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Cover Page

Order ID : N6070

Project ID : Former Schlumberger Site Princeton NJ

Client : JACOBS Engineering Group, Inc.

Lab Sample Number	Client Sample Number
N6070-01	GW-BR-04-226-245-121422
N6070-02	TB-01-121422
N6070-03	OWBR-01-160-180-121422
N6070-04	OWBR-02-160-180-121422
N6070-05	OWBR-03-128-148-121422

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. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : _____ Date: 12/29/2022

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

JACOBS Engineering Group, Inc.
Project Name: Former Schlumberger Site Princeton NJ
Project # N/A
Chemtech Project # N6070
Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:
5 Water samples were received on 12/14/2022.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: SVOC-SIMGroup1 and VOCMS Group3. This data package contains results for SVOC-SIMGroup1.

C. Analytical Techniques:
The samples were analyzed on instrument BNA_N using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe analysis of SVOC-SIMGroup1 was based on method 8270-Modified and extraction was done based on method 3510.

D. QA/ QC Samples:
The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for OWBR-03-128-148-121422 [Terphenyl-d14 - 142%] this compound did not meet the NJDKQP criteria but met the in-house criteria.

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

The Continuous Calibration File ID BN023280.D met the requirements except for 2-Fluorophenol and Phenol-d6 , failure surrogate is not associated with the client list, as per criteria affected surrogates were passing, therefore no corrective action was taken.

The Tuning criteria met requirements.

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E. Additional Comments:
The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

F. Manual Integration Comments:
Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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_____

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DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value**.** This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

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NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

GC/MS SEMI-VOLATILE ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: N6070 MATRIX: Water

METHOD: 8270-Modified/3510

		NA	NO	YES
1.	Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)			✓
2.	GC/MS Tuning Specifications. DFTPP Meet Criteria. (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4.	GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5.	GC/MS Calibration Requirements.		✓	
	The Initial Calibration met the requirements .			
	The Continuous Calibration File ID BN023280.D met the requirements except for 2-Fluorophenol and Phenol-d6 , failure surrogate is not associated with the client list, as per criteria affected surrogates were passing, therefore no corrective action was taken.			
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
7.	Surrogate Recoveries Meet Criteria		✓	
	If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
	The Surrogate recoveries met the acceptable criteria except for OWBR-03-128-148-121422 [Terphenyl-d14 - 142%] this compound did not meet the NJDKQP criteria but met the in-house criteria.			

GC/MS SEMI-VOLATILE ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

		NA	NO	YES
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The Blank Spike met requirements for all samples . The Blank Spike Duplicate met requirements for all samples .			
9.	Internal Standard Area/Retention Time Shift Meet Criteria			✓
	Comments:			
10.	Extraction Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			
11.	Analysis Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			

ADDITIONAL COMMENTS:

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

_____ _____

QA REVIEW Date

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: N6070

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	✓
Collect information for each project id from server. Were all requirements followed	✓
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	✓
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	✓
Does the case narrative summarize all QC failure?	✓
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	✓

1st Level QA Review Signature: SOHIL JODHANI **Date:** 12/29/2022

2nd Level QA Review Signature: _____ **Date:** _____

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LAB CHRONICLE

OrderID:	N6070	**OrderDate:**	12/14/2022 4:13:00 PM
Client:	JACOBS Engineering Group, Inc.	**Project:**	Former Schlumberger Site Princeton NJ
Contact:	Doug Scott	**Location:**	M11,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
N6070-01	**GW-BR-04-226-245-121422**	**Water**			**12/14/22**			**12/14/22**
			SVOC-SIMGroup1	8270-Modified		12/16/22	12/19/22	
N6070-03	**OWBR-01-160-180-121422**	**Water**			**12/14/22**			**12/14/22**
			SVOC-SIMGroup1	8270-Modified		12/16/22	12/19/22	
N6070-04	**OWBR-02-160-180-121422**	**Water**			**12/14/22**			**12/14/22**
			SVOC-SIMGroup1	8270-Modified		12/16/22	12/19/22	
N6070-05	**OWBR-03-128-148-121422**	**Water**			**12/14/22**			**12/14/22**
			SVOC-SIMGroup1	8270-Modified		12/16/22	12/19/22	

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Hit Summary Sheet
SW-846

SDG No.: N6070

Client: JACOBS Engineering Group, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	RDL	Units
Client ID :	**GW-BR-04-226-245-121422**						
N6070-01	GW-BR-04-226-245-121	WATER 1,4-Dioxane	1.100		0.08	0.2	ug/L
		Total Svoc :			**1.10**		
		Total Concentration:			**1.10**		

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QC SUMMARY

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Surrogate Summary

SW-846

SDG No.: N6070

Client: JACOBS Engineering Group, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
N6070-01	GW-BR-04-226-245-121422	2-Methylnaphthalene-d10	0.4	0.20	50		30 (30)	150 (150)
		Fluoranthene-d10	0.4	0.27	68		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.24	59		30 (11)	130 (175)
		2-Fluorobiphenyl	0.4	0.28	69		30 (10)	130 (175)
		Terphenyl-d14	0.4	0.34	84		30 (54)	130 (171)
N6070-03	OWBR-01-160-180-121422	2-Methylnaphthalene-d10	0.4	0.25	63		30 (30)	150 (150)
		Fluoranthene-d10	0.4	0.32	80		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.35	88		30 (11)	130 (175)
		2-Fluorobiphenyl	0.4	0.34	85		30 (10)	130 (175)
		Terphenyl-d14	0.4	0.37	91		30 (54)	130 (171)
N6070-04	OWBR-02-160-180-121422	2-Methylnaphthalene-d10	0.4	0.25	61		30 (30)	150 (150)
		Fluoranthene-d10	0.4	0.25	61		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.33	82		30 (11)	130 (175)
		2-Fluorobiphenyl	0.4	0.33	83		30 (10)	130 (175)
		Terphenyl-d14	0.4	0.23	56		30 (54)	130 (171)
N6070-05	OWBR-03-128-148-121422	2-Methylnaphthalene-d10	0.4	0.26	66		30 (30)	150 (150)
		Fluoranthene-d10	0.4	0.28	70		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.36	89		30 (11)	130 (175)
		2-Fluorobiphenyl	0.4	0.40	99		30 (10)	130 (175)
		Terphenyl-d14	0.4	0.57	142	*	30 (54)	130 (171)
PB149692BL	PB149692BL	2-Methylnaphthalene-d10	0.4	0.37	94		30 (30)	150 (150)
		Fluoranthene-d10	0.4	0.37	93		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.41	102		30 (11)	130 (175)
		2-Fluorobiphenyl	0.4	0.35	87		30 (10)	130 (175)
		Terphenyl-d14	0.4	0.46	114		30 (54)	130 (171)
PB149692BS	PB149692BS	2-Methylnaphthalene-d10	0.4	0.32	80		30 (30)	150 (150)
		Fluoranthene-d10	0.4	0.40	101		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.42	104		30 (11)	130 (175)
		2-Fluorobiphenyl	0.4	0.36	90		30 (10)	130 (175)
		Terphenyl-d14	0.4	0.43	108		30 (54)	130 (171)
PB149692BSD	PB149692BSD	2-Methylnaphthalene-d10	0.4	0.37	94		30 (30)	150 (150)
		Fluoranthene-d10	0.4	0.41	103		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.42	105		30 (11)	130 (175)
		2-Fluorobiphenyl	0.4	0.36	89		30 (10)	130 (175)
		Terphenyl-d14	0.4	0.42	105		30 (54)	130 (171)

( ) = LABORATORY INHOUSE LIMIT

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: N6070

Client: JACOBS Engineering Group, Inc.

Analytical Method: 8270-Modified **DataFile:** BN023287.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB149692BS	1,4-Dioxane	0.4	0.40	ug/L	100				20 (60)	160 (132)	

( ) = LABORATORY INHOUSE LIMIT

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: N6070

Client: JACOBS Engineering Group, Inc.

Analytical Method: 8270-Modified **DataFile:** BN023288.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB149692BSD	1,4-Dioxane	0.4	0.39	ug/L	98	3			20 (60)	160 (132)	20 (20)

( ) = LABORATORY INHOUSE LIMIT

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB149692BL

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: N6070 SAS No.: N6070 SDG NO.: N6070

Lab File ID: BN023281.D Lab Sample ID: PB149692BL

Instrument ID: BNA_N Date Extracted: 12/16/2022

Matrix: (soil/water) Water Date Analyzed: 12/19/2022

Level: (low/med) LOW Time Analyzed: 12:02

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
OWBR-02-160-180-121422	N6070-04	BN023284.D	12/19/2022
OWBR-03-128-148-121422	N6070-05	BN023285.D	12/19/2022
PB149692BS	PB149692BS	BN023287.D	12/19/2022
PB149692BSD	PB149692BSD	BN023288.D	12/19/2022
GW-BR-04-226-245-121422	N6070-01	BN023282.D	12/19/2022
OWBR-01-160-180-121422	N6070-03	BN023283.D	12/19/2022

COMMENTS:

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM SAS No.: N6070 SDG NO.: N6070

Lab File ID: BN023092.D DFTPP Injection Date: 12/08/2022

Instrument ID: BNA_N DFTPP Injection Time: 12:45

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	35.5
68	Less than 2.0% of mass 69	0.6 (1.6) 1
69	Mass 69 relative abundance	38.2
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	48.4
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	25.9
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	15.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	18.6 (20.8) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN023093.D	12/08/2022	14:00
SSTDICC0.2	SSTDICC0.2	BN023094.D	12/08/2022	14:37
SSTDICCC0.4	SSTDICCC0.4	BN023095.D	12/08/2022	15:13
SSTDICC0.8	SSTDICC0.8	BN023096.D	12/08/2022	15:50
SSTDICC1.6	SSTDICC1.6	BN023097.D	12/08/2022	16:26
SSTDICC3.2	SSTDICC3.2	BN023098.D	12/08/2022	17:03
SSTDICC5.0	SSTDICC5.0	BN023099.D	12/08/2022	17:40

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM SAS No.: N6070 SDG NO.: N6070

Lab File ID: BN023279.D DFTPP Injection Date: 12/19/2022

Instrument ID: BNA_N DFTPP Injection Time: 10:45

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	32.4
68	Less than 2.0% of mass 69	0.5 (1.6) 1
69	Mass 69 relative abundance	36.0
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	46.3
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	6.8
275	10.0 - 60.0% of mass 198	27.9
365	Greater than 1% of mass 198	3.6
441	Present, but less than mass 443	17.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	16.9 (16.9) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC0.4	SSTDCCC0.4	BN023280.D	12/19/2022	11:22
PB149692BL	PB149692BL	BN023281.D	12/19/2022	12:02
GW-BR-04-226-245-121422	N6070-01	BN023282.D	12/19/2022	12:40
OWBR-01-160-180-121422	N6070-03	BN023283.D	12/19/2022	13:16
OWBR-02-160-180-121422	N6070-04	BN023284.D	12/19/2022	13:53
OWBR-03-128-148-121422	N6070-05	BN023285.D	12/19/2022	14:30
PB149692BS	PB149692BS	BN023287.D	12/19/2022	15:44
PB149692BSD	PB149692BSD	BN023288.D	12/19/2022	16:21

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: N6070 SAS No.: N6070 SDG NO.: N6070

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/19/2022

Lab File ID: BN023280.D Time Analyzed: 11:22

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	7661	7.999	24904	10.82	15496	14.65
	UPPER LIMIT	15322	8.499	49808	11.319	30992	15.145
	LOWER LIMIT	3830.5	7.499	12452	10.319	7748	14.145
	EPA SAMPLE NO.						
01	PB149692BL	8904	8.00	28123	10.82	17435	14.65
02	GW-BR-04-226-245-121422	6913	8.00	22753	10.82	14155	14.65
03	OWBR-01-160-180-121422	7610	8.01	24602	10.82	15939	14.65
04	OWBR-02-160-180-121422	7230	8.00	23777	10.82	14567	14.65
05	OWBR-03-128-148-121422	7020	8.00	22963	10.82	14454	14.65
06	PB149692BS	8509	8.01	26860	10.82	16157	14.65
07	PB149692BSD	8380	8.00	26080	10.82	15594	14.65

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

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: N6070 SAS No.: N6070 SDG NO.: N6070

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/19/2022

Lab File ID: BN023280.D Time Analyzed: 11:22

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	33722	17.39	25842	21.58	18763	24.027
	UPPER LIMIT	67444	17.89	51684	22.08	37526	24.527
	LOWER LIMIT	16861	16.89	12921	21.08	9381.5	23.527
	EPA SAMPLE NO.						
01	PB149692BL	38498	17.39	26428	21.58	19388	24.03
02	GW-BR-04-226-245-121422	30735	17.39	24364	21.58	17711	24.03
03	OWBR-01-160-180-121422	33981	17.39	27221	21.58	19632	24.03
04	OWBR-02-160-180-121422	32593	17.39	25059	21.58	17925	24.03
05	OWBR-03-128-148-121422	30794	17.39	23636	21.58	16694	24.03
06	PB149692BS	34289	17.39	26436	21.58	18732	24.03
07	PB149692BSD	33450	17.39	27783	21.58	19326	24.03

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

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

CHEMTECH

SAMPLE DATA

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	12/14/22
Project:	Former Schlumberger Site Princeton NJ	Date Received:	12/14/22
Client Sample ID:	GW-BR-04-226-245-121422	SDG No.:	N6070
Lab Sample ID:	N6070-01	Matrix:	Water
Analytical Method:	SW8270SIM	% Moisture:	100
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN023282.D	1	12/16/22 08:59	12/19/22 12:40	PB149692

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
123-91-1	1,4-Dioxane	1.10		0.080	0.20	ug/L
SURROGATES						
7297-45-2	2-Methylnaphthalene-d10	0.20		30 (30) - 150 (150)	50%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.27		30 (30) - 150 (150)	68%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.24		30 (11) - 130 (175)	59%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.28		30 (10) - 130 (175)	69%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.34		30 (54) - 130 (171)	84%	SPK: 0.4
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	6910	7.999			
1146-65-2	Naphthalene-d8	22800	10.818			
15067-26-2	Acenaphthene-d10	14200	14.645			
1517-22-2	Phenanthrene-d10	30700	17.39			
1719-03-5	Chrysene-d12	24400	21.576			
1520-96-3	Perylene-d12	17700	24.028			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023282.D
Acq On : 19 Dec 2022 12:40
Operator : CG/JU
Sample : N6070-01
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
GW-BR-04-226-245-121422

Quant Time: Dec 19 15:45:27 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration

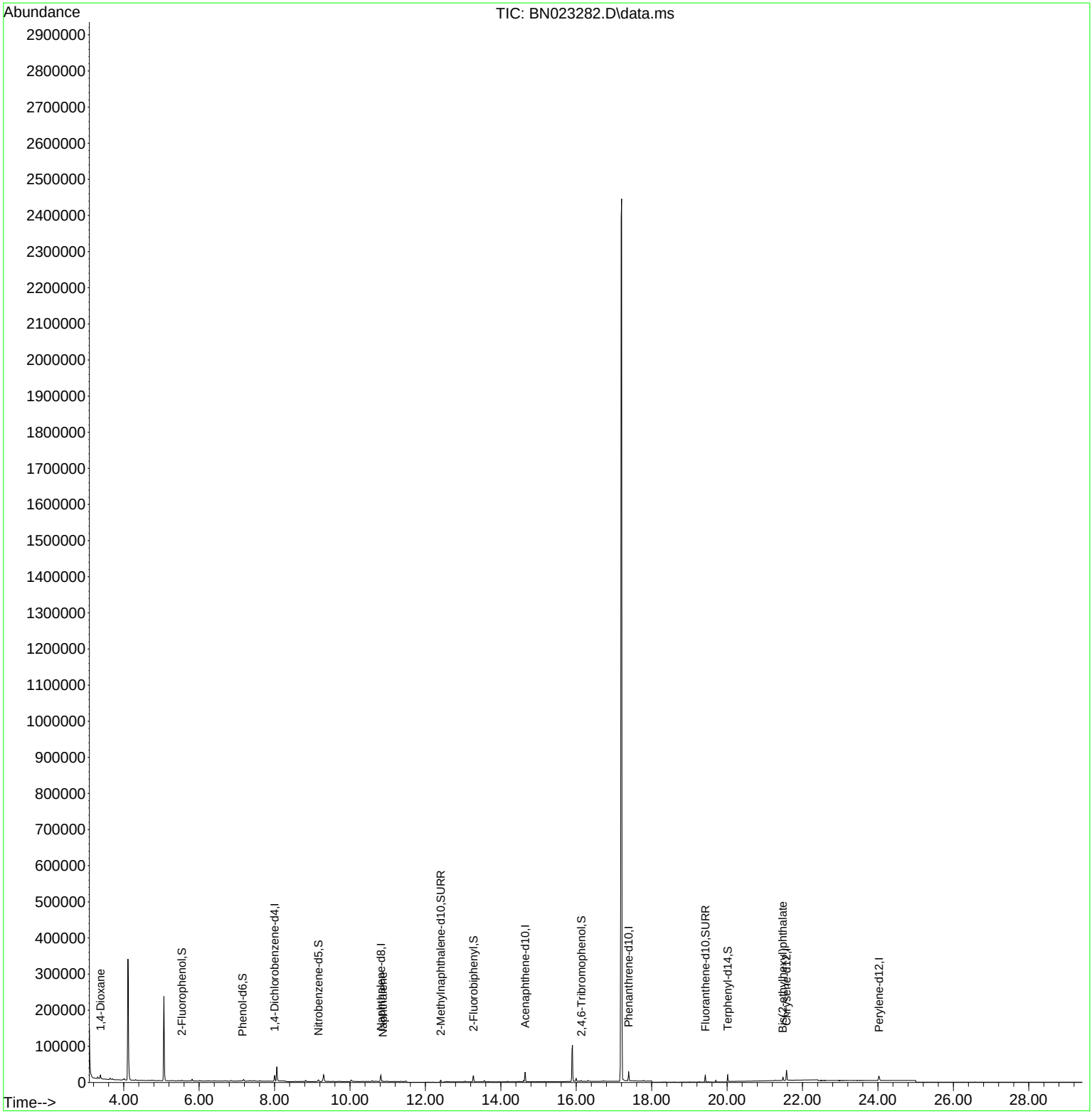
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.999	152	6913	0.400	ng	0.00
7) Naphthalene-d8	10.818	136	22753	0.400	ng	0.00
13) Acenaphthene-d10	14.645	164	14155	0.400	ng	0.00
19) Phenanthrene-d10	17.390	188	30735	0.400	ng	# 0.00
29) Chrysene-d12	21.576	240	24364	0.400	ng	# 0.00
35) Perylene-d12	24.028	264	17711	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.543	112	1515	0.118	ng	0.00
5) Phenol-d6	7.154	99	1641	0.100	ng	0.00
8) Nitrobenzene-d5	9.164	82	3529	0.235	ng	0.00
11) 2-Methylnaphthalene-d10	12.405	152	7787	0.202	ng	0.00
14) 2,4,6-Tribromophenol	16.136	330	1237	0.241	ng	0.00
15) 2-Fluorobiphenyl	13.276	172	15703	0.278	ng	0.00
27) Fluoranthene-d10	19.422	212	19451	0.270	ng	0.00
31) Terphenyl-d14	20.017	244	13293	0.336	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.384	88	7112	1.042	ng	# 84
9) Naphthalene	10.872	128	1338	0.023	ng	# 83
34) Bis(2-ethylhexyl)phtha...	21.477	149	9369	0.282	ng	98

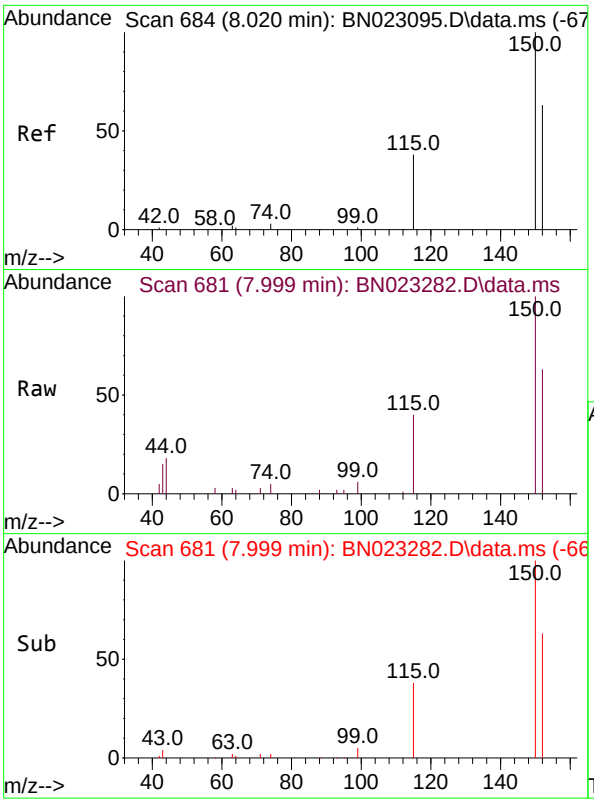
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023282.D
Acq On : 19 Dec 2022 12:40
Operator : CG/JU
Sample : N6070-01
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
GW-BR-04-226-245-121422

Quant Time: Dec 19 15:45:27 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration



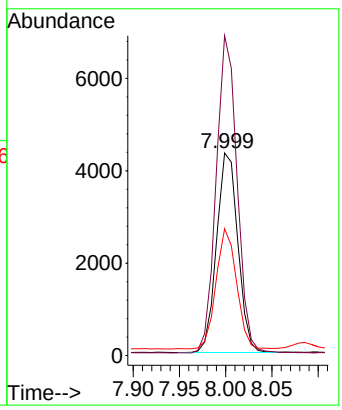


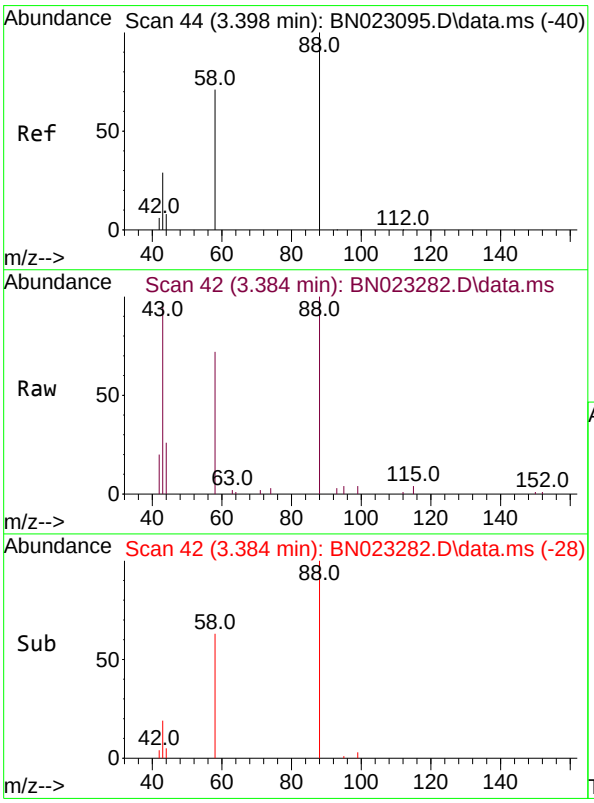
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.999 min Scan# 68
Delta R.T. -0.000 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Instrument :
BNA_N
ClientSampleId :
GW-BR-04-226-245-121422

Tgt Ion:152 Resp: 6913

Ion	Ratio	Lower	Upper
152	100		
150	157.9	125.6	188.4
115	62.6	49.0	73.4

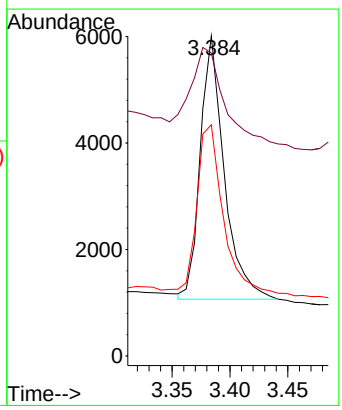


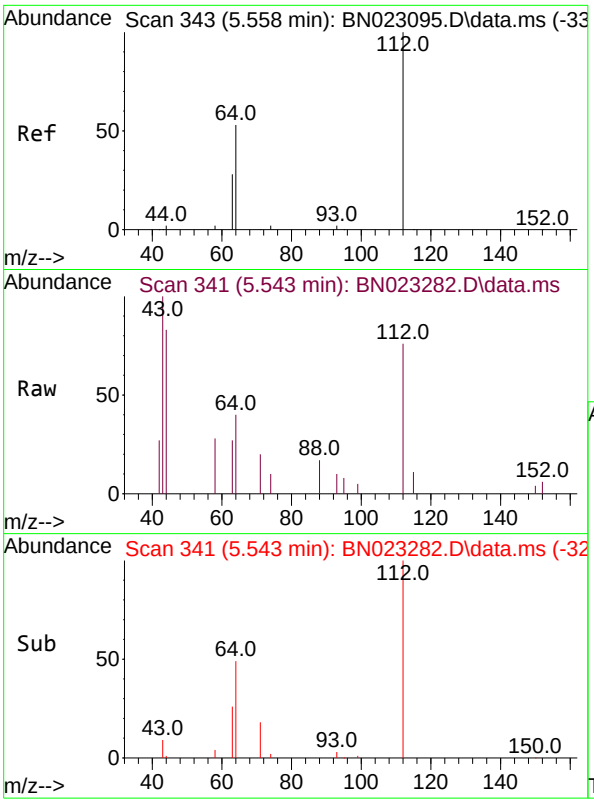


#2
1,4-Dioxane
Concen: 1.042 ng
RT: 3.384 min Scan# 42
Delta R.T. -0.000 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Tgt Ion: 88 Resp: 7112

Ion	Ratio	Lower	Upper
88	100		
43	53.1	23.3	34.9#
58	69.0	58.0	87.0



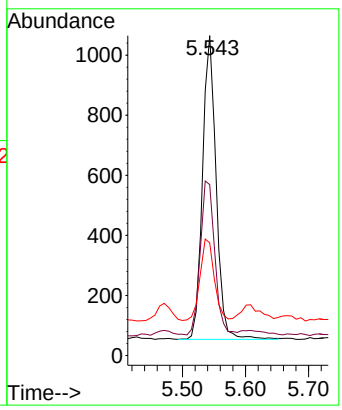


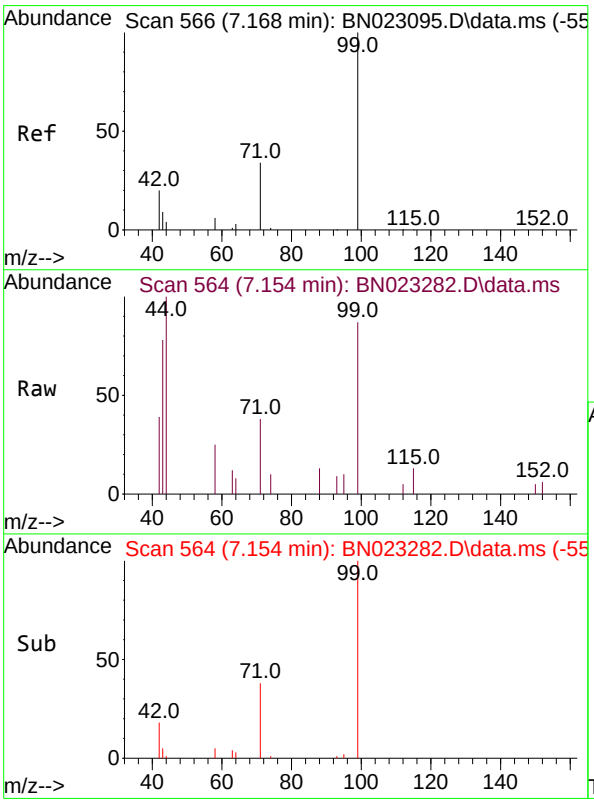
#4
2-Fluorophenol
Concen: 0.118 ng
RT: 5.543 min Scan# 34
Delta R.T. -0.000 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Instrument :
BNA_N
ClientSampleId :
GW-BR-04-226-245-121422

Tgt Ion:112 Resp: 1515

Ion	Ratio	Lower	Upper
112	100		
64	53.3	44.4	66.6
63	27.7	23.7	35.5

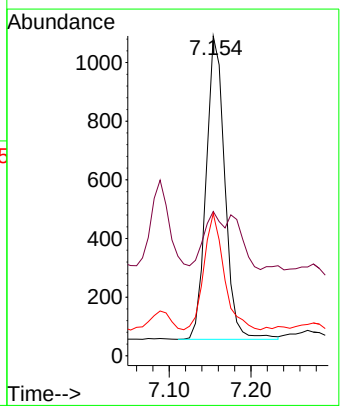


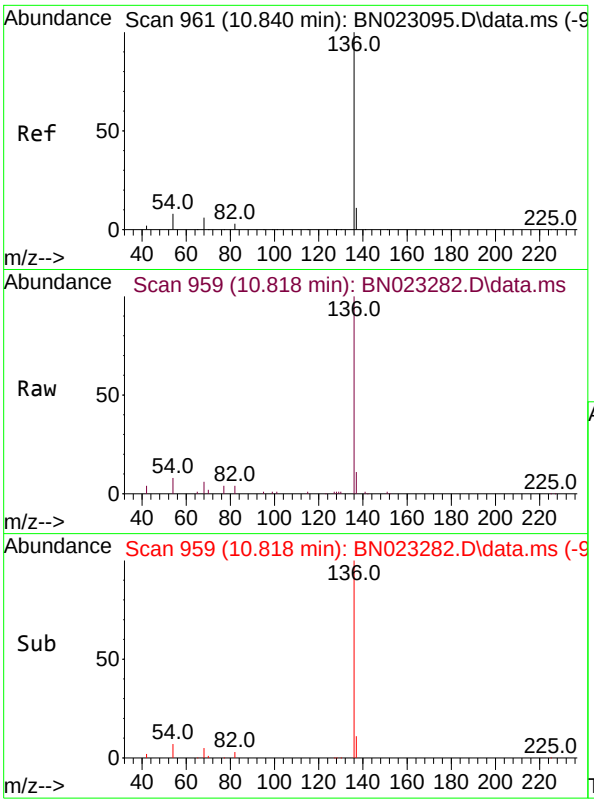


#5
Phenol-d6
Concen: 0.100 ng
RT: 7.154 min Scan# 564
Delta R.T. -0.000 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Tgt Ion: 99 Resp: 1641

Ion	Ratio	Lower	Upper
99	100		
42	18.6	16.3	24.5
71	41.0	26.5	39.7#



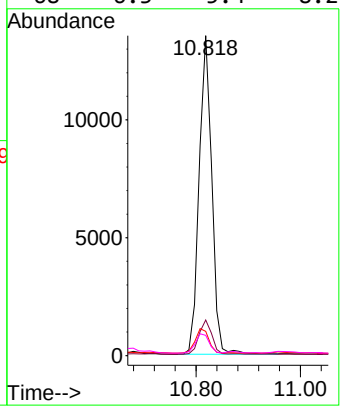


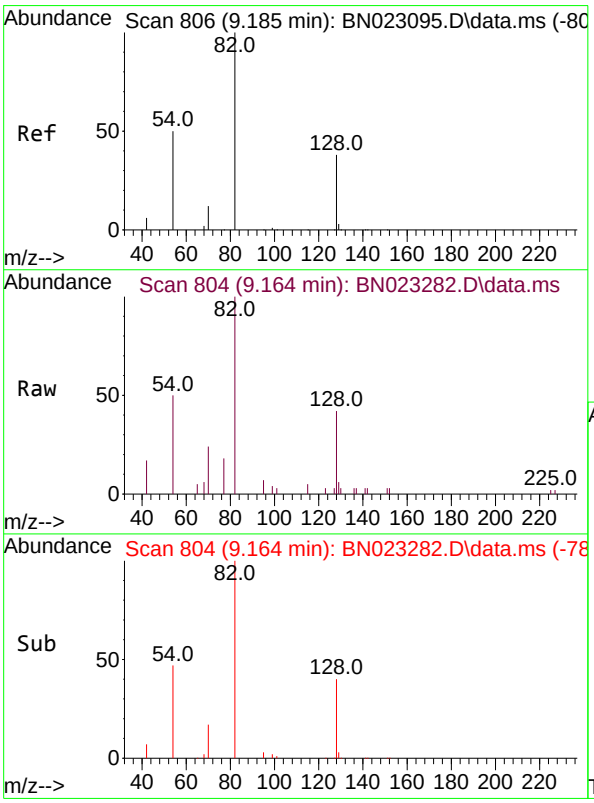
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.818 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Instrument :
BNA_N
ClientSampleId :
GW-BR-04-226-245-121422

Tgt Ion:136 Resp: 22753

Ion	Ratio	Lower	Upper
136	100		
137	11.2	9.0	13.4
54	7.6	6.5	9.7
68	6.3	5.4	8.2

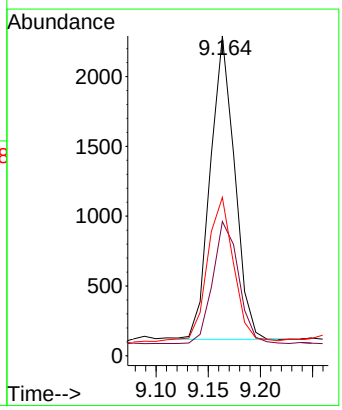


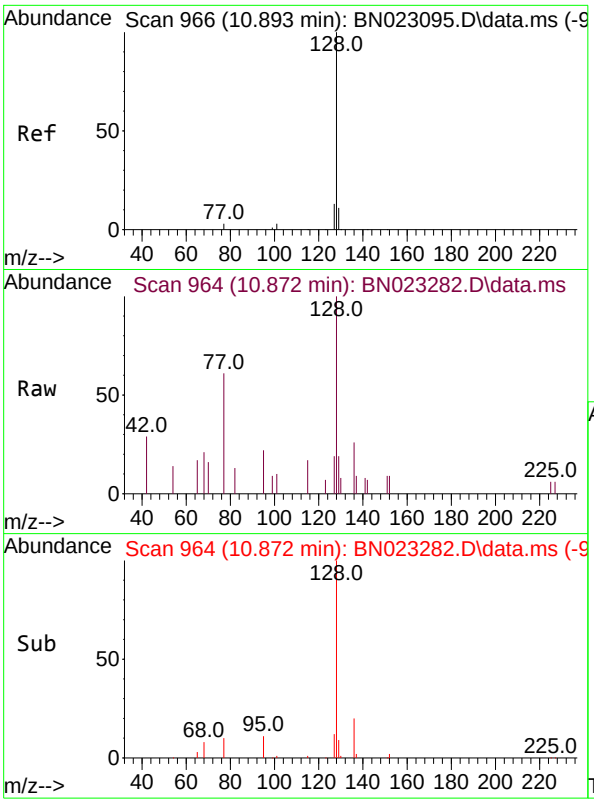


#8
Nitrobenzene-d5
Concen: 0.235 ng
RT: 9.164 min Scan# 804
Delta R.T. -0.000 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Tgt Ion: 82 Resp: 3529

Ion	Ratio	Lower	Upper
82	100		
128	42.0	31.4	47.2
54	49.5	41.0	61.4



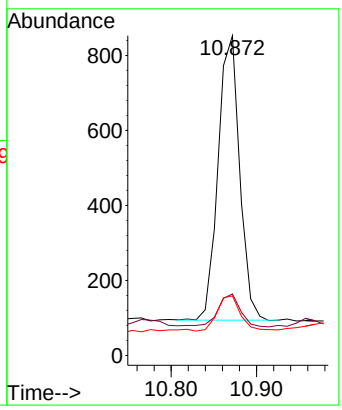


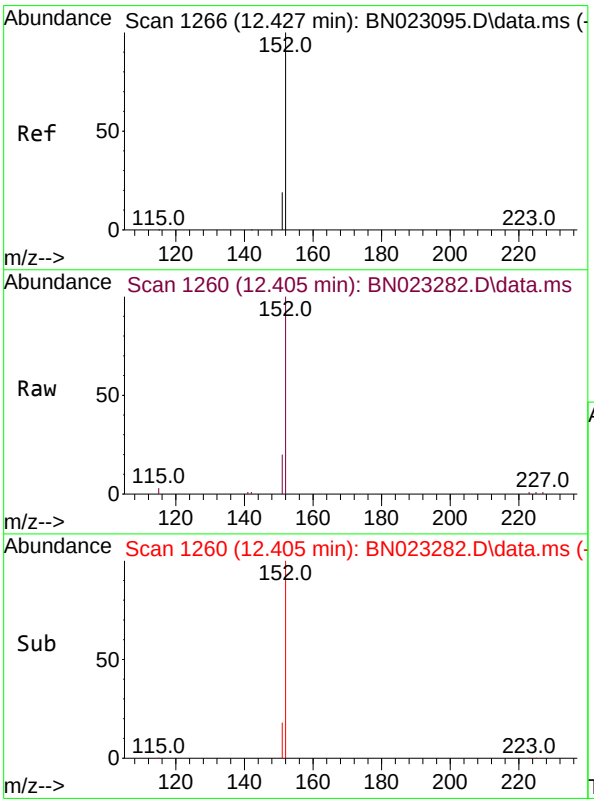
#9
Naphthalene
Concen: 0.023 ng
RT: 10.872 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Instrument :
BNA_N
ClientSampleId :
GW-BR-04-226-245-121422

Tgt Ion:128 Resp: 1338

Ion	Ratio	Lower	Upper
128	100		
129	19.2	9.0	13.6#
127	18.6	10.5	15.7#

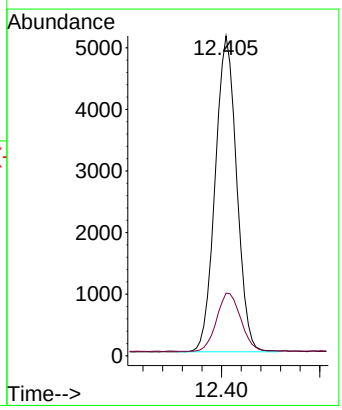


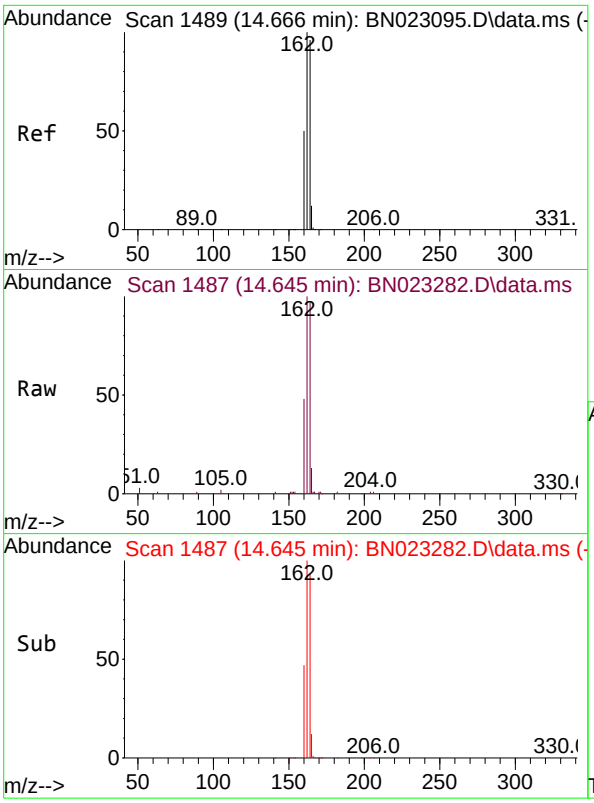


#11
2-Methylnaphthalene-d10
Concen: 0.202 ng
RT: 12.405 min Scan# 1260
Delta R.T. -0.000 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Tgt Ion:152 Resp: 7787

Ion	Ratio	Lower	Upper
152	100		
151	20.9	15.1	22.7



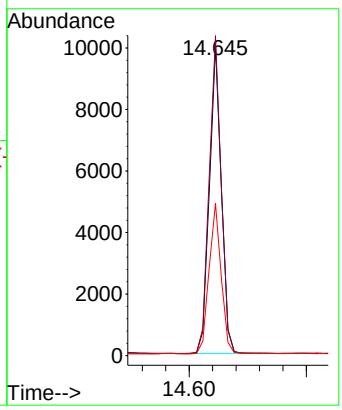


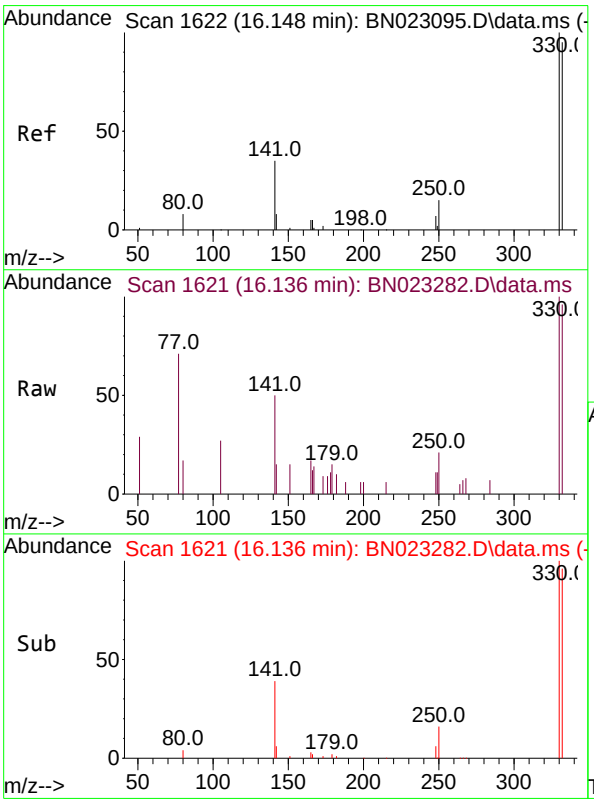
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.645 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Instrument :
BNA_N
ClientSampleId :
GW-BR-04-226-245-121422

Tgt Ion:164 Resp: 14155

Ion	Ratio	Lower	Upper
164	100		
162	103.2	83.4	125.0
160	49.1	41.8	62.8

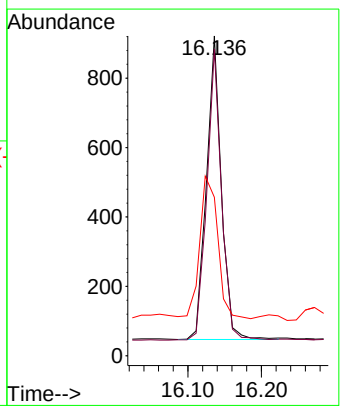


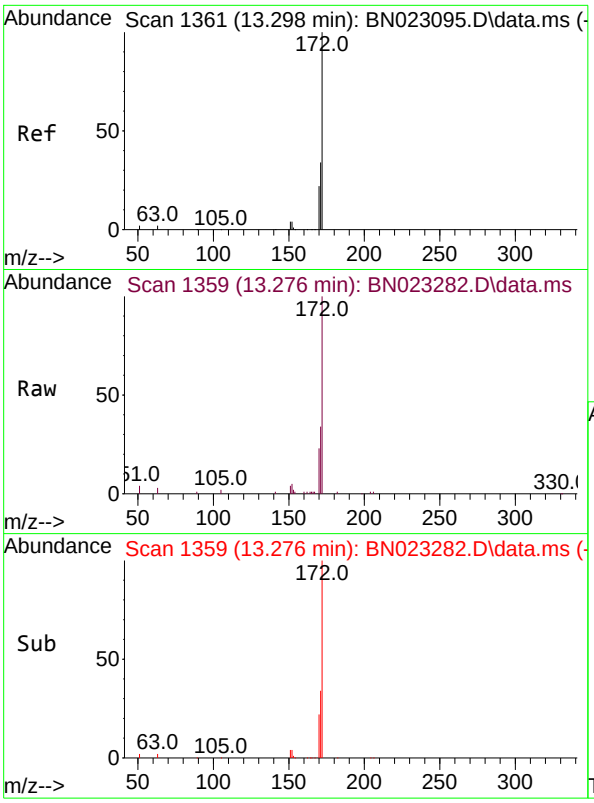


#14
2,4,6-Tribromophenol
Concen: 0.241 ng
RT: 16.136 min Scan# 1621
Delta R.T. -0.000 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Tgt Ion:330 Resp: 1237

Ion	Ratio	Lower	Upper
330	100		
332	94.4	77.3	115.9
141	56.5	33.5	50.3#



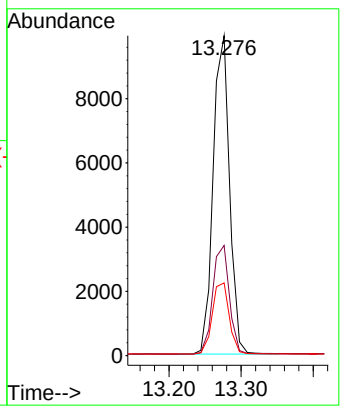


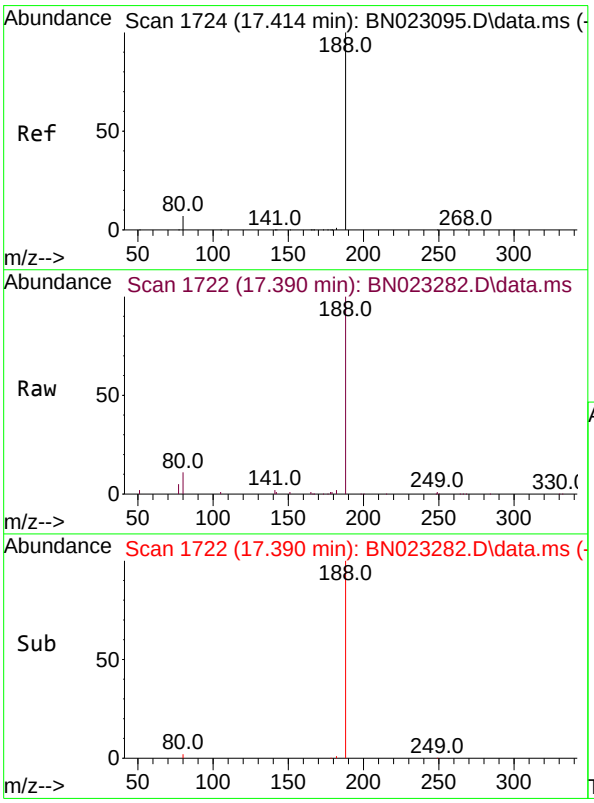
#15
2-Fluorobiphenyl
Concen: 0.278 ng
RT: 13.276 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Instrument :
BNA_N
ClientSampleId :
GW-BR-04-226-245-121422

Tgt Ion:172 Resp: 15703

Ion	Ratio	Lower	Upper
172	100		
171	34.4	27.4	41.0
170	22.7	17.9	26.9

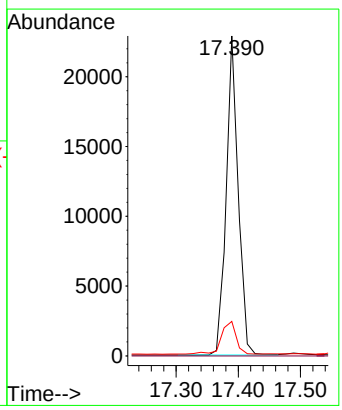


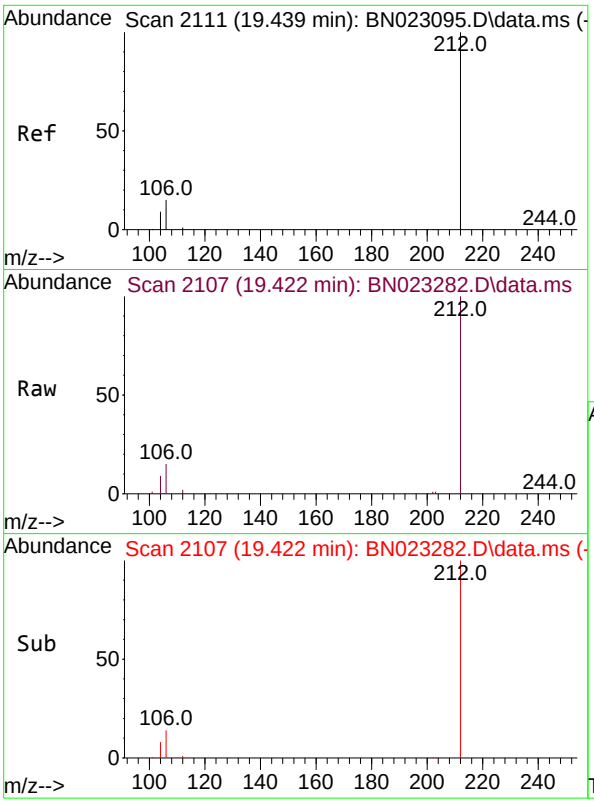


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.390 min Scan# 1722
Delta R.T. -0.000 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Tgt Ion:188 Resp: 30735

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.8	6.1	9.1#



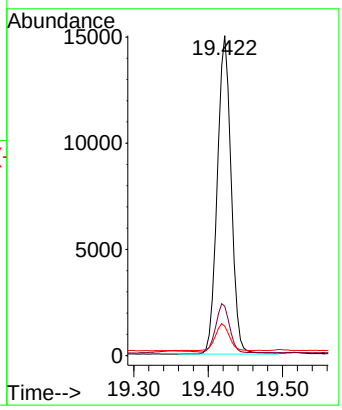


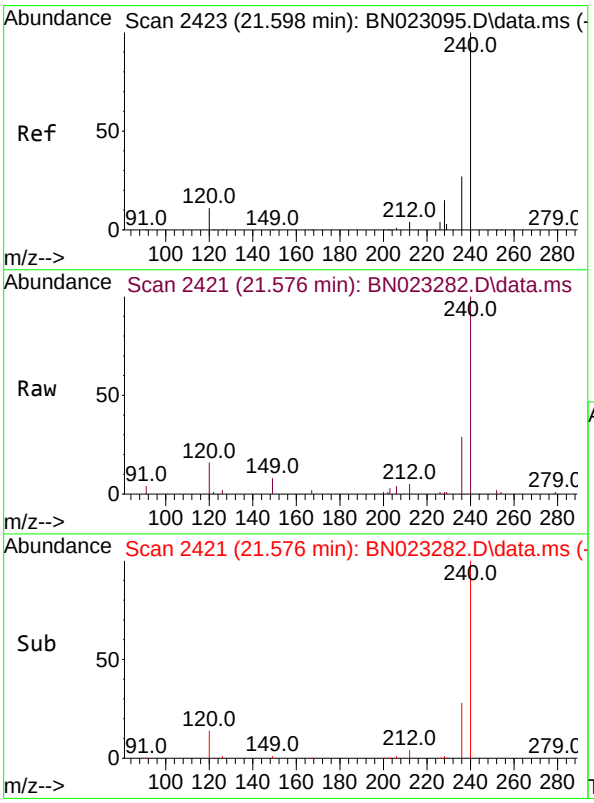
#27
Fluoranthene-d10
Concen: 0.270 ng
RT: 19.422 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Instrument :
BNA_N
ClientSampleId :
GW-BR-04-226-245-121422

Tgt Ion:212 Resp: 19451

Ion	Ratio	Lower	Upper
212	100		
106	15.2	13.0	19.4
104	8.4	7.5	11.3

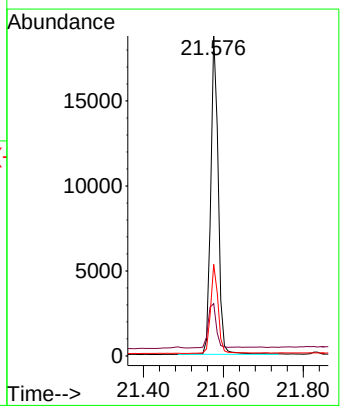


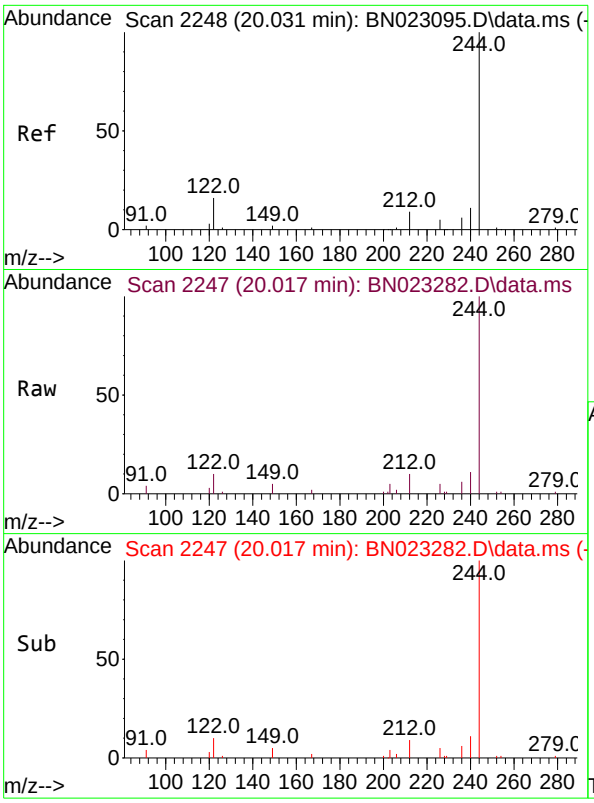


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.576 min Scan# 2421
Delta R.T. -0.005 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Tgt Ion:240 Resp: 24364

Ion	Ratio	Lower	Upper
240	100		
120	16.3	10.1	15.1#
236	28.6	22.2	33.4



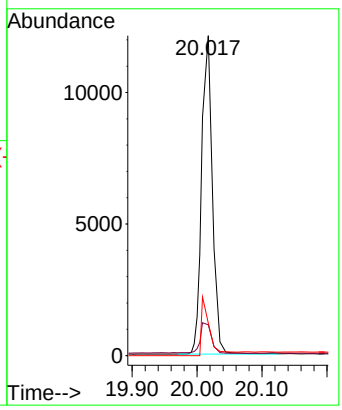


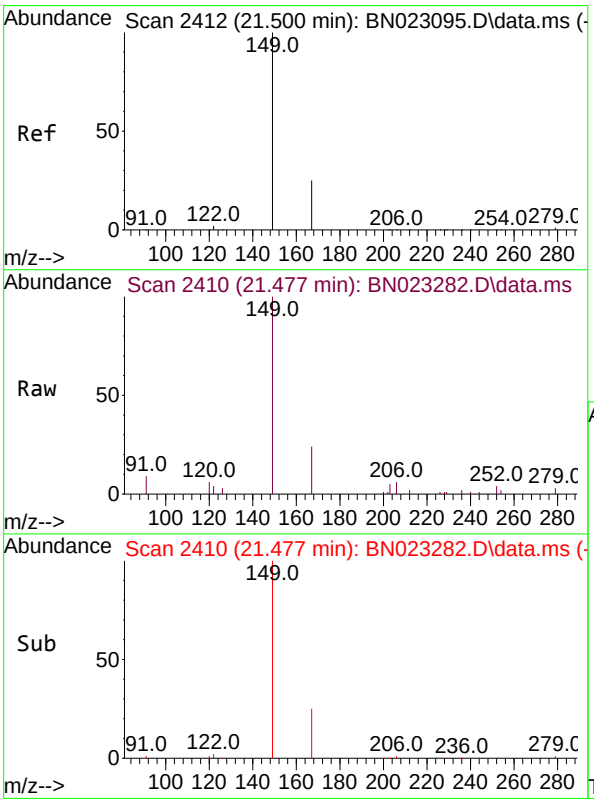
#31
Terphenyl-d14
Concen: 0.336 ng
RT: 20.017 min Scan# 2
Delta R.T. 0.004 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Instrument :
BNA_N
ClientSampleId :
GW-BR-04-226-245-121422

Tgt Ion:244 Resp: 13293

Ion	Ratio	Lower	Upper
244	100		
212	9.6	7.6	11.4
122	10.2	12.6	18.8#

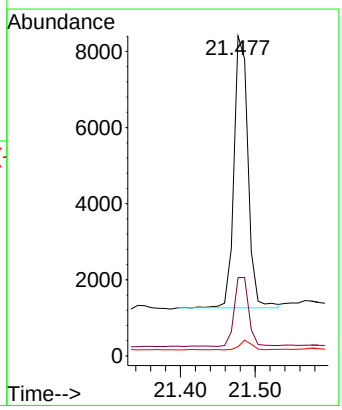


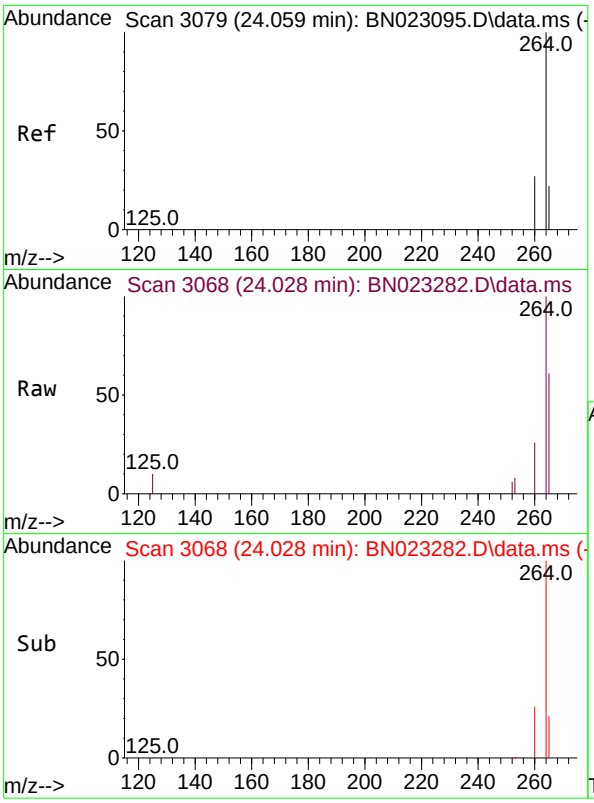


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.282 ng
RT: 21.477 min Scan# 2410
Delta R.T. -0.005 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Tgt Ion:149 Resp: 9369

Ion	Ratio	Lower	Upper
149	100		
167	26.2	20.2	30.2
279	3.1	2.3	3.5



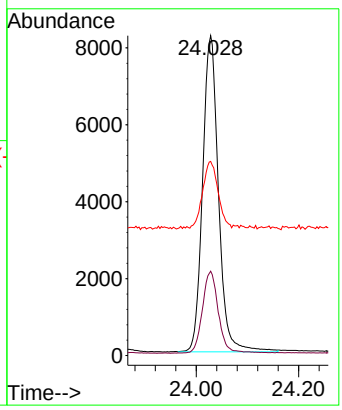


#35
Perylene-d12
Concen: 0.400 ng
RT: 24.028 min Scan# 3
Delta R.T. 0.001 min
Lab File: BN023282.D
Acq: 19 Dec 2022 12:40

Instrument :
BNA_N
ClientSampleId :
GW-BR-04-226-245-121422

Tgt Ion:264 Resp: 17711

Ion	Ratio	Lower	Upper
264	100		
260	26.4	21.7	32.5
265	60.7	43.2	64.8



CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	12/14/22
Project:	Former Schlumberger Site Princeton NJ	Date Received:	12/14/22
Client Sample ID:	OWBR-01-160-180-121422	SDG No.:	N6070
Lab Sample ID:	N6070-03	Matrix:	Water
Analytical Method:	SW8270SIM	% Moisture:	100
Sample Wt/Vol:	970 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN023283.D	1	12/16/22 08:59	12/19/22 13:16	PB149692

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
123-91-1	1,4-Dioxane	0.080	U	0.080	0.21	ug/L
SURROGATES						
7297-45-2	2-Methylnaphthalene-d10	0.25		30 (30) - 150 (150)	63%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.32		30 (30) - 150 (150)	80%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		30 (11) - 130 (175)	88%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		30 (10) - 130 (175)	85%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.37		30 (54) - 130 (171)	91%	SPK: 0.4
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	7610	8.006			
1146-65-2	Naphthalene-d8	24600	10.819			
15067-26-2	Acenaphthene-d10	15900	14.645			
1517-22-2	Phenanthrene-d10	34000	17.39			
1719-03-5	Chrysene-d12	27200	21.58			
1520-96-3	Perylene-d12	19600	24.027			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023283.D
Acq On : 19 Dec 2022 13:16
Operator : CG/JU
Sample : N6070-03
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422

Quant Time: Dec 19 15:45:30 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration

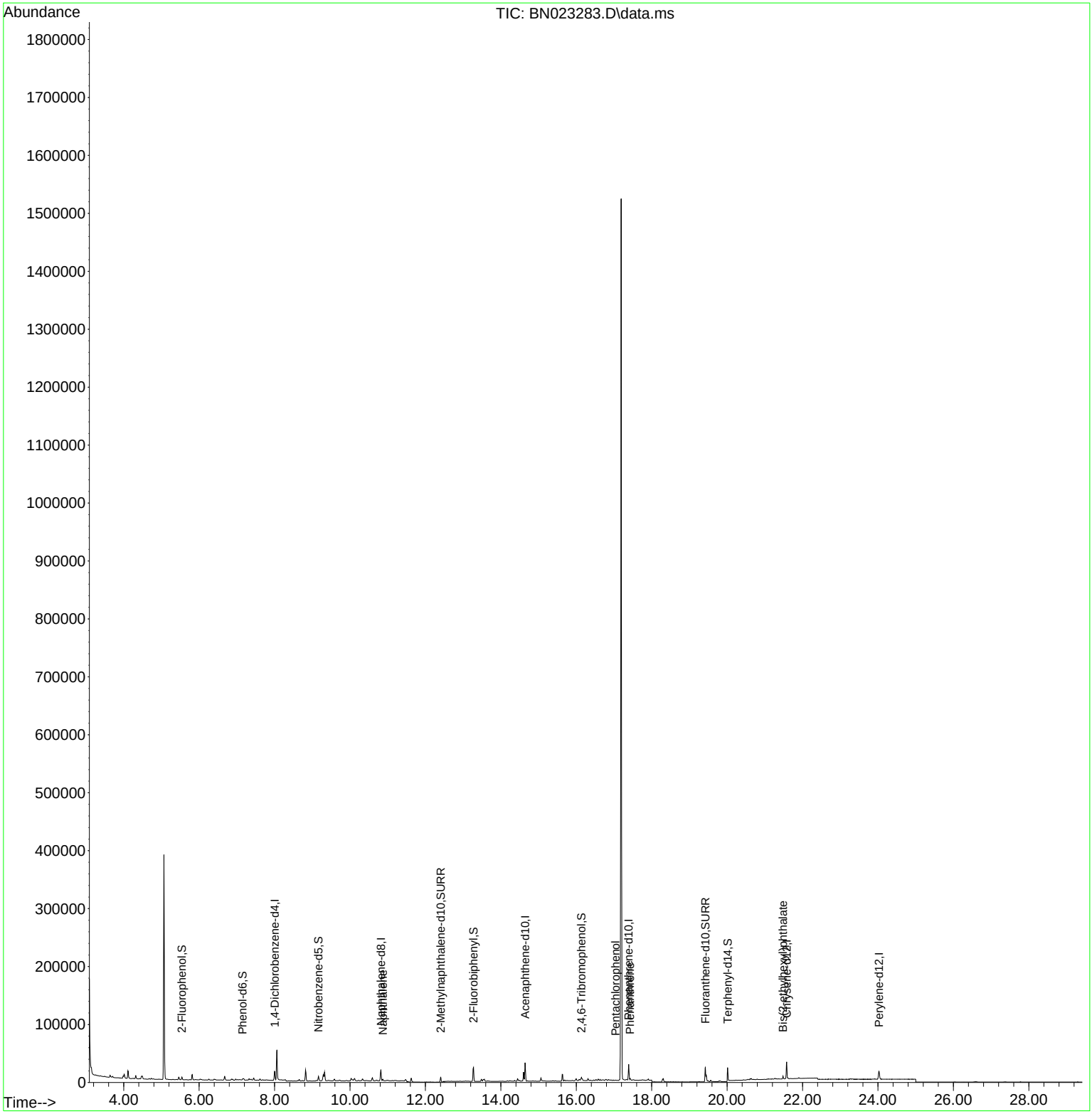
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	8.006	152	7610	0.400	ng	0.00
7) Naphthalene-d8	10.819	136	24602	0.400	ng	0.00
13) Acenaphthene-d10	14.645	164	15939	0.400	ng	0.00
19) Phenanthrene-d10	17.390	188	33981	0.400	ng	# 0.00
29) Chrysene-d12	21.580	240	27221	0.400	ng	0.00
35) Perylene-d12	24.027	264	19632	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.543	112	1884	0.133	ng	0.00
5) Phenol-d6	7.154	99	1822	0.101	ng	0.00
8) Nitrobenzene-d5	9.164	82	5671	0.350	ng	0.00
11) 2-Methylnaphthalene-d10	12.405	152	10482	0.251	ng	0.00
14) 2,4,6-Tribromophenol	16.136	330	2615	0.452	ng	0.00
15) 2-Fluorobiphenyl	13.277	172	21597	0.339	ng	0.00
27) Fluoranthene-d10	19.422	212	25453	0.320	ng	0.00
31) Terphenyl-d14	20.013	244	16176	0.366	ng	0.00
Target Compounds						Qvalue
9) Naphthalene	10.872	128	2309	0.037	ng	# 88
24) Pentachlorophenol	17.042	266	239	0.029	ng	89
25) Phenanthrene	17.427	178	3200	0.032	ng	# 94
34) Bis(2-ethylhexyl)phtha...	21.482	149	4555	0.123	ng	99

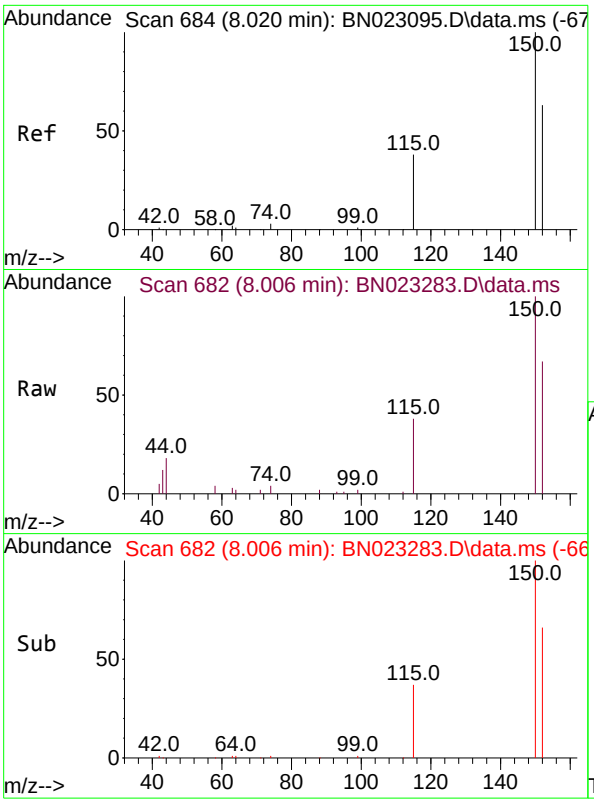
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023283.D
Acq On : 19 Dec 2022 13:16
Operator : CG/JU
Sample : N6070-03
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422

Quant Time: Dec 19 15:45:30 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration



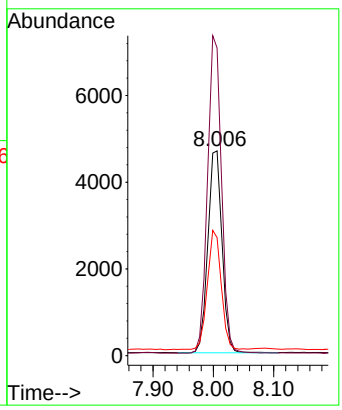


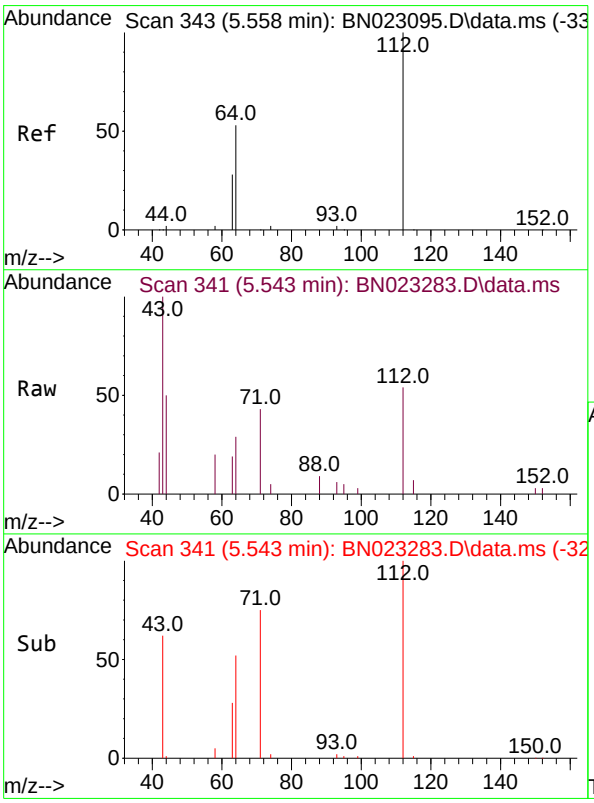
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 8.006 min Scan# 68
Delta R.T. 0.007 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422

Tgt Ion:152 Resp: 7610

Ion	Ratio	Lower	Upper
152	100		
150	150.2	125.6	188.4
115	57.6	49.0	73.4

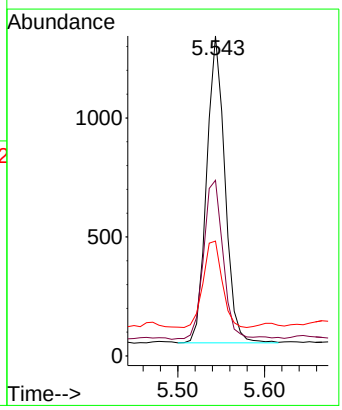


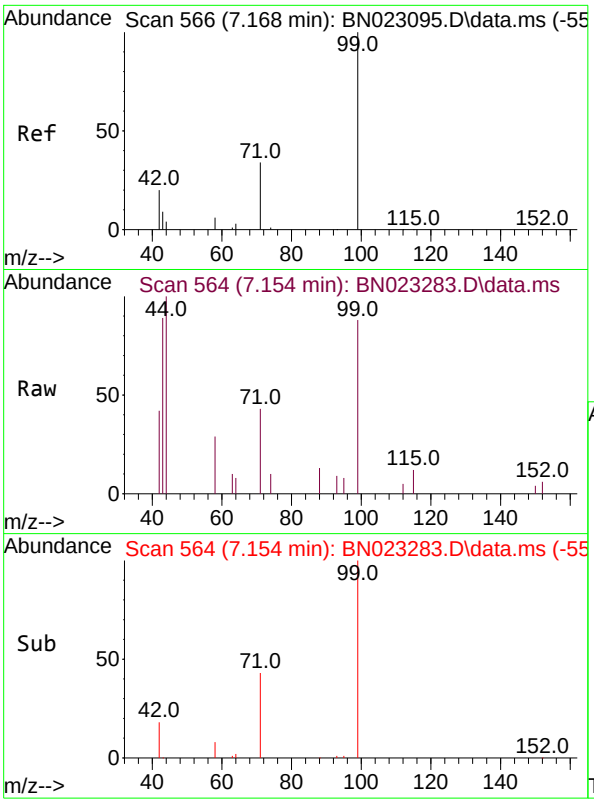


#4
2-Fluorophenol
Concen: 0.133 ng
RT: 5.543 min Scan# 341
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion:112 Resp: 1884

Ion	Ratio	Lower	Upper
112	100		
64	56.0	44.4	66.6
63	29.1	23.7	35.5



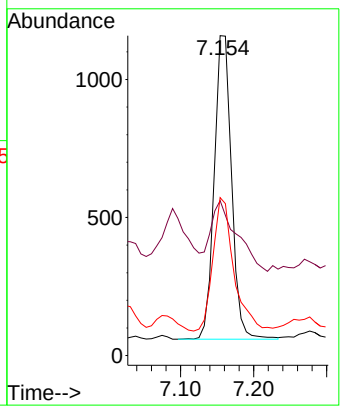


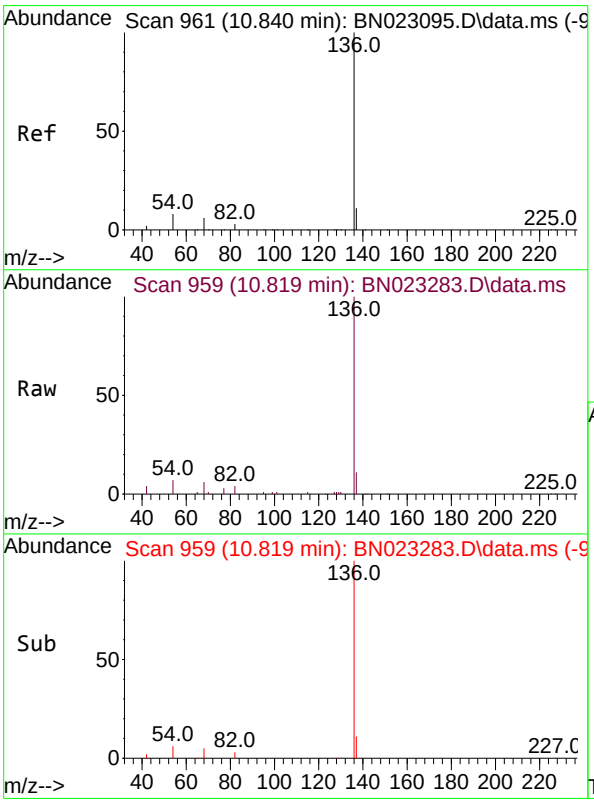
#5
Phenol-d6
Concen: 0.101 ng
RT: 7.154 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422

Tgt Ion: 99 Resp: 1822

Ion	Ratio	Lower	Upper
99	100		
42	35.6	16.3	24.5#
71	53.2	26.5	39.7#

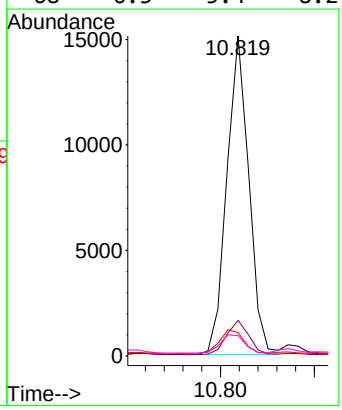


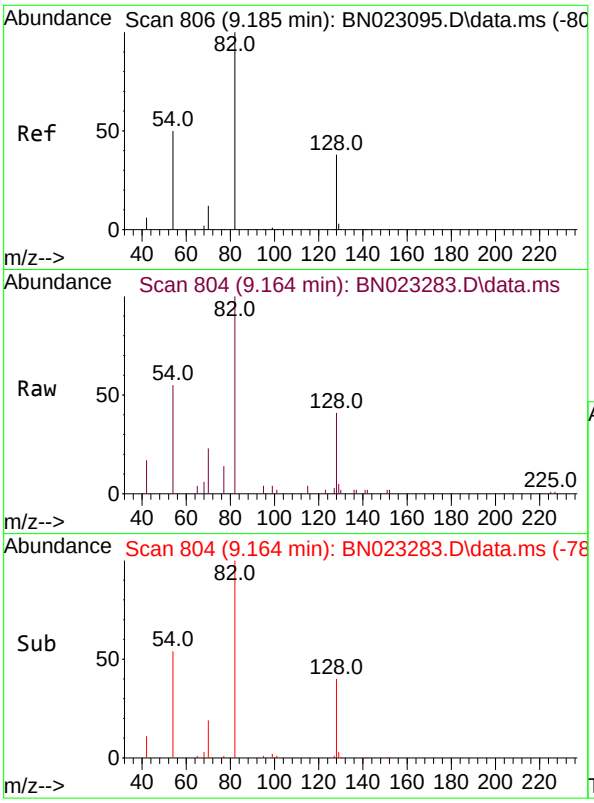


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.819 min Scan# 959
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion:136 Resp: 24602

Ion	Ratio	Lower	Upper
136	100		
137	11.1	9.0	13.4
54	7.3	6.5	9.7
68	6.3	5.4	8.2



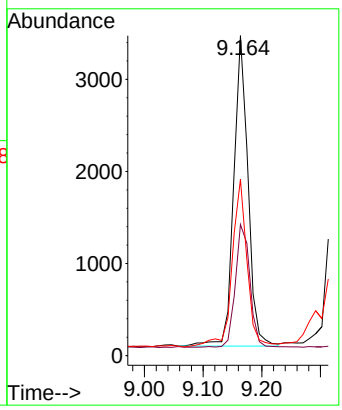


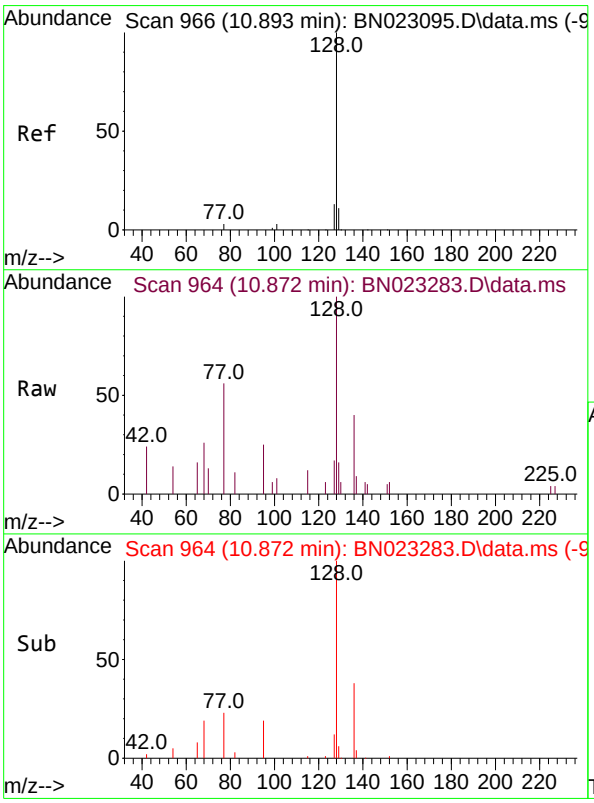
#8
Nitrobenzene-d5
Concen: 0.350 ng
RT: 9.164 min Scan# 80
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422

Tgt Ion: 82 Resp: 5671

Ion	Ratio	Lower	Upper
82	100		
128	41.0	31.4	47.2
54	55.1	41.0	61.4

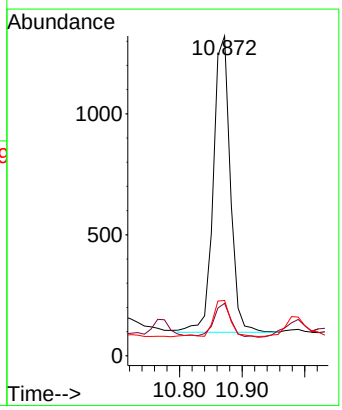


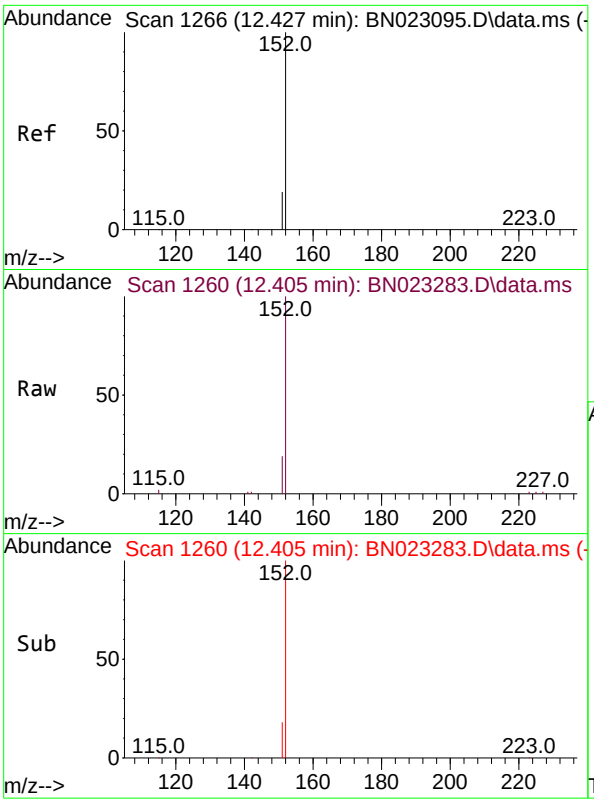


#9
Naphthalene
Concen: 0.037 ng
RT: 10.872 min Scan# 964
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion:128 Resp: 2309

Ion	Ratio	Lower	Upper
128	100		
129	16.4	9.0	13.6#
127	17.3	10.5	15.7#



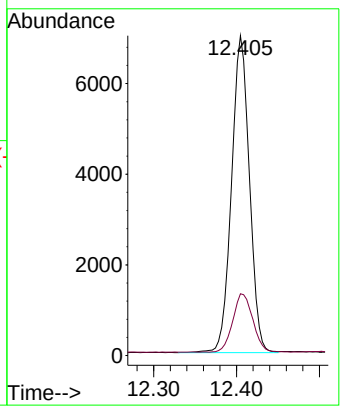


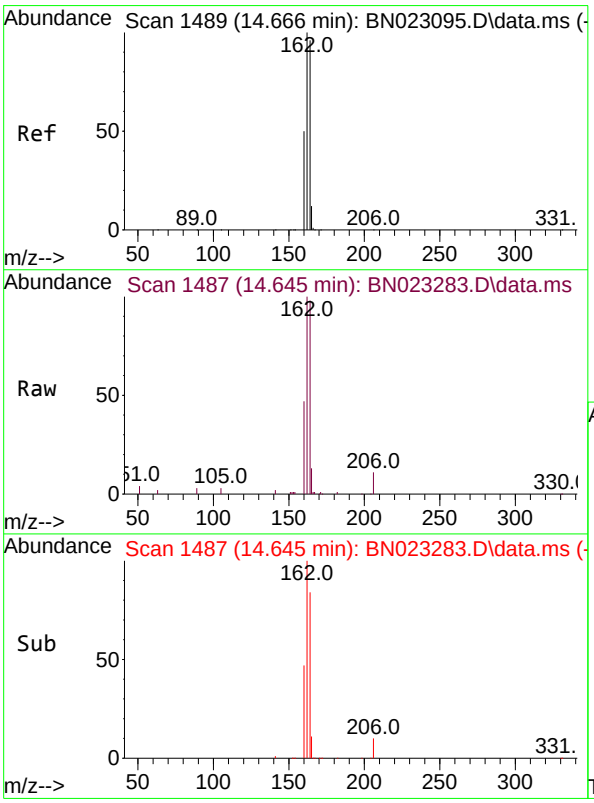
#11
2-Methylnaphthalene-d10
Concen: 0.251 ng
RT: 12.405 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422

Tgt Ion:152 Resp: 10482

Ion	Ratio	Lower	Upper
152	100		
151	20.7	15.1	22.7

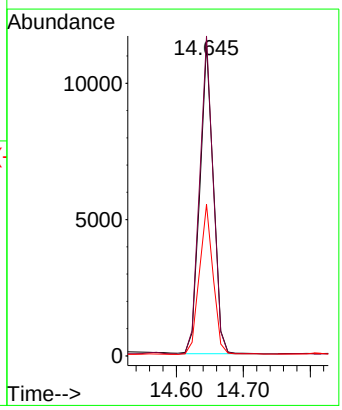


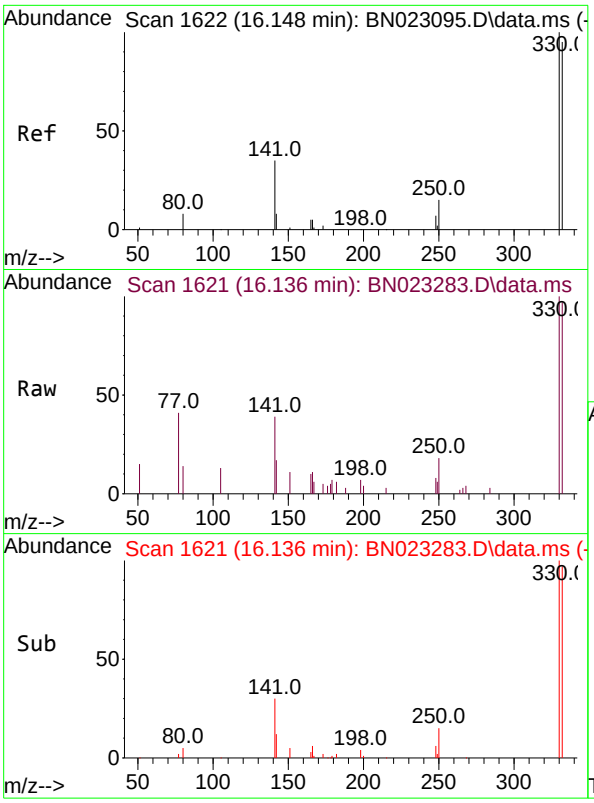


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.645 min Scan# 1487
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion:164 Resp: 15939

Ion	Ratio	Lower	Upper
164	100		
162	102.5	83.4	125.0
160	48.5	41.8	62.8



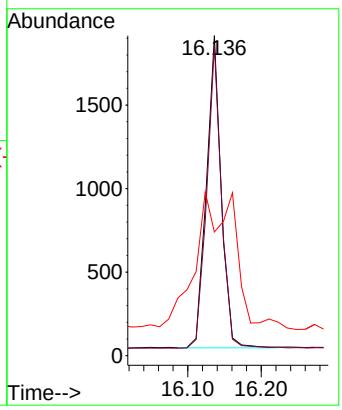


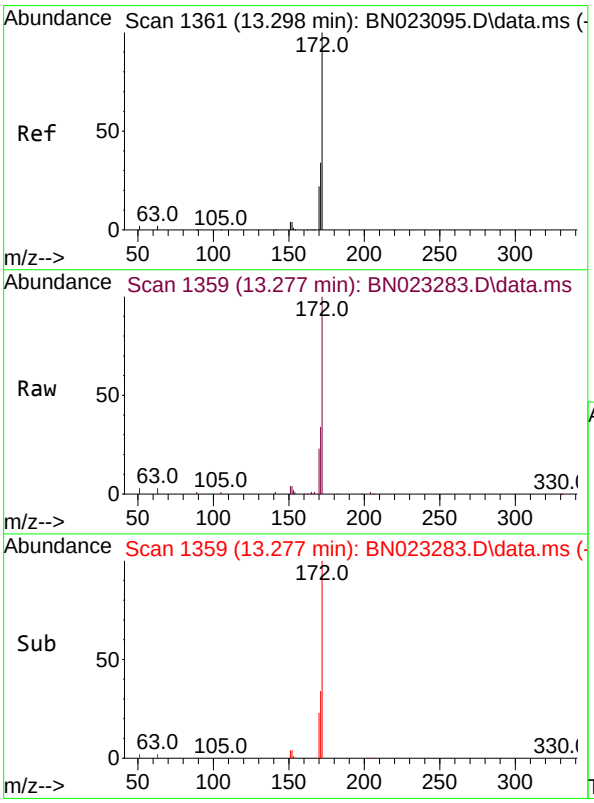
#14
2,4,6-Tribromophenol
Concen: 0.452 ng
RT: 16.136 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422

Tgt Ion:330 Resp: 2615

Ion	Ratio	Lower	Upper
330	100		
332	96.3	77.3	115.9
141	110.1	33.5	50.3#

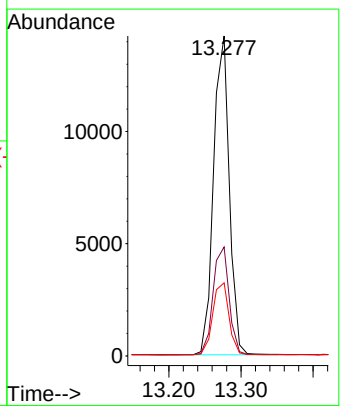


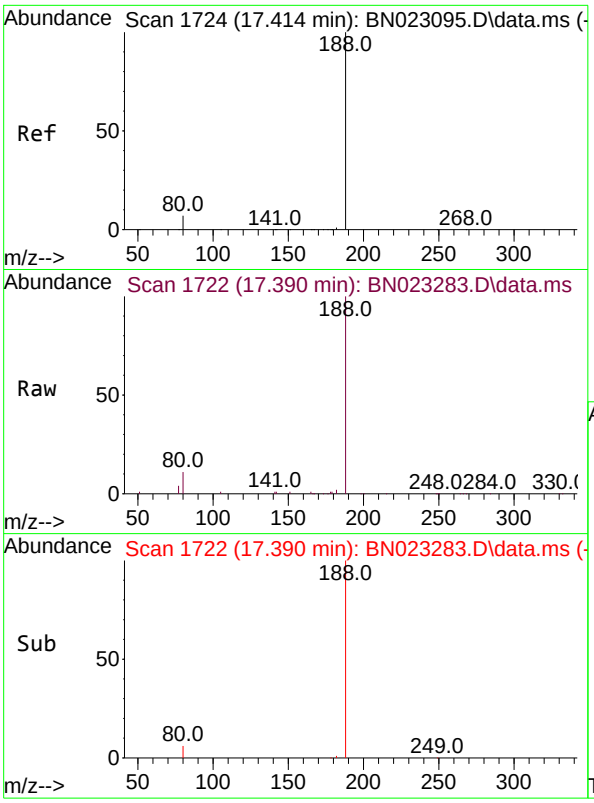


#15
2-Fluorobiphenyl
Concen: 0.339 ng
RT: 13.277 min Scan# 1359
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion:172 Resp: 21597

Ion	Ratio	Lower	Upper
172	100		
171	34.0	27.4	41.0
170	22.8	17.9	26.9



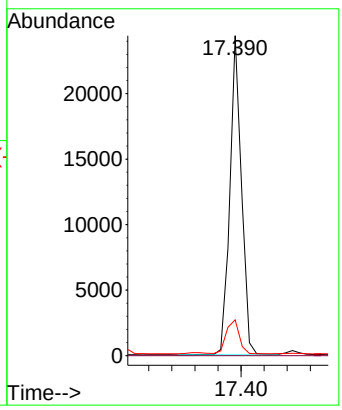


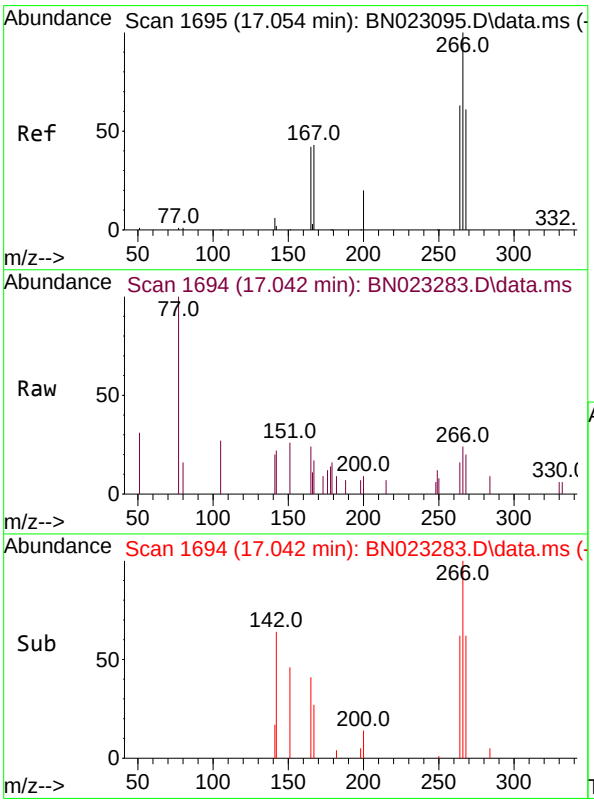
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.390 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422

Tgt Ion:188 Resp: 33981

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.2	6.1	9.1#

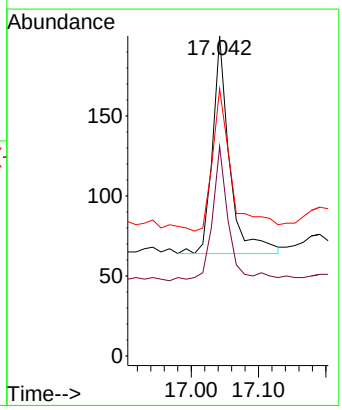


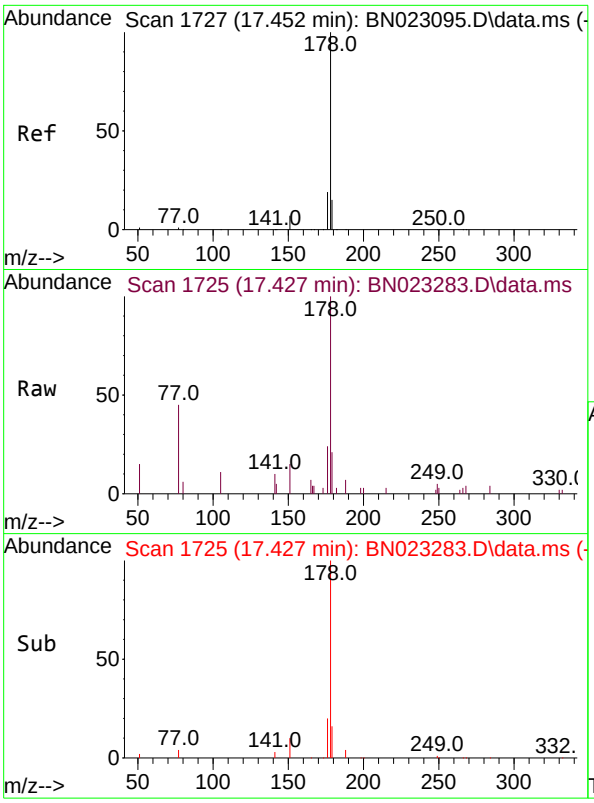


#24
Pentachlorophenol
Concen: 0.029 ng
RT: 17.042 min Scan# 1694
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion:266 Resp: 239

Ion	Ratio	Lower	Upper
266	100		
264	56.9	50.1	75.1
268	72.8	49.7	74.5



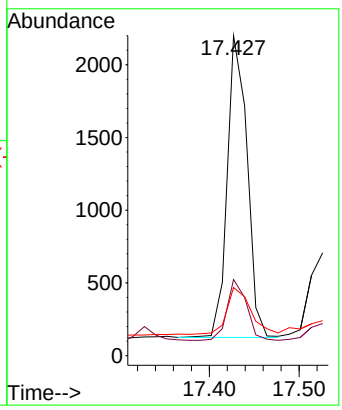


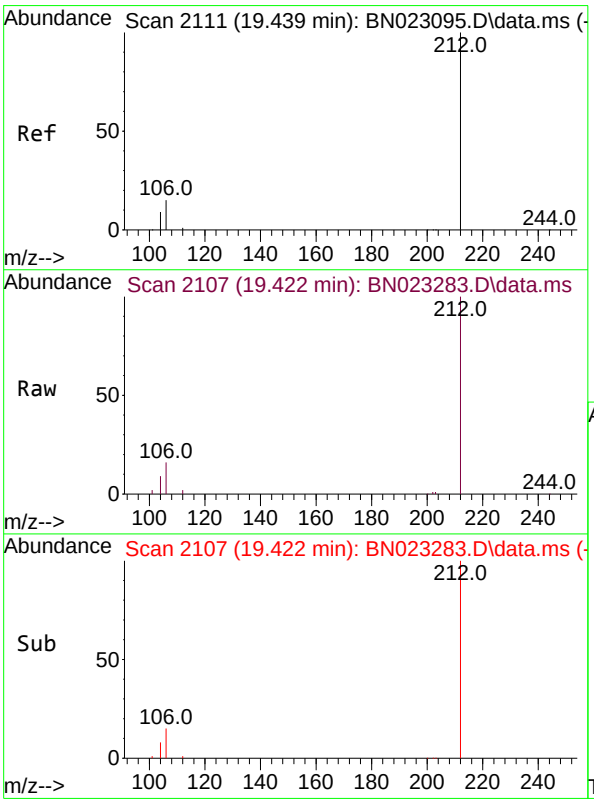
#25
Phenanthrene
Concen: 0.032 ng
RT: 17.427 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422

Tgt Ion:178 Resp: 3200

Ion	Ratio	Lower	Upper
178	100		
176	19.7	15.4	23.2
179	20.3	12.2	18.2#

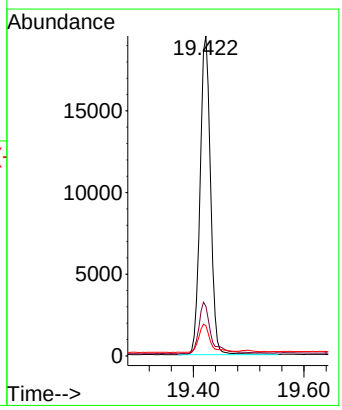


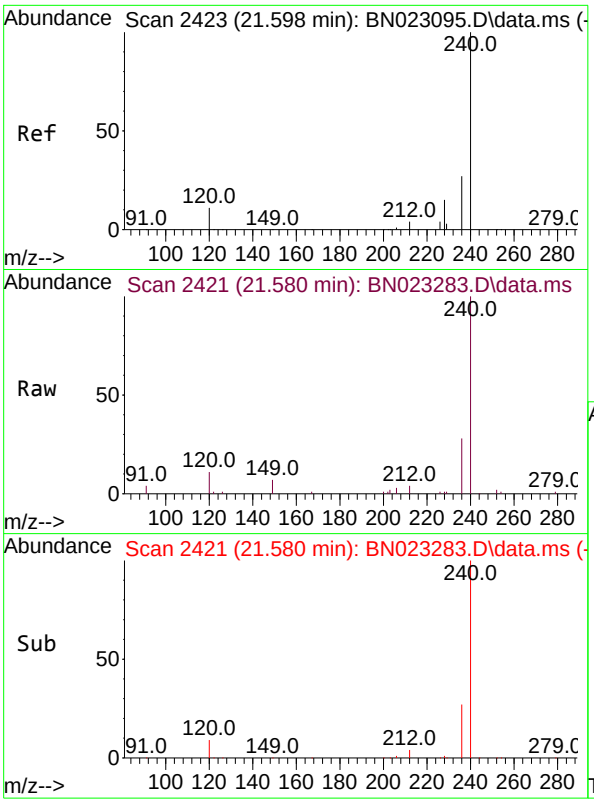


#27
Fluoranthene-d10
Concen: 0.320 ng
RT: 19.422 min Scan# 2107
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion:212 Resp: 25453

Ion	Ratio	Lower	Upper
212	100		
106	18.8	13.0	19.4
104	9.7	7.5	11.3



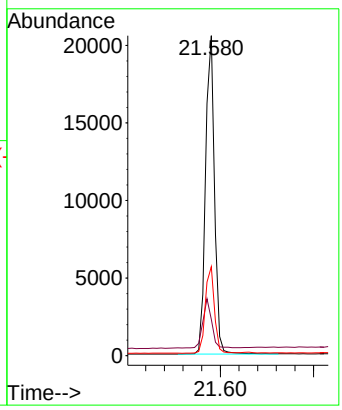


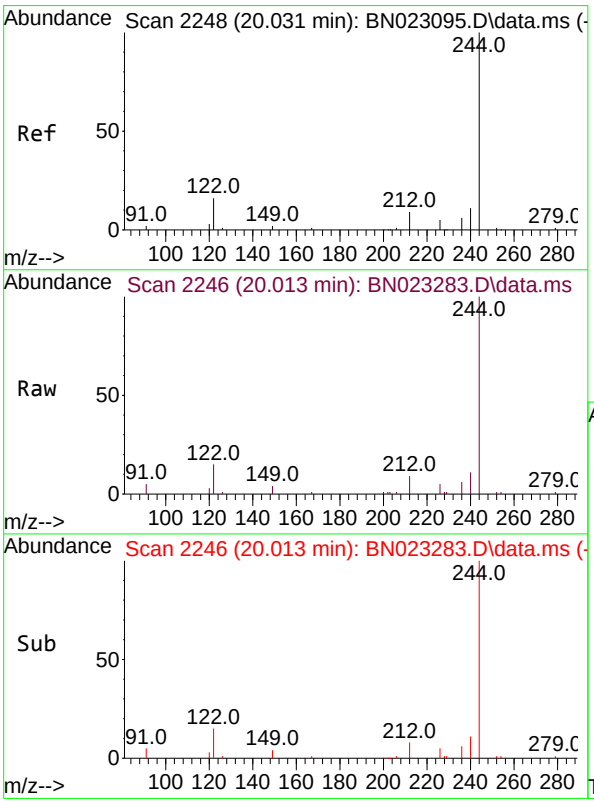
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.580 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422

Tgt Ion:240 Resp: 27221

Ion	Ratio	Lower	Upper
240	100		
120	11.3	10.1	15.1
236	27.8	22.2	33.4

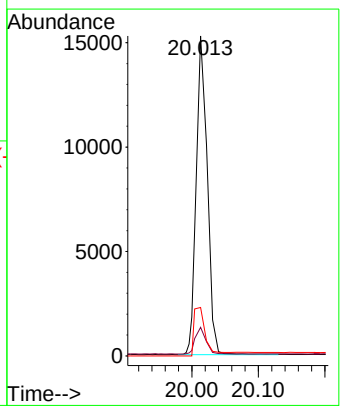


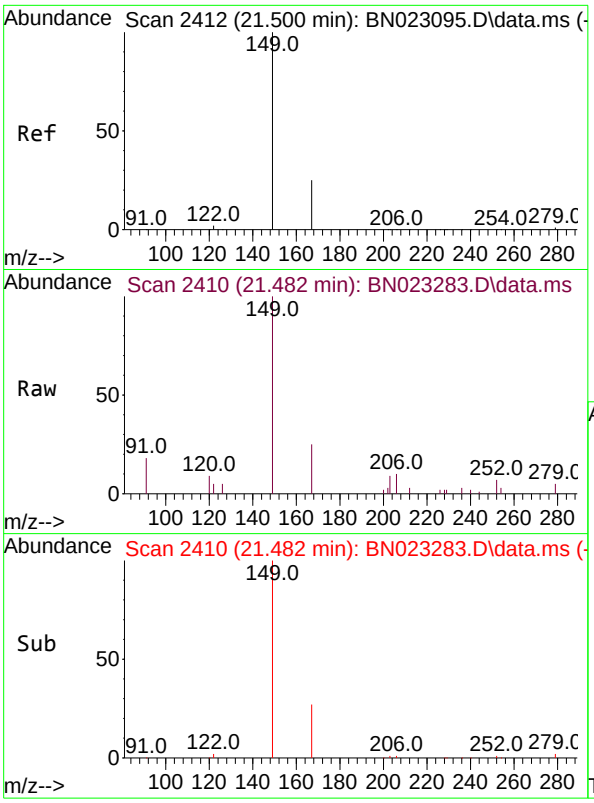


#31
Terphenyl-d14
Concen: 0.366 ng
RT: 20.013 min Scan# 2246
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion:244 Resp: 16176

Ion	Ratio	Lower	Upper
244	100		
212	8.9	7.6	11.4
122	15.1	12.6	18.8



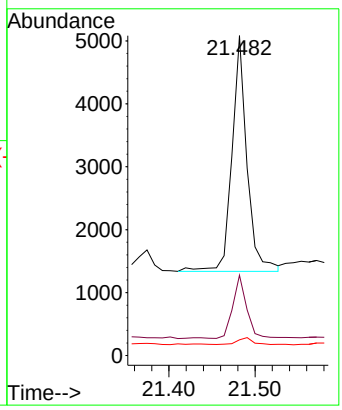


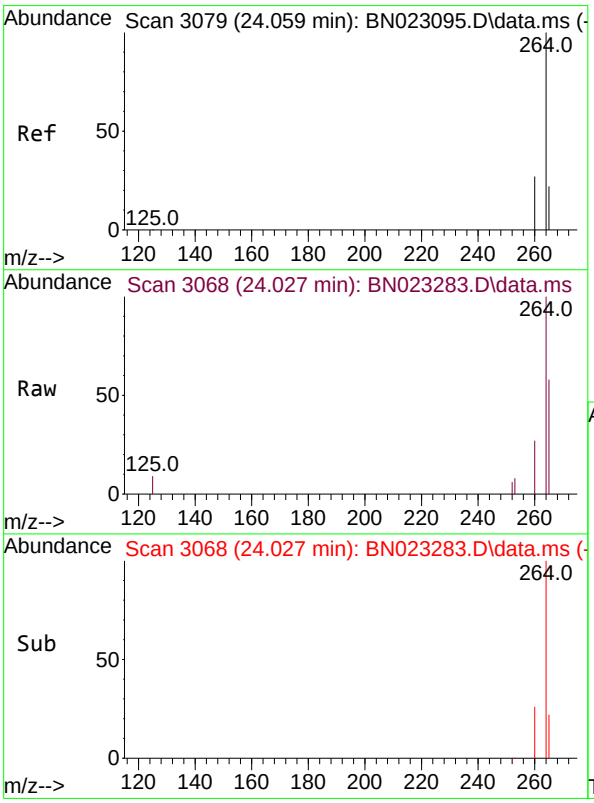
#34
Bis(2-ethylhexyl)phthalate
Concen: 0.123 ng
RT: 21.482 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422

Tgt Ion:149 Resp: 4555

Ion	Ratio	Lower	Upper
149	100		
167	24.5	20.2	30.2
279	3.3	2.3	3.5

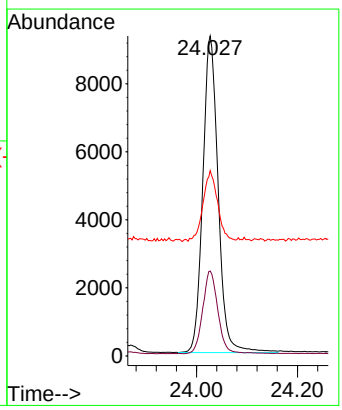




#35
Perylene-d12
Concen: 0.400 ng
RT: 24.027 min Scan# 3068
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion:264 Resp: 19632

Ion	Ratio	Lower	Upper
264	100		
260	26.5	21.7	32.5
265	57.9	43.2	64.8



CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	12/14/22
Project:	Former Schlumberger Site Princeton NJ	Date Received:	12/14/22
Client Sample ID:	OWBR-02-160-180-121422	SDG No.:	N6070
Lab Sample ID:	N6070-04	Matrix:	Water
Analytical Method:	SW8270SIM	% Moisture:	100
Sample Wt/Vol:	960 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN023284.D	1	12/16/22 08:59	12/19/22 13:53	PB149692

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
123-91-1	1,4-Dioxane	0.080	U	0.080	0.21	ug/L
SURROGATES						
7297-45-2	2-Methylnaphthalene-d10	0.25		30 (30) - 150 (150)	61%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.25		30 (30) - 150 (150)	61%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		30 (11) - 130 (175)	82%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		30 (10) - 130 (175)	83%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.23		30 (54) - 130 (171)	56%	SPK: 0.4
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	7230	7.999			
1146-65-2	Naphthalene-d8	23800	10.818			
15067-26-2	Acenaphthene-d10	14600	14.645			
1517-22-2	Phenanthrene-d10	32600	17.39			
1719-03-5	Chrysene-d12	25100	21.58			
1520-96-3	Perylene-d12	17900	24.027			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023284.D
Acq On : 19 Dec 2022 13:53
Operator : CG/JU
Sample : N6070-04
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422

Quant Time: Dec 19 15:45:32 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration

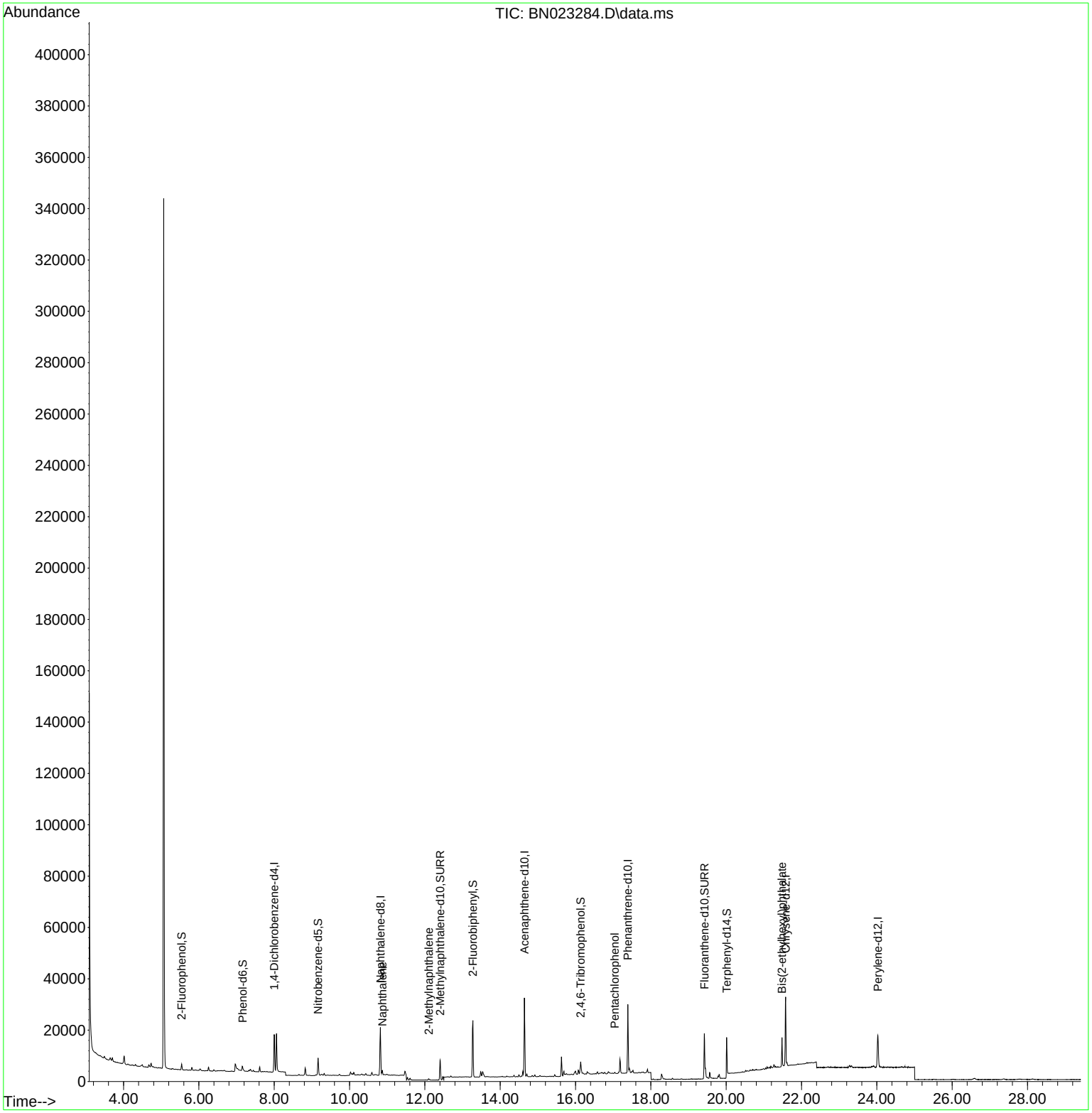
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.999	152	7230	0.400	ng	0.00
7) Naphthalene-d8	10.818	136	23777	0.400	ng	0.00
13) Acenaphthene-d10	14.645	164	14567	0.400	ng	0.00
19) Phenanthrene-d10	17.390	188	32593	0.400	ng	# 0.00
29) Chrysene-d12	21.580	240	25059	0.400	ng	0.00
35) Perylene-d12	24.027	264	17925	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.543	112	1659	0.123	ng	0.00
5) Phenol-d6	7.161	99	1702	0.099	ng	0.00
8) Nitrobenzene-d5	9.163	82	5160	0.329	ng	0.00
11) 2-Methylnaphthalene-d10	12.405	152	9896	0.245	ng	0.00
14) 2,4,6-Tribromophenol	16.136	330	2320	0.439	ng	0.00
15) 2-Fluorobiphenyl	13.276	172	19464	0.334	ng	0.00
27) Fluoranthene-d10	19.422	212	18662	0.245	ng	0.00
31) Terphenyl-d14	20.013	244	9141	0.225	ng	0.00
Target Compounds						Qvalue
9) Naphthalene	10.872	128	2024	0.033	ng	# 89
12) 2-Methylnaphthalene	12.102	142	701	0.078	ng	# 55
24) Pentachlorophenol	17.042	266	226	0.029	ng	91
34) Bis(2-ethylhexyl)phtha...	21.482	149	9694	0.284	ng	97

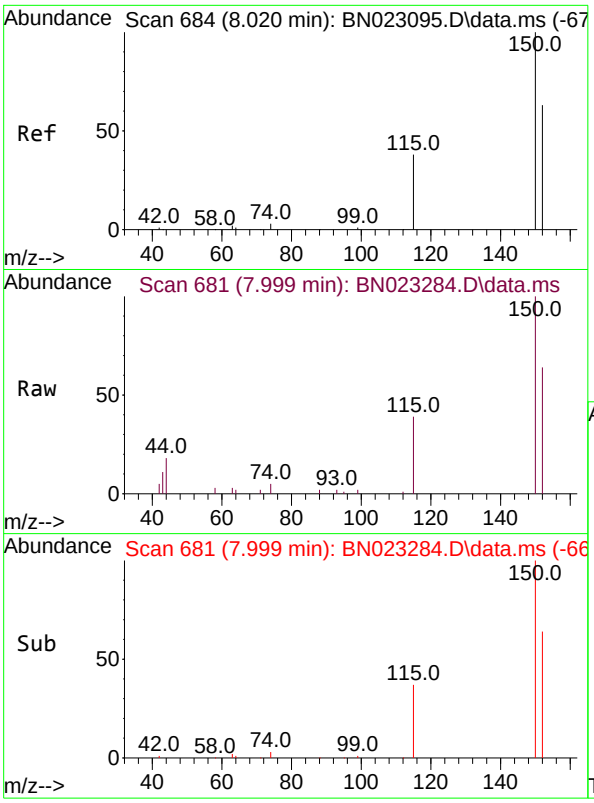
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023284.D
Acq On : 19 Dec 2022 13:53
Operator : CG/JU
Sample : N6070-04
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422

Quant Time: Dec 19 15:45:32 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration



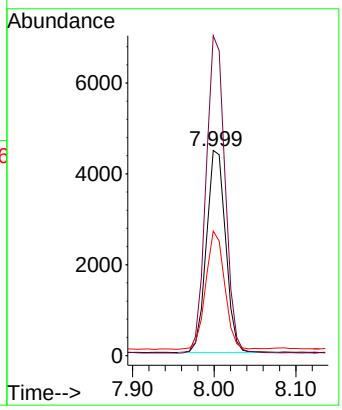


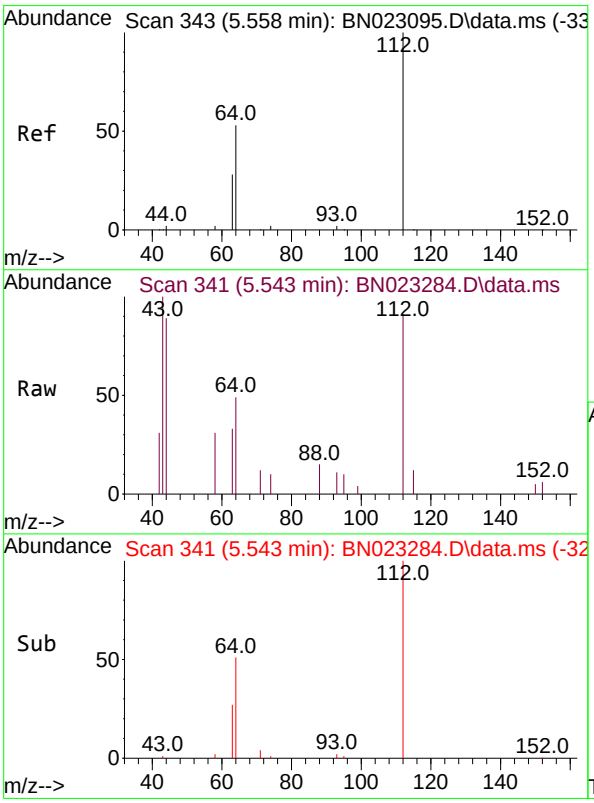
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.999 min Scan# 68
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422

Tgt Ion:152 Resp: 7230

Ion	Ratio	Lower	Upper
152	100		
150	156.0	125.6	188.4
115	60.7	49.0	73.4

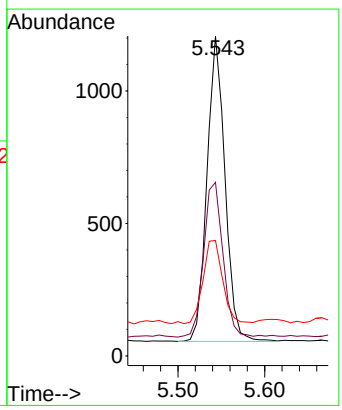


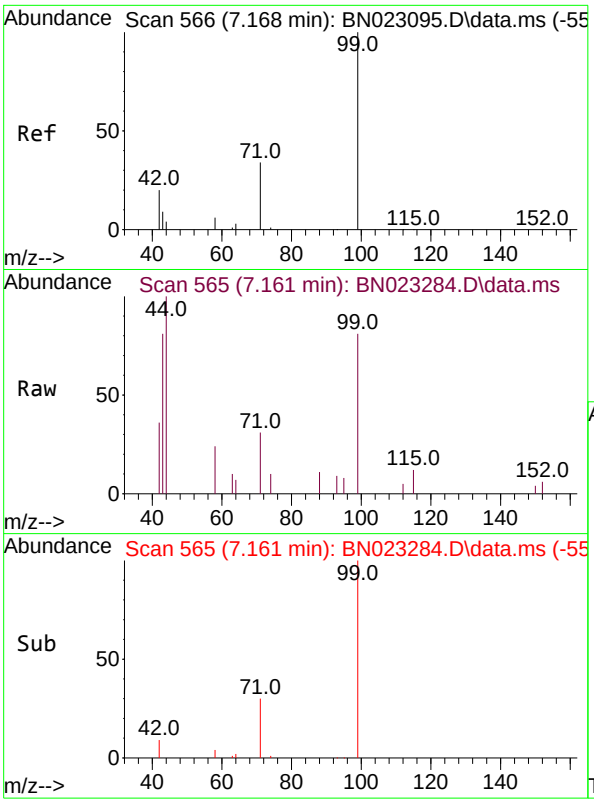


#4
2-Fluorophenol
Concen: 0.123 ng
RT: 5.543 min Scan# 341
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion:112 Resp: 1659

Ion	Ratio	Lower	Upper
112	100		
64	54.2	44.4	66.6
63	29.8	23.7	35.5



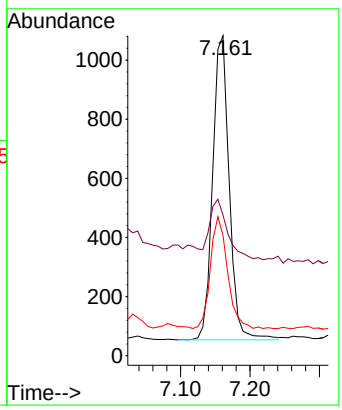


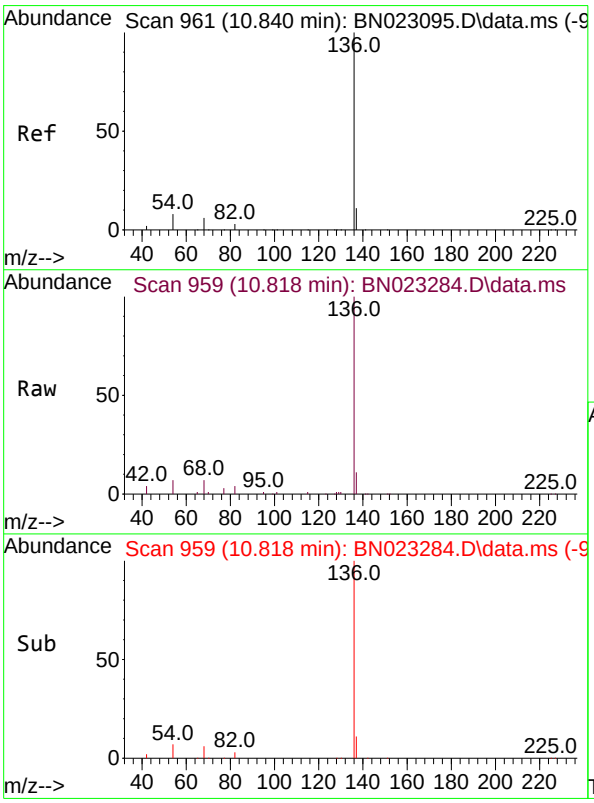
#5
Phenol-d6
Concen: 0.099 ng
RT: 7.161 min Scan# 5
Delta R.T. 0.007 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422

Tgt Ion: 99 Resp: 1702

Ion	Ratio	Lower	Upper
99	100		
42	21.2	16.3	24.5
71	38.0	26.5	39.7

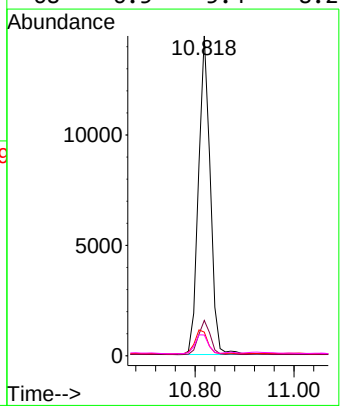


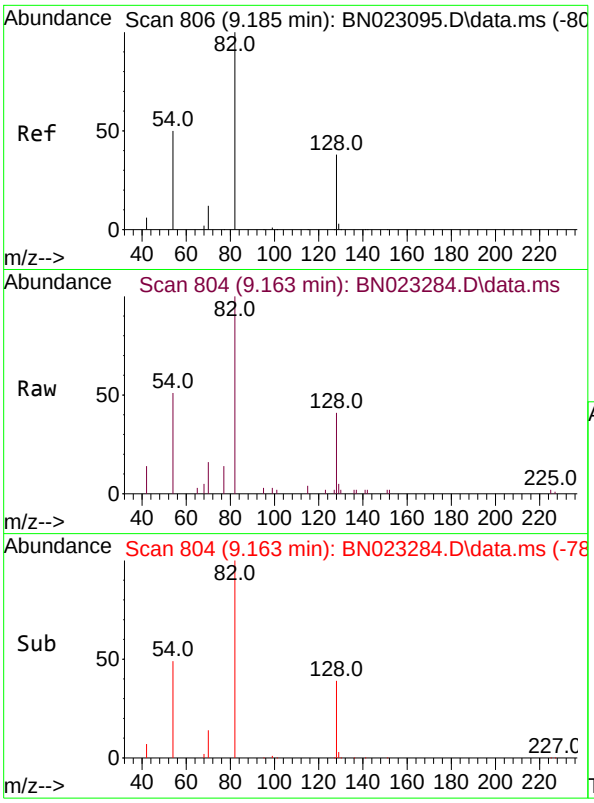


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.818 min Scan# 959
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion:136 Resp: 23777

Ion	Ratio	Lower	Upper
136	100		
137	11.1	9.0	13.4
54	7.4	6.5	9.7
68	6.5	5.4	8.2



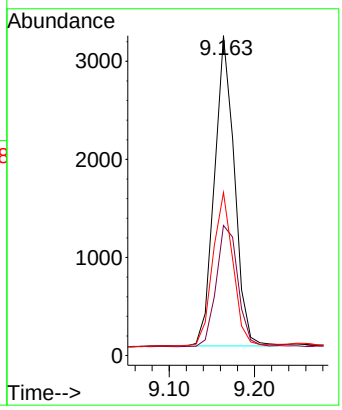


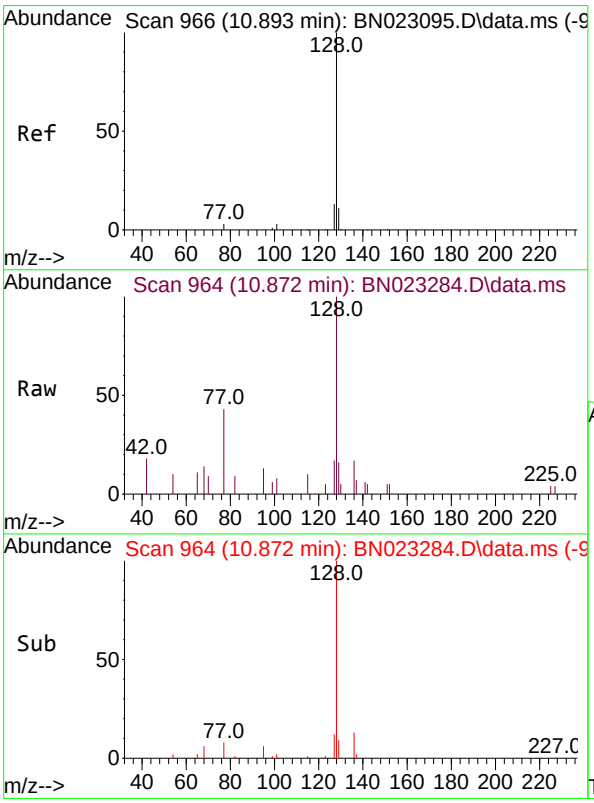
#8
Nitrobenzene-d5
Concen: 0.329 ng
RT: 9.163 min Scan# 80
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422

Tgt Ion: 82 Resp: 5160

Ion	Ratio	Lower	Upper
82	100		
128	40.7	31.4	47.2
54	51.0	41.0	61.4

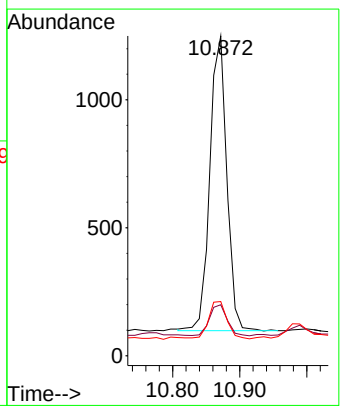


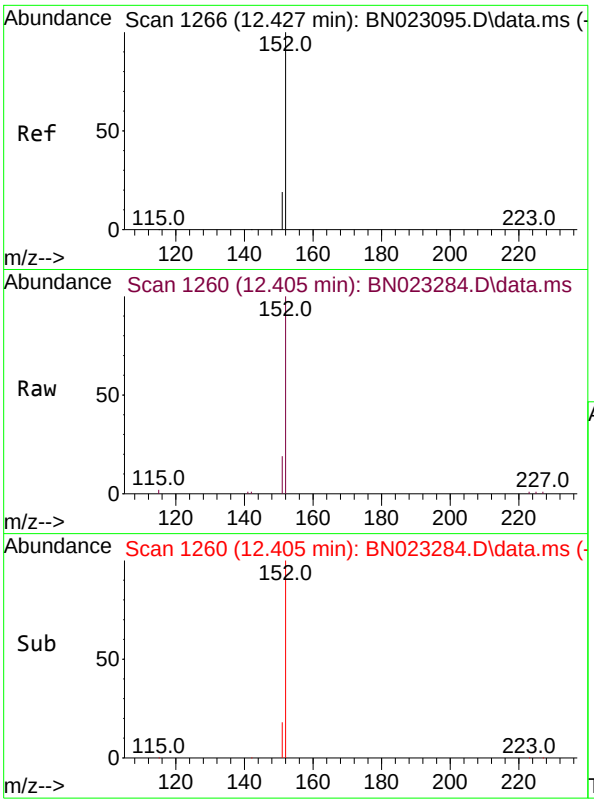


#9
Naphthalene
Concen: 0.033 ng
RT: 10.872 min Scan# 964
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion:128 Resp: 2024

Ion	Ratio	Lower	Upper
128	100		
129	15.9	9.0	13.6#
127	17.0	10.5	15.7#



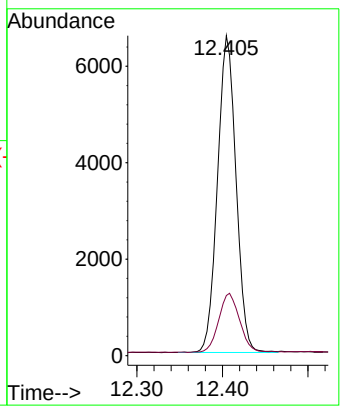


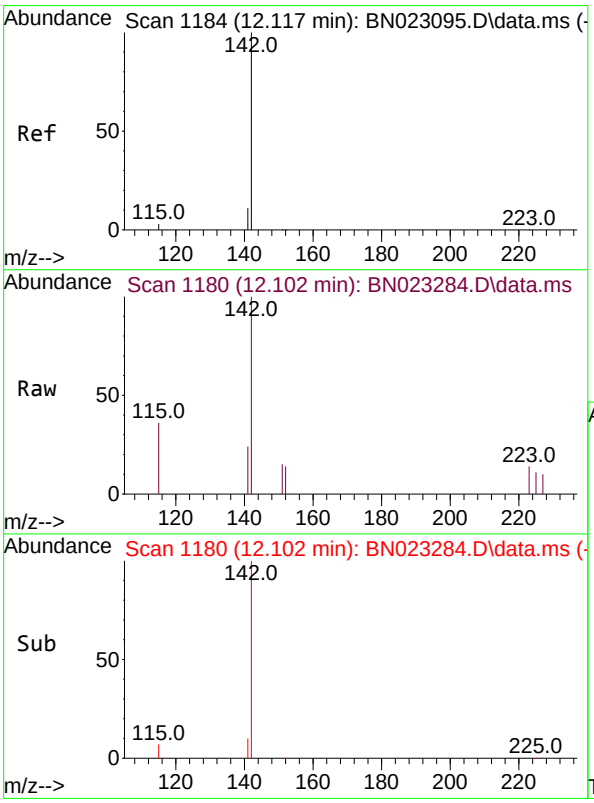
#11
2-Methylnaphthalene-d10
Concen: 0.245 ng
RT: 12.405 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422

Tgt Ion:152 Resp: 9896

Ion	Ratio	Lower	Upper
152	100		
151	21.2	15.1	22.7

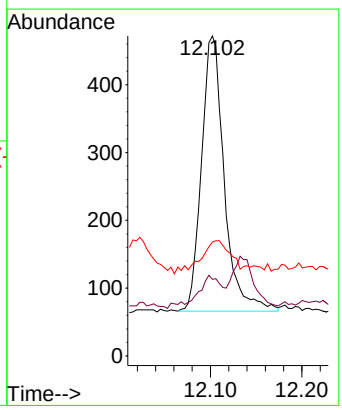


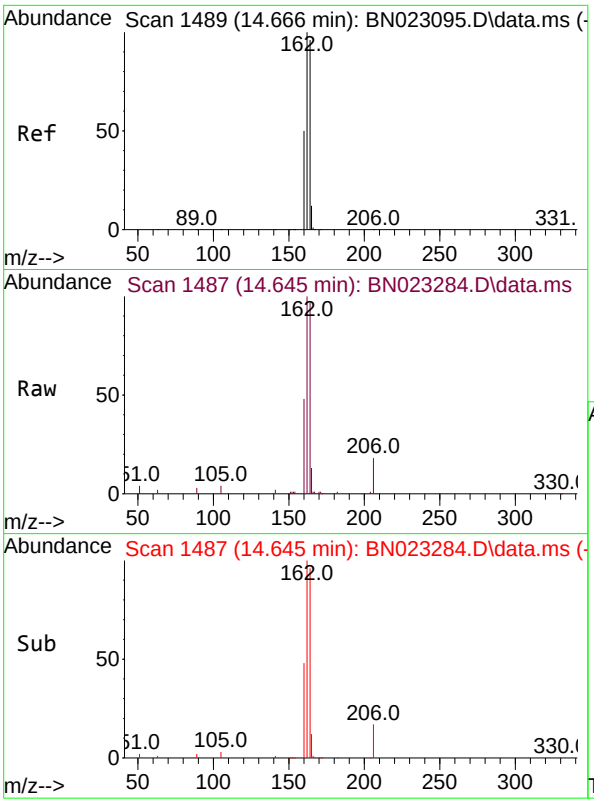


#12
2-Methylnaphthalene
Concen: 0.078 ng
RT: 12.102 min Scan# 1180
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion:142 Resp: 701

Ion	Ratio	Lower	Upper
142	100		
141	23.9	10.9	16.3#
115	35.6	5.7	8.5#



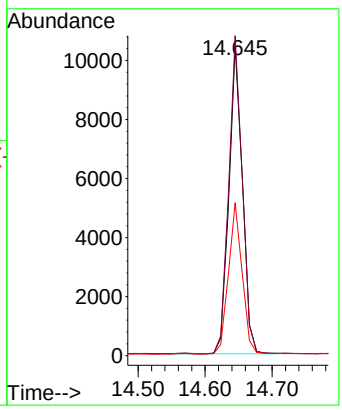


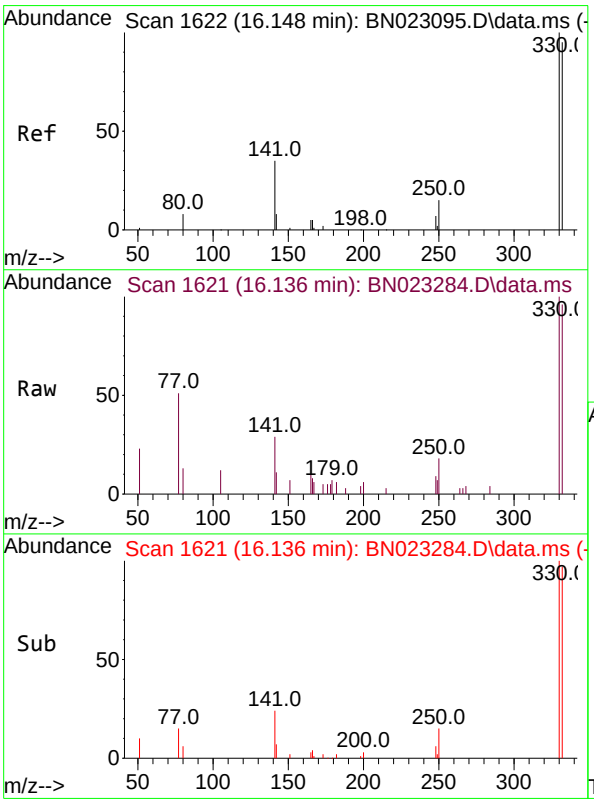
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.645 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422

Tgt Ion:164 Resp: 14567

Ion	Ratio	Lower	Upper
164	100		
162	103.5	83.4	125.0
160	49.4	41.8	62.8

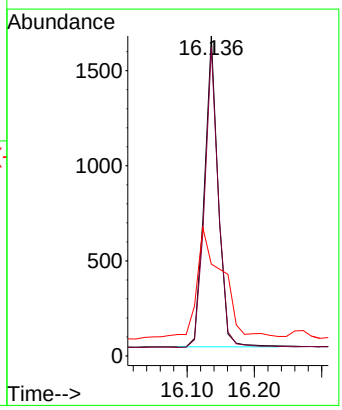


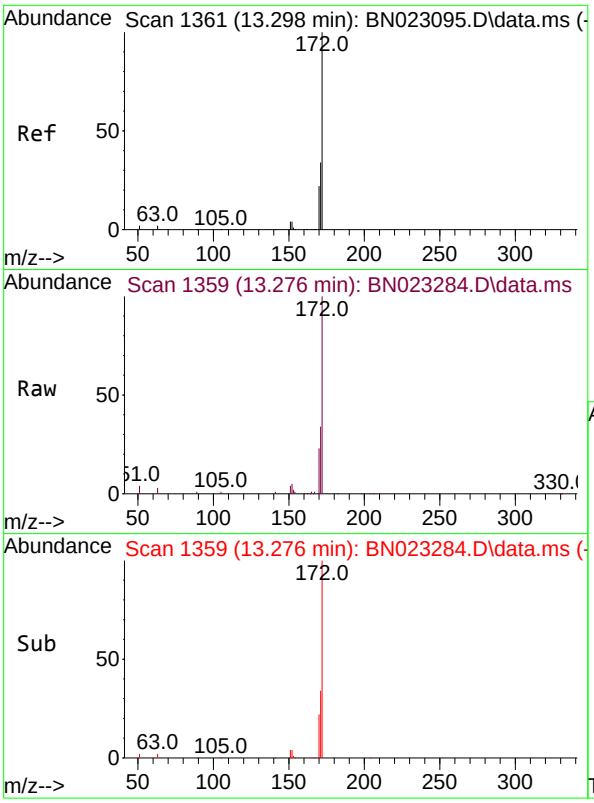


#14
2,4,6-Tribromophenol
Concen: 0.439 ng
RT: 16.136 min Scan# 1621
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion:330 Resp: 2320

Ion	Ratio	Lower	Upper
330	100		
332	97.0	77.3	115.9
141	62.6	33.5	50.3#



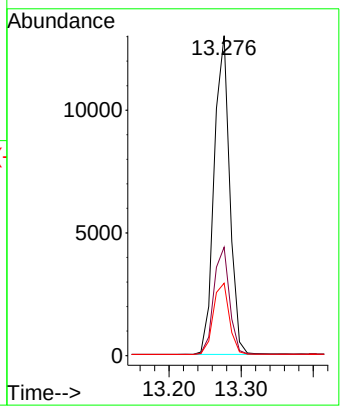


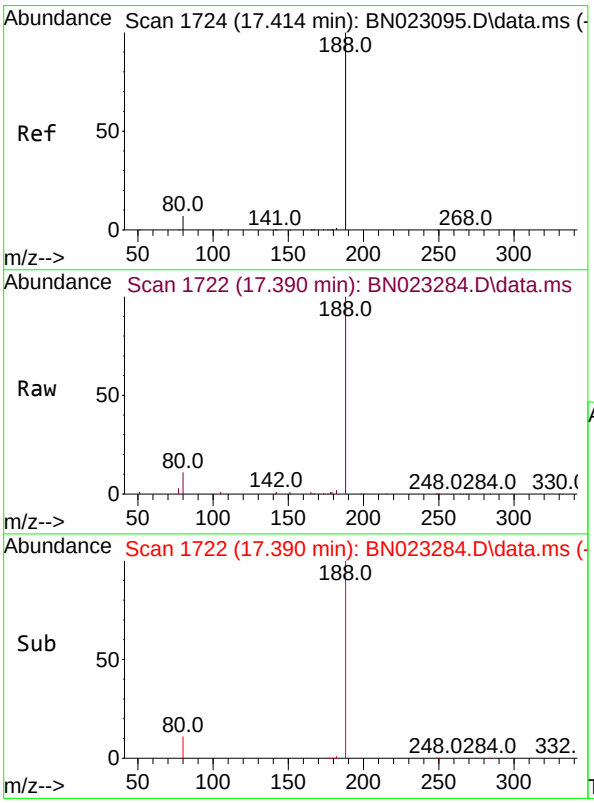
#15
2-Fluorobiphenyl
Concen: 0.334 ng
RT: 13.276 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422

Tgt Ion:172 Resp: 19464

Ion	Ratio	Lower	Upper
172	100		
171	33.9	27.4	41.0
170	22.6	17.9	26.9

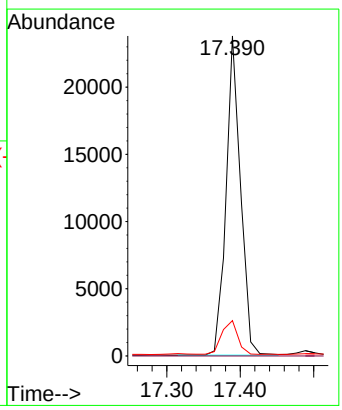


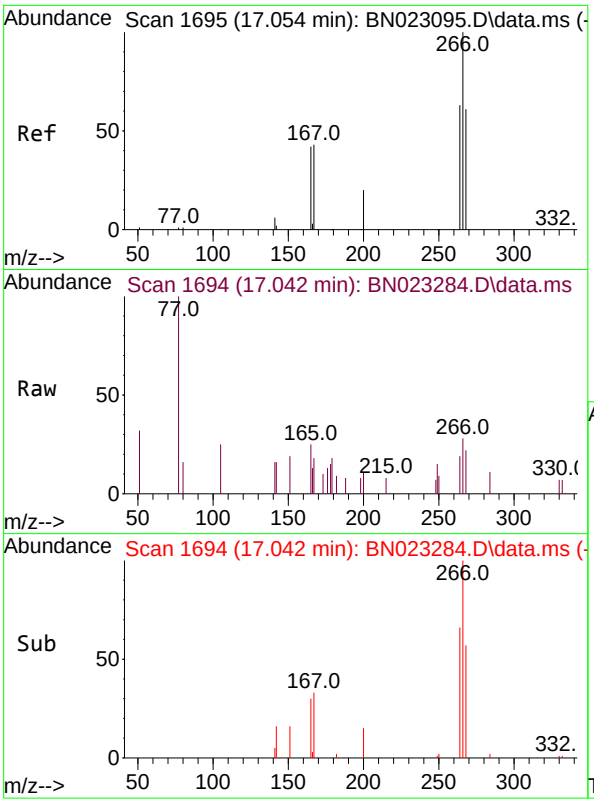


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.390 min Scan# 1722
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion:188 Resp: 32593

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.0	6.1	9.1#



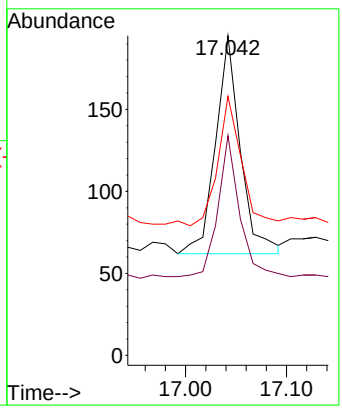


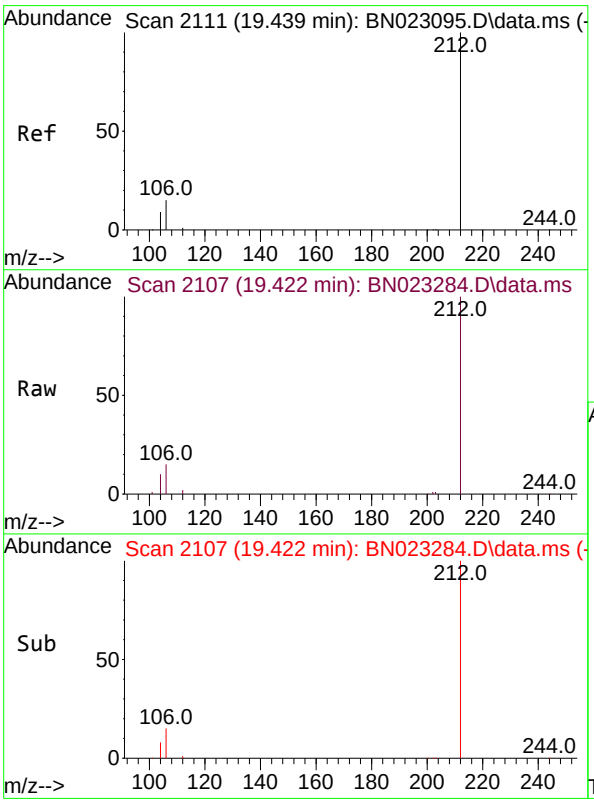
#24
Pentachlorophenol
Concen: 0.029 ng
RT: 17.042 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422

Tgt Ion:266 Resp: 226

Ion	Ratio	Lower	Upper
266	100		
264	56.2	50.1	75.1
268	54.9	49.7	74.5

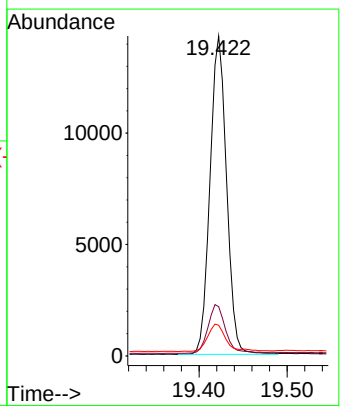


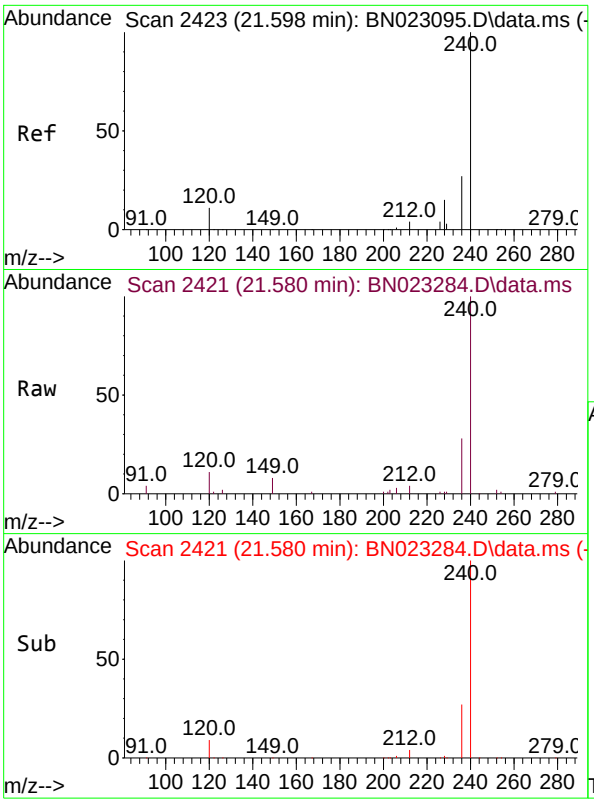


#27
Fluoranthene-d10
Concen: 0.245 ng
RT: 19.422 min Scan# 2107
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion:212 Resp: 18662

Ion	Ratio	Lower	Upper
212	100		
106	16.2	13.0	19.4
104	9.8	7.5	11.3



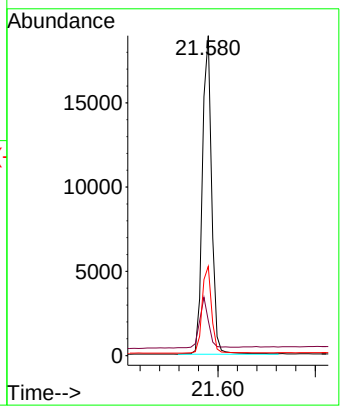


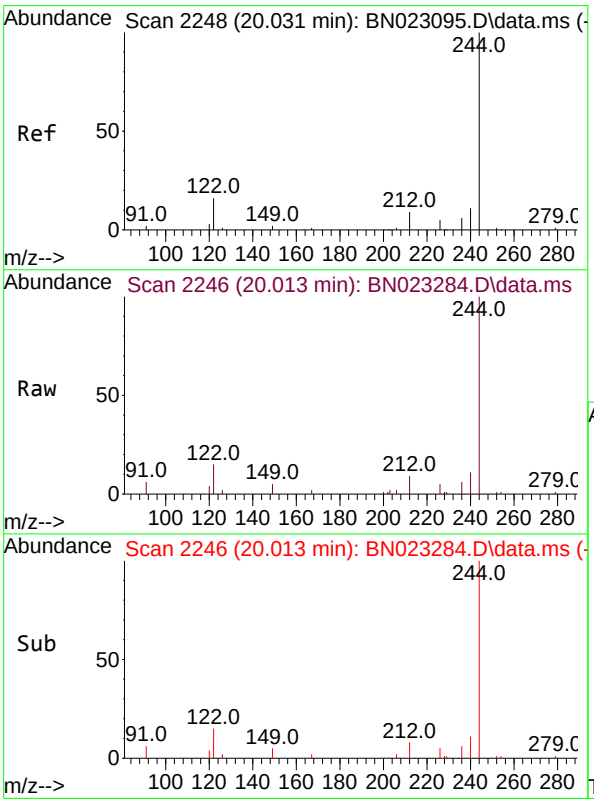
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.580 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422

Tgt Ion:240 Resp: 25059

Ion	Ratio	Lower	Upper
240	100		
120	10.9	10.1	15.1
236	27.9	22.2	33.4

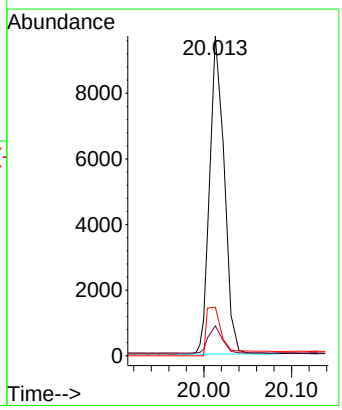


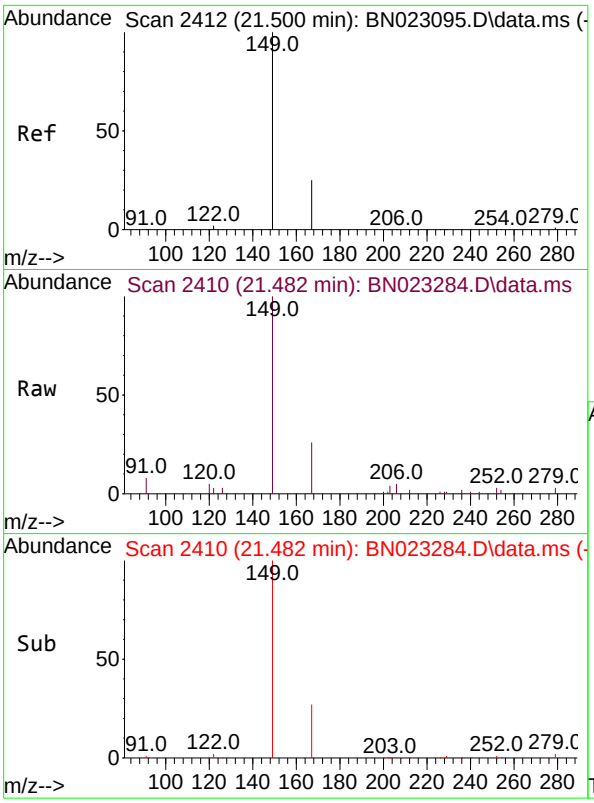


#31
Terphenyl-d14
Concen: 0.225 ng
RT: 20.013 min Scan# 2246
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion:244 Resp: 9141

Ion	Ratio	Lower	Upper
244	100		
212	9.4	7.6	11.4
122	15.2	12.6	18.8



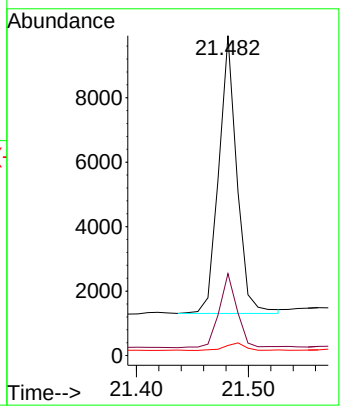


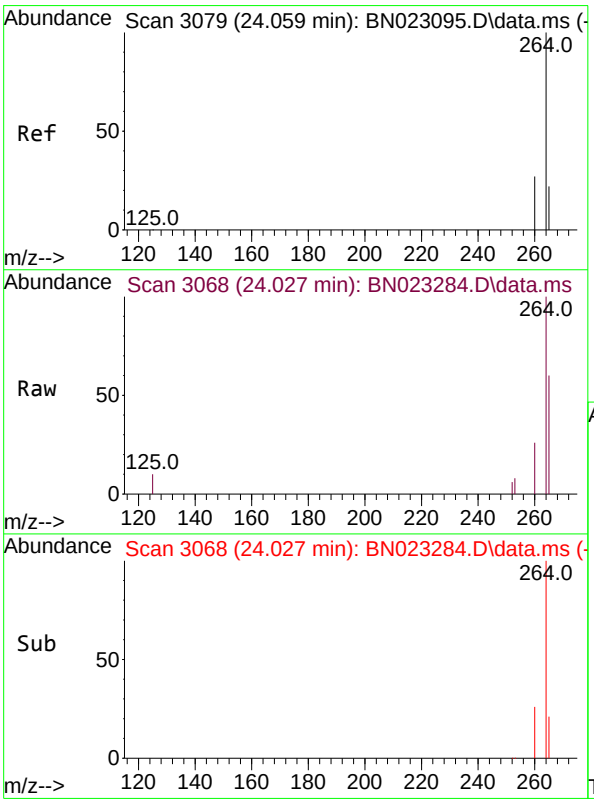
#34
Bis(2-ethylhexyl)phthalate
Concen: 0.284 ng
RT: 21.482 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422

Tgt Ion:149 Resp: 9694

Ion	Ratio	Lower	Upper
149	100		
167	26.8	20.2	30.2
279	3.0	2.3	3.5

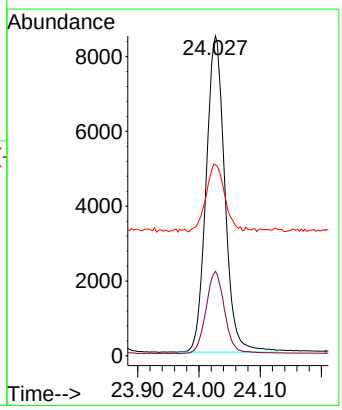




#35
Perylene-d12
Concen: 0.400 ng
RT: 24.027 min Scan# 3068
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion:264 Resp: 17925

Ion	Ratio	Lower	Upper
264	100		
260	26.4	21.7	32.5
265	59.7	43.2	64.8



CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	12/14/22
Project:	Former Schlumberger Site Princeton NJ	Date Received:	12/14/22
Client Sample ID:	OWBR-03-128-148-121422	SDG No.:	N6070
Lab Sample ID:	N6070-05	Matrix:	Water
Analytical Method:	SW8270SIM	% Moisture:	100
Sample Wt/Vol:	960 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN023285.D	1	12/16/22 08:59	12/19/22 14:30	PB149692

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
123-91-1	1,4-Dioxane	0.080	U	0.080	0.21	ug/L
SURROGATES						
7297-45-2	2-Methylnaphthalene-d10	0.26		30 (30) - 150 (150)	66%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.28		30 (30) - 150 (150)	70%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		30 (11) - 130 (175)	89%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		30 (10) - 130 (175)	99%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.57	*	30 (54) - 130 (171)	142%	SPK: 0.4
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	7020	7.999			
1146-65-2	Naphthalene-d8	23000	10.819			
15067-26-2	Acenaphthene-d10	14500	14.645			
1517-22-2	Phenanthrene-d10	30800	17.39			
1719-03-5	Chrysene-d12	23600	21.58			
1520-96-3	Perylene-d12	16700	24.027			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023285.D
Acq On : 19 Dec 2022 14:30
Operator : CG/JU
Sample : N6070-05
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422

Quant Time: Dec 19 15:45:34 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration

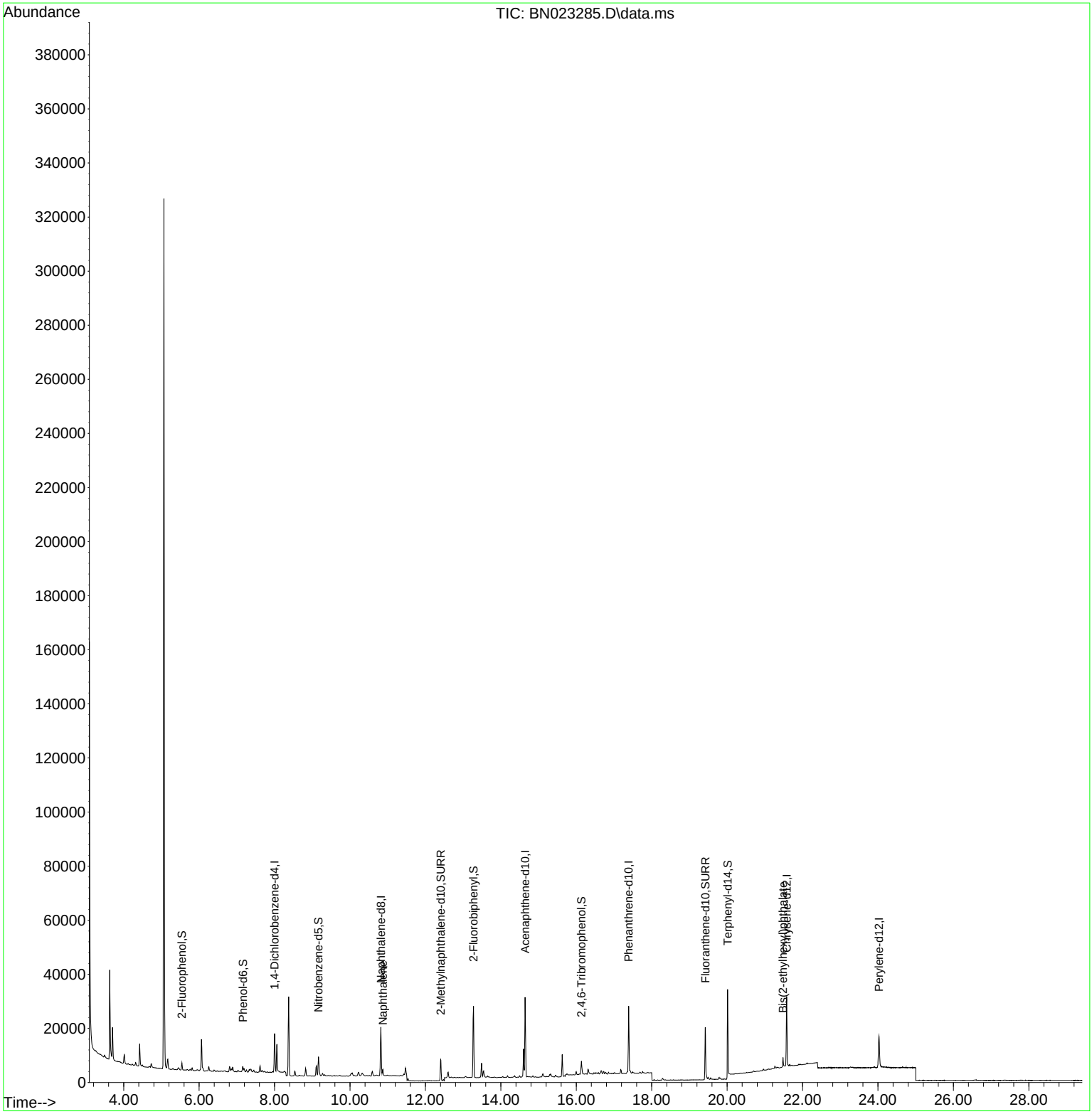
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.999	152	7020	0.400	ng	0.00
7) Naphthalene-d8	10.819	136	22963	0.400	ng	0.00
13) Acenaphthene-d10	14.645	164	14454	0.400	ng	0.00
19) Phenanthrene-d10	17.390	188	30794	0.400	ng	# 0.00
29) Chrysene-d12	21.580	240	23636	0.400	ng	0.00
35) Perylene-d12	24.027	264	16694	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.543	112	1954	0.149	ng	0.00
5) Phenol-d6	7.161	99	1902	0.114	ng	0.00
8) Nitrobenzene-d5	9.164	82	5386	0.356	ng	0.00
11) 2-Methylnaphthalene-d10	12.405	152	10278	0.264	ng	0.00
14) 2,4,6-Tribromophenol	16.136	330	2348	0.448	ng	0.00
15) 2-Fluorobiphenyl	13.277	172	22823	0.395	ng	0.00
27) Fluoranthene-d10	19.422	212	20341	0.282	ng	0.00
31) Terphenyl-d14	20.013	244	21854	0.569	ng	0.00
Target Compounds						Qvalue
9) Naphthalene	10.872	128	2464	0.042	ng	# 87
34) Bis(2-ethylhexyl)phtha...	21.482	149	3364	0.104	ng	95

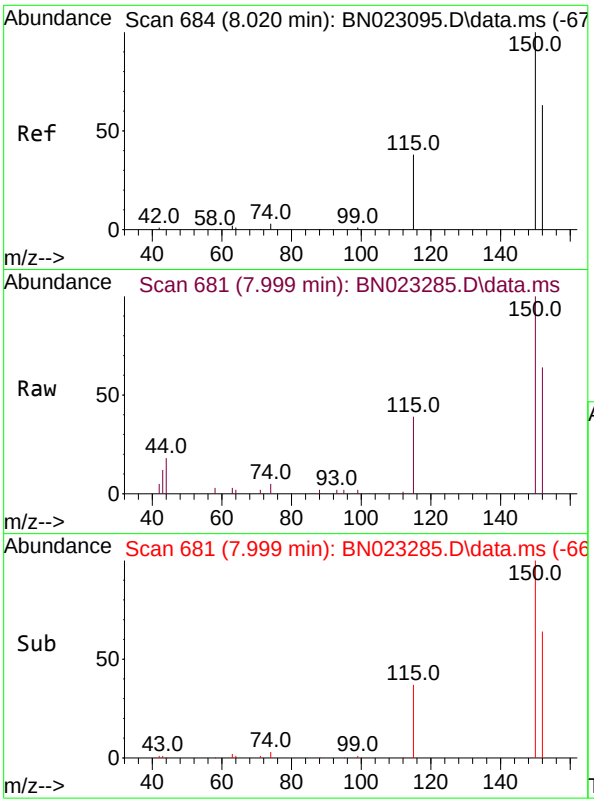
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023285.D
Acq On : 19 Dec 2022 14:30
Operator : CG/JU
Sample : N6070-05
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422

Quant Time: Dec 19 15:45:34 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration



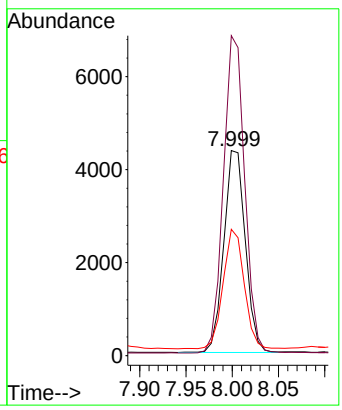


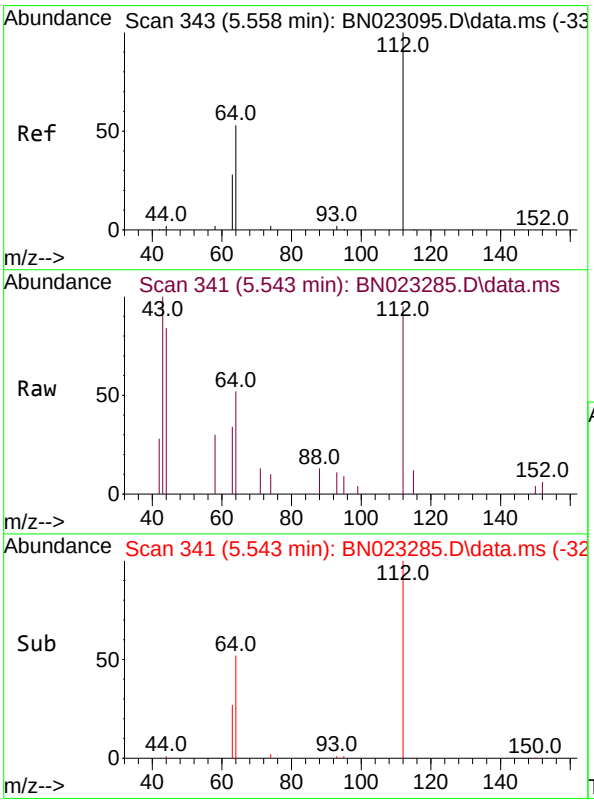
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.999 min Scan# 68
Delta R.T. -0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422

Tgt Ion:152 Resp: 7020

Ion	Ratio	Lower	Upper
152	100		
150	156.1	125.6	188.4
115	61.6	49.0	73.4

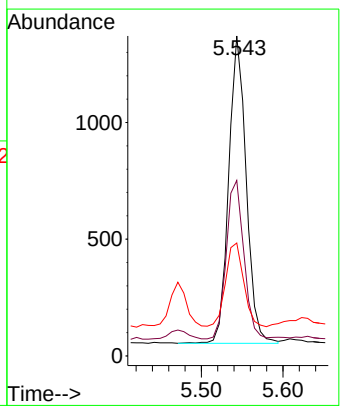


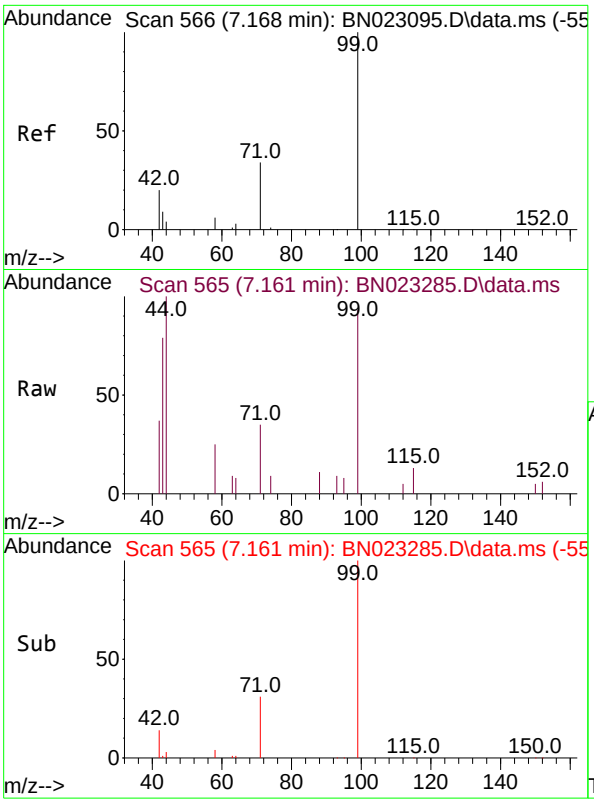


#4
2-Fluorophenol
Concen: 0.149 ng
RT: 5.543 min Scan# 341
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Tgt Ion:112 Resp: 1954

Ion	Ratio	Lower	Upper
112	100		
64	51.9	44.4	66.6
63	28.1	23.7	35.5



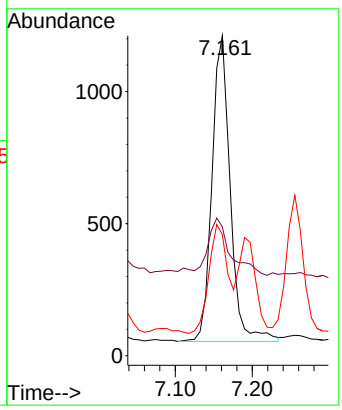


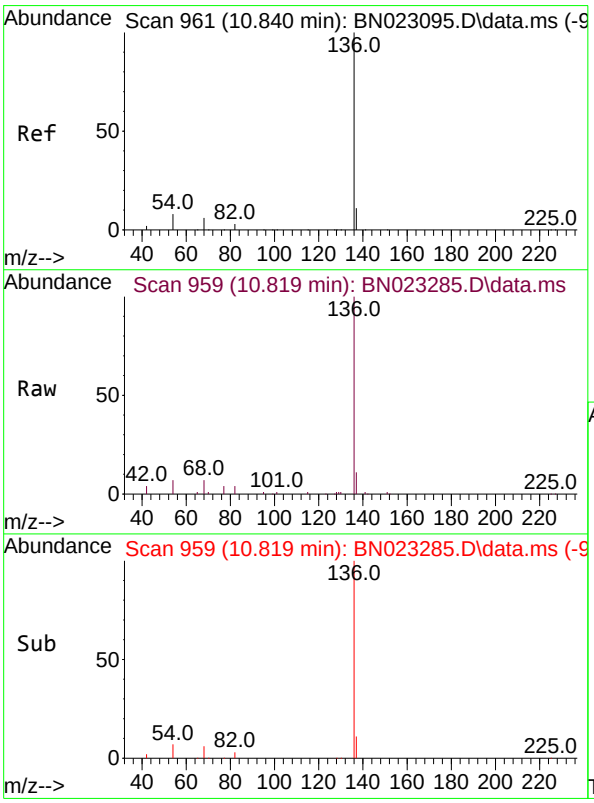
#5
Phenol-d6
Concen: 0.114 ng
RT: 7.161 min Scan# 5
Delta R.T. 0.007 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422

Tgt Ion: 99 Resp: 1902

Ion	Ratio	Lower	Upper
99	100		
42	25.8	16.3	24.5#
71	37.9	26.5	39.7

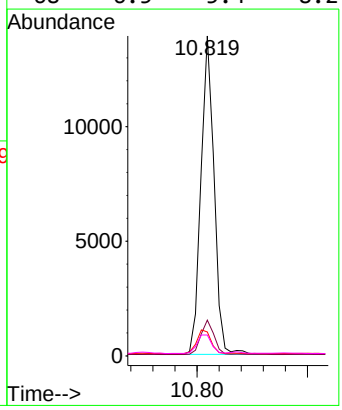


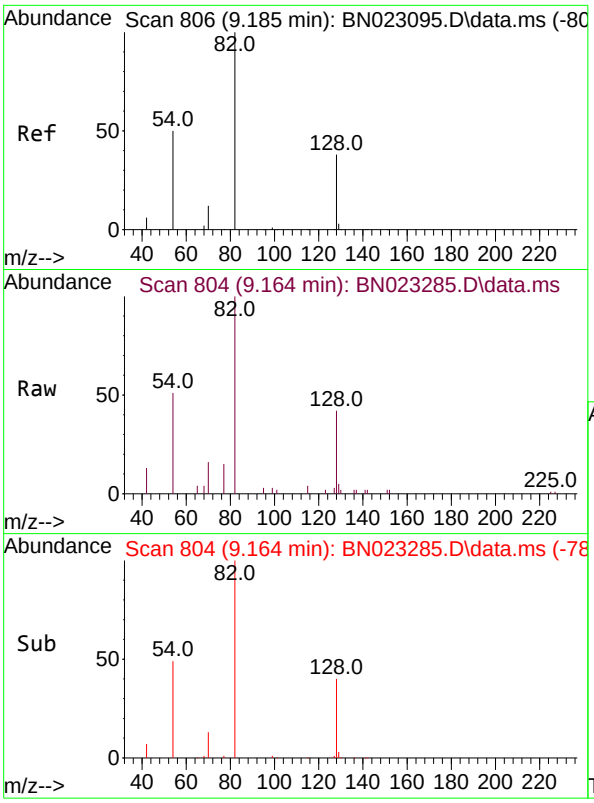


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.819 min Scan# 959
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Tgt Ion:136 Resp: 22963

Ion	Ratio	Lower	Upper
136	100		
137	11.2	9.0	13.4
54	7.5	6.5	9.7
68	6.5	5.4	8.2



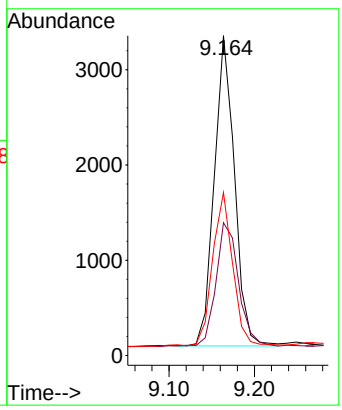


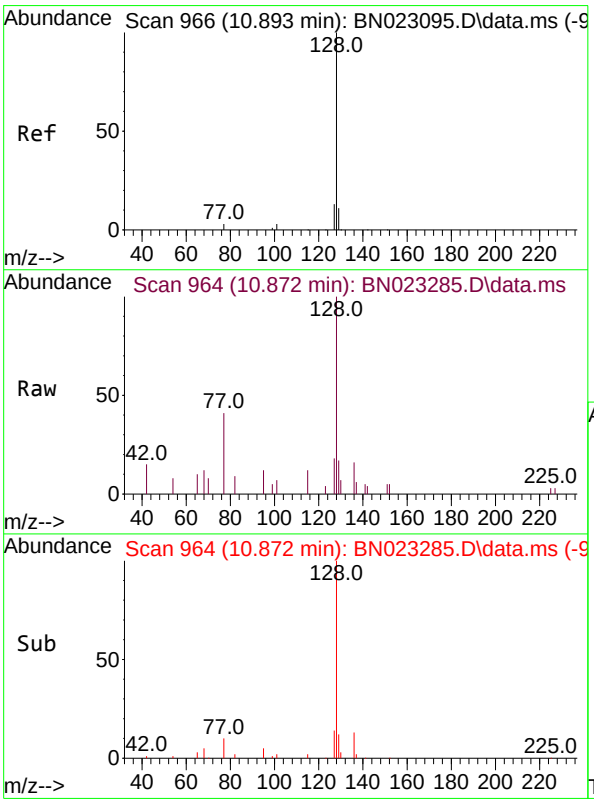
#8
Nitrobenzene-d5
Concen: 0.356 ng
RT: 9.164 min Scan# 80
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422

Tgt Ion: 82 Resp: 5386

Ion	Ratio	Lower	Upper
82	100		
128	41.5	31.4	47.2
54	51.0	41.0	61.4

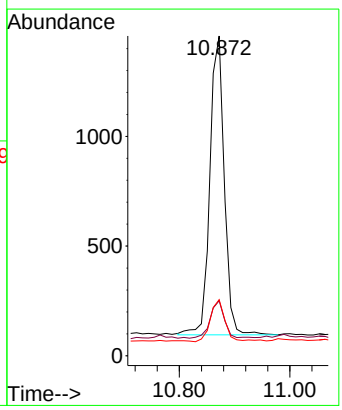


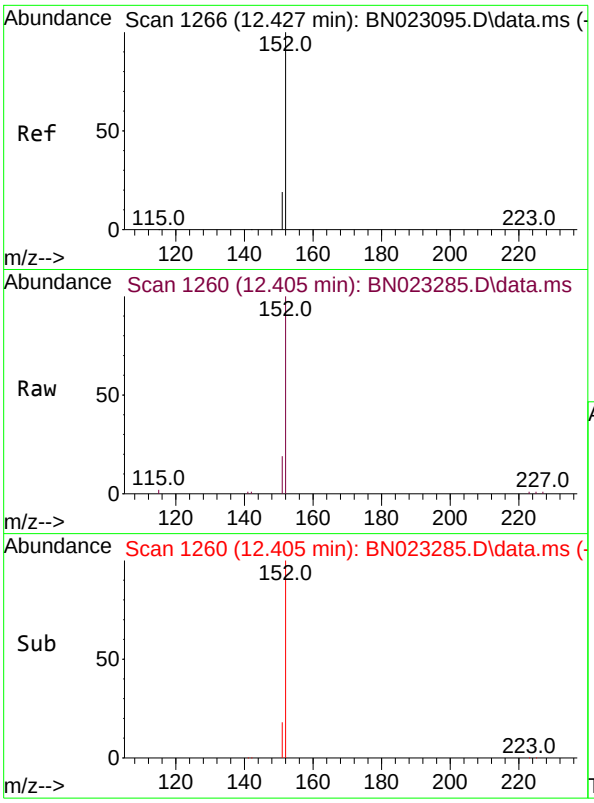


#9
Naphthalene
Concen: 0.042 ng
RT: 10.872 min Scan# 964
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Tgt Ion:128 Resp: 2464

Ion	Ratio	Lower	Upper
128	100		
129	17.2	9.0	13.6#
127	17.6	10.5	15.7#



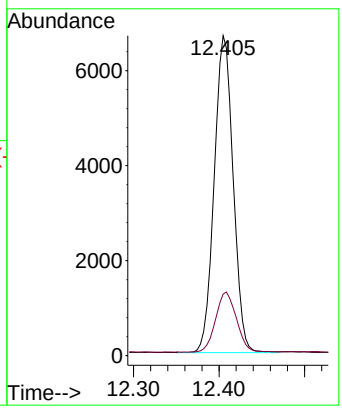


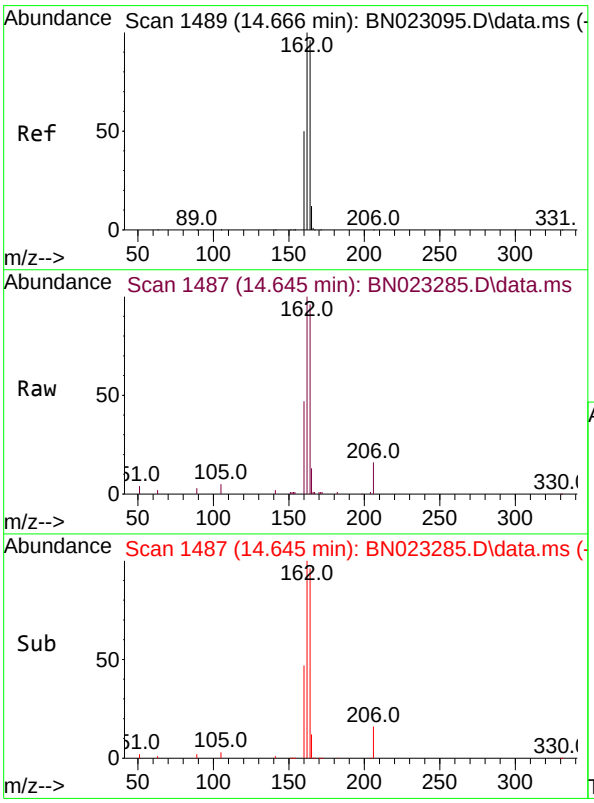
#11
2-Methylnaphthalene-d10
Concen: 0.264 ng
RT: 12.405 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422

Tgt Ion:152 Resp: 10278

Ion	Ratio	Lower	Upper
152	100		
151	20.9	15.1	22.7

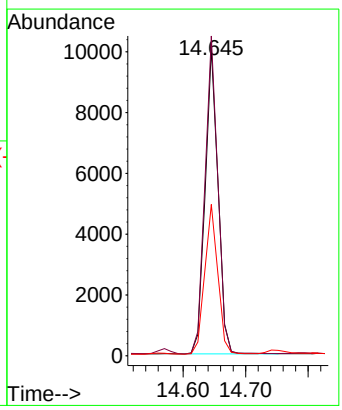


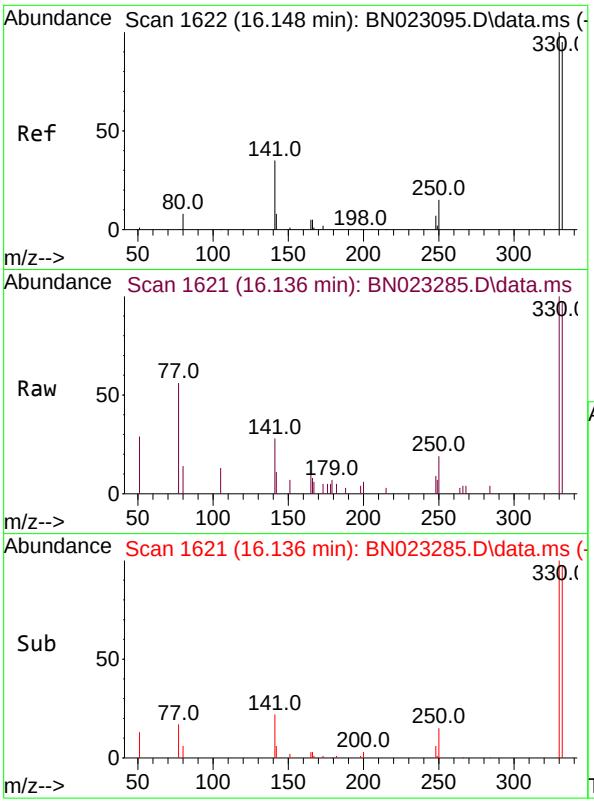


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.645 min Scan# 1487
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Tgt Ion:164 Resp: 14454

Ion	Ratio	Lower	Upper
164	100		
162	104.0	83.4	125.0
160	49.2	41.8	62.8



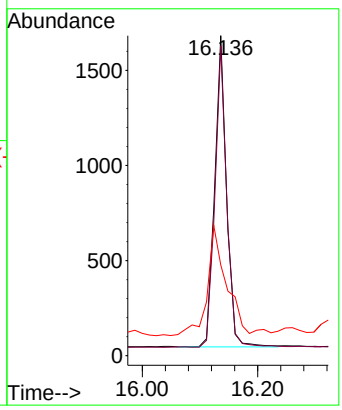


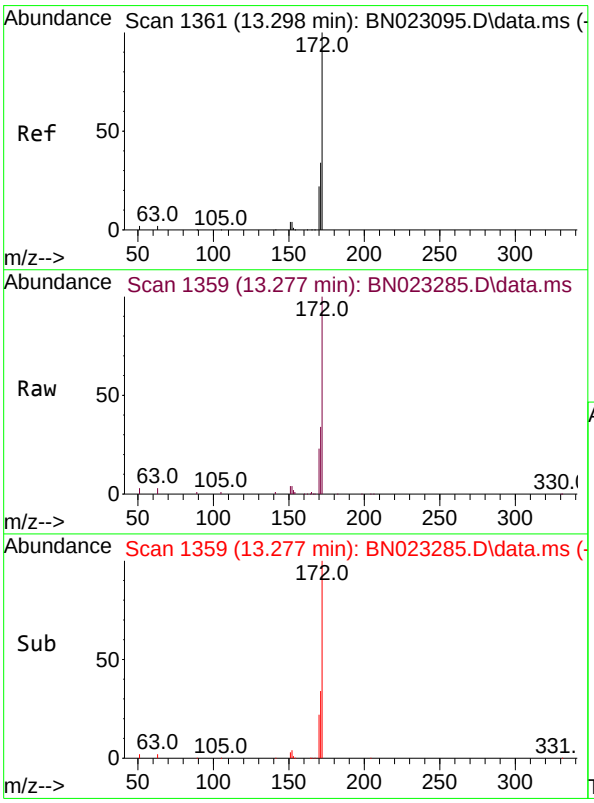
#14
2,4,6-Tribromophenol
Concen: 0.448 ng
RT: 16.136 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422

Tgt Ion:330 Resp: 2348

Ion	Ratio	Lower	Upper
330	100		
332	96.0	77.3	115.9
141	55.0	33.5	50.3#

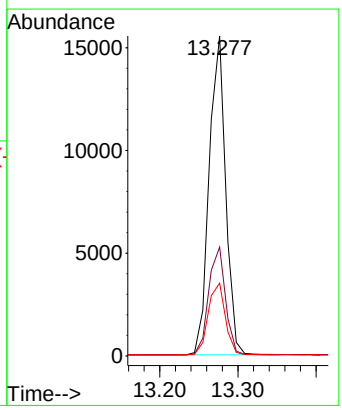


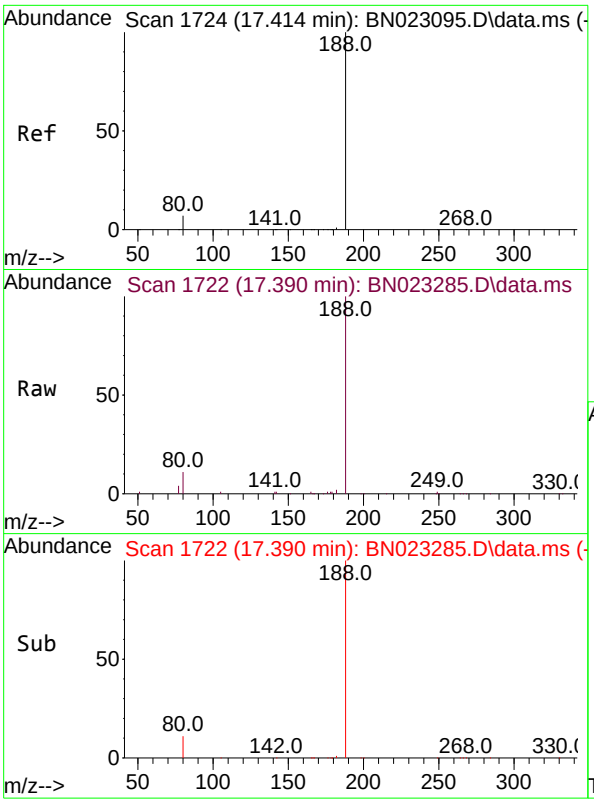


#15
2-Fluorobiphenyl
Concen: 0.395 ng
RT: 13.277 min Scan# 1359
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Tgt Ion:172 Resp: 22823

Ion	Ratio	Lower	Upper
172	100		
171	34.0	27.4	41.0
170	22.7	17.9	26.9



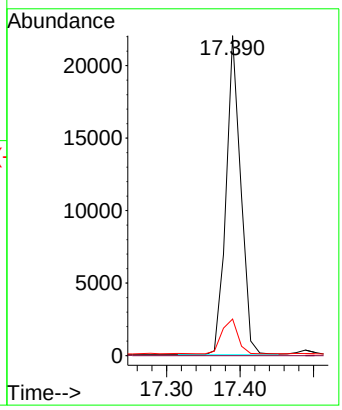


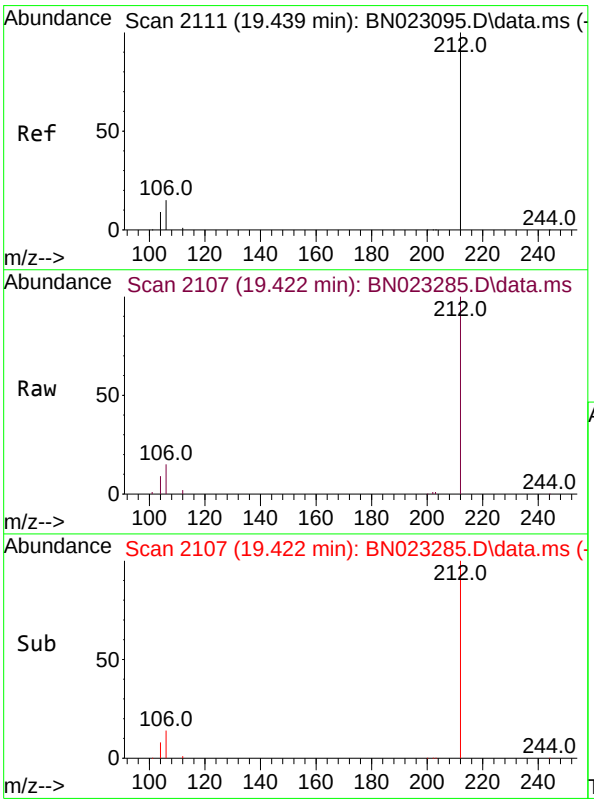
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.390 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422

Tgt Ion:188 Resp: 30794

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.4	6.1	9.1#

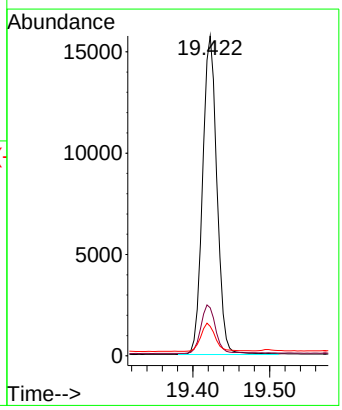


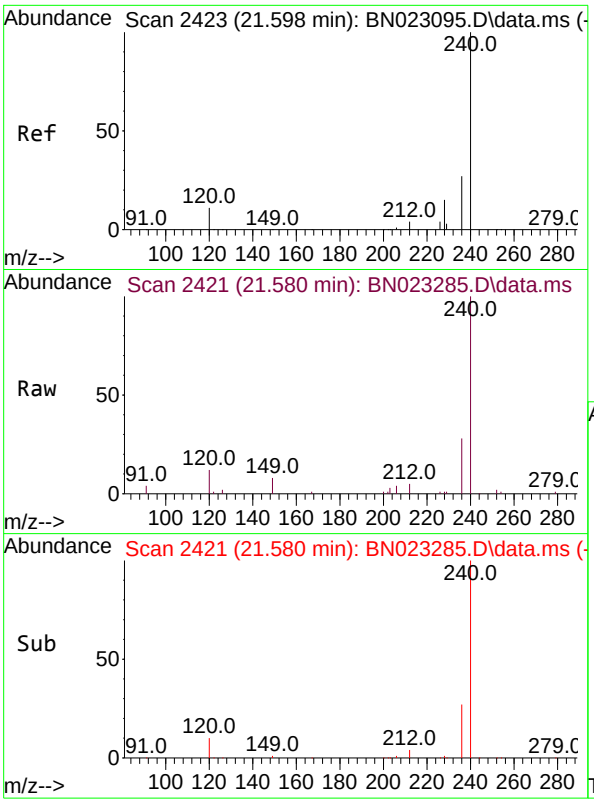


#27
Fluoranthene-d10
Concen: 0.282 ng
RT: 19.422 min Scan# 2107
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Tgt Ion:212 Resp: 20341

Ion	Ratio	Lower	Upper
212	100		
106	16.0	13.0	19.4
104	8.8	7.5	11.3



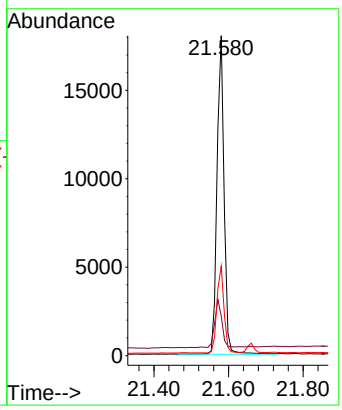


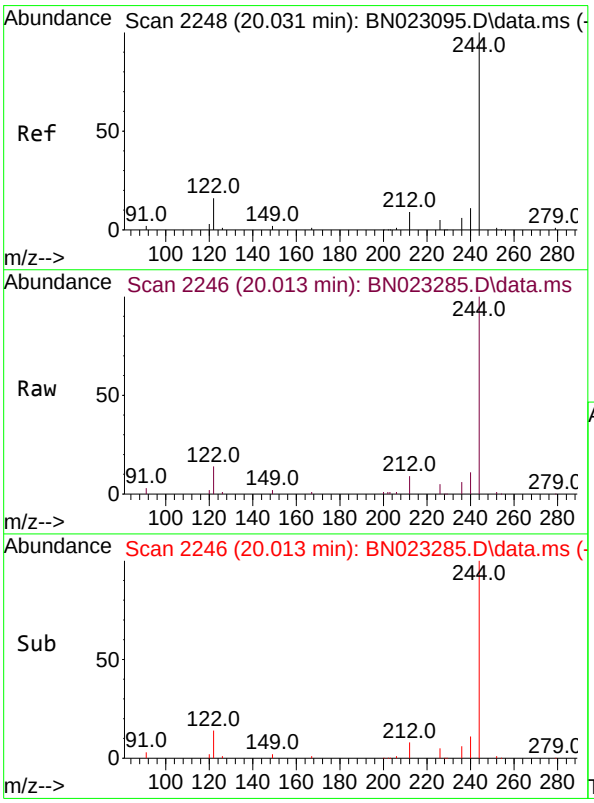
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.580 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422

Tgt Ion:240 Resp: 23636

Ion	Ratio	Lower	Upper
240	100		
120	12.3	10.1	15.1
236	28.0	22.2	33.4

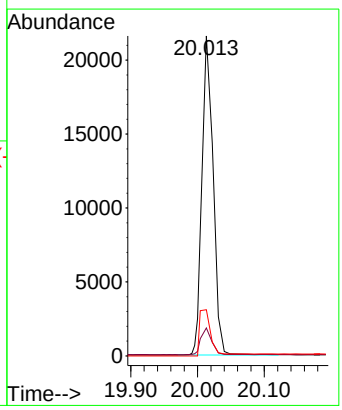


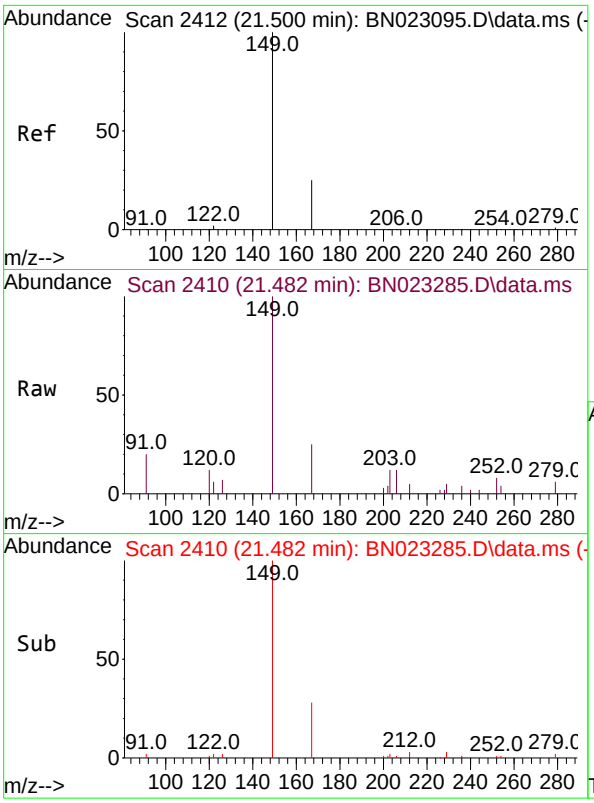


#31
Terphenyl-d14
Concen: 0.569 ng
RT: 20.013 min Scan# 2246
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Tgt Ion:244 Resp: 21854

Ion	Ratio	Lower	Upper
244	100		
212	8.7	7.6	11.4
122	14.4	12.6	18.8



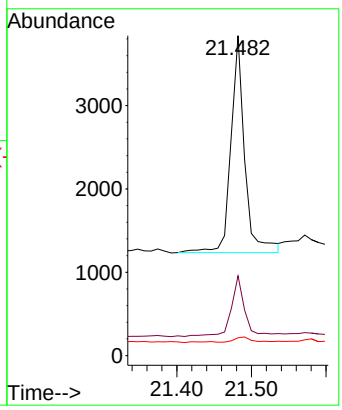


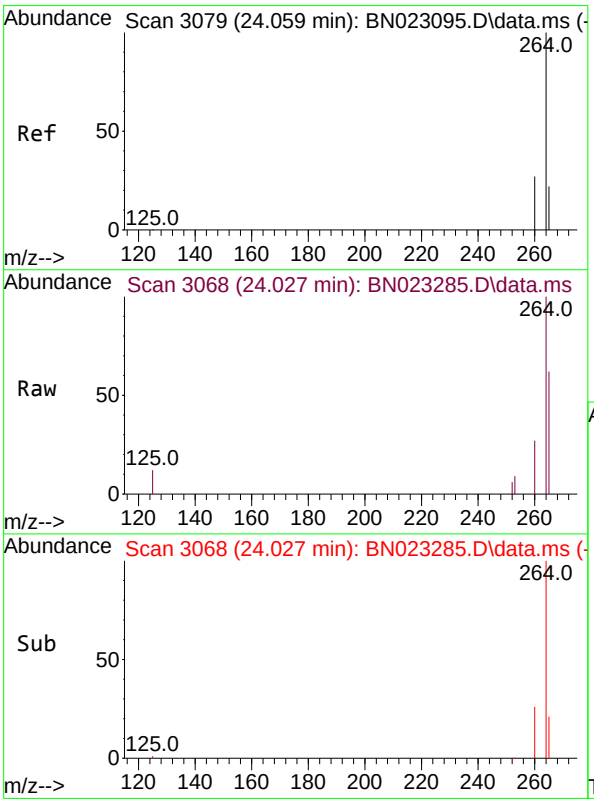
#34
Bis(2-ethylhexyl)phthalate
Concen: 0.104 ng
RT: 21.482 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422

Tgt Ion:149 Resp: 3364

Ion	Ratio	Lower	Upper
149	100		
167	28.2	20.2	30.2
279	3.1	2.3	3.5

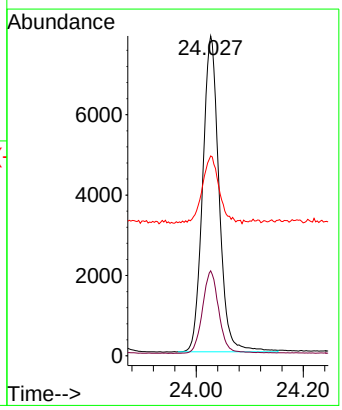




#35
Perylene-d12
Concen: 0.400 ng
RT: 24.027 min Scan# 3068
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Tgt Ion:264 Resp: 16694

Ion	Ratio	Lower	Upper
264	100		
260	26.6	21.7	32.5
265	62.5	43.2	64.8



CHEMTECH

CALIBRATION SUMMARY

Response Factor Report BNA_N

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN120822.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Fri Dec 09 07:44:40 2022
Response Via : Initial Calibration

Calibration Files
0.1 =BN023093.D 0.2 =BN023094.D 0.4 =BN023095.D 0.8 =BN023096.D 1.6 =BN023097.D 3.2 =BN023098.D 5.0 =BN023099.D

		Compound	0.1	0.2	0.4	0.8	1.6	3.2	5.0	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------ISTD----------								
2)		1,4-Dioxane	0.393	0.400	0.405	0.382	0.418	0.392	0.373	0.395	3.74
3)		n-Nitrosodimet...	0.318	0.315	0.373	0.374	0.456	0.446	0.433	0.388	15.15
4)	S	2-Fluorophenol	0.767	0.723	0.748	0.680	0.776	0.767	0.753	0.745	4.51
5)	S	Phenol-d6	0.921	0.885	0.915	0.858	1.005	1.020	1.025	0.947	7.25
6)		bis(2-Chloroet...	1.107	1.088	1.102	1.015	1.122	1.071	1.026	1.076	3.82
7)	I	Naphthalene-d8	----------ISTD----------								
8)	S	Nitrobenzene-d5	0.247	0.244	0.248	0.251	0.278	0.285	0.291	0.264	7.65
9)		Naphthalene	0.987	0.990	0.998	1.000	1.056	1.059	1.041	1.019	3.14
10)		Hexachlorobuta...	0.190	0.192	0.195	0.193	0.201	0.197	0.190	0.194	1.99
11)	SURR	2-Methylnaphth...	0.585	0.655	0.642	0.662	0.713	0.748	0.743	0.678	8.72
12)		2-Methylnaphth...	0.135	0.135	0.147	0.154	0.187			0.152	14.17
13)	I	Acenaphthene-d10	----------ISTD----------								
14)	S	2,4,6-Tribromo...	0.120	0.122	0.132	0.133	0.156	0.172	0.182	0.145	17.17
15)	S	2-Fluorobiphenyl	1.569	1.574	1.607	1.555	1.668	1.615	1.598	1.598	2.36
16)		Acenaphthylene	1.353	1.379	1.474	1.517	1.773	1.868	1.916	1.611	14.63
17)		Acenaphthene	1.102	1.106	1.151	1.145	1.252	1.263	1.269	1.184	6.31
18)		Fluorene	1.177	1.221	1.293	1.285	1.427	1.434	1.439	1.325	8.19
19)	I	Phenanthrene-d10	----------ISTD----------								
20)		4,6-Dinitro-2-...		0.040	0.046	0.048	0.061	0.071	0.077	0.057	25.87
21)		4-Bromophenyl-...	0.196	0.197	0.204	0.204	0.229	0.231	0.233	0.213	7.78
22)		Hexachlorobenzene	0.256	0.267	0.280	0.276	0.296	0.293	0.288	0.280	5.23
23)		Atrazine	0.125	0.127	0.134	0.138	0.163	0.180	0.187	0.150	17.12
24)		Pentachlorophenol	0.093	0.078	0.080	0.084	0.102	0.116	0.126	0.097	19.10
25)		Phenanthrene	1.143	1.111	1.147	1.148	1.255	1.275	1.265	1.192	5.85
26)		Anthracene	0.816	0.824	0.859	0.893	1.037	1.098	1.122	0.950	13.91
27)	SURR	Fluoranthene-d10	0.825	0.854	0.882	0.896	1.002	1.039	1.056	0.936	10.03
28)		Fluoranthene	1.088	1.131	1.201	1.251	1.411	1.437	1.415	1.276	11.35
29)	I	Chrysene-d12	----------ISTD----------								
30)		Pyrene	1.375	1.424	1.448	1.426	1.527	1.527	1.525	1.464	4.21
31)	S	Terphenyl-d14	0.612	0.577	0.684	0.650	0.690	0.663	0.671	0.649	6.32
32)		Benzo(a)anthra...	1.163	1.164	1.199	1.229	1.381	1.422	1.462	1.289	9.99
33)		Chrysene	1.436	1.392	1.442	1.434	1.529	1.463	1.447	1.449	2.87
34)		Bis(2-ethylhex...	0.505	0.506	0.489	0.485	0.539	0.591	0.700	0.545	14.22
35)	I	Perylene-d12	----------ISTD----------								

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN120822.M

36)		Indeno(1,2,3-c...	1.483	1.452	1.693	1.753	2.038	2.051	2.079	1.793	14.98
37)		Benzo(b)fluora...	1.359	1.402	1.594	1.651	1.849	1.874	1.879	1.658	13.29
38)		Benzo(k)fluora...	1.286	1.378	1.611	1.675	1.933	1.955	1.947	1.684	16.49
39)	C	Benzo(a)pyrene	1.135	1.009	1.111	1.151	1.375	1.444	1.482	1.244	14.93
40)		Dibenzo(a,h)an...	1.148	1.144	1.370	1.422	1.663	1.655	1.672	1.439	16.24
41)		Benzo(g,h,i)pe...	1.219	1.295	1.512	1.538	1.731	1.716	1.748	1.537	13.90

(#) = Out of Range

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023093.D
Acq On : 08 Dec 2022 14:00
Operator : CG/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Quant Time: Dec 09 07:27:34 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	8.020	152	9714	0.400	ng		0.00
7) Naphthalene-d8	10.839	136	29087	0.400	ng		# 0.00
13) Acenaphthene-d10	14.666	164	16291	0.400	ng		0.00
19) Phenanthrene-d10	17.414	188	36859	0.400	ng		0.00
29) Chrysene-d12	21.593	240	29376	0.400	ng		# 0.00
35) Perylene-d12	24.060	264	26107	0.400	ng		# 0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.550	112	1863	0.083	ng		0.00
5) Phenol-d6	7.168	99	2237	0.079	ng		0.00
8) Nitrobenzene-d5	9.174	82	1799	0.082	ng		-0.01
11) 2-Methylnaphthalene-d10	12.423	152	4254	0.077	ng		0.00
14) 2,4,6-Tribromophenol	16.148	330	489	0.071	ng		0.00
15) 2-Fluorobiphenyl	13.287	172	6390	0.088	ng		-0.01
27) Fluoranthene-d10	19.439	212	7606	0.075	ng		0.00
31) Terphenyl-d14	20.035	244	4494	0.081	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.398	88	955	0.079	ng		98
3) n-Nitrosodimethylamine	3.745	42	772	0.066	ng		96
6) bis(2-Chloroethyl)ether	7.435	93	2688	0.086	ng		98
9) Naphthalene	10.882	128	7179	0.083	ng		97
10) Hexachlorobutadiene	11.181	225	1383	0.085	ng	#	99
12) 2-Methylnaphthalene	12.113	142	983	0.074	ng	#	77
16) Acenaphthylene	14.388	152	5509	0.072	ng		100
17) Acenaphthene	14.730	154	4487	0.080	ng		99
18) Fluorene	15.703	166	4794	0.077	ng		99
21) 4-Bromophenyl-phenylether	16.595	248	1805	0.081	ng		99
22) Hexachlorobenzene	16.719	284	2356	0.082	ng		98
23) Atrazine	16.868	200	1151	0.071	ng	#	96
24) Pentachlorophenol	17.054	266	861	0.102	ng		98
25) Phenanthrene	17.451	178	10530	0.085	ng		99
26) Anthracene	17.538	178	7515	0.075	ng		100
28) Fluoranthene	19.468	202	10024	0.074	ng		100
30) Pyrene	19.831	202	10098	0.082	ng		100
32) Benzo(a)anthracene	21.584	228	8542	0.079	ng		99
33) Chrysene	21.638	228	10544	0.087	ng		99
34) Bis(2-ethylhexyl)phtha...	21.504	149	3706	0.079	ng		98
36) Indeno(1,2,3-cd)pyrene	26.630	276	9677	0.070	ng	#	82
37) Benzo(b)fluoranthene	23.306	252	8869	0.074	ng	#	85
38) Benzo(k)fluoranthene	23.355	252	8393	0.069	ng	#	87
39) Benzo(a)pyrene	23.949	252	7407	0.077	ng	#	77
40) Dibenzo(a,h)anthracene	26.656	278	7491	0.068	ng		94
41) Benzo(g,h,i)perylene	27.425	276	7959	0.071	ng		96

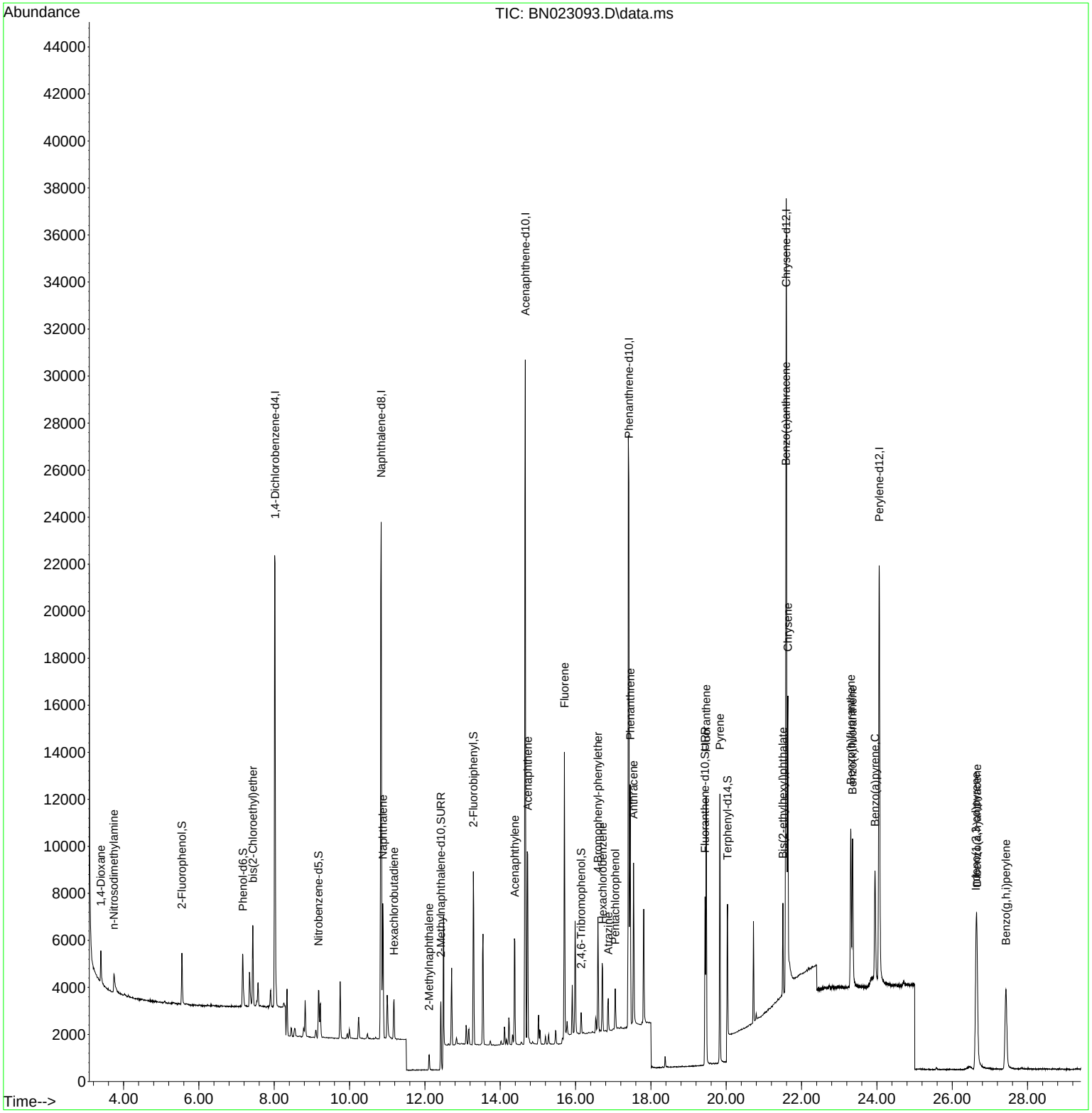
(#) = qualifier out of range (m) = manual integration (+) = signals summed

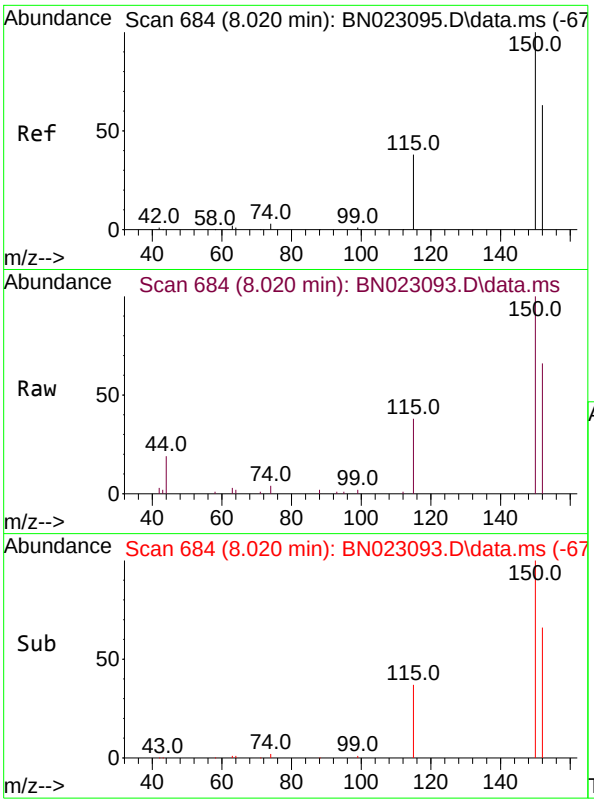
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023093.D
Acq On : 08 Dec 2022 14:00
Operator : CG/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Quant Time: Dec 09 07:27:34 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration



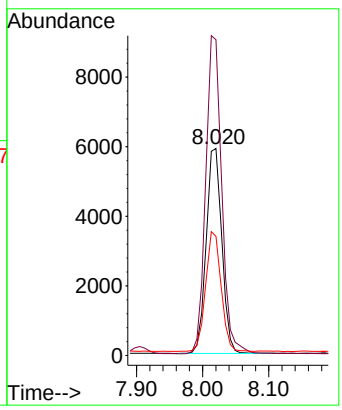


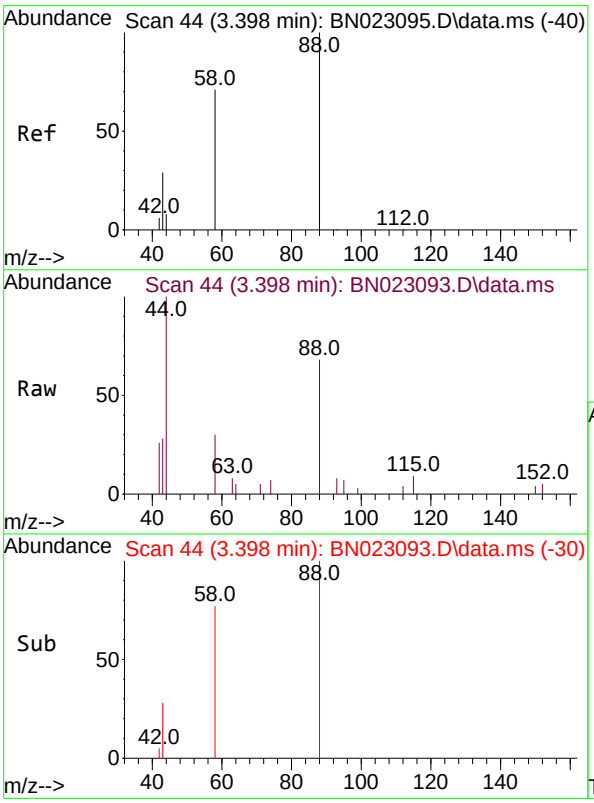
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 8.020 min Scan# 68
Delta R.T. 0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:152 Resp: 9714

Ion	Ratio	Lower	Upper
152	100		
150	152.5	125.6	188.4
115	57.6	49.0	73.4

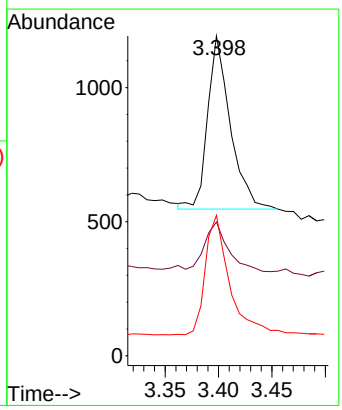


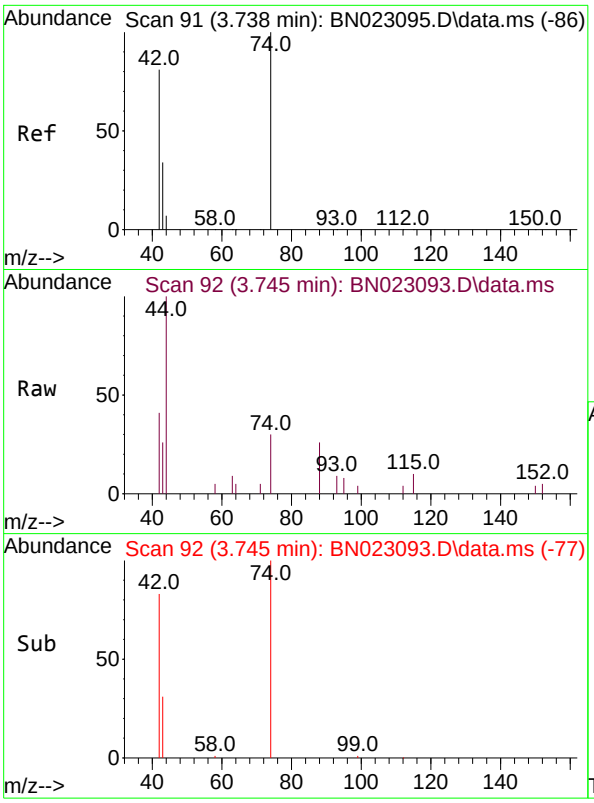


#2
1,4-Dioxane
Concen: 0.079 ng
RT: 3.398 min Scan# 44
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion: 88 Resp: 955

Ion	Ratio	Lower	Upper
88	100		
43	31.8	23.3	34.9
58	72.9	58.0	87.0



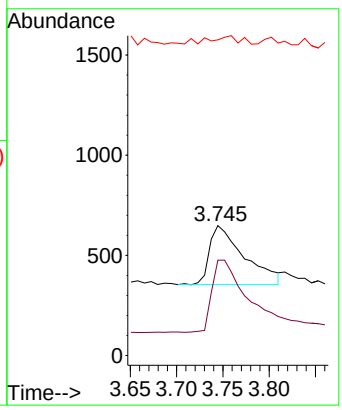


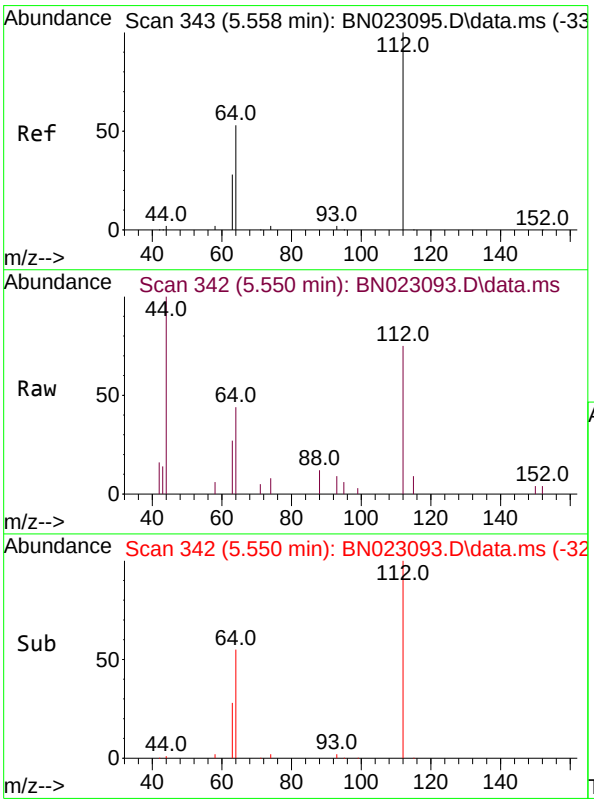
#3
n-Nitrosodimethylamine
Concen: 0.066 ng
RT: 3.745 min Scan# 9
Delta R.T. 0.007 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion: 42 Resp: 772

Ion	Ratio	Lower	Upper
42	100		
74	124.9	95.8	143.6
44	10.5	8.4	12.6

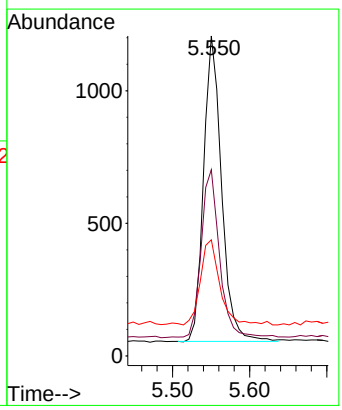


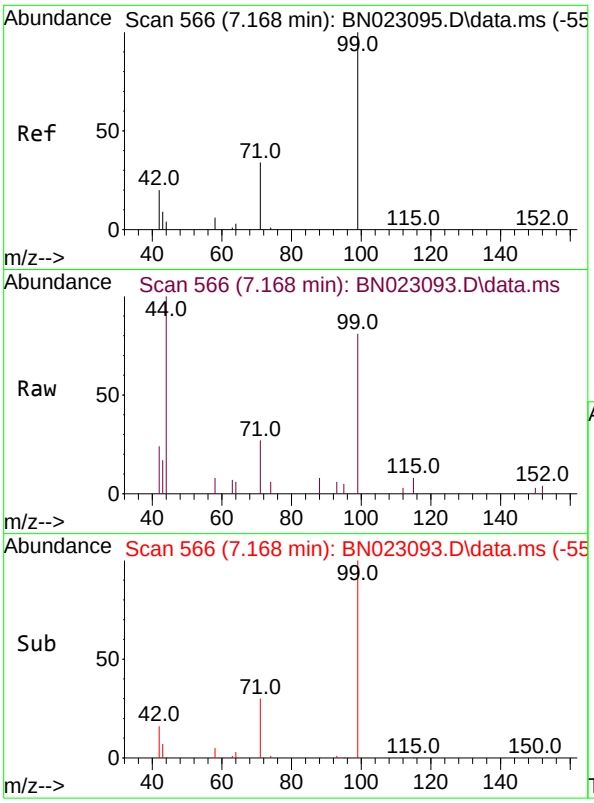


#4
2-Fluorophenol
Concen: 0.083 ng
RT: 5.550 min Scan# 342
Delta R.T. -0.007 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:112 Resp: 1863

Ion	Ratio	Lower	Upper
112	100		
64	56.0	44.4	66.6
63	30.5	23.7	35.5



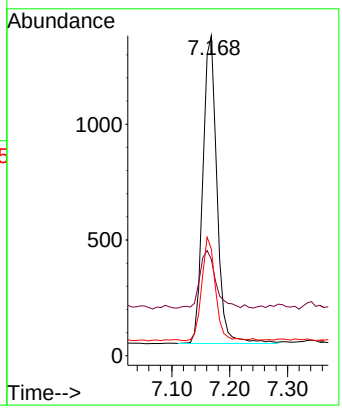


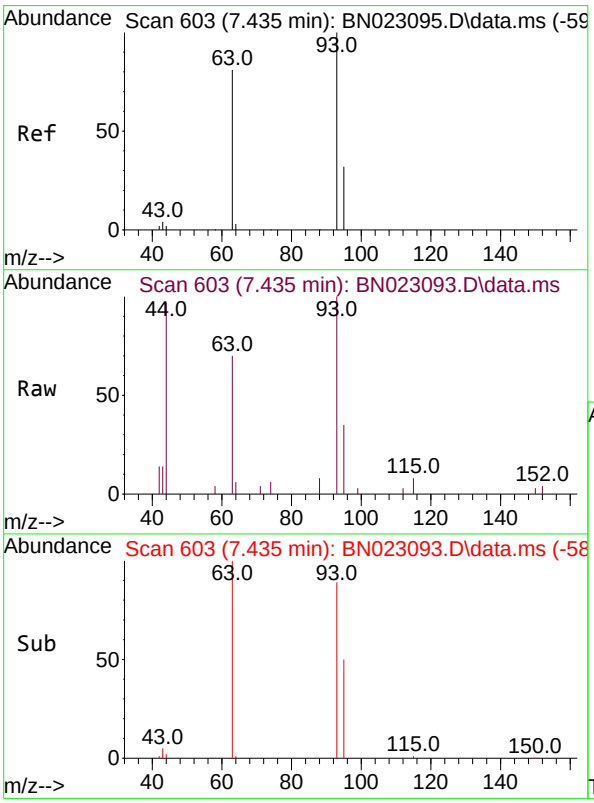
#5
Phenol-d6
Concen: 0.079 ng
RT: 7.168 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion: 99 Resp: 2237

Ion	Ratio	Lower	Upper
99	100		
42	20.8	16.3	24.5
71	32.1	26.5	39.7

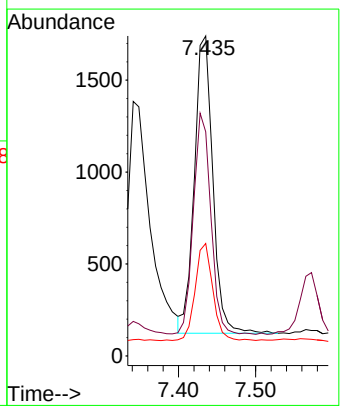


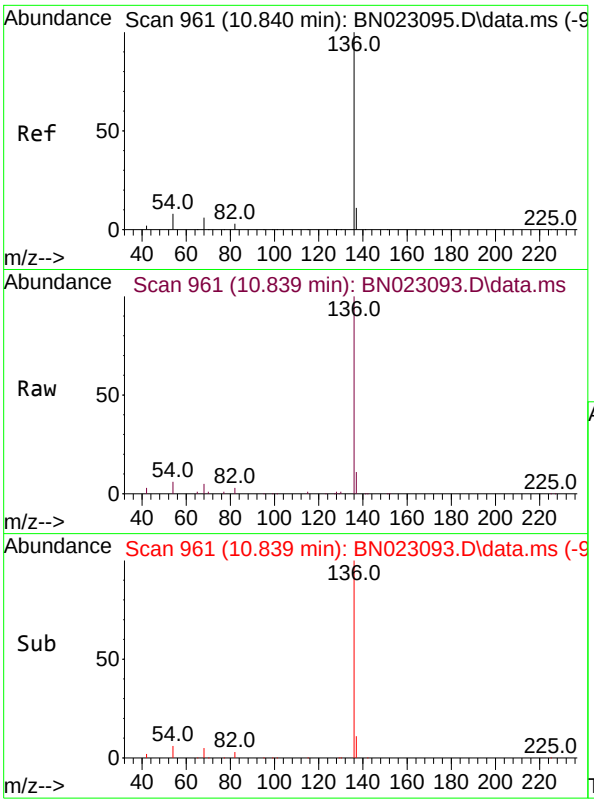


#6
bis(2-Chloroethyl)ether
Concen: 0.086 ng
RT: 7.435 min Scan# 603
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion: 93 Resp: 2688

Ion	Ratio	Lower	Upper
93	100		
63	70.5	58.1	87.1
95	31.3	25.2	37.8



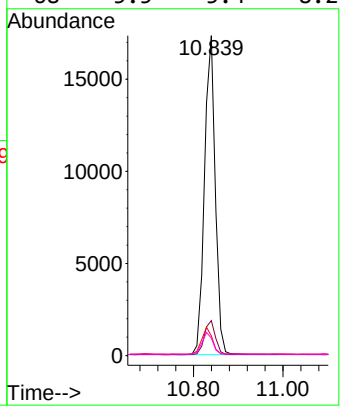


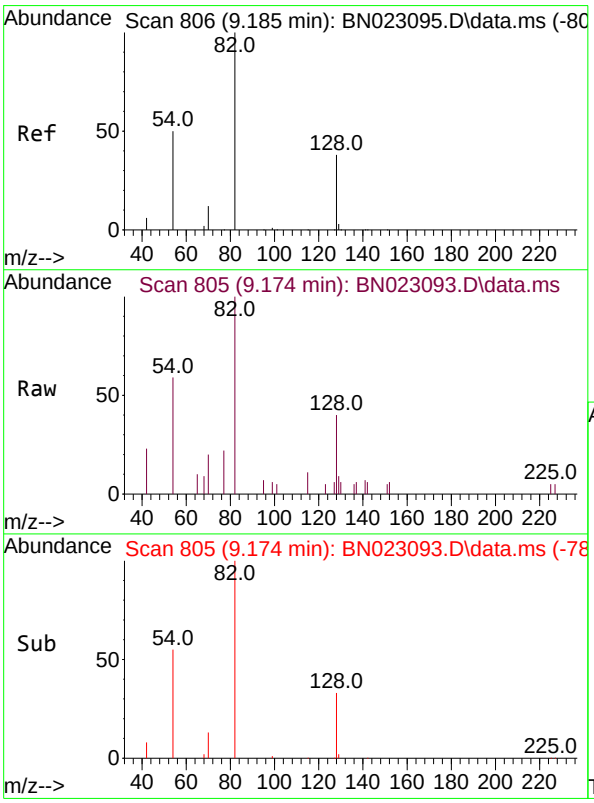
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.839 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:136 Resp: 29087

Ion	Ratio	Lower	Upper
136	100		
137	10.9	9.0	13.4
54	6.2	6.5	9.7#
68	5.5	5.4	8.2

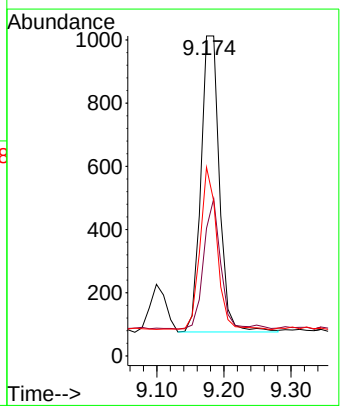


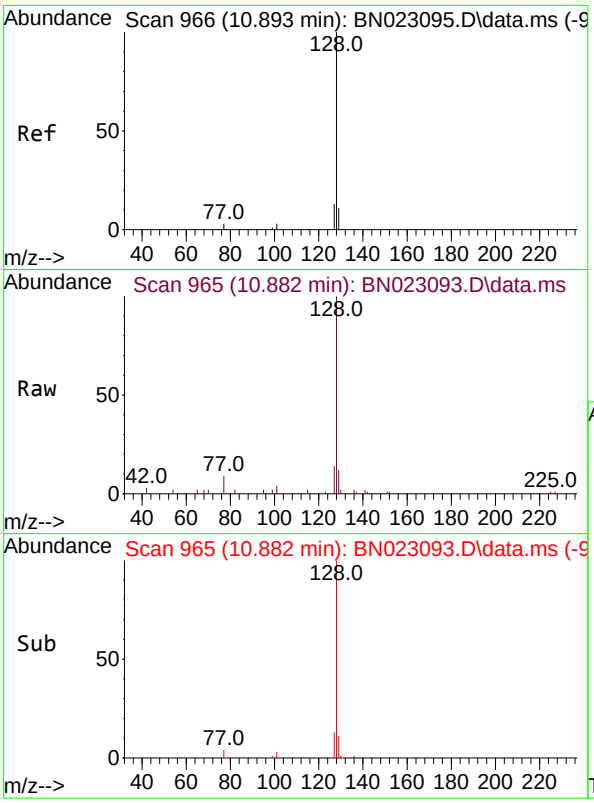


#8
Nitrobenzene-d5
Concen: 0.082 ng
RT: 9.174 min Scan# 805
Delta R.T. -0.011 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion: 82 Resp: 1799

Ion	Ratio	Lower	Upper
82	100		
128	39.9	31.4	47.2
54	58.9	41.0	61.4



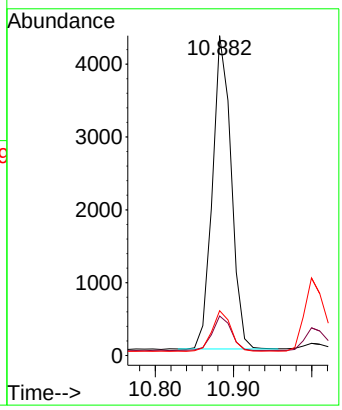


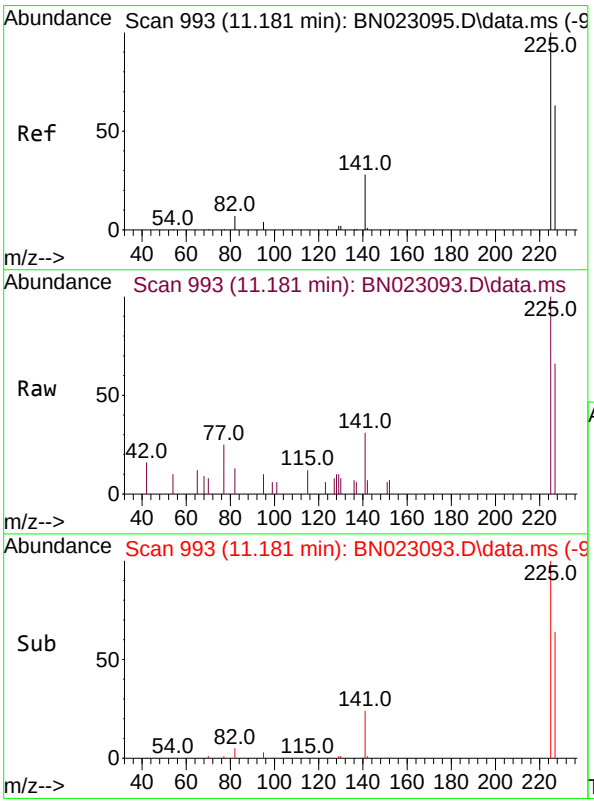
#9
Naphthalene
Concen: 0.083 ng
RT: 10.882 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:128 Resp: 7179

Ion	Ratio	Lower	Upper
128	100		
129	12.4	9.0	13.6
127	14.0	10.5	15.7

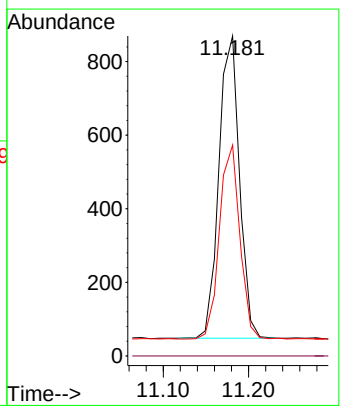


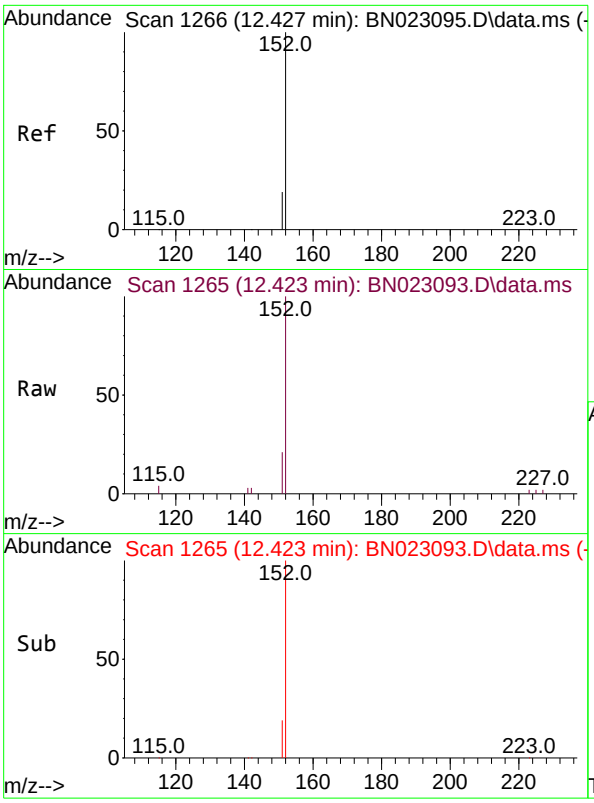


#10
Hexachlorobutadiene
Concen: 0.085 ng
RT: 11.181 min Scan# 993
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:225 Resp: 1383

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.5	51.1	76.7



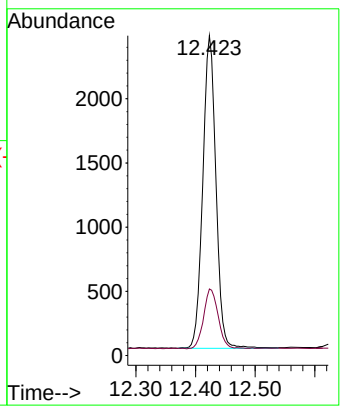


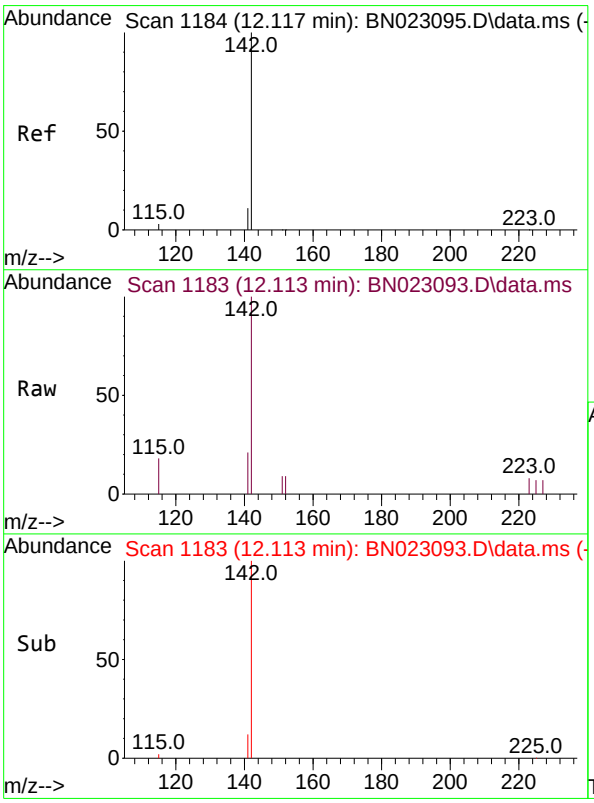
#11
2-Methylnaphthalene-d10
Concen: 0.077 ng
RT: 12.423 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:152 Resp: 4254

Ion	Ratio	Lower	Upper
152	100		
151	18.7	15.1	22.7

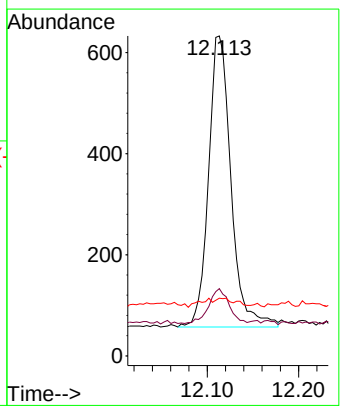


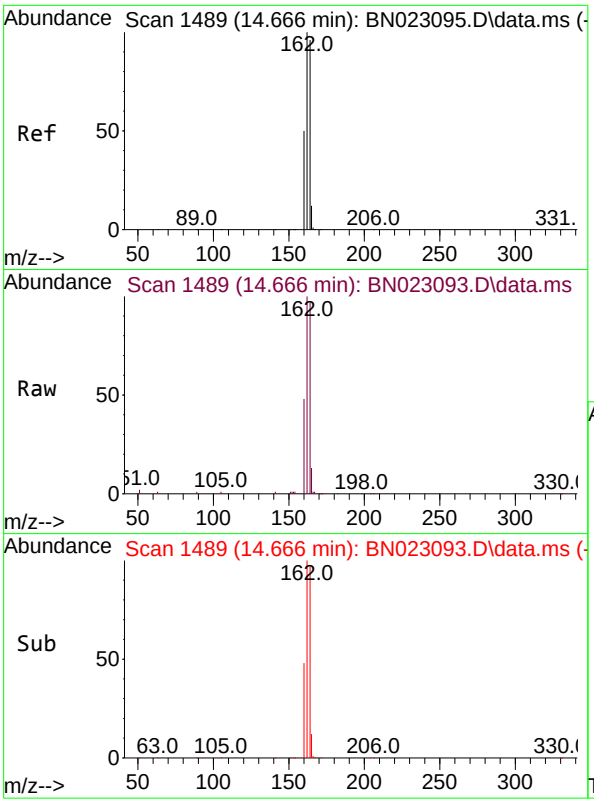


#12
2-Methylnaphthalene
Concen: 0.074 ng
RT: 12.113 min Scan# 1183
Delta R.T. -0.004 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:142 Resp: 983

Ion	Ratio	Lower	Upper
142	100		
141	21.0	10.9	16.3#
115	18.0	5.7	8.5#



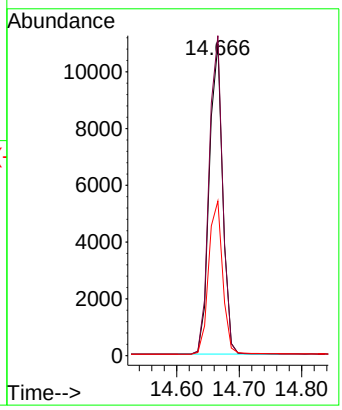


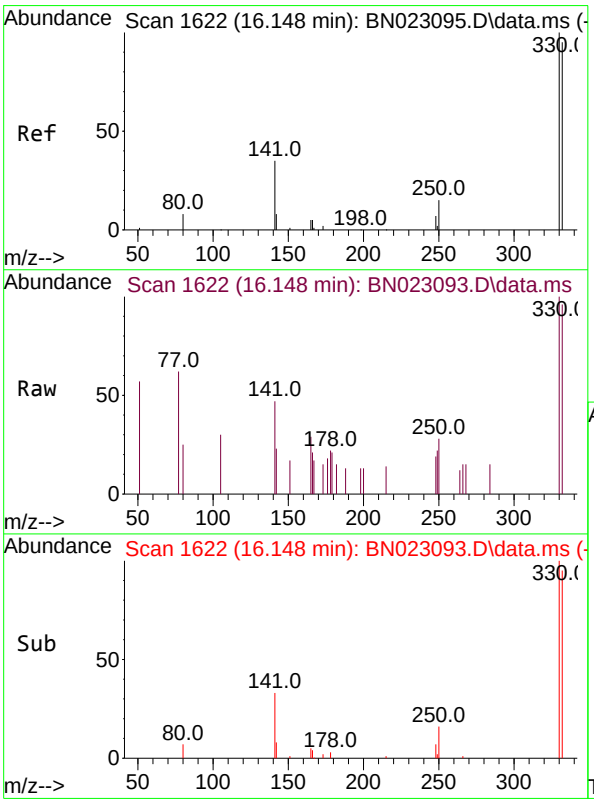
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.666 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:164 Resp: 16291

Ion	Ratio	Lower	Upper
164	100		
162	102.7	83.4	125.0
160	49.6	41.8	62.8

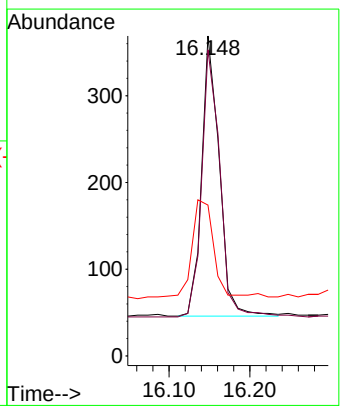


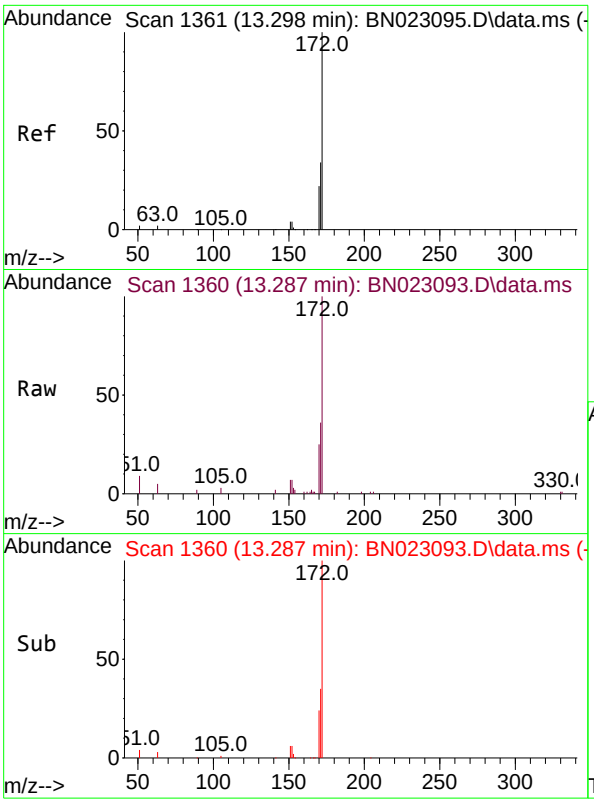


#14
2,4,6-Tribromophenol
Concen: 0.071 ng
RT: 16.148 min Scan# 1622
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:330 Resp: 489

Ion	Ratio	Lower	Upper
330	100		
332	98.4	77.3	115.9
141	40.9	33.5	50.3



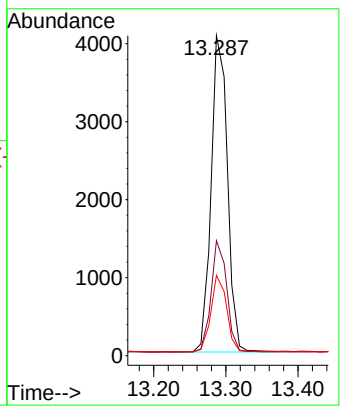


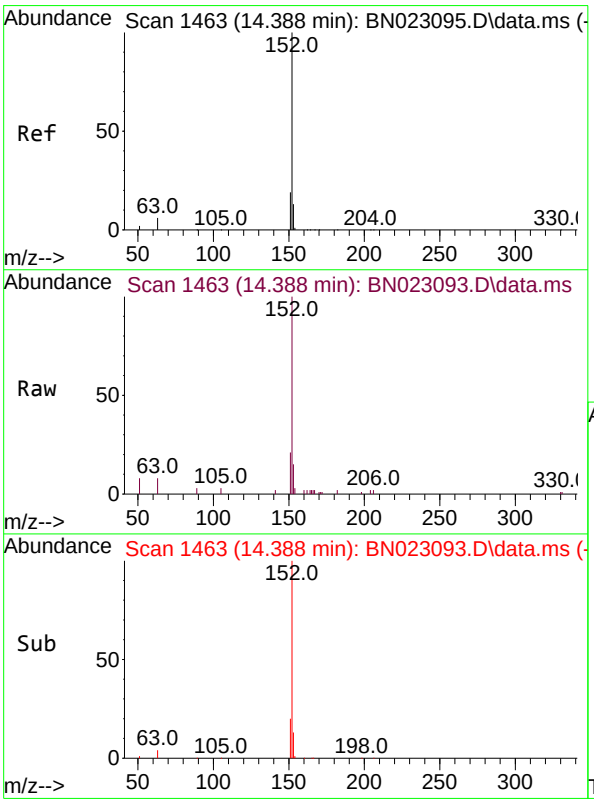
#15
2-Fluorobiphenyl
Concen: 0.088 ng
RT: 13.287 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:172 Resp: 6390

Ion	Ratio	Lower	Upper
172	100		
171	35.9	27.4	41.0
170	25.1	17.9	26.9

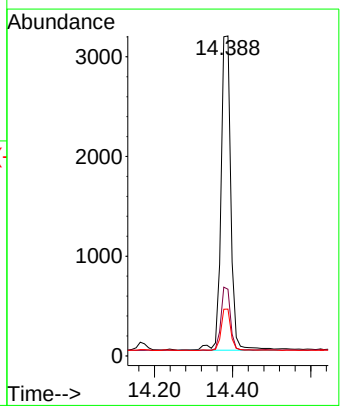


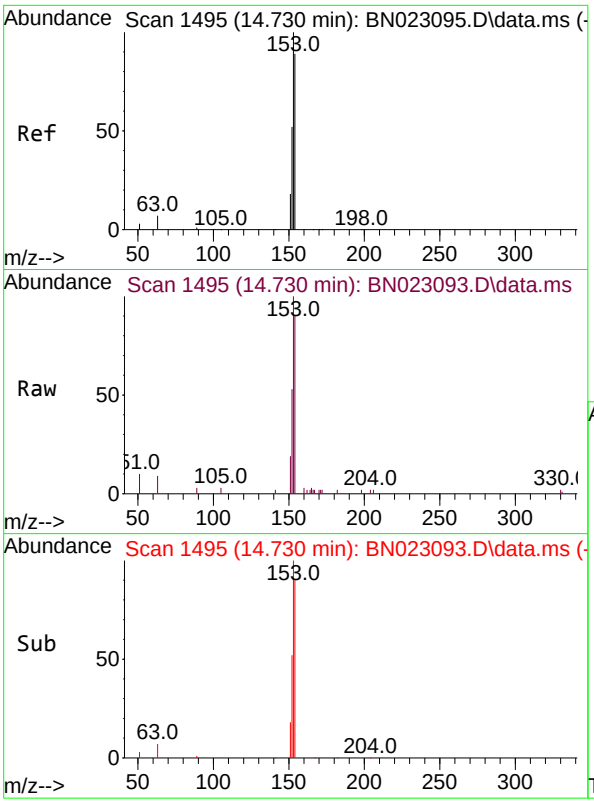


#16
Acenaphthylene
Concen: 0.072 ng
RT: 14.388 min Scan# 1463
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:152 Resp: 5509

Ion	Ratio	Lower	Upper
152	100		
151	19.4	15.4	23.2
153	13.2	10.3	15.5



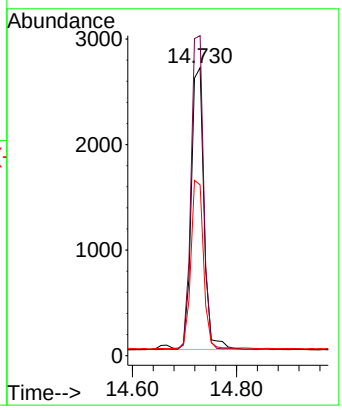


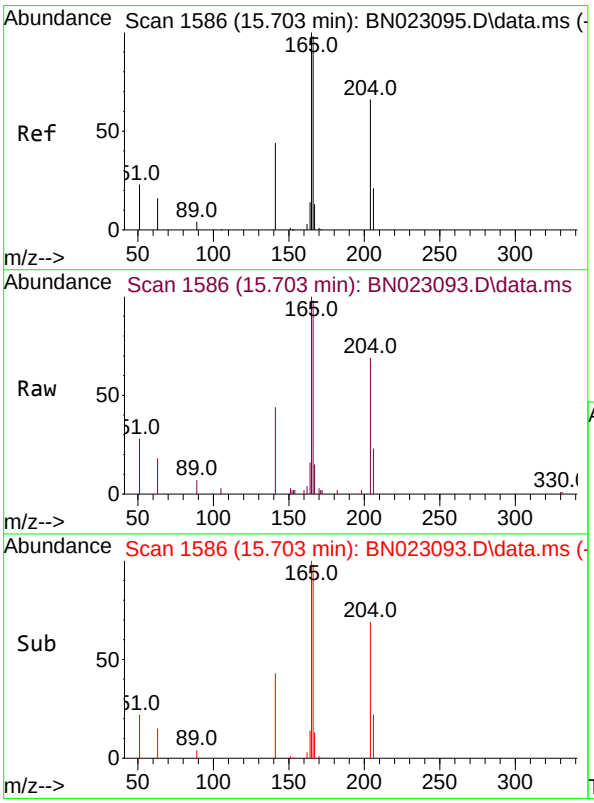
#17
Acenaphthene
Concen: 0.080 ng
RT: 14.730 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:154 Resp: 4487

Ion	Ratio	Lower	Upper
154	100		
153	109.9	88.6	132.8
152	59.5	48.1	72.1

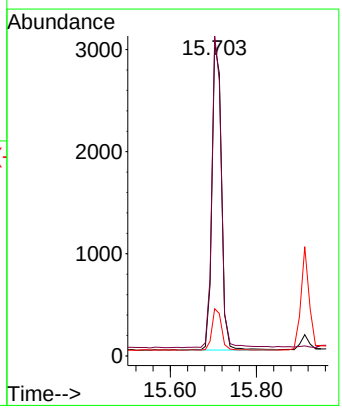


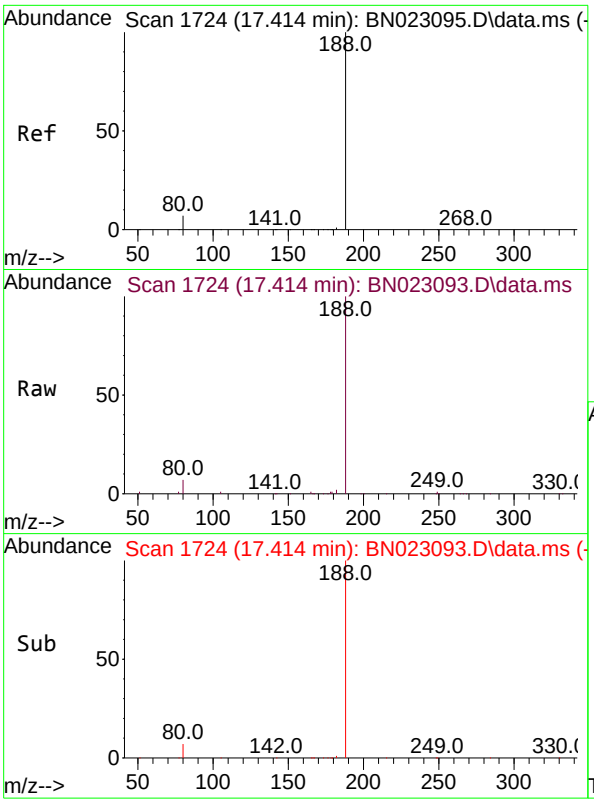


#18
Fluorene
Concen: 0.077 ng
RT: 15.703 min Scan# 1586
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:166 Resp: 4794

Ion	Ratio	Lower	Upper
166	100		
165	100.7	79.8	119.6
167	13.7	10.6	16.0



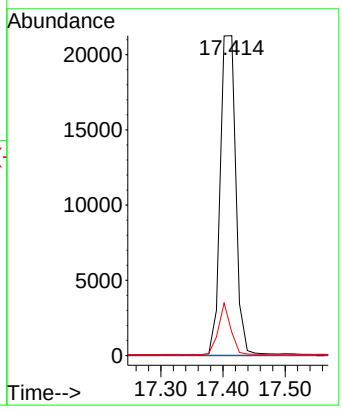


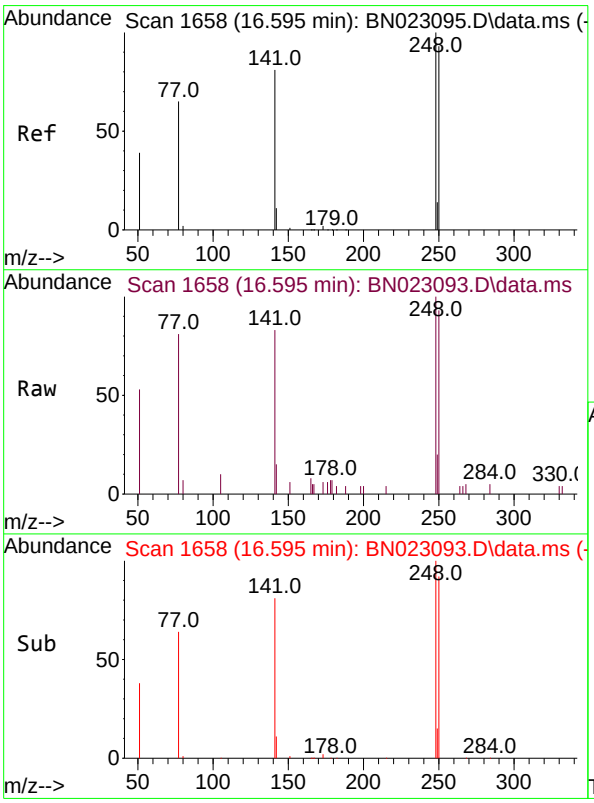
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.414 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:188 Resp: 36859

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	7.3	6.1	9.1

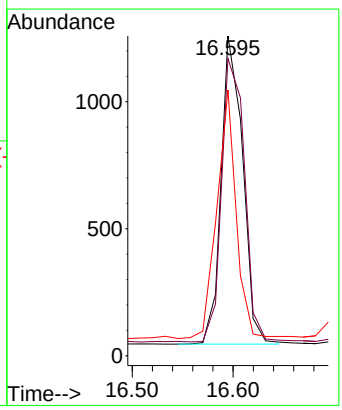


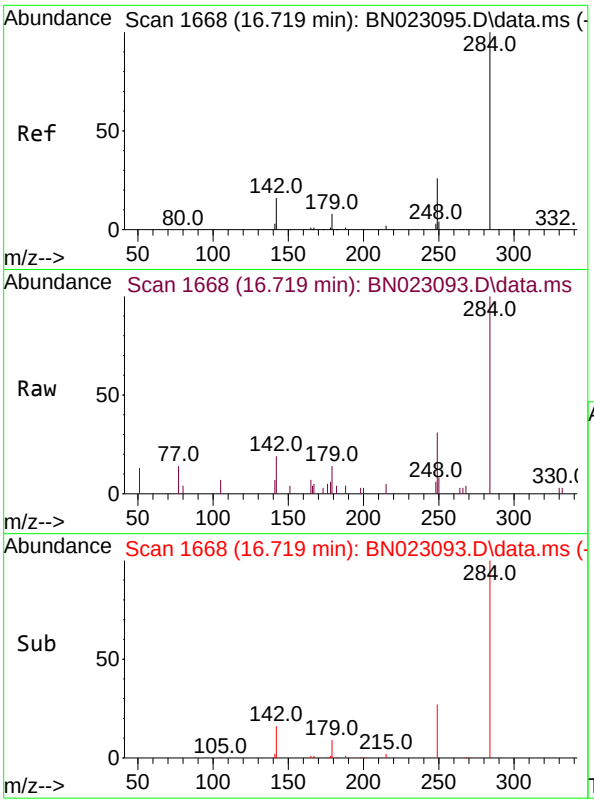


#21
4-Bromophenyl-phenylether
Concen: 0.081 ng
RT: 16.595 min Scan# 1658
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:248 Resp: 1805

Ion	Ratio	Lower	Upper
248	100		
250	92.9	74.3	111.5
141	83.1	65.0	97.6



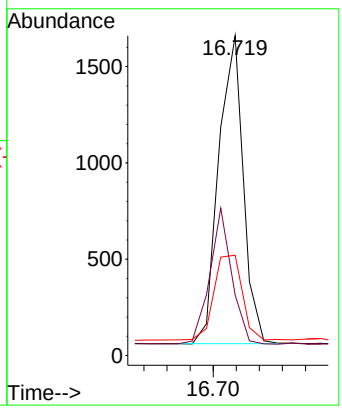


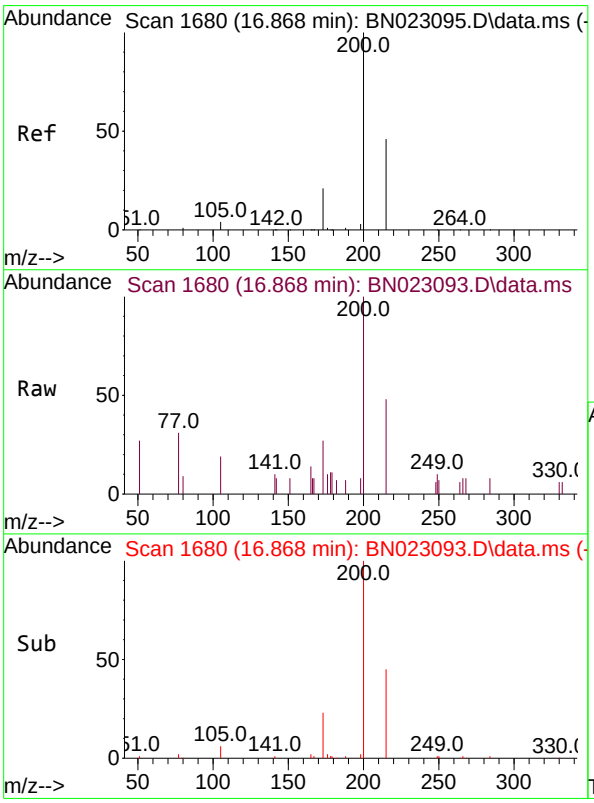
#22
Hexachlorobenzene
Concen: 0.082 ng
RT: 16.719 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:284 Resp: 2356

Ion	Ratio	Lower	Upper
284	100		
142	39.7	31.0	46.4
249	31.7	24.4	36.6

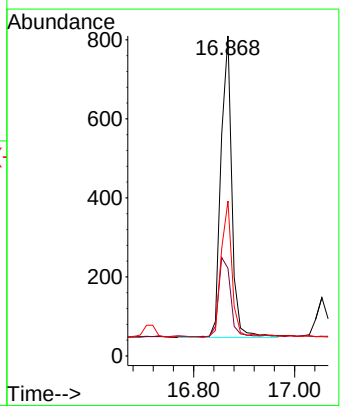


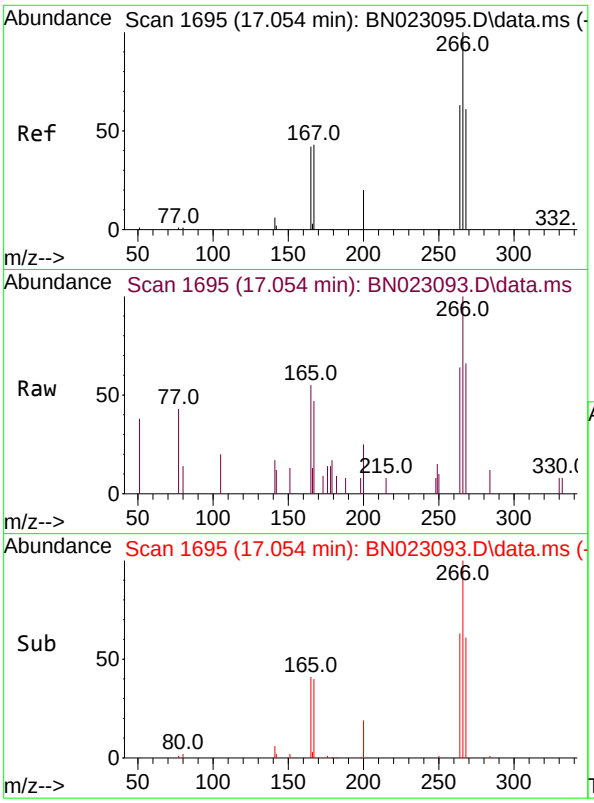


#23
Atrazine
Concen: 0.071 ng
RT: 16.868 min Scan# 1680
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:200 Resp: 1151

Ion	Ratio	Lower	Upper
200	100		
173	27.4	18.2	27.4#
215	48.4	38.0	57.0



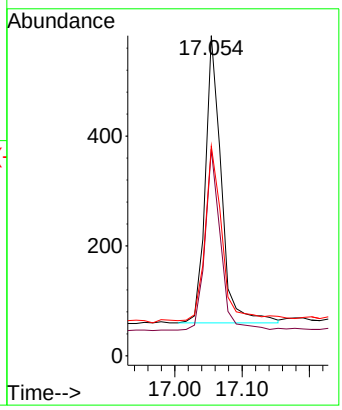


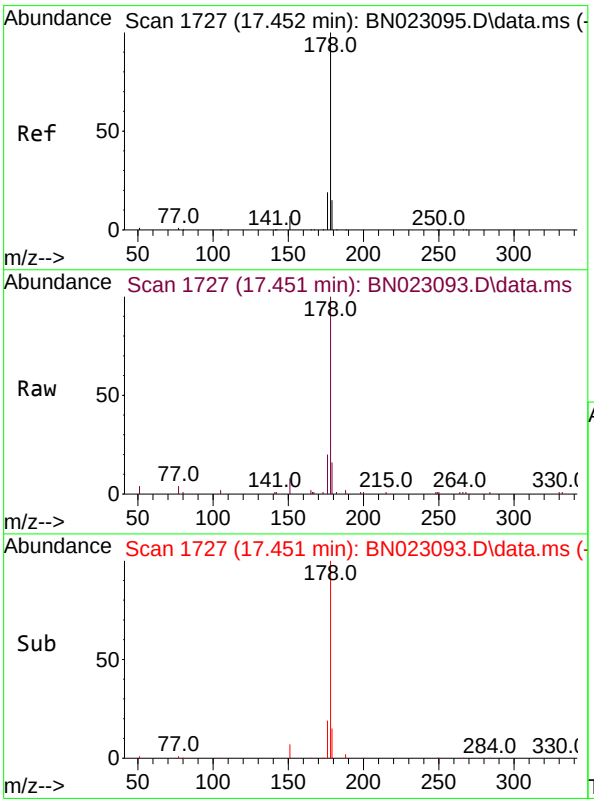
#24
Pentachlorophenol
Concen: 0.102 ng
RT: 17.054 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:266 Resp: 861

Ion	Ratio	Lower	Upper
266	100		
264	60.6	50.1	75.1
268	63.9	49.7	74.5

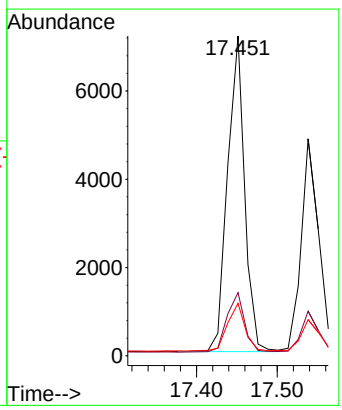


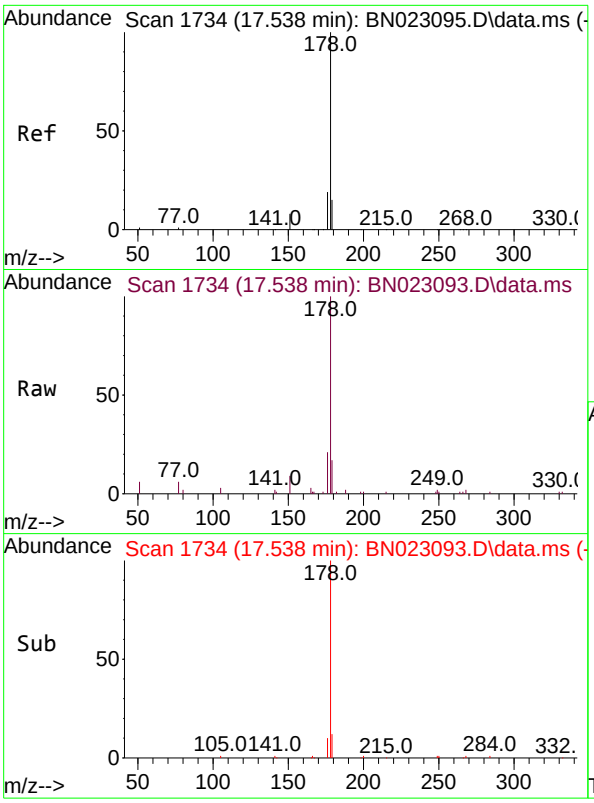


#25
Phenanthrene
Concen: 0.085 ng
RT: 17.451 min Scan# 1727
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:178 Resp: 10530

Ion	Ratio	Lower	Upper
178	100		
176	19.5	15.4	23.2
179	15.7	12.2	18.2



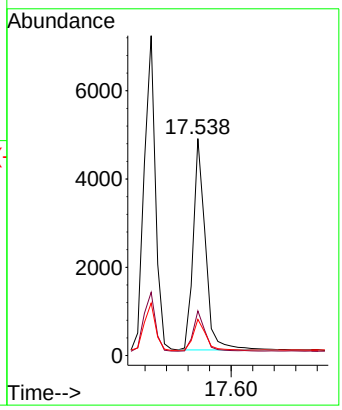


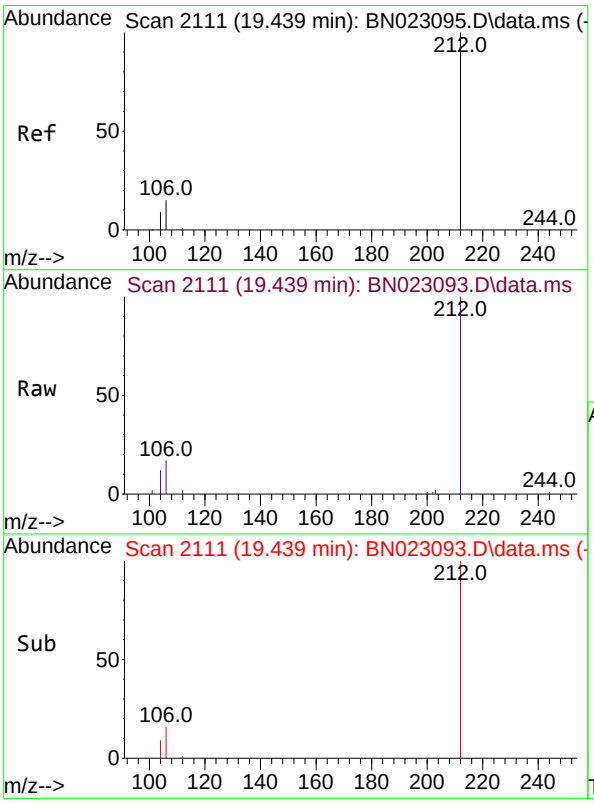
#26
Anthracene
Concen: 0.075 ng
RT: 17.538 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:178 Resp: 7515

Ion	Ratio	Lower	Upper
178	100		
176	18.7	15.1	22.7
179	15.2	12.2	18.4

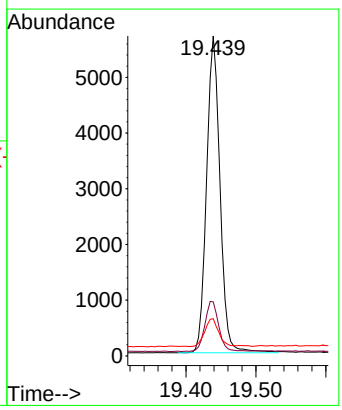


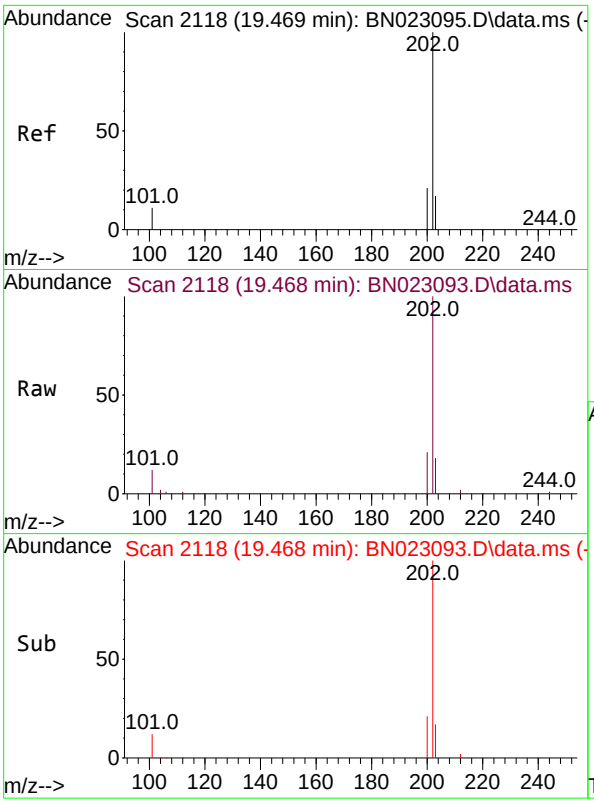


#27
Fluoranthene-d10
Concen: 0.075 ng
RT: 19.439 min Scan# 2111
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:212 Resp: 7606

Ion	Ratio	Lower	Upper
212	100		
106	16.3	13.0	19.4
104	9.1	7.5	11.3



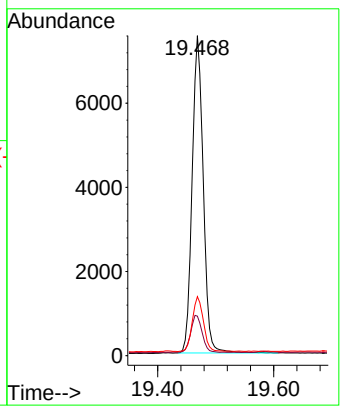


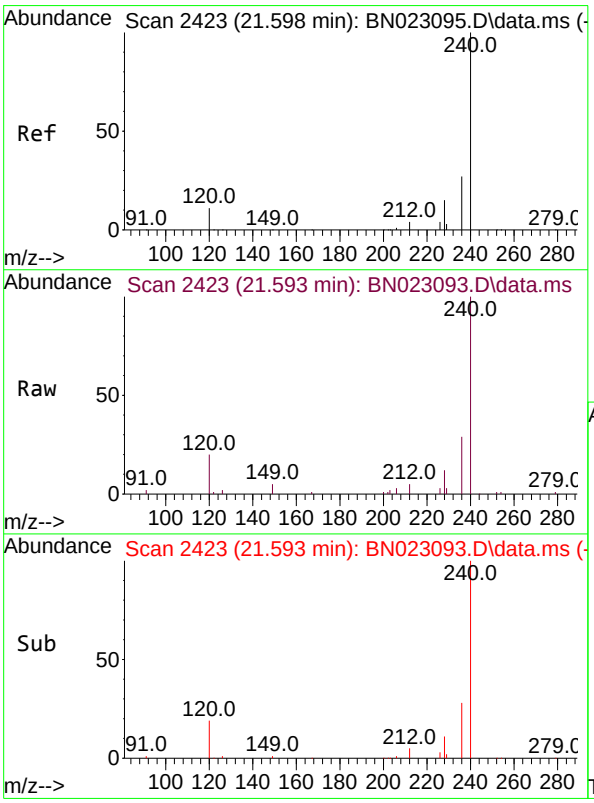
#28
Fluoranthene
Concen: 0.074 ng
RT: 19.468 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:202 Resp: 10024

Ion	Ratio	Lower	Upper
202	100		
101	11.8	9.7	14.5
203	17.1	13.8	20.6

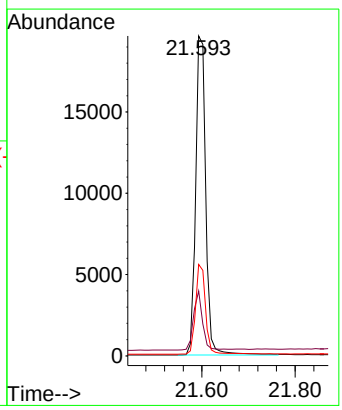


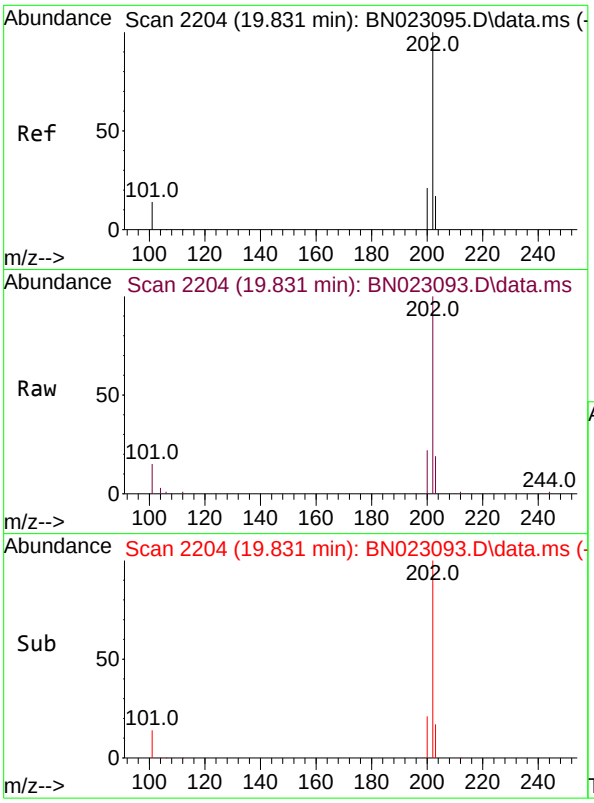


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.593 min Scan# 2423
Delta R.T. -0.005 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:240 Resp: 29376

Ion	Ratio	Lower	Upper
240	100		
120	20.3	10.1	15.1#
236	28.6	22.2	33.4



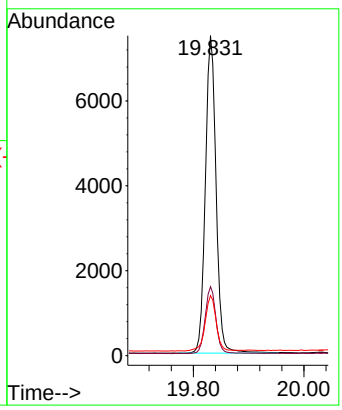


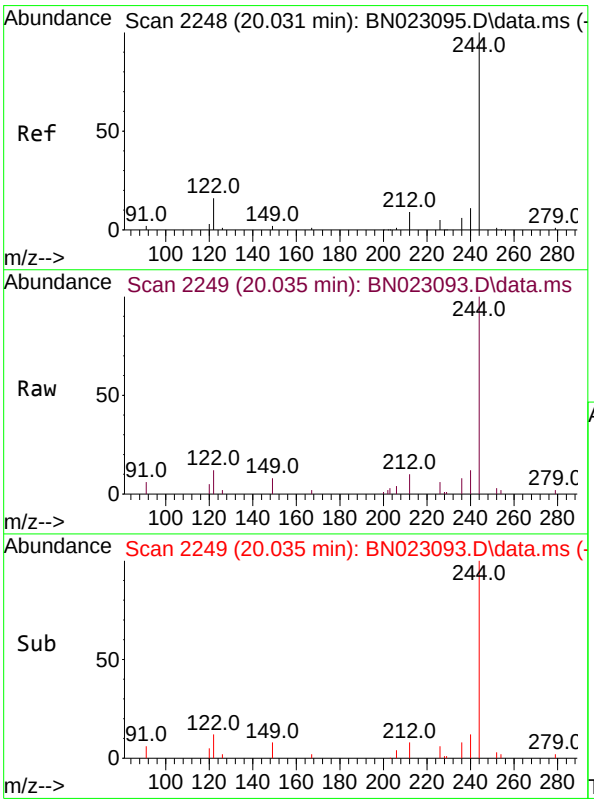
#30
Pyrene
Concen: 0.082 ng
RT: 19.831 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:202 Resp: 10098

Ion	Ratio	Lower	Upper
202	100		
200	20.9	16.9	25.3
203	18.0	14.2	21.4

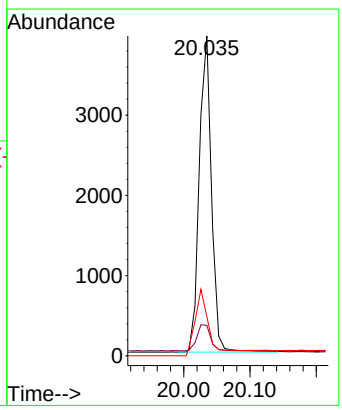


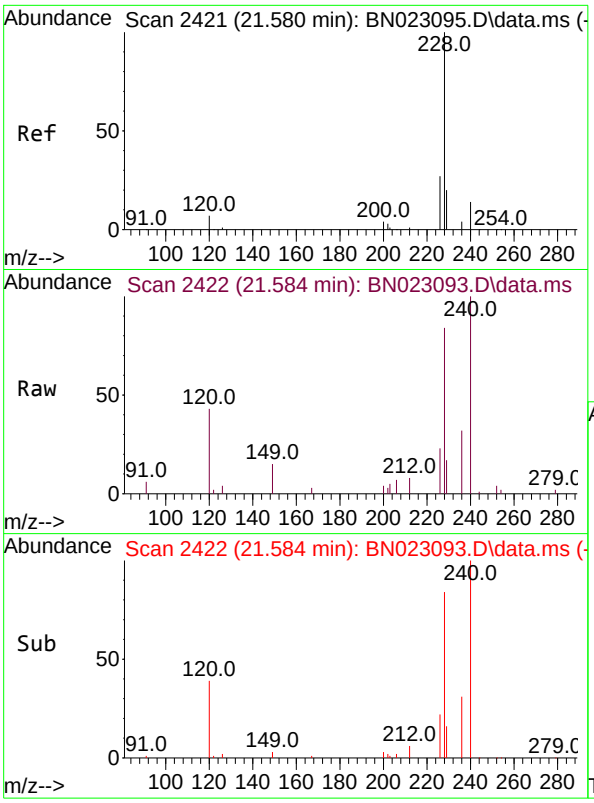


#31
Terphenyl-d14
Concen: 0.081 ng
RT: 20.035 min Scan# 2249
Delta R.T. 0.004 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:244 Resp: 4494

Ion	Ratio	Lower	Upper
244	100		
212	9.5	7.6	11.4
122	12.3	12.6	18.8#



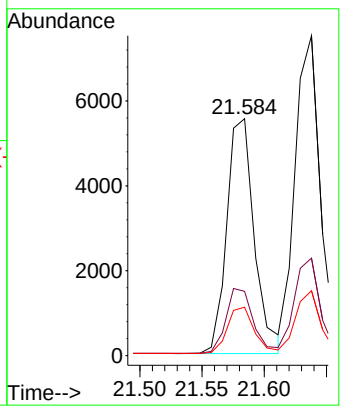


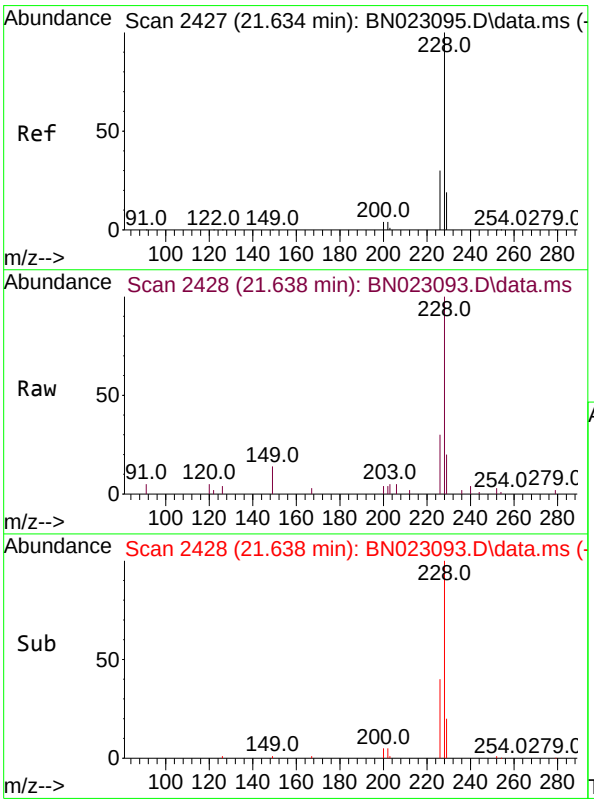
#32
Benzo(a)anthracene
Concen: 0.079 ng
RT: 21.584 min Scan# 24
Delta R.T. 0.004 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:228 Resp: 8542

Ion	Ratio	Lower	Upper
228	100		
226	27.1	22.0	33.0
229	20.5	15.8	23.8

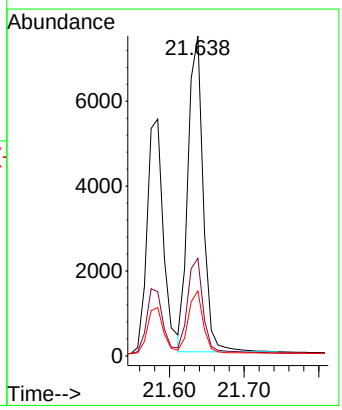


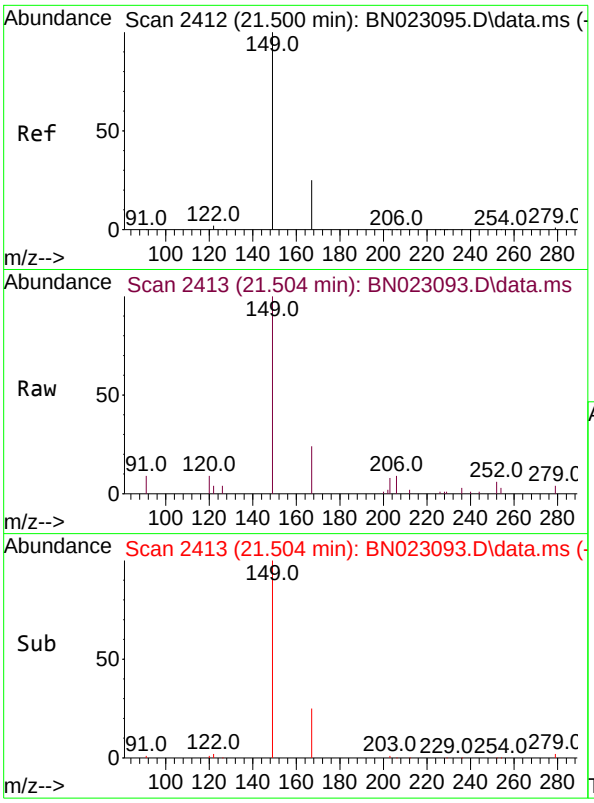


#33
Chrysene
Concen: 0.087 ng
RT: 21.638 min Scan# 2428
Delta R.T. 0.004 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:228 Resp: 10544

Ion	Ratio	Lower	Upper
228	100		
226	30.5	24.4	36.6
229	20.3	15.6	23.4



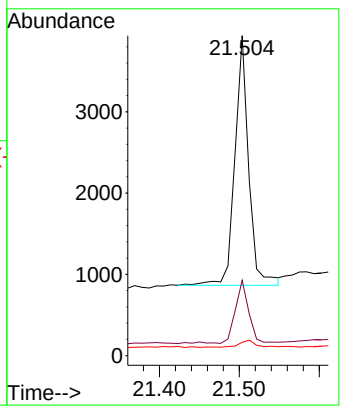


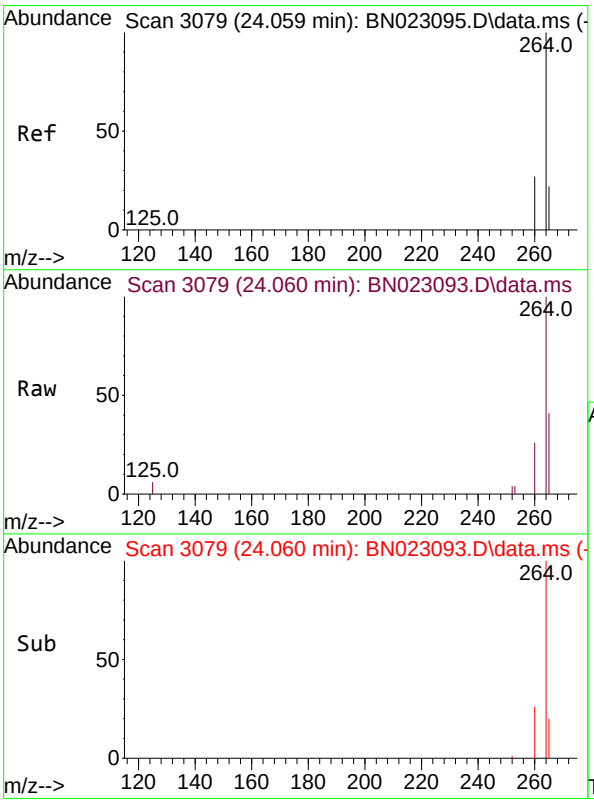
#34
Bis(2-ethylhexyl)phthalate
Concen: 0.079 ng
RT: 21.504 min Scan# 24
Delta R.T. 0.004 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:149 Resp: 3706

Ion	Ratio	Lower	Upper
149	100		
167	24.0	20.2	30.2
279	3.0	2.3	3.5

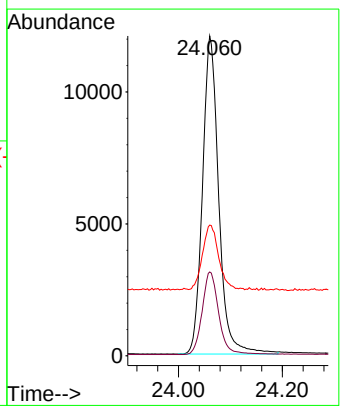


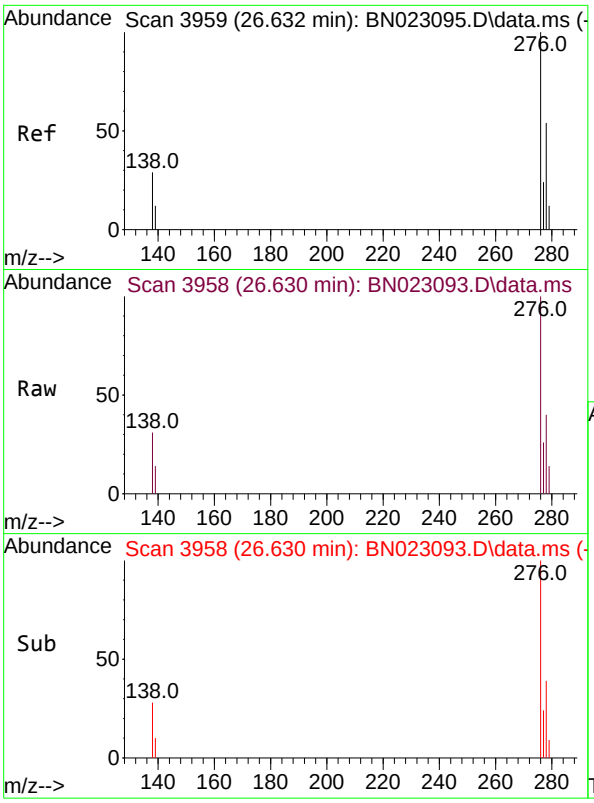


#35
Perylene-d12
Concen: 0.400 ng
RT: 24.060 min Scan# 3079
Delta R.T. 0.001 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:264 Resp: 26107

Ion	Ratio	Lower	Upper
264	100		
260	26.2	21.7	32.5
265	40.9	43.2	64.8#



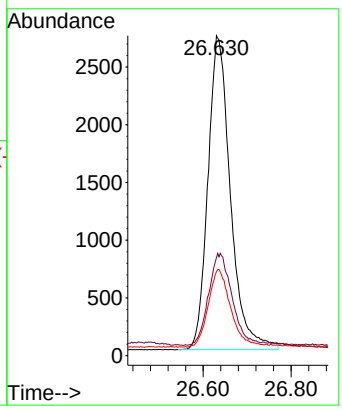


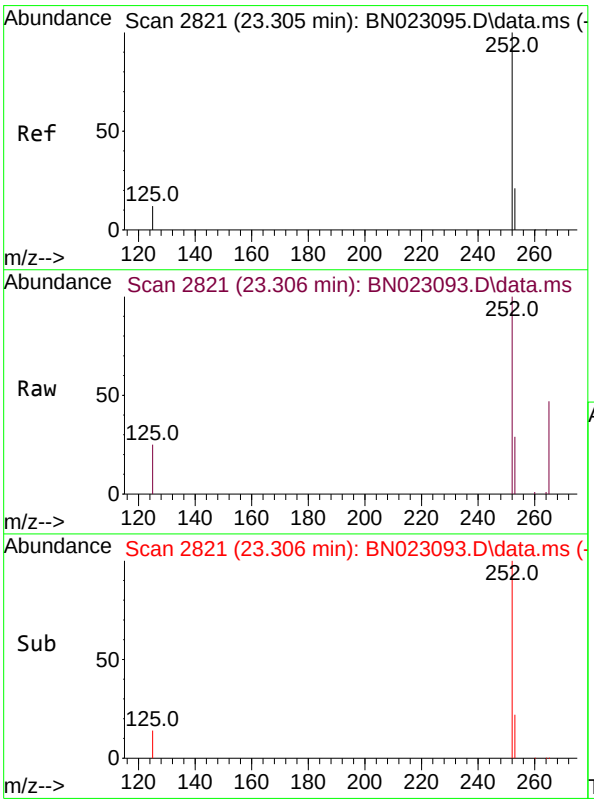
#36
Indeno(1,2,3-cd)pyrene
Concen: 0.070 ng
RT: 26.630 min Scan# 3
Delta R.T. -0.002 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:276 Resp: 9677

Ion	Ratio	Lower	Upper
276	100		
138	13.9	25.0	37.6#
277	24.8	19.8	29.8

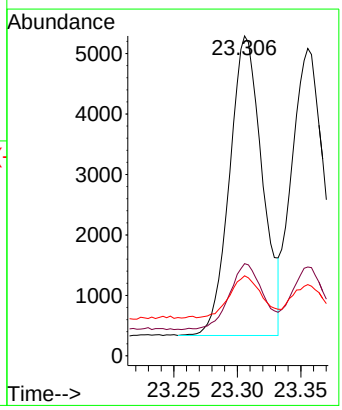


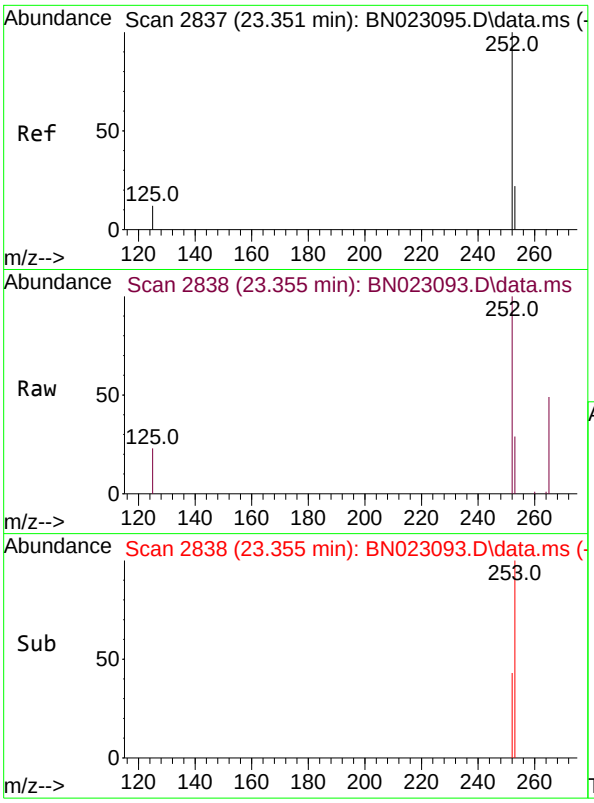


#37
Benzo(b)fluoranthene
Concen: 0.074 ng
RT: 23.306 min Scan# 2821
Delta R.T. 0.001 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:252 Resp: 8869

Ion	Ratio	Lower	Upper
252	100		
253	28.8	19.0	28.4#
125	25.0	12.8	19.2#



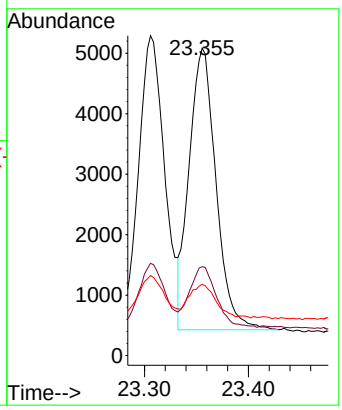


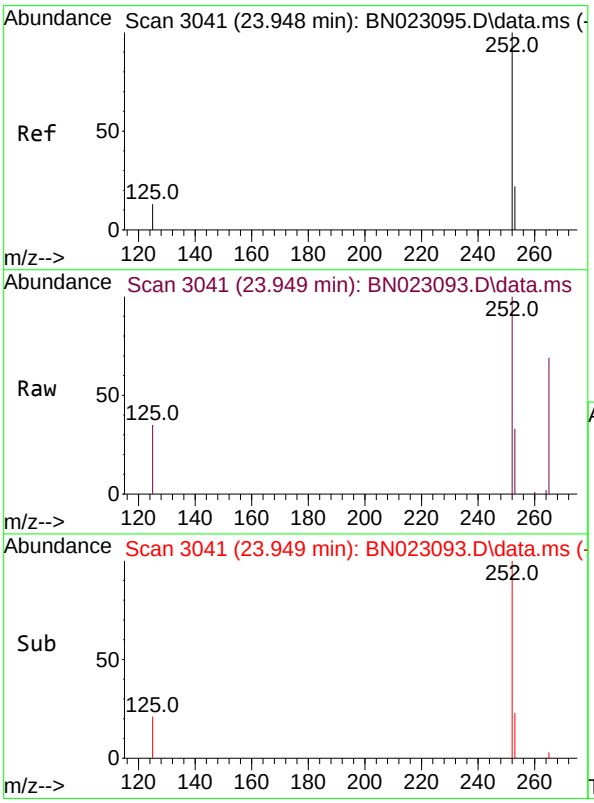
#38
Benzo(k)fluoranthene
Concen: 0.069 ng
RT: 23.355 min Scan# 28
Delta R.T. 0.004 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:252 Resp: 8393

Ion	Ratio	Lower	Upper
252	100		
253	28.9	19.1	28.7#
125	23.2	12.5	18.7#

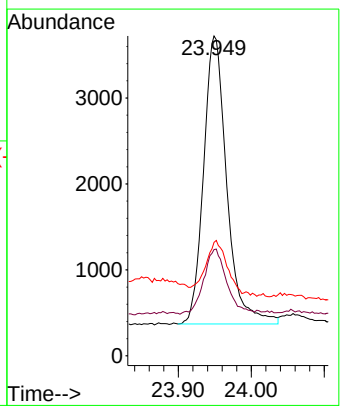


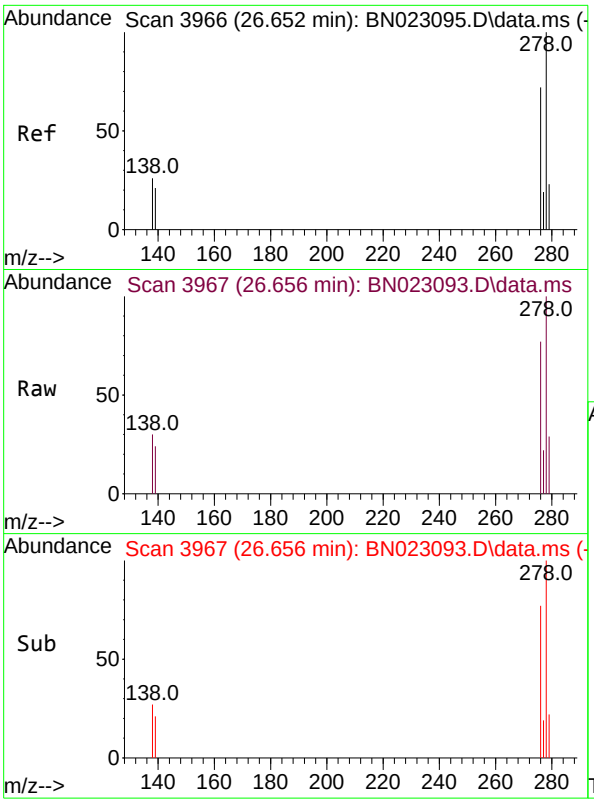


#39
Benzo(a)pyrene
Concen: 0.077 ng
RT: 23.949 min Scan# 3041
Delta R.T. 0.001 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:252 Resp: 7407

Ion	Ratio	Lower	Upper
252	100		
253	33.2	20.6	30.8#
125	35.5	15.8	23.8#



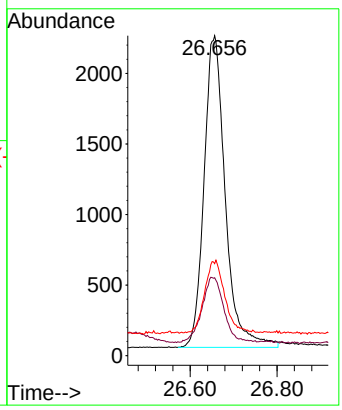


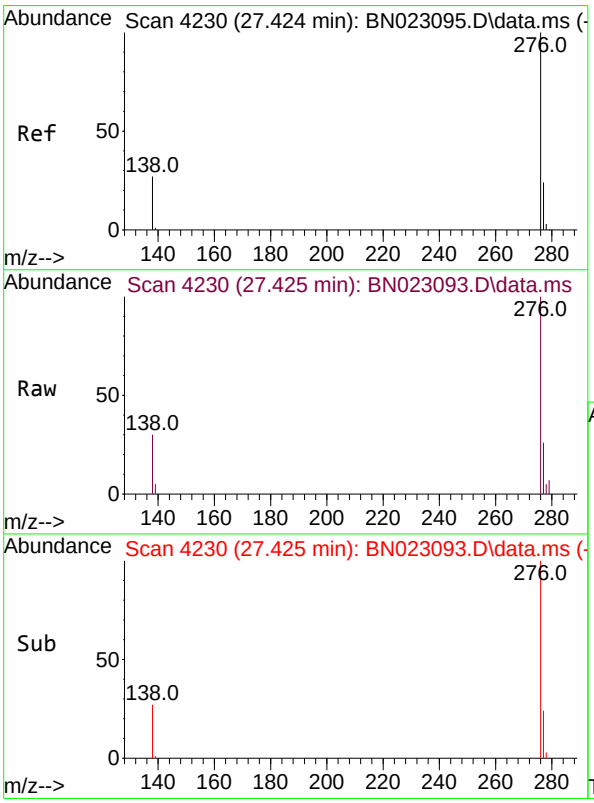
#40
Dibenzo(a,h)anthracene
Concen: 0.068 ng
RT: 26.656 min Scan# 3
Delta R.T. 0.004 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:278 Resp: 7491

Ion	Ratio	Lower	Upper
278	100		
139	24.3	17.5	26.3
279	28.7	20.5	30.7

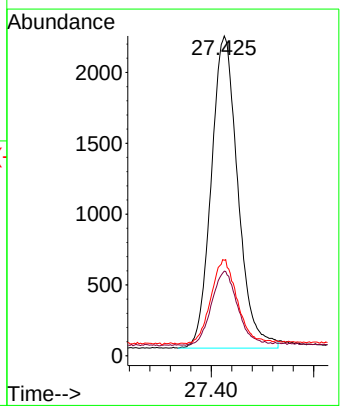




#41
Benzo(g,h,i)perylene
Concen: 0.071 ng
RT: 27.425 min Scan# 4230
Delta R.T. 0.001 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:276 Resp: 7959

Ion	Ratio	Lower	Upper
276	100		
277	26.5	19.9	29.9
138	29.9	22.2	33.2



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023094.D
Acq On : 08 Dec 2022 14:37
Operator : CG/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Quant Time: Dec 09 07:27:50 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	8.020	152	7299	0.400	ng		0.00
7) Naphthalene-d8	10.840	136	21832	0.400	ng		0.00
13) Acenaphthene-d10	14.666	164	12180	0.400	ng		0.00
19) Phenanthrene-d10	17.402	188	27325	0.400	ng		#-0.01
29) Chrysene-d12	21.589	240	21585	0.400	ng		# 0.00
35) Perylene-d12	24.056	264	17922	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.558	112	2640	0.156	ng		0.00
5) Phenol-d6	7.168	99	3230	0.152	ng		0.00
8) Nitrobenzene-d5	9.185	82	2667	0.163	ng		0.00
11) 2-Methylnaphthalene-d10	12.427	152	7153	0.174	ng		0.00
14) 2,4,6-Tribromophenol	16.148	330	740	0.144	ng		0.00
15) 2-Fluorobiphenyl	13.298	172	9585	0.177	ng		0.00
27) Fluoranthene-d10	19.439	212	11666	0.156	ng		0.00
31) Terphenyl-d14	20.031	244	6228	0.152	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.398	88	1459	0.161	ng		99
3) n-Nitrosodimethylamine	3.745	42	1148	0.130	ng	#	96
6) bis(2-Chloroethyl)ether	7.435	93	3970	0.169	ng		98
9) Naphthalene	10.893	128	10803	0.167	ng		99
10) Hexachlorobutadiene	11.181	225	2100	0.173	ng	#	100
12) 2-Methylnaphthalene	12.117	142	1474	0.149	ng	#	90
16) Acenaphthylene	14.388	152	8400	0.147	ng		99
17) Acenaphthene	14.730	154	6737	0.162	ng		100
18) Fluorene	15.703	166	7437	0.159	ng		99
20) 4,6-Dinitro-2-methylph...	15.776	198	547	0.148	ng	#	84
21) 4-Bromophenyl-phenylether	16.595	248	2698	0.164	ng		98
22) Hexachlorobenzene	16.719	284	3650	0.171	ng		99
23) Atrazine	16.868	200	1729	0.144	ng		95
24) Pentachlorophenol	17.054	266	1064	0.169	ng		96
25) Phenanthrene	17.451	178	15180	0.165	ng		99
26) Anthracene	17.538	178	11253	0.152	ng		99
28) Fluoranthene	19.469	202	15457	0.154	ng		99
30) Pyrene	19.831	202	15365	0.171	ng		99
32) Benzo(a)anthracene	21.580	228	12565	0.158	ng		99
33) Chrysene	21.634	228	15019	0.169	ng		99
34) Bis(2-ethylhexyl)phtha...	21.500	149	5458	0.159	ng		98
36) Indeno(1,2,3-cd)pyrene	26.629	276	13007	0.137	ng		99
37) Benzo(b)fluoranthene	23.302	252	12559	0.153	ng	#	93
38) Benzo(k)fluoranthene	23.351	252	12349	0.147	ng	#	93
39) Benzo(a)pyrene	23.942	252	9043	0.136	ng	#	88
40) Dibenzo(a,h)anthracene	26.646	278	10252	0.136	ng		98
41) Benzo(g,h,i)perylene	27.418	276	11608	0.150	ng		100

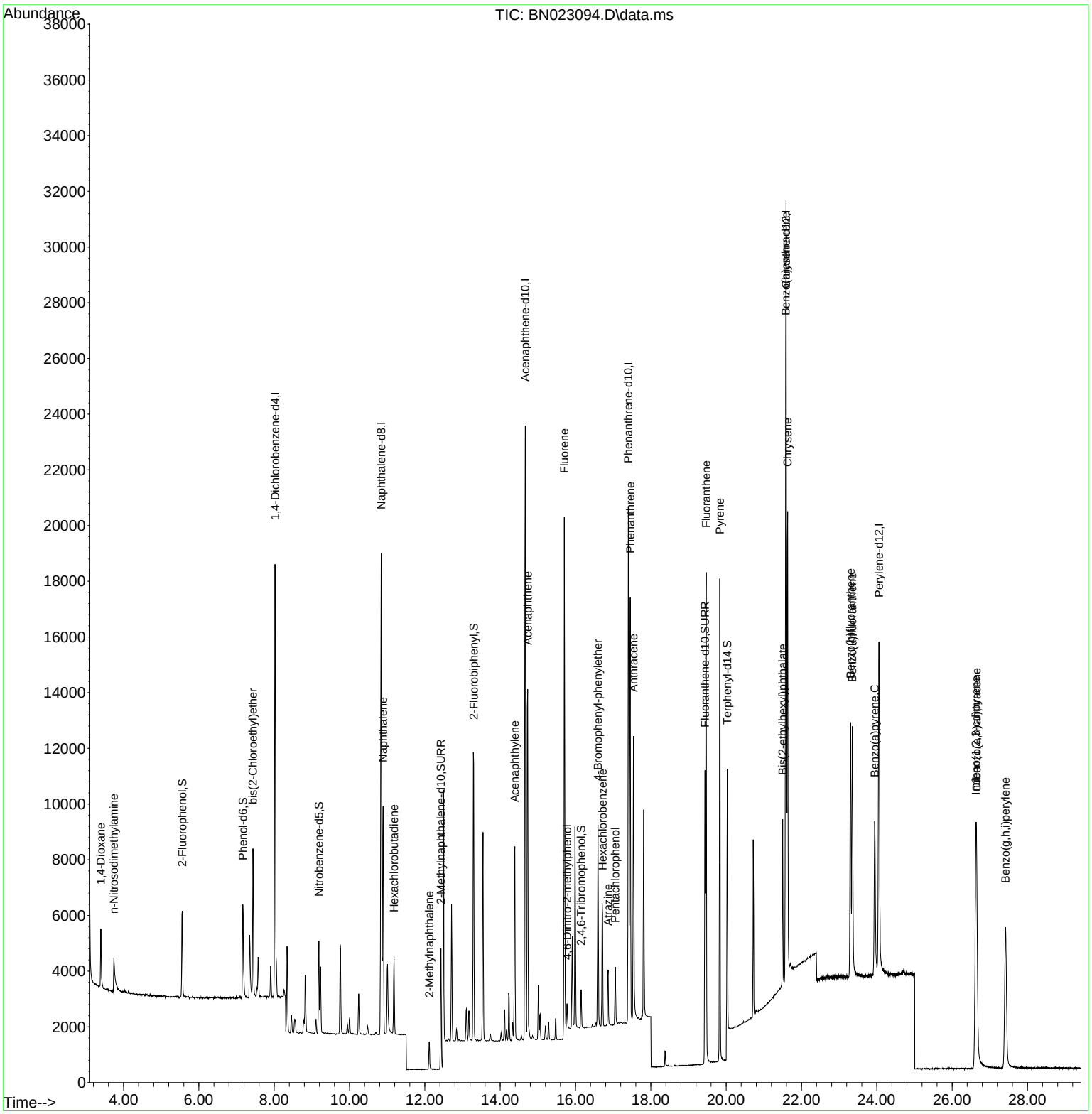
(#) = qualifier out of range (m) = manual integration (+) = signals summed

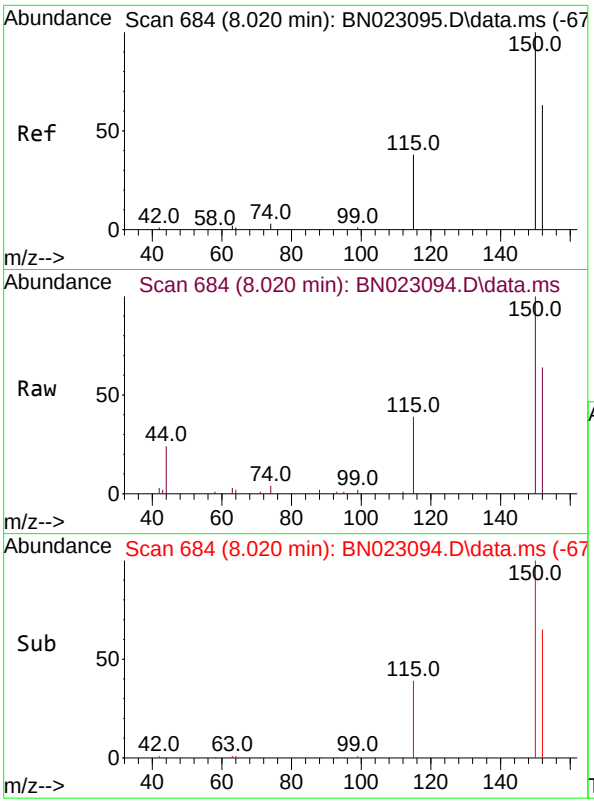
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023094.D
Acq On : 08 Dec 2022 14:37
Operator : CG/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Quant Time: Dec 09 07:27:50 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration



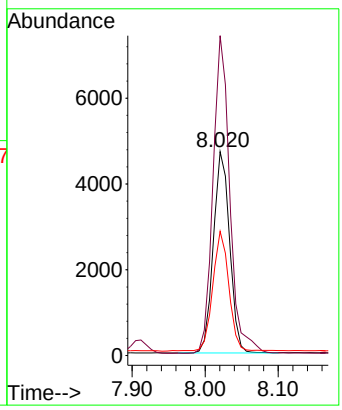


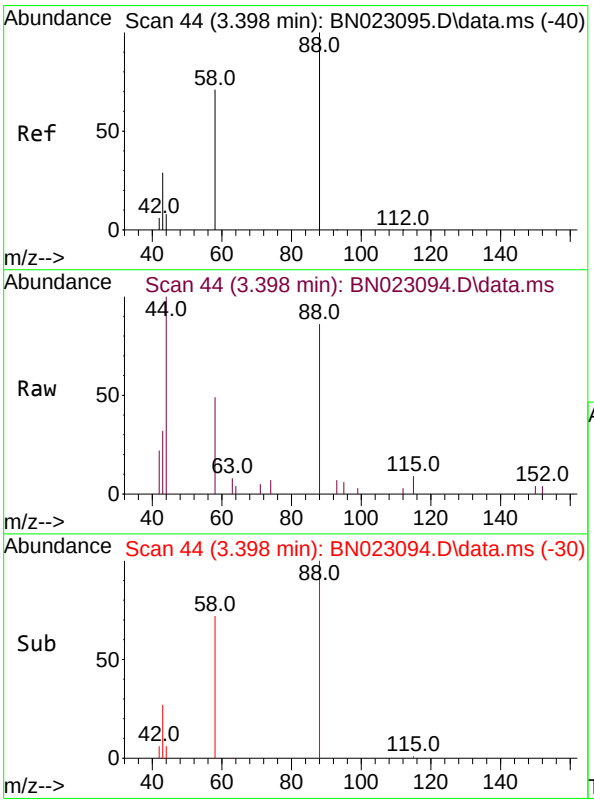
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 8.020 min Scan# 68
Delta R.T. 0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:152 Resp: 7299

Ion	Ratio	Lower	Upper
152	100		
150	156.9	125.6	188.4
115	60.9	49.0	73.4

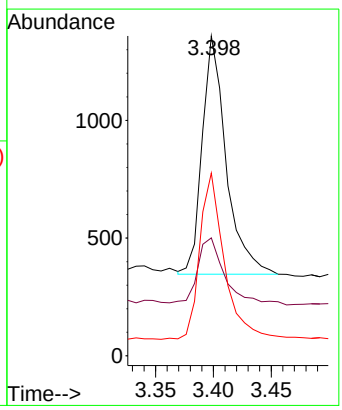


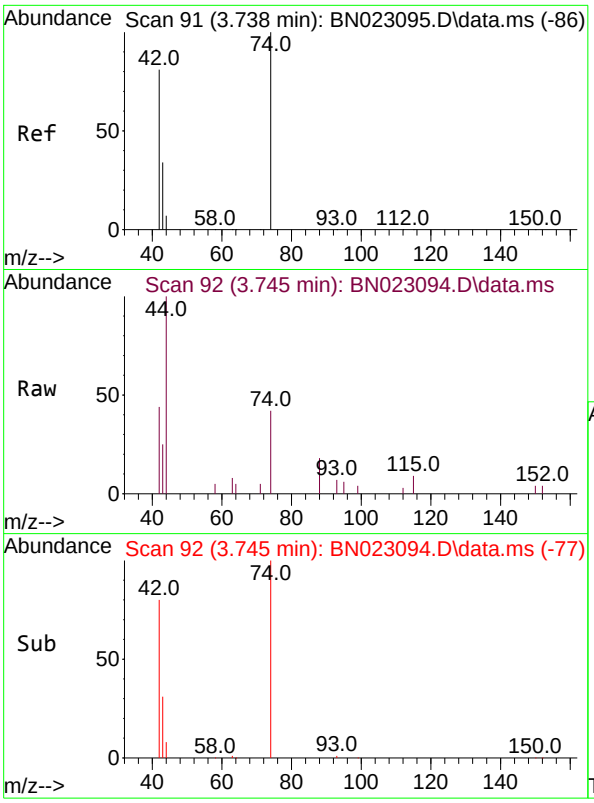


#2
1,4-Dioxane
Concen: 0.161 ng
RT: 3.398 min Scan# 44
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion: 88 Resp: 1459

Ion	Ratio	Lower	Upper
88	100		
43	29.1	23.3	34.9
58	71.4	58.0	87.0



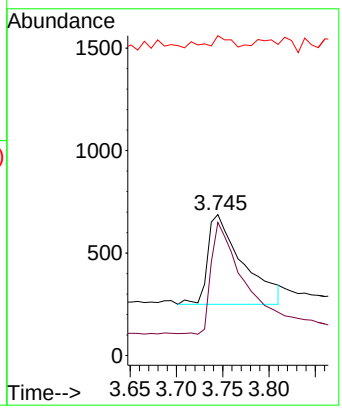


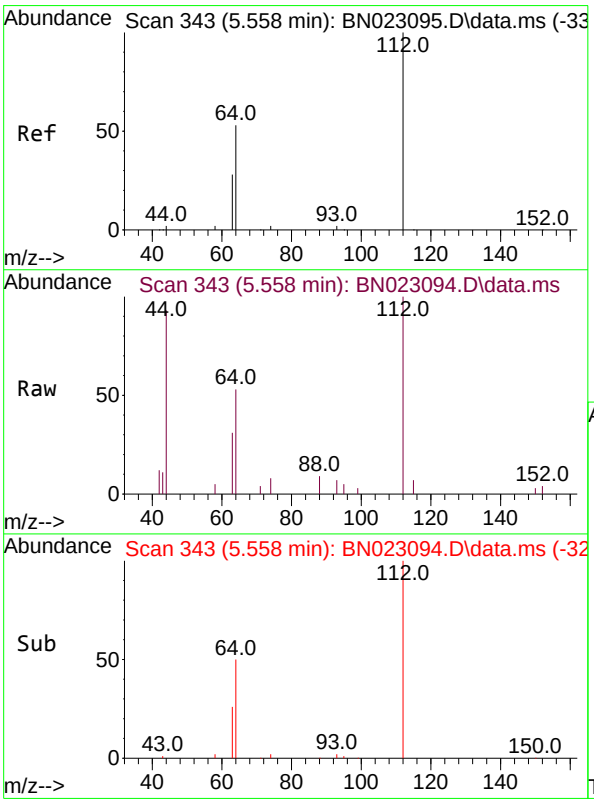
#3
n-Nitrosodimethylamine
Concen: 0.130 ng
RT: 3.745 min Scan# 9
Delta R.T. 0.007 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion: 42 Resp: 1148

Ion	Ratio	Lower	Upper
42	100		
74	115.8	95.8	143.6
44	4.8	8.4	12.6#

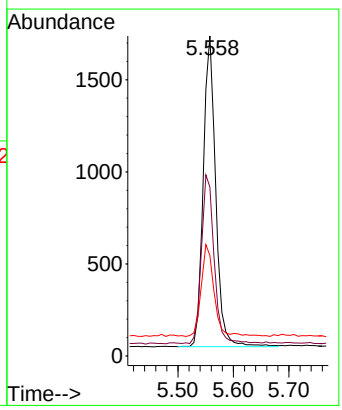


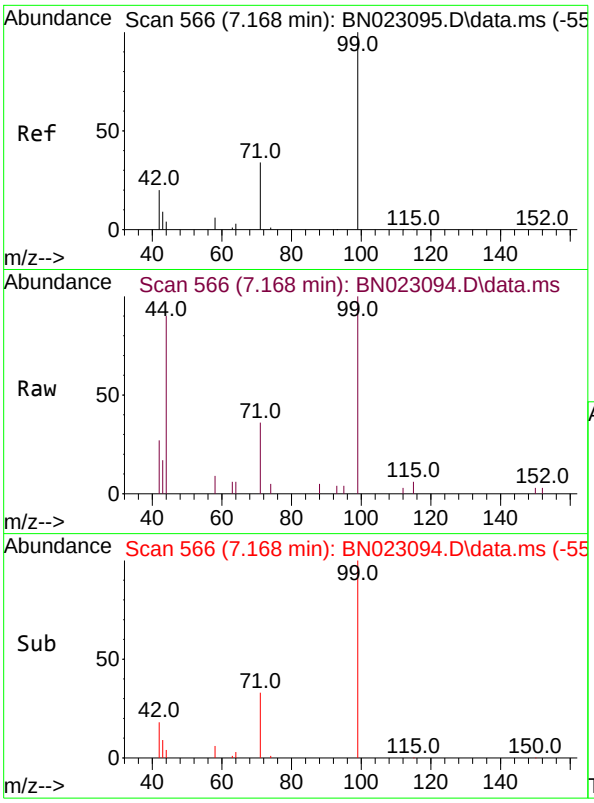


#4
2-Fluorophenol
Concen: 0.156 ng
RT: 5.558 min Scan# 343
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:112 Resp: 2640

Ion	Ratio	Lower	Upper
112	100		
64	55.3	44.4	66.6
63	30.6	23.7	35.5



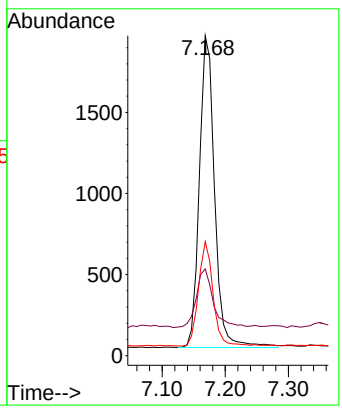


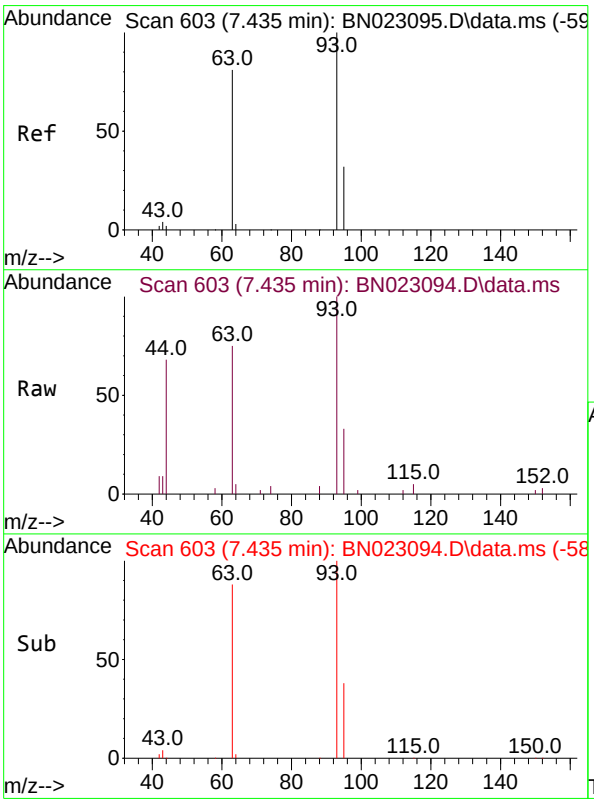
#5
Phenol-d6
Concen: 0.152 ng
RT: 7.168 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion: 99 Resp: 3230

Ion	Ratio	Lower	Upper
99	100		
42	21.0	16.3	24.5
71	31.9	26.5	39.7

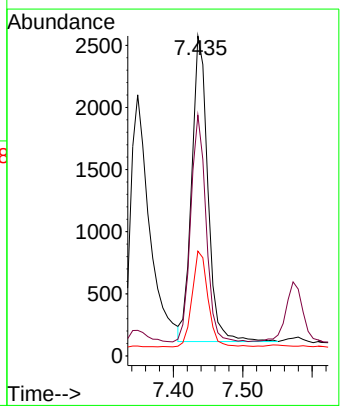


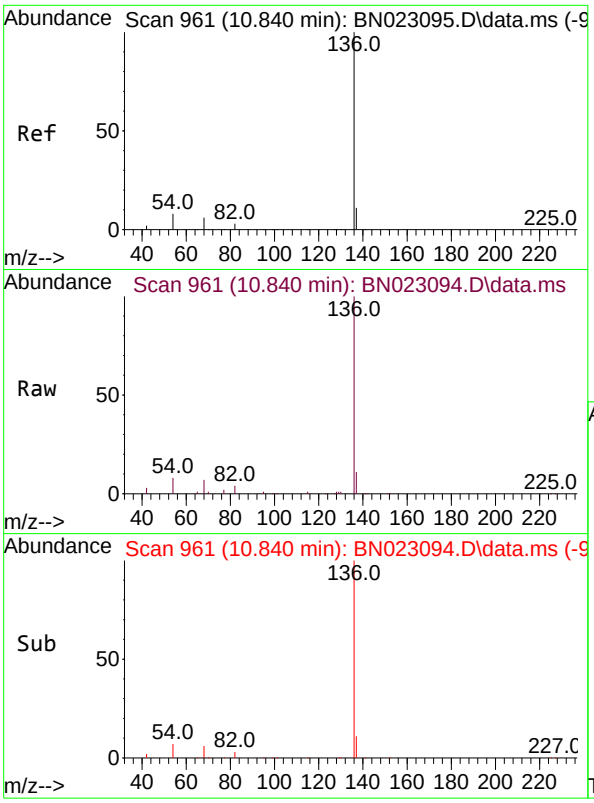


#6
bis(2-Chloroethyl)ether
Concen: 0.169 ng
RT: 7.435 min Scan# 603
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion: 93 Resp: 3970

Ion	Ratio	Lower	Upper
93	100		
63	70.7	58.1	87.1
95	30.8	25.2	37.8



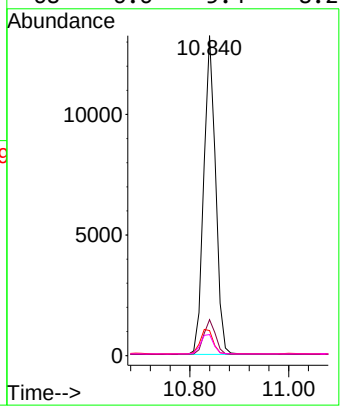


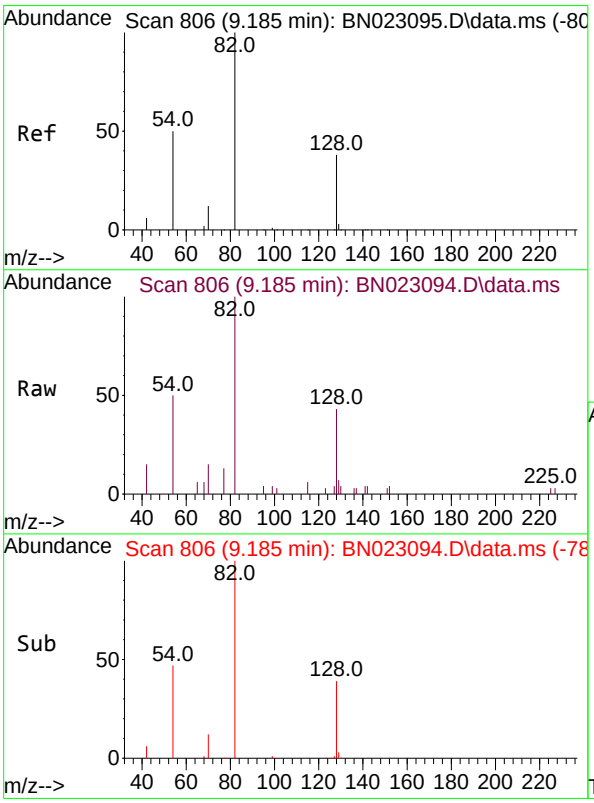
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.840 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:136 Resp: 21832

Ion	Ratio	Lower	Upper
136	100		
137	11.2	9.0	13.4
54	7.8	6.5	9.7
68	6.6	5.4	8.2

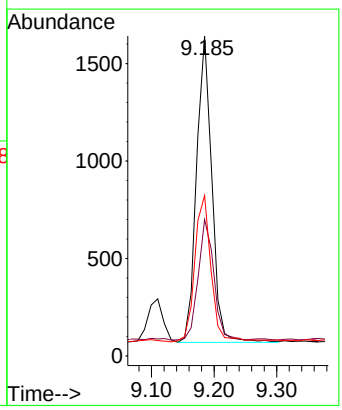


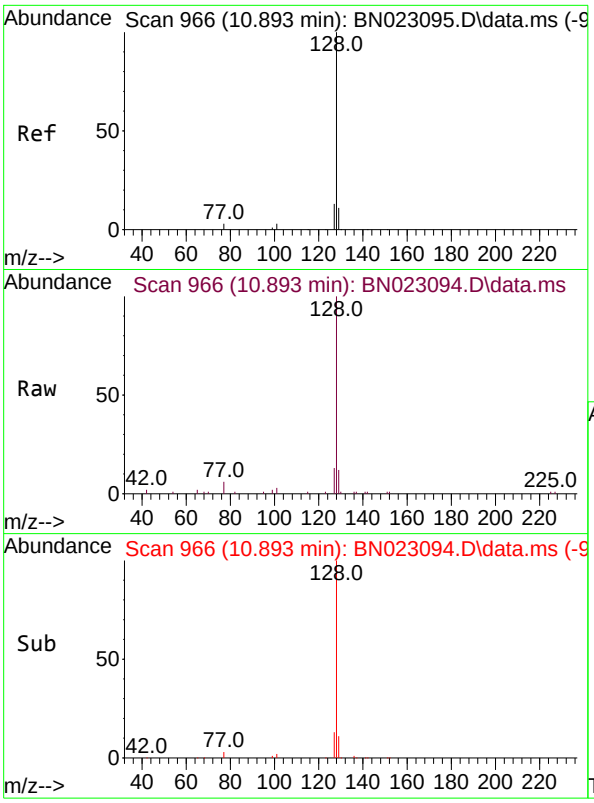


#8
Nitrobenzene-d5
Concen: 0.163 ng
RT: 9.185 min Scan# 806
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion: 82 Resp: 2667

Ion	Ratio	Lower	Upper
82	100		
128	42.6	31.4	47.2
54	50.1	41.0	61.4



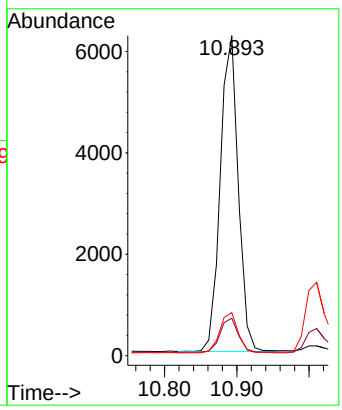


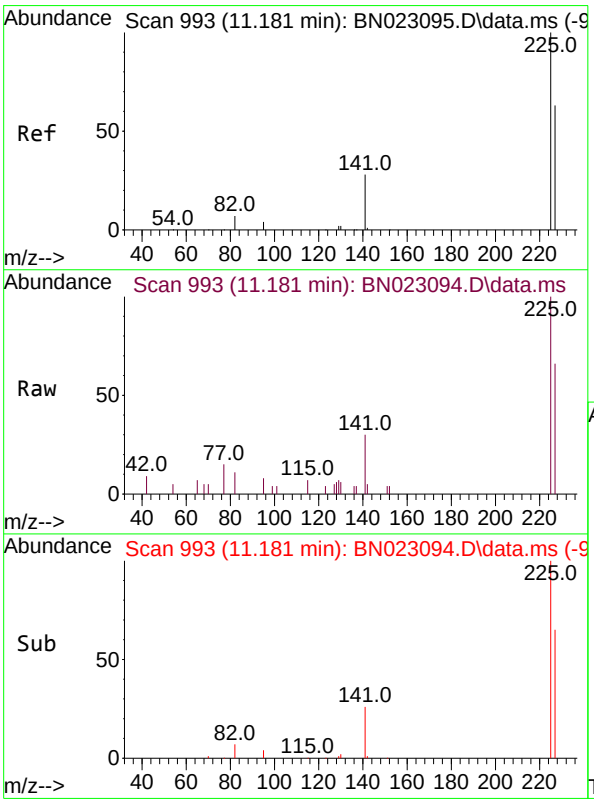
#9
Naphthalene
Concen: 0.167 ng
RT: 10.893 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:128 Resp: 10803

Ion	Ratio	Lower	Upper
128	100		
129	11.7	9.0	13.6
127	13.4	10.5	15.7

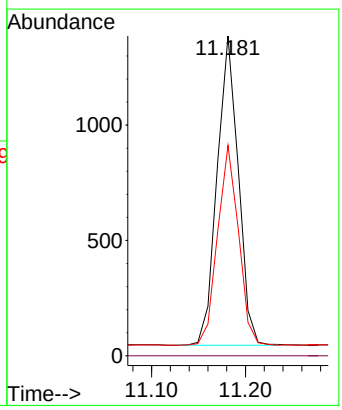


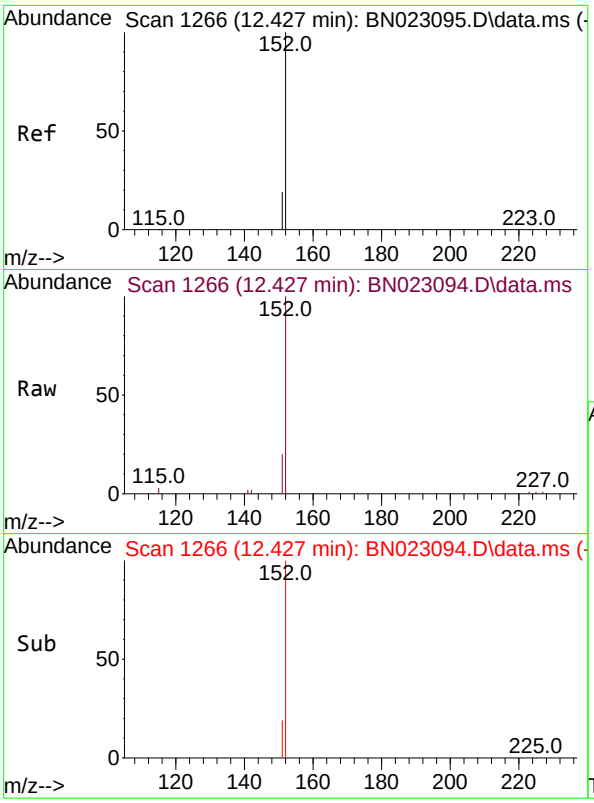


#10
Hexachlorobutadiene
Concen: 0.173 ng
RT: 11.181 min Scan# 993
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:225 Resp: 2100

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.9	51.1	76.7



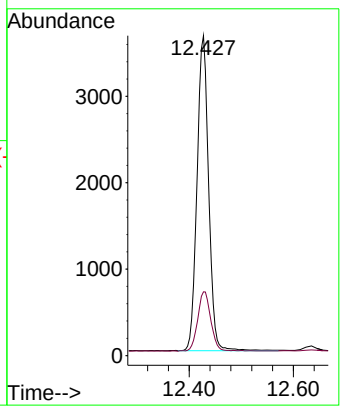


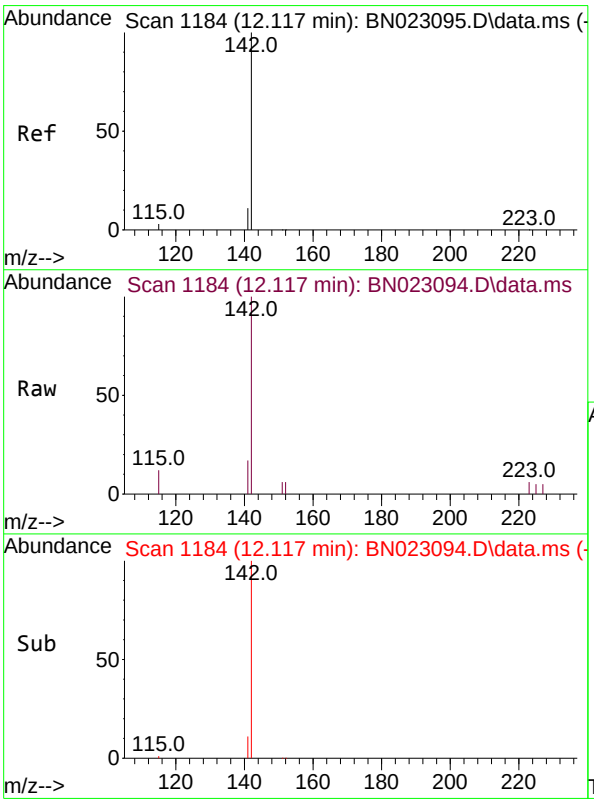
#11
2-Methylnaphthalene-d10
Concen: 0.174 ng
RT: 12.427 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:152 Resp: 7153

Ion	Ratio	Lower	Upper
152	100		
151	16.7	15.1	22.7

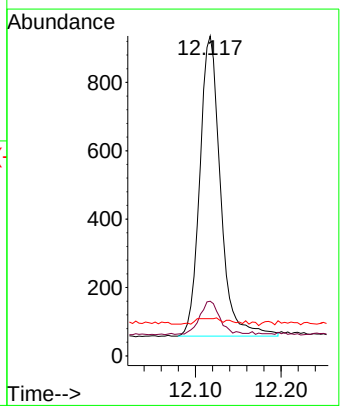


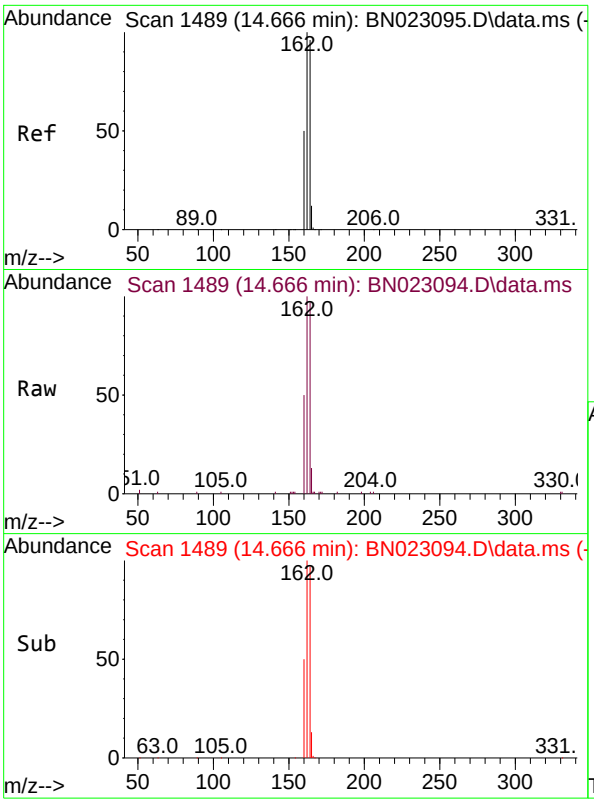


#12
2-Methylnaphthalene
Concen: 0.149 ng
RT: 12.117 min Scan# 1184
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:142 Resp: 1474

Ion	Ratio	Lower	Upper
142	100		
141	17.1	10.9	16.3#
115	11.6	5.7	8.5#



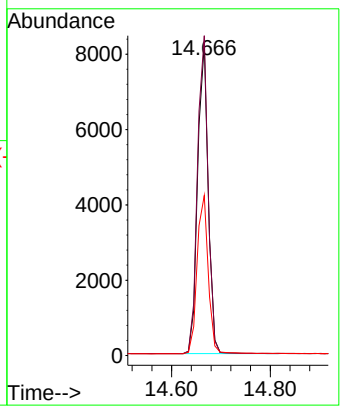


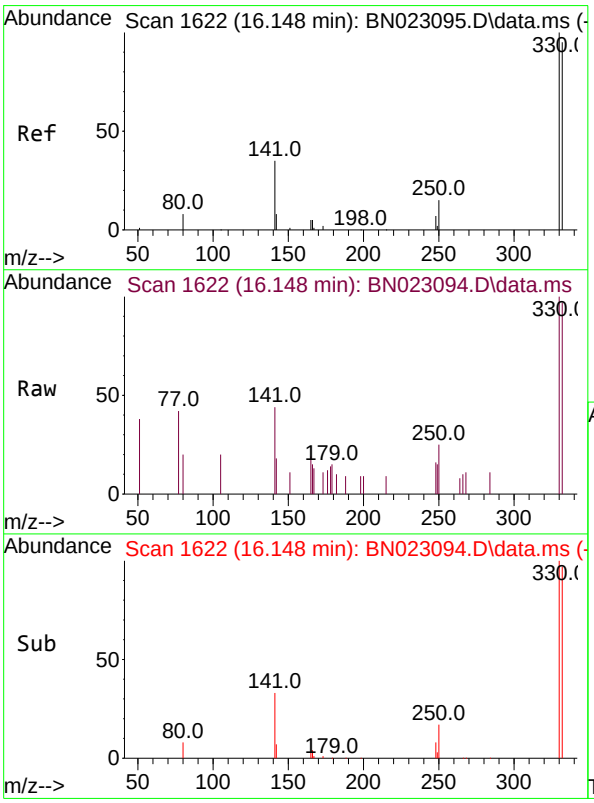
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.666 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:164 Resp: 12180

Ion	Ratio	Lower	Upper
164	100		
162	102.8	83.4	125.0
160	51.4	41.8	62.8

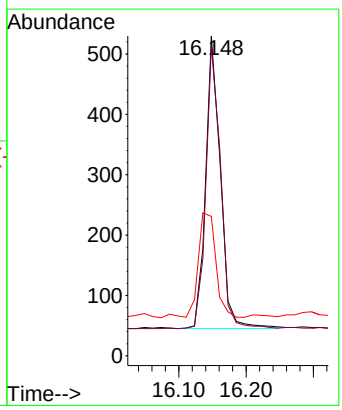


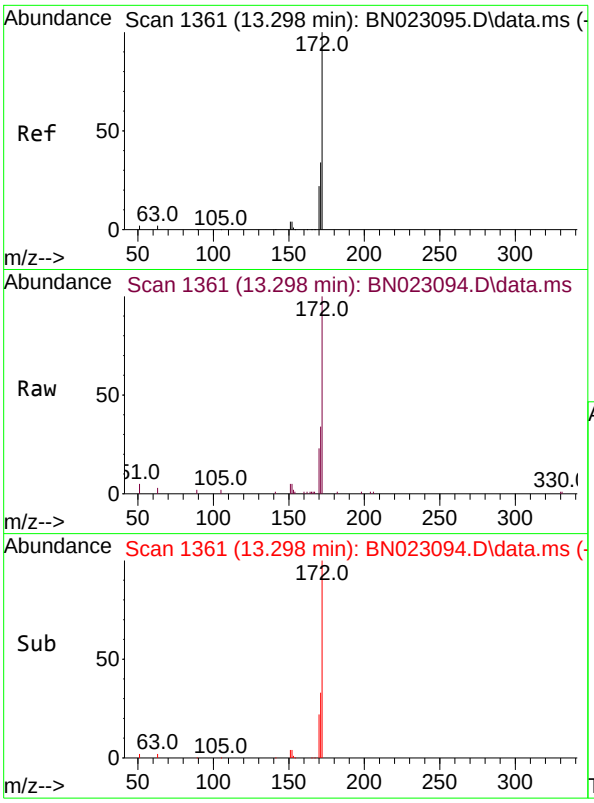


#14
2,4,6-Tribromophenol
Concen: 0.144 ng
RT: 16.148 min Scan# 1622
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:330 Resp: 740

Ion	Ratio	Lower	Upper
330	100		
332	96.4	77.3	115.9
141	43.1	33.5	50.3



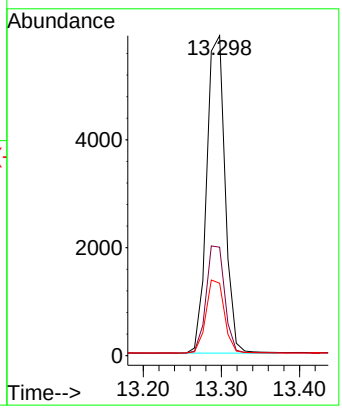


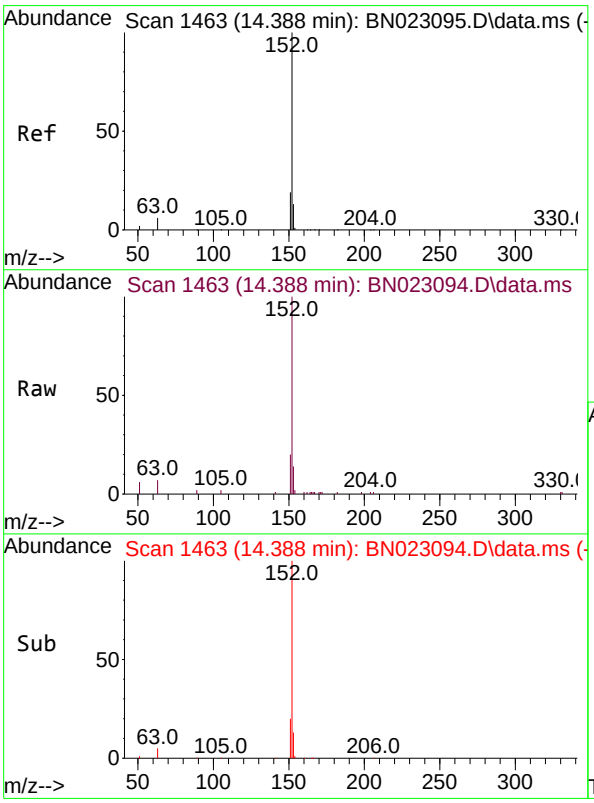
#15
2-Fluorobiphenyl
Concen: 0.177 ng
RT: 13.298 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:172 Resp: 9585

Ion	Ratio	Lower	Upper
172	100		
171	33.9	27.4	41.0
170	22.6	17.9	26.9

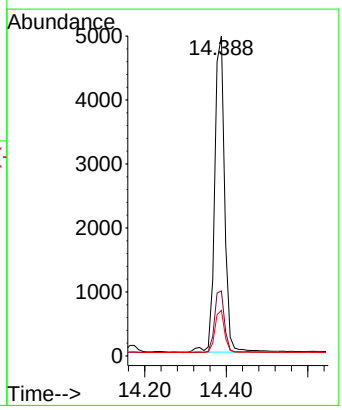


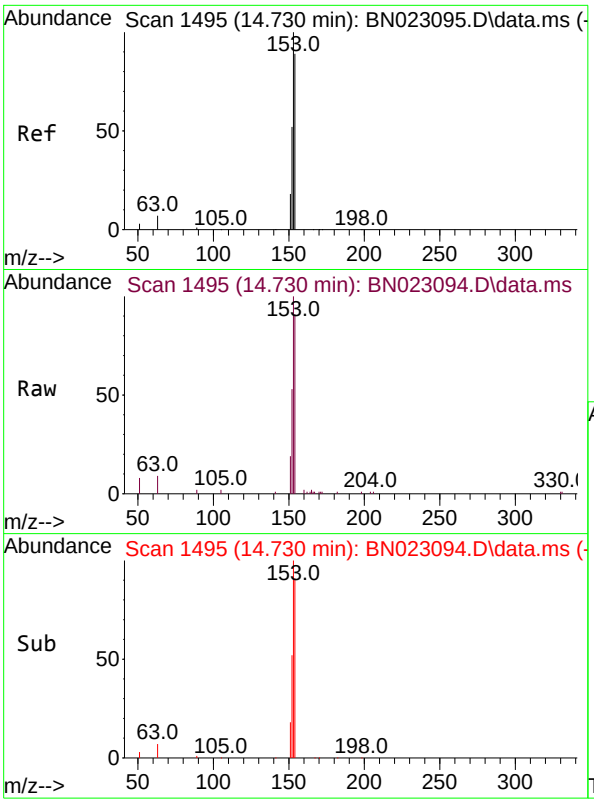


#16
Acenaphthylene
Concen: 0.147 ng
RT: 14.388 min Scan# 1463
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:152 Resp: 8400

Ion	Ratio	Lower	Upper
152	100		
151	19.7	15.4	23.2
153	12.9	10.3	15.5



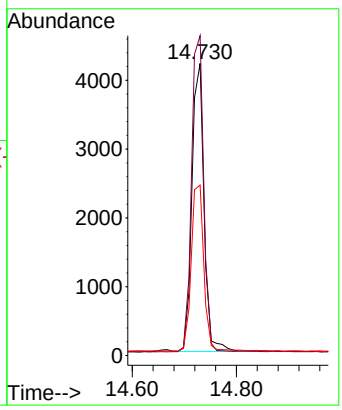


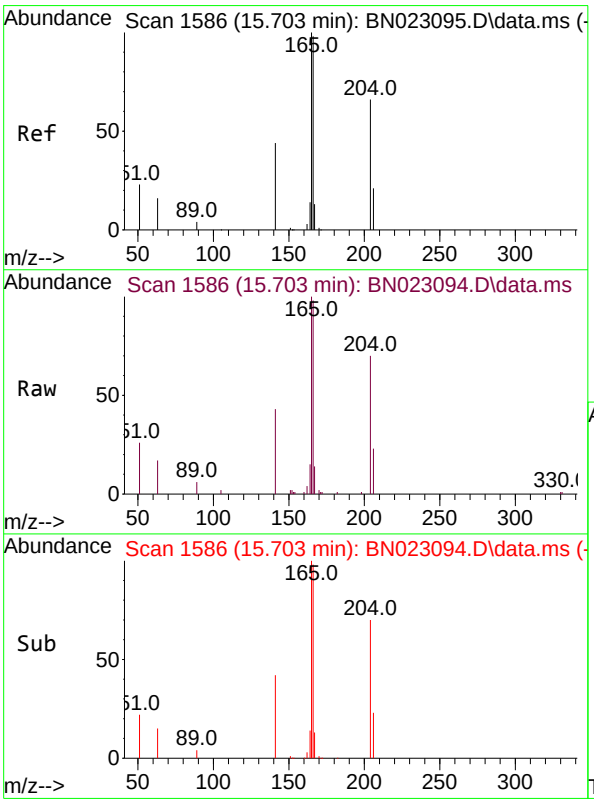
#17
Acenaphthene
Concen: 0.162 ng
RT: 14.730 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:154 Resp: 6737

Ion	Ratio	Lower	Upper
154	100		
153	110.4	88.6	132.8
152	59.7	48.1	72.1

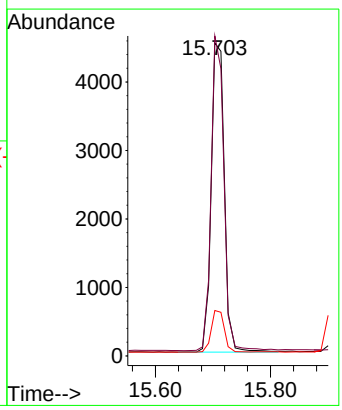


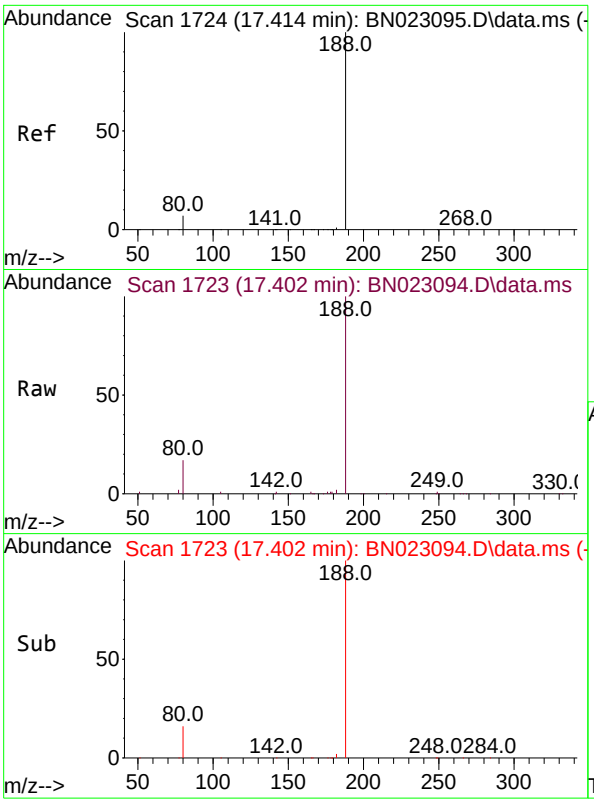


#18
Fluorene
Concen: 0.159 ng
RT: 15.703 min Scan# 1586
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:166 Resp: 7437

Ion	Ratio	Lower	Upper
166	100		
165	100.3	79.8	119.6
167	12.9	10.6	16.0



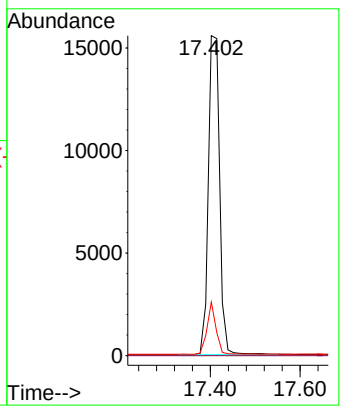


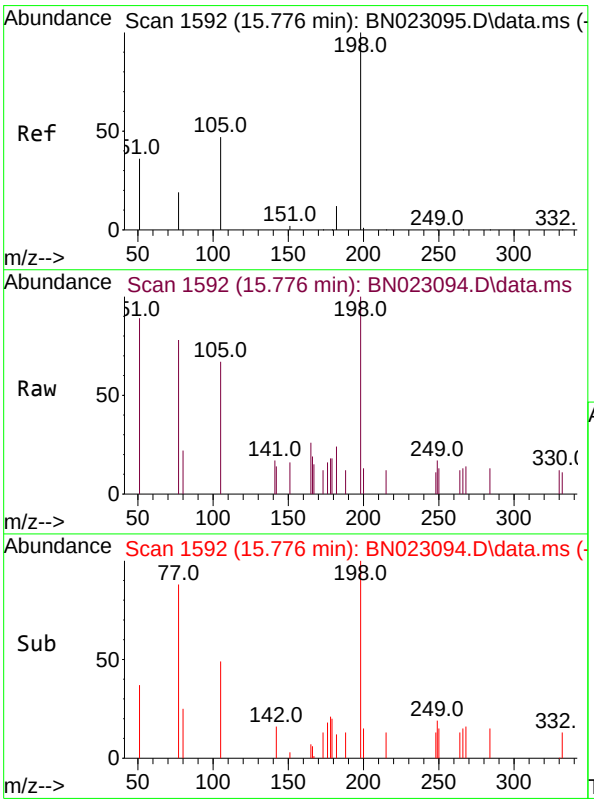
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.402 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:188 Resp: 27325

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	16.7	6.1	9.1#

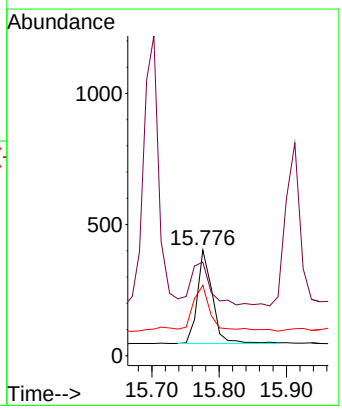


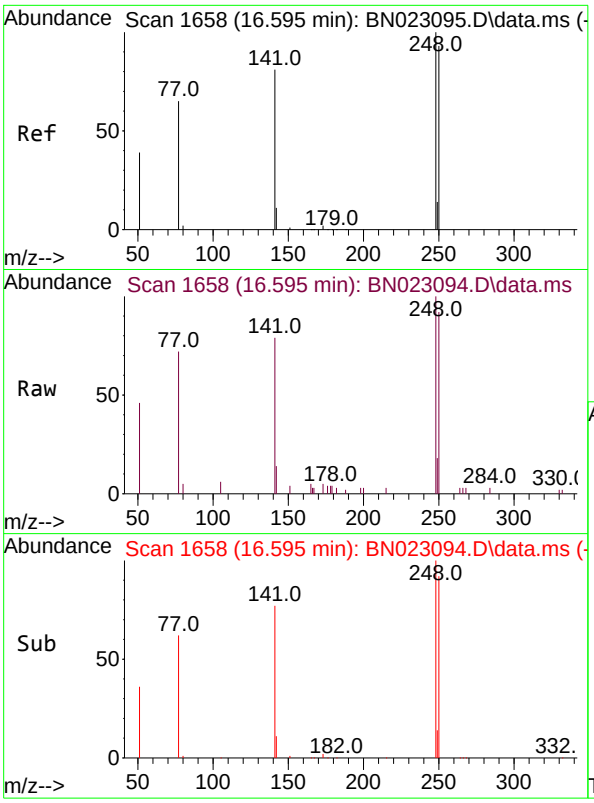


#20
4,6-Dinitro-2-methylphenol
Concen: 0.148 ng
RT: 15.776 min Scan# 1592
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:198 Resp: 547

Ion	Ratio	Lower	Upper
198	100		
51	88.6	57.0	85.4#
105	66.5	47.2	70.8



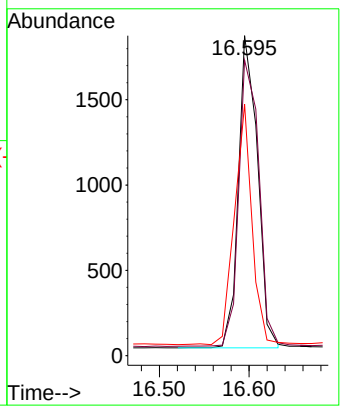


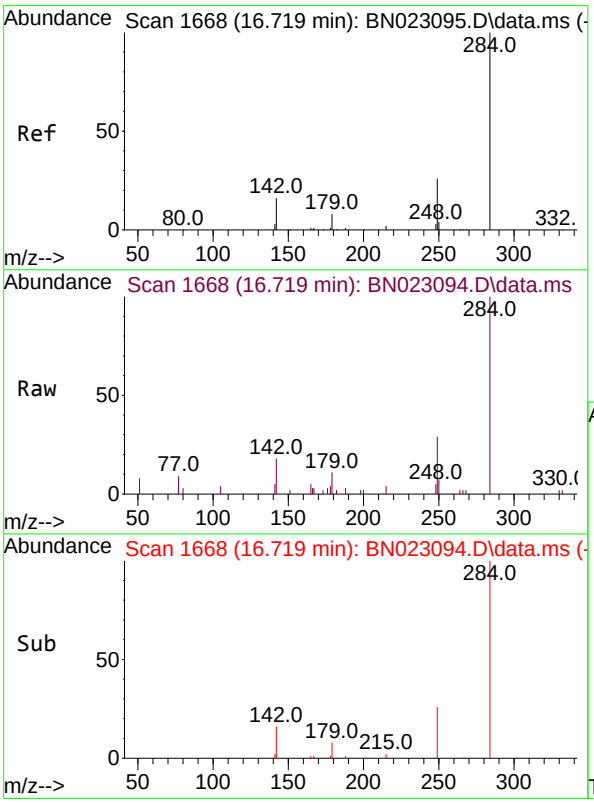
#21
4-Bromophenyl-phenylether
Concen: 0.164 ng
RT: 16.595 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:248 Resp: 2698

Ion	Ratio	Lower	Upper
248	100		
250	92.3	74.3	111.5
141	78.6	65.0	97.6

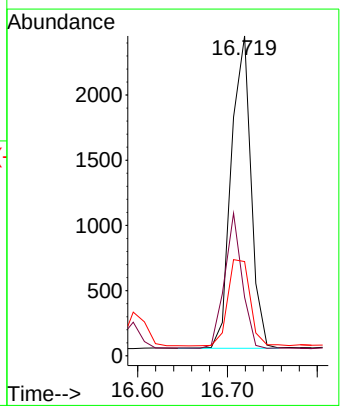


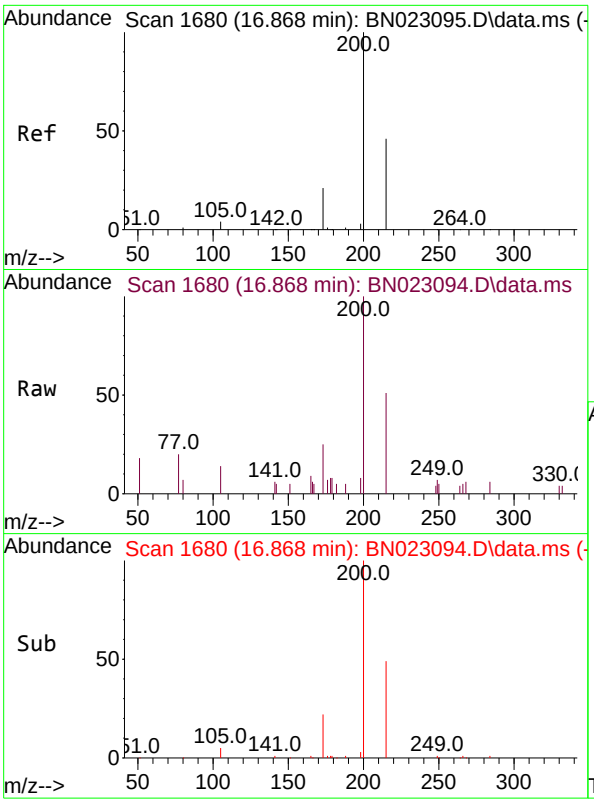


#22
Hexachlorobenzene
Concen: 0.171 ng
RT: 16.719 min Scan# 1668
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:284 Resp: 3650

Ion	Ratio	Lower	Upper
284	100		
142	38.6	31.0	46.4
249	31.1	24.4	36.6



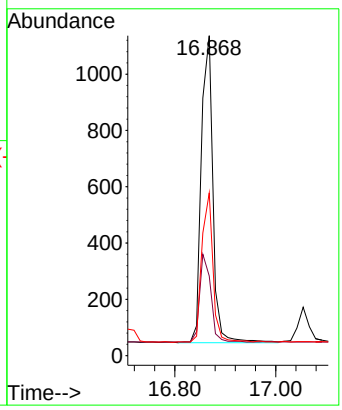


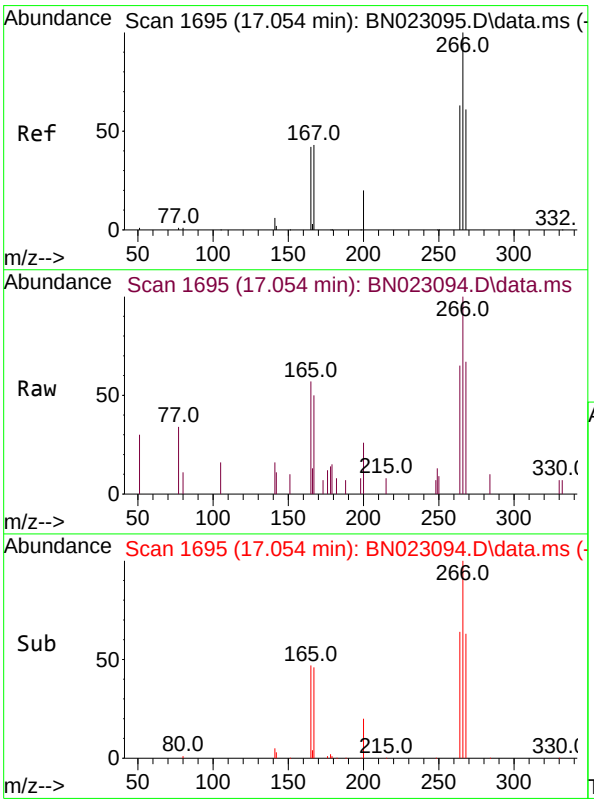
#23
Atrazine
Concen: 0.144 ng
RT: 16.868 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:200 Resp: 1729

Ion	Ratio	Lower	Upper
200	100		
173	24.9	18.2	27.4
215	50.8	38.0	57.0

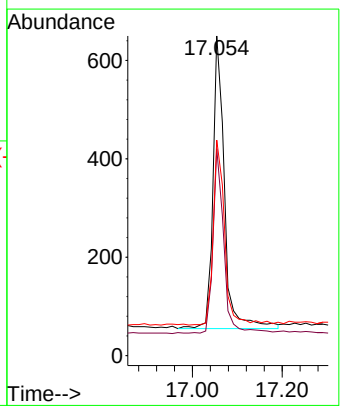


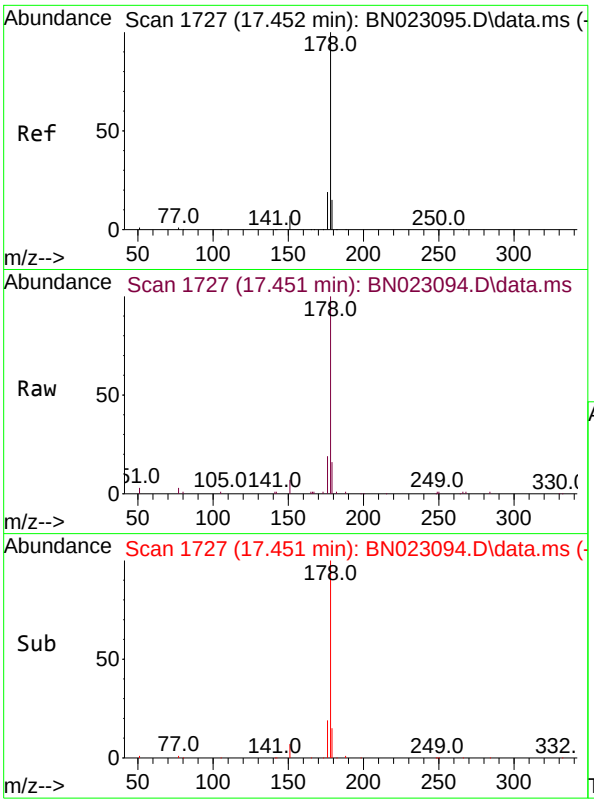


#24
Pentachlorophenol
Concen: 0.169 ng
RT: 17.054 min Scan# 1695
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:266 Resp: 1064

Ion	Ratio	Lower	Upper
266	100		
264	58.0	50.1	75.1
268	63.0	49.7	74.5



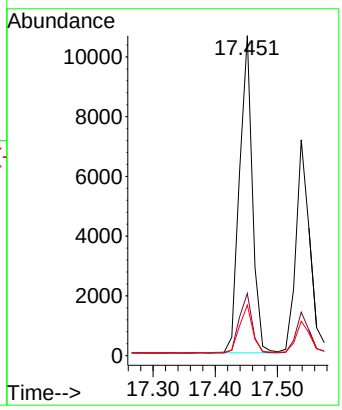


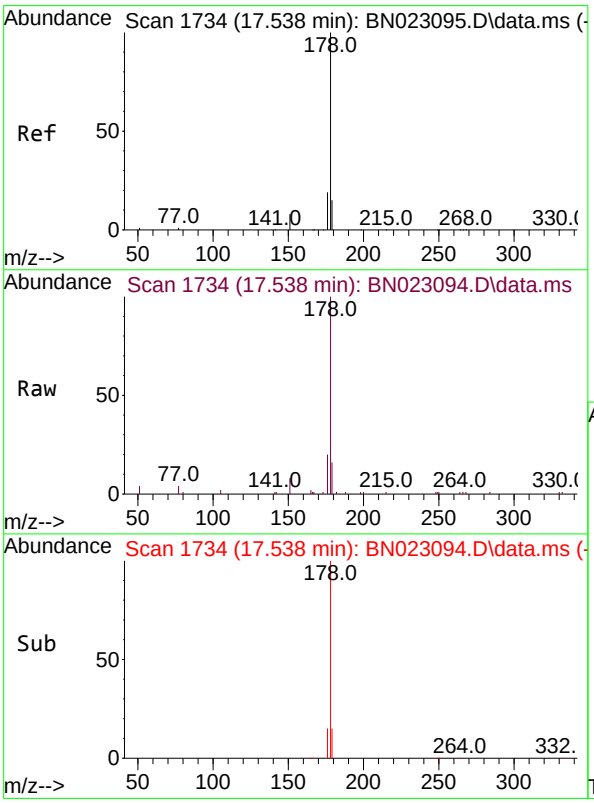
#25
Phenanthrene
Concen: 0.165 ng
RT: 17.451 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:178 Resp: 15180

Ion	Ratio	Lower	Upper
178	100		
176	19.0	15.4	23.2
179	15.4	12.2	18.2

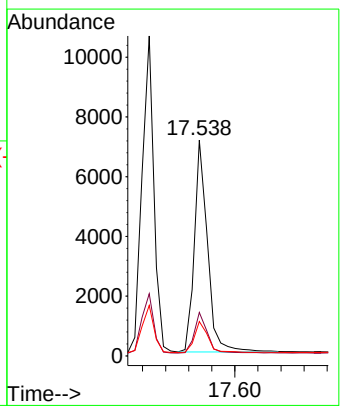


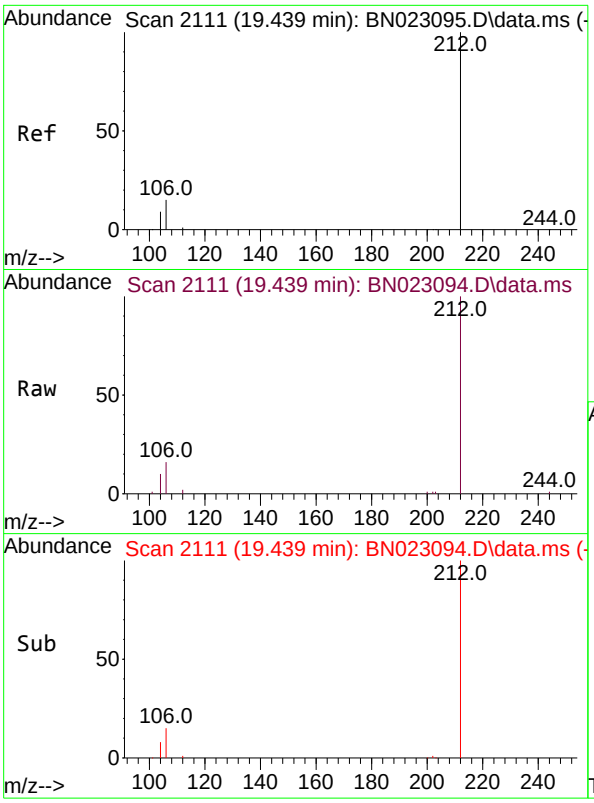


#26
Anthracene
Concen: 0.152 ng
RT: 17.538 min Scan# 1734
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:178 Resp: 11253

Ion	Ratio	Lower	Upper
178	100		
176	18.8	15.1	22.7
179	14.7	12.2	18.4



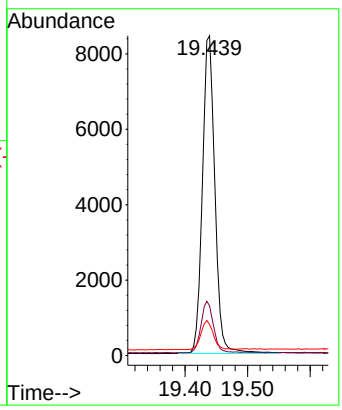


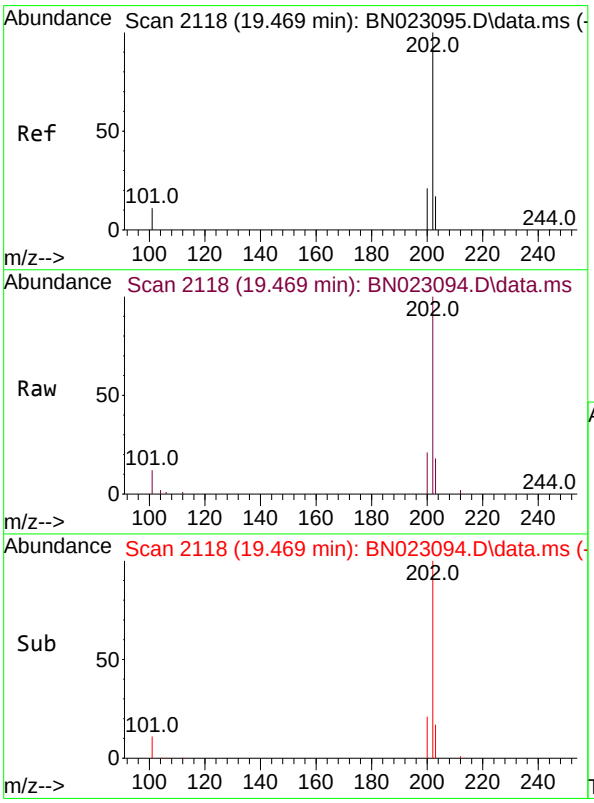
#27
Fluoranthene-d10
Concen: 0.156 ng
RT: 19.439 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:212 Resp: 11666

Ion	Ratio	Lower	Upper
212	100		
106	16.1	13.0	19.4
104	9.0	7.5	11.3

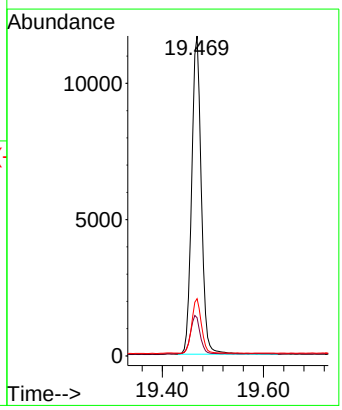


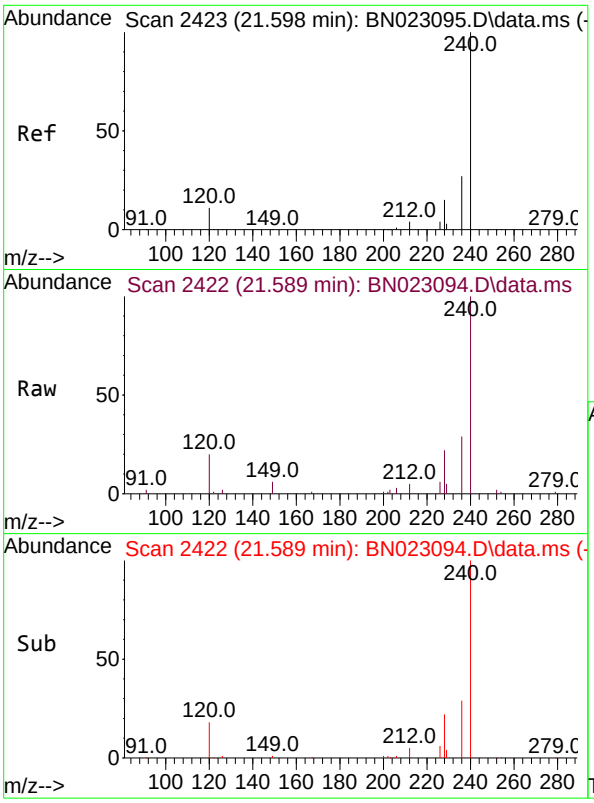


#28
Fluoranthene
Concen: 0.154 ng
RT: 19.469 min Scan# 2118
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:202 Resp: 15457

Ion	Ratio	Lower	Upper
202	100		
101	12.6	9.7	14.5
203	17.0	13.8	20.6



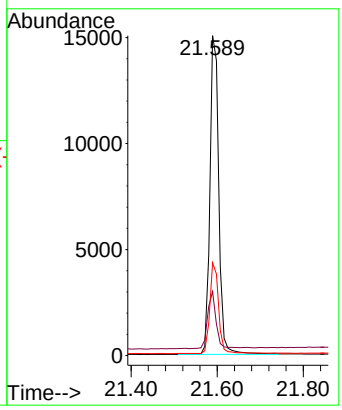


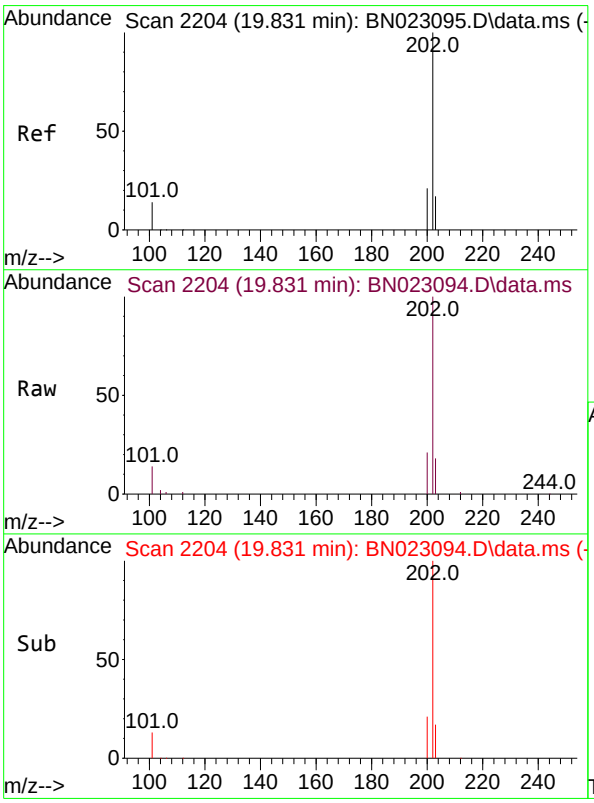
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.589 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:240 Resp: 21585

Ion	Ratio	Lower	Upper
240	100		
120	20.0	10.1	15.1#
236	29.0	22.2	33.4

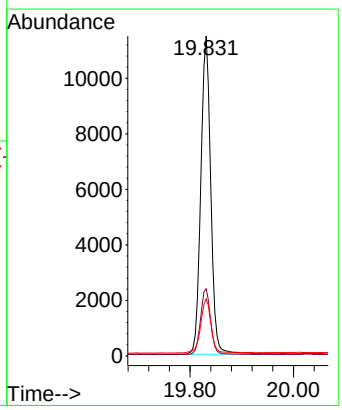


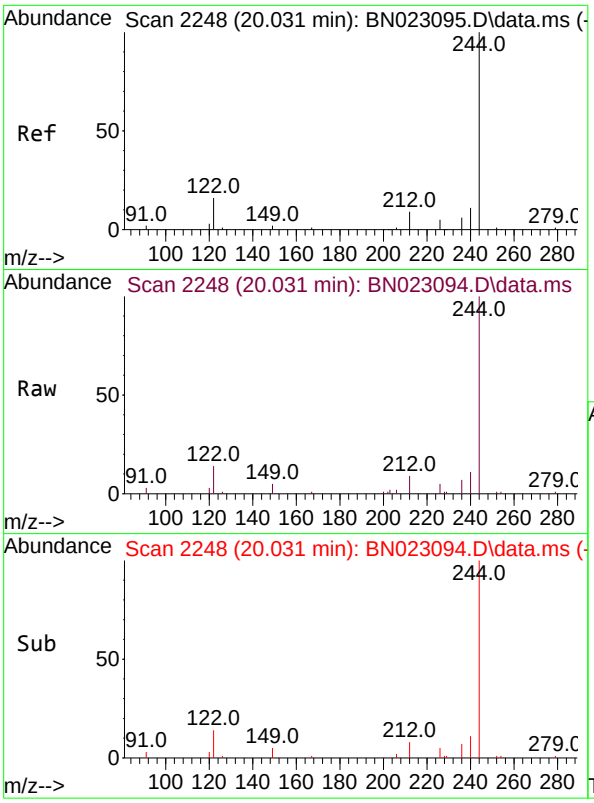


#30
Pyrene
Concen: 0.171 ng
RT: 19.831 min Scan# 2204
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:202 Resp: 15365

Ion	Ratio	Lower	Upper
202	100		
200	20.7	16.9	25.3
203	17.4	14.2	21.4



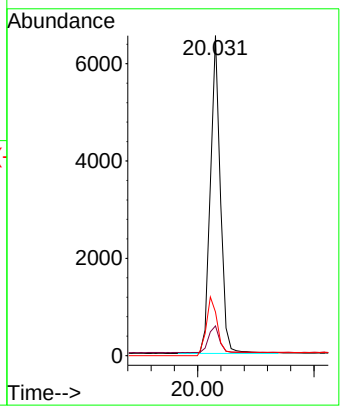


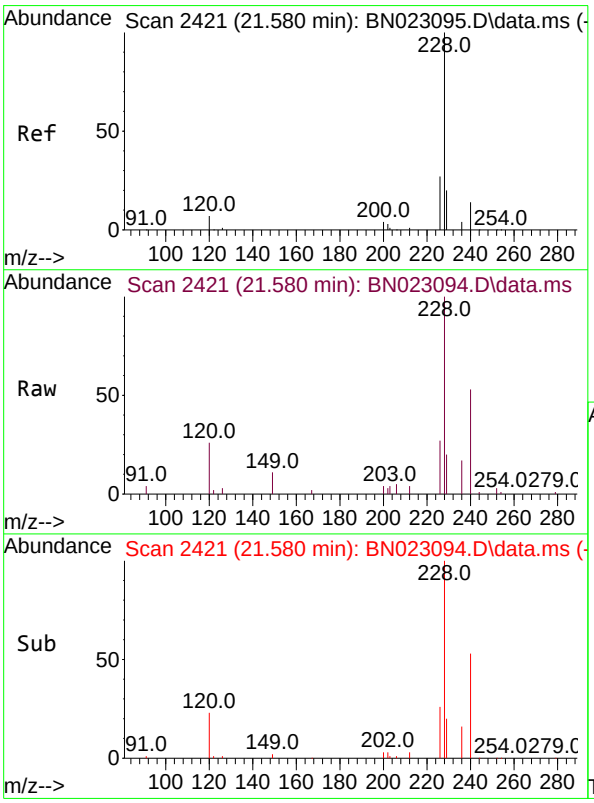
#31
Terphenyl-d14
Concen: 0.152 ng
RT: 20.031 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:244 Resp: 6228

Ion	Ratio	Lower	Upper
244	100		
212	9.3	7.6	11.4
122	13.6	12.6	18.8

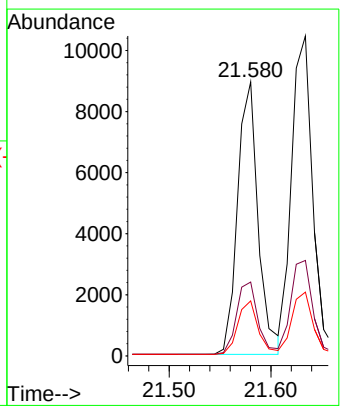


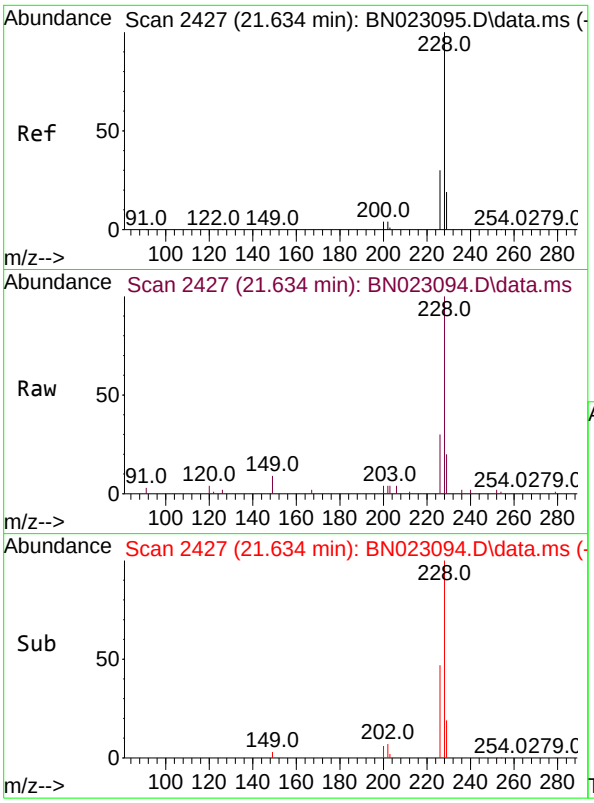


#32
Benzo(a)anthracene
Concen: 0.158 ng
RT: 21.580 min Scan# 2421
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:228 Resp: 12565

Ion	Ratio	Lower	Upper
228	100		
226	27.0	22.0	33.0
229	20.0	15.8	23.8



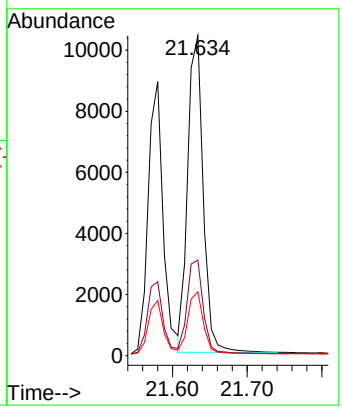


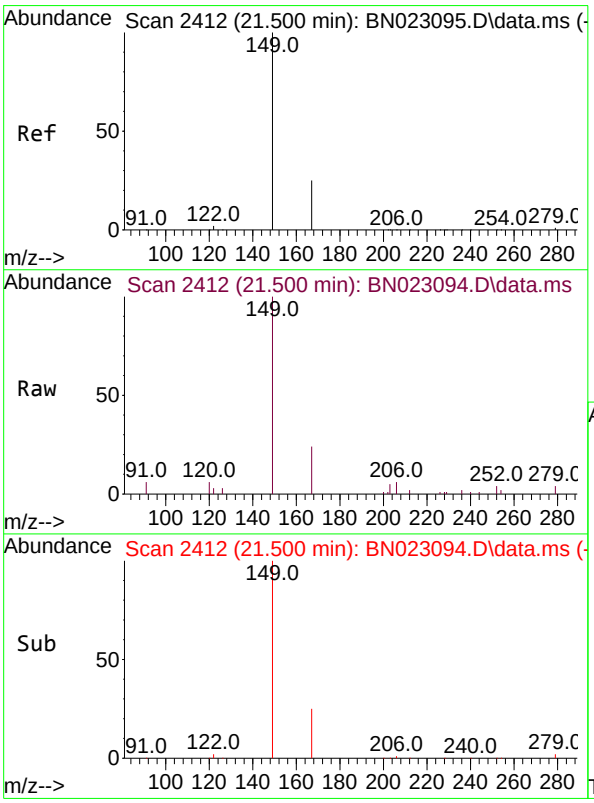
#33
Chrysene
Concen: 0.169 ng
RT: 21.634 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:228 Resp: 15019

Ion	Ratio	Lower	Upper
228	100		
226	29.8	24.4	36.6
229	19.9	15.6	23.4

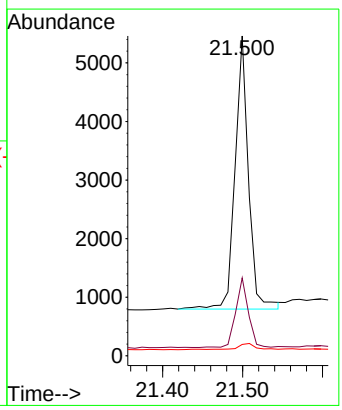


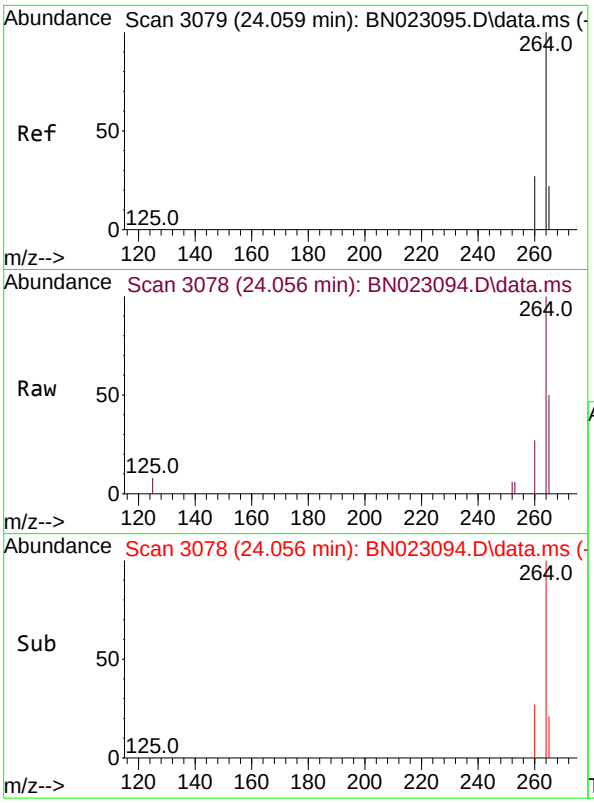


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.159 ng
RT: 21.500 min Scan# 2412
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:149 Resp: 5458

Ion	Ratio	Lower	Upper
149	100		
167	23.9	20.2	30.2
279	3.4	2.3	3.5



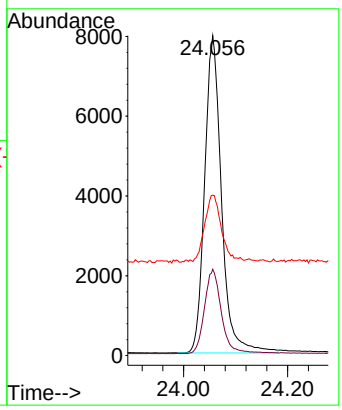


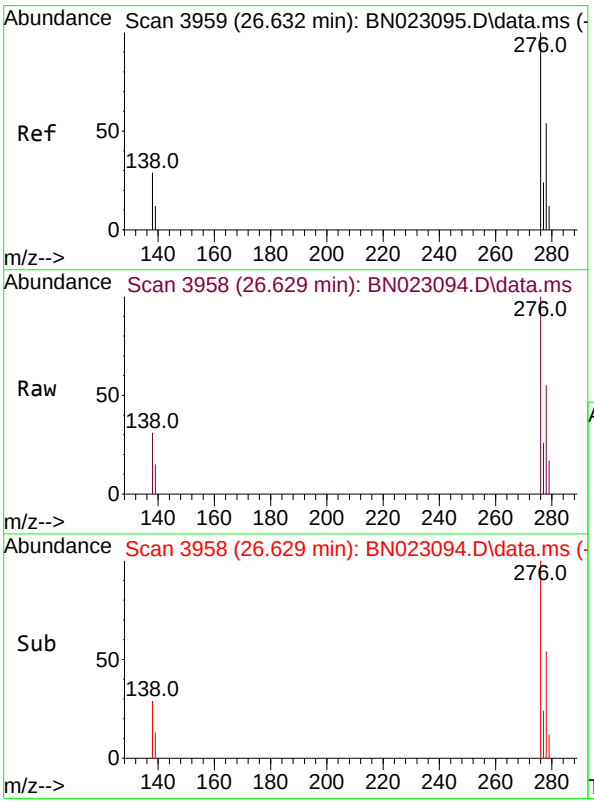
#35
Perylene-d12
Concen: 0.400 ng
RT: 24.056 min Scan# 30
Delta R.T. -0.003 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:264 Resp: 17922

Ion	Ratio	Lower	Upper
264	100		
260	27.0	21.7	32.5
265	50.1	43.2	64.8

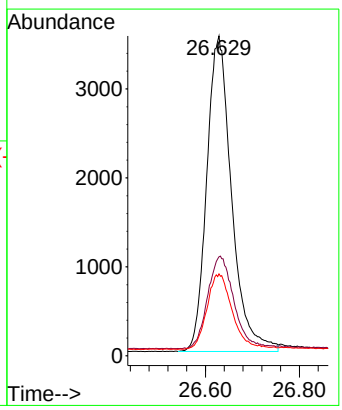


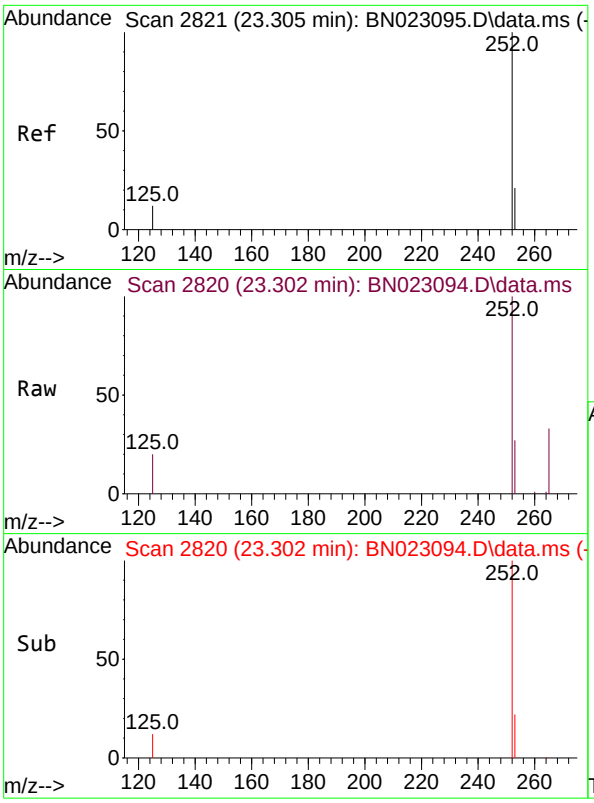


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.137 ng
RT: 26.629 min Scan# 3958
Delta R.T. -0.003 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:276 Resp: 13007

Ion	Ratio	Lower	Upper
276	100		
138	30.8	25.0	37.6
277	24.3	19.8	29.8



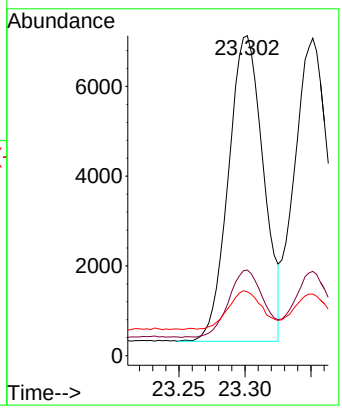


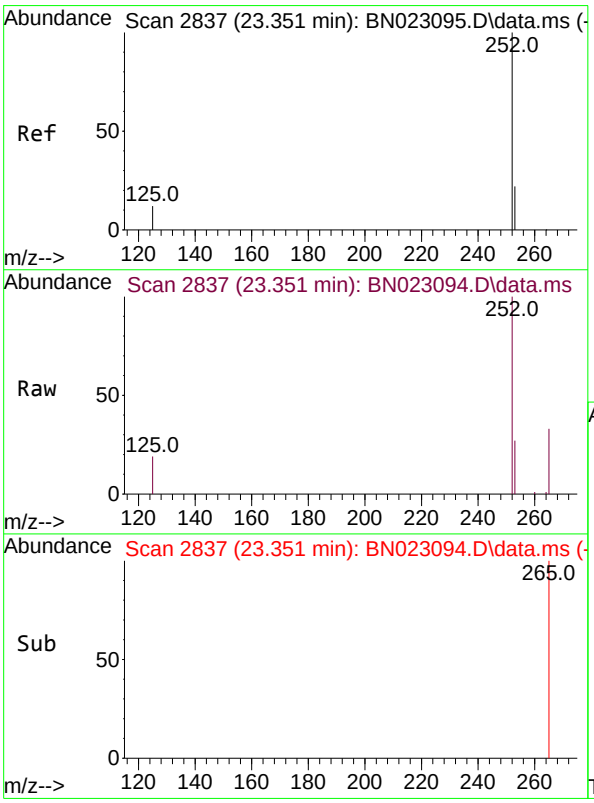
#37
Benzo(b)fluoranthene
Concen: 0.153 ng
RT: 23.302 min Scan# 28
Delta R.T. -0.003 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:252 Resp: 12559

Ion	Ratio	Lower	Upper
252	100		
253	26.7	19.0	28.4
125	19.9	12.8	19.2#

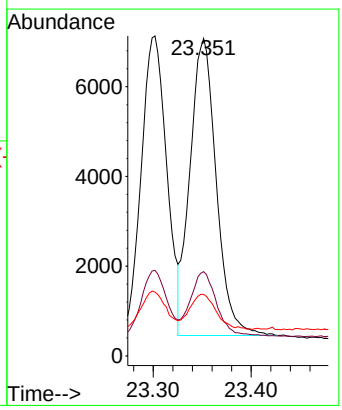


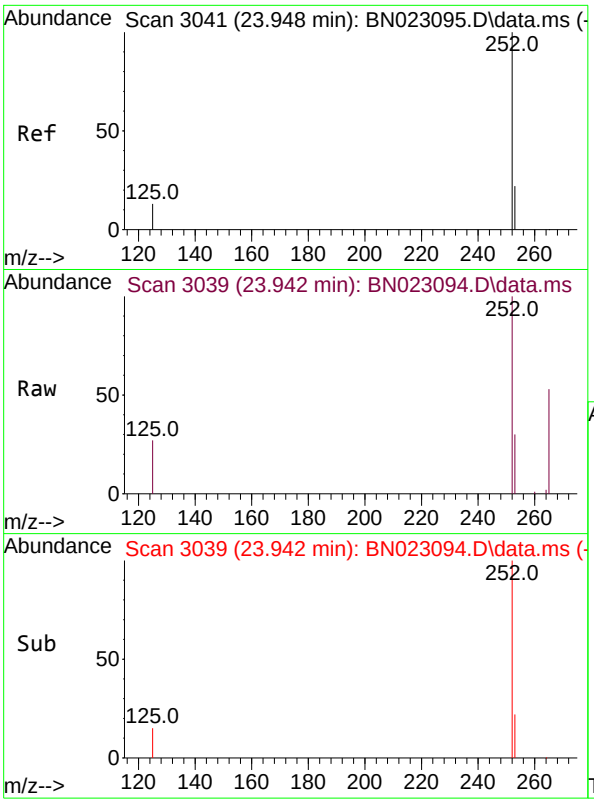


#38
Benzo(k)fluoranthene
Concen: 0.147 ng
RT: 23.351 min Scan# 2837
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:252 Resp: 12349

Ion	Ratio	Lower	Upper
252	100		
253	26.6	19.1	28.7
125	19.4	12.5	18.7#



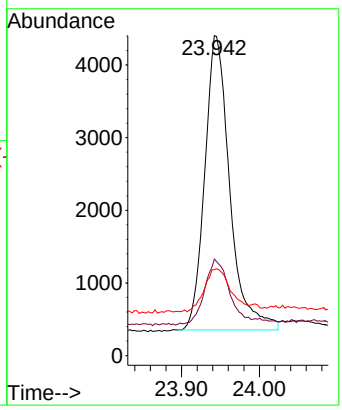


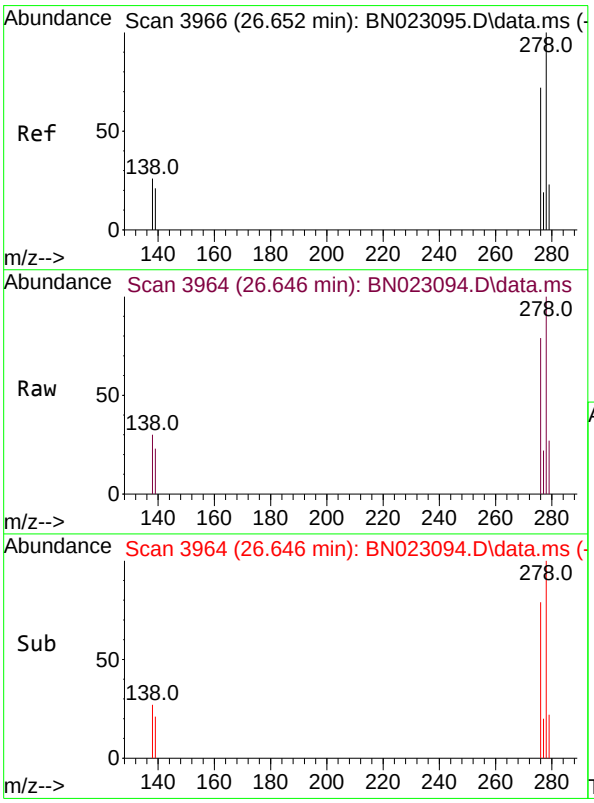
#39
Benzo(a)pyrene
Concen: 0.136 ng
RT: 23.942 min Scan# 3
Delta R.T. -0.006 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:252 Resp: 9043

Ion	Ratio	Lower	Upper
252	100		
253	30.2	20.6	30.8
125	26.9	15.8	23.8#

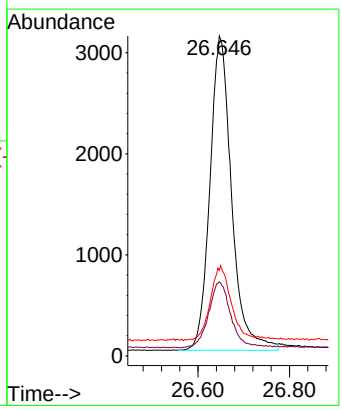


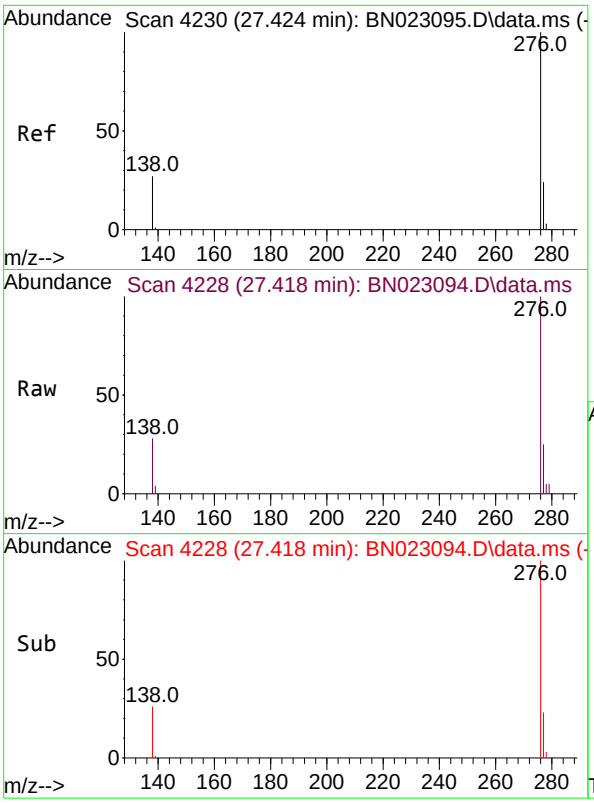


#40
Dibenzo(a,h)anthracene
Concen: 0.136 ng
RT: 26.646 min Scan# 3964
Delta R.T. -0.006 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:278 Resp: 10252

Ion	Ratio	Lower	Upper
278	100		
139	23.1	17.5	26.3
279	26.7	20.5	30.7



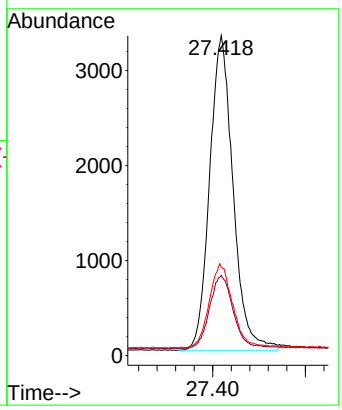


#41
Benzo(g,h,i)perylene
Concen: 0.150 ng
RT: 27.418 min Scan# 4
Delta R.T. -0.006 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:276 Resp: 11608

Ion	Ratio	Lower	Upper
276	100		
277	25.1	19.9	29.9
138	27.8	22.2	33.2



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023095.D
Acq On : 08 Dec 2022 15:13
Operator : CG/JU
Sample : SSTDICCC0.4
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Quant Time: Dec 09 07:28:06 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	8.020	152	6900	0.400	ng		0.00
7) Naphthalene-d8	10.840	136	20701	0.400	ng		0.00
13) Acenaphthene-d10	14.666	164	11453	0.400	ng		0.00
19) Phenanthrene-d10	17.414	188	25275	0.400	ng		0.00
29) Chrysene-d12	21.598	240	20569	0.400	ng		0.00
35) Perylene-d12	24.059	264	15521	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.558	112	5158	0.323	ng		0.00
5) Phenol-d6	7.168	99	6316	0.315	ng		0.00
8) Nitrobenzene-d5	9.185	82	5132	0.330	ng		0.00
11) 2-Methylnaphthalene-d10	12.427	152	13294	0.340	ng		0.00
14) 2,4,6-Tribromophenol	16.148	330	1509	0.312	ng		0.00
15) 2-Fluorobiphenyl	13.298	172	18409	0.362	ng		0.00
27) Fluoranthene-d10	19.439	212	22299	0.322	ng		0.00
31) Terphenyl-d14	20.031	244	14076	0.361	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.398	88	2794	0.327	ng		100
3) n-Nitrosodimethylamine	3.738	42	2572	0.307	ng		100
6) bis(2-Chloroethyl)ether	7.435	93	7602	0.343	ng		100
9) Naphthalene	10.893	128	20658	0.336	ng		100
10) Hexachlorobutadiene	11.181	225	4047	0.351	ng	#	100
12) 2-Methylnaphthalene	12.117	142	3041	0.324	ng		100
16) Acenaphthylene	14.388	152	16880	0.314	ng		100
17) Acenaphthene	14.730	154	13187	0.336	ng		100
18) Fluorene	15.703	166	14809	0.337	ng		100
20) 4,6-Dinitro-2-methylph...	15.776	198	1159	0.339	ng		100
21) 4-Bromophenyl-phenylether	16.595	248	5161	0.339	ng		100
22) Hexachlorobenzene	16.719	284	7088	0.358	ng		100
23) Atrazine	16.868	200	3382	0.305	ng		100
24) Pentachlorophenol	17.054	266	2029	0.349	ng		100
25) Phenanthrene	17.452	178	28996	0.340	ng		100
26) Anthracene	17.538	178	21713	0.316	ng		100
28) Fluoranthene	19.469	202	30350	0.327	ng		100
30) Pyrene	19.831	202	29786	0.347	ng		100
32) Benzo(a)anthracene	21.580	228	24652	0.325	ng		100
33) Chrysene	21.634	228	29670	0.350	ng		100
34) Bis(2-ethylhexyl)phtha...	21.500	149	10060	0.307	ng		100
36) Indeno(1,2,3-cd)pyrene	26.632	276	26282	0.319	ng		100
37) Benzo(b)fluoranthene	23.305	252	24739	0.349	ng		100
38) Benzo(k)fluoranthene	23.351	252	24998	0.344	ng		100
39) Benzo(a)pyrene	23.948	252	17239	0.300	ng		100
40) Dibenzo(a,h)anthracene	26.652	278	21269	0.326	ng		100
41) Benzo(g,h,i)perylene	27.424	276	23466	0.351	ng		100

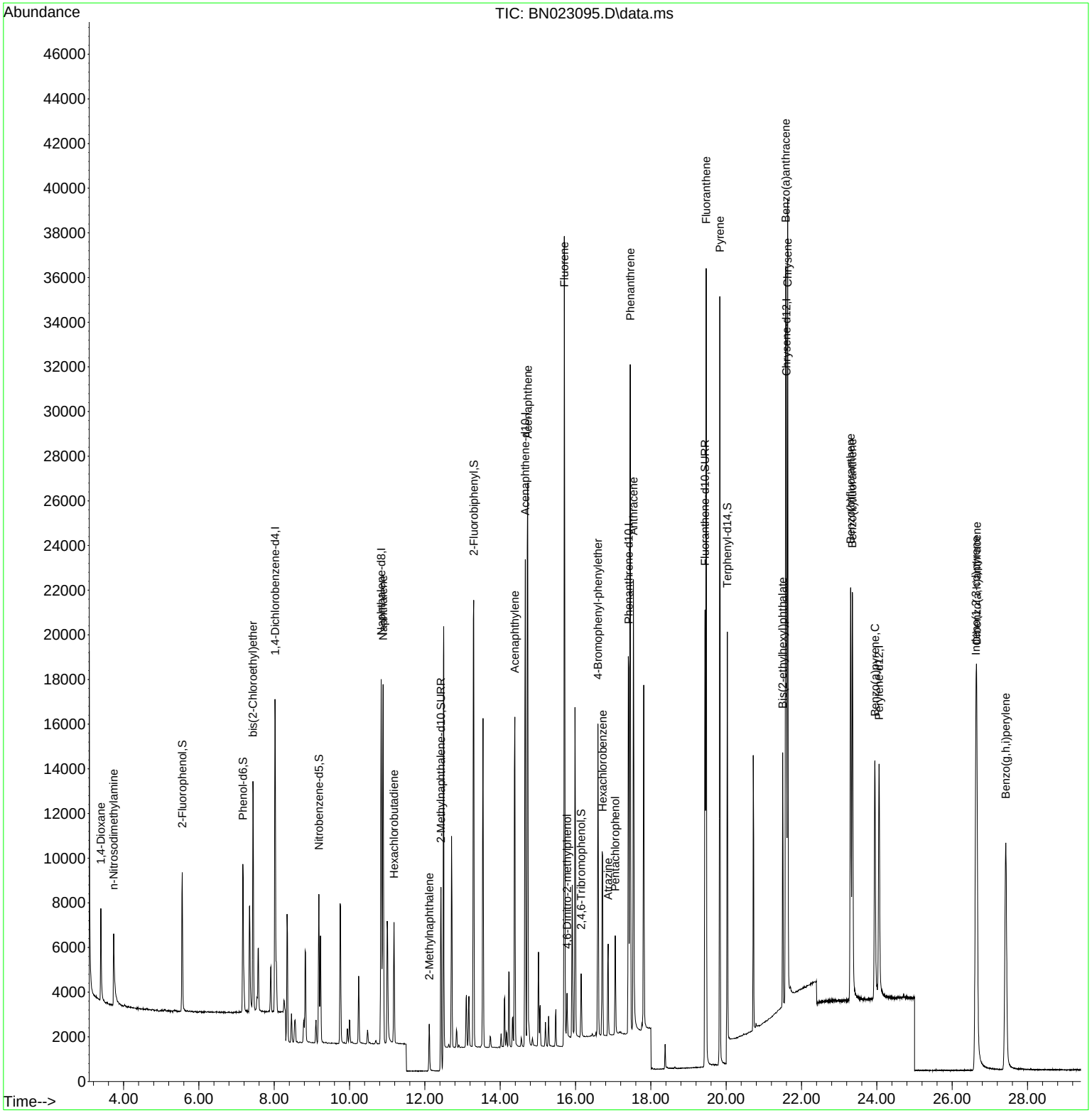
(#) = qualifier out of range (m) = manual integration (+) = signals summed

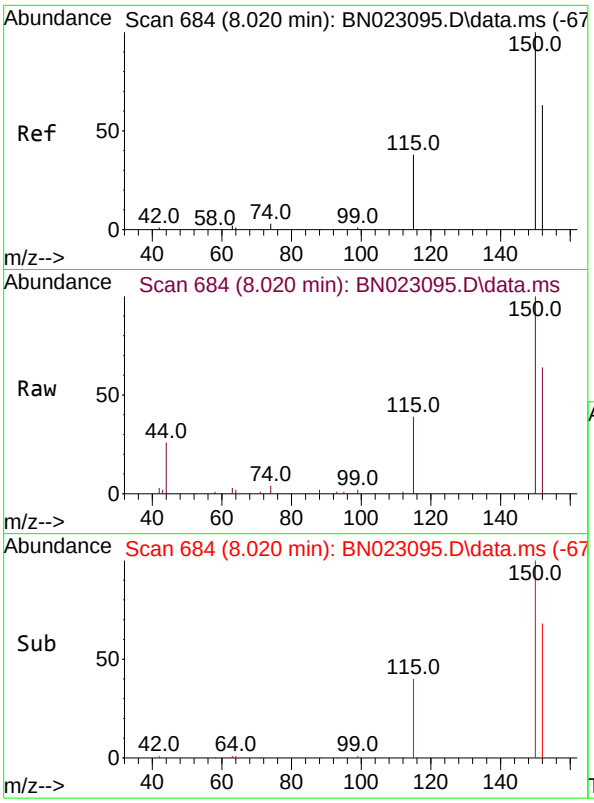
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023095.D
Acq On : 08 Dec 2022 15:13
Operator : CG/JU
Sample : SSTDICCC0.4
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Quant Time: Dec 09 07:28:06 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration



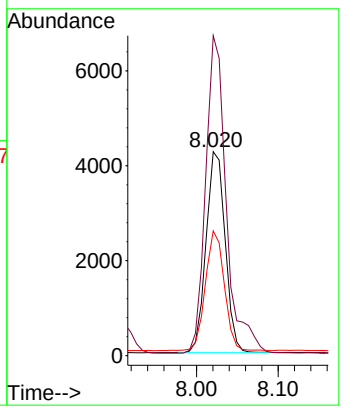


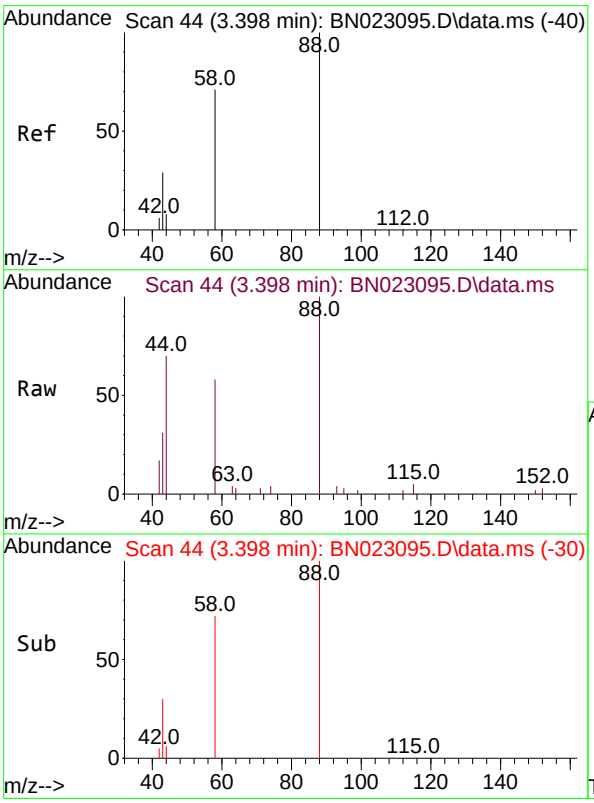
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 8.020 min Scan# 68
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:152 Resp: 6900

Ion	Ratio	Lower	Upper
152	100		
150	157.0	125.6	188.4
115	61.2	49.0	73.4

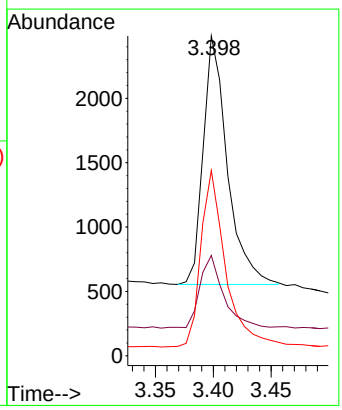


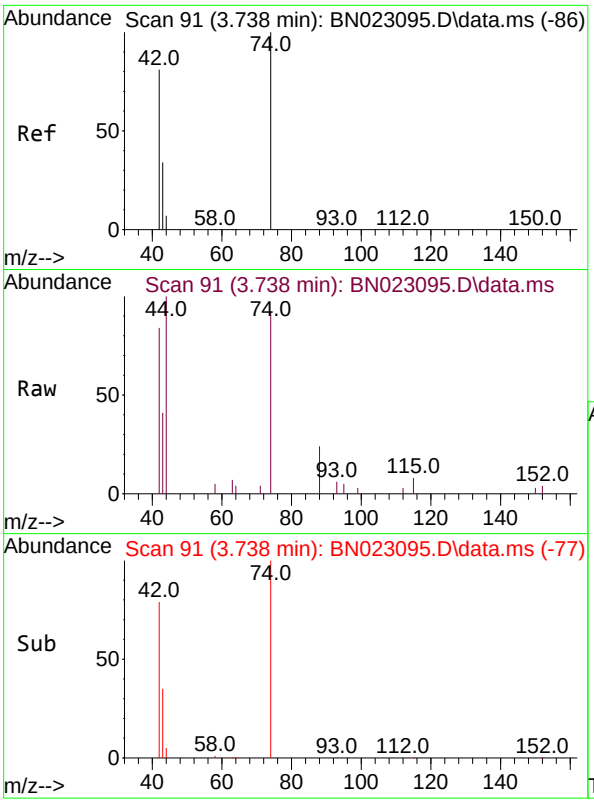


#2
1,4-Dioxane
Concen: 0.327 ng
RT: 3.398 min Scan# 44
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion: 88 Resp: 2794

Ion	Ratio	Lower	Upper
88	100		
43	29.1	23.3	34.9
58	72.9	58.0	87.0



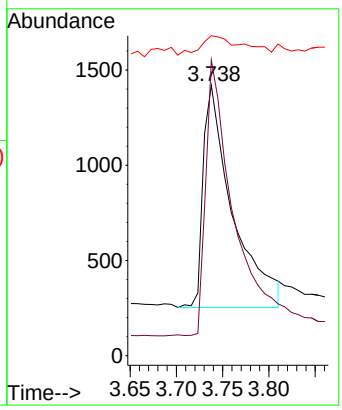


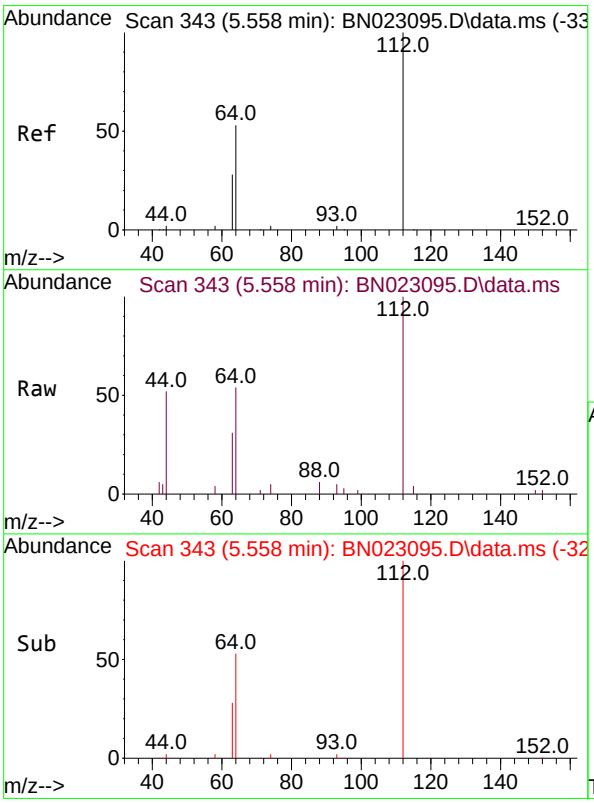
#3
n-Nitrosodimethylamine
Concen: 0.307 ng
RT: 3.738 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion: 42 Resp: 2572

Ion	Ratio	Lower	Upper
42	100		
74	119.8	95.8	143.6
44	10.3	8.4	12.6

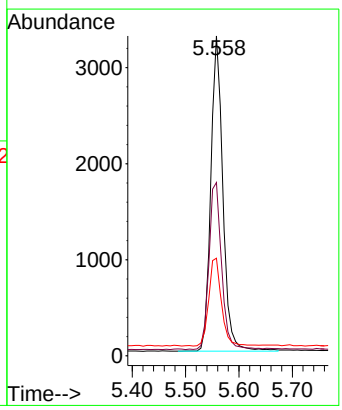


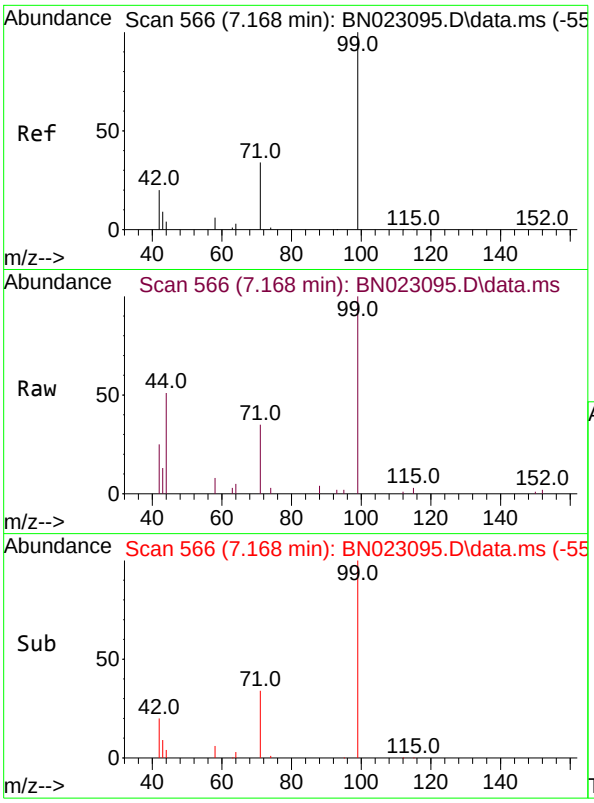


#4
2-Fluorophenol
Concen: 0.323 ng
RT: 5.558 min Scan# 343
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:112 Resp: 5158

Ion	Ratio	Lower	Upper
112	100		
64	55.5	44.4	66.6
63	29.6	23.7	35.5



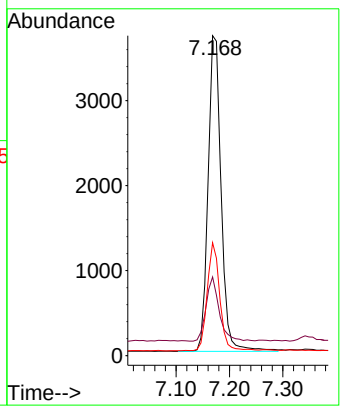


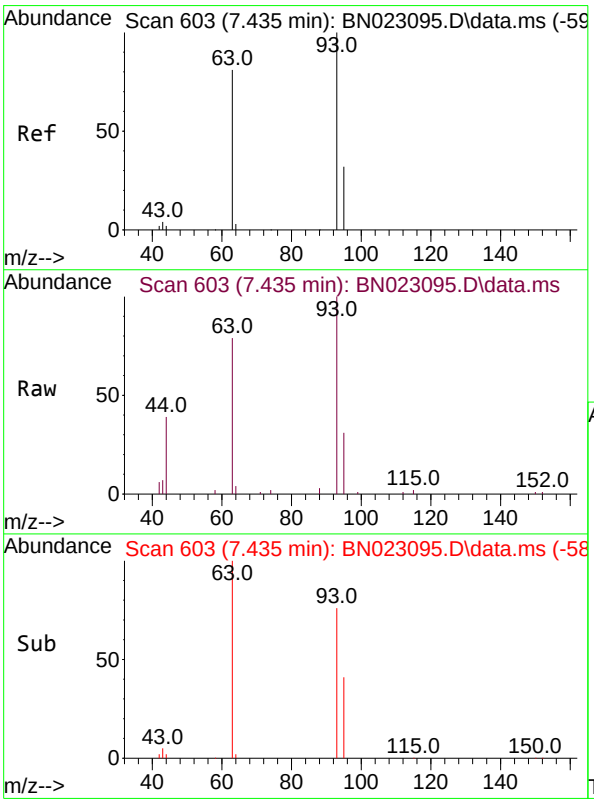
#5
Phenol-d6
Concen: 0.315 ng
RT: 7.168 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion: 99 Resp: 6316

Ion	Ratio	Lower	Upper
99	100		
42	20.4	16.3	24.5
71	33.1	26.5	39.7

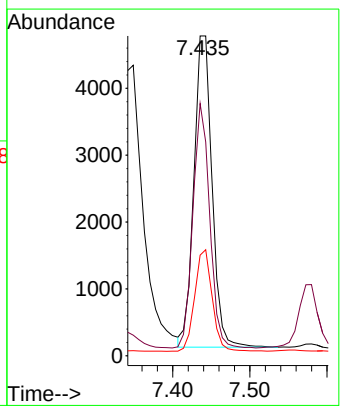


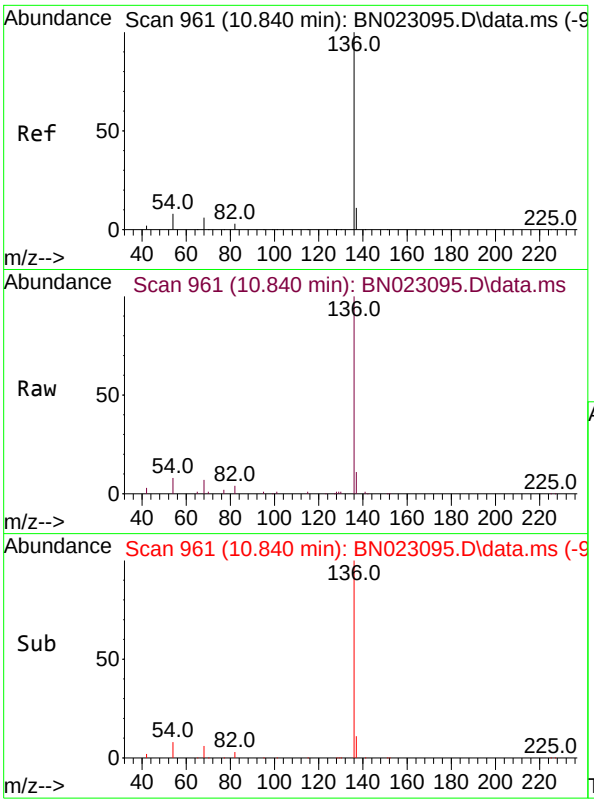


#6
bis(2-Chloroethyl)ether
Concen: 0.343 ng
RT: 7.435 min Scan# 603
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion: 93 Resp: 7602

Ion	Ratio	Lower	Upper
93	100		
63	72.6	58.1	87.1
95	31.5	25.2	37.8



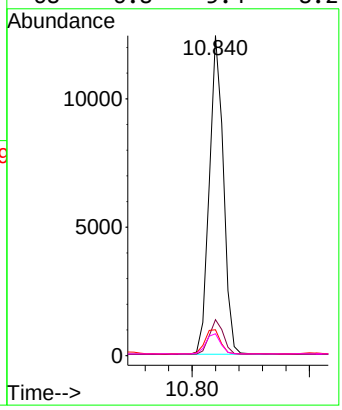


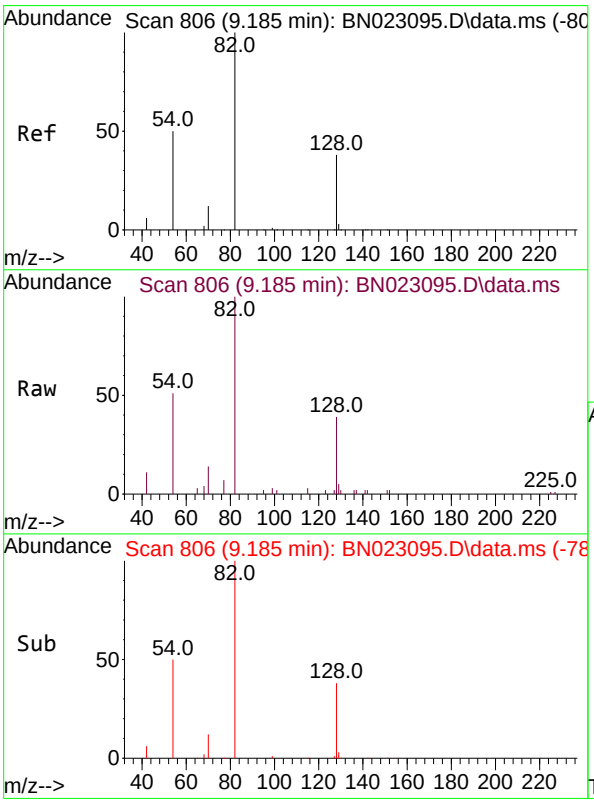
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.840 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:136 Resp: 20701

Ion	Ratio	Lower	Upper
136	100		
137	11.2	9.0	13.4
54	8.1	6.5	9.7
68	6.8	5.4	8.2

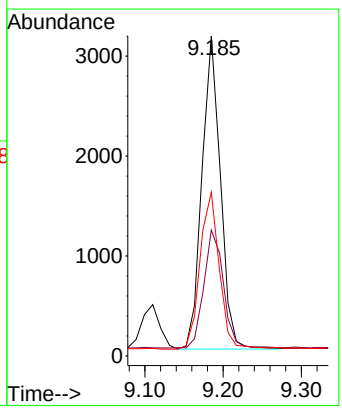


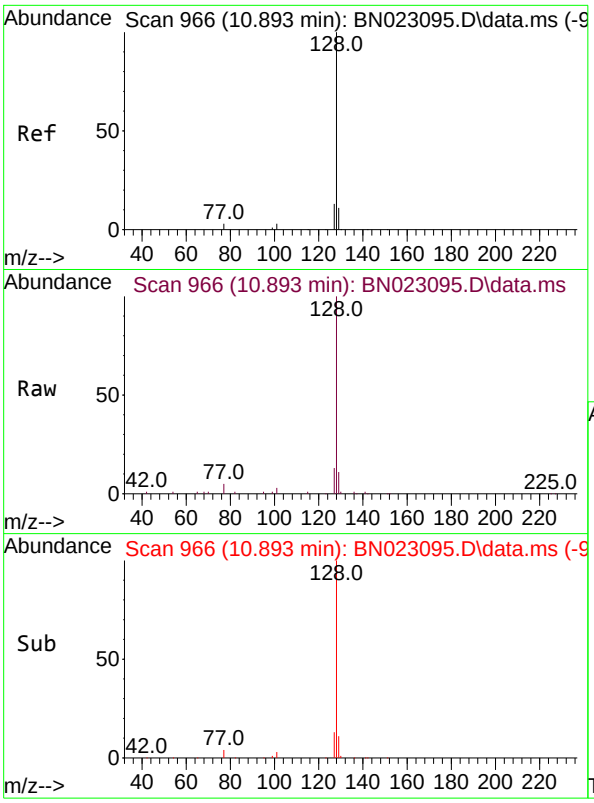


#8
Nitrobenzene-d5
Concen: 0.330 ng
RT: 9.185 min Scan# 806
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion: 82 Resp: 5132

Ion	Ratio	Lower	Upper
82	100		
128	39.3	31.4	47.2
54	51.2	41.0	61.4



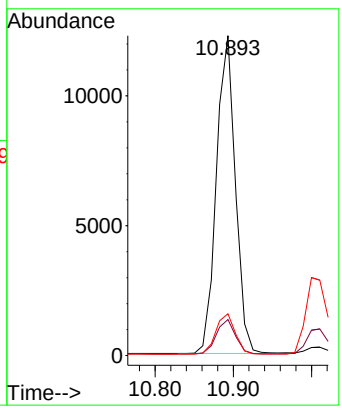


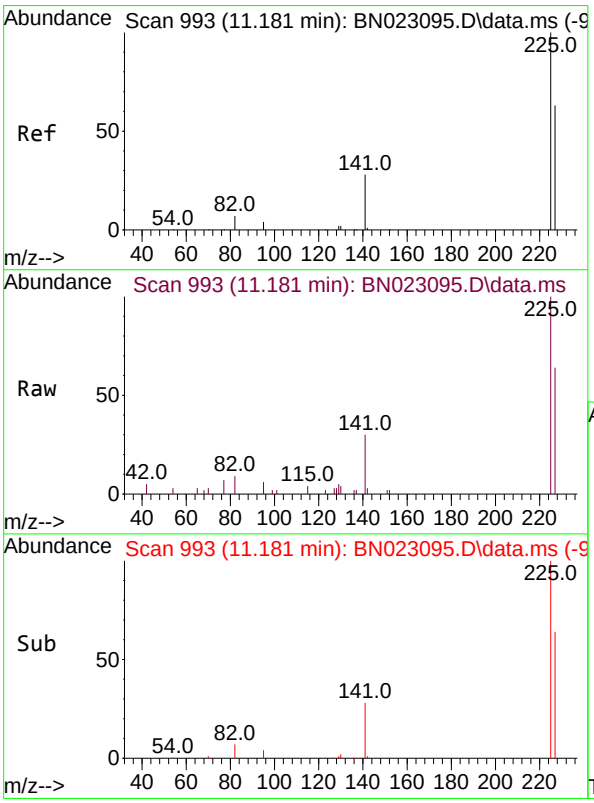
#9
Naphthalene
Concen: 0.336 ng
RT: 10.893 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:128 Resp: 20658

Ion	Ratio	Lower	Upper
128	100		
129	11.3	9.0	13.6
127	13.1	10.5	15.7

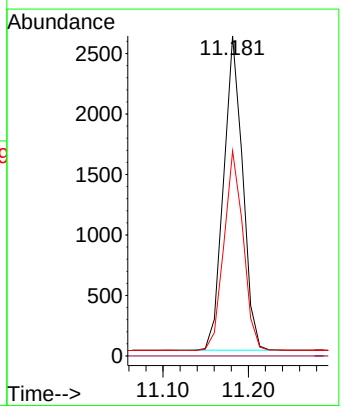


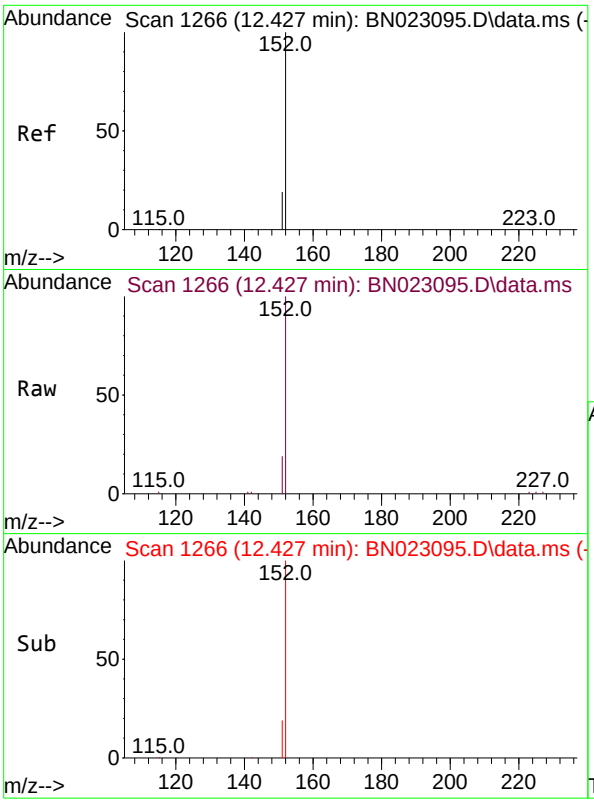


#10
Hexachlorobutadiene
Concen: 0.351 ng
RT: 11.181 min Scan# 993
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:225 Resp: 4047

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.9	51.1	76.7



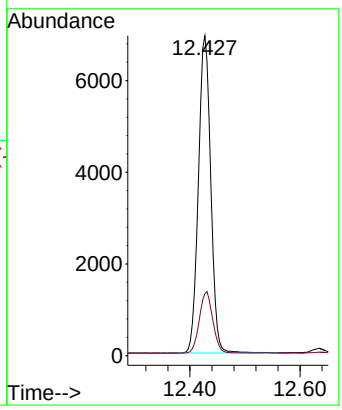


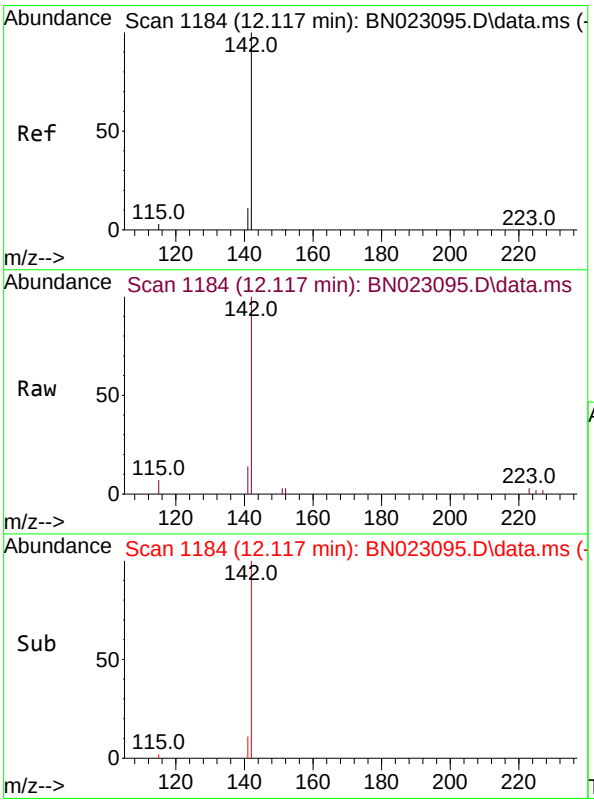
#11
2-Methylnaphthalene-d10
Concen: 0.340 ng
RT: 12.427 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:152 Resp: 13294

Ion	Ratio	Lower	Upper
152	100		
151	18.9	15.1	22.7

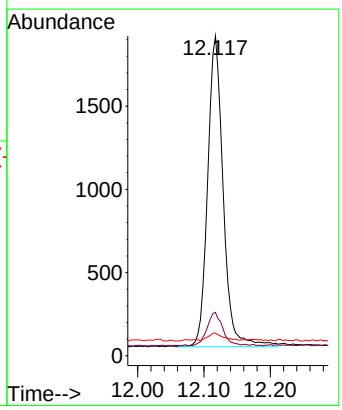


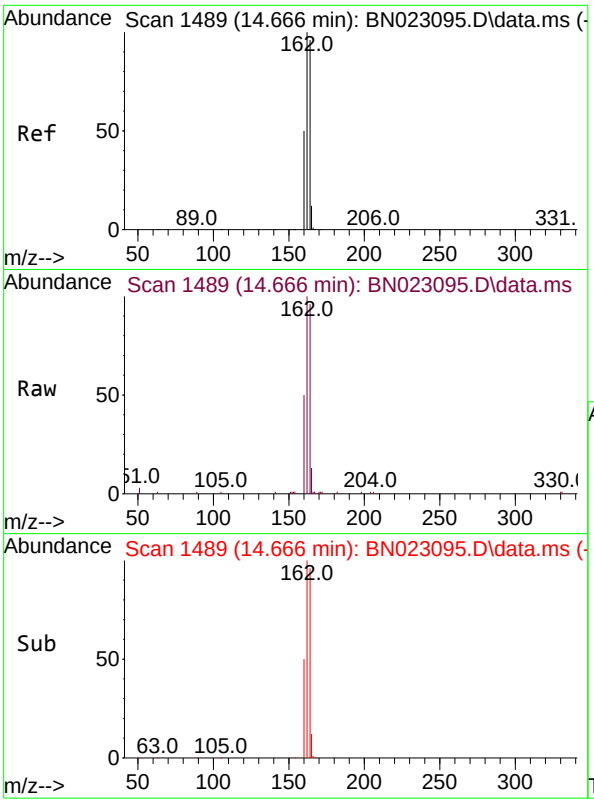


#12
2-Methylnaphthalene
Concen: 0.324 ng
RT: 12.117 min Scan# 1184
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:142 Resp: 3041

Ion	Ratio	Lower	Upper
142	100		
141	13.6	10.9	16.3
115	7.1	5.7	8.5



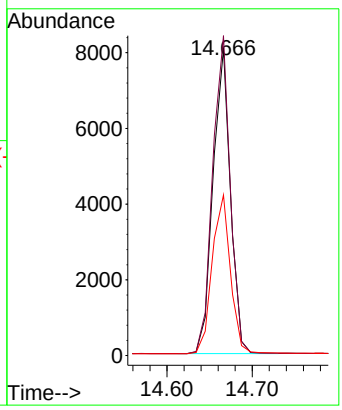


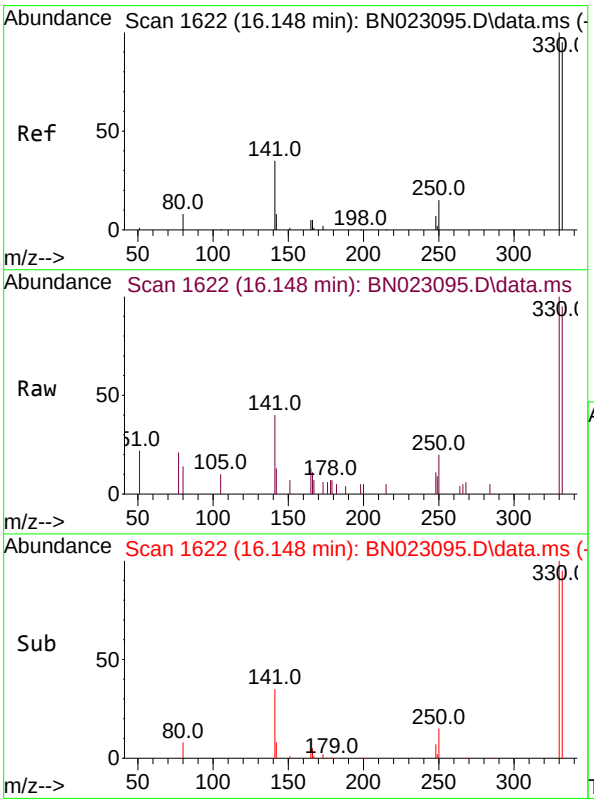
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.666 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:164 Resp: 11453

Ion	Ratio	Lower	Upper
164	100		
162	104.2	83.4	125.0
160	52.3	41.8	62.8

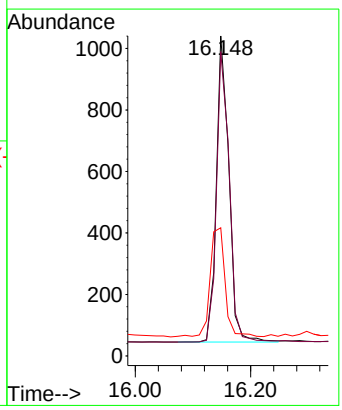


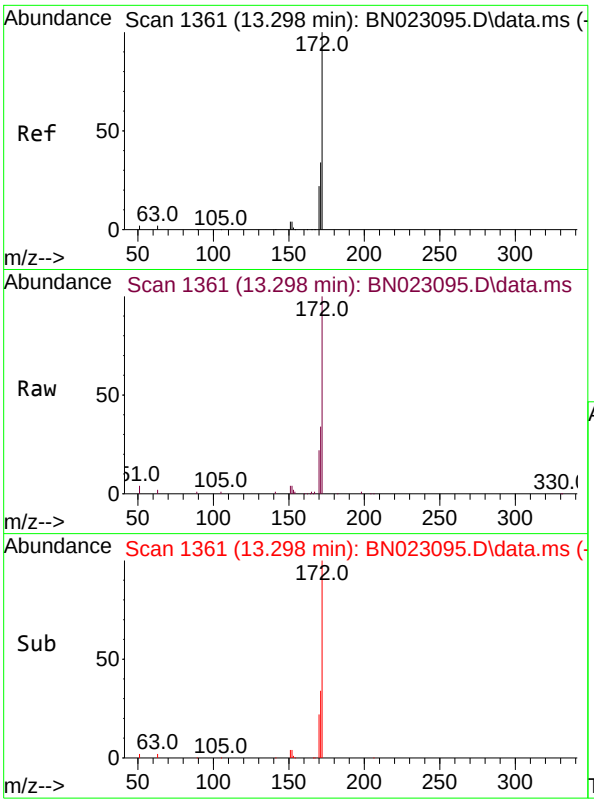


#14
2,4,6-Tribromophenol
Concen: 0.312 ng
RT: 16.148 min Scan# 1622
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:330 Resp: 1509

Ion	Ratio	Lower	Upper
330	100		
332	96.6	77.3	115.9
141	41.9	33.5	50.3



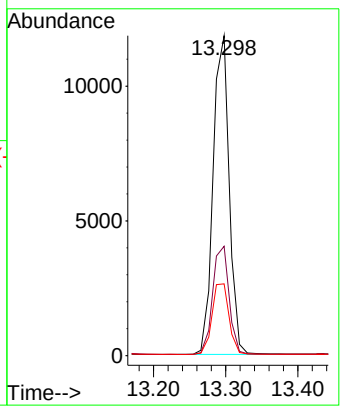


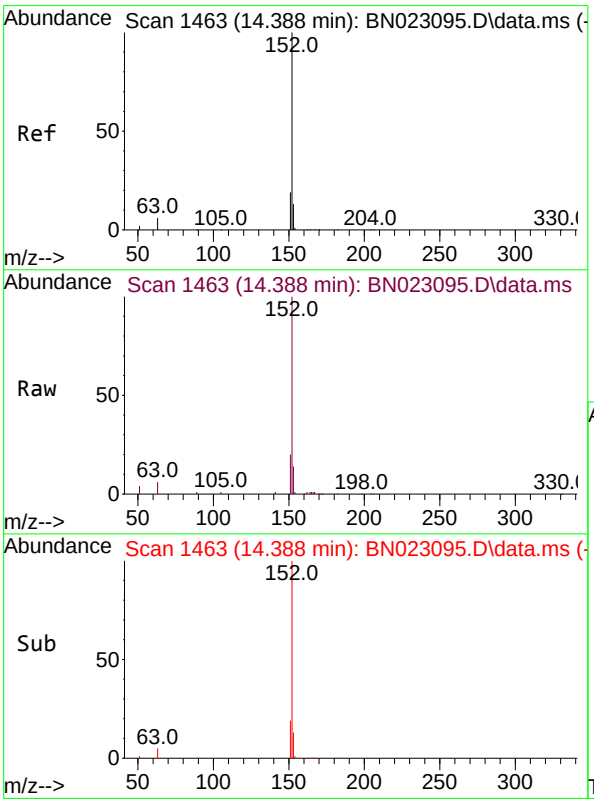
#15
2-Fluorobiphenyl
Concen: 0.362 ng
RT: 13.298 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:172 Resp: 18409

Ion	Ratio	Lower	Upper
172	100		
171	34.2	27.4	41.0
170	22.4	17.9	26.9

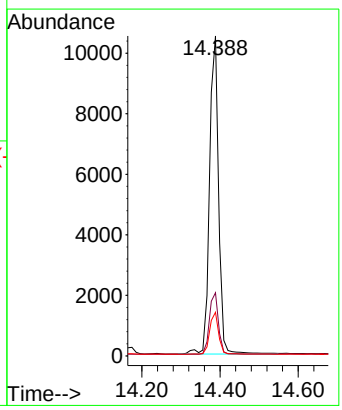


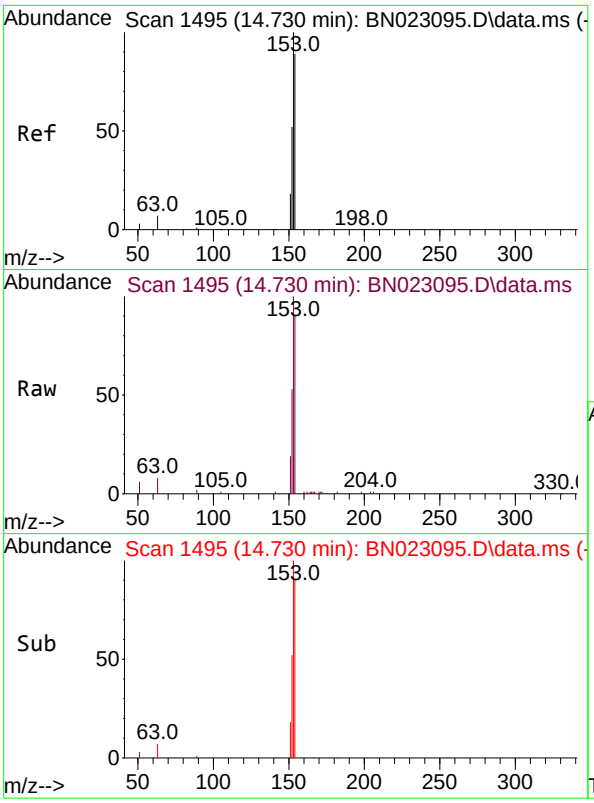


#16
Acenaphthylene
Concen: 0.314 ng
RT: 14.388 min Scan# 1463
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:152 Resp: 16880

Ion	Ratio	Lower	Upper
152	100		
151	19.3	15.4	23.2
153	12.9	10.3	15.5



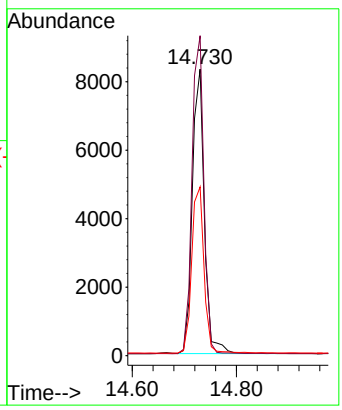


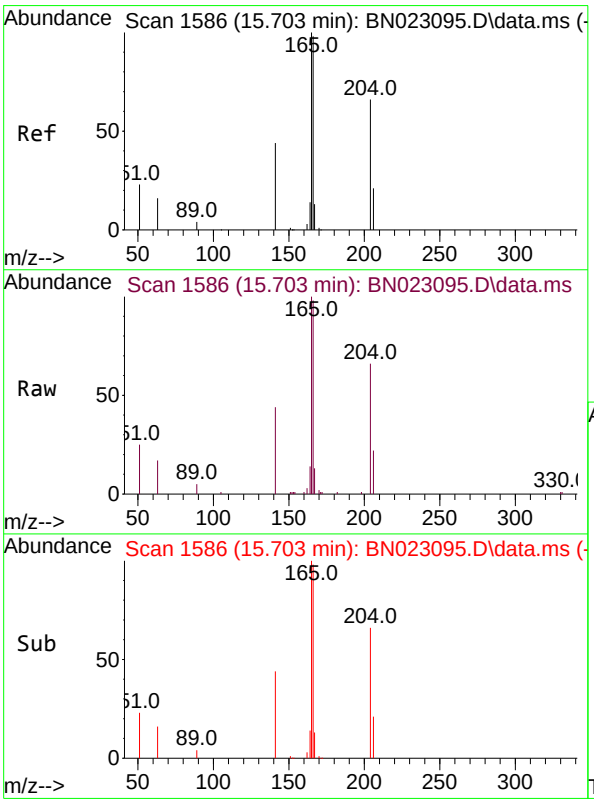
#17
Acenaphthene
Concen: 0.336 ng
RT: 14.730 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:154 Resp: 13187

Ion	Ratio	Lower	Upper
154	100		
153	110.7	88.6	132.8
152	60.1	48.1	72.1

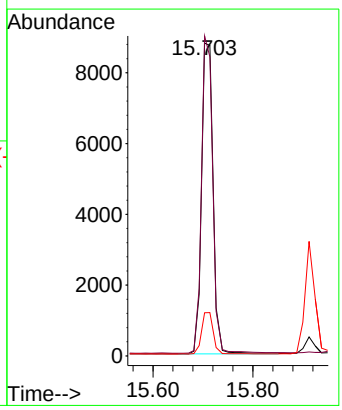


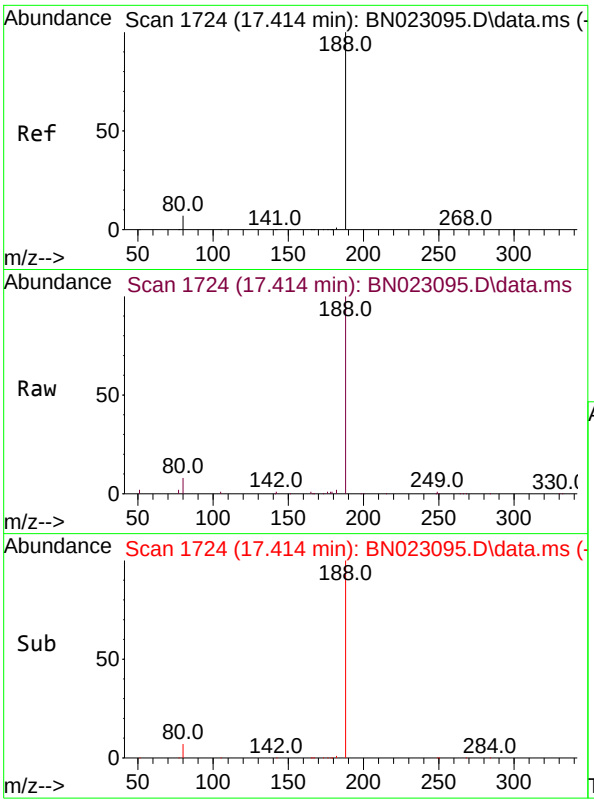


#18
Fluorene
Concen: 0.337 ng
RT: 15.703 min Scan# 1586
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:166 Resp: 14809

Ion	Ratio	Lower	Upper
166	100		
165	99.2	79.8	119.6
167	13.3	10.6	16.0



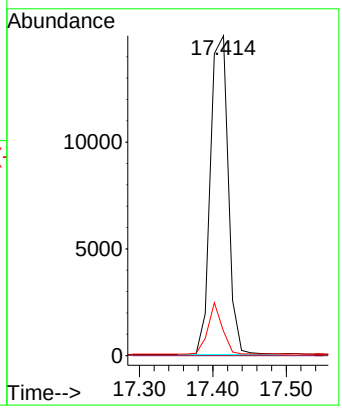


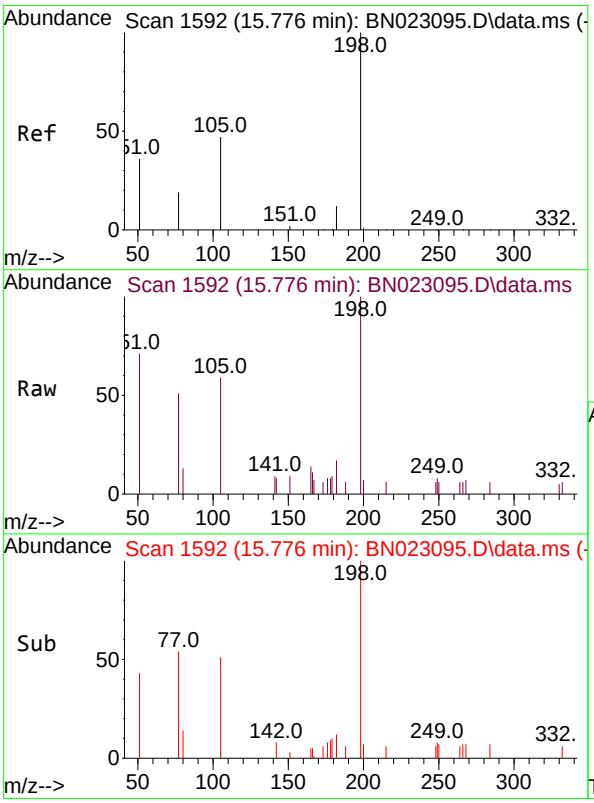
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.414 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:188 Resp: 25275

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	7.6	6.1	9.1

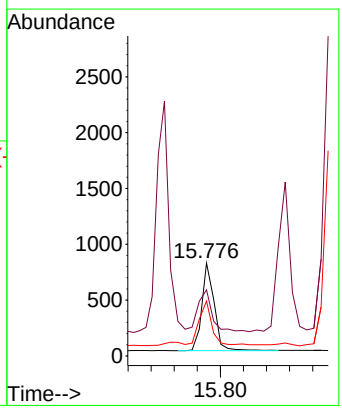


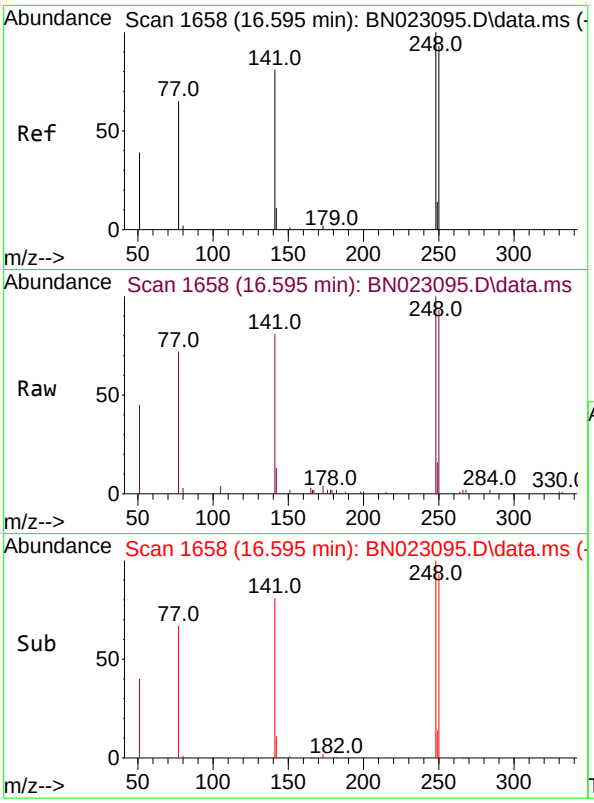


#20
4,6-Dinitro-2-methylphenol
Concen: 0.339 ng
RT: 15.776 min Scan# 1592
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:198 Resp: 1159

Ion	Ratio	Lower	Upper
198	100		
51	71.2	57.0	85.4
105	59.0	47.2	70.8



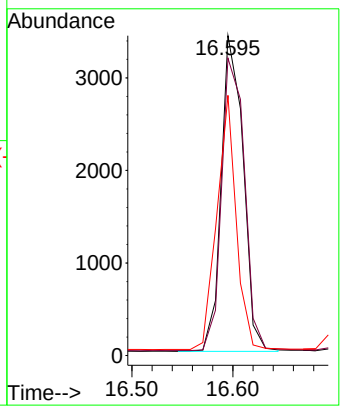


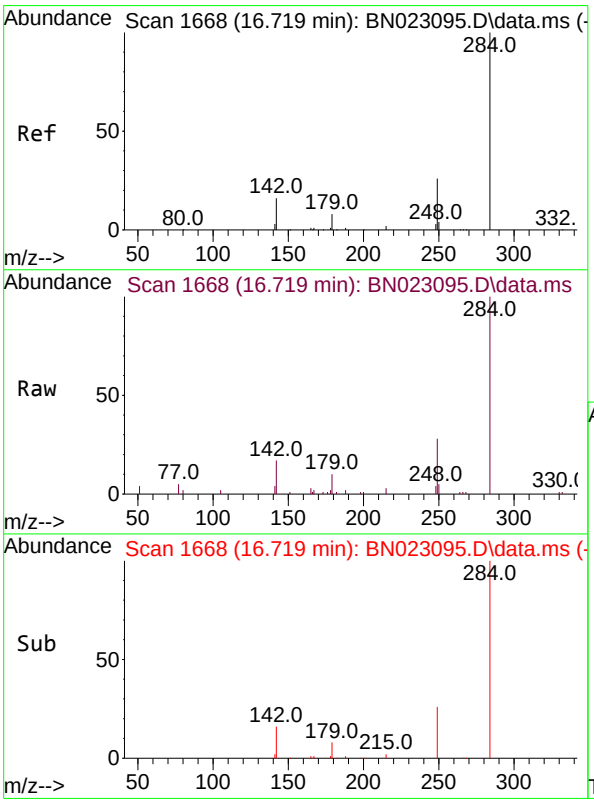
#21
4-Bromophenyl-phenylether
Concen: 0.339 ng
RT: 16.595 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:248 Resp: 5161

Ion	Ratio	Lower	Upper
248	100		
250	92.9	74.3	111.5
141	81.3	65.0	97.6

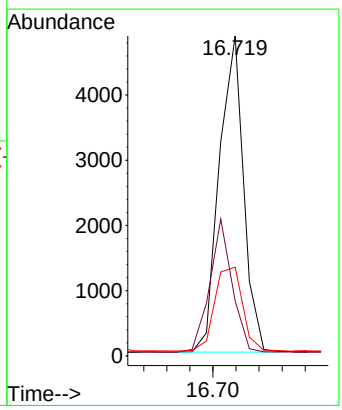


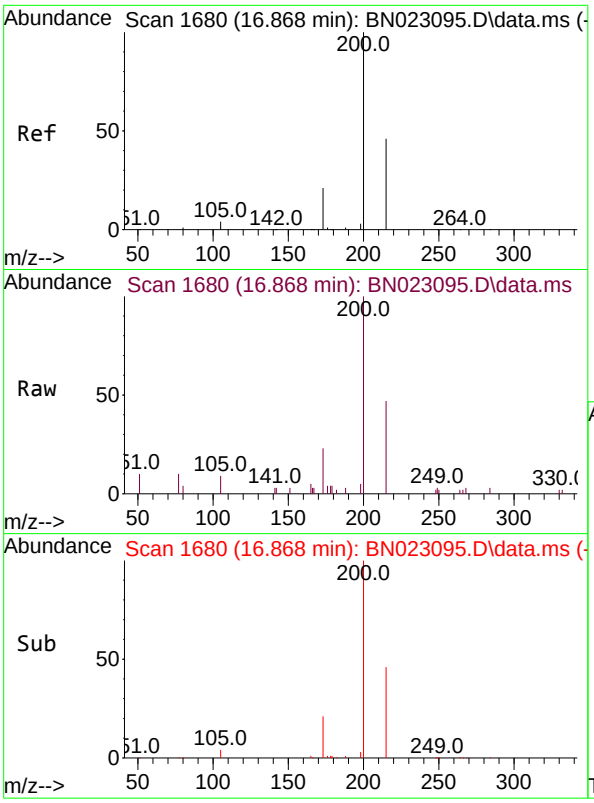


#22
Hexachlorobenzene
Concen: 0.358 ng
RT: 16.719 min Scan# 1668
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:284 Resp: 7088

Ion	Ratio	Lower	Upper
284	100		
142	38.7	31.0	46.4
249	30.5	24.4	36.6



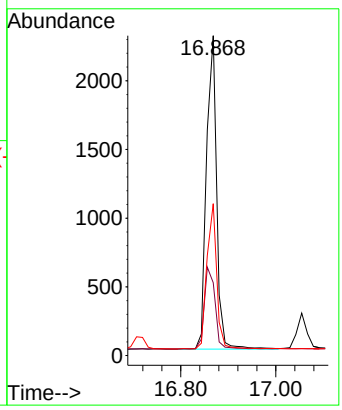


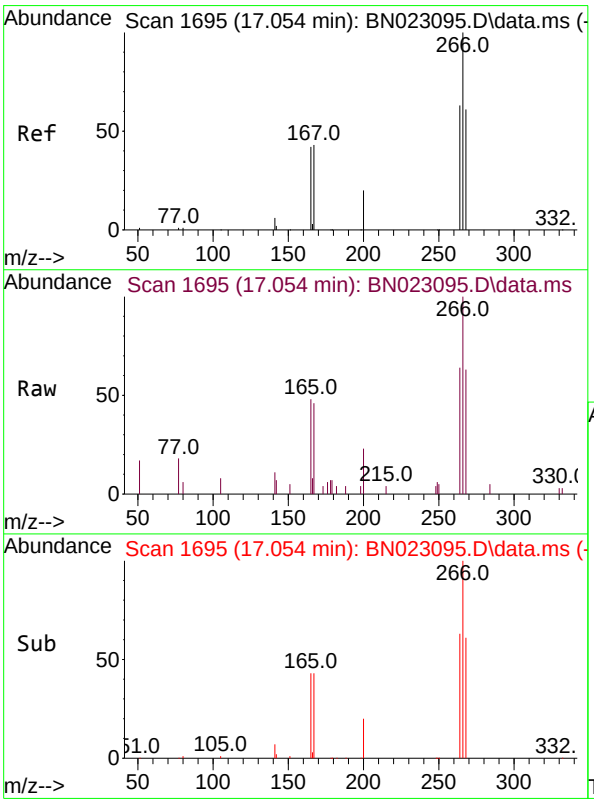
#23
Atrazine
Concen: 0.305 ng
RT: 16.868 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:200 Resp: 3382

Ion	Ratio	Lower	Upper
200	100		
173	22.8	18.2	27.4
215	47.5	38.0	57.0

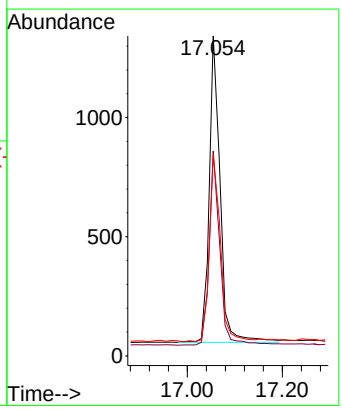


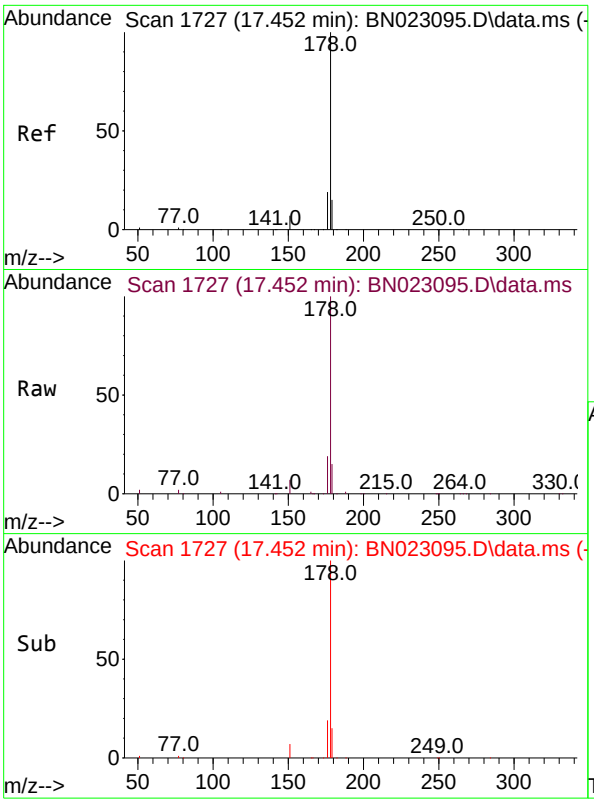


#24
Pentachlorophenol
Concen: 0.349 ng
RT: 17.054 min Scan# 1695
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:266 Resp: 2029

Ion	Ratio	Lower	Upper
266	100		
264	62.6	50.1	75.1
268	62.1	49.7	74.5



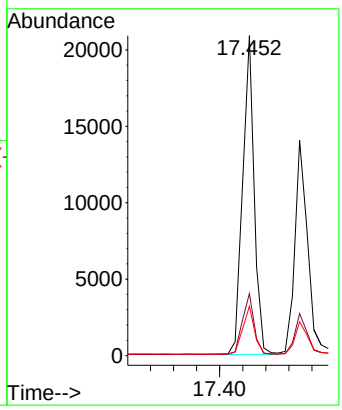


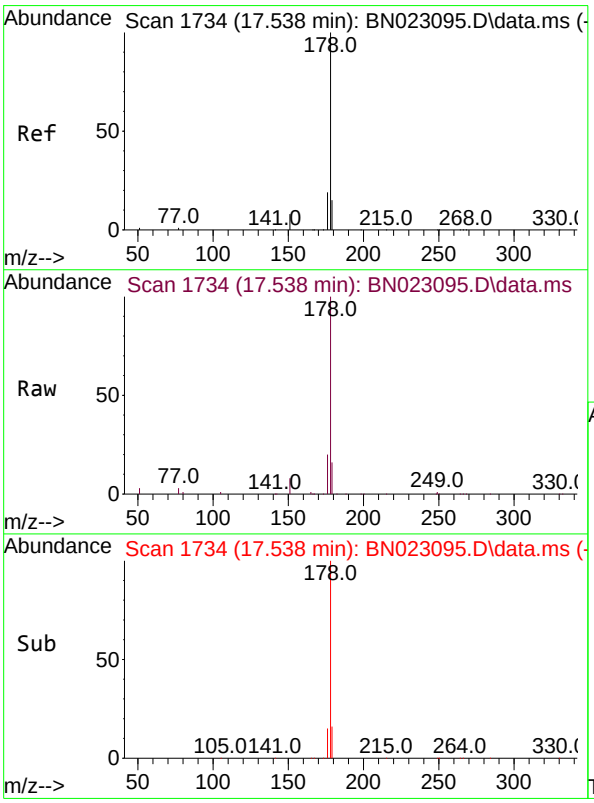
#25
Phenanthrene
Concen: 0.340 ng
RT: 17.452 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:178 Resp: 28996

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.2
179	15.2	12.2	18.2

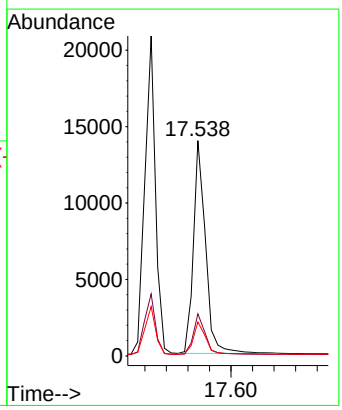


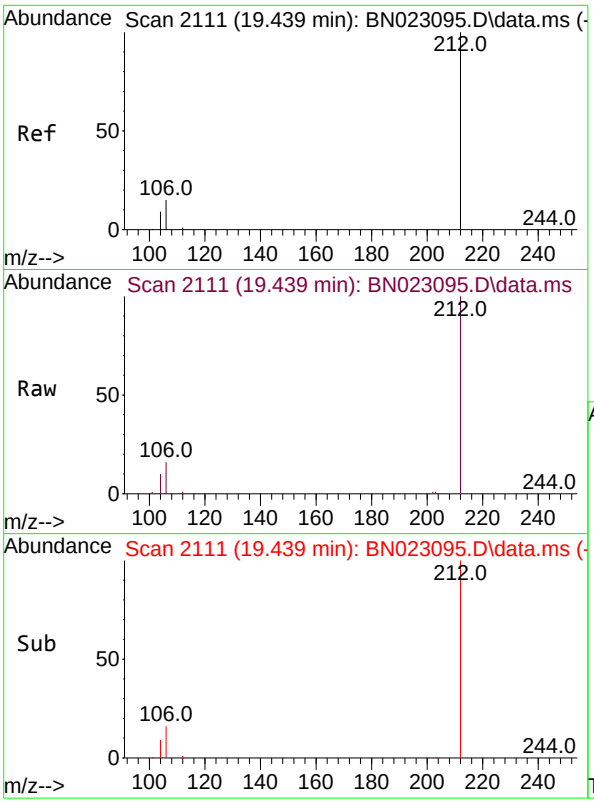


#26
Anthracene
Concen: 0.316 ng
RT: 17.538 min Scan# 1734
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:178 Resp: 21713

Ion	Ratio	Lower	Upper
178	100		
176	18.9	15.1	22.7
179	15.3	12.2	18.4



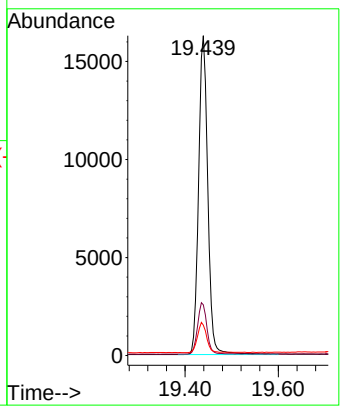


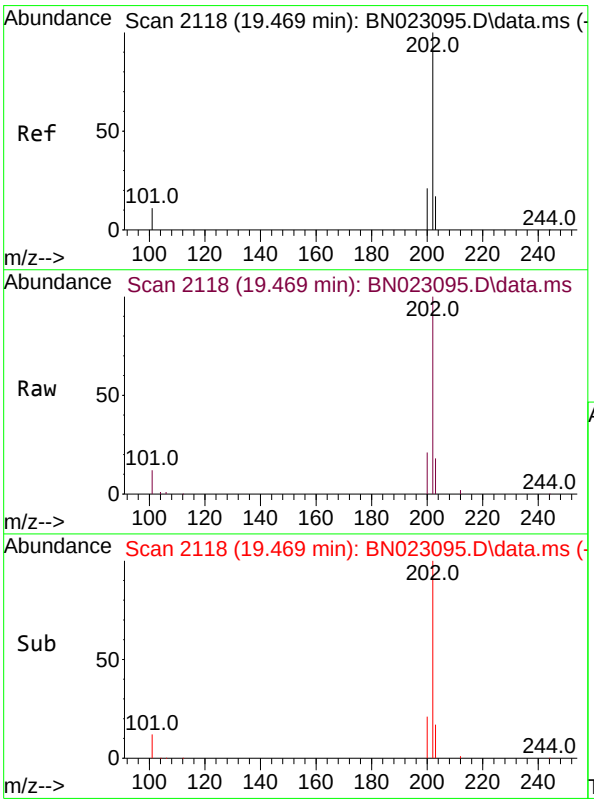
#27
Fluoranthene-d10
Concen: 0.322 ng
RT: 19.439 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:212 Resp: 22299

Ion	Ratio	Lower	Upper
212	100		
106	16.2	13.0	19.4
104	9.4	7.5	11.3

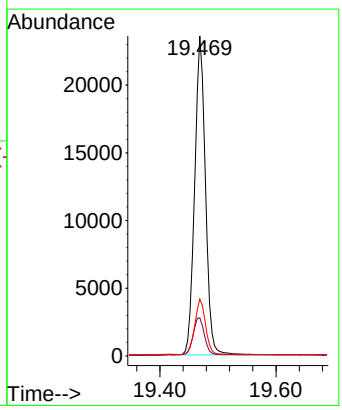


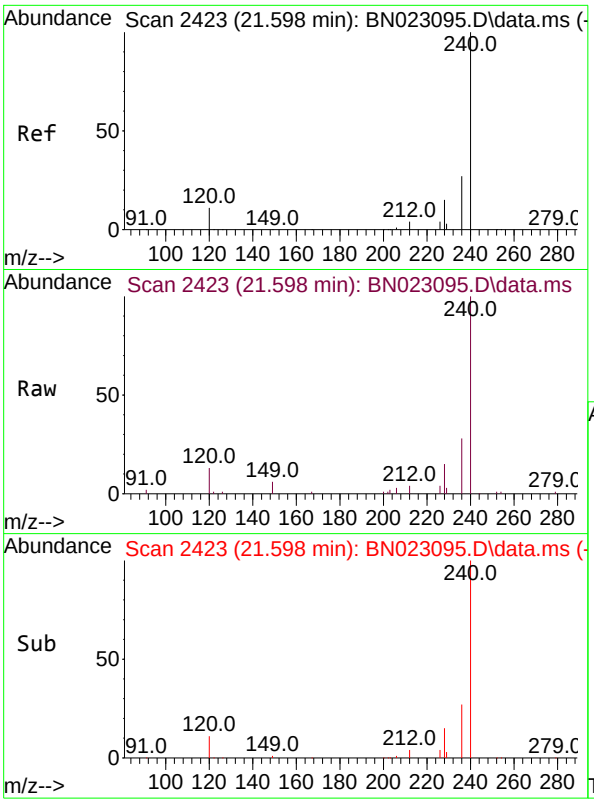


#28
Fluoranthene
Concen: 0.327 ng
RT: 19.469 min Scan# 2118
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:202 Resp: 30350

Ion	Ratio	Lower	Upper
202	100		
101	12.1	9.7	14.5
203	17.2	13.8	20.6



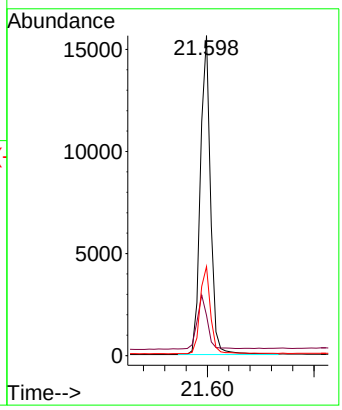


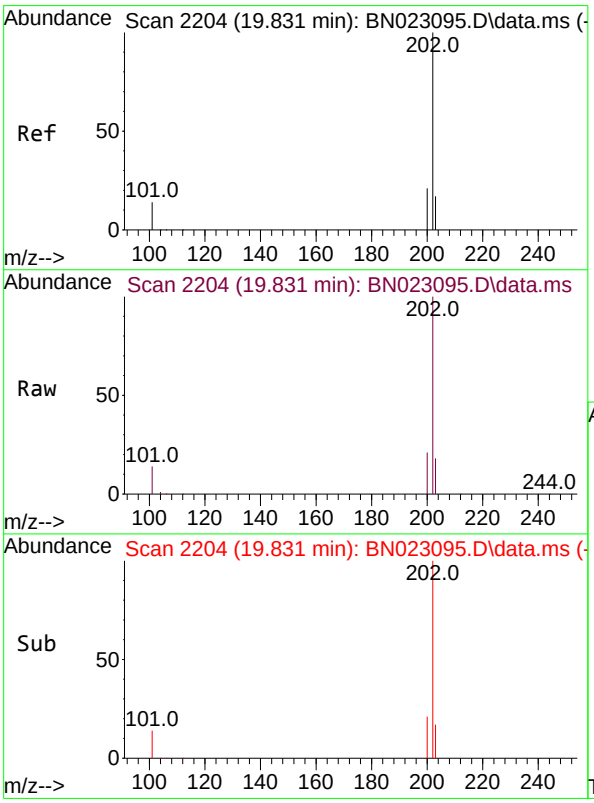
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.598 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:240 Resp: 20569

Ion	Ratio	Lower	Upper
240	100		
120	12.6	10.1	15.1
236	27.8	22.2	33.4

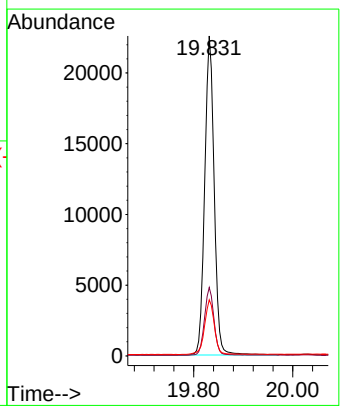


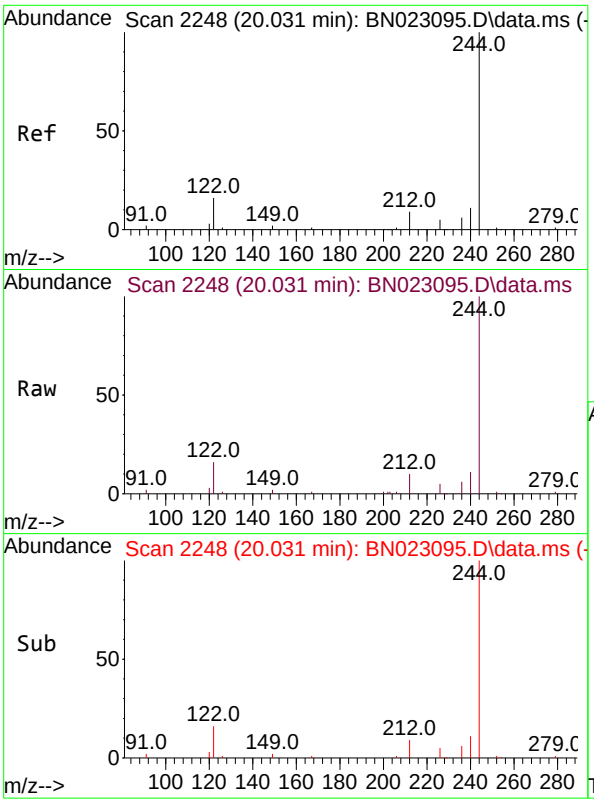


#30
Pyrene
Concen: 0.347 ng
RT: 19.831 min Scan# 2204
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:202 Resp: 29786

Ion	Ratio	Lower	Upper
202	100		
200	21.1	16.9	25.3
203	17.8	14.2	21.4



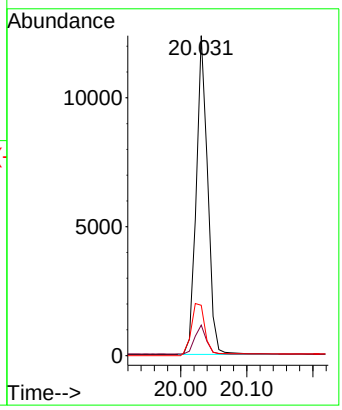


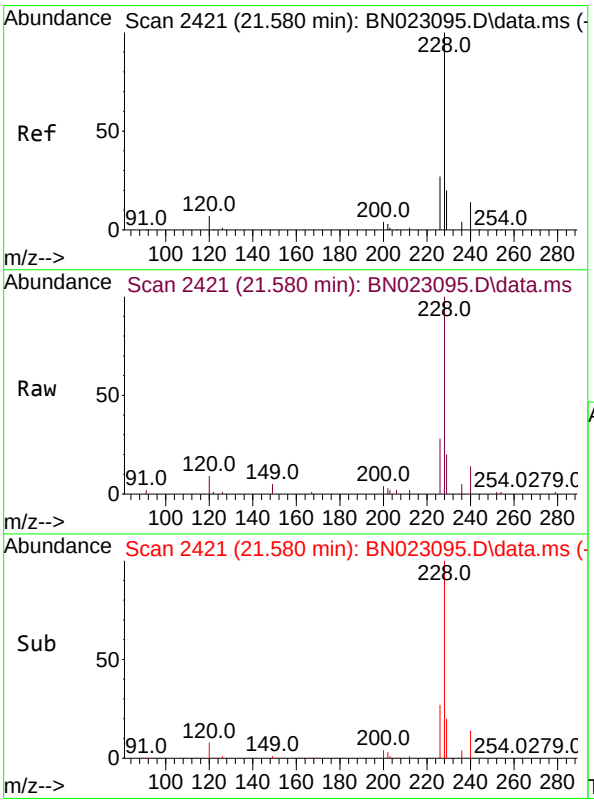
#31
Terphenyl-d14
Concen: 0.361 ng
RT: 20.031 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:244 Resp: 14076

Ion	Ratio	Lower	Upper
244	100		
212	9.5	7.6	11.4
122	15.7	12.6	18.8

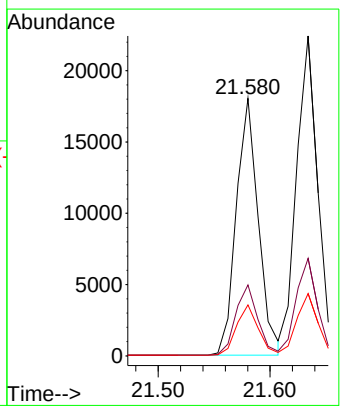


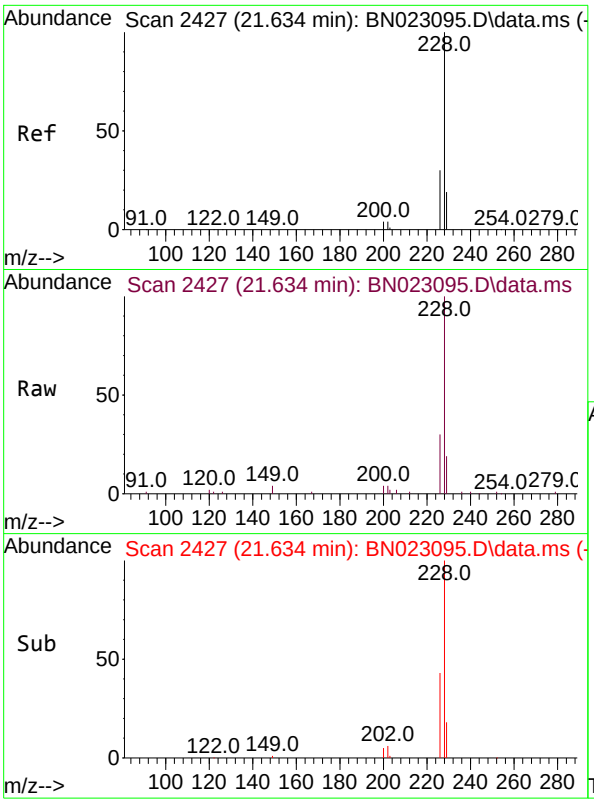


#32
Benzo(a)anthracene
Concen: 0.325 ng
RT: 21.580 min Scan# 2421
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:228 Resp: 24652

Ion	Ratio	Lower	Upper
228	100		
226	27.5	22.0	33.0
229	19.8	15.8	23.8



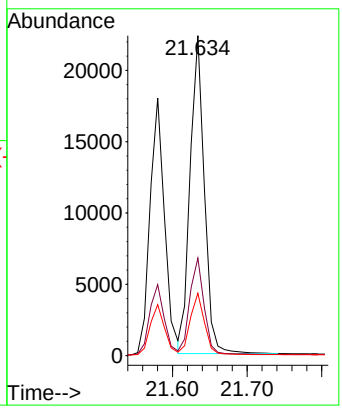


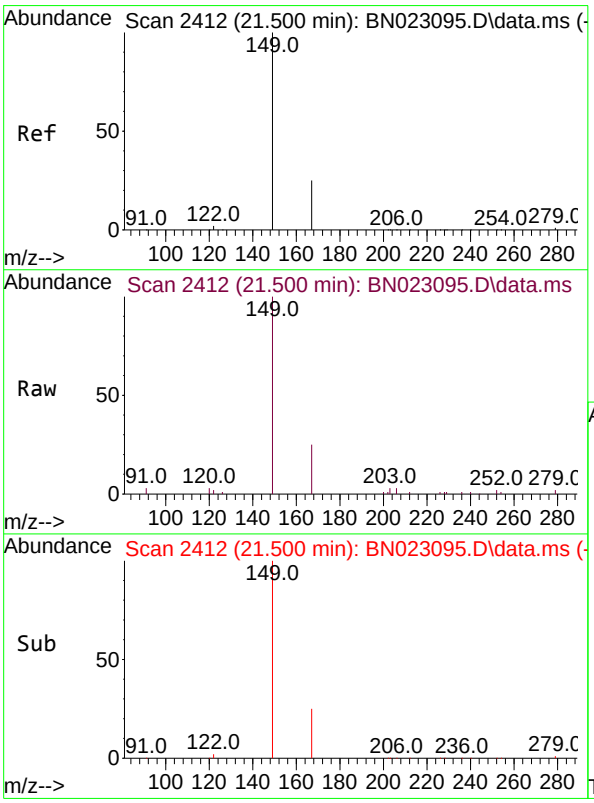
#33
Chrysene
Concen: 0.350 ng
RT: 21.634 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:228 Resp: 29670

Ion	Ratio	Lower	Upper
228	100		
226	30.5	24.4	36.6
229	19.5	15.6	23.4

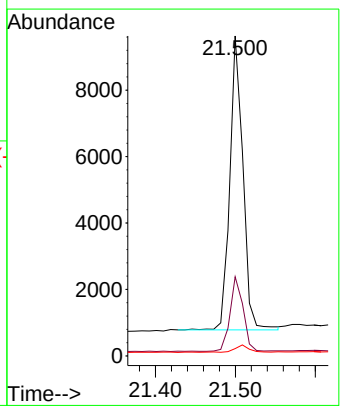


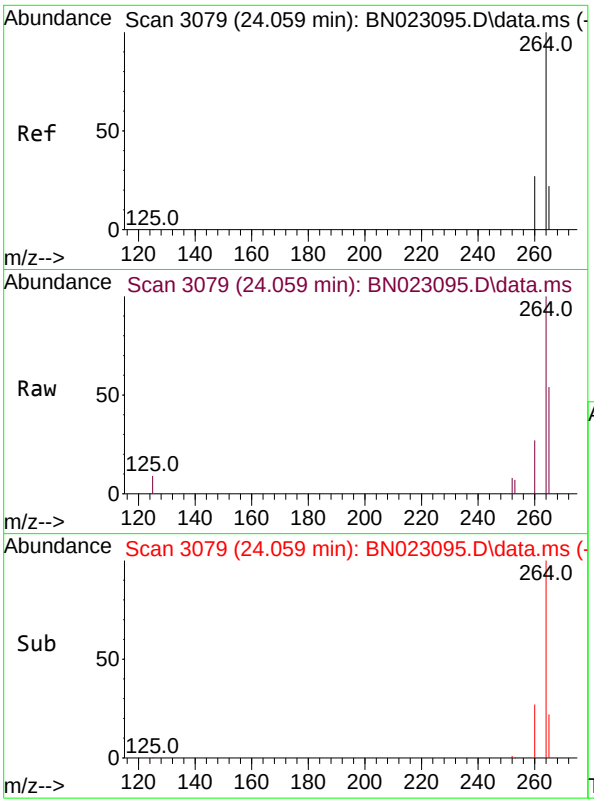


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.307 ng
RT: 21.500 min Scan# 2412
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:149 Resp: 10060

Ion	Ratio	Lower	Upper
149	100		
167	25.2	20.2	30.2
279	2.9	2.3	3.5



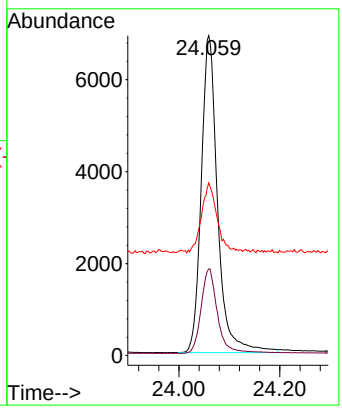


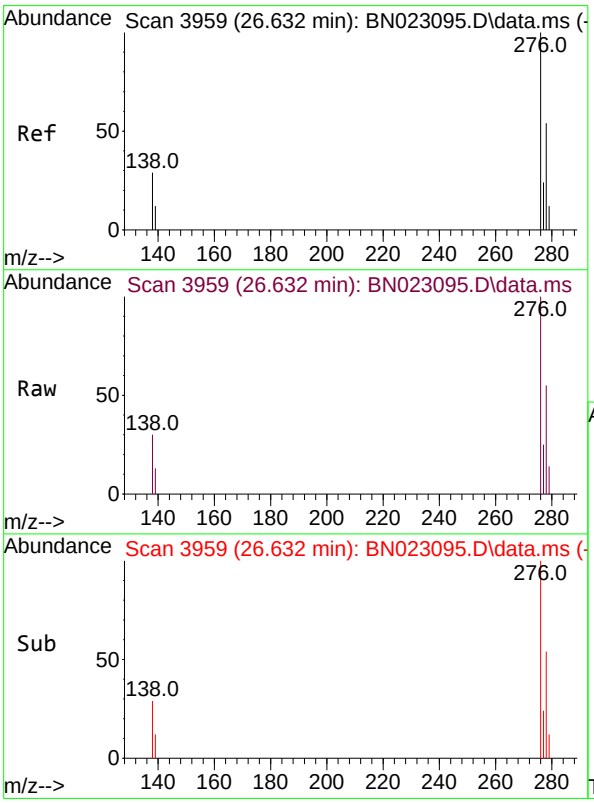
#35
Perylene-d12
Concen: 0.400 ng
RT: 24.059 min Scan# 30
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:264 Resp: 15521

Ion	Ratio	Lower	Upper
264	100		
260	27.1	21.7	32.5
265	54.0	43.2	64.8

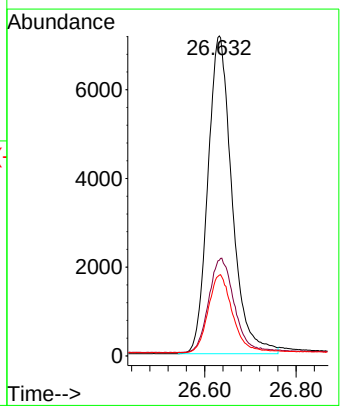


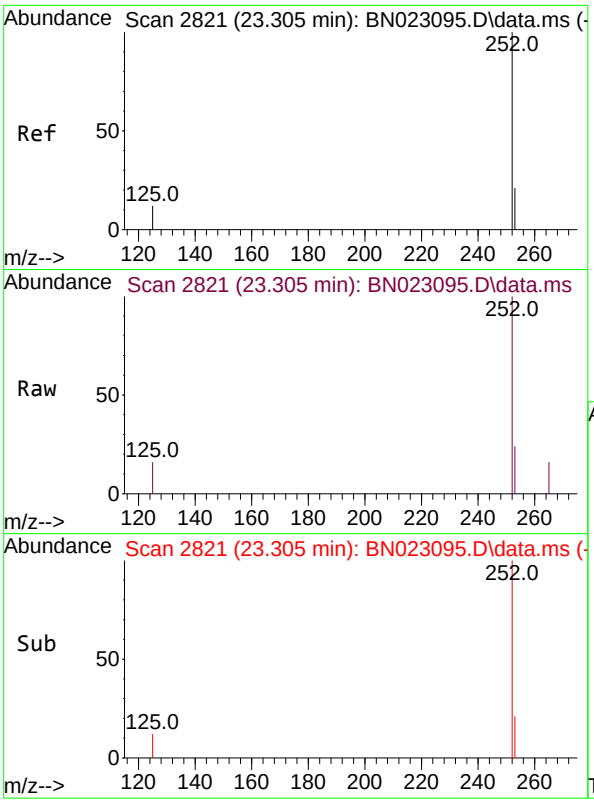


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.319 ng
RT: 26.632 min Scan# 3959
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:276 Resp: 26282

Ion	Ratio	Lower	Upper
276	100		
138	31.4	25.0	37.6
277	24.8	19.8	29.8



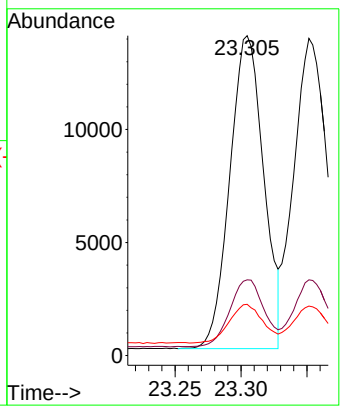


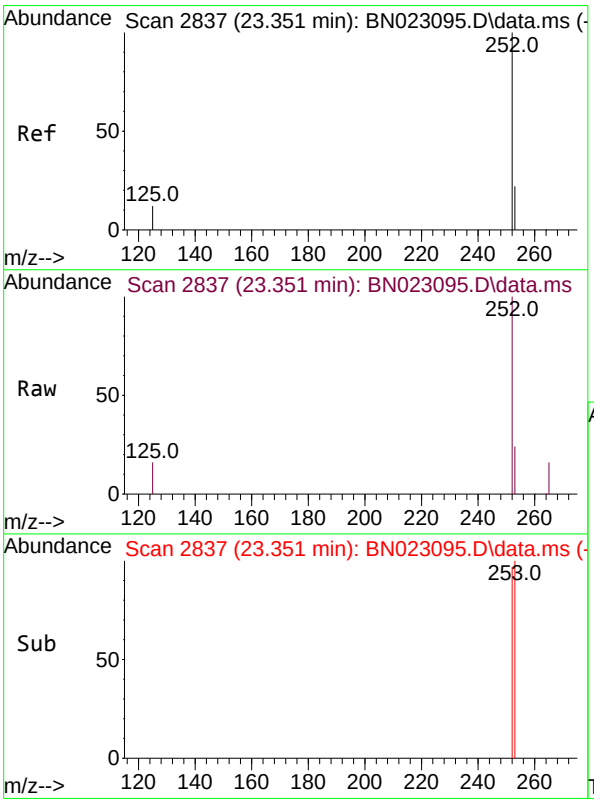
#37
Benzo(b)fluoranthene
Concen: 0.349 ng
RT: 23.305 min Scan# 28
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:252 Resp: 24739

Ion	Ratio	Lower	Upper
252	100		
253	23.7	19.0	28.4
125	16.0	12.8	19.2

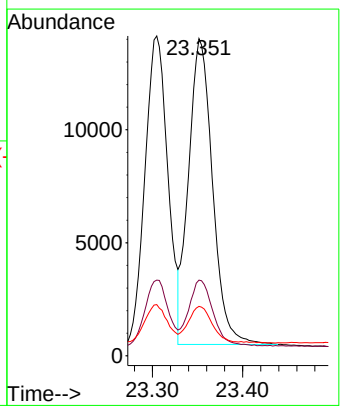


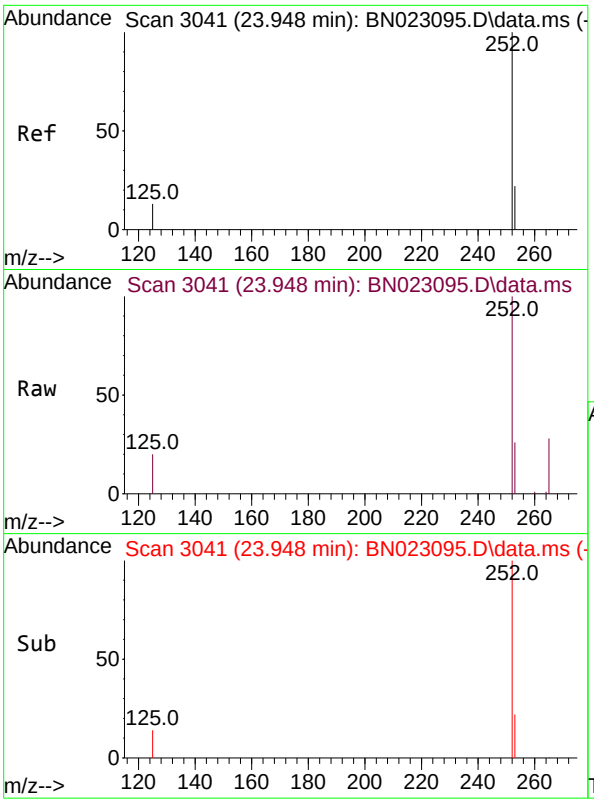


#38
Benzo(k)fluoranthene
Concen: 0.344 ng
RT: 23.351 min Scan# 2837
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:252 Resp: 24998

Ion	Ratio	Lower	Upper
252	100		
253	23.9	19.1	28.7
125	15.6	12.5	18.7



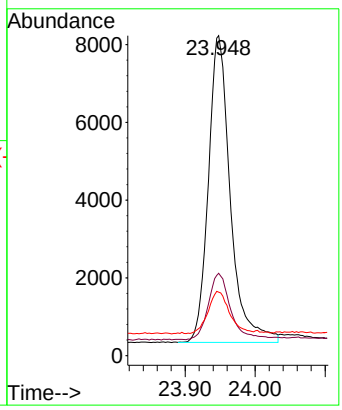


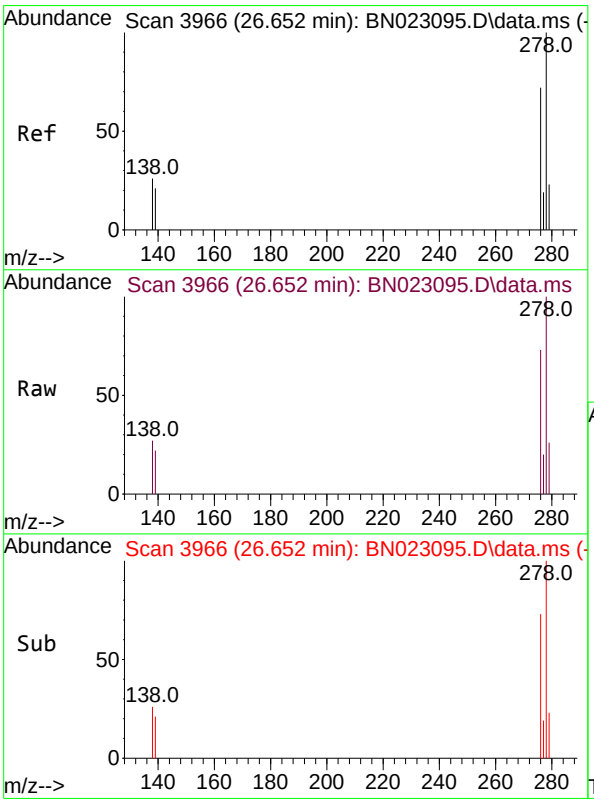
#39
Benzo(a)pyrene
Concen: 0.300 ng
RT: 23.948 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:252 Resp: 17239

Ion	Ratio	Lower	Upper
252	100		
253	25.7	20.6	30.8
125	19.8	15.8	23.8

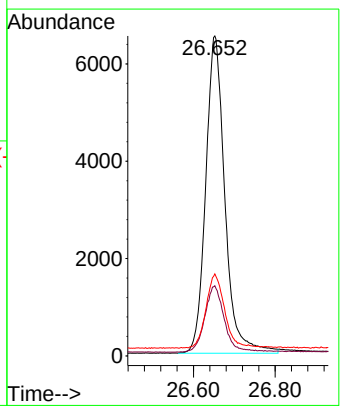


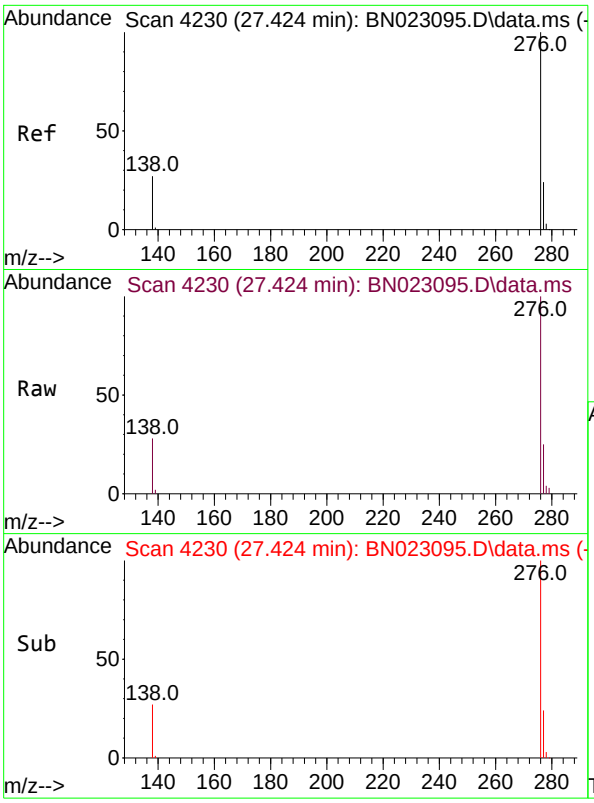


#40
Dibenzo(a,h)anthracene
Concen: 0.326 ng
RT: 26.652 min Scan# 3966
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:278 Resp: 21269

Ion	Ratio	Lower	Upper
278	100		
139	21.9	17.5	26.3
279	25.6	20.5	30.7



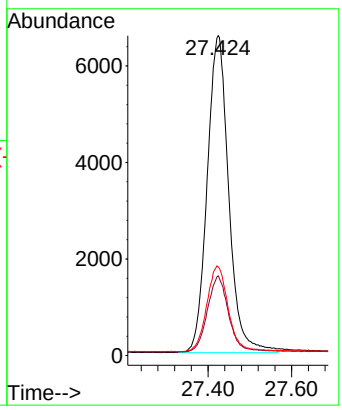


#41
Benzo(g,h,i)perylene
Concen: 0.351 ng
RT: 27.424 min Scan# 4
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:276 Resp: 23466

Ion	Ratio	Lower	Upper
276	100		
277	24.9	19.9	29.9
138	27.7	22.2	33.2



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023096.D
Acq On : 08 Dec 2022 15:50
Operator : CG/JU
Sample : SSTDICC0.8
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Quant Time: Dec 09 07:28:23 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration

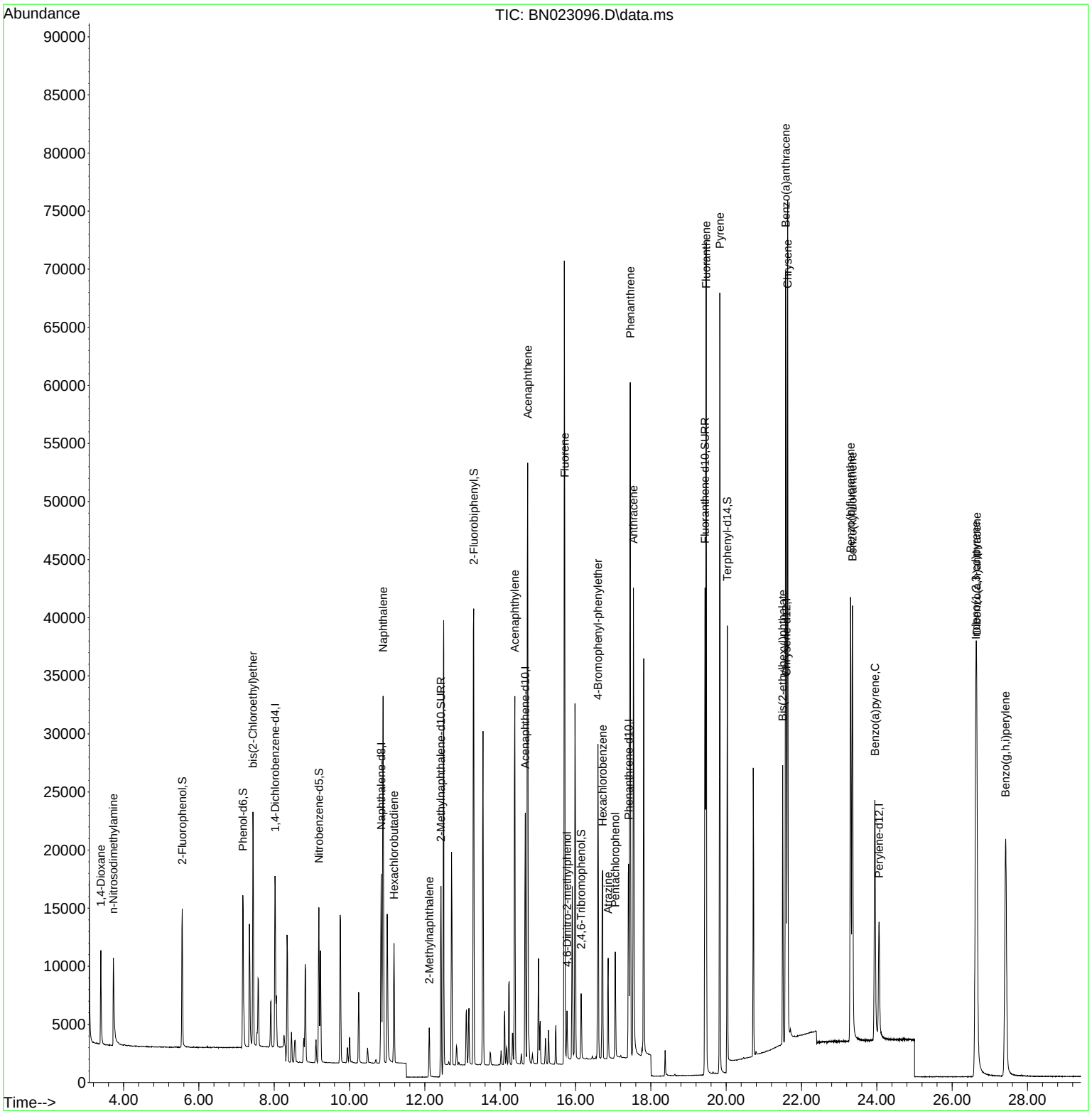
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	8.020	152	7156	0.400	ng		0.00
7) Naphthalene-d8	10.840	136	20210	0.400	ng		0.00
13) Acenaphthene-d10	14.666	164	11426	0.400	ng		0.00
19) Phenanthrene-d10	17.414	188	24706	0.400	ng		0.00
29) Chrysene-d12	21.598	240	20806	0.400	ng		0.00
35) Perylene-d12	24.059	264	15181	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.558	112	9728	0.588	ng		0.00
5) Phenol-d6	7.168	99	12278	0.590	ng		0.00
8) Nitrobenzene-d5	9.185	82	10150	0.669	ng		0.00
11) 2-Methylnaphthalene-d10	12.427	152	26746	0.701	ng		0.00
14) 2,4,6-Tribromophenol	16.148	330	3033	0.628	ng		0.00
15) 2-Fluorobiphenyl	13.298	172	35533	0.701	ng		0.00
27) Fluoranthene-d10	19.439	212	44274	0.654	ng		0.00
31) Terphenyl-d14	20.031	244	27028	0.684	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.398	88	5467	0.616	ng		99
3) n-Nitrosodimethylamine	3.730	42	5353	0.617	ng	#	98
6) bis(2-Chloroethyl)ether	7.435	93	14530	0.632	ng		98
9) Naphthalene	10.893	128	40429	0.674	ng		100
10) Hexachlorobutadiene	11.181	225	7814	0.694	ng	#	100
12) 2-Methylnaphthalene	12.117	142	6224	0.678	ng	#	96
16) Acenaphthylene	14.388	152	34662	0.645	ng		100
17) Acenaphthene	14.730	154	26163	0.669	ng		99
18) Fluorene	15.714	166	29372	0.669	ng		99
20) 4,6-Dinitro-2-methylph...	15.776	198	2377	0.711	ng		91
21) 4-Bromophenyl-phenylether	16.595	248	10088	0.678	ng		95
22) Hexachlorobenzene	16.719	284	13630	0.705	ng		99
23) Atrazine	16.868	200	6823	0.630	ng		99
24) Pentachlorophenol	17.054	266	4149	0.731	ng		99
25) Phenanthrene	17.452	178	56706	0.681	ng		100
26) Anthracene	17.538	178	44125	0.657	ng		100
28) Fluoranthene	19.469	202	61820	0.680	ng		99
30) Pyrene	19.831	202	59340	0.684	ng		100
32) Benzo(a)anthracene	21.580	228	51136	0.666	ng		100
33) Chrysene	21.634	228	59672	0.695	ng		100
34) Bis(2-ethylhexyl)phtha...	21.500	149	20192	0.608	ng		99
36) Indeno(1,2,3-cd)pyrene	26.629	276	53216	0.660	ng		99
37) Benzo(b)fluoranthene	23.302	252	50131	0.722	ng		96
38) Benzo(k)fluoranthene	23.354	252	50862	0.715	ng		96
39) Benzo(a)pyrene	23.948	252	34953	0.622	ng		95
40) Dibenzo(a,h)anthracene	26.652	278	43165	0.676	ng		99
41) Benzo(g,h,i)perylene	27.418	276	46710	0.715	ng		99

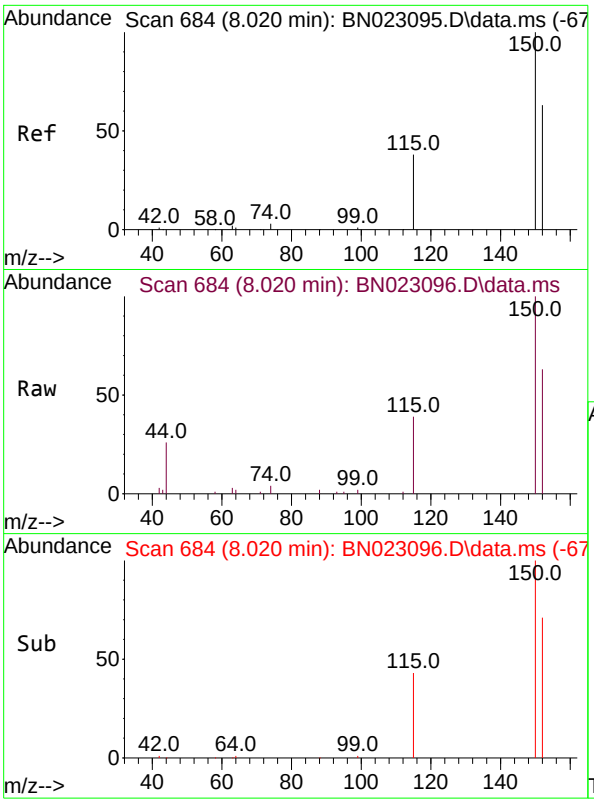
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023096.D
Acq On : 08 Dec 2022 15:50
Operator : CG/JU
Sample : SSTDICC0.8
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Quant Time: Dec 09 07:28:23 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration



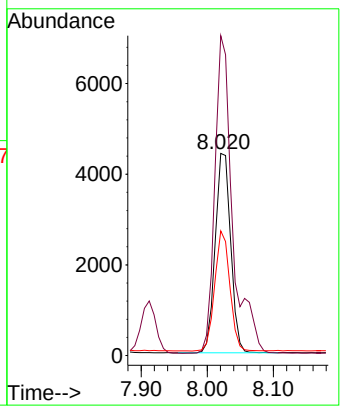


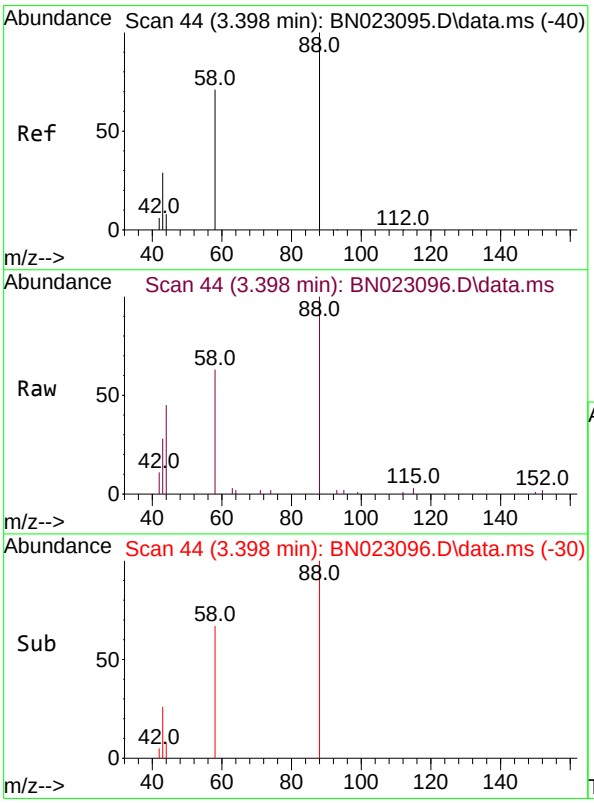
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 8.020 min Scan# 68
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:152 Resp: 7156

Ion	Ratio	Lower	Upper
152	100		
150	158.3	125.6	188.4
115	61.7	49.0	73.4

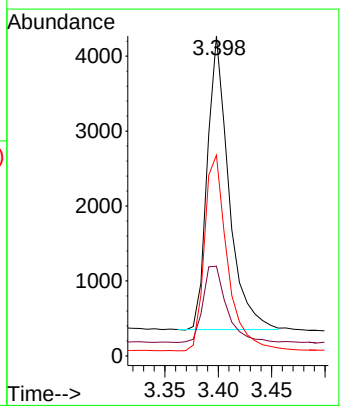


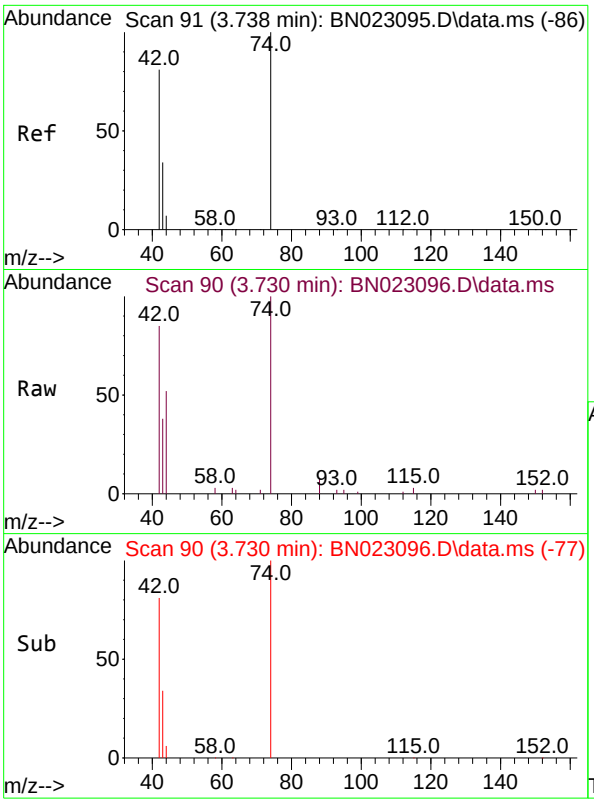


#2
1,4-Dioxane
Concen: 0.616 ng
RT: 3.398 min Scan# 44
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion: 88 Resp: 5467

Ion	Ratio	Lower	Upper
88	100		
43	28.9	23.3	34.9
58	71.5	58.0	87.0



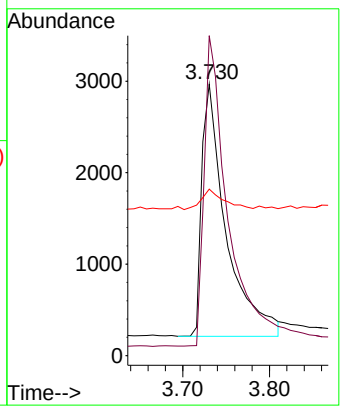


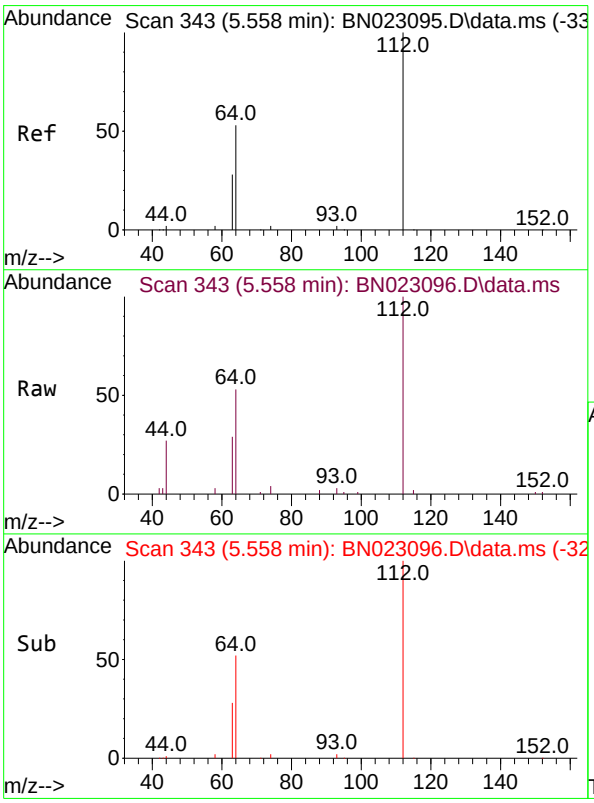
#3
n-Nitrosodimethylamine
Concen: 0.617 ng
RT: 3.730 min Scan# 90
Delta R.T. -0.007 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion: 42 Resp: 5353

Ion	Ratio	Lower	Upper
42	100		
74	121.4	95.8	143.6
44	7.5	8.4	12.6#

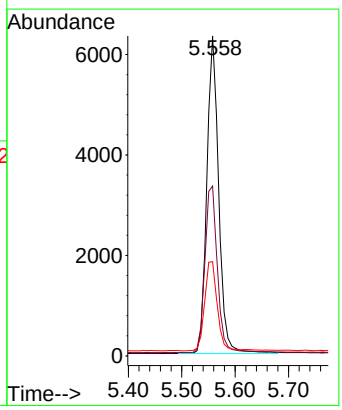


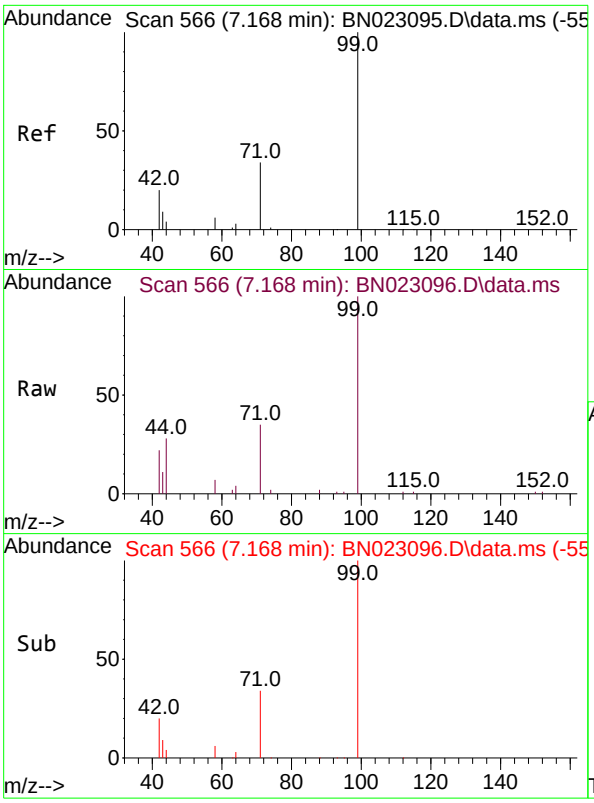


#4
2-Fluorophenol
Concen: 0.588 ng
RT: 5.558 min Scan# 343
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:112 Resp: 9728

Ion	Ratio	Lower	Upper
112	100		
64	55.5	44.4	66.6
63	29.7	23.7	35.5



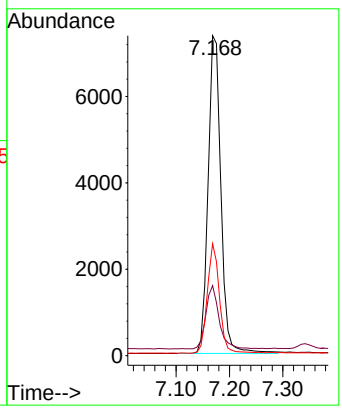


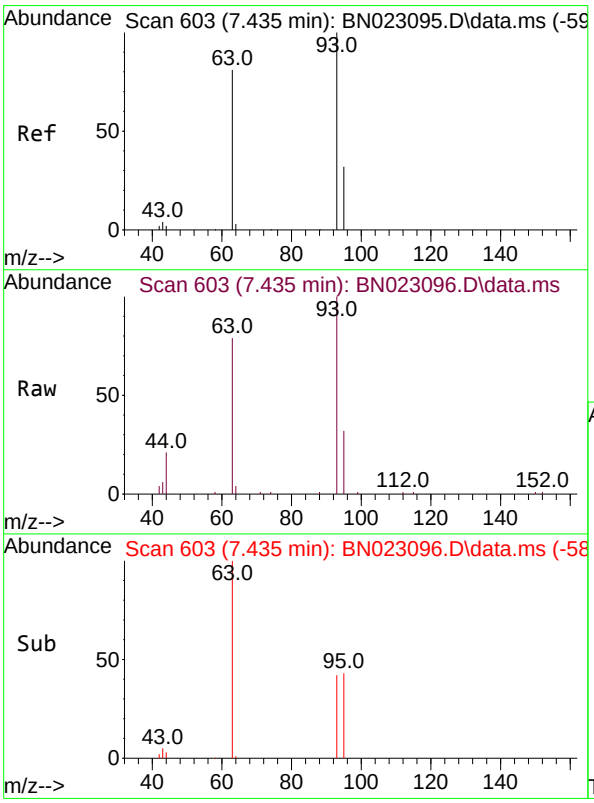
#5
Phenol-d6
Concen: 0.590 ng
RT: 7.168 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion: 99 Resp: 12278

Ion	Ratio	Lower	Upper
99	100		
42	20.5	16.3	24.5
71	32.8	26.5	39.7

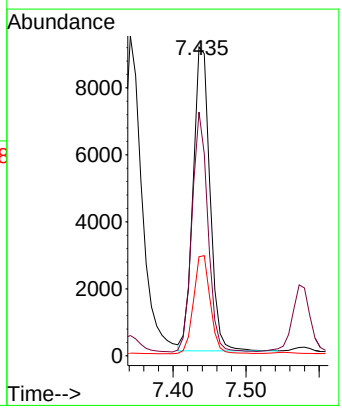


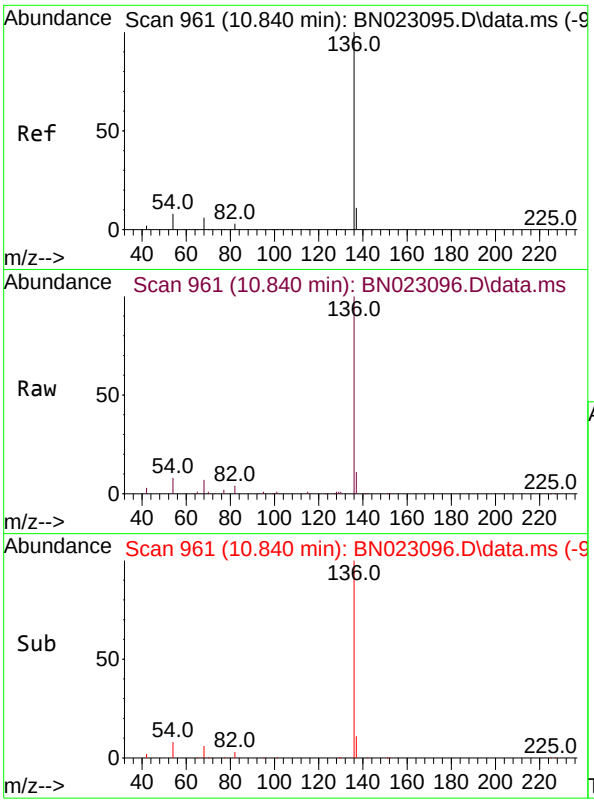


#6
bis(2-Chloroethyl)ether
Concen: 0.632 ng
RT: 7.435 min Scan# 603
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion: 93 Resp: 14530

Ion	Ratio	Lower	Upper
93	100		
63	74.5	58.1	87.1
95	32.2	25.2	37.8



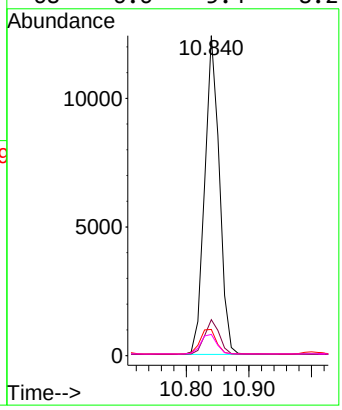


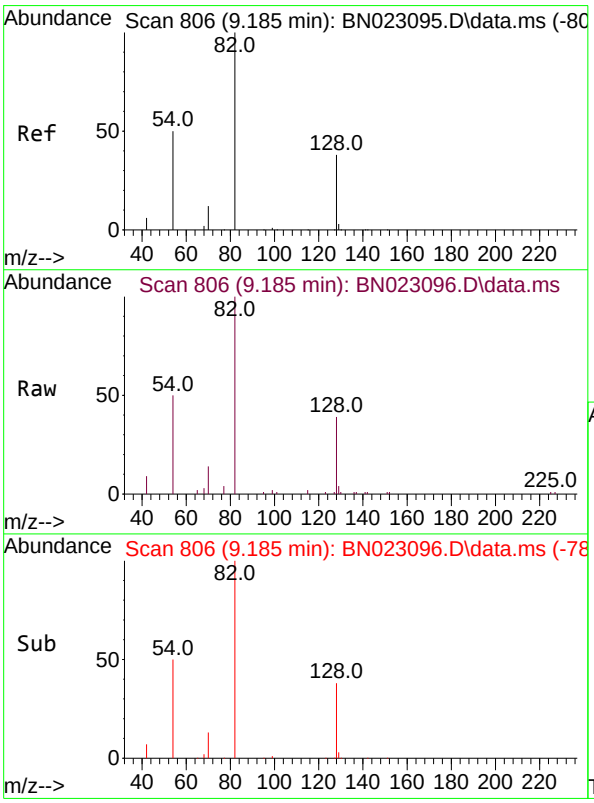
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.840 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:136 Resp: 20210

Ion	Ratio	Lower	Upper
136	100		
137	11.2	9.0	13.4
54	8.2	6.5	9.7
68	6.6	5.4	8.2

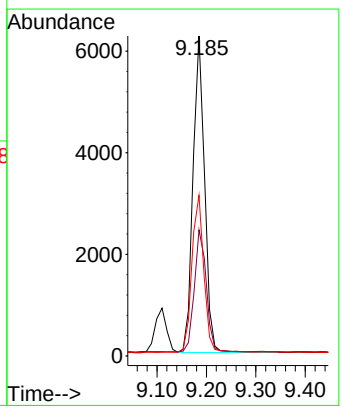


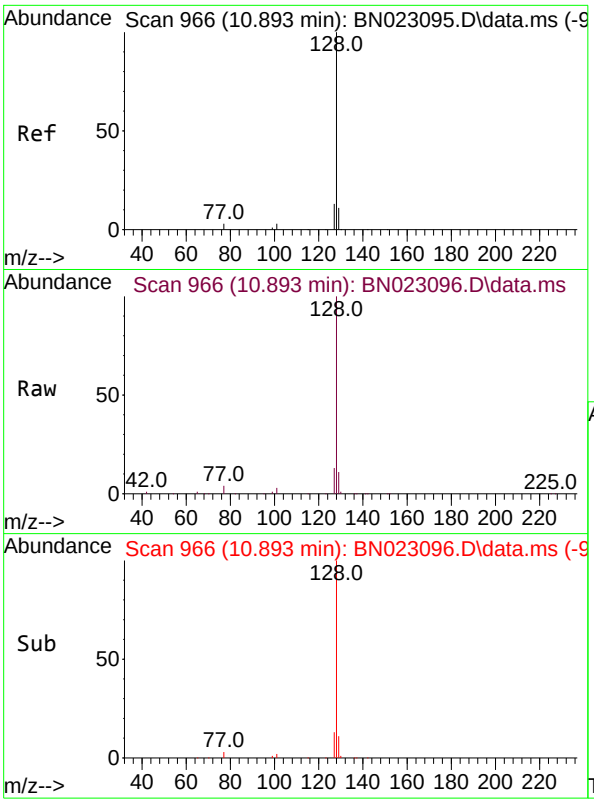


#8
Nitrobenzene-d5
Concen: 0.669 ng
RT: 9.185 min Scan# 806
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion: 82 Resp: 10150

Ion	Ratio	Lower	Upper
82	100		
128	39.4	31.4	47.2
54	50.2	41.0	61.4



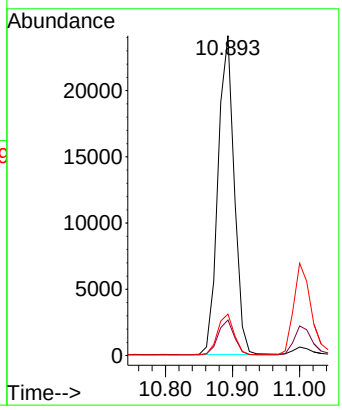


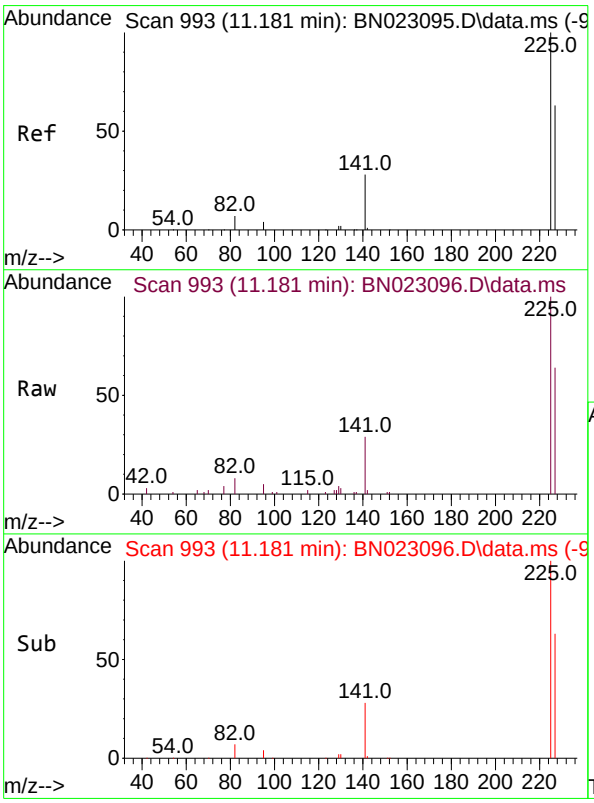
#9
Naphthalene
Concen: 0.674 ng
RT: 10.893 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:128 Resp: 40429

Ion	Ratio	Lower	Upper
128	100		
129	11.1	9.0	13.6
127	13.0	10.5	15.7

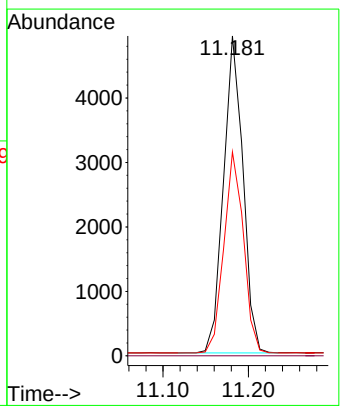


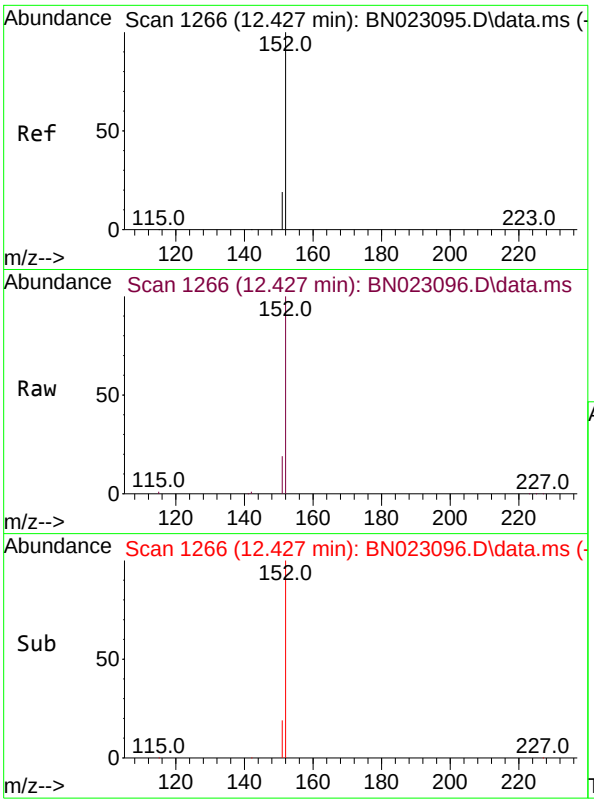


#10
Hexachlorobutadiene
Concen: 0.694 ng
RT: 11.181 min Scan# 993
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:225 Resp: 7814

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.7	51.1	76.7



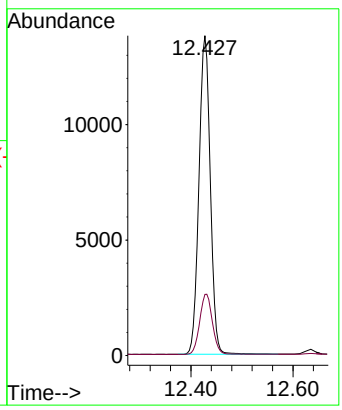


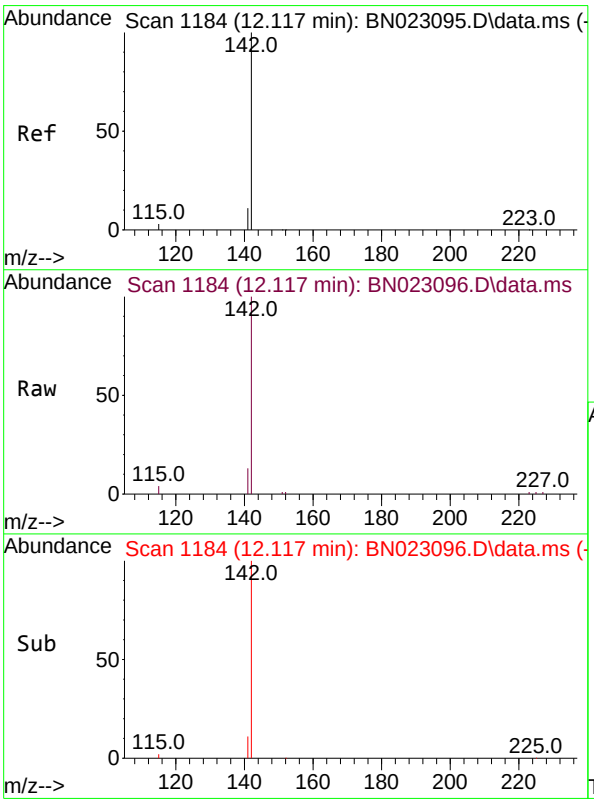
#11
2-Methylnaphthalene-d10
Concen: 0.701 ng
RT: 12.427 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:152 Resp: 26746

Ion	Ratio	Lower	Upper
152	100		
151	17.6	15.1	22.7

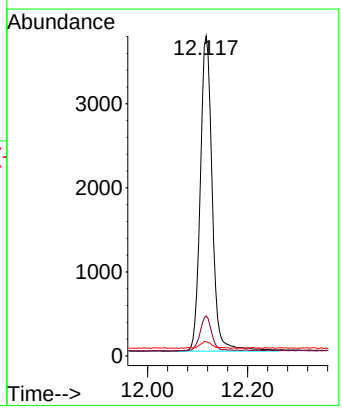


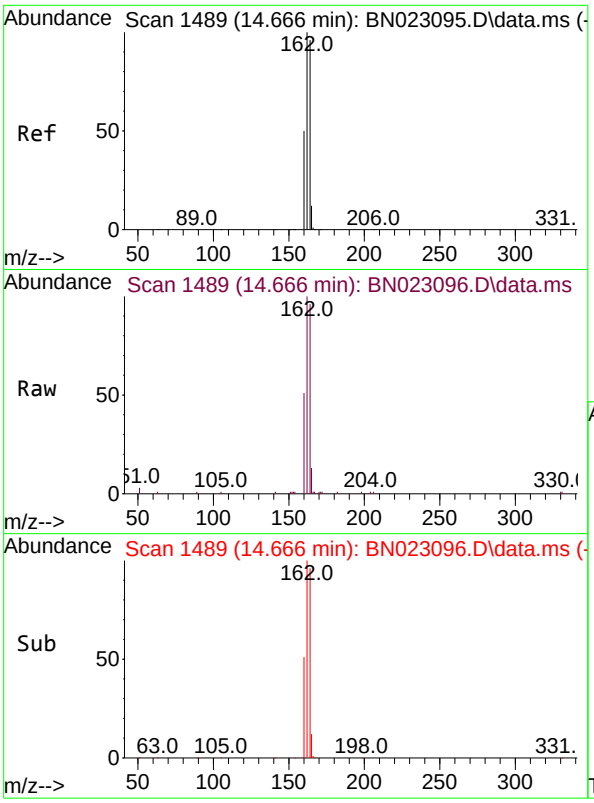


#12
2-Methylnaphthalene
Concen: 0.678 ng
RT: 12.117 min Scan# 1184
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:142 Resp: 6224

Ion	Ratio	Lower	Upper
142	100		
141	12.5	10.9	16.3
115	4.4	5.7	8.5#



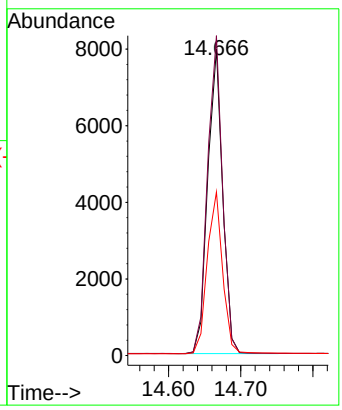


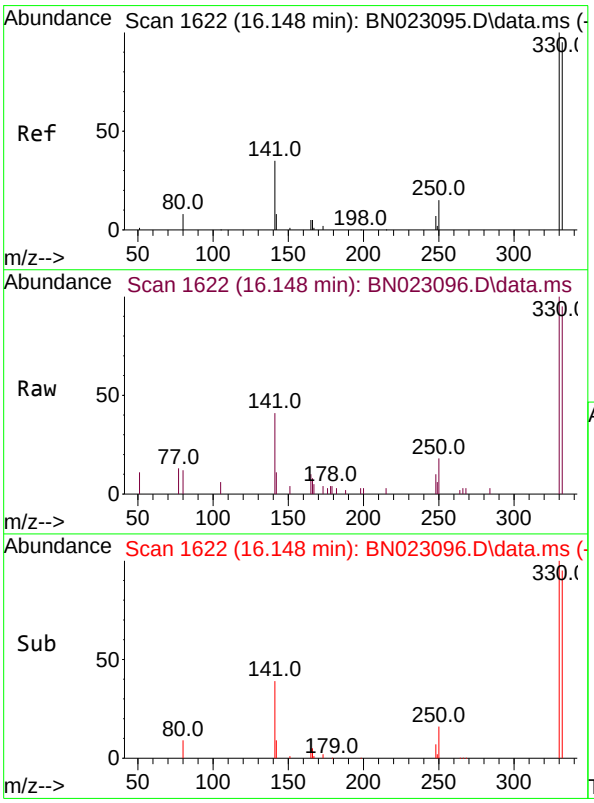
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.666 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:164 Resp: 11426

Ion	Ratio	Lower	Upper
164	100		
162	104.3	83.4	125.0
160	53.4	41.8	62.8

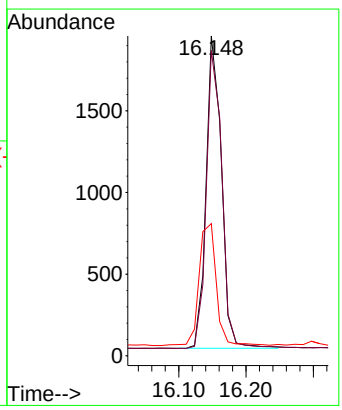


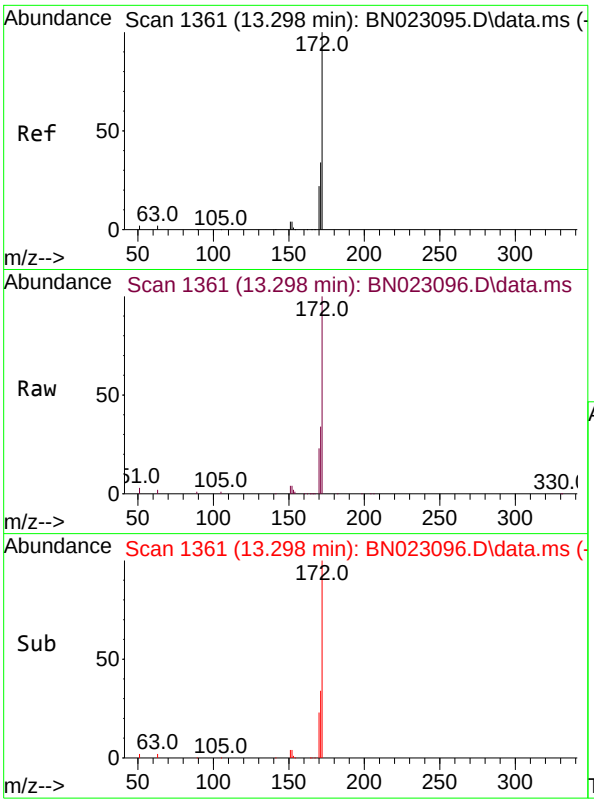


#14
2,4,6-Tribromophenol
Concen: 0.628 ng
RT: 16.148 min Scan# 1622
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:330 Resp: 3033

Ion	Ratio	Lower	Upper
330	100		
332	97.2	77.3	115.9
141	43.5	33.5	50.3



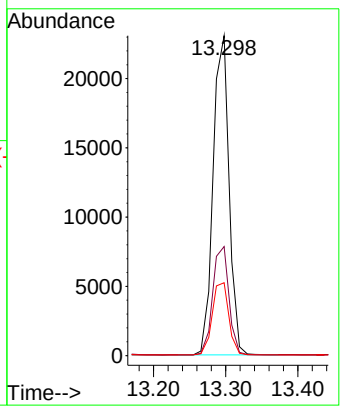


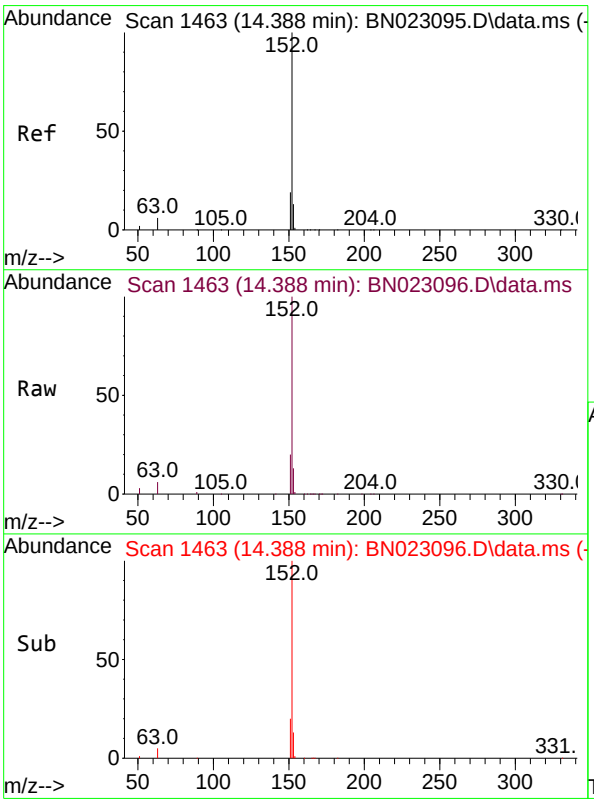
#15
2-Fluorobiphenyl
Concen: 0.701 ng
RT: 13.298 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:172 Resp: 35533

Ion	Ratio	Lower	Upper
172	100		
171	34.1	27.4	41.0
170	22.8	17.9	26.9

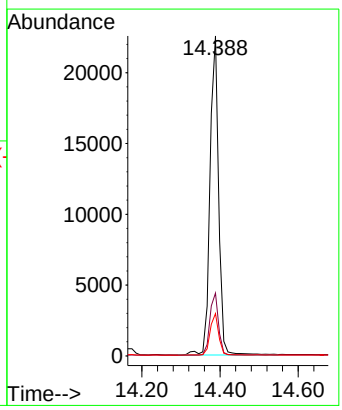


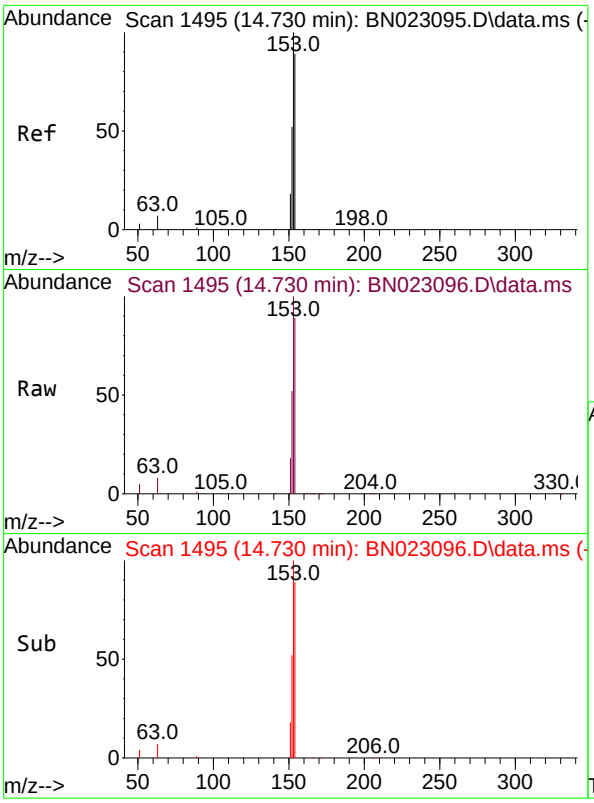


#16
Acenaphthylene
Concen: 0.645 ng
RT: 14.388 min Scan# 1463
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:152 Resp: 34662

Ion	Ratio	Lower	Upper
152	100		
151	19.5	15.4	23.2
153	12.9	10.3	15.5



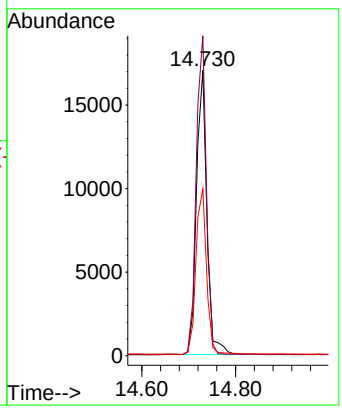


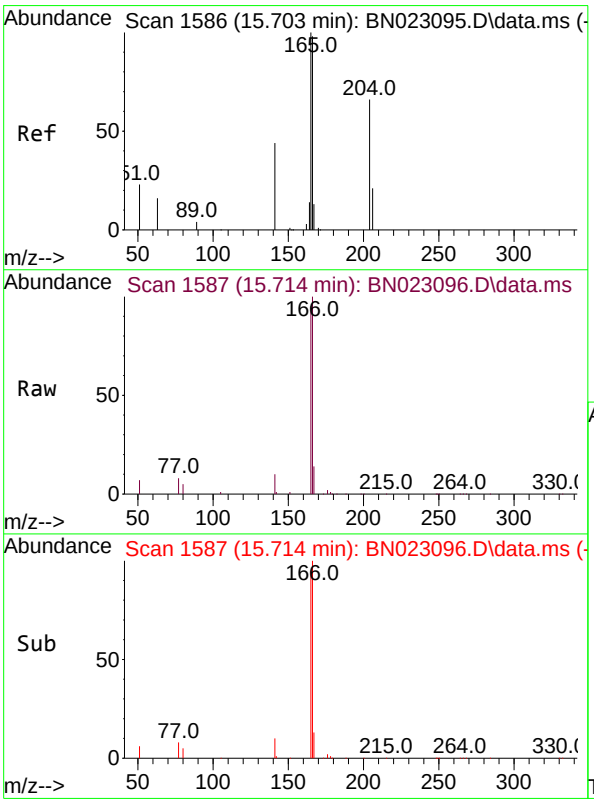
#17
Acenaphthene
Concen: 0.669 ng
RT: 14.730 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:154 Resp: 26163

Ion	Ratio	Lower	Upper
154	100		
153	109.9	88.6	132.8
152	59.4	48.1	72.1

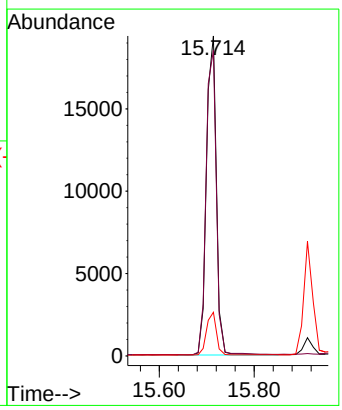


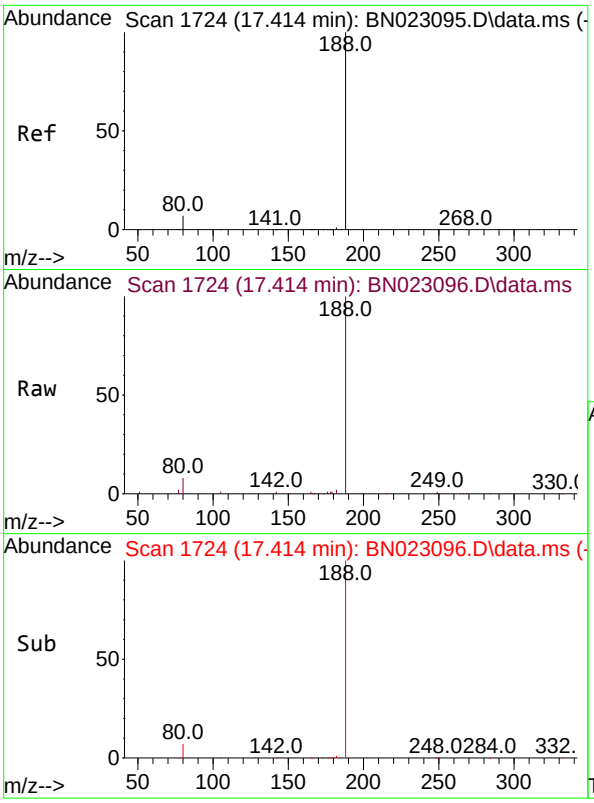


#18
Fluorene
Concen: 0.669 ng
RT: 15.714 min Scan# 1587
Delta R.T. 0.011 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:166 Resp: 29372

Ion	Ratio	Lower	Upper
166	100		
165	99.0	79.8	119.6
167	13.3	10.6	16.0



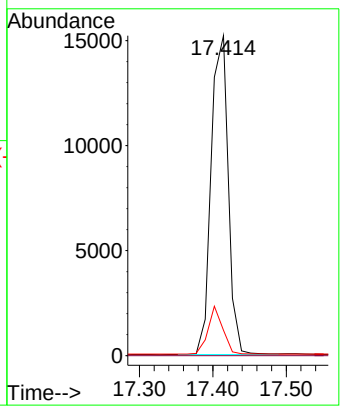


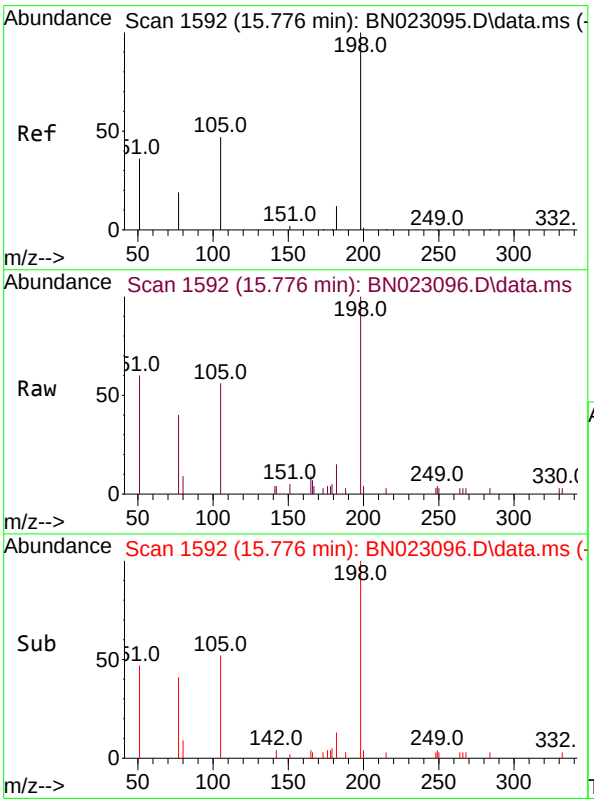
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.414 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:188 Resp: 24706

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	7.9	6.1	9.1

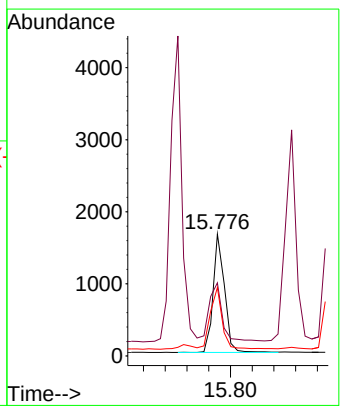


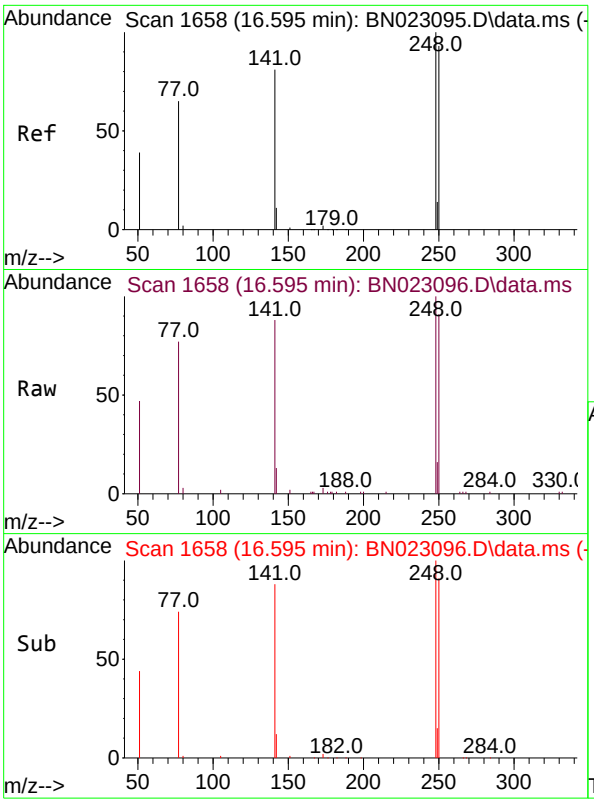


#20
4,6-Dinitro-2-methylphenol
Concen: 0.711 ng
RT: 15.776 min Scan# 1592
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:198 Resp: 2377

Ion	Ratio	Lower	Upper
198	100		
51	60.0	57.0	85.4
105	56.2	47.2	70.8



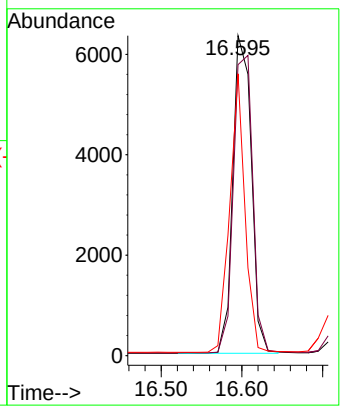


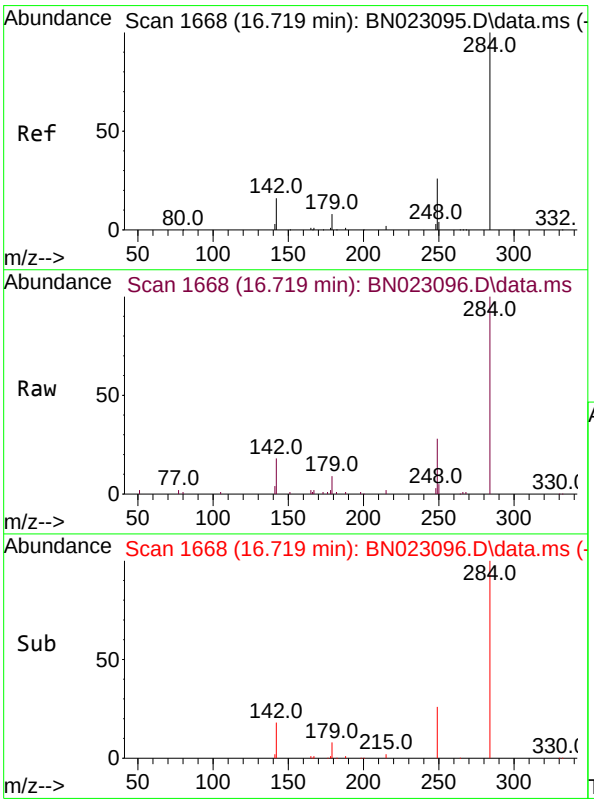
#21
4-Bromophenyl-phenylether
Concen: 0.678 ng
RT: 16.595 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:248 Resp: 10088

Ion	Ratio	Lower	Upper
248	100		
250	90.9	74.3	111.5
141	88.1	65.0	97.6

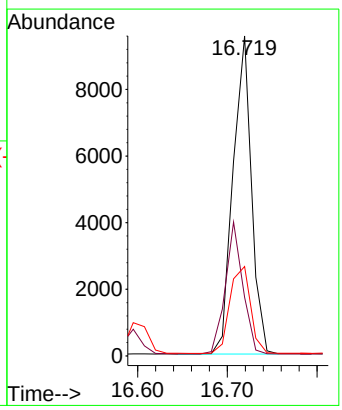


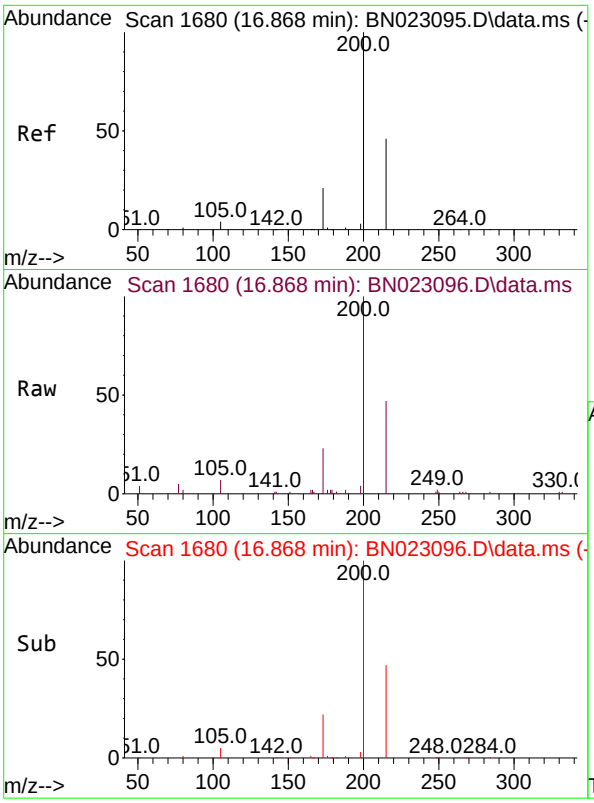


#22
Hexachlorobenzene
Concen: 0.705 ng
RT: 16.719 min Scan# 1668
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:284 Resp: 13630

Ion	Ratio	Lower	Upper
284	100		
142	39.3	31.0	46.4
249	30.6	24.4	36.6



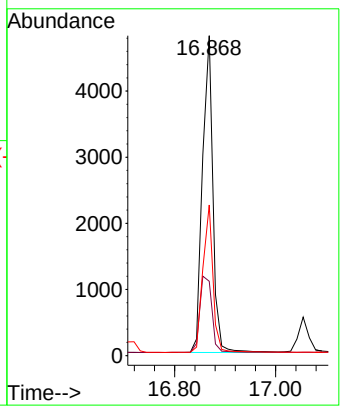


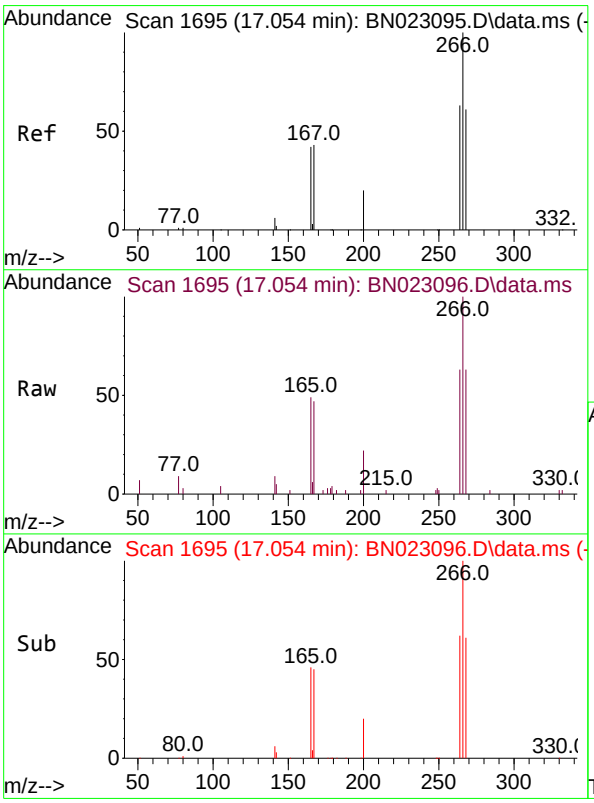
#23
Atrazine
Concen: 0.630 ng
RT: 16.868 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:200 Resp: 6823

Ion	Ratio	Lower	Upper
200	100		
173	23.2	18.2	27.4
215	47.1	38.0	57.0

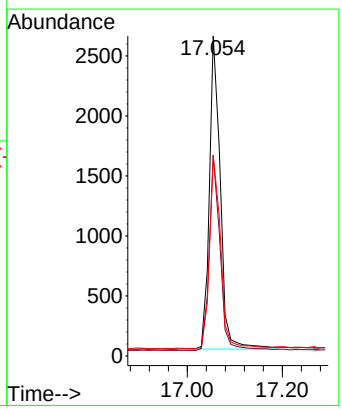


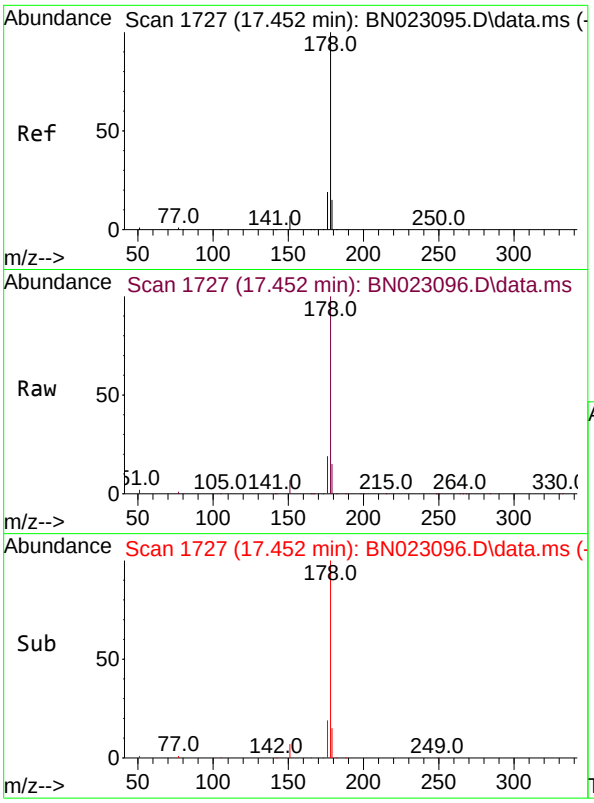


#24
Pentachlorophenol
Concen: 0.731 ng
RT: 17.054 min Scan# 1695
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:266 Resp: 4149

Ion	Ratio	Lower	Upper
266	100		
264	61.8	50.1	75.1
268	62.8	49.7	74.5



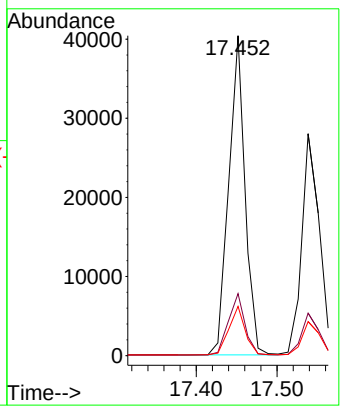


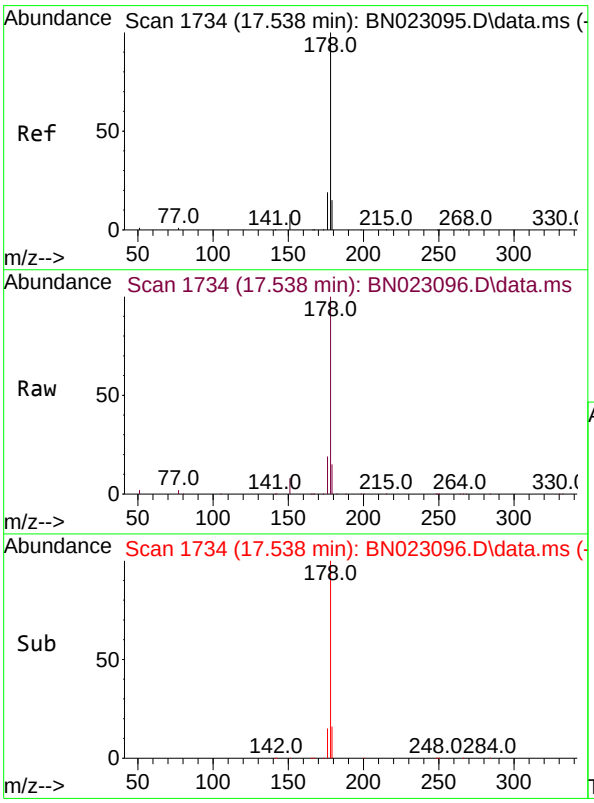
#25
Phenanthrene
Concen: 0.681 ng
RT: 17.452 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:178 Resp: 56706

Ion	Ratio	Lower	Upper
178	100		
176	19.5	15.4	23.2
179	15.2	12.2	18.2

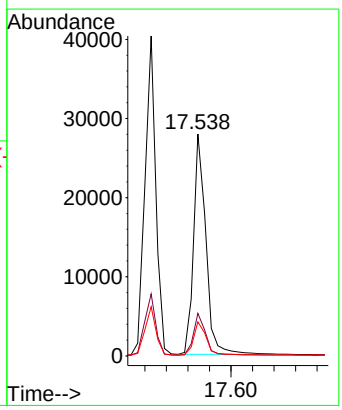


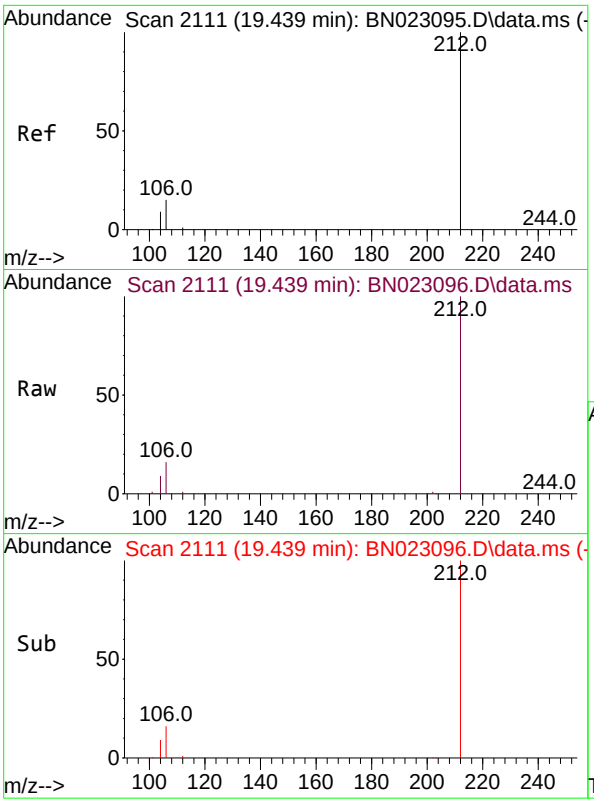


#26
Anthracene
Concen: 0.657 ng
RT: 17.538 min Scan# 1734
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:178 Resp: 44125

Ion	Ratio	Lower	Upper
178	100		
176	18.7	15.1	22.7
179	15.2	12.2	18.4



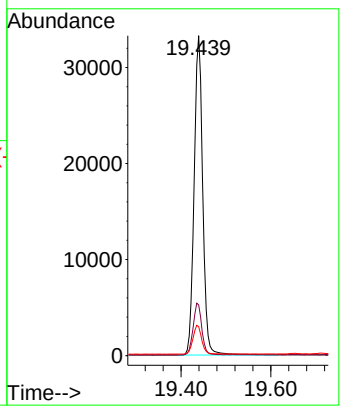


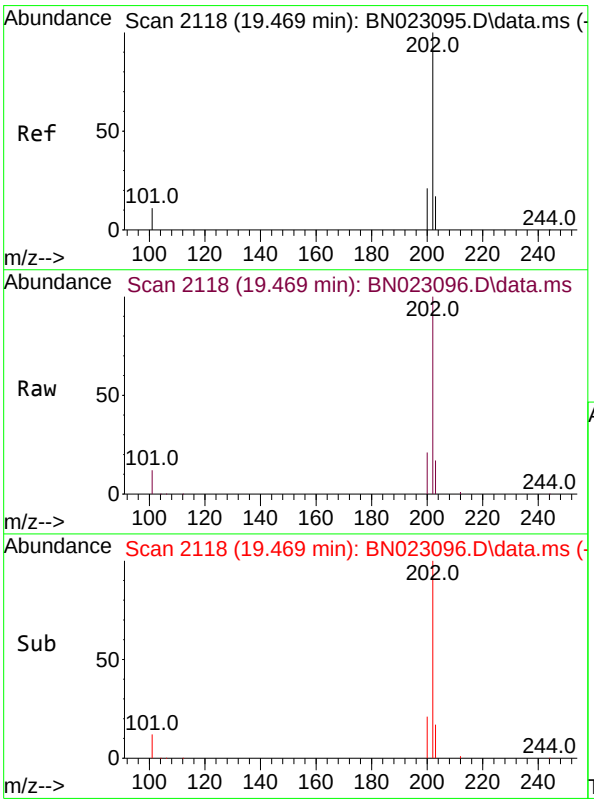
#27
Fluoranthene-d10
Concen: 0.654 ng
RT: 19.439 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:212 Resp: 44274

Ion	Ratio	Lower	Upper
212	100		
106	16.2	13.0	19.4
104	9.2	7.5	11.3

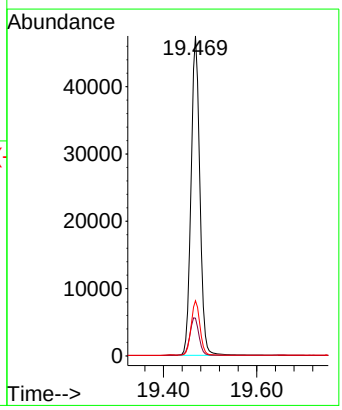


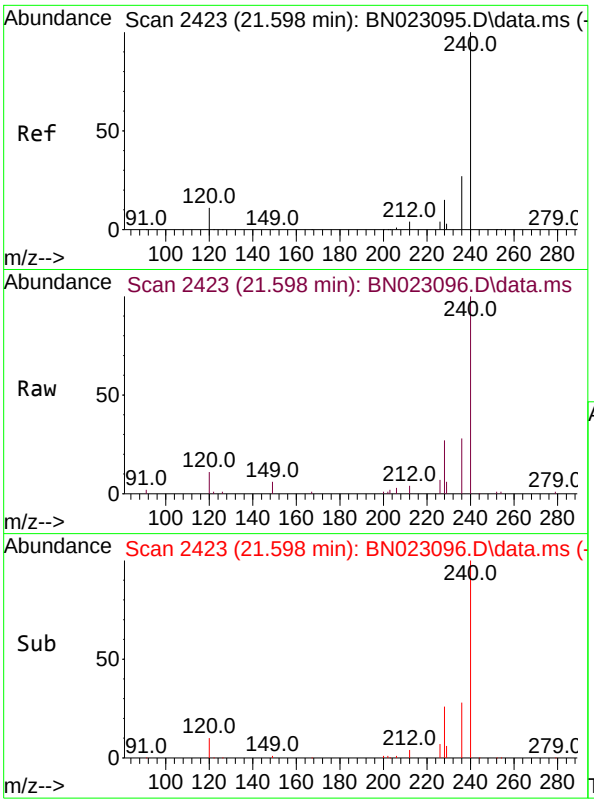


#28
Fluoranthene
Concen: 0.680 ng
RT: 19.469 min Scan# 2118
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:202 Resp: 61820

Ion	Ratio	Lower	Upper
202	100		
101	12.4	9.7	14.5
203	17.0	13.8	20.6



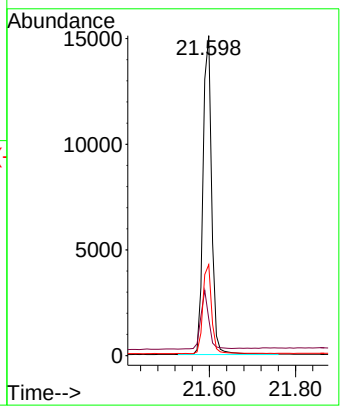


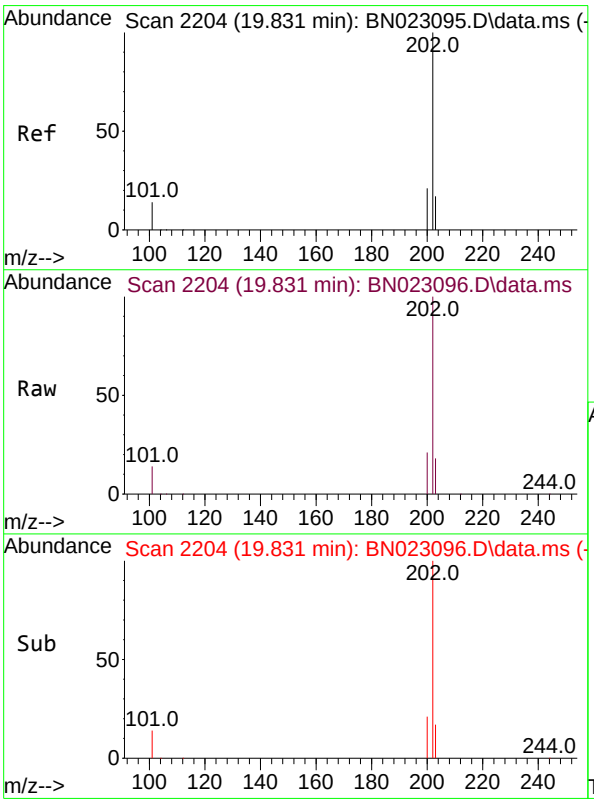
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.598 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:240 Resp: 20806

Ion	Ratio	Lower	Upper
240	100		
120	11.5	10.1	15.1
236	28.4	22.2	33.4

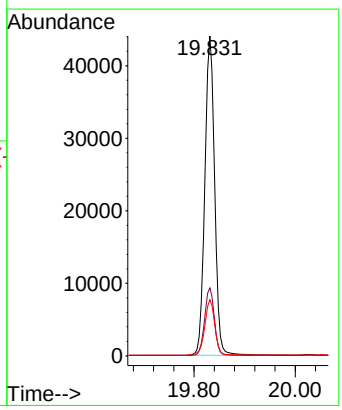


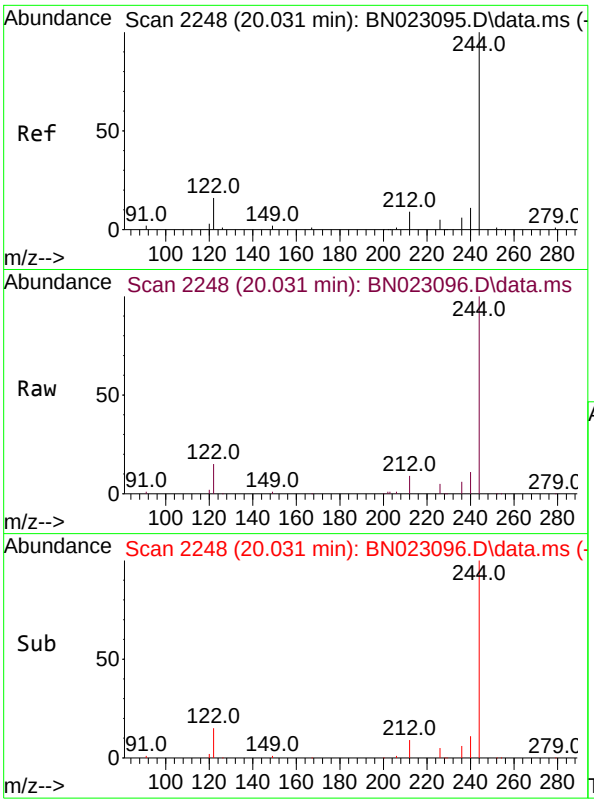


#30
Pyrene
Concen: 0.684 ng
RT: 19.831 min Scan# 2204
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:202 Resp: 59340

Ion	Ratio	Lower	Upper
202	100		
200	21.2	16.9	25.3
203	17.8	14.2	21.4



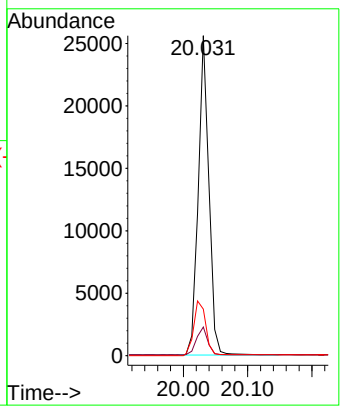


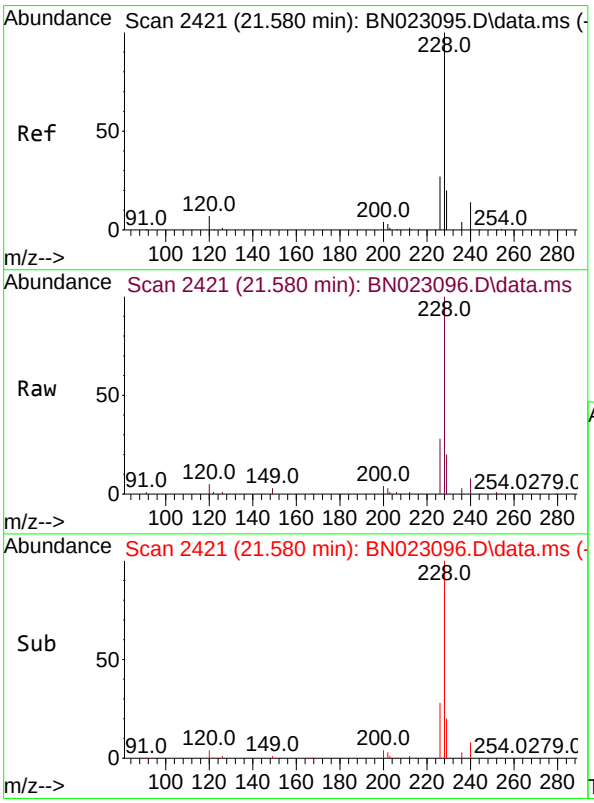
#31
Terphenyl-d14
Concen: 0.684 ng
RT: 20.031 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:244 Resp: 27028

Ion	Ratio	Lower	Upper
244	100		
212	8.9	7.6	11.4
122	14.5	12.6	18.8

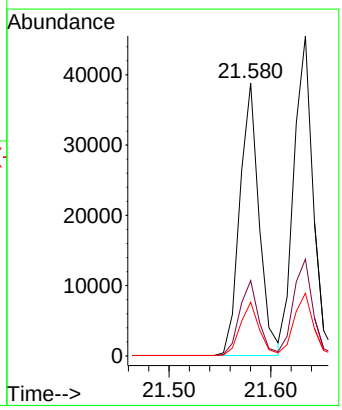


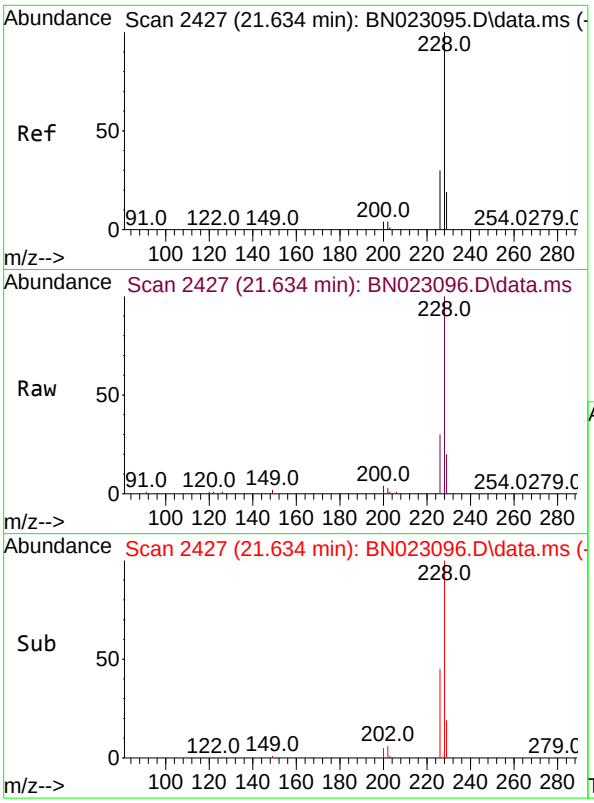


#32
Benzo(a)anthracene
Concen: 0.666 ng
RT: 21.580 min Scan# 2421
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:228 Resp: 51136

Ion	Ratio	Lower	Upper
228	100		
226	27.6	22.0	33.0
229	19.7	15.8	23.8



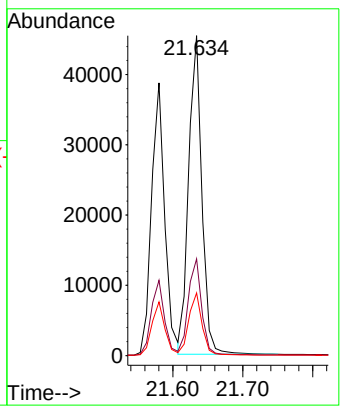


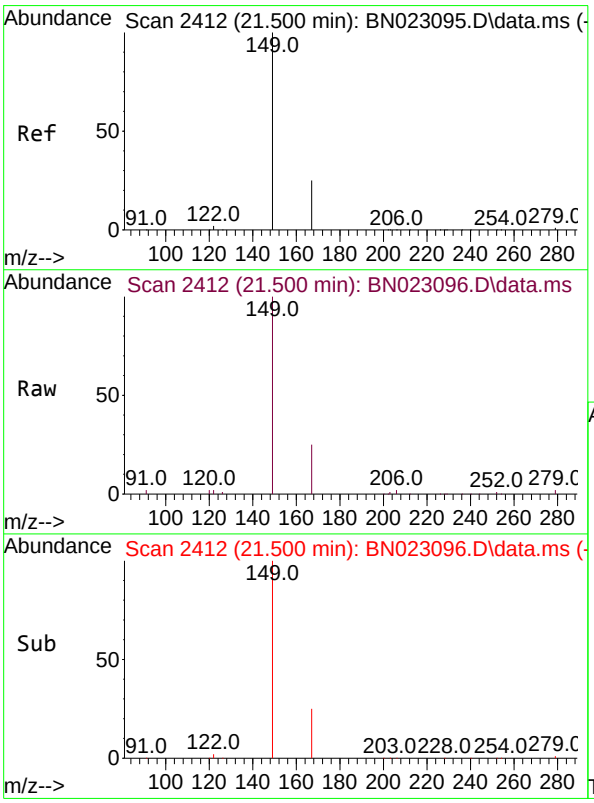
#33
Chrysene
Concen: 0.695 ng
RT: 21.634 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:228 Resp: 59672

Ion	Ratio	Lower	Upper
228	100		
226	30.2	24.4	36.6
229	19.6	15.6	23.4

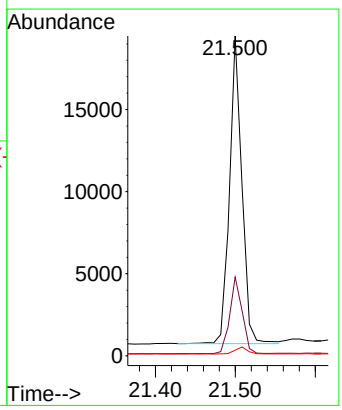


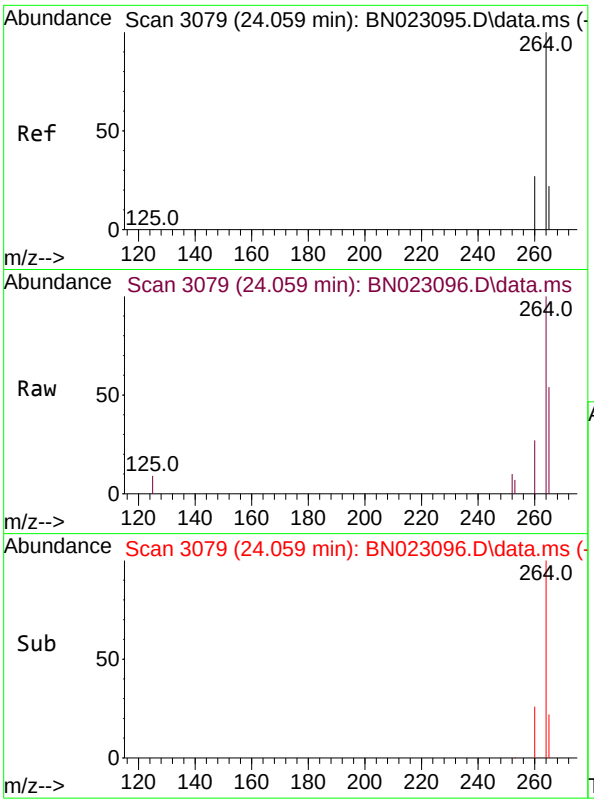


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.608 ng
RT: 21.500 min Scan# 2412
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:149 Resp: 20192

Ion	Ratio	Lower	Upper
149	100		
167	25.0	20.2	30.2
279	2.4	2.3	3.5



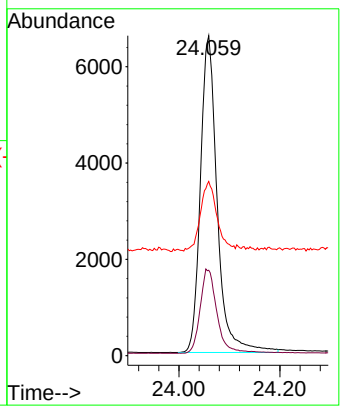


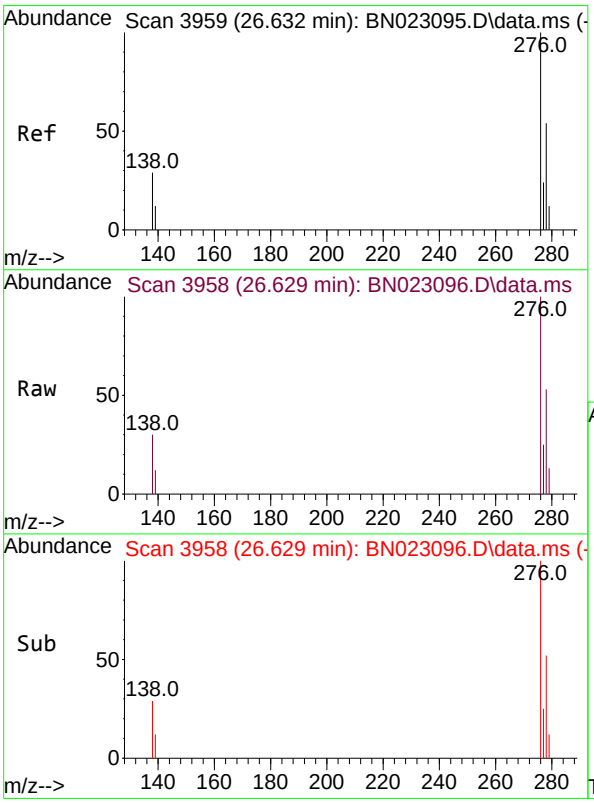
#35
Perylene-d12
Concen: 0.400 ng
RT: 24.059 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:264 Resp: 15181

Ion	Ratio	Lower	Upper
264	100		
260	26.7	21.7	32.5
265	54.5	43.2	64.8

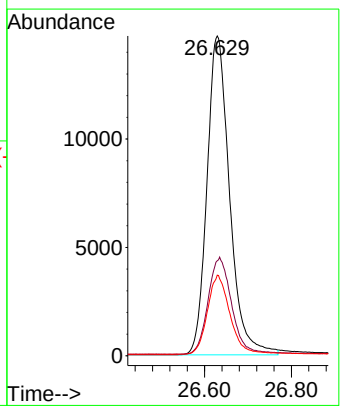


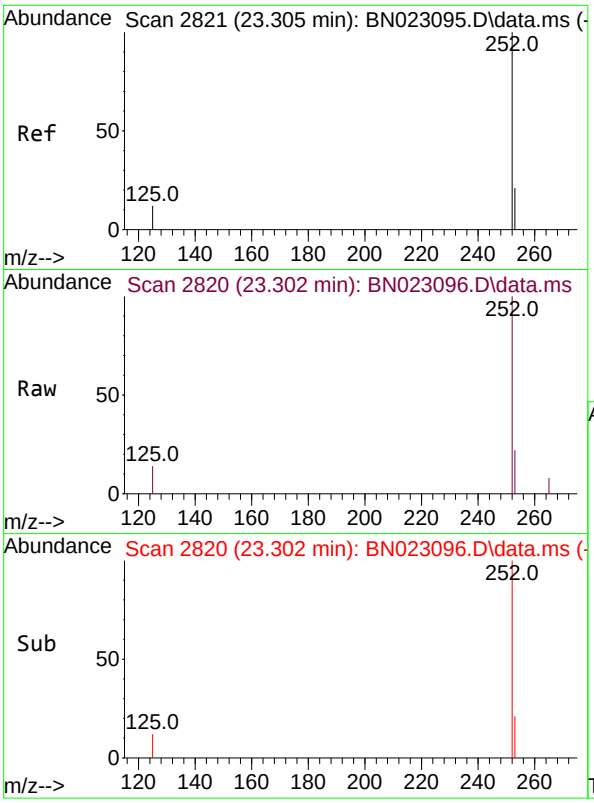


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.660 ng
RT: 26.629 min Scan# 3958
Delta R.T. -0.003 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:276 Resp: 53216

Ion	Ratio	Lower	Upper
276	100		
138	31.6	25.0	37.6
277	24.6	19.8	29.8



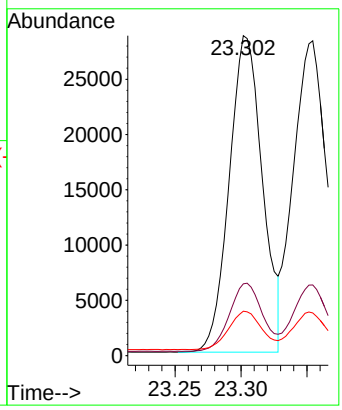


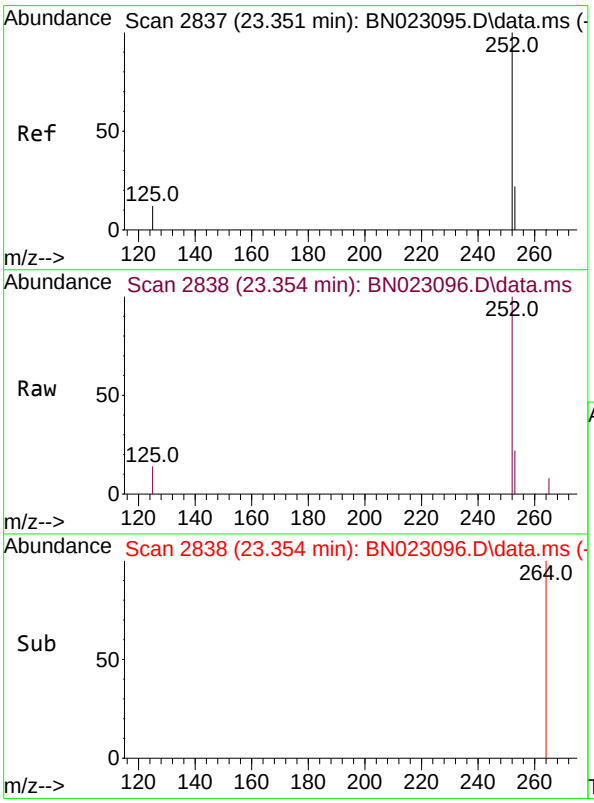
#37
Benzo(b)fluoranthene
Concen: 0.722 ng
RT: 23.302 min Scan# 28
Delta R.T. -0.003 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:252 Resp: 50131

Ion	Ratio	Lower	Upper
252	100		
253	22.4	19.0	28.4
125	13.9	12.8	19.2

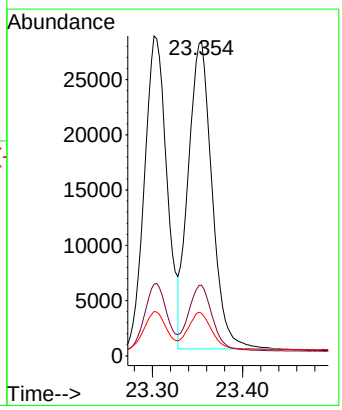


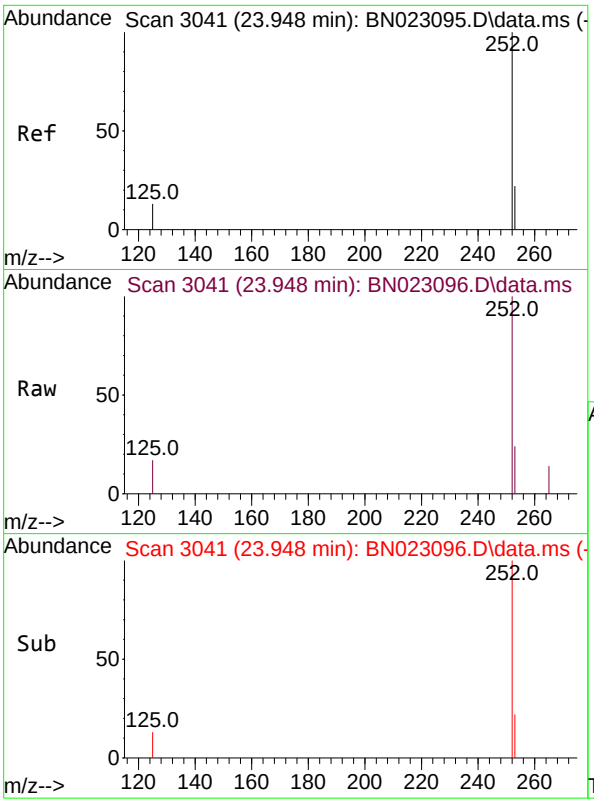


#38
Benzo(k)fluoranthene
Concen: 0.715 ng
RT: 23.354 min Scan# 2838
Delta R.T. 0.003 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:252 Resp: 50862

Ion	Ratio	Lower	Upper
252	100		
253	22.4	19.1	28.7
125	13.5	12.5	18.7



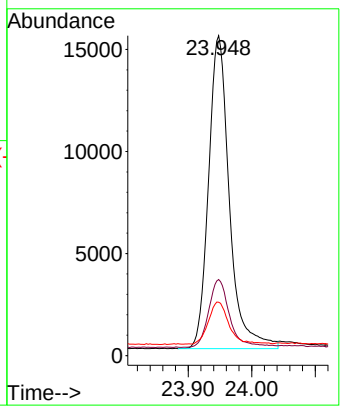


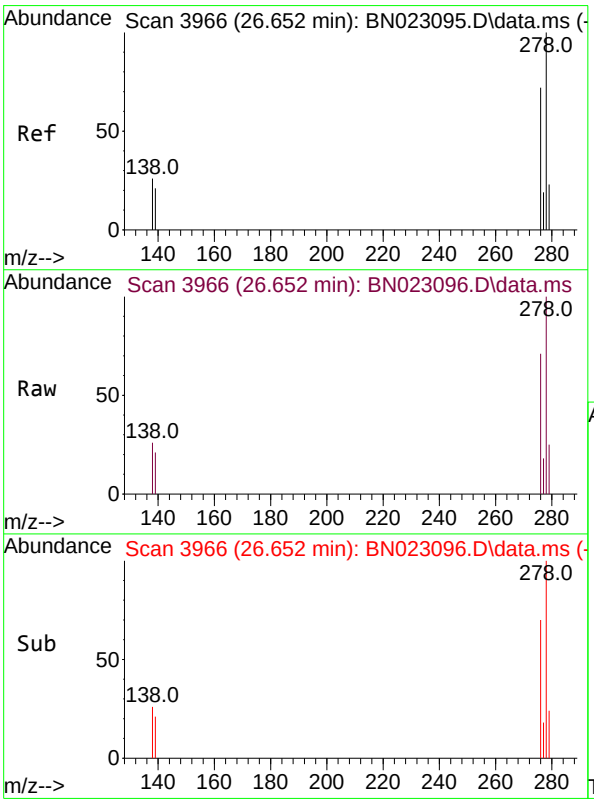
#39
Benzo(a)pyrene
Concen: 0.622 ng
RT: 23.948 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:252 Resp: 34953

Ion	Ratio	Lower	Upper
252	100		
253	23.8	20.6	30.8
125	16.7	15.8	23.8

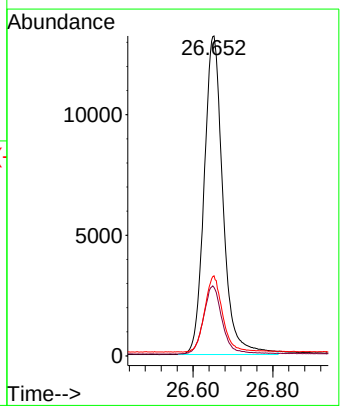


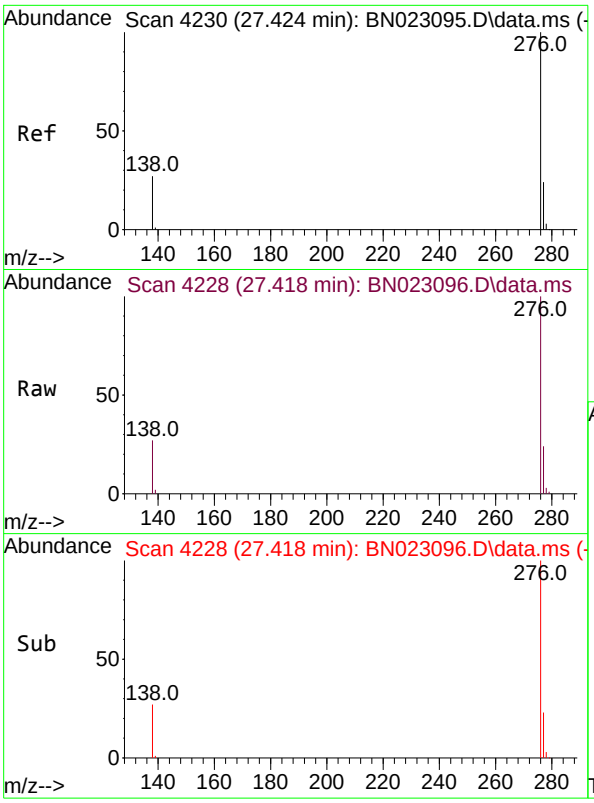


#40
Dibenzo(a,h)anthracene
Concen: 0.676 ng
RT: 26.652 min Scan# 3966
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:278 Resp: 43165

Ion	Ratio	Lower	Upper
278	100		
139	21.4	17.5	26.3
279	25.0	20.5	30.7



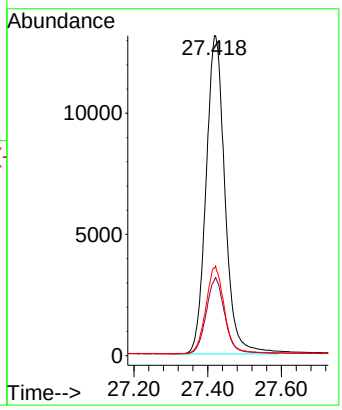


#41
Benzo(g,h,i)perylene
Concen: 0.715 ng
RT: 27.418 min Scan# 4
Delta R.T. -0.006 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:276 Resp: 46710

Ion	Ratio	Lower	Upper
276	100		
277	23.8	19.9	29.9
138	27.3	22.2	33.2



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023097.D
Acq On : 08 Dec 2022 16:26
Operator : CG/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Dec 09 07:28:39 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	8.021	152	7961	0.400	ng		0.00
7) Naphthalene-d8	10.840	136	23515	0.400	ng		0.00
13) Acenaphthene-d10	14.666	164	13256	0.400	ng		0.00
19) Phenanthrene-d10	17.414	188	27793	0.400	ng		0.00
29) Chrysene-d12	21.598	240	24897	0.400	ng		0.00
35) Perylene-d12	24.059	264	17546	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.558	112	24725	1.343	ng		0.00
5) Phenol-d6	7.168	99	32018	1.383	ng		0.00
8) Nitrobenzene-d5	9.185	82	26154	1.482	ng		0.00
11) 2-Methylnaphthalene-d10	12.427	152	67111	1.512	ng		0.00
14) 2,4,6-Tribromophenol	16.148	330	8264	1.476	ng		0.00
15) 2-Fluorobiphenyl	13.298	172	88442	1.503	ng		0.00
27) Fluoranthene-d10	19.439	212	111381	1.463	ng		0.00
31) Terphenyl-d14	20.031	244	68689	1.454	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.398	88	13318	1.349	ng		98
3) n-Nitrosodimethylamine	3.723	42	14509	1.503	ng	#	99
6) bis(2-Chloroethyl)ether	7.436	93	35736	1.398	ng		97
9) Naphthalene	10.893	128	99339	1.424	ng		99
10) Hexachlorobutadiene	11.182	225	18899	1.443	ng	#	100
12) 2-Methylnaphthalene	12.117	142	17618	1.651	ng	#	92
16) Acenaphthylene	14.388	152	94028	1.509	ng		100
17) Acenaphthene	14.730	154	66404	1.463	ng		99
18) Fluorene	15.703	166	75662	1.486	ng		99
20) 4,6-Dinitro-2-methylph...	15.776	198	6771	1.801	ng	#	81
21) 4-Bromophenyl-phenylether	16.595	248	25451	1.520	ng		98
22) Hexachlorobenzene	16.719	284	32935	1.515	ng		99
23) Atrazine	16.868	200	18156	1.490	ng		99
24) Pentachlorophenol	17.055	266	11351	1.778	ng		99
25) Phenanthrene	17.452	178	139569	1.490	ng		100
26) Anthracene	17.539	178	115325	1.528	ng		100
28) Fluoranthene	19.469	202	156823	1.534	ng		100
30) Pyrene	19.831	202	152036	1.465	ng		100
32) Benzo(a)anthracene	21.580	228	137563	1.497	ng		99
33) Chrysene	21.634	228	152270	1.482	ng		100
34) Bis(2-ethylhexyl)phtha...	21.500	149	53634	1.350	ng		99
36) Indeno(1,2,3-cd)pyrene	26.632	276	143051	1.534	ng		100
37) Benzo(b)fluoranthene	23.305	252	129768	1.618	ng	#	94
38) Benzo(k)fluoranthene	23.355	252	135698	1.651	ng		95
39) Benzo(a)pyrene	23.948	252	96478	1.485	ng	#	91
40) Dibenzo(a,h)anthracene	26.650	278	116720	1.582	ng		97
41) Benzo(g,h,i)perylene	27.421	276	121454	1.608	ng		98

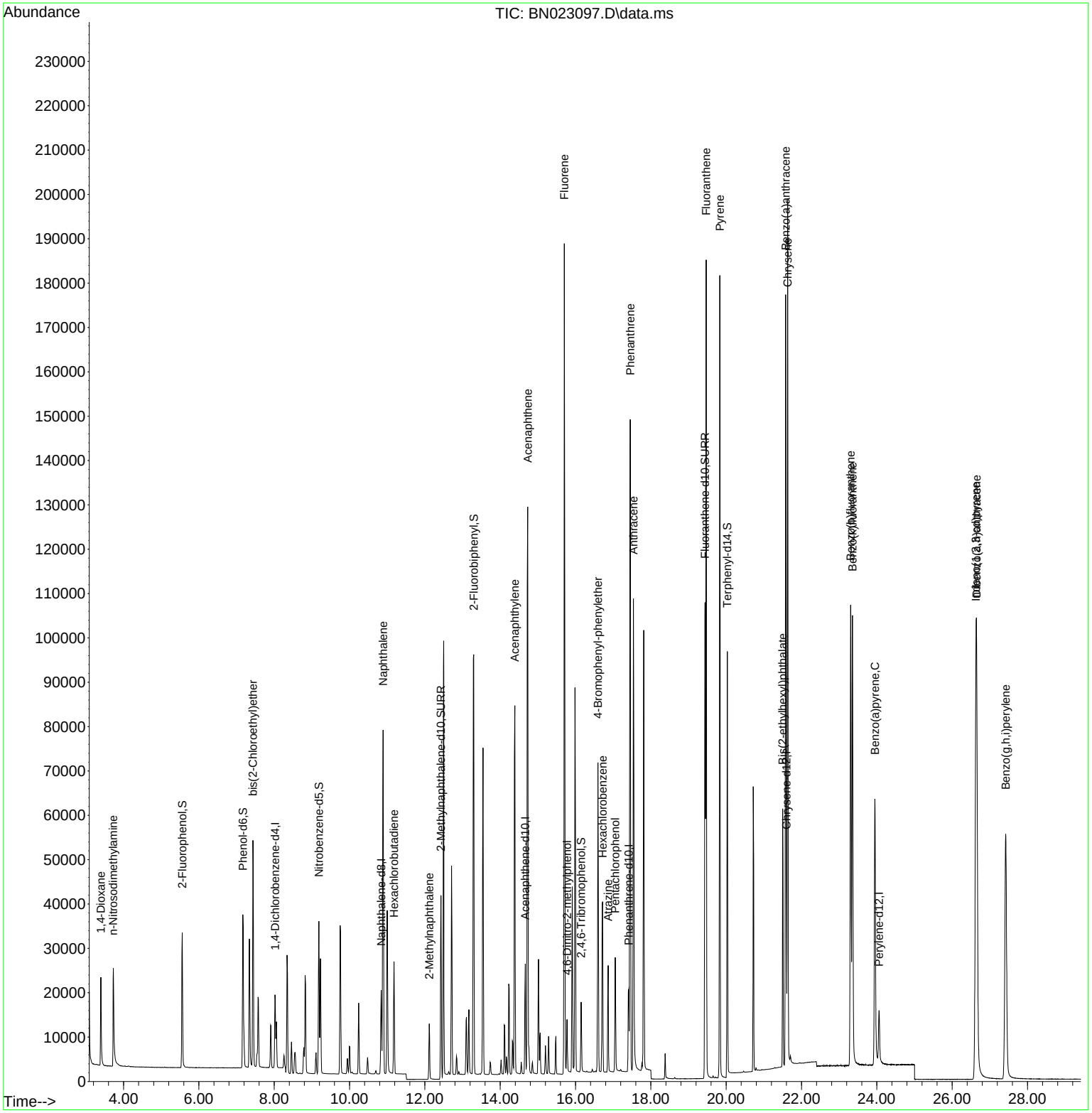
(#) = qualifier out of range (m) = manual integration (+) = signals summed

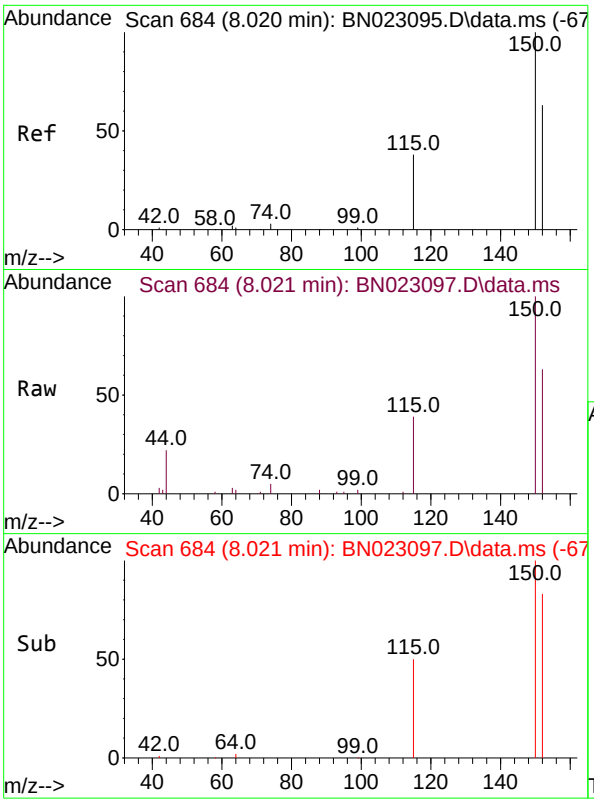
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023097.D
Acq On : 08 Dec 2022 16:26
Operator : CG/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Dec 09 07:28:39 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration



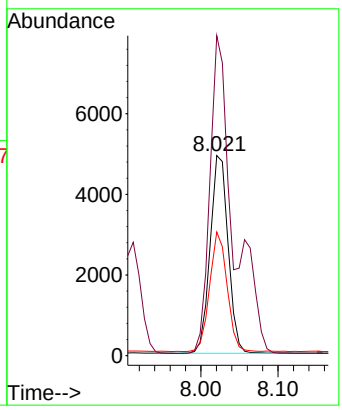


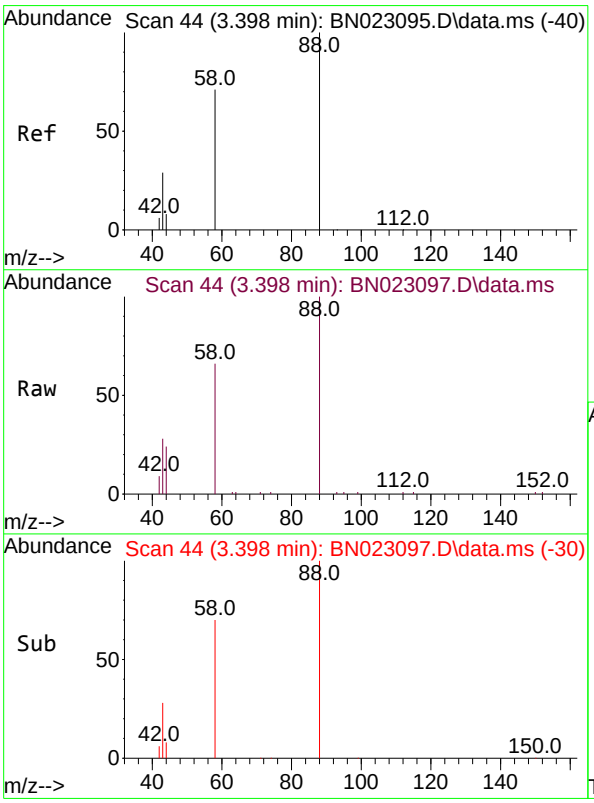
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 8.021 min Scan# 68
Delta R.T. 0.001 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:152 Resp: 7961

Ion	Ratio	Lower	Upper
152	100		
150	159.9	125.6	188.4
115	61.8	49.0	73.4

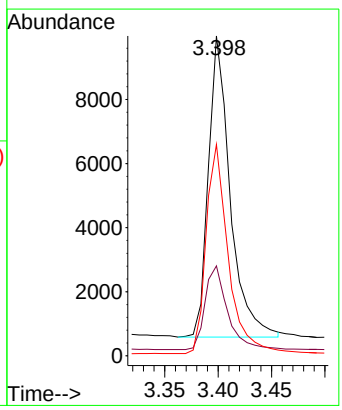


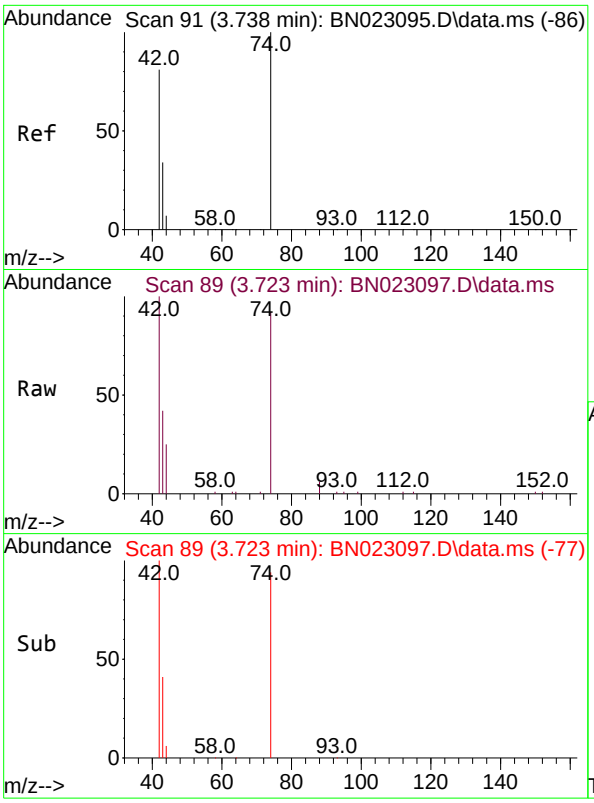


#2
1,4-Dioxane
Concen: 1.349 ng
RT: 3.398 min Scan# 44
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion: 88 Resp: 13318

Ion	Ratio	Lower	Upper
88	100		
43	28.6	23.3	34.9
58	70.2	58.0	87.0



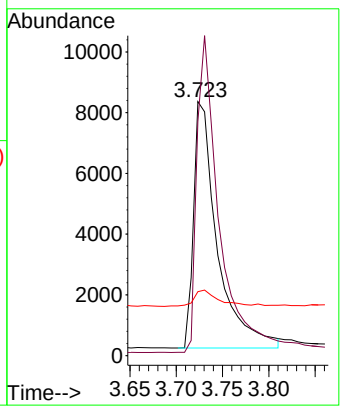


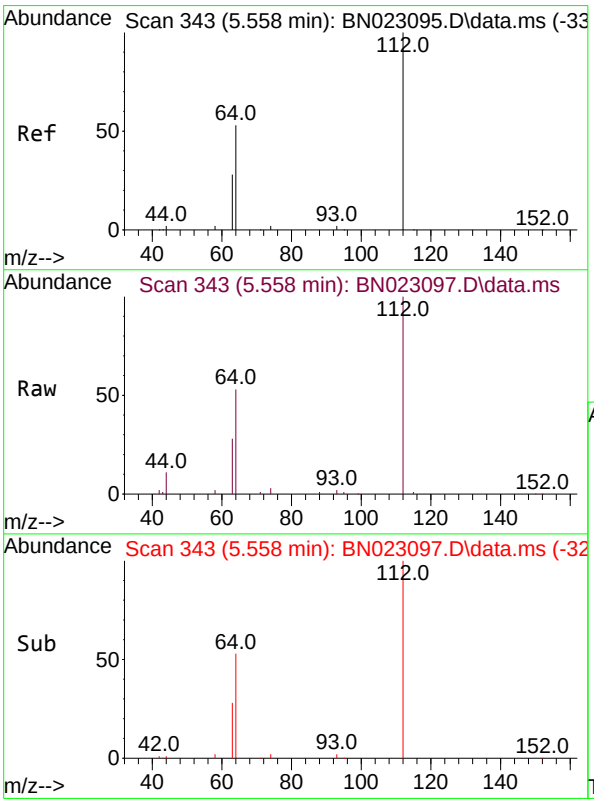
#3
n-Nitrosodimethylamine
Concen: 1.503 ng
RT: 3.723 min Scan# 8
Delta R.T. -0.014 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion: 42 Resp: 14509

Ion	Ratio	Lower	Upper
42	100		
74	120.3	95.8	143.6
44	6.7	8.4	12.6#

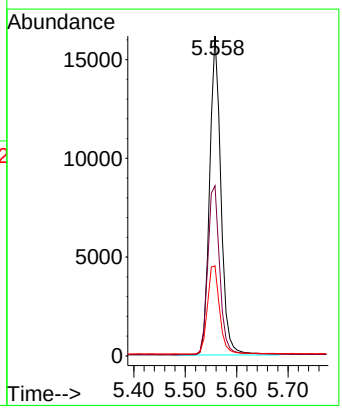


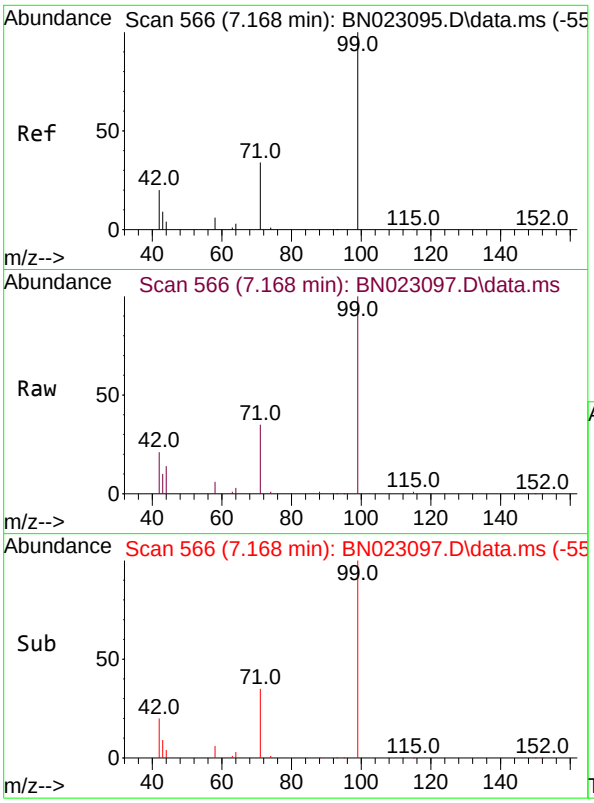


#4
2-Fluorophenol
Concen: 1.343 ng
RT: 5.558 min Scan# 343
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:112 Resp: 24725

Ion	Ratio	Lower	Upper
112	100		
64	56.0	44.4	66.6
63	29.6	23.7	35.5



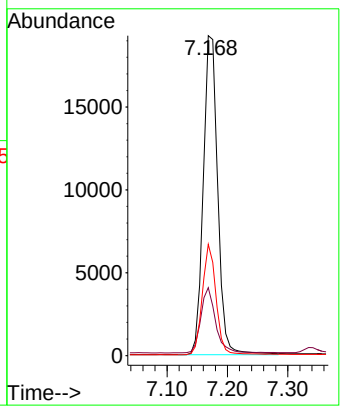


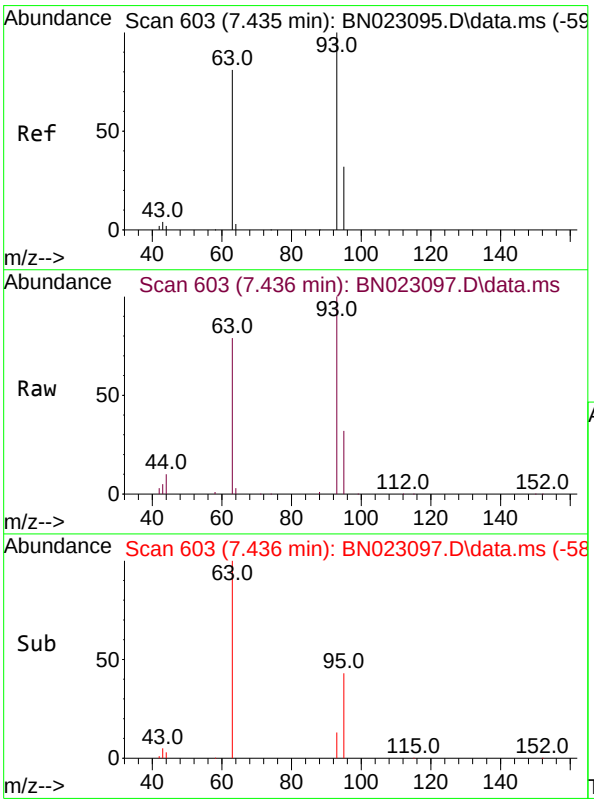
#5
Phenol-d6
Concen: 1.383 ng
RT: 7.168 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion: 99 Resp: 32018

Ion	Ratio	Lower	Upper
99	100		
42	20.9	16.3	24.5
71	33.0	26.5	39.7

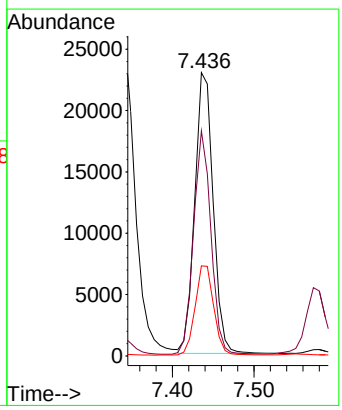


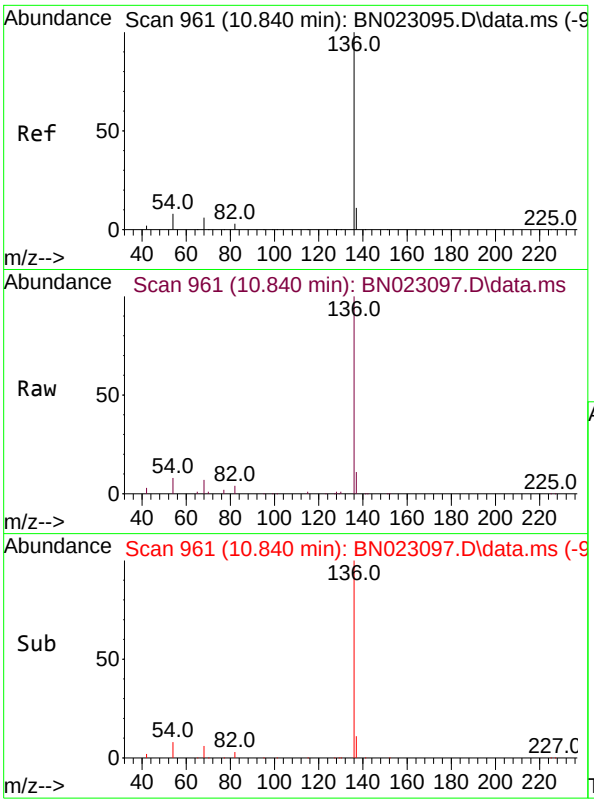


#6
bis(2-Chloroethyl)ether
Concen: 1.398 ng
RT: 7.436 min Scan# 603
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion: 93 Resp: 35736

Ion	Ratio	Lower	Upper
93	100		
63	75.2	58.1	87.1
95	32.2	25.2	37.8



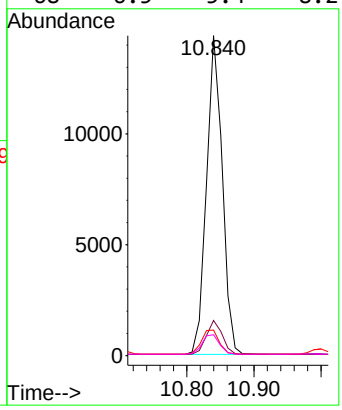


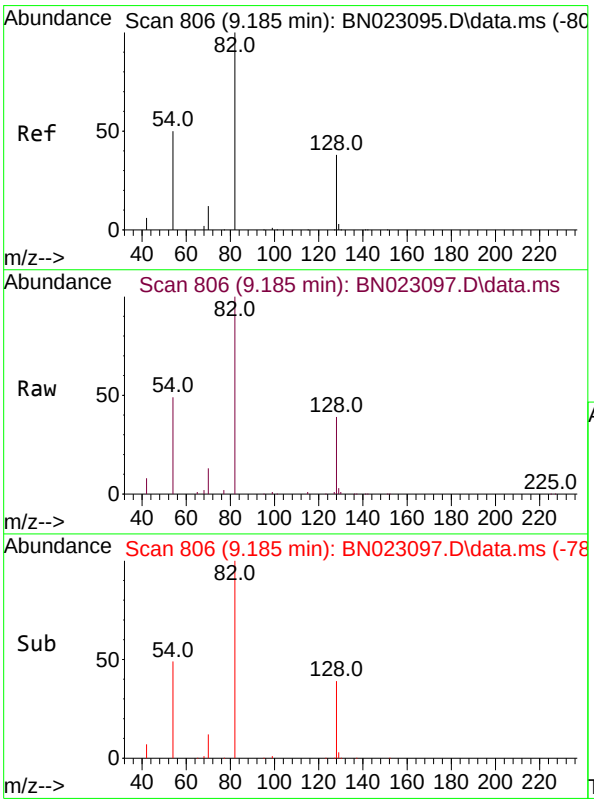
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.840 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:136 Resp: 23515

Ion	Ratio	Lower	Upper
136	100		
137	11.0	9.0	13.4
54	8.0	6.5	9.7
68	6.5	5.4	8.2

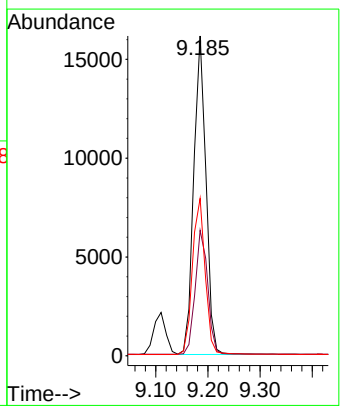


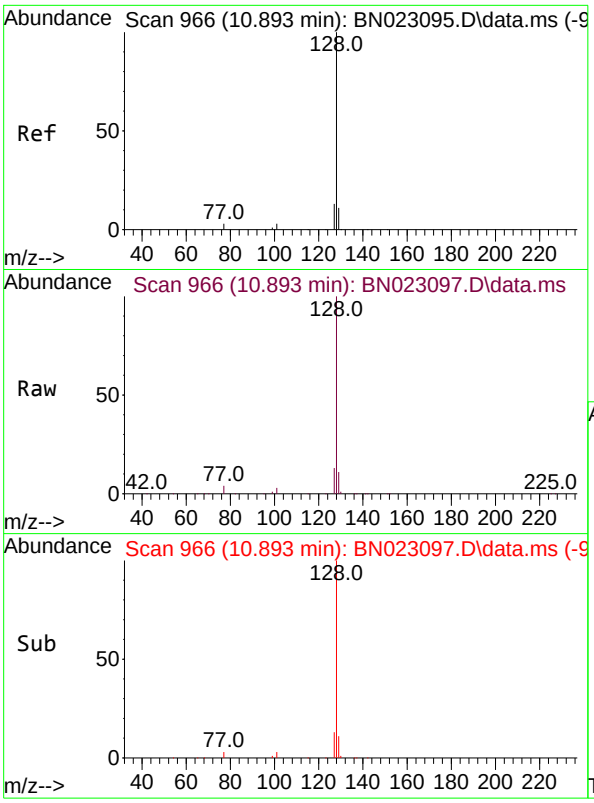


#8
Nitrobenzene-d5
Concen: 1.482 ng
RT: 9.185 min Scan# 806
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion: 82 Resp: 26154

Ion	Ratio	Lower	Upper
82	100		
128	39.2	31.4	47.2
54	49.2	41.0	61.4



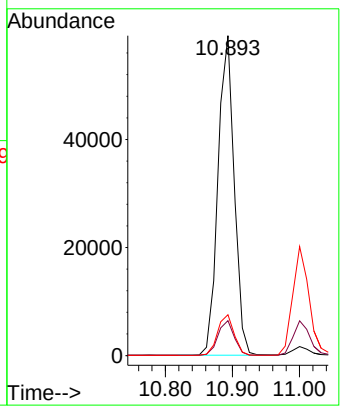


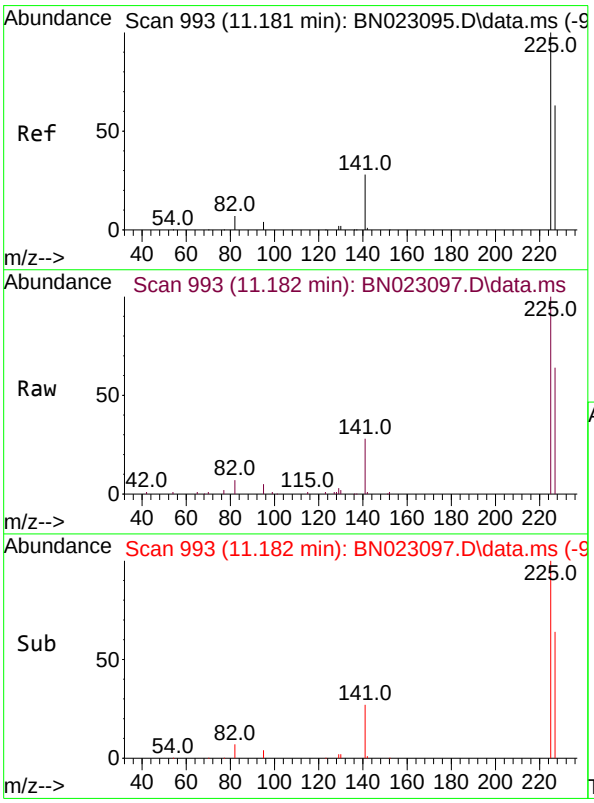
#9
Naphthalene
Concen: 1.424 ng
RT: 10.893 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:128 Resp: 99339

Ion	Ratio	Lower	Upper
128	100		
129	11.0	9.0	13.6
127	12.8	10.5	15.7

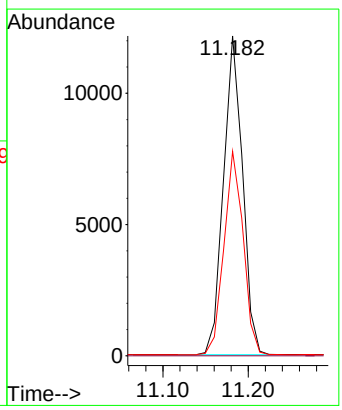


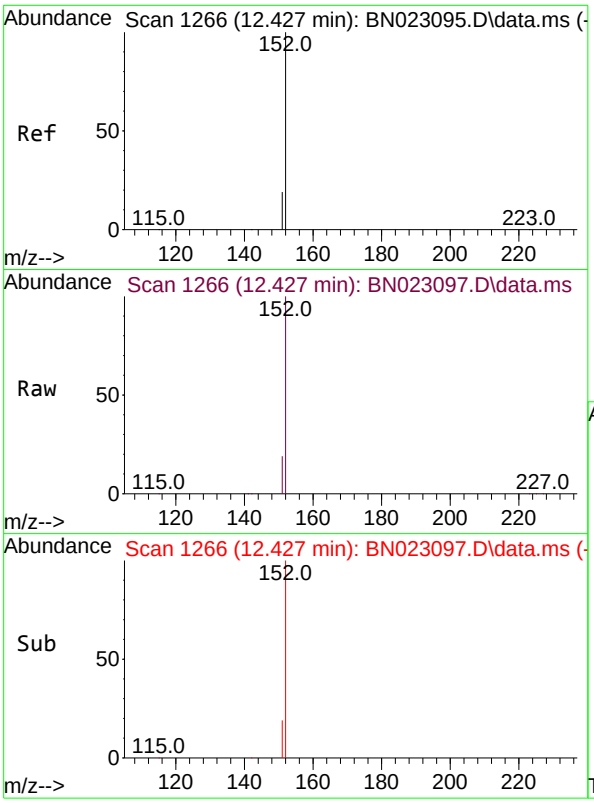


#10
Hexachlorobutadiene
Concen: 1.443 ng
RT: 11.182 min Scan# 993
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:225 Resp: 18899

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.1	51.1	76.7



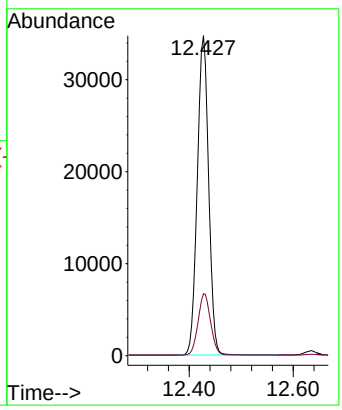


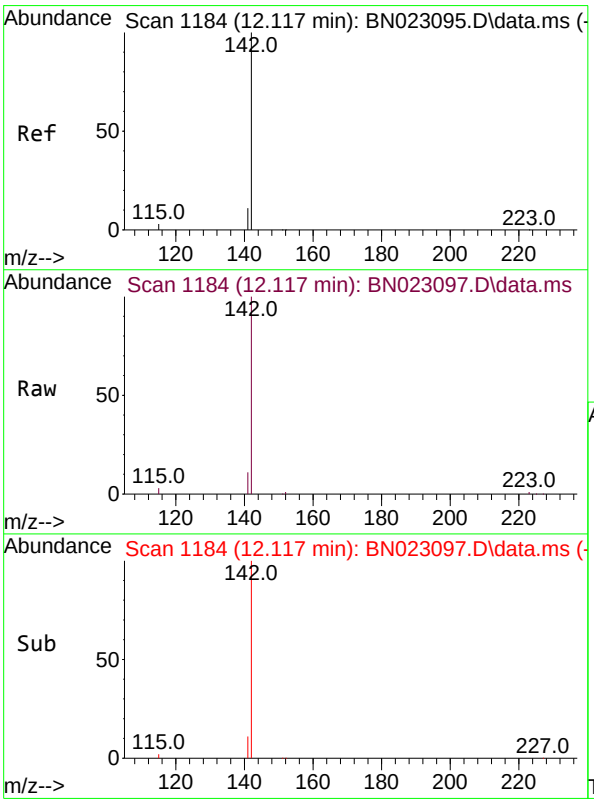
#11
2-Methylnaphthalene-d10
Concen: 1.512 ng
RT: 12.427 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:152 Resp: 67111

Ion	Ratio	Lower	Upper
152	100		
151	21.9	15.1	22.7

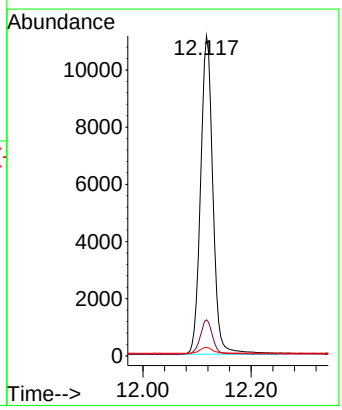


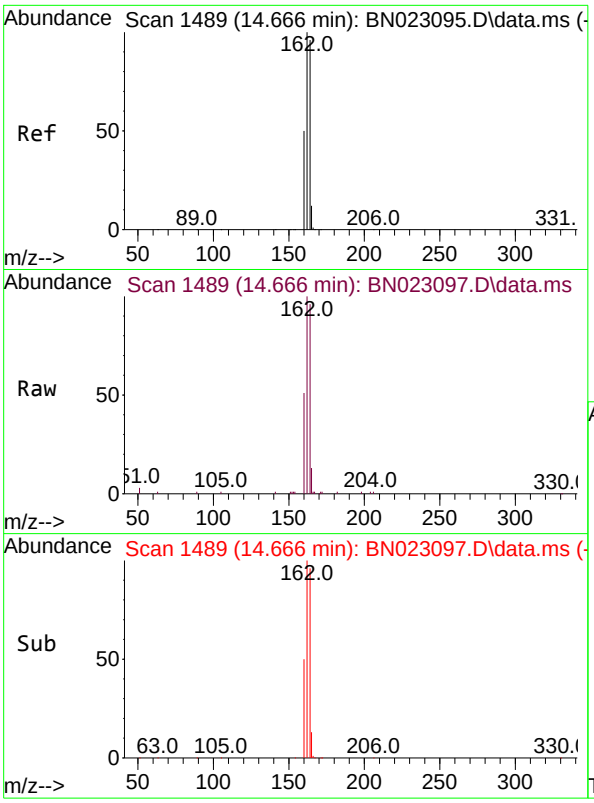


#12
2-Methylnaphthalene
Concen: 1.651 ng
RT: 12.117 min Scan# 1184
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:142 Resp: 17618

Ion	Ratio	Lower	Upper
142	100		
141	11.3	10.9	16.3
115	2.6	5.7	8.5#



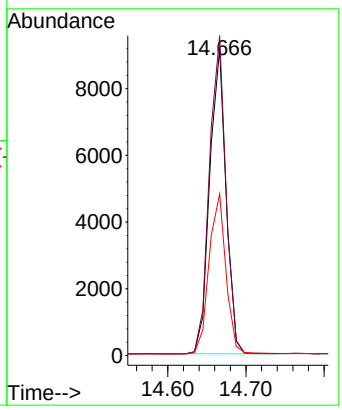


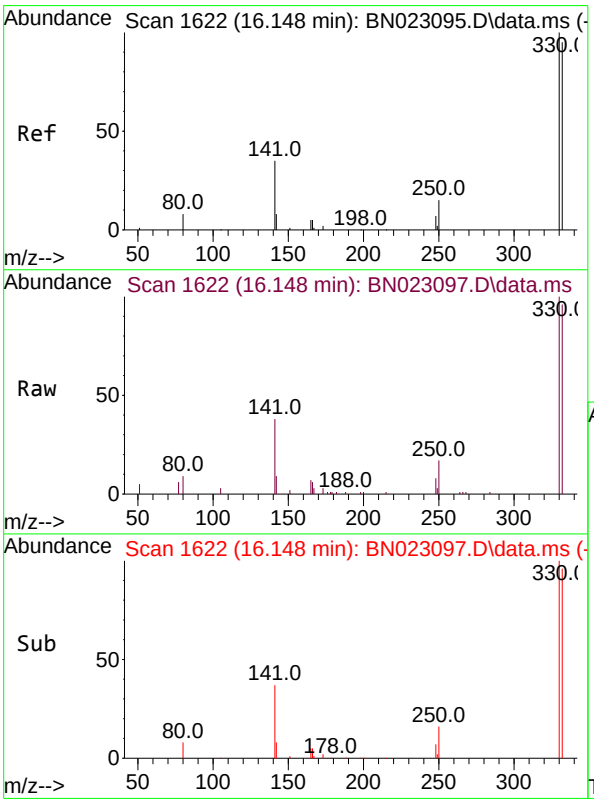
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.666 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:164 Resp: 13256

Ion	Ratio	Lower	Upper
164	100		
162	104.3	83.4	125.0
160	52.7	41.8	62.8

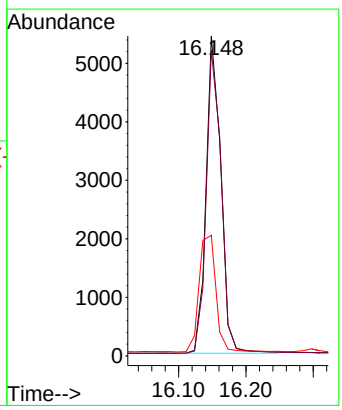


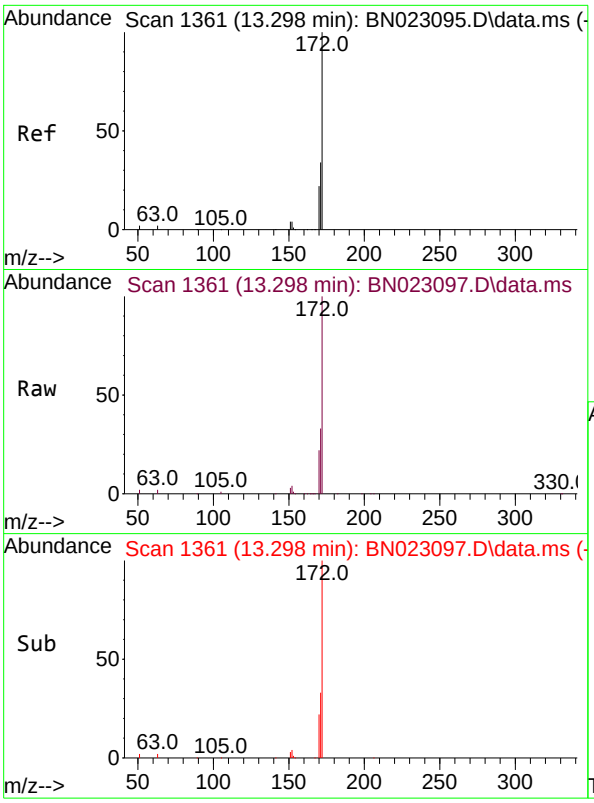


#14
2,4,6-Tribromophenol
Concen: 1.476 ng
RT: 16.148 min Scan# 1622
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:330 Resp: 8264

Ion	Ratio	Lower	Upper
330	100		
332	97.1	77.3	115.9
141	41.8	33.5	50.3



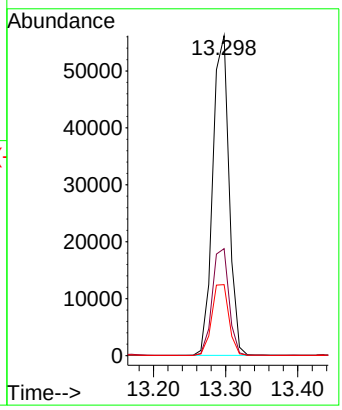


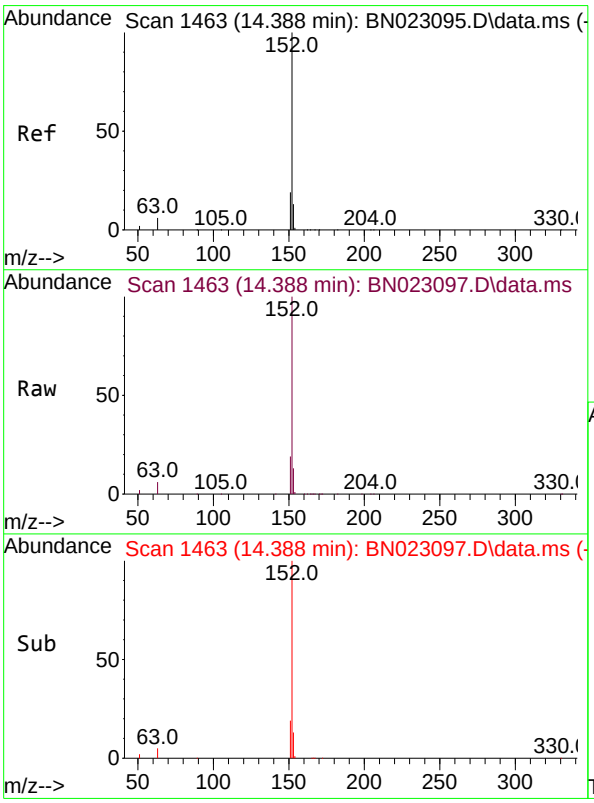
#15
2-Fluorobiphenyl
Concen: 1.503 ng
RT: 13.298 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:172 Resp: 88442

Ion	Ratio	Lower	Upper
172	100		
171	33.4	27.4	41.0
170	22.2	17.9	26.9

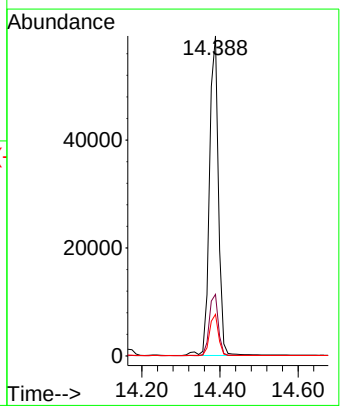


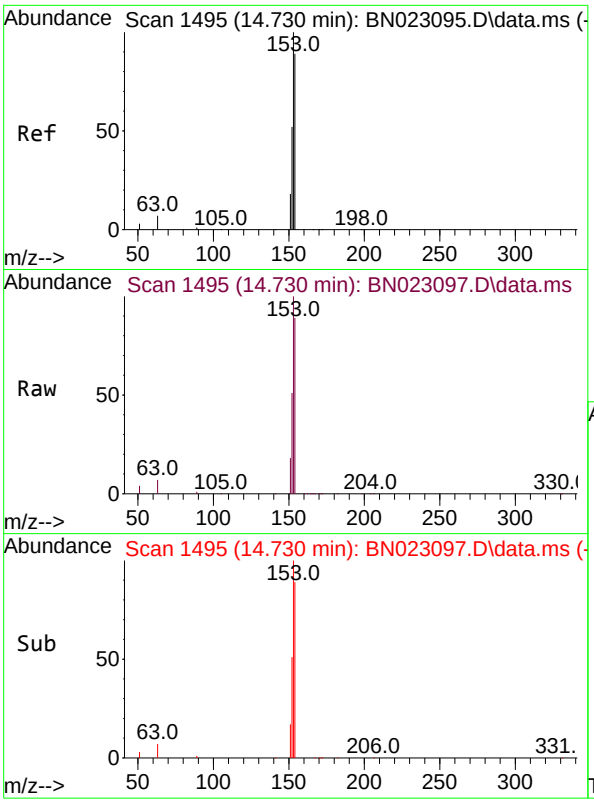


#16
Acenaphthylene
Concen: 1.509 ng
RT: 14.388 min Scan# 1463
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:152 Resp: 94028

Ion	Ratio	Lower	Upper
152	100		
151	19.5	15.4	23.2
153	12.9	10.3	15.5



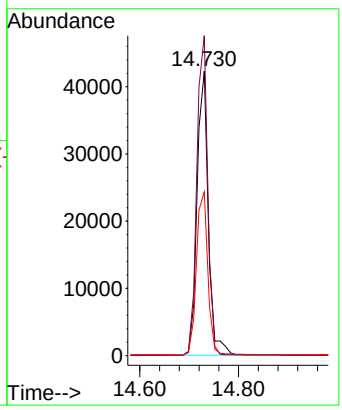


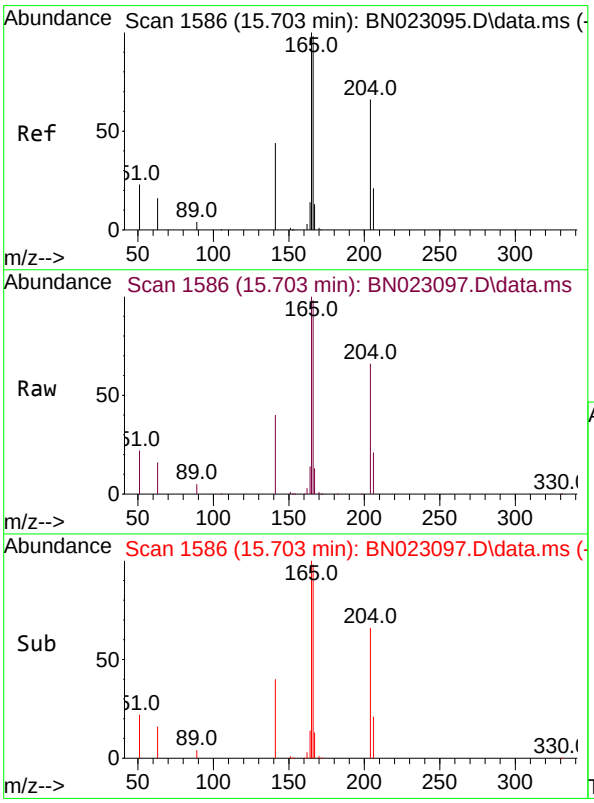
#17
Acenaphthene
Concen: 1.463 ng
RT: 14.730 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:154 Resp: 66404

Ion	Ratio	Lower	Upper
154	100		
153	109.7	88.6	132.8
152	58.4	48.1	72.1

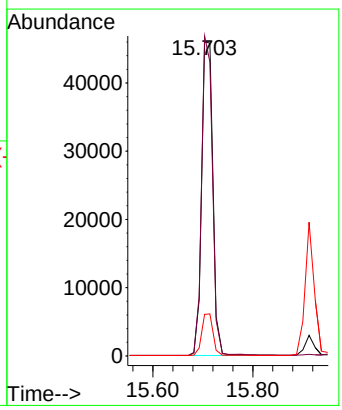


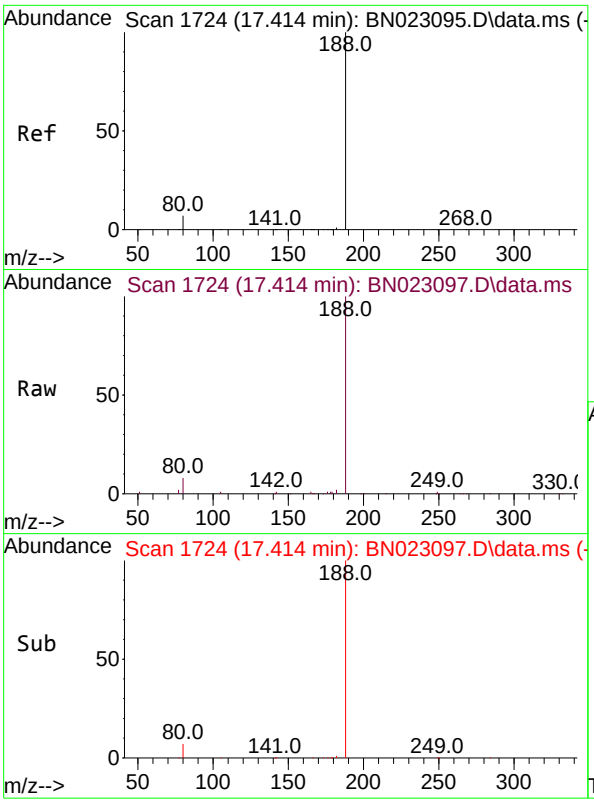


#18
Fluorene
Concen: 1.486 ng
RT: 15.703 min Scan# 1586
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:166 Resp: 75662

Ion	Ratio	Lower	Upper
166	100		
165	99.1	79.8	119.6
167	12.7	10.6	16.0



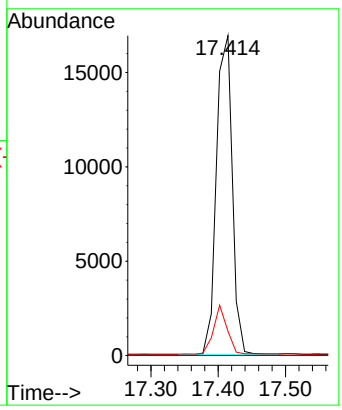


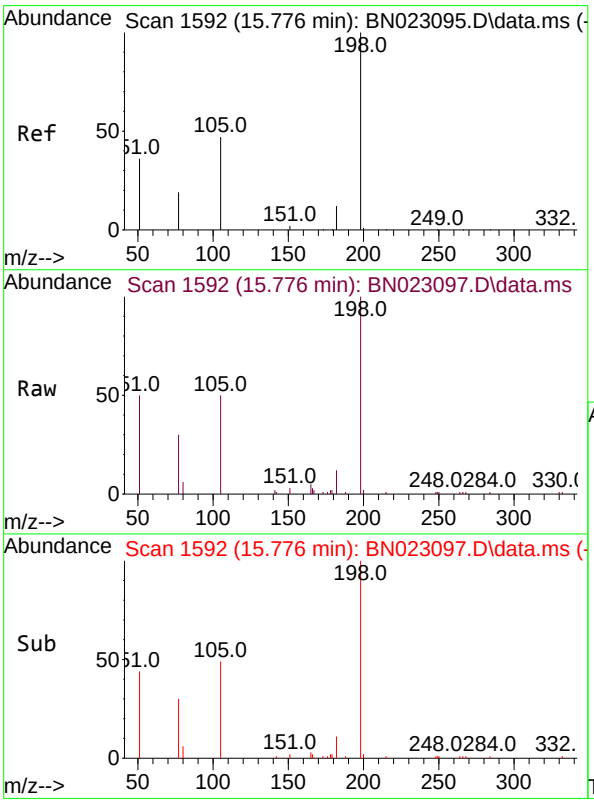
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.414 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:188 Resp: 27793

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	7.6	6.1	9.1

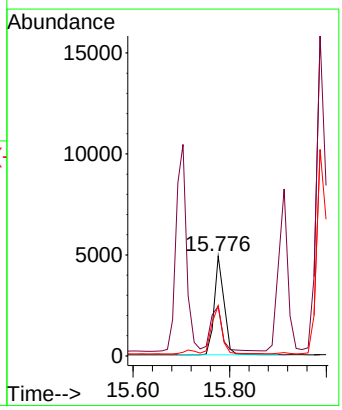


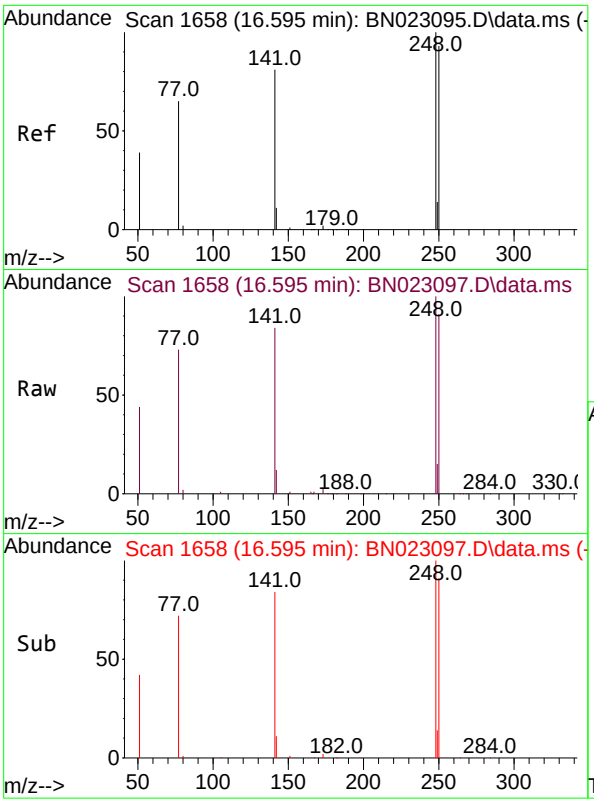


#20
4,6-Dinitro-2-methylphenol
Concen: 1.801 ng
RT: 15.776 min Scan# 1592
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:198 Resp: 6771

Ion	Ratio	Lower	Upper
198	100		
51	49.8	57.0	85.4#
105	50.3	47.2	70.8



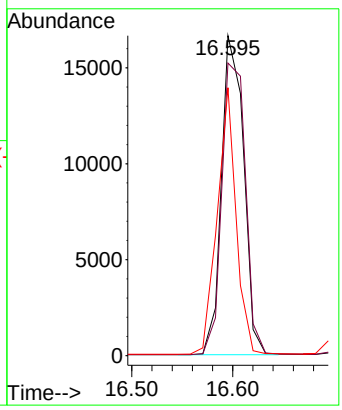


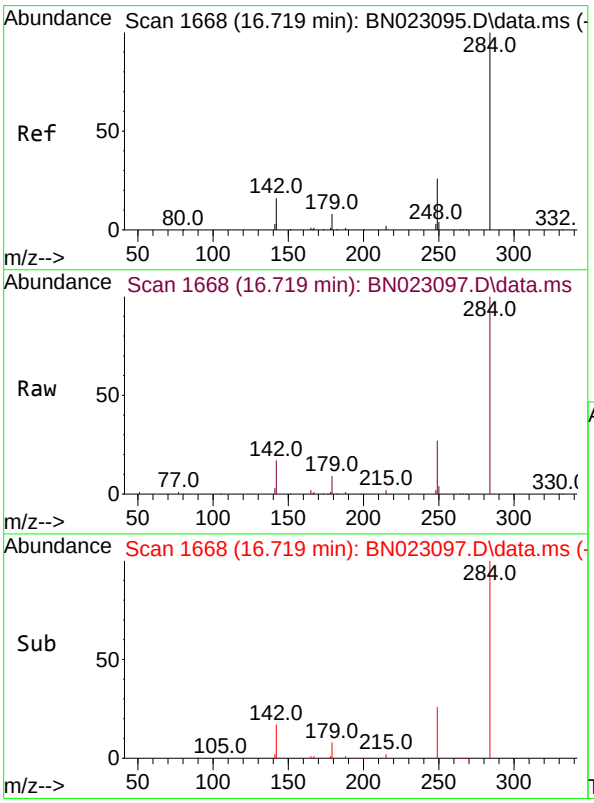
#21
4-Bromophenyl-phenylether
Concen: 1.520 ng
RT: 16.595 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:248 Resp: 25451

Ion	Ratio	Lower	Upper
248	100		
250	91.4	74.3	111.5
141	83.7	65.0	97.6

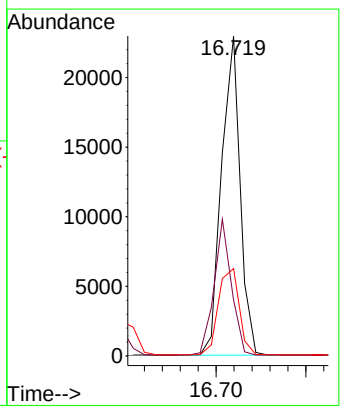


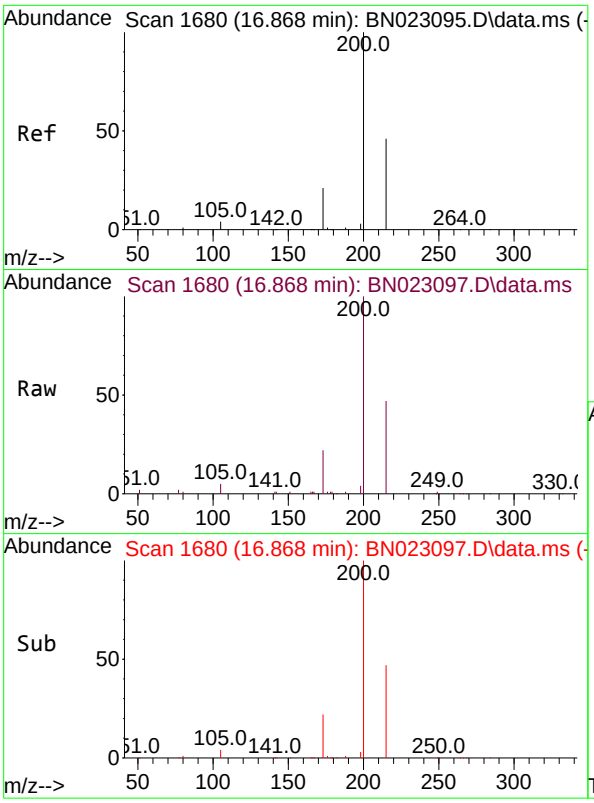


#22
Hexachlorobenzene
Concen: 1.515 ng
RT: 16.719 min Scan# 1668
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:284 Resp: 32935

Ion	Ratio	Lower	Upper
284	100		
142	39.6	31.0	46.4
249	30.5	24.4	36.6



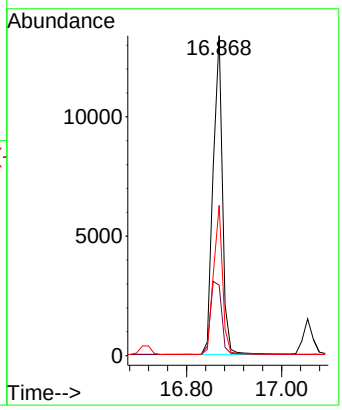


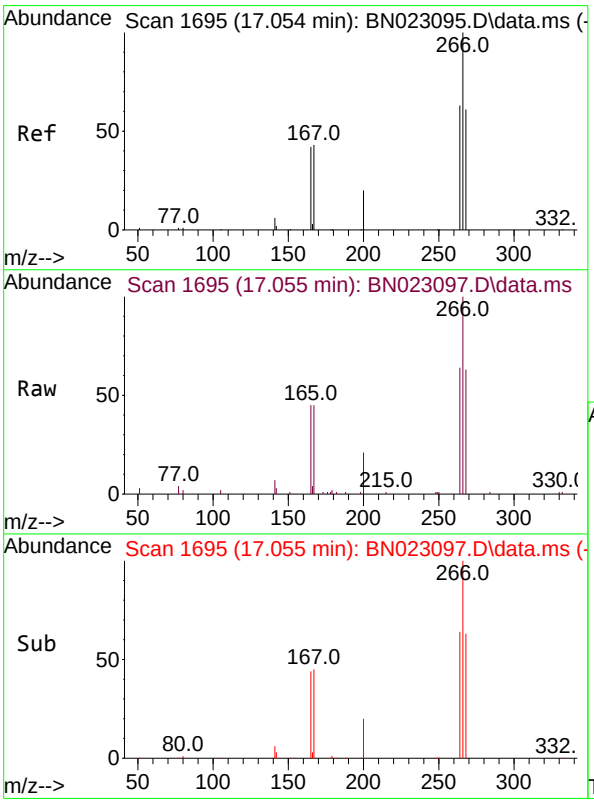
#23
Atrazine
Concen: 1.490 ng
RT: 16.868 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:200 Resp: 18156

Ion	Ratio	Lower	Upper
200	100		
173	22.0	18.2	27.4
215	46.9	38.0	57.0

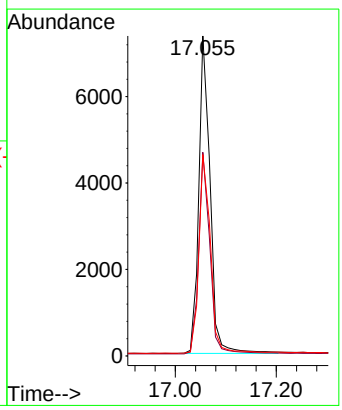


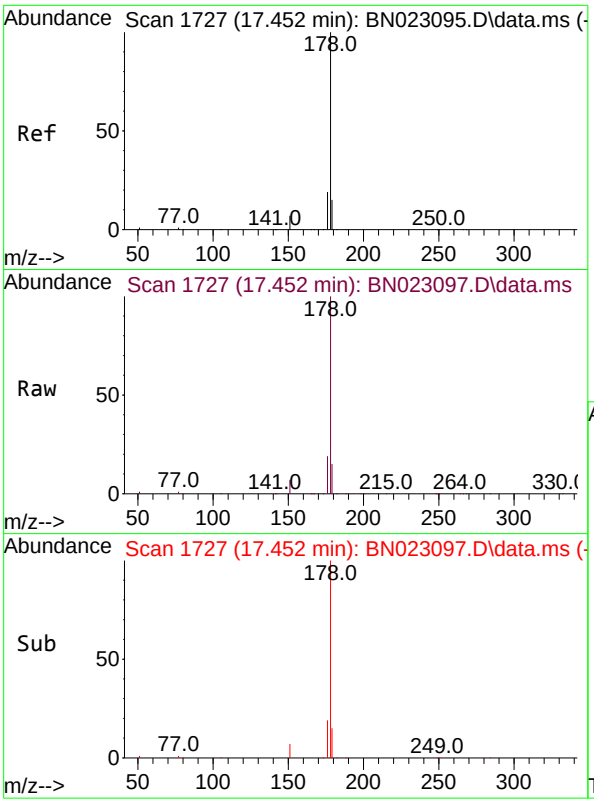


#24
Pentachlorophenol
Concen: 1.778 ng
RT: 17.055 min Scan# 1695
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:266 Resp: 11351

Ion	Ratio	Lower	Upper
266	100		
264	62.8	50.1	75.1
268	63.9	49.7	74.5



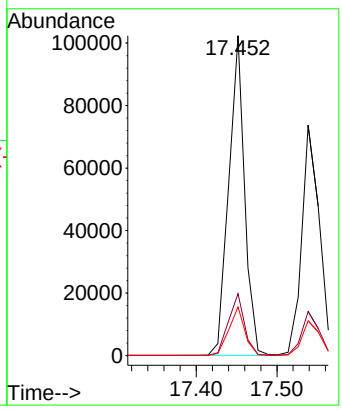


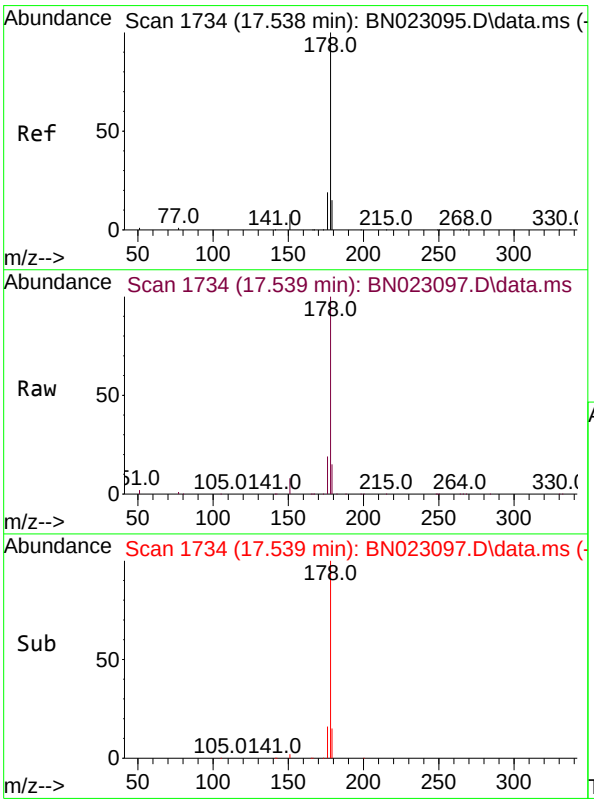
#25
Phenanthrene
Concen: 1.490 ng
RT: 17.452 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:178 Resp: 139569

Ion	Ratio	Lower	Upper
178	100		
176	19.4	15.4	23.2
179	15.2	12.2	18.2

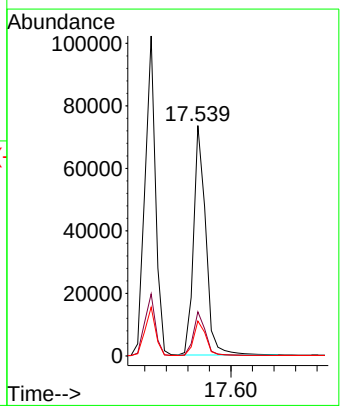


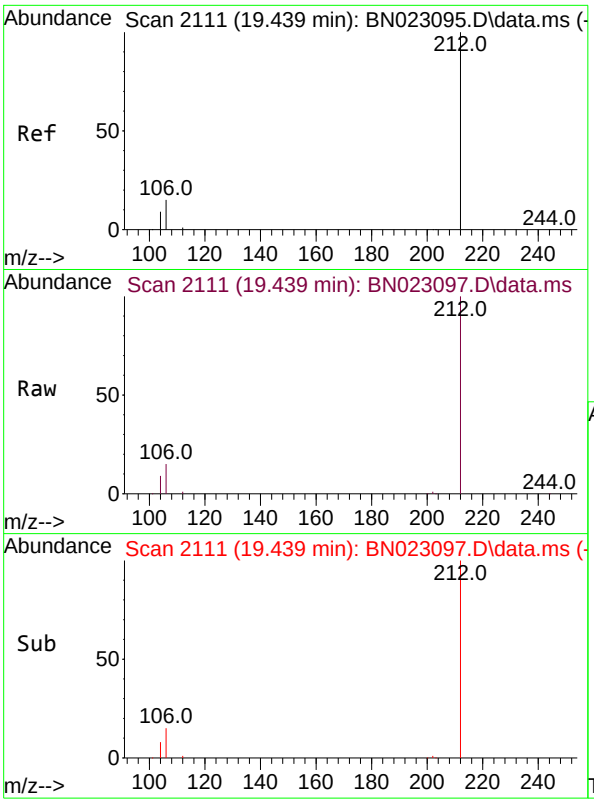


#26
Anthracene
Concen: 1.528 ng
RT: 17.539 min Scan# 1734
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:178 Resp: 115325

Ion	Ratio	Lower	Upper
178	100		
176	18.8	15.1	22.7
179	15.2	12.2	18.4



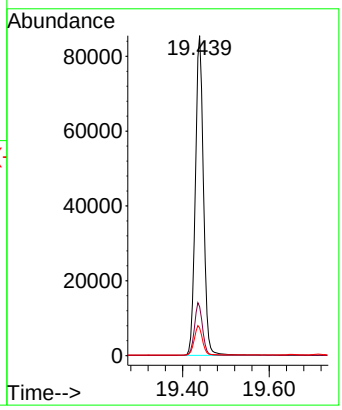


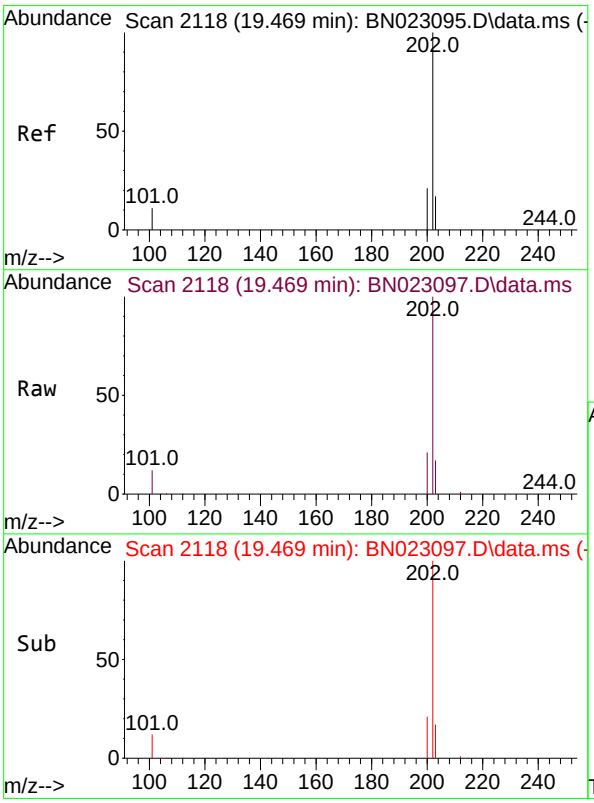
#27
Fluoranthene-d10
Concen: 1.463 ng
RT: 19.439 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:212 Resp: 111381

Ion	Ratio	Lower	Upper
212	100		
106	16.4	13.0	19.4
104	9.2	7.5	11.3

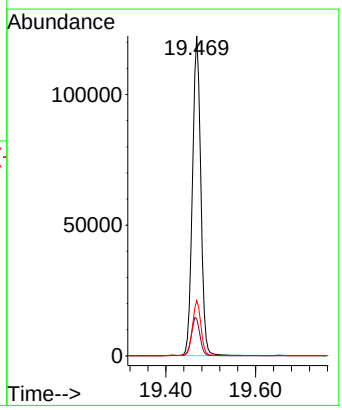


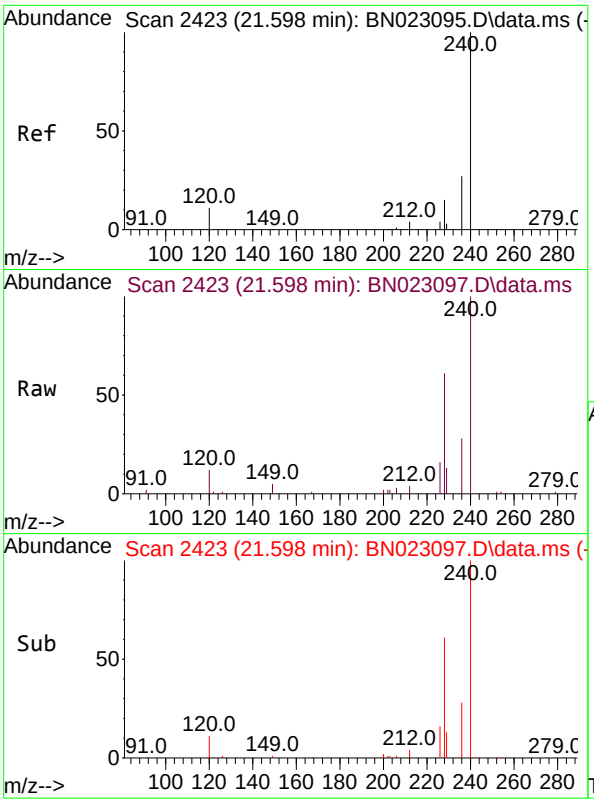


#28
Fluoranthene
Concen: 1.534 ng
RT: 19.469 min Scan# 2118
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:202 Resp: 156823

Ion	Ratio	Lower	Upper
202	100		
101	12.4	9.7	14.5
203	17.2	13.8	20.6



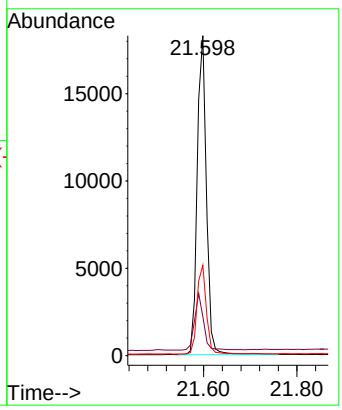


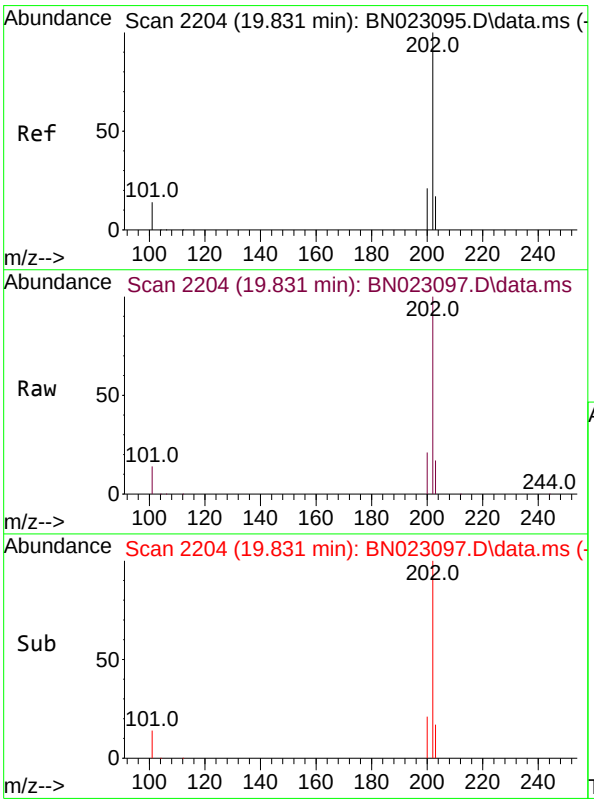
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.598 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:240 Resp: 24897

Ion	Ratio	Lower	Upper
240	100		
120	12.2	10.1	15.1
236	28.3	22.2	33.4

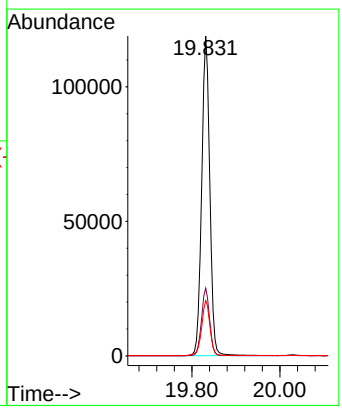


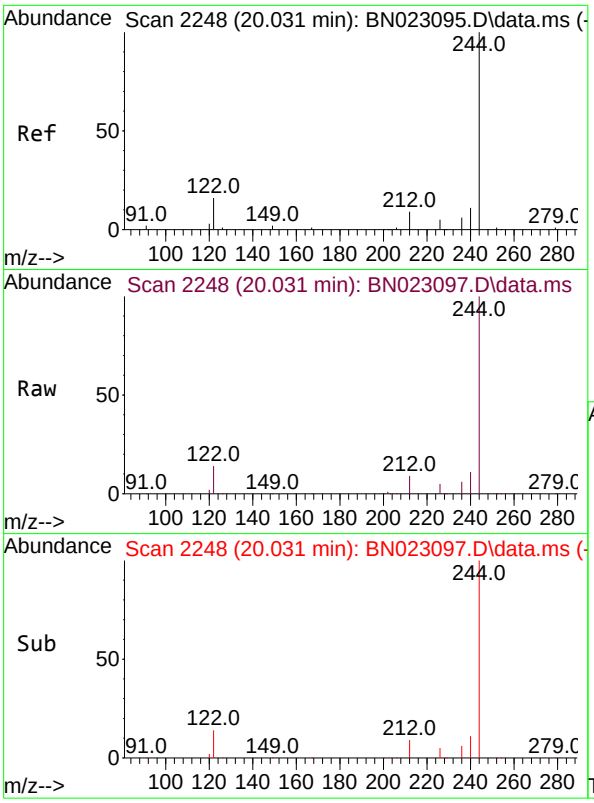


#30
Pyrene
Concen: 1.465 ng
RT: 19.831 min Scan# 2204
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:202 Resp: 152036

Ion	Ratio	Lower	Upper
202	100		
200	21.2	16.9	25.3
203	17.7	14.2	21.4



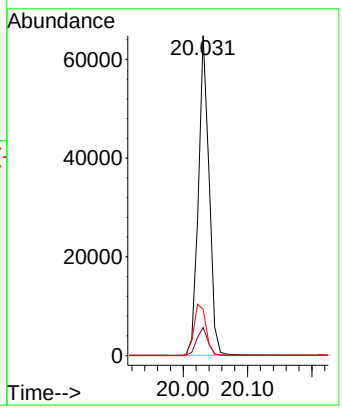


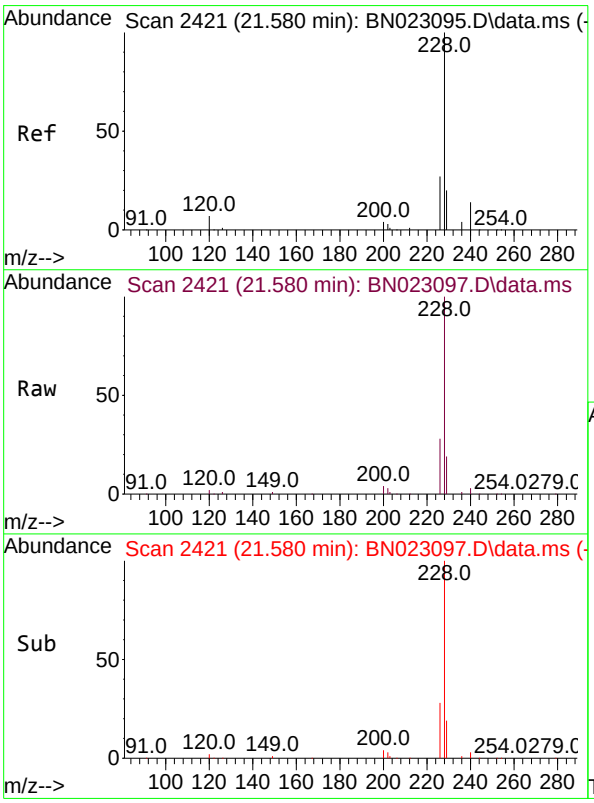
#31
Terphenyl-d14
Concen: 1.454 ng
RT: 20.031 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:244 Resp: 68689

Ion	Ratio	Lower	Upper
244	100		
212	8.8	7.6	11.4
122	14.5	12.6	18.8

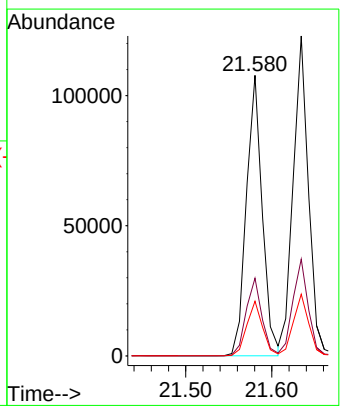


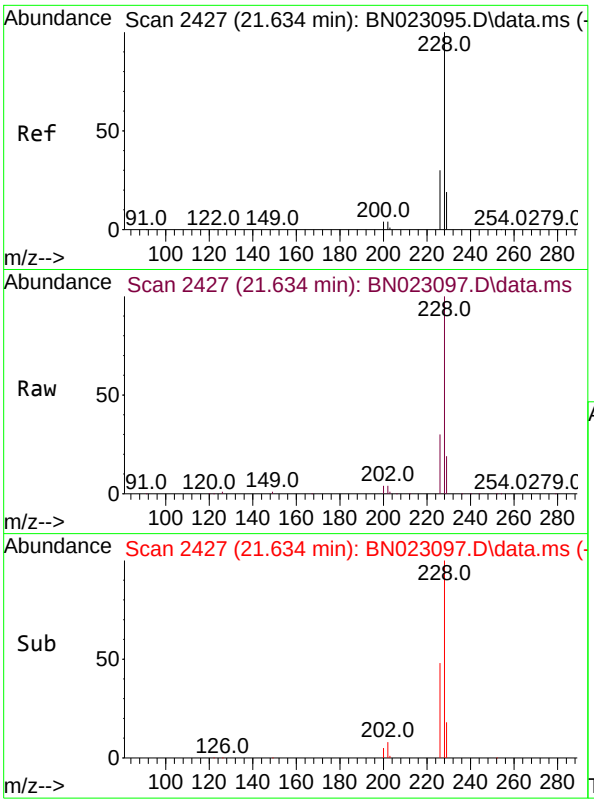


#32
Benzo(a)anthracene
Concen: 1.497 ng
RT: 21.580 min Scan# 2421
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:228 Resp: 137563

Ion	Ratio	Lower	Upper
228	100		
226	27.7	22.0	33.0
229	19.5	15.8	23.8



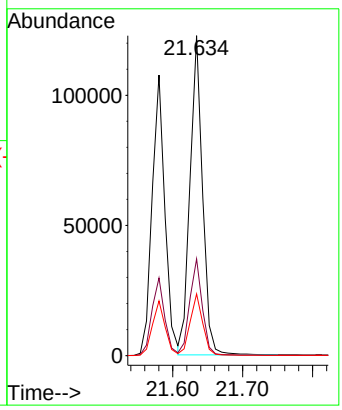


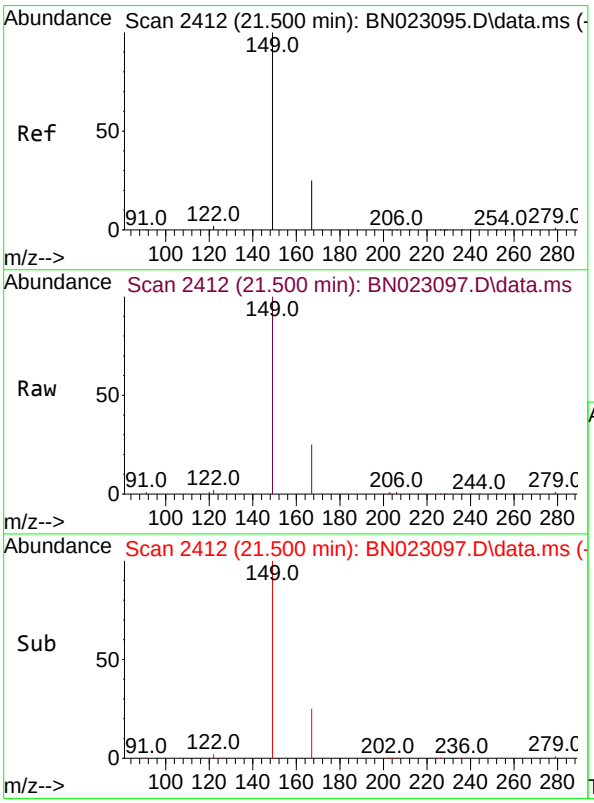
#33
Chrysene
Concen: 1.482 ng
RT: 21.634 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:228 Resp: 152270

Ion	Ratio	Lower	Upper
228	100		
226	30.2	24.4	36.6
229	19.3	15.6	23.4

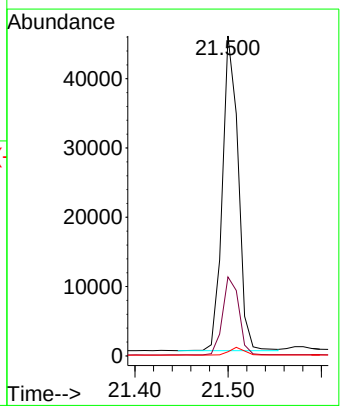


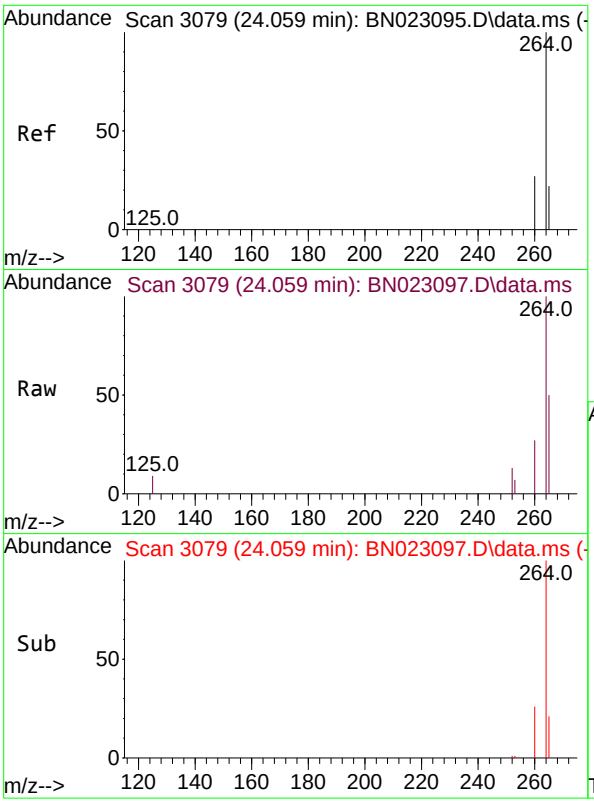


#34
Bis(2-ethylhexyl)phthalate
Concen: 1.350 ng
RT: 21.500 min Scan# 2412
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:149 Resp: 53634

Ion	Ratio	Lower	Upper
149	100		
167	25.6	20.2	30.2
279	2.4	2.3	3.5



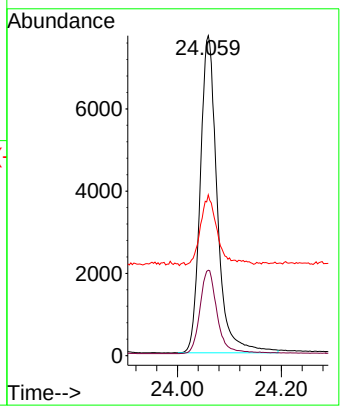


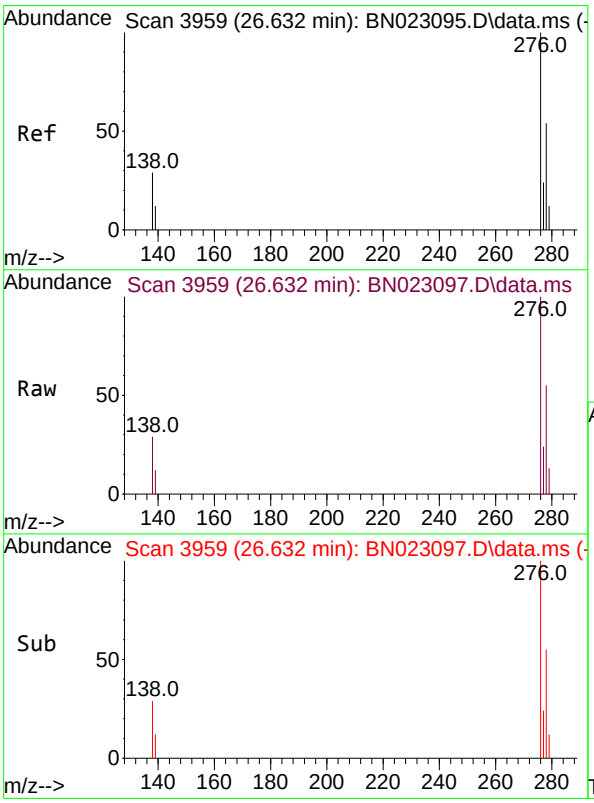
#35
Perylene-d12
Concen: 0.400 ng
RT: 24.059 min Scan# 30
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:264 Resp: 17546

Ion	Ratio	Lower	Upper
264	100		
260	26.7	21.7	32.5
265	50.2	43.2	64.8

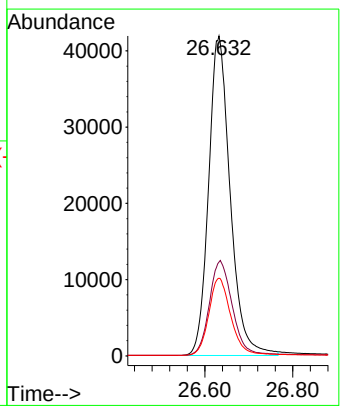


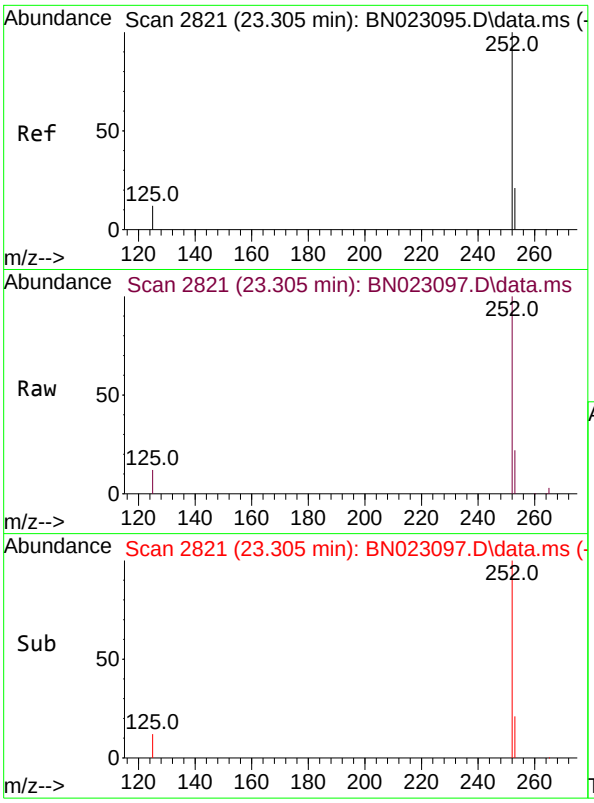


#36
Indeno(1,2,3-cd)pyrene
Concen: 1.534 ng
RT: 26.632 min Scan# 3959
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:276 Resp: 143051

Ion	Ratio	Lower	Upper
276	100		
138	31.4	25.0	37.6
277	24.7	19.8	29.8



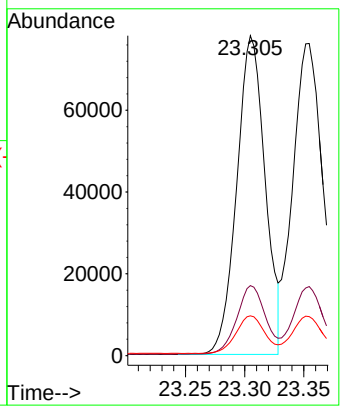


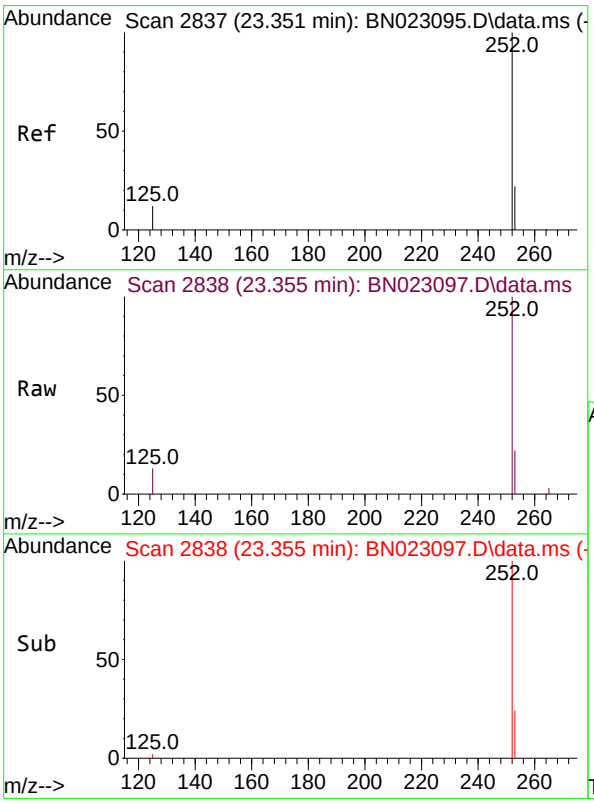
#37
Benzo(b)fluoranthene
Concen: 1.618 ng
RT: 23.305 min Scan# 28
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:252 Resp: 129768

Ion	Ratio	Lower	Upper
252	100		
253	21.9	19.0	28.4
125	12.5	12.8	19.2#

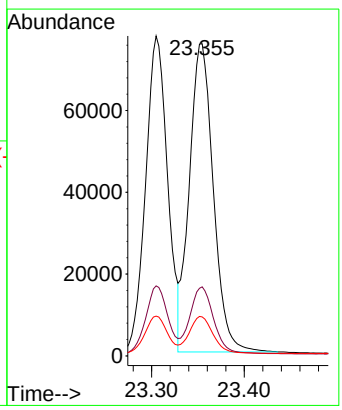


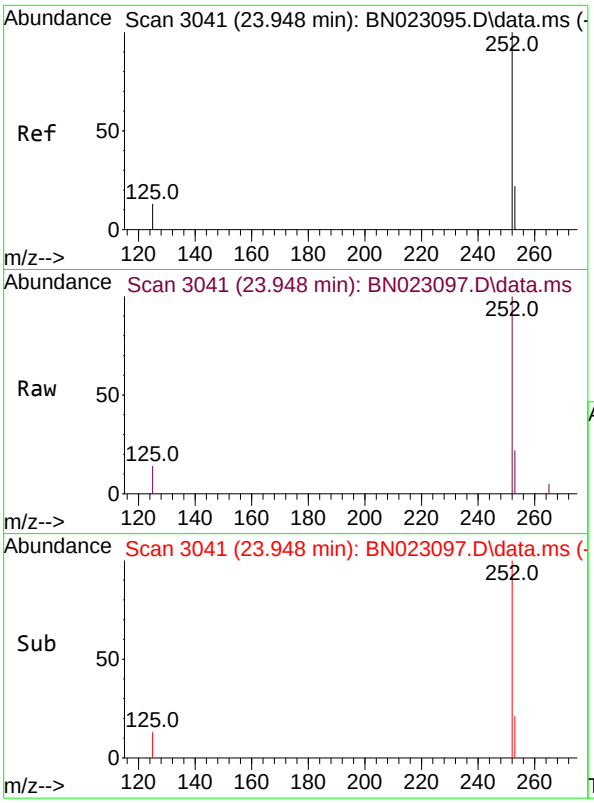


#38
Benzo(k)fluoranthene
Concen: 1.651 ng
RT: 23.355 min Scan# 2838
Delta R.T. 0.003 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:252 Resp: 135698

Ion	Ratio	Lower	Upper
252	100		
253	22.1	19.1	28.7
125	12.5	12.5	18.7



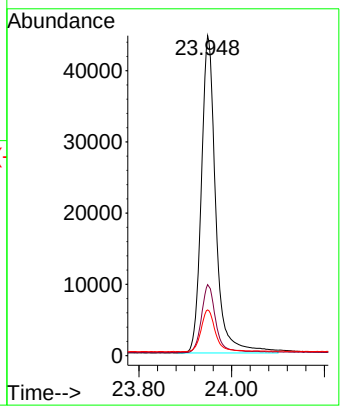


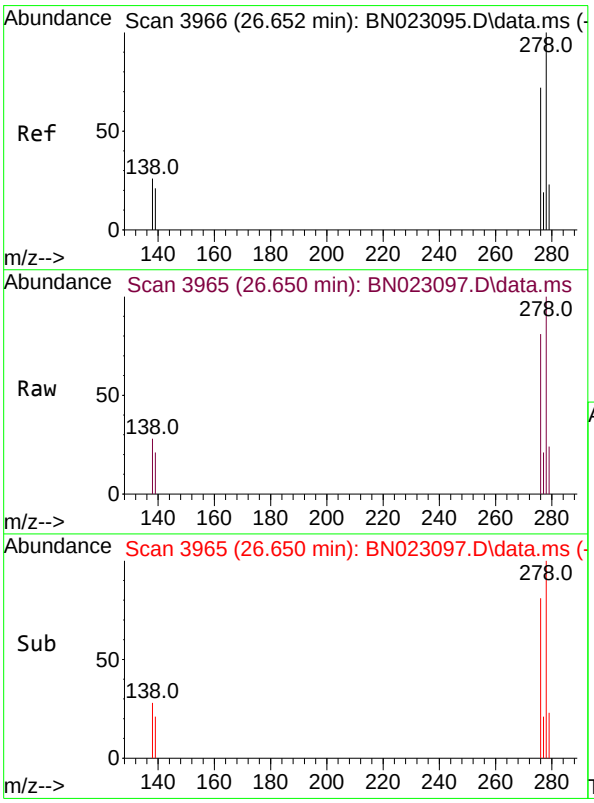
#39
Benzo(a)pyrene
Concen: 1.485 ng
RT: 23.948 min Scan# 30
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:252 Resp: 96478

Ion	Ratio	Lower	Upper
252	100		
253	22.2	20.6	30.8
125	14.3	15.8	23.8#

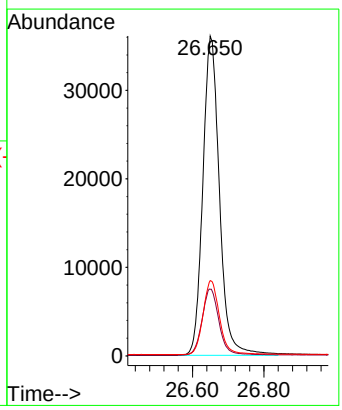


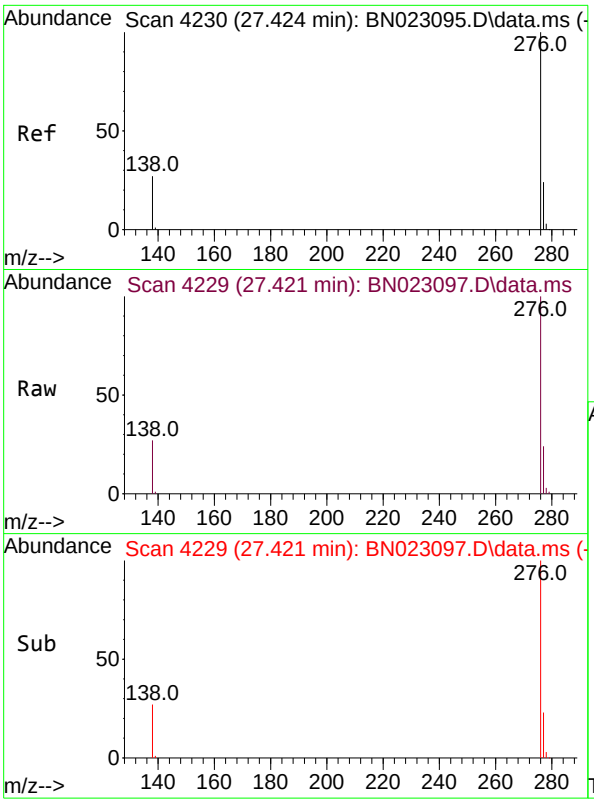


#40
Dibenzo(a,h)anthracene
Concen: 1.582 ng
RT: 26.650 min Scan# 3965
Delta R.T. -0.003 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:278 Resp: 116720

Ion	Ratio	Lower	Upper
278	100		
139	20.9	17.5	26.3
279	23.5	20.5	30.7



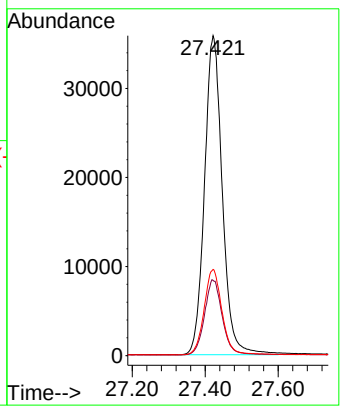


#41
Benzo(g,h,i)perylene
Concen: 1.608 ng
RT: 27.421 min Scan# 4
Delta R.T. -0.003 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:276 Resp: 121454

Ion	Ratio	Lower	Upper
276	100		
277	23.5	19.9	29.9
138	26.9	22.2	33.2



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023098.D
Acq On : 08 Dec 2022 17:03
Operator : CG/JU
Sample : SSTDICC3.2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Quant Time: Dec 09 07:28:55 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	8.020	152	8090	0.400	ng		0.00
7) Naphthalene-d8	10.840	136	23133	0.400	ng		0.00
13) Acenaphthene-d10	14.666	164	13470	0.400	ng		0.00
19) Phenanthrene-d10	17.414	188	28191	0.400	ng		0.00
29) Chrysene-d12	21.589	240	26247	0.400	ng	#	0.00
35) Perylene-d12	24.056	264	17877	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.558	112	49643	2.653	ng		0.00
5) Phenol-d6	7.175	99	65990	2.805	ng		0.00
8) Nitrobenzene-d5	9.185	82	52766	3.040	ng		0.00
11) 2-Methylnaphthalene-d10	12.427	152	138357	3.168	ng		0.00
14) 2,4,6-Tribromophenol	16.148	330	18487	3.249	ng		0.00
15) 2-Fluorobiphenyl	13.298	172	173988	2.910	ng		0.00
27) Fluoranthene-d10	19.439	212	234419	3.037	ng		0.00
31) Terphenyl-d14	20.031	244	139156	2.793	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.398	88	25353	2.527	ng		98
3) n-Nitrosodimethylamine	3.723	42	28858	2.941	ng	#	96
6) bis(2-Chloroethyl)ether	7.435	93	69322	2.669	ng		98
9) Naphthalene	10.893	128	195994	2.856	ng		99
10) Hexachlorobutadiene	11.181	225	36427	2.827	ng	#	100
16) Acenaphthylene	14.388	152	201290	3.180	ng		100
17) Acenaphthene	14.730	154	136104	2.951	ng		97
18) Fluorene	15.714	166	154549	2.988	ng		99
20) 4,6-Dinitro-2-methylph...	15.776	198	16007	4.197	ng	#	81
21) 4-Bromophenyl-phenylether	16.595	248	52085	3.067	ng		98
22) Hexachlorobenzene	16.719	284	66183	3.001	ng		100
23) Atrazine	16.868	200	40499	3.278	ng		98
24) Pentachlorophenol	17.054	266	26196	4.044	ng		99
25) Phenanthrene	17.452	178	287541	3.026	ng		100
26) Anthracene	17.538	178	247626	3.234	ng		100
28) Fluoranthene	19.469	202	324068	3.126	ng		100
30) Pyrene	19.831	202	320665	2.930	ng		100
32) Benzo(a)anthracene	21.580	228	298657	3.082	ng		99
33) Chrysene	21.634	228	307277	2.838	ng		99
34) Bis(2-ethylhexyl)phtha...	21.500	149	124141	2.965	ng		99
36) Indeno(1,2,3-cd)pyrene	26.626	276	293290	3.087	ng		100
37) Benzo(b)fluoranthene	23.302	252	268022	3.280	ng	#	94
38) Benzo(k)fluoranthene	23.351	252	279632	3.339	ng	#	94
39) Benzo(a)pyrene	23.945	252	206454	3.118	ng	#	90
40) Dibenzo(a,h)anthracene	26.649	278	236723	3.149	ng		97
41) Benzo(g,h,i)perylene	27.421	276	245390	3.189	ng		98

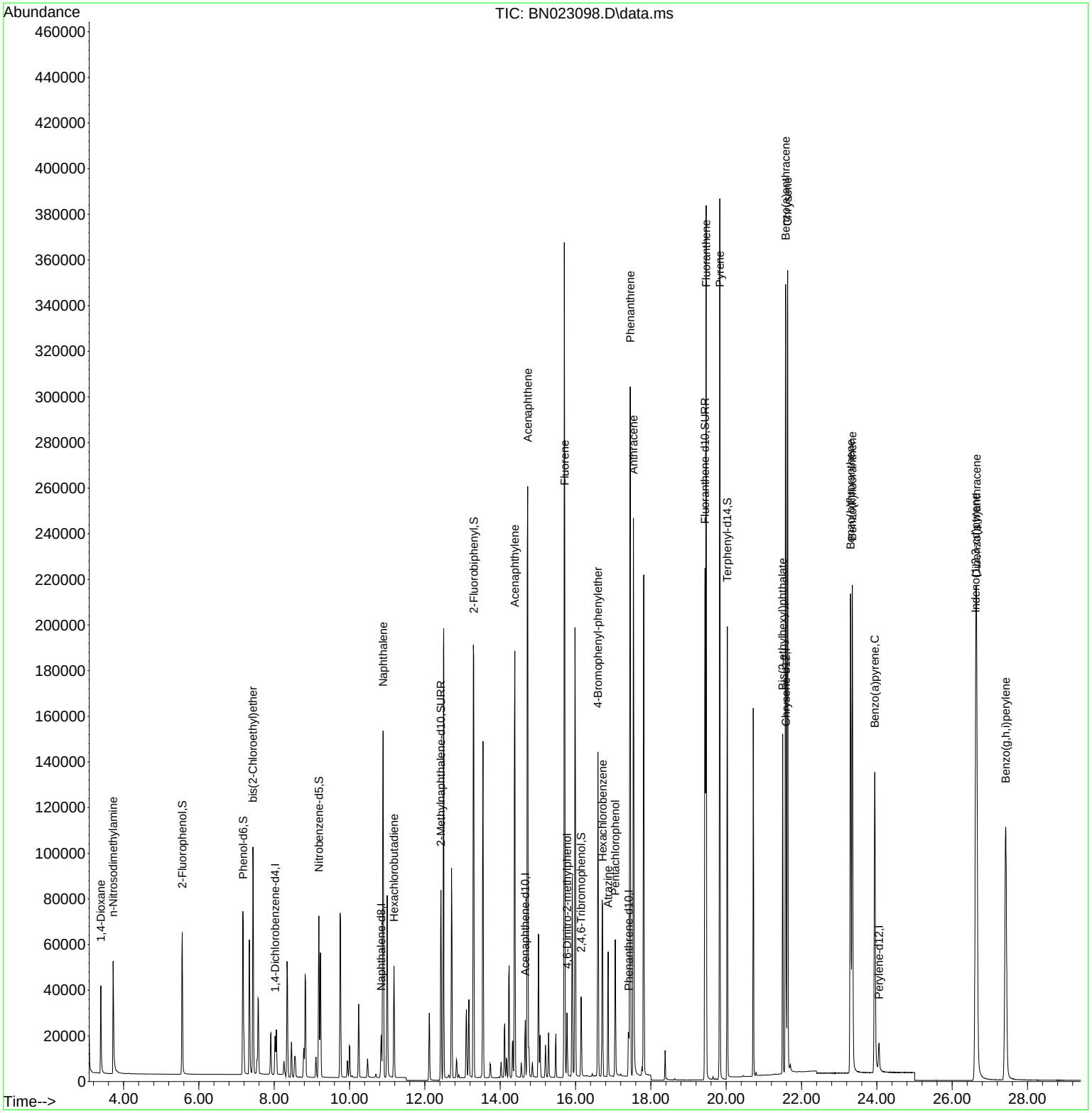
(#) = qualifier out of range (m) = manual integration (+) = signals summed

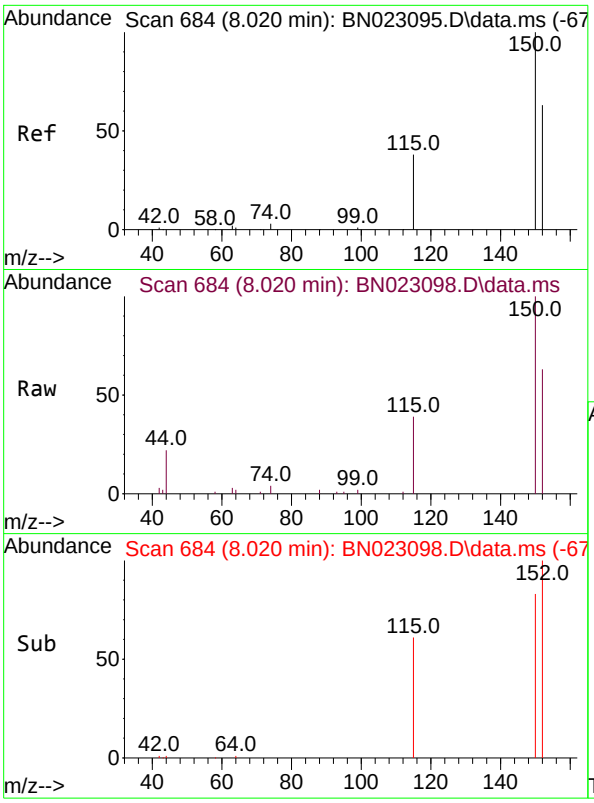
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023098.D
Acq On : 08 Dec 2022 17:03
Operator : CG/JU
Sample : SSTDICC3.2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Quant Time: Dec 09 07:28:55 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration



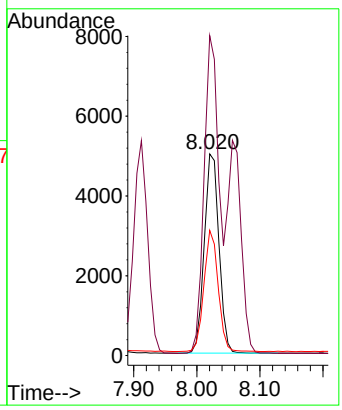


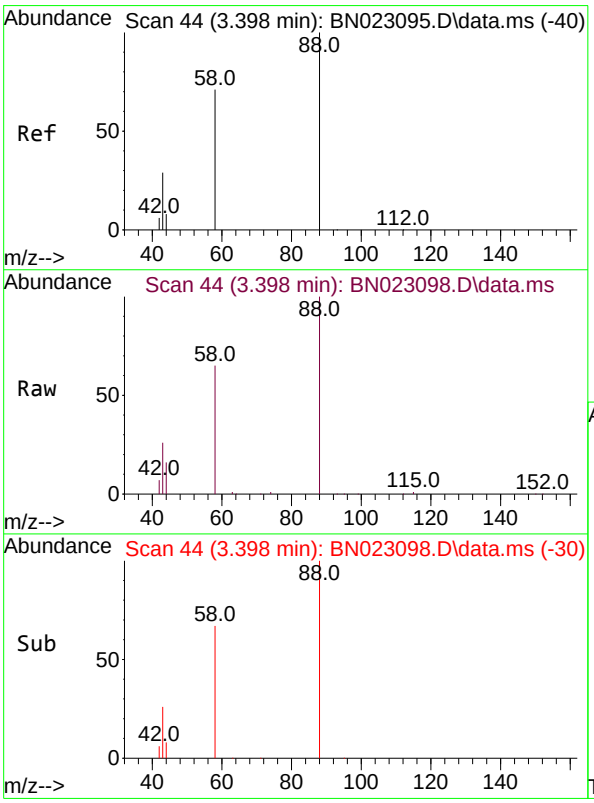
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 8.020 min Scan# 68
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:152 Resp: 8090

Ion	Ratio	Lower	Upper
152	100		
150	158.7	125.6	188.4
115	62.1	49.0	73.4

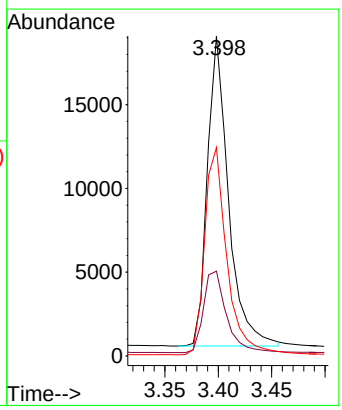


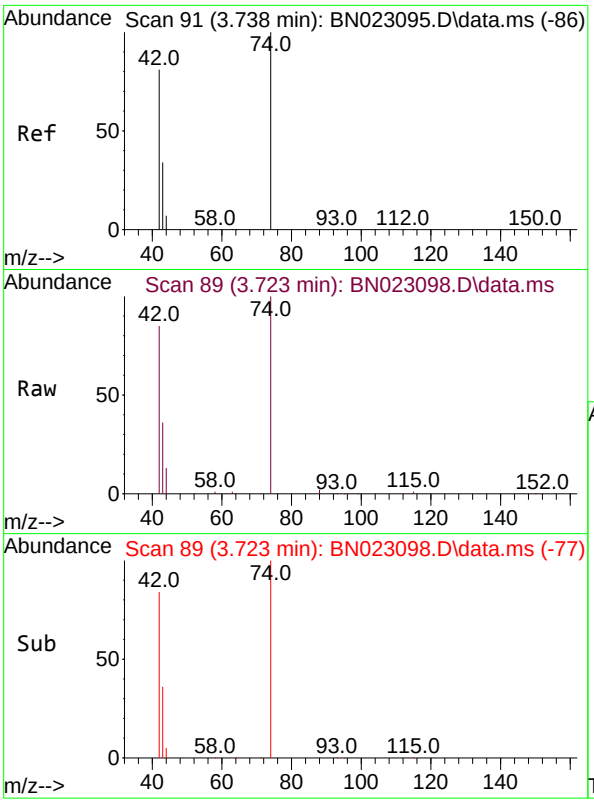


#2
1,4-Dioxane
Concen: 2.527 ng
RT: 3.398 min Scan# 44
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion: 88 Resp: 25353

Ion	Ratio	Lower	Upper
88	100		
43	28.7	23.3	34.9
58	70.4	58.0	87.0



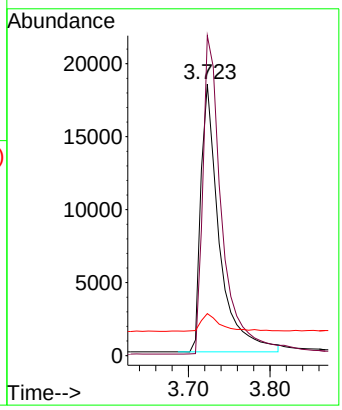


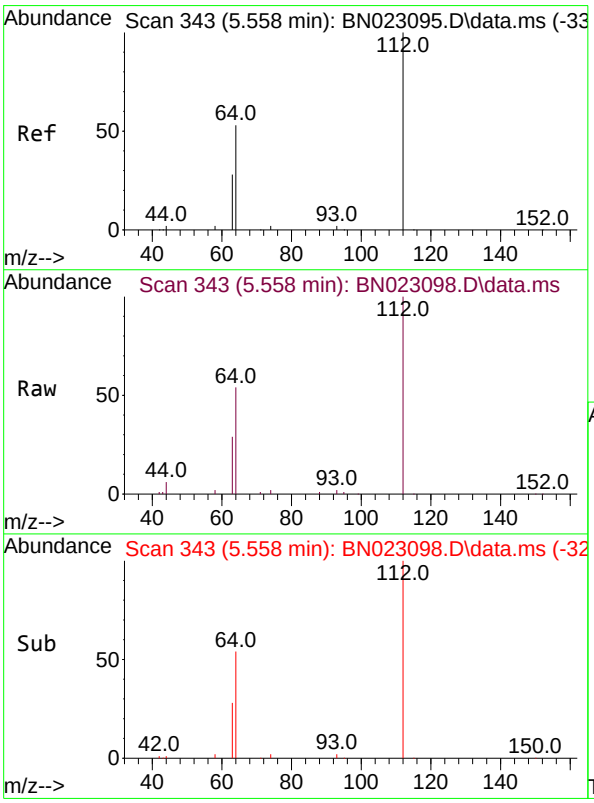
#3
n-Nitrosodimethylamine
Concen: 2.941 ng
RT: 3.723 min Scan# 89
Delta R.T. -0.014 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion: 42 Resp: 28858

Ion	Ratio	Lower	Upper
42	100		
74	123.3	95.8	143.6
44	7.1	8.4	12.6#

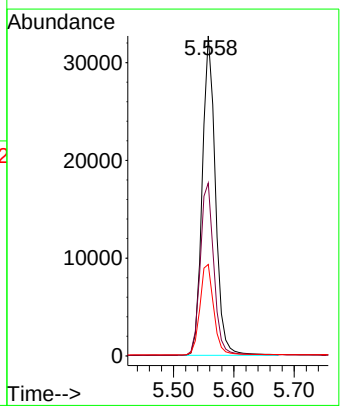


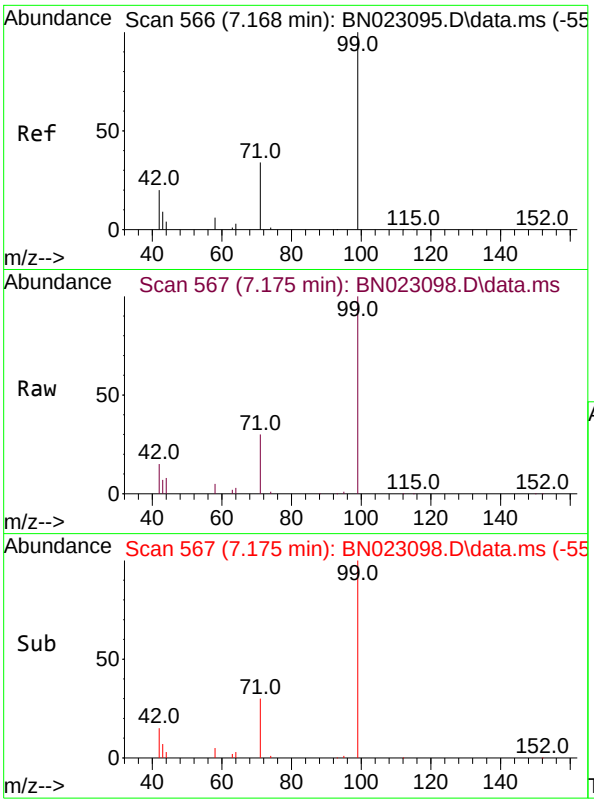


#4
2-Fluorophenol
Concen: 2.653 ng
RT: 5.558 min Scan# 343
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:112 Resp: 49643

Ion	Ratio	Lower	Upper
112	100		
64	55.8	44.4	66.6
63	29.8	23.7	35.5



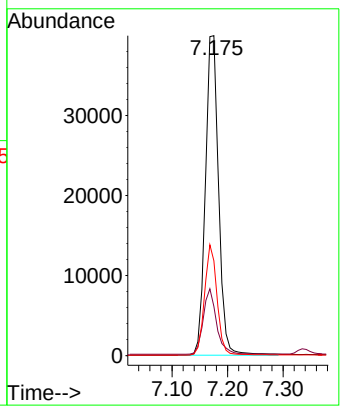


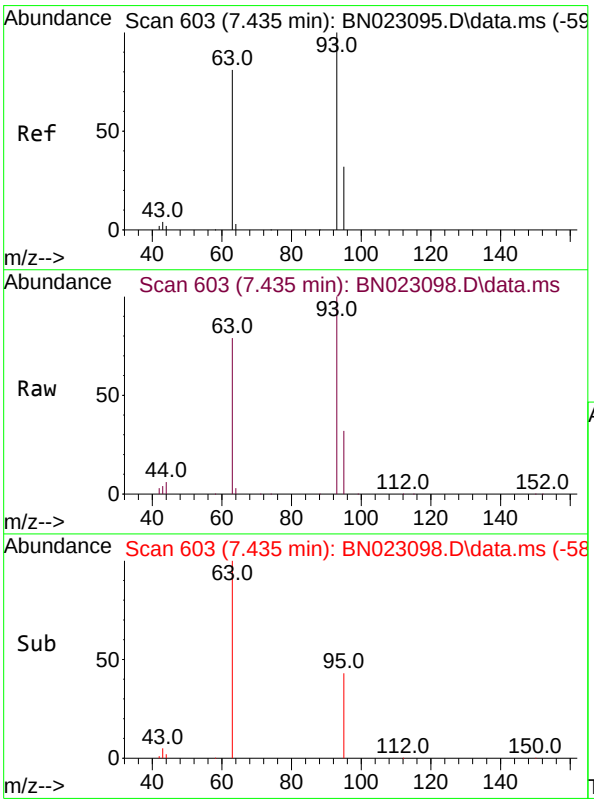
#5
Phenol-d6
Concen: 2.805 ng
RT: 7.175 min Scan# 5
Delta R.T. 0.007 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion: 99 Resp: 65990

Ion	Ratio	Lower	Upper
99	100		
42	20.8	16.3	24.5
71	32.7	26.5	39.7

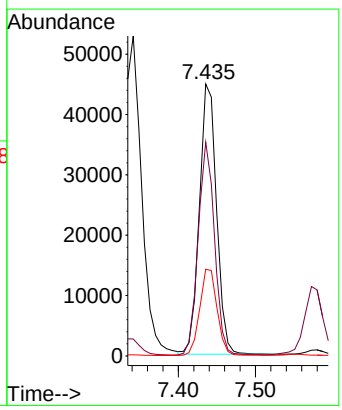


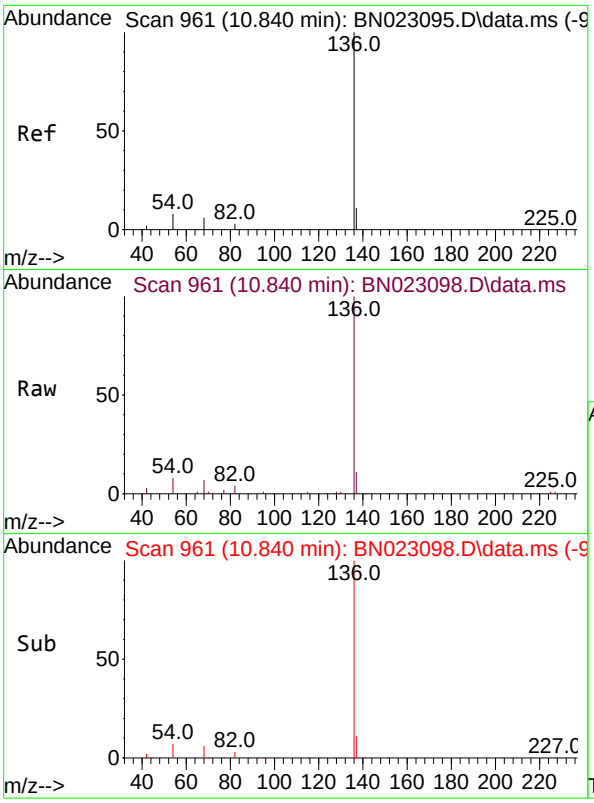


#6
bis(2-Chloroethyl)ether
Concen: 2.669 ng
RT: 7.435 min Scan# 603
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion: 93 Resp: 69322

Ion	Ratio	Lower	Upper
93	100		
63	74.9	58.1	87.1
95	32.3	25.2	37.8



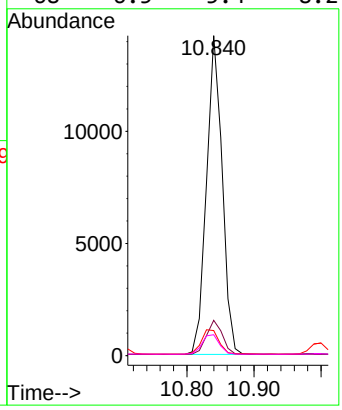


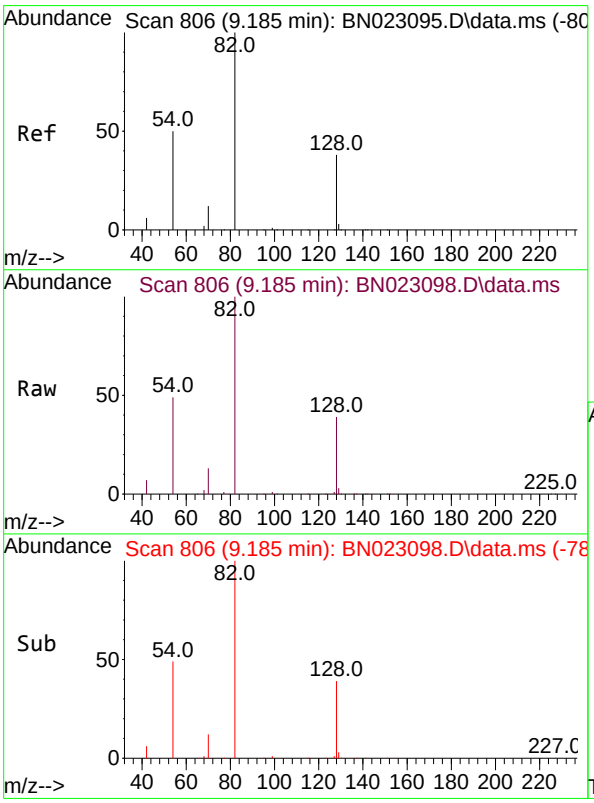
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.840 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:136 Resp: 23133

Ion	Ratio	Lower	Upper
136	100		
137	11.0	9.0	13.4
54	7.9	6.5	9.7
68	6.5	5.4	8.2

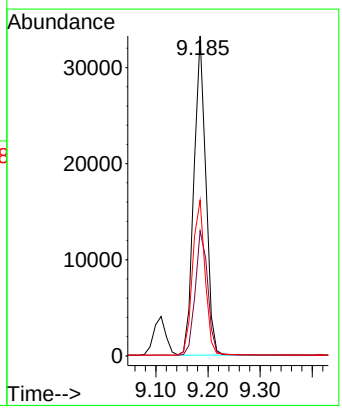


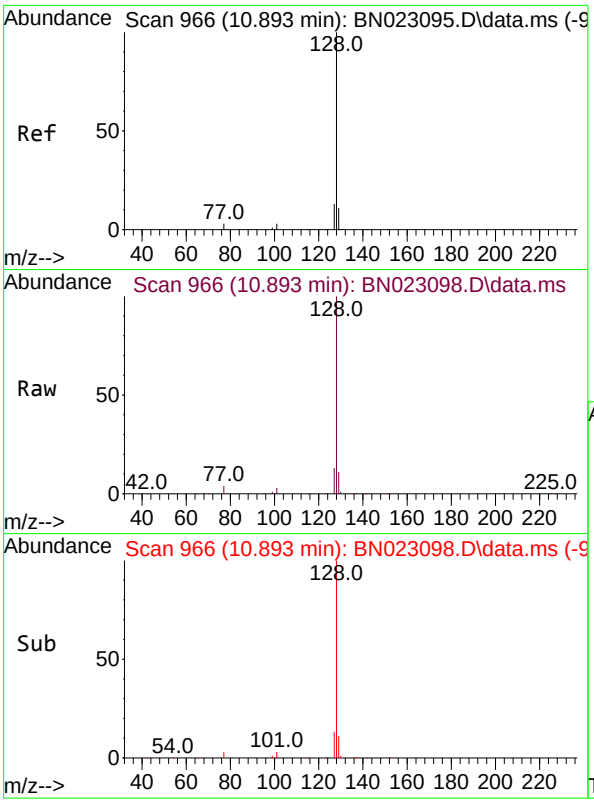


#8
Nitrobenzene-d5
Concen: 3.040 ng
RT: 9.185 min Scan# 806
Delta R.T. -0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion: 82 Resp: 52766

Ion	Ratio	Lower	Upper
82	100		
128	39.1	31.4	47.2
54	48.7	41.0	61.4



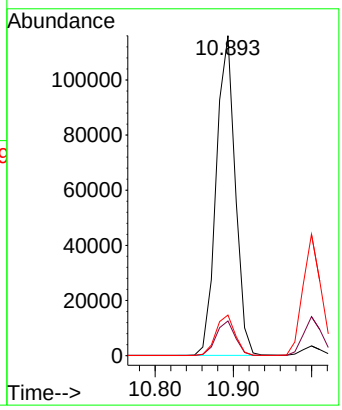


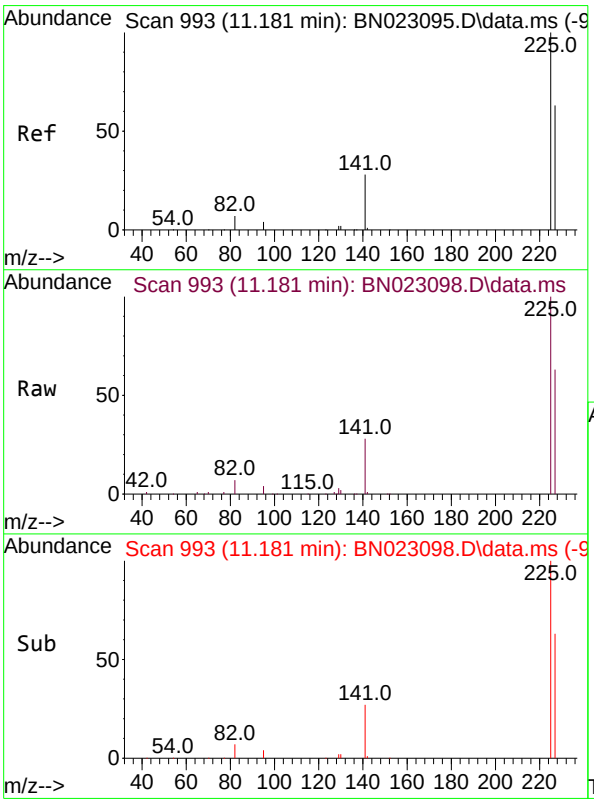
#9
Naphthalene
Concen: 2.856 ng
RT: 10.893 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:128 Resp: 195994

Ion	Ratio	Lower	Upper
128	100		
129	10.9	9.0	13.6
127	12.7	10.5	15.7

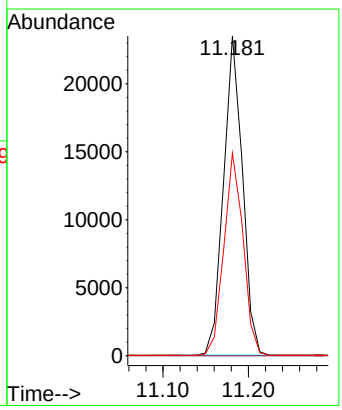


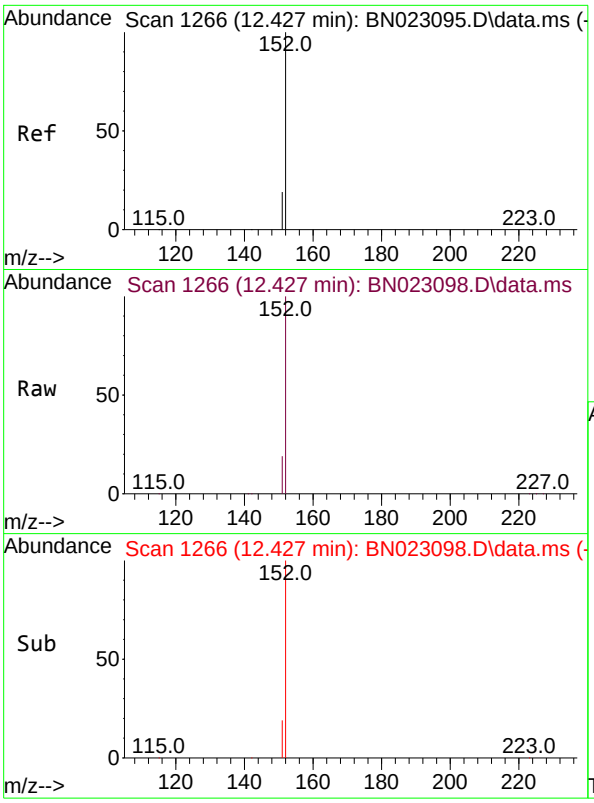


#10
Hexachlorobutadiene
Concen: 2.827 ng
RT: 11.181 min Scan# 993
Delta R.T. -0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:225 Resp: 36427

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.0	51.1	76.7



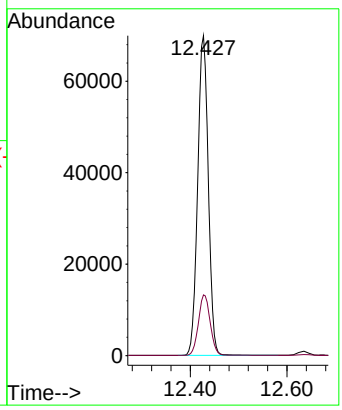


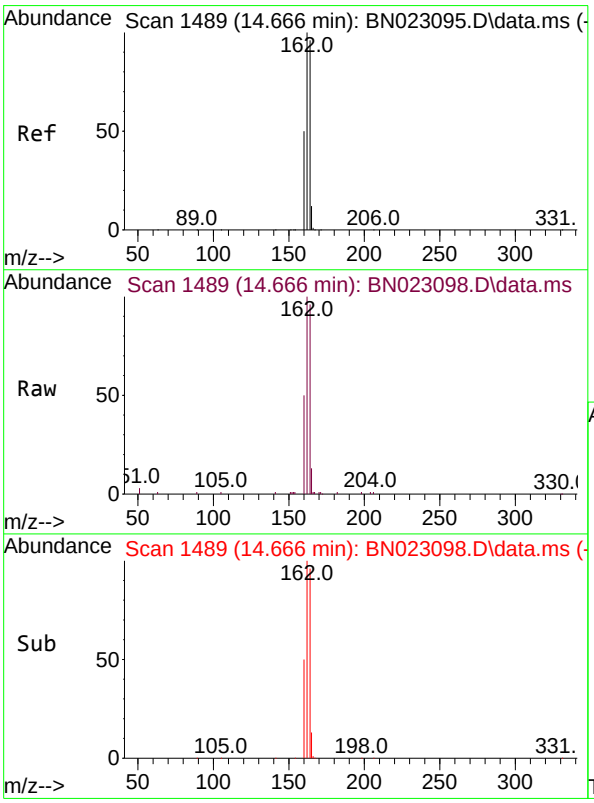
#11
2-Methylnaphthalene-d10
Concen: 3.168 ng
RT: 12.427 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:152 Resp: 138357

Ion	Ratio	Lower	Upper
152	100		
151	19.7	15.1	22.7

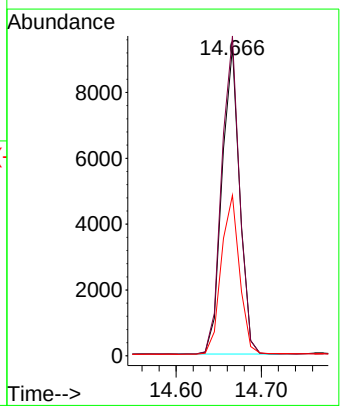


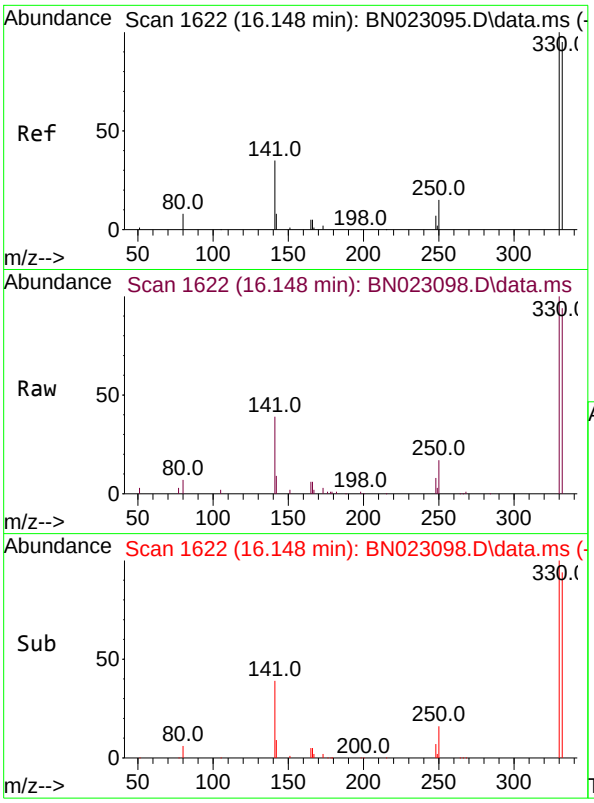


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.666 min Scan# 1489
Delta R.T. -0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:164 Resp: 13470

Ion	Ratio	Lower	Upper
164	100		
162	103.7	83.4	125.0
160	52.0	41.8	62.8



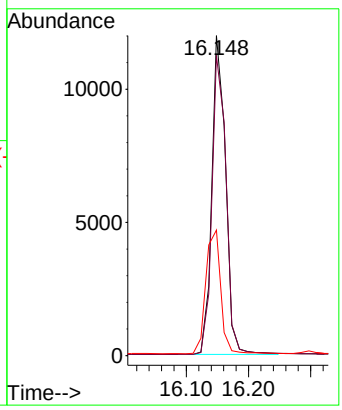


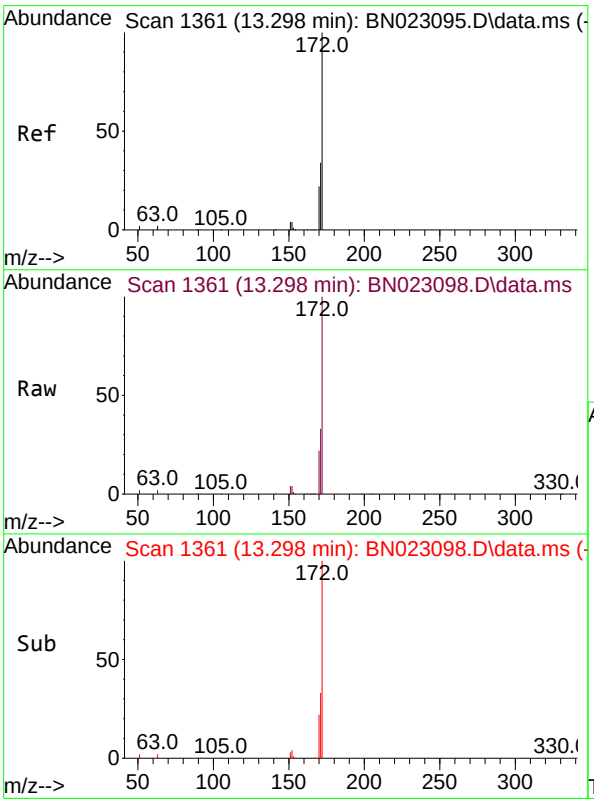
#14
2,4,6-Tribromophenol
Concen: 3.249 ng
RT: 16.148 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:330 Resp: 18487

Ion	Ratio	Lower	Upper
330	100		
332	96.4	77.3	115.9
141	41.8	33.5	50.3

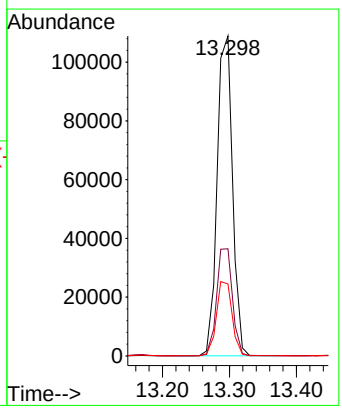


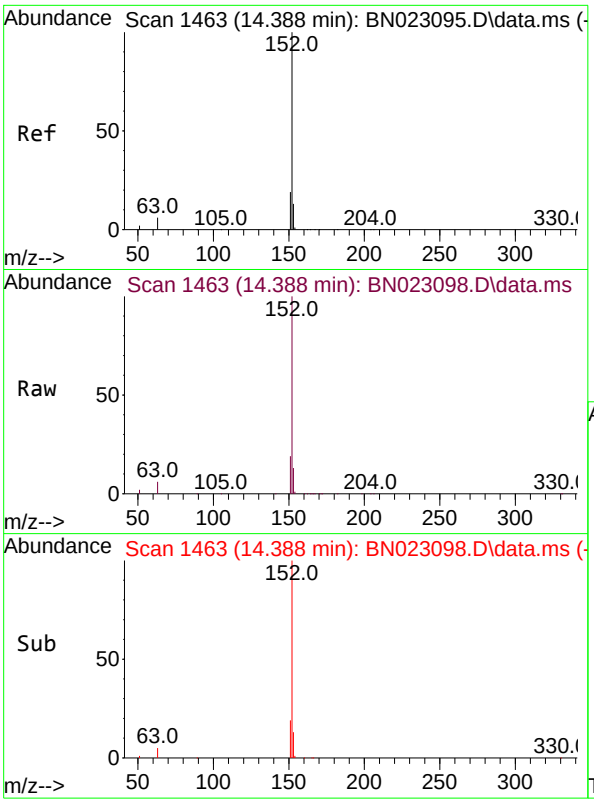


#15
2-Fluorobiphenyl
Concen: 2.910 ng
RT: 13.298 min Scan# 1361
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:172 Resp: 173988

Ion	Ratio	Lower	Upper
172	100		
171	33.5	27.4	41.0
170	22.5	17.9	26.9



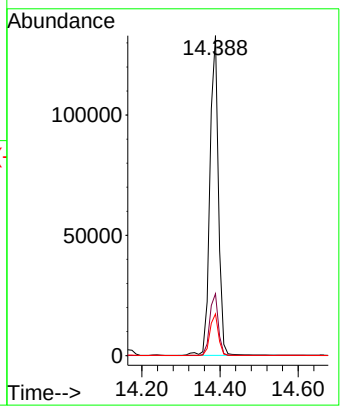


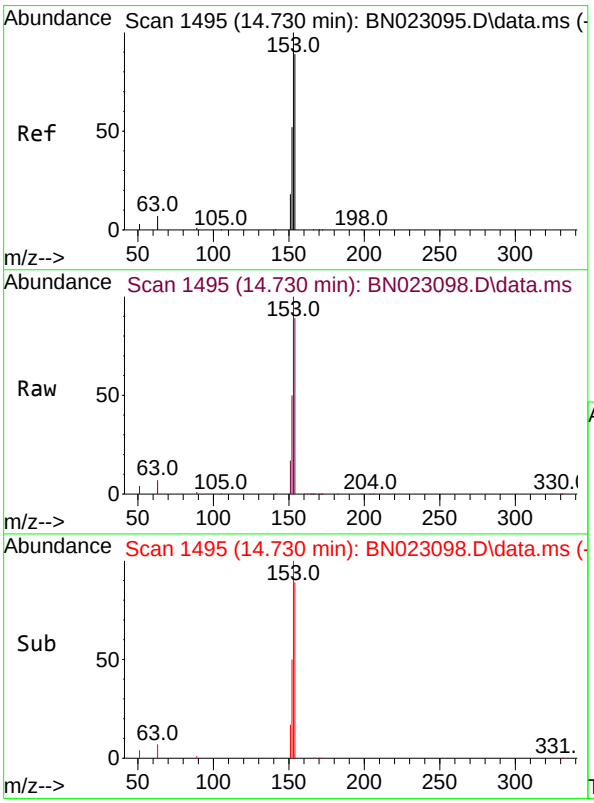
#16
Acenaphthylene
Concen: 3.180 ng
RT: 14.388 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:152 Resp: 201290

Ion	Ratio	Lower	Upper
152	100		
151	19.4	15.4	23.2
153	13.0	10.3	15.5

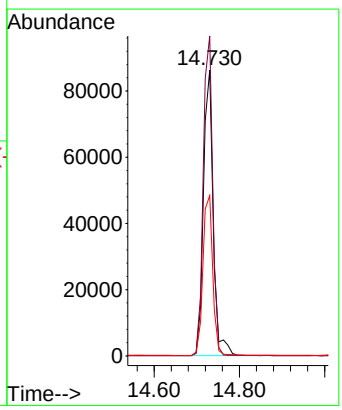


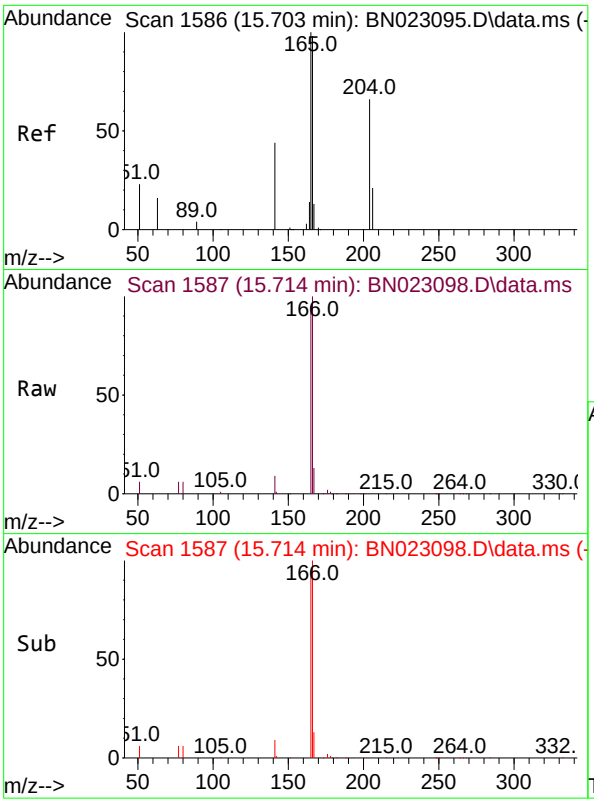


#17
Acenaphthene
Concen: 2.951 ng
RT: 14.730 min Scan# 1495
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:154 Resp: 136104

Ion	Ratio	Lower	Upper
154	100		
153	108.9	88.6	132.8
152	56.7	48.1	72.1



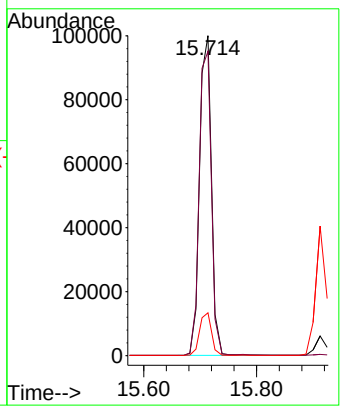


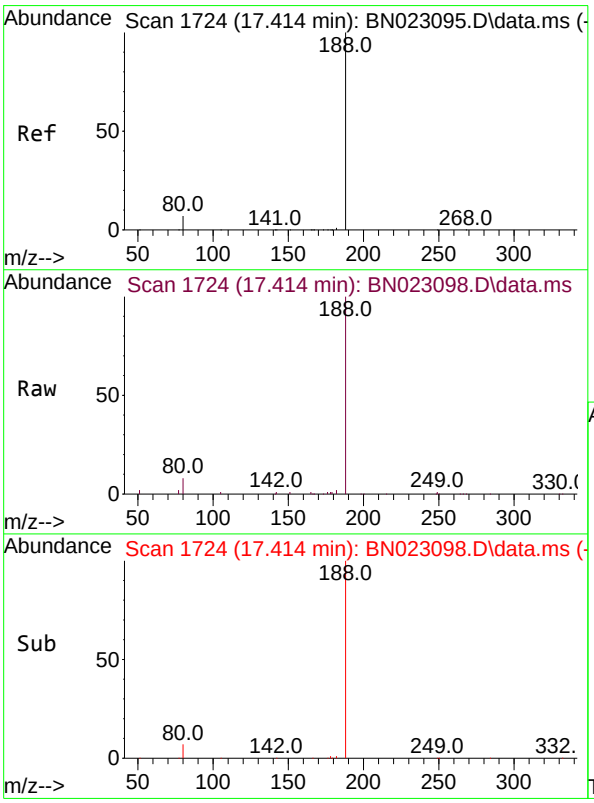
#18
Fluorene
Concen: 2.988 ng
RT: 15.714 min Scan# 1
Delta R.T. 0.011 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:166 Resp: 154549

Ion	Ratio	Lower	Upper
166	100		
165	98.3	79.8	119.6
167	12.9	10.6	16.0

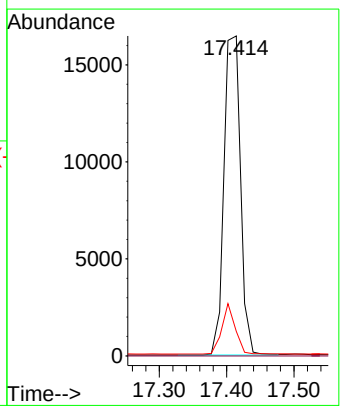


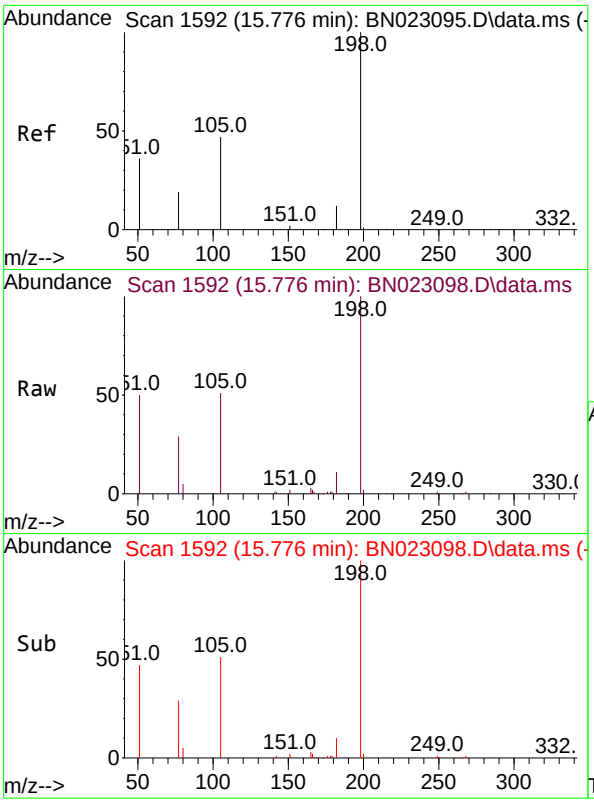


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.414 min Scan# 1724
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:188 Resp: 28191

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	7.7	6.1	9.1



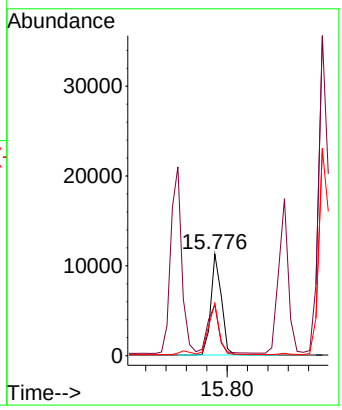


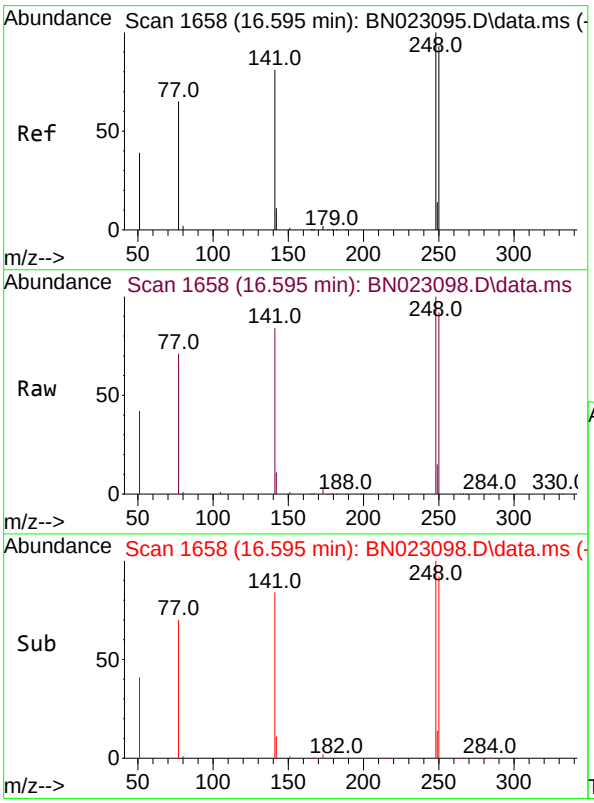
#20
4,6-Dinitro-2-methylphenol
Concen: 4.197 ng
RT: 15.776 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:198 Resp: 16007

Ion	Ratio	Lower	Upper
198	100		
51	49.8	57.0	85.4#
105	51.4	47.2	70.8

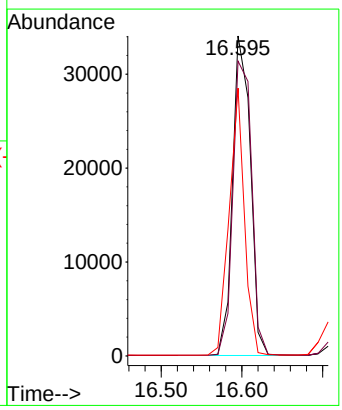


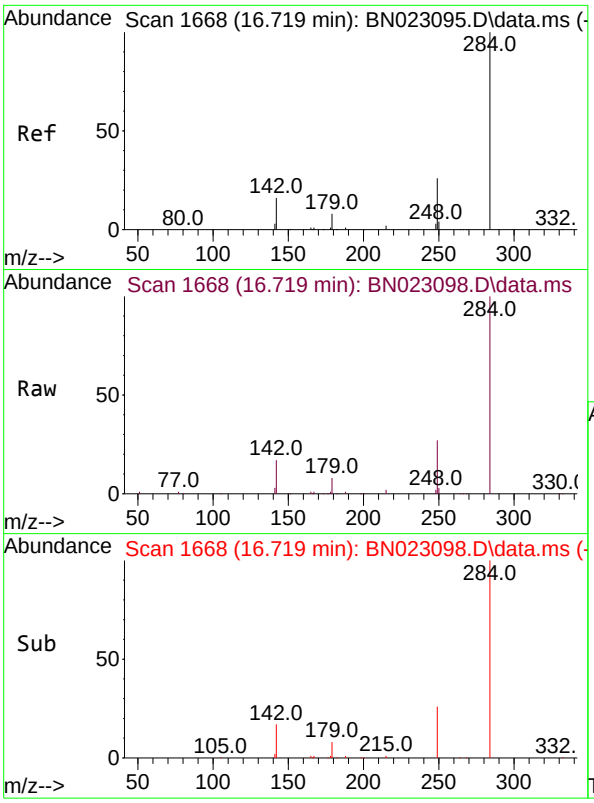


#21
4-Bromophenyl-phenylether
Concen: 3.067 ng
RT: 16.595 min Scan# 1658
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:248 Resp: 52085

Ion	Ratio	Lower	Upper
248	100		
250	92.1	74.3	111.5
141	83.7	65.0	97.6



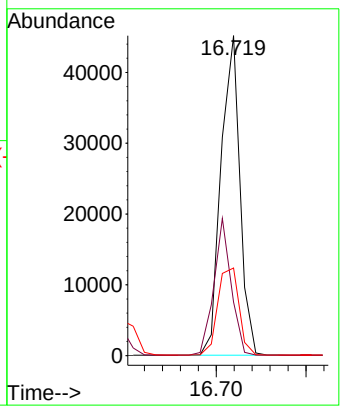


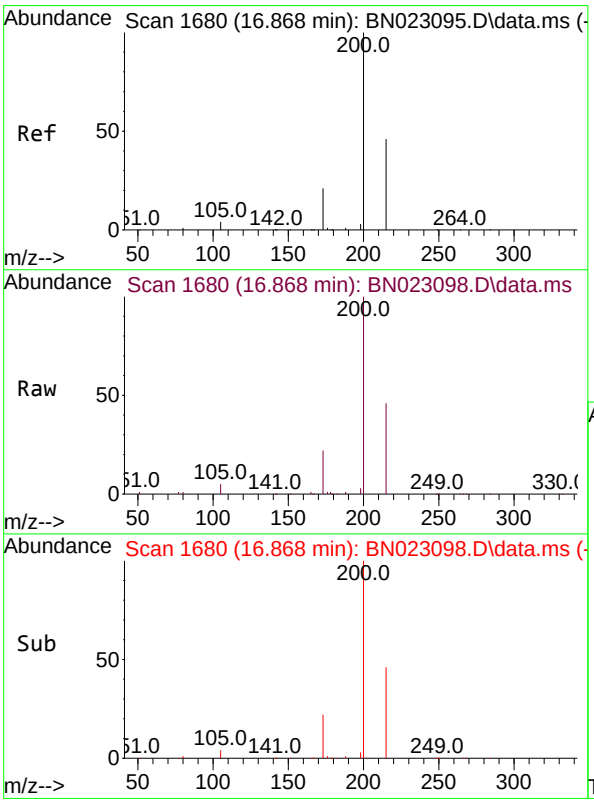
#22
Hexachlorobenzene
Concen: 3.001 ng
RT: 16.719 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:284 Resp: 66183

Ion	Ratio	Lower	Upper
284	100		
142	39.1	31.0	46.4
249	30.7	24.4	36.6

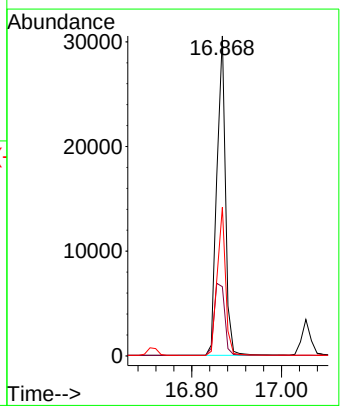


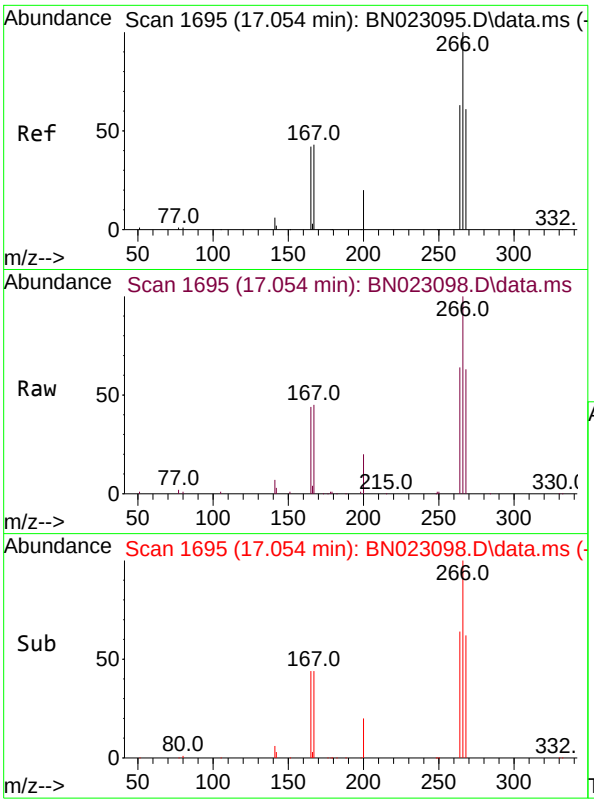


#23
Atrazine
Concen: 3.278 ng
RT: 16.868 min Scan# 1680
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:200 Resp: 40499

Ion	Ratio	Lower	Upper
200	100		
173	21.6	18.2	27.4
215	46.4	38.0	57.0



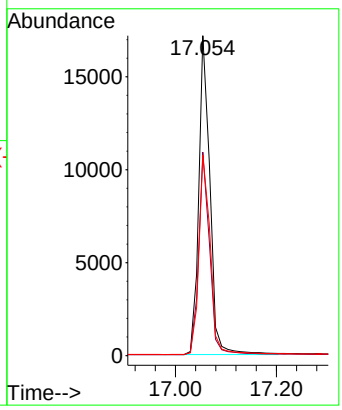


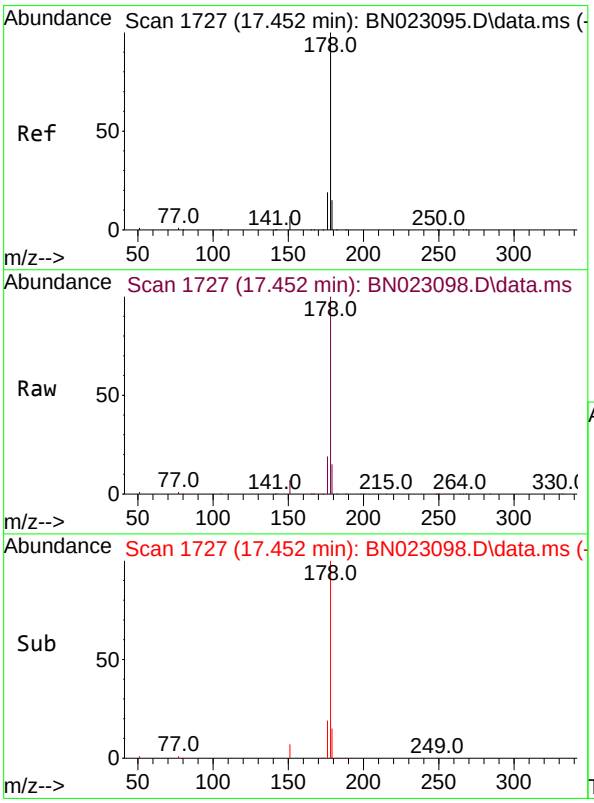
#24
Pentachlorophenol
Concen: 4.044 ng
RT: 17.054 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:266 Resp: 26196

Ion	Ratio	Lower	Upper
266	100		
264	62.6	50.1	75.1
268	63.9	49.7	74.5

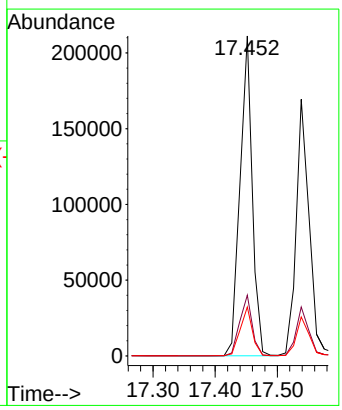


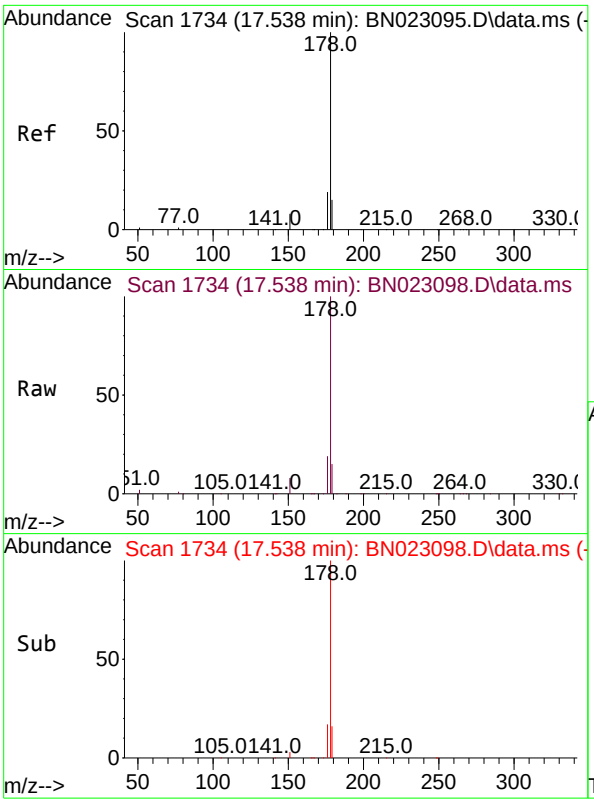


#25
Phenanthrene
Concen: 3.026 ng
RT: 17.452 min Scan# 1727
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:178 Resp: 287541

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.2
179	15.2	12.2	18.2



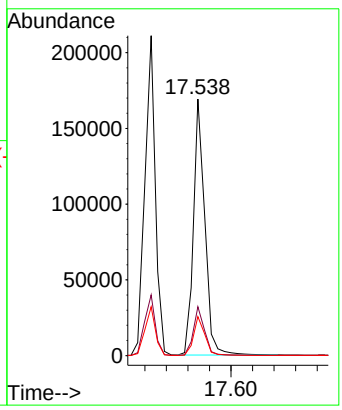


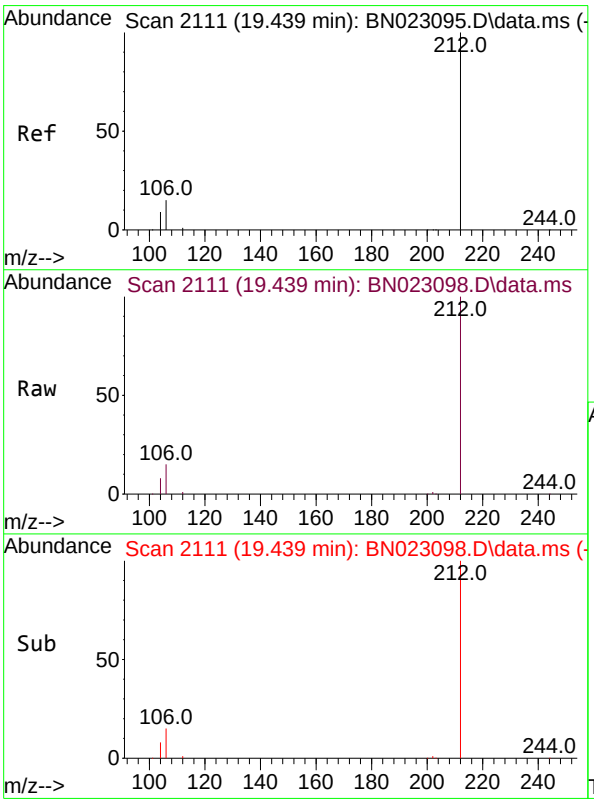
#26
Anthracene
Concen: 3.234 ng
RT: 17.538 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:178 Resp: 247626

Ion	Ratio	Lower	Upper
178	100		
176	18.7	15.1	22.7
179	15.2	12.2	18.4

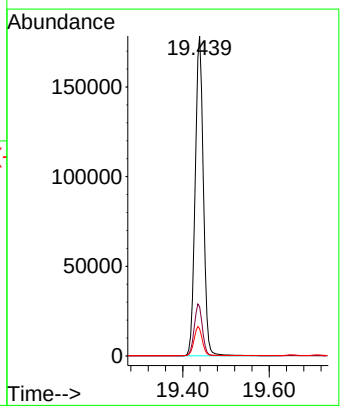


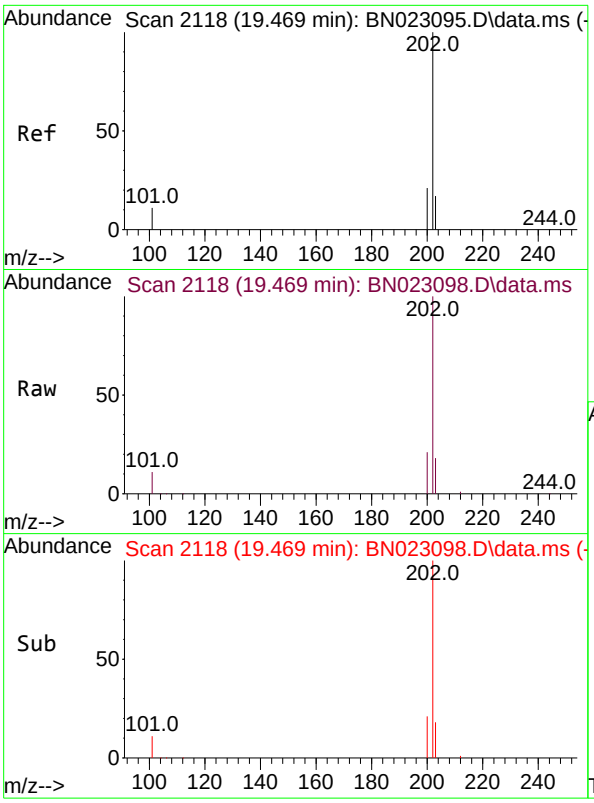


#27
Fluoranthene-d10
Concen: 3.037 ng
RT: 19.439 min Scan# 2111
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:212 Resp: 234419

Ion	Ratio	Lower	Upper
212	100		
106	16.2	13.0	19.4
104	9.2	7.5	11.3



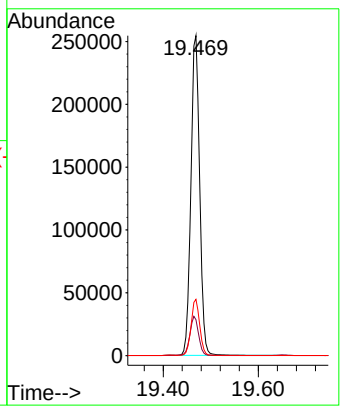


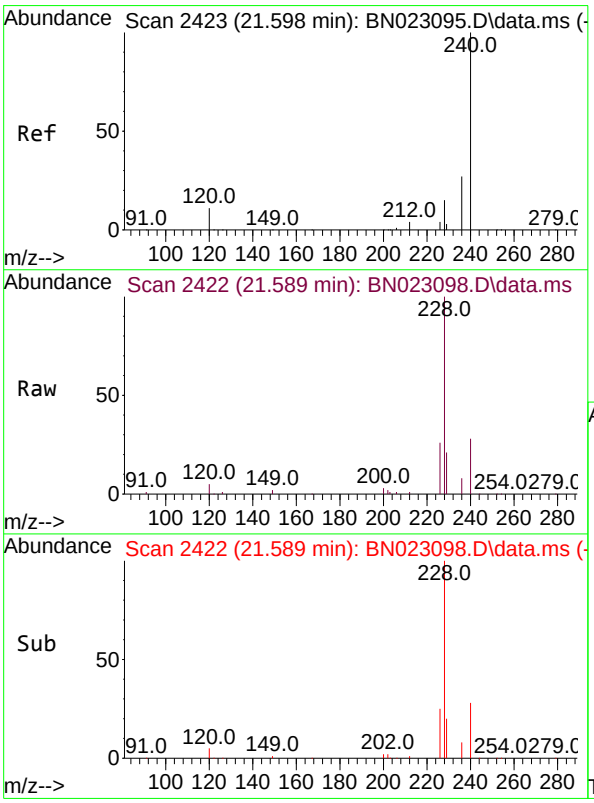
#28
Fluoranthene
Concen: 3.126 ng
RT: 19.469 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:202 Resp: 324068

Ion	Ratio	Lower	Upper
202	100		
101	12.3	9.7	14.5
203	17.4	13.8	20.6

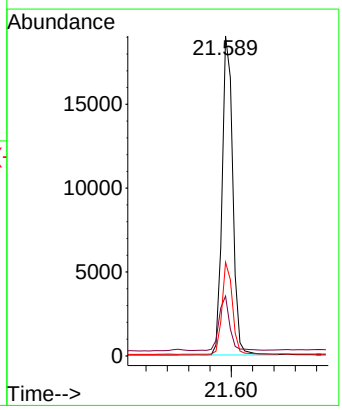


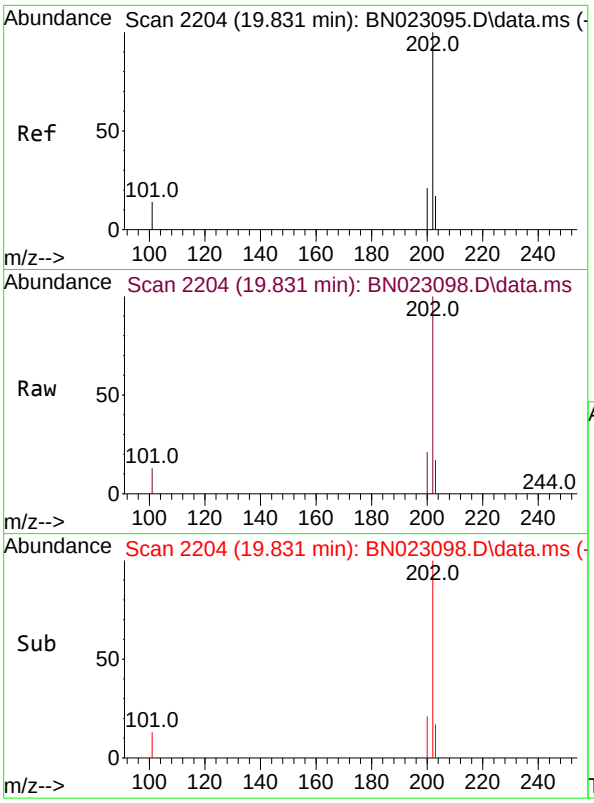


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.589 min Scan# 2422
Delta R.T. -0.009 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:240 Resp: 26247

Ion	Ratio	Lower	Upper
240	100		
120	18.7	10.1	15.1#
236	29.3	22.2	33.4



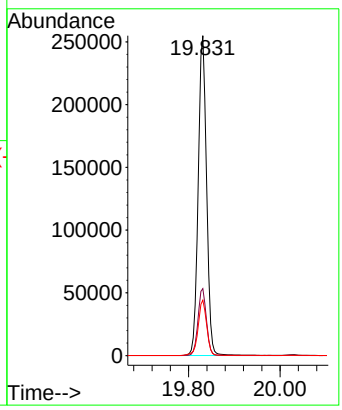


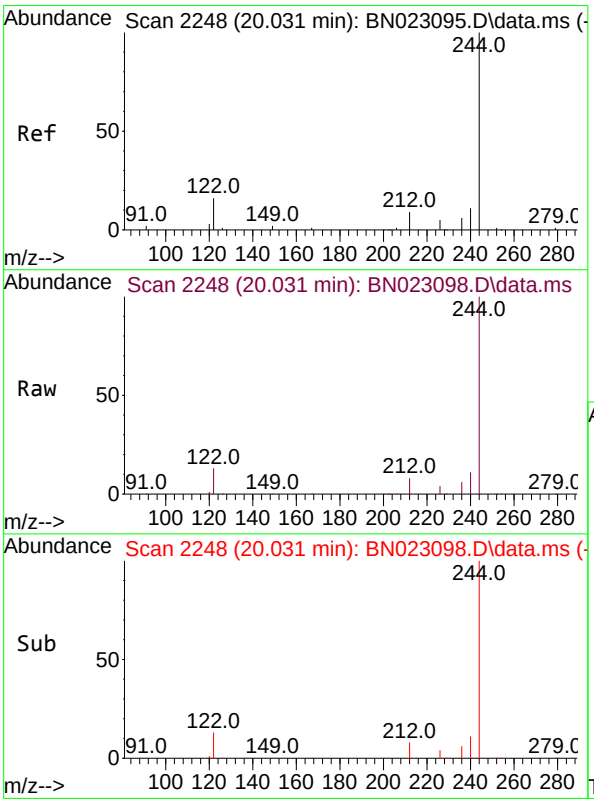
#30
Pyrene
Concen: 2.930 ng
RT: 19.831 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:202 Resp: 320665

Ion	Ratio	Lower	Upper
202	100		
200	21.1	16.9	25.3
203	17.8	14.2	21.4

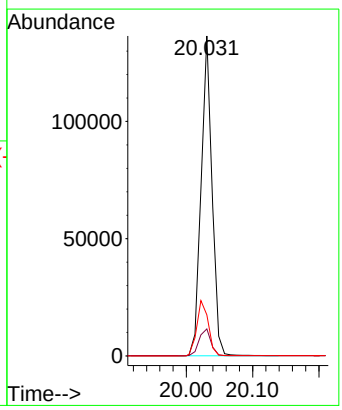


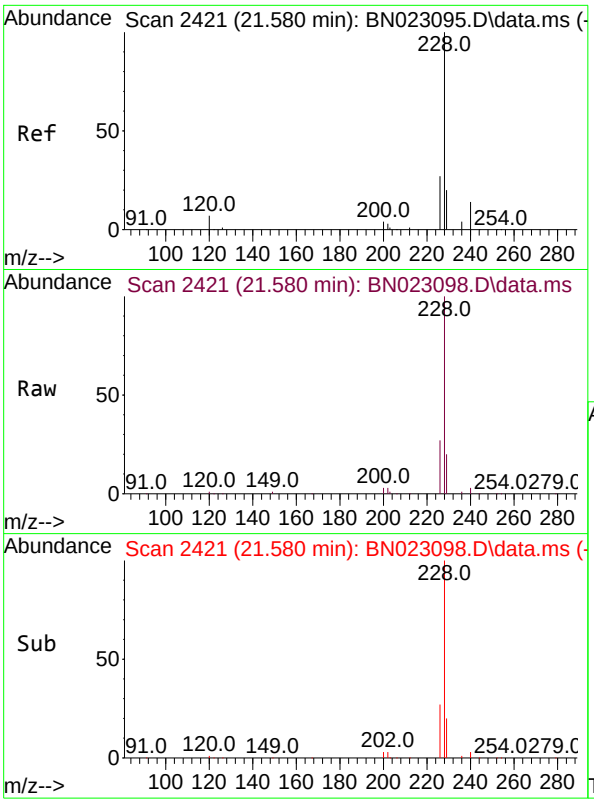


#31
Terphenyl-d14
Concen: 2.793 ng
RT: 20.031 min Scan# 2248
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:244 Resp: 139156

Ion	Ratio	Lower	Upper
244	100		
212	8.4	7.6	11.4
122	12.8	12.6	18.8



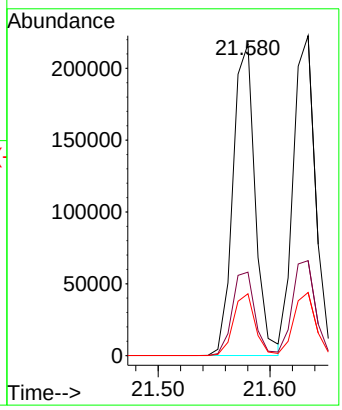


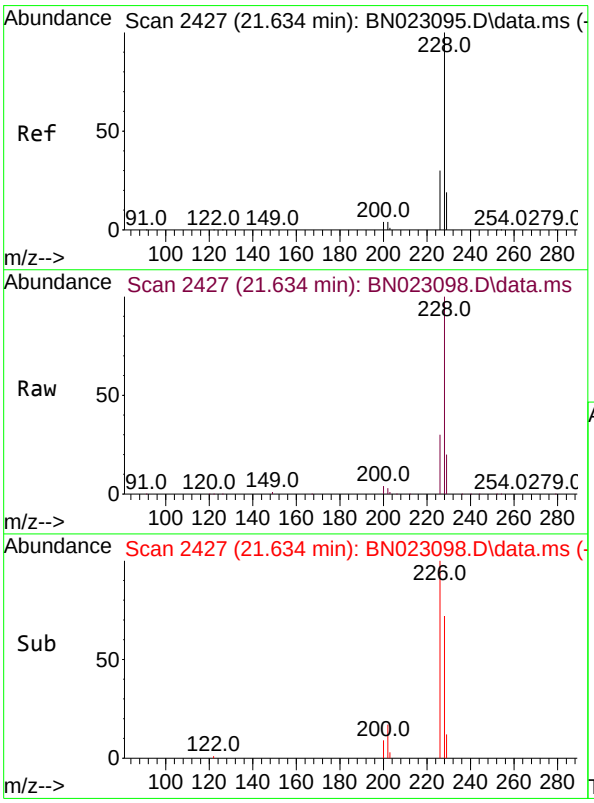
#32
Benzo(a)anthracene
Concen: 3.082 ng
RT: 21.580 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:228 Resp: 298657

Ion	Ratio	Lower	Upper
228	100		
226	26.8	22.0	33.0
229	19.8	15.8	23.8

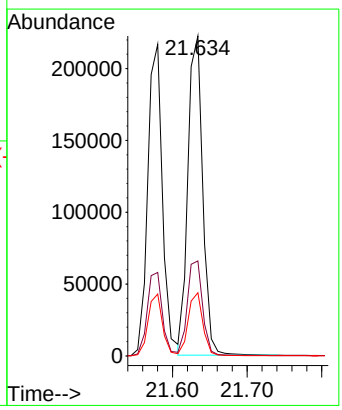


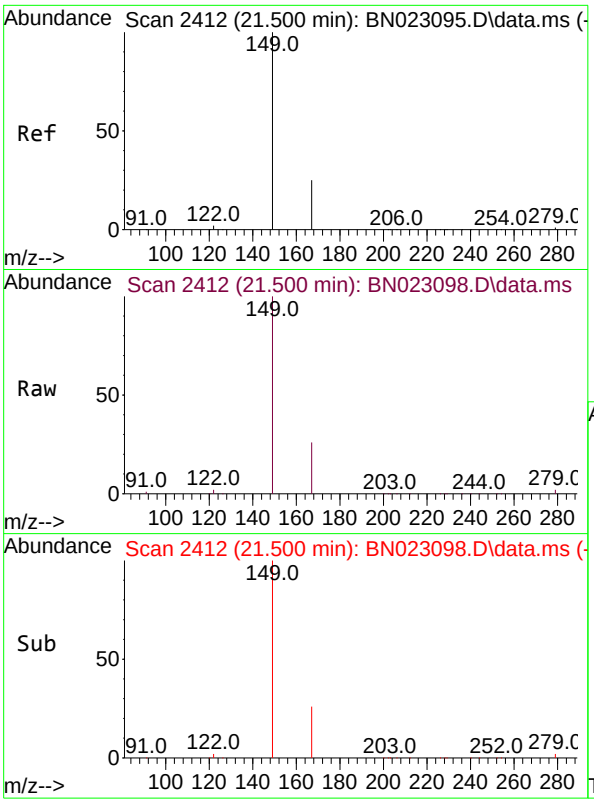


#33
Chrysene
Concen: 2.838 ng
RT: 21.634 min Scan# 2427
Delta R.T. -0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:228 Resp: 307277

Ion	Ratio	Lower	Upper
228	100		
226	29.7	24.4	36.6
229	19.7	15.6	23.4



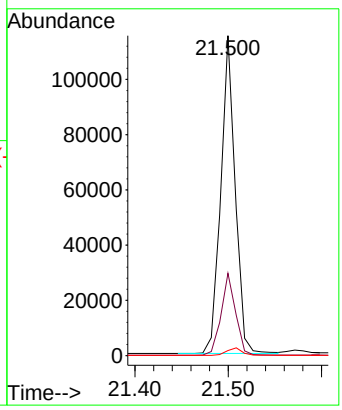


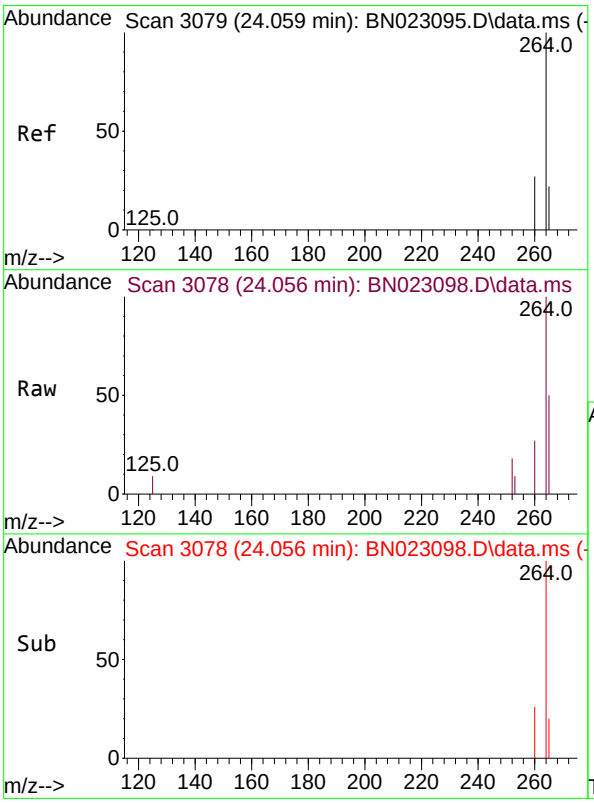
#34
Bis(2-ethylhexyl)phthalate
Concen: 2.965 ng
RT: 21.500 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:149 Resp: 124141

Ion	Ratio	Lower	Upper
149	100		
167	25.7	20.2	30.2
279	2.5	2.3	3.5

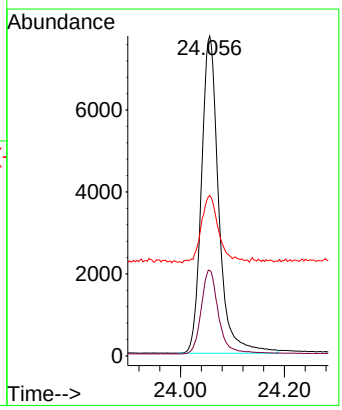


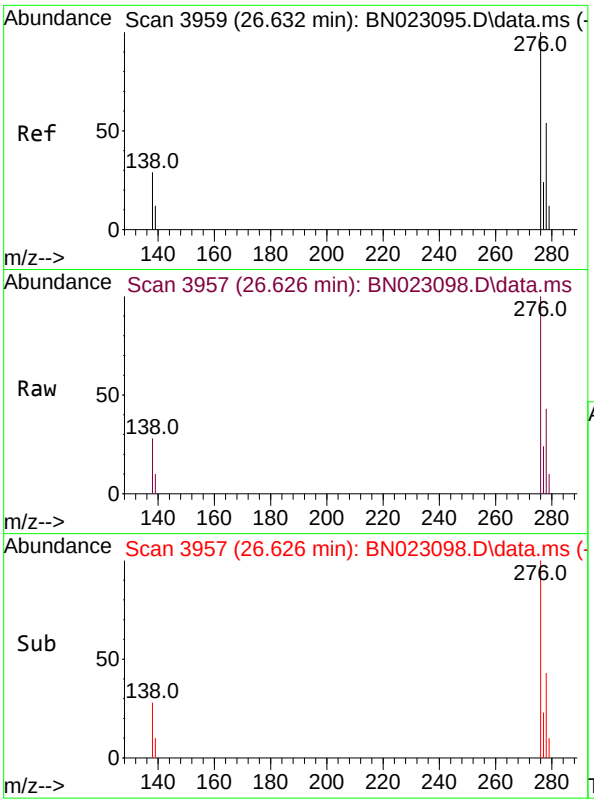


#35
Perylene-d12
Concen: 0.400 ng
RT: 24.056 min Scan# 3078
Delta R.T. -0.003 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:264 Resp: 17877

Ion	Ratio	Lower	Upper
264	100		
260	26.7	21.7	32.5
265	50.1	43.2	64.8



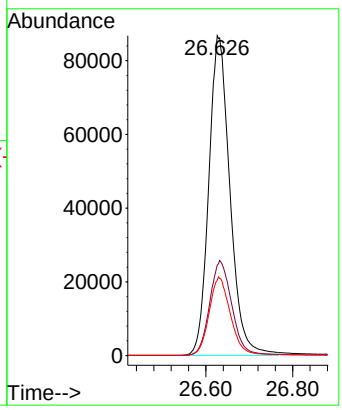


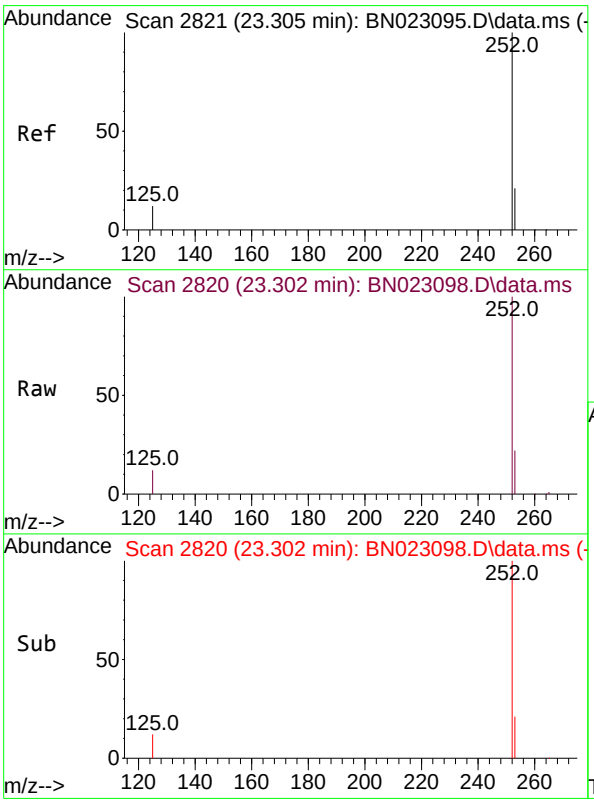
#36
Indeno(1,2,3-cd)pyrene
Concen: 3.087 ng
RT: 26.626 min Scan# 3
Delta R.T. -0.006 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:276 Resp: 293290

Ion	Ratio	Lower	Upper
276	100		
138	30.9	25.0	37.6
277	24.7	19.8	29.8

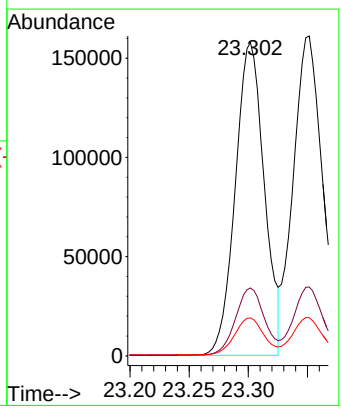


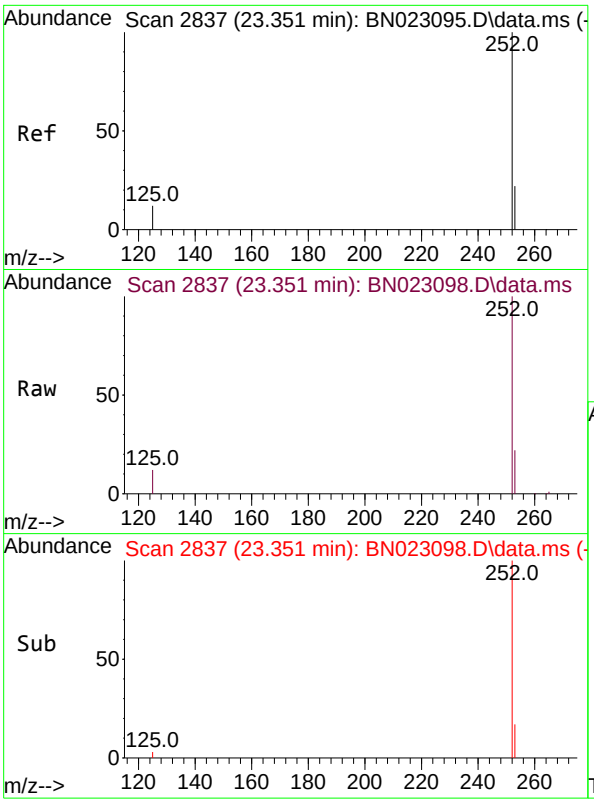


#37
Benzo(b)fluoranthene
Concen: 3.280 ng
RT: 23.302 min Scan# 2820
Delta R.T. -0.003 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:252 Resp: 268022

Ion	Ratio	Lower	Upper
252	100		
253	21.6	19.0	28.4
125	12.1	12.8	19.2#



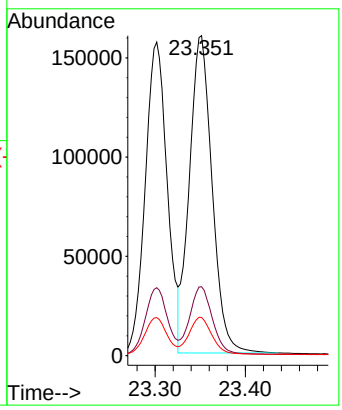


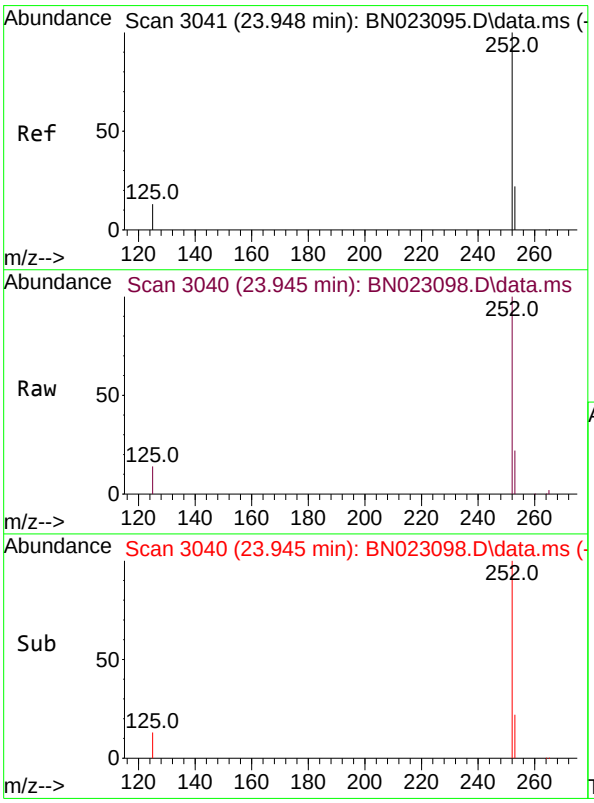
#38
Benzo(k)fluoranthene
Concen: 3.339 ng
RT: 23.351 min Scan# 28
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:252 Resp: 279632

Ion	Ratio	Lower	Upper
252	100		
253	21.6	19.1	28.7
125	11.9	12.5	18.7#

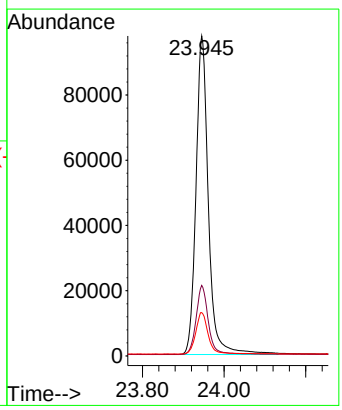


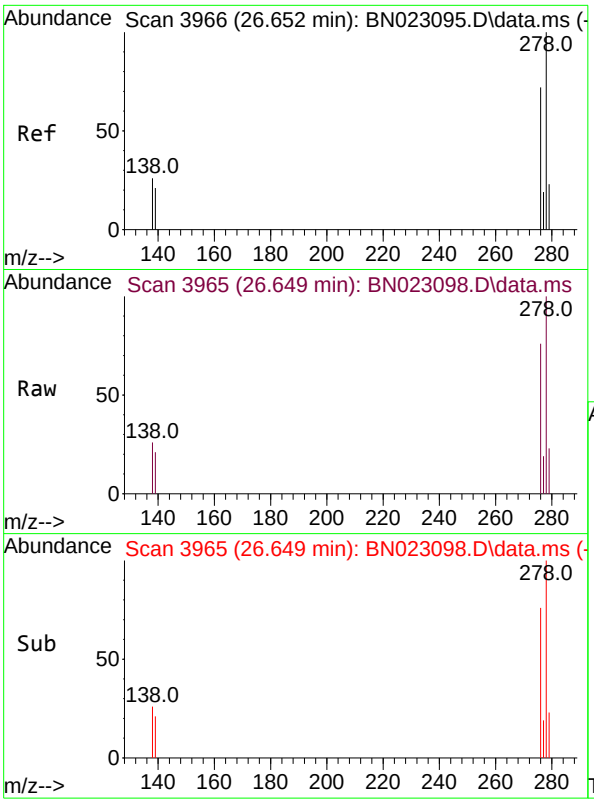


#39
Benzo(a)pyrene
Concen: 3.118 ng
RT: 23.945 min Scan# 3040
Delta R.T. -0.003 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:252 Resp: 206454

Ion	Ratio	Lower	Upper
252	100		
253	22.0	20.6	30.8
125	13.5	15.8	23.8#



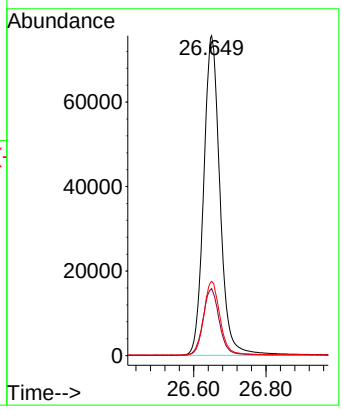


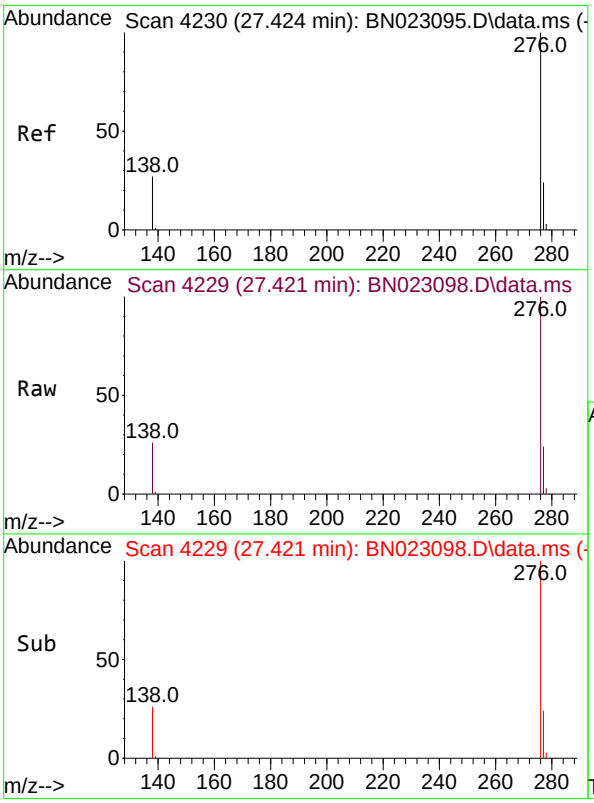
#40
Dibenzo(a,h)anthracene
Concen: 3.149 ng
RT: 26.649 min Scan# 3
Delta R.T. -0.003 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:278 Resp: 236723

Ion	Ratio	Lower	Upper
278	100		
139	20.9	17.5	26.3
279	23.2	20.5	30.7

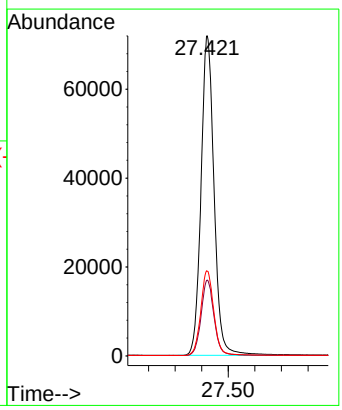




#41
Benzo(g,h,i)perylene
Concen: 3.189 ng
RT: 27.421 min Scan# 4229
Delta R.T. -0.003 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:276 Resp: 245390

Ion	Ratio	Lower	Upper
276	100		
277	23.7	19.9	29.9
138	26.5	22.2	33.2



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023099.D
Acq On : 08 Dec 2022 17:40
Operator : CG/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Manual Integrations APPROVED

Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022

Quant Time: Dec 09 07:29:11 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	8.021	152	8360	0.400	ng		0.00
7) Naphthalene-d8	10.840	136	23462	0.400	ng		0.00
13) Acenaphthene-d10	14.666	164	13758	0.400	ng		0.00
19) Phenanthrene-d10	17.402	188	28616	0.400	ng		#-0.01
29) Chrysene-d12	21.589	240	26816	0.400	ng		# 0.00
35) Perylene-d12	24.053	264	18277	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.558	112	78686	4.070	ng		0.00
5) Phenol-d6	7.168	99	107140	4.407	ng		0.00
8) Nitrobenzene-d5	9.185	82	85223	4.841	ng		0.00
11) 2-Methylnaphthalene-d10	12.427	152	217799	4.917	ng		0.00
14) 2,4,6-Tribromophenol	16.148	330	31378	5.398	ng		0.00
15) 2-Fluorobiphenyl	13.298	172	274850	4.501	ng		0.00
27) Fluoranthene-d10	19.439	212	377753	4.821	ng		0.00
31) Terphenyl-d14	20.031	244	224844	4.418	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.398	88	39029m	3.765	ng		
3) n-Nitrosodimethylamine	3.723	42	45253	4.463	ng	#	96
6) bis(2-Chloroethyl)ether	7.436	93	107173	3.993	ng		98
9) Naphthalene	10.893	128	305357	4.387	ng		99
10) Hexachlorobutadiene	11.182	225	55800	4.270	ng	#	100
16) Acenaphthylene	14.388	152	329503	5.096	ng		100
17) Acenaphthene	14.730	154	218157	4.631	ng		96
18) Fluorene	15.714	166	247542	4.685	ng		98
20) 4,6-Dinitro-2-methylph...	15.776	198	27445	7.089	ng	#	79
21) 4-Bromophenyl-phenylether	16.595	248	83257	4.830	ng		98
22) Hexachlorobenzene	16.719	284	103010	4.601	ng		100
23) Atrazine	16.868	200	66765	5.323	ng		98
24) Pentachlorophenol	17.055	266	45088	6.858	ng		99
25) Phenanthrene	17.452	178	452445	4.690	ng		100
26) Anthracene	17.539	178	401356	5.163	ng		100
28) Fluoranthene	19.469	202	506003	4.809	ng		100
30) Pyrene	19.831	202	511132	4.571	ng		100
32) Benzo(a)anthracene	21.571	228	490036	4.950	ng		99
33) Chrysene	21.634	228	485095	4.385	ng		99
34) Bis(2-ethylhexyl)phtha...	21.500	149	234584	5.484	ng		99
36) Indeno(1,2,3-cd)pyrene	26.629	276	474956	4.890	ng		99
37) Benzo(b)fluoranthene	23.299	252	429250	5.138	ng	#	94
38) Benzo(k)fluoranthene	23.352	252	444851	5.195	ng	#	94
39) Benzo(a)pyrene	23.945	252	338522	5.001	ng	#	90
40) Dibenzo(a,h)anthracene	26.647	278	381911	4.970	ng		97
41) Benzo(g,h,i)perylene	27.421	276	399388	5.077	ng		97

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

ICAL Form

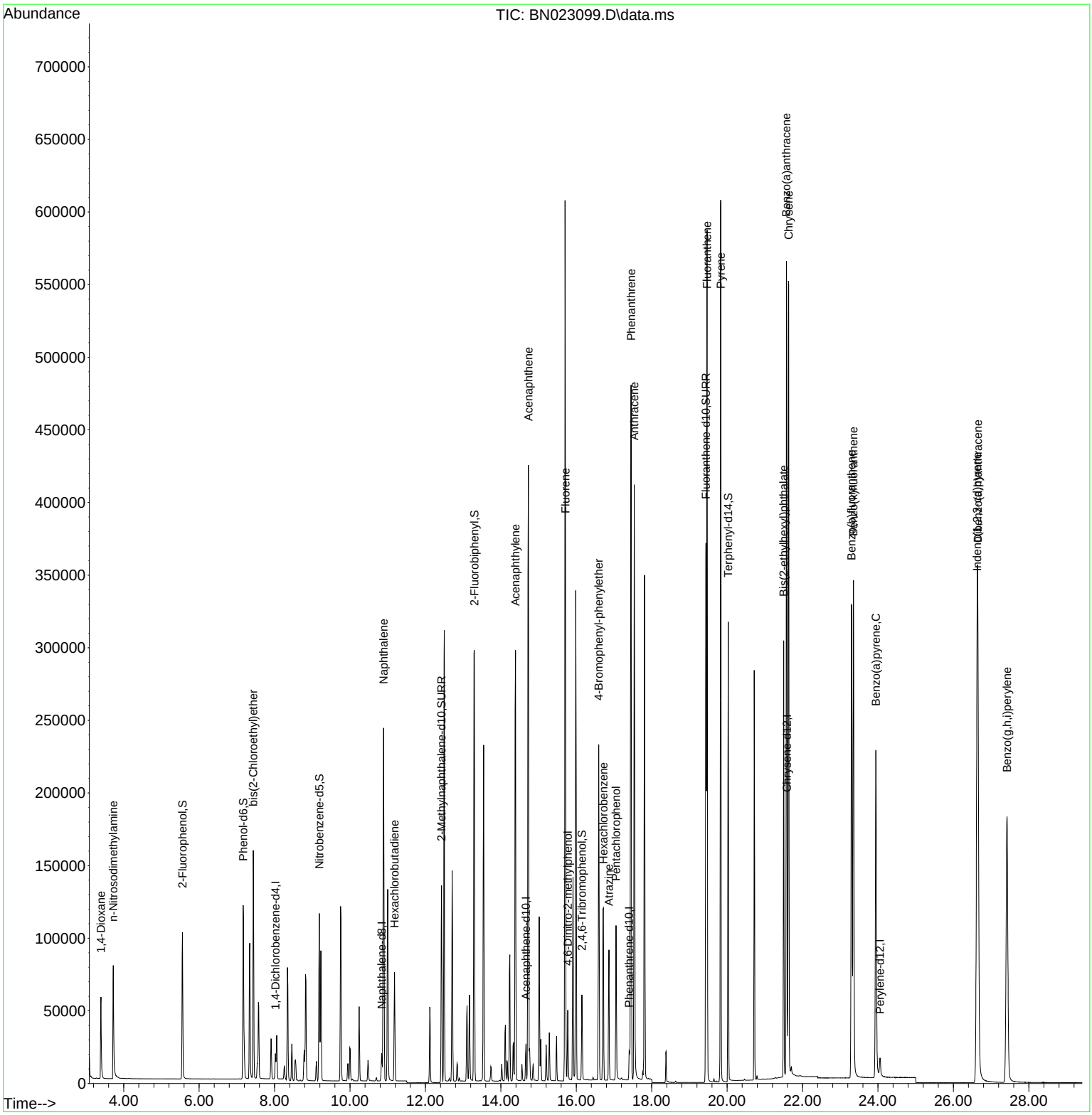
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023099.D
Acq On : 08 Dec 2022 17:40
Operator : CG/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 8 Sample Multiplier: 1

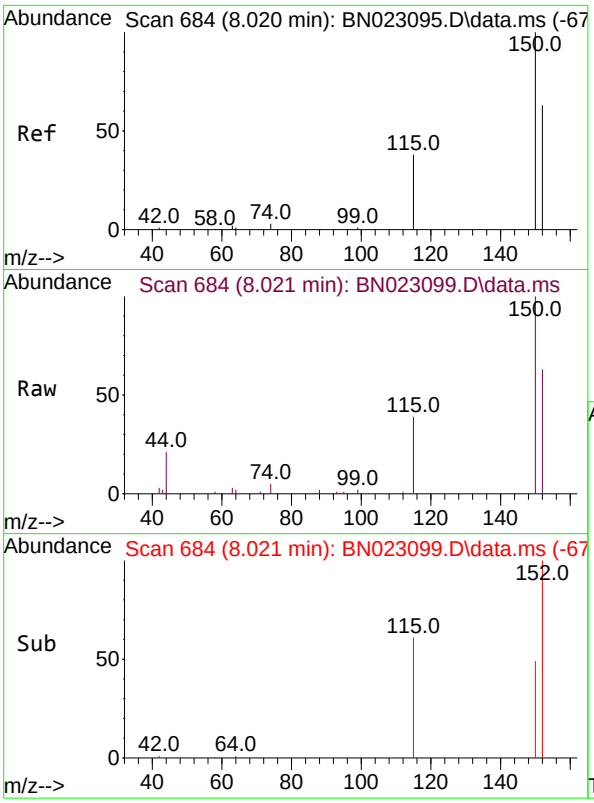
Quant Time: Dec 09 07:29:11 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Manual Integrations APPROVED

Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022

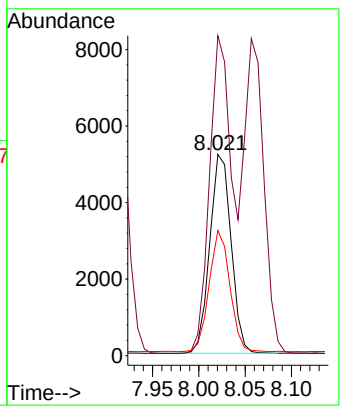




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 8.021 min Scan# 68
Delta R.T. 0.001 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:152 Resp: 836

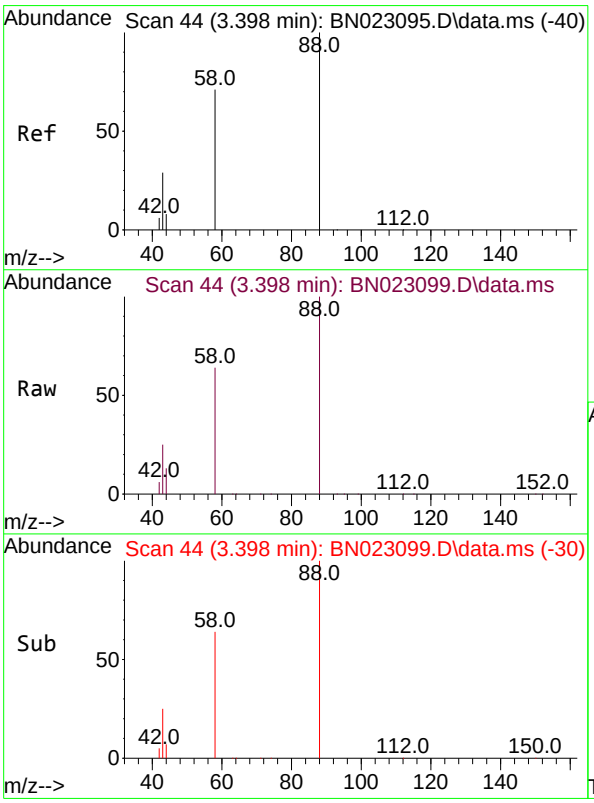
Ion	Ratio	Lower	Upper
152	100		
150	159.0	125.6	188.4
115	62.1	49.0	73.4



Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Manual Integrations
APPROVED

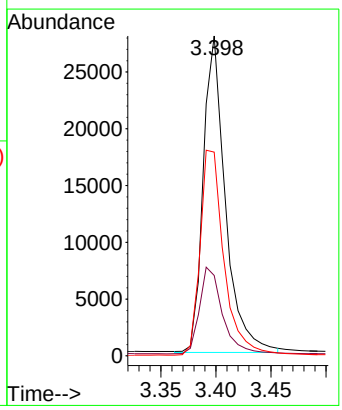
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022

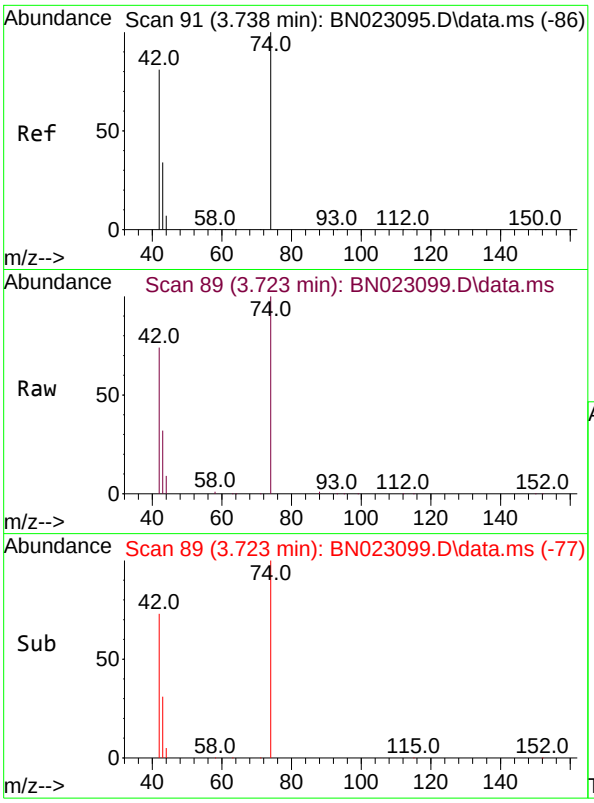


#2
1,4-Dioxane
Concen: 3.765 ng m
RT: 3.398 min Scan# 44
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion: 88 Resp: 39029

Ion	Ratio	Lower	Upper
88	100		
43	28.3	23.3	34.9
58	69.5	58.0	87.0

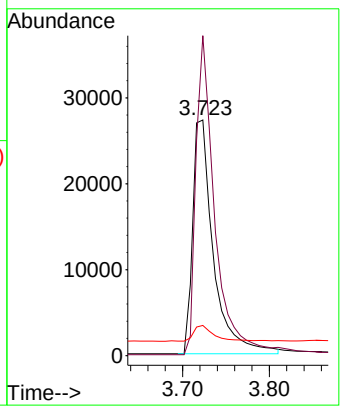




#3
n-Nitrosodimethylamine
Concen: 4.463 ng
RT: 3.723 min Scan# 8
Delta R.T. -0.014 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion: 42 Resp: 4525

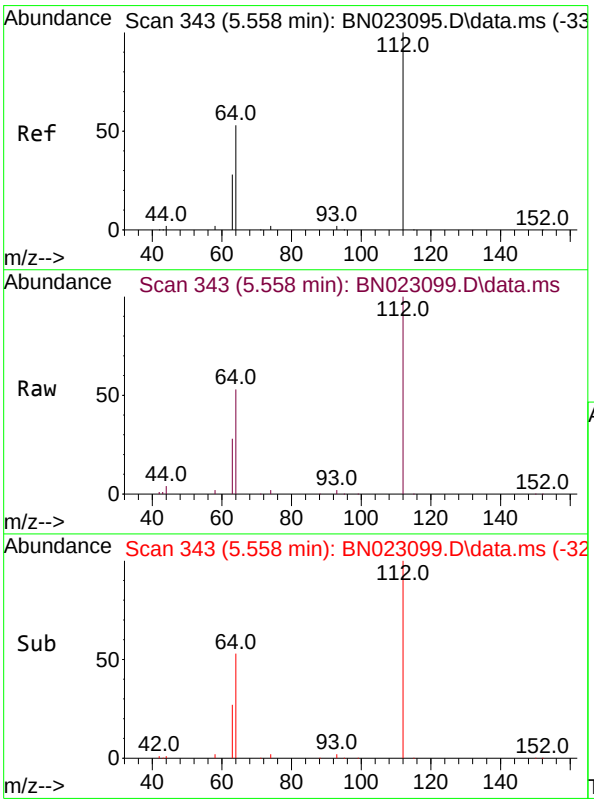
Ion	Ratio	Lower	Upper
42	100		
74	123.1	95.8	143.6
44	6.9	8.4	12.6#



Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Manual Integrations
APPROVED

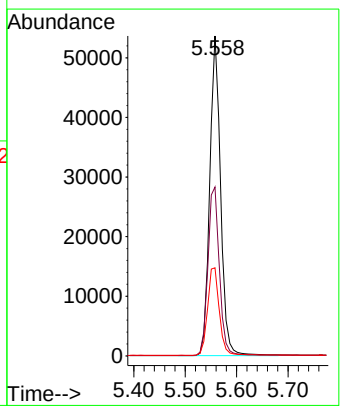
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022

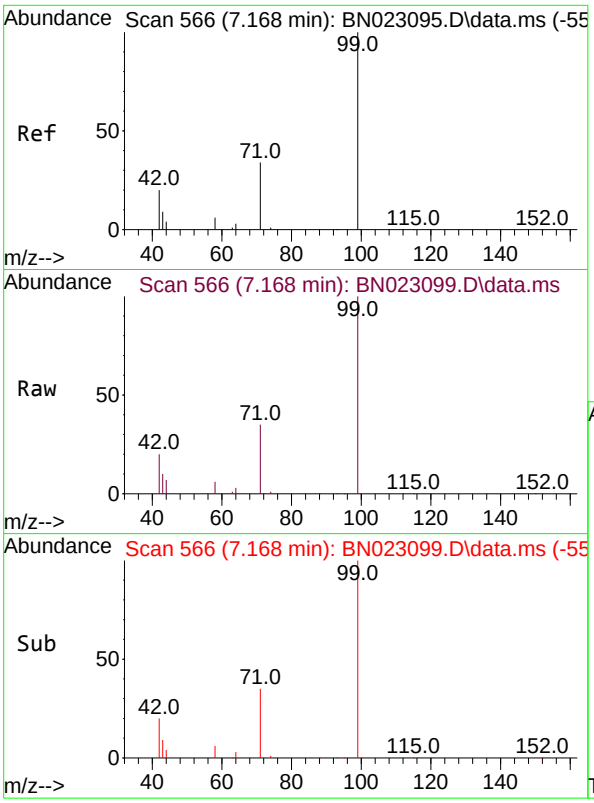


#4
2-Fluorophenol
Concen: 4.070 ng
RT: 5.558 min Scan# 343
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:112 Resp: 78686

Ion	Ratio	Lower	Upper
112	100		
64	55.8	44.4	66.6
63	29.5	23.7	35.5





#5
Phenol-d6
Concen: 4.407 ng
RT: 7.168 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

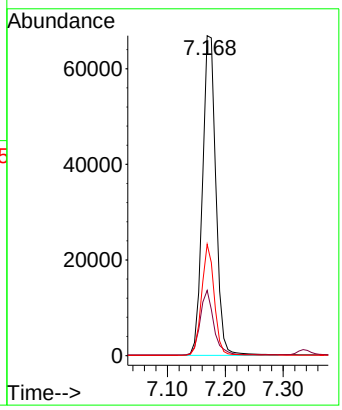
Tgt Ion: 99 Resp: 10714

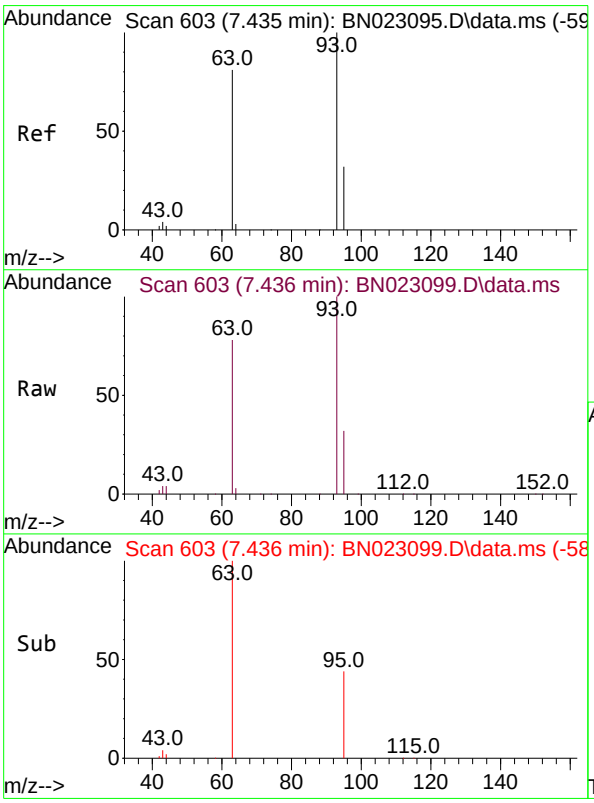
Ion	Ratio	Lower	Upper
99	100		
42	20.4	16.3	24.5
71	32.8	26.5	39.7

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Manual Integrations
APPROVED

Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022

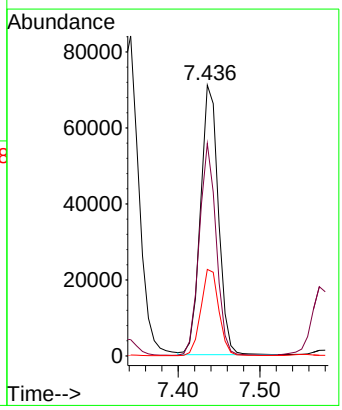


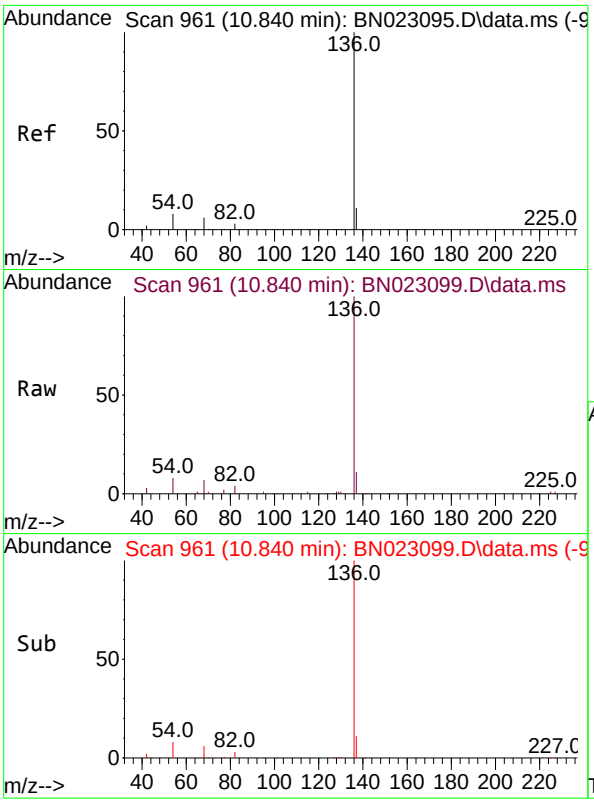


#6
bis(2-Chloroethyl)ether
Concen: 3.993 ng
RT: 7.436 min Scan# 603
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion: 93 Resp: 107173

Ion	Ratio	Lower	Upper
93	100		
63	74.7	58.1	87.1
95	32.3	25.2	37.8

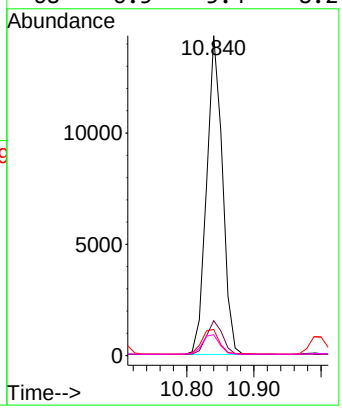




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.840 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:136 Resp: 2346

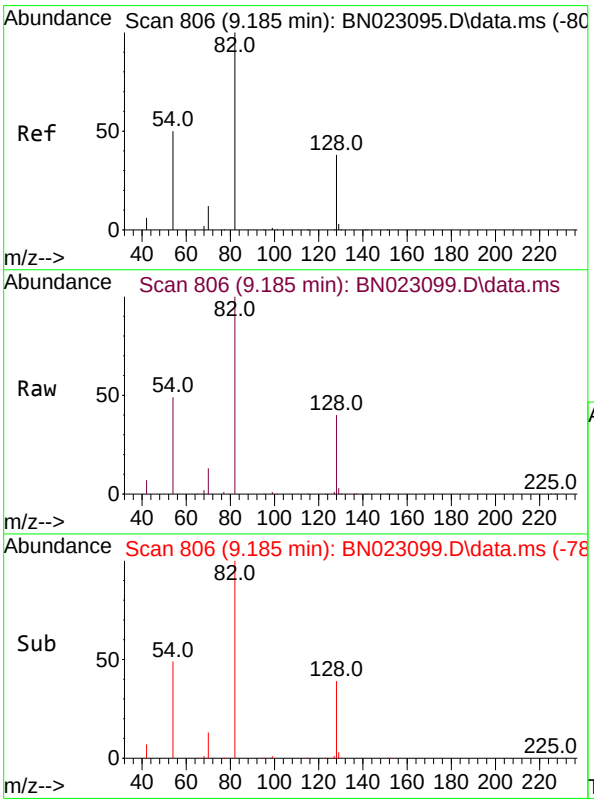
Ion	Ratio	Lower	Upper
136	100		
137	10.9	9.0	13.4
54	8.2	6.5	9.7
68	6.5	5.4	8.2



Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Manual Integrations
APPROVED

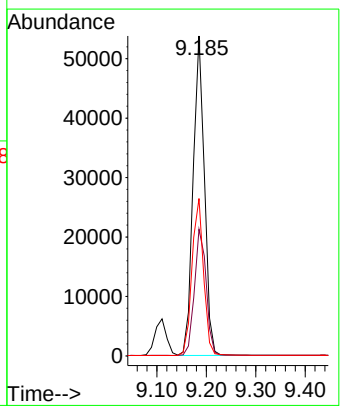
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022

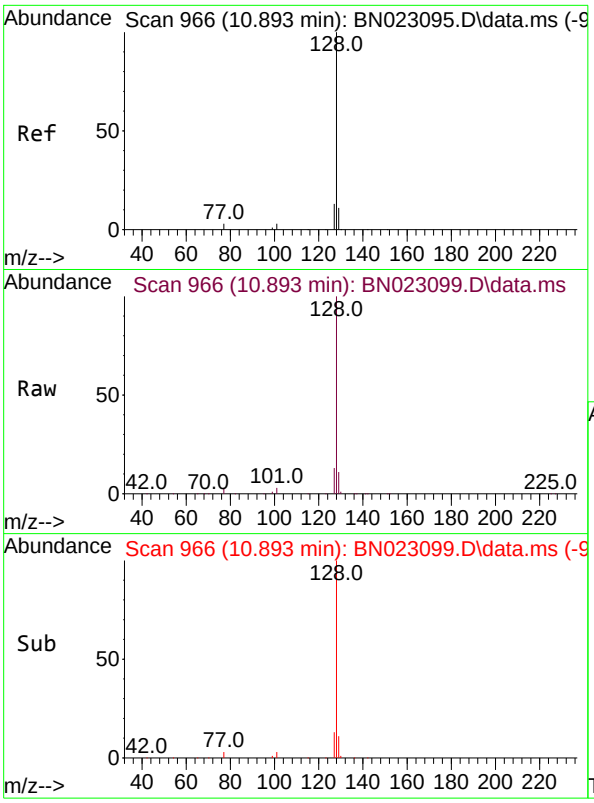


#8
Nitrobenzene-d5
Concen: 4.841 ng
RT: 9.185 min Scan# 806
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion: 82 Resp: 85223

Ion	Ratio	Lower	Upper
82	100		
128	39.6	31.4	47.2
54	49.2	41.0	61.4

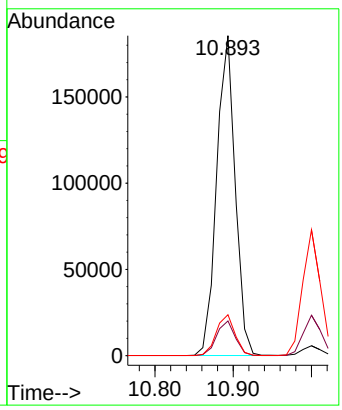




#9
Naphthalene
Concen: 4.387 ng
RT: 10.893 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:128 Resp: 30535

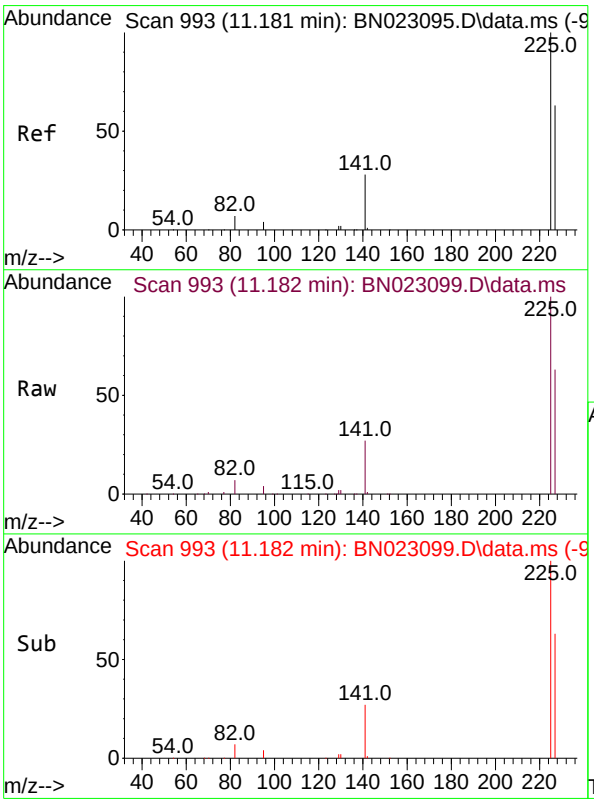
Ion	Ratio	Lower	Upper
128	100		
129	10.8	9.0	13.6
127	12.8	10.5	15.7



Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Manual Integrations
APPROVED

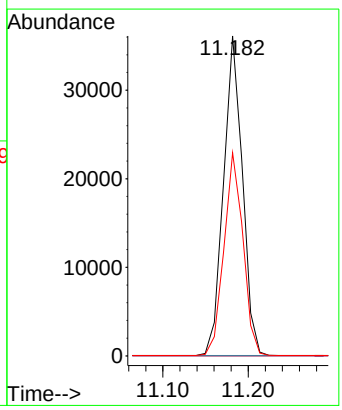
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022

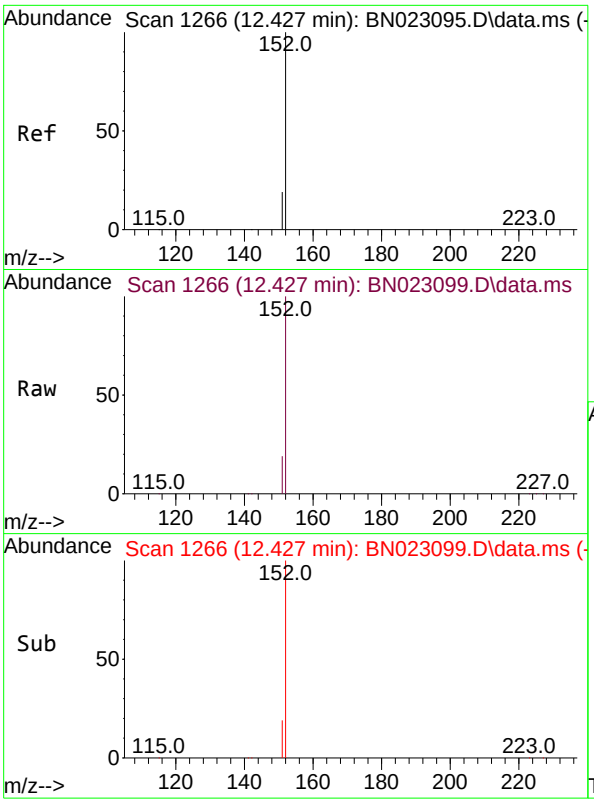


#10
Hexachlorobutadiene
Concen: 4.270 ng
RT: 11.182 min Scan# 993
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:225 Resp: 55800

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.8	51.1	76.7

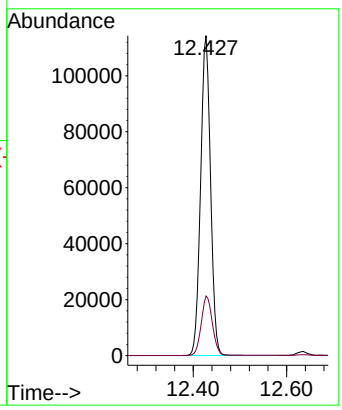




#11
2-Methylnaphthalene-d10
Concen: 4.917 ng
RT: 12.427 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:152 Resp: 21779

Ion	Ratio	Lower	Upper
152	100		
151	20.3	15.1	22.7



Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

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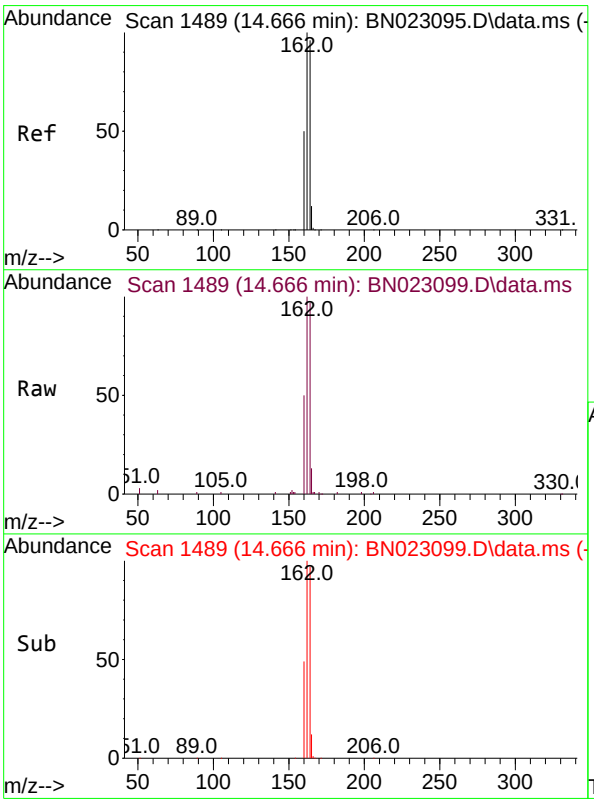
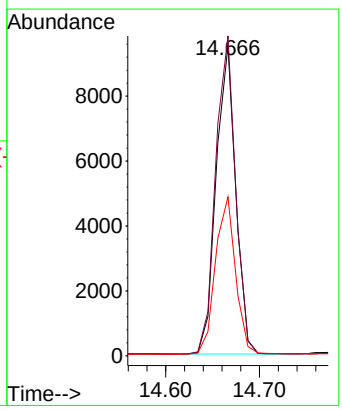
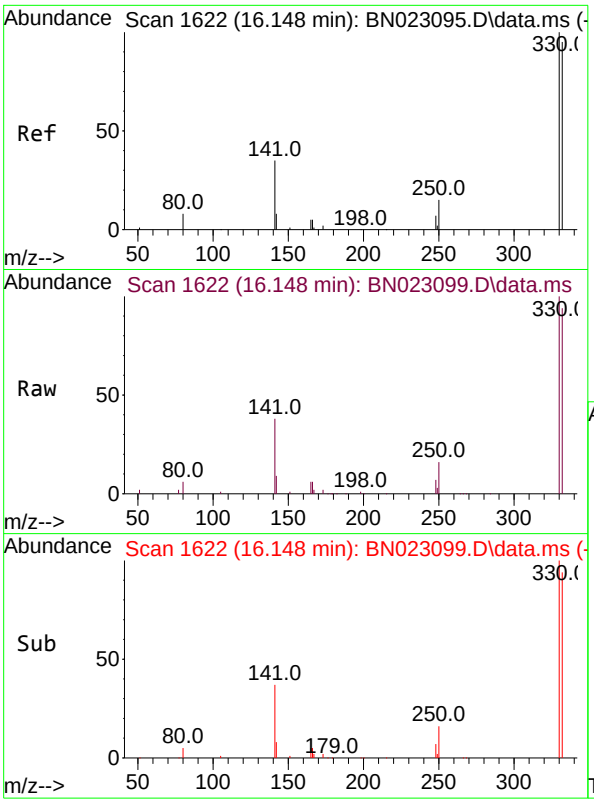


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.666 min Scan# 1489
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:164 Resp: 13758

Ion	Ratio	Lower	Upper
164	100		
162	103.1	83.4	125.0
160	51.2	41.8	62.8

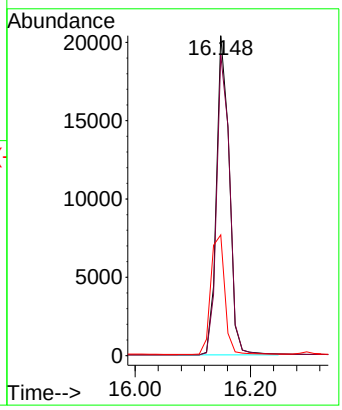




#14
2,4,6-Tribromophenol
Concen: 5.398 ng
RT: 16.148 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:330 Resp: 3137

Ion	Ratio	Lower	Upper
330	100		
332	96.2	77.3	115.9
141	41.2	33.5	50.3



Instrument :
BNA_N
ClientSampleId :
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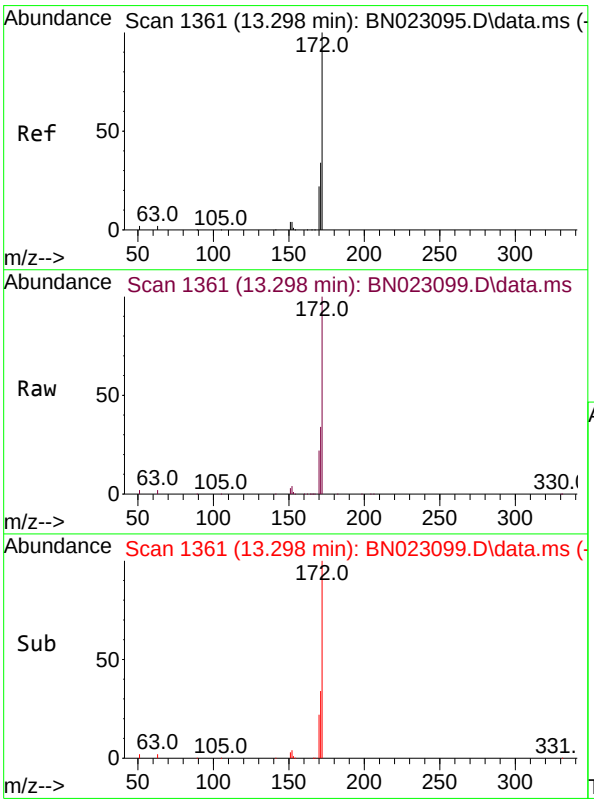
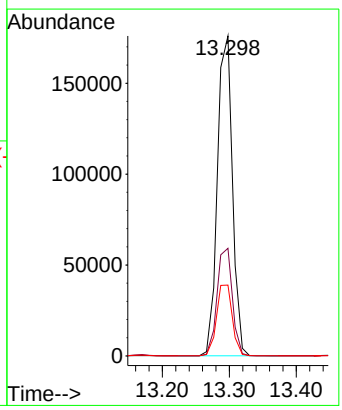
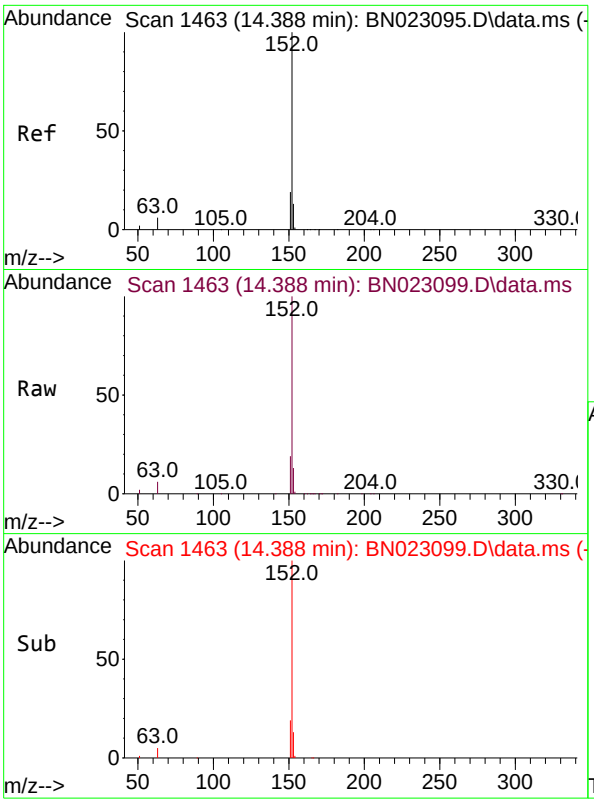


#15
2-Fluorobiphenyl
Concen: 4.501 ng
RT: 13.298 min Scan# 1361
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:172 Resp: 274850

Ion	Ratio	Lower	Upper
172	100		
171	33.6	27.4	41.0
170	22.1	17.9	26.9

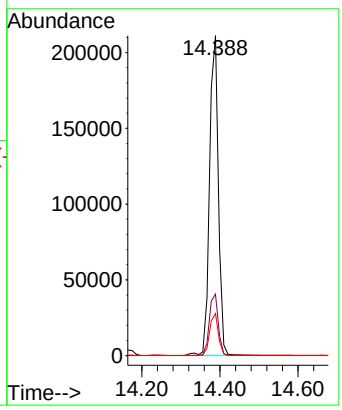




#16
Acenaphthylene
Concen: 5.096 ng
RT: 14.388 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:152 Resp: 32950

Ion	Ratio	Lower	Upper
152	100		
151	19.4	15.4	23.2
153	13.0	10.3	15.5



Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

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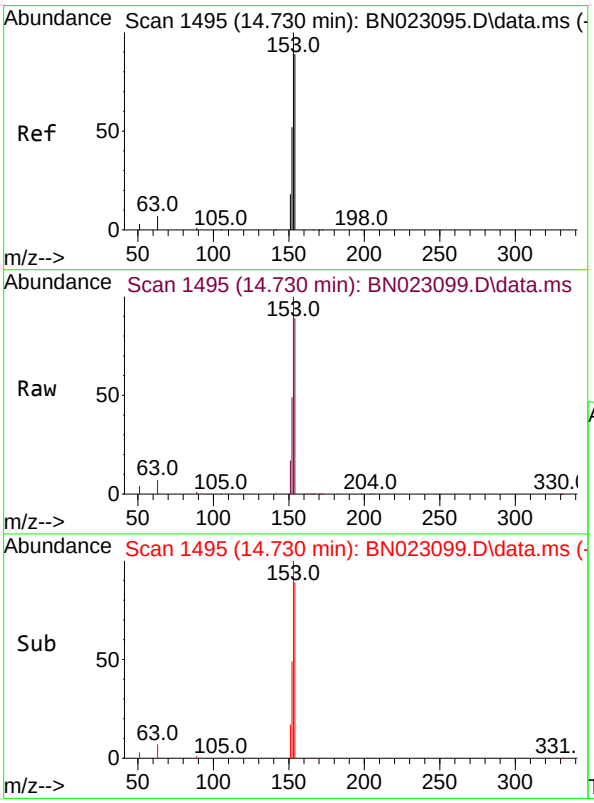
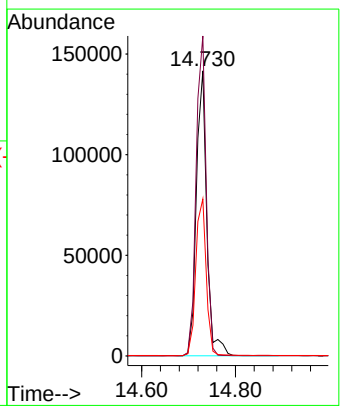
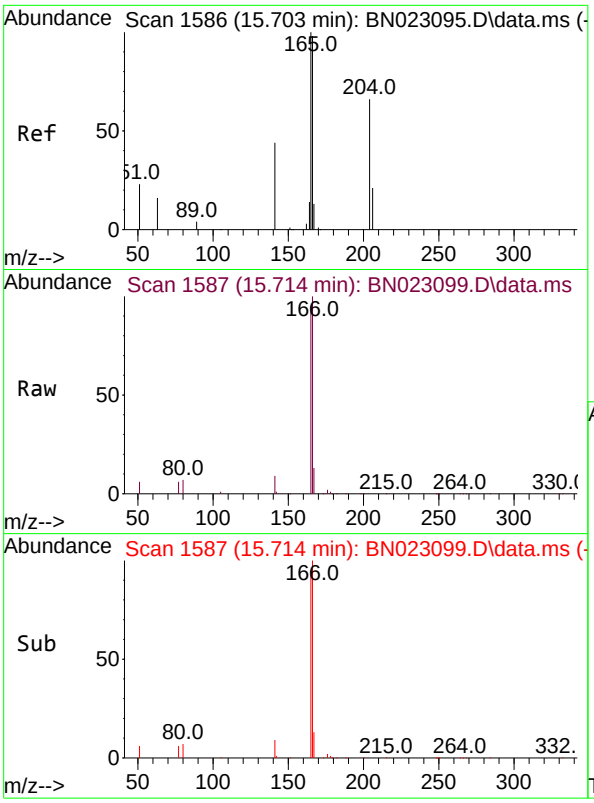


#17
Acenaphthene
Concen: 4.631 ng
RT: 14.730 min Scan# 1495
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:154 Resp: 218157

Ion	Ratio	Lower	Upper
154	100		
153	108.2	88.6	132.8
152	55.1	48.1	72.1

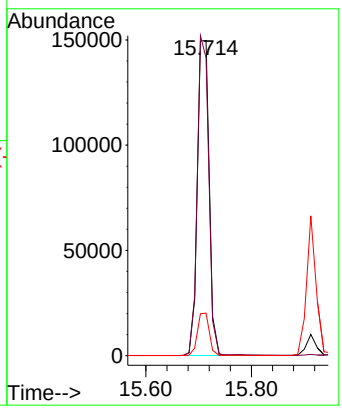




#18
Fluorene
Concen: 4.685 ng
RT: 15.714 min Scan# 1
Delta R.T. 0.011 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:166 Resp: 24754

Ion	Ratio	Lower	Upper
166	100		
165	97.3	79.8	119.6
167	12.8	10.6	16.0



Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

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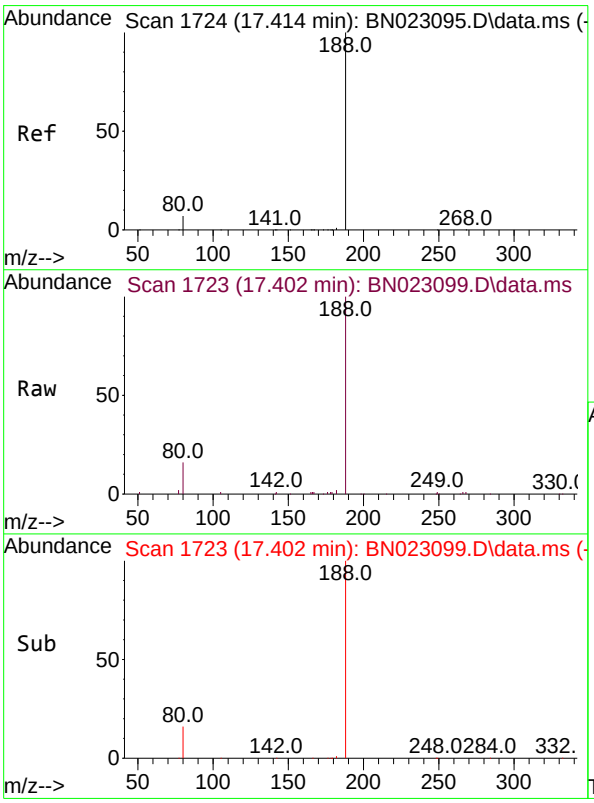
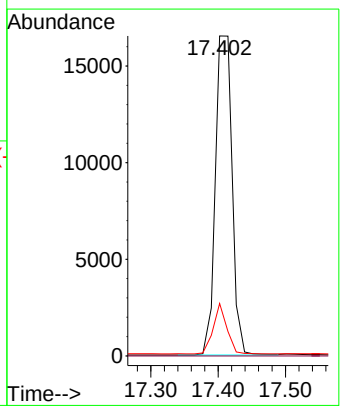
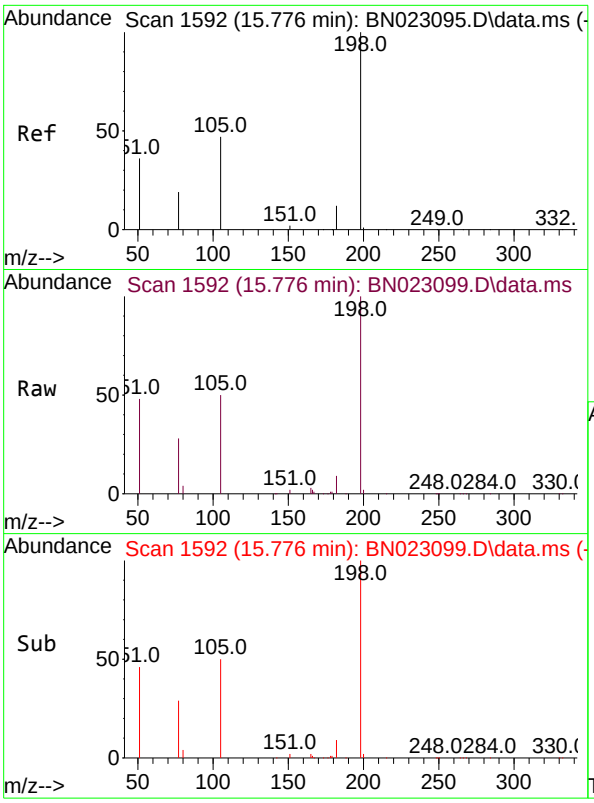


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.402 min Scan# 1723
Delta R.T. -0.012 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:188 Resp: 28616

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	16.4	6.1	9.1#





#20
4,6-Dinitro-2-methylphenol
Concen: 7.089 ng
RT: 15.776 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:198 Resp: 2744

Ion	Ratio	Lower	Upper
198	100		
51	48.2	57.0	85.4
105	50.2	47.2	70.8

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

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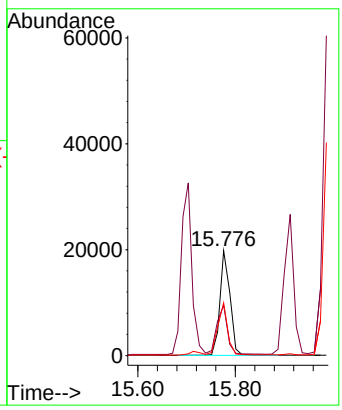
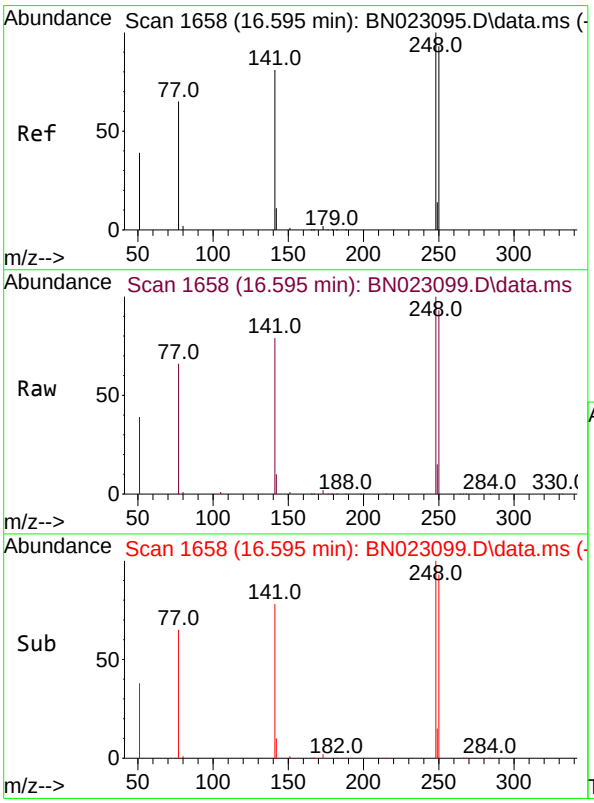
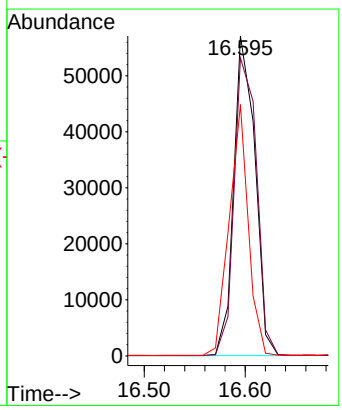


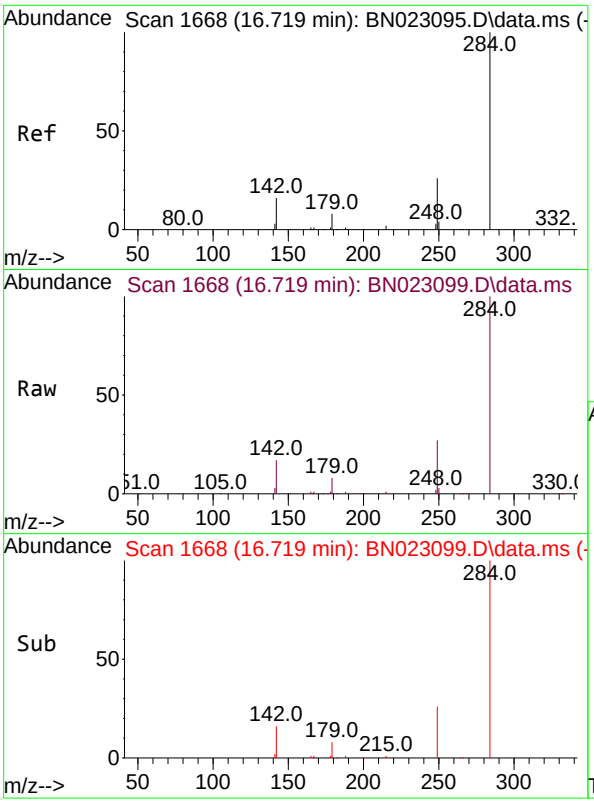


#21
4-Bromophenyl-phenylether
Concen: 4.830 ng
RT: 16.595 min Scan# 1658
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:248 Resp: 83257

Ion	Ratio	Lower	Upper
248	100		
250	93.2	74.3	111.5
141	78.5	65.0	97.6

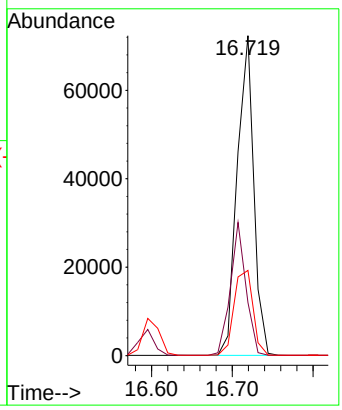




#22
Hexachlorobenzene
Concen: 4.601 ng
RT: 16.719 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:284 Resp: 10301(

Ion	Ratio	Lower	Upper
284	100		
142	39.1	31.0	46.4
249	30.5	24.4	36.6



Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

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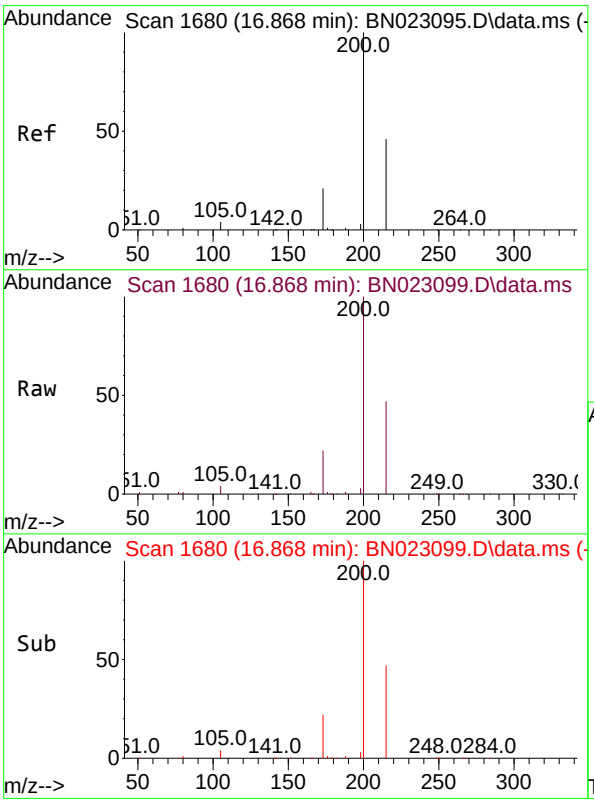
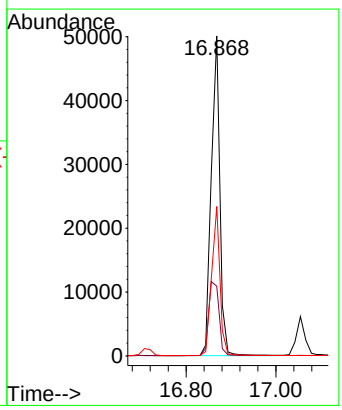
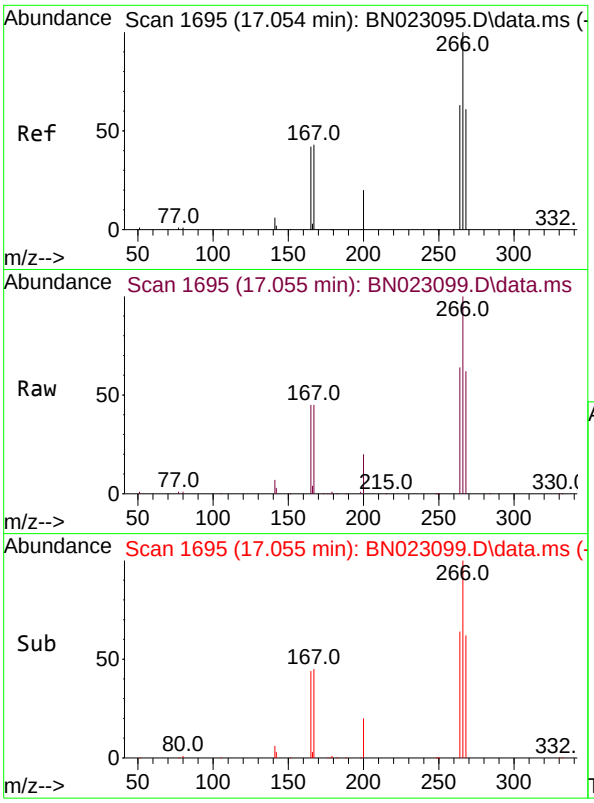


#23
Atrazine
Concen: 5.323 ng
RT: 16.868 min Scan# 1680
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:200 Resp: 66765

Ion	Ratio	Lower	Upper
200	100		
173	21.8	18.2	27.4
215	46.7	38.0	57.0

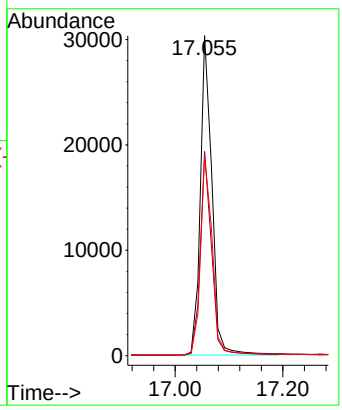




#24
Pentachlorophenol
Concen: 6.858 ng
RT: 17.055 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:266 Resp: 4508

Ion	Ratio	Lower	Upper
266	100		
264	62.4	50.1	75.1
268	63.6	49.7	74.5



Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

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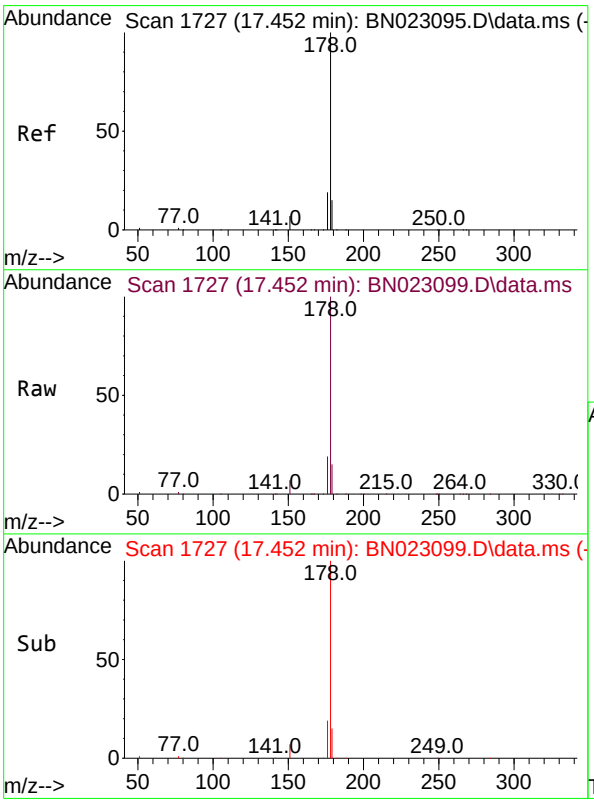
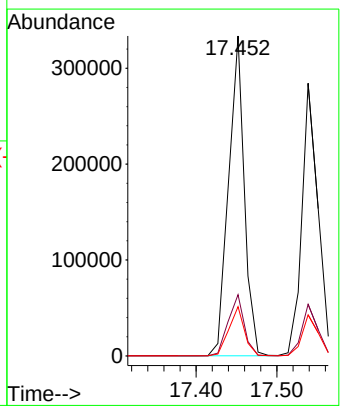
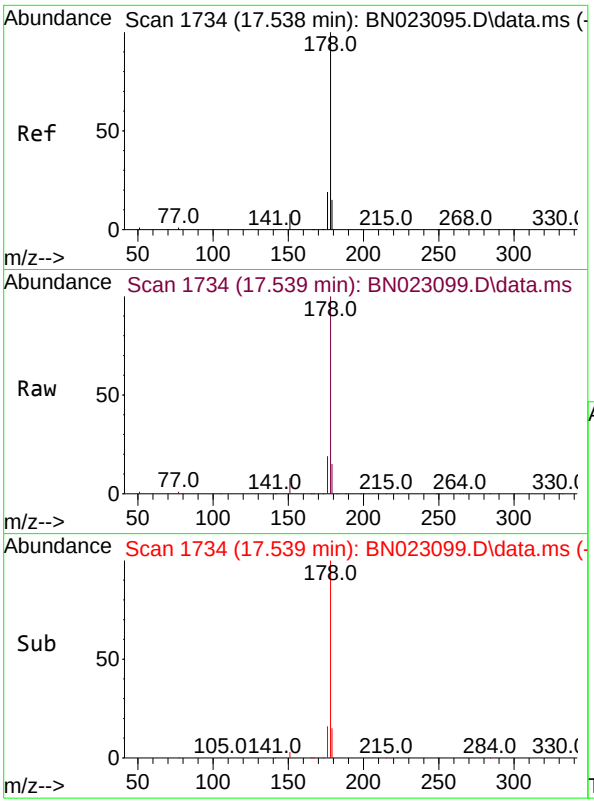


#25
Phenanthrene
Concen: 4.690 ng
RT: 17.452 min Scan# 1727
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:178 Resp: 452445

Ion	Ratio	Lower	Upper
178	100		
176	19.4	15.4	23.2
179	15.3	12.2	18.2

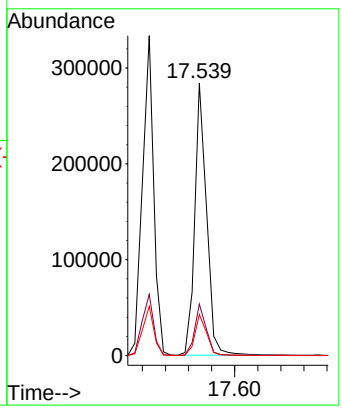




#26
Anthracene
Concen: 5.163 ng
RT: 17.539 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:178 Resp: 40135

Ion	Ratio	Lower	Upper
178	100		
176	18.7	15.1	22.7
179	15.2	12.2	18.4



Instrument :
BNA_N
ClientSampleId :
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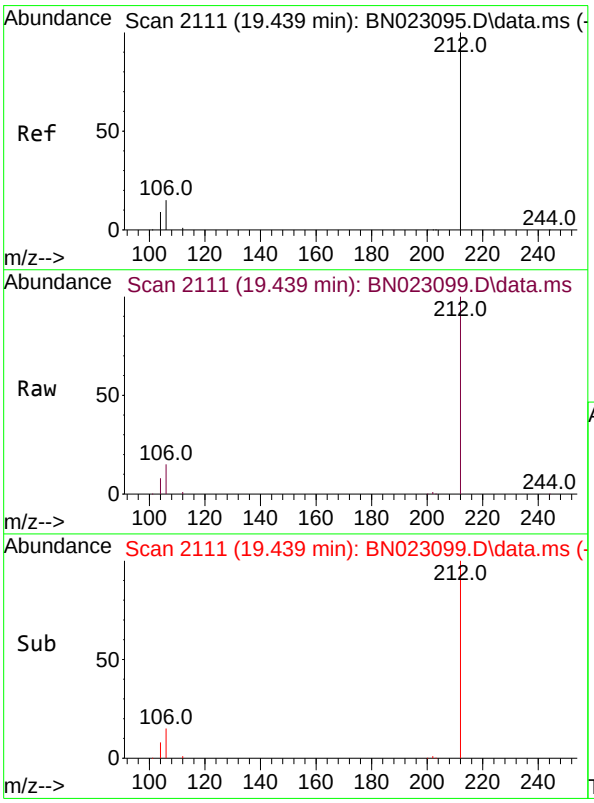
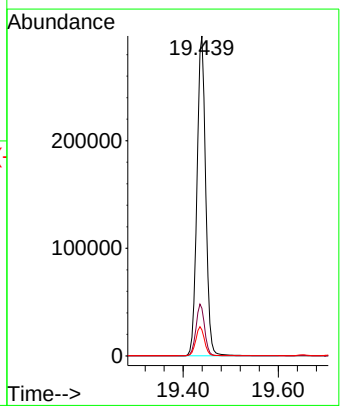
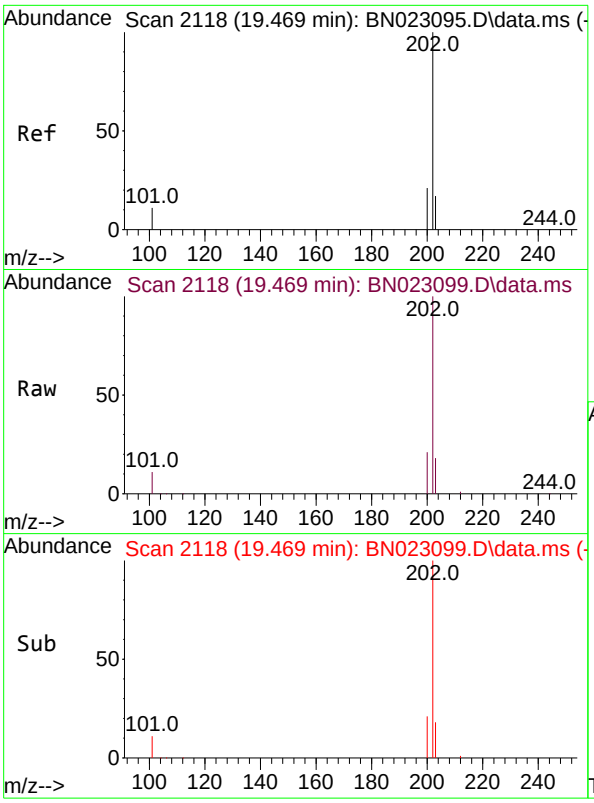


#27
Fluoranthene-d10
Concen: 4.821 ng
RT: 19.439 min Scan# 2111
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:212 Resp: 377753

Ion	Ratio	Lower	Upper
212	100		
106	16.1	13.0	19.4
104	9.0	7.5	11.3





#28
Fluoranthene
Concen: 4.809 ng
RT: 19.469 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:202 Resp: 50600

Ion	Ratio	Lower	Upper
202	100		
101	12.3	9.7	14.5
203	17.4	13.8	20.6

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

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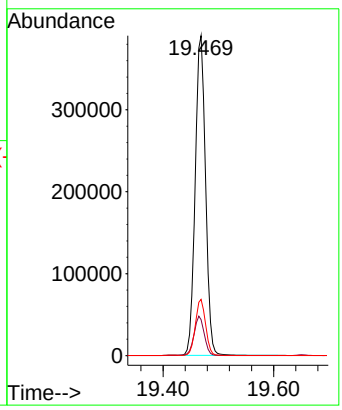
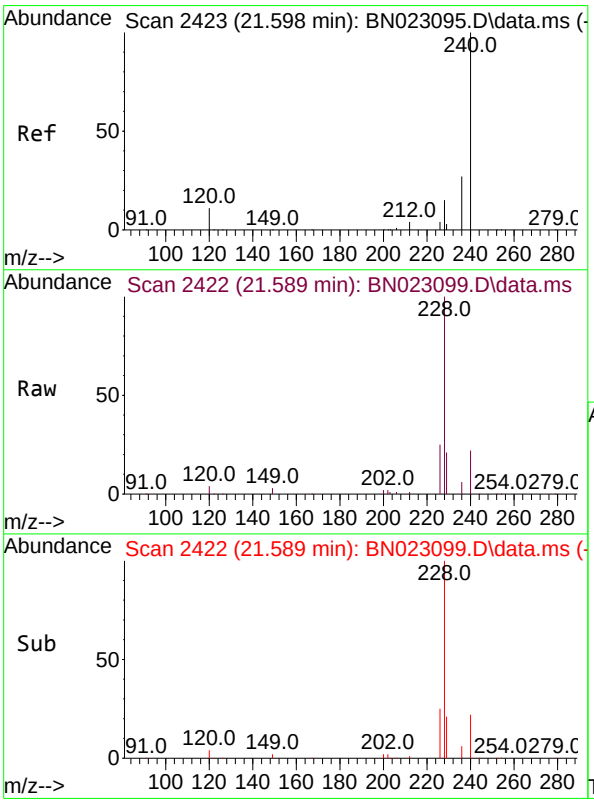
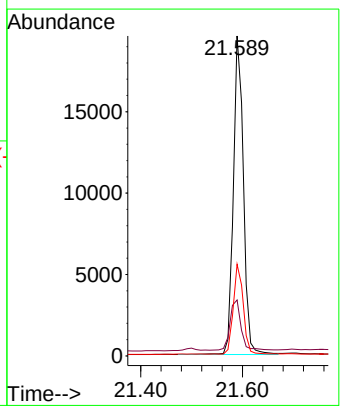


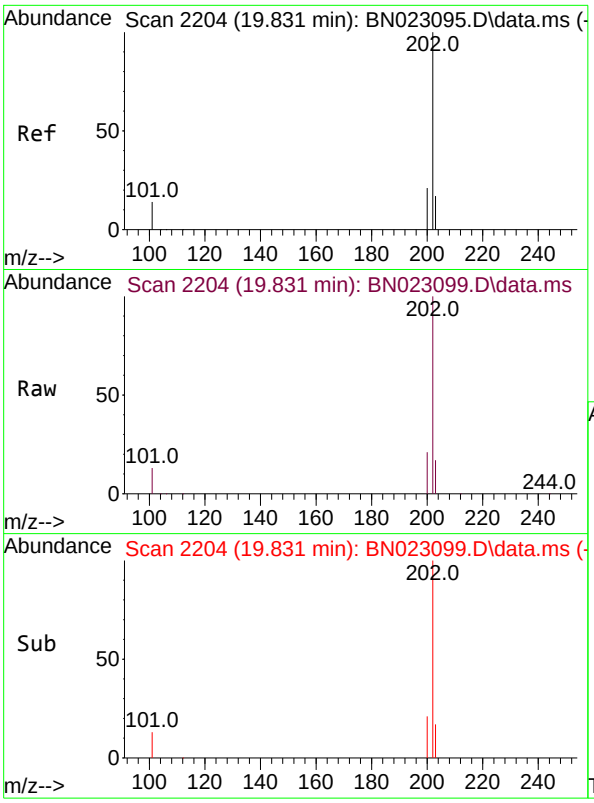


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.589 min Scan# 2422
Delta R.T. -0.009 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:240 Resp: 26816

Ion	Ratio	Lower	Upper
240	100		
120	17.5	10.1	15.1#
236	28.6	22.2	33.4

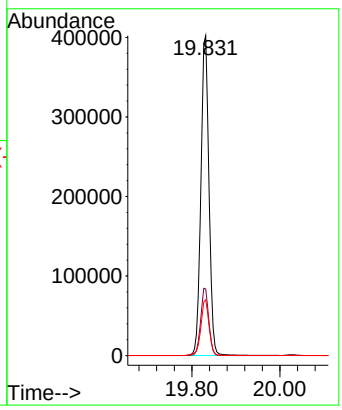




#30
Pyrene
Concen: 4.571 ng
RT: 19.831 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:202 Resp: 51113

Ion	Ratio	Lower	Upper
202	100		
200	21.1	16.9	25.3
203	17.8	14.2	21.4



Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

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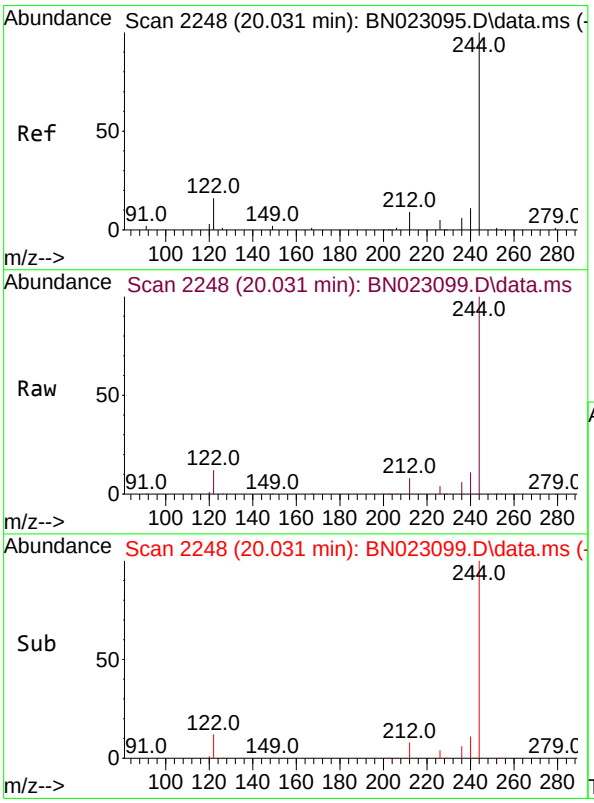
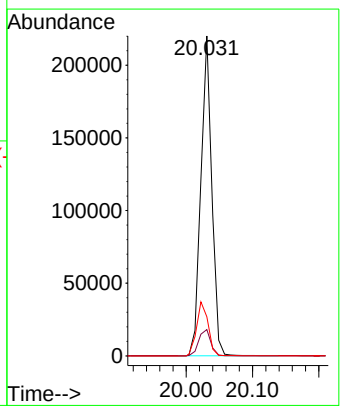
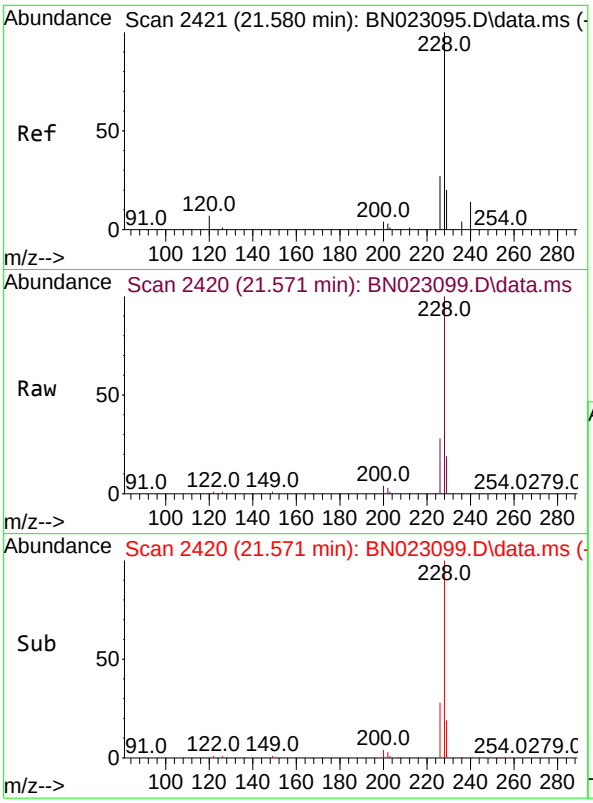


#31
Terphenyl-d14
Concen: 4.418 ng
RT: 20.031 min Scan# 2248
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:244 Resp: 224844

Ion	Ratio	Lower	Upper
244	100		
212	8.2	7.6	11.4
122	12.2	12.6	18.8#

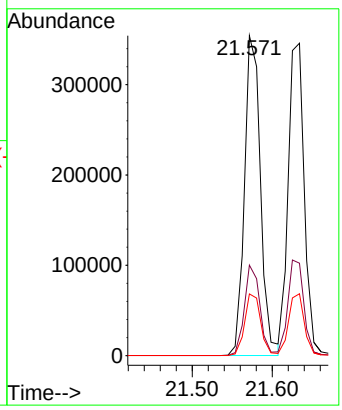




#32
Benzo(a)anthracene
Concen: 4.950 ng
RT: 21.571 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:228 Resp: 49003

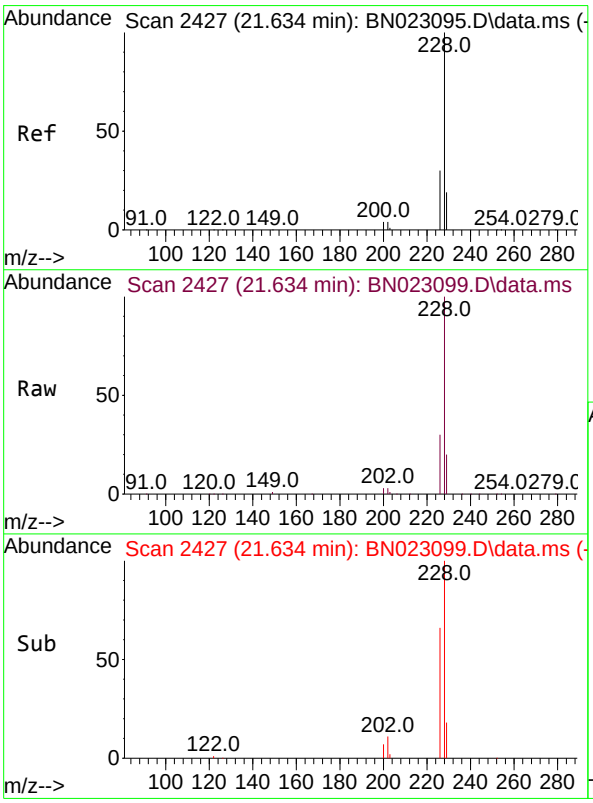
Ion	Ratio	Lower	Upper
228	100		
226	28.3	22.0	33.0
229	19.3	15.8	23.8



Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Manual Integrations
APPROVED

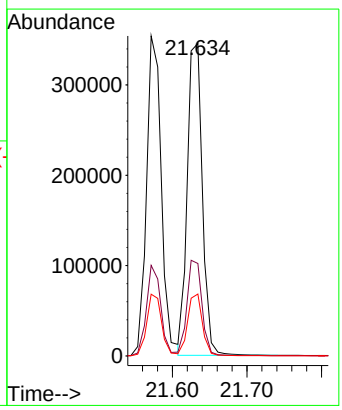
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022

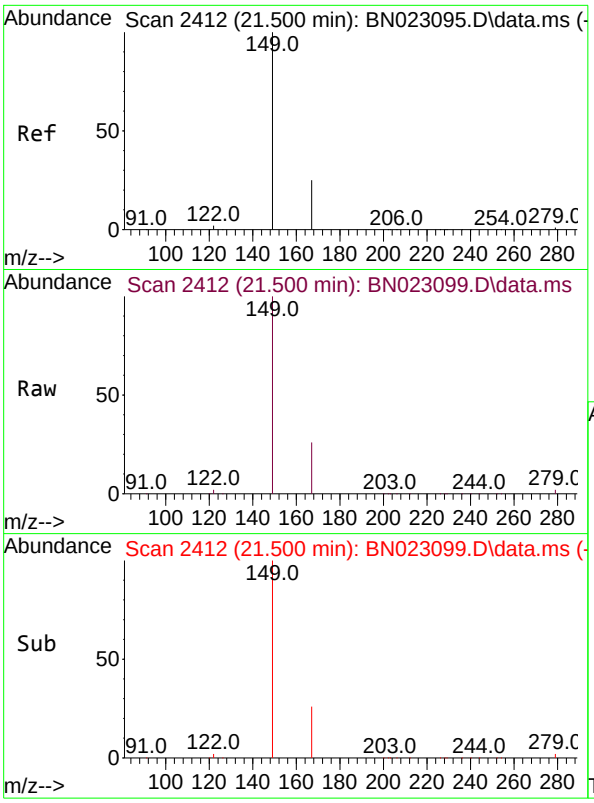


#33
Chrysene
Concen: 4.385 ng
RT: 21.634 min Scan# 2427
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:228 Resp: 485095

Ion	Ratio	Lower	Upper
228	100		
226	29.6	24.4	36.6
229	19.8	15.6	23.4





#34
Bis(2-ethylhexyl)phthalate
Concen: 5.484 ng
RT: 21.500 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:149 Resp: 234584

Ion	Ratio	Lower	Upper
149	100		
167	25.9	20.2	30.2
279	2.4	2.3	3.5

Manual Integrations
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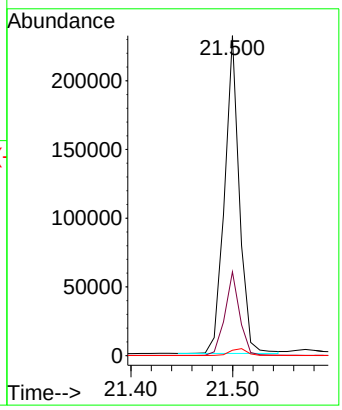
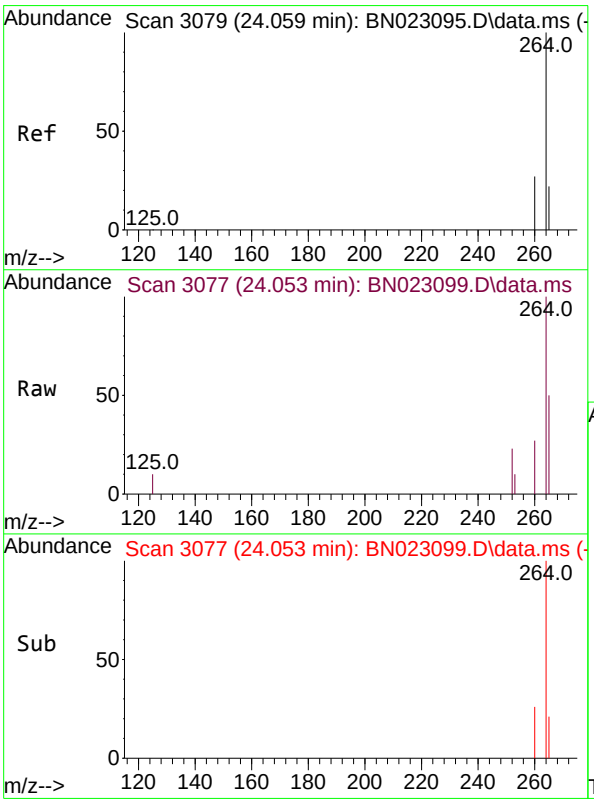
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022

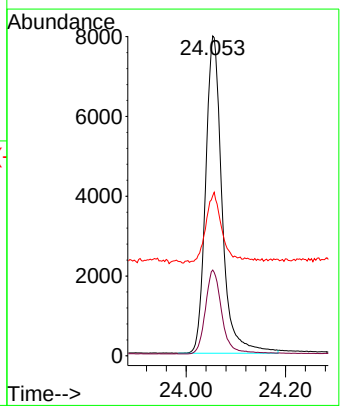


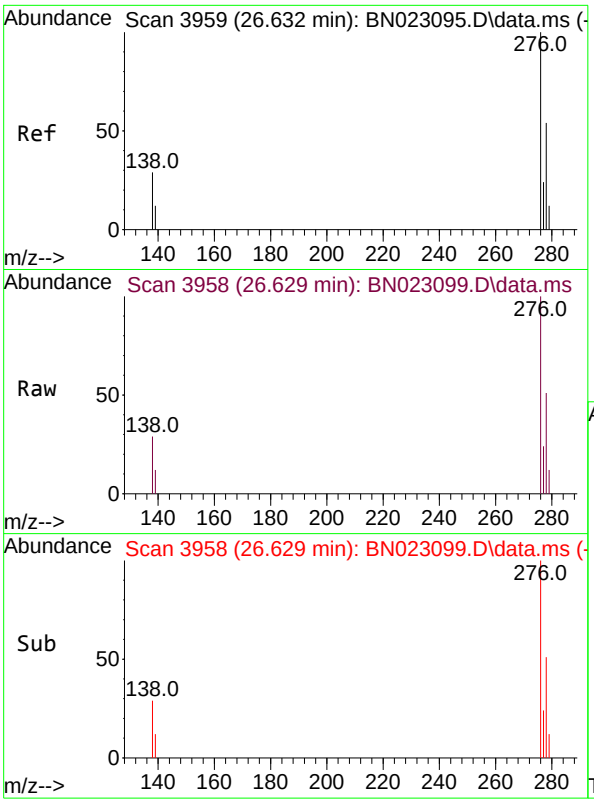


#35
Perylene-d12
Concen: 0.400 ng
RT: 24.053 min Scan# 3077
Delta R.T. -0.006 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:264 Resp: 18277

Ion	Ratio	Lower	Upper
264	100		
260	26.8	21.7	32.5
265	50.1	43.2	64.8

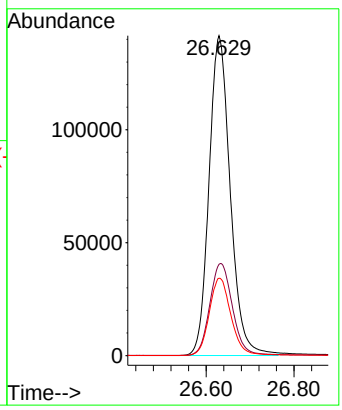




#36
Indeno(1,2,3-cd)pyrene
Concen: 4.890 ng
RT: 26.629 min Scan# 3
Delta R.T. -0.003 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:276 Resp: 47495

Ion	Ratio	Lower	Upper
276	100		
138	30.7	25.0	37.6
277	24.8	19.8	29.8



Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Manual Integrations
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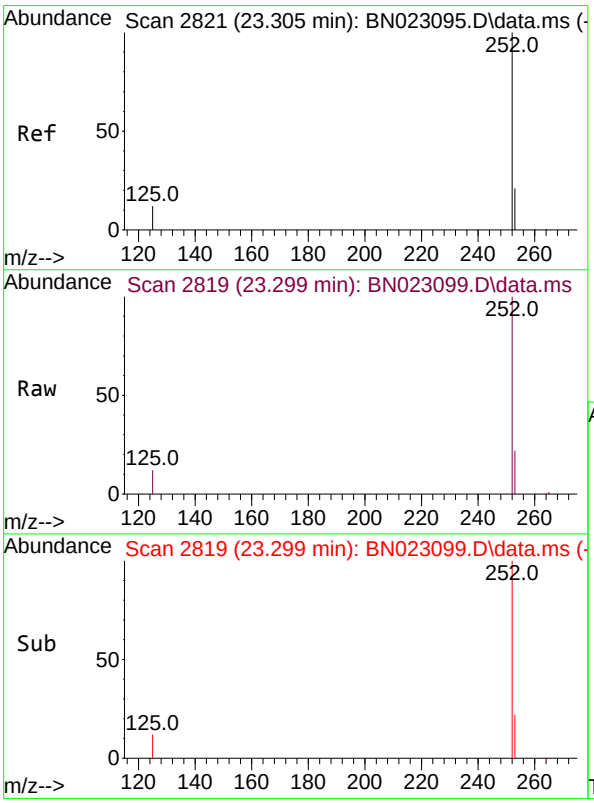
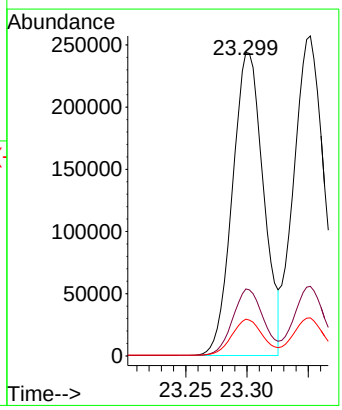
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022

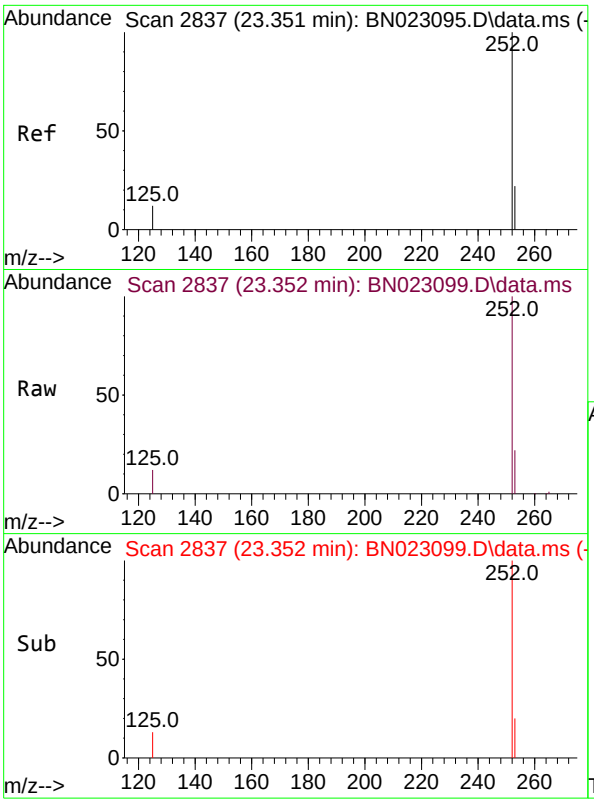


#37
Benzo(b)fluoranthene
Concen: 5.138 ng
RT: 23.299 min Scan# 2819
Delta R.T. -0.006 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:252 Resp: 429250

Ion	Ratio	Lower	Upper
252	100		
253	22.1	19.0	28.4
125	12.1	12.8	19.2#

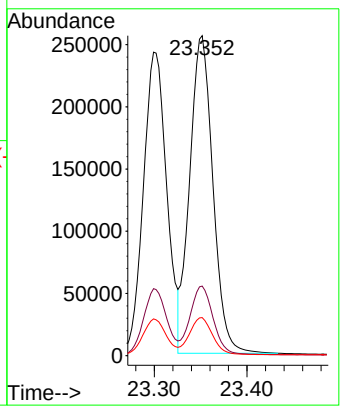




#38
Benzo(k)fluoranthene
Concen: 5.195 ng
RT: 23.352 min Scan# 28
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:252 Resp: 444851

Ion	Ratio	Lower	Upper
252	100		
253	21.8	19.1	28.7
125	11.9	12.5	18.7#



Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Manual Integrations
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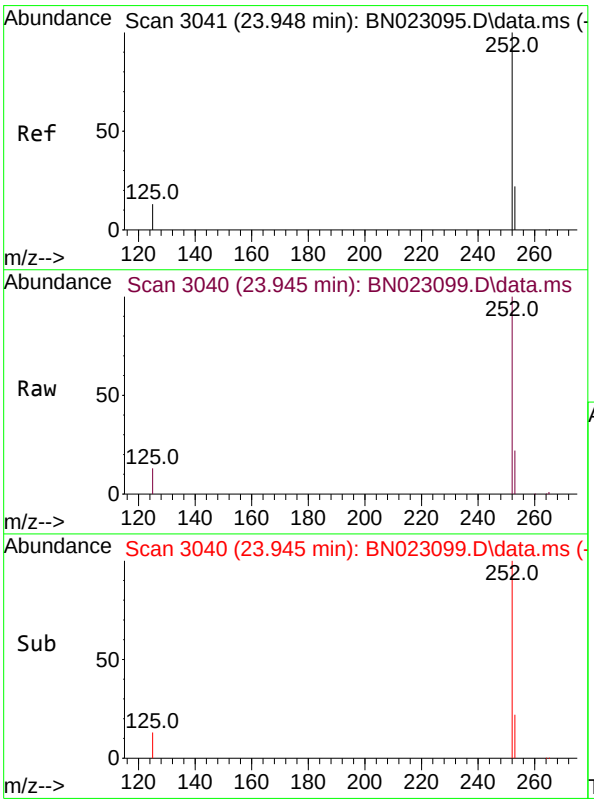
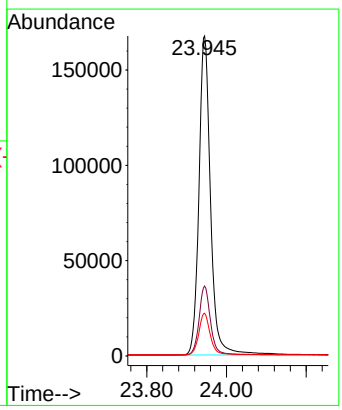
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022

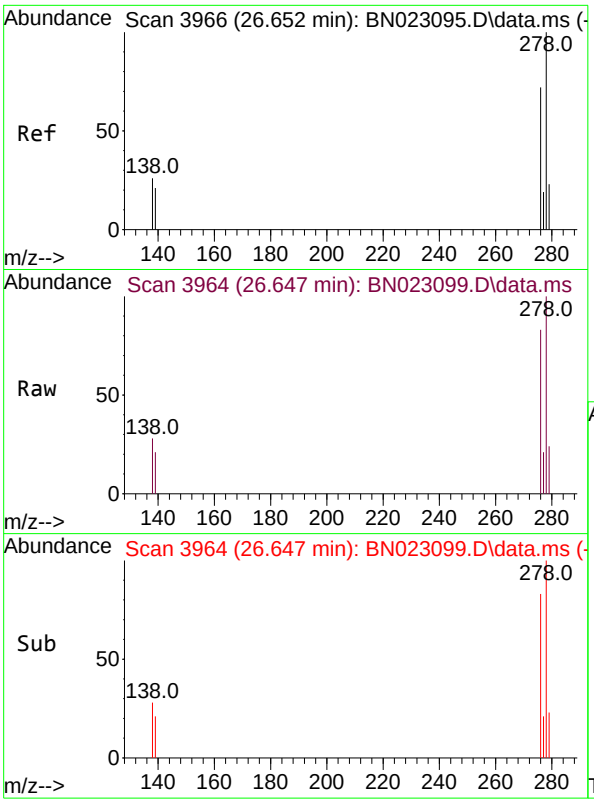


#39
Benzo(a)pyrene
Concen: 5.001 ng
RT: 23.945 min Scan# 3040
Delta R.T. -0.003 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:252 Resp: 338522

Ion	Ratio	Lower	Upper
252	100		
253	21.8	20.6	30.8
125	13.3	15.8	23.8#

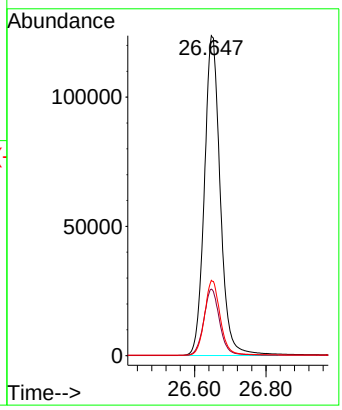




#40
Dibenzo(a,h)anthracene
Concen: 4.970 ng
RT: 26.647 min Scan# 3
Delta R.T. -0.006 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:278 Resp: 38191

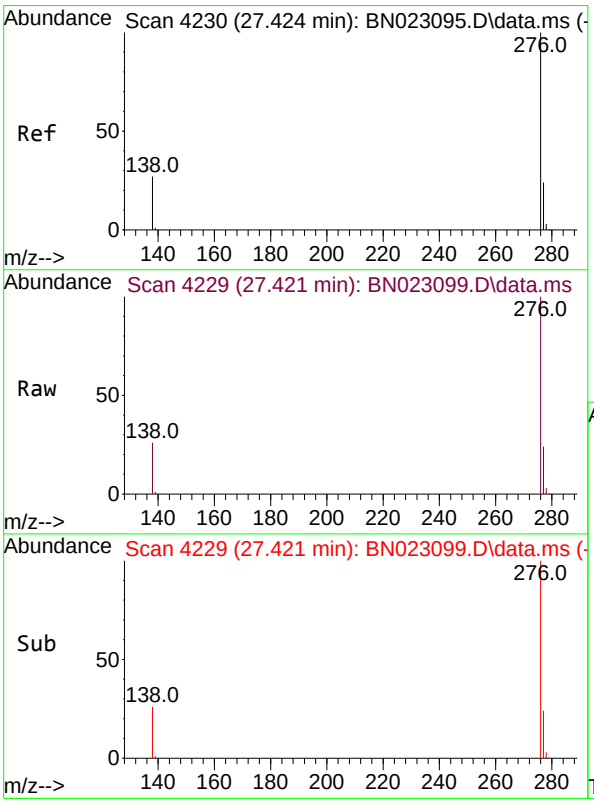
Ion	Ratio	Lower	Upper
278	100		
139	20.8	17.5	26.3
279	23.5	20.5	30.7



Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Manual Integrations
APPROVED

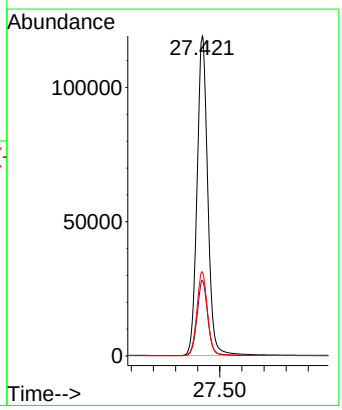
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022



#41
Benzo(g,h,i)perylene
Concen: 5.077 ng
RT: 27.421 min Scan# 4229
Delta R.T. -0.003 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:276 Resp: 399388

Ion	Ratio	Lower	Upper
276	100		
277	23.6	19.9	29.9
138	26.2	22.2	33.2



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023100.D
Acq On : 08 Dec 2022 18:17
Operator : CG/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Quant Time: Dec 09 07:47:50 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:44:40 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	8.021	152	7612	0.400	ng		0.00
7) Naphthalene-d8	10.840	136	22566	0.400	ng		0.00
13) Acenaphthene-d10	14.666	164	12449	0.400	ng		0.00
19) Phenanthrene-d10	17.402	188	27164	0.400	ng		#-0.01
29) Chrysene-d12	21.589	240	22009	0.400	ng		# 0.00
35) Perylene-d12	24.053	264	17542	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.558	112	5566	0.393	ng		0.00
5) Phenol-d6	7.168	99	6971	0.387	ng		0.00
8) Nitrobenzene-d5	9.185	82	5658	0.381	ng		0.00
11) 2-Methylnaphthalene-d10	12.427	152	15694	0.410	ng		0.00
14) 2,4,6-Tribromophenol	16.148	330	1561	0.346	ng		0.00
15) 2-Fluorobiphenyl	13.298	172	20220	0.407	ng		0.00
27) Fluoranthene-d10	19.439	212	24017	0.378	ng		0.00
31) Terphenyl-d14	20.031	244	14543	0.407	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.398	88	3062	0.408	ng		99
3) n-Nitrosodimethylamine	3.738	42	2878	0.390	ng		99
6) bis(2-Chloroethyl)ether	7.436	93	8241	0.403	ng		98
9) Naphthalene	10.893	128	22785	0.396	ng		100
10) Hexachlorobutadiene	11.182	225	4421	0.404	ng	#	100
12) 2-Methylnaphthalene	12.117	142	3243	0.379	ng		99
16) Acenaphthylene	14.388	152	18308	0.365	ng		100
17) Acenaphthene	14.730	154	14119	0.383	ng		99
18) Fluorene	15.703	166	15779	0.383	ng		100
20) 4,6-Dinitro-2-methylph...	15.776	198	1113	0.440	ng		98
21) 4-Bromophenyl-phenylether	16.595	248	5541	0.382	ng		99
22) Hexachlorobenzene	16.719	284	7695	0.405	ng		100
23) Atrazine	16.868	200	3573	0.350	ng		99
24) Pentachlorophenol	17.055	266	1977	0.300	ng		98
25) Phenanthrene	17.452	178	31445	0.388	ng		100
26) Anthracene	17.539	178	23419	0.363	ng		99
28) Fluoranthene	19.469	202	32800	0.378	ng		100
30) Pyrene	19.827	202	31897	0.396	ng		100
32) Benzo(a)anthracene	21.571	228	25864	0.365	ng		98
33) Chrysene	21.625	228	31807	0.399	ng		98
34) Bis(2-ethylhexyl)phtha...	21.500	149	10468	0.349	ng		100
36) Indeno(1,2,3-cd)pyrene	26.623	276	31454	0.400	ng		100
37) Benzo(b)fluoranthene	23.299	252	28324	0.389	ng		99
38) Benzo(k)fluoranthene	23.346	252	27995	0.379	ng		99
39) Benzo(a)pyrene	23.942	252	20767	0.381	ng		96
40) Dibenzo(a,h)anthracene	26.644	278	25035	0.397	ng		99
41) Benzo(g,h,i)perylene	27.418	276	24921	0.370	ng		99

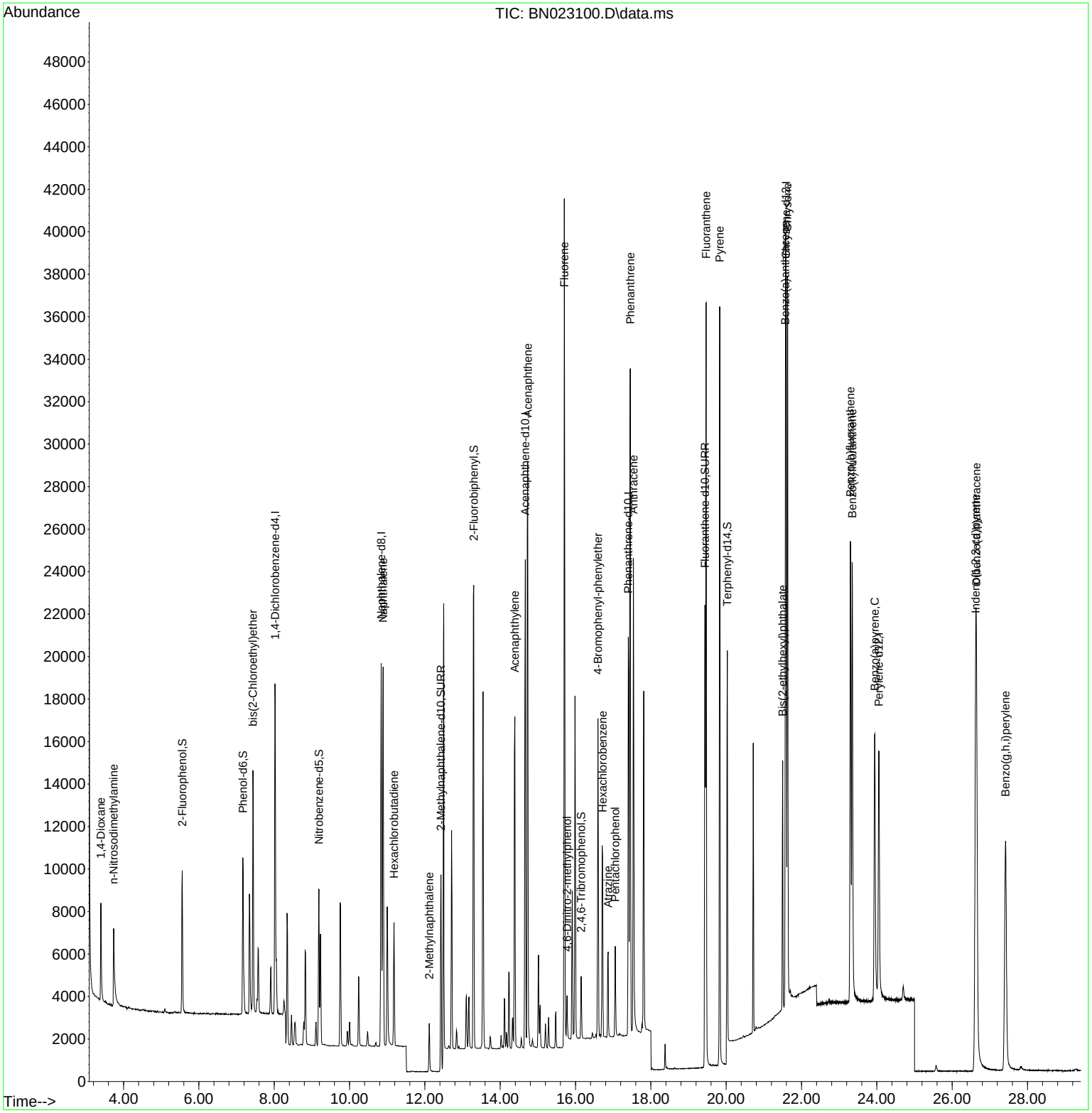
(#) = qualifier out of range (m) = manual integration (+) = signals summed

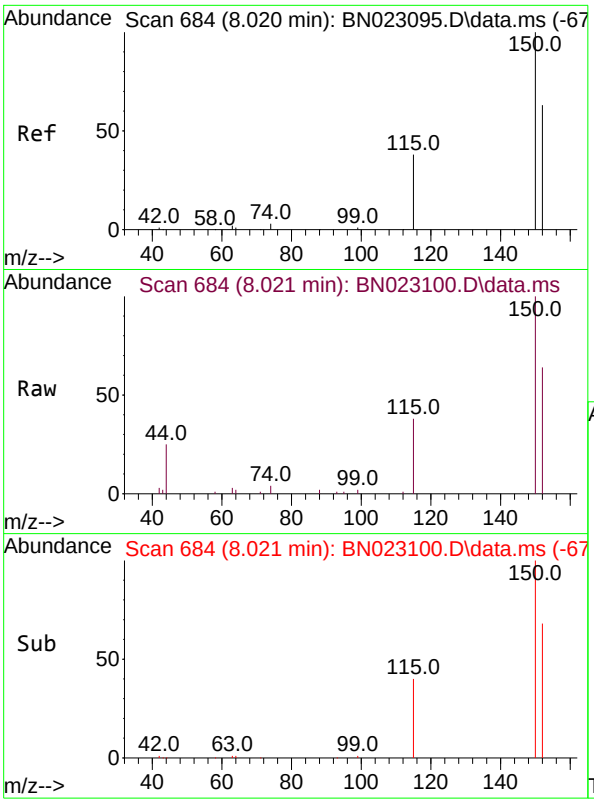
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023100.D
Acq On : 08 Dec 2022 18:17
Operator : CG/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Quant Time: Dec 09 07:47:50 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:44:40 2022
Response via : Initial Calibration



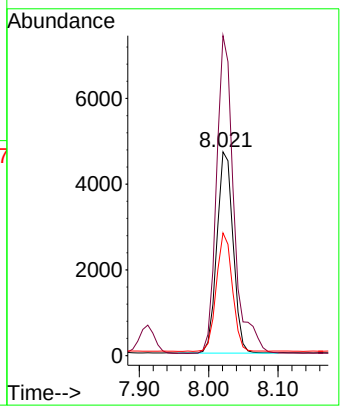


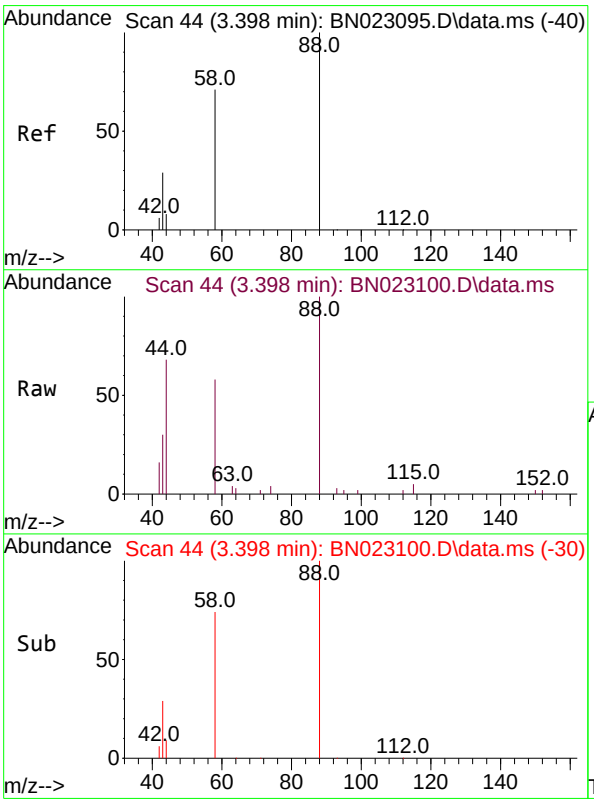
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 8.021 min Scan# 68
Delta R.T. 0.001 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:152 Resp: 7612

Ion	Ratio	Lower	Upper
152	100		
150	157.1	125.6	188.4
115	60.2	49.0	73.4

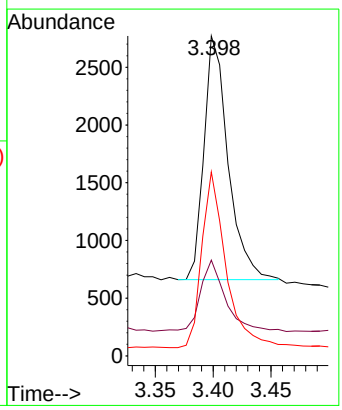


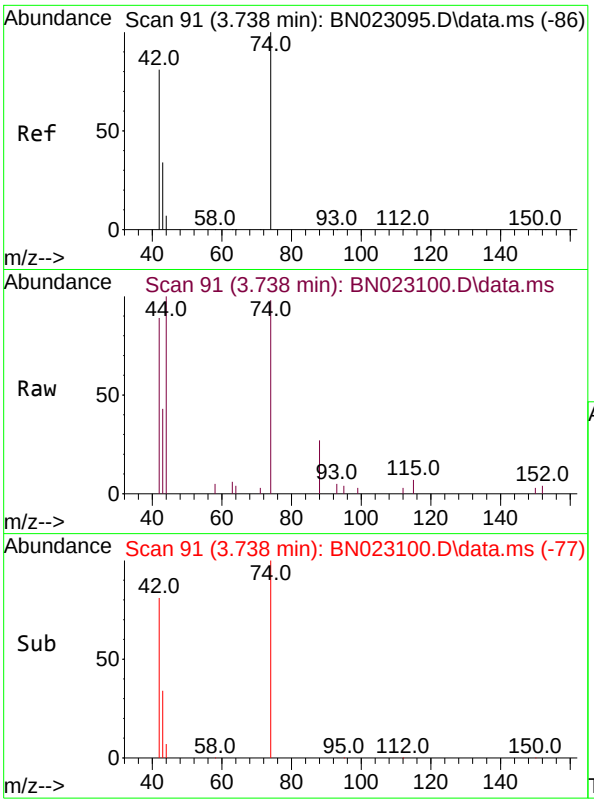


#2
1,4-Dioxane
Concen: 0.408 ng
RT: 3.398 min Scan# 44
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion: 88 Resp: 3062

Ion	Ratio	Lower	Upper
88	100		
43	29.9	23.3	34.9
58	72.0	58.0	87.0



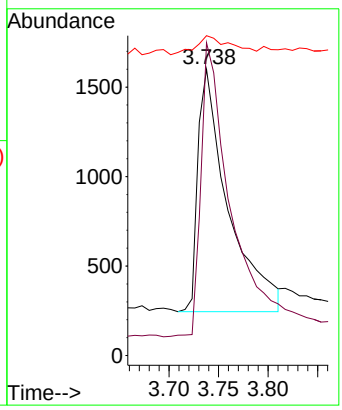


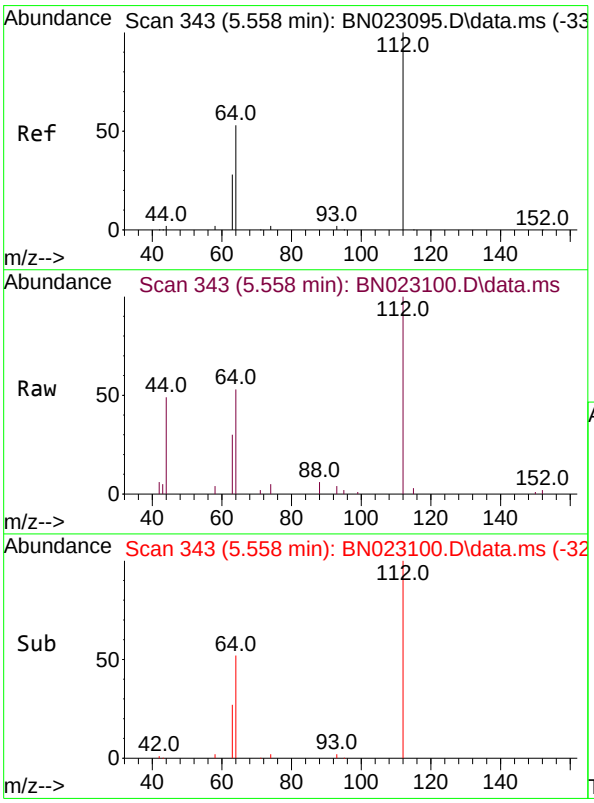
#3
n-Nitrosodimethylamine
Concen: 0.390 ng
RT: 3.738 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion: 42 Resp: 2878

Ion	Ratio	Lower	Upper
42	100		
74	120.6	95.8	143.6
44	9.0	8.4	12.6

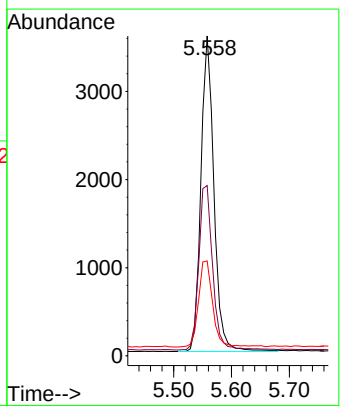


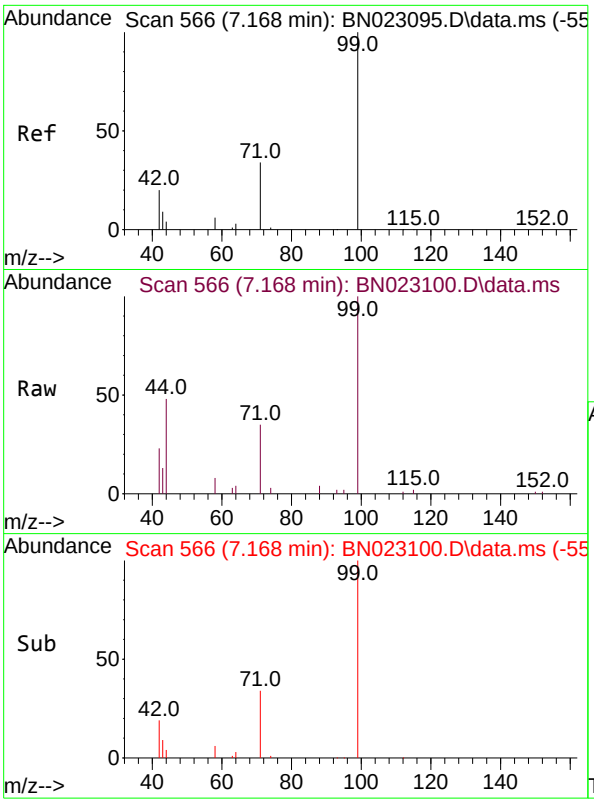


#4
2-Fluorophenol
Concen: 0.393 ng
RT: 5.558 min Scan# 343
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:112 Resp: 5566

Ion	Ratio	Lower	Upper
112	100		
64	55.6	44.4	66.6
63	29.7	23.7	35.5



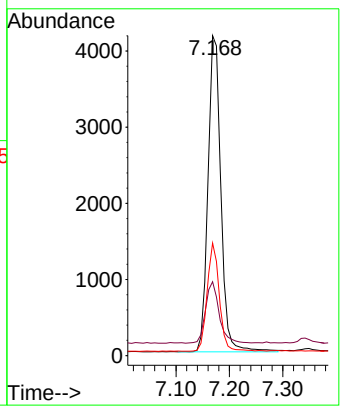


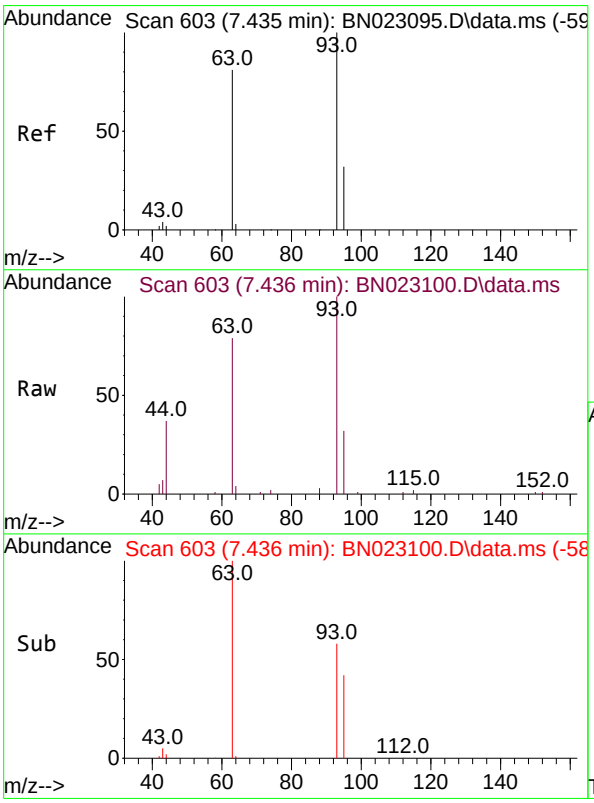
#5
Phenol-d6
Concen: 0.387 ng
RT: 7.168 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion: 99 Resp: 6971

Ion	Ratio	Lower	Upper
99	100		
42	20.5	16.3	24.5
71	32.3	26.5	39.7

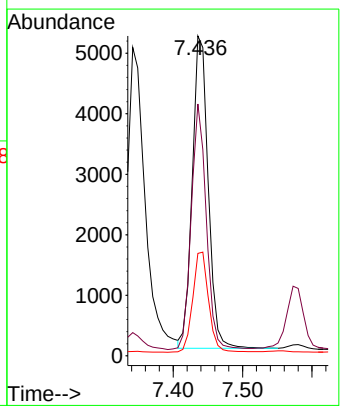


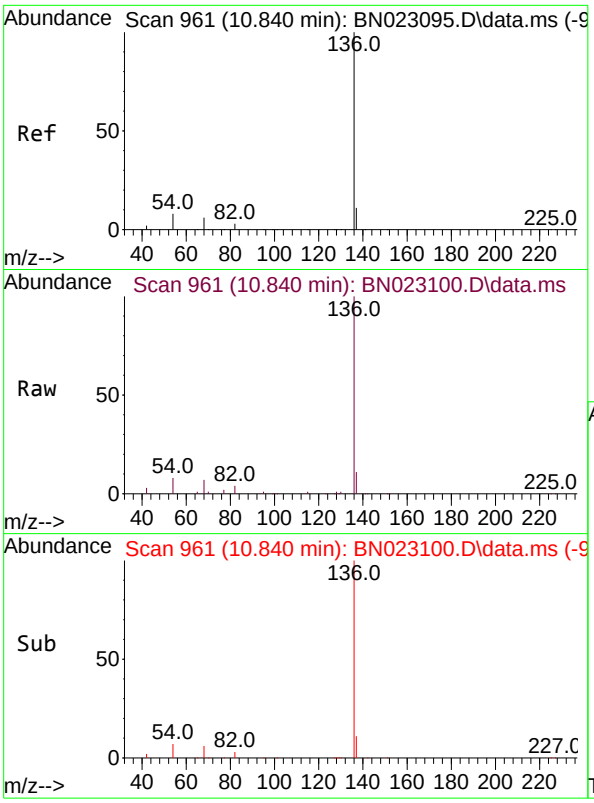


#6
bis(2-Chloroethyl)ether
Concen: 0.403 ng
RT: 7.436 min Scan# 603
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion: 93 Resp: 8241

Ion	Ratio	Lower	Upper
93	100		
63	74.4	58.1	87.1
95	31.9	25.2	37.8



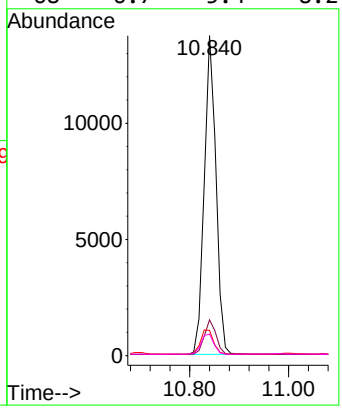


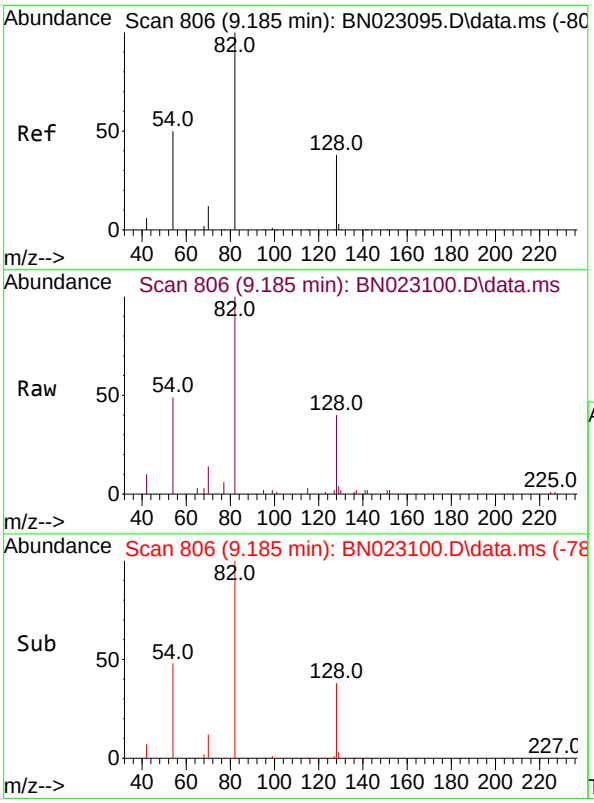
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.840 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:136 Resp: 22566

Ion	Ratio	Lower	Upper
136	100		
137	11.2	9.0	13.4
54	7.9	6.5	9.7
68	6.7	5.4	8.2

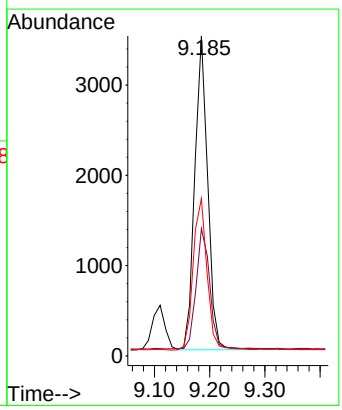


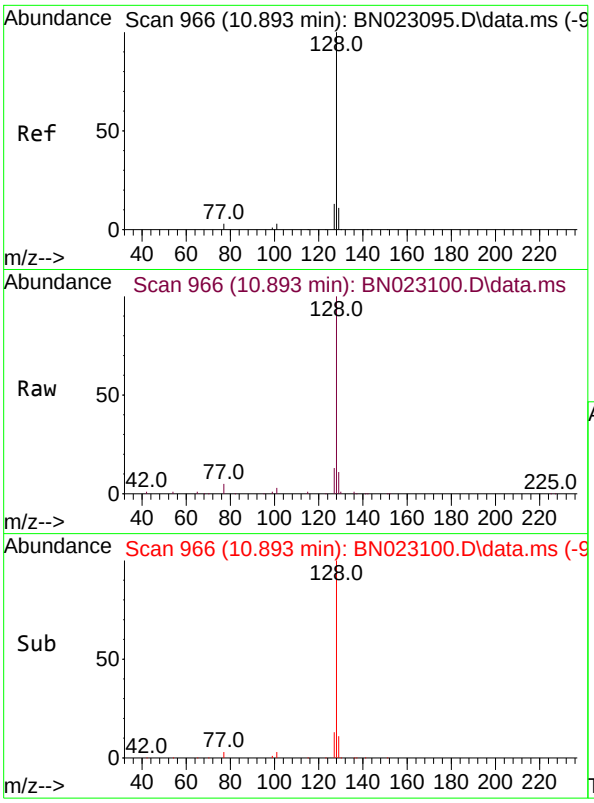


#8
Nitrobenzene-d5
Concen: 0.381 ng
RT: 9.185 min Scan# 806
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion: 82 Resp: 5658

Ion	Ratio	Lower	Upper
82	100		
128	39.8	31.4	47.2
54	49.1	41.0	61.4



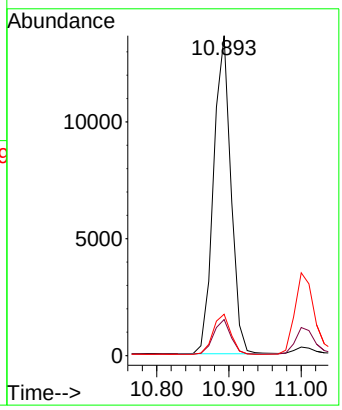


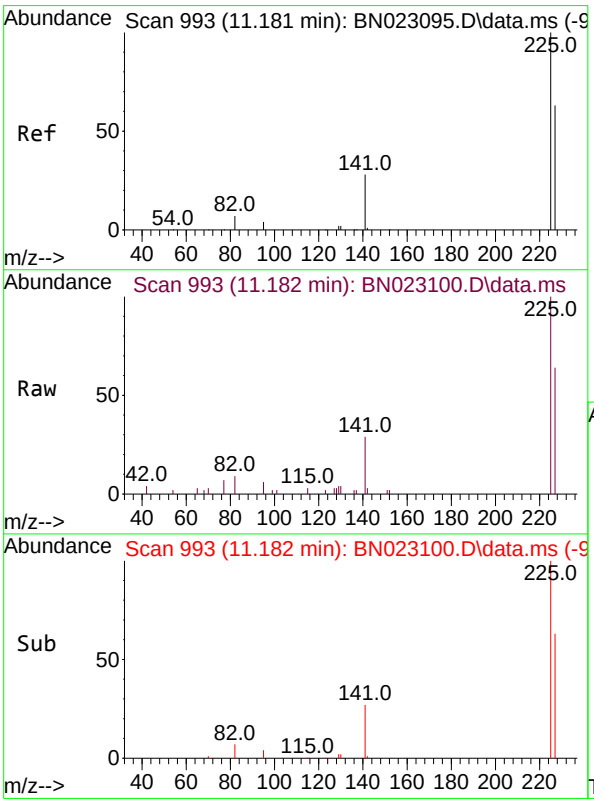
#9
Naphthalene
Concen: 0.396 ng
RT: 10.893 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:128 Resp: 22785

Ion	Ratio	Lower	Upper
128	100		
129	11.3	9.0	13.6
127	12.9	10.5	15.7

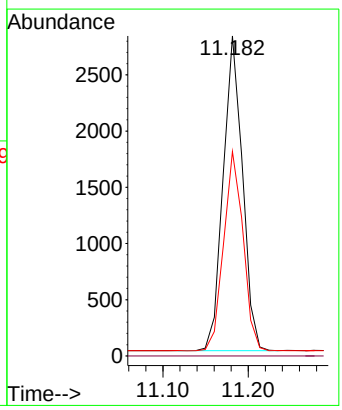


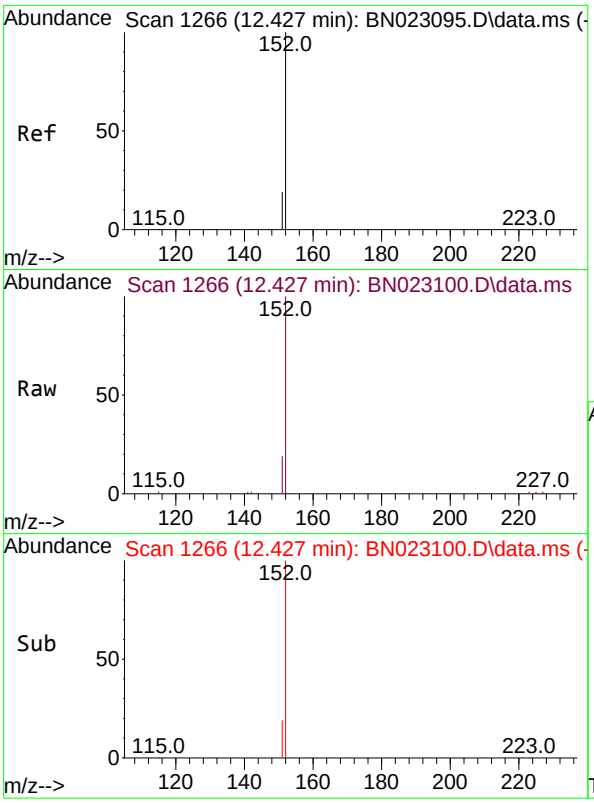


#10
Hexachlorobutadiene
Concen: 0.404 ng
RT: 11.182 min Scan# 993
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:225 Resp: 4421

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.5	51.1	76.7



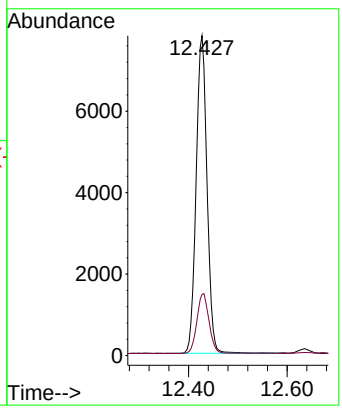


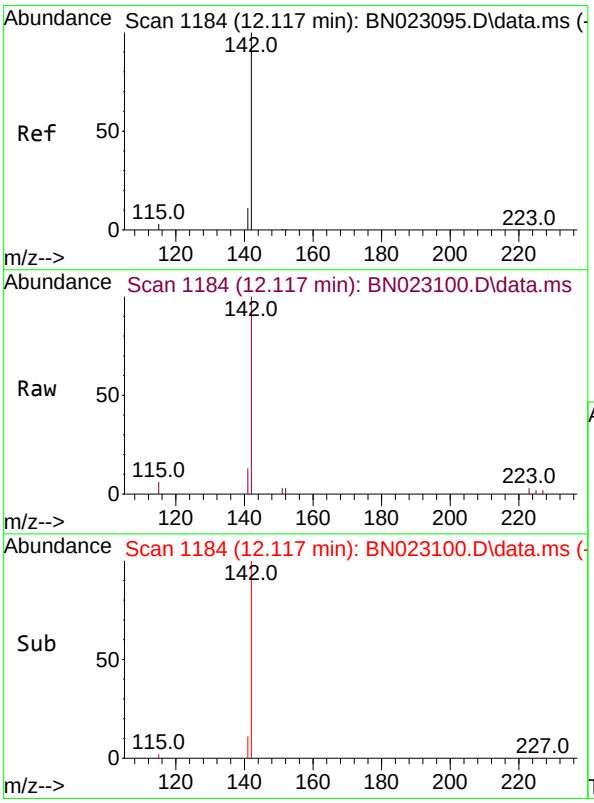
#11
2-Methylnaphthalene-d10
Concen: 0.410 ng
RT: 12.427 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:152 Resp: 15694

Ion	Ratio	Lower	Upper
152	100		
151	15.9	15.1	22.7

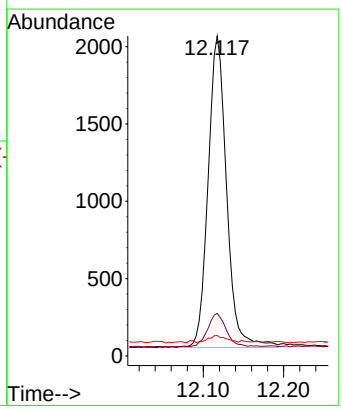


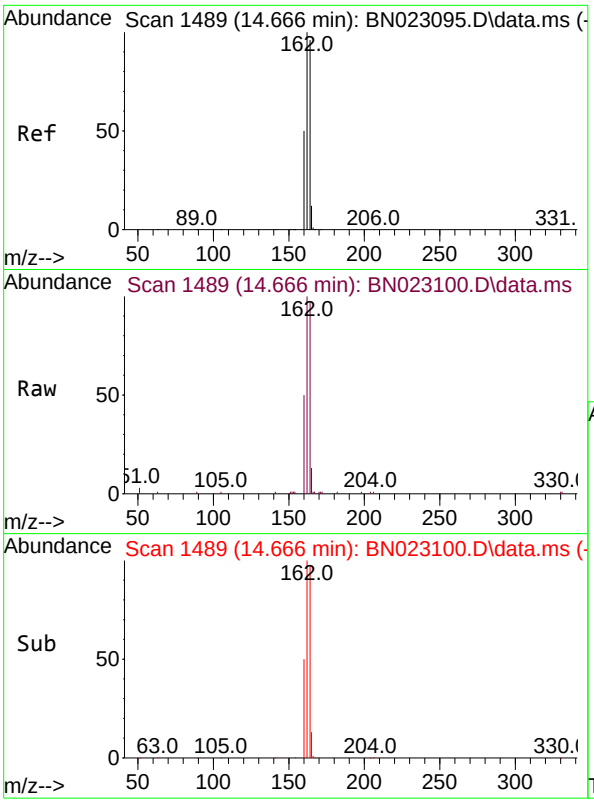


#12
2-Methylnaphthalene
Concen: 0.379 ng
RT: 12.117 min Scan# 1184
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:142 Resp: 3243

Ion	Ratio	Lower	Upper
142	100		
141	13.3	10.9	16.3
115	6.4	5.7	8.5



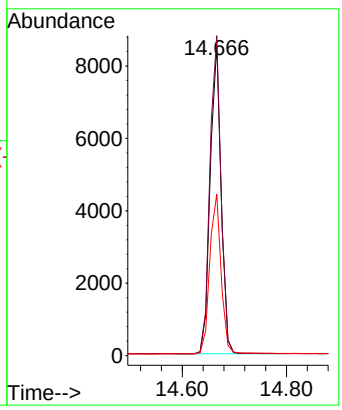


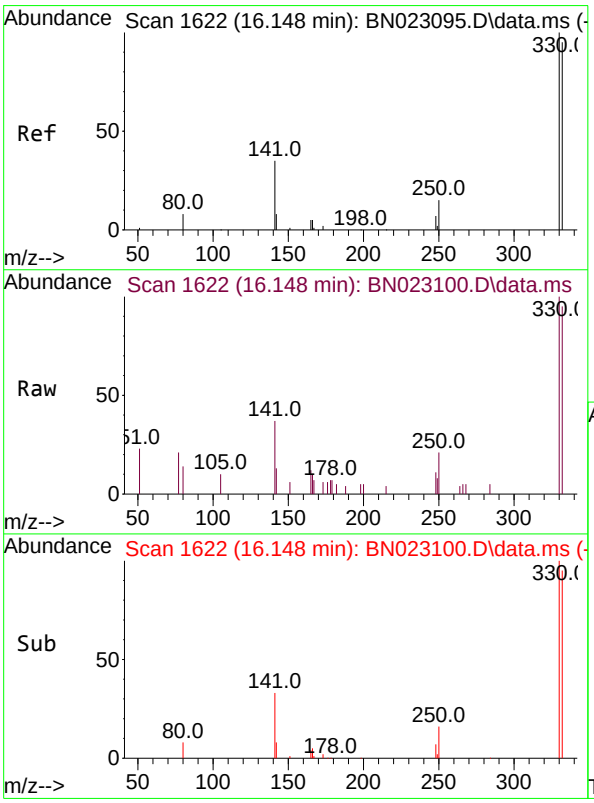
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.666 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:164 Resp: 12449

Ion	Ratio	Lower	Upper
164	100		
162	102.9	83.4	125.0
160	51.9	41.8	62.8

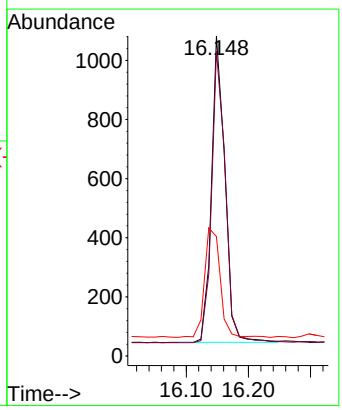


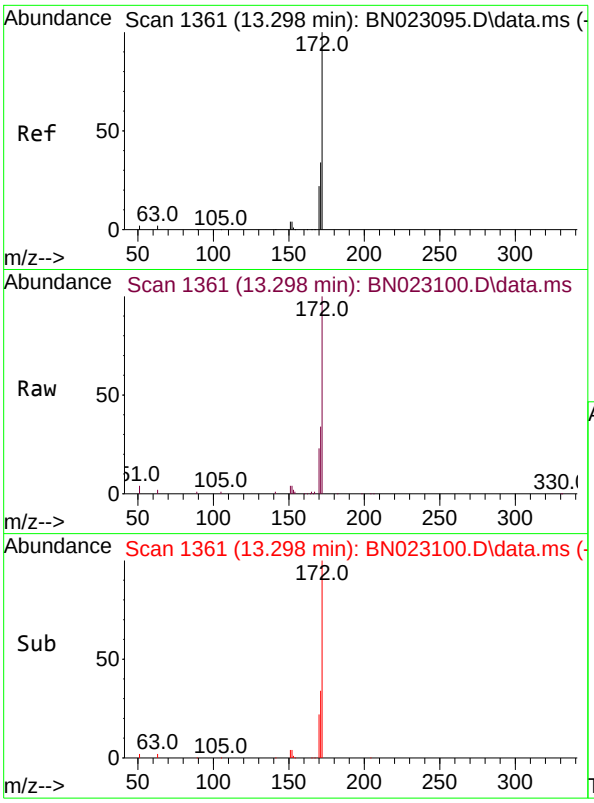


#14
2,4,6-Tribromophenol
Concen: 0.346 ng
RT: 16.148 min Scan# 1622
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:330 Resp: 1561

Ion	Ratio	Lower	Upper
330	100		
332	97.1	77.3	115.9
141	41.2	33.5	50.3



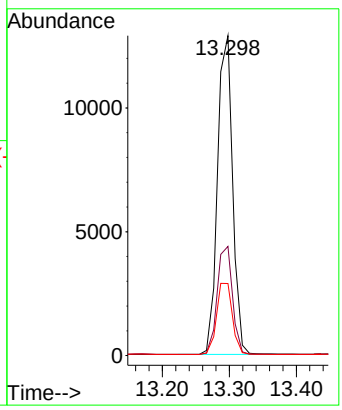


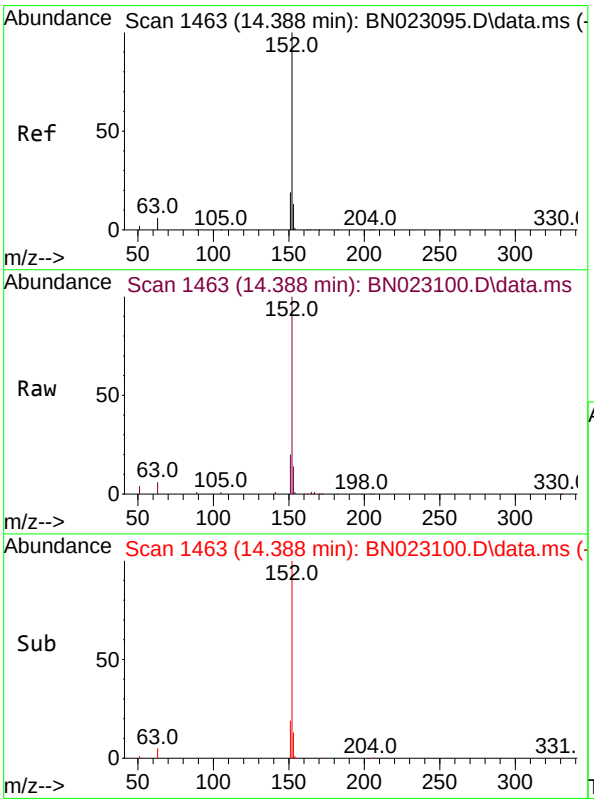
#15
2-Fluorobiphenyl
Concen: 0.407 ng
RT: 13.298 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:172 Resp: 20220

Ion	Ratio	Lower	Upper
172	100		
171	34.1	27.4	41.0
170	22.5	17.9	26.9

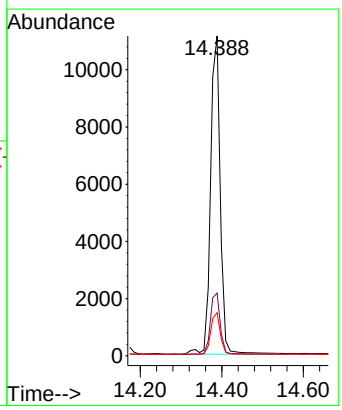


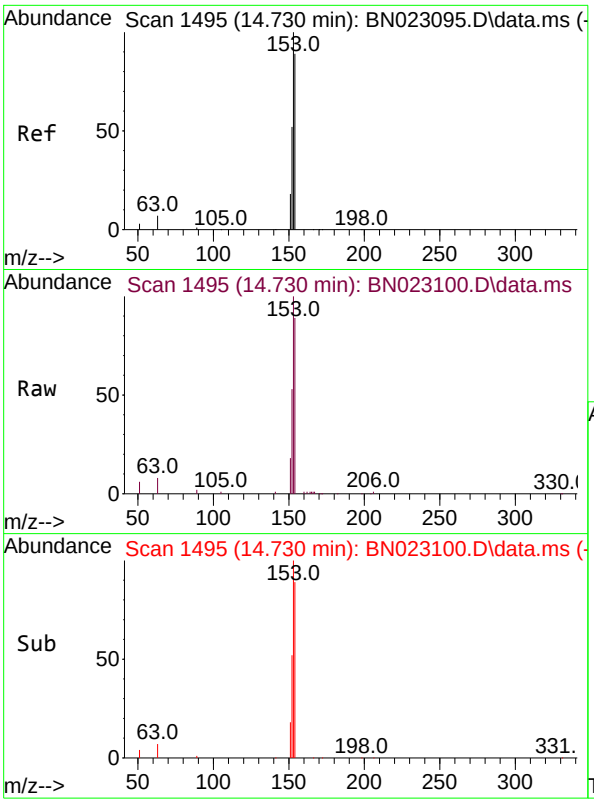


#16
Acenaphthylene
Concen: 0.365 ng
RT: 14.388 min Scan# 1463
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:152 Resp: 18308

Ion	Ratio	Lower	Upper
152	100		
151	19.5	15.4	23.2
153	12.9	10.3	15.5



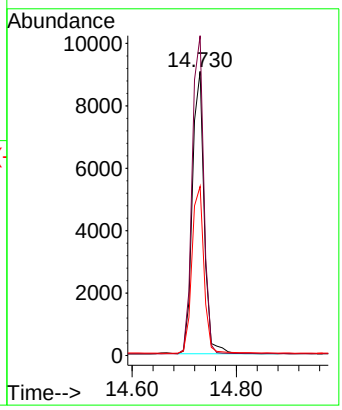


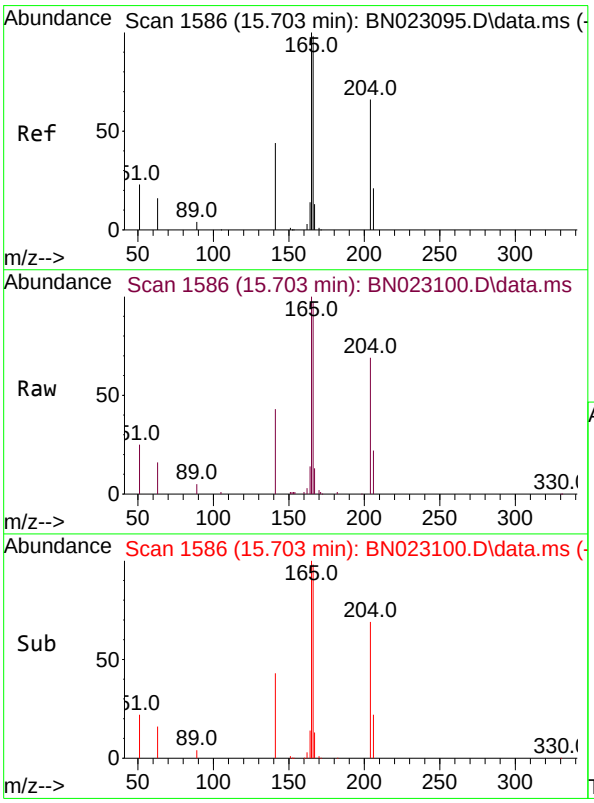
#17
Acenaphthene
Concen: 0.383 ng
RT: 14.730 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:154 Resp: 14119

Ion	Ratio	Lower	Upper
154	100		
153	111.9	88.6	132.8
152	60.6	48.1	72.1

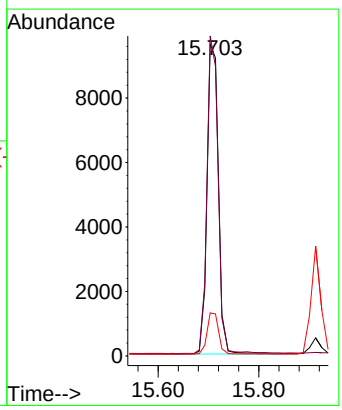


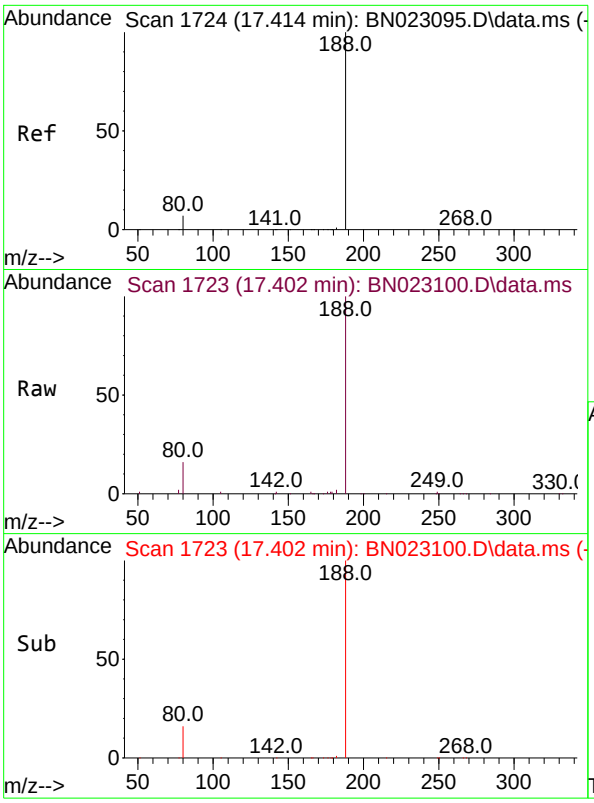


#18
Fluorene
Concen: 0.383 ng
RT: 15.703 min Scan# 1586
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:166 Resp: 15779

Ion	Ratio	Lower	Upper
166	100		
165	99.9	79.8	119.6
167	13.8	10.6	16.0



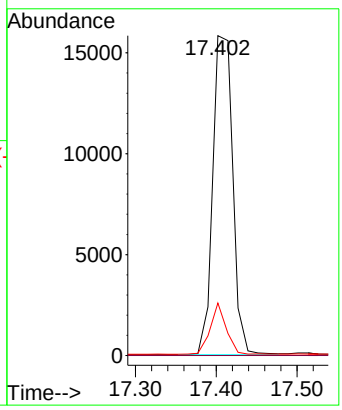


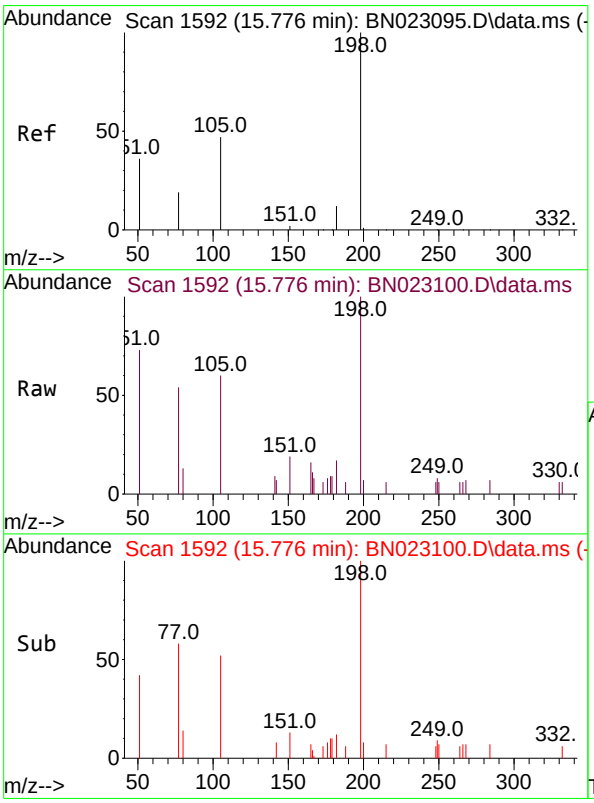
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.402 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:188 Resp: 27164

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	16.4	6.1	9.1#

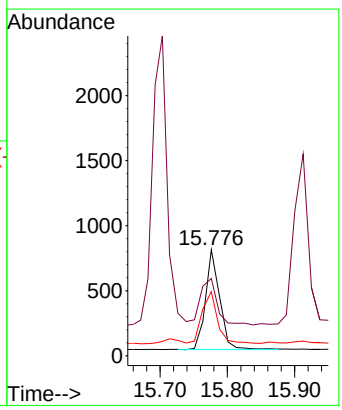


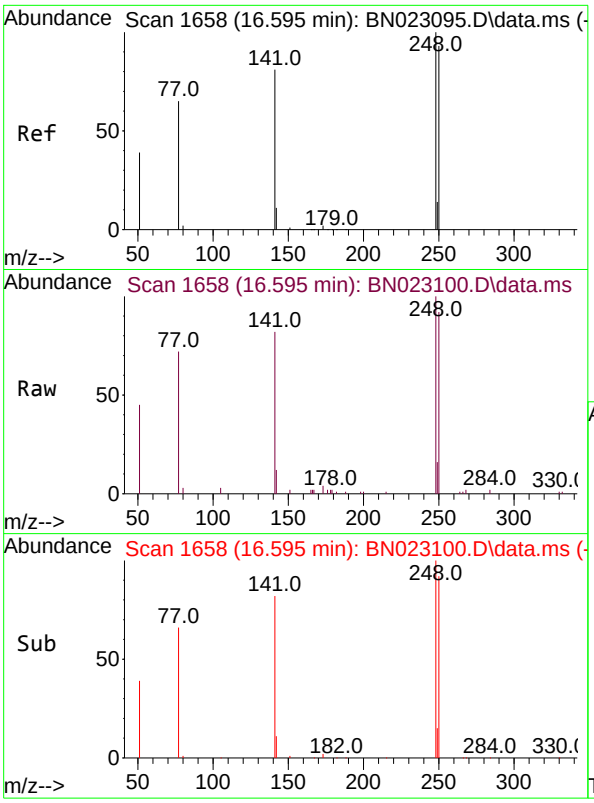


#20
4,6-Dinitro-2-methylphenol
Concen: 0.440 ng
RT: 15.776 min Scan# 1592
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:198 Resp: 1113

Ion	Ratio	Lower	Upper
198	100		
51	72.8	57.0	85.4
105	60.4	47.2	70.8



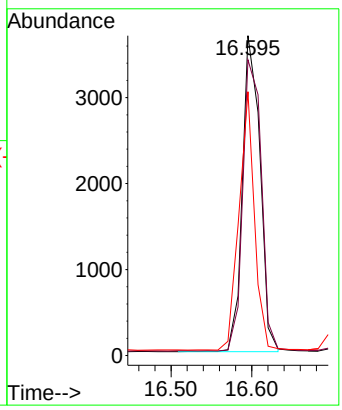


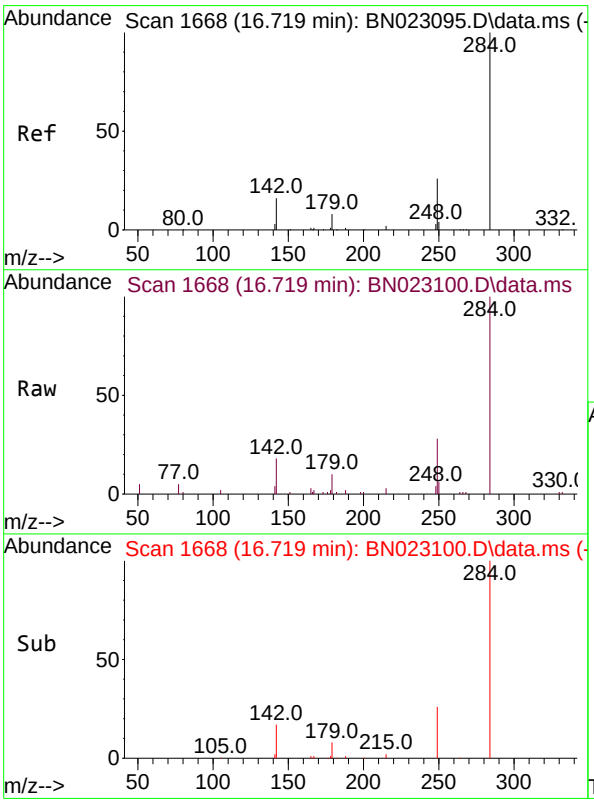
#21
4-Bromophenyl-phenylether
Concen: 0.382 ng
RT: 16.595 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:248 Resp: 5541

Ion	Ratio	Lower	Upper
248	100		
250	92.4	74.3	111.5
141	82.5	65.0	97.6

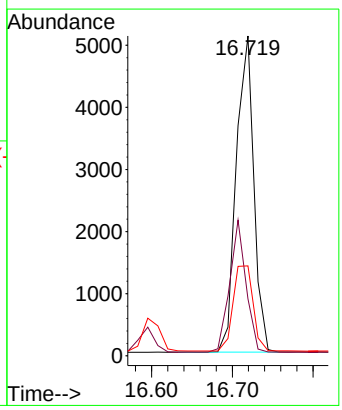


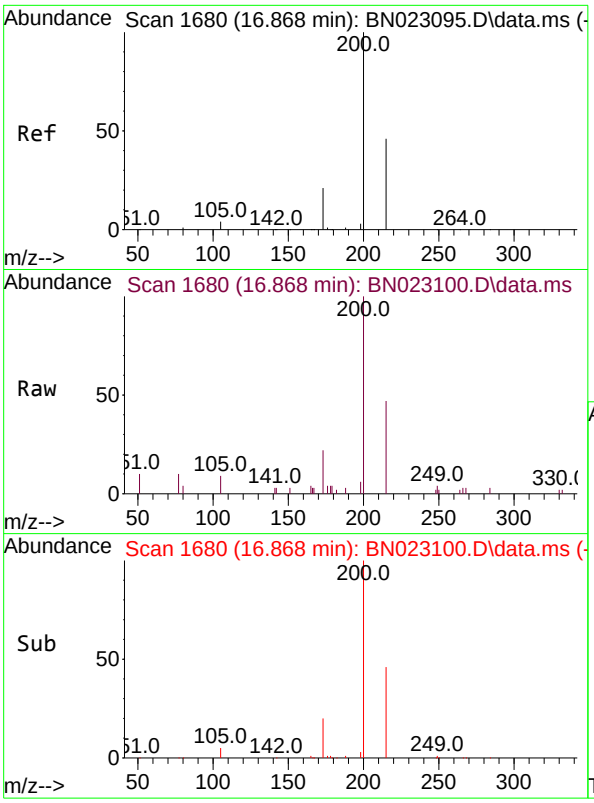


#22
Hexachlorobenzene
Concen: 0.405 ng
RT: 16.719 min Scan# 1668
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:284 Resp: 7695

Ion	Ratio	Lower	Upper
284	100		
142	38.7	31.0	46.4
249	30.6	24.4	36.6



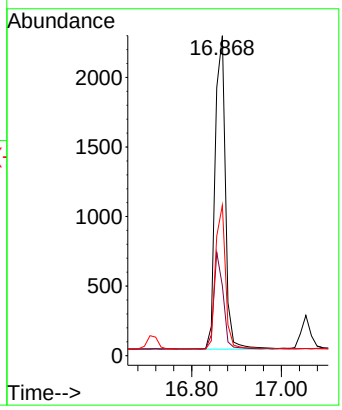


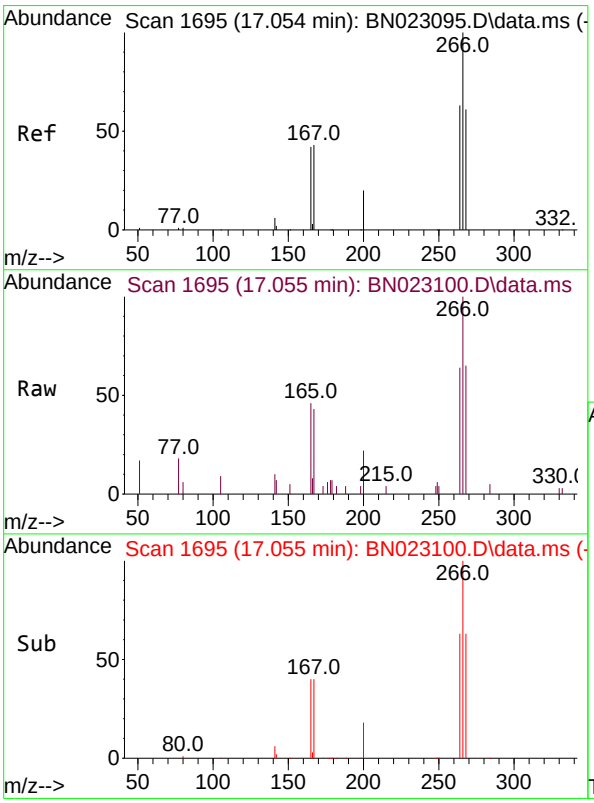
#23
Atrazine
Concen: 0.350 ng
RT: 16.868 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:200 Resp: 3573

Ion	Ratio	Lower	Upper
200	100		
173	21.8	18.2	27.4
215	47.0	38.0	57.0

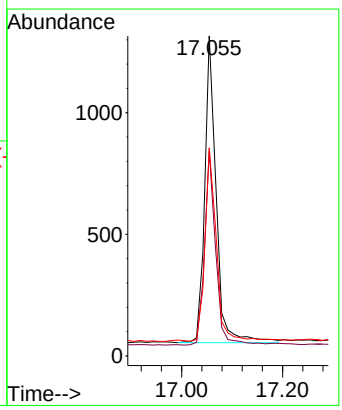


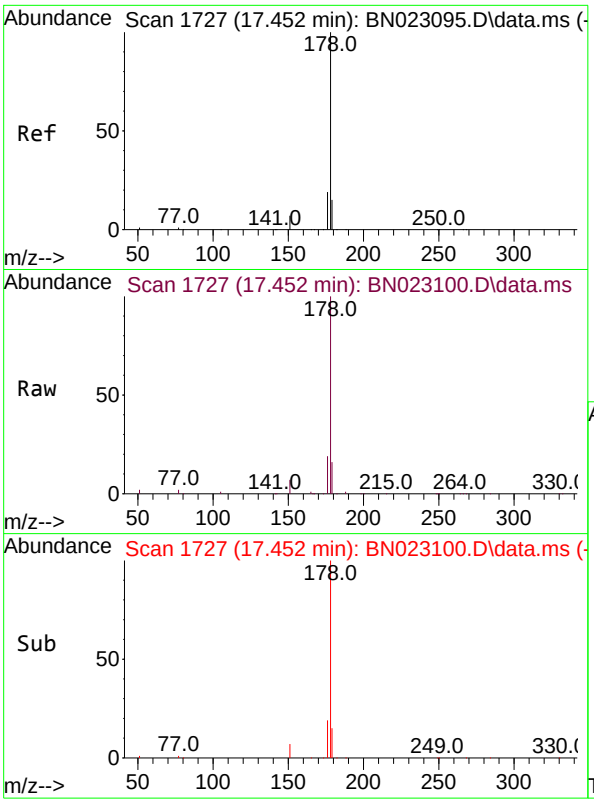


#24
Pentachlorophenol
Concen: 0.300 ng
RT: 17.055 min Scan# 1695
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:266 Resp: 1977

Ion	Ratio	Lower	Upper
266	100		
264	61.5	50.1	75.1
268	63.3	49.7	74.5



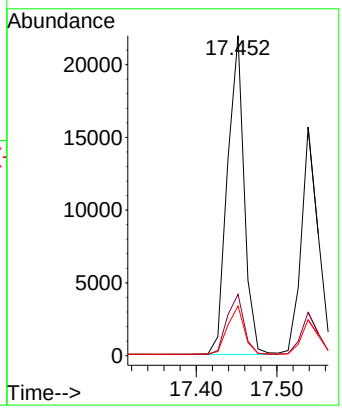


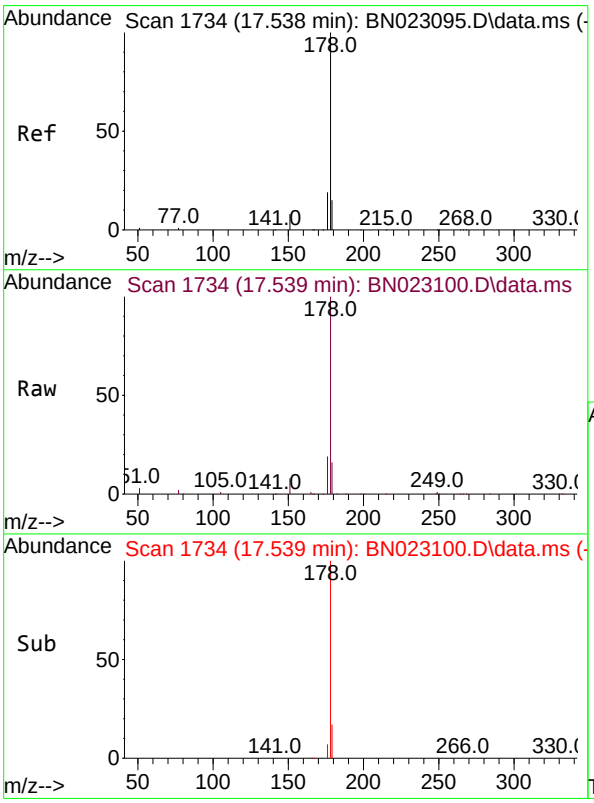
#25
Phenanthrene
Concen: 0.388 ng
RT: 17.452 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:178 Resp: 31445

Ion	Ratio	Lower	Upper
178	100		
176	19.4	15.4	23.2
179	15.2	12.2	18.2

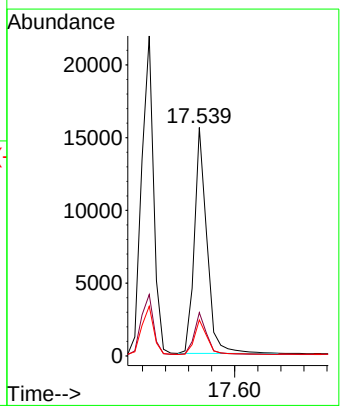


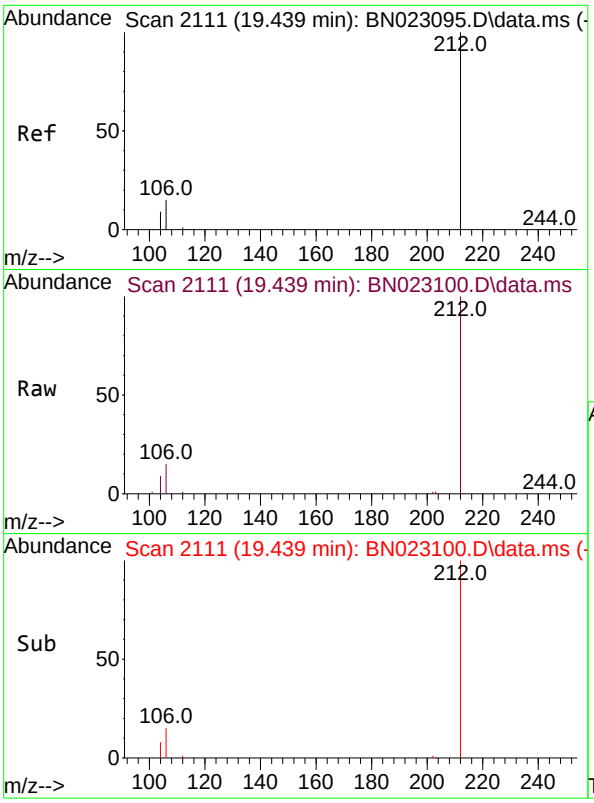


#26
Anthracene
Concen: 0.363 ng
RT: 17.539 min Scan# 1734
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:178 Resp: 23419

Ion	Ratio	Lower	Upper
178	100		
176	18.4	15.1	22.7
179	15.5	12.2	18.4



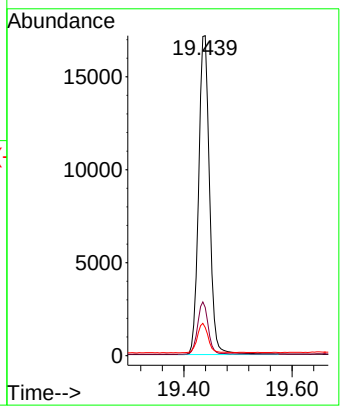


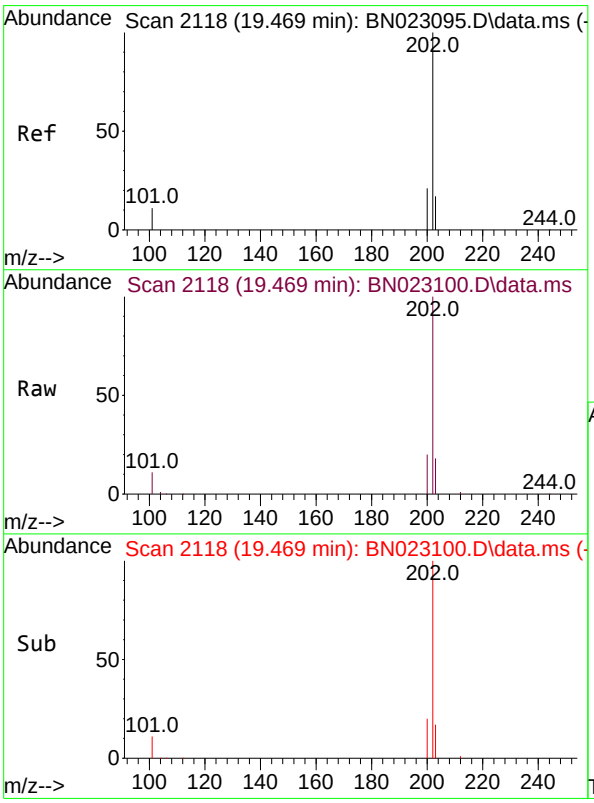
#27
Fluoranthene-d10
Concen: 0.378 ng
RT: 19.439 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:212 Resp: 24017

Ion	Ratio	Lower	Upper
212	100		
106	16.0	13.0	19.4
104	9.1	7.5	11.3

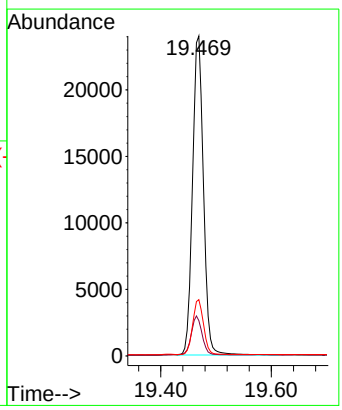


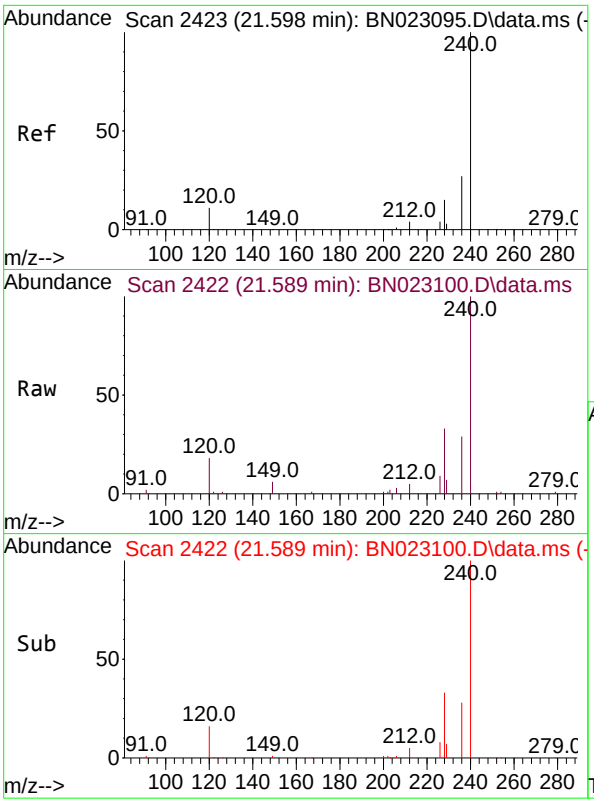


#28
Fluoranthene
Concen: 0.378 ng
RT: 19.469 min Scan# 2118
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:202 Resp: 32800

Ion	Ratio	Lower	Upper
202	100		
101	12.3	9.7	14.5
203	17.1	13.8	20.6



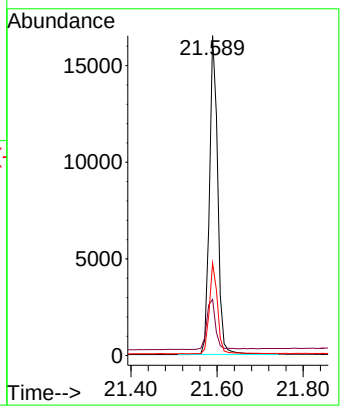


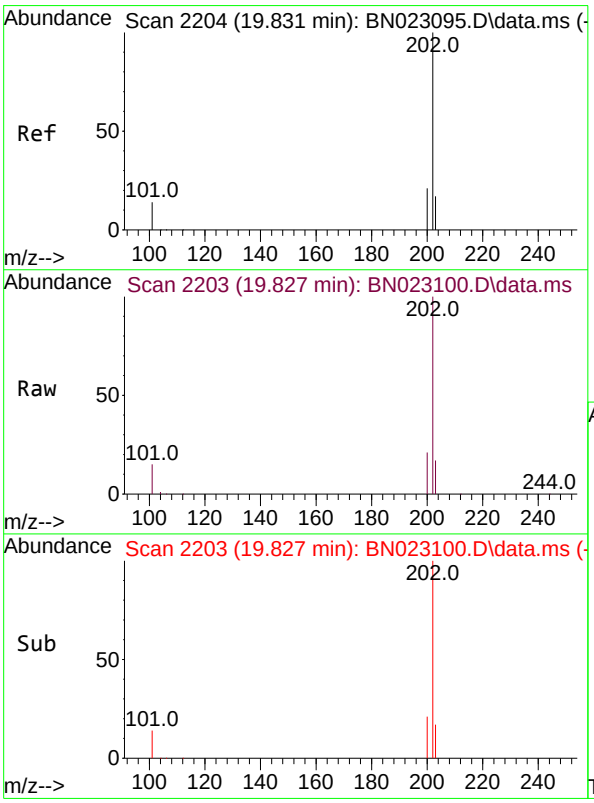
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.589 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:240 Resp: 22009

Ion	Ratio	Lower	Upper
240	100		
120	17.5	10.1	15.1#
236	28.9	22.2	33.4

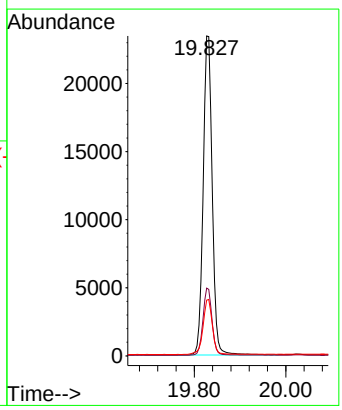


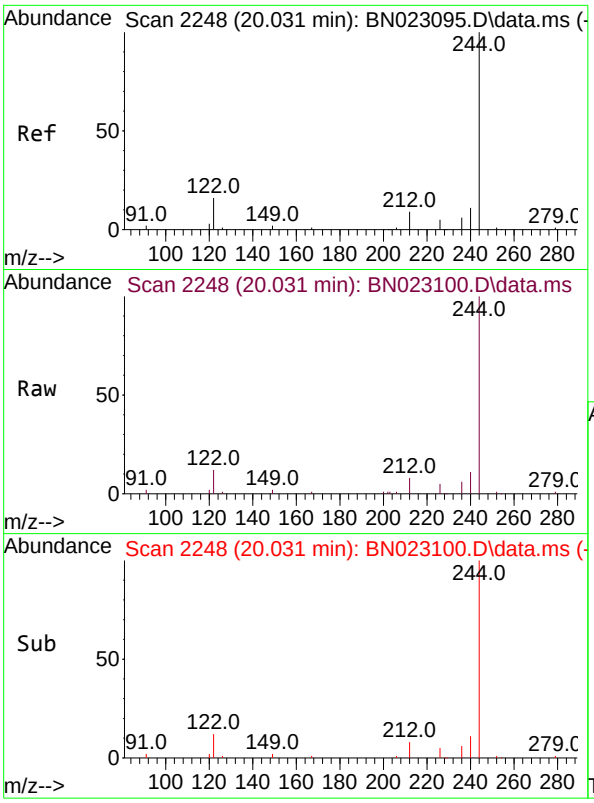


#30
Pyrene
Concen: 0.396 ng
RT: 19.827 min Scan# 2203
Delta R.T. -0.004 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:202 Resp: 31897

Ion	Ratio	Lower	Upper
202	100		
200	20.9	16.9	25.3
203	17.7	14.2	21.4



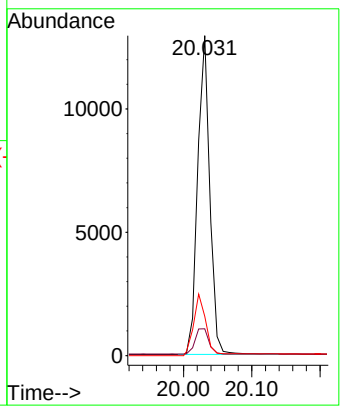


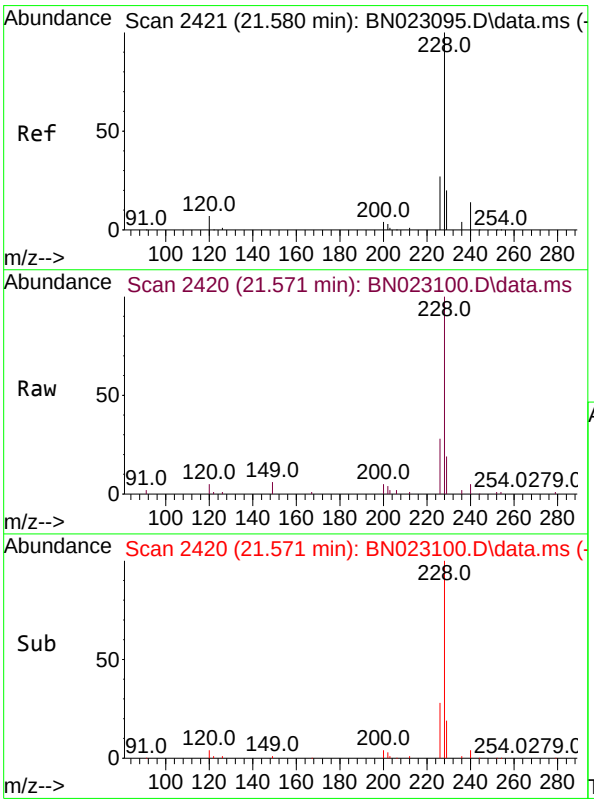
#31
Terphenyl-d14
Concen: 0.407 ng
RT: 20.031 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:244 Resp: 14543

Ion	Ratio	Lower	Upper
244	100		
212	8.4	7.6	11.4
122	12.3	12.6	18.8#

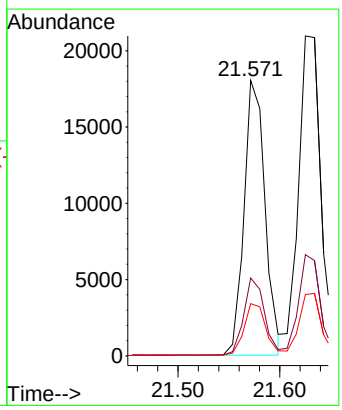


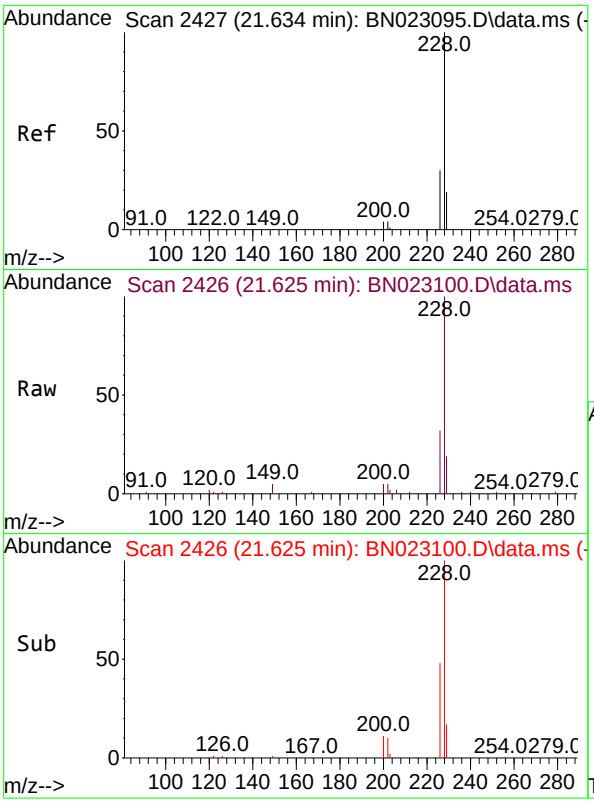


#32
Benzo(a)anthracene
Concen: 0.365 ng
RT: 21.571 min Scan# 2420
Delta R.T. -0.009 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:228 Resp: 25864

Ion	Ratio	Lower	Upper
228	100		
226	28.3	22.0	33.0
229	19.0	15.8	23.8



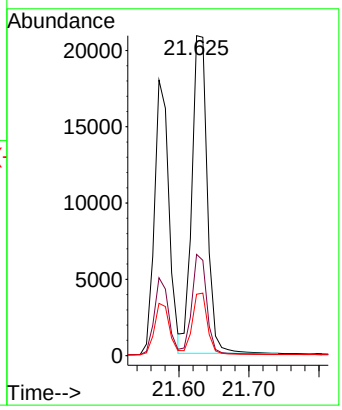


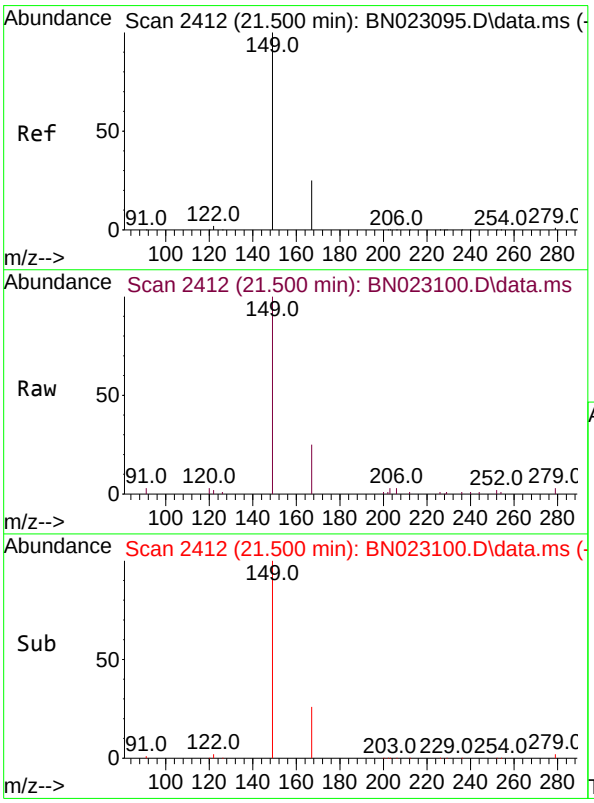
#33
Chrysene
Concen: 0.399 ng
RT: 21.625 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:228 Resp: 31807

Ion	Ratio	Lower	Upper
228	100		
226	31.6	24.4	36.6
229	19.2	15.6	23.4

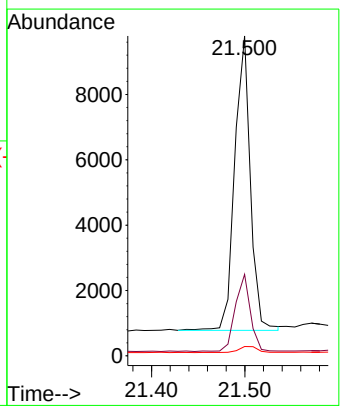


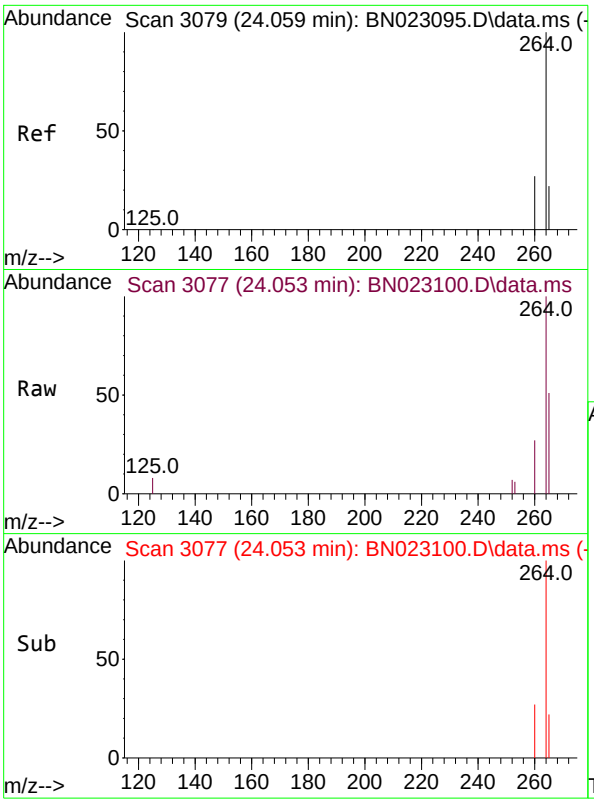


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.349 ng
RT: 21.500 min Scan# 2412
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:149 Resp: 10468

Ion	Ratio	Lower	Upper
149	100		
167	25.4	20.2	30.2
279	2.5	2.3	3.5



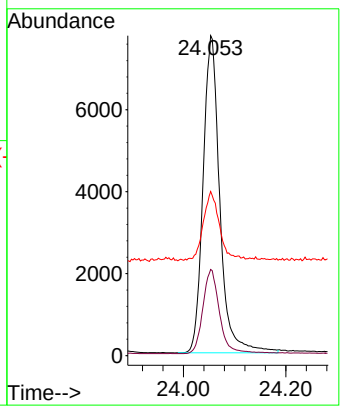


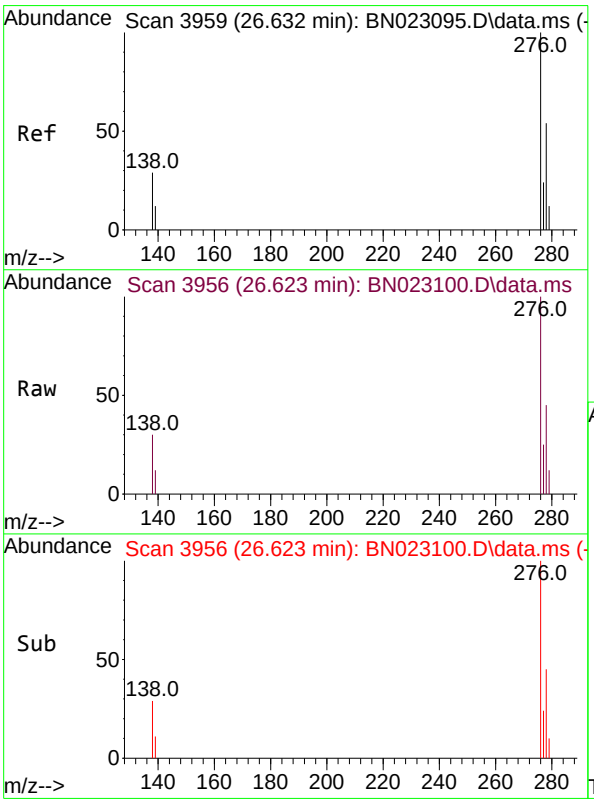
#35
Perylene-d12
Concen: 0.400 ng
RT: 24.053 min Scan# 30
Delta R.T. -0.006 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:264 Resp: 17542

Ion	Ratio	Lower	Upper
264	100		
260	26.9	21.7	32.5
265	51.3	43.2	64.8

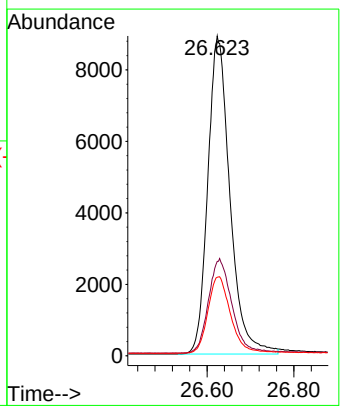


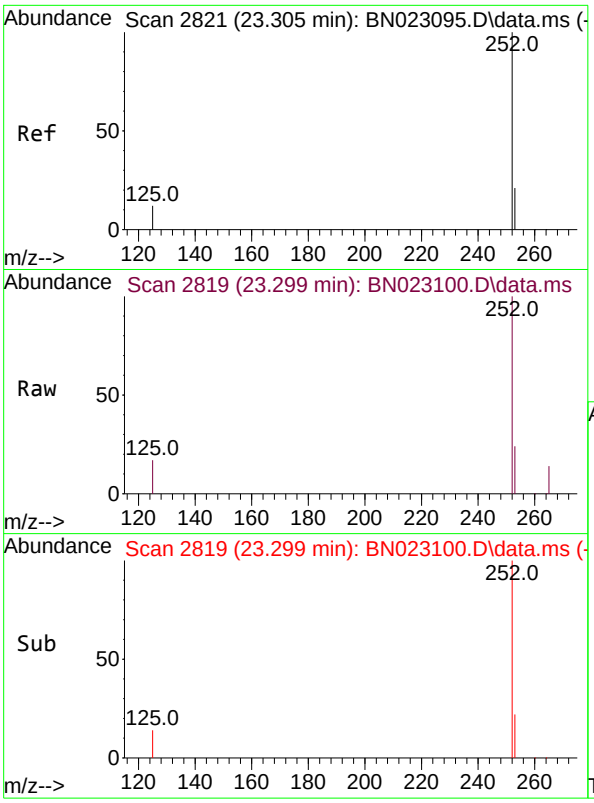


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.400 ng
RT: 26.623 min Scan# 3956
Delta R.T. -0.009 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:276 Resp: 31454

Ion	Ratio	Lower	Upper
276	100		
138	31.3	25.0	37.6
277	24.6	19.8	29.8



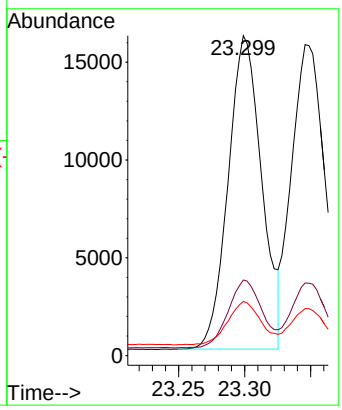


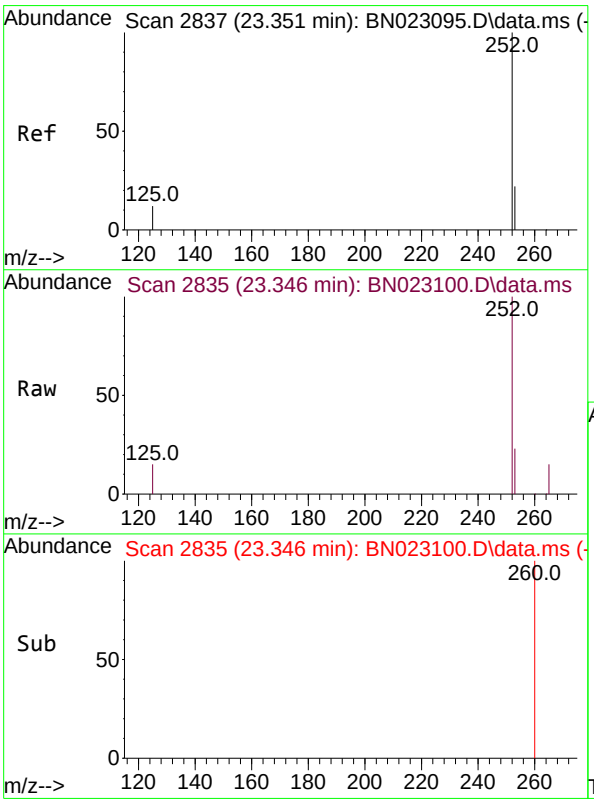
#37
Benzo(b)fluoranthene
Concen: 0.389 ng
RT: 23.299 min Scan# 28
Delta R.T. -0.006 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:252 Resp: 28324

Ion	Ratio	Lower	Upper
252	100		
253	23.6	19.0	28.4
125	16.9	12.8	19.2

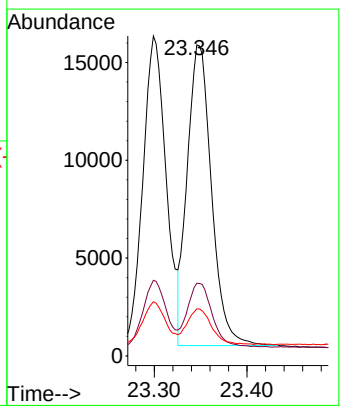


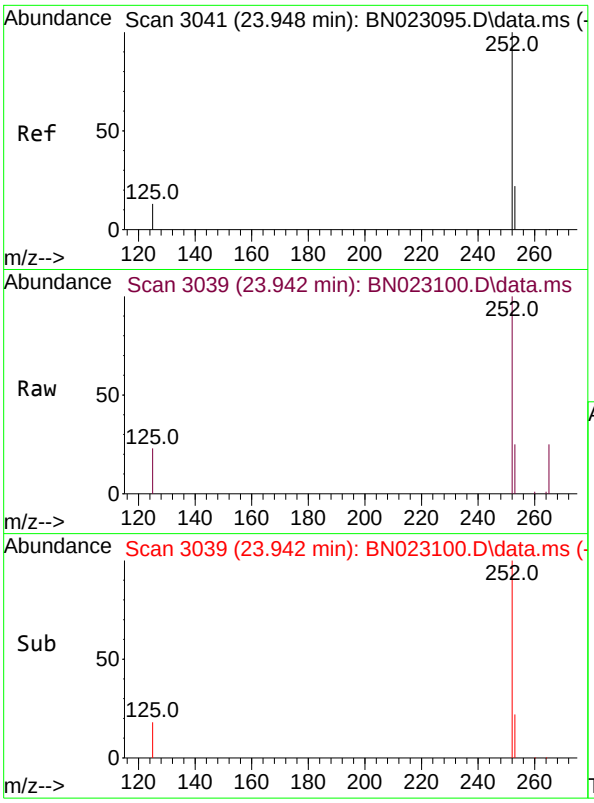


#38
Benzo(k)fluoranthene
Concen: 0.379 ng
RT: 23.346 min Scan# 2835
Delta R.T. -0.006 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:252 Resp: 27995

Ion	Ratio	Lower	Upper
252	100		
253	23.3	19.1	28.7
125	15.1	12.5	18.7



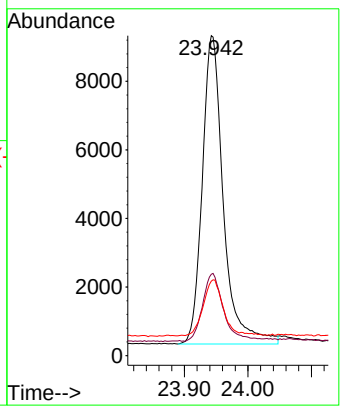


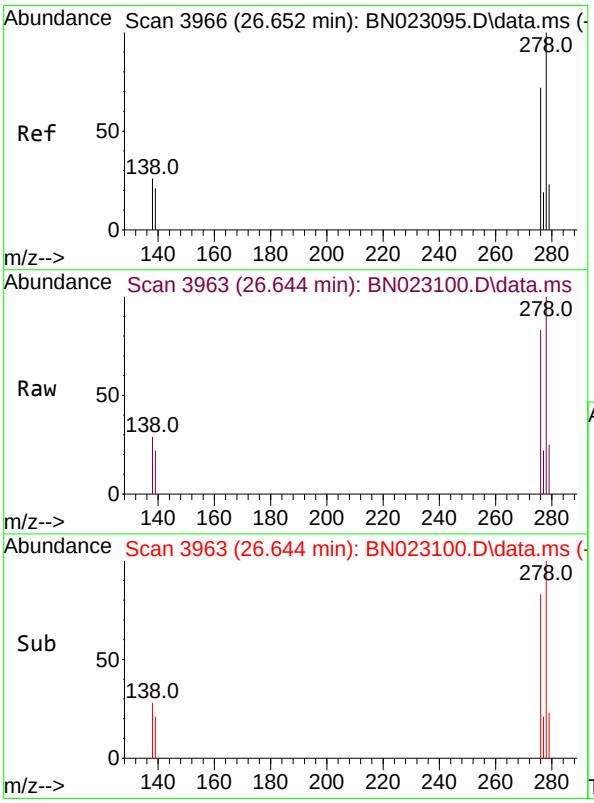
#39
Benzo(a)pyrene
Concen: 0.381 ng
RT: 23.942 min Scan# 30
Delta R.T. -0.006 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:252 Resp: 20767

Ion	Ratio	Lower	Upper
252	100		
253	25.4	20.6	30.8
125	23.3	15.8	23.8

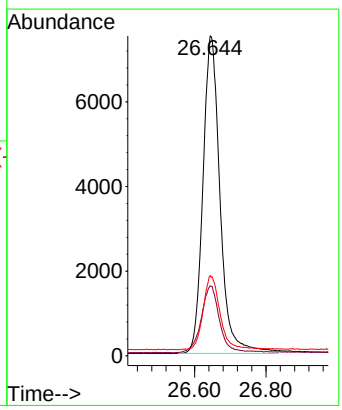


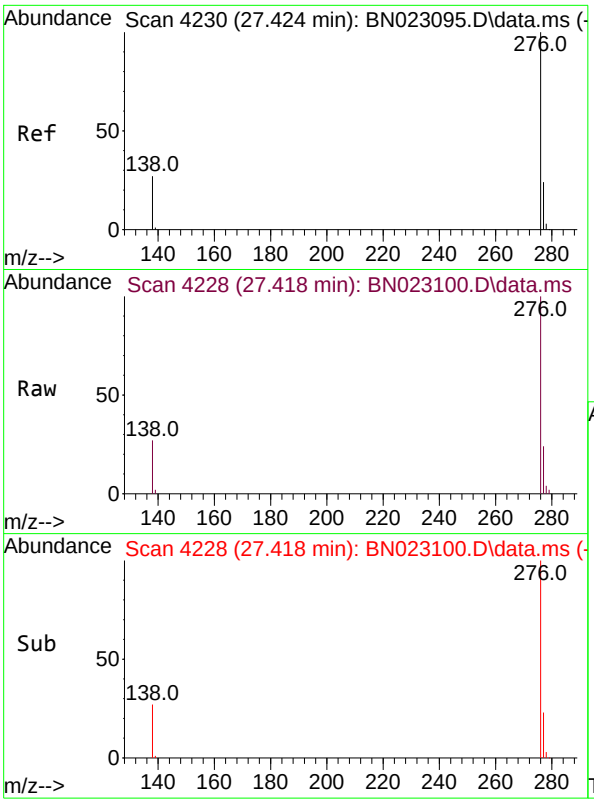


#40
Dibenzo(a,h)anthracene
Concen: 0.397 ng
RT: 26.644 min Scan# 3963
Delta R.T. -0.009 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:278 Resp: 25035

Ion	Ratio	Lower	Upper
278	100		
139	21.9	17.5	26.3
279	25.1	20.5	30.7



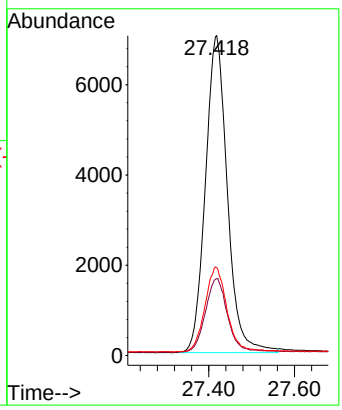


#41
Benzo(g,h,i)perylene
Concen: 0.370 ng
RT: 27.418 min Scan# 4
Delta R.T. -0.006 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Tgt Ion:276 Resp: 24921

Ion	Ratio	Lower	Upper
276	100		
277	24.0	19.9	29.9
138	27.5	22.2	33.2



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023100.D
Acq On : 08 Dec 2022 18:17
Operator : CG/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Quant Time: Dec 09 07:47:50 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:44:40 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	110	0.00
2		1,4-Dioxane	0.395	0.402	-1.8	110	0.00
3		n-Nitrosodimethylamine	0.388	0.378	2.6	112	0.00
4	S	2-Fluorophenol	0.745	0.731	1.9	108	0.00
5	S	Phenol-d6	0.947	0.916	3.3	110	0.00
6		bis(2-Chloroethyl)ether	1.076	1.083	-0.7	108	0.00
7	I	Naphthalene-d8	1.000	1.000	0.0	109	0.00
8	S	Nitrobenzene-d5	0.264	0.251	4.9	110	0.00
9		Naphthalene	1.019	1.010	0.9	110	0.00
10		Hexachlorobutadiene	0.194	0.196	-1.0	109	0.00
11	SURR	2-Methylnaphthalene-d10	0.678	0.695	-2.5	118	0.00
12		2-Methylnaphthalene	0.152	0.144	5.3	107	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	109	0.00
14	S	2,4,6-Tribromophenol	0.145	0.125	13.8	103	0.00
15	S	2-Fluorobiphenyl	1.598	1.624	-1.6	110	0.00
16		Acenaphthylene	1.611	1.471	8.7	108	0.00
17		Acenaphthene	1.184	1.134	4.2	107	0.00
18		Fluorene	1.325	1.267	4.4	107	0.00
19	I	Phenanthrene-d10	1.000	1.000	0.0	107	-0.01
20		4,6-Dinitro-2-methylphenol	0.057	0.041	28.1#	96	0.00
21		4-Bromophenyl-phenylether	0.213	0.204	4.2	107	0.00
22		Hexachlorobenzene	0.280	0.283	-1.1	109	0.00
23		Atrazine	0.150	0.132	12.0	106	0.00
24		Pentachlorophenol	0.097	0.073	24.7	97	0.00
25		Phenanthrene	1.192	1.158	2.9	108	0.00
26		Anthracene	0.950	0.862	9.3	108	0.00
27	SURR	Fluoranthene-d10	0.936	0.884	5.6	108	0.00
28		Fluoranthene	1.276	1.207	5.4	108	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	107	0.00
30		Pyrene	1.464	1.449	1.0	107	0.00
31	S	Terphenyl-d14	0.649	0.661	-1.8	103	0.00
32		Benzo(a)anthracene	1.289	1.175	8.8	105	0.00
33		Chrysene	1.449	1.445	0.3	107	0.00
34		Bis(2-ethylhexyl)phthalate	0.545	0.476	12.7	104	0.00
35	I	Perylene-d12	1.000	1.000	0.0	113	0.00
36		Indeno(1,2,3-cd)pyrene	1.793	1.793	0.0	120	0.00
37		Benzo(b)fluoranthene	1.658	1.615	2.6	114	0.00
38		Benzo(k)fluoranthene	1.684	1.596	5.2	112	0.00
39	C	Benzo(a)pyrene	1.244	1.184	4.8	120	0.00
40		Dibenzo(a,h)anthracene	1.439	1.427	0.8	118	0.00
41		Benzo(g,h,i)perylene	1.537	1.421	7.5	106	0.00

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

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023100.D
Acq On : 08 Dec 2022 18:17
Operator : CG/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

Quant Time: Dec 09 07:47:50 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:44:40 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	0.400	0.400	0.0	110	0.00
2		1,4-Dioxane	0.400	0.408	-2.0	110	0.00
3		n-Nitrosodimethylamine	0.400	0.390	2.5	112	0.00
4	S	2-Fluorophenol	0.400	0.393	1.8	108	0.00
5	S	Phenol-d6	0.400	0.387	3.3	110	0.00
6		bis(2-Chloroethyl)ether	0.400	0.403	-0.8	108	0.00
7	I	Naphthalene-d8	0.400	0.400	0.0	109	0.00
8	S	Nitrobenzene-d5	0.400	0.381	4.8	110	0.00
9		Naphthalene	0.400	0.396	1.0	110	0.00
10		Hexachlorobutadiene	0.400	0.404	-1.0	109	0.00
11	SURR	2-Methylnaphthalene-d10	0.400	0.410	-2.5	118	0.00
12		2-Methylnaphthalene	0.400	0.379	5.3	107	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	109	0.00
14	S	2,4,6-Tribromophenol	0.400	0.346	13.5	103	0.00
15	S	2-Fluorobiphenyl	0.400	0.407	-1.7	110	0.00
16		Acenaphthylene	0.400	0.365	8.8	108	0.00
17		Acenaphthene	0.400	0.383	4.3	107	0.00
18		Fluorene	0.400	0.383	4.3	107	0.00
19	I	Phenanthrene-d10	0.400	0.400	0.0	107	-0.01
20		4,6-Dinitro-2-methylphenol	0.400	0.440	-10.0	96	0.00
21		4-Bromophenyl-phenylether	0.400	0.382	4.5	107	0.00
22		Hexachlorobenzene	0.400	0.405	-1.3	109	0.00
23		Atrazine	0.400	0.350	12.5	106	0.00
24		Pentachlorophenol	0.400	0.300	25.0#	97	0.00
25		Phenanthrene	0.400	0.388	3.0	108	0.00
26		Anthracene	0.400	0.363	9.3	108	0.00
27	SURR	Fluoranthene-d10	0.400	0.378	5.5	108	0.00
28		Fluoranthene	0.400	0.378	5.5	108	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	107	0.00
30		Pyrene	0.400	0.396	1.0	107	0.00
31	S	Terphenyl-d14	0.400	0.407	-1.7	103	0.00
32		Benzo(a)anthracene	0.400	0.365	8.8	105	0.00
33		Chrysene	0.400	0.399	0.3	107	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.349	12.8	104	0.00
35	I	Perylene-d12	0.400	0.400	0.0	113	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.400	0.0	120	0.00
37		Benzo(b)fluoranthene	0.400	0.389	2.8	114	0.00
38		Benzo(k)fluoranthene	0.400	0.379	5.3	112	0.00
39	C	Benzo(a)pyrene	0.400	0.381	4.8	120	0.00
40		Dibenzo(a,h)anthracene	0.400	0.397	0.8	118	0.00
41		Benzo(g,h,i)perylene	0.400	0.370	7.5	106	0.00

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

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: N6070 SAS No.: N6070 SDG No.: N6070

Instrument ID: BNA_N Calibration Date/Time: 12/19/2022 11:22

Lab File ID: BN023280.D Init. Calib. Date(s): 12/08/2022 12/08/2022

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 14:00 17:40

GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.678	0.625		-7.8	20.0
Fluoranthene-d10	0.936	0.950		1.5	20.0
2-Fluorophenol	0.745	0.926		24.3	20.0
Phenol-d6	0.947	1.181		24.7	20.0
Nitrobenzene-d5	0.264	0.271		2.7	20.0
2-Fluorobiphenyl	1.598	1.405		-12.1	20.0
2,4,6-Tribromophenol	0.145	0.172		18.6	20.0
Terphenyl-d14	0.649	0.685		5.5	20.0
1,4-Dioxane	0.395	0.440		11.4	20.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023280.D
Acq On : 19 Dec 2022 11:22
Operator : CG/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Dec 19 15:45:22 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration

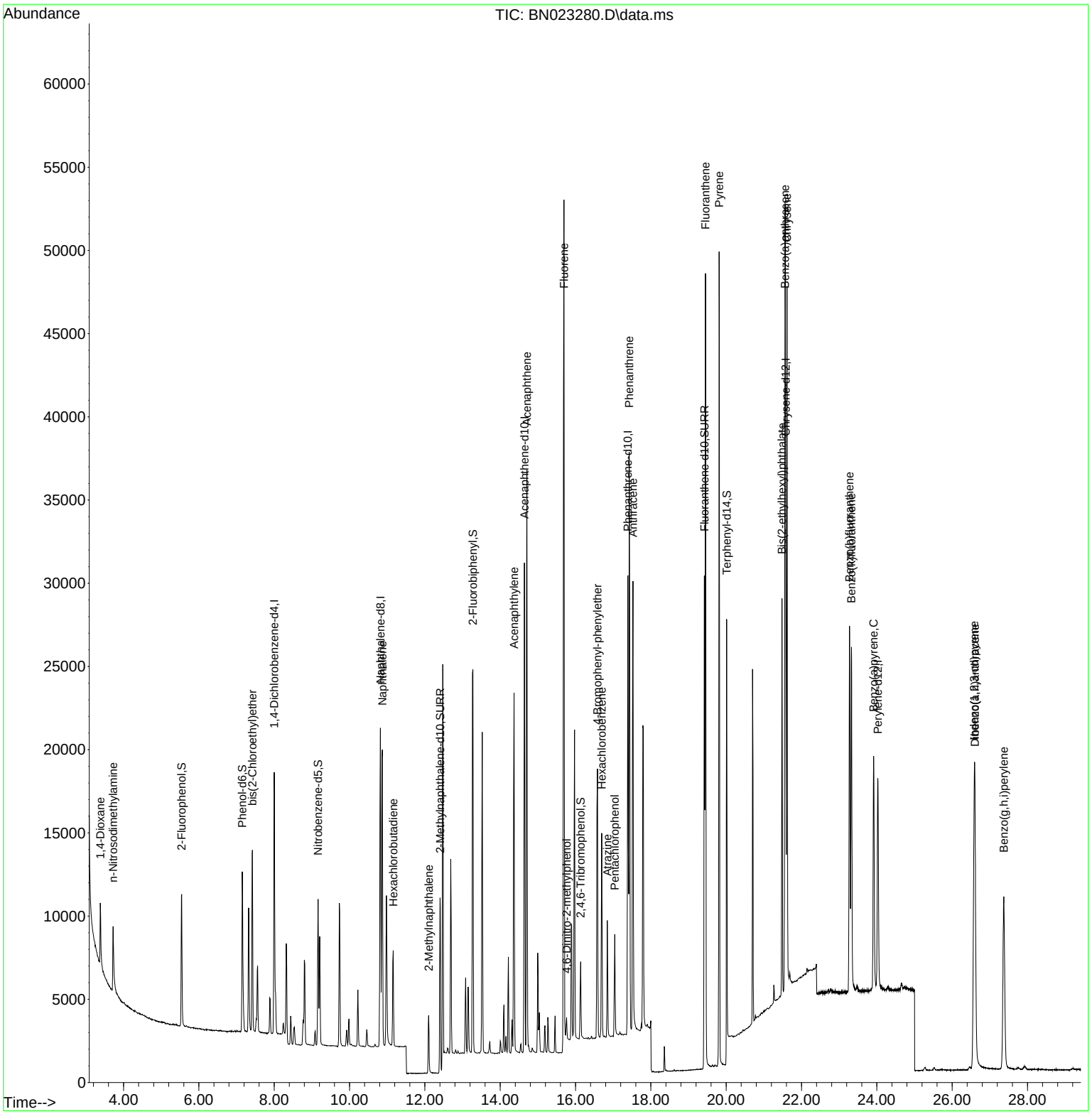
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.999	152	7661	0.400	ng		0.00
7) Naphthalene-d8	10.819	136	24904	0.400	ng		0.00
13) Acenaphthene-d10	14.645	164	15496	0.400	ng		0.00
19) Phenanthrene-d10	17.390	188	33722	0.400	ng	#	0.00
29) Chrysene-d12	21.580	240	25842	0.400	ng		0.00
35) Perylene-d12	24.027	264	18763	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.543	112	7094	0.497	ng		0.00
5) Phenol-d6	7.154	99	9048	0.499	ng		0.00
8) Nitrobenzene-d5	9.164	82	6755	0.412	ng		0.00
11) 2-Methylnaphthalene-d10	12.405	152	15577	0.369	ng		0.00
14) 2,4,6-Tribromophenol	16.136	330	2663	0.474	ng		0.00
15) 2-Fluorobiphenyl	13.276	172	21769	0.352	ng		0.00
27) Fluoranthene-d10	19.422	212	32028	0.406	ng		0.00
31) Terphenyl-d14	20.013	244	17696	0.422	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.384	88	3369	0.446	ng		86
3) n-Nitrosodimethylamine	3.723	42	2724	0.367	ng	#	80
6) bis(2-Chloroethyl)ether	7.421	93	8163	0.396	ng		99
9) Naphthalene	10.872	128	24598	0.388	ng		100
10) Hexachlorobutadiene	11.160	225	4773	0.395	ng	#	100
12) 2-Methylnaphthalene	12.102	142	5285	0.560	ng		97
16) Acenaphthylene	14.367	152	23837	0.382	ng		100
17) Acenaphthene	14.709	154	17079	0.372	ng		97
18) Fluorene	15.693	166	23490	0.458	ng		99
20) 4,6-Dinitro-2-methylph...	15.764	198	866	0.362	ng		99
21) 4-Bromophenyl-phenylether	16.583	248	7067	0.393	ng	#	77
22) Hexachlorobenzene	16.695	284	8969	0.381	ng		97
23) Atrazine	16.843	200	5103	0.402	ng	#	92
24) Pentachlorophenol	17.042	266	2939	0.359	ng		99
25) Phenanthrene	17.427	178	37463	0.373	ng		100
26) Anthracene	17.526	178	30364	0.379	ng		100
28) Fluoranthene	19.452	202	41357	0.384	ng		100
30) Pyrene	19.814	202	41984	0.444	ng		100
32) Benzo(a)anthracene	21.562	228	33710	0.405	ng		100
33) Chrysene	21.616	228	34659	0.370	ng		100
34) Bis(2-ethylhexyl)phtha...	21.482	149	20171	0.573	ng		97
36) Indeno(1,2,3-cd)pyrene	26.585	276	27074	0.322	ng		97
37) Benzo(b)fluoranthene	23.276	252	28714	0.369	ng		98
38) Benzo(k)fluoranthene	23.325	252	27427	0.347	ng		99
39) Benzo(a)pyrene	23.916	252	21593	0.370	ng		97
40) Dibenzo(a,h)anthracene	26.606	278	21241	0.315	ng		100
41) Benzo(g,h,i)perylene	27.372	276	23015	0.319	ng		99

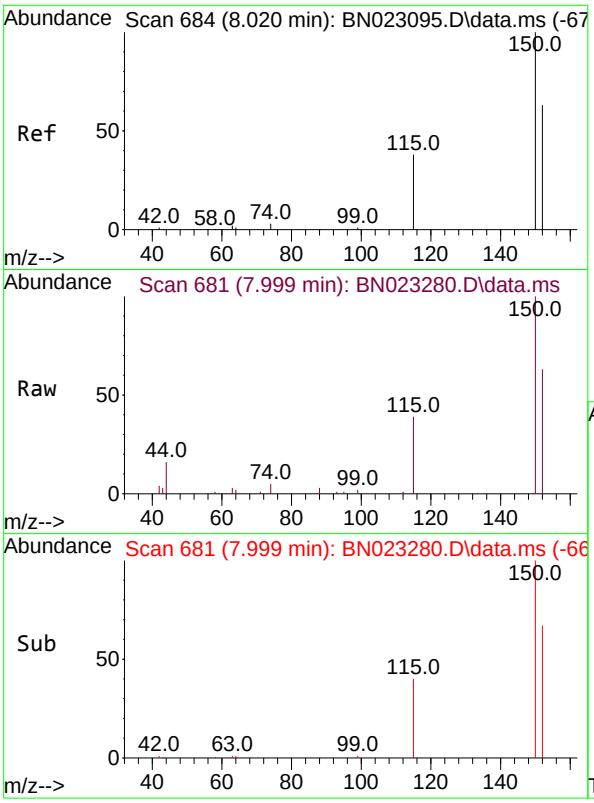
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023280.D
Acq On : 19 Dec 2022 11:22
Operator : CG/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Dec 19 15:45:22 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration



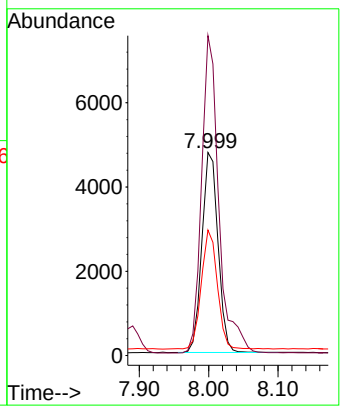


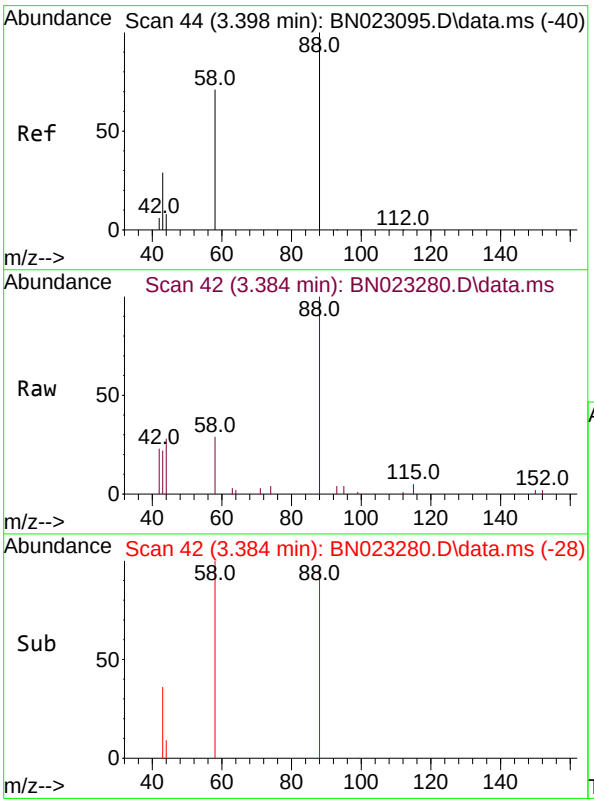
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.999 min Scan# 68
Delta R.T. -0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 7661

Ion	Ratio	Lower	Upper
152	100		
150	157.6	125.6	188.4
115	61.8	49.0	73.4

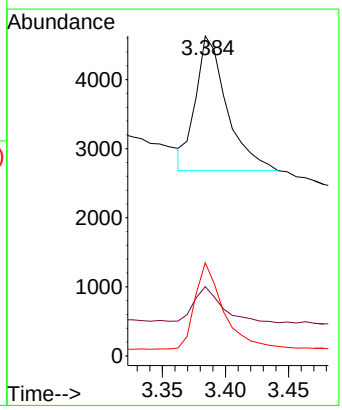


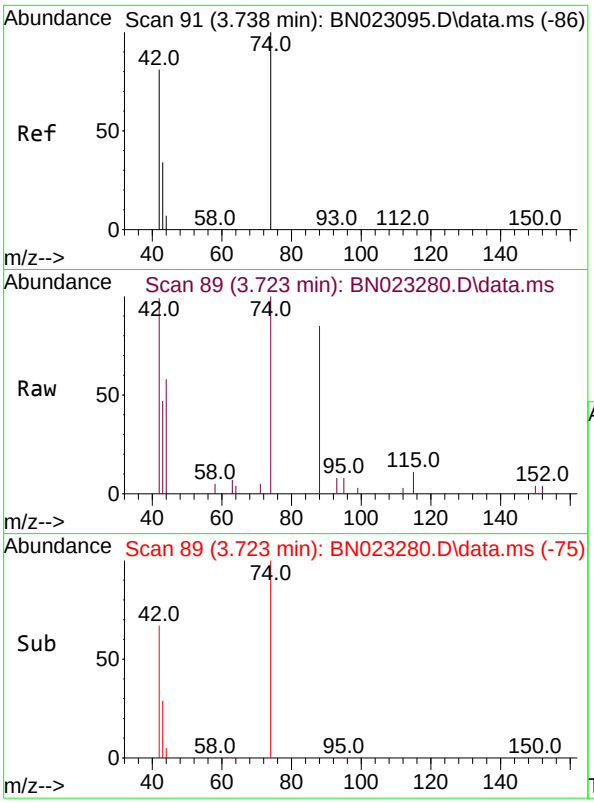


#2
1,4-Dioxane
Concen: 0.446 ng
RT: 3.384 min Scan# 42
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion: 88 Resp: 3369

Ion	Ratio	Lower	Upper
88	100		
43	24.0	23.3	34.9
58	59.0	58.0	87.0



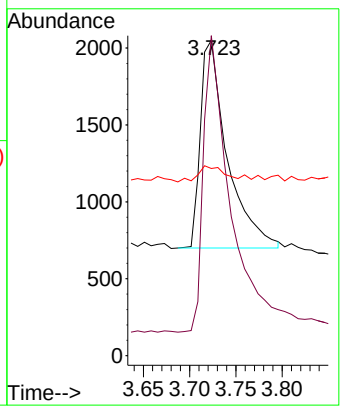


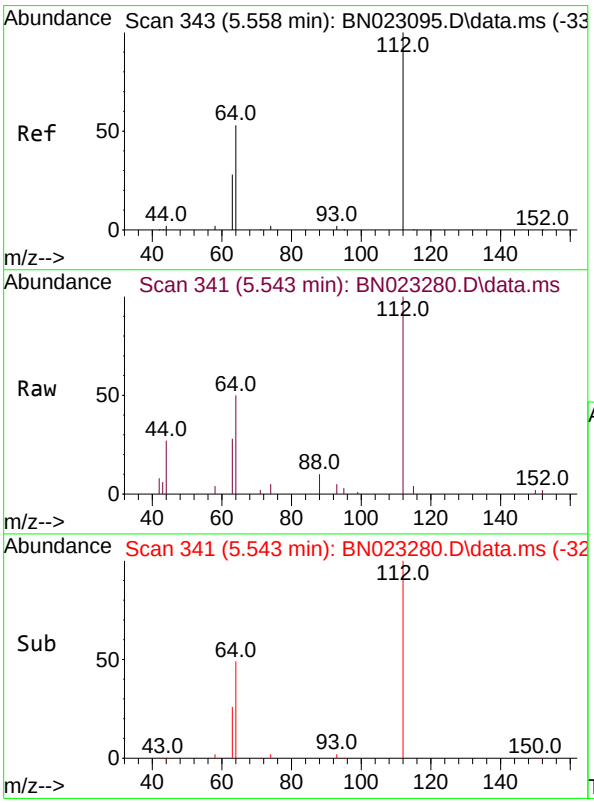
#3
n-Nitrosodimethylamine
Concen: 0.367 ng
RT: 3.723 min Scan# 8
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 42 Resp: 2724

Ion	Ratio	Lower	Upper
42	100		
74	142.7	95.8	143.6
44	7.4	8.4	12.6#

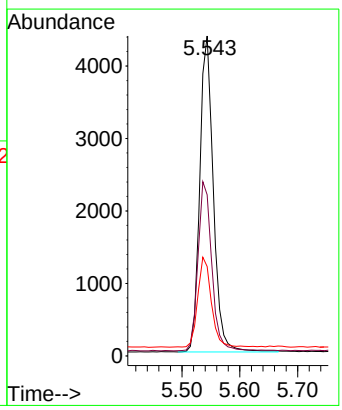


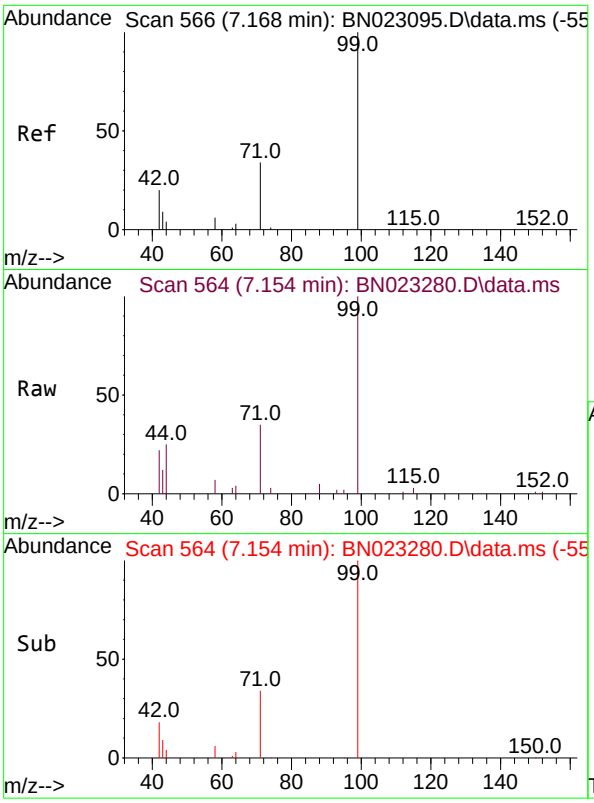


#4
2-Fluorophenol
Concen: 0.497 ng
RT: 5.543 min Scan# 341
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:112 Resp: 7094

Ion	Ratio	Lower	Upper
112	100		
64	54.3	44.4	66.6
63	28.5	23.7	35.5



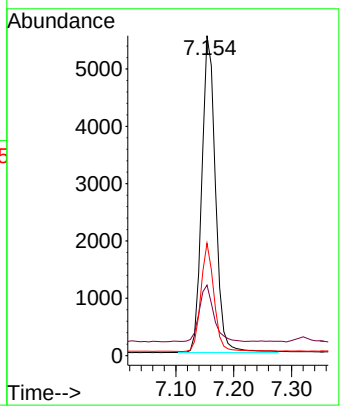


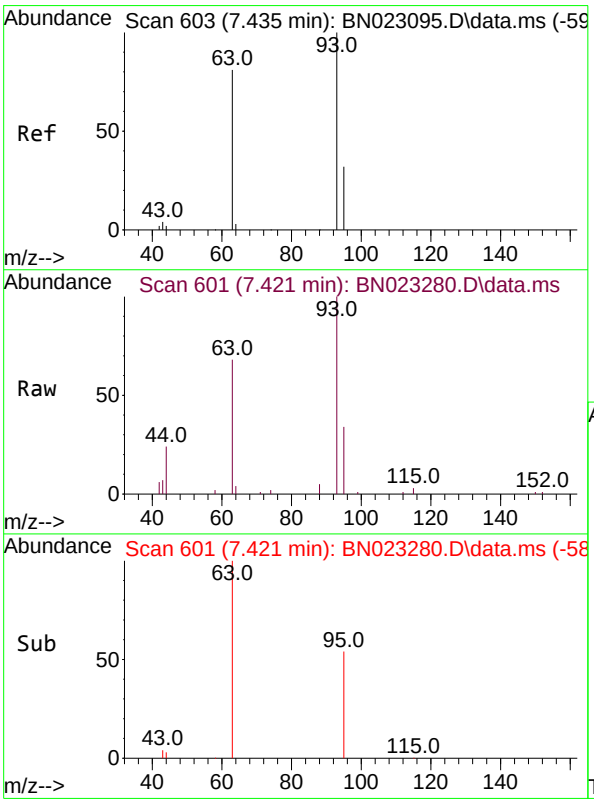
#5
Phenol-d6
Concen: 0.499 ng
RT: 7.154 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 99 Resp: 9048

Ion	Ratio	Lower	Upper
99	100		
42	18.6	16.3	24.5
71	32.6	26.5	39.7

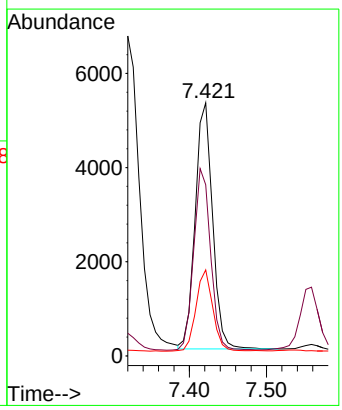


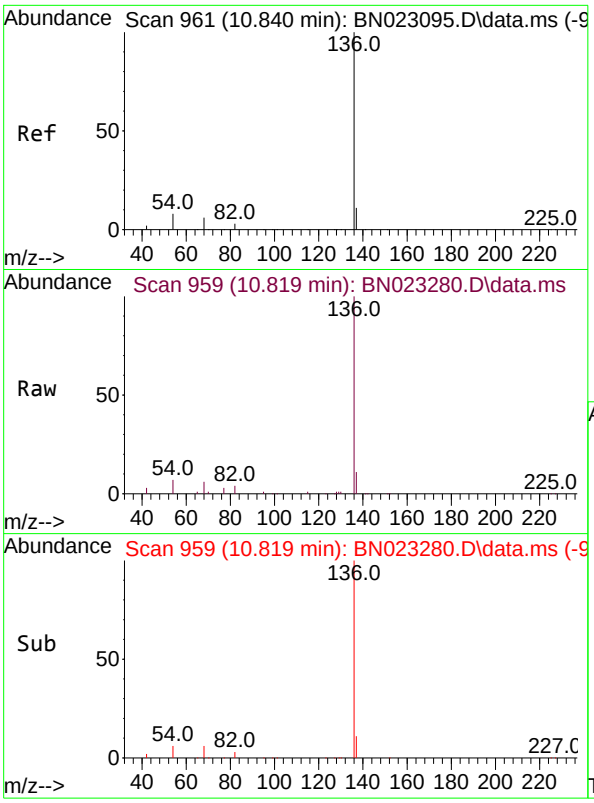


#6
bis(2-Chloroethyl)ether
Concen: 0.396 ng
RT: 7.421 min Scan# 601
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion: 93 Resp: 8163

Ion	Ratio	Lower	Upper
93	100		
63	71.8	58.1	87.1
95	32.0	25.2	37.8



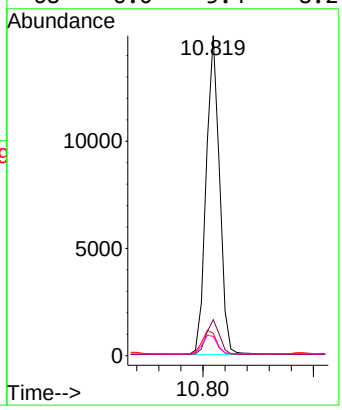


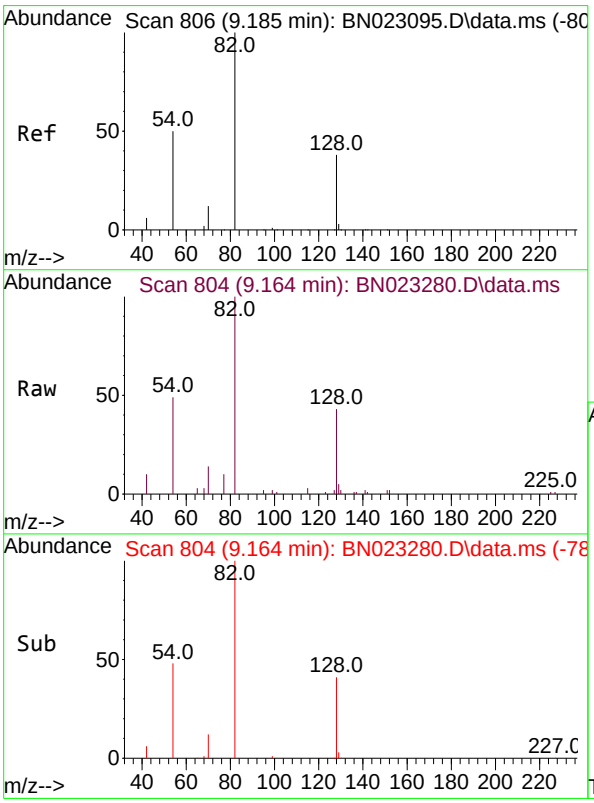
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.819 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:136 Resp: 24904

Ion	Ratio	Lower	Upper
136	100		
137	11.2	9.0	13.4
54	7.0	6.5	9.7
68	6.0	5.4	8.2

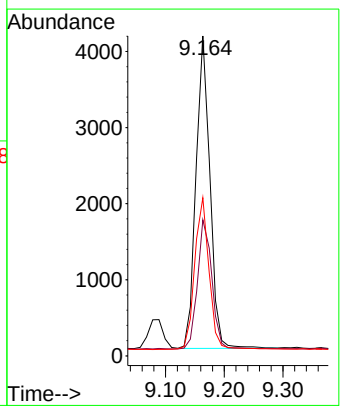


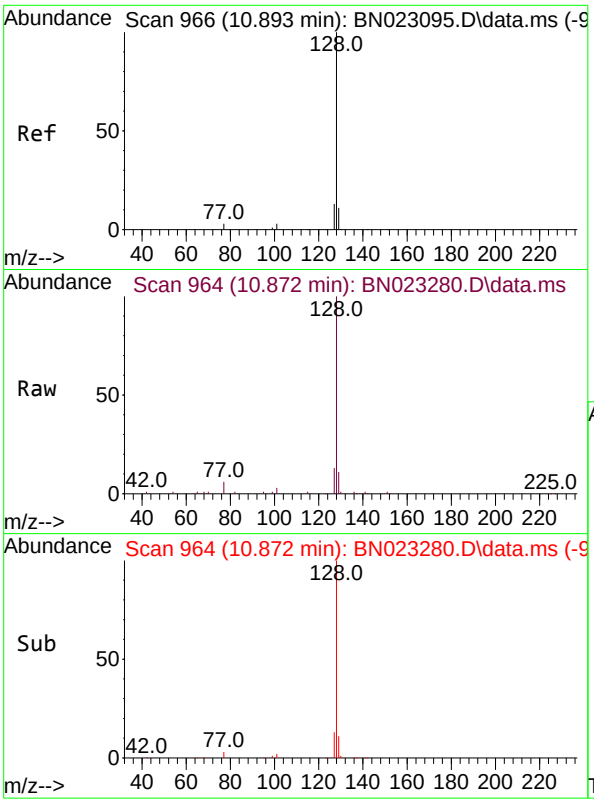


#8
Nitrobenzene-d5
Concen: 0.412 ng
RT: 9.164 min Scan# 804
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion: 82 Resp: 6755

Ion	Ratio	Lower	Upper
82	100		
128	42.5	31.4	47.2
54	49.4	41.0	61.4



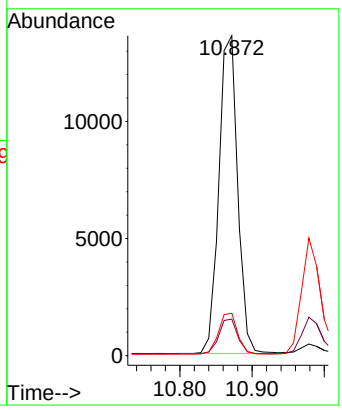


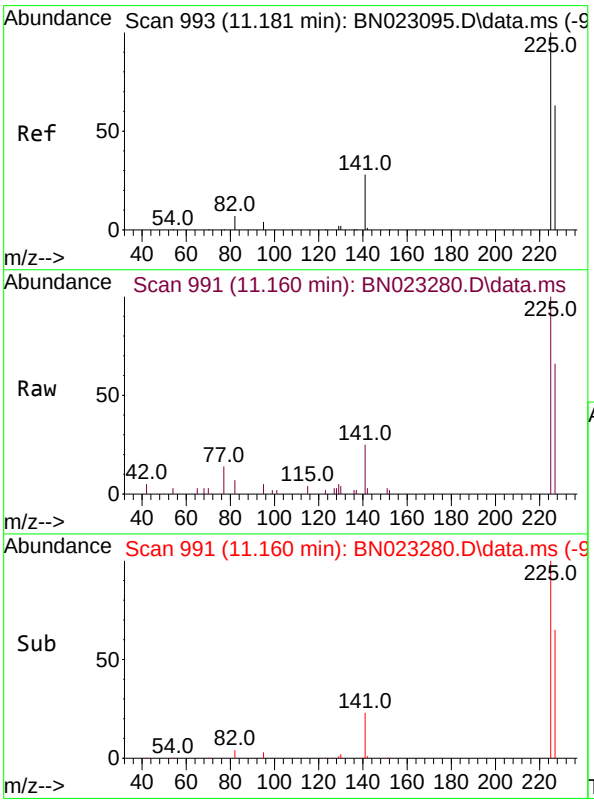
#9
Naphthalene
Concen: 0.388 ng
RT: 10.872 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:128 Resp: 24598

Ion	Ratio	Lower	Upper
128	100		
129	11.4	9.0	13.6
127	13.2	10.5	15.7

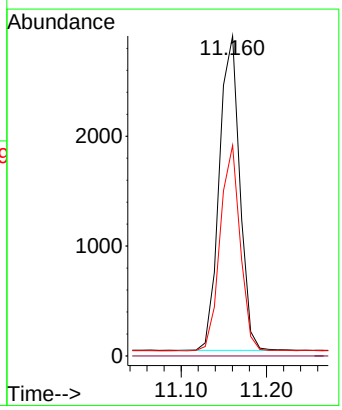


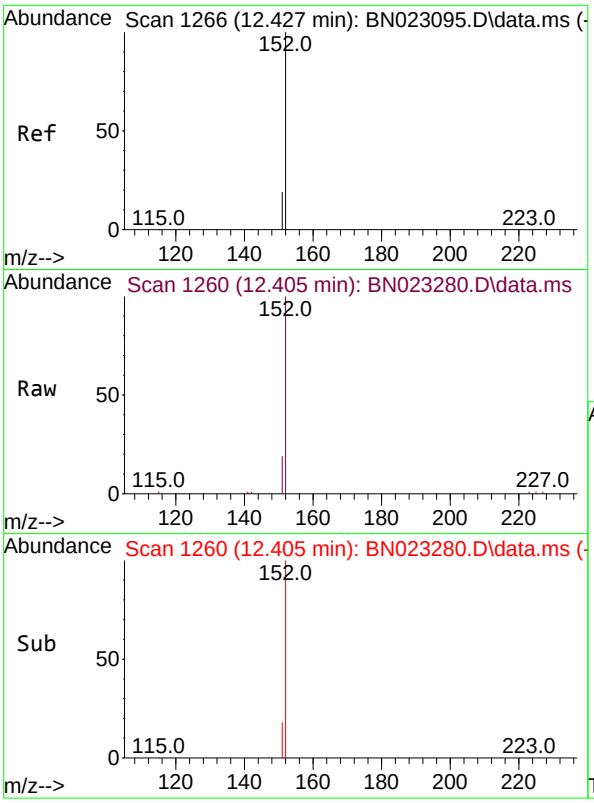


#10
Hexachlorobutadiene
Concen: 0.395 ng
RT: 11.160 min Scan# 991
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:225 Resp: 4773

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.6	51.1	76.7



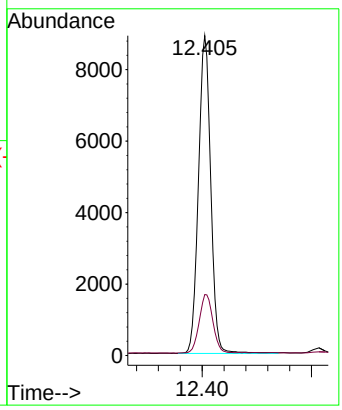


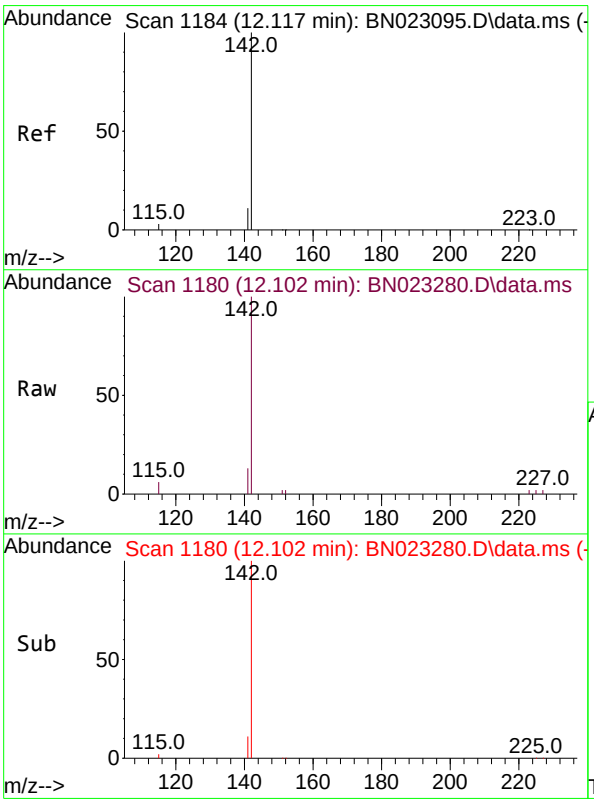
#11
2-Methylnaphthalene-d10
Concen: 0.369 ng
RT: 12.405 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 15577

Ion	Ratio	Lower	Upper
152	100		
151	18.3	15.1	22.7

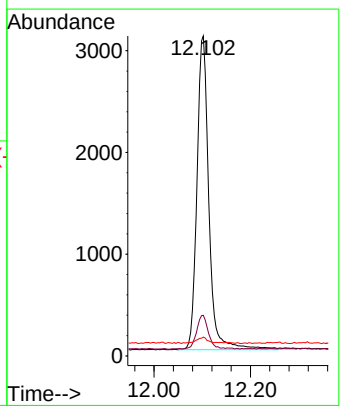


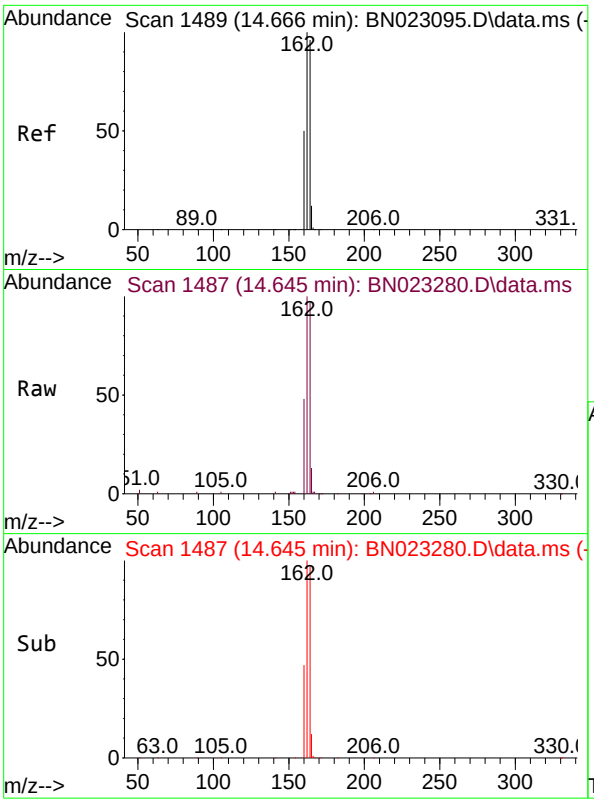


#12
2-Methylnaphthalene
Concen: 0.560 ng
RT: 12.102 min Scan# 1180
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:142 Resp: 5285

Ion	Ratio	Lower	Upper
142	100		
141	12.7	10.9	16.3
115	5.9	5.7	8.5



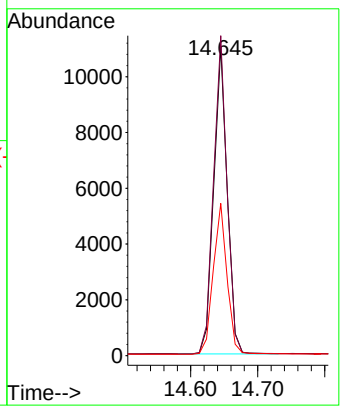


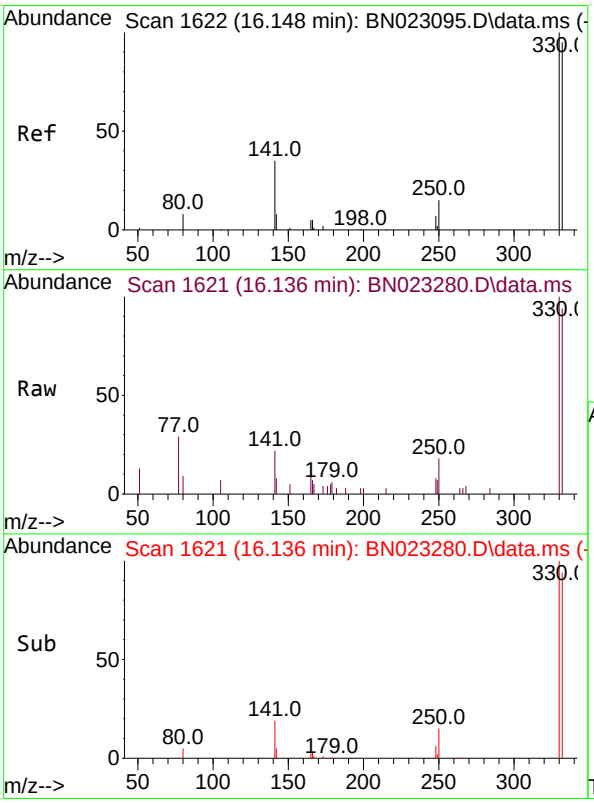
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.645 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:164 Resp: 15496

Ion	Ratio	Lower	Upper
164	100		
162	103.5	83.4	125.0
160	49.3	41.8	62.8

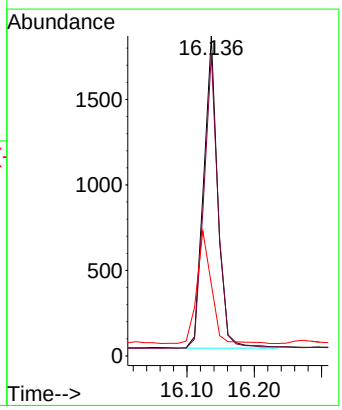


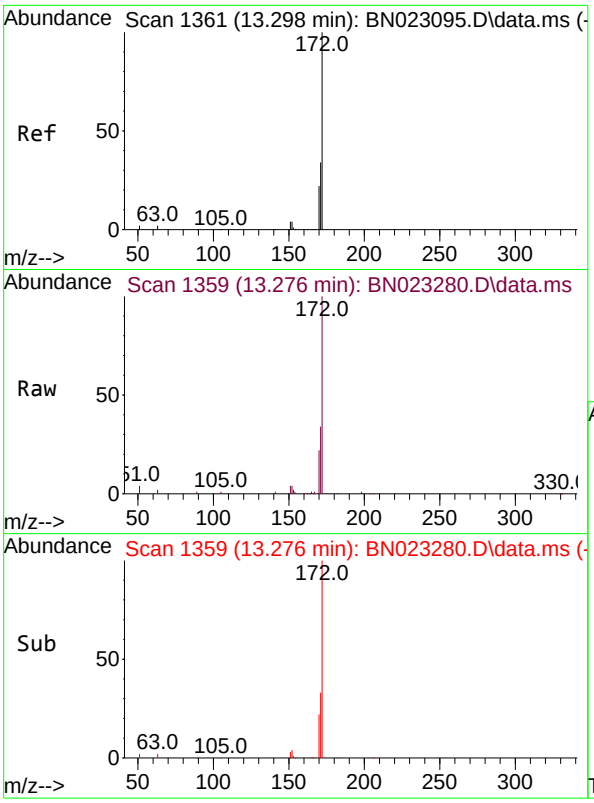


#14
2,4,6-Tribromophenol
Concen: 0.474 ng
RT: 16.136 min Scan# 1621
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:330 Resp: 2663

Ion	Ratio	Lower	Upper
330	100		
332	94.2	77.3	115.9
141	36.8	33.5	50.3



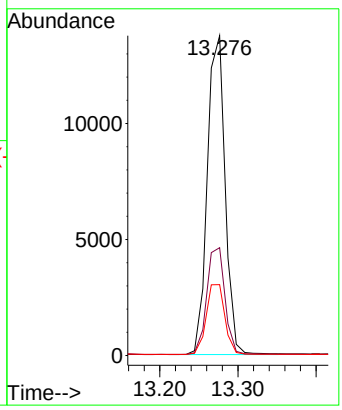


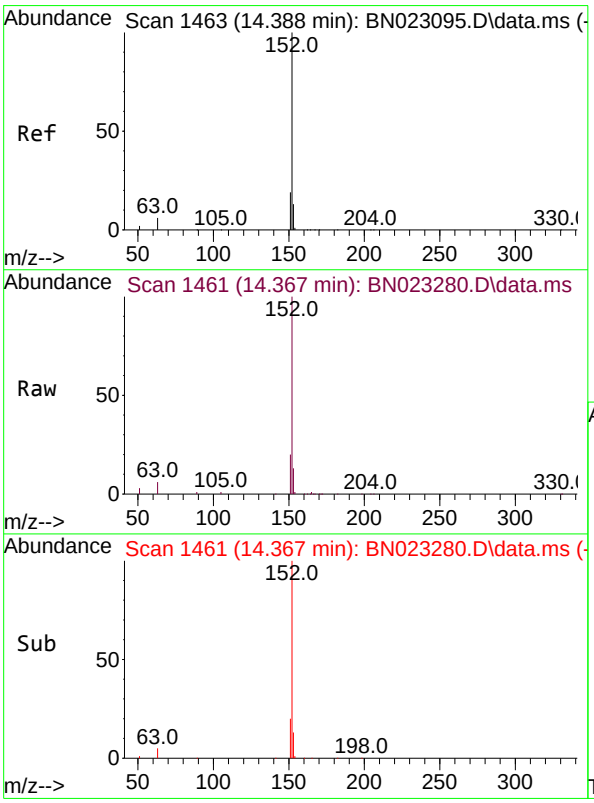
#15
2-Fluorobiphenyl
Concen: 0.352 ng
RT: 13.276 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:172 Resp: 21769

Ion	Ratio	Lower	Upper
172	100		
171	33.7	27.4	41.0
170	22.2	17.9	26.9

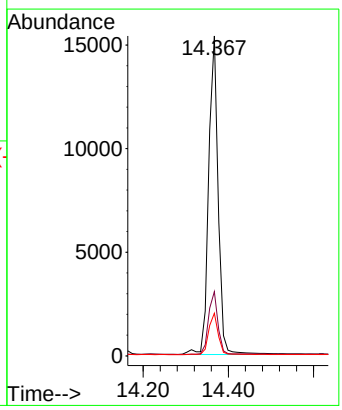


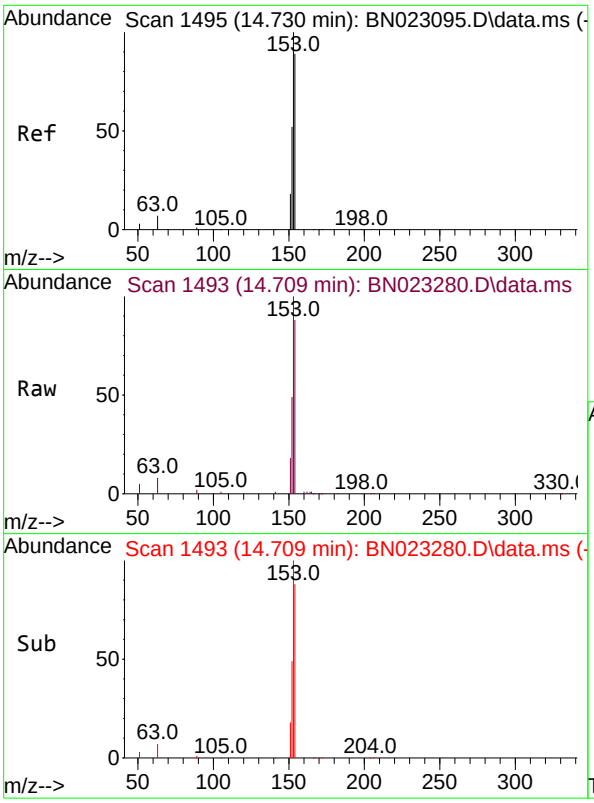


#16
Acenaphthylene
Concen: 0.382 ng
RT: 14.367 min Scan# 1461
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:152 Resp: 23837

Ion	Ratio	Lower	Upper
152	100		
151	19.6	15.4	23.2
153	12.9	10.3	15.5



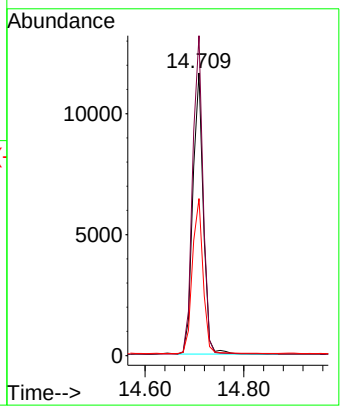


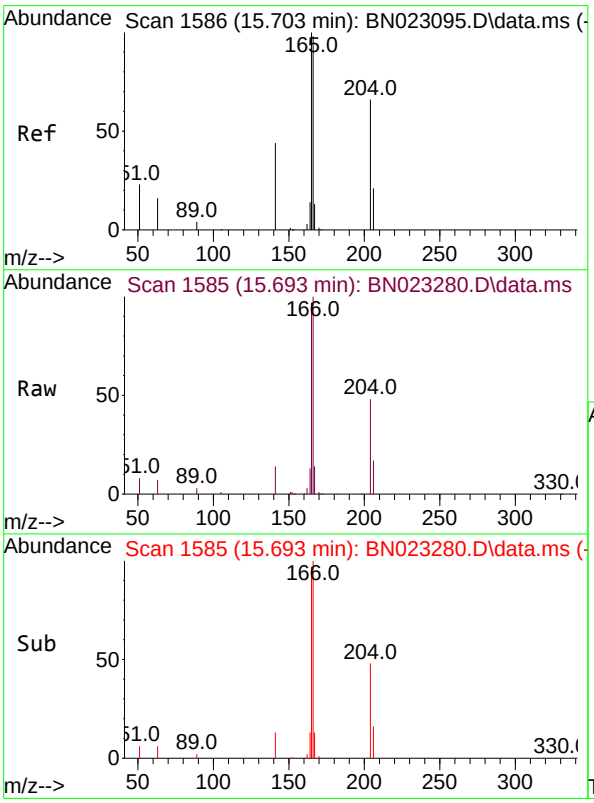
#17
Acenaphthene
Concen: 0.372 ng
RT: 14.709 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:154 Resp: 17079

Ion	Ratio	Lower	Upper
154	100		
153	113.0	88.6	132.8
152	56.2	48.1	72.1

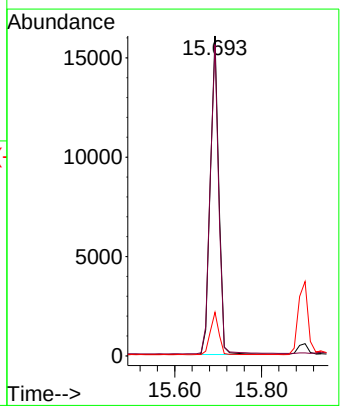


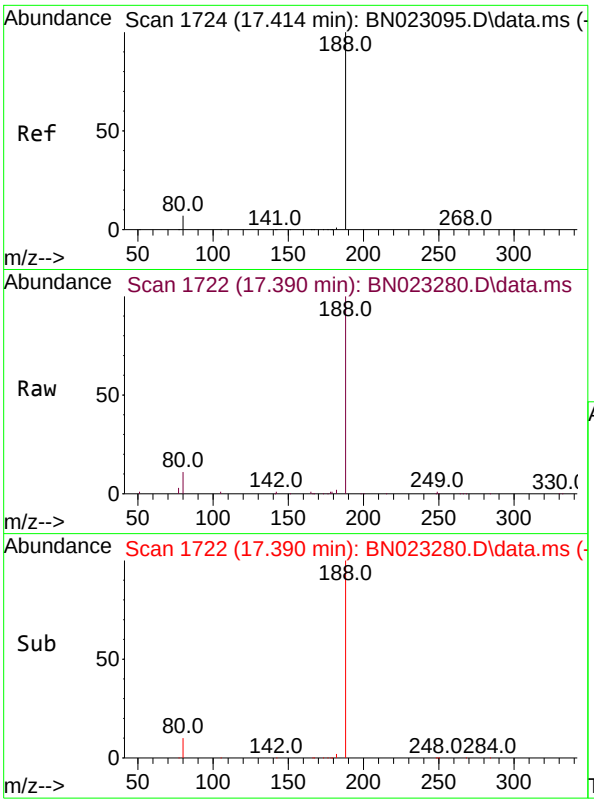


#18
Fluorene
Concen: 0.458 ng
RT: 15.693 min Scan# 1585
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:166 Resp: 23490

Ion	Ratio	Lower	Upper
166	100		
165	98.6	79.8	119.6
167	13.4	10.6	16.0



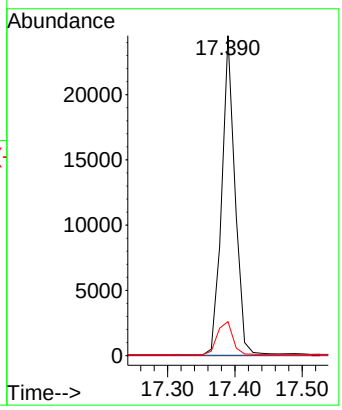


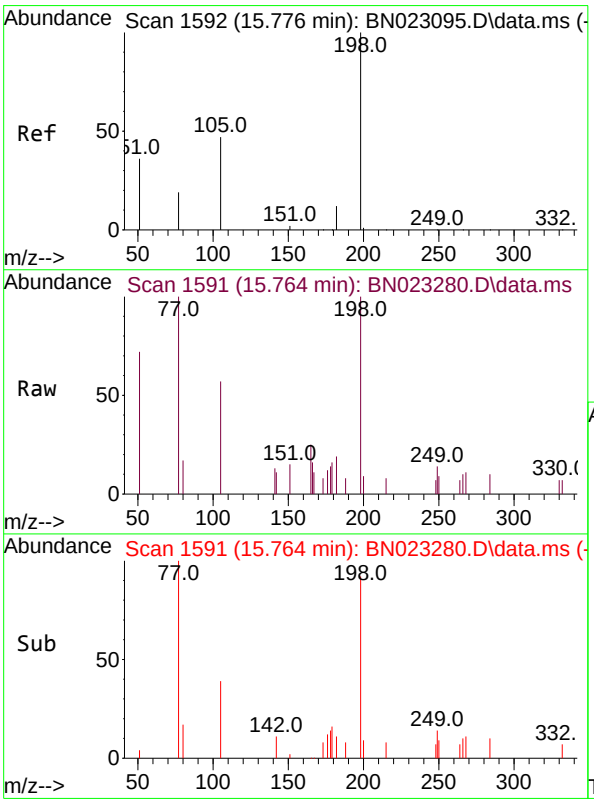
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.390 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:188 Resp: 33722

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.6	6.1	9.1#

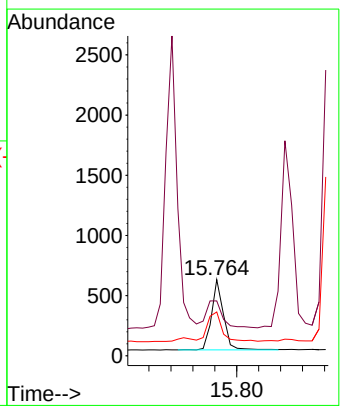


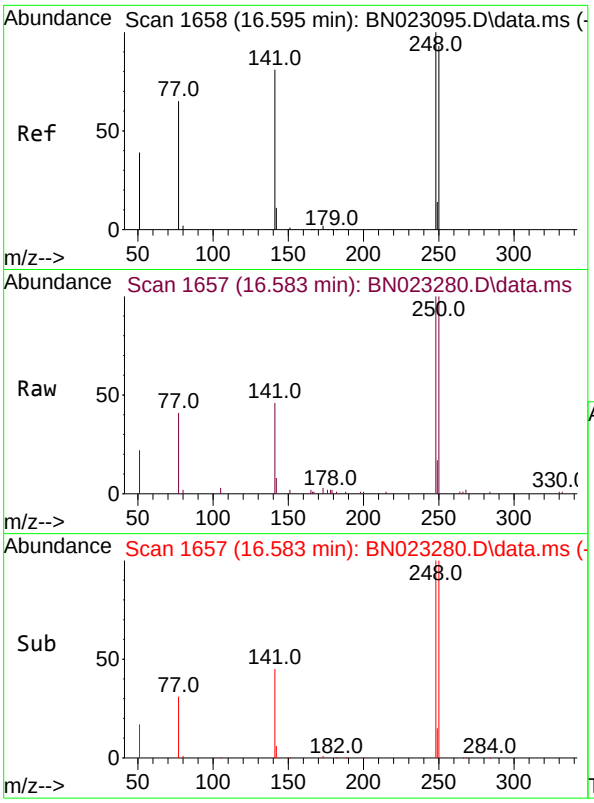


#20
4,6-Dinitro-2-methylphenol
Concen: 0.362 ng
RT: 15.764 min Scan# 1591
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:198 Resp: 866

Ion	Ratio	Lower	Upper
198	100		
51	72.0	57.0	85.4
105	57.7	47.2	70.8



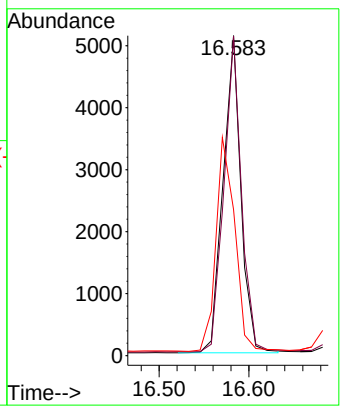


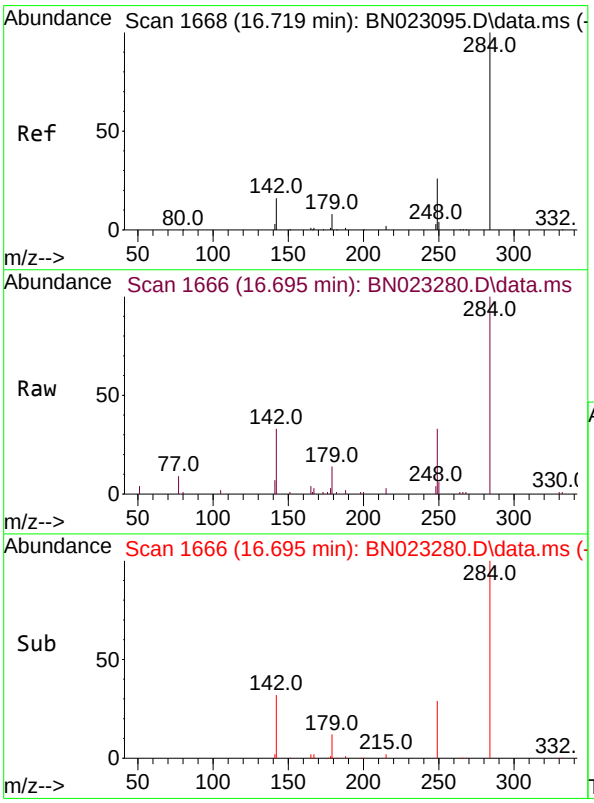
#21
4-Bromophenyl-phenylether
Concen: 0.393 ng
RT: 16.583 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:248 Resp: 7067

Ion	Ratio	Lower	Upper
248	100		
250	99.8	74.3	111.5
141	45.6	65.0	97.6#

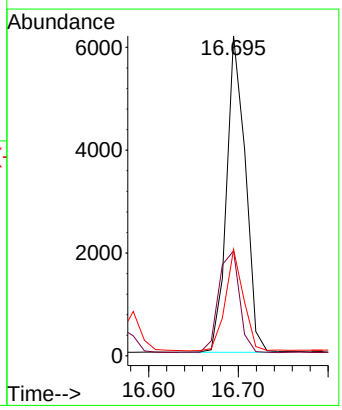


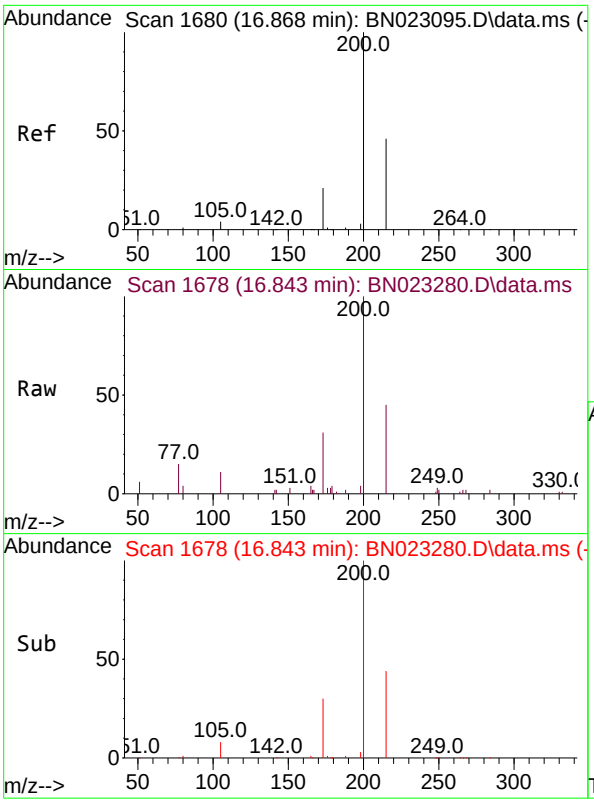


#22
Hexachlorobenzene
Concen: 0.381 ng
RT: 16.695 min Scan# 1666
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:284 Resp: 8969

Ion	Ratio	Lower	Upper
284	100		
142	35.6	31.0	46.4
249	30.7	24.4	36.6



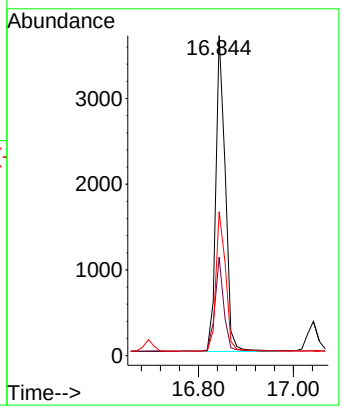


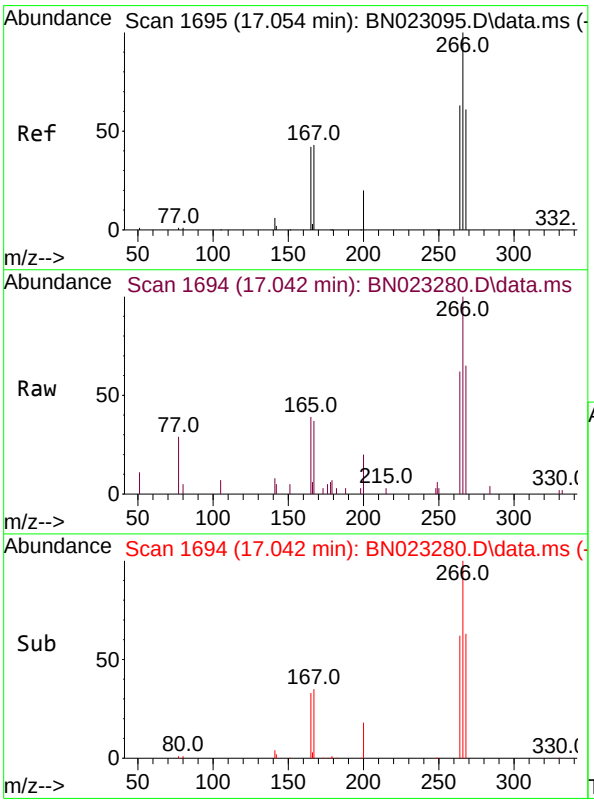
#23
Atrazine
Concen: 0.402 ng
RT: 16.843 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:200 Resp: 5103

Ion	Ratio	Lower	Upper
200	100		
173	30.7	18.2	27.4#
215	45.0	38.0	57.0

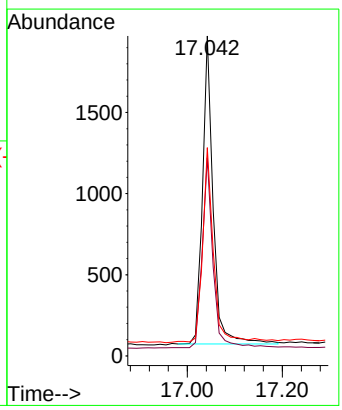


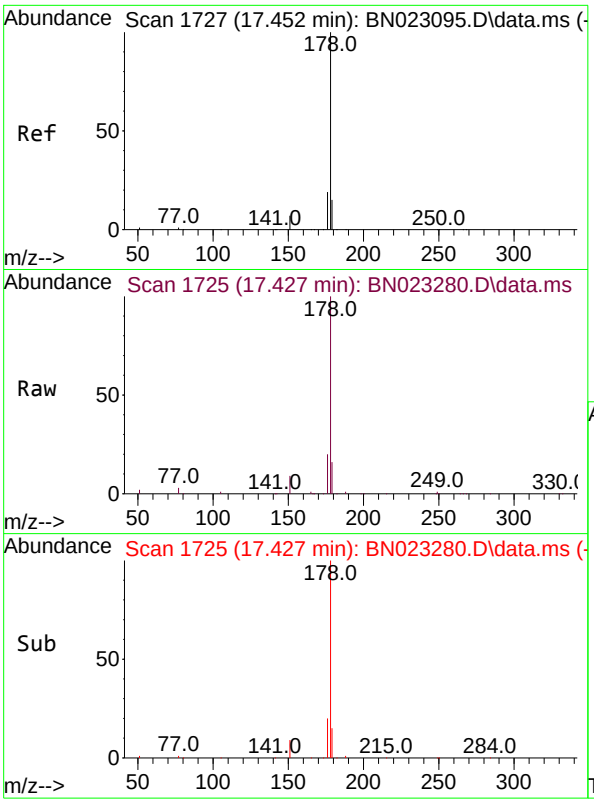


#24
Pentachlorophenol
Concen: 0.359 ng
RT: 17.042 min Scan# 1694
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:266 Resp: 2939

Ion	Ratio	Lower	Upper
266	100		
264	62.3	50.1	75.1
268	63.0	49.7	74.5



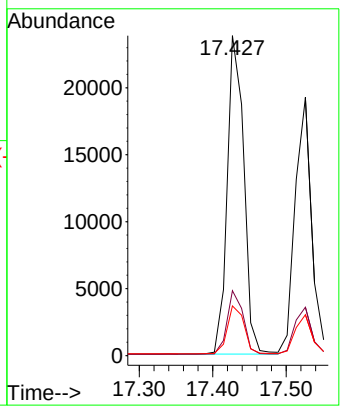


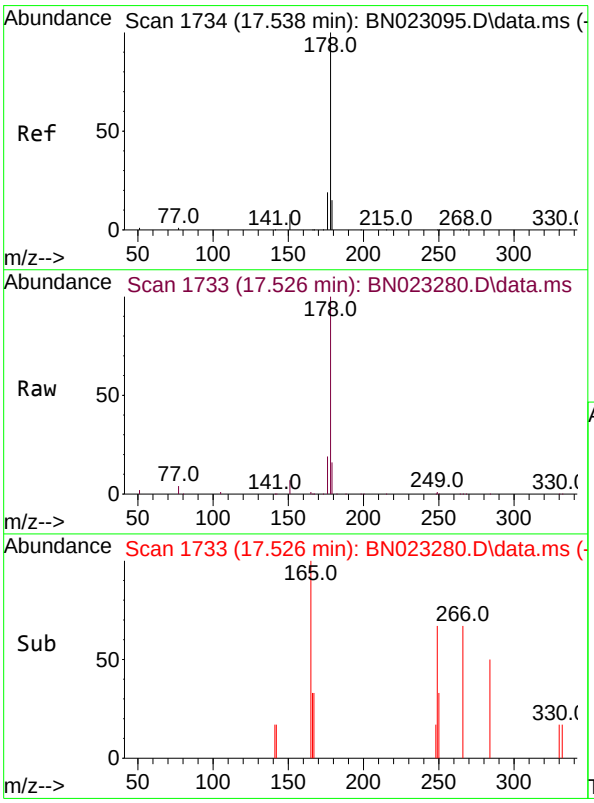
#25
Phenanthrene
Concen: 0.373 ng
RT: 17.427 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:178 Resp: 37463

Ion	Ratio	Lower	Upper
178	100		
176	19.4	15.4	23.2
179	15.3	12.2	18.2

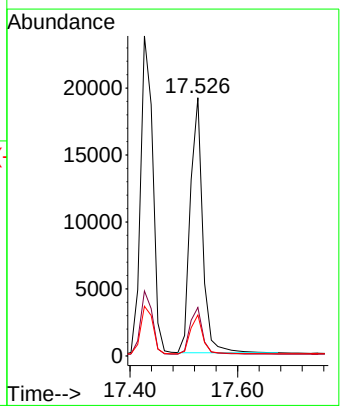


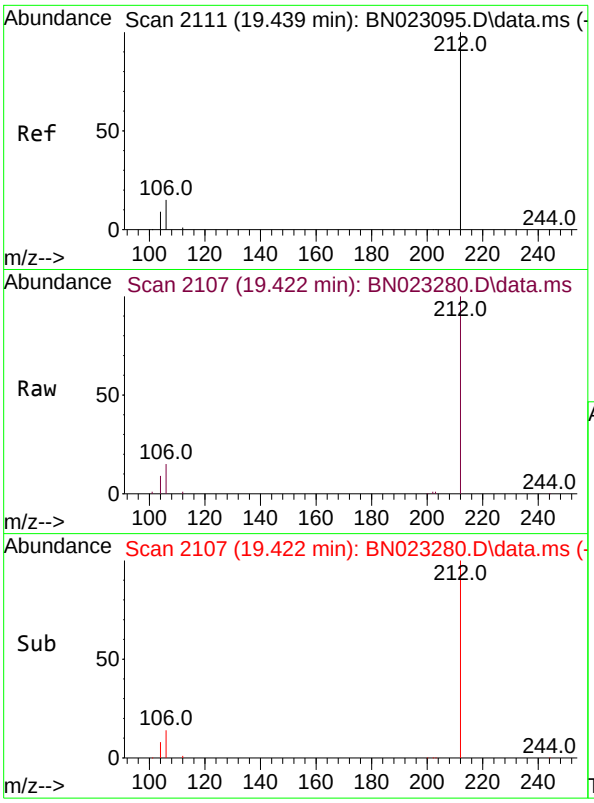


#26
Anthracene
Concen: 0.379 ng
RT: 17.526 min Scan# 1733
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:178 Resp: 30364

Ion	Ratio	Lower	Upper
178	100		
176	18.7	15.1	22.7
179	15.2	12.2	18.4



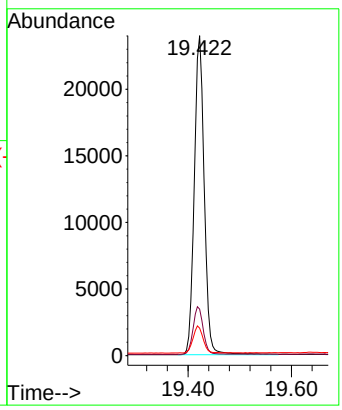


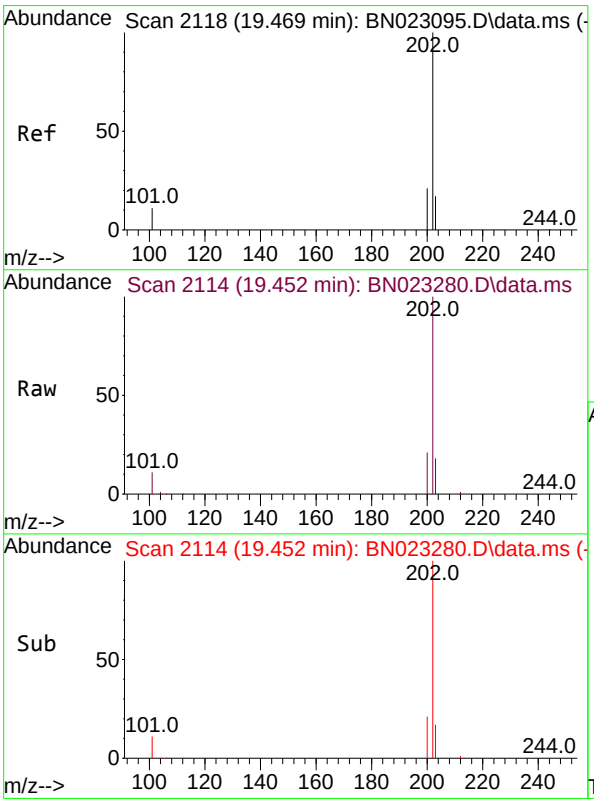
#27
Fluoranthene-d10
Concen: 0.406 ng
RT: 19.422 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:212 Resp: 32028

Ion	Ratio	Lower	Upper
212	100		
106	15.1	13.0	19.4
104	8.7	7.5	11.3

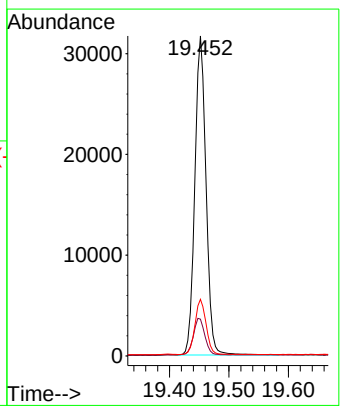


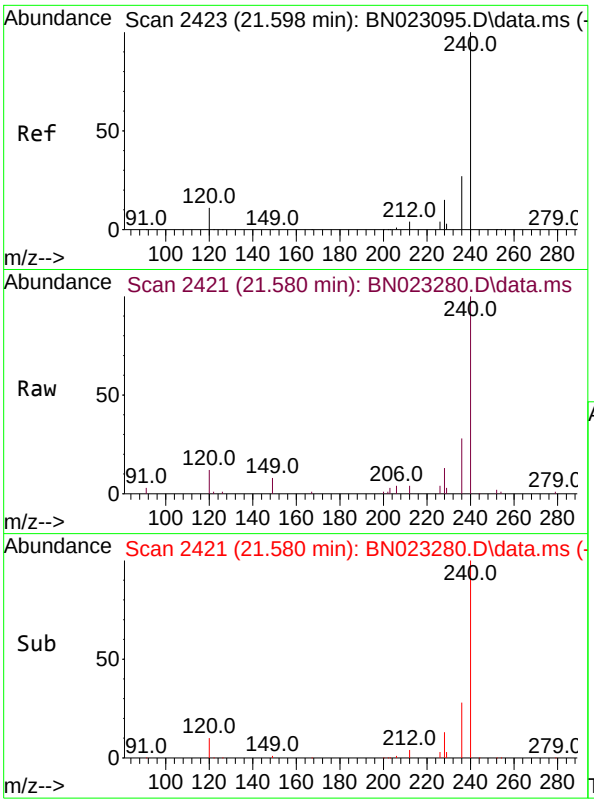


#28
Fluoranthene
Concen: 0.384 ng
RT: 19.452 min Scan# 2114
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:202 Resp: 41357

Ion	Ratio	Lower	Upper
202	100		
101	11.9	9.7	14.5
203	17.1	13.8	20.6



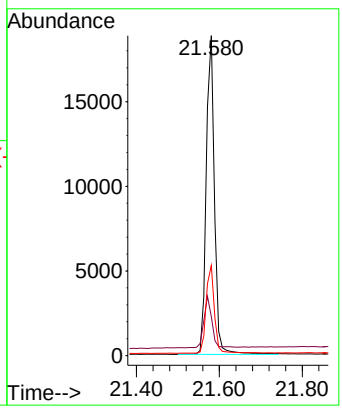


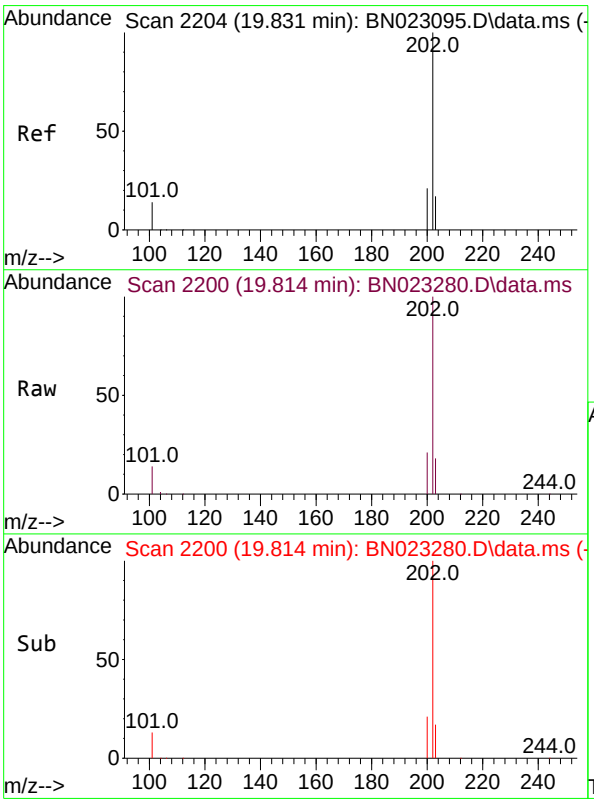
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.580 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:240 Resp: 25842

Ion	Ratio	Lower	Upper
240	100		
120	12.2	10.1	15.1
236	28.2	22.2	33.4

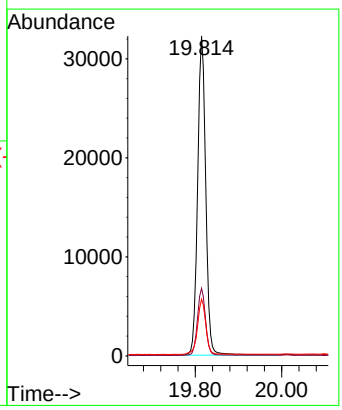


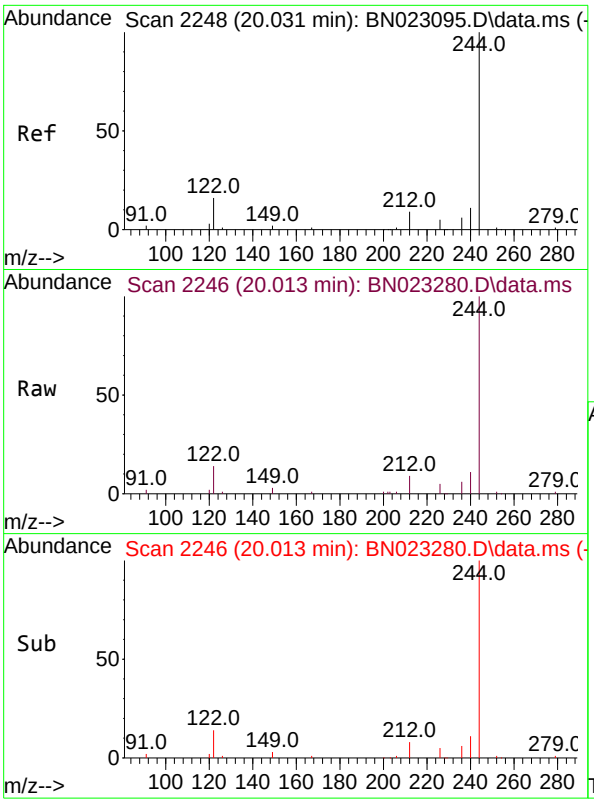


#30
Pyrene
Concen: 0.444 ng
RT: 19.814 min Scan# 2200
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:202 Resp: 41984

Ion	Ratio	Lower	Upper
202	100		
200	20.9	16.9	25.3
203	17.6	14.2	21.4



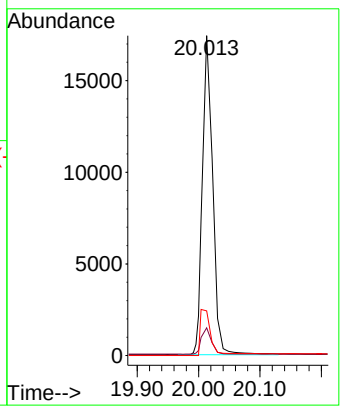


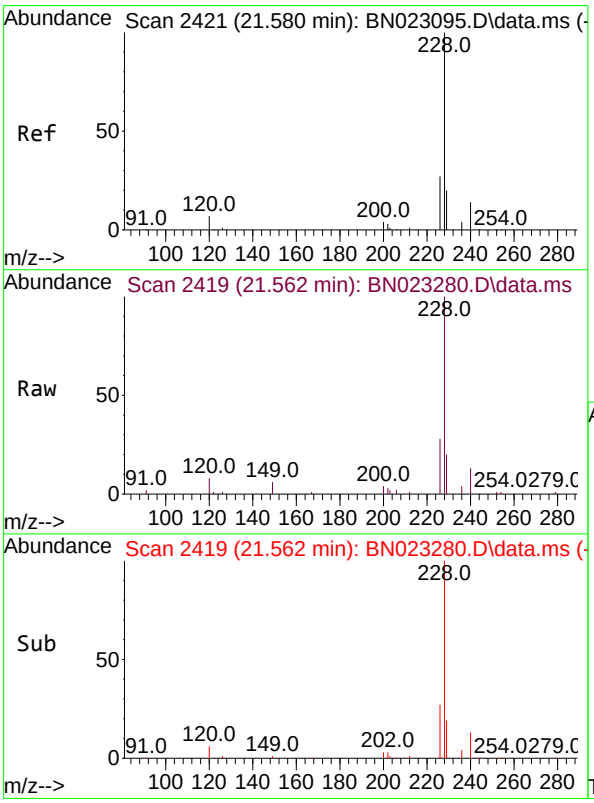
#31
Terphenyl-d14
Concen: 0.422 ng
RT: 20.013 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:244 Resp: 17696

Ion	Ratio	Lower	Upper
244	100		
212	8.7	7.6	11.4
122	14.0	12.6	18.8

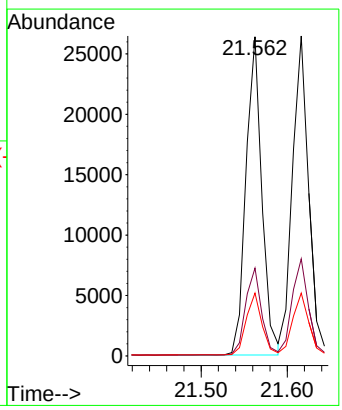


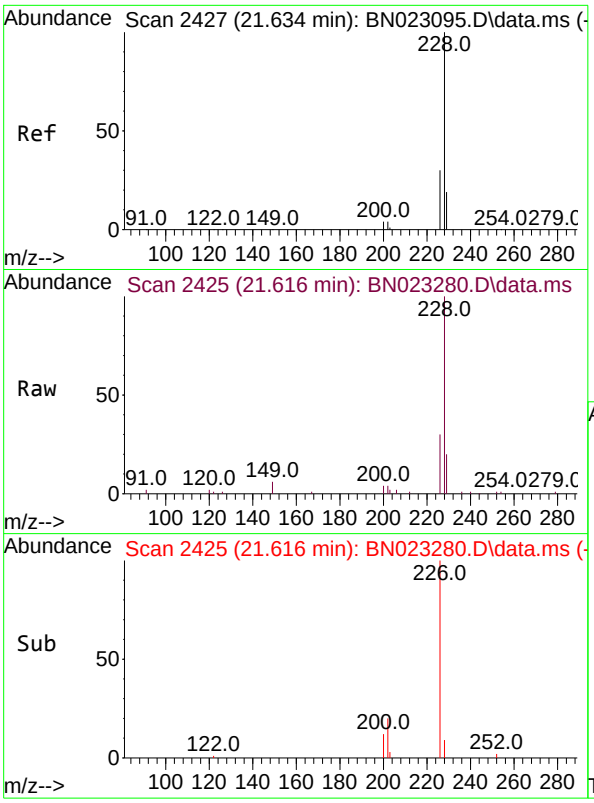


#32
Benzo(a)anthracene
Concen: 0.405 ng
RT: 21.562 min Scan# 2419
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:228 Resp: 33710

Ion	Ratio	Lower	Upper
228	100		
226	27.5	22.0	33.0
229	19.7	15.8	23.8



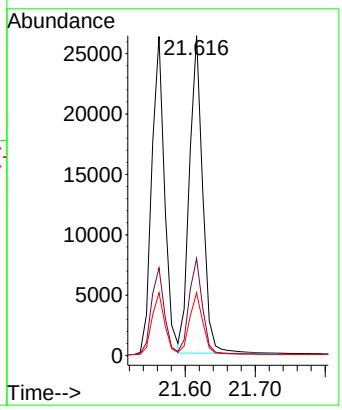


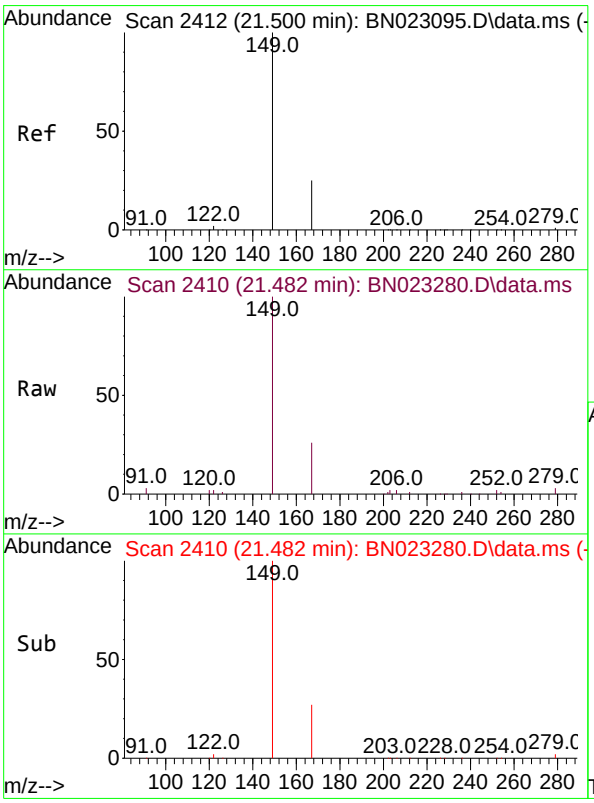
#33
Chrysene
Concen: 0.370 ng
RT: 21.616 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:228 Resp: 34659

Ion	Ratio	Lower	Upper
228	100		
226	30.3	24.4	36.6
229	19.6	15.6	23.4

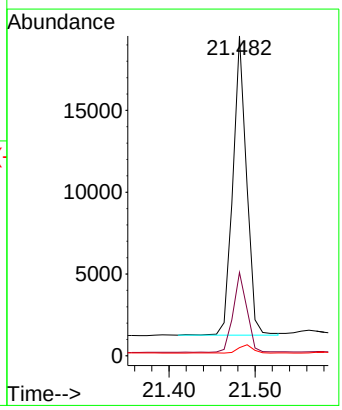


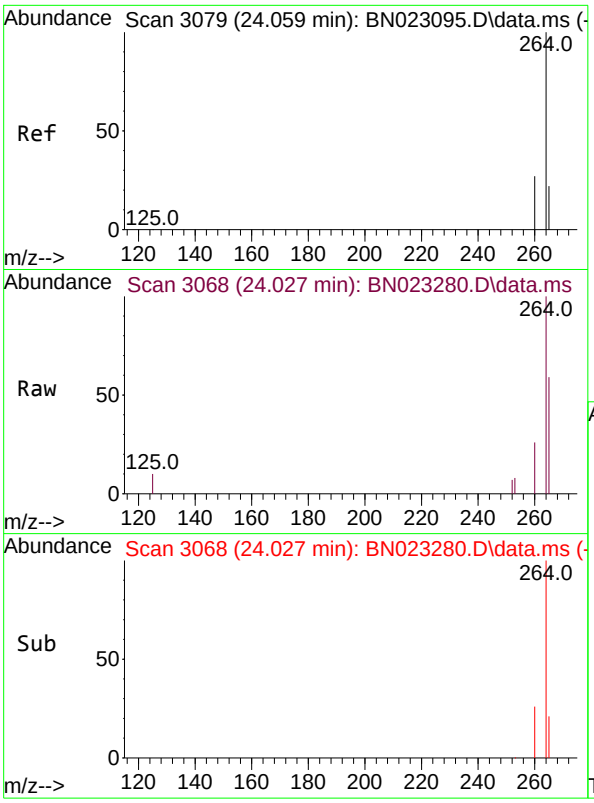


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.573 ng
RT: 21.482 min Scan# 2410
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:149 Resp: 20171

Ion	Ratio	Lower	Upper
149	100		
167	26.9	20.2	30.2
279	3.1	2.3	3.5



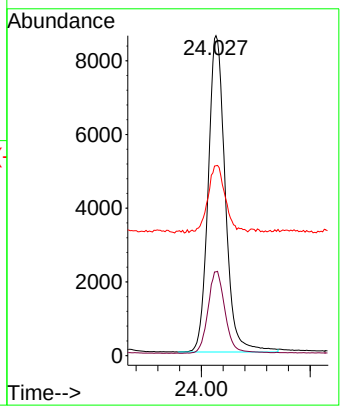


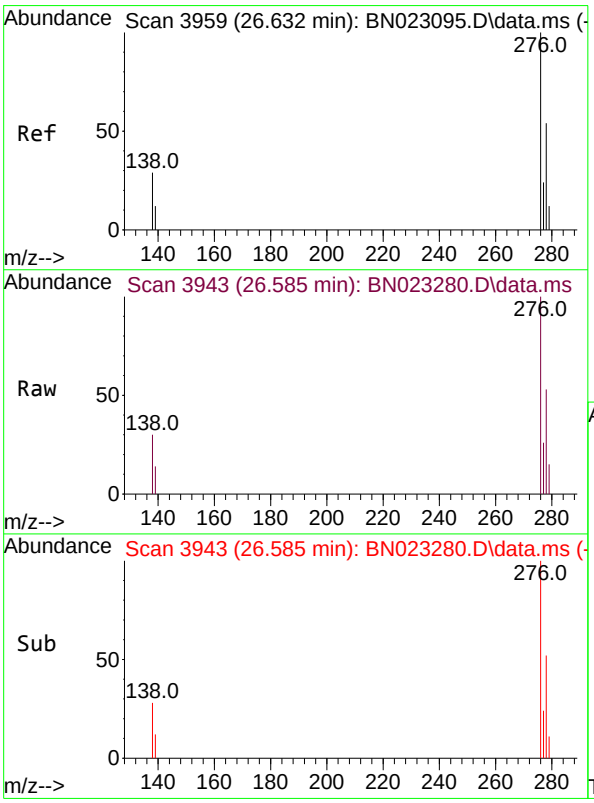
#35
Perylene-d12
Concen: 0.400 ng
RT: 24.027 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:264 Resp: 18763

Ion	Ratio	Lower	Upper
264	100		
260	26.2	21.7	32.5
265	59.3	43.2	64.8

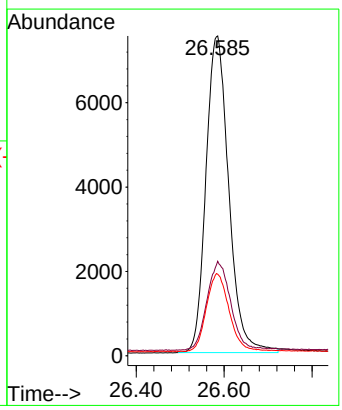


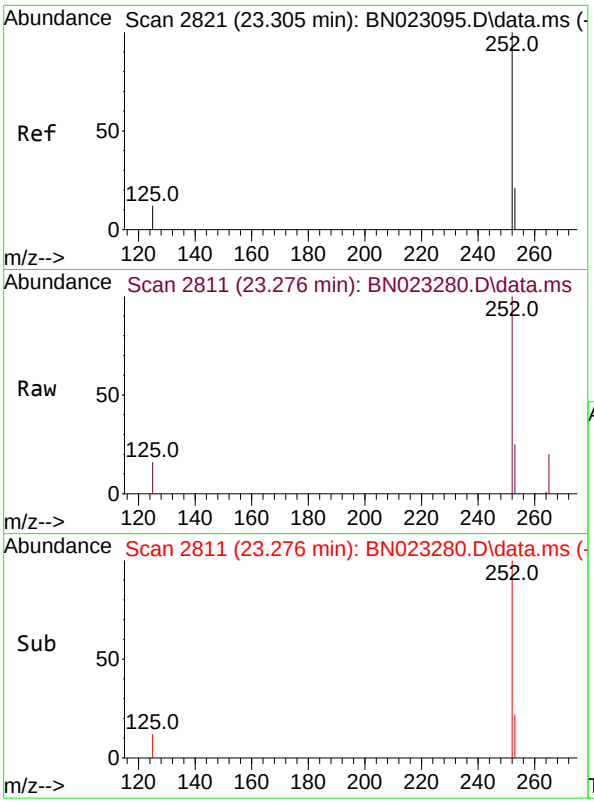


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.322 ng
RT: 26.585 min Scan# 3943
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:276 Resp: 27074

Ion	Ratio	Lower	Upper
276	100		
138	28.8	25.0	37.6
277	24.4	19.8	29.8



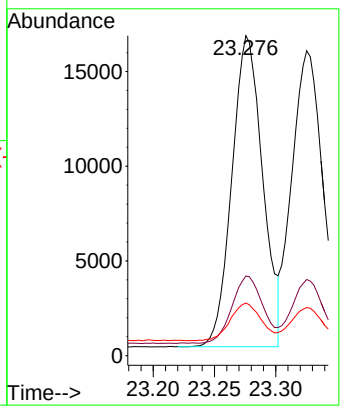


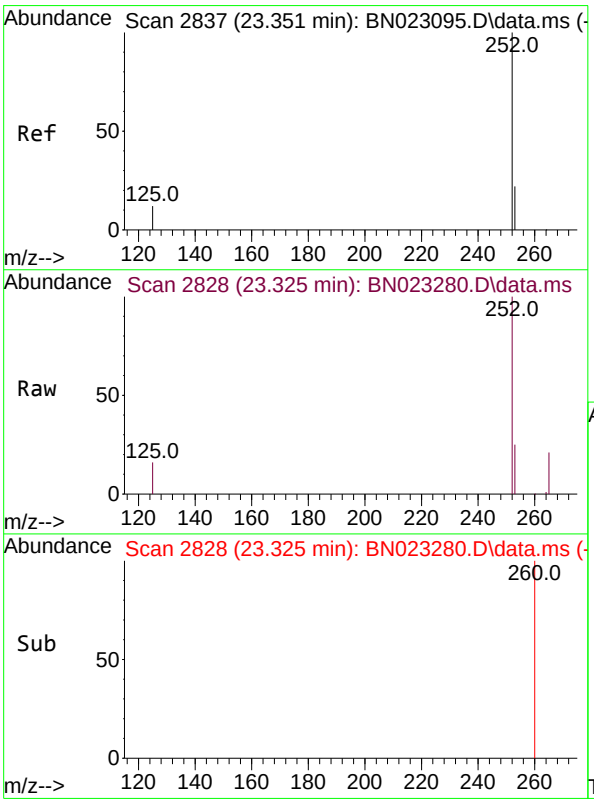
#37
Benzo(b)fluoranthene
Concen: 0.369 ng
RT: 23.276 min Scan# 28
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 28714

Ion	Ratio	Lower	Upper
252	100		
253	24.9	19.0	28.4
125	16.4	12.8	19.2

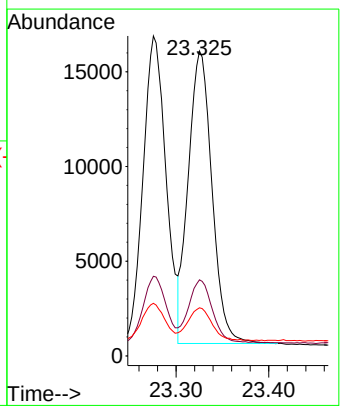


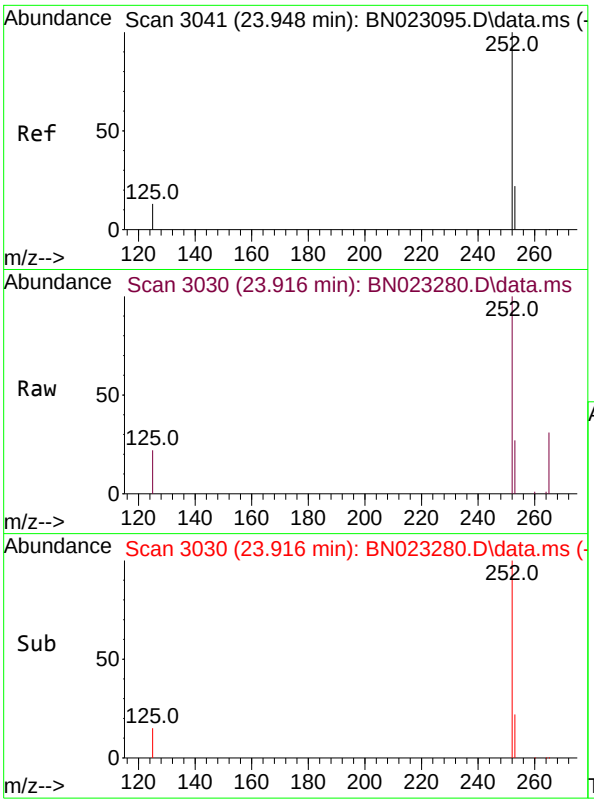


#38
Benzo(k)fluoranthene
Concen: 0.347 ng
RT: 23.325 min Scan# 2828
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:252 Resp: 27427

Ion	Ratio	Lower	Upper
252	100		
253	24.9	19.1	28.7
125	15.8	12.5	18.7



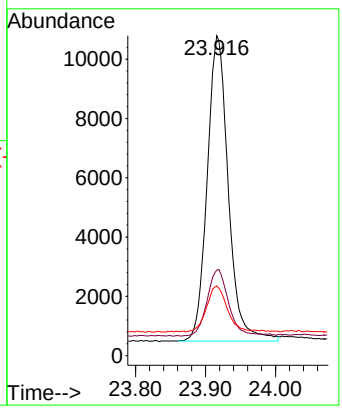


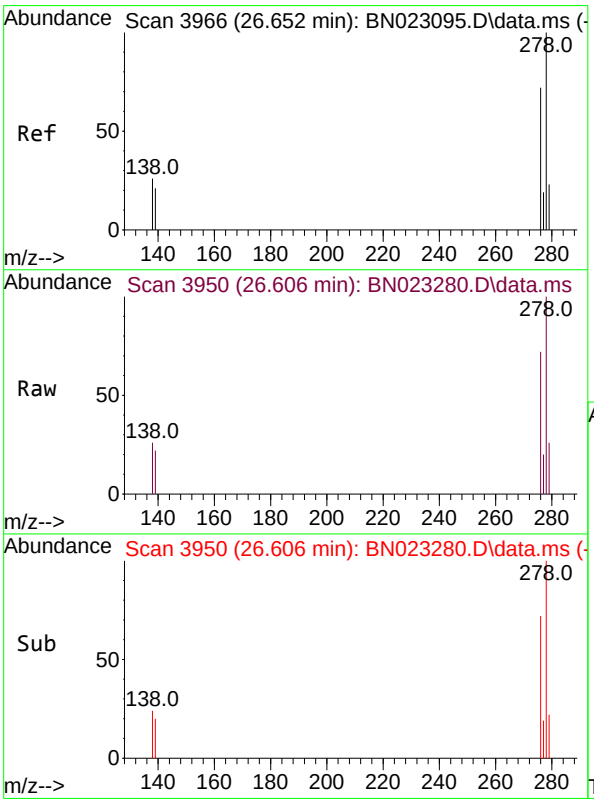
#39
Benzo(a)pyrene
Concen: 0.370 ng
RT: 23.916 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 21593

Ion	Ratio	Lower	Upper
252	100		
253	26.7	20.6	30.8
125	21.8	15.8	23.8

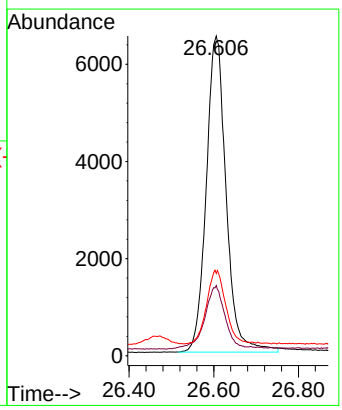


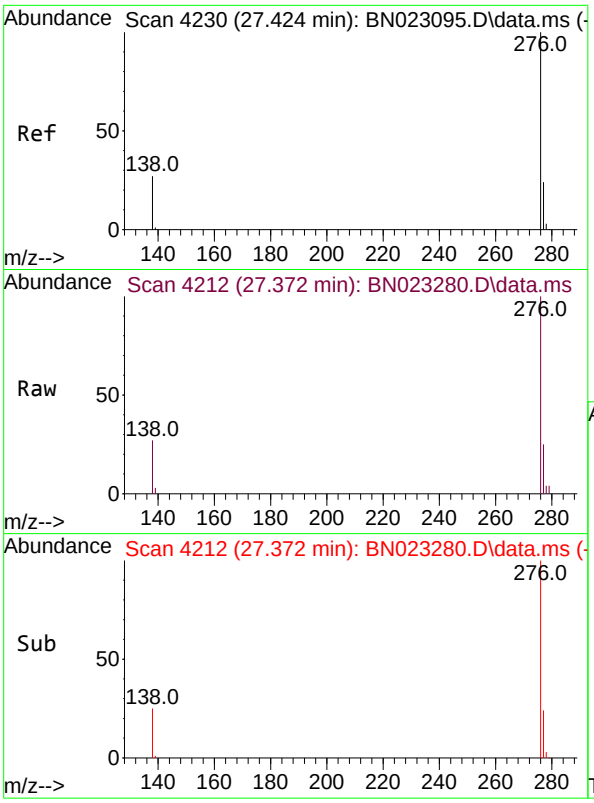


#40
Dibenzo(a,h)anthracene
Concen: 0.315 ng
RT: 26.606 min Scan# 3950
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:278 Resp: 21241

Ion	Ratio	Lower	Upper
278	100		
139	22.0	17.5	26.3
279	25.8	20.5	30.7



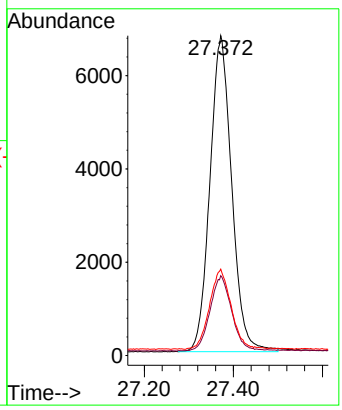


#41
Benzo(g,h,i)perylene
Concen: 0.319 ng
RT: 27.372 min Scan# 4
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:276 Resp: 23015

Ion	Ratio	Lower	Upper
276	100		
277	25.0	19.9	29.9
138	27.0	22.2	33.2



Sample Results: **BN023280.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023280.D
Acq On : 19 Dec 2022 11:22
Operator : CG/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Dec 19 15:45:22 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	111	-0.02
2		1,4-Dioxane	0.395	0.440	-11.4	121	-0.01
3		n-Nitrosodimethylamine	0.388	0.356	8.2	106	-0.01
4	S	2-Fluorophenol	0.745	0.926	-24.3	138	0.00
5	S	Phenol-d6	0.947	1.181	-24.7	143	-0.01
6		bis(2-Chloroethyl)ether	1.076	1.066	0.9	107	-0.01
7	I	Naphthalene-d8	1.000	1.000	0.0	120	-0.02
8	S	Nitrobenzene-d5	0.264	0.271	-2.7	132	-0.02
9		Naphthalene	1.019	0.988	3.0	119	-0.01
10		Hexachlorobutadiene	0.194	0.192	1.0	118	-0.02
11	SURR	2-Methylnaphthalene-d10	0.678	0.625	7.8	117	-0.02
12		2-Methylnaphthalene	0.152	0.212	-39.5#	174#	-0.01
13	I	Acenaphthene-d10	1.000	1.000	0.0	135	-0.01
14	S	2,4,6-Tribromophenol	0.145	0.172	-18.6	176#	-0.01
15	S	2-Fluorobiphenyl	1.598	1.405	12.1	118	-0.01
16		Acenaphthylene	1.611	1.538	4.5	141	-0.01
17		Acenaphthene	1.184	1.102	6.9	130	-0.01
18		Fluorene	1.325	1.516	-14.4	159#	-0.01
19	I	Phenanthrene-d10	1.000	1.000	0.0	133	-0.01
20		4,6-Dinitro-2-methylphenol	0.057	0.026	54.4#	75	-0.01
21		4-Bromophenyl-phenylether	0.213	0.210	1.4	137	-0.01
22		Hexachlorobenzene	0.280	0.266	5.0	127	-0.01
23		Atrazine	0.150	0.151	-0.7	151#	-0.01
24		Pentachlorophenol	0.097	0.087	10.3	145	-0.01
25		Phenanthrene	1.192	1.111	6.8	129	-0.01
26		Anthracene	0.950	0.900	5.3	140	-0.01
27	SURR	Fluoranthene-d10	0.936	0.950	-1.5	144	-0.01
28		Fluoranthene	1.276	1.226	3.9	136	-0.01
29	I	Chrysene-d12	1.000	1.000	0.0	126	0.00
30		Pyrene	1.464	1.625	-11.0	141	-0.01
31	S	Terphenyl-d14	0.649	0.685	-5.5	126	-0.02
32		Benzo(a)anthracene	1.289	1.304	-1.2	137	0.00
33		Chrysene	1.449	1.341	7.5	117	0.00
34		Bis(2-ethylhexyl)phthalate	0.545	0.781	-43.3#	201#	0.00
35	I	Perylene-d12	1.000	1.000	0.0	121	-0.02
36		Indeno(1,2,3-cd)pyrene	1.793	1.443	19.5	103	-0.03
37		Benzo(b)fluoranthene	1.658	1.530	7.7	116	-0.02
38		Benzo(k)fluoranthene	1.684	1.462	13.2	110	-0.02
39	C	Benzo(a)pyrene	1.244	1.151	7.5	125	-0.03
40		Dibenzo(a,h)anthracene	1.439	1.132	21.3	100	-0.03
41		Benzo(g,h,i)perylene	1.537	1.227	20.2	98	-0.04

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

Sample Results: **BN023280.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023280.D
Acq On : 19 Dec 2022 11:22
Operator : CG/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Dec 19 15:45:22 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	0.400	0.400	0.0	111	-0.02
2		1,4-Dioxane	0.400	0.446	-11.5	121	-0.01
3		n-Nitrosodimethylamine	0.400	0.367	8.3	106	-0.01
4	S	2-Fluorophenol	0.400	0.497	-24.2	138	0.00
5	S	Phenol-d6	0.400	0.499	-24.7	143	-0.01
6		bis(2-Chloroethyl)ether	0.400	0.396	1.0	107	-0.01
7	I	Naphthalene-d8	0.400	0.400	0.0	120	-0.02
8	S	Nitrobenzene-d5	0.400	0.412	-3.0	132	-0.02
9		Naphthalene	0.400	0.388	3.0	119	-0.01
10		Hexachlorobutadiene	0.400	0.395	1.3	118	-0.02
11	SURR	2-Methylnaphthalene-d10	0.400	0.369	7.8	117	-0.02
12		2-Methylnaphthalene	0.400	0.560	-40.0#	174	-0.01
13	I	Acenaphthene-d10	0.400	0.400	0.0	135	-0.01
14	S	2,4,6-Tribromophenol	0.400	0.474	-18.5	176	-0.01
15	S	2-Fluorobiphenyl	0.400	0.352	12.0	118	-0.01
16		Acenaphthylene	0.400	0.382	4.5	141	-0.01
17		Acenaphthene	0.400	0.372	7.0	130	-0.01
18		Fluorene	0.400	0.458	-14.5	159	-0.01
19	I	Phenanthrene-d10	0.400	0.400	0.0	133	-0.01
20		4,6-Dinitro-2-methylphenol	0.400	0.362	9.5	75	-0.01
21		4-Bromophenyl-phenylether	0.400	0.393	1.8	137	-0.01
22		Hexachlorobenzene	0.400	0.381	4.8	127	-0.01
23		Atrazine	0.400	0.402	-0.5	151	-0.01
24		Pentachlorophenol	0.400	0.359	10.3	145	-0.01
25		Phenanthrene	0.400	0.373	6.8	129	-0.01
26		Anthracene	0.400	0.379	5.3	140	-0.01
27	SURR	Fluoranthene-d10	0.400	0.406	-1.5	144	-0.01
28		Fluoranthene	0.400	0.384	4.0	136	-0.01
29	I	Chrysene-d12	0.400	0.400	0.0	126	0.00
30		Pyrene	0.400	0.444	-11.0	141	-0.01
31	S	Terphenyl-d14	0.400	0.422	-5.5	126	-0.02
32		Benzo(a)anthracene	0.400	0.405	-1.3	137	0.00
33		Chrysene	0.400	0.370	7.5	117	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.573	-43.2#	201	0.00
35	I	Perylene-d12	0.400	0.400	0.0	121	-0.02
36		Indeno(1,2,3-cd)pyrene	0.400	0.322	19.5	103	-0.03
37		Benzo(b)fluoranthene	0.400	0.369	7.8	116	-0.02
38		Benzo(k)fluoranthene	0.400	0.347	13.3	110	-0.02
39	C	Benzo(a)pyrene	0.400	0.370	7.5	125	-0.03
40		Dibenzo(a,h)anthracene	0.400	0.315	21.3	100	-0.03
41		Benzo(g,h,i)perylene	0.400	0.319	20.3	98	-0.04

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

CHEMTECH

QC SAMPLE DATA

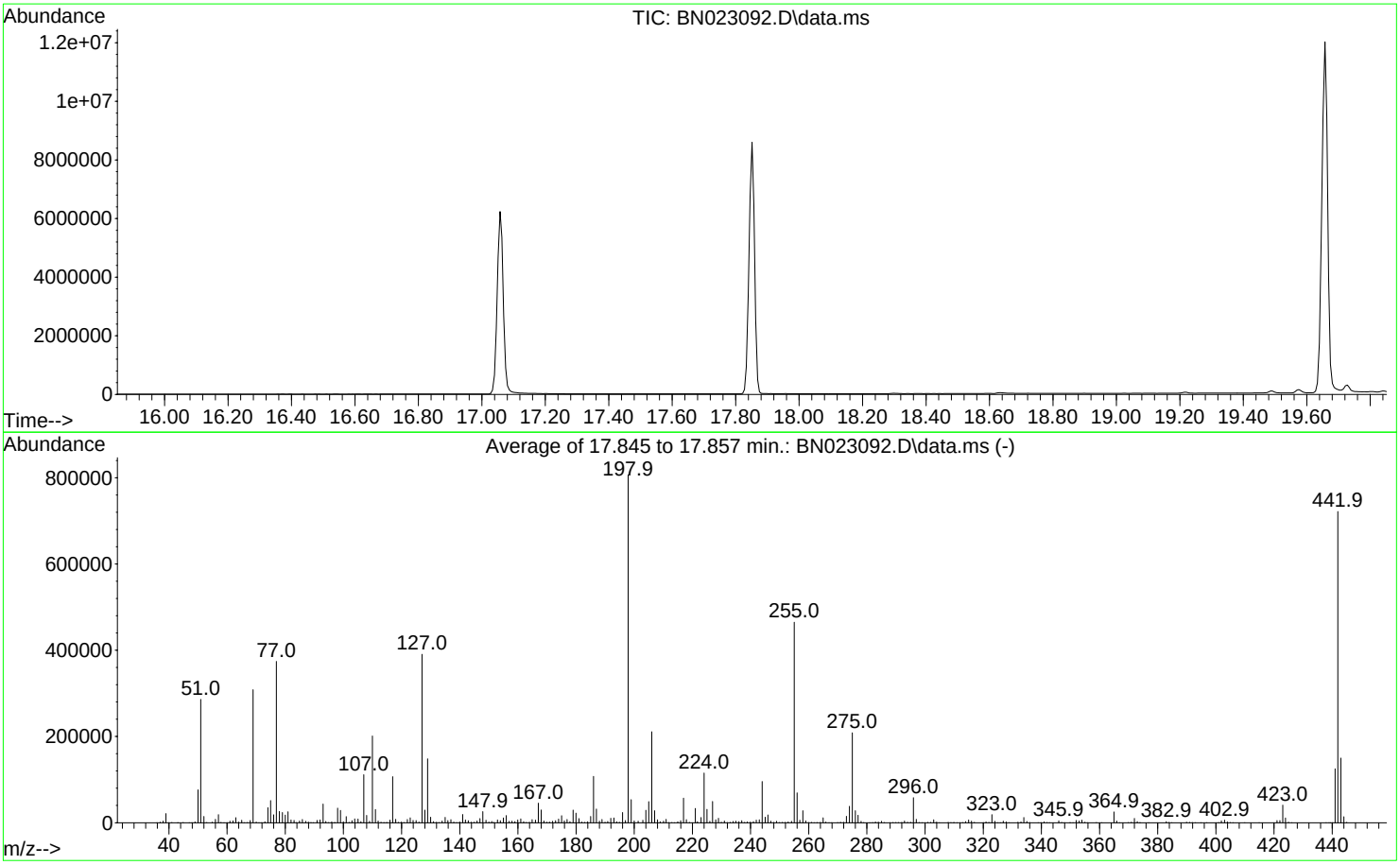
Sample Results: **BN023092.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023092.D
Acq On : 08 Dec 2022 12:45
Operator : CG/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Fri Dec 09 07:44:40 2022



AutoFind: Scans 2509, 2510, 2511; Background Corrected with Scan 2501

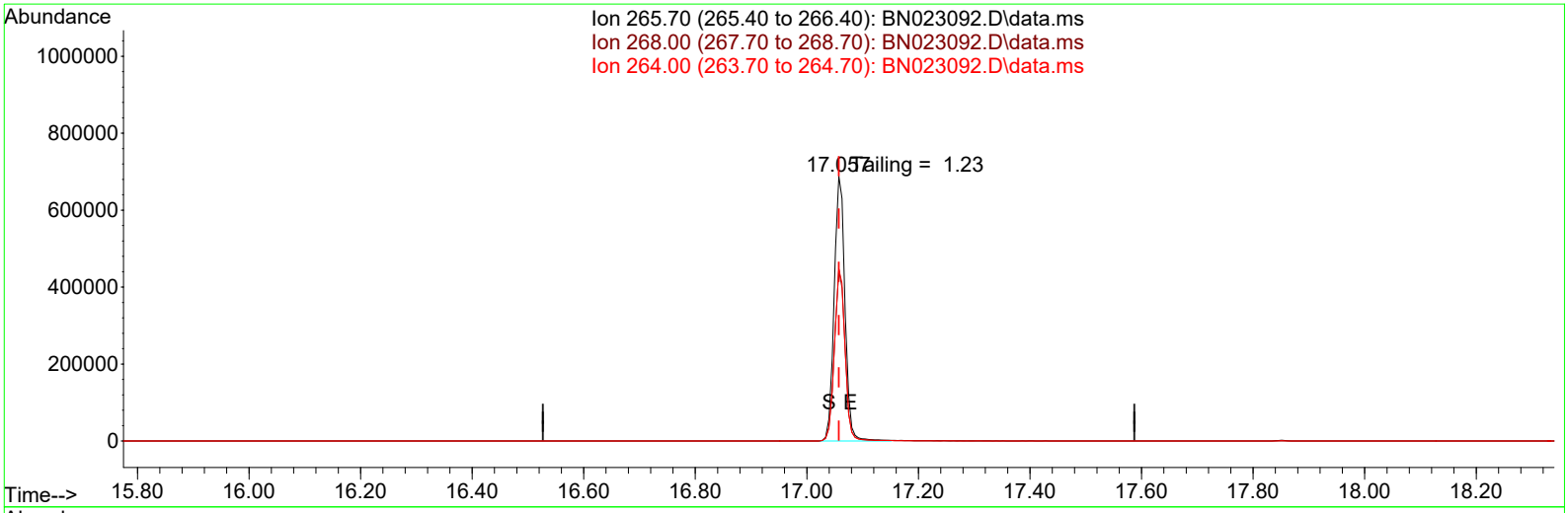
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	35.5	286051	PASS
68	69	0.00	2	1.6	5003	PASS
69	198	0.00	100	38.2	308437	PASS
70	69	0.00	2	0.5	1672	PASS
127	198	10	80	48.4	390485	PASS
197	198	0.00	2	0.6	5002	PASS
198	198	100	100	100.0	806400	PASS
199	198	5	9	6.6	53560	PASS
275	198	10	60	25.9	208533	PASS
365	198	1	100	3.1	25240	PASS
441	198	0.01	100	15.5	125061	PASS
442	442	50	100	100.0	721600	PASS
443	442	15	24	20.8	149963	PASS

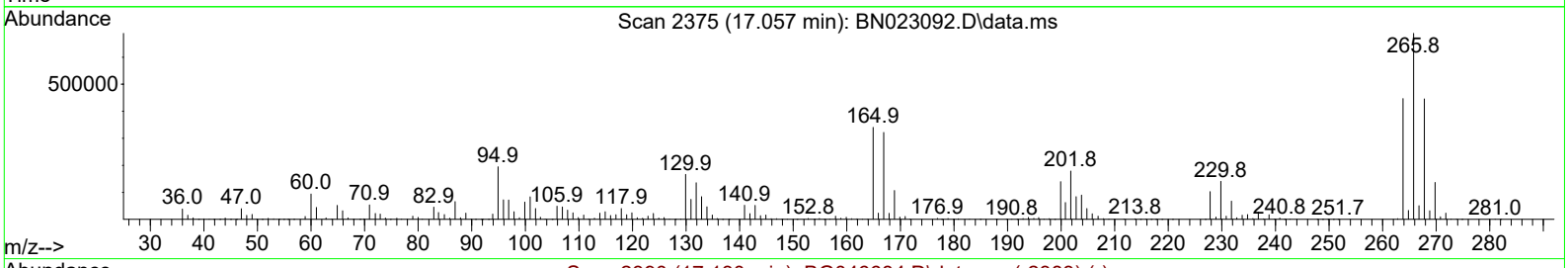
Sample Results: **BN023092.D**

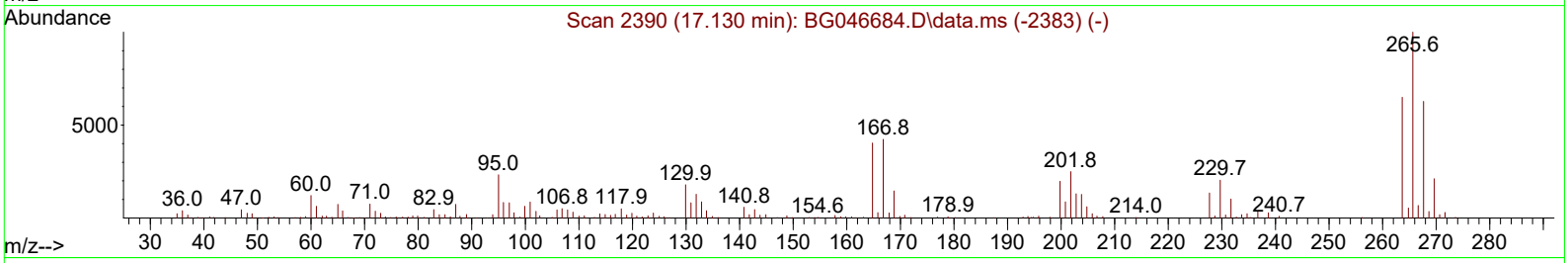
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023092.D
Acq On : 08 Dec 2022 12:45
Operator : CG/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Dec 09 09:10:53 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 09:10:48 2022
Response via : Initial Calibration







TIC: BN023092.D\data.ms

(70) Pentachlorophenol (C)

17.057min (0.000) 22077.14 ng

response 935928

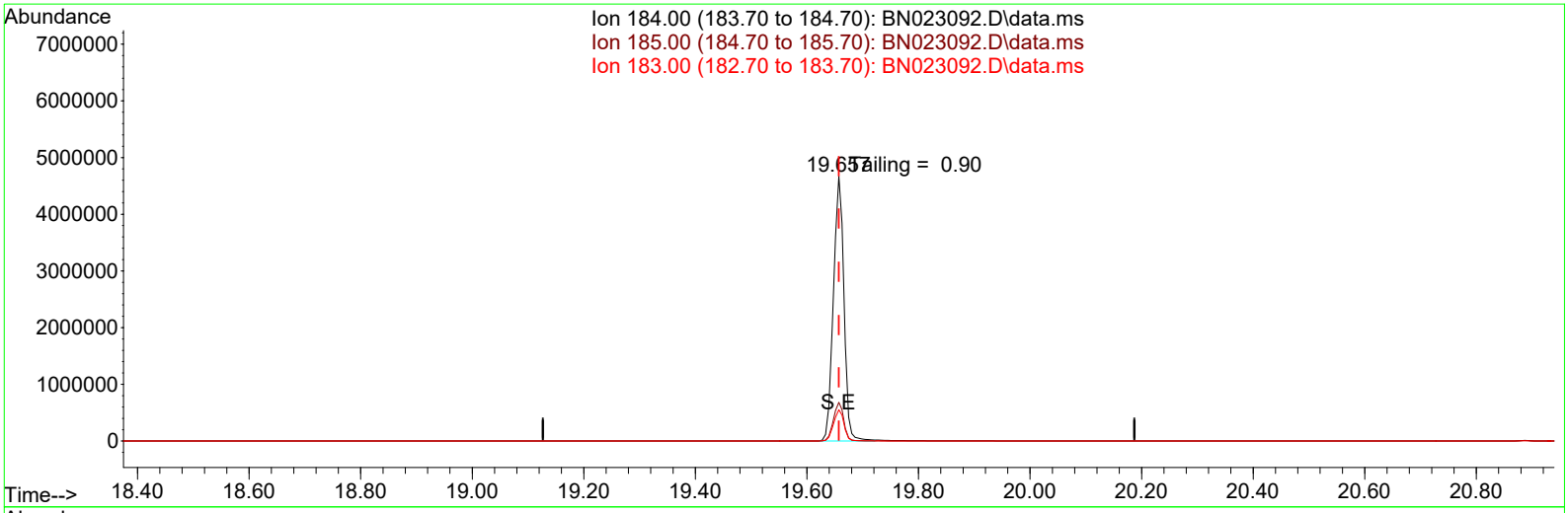
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	64.79
264.00	61.60	64.96
0.00	0.00	0.00

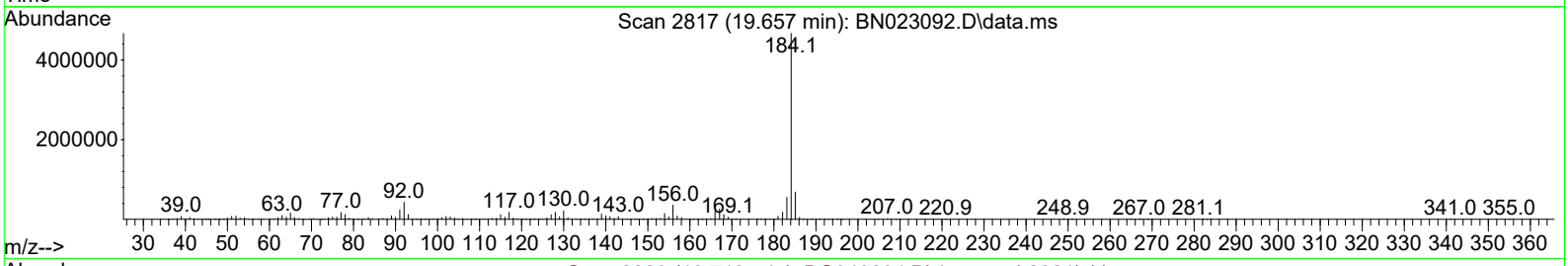
Sample Results: **BN023092.D**

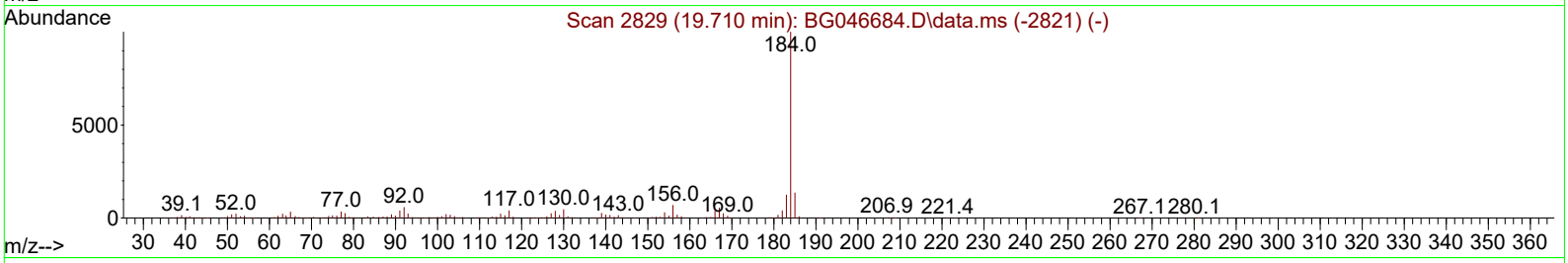
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023092.D
Acq On : 08 Dec 2022 12:45
Operator : CG/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Dec 09 09:10:53 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 09:10:48 2022
Response via : Initial Calibration







TIC: BN023092.D\data.ms

(77) Benzidine

19.657min (0.000) 3431862.86 ng

response 6135730

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	14.62
183.00	13.20	11.85
0.00	0.00	0.00

Instrument :
BNA_N
ClientSampleId :
DFTPP

DDT Breakdown

Date	Instrument Name	DFTPP Data File
12/8/2022	BNA_N	BN023092.D
Compound Name	**Response**	**Retention Time**
DDT	2597977	20.886
DDD	21198	20.498
DDE	214	19.939
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
21412	2619389	0.82

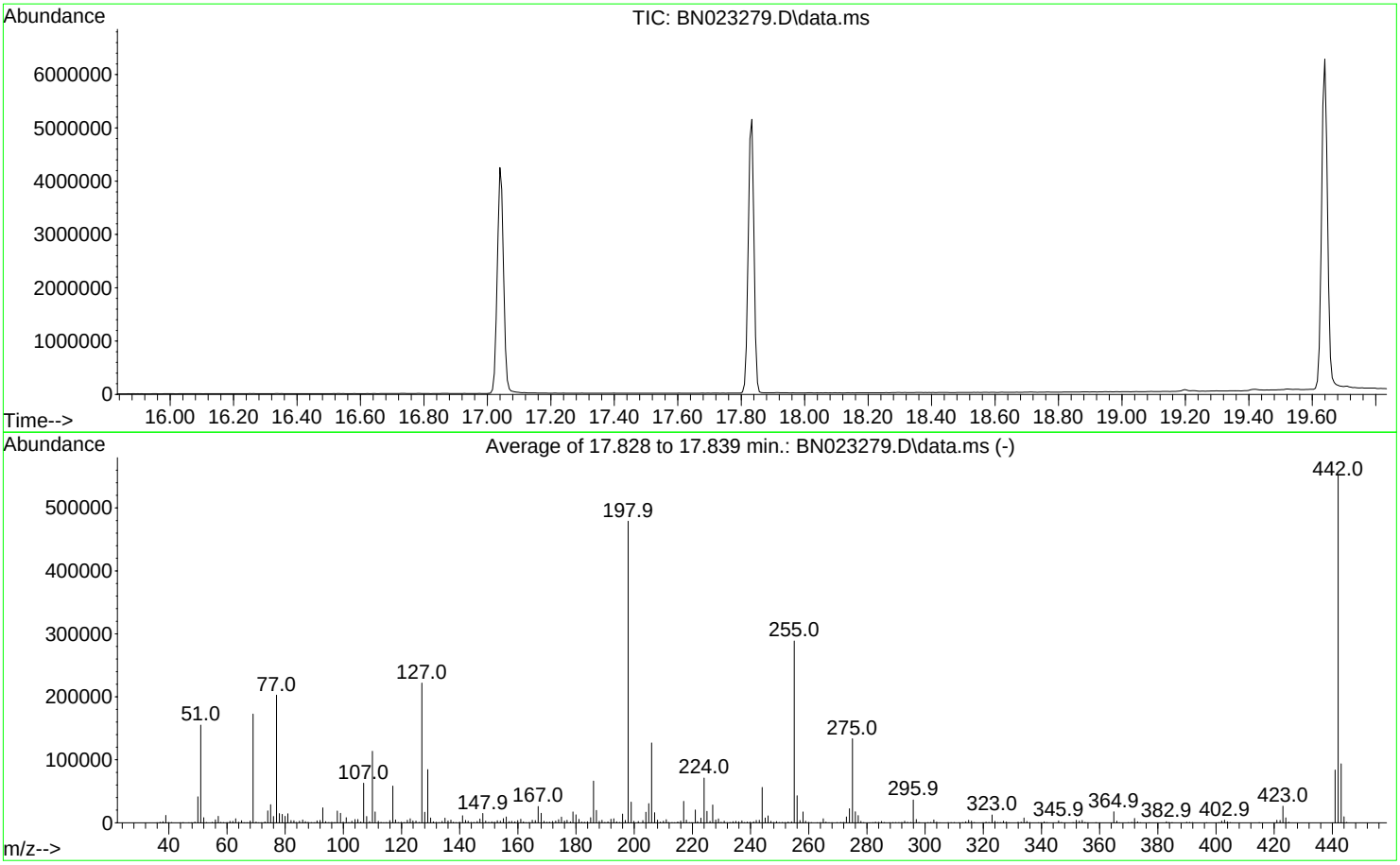
Sample Results: **BN023279.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023279.D
Acq On : 19 Dec 2022 10:45
Operator : CG/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Dec 19 15:44:58 2022



AutoFind: Scans 2506, 2507, 2508; Background Corrected with Scan 2498

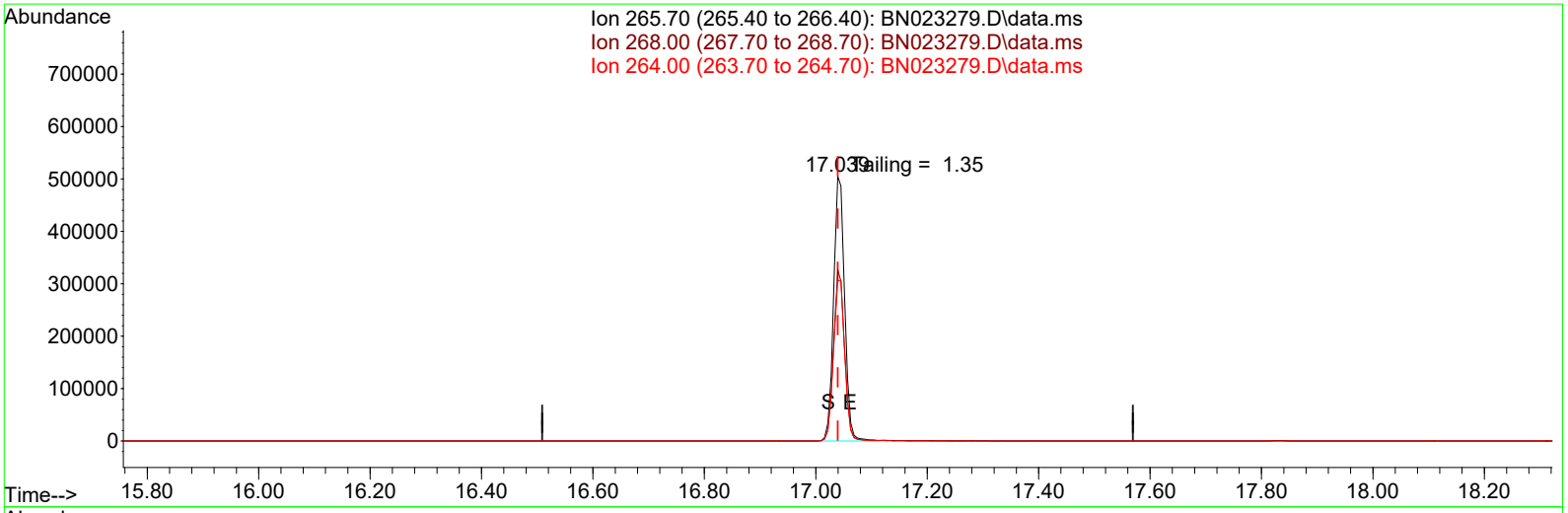
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	32.4	155011	PASS
68	69	0.00	2	1.6	2838	PASS
69	198	0.00	100	36.0	172621	PASS
70	69	0.00	2	0.6	1058	PASS
127	198	10	80	46.3	221845	PASS
197	198	0.00	2	0.8	3681	PASS
198	198	100	100	100.0	478933	PASS
199	198	5	9	6.8	32725	PASS
275	198	10	60	27.9	133419	PASS
365	198	1	100	3.6	17402	PASS
441	198	0.01	100	17.5	83835	PASS
442	442	50	100	100.0	552363	PASS
443	442	15	24	16.9	93541	PASS

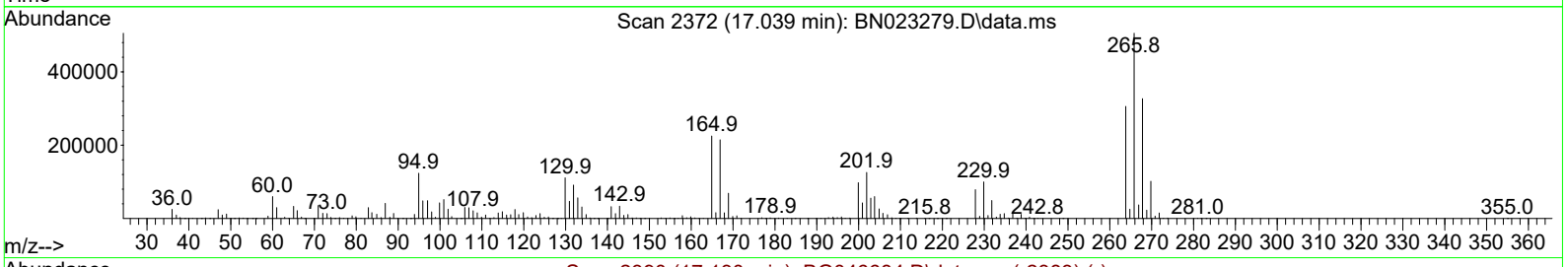
Sample Results: **BN023279.D**

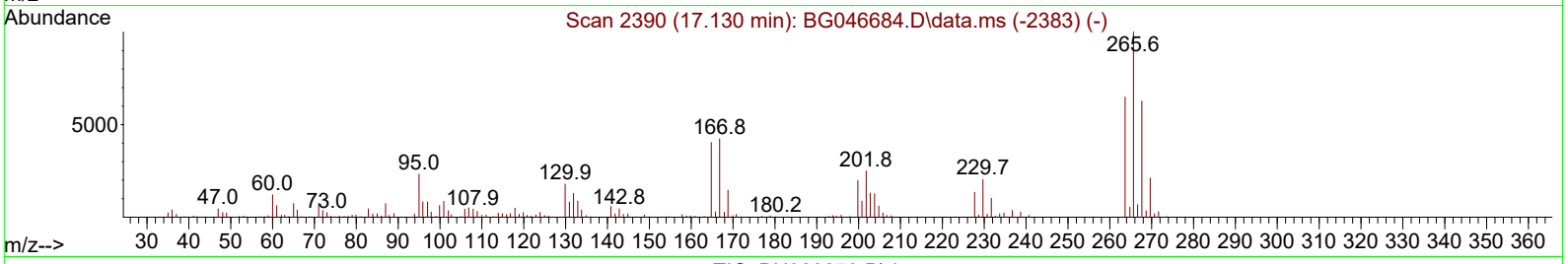
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023279.D
Acq On : 19 Dec 2022 10:45
Operator : CG/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Dec 20 06:26:08 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Dec 20 06:26:03 2022
Response via : Initial Calibration







TIC: BN023279.D\data.ms

(70) Pentachlorophenol (C)

17.039min (0.000) 25233.58 ng

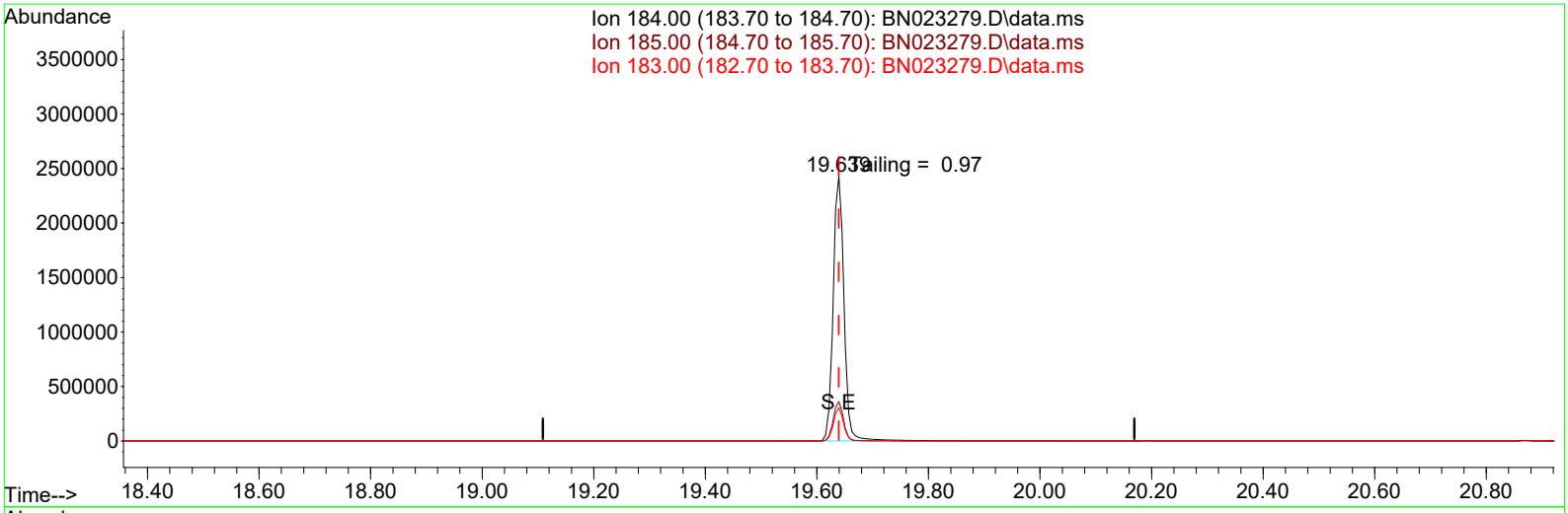
response 695470

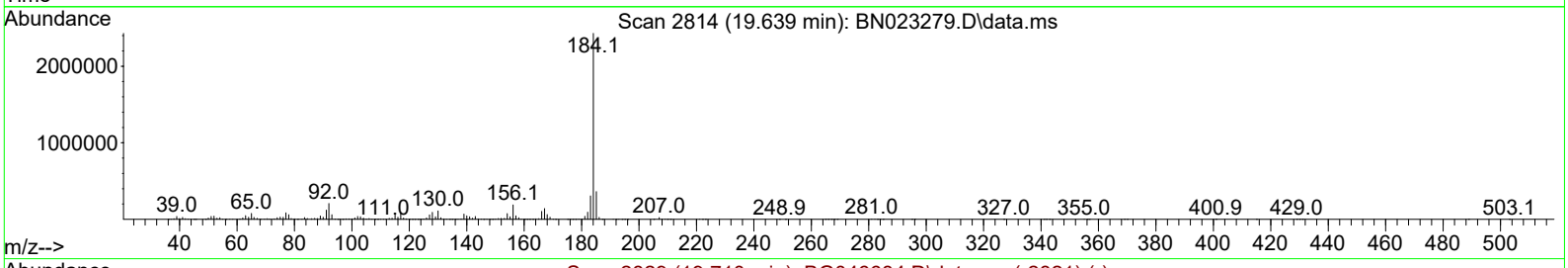
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	64.68
264.00	61.60	60.53
0.00	0.00	0.00

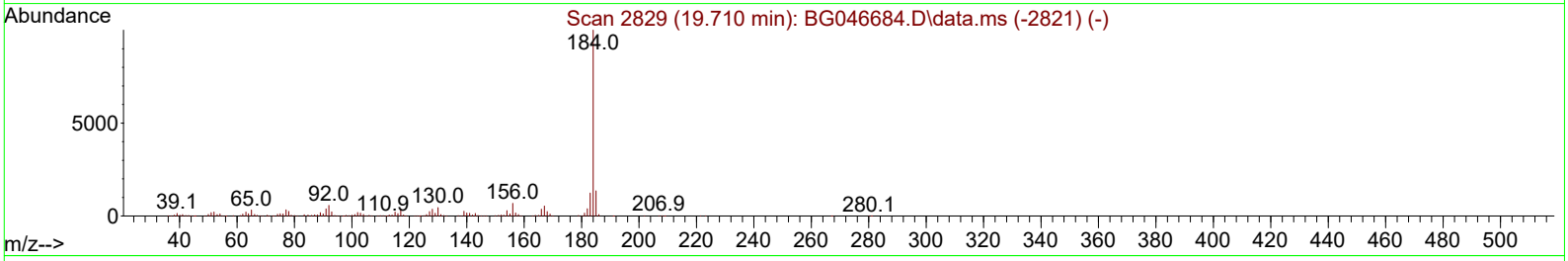
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023279.D
Acq On : 19 Dec 2022 10:45
Operator : CG/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Dec 20 06:26:08 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Dec 20 06:26:03 2022
Response via : Initial Calibration







TIC: BN023279.D\data.ms

(77) Benzidine

19.639min (0.000) 579785.01 ng

response 3234848

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	14.91
183.00	13.20	12.65
0.00	0.00	0.00

Instrument :
BNA_N
ClientSampleId :
DFTPP

DDT Breakdown

Date	Instrument Name	DFTPP Data File
12/19/2022	BNA_N	BN023279.D
Compound Name	**Response**	**Retention Time**
DDT	1544427	20.869
DDD	201124	20.427
DDE	7574	19.922
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
208698	1753125	11.90

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ	Date Received:	
Client Sample ID:	PB149692BL	SDG No.:	N6070
Lab Sample ID:	PB149692BL	Matrix:	Water
Analytical Method:	SW8270SIM	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN023281.D	1	12/16/22 08:59	12/19/22 12:02	PB149692

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
123-91-1	1,4-Dioxane	0.080	U	0.080	0.20	ug/L
SURROGATES						
7297-45-2	2-Methylnaphthalene-d10	0.37		30 (30) - 150 (150)	94%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 (30) - 150 (150)	93%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.41		30 (11) - 130 (175)	102%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		30 (10) - 130 (175)	87%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		30 (54) - 130 (171)	114%	SPK: 0.4
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	8900	7.999			
1146-65-2	Naphthalene-d8	28100	10.818			
15067-26-2	Acenaphthene-d10	17400	14.645			
1517-22-2	Phenanthrene-d10	38500	17.39			
1719-03-5	Chrysene-d12	26400	21.58			
1520-96-3	Perylene-d12	19400	24.027			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023281.D
Acq On : 19 Dec 2022 12:02
Operator : CG/JU
Sample : PB149692BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB149692BL

Quant Time: Dec 19 15:45:25 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration

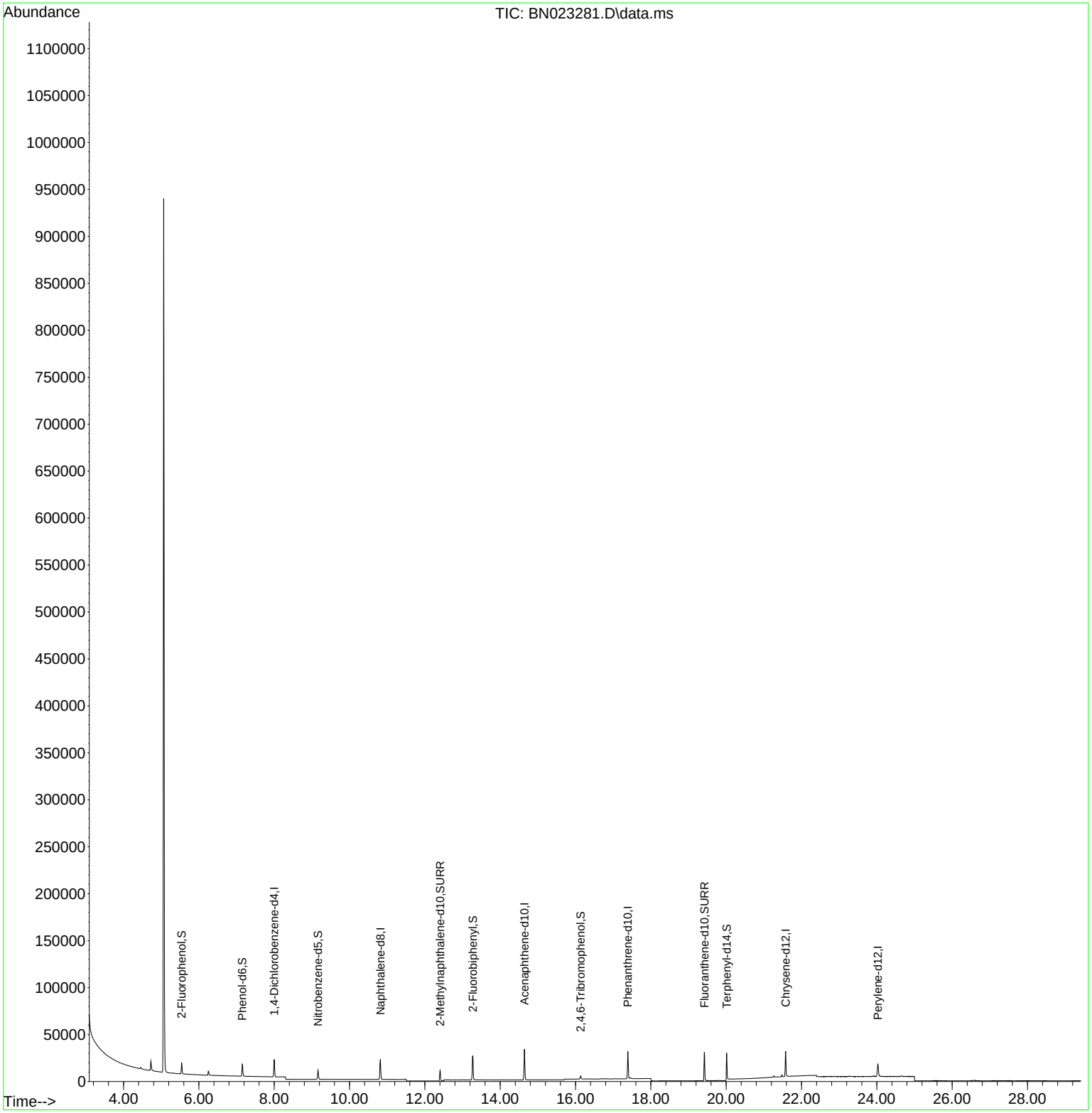
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.999	152	8904	0.400	ng	0.00
7) Naphthalene-d8	10.818	136	28123	0.400	ng	0.00
13) Acenaphthene-d10	14.645	164	17435	0.400	ng	0.00
19) Phenanthrene-d10	17.390	188	38498	0.400	ng	# 0.00
29) Chrysene-d12	21.580	240	26428	0.400	ng	0.00
35) Perylene-d12	24.027	264	19388	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.543	112	9396	0.567	ng	0.00
5) Phenol-d6	7.154	99	12090	0.573	ng	0.00
8) Nitrobenzene-d5	9.163	82	7571	0.409	ng	0.00
11) 2-Methylnaphthalene-d10	12.405	152	17845	0.374	ng	0.00
14) 2,4,6-Tribromophenol	16.136	330	1986	0.314	ng	0.00
15) 2-Fluorobiphenyl	13.276	172	24341	0.349	ng	0.00
27) Fluoranthene-d10	19.422	212	33448	0.371	ng	0.00
31) Terphenyl-d14	20.013	244	19618	0.457	ng	0.00
Target Compounds						Qvalue

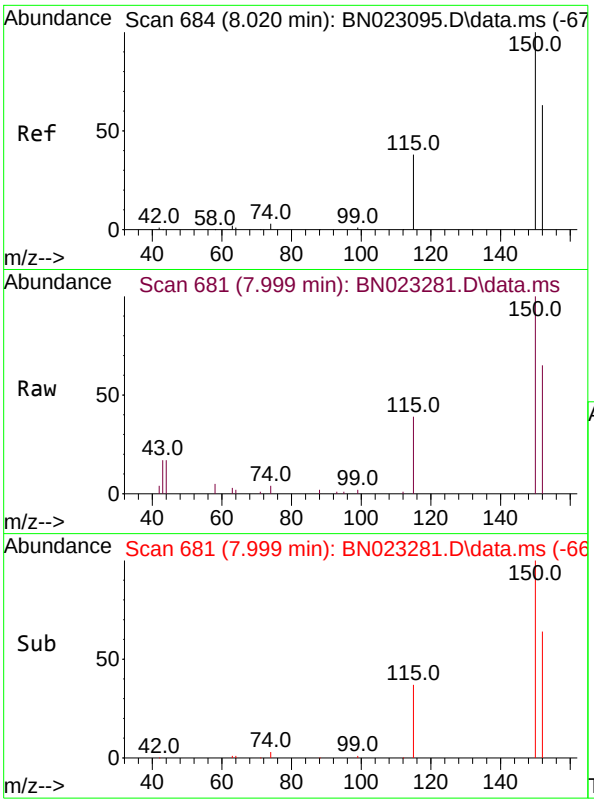
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023281.D
Acq On : 19 Dec 2022 12:02
Operator : CG/JU
Sample : PB149692BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB149692BL

Quant Time: Dec 19 15:45:25 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration



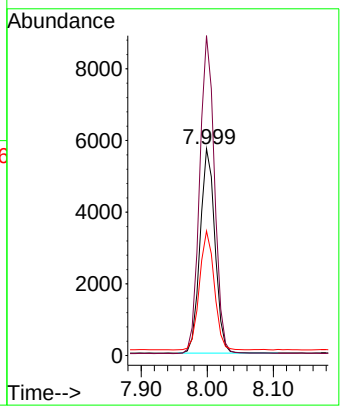


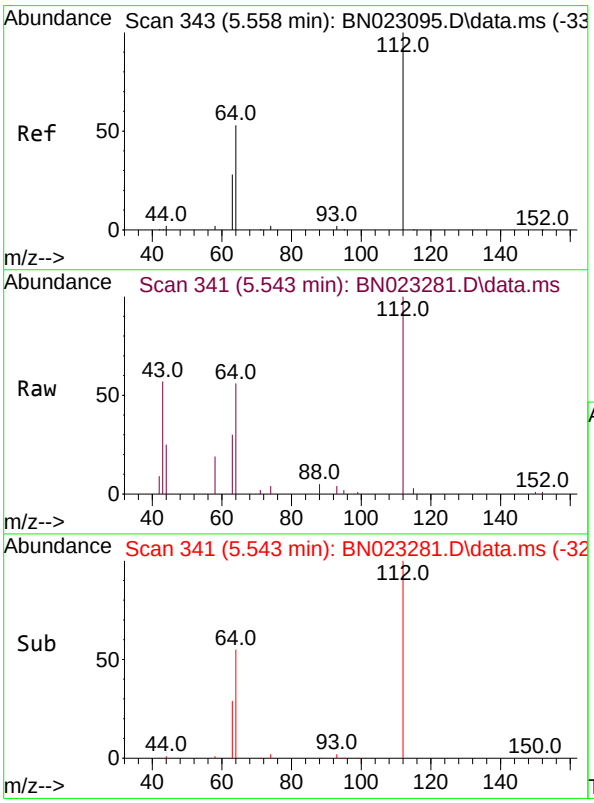
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.999 min Scan# 68
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Instrument :
BNA_N
ClientSampleId :
PB149692BL

Tgt Ion:152 Resp: 8904

Ion	Ratio	Lower	Upper
152	100		
150	154.8	125.6	188.4
115	60.3	49.0	73.4

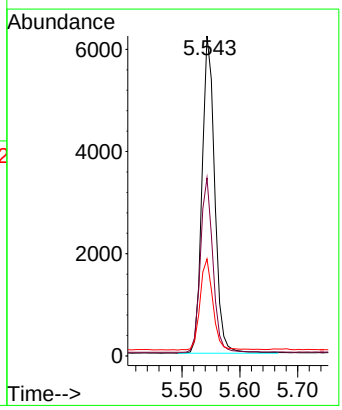


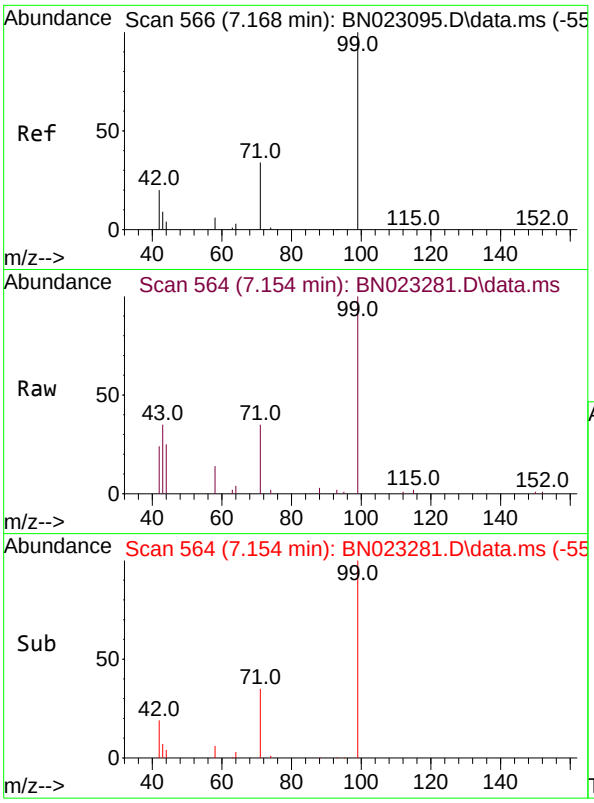


#4
2-Fluorophenol
Concen: 0.567 ng
RT: 5.543 min Scan# 341
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Tgt Ion:112 Resp: 9396

Ion	Ratio	Lower	Upper
112	100		
64	54.1	44.4	66.6
63	29.3	23.7	35.5



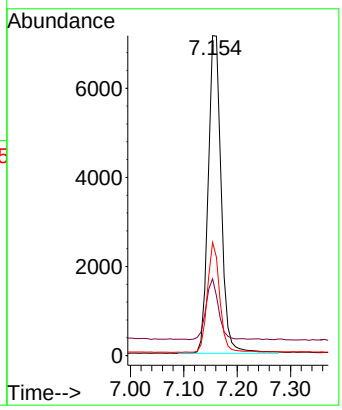


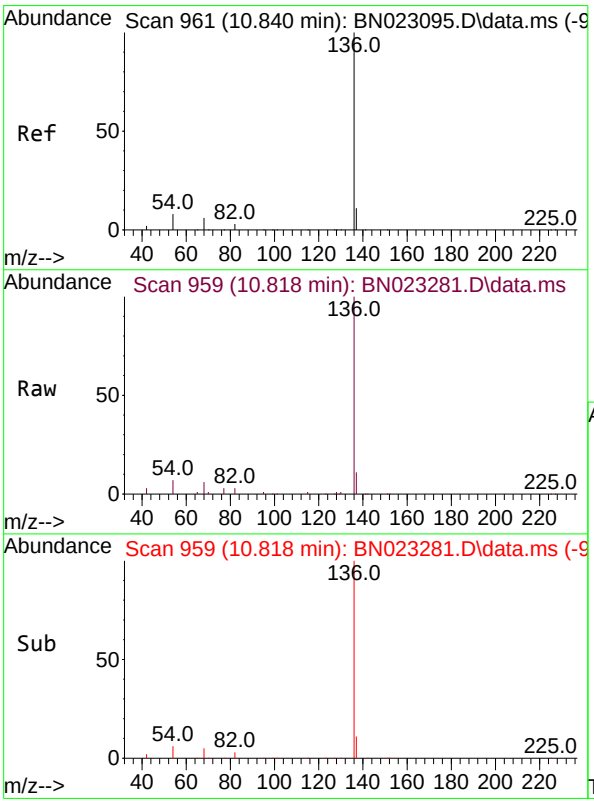
#5
Phenol-d6
Concen: 0.573 ng
RT: 7.154 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Instrument :
BNA_N
ClientSampleId :
PB149692BL

Tgt Ion: 99 Resp: 12090

Ion	Ratio	Lower	Upper
99	100		
42	18.1	16.3	24.5
71	32.8	26.5	39.7

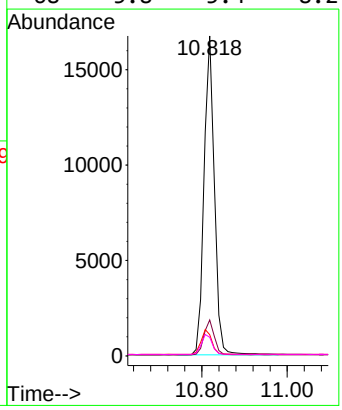


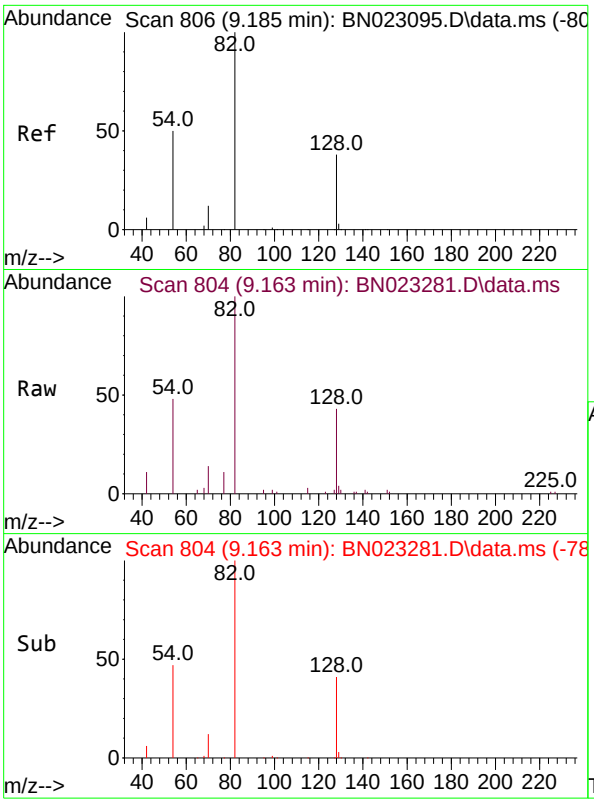


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.818 min Scan# 959
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Tgt Ion:136 Resp: 28123

Ion	Ratio	Lower	Upper
136	100		
137	11.2	9.0	13.4
54	6.6	6.5	9.7
68	5.8	5.4	8.2



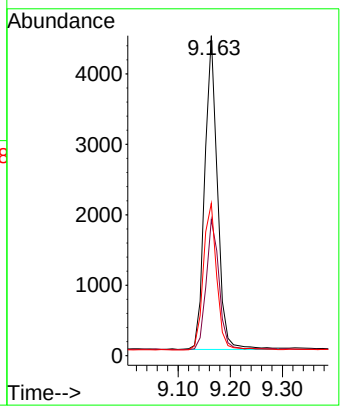


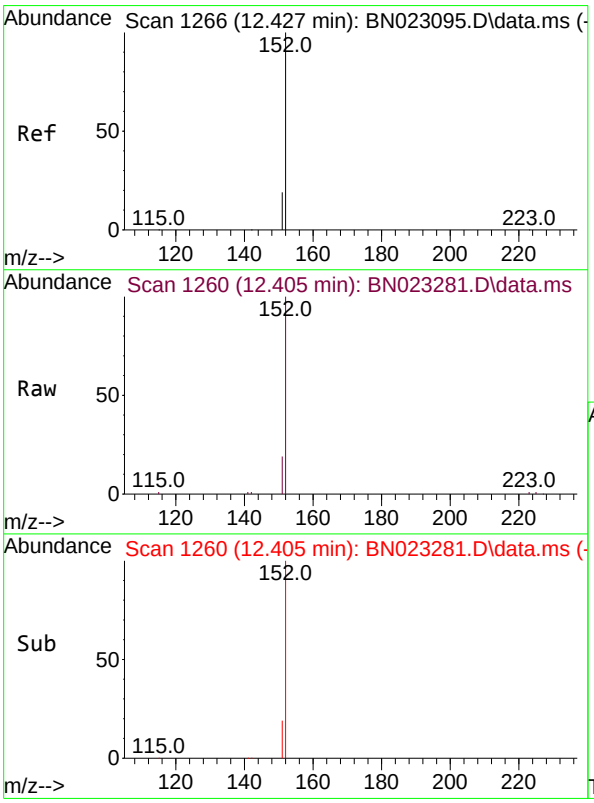
#8
Nitrobenzene-d5
Concen: 0.409 ng
RT: 9.163 min Scan# 80
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Instrument :
BNA_N
ClientSampleId :
PB149692BL

Tgt Ion: 82 Resp: 7571

Ion	Ratio	Lower	Upper
82	100		
128	42.6	31.4	47.2
54	47.6	41.0	61.4

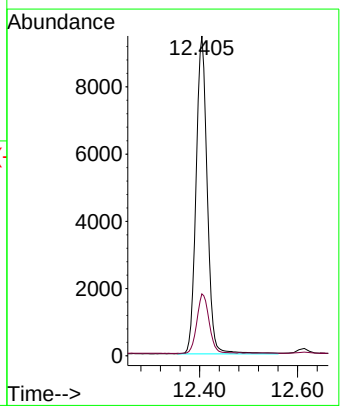


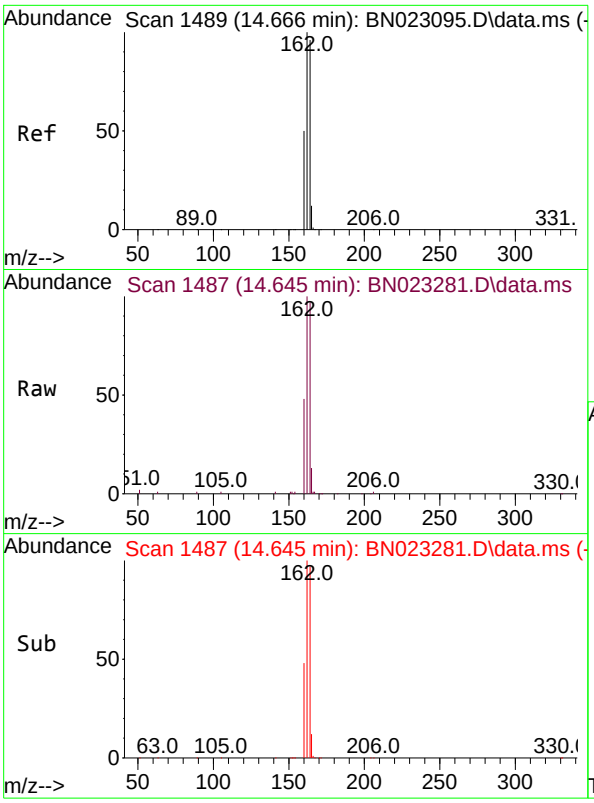


#11
2-Methylnaphthalene-d10
Concen: 0.374 ng
RT: 12.405 min Scan# 1260
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Tgt Ion:152 Resp: 17845

Ion	Ratio	Lower	Upper
152	100		
151	17.2	15.1	22.7



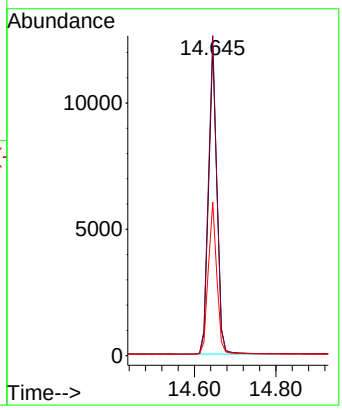


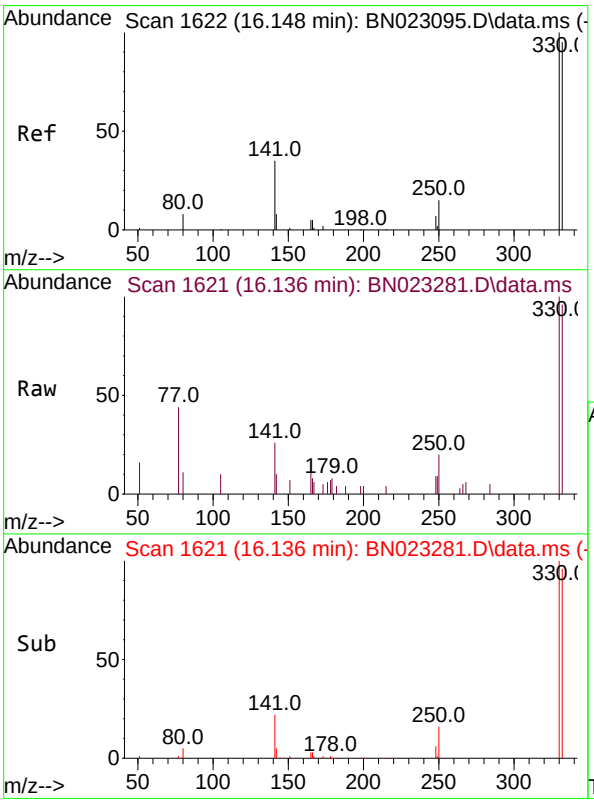
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.645 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Instrument :
BNA_N
ClientSampleId :
PB149692BL

Tgt Ion:164 Resp: 17435

Ion	Ratio	Lower	Upper
164	100		
162	103.3	83.4	125.0
160	49.5	41.8	62.8

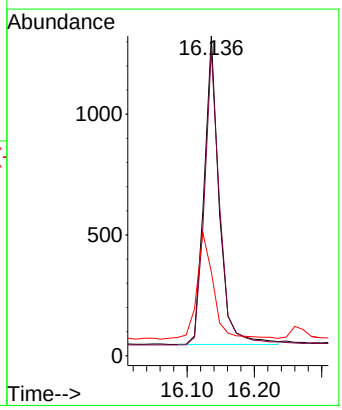


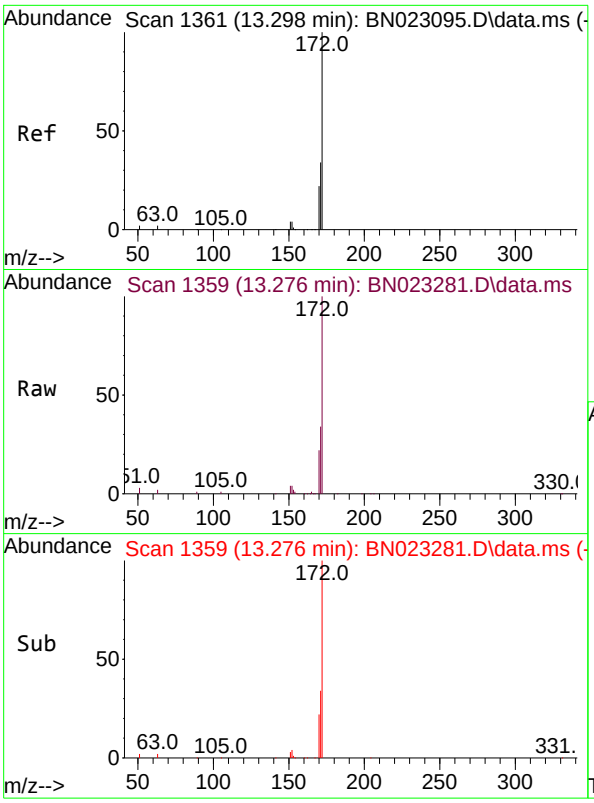


#14
2,4,6-Tribromophenol
Concen: 0.314 ng
RT: 16.136 min Scan# 1621
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Tgt Ion:330 Resp: 1986

Ion	Ratio	Lower	Upper
330	100		
332	96.2	77.3	115.9
141	38.3	33.5	50.3



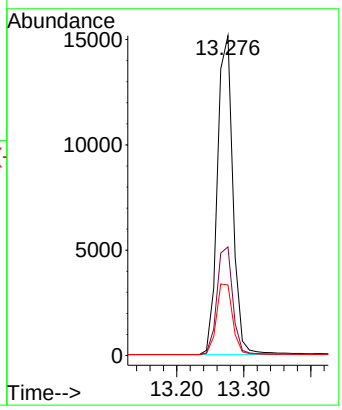


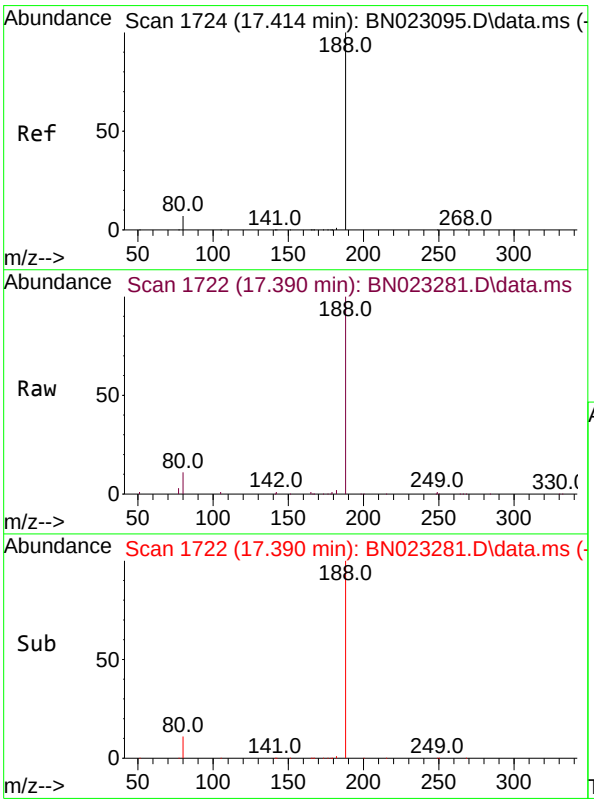
#15
2-Fluorobiphenyl
Concen: 0.349 ng
RT: 13.276 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Instrument :
BNA_N
ClientSampleId :
PB149692BL

Tgt Ion:172 Resp: 24341

Ion	Ratio	Lower	Upper
172	100		
171	34.0	27.4	41.0
170	22.1	17.9	26.9

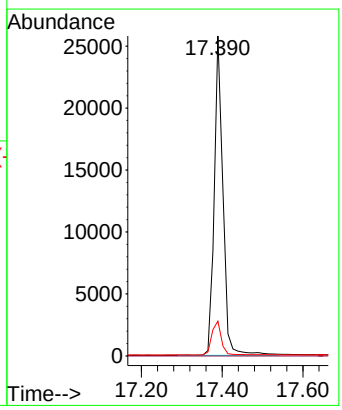


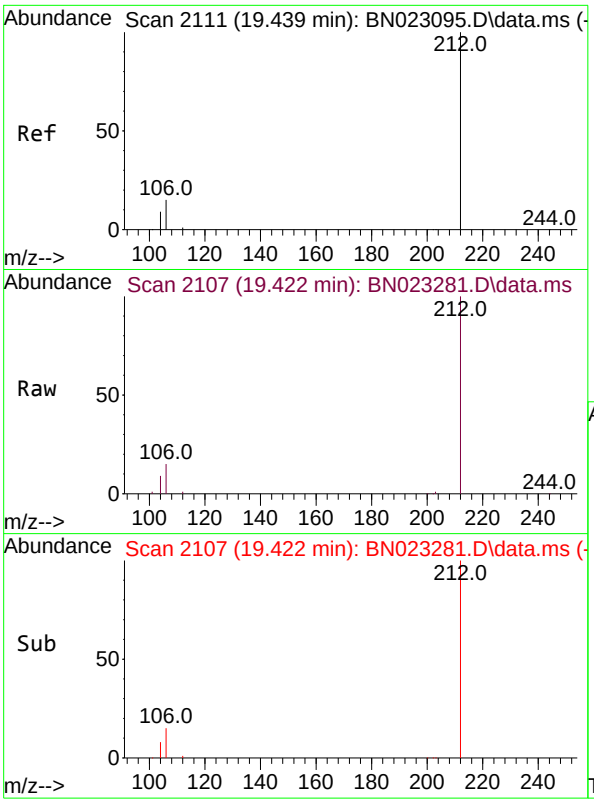


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.390 min Scan# 1722
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Tgt Ion:188 Resp: 38498

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.9	6.1	9.1#



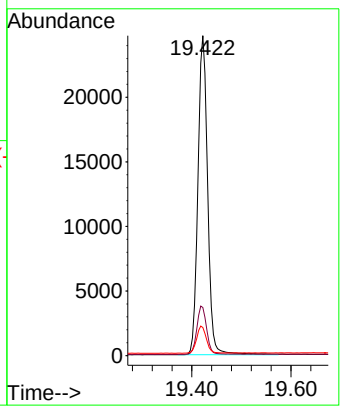


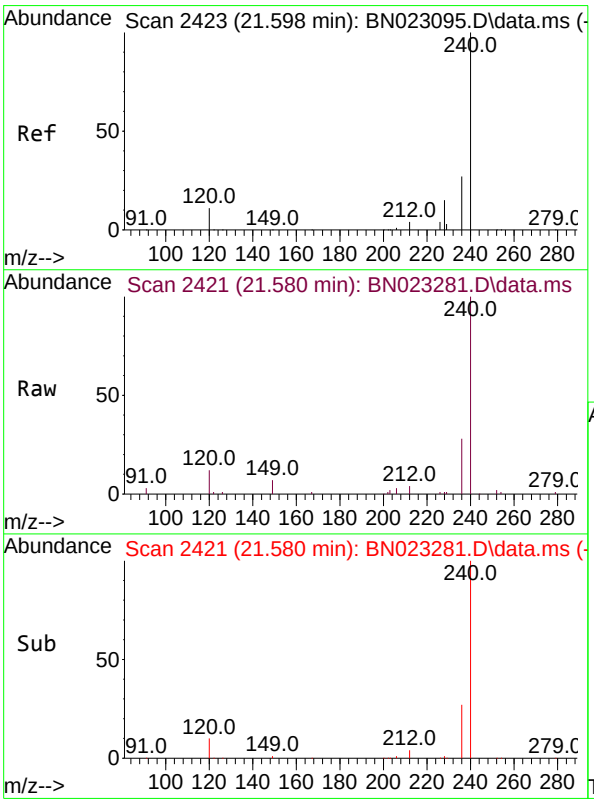
#27
Fluoranthene-d10
Concen: 0.371 ng
RT: 19.422 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Instrument :
BNA_N
ClientSampleId :
PB149692BL

Tgt Ion:212 Resp: 33448

Ion	Ratio	Lower	Upper
212	100		
106	15.1	13.0	19.4
104	8.5	7.5	11.3

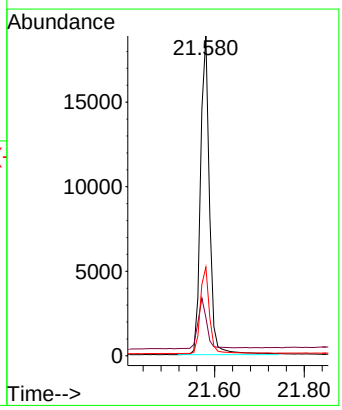


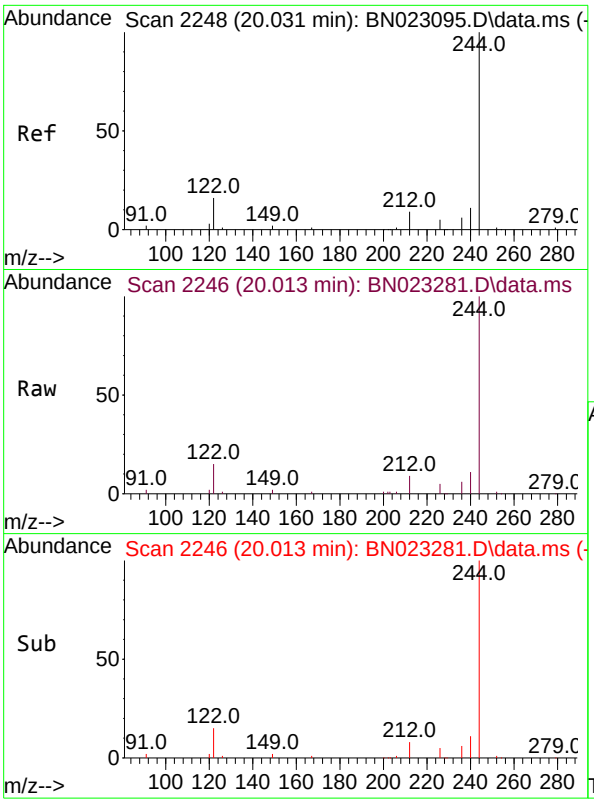


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.580 min Scan# 2421
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Tgt Ion:240 Resp: 26428

Ion	Ratio	Lower	Upper
240	100		
120	12.0	10.1	15.1
236	27.8	22.2	33.4



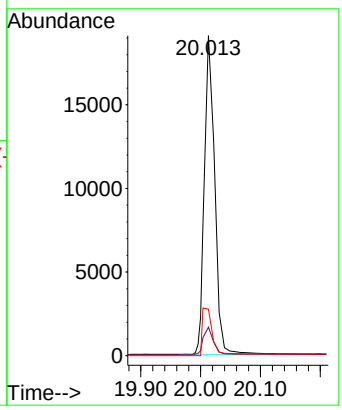


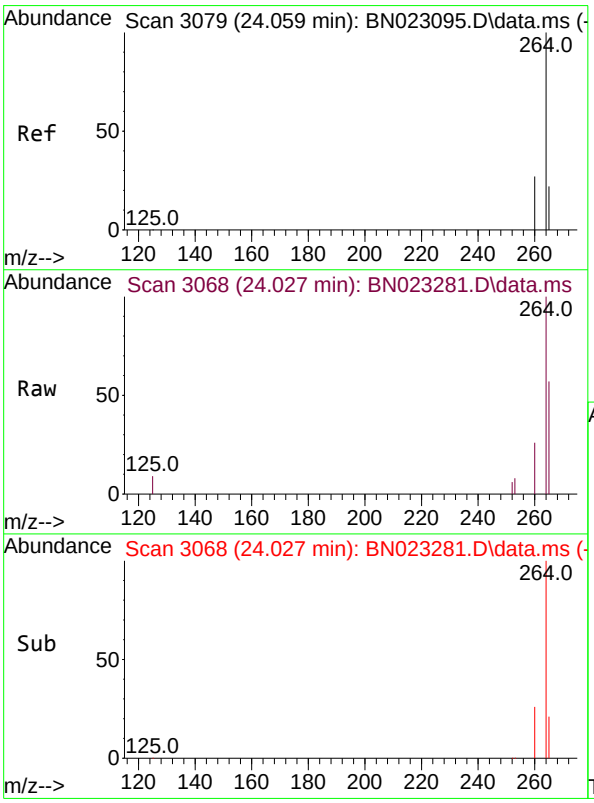
#31
Terphenyl-d14
Concen: 0.457 ng
RT: 20.013 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Instrument :
BNA_N
ClientSampleId :
PB149692BL

Tgt Ion:244 Resp: 19618

Ion	Ratio	Lower	Upper
244	100		
212	8.9	7.6	11.4
122	14.5	12.6	18.8

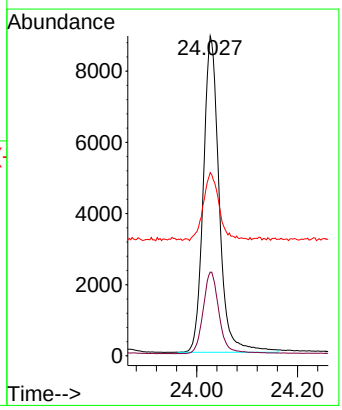




#35
Perylene-d12
Concen: 0.400 ng
RT: 24.027 min Scan# 3068
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Tgt Ion:264 Resp: 19388

Ion	Ratio	Lower	Upper
264	100		
260	26.2	21.7	32.5
265	57.3	43.2	64.8



CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ	Date Received:	
Client Sample ID:	PB149692BS	SDG No.:	N6070
Lab Sample ID:	PB149692BS	Matrix:	Water
Analytical Method:	SW8270SIM	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN023287.D	1	12/16/22 08:59	12/19/22 15:44	PB149692

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
123-91-1	1,4-Dioxane	0.40		0.080	0.20	ug/L
SURROGATES						
7297-45-2	2-Methylnaphthalene-d10	0.32		30 (30) - 150 (150)	80%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 (30) - 150 (150)	101%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		30 (11) - 130 (175)	104%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		30 (10) - 130 (175)	90%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.43		30 (54) - 130 (171)	108%	SPK: 0.4
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	8510	8.006			
1146-65-2	Naphthalene-d8	26900	10.819			
15067-26-2	Acenaphthene-d10	16200	14.645			
1517-22-2	Phenanthrene-d10	34300	17.39			
1719-03-5	Chrysene-d12	26400	21.58			
1520-96-3	Perylene-d12	18700	24.03			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023287.D
Acq On : 19 Dec 2022 15:44
Operator : CG/JU
Sample : PB149692BS
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Quant Time: Dec 19 16:21:01 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration

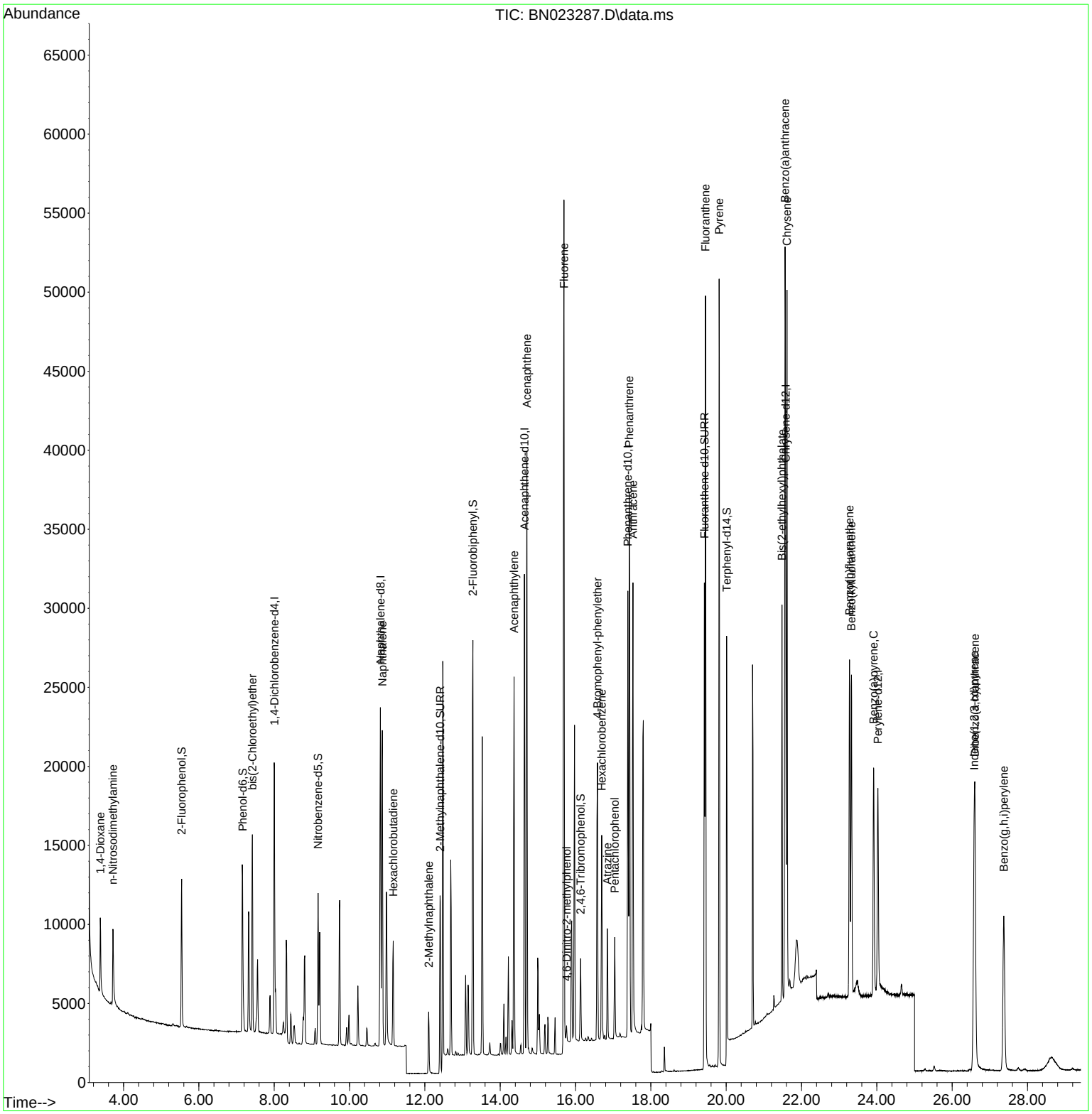
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	8.006	152	8509	0.400	ng		0.00
7) Naphthalene-d8	10.819	136	26860	0.400	ng		0.00
13) Acenaphthene-d10	14.645	164	16157	0.400	ng		0.00
19) Phenanthrene-d10	17.390	188	34289	0.400	ng	#	0.00
29) Chrysene-d12	21.580	240	26436	0.400	ng		0.00
35) Perylene-d12	24.030	264	18732	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.543	112	7784	0.491	ng		0.00
5) Phenol-d6	7.161	99	10156	0.504	ng		0.00
8) Nitrobenzene-d5	9.164	82	7338	0.415	ng		0.00
11) 2-Methylnaphthalene-d10	12.405	152	14614	0.321	ng		0.00
14) 2,4,6-Tribromophenol	16.136	330	2898	0.494	ng		0.00
15) 2-Fluorobiphenyl	13.277	172	23189	0.359	ng		0.00
27) Fluoranthene-d10	19.422	212	32347	0.403	ng		0.00
31) Terphenyl-d14	20.013	244	18539	0.432	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.384	88	3385	0.403	ng		94
3) n-Nitrosodimethylamine	3.716	42	3247	0.394	ng	#	82
6) bis(2-Chloroethyl)ether	7.421	93	9092	0.397	ng		99
9) Naphthalene	10.872	128	26722	0.391	ng		100
10) Hexachlorobutadiene	11.160	225	5223	0.401	ng	#	100
12) 2-Methylnaphthalene	12.102	142	5684	0.558	ng		97
16) Acenaphthylene	14.367	152	25141	0.386	ng		100
17) Acenaphthene	14.709	154	17630	0.369	ng		97
18) Fluorene	15.693	166	24191	0.452	ng		100
20) 4,6-Dinitro-2-methylph...	15.764	198	618	0.323	ng		91
21) 4-Bromophenyl-phenylether	16.583	248	7469	0.408	ng	#	78
22) Hexachlorobenzene	16.695	284	9396	0.392	ng		97
23) Atrazine	16.844	200	5392	0.418	ng	#	91
24) Pentachlorophenol	17.042	266	2968	0.356	ng		99
25) Phenanthrene	17.427	178	38060	0.372	ng		99
26) Anthracene	17.526	178	30966	0.380	ng		99
28) Fluoranthene	19.452	202	41811	0.382	ng		99
30) Pyrene	19.814	202	42283	0.437	ng		100
32) Benzo(a)anthracene	21.563	228	34347	0.403	ng		99
33) Chrysene	21.616	228	35404	0.370	ng		99
34) Bis(2-ethylhexyl)phtha...	21.482	149	20630	0.573	ng		97
36) Indeno(1,2,3-cd)pyrene	26.582	276	26339	0.314	ng		98
37) Benzo(b)fluoranthene	23.276	252	28455	0.366	ng		96
38) Benzo(k)fluoranthene	23.325	252	27179	0.345	ng		98
39) Benzo(a)pyrene	23.916	252	21767	0.374	ng	#	95
40) Dibenzo(a,h)anthracene	26.606	278	20754	0.308	ng		98
41) Benzo(g,h,i)perylene	27.372	276	21609	0.300	ng		98

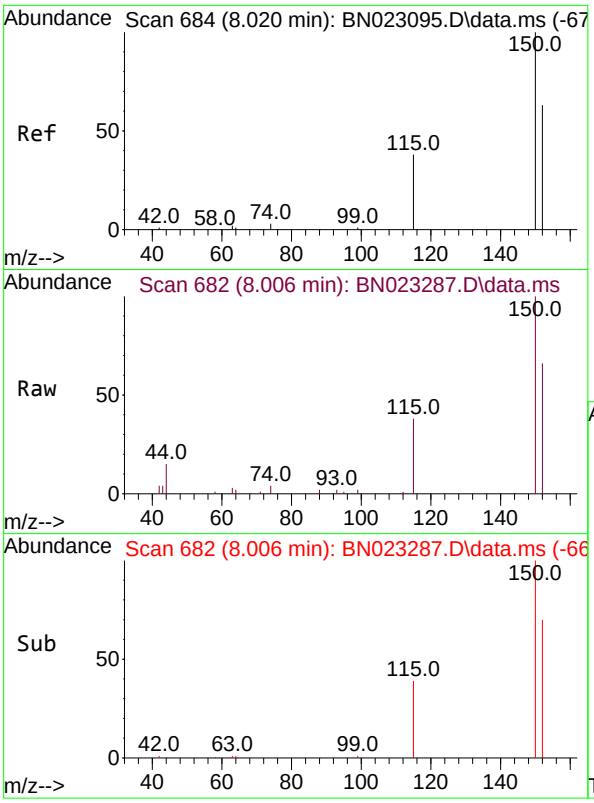
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023287.D
Acq On : 19 Dec 2022 15:44
Operator : CG/JU
Sample : PB149692BS
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Quant Time: Dec 19 16:21:01 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration



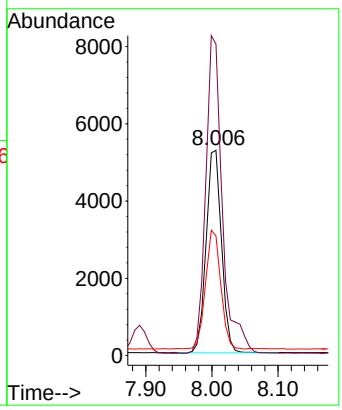


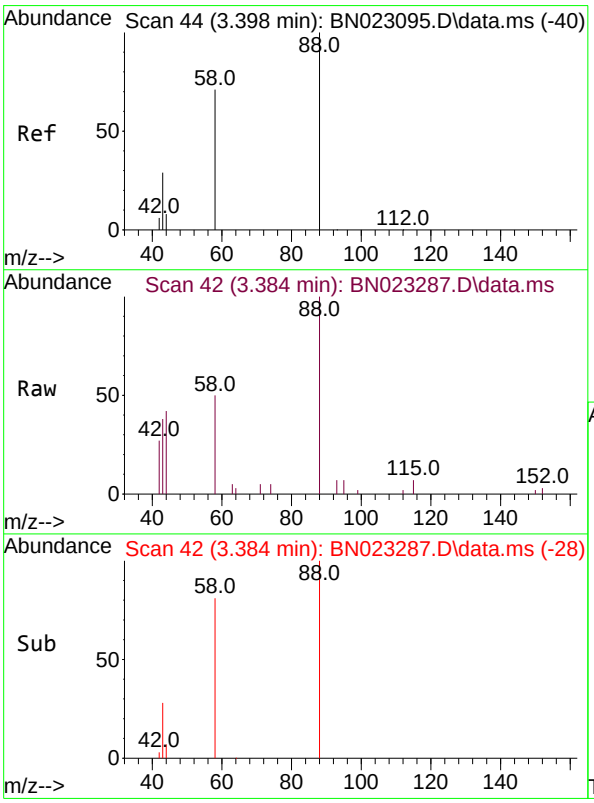
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 8.006 min Scan# 68
Delta R.T. 0.007 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:152 Resp: 8509

Ion	Ratio	Lower	Upper
152	100		
150	151.7	125.6	188.4
115	58.3	49.0	73.4

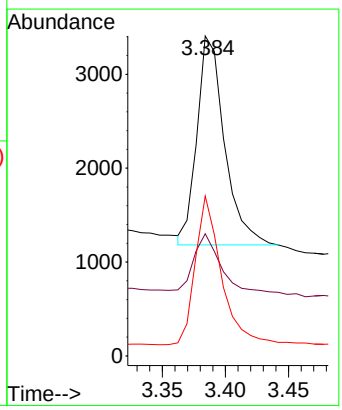


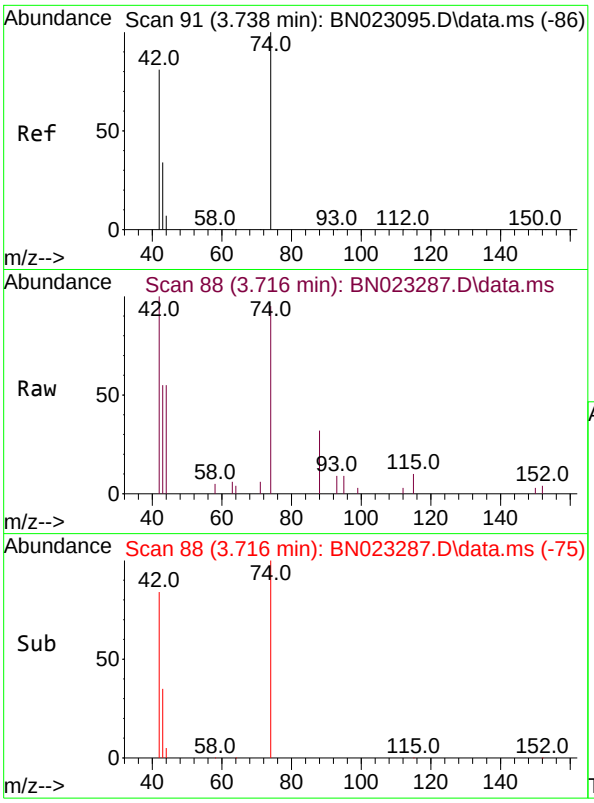


#2
1,4-Dioxane
Concen: 0.403 ng
RT: 3.384 min Scan# 42
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion: 88 Resp: 3385

Ion	Ratio	Lower	Upper
88	100		
43	26.5	23.3	34.9
58	67.6	58.0	87.0



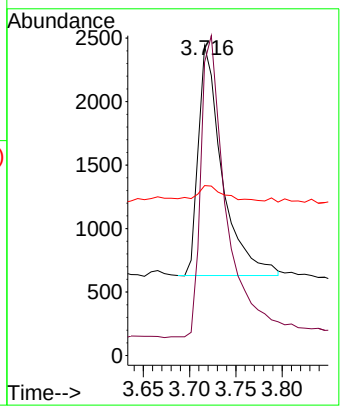


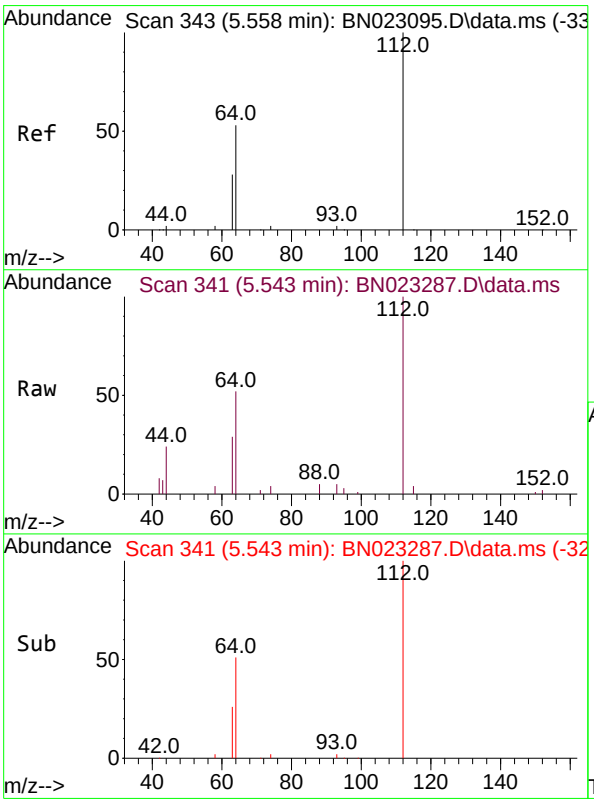
#3
n-Nitrosodimethylamine
Concen: 0.394 ng
RT: 3.716 min Scan# 8
Delta R.T. -0.007 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion: 42 Resp: 3247

Ion	Ratio	Lower	Upper
42	100		
74	141.2	95.8	143.6
44	7.8	8.4	12.6#

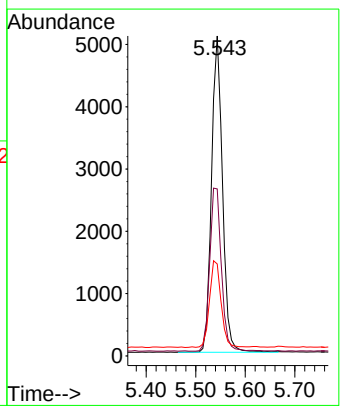


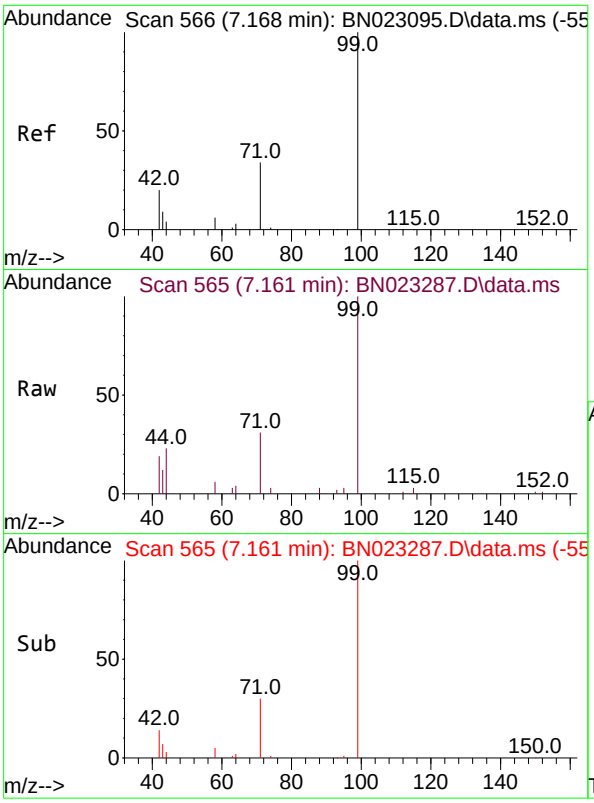


#4
2-Fluorophenol
Concen: 0.491 ng
RT: 5.543 min Scan# 341
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:112 Resp: 7784

Ion	Ratio	Lower	Upper
112	100		
64	54.9	44.4	66.6
63	28.9	23.7	35.5



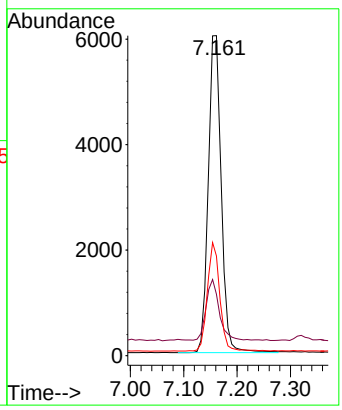


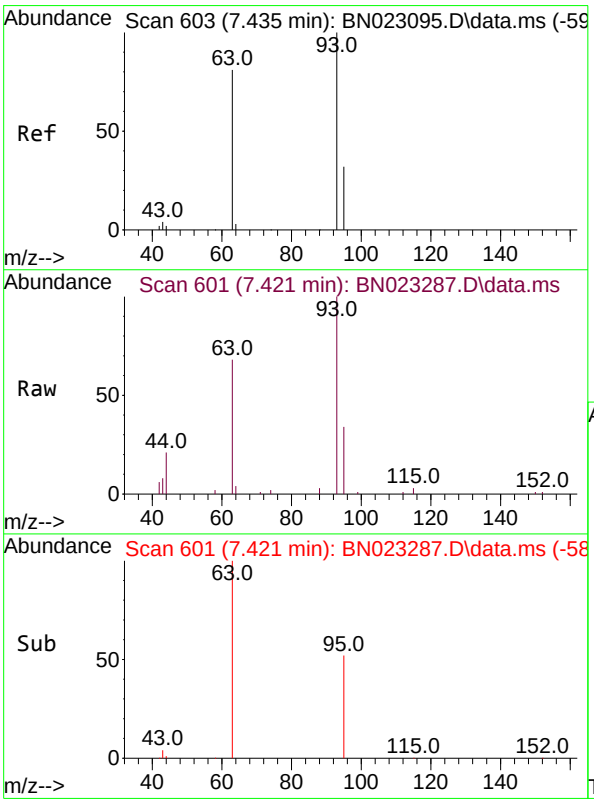
#5
Phenol-d6
Concen: 0.504 ng
RT: 7.161 min Scan# 5
Delta R.T. 0.007 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion: 99 Resp: 10156

Ion	Ratio	Lower	Upper
99	100		
42	19.5	16.3	24.5
71	32.7	26.5	39.7

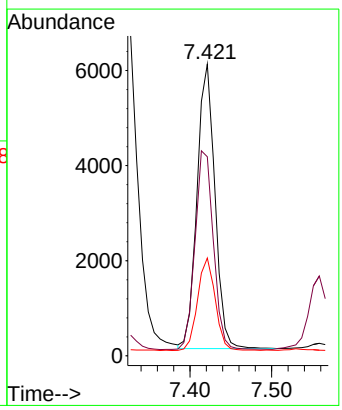


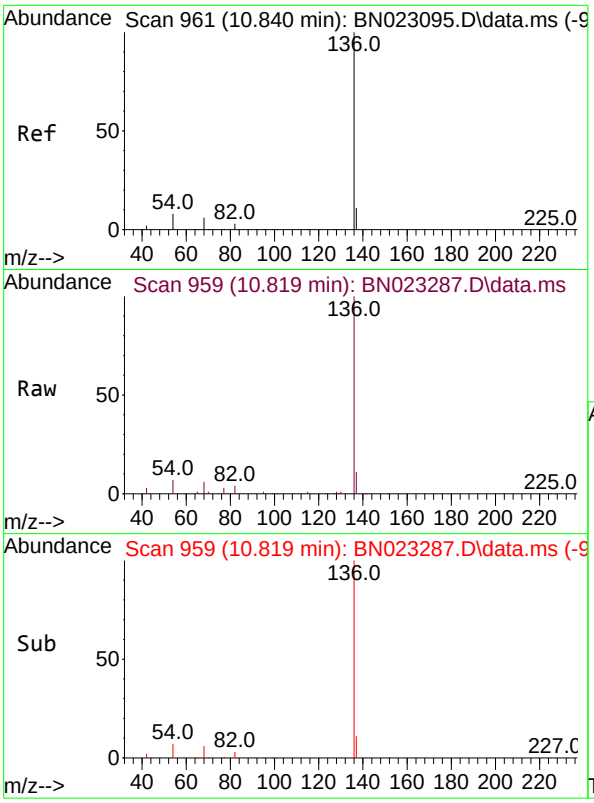


#6
bis(2-Chloroethyl)ether
Concen: 0.397 ng
RT: 7.421 min Scan# 601
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion: 93 Resp: 9092

Ion	Ratio	Lower	Upper
93	100		
63	71.6	58.1	87.1
95	32.1	25.2	37.8



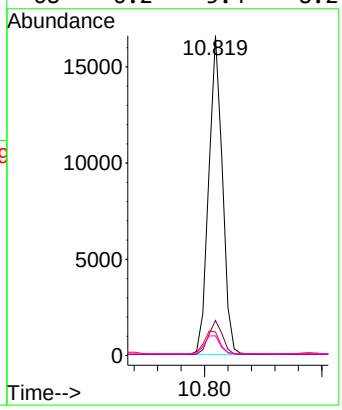


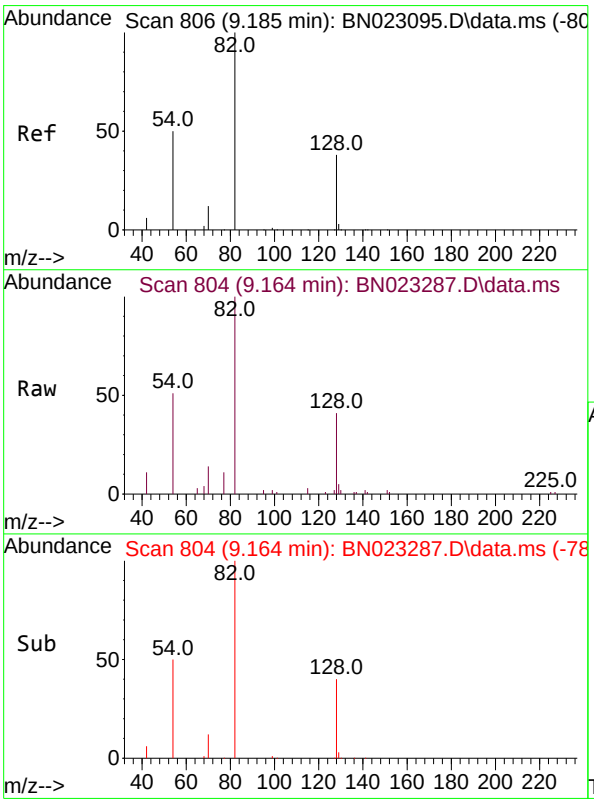
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.819 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:136 Resp: 26860

Ion	Ratio	Lower	Upper
136	100		
137	11.0	9.0	13.4
54	7.4	6.5	9.7
68	6.2	5.4	8.2

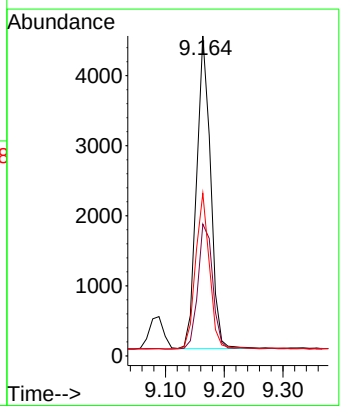


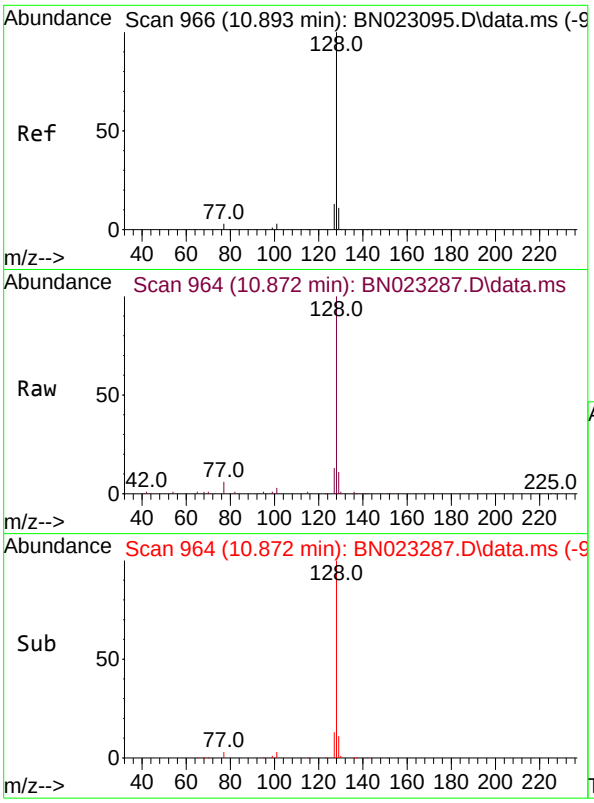


#8
Nitrobenzene-d5
Concen: 0.415 ng
RT: 9.164 min Scan# 804
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion: 82 Resp: 7338

Ion	Ratio	Lower	Upper
82	100		
128	41.2	31.4	47.2
54	50.8	41.0	61.4



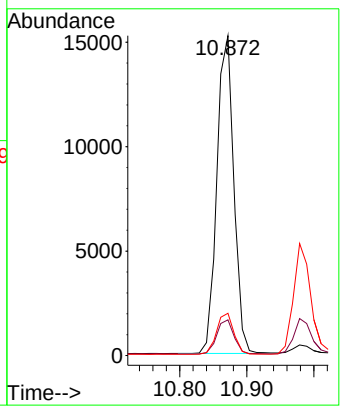


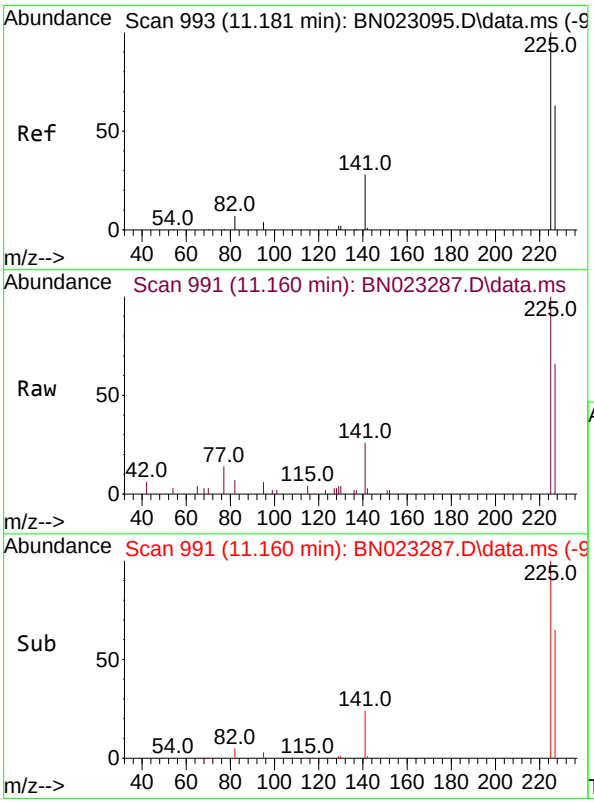
#9
Naphthalene
Concen: 0.391 ng
RT: 10.872 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:128 Resp: 26722

Ion	Ratio	Lower	Upper
128	100		
129	11.2	9.0	13.6
127	13.2	10.5	15.7

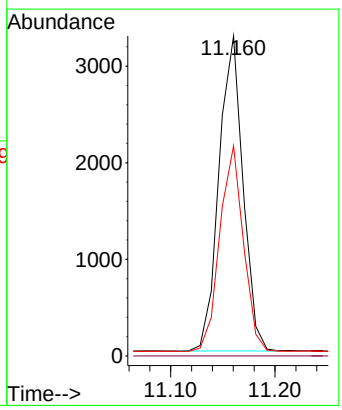


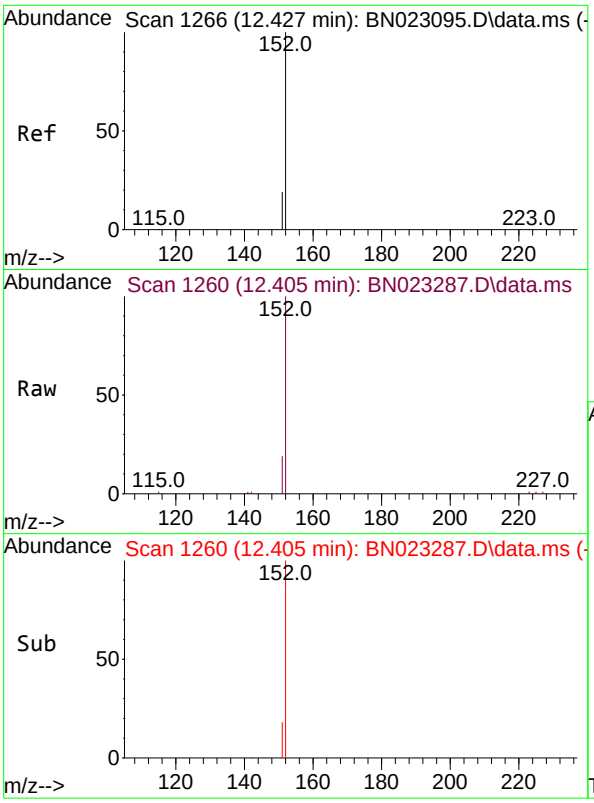


#10
Hexachlorobutadiene
Concen: 0.401 ng
RT: 11.160 min Scan# 991
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:225 Resp: 5223

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.2	51.1	76.7



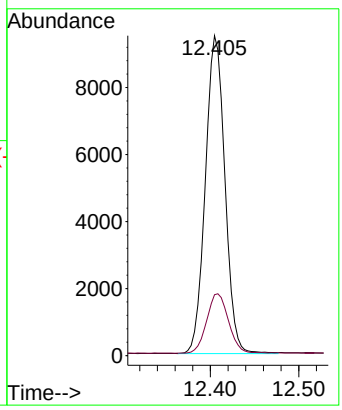


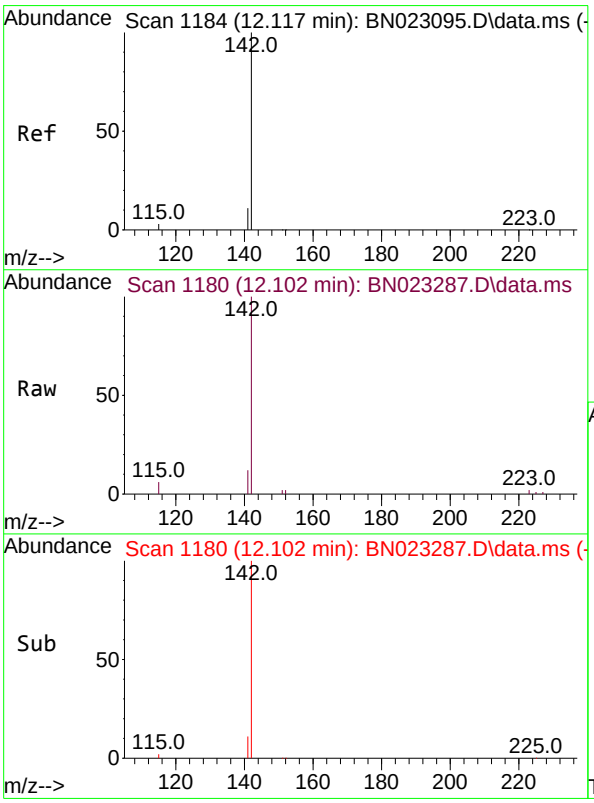
#11
2-Methylnaphthalene-d10
Concen: 0.321 ng
RT: 12.405 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:152 Resp: 14614

Ion	Ratio	Lower	Upper
152	100		
151	20.8	15.1	22.7

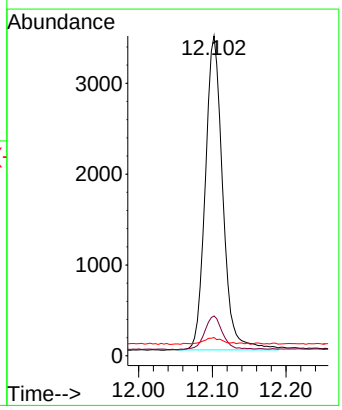


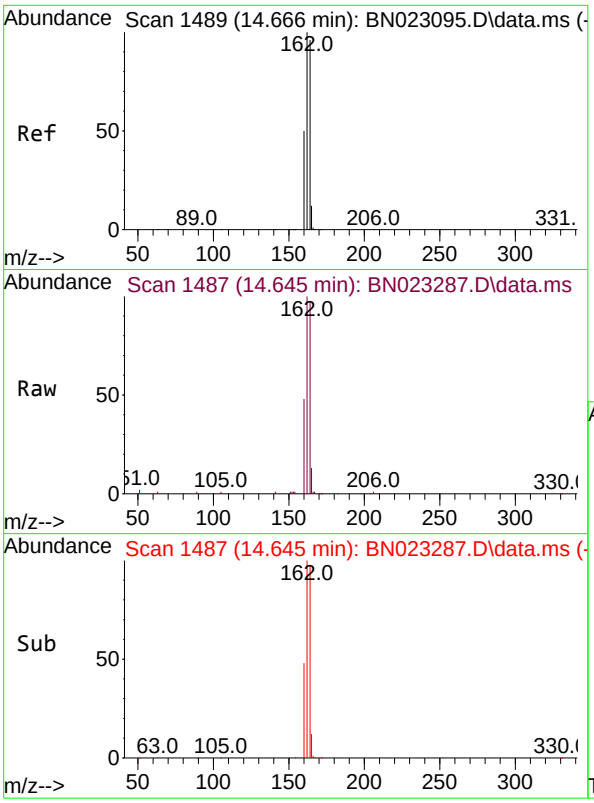


#12
2-Methylnaphthalene
Concen: 0.558 ng
RT: 12.102 min Scan# 1180
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:142 Resp: 5684

Ion	Ratio	Lower	Upper
142	100		
141	12.5	10.9	16.3
115	5.7	5.7	8.5



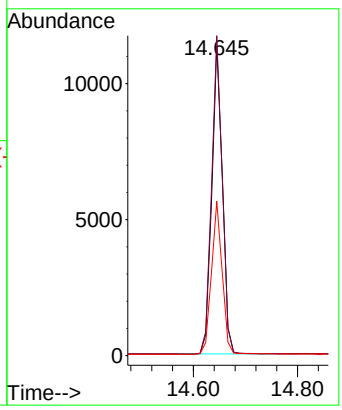


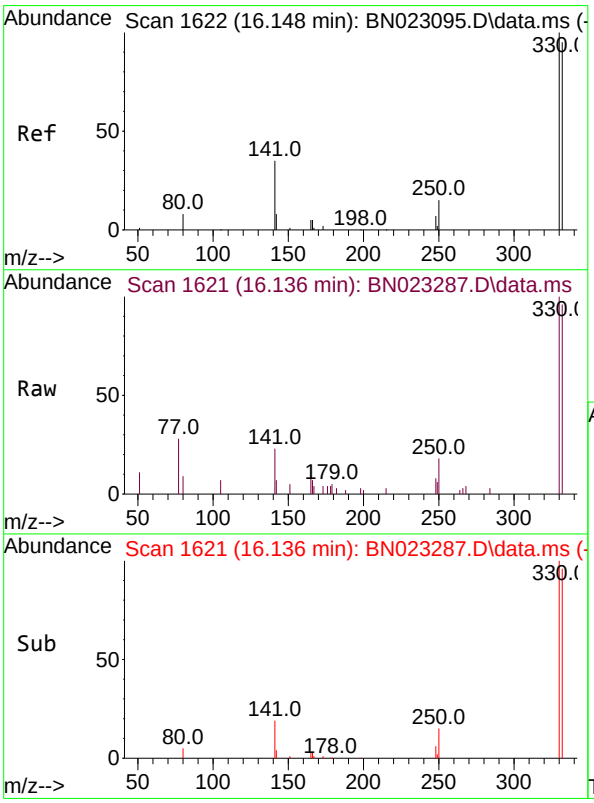
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.645 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:164 Resp: 16157

Ion	Ratio	Lower	Upper
164	100		
162	103.0	83.4	125.0
160	49.7	41.8	62.8

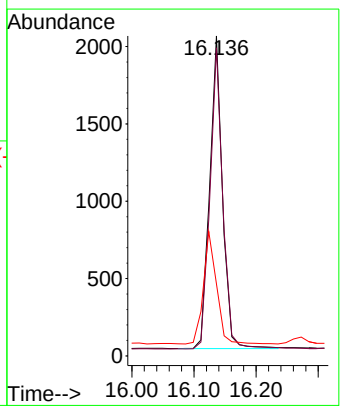


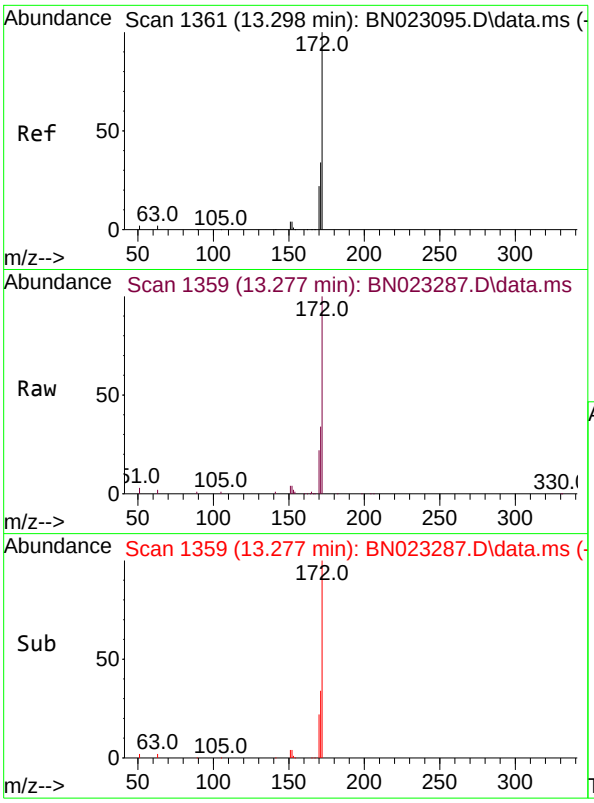


#14
2,4,6-Tribromophenol
Concen: 0.494 ng
RT: 16.136 min Scan# 1621
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:330 Resp: 2898

Ion	Ratio	Lower	Upper
330	100		
332	96.7	77.3	115.9
141	36.7	33.5	50.3



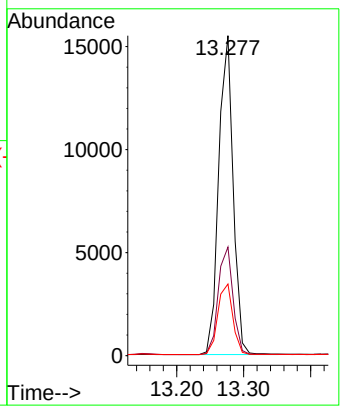


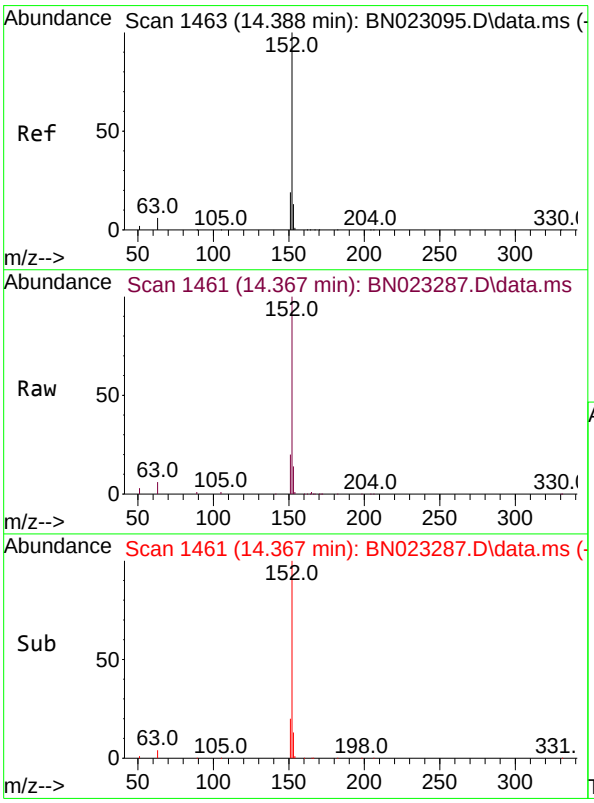
#15
2-Fluorobiphenyl
Concen: 0.359 ng
RT: 13.277 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:172 Resp: 23189

Ion	Ratio	Lower	Upper
172	100		
171	33.9	27.4	41.0
170	22.4	17.9	26.9

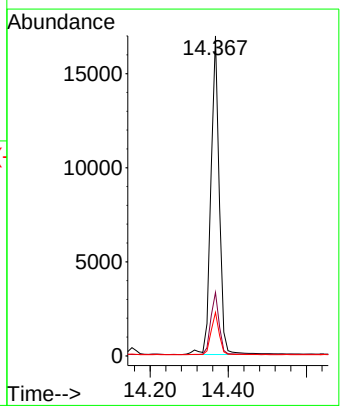


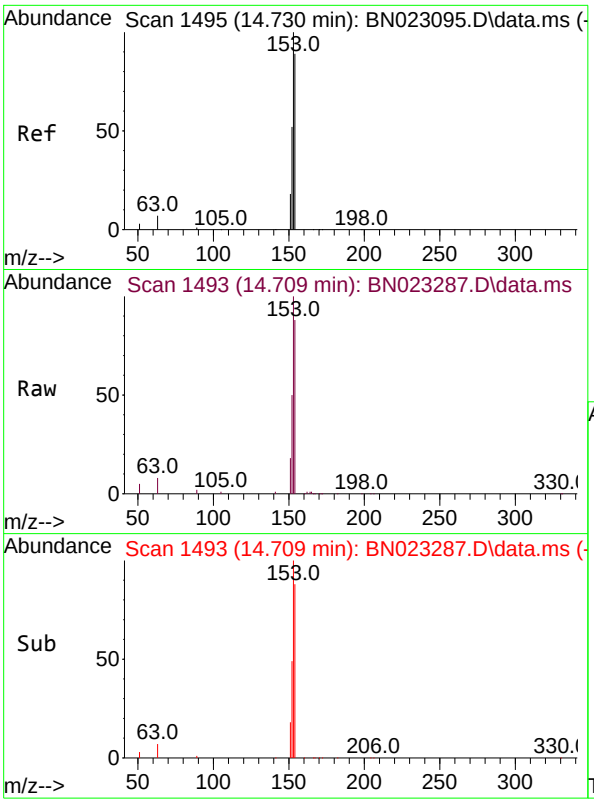


#16
Acenaphthylene
Concen: 0.386 ng
RT: 14.367 min Scan# 1461
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:152 Resp: 25141

Ion	Ratio	Lower	Upper
152	100		
151	19.6	15.4	23.2
153	12.9	10.3	15.5



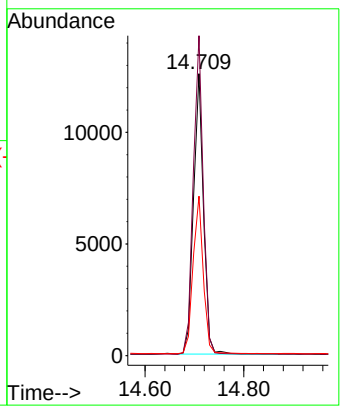


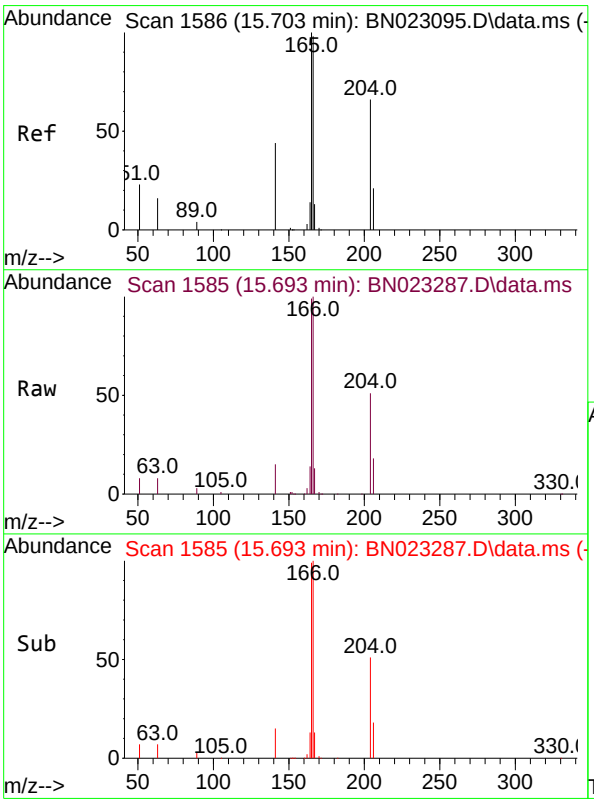
#17
Acenaphthene
Concen: 0.369 ng
RT: 14.709 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:154 Resp: 17630

Ion	Ratio	Lower	Upper
154	100		
153	113.5	88.6	132.8
152	57.4	48.1	72.1

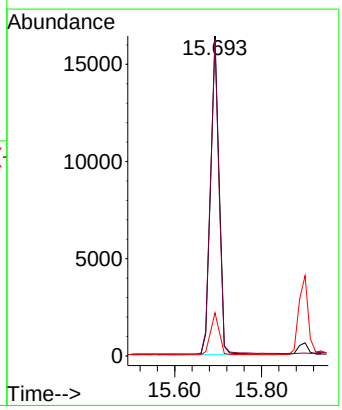


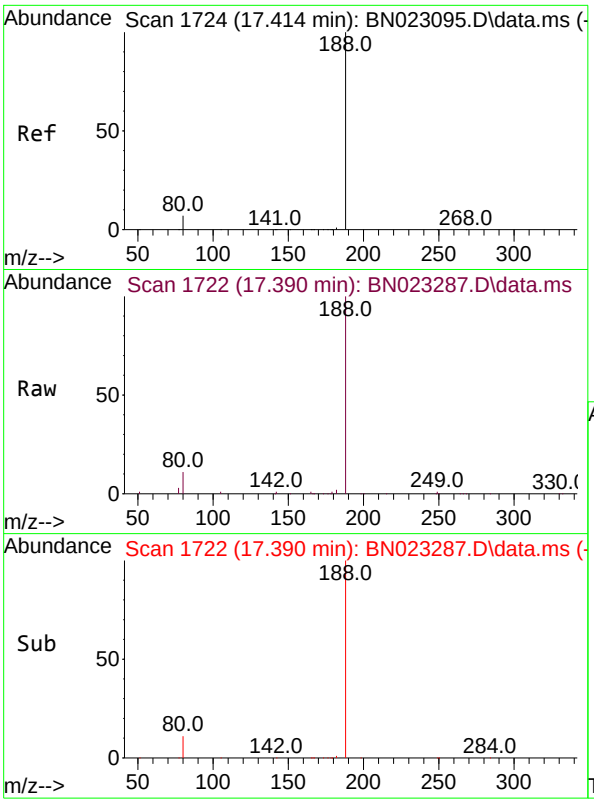


#18
Fluorene
Concen: 0.452 ng
RT: 15.693 min Scan# 1585
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:166 Resp: 24191

Ion	Ratio	Lower	Upper
166	100		
165	100.1	79.8	119.6
167	12.9	10.6	16.0



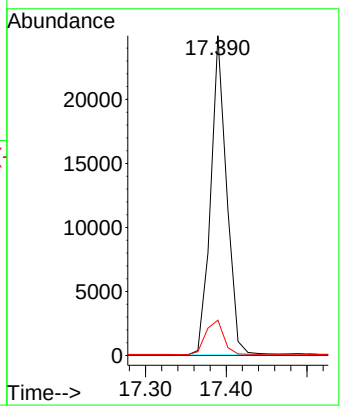


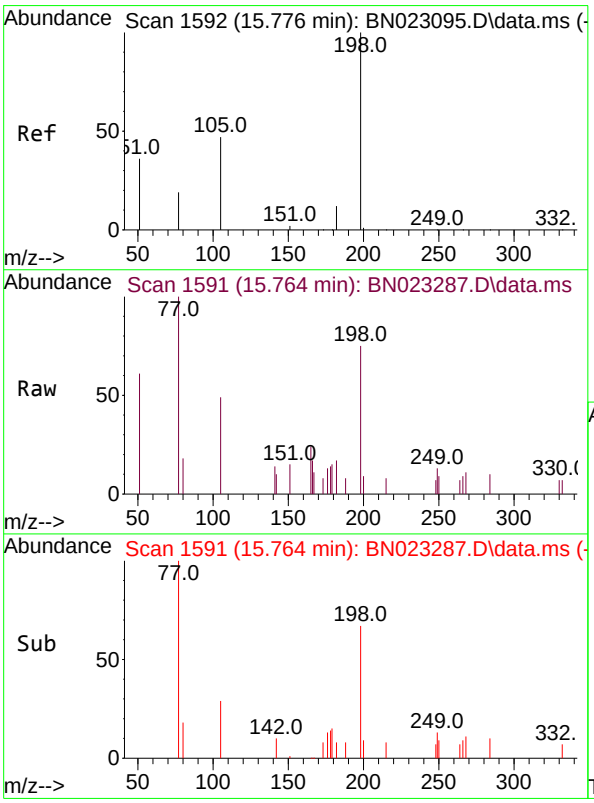
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.390 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:188 Resp: 34289

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.1	6.1	9.1#

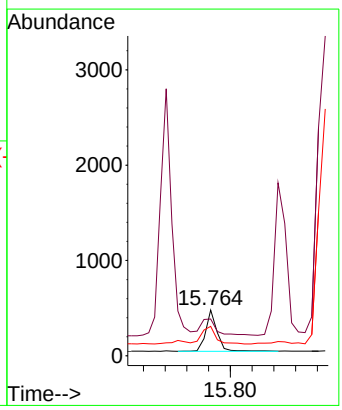


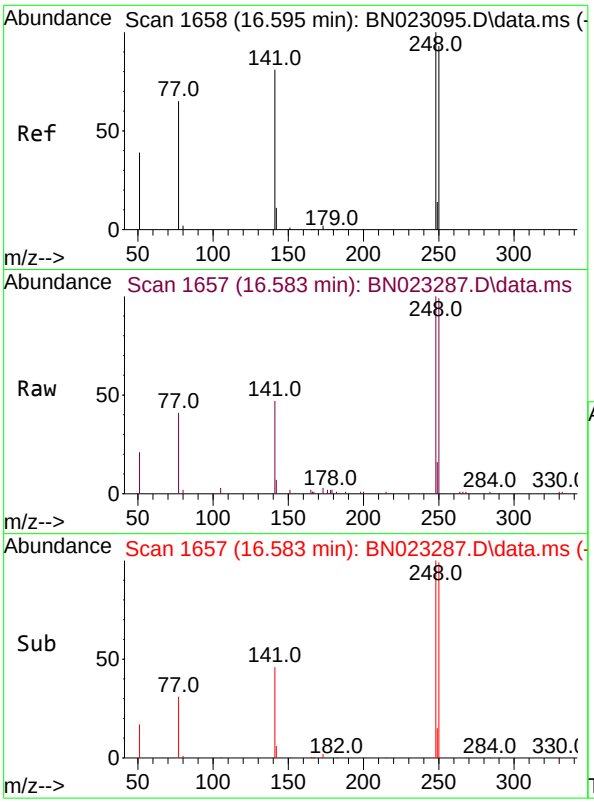


#20
4,6-Dinitro-2-methylphenol
Concen: 0.323 ng
RT: 15.764 min Scan# 1591
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:198 Resp: 618

Ion	Ratio	Lower	Upper
198	100		
51	80.4	57.0	85.4
105	64.6	47.2	70.8



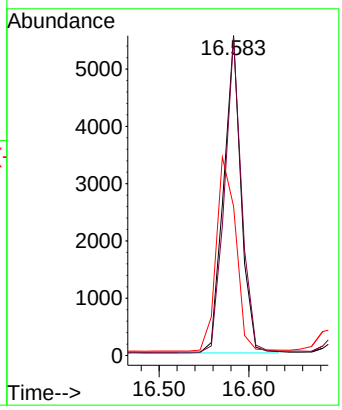


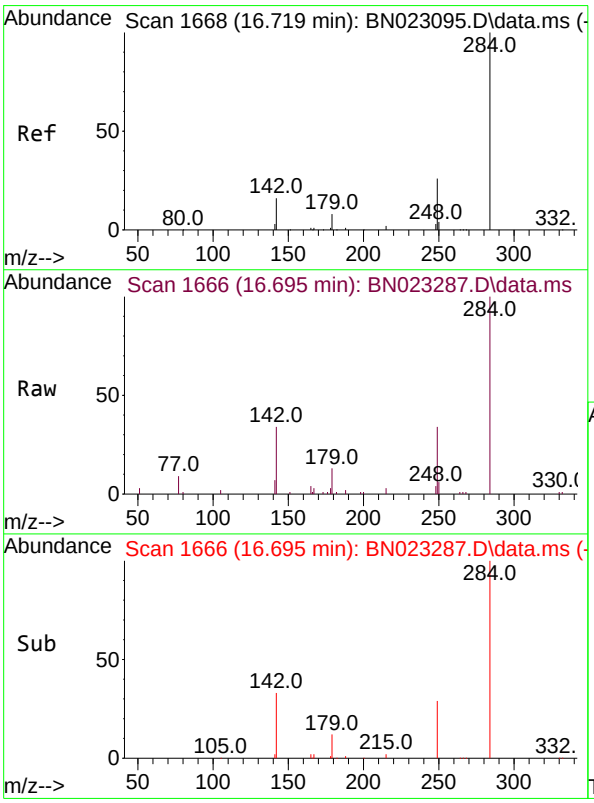
#21
4-Bromophenyl-phenylether
Concen: 0.408 ng
RT: 16.583 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:248 Resp: 7469

Ion	Ratio	Lower	Upper
248	100		
250	99.5	74.3	111.5
141	46.7	65.0	97.6#

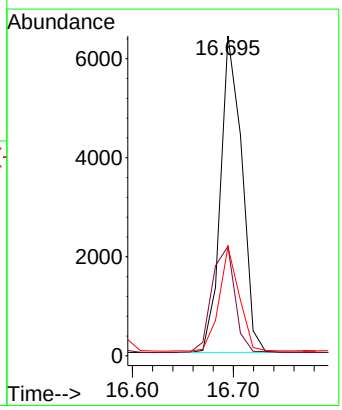


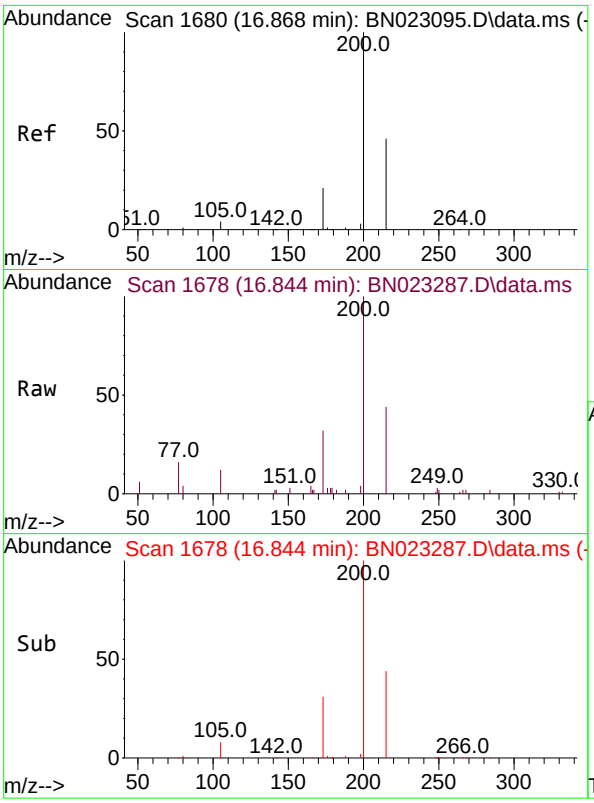


#22
Hexachlorobenzene
Concen: 0.392 ng
RT: 16.695 min Scan# 1666
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:284 Resp: 9396

Ion	Ratio	Lower	Upper
284	100		
142	36.2	31.0	46.4
249	30.9	24.4	36.6



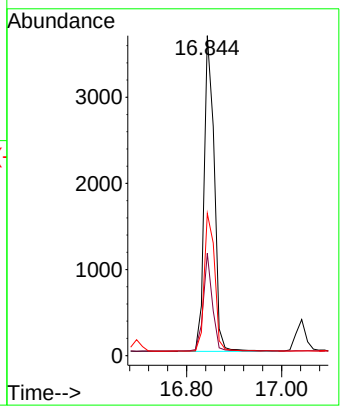


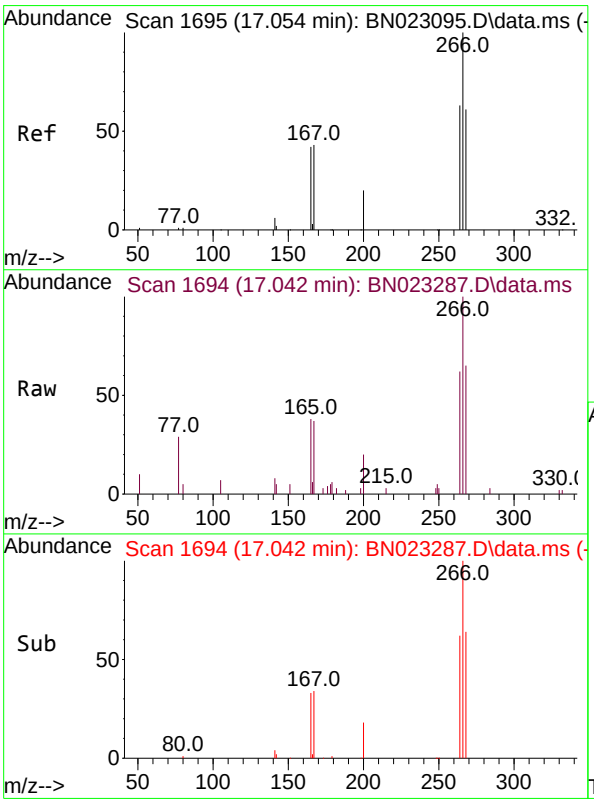
#23
Atrazine
Concen: 0.418 ng
RT: 16.844 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:200 Resp: 5392

Ion	Ratio	Lower	Upper
200	100		
173	32.0	18.2	27.4#
215	44.5	38.0	57.0

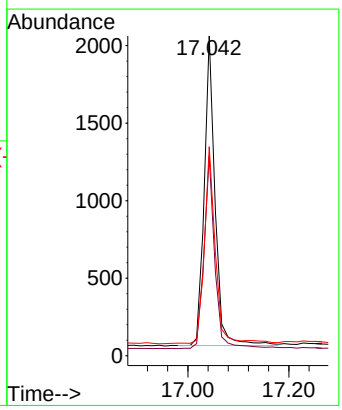


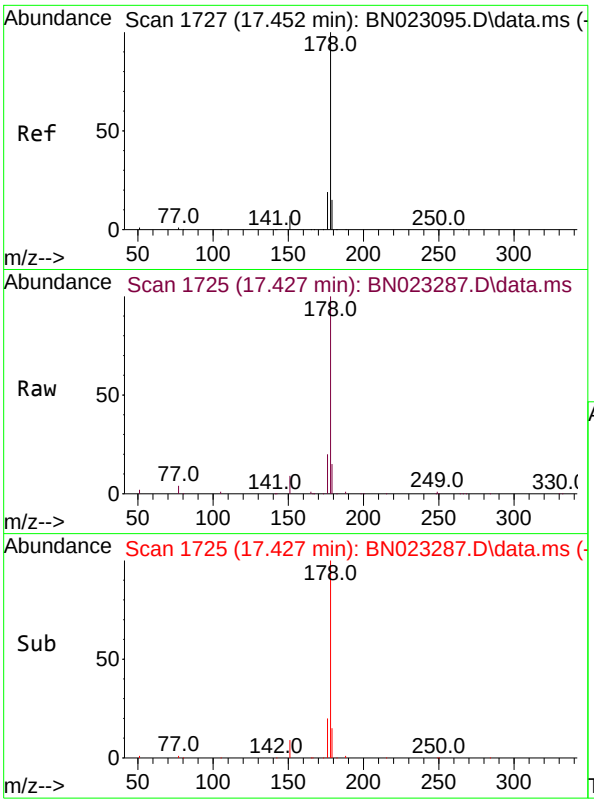


#24
Pentachlorophenol
Concen: 0.356 ng
RT: 17.042 min Scan# 1694
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:266 Resp: 2968

Ion	Ratio	Lower	Upper
266	100		
264	62.3	50.1	75.1
268	63.5	49.7	74.5



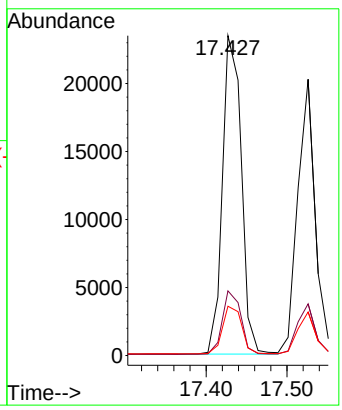


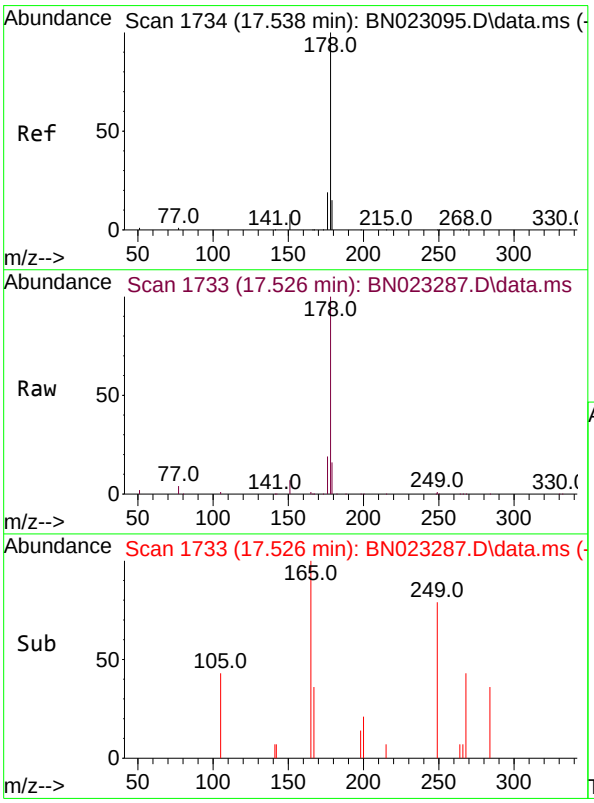
#25
Phenanthrene
Concen: 0.372 ng
RT: 17.427 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:178 Resp: 38060

Ion	Ratio	Lower	Upper
178	100		
176	19.6	15.4	23.2
179	15.5	12.2	18.2

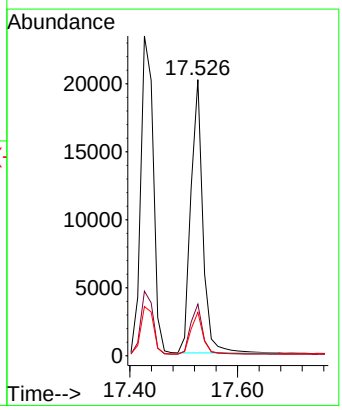


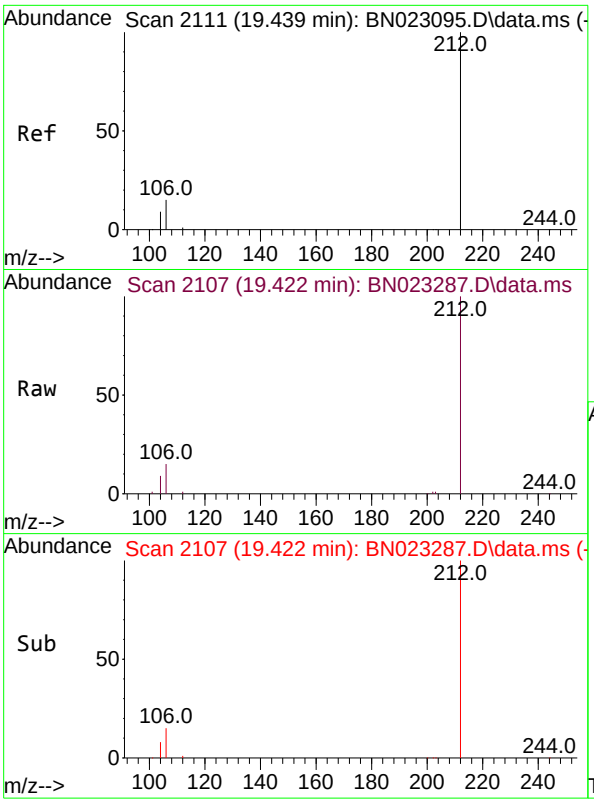


#26
Anthracene
Concen: 0.380 ng
RT: 17.526 min Scan# 1733
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:178 Resp: 30966

Ion	Ratio	Lower	Upper
178	100		
176	18.5	15.1	22.7
179	15.4	12.2	18.4



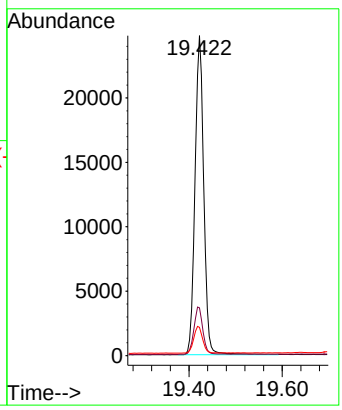


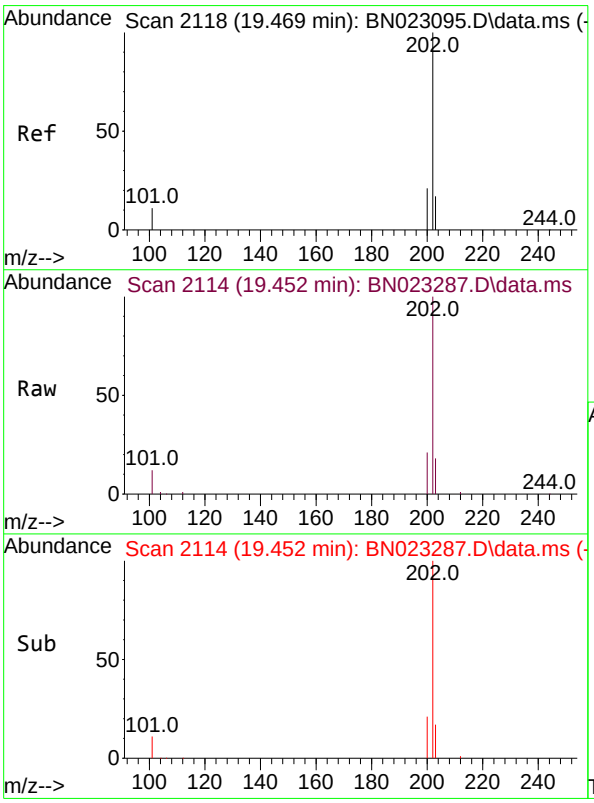
#27
Fluoranthene-d10
Concen: 0.403 ng
RT: 19.422 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:212 Resp: 32347

Ion	Ratio	Lower	Upper
212	100		
106	15.1	13.0	19.4
104	8.5	7.5	11.3

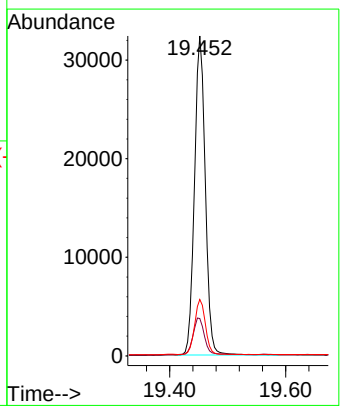


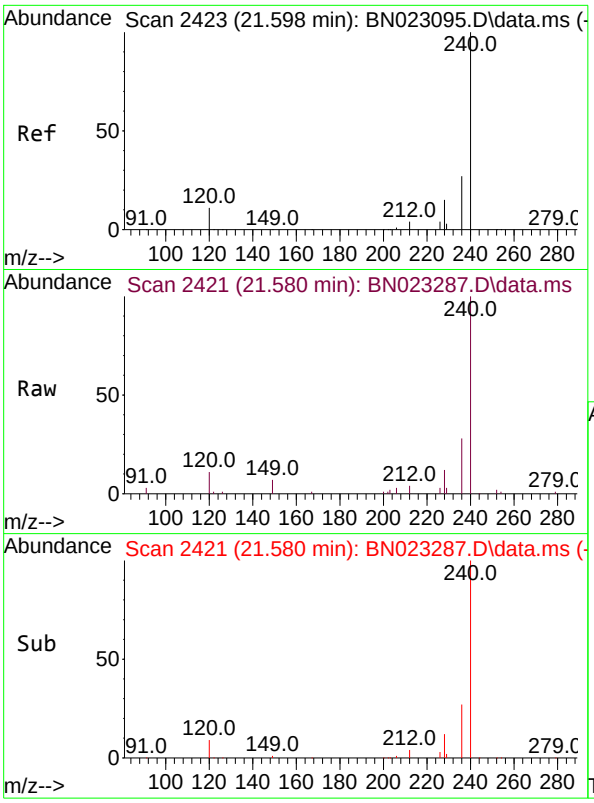


#28
Fluoranthene
Concen: 0.382 ng
RT: 19.452 min Scan# 2114
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:202 Resp: 41811

Ion	Ratio	Lower	Upper
202	100		
101	12.6	9.7	14.5
203	17.1	13.8	20.6



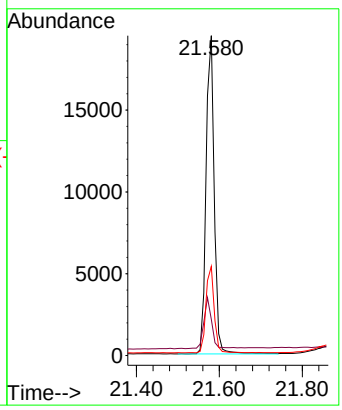


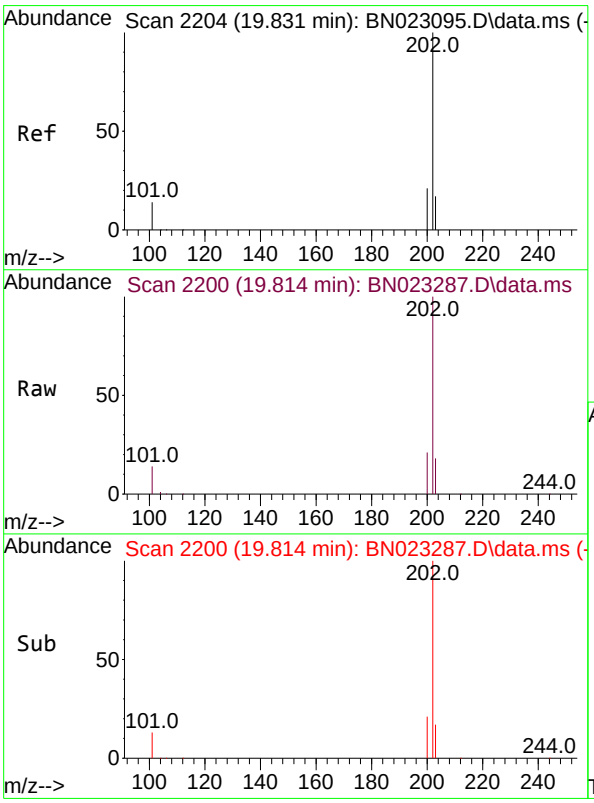
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.580 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:240 Resp: 26436

Ion	Ratio	Lower	Upper
240	100		
120	11.3	10.1	15.1
236	27.9	22.2	33.4

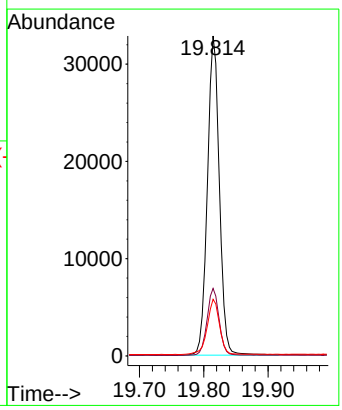


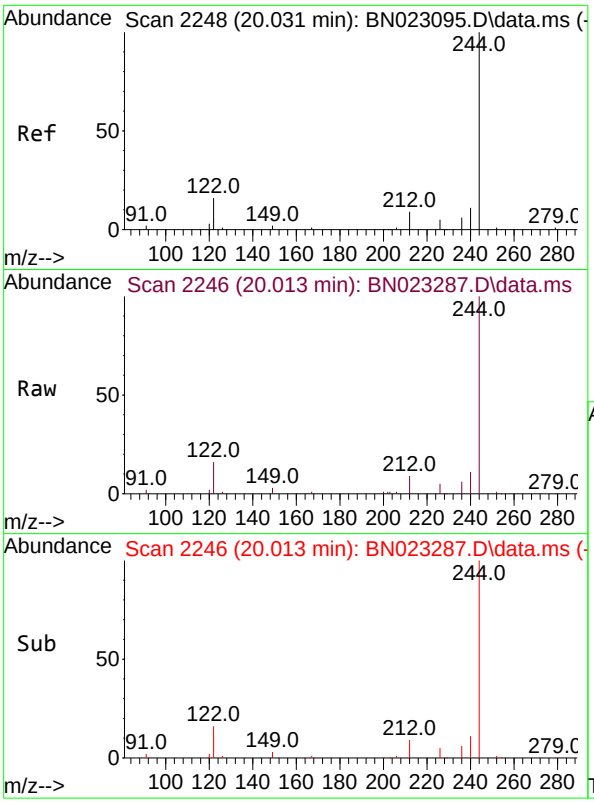


#30
Pyrene
Concen: 0.437 ng
RT: 19.814 min Scan# 2200
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:202 Resp: 42283

Ion	Ratio	Lower	Upper
202	100		
200	21.1	16.9	25.3
203	17.8	14.2	21.4



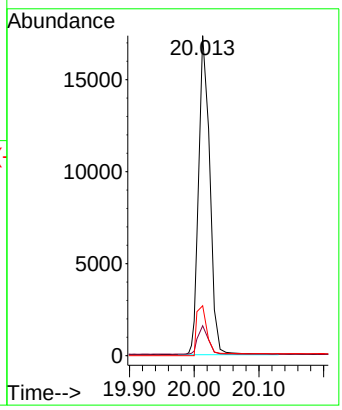


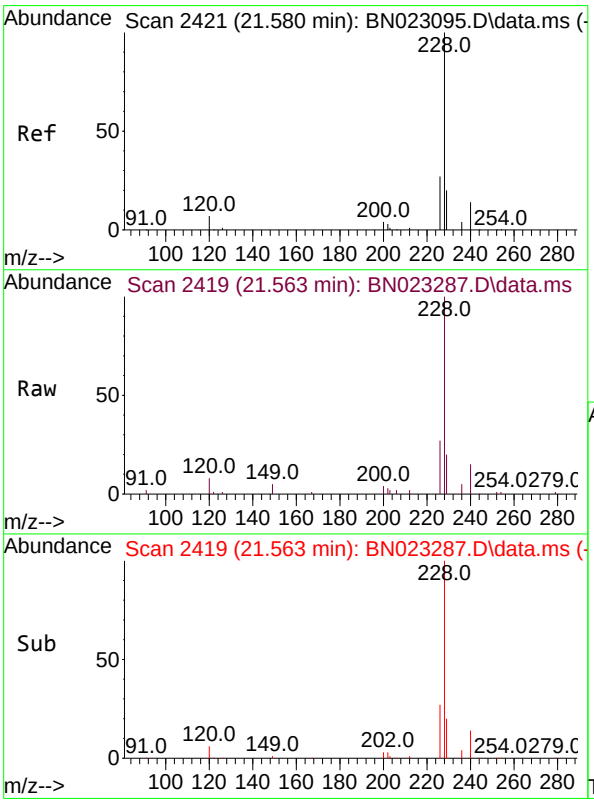
#31
Terphenyl-d14
Concen: 0.432 ng
RT: 20.013 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:244 Resp: 18539

Ion	Ratio	Lower	Upper
244	100		
212	9.3	7.6	11.4
122	15.6	12.6	18.8

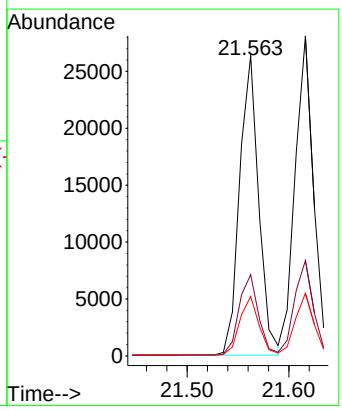


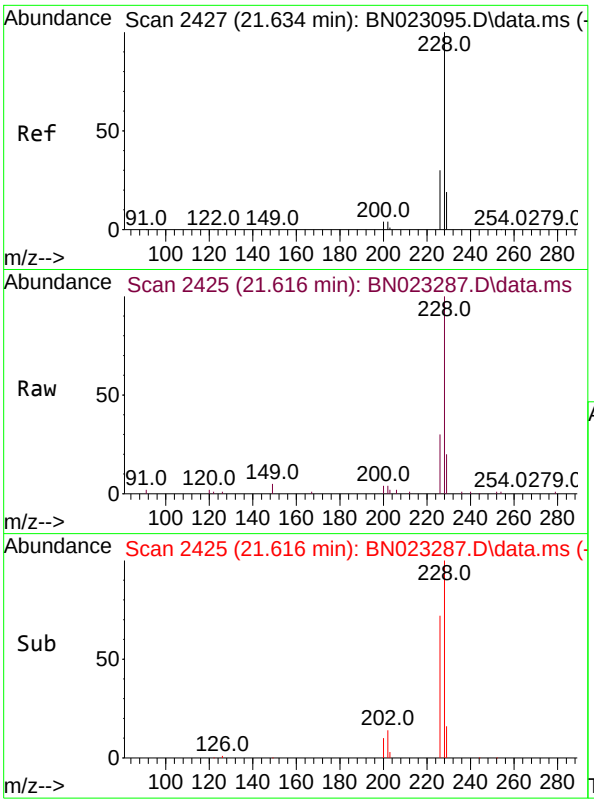


#32
Benzo(a)anthracene
Concen: 0.403 ng
RT: 21.563 min Scan# 2419
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:228 Resp: 34347

Ion	Ratio	Lower	Upper
228	100		
226	27.1	22.0	33.0
229	19.8	15.8	23.8



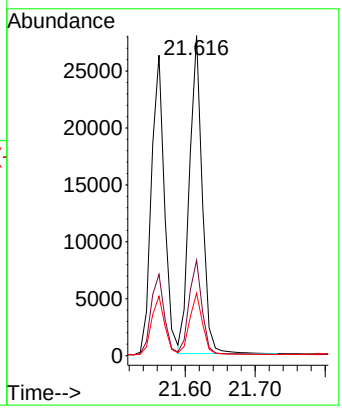


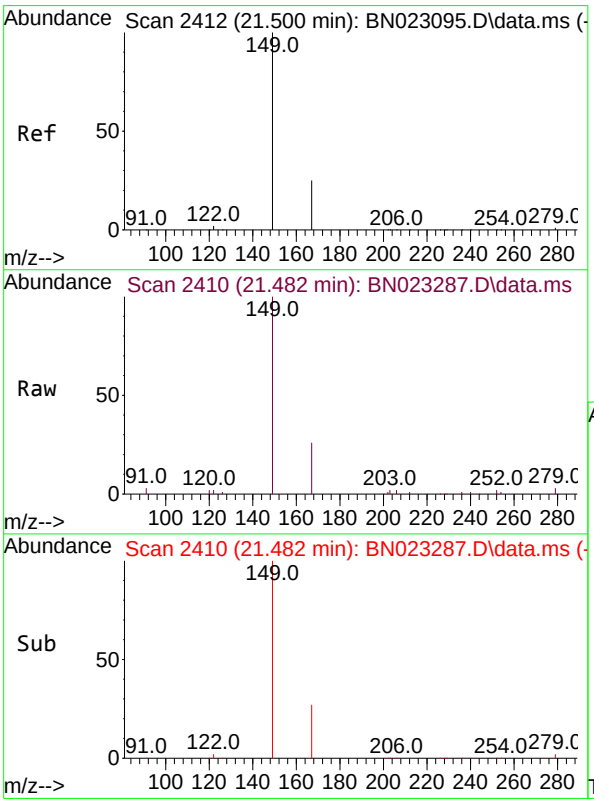
#33
Chrysene
Concen: 0.370 ng
RT: 21.616 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:228 Resp: 35404

Ion	Ratio	Lower	Upper
228	100		
226	29.8	24.4	36.6
229	19.6	15.6	23.4

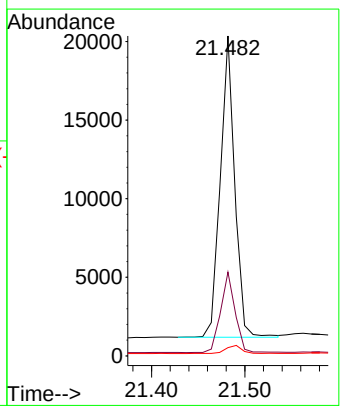


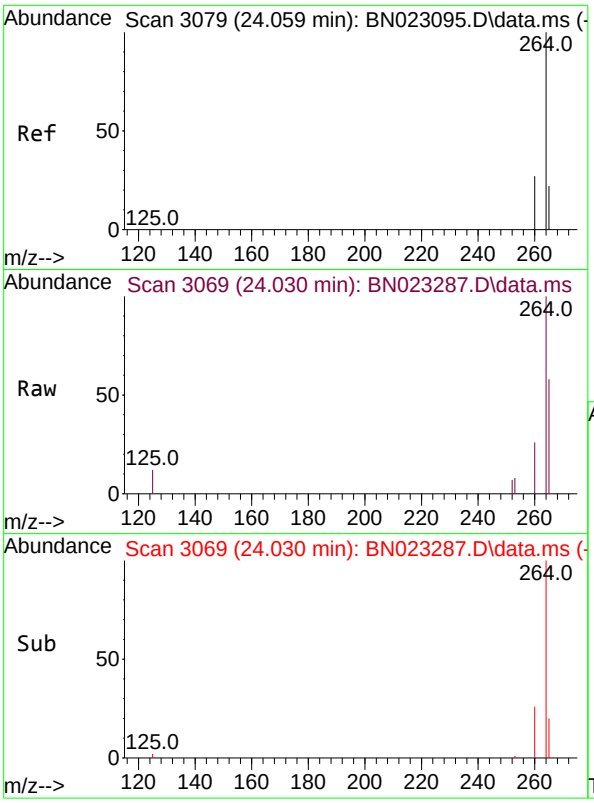


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.573 ng
RT: 21.482 min Scan# 2410
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:149 Resp: 20630

Ion	Ratio	Lower	Upper
149	100		
167	26.9	20.2	30.2
279	3.0	2.3	3.5



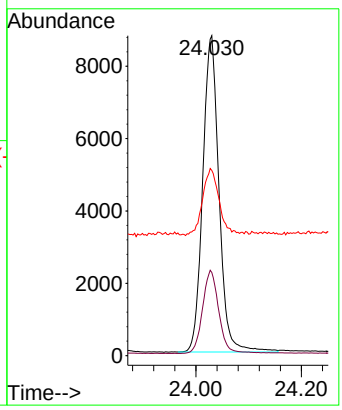


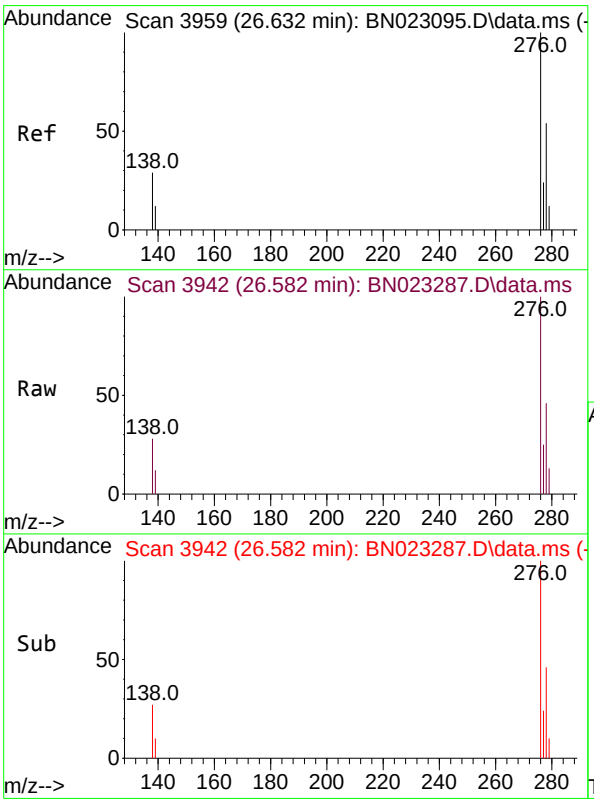
#35
Perylene-d12
Concen: 0.400 ng
RT: 24.030 min Scan# 3
Delta R.T. 0.003 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:264 Resp: 18732

Ion	Ratio	Lower	Upper
264	100		
260	26.0	21.7	32.5
265	57.9	43.2	64.8

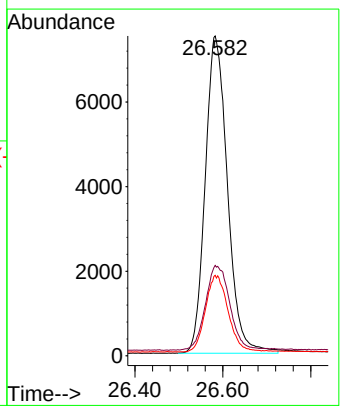


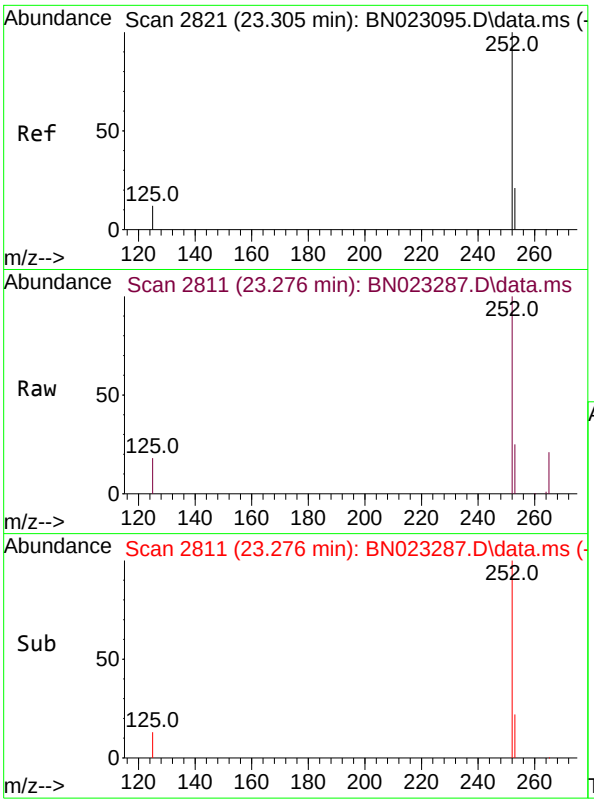


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.314 ng
RT: 26.582 min Scan# 3942
Delta R.T. -0.003 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:276 Resp: 26339

Ion	Ratio	Lower	Upper
276	100		
138	29.1	25.0	37.6
277	24.6	19.8	29.8



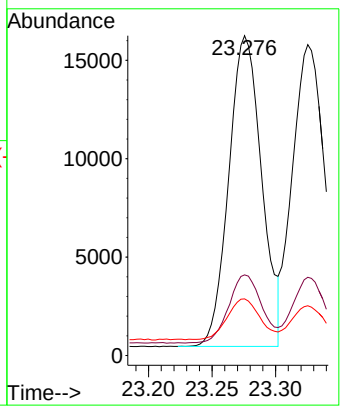


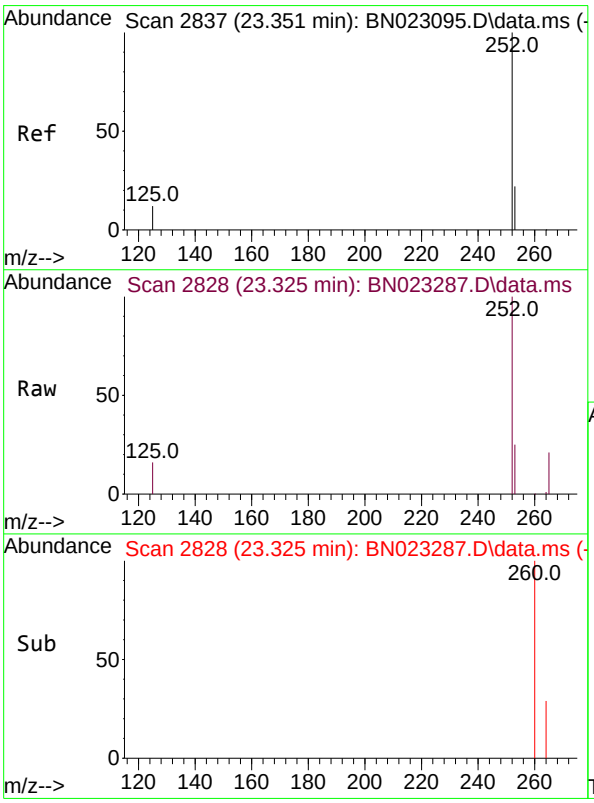
#37
Benzo(b)fluoranthene
Concen: 0.366 ng
RT: 23.276 min Scan# 28
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:252 Resp: 28455

Ion	Ratio	Lower	Upper
252	100		
253	25.2	19.0	28.4
125	17.7	12.8	19.2

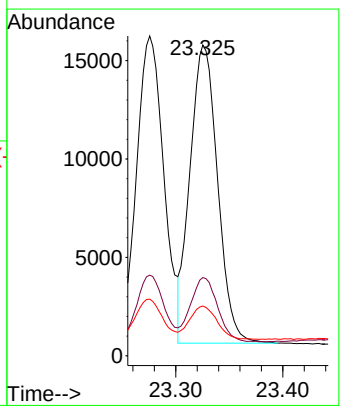


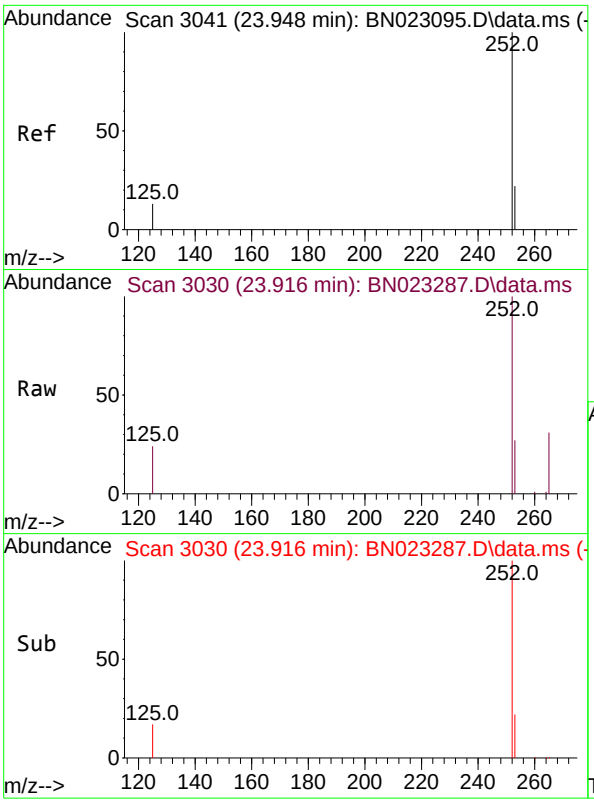


#38
Benzo(k)fluoranthene
Concen: 0.345 ng
RT: 23.325 min Scan# 2828
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:252 Resp: 27179

Ion	Ratio	Lower	Upper
252	100		
253	25.2	19.1	28.7
125	16.0	12.5	18.7



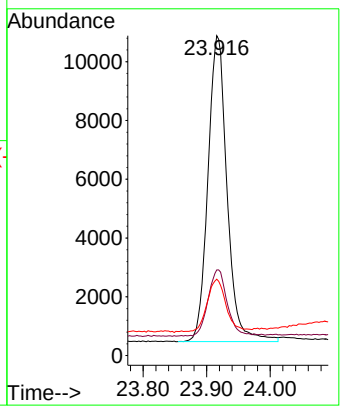


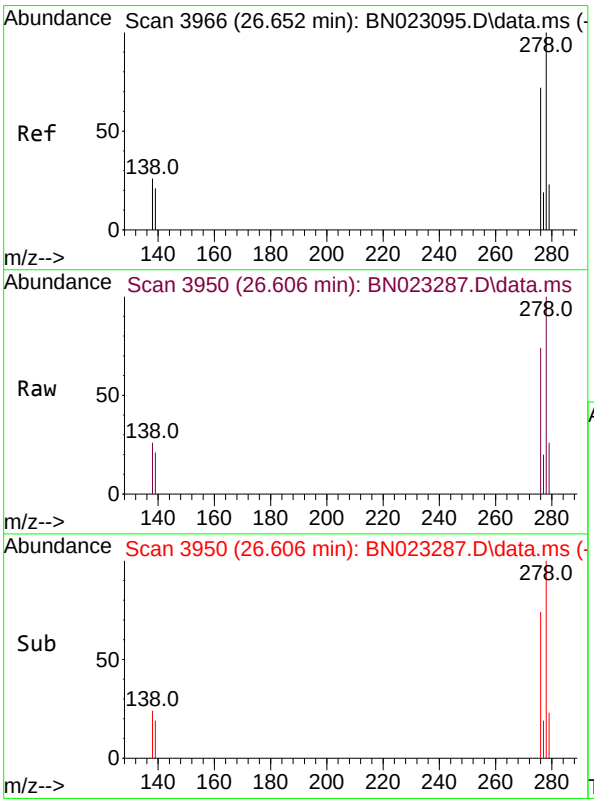
#39
Benzo(a)pyrene
Concen: 0.374 ng
RT: 23.916 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:252 Resp: 21767

Ion	Ratio	Lower	Upper
252	100		
253	26.8	20.6	30.8
125	23.9	15.8	23.8#

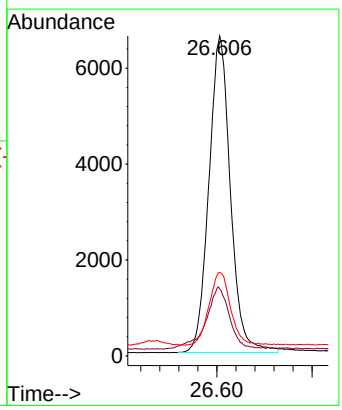


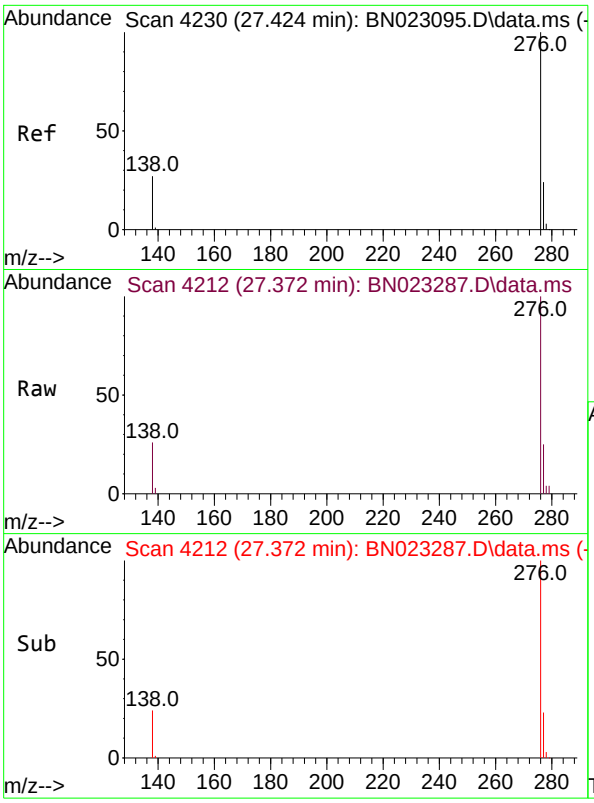


#40
Dibenzo(a,h)anthracene
Concen: 0.308 ng
RT: 26.606 min Scan# 3950
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:278 Resp: 20754

Ion	Ratio	Lower	Upper
278	100		
139	20.9	17.5	26.3
279	26.1	20.5	30.7



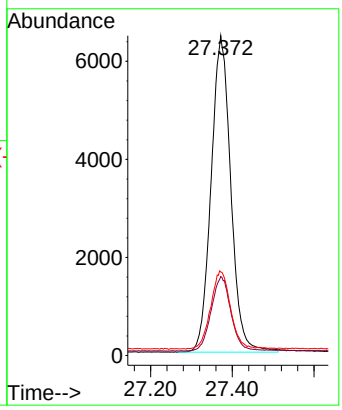


#41
Benzo(g,h,i)perylene
Concen: 0.300 ng
RT: 27.372 min Scan# 4
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Instrument :
BNA_N
ClientSampleId :
PB149692BS

Tgt Ion:276 Resp: 21609

Ion	Ratio	Lower	Upper
276	100		
277	24.7	19.9	29.9
138	26.1	22.2	33.2



CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ	Date Received:	
Client Sample ID:	PB149692BSD	SDG No.:	N6070
Lab Sample ID:	PB149692BSD	Matrix:	Water
Analytical Method:	SW8270SIM	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN023288.D	1	12/16/22 08:59	12/19/22 16:21	PB149692

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
123-91-1	1,4-Dioxane	0.39		0.080	0.20	ug/L
SURROGATES						
7297-45-2	2-Methylnaphthalene-d10	0.37		30 (30) - 150 (150)	94%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.41		30 (30) - 150 (150)	103%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		30 (11) - 130 (175)	105%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		30 (10) - 130 (175)	89%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		30 (54) - 130 (171)	105%	SPK: 0.4
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	8380	7.999			
1146-65-2	Naphthalene-d8	26100	10.818			
15067-26-2	Acenaphthene-d10	15600	14.645			
1517-22-2	Phenanthrene-d10	33500	17.39			
1719-03-5	Chrysene-d12	27800	21.58			
1520-96-3	Perylene-d12	19300	24.027			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023288.D
Acq On : 19 Dec 2022 16:21
Operator : CG/JU
Sample : PB149692BSD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Quant Time: Dec 19 17:36:15 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration

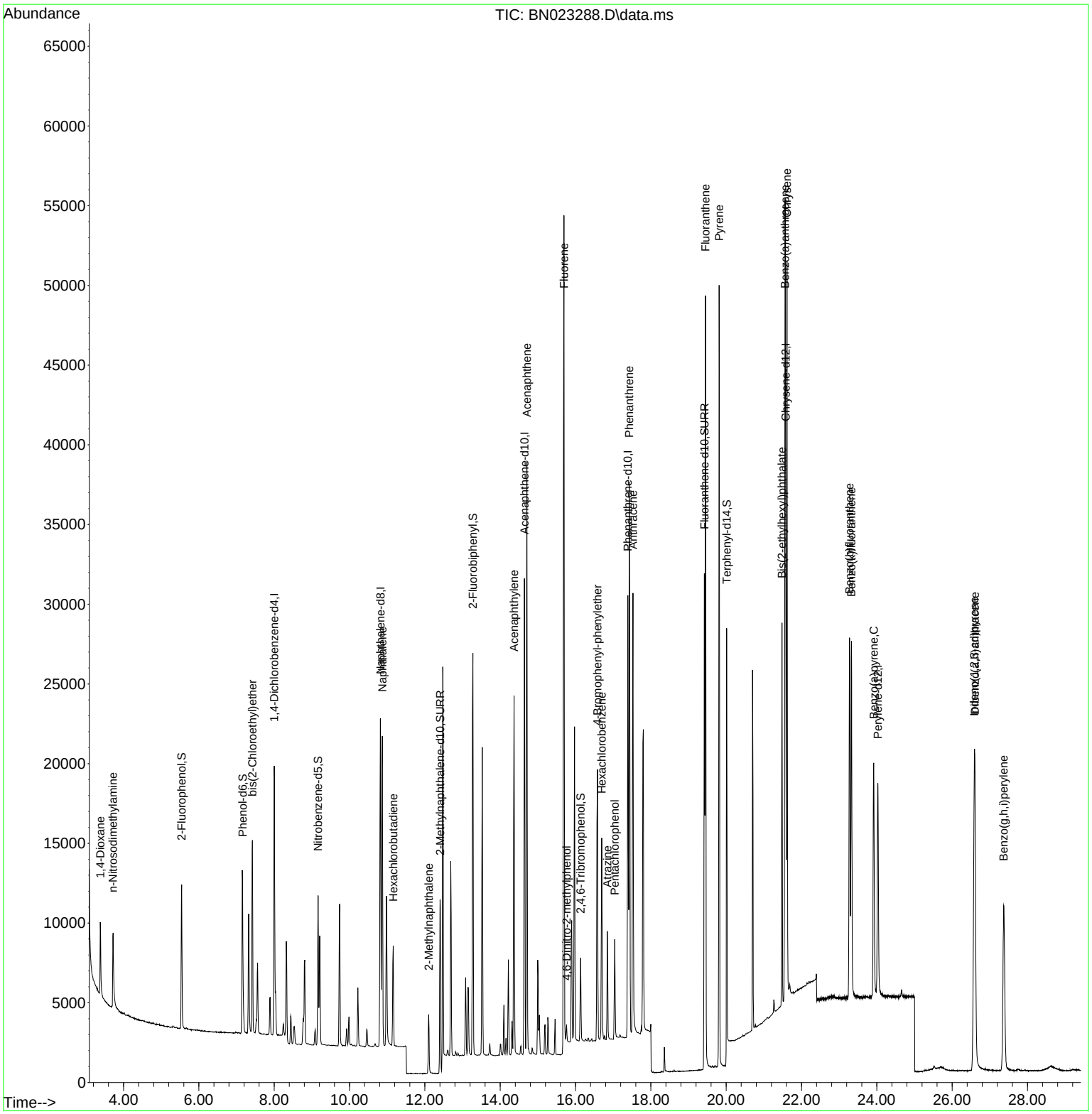
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.999	152	8380	0.400	ng		0.00
7) Naphthalene-d8	10.818	136	26080	0.400	ng		0.00
13) Acenaphthene-d10	14.645	164	15594	0.400	ng		0.00
19) Phenanthrene-d10	17.390	188	33450	0.400	ng	#	0.00
29) Chrysene-d12	21.580	240	27783	0.400	ng		0.00
35) Perylene-d12	24.027	264	19326	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.543	112	7545	0.483	ng		0.00
5) Phenol-d6	7.161	99	9755	0.492	ng		0.00
8) Nitrobenzene-d5	9.164	82	7213	0.420	ng		0.00
11) 2-Methylnaphthalene-d10	12.405	152	16556	0.374	ng		0.00
14) 2,4,6-Tribromophenol	16.136	330	2840	0.502	ng		0.00
15) 2-Fluorobiphenyl	13.276	172	22265	0.357	ng		0.00
27) Fluoranthene-d10	19.422	212	32302	0.412	ng		0.00
31) Terphenyl-d14	20.013	244	19027	0.422	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.384	88	3249	0.393	ng		97
3) n-Nitrosodimethylamine	3.716	42	3278	0.404	ng	#	87
6) bis(2-Chloroethyl)ether	7.421	93	8864	0.393	ng		99
9) Naphthalene	10.872	128	25915	0.390	ng		100
10) Hexachlorobutadiene	11.160	225	5090	0.402	ng	#	100
12) 2-Methylnaphthalene	12.102	142	5521	0.558	ng	#	97
16) Acenaphthylene	14.367	152	24287	0.387	ng		100
17) Acenaphthene	14.709	154	17134	0.371	ng		97
18) Fluorene	15.693	166	23685	0.458	ng		99
20) 4,6-Dinitro-2-methylph...	15.764	198	614	0.325	ng		92
21) 4-Bromophenyl-phenylether	16.583	248	7247	0.406	ng	#	78
22) Hexachlorobenzene	16.694	284	9218	0.394	ng		98
23) Atrazine	16.843	200	5175	0.411	ng	#	91
24) Pentachlorophenol	17.042	266	2942	0.362	ng		99
25) Phenanthrene	17.427	178	37812	0.379	ng		100
26) Anthracene	17.526	178	30463	0.384	ng		100
28) Fluoranthene	19.452	202	41868	0.392	ng		99
30) Pyrene	19.814	202	42727	0.420	ng		100
32) Benzo(a)anthracene	21.562	228	36084	0.403	ng		100
33) Chrysene	21.616	228	36965	0.367	ng		99
34) Bis(2-ethylhexyl)phtha...	21.482	149	19873	0.525	ng		97
36) Indeno(1,2,3-cd)pyrene	26.588	276	28213	0.326	ng		98
37) Benzo(b)fluoranthene	23.276	252	30332	0.379	ng		98
38) Benzo(k)fluoranthene	23.325	252	29310	0.360	ng		100
39) Benzo(a)pyrene	23.919	252	22613	0.376	ng		98
40) Dibenzo(a,h)anthracene	26.603	278	22498	0.324	ng		99
41) Benzo(g,h,i)perylene	27.369	276	23348	0.314	ng		99

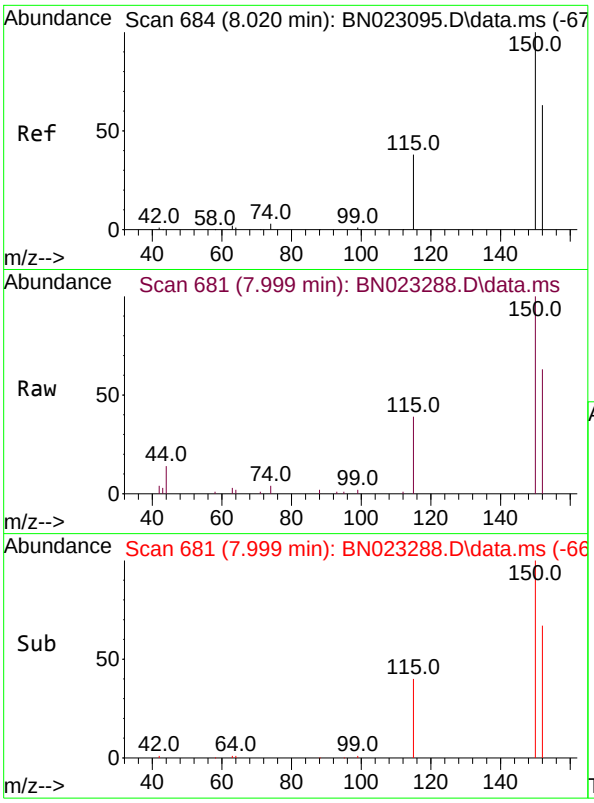
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023288.D
Acq On : 19 Dec 2022 16:21
Operator : CG/JU
Sample : PB149692BSD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Quant Time: Dec 19 17:36:15 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration



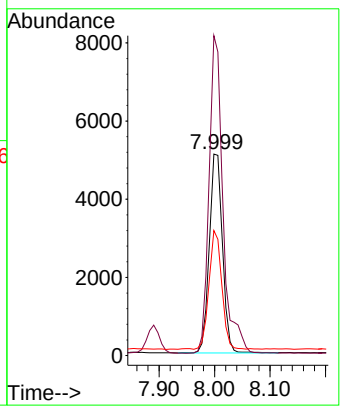


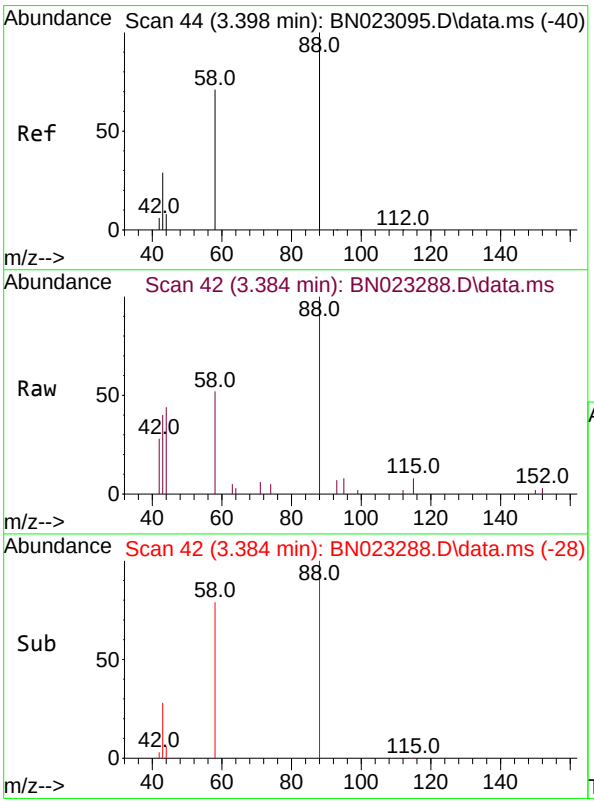
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.999 min Scan# 68
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:152 Resp: 8380

Ion	Ratio	Lower	Upper
152	100		
150	158.8	125.6	188.4
115	62.1	49.0	73.4

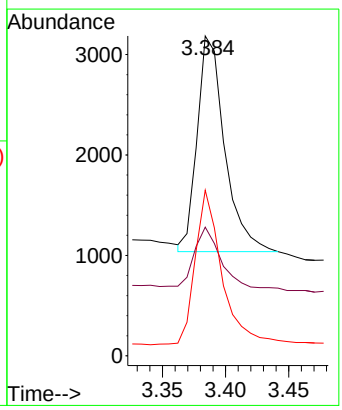


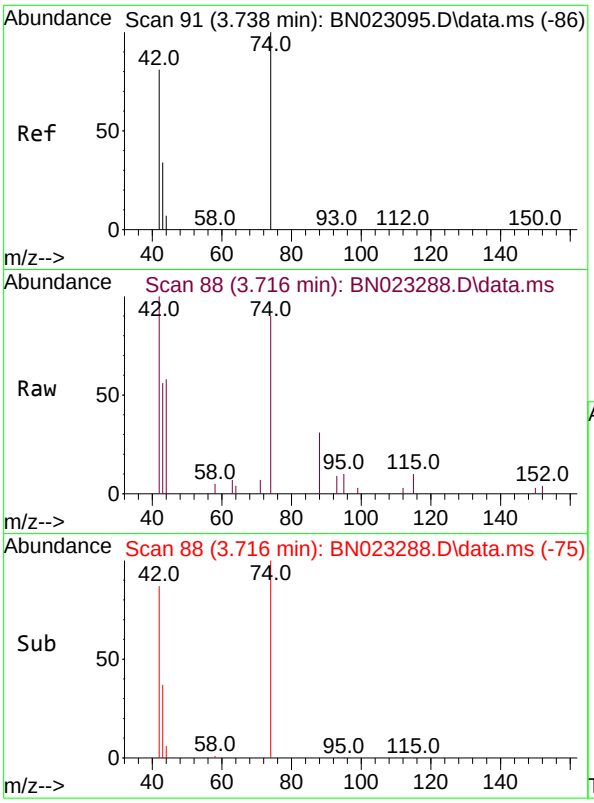


#2
1,4-Dioxane
Concen: 0.393 ng
RT: 3.384 min Scan# 42
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion: 88 Resp: 3249

Ion	Ratio	Lower	Upper
88	100		
43	26.9	23.3	34.9
58	70.1	58.0	87.0



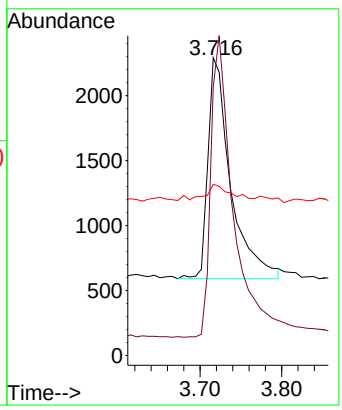


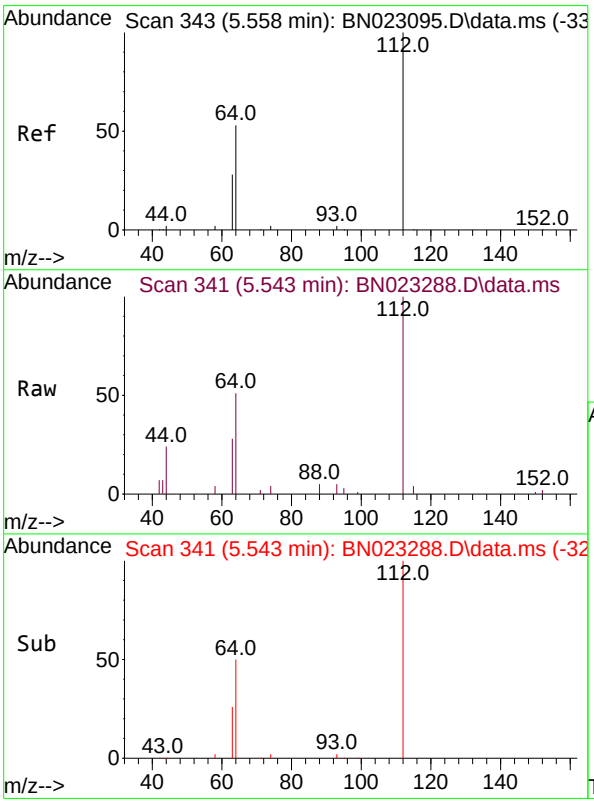
#3
n-Nitrosodimethylamine
Concen: 0.404 ng
RT: 3.716 min Scan# 8
Delta R.T. -0.007 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion: 42 Resp: 3278

Ion	Ratio	Lower	Upper
42	100		
74	133.9	95.8	143.6
44	6.6	8.4	12.6#

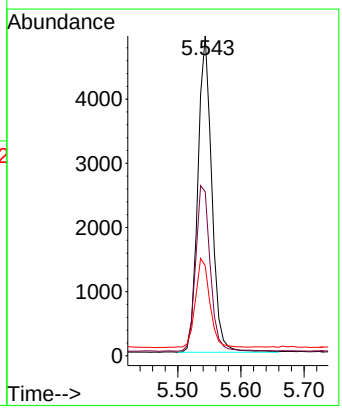


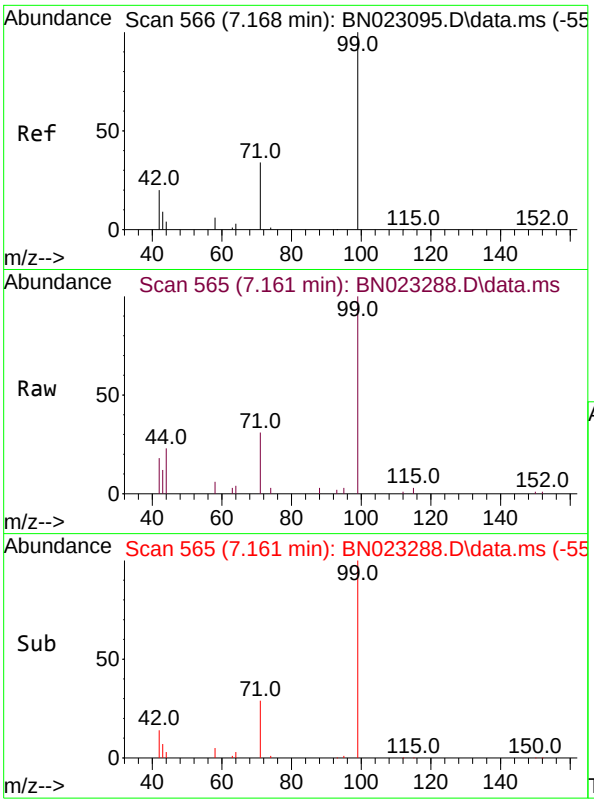


#4
2-Fluorophenol
Concen: 0.483 ng
RT: 5.543 min Scan# 341
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:112 Resp: 7545

Ion	Ratio	Lower	Upper
112	100		
64	54.8	44.4	66.6
63	29.3	23.7	35.5



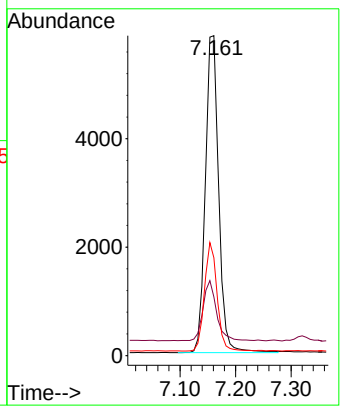


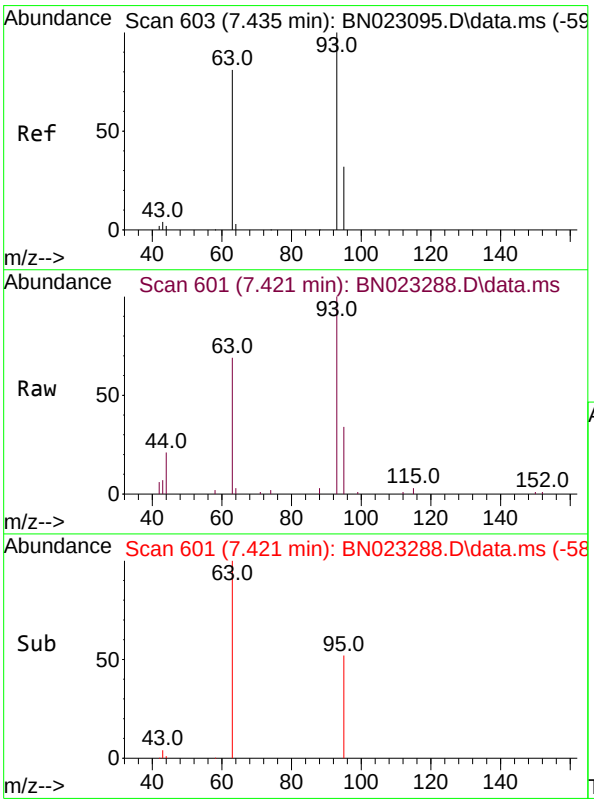
#5
Phenol-d6
Concen: 0.492 ng
RT: 7.161 min Scan# 5
Delta R.T. 0.007 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion: 99 Resp: 9755

Ion	Ratio	Lower	Upper
99	100		
42	19.4	16.3	24.5
71	32.6	26.5	39.7

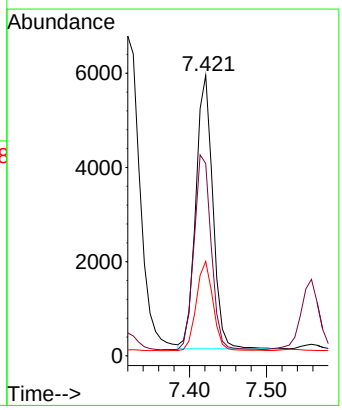


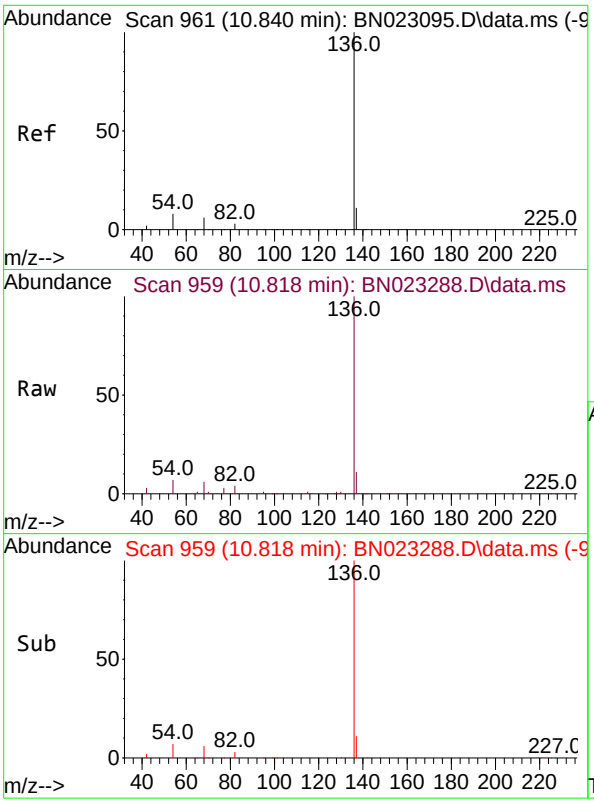


#6
bis(2-Chloroethyl)ether
Concen: 0.393 ng
RT: 7.421 min Scan# 601
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion: 93 Resp: 8864

Ion	Ratio	Lower	Upper
93	100		
63	71.9	58.1	87.1
95	32.4	25.2	37.8



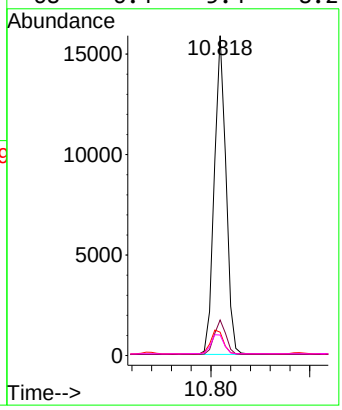


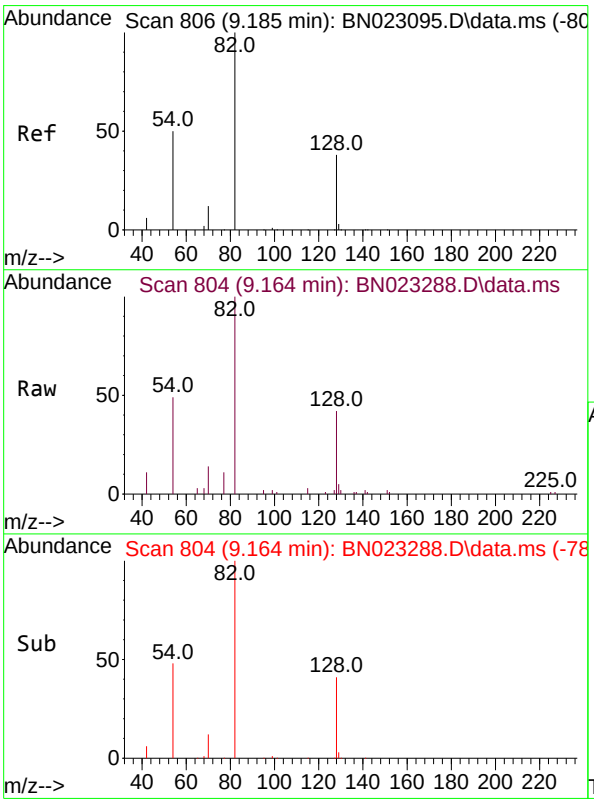
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.818 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:136 Resp: 26080

Ion	Ratio	Lower	Upper
136	100		
137	11.1	9.0	13.4
54	7.3	6.5	9.7
68	6.4	5.4	8.2

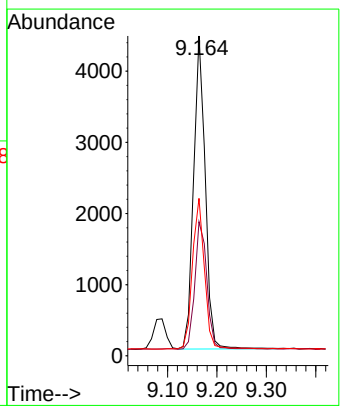


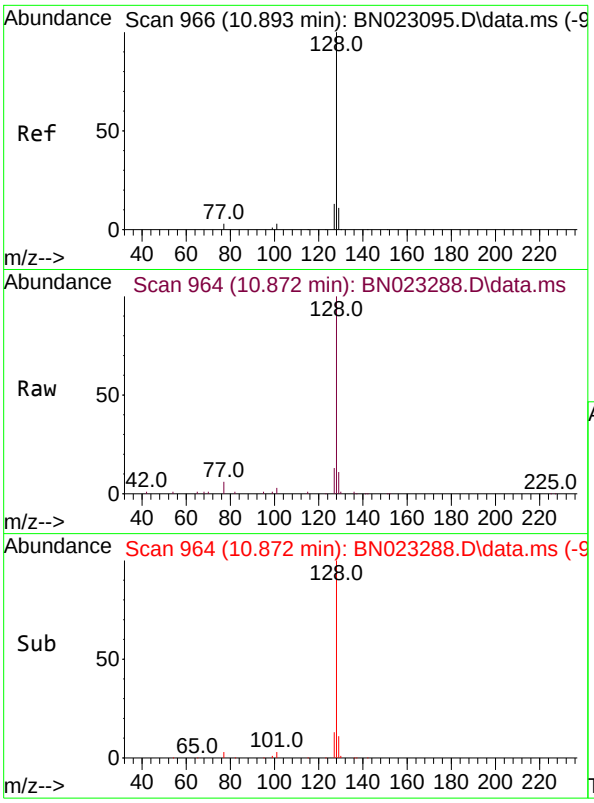


#8
Nitrobenzene-d5
Concen: 0.420 ng
RT: 9.164 min Scan# 804
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion: 82 Resp: 7213

Ion	Ratio	Lower	Upper
82	100		
128	41.9	31.4	47.2
54	49.2	41.0	61.4



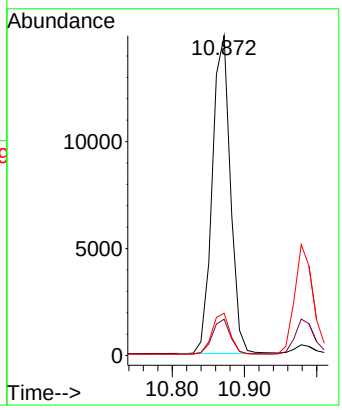


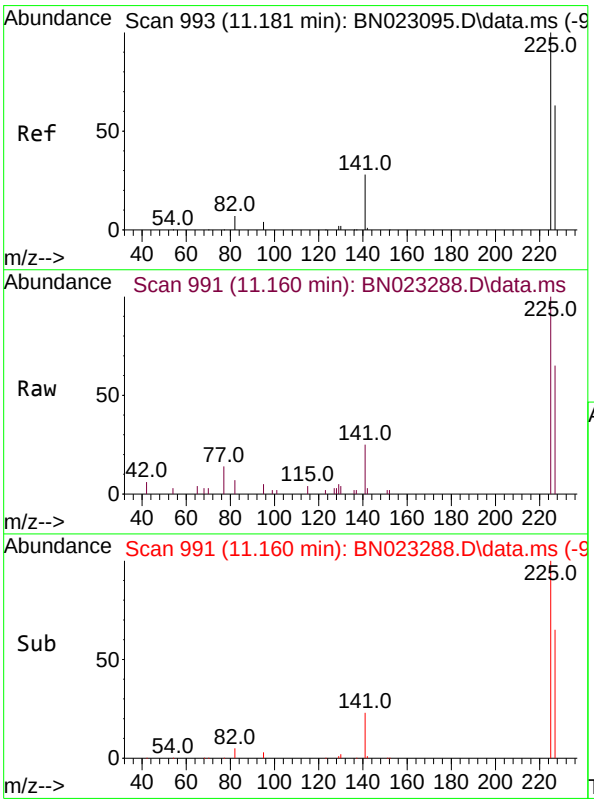
#9
Naphthalene
Concen: 0.390 ng
RT: 10.872 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:128 Resp: 25915

Ion	Ratio	Lower	Upper
128	100		
129	11.4	9.0	13.6
127	13.2	10.5	15.7

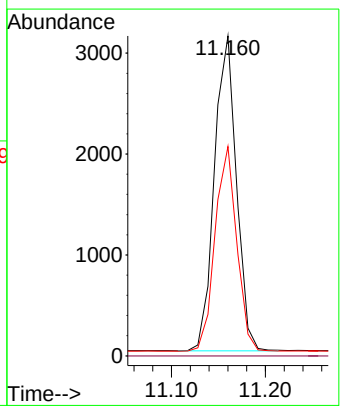


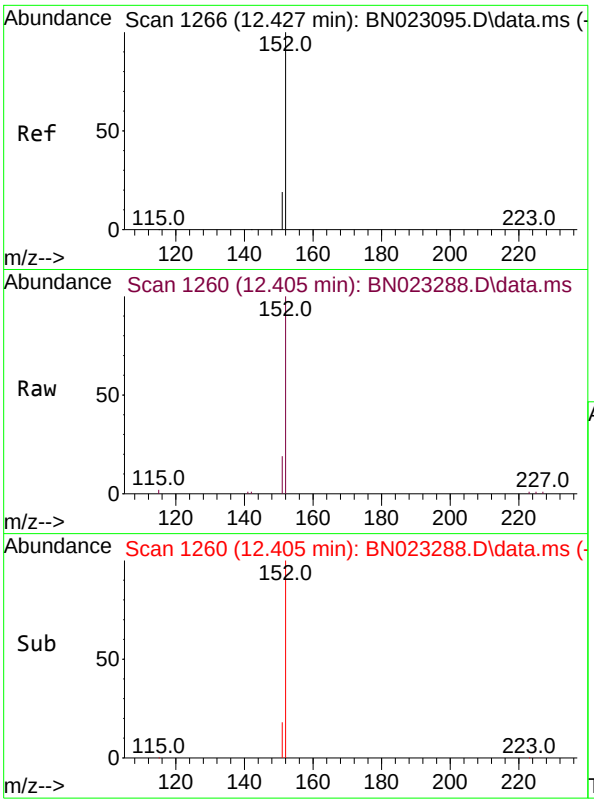


#10
Hexachlorobutadiene
Concen: 0.402 ng
RT: 11.160 min Scan# 991
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:225 Resp: 5090

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.7	51.1	76.7



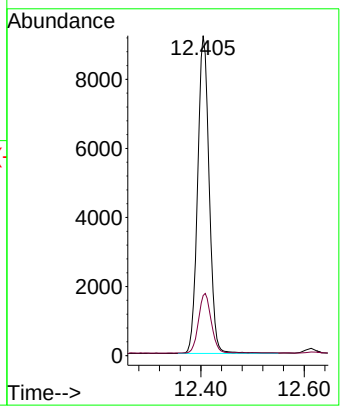


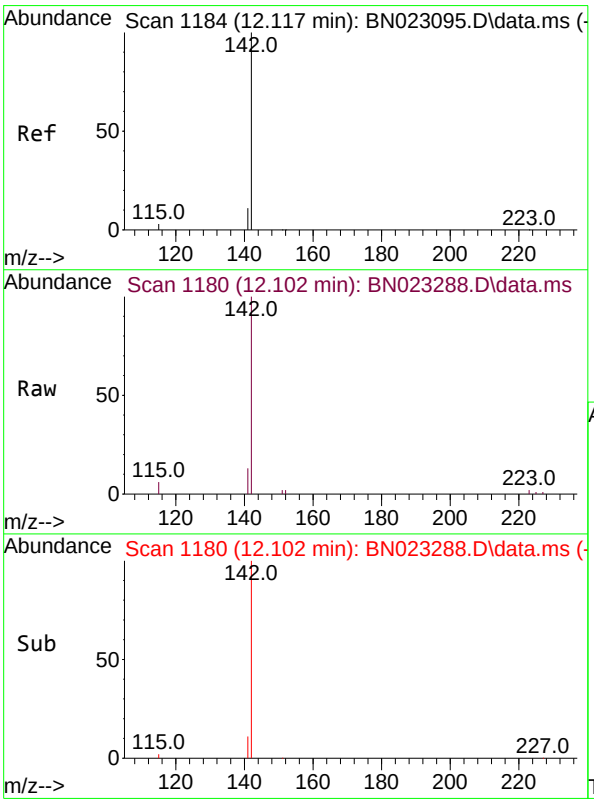
#11
2-Methylnaphthalene-d10
Concen: 0.374 ng
RT: 12.405 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:152 Resp: 16556

Ion	Ratio	Lower	Upper
152	100		
151	17.6	15.1	22.7

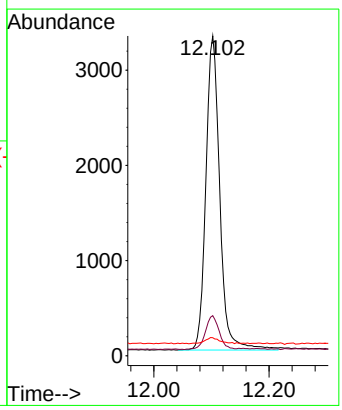


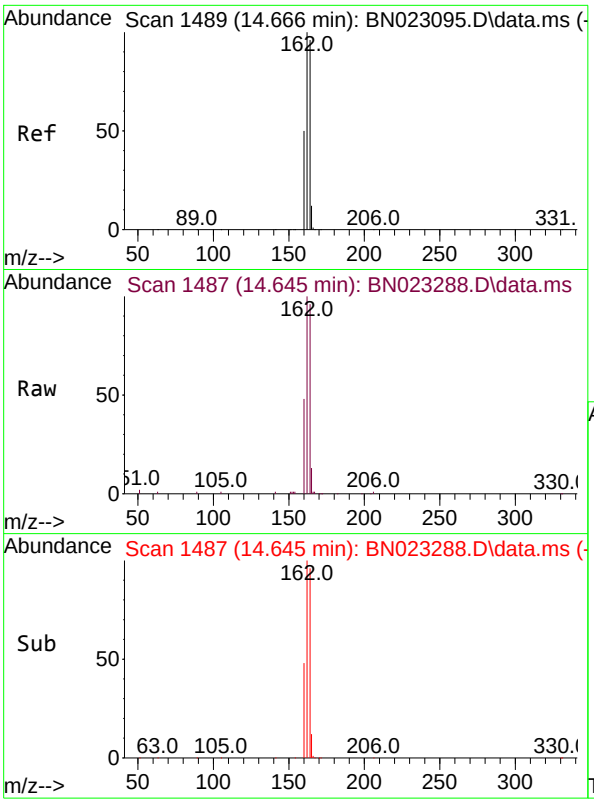


#12
2-Methylnaphthalene
Concen: 0.558 ng
RT: 12.102 min Scan# 1180
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:142 Resp: 5521

Ion	Ratio	Lower	Upper
142	100		
141	12.6	10.9	16.3
115	5.7	5.7	8.5#



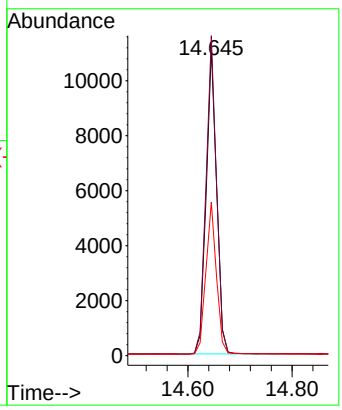


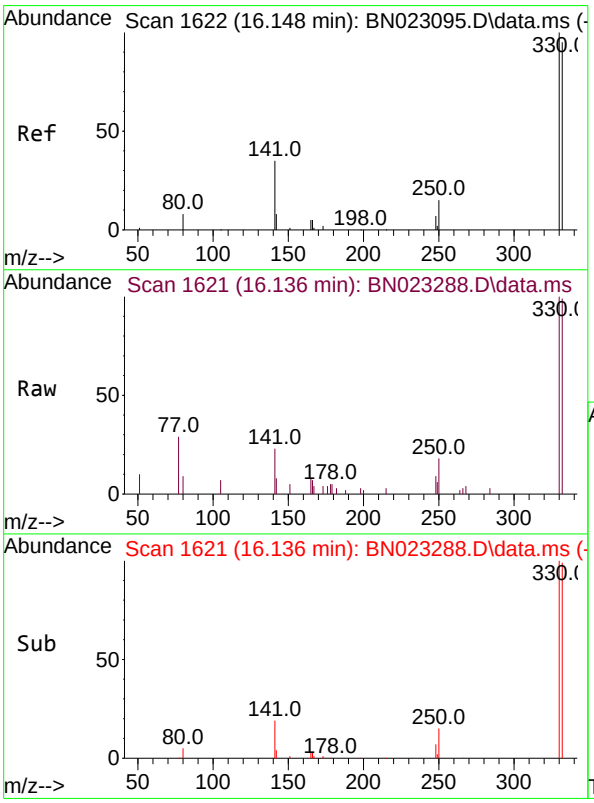
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.645 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:164 Resp: 15594

Ion	Ratio	Lower	Upper
164	100		
162	104.2	83.4	125.0
160	50.0	41.8	62.8

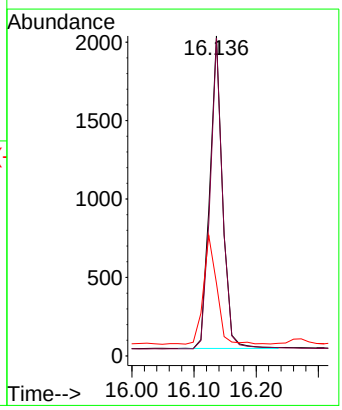


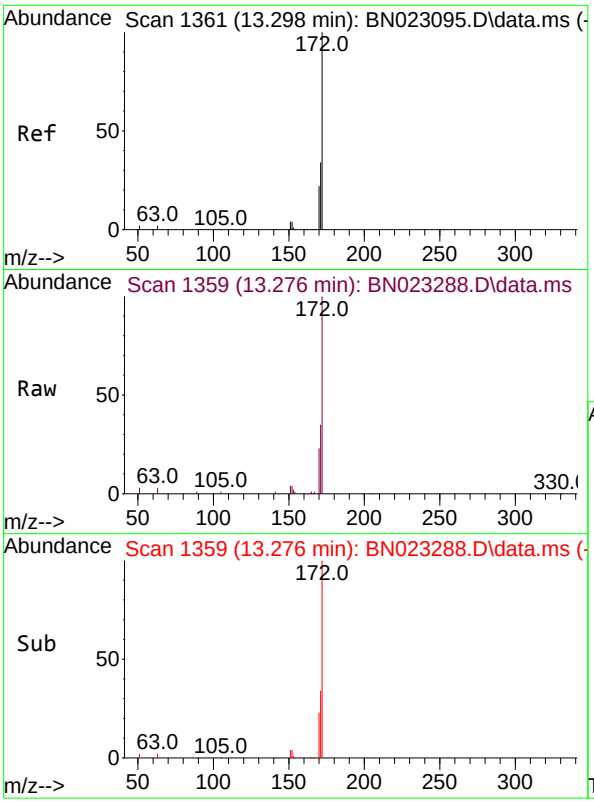


#14
2,4,6-Tribromophenol
Concen: 0.502 ng
RT: 16.136 min Scan# 1621
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:330 Resp: 2840

Ion	Ratio	Lower	Upper
330	100		
332	97.4	77.3	115.9
141	35.8	33.5	50.3



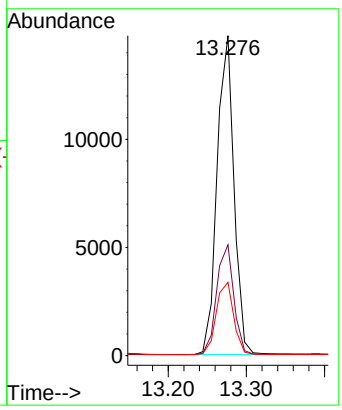


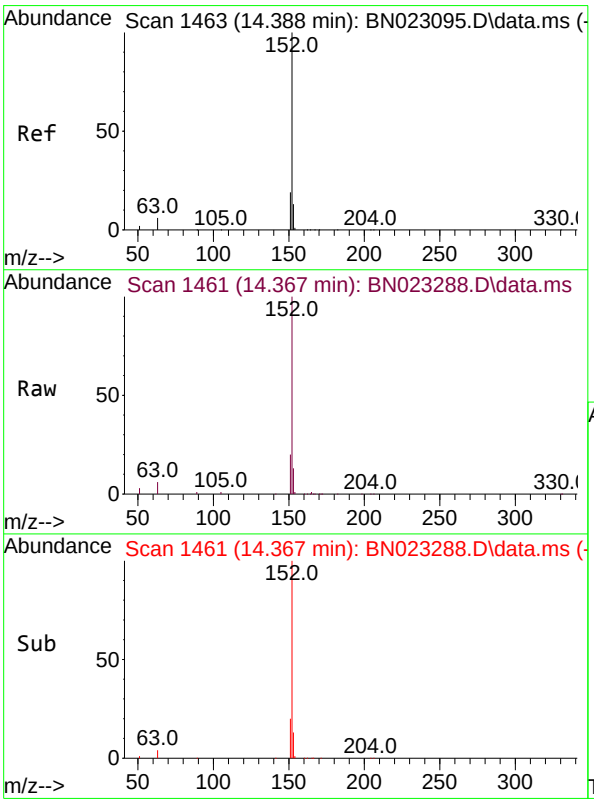
#15
2-Fluorobiphenyl
Concen: 0.357 ng
RT: 13.276 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:172 Resp: 22265

Ion	Ratio	Lower	Upper
172	100		
171	34.6	27.4	41.0
170	22.9	17.9	26.9

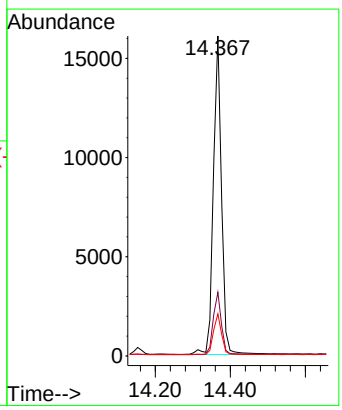


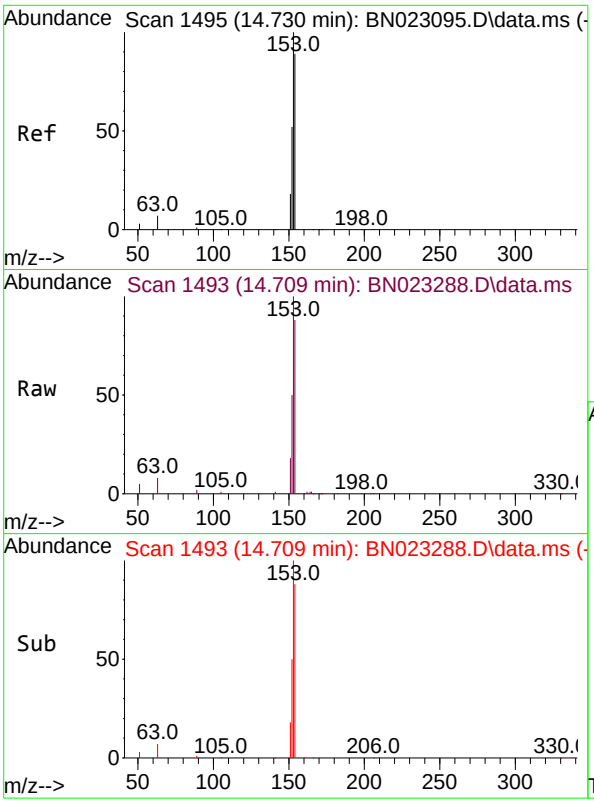


#16
Acenaphthylene
Concen: 0.387 ng
RT: 14.367 min Scan# 1461
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:152 Resp: 24287

Ion	Ratio	Lower	Upper
152	100		
151	19.3	15.4	23.2
153	12.8	10.3	15.5



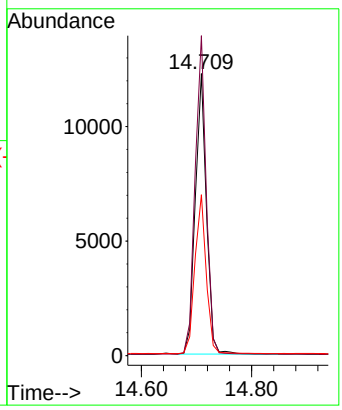


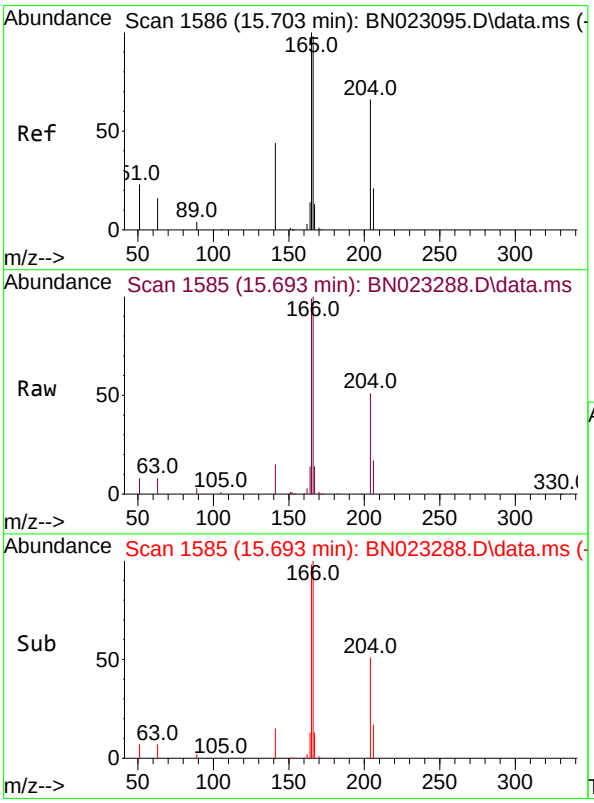
#17
Acenaphthene
Concen: 0.371 ng
RT: 14.709 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:154 Resp: 17134

Ion	Ratio	Lower	Upper
154	100		
153	113.4	88.6	132.8
152	57.6	48.1	72.1

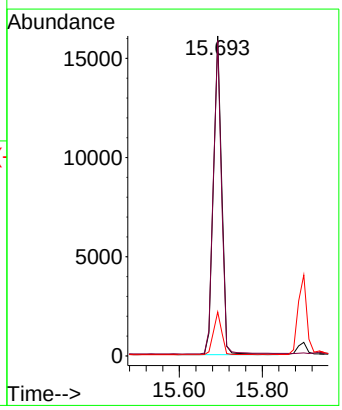


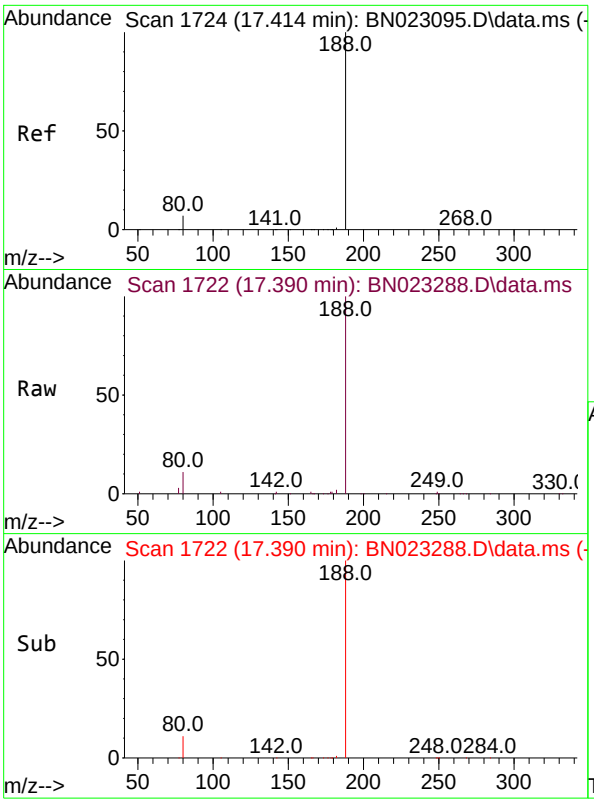


#18
Fluorene
Concen: 0.458 ng
RT: 15.693 min Scan# 1585
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:166 Resp: 23685

Ion	Ratio	Lower	Upper
166	100		
165	98.1	79.8	119.6
167	13.5	10.6	16.0



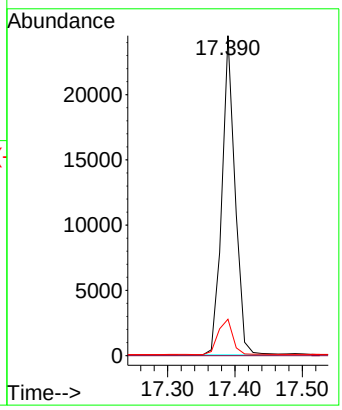


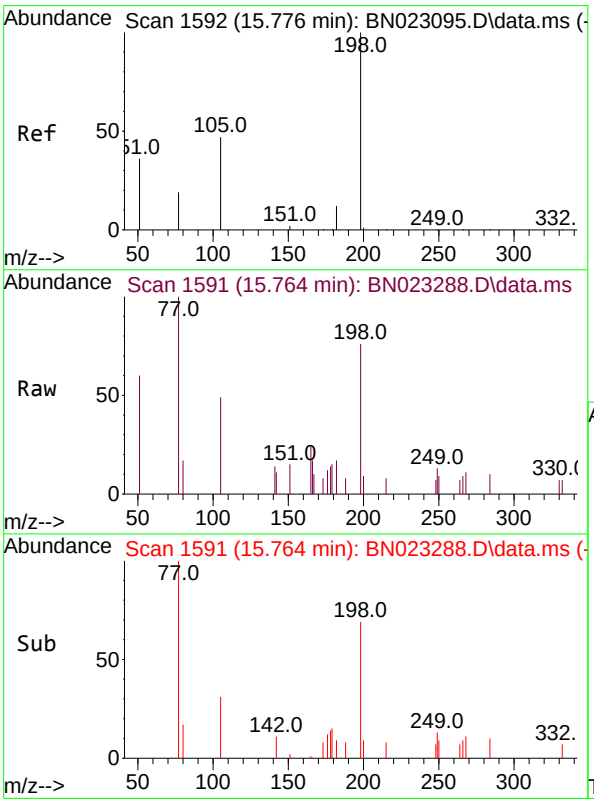
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.390 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:188 Resp: 33450

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.4	6.1	9.1#

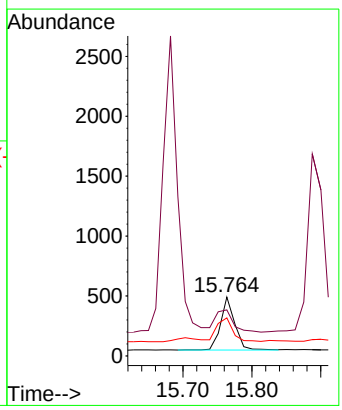


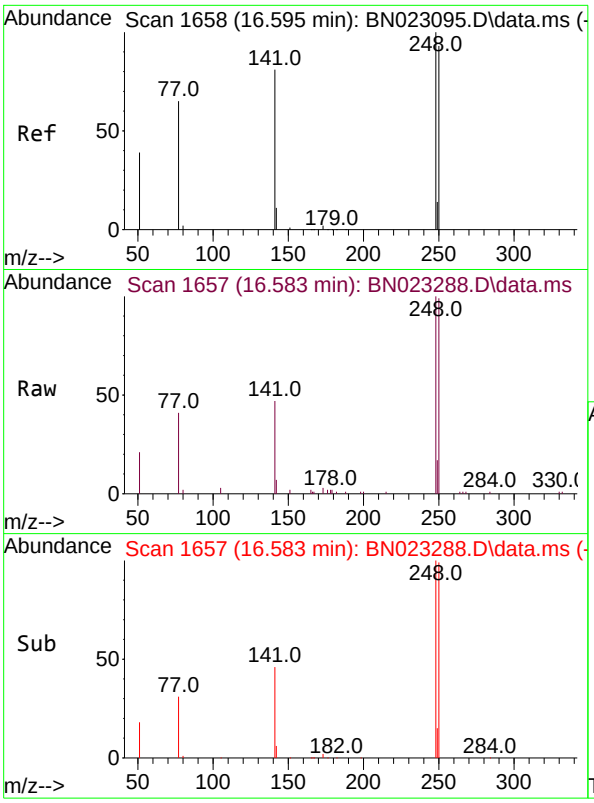


#20
4,6-Dinitro-2-methylphenol
Concen: 0.325 ng
RT: 15.764 min Scan# 1591
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:198 Resp: 614

Ion	Ratio	Lower	Upper
198	100		
51	78.2	57.0	85.4
105	64.6	47.2	70.8



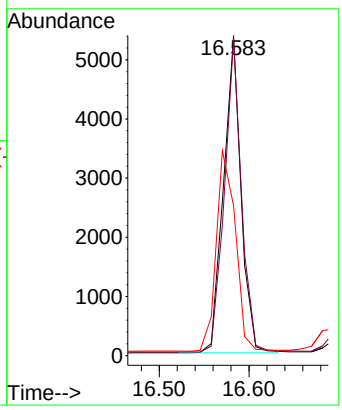


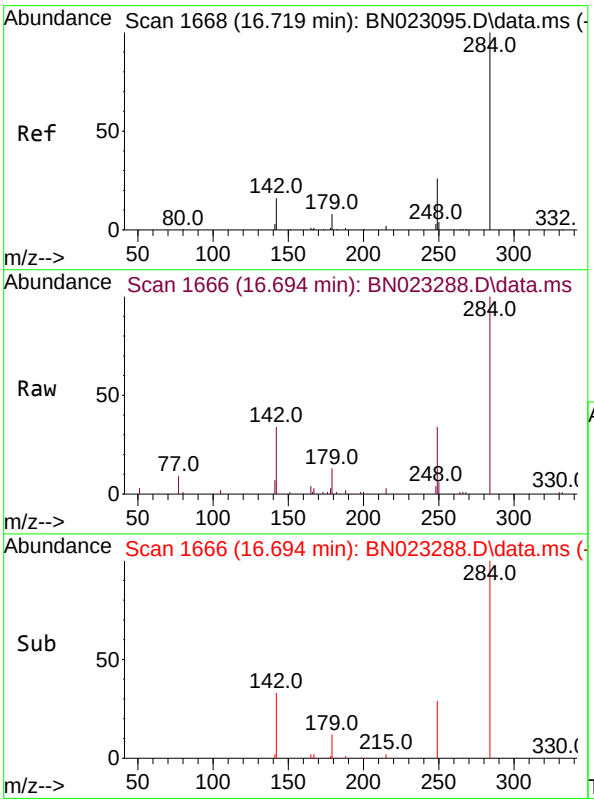
#21
4-Bromophenyl-phenylether
Concen: 0.406 ng
RT: 16.583 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:248 Resp: 7247

Ion	Ratio	Lower	Upper
248	100		
250	99.1	74.3	111.5
141	46.8	65.0	97.6#

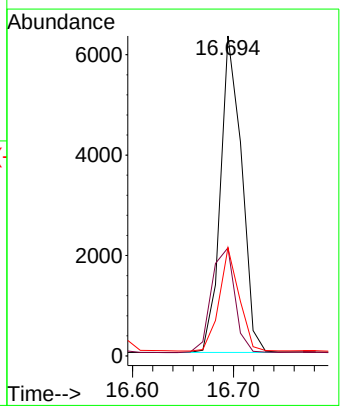


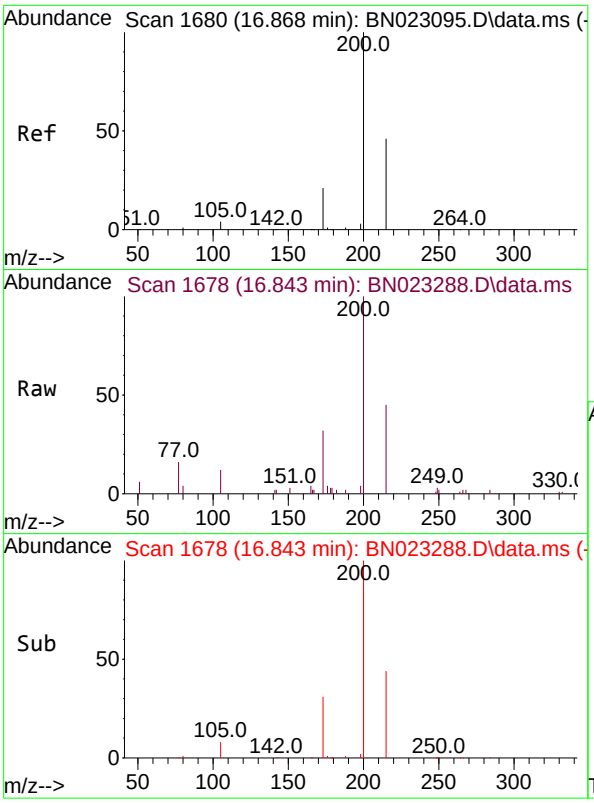


#22
Hexachlorobenzene
Concen: 0.394 ng
RT: 16.694 min Scan# 1666
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:284 Resp: 9218

Ion	Ratio	Lower	Upper
284	100		
142	36.5	31.0	46.4
249	30.5	24.4	36.6



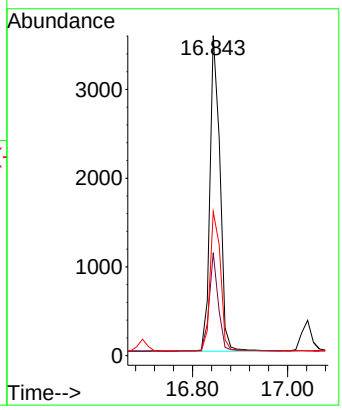


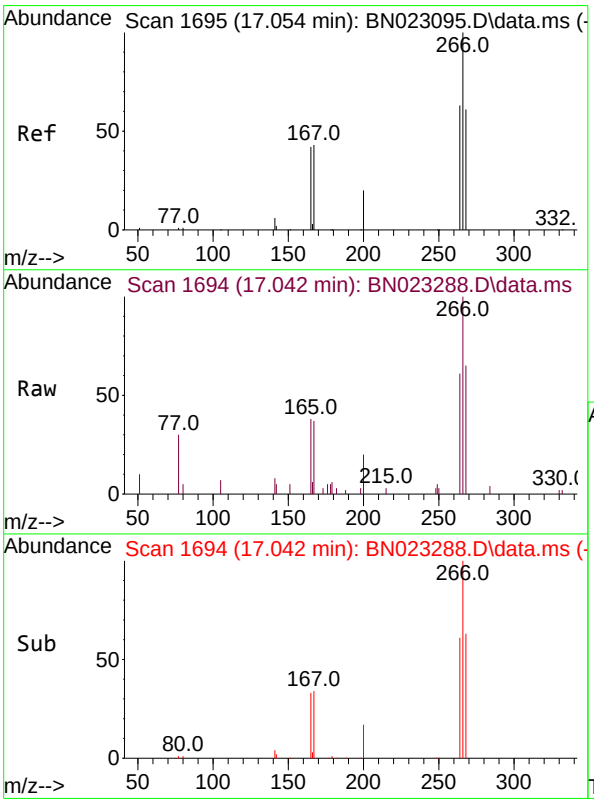
#23
Atrazine
Concen: 0.411 ng
RT: 16.843 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:200 Resp: 5175

Ion	Ratio	Lower	Upper
200	100		
173	32.2	18.2	27.4#
215	45.0	38.0	57.0

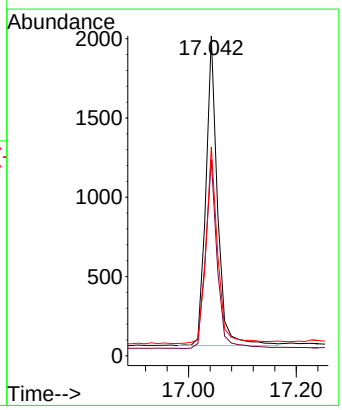


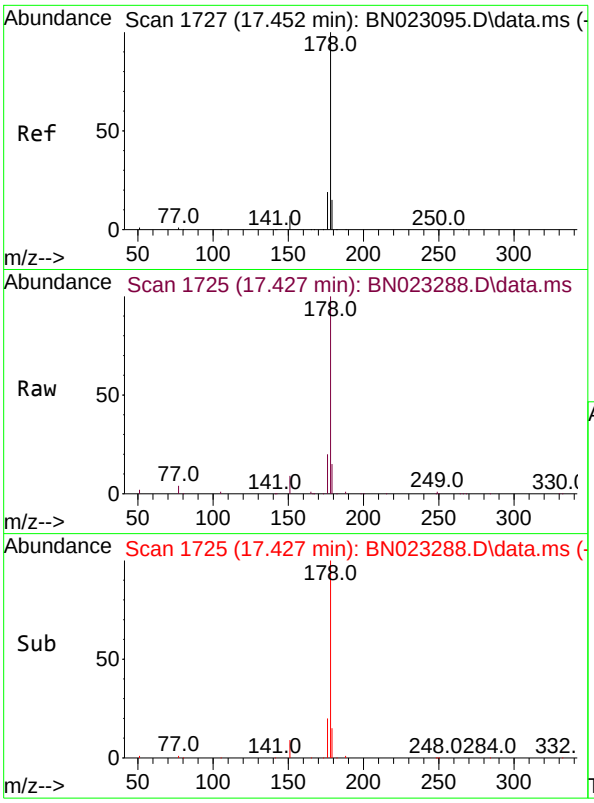


#24
Pentachlorophenol
Concen: 0.362 ng
RT: 17.042 min Scan# 1694
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:266 Resp: 2942

Ion	Ratio	Lower	Upper
266	100		
264	61.6	50.1	75.1
268	63.2	49.7	74.5



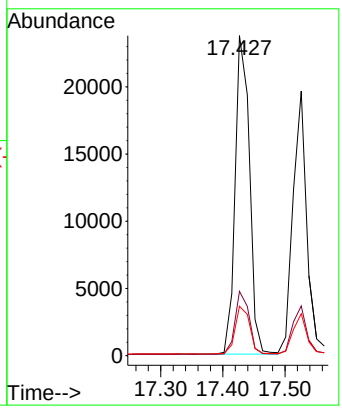


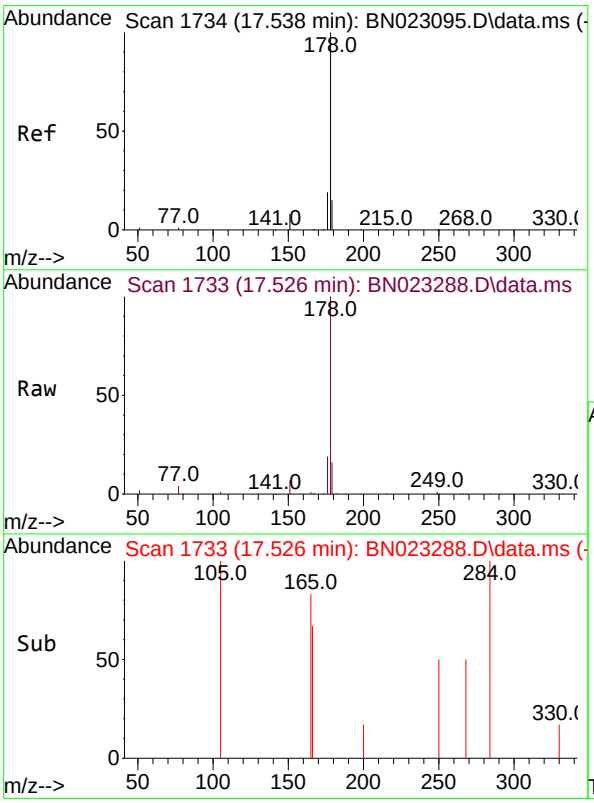
#25
Phenanthrene
Concen: 0.379 ng
RT: 17.427 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:178 Resp: 37812

Ion	Ratio	Lower	Upper
178	100		
176	19.4	15.4	23.2
179	15.4	12.2	18.2

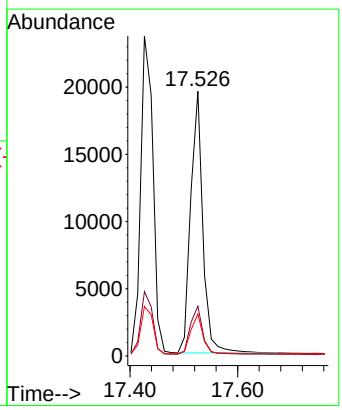


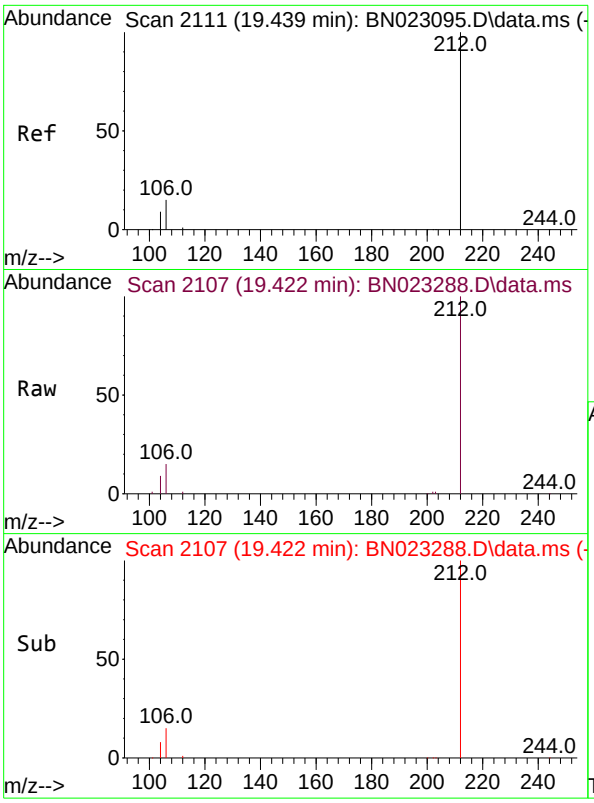


#26
Anthracene
Concen: 0.384 ng
RT: 17.526 min Scan# 1733
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:178 Resp: 30463

Ion	Ratio	Lower	Upper
178	100		
176	18.8	15.1	22.7
179	15.4	12.2	18.4



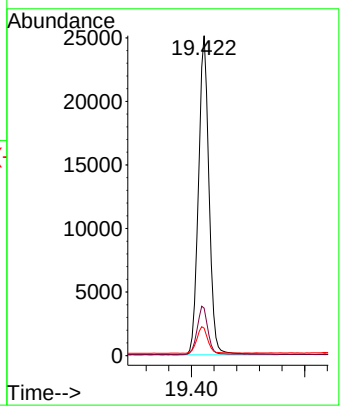


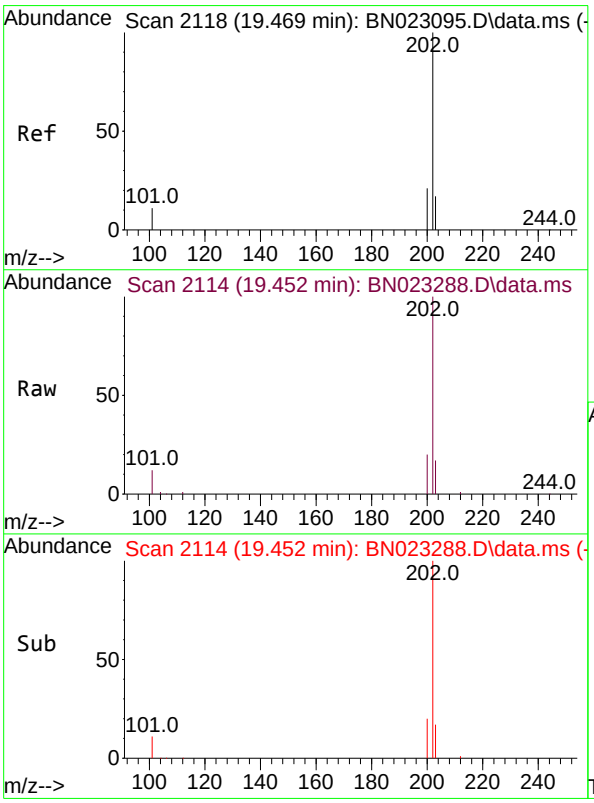
#27
Fluoranthene-d10
Concen: 0.412 ng
RT: 19.422 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:212 Resp: 32302

Ion	Ratio	Lower	Upper
212	100		
106	15.4	13.0	19.4
104	8.5	7.5	11.3

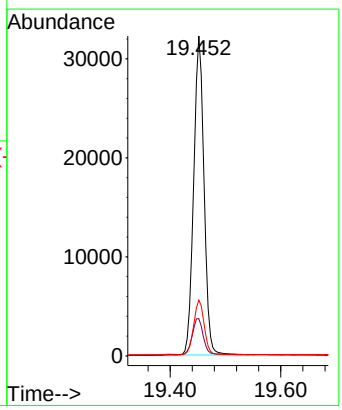


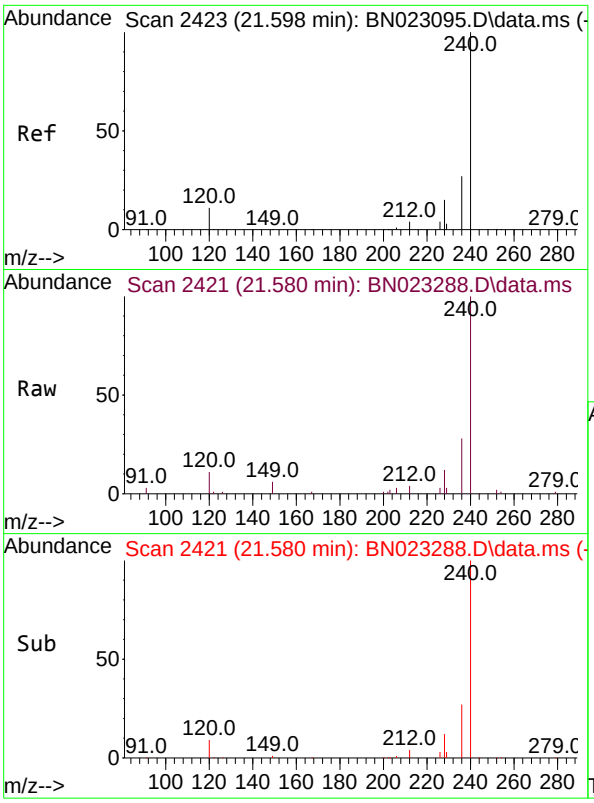


#28
Fluoranthene
Concen: 0.392 ng
RT: 19.452 min Scan# 2114
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:202 Resp: 41868

Ion	Ratio	Lower	Upper
202	100		
101	12.5	9.7	14.5
203	17.1	13.8	20.6



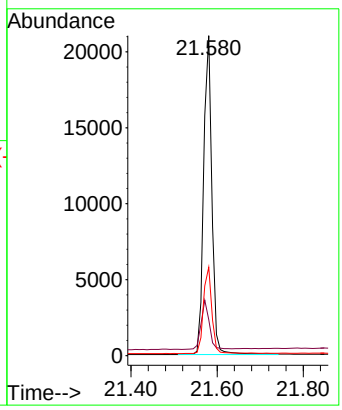


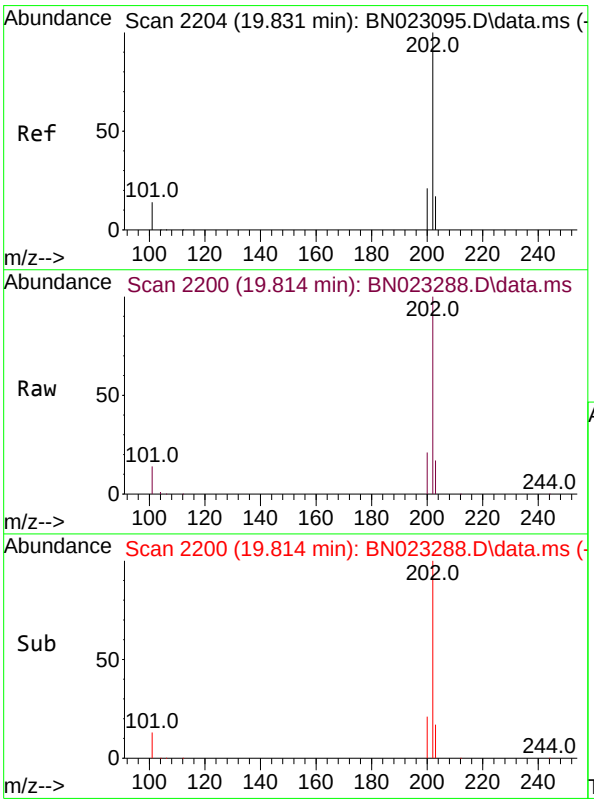
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.580 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:240 Resp: 27783

Ion	Ratio	Lower	Upper
240	100		
120	11.2	10.1	15.1
236	27.6	22.2	33.4

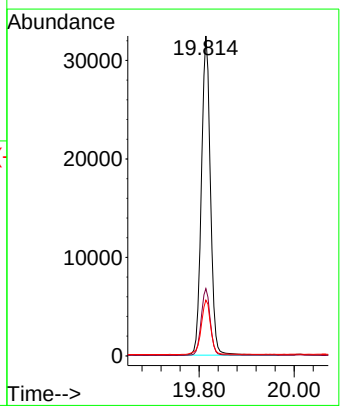


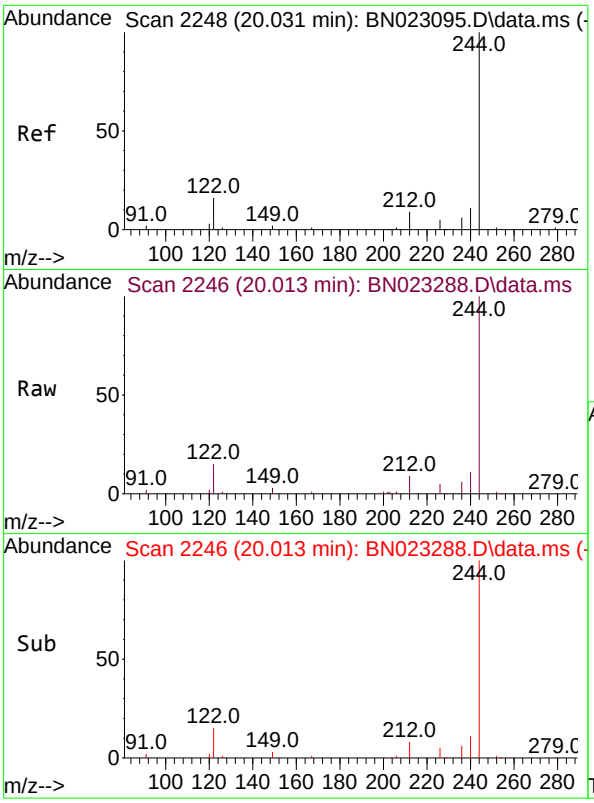


#30
Pyrene
Concen: 0.420 ng
RT: 19.814 min Scan# 2200
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:202 Resp: 42727

Ion	Ratio	Lower	Upper
202	100		
200	21.0	16.9	25.3
203	17.7	14.2	21.4



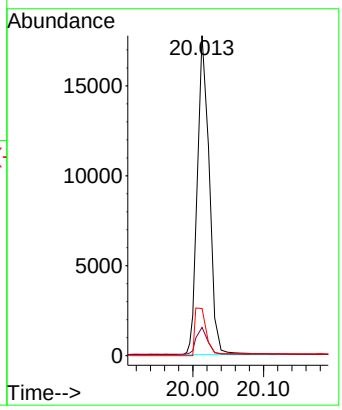


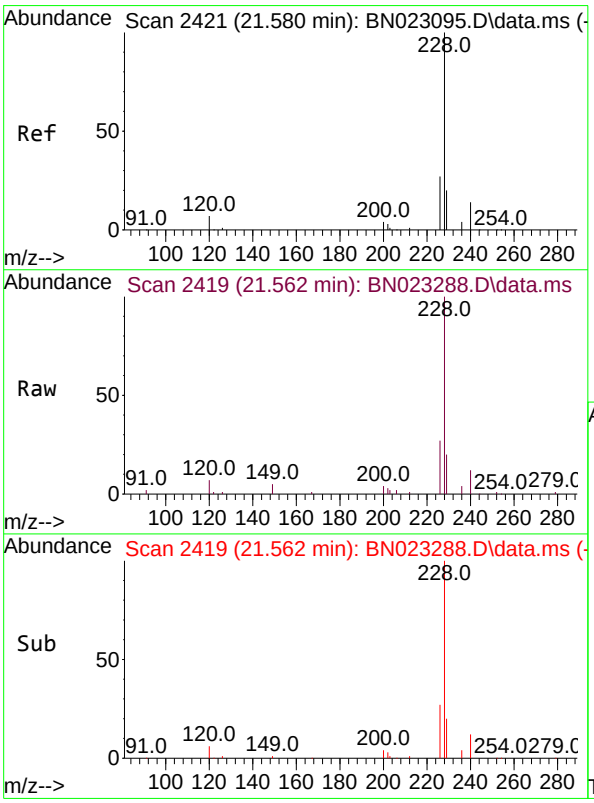
#31
Terphenyl-d14
Concen: 0.422 ng
RT: 20.013 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:244 Resp: 19027

Ion	Ratio	Lower	Upper
244	100		
212	8.8	7.6	11.4
122	14.7	12.6	18.8

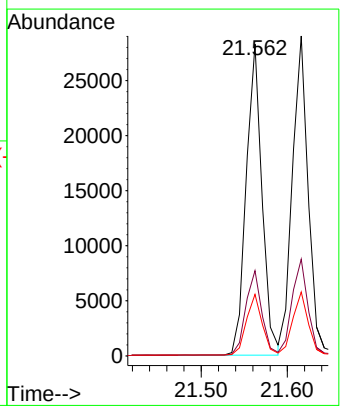


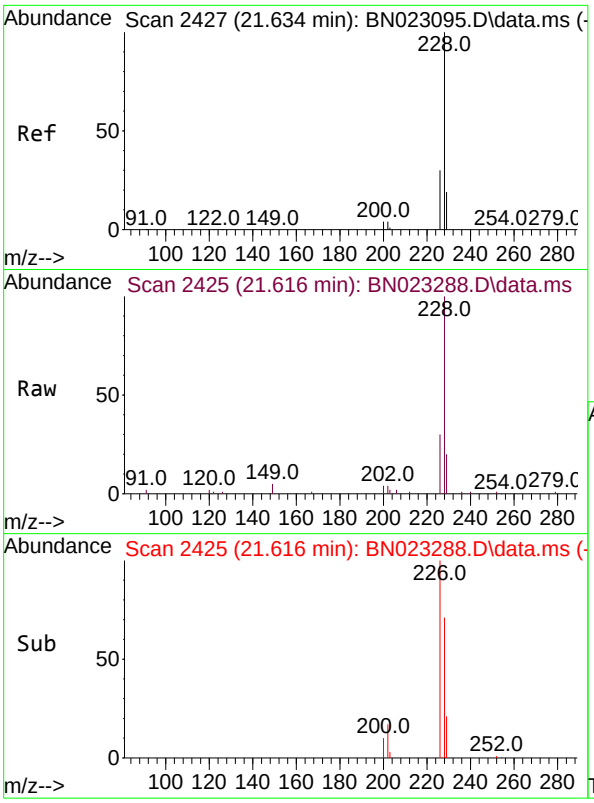


#32
Benzo(a)anthracene
Concen: 0.403 ng
RT: 21.562 min Scan# 2419
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:228 Resp: 36084

Ion	Ratio	Lower	Upper
228	100		
226	27.3	22.0	33.0
229	19.7	15.8	23.8



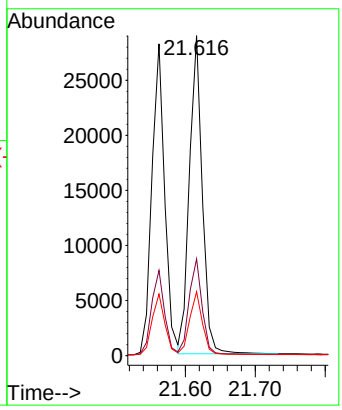


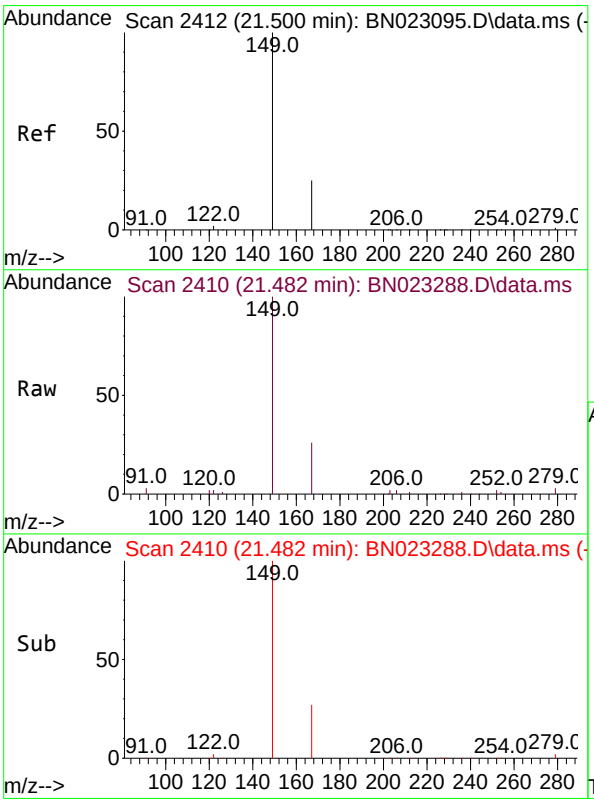
#33
Chrysene
Concen: 0.367 ng
RT: 21.616 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:228 Resp: 36965

Ion	Ratio	Lower	Upper
228	100		
226	30.2	24.4	36.6
229	20.0	15.6	23.4

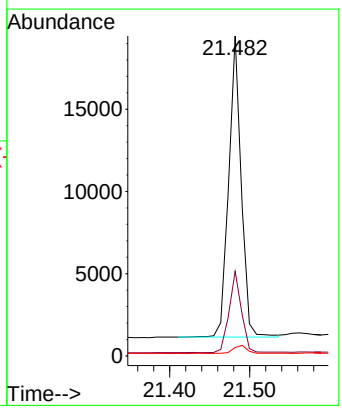


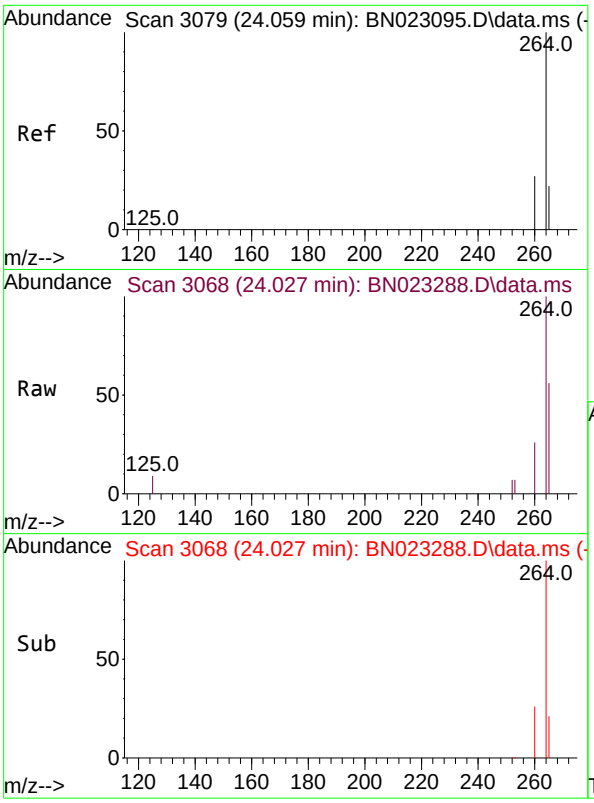


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.525 ng
RT: 21.482 min Scan# 2410
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:149 Resp: 19873

Ion	Ratio	Lower	Upper
149	100		
167	26.8	20.2	30.2
279	2.9	2.3	3.5



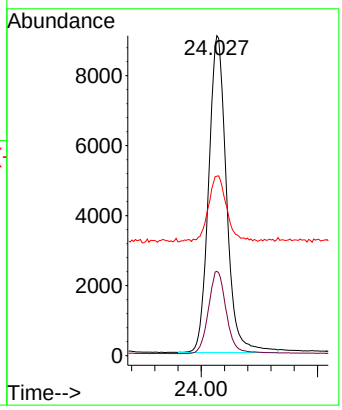


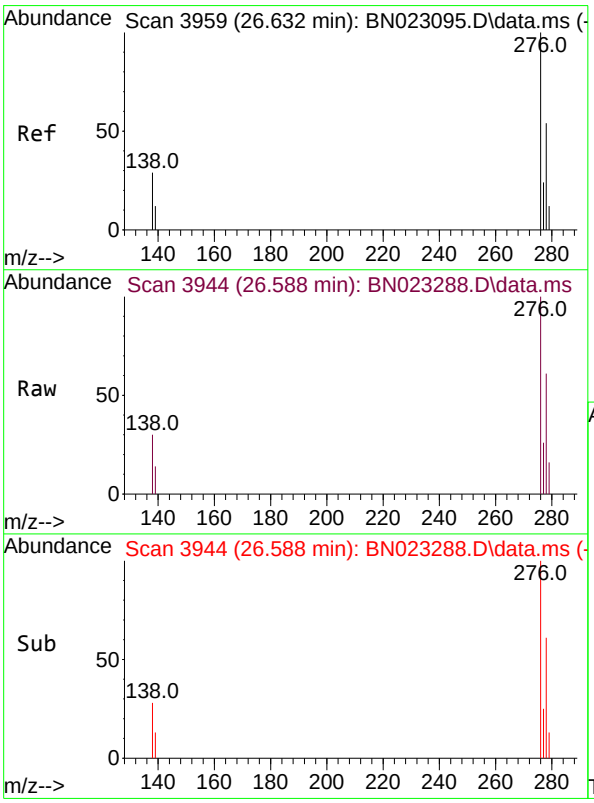
#35
Perylene-d12
Concen: 0.400 ng
RT: 24.027 min Scan# 3
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:264 Resp: 19326

Ion	Ratio	Lower	Upper
264	100		
260	26.3	21.7	32.5
265	56.1	43.2	64.8

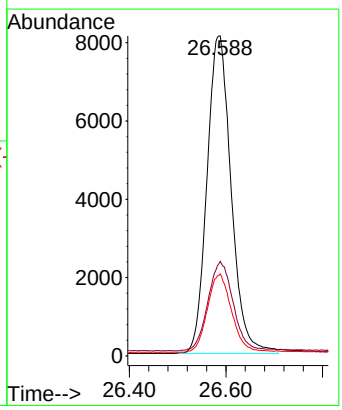


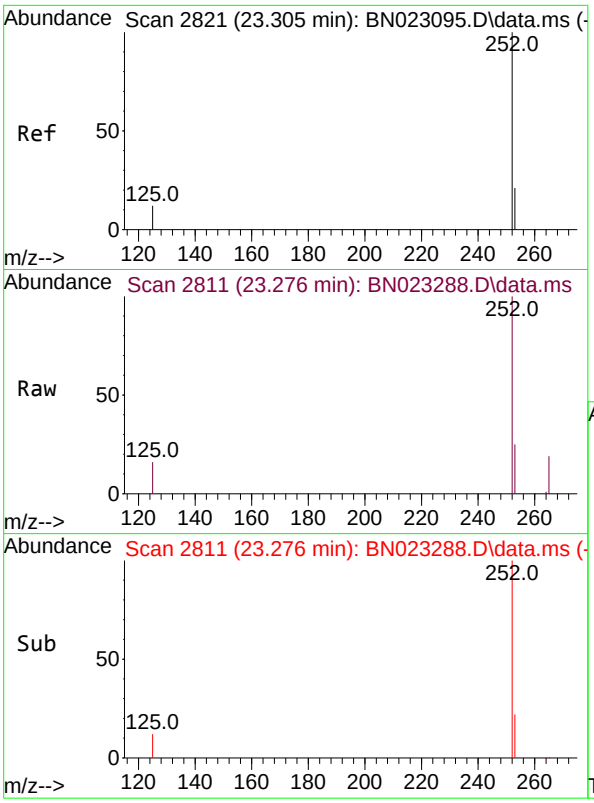


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.326 ng
RT: 26.588 min Scan# 3944
Delta R.T. 0.003 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:276 Resp: 28213

Ion	Ratio	Lower	Upper
276	100		
138	29.2	25.0	37.6
277	24.4	19.8	29.8



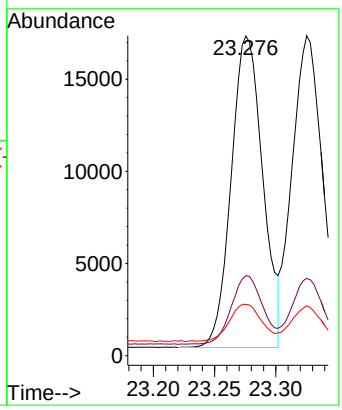


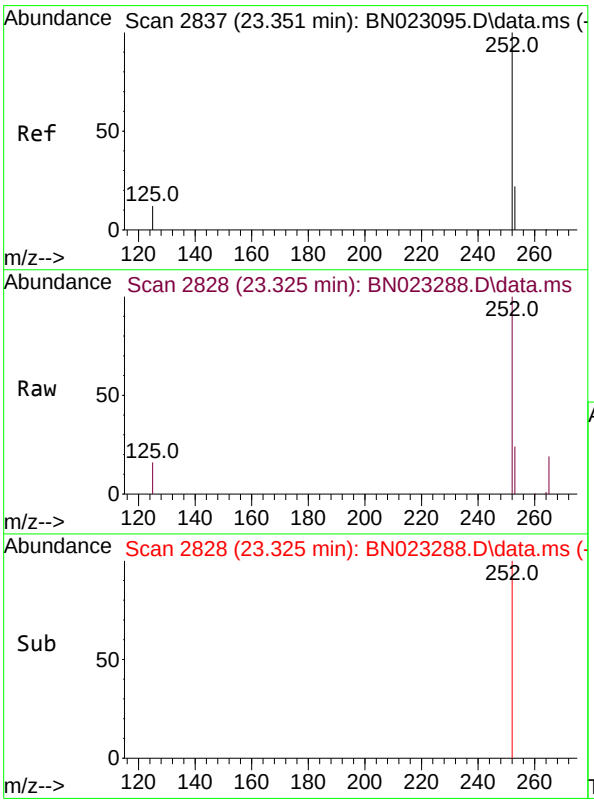
#37
Benzo(b)fluoranthene
Concen: 0.379 ng
RT: 23.276 min Scan# 28
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:252 Resp: 30332

Ion	Ratio	Lower	Upper
252	100		
253	25.0	19.0	28.4
125	16.0	12.8	19.2

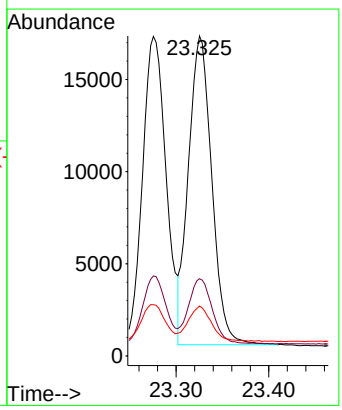


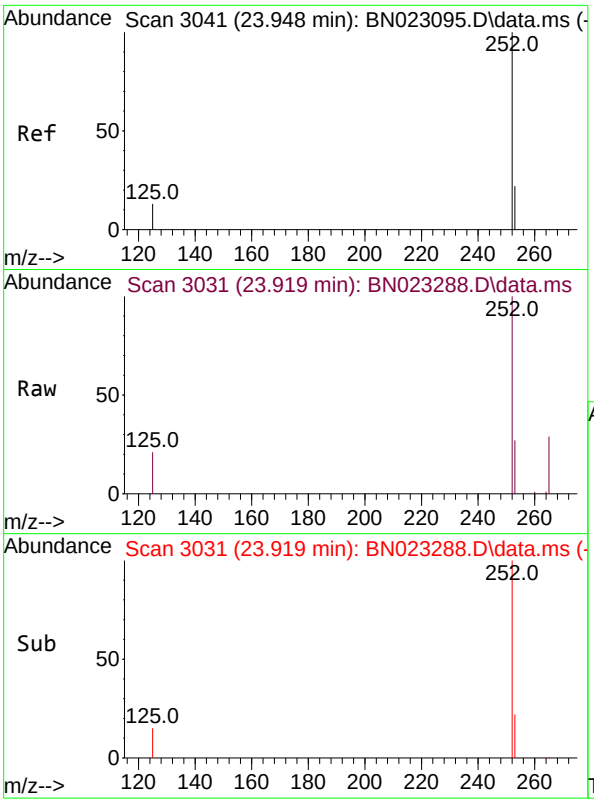


#38
Benzo(k)fluoranthene
Concen: 0.360 ng
RT: 23.325 min Scan# 2828
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:252 Resp: 29310

Ion	Ratio	Lower	Upper
252	100		
253	24.1	19.1	28.7
125	15.6	12.5	18.7



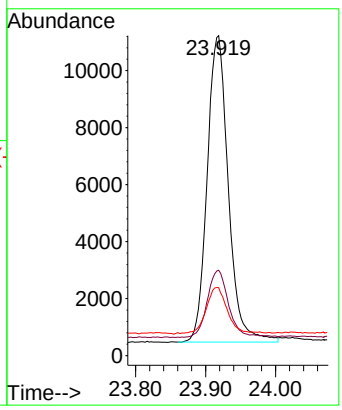


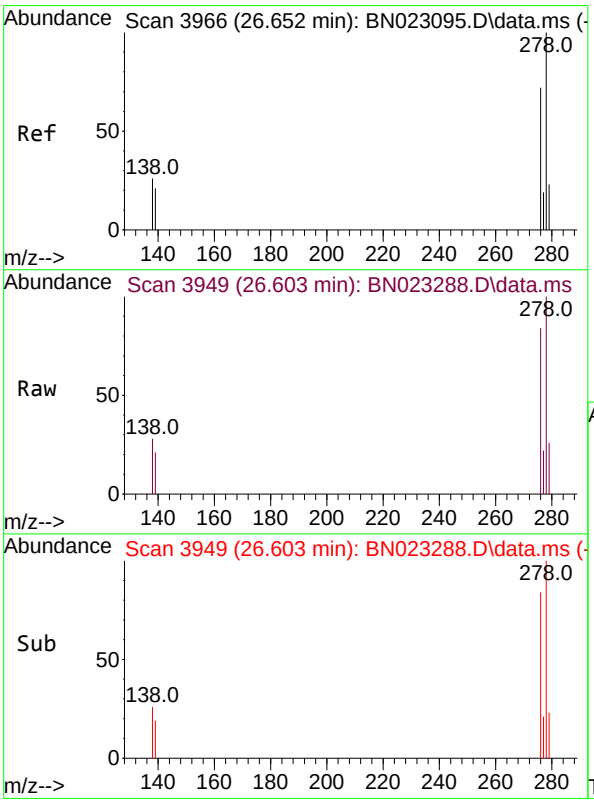
#39
Benzo(a)pyrene
Concen: 0.376 ng
RT: 23.919 min Scan# 3
Delta R.T. 0.003 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:252 Resp: 22613

Ion	Ratio	Lower	Upper
252	100		
253	26.7	20.6	30.8
125	21.2	15.8	23.8

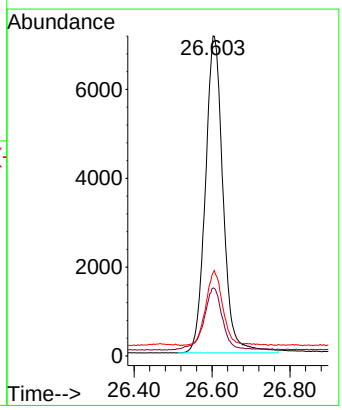


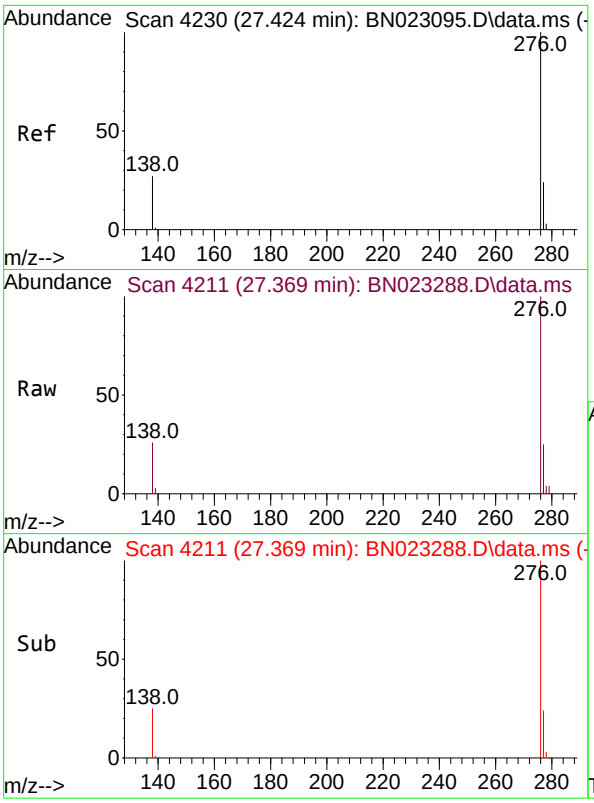


#40
Dibenzo(a,h)anthracene
Concen: 0.324 ng
RT: 26.603 min Scan# 3949
Delta R.T. -0.003 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:278 Resp: 22498

Ion	Ratio	Lower	Upper
278	100		
139	21.2	17.5	26.3
279	26.0	20.5	30.7



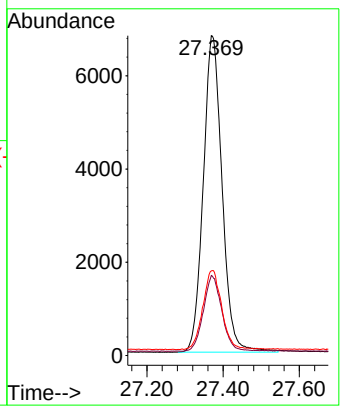


#41
Benzo(g,h,i)perylene
Concen: 0.314 ng
RT: 27.369 min Scan# 4
Delta R.T. -0.003 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Tgt Ion:276 Resp: 23348

Ion	Ratio	Lower	Upper
276	100		
277	25.0	19.9	29.9
138	26.5	22.2	33.2



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Manual Integration Report

Sequence:	BN120822	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDICC5.0	BN023099.D	1,4-Dioxane	Christian	12/13/2022 10:05:00 AM	Jagrut	12/13/2022 10:06:45 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	BN121922	Instrument	BNA_n

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

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN120822

Review By	Christian	Review On	12/13/2022 10:05:36 AM				
Supervise By	Jagrut	Supervise On	12/13/2022 10:07:05 AM				
SubDirectory	BN120822	HP Acquire Method	BNA_N,8270_SIM	HP Processing Method	Bn120822		

STD. NAME	STD REF.#
Tune/Reschk	SP6029
Initial Calibration Stds	SP6085,SP6083,SP6082,SP6081,SP6080,SP6079,SP6078
CCC	SP6082
Internal Standard/PEM	SP6065,10ul/1000ul sample
ICV/I.BLK	SP6031
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN023092.D	08 Dec 2022 12:45	CG/JU	Ok
2	SSTDICC0.1	BN023093.D	08 Dec 2022 14:00	CG/JU	Ok
3	SSTDICC0.2	BN023094.D	08 Dec 2022 14:37	CG/JU	Ok
4	SSTDICCC0.4	BN023095.D	08 Dec 2022 15:13	CG/JU	Ok
5	SSTDICC0.8	BN023096.D	08 Dec 2022 15:50	CG/JU	Ok
6	SSTDICC1.6	BN023097.D	08 Dec 2022 16:26	CG/JU	Ok
7	SSTDICC3.2	BN023098.D	08 Dec 2022 17:03	CG/JU	Ok
8	SSTDICC5.0	BN023099.D	08 Dec 2022 17:40	CG/JU	Ok,M
9	SSTDICV0.4	BN023100.D	08 Dec 2022 18:17	CG/JU	Ok
10	PB149367BL	BN023101.D	08 Dec 2022 19:30	CG/JU	Not Ok

M : Manual Integration

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN121922

Review By	Christian	Review On	12/20/2022 9:10:56 AM		
Supervise By	mohammad	Supervise On	12/20/2022 5:04:40 PM		
SubDirectory	BN121922	HP Acquire Method	BNA_N,8270_SIM	HP Processing Method	Bn120822

STD. NAME	STD REF.#
Tune/Reschk	SP6029
Initial Calibration Stds	SP6085,SP6083,SP6082,SP6081,SP6080,SP6079,SP6078
CCC	SP6082
Internal Standard/PEM	SP6065,10ul/1000ul sample
ICV/I.BLK	SP6031
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN023279.D	19 Dec 2022 10:45	CG/JU	Ok
2	SSTDCCC0.4	BN023280.D	19 Dec 2022 11:22	CG/JU	Ok
3	PB149692BL	BN023281.D	19 Dec 2022 12:02	CG/JU	Ok
4	N6070-01	BN023282.D	19 Dec 2022 12:40	CG/JU	Ok
5	N6070-03	BN023283.D	19 Dec 2022 13:16	CG/JU	Ok
6	N6070-04	BN023284.D	19 Dec 2022 13:53	CG/JU	Ok
7	N6070-05	BN023285.D	19 Dec 2022 14:30	CG/JU	Ok
8	N6095-01	BN023286.D	19 Dec 2022 15:07	CG/JU	Ok
9	PB149692BS	BN023287.D	19 Dec 2022 15:44	CG/JU	Ok
10	PB149692BSD	BN023288.D	19 Dec 2022 16:21	CG/JU	Ok

M : Manual Integration

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN120822

Review By	Christian	Review On	12/13/2022 10:05:36 AM		
Supervise By	Jagrut	Supervise On	12/13/2022 10:07:05 AM		
SubDirectory	BN120822	HP Acquire Method	BNA_N,8270_S	HP Processing Method	Bn120822

STD. NAME	STD REF.#
Tune/Reschk	SP6029
Initial Calibration Stds	SP6085,SP6083,SP6082,SP6081,SP6080,SP6079,SP6078
CCC	SP6082
Internal Standard/PEM	SP6065,10ul/1000ul sample
ICV/I.BLK	SP6031
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN023092.D	08 Dec 2022 12:45		CG/JU	Ok
2	SSTDICC0.1	SSTDICC0.1	BN023093.D	08 Dec 2022 14:00	Compound #20 removed from 0.1ppm	CG/JU	Ok
3	SSTDICC0.2	SSTDICC0.2	BN023094.D	08 Dec 2022 14:37	Compound #20 Kept on LR	CG/JU	Ok
4	SSTDICCC0.4	SSTDICCC0.4	BN023095.D	08 Dec 2022 15:13	Method is Good For DOD	CG/JU	Ok
5	SSTDICC0.8	SSTDICC0.8	BN023096.D	08 Dec 2022 15:50		CG/JU	Ok
6	SSTDICC1.6	SSTDICC1.6	BN023097.D	08 Dec 2022 16:26		CG/JU	Ok
7	SSTDICC3.2	SSTDICC3.2	BN023098.D	08 Dec 2022 17:03	Compound #12 removed from 3.2ppm	CG/JU	Ok
8	SSTDICC5.0	SSTDICC5.0	BN023099.D	08 Dec 2022 17:40	Compound #12 removed from 5.0ppm	CG/JU	Ok,M
9	SSTDICV0.4	ICVBN120822	BN023100.D	08 Dec 2022 18:17		CG/JU	Ok
10	PB149367BL	PB149367BL	BN023101.D	08 Dec 2022 19:30	END CCC Missing	CG/JU	Not Ok

M : Manual Integration

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN121922

Review By	Christian	Review On	12/20/2022 9:10:56 AM		
Supervise By	mohammad	Supervise On	12/20/2022 5:04:40 PM		
SubDirectory	BN121922	HP Acquire Method	BNA_N,8270_S	HP Processing Method	Bn120822

STD. NAME	STD REF.#
Tune/Reschk	SP6029
Initial Calibration Stds	SP6085,SP6083,SP6082,SP6081,SP6080,SP6079,SP6078
CCC	SP6082
Internal Standard/PEM	SP6065,10ul/1000ul sample
ICV/I.BLK	SP6031
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN023279.D	19 Dec 2022 10:45		CG/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN023280.D	19 Dec 2022 11:22		CG/JU	Ok
3	PB149692BL	PB149692BL	BN023281.D	19 Dec 2022 12:02		CG/JU	Ok
4	N6070-01	GW-BR-04-226-245-12	BN023282.D	19 Dec 2022 12:40		CG/JU	Ok
5	N6070-03	OWBR-01-160-180-121	BN023283.D	19 Dec 2022 13:16		CG/JU	Ok
6	N6070-04	OWBR-02-160-180-121	BN023284.D	19 Dec 2022 13:53		CG/JU	Ok
7	N6070-05	OWBR-03-128-148-121	BN023285.D	19 Dec 2022 14:30		CG/JU	Ok
8	N6095-01	GW-BR-04-270-289-12	BN023286.D	19 Dec 2022 15:07		CG/JU	Ok
9	PB149692BS	PB149692BS	BN023287.D	19 Dec 2022 15:44		CG/JU	Ok
10	PB149692BSD	PB149692BSD	BN023288.D	19 Dec 2022 16:21		CG/JU	Ok

M : Manual Integration

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EXTRACTION LOGPAGE

PB149692

SOP ID: M3510C,3580A-Extraction SVOC-19

Clean Up SOP #: N/A

Matrix : Water

Weigh By: N/A

Balance check: N/A

Balance ID: N/A

pH Strip Lot#: E3433

Extraction By: RP

Filter By: RS

pH Meter ID: N/A

Hood ID: 4,5,6,7

Extraction Start Date : 12/16/2022

Extraction Start Time : 08:59

Extraction End Date : 12/16/2022

Extraction End Time : 15:00

Concentration By: RS

Supervisor By : rajesh

Extraction Method: [√] Seperatory Funnel [ ] Continious Liquid/Liquid [ ] Sonication [ ] Waste Dilution [ ] Soxhlet

Standared Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	0.4 PPM	SP6059
Surrogate	1.0ML	0.4 PPM	SP6064
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
Methylene Chloride	N/A	E3446
Baked Na2SO4	N/A	EP2279
10N NaoH	N/A	EP2278
H2SO4 1:1	N/A	EP2260
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:

N6095 added in batch at 09:53. pH Adjusted < 2with 1:1 H2SO4 & >11 with10 N NaOH.

KD Bath ID: W.BATH-1,2

KD Bath Temperature: 60 °C

Envap ID: NE VAP-02

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
12/16/22	RP (Ext. Lab)	JH / SVOC Lab
15:05	Preparation Group	Analysis Group

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EXTRACTION LOGPAGE

PrepBatch ID : PB149692

Analytical Method: M3510C,3580A-Extraction SVOC-19 **Concentration Date:** 12/16/2022

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB149692BL	SBLK692	SVOC-SIMGroup1	1000.0	6	RUPESH	rajesh	1			SEP-09
PB149692BS	SLCS692	SVOC-SIMGroup1	1000.0	6	RUPESH	rajesh	1			10
PB149692BSD	SLCSD692	SVOC-SIMGroup1	1000.0	6	RUPESH	rajesh	1			11
N6070-01	GW-BR-04-226-245-121422	SVOC-SIMGroup1	980.0	6	RUPESH	rajesh	1	C		12
N6070-03	~~GW-BR~~-01-160-180-121422 OWBR-	SVOC-SIMGroup1	970.0	6	RUPESH	rajesh	1	C		13
N6070-04	~~GW-BR~~-02-160-180-121422 OWBR-	SVOC-SIMGroup1	960.0	6	RUPESH	rajesh	1	C		14
N6070-05	~~GW-BR~~-03-128-148-121422 OWBR-	SVOC-SIMGroup1	960.0	6	RUPESH	rajesh	1	C		15
N6095-01	GW-BR-04-270-289-121522	SVOC-SIMGroup1	1000.0	6	RUPESH	rajesh	1	C		16

* **Extracts relinquished on the same date as received.**

12/16/22

14962
8:59

WORKLIST(Hardcopy Internal Chain)

WorkList Name : N6070 **WorkList ID :** 165856 **Department :** Extraction **Date :** 12-16-2022 08:50:48

Due Date	Matrix	Sample	Test	Preservative	Customer	Raw Sample Storage Location	Customer Sample	Collect Date	Method
12/16/2022	Water	N6070-01	SVOC-SIMGroup1	Cool 4 deg C	JACO05	M11	GW-BR-04-226-245-121422	12/14/2022	8270-Modified
12/16/2022	Water	N6070-03	SVOC-SIMGroup1	Cool 4 deg C	JACO05	M11	GW-BR-01-160-180-121422	12/14/2022	8270-Modified
12/16/2022	Water	N6070-04	SVOC-SIMGroup1	Cool 4 deg C	JACO05	M11	GW-BR-02-160-180-121422	12/14/2022	8270-Modified
12/16/2022	Water	N6070-05	SVOC-SIMGroup1	Cool 4 deg C	JACO05	M11	GW-BR-03-128-148-121422	12/14/2022	8270-Modified

RS 12/27

Date/Time 12/16/22 8:59
Raw Sample Received by: RS [Set-104]
Raw Sample Relinquished by: J.C (Sm)

Date/Time 12/16/22 9:28
Raw Sample Received by: J.C (Sm)
Raw Sample Relinquished by: RS [Set-104]

WORKLIST(Hardcopy Internal Chain)

WorkList Name : n6095 **WorkList ID :** 165889 **Department :** Extraction **Date :** 12-16-2022 09:53:03

Due Date	Matrix	Sample	Test	Preservative	Customer	Raw Sample Storage Location	Customer Sample	Collect Date	Method
12/19/2022	Water	N6095-01	SVOC-SIMGroup1	Cool 4 deg C	JACO05	N11	GW-BR-04-270-289-121522	12/15/2022	8270-Modified

Date/Time 12/16/22 9:53

Raw Sample Received by: RS (Ent. Lab)

Raw Sample Relinquished by: L-C (Sun)

Date/Time 12/16/22 10:00

Raw Sample Received by: L-C (Sun)

Raw Sample Relinquished by: RS (Ent. Lab)

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Prep Standard - Chemical Standard Summary

Order ID : N6070

Test : SVOC-SIMGroup1

Prepbatch ID : PB149692,

Sequence ID/Qc Batch ID: BN121922,

Standard ID :
EP2260,EP2278,EP2279,SP6015,SP6029,SP6030,SP6031,SP6059,SP6064,SP6065,SP6077,SP6078,SP6079,SP6080,
SP6081,SP6082,SP6083,SP6085,

Chemical ID :
10ul/1000ul
sample,E3382,E3397,E3412,E3425,E3430,E3432,E3446,M5037,S10089,S10090,S10210,S10244,S10523,S10541,S105
49,S10597,S10648,S10715,S8793,S9217,S9238,S9273,S9285,S9725,S9901,S9916,S9919,W2606,

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Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
314	1.1 H2SO4 SOLN	EP2260	07/28/2022	01/28/2023	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 07/28/2022

FROM 1000.00000ml of M5037 + 1000.00000ml of W2606 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1874	10 N SODIUM HYDROXIDE SOLN	EP2278	11/22/2022	02/04/2023	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 11/22/2022

FROM 1000.00000ml of W2606 + 400.00000gram of E3382 = Final Quantity: 1000.000 ml

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Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3923	Baked Sodium Sulfate	EP2279	11/28/2022	04/13/2023	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 11/28/2022

FROM 4000.00000gram of E3412 = Final Quantity: 4000.000 gram

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3493	Internal Standard 0.4 PPM	SP6015	09/28/2022	03/13/2023	Jagrut Upadhyay	None	None	mohammad ahmed 10/05/2022

FROM 0.02000ml of S10523 + 0.98000ml of E3397 = Final Quantity: 1.000 ml

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SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3895	50 ug/ml DFTPP 8270E	SP6029	10/25/2022	02/16/2023	Christian Giraldo	None	None	mohammad ahmed 11/01/2022

FROM 1.00000ml of S10244 + 19.00000ml of E3397 = Final Quantity: 20.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3355	8270-SIM MDL-3.2PPM CALIBRATION STOCK SOL- 2ND SOURCE	SP6030	10/25/2022	02/26/2023	Jagrut Upadhyay	None	None	mohammad ahmed 11/01/2022

FROM 0.00630ml of S9725 + 0.01280ml of S10597 + 0.03200ml of S8793 + 0.03200ml of S9285 + 0.06400ml of S10089 + 0.06400ml of S10210 + 0.06400ml of S10648 + 19.72490ml of E3397 = Final Quantity: 20.000 ml

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SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3356	8270-SIM MDL-0.4PPM CALIBRATION SOL ICV-2ND SOURCE	SP6031	10/25/2022	02/26/2023	Jagrut Upadhyay	None	None	mohammad ahmed 11/01/2022

FROM 0.87500ml of E3397 + 0.01000ml of SP6015 + 0.12500ml of SP6030 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3492	8270-SIM-Spike 0.4 PPM	SP6059	11/10/2022	02/28/2023	Christian Giraldo	None	None	mohammad ahmed 11/17/2022

FROM 0.00080ml of S9901 + 0.01000ml of S10549 + 0.02000ml of S10090 + 0.02000ml of S10210 + 0.02000ml of S10648 + 49.92920ml of E3425 = Final Quantity: 50.000 ml

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SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3491	8270-SIM-Surrogate 0.4 PPM	SP6064	11/30/2022	03/16/2023	Christian Giraldo	None	None	mohammad ahmed 12/07/2022

FROM 0.00200ml of S9725 + 0.00400ml of S10597 + 0.01000ml of S9273 + 49.98400ml of E3430 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3493	Internal Standard 0.4 PPM	SP6065	12/05/2022	05/22/2023	Christian Giraldo	None	None	mohammad ahmed 12/07/2022

FROM 0.10000ml of S10541 + 4.90000ml of E3432 = Final Quantity: 5.000 ml

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SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3339	8270 sim calibration stock 10ppm (CPI)	SP6077	12/08/2022	02/26/2023	Christian Giraldo	None	None	mohammad ahmed 12/19/2022

FROM 0.03350ml of S9238 + 0.05000ml of S9217 + 0.12500ml of S9273 + 0.12500ml of S9919 + 0.25000ml of S10715 + 0.25000ml of S9916 + 24.16650ml of E3432 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3361	8270-SIM MDL-5PPM CALIBRATION SOLUTION	SP6078	12/08/2022	02/26/2023	Christian Giraldo	None	None	mohammad ahmed 12/19/2022

FROM 0.50000ml of E3432 + 0.01000ml of SP6065 + 0.50000ml of SP6077 = Final Quantity: 1.010 ml

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SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3341	8270-SIM MDL-3.2PPM CALIBRATION SOLUTION	SP6079	12/08/2022	02/26/2023	Christian Giraldo	None	None	mohammad ahmed 12/19/2022

FROM 0.68000ml of E3432 + 0.01000ml of SP6065 + 0.32000ml of SP6077 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3344	8270-SIM MDL-1.6PPM CALIBRATION SOLUTION	SP6080	12/08/2022	02/26/2023	Christian Giraldo	None	None	mohammad ahmed 12/19/2022

FROM 0.84000ml of E3432 + 0.01000ml of SP6065 + 0.16000ml of SP6077 = Final Quantity: 1.010 ml

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SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3342	8270-SIM MDL-0.8PPM CALIBRATION SOLUTION	SP6081	12/08/2022	02/26/2023	Christian Giraldo	None	None	mohammad ahmed 12/19/2022

FROM 0.92000ml of E3432 + 0.01000ml of SP6065 + 0.08000ml of SP6077 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3343	8270-SIM MDL-0.4PPM CALIBRATION SOLUTION	SP6082	12/08/2022	02/26/2023	Christian Giraldo	None	None	mohammad ahmed 12/19/2022

FROM 0.96000ml of E3432 + 0.01000ml of SP6065 + 0.04000ml of SP6077 = Final Quantity: 1.010 ml

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SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3345	8270-SIM MDL-0.2PPM CALIBRATION SOLUTION	SP6083	12/08/2022	02/26/2023	Christian Giraldo	None	None	mohammad ahmed 12/19/2022

FROM 0.50000ml of E3432 + 0.01000ml of SP6065 + 0.50000ml of SP6082 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3346	8270-SIM MDL-0.1PPM CALIBRATION SOLUTION	SP6085	12/08/2022	02/26/2023	Christian Giraldo	None	None	mohammad ahmed 12/19/2022

FROM 0.75000ml of E3432 + 0.01000ml of SP6065 + 0.25000ml of SP6082 = Final Quantity: 1.010 ml

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19510-5 / Sodium Hydroxide Pellets 2.5 Kg, Pk of 4	220601-B017657	02/04/2023	08/04/2022 / Rajesh	08/03/2022 / Rajesh	E3382

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)	22G1962004	03/13/2023	09/13/2022 / Rajesh	09/02/2022 / Rajesh	E3397

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	139404	04/13/2023	10/18/2022 / Rajesh	10/13/2022 / Rajesh	E3412

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)	22E1562001	05/03/2023	11/03/2022 / Rajesh	11/03/2022 / Rajesh	E3425

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)	22E1562001	05/29/2023	11/29/2022 / Rajesh	11/16/2022 / Rajesh	E3430

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)	22I2962012	05/22/2023	11/22/2022 / Rajesh	11/14/2022 / Rajesh	E3432

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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)	22J1962006	06/13/2023	12/13/2022 / Rajesh	11/14/2022 / Rajesh	E3446

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	0000250349	12/15/2024	01/06/2022 / mohan	09/18/2021 / mohan	M5037

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]	A0178679	04/20/2023	10/20/2022 / Christian	11/23/2021 / Christian	S10089

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]	A0178679	04/20/2023	10/20/2022 / Christian	11/23/2021 / Christian	S10090

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]	A0176420	03/31/2023	10/20/2022 / Christian	03/18/2022 / Christian	S10210

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31615 / SV Mixture, GC/MS Tuning Mixture, CH2Cl2, 1mL,	A0182667	02/16/2023	08/16/2022 / Christian	03/18/2022 / Christian	S10244

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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	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 1mL	A0180950	12/31/2027	09/23/2022 / Christian	07/05/2022 / Christian	S10523

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	A0180950	05/30/2023	11/30/2022 / Christian	07/05/2022 / Christian	S10541

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	A0179300	04/30/2023	10/31/2022 / Christian	07/05/2022 / Christian	S10549

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml	A0186198	03/16/2023	09/16/2022 / Christian	08/16/2022 / Christian	S10597

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]	A0188685	04/20/2023	10/20/2022 / Christian	08/23/2022 / Christian	S10648

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110816-01 / Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL, (Maximum Expiration: 180 Days)	414127	02/26/2023	08/26/2022 / Christian	08/26/2022 / Christian	S10715

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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	33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM	A0161851	02/26/2023	08/26/2022 / Jagrut	07/14/2020 / Christian	S8793

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110094-02 / CLP Base/Neutral Surrogate Solution, 5000 mg/L, 1ml	411712	02/26/2023	08/26/2022 / Jagrut	02/25/2021 / Christian	S9217

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-112090-04 / CLP Acid Surrogate Solution, 7500 mg/L, 1ml	440246	02/26/2023	08/26/2022 / Jagrut	02/25/2021 / Christian	S9238

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	A0168492	04/28/2023	10/28/2022 / Christian	03/01/2021 / Christian	S9273

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	A0156277	04/25/2023	10/25/2022 / Jagrut	06/11/2020 / Christian	S9285

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ampul	A0173743	03/16/2023	09/16/2022 / Christian	08/25/2021 / Christian	S9725

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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	555872 / Custom Standard, pentachlorophenol Std [CS 5328-5]	A0175414	02/28/2023	08/30/2022 / Christian	08/12/2021 / Christian	S9901

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	z-110381-01 / 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1ml	459699	02/26/2023	08/26/2022 / Jagrut	09/03/2021 / Christian	S9916

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	z-010223-01 / 1,4-Dioxane Solution, 2,000mg/L, 1ml	459696	06/08/2023	12/08/2022 / Christian	09/03/2021 / Christian	S9919

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	10/24/2024	10/24/2019 / apatel	10/24/2019 / apatel	W2606

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Date Received: _____

Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110094-02	411712	≤ -10 °C	Methylene Chloride	6/24/2023	CLP Base/Neutral Surrogate Solution, 5,000 mg/L, 1 ml

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,2-dichlorobenzene-d_4	2199-69-1	98.5	247.29.2P	4983 ± 74.16
2-fluorobiphenyl	321-60-8	97.8	8.226.1P	5023 ± 89.92
nitrobenzene-d_5	4165-60-0	99.66	7.9.1P	5049 ± 74.97
p-terphenyl-d_{14}	1718-51-0	100	9.12.8.1P	5039 ± 74.99

Received on 02/25/21
by
CG

S9216
to
S9219

*Not a certified value

Certified By: _____
Shane Overcash
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

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Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110816-01	414127	≤ -10 °C	Methylene Chloride	6/21/2025	Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
atrazine	1912-24-9	99.5	337.7.3P	997 ± 5.81
benzidine	92-87-5	99.9	124.18.6.2P	991.8 ± 5.77
caprolactam	105-60-2	99.9	271.1.6P	999 ± 5.82

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09/20/22
by CG

S10795
to
S10799

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Certified By: _____
Shane Overcash
Chemist

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Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-112090-04	440246	≤ -10 °C	Methylene Chloride	2/16/2026	CLP Acid Surrogate Solution, 7,500 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
2-chlorophenol-d_4	93951-73-6	99.3	248.12.7P	7487 ± 17.2
2-fluorophenol	367-12-4	99.8	10.7.3.3P	7513 ± 17.26
phenol-d6	13127-88-3	99.9	949.120.8P	7481 ± 17.19
2,4,6-tribromophenol	118-79-6	99.8	12.1.6P	7469 ± 17.17

Received on
02/25/21
by
CG

S9236
to
S9240

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Certified By: Erica Castiglione

Erica Castiglione
Chemist

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Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-010223 -01	459696	≤ -10 °C	Methylene Chloride	7/13/2024	1,4-Dioxane Solution, 2,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,4-dioxane	123-91-1	100	223.1.3P	1993 ± 21.11

Received
on
04/22/22
by
CG
S10318
to
S10322

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Certified By: Joanna Radu

Joanna Radu
Chemist

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S9914 to S9918

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Date Received:_____

Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110381-01	459699	≤ -10 °C	Methylene Chloride	5/10/2026	Method 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
acenaphthene	83-32-9	99.9	13.1.5P	1000 ± 4.58
acenaphthylene	208-96-8	97.6	14.290.1P	1000 ± 4.58
aniline	62-53-3	99.9	64.7.1P	997.4 ± 4.57
anthracene	120-12-7	99.2	15.29.1.1P	1000 ± 10.95
azobenzene	103-33-3	98.1	252.7.2P	1001 ± 4.69
benzo[a]anthracene	56-55-3	98.7	16.7.2.5P	1000 ± 4.58
benzo[b]fluoranthene	205-99-2	98.7	17.1.16P	1000 ± 4.58
benzo[k]fluoranthene	207-08-9	98.9	18.421.4P	1000 ± 6.7
benzo[ghi]perylene	191-24-2	97.3	19.286.3P	1001 ± 20.51
benzo[a]pyrene	50-32-8	98.3	20.286.1P	1000 ± 20.49
benzyl alcohol	100-51-6	99.9	65.18.1P	982 ± 4.6
bis(2-chloroethoxy)methane	111-91-1	99.2	31.494.1P	997.5 ± 14.66
bis(2-chloroethyl)ether	111-44-4	99.8	32.7.1P	1005 ± 10.87
bis(2-chloro-1-methylethyl) ether	108-60-1	99.5	34.3.14P	1005 ± 11.93
bis(2-ethylhexyl)adipate	103-23-1	99.5	874.7.1P	995 ± 4.66
bis(2-ethylhexyl)phthalate	117-81-7	99.4	33.29.1P	993.5 ± 14.6
4-bromophenyl phenyl ether	101-55-3	99.4	35.7.1.1P	998.7 ± 10.8
butyl benzyl phthalate	85-68-7	98	36.1.5P	999.7 ± 14.69
carbazole	86-74-8	99	239.7.1P	987 ± 4.52

*Not a certified value

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Certified By: _____

Megan Warren
Chemist

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Certificate of Analysis

Catalog No.: Z-110381-01 **Lot No.:** 459699 **Expiration Date:** 5/10/2026

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
4-chloroaniline	106-47-8	99.9	66.9.1.1P	995.8 ± 10.91
4-chlorophenylphenyl ether	7005-72-3	98	37.158.2P	985 ± 14.47
4-chloro-3-methylphenol	59-50-7	99.9	102.7.1.1P	999.7 ± 10.81
2-chloronaphthalene	91-58-7	99.8	42.7.5.2P	988.8 ± 4.53
2-chlorophenol	95-57-8	99.9	103.1.3.1P	999.7 ± 14.69
chrysene	218-01-9	98	21.286.1.3P	1000 ± 20.49
dibenz[a,h]anthracene	53-70-3	98	22.286.2.1P	1000 ± 20.49
dibenzofuran	132-64-9	100	67.7.2.1P	991 ± 4.54
di-n-butyl phthalate	84-74-2	99.8	40.9.2P	999.9 ± 14.69
1,2-dichlorobenzene	95-50-1	99.5	43.1.2P	989.4 ± 4.53
1,3-dichlorobenzene	541-73-1	99.8	44.1.2P	991.7 ± 4.54
1,4-dichlorobenzene	106-46-7	99.9	45.29.1P	990.4 ± 4.53
2,4-dichlorophenol	120-83-2	99.2	104.9.1.1P	1011 ± 14.85
diethyl phthalate	84-66-2	99.8	38.7.1P	998.4 ± 10.79
2,4-dimethylphenol	105-67-9	99.6	105.7.1.1P	999.3 ± 10.8
dimethyl phthalate	131-11-3	99.9	39.9.2P	998.7 ± 10.8
1,2-dinitrobenzene	528-29-0	100	86.7.3P	993 ± 4.65
1,3-dinitrobenzene	99-65-0	100	313.7.2P	998 ± 4.68
1,4-dinitrobenzene	100-25-4	100	907.7.1P	999 ± 4.68
2,4-dinitrophenol	51-28-5	99.9	106.1.6DP	1000 ± 10.81
2,4-dinitrotoluene	121-14-2	100	87.7.3P	999.9 ± 10.81
2,6-dinitrotoluene	606-20-2	99.4	88.7.2.1P	998.8 ± 10.8
di-n-octyl phthalate	117-84-0	99.1	41.7.4P	996.5 ± 10.77
diphenylamine	122-39-4	99.9	78.29.1P	993.6 ± 14.6
2,3,5,6-tetrachlorophenol	935-95-5	99	1112.5.10P	989 ± 4.63
fluoranthene	206-44-0	98.6	23.7.4P	1001 ± 4.58
fluorene	86-73-7	99.8	24.1.4P	1008 ± 11.04

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Certified By: Megan Warren
Chemist

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Certificate of Analysis

Catalog No.: Z-110381-01 **Lot No.:** 459699 **Expiration Date:** 5/10/2026

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
hexachlorobenzene	118-74-1	99	46.158.4P	997.5 ± 10.92
hexachlorobutadiene	87-68-3	97	47.158.2P	988.8 ± 10.83
hexachlorocyclopentadiene	77-47-4	96.5	48.2.1P	1014 ± 11.1
hexachloroethane	67-72-1	99.9	49.1.3P	989.5 ± 4.53
indeno[1,2,3-cd]pyrene	193-39-5	98	25.286.3P	1001 ± 10.96
isophorone	78-59-1	98.8	90.1.2P	995.7 ± 14.63
2-methyl-4,6-dinitrophenol	534-52-1	100	107.1.4.3DP	1003 ± 10.84
1-methylnaphthalene	90-12-0	98.4	249.7.4P	1001 ± 4.58
2-methylnaphthalene	91-57-6	99.1	68.8.1.1P	1002 ± 10.97
2-methylphenol	95-48-7	99.6	114.7.3P	1004 ± 10.86
3-methylphenol	108-39-4	99.2	115.7.3P	500.5 ± 5.41
4-methylphenol	106-44-5	99	116.1.3P	505.6 ± 7.43
naphthalene	91-20-3	99.8	26.9.2P	1000 ± 4.58
2-nitroaniline	88-74-4	99.7	69.29.1P	996.4 ± 4.57
3-nitroaniline	99-09-2	100	70.7.2P	995.6 ± 4.56
4-nitroaniline	100-01-6	99.8	71.1.1P	1000 ± 10.95
nitrobenzene	98-95-3	100	94.7.1P	999.5 ± 10.81
2-nitrophenol	88-75-5	99.1	108.29.1P	1000 ± 10.81
4-nitrophenol	100-02-7	99.9	109.8.1P	1000 ± 14.69
N-nitrosodimethylamine	62-75-9	99.5	57.3.18P	985.4 ± 11.7
N-nitrosodi-n-propylamine	621-64-7	100	59.7.4P	984.4 ± 10.64
pentachlorophenol	87-86-5	99	110.1.7P	1000 ± 10.81
phenanthrene	85-01-8	98.9	27.1.3P	1009 ± 11.05
phenol	108-95-2	100	112.7.1P	1011 ± 10.88
pyrene	129-00-0	98.5	28.9.1.1P	1000 ± 4.58
pyridine	110-86-1	100	101.24.1P	996.8 ± 4.46
2,3,4,6-Tetrachlorophenol	58-90-2	95	120.286.2.1P	984.2 ± 20.19

*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By: 

Megan Warren
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

Certificate of Analysis

Catalog No.: Z-110381-01

Lot No.: 459699 **Expiration Date:** 5/10/2026

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,2,4-trichlorobenzene	120-82-1	99.6	54.29.1P	987.3 ± 4.52
2,4,5-trichlorophenol	95-95-4	96.5	121.7.1P	996.6 ± 10.78
2,4,6-trichlorophenol	88-06-2	99.6	113.7.1P	1001 ± 10.82

*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By: _____

Megan Warren
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

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Received on 06/11/20 by CG
S8666 to S8695

Catalog No. : 31853 **Lot No.:** A0156277

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, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane	2,003.0 µg/mL	+/- 11.7547	µg/mL	Gravimetric
	CAS # 123-91-1 (Lot SHBK6493)		+/- 42.9142	µg/mL	Unstressed
	Purity 99%		+/- 44.1601	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S9274 to S9290

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

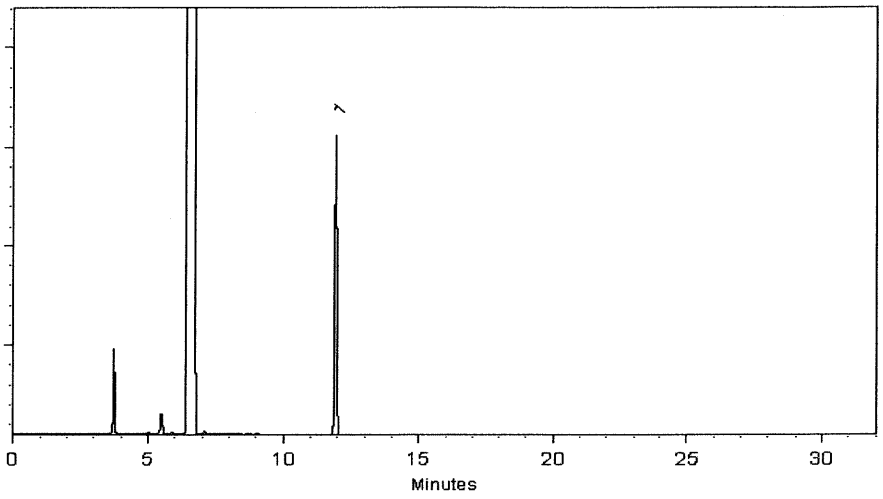
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Russ Bookhamer - Operations Technician I

Date Mixed: 02-Jan-2020 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-Jan-2020

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Received on 07/14/20 by CG

Catalog No. : 33913 **Lot No.:** A0161851

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 : May 31, 2026 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

S8793 to S8794

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 EF-135) **Purity** 96%	2,000.6 µg/mL	+/- 18.6049 +/- 91.2724 +/- 101.0370	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Fluoranthene-d10 **CAS #** 93951-69-0 (Lot PR-20668) **Purity** 98%	2,001.9 µg/mL	+/- 18.6170 +/- 91.3319 +/- 101.1029	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)

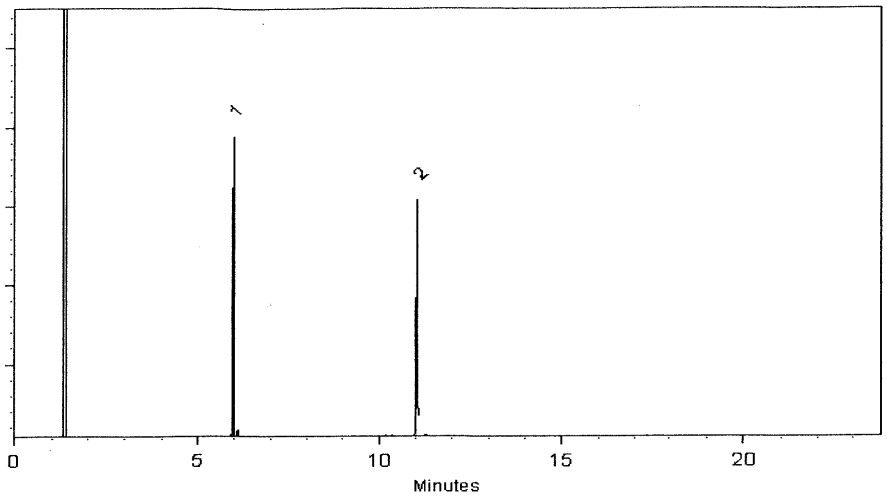
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
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.

Katelyn McGinnl - Operations Tech I

Date Mixed: 17-Jun-2020 **Balance:** 1128360905

Fang-Yun Lo - QC Analyst

Date Passed: 19-Jun-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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Received on 03/01/21 by CG

S9271 to S9273

Catalog No. : 33913 **Lot No.:** A0168492

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 : December 31, 2026 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

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 EF-135) **Purity** 96%	2,001.6 µg/mL	+/- 11.7465 +/- 90.1674 +/- 100.0489	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Fluoranthene-d10 **CAS #** 93951-69-0 (Lot PR-20668) **Purity** 99%	2,008.0 µg/mL	+/- 11.7841 +/- 90.4557 +/- 100.3688	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)

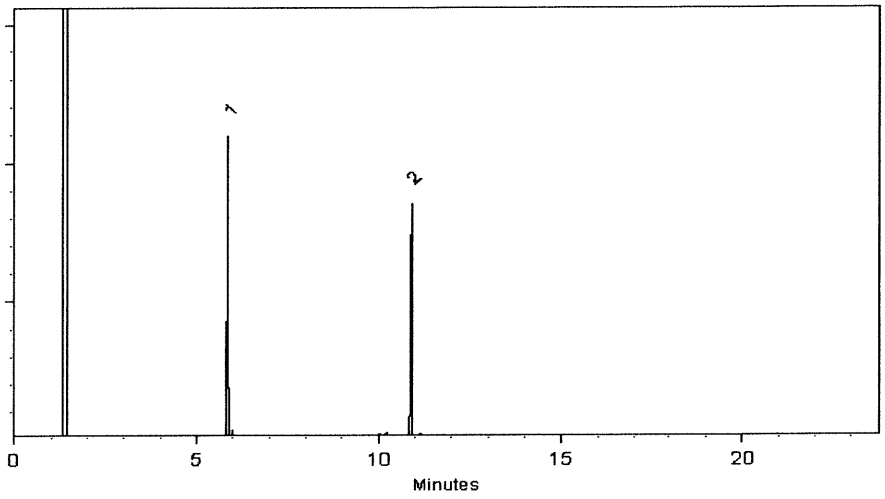
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
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.

Sam Moodler - Operations Tech I

Date Mixed: 26-Jan-2021 **Balance:** B345965662

Alexis Shelow - Operations Tech I

Date Passed: 27-Jan-2021

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Received on 08/25/21 by CG S9709 to S9738

Catalog No. : 31087 **Lot No.:** A0173743

Description : Acid Surrogate Mix (4/89 SOW)

Acid Surrogate 10, 000µg/mL, Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2029 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Fluorophenol	10,013.5 µg/mL	+/- 58.2194 µg/mL	Gravimetric
	CAS # 367-12-4 (Lot STBJ2508)		+/- 292.2275 µg/mL	Unstressed
	Purity 99%		+/- 354.6068 µg/mL	Stressed
2	Phenol-d6	10,050.1 µg/mL	+/- 58.4323 µg/mL	Gravimetric
	CAS # 13127-88-3 (Lot PR-31262)		+/- 293.2963 µg/mL	Unstressed
	Purity 99%		+/- 355.9038 µg/mL	Stressed
3	2,4,6-Tribromophenol	10,044.9 µg/mL	+/- 58.4018 µg/mL	Gravimetric
	CAS # 118-79-6 (Lot MKCJ7664)		+/- 293.1431 µg/mL	Unstressed
	Purity 99%		+/- 355.7179 µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

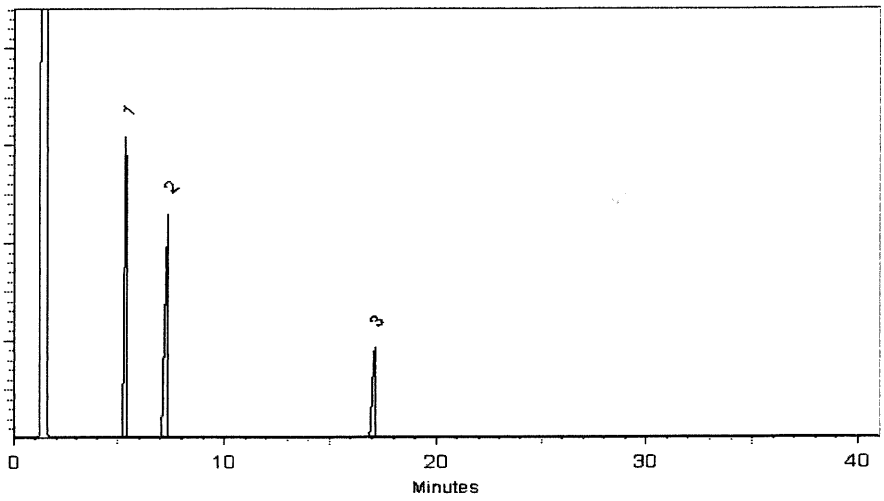
Carrier Gas:
hydrogen-constant pressure 10 psi.

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.

Aurelia Confer - Operations Tech I

Date Mixed: 23-Jun-2021 **Balance:** B442140311

Marlina Cowan - Operations Tech I

Date Passed: 25-Jun-2021

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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 on 08/12/21 by CG S9899 to S9903

Catalog No. : 555872 **Lot No.:** A0175414

Description : Custom Pentachlorophenol Standard

Custom Pentachlorophenol Standard 25,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2024 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Pentachlorophenol **CAS #** 87-86-5 **Purity** 99% (Lot 210706RSR)	25,072.0 µg/mL	+/- 232.0210 µg/mL +/- 753.6229 µg/mL +/- 906.0356 µg/mL		Gravimetric Unstressed Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Matt Fragassi - Mix Technician **Date Mixed:** 16-Aug-2021 **Balance:** 1128342314

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) -20°C or colder (Deep 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.

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Received on 03/18/22 by CG S10182 to S10211

Catalog No. : 31850 **Lot No.:** A0176420

Description : 8270 MegaMix®

8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Pyridine	1,003.7 µg/mL	+/- 5.8354 µg/mL	Gravimetric
	CAS # 110-86-1 (Lot SHBL0433)		+/- 30.3591 µg/mL	Unstressed
	Purity 99%		+/- 30.3591 µg/mL	Stressed
2	N-Nitrosodimethylamine	1,000.8 µg/mL	+/- 5.8186 µg/mL	Gravimetric
	CAS # 62-75-9 (Lot 210512JLM)		+/- 30.2717 µg/mL	Unstressed
	Purity 99%		+/- 30.2717 µg/mL	Stressed
3	Phenol	1,002.3 µg/mL	+/- 5.8273 µg/mL	Gravimetric
	CAS # 108-95-2 (Lot MKCK1120)		+/- 30.3171 µg/mL	Unstressed
	Purity 99%		+/- 30.3171 µg/mL	Stressed
4	Aniline	1,000.7 µg/mL	+/- 5.8183 µg/mL	Gravimetric
	CAS # 62-53-3 (Lot K22Z462)		+/- 30.2700 µg/mL	Unstressed
	Purity 99%		+/- 30.2700 µg/mL	Stressed
5	Bis(2-chloroethyl)ether	1,001.1 µg/mL	+/- 5.8202 µg/mL	Gravimetric
	CAS # 111-44-4 (Lot SHBL6942)		+/- 30.2801 µg/mL	Unstressed
	Purity 99%		+/- 30.2801 µg/mL	Stressed
6	2-Chlorophenol	1,000.8 µg/mL	+/- 5.8186 µg/mL	Gravimetric
	CAS # 95-57-8 (Lot STBH7290)		+/- 30.2717 µg/mL	Unstressed
	Purity 99%		+/- 30.2717 µg/mL	Stressed
7	1,3-Dichlorobenzene	1,001.7 µg/mL	+/- 5.8241 µg/mL	Gravimetric
	CAS # 541-73-1 (Lot BCBZ7498)		+/- 30.3003 µg/mL	Unstressed
	Purity 99%		+/- 30.3003 µg/mL	Stressed

8	1,4-Dichlorobenzene		1,001.8	µg/mL	+/-	5.8244	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	30.3020	µg/mL	Unstressed
	Purity 99%				+/-	30.3020	µg/mL	Stressed
9	Benzyl alcohol		1,000.7	µg/mL	+/-	5.8183	µg/mL	Gravimetric
	CAS # 100-51-6	(Lot SHBK5943)			+/-	30.2700	µg/mL	Unstressed
	Purity 99%				+/-	30.2700	µg/mL	Stressed
10	1,2-Dichlorobenzene		1,000.9	µg/mL	+/-	5.8193	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBK7741)			+/-	30.2751	µg/mL	Unstressed
	Purity 99%				+/-	30.2751	µg/mL	Stressed
11	2-Methylphenol (o-cresol)		1,000.8	µg/mL	+/-	5.8189	µg/mL	Gravimetric
	CAS # 95-48-7	(Lot SHBH6379)			+/-	30.2734	µg/mL	Unstressed
	Purity 99%				+/-	30.2734	µg/mL	Stressed
12	2,2'-oxybis(1-chloropropane)		1,001.5	µg/mL	+/-	5.8228	µg/mL	Gravimetric
	CAS # 108-60-1	(Lot 12308600)			+/-	30.2936	µg/mL	Unstressed
	Purity 99%				+/-	30.2936	µg/mL	Stressed
13	3-Methylphenol (m-cresol)		501.7	µg/mL	+/-	2.9238	µg/mL	Gravimetric
	CAS # 108-39-4	(Lot SHBD0627V)			+/-	15.1775	µg/mL	Unstressed
	Purity 99%				+/-	15.1775	µg/mL	Stressed
14	4-Methylphenol (p-cresol)		502.2	µg/mL	+/-	2.9264	µg/mL	Gravimetric
	CAS # 106-44-5	(Lot SHBL4411)			+/-	15.1909	µg/mL	Unstressed
	Purity 99%				+/-	15.1909	µg/mL	Stressed
15	N-Nitroso-di-n-propylamine		1,001.6	µg/mL	+/-	5.8235	µg/mL	Gravimetric
	CAS # 621-64-7	(Lot 2D5VJ)			+/-	30.2969	µg/mL	Unstressed
	Purity 99%				+/-	30.2969	µg/mL	Stressed
16	Hexachloroethane		1,000.6	µg/mL	+/-	5.8176	µg/mL	Gravimetric
	CAS # 67-72-1	(Lot ENSIK)			+/-	30.2667	µg/mL	Unstressed
	Purity 99%				+/-	30.2667	µg/mL	Stressed
17	Nitrobenzene		1,001.4	µg/mL	+/-	5.8225	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot MKCK4267)			+/-	30.2919	µg/mL	Unstressed
	Purity 99%				+/-	30.2919	µg/mL	Stressed
18	Isophorone		1,002.2	µg/mL	+/-	5.8270	µg/mL	Gravimetric
	CAS # 78-59-1	(Lot MKCC9506)			+/-	30.3154	µg/mL	Unstressed
	Purity 99%				+/-	30.3154	µg/mL	Stressed
19	2-Nitrophenol		1,002.0	µg/mL	+/-	5.8257	µg/mL	Gravimetric
	CAS # 88-75-5	(Lot BCCB2407)			+/-	30.3087	µg/mL	Unstressed
	Purity 99%				+/-	30.3087	µg/mL	Stressed
20	2,4-Dimethylphenol		1,002.5	µg/mL	+/-	5.8286	µg/mL	Gravimetric
	CAS # 105-67-9	(Lot 10165155)			+/-	30.3238	µg/mL	Unstressed
	Purity 99%				+/-	30.3238	µg/mL	Stressed
21	Bis(2-chloroethoxy)methane		1,002.0	µg/mL	+/-	5.8257	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 10991500)			+/-	30.3087	µg/mL	Unstressed
	Purity 99%				+/-	30.3087	µg/mL	Stressed
22	2,4-Dichlorophenol		1,000.2	µg/mL	+/-	5.8154	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBZ6787)			+/-	30.2549	µg/mL	Unstressed
	Purity 99%				+/-	30.2549	µg/mL	Stressed
23	1,2,4-Trichlorobenzene		1,001.6	µg/mL	+/-	5.8235	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBM0526)			+/-	30.2969	µg/mL	Unstressed
	Purity 99%				+/-	30.2969	µg/mL	Stressed

24	Naphthalene		1,000.2	µg/mL	+/-	5.8154	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKCH0219)			+/-	30.2549	µg/mL	Unstressed
	Purity 99%				+/-	30.2549	µg/mL	Stressed
25	4-Chloroaniline		1,001.1	µg/mL	+/-	5.8202	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot BCBJ1580V)			+/-	30.2801	µg/mL	Unstressed
	Purity 99%				+/-	30.2801	µg/mL	Stressed
26	Hexachlorobutadiene		1,000.4	µg/mL	+/-	5.8162	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot N21G023)			+/-	30.2591	µg/mL	Unstressed
	Purity 98%				+/-	30.2591	µg/mL	Stressed
27	4-Chloro-3-methylphenol		1,000.8	µg/mL	+/-	5.8189	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC7309V)			+/-	30.2734	µg/mL	Unstressed
	Purity 99%				+/-	30.2734	µg/mL	Stressed
28	2-Methylnaphthalene		1,002.0	µg/mL	+/-	5.8257	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot STBG8884)			+/-	30.3087	µg/mL	Unstressed
	Purity 99%				+/-	30.3087	µg/mL	Stressed
29	1-Methylnaphthalene		1,000.3	µg/mL	+/-	5.8157	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 5234.00-3)			+/-	30.2566	µg/mL	Unstressed
	Purity 99%				+/-	30.2566	µg/mL	Stressed
30	Hexachlorocyclopentadiene		1,001.2	µg/mL	+/-	5.8209	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 0012015)			+/-	30.2835	µg/mL	Unstressed
	Purity 99%				+/-	30.2835	µg/mL	Stressed
31	2,4,6-Trichlorophenol		1,002.2	µg/mL	+/-	5.8267	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot STBJ5914)			+/-	30.3137	µg/mL	Unstressed
	Purity 99%				+/-	30.3137	µg/mL	Stressed
32	2,4,5-Trichlorophenol		1,000.4	µg/mL	+/-	5.8162	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHN01)			+/-	30.2591	µg/mL	Unstressed
	Purity 98%				+/-	30.2591	µg/mL	Stressed
33	2-Chloronaphthalene		1,001.4	µg/mL	+/-	5.8222	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot TWYRD)			+/-	30.2902	µg/mL	Unstressed
	Purity 99%				+/-	30.2902	µg/mL	Stressed
34	2-Nitroaniline		1,001.7	µg/mL	+/-	5.8238	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKCJ8895)			+/-	30.2986	µg/mL	Unstressed
	Purity 99%				+/-	30.2986	µg/mL	Stressed
35	1,4-Dinitrobenzene		1,000.8	µg/mL	+/-	5.8189	µg/mL	Gravimetric
	CAS # 100-25-4	(Lot STBF8844V)			+/-	30.2734	µg/mL	Unstressed
	Purity 99%				+/-	30.2734	µg/mL	Stressed
36	Acenaphthylene		1,000.1	µg/mL	+/-	5.8149	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot P06V)			+/-	30.2526	µg/mL	Unstressed
	Purity 98%				+/-	30.2526	µg/mL	Stressed
37	1,3-Dinitrobenzene		1,000.4	µg/mL	+/-	5.8167	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot 1-DXX-24-1)			+/-	30.2616	µg/mL	Unstressed
	Purity 99%				+/-	30.2616	µg/mL	Stressed
38	Dimethylphthalate		1,000.9	µg/mL	+/-	5.8193	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)			+/-	30.2751	µg/mL	Unstressed
	Purity 99%				+/-	30.2751	µg/mL	Stressed
39	2,6-Dinitrotoluene		1,000.2	µg/mL	+/-	5.8154	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot BCBB8606)			+/-	30.2549	µg/mL	Unstressed
	Purity 99%				+/-	30.2549	µg/mL	Stressed

40	1,2-Dinitrobenzene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 528-29-0	(Lot MKCH6067)			+/-	30.2482	µg/mL	Unstressed
	Purity 99%				+/-	30.2482	µg/mL	Stressed
41	Acenaphthene		1,002.4	µg/mL	+/-	5.8283	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKCN0610)			+/-	30.3221	µg/mL	Unstressed
	Purity 99%				+/-	30.3221	µg/mL	Stressed
42	3-Nitroaniline		1,000.9	µg/mL	+/-	5.8196	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot MKCH5457)			+/-	30.2768	µg/mL	Unstressed
	Purity 99%				+/-	30.2768	µg/mL	Stressed
43	2,4-Dinitrophenol		1,002.2	µg/mL	+/-	5.8267	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot STBH7564)			+/-	30.3137	µg/mL	Unstressed
	Purity 99%				+/-	30.3137	µg/mL	Stressed
44	Dibenzofuran		1,001.7	µg/mL	+/-	5.8238	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKCN1772)			+/-	30.2986	µg/mL	Unstressed
	Purity 99%				+/-	30.2986	µg/mL	Stressed
45	2,4-Dinitrotoluene		1,001.6	µg/mL	+/-	5.8231	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/-	30.2952	µg/mL	Unstressed
	Purity 99%				+/-	30.2952	µg/mL	Stressed
46	4-Nitrophenol		1,000.7	µg/mL	+/-	5.8183	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKCF6111)			+/-	30.2700	µg/mL	Unstressed
	Purity 99%				+/-	30.2700	µg/mL	Stressed
47	2,3,4,6-Tetrachlorophenol		1,000.9	µg/mL	+/-	5.8196	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot PR-30126)			+/-	30.2768	µg/mL	Unstressed
	Purity 99%				+/-	30.2768	µg/mL	Stressed
48	2,3,5,6-Tetrachlorophenol		1,001.3	µg/mL	+/-	5.8218	µg/mL	Gravimetric
	CAS # 935-95-5	(Lot 012016)			+/-	30.2885	µg/mL	Unstressed
	Purity 99%				+/-	30.2885	µg/mL	Stressed
49	Fluorene		1,002.6	µg/mL	+/-	5.8289	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 094650L18G)			+/-	30.3255	µg/mL	Unstressed
	Purity 99%				+/-	30.3255	µg/mL	Stressed
50	4-Chlorophenyl phenyl ether		1,001.8	µg/mL	+/-	5.8244	µg/mL	Gravimetric
	CAS # 7005-72-3	(Lot MKCN1186)			+/-	30.3020	µg/mL	Unstressed
	Purity 99%				+/-	30.3020	µg/mL	Stressed
51	Diethylphthalate		1,000.9	µg/mL	+/-	5.8193	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot BCCD3396)			+/-	30.2751	µg/mL	Unstressed
	Purity 99%				+/-	30.2751	µg/mL	Stressed
52	4-Nitroaniline		1,000.9	µg/mL	+/-	5.8196	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot RP210713)			+/-	30.2768	µg/mL	Unstressed
	Purity 99%				+/-	30.2768	µg/mL	Stressed
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		1,002.2	µg/mL	+/-	5.8270	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot RP210716)			+/-	30.3154	µg/mL	Unstressed
	Purity 99%				+/-	30.3154	µg/mL	Stressed
54	Diphenylamine		1,000.6	µg/mL	+/-	5.8173	µg/mL	Gravimetric
	CAS # 122-39-4	(Lot MKBN8295V)			+/-	30.2650	µg/mL	Unstressed
	Purity 99%				+/-	30.2650	µg/mL	Stressed
55	Azobenzene		1,001.2	µg/mL	+/-	5.8212	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot BCCB8438)			+/-	30.2852	µg/mL	Unstressed
	Purity 99%				+/-	30.2852	µg/mL	Stressed

56	4-Bromophenyl phenyl ether		1,001.3	µg/mL	+/-	5.8218	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	30.2885	µg/mL	Unstressed
	Purity 99%				+/-	30.2885	µg/mL	Stressed
57	Hexachlorobenzene		1,000.2	µg/mL	+/-	5.8154	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot SL210804)			+/-	30.2549	µg/mL	Unstressed
	Purity 99%				+/-	30.2549	µg/mL	Stressed
58	Pentachlorophenol		1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 210706RSR)			+/-	30.2633	µg/mL	Unstressed
	Purity 99%				+/-	30.2633	µg/mL	Stressed
59	Phenanthrene		1,000.8	µg/mL	+/-	5.8186	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKCL7390)			+/-	30.2717	µg/mL	Unstressed
	Purity 99%				+/-	30.2717	µg/mL	Stressed
60	Anthracene		1,001.9	µg/mL	+/-	5.8254	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKCM0015)			+/-	30.3070	µg/mL	Unstressed
	Purity 99%				+/-	30.3070	µg/mL	Stressed
61	Carbazole		1,000.7	µg/mL	+/-	5.8180	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot 10812100)			+/-	30.2684	µg/mL	Unstressed
	Purity 99%				+/-	30.2684	µg/mL	Stressed
62	Di-n-butylphthalate		1,001.6	µg/mL	+/-	5.8231	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKCL9573)			+/-	30.2952	µg/mL	Unstressed
	Purity 99%				+/-	30.2952	µg/mL	Stressed
63	Fluoranthene		1,000.4	µg/mL	+/-	5.8167	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKCF7378)			+/-	30.2616	µg/mL	Unstressed
	Purity 99%				+/-	30.2616	µg/mL	Stressed
64	Pyrene		1,001.1	µg/mL	+/-	5.8202	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCCB9880)			+/-	30.2801	µg/mL	Unstressed
	Purity 99%				+/-	30.2801	µg/mL	Stressed
65	Benzyl butyl phthalate		1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot MKCM1987)			+/-	30.2516	µg/mL	Unstressed
	Purity 99%				+/-	30.2516	µg/mL	Stressed
66	Bis(2-ethylhexyl)adipate		1,000.9	µg/mL	+/-	5.8196	µg/mL	Gravimetric
	CAS # 103-23-1	(Lot MKCM1988)			+/-	30.2768	µg/mL	Unstressed
	Purity 99%				+/-	30.2768	µg/mL	Stressed
67	Benz(a)anthracene		1,000.7	µg/mL	+/-	5.8184	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot RP210125)			+/-	30.2708	µg/mL	Unstressed
	Purity 96%				+/-	30.2708	µg/mL	Stressed
68	Chrysene		1,001.6	µg/mL	+/-	5.8235	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot STBJ1016)			+/-	30.2969	µg/mL	Unstressed
	Purity 99%				+/-	30.2969	µg/mL	Stressed
69	Bis(2-ethylhexyl)phthalate		1,002.1	µg/mL	+/-	5.8260	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKCJ1159)			+/-	30.3104	µg/mL	Unstressed
	Purity 99%				+/-	30.3104	µg/mL	Stressed
70	Di-n-octyl phthalate		1,001.4	µg/mL	+/-	5.8222	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 11004300)			+/-	30.2902	µg/mL	Unstressed
	Purity 99%				+/-	30.2902	µg/mL	Stressed
71	Benzo(b)fluoranthene		1,000.9	µg/mL	+/-	5.8193	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot 012020B)			+/-	30.2751	µg/mL	Unstressed
	Purity 99%				+/-	30.2751	µg/mL	Stressed

72	Benzo(k)fluoranthene		1,001.3	µg/mL	+/-	5.8218	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot 012019K)			+/-	30.2885	µg/mL	Unstressed
	Purity 99%				+/-	30.2885	µg/mL	Stressed
73	Benzo(a)pyrene		1,000.6	µg/mL	+/-	5.8173	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot Z8BKF)			+/-	30.2650	µg/mL	Unstressed
	Purity 99%				+/-	30.2650	µg/mL	Stressed
74	Indeno(1,2,3-cd)pyrene		1,002.3	µg/mL	+/-	5.8277	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot 1-RAK-33-4)			+/-	30.3188	µg/mL	Unstressed
	Purity 99%				+/-	30.3188	µg/mL	Stressed
75	Dibenz(a,h)anthracene		1,002.3	µg/mL	+/-	5.8273	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	30.3171	µg/mL	Unstressed
	Purity 99%				+/-	30.3171	µg/mL	Stressed
76	Benzo(g,h,i)perylene		1,008.8	µg/mL	+/-	5.8651	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot 8GFYJ)			+/-	30.5137	µg/mL	Unstressed
	Purity 99%				+/-	30.5137	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

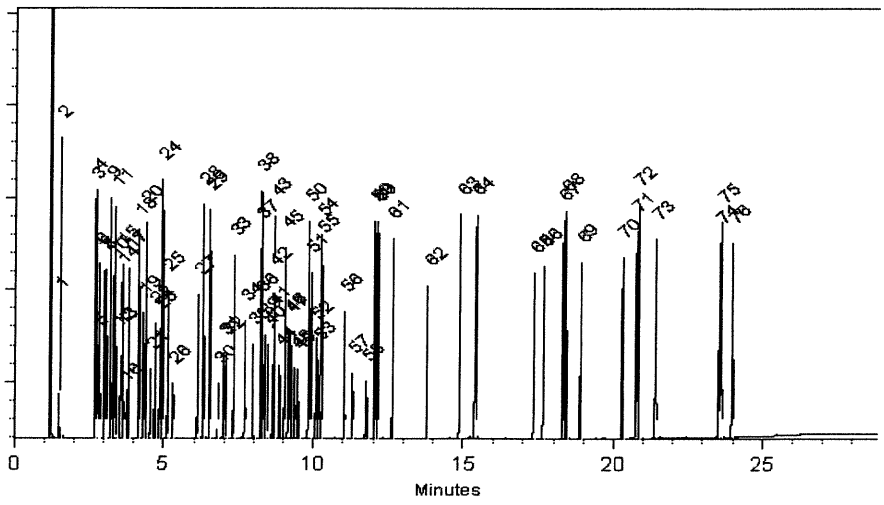
Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:
250°C

Det. Temp:
340°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.

Cathleen Soltis - Mix Technician

Date Mixed: 14-Sep-2021 **Balance:** 1128360905

Alexis Shelow - Operations Tech I

Date Passed: 23-Sep-2021

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) -20°C or colder (Deep 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.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate

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.

Received by CG on 11/23/21 S10066 to S10095

Catalog No. : 555224 **Lot No.:** A0178679

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 : November 30, 2023 **Storage:** 10°C or colder

Ship: Ambient

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 MKCG5992) **Purity** 99%	1,001.0 µg/mL	+/- 5.945637 µg/mL +/- 20.022252 µg/mL +/- 44.874556 µg/mL	Gravimetric Unstressed Stressed
2	Acetophenone **CAS #** 98-86-2 (Lot STBH8205) **Purity** 99%	1,001.0 µg/mL	+/- 5.945637 µg/mL +/- 20.022252 µg/mL +/- 44.874556 µg/mL	Gravimetric Unstressed Stressed
3	Benzaldehyde **CAS #** 100-52-7 (Lot SHBG8690V) **Purity** 99%	1,001.0 µg/mL	+/- 5.945637 µg/mL +/- 20.022252 µg/mL +/- 44.874556 µg/mL	Gravimetric Unstressed Stressed
4	Benzoic acid **CAS #** 65-85-0 (Lot MKCL7479) **Purity** 99%	1,001.0 µg/mL	+/- 5.945637 µg/mL +/- 20.022252 µg/mL +/- 44.874556 µg/mL	Gravimetric Unstressed Stressed
5	Biphenyl **CAS #** 92-52-4 (Lot MKCJ6240) **Purity** 99%	1,005.0 µg/mL	+/- 5.969395 µg/mL +/- 20.102261 µg/mL +/- 45.053875 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Lane Kibe - Mix Technician **Date Mixed:** 18-Nov-2021 **Balance:** B345965662

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate

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.

Received by CG on 11/23/21 S10066 to S10095

Catalog No. : 555224 **Lot No.:** A0178679

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 : November 30, 2023 **Storage:** 10°C or colder

Ship: Ambient

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 MKCG5992) **Purity** 99%	1,001.0 µg/mL	+/- 5.945637 µg/mL +/- 20.022252 µg/mL +/- 44.874556 µg/mL	Gravimetric Unstressed Stressed
2	Acetophenone **CAS #** 98-86-2 (Lot STBH8205) **Purity** 99%	1,001.0 µg/mL	+/- 5.945637 µg/mL +/- 20.022252 µg/mL +/- 44.874556 µg/mL	Gravimetric Unstressed Stressed
3	Benzaldehyde **CAS #** 100-52-7 (Lot SHBG8690V) **Purity** 99%	1,001.0 µg/mL	+/- 5.945637 µg/mL +/- 20.022252 µg/mL +/- 44.874556 µg/mL	Gravimetric Unstressed Stressed
4	Benzoic acid **CAS #** 65-85-0 (Lot MKCL7479) **Purity** 99%	1,001.0 µg/mL	+/- 5.945637 µg/mL +/- 20.022252 µg/mL +/- 44.874556 µg/mL	Gravimetric Unstressed Stressed
5	Biphenyl **CAS #** 92-52-4 (Lot MKCJ6240) **Purity** 99%	1,005.0 µg/mL	+/- 5.969395 µg/mL +/- 20.102261 µg/mL +/- 45.053875 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Lane Kibe - Mix Technician **Date Mixed:** 18-Nov-2021 **Balance:** B345965662

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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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.

Received on 07/05/22 by CG S10542 to S10571

Catalog No. : 31853 **Lot No.:** A0179300

Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane	2,004.0 µg/mL	+/- 11.7606	µg/mL	Gravimetric
	CAS # 123-91-1 (Lot SHBM9675)		+/- 42.9357	µg/mL	Unstressed
	Purity 99%		+/- 44.1822	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)

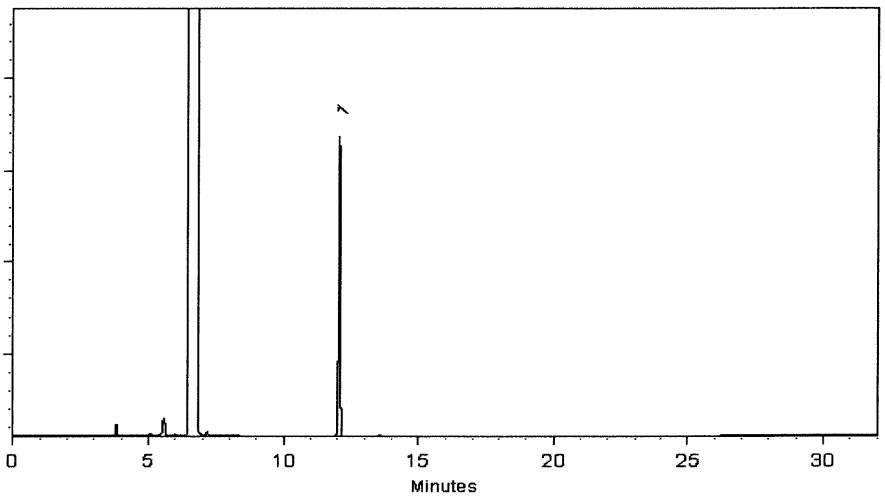
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Ashley Frantz - Quoting Technician

Date Mixed: 08-Dec-2021 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 10-Dec-2021

Manufactured under Restek's ISO 9001:2015 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.

Received on 07/05/22 by CG S10512 to S10541

Catalog No. : 31206 **Lot No.:** A0180950

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 : December 31, 2027 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

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-30447) **Purity** 99%	2,019.1 µg/mL	+/- 11.7390 µg/mL +/- 90.9400 µg/mL +/- 100.9091 µg/mL	Gravimetric Unstressed Stressed
2	Naphthalene-d8 **CAS #** 1146-65-2 (Lot M-2180) **Purity** 99%	2,018.9 µg/mL	+/- 11.7379 µg/mL +/- 90.9310 µg/mL +/- 100.8991 µg/mL	Gravimetric Unstressed Stressed
3	Acenaphthene-d10 **CAS #** 15067-26-2 (Lot PR-30913) **Purity** 99%	2,018.8 µg/mL	+/- 11.7375 µg/mL +/- 90.9280 µg/mL +/- 100.8958 µg/mL	Gravimetric Unstressed Stressed
4	Phenanthrene-d10 **CAS #** 1517-22-2 (Lot PR-32303) **Purity** 99%	2,018.4 µg/mL	+/- 11.7352 µg/mL +/- 90.9099 µg/mL +/- 100.8758 µg/mL	Gravimetric Unstressed Stressed
5	Chrysene-d12 **CAS #** 1719-03-5 (Lot PR-30486) **Purity** 99%	2,018.7 µg/mL	+/- 11.7367 µg/mL +/- 90.9220 µg/mL +/- 100.8891 µg/mL	Gravimetric Unstressed Stressed
6	Perylene-d12 **CAS #** 1520-96-3 (Lot PR-31716) **Purity** 99%	2,019.9 µg/mL	+/- 11.7437 µg/mL +/- 90.9760 µg/mL +/- 100.9491 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)

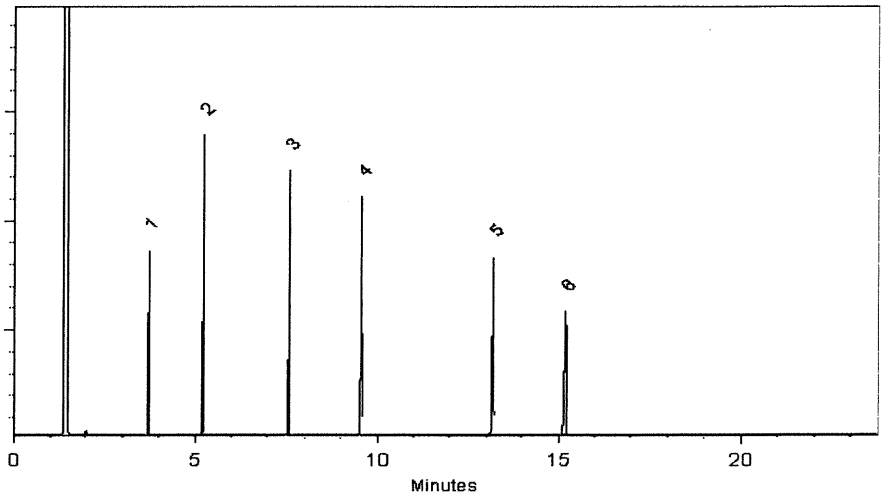
Carrier Gas:
hydrogen-constant pressure 10 psi.

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.

Brittany Federinko - Operations Tech I

Date Mixed: 24-Jan-2022 **Balance:** 1128360905

Marlina Cowan - Operations Tech I

Date Passed: 27-Jan-2022

Manufactured under Restek's ISO 9001:2015 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.

Received on 07/05/22 by CG S10512 to S10541

Catalog No. : 31206 **Lot No.:** A0180950

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 : December 31, 2027 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

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-30447) **Purity** 99%	2,019.1 µg/mL	+/- 11.7390 µg/mL +/- 90.9400 µg/mL +/- 100.9091 µg/mL	Gravimetric Unstressed Stressed
2	Naphthalene-d8 **CAS #** 1146-65-2 (Lot M-2180) **Purity** 99%	2,018.9 µg/mL	+/- 11.7379 µg/mL +/- 90.9310 µg/mL +/- 100.8991 µg/mL	Gravimetric Unstressed Stressed
3	Acenaphthene-d10 **CAS #** 15067-26-2 (Lot PR-30913) **Purity** 99%	2,018.8 µg/mL	+/- 11.7375 µg/mL +/- 90.9280 µg/mL +/- 100.8958 µg/mL	Gravimetric Unstressed Stressed
4	Phenanthrene-d10 **CAS #** 1517-22-2 (Lot PR-32303) **Purity** 99%	2,018.4 µg/mL	+/- 11.7352 µg/mL +/- 90.9099 µg/mL +/- 100.8758 µg/mL	Gravimetric Unstressed Stressed
5	Chrysene-d12 **CAS #** 1719-03-5 (Lot PR-30486) **Purity** 99%	2,018.7 µg/mL	+/- 11.7367 µg/mL +/- 90.9220 µg/mL +/- 100.8891 µg/mL	Gravimetric Unstressed Stressed
6	Perylene-d12 **CAS #** 1520-96-3 (Lot PR-31716) **Purity** 99%	2,019.9 µg/mL	+/- 11.7437 µg/mL +/- 90.9760 µg/mL +/- 100.9491 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)

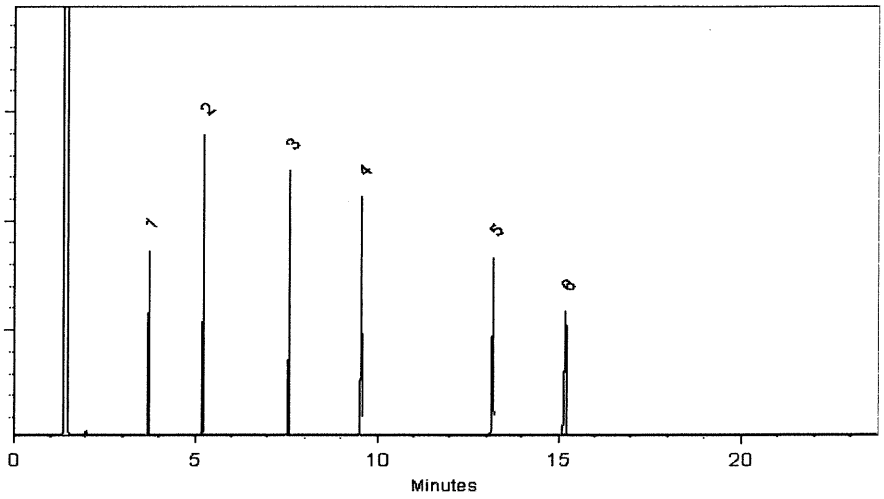
Carrier Gas:
hydrogen-constant pressure 10 psi.

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.

Brittany Federinko - Operations Tech I

Date Mixed: 24-Jan-2022 **Balance:** 1128360905

Marlina Cowan - Operations Tech I

Date Passed: 27-Jan-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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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.

Received on 03/18/22 by CG S10242 to S10247

Catalog No. : 31615 **Lot No.:** A0182667

Description : GC/MS Tuning Mixture

GC/MS Tuning Mixture 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2025 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Pentachlorophenol **CAS #** 87-86-5 (Lot 211229RSR) **Purity** 99%	1,003.6 µg/mL	+/- 5.8897 µg/mL +/- 45.7132 µg/mL +/- 66.0037 µg/mL	Gravimetric Unstressed Stressed
2	DFTPP (Decafluorotriphenylphosphine) **CAS #** 5074-71-5 (Lot Q117-147) **Purity** 95%	1,006.6 µg/mL	+/- 5.9074 µg/mL +/- 45.8508 µg/mL +/- 66.2023 µg/mL	Gravimetric Unstressed Stressed
3	Benzidine **CAS #** 92-87-5 (Lot 211228JLM) **Purity** 99%	1,008.4 µg/mL	+/- 5.9179 µg/mL +/- 45.9318 µg/mL +/- 66.3193 µg/mL	Gravimetric Unstressed Stressed
4	4,4'-DDT **CAS #** 50-29-3 (Lot 210916JLM) **Purity** 99%	1,007.6 µg/mL	+/- 5.9132 µg/mL +/- 45.8954 µg/mL +/- 66.2667 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)

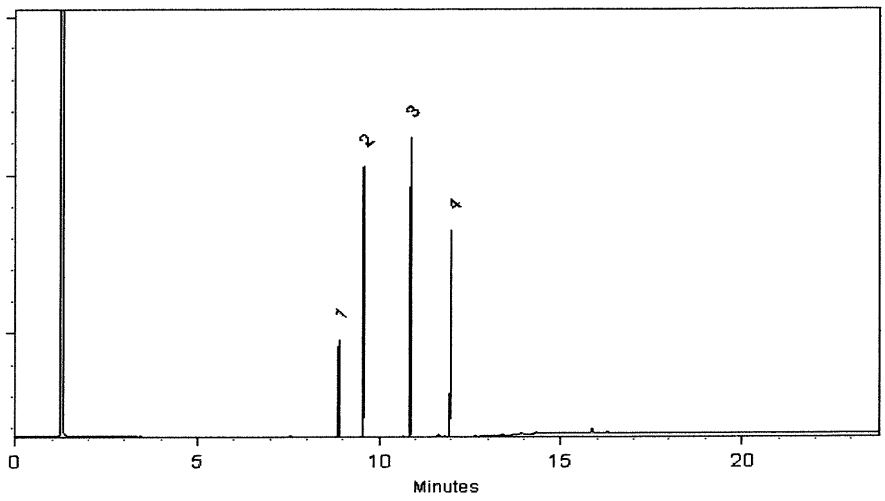
Carrier Gas:
hydrogen-constant pressure 10 psi.

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.

Morgan Craighead - Mix Technician

Date Mixed: 08-Mar-2022 **Balance:** B345965662

Merlina Cowan - Operations Tech I

Date Passed: 10-Mar-2022

Manufactured under Restek's ISO 9001:2015 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.

Received on 08/16/22 by CG
S10595 to S10624

Catalog No. : 31086 **Lot No.:** A0186198

Description : B/N Surrogate Mix (4/89 SOW)

Base Neutral Surrogate 5000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : May 31, 2028 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940A) **Purity** 99%	5,019.7 µg/mL	+/- 29.1848 µg/mL +/- 226.0888 µg/mL +/- 250.8734 µg/mL	Gravimetric Unstressed Stressed
2	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 00021384) **Purity** 99%	5,011.8 µg/mL	+/- 29.1387 µg/mL +/- 225.7322 µg/mL +/- 250.4778 µg/mL	Gravimetric Unstressed Stressed
3	p-Terphenyl-d14 **CAS #** 1718-51-0 (Lot PR-30504) **Purity** 99%	5,015.0 µg/mL	+/- 29.1576 µg/mL +/- 225.8786 µg/mL +/- 250.6402 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:
Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

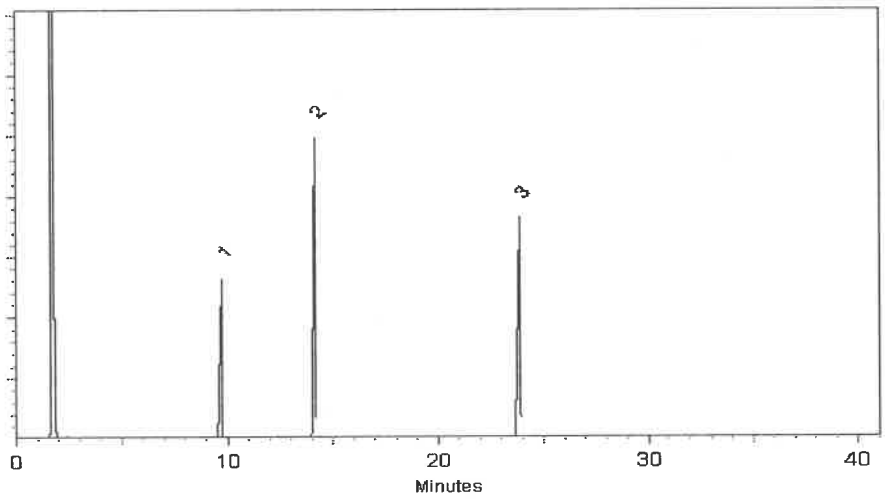
Carrier Gas:
hydrogen-constant pressure 10 psi.

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.

Jess Hoy - Operations Tech I

Date Mixed: 10-Jun-2022 **Balance:** 1128353505

Christie Mills - Operations Tech II - ARM QC

Date Passed: 15-Jun-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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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.

Received on 08/23/22 by CG S10648 to S10677

Catalog No. : 555223 **Lot No.:** A0188685

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 : August 31, 2024 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	3,3'-Dichlorobenzidine **CAS #** 91-94-1 (Lot 220223RSR) **Purity** 99%	1,005.0 µg/mL	+/- 5.9694 +/- 46.1808 +/- 47.3621	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Atrazine **CAS #** 1912-24-9 (Lot PI8FG) **Purity** 99%	1,001.0 µg/mL	+/- 5.9456 +/- 45.9970 +/- 47.1736	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Benzidine **CAS #** 92-87-5 (Lot 220511RSR) **Purity** 99%	1,004.0 µg/mL	+/- 5.9635 +/- 46.1348 +/- 47.3150	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	epsilon-Caprolactam **CAS #** 105-60-2 (Lot I16X016) **Purity** 99%	1,001.0 µg/mL	+/- 5.9456 +/- 45.9970 +/- 47.1736	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Cathleen Soltis

Cathleen Soltis - Mix Technician

Date Mixed: 17-Aug-2022 **Balance:** 1128353505

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

PHARMCO
by Greenfield Global

CERTIFICATE OF ANALYSIS

Product Name	Sodium Hydroxide
Grade	Reagent ACS Grade
Catalog #	289000ACS
Item #	101007
Batch #	220601-B017657
Date of Manufacture:	04/06/2022
Recommended Retest Date:	04/05/2025
Customer PO #	6051379
Packaging Type	Drum Fiber 50 Kg

TEST	MONO-GRAPH	SPECIFICATION	RESULT	UNITS
Assay	ACS	NLT 97.0%	98.7	%
Calcium (Ca)	ACS	0.005%, max	LT 0.005%	N/A
Chloride (Cl)	ACS	0.005% max.	LT 0.005%	N/A
Heavy Metals (as Ag)	ACS	0.002% max	LT 0.002%	N/A
Iron (Fe)	ACS	0.001% max.	LT 0.001%	N/A
Magnesium (Mg)	ACS	0.002% max.	LT 0.002%	N/A
Mercury (Hg)	ACS	0.1 ppm max.	LT 0.1 ppm	N/A
Nickel (Ni)	ACS	0.001%, max	LT 0.001%	N/A
Nitrogen Compounds (as N)	ACS	0.001% max.	LT 0.001%	N/A
Phosphate (PO4)	ACS	0.001% max.	LT 0.001%	N/A
Potassium (K)	ACS	0.02% max.	LT 0.02%	N/A
Sodium Carbonate (Na2CO3)	ACS	1.0% max.	0.6	%
Sulfate (SO4)	ACS	0.003% max.	LT 0.003%	N/A

Certification and Compliance Statements

This product is not derived, nor does it come in contact with, any materials derived from bovine or other animal sources.

E3382

Rec'd by RP on 08/03/22

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.Baker®

Material No.: 9266-A4
Batch No.: 22G1962004
Manufactured Date: 2022-06-22
Expiration Date: 2023-09-21
Revision No.: 0

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 %	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Titrable Acid (µeq/g)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	5 ppm
Water (by KF, coulometric)	≤ 0.02 %	< 0.01 %

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by RF on 9/13/22

E 3397

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

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ALLAN CHEMICAL CORPORATION
235 MARGARET KING AVENUE
RINGWOOD, NEW JERSEY, 07456
(973) 962-6016 • INFO@ALLANCHEM.COM
WWW.ALLANCHEM.COM

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MÉXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	**SODIUM SULFATE CRYSTALS ANHYDROUS**		
QUALITY :	**ACS (CODE RMB3375)**	**FORMULA :**	**Na_2SO_4**
SPECIFICATION NUMBER :	**6399**	**RELEASE DATE:**	**OCT/28/2021**
LOT NUMBER :	**139404**		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na_2SO_4)	Min. 99.0%	99.8 %
pH of a 5% solution at 25ºC	5.2 - 9.2	6.0
Insoluble matter	Max. 0.01%	0.005 %
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%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
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%	0.2 %
Retained on US Standard No. 60 sieve	Min. 94%	97.6 %
Through US Standard No. 60 sieve	Max. 5%	2.1 %
Through US Standard No. 100 sieve	Max. 10%	0.2 %

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

RE-02-01, Ed. 3

E 3412

Recd. by RP on 10/13/22

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™ | J.T.Baker®

Material No.: 9254-03
Batch No.: 22E1562001
Manufactured Date: 2022-05-03
Expiration Date: 2025-05-02
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected for water)	≥ 99.4 %	99.8 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	< 1.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (µeq/g)	≤ 0.3	0.1
Titrable Base (µeq/g)	≤ 0.6	< 0.1
Water (H_2O)	≤ 0.5 %	0.1 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
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: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by RP on 11/3/22

E3425

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

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™ | J.T.Baker®

Material No.: 9254-03
Batch No.: 22E1562001
Manufactured Date: 2022-05-03
Expiration Date: 2025-05-02
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected for water)	≥ 99.4 %	99.8 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	< 1.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (µeq/g)	≤ 0.3	0.1
Titrable Base (µeq/g)	≤ 0.6	< 0.1
Water (H_2O)	≤ 0.5 %	0.1 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
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: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by RP on 11/16/22

E 3430

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

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.Baker®

Material No.: 9266-A4
Batch No.: 22I2962012
Manufactured Date: 2022-09-10
Expiration Date: 2023-12-10
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	2
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 %	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	< 0.1 ppm
Titrable Acid (µeq/g)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	≤ 0.02 %	0.01 %

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3432

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

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.Baker®

Material No.: 9266-A4
Batch No.: 22J1962006
Manufactured Date: 2022-09-23
Expiration Date: 2023-12-23
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	3
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	6
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	≥ 99.8 %	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Titrable Acid (µeq/g)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	≤ 0.02 %	< 0.01 %

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3446

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

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

M5037-38-39-40
ND

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 0000250349
Manufactured Date: 2019/12/17
Retest Date: 2024/12/15
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS - Assay (H_2SO_4)	95.0 - 98.0 %	96.5
Appearance	Passes Test	PT
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	1
ACS - Substances Reducing Permanganate (as SO_2)	<= 2 ppm	< 2
Ammonium (NH_4)	<= 1 ppm	< 1
Chloride (Cl)	<= 0.1 ppm	< 0.1
Nitrate (NO_3)	<= 0.2 ppm	< 0.1
Phosphate (PO_4)	<= 0.5 ppm	< 0.1
Trace Impurities - Aluminum (Al)	<= 30.0 ppb	0.2
Arsenic and Antimony (as As)	<= 4 ppb	< 2
Trace Impurities - Barium (Ba)	<= 10.0 ppb	< 1.0
Trace Impurities - Beryllium (Be)	<= 10.0 ppb	< 1.0
Trace Impurities - Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities - Boron (B)	<= 10.0 ppb	< 5.0
Trace Impurities - Cadmium (Cd)	<= 2.0 ppb	< 0.3
Trace Impurities - Calcium (Ca)	<= 50.0 ppb	2.9
Trace Impurities - Chromium (Cr)	<= 6.0 ppb	< 0.4
Trace Impurities - Cobalt (Co)	<= 0.5 ppb	< 0.3
Trace Impurities - Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities - Gallium (Ga)	<= 10.0 ppb	< 1.0
Trace Impurities - Germanium (Ge)	<= 10.0 ppb	< 10.0
Trace Impurities - Gold (Au)	<= 10.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 500 ppb	< 100

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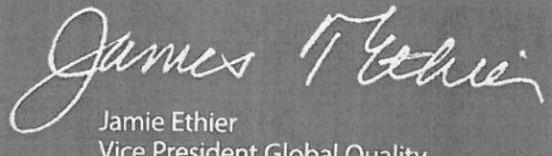
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Material No.: 9673-33
Batch No.: 0000250349

Test	Specification	Result
Trace Impurities - Iron (Fe)	<= 50.0 ppb	4.1
Trace Impurities - Lead (Pb)	<= 0.5 ppb	< 0.5
Trace Impurities - Lithium (Li)	<= 10.0 ppb	< 1.0
Trace Impurities - Magnesium (Mg)	<= 7.0 ppb	0.4
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	< 0.1
Trace Impurities - Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities - Nickel (Ni)	<= 2.0 ppb	< 0.3
Trace Impurities - Niobium (Nb)	<= 10.0 ppb	< 1.0
Trace Impurities - Potassium (K)	<= 500.0 ppb	< 2.0
Trace Impurities - Selenium (Se)	<= 50.0 ppb	22.9
Trace Impurities - Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities - Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities - Sodium (Na)	<= 500.0 ppb	2.7
Trace Impurities - Strontium (Sr)	<= 5.0 ppb	< 0.2
Trace Impurities - Tantalum (Ta)	<= 10.0 ppb	< 5.0
Trace Impurities - Thallium (Tl)	<= 20.0 ppb	< 5.0
Trace Impurities - Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities - Titanium (Ti)	<= 10.0 ppb	< 1.0
Trace Impurities - Vanadium (V)	<= 10.0 ppb	< 1.0
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	0.3
Trace Impurities - Zirconium (Zr)	<= 10.0 ppb	< 1.0

For Laboratory, Research or Manufacturing Use

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Ethier
Vice President Global Quality

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CHEMTECH

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.
QUOTE NO. N6070
COC Number 2035954

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Jacobs
ADDRESS: 10 10th Street Suite 1400
CITY Atlanta STATE: GA ZIP: 30309
ATTENTION: Melissa Warren
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Princeton STC
PROJECT NO.: D3662225 LOCATION: Princeton Junction, NJ
PROJECT MANAGER: Chris English
e-mail: Chris.English@Jacobs.com
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: Chris English PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) Rush! DAYS*
HARDCOPY (DATA PACKAGE): 24Hr VOC DAYS*
EDD: 48 Hr 1,4 DXN DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☐ Level 2 (Results + QC)
- ☐ Level 3 (Results + QC + Raw Data)
- ☐ Level 4 (QC + Full Raw Data)
- ☐ NJ Reduced ☐ US EPA CLP
- ☐ NYS ASP A ☐ NYS ASP B
- ☐ Other
- ☐ EDD FORMAT

ANALYSIS

Side Specific VOCs
1,4 DXN

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1 (A)	2 (E)	3	4	5	6	7	8	9	COMMENTS
1.	GW-BR-04-226-246-121422	GW		X	12-14-22	1030	3	X	X								Rush!
2.	TB-01-121422	DI		X	12-14-22	1035	2	X									
3.	GWBR-01-160-180-121422	GW		X	12-14-22	800	3	X	X								Rush!
4.	GWBR-02-160-180-121422	GW		X	12-14-22	900	3	X	X								Rush!
5.	GWBR-03-128-148-121422	GW		X	12-14-22	1000	3	X	X								Rush!
6.																	
7.																	
8.																	
9.																	
10.																	

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

	DATE/TIME	RECEIVED BY
RELINQUISHED BY SAMPLER: 1.	12-14-22/1600	1. 1600 12-14-22
RELINQUISHED BY SAMPLER: 2.	DATE/TIME:	RECEIVED BY: 2.
RELINQUISHED BY SAMPLER: 3.	DATE/TIME: 1730 12-14-22	RECEIVED BY: 3. SB

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 4.2 °C
Comments: See work order for Side Specific VOC List

Page 1 of 1

CLIENT: ☐ Hand Delivered ☐ Other
CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete ☑ YES ☐ NO

2/6/20

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

From: Ynfante, John <John.Ynfante@jacobs.com>
Sent: Thursday, December 22, 2022 10:14 PM
To: Jordan Hedvat; Samantha@chemtech.net
Cc: CHEMTECH-Data@chemtech.net
Subject: RE: [EXTERNAL] Summary Report Details For Project Former Schlumberger Site Princeton NJ-N6070.

Jordan and Samantha,

It was brought to my attention that this report N6070 has some incorrect sample IDs. The first sample GW-BR-04-226-245-121422 is correct, but the other 3 samples need to be corrected to match the chain as listed below:
GW-BR-01-160-180-121422 should be “OWBR-01-160-180-121422”
GW-BR-02-160-180-121422 should be “OWBR-02-160-180-121422”
GW-BR-03-128-148-121422 should be “OWBR-03-128-148-121422”

Please revise and reissue the data. Thanks!

- John Y.

From: CHEMTECH-Data@chemtech.net <CHEMTECH-Data@chemtech.net>
Sent: Monday, December 19, 2022 5:35 PM
To: Murphy, Mary <Mary.Murphy@jacobs.com>; Warren, Melissa <Melissa.Warren@jacobs.com>; Scott, Doug <Doug.Scott@jacobs.com>; Bingeman, Ian <Ian.Bingeman@jacobs.com>; Jones, Philip <Philip.Jones1@jacobs.com>; Garvey, Bethany <Bethany.Garvey@jacobs.com>; khummler@chemtech.net; Ynfante, John <John.Ynfante@jacobs.com>
Subject: [EXTERNAL] Summary Report Details For Project Former Schlumberger Site Princeton NJ-N6070.

To Doug Scott;

Please see the attached Summary Report for the following project, or download the file using your login credentials from the link below.

Order ID	: N6070
Project ID	: Former Schlumberger Site Princeton NJ
Download File	: **https://chemtech.net/secureLogin.aspx**
Order Date	: 12/14/2022 4:13:00 PM

CHEMTECH’s Project Manager : Samantha Beazley , Samantha@chemtech.net , Ext :

CHEMTECH's Sales Executive : Kurt Hummler , khummler@chemtech.net , 908-728-3143 Ext :3143

Thank you for the opportunity to provide you with our services. For any questions please feel free to contact your project manager.

Click Here for our short online customer Survey **//chemtech.net/ClientSurvey.aspx**.

Thank you,

CHEMTECH

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0649
DOD ELAP (L-A-B)	L2219
Maine	2022022
Maryland	296
New Hampshire	255422
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	P330-21-00137
Texas	T104704488-22-15

CHEMTECH

LOGIN REPORT/SAMPLE TRANSFER

Order ID : N6070 JACO05
Client Name : JACOBS Engineering Grou
Client Contact : Doug Scott
Invoice Name : JACOBS Engineering Grou
Invoice Contact : Doug Scott

Order Date : 12/14/2022 4:13:00 PM
Project Name : Former Schlumberger Site I
Receive DateTime : 12/14/2022 ~~12:00:00 AM~~ 5:30pm
Purchase Order : SB 12-19

Project Mgr :
Report Type : Level 4
EDD Type : CH2MHILL
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
N6070-01	GW-BR-04-226-245-121422	Water	12/14/2022	10:30					
					VOCMS Group3		8260-Low		1 Bus. Day
N6070-02	TB-01-121422	Water	12/14/2022	10:35					
					VOCMS Group3		8260-Low		10 Bus. Days
N6070-03	OWBR ~~GW-BR~~-01-160-180-121422	Water	12/14/2022	08:00					
					VOCMS Group3		8260-Low		1 Bus. Day
N6070-04	OWBR ~~GW-BR~~-02-160-180-121422	Water	12/14/2022	09:00					
					VOCMS Group3		8260-Low		1 Bus. Day
N6070-05	OWBR ~~GW-BR~~-03-128-148-121422	Water	12/14/2022	10:00					
	SB 12/28/2022				VOCMS Group3		8260-Low		1 Bus. Day

Relinguished By :
Date / Time : 12-14-22 1740

Received By :
Date / Time : 12/14/22 1740
Storage Area : VOA Refridgerator Room