

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	13.97
100.00	8.10	10.25
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

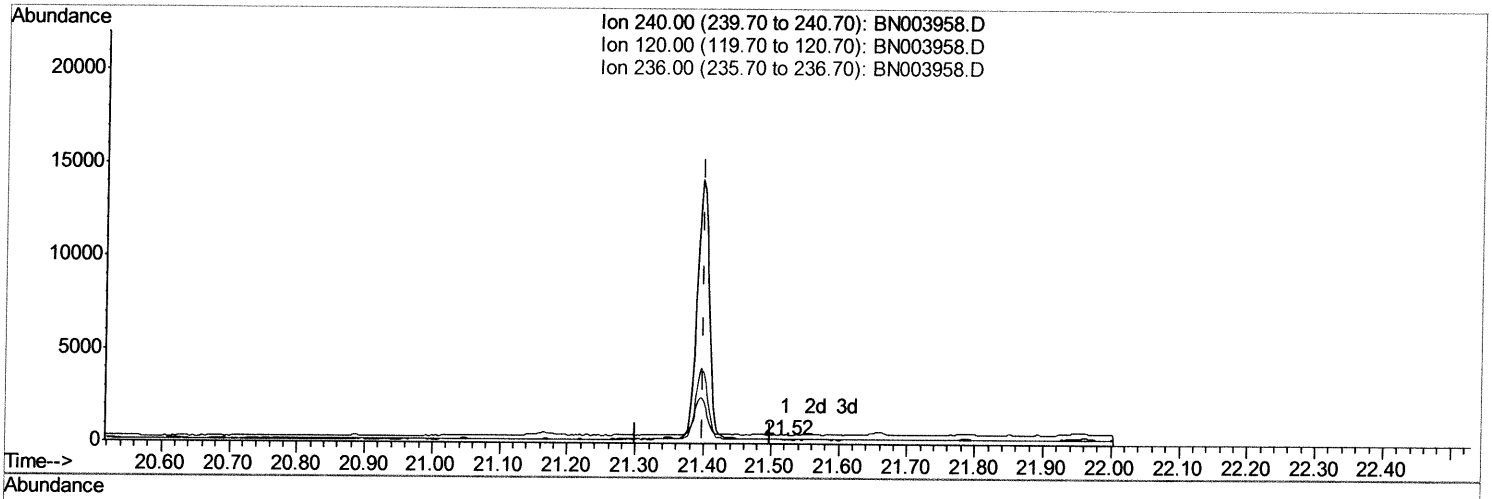
Quantitation Report (Qedit)

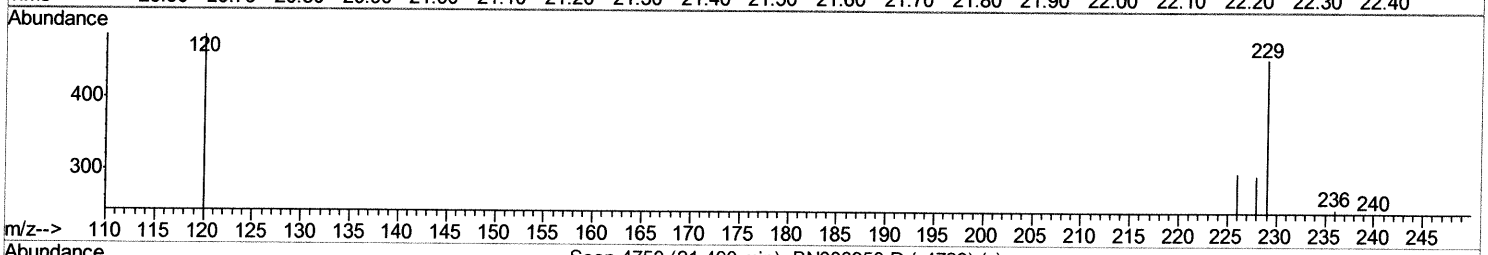
Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

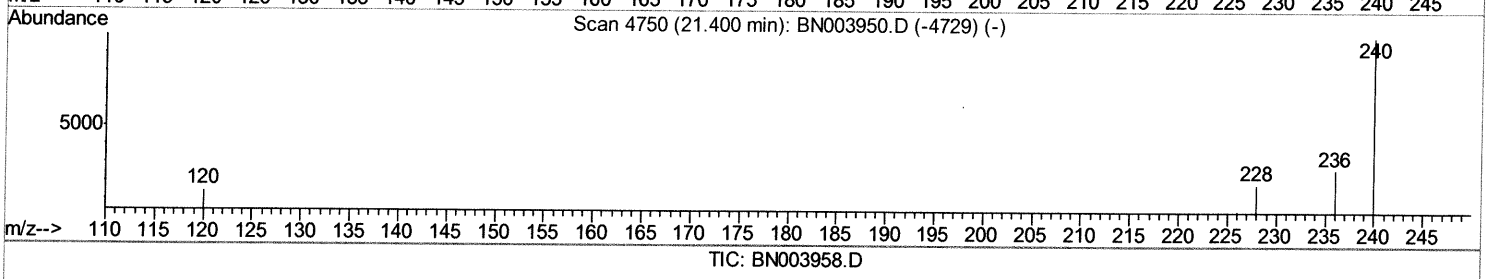
Quant Time: Dec 15 22:40:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM







TIC: BN003958.D

(16) Chrysene-d12 (I)

21.522min (+0.123) 0.40ng/ul

response 10

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	201.65#
236.00	27.60	102.07#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

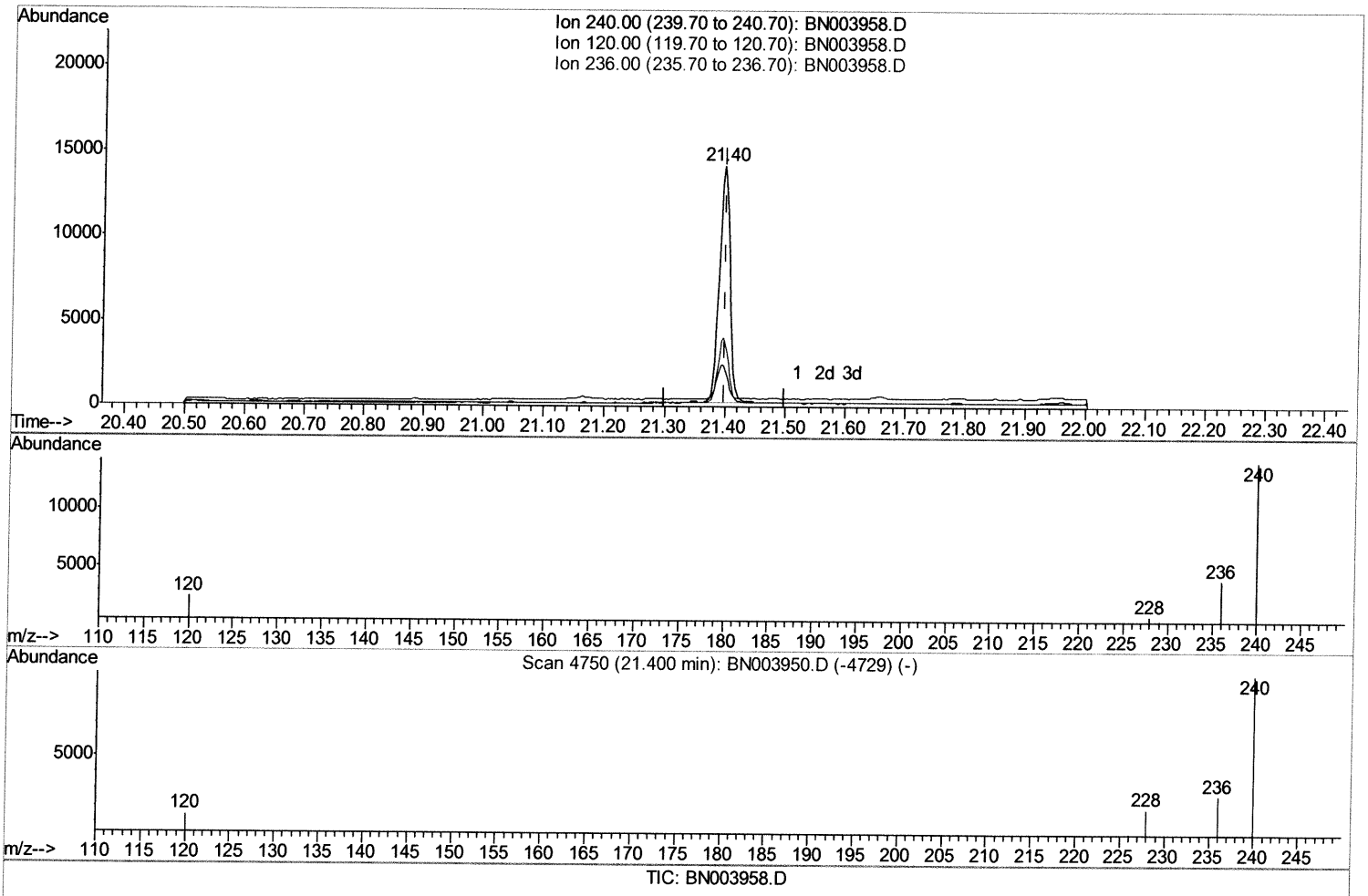
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:40:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



TIC: BN003958.D

(16) Chrysene-d12 (I)

21.397min (-0.003) 0.40ng/ul m SJ 12/19/18

response 17371

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	17.46#
236.00	27.60	28.64
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

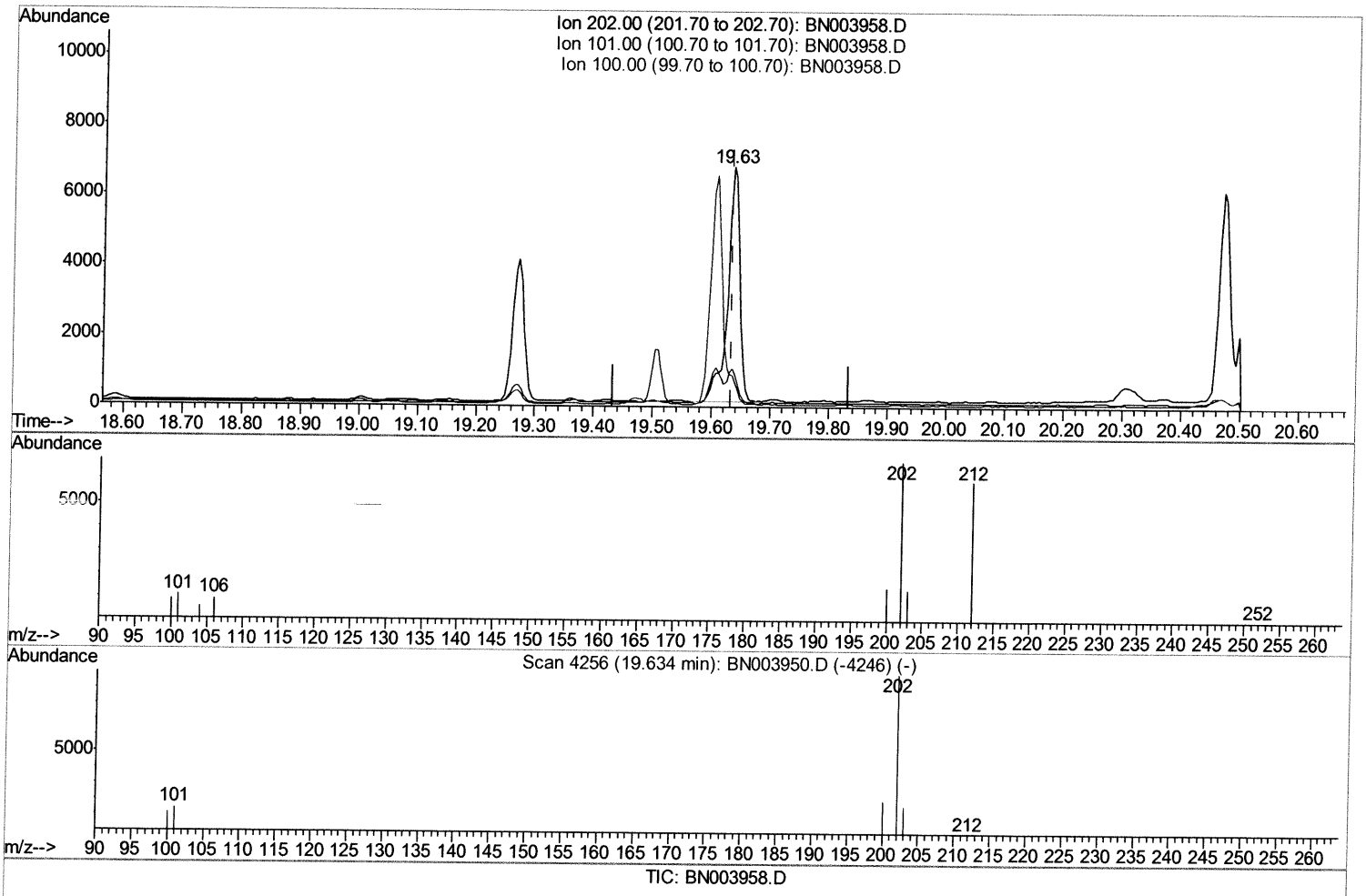
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:40:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



TIC: BN003958.D

(17) Pyrene

19.634min (-0.000) 0.15ng/ul

response 9624

Ion	Exp%	Act%
202.00	100	100
101.00	12.90	16.00#
100.00	10.60	13.16#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

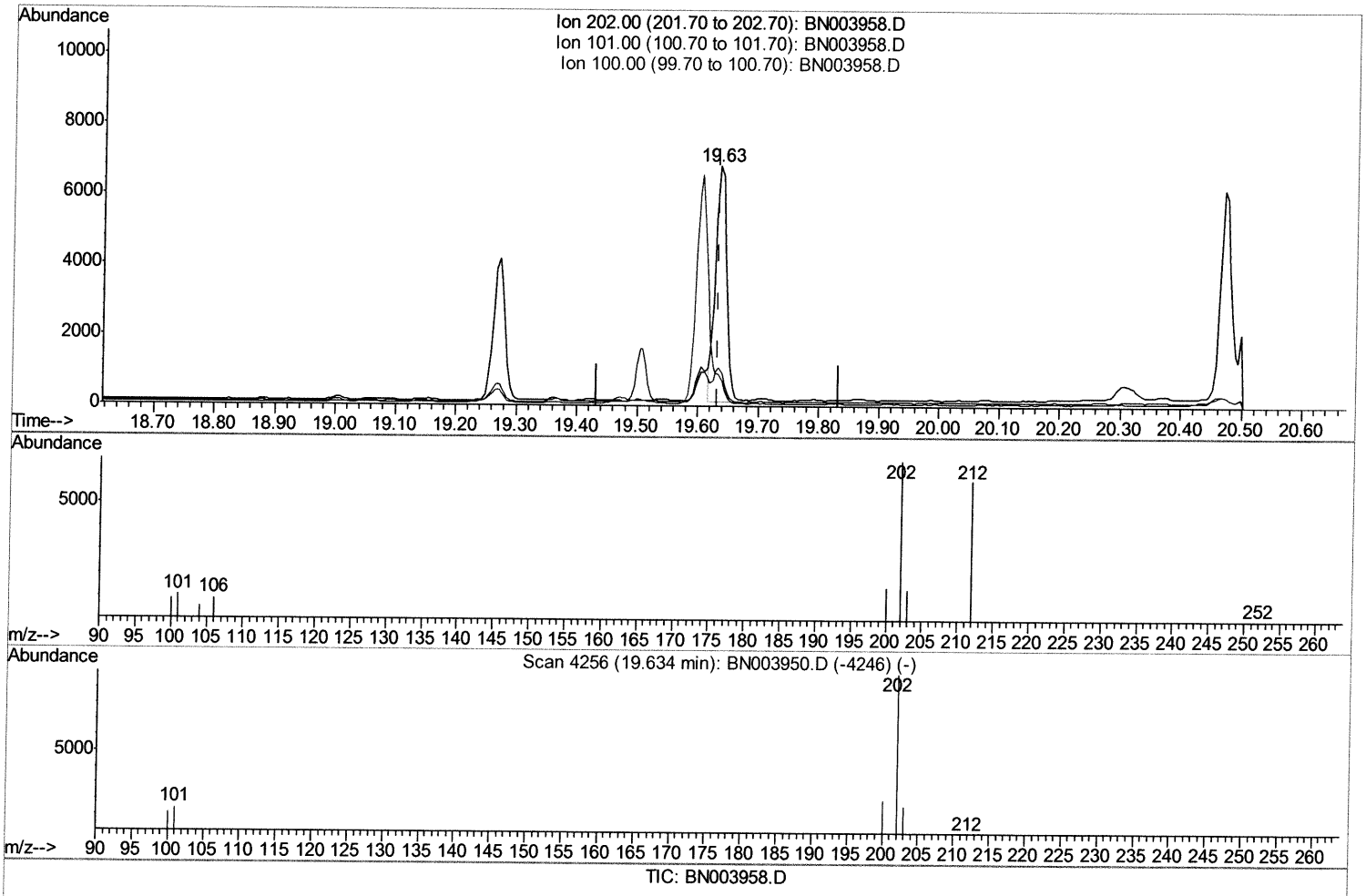
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:40:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



TIC: BN003958.D

(17) Pyrene

19.634min (-0.000) 0.14ng/ul m SJ 12/17/18

response 8555

Ion	Exp%	Act%
202.00	100	100
101.00	12.90	16.00#
100.00	10.60	13.16#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

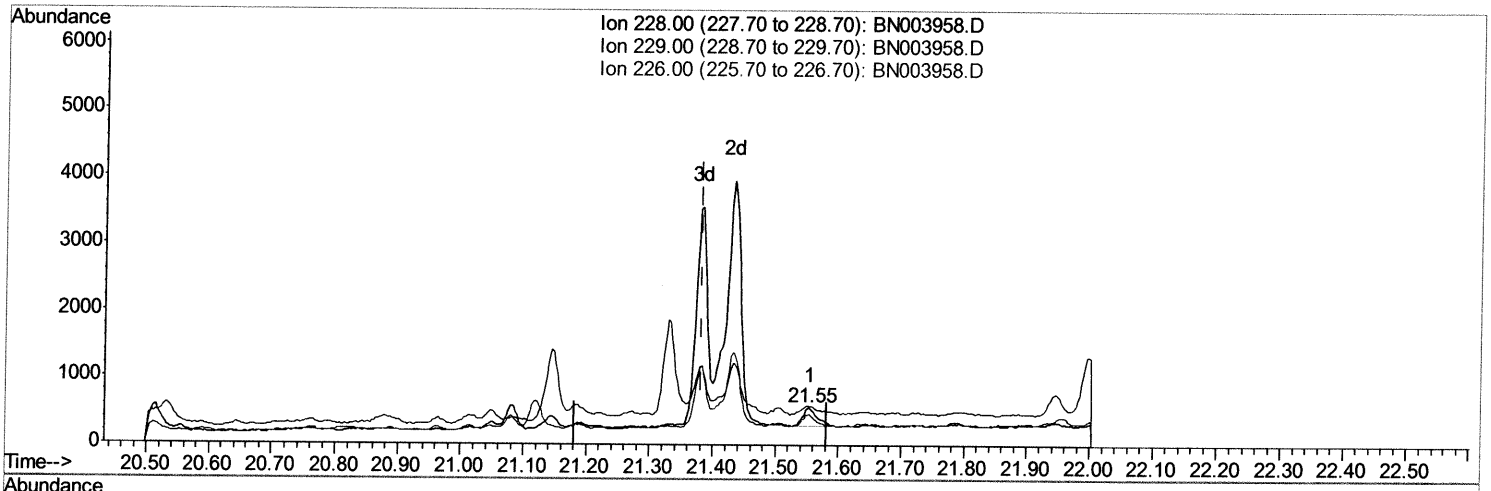
Quantitation Report (Qedit)

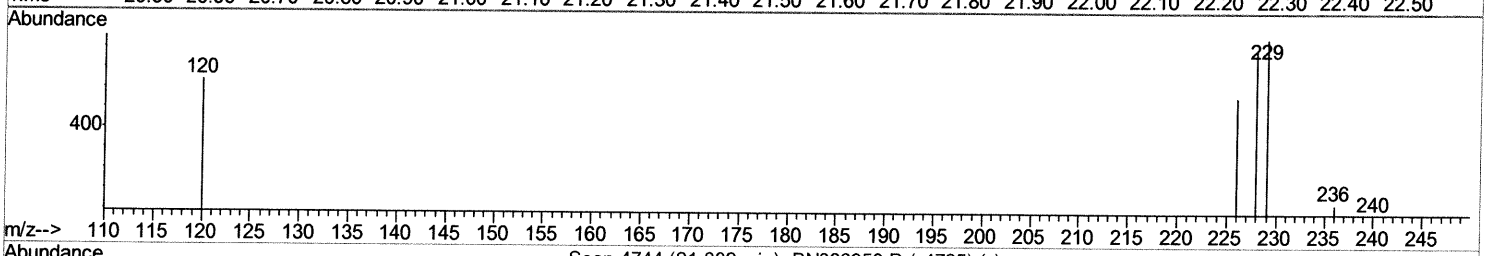
Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

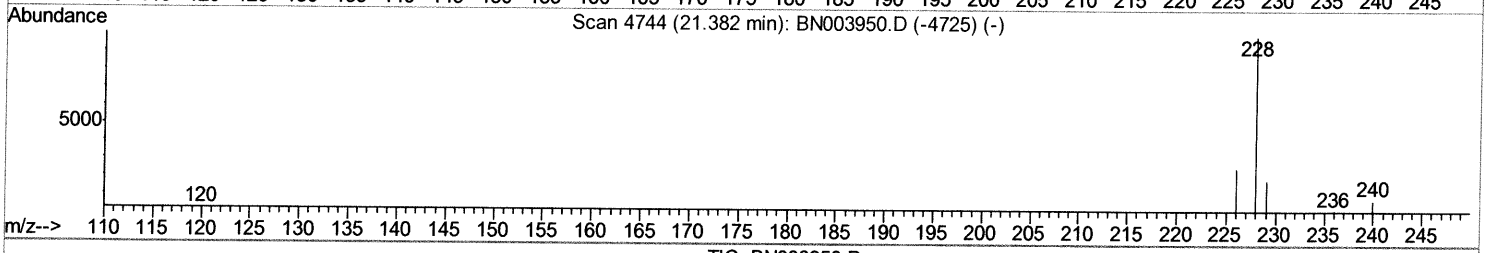
Quant Time: Dec 15 22:40:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM







TIC: BN003958.D

(18) Benzo(a)anthracene

21.554min (+0.172) 0.01ng/ul

response 462

Ion	Exp%	Act%
228.00	100	100
229.00	19.50	103.75#
226.00	26.40	82.86#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

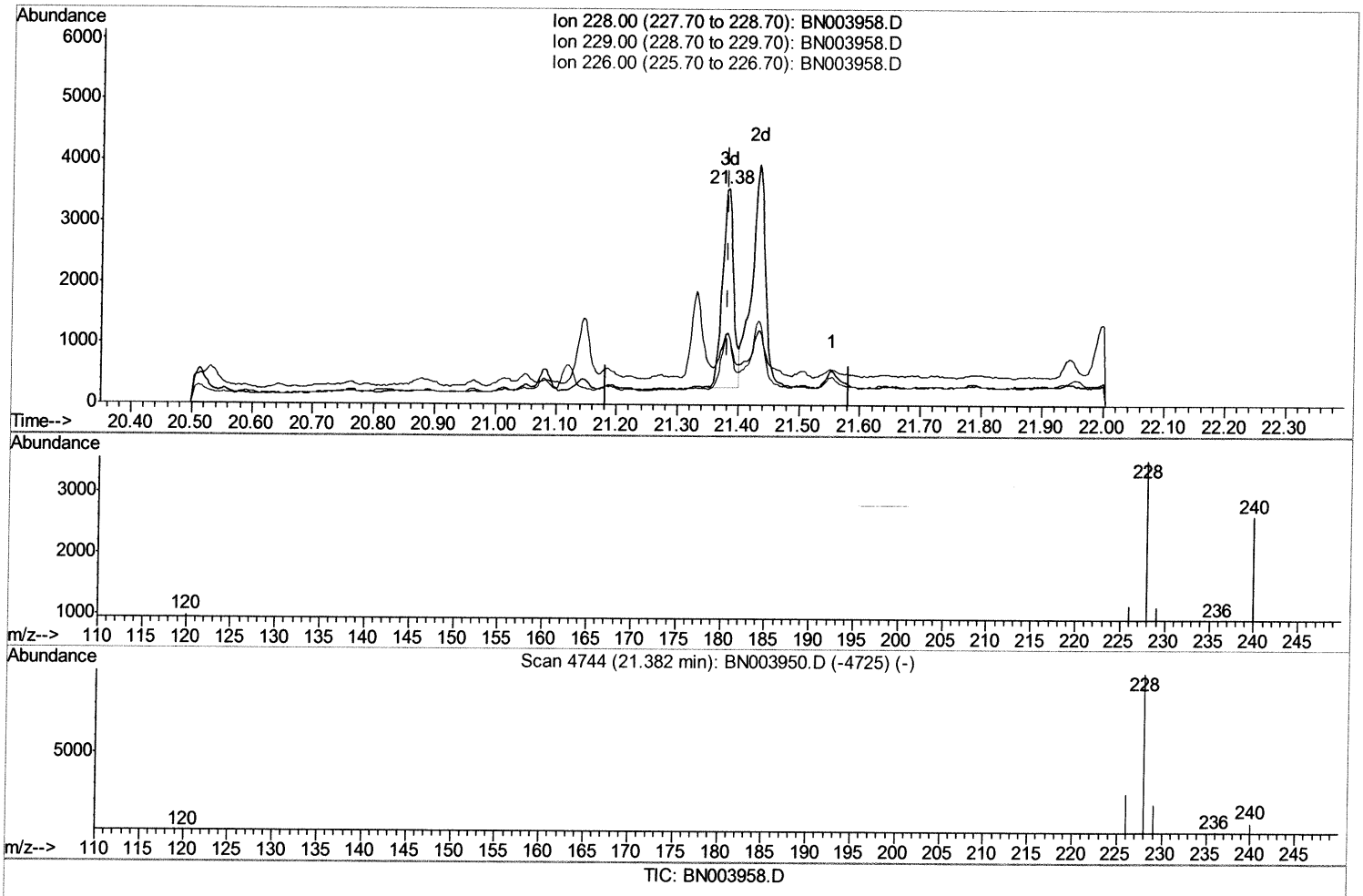
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:40:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



TIC: BN003958.D

(18) Benzo(a)anthracene

21.382min (-0.000) 0.08ng/ul m SJ 12/17/18

response 4127

Ion	Exp%	Act%
228.00	100	100
229.00	19.50	32.80#
226.00	26.40	33.14#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

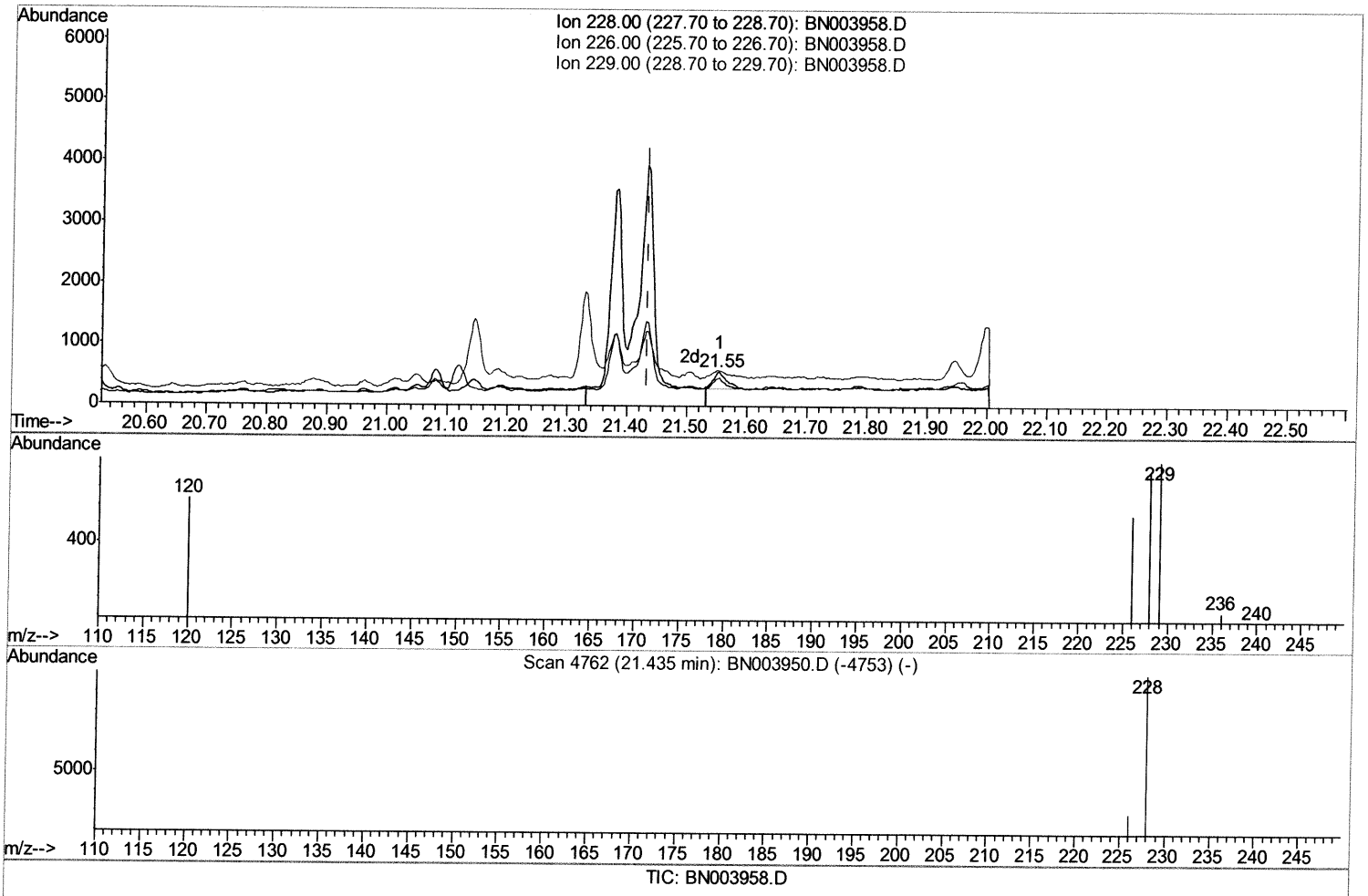
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:40:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



(19) Chrysene

21.554min (+0.120) 0.01ng/ul

response 462

Ion	Exp%	Act%
228.00	100	100
226.00	30.00	82.86#
229.00	19.60	103.75#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

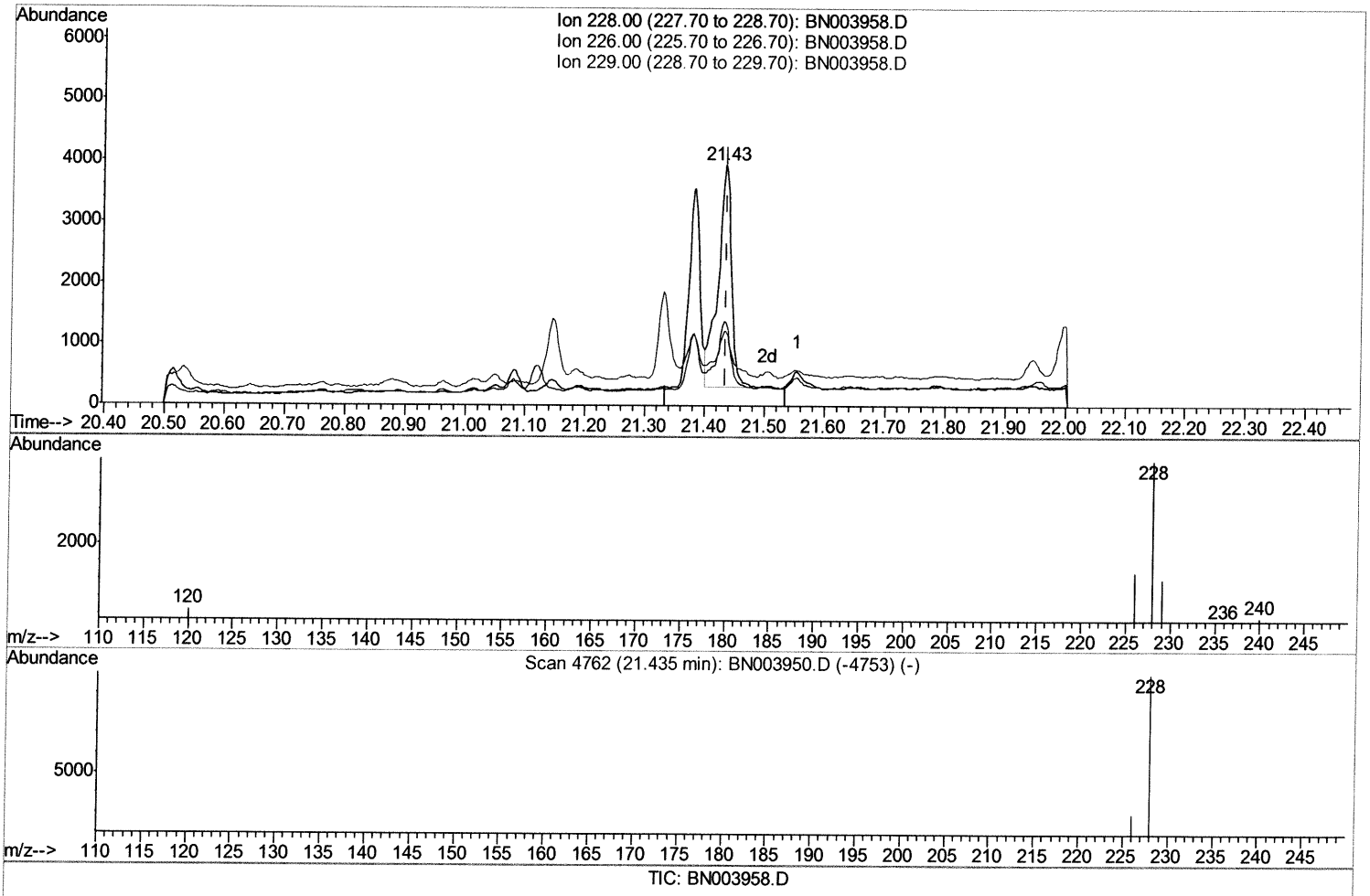
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:40:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



(19) Chrysene

21.432min (-0.003) 0.09ng/ul m SJ 12/19/18

response 5699

Ion	Exp%	Act%
228.00	100	100
226.00	30.00	35.10
229.00	19.60	30.97#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

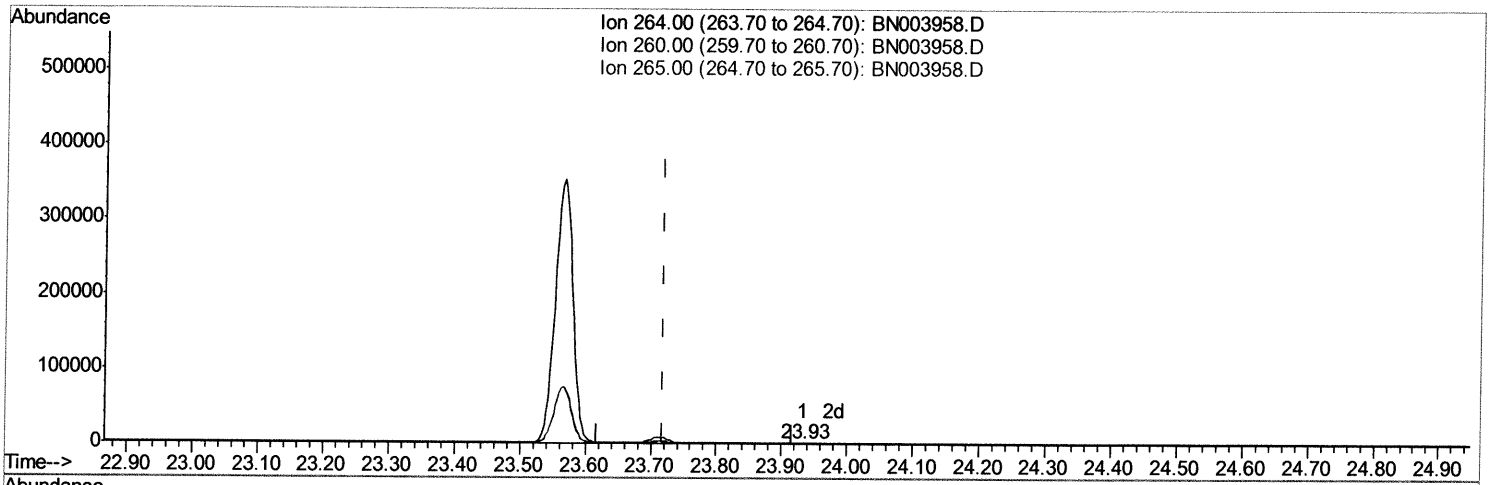
Quantitation Report (Qedit)

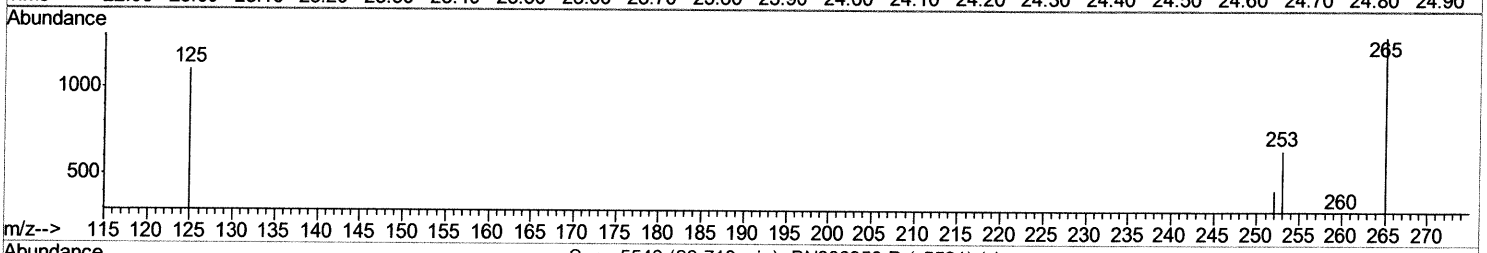
Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

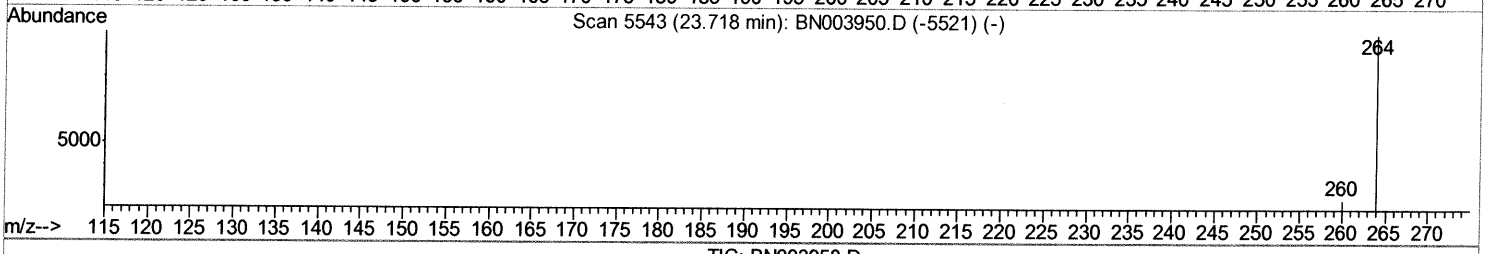
Quant Time: Dec 15 22:40:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM







TIC: BN003958.D

(20) Perylene-d12 (I)

23.934min (+0.216) 0.40ng/ul

response 8

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	99.00#
265.00	33.50	436.12#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

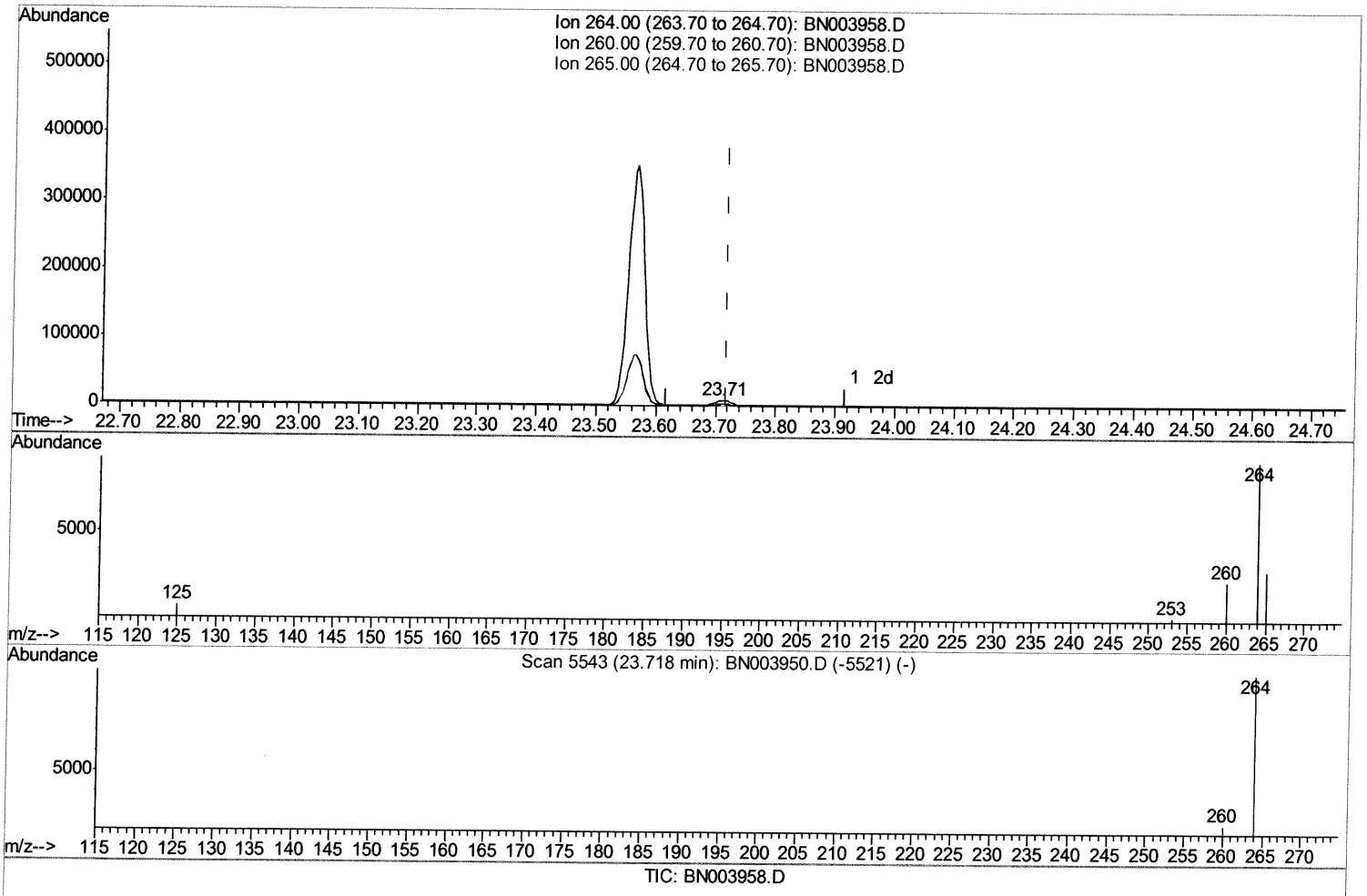
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:40:34 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



(20) Perylene-d12 (I)

23.712min (-0.006) 0.40ng/ul m SJ 12/19/18

response 15893

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	28.64
265.00	33.50	35.04
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

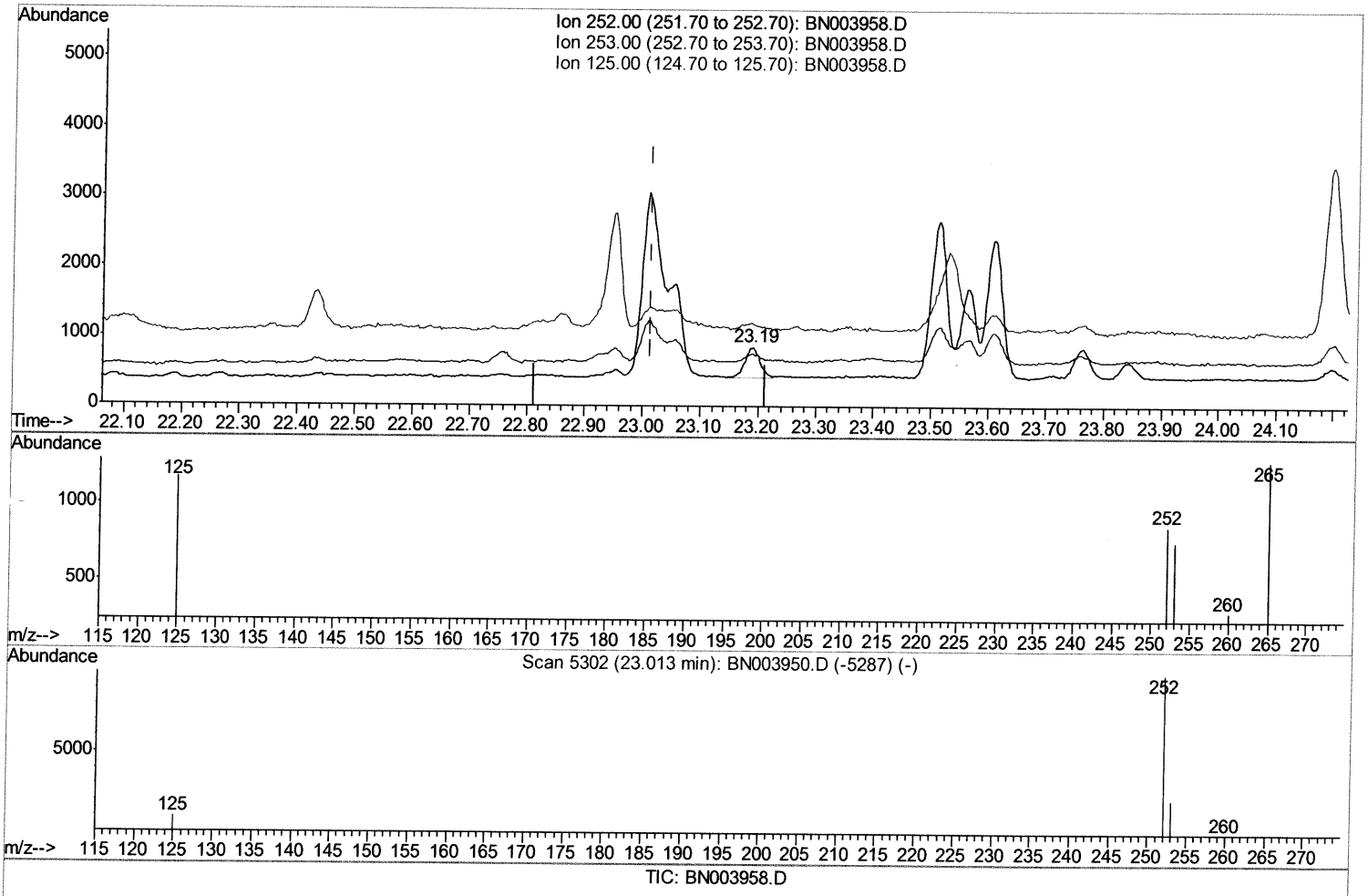
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:45:53 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



TIC: BN003958.D

(21) Benzo(b)fluoranthene

23.191min (+0.178) 0.01ng/ul

response 795

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	87.85#
125.00	11.20	137.15#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

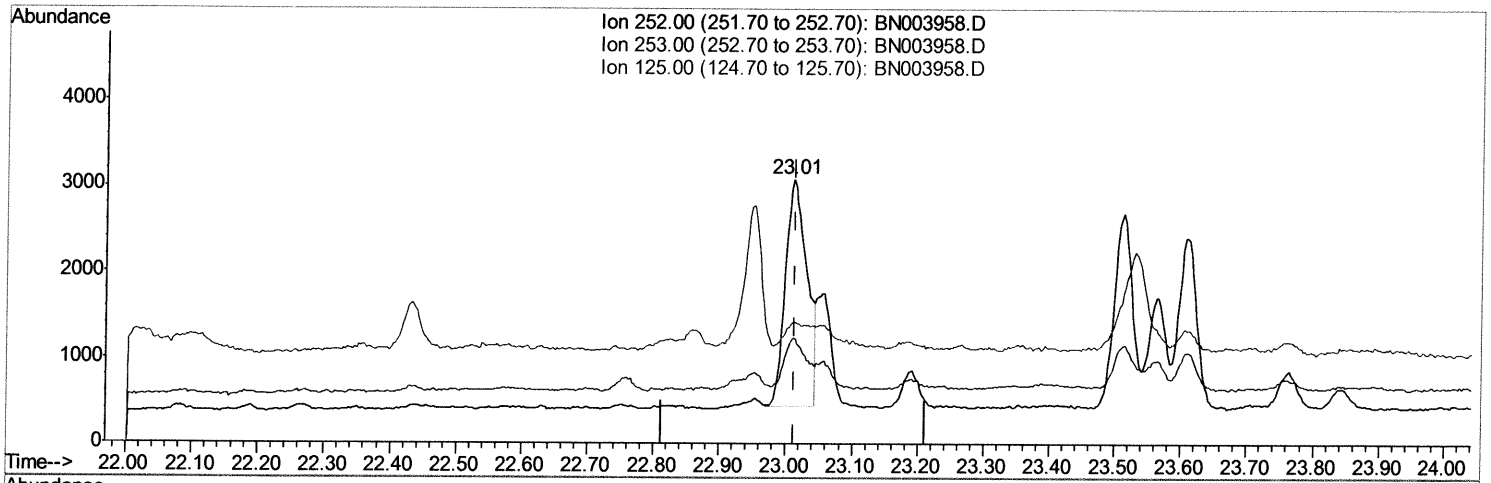
Quantitation Report (Qedit)

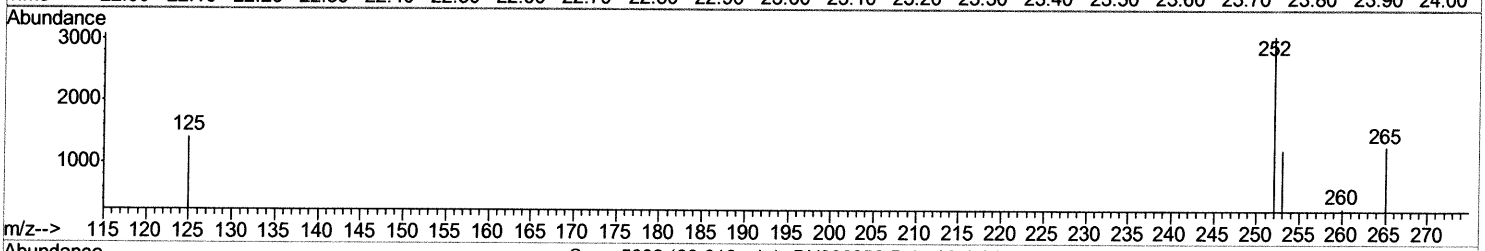
Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

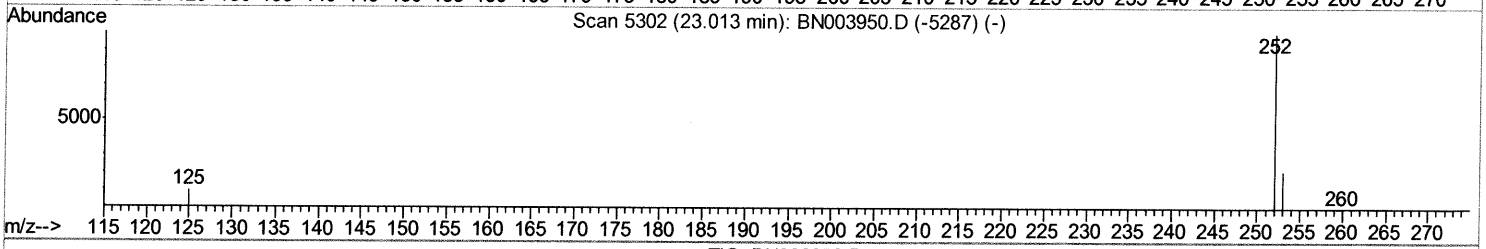
Quant Time: Dec 15 22:45:53 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM







TIC: BN003958.D

(21) Benzo(b)fluoranthene

23.010min (-0.003) 0.09ng/ul m SJ 12/17/18

response 5909

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	40.14
125.00	11.20	45.73#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

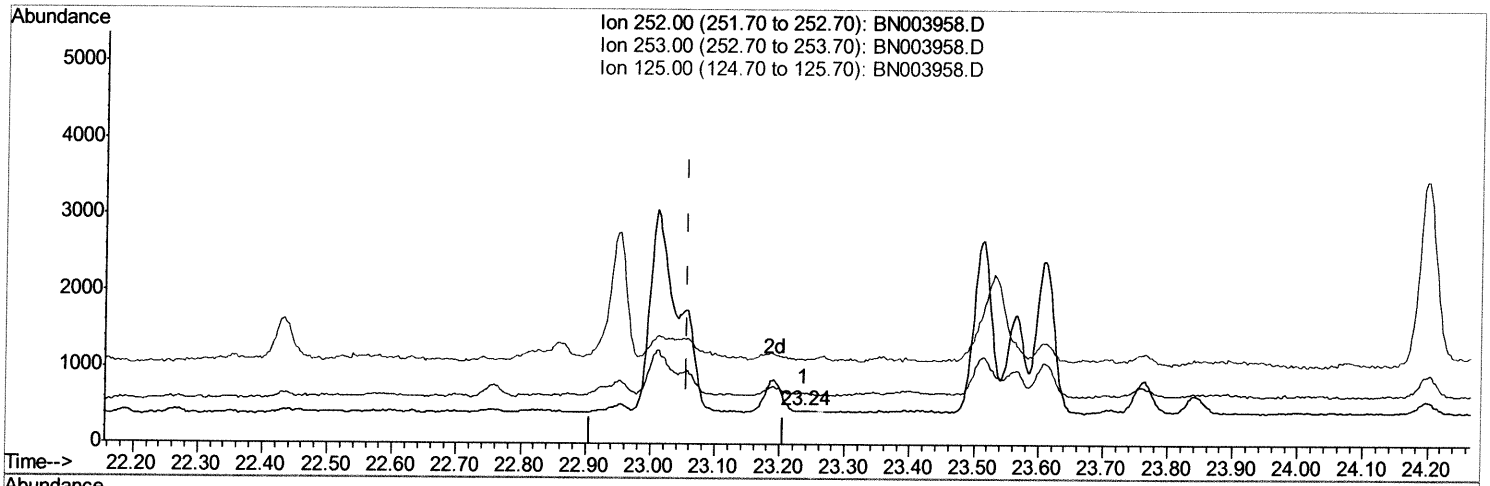
Quantitation Report (Qedit)

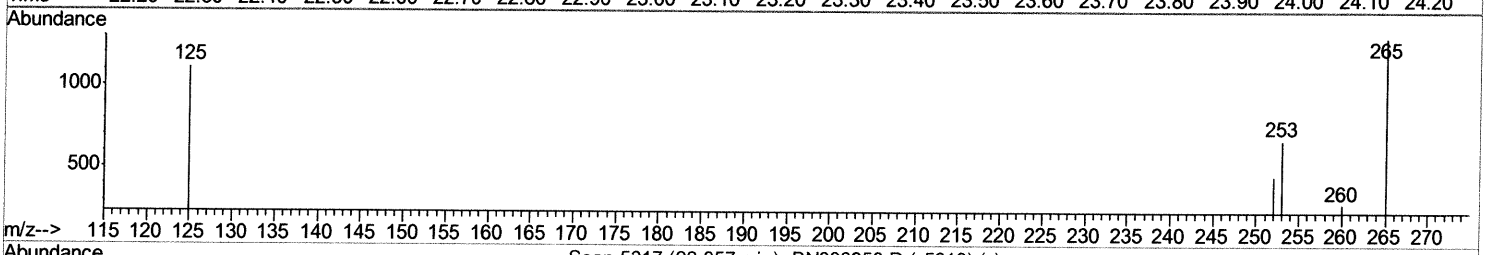
Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

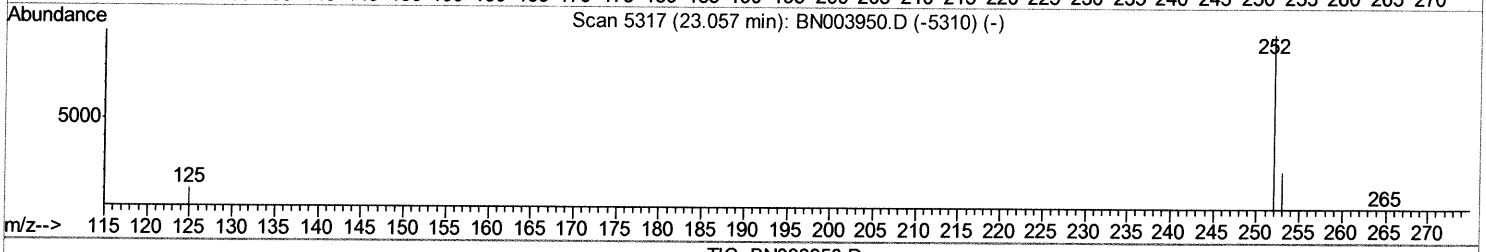
Quant Time: Dec 15 22:45:53 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM







TIC: BN003958.D

(22) Benzo(k)fluoranthene

23.235min (+0.178) 0.00ng/ul

response 40

Ion	Exp%	Act%
252.00	100	100
253.00	23.10	149.67#
125.00	11.30	247.88#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

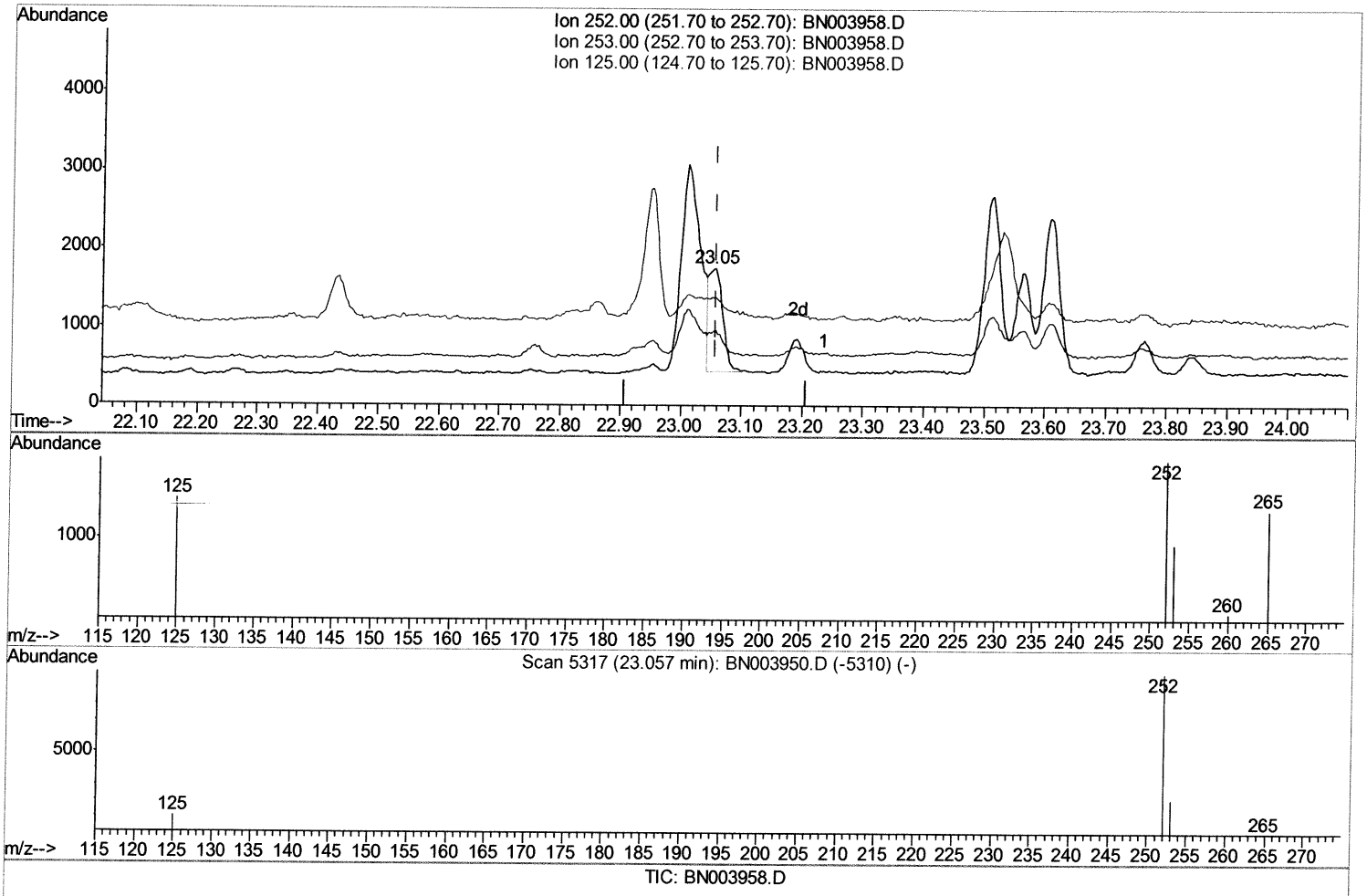
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:45:53 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



TIC: BN003958.D

(22) Benzo(k)fluoranthene

23.054min (-0.003) 0.03ng/ul m SJ 12/17/18

response 2055

Ion	Exp%	Act%
252.00	100	100
253.00	23.10	54.34#
125.00	11.30	78.69#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

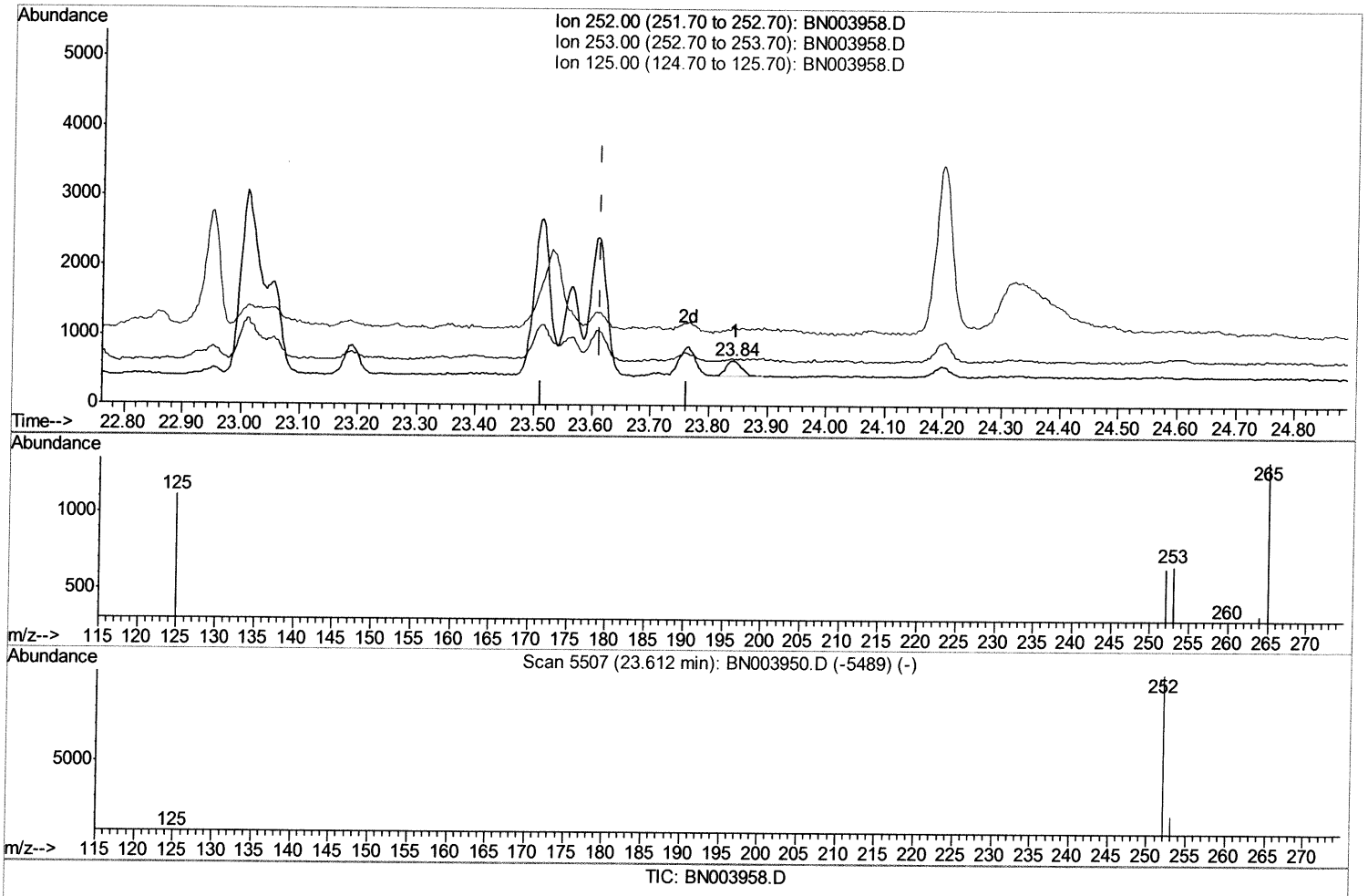
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:45:53 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



TIC: BN003958.D

(23) Benzo(a)pyrene (C)

23.843min (+0.231) 0.01ng/ul

response 447

Ion	Exp%	Act%
252.00	100	100
253.00	23.70	102.93#
125.00	12.80	171.30#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

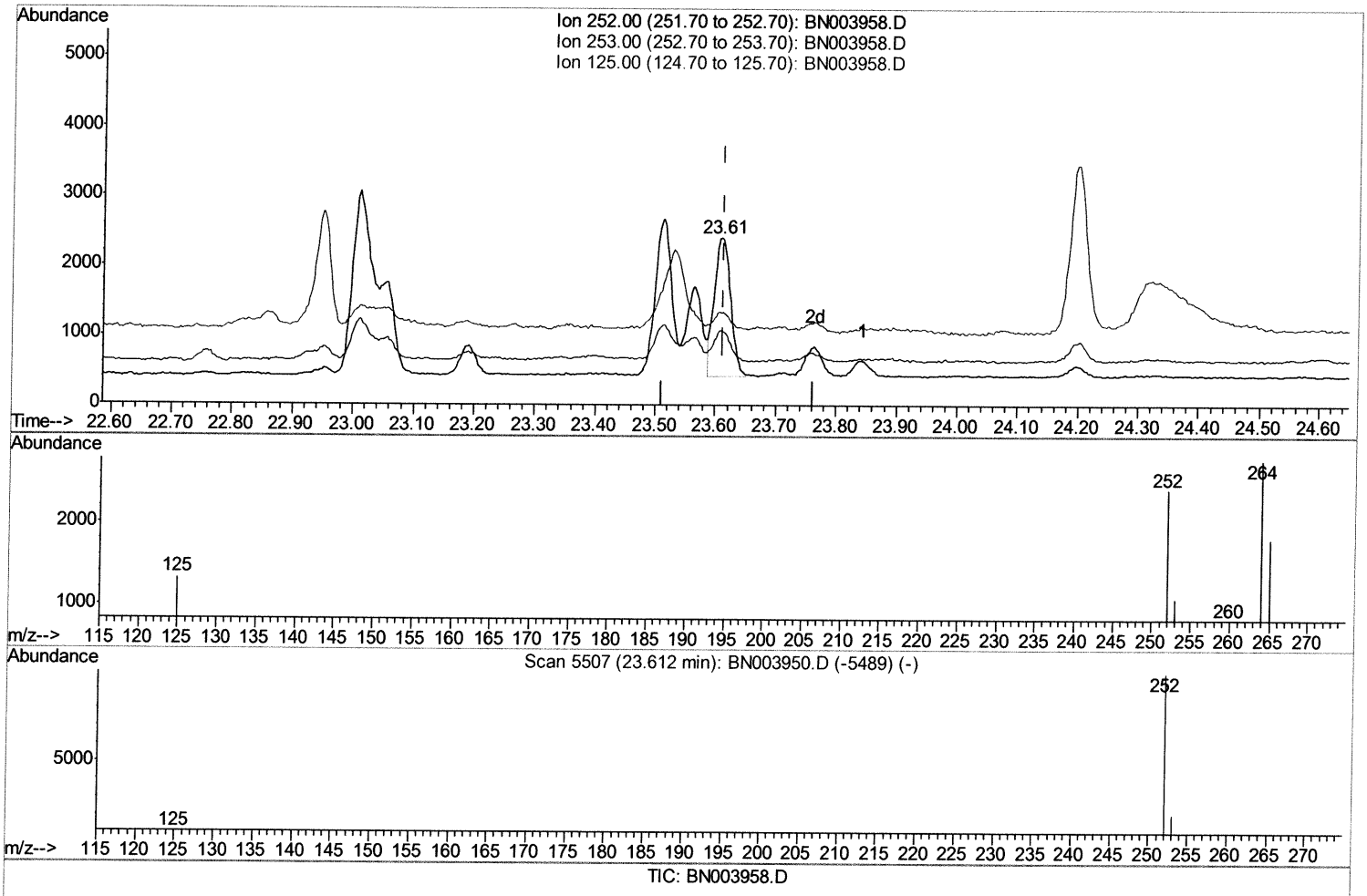
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:45:53 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



(23) Benzo(a)pyrene (C)

23.609min (-0.003) 0.07ng/ul m SJ 12/19/18

response 3741

Ion	Exp%	Act%
252.00	100	100
253.00	23.70	44.51#
125.00	12.80	54.87#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

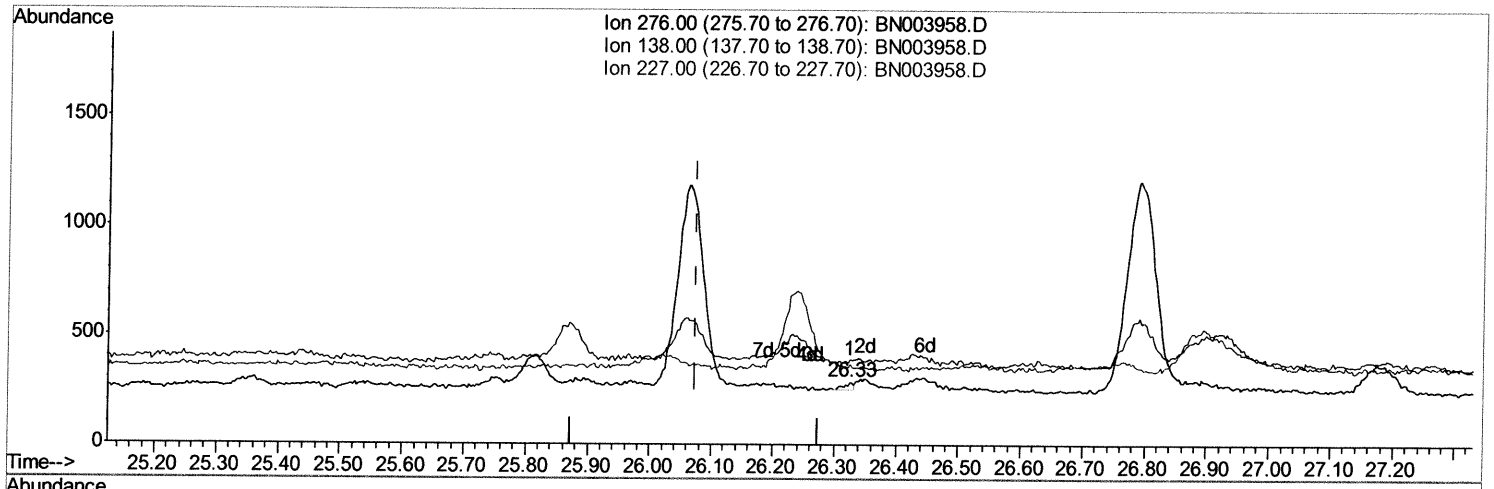
Quantitation Report (Qedit)

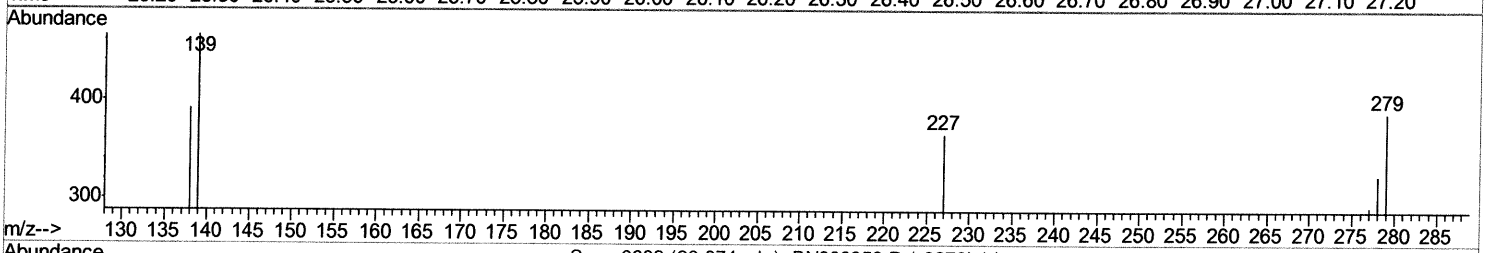
Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

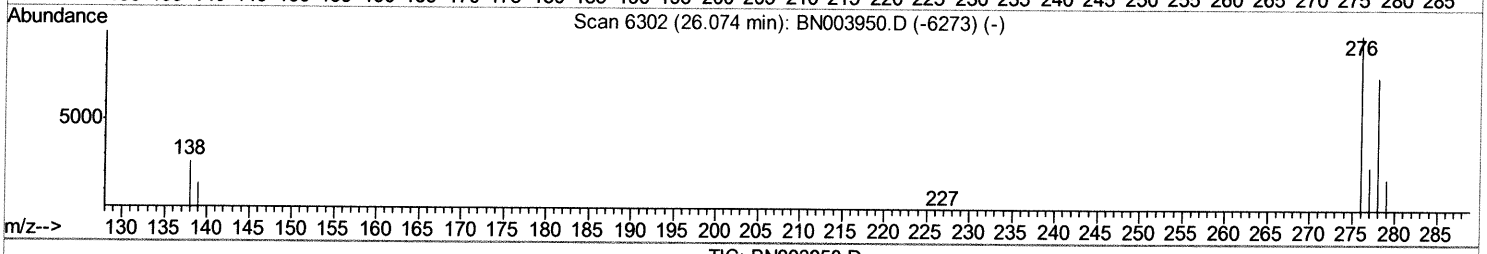
Quant Time: Dec 15 22:45:53 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM







TIC: BN003958.D

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

26.325min (+0.252) 0.00ng/ul

response 35

Ion	Exp%	Act%
276.00	100	100
138.00	25.40	0.00#
227.00	0.20	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

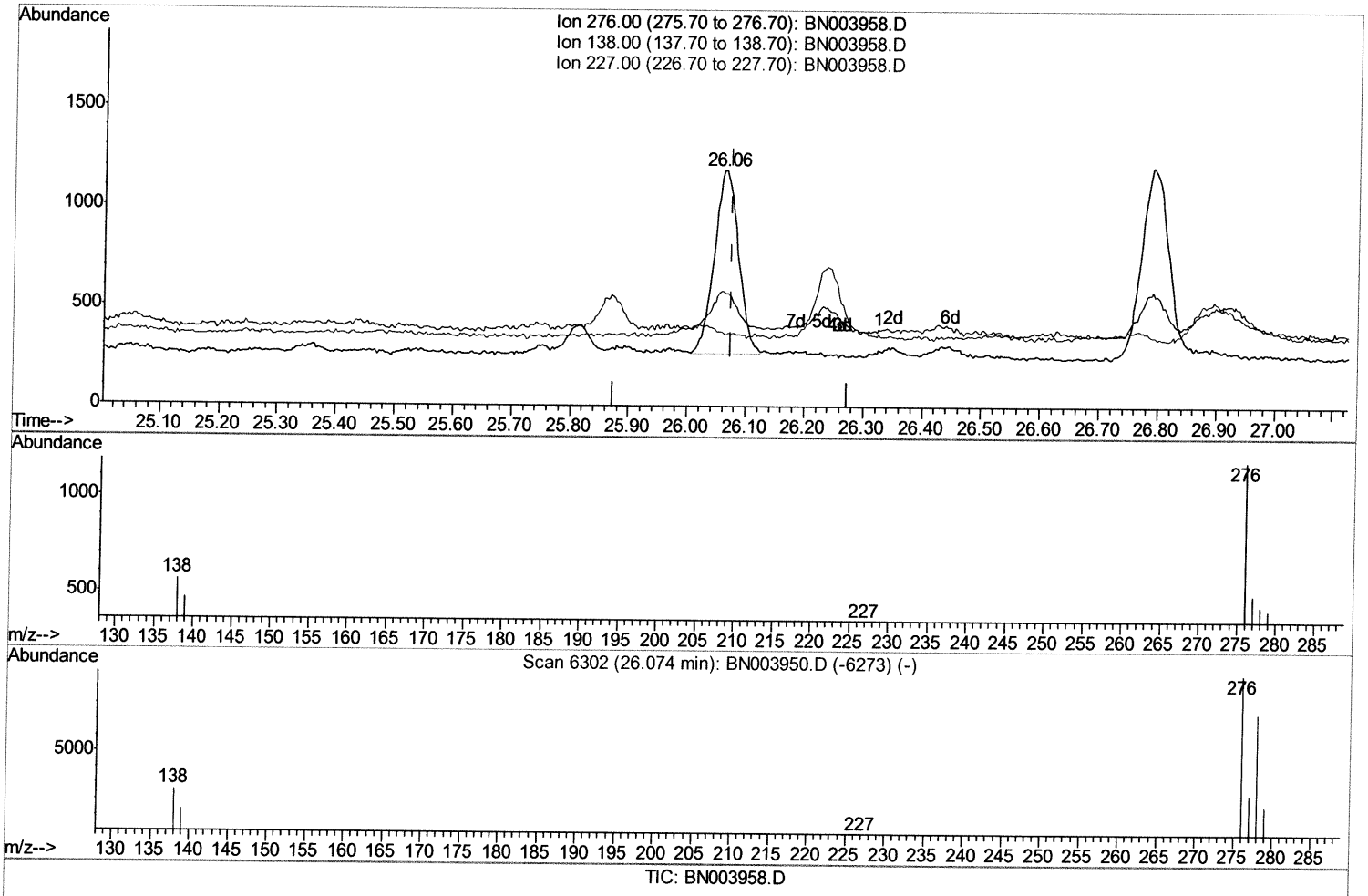
Quantitation Report (Qedit)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:45:53 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM



TIC: BN003958.D

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

26.064min (-0.010) 0.04ng/ul m SJ 12/17/18

response 2662

Ion	Exp%	Act%
276.00	100	100
138.00	25.40	0.00#
227.00	0.20	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

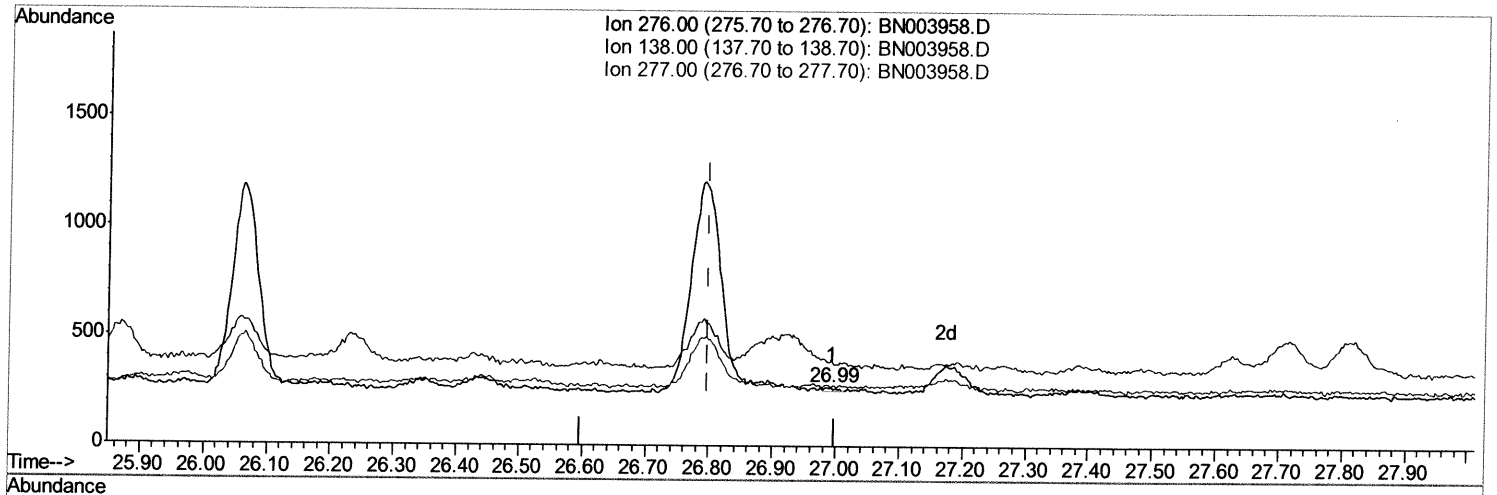
Quantitation Report (Qedit)

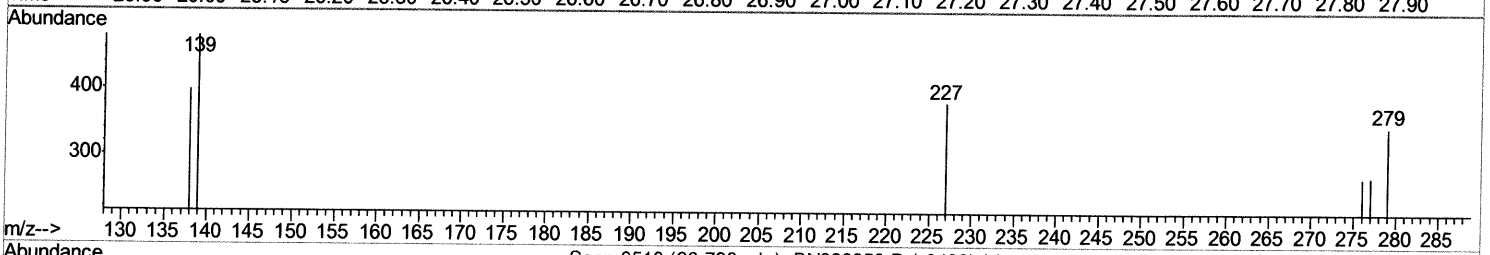
Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

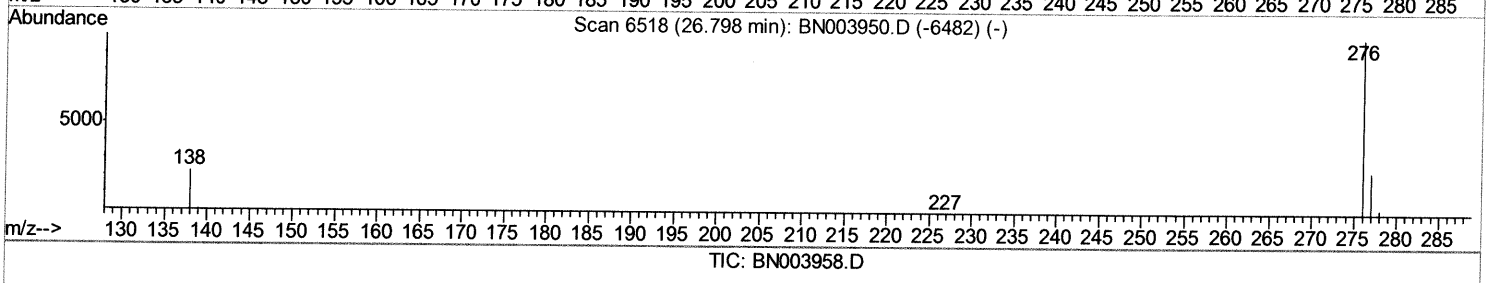
Quant Time: Dec 15 22:45:53 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM







(26) Benzo(g,h,i)perylene

26.993min (+0.194) 0.00ng/ul

response 21

Ion	Exp%	Act%
276.00	100	100
138.00	22.10	147.04#
277.00	24.10	100.37#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

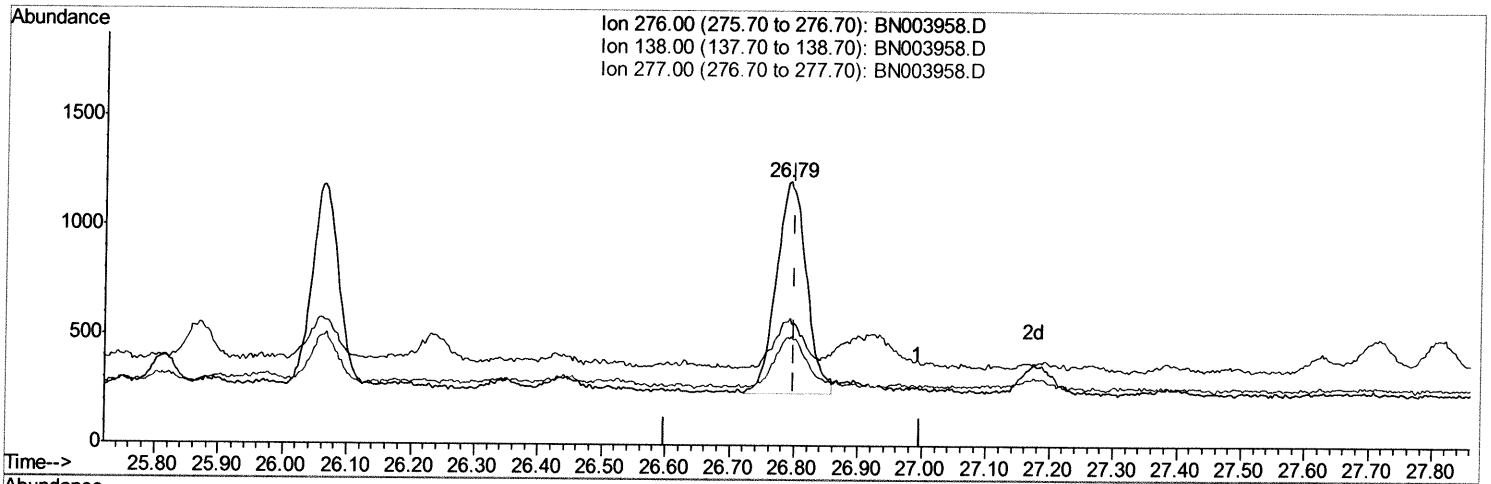
Quantitation Report (Qedit)

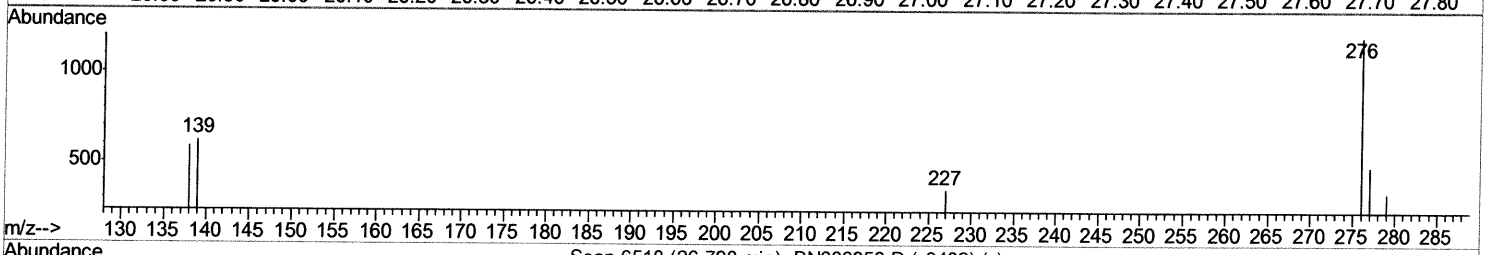
Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

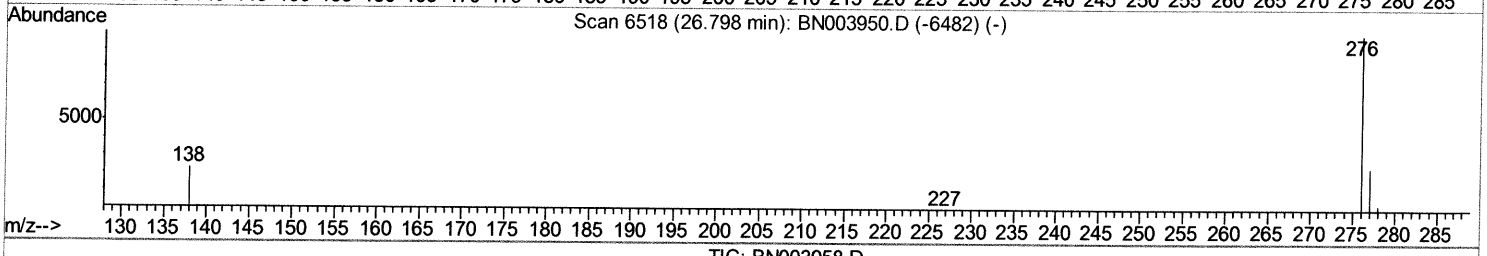
Quant Time: Dec 15 22:45:53 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM







TIC: BN003958.D

(26) Benzo(g,h,i)perylene

SJ 12/17/18

26.792min (-0.007) 0.06ng/ul m

response 3186

Ion	Exp%	Act%
276.00	100	100
138.00	22.10	48.30#
277.00	24.10	40.36#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (QT Reviewed)

Data File : BN003958.D
Acq On : 15 Dec 2018 14:31
Operator : JU/SJ
Sample : J6227-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 15 22:48:16 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument : BNA_N
ClientSampleId : F9F33

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:51 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	1778	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	8864	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	5432	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.22	188	13431m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	17371m	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	15893m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	2435	0.18	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	7619m	0.19	ng/ul	0.00
Target Compounds						Qvalue
5) 2-Methylnaphthalene	12.29	142	814	0.047	ng/ul	100
12) Phenanthrene	17.25	178	3750	0.085	ng/ul	95
13) Anthracene	17.35	178	1035m	0.029	ng/ul	
15) Fluoranthene	19.27	202	5492m	0.106	ng/ul	
17) Pyrene	19.63	202	8555m	0.137	ng/ul	
18) Benzo(a)anthracene	21.38	228	4127m	0.075	ng/ul	
19) Chrysene	21.43	228	5699m	0.091	ng/ul	
21) Benzo(b)fluoranthene	23.01	252	5909m	0.090	ng/ul	
22) Benzo(k)fluoranthene	23.05	252	2055m	0.032	ng/ul	
23) Benzo(a)pyrene	23.61	252	3741m	0.066	ng/ul	
24) Indeno(1,2,3-cd)pyrene	26.06	276	2662m	0.041	ng/ul	
26) Benzo(g,h,i)perylene	26.79	276	3186m	0.056	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SJ
12/19/18

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9F34

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-15
Sample wt/vol : 30.1 (g/mL): g
Lab File ID : BN003951.D
% Solids : 90.7
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/15/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	3.6	U
91-57-6	2-Methylnaphthalene	1.9	J
208-96-8	Acenaphthylene	3.6	U
83-32-9	Acenaphthene	3.6	U
86-73-7	Fluorene	3.6	U
87-86-5	Pentachlorophenol	7.4	U
85-01-8	Phenanthrene	3.9	
120-12-7	Anthracene	0.88	J
206-44-0	Fluoranthene	1.2	J
129-00-0	Pyrene	3.6	
56-55-3	Benzo(a)anthracene	2.3	J
218-01-9	Chrysene	3.3	J
205-99-2	Benzo(b)fluoranthene	1.5	J
207-08-9	Benzo(k)fluoranthene	3.6	U
50-32-8	Benzo(a)pyrene	1.7	J
193-39-5	Indeno(1,2,3-cd)pyrene	0.95	J
53-70-3	Dibenzo(a,h)anthracene	3.6	U
191-24-2	Benzo(g,h,i)perylene	1.7	J

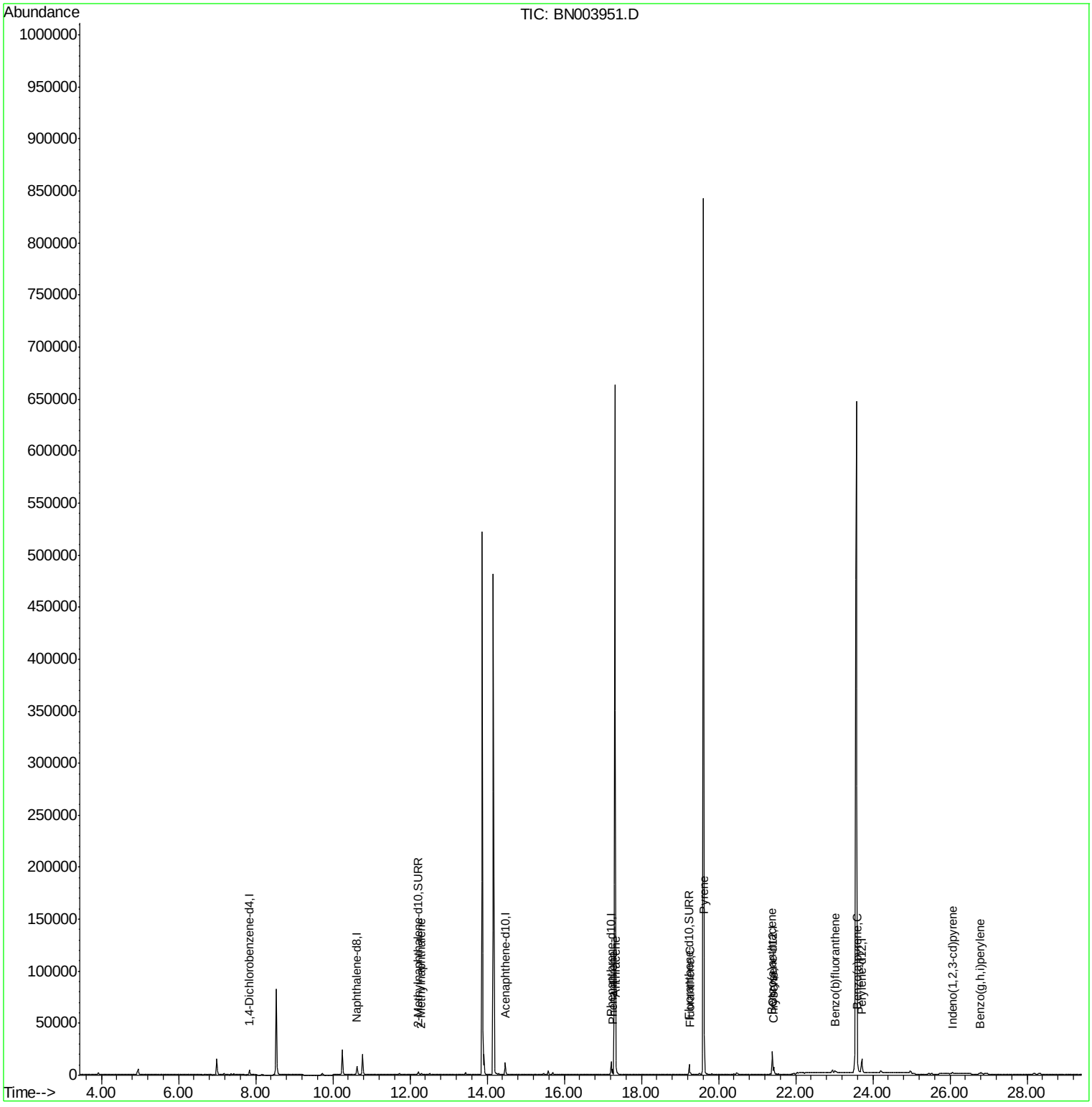
Quantitation Report (QT Reviewed)

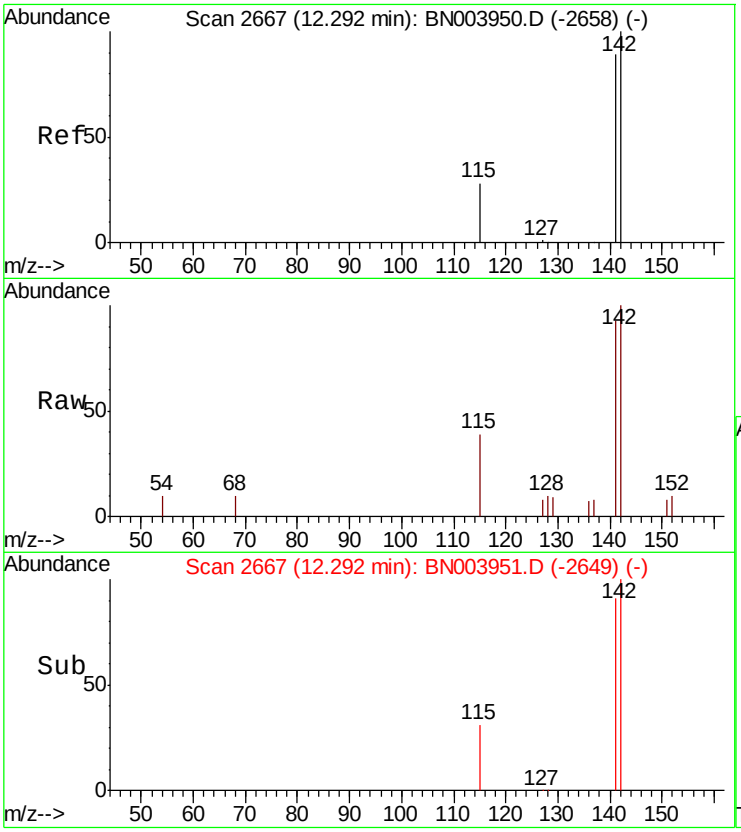
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 15 22:08:19 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM





#5
2-Methylnaphthalene
Concen: 0.051 ng/ul
RT: 12.29 min Scan# 2667
Delta R.T. -0.00 min
Lab File: BN003951.D
Acq: 15 Dec 2018 10:24

Tgt Ion:142 Resp: 1057

Ion	Ratio	Lower	Upper
142	100		
141	92.1	71.5	107.3

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
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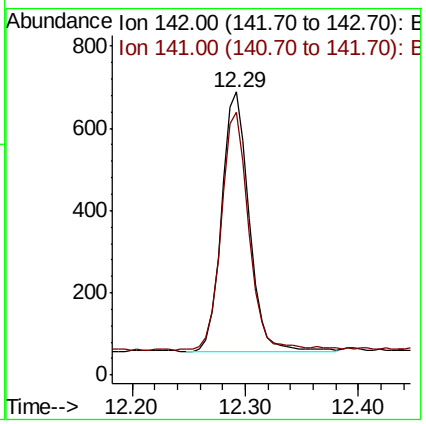
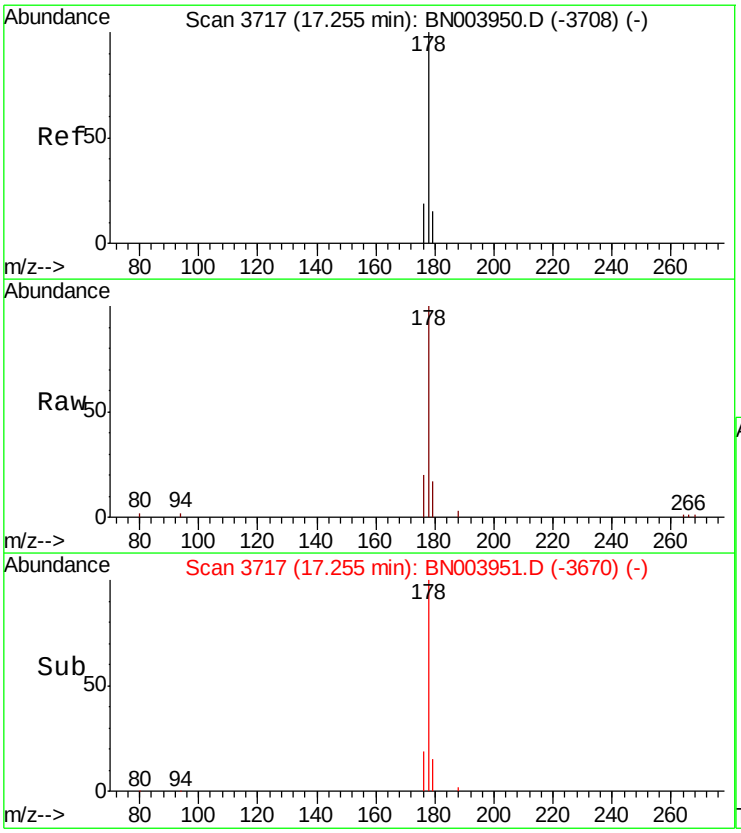
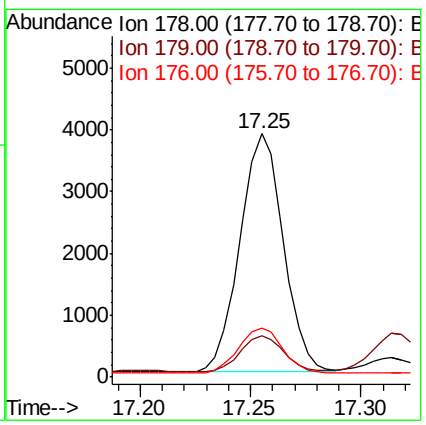


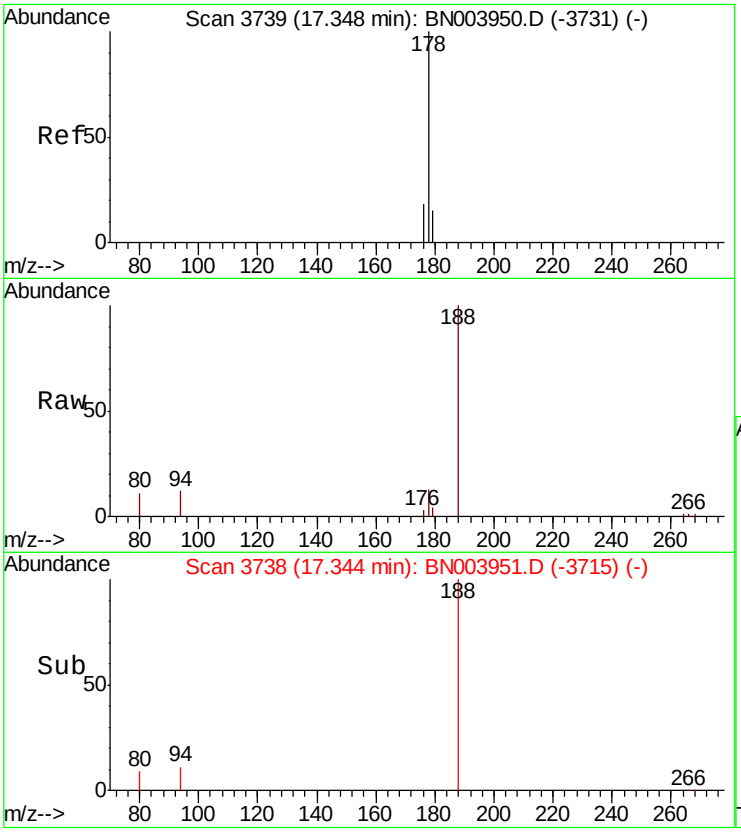


#12
Phenanthrene
Concen: 0.107 ng/ul
RT: 17.25 min Scan# 3717
Delta R.T. -0.00 min
Lab File: BN003951.D
Acq: 15 Dec 2018 10:24

Tgt Ion:178 Resp: 5285

Ion	Ratio	Lower	Upper
178	100		
179	17.0	12.5	18.7
176	20.1	15.0	22.4

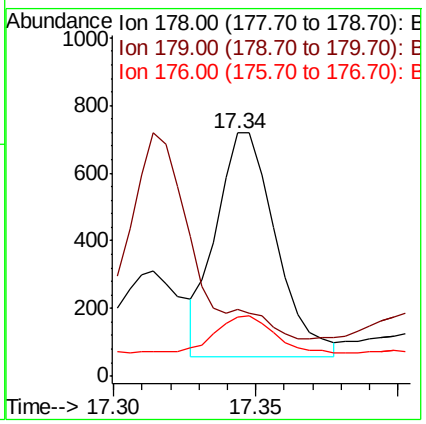




#13
Anthracene
Concen: 0.024 ng/ul m
RT: 17.34 min Scan# 3738
Delta R.T. -0.00 min
Lab File: BN003951.D
Acq: 15 Dec 2018 10:24

Tgt Ion:178 Resp: 982

Ion	Ratio	Lower	Upper
178	100		
179	27.7	12.3	18.5#
176	24.5	14.8	22.2#



Instrument :
BNA_N
ClientSampleId :
F9F34

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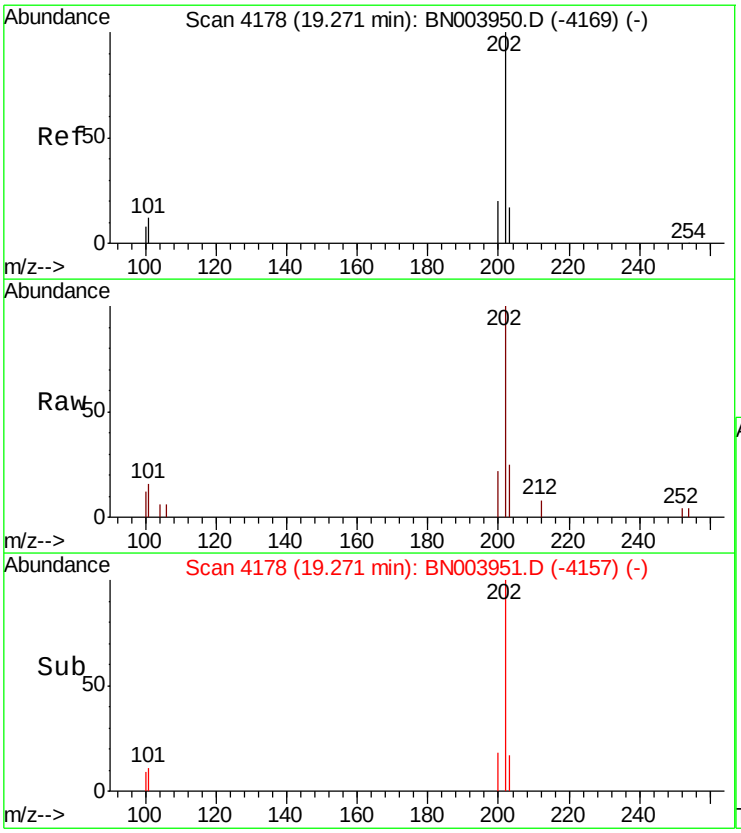
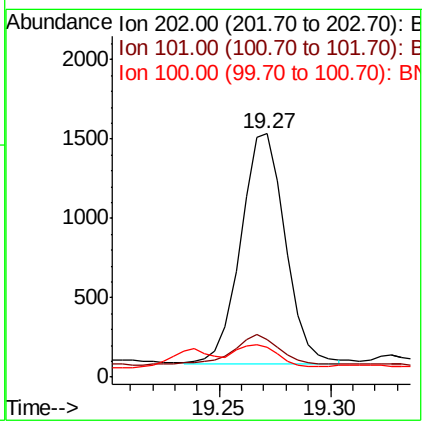
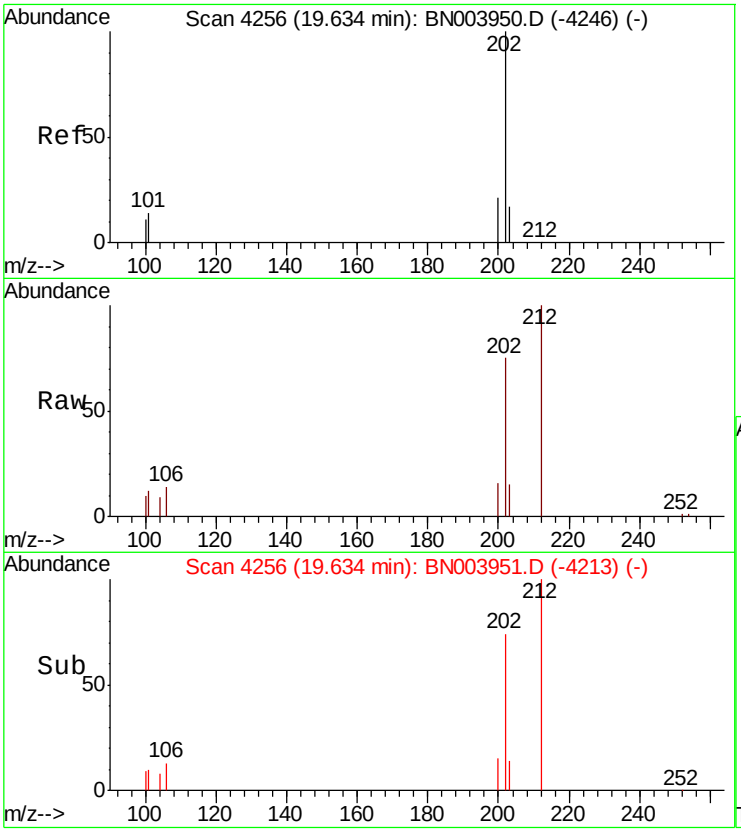


#15
Fluoranthene
Concen: 0.034 ng/ul m
RT: 19.27 min Scan# 4178
Delta R.T. -0.00 min
Lab File: BN003951.D
Acq: 15 Dec 2018 10:24

Tgt Ion:202 Resp: 2013

Ion	Ratio	Lower	Upper
202	100		
101	15.5	0.0	30.7
100	12.4	0.0	28.1





#17
Pyrene
Concen: 0.099 ng/ul m
RT: 19.63 min Scan# 4256
Delta R.T. -0.00 min
Lab File: BN003951.D
Acq: 15 Dec 2018 10:24

Tgt Ion:202 Resp: 6435

Ion	Ratio	Lower	Upper
202	100		
101	15.4	10.3	15.5
100	12.9	8.5	12.7#

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
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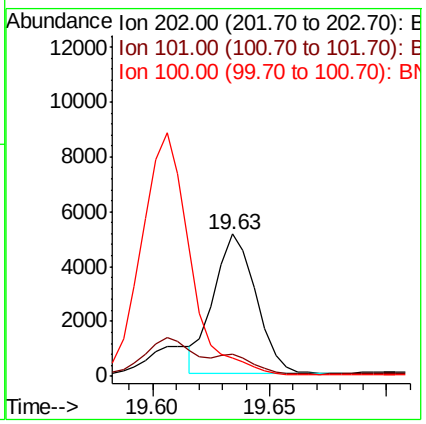
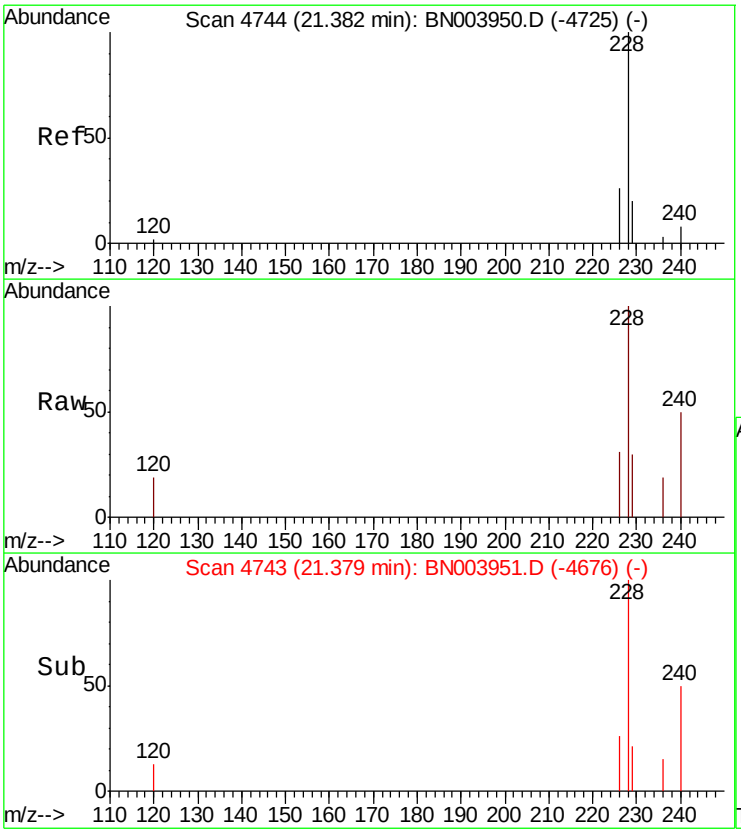
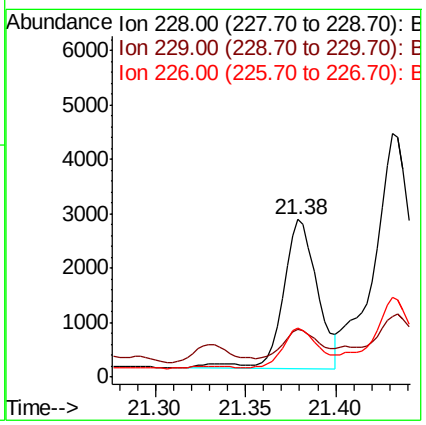


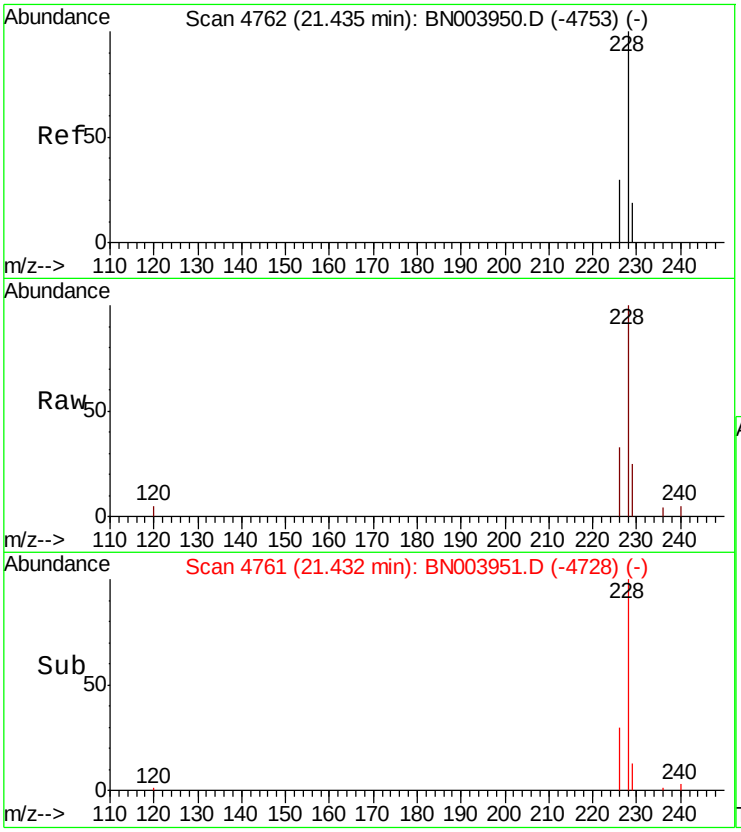


#18
Benzo(a)anthracene
Concen: 0.064 ng/ul m
RT: 21.38 min Scan# 4743
Delta R.T. -0.00 min
Lab File: BN003951.D
Acq: 15 Dec 2018 10:24

Tgt Ion:228 Resp: 3632

Ion	Ratio	Lower	Upper
228	100		
229	30.3	15.6	23.4#
226	31.1	21.1	31.7

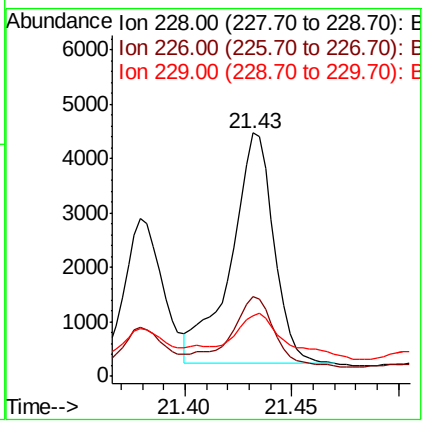




#19
Chrysene
Concen: 0.091 ng/ul m
RT: 21.43 min Scan# 4761
Delta R.T. -0.00 min
Lab File: BN003951.D
Acq: 15 Dec 2018 10:24

Tgt Ion:228 Resp: 5939

Ion	Ratio	Lower	Upper
228	100		
226	32.6	24.0	36.0
229	25.1	15.7	23.5#



Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
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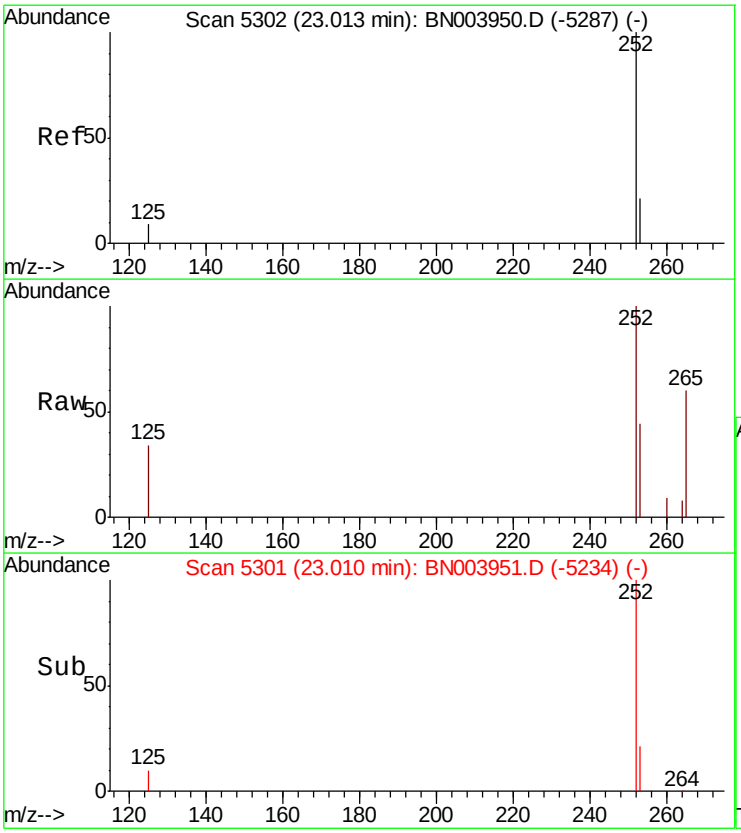
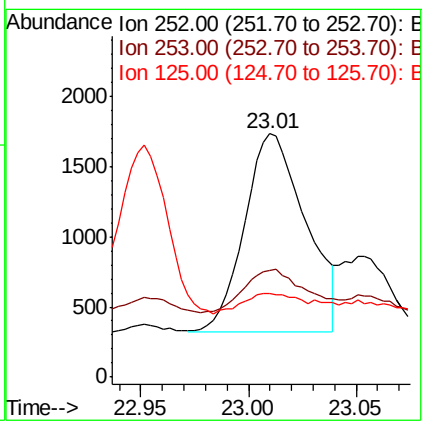
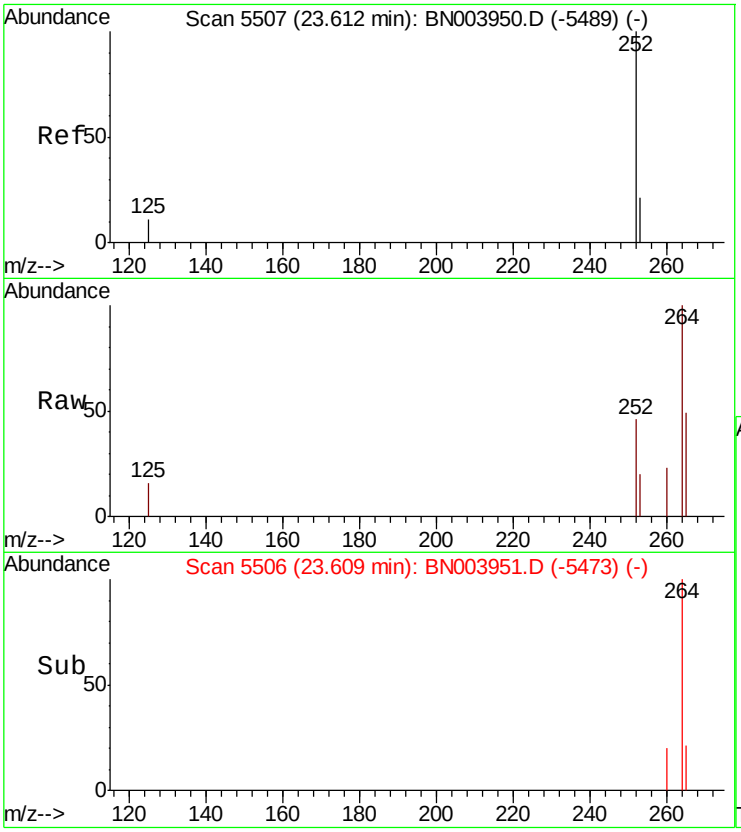


#21
Benzo(b)fluoranthene
Concen: 0.041 ng/ul m
RT: 23.01 min Scan# 5301
Delta R.T. -0.00 min
Lab File: BN003951.D
Acq: 15 Dec 2018 10:24

Tgt Ion:252 Resp: 2817

Ion	Ratio	Lower	Upper
252	100		
253	44.0	0.0	46.0
125	34.2	0.0	22.4#





#23
Benzo(a)pyrene
Concen: 0.047 ng/ul m
RT: 23.61 min Scan# 5506
Delta R.T. -0.00 min
Lab File: BN003951.D
Acq: 15 Dec 2018 10:24

Tgt Ion:252 Resp: 2805

Ion	Ratio	Lower	Upper
252	100		
253	44.1	19.0	28.4#
125	34.5	10.2	15.4#

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
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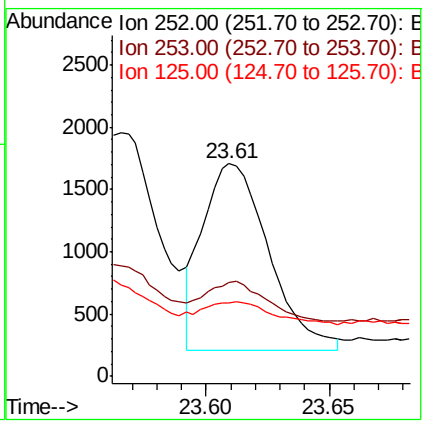
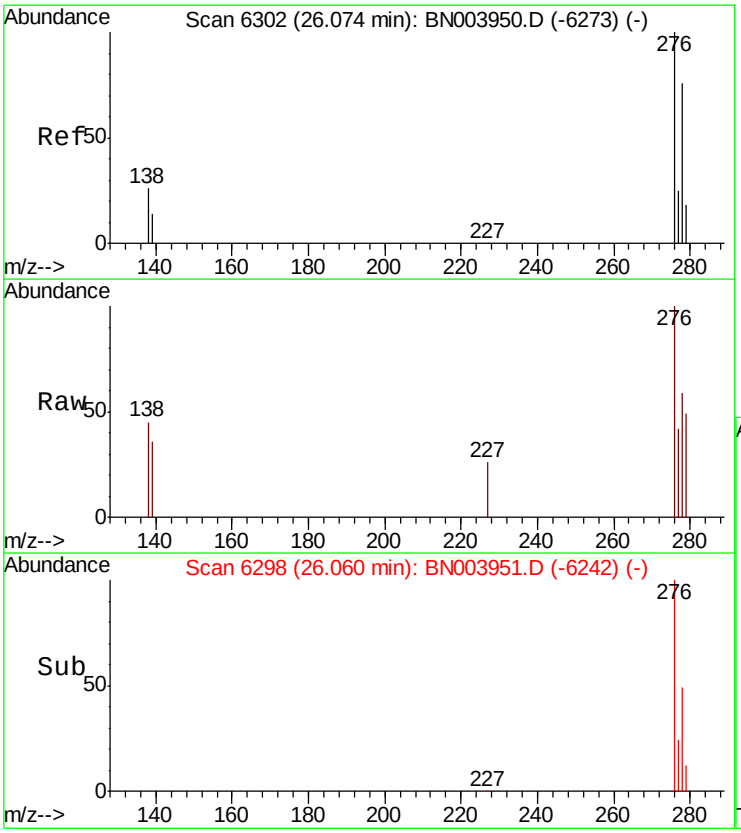
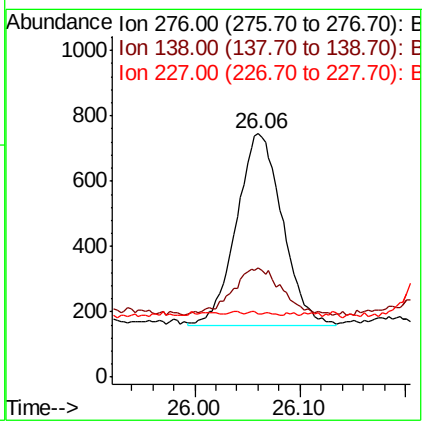


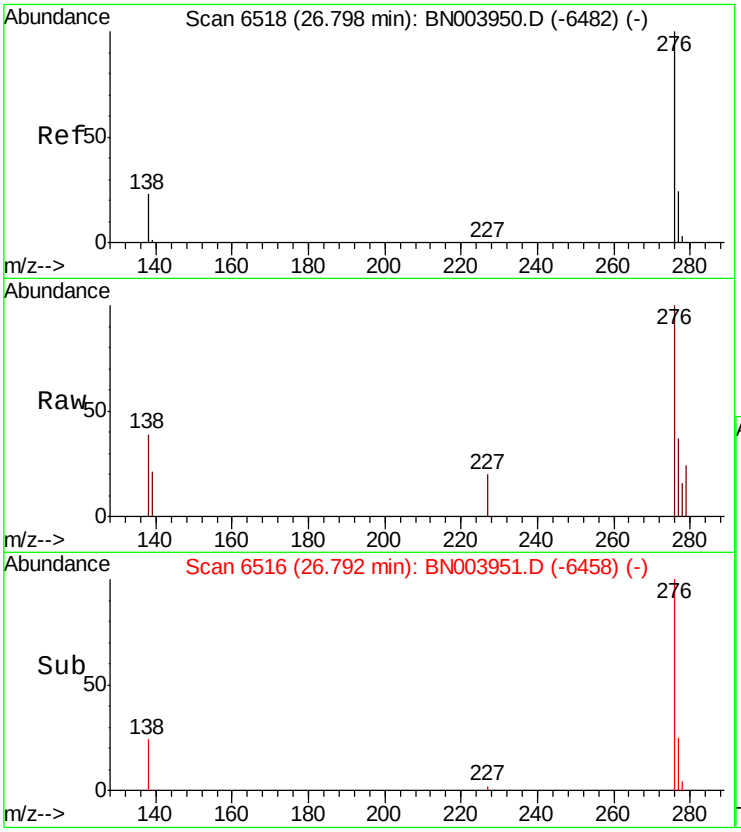


#24
Indeno(1,2,3-cd)pyrene
Concen: 0.026 ng/ul m
RT: 26.06 min Scan# 6298
Delta R.T. -0.01 min
Lab File: BN003951.D
Acq: 15 Dec 2018 10:24

Tgt Ion:276 Resp: 1785

Ion	Ratio	Lower	Upper
276	100		
138	1.5	20.3	30.5#
227	0.0	0.2	0.2#

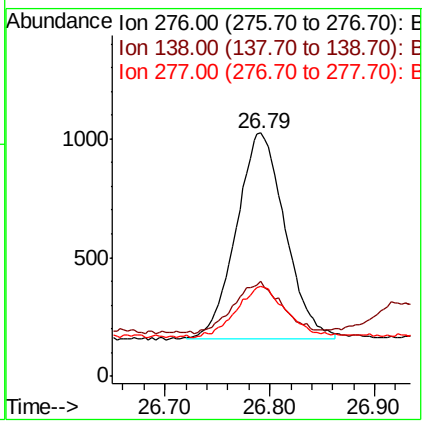




#26
Benzo(g,h,i)perylene
Concen: 0.047 ng/ul m
RT: 26.79 min Scan# 6516
Delta R.T. -0.01 min
Lab File: BN003951.D
Acq: 15 Dec 2018 10:24

Tgt Ion:276 Resp: 2814

Ion	Ratio	Lower	Upper
276	100		
138	38.8	17.7	26.5#
277	37.0	19.3	28.9#



Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM

Quant Time: Dec 15 22:08:19 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	2284	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	10618	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	6240	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	15111m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	18090m	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	16672m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	3749	0.23	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	10603m	0.24	ng/ul	0.00
Target Compounds						Qvalue
5) 2-Methylnaphthalene	12.29	142	1057	0.051	ng/ul	97
12) Phenanthrene	17.25	178	5285	0.107	ng/ul	97
13) Anthracene	17.34	178	982m	0.024	ng/ul	
15) Fluoranthene	19.27	202	2013m	0.034	ng/ul	
17) Pyrene	19.63	202	6435m	0.099	ng/ul	
18) Benzo(a)anthracene	21.38	228	3632m	0.064	ng/ul	
19) Chrysene	21.43	228	5939m	0.091	ng/ul	
21) Benzo(b)fluoranthene	23.01	252	2817m	0.041	ng/ul	
23) Benzo(a)pyrene	23.61	252	2805m	0.047	ng/ul	
24) Indeno(1,2,3-cd)pyrene	26.06	276	1785m	0.026	ng/ul	
26) Benzo(g,h,i)perylene	26.79	276	2814m	0.047	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

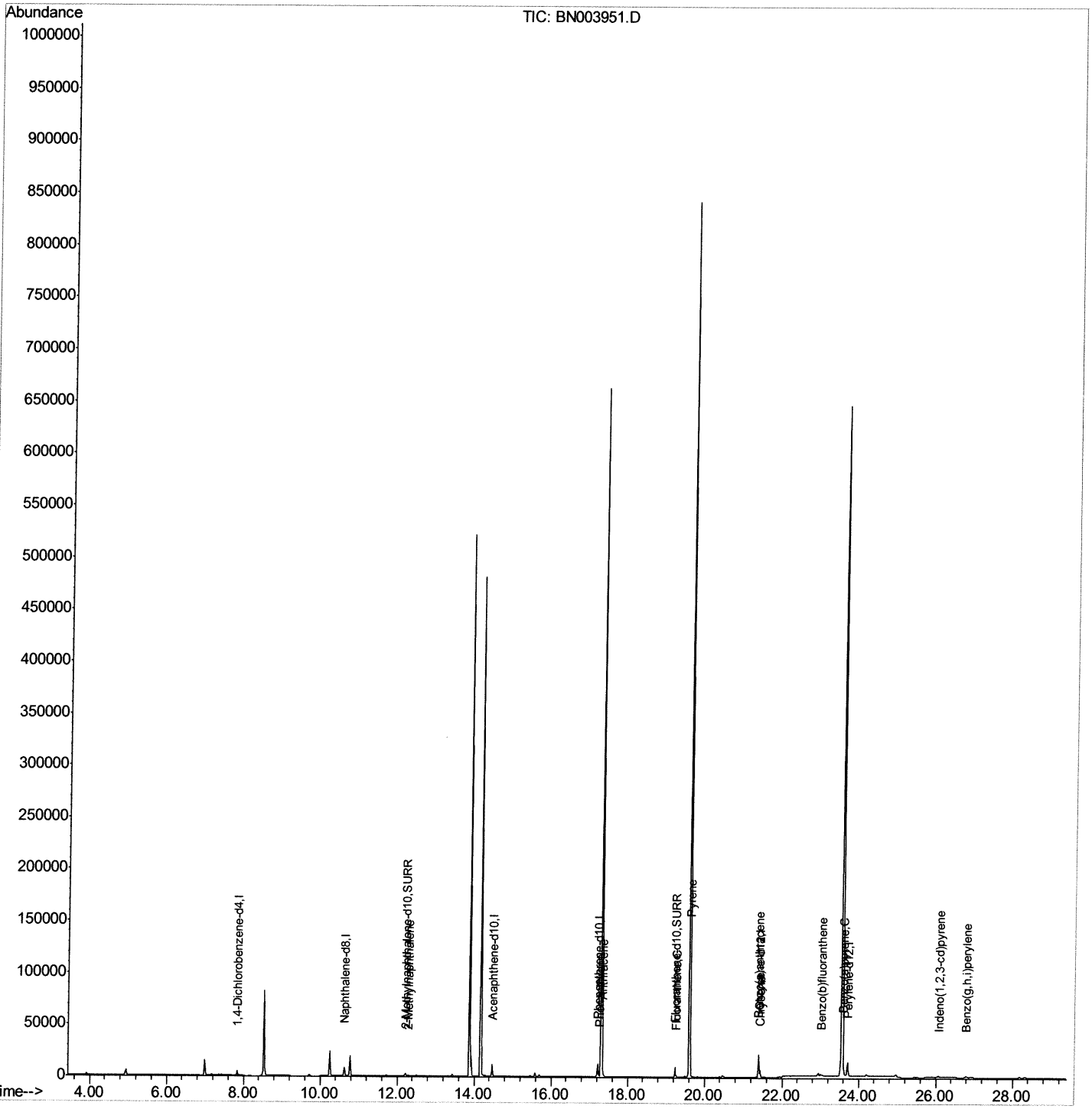
Quantitation Report (QT Reviewed)

Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 15 22:08:19 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (Qedit)

Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 15 22:01:09 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
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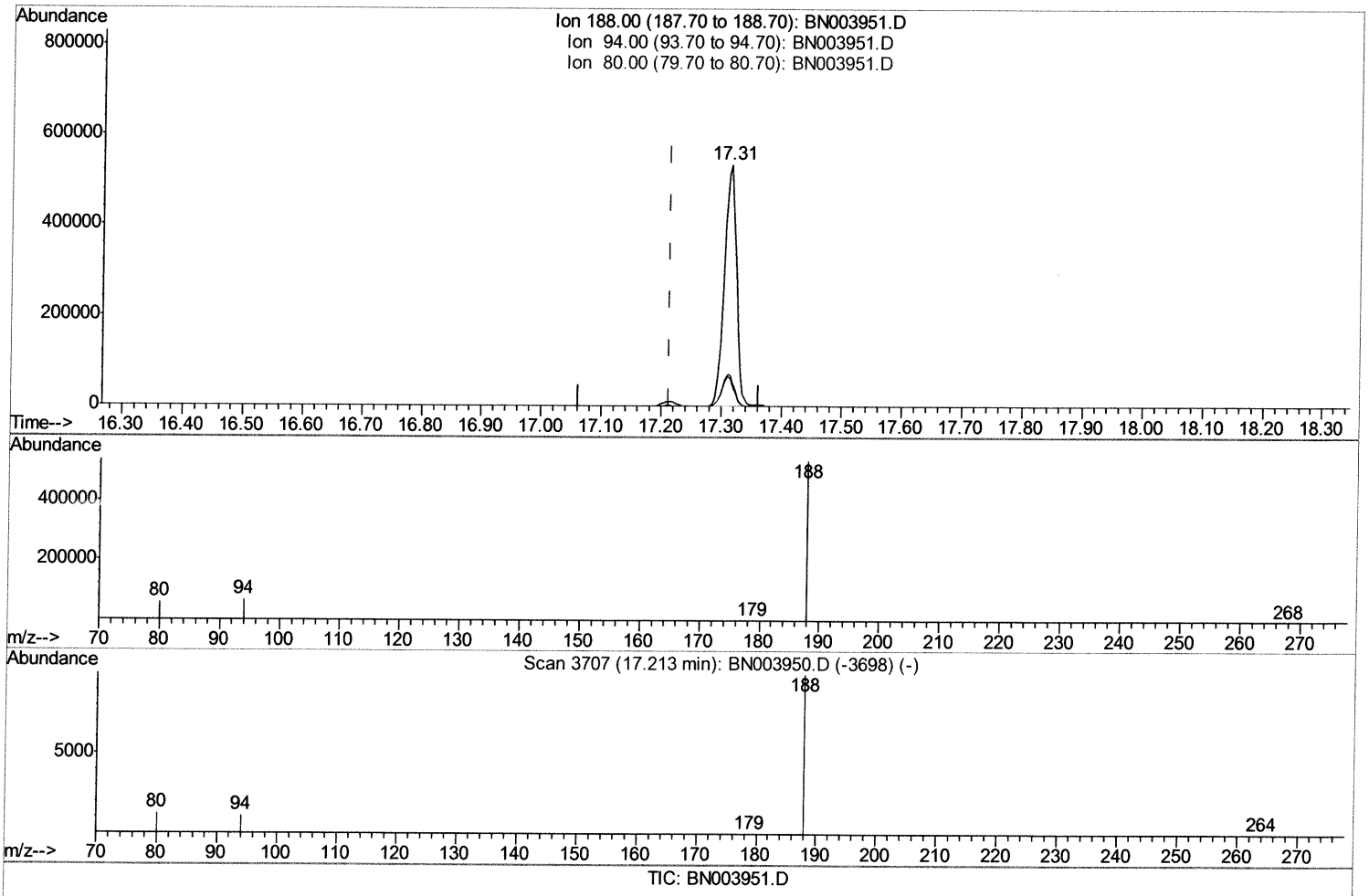


TIC: BN003951.D

(10) Phenanthrene-d10 (I)

17.314min (+0.101) 0.40ng/ul

response 740656

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	12.64#
80.00	11.60	11.19
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

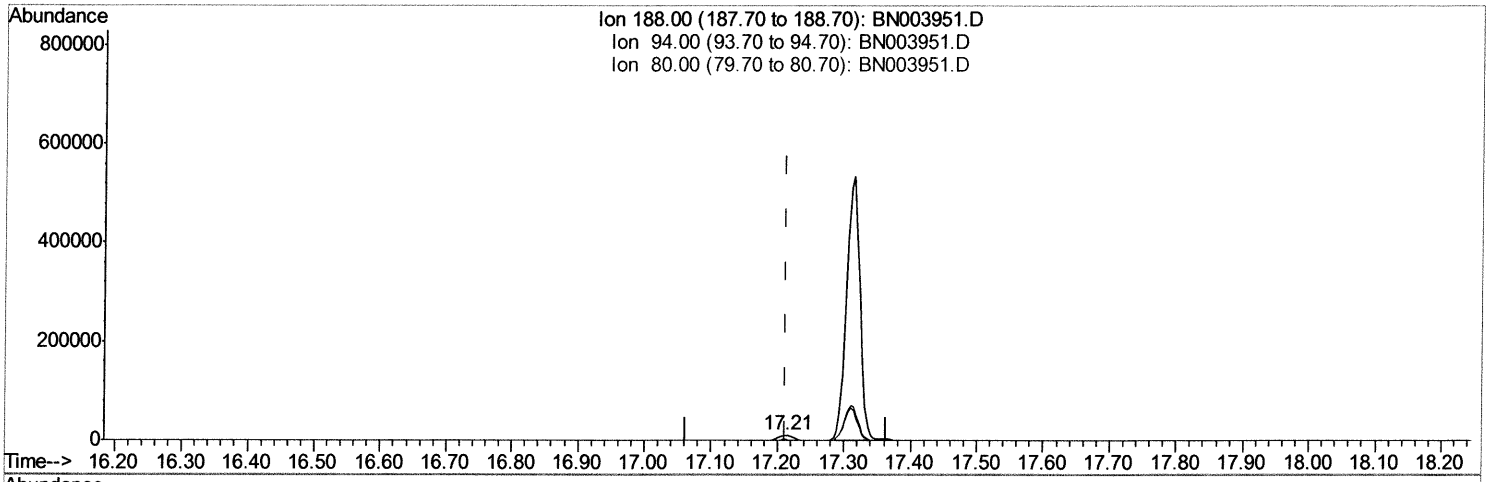
Quantitation Report (Qedit)

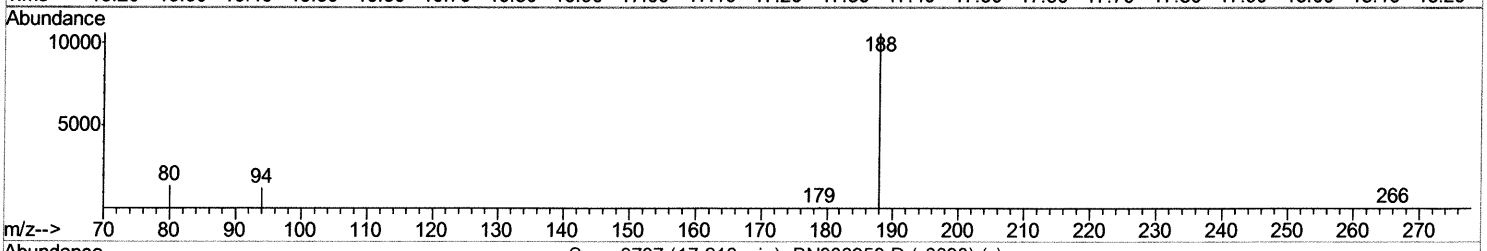
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

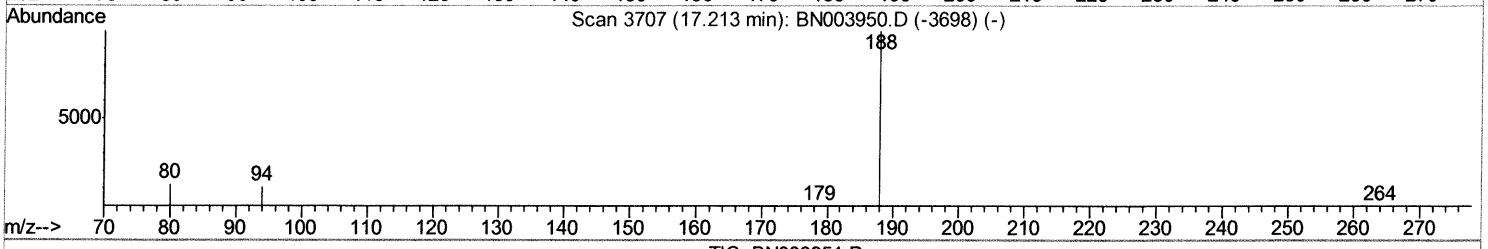
Quant Time: Dec 15 22:01:09 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

(10) Phenanthrene-d10 (I)

17.213min (-0.000) 0.40ng/ul m > SJ 12/17/18

response 15111

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	12.01
80.00	11.60	13.10
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

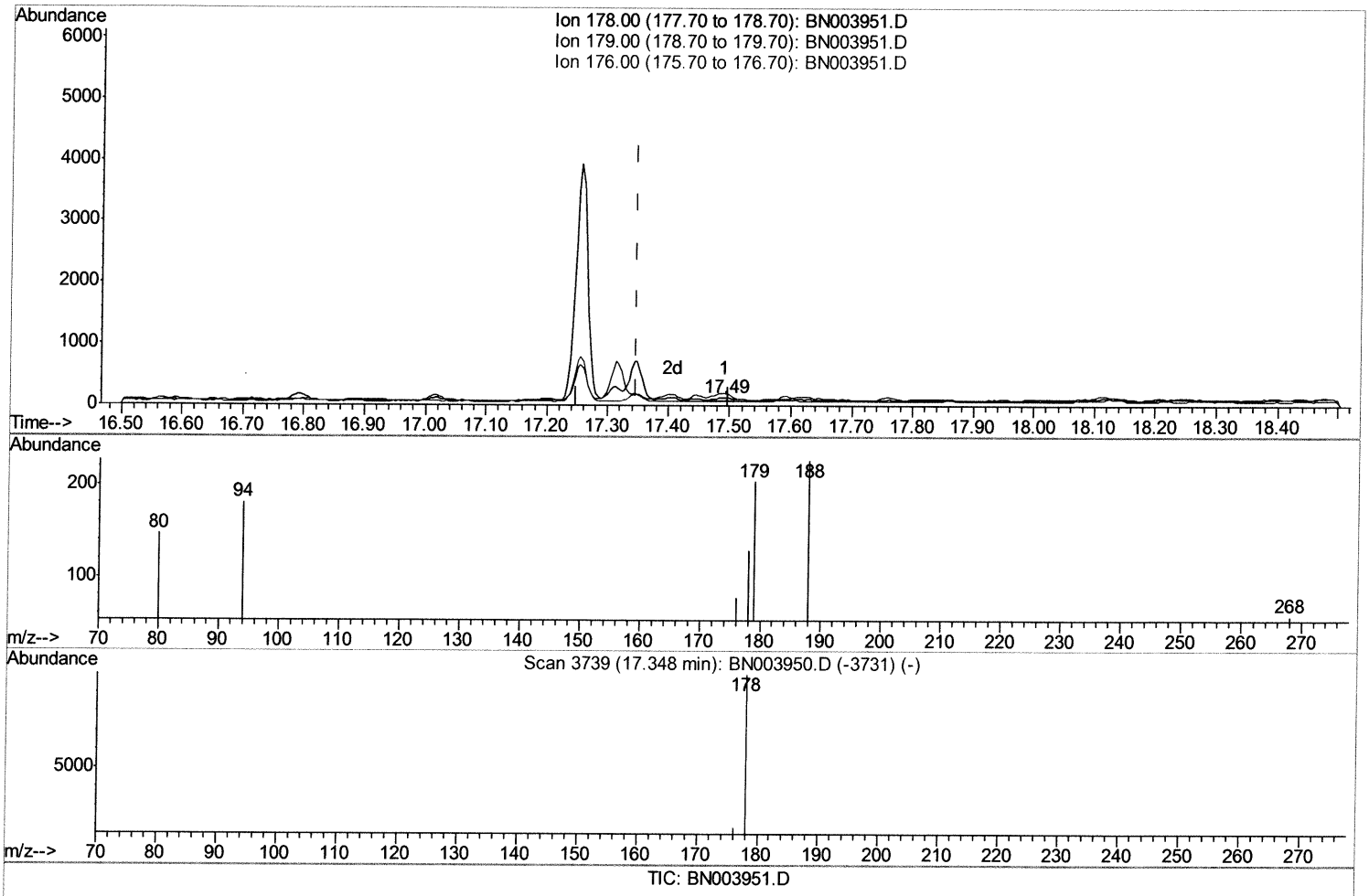
Quantitation Report (Qedit)

Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 15 22:04:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM



TIC: BN003951.D

(13) Anthracene

17.491min (+0.143) 0.00ng/ul

response 92

Ion	Exp%	Act%
178.00	100	100
179.00	15.40	158.14#
176.00	18.50	60.47#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

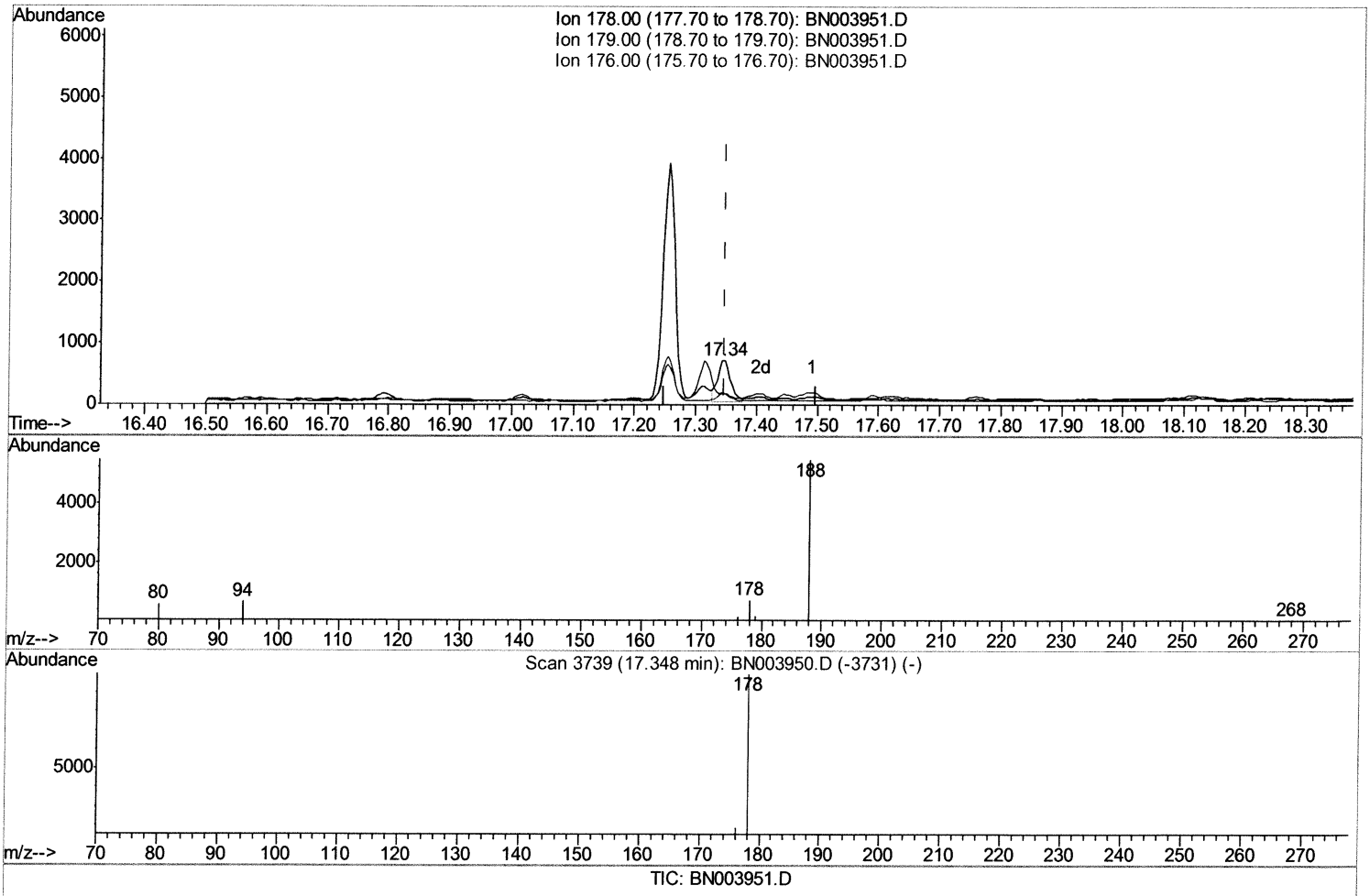
Quantitation Report (Qedit)

Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 15 22:04:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM



TIC: BN003951.D

(13) Anthracene

17.344min (-0.004) 0.02ng/ul m SJ 12/17/18

response 982

Ion	Exp%	Act%
178.00	100	100
179.00	15.40	27.68#
176.00	18.50	24.48#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

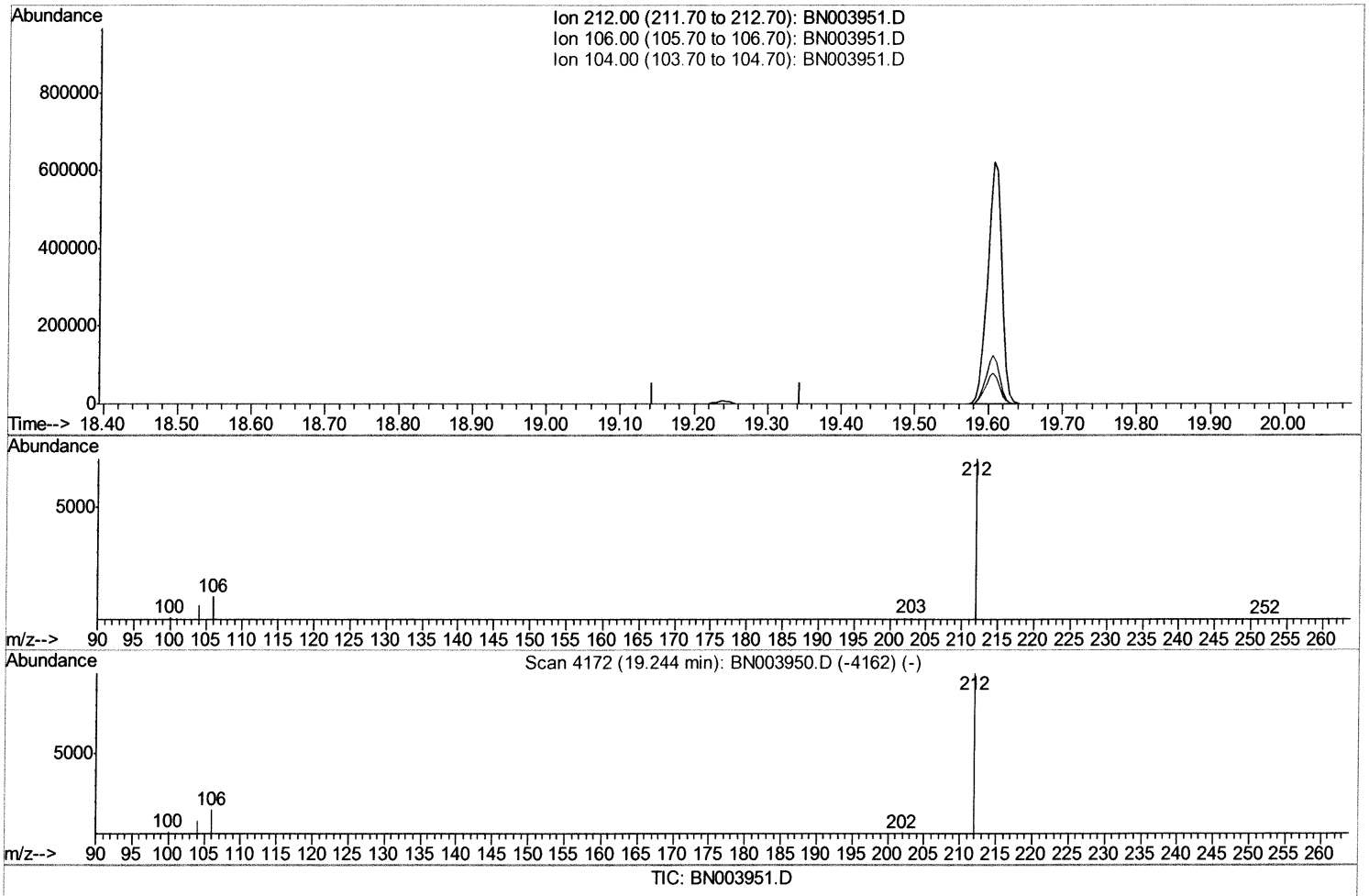
Quantitation Report (Qedit)

Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 15 22:04:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM



TIC: BN003951.D

(14) Fluoranthene-d10 (SURR)

19.244min (-19.244) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

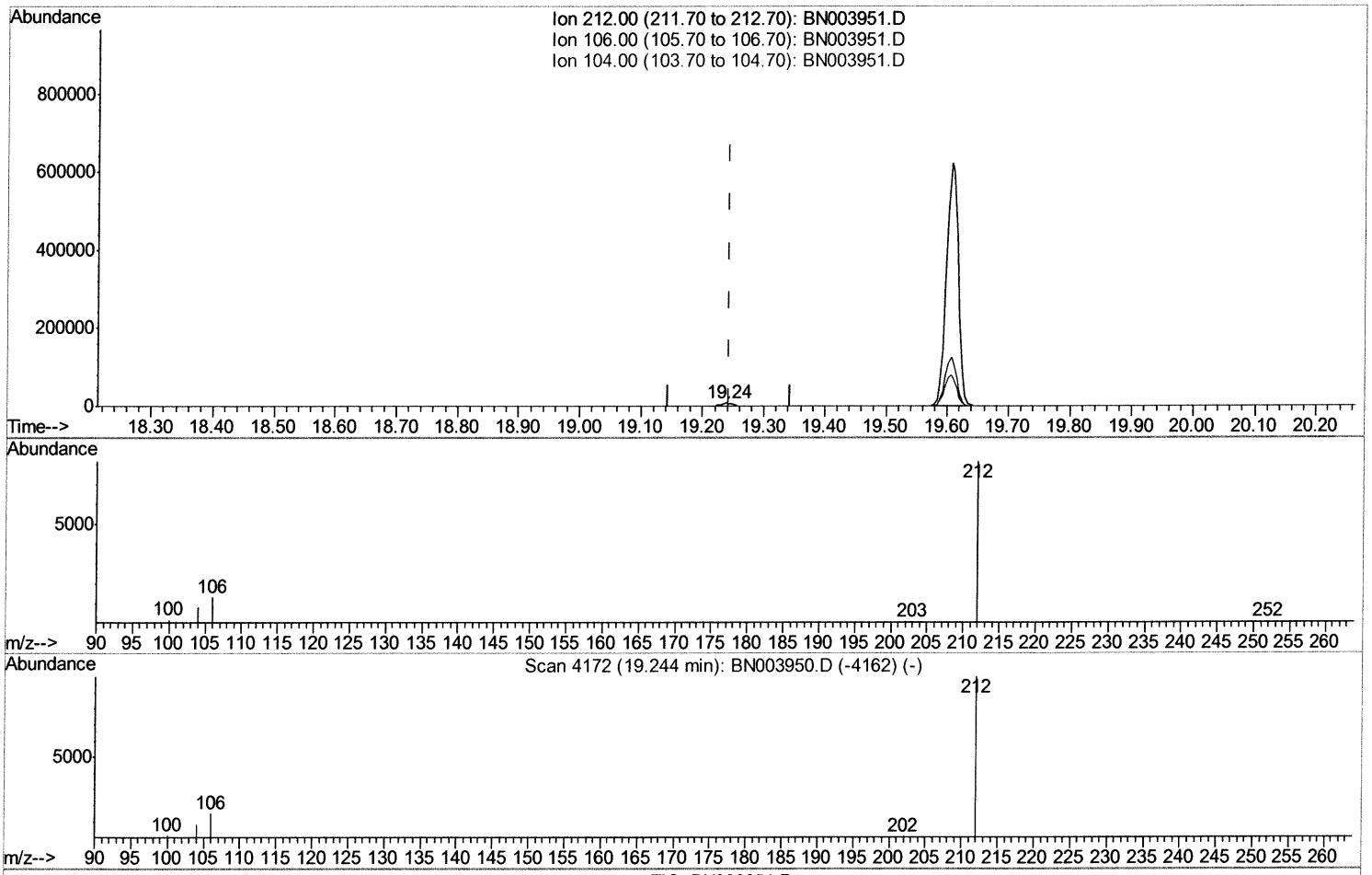
Quantitation Report (Qedit)

Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 15 22:04:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM



TIC: BN003951.D

(14) Fluoranthene-d10 (SURR)

19.239min (-0.005) 0.24ng/ul m> SJ 12/17/18

response 10603

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

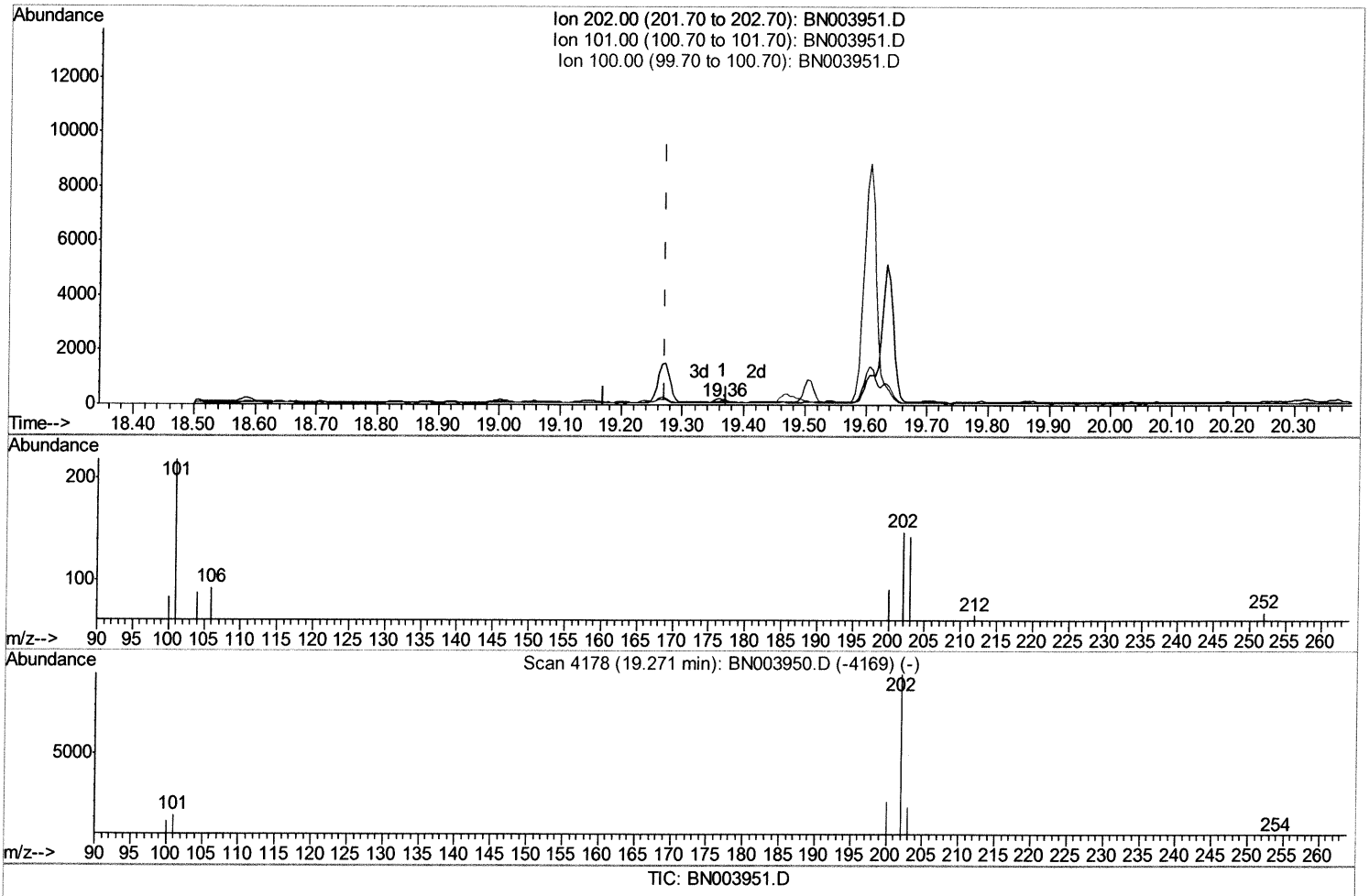
Quantitation Report (Qedit)

Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 15 22:04:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM



TIC: BN003951.D

(15) Fluoranthene (C)

19.364min (+0.093) 0.00ng/ul

response 72

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	147.30#
100.00	8.10	56.76#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

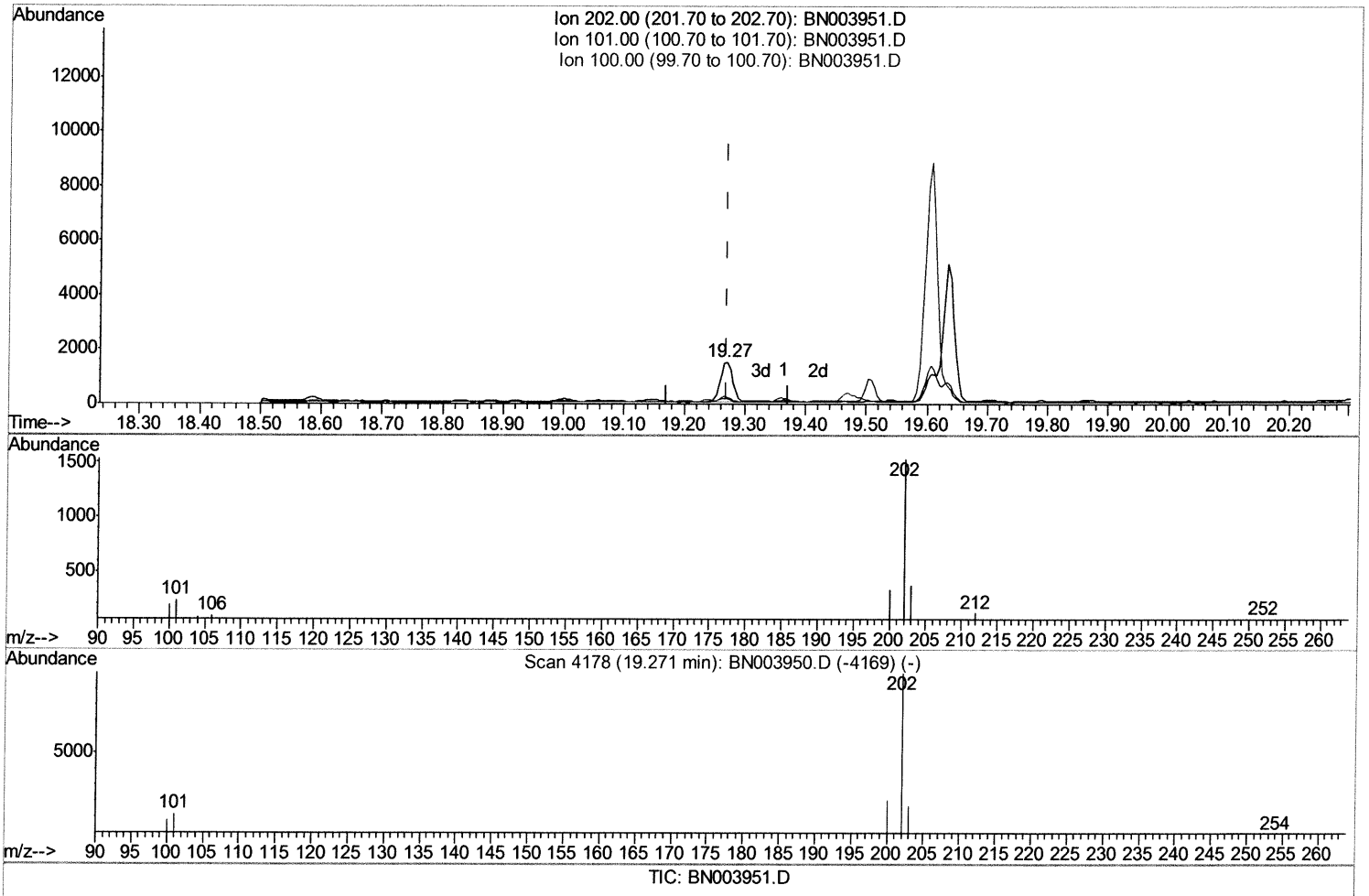
Quantitation Report (Qedit)

Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 15 22:04:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM



TIC: BN003951.D

(15) Fluoranthene (C)

19.271min (-0.000) 0.03ng/ul m) SJ 12/17/18

response 2013

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	15.51
100.00	8.10	12.39
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

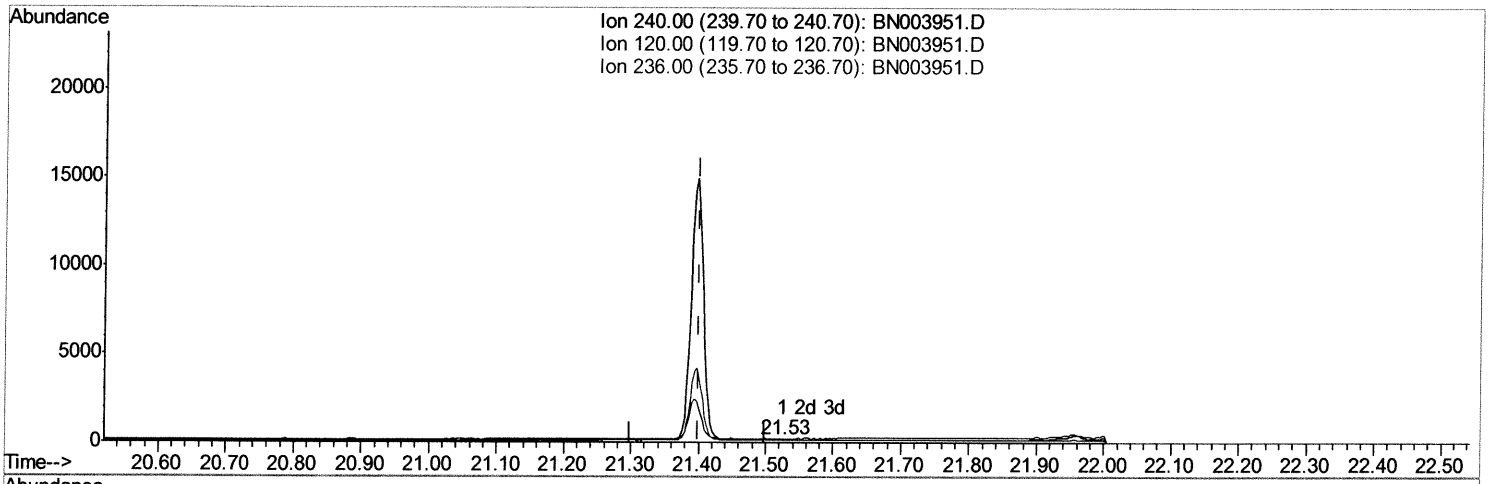
Quantitation Report (Qedit)

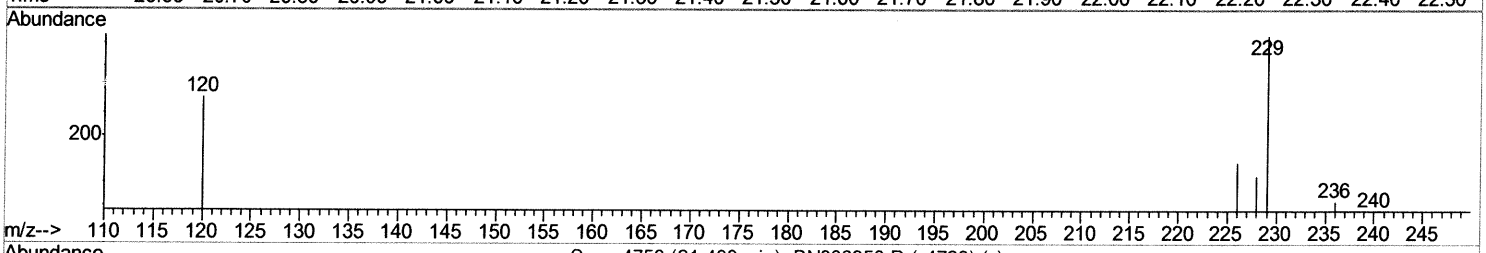
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

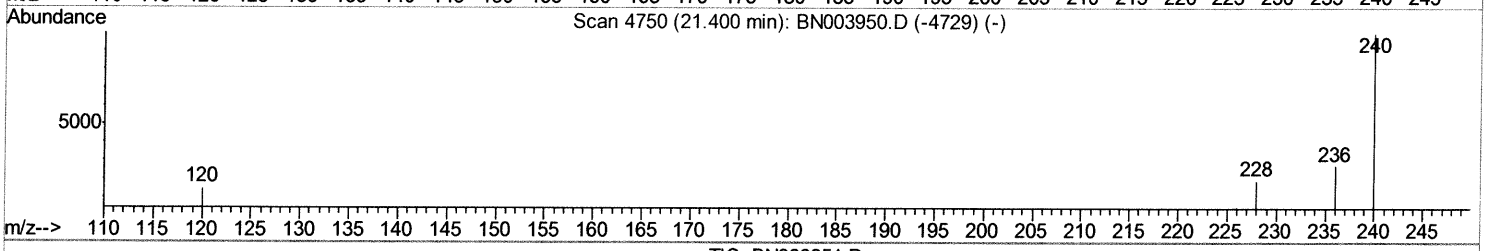
Quant Time: Dec 15 22:04:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

(16) Chrysene-d12 (I)

21.525min (+0.125) 0.40ng/ul

response 9

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	171.32#
236.00	27.60	105.88#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

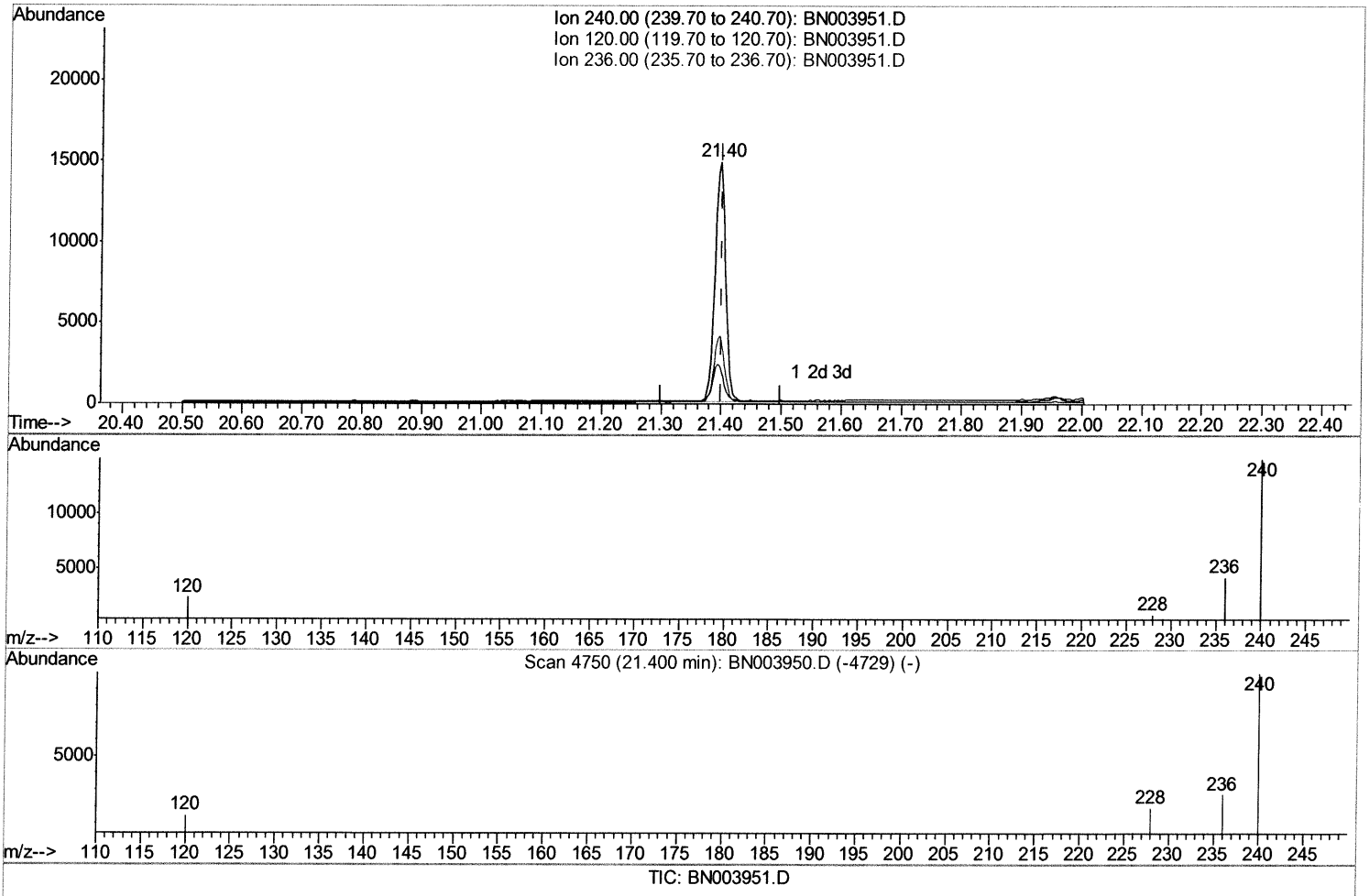
Quantitation Report (Qedit)

Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 15 22:04:18 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM



TIC: BN003951.D

(16) Chrysene-d12 (I)

21.397min (-0.003) 0.40ng/ul m > SJ 12/17/18

response 18090

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	15.69
236.00	27.60	28.13
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

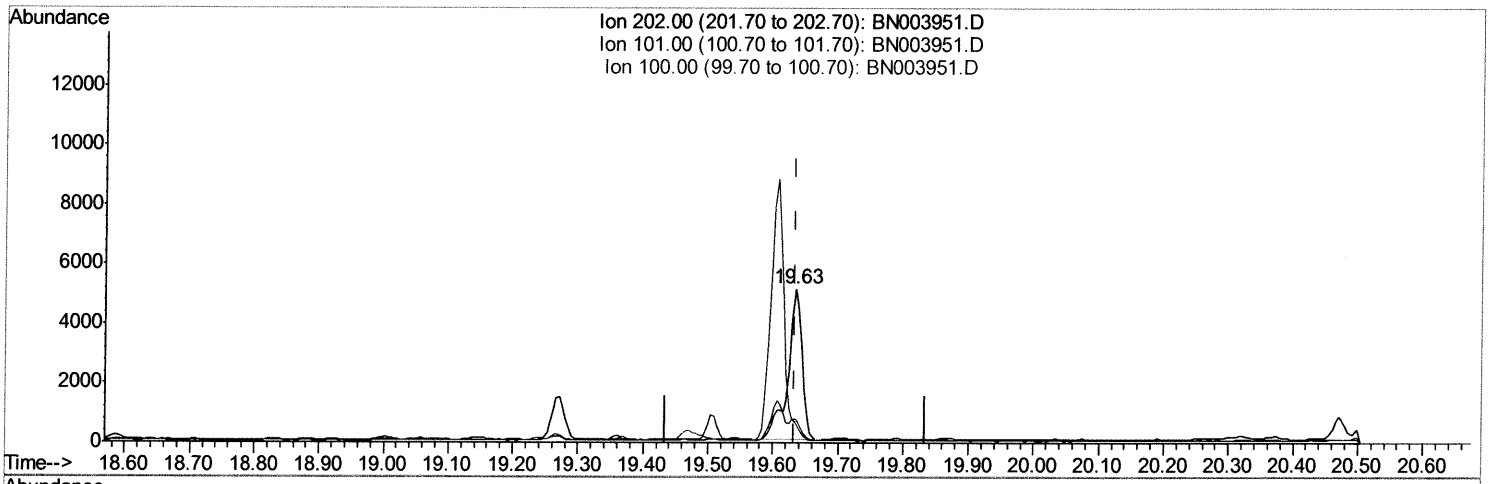
Quantitation Report (Qedit)

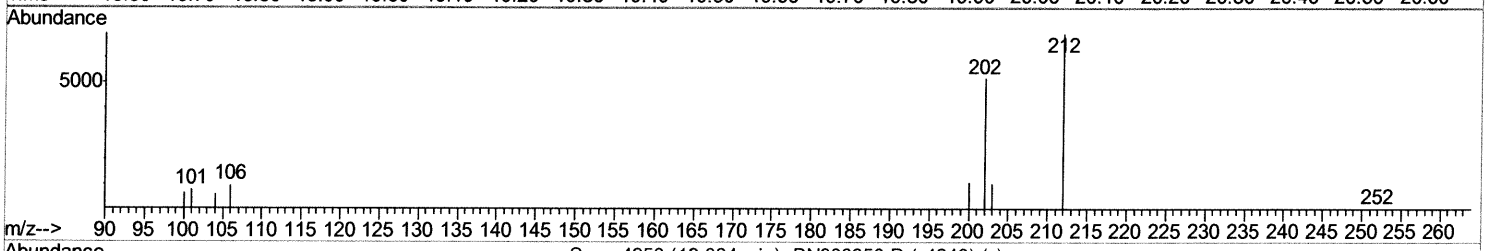
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

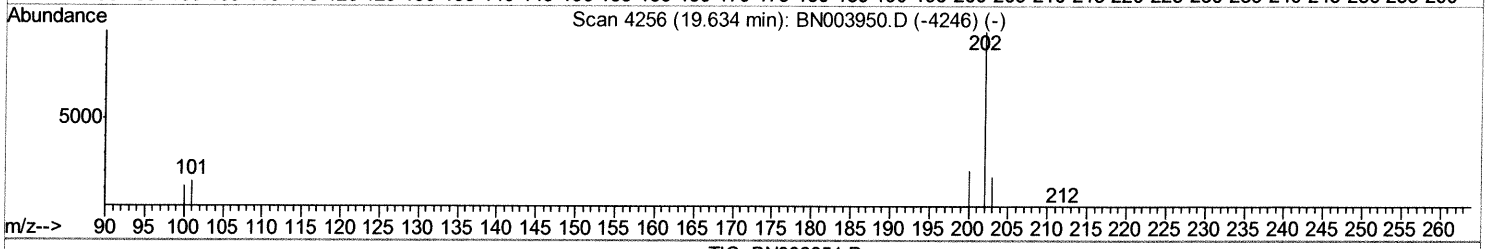
Quant Time: Dec 15 22:05:20 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

(17) Pyrene

19.634min (-0.000) 0.12ng/ul

response 7663

Ion	Exp%	Act%
202.00	100	100
101.00	12.90	15.39
100.00	10.60	12.92#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

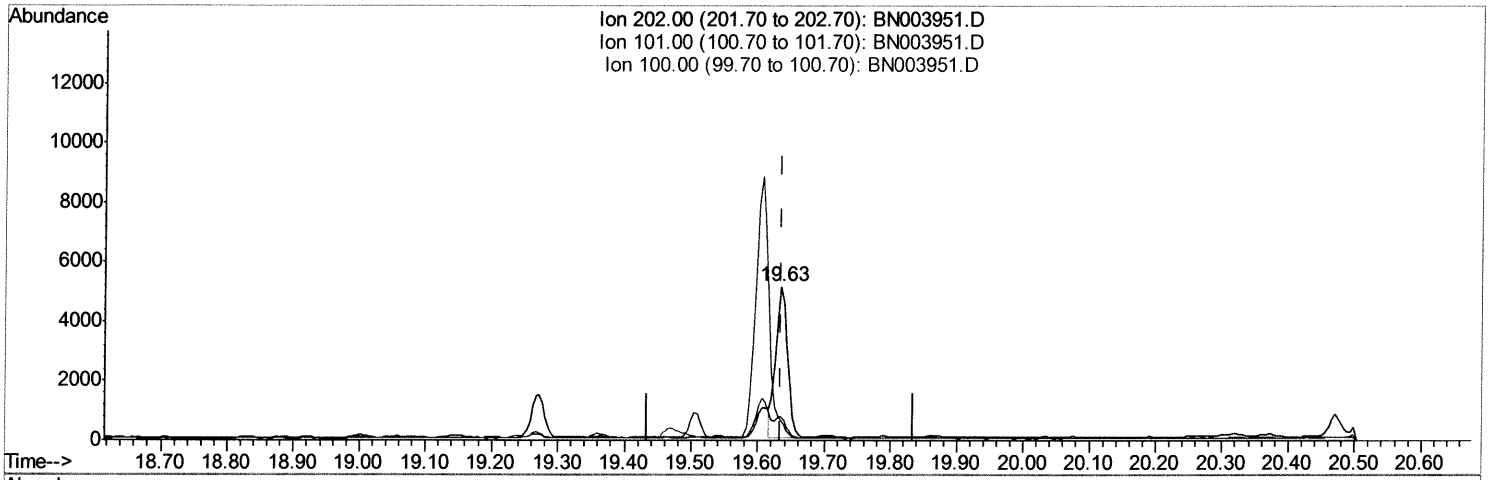
Quantitation Report (Qedit)

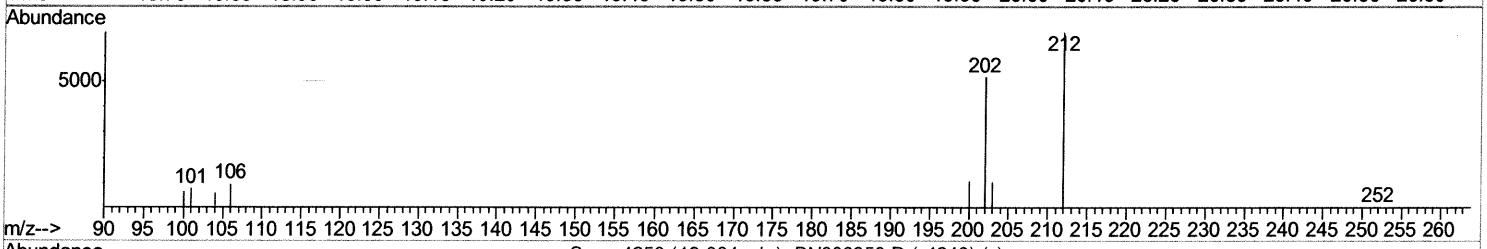
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

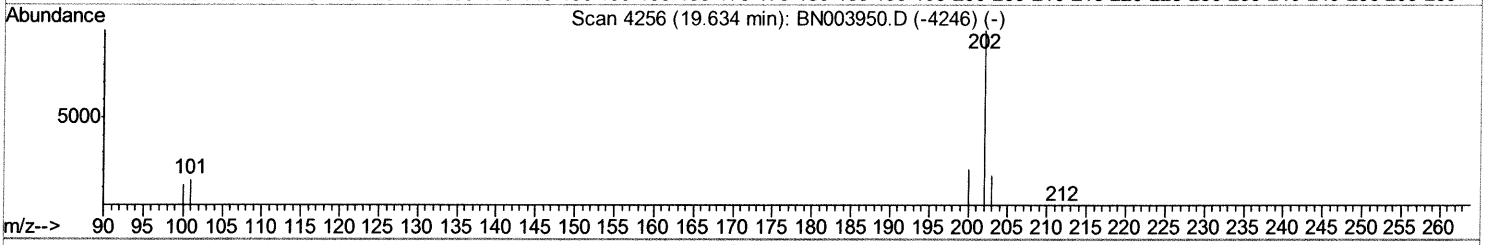
Quant Time: Dec 15 22:05:20 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

(17) Pyrene

19.634min (-0.000) 0.10ng/ul m > SJ 12/17/18

response 6435

Ion	Exp%	Act%
202.00	100	100
101.00	12.90	15.39
100.00	10.60	12.92#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

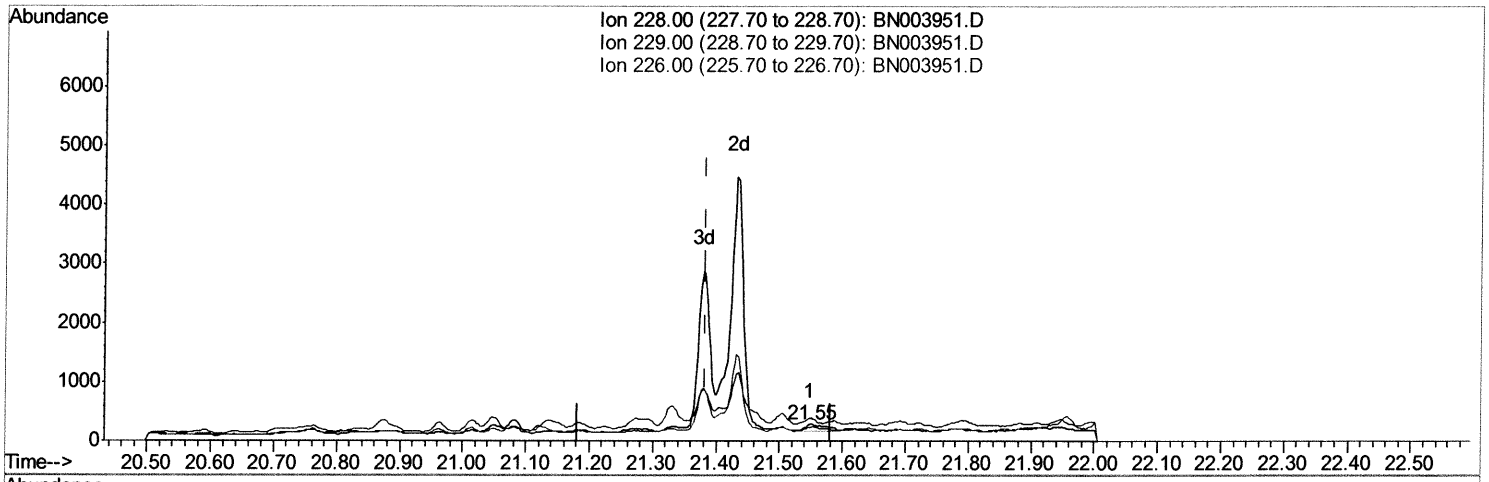
Quantitation Report (Qedit)

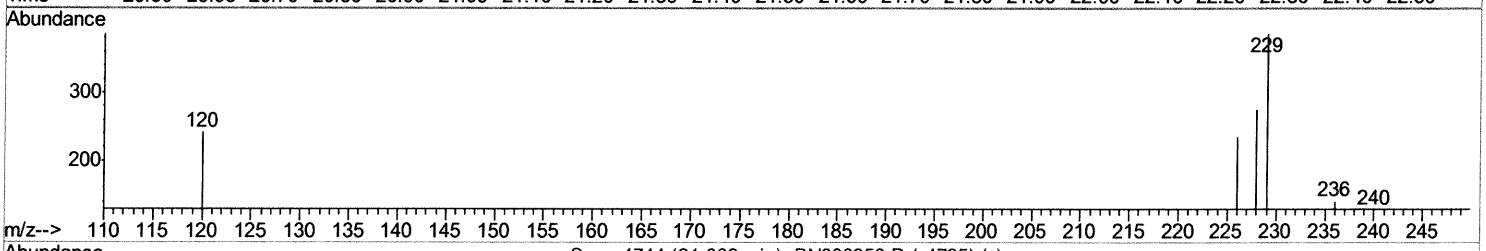
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

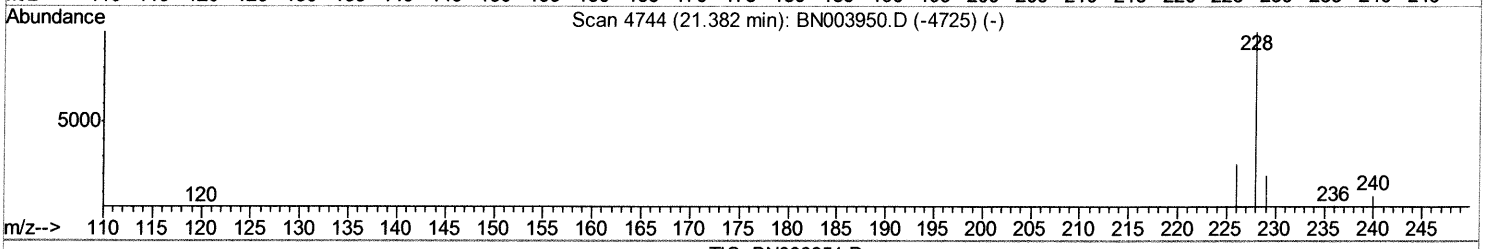
Quant Time: Dec 15 22:05:20 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

(18) Benzo(a)anthracene

21.549min (+0.166) 0.00ng/ul

response 274

Ion	Exp%	Act%
228.00	100	100
229.00	19.50	139.86#
226.00	26.40	84.78#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

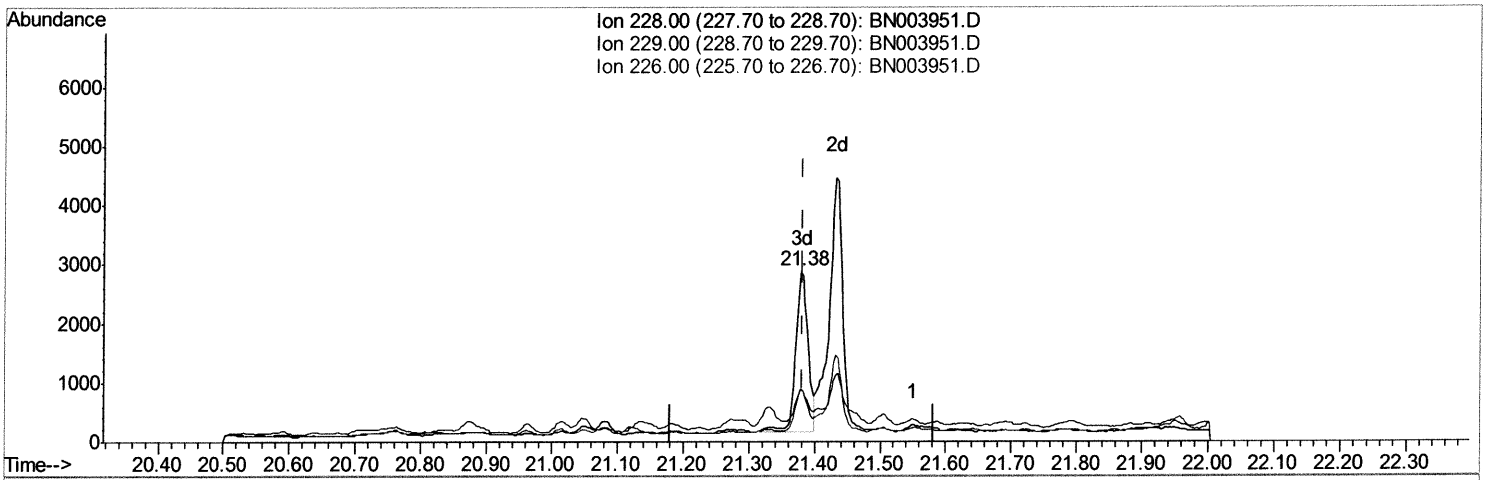
Quantitation Report (Qedit)

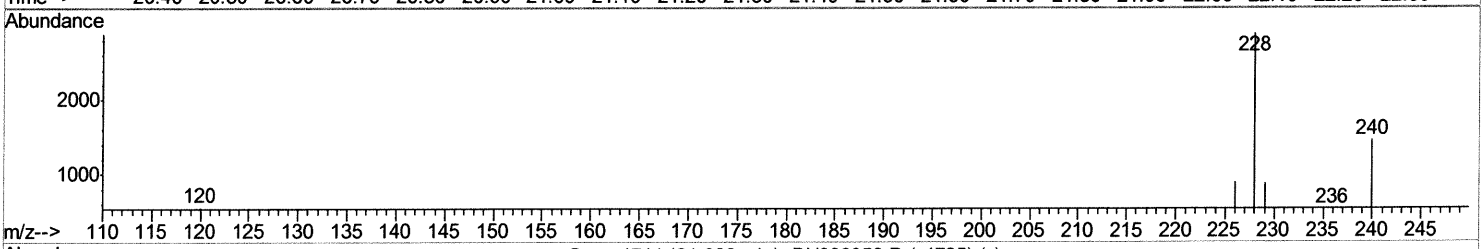
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

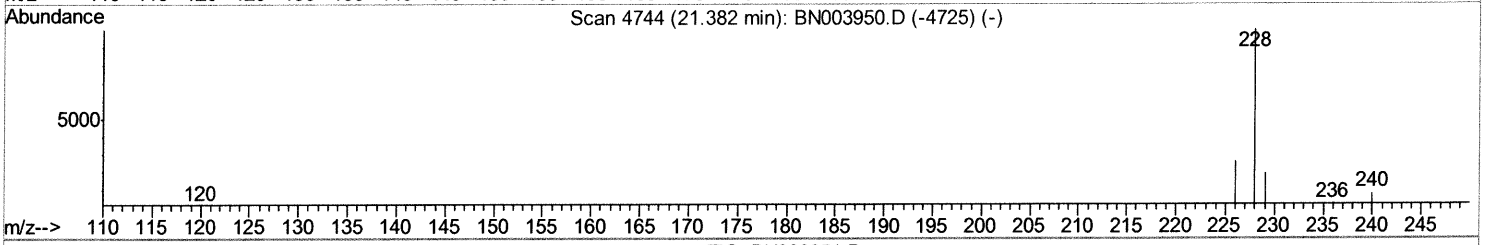
Quant Time: Dec 15 22:05:20 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

(18) Benzo(a)anthracene

21.379min (-0.003) 0.06ng/ul m > SJ 12/17/18

response 3632

Ion	Exp%	Act%
228.00	100	100
229.00	19.50	30.29#
226.00	26.40	31.05
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

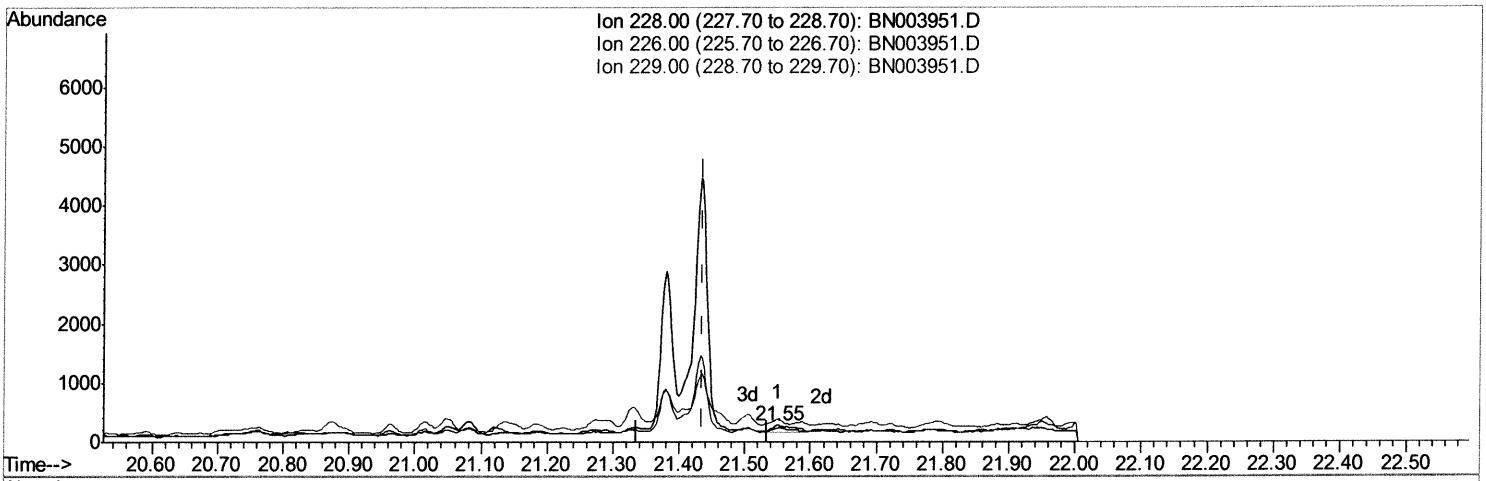
Quantitation Report (Qedit)

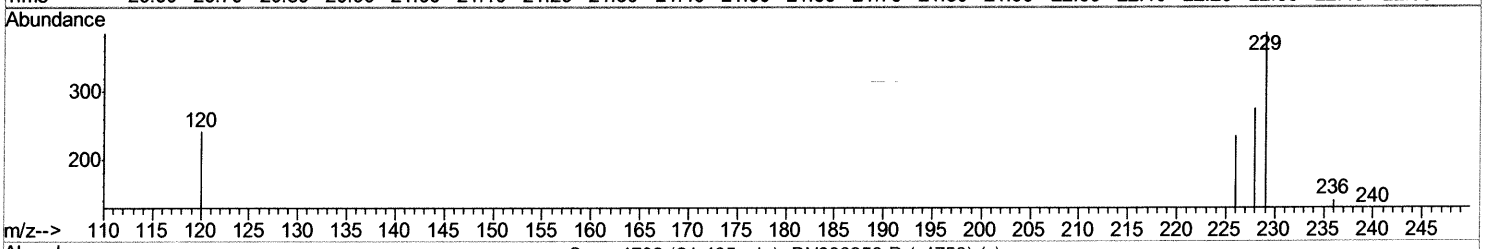
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

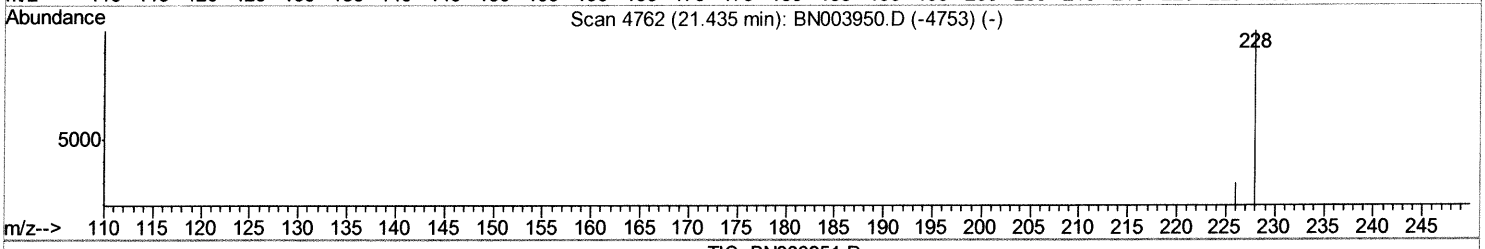
Quant Time: Dec 15 22:05:20 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

(19) Chrysene

21.549min (+0.114) 0.00ng/ul

response 274

Ion	Exp%	Act%
228.00	100	100
226.00	30.00	84.78#
229.00	19.60	139.86#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

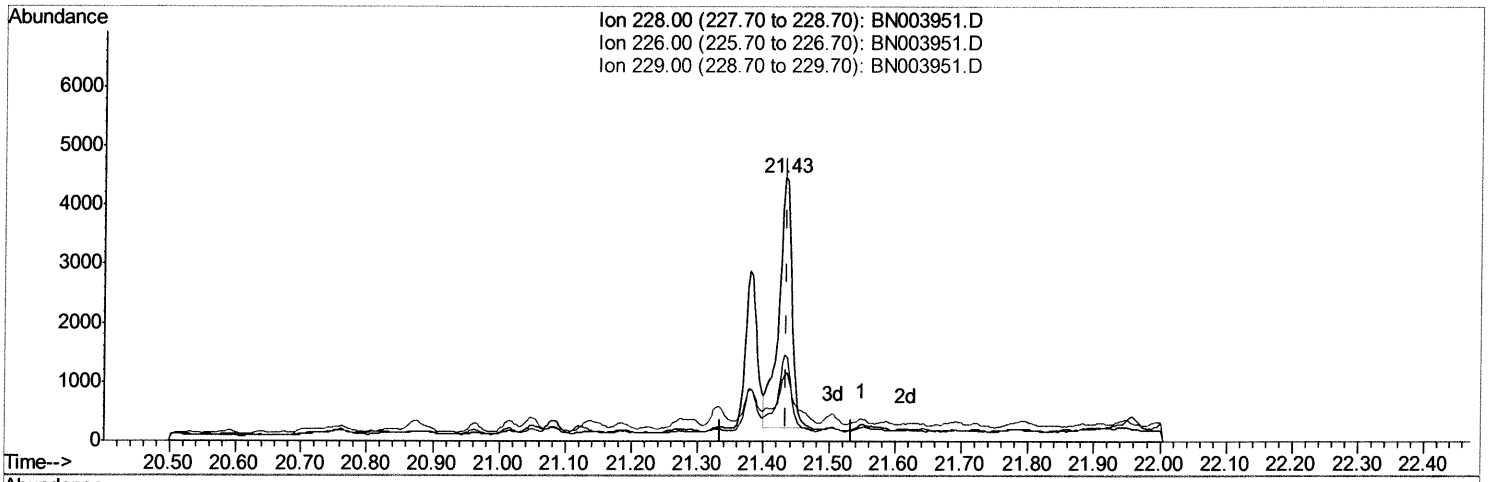
Quantitation Report (Qedit)

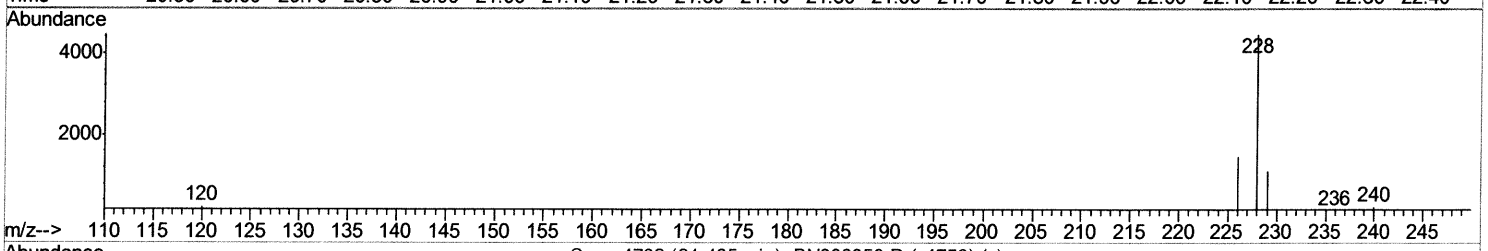
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

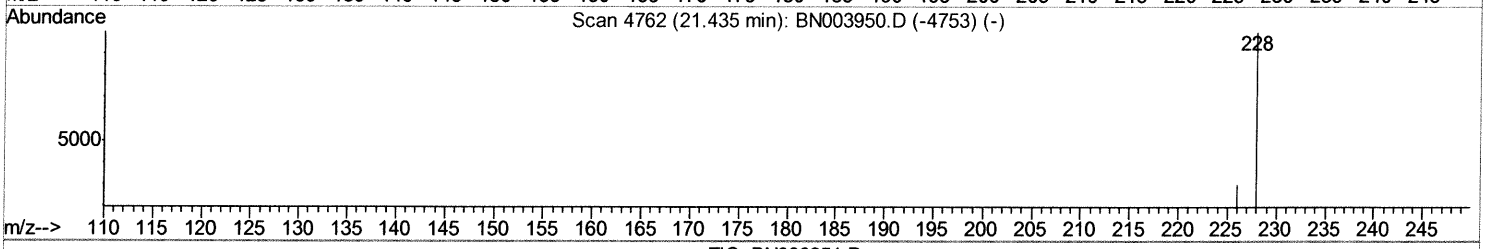
Quant Time: Dec 15 22:05:20 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

(19) Chrysene

21.432min (-0.003) 0.09ng/ul m) SJ 12/17/18

response 5939

Ion	Exp%	Act%
228.00	100	100
226.00	30.00	32.58
229.00	19.60	25.13#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

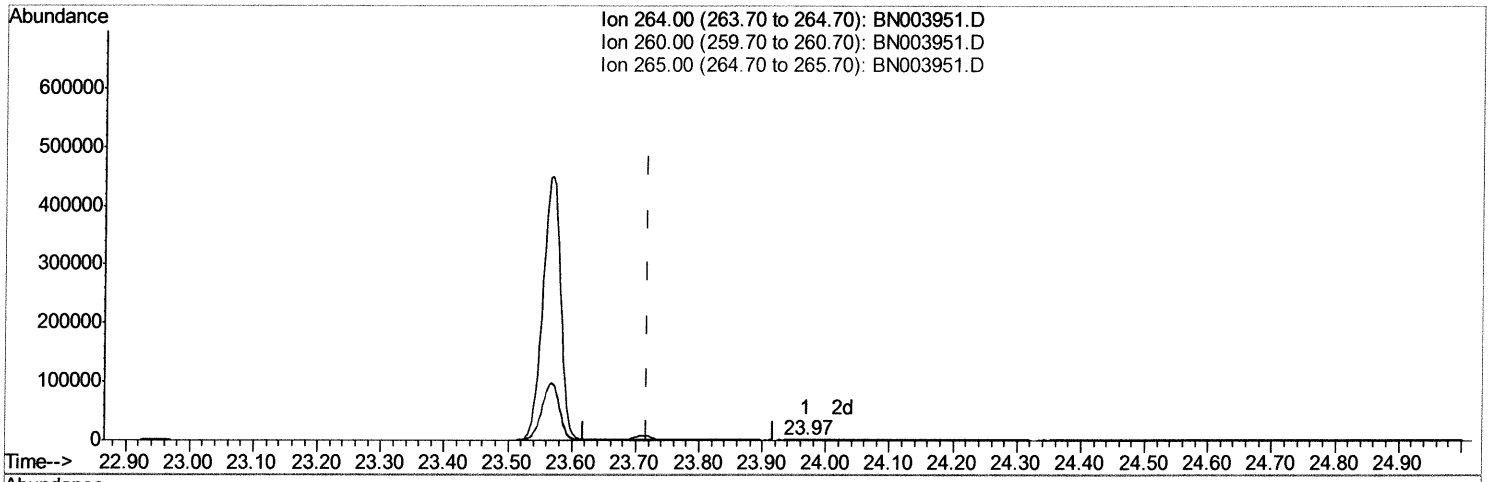
Quantitation Report (Qedit)

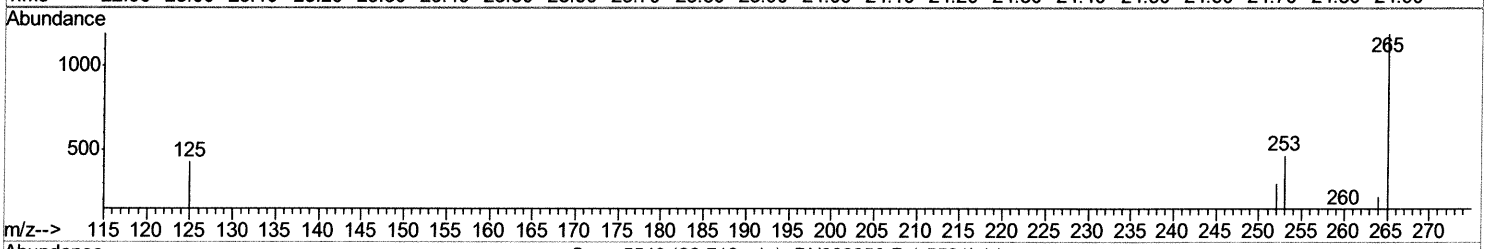
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

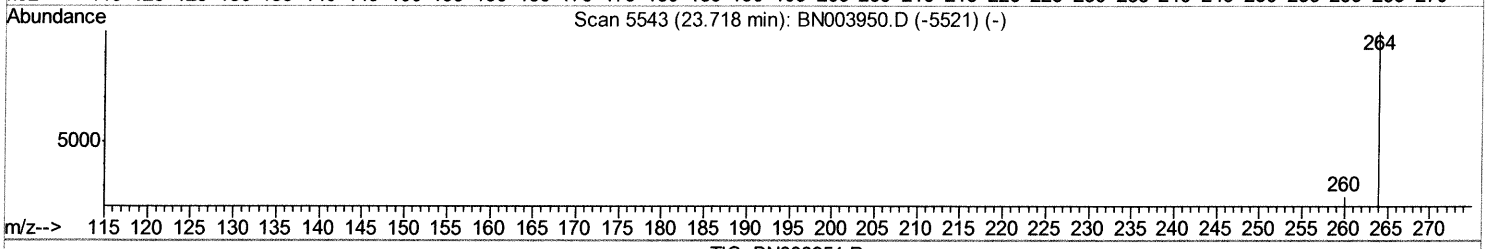
Quant Time: Dec 15 22:05:20 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

(20) Perylene-d12 (I)

23.969min (+0.251) 0.40ng/ul

response 59

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	66.67#
265.00	33.50	537.84#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

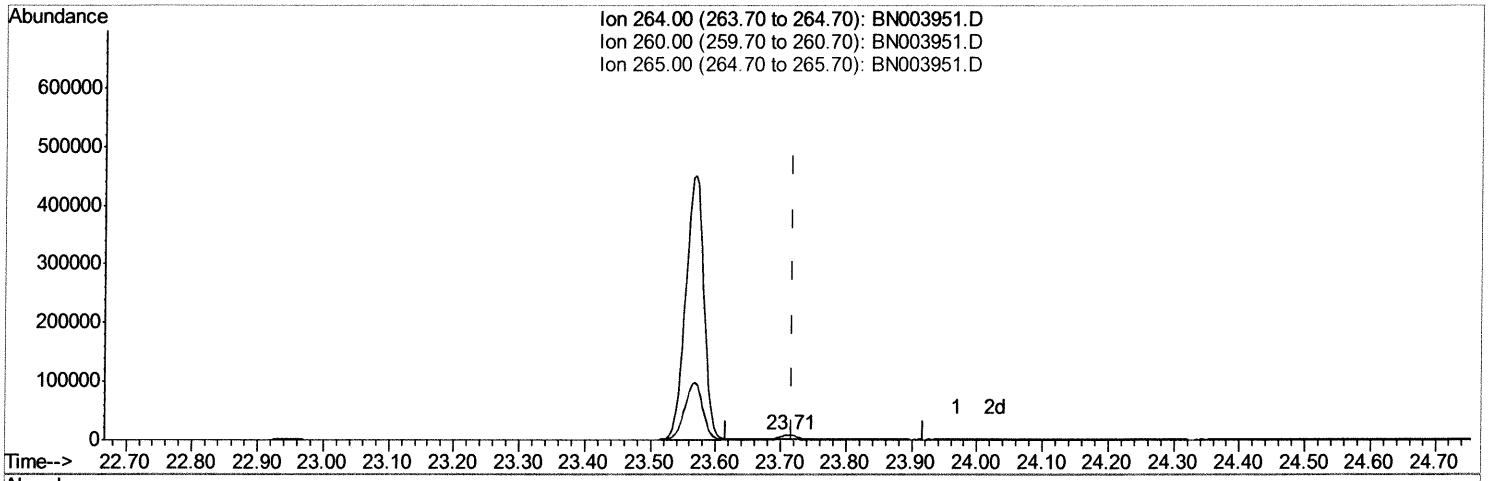
Quantitation Report (Qedit)

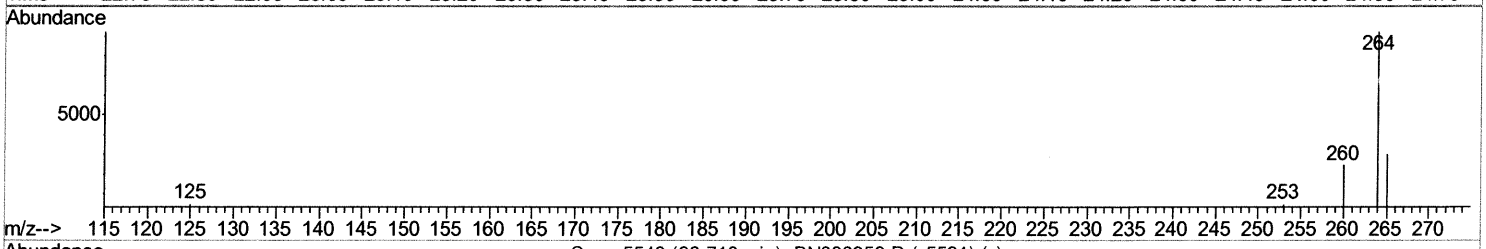
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

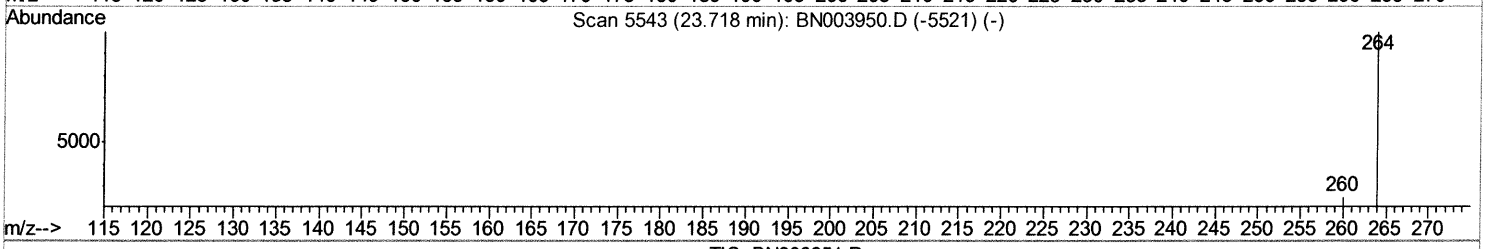
Quant Time: Dec 15 22:05:20 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

(20) Perylene-d12 (I)

23.712min (-0.006) 0.40ng/ul m > SD 12/12/18

response 16672

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.58
265.00	33.50	32.43
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

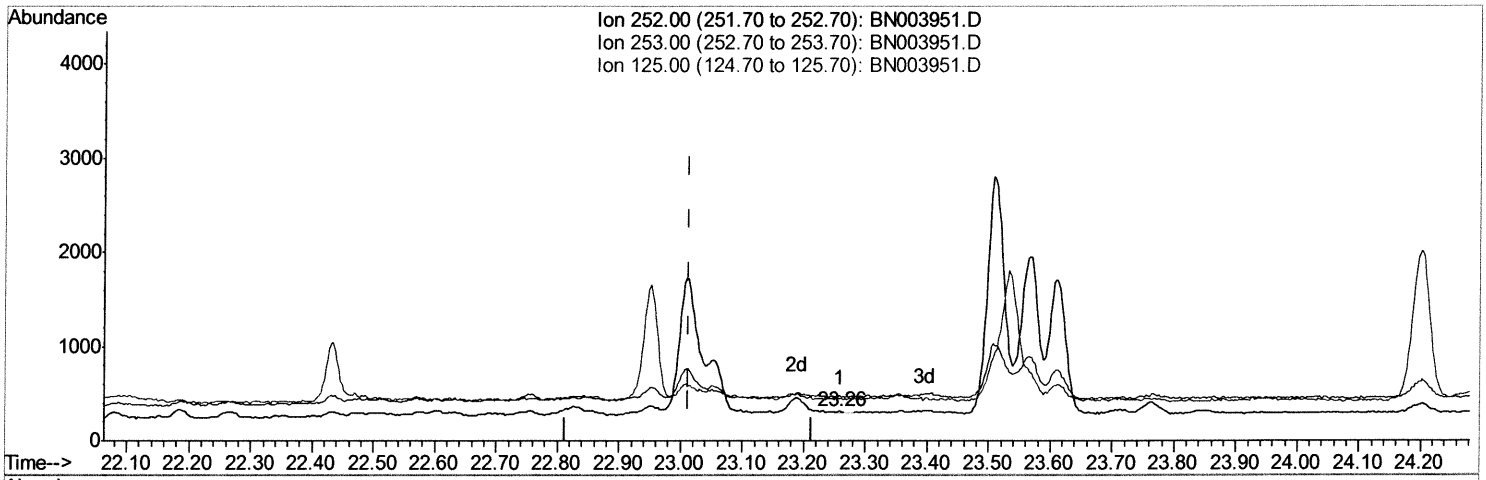
Quantitation Report (Qedit)

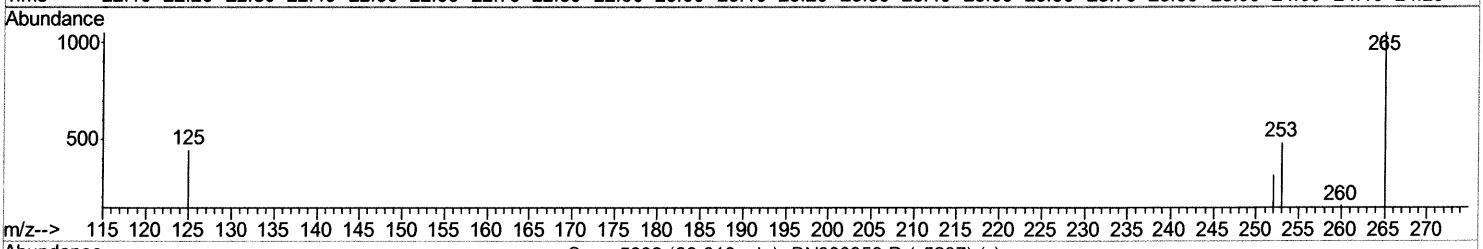
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

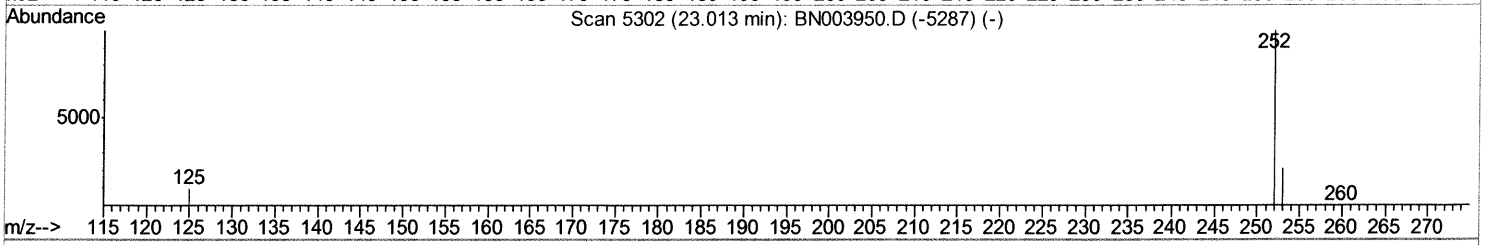
Quant Time: Dec 15 22:06:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

(21) Benzo(b)fluoranthene

23.258min (+0.245) 0.00ng/ul

response 22

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	153.04#
125.00	11.20	141.21#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

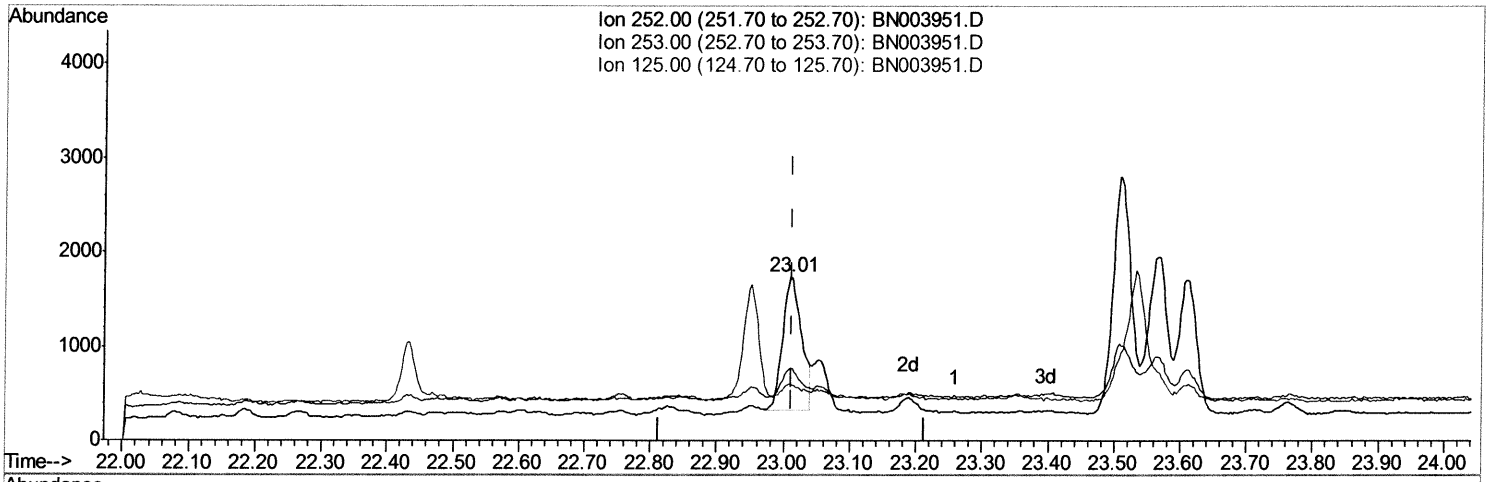
Quantitation Report (Qedit)

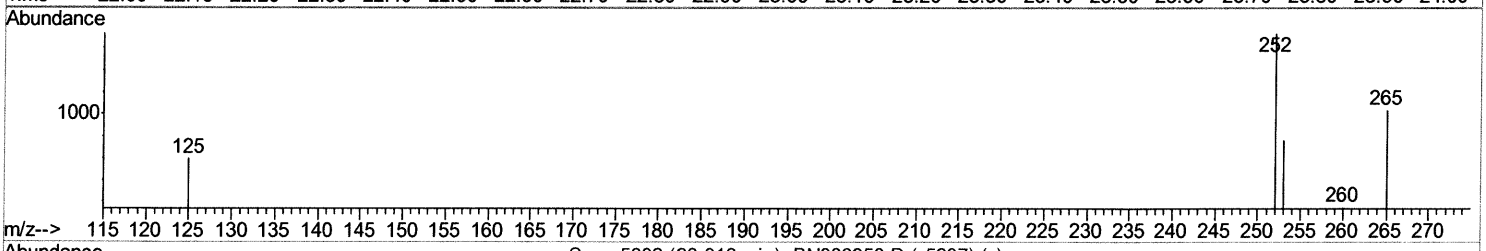
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

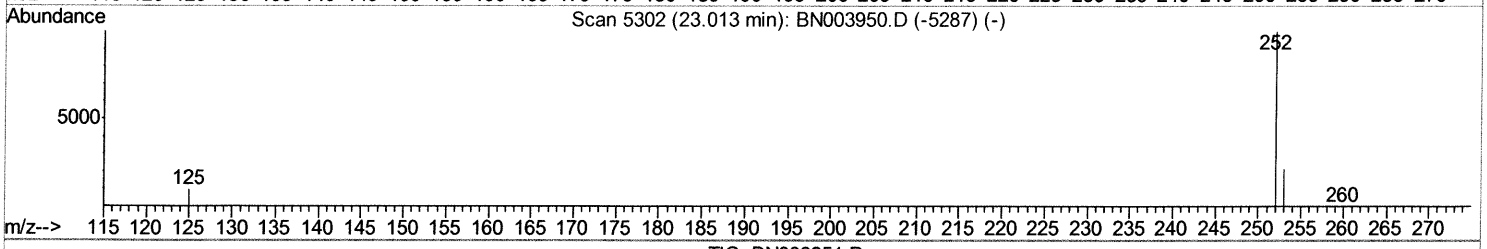
Quant Time: Dec 15 22:06:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

(21) Benzo(b)fluoranthene

23.010min (-0.003) 0.04ng/ul m SJ 12/17/18

response 2817

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	44.01
125.00	11.20	34.22#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

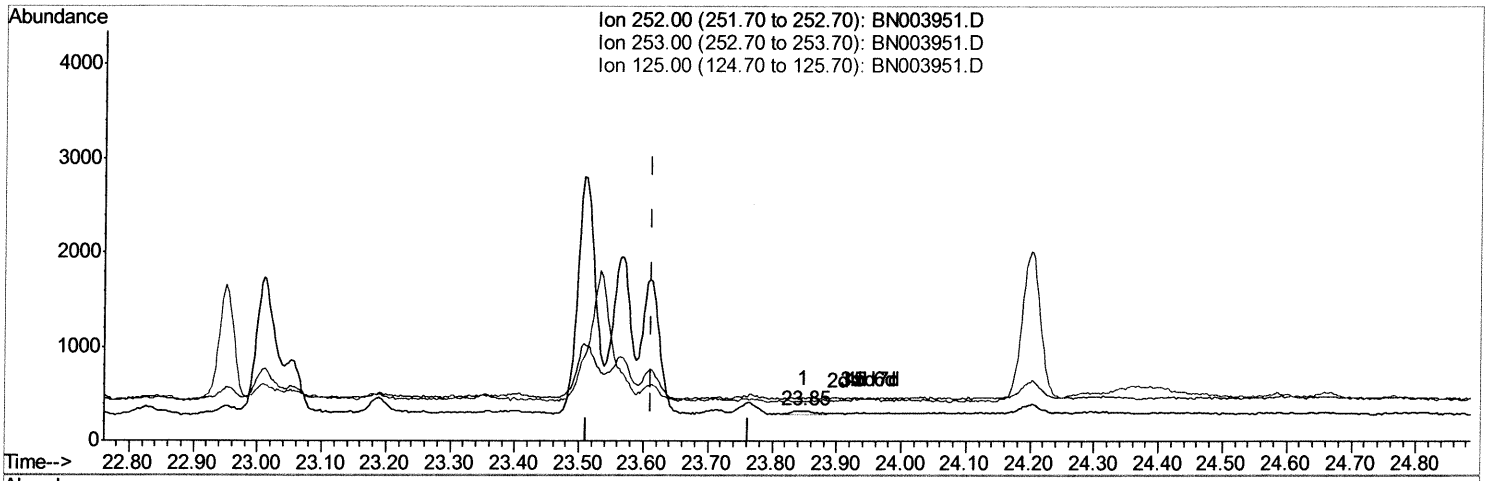
Quantitation Report (Qedit)

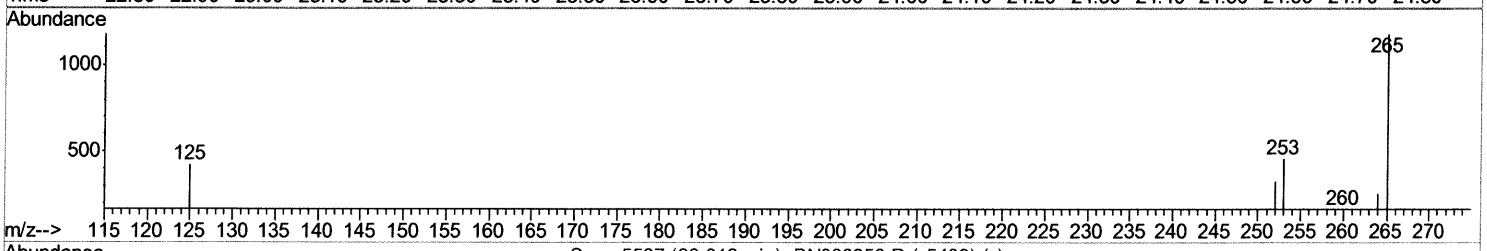
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

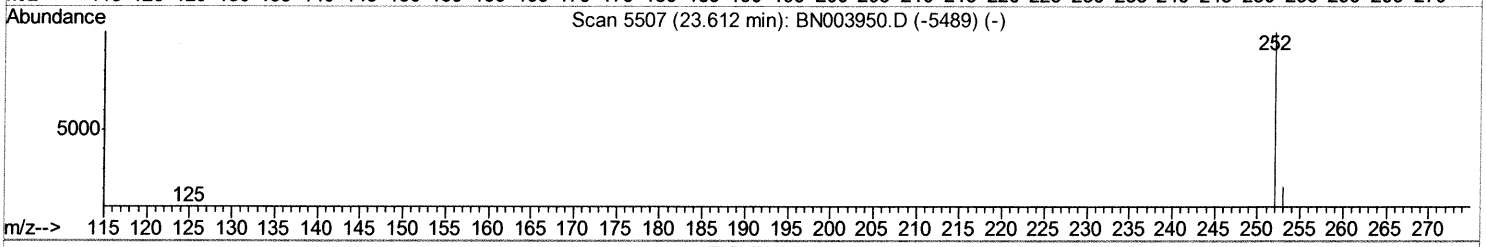
Quant Time: Dec 15 22:06:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

(23) Benzo(a)pyrene (C)

23.849min (+0.237) 0.00ng/ul

response 85

Ion	Exp%	Act%
252.00	100	100
253.00	23.70	141.18#
125.00	12.80	130.03#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

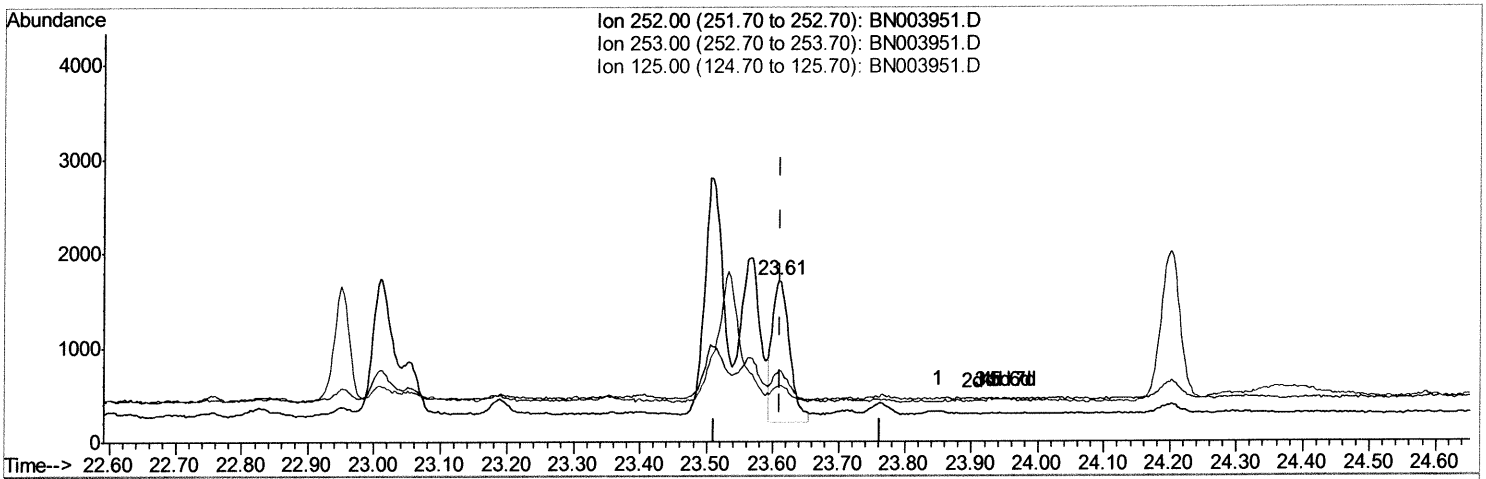
Quantitation Report (Qedit)

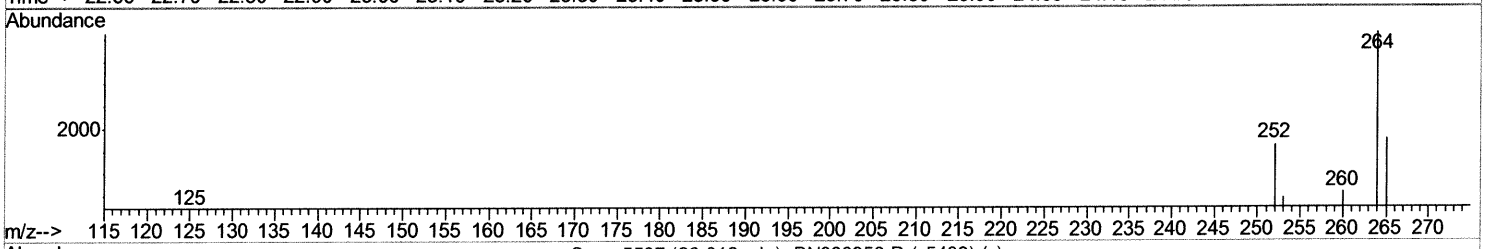
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

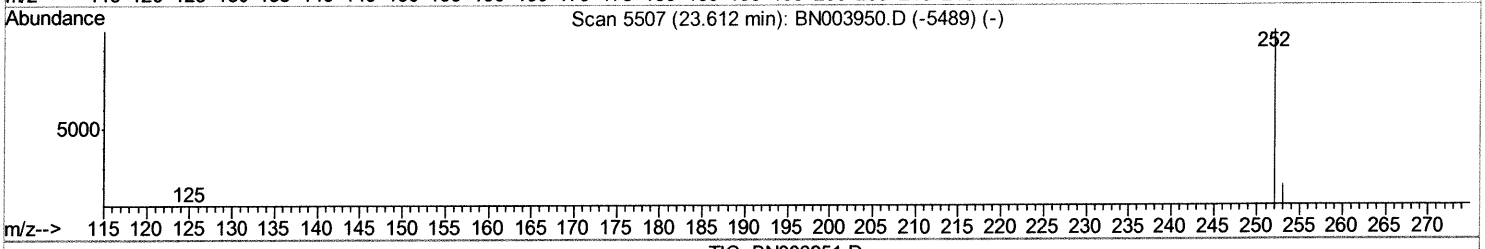
Quant Time: Dec 15 22:06:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

(23) Benzo(a)pyrene (C)

23.609min (-0.003) 0.05ng/ul m > SJ 12/17/18

response 2805

Ion	Exp%	Act%
252.00	100	100
253.00	23.70	44.06#
125.00	12.80	34.46#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

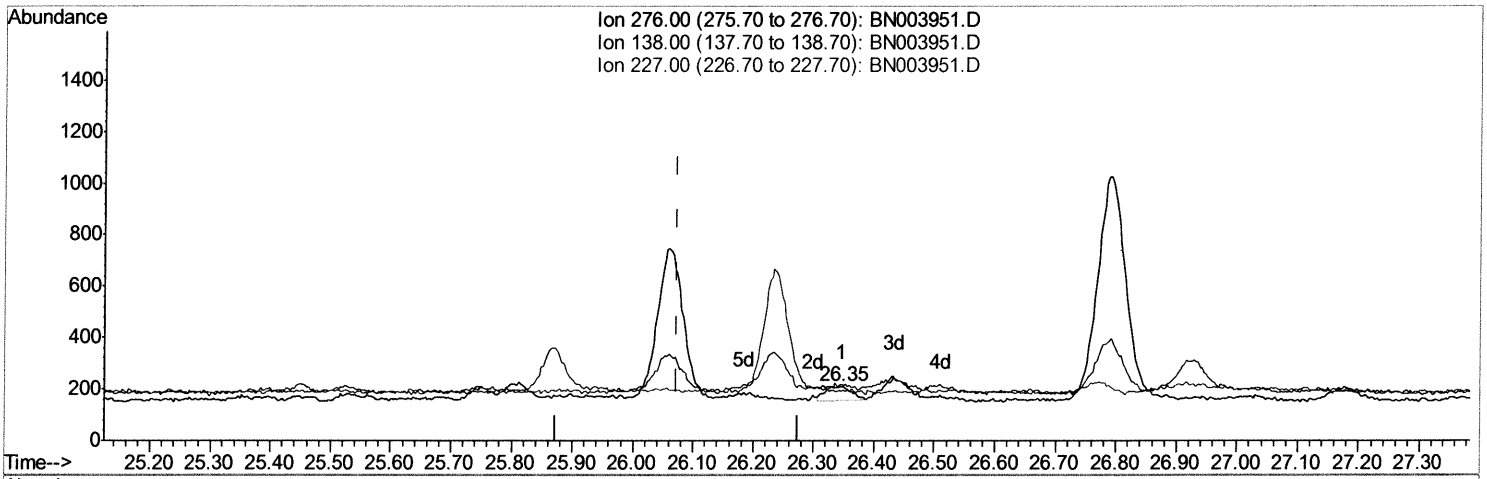
Quantitation Report (Qedit)

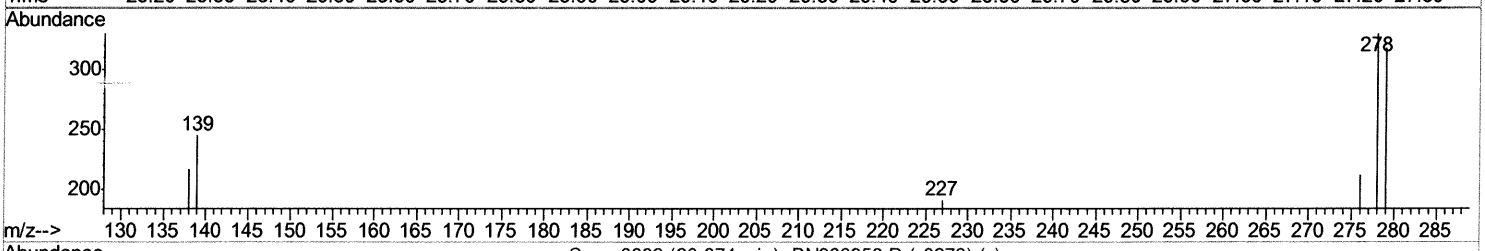
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

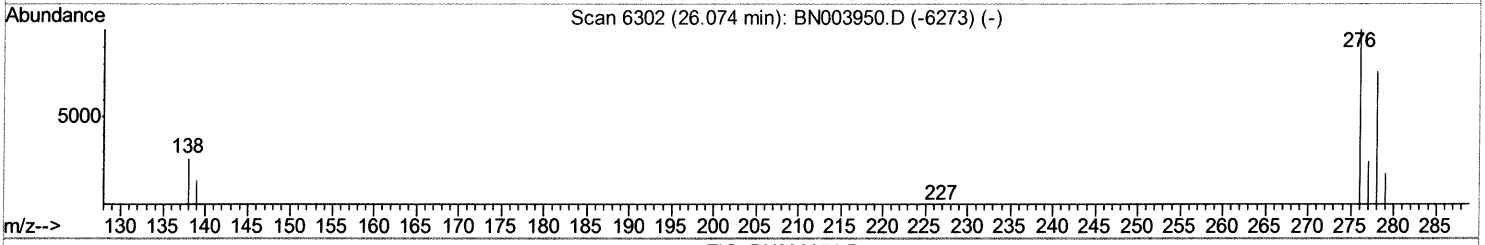
Quant Time: Dec 15 22:06:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

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

26.345min (+0.272) 0.00ng/ul

response 160

Ion	Exp%	Act%
276.00	100	100
138.00	25.40	16.88#
227.00	0.20	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

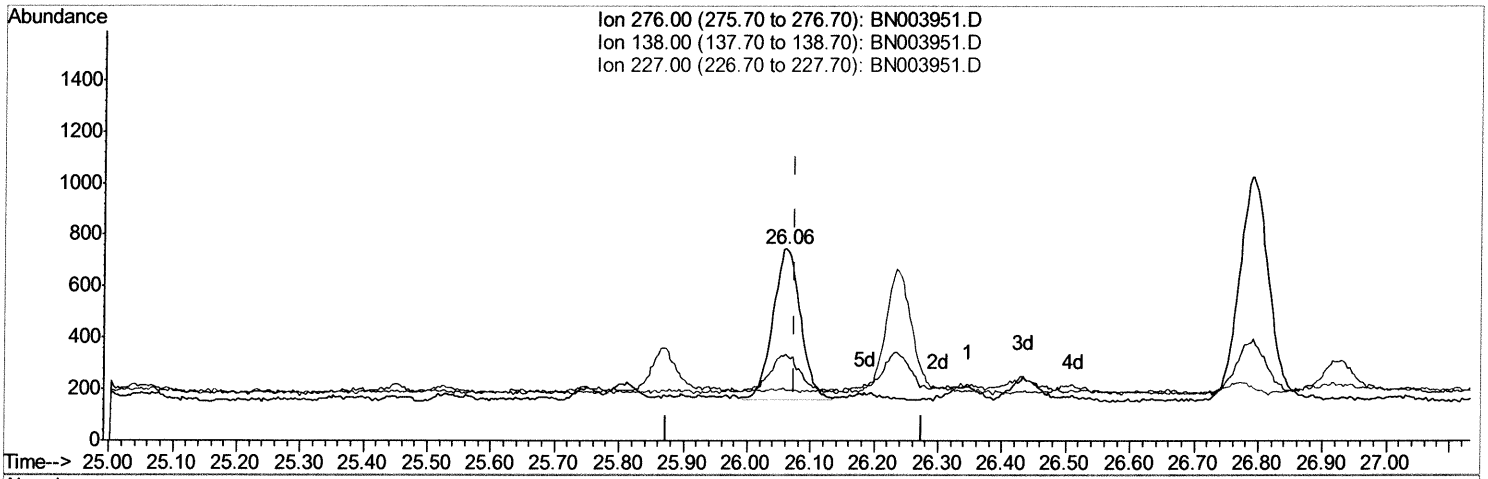
Quantitation Report (Qedit)

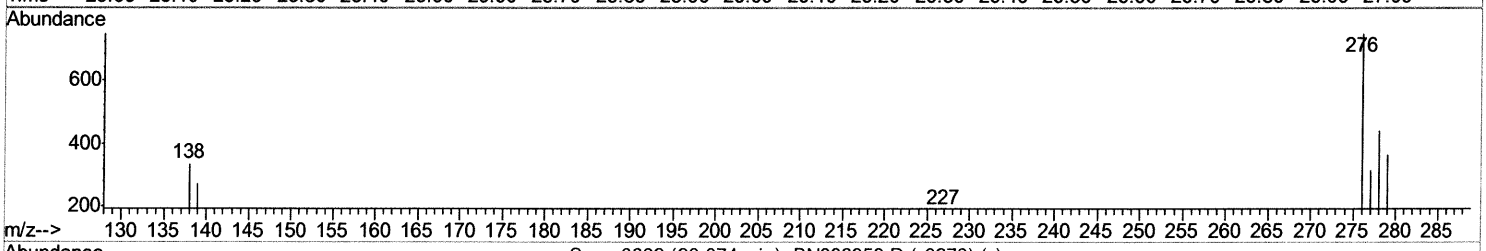
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

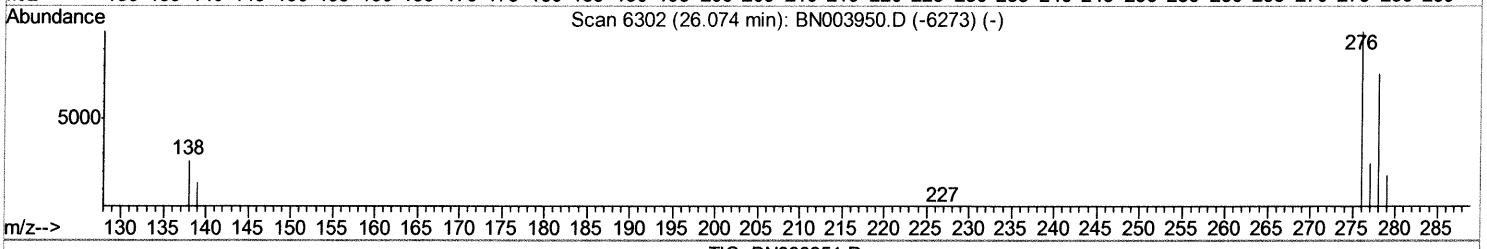
Quant Time: Dec 15 22:06:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

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

26.060min (-0.014) 0.03ng/ul m) SJ 12/17/18

response 1785

Ion	Exp%	Act%
276.00	100	100
138.00	25.40	1.51#
227.00	0.20	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

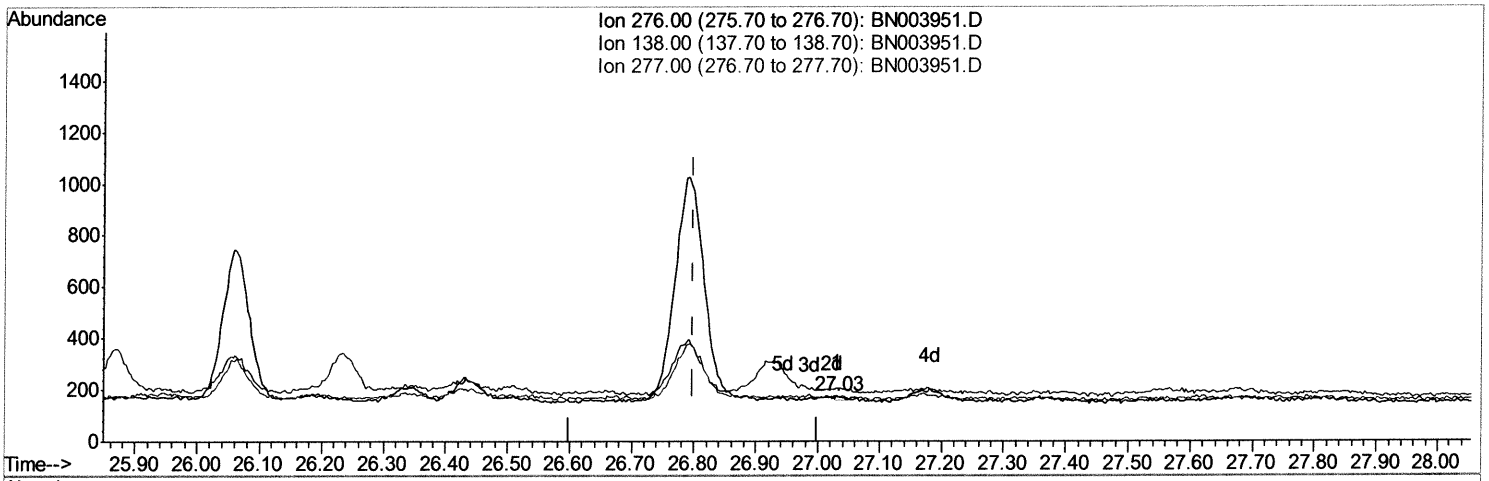
Quantitation Report (Qedit)

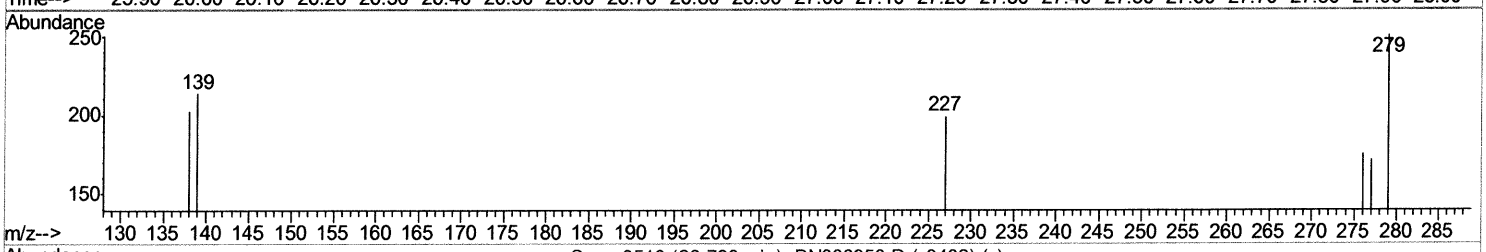
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

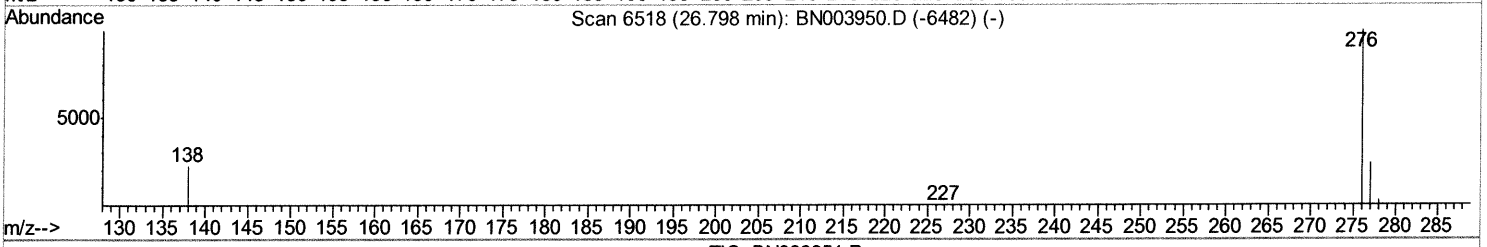
Quant Time: Dec 15 22:06:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

(26) Benzo(g,h,i)perylene

27.030min (+0.231) 0.00ng/ul

response 18

Ion	Exp%	Act%
276.00	100	100
138.00	22.10	116.00#
277.00	24.10	97.71#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

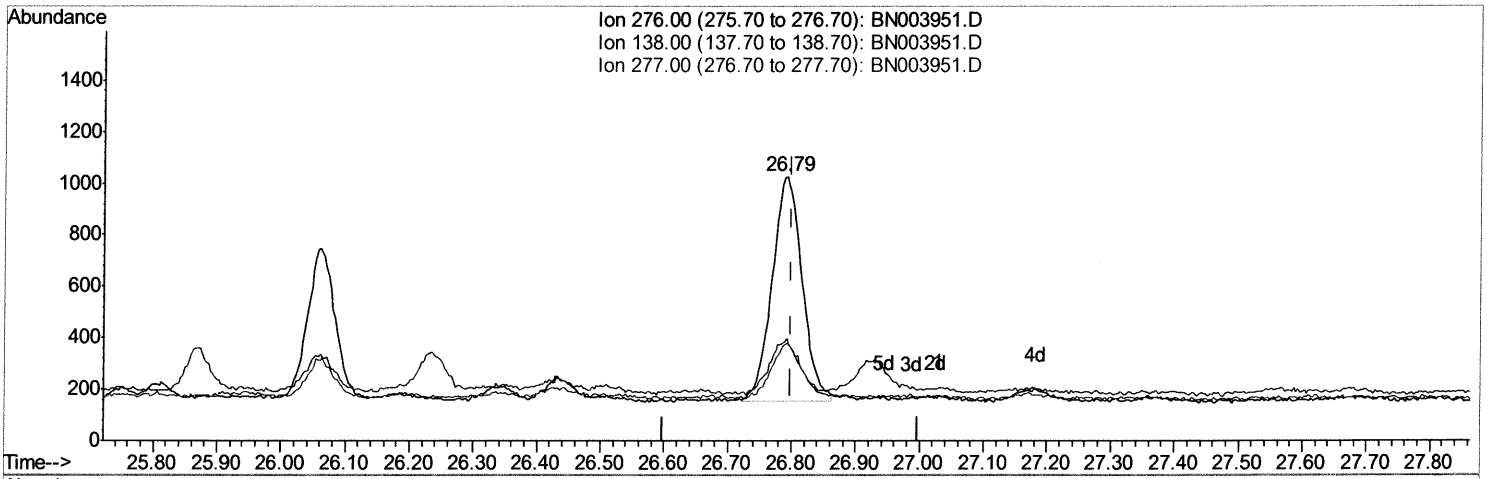
Quantitation Report (Qedit)

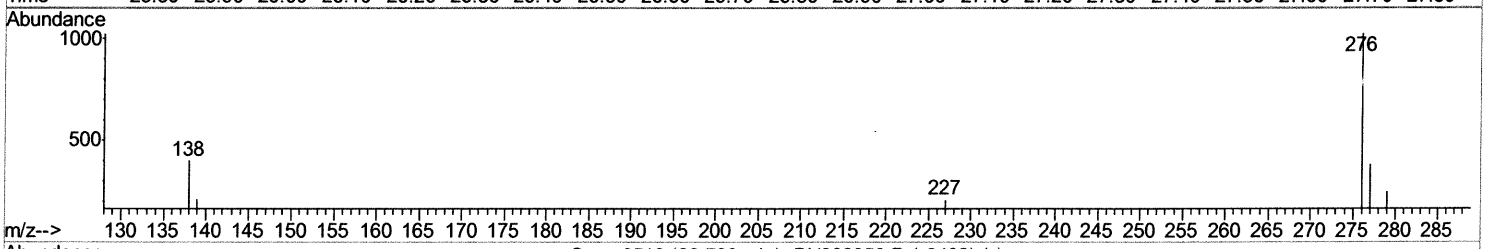
Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

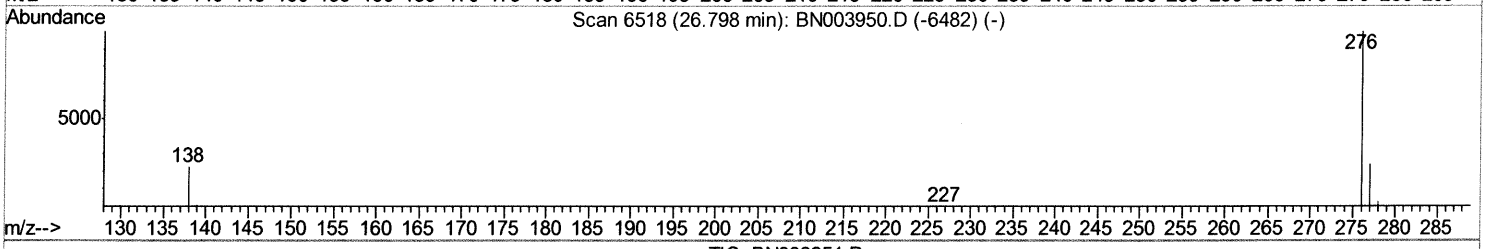
Quant Time: Dec 15 22:06:39 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM







TIC: BN003951.D

(26) Benzo(g,h,i)perylene

26.792min (-0.007) 0.05ng/ul m > SJ 12/19/18

response 2814

Ion	Exp%	Act%
276.00	100	100
138.00	22.10	38.79#
277.00	24.10	37.04#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (QT Reviewed)

Data File : BN003951.D
Acq On : 15 Dec 2018 10:24
Operator : JU/SJ
Sample : J6227-15
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 15 22:08:19 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument : BNA_N
ClientSampleId : F9F34

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:43 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	2284	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	10618	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	6240	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	15111m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	18090m	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	16672m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	3749	0.23	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	10603m	0.24	ng/ul	0.00
Target Compounds						Qvalue
5) 2-Methylnaphthalene	12.29	142	1057	0.051	ng/ul	97
12) Phenanthrene	17.25	178	5285	0.107	ng/ul	97
13) Anthracene	17.34	178	982m	0.024	ng/ul	
15) Fluoranthene	19.27	202	2013m	0.034	ng/ul	
17) Pyrene	19.63	202	6435m	0.099	ng/ul	
18) Benzo(a)anthracene	21.38	228	3632m	0.064	ng/ul	
19) Chrysene	21.43	228	5939m	0.091	ng/ul	
21) Benzo(b)fluoranthene	23.01	252	2817m	0.041	ng/ul	
23) Benzo(a)pyrene	23.61	252	2805m	0.047	ng/ul	
24) Indeno(1,2,3-cd)pyrene	26.06	276	1785m	0.026	ng/ul	
26) Benzo(g,h,i)perylene	26.79	276	2814m	0.047	ng/ul	

SJ 12/17/18

SJ 12/17/18

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
F9F35

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : J6227-16
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BN003960.D
% Solids : 90.6
Date Received : 12/04/2018
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/15/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	4.6	
91-57-6	2-Methylnaphthalene	15	
208-96-8	Acenaphthylene	3.6	U
83-32-9	Acenaphthene	3.6	U
86-73-7	Fluorene	3.6	U
87-86-5	Pentachlorophenol	7.4	U
85-01-8	Phenanthrene	22	
120-12-7	Anthracene	21	
206-44-0	Fluoranthene	5.0	
129-00-0	Pyrene	31	
56-55-3	Benzo(a)anthracene	7.7	
218-01-9	Chrysene	13	
205-99-2	Benzo(b)fluoranthene	3.8	
207-08-9	Benzo(k)fluoranthene	3.6	U
50-32-8	Benzo(a)pyrene	5.2	
193-39-5	Indeno(1,2,3-cd)pyrene	3.1	J
53-70-3	Dibenzo(a,h)anthracene	1.9	J
191-24-2	Benzo(g,h,i)perylene	9.6	

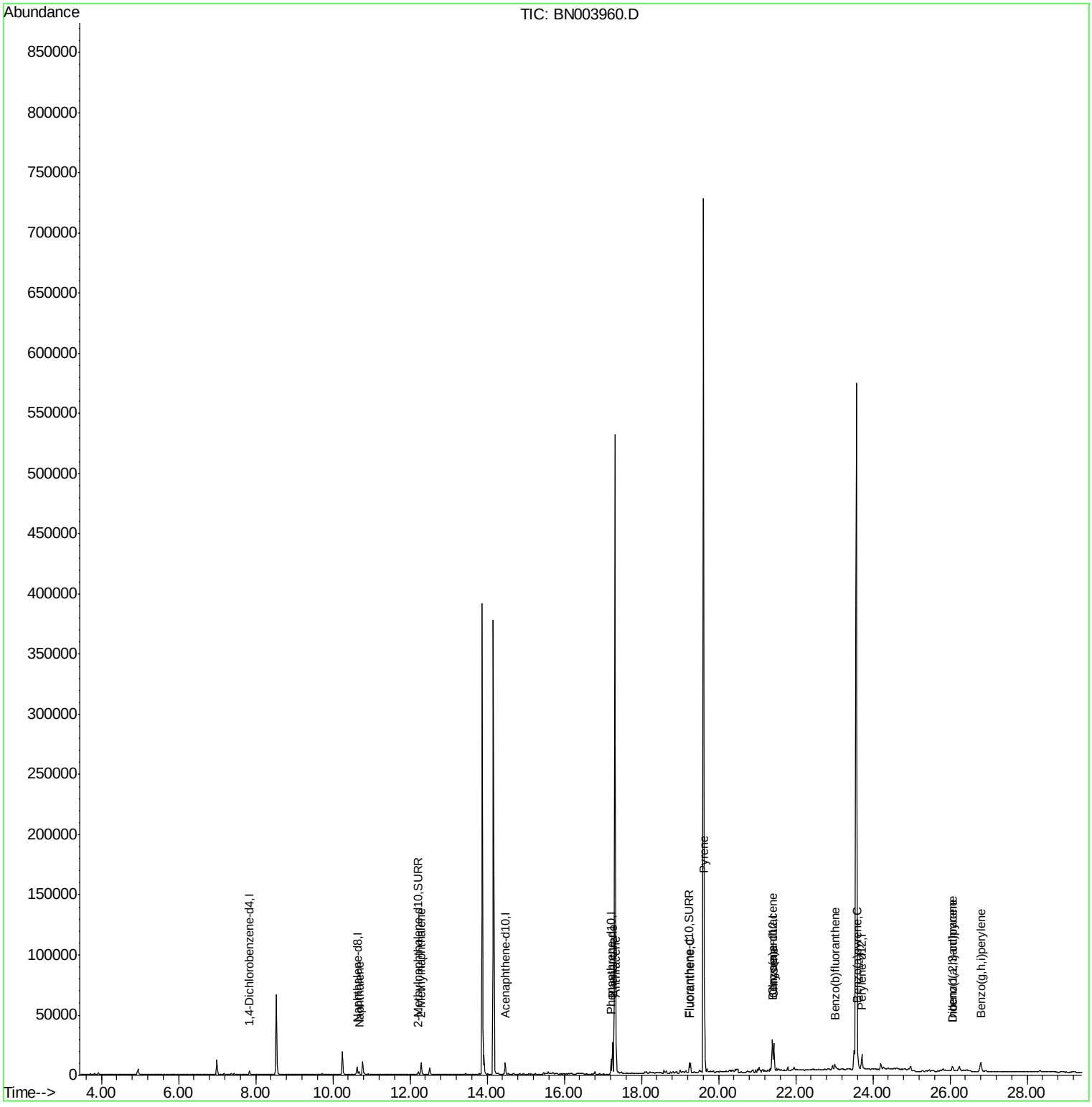
Quantitation Report (QT Reviewed)

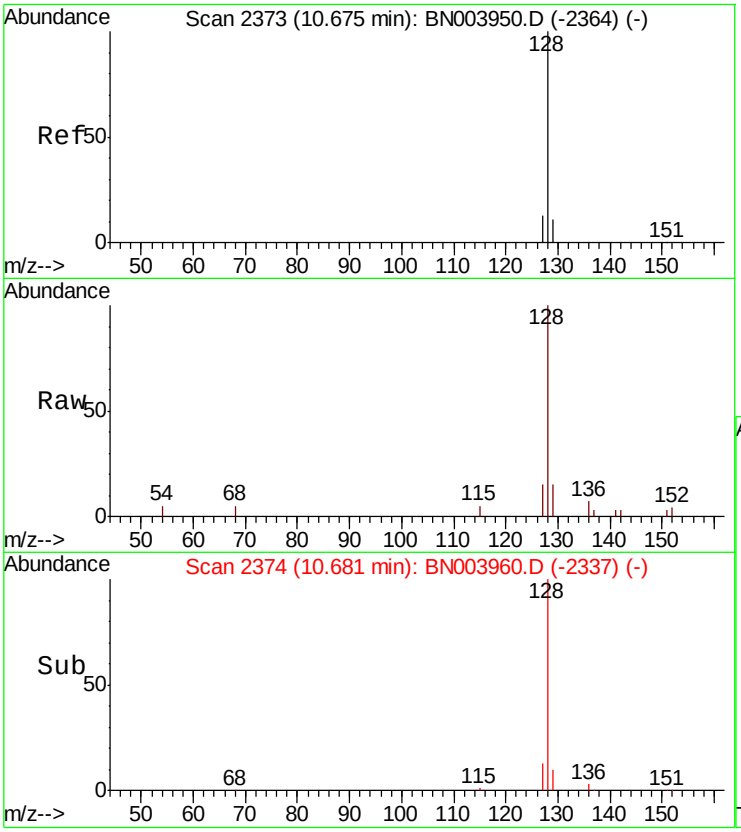
Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:57:41 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM





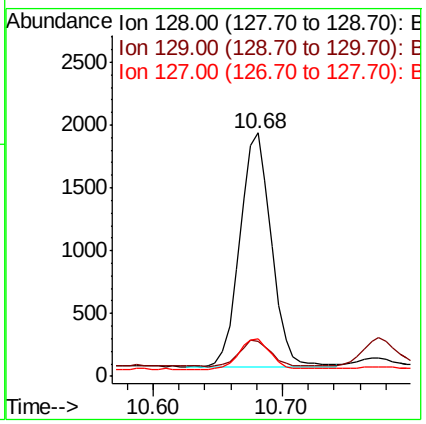
#3
Naphthalene
Concen: 0.125 ng/ul
RT: 10.68 min Scan# 2374
Delta R.T. 0.01 min
Lab File: BN003960.D
Acq: 15 Dec 2018 15:42

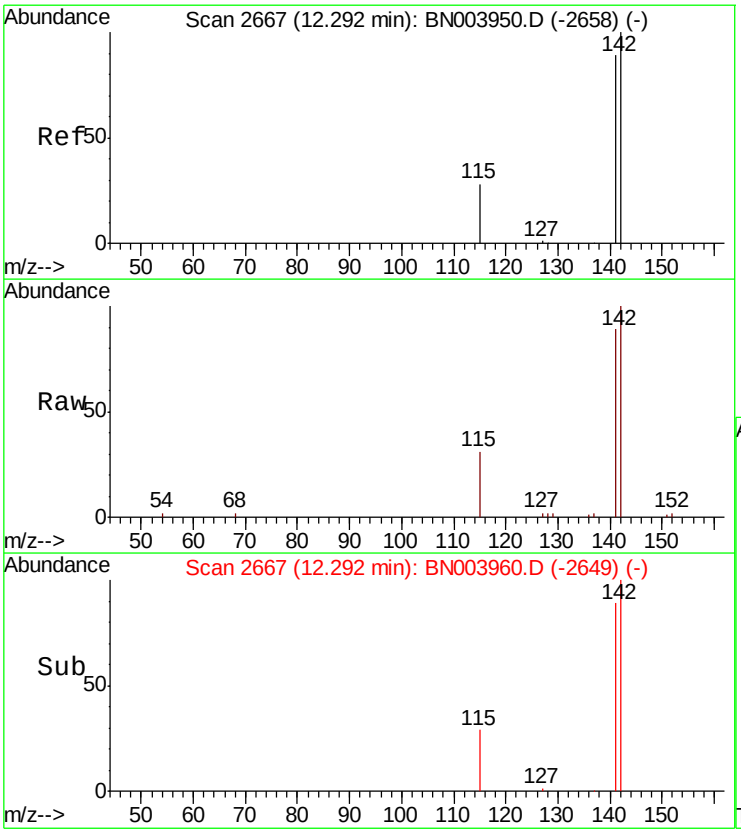
Tgt Ion:128 Resp: 3155

Ion	Ratio	Lower	Upper
128	100		
129	14.6	9.0	13.6#
127	15.3	10.5	15.7

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM

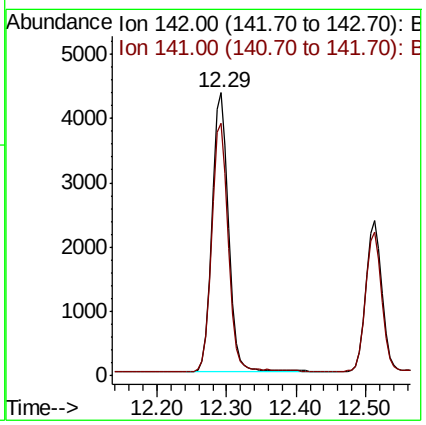


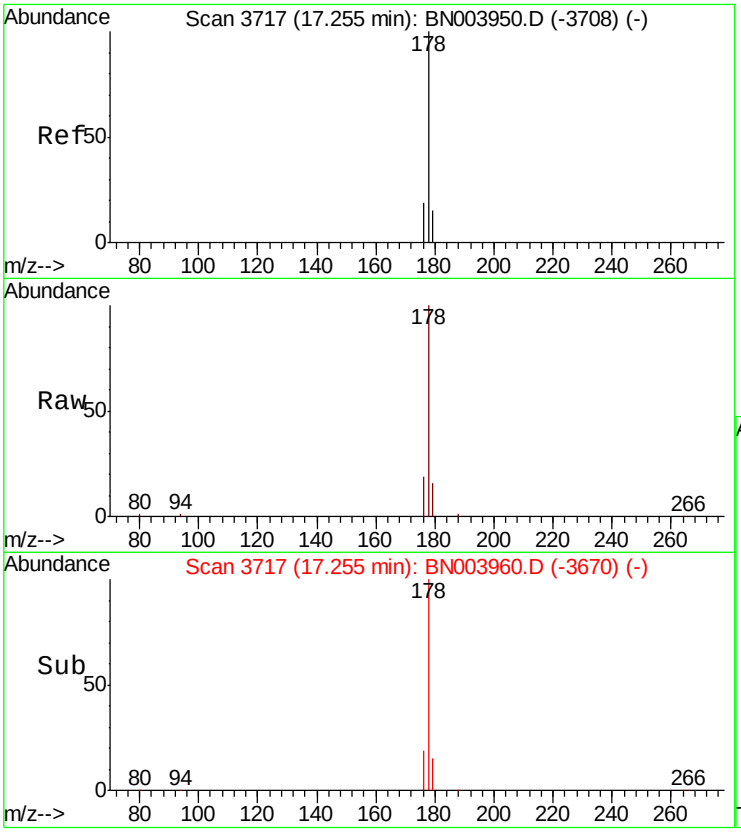


#5
2-Methylnaphthalene
Concen: 0.405 ng/ul
RT: 12.29 min Scan# 2667
Delta R.T. 0.00 min
Lab File: BN003960.D
Acq: 15 Dec 2018 15:42

Tgt Ion:142 Resp: 7152

Ion	Ratio	Lower	Upper
142	100		
141	89.5	71.5	107.3

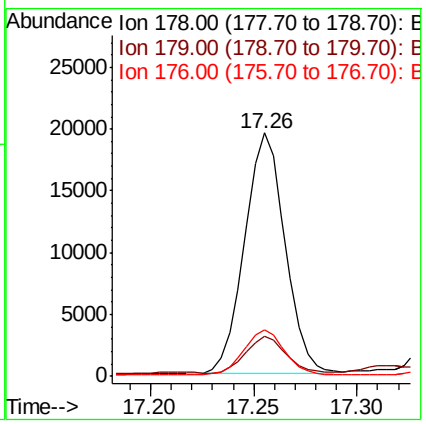




#12
Phenanthrene
Concen: 0.587 ng/ul m
RT: 17.26 min Scan# 3717
Delta R.T. 0.00 min
Lab File: BN003960.D
Acq: 15 Dec 2018 15:42

Tgt Ion:178 Resp: 26602

Ion	Ratio	Lower	Upper
178	100		
179	16.3	12.5	18.7
176	19.1	15.0	22.4



Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
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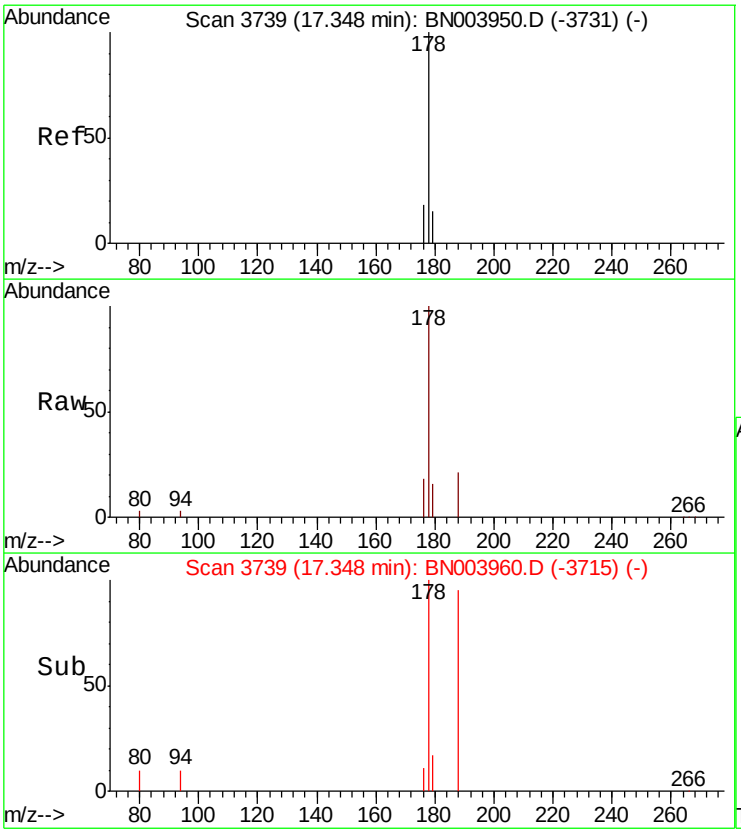
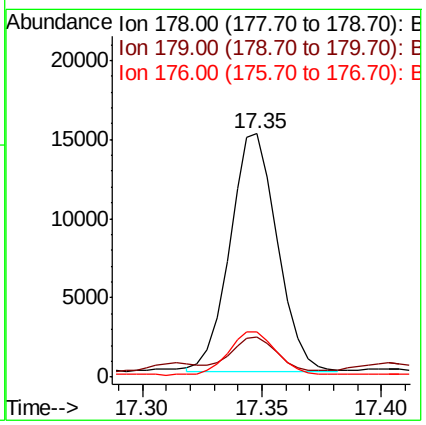
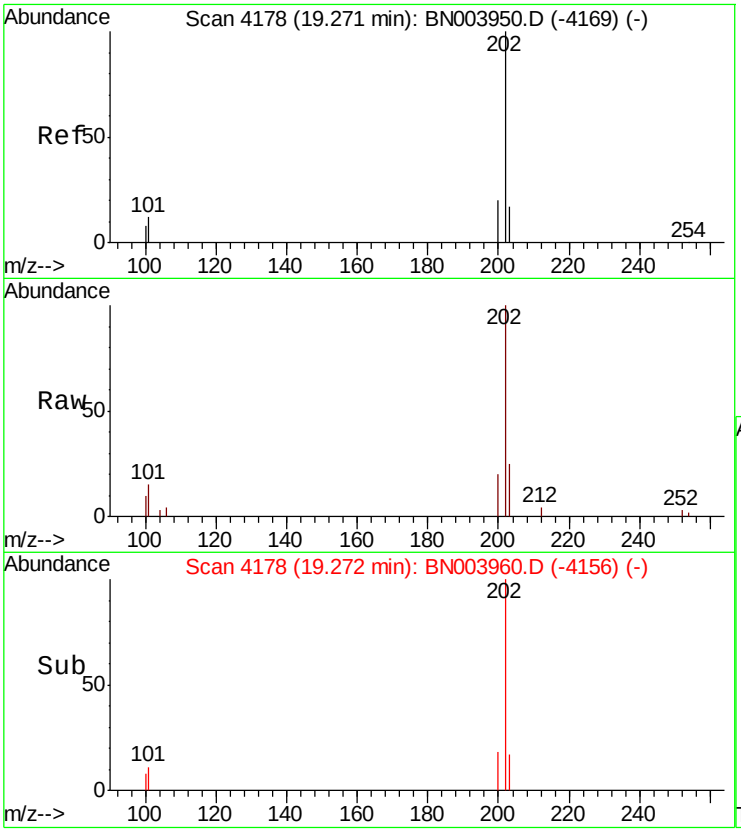


#13
Anthracene
Concen: 0.559 ng/ul m
RT: 17.35 min Scan# 3739
Delta R.T. 0.00 min
Lab File: BN003960.D
Acq: 15 Dec 2018 15:42

Tgt Ion:178 Resp: 20814

Ion	Ratio	Lower	Upper
178	100		
179	16.4	12.3	18.5
176	18.3	14.8	22.2

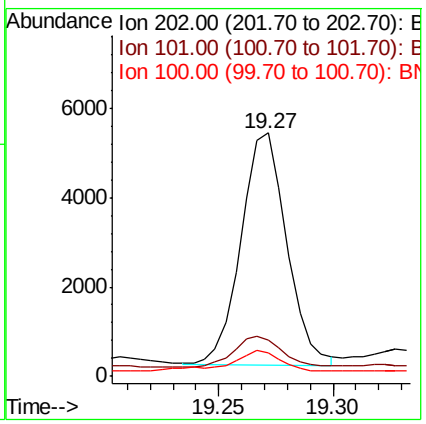




#15
Fluoranthene
Concen: 0.135 ng/ul m
RT: 19.27 min Scan# 4178
Delta R.T. 0.00 min
Lab File: BN003960.D
Acq: 15 Dec 2018 15:42

Tgt Ion:202 Resp: 7235

Ion	Ratio	Lower	Upper
202	100		
101	14.9	0.0	30.7
100	9.7	0.0	28.1



Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
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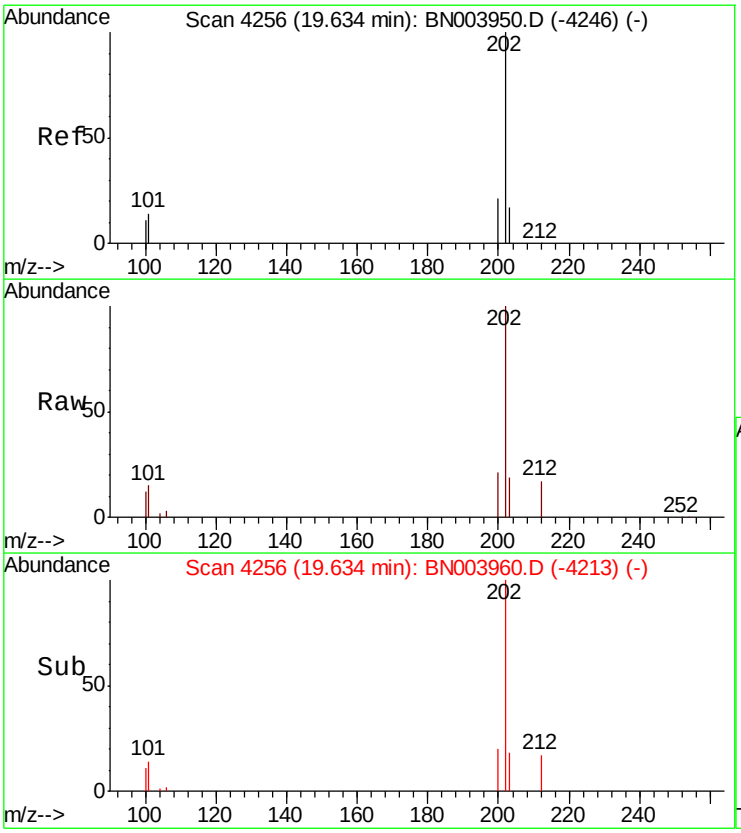
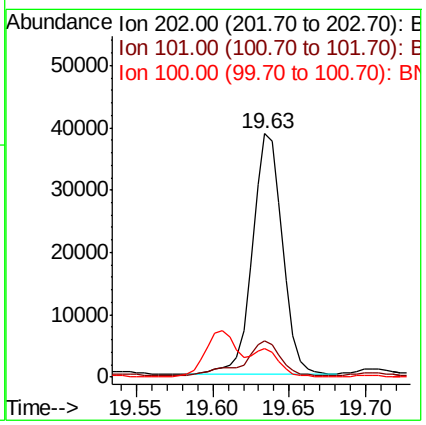
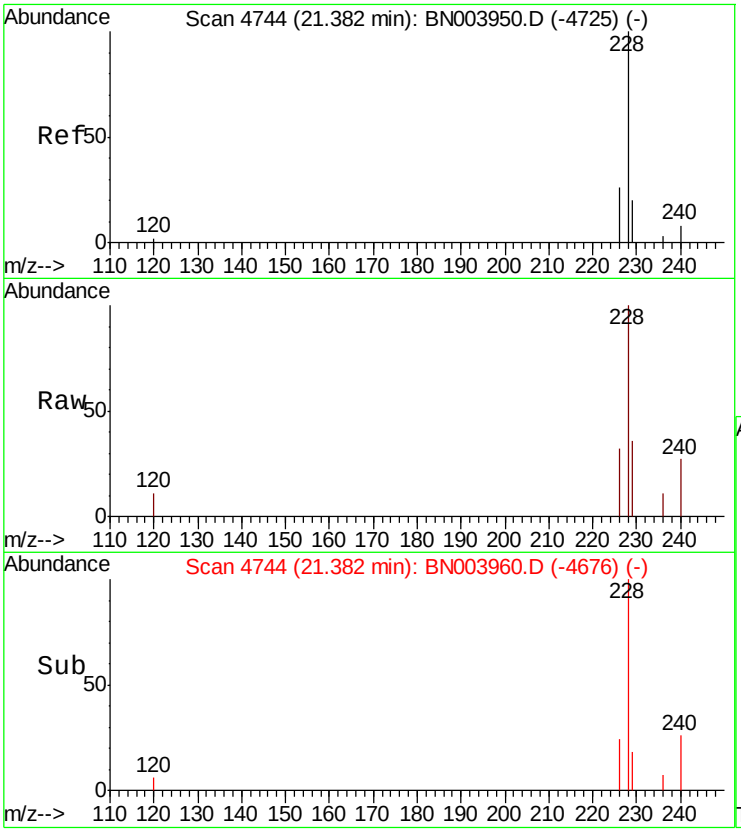


#17
Pyrene
Concen: 0.833 ng/ul
RT: 19.63 min Scan# 4256
Delta R.T. 0.00 min
Lab File: BN003960.D
Acq: 15 Dec 2018 15:42

Tgt Ion:202 Resp: 53089

Ion	Ratio	Lower	Upper
202	100		
101	14.8	10.3	15.5
100	11.6	8.5	12.7





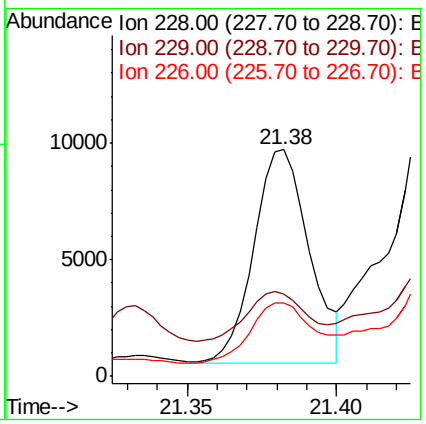
#18
Benzo(a)anthracene
Concen: 0.210 ng/ul m
RT: 21.38 min Scan# 4744
Delta R.T. 0.00 min
Lab File: BN003960.D
Acq: 15 Dec 2018 15:42

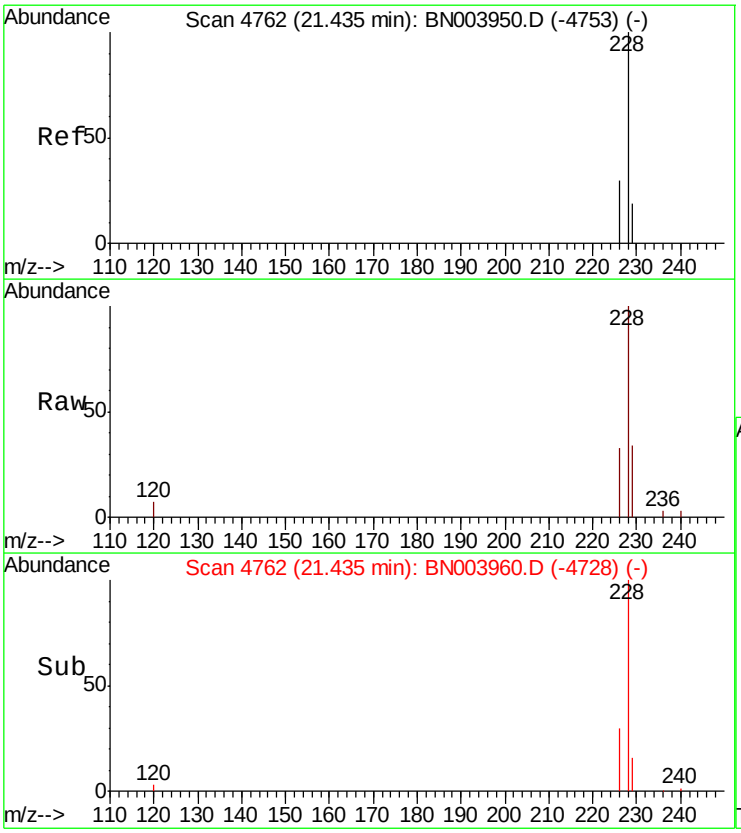
Tgt Ion:228 Resp: 11815

Ion	Ratio	Lower	Upper
228	100		
229	36.5	15.6	23.4#
226	32.3	21.1	31.7#

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM

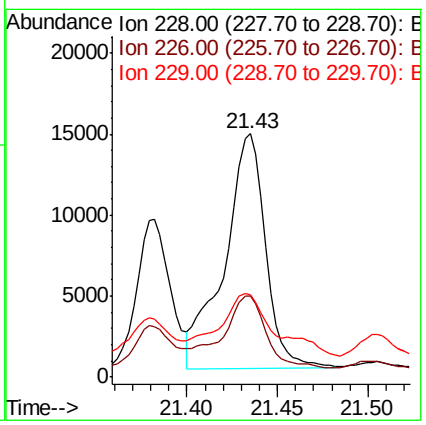


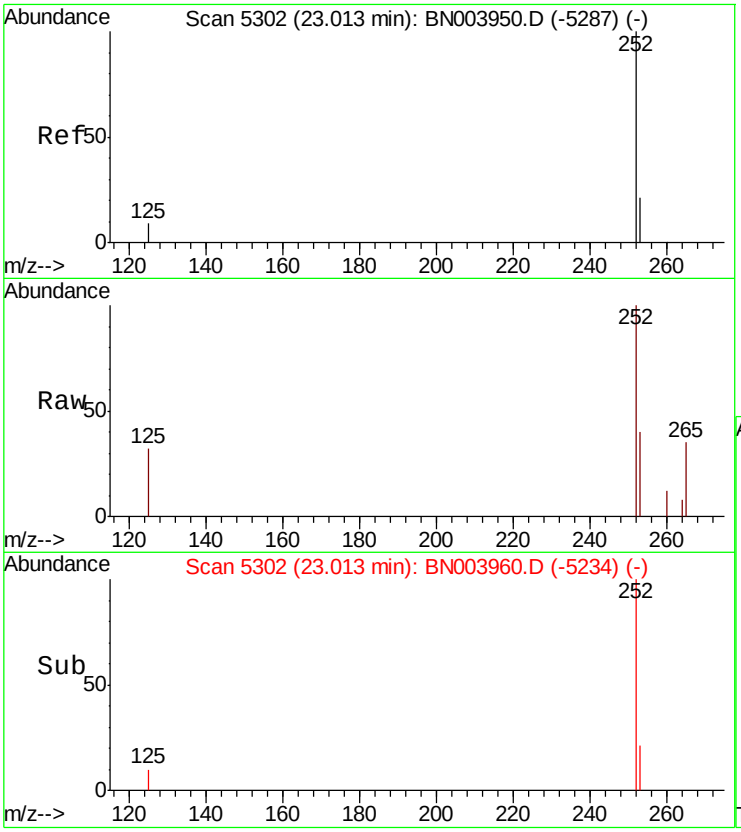


#19
Chrysene
Concen: 0.358 ng/ul m
RT: 21.43 min Scan# 4762
Delta R.T. 0.00 min
Lab File: BN003960.D
Acq: 15 Dec 2018 15:42

Tgt Ion:228 Resp: 23031

Ion	Ratio	Lower	Upper
228	100		
226	33.3	24.0	36.0
229	33.9	15.7	23.5#





#21
Benzo(b)fluoranthene
Concen: 0.102 ng/ul m
RT: 23.01 min Scan# 5302
Delta R.T. 0.00 min
Lab File: BN003960.D
Acq: 15 Dec 2018 15:42

Tgt Ion:252 Resp: 6820

Ion	Ratio	Lower	Upper
252	100		
253	40.2	0.0	46.0
125	32.5	0.0	22.4#

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
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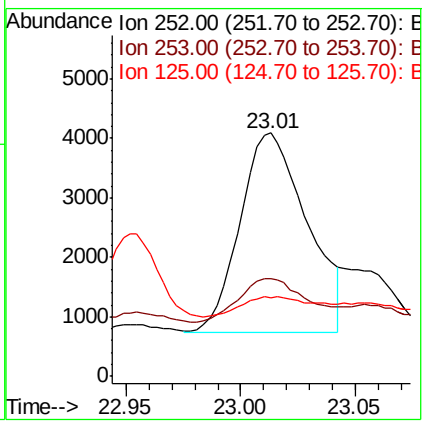
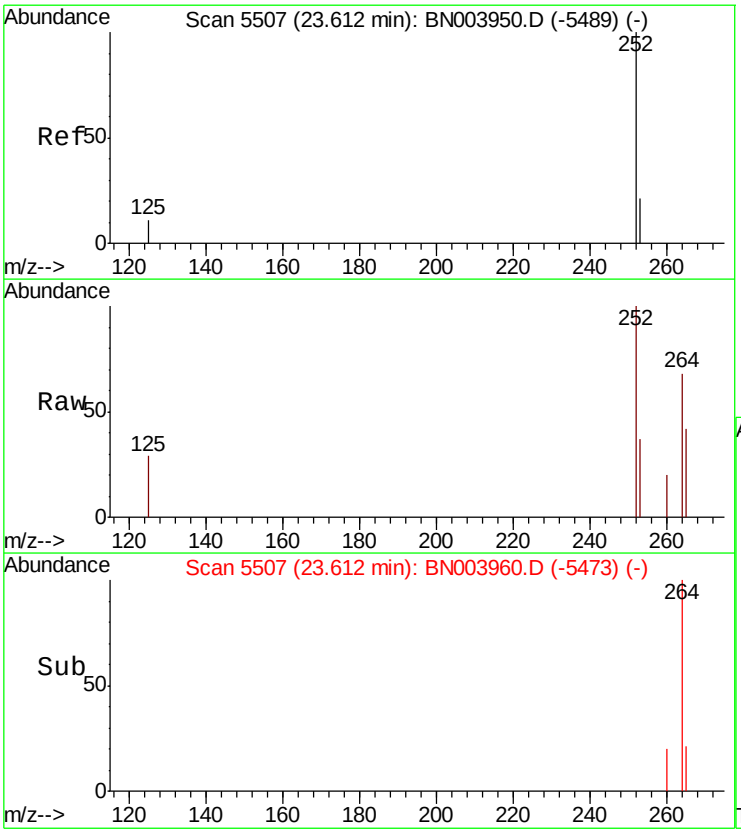
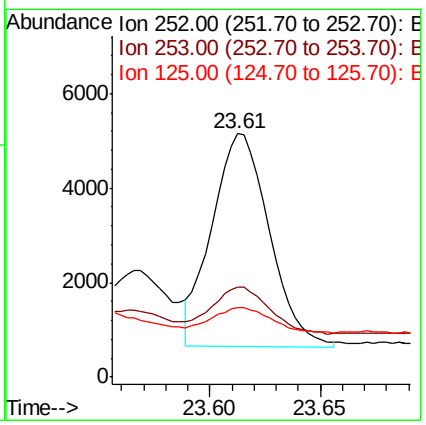


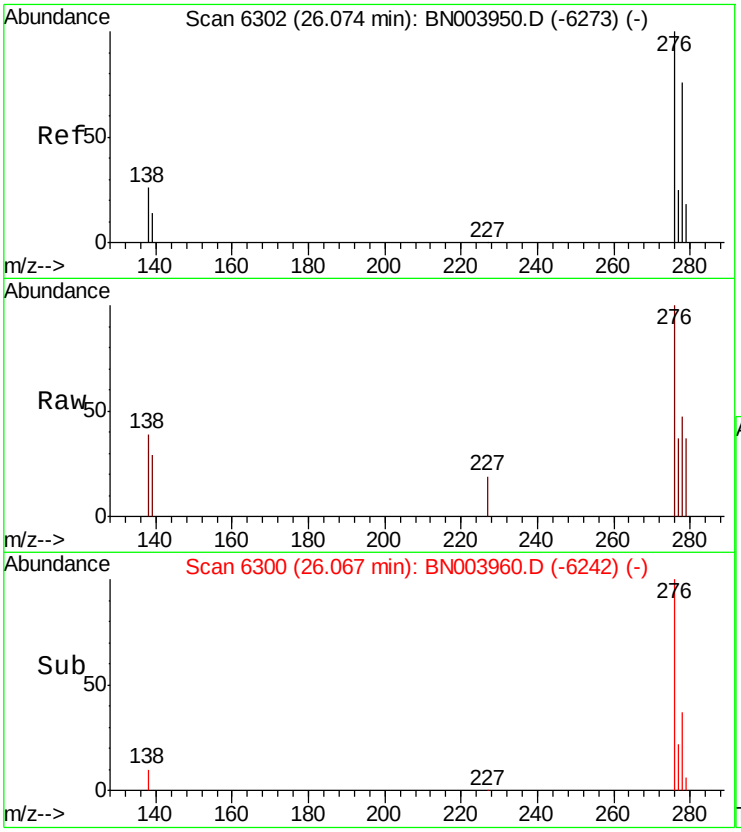


#23
Benzo(a)pyrene
Concen: 0.141 ng/ul m
RT: 23.61 min Scan# 5507
Delta R.T. 0.00 min
Lab File: BN003960.D
Acq: 15 Dec 2018 15:42

Tgt Ion:252 Resp: 8186

Ion	Ratio	Lower	Upper
252	100		
253	36.9	19.0	28.4#
125	28.7	10.2	15.4#





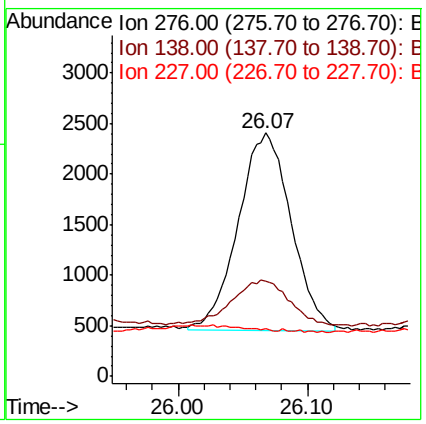
#24
Indeno(1,2,3-cd)pyrene
Concen: 0.083 ng/ul m
RT: 26.07 min Scan# 6300
Delta R.T. -0.01 min
Lab File: BN003960.D
Acq: 15 Dec 2018 15:42

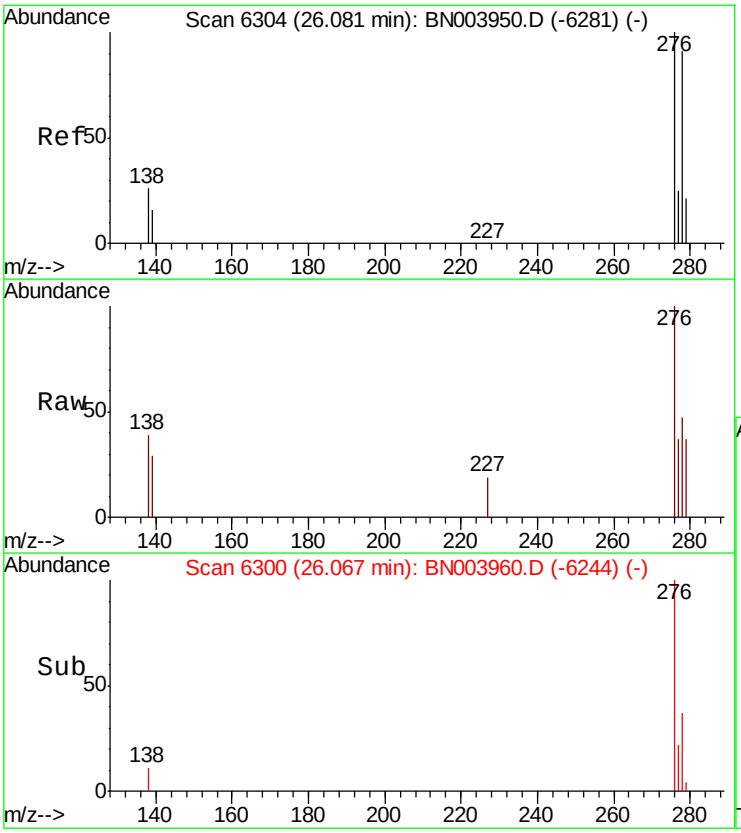
Tgt Ion:276 Resp: 5510

Ion	Ratio	Lower	Upper
276	100		
138	0.0	20.3	30.5#
227	0.0	0.2	0.2#

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM

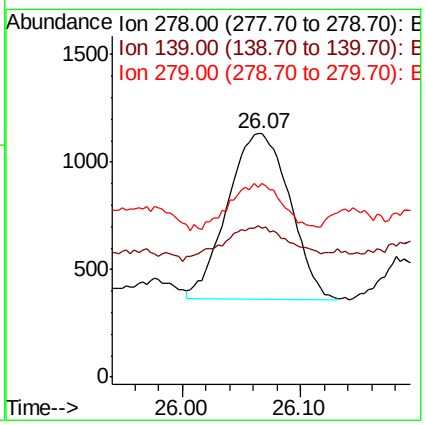


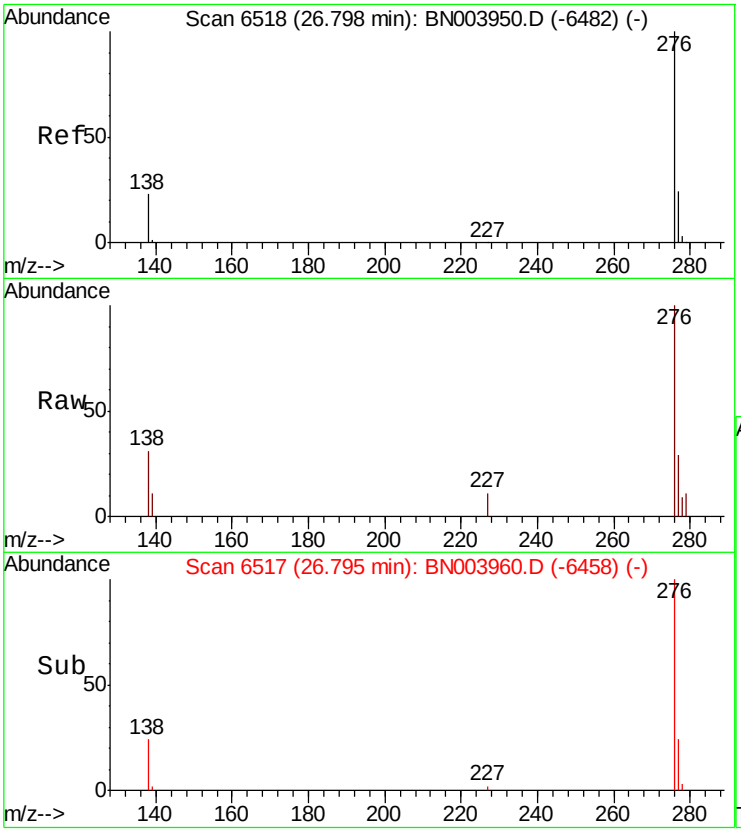


#25
Dibenzo(a,h)anthracene
Concen: 0.053 ng/ul m
RT: 26.07 min Scan# 6300
Delta R.T. -0.01 min
Lab File: BN003960.D
Acq: 15 Dec 2018 15:42

Tgt Ion:278 Resp: 2815

Ion	Ratio	Lower	Upper
278	100		
139	60.9	14.2	21.4#
279	79.5	19.8	29.6#

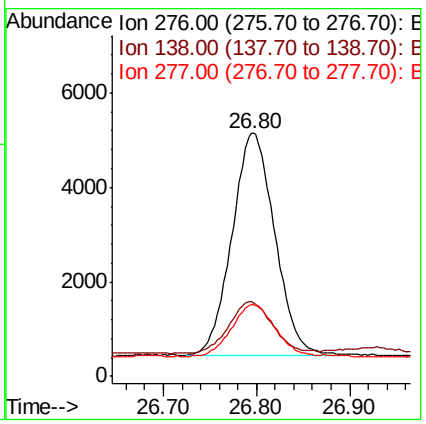




#26
Benzo(g,h,i)perylene
Concen: 0.261 ng/ul m
RT: 26.80 min Scan# 6517
Delta R.T. -0.00 min
Lab File: BN003960.D
Acq: 15 Dec 2018 15:42

Tgt Ion:276 Resp: 15056

Ion	Ratio	Lower	Upper
276	100		
138	30.9	17.7	26.5#
277	29.4	19.3	28.9#



Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM

Quant Time: Dec 15 22:57:41 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	1809	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	8997	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	5471	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	13810m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	17775m	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	16182m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	2964	0.21	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	9488m	0.23	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.68	128	3155	0.125	ng/ul#	93
5) 2-Methylnaphthalene	12.29	142	7152	0.405	ng/ul	100
12) Phenanthrene	17.26	178	26602m	0.587	ng/ul	
13) Anthracene	17.35	178	20814m	0.559	ng/ul	
15) Fluoranthene	19.27	202	7235m	0.135	ng/ul	
17) Pyrene	19.63	202	53089	0.833	ng/ul	96
18) Benzo(a)anthracene	21.38	228	11815m	0.210	ng/ul	
19) Chrysene	21.43	228	23031m	0.358	ng/ul	
21) Benzo(b)fluoranthene	23.01	252	6820m	0.102	ng/ul	
23) Benzo(a)pyrene	23.61	252	8186m	0.141	ng/ul	
24) Indeno(1,2,3-cd)pyrene	26.07	276	5510m	0.083	ng/ul	
25) Dibenzo(a,h)anthracene	26.07	278	2815m	0.053	ng/ul	
26) Benzo(g,h,i)perylene	26.80	276	15056m	0.261	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

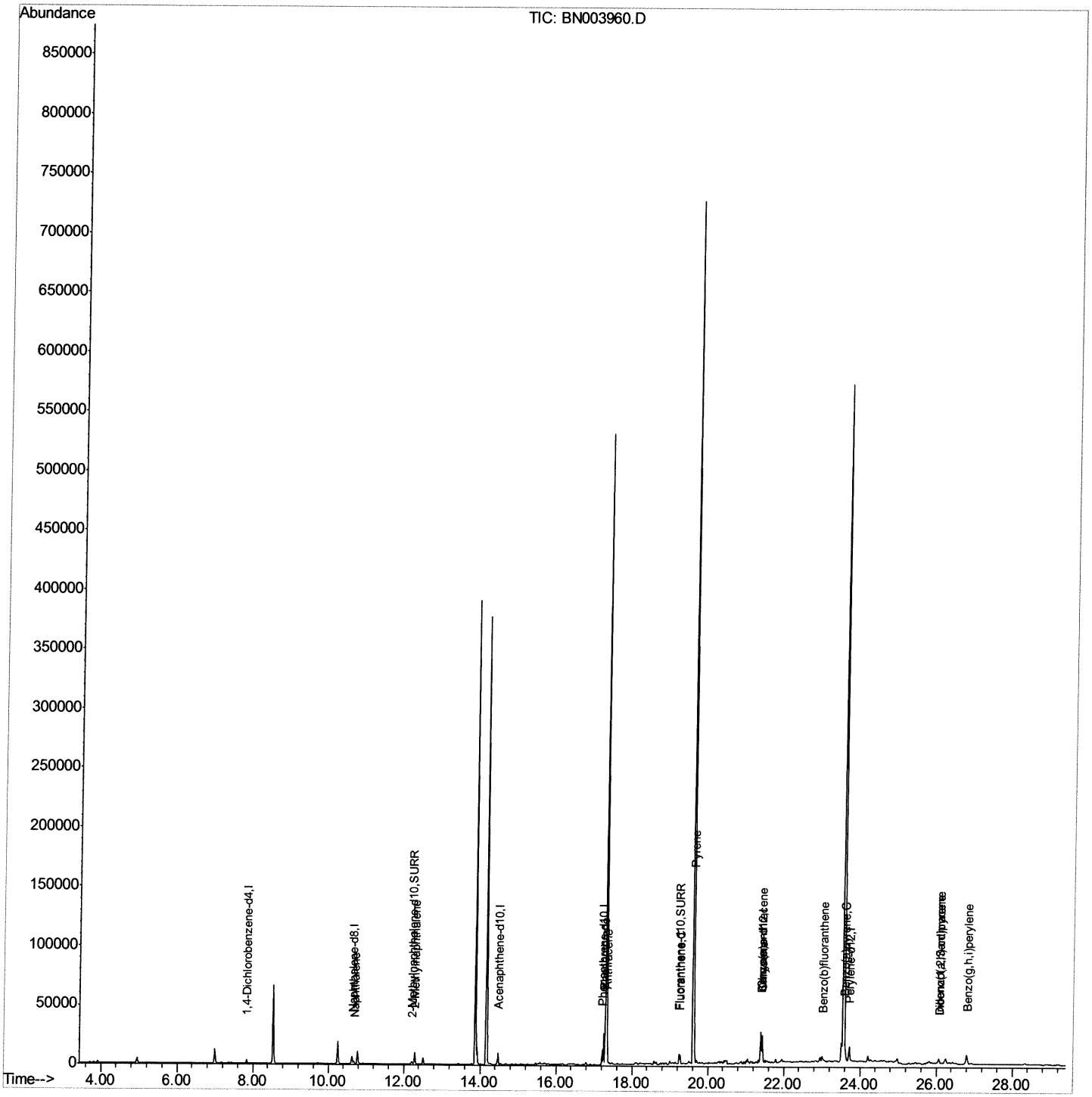
Quantitation Report (QT Reviewed)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:57:41 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

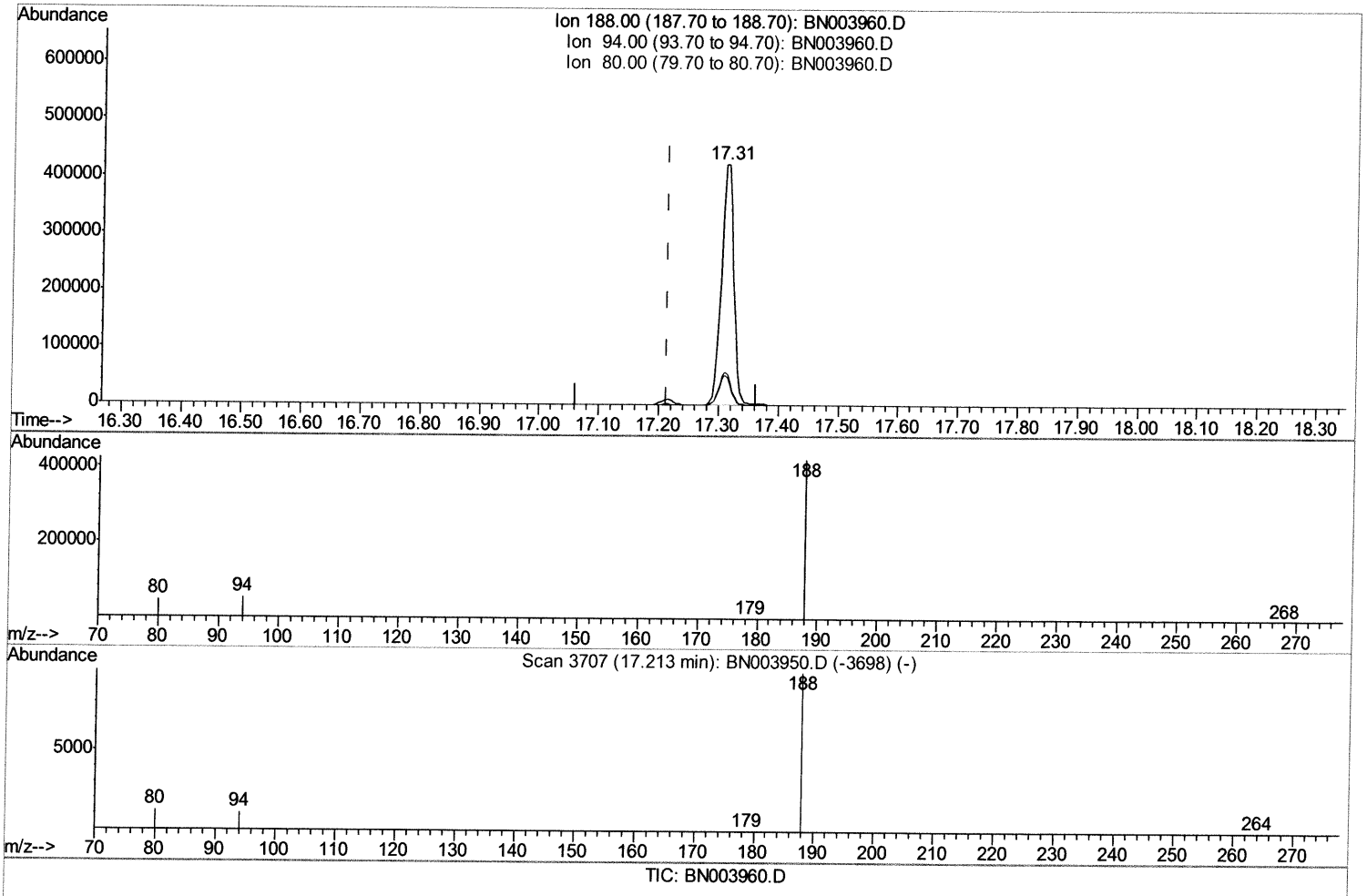
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:02:22 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



TIC: BN003960.D

(10) Phenanthrene-d10 (I)

17.314min (+0.101) 0.40ng/ul

response 600905

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	12.63#
80.00	11.60	11.20
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

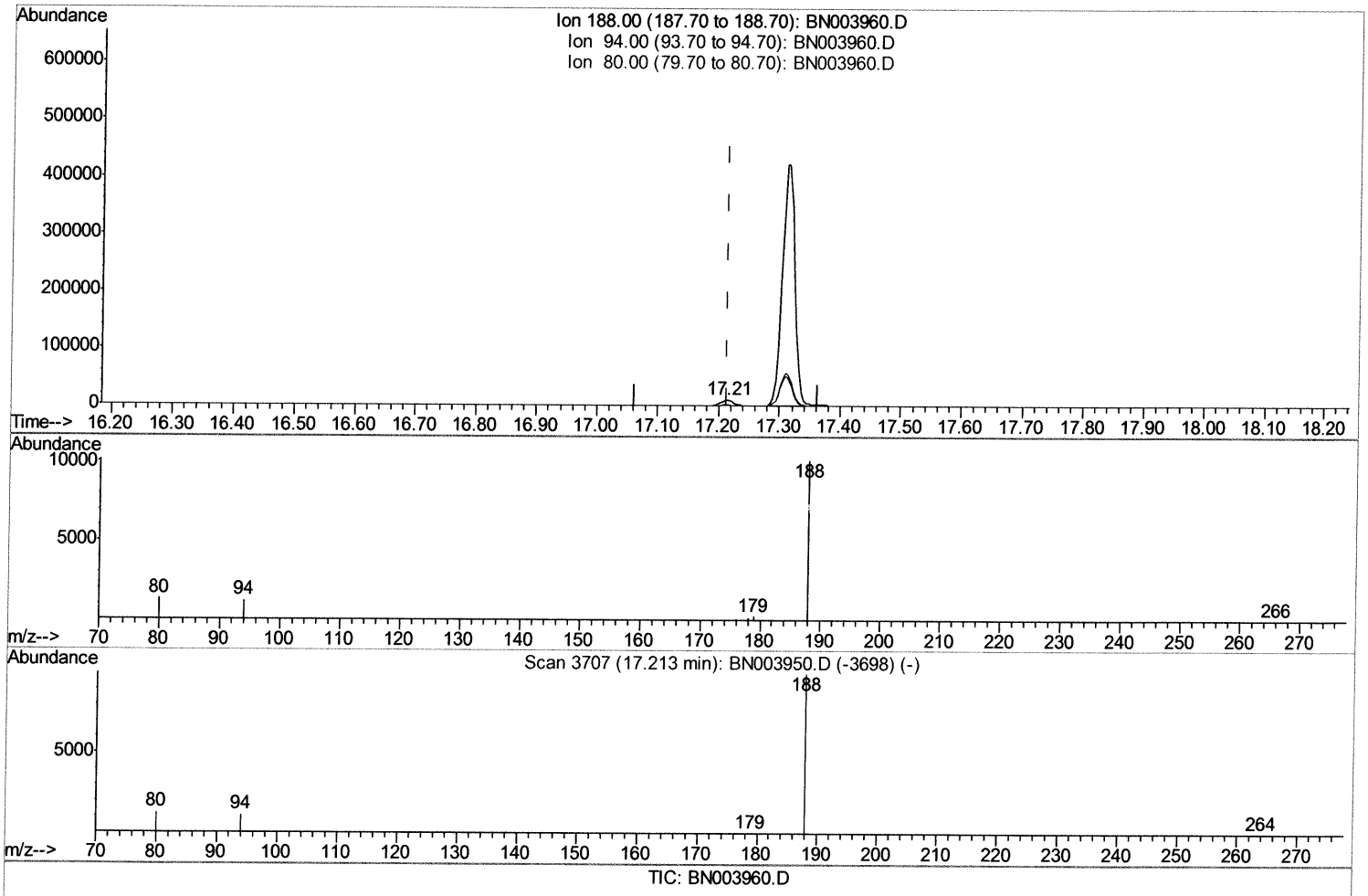
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:02:22 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



(10) Phenanthrene-d10 (I)

17.213min (+0.000) 0.40ng/ul m SJ 12/19/18

response 13810

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	12.42
80.00	11.60	13.41
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

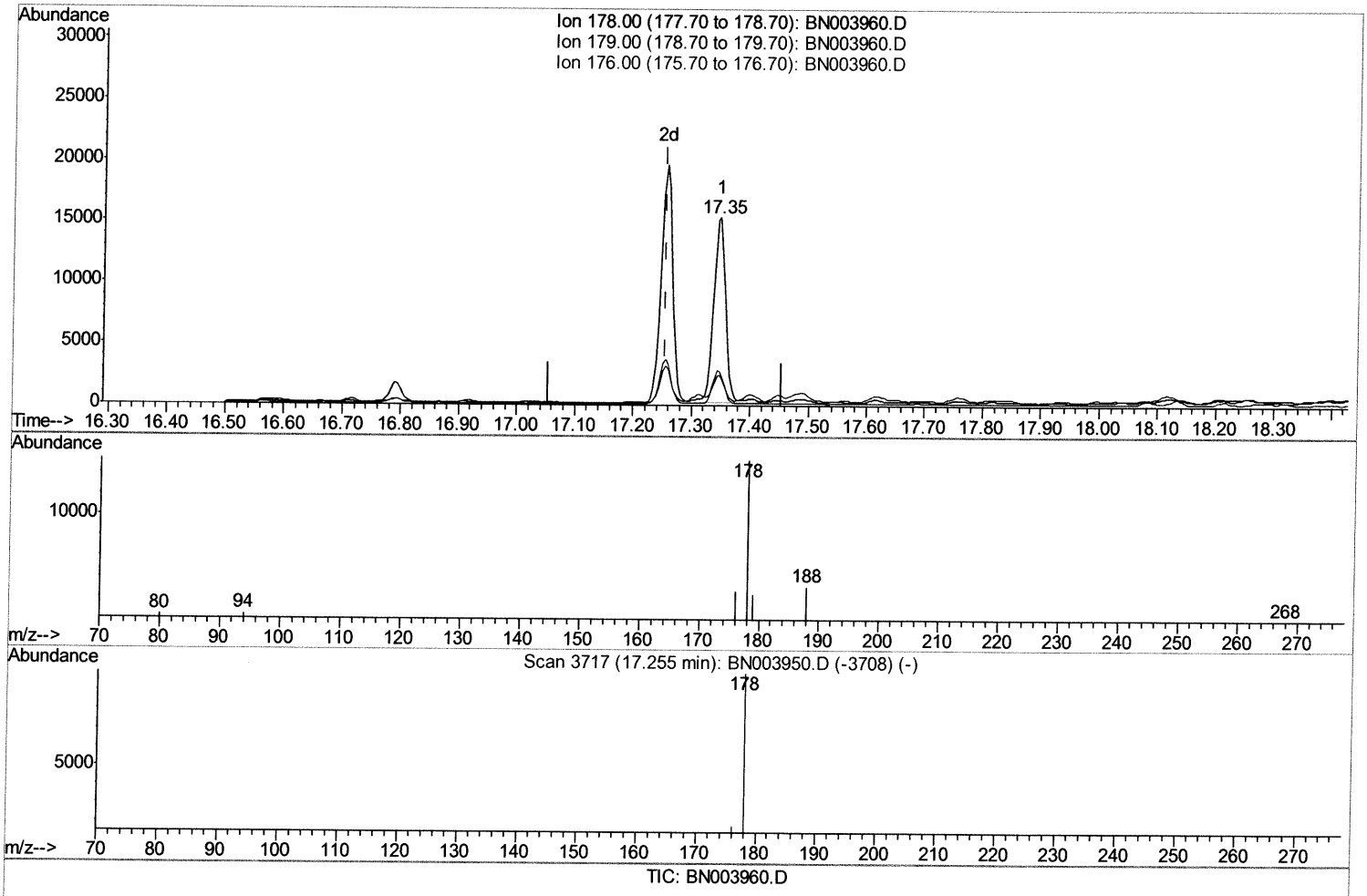
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:53:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



(12) Phenanthrene

17.348min (+0.093) 0.48ng/ul

response 21715

Ion	Exp%	Act%
178.00	100	100
179.00	15.60	16.38
176.00	18.70	18.32
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

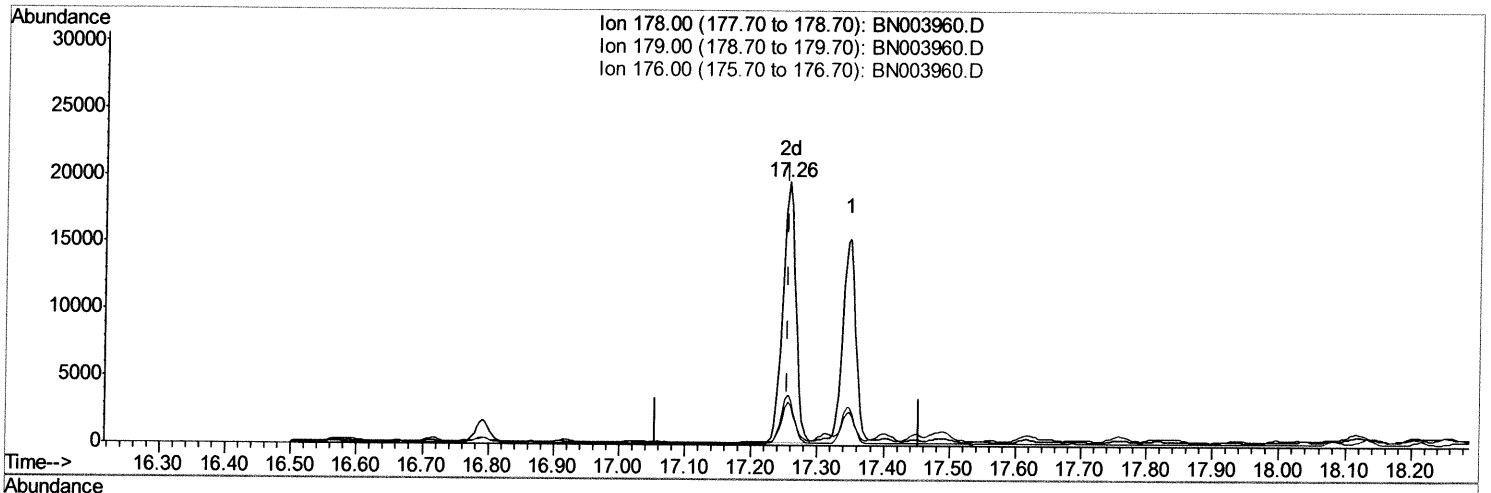
Quantitation Report (Qedit)

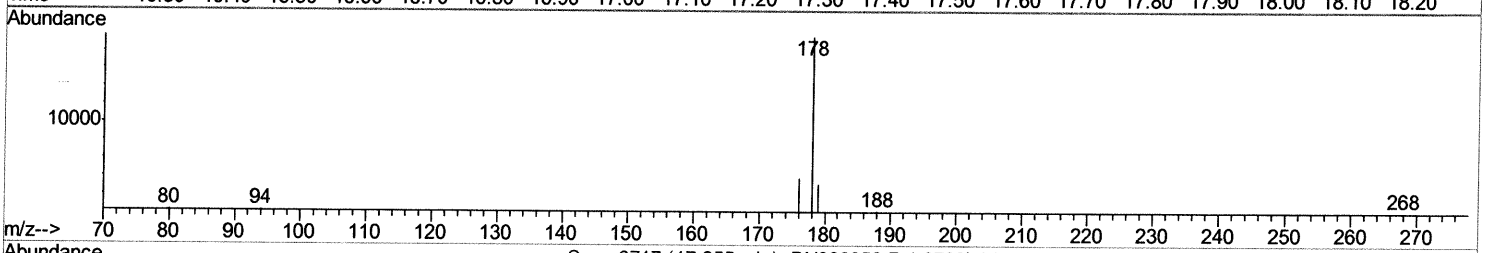
Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

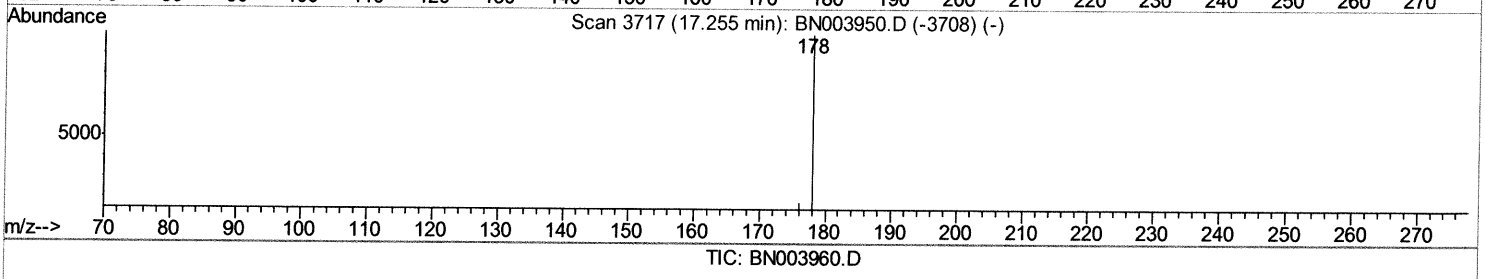
Quant Time: Dec 15 22:53:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM







TIC: BN003960.D

(12) Phenanthrene

17.255min (+0.000) 0.59ng/ul m SJ 12/17/18

response 26602

Ion	Exp%	Act%
178.00	100	100
179.00	15.60	16.29
176.00	18.70	19.14
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

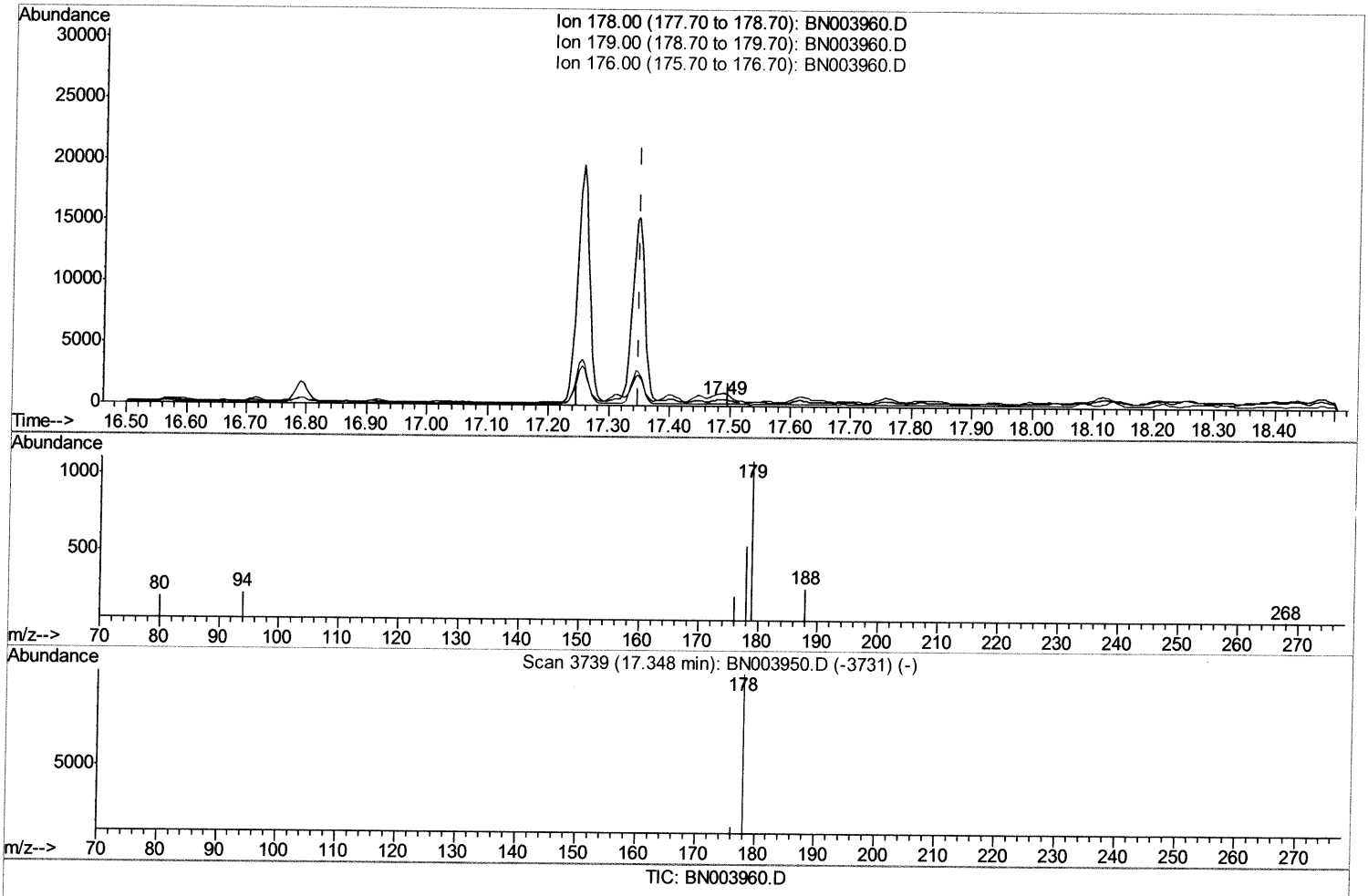
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:53:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



TIC: BN003960.D

(13) Anthracene

17.487min (+0.139) 0.02ng/ul

response 571

Ion	Exp%	Act%
178.00	100	100
179.00	15.40	202.39#
176.00	18.50	38.97#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

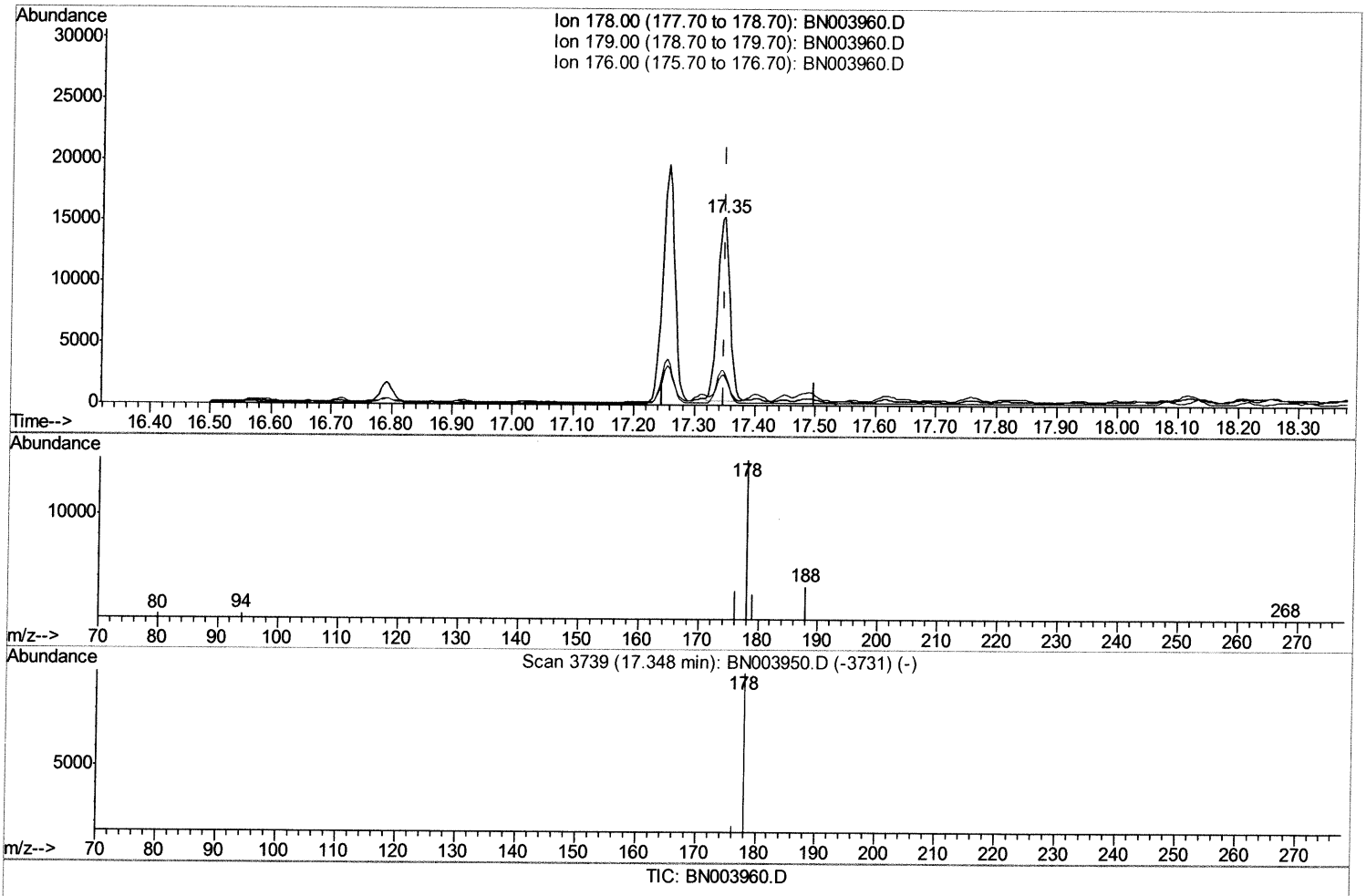
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:53:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



TIC: BN003960.D

(13) Anthracene

17.348min (+0.000) 0.56ng/ul m SJ 12/17/18

response 20814

Ion	Exp%	Act%
178.00	100	100
179.00	15.40	16.38
176.00	18.50	18.32
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

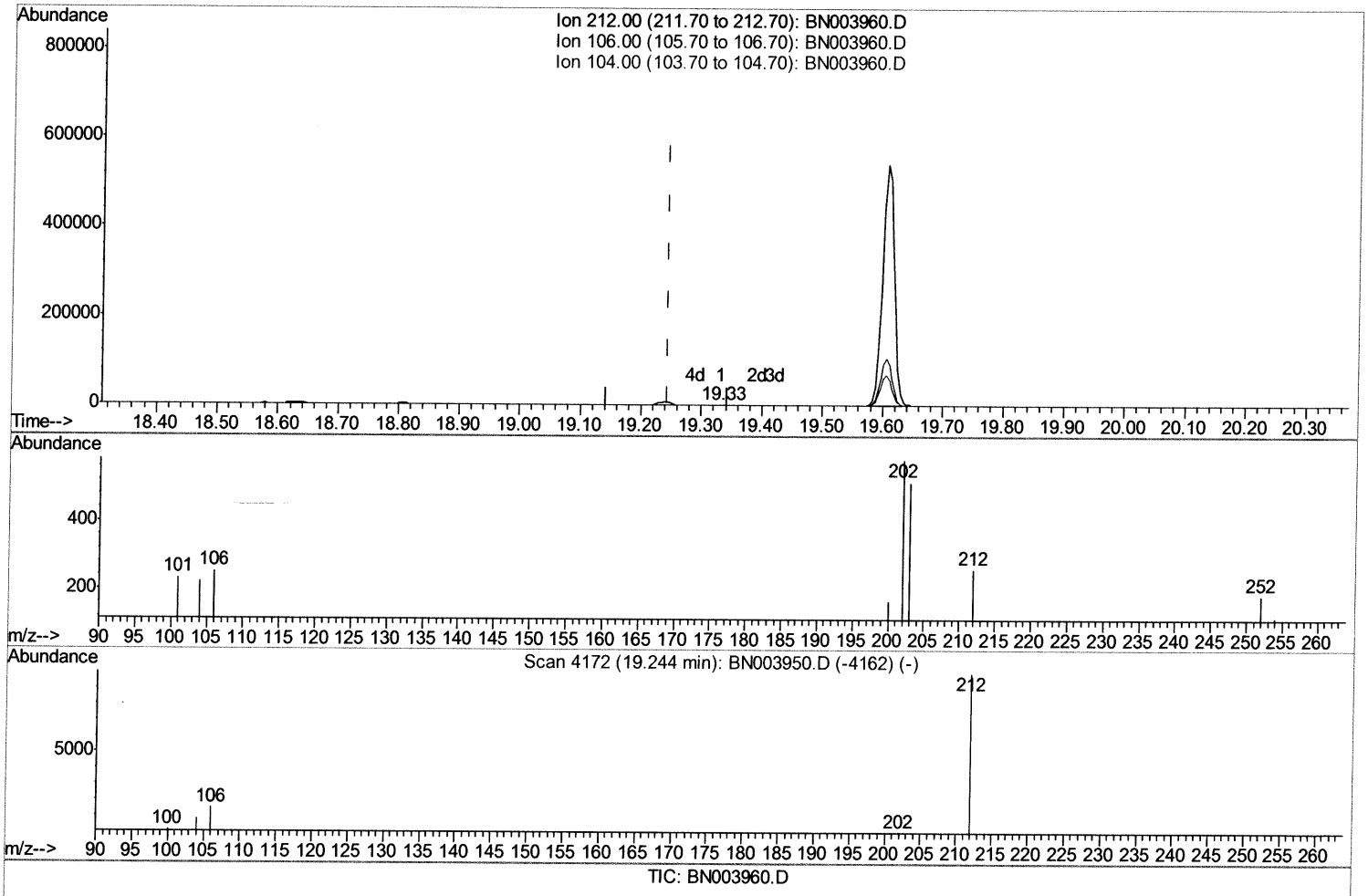
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:53:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



(14) Fluoranthene-d10 (SURR)

19.332min (+0.088) 0.01ng/ul

response 217

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	36.87#
104.00	8.00	52.07#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

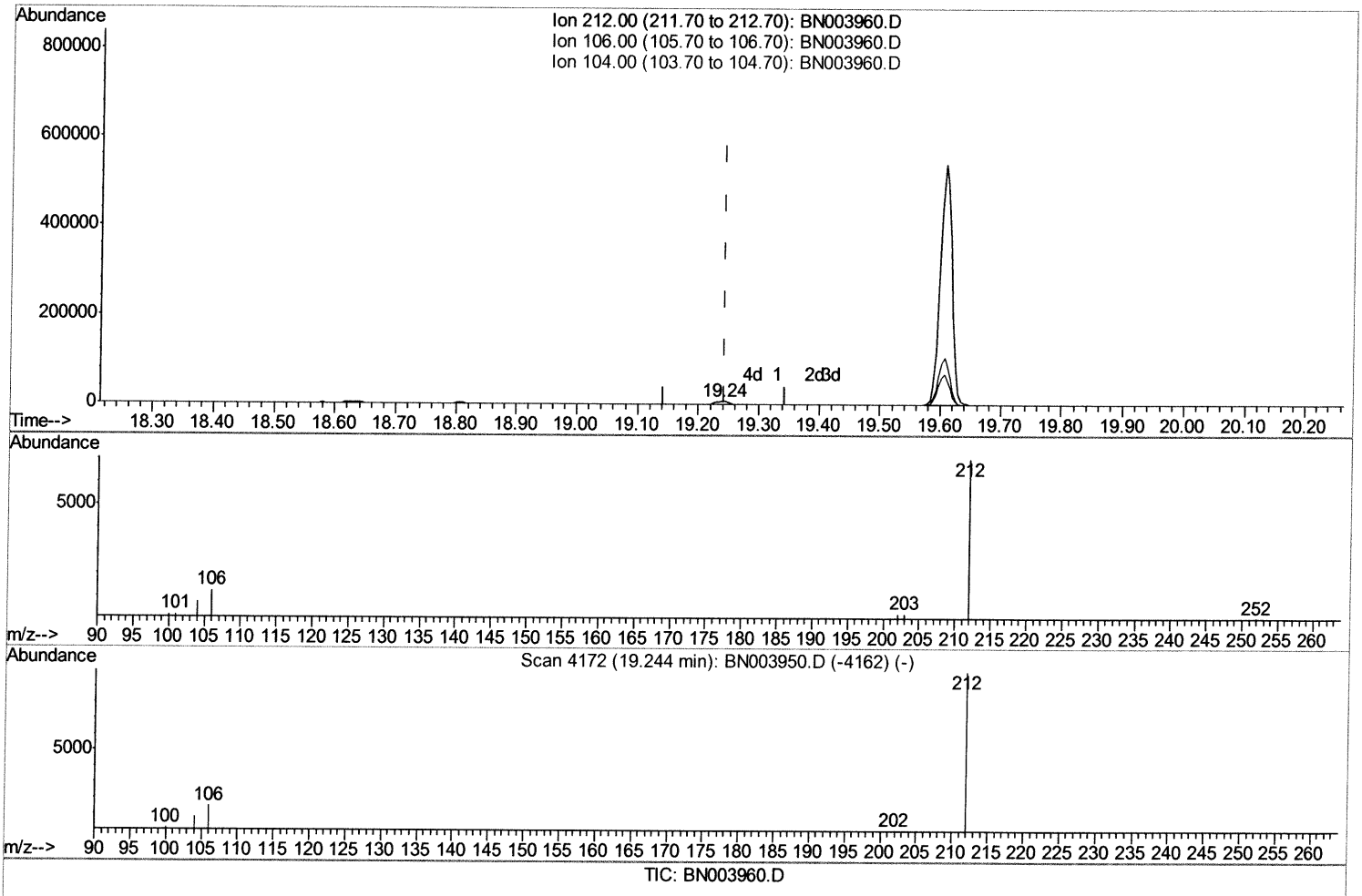
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:53:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



(14) Fluoranthene-d10 (SURR)

19.239min (-0.005) 0.23ng/ul m SJ 12/19/18

response 9488

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.84#
104.00	8.00	1.19#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

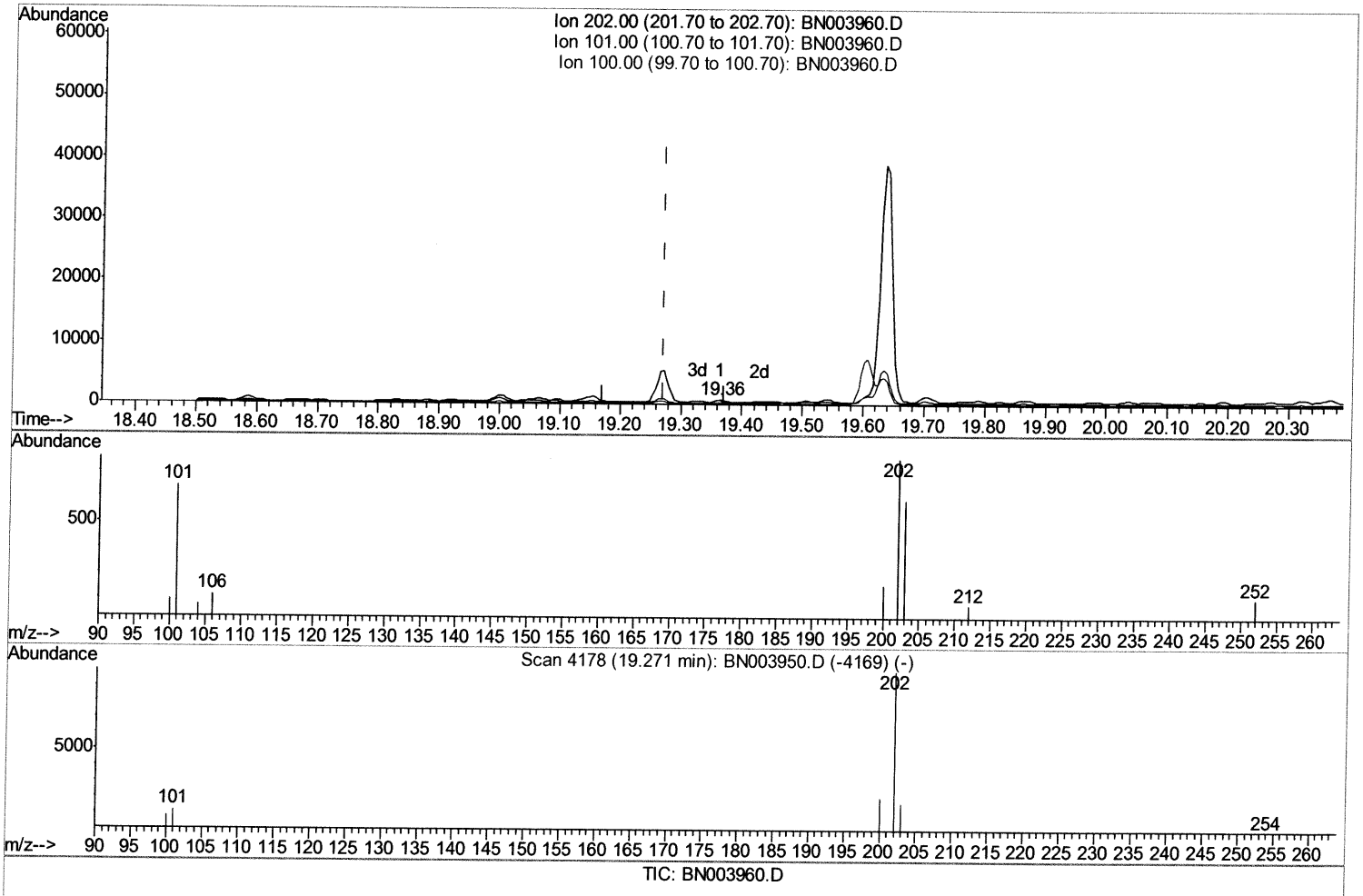
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:53:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



TIC: BN003960.D

(15) Fluoranthene (C)

19.364min (+0.093) 0.01ng/ul

response 510

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	85.45#
100.00	8.10	25.66
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

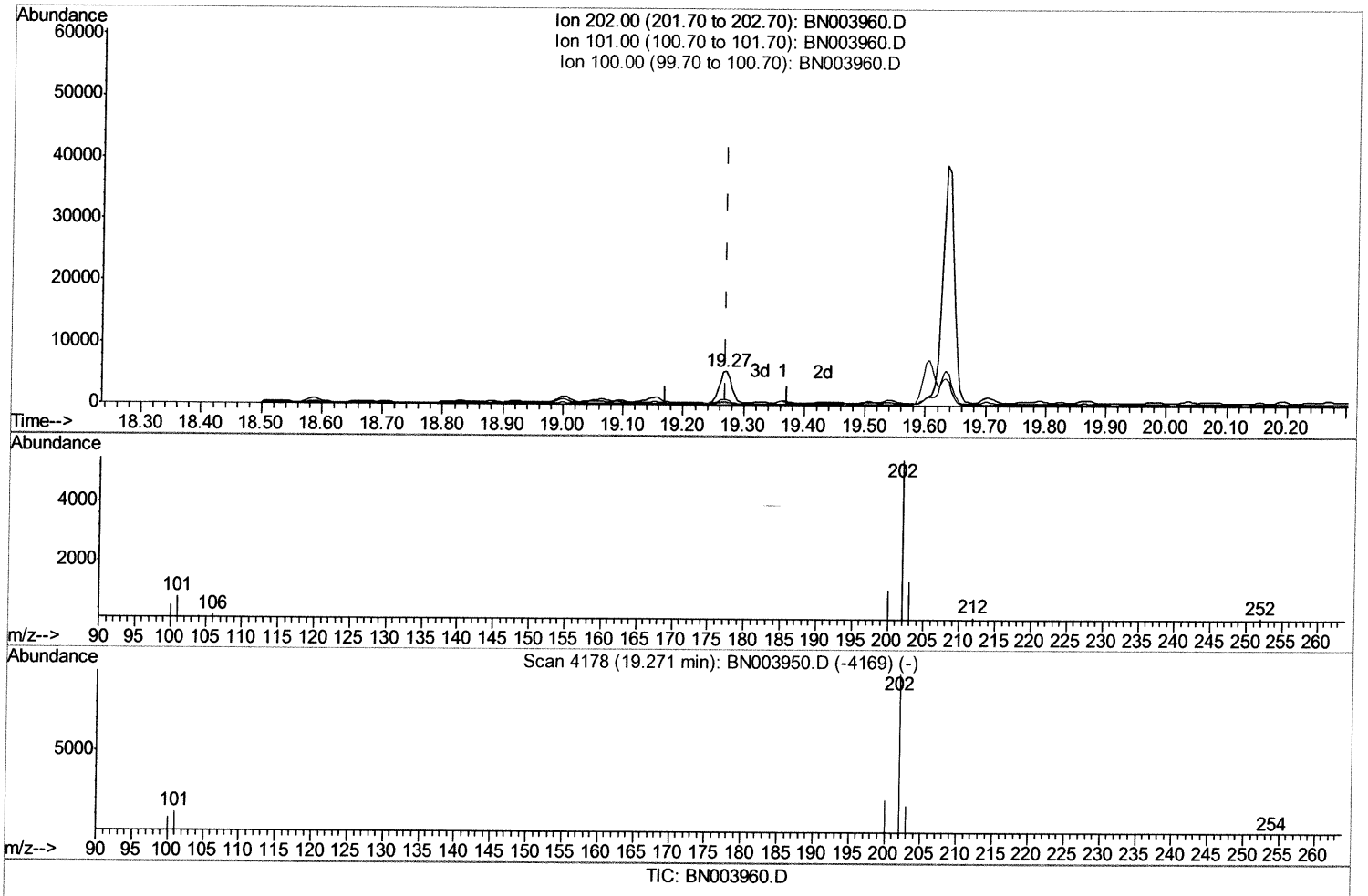
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:53:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



TIC: BN003960.D

(15) Fluoranthene (C)

19.272min (+0.000) 0.14ng/ul m > SJ 12/19/18

response 7235

Ion	Exp%	Act%
202.00	100	100
101.00	10.70	14.94
100.00	8.10	9.65
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

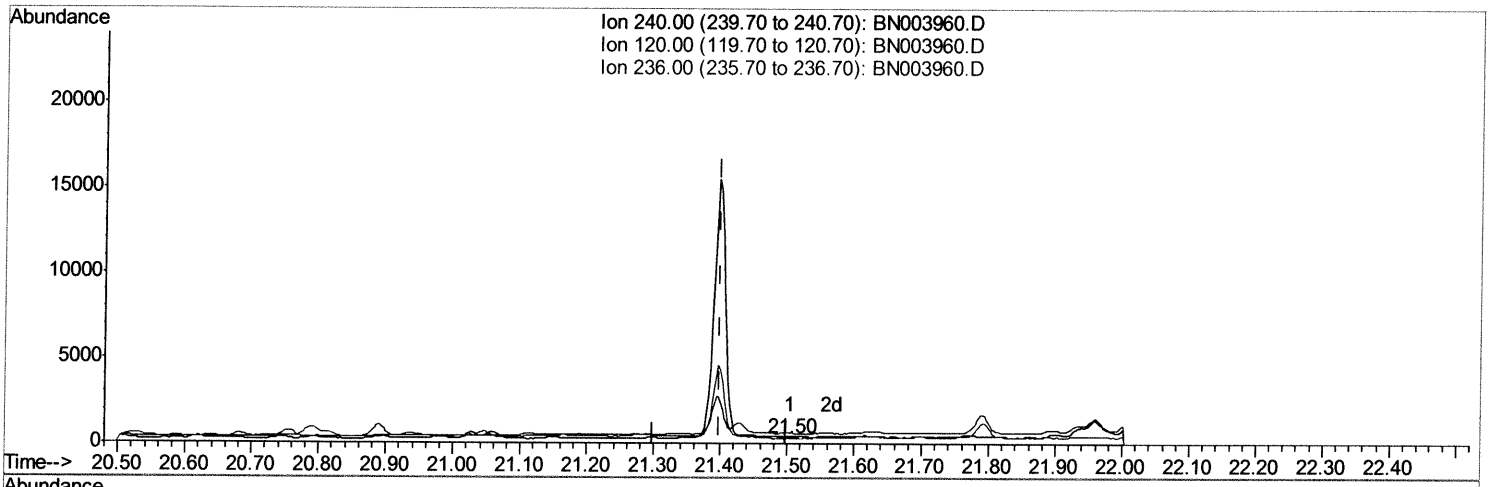
Quantitation Report (Qedit)

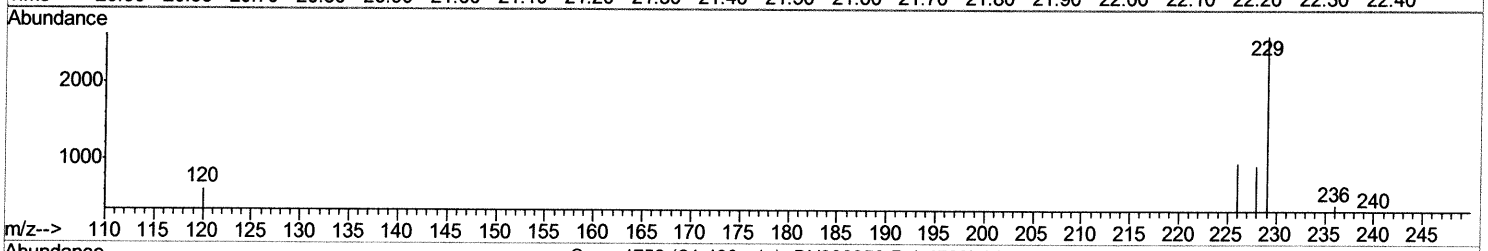
Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

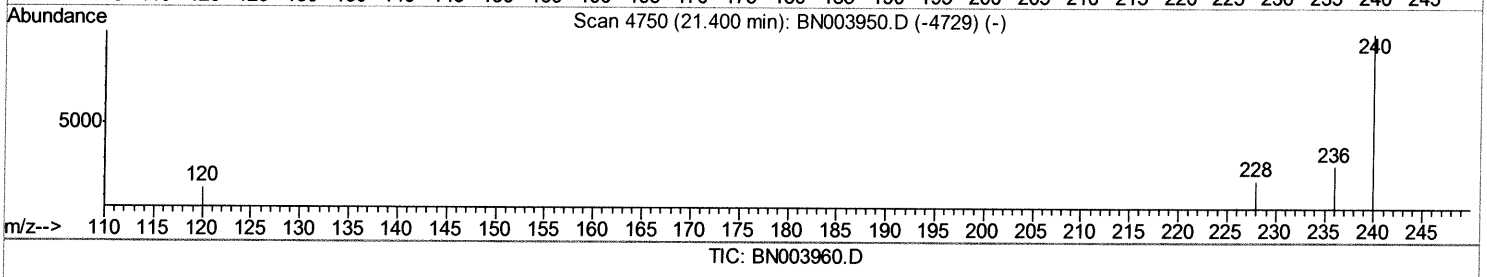
Quant Time: Dec 15 22:53:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM







TIC: BN003960.D

(16) Chrysene-d12 (I)

21.505min (+0.105) 0.40ng/ul

response 48

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	177.21#
236.00	27.60	120.51#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

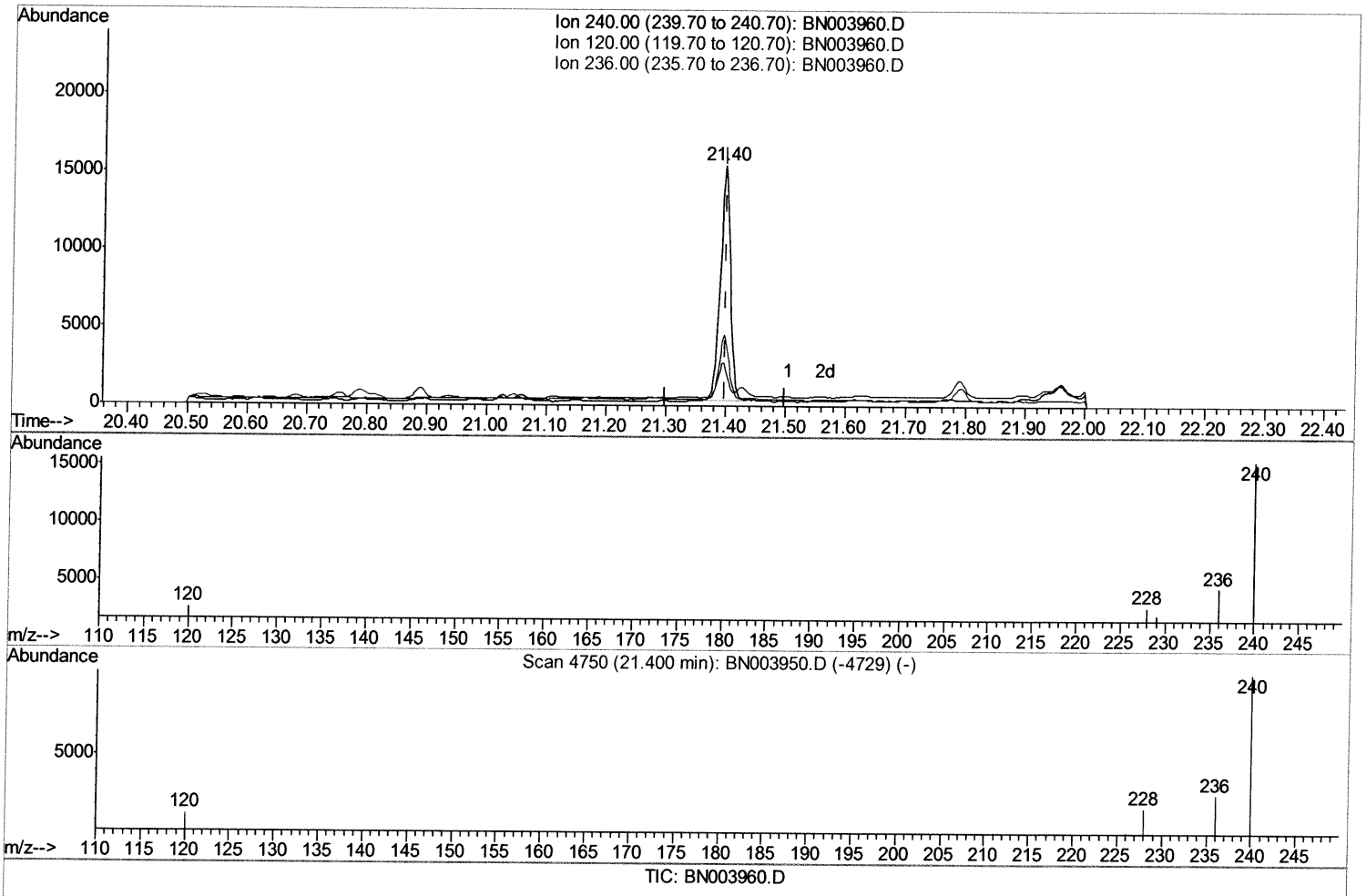
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:53:05 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



TIC: BN003960.D

(16) Chrysene-d12 (I)

21.397min (-0.003) 0.40ng/ul m SJ 12/19/18

response 17775

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	17.57#
236.00	27.60	29.35
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

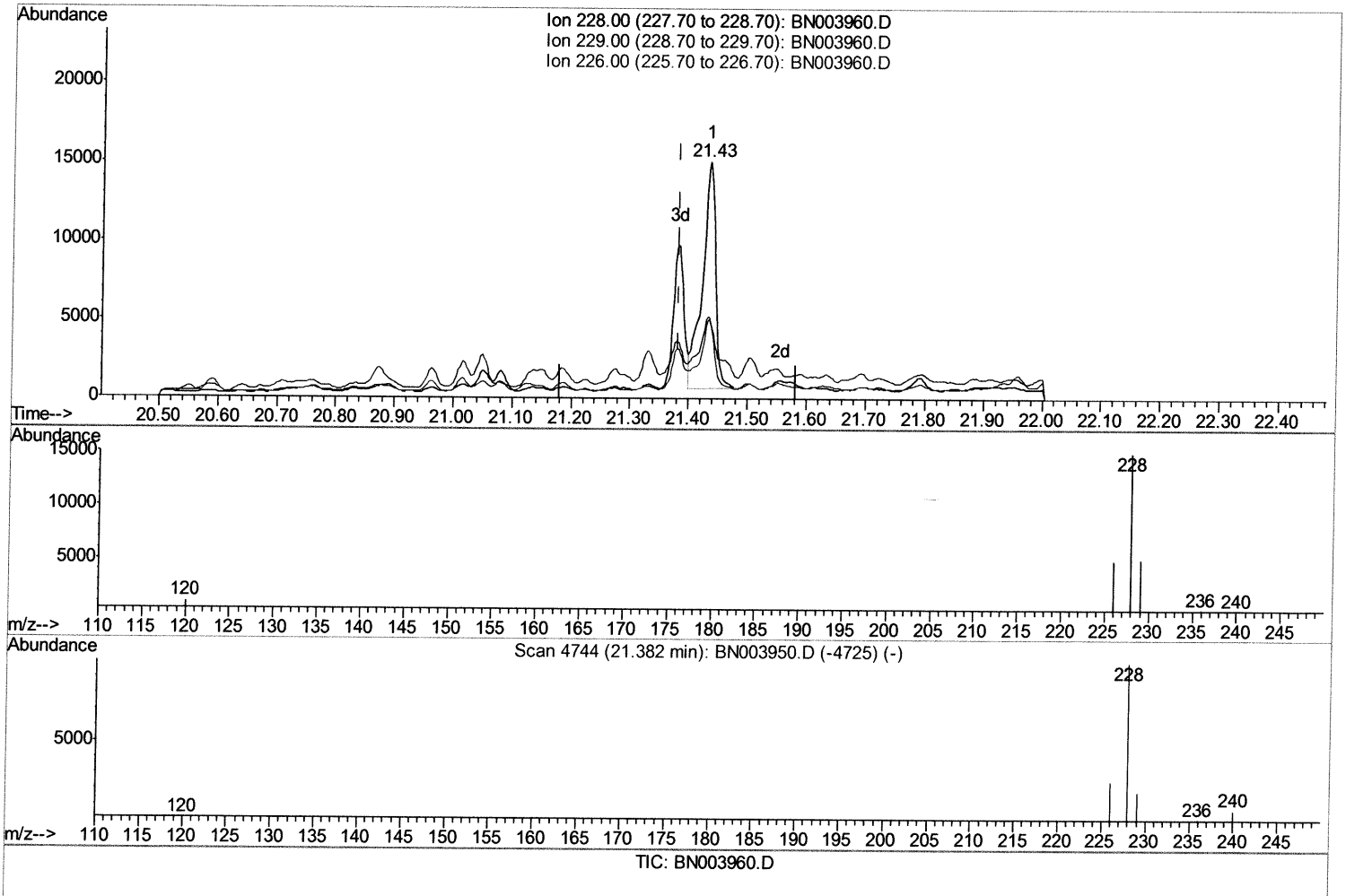
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:54:33 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



TIC: BN003960.D

(18) Benzo(a)anthracene

21.435min (+0.053) 0.40ng/ul

response 22572

Ion	Exp%	Act%
228.00	100	100
229.00	19.50	33.89#
226.00	26.40	33.30#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

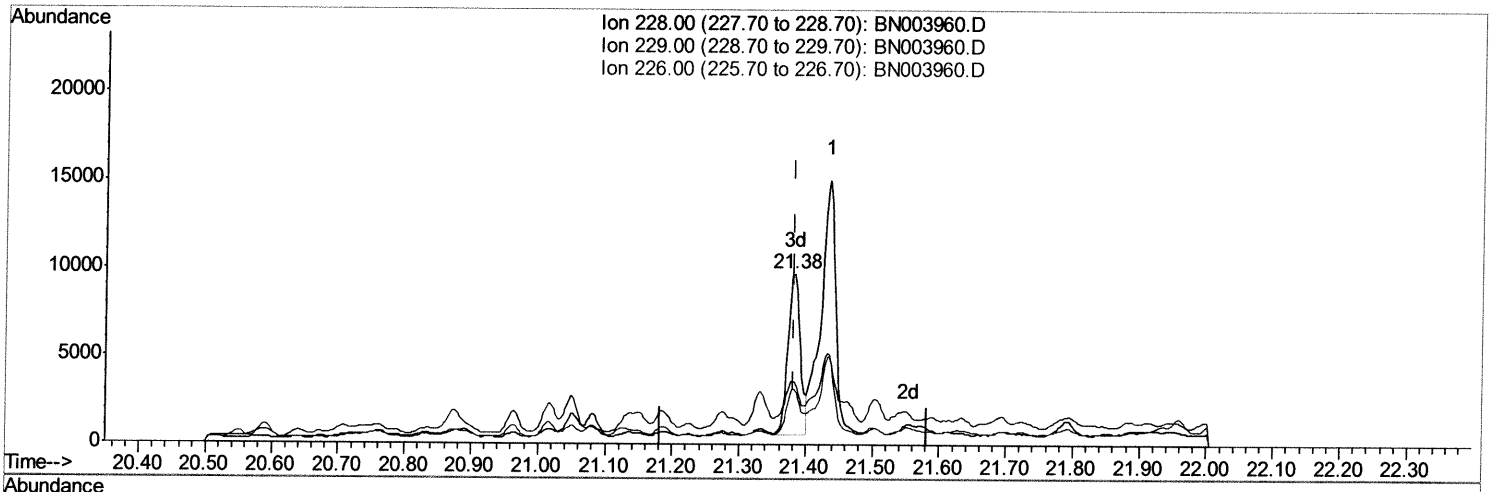
Quantitation Report (Qedit)

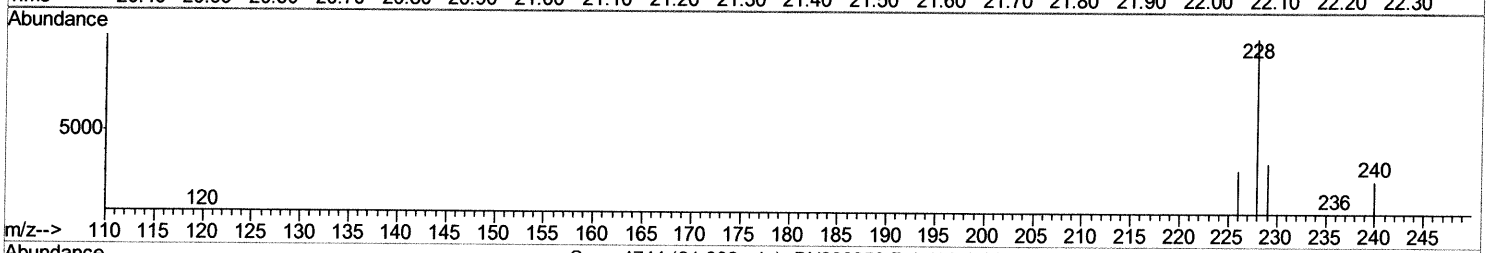
Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

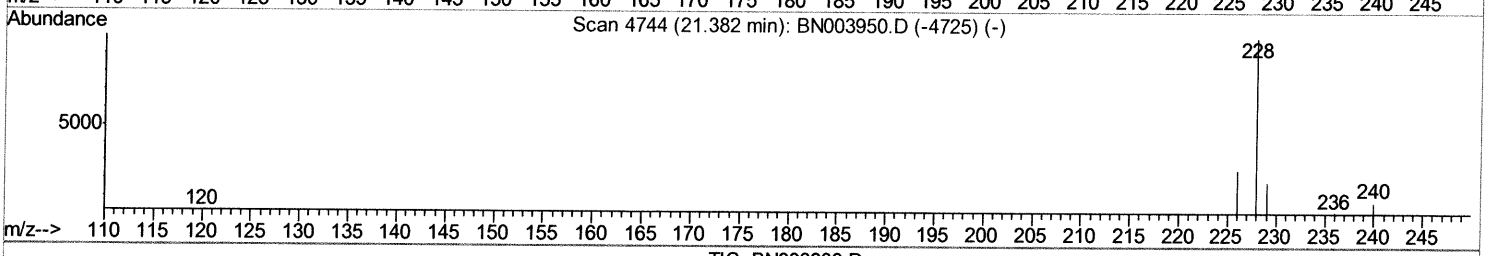
Quant Time: Dec 15 22:54:33 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM







TIC: BN003960.D

(18) Benzo(a)anthracene

21.382min (+0.000) 0.21ng/ul m SJ 12/19/18

response 11815

Ion	Exp%	Act%
228.00	100	100
229.00	19.50	36.45#
226.00	26.40	32.31#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

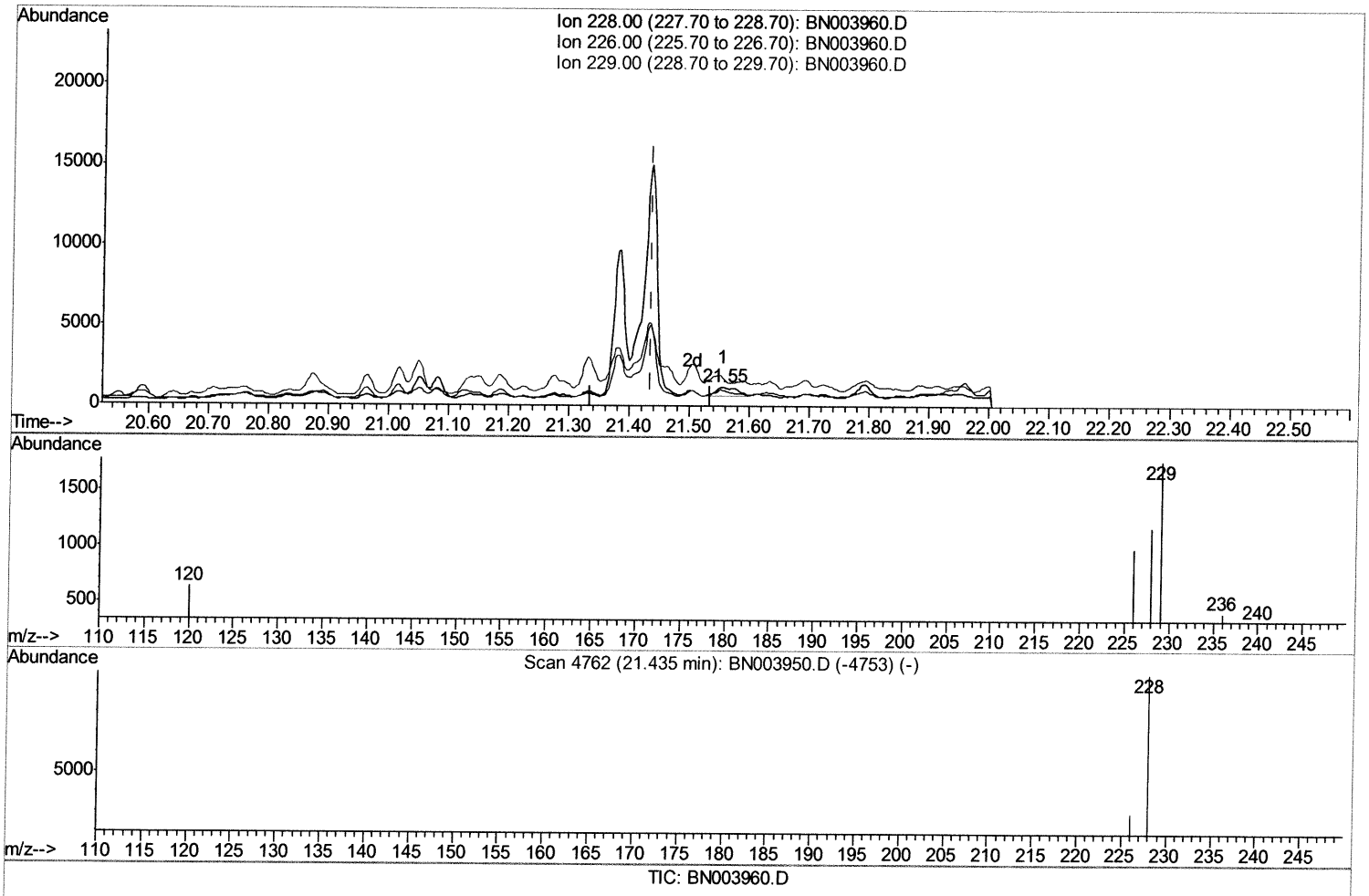
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:54:33 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



(19) Chrysene

21.555min (+0.120) 0.02ng/ul

response 1344

Ion	Exp%	Act%
228.00	100	100
226.00	30.00	83.79#
229.00	19.60	150.68#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

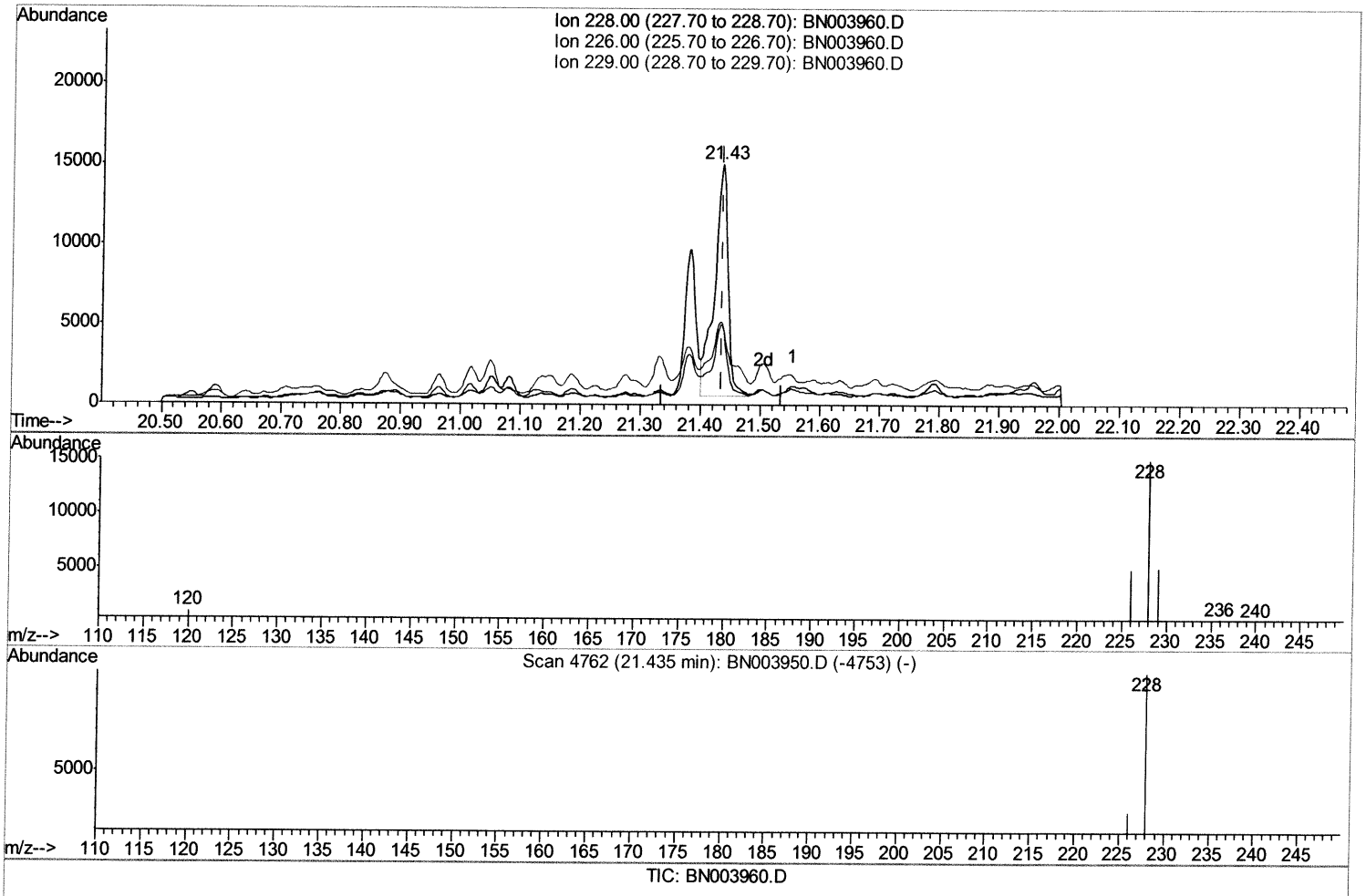
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:54:33 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



TIC: BN003960.D

(19) Chrysene

21.435min (+0.000) 0.36ng/ul m SD 12/17/18

response 23031

Ion	Exp%	Act%
228.00	100	100
226.00	30.00	33.30
229.00	19.60	33.89#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

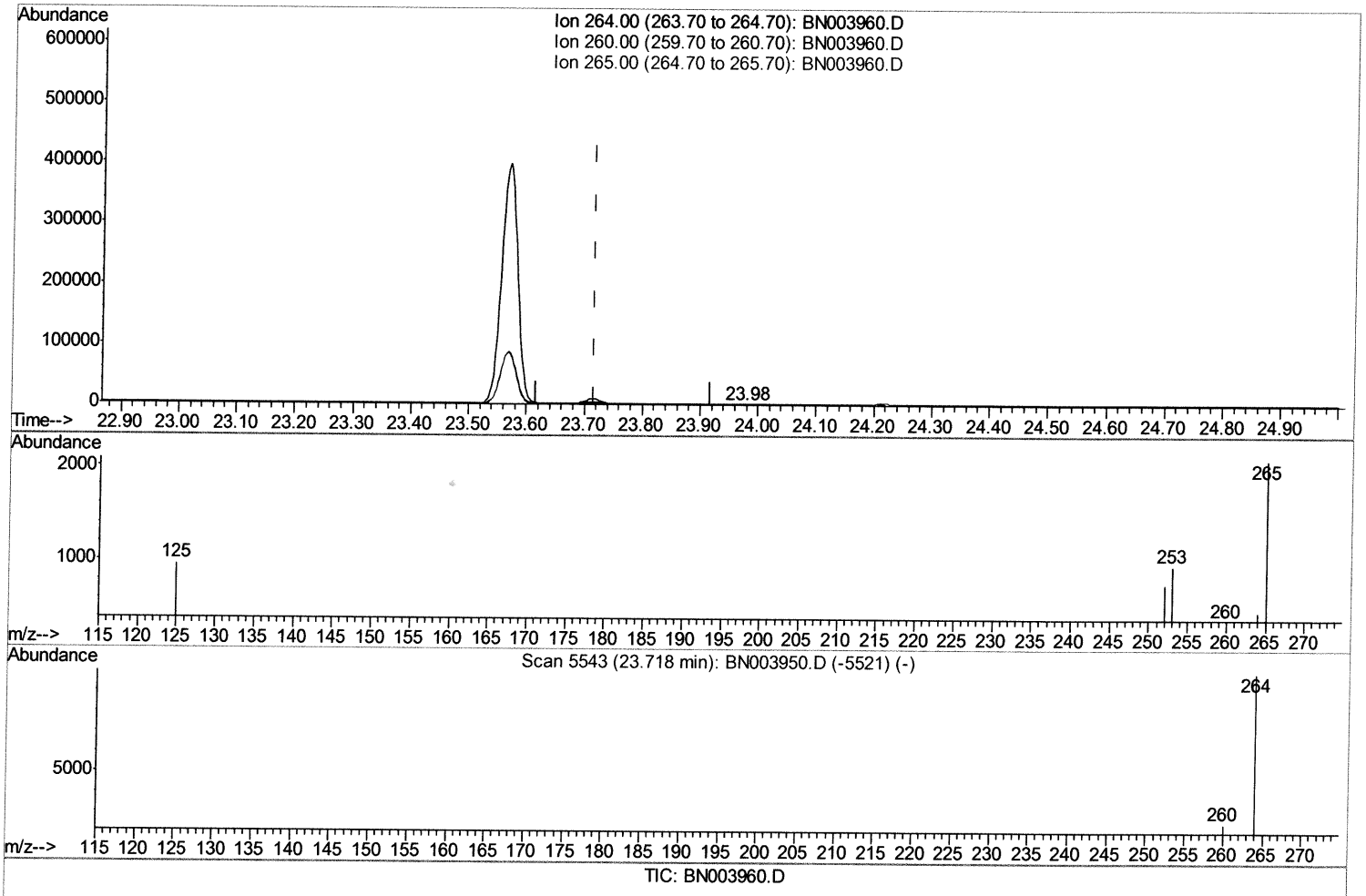
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:54:33 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



TIC: BN003960.D

(20) Perylene-d12 (I)

23.978min (+0.260) 0.40ng/ul

response 166

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	83.37#
265.00	33.50	442.64#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

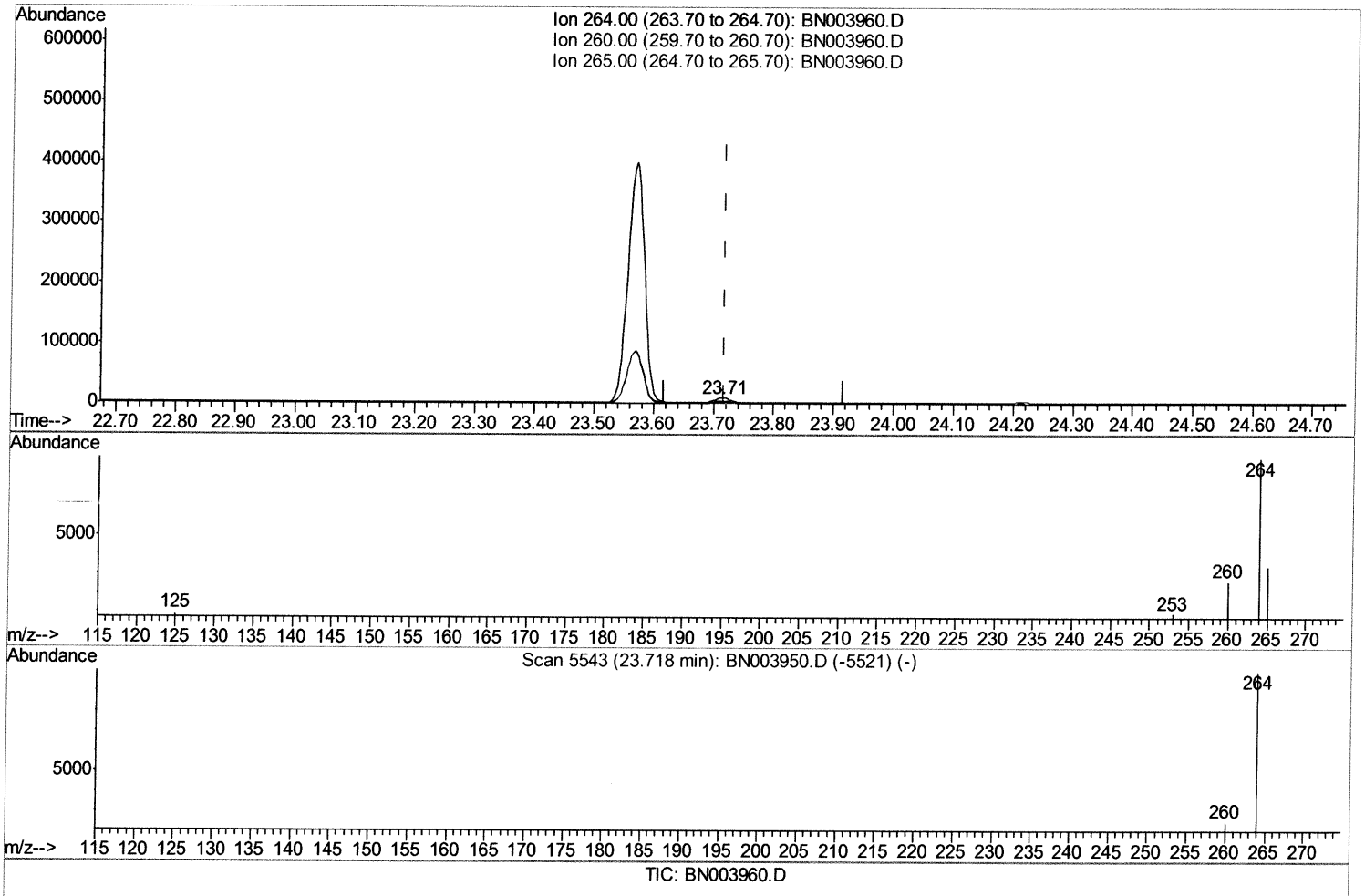
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:54:33 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



(20) Perylene-d12 (I)

23.715min (-0.003) 0.40ng/ul m

SJ 12/17/18

response 16182

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	29.14
265.00	33.50	37.89
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

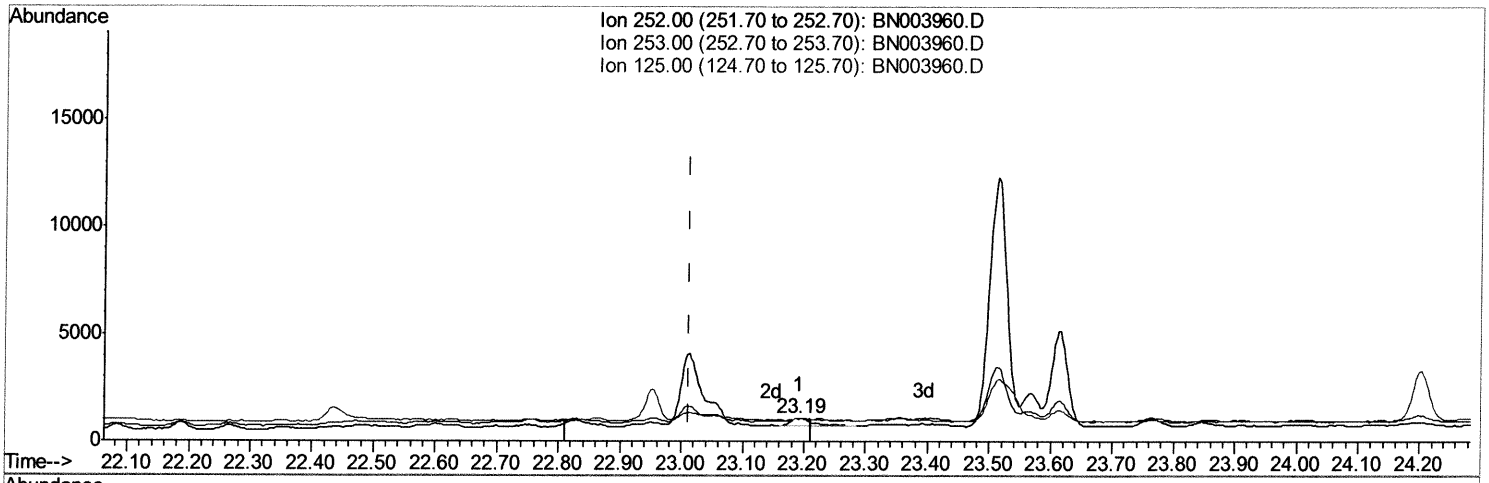
Quantitation Report (Qedit)

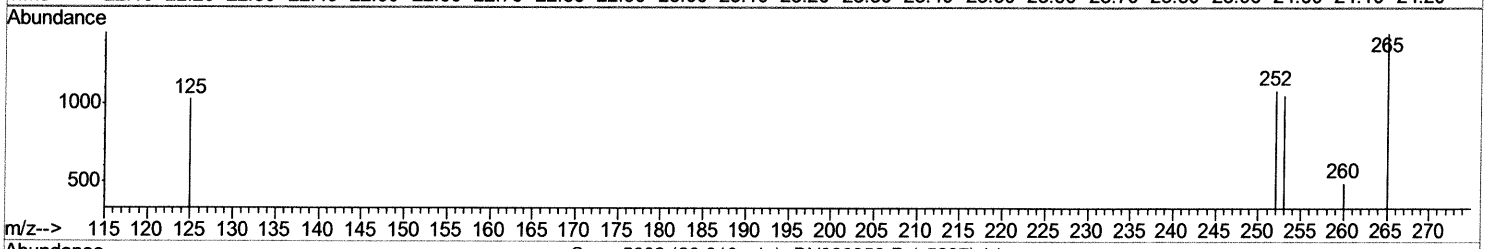
Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

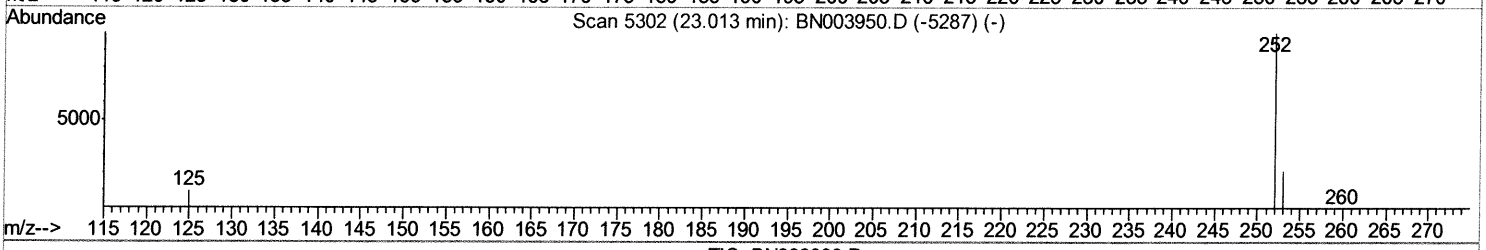
Quant Time: Dec 15 22:55:48 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM







TIC: BN003960.D

(21) Benzo(b)fluoranthene

23.191min (+0.178) 0.01ng/ul

response 868

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	96.96#
125.00	11.20	94.39#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

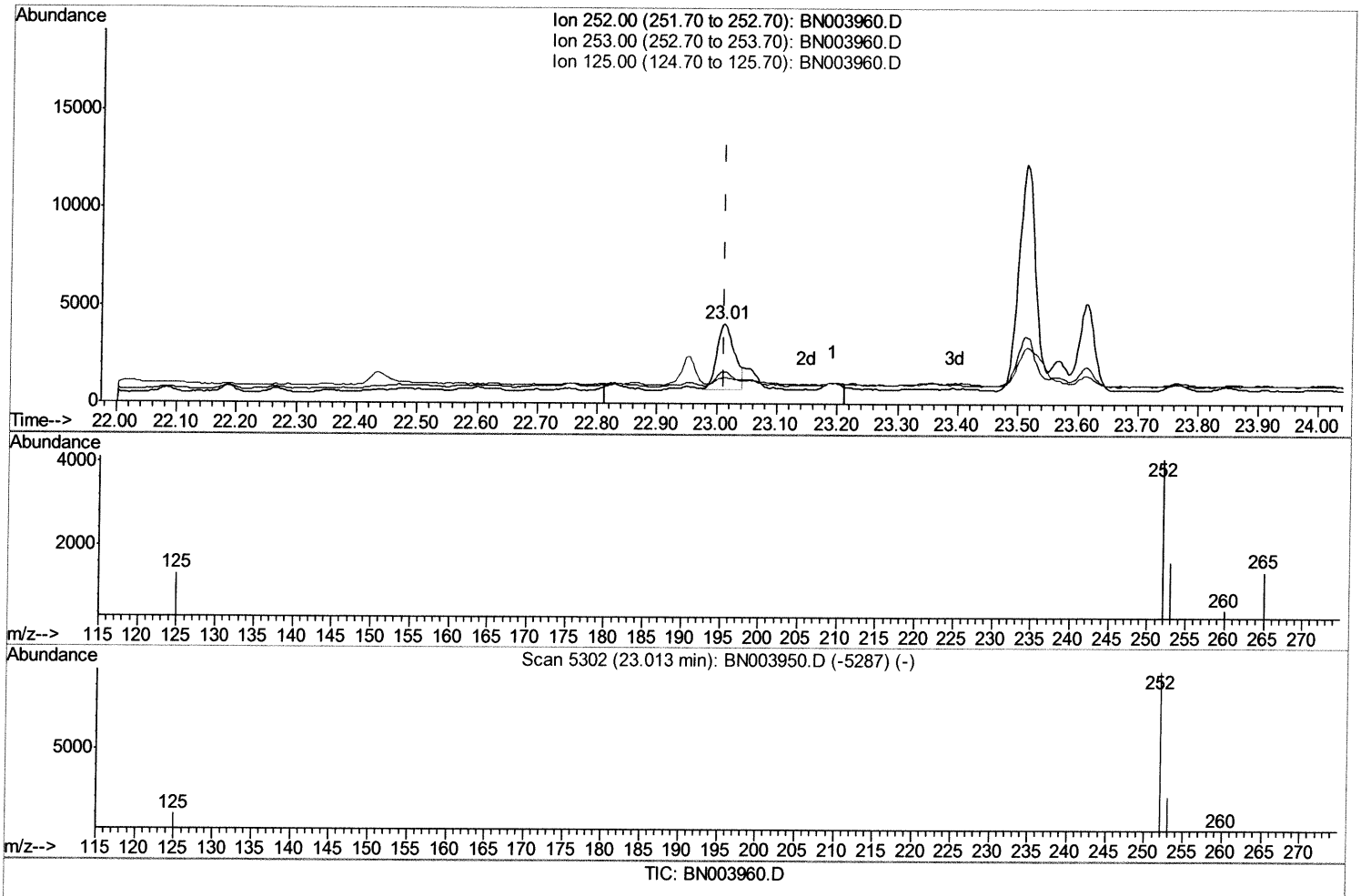
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:55:48 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



(21) Benzo(b)fluoranthene

23.013min (+0.000) 0.10ng/ul m SJ 12/17/18

response 6820

Ion	Exp%	Act%
252.00	100	100
253.00	23.00	40.17
125.00	11.20	32.47#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

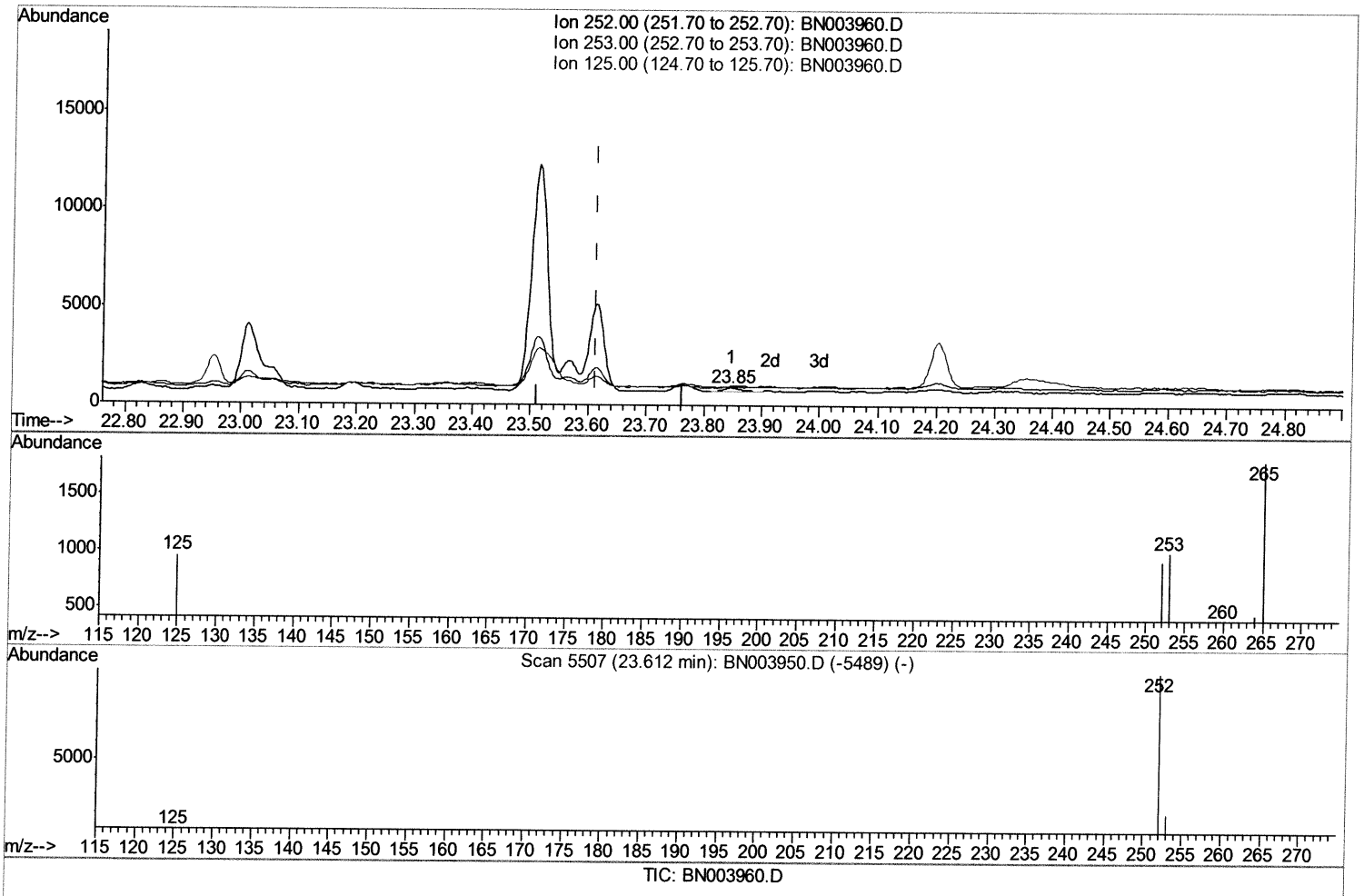
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:55:48 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



(23) Benzo(a)pyrene (C)

23.846min (+0.234) 0.01ng/ul

response 497

Ion	Exp%	Act%
252.00	100	100
253.00	23.70	107.83#
125.00	12.80	101.93#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

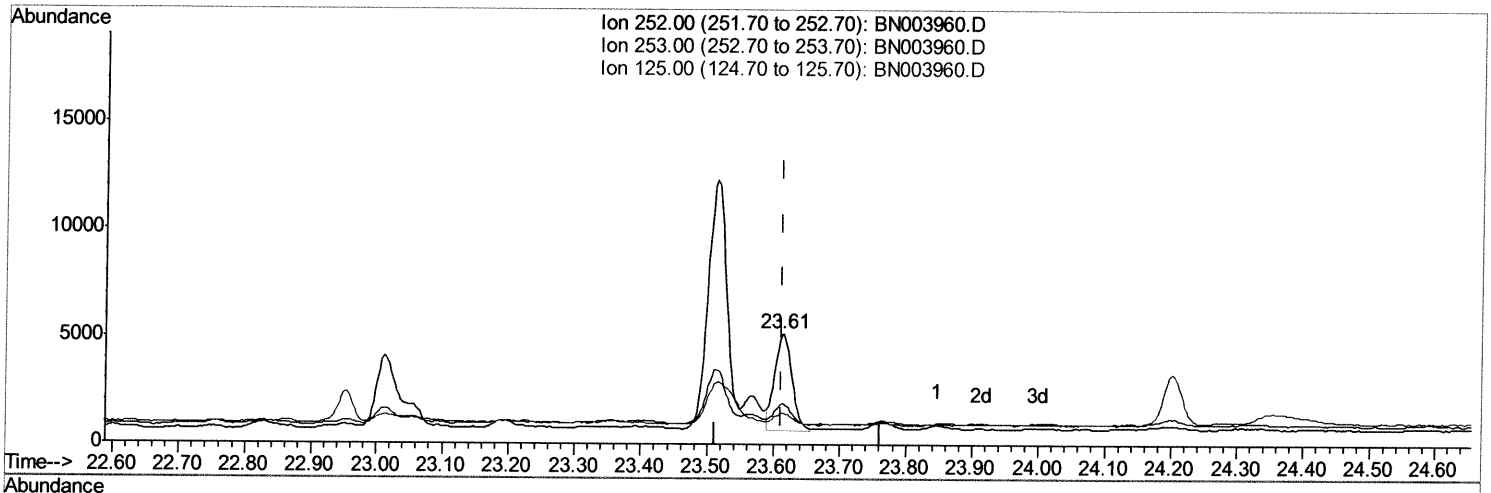
Quantitation Report (Qedit)

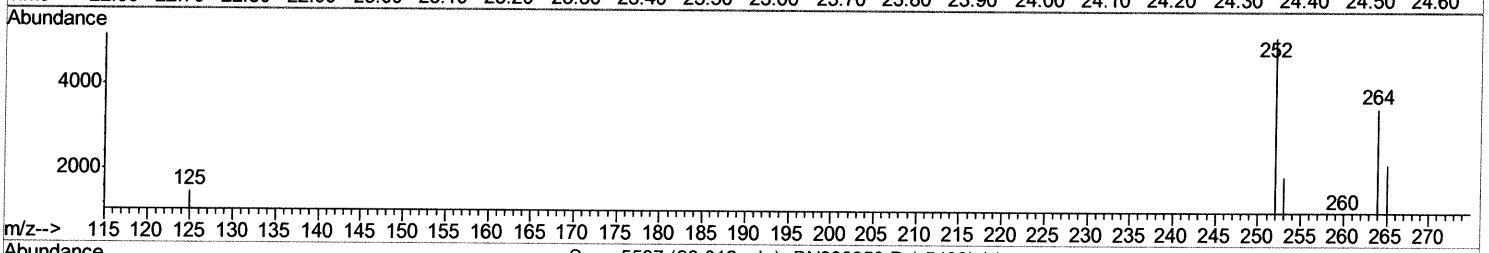
Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

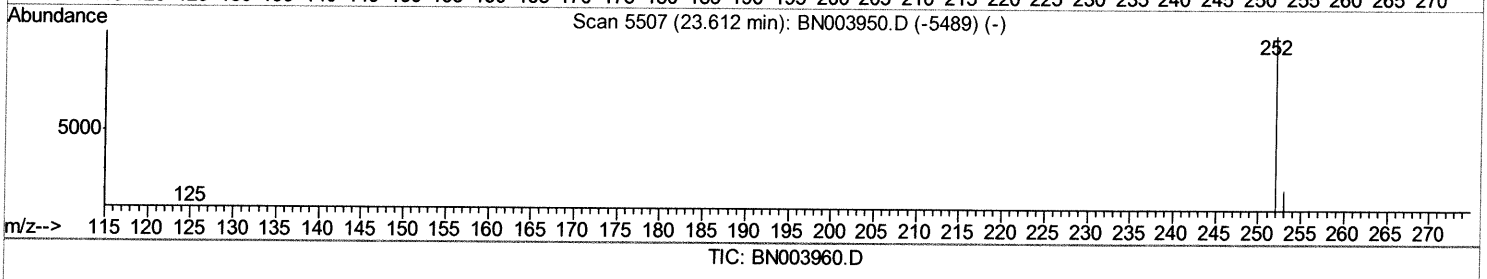
Quant Time: Dec 15 22:55:48 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM







(23) Benzo(a)pyrene (C)

23.612min (+0.000) 0.14ng/ul m SJ 12/17/18

response 8186

Ion	Exp%	Act%
252.00	100	100
253.00	23.70	36.94#
125.00	12.80	28.69#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

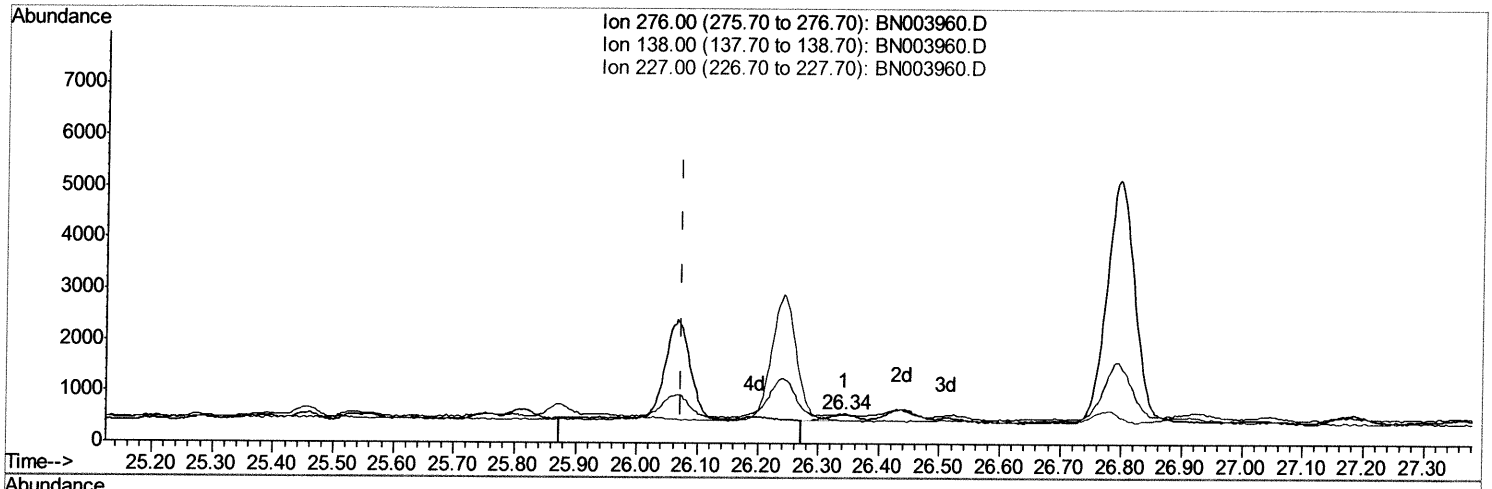
Quantitation Report (Qedit)

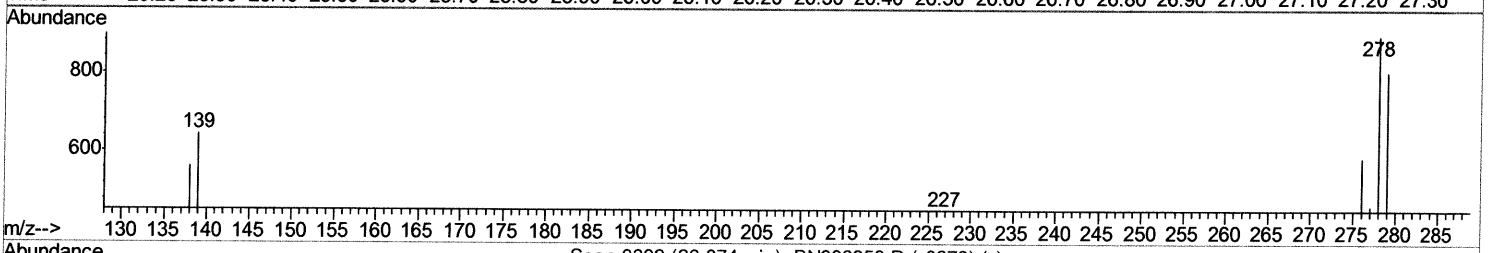
Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

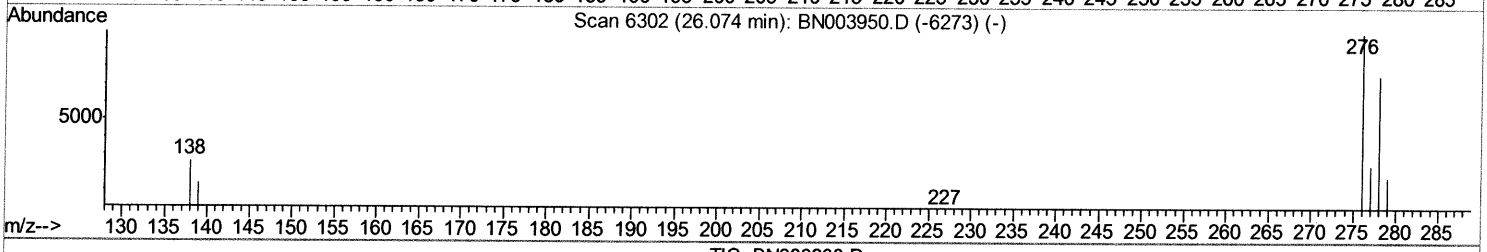
Quant Time: Dec 15 22:55:48 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM







TIC: BN003960.D

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

26.342min (+0.268) 0.01ng/ul

response 449

Ion	Exp%	Act%
276.00	100	100
138.00	25.40	0.00#
227.00	0.20	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

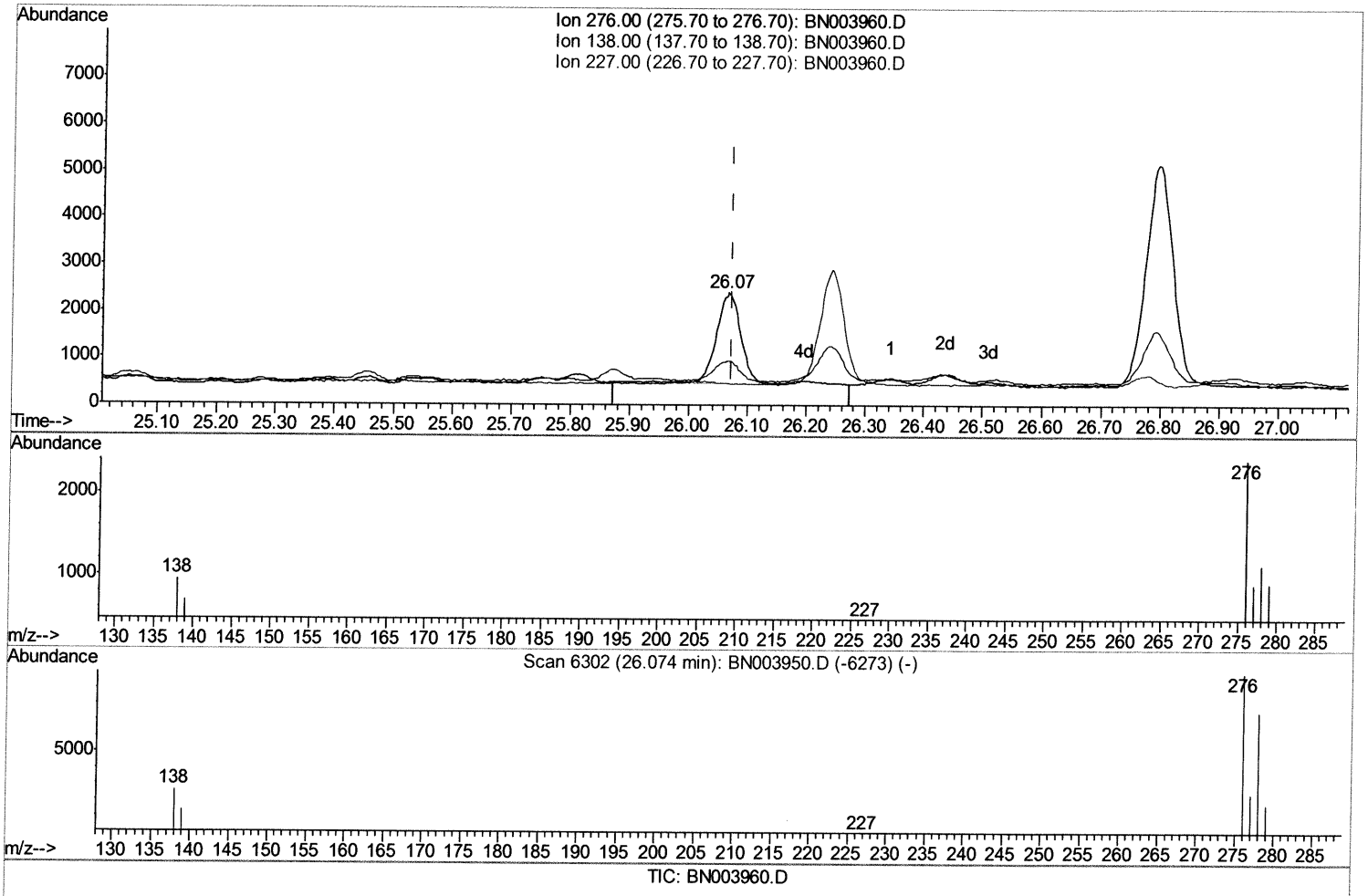
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:55:48 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



TIC: BN003960.D

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

26.067min (-0.007) 0.08ng/ul m SJ 12/19/18

response 5510

Ion	Exp%	Act%
276.00	100	100
138.00	25.40	0.00#
227.00	0.20	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

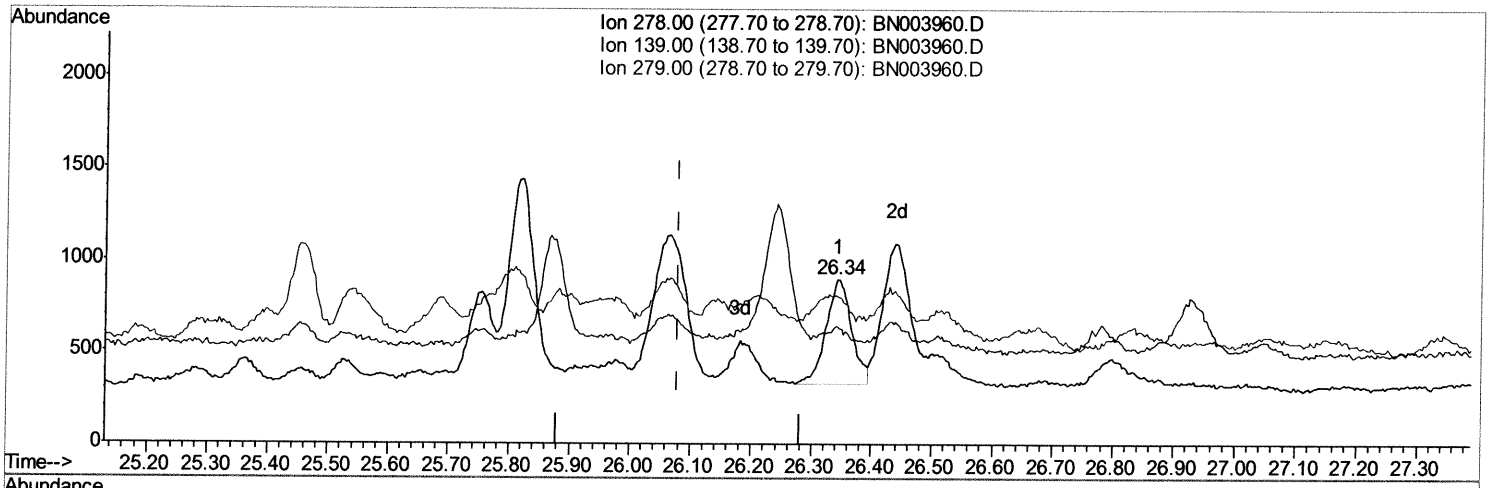
Quantitation Report (Qedit)

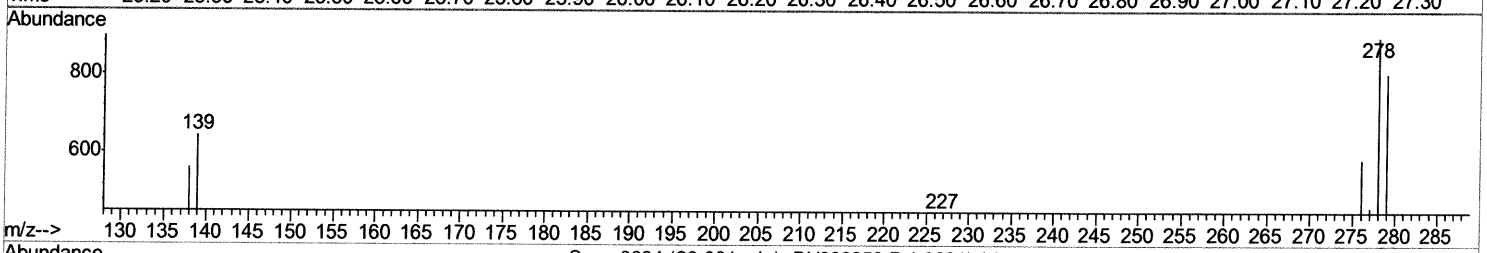
Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

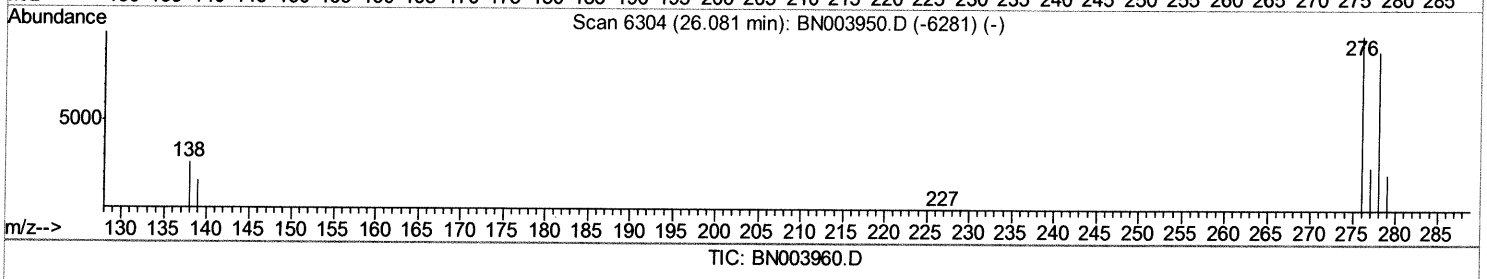
Quant Time: Dec 15 22:55:48 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM







(25) Dibenzo(a,h)anthracene

26.342min (+0.262) 0.03ng/ul

response 1683

Ion	Exp%	Act%
278.00	100	100
139.00	17.80	71.76#
279.00	24.70	89.84#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

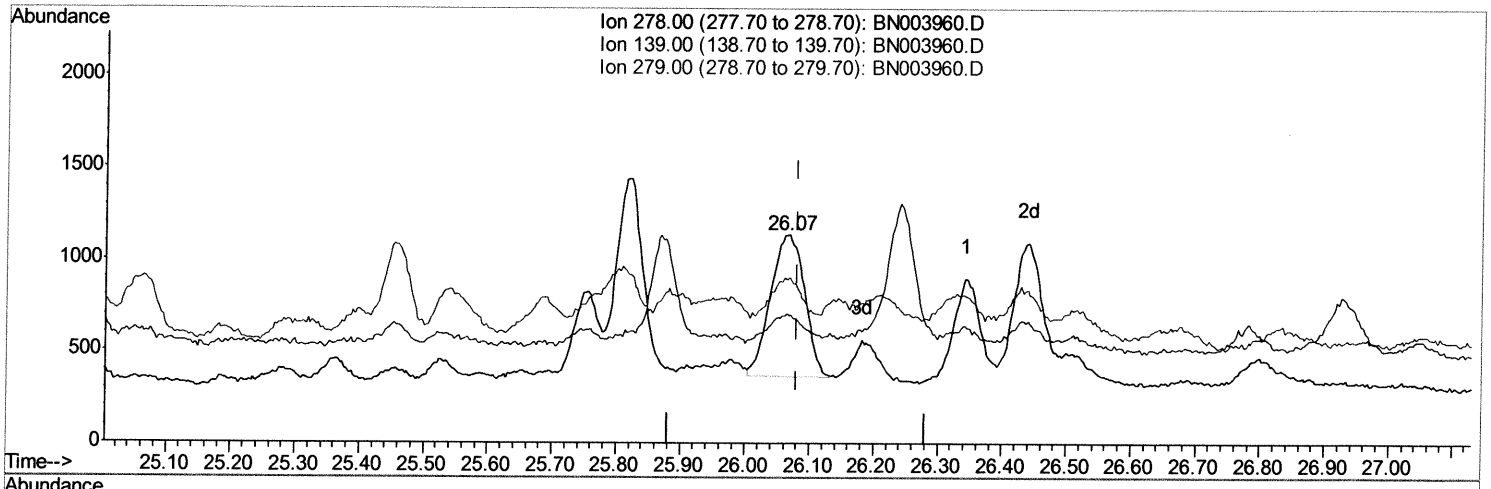
Quantitation Report (Qedit)

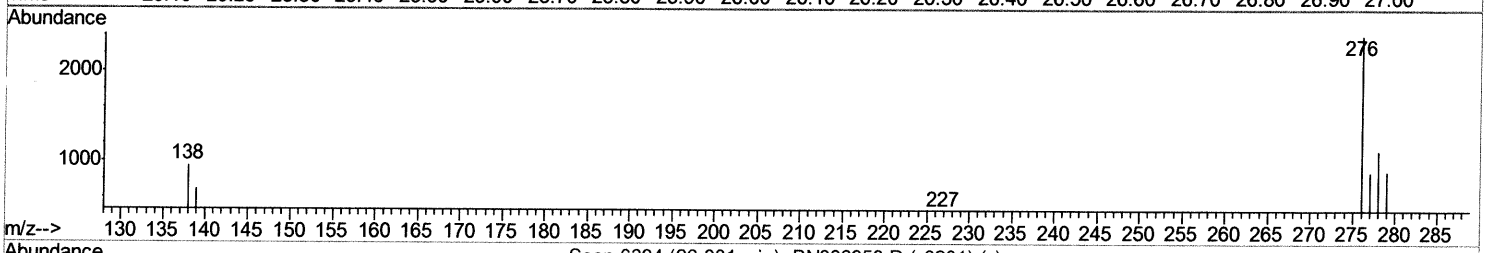
Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

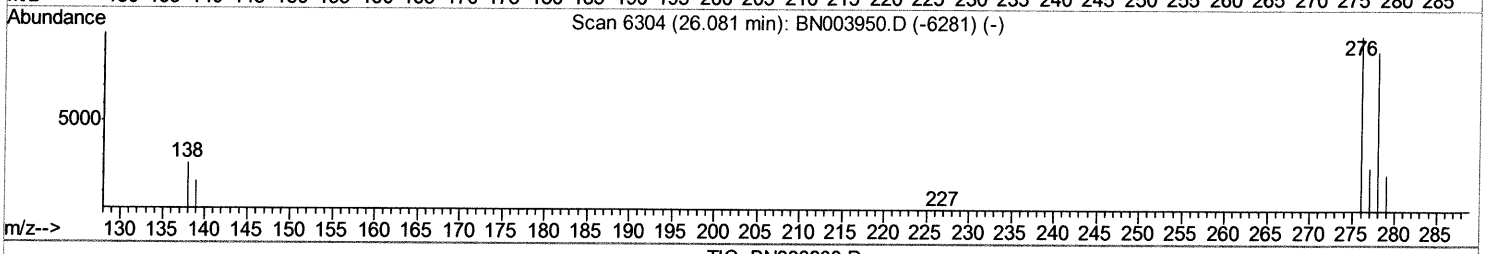
Quant Time: Dec 15 22:55:48 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM







TIC: BN003960.D

(25) Dibenzo(a,h)anthracene

26.067min (-0.013) 0.05ng/ul m SJ 12/17/18

response 2815

Ion	Exp%	Act%
278.00	100	100
139.00	17.80	60.90#
279.00	24.70	79.52#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

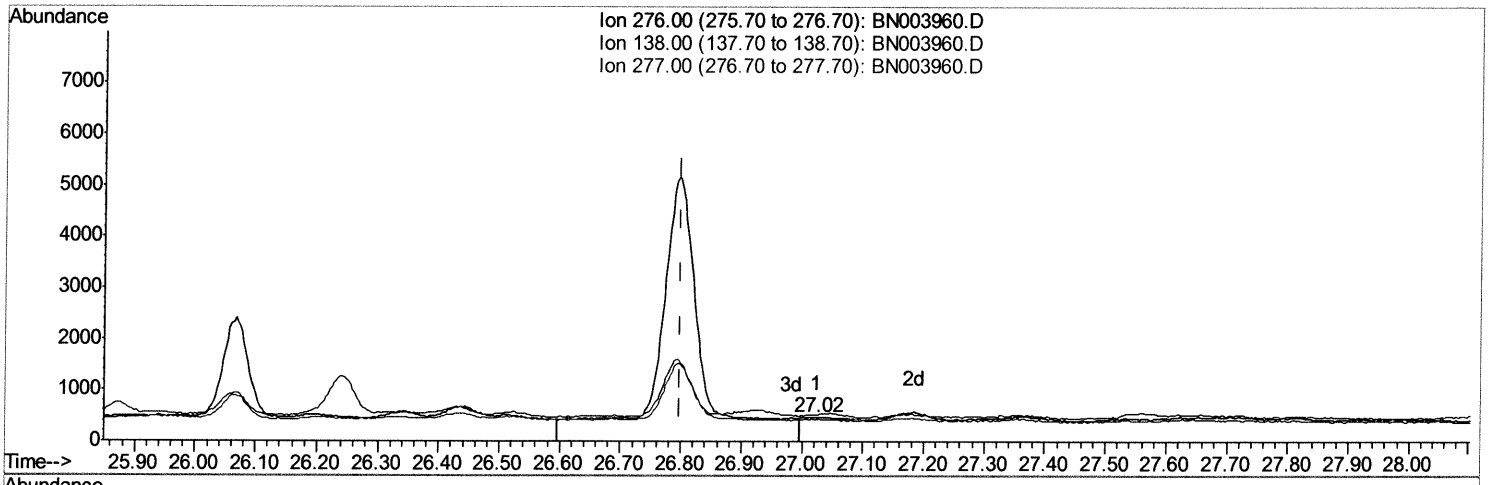
Quantitation Report (Qedit)

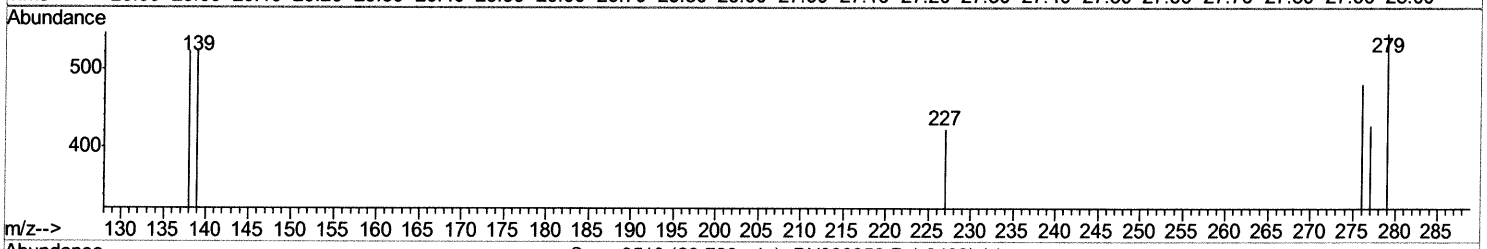
Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

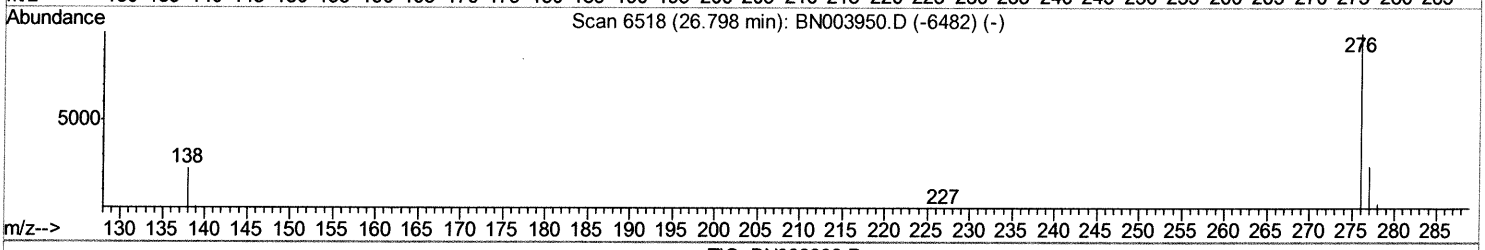
Quant Time: Dec 15 22:55:48 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM







TIC: BN003960.D

(26) Benzo(g,h,i)perylene

27.023min (+0.225) 0.00ng/ul

response 218

Ion	Exp%	Act%
276.00	100	100
138.00	22.10	108.52#
277.00	24.10	88.98#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

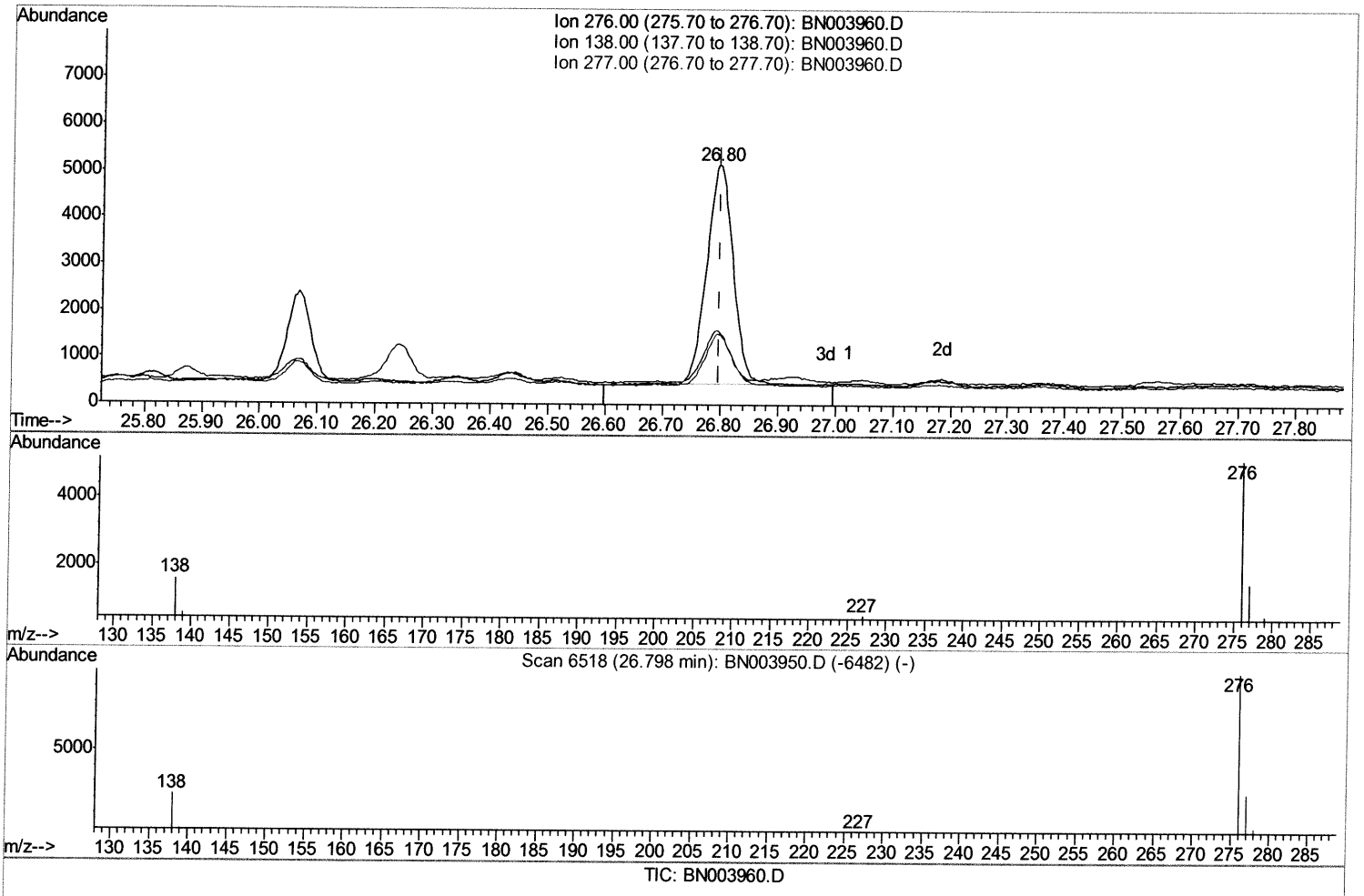
Quantitation Report (Qedit)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:55:48 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM



TIC: BN003960.D

(26) Benzo(g,h,i)perylene

26.795min (-0.003) 0.26ng/ul m SJ 12/17/18

response 15056

Ion	Exp%	Act%
276.00	100	100
138.00	22.10	30.92#
277.00	24.10	29.44#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN121518\

Quantitation Report (QT Reviewed)

Data File : BN003960.D
Acq On : 15 Dec 2018 15:42
Operator : JU/SJ
Sample : J6227-16
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 15 22:57:41 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	1809	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	8997	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	5471	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	13810m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	17775m	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	16182m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	2964	0.21	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	9488m	0.23	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.68	128	3155	0.125	ng/ul#	93
5) 2-Methylnaphthalene	12.29	142	7152	0.405	ng/ul	100
12) Phenanthrene	17.26	178	26602m	0.587	ng/ul	
13) Anthracene	17.35	178	20814m	0.559	ng/ul	
15) Fluoranthene	19.27	202	7235m	0.135	ng/ul	
17) Pyrene	19.63	202	53089	0.833	ng/ul	96
18) Benzo(a)anthracene	21.38	228	11815m	0.210	ng/ul	
19) Chrysene	21.43	228	23031m	0.358	ng/ul	
21) Benzo(b)fluoranthene	23.01	252	6820m	0.102	ng/ul	
23) Benzo(a)pyrene	23.61	252	8186m	0.141	ng/ul	
24) Indeno(1,2,3-cd)pyrene	26.07	276	5510m	0.083	ng/ul	
25) Dibenzo(a,h)anthracene	26.07	278	2815m	0.053	ng/ul	
26) Benzo(g,h,i)perylene	26.80	276	15056m	0.261	ng/ul	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SD
12/19/18

Instrument :
BNA_N
ClientSampleId :
F9F35

Manual Integrations APPROVED
Sohil
12/17/2018 4:23:53 PM

FORM 6A-OR
GC/MS INITIAL CALIBRATION DATA

Lab Name: Chemtech Consulting Group | Contract: EPW14030

Lab Code: CHM | Case No.: 48019 | MA No.: | SDG No.: F9E54

Analytical Method : SVOA SIM | Level :

Instrument ID: BNA_N | Calibration Date(s): 11/19/2018 11/19/2018

GC Column: ZB-GR | ID: 0.25 (mm) | Calibration Time(s): 12:15 15:10

Length : 30 (m)

Heated Purge: (Y/N) | Purge Volume : (mL)

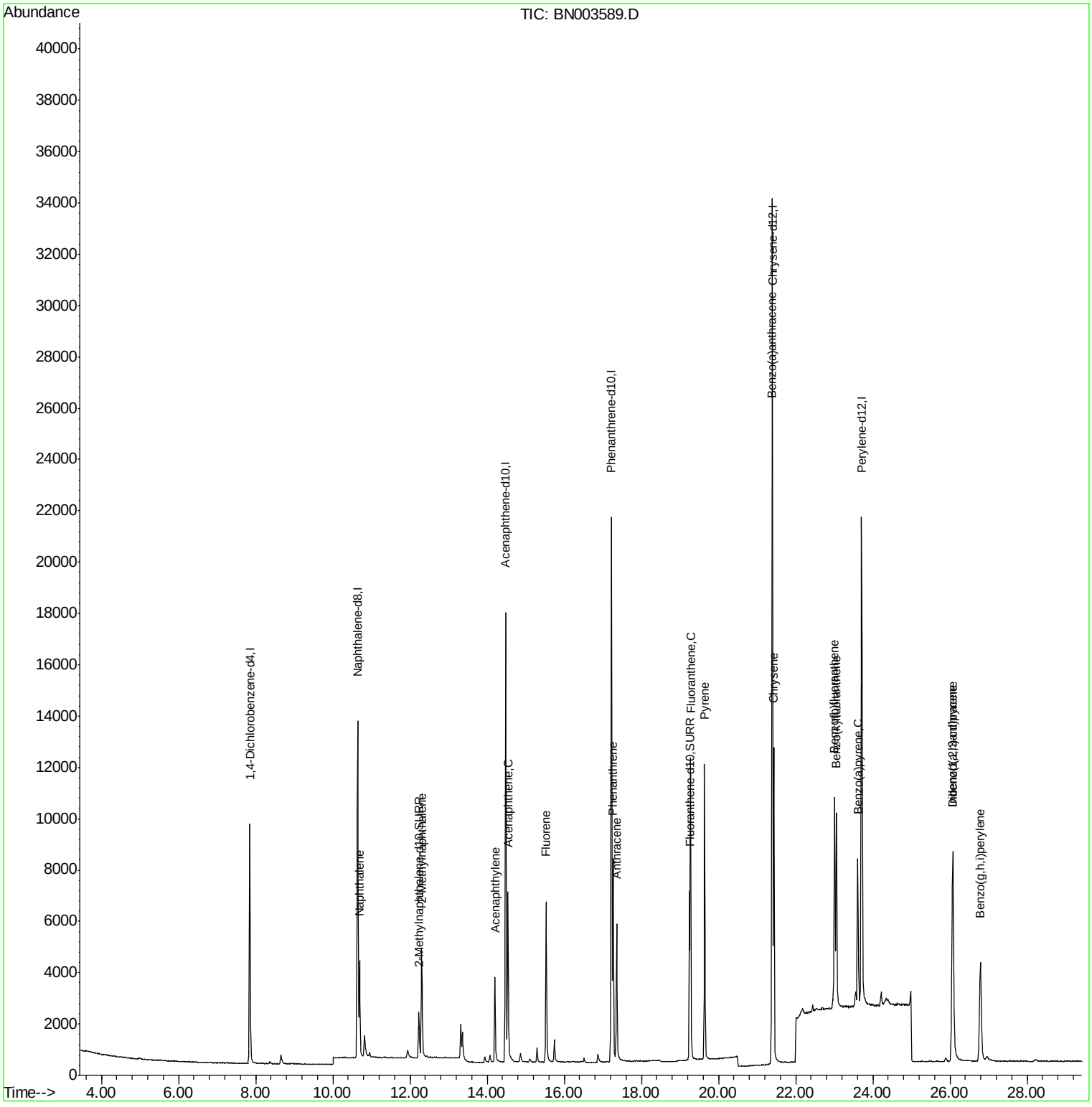
LAB FILE ID:	RRF0.1 =BN003589.D RRF0.8 =BN003592.D			RRF0.2= BN003590.D RRF1.6= BN003593.D			RRF0.4 =BN003591.D RRF3.2 =BN003594.D	
ANALYTE	RRF0.1	RRF0.2	RRF0.4	RRF0.8	RRF1.6	RRF3.2	$\overline{\text{RRF}}$	% RSD
Naphthalene	1.123	1.112	1.090	1.154	1.138		1.124	2.2
2-Methylnaphthalene	0.766	0.770	0.755	0.816	0.816		0.785	3.7
Acenaphthylene	1.769	1.742	1.756	1.841	1.897		1.801	3.7
Acenaphthene	1.566	1.549	1.564	1.609	1.604		1.578	1.7
Fluorene	1.802	1.798	1.827	1.888	1.885		1.840	2.4
Pentachlorophenol		0.051	0.061	0.070	0.079	0.098	0.072	25.1
Phenanthrene	1.270	1.272	1.302	1.357	1.363		1.313	3.4
Anthracene	1.016	1.011	1.051	1.130	1.187		1.079	7.1
Fluoranthene	1.533	1.426	1.508	1.625	1.660		1.550	6.0
Pyrene	1.445	1.394	1.575	1.395	1.365		1.435	5.8
Benzo(a)anthracene	1.276	1.204	1.231	1.284	1.321		1.263	3.6
Chrysene	1.467	1.431	1.445	1.461	1.425		1.446	1.3
Benzo(b)fluoranthene	1.594	1.616	1.640	1.702	1.722		1.655	3.3
Benzo(k)fluoranthene	1.546	1.521	1.597	1.682	1.714		1.612	5.2
Benzo(a)pyrene	1.361	1.358	1.423	1.488	1.534		1.433	5.4
Indeno(1,2,3-cd)pyrene	1.568	1.526	1.630	1.717	1.775		1.643	6.3
Dibenzo(a,h)anthracene	1.258	1.222	1.303	1.389	1.441		1.322	6.9
Benzo(g,h,i)perylene	1.375	1.346	1.451	1.475	1.495		1.428	4.5
Fluoranthene-d10	1.174	1.104	1.139	1.207	1.227		1.170	4.3
2-Methylnaphthalene-d10	0.600	0.602	0.596	0.637	0.638		0.615	3.4

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN111918\
Data File : BN003589.D
Acq On : 19 Nov 2018 12:15
Operator : MJ/SJ
Sample : SSTD0.161
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTD0.161

Quant Time: Nov 19 14:04:52 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Nov 19 13:56:58 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN111918\
Data File : BN003589.D
Acq On : 19 Nov 2018 12:15
Operator : MJ/SJ
Sample : SSTD0.161
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTD0.161

Quant Time: Nov 19 14:04:52 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Nov 19 13:56:58 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5069	0.40	ng/ul	0.00
2) Naphthalene-d8	10.64	136	18986	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.48	164	10372	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.22	188	26910	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	28337	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	27631	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.23	152	2849	0.09	ng/ul	0.00
14) Fluoranthene-d10	19.25	212	7899	0.10	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.69	128	5332	0.100	ng/ul	97
5) 2-Methylnaphthalene	12.30	142	3637	0.095	ng/ul	99
7) Acenaphthylene	14.20	152	4587	0.102	ng/ul	97
8) Acenaphthene	14.54	153	4060	0.101	ng/ul	100
9) Fluorene	15.53	166	4673	0.099	ng/ul	98
12) Phenanthrene	17.26	178	8541	0.097	ng/ul	97
13) Anthracene	17.36	178	6834	0.095	ng/ul	98
15) Fluoranthene	19.28	202	10312	0.104	ng/ul	97
17) Pyrene	19.64	202	10238	0.099	ng/ul	98
18) Benzo(a)anthracene	21.38	228	9041	0.102	ng/ul	99
19) Chrysene	21.43	228	10392	0.103	ng/ul	99
21) Benzo(b)fluoranthene	23.01	252	11014	0.093	ng/ul	90
22) Benzo(k)fluoranthene	23.06	252	10677	0.093	ng/ul#	90
23) Benzo(a)pyrene	23.61	252	9399	0.095	ng/ul#	86
24) Indeno(1,2,3-cd)pyrene	26.07	276	10832	0.102	ng/ul#	99
25) Dibenzo(a,h)anthracene	26.08	278	8688	0.100	ng/ul	95
26) Benzo(g,h,i)perylene	26.79	276	9495	0.104	ng/ul	97

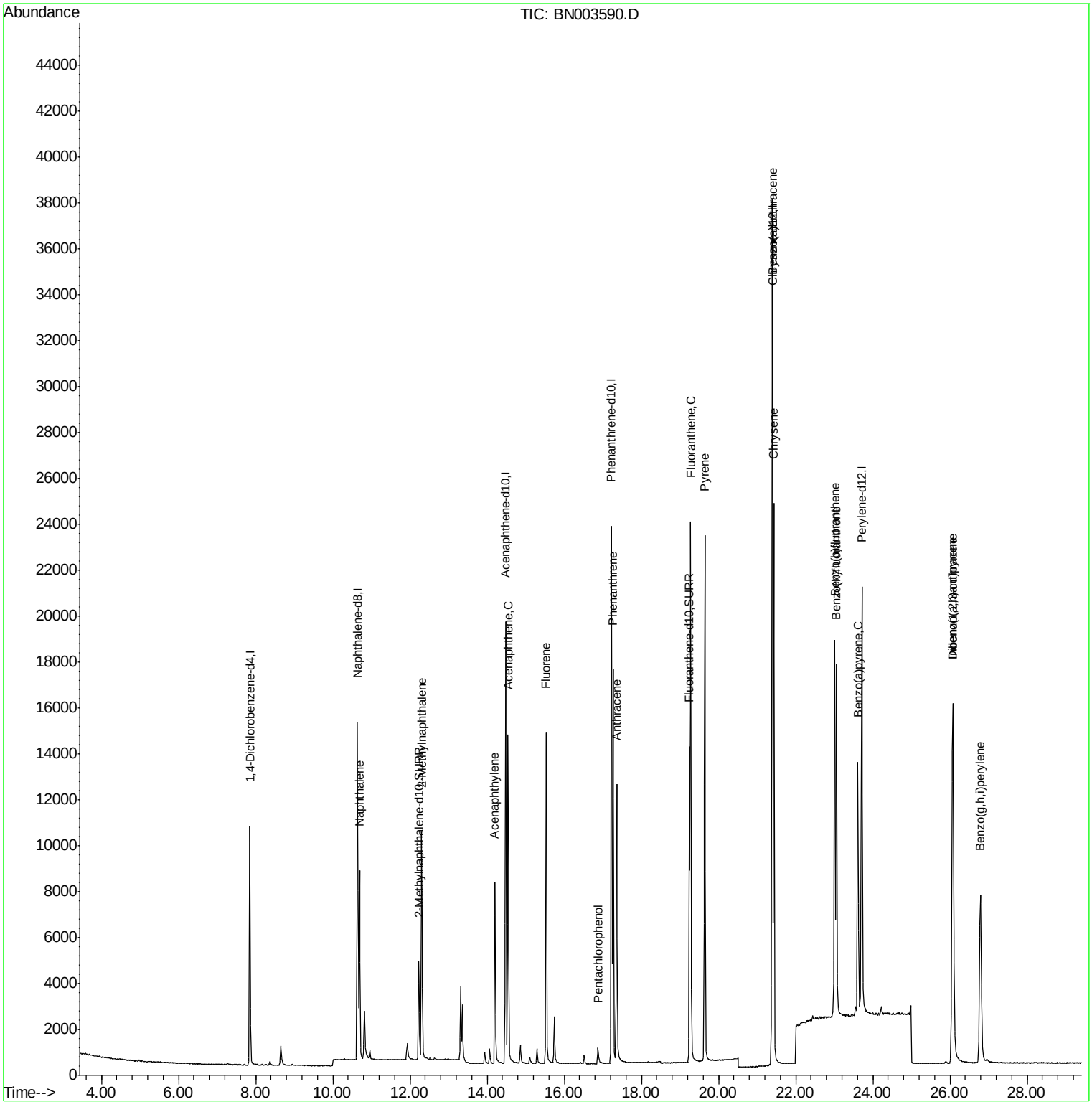
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN111918\
Data File : BN003590.D
Acq On : 19 Nov 2018 12:50
Operator : MJ/SJ
Sample : SSTD0.262
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTD0.262

Quant Time: Nov 19 14:03:14 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Nov 19 13:56:58 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN111918\
Data File : BN003590.D
Acq On : 19 Nov 2018 12:50
Operator : MJ/SJ
Sample : SSTD0.262
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTD0.262

Quant Time: Nov 19 14:03:14 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Nov 19 13:56:58 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.85	152	5624	0.40	ng/ul	0.00
2) Naphthalene-d8	10.64	136	20741	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.48	164	11219	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.22	188	28642	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	29208	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	26617	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.23	152	6244	0.19	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	15804	0.20	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.69	128	11529	0.198	ng/ul	99
5) 2-Methylnaphthalene	12.30	142	7984	0.191	ng/ul	98
7) Acenaphthylene	14.20	152	9774	0.200	ng/ul	99
8) Acenaphthene	14.54	153	8687	0.199	ng/ul	100
9) Fluorene	15.53	166	10086	0.197	ng/ul	99
11) Pentachlorophenol	16.87	266	733	0.128	ng/ul	98
12) Phenanthrene	17.26	178	18216	0.194	ng/ul	99
13) Anthracene	17.36	178	14482	0.189	ng/ul	99
15) Fluoranthene	19.28	202	20416	0.193	ng/ul	99
17) Pyrene	19.64	202	20355	0.192	ng/ul	98
18) Benzo(a)anthracene	21.38	228	17586	0.192	ng/ul	99
19) Chrysene	21.43	228	20895	0.201	ng/ul	99
21) Benzo(b)fluoranthene	23.01	252	21500	0.187	ng/ul	97
22) Benzo(k)fluoranthene	23.05	252	20246	0.182	ng/ul	97
23) Benzo(a)pyrene	23.61	252	18069	0.189	ng/ul	96
24) Indeno(1,2,3-cd)pyrene	26.06	276	20306	0.198	ng/ul	99
25) Dibenzo(a,h)anthracene	26.08	278	16259	0.195	ng/ul	98
26) Benzo(g,h,i)perylene	26.79	276	17909	0.204	ng/ul	100

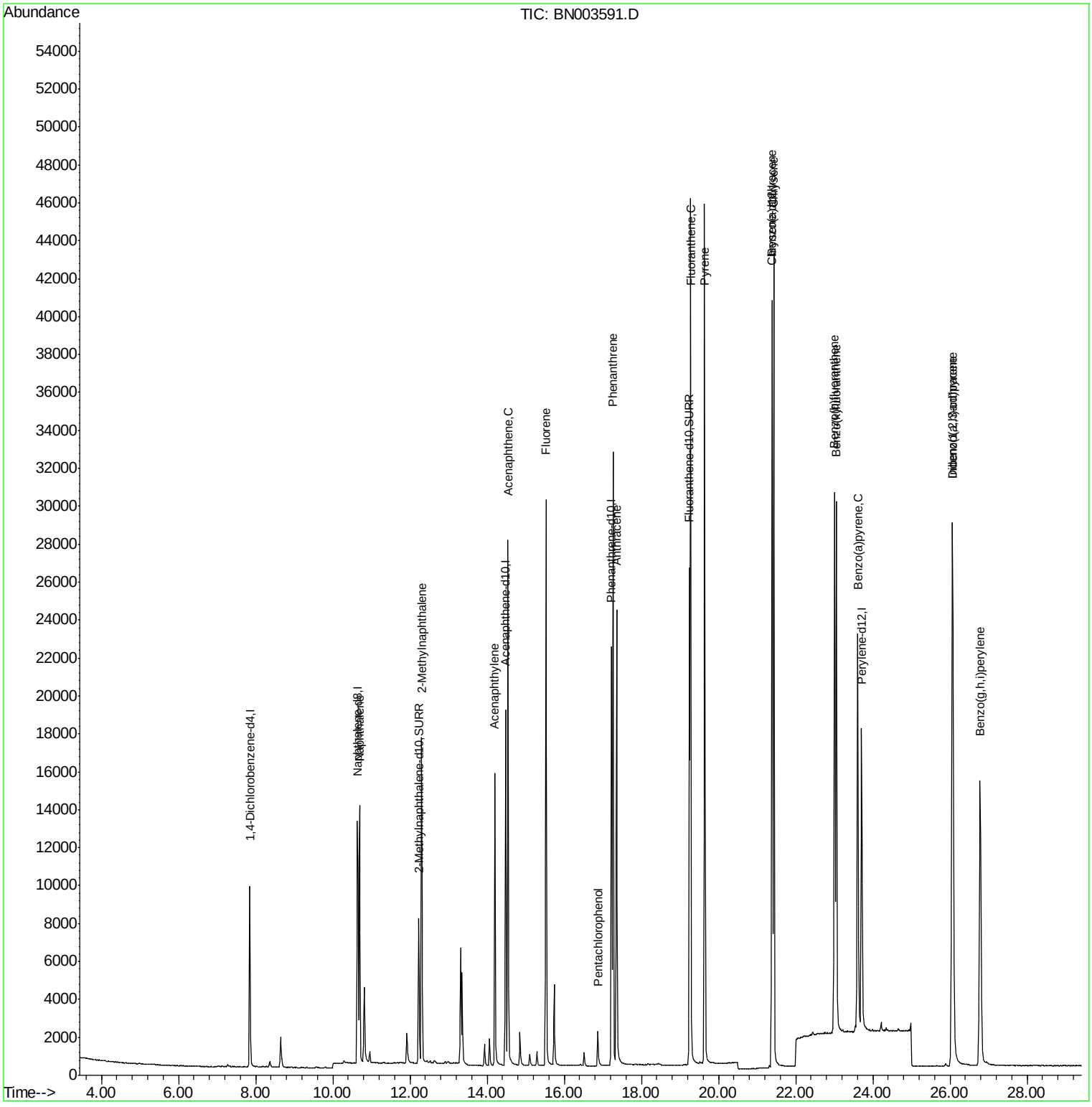
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN111918\
Data File : BN003591.D
Acq On : 19 Nov 2018 13:25
Operator : MJ/SJ
Sample : SSTD0.463
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTD0.463

Quant Time: Nov 19 14:01:54 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Nov 19 13:56:58 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN111918\
Data File : BN003591.D
Acq On : 19 Nov 2018 13:25
Operator : MJ/SJ
Sample : SSTD0.463
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTD0.463

Quant Time: Nov 19 14:01:54 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Nov 19 13:56:58 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5158	0.40	ng/ul	0.00
2) Naphthalene-d8	10.64	136	17586	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.48	164	10570	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.22	188	26429	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	24872	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	22923	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.23	152	10480	0.37	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	30113	0.41	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.69	128	19175	0.389	ng/ul	100
5) 2-Methylnaphthalene	12.30	142	13285	0.374	ng/ul	100
7) Acenaphthylene	14.20	152	18560	0.404	ng/ul	100
8) Acenaphthene	14.54	153	16535	0.403	ng/ul	100
9) Fluorene	15.53	166	19316	0.400	ng/ul	100
11) Pentachlorophenol	16.87	266	1610	0.304	ng/ul	100
12) Phenanthrene	17.26	178	34420	0.397	ng/ul	100
13) Anthracene	17.36	178	27778	0.393	ng/ul	100
15) Fluoranthene	19.28	202	39866	0.409	ng/ul	100
17) Pyrene	19.64	202	39163	0.433	ng/ul	100
18) Benzo(a)anthracene	21.38	228	30626	0.393	ng/ul	100
19) Chrysene	21.43	228	35937	0.405	ng/ul	100
21) Benzo(b)fluoranthene	23.01	252	37588	0.381	ng/ul	100
22) Benzo(k)fluoranthene	23.05	252	36597	0.383	ng/ul	100
23) Benzo(a)pyrene	23.61	252	32627	0.396	ng/ul	100
24) Indeno(1,2,3-cd)pyrene	26.06	276	37365	0.423	ng/ul	100
25) Dibenzo(a,h)anthracene	26.07	278	29863	0.415	ng/ul	100
26) Benzo(g,h,i)perylene	26.78	276	33253	0.439	ng/ul	100

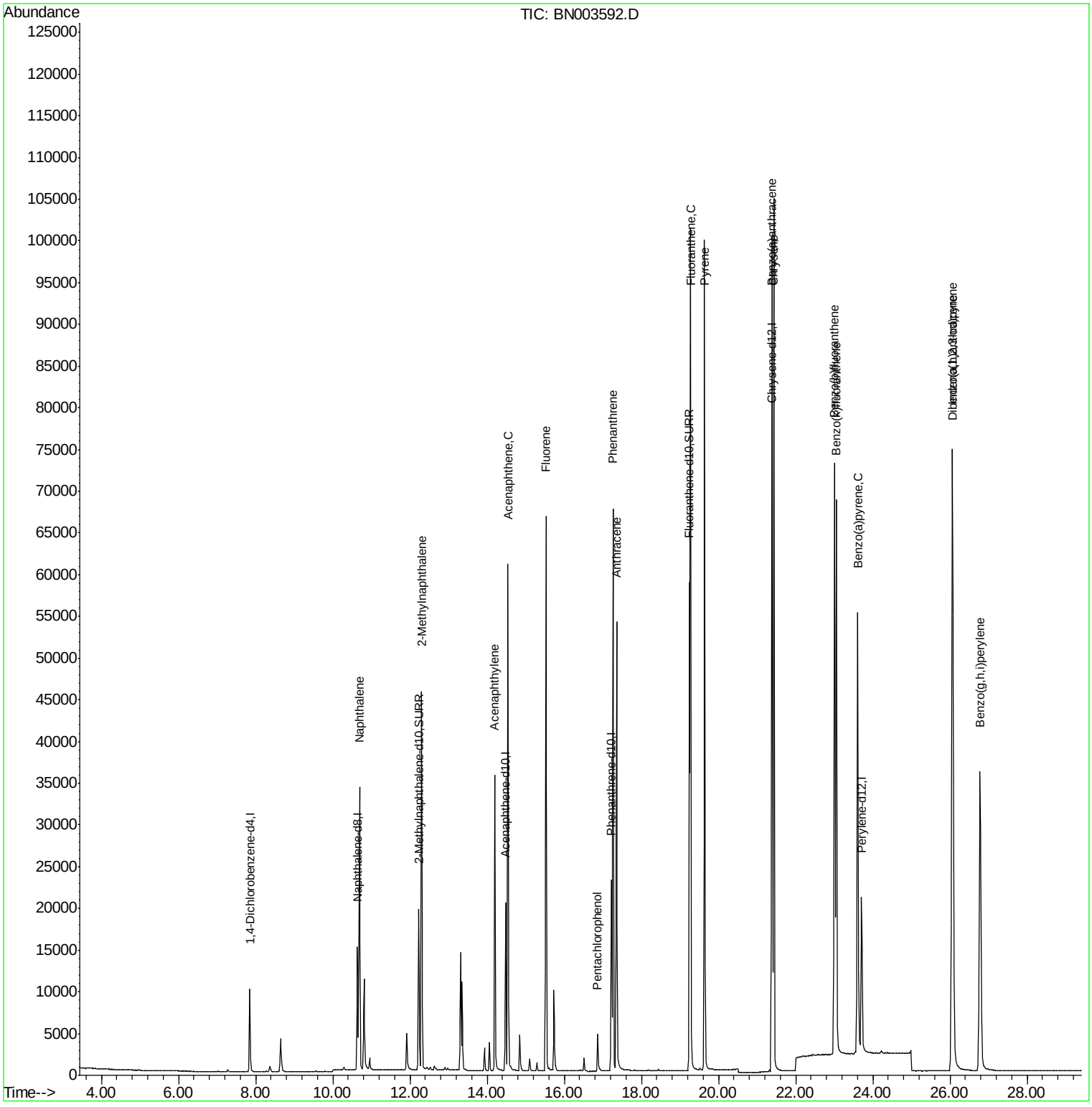
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN111918\
Data File : BN003592.D
Acq On : 19 Nov 2018 14:00
Operator : MJ/SJ
Sample : SSTD0.864
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTD0.864

Quant Time: Nov 19 14:36:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Nov 19 13:56:58 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN111918\
Data File : BN003592.D
Acq On : 19 Nov 2018 14:00
Operator : MJ/SJ
Sample : SSTD0.864
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTD0.864

Quant Time: Nov 19 14:36:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Nov 19 13:56:58 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.85	152	5372	0.40	ng/ul	0.00
2) Naphthalene-d8	10.64	136	20346	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.48	164	11147	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.22	188	26805	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	30262	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	26713	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.23	152	25903	0.80	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	64723	0.86	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.69	128	46972	0.823	ng/ul	99
5) 2-Methylnaphthalene	12.30	142	33191	0.809	ng/ul	99
7) Acenaphthylene	14.20	152	41048	0.847	ng/ul	100
8) Acenaphthene	14.54	153	35862	0.829	ng/ul	99
9) Fluorene	15.53	166	42086	0.826	ng/ul	100
11) Pentachlorophenol	16.87	266	3769	0.702	ng/ul	99
12) Phenanthrene	17.26	178	72765	0.828	ng/ul	99
13) Anthracene	17.36	178	60558	0.845	ng/ul	100
15) Fluoranthene	19.28	202	87120	0.882	ng/ul	99
17) Pyrene	19.64	202	84431	0.767	ng/ul	100
18) Benzo(a)anthracene	21.38	228	77728	0.819	ng/ul	99
19) Chrysene	21.43	228	88442	0.820	ng/ul	99
21) Benzo(b)fluoranthene	23.01	252	90928	0.790	ng/ul	99
22) Benzo(k)fluoranthene	23.05	252	89888	0.806	ng/ul	98
23) Benzo(a)pyrene	23.61	252	79500	0.827	ng/ul	97
24) Indeno(1,2,3-cd)pyrene	26.06	276	91730	0.892	ng/ul	99
25) Dibenzo(a,h)anthracene	26.08	278	74216	0.885	ng/ul	98
26) Benzo(g,h,i)perylene	26.78	276	78804	0.893	ng/ul	98

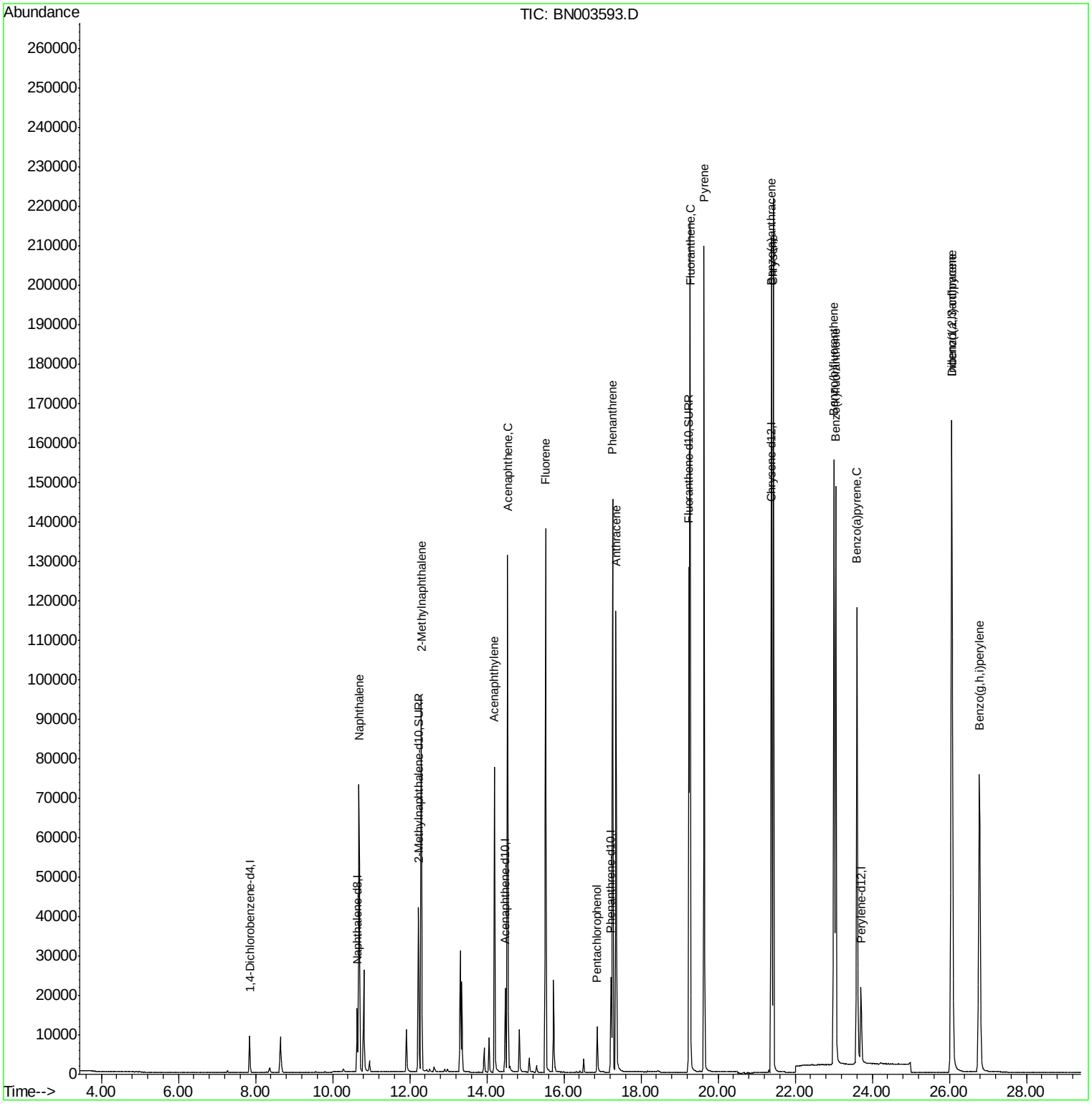
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN111918\
Data File : BN003593.D
Acq On : 19 Nov 2018 14:35
Operator : MJ/SJ
Sample : SSTD1.665
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTD1.665

Quant Time: Nov 19 15:22:06 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Nov 19 13:56:58 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN111918\
Data File : BN003593.D
Acq On : 19 Nov 2018 14:35
Operator : MJ/SJ
Sample : SSTD1.665
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTD1.665

Quant Time: Nov 19 15:22:06 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Nov 19 13:56:58 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.85	152	4904	0.40	ng/ul	0.00
2) Naphthalene-d8	10.64	136	21454	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.48	164	11880	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.22	188	27692	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	32316	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	27578	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.23	152	54790	1.60	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	135960	1.75	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.69	128	97666	1.623	ng/ul	99
5) 2-Methylnaphthalene	12.30	142	69987	1.617	ng/ul	100
7) Acenaphthylene	14.20	152	90157	1.747	ng/ul	99
8) Acenaphthene	14.54	153	76227	1.653	ng/ul	99
9) Fluorene	15.53	166	89594	1.650	ng/ul	100
11) Pentachlorophenol	16.87	266	8804	1.587	ng/ul	99
12) Phenanthrene	17.26	178	150946	1.662	ng/ul	99
13) Anthracene	17.35	178	131464	1.776	ng/ul	100
15) Fluoranthene	19.28	202	183845	1.801	ng/ul	99
17) Pyrene	19.64	202	176399	1.501	ng/ul	100
18) Benzo(a)anthracene	21.38	228	170750	1.685	ng/ul	99
19) Chrysene	21.43	228	184229	1.600	ng/ul	100
21) Benzo(b)fluoranthene	23.01	252	189911	1.598	ng/ul	98
22) Benzo(k)fluoranthene	23.05	252	189086	1.643	ng/ul	98
23) Benzo(a)pyrene	23.61	252	169273	1.706	ng/ul	96
24) Indeno(1,2,3-cd)pyrene	26.06	276	195763	1.843	ng/ul	100
25) Dibenzo(a,h)anthracene	26.07	278	158955	1.836	ng/ul	98
26) Benzo(g,h,i)perylene	26.78	276	164865	1.810	ng/ul	99

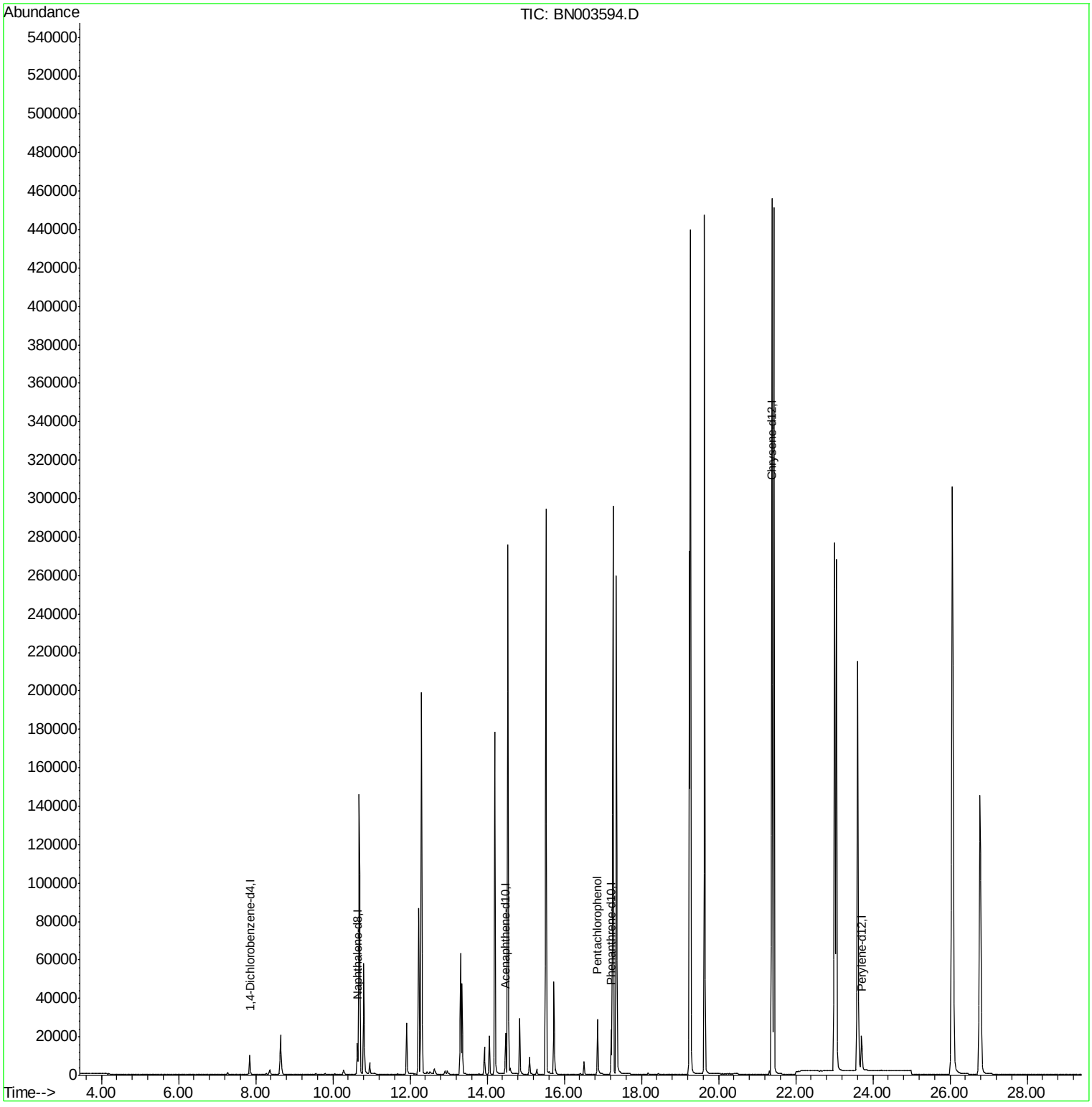
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN111918\
Data File : BN003594.D
Acq On : 19 Nov 2018 15:10
Operator : MJ/SJ
Sample : SSTD3.266
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTD3.266

Quant Time: Nov 19 15:43:57 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Nov 19 13:56:58 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN111918\
Data File : BN003594.D
Acq On : 19 Nov 2018 15:10
Operator : MJ/SJ
Sample : SSTD3.266
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTD3.266

Quant Time: Nov 19 15:43:57 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Nov 19 13:56:58 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.85	152	5386	0.40	ng/ul	0.00
2) Naphthalene-d8	10.64	136	21160	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.48	164	11732	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.22	188	26515	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	32057	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	24214	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	0.00	152	0d	0.00	ng/ul	
14) Fluoranthene-d10	0.00	212	0d	0.00	ng/ul	
Target Compounds						Qvalue
11) Pentachlorophenol	16.86	266	20858	3.928	ng/ul	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA SIM Level:

Instrument ID: BNA_N Date Analyzed: 11/19/2018 Time: 15:45

Lab File ID: BN003595.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SICV67 Init. Calib Time(s): 12:15 15:10

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF0.4	MIN RRF	%D	MAX %D
Naphthalene	1.124	1.164	0.60	3.6	± 25.0
2-Methylnaphthalene	0.785	0.810	0.30	3.2	± 20.0
Acenaphthylene	1.801	1.792	0.90	-0.5	± 20.0
Acenaphthene	1.578	1.614	0.50	2.2	± 20.0
Fluorene	1.840	1.894	0.70	2.9	± 25.0
Pentachlorophenol	0.072	0.061	0.01	-15.5	± 50.0
Phenanthrene	1.313	1.352	0.30	3.0	± 25.0
Anthracene	1.079	1.077	0.40	-0.2	± 25.0
Fluoranthene	1.550	1.546	0.40	-0.3	± 25.0
Pyrene	1.435	1.437	0.50	0.2	± 30.0
Benzo(a)anthracene	1.263	1.250	0.40	-1.0	± 25.0
Chrysene	1.446	1.522	0.40	5.2	± 25.0
Benzo(b)fluoranthene	1.655	1.676	0.10	1.3	± 30.0
Benzo(k)fluoranthene	1.612	1.656	0.10	2.7	± 30.0
Benzo(a)pyrene	1.433	1.436	0.10	0.2	± 25.0
Indeno(1,2,3-cd)pyrene	1.643	1.660	0.10	1.0	± 40.0
Dibenzo(a,h)anthracene	1.322	1.333	0.01	0.8	± 40.0
Benzo(g,h,i)perylene	1.428	1.458	0.02	2.1	± 40.0
Fluoranthene-d10	1.170	1.166	0.40	-0.4	± 25.0
2-Methylnaphthalene-d10	0.615	0.639	0.30	4.0	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA SIM Level:

Instrument ID: BNA_N Date Analyzed: 12/06/2018 Time: 14:32

Lab File ID: BN003730.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD0.489 Init. Calib Time(s): 12:15 15:10

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF0.4	MIN RRF	%D	MAX %D
Naphthalene	1.124	1.167	0.60	3.9	± 25.0
2-Methylnaphthalene	0.785	0.807	0.30	2.9	± 20.0
Acenaphthylene	1.801	1.937	0.90	7.6	± 20.0
Acenaphthene	1.578	1.638	0.50	3.8	± 20.0
Fluorene	1.840	1.839	0.70	-0.1	± 25.0
Pentachlorophenol	0.072	0.089	0.01	23.5	± 50.0
Phenanthrene	1.313	1.365	0.30	4.0	± 25.0
Anthracene	1.079	1.165	0.40	7.9	± 25.0
Fluoranthene	1.550	1.653	0.40	6.6	± 25.0
Pyrene	1.435	1.664	0.50	16.0	± 30.0
Benzo(a)anthracene	1.263	1.446	0.40	14.4	± 25.0
Chrysene	1.446	1.471	0.40	1.7	± 25.0
Benzo(b)fluoranthene	1.655	1.641	0.10	-0.8	± 30.0
Benzo(k)fluoranthene	1.612	1.613	0.10	0.1	± 30.0
Benzo(a)pyrene	1.433	1.483	0.10	3.5	± 25.0
Indeno(1,2,3-cd)pyrene	1.643	1.598	0.10	-2.8	± 40.0
Dibenzo(a,h)anthracene	1.322	1.253	0.01	-5.2	± 40.0
Benzo(g,h,i)perylene	1.428	1.353	0.02	-5.2	± 40.0
Fluoranthene-d10	1.170	1.215	0.40	3.8	± 25.0
2-Methylnaphthalene-d10	0.615	0.609	0.30	-0.9	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA SIM Level:

Instrument ID: BNA_N Date Analyzed: 12/06/2018 Time: 22:20

Lab File ID: BN003743.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD0.490 Init. Calib Time(s): 12:15 15:10

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF0.4	MIN RRF	%D	MAX %D
Naphthalene	1.124	1.162	0.60	3.5	± 25.0
2-Methylnaphthalene	0.785	0.804	0.30	2.5	± 20.0
Acenaphthylene	1.801	1.895	0.90	5.2	± 20.0
Acenaphthene	1.578	1.644	0.50	4.2	± 20.0
Fluorene	1.840	1.820	0.70	-1.1	± 25.0
Pentachlorophenol	0.072	0.072	0.01	0.4	± 50.0
Phenanthrene	1.313	1.366	0.30	4.1	± 25.0
Anthracene	1.079	1.137	0.40	5.3	± 25.0
Fluoranthene	1.550	1.508	0.40	-2.7	± 25.0
Pyrene	1.435	1.711	0.50	19.3	± 30.0
Benzo(a)anthracene	1.263	1.365	0.40	8.0	± 25.0
Chrysene	1.446	1.505	0.40	4.1	± 25.0
Benzo(b)fluoranthene	1.655	1.755	0.10	6.0	± 30.0
Benzo(k)fluoranthene	1.612	1.694	0.10	5.1	± 30.0
Benzo(a)pyrene	1.433	1.518	0.10	6.0	± 25.0
Indeno(1,2,3-cd)pyrene	1.643	1.659	0.10	1.0	± 40.0
Dibenzo(a,h)anthracene	1.322	1.323	0.01	0.0	± 40.0
Benzo(g,h,i)perylene	1.428	1.403	0.02	-1.8	± 40.0
Fluoranthene-d10	1.170	1.102	0.40	-5.8	± 25.0
2-Methylnaphthalene-d10	0.615	0.606	0.30	-1.4	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA SIM Level:

Instrument ID: BNA_N Date Analyzed: 12/07/2018 Time: 07:04

Lab File ID: BN003756.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD0.491 Init. Calib Time(s): 12:15 15:10

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF0.4	MIN RRF	%D	MAX %D
Naphthalene	1.124	1.165	0.60	3.7	± 25.0
2-Methylnaphthalene	0.785	0.804	0.30	2.5	± 25.0
Acenaphthylene	1.801	1.942	0.90	7.8	± 25.0
Acenaphthene	1.578	1.653	0.50	4.7	± 25.0
Fluorene	1.840	1.834	0.70	-0.3	± 50.0
Pentachlorophenol	0.072	0.078	0.01	8.8	± 50.0
Phenanthrene	1.313	1.374	0.30	4.7	± 50.0
Anthracene	1.079	1.168	0.40	8.3	± 50.0
Fluoranthene	1.550	1.525	0.40	-1.6	± 50.0
Pyrene	1.435	1.708	0.50	19.1	± 50.0
Benzo(a)anthracene	1.263	1.426	0.40	12.9	± 50.0
Chrysene	1.446	1.498	0.40	3.6	± 50.0
Benzo(b)fluoranthene	1.655	1.752	0.10	5.9	± 50.0
Benzo(k)fluoranthene	1.612	1.663	0.10	3.2	± 50.0
Benzo(a)pyrene	1.433	1.508	0.10	5.2	± 50.0
Indeno(1,2,3-cd)pyrene	1.643	1.627	0.10	-1.0	± 50.0
Dibenzo(a,h)anthracene	1.322	1.299	0.01	-1.8	± 50.0
Benzo(g,h,i)perylene	1.428	1.367	0.02	-4.3	± 50.0
Fluoranthene-d10	1.170	1.111	0.40	-5.1	± 50.0
2-Methylnaphthalene-d10	0.615	0.609	0.30	-0.9	± 25.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA SIM Level:

Instrument ID: BNA_N Date Analyzed: 12/15/2018 Time: 09:48

Lab File ID: BN003950.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD0.417 Init. Calib Time(s): 12:15 15:10

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF0.4	MIN RRF	%D	MAX %D
Naphthalene	1.124	1.065	0.60	-5.3	± 25.0
2-Methylnaphthalene	0.785	0.772	0.30	-1.6	± 20.0
Acenaphthylene	1.801	1.958	0.90	8.7	± 20.0
Acenaphthene	1.578	1.493	0.50	-5.4	± 20.0
Fluorene	1.840	1.718	0.70	-6.6	± 25.0
Pentachlorophenol	0.072	0.079	0.01	9.5	± 50.0
Phenanthrene	1.313	1.201	0.30	-8.5	± 25.0
Anthracene	1.079	1.124	0.40	4.2	± 25.0
Fluoranthene	1.550	1.545	0.40	-0.4	± 25.0
Pyrene	1.435	1.266	0.50	-11.8	± 30.0
Benzo(a)anthracene	1.263	1.322	0.40	4.7	± 25.0
Chrysene	1.446	1.282	0.40	-11.3	± 25.0
Benzo(b)fluoranthene	1.655	1.479	0.10	-10.6	± 30.0
Benzo(k)fluoranthene	1.612	1.467	0.10	-9.0	± 30.0
Benzo(a)pyrene	1.433	1.357	0.10	-5.3	± 25.0
Indeno(1,2,3-cd)pyrene	1.643	1.469	0.10	-10.6	± 40.0
Dibenzo(a,h)anthracene	1.322	1.196	0.01	-9.5	± 40.0
Benzo(g,h,i)perylene	1.428	1.213	0.02	-15.1	± 40.0
Fluoranthene-d10	1.170	1.165	0.40	-0.5	± 25.0
2-Methylnaphthalene-d10	0.615	0.595	0.30	-3.2	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA SIM Level:

Instrument ID: BNA_N Date Analyzed: 12/15/2018 Time: 18:38

Lab File ID: BN003964.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD0.418 Init. Calib Time(s): 12:15 15:10

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

ANALYTE	$\overline{RRF}$	RRF0.4	MIN RRF	%D	MAX %D
Naphthalene	1.124	1.058	0.60	-5.9	± 25.0
2-Methylnaphthalene	0.785	0.777	0.30	-0.9	± 20.0
Acenaphthylene	1.801	1.942	0.90	7.8	± 20.0
Acenaphthene	1.578	1.501	0.50	-4.9	± 20.0
Fluorene	1.840	1.724	0.70	-6.3	± 25.0
Pentachlorophenol	0.072	0.084	0.01	17.1	± 50.0
Phenanthrene	1.313	1.198	0.30	-8.7	± 25.0
Anthracene	1.079	1.124	0.40	4.2	± 25.0
Fluoranthene	1.550	1.555	0.40	0.3	± 25.0
Pyrene	1.435	1.293	0.50	-9.9	± 30.0
Benzo(a)anthracene	1.263	1.345	0.40	6.4	± 25.0
Chrysene	1.446	1.308	0.40	-9.5	± 25.0
Benzo(b)fluoranthene	1.655	1.439	0.10	-13.0	± 30.0
Benzo(k)fluoranthene	1.612	1.479	0.10	-8.2	± 30.0
Benzo(a)pyrene	1.433	1.342	0.10	-6.3	± 25.0
Indeno(1,2,3-cd)pyrene	1.643	1.467	0.10	-10.7	± 40.0
Dibenzo(a,h)anthracene	1.322	1.194	0.01	-9.7	± 40.0
Benzo(g,h,i)perylene	1.428	1.214	0.02	-15.0	± 40.0
Fluoranthene-d10	1.170	1.168	0.40	-0.2	± 25.0
2-Methylnaphthalene-d10	0.615	0.597	0.30	-2.8	± 20.0

FORM 7A-OR

INITIAL CALIBRATION VERIFICATION AND CONTINUING CALIBRATION VERIFICATION FOR GC/MS

Lab Name: Chemtech Consulting Group Contract: EPW14030

Lab Code: CHM Case No.: 48019 MA No.: SDG No.: F9E54

Analytical Method: SVOA SIM Level:

Instrument ID: BNA_N Date Analyzed: 12/16/2018 Time: 04:44

Lab File ID: BN003980.D Init. Calib Date(s): 11/19/2018 11/19/2018

EPA Sample No.: SSTD0.419 Init. Calib Time(s): 12:15 15:10

GC Column: ZB-GR ID: 0.25 (mm) Length: 30 (m)

Heated Purge: (Y/N) Purge Volume: (mL)

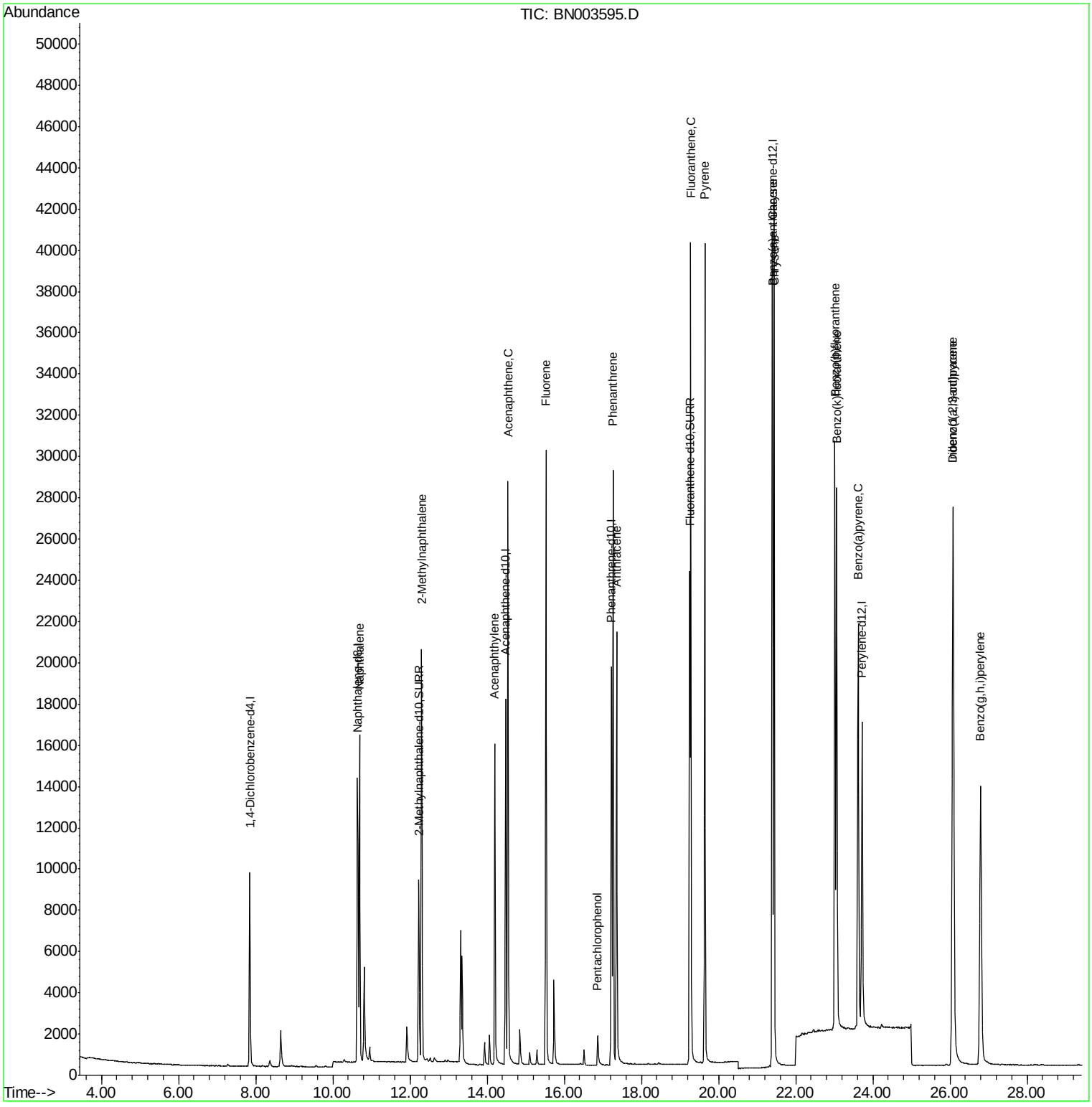
ANALYTE	$\overline{RRF}$	RRF0.4	MIN RRF	%D	MAX %D
Naphthalene	1.124	1.061	0.60	-5.5	± 25.0
2-Methylnaphthalene	0.785	0.777	0.30	-0.9	± 20.0
Acenaphthylene	1.801	1.974	0.90	9.6	± 20.0
Acenaphthene	1.578	1.506	0.50	-4.6	± 20.0
Fluorene	1.840	1.743	0.70	-5.3	± 25.0
Pentachlorophenol	0.072	0.075	0.01	4.7	± 50.0
Phenanthrene	1.313	1.209	0.30	-7.9	± 25.0
Anthracene	1.079	1.144	0.40	6.1	± 25.0
Fluoranthene	1.550	1.626	0.40	4.9	± 25.0
Pyrene	1.435	1.282	0.50	-10.6	± 30.0
Benzo(a)anthracene	1.263	1.342	0.40	6.3	± 25.0
Chrysene	1.446	1.311	0.40	-9.4	± 25.0
Benzo(b)fluoranthene	1.655	1.439	0.10	-13.0	± 30.0
Benzo(k)fluoranthene	1.612	1.440	0.10	-10.7	± 30.0
Benzo(a)pyrene	1.433	1.339	0.10	-6.5	± 25.0
Indeno(1,2,3-cd)pyrene	1.643	1.483	0.10	-9.7	± 40.0
Dibenzo(a,h)anthracene	1.322	1.204	0.01	-8.9	± 40.0
Benzo(g,h,i)perylene	1.428	1.225	0.02	-14.2	± 40.0
Fluoranthene-d10	1.170	1.228	0.40	4.9	± 25.0
2-Methylnaphthalene-d10	0.615	0.601	0.30	-2.2	± 20.0

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN111918\
Data File : BN003595.D
Acq On : 19 Nov 2018 15:45
Operator : MJ/SJ
Sample : SSTDICV0.4
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SICV67

Quant Time: Nov 19 17:33:37 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Nov 19 15:40:59 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN111918\
Data File : BN003595.D
Acq On : 19 Nov 2018 15:45
Operator : MJ/SJ
Sample : SSTDICV0.4
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SICV67

Quant Time: Nov 19 17:33:37 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Nov 19 15:40:59 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.85	152	5131	0.40	ng/ul	0.00
2) Naphthalene-d8	10.64	136	19237	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.48	164	10359	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.22	188	22706	0.40	ng/ul	0.00
16) Chrysene-d12	21.41	240	23933	0.40	ng/ul	0.01
20) Perylene-d12	23.72	264	21667	0.40	ng/ul	0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.23	152	12302	0.42	ng/ul	0.00
14) Fluoranthene-d10	19.25	212	26468	0.40	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.69	128	22398	0.415	ng/ul	100
5) 2-Methylnaphthalene	12.30	142	15573	0.413	ng/ul	99
7) Acenaphthylene	14.20	152	18566	0.398	ng/ul	100
8) Acenaphthene	14.54	153	16717	0.409	ng/ul	100
9) Fluorene	15.53	166	19622	0.412	ng/ul	100
11) Pentachlorophenol	16.87	266	1383	0.338	ng/ul	99
12) Phenanthrene	17.26	178	30707	0.412	ng/ul	99
13) Anthracene	17.36	178	24458	0.399	ng/ul	100
15) Fluoranthene	19.28	202	35109	0.399	ng/ul	98
17) Pyrene	19.64	202	34403	0.401	ng/ul	100
18) Benzo(a)anthracene	21.39	228	29926	0.396	ng/ul	99
19) Chrysene	21.44	228	36418	0.421	ng/ul	100
21) Benzo(b)fluoranthene	23.02	252	36320	0.405	ng/ul	100
22) Benzo(k)fluoranthene	23.06	252	35880	0.411	ng/ul	100
23) Benzo(a)pyrene	23.62	252	31115	0.401	ng/ul	100
24) Indeno(1,2,3-cd)pyrene	26.07	276	35958	0.404	ng/ul#	100
25) Dibenzo(a,h)anthracene	26.09	278	28877	0.403	ng/ul	99
26) Benzo(g,h,i)perylene	26.80	276	31599	0.408	ng/ul	99

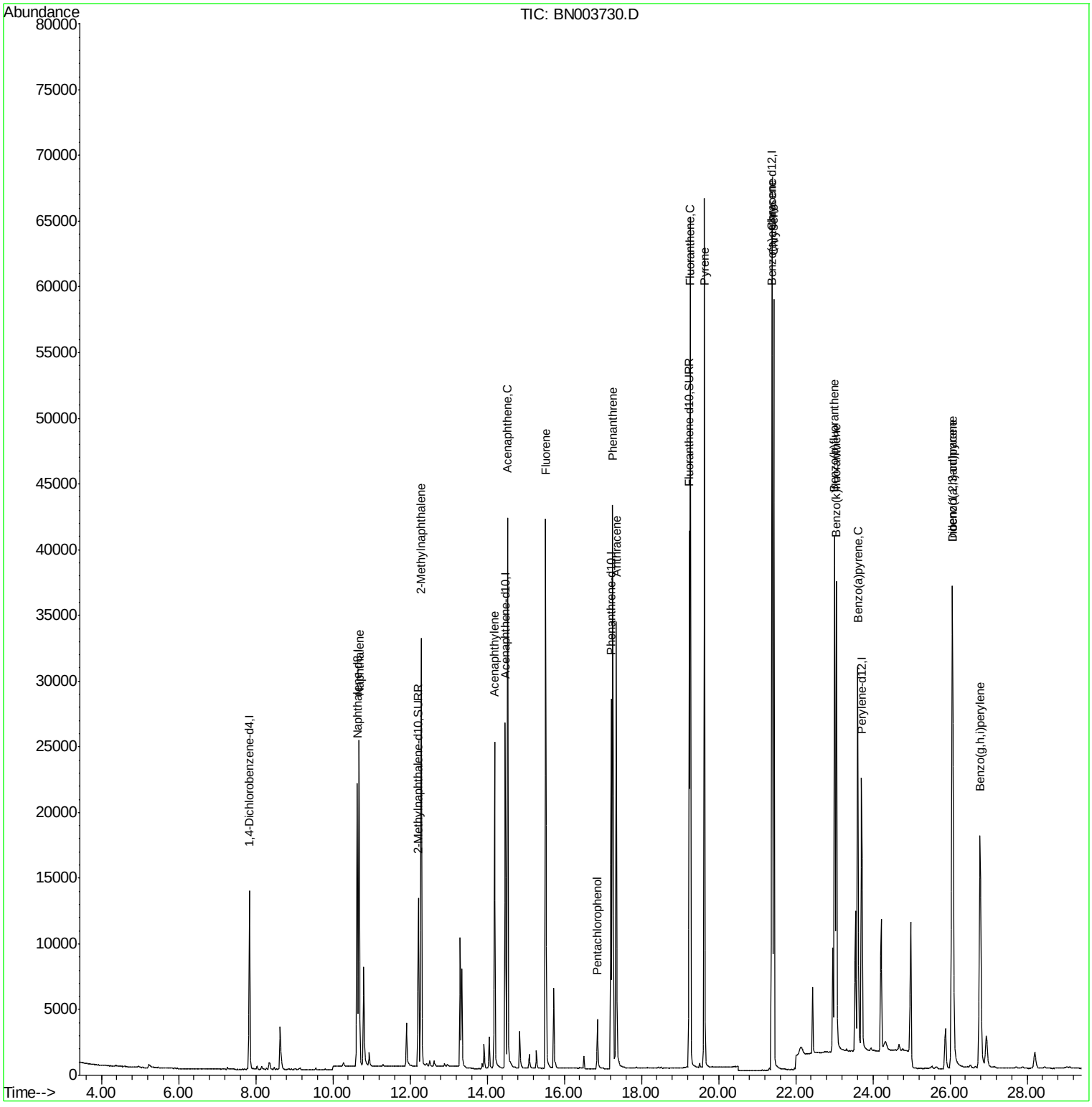
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003730.D
Acq On : 06 Dec 2018 14:32
Operator : JU/SJ
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTD0.489

Quant Time: Dec 06 15:14:12 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Dec 06 02:51:43 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003730.D
Acq On : 06 Dec 2018 14:32
Operator : JU/SJ
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTD0.489

Quant Time: Dec 06 15:14:12 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Dec 06 02:51:43 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	7212	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	29029	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	15158	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	33873	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	32378	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	29382	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	17680	0.40	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	41142	0.42	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.68	128	33887	0.416	ng/ul	100
5) 2-Methylnaphthalene	12.29	142	23439	0.412	ng/ul	100
7) Acenaphthylene	14.19	152	29365	0.430	ng/ul	100
8) Acenaphthene	14.53	153	24825	0.415	ng/ul	100
9) Fluorene	15.52	166	27873	0.400	ng/ul	99
11) Pentachlorophenol	16.86	266	3013	0.494	ng/ul	99
12) Phenanthrene	17.25	178	46244	0.416	ng/ul	99
13) Anthracene	17.35	178	39447	0.432	ng/ul	100
15) Fluoranthene	19.27	202	55978	0.426	ng/ul	99
17) Pyrene	19.63	202	53888	0.464	ng/ul	98
18) Benzo(a)anthracene	21.38	228	46808	0.458	ng/ul	99
19) Chrysene	21.43	228	47627	0.407	ng/ul	100
21) Benzo(b)fluoranthene	23.01	252	48223	0.397	ng/ul	99
22) Benzo(k)fluoranthene	23.06	252	47398	0.400	ng/ul	99
23) Benzo(a)pyrene	23.61	252	43572	0.414	ng/ul	99
24) Indeno(1,2,3-cd)pyrene	26.06	276	46942	0.389	ng/ul	98
25) Dibenzo(a,h)anthracene	26.07	278	36823	0.379	ng/ul	99
26) Benzo(g,h,i)perylene	26.78	276	39768	0.379	ng/ul	99

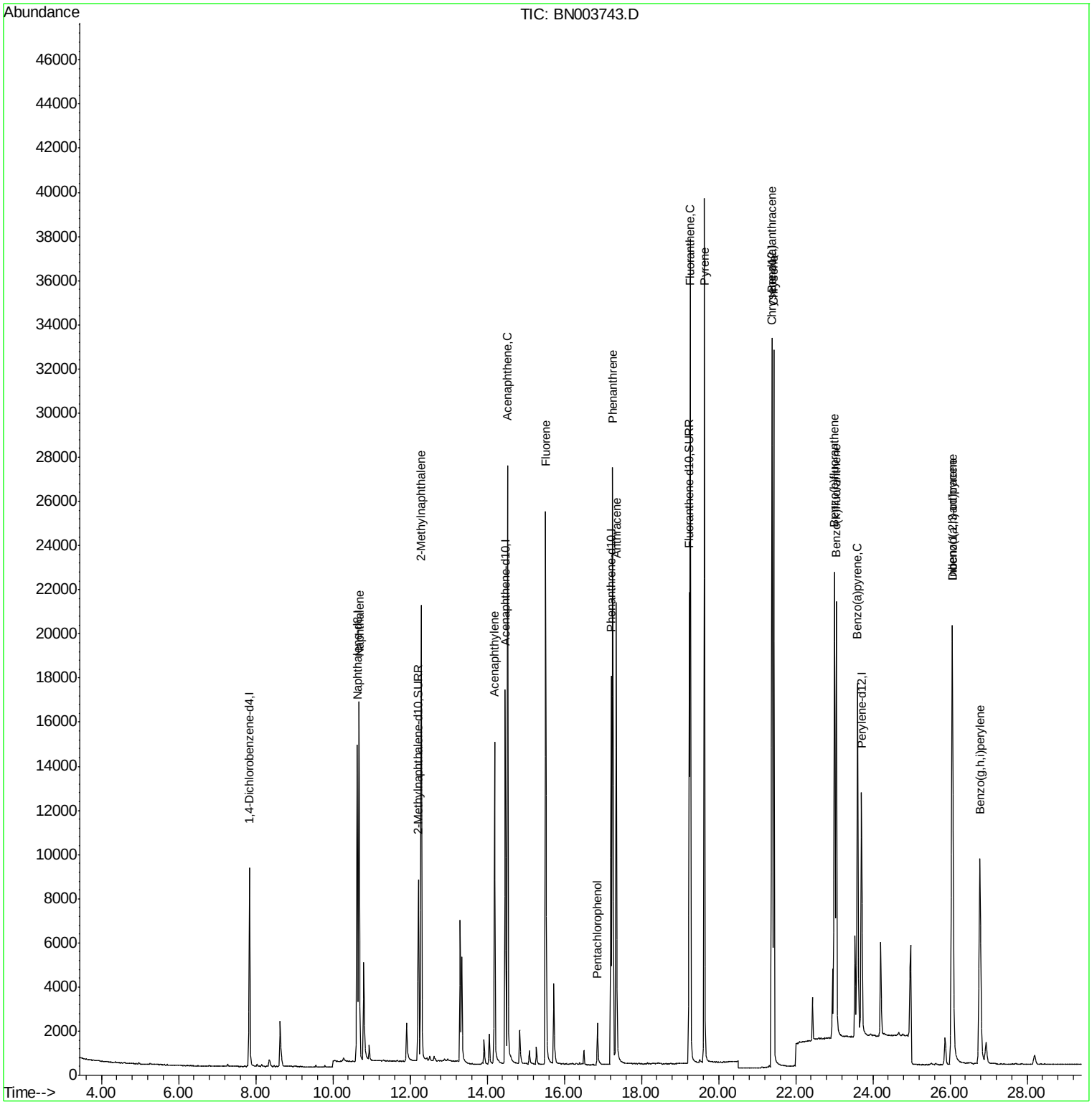
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003743.D
Acq On : 06 Dec 2018 22:20
Operator : JU/SJ
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTD0.490

Quant Time: Dec 07 03:20:52 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003743.D
Acq On : 06 Dec 2018 22:20
Operator : JU/SJ
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTD0.490

Quant Time: Dec 07 03:20:52 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	4862	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	19350	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	9811	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.22	188	21427	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	18368	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	15568	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	11731	0.39	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	23613	0.38	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.68	128	22493	0.414	ng/ul	100
5) 2-Methylnaphthalene	12.29	142	15555	0.410	ng/ul	99
7) Acenaphthylene	14.19	152	18587	0.421	ng/ul	100
8) Acenaphthene	14.53	153	16134	0.417	ng/ul	100
9) Fluorene	15.52	166	17855	0.396	ng/ul	99
11) Pentachlorophenol	16.86	266	1550	0.402	ng/ul	100
12) Phenanthrene	17.25	178	29272	0.416	ng/ul	99
13) Anthracene	17.35	178	24354	0.421	ng/ul	100
15) Fluoranthene	19.27	202	32316	0.389	ng/ul	96
17) Pyrene	19.63	202	31427	0.477	ng/ul	99
18) Benzo(a)anthracene	21.38	228	25066	0.432	ng/ul	98
19) Chrysene	21.43	228	27648	0.416	ng/ul	100
21) Benzo(b)fluoranthene	23.01	252	27315	0.424	ng/ul	98
22) Benzo(k)fluoranthene	23.05	252	26370	0.420	ng/ul	99
23) Benzo(a)pyrene	23.61	252	23635	0.424	ng/ul	98
24) Indeno(1,2,3-cd)pyrene	26.06	276	25831	0.404	ng/ul#	98
25) Dibenzo(a,h)anthracene	26.07	278	20590	0.400	ng/ul	99
26) Benzo(g,h,i)perylene	26.78	276	21841	0.393	ng/ul	98

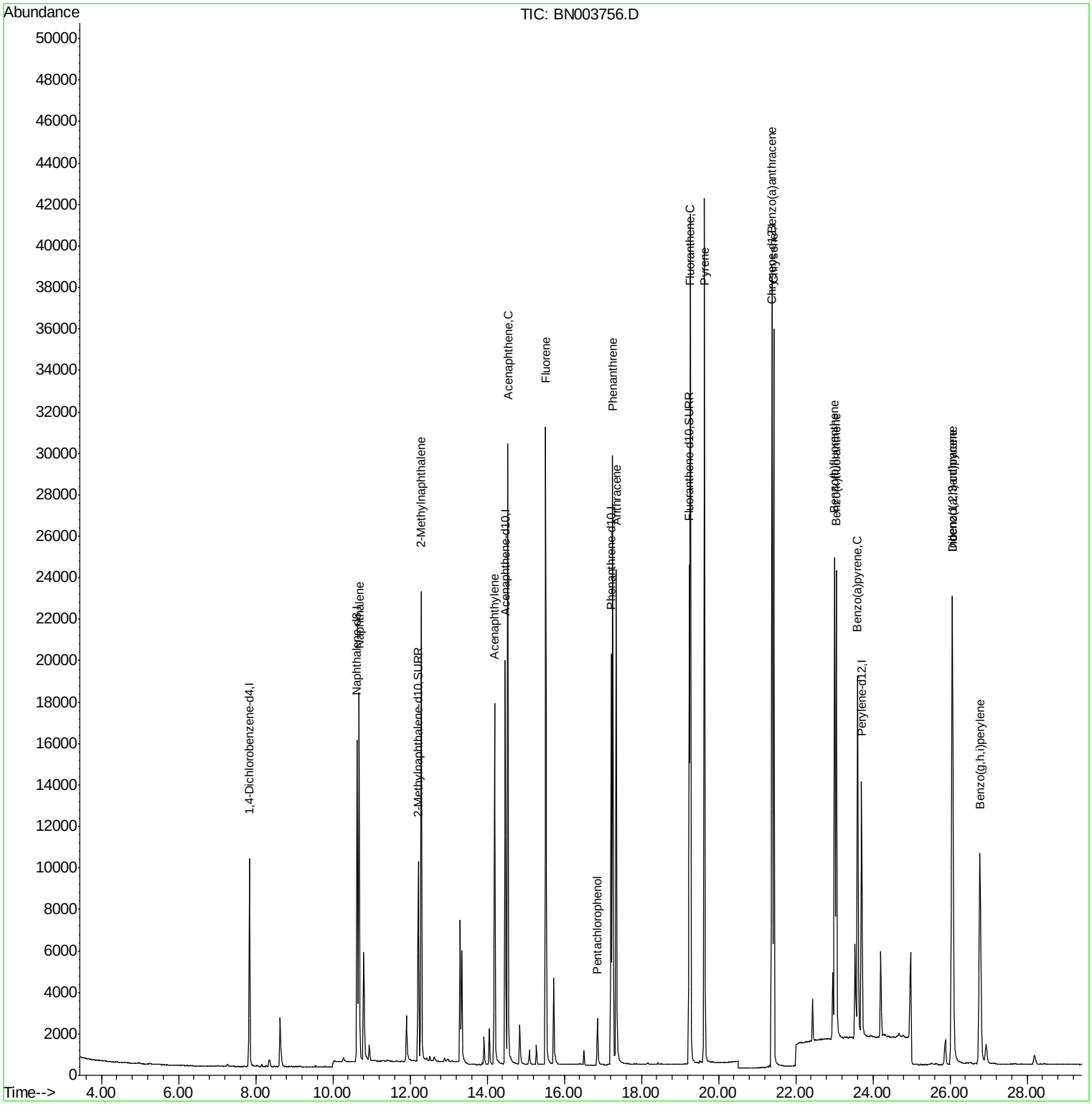
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003756.D
Acq On : 07 Dec 2018 07:04
Operator : JU/SJ
Sample : SSTDCCC0.4EC
Misc :
ALS Vial : 27 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTD0.491

Quant Time: Dec 07 07:50:47 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003756.D
Acq On : 07 Dec 2018 07:04
Operator : JU/SJ
Sample : SSTDCCC0.4EC
Misc :
ALS Vial : 27 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTD0.491

Quant Time: Dec 07 07:50:47 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 04:08:50 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	5242	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	21295	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	10829	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	23427	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	20432	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	17306	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	12966	0.40	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	26023	0.38	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.68	128	24807	0.415	ng/ul	100
5) 2-Methylnaphthalene	12.29	142	17128	0.410	ng/ul	100
7) Acenaphthylene	14.19	152	21029	0.431	ng/ul	100
8) Acenaphthene	14.53	153	17902	0.419	ng/ul	100
9) Fluorene	15.52	166	19863	0.399	ng/ul	99
11) Pentachlorophenol	16.86	266	1836	0.435	ng/ul	98
12) Phenanthrene	17.26	178	32197	0.419	ng/ul	100
13) Anthracene	17.34	178	27374	0.433	ng/ul	100
15) Fluoranthene	19.27	202	35736	0.394	ng/ul	97
17) Pyrene	19.63	202	34901	0.476	ng/ul	98
18) Benzo(a)anthracene	21.38	228	29140	0.452	ng/ul	99
19) Chrysene	21.43	228	30617	0.415	ng/ul	100
21) Benzo(b)fluoranthene	23.00	252	30326	0.424	ng/ul	99
22) Benzo(k)fluoranthene	23.05	252	28788	0.413	ng/ul	99
23) Benzo(a)pyrene	23.60	252	26095	0.421	ng/ul	99
24) Indeno(1,2,3-cd)pyrene	26.05	276	28155	0.396	ng/ul	98
25) Dibenzo(a,h)anthracene	26.07	278	22477	0.393	ng/ul	99
26) Benzo(g,h,i)perylene	26.77	276	23658	0.383	ng/ul	98

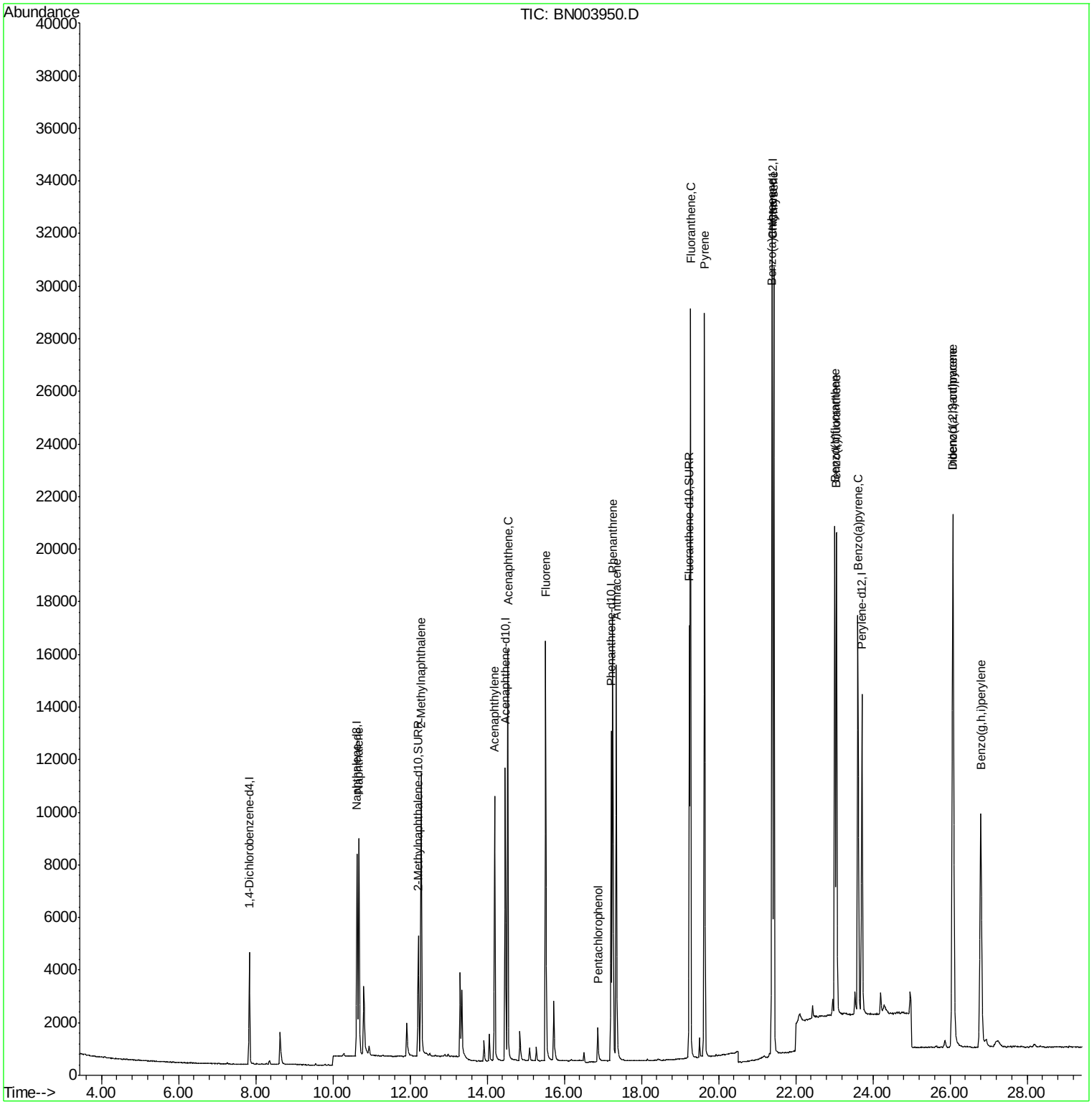
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003950.D
Acq On : 15 Dec 2018 09:48
Operator : JU/SJ
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTD0.417

Quant Time: Dec 15 21:55:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Dec 12 03:46:49 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003950.D
Acq On : 15 Dec 2018 09:48
Operator : JU/SJ
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTD0.417

Quant Time: Dec 15 21:55:51 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Dec 12 03:46:49 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.83	152	2264	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	10864	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	6266	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	15201	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	19004	0.40	ng/ul	0.00
20) Perylene-d12	23.72	264	16479	0.40	ng/ul	0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	6466	0.39	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	17703	0.40	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.68	128	11565	0.379	ng/ul	98
5) 2-Methylnaphthalene	12.29	142	8386	0.394	ng/ul	99
7) Acenaphthylene	14.20	152	12267	0.435	ng/ul	100
8) Acenaphthene	14.53	153	9353	0.378	ng/ul	99
9) Fluorene	15.52	166	10766	0.373	ng/ul	99
11) Pentachlorophenol	16.87	266	1199	0.438	ng/ul	99
12) Phenanthrene	17.26	178	18253	0.366	ng/ul	100
13) Anthracene	17.35	178	17084	0.417	ng/ul	99
15) Fluoranthene	19.27	202	23479	0.399	ng/ul	96
17) Pyrene	19.63	202	24050	0.353	ng/ul	96
18) Benzo(a)anthracene	21.38	228	25129	0.419	ng/ul	98
19) Chrysene	21.43	228	24358	0.355	ng/ul	100
21) Benzo(b)fluoranthene	23.01	252	24377	0.358	ng/ul	97
22) Benzo(k)fluoranthene	23.06	252	24178	0.364	ng/ul	98
23) Benzo(a)pyrene	23.61	252	22361	0.379	ng/ul	97
24) Indeno(1,2,3-cd)pyrene	26.07	276	24208	0.358	ng/ul	98
25) Dibenzo(a,h)anthracene	26.08	278	19717	0.362	ng/ul	97
26) Benzo(g,h,i)perylene	26.80	276	19982	0.340	ng/ul	96

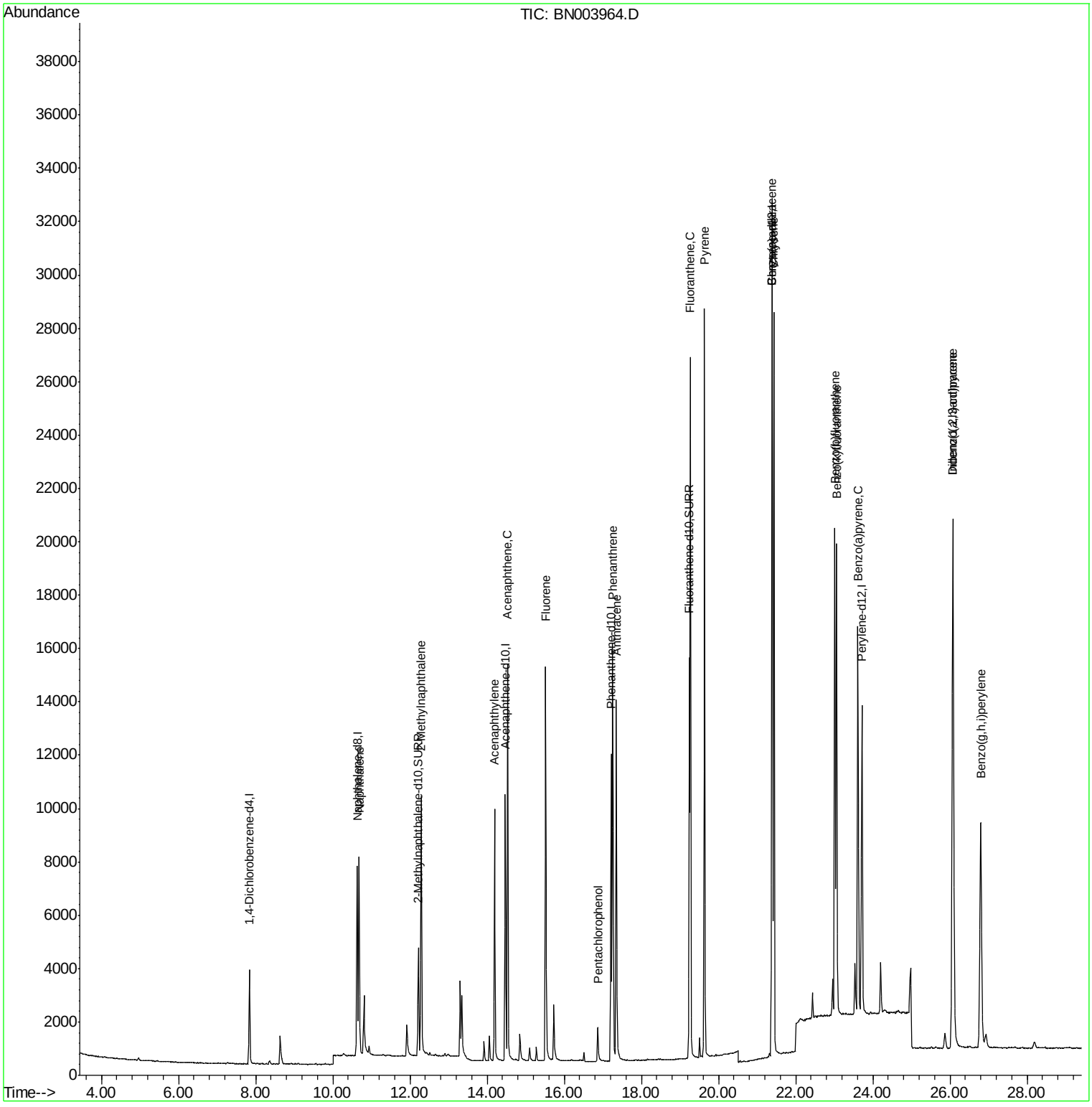
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003964.D
Acq On : 15 Dec 2018 18:38
Operator : JU/SJ
Sample : SSTDCCC0.4
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTD0.418

Quant Time: Dec 15 22:02:57 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003964.D
Acq On : 15 Dec 2018 18:38
Operator : JU/SJ
Sample : SSTDCCC0.4
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTD0.418

Quant Time: Dec 15 22:02:57 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 21:58:36 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	1929	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	9849	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	5818	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.22	188	14457	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	18093	0.40	ng/ul	0.00
20) Perylene-d12	23.72	264	15964	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.21	152	5884	0.39	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	16890	0.40	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.68	128	10418	0.377	ng/ul	99
5) 2-Methylnaphthalene	12.29	142	7657	0.396	ng/ul	99
7) Acenaphthylene	14.19	152	11296	0.431	ng/ul	100
8) Acenaphthene	14.53	153	8734	0.380	ng/ul	100
9) Fluorene	15.52	166	10033	0.375	ng/ul	99
11) Pentachlorophenol	16.87	266	1220	0.469	ng/ul	99
12) Phenanthrene	17.25	178	17322	0.365	ng/ul	99
13) Anthracene	17.35	178	16256	0.417	ng/ul	99
15) Fluoranthene	19.27	202	22483	0.401	ng/ul	96
17) Pyrene	19.64	202	23387	0.360	ng/ul	98
18) Benzo(a)anthracene	21.38	228	24327	0.426	ng/ul	99
19) Chrysene	21.44	228	23661	0.362	ng/ul	99
21) Benzo(b)fluoranthene	23.01	252	22975	0.348	ng/ul	97
22) Benzo(k)fluoranthene	23.06	252	23615	0.367	ng/ul	97
23) Benzo(a)pyrene	23.61	252	21430	0.375	ng/ul	97
24) Indeno(1,2,3-cd)pyrene	26.08	276	23423	0.357	ng/ul	98
25) Dibenzo(a,h)anthracene	26.08	278	19067	0.361	ng/ul	97
26) Benzo(g,h,i)perylene	26.80	276	19376	0.340	ng/ul	97

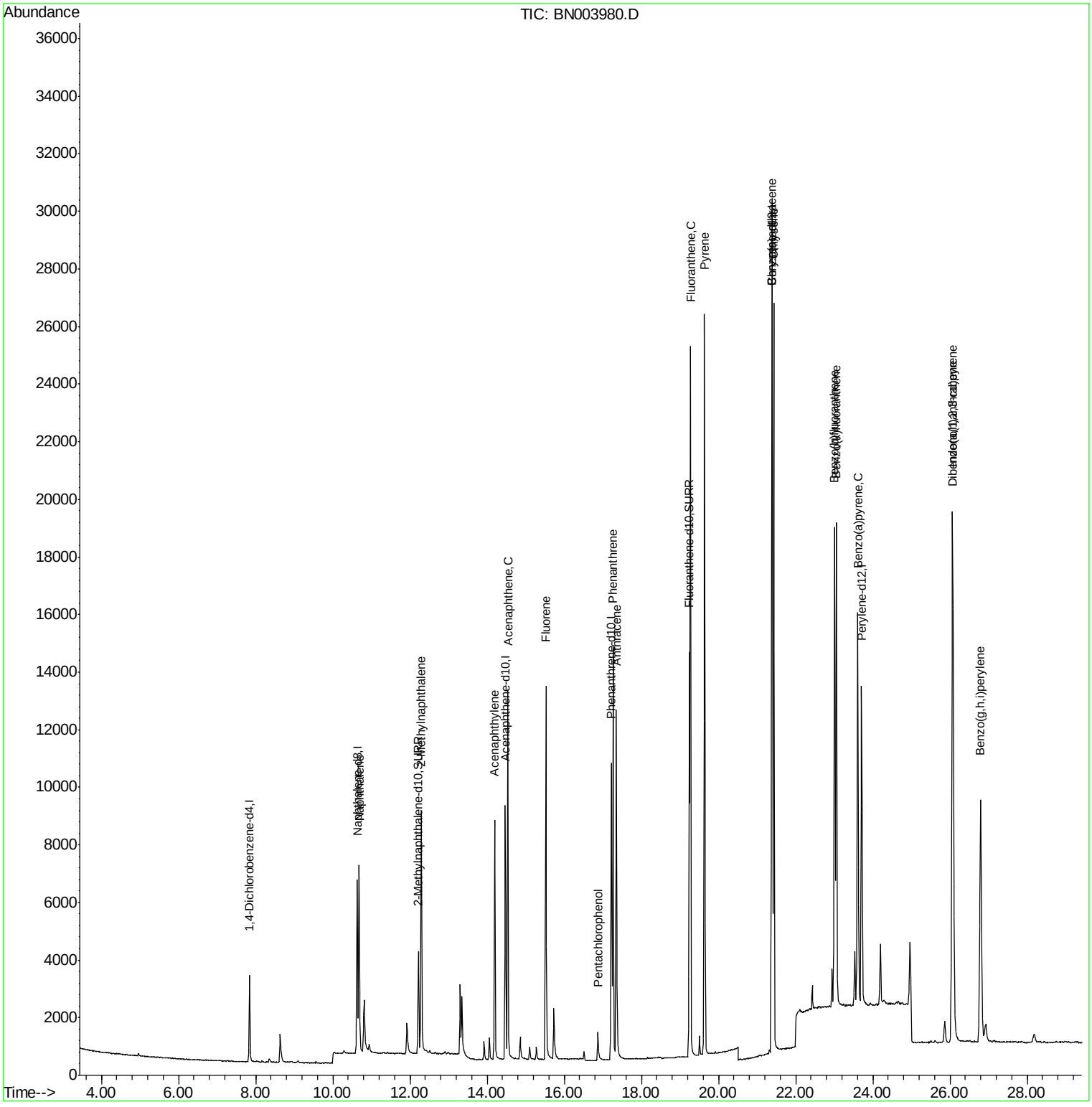
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003980.D
Acq On : 16 Dec 2018 04:44
Operator : JU/SJ
Sample : SSTDCCC0.4
Misc :
ALS Vial : 32 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTD0.419

Quant Time: Dec 16 23:56:31 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN121518\
Data File : BN003980.D
Acq On : 16 Dec 2018 04:44
Operator : JU/SJ
Sample : SSTDCCC0.4
Misc :
ALS Vial : 32 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTD0.419

Quant Time: Dec 16 23:56:31 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sat Dec 15 23:04:58 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	1622	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	8459	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	5099	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.22	188	12816	0.40	ng/ul	0.00
16) Chrysene-d12	21.39	240	17052	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	15262	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	5086	0.39	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	15736	0.42	ng/ul	0.00
Target Compounds						Qvalue
3) Naphthalene	10.68	128	8978	0.378	ng/ul	98
5) 2-Methylnaphthalene	12.29	142	6576	0.396	ng/ul	99
7) Acenaphthylene	14.19	152	10063	0.438	ng/ul	99
8) Acenaphthene	14.53	153	7678	0.382	ng/ul	99
9) Fluorene	15.52	166	8885	0.379	ng/ul	100
11) Pentachlorophenol	16.87	266	967	0.419	ng/ul	99
12) Phenanthrene	17.26	178	15492	0.368	ng/ul	99
13) Anthracene	17.35	178	14667	0.424	ng/ul	99
15) Fluoranthene	19.27	202	20835	0.419	ng/ul	96
17) Pyrene	19.64	202	21860	0.357	ng/ul	99
18) Benzo(a)anthracene	21.38	228	22891	0.425	ng/ul	99
19) Chrysene	21.43	228	22348	0.363	ng/ul	99
21) Benzo(b)fluoranthene	23.01	252	21961	0.348	ng/ul	96
22) Benzo(k)fluoranthene	23.05	252	21970	0.357	ng/ul#	96
23) Benzo(a)pyrene	23.61	252	20441	0.374	ng/ul#	96
24) Indeno(1,2,3-cd)pyrene	26.06	276	22636	0.361	ng/ul#	98
25) Dibenzo(a,h)anthracene	26.08	278	18379	0.364	ng/ul	95
26) Benzo(g,h,i)perylene	26.79	276	18699	0.343	ng/ul	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

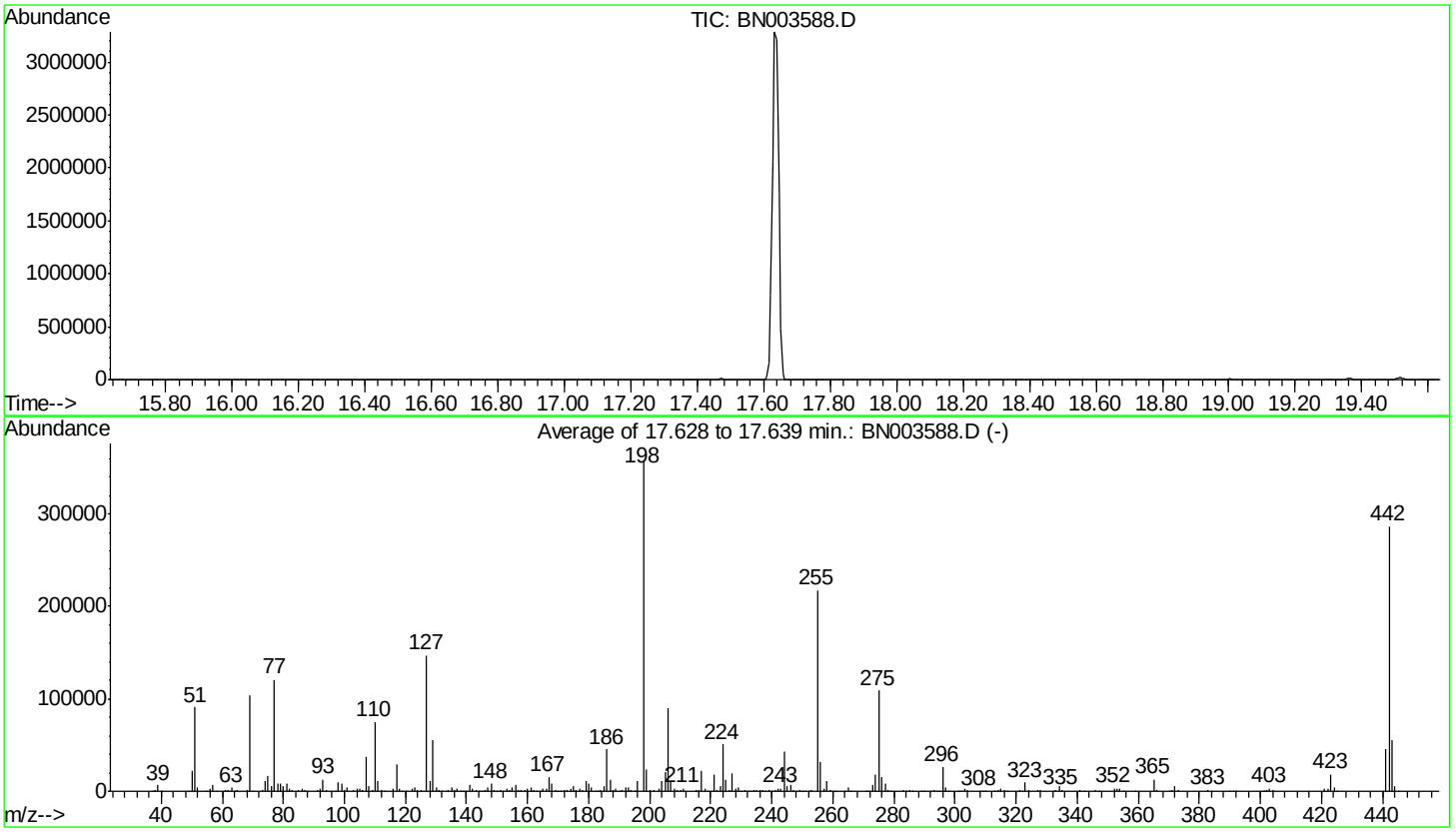
DFTPP

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN111918\
Data File : BN003588.D
Acq On : 19 Nov 2018 11:40
Operator : MJ/SJ
Sample : DFTPP54
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : DFTPP54

Integration File: rteint.p

Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Tue Nov 20 03:27:39 2018



AutoFind: Scans 2489, 2490, 2491; Background Corrected with Scan 2483

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	25.4	91082	PASS
68	69	0.00	2	1.9	1997	PASS
69	198	0.00	100	28.8	103082	PASS
70	69	0.00	2	0.5	523	PASS
127	198	10	80	41.1	147266	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	358186	PASS
199	198	5	9	6.7	24106	PASS
275	198	10	60	30.4	108869	PASS
365	198	1	100	3.5	12605	PASS
441	198	0.01	100	12.6	45237	PASS
442	198	50	100	80.0	286400	PASS
443	442	15	24	19.4	55480	PASS

Scan 2483 (17.592 min): BN003588.D
DFTPP54

m/z	Abundance
44.00	1532.0
207.00	427.0

Instrument :
BNA_N
ClientSampleId :
DFTPP54

Scan 2489 (17.628 min): BN003588.D
DFTPP54

m/z	Abundance
37.00	433.0
38.00	969.0
39.00	5726.0
40.00	404.0
44.00	1359.0
49.00	613.0
50.00	19848.0
51.00	79296.0
52.00	4273.0
55.00	457.0
56.00	2478.0
57.00	5726.0
61.00	1008.0
62.00	1224.0
63.00	3364.0
64.00	545.0
65.00	1622.0
68.10	1724.0
69.00	88336.0
70.00	458.0
73.00	662.0
74.00	9027.0
75.00	13900.0
76.10	5005.0
77.00	100888.0
78.00	7359.0
79.00	6549.0
80.00	5070.0
81.00	6889.0
82.00	1795.0
83.00	1583.0
85.00	1503.0
86.00	2106.0
87.00	962.0
88.00	329.0
91.00	1488.0
92.00	1967.0
93.00	11032.0
94.00	734.0
96.00	532.0
98.00	8404.0
99.00	7606.0
100.00	727.0
101.00	3966.0
103.00	1510.0
104.00	2667.0
105.00	2443.0
106.00	788.0
107.00	30664.0
108.00	5061.0
110.00	61168.0
111.00	9148.0
112.00	1243.0
113.00	402.0
116.00	1813.0
117.00	23776.0
118.00	2133.0
118.90	311.0
120.00	410.0
122.00	2232.0
123.00	3250.0
124.00	1475.0
125.00	1258.0
127.00	117000.0
128.00	9163.0
129.00	43496.0
130.00	3635.0
131.00	754.0
132.00	397.0
134.00	1404.0
135.00	3599.0
136.00	1306.0
137.00	2220.0
138.00	501.0
139.90	530.0
141.00	5762.0
142.00	1993.0
143.00	1303.0
144.00	303.0
145.00	310.0
145.90	994.0
147.00	2735.0
148.00	6608.0
149.00	1582.0
150.00	466.0
151.10	766.0
153.00	1740.0
154.00	1521.0
155.00	3226.0
156.00	5042.0
157.00	1001.0

Instrument :
BNA_N
ClientSampleId :
DFTPP54

158.00	1044.0
159.00	906.0
160.00	1959.0
161.00	2751.0
161.90	751.0
165.00	2214.0
166.00	1830.0
167.00	11605.0
168.00	7944.0
169.00	1422.0
170.00	415.0
170.90	513.0
171.90	1075.0
173.00	1400.0
174.00	2470.0
175.00	4674.0
176.00	1548.0
176.90	2382.0
177.90	804.0
179.00	8500.0
180.00	6620.0
181.00	2830.0
182.00	509.0
183.00	313.0
183.90	701.0
185.00	4275.0
186.00	33928.0
187.00	9829.0
188.00	1089.0
189.00	2098.0
189.90	349.0
191.00	924.0
192.00	2768.0
193.00	2987.0
193.90	641.0
194.90	456.0
196.00	8024.0
198.00	262976.0
199.00	17888.0
200.00	1390.0
201.50	1312.0
203.00	1592.0
204.00	8561.0
205.00	15271.0
206.00	65152.0
207.00	9095.0
208.00	2194.0
209.00	739.0
210.30	1093.0
211.00	2452.0
215.00	678.0
216.00	1318.0
217.00	16568.0
218.00	2141.0
221.00	12646.0
223.00	3759.0
224.00	36048.0
225.00	9372.0
226.00	1224.0
227.00	13812.0
228.00	1964.0
229.00	3066.0
229.90	420.0
231.00	1240.0
234.00	924.0
235.00	1059.0
235.90	547.0
237.00	1660.0
238.90	575.0
240.00	472.0
241.00	755.0
242.00	1894.0
243.00	2089.0
244.00	29912.0
245.00	3963.0
246.00	5221.0
247.00	1077.0
249.00	1078.0
253.00	549.0
255.00	149632.0
256.00	23040.0
257.00	2038.0
258.00	8247.0
259.00	1409.0
265.00	3391.0
266.00	422.0
272.00	407.0
273.00	4646.0
274.00	12077.0
275.00	72928.0
276.00	10297.0
277.00	5596.0
278.00	1182.0
283.00	503.0
284.00	408.0

Instrument :
BNA_N
ClientSampleId :
DFTPP54

285.00	972.0
293.00	1285.0
294.00	399.0
295.00	371.0
296.00	18120.0
297.00	2683.0
303.00	2275.0
304.00	618.0
308.00	317.0
314.00	950.0
315.00	2004.0
316.00	1224.0
321.00	560.0
323.00	6199.0
324.00	1187.0
326.90	1130.0
328.00	676.0
332.00	502.0
333.00	484.0
334.00	3933.0
335.00	1082.0
341.00	657.0
346.00	1302.0
352.00	1763.0
353.00	1319.0
354.00	1937.0
355.00	415.0
365.00	8071.0
366.00	1124.0
371.00	469.0
372.00	2901.0
373.00	753.0
382.90	818.0
390.10	381.0
402.00	1283.0
403.00	1766.0
404.00	822.0
420.90	1365.0
422.00	1439.0
423.10	10095.0
424.00	3500.0
425.00	575.0
441.10	24096.0
442.10	155264.0
443.10	31648.0
444.00	2960.0

Instrument :
BNA_N
ClientSampleId :
DFTPP54

Scan 2490 (17.633 min): BN003588.D
DFTPP54

m/z	Abundance
37.00	419.0
38.00	1234.0
39.00	7505.0
40.00	445.0
44.00	1257.0
49.10	854.0
50.00	26024.0
51.00	105784.0
52.00	5358.0
54.90	575.0
56.00	3157.0
57.00	7387.0
61.00	1433.0
62.00	1546.0
63.00	4336.0
64.00	633.0
65.00	2197.0
68.10	2408.0
69.00	119888.0
70.00	552.0
73.00	973.0
74.00	12102.0
75.00	19312.0
76.10	7003.0
77.00	141056.0
78.10	10023.0
79.00	9300.0
80.00	6833.0
81.00	9466.0
82.00	2387.0
83.00	2320.0
85.00	2188.0
86.00	2792.0
87.00	1267.0
87.90	480.0
91.00	2271.0
92.00	2717.0
93.00	15052.0
94.00	1258.0
96.00	783.0
98.00	11969.0
99.00	9930.0
100.00	926.0
101.00	5802.0
103.00	2056.0
104.00	3623.0
105.00	3259.0
106.10	1269.0
107.00	43760.0
108.00	7159.0
109.10	1449.0
110.00	88112.0
111.00	12806.0
112.00	1597.0
112.90	444.0
116.00	2514.0
117.00	34128.0
118.00	2762.0
118.90	372.0
120.00	615.0
122.00	2897.0
123.00	4638.0
124.00	2237.0
125.00	2010.0
127.00	173248.0
128.00	13072.0
129.00	64432.0
130.00	5444.0
131.00	956.0
131.90	614.0
134.00	1774.0
135.00	5263.0
136.00	2036.0
137.10	2847.0
138.00	674.0
139.00	409.0
140.00	907.0
141.00	8492.0
142.00	2920.0
142.90	1859.0
144.00	508.0
144.90	518.0
146.00	1415.0
147.00	4478.0
148.00	9510.0
149.00	2260.0
149.90	562.0
151.20	1136.0
151.80	811.0
153.00	2570.0
154.00	2061.0

Instrument :
BNA_N
ClientSampleId :
DFTPP54

Instrument :
BNA_N
ClientSampleId :
DFTPP54

155.00	4995.0
156.00	7316.0
157.00	1646.0
157.90	1692.0
159.00	1165.0
160.00	2603.0
161.00	4293.0
162.00	1205.0
163.00	326.0
163.90	550.0
165.00	3133.0
166.00	2817.0
167.00	18144.0
168.00	10227.0
169.00	1797.0
170.00	534.0
170.90	740.0
171.90	1661.0
173.00	2149.0
174.00	3813.0
175.00	7058.0
176.00	2198.0
177.00	3355.0
178.00	1149.0
179.00	12838.0
180.00	9829.0
181.00	4434.0
181.90	683.0
183.00	374.0
184.00	981.0
185.00	6619.0
186.00	51392.0
187.00	14981.0
188.00	1776.0
189.00	3250.0
190.00	541.0
191.00	1555.0
192.00	4376.0
193.00	4838.0
194.00	972.0
195.10	676.0
196.00	13010.0
198.00	419392.0
199.00	28480.0
200.00	2236.0
201.50	2172.0
203.00	2580.0
204.00	13175.0
205.00	23352.0
206.00	106056.0
207.00	14103.0
208.00	3330.0
209.00	1107.0
210.30	1781.0
211.00	3989.0
215.00	1042.0
216.00	1905.0
217.00	26200.0
218.00	3331.0
219.00	331.0
221.00	21104.0
223.00	6070.0
224.00	58464.0
225.00	14820.0
226.10	1849.0
227.00	21952.0
228.00	3287.0
229.00	4516.0
230.00	626.0
231.00	2277.0
232.00	317.0
233.00	417.0
234.00	1452.0
235.00	1803.0
236.00	1177.0
237.00	2509.0
238.00	334.0
238.90	931.0
240.00	756.0
241.00	1373.0
242.00	2939.0
243.10	3748.0
244.00	49008.0
245.10	6534.0
246.00	8615.0
247.00	1861.0
248.00	481.0
249.00	1833.0
249.90	308.0
250.90	380.0
252.00	323.0
253.00	1070.0
255.00	248832.0
256.00	37240.0
257.00	3300.0

258.00	13066.0
259.00	2009.0
260.00	434.0
261.00	459.0
264.00	416.0
265.00	5337.0
265.90	784.0
271.00	496.0
271.90	641.0
273.00	7708.0
274.00	20544.0
275.00	124008.0
276.00	16888.0
277.00	9423.0
278.00	1774.0
279.00	391.0
283.00	1053.0
284.00	803.0
285.00	1798.0
286.00	329.0
289.00	320.0
290.00	385.0
292.00	419.0
293.00	2309.0
294.00	634.0
295.00	772.0
296.00	29864.0
297.00	4141.0
301.00	399.0
302.10	576.0
303.00	3697.0
304.00	970.0
308.00	443.0
309.00	319.0
310.00	513.0
312.90	309.0
314.00	1560.0
315.00	3241.0
316.00	1963.0
317.00	395.0
321.00	1083.0
322.10	576.0
323.00	11117.0
324.10	2129.0
327.00	1929.0
328.00	1138.0
332.00	799.0
333.00	1041.0
334.00	6764.0
335.00	1942.0
341.00	1283.0
342.10	447.0
346.00	2348.0
346.90	459.0
352.00	3431.0
353.00	2379.0
354.00	3640.0
355.00	733.0
365.00	13751.0
366.00	2032.0
370.00	327.0
370.90	801.0
372.00	5872.0
373.00	1557.0
383.00	1582.0
384.10	500.0
390.00	838.0
391.10	476.0
392.00	364.0
400.90	363.0
402.00	2172.0
403.00	3542.0
404.00	1163.0
421.00	2687.0
422.10	2766.0
423.00	19728.0
424.10	5245.0
425.10	689.0
441.10	49432.0
442.00	312512.0
443.10	61680.0
444.00	5612.0
445.00	333.0

Instrument :
BNA_N
ClientSampleId :
DFTPP54

Scan 2491 (17.639 min): BN003588.D
DFTPP54

Instrument :
BNA_N
ClientSampleId :
DFTPP54

m/z	Abundance
37.00	417.0
38.00	996.0
39.00	6394.0
40.00	444.0
44.00	1277.0
49.10	722.0
50.00	22336.0
51.00	88168.0
52.00	4597.0
54.90	483.0
56.00	2792.0
57.00	6076.0
58.00	325.0
61.00	1313.0
62.00	1397.0
63.00	3832.0
64.00	567.0
65.00	1975.0
68.00	1860.0
69.00	101024.0
70.00	559.0
73.00	899.0
74.00	10223.0
75.00	15967.0
76.10	5656.0
77.00	120104.0
78.10	8295.0
79.00	8075.0
80.00	5757.0
81.00	8173.0
82.00	2261.0
83.00	2039.0
85.00	1871.0
86.00	2542.0
87.00	1173.0
87.90	529.0
91.00	2003.0
92.00	2224.0
93.00	13431.0
94.00	902.0
96.00	699.0
97.20	322.0
98.00	10829.0
99.00	8683.0
100.00	785.0
101.00	4794.0
103.00	1726.0
104.00	3179.0
105.00	2884.0
106.10	882.0
107.00	38400.0
108.00	5876.0
109.10	1350.0
110.00	76472.0
111.00	11140.0
112.00	1472.0
112.90	372.0
116.00	2120.0
117.00	29984.0
118.00	2373.0
120.00	508.0
122.00	2510.0
123.00	4199.0
124.00	1845.0
125.00	1733.0
127.00	151552.0
128.00	10977.0
129.00	56672.0
130.00	4490.0
131.00	878.0
131.90	546.0
133.90	1744.0
135.00	4573.0
136.00	1864.0
137.00	2558.0
137.90	600.0
140.00	760.0
141.00	7327.0
142.00	2475.0
143.00	1726.0
144.00	565.0
145.00	383.0
146.00	1411.0
147.00	4040.0
148.00	8220.0
149.00	1959.0
150.00	560.0
151.10	949.0
151.70	697.0
153.00	2495.0
154.00	1917.0

155.00	4260.0
156.00	6892.0
157.10	1409.0
157.90	1485.0
159.00	1032.0
160.00	2425.0
161.00	3844.0
161.90	1198.0
164.00	412.0
165.00	3031.0
166.00	2565.0
167.00	16344.0
168.00	8699.0
169.00	1592.0
170.10	539.0
170.80	655.0
172.00	1531.0
173.00	1907.0
174.00	3720.0
175.00	6574.0
176.00	2307.0
177.00	3237.0
178.00	1040.0
179.00	12349.0
180.00	8757.0
181.00	4219.0
182.10	719.0
182.80	312.0
183.90	1006.0
185.00	6445.0
186.00	49832.0
187.00	14154.0
188.00	1599.0
189.00	2928.0
190.00	541.0
191.00	1423.0
192.00	3985.0
193.00	4592.0
194.00	960.0
194.90	569.0
196.00	12089.0
198.00	392192.0
199.00	25952.0
200.00	2021.0
201.50	2041.0
203.00	2465.0
204.00	13000.0
205.00	22440.0
206.00	99896.0
207.10	13272.0
208.00	3150.0
209.00	925.0
210.40	1867.0
211.00	3955.0
215.00	1053.0
216.00	2092.0
217.00	24768.0
218.00	3350.0
221.00	20880.0
221.80	4257.0
223.00	5954.0
224.00	57400.0
225.00	14521.0
226.00	1677.0
227.00	21528.0
228.00	3022.0
229.00	4770.0
229.90	692.0
231.00	2033.0
232.00	351.0
232.90	373.0
234.00	1369.0
235.00	1612.0
236.00	954.0
237.00	2070.0
238.00	346.0
239.00	820.0
240.10	691.0
241.00	1234.0
242.00	3247.0
243.00	3387.0
244.00	49920.0
245.00	6415.0
246.00	8537.0
247.00	1865.0
248.00	407.0
249.00	1825.0
249.90	325.0
251.00	356.0
252.00	373.0
253.00	874.0
255.00	254016.0
256.00	36680.0
257.00	2985.0
258.00	13281.0

Instrument :
BNA_N
ClientSampleId :
DFTPP54

259.00	1886.0
259.90	441.0
260.90	400.0
264.00	379.0
265.00	5480.0
266.00	793.0
270.90	515.0
272.00	679.0
273.00	7974.0
274.00	21672.0
275.00	129672.0
276.00	16824.0
277.00	9701.0
278.00	1717.0
279.00	330.0
283.00	924.0
284.00	724.0
285.00	1725.0
286.00	337.0
288.90	391.0
289.90	345.0
292.10	491.0
293.00	2151.0
294.00	589.0
296.00	31960.0
297.00	4419.0
297.90	359.0
301.00	464.0
302.00	609.0
303.00	3989.0
304.00	1198.0
308.00	421.0
309.00	335.0
310.00	434.0
313.00	308.0
314.00	1735.0
315.00	3507.0
316.00	2310.0
317.00	425.0
321.00	1183.0
322.00	623.0
323.10	11696.0
324.00	2143.0
326.90	2109.0
327.90	1141.0
332.00	803.0
333.00	1062.0
334.00	7542.0
335.00	1849.0
341.00	1491.0
342.00	413.0
345.90	2391.0
347.00	481.0
352.00	3793.0
353.00	2687.0
354.00	4127.0
355.00	719.0
359.00	304.0
365.00	15995.0
366.00	2441.0
370.00	377.0
371.00	1027.0
372.00	6772.0
373.00	1606.0
383.00	1924.0
383.90	492.0
390.00	798.0
391.00	637.0
392.00	507.0
401.10	368.0
402.00	2813.0
403.00	4201.0
404.00	1612.0
421.00	3503.0
422.00	3261.0
423.00	24136.0
424.00	5296.0
425.00	694.0
441.10	62184.0
442.10	391424.0
443.10	73112.0
444.10	6771.0
445.00	335.0

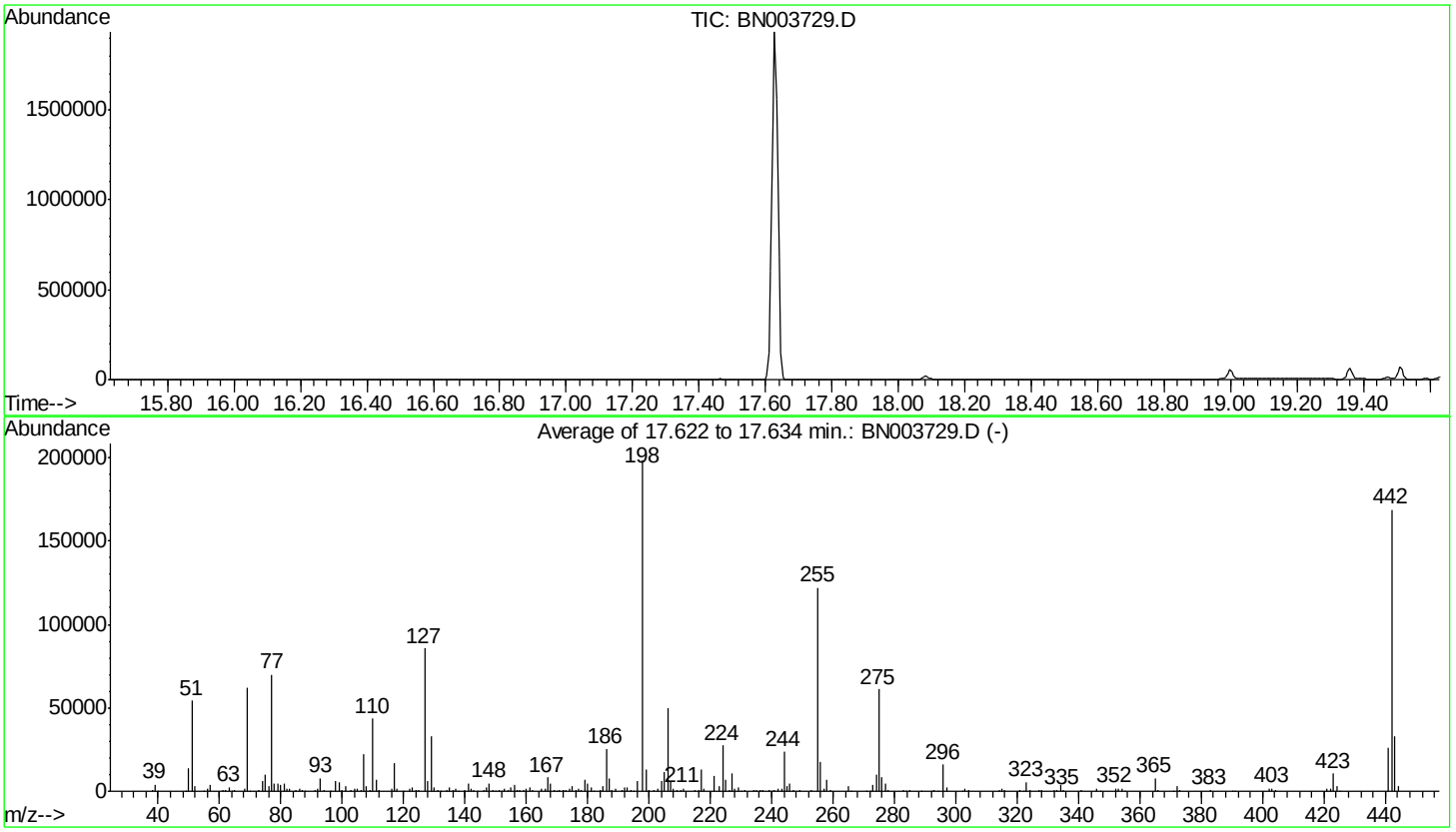
Instrument :
BNA_N
ClientSampleId :
DFTPP54

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120618\
Data File : BN003729.D
Acq On : 06 Dec 2018 13:57
Operator : JU/SJ
Sample : DFTPP62
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : DFTPP62

Integration File: rteint.p

Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Fri Dec 07 04:08:50 2018



AutoFind: Scans 2488, 2489, 2490; Background Corrected with Scan 2481

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	27.3	54160	PASS
68	69	0.00	2	1.9	1194	PASS
69	198	0.00	100	31.2	61936	PASS
70	69	0.00	2	0.4	242	PASS
127	198	10	80	43.1	85509	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	198528	PASS
199	198	5	9	6.7	13255	PASS
275	198	10	60	30.8	61226	PASS
365	198	1	100	3.9	7840	PASS
441	198	0.01	100	13.2	26248	PASS
442	198	50	100	85.0	168824	PASS
443	442	15	24	19.5	32960	PASS

Scan 2481 (17.581 min): BN003729.D
DFTPP62

m/z	Abundance
44.00	841.0
207.00	330.0

Instrument :
BNA_N
ClientSampleId :
DFTPP62

Scan 2488 (17.622 min): BN003729.D
DFTPP62

m/z	Abundance
38.00	623.0
39.00	4199.0
39.90	362.0
44.00	739.0
49.10	417.0
50.00	14177.0
51.00	54472.0
52.00	2910.0
55.00	415.0
56.00	1664.0
57.00	3791.0
61.00	747.0
62.00	759.0
63.00	2415.0
64.00	387.0
65.00	1069.0
68.00	1164.0
69.00	61880.0
70.00	337.0
73.00	533.0
74.00	6006.0
75.00	9903.0
76.10	3335.0
77.00	69152.0
78.00	4795.0
79.00	4689.0
80.00	3463.0
81.00	4912.0
82.00	1180.0
83.00	1139.0
85.00	859.0
86.00	1604.0
87.00	720.0
91.00	1181.0
92.00	1364.0
93.00	7571.0
94.00	521.0
95.90	395.0
98.00	6025.0
99.00	5333.0
100.00	496.0
101.00	2820.0
103.00	1030.0
104.00	1739.0
105.00	1651.0
106.10	594.0
107.00	20944.0
108.00	3236.0
109.10	684.0
110.00	41472.0
111.00	6497.0
112.00	678.0
116.10	1091.0
117.00	16087.0
118.00	1350.0
120.00	311.0
122.00	1525.0
123.00	2240.0
124.00	992.0
125.00	966.0
127.00	81304.0
128.00	6282.0
129.00	31056.0
130.00	2570.0
131.00	559.0
134.00	973.0
135.00	2529.0
136.00	1045.0
137.00	1384.0
140.00	385.0
141.00	4054.0
142.00	1431.0
143.00	824.0
146.00	643.0
147.00	2042.0
148.00	4331.0
149.00	858.0
151.10	540.0
151.80	403.0
152.90	1270.0
154.00	911.0
155.00	2107.0
156.00	3447.0
157.00	679.0
157.90	795.0
159.00	554.0
160.00	1341.0
161.00	1781.0
162.00	494.0
165.00	1558.0
166.00	1280.0

Instrument :
BNA_N
ClientSampleId :
DFTPP62

167.00	7482.0
168.00	4350.0
169.00	725.0
170.90	379.0
171.90	648.0
173.00	900.0
174.00	1671.0
175.00	2988.0
176.00	968.0
177.00	1464.0
177.90	557.0
179.00	5614.0
180.00	4399.0
181.00	1903.0
182.00	308.0
184.00	498.0
185.00	2876.0
186.00	22528.0
187.00	6645.0
188.00	780.0
189.00	1328.0
191.00	669.0
191.90	1831.0
193.00	2252.0
194.00	507.0
195.10	302.0
196.00	5417.0
198.00	172608.0
199.00	11904.0
200.00	866.0
201.50	955.0
202.90	1010.0
204.10	5545.0
205.00	9959.0
206.00	42160.0
207.10	5918.0
208.00	1568.0
208.90	545.0
211.00	1636.0
215.00	505.0
216.00	868.0
217.00	10666.0
218.00	1435.0
221.10	7552.0
223.00	2600.0
224.00	23016.0
225.00	6049.0
226.10	788.0
227.00	9399.0
228.00	1346.0
229.00	2036.0
230.00	317.0
231.00	864.0
234.00	614.0
235.00	659.0
236.10	345.0
237.00	953.0
239.00	399.0
240.00	313.0
240.90	551.0
242.00	1325.0
243.10	1445.0
244.00	19304.0
245.00	2618.0
246.00	3542.0
247.00	728.0
249.00	725.0
253.00	379.0
255.00	99360.0
256.00	14948.0
257.00	1254.0
258.00	5428.0
259.00	912.0
265.00	2239.0
265.90	310.0
272.00	311.0
273.00	3126.0
274.00	8119.0
275.00	49352.0
276.00	7080.0
277.00	3730.0
278.00	688.0
283.00	457.0
283.90	305.0
285.00	721.0
293.00	905.0
296.00	12365.0
297.00	1832.0
303.00	1531.0
304.00	372.0
314.00	686.0
315.00	1490.0
316.10	822.0
321.00	413.0
323.10	4216.0

Instrument :
BNA_N
ClientSampleId :
DFTPP62

324.00	858.0
327.00	764.0
327.90	423.0
332.10	350.0
333.00	390.0
334.00	2751.0
335.00	825.0
341.00	454.0
346.00	1015.0
352.00	1383.0
353.00	982.0
354.00	1359.0
355.00	350.0
365.00	5670.0
366.00	831.0
372.00	2324.0
373.10	599.0
382.90	600.0
402.00	979.0
403.00	1236.0
404.00	530.0
421.10	934.0
422.10	1126.0
423.10	7159.0
424.10	2299.0
425.00	312.0
441.10	17208.0
442.10	112744.0
443.10	21440.0
444.10	2150.0

Instrument :
BNA_N
ClientSampleId :
DFTPP62

Scan 2489 (17.628 min): BN003729.D
DFTPP62

Instrument :
BNA_N
ClientSampleId :
DFTPP62

m/z	Abundance
38.00	799.0
39.00	4760.0
40.00	384.0
44.00	765.0
49.10	457.0
50.00	15969.0
51.00	63336.0
52.00	3151.0
55.00	388.0
56.00	1986.0
57.00	4604.0
61.00	913.0
62.00	1053.0
63.00	2750.0
64.00	382.0
65.00	1459.0
68.10	1412.0
69.00	72736.0
70.00	390.0
73.00	584.0
74.00	7304.0
75.00	11179.0
76.00	3829.0
77.00	82160.0
78.00	5705.0
79.00	5784.0
80.00	4260.0
81.00	5818.0
82.00	1520.0
83.00	1332.0
85.00	1095.0
86.00	1685.0
86.90	822.0
87.90	324.0
91.00	1411.0
92.00	1576.0
93.00	9261.0
94.00	595.0
96.00	415.0
98.00	7357.0
99.00	6054.0
100.00	571.0
101.00	3474.0
103.00	1098.0
104.00	2172.0
105.00	1907.0
106.00	722.0
107.00	26040.0
108.00	3988.0
109.10	797.0
110.00	51888.0
111.00	7698.0
112.00	883.0
116.00	1502.0
117.00	19824.0
118.00	1388.0
120.00	342.0
122.00	1887.0
123.00	2759.0
124.00	1281.0
125.00	1179.0
127.00	100800.0
128.00	7712.0
129.00	38248.0
130.00	3210.0
131.00	560.0
132.00	366.0
134.00	1158.0
135.00	3179.0
136.00	1250.0
137.00	1536.0
138.00	341.0
140.00	539.0
141.00	4976.0
142.00	1603.0
143.00	1160.0
144.00	302.0
146.00	937.0
147.00	2542.0
148.00	5543.0
149.00	1182.0
150.00	321.0
151.20	678.0
151.90	432.0
153.00	1583.0
154.00	1240.0
155.00	2929.0
156.00	4264.0
157.10	859.0
158.00	966.0
158.90	726.0

160.00	1662.0
161.00	2481.0
161.90	741.0
165.00	1921.0
166.00	1630.0
167.00	9782.0
168.00	5640.0
169.00	814.0
169.90	353.0
170.90	485.0
172.00	964.0
173.00	1156.0
174.00	2117.0
175.00	4043.0
176.00	1343.0
177.00	2067.0
178.00	626.0
179.00	7982.0
180.00	5606.0
181.00	2461.0
182.00	407.0
184.00	580.0
185.00	3851.0
186.00	30440.0
187.00	8880.0
188.00	987.0
189.00	1790.0
191.00	833.0
192.00	2512.0
193.00	2586.0
194.00	588.0
195.10	339.0
196.00	7275.0
198.00	235584.0
199.00	15804.0
200.00	1189.0
201.50	1308.0
203.00	1529.0
204.00	7814.0
205.00	13776.0
206.00	60184.0
207.00	8348.0
208.00	1885.0
209.00	631.0
210.20	993.0
211.00	2333.0
215.00	665.0
216.00	1286.0
217.00	15447.0
218.00	1940.0
221.00	11343.0
223.00	3586.0
224.00	33688.0
225.00	8763.0
226.10	987.0
227.00	12978.0
228.00	2035.0
229.00	2836.0
230.00	492.0
231.00	1275.0
234.00	838.0
235.00	1003.0
236.00	627.0
237.00	1312.0
239.00	600.0
240.00	507.0
241.00	764.0
242.00	1970.0
243.10	2068.0
244.10	28776.0
245.10	3757.0
246.00	5111.0
247.00	1023.0
249.00	1119.0
252.90	548.0
255.00	146816.0
256.00	21552.0
257.00	1803.0
258.00	7876.0
259.00	1264.0
265.00	3198.0
265.90	468.0
271.00	339.0
271.90	415.0
273.00	4550.0
274.00	12055.0
275.00	72952.0
276.00	9568.0
277.00	5678.0
278.00	1032.0
283.00	611.0
283.90	452.0
285.00	1045.0
288.90	309.0
292.00	332.0

Instrument :
BNA_N
ClientSampleId :
DFTPP62

293.00	1296.0
294.10	364.0
296.00	19000.0
297.00	2844.0
302.00	442.0
303.00	2259.0
304.00	609.0
314.00	954.0
315.00	2073.0
316.00	1442.0
321.00	567.0
322.10	403.0
323.10	6741.0
324.00	1236.0
327.00	1183.0
327.90	640.0
332.10	497.0
332.90	668.0
334.00	4417.0
335.00	1210.0
341.00	805.0
345.90	1353.0
347.00	331.0
352.00	1987.0
353.10	1450.0
354.00	2092.0
355.00	390.0
365.00	9140.0
366.00	1225.0
371.00	511.0
372.10	3812.0
373.10	969.0
383.00	941.0
390.00	508.0
391.00	370.0
402.00	1433.0
403.00	2275.0
404.00	898.0
421.00	1574.0
422.00	1723.0
423.10	12799.0
424.10	3291.0
425.00	405.0
441.10	30464.0
442.10	196032.0
443.10	39400.0
444.10	3553.0

Instrument :
BNA_N
ClientSampleId :
DFTPP62

Scan 2490 (17.634 min): BN003729.D
DFTPP62

m/z	Abundance
38.00	519.0
39.00	3387.0
40.00	327.0
44.00	734.0
49.00	325.0
50.00	11354.0
51.00	44672.0
52.00	2236.0
56.00	1324.0
57.00	3338.0
61.00	616.0
61.90	622.0
63.00	2005.0
65.00	930.0
68.10	1007.0
69.00	51192.0
73.00	514.0
74.00	5193.0
75.00	8124.0
76.00	2776.0
77.00	58792.0
78.00	3929.0
79.00	3852.0
80.00	3125.0
81.00	3931.0
82.00	994.0
83.00	1112.0
85.00	716.0
86.00	1241.0
87.00	515.0
90.90	866.0
92.00	1148.0
93.00	6848.0
94.00	436.0
96.00	308.0
98.00	5311.0
99.00	4487.0
100.00	372.0
101.00	2355.0
103.00	914.0
104.00	1624.0
105.00	1480.0
106.00	535.0
107.00	19192.0
108.00	3004.0
109.10	707.0
110.00	37304.0
111.00	5522.0
112.00	684.0
115.90	1034.0
117.00	14884.0
118.00	1062.0
122.00	1462.0
123.00	2113.0
123.90	871.0
125.00	795.0
127.00	74424.0
128.00	5520.0
129.00	28720.0
130.00	2283.0
131.00	466.0
134.00	825.0
135.00	2276.0
136.00	920.0
137.00	1211.0
139.90	368.0
141.00	3773.0
142.00	1370.0
143.00	934.0
146.00	697.0
147.00	2018.0
148.00	4074.0
149.00	942.0
151.10	439.0
153.00	1258.0
154.00	966.0
155.00	2162.0
156.00	3183.0
157.00	703.0
157.90	733.0
158.90	469.0
160.00	1171.0
161.00	1735.0
162.00	550.0
165.00	1507.0
166.00	1236.0
167.00	7994.0
168.00	3981.0
169.00	694.0
170.90	378.0
171.90	722.0

Instrument :
BNA_N
ClientSampleId :
DFTPP62

173.00	918.0
174.00	1717.0
175.00	3185.0
176.00	864.0
176.90	1568.0
178.00	534.0
179.00	6143.0
180.00	4222.0
181.00	1991.0
182.00	340.0
183.90	443.0
185.00	2955.0
186.00	23856.0
187.00	6767.0
188.00	768.0
188.90	1371.0
191.00	653.0
192.00	1972.0
193.00	2204.0
194.00	536.0
196.00	5636.0
198.00	187392.0
199.00	12057.0
200.00	960.0
201.50	963.0
203.00	1178.0
204.00	6164.0
205.00	10878.0
206.00	47208.0
207.10	6264.0
208.00	1569.0
209.00	572.0
210.20	856.0
211.00	1850.0
214.90	456.0
216.00	1053.0
217.00	12317.0
218.00	1387.0
221.00	8688.0
223.00	2935.0
224.00	26032.0
225.00	6991.0
226.00	703.0
227.00	10568.0
228.00	1565.0
229.00	2349.0
230.00	346.0
231.10	949.0
234.00	643.0
235.00	786.0
236.00	513.0
237.00	978.0
238.90	457.0
240.00	322.0
240.90	603.0
242.00	1393.0
243.10	1684.0
244.00	22664.0
245.00	3017.0
246.00	4193.0
247.00	855.0
249.00	868.0
253.00	474.0
255.00	120528.0
256.00	17120.0
257.00	1413.0
258.00	6681.0
259.00	1046.0
265.00	2727.0
266.00	342.0
272.10	349.0
273.00	3948.0
274.00	10043.0
275.00	61376.0
276.00	8318.0
277.00	4761.0
278.00	786.0
282.90	451.0
283.90	365.0
285.00	899.0
293.00	1182.0
296.00	16202.0
297.00	2065.0
302.00	319.0
303.10	2011.0
304.00	550.0
314.00	786.0
315.00	1771.0
316.00	1153.0
321.00	564.0
322.00	329.0
323.10	5762.0
324.00	1092.0
327.00	1111.0
328.00	537.0

Instrument :
BNA_N
ClientSampleId :
DFTPP62

332.00	465.0
333.00	613.0
334.00	4022.0
335.00	1084.0
341.00	792.0
346.00	1260.0
352.00	1795.0
353.00	1300.0
354.00	2142.0
355.00	379.0
365.00	8711.0
366.00	1095.0
371.00	523.0
372.00	3561.0
373.00	885.0
383.00	1038.0
390.00	447.0
391.00	349.0
402.00	1394.0
403.00	2050.0
404.10	725.0
421.00	1688.0
422.10	1825.0
423.10	12093.0
424.00	2990.0
441.10	31072.0
442.10	197696.0
443.10	38040.0
444.10	3428.0

Instrument :
BNA_N
ClientSampleId :
DFTPP62

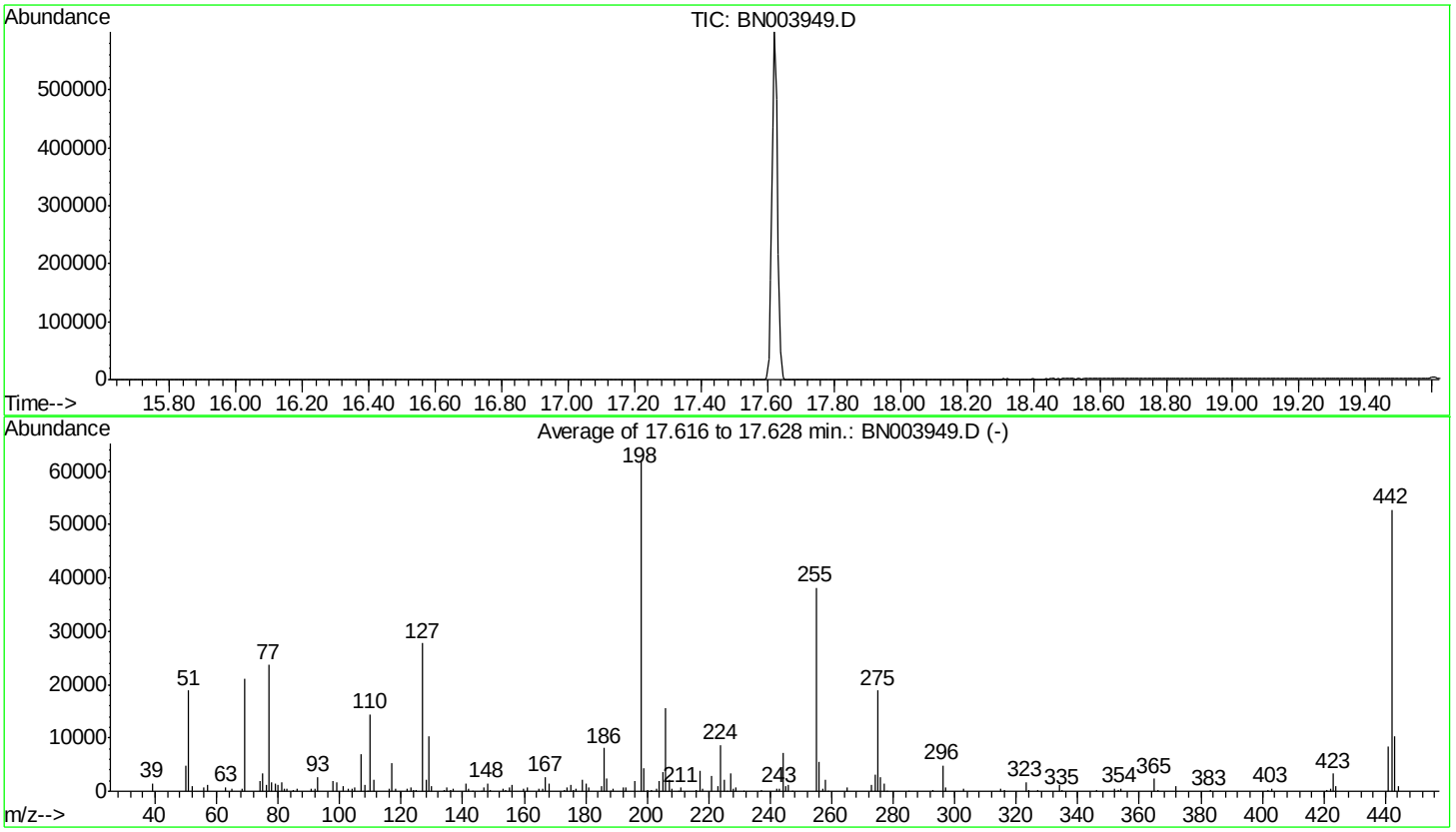
DFTPP

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121518\
Data File : BN003949.D
Acq On : 15 Dec 2018 08:31
Operator : JU/SJ
Sample : DFTPP69
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : DFTPP69

Integration File: rteint.p

Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Dec 17 06:22:23 2018



AutoFind: Scans 2487, 2488, 2489; Background Corrected with Scan 2481

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	30.4	18849	PASS
68	69	0.00	2	1.9	390	PASS
69	198	0.00	100	34.0	21069	PASS
70	69	0.00	2	0.0	0	PASS
127	198	10	80	44.7	27765	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	62058	PASS
199	198	5	9	6.9	4263	PASS
275	198	10	60	30.3	18830	PASS
365	198	1	100	3.9	2391	PASS
441	198	0.01	100	13.4	8303	PASS
442	198	50	100	85.0	52752	PASS
443	442	15	24	19.4	10240	PASS

Scan 2481 (17.580 min): BN003949.D
DFTPP69

m/z	Abundance
44.00	682.0

Instrument :
BNA_N
ClientSampleId :
DFTPP69

Scan 2487 (17.616 min): BN003949.D
DFTPP69

m/z	Abundance
39.00	1426.0
43.90	637.0
50.00	4746.0
51.00	19376.0
52.00	935.0
55.90	573.0
57.00	1292.0
63.00	803.0
65.00	368.0
68.10	410.0
69.00	21064.0
74.00	1998.0
75.00	3322.0
76.00	1125.0
77.00	23568.0
78.00	1672.0
79.00	1544.0
79.90	1150.0
81.00	1679.0
81.90	441.0
82.90	412.0
84.90	316.0
86.00	470.0
90.90	338.0
92.00	424.0
93.00	2527.0
98.00	1865.0
99.00	1673.0
101.00	948.0
103.00	387.0
104.00	573.0
104.90	609.0
107.00	6850.0
108.00	1167.0
110.00	13821.0
111.00	2089.0
115.90	370.0
117.00	5081.0
118.00	393.0
121.90	456.0
123.00	779.0
123.90	320.0
124.90	344.0
127.00	26088.0
128.00	2137.0
129.00	9803.0
130.00	869.0
135.00	714.0
137.00	475.0
141.00	1287.0
141.90	403.0
147.00	694.0
148.00	1331.0
148.90	317.0
152.90	416.0
153.90	353.0
155.00	663.0
156.00	999.0
159.90	415.0
160.90	646.0
164.90	515.0
166.00	407.0
167.00	2374.0
168.00	1376.0
173.00	318.0
173.90	547.0
175.00	965.0
176.00	324.0
177.00	476.0
179.00	1887.0
180.00	1343.0
181.00	634.0
185.00	926.0
186.00	7370.0
187.00	2133.0
189.00	411.0
192.00	609.0
193.00	677.0
196.00	1669.0
198.00	53784.0
199.00	3782.0
201.40	325.0
202.90	395.0
204.00	1774.0
205.00	3168.0
206.00	13308.0
207.00	2139.0
208.00	478.0
211.00	576.0
217.00	3346.0
217.90	432.0

Instrument :
BNA_N
ClientSampleId :
DFTPP69

221.00	2549.0
223.00	854.0
224.00	7451.0
225.00	1743.0
227.00	2860.0
227.90	451.0
229.00	679.0
242.00	435.0
243.00	476.0
244.00	6189.0
245.00	866.0
246.00	1129.0
255.00	31696.0
256.00	4704.0
257.00	400.0
258.00	1703.0
265.00	680.0
273.00	964.0
274.00	2553.0
275.00	15076.0
276.00	2144.0
276.90	1125.0
296.00	3780.0
297.00	555.0
303.00	448.0
314.90	349.0
323.00	1326.0
334.00	834.0
351.90	389.0
354.00	461.0
365.00	1652.0
365.90	309.0
372.00	696.0
402.90	364.0
422.00	334.0
423.10	2180.0
424.00	661.0
441.10	5228.0
442.10	35024.0
443.10	6719.0
444.00	643.0

Instrument :
BNA_N
ClientSampleId :
DFTPP69

Scan 2488 (17.622 min): BN003949.D
DFTPP69

Instrument :
BNA_N
ClientSampleId :
DFTPP69

m/z	Abundance
39.00	1743.0
44.00	681.0
50.00	5621.0
51.00	21544.0
52.00	1142.0
56.00	736.0
57.00	1544.0
63.00	909.0
65.00	455.0
68.10	436.0
69.00	24704.0
74.00	2462.0
75.00	3874.0
76.00	1277.0
77.00	27448.0
78.00	1884.0
79.00	1817.0
80.00	1334.0
81.00	1919.0
81.90	461.0
83.00	463.0
84.90	320.0
86.00	545.0
90.90	427.0
92.00	508.0
93.00	3139.0
98.00	2430.0
99.00	1900.0
101.00	1211.0
102.90	407.0
103.90	652.0
105.00	682.0
107.00	8422.0
108.00	1235.0
109.10	318.0
110.00	17224.0
111.00	2480.0
116.00	492.0
117.00	6448.0
118.00	505.0
121.90	593.0
123.00	933.0
123.90	429.0
125.00	405.0
127.00	32952.0
128.00	2544.0
129.00	11991.0
130.00	1043.0
133.90	399.0
134.90	1008.0
135.90	379.0
137.00	581.0
141.00	1495.0
141.90	610.0
143.00	364.0
146.00	307.0
146.90	849.0
148.00	1723.0
148.90	404.0
153.00	583.0
154.00	380.0
155.00	831.0
156.00	1380.0
160.00	524.0
161.00	794.0
164.90	624.0
165.90	489.0
167.00	3148.0
168.00	1549.0
172.90	400.0
174.00	729.0
175.00	1305.0
176.00	440.0
176.90	621.0
178.90	2510.0
180.00	1734.0
181.00	792.0
185.00	1177.0
186.00	9589.0
187.00	2797.0
188.00	326.0
188.90	537.0
192.00	686.0
193.00	918.0
196.00	2138.0
198.00	74112.0
199.00	5081.0
200.00	378.0
201.50	363.0
203.00	449.0
204.00	2394.0

205.00	4048.0
206.10	18504.0
207.00	2518.0
208.00	668.0
210.00	311.0
211.00	773.0
215.90	366.0
217.00	4500.0
217.90	604.0
221.00	3420.0
223.00	1047.0
224.00	10223.0
225.00	2601.0
226.00	372.0
227.00	4039.0
228.00	685.0
229.00	861.0
231.10	356.0
237.00	391.0
242.00	542.0
243.10	626.0
244.00	8312.0
245.00	1050.0
246.00	1522.0
247.00	356.0
255.00	44968.0
256.00	6563.0
257.00	570.0
258.00	2424.0
258.90	373.0
264.90	1003.0
273.00	1377.0
274.00	3549.0
275.00	22104.0
276.00	3045.0
277.00	1677.0
278.00	316.0
285.00	331.0
293.00	429.0
296.00	5881.0
297.00	802.0
303.00	752.0
315.00	655.0
316.00	393.0
323.00	2021.0
324.00	383.0
326.90	430.0
334.00	1297.0
335.00	416.0
345.90	418.0
352.00	642.0
352.90	448.0
354.00	668.0
365.00	2787.0
366.00	411.0
372.00	1180.0
383.00	329.0
401.90	423.0
403.00	688.0
420.90	549.0
422.00	493.0
423.10	3978.0
424.10	1014.0
441.10	9703.0
442.10	61064.0
443.10	12522.0
444.00	1254.0

Instrument :
BNA_N
ClientSampleId :
DFTPP69

Scan 2489 (17.628 min): BN003949.D
DFTPP69

m/z	Abundance
39.00	1231.0
43.90	686.0
50.00	3863.0
51.00	15629.0
52.00	846.0
56.00	530.0
57.00	1108.0
63.00	653.0
65.00	366.0
68.10	326.0
69.00	17440.0
74.00	1619.0
75.00	2747.0
76.10	1031.0
77.00	20104.0
78.00	1386.0
79.00	1326.0
79.90	979.0
81.00	1463.0
82.00	343.0
83.00	327.0
85.90	377.0
90.90	424.0
92.00	392.0
93.00	2273.0
98.00	1804.0
99.00	1469.0
101.00	792.0
103.00	315.0
104.00	514.0
104.90	548.0
107.00	5920.0
108.00	960.0
110.00	12304.0
111.00	1693.0
116.00	307.0
117.00	4573.0
118.00	355.0
121.90	366.0
123.00	728.0
127.00	24256.0
128.00	1780.0
129.00	9198.0
130.00	823.0
133.90	316.0
135.00	748.0
136.00	310.0
136.90	352.0
141.00	1225.0
141.90	399.0
147.00	636.0
148.00	1364.0
149.00	308.0
152.90	336.0
154.00	319.0
155.00	678.0
156.00	955.0
160.00	371.0
160.90	582.0
165.00	460.0
166.00	374.0
167.00	2525.0
168.00	1251.0
172.90	368.0
174.00	581.0
175.00	1126.0
175.90	315.0
176.90	517.0
178.90	1940.0
180.00	1280.0
180.90	595.0
185.00	1000.0
186.00	7174.0
187.00	2085.0
188.90	478.0
192.00	663.0
193.00	712.0
196.00	1834.0
198.00	58280.0
199.00	3927.0
199.90	321.0
201.50	301.0
203.00	351.0
204.00	1954.0
205.00	3231.0
206.00	14717.0
207.00	2095.0
208.00	464.0
211.00	591.0
215.90	325.0
217.00	3983.0

Instrument :
BNA_N
ClientSampleId :
DFTPP69

218.00	487.0
221.00	2730.0
223.00	887.0
224.00	8386.0
225.00	2173.0
227.00	3288.0
228.00	439.0
229.00	727.0
237.00	324.0
242.00	499.0
243.00	514.0
244.10	6818.0
245.00	1019.0
246.00	1274.0
255.00	37840.0
256.00	5435.0
257.00	402.0
258.00	2187.0
265.00	810.0
273.00	1223.0
274.00	3174.0
275.00	19312.0
276.00	2571.0
277.00	1409.0
293.00	381.0
296.00	4945.0
296.90	660.0
303.00	612.0
314.90	577.0
316.00	406.0
323.00	1893.0
323.90	323.0
334.00	1182.0
335.00	336.0
346.00	359.0
352.00	557.0
353.00	403.0
353.90	639.0
365.00	2734.0
366.00	331.0
372.00	1076.0
383.00	301.0
402.00	462.0
403.00	652.0
421.00	489.0
422.10	539.0
423.00	3629.0
424.00	865.0
441.10	9980.0
442.10	62168.0
443.10	11480.0
444.10	1069.0

Instrument :
BNA_N
ClientSampleId :
DFTPP69

FORM 1A-OR
ORGANIC ANALYSIS DATA SHEET
TARGET ANALYTE LIST

EPA SAMPLE NO.
SBLK50

Lab Name : Chemtech Consulting Group
Contract : EPW14030
Lab Code: CHM Case No.: 48019
MA No. : SDG No.: F9E54
Analytical Method : SVOA SIM
Level : LOW
Matrix : Soil
Lab Sample ID : PB115350BL
Sample wt/vol : 30.0 (g/mL): g
Lab File ID : BN003742.D
% Solids : 100
Date Received :
GC Column : ZB-GR ID : 0.25 (mm)
Date Extracted : 12/05/2018
GC Column : ID : (mm)
Date Analyzed : 12/06/2018
Extract Concentrated :(Y / N) Y
Extract Volume : 500 (µL)
Soil Aliquot (VOA) : (µL)
Extraction Type : SOXH
Heated Purge : (Y / N)
Injection Volume : 1.0 (µL)
Purge Volume : (mL)
pH : Dilution Factor : 1.0
Cleanup Types : GPC
Cleanup Factor : 2.0
Concentration Units (µg/L,mg/L,µg/kg): µg/kg

CAS NO.	ANALYTE	CONCENTRATION	Q
91-20-3	Naphthalene	3.3	U
91-57-6	2-Methylnaphthalene	3.3	U
208-96-8	Acenaphthylene	3.3	U
83-32-9	Acenaphthene	3.3	U
86-73-7	Fluorene	3.3	U
87-86-5	Pentachlorophenol	6.7	U
85-01-8	Phenanthrene	3.3	U
120-12-7	Anthracene	3.3	U
206-44-0	Fluoranthene	3.3	U
129-00-0	Pyrene	3.3	U
56-55-3	Benzo(a)anthracene	3.3	U
218-01-9	Chrysene	3.3	U
205-99-2	Benzo(b)fluoranthene	3.3	U
207-08-9	Benzo(k)fluoranthene	3.3	U
50-32-8	Benzo(a)pyrene	3.3	U
193-39-5	Indeno(1,2,3-cd)pyrene	3.3	U
53-70-3	Dibenzo(a,h)anthracene	3.3	U
191-24-2	Benzo(g,h,i)perylene	3.3	U

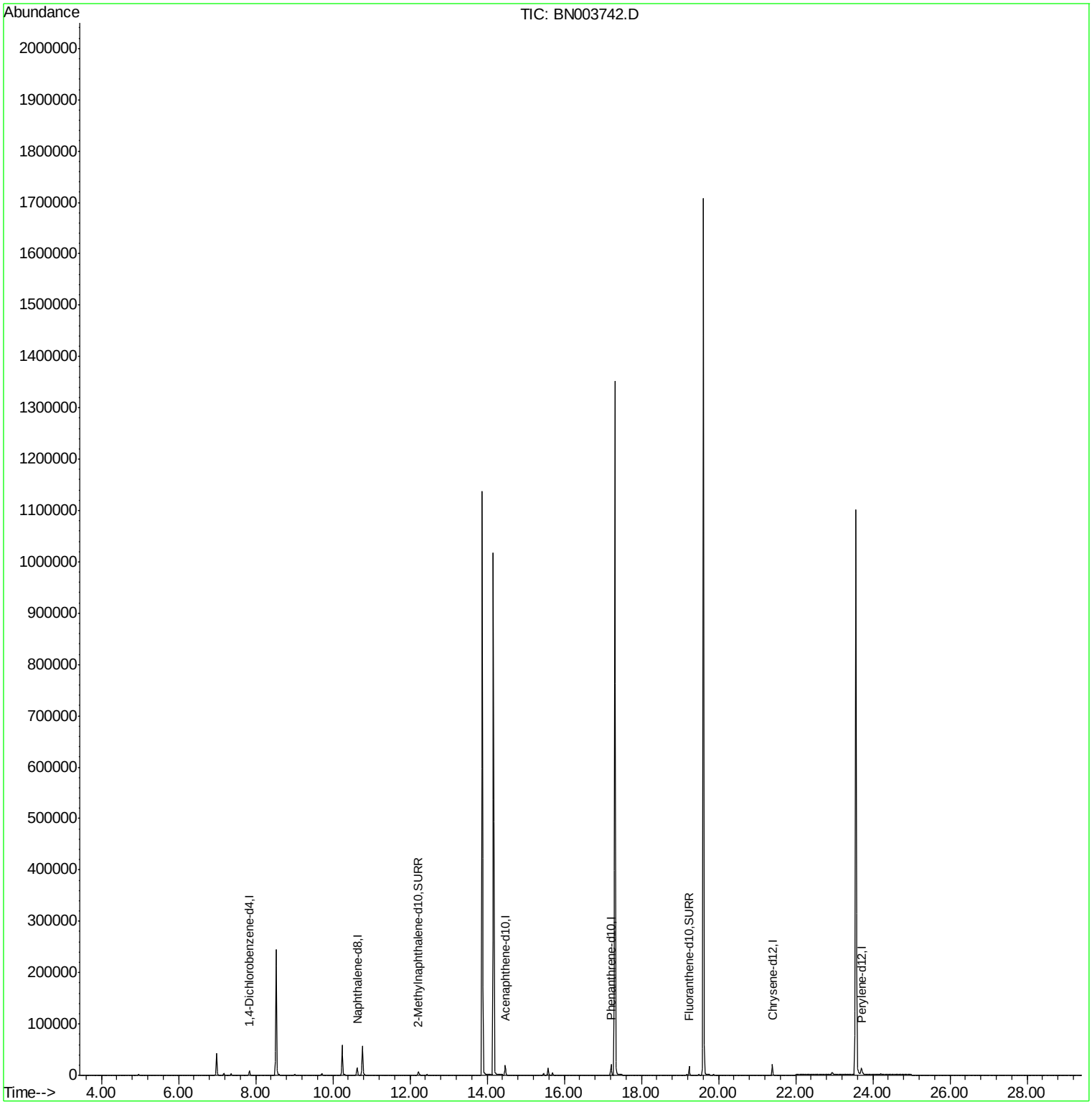
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003742.D
Acq On : 06 Dec 2018 21:45
Operator : JU/SJ
Sample : PB115350BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 07 04:08:37 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SBLK50

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:34 PM



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN120618\
Data File : BN003742.D
Acq On : 06 Dec 2018 21:45
Operator : JU/SJ
Sample : PB115350BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SBLK50

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:34 PM

Quant Time: Dec 07 04:08:37 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	4597	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	19064	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	10696	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	22939m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	19266m	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	15287m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	8299	0.28	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	19344m	0.29	ng/ul	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

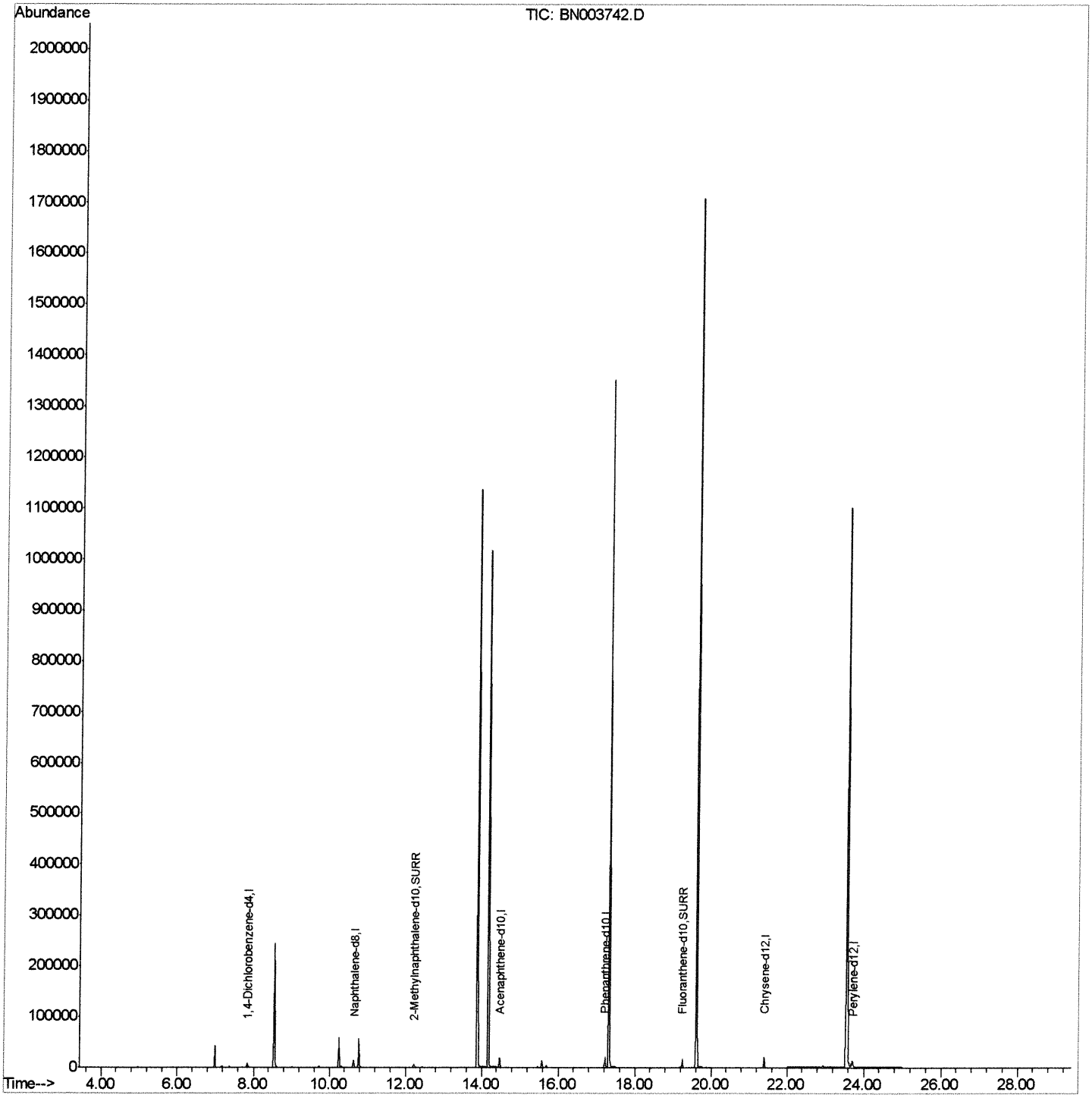
Quantitation Report (QT Reviewed)

Data File : BN003742.D
Acq On : 06 Dec 2018 21:45
Operator : JU/SJ
Sample : PB115350BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 07 04:08:37 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SBLK50

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:34 PM



Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

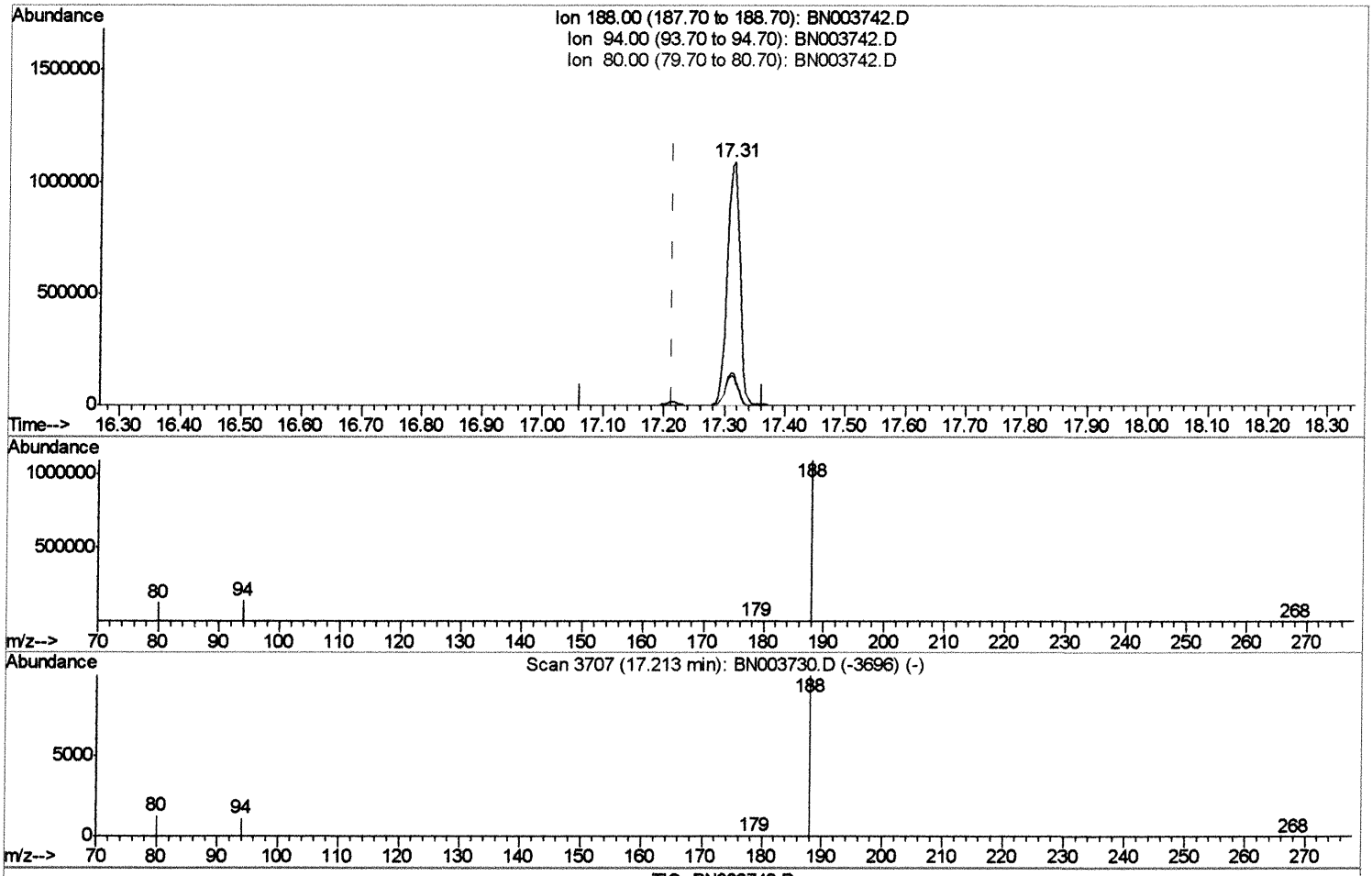
Quantitation Report (Qedit)

Data File : BN003742.D
Acq On : 06 Dec 2018 21:45
Operator : JU/SJ
Sample : PB115350BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 07 03:20:47 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SBLK50

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:34 PM



TIC: BN003742.D

(10) Phenanthrene-d10 (I)

17.314min (+0.101) 0.40ng/ul

response 1581293

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	12.75#
80.00	11.60	11.35
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

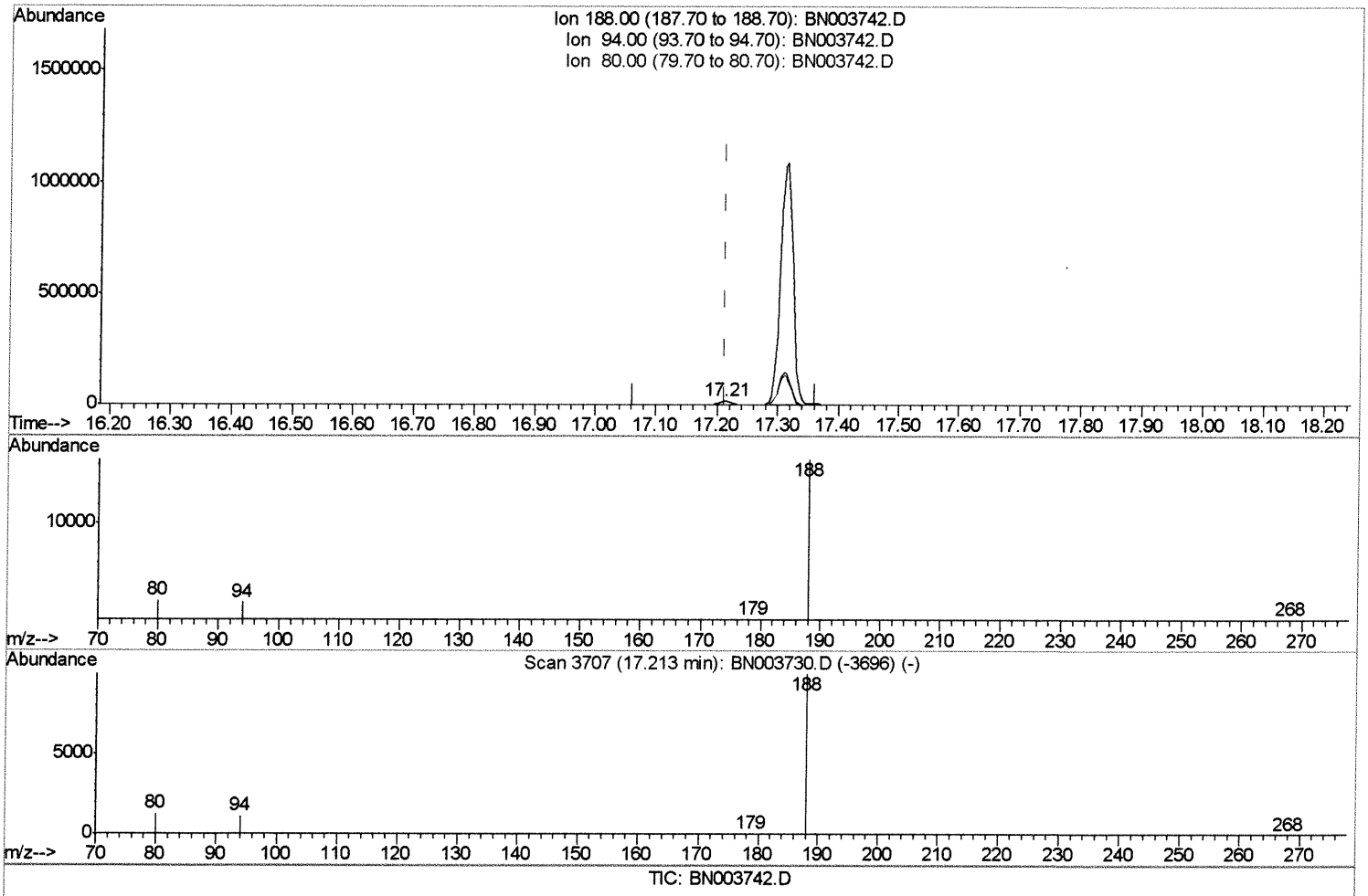
Quantitation Report (Qedit)

Data File : BN003742.D
Acq On : 06 Dec 2018 21:45
Operator : JU/SJ
Sample : PB115350BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 07 03:20:47 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SBLK50

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:34 PM



TIC: BN003742.D

(10) Phenanthrene-d10 (I)

17.213min (0.000) 0.40ng/ul m) SJ 12/11/18

response 22939

Ion	Exp%	Act%
188.00	100	100
94.00	10.40	11.09
80.00	11.60	12.18
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

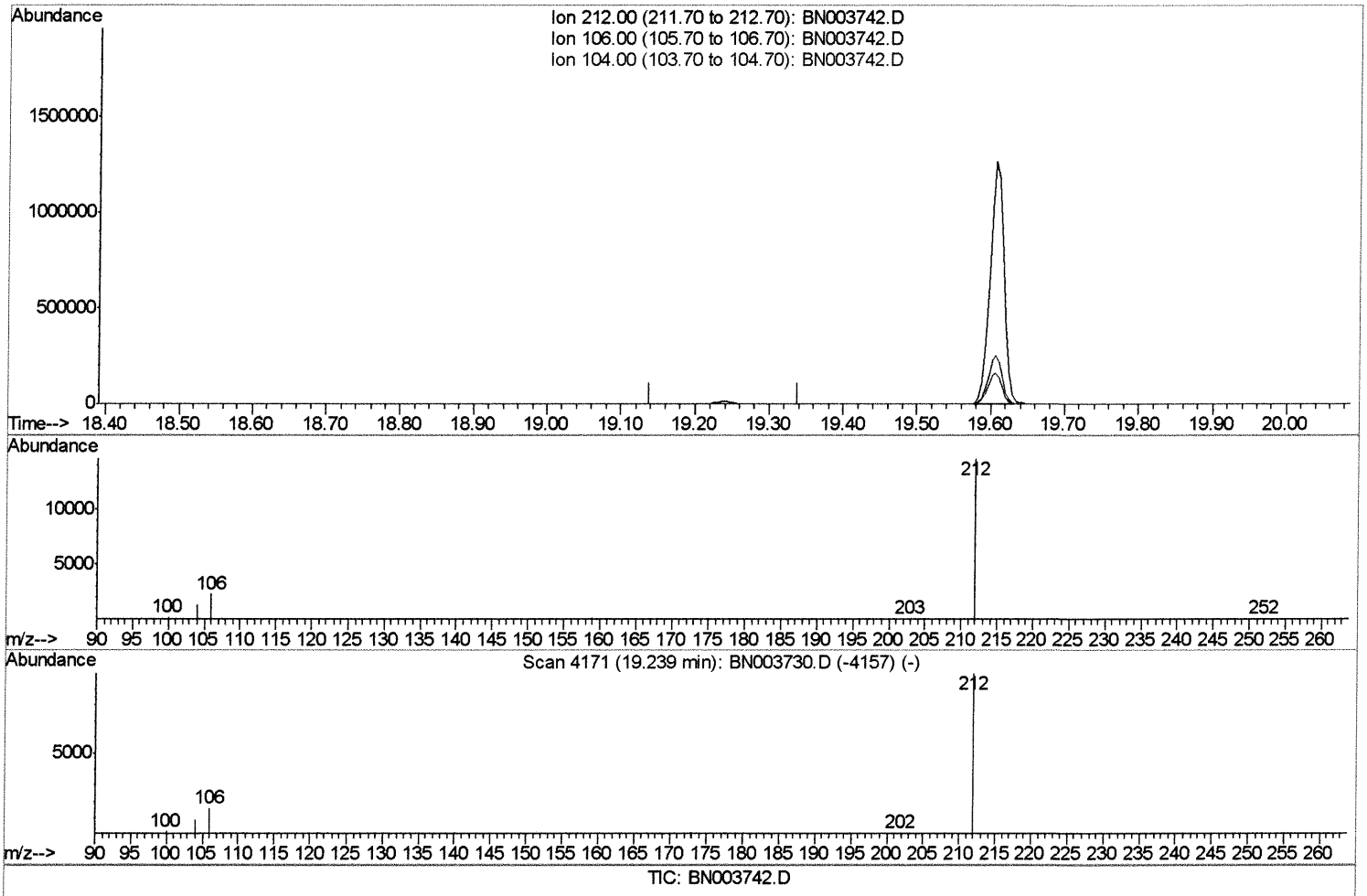
Quantitation Report (Qedit)

Data File : BN003742.D
Acq On : 06 Dec 2018 21:45
Operator : JU/SJ
Sample : PB115350BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 07 04:03:06 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SBLK50

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:34 PM



TIC: BN003742.D

(14) Fluoranthene-d10 (SURR)

19.239min (-19.239) 0.00ng/ul

response 0

Ion	Exp%	Act%
212.00	100	0.00
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

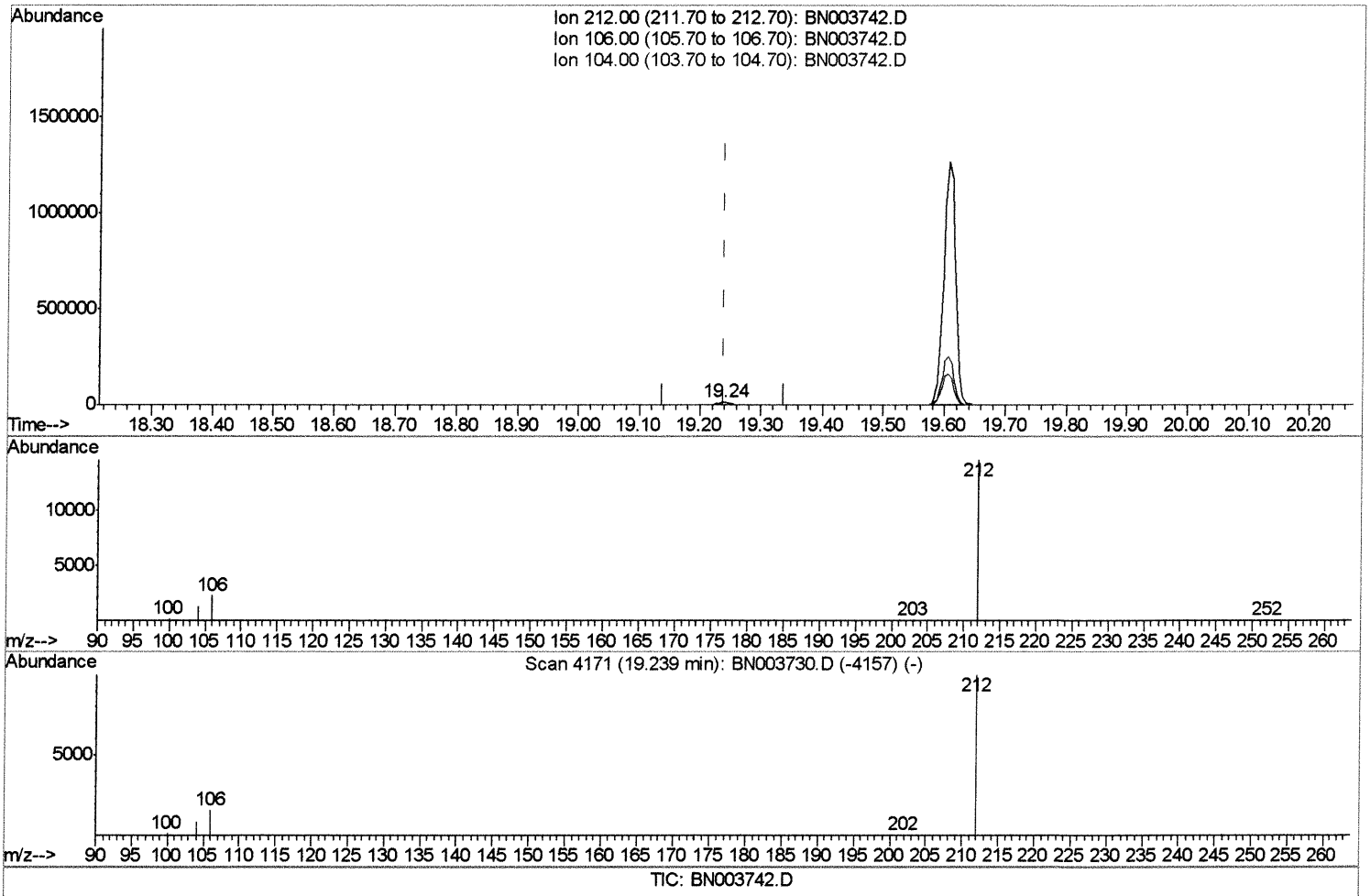
Quantitation Report (Qedit)

Data File : BN003742.D
Acq On : 06 Dec 2018 21:45
Operator : JU/SJ
Sample : PB115350BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 07 04:03:06 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SBLK50

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:34 PM



TIC: BN003742.D

(14) Fluoranthene-d10 (SURR)

19.239min (+0.000) 0.29ng/ul m

response 19344

SJ 12/11/18

Ion	Exp%	Act%
212.00	100	100
106.00	14.20	0.00#
104.00	8.00	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

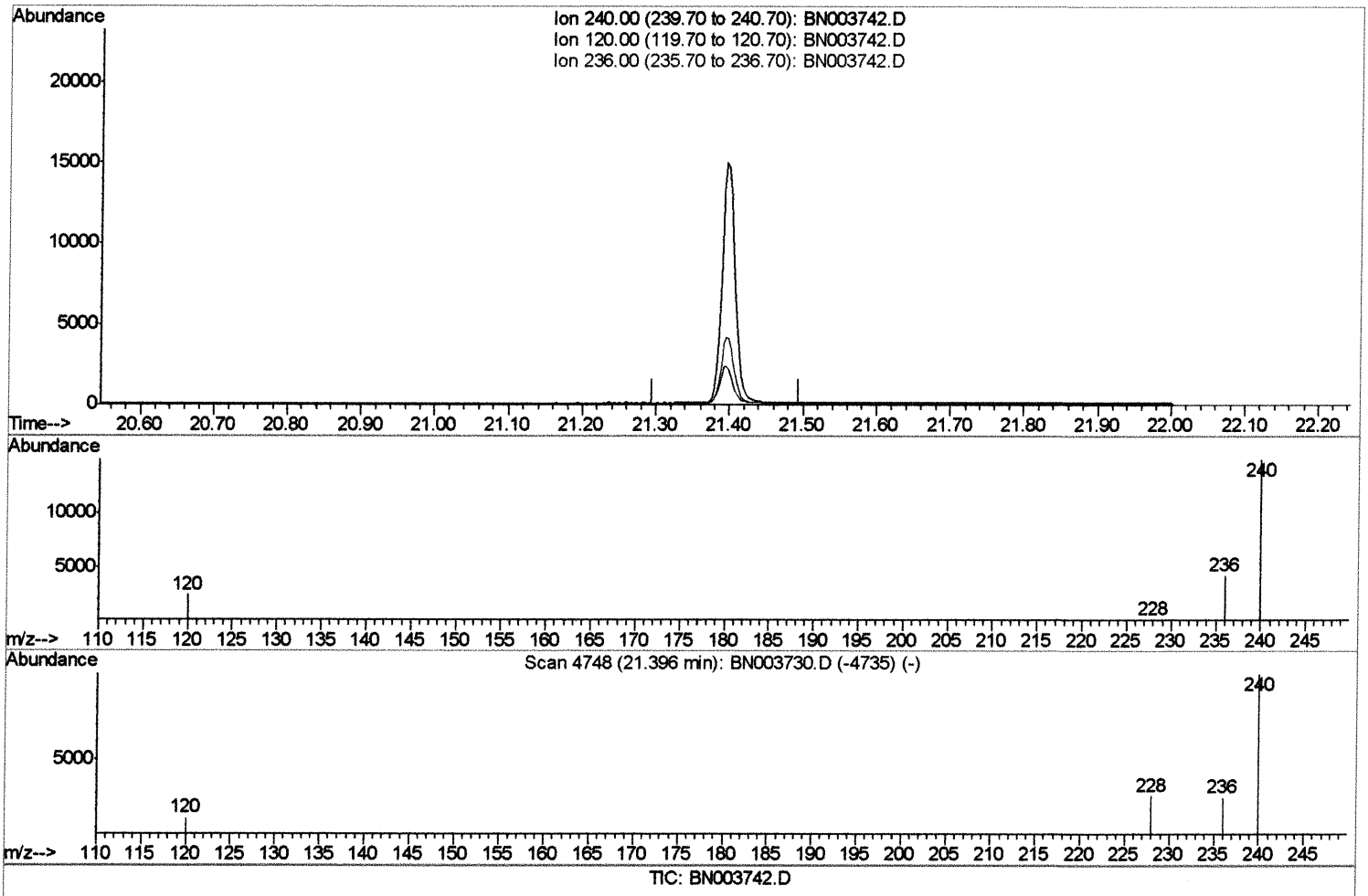
Quantitation Report (Qedit)

Data File : BN003742.D
Acq On : 06 Dec 2018 21:45
Operator : JU/SJ
Sample : PB115350BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 07 04:03:06 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SBLK50

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:34 PM



TIC: BN003742.D

(16) Chrysene-d12 (I)

21.396min (-21.396) 0.00ng/ul

response 0

Ion	Exp%	Act%
240.00	100	0.00
120.00	14.00	0.00#
236.00	27.60	0.00#
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

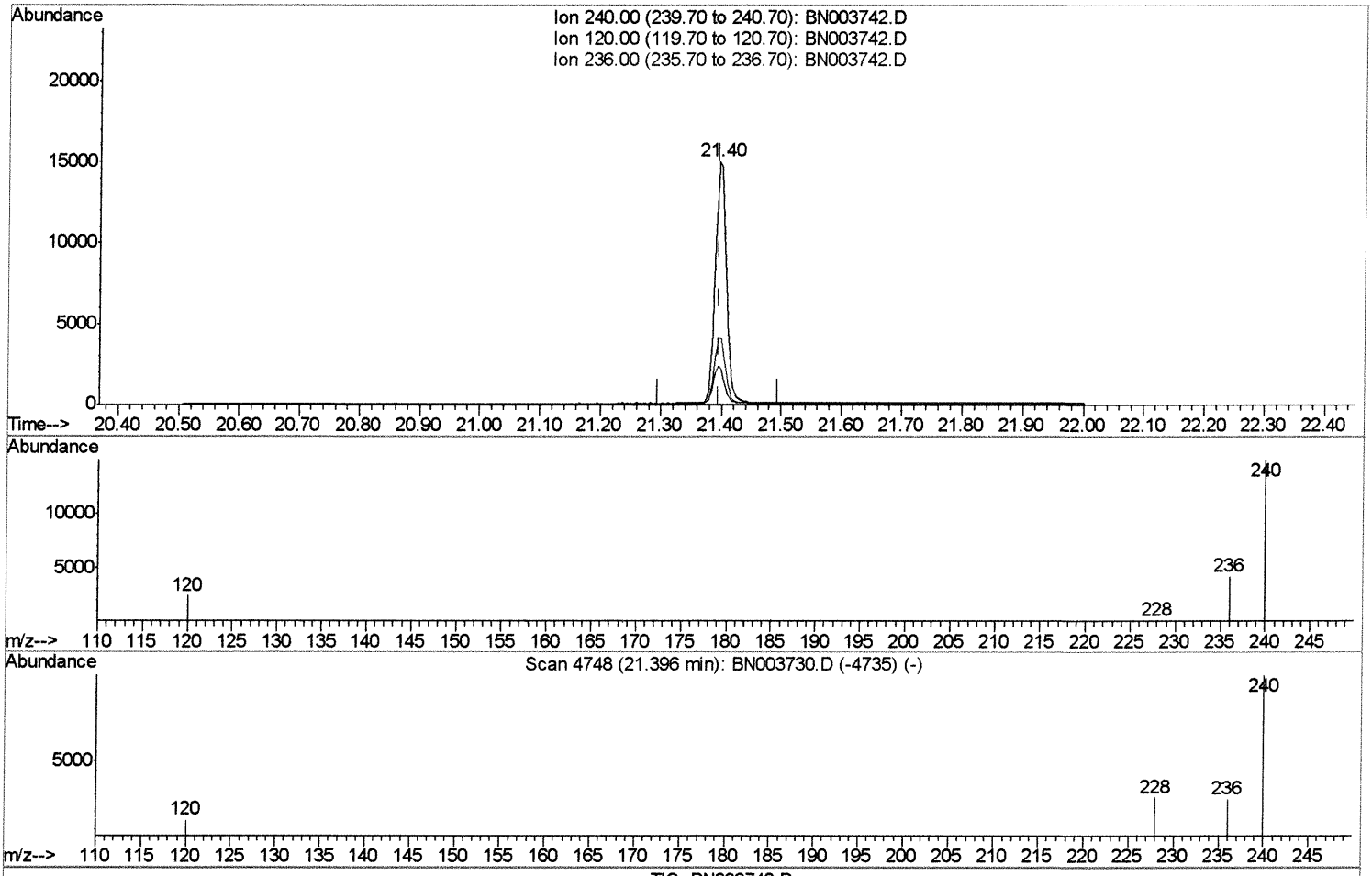
Quantitation Report (Qedit)

Data File : BN003742.D
Acq On : 06 Dec 2018 21:45
Operator : JU/SJ
Sample : PB115350BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 07 04:03:06 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SBLK50

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:34 PM



TIC: BN003742.D

(16) Chrysene-d12 (I)

21.396min (+0.000) 0.40ng/ul m

response 19266

SJ 12/11/18

Ion	Exp%	Act%
240.00	100	100
120.00	14.00	15.78
236.00	27.60	27.96
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

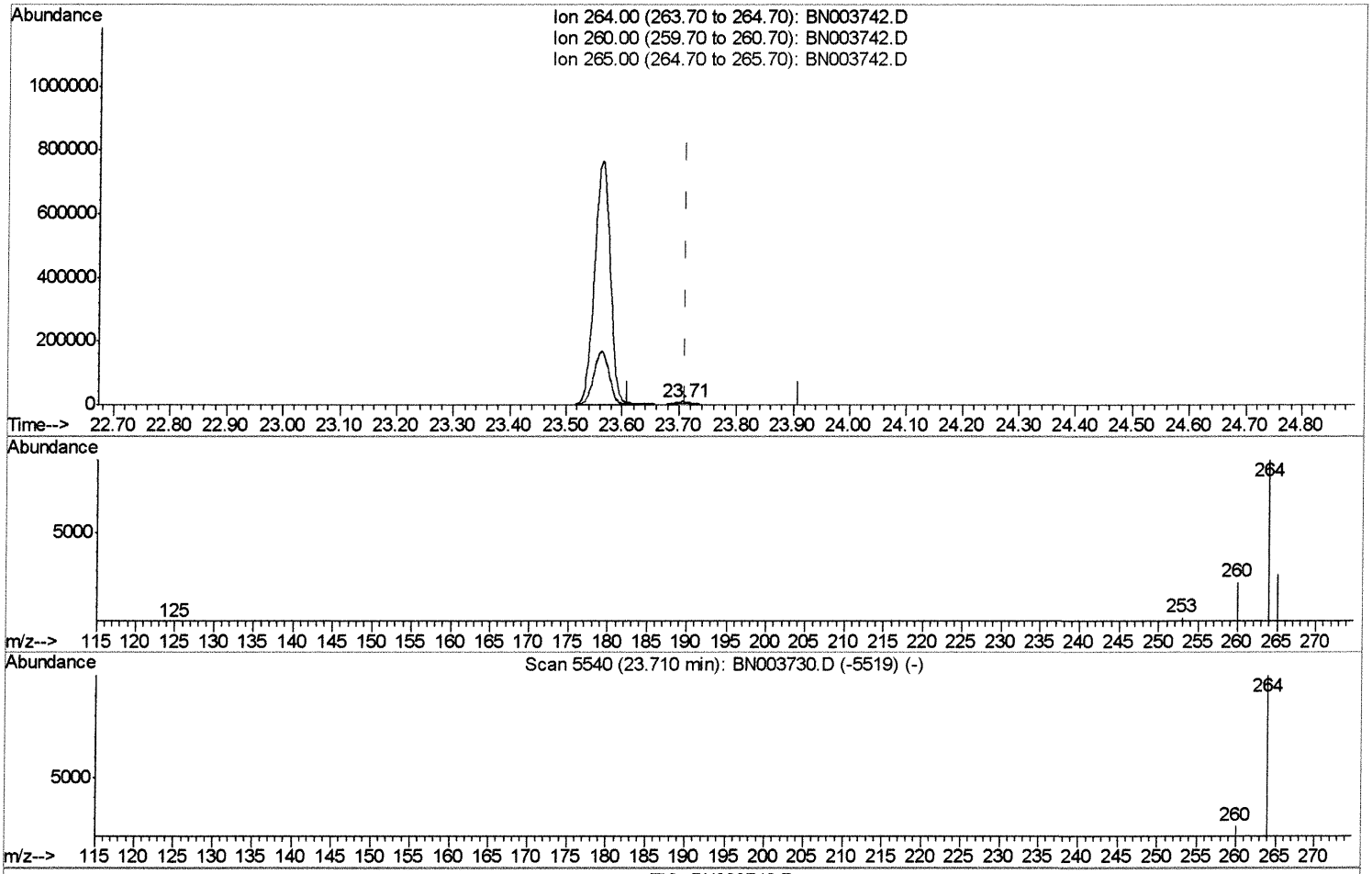
Quantitation Report (Qedit)

Data File : BN003742.D
Acq On : 06 Dec 2018 21:45
Operator : JU/SJ
Sample : PB115350BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 07 04:07:46 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SBLK50

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:34 PM



TIC: BN003742.D

(20) Perylene-d12 (I)

23.708min (-0.003) 0.40ng/ul

response 21006

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.01
265.00	33.50	30.71
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

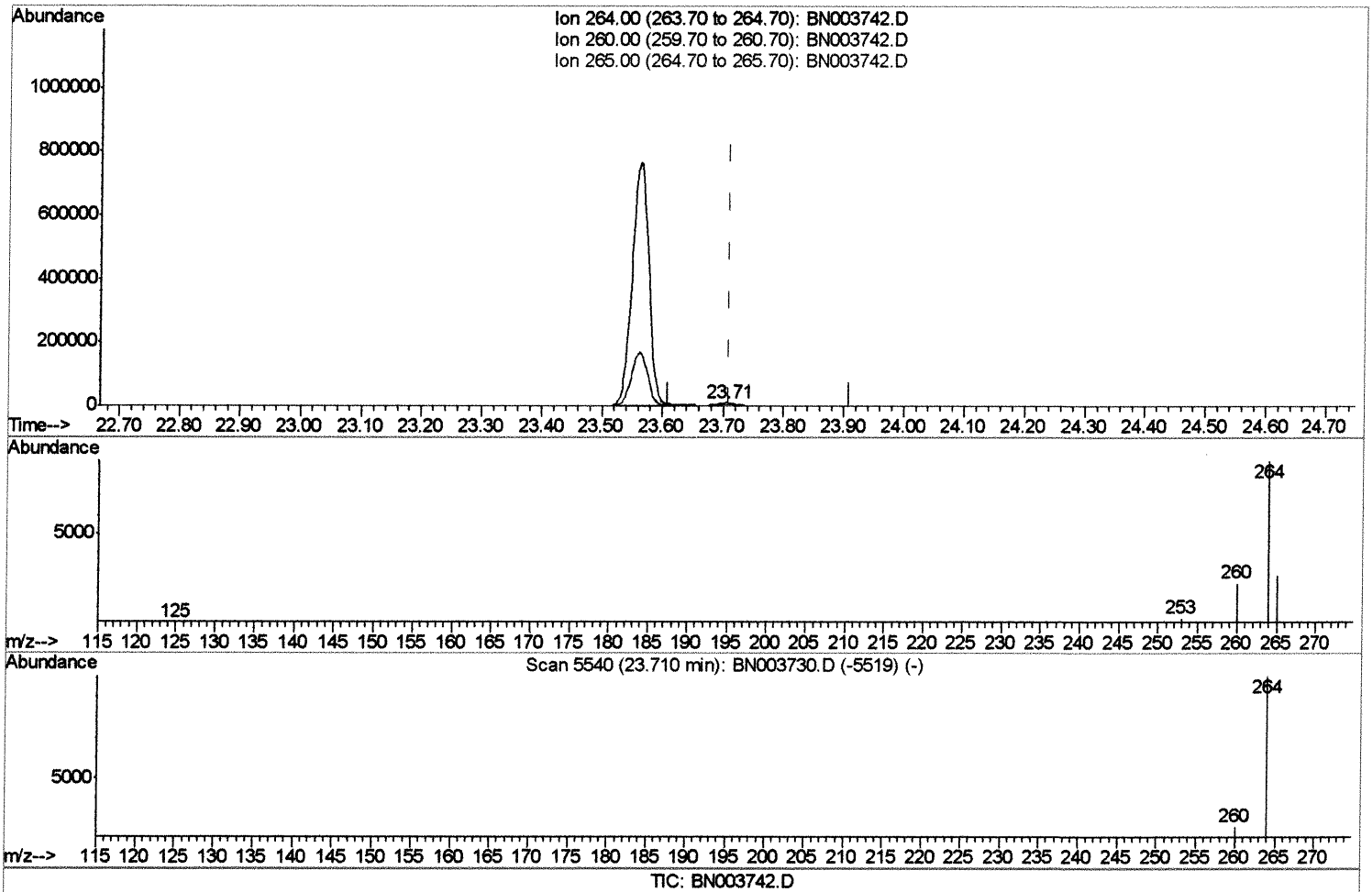
Quantitation Report (Qedit)

Data File : BN003742.D
Acq On : 06 Dec 2018 21:45
Operator : JU/SJ
Sample : PB115350BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 07 04:07:46 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SBLK50

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:34 PM



TIC: BN003742.D

(20) Perylene-d12 (I)

23.708min (-0.003) 0.40ng/ul m > SJ 12/11/18

response 15287

Ion	Exp%	Act%
264.00	100	100
260.00	26.20	26.01
265.00	33.50	30.71
0.00	0.00	0.00

Data Path : Z:\SVOASRV\HPCHEM1\BNA_N\DATA\BN120618\

Quantitation Report (QT Reviewed)

Data File : BN003742.D
Acq On : 06 Dec 2018 21:45
Operator : JU/SJ
Sample : PB115350BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 07 04:08:37 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\SOM-EPA-SIM-BN111918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 07 03:02:08 2018
Response via : Initial Calibration

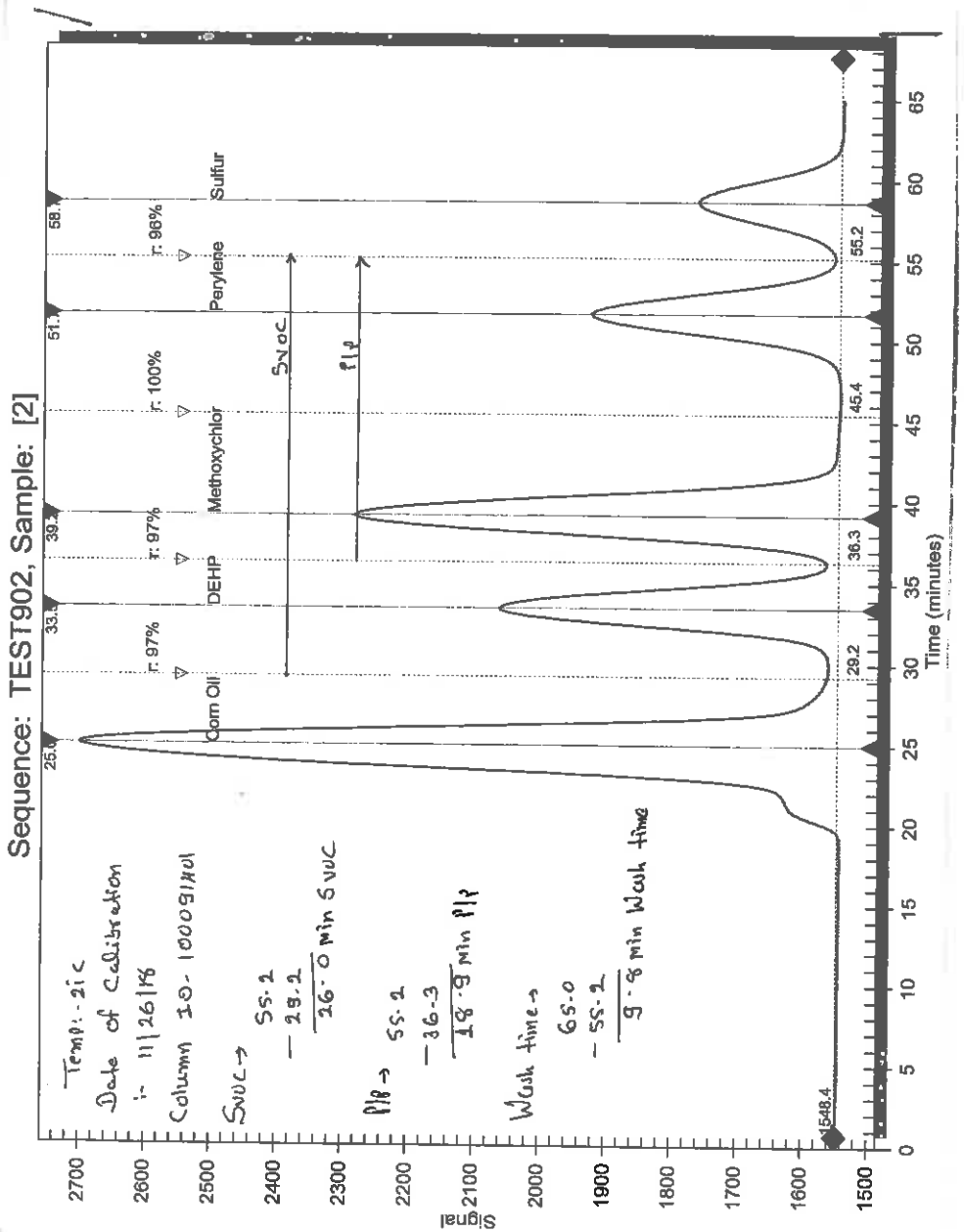
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	4597	0.40	ng/ul	0.00
2) Naphthalene-d8	10.63	136	19064	0.40	ng/ul	0.00
6) Acenaphthene-d10	14.47	164	10696	0.40	ng/ul	0.00
10) Phenanthrene-d10	17.21	188	22939m	0.40	ng/ul	0.00
16) Chrysene-d12	21.40	240	19266m	0.40	ng/ul	0.00
20) Perylene-d12	23.71	264	15287m	0.40	ng/ul	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	12.22	152	8299	0.28	ng/ul	0.00
14) Fluoranthene-d10	19.24	212	19344m	0.29	ng/ul	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
BNA_N
ClientSampleId :
SBLK50

Manual Integrations APPROVED
mohammad
12/10/2018 12:20:34 PM

SJ
12/11/18



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Daily Analysis Runlog

J2 SCIENTIFIC ACCUPREP GPC System GPC/1

Start Date: 11/26/18 End Date: 12/02/18 Analyst [illegible] Review By: [illegible]

STD. Name	STD REF. #:	Check Standard	Data File and Date	Reagent
GPC Calibration	EP 1907	BNA Blank Check		Methylene Chloride
Pest Check Std	PP 14143 2.0ML	Pesticide Blank Check		Reagent Reference
PCB Check Std	PP 14651 1.0ML	Pesticide Check		E. 2555
CALIB. DATE:	11/26/18	PCB Check		

	Port #	Sample ID	Volume Collected	GPC Date	BNA	PEST	Comments
	1	Column Cleaned	–	11/26/18	–	–	
	2	GPC Calibration	–		–	–	
	1	J 6063-07 Pest SPK	55	11/26/18	–	✓	J 6063-BN/PCB/1
	2	J 6063-06 Pest BLK	55		–	✓	
	3	J 6063-09 PCB SPK	55		–	✓	
	4	J 6063-08 PCB BLK	55		–	✓	
	5	J 6063-05 BLK BN	75		✓	–	

11/26

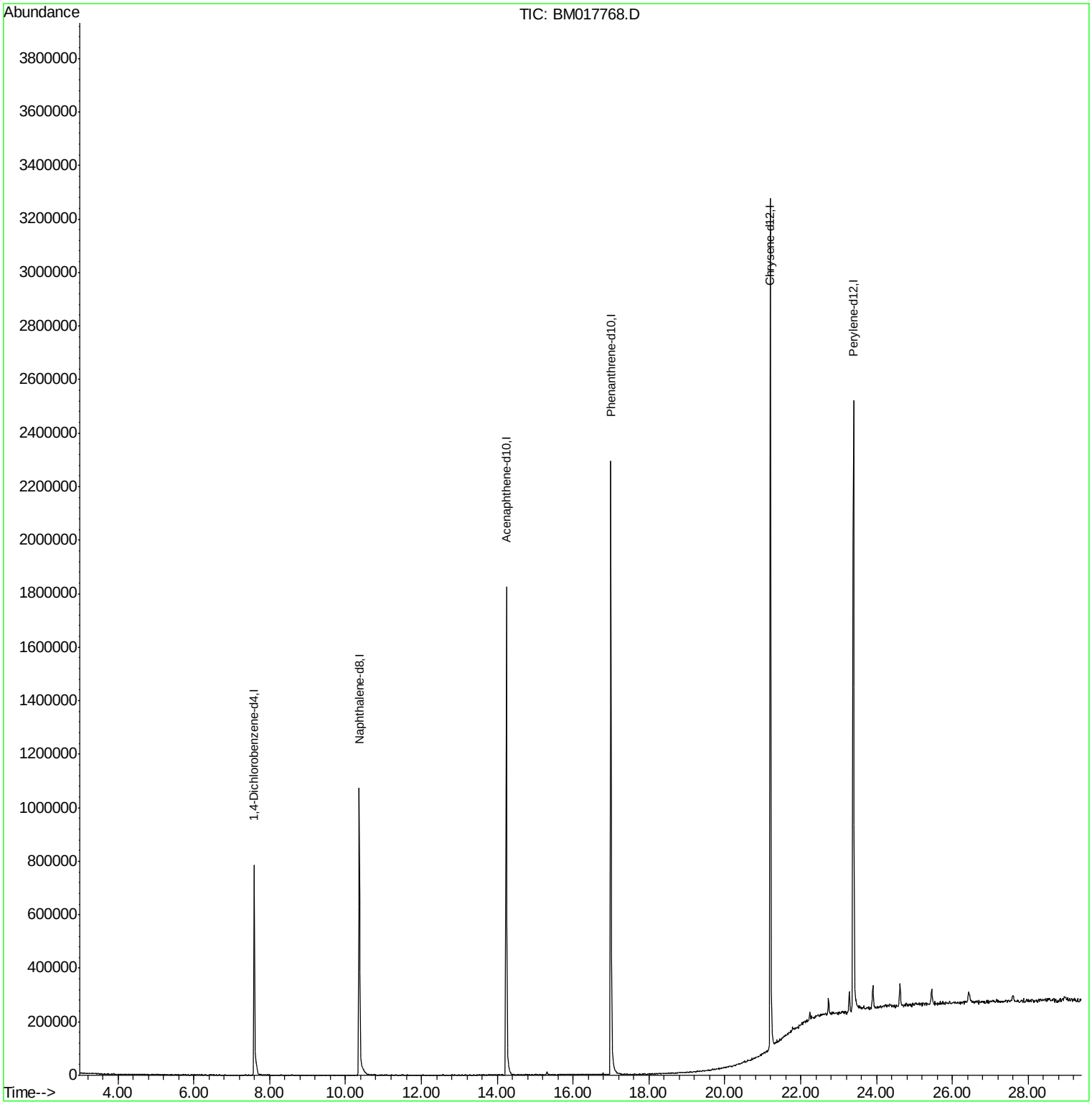
Doc Control # A3041189

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM112818\
Data File : BM017768.D
Acq On : 28 Nov 2018 12:04
Operator : JU/SJ
Sample : J6063-05
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SVOC-GPC-BLANK

Quant Time: Nov 28 12:41:21 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Nov 23 21:57:24 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM112818\
Data File : BM017768.D
Acq On : 28 Nov 2018 12:04
Operator : JU/SJ
Sample : J6063-05
Misc :
ALS Vial : 3 Sample Multiplier: 1

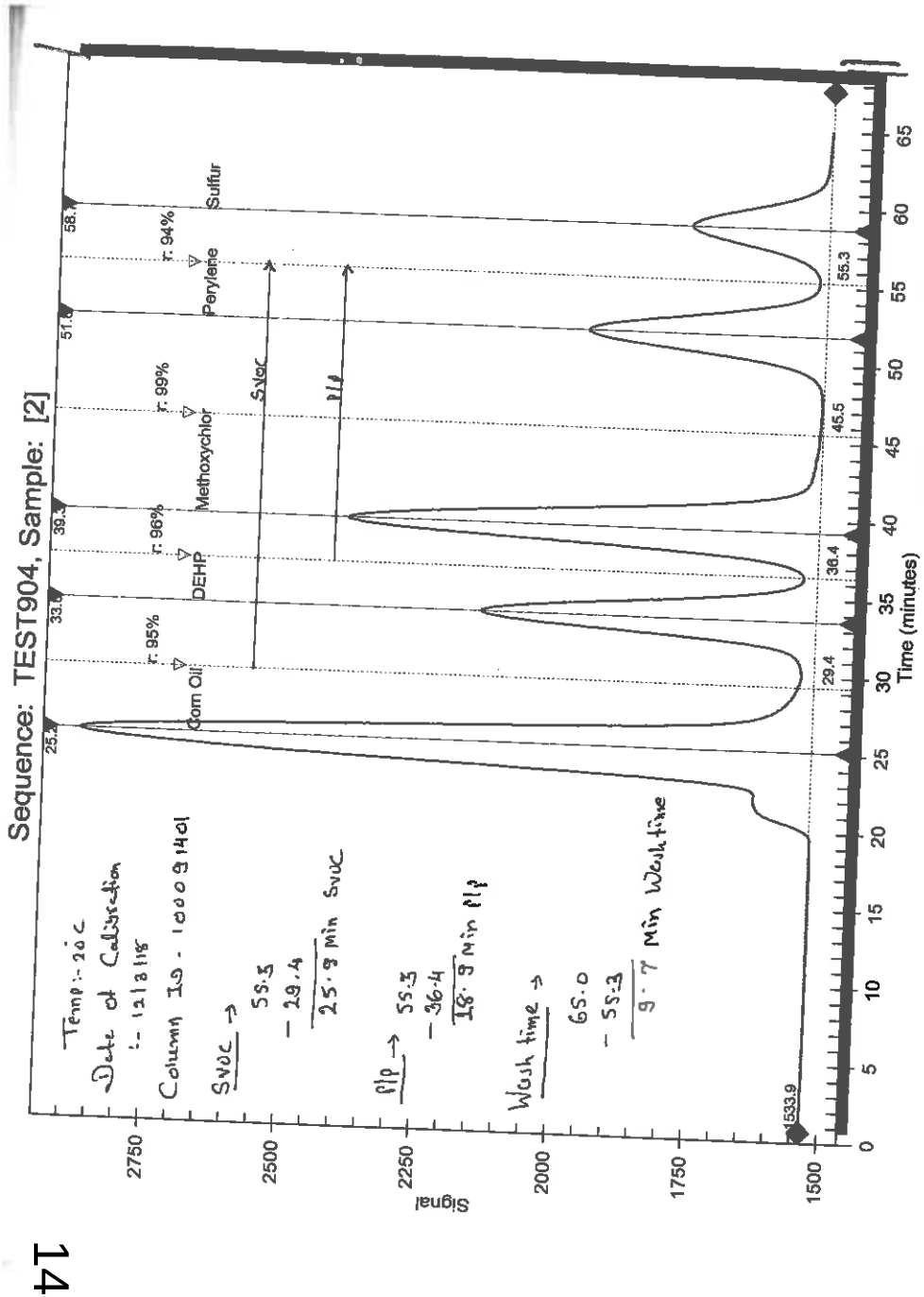
Instrument : BNA_M
ClientSampleId : SVOC-GPC-BLANK

Quant Time: Nov 28 12:41:21 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Nov 23 21:57:24 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.59	152	232333	20.00	ng/ul	0.00
18) Naphthalene-d8	10.36	136	986207	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.24	164	644238	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.00	188	1496467	20.00	ng/ul	0.00
77) Chrysene-d12	21.20	240	1648628	20.00	ng/ul	0.00
85) Perylene-d12	23.39	264	1702115	20.00	ng/ul	0.00
System Monitoring Compounds						
3) 1,4-Dioxane-d8	0.00	96	0	0.00	ng/uL	
5) Phenol-d5	0.00	99	0	0.00	ng/ul	
7) Bis-(2-Chloroethyl)ether-d	0.00	67	0	0.00	ng/ul	
9) 2-Chlorophenol-d4	0.00	132	0	0.00	ng/ul	
13) 4-Methylphenol-d8	0.00	113	0	0.00	ng/ul	
19) Nitrobenzene-d5	0.00	128	0	0.00	ng/ul	
22) 2-Nitrophenol-d4	0.00	143	0	0.00	ng/ul	
26) 2,4-Dichlorophenol-d3	0.00	165	0	0.00	ng/ul	
29) 4-Chloroaniline-d4	0.00	131	0d	0.00	ng/ul	
43) Dimethylphthalate-d6	0.00	166	0	0.00	ng/ul	
46) Acenaphthylene-d8	0.00	160	0	0.00	ng/ul	
51) 4-Nitrophenol-d4	0.00	143	0	0.00	ng/ul	
57) Fluorene-d10	0.00	176	0d	0.00	ng/ul	
62) 4,6-Dinitro-2-methylphenol	0.00	200	0	0.00	ng/ul	
70) Anthracene-d10	0.00	188	0d	0.00	ng/ul	
78) Pyrene-d10	0.00	212	0	0.00	ng/ul	
89) Benzo(a)pyrene-d12	0.00	264	0d	0.00	ng/ul	

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed



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Daily Analysis Runlog

J2 SCIENTIFIC ACCUPREP GPC System GPC/1

Start Date: 12/03/18 End Date: 12/03/18 Analyst RE|AP Review By:

STD. Name	STD REF. #:	Check Standard	Data File and Date	Reagent
GPC Calibration	E# 1907	BNA Blank Check		Methylene Chloride
Pest Check Std	PP 141143 2.0 mL	Pesticide Blank Check		Reagent Reference #
PCB Check Std	PP 141651 1.0 mL	Pesticide Check		E 2560
CALIB. DATE:	12/3/18	PCB Check		

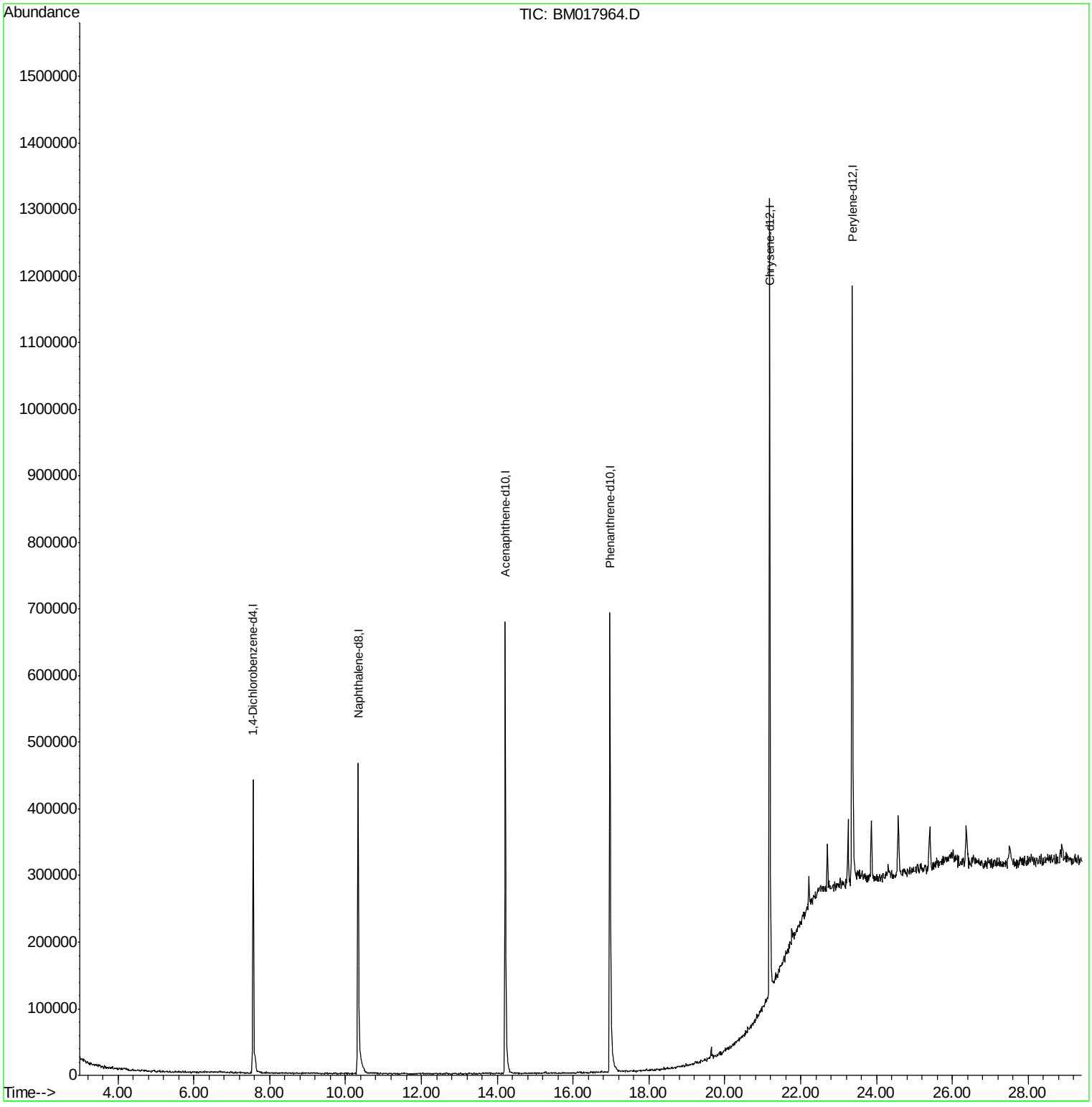
	Port #	Sample ID	Volume Collected	GPC Date	BNA	PEST	Comments
	1	Column Cleaned	-	12/3/18	-	-	
	2	GPC Calibration	-	"	-	-	
	1	J 6203-07 Pest Blk	55	12/3/18	-	✓	J Pest, PCB, B
	2	J 6203-06 Pest Blk	55	"	-	✓	
	3	J 6203-09 PCB Blk	55	"	-	✓	
	4	J 6203-08 PCB Blk	55	"	-	✓	
	5	J 6203-05 Blk Bal	75	"	✓	—	

Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120718\
Data File : BM017964.D
Acq On : 06 Dec 2018 13:08
Operator : JU/SJ
Sample : J6203-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
SVOC-GPC-BLANK

Quant Time: Dec 06 14:13:20 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 06 13:33:35 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM120718\
Data File : BM017964.D
Acq On : 06 Dec 2018 13:08
Operator : JU/SJ
Sample : J6203-05
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : SVOC-GPC-BLANK

Quant Time: Dec 06 14:13:20 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\SOM-EPA-BM111918MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 06 13:33:35 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.56	152	132911	20.00	ng/ul	-0.02
18) Naphthalene-d8	10.33	136	510778	20.00	ng/ul	-0.02
35) Acenaphthene-d10	14.21	164	277491	20.00	ng/ul	-0.02
61) Phenanthrene-d10	16.97	188	559972	20.00	ng/ul	-0.01
77) Chrysene-d12	21.18	240	645973	20.00	ng/ul	-0.01
85) Perylene-d12	23.36	264	708238	20.00	ng/ul	-0.01
System Monitoring Compounds						
3) 1,4-Dioxane-d8	0.00	96	0d	0.00	ng/uL	
5) Phenol-d5	0.00	99	0	0.00	ng/ul	
7) Bis-(2-Chloroethyl)ether-d	0.00	67	0	0.00	ng/ul	
9) 2-Chlorophenol-d4	0.00	132	0	0.00	ng/ul	
13) 4-Methylphenol-d8	0.00	113	0	0.00	ng/ul	
19) Nitrobenzene-d5	0.00	128	0	0.00	ng/ul	
22) 2-Nitrophenol-d4	0.00	143	0	0.00	ng/ul	
26) 2,4-Dichlorophenol-d3	0.00	165	0	0.00	ng/ul	
29) 4-Chloroaniline-d4	0.00	131	0d	0.00	ng/ul	
43) Dimethylphthalate-d6	0.00	166	0	0.00	ng/ul	
46) Acenaphthylene-d8	0.00	160	0	0.00	ng/ul	
51) 4-Nitrophenol-d4	0.00	143	0	0.00	ng/ul	
57) Fluorene-d10	0.00	176	0d	0.00	ng/ul	
62) 4,6-Dinitro-2-methylphenol	0.00	200	0	0.00	ng/ul	
70) Anthracene-d10	0.00	188	0d	0.00	ng/ul	
78) Pyrene-d10	0.00	212	0	0.00	ng/ul	
89) Benzo(a)pyrene-d12	0.00	264	0d	0.00	ng/ul	

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

CHEMTECH

EXTRACTION LOGPAGE

PB115350

SOP ID:	MSOM02.4-Sample Prep-1				
Clean Up SOP #:	GPC Cleanup			**Extraction Start Date :**	12/05/2018
Matrix :	Solid			**Extraction Start Time :**	08:16
Weigh By:	RJ	**Extraction By:**	RS	**Extraction End Date :**	12/06/2018
Balance check:	HP	**Filter By:**	RS	**Extraction End Time :**	12:55
Balance ID:	EX-SC-1	**pH Meter ID:**	N/A	**Concentration By:**	HP
pH Strip Lot#:	N/A	**Hood ID:**	3,7	**Supervisor By :**	rajesh

Extraction Method: ☐ Seperatory Funne ☐ Continious Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☑ Soxhlet

Standared Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
N/A	N/A	N/A	N/A
Surrogate	0.5ML	80/16/0.8 PPM	SP4559
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
MeCl2/Acetone/1:1	N/A	EP1898
Baked Na2SO4	N/A	EP1897
Methylene Chloride	N/A	E2560
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

GPC PROJECT J6203 & J6063

KD Bath ID:	W. BATH-1	**Envap ID:**	NE.VAP-2
KD Bath Temperature:	60.0 °C	**Envap Temperature:**	40 °C
Received Date/Time:	12/6/18	**Received By:**	Ju
Delivered Date/Time:	12/6/18 13:00	**Delivered By:**	RP

CHEMTECH

EXTRACTION LOGPAGE

PrepBatch ID : PB115350

Analytical Method: MSOM02.4-Sample Prep-1

Concentration Date: 12/06/2018

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol.(mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB115350BL	SBLK50	SVOC-SIM	30.02		RUPESH	ritesh	0.5			U7-1
J6227-01	F9E64	SVOC-SIM	30.07		RUPESH	ritesh	0.5			2
J6227-02	F9E65	SVOC-SIM	30.12		RUPESH	ritesh	0.5			3
J6227-03	F9E66	SVOC-SIM	30.16		RUPESH	ritesh	0.5			4
J6227-04	F9E67	SVOC-SIM	30.06		RUPESH	ritesh	0.5			5
J6227-05	F9E74	SVOC-SIM	30.11		RUPESH	ritesh	0.5			6
J6227-06	F9E75	SVOC-SIM	30.15		RUPESH	ritesh	0.5			U3-1
J6227-07	F9E80	SVOC-SIM	30.05		RUPESH	ritesh	0.5			2
J6227-08	F9F33	SVOC-SIM	30.10		RUPESH	ritesh	0.5			3
J6227-09	F9E54	SVOC-SIM	30.14		RUPESH	ritesh	0.5			4
J6227-10	F9E55	SVOC-SIM	30.04		RUPESH	ritesh	0.5			5
J6227-11	F9E56	SVOC-SIM	30.09		RUPESH	ritesh	0.5			6
J6227-12	F9E57	SVOC-SIM	30.13		RUPESH	ritesh	0.5			U4-1
J6227-13	F9E60	SVOC-SIM	30.03		RUPESH	ritesh	0.5			2
J6227-14	F9E61	SVOC-SIM	30.08		RUPESH	ritesh	0.5			3
J6227-15	F9F34	SVOC-SIM	30.12		RUPESH	ritesh	0.5			4
J6227-16	F9F35	SVOC-SIM	30.02		RUPESH	ritesh	0.5			5
J6227-17	F9E62	SVOC-SIM	30.07		RUPESH	ritesh	0.5			6
J6227-18	F9E63	SVOC-SIM	30.11		RUPESH	ritesh	0.5			U5-1
J6227-19	F9E68	SVOC-SIM	30.01		RUPESH	ritesh	0.5			2
J6227-20	F9E69	SVOC-SIM	30.06		RUPESH	ritesh	0.5			3

* Extracts relinquished on the same date as received.

12/16

Daily Maintenance Runlog For J2 SCIENTIFIC ACCUPREP GPC System

	Analyst Initial	Performed
1.	RS 12/5	Filling Meals
2.		
3		
4		
5		

Daily Analysis Runlog

J2 SCIENTIFIC ACCUPREP GPC System GPC/1

Start Date: 12/03/18 End Date: 12/09/18 Analyst RP/LS Review By: CW

STD. Name	STD REF. #:	Check Standard	Data File and Date	Reagent
GPC Calibration	EP1907	BNA Blank Check		Methylene Chloride
Pest Check Std	PP14743 2.0ML	Pesticide Blank Check		Reagent Reference #
PCB Check Std	PP14651 1.0ML	Pesticide Check		E2560
CALIB. DATE:	12/3/18	PCB Check		

Port #	Sample ID	Volume Collected	GPC Date	BNA	PEST	Comments
1	J6227-01 BN	75	12/5/18	✓	—	J6227 BN
2	-02	75		✓	—	
3	-03	75		✓	—	
4	-04	75		✓	—	
5	-05	75		✓	—	
6	-06	75		✓	—	
7	-07	75		✓	—	
8	-08	75		✓	—	
9	-09	75		✓	—	
10	-60	75		✓	—	
11	-11	75		✓	—	
12	-12	75		✓	—	
13	-13	75	12/6/18	✓	—	
14	-14	75		✓	—	
15	-15	75		✓	—	
16	-16	75		✓	—	
17	-17	75		✓	—	
18	-18	75		✓	—	
19	-19	75		✓	—	
20	-20	75		✓	—	
21	BLK BN PB115350	75		✓	—	

12/5

CHEMTECH

PERCENT SOLID

Supervisor: apatel
Analyst: jignesh
Date: 12/6/2018

OVENTEMP IN Celsius(°C): 108
Time IN: 16:05
In Date: 12/04/2018
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M Oven-1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 07:40
Out Date: 12/05/2018
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M Sc-1

QC: LB99571

Lab ID	Client Sample ID	Dish#	Dish Wt(g) (A)	Dish + Sample Wt(g) (B)	Dish + Dry Sample Wt(g) (C)	% Solid
J6227-01	F9E64	1	1.14	9.95	8.64	85.1
J6227-02	F9E65	2	1.16	9.56	8.44	86.7
J6227-03	F9E66	3	1.18	9.97	9.21	91.4
J6227-04	F9E67	4	1.19	9.7	8.72	88.5
J6227-05	F9E74	5	1.14	9.88	8.91	88.9
J6227-06	F9E75	6	1.13	9.83	8.78	87.9
J6227-07	F9E80	7	1.14	9.77	9.01	91.2
J6227-08	F9F33	8	1.18	9.74	8.78	88.8
J6227-09	F9E54	9	1.1	9.85	8.79	87.9
J6227-10	F9E55	10	1.18	9.69	8.39	84.7
J6227-11	F9E56	11	1.19	9.85	8.7	86.7
J6227-12	F9E57	12	1.17	9.52	8.36	86.1
J6227-13	F9E60	13	1.14	9.57	7.93	80.5
J6227-14	F9E61	14	1.1	9.78	8.41	84.2
J6227-15	F9F34	15	1.13	9.63	8.84	90.7
J6227-16	F9F35	16	1.18	9.82	9.01	90.6
J6227-17	F9E62	17	1.13	9.53	8.51	87.9
J6227-18	F9E63	18	1.19	9.89	8.79	87.4
J6227-19	F9E68	19	1.2	9.83	9.05	91.0
J6227-20	F9E69	20	1.17	9.62	8.79	90.2

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

1B99571

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-j6227 WorkList ID : 119918 Date : 12/4/2018 3:06:44 PM

Due Date	Matrix	Sample	Test	Preservative	Customer	Storage Location	Customer Sample	Collect Date	Method
12/13/2018	Solid	J6227-01	Percent Solids	Cool 4 deg C	USEP04	R32	F9E64	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-02	Percent Solids	Cool 4 deg C	USEP04	R32	F9E65	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-03	Percent Solids	Cool 4 deg C	USEP04	R32	F9E66	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-04	Percent Solids	Cool 4 deg C	USEP04	R32	F9E67	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-05	Percent Solids	Cool 4 deg C	USEP04	R32	F9E74	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-06	Percent Solids	Cool 4 deg C	USEP04	R32	F9E75	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-07	Percent Solids	Cool 4 deg C	USEP04	R32	F9E80	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-08	Percent Solids	Cool 4 deg C	USEP04	R32	F9F33	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-09	Percent Solids	Cool 4 deg C	USEP04	R32	F9E54	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-10	Percent Solids	Cool 4 deg C	USEP04	R32	F9E55	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-11	Percent Solids	Cool 4 deg C	USEP04	R32	F9E56	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-12	Percent Solids	Cool 4 deg C	USEP04	R32	F9E57	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-13	Percent Solids	Cool 4 deg C	USEP04	R32	F9E60	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-14	Percent Solids	Cool 4 deg C	USEP04	R32	F9E61	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-15	Percent Solids	Cool 4 deg C	USEP04	R32	F9F34	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-16	Percent Solids	Cool 4 deg C	USEP04	R32	F9F35	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-17	Percent Solids	Cool 4 deg C	USEP04	R32	F9E62	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-18	Percent Solids	Cool 4 deg C	USEP04	R32	F9E63	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-19	Percent Solids	Cool 4 deg C	USEP04	R32	F9E68	12/03/2018	Chemtech -SO
12/13/2018	Solid	J6227-20	Percent Solids	Cool 4 deg C	USEP04	R32	F9E69	12/03/2018	Chemtech -SO

14454

Date/Time 12.04.18 3:15 PM
Received by: JP
Relinquished by: CP

Date/Time 12.04.18 4:00 PM
Received by: CP
Relinquished by: JP

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Prep Standard - Chemical Standard Summary

Order ID : J6227

Test : SVOC-SIM

Prepbatch ID : PB115350,

Sequence ID/Qc Batch ID: BN120618,BN121518,BN111918

Standard ID :
EP1897,EP1898,SP4458,SP4489,SP4548,SP4549,SP4550,SP4551,SP4552,SP4553,SP4554,SP4555,SP4556,SP4559,SP4560,

Chemical ID :
10ul/1000ul sample,E2489,E2510,E2519,E2529,E2534,E2536,E2540,E2560,H1316,S5265,S5393,S5414,S5415,S6327,S6429,S6540,S6569,S6749,S6750,S6751,S6752,S6753,S6754,S6782,S6893,S6909,S6910,S7048,

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
256	BAKED SODIUM SULPHATE	EP1897	10/25/2018	02/19/2019	Rajesh

FROM 4000.000ml of E2519 = Final Quantity: 4000.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2017	1:1 ACETONE/METHYLENE CHLORIDE	EP1898	10/25/2018	04/18/2019	Rajesh

FROM 8000.000ml of E2534 + 8000.000ml of E2536 = Final Quantity: 16000.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3493	Internal Standard 0.4 PPM	SP4458	07/31/2018	01/19/2019	Jagrut

FROM 0.020ml of S6782 + 0.980ml of E2489 = Final Quantity: 1.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
2564	50 ng/ul DFTPP	SP4489	09/10/2018	02/28/2019	Jabed

FROM 0.200ml of S6327 + 9.800ml of E2510 = Final Quantity: 10.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3656	SSTD3.2 SOM02.1 SIM-STK (1,4 dio 8ppm)	SP4548	10/25/2018	02/28/2019	Jagrut

FROM 0.040ml of S6910 + 0.080ml of S6429 + 0.100ml of S5414 + 0.100ml of S6569 + 24.680ml of E2529 = Final Quantity: 25.000 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3657	SSTD3.2 SOM02.4-SIM	SP4549	10/25/2018	01/19/2019	Jagrut

FROM 0.010ml of SP4458 + 1.000ml of SP4548 = Final Quantity: 1.010 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3658	SSTD1.6 SOM02.4-SIM	SP4550	10/25/2018	01/19/2019	Jagrut

FROM 0.500ml of E2529 + 0.010ml of SP4458 + 0.500ml of SP4548 = Final Quantity: 1.010 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3659	SSTD0.8 SOM02.4-SIM	SP4551	10/25/2018	01/19/2019	Jagrut

FROM 0.750ml of E2529 + 0.010ml of SP4458 + 0.250ml of SP4548 = Final Quantity: 1.010 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3660	SSTD0.4 SOM02.4-SIM	SP4552	10/25/2018	01/19/2019	Jagrut

FROM 0.875ml of E2529 + 0.010ml of SP4458 + 0.125ml of SP4548 = Final Quantity: 1.010 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3661	SSTD0.2 SOM02.4-SIM	SP4553	10/25/2018	01/19/2019	Jagrut

FROM 0.500ml of E2529 + 0.010ml of SP4458 + 0.500ml of SP4552 = Final Quantity: 1.010 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3662	SSTD0.1 SOM02.4-SIM	SP4554	10/25/2018	01/19/2019	Jagrut

FROM 0.750ml of E2529 + 0.010ml of SP4458 + 0.250ml of SP4552 = Final Quantity: 1.010 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3457	SOM-SIM ICV STOCK 3.2 PPM	SP4555	10/25/2018	03/28/2019	Jagrut

FROM 0.016ml of S5265 + 0.016ml of S5393 + 0.016ml of S6540 + 0.032ml of S6893 + 9.920ml of E2529 = Final Quantity: 10.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3458	SOM-SIM ICV 0.4 PPM	SP4556	10/25/2018	01/19/2019	Jagrut

FROM 0.875ml of E2529 + 0.010ml of SP4458 + 0.125ml of SP4555 = Final Quantity: 1.010 ml

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3616	SOM Surrogates 80/16/0.8 ppm	SP4559	10/31/2018	02/28/2019	Jabed

FROM 0.080ml of S6909 + 0.600ml of S5414 + 1.000ml of S5415 + 1.250ml of S6749 + 1.250ml of S6750 + 1.250ml of S6751 + 1.250ml of S6754 + 1.500ml of S6752 + 1.500ml of S6753 + 190.320ml of H1316 = Final Quantity: 200.000 ml

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STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
3493	Internal Standard 0.4 PPM	SP4560	10/31/2018	04/29/2019	Jabed

FROM 0.020ml of S7048 + 0.980ml of E2540 = Final Quantity: 1.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	0000202209	01/19/2019	07/20/2018 / Rajesh	07/20/2018 / Rajesh	E2489

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	0000207558	02/28/2019	08/31/2018 / Rajesh	08/31/2018 / Rajesh	E2510

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	/ Sodium sulfate (anhyhdrous)	743502	02/19/2019	08/20/2018 / Rajesh	08/13/2018 / Rajesh	E2519

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	0000211047	04/08/2019	10/09/2018 / Rajesh	10/08/2018 / Rajesh	E2529

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	0000196204	02/05/2021	10/23/2018 /	10/18/2018 / Rajesh	E2534

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	0000211047	04/18/2019	10/19/2018 / Rajesh	10/15/2018 / Rajesh	E2536

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	0000211047	04/29/2019	10/30/2018 / Rajesh	10/25/2018 / Rajesh	E2540

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	0000214356	06/02/2019	12/03/2018 / rajesh	11/26/2018 / rajesh	E2560

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9093-03 / Methanol, HPLC (cs/4x4L)	0000119840	08/16/2020	02/23/2016 / umangi	01/22/2016 / UMANGI	H1316

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM	A0117506	01/31/2022	09/30/2017 / Jagrut	05/10/2016 / umangi	S5265

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0116781	01/31/2021	07/10/2017 / Jagrut	06/27/2016 / UMANGI	S5393

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30614 / 1,4-Dioxane-D8 Standard	A0117024	02/28/2019	10/12/2018 / Jabed	06/27/2016 / umangi	S5414

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30614 / 1,4-Dioxane-D8 Standard	A0117024	02/28/2019	10/31/2018 / Jabed	06/27/2016 / umangi	S5415

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31001 / SV Tuning Compound Standard, 2500 ug/ml,	A0131451	10/31/2020	01/29/2018 / Jagrut	12/18/2017 / Jagrut	S6327

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31900 / SOM01.1 Mega Mix, 500-1000 ug/ml	A0134696	07/31/2019	08/13/2018 / Jabed	02/06/2018 / Sohil	S6429

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30614 / 1,4-Dioxane-D8 Standard	A0134839	02/28/2021	07/02/2018 / Jabed	04/04/2018 / Jabed	S6540

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0131219	03/28/2019	10/26/2018 / Jagrut	04/04/2018 / Jabed	S6569

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6749

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6750

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6751

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6752

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6753

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31810 / SV Mix, OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL, 2000ug/mL, CH2Cl2	A0135095	03/21/2019	10/31/2018 / Jabed	05/24/2018 / Jabed	S6754

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 1mL	A0136809	03/31/3024	07/30/2018 / Jagrut	05/24/2018 / Jabed	S6782

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]	A0132384	03/28/2019	09/28/2018 / Jabed	06/14/2018 / Jabed	S6893

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM	A0137718	04/30/2024	07/02/2018 / Jabed	06/22/2018 / Sohil	S6909

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM	A0137718	04/30/2024	09/27/2018 / Jabed	06/22/2018 / Sohil	S6910

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 1mL	A0139548	06/30/2024	10/31/2018 / Jabed	09/06/2018 / Sohil	S7048

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31853 **Lot No.:** A0131219

Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2022 **Storage:** 0°C or colder

S6541
10
S6570
M.U.
04/04/2018

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight:volume)	Expanded Uncertainty (95% C.L., K=2)		
1	1,4-Dioxane	2,000.0 µg/mL	+/- 11.7371	µg/mL	Gravimetric
	CAS # 123-91-1 (Lot SHBH5677)		+/- 42.8500	µg/mL	Unstressed
	Purity 99%		+/- 44.0940	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

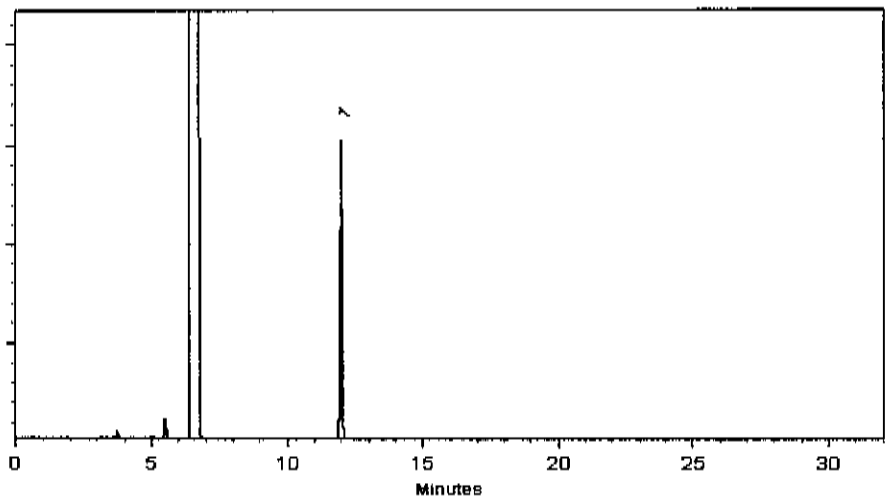
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cydnel L. Cruz - Mix Technician

Date Mixed: 29-Sep-2017 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 03-Oct-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value If the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31850 **Lot No.:** A0132384

Description : 8270 MegaMix®

8270 MegaMix® 500-1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2019 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive.

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CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.: K=2)		
1	Pyridine		1,002.4	µg/mL	+/- 5.8277	µg/mL	Gravimetric
	CAS # 110-86-1	(Lot SHBC7174V)			+/- 30.3193	µg/mL	Unstressed
	Purity 99%				+/- 30.3193	µg/mL	Stressed
2	N-Nitrosodimethylamine		1,003.3	µg/mL	+/- 5.8333	µg/mL	Gravimetric
	CAS # 62-75-9	(Lot 170310JLM)			+/- 30.3480	µg/mL	Unstressed
	Purity 99%				+/- 30.3480	µg/mL	Stressed
3	Aniline		1,003.2	µg/mL	+/- 5.8324	µg/mL	Gravimetric
	CAS # 62-53-3	(Lot K22Z462)			+/- 30.3435	µg/mL	Unstressed
	Purity 99%				+/- 30.3435	µg/mL	Stressed
4	2-Chlorophenol		1,000.3	µg/mL	+/- 5.8155	µg/mL	Gravimetric
	CAS # 95-57-8	(Lot STBF2690V)			+/- 30.2558	µg/mL	Unstressed
	Purity 99%				+/- 30.2558	µg/mL	Stressed
5	Phenol		1,000.6	µg/mL	+/- 5.8176	µg/mL	Gravimetric
	CAS # 108-95-2	(Lot SHBF1351V)			+/- 30.2663	µg/mL	Unstressed
	Purity 99%				+/- 30.2663	µg/mL	Stressed
6	Bis(2-chloroethyl)ether		1,001.8	µg/mL	+/- 5.8243	µg/mL	Gravimetric
	CAS # 111-44-4	(Lot 45296HKV)			+/- 30.3011	µg/mL	Unstressed
	Purity 99%				+/- 30.3011	µg/mL	Stressed
7	1,3-Dichlorobenzene		1,001.5	µg/mL	+/- 5.8228	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBM5751V)			+/- 30.2936	µg/mL	Unstressed
	Purity 99%				+/- 30.2936	µg/mL	Stressed

8	1,4-Dichlorobenzene		1,001.5	µg/mL	+/-	5.8225	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS1350V)			+/-	30.2921	µg/mL	Unstressed
	Purity 99%				+/-	30.2921	µg/mL	Stressed
9	1,2-Dichlorobenzene		1,002.4	µg/mL	+/-	5.8280	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBD7331V)			+/-	30.3208	µg/mL	Unstressed
	Purity 99%				+/-	30.3208	µg/mL	Stressed
10	Benzyl alcohol		1,000.3	µg/mL	+/-	5.8158	µg/mL	Gravimetric
	CAS # 100-51-6	(Lot SHBC1850V)			+/-	30.2573	µg/mL	Unstressed
	Purity 99%				+/-	30.2573	µg/mL	Stressed
11	2,2'-oxybis(1-chloropropane)		998.5	µg/mL	+/-	5.8052	µg/mL	Gravimetric
	CAS # 108-60-1	(Lot 5710100)			+/-	30.2019	µg/mL	Unstressed
	Purity 97%				+/-	30.2019	µg/mL	Stressed
12	2-Methylphenol (o-cresol)		1,006.2	µg/mL	+/-	5.8501	µg/mL	Gravimetric
	CAS # 95-48-7	(Lot SHBC1479V)			+/-	30.4357	µg/mL	Unstressed
	Purity 99%				+/-	30.4357	µg/mL	Stressed
13	Hexachloroethane		1,003.2	µg/mL	+/-	5.8324	µg/mL	Gravimetric
	CAS # 67-72-1	(Lot 4H3SF)			+/-	30.3435	µg/mL	Unstressed
	Purity 99%				+/-	30.3435	µg/mL	Stressed
14	N-Nitroso-di-n-propylamine		1,001.6	µg/mL	+/-	5.8234	µg/mL	Gravimetric
	CAS # 621-64-7	(Lot NOPCF)			+/-	30.2966	µg/mL	Unstressed
	Purity 99%				+/-	30.2966	µg/mL	Stressed
15	4-Methylphenol (p-cresol)		503.5	µg/mL	+/-	2.9274	µg/mL	Gravimetric
	CAS # 106-44-5	(Lot 49396APV)			+/-	15.2300	µg/mL	Unstressed
	Purity 99%				+/-	15.2300	µg/mL	Stressed
16	3-Methylphenol (m-cresol)		501.0	µg/mL	+/-	2.9129	µg/mL	Gravimetric
	CAS # 108-39-4	(Lot SHBD0627V)			+/-	15.1543	µg/mL	Unstressed
	Purity 99%				+/-	15.1543	µg/mL	Stressed
17	Nitrobenzene		1,001.9	µg/mL	+/-	5.8248	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBF2348V)			+/-	30.3042	µg/mL	Unstressed
	Purity 99%				+/-	30.3042	µg/mL	Stressed
18	Isophorone		1,000.8	µg/mL	+/-	5.8189	µg/mL	Gravimetric
	CAS # 78-59-1	(Lot MKBG2442V)			+/-	30.2731	µg/mL	Unstressed
	Purity 98%				+/-	30.2731	µg/mL	Stressed
19	2-Nitrophenol		1,003.9	µg/mL	+/-	5.8368	µg/mL	Gravimetric
	CAS # 88-75-5	(Lot BCBH7602V)			+/-	30.3662	µg/mL	Unstressed
	Purity 99%				+/-	30.3662	µg/mL	Stressed
20	2,4-Dimethylphenol		1,001.6	µg/mL	+/-	5.8231	µg/mL	Gravimetric
	CAS # 105-67-9	(Lot 10165155)			+/-	30.2951	µg/mL	Unstressed
	Purity 99%				+/-	30.2951	µg/mL	Stressed
21	Bis(2-chloroethoxy)methane		1,001.3	µg/mL	+/-	5.8214	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 4621000)			+/-	30.2860	µg/mL	Unstressed
	Purity 99%				+/-	30.2860	µg/mL	Stressed
22	2,4-Dichlorophenol		1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBH1617V)			+/-	30.2512	µg/mL	Unstressed
	Purity 99%				+/-	30.2512	µg/mL	Stressed
23	1,2,4-Trichlorobenzene		1,003.6	µg/mL	+/-	5.8350	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ0905)			+/-	30.3571	µg/mL	Unstressed
	Purity 99%				+/-	30.3571	µg/mL	Stressed

24	Naphthalene		1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBW2603V)		+/-	30.2482	µg/mL	Unstressed
	Purity 99%			+/-	30.2482	µg/mL	Stressed
25	4-Chloroaniline		1,004.1 µg/mL	+/-	5.8379	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot BCBJ1580V)		+/-	30.3722	µg/mL	Unstressed
	Purity 99%			+/-	30.3722	µg/mL	Stressed
26	Hexachlorobutadiene		1,004.3 µg/mL	+/-	5.8388	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)		+/-	30.3767	µg/mL	Unstressed
	Purity 99%			+/-	30.3767	µg/mL	Stressed
27	2-Methylnaphthalene		1,000.9 µg/mL	+/-	5.8192	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot STBF0201V)		+/-	30.2746	µg/mL	Unstressed
	Purity 95%			+/-	30.2746	µg/mL	Stressed
28	4-Chloro-3-methylphenol		1,004.2 µg/mL	+/-	5.8385	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC7309V)		+/-	30.3752	µg/mL	Unstressed
	Purity 99%			+/-	30.3752	µg/mL	Stressed
29	1-Methylnaphthalene		1,004.5 µg/mL	+/-	5.8402	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 523400-9)		+/-	30.3843	µg/mL	Unstressed
	Purity 98%			+/-	30.3843	µg/mL	Stressed
30	Hexachlorocyclopentadiene		1,001.0 µg/mL	+/-	5.8196	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 0012015)		+/-	30.2769	µg/mL	Unstressed
	Purity 99%			+/-	30.2769	µg/mL	Stressed
31	2,4,6-Trichlorophenol		1,002.5 µg/mL	+/-	5.8283	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot STBF3742V)		+/-	30.3223	µg/mL	Unstressed
	Purity 99%			+/-	30.3223	µg/mL	Stressed
32	2,4,5-Trichlorophenol		1,004.2 µg/mL	+/-	5.8385	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHN01)		+/-	30.3752	µg/mL	Unstressed
	Purity 99%			+/-	30.3752	µg/mL	Stressed
33	2-Chloronaphthalene		1,001.3 µg/mL	+/-	5.8214	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot AJ2U1)		+/-	30.2860	µg/mL	Unstressed
	Purity 99%			+/-	30.2860	µg/mL	Stressed
34	2-Nitroaniline		1,004.6 µg/mL	+/-	5.8405	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBK7597V)		+/-	30.3858	µg/mL	Unstressed
	Purity 99%			+/-	30.3858	µg/mL	Stressed
35	1,4-Dinitrobenzene		1,004.3 µg/mL	+/-	5.8391	µg/mL	Gravimetric
	CAS # 100-25-4	(Lot STBF8844V)		+/-	30.3783	µg/mL	Unstressed
	Purity 99%			+/-	30.3783	µg/mL	Stressed
36	Acenaphthylene		1,004.9 µg/mL	+/-	5.8424	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot O03R)		+/-	30.3955	µg/mL	Unstressed
	Purity 97%			+/-	30.3955	µg/mL	Stressed
37	1,3-Dinitrobenzene		1,004.1 µg/mL	+/-	5.8379	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBB1436V)		+/-	30.3722	µg/mL	Unstressed
	Purity 99%			+/-	30.3722	µg/mL	Stressed
38	Dimethylphthalate		1,005.6 µg/mL	+/-	5.8466	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)		+/-	30.4176	µg/mL	Unstressed
	Purity 99%			+/-	30.4176	µg/mL	Stressed
39	2,6-Dinitrotoluene		1,001.1 µg/mL	+/-	5.8202	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot BCBB8606V)		+/-	30.2800	µg/mL	Unstressed
	Purity 99%			+/-	30.2800	µg/mL	Stressed

40	1,2-Dinitrobenzene		1,003.7	µg/mL	+/-	5.8356	µg/mL	Gravimetric
	CAS # 528-29-0	(Lot MKBW2921V)			+/-	30.3601	µg/mL	Unstressed
	Purity 99%				+/-	30.3601	µg/mL	Stressed
41	Acenaphthene		1,003.2	µg/mL	+/-	5.8324	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKCC8329)			+/-	30.3435	µg/mL	Unstressed
	Purity 99%				+/-	30.3435	µg/mL	Stressed
42	3-Nitroaniline		1,002.4	µg/mL	+/-	5.8280	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot 12836338V)			+/-	30.3208	µg/mL	Unstressed
	Purity 99%				+/-	30.3208	µg/mL	Stressed
43	2,4-Dinitrophenol		1,003.7	µg/mL	+/-	5.8353	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot STBF9439V)			+/-	30.3586	µg/mL	Unstressed
	Purity 99%				+/-	30.3586	µg/mL	Stressed
44	Dibenzofuran		1,004.3	µg/mL	+/-	5.8391	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBW2691V)			+/-	30.3783	µg/mL	Unstressed
	Purity 99%				+/-	30.3783	µg/mL	Stressed
45	2,4-Dinitrotoluene		1,003.8	µg/mL	+/-	5.8359	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/-	30.3616	µg/mL	Unstressed
	Purity 99%				+/-	30.3616	µg/mL	Stressed
46	4-Nitrophenol		1,004.3	µg/mL	+/-	5.8391	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKBV0501V)			+/-	30.3783	µg/mL	Unstressed
	Purity 99%				+/-	30.3783	µg/mL	Stressed
47	2,3,4,6-Tetrachlorophenol		1,001.6	µg/mL	+/-	5.8231	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot B17W01051)			+/-	30.2951	µg/mL	Unstressed
	Purity 99%				+/-	30.2951	µg/mL	Stressed
48	2,3,5,6-Tetrachlorophenol		1,002.4	µg/mL	+/-	5.8277	µg/mL	Gravimetric
	CAS # 935-95-5	(Lot 012016)			+/-	30.3193	µg/mL	Unstressed
	Purity 99%				+/-	30.3193	µg/mL	Stressed
49	Fluorene		1,005.6	µg/mL	+/-	5.8466	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 10193329)			+/-	30.4176	µg/mL	Unstressed
	Purity 99%				+/-	30.4176	µg/mL	Stressed
50	4-Chlorophenyl phenyl ether		1,001.7	µg/mL	+/-	5.8237	µg/mL	Gravimetric
	CAS # 7005-72-3	(Lot MKBW2403V)			+/-	30.2981	µg/mL	Unstressed
	Purity 99%				+/-	30.2981	µg/mL	Stressed
51	Diethylphthalate		1,001.5	µg/mL	+/-	5.8228	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot MKBV9622V)			+/-	30.2936	µg/mL	Unstressed
	Purity 99%				+/-	30.2936	µg/mL	Stressed
52	4-Nitroaniline		1,001.5	µg/mL	+/-	5.8229	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot BCBG4702V)			+/-	30.2939	µg/mL	Unstressed
	Purity 98%				+/-	30.2939	µg/mL	Stressed
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		1,003.7	µg/mL	+/-	5.8356	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot LC22071V)			+/-	30.3601	µg/mL	Unstressed
	Purity 99%				+/-	30.3601	µg/mL	Stressed
54	Diphenylamine		1,001.2	µg/mL	+/-	5.8208	µg/mL	Gravimetric
	CAS # 122-39-4	(Lot MKBN8295V)			+/-	30.2830	µg/mL	Unstressed
	Purity 99%				+/-	30.2830	µg/mL	Stressed
55	Azobenzene		1,001.3	µg/mL	+/-	5.8218	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot BCBS6535V)			+/-	30.2885	µg/mL	Unstressed
	Purity 97%				+/-	30.2885	µg/mL	Stressed

56	4-Bromophenyl phenyl ether		1,000.5	µg/mL	+/-	5.8172	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	30.2643	µg/mL	Unstressed
	Purity 98%				+/-	30.2643	µg/mL	Stressed
57	Hexachlorobenzene		1,004.3	µg/mL	+/-	5.8388	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot LC25401V)			+/-	30.3767	µg/mL	Unstressed
	Purity 99%				+/-	30.3767	µg/mL	Stressed
58	Pentachlorophenol		1,003.5	µg/mL	+/-	5.8341	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 170717KJA)			+/-	30.3525	µg/mL	Unstressed
	Purity 99%				+/-	30.3525	µg/mL	Stressed
59	Phenanthrene		1,003.7	µg/mL	+/-	5.8356	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKCB1762V)			+/-	30.3601	µg/mL	Unstressed
	Purity 99%				+/-	30.3601	µg/mL	Stressed
60	Anthracene		1,001.4	µg/mL	+/-	5.8219	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKBR2268V)			+/-	30.2890	µg/mL	Unstressed
	Purity 99%				+/-	30.2890	µg/mL	Stressed
61	Carbazole		1,002.5	µg/mL	+/-	5.8286	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot 5945900)			+/-	30.3238	µg/mL	Unstressed
	Purity 99%				+/-	30.3238	µg/mL	Stressed
62	Di-n-butylphthalate		1,001.6	µg/mL	+/-	5.8231	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKBT0244V)			+/-	30.2951	µg/mL	Unstressed
	Purity 99%				+/-	30.2951	µg/mL	Stressed
63	Fluoranthene		1,001.6	µg/mL	+/-	5.8232	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKBQ6360V)			+/-	30.2954	µg/mL	Unstressed
	Purity 98%				+/-	30.2954	µg/mL	Stressed
64	Pyrene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCBR9108V)			+/-	30.2482	µg/mL	Unstressed
	Purity 99%				+/-	30.2482	µg/mL	Stressed
65	Benzyl butyl phthalate		1,000.6	µg/mL	+/-	5.8175	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot MKBZ4553V)			+/-	30.2657	µg/mL	Unstressed
	Purity 98%				+/-	30.2657	µg/mL	Stressed
66	Bis(2-ethylhexyl)adipate		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 103-23-1	(Lot MKBT7308V)			+/-	30.2482	µg/mL	Unstressed
	Purity 99%				+/-	30.2482	µg/mL	Stressed
67	Benz(a)anthracene		1,004.9	µg/mL	+/-	5.8423	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot ER031412-01)			+/-	30.3949	µg/mL	Unstressed
	Purity 99%				+/-	30.3949	µg/mL	Stressed
68	Chrysene		1,001.8	µg/mL	+/-	5.8243	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot 012015)			+/-	30.3011	µg/mL	Unstressed
	Purity 99%				+/-	30.3011	µg/mL	Stressed
69	Bis(2-ethylhexyl)phthalate		1,003.7	µg/mL	+/-	5.8356	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBZ3868V)			+/-	30.3601	µg/mL	Unstressed
	Purity 99%				+/-	30.3601	µg/mL	Stressed
70	Di-n-octyl phthalate		1,001.8	µg/mL	+/-	5.8246	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 5699100)			+/-	30.3026	µg/mL	Unstressed
	Purity 99%				+/-	30.3026	µg/mL	Stressed
71	Benzo(b)fluoranthene		1,000.7	µg/mL	+/-	5.8182	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot ER03101401)			+/-	30.2694	µg/mL	Unstressed
	Purity 99%				+/-	30.2694	µg/mL	Stressed

72	Benzo(k)fluoranthene		1,005.0	µg/mL	+/-	5.8432	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot 012012K)			+/-	30.3994	µg/mL	Unstressed
	Purity 99%				+/-	30.3994	µg/mL	Stressed
73	Benzo(a)pyrene		1,001.4	µg/mL	+/-	5.8219	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	30.2890	µg/mL	Unstressed
	Purity 99%				+/-	30.2890	µg/mL	Stressed
74	Indeno(1,2,3-cd)pyrene		1,002.6	µg/mL	+/-	5.8289	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	30.3253	µg/mL	Unstressed
	Purity 99%				+/-	30.3253	µg/mL	Stressed
75	Dibenz(a,h)anthracene		1,002.1	µg/mL	+/-	5.8263	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	30.3117	µg/mL	Unstressed
	Purity 99%				+/-	30.3117	µg/mL	Stressed
76	Benzo(g,h,i)perylene		1,002.5	µg/mL	+/-	5.8283	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER05121401)			+/-	30.3223	µg/mL	Unstressed
	Purity 99%				+/-	30.3223	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

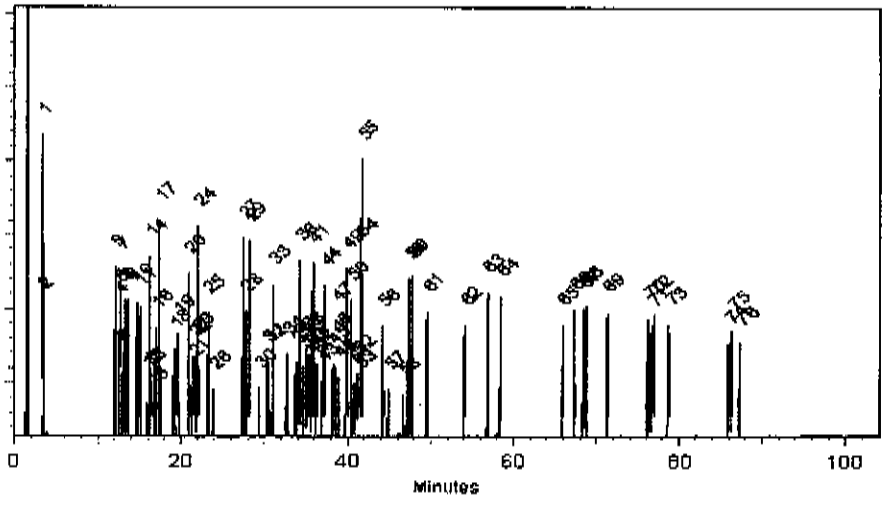
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician **Date Mixed:** 13-Nov-2017 **Balance:** B345965662

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Dec-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate of Analysis

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

S6526
10
S6540
M.V.
04/04/2018

Catalog No. : 30614 **Lot No.:** A0134839

Description : 1,4-dioxane-d8 Standard

1,4-dioxane-d8 Standard 2000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.I., K=2)		
1	1,4-Dioxane-d8	2,008.7 µg/mL	+/- 11.7880	µg/mL	Gravimetric
	CAS # 17647-74-4 (Lot 1-19942)		+/- 43.0356	µg/mL	Unstressed
	Purity 99%		+/- 44.2850	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

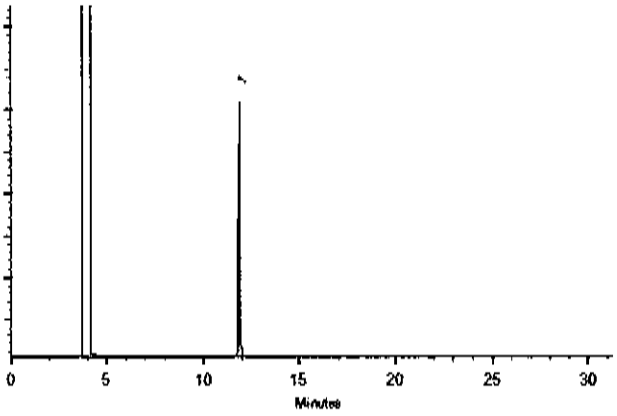
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Matt Fragassi - Mix Technician

Date Mixed: 01-Feb-2018 **Balance:** 1128342314

Jennifer Alderson - Operations Tech-Area 80

Date Passed: 06-Feb-2018

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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ilac-MRA

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31810 **Lot No.:** A0135095

Description : OLC03.2 SVOA Deuterated Monitoring Compounds Mix

OLC 03.2 SVOA Deuterated Monitoring Compounds, 1mL/ampul, Methylene Chloride, 2000µg/mL

S6731 to S6760

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2021 **Storage:** 10°C or colder

M.U. 05/30/2018

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Phenol-d5 **CAS #** 4165-62-2 (Lot X-479) **Purity** 99%	2,016.7 µg/mL	+/- 11.8349 µg/mL +/- 58.8751 µg/mL +/- 71.4341 µg/mL	Gravimetric Unstressed Stressed
2	bis(2-Chloroethyl) ether-d8 **CAS #** 93952-02-4 (Lot I-15074) **Purity** 98%	2,013.6 µg/mL	+/- 11.8168 µg/mL +/- 58.7848 µg/mL +/- 71.3245 µg/mL	Gravimetric Unstressed Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-28977) **Purity** 99%	2,012.7 µg/mL	+/- 11.8115 µg/mL +/- 58.7583 µg/mL +/- 71.2924 µg/mL	Gravimetric Unstressed Stressed
4	4-Methylphenol-d8 **CAS #** 190780-66-6 (Lot W-519) **Purity** 99%	2,003.3 µg/mL	+/- 11.7567 µg/mL +/- 58.4858 µg/mL +/- 70.9618 µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-25462) **Purity** 99%	2,006.0 µg/mL	+/- 11.7723 µg/mL +/- 58.5637 µg/mL +/- 71.0562 µg/mL	Gravimetric Unstressed Stressed
6	2-Nitrophenol-d4 **CAS #** 93951-78-1 (Lot H-151) **Purity** 99%	2,014.7 µg/mL	+/- 11.8232 µg/mL +/- 58.8167 µg/mL +/- 71.3632 µg/mL	Gravimetric Unstressed Stressed
7	2,4-Dichlorophenol-d3 **CAS #** 93951-74-7 (Lot AB-210) **Purity** 98%	2,004.4 µg/mL	+/- 11.7631 µg/mL +/- 58.5177 µg/mL +/- 71.0005 µg/mL	Gravimetric Unstressed Stressed

8	4-Chloroaniline-d4 **CAS #** 191656-33-4 **Purity** 99%	(Lot C-190)	2,010.0	µg/mL	+/- 11.7958 +/- 58.6804 +/- 71.1979	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Dimethylphthalate-d6 **CAS #** 85448-30-2 **Purity** 99%	(Lot X-477)	2,014.7	µg/mL	+/- 11.8232 +/- 58.8167 +/- 71.3632	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acenaphthylene-d8 **CAS #** 93951-97-4 **Purity** 99%	(Lot AB-282)	2,002.7	µg/mL	+/- 11.7528 +/- 58.4664 +/- 70.9382	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	4-Nitrophenol-d4 **CAS #** 93951-79-2 **Purity** 99%	(Lot P-141)	2,011.3	µg/mL	+/- 11.8036 +/- 58.7194 +/- 71.2452	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Fluorene-d10 **CAS #** 81103-79-9 **Purity** 98%	(Lot M149P29)	2,012.3	µg/mL	+/- 11.8091 +/- 58.7466 +/- 71.2782	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	4,6-Dinitro-2-methylphenol-d2 **CAS #** 93951-76-9 **Purity** 99%	(Lot AB-322)	2,004.0	µg/mL	+/- 11.7606 +/- 58.5053 +/- 70.9854	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Anthracene-d10 **CAS #** 1719-06-8 **Purity** 99%	(Lot PR-20576)	2,016.0	µg/mL	+/- 11.8310 +/- 58.8556 +/- 71.4105	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Pyrene-d10 **CAS #** 1718-52-1 **Purity** 98%	(Lot PR-14089)	2,014.9	µg/mL	+/- 11.8244 +/- 58.8229 +/- 71.3708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Benzo(a)pyrene-d12 **CAS #** 63466-71-7 **Purity** 99%	(Lot PR-28576)	2,010.7	µg/mL	+/- 11.7997 +/- 58.6999 +/- 71.2215	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

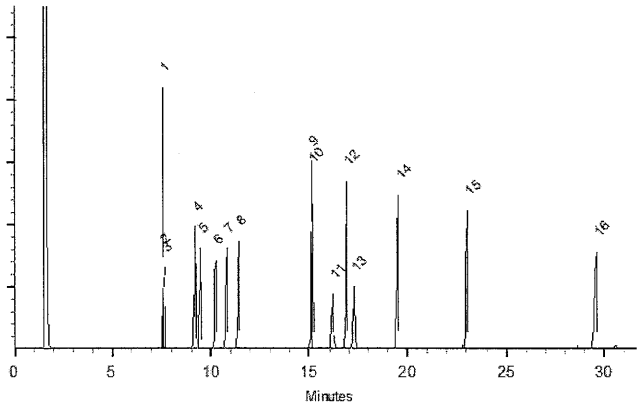
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Alice Brooks - Mix Technician

Date Mixed: 12-Feb-2018 **Balance:** B442140311

Justine Albertson - Operations Tech-ARM QC

Date Passed: 16-Feb-2018

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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SJ 5/31/18

Catalog No. : 31206 **Lot No.:** A0136809

From: 56791
to: 56820

Description : SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2024 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dichlorobenzene-d4	2,006.9 µg/mL	+/- 11.6683	µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 90.3920	µg/mL	Unstressed
	Purity 99%		+/- 100.3011	µg/mL	Stressed
2	Naphthalene-d8	2,011.0 µg/mL	+/- 11.6921	µg/mL	Gravimetric
	CAS # 1146-65-2 (Lot M-1452)		+/- 90.5766	µg/mL	Unstressed
	Purity 99%		+/- 100.5060	µg/mL	Stressed
3	Acenaphthene-d10	2,007.9 µg/mL	+/- 11.6741	µg/mL	Gravimetric
	CAS # 15067-26-2 (Lot PR-25444)		+/- 90.4370	µg/mL	Unstressed
	Purity 99%		+/- 100.3510	µg/mL	Stressed
4	Phenanthrene-d10	2,016.8 µg/mL	+/- 11.7258	µg/mL	Gravimetric
	CAS # 1517-22-2 (Lot PR-23065)		+/- 90.8379	µg/mL	Unstressed
	Purity 99%		+/- 100.7958	µg/mL	Stressed
5	Chrysene-d12	2,011.3 µg/mL	+/- 11.6939	µg/mL	Gravimetric
	CAS # 1719-03-5 (Lot PR-27952)		+/- 90.5902	µg/mL	Unstressed
	Purity 99%		+/- 100.5210	µg/mL	Stressed
6	Perylene-d12	2,019.3 µg/mL	+/- 11.7404	µg/mL	Gravimetric
	CAS # 1520-96-3 (Lot PR-24113)		+/- 90.9505	µg/mL	Unstressed
	Purity 99%		+/- 100.9208	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

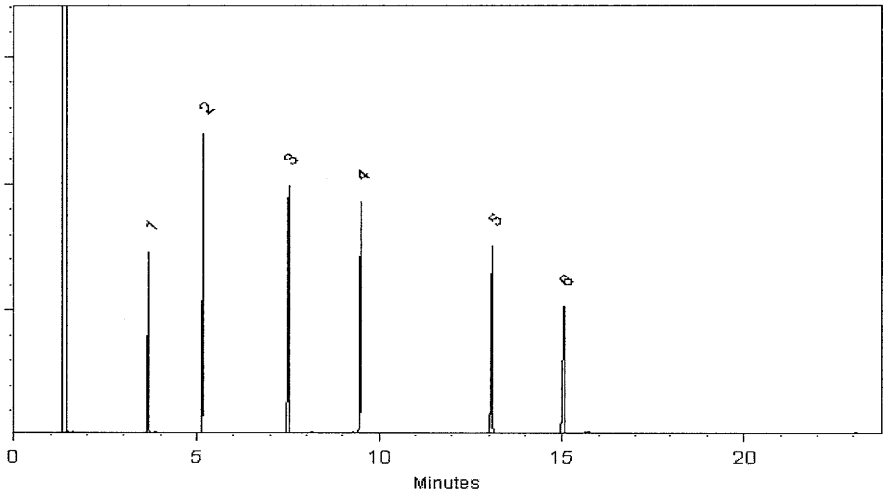
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 03-Apr-2018 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 05-Apr-2018

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

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Certificate #3222.02

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S6909
S6910
S6911
SJ
6/22/18

Catalog No. : 33913 **Lot No.:** A0137718

Description : SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2024 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Methylnaphthalene-d10	2,001.1 µg/mL	+/- 11.7436	µg/mL	Gravimetric
	CAS # 7297-45-2 (Lot AC-257)		+/- 90.1453	µg/mL	Unstressed
	Purity 97%		+/- 100.0244	µg/mL	Stressed
2	Fluoranthene-d10	2,009.0 µg/mL	+/- 11.7899	µg/mL	Gravimetric
	CAS # 93951-69-0 (Lot PR-20668)		+/- 90.5008	µg/mL	Unstressed
	Purity 98%		+/- 100.4188	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

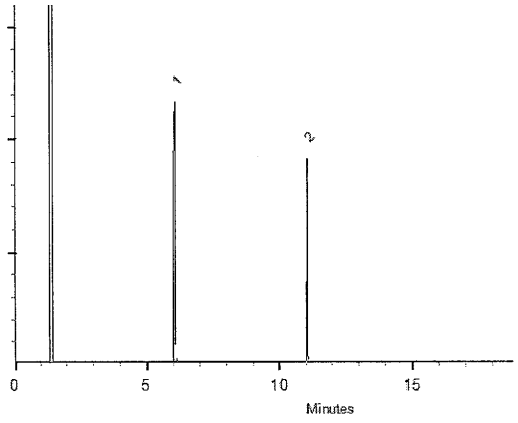
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Alice Brooks

Alice Brooks - Mix Technician

Date Mixed: 02-May-2018 **Balance:** 1128360905

Justine Albertson

Justine Albertson - Operations Tech-ARM QC

Date Passed: 03-May-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31853 **Lot No.:** A0116781

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Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav Conc. (weight/volume)	Expanded Uncertainty (95% C.I. ; K=2)		
1	1,4-Dioxane	2,010.0 µg/mL	+/- 11.7958	µg/mL	Gravimetric
	CAS # 123-91-1 (Lot SHBG1461V)		+/- 43.0642	µg/mL	Unstressed
	Purity 99%		+/- 44.3144	µg/mL	Stressed

Solvent: Methylene Chloride (MEOH FREE)
CAS # 75-09-2
Purity 99%

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
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Catalog No. : 30614 **Lot No.:** A0117024

Description : 1,4-dioxane-d8 Standard

1,4-dioxane-d8 Standard 2000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2019 **Storage:** 0°C or colder

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CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.: K=2)	
1	1,4-Dioxane-d8	2,003.6 µg/mL	+/- 11.7582 µg/mL	Gravimetric
	CAS # 17647-74-4 (Lot I-19239)		+/- 42.9271 µg/mL	Unstressed
	Purity 99%		+/- 44.1733 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
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Certificate #3223.02

Received on 05/10/16

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} bm 05/10/16

Catalog No. : 33913 **Lot No.:** A0117506

Description : SOM01.0 SIM Analysis Standard

SOM01.1 Deuterated Monitoring Compound Mix SIM Compounds
2000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2022 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Methylnaphthalene-d10 **CAS #** 7297-45-2 (Lot P364P17) **Purity** 99%	2,008.0 µg/mL	+/- 18.6733 µg/mL +/- 91.6082 µg/mL +/- 101.4087 µg/mL	Gravimetric Unstressed Stressed
2	Fluoranthene-d10 **CAS #** 93951-69-0 (Lot PR-20668) **Purity** 98%	2,007.0 µg/mL	+/- 18.6644 µg/mL +/- 91.5644 µg/mL +/- 101.3602 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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Purity Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
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Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Received 12/18/17

12/18/17

Catalog No. : 31001 **Lot No.:** A0131451

Description : SV Tuning Compound Standard

Tuning Std Decafluorotriphenylphosphine 2500µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2020 **Storage:** 10°C or colder

S6327

S6328

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.I., K=2)		
1	DFTPP (Decafluorotriphenylphosphine)	2,516.0 µg/mL	+/- 14.9443	µg/mL	Gravimetric
	CAS # 5074-71-5 (Lot Q15B005)		+/- 113.3634	µg/mL	Unstressed
	Purity 99%		+/- 125.7821	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

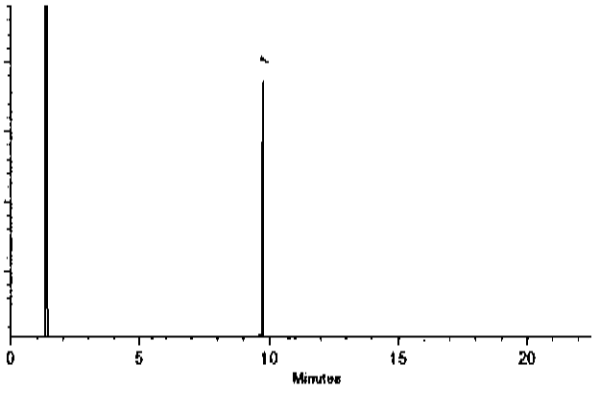
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Relish - Mix Technician

Date Mixed: 09-Oct-2017 **Balance:** B345965662

Date Passed: 10-Oct-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31900 **Lot No.:** A0134696

Description : OLM 01.1 Revised SV MegaMix

OLM 01.1 Revised SV MegaMix 500-1000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2019 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Phenol	1,004.8 µg/mL	+/- 6.7163 µg/mL	Gravimetric
	CAS # 108-95-2 (Lot SHBF1351V)		+/- 12.4597 µg/mL	Unstressed
	Purity 99%		+/- 19.4003 µg/mL	Stressed
2	Bis(2-chloroethyl)ether	1,005.4 µg/mL	+/- 6.7209 µg/mL	Gravimetric
	CAS # 111-44-4 (Lot SHBD4430V)		+/- 12.4682 µg/mL	Unstressed
	Purity 99%		+/- 19.4135 µg/mL	Stressed
3	2-Chlorophenol	1,004.6 µg/mL	+/- 6.7155 µg/mL	Gravimetric
	CAS # 95-57-8 (Lot STBF2690V)		+/- 12.4581 µg/mL	Unstressed
	Purity 99%		+/- 19.3978 µg/mL	Stressed
4	2,2'-oxybis(1-chloropropane)	1,010.0 µg/mL	+/- 6.7511 µg/mL	Gravimetric
	CAS # 108-60-1 (Lot 5922200)		+/- 12.5242 µg/mL	Unstressed
	Purity 98%		+/- 19.5007 µg/mL	Stressed
5	2-Methylphenol (o-cresol)	1,009.1 µg/mL	+/- 6.7452 µg/mL	Gravimetric
	CAS # 95-48-7 (Lot SHBC1479V)		+/- 12.5132 µg/mL	Unstressed
	Purity 99%		+/- 19.4835 µg/mL	Stressed
6	Acetophenone	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 98-86-2 (Lot MKBR7156V)		+/- 12.0397 µg/mL	Unstressed
	Purity 99%		+/- 19.1016 µg/mL	Stressed
7	Hexachloroethane	1,001.4 µg/mL	+/- 6.6938 µg/mL	Gravimetric
	CAS # 67-72-1 (Lot 4H3SF)		+/- 12.4178 µg/mL	Unstressed
	Purity 99%		+/- 19.3351 µg/mL	Stressed

8	N-Nitroso-di-n-propylamine **CAS #** 621-64-7 **Purity** 99%	(Lot NOPCF)	1,001.0	µg/mL	+/- 6.7387 +/- 12.4388 +/- 19.3443	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	4-Methylphenol (p-cresol) **CAS #** 106-44-5 **Purity** 99%	(Lot 49396APV)	503.2	µg/mL	+/- 3.3695 +/- 6.2431 +/- 9.7179	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	3-Methylphenol (m-cresol) **CAS #** 108-39-4 **Purity** 99%	(Lot 04627KA)	501.0	µg/mL	+/- 3.3548 +/- 6.2160 +/- 9.6756	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot SHBG5577V)	1,008.6	µg/mL	+/- 6.7422 +/- 12.5077 +/- 19.4751	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Isophorone **CAS #** 78-59-1 **Purity** 98%	(Lot MKBG2442V)	1,009.8	µg/mL	+/- 6.7503 +/- 12.5227 +/- 19.4983	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	2-Nitrophenol **CAS #** 88-75-5 **Purity** 99%	(Lot BCBH7602V)	1,004.6	µg/mL	+/- 6.7151 +/- 12.4574 +/- 19.3966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	2,4-Dimethylphenol **CAS #** 105-67-9 **Purity** 99%	(Lot 10165155)	1,002.4	µg/mL	+/- 6.7005 +/- 12.4302 +/- 19.3544	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Bis(2-chloroethoxy)methane **CAS #** 111-91-1 **Purity** 99%	(Lot 5670100)	1,007.4	µg/mL	+/- 6.7343 +/- 12.4930 +/- 19.4521	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	2,4-Dichlorophenol **CAS #** 120-83-2 **Purity** 99%	(Lot BCBJ8113V)	1,008.6	µg/mL	+/- 6.7418 +/- 12.5070 +/- 19.4739	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBW2603V)	1,004.4	µg/mL	+/- 6.7138 +/- 12.4550 +/- 19.3930	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	4-Chloroaniline **CAS #** 106-47-8 **Purity** 99%	(Lot BCBJ1580V)	1,002.0	µg/mL	+/- 6.7455 +/- 12.4513 +/- 19.3637	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 99%	(Lot J31X013)	1,003.3	µg/mL	+/- 6.7067 +/- 12.4419 +/- 19.3725	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	2-Methylnaphthalene **CAS #** 91-57-6 **Purity** 95%	(Lot STBF0201V)	1,000.4	µg/mL	+/- 6.7344 +/- 12.4308 +/- 19.3318	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	4-Chloro-3-methylphenol **CAS #** 59-50-7 **Purity** 99%	(Lot STBC7309V)	1,007.0	µg/mL	+/- 6.7314 +/- 12.4876 +/- 19.4437	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	1,2,4,5-Tetrachlorobenzene **CAS #** 95-94-3 **Purity** 99%	(Lot MKBW7717V)	1,001.0	µg/mL	+/- 6.7387 +/- 12.4388 +/- 19.3443	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	Hexachlorocyclopentadiene **CAS #** 77-47-4 **Purity** 99%	(Lot 0012015)	1,007.6	µg/mL	+/- 6.7355 +/- 12.4953 +/- 19.4558	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	2,4,6-Trichlorophenol		1,005.9	µg/mL	+/-	6.7243	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot MKBL4698V)			+/-	12.4744	µg/mL	Unstressed
	Purity 99%				+/-	19.4232	µg/mL	Stressed
25	2,4,5-Trichlorophenol		1,002.6	µg/mL	+/-	6.7017	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHM01)			+/-	12.4326	µg/mL	Unstressed
	Purity 99%				+/-	19.3580	µg/mL	Stressed
26	2-Chloronaphthalene		1,008.2	µg/mL	+/-	6.7393	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot AJ2UI)			+/-	12.5023	µg/mL	Unstressed
	Purity 99%				+/-	19.4666	µg/mL	Stressed
27	Biphenyl		1,000.0	µg/mL	+/-	5.9397	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot MKBV9808V)			+/-	12.0157	µg/mL	Unstressed
	Purity 99%				+/-	19.0635	µg/mL	Stressed
28	2-Nitroaniline		1,002.0	µg/mL	+/-	6.7455	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBK7597V)			+/-	12.4513	µg/mL	Unstressed
	Purity 99%				+/-	19.3637	µg/mL	Stressed
29	Acenaphthylene		1,004.4	µg/mL	+/-	6.7138	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot L18Q)			+/-	12.4551	µg/mL	Unstressed
	Purity 98%				+/-	19.3931	µg/mL	Stressed
30	Dimethylphthalate		1,008.1	µg/mL	+/-	6.7385	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)			+/-	12.5008	µg/mL	Unstressed
	Purity 99%				+/-	19.4642	µg/mL	Stressed
31	2,6-Dinitrotoluene		1,008.8	µg/mL	+/-	6.7431	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot BCBB8606V)			+/-	12.5093	µg/mL	Unstressed
	Purity 99%				+/-	19.4775	µg/mL	Stressed
32	Acenaphthene		1,009.1	µg/mL	+/-	6.7452	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKBW9515V)			+/-	12.5132	µg/mL	Unstressed
	Purity 99%				+/-	19.4835	µg/mL	Stressed
33	3-Nitroaniline		1,001.5	µg/mL	+/-	6.7421	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot MKBX1283V)			+/-	12.4451	µg/mL	Unstressed
	Purity 99%				+/-	19.3540	µg/mL	Stressed
34	2,4-Dinitrophenol		1,002.1	µg/mL	+/-	6.6984	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot STBF9439V)			+/-	12.4264	µg/mL	Unstressed
	Purity 99%				+/-	19.3484	µg/mL	Stressed
35	Dibenzofuran		1,004.0	µg/mL	+/-	5.9635	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBW2691V)			+/-	12.0637	µg/mL	Unstressed
	Purity 99%				+/-	19.1397	µg/mL	Stressed
36	2,4-Dinitrotoluene		1,003.1	µg/mL	+/-	6.7051	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/-	12.4388	µg/mL	Unstressed
	Purity 99%				+/-	19.3677	µg/mL	Stressed
37	4-Nitrophenol		1,007.3	µg/mL	+/-	6.7330	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKBP6945V)			+/-	12.4907	µg/mL	Unstressed
	Purity 99%				+/-	19.4485	µg/mL	Stressed
38	2,3,4,6-Tetrachlorophenol		1,000.0	µg/mL	+/-	6.7320	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot B17W03081)			+/-	12.4264	µg/mL	Unstressed
	Purity 99%				+/-	19.3250	µg/mL	Stressed
39	Fluorene		1,003.6	µg/mL	+/-	6.7088	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 10193329)			+/-	12.4457	µg/mL	Unstressed
	Purity 99%				+/-	19.3785	µg/mL	Stressed

40	4-Chlorophenyl phenyl ether **CAS #** 7005-72-3 **Purity** 99%	(Lot MKBX5225V)	1,009.2	µg/mL	+/- 6.7460 +/- 12.5147 +/- 19.4859	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	Diethylphthalate **CAS #** 84-66-2 **Purity** 99%	(Lot MKBV9622V)	1,004.6	µg/mL	+/- 6.7155 +/- 12.4581 +/- 19.3978	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	4-Nitroaniline **CAS #** 100-01-6 **Purity** 98%	(Lot BCBG4702V)	1,000.1	µg/mL	+/- 6.7326 +/- 12.4275 +/- 19.3267	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) **CAS #** 534-52-1 **Purity** 98%	(Lot LC22071V)	1,004.9	µg/mL	+/- 6.7172 +/- 12.4612 +/- 19.4027	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	Diphenylamine **CAS #** 122-39-4 **Purity** 99%	(Lot MKBN8295V)	1,002.5	µg/mL	+/- 6.7488 +/- 12.4575 +/- 19.3733	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	4-Bromophenyl phenyl ether **CAS #** 101-55-3 **Purity** 98%	(Lot STBB9729V)	1,007.6	µg/mL	+/- 6.7351 +/- 12.4946 +/- 19.4546	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	Hexachlorobenzene **CAS #** 118-74-1 **Purity** 99%	(Lot LC24211V)	1,009.8	µg/mL	+/- 6.7502 +/- 12.5225 +/- 19.4980	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	Pentachlorophenol **CAS #** 87-86-5 **Purity** 99%	(Lot 170306KJA)	1,002.9	µg/mL	+/- 6.7042 +/- 12.4372 +/- 19.3653	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Phenanthrene **CAS #** 85-01-8 **Purity** 99%	(Lot MKCB1762V)	1,007.1	µg/mL	+/- 6.7318 +/- 12.4884 +/- 19.4449	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Anthracene **CAS #** 120-12-7 **Purity** 99%	(Lot MKBV7759V)	1,003.6	µg/mL	+/- 6.7088 +/- 12.4457 +/- 19.3785	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Carbazole **CAS #** 86-74-8 **Purity** 99%	(Lot 5945900)	1,001.5	µg/mL	+/- 6.7421 +/- 12.4451 +/- 19.3540	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Di-n-butylphthalate **CAS #** 84-74-2 **Purity** 99%	(Lot MKBT0244V)	1,005.3	µg/mL	+/- 6.7201 +/- 12.4667 +/- 19.4111	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Fluoranthene **CAS #** 206-44-0 **Purity** 98%	(Lot MKBQ6360V)	1,009.3	µg/mL	+/- 6.7466 +/- 12.5158 +/- 19.4877	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	Pyrene **CAS #** 129-00-0 **Purity** 99%	(Lot BCBR9108V)	1,003.1	µg/mL	+/- 6.7055 +/- 12.4395 +/- 19.3689	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	Benzyl butyl phthalate **CAS #** 85-68-7 **Purity** 98%	(Lot MKBZ4553V)	1,003.6	µg/mL	+/- 6.7085 +/- 12.4452 +/- 19.3777	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	Benz(a)anthracene **CAS #** 56-55-3 **Purity** 99%	(Lot ER031412-01)	1,008.7	µg/mL	+/- 6.7427 +/- 12.5085 +/- 19.4763	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Chrysene		1,004.5	µg/mL	+/-	6.7147	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot 012015)			+/-	12.4566	µg/mL	Unstressed
	Purity 99%				+/-	19.3954	µg/mL	Stressed
57	3,3'-Dichlorobenzidine		1,001.5	µg/mL	+/-	6.7421	µg/mL	Gravimetric
	CAS # 91-94-1	(Lot 170112KJA)			+/-	12.4451	µg/mL	Unstressed
	Purity 99%				+/-	19.3540	µg/mL	Stressed
58	Bis(2-ethylhexyl)phthalate		1,009.9	µg/mL	+/-	6.7510	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBZ3868V)			+/-	12.5240	µg/mL	Unstressed
	Purity 99%				+/-	19.5004	µg/mL	Stressed
59	Di-n-octyl phthalate		1,007.7	µg/mL	+/-	6.7360	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 5555000)			+/-	12.4961	µg/mL	Unstressed
	Purity 99%				+/-	19.4570	µg/mL	Stressed
60	Benzo(b)fluoranthene		1,003.9	µg/mL	+/-	6.7105	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot ER03101401)			+/-	12.4488	µg/mL	Unstressed
	Purity 99%				+/-	19.3834	µg/mL	Stressed
61	Benzo(k)fluoranthene		1,003.8	µg/mL	+/-	6.7096	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot 012012K)			+/-	12.4473	µg/mL	Unstressed
	Purity 99%				+/-	19.3809	µg/mL	Stressed
62	Benzo(a)pyrene		1,003.1	µg/mL	+/-	6.7051	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	12.4388	µg/mL	Unstressed
	Purity 99%				+/-	19.3677	µg/mL	Stressed
63	Indeno(1,2,3-cd)pyrene		1,009.3	µg/mL	+/-	6.7468	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	12.5163	µg/mL	Unstressed
	Purity 99%				+/-	19.4883	µg/mL	Stressed
64	Dibenz(a,h)anthracene		1,002.1	µg/mL	+/-	6.6988	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	12.4271	µg/mL	Unstressed
	Purity 99%				+/-	19.3496	µg/mL	Stressed
65	Benzo(g,h,i)perylene		1,006.2	µg/mL	+/-	6.7259	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER05121401)			+/-	12.4775	µg/mL	Unstressed
	Purity 99%				+/-	19.4280	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

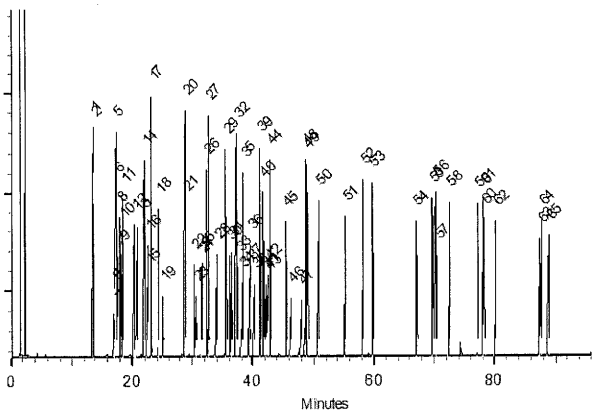
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Date Mixed: 30-Jan-2018 **Balance:** 1122030677

Justine Albertson - Operations Tech-ARM QC

Date Passed: 01-Feb-2018

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

PCI SCIENTIFIC SUPPLY, INC.
41 PLYMOUTH STREET
FAIRFIELD, NJ 07004
P# (973) 244-9002
F# (973) 244-9448

E 2519

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na_2SO_4
SPECIFICATION NUMBER :	6399	RELEASE DATE:	NOV/30/2017
LOT NUMBER :	743502		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na_2SO_4)	Min. 99.0 %	99.4 %
pH of a 5% solution at 25°C	5.2 - 9.2	5.8
Insoluble matter	Max. 0.01 %	0.007 %
Loss on ignition	Max. 0.5 %	0.1 %
Chloride (Cl)	Max. 0.001 %	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO_4)	Max. 0.001 %	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001 %	<0.001 %
Calcium (Ca)	Max. 0.01 %	0.001 %
Magnesium (Mg)	Max. 0.005 %	0.0002 %
Potassium (K)	Max. 0.008 %	0.002 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreing matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1 %	0.0 %
Retained on US Standard No. 60 sieve	Min. 94 %	98.1 %
Through US Standard No. 60 sieve	Max. 5 %	1.8 %
Through US Standard No. 100 sieve	Max. 10 %	0.0 %

QC: PhC Irma Belmares

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

SJ 9/6/14

Catalog No. : 31206 **Lot No.:** A0139548

Description : SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

S7047 to S7076

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2024 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	2,002.3 µg/mL	+/- 11.6415 µg/mL +/- 90.1848 µg/mL +/- 100.0712 µg/mL	Gravimetric Unstressed Stressed
2	Naphthalene-d8 **CAS #** 1146-65-2 (Lot M-1452) **Purity** 99%	2,001.2 µg/mL	+/- 11.6351 µg/mL +/- 90.1352 µg/mL +/- 100.0162 µg/mL	Gravimetric Unstressed Stressed
3	Acenaphthene-d10 **CAS #** 15067-26-2 (Lot PR-25444) **Purity** 99%	2,001.2 µg/mL	+/- 11.6351 µg/mL +/- 90.1352 µg/mL +/- 100.0162 µg/mL	Gravimetric Unstressed Stressed
4	Phenanthrene-d10 **CAS #** 1517-22-2 (Lot PR-23065) **Purity** 99%	2,000.5 µg/mL	+/- 11.6311 µg/mL +/- 90.1037 µg/mL +/- 99.9812 µg/mL	Gravimetric Unstressed Stressed
5	Chrysene-d12 **CAS #** 1719-03-5 (Lot PR-28823) **Purity** 99%	2,003.3 µg/mL	+/- 11.6474 µg/mL +/- 90.2298 µg/mL +/- 100.1211 µg/mL	Gravimetric Unstressed Stressed
6	Perylene-d12 **CAS #** 1520-96-3 (Lot PR-24113) **Purity** 99%	2,002.8 µg/mL	+/- 11.6445 µg/mL +/- 90.2073 µg/mL +/- 100.0962 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

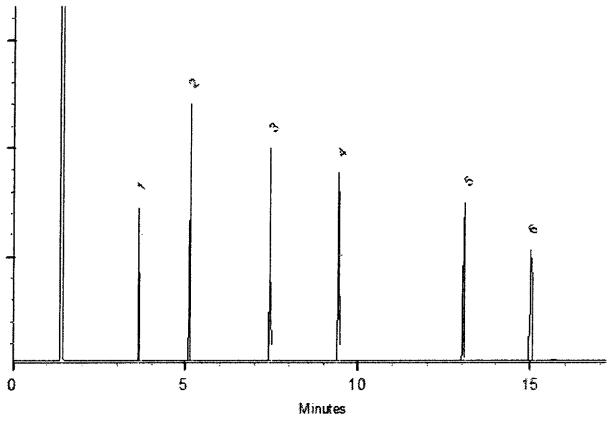
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dustin J Lidgett
Dustin Lidgett - Mix Technician

Date Mixed: 11-Jul-2018 **Balance:** 1128353505

Justine Albertson - Operations Tech-ARM QC

Date Passed: 16-Jul-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

J.T.Baker | avantor

Material No.: 9266-A4
Batch No.: 0000202209
Manufactured Date: 2018/05/25
Expiration Date: 2019/08/24
Revision No: 1

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	5
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0000 ppm	0.2000
Titrable Acid (µeq/g)	<= 0.3	< 0.1
Chloride (Cl)	<= 10 ppm	< 5
Water (by KF, coulometric)	<= 0.02 %	< 0.01

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E2489

ISO
Phillipsburg, NJ 9001:2008, 14001:2004, FSSC 22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Deventer, The Netherlands 9001:2008, 14001:2004, 13485:2003
Gliwice, Poland 9001:2008, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2008
Panoli, India 9001:2008

James T Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.573.2600
Avantor Performance Materials, LLC.
3477 Corporate Parkway. Center Valley, PA 18034. U.S.A. Phone: 610.573.2600 . Fax: 610.573.2610

1511

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

J.T.Baker | avantor

Material No.: 9266-A4
Batch No.: 0000207558
Manufactured Date: 2018/08/03
Expiration Date: 2019/11/02
Revision No: 1

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	3
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0000 ppm	0.2000
Titrable Acid (µeq/g)	<= 0.3	< 0.1
Chloride (Cl)	<= 10 ppm	< 5
Water (by KF, coulometric)	<= 0.02 %	0.01

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E 2510

ISO
Phillipsburg, NJ 9001:2015, FSSC 22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2008
Selangor, Malaysia 9001:2008
Dehradun, India 9001:2015, 14001:2015, 13485:2016
Mumbai, India 9001:2015
Panoli, India 9001:2015

James T Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.573.2600
Avantor Performance Materials, LLC.
3477 Corporate Parkway. Center Valley, PA 18034. U.S.A. Phone: 610.573.2600 . Fax: 610.573.2610

1512

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

J.T.Baker® | avantor

Material No.: 9266-A4
Batch No.: 0000211047
Manufactured Date: 2018/09/11
Expiration Date: 2019/12/11
Revision No: 1

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0000 ppm	0.2000
Titrable Acid (µeq/g)	<= 0.3	< 0.1
Chloride (Cl)	<= 10 ppm	< 5
Water (by KF, coulometric)	<= 0.02 %	< 0.01

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E 2529

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

1513

Acetone
ULTRA RESI-ANALYZED
For Organic Residue Analysis

J.T.Baker® | avantor

Material No.: 9254-03
Batch No.: 0000196204
Manufactured Date: 2018/02/06
Expiration Date: 2021/02/05
Revision No: 1

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected for water)	>= 99.4 %	99.8
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0000 ppm	0.3000
Substances Reducing Permanganate	Passes Test	PT
Titrable Acid (µeq/g)	<= 0.3	0.3
Titrable Base (µeq/g)	<= 0.6	< 0.1
Water (H_2O)	<= 0.5 %	0.2
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	2
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E 2534

ISO
Phillipsburg, NJ 9001:2008, 14001:2004, FSSC 22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Deventer, The Netherlands 9001:2008, 14001:2004, 13485:2003
Gliwice, Poland 9001:2008, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2008
Panoli, India 9001:2008

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.573.2600
Avantor Performance Materials, LLC.
3477 Corporate Parkway. Center Valley, PA 18034. U.S.A. Phone: 610.573.2600 . Fax: 610.573.2610

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

J.T.Baker | avantor

Material No.: 9266-A4
Batch No.: 0000211047
Manufactured Date: 2018/09/11
Expiration Date: 2019/12/11
Revision No: 1

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0000 ppm	0.2000
Titrable Acid (µeq/g)	<= 0.3	< 0.1
Chloride (Cl)	<= 10 ppm	< 5
Water (by KF, coulometric)	<= 0.02 %	< 0.01

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E 2536

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India 9001:2008, 14001:2004, 13485:2003
Mumbai, India 9001:2015, 17025:2005
Pandi, India 9001:2015

James T Ethier
Jamie Ethier
Vice President Global Quality

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Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

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Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

J.T.Baker® | avantor

Material No.: 9266-A4
Batch No.: 0000211047
Manufactured Date: 2018/09/11
Expiration Date: 2019/12/11
Revision No: 1

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0000 ppm	0.2000
Titrable Acid (µeq/g)	<= 0.3	< 0.1
Chloride (Cl)	<= 10 ppm	< 5
Water (by KF, coulometric)	<= 0.02 %	< 0.01

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E 2540

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

James Ethier
Jamie Ethier
Vice President Global Quality

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Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

J.T.Baker® | avantor

Material No.: 9266-A4
Batch No.: 0000214356
Manufactured Date: 2018/10/23
Expiration Date: 2020/01/22
Revision No: 1

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	3
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0000 ppm	0.2000
Titrable Acid (µeq/g)	<= 0.3	< 0.1
Chloride (Cl)	<= 10 ppm	< 5
Water (by KF, coulometric)	<= 0.02 %	< 0.01

For Laboratory, Research or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

E 2560

ISO
Phillipsburg, NJ 9001:2015, FSSC 22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

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Jamie Ethier
Vice President Global Quality

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN111918

Review By	Jagrut	Review On	11/20/2018 5:12:29 PM		
Supervise By	Sohil	Supervise On	11/20/2018 5:14:04 PM		
SubDirectory	BN111918	HP Acquire Method	BNA_N,EPA_SIM	HP Processing Method	BN111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4548,SP4549,SP4550,SP4551,SP4552,SP4553,SP4554
CCC	SP4552
Internal Standard/PEM	SP4560,10ul/1000ul sample
ICV/I.BLK	SP4555,SP4556

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP54	BN003588.D	19 Nov 2018 11:40	MJ/SJ	Ok
2	SSTD0.161	BN003589.D	19 Nov 2018 12:15	MJ/SJ	Ok
3	SSTD0.262	BN003590.D	19 Nov 2018 12:50	MJ/SJ	Ok
4	SSTD0.463	BN003591.D	19 Nov 2018 13:25	MJ/SJ	Ok
5	SSTD0.864	BN003592.D	19 Nov 2018 14:00	MJ/SJ	Ok
6	SSTD1.665	BN003593.D	19 Nov 2018 14:35	MJ/SJ	Ok
7	SSTD3.266	BN003594.D	19 Nov 2018 15:10	MJ/SJ	Ok
8	SSTDICV0.4	BN003595.D	19 Nov 2018 15:45	MJ/SJ	Ok
9	J5928-11	BN003596.D	19 Nov 2018 16:20	MJ/SJ	Ok
10	SSTDCCC0.4	BN003597.D	19 Nov 2018 16:56	MJ/SJ	Ok
11	PB114864BL	BN003598.D	19 Nov 2018 17:31	MJ/SJ	Ok,M
12	PB114865BL	BN003599.D	19 Nov 2018 18:06	MJ/SJ	Ok,M
13	PB114881BL	BN003600.D	19 Nov 2018 18:41	MJ/SJ	Ok,M
14	J5928-01	BN003601.D	19 Nov 2018 19:16	MJ/SJ	Ok,M
15	J5928-02	BN003602.D	19 Nov 2018 19:51	MJ/SJ	Ok,M
16	J5928-03	BN003603.D	19 Nov 2018 20:26	MJ/SJ	Ok,M
17	J5928-06MS	BN003604.D	19 Nov 2018 21:01	MJ/SJ	Not Ok
18	J5928-07MSD	BN003605.D	19 Nov 2018 21:36	MJ/SJ	Not Ok
19	J5928-12	BN003606.D	19 Nov 2018 22:11	MJ/SJ	Ok,M
20	J5928-08	BN003607.D	19 Nov 2018 22:46	MJ/SJ	Ok,M
21	J5928-09	BN003608.D	19 Nov 2018 23:21	MJ/SJ	Ok,M
22	J5928-16	BN003609.D	19 Nov 2018 23:56	MJ/SJ	Ok,M
23	J5928-13	BN003610.D	20 Nov 2018 00:31	MJ/SJ	Ok,M
24	J5928-17	BN003611.D	20 Nov 2018 01:06	MJ/SJ	Ok,M
25	SSTDCCC0.4	BN003612.D	20 Nov 2018 01:41	MJ/SJ	Ok
26	J5928-20	BN003613.D	20 Nov 2018 02:16	MJ/SJ	Ok,M

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN111918

Review By	Jagrut	Review On	11/20/2018 5:12:29 PM		
Supervise By	Sohil	Supervise On	11/20/2018 5:14:04 PM		
SubDirectory	BN111918	HP Acquire Method	BNA_N,EPA_SIM	HP Processing Method	BN111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4548,SP4549,SP4550,SP4551,SP4552,SP4553,SP4554
CCC	SP4552
Internal Standard/PEM	SP4560,10ul/1000ul sample
ICV/I.BLK	SP4555,SP4556

27	J5928-21	BN003614.D	20 Nov 2018 02:51	MJ/SJ	Ok,M
28	J5928-19	BN003615.D	20 Nov 2018 03:26	MJ/SJ	Ok,M
29	J5928-18	BN003616.D	20 Nov 2018 04:01	MJ/SJ	Ok
30	J5928-04	BN003617.D	20 Nov 2018 04:36	MJ/SJ	Ok,M
31	J5928-14	BN003618.D	20 Nov 2018 05:11	MJ/SJ	Ok,M
32	J5928-05	BN003619.D	20 Nov 2018 05:46	MJ/SJ	Ok,M
33	J5928-06MS	BN003620.D	20 Nov 2018 06:21	MJ/SJ	Ok
34	J5928-07MSD	BN003621.D	20 Nov 2018 06:56	MJ/SJ	Ok
35	SSTDCCC0.4EC	BN003622.D	20 Nov 2018 07:31	MJ/SJ	Ok

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN120618

Review By	Jagrut	Review On	12/7/2018 5:58:07 PM		
Supervise By	mohammad	Supervise On	12/10/2018 12:21:14 PM		
SubDirectory	BN120618	HP Acquire Method	BNA_N,EPA_SIM	HP Processing Method	BN111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4548,SP4549,SP4550,SP4551,SP4552,SP4553,SP4554
CCC	SP4552
Internal Standard/PEM	SP4560,10ul/1000ul sample
ICV/I.BLK	SP4555,SP4556

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP62	BN003729.D	06 Dec 2018 13:57	JU/SJ	Ok
2	SSTDCCC0.4	BN003730.D	06 Dec 2018 14:32	JU/SJ	Ok
3	PB115266BL	BN003731.D	06 Dec 2018 15:07	JU/SJ	Ok,M
4	J6077-01	BN003732.D	06 Dec 2018 15:54	JU/SJ	Ok,M
5	J6077-02	BN003733.D	06 Dec 2018 16:29	JU/SJ	Ok,M
6	J6077-03	BN003734.D	06 Dec 2018 17:04	JU/SJ	Ok,M
7	J6077-05	BN003735.D	06 Dec 2018 17:39	JU/SJ	Dilution
8	J6077-06	BN003736.D	06 Dec 2018 18:14	JU/SJ	Dilution
9	J6077-07	BN003737.D	06 Dec 2018 18:49	JU/SJ	Ok,M
10	J6077-08	BN003738.D	06 Dec 2018 19:24	JU/SJ	Ok,M
11	J6077-09	BN003739.D	06 Dec 2018 19:59	JU/SJ	Ok,M
12	J6077-10	BN003740.D	06 Dec 2018 20:34	JU/SJ	Ok,M
13	J6227-01	BN003741.D	06 Dec 2018 21:09	JU/SJ	Ok,M
14	PB115350BL	BN003742.D	06 Dec 2018 21:45	JU/SJ	Ok,M
15	SSTDCCC0.4	BN003743.D	06 Dec 2018 22:20	JU/SJ	Ok
16	J6227-02	BN003744.D	07 Dec 2018 00:05	JU/SJ	Ok,M
17	J6227-05	BN003745.D	07 Dec 2018 00:40	JU/SJ	Ok,M
18	J6227-06	BN003746.D	07 Dec 2018 01:15	JU/SJ	Ok,M
19	J6227-07	BN003747.D	07 Dec 2018 01:50	JU/SJ	Ok,M
20	J6227-09	BN003748.D	07 Dec 2018 02:25	JU/SJ	Ok,M
21	J6227-10	BN003749.D	07 Dec 2018 03:00	JU/SJ	Ok,M
22	J6227-11	BN003750.D	07 Dec 2018 03:35	JU/SJ	Ok,M
23	J6227-12	BN003751.D	07 Dec 2018 04:09	JU/SJ	Ok,M
24	J6227-13	BN003752.D	07 Dec 2018 04:44	JU/SJ	Ok,M
25	J6227-14	BN003753.D	07 Dec 2018 05:19	JU/SJ	Ok,M
26	J6227-17	BN003754.D	07 Dec 2018 05:54	JU/SJ	Ok,M

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN120618

Review By	Jagrut	Review On	12/7/2018 5:58:07 PM		
Supervise By	mohammad	Supervise On	12/10/2018 12:21:14 PM		
SubDirectory	BN120618	HP Acquire Method	BNA_N,EPA_SIM	HP Processing Method	BN111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4548,SP4549,SP4550,SP4551,SP4552,SP4553,SP4554
CCC	SP4552
Internal Standard/PEM	SP4560,10ul/1000ul sample
ICV/I.BLK	SP4555,SP4556

27	J6227-18	BN003755.D	07 Dec 2018 06:29	JU/SJ	Ok,M
28	SSTDCCC0.4EC	BN003756.D	07 Dec 2018 07:04	JU/SJ	Ok

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN121518

Review By	Jagrut	Review On	12/17/2018 4:23:15 PM		
Supervise By	Sohil	Supervise On	12/17/2018 4:24:37 PM		
SubDirectory	BN121518	HP Acquire Method	BNA_N,EPA_SIM	HP Processing Method	BN111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4548,SP4549,SP4550,SP4551,SP4552,SP4553,SP4554
CCC	SP4552
Internal Standard/PEM	SP4560,10ul/1000ul sample
ICV/I.BLK	SP4555,SP4556

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP69	BN003949.D	15 Dec 2018 08:31	JU/SJ	Ok
2	SSTDCCC0.4	BN003950.D	15 Dec 2018 09:48	JU/SJ	Ok
3	J6227-15	BN003951.D	15 Dec 2018 10:24	JU/SJ	Ok,M
4	J6171-10	BN003952.D	15 Dec 2018 10:59	JU/SJ	Dilution
5	J6171-10DL	BN003953.D	15 Dec 2018 11:34	JU/SJ	Ok,M
6	J6227-03	BN003954.D	15 Dec 2018 12:09	JU/SJ	Ok,M
7	J6227-03DL	BN003955.D	15 Dec 2018 12:45	JU/SJ	Not Ok
8	J6227-04	BN003956.D	15 Dec 2018 13:20	JU/SJ	Ok,M
9	J6227-04DL	BN003957.D	15 Dec 2018 13:56	JU/SJ	Not Ok
10	J6227-08	BN003958.D	15 Dec 2018 14:31	JU/SJ	Ok,M
11	J6227-08DL	BN003959.D	15 Dec 2018 15:06	JU/SJ	Not Ok
12	J6227-16	BN003960.D	15 Dec 2018 15:42	JU/SJ	Ok,M
13	J6227-16DL	BN003961.D	15 Dec 2018 16:17	JU/SJ	Not Ok
14	J6227-19	BN003962.D	15 Dec 2018 16:52	JU/SJ	Ok,M
15	J6227-19DL	BN003963.D	15 Dec 2018 17:28	JU/SJ	Not Ok
16	SSTDCCC0.4	BN003964.D	15 Dec 2018 18:38	JU/SJ	Ok
17	J6227-20	BN003965.D	15 Dec 2018 19:14	JU/SJ	Ok,M
18	J6171-02	BN003966.D	15 Dec 2018 19:49	JU/SJ	Ok,M
19	J6171-02DL	BN003967.D	15 Dec 2018 20:24	JU/SJ	Not Ok
20	J6171-03	BN003968.D	15 Dec 2018 20:59	JU/SJ	Ok,M
21	J6171-03DL	BN003969.D	15 Dec 2018 21:35	JU/SJ	Not Ok
22	J6171-06	BN003970.D	15 Dec 2018 22:10	JU/SJ	Ok,M
23	J6171-06DL	BN003971.D	15 Dec 2018 22:46	JU/SJ	Not Ok
24	J6171-07	BN003972.D	15 Dec 2018 23:22	JU/SJ	Ok,M
25	J6171-07DL	BN003973.D	15 Dec 2018 23:57	JU/SJ	Not Ok
26	J6171-17	BN003974.D	16 Dec 2018 00:33	JU/SJ	Ok,M

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN121518

Review By	Jagrut	Review On	12/17/2018 4:23:15 PM		
Supervise By	Sohil	Supervise On	12/17/2018 4:24:37 PM		
SubDirectory	BN121518	HP Acquire Method	BNA_N,EPA_SIM	HP Processing Method	BN111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4548,SP4549,SP4550,SP4551,SP4552,SP4553,SP4554
CCC	SP4552
Internal Standard/PEM	SP4560,10ul/1000ul sample
ICV/I.BLK	SP4555,SP4556

27	J6171-17DL	BN003975.D	16 Dec 2018 01:09	JU/SJ	Not Ok
28	J6171-12	BN003976.D	16 Dec 2018 01:45	JU/SJ	Ok,M
29	J6171-12DL	BN003977.D	16 Dec 2018 02:21	JU/SJ	Not Ok
30	J6171-13	BN003978.D	16 Dec 2018 02:56	JU/SJ	Ok,M
31	J6171-13DL	BN003979.D	16 Dec 2018 03:32	JU/SJ	Not Ok
32	SSTDCCC0.4	BN003980.D	16 Dec 2018 04:44	JU/SJ	Ok
33	J6171-11	BN003981.D	16 Dec 2018 05:19	JU/SJ	Dilution
34	J6171-11DL	BN003982.D	16 Dec 2018 05:55	JU/SJ	Ok,M
35	J6171-16	BN003983.D	16 Dec 2018 06:30	JU/SJ	Dilution
36	J6171-16DL	BN003984.D	16 Dec 2018 07:05	JU/SJ	Ok,M
37	J6171-01	BN003985.D	16 Dec 2018 07:41	JU/SJ	Ok,M
38	J6171-01DL	BN003986.D	16 Dec 2018 08:16	JU/SJ	Not Ok
39	SSTDCCC0.4EC	BN003987.D	16 Dec 2018 08:51	JU/SJ	Ok

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN111918

Review By	Jagrut	Review On	11/20/2018 5:12:29 PM		
Supervise By	Sohil	Supervise On	11/20/2018 5:14:04 PM		
SubDirectory	BN111918	HP Acquire Method	BNA_N,EPA_SHP Processing Method	BN111918	

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4548,SP4549,SP4550,SP4551,SP4552,SP4553,SP4554
CCC	SP4552
Internal Standard/PEM	SP4560,10ul/1000ul sample
ICV/I.BLK	SP4555,SP4556

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP54	DFTPP54	BN003588.D	19 Nov 2018 11:40		MJ/SJ	Ok
2	SSTD0.161	SSTD0.161	BN003589.D	19 Nov 2018 12:15		MJ/SJ	Ok
3	SSTD0.262	SSTD0.262	BN003590.D	19 Nov 2018 12:50		MJ/SJ	Ok
4	SSTD0.463	SSTD0.463	BN003591.D	19 Nov 2018 13:25		MJ/SJ	Ok
5	SSTD0.864	SSTD0.864	BN003592.D	19 Nov 2018 14:00		MJ/SJ	Ok
6	SSTD1.665	SSTD1.665	BN003593.D	19 Nov 2018 14:35		MJ/SJ	Ok
7	SSTD3.266	SSTD3.266	BN003594.D	19 Nov 2018 15:10		MJ/SJ	Ok
8	SSTDICV0.4	SICV67	BN003595.D	19 Nov 2018 15:45		MJ/SJ	Ok
9	J5928-11	A40S5	BN003596.D	19 Nov 2018 16:20		MJ/SJ	Ok
10	SSTDCCC0.4	SSTD0.468	BN003597.D	19 Nov 2018 16:56		MJ/SJ	Ok
11	PB114864BL	SBLK64	BN003598.D	19 Nov 2018 17:31		MJ/SJ	Ok,M
12	PB114865BL	SBLK65	BN003599.D	19 Nov 2018 18:06		MJ/SJ	Ok,M
13	PB114881BL	SBLK81	BN003600.D	19 Nov 2018 18:41		MJ/SJ	Ok,M
14	J5928-01	A40Z4	BN003601.D	19 Nov 2018 19:16		MJ/SJ	Ok,M
15	J5928-02	A40Z6	BN003602.D	19 Nov 2018 19:51		MJ/SJ	Ok,M
16	J5928-03	A40S0	BN003603.D	19 Nov 2018 20:26		MJ/SJ	Ok,M
17	J5928-06MS	A4102MS	BN003604.D	19 Nov 2018 21:01	full scan MS	MJ/SJ	Not Ok
18	J5928-07MSD	A4102MSD	BN003605.D	19 Nov 2018 21:36	full scan MSD	MJ/SJ	Not Ok
19	J5928-12	A40W8	BN003606.D	19 Nov 2018 22:11		MJ/SJ	Ok,M
20	J5928-08	A40W0	BN003607.D	19 Nov 2018 22:46		MJ/SJ	Ok,M
21	J5928-09	A4100	BN003608.D	19 Nov 2018 23:21		MJ/SJ	Ok,M

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN111918

Review By	Jagrut	Review On	11/20/2018 5:12:29 PM		
Supervise By	Sohil	Supervise On	11/20/2018 5:14:04 PM		
SubDirectory	BN111918	HP Acquire Method	BNA_N,EPA_S	HP Processing Method	BN111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4548,SP4549,SP4550,SP4551,SP4552,SP4553,SP4554
CCC	SP4552
Internal Standard/PEM	SP4560,10ul/1000ul sample
ICV/I.BLK	SP4555,SP4556

22	J5928-16	A40Z0	BN003609.D	19 Nov 2018 23:56		MJ/SJ	Ok,M
23	J5928-13	A40X8	BN003610.D	20 Nov 2018 00:31		MJ/SJ	Ok,M
24	J5928-17	A40Z2	BN003611.D	20 Nov 2018 01:06		MJ/SJ	Ok,M
25	SSTDCCC0.4	SSTD0.469	BN003612.D	20 Nov 2018 01:41		MJ/SJ	Ok
26	J5928-20	A40S2	BN003613.D	20 Nov 2018 02:16		MJ/SJ	Ok,M
27	J5928-21	A40Y4	BN003614.D	20 Nov 2018 02:51		MJ/SJ	Ok,M
28	J5928-19	A40Y8	BN003615.D	20 Nov 2018 03:26		MJ/SJ	Ok,M
29	J5928-18	A40Y6	BN003616.D	20 Nov 2018 04:01		MJ/SJ	Ok
30	J5928-04	A40Z8	BN003617.D	20 Nov 2018 04:36		MJ/SJ	Ok,M
31	J5928-14	A40X6	BN003618.D	20 Nov 2018 05:11		MJ/SJ	Ok,M
32	J5928-05	A4102	BN003619.D	20 Nov 2018 05:46		MJ/SJ	Ok,M
33	J5928-06MS	A4102MS	BN003620.D	20 Nov 2018 06:21		MJ/SJ	Ok
34	J5928-07MSD	A4102MSD	BN003621.D	20 Nov 2018 06:56		MJ/SJ	Ok
35	SSTDCCC0.4EC	SSTD0.470	BN003622.D	20 Nov 2018 07:31		MJ/SJ	Ok

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN120618

Review By	Jagrut	Review On	12/7/2018 5:58:07 PM		
Supervise By	mohammad	Supervise On	12/10/2018 12:21:14 PM		
SubDirectory	BN120618	HP Acquire Method	BNA_N,EPA_SHP Processing Method	BN111918	

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4548,SP4549,SP4550,SP4551,SP4552,SP4553,SP4554
CCC	SP4552
Internal Standard/PEM	SP4560,10ul/1000ul sample
ICV/I.BLK	SP4555,SP4556

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP62	DFTPP62	BN003729.D	06 Dec 2018 13:57		JU/SJ	Ok
2	SSTDCCC0.4	SSTD0.489	BN003730.D	06 Dec 2018 14:32		JU/SJ	Ok
3	PB115266BL	SBLK66	BN003731.D	06 Dec 2018 15:07		JU/SJ	Ok,M
4	J6077-01	F9Y35	BN003732.D	06 Dec 2018 15:54		JU/SJ	Ok,M
5	J6077-02	F9Y36	BN003733.D	06 Dec 2018 16:29		JU/SJ	Ok,M
6	J6077-03	F9Y42	BN003734.D	06 Dec 2018 17:04		JU/SJ	Ok,M
7	J6077-05	F9Y38	BN003735.D	06 Dec 2018 17:39	Need 5X	JU/SJ	Dilution
8	J6077-06	F9Y41	BN003736.D	06 Dec 2018 18:14	Need 5X	JU/SJ	Dilution
9	J6077-07	F9Y39	BN003737.D	06 Dec 2018 18:49		JU/SJ	Ok,M
10	J6077-08	F9Y40	BN003738.D	06 Dec 2018 19:24		JU/SJ	Ok,M
11	J6077-09	F9Y43	BN003739.D	06 Dec 2018 19:59		JU/SJ	Ok,M
12	J6077-10	F9Y44	BN003740.D	06 Dec 2018 20:34		JU/SJ	Ok,M
13	J6227-01	F9E64	BN003741.D	06 Dec 2018 21:09		JU/SJ	Ok,M
14	PB115350BL	SBLK50	BN003742.D	06 Dec 2018 21:45		JU/SJ	Ok,M
15	SSTDCCC0.4	SSTD0.490	BN003743.D	06 Dec 2018 22:20		JU/SJ	Ok
16	J6227-02	F9E65	BN003744.D	07 Dec 2018 00:05		JU/SJ	Ok,M
17	J6227-05	F9E74	BN003745.D	07 Dec 2018 00:40		JU/SJ	Ok,M
18	J6227-06	F9E75	BN003746.D	07 Dec 2018 01:15		JU/SJ	Ok,M
19	J6227-07	F9E80	BN003747.D	07 Dec 2018 01:50		JU/SJ	Ok,M
20	J6227-09	F9E54	BN003748.D	07 Dec 2018 02:25		JU/SJ	Ok,M
21	J6227-10	F9E55	BN003749.D	07 Dec 2018 03:00		JU/SJ	Ok,M

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN120618

Review By	Jagrut	Review On	12/7/2018 5:58:07 PM		
Supervise By	mohammad	Supervise On	12/10/2018 12:21:14 PM		
SubDirectory	BN120618	HP Acquire Method	BNA_N,EPA_SHP Processing Method	BN111918	

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4548,SP4549,SP4550,SP4551,SP4552,SP4553,SP4554
CCC	SP4552
Internal Standard/PEM	SP4560,10ul/1000ul sample
ICV/I.BLK	SP4555,SP4556

22	J6227-11	F9E56	BN003750.D	07 Dec 2018 03:35		JU/SJ	Ok,M
23	J6227-12	F9E57	BN003751.D	07 Dec 2018 04:09		JU/SJ	Ok,M
24	J6227-13	F9E60	BN003752.D	07 Dec 2018 04:44		JU/SJ	Ok,M
25	J6227-14	F9E61	BN003753.D	07 Dec 2018 05:19		JU/SJ	Ok,M
26	J6227-17	F9E62	BN003754.D	07 Dec 2018 05:54		JU/SJ	Ok,M
27	J6227-18	F9E63	BN003755.D	07 Dec 2018 06:29		JU/SJ	Ok,M
28	SSTDCCC0.4EC	SSTD0.491	BN003756.D	07 Dec 2018 07:04		JU/SJ	Ok

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN121518

Review By	Jagrut	Review On	12/17/2018 4:23:15 PM	
Supervise By	Sohil	Supervise On	12/17/2018 4:24:37 PM	
SubDirectory	BN121518	HP Acquire Method	BNA_N,EPA_SHP Processing Method	BN111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4548,SP4549,SP4550,SP4551,SP4552,SP4553,SP4554
CCC	SP4552
Internal Standard/PEM	SP4560,10ul/1000ul sample
ICV/I.BLK	SP4555,SP4556

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP69	DFTPP69	BN003949.D	15 Dec 2018 08:31		JU/SJ	Ok
2	SSTDCCC0.4	SSTD0.417	BN003950.D	15 Dec 2018 09:48		JU/SJ	Ok
3	J6227-15	F9F34	BN003951.D	15 Dec 2018 10:24		JU/SJ	Ok,M
4	J6171-10	F9Y14	BN003952.D	15 Dec 2018 10:59	Need 5X	JU/SJ	Dilution
5	J6171-10DL	F9Y14DL	BN003953.D	15 Dec 2018 11:34		JU/SJ	Ok,M
6	J6227-03	F9E66	BN003954.D	15 Dec 2018 12:09		JU/SJ	Ok,M
7	J6227-03DL	F9E66DL	BN003955.D	15 Dec 2018 12:45	Not Required	JU/SJ	Not Ok
8	J6227-04	F9E67	BN003956.D	15 Dec 2018 13:20		JU/SJ	Ok,M
9	J6227-04DL	F9E67DL	BN003957.D	15 Dec 2018 13:56	Not Required	JU/SJ	Not Ok
10	J6227-08	F9F33	BN003958.D	15 Dec 2018 14:31		JU/SJ	Ok,M
11	J6227-08DL	F9F33DL	BN003959.D	15 Dec 2018 15:06	Not Required	JU/SJ	Not Ok
12	J6227-16	F9F35	BN003960.D	15 Dec 2018 15:42		JU/SJ	Ok,M
13	J6227-16DL	F9F35DL	BN003961.D	15 Dec 2018 16:17	Not Required	JU/SJ	Not Ok
14	J6227-19	F9E68	BN003962.D	15 Dec 2018 16:52		JU/SJ	Ok,M
15	J6227-19DL	F9E68DL	BN003963.D	15 Dec 2018 17:28	Not Required	JU/SJ	Not Ok
16	SSTDCCC0.4	SSTD0.418	BN003964.D	15 Dec 2018 18:38		JU/SJ	Ok
17	J6227-20	F9E69	BN003965.D	15 Dec 2018 19:14		JU/SJ	Ok,M
18	J6171-02	F9Y06	BN003966.D	15 Dec 2018 19:49		JU/SJ	Ok,M
19	J6171-02DL	F9Y06DL	BN003967.D	15 Dec 2018 20:24	Not Required	JU/SJ	Not Ok
20	J6171-03	F9Y07	BN003968.D	15 Dec 2018 20:59		JU/SJ	Ok,M
21	J6171-03DL	F9Y07DL	BN003969.D	15 Dec 2018 21:35	Not Required	JU/SJ	Not Ok

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN121518

Review By	Jagrut	Review On	12/17/2018 4:23:15 PM		
Supervise By	Sohil	Supervise On	12/17/2018 4:24:37 PM		
SubDirectory	BN121518	HP Acquire Method	BNA_N,EPA_SHP	Processing Method	BN111918

STD. NAME	STD REF.#
Tune/Reschk	SP4489
Initial Calibration Stds	SP4548,SP4549,SP4550,SP4551,SP4552,SP4553,SP4554
CCC	SP4552
Internal Standard/PEM	SP4560,10ul/1000ul sample
ICV/I.BLK	SP4555,SP4556

22	J6171-06	F9Y10	BN003970.D	15 Dec 2018 22:10		JU/SJ	Ok,M
23	J6171-06DL	F9Y10DL	BN003971.D	15 Dec 2018 22:46	Not Required	JU/SJ	Not Ok
24	J6171-07	F9Y11	BN003972.D	15 Dec 2018 23:22		JU/SJ	Ok,M
25	J6171-07DL	F9Y11DL	BN003973.D	15 Dec 2018 23:57	Not Required	JU/SJ	Not Ok
26	J6171-17	F9Y27	BN003974.D	16 Dec 2018 00:33		JU/SJ	Ok,M
27	J6171-17DL	F9Y27DL	BN003975.D	16 Dec 2018 01:09	Not Required	JU/SJ	Not Ok
28	J6171-12	F9Y16	BN003976.D	16 Dec 2018 01:45		JU/SJ	Ok,M
29	J6171-12DL	F9Y16DL	BN003977.D	16 Dec 2018 02:21	Not Required	JU/SJ	Not Ok
30	J6171-13	F9Y17	BN003978.D	16 Dec 2018 02:56		JU/SJ	Ok,M
31	J6171-13DL	F9Y17DL	BN003979.D	16 Dec 2018 03:32	Not Required	JU/SJ	Not Ok
32	SSTDCCC0.4	SSTD0.419	BN003980.D	16 Dec 2018 04:44		JU/SJ	Ok
33	J6171-11	F9Y15	BN003981.D	16 Dec 2018 05:19	Need 5X	JU/SJ	Dilution
34	J6171-11DL	F9Y15DL	BN003982.D	16 Dec 2018 05:55		JU/SJ	Ok,M
35	J6171-16	F9Y26	BN003983.D	16 Dec 2018 06:30	Need 5X	JU/SJ	Dilution
36	J6171-16DL	F9Y26DL	BN003984.D	16 Dec 2018 07:05		JU/SJ	Ok,M
37	J6171-01	F9Y05	BN003985.D	16 Dec 2018 07:41		JU/SJ	Ok,M
38	J6171-01DL	F9Y05DL	BN003986.D	16 Dec 2018 08:16	Not Required	JU/SJ	Not Ok
39	SSTDCCC0.4EC	SSTD0.420	BN003987.D	16 Dec 2018 08:51		JU/SJ	Ok

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Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

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Login Summary Report

Order ID :	J6227	Order Date :	12/4/2018 12:33:00 PM	Project Mgr :	Deepak
Client :	USEPA CLP Organics	Project :	48019	Report Type :	USEPA CLP
Contact :	Anita Kapadia	Receive Date :	12/4/2018 12:33:00 PM	EDD Type :	EPA CLP
Date Sign Off :	12/4/2018 2:49:51 PM				

Sample ID	Client ID	Matrix	Sampling Date	Test	Test Group	Method	TAT Days	Fax Due Date	HC Due Date
J6227-01	F9E64	Solid	12/03/2018						
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-02	F9E65	Solid	12/03/2018						
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-03	F9E66	Solid	12/03/2018						
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-04	F9E67	Solid	12/03/2018						
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-05	F9E74	Solid	12/03/2018						
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-06	F9E75	Solid	12/03/2018						
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-07	F9E80	Solid	12/03/2018						
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-08	F9F33	Solid	12/03/2018		DUP				
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018

				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-09	F9E54	Solid	12/03/2018						
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-10	F9E55	Solid	12/03/2018						
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-11	F9E56	Solid	12/03/2018						
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-12	F9E57	Solid	12/03/2018						
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-13	F9E60	Solid	12/03/2018						
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-14	F9E61	Solid	12/03/2018						
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-15	F9F34	Solid	12/03/2018		DUP				
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-16	F9F35	Solid	12/03/2018		DUP				
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-17	F9E62	Solid	12/03/2018						
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20		SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-18	F9E63	Solid	12/03/2018						
				Percent Solids		Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM		SOM02.4_SIM	15	12/25/2018	12/25/2018

				SVOC-TCL BNA -20	SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-19	F9E68	Solid	12/03/2018					
				Percent Solids	Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM	SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20	SOM02.4_SVOC	15	12/25/2018	12/25/2018
J6227-20	F9E69	Solid	12/03/2018					
				Percent Solids	Chemtech -SOP	15	12/25/2018	12/25/2018
				SVOC-SIM	SOM02.4_SIM	15	12/25/2018	12/25/2018
				SVOC-TCL BNA -20	SOM02.4_SVOC	15	12/25/2018	12/25/2018

WORKLIST(Hardcopy Internal Chain)

WorkList Name : J6227 WorkList ID : 119928 Date : 12/5/2018 8:09:08 AM

Due Date	Matrix	Sample	Test	Preservative	Customer	Storage Location	Customer Sample	Collect Date	Method
12/17/2018	Solid	J6227-01	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E64	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-01	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E64	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-02	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E65	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-02	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E65	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-03	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E66	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-03	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E66	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-04	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E67	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-04	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E67	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-05	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E74	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-05	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E74	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-06	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E75	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-06	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E75	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-07	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E80	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-07	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E80	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-08	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9F33	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-08	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9F33	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-09	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E54	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-09	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E54	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-10	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E55	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-10	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E55	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-11	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E56	12/03/2018	SOM02.4_SIM

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WORKLIST(Hardcopy Internal Chain)

WorkList Name : J6227 WorkList ID : 119928 Date : 12/5/2018 8:09:08 AM

Due Date	Matrix	Sample	Test	Preservative	Customer	Storage Location	Customer Sample	Collect Date	Method
12/17/2018	Solid	J6227-11	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E56	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-12	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E57	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-12	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E57	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-13	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E60	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-13	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E60	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-14	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E61	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-14	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E61	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-15	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9F34	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-15	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9F34	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-16	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9F35	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-16	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9F35	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-17	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E62	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-17	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E62	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-18	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E63	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-18	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E63	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-19	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E68	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-19	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E68	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-20	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E69	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-20	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E69	12/03/2018	SOM02.4_SVC

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WORKLIST(Hardcopy Internal Chain)

WorkList Name : J6227 WorkList ID : 119928 Date : 12/5/2018 8:09:08 AM

Due Date	Matrix	Sample	Test	Preservative	Customer	Storage Location	Customer Sample	Collect Date	Method
12/17/2018	Solid	J6227-01	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E64	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-01	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E64	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-02	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E65	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-02	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E65	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-03	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E66	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-03	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E66	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-04	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E67	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-04	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E67	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-05	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E74	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-05	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E74	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-06	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E75	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-06	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E75	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-07	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E80	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-07	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E80	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-08	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9F33	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-08	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9F33	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-09	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E54	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-09	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E54	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-10	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E55	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-10	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E55	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-11	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E56	12/03/2018	SOM02.4_SIM

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WORKLIST(Hardcopy Internal Chain)

WorkList Name : J6227 WorkList ID : 119928 Date : 12/5/2018 8:09:08 AM

Due Date	Matrix	Sample	Test	Preservative	Customer	Storage Location	Customer Sample	Collect Date	Method
12/17/2018	Solid	J6227-11	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E56	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-12	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E57	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-12	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E57	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-13	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E60	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-13	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E60	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-14	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E61	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-14	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E61	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-15	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9F34	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-15	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9F34	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-16	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9F35	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-16	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9F35	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-17	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E62	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-17	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E62	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-18	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E63	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-18	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E63	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-19	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E68	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-19	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E68	12/03/2018	SOM02.4_SVC
12/17/2018	Solid	J6227-20	SVOC-SIM	Cool 4 deg C	USEP04	R32	F9E69	12/03/2018	SOM02.4_SIM
12/17/2018	Solid	J6227-20	SVOC-TCL BNA -20	Cool 4 deg C	USEP04	R32	F9E69	12/03/2018	SOM02.4_SVC

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