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Cover Page

Order ID : P4440

Project ID : CTO WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number	Client Sample Number
P4440-01	BPOW6-11-HYD-20241016
P4440-02	BPOW6-11-TB-20241016

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: 10/28/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Tetra Tech NUS, Inc.
Project Name: CTO WE13
Project Manager : Ernie Wu
Chemtech Project # P4440
Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:
2 Water samples were received on 10/18/2024.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: SVOC-SIMGroup1 and VOCMS Group1. 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 BPOW6-11-HYD-20241016 [2-Methylnaphthalene-d10 - 23%,], BPOW6-11-HYD-20241016RE [2-Methylnaphthalene-d10 - 24%], Failure sample for surrogate was reanalyzed to confirm the failure and both run were reported in Hard Copy.

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 BN034701.D met the requirements except for 2,4,6-Tribromophenol, The failure compound not associated with the client parameters list, therefore no corrective action was taken.

The Tuning criteria met requirements.

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E. Additional Comments:
The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is)."
The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.
The not QT review data is reported in the Miscellaneous.
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

ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

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

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

CHEMTECH PROJECT NUMBER: P4440 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 BN034701.D met the requirements except for 2,4,6-Tribromophenol, The failure compound not associated with the client parameters list, 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 BPOW6-11-HYD-20241016 [2-Methylnaphthalene-d10 - 23%,], BPOW6-11-HYD-20241016RE [2-Methylnaphthalene-d10 - 24%], Failure sample for surrogate was reanalyzed to confirm the failure and both run were reported in Hard Copy.			
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 .			

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

(CONTINUED)

		NA	NO	YES
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 laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is)."

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

The not QT review data is reported in the Miscellaneous.

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 #: **P4440**

	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	✓

QA Review Signature: **SOHIL JODHANI** **Date:** **10/28/2024**

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LAB CHRONICLE

OrderID:	P4440	**OrderDate:**	10/18/2024 10:22:00 AM
Client:	Tetra Tech NUS, Inc.	**Project:**	CTO WE13
Contact:	Ernie Wu	**Location:**	K51,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4440-01	**BPOW6-11-HYD-2024 1016**	**Water**			**10/16/24**			**10/18/24**
			SVOC-SIMGroup1	8270-Modified		10/21/24	10/25/24	
P4440-01RE	**BPOW6-11-HYD-2024 1016RE**	**Water**			**10/16/24**			**10/18/24**
			SVOC-SIMGroup1	8270-Modified		10/21/24	10/25/24	

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Hit Summary Sheet
SW-846

SDG No.: P4440

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :									
				0.000					
			Total Svoc :		**0.00**				
			Total Concentration:		**0.00**				

QC SUMMARY

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Surrogate Summary

SW-846

SDG No.: P4440

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
P4440-01	BPOW6-11-HYD-20241016	2-Methylnaphthalene-d10	0.4	0.091	23	*	30	150
		Fluoranthene-d10	0.4	0.35	86		30	150
		Nitrobenzene-d5	0.4	0.31	78		55	111
		2-Fluorobiphenyl	0.4	0.34	84		53	106
		Terphenyl-d14	0.4	0.38	96		58	132
P4440-01RE	BPOW6-11-HYD-20241016RE	2-Methylnaphthalene-d10	0.4	0.095	24	*	30	150
		Fluoranthene-d10	0.4	0.37	93		30	150
		Nitrobenzene-d5	0.4	0.32	81		55	111
		2-Fluorobiphenyl	0.4	0.33	83		53	106
		Terphenyl-d14	0.4	0.39	98		58	132
PB164282BL	PB164282BL	2-Methylnaphthalene-d10	0.4	0.33	83		30	150
		Fluoranthene-d10	0.4	0.34	86		30	150
		Nitrobenzene-d5	0.4	0.34	85		55	111
		2-Fluorobiphenyl	0.4	0.37	91		53	106
		Terphenyl-d14	0.4	0.39	97		58	132
PB164282BS	PB164282BS	2-Methylnaphthalene-d10	0.4	0.50	125		30	150
		Fluoranthene-d10	0.4	0.34	84		30	150
		Nitrobenzene-d5	0.4	0.34	84		55	111
		2-Fluorobiphenyl	0.4	0.36	90		53	106
		Terphenyl-d14	0.4	0.36	91		58	132
PB164282BSD	PB164282BSD	2-Methylnaphthalene-d10	0.4	0.50	125		30	150
		Fluoranthene-d10	0.4	0.33	83		30	150
		Nitrobenzene-d5	0.4	0.34	84		55	111
		2-Fluorobiphenyl	0.4	0.36	89		53	106
		Terphenyl-d14	0.4	0.37	93		58	132

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4440

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN034706.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB164282BS	1,4-Dioxane	0.4	0.30	ug/L	75				70	130	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4440

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN034711.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB164282BSD	1,4-Dioxane	0.4	0.31	ug/L	78	3			70	130	20

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB164282BL

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4440 SAS No.: P4440 SDG NO.: P4440

Lab File ID: BN034705.D Lab Sample ID: PB164282BL

Instrument ID: BNA_N Date Extracted: 10/21/2024

Matrix: (soil/water) Water Date Analyzed: 10/24/2024

Level: (low/med) LOW Time Analyzed: 23:26

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB164282BS	PB164282BS	BN034706.D	10/25/2024
PB164282BSD	PB164282BSD	BN034711.D	10/25/2024
BPOW6-11-HYD-20241016	P4440-01	BN034717.D	10/25/2024

COMMENTS:

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: P4440 SDG NO.: P4440

Lab File ID: BN034683.D DFTPP Injection Date: 10/24/2024

Instrument ID: BNA_N DFTPP Injection Time: 07:59

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	66.1
68	Less than 2.0% of mass 69	0.9 (1.7) 1
69	Mass 69 relative abundance	54.4
70	Less than 2.0% of mass 69	0.3 (0.5) 1
127	10.0 - 80.0% of mass 198	60.3
197	Less than 2.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 60.0% of mass 198	20.6
365	Greater than 1% of mass 198	2.5
441	Present, but less than mass 443	7.8
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	9.1 (18.6) 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	BN034684.D	10/24/2024	09:11
SSTDICC0.2	SSTDICC0.2	BN034685.D	10/24/2024	09:47
SSTDICCC0.4	SSTDICCC0.4	BN034686.D	10/24/2024	10:23
SSTDICC0.8	SSTDICC0.8	BN034687.D	10/24/2024	10:59
SSTDICC1.6	SSTDICC1.6	BN034688.D	10/24/2024	11:35
SSTDICC3.2	SSTDICC3.2	BN034689.D	10/24/2024	12:11
SSTDICC5.0	SSTDICC5.0	BN034690.D	10/24/2024	12:48
SSTDCCC0.4EC	SSTDCCC0.4	BN034699.D	10/24/2024	19:06

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: P4440 SDG NO.: P4440

Lab File ID: BN034700.D DFTPP Injection Date: 10/24/2024

Instrument ID: BNA_N DFTPP Injection Time: 20:22

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	73.1
68	Less than 2.0% of mass 69	0.9 (1.6) 1
69	Mass 69 relative abundance	59.5
70	Less than 2.0% of mass 69	0.3 (0.5) 1
127	10.0 - 80.0% of mass 198	65.2
197	Less than 2.0% of mass 198	0.5
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 60.0% of mass 198	20.7
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	7.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	9.2 (21.6) 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	BN034701.D	10/24/2024	21:01
PB164282BL	PB164282BL	BN034705.D	10/24/2024	23:26
PB164282BS	PB164282BS	BN034706.D	10/25/2024	00:02
PB164282BSD	PB164282BSD	BN034711.D	10/25/2024	03:02
BPOW6-11-HYD-20241016	P4440-01	BN034717.D	10/25/2024	06:39
SSTDCCC0.4EC	SSTDCCC0.4	BN034719.D	10/25/2024	07:51

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: P4440 SDG NO.: P4440

Lab File ID: BN034720.D DFTPP Injection Date: 10/25/2024

Instrument ID: BNA_N DFTPP Injection Time: 09:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	66.6
68	Less than 2.0% of mass 69	0.9 (1.6) 1
69	Mass 69 relative abundance	56.4
70	Less than 2.0% of mass 69	0.2 (0.4) 1
127	10.0 - 80.0% of mass 198	61.5
197	Less than 2.0% of mass 198	0.3
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	21
365	Greater than 1% of mass 198	2.8
441	Present, but less than mass 443	7.4
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	9.5 (19.4) 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	BN034721.D	10/25/2024	09:46
BPOW6-11-HYD-20241016RE	P4440-01RE	BN034724.D	10/25/2024	11:34
SSTDCCC0.4EC	SSTDCCC0.4	BN034732.D	10/25/2024	20:41

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P4440 SAS No.: P4440 SDG NO.: P4440

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 10/24/2024

Lab File ID: BN034701.D Time Analyzed: 21:01

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	5885	7.712	17350	10.48	8078	14.33
	UPPER LIMIT	11770	8.212	34700	10.979	16156	14.825
	LOWER LIMIT	2942.5	7.212	8675	9.979	4039	13.825
	EPA SAMPLE NO.						
01	BPOW6-11-HYD-20241016	5535	7.71	15645	10.48	6994	14.32
02	PB164282BL	6454	7.71	17746	10.48	7655	14.33
03	PB164282BS	6277	7.71	17435	10.48	7557	14.32
04	PB164282BSD	5974	7.71	16564	10.48	7143	14.33

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.: P4440 SAS No.: P4440 SDG NO.: P4440

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 10/24/2024

Lab File ID: BN034701.D Time Analyzed: 21:01

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	14577	17.064	8841	21.248	8336	23.464
	UPPER LIMIT	29154	17.564	17682	21.748	16672	23.964
	LOWER LIMIT	7288.5	16.564	4420.5	20.748	4168	22.964
	EPA SAMPLE NO.						
01	BPOW6-11-HYD-20241016	12994	17.06	7954	21.24	7258	23.46
02	PB164282BL	13670	17.07	7475	21.24	6736	23.46
03	PB164282BS	13505	17.06	7661	21.24	6455	23.46
04	PB164282BSD	13002	17.06	7027	21.24	5873	23.46

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.

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P4440 SAS No.: P4440 SDG NO.: P4440

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 10/25/2024

Lab File ID: BN034721.D Time Analyzed: 09:46

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	6565	7.705	19566	10.48	9604	14.33
	UPPER LIMIT	13130	8.205	39132	10.979	19208	14.825
	LOWER LIMIT	3282.5	7.205	9783	9.979	4802	13.825
	EPA SAMPLE NO.						
01	BPOW6-11-HYD-20241016RE	6120	7.71	17531	10.48	8276	14.32

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.

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P4440 SAS No.: P4440 SDG NO.: P4440

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 10/25/2024

Lab File ID: BN034721.D Time Analyzed: 09:46

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	17577	17.064	13068	21.248	14018	23.459
	UPPER LIMIT	35154	17.564	26136	21.748	28036	23.959
	LOWER LIMIT	8788.5	16.564	6534	20.748	7009	22.959
	EPA SAMPLE NO.						
01	BPOW6-11-HYD-20241016RE	15513	17.06	11157	21.24	11491	23.46

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.

Alliance
TECHNICAL GROUP

SAMPLE DATA

Raw Data: **BN034717.D**

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	10/16/24
Project:	CTO WE13	Date Received:	10/18/24
Client Sample ID:	BPOW6-11-HYD-20241016	SDG No.:	P4440
Lab Sample ID:	P4440-01	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
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 :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034717.D	1	10/21/24 08:45	10/25/24 06:39	PB164282

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.091	*	30 - 150		23%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.35		30 - 150		86%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		55 - 111		78%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		84%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.38		58 - 132		96%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	5540	7.712				
1146-65-2	Naphthalene-d8	15600	10.479				
15067-26-2	Acenaphthene-d10	6990	14.318				
1517-22-2	Phenanthrene-d10	13000	17.057				
1719-03-5	Chrysene-d12	7950	21.241				
1520-96-3	Perylene-d12	7260	23.458				

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

Sample Results: **BN034717.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034717.D
Acq On : 25 Oct 2024 06:39
Operator : RC/JU
Sample : P4440-01
Misc :
ALS Vial : 34 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016

Quant Time: Oct 25 07:09:43 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration

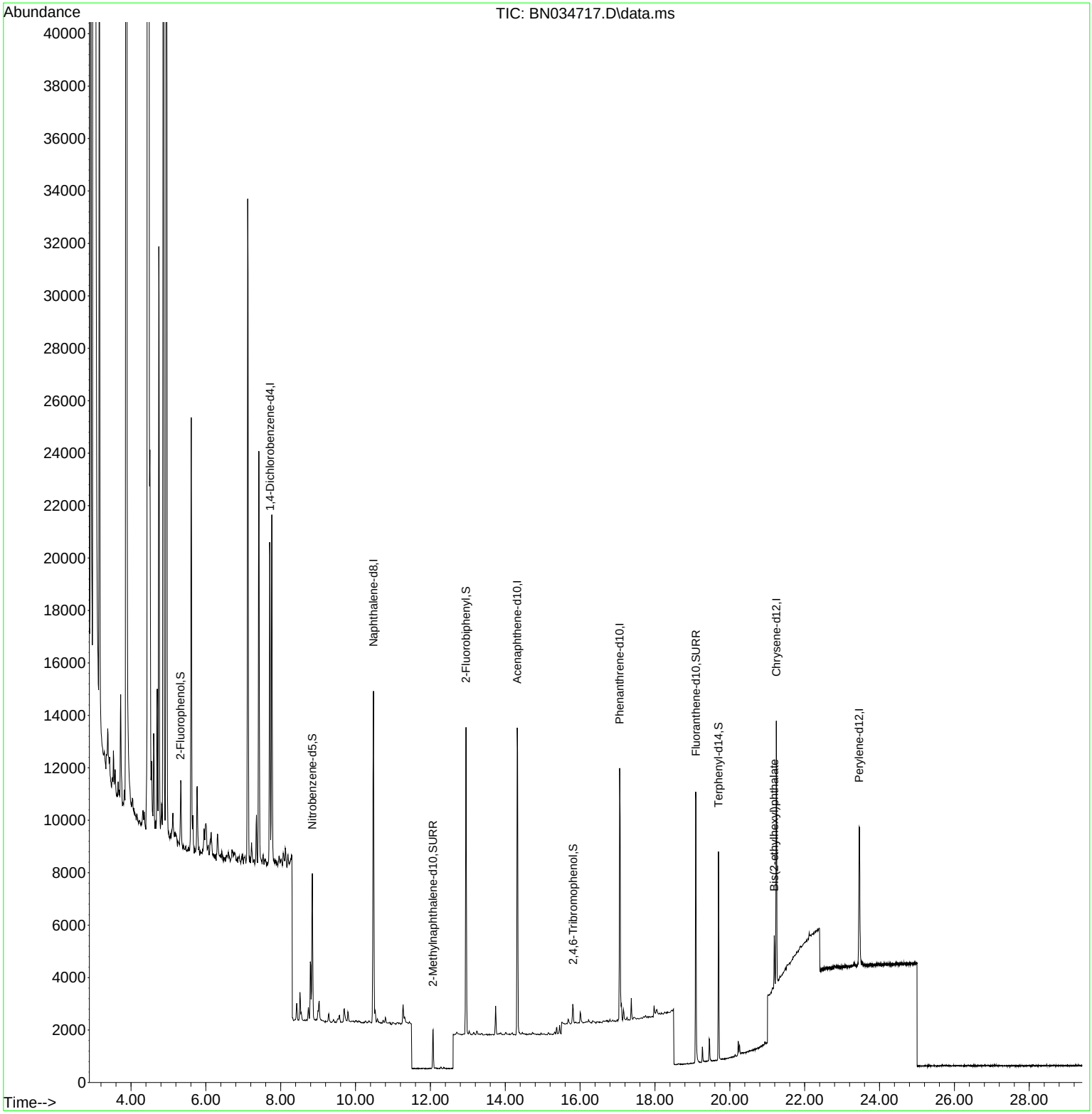
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.712	152	5535	0.400	ng	0.00
7) Naphthalene-d8	10.479	136	15645	0.400	ng	0.00
13) Acenaphthene-d10	14.318	164	6994	0.400	ng	-0.01
19) Phenanthrene-d10	17.057	188	12994	0.400	ng	#-0.01
29) Chrysene-d12	21.241	240	7954	0.400	ng	# 0.00
35) Perylene-d12	23.458	264	7258	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.322	112	400	0.024	ng	0.00
5) Phenol-d6	6.882	99	94	0.004	ng	0.00
8) Nitrobenzene-d5	8.845	82	4108	0.313	ng	0.00
11) 2-Methylnaphthalene-d10	12.067	152	1956	0.091	ng	0.00
14) 2,4,6-Tribromophenol	15.815	330	370	0.171	ng	0.00
15) 2-Fluorobiphenyl	12.950	172	9314	0.335	ng	0.00
27) Fluoranthene-d10	19.094	212	10124	0.346	ng	0.00
31) Terphenyl-d14	19.698	244	6233	0.383	ng	0.00
Target Compounds						Qvalue
34) Bis(2-ethylhexyl)phtha...	21.187	149	1931	0.112	ng	# 99

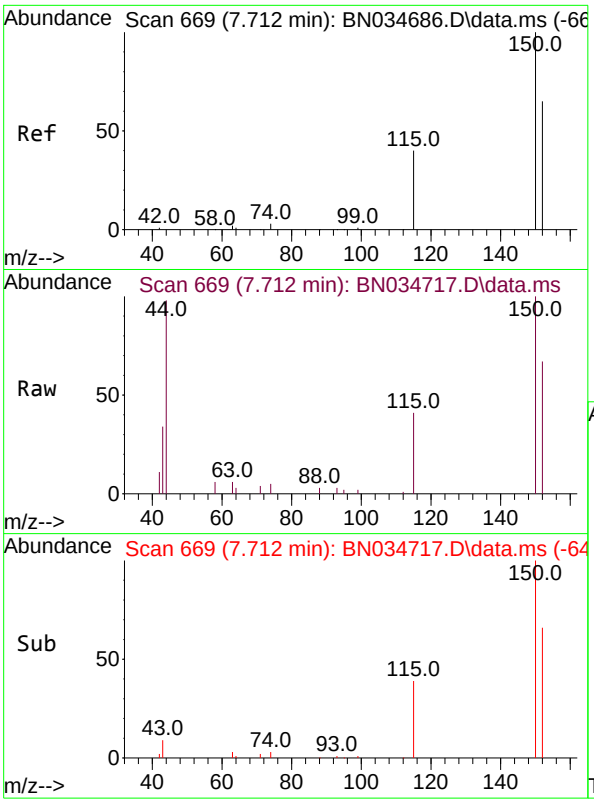
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034717.D
Acq On : 25 Oct 2024 06:39
Operator : RC/JU
Sample : P4440-01
Misc :
ALS Vial : 34 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016

Quant Time: Oct 25 07:09:43 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration



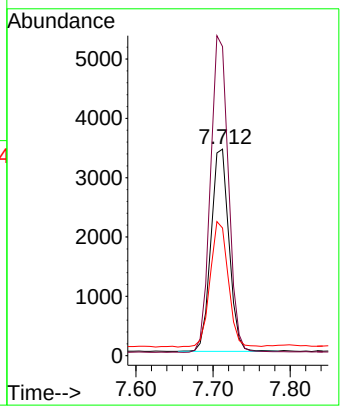


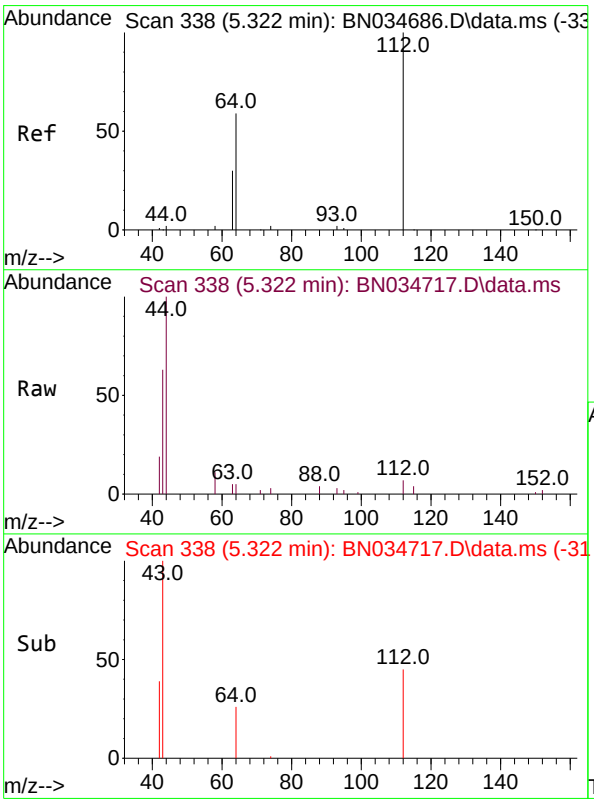
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN034717.D
Acq: 25 Oct 2024 06:39

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016

Tgt Ion:152 Resp: 5535

Ion	Ratio	Lower	Upper
152	100		
150	149.7	122.7	184.1
115	61.8	51.0	76.6

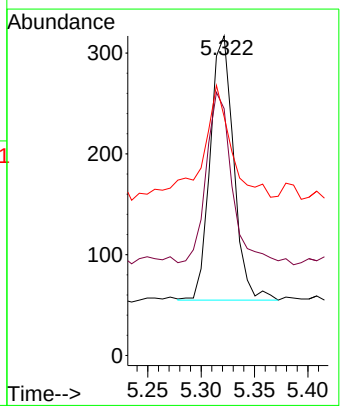


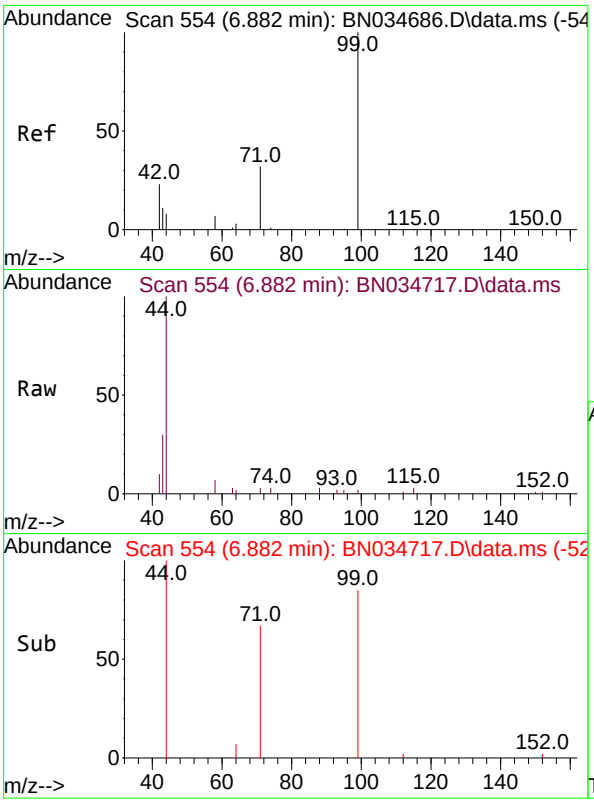


#4
2-Fluorophenol
Concen: 0.024 ng
RT: 5.322 min Scan# 338
Delta R.T. 0.000 min
Lab File: BN034717.D
Acq: 25 Oct 2024 06:39

Tgt Ion:112 Resp: 400

Ion	Ratio	Lower	Upper
112	100		
64	73.3	53.0	79.6
63	50.2	27.6	41.4#



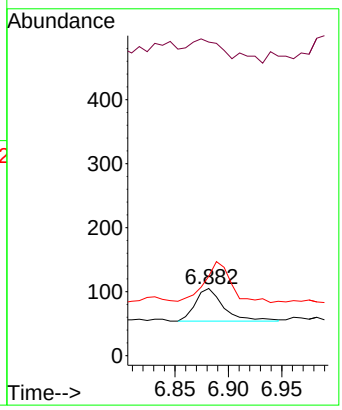


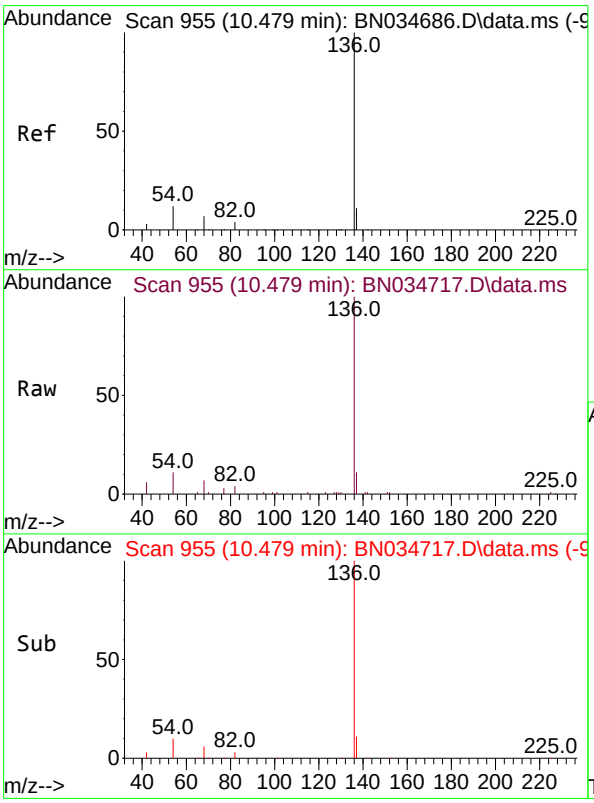
#5
Phenol-d6
Concen: 0.004 ng
RT: 6.882 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN034717.D
Acq: 25 Oct 2024 06:39

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016

Tgt Ion: 99 Resp: 94

Ion	Ratio	Lower	Upper
99	100		
42	55.3	21.8	32.8#
71	111.7	26.6	40.0#

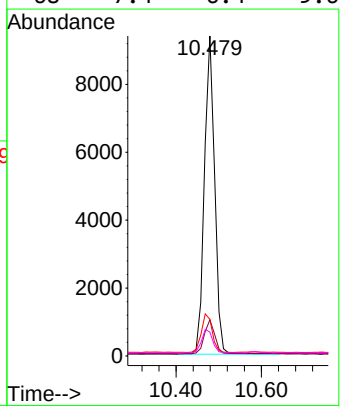


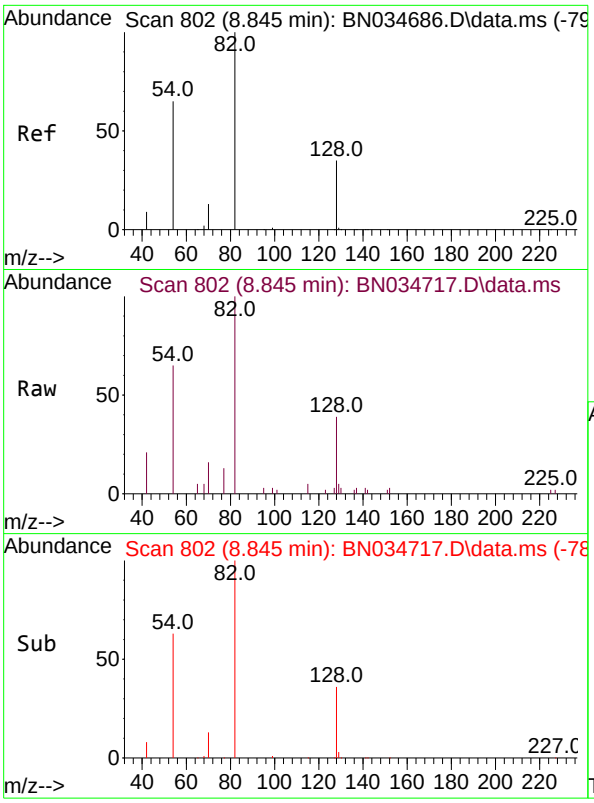


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 955
Delta R.T. 0.000 min
Lab File: BN034717.D
Acq: 25 Oct 2024 06:39

Tgt Ion:136 Resp: 15645

Ion	Ratio	Lower	Upper
136	100		
137	11.3	9.1	13.7
54	11.4	9.8	14.8
68	7.4	6.4	9.6



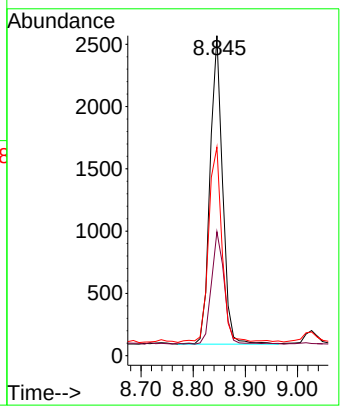


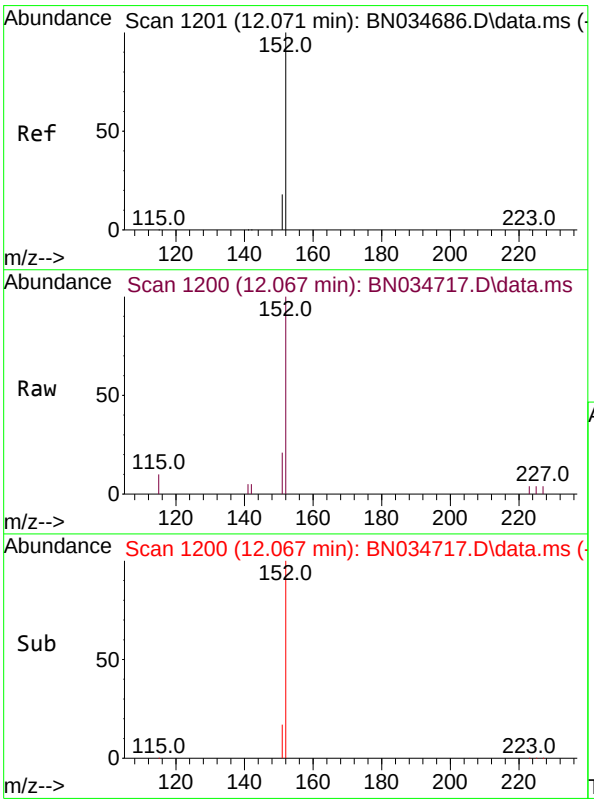
#8
Nitrobenzene-d5
Concen: 0.313 ng
RT: 8.845 min Scan# 8
Delta R.T. 0.000 min
Lab File: BN034717.D
Acq: 25 Oct 2024 06:39

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016

Tgt Ion: 82 Resp: 4108

Ion	Ratio	Lower	Upper
82	100		
128	38.7	29.7	44.5
54	65.2	53.0	79.6

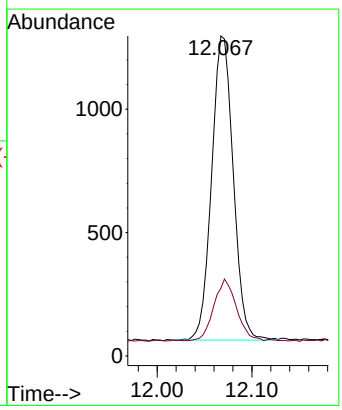


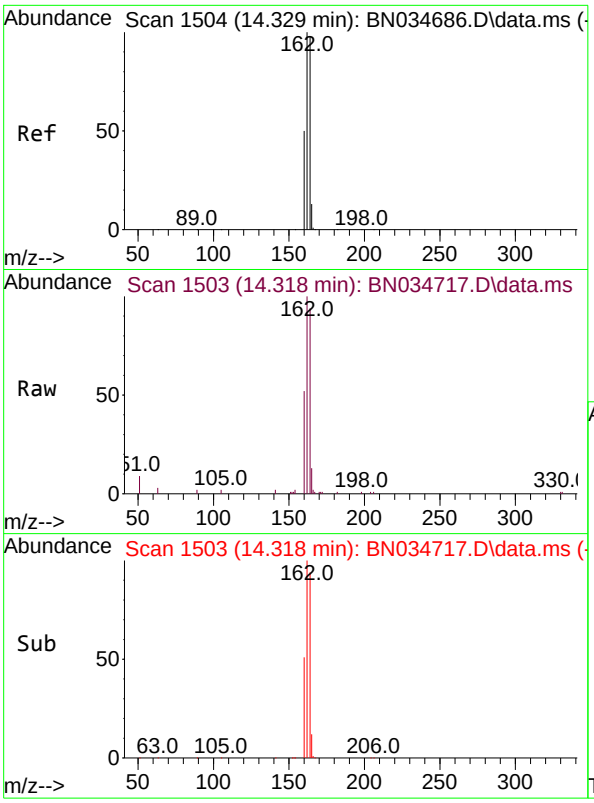


#11
2-Methylnaphthalene-d10
Concen: 0.091 ng
RT: 12.067 min Scan# 1200
Delta R.T. -0.004 min
Lab File: BN034717.D
Acq: 25 Oct 2024 06:39

Tgt Ion:152 Resp: 1956

Ion	Ratio	Lower	Upper
152	100		
151	21.0	16.7	25.1



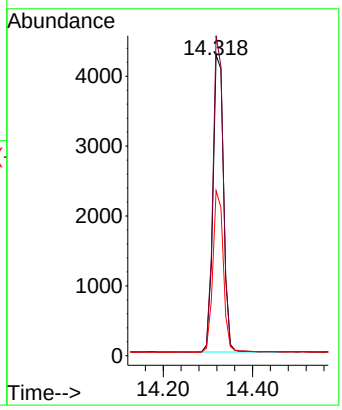


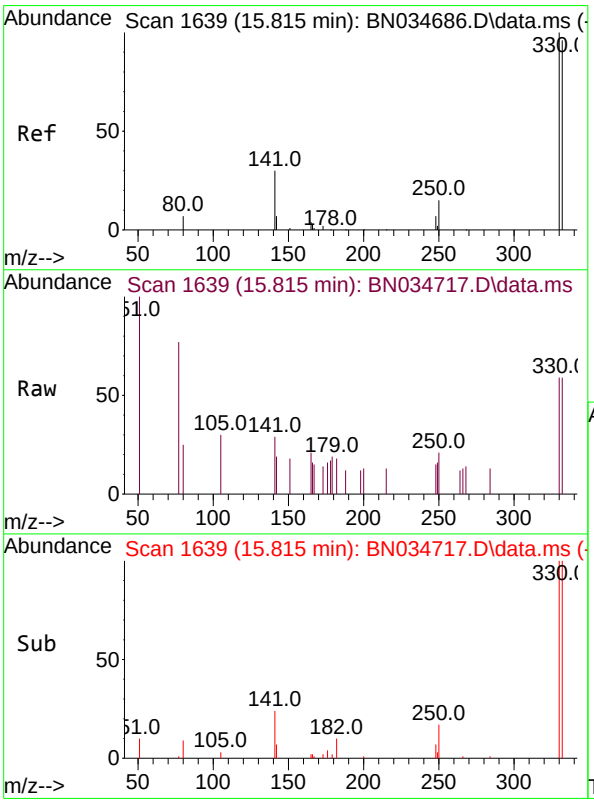
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.318 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN034717.D
Acq: 25 Oct 2024 06:39

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016

Tgt Ion:164 Resp: 6994

Ion	Ratio	Lower	Upper
164	100		
162	106.5	81.4	122.0
160	54.9	40.6	61.0

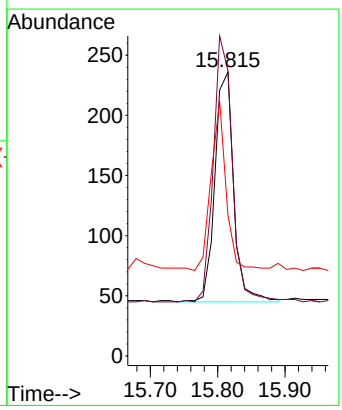


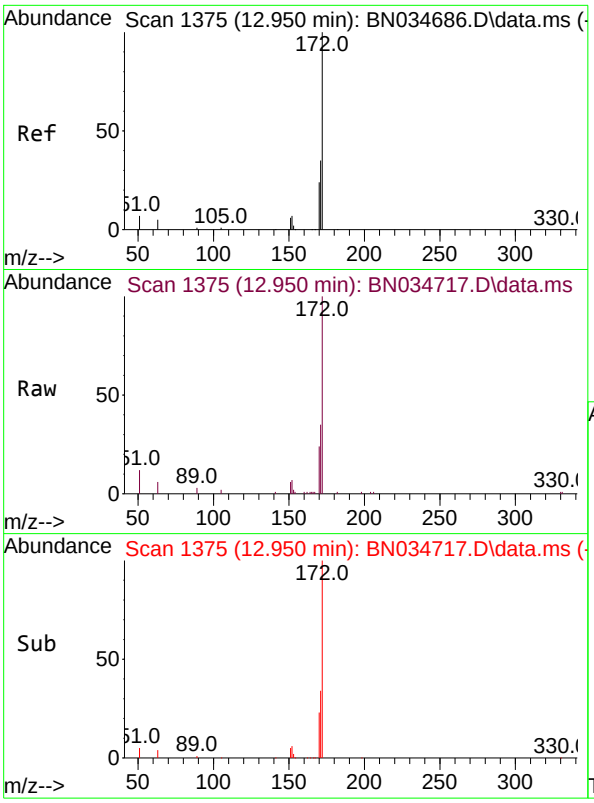


#14
2,4,6-Tribromophenol
Concen: 0.171 ng
RT: 15.815 min Scan# 1639
Delta R.T. 0.000 min
Lab File: BN034717.D
Acq: 25 Oct 2024 06:39

Tgt Ion:330 Resp: 370

Ion	Ratio	Lower	Upper
330	100		
332	117.6	76.6	115.0#
141	59.2	54.6	81.8



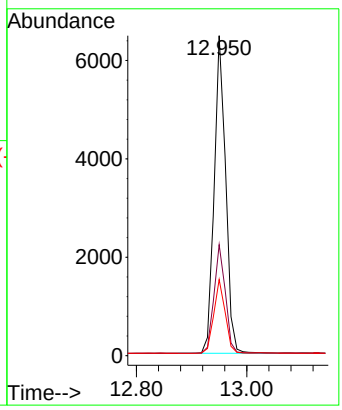


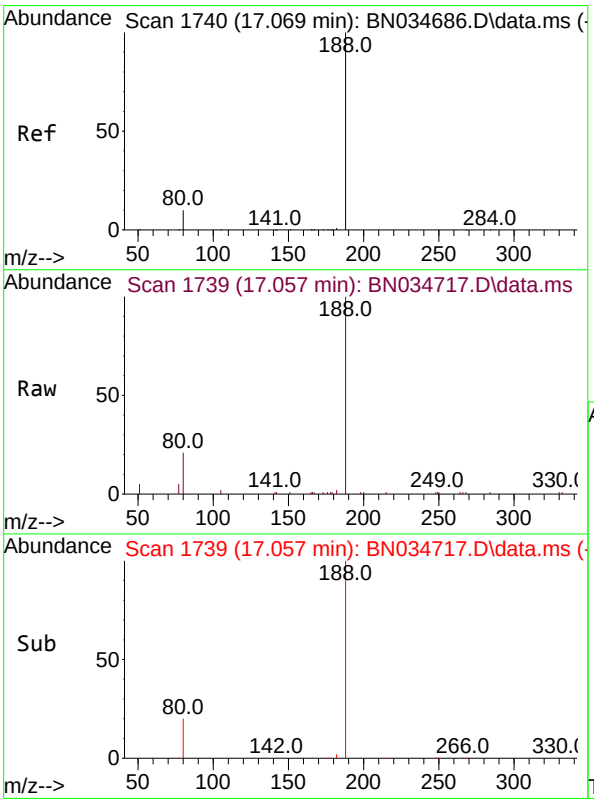
#15
2-Fluorobiphenyl
Concen: 0.335 ng
RT: 12.950 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034717.D
Acq: 25 Oct 2024 06:39

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016

Tgt Ion:172 Resp: 9314

Ion	Ratio	Lower	Upper
172	100		
171	34.7	28.3	42.5
170	23.8	19.8	29.6

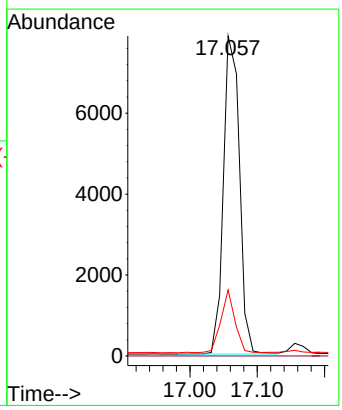


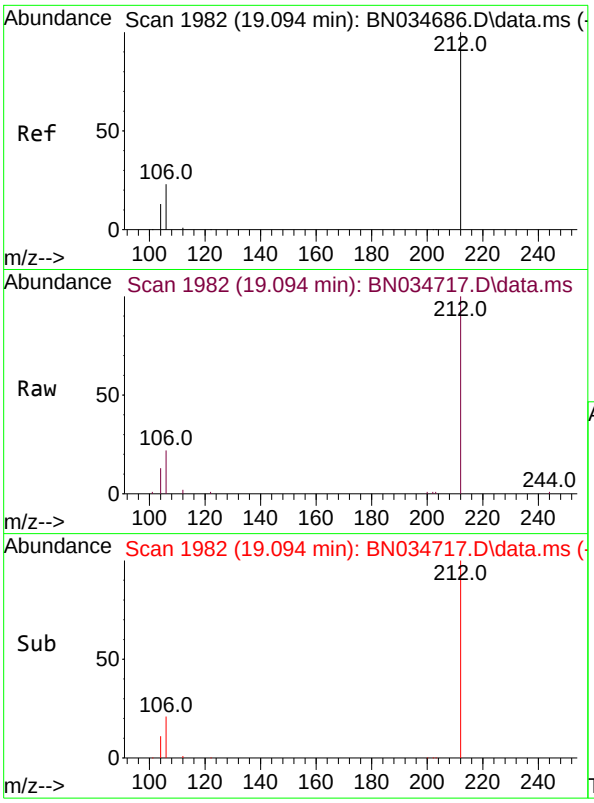


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.057 min Scan# 1739
Delta R.T. -0.012 min
Lab File: BN034717.D
Acq: 25 Oct 2024 06:39

Tgt Ion:188 Resp: 12994

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	20.6	8.9	13.3#



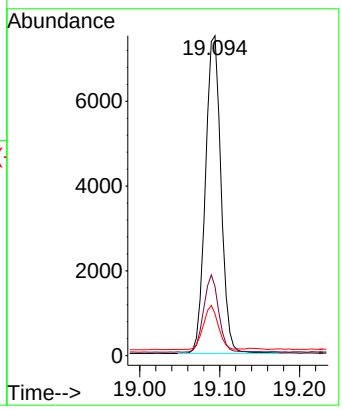


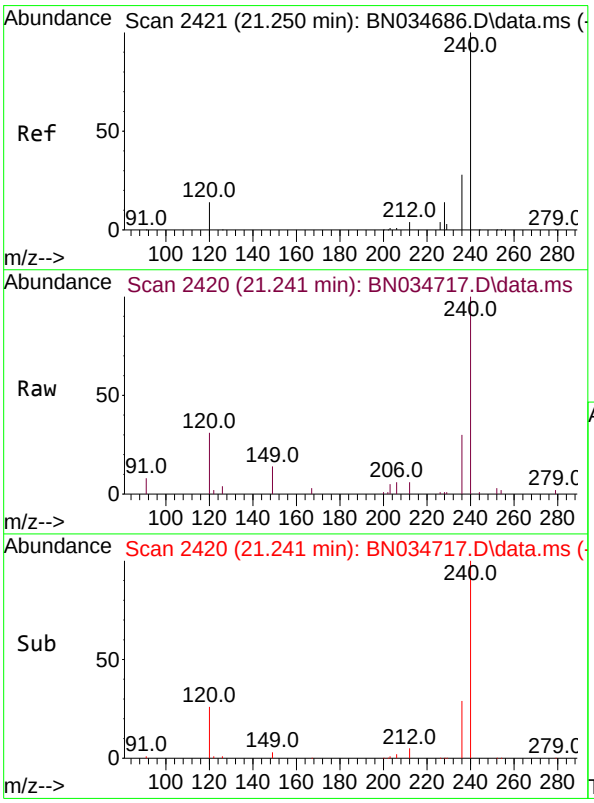
#27
Fluoranthene-d10
Concen: 0.346 ng
RT: 19.094 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034717.D
Acq: 25 Oct 2024 06:39

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016

Tgt Ion:212 Resp: 10124

Ion	Ratio	Lower	Upper
212	100		
106	23.5	17.8	26.8
104	13.3	10.2	15.4

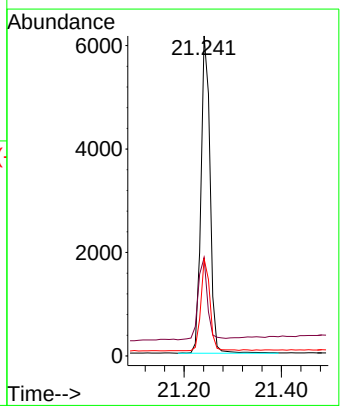


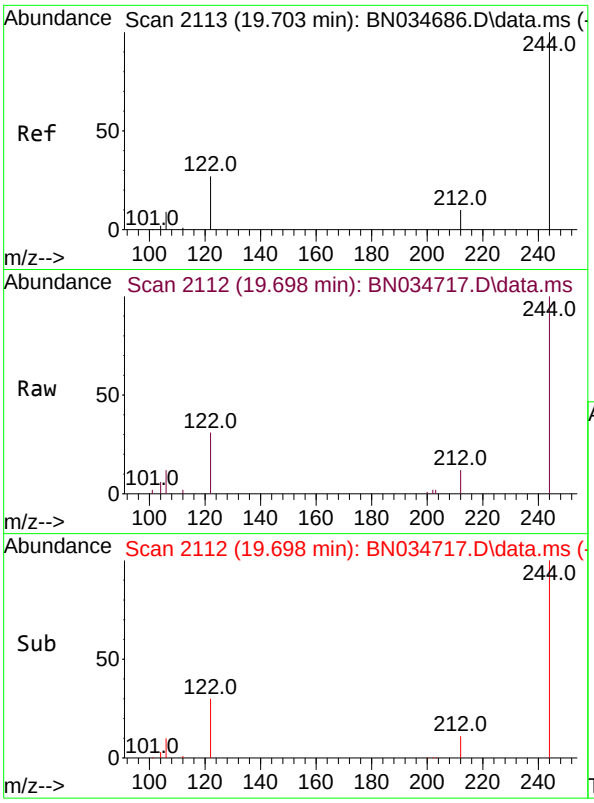


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.241 min Scan# 2420
Delta R.T. -0.009 min
Lab File: BN034717.D
Acq: 25 Oct 2024 06:39

Tgt Ion:240 Resp: 7954

Ion	Ratio	Lower	Upper
240	100		
120	30.7	14.2	21.2#
236	30.4	23.1	34.7



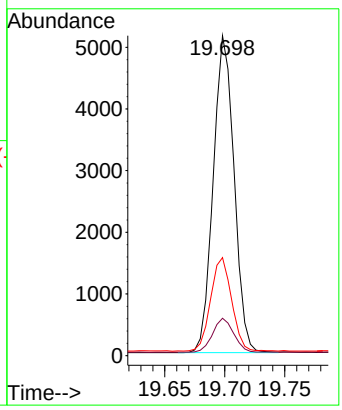


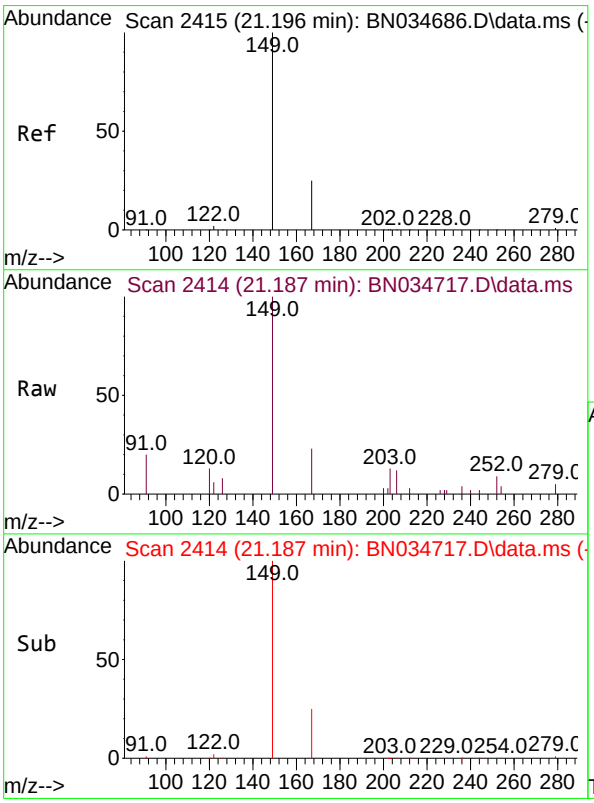
#31
Terphenyl-d14
Concen: 0.383 ng
RT: 19.698 min Scan# 21
Delta R.T. -0.005 min
Lab File: BN034717.D
Acq: 25 Oct 2024 06:39

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016

Tgt Ion:244 Resp: 6233

Ion	Ratio	Lower	Upper
244	100		
212	11.7	8.6	13.0
122	30.7	22.3	33.5

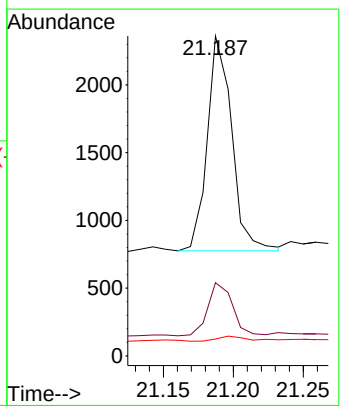


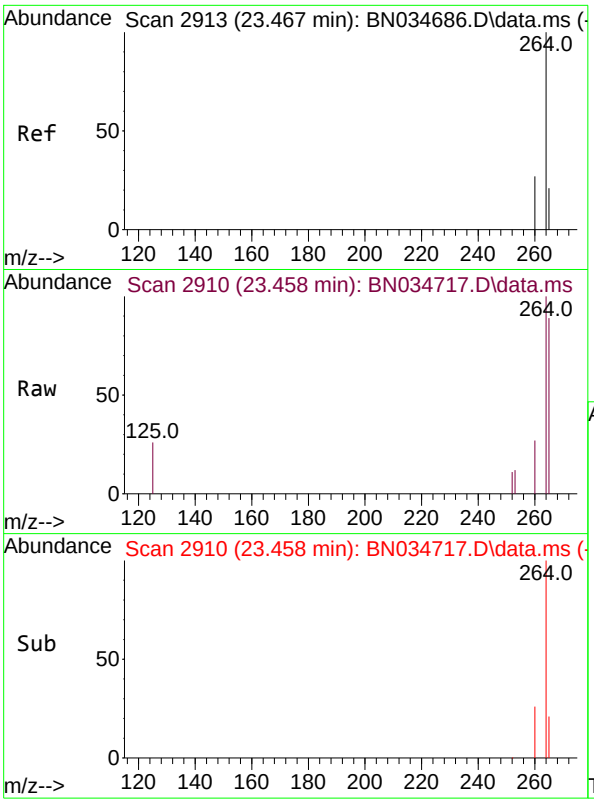


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.112 ng
RT: 21.187 min Scan# 2414
Delta R.T. -0.009 min
Lab File: BN034717.D
Acq: 25 Oct 2024 06:39

Tgt Ion:149 Resp: 1931

Ion	Ratio	Lower	Upper
149	100		
167	24.9	19.7	29.5
279	3.3	1.8	2.6#



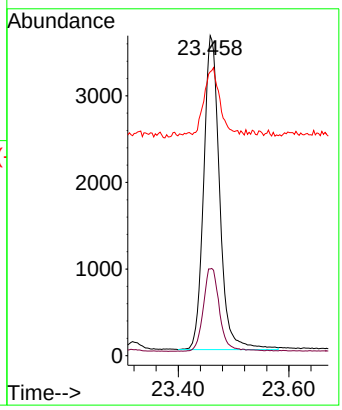


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.458 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN034717.D
Acq: 25 Oct 2024 06:39

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016

Tgt Ion:264 Resp: 7258

Ion	Ratio	Lower	Upper
264	100		
260	27.1	21.9	32.9
265	88.7	60.6	91.0



Raw Data: **BN034724.D**

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	10/16/24
Project:	CTO WE13	Date Received:	10/18/24
Client Sample ID:	BPOW6-11-HYD-20241016RE	SDG No.:	P4440
Lab Sample ID:	P4440-01RE	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
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 :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034724.D	1	10/21/24 08:45	10/25/24 11:34	PB164282

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.095	*	30 - 150		24%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		93%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		81%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		83%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.39		58 - 132		98%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6120	7.712				
1146-65-2	Naphthalene-d8	17500	10.479				
15067-26-2	Acenaphthene-d10	8280	14.318				
1517-22-2	Phenanthrene-d10	15500	17.057				
1719-03-5	Chrysene-d12	11200	21.241				
1520-96-3	Perylene-d12	11500	23.461				

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

Sample Results: **BN034724.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102524\
Data File : BN034724.D
Acq On : 25 Oct 2024 11:34
Operator : RC/JU
Sample : P4440-01RE
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016RE

Quant Time: Oct 25 12:33:55 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration

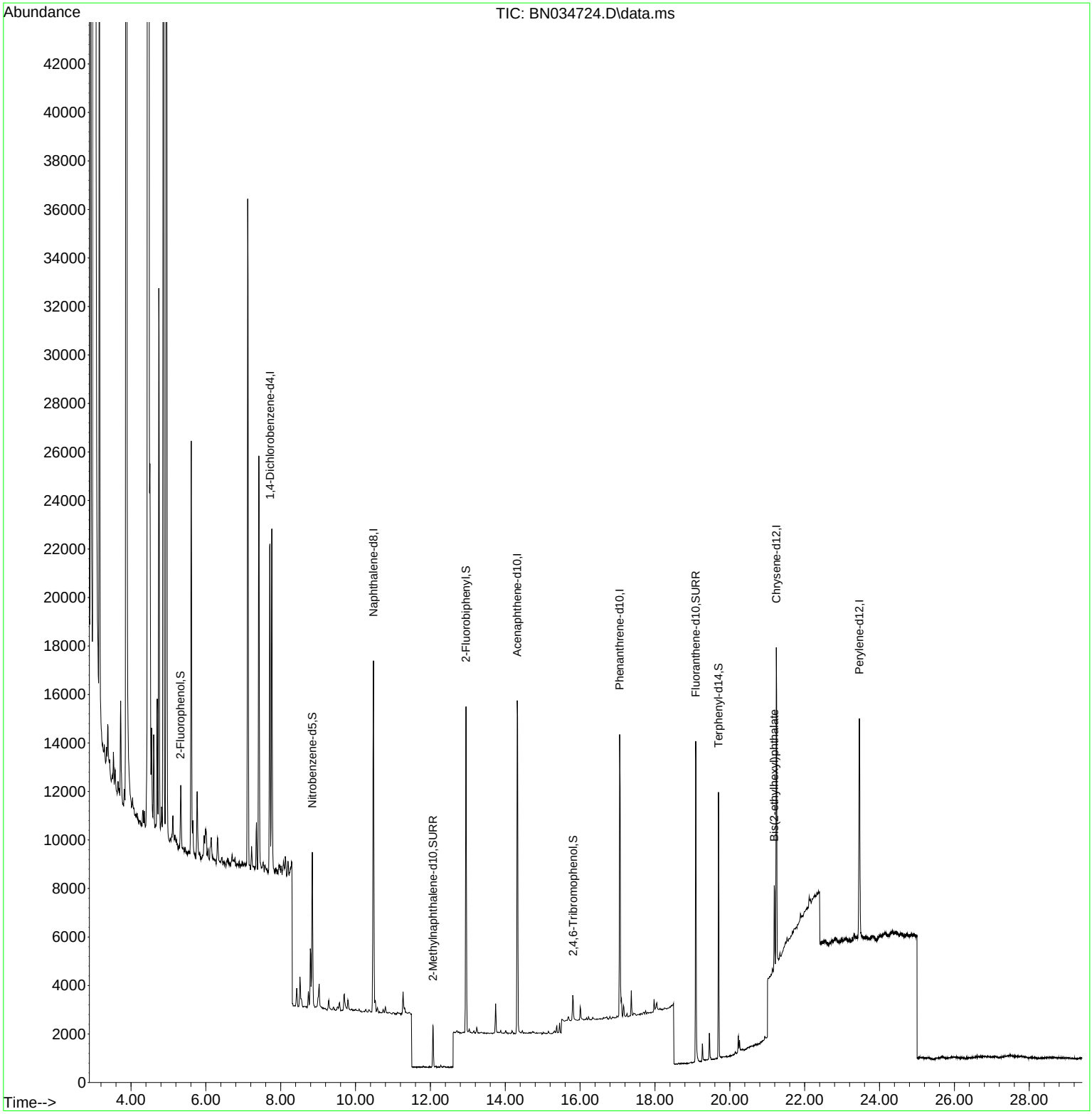
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.712	152	6120	0.400	ng	0.00
7) Naphthalene-d8	10.479	136	17531	0.400	ng	0.00
13) Acenaphthene-d10	14.318	164	8276	0.400	ng	-0.01
19) Phenanthrene-d10	17.057	188	15513	0.400	ng	#-0.01
29) Chrysene-d12	21.241	240	11157	0.400	ng	# 0.00
35) Perylene-d12	23.461	264	11491	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.322	112	471	0.026	ng	0.00
5) Phenol-d6	6.882	99	99	0.004	ng	0.00
8) Nitrobenzene-d5	8.845	82	4759	0.324	ng	0.00
11) 2-Methylnaphthalene-d10	12.067	152	2286	0.095	ng	0.00
14) 2,4,6-Tribromophenol	15.815	330	550	0.215	ng	0.00
15) 2-Fluorobiphenyl	12.950	172	10852	0.330	ng	0.00
27) Fluoranthene-d10	19.089	212	12945	0.371	ng	0.00
31) Terphenyl-d14	19.698	244	8939	0.392	ng	0.00
Target Compounds						Qvalue
34) Bis(2-ethylhexyl)phtha...	21.187	149	3662	0.151	ng	# 98

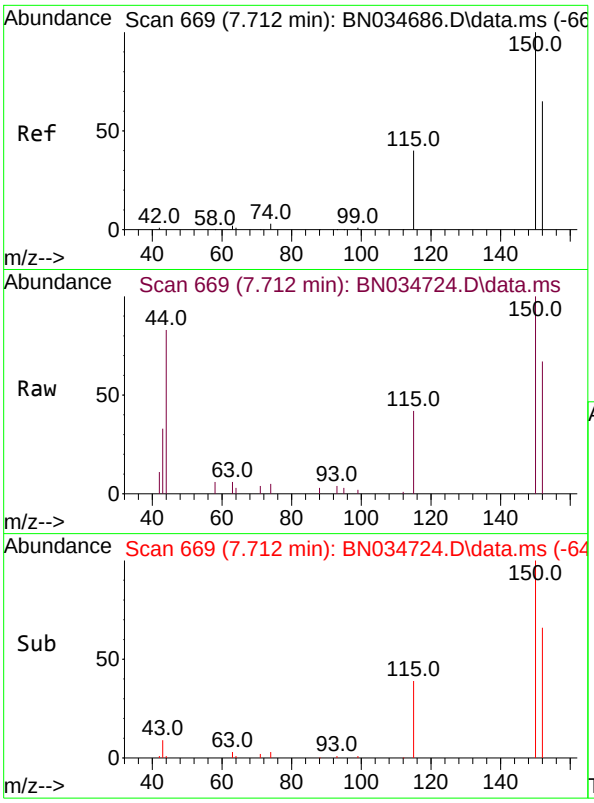
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102524\
Data File : BN034724.D
Acq On : 25 Oct 2024 11:34
Operator : RC/JU
Sample : P4440-01RE
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016RE

Quant Time: Oct 25 12:33:55 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration



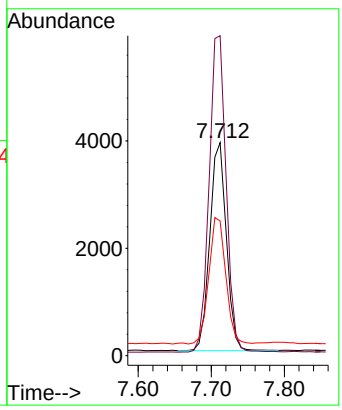


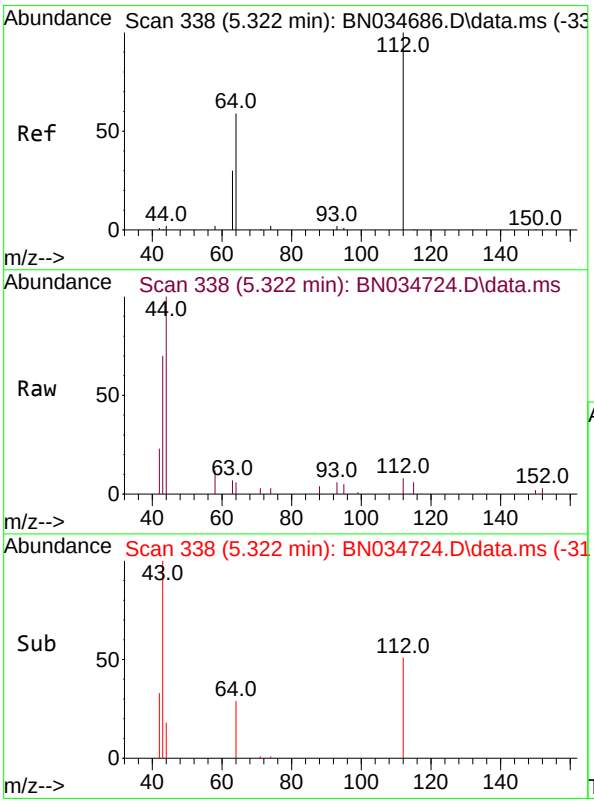
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN034724.D
Acq: 25 Oct 2024 11:34

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016RE

Tgt Ion:152 Resp: 6120

Ion	Ratio	Lower	Upper
152	100		
150	150.2	122.7	184.1
115	63.2	51.0	76.6

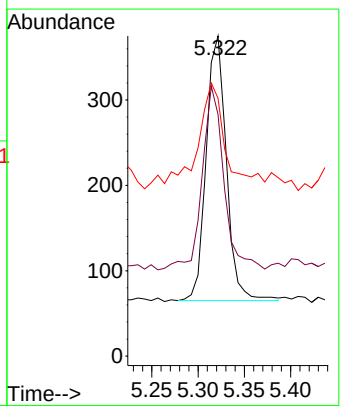


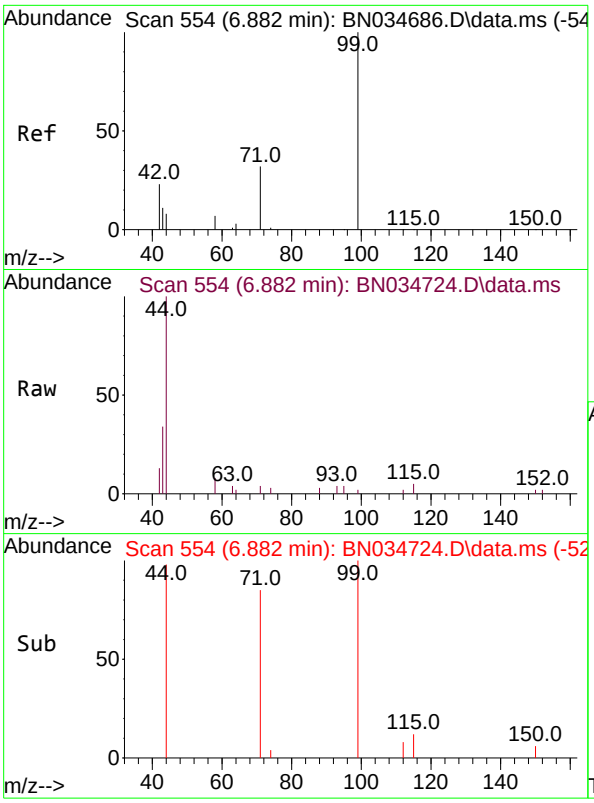


#4
2-Fluorophenol
Concen: 0.026 ng
RT: 5.322 min Scan# 338
Delta R.T. -0.000 min
Lab File: BN034724.D
Acq: 25 Oct 2024 11:34

Tgt Ion:112 Resp: 471

Ion	Ratio	Lower	Upper
112	100		
64	74.7	53.0	79.6
63	57.3	27.6	41.4#



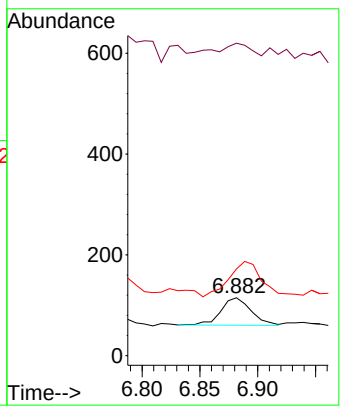


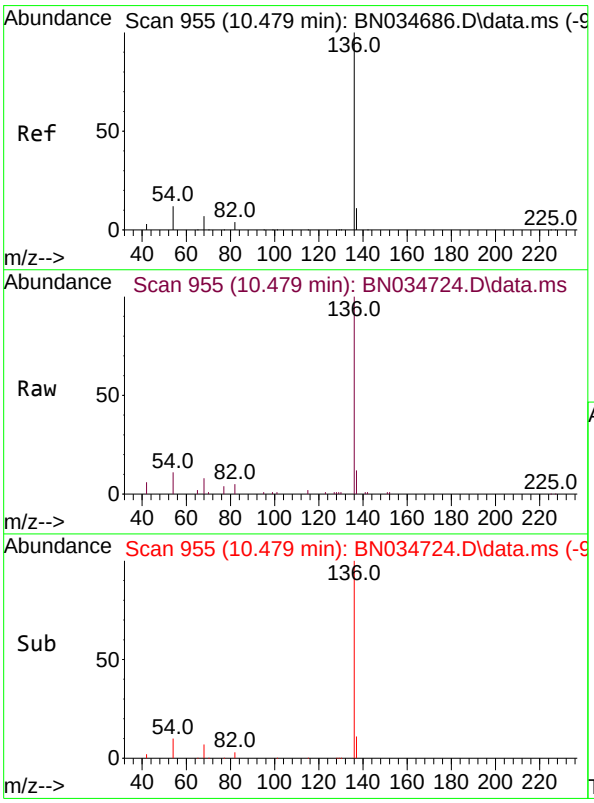
#5
Phenol-d6
Concen: 0.004 ng
RT: 6.882 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN034724.D
Acq: 25 Oct 2024 11:34

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016RE

Tgt Ion: 99 Resp: 99

Ion	Ratio	Lower	Upper
99	100		
42	82.8	21.8	32.8#
71	140.4	26.6	40.0#

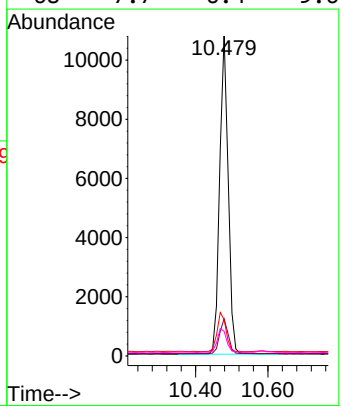


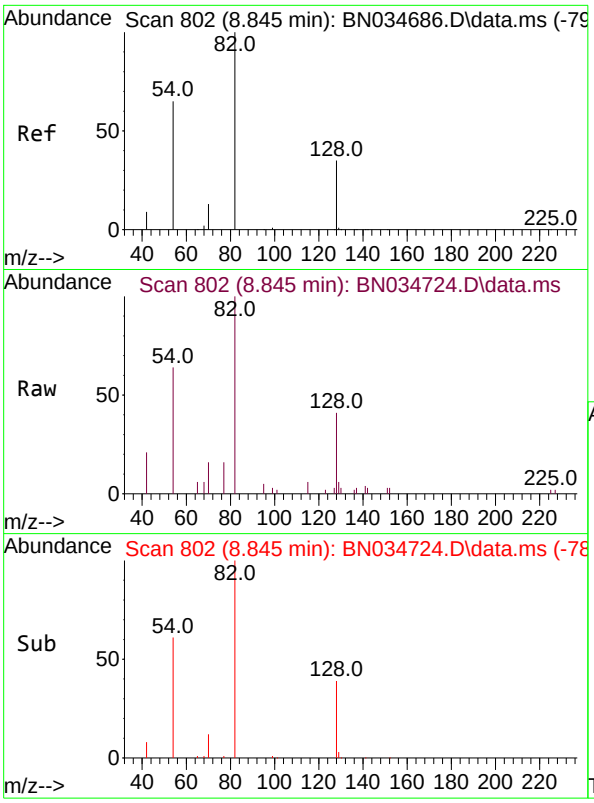


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 955
Delta R.T. -0.000 min
Lab File: BN034724.D
Acq: 25 Oct 2024 11:34

Tgt Ion:136 Resp: 17531

Ion	Ratio	Lower	Upper
136	100		
137	11.6	9.1	13.7
54	11.3	9.8	14.8
68	7.7	6.4	9.6



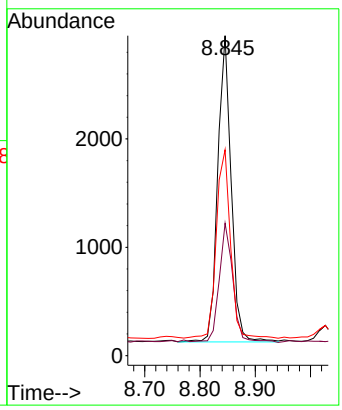


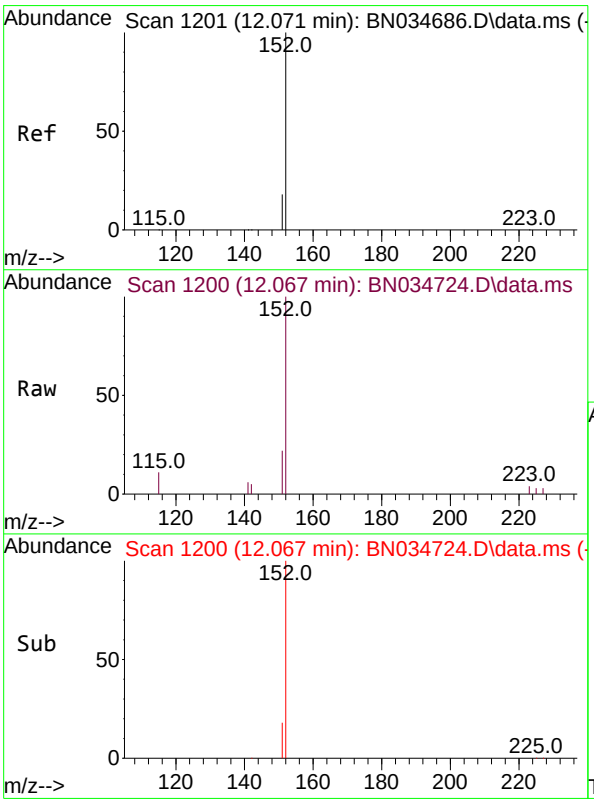
#8
Nitrobenzene-d5
Concen: 0.324 ng
RT: 8.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: BN034724.D
Acq: 25 Oct 2024 11:34

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016RE

Tgt Ion: 82 Resp: 4759

Ion	Ratio	Lower	Upper
82	100		
128	41.4	29.7	44.5
54	64.3	53.0	79.6

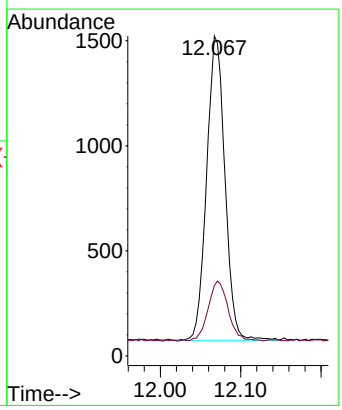


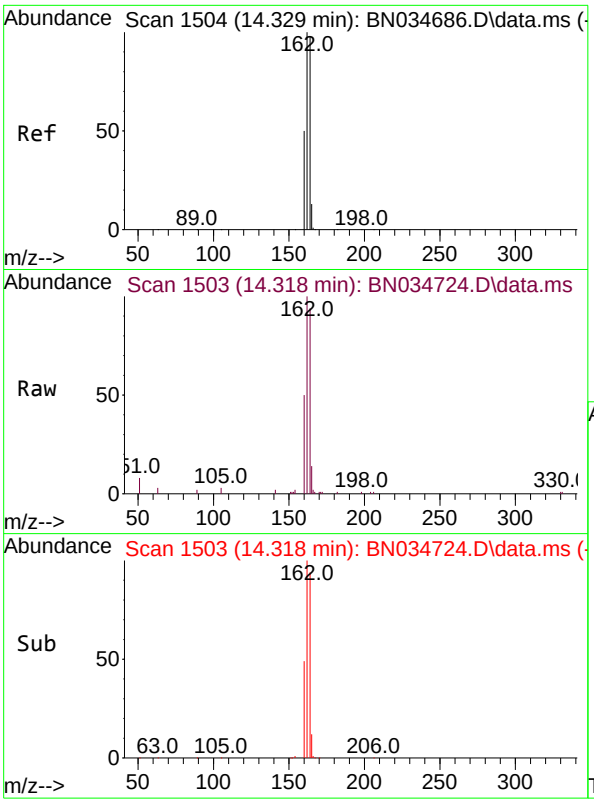


#11
2-Methylnaphthalene-d10
Concen: 0.095 ng
RT: 12.067 min Scan# 1200
Delta R.T. -0.004 min
Lab File: BN034724.D
Acq: 25 Oct 2024 11:34

Tgt Ion:152 Resp: 2286

Ion	Ratio	Lower	Upper
152	100		
151	21.9	16.7	25.1



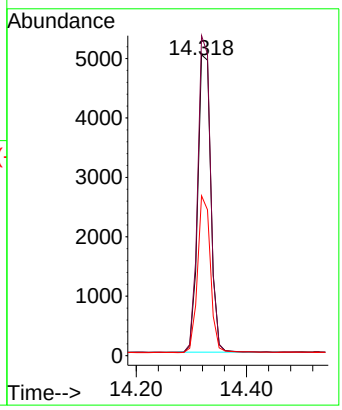


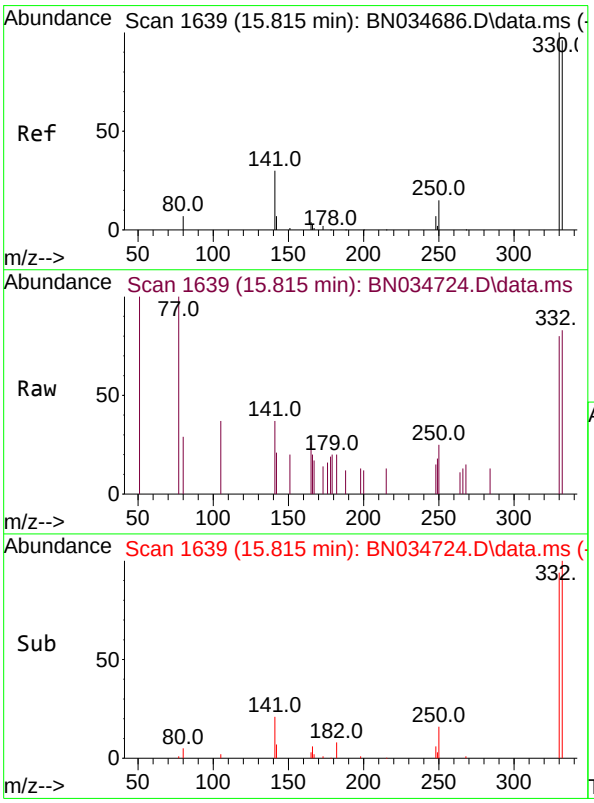
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.318 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN034724.D
Acq: 25 Oct 2024 11:34

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016RE

Tgt Ion:164 Resp: 8276

Ion	Ratio	Lower	Upper
164	100		
162	106.4	81.4	122.0
160	53.1	40.6	61.0

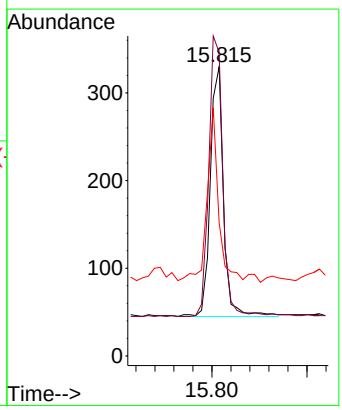


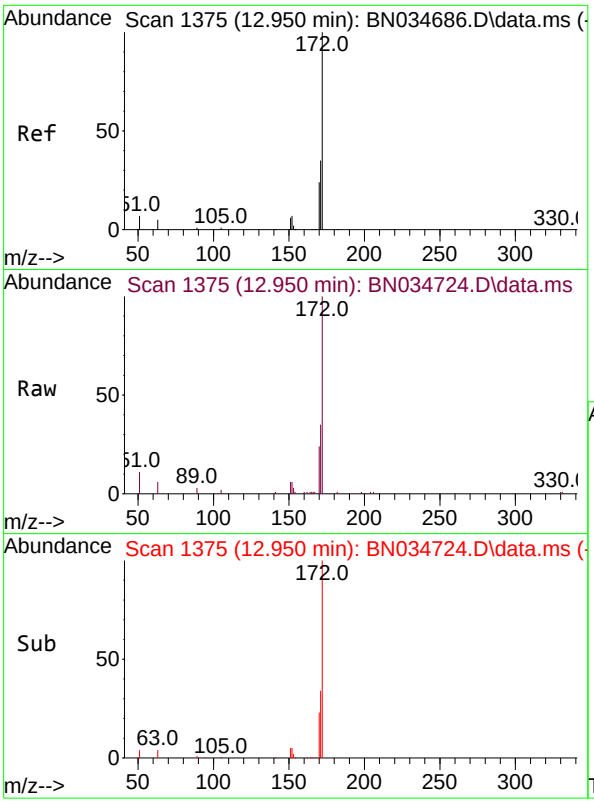


#14
2,4,6-Tribromophenol
Concen: 0.215 ng
RT: 15.815 min Scan# 1639
Delta R.T. -0.000 min
Lab File: BN034724.D
Acq: 25 Oct 2024 11:34

Tgt Ion:330 Resp: 550

Ion	Ratio	Lower	Upper
330	100		
332	119.6	76.6	115.0#
141	58.0	54.6	81.8



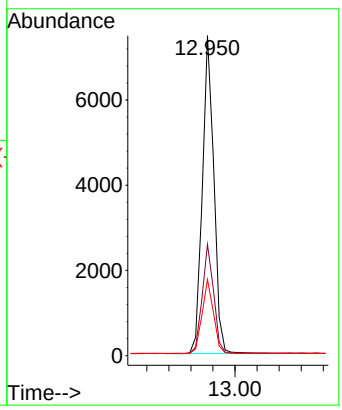


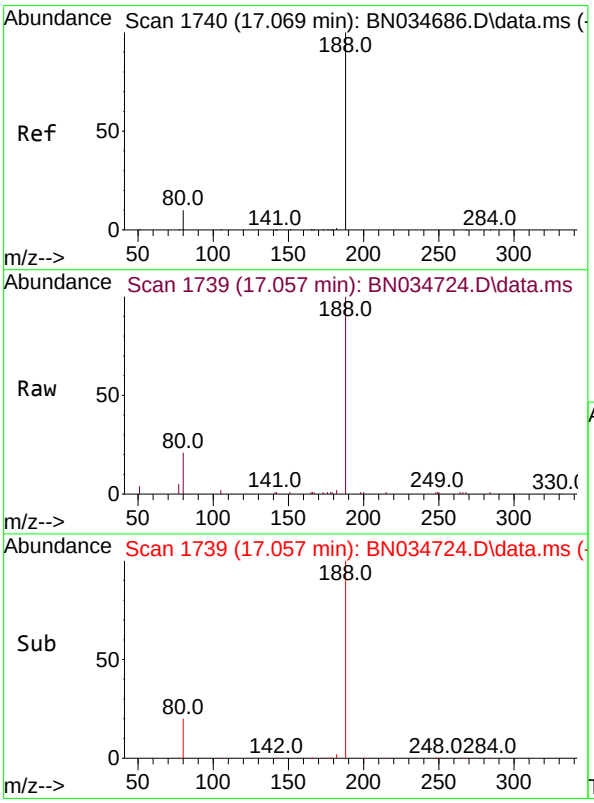
#15
2-Fluorobiphenyl
Concen: 0.330 ng
RT: 12.950 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034724.D
Acq: 25 Oct 2024 11:34

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016RE

Tgt Ion:172 Resp: 10852

Ion	Ratio	Lower	Upper
172	100		
171	34.8	28.3	42.5
170	23.8	19.8	29.6

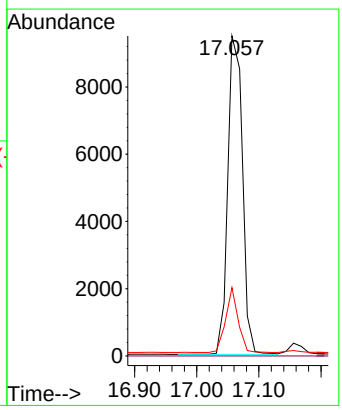


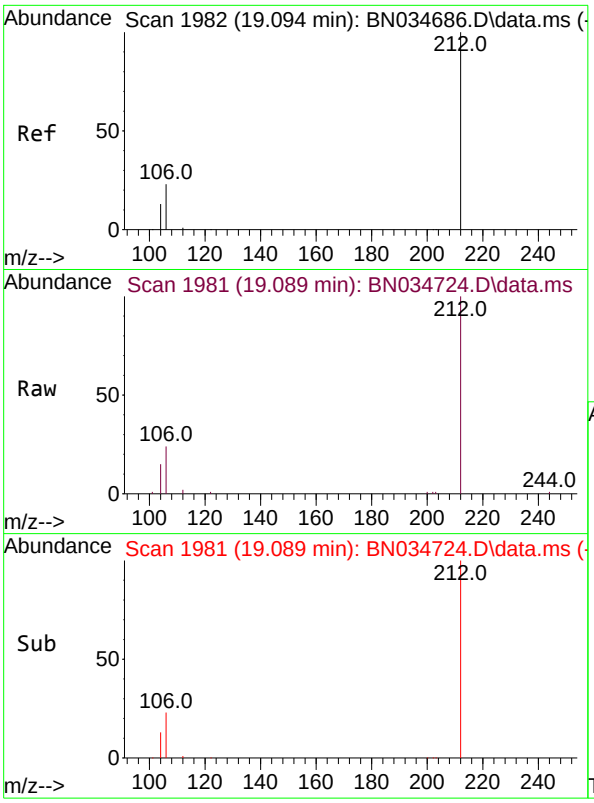


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.057 min Scan# 1739
Delta R.T. -0.012 min
Lab File: BN034724.D
Acq: 25 Oct 2024 11:34

Tgt Ion:188 Resp: 15513

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	21.4	8.9	13.3#



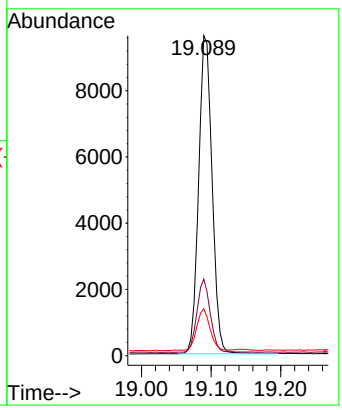


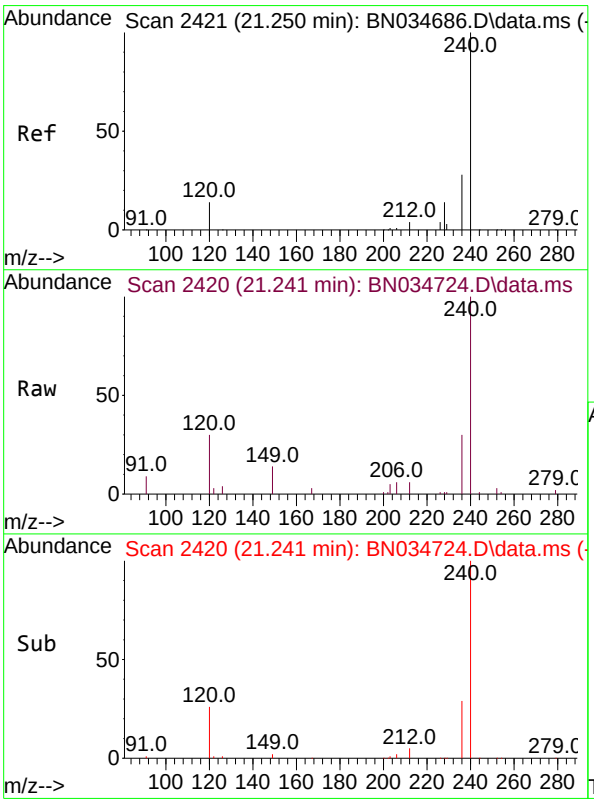
#27
Fluoranthene-d10
Concen: 0.371 ng
RT: 19.089 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN034724.D
Acq: 25 Oct 2024 11:34

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016RE

Tgt Ion:212 Resp: 12945

Ion	Ratio	Lower	Upper
212	100		
106	22.7	17.8	26.8
104	12.7	10.2	15.4

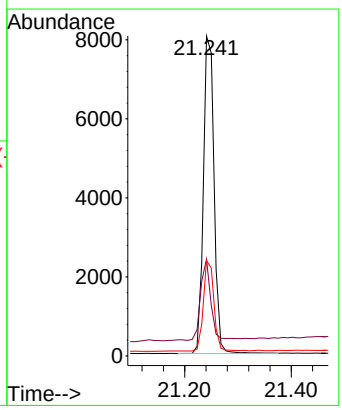


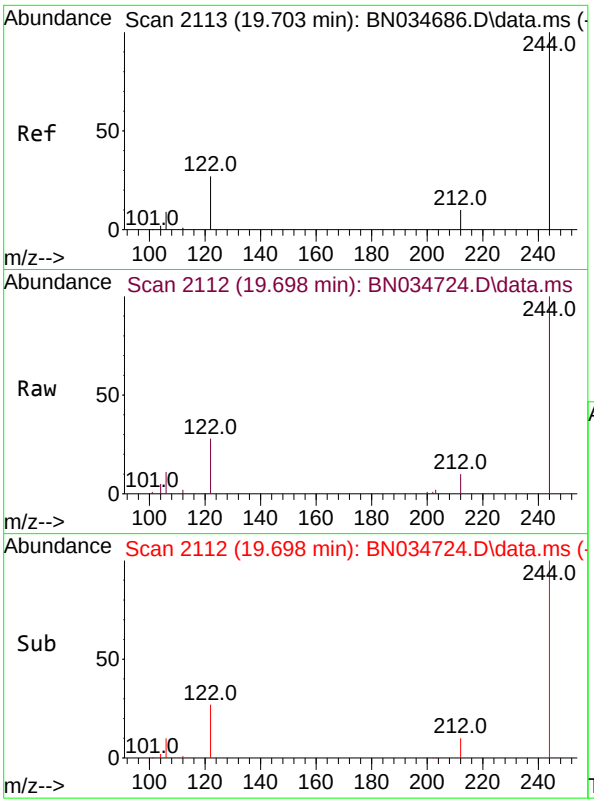


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.241 min Scan# 2420
Delta R.T. -0.009 min
Lab File: BN034724.D
Acq: 25 Oct 2024 11:34

Tgt Ion:240 Resp: 11157

Ion	Ratio	Lower	Upper
240	100		
120	30.3	14.2	21.2#
236	29.9	23.1	34.7



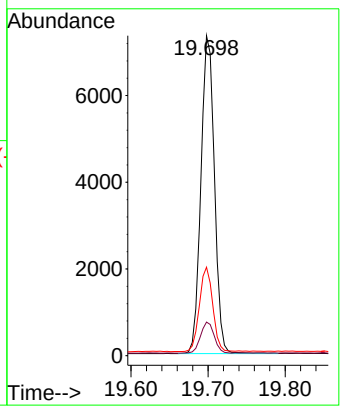


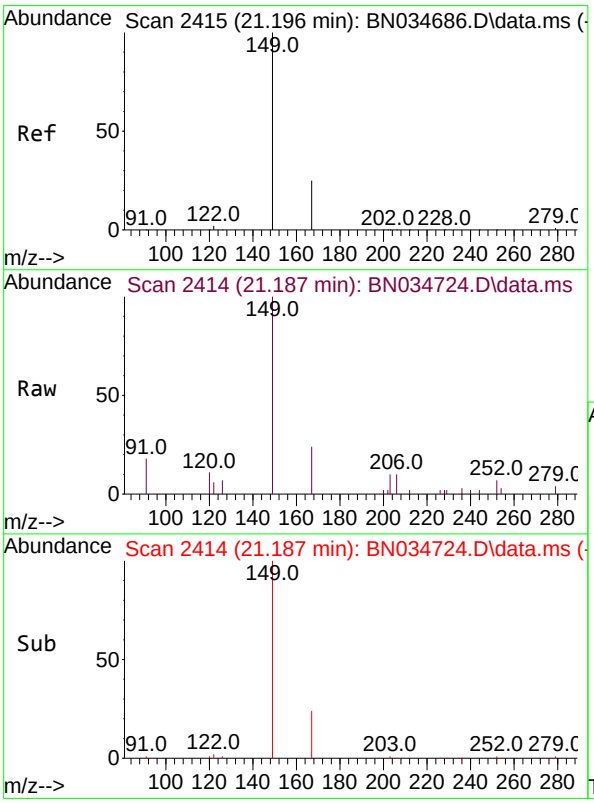
#31
Terphenyl-d14
Concen: 0.392 ng
RT: 19.698 min Scan# 21
Delta R.T. -0.005 min
Lab File: BN034724.D
Acq: 25 Oct 2024 11:34

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016RE

Tgt Ion:244 Resp: 8939

Ion	Ratio	Lower	Upper
244	100		
212	10.5	8.6	13.0
122	27.6	22.3	33.5

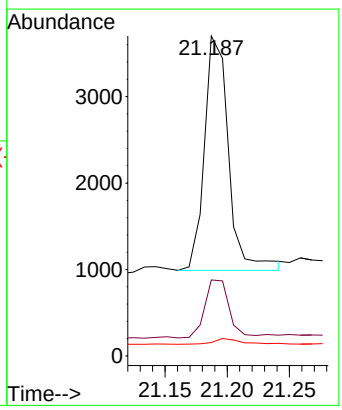


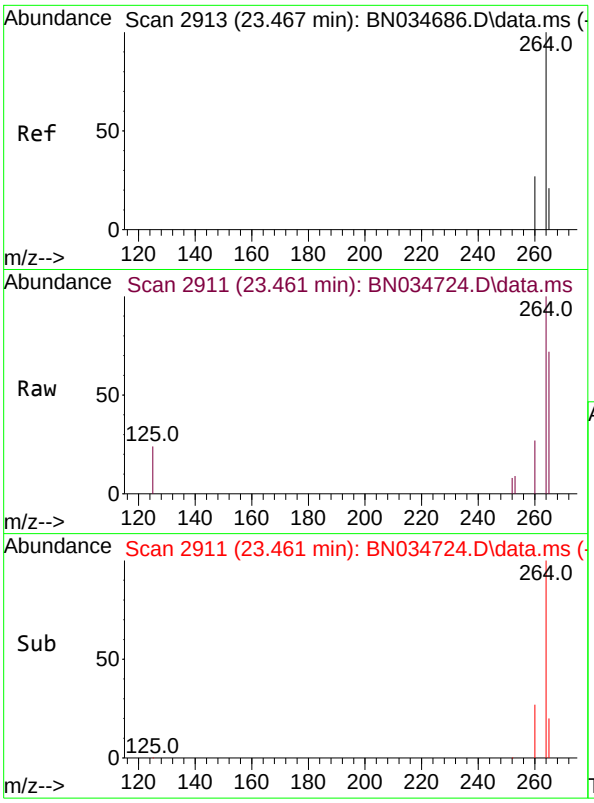


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.151 ng
RT: 21.187 min Scan# 2414
Delta R.T. -0.009 min
Lab File: BN034724.D
Acq: 25 Oct 2024 11:34

Tgt Ion:149 Resp: 3662

Ion	Ratio	Lower	Upper
149	100		
167	25.6	19.7	29.5
279	2.8	1.8	2.6#



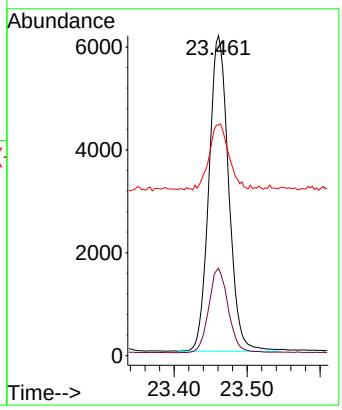


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.461 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN034724.D
Acq: 25 Oct 2024 11:34

Instrument :
BNA_N
ClientSampleId :
BPOW6-11-HYD-20241016RE

Tgt Ion:264 Resp: 11491

Ion	Ratio	Lower	Upper
264	100		
260	27.3	21.9	32.9
265	72.1	60.6	91.0



CALIBRATION SUMMARY

Response Factor Report BNA_N

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN102424.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Oct 24 13:17:02 2024
Response Via : Initial Calibration

Calibration Files
0.1 =BN034684.D 0.2 =BN034685.D 0.4 =BN034686.D 0.8 =BN034687.D 1.6 =BN034688.D 3.2 =BN034689.D 5.0 =BN034690.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	0.621	0.564	0.485	0.545	0.530	0.503	0.479	0.532	9.40
3)		n-Nitrosodimet...	0.775	0.766	0.704	0.842	0.827	0.761	0.749	0.775	6.06
4)	S	2-Fluorophenol	1.188	1.202	1.070	1.268	1.253	1.168	1.177	1.189	5.46
5)	S	Phenol-d6	1.556	1.554	1.386	1.658	1.657	1.569	1.597	1.568	5.85
6)		bis(2-Chloroet...	1.306	1.281	1.140	1.380	1.346	1.243	1.220	1.274	6.37
7)	I	Naphthalene-d8	----------ISTD----------								
8)	S	Nitrobenzene-d5	0.345	0.323	0.294	0.354	0.349	0.337	0.348	0.336	6.27
9)		Naphthalene	1.126	1.100	0.987	1.182	1.157	1.094	1.101	1.107	5.61
10)		Hexachlorobuta...	0.175	0.169	0.149	0.178	0.170	0.160	0.159	0.166	6.23
11)	SURR	2-Methylnaphth...	0.542	0.534	0.481	0.583	0.586	0.557	0.566	0.550	6.53
12)		2-Methylnaphth...	0.675	0.670	0.600	0.729	0.730	0.697	0.705	0.687	6.50
13)	I	Acenaphthene-d10	----------ISTD----------								
14)	S	2,4,6-Tribromo...	0.110	0.118	0.096	0.127	0.133	0.136	0.146	0.124	13.66
15)	S	2-Fluorobiphenyl	1.661	1.577	1.379	1.703	1.666	1.540	1.601	1.590	6.84
16)		Acenaphthylene	1.900	1.860	1.581	2.040	2.038	1.964	2.064	1.921	8.76
17)		Acenaphthene	1.318	1.286	1.122	1.435	1.407	1.329	1.370	1.324	7.79
18)		Fluorene	1.598	1.609	1.388	1.764	1.750	1.663	1.663	1.634	7.68
19)	I	Phenanthrene-d10	----------ISTD----------								
20)		4,6-Dinitro-2-...	0.048	0.043	0.055	0.059	0.063	0.067	0.056	16.66	
21)		4-Bromophenyl-...	0.217	0.211	0.190	0.224	0.221	0.212	0.219	0.213	5.22
22)		Hexachlorobenzene	0.238	0.234	0.211	0.243	0.238	0.226	0.229	0.231	4.55
23)		Atrazine	0.151	0.158	0.140	0.183	0.181	0.181	0.179	0.168	10.55
24)		Pentachlorophenol	0.065	0.064	0.083	0.087	0.092	0.100	0.082	17.73	
25)		Phenanthrene	1.214	1.208	1.065	1.273	1.244	1.191	1.215	1.202	5.49
26)		Anthracene	1.006	1.043	0.931	1.124	1.127	1.102	1.131	1.067	7.17
27)	SURR	Fluoranthene-d10	0.870	0.885	0.784	0.994	0.951	0.913	0.910	0.901	7.35
28)		Fluoranthene	1.188	1.222	1.092	1.380	1.333	1.290	1.269	1.253	7.66
29)	I	Chrysene-d12	----------ISTD----------								
30)		Pyrene	2.066	2.035	1.880	2.152	2.164	2.039	2.048	2.055	4.57
31)	S	Terphenyl-d14	0.813	0.797	0.740	0.867	0.865	0.820	0.820	0.817	5.27
32)		Benzo(a)anthra...	1.502	1.445	1.373	1.640	1.613	1.553	1.570	1.528	6.19
33)		Chrysene	1.642	1.568	1.442	1.709	1.643	1.533	1.531	1.581	5.68
34)		Bis(2-ethylhex...	0.901	0.779	0.722	0.843	0.878	0.915	1.030	0.867	11.48
35)	I	Perylene-d12	----------ISTD----------								

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN102424.M

36)		Indeno(1,2,3-c...	1.562	1.447	1.418	1.596	1.620	1.517	1.624	1.541	5.39
37)		Benzo(b)fluora...	1.543	1.516	1.481	1.714	1.699	1.614	1.615	1.597	5.57
38)		Benzo(k)fluora...	1.511	1.491	1.386	1.723	1.712	1.596	1.613	1.576	7.75
39)	C	Benzo(a)pyrene	1.203	1.188	1.157	1.369	1.383	1.323	1.350	1.282	7.45
40)		Dibenzo(a,h)an...	1.236	1.139	1.113	1.246	1.283	1.201	1.288	1.215	5.58
41)		Benzo(g,h,i)pe...	1.397	1.287	1.262	1.377	1.387	1.290	1.378	1.340	4.28

(#) = Out of Range

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034684.D
Acq On : 24 Oct 2024 09:11
Operator : RC/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Quant Time: Oct 24 12:42:02 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 12:41:40 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.712	152	5558	0.400	ng		0.00
7) Naphthalene-d8	10.479	136	16023	0.400	ng		0.00
13) Acenaphthene-d10	14.329	164	7436	0.400	ng		0.00
19) Phenanthrene-d10	17.069	188	15281	0.400	ng		0.00
29) Chrysene-d12	21.250	240	9023	0.400	ng		0.00
35) Perylene-d12	23.467	264	9104	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.322	112	1651	0.097	ng		0.00
5) Phenol-d6	6.882	99	2162	0.099	ng		0.00
8) Nitrobenzene-d5	8.846	82	1381	0.104	ng		0.00
11) 2-Methylnaphthalene-d10	12.071	152	2173	0.096	ng		0.00
14) 2,4,6-Tribromophenol	15.815	330	205	0.065	ng		0.00
15) 2-Fluorobiphenyl	12.950	172	3087	0.105	ng		0.00
27) Fluoranthene-d10	19.094	212	3322	0.089	ng		0.00
31) Terphenyl-d14	19.703	244	1833	0.105	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.285	88	863	0.128	ng		89
3) n-Nitrosodimethylamine	3.588	42	1077	0.132	ng	#	95
6) bis(2-Chloroethyl)ether	7.142	93	1815	0.109	ng		99
9) Naphthalene	10.533	128	4509	0.102	ng		96
10) Hexachlorobutadiene	10.831	225	703	0.099	ng	#	99
12) 2-Methylnaphthalene	12.147	142	2704	0.097	ng		98
16) Acenaphthylene	14.041	152	3532	0.099	ng		100
17) Acenaphthene	14.393	154	2450	0.101	ng		97
18) Fluorene	15.377	166	2971	0.098	ng		100
21) 4-Bromophenyl-phenylether	16.275	248	830	0.099	ng		96
22) Hexachlorobenzene	16.374	284	909	0.098	ng		97
23) Atrazine	16.548	200	577	0.079	ng	#	87
25) Phenanthrene	17.106	178	4637	0.102	ng		100
26) Anthracene	17.193	178	3843	0.095	ng		100
28) Fluoranthene	19.127	202	4537	0.089	ng		99
30) Pyrene	19.485	202	4660	0.116	ng		99
32) Benzo(a)anthracene	21.232	228	3389	0.099	ng		97
33) Chrysene	21.286	228	3705	0.109	ng		98
34) Bis(2-ethylhexyl)phtha...	21.196	149	2033	0.087	ng	#	97
36) Indeno(1,2,3-cd)pyrene	25.695	276	3556	0.101	ng		96
37) Benzo(b)fluoranthene	22.806	252	3512	0.107	ng	#	65
38) Benzo(k)fluoranthene	22.847	252	3438	0.107	ng	#	62
39) Benzo(a)pyrene	23.370	252	2737	0.098	ng	#	55
40) Dibenzo(a,h)anthracene	25.718	278	2812	0.102	ng	#	78
41) Benzo(g,h,i)perylene	26.370	276	3179	0.105	ng	#	89

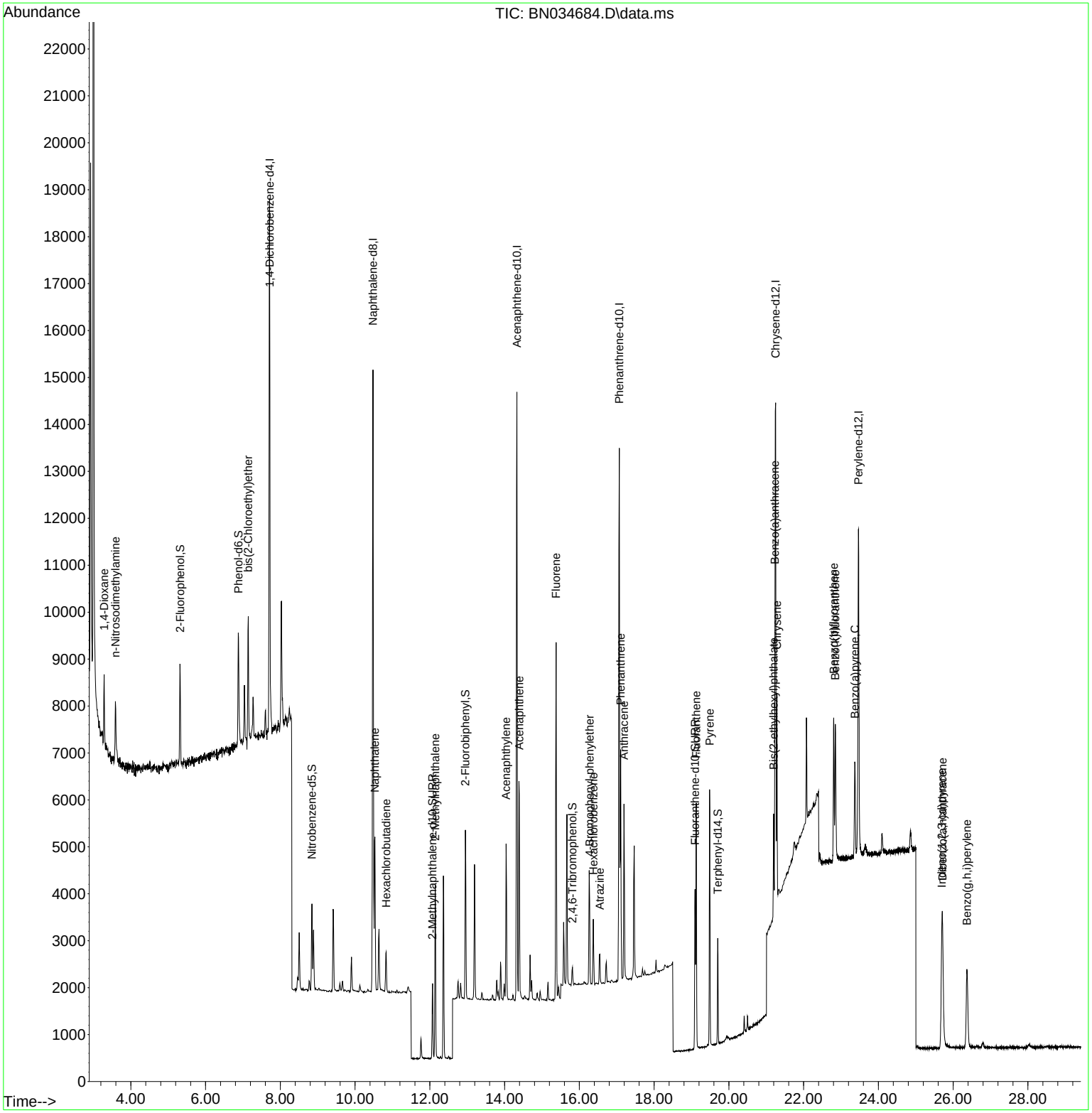
(#) = qualifier out of range (m) = manual integration (+) = signals summed

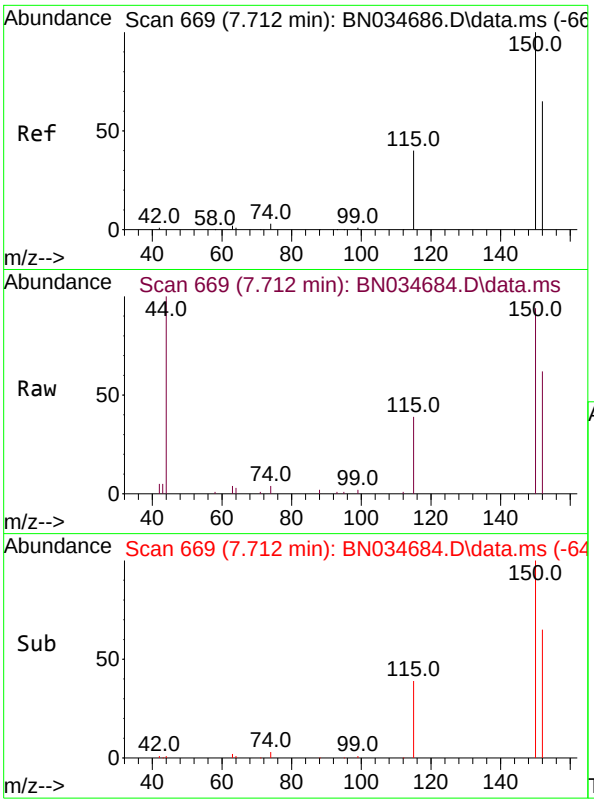
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034684.D
Acq On : 24 Oct 2024 09:11
Operator : RC/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Quant Time: Oct 24 12:42:02 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 12:41:40 2024
Response via : Initial Calibration



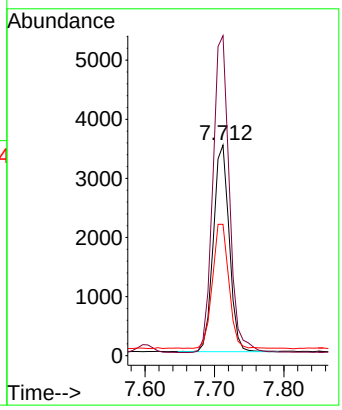


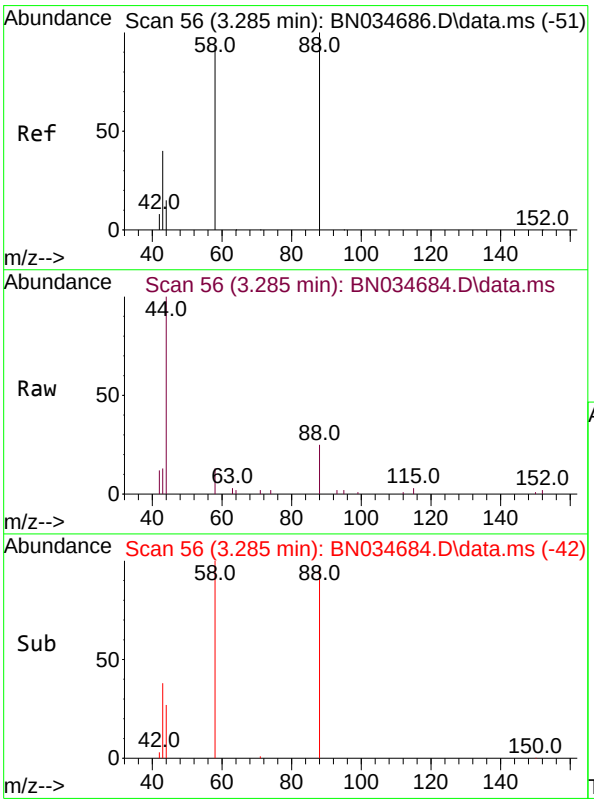
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:152 Resp: 5558

Ion	Ratio	Lower	Upper
152	100		
150	152.0	122.7	184.1
115	62.4	51.0	76.6

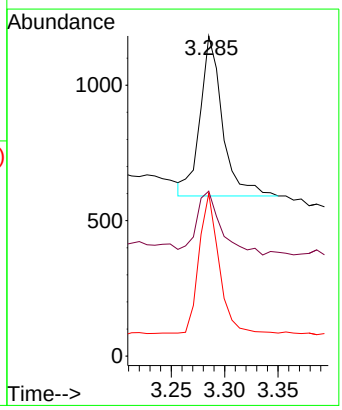


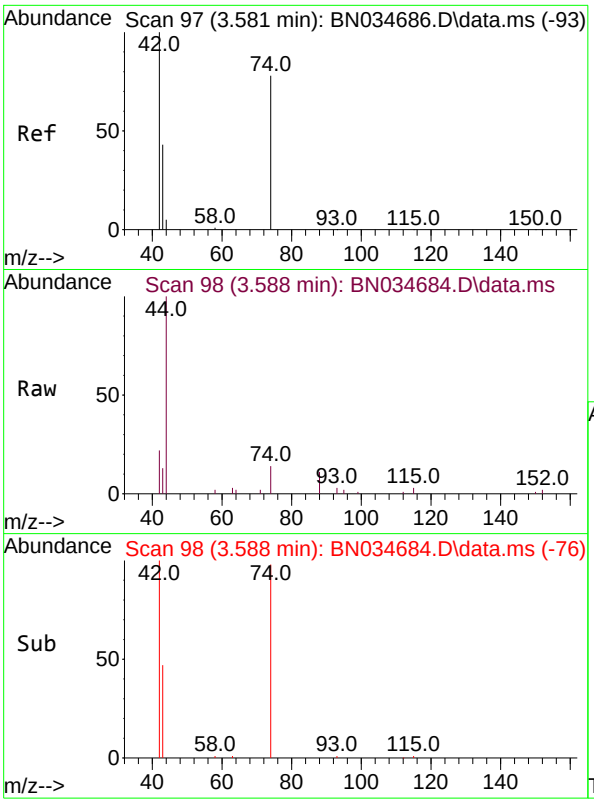


#2
1,4-Dioxane
Concen: 0.128 ng
RT: 3.285 min Scan# 56
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion: 88 Resp: 863

Ion	Ratio	Lower	Upper
88	100		
43	40.9	32.1	48.1
58	77.6	73.7	110.5



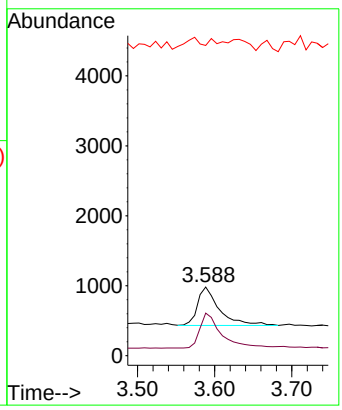


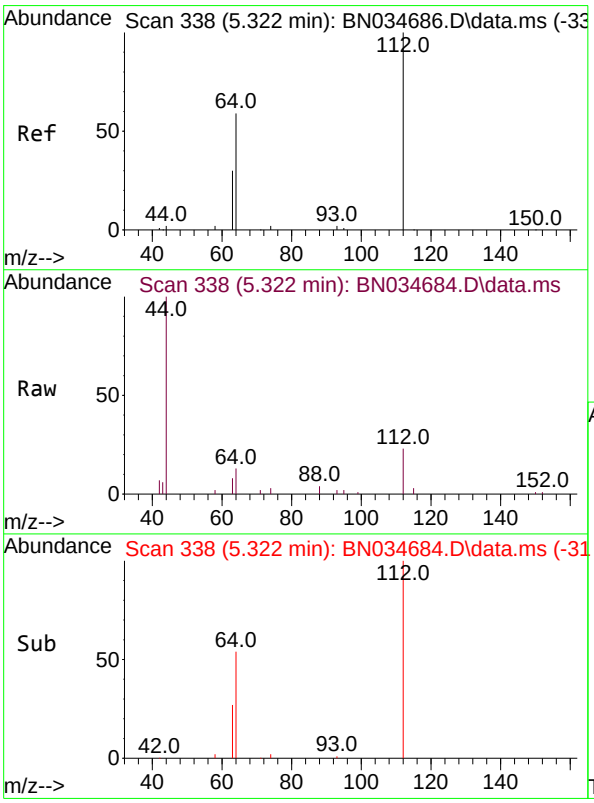
#3
n-Nitrosodimethylamine
Concen: 0.132 ng
RT: 3.588 min Scan# 9
Delta R.T. 0.007 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion: 42 Resp: 1077

Ion	Ratio	Lower	Upper
42	100		
74	93.9	77.2	115.8
44	8.6	13.4	20.2#

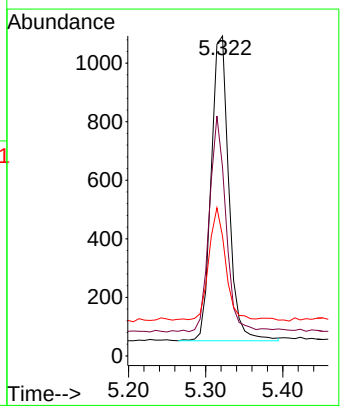


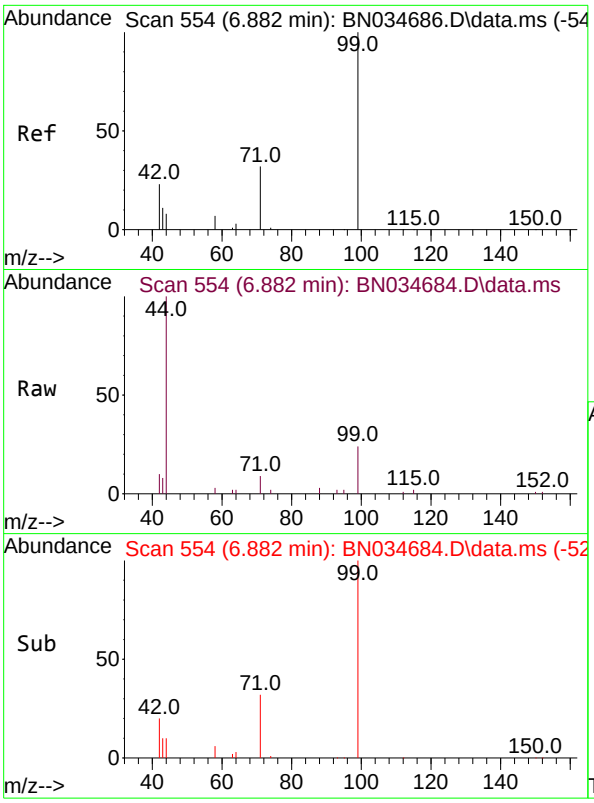


#4
2-Fluorophenol
Concen: 0.097 ng
RT: 5.322 min Scan# 338
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion:112 Resp: 1651

Ion	Ratio	Lower	Upper
112	100		
64	67.8	53.0	79.6
63	35.0	27.6	41.4



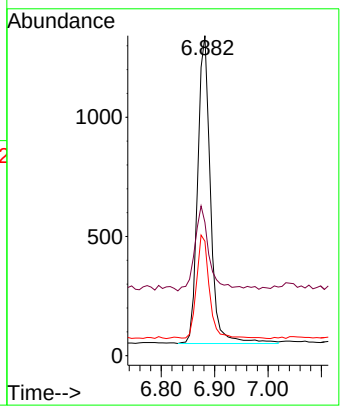


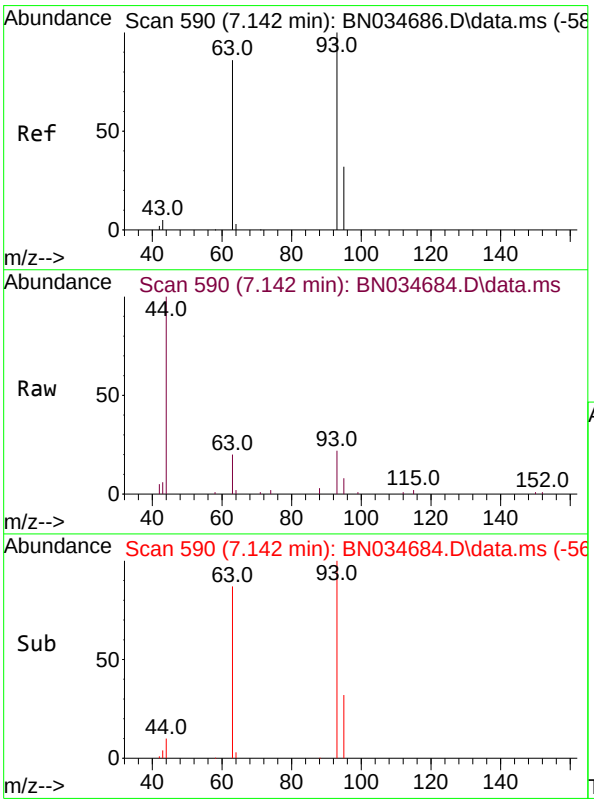
#5
Phenol-d6
Concen: 0.099 ng
RT: 6.882 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion: 99 Resp: 2162

Ion	Ratio	Lower	Upper
99	100		
42	31.1	21.8	32.8
71	33.9	26.6	40.0

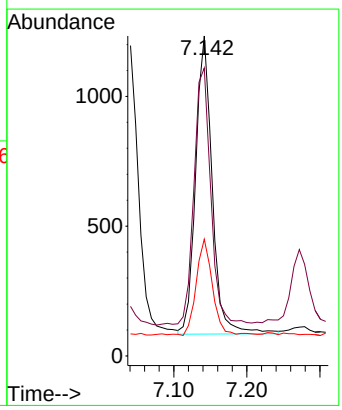


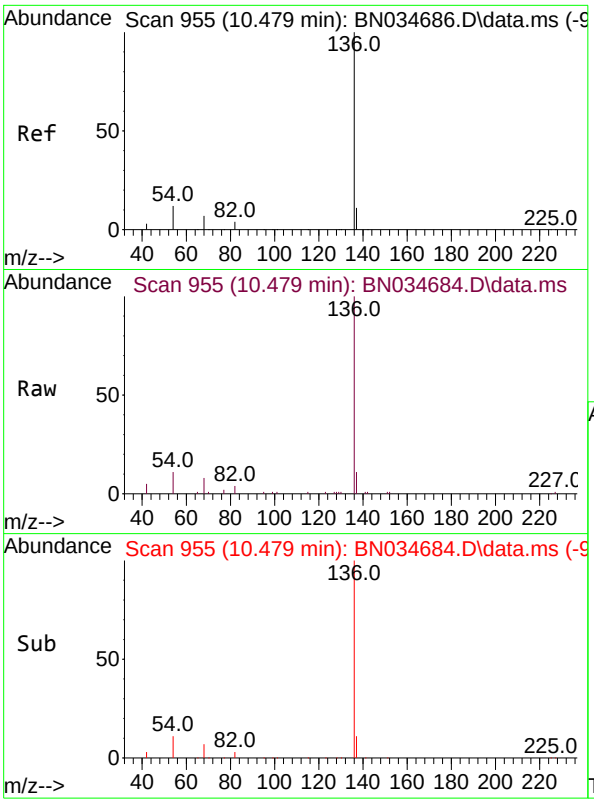


#6
bis(2-Chloroethyl)ether
Concen: 0.109 ng
RT: 7.142 min Scan# 590
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion: 93 Resp: 1815

Ion	Ratio	Lower	Upper
93	100		
63	87.8	71.5	107.3
95	31.8	25.8	38.6



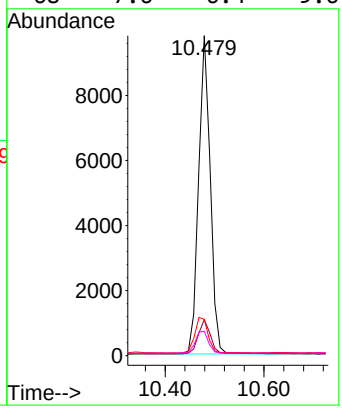


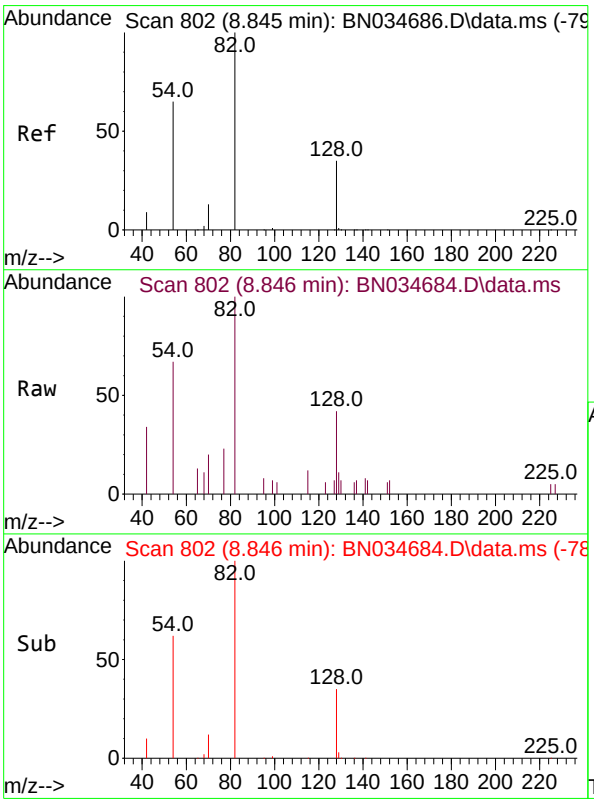
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:136 Resp: 16023

Ion	Ratio	Lower	Upper
136	100		
137	11.3	9.1	13.7
54	11.3	9.8	14.8
68	7.6	6.4	9.6

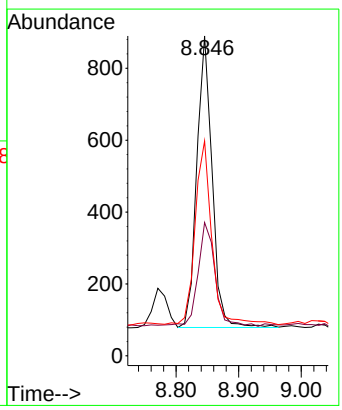


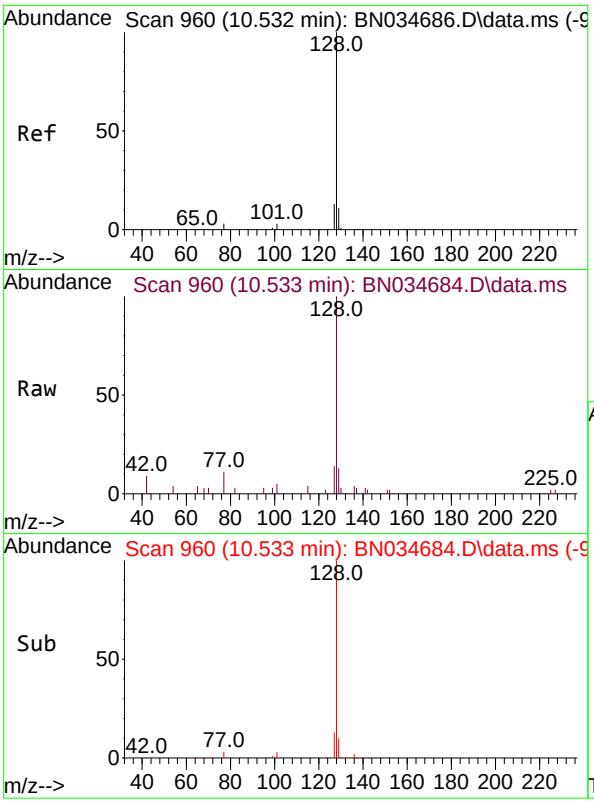


#8
Nitrobenzene-d5
Concen: 0.104 ng
RT: 8.846 min Scan# 802
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion: 82 Resp: 1381

Ion	Ratio	Lower	Upper
82	100		
128	41.7	29.7	44.5
54	67.2	53.0	79.6



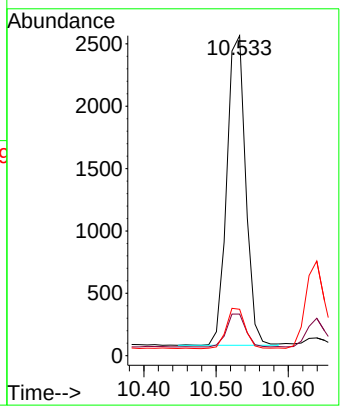


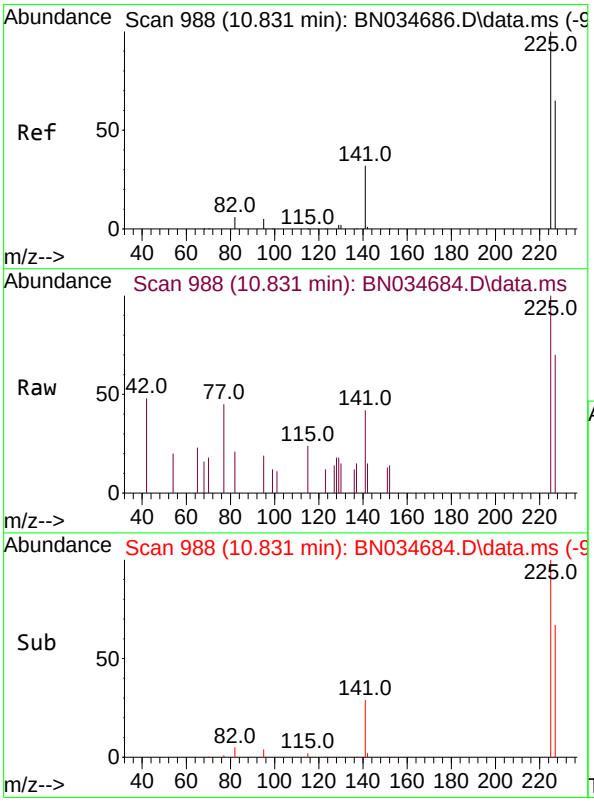
#9
Naphthalene
Concen: 0.102 ng
RT: 10.533 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:128 Resp: 4509

Ion	Ratio	Lower	Upper
128	100		
129	13.0	9.0	13.6
127	14.5	10.5	15.7

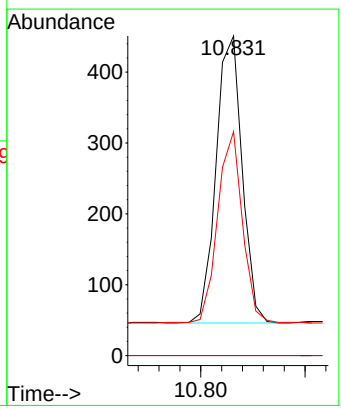


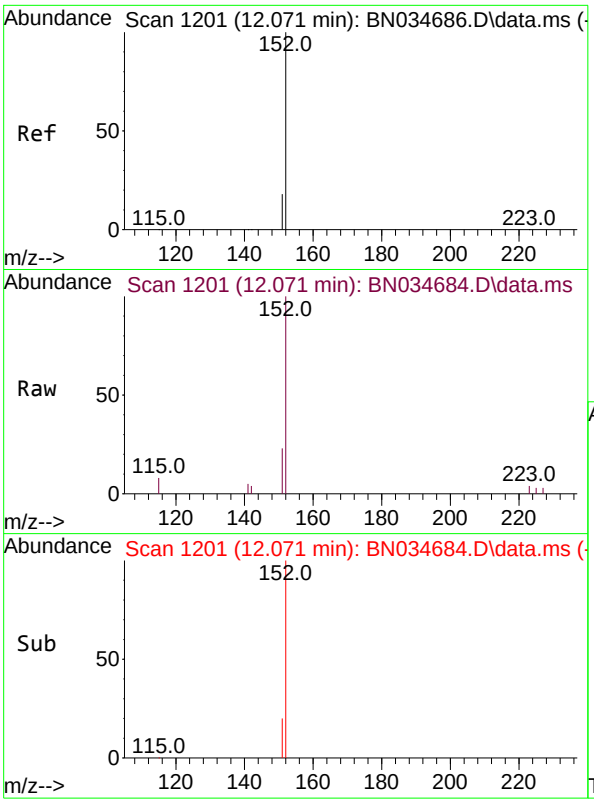


#10
Hexachlorobutadiene
Concen: 0.099 ng
RT: 10.831 min Scan# 988
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion:225 Resp: 703

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.7	51.4	77.0



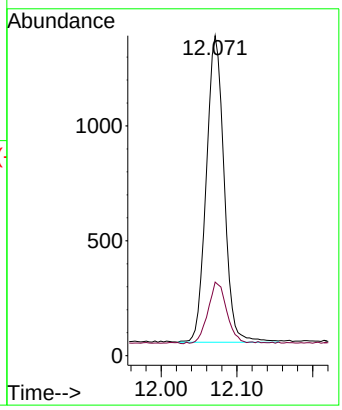


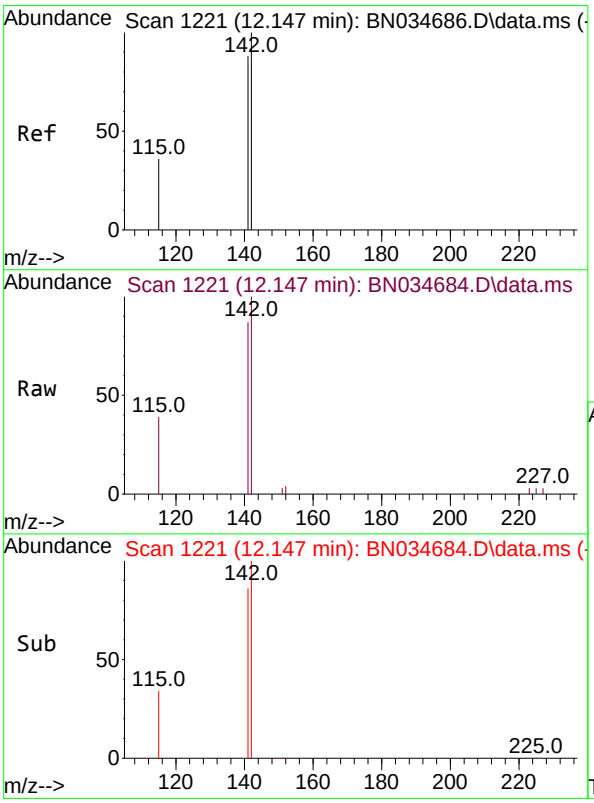
#11
2-Methylnaphthalene-d10
Concen: 0.096 ng
RT: 12.071 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:152 Resp: 2173

Ion	Ratio	Lower	Upper
152	100		
151	21.4	16.7	25.1

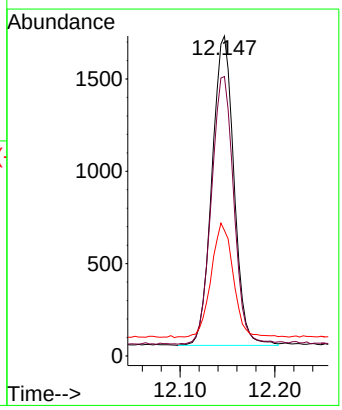


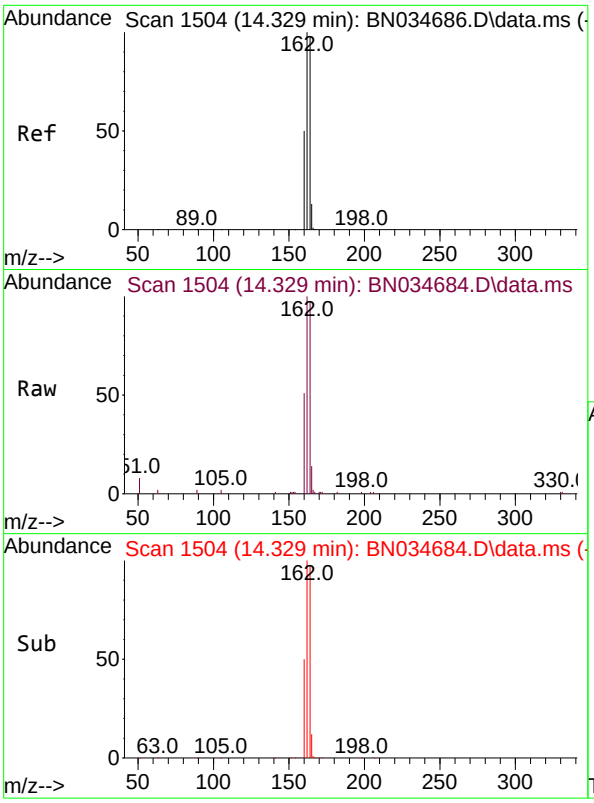


#12
2-Methylnaphthalene
Concen: 0.097 ng
RT: 12.147 min Scan# 1221
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion:142 Resp: 2704

Ion	Ratio	Lower	Upper
142	100		
141	87.3	70.4	105.6
115	39.2	29.8	44.6



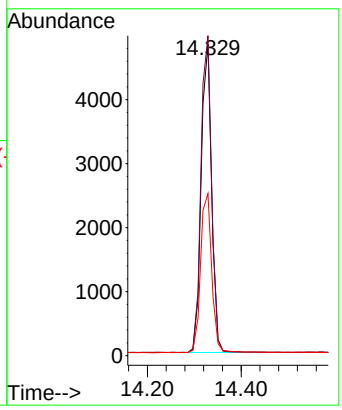


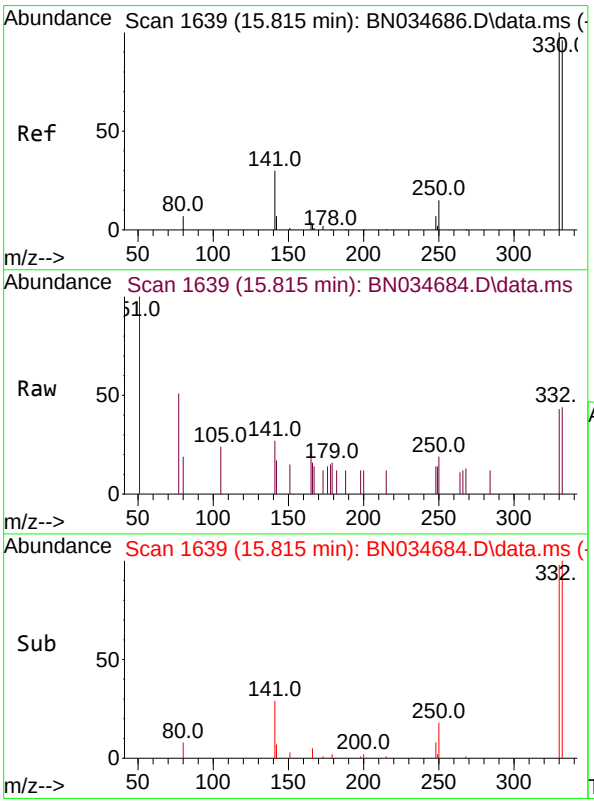
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.329 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:164 Resp: 7436

Ion	Ratio	Lower	Upper
164	100		
162	102.7	81.4	122.0
160	52.0	40.6	61.0

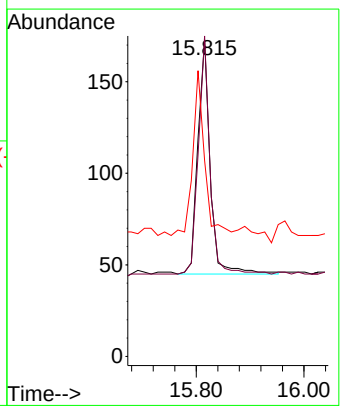


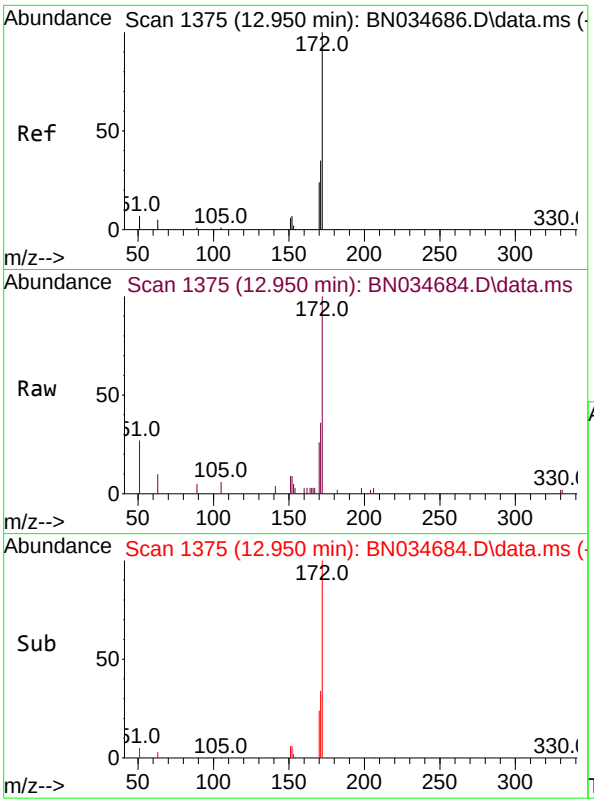


#14
2,4,6-Tribromophenol
Concen: 0.065 ng
RT: 15.815 min Scan# 1639
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion:330 Resp: 205

Ion	Ratio	Lower	Upper
330	100		
332	95.1	76.6	115.0
141	66.3	54.6	81.8



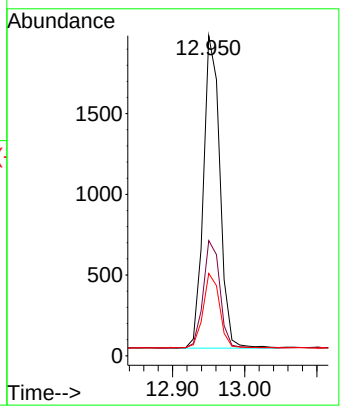


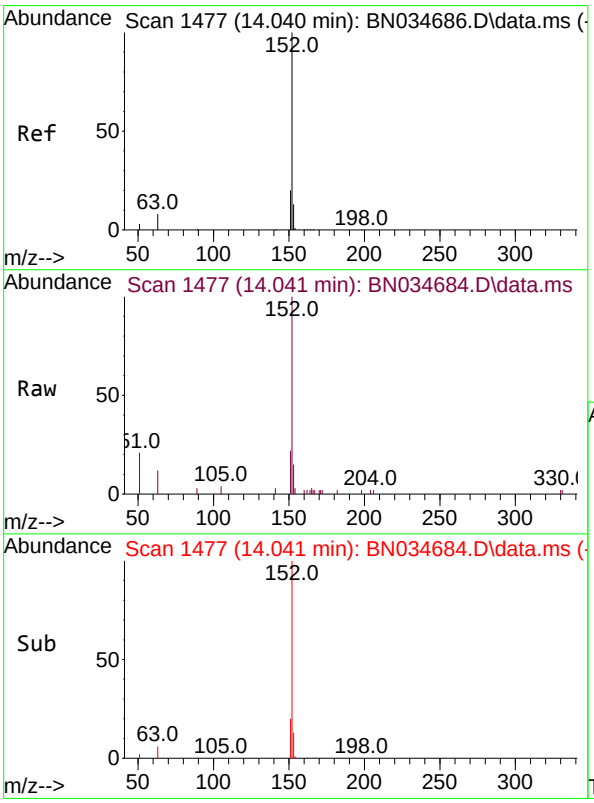
#15
2-Fluorobiphenyl
Concen: 0.105 ng
RT: 12.950 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:172 Resp: 3087

Ion	Ratio	Lower	Upper
172	100		
171	36.0	28.3	42.5
170	25.7	19.8	29.6

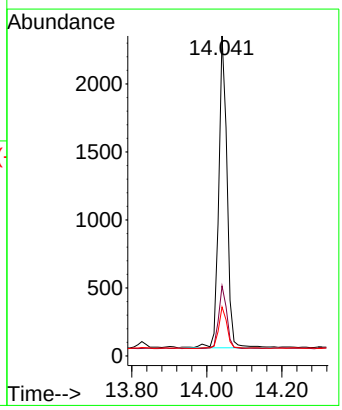


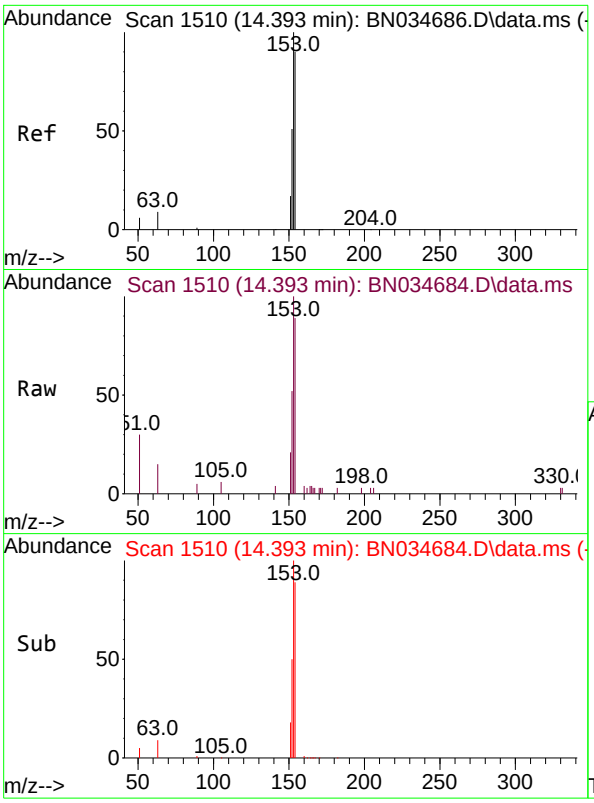


#16
Acenaphthylene
Concen: 0.099 ng
RT: 14.041 min Scan# 1477
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion:152 Resp: 3532

Ion	Ratio	Lower	Upper
152	100		
151	19.4	15.6	23.4
153	13.5	10.6	15.8



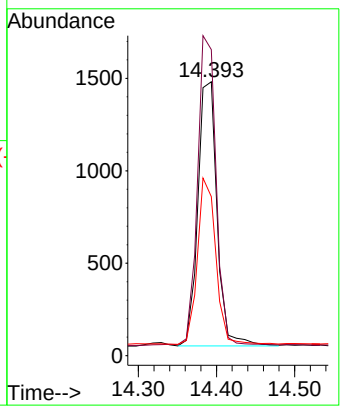


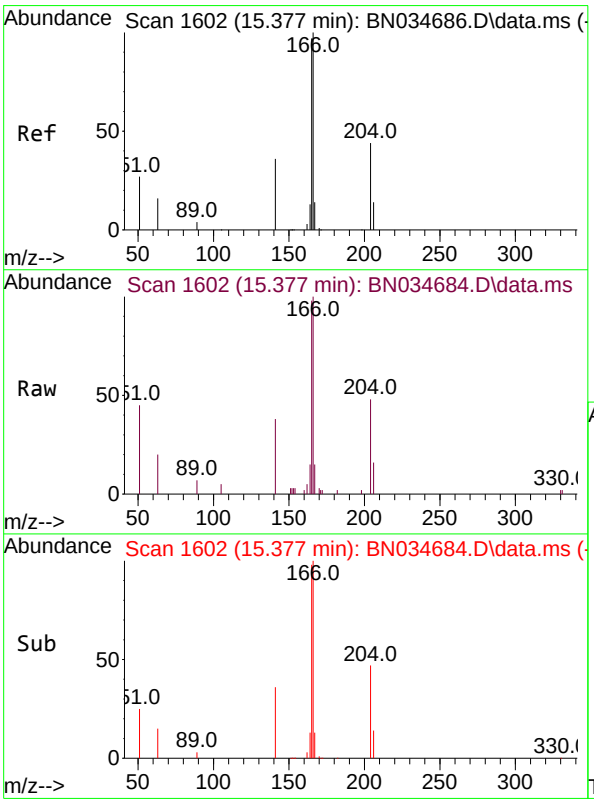
#17
Acenaphthene
Concen: 0.101 ng
RT: 14.393 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:154 Resp: 2450

Ion	Ratio	Lower	Upper
154	100		
153	113.7	88.2	132.2
152	59.7	46.9	70.3

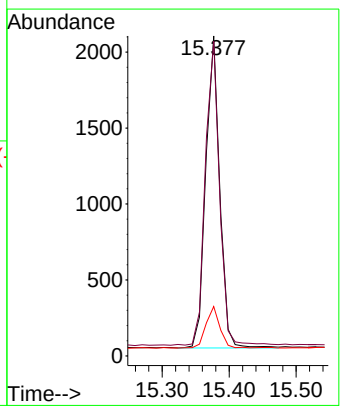


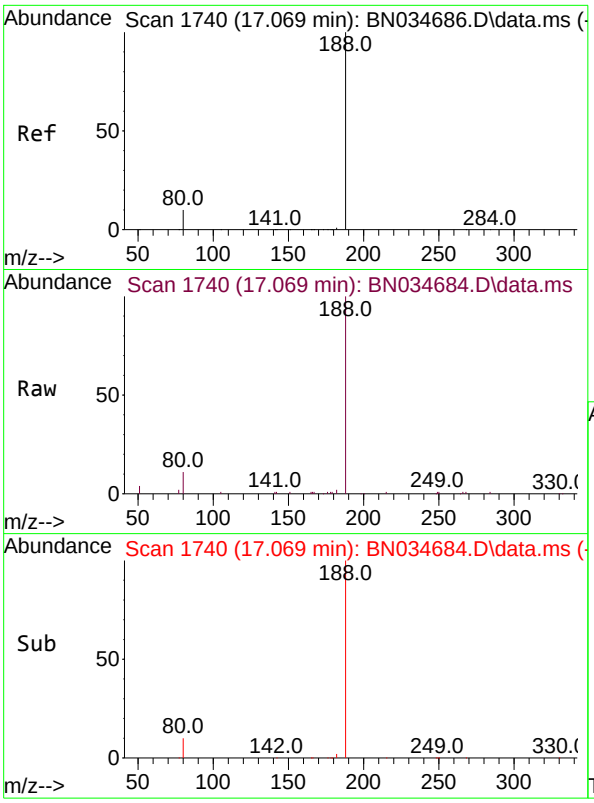


#18
Fluorene
Concen: 0.098 ng
RT: 15.377 min Scan# 1602
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion:166 Resp: 2971

Ion	Ratio	Lower	Upper
166	100		
165	98.5	78.8	118.2
167	13.1	10.6	16.0



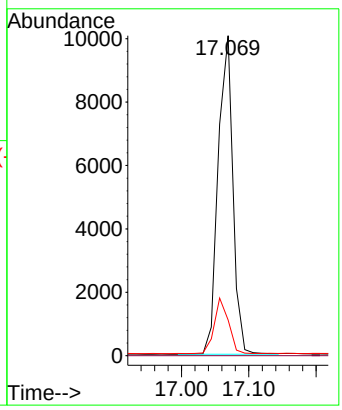


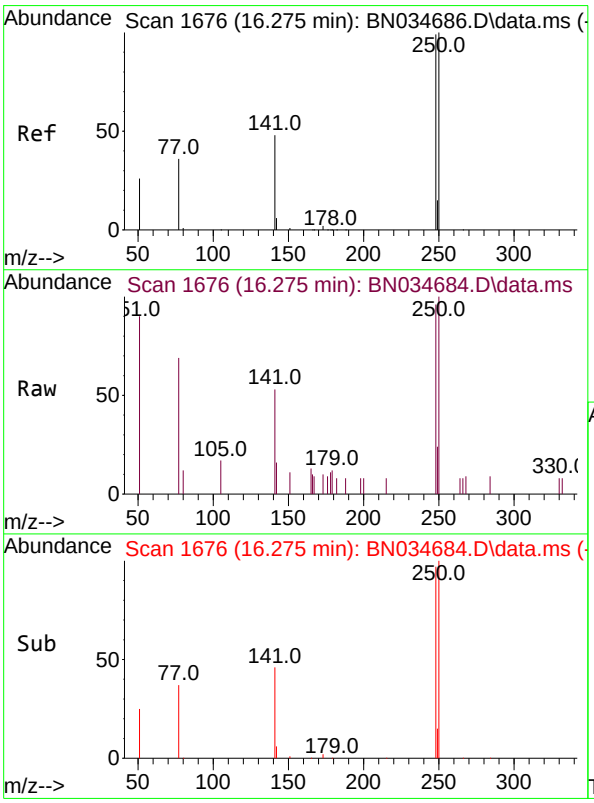
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.069 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:188 Resp: 15281

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.1	8.9	13.3

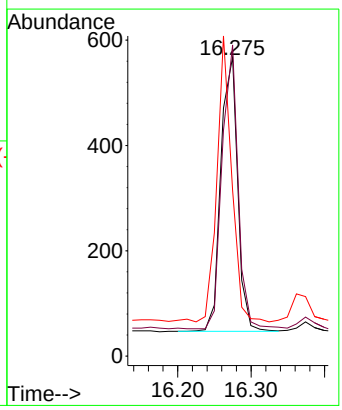


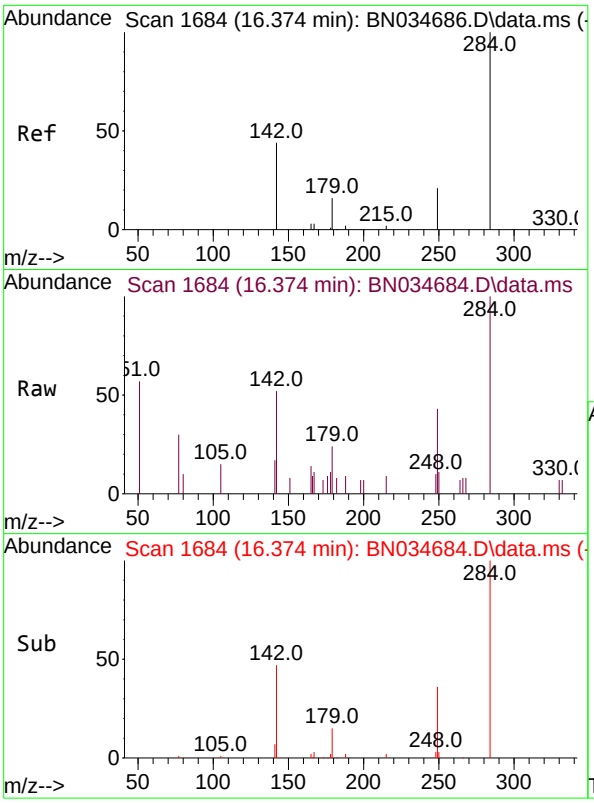


#21
4-Bromophenyl-phenylether
Concen: 0.099 ng
RT: 16.275 min Scan# 1676
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion:248 Resp: 830

Ion	Ratio	Lower	Upper
248	100		
250	104.0	80.9	121.3
141	55.5	40.5	60.7



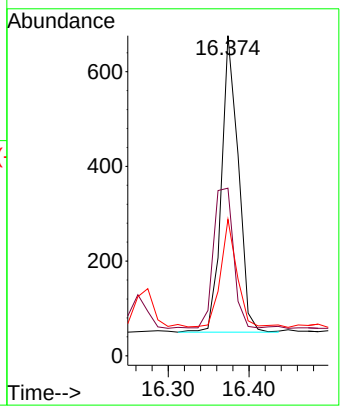


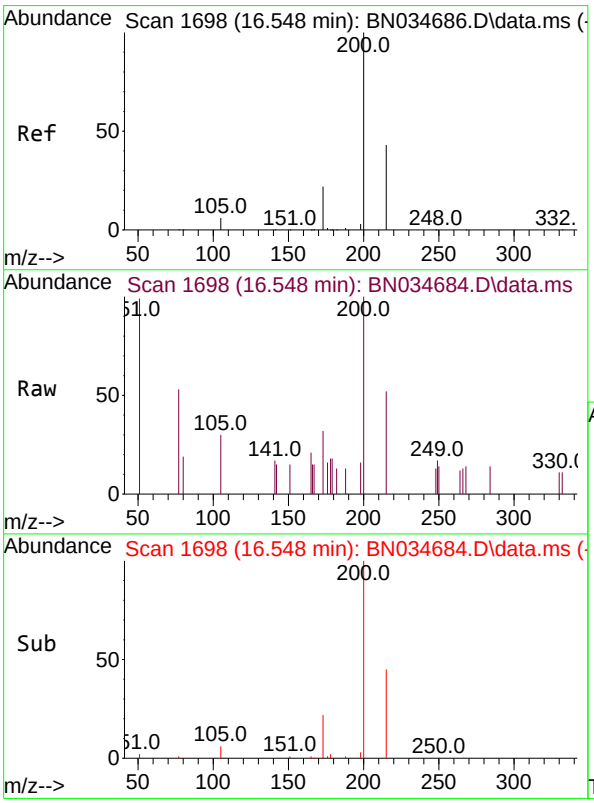
#22
Hexachlorobenzene
Concen: 0.098 ng
RT: 16.374 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:284 Resp: 909

Ion	Ratio	Lower	Upper
284	100		
142	55.8	43.6	65.4
249	36.0	26.6	40.0

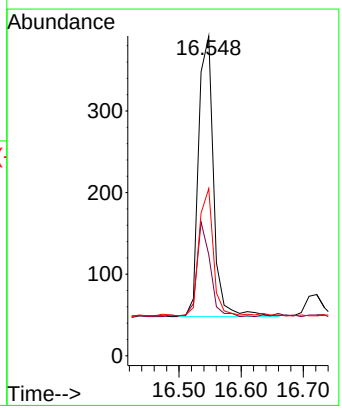


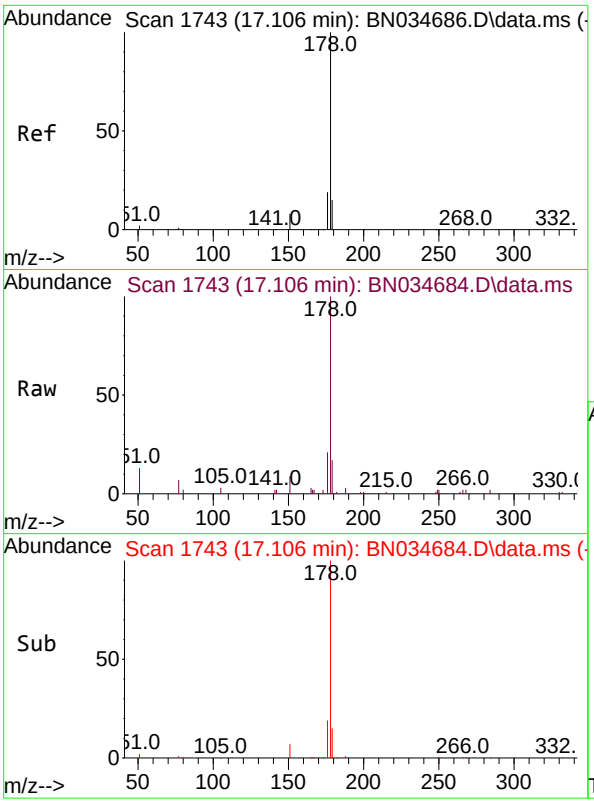


#23
Atrazine
Concen: 0.079 ng
RT: 16.548 min Scan# 1698
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion:200 Resp: 577

Ion	Ratio	Lower	Upper
200	100		
173	31.6	19.7	29.5#
215	52.3	35.7	53.5



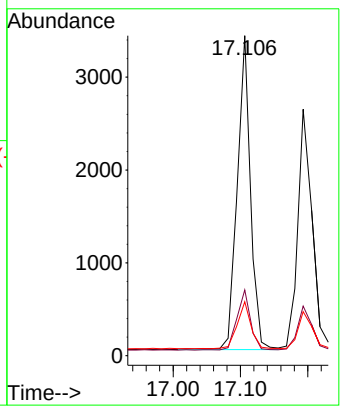


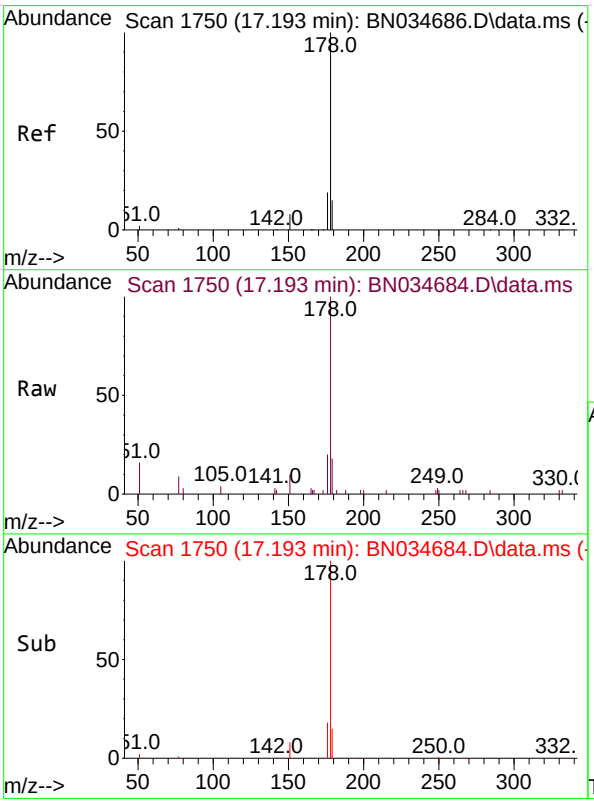
#25
Phenanthrene
Concen: 0.102 ng
RT: 17.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:178 Resp: 4637

Ion	Ratio	Lower	Upper
178	100		
176	19.5	15.4	23.2
179	15.2	12.2	18.4

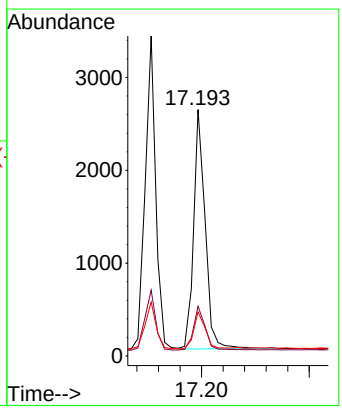


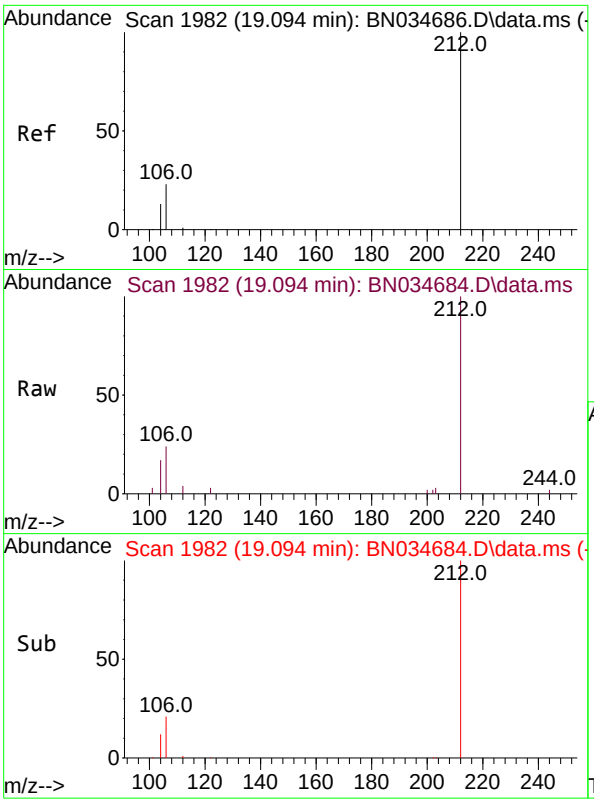


#26
Anthracene
Concen: 0.095 ng
RT: 17.193 min Scan# 1750
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion:178 Resp: 3843

Ion	Ratio	Lower	Upper
178	100		
176	18.7	14.9	22.3
179	15.3	12.2	18.2



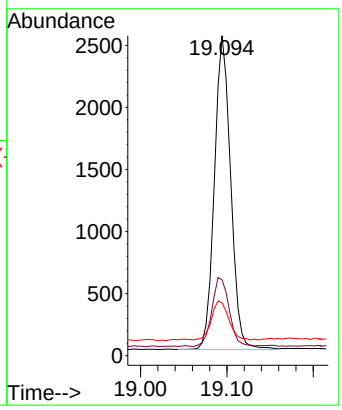


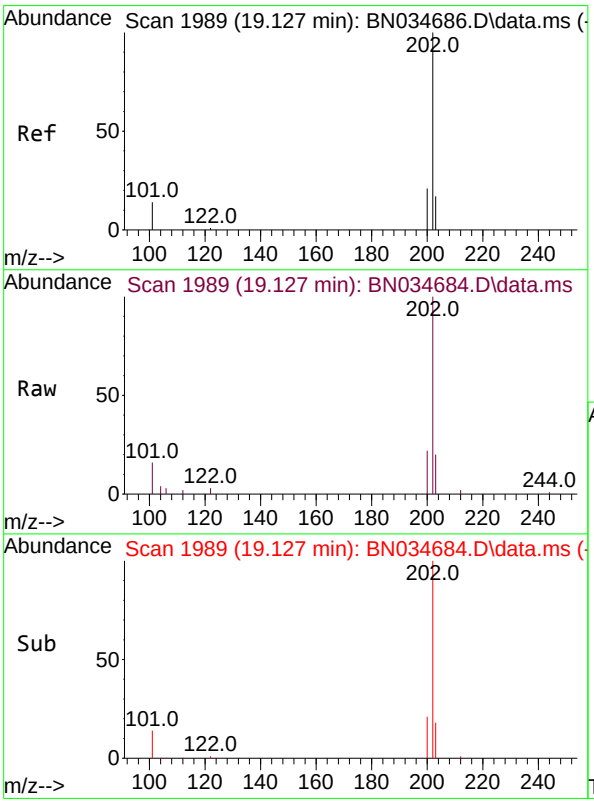
#27
Fluoranthene-d10
Concen: 0.089 ng
RT: 19.094 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:212 Resp: 3322

Ion	Ratio	Lower	Upper
212	100		
106	23.1	17.8	26.8
104	13.2	10.2	15.4

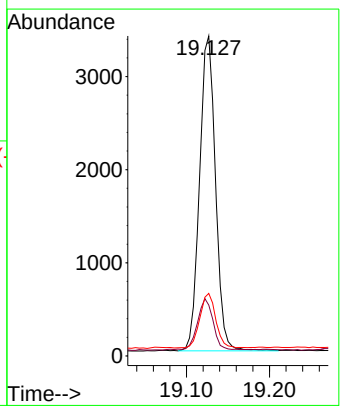


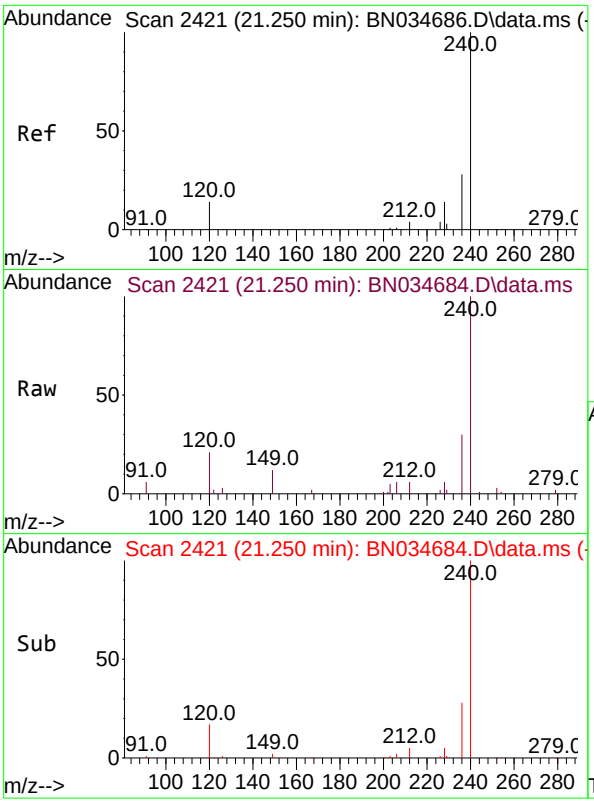


#28
Fluoranthene
Concen: 0.089 ng
RT: 19.127 min Scan# 1989
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion:202 Resp: 4537

Ion	Ratio	Lower	Upper
202	100		
101	15.5	12.8	19.2
203	17.2	13.5	20.3



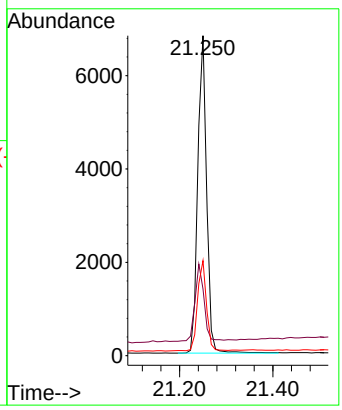


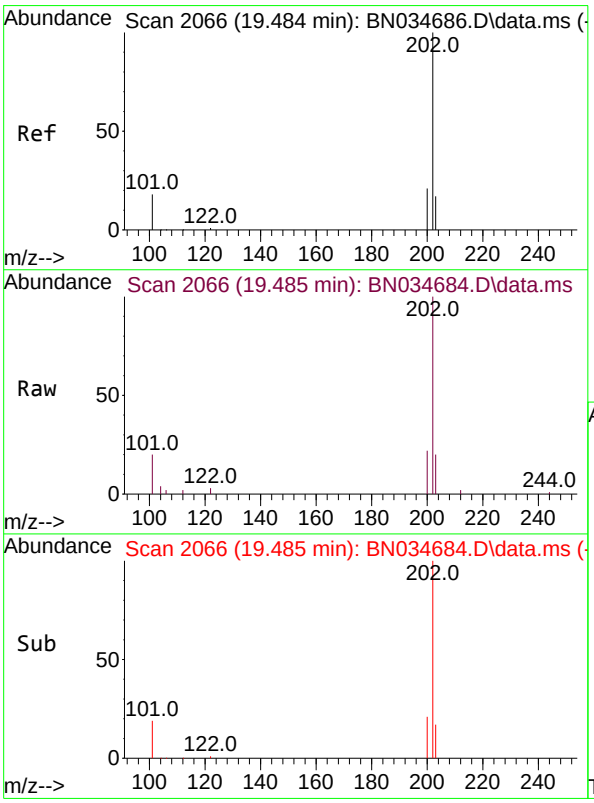
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.250 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:240 Resp: 9023

Ion	Ratio	Lower	Upper
240	100		
120	20.9	14.2	21.2
236	29.7	23.1	34.7

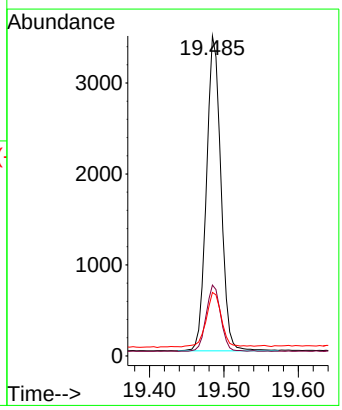


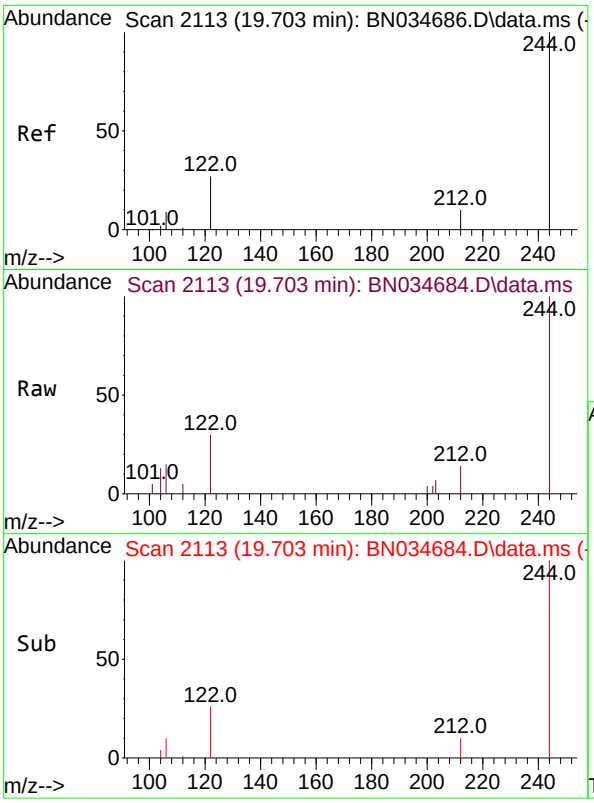


#30
Pyrene
Concen: 0.116 ng
RT: 19.485 min Scan# 2066
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion:202 Resp: 4660

Ion	Ratio	Lower	Upper
202	100		
200	21.1	16.6	25.0
203	18.3	14.2	21.4



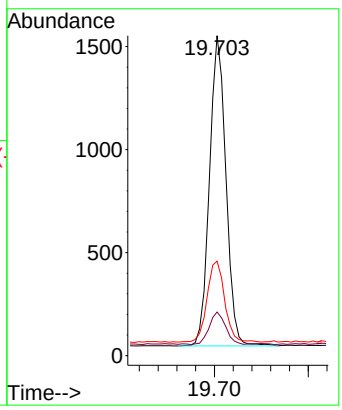


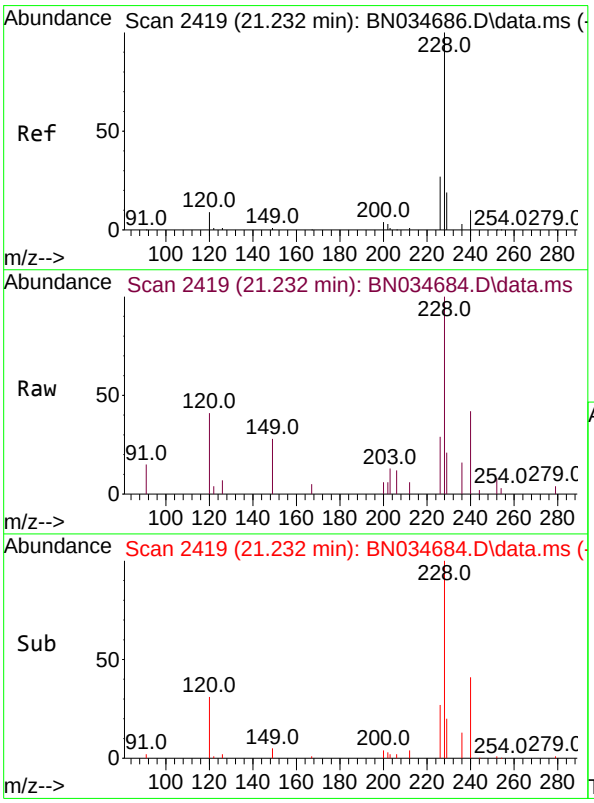
#31
Terphenyl-d14
Concen: 0.105 ng
RT: 19.703 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:244 Resp: 1833

Ion	Ratio	Lower	Upper
244	100		
212	13.7	8.6	13.0#
122	29.6	22.3	33.5

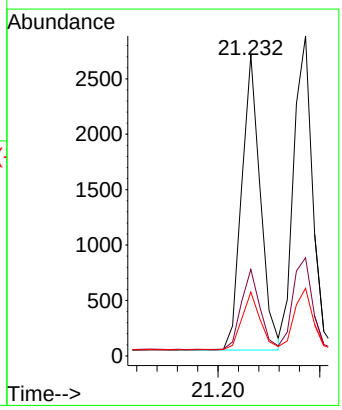


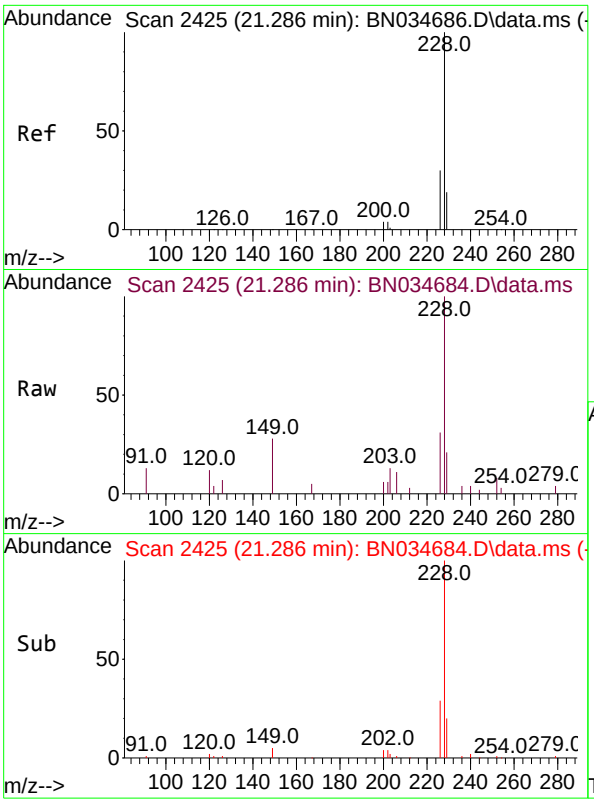


#32
Benzo(a)anthracene
Concen: 0.099 ng
RT: 21.232 min Scan# 2419
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion:228 Resp: 3389

Ion	Ratio	Lower	Upper
228	100		
226	28.7	22.0	33.0
229	21.2	15.6	23.4



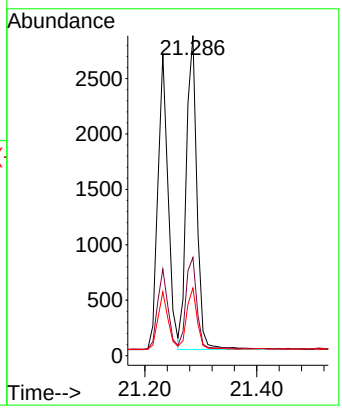


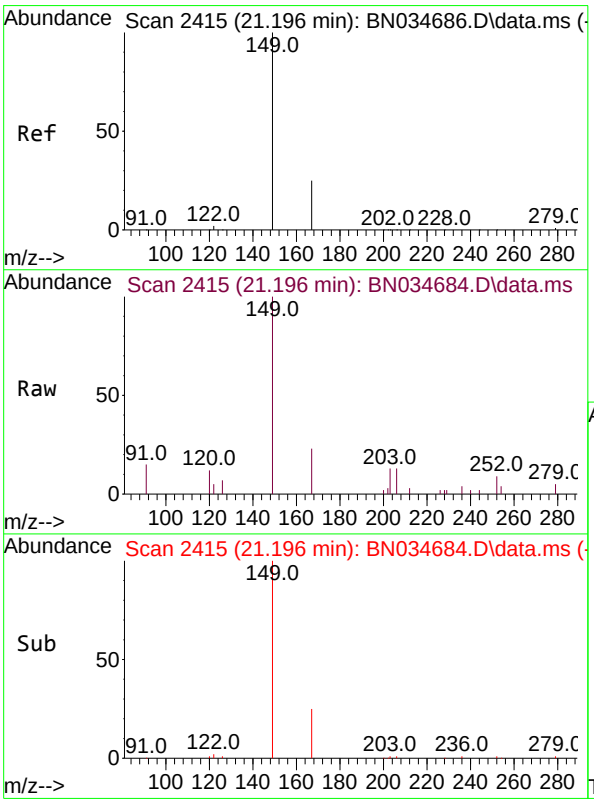
#33
Chrysene
Concen: 0.109 ng
RT: 21.286 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:228 Resp: 3705

Ion	Ratio	Lower	Upper
228	100		
226	30.7	24.1	36.1
229	21.1	15.8	23.8

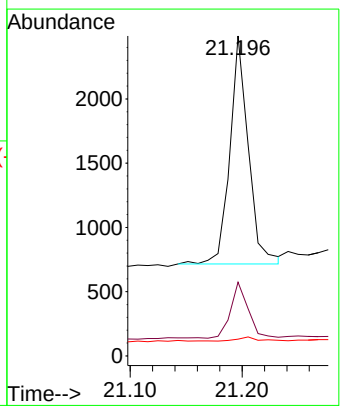


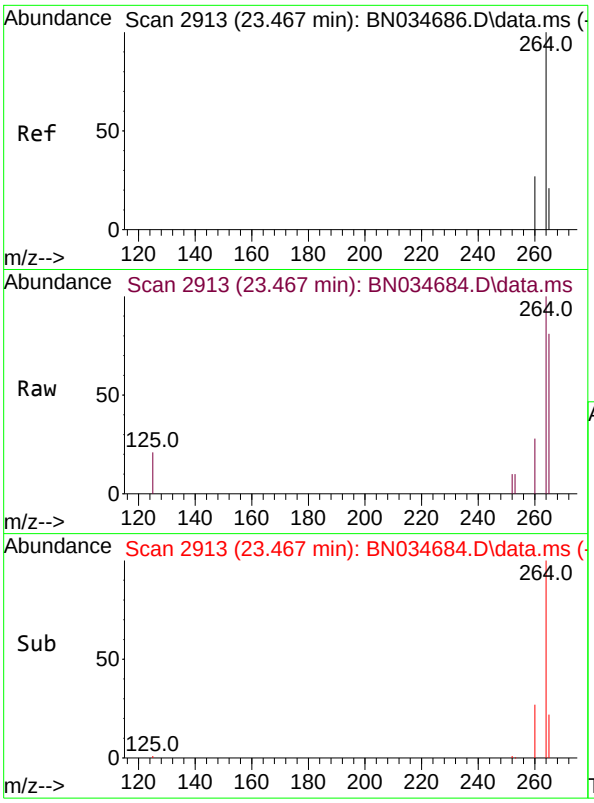


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.087 ng
RT: 21.196 min Scan# 2415
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion:149 Resp: 2033

Ion	Ratio	Lower	Upper
149	100		
167	23.0	19.7	29.5
279	1.7	1.8	2.6#



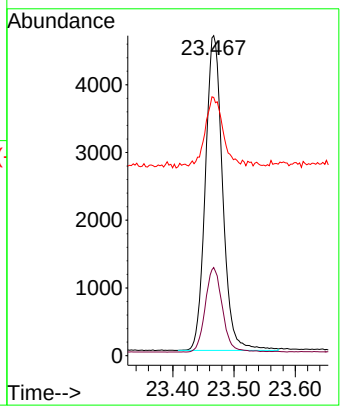


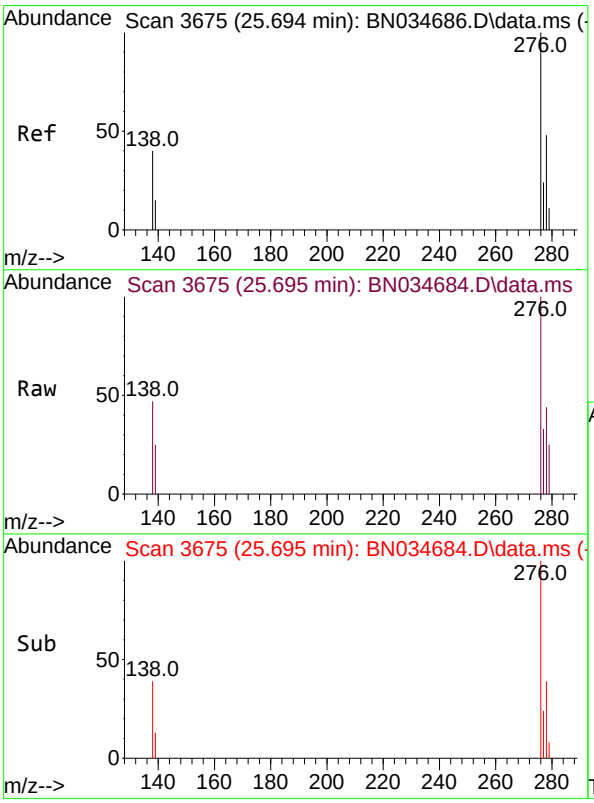
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.467 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:264 Resp: 9104

Ion	Ratio	Lower	Upper
264	100		
260	27.6	21.9	32.9
265	80.7	60.6	91.0

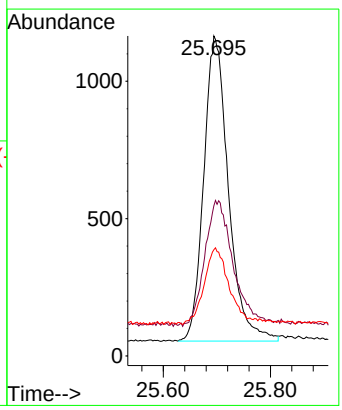


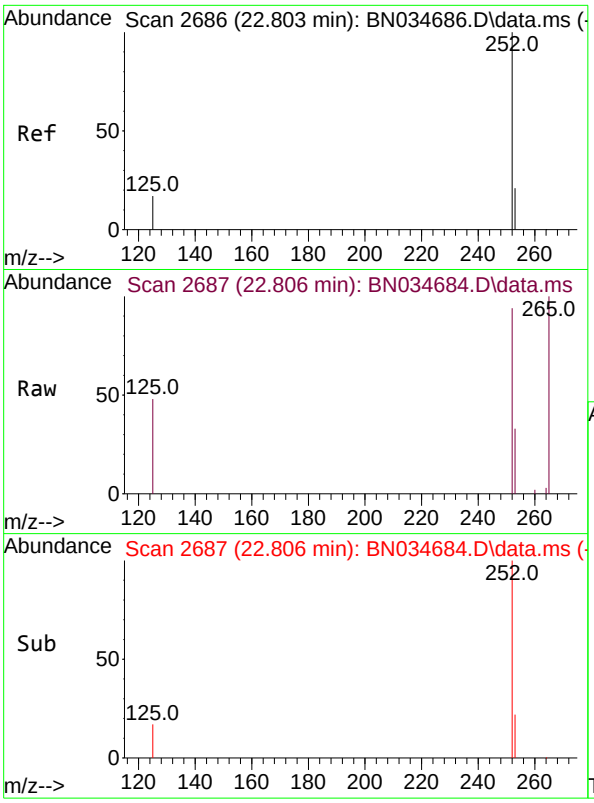


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.101 ng
RT: 25.695 min Scan# 3675
Delta R.T. 0.000 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion:276 Resp: 3556

Ion	Ratio	Lower	Upper
276	100		
138	47.7	35.1	52.7
277	25.1	19.7	29.5



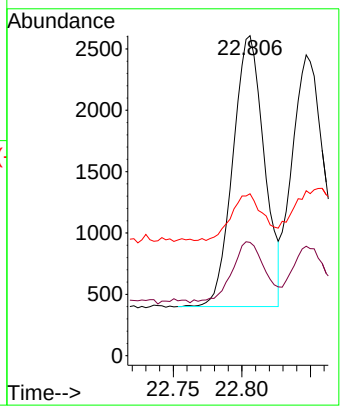


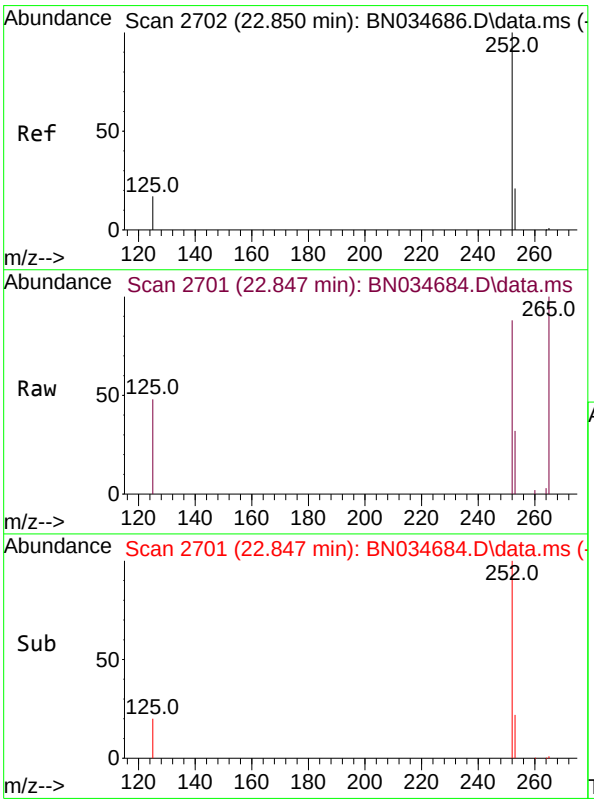
#37
Benzo(b)fluoranthene
Concen: 0.107 ng
RT: 22.806 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:252 Resp: 3512

Ion	Ratio	Lower	Upper
252	100		
253	35.4	20.0	30.0#
125	50.6	20.9	31.3#

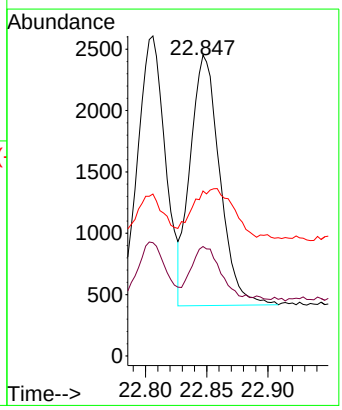


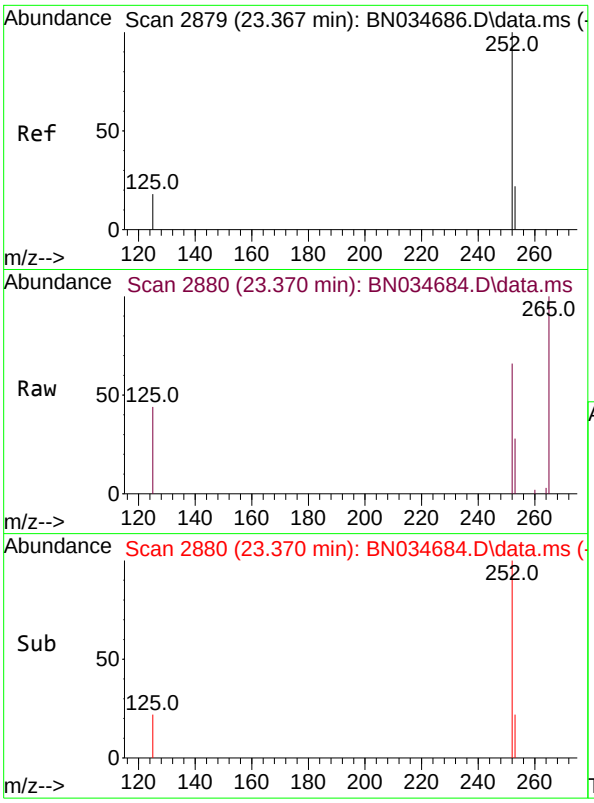


#38
Benzo(k)fluoranthene
Concen: 0.107 ng
RT: 22.847 min Scan# 2701
Delta R.T. -0.003 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion:252 Resp: 3438

Ion	Ratio	Lower	Upper
252	100		
253	36.4	20.6	31.0#
125	54.9	21.6	32.4#



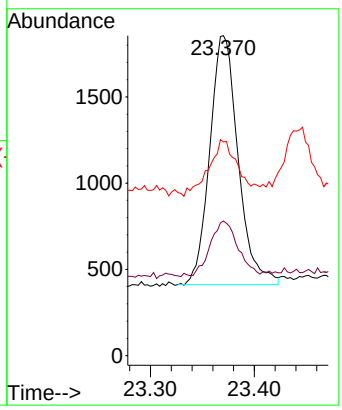


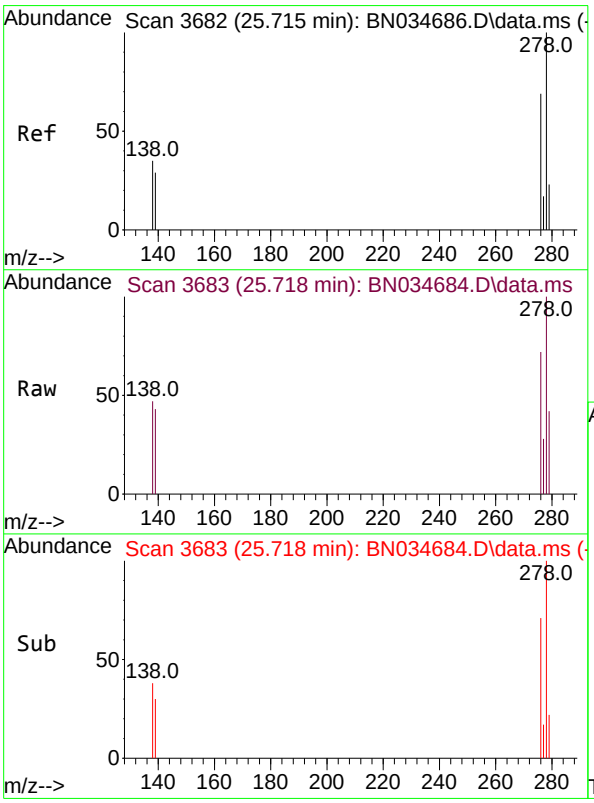
#39
Benzo(a)pyrene
Concen: 0.098 ng
RT: 23.370 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:252 Resp: 2737

Ion	Ratio	Lower	Upper
252	100		
253	42.1	22.2	33.4#
125	66.8	26.0	39.0#

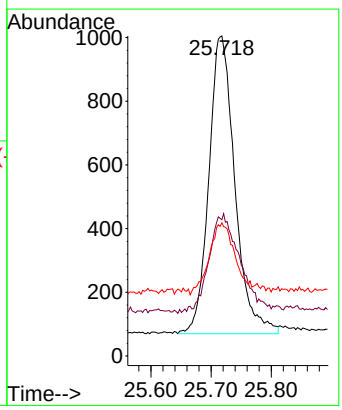


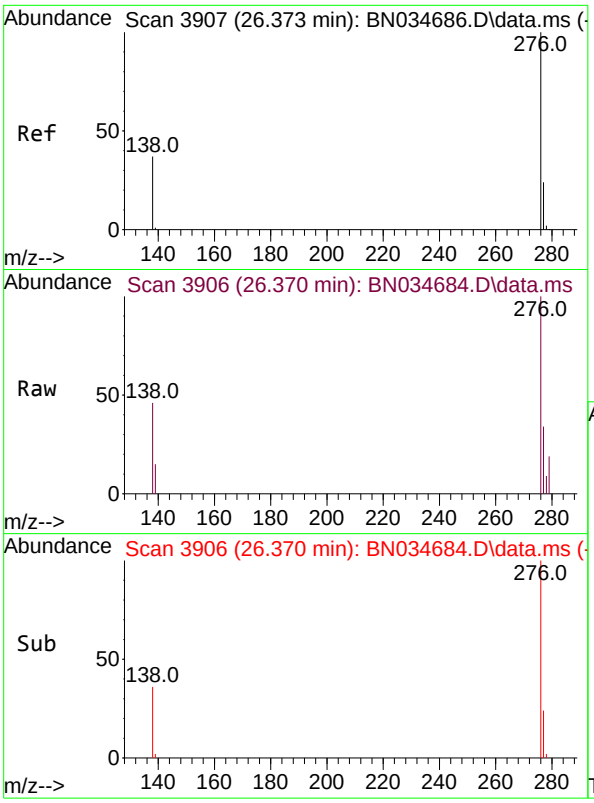


#40
Dibenzo(a,h)anthracene
Concen: 0.102 ng
RT: 25.718 min Scan# 3683
Delta R.T. 0.003 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Tgt Ion:278 Resp: 2812

Ion	Ratio	Lower	Upper
278	100		
139	42.6	25.4	38.2#
279	41.6	22.4	33.6#



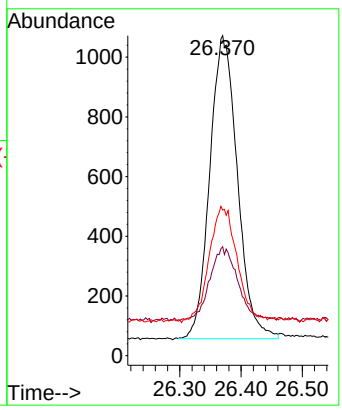


#41
Benzo(g,h,i)perylene
Concen: 0.105 ng
RT: 26.370 min Scan# 3
Delta R.T. -0.003 min
Lab File: BN034684.D
Acq: 24 Oct 2024 09:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:276 Resp: 3179

Ion	Ratio	Lower	Upper
276	100		
277	34.0	21.3	31.9#
138	45.5	31.9	47.9



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034685.D
Acq On : 24 Oct 2024 09:47
Operator : RC/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Quant Time: Oct 24 12:42:31 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 12:41:40 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.712	152	5856	0.400	ng		0.00
7) Naphthalene-d8	10.479	136	17008	0.400	ng		0.00
13) Acenaphthene-d10	14.329	164	8253	0.400	ng		0.00
19) Phenanthrene-d10	17.069	188	17136	0.400	ng		0.00
29) Chrysene-d12	21.250	240	10548	0.400	ng		0.00
35) Perylene-d12	23.467	264	9753	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.322	112	3519	0.196	ng		0.00
5) Phenol-d6	6.882	99	4551	0.199	ng		0.00
8) Nitrobenzene-d5	8.845	82	2747	0.195	ng		0.00
11) 2-Methylnaphthalene-d10	12.071	152	4541	0.190	ng		0.00
14) 2,4,6-Tribromophenol	15.815	330	486	0.139	ng		0.00
15) 2-Fluorobiphenyl	12.950	172	6506	0.200	ng		0.00
27) Fluoranthene-d10	19.094	212	7583	0.181	ng		0.00
31) Terphenyl-d14	19.703	244	4203	0.206	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.285	88	1652	0.232	ng		93
3) n-Nitrosodimethylamine	3.588	42	2242	0.260	ng	#	97
6) bis(2-Chloroethyl)ether	7.142	93	3752	0.214	ng		100
9) Naphthalene	10.532	128	9353	0.199	ng		98
10) Hexachlorobutadiene	10.831	225	1441	0.192	ng	#	97
12) 2-Methylnaphthalene	12.147	142	5699	0.192	ng		99
16) Acenaphthylene	14.040	152	7676	0.194	ng		99
17) Acenaphthene	14.393	154	5306	0.196	ng		98
18) Fluorene	15.377	166	6638	0.197	ng		99
20) 4,6-Dinitro-2-methylph...	15.452	198	410	0.175	ng	#	58
21) 4-Bromophenyl-phenylether	16.275	248	1806	0.193	ng		99
22) Hexachlorobenzene	16.374	284	2002	0.192	ng		99
23) Atrazine	16.548	200	1350	0.165	ng		94
24) Pentachlorophenol	16.721	266	558	0.137	ng		98
25) Phenanthrene	17.106	178	10352	0.203	ng		100
26) Anthracene	17.193	178	8939	0.196	ng		99
28) Fluoranthene	19.127	202	10471	0.183	ng		100
30) Pyrene	19.484	202	10731	0.228	ng		100
32) Benzo(a)anthracene	21.232	228	7621	0.190	ng		99
33) Chrysene	21.286	228	8267	0.208	ng		99
34) Bis(2-ethylhexyl)phtha...	21.196	149	4110	0.150	ng	#	99
36) Indeno(1,2,3-cd)pyrene	25.700	276	7054	0.188	ng		98
37) Benzo(b)fluoranthene	22.803	252	7395	0.210	ng	#	88
38) Benzo(k)fluoranthene	22.847	252	7269	0.211	ng	#	89
39) Benzo(a)pyrene	23.370	252	5791	0.193	ng	#	84
40) Dibenzo(a,h)anthracene	25.715	278	5556	0.188	ng		91
41) Benzo(g,h,i)perylene	26.367	276	6274	0.193	ng		97

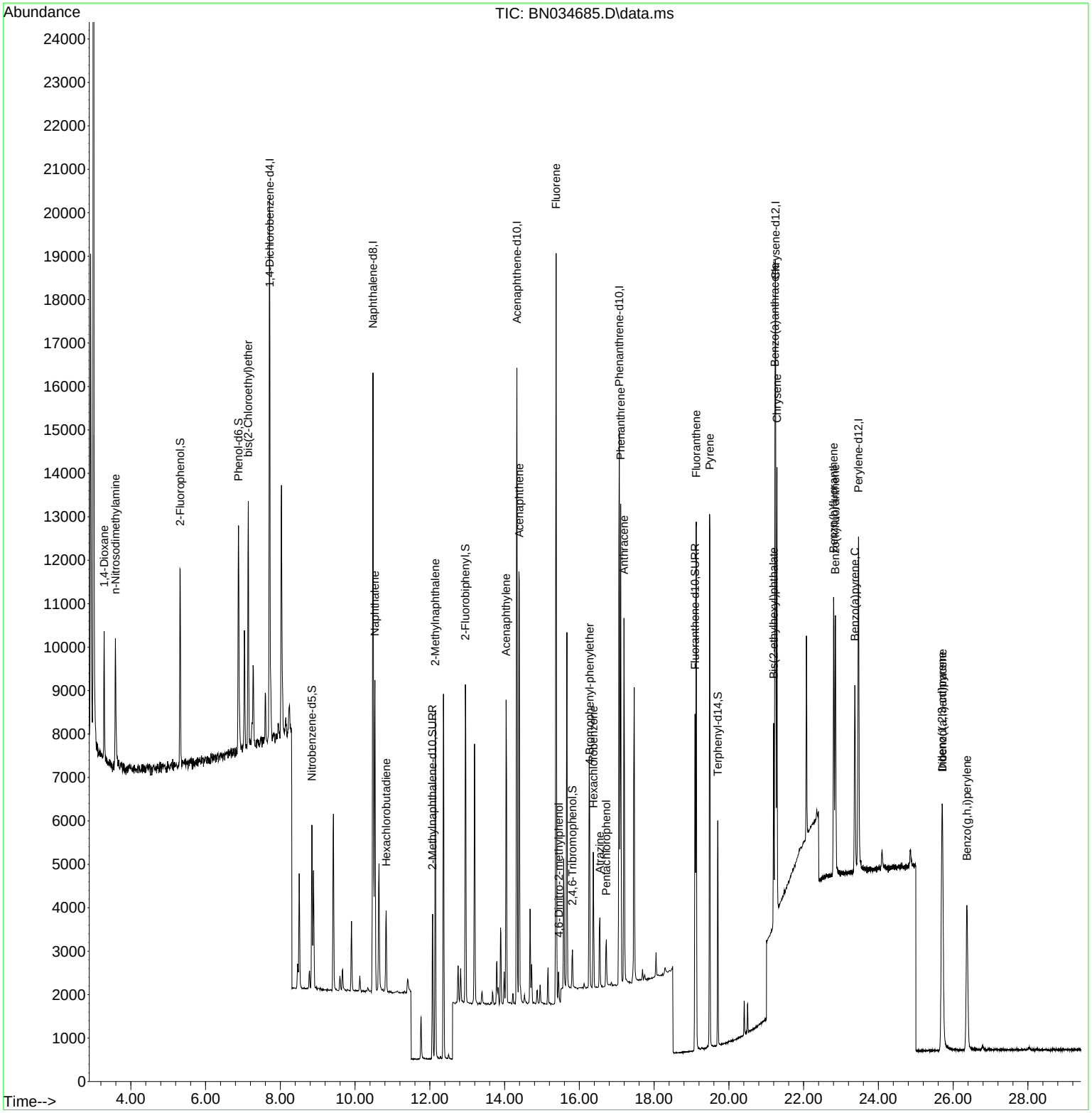
(#) = qualifier out of range (m) = manual integration (+) = signals summed

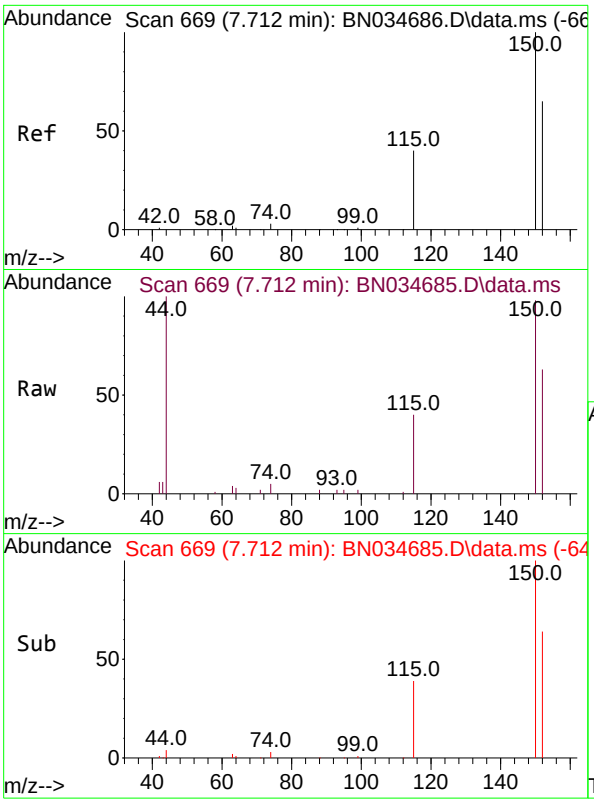
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034685.D
Acq On : 24 Oct 2024 09:47
Operator : RC/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Quant Time: Oct 24 12:42:31 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 12:41:40 2024
Response via : Initial Calibration



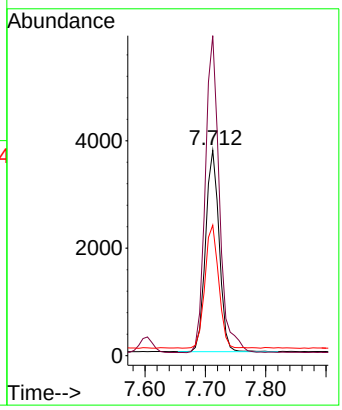


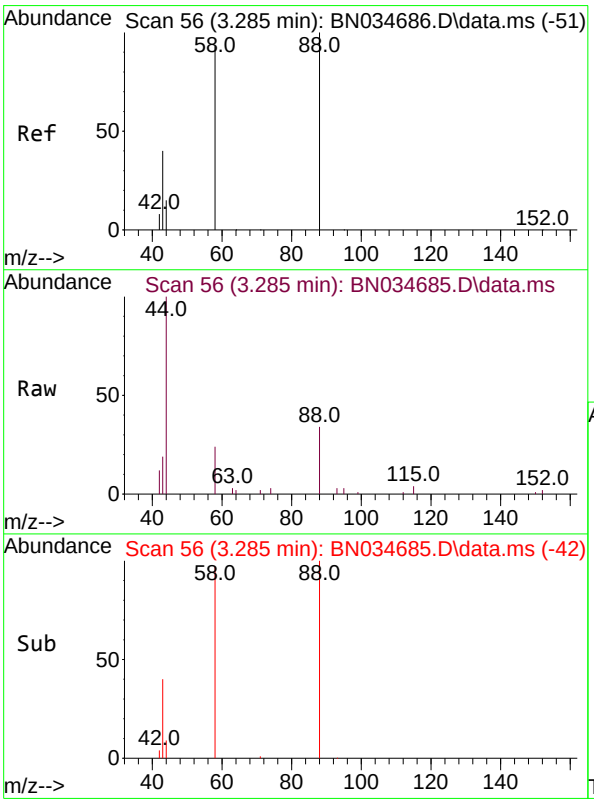
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:152 Resp: 5856

Ion	Ratio	Lower	Upper
152	100		
150	155.7	122.7	184.1
115	63.5	51.0	76.6

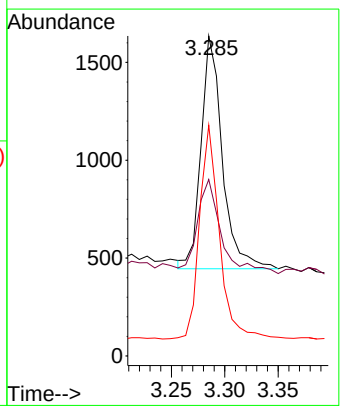


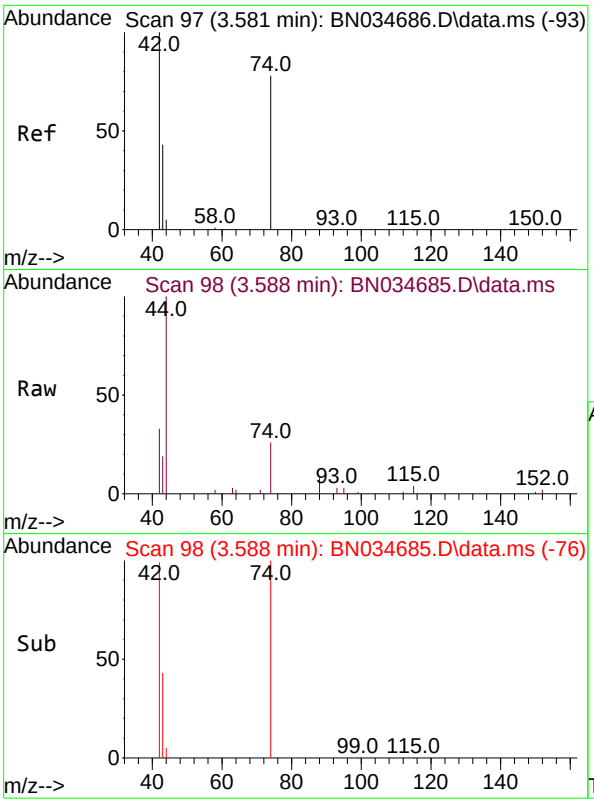


#2
1,4-Dioxane
Concen: 0.232 ng
RT: 3.285 min Scan# 56
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion: 88 Resp: 1652

Ion	Ratio	Lower	Upper
88	100		
43	45.2	32.1	48.1
58	85.9	73.7	110.5



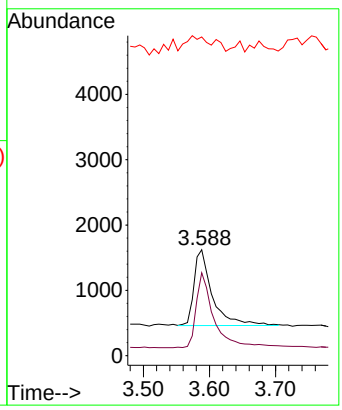


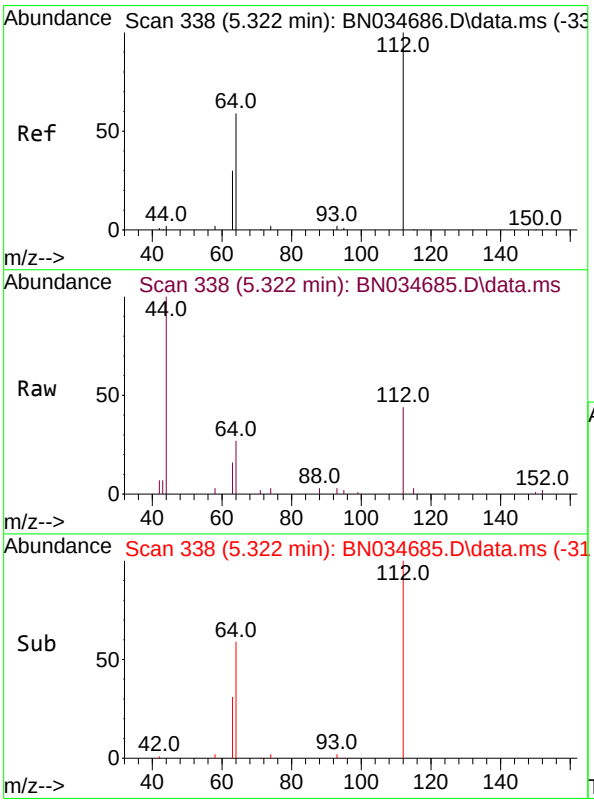
#3
n-Nitrosodimethylamine
Concen: 0.260 ng
RT: 3.588 min Scan# 9
Delta R.T. 0.007 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion: 42 Resp: 2242

Ion	Ratio	Lower	Upper
42	100		
74	95.2	77.2	115.8
44	21.1	13.4	20.2#

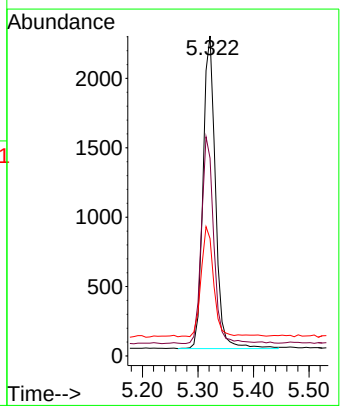


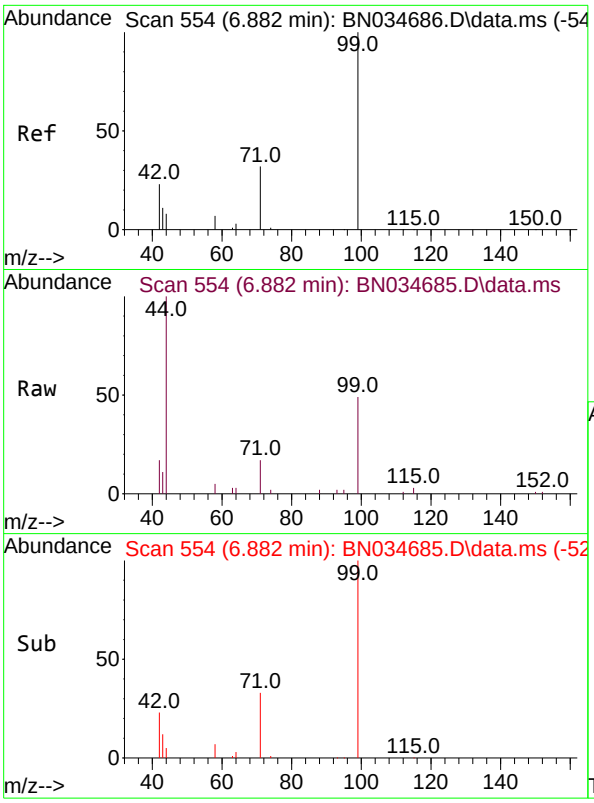


#4
2-Fluorophenol
Concen: 0.196 ng
RT: 5.322 min Scan# 338
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:112 Resp: 3519

Ion	Ratio	Lower	Upper
112	100		
64	65.2	53.0	79.6
63	34.5	27.6	41.4



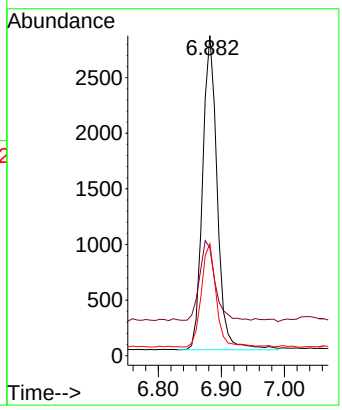


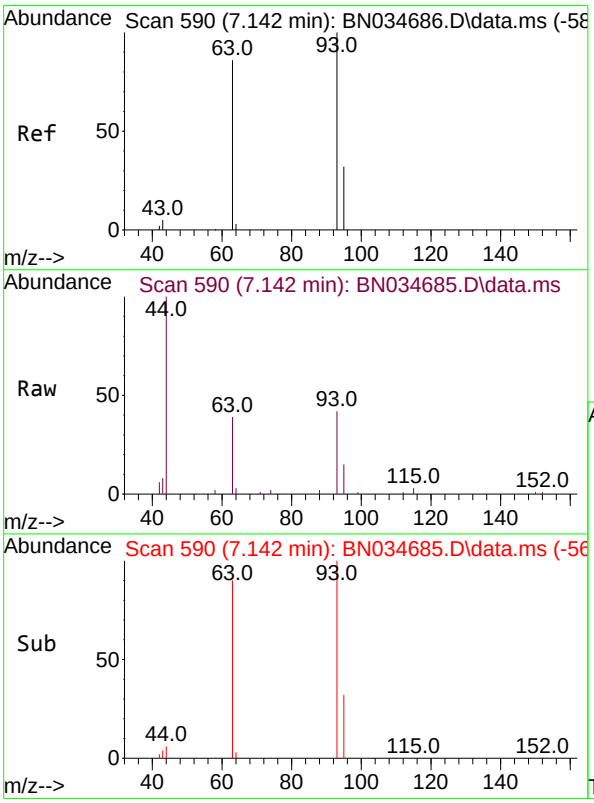
#5
Phenol-d6
Concen: 0.199 ng
RT: 6.882 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion: 99 Resp: 4551

Ion	Ratio	Lower	Upper
99	100		
42	26.6	21.8	32.8
71	33.2	26.6	40.0

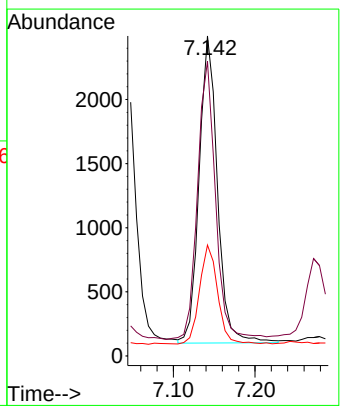


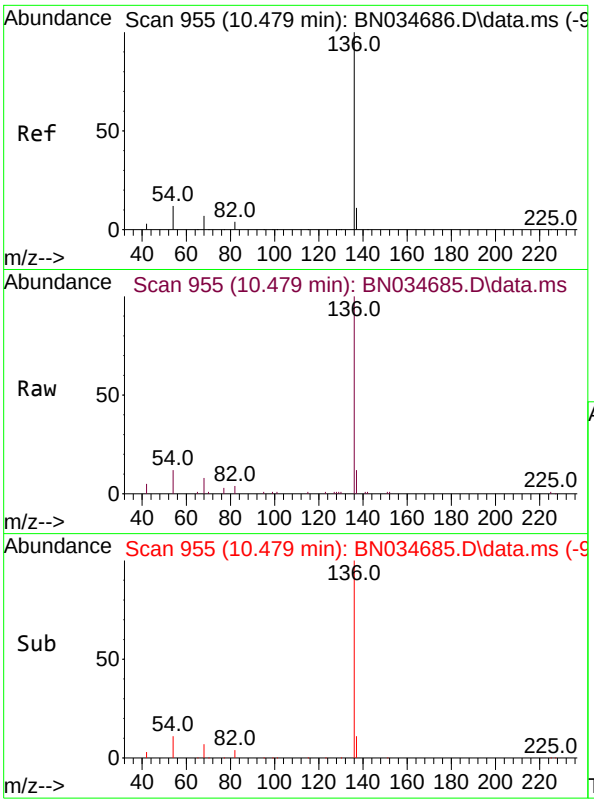


#6
bis(2-Chloroethyl)ether
Concen: 0.214 ng
RT: 7.142 min Scan# 590
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion: 93 Resp: 3752

Ion	Ratio	Lower	Upper
93	100		
63	89.0	71.5	107.3
95	31.9	25.8	38.6



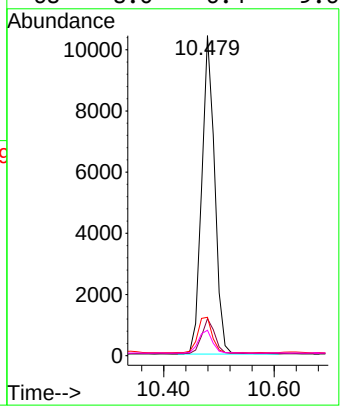


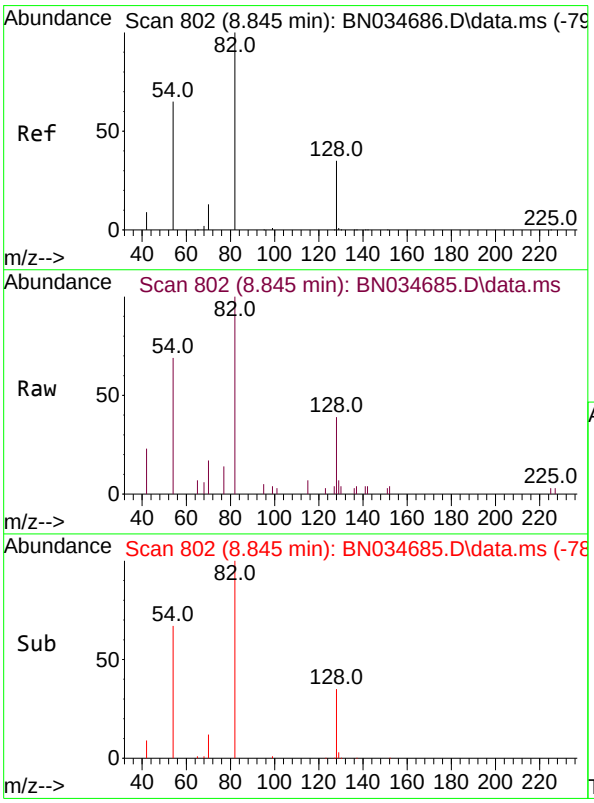
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:136 Resp: 17008

Ion	Ratio	Lower	Upper
136	100		
137	11.5	9.1	13.7
54	12.0	9.8	14.8
68	8.0	6.4	9.6

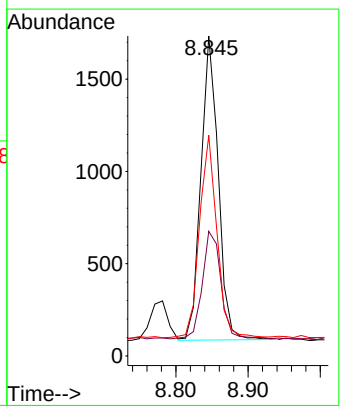


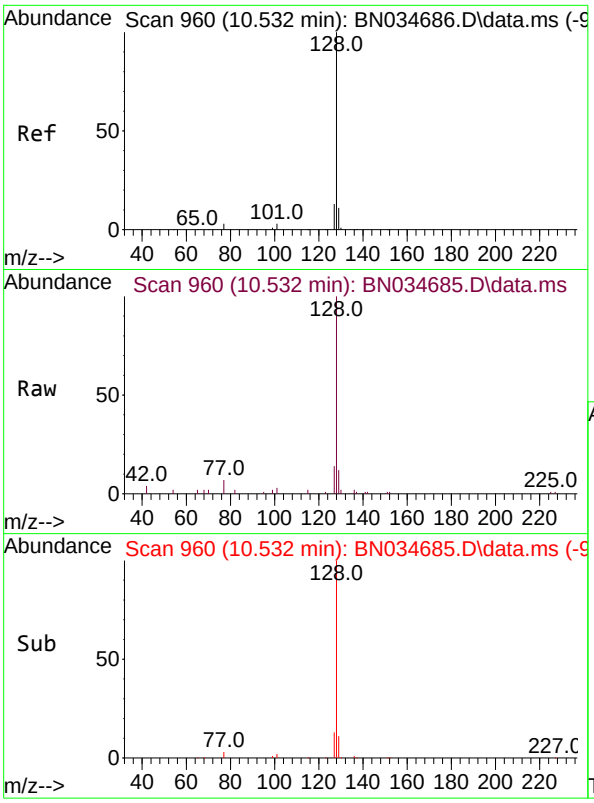


#8
Nitrobenzene-d5
Concen: 0.195 ng
RT: 8.845 min Scan# 802
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion: 82 Resp: 2747

Ion	Ratio	Lower	Upper
82	100		
128	38.9	29.7	44.5
54	69.0	53.0	79.6



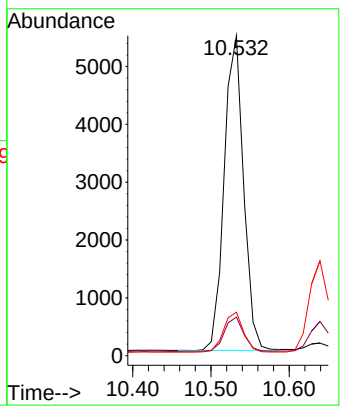


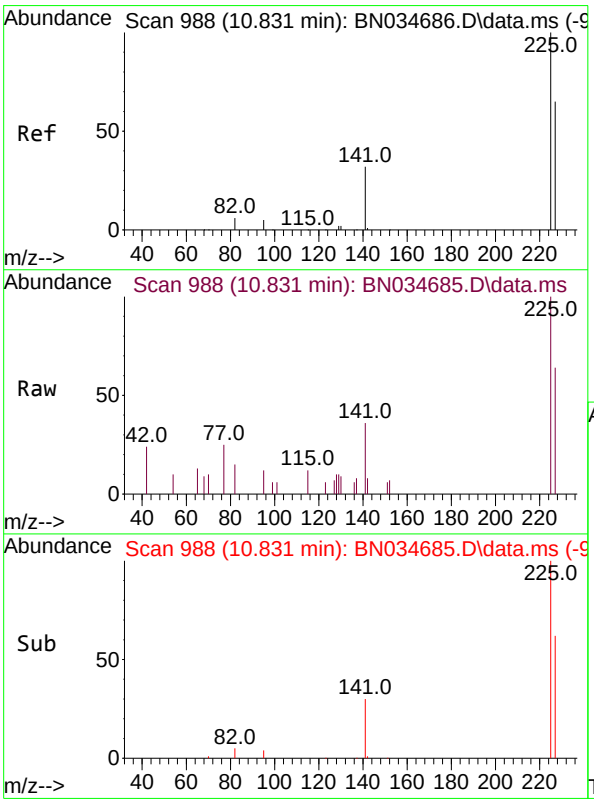
#9
Naphthalene
Concen: 0.199 ng
RT: 10.532 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:128 Resp: 9353

Ion	Ratio	Lower	Upper
128	100		
129	12.1	9.0	13.6
127	13.6	10.5	15.7

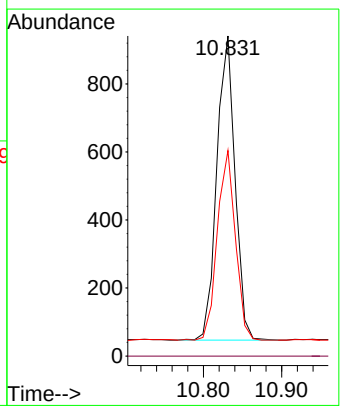


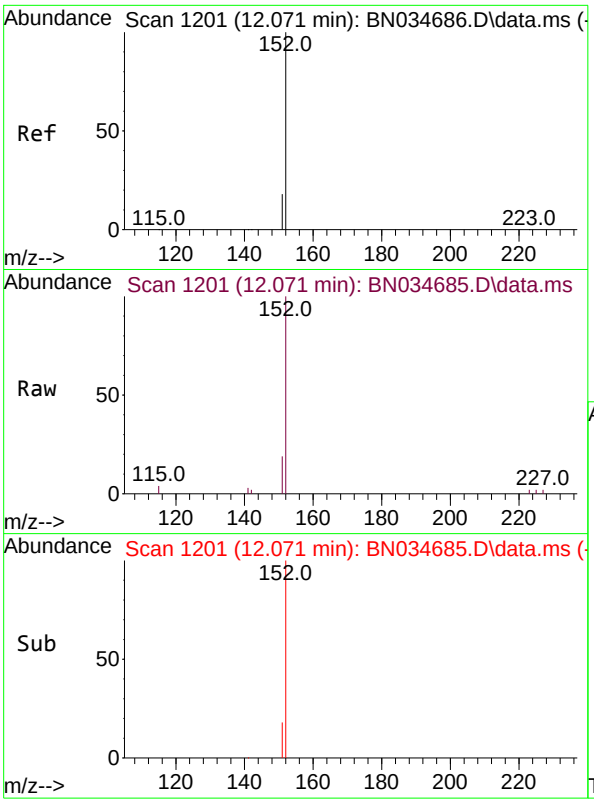


#10
Hexachlorobutadiene
Concen: 0.192 ng
RT: 10.831 min Scan# 988
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:225 Resp: 1441

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	61.8	51.4	77.0



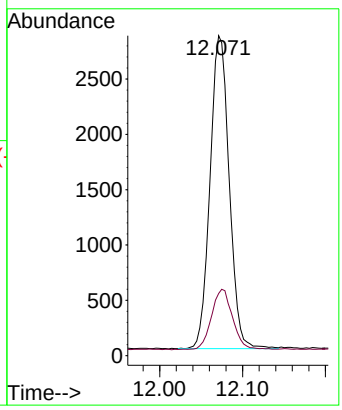


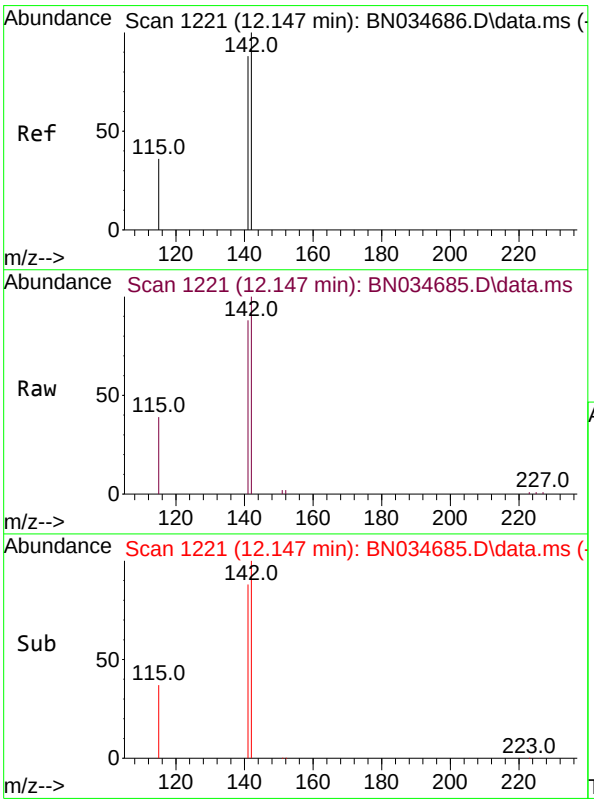
#11
2-Methylnaphthalene-d10
Concen: 0.190 ng
RT: 12.071 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:152 Resp: 4541

Ion	Ratio	Lower	Upper
152	100		
151	21.4	16.7	25.1

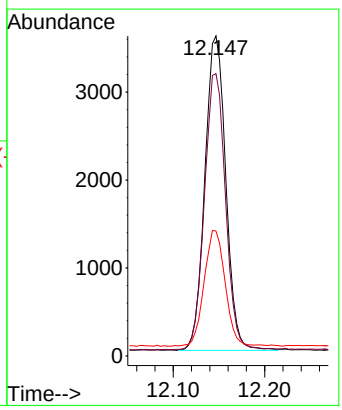


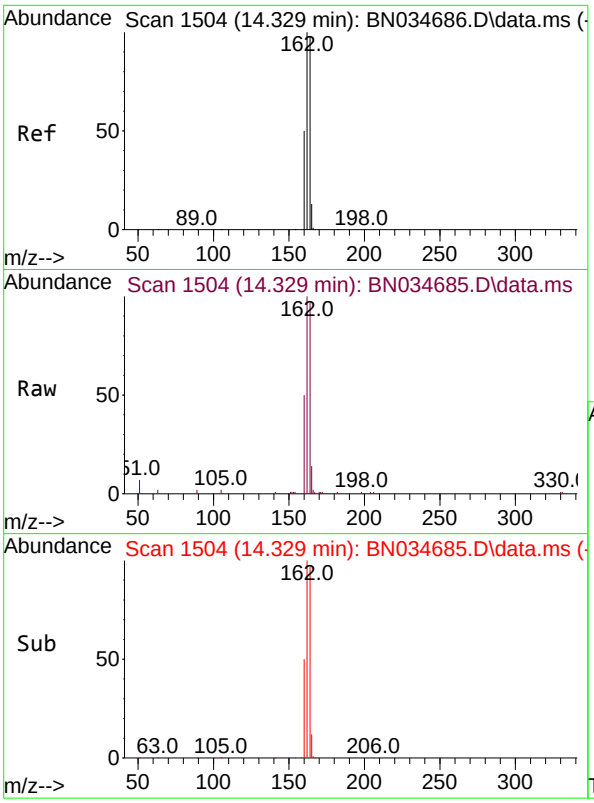


#12
2-Methylnaphthalene
Concen: 0.192 ng
RT: 12.147 min Scan# 1221
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:142 Resp: 5699

Ion	Ratio	Lower	Upper
142	100		
141	88.2	70.4	105.6
115	39.1	29.8	44.6



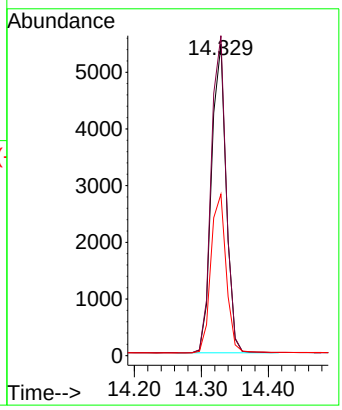


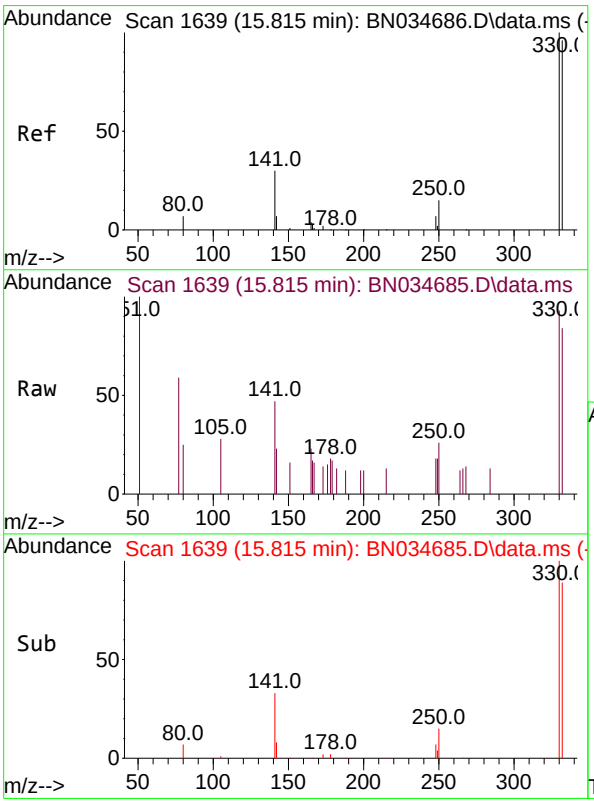
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.329 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:164 Resp: 8253

Ion	Ratio	Lower	Upper
164	100		
162	102.7	81.4	122.0
160	51.8	40.6	61.0

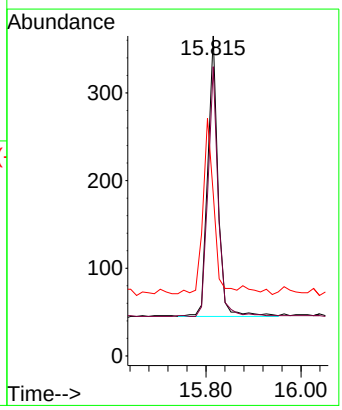


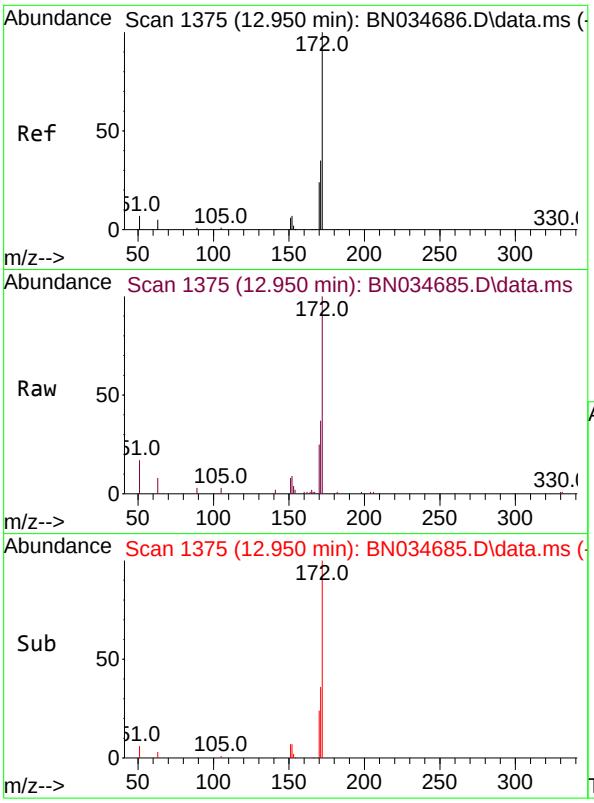


#14
2,4,6-Tribromophenol
Concen: 0.139 ng
RT: 15.815 min Scan# 1639
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:330 Resp: 486

Ion	Ratio	Lower	Upper
330	100		
332	88.7	76.6	115.0
141	65.0	54.6	81.8



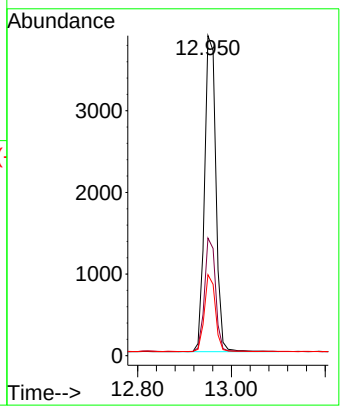


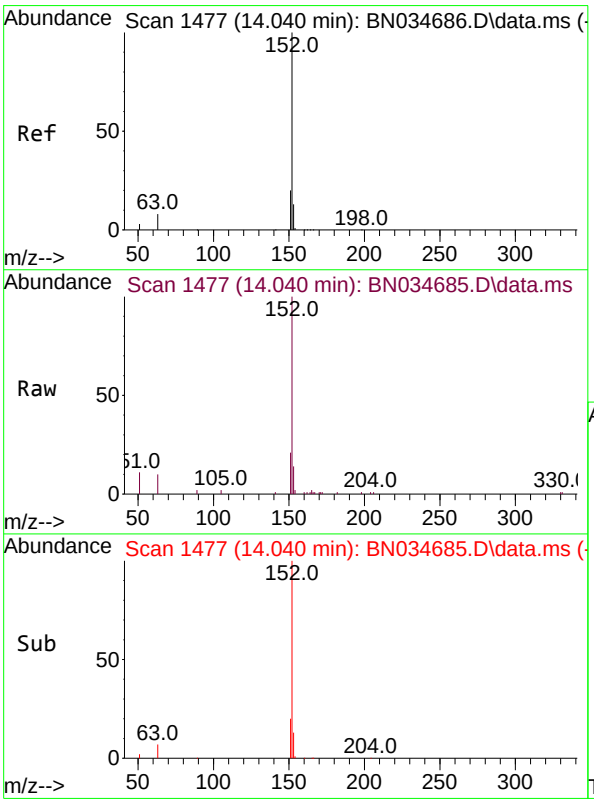
#15
2-Fluorobiphenyl
Concen: 0.200 ng
RT: 12.950 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:172 Resp: 6506

Ion	Ratio	Lower	Upper
172	100		
171	36.7	28.3	42.5
170	25.3	19.8	29.6

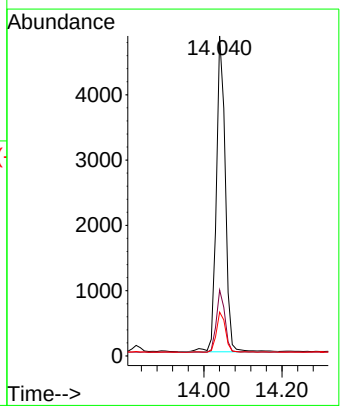


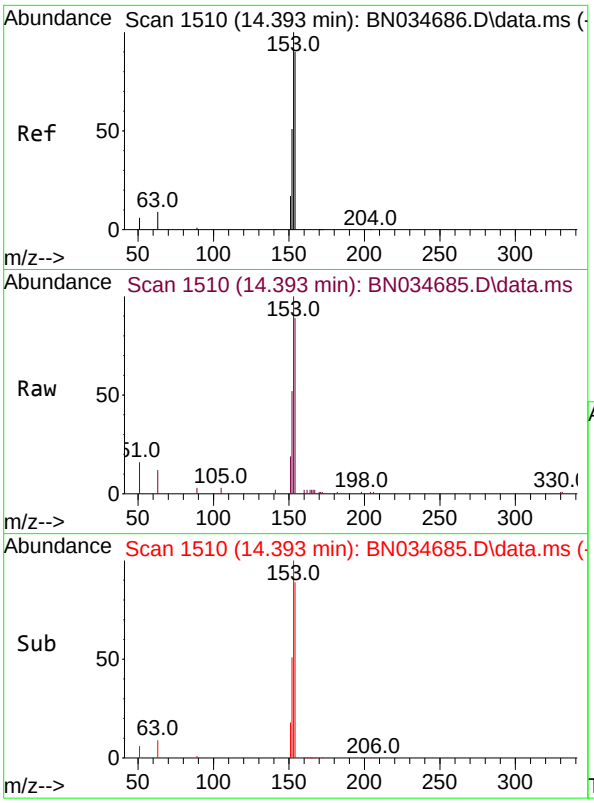


#16
Acenaphthylene
Concen: 0.194 ng
RT: 14.040 min Scan# 1477
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:152 Resp: 7676

Ion	Ratio	Lower	Upper
152	100		
151	19.2	15.6	23.4
153	12.7	10.6	15.8



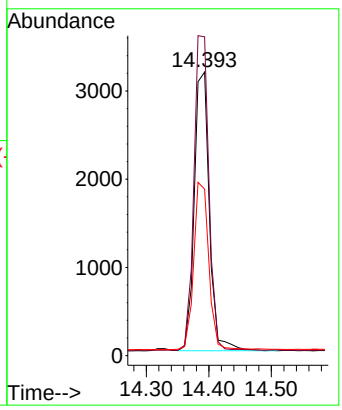


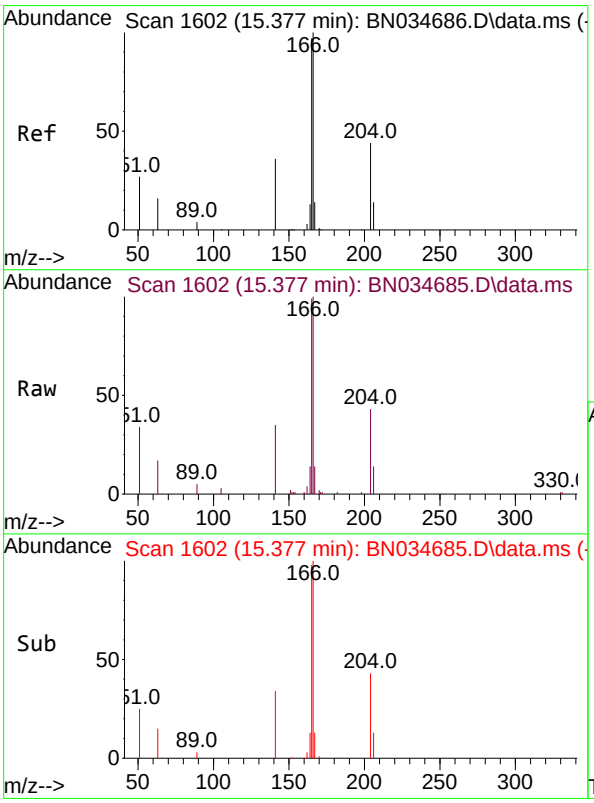
#17
Acenaphthene
Concen: 0.196 ng
RT: 14.393 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:154 Resp: 5306

Ion	Ratio	Lower	Upper
154	100		
153	112.7	88.2	132.2
152	60.1	46.9	70.3

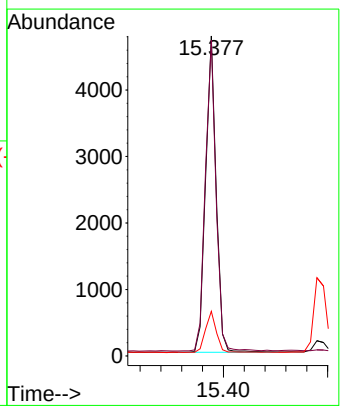


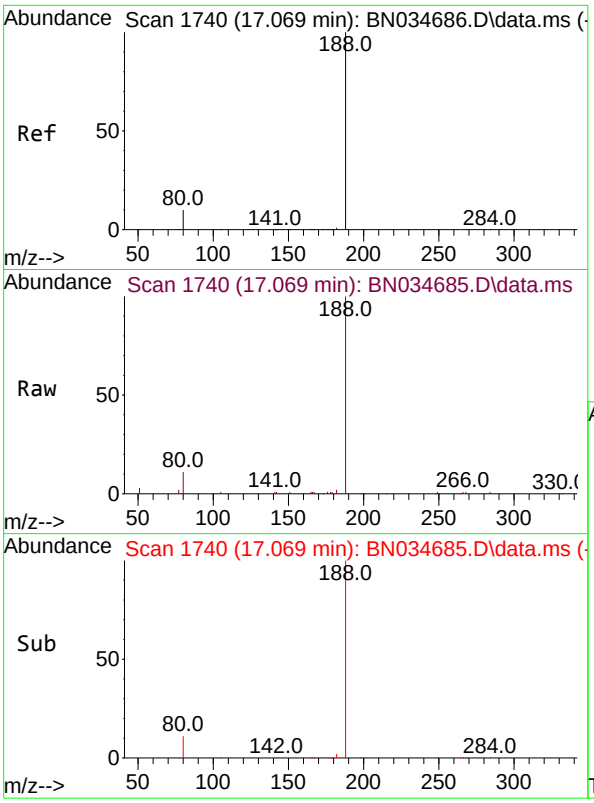


#18
Fluorene
Concen: 0.197 ng
RT: 15.377 min Scan# 1602
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:166 Resp: 6638

Ion	Ratio	Lower	Upper
166	100		
165	99.3	78.8	118.2
167	13.5	10.6	16.0



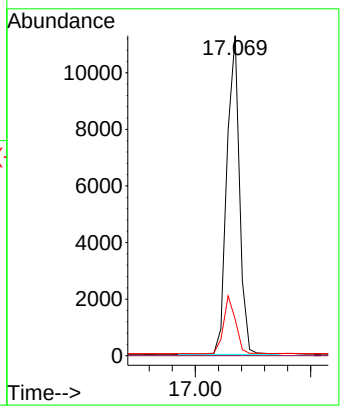


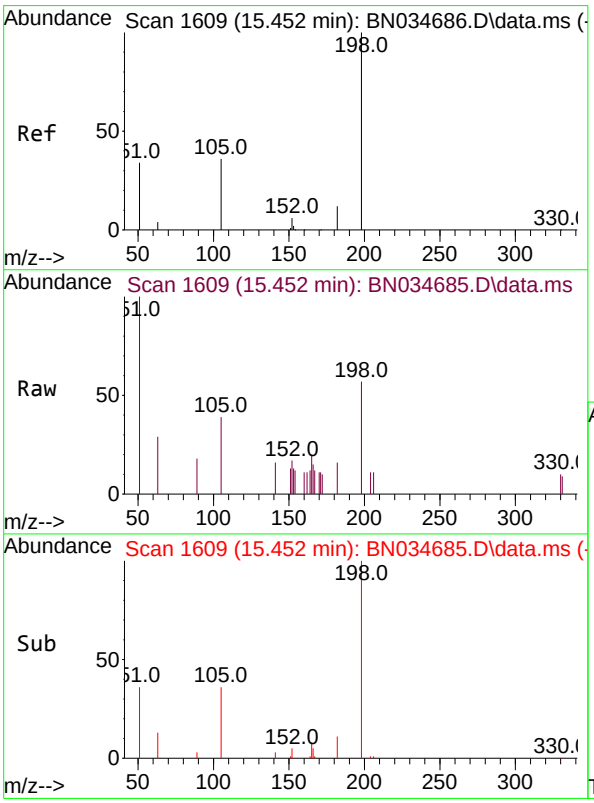
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.069 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:188 Resp: 17136

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.4	8.9	13.3

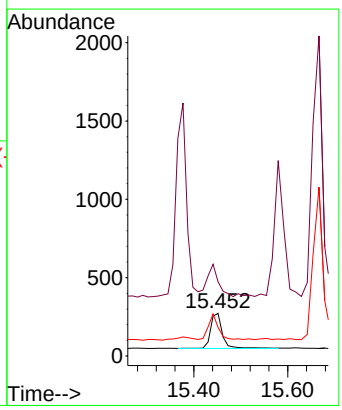


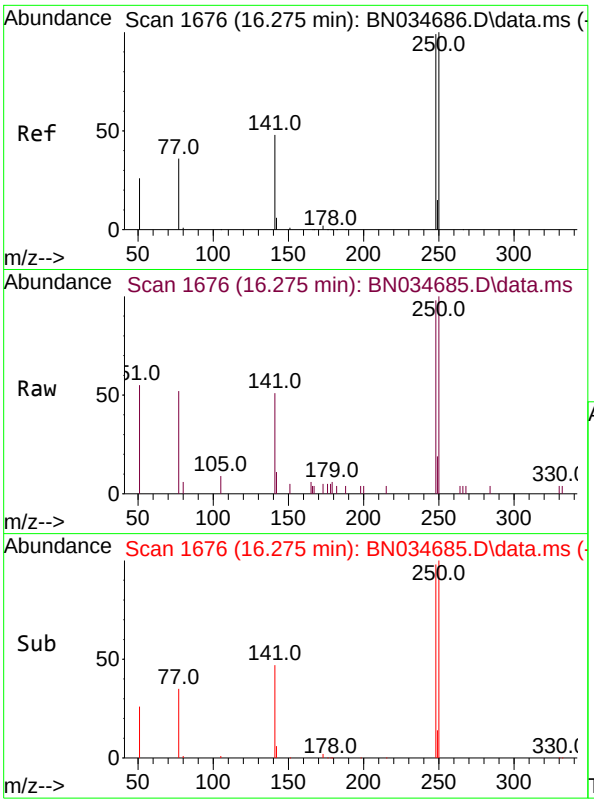


#20
4,6-Dinitro-2-methylphenol
Concen: 0.175 ng
RT: 15.452 min Scan# 1609
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:198 Resp: 410

Ion	Ratio	Lower	Upper
198	100		
51	174.3	91.8	137.8#
105	67.3	44.3	66.5#



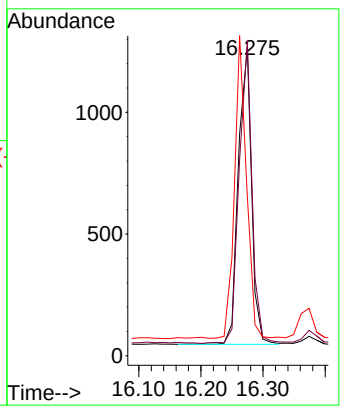


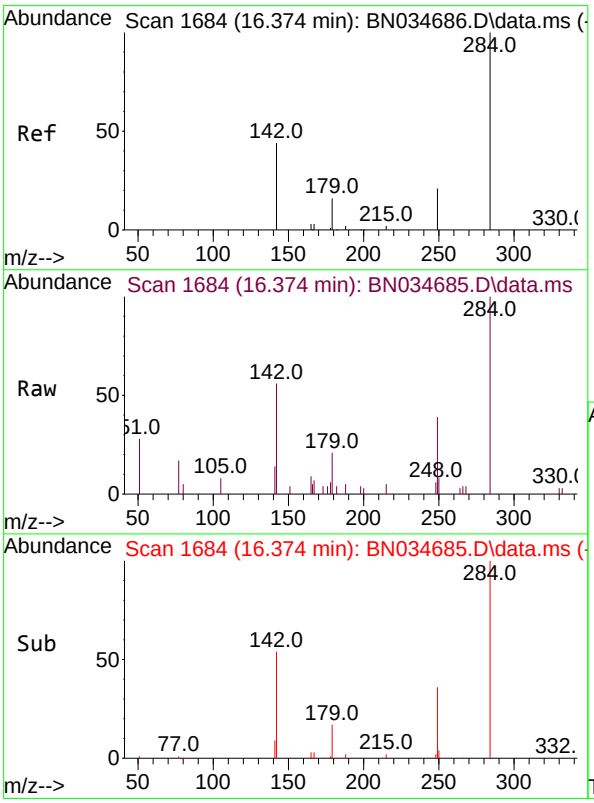
#21
4-Bromophenyl-phenylether
Concen: 0.193 ng
RT: 16.275 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:248 Resp: 1806

Ion	Ratio	Lower	Upper
248	100		
250	102.2	80.9	121.3
141	51.7	40.5	60.7

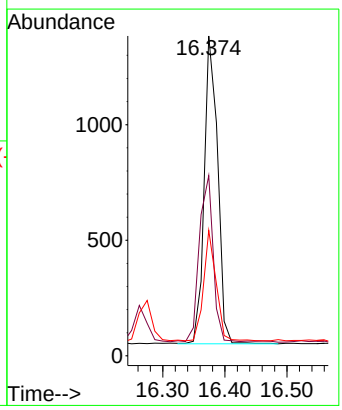


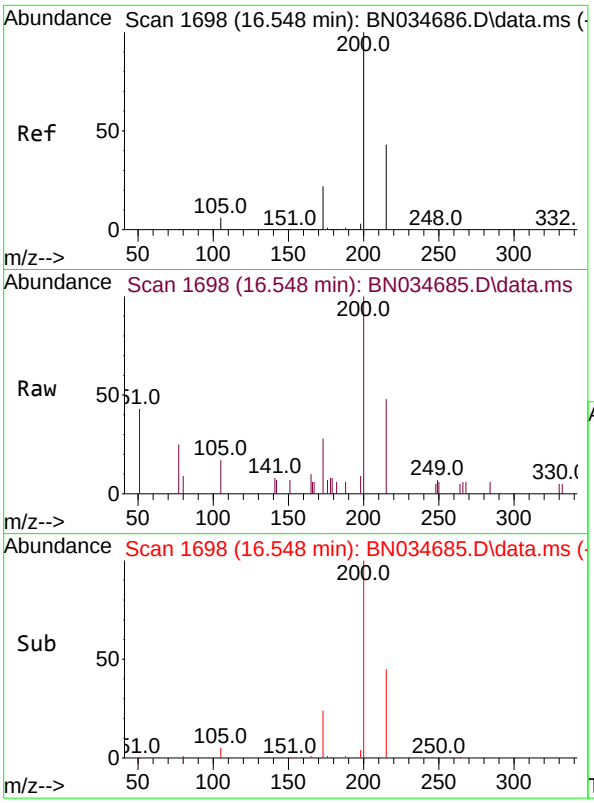


#22
Hexachlorobenzene
Concen: 0.192 ng
RT: 16.374 min Scan# 1684
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:284 Resp: 2002

Ion	Ratio	Lower	Upper
284	100		
142	55.4	43.6	65.4
249	33.6	26.6	40.0



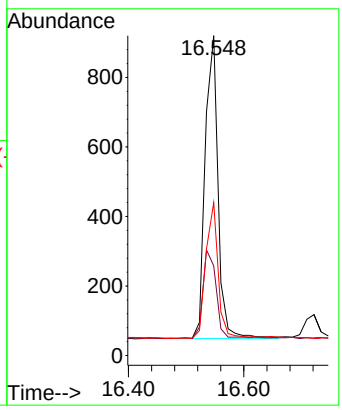


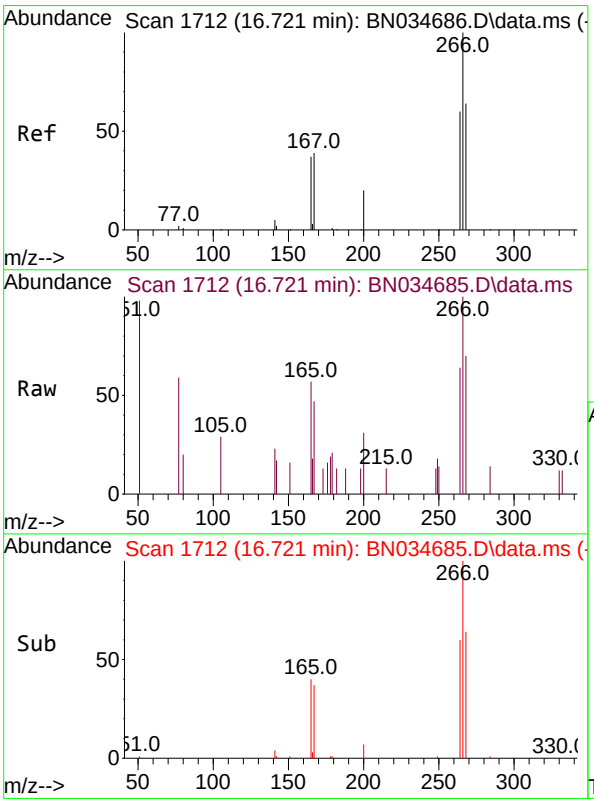
#23
Atrazine
Concen: 0.165 ng
RT: 16.548 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:200 Resp: 1350

Ion	Ratio	Lower	Upper
200	100		
173	28.0	19.7	29.5
215	47.8	35.7	53.5

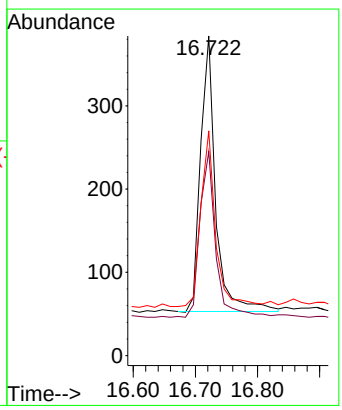


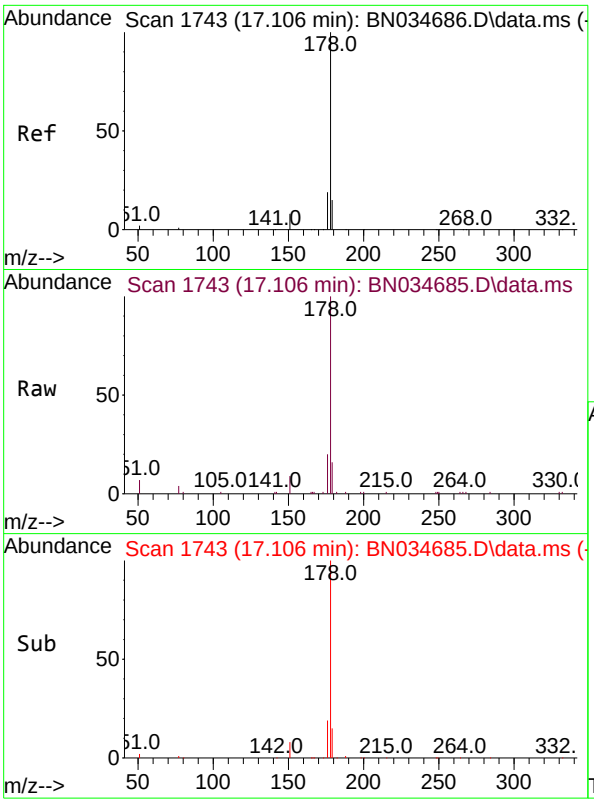


#24
Pentachlorophenol
Concen: 0.137 ng
RT: 16.721 min Scan# 1712
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:266 Resp: 558

Ion	Ratio	Lower	Upper
266	100		
264	64.3	49.4	74.2
268	62.4	50.5	75.7



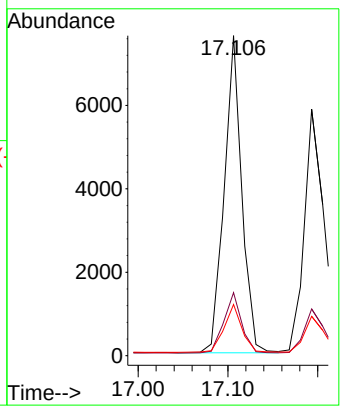


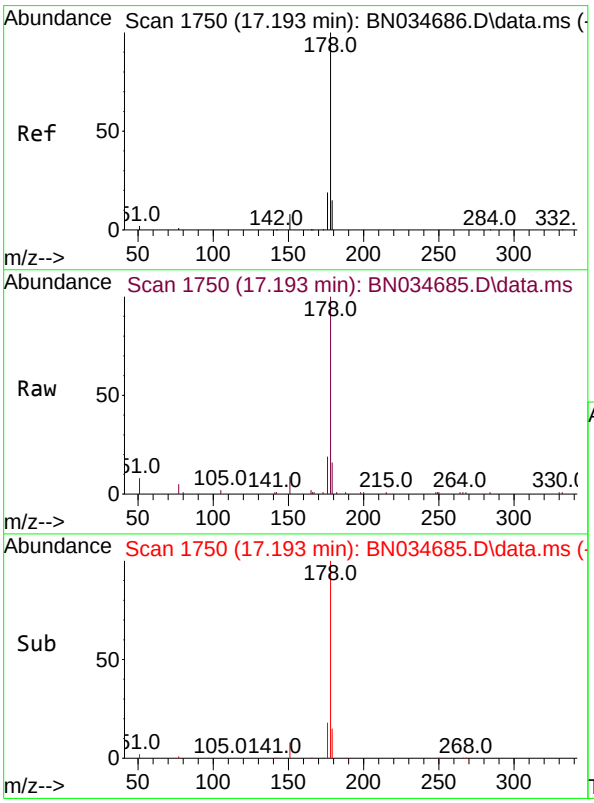
#25
Phenanthrene
Concen: 0.203 ng
RT: 17.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:178 Resp: 10352

Ion	Ratio	Lower	Upper
178	100		
176	19.2	15.4	23.2
179	15.4	12.2	18.4

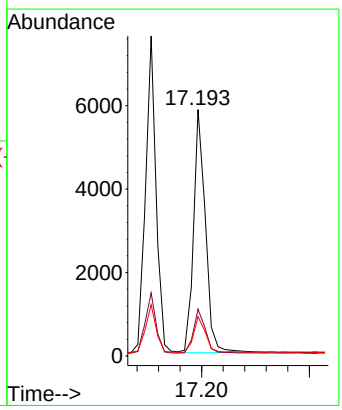


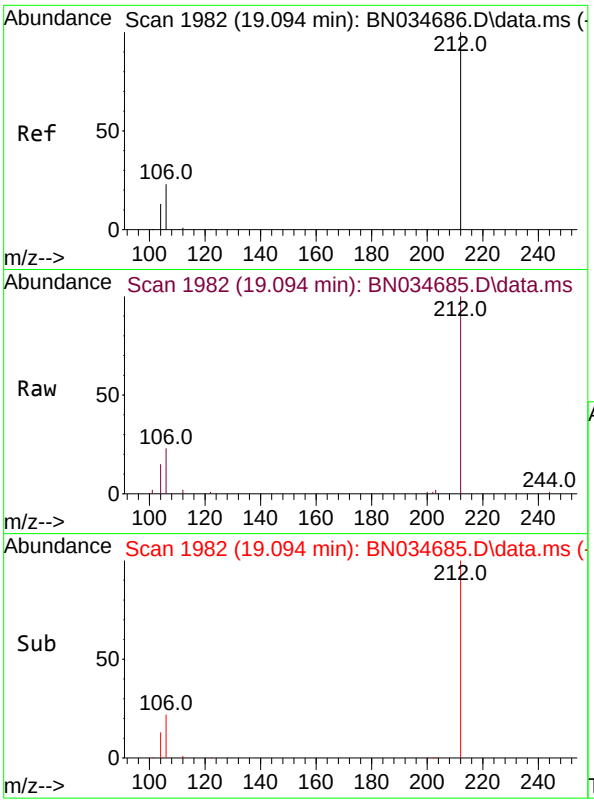


#26
Anthracene
Concen: 0.196 ng
RT: 17.193 min Scan# 1750
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:178 Resp: 8939

Ion	Ratio	Lower	Upper
178	100		
176	18.2	14.9	22.3
179	15.1	12.2	18.2



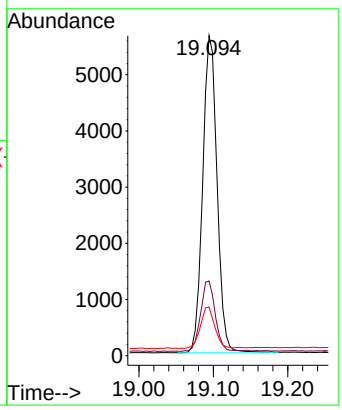


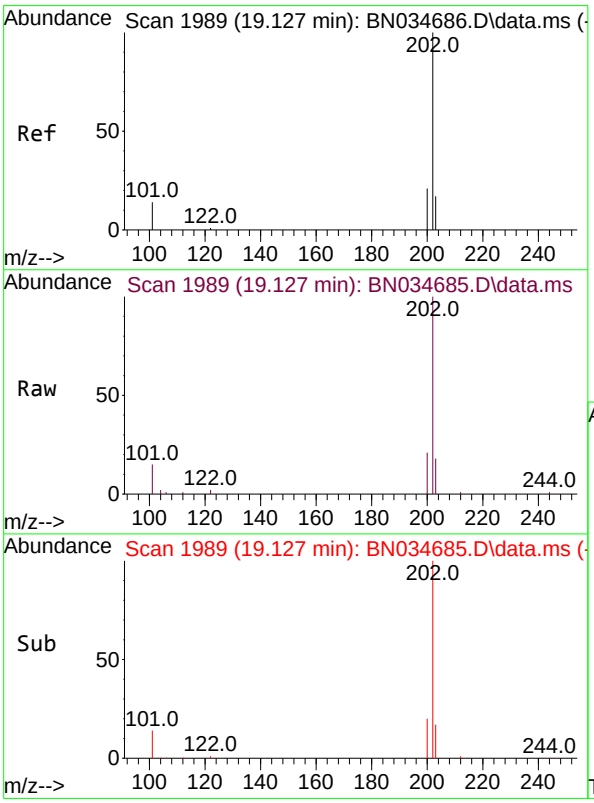
#27
Fluoranthene-d10
Concen: 0.181 ng
RT: 19.094 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:212 Resp: 7583

Ion	Ratio	Lower	Upper
212	100		
106	22.5	17.8	26.8
104	13.0	10.2	15.4

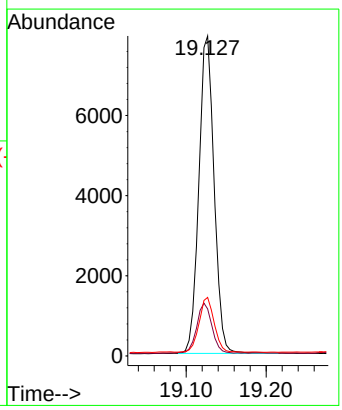


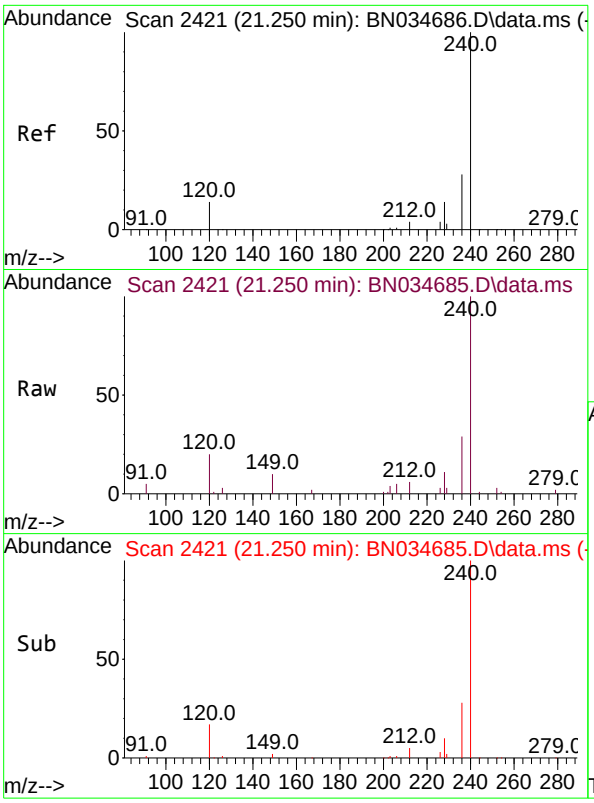


#28
Fluoranthene
Concen: 0.183 ng
RT: 19.127 min Scan# 1989
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:202 Resp: 10471

Ion	Ratio	Lower	Upper
202	100		
101	16.0	12.8	19.2
203	16.9	13.5	20.3



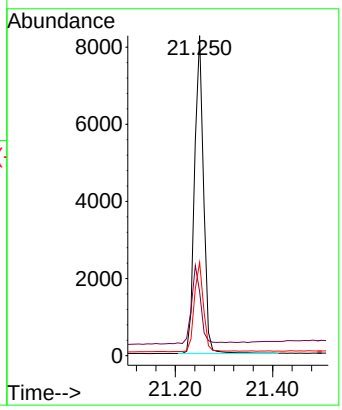


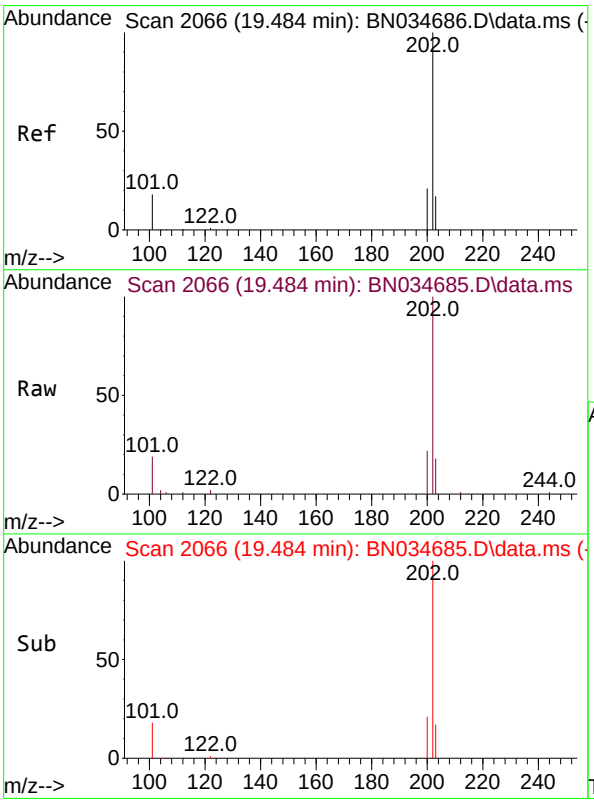
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.250 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:240 Resp: 10548

Ion	Ratio	Lower	Upper
240	100		
120	20.0	14.2	21.2
236	29.2	23.1	34.7

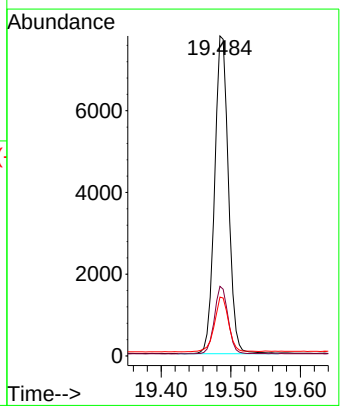


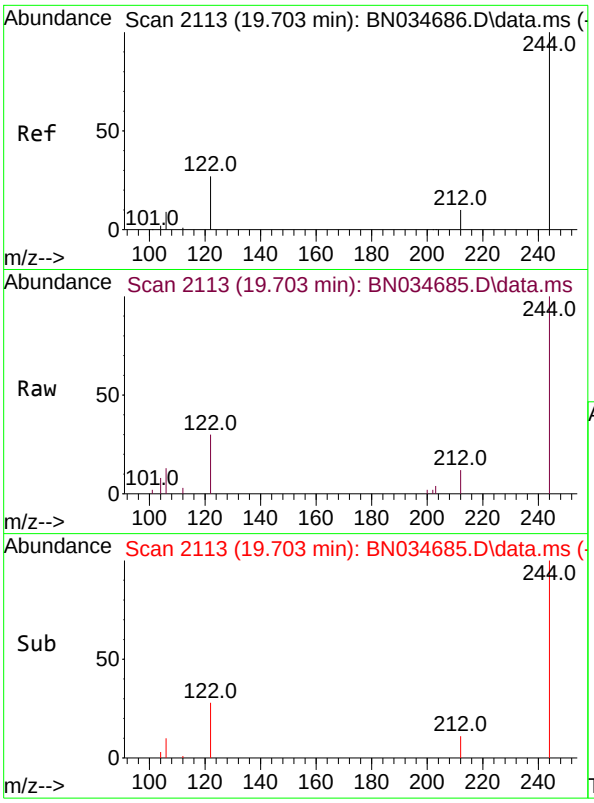


#30
Pyrene
Concen: 0.228 ng
RT: 19.484 min Scan# 2066
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:202 Resp: 10731

Ion	Ratio	Lower	Upper
202	100		
200	20.9	16.6	25.0
203	17.6	14.2	21.4



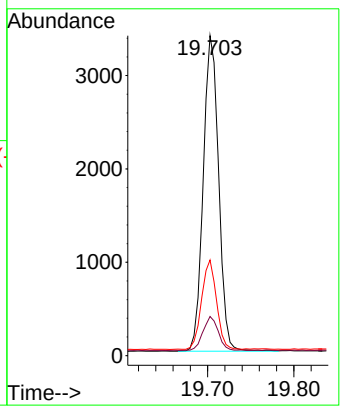


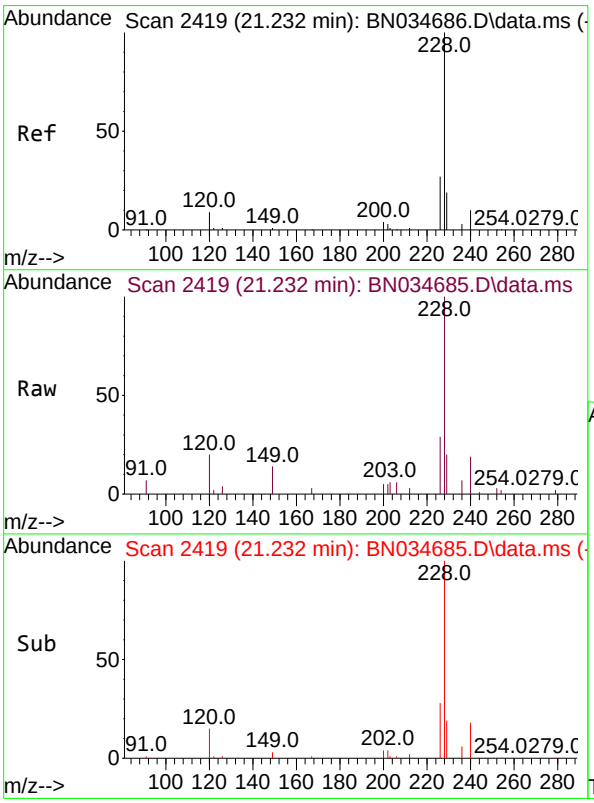
#31
Terphenyl-d14
Concen: 0.206 ng
RT: 19.703 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:244 Resp: 4203

Ion	Ratio	Lower	Upper
244	100		
212	12.2	8.6	13.0
122	29.9	22.3	33.5

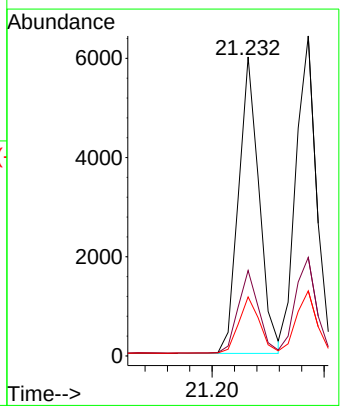


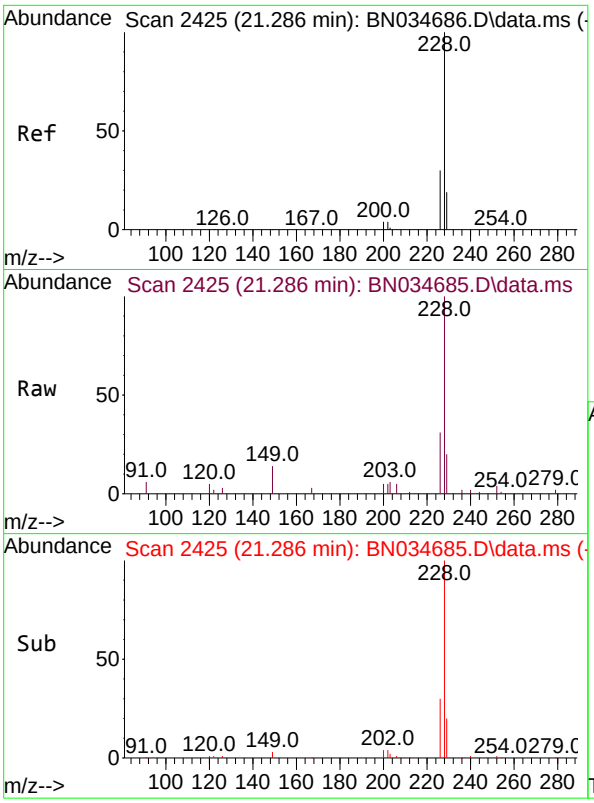


#32
Benzo(a)anthracene
Concen: 0.190 ng
RT: 21.232 min Scan# 2419
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:228 Resp: 7621

Ion	Ratio	Lower	Upper
228	100		
226	28.6	22.0	33.0
229	19.7	15.6	23.4



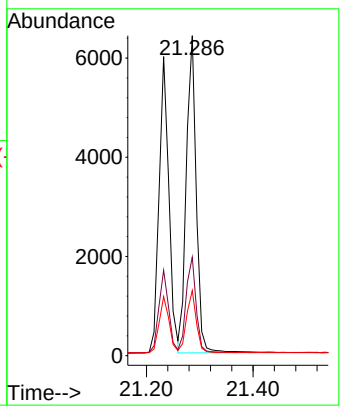


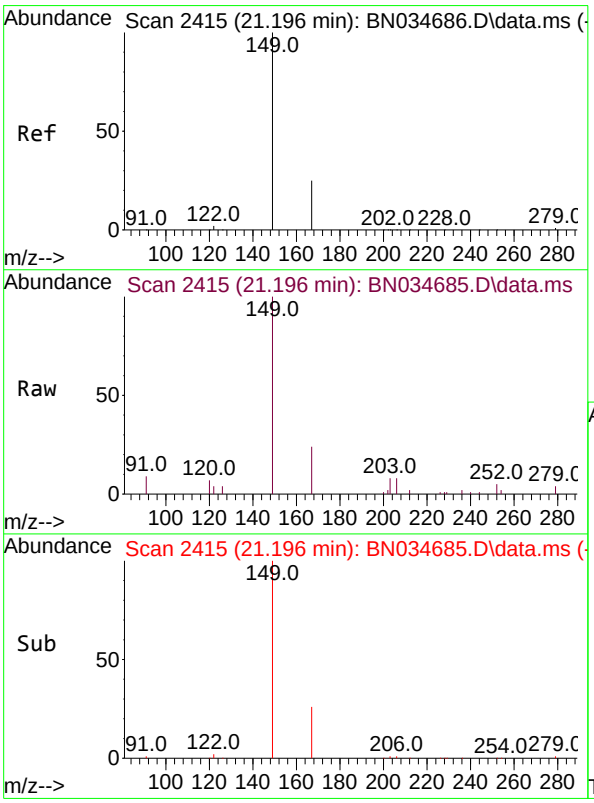
#33
Chrysene
Concen: 0.208 ng
RT: 21.286 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:228 Resp: 8267

Ion	Ratio	Lower	Upper
228	100		
226	30.8	24.1	36.1
229	20.4	15.8	23.8

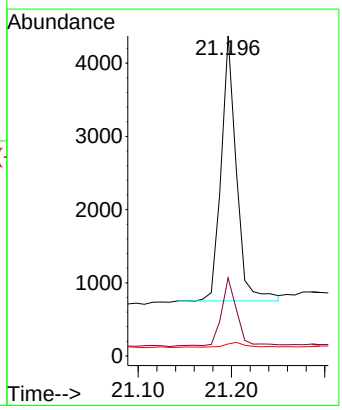


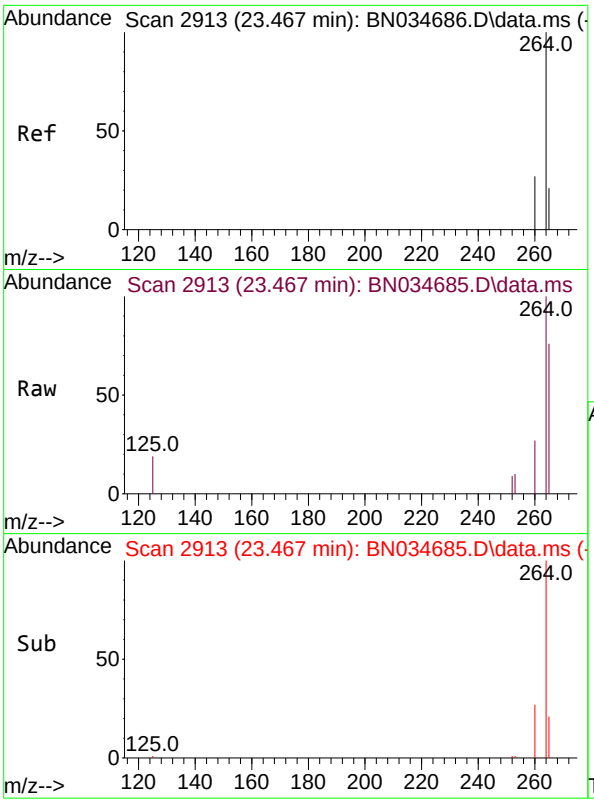


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.150 ng
RT: 21.196 min Scan# 2415
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:149 Resp: 4110

Ion	Ratio	Lower	Upper
149	100		
167	25.2	19.7	29.5
279	2.7	1.8	2.6#



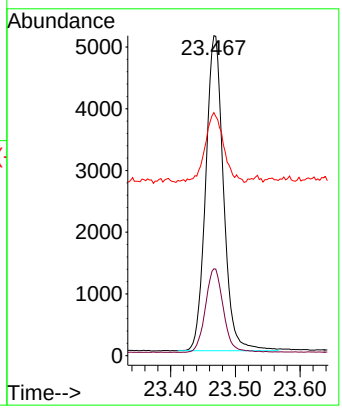


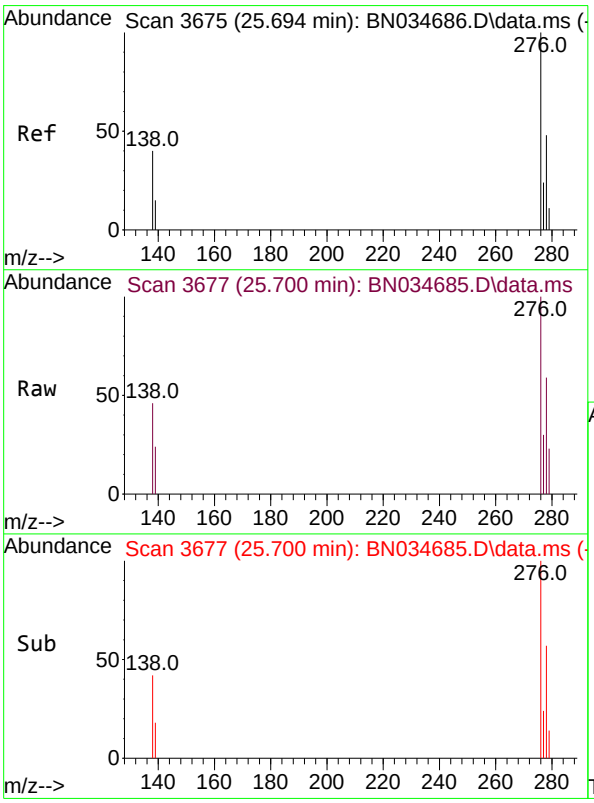
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.467 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:264 Resp: 9753

Ion	Ratio	Lower	Upper
264	100		
260	27.2	21.9	32.9
265	75.9	60.6	91.0

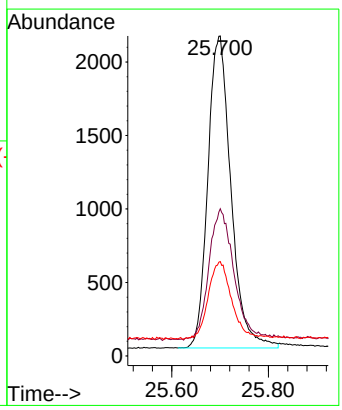


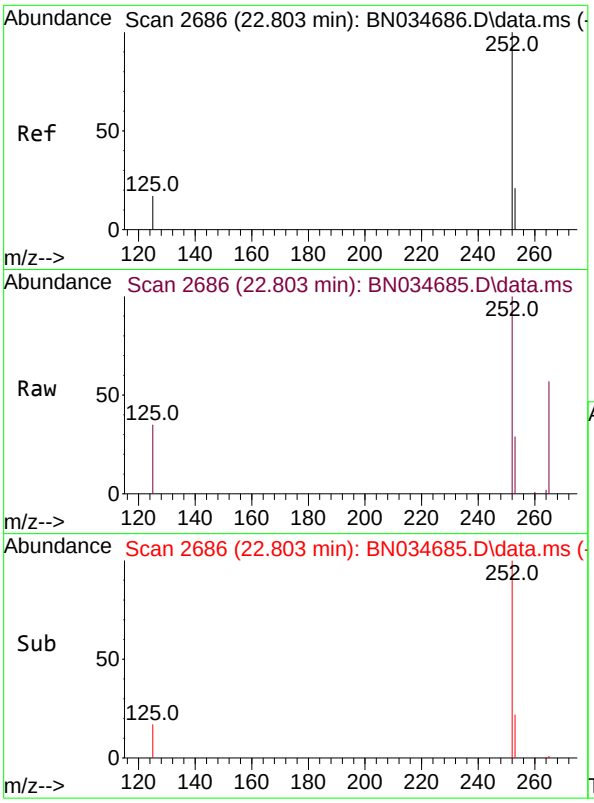


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.188 ng
RT: 25.700 min Scan# 3677
Delta R.T. 0.006 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:276 Resp: 7054

Ion	Ratio	Lower	Upper
276	100		
138	45.8	35.1	52.7
277	24.7	19.7	29.5



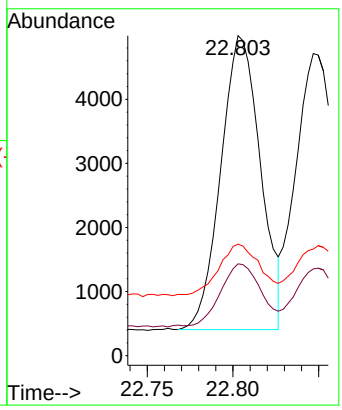


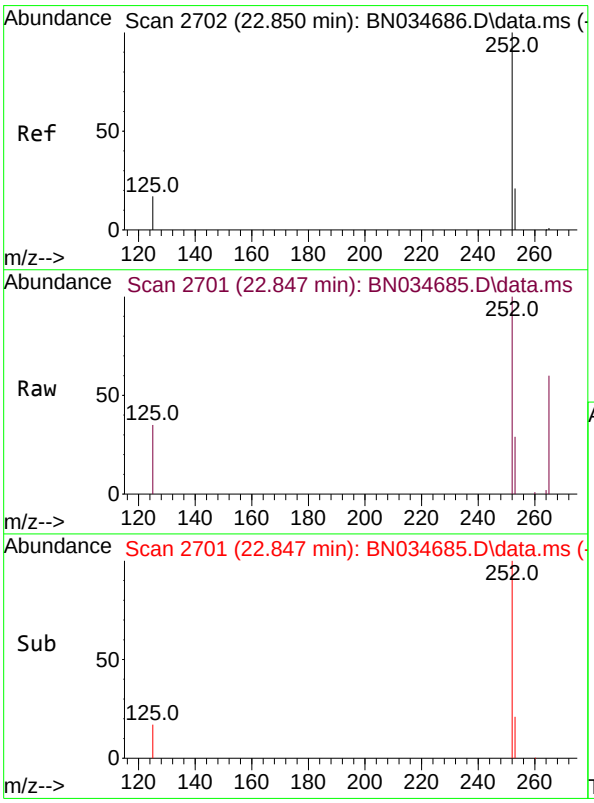
#37
Benzo(b)fluoranthene
Concen: 0.210 ng
RT: 22.803 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:252 Resp: 7395

Ion	Ratio	Lower	Upper
252	100		
253	28.7	20.0	30.0
125	34.8	20.9	31.3#

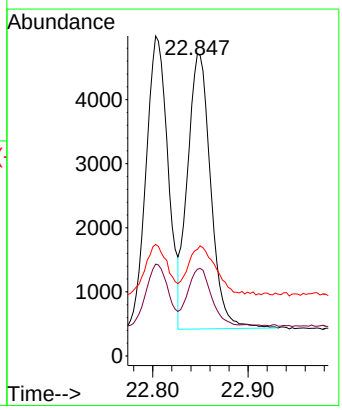


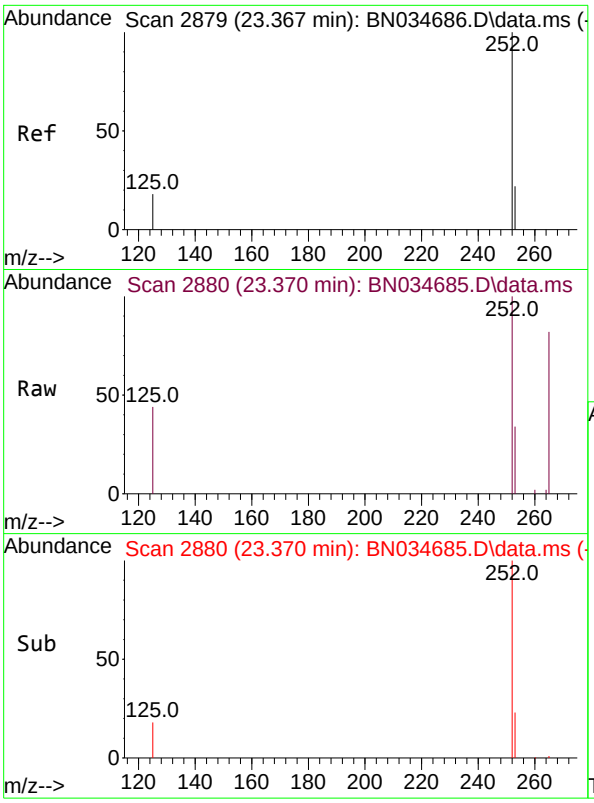


#38
Benzo(k)fluoranthene
Concen: 0.211 ng
RT: 22.847 min Scan# 2701
Delta R.T. -0.003 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:252 Resp: 7269

Ion	Ratio	Lower	Upper
252	100		
253	28.7	20.6	31.0
125	35.3	21.6	32.4#



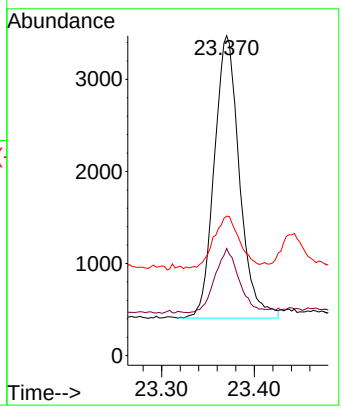


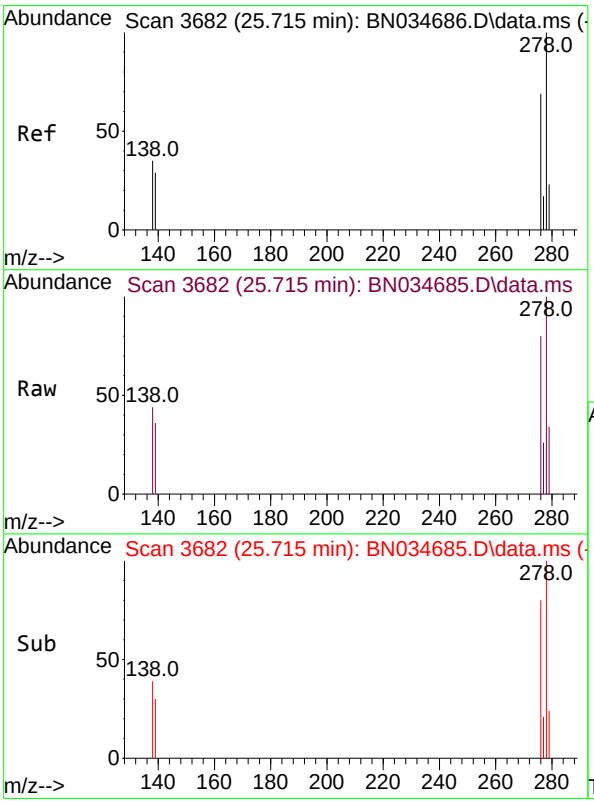
#39
Benzo(a)pyrene
Concen: 0.193 ng
RT: 23.370 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:252 Resp: 5791

Ion	Ratio	Lower	Upper
252	100		
253	33.5	22.2	33.4#
125	43.6	26.0	39.0#

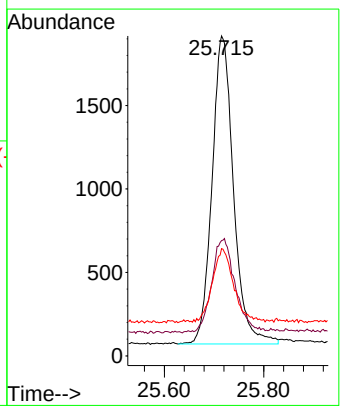


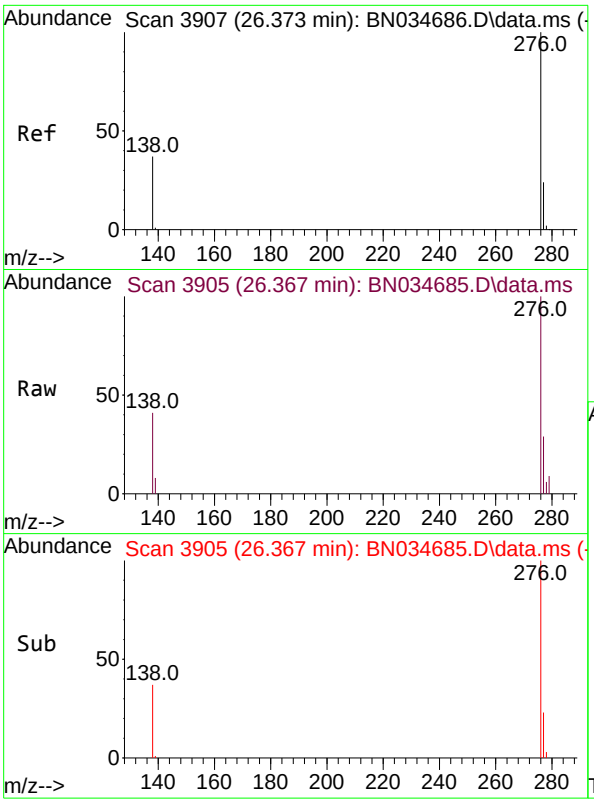


#40
Dibenzo(a,h)anthracene
Concen: 0.188 ng
RT: 25.715 min Scan# 3682
Delta R.T. 0.000 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Tgt Ion:278 Resp: 5556

Ion	Ratio	Lower	Upper
278	100		
139	36.0	25.4	38.2
279	33.5	22.4	33.6



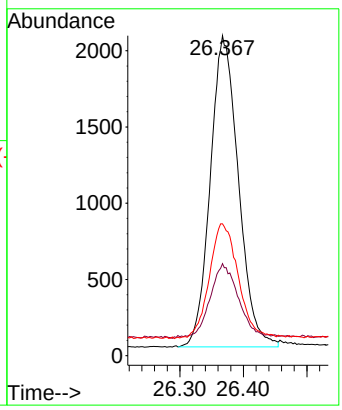


#41
Benzo(g,h,i)perylene
Concen: 0.193 ng
RT: 26.367 min Scan# 3
Delta R.T. -0.006 min
Lab File: BN034685.D
Acq: 24 Oct 2024 09:47

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:276 Resp: 6274

Ion	Ratio	Lower	Upper
276	100		
277	28.7	21.3	31.9
138	41.2	31.9	47.9



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034686.D
Acq On : 24 Oct 2024 10:23
Operator : RC/JU
Sample : SSTDICCC0.4
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Quant Time: Oct 24 12:42:59 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 12:41:40 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.712	152	6324	0.400	ng		0.00
7) Naphthalene-d8	10.479	136	18497	0.400	ng		0.00
13) Acenaphthene-d10	14.329	164	9311	0.400	ng		0.00
19) Phenanthrene-d10	17.069	188	18185	0.400	ng		0.00
29) Chrysene-d12	21.250	240	10628	0.400	ng		0.00
35) Perylene-d12	23.467	264	9595	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.322	112	6764	0.350	ng		0.00
5) Phenol-d6	6.882	99	8764	0.354	ng		0.00
8) Nitrobenzene-d5	8.845	82	5433	0.355	ng		0.00
11) 2-Methylnaphthalene-d10	12.071	152	8901	0.342	ng		0.00
14) 2,4,6-Tribromophenol	15.815	330	897	0.227	ng		0.00
15) 2-Fluorobiphenyl	12.950	172	12842	0.350	ng		0.00
27) Fluoranthene-d10	19.094	212	14254	0.320	ng		0.00
31) Terphenyl-d14	19.703	244	7865	0.382	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.285	88	3065	0.398	ng		100
3) n-Nitrosodimethylamine	3.581	42	4451	0.478	ng		100
6) bis(2-Chloroethyl)ether	7.142	93	7208	0.380	ng		100
9) Naphthalene	10.532	128	18256	0.358	ng		100
10) Hexachlorobutadiene	10.831	225	2759	0.338	ng	#	100
12) 2-Methylnaphthalene	12.147	142	11104	0.344	ng		100
16) Acenaphthylene	14.040	152	14720	0.329	ng		100
17) Acenaphthene	14.393	154	10443	0.342	ng		100
18) Fluorene	15.377	166	12923	0.340	ng		100
20) 4,6-Dinitro-2-methylph...	15.452	198	774	0.311	ng		100
21) 4-Bromophenyl-phenylether	16.275	248	3462	0.348	ng		100
22) Hexachlorobenzene	16.374	284	3844	0.348	ng		100
23) Atrazine	16.548	200	2545	0.292	ng		100
24) Pentachlorophenol	16.721	266	1164	0.269	ng		100
25) Phenanthrene	17.106	178	19369	0.358	ng		100
26) Anthracene	17.193	178	16930	0.350	ng		100
28) Fluoranthene	19.127	202	19859	0.327	ng		100
30) Pyrene	19.484	202	19977	0.420	ng		100
32) Benzo(a)anthracene	21.232	228	14596	0.360	ng		100
33) Chrysene	21.286	228	15321	0.382	ng		100
34) Bis(2-ethylhexyl)phtha...	21.196	149	7675	0.278	ng		100
36) Indeno(1,2,3-cd)pyrene	25.694	276	13606	0.368	ng		100
37) Benzo(b)fluoranthene	22.803	252	14206	0.410	ng		100
38) Benzo(k)fluoranthene	22.850	252	13300	0.393	ng		100
39) Benzo(a)pyrene	23.367	252	11106	0.377	ng		100
40) Dibenzo(a,h)anthracene	25.715	278	10684	0.368	ng		100
41) Benzo(g,h,i)perylene	26.373	276	12106	0.378	ng		100

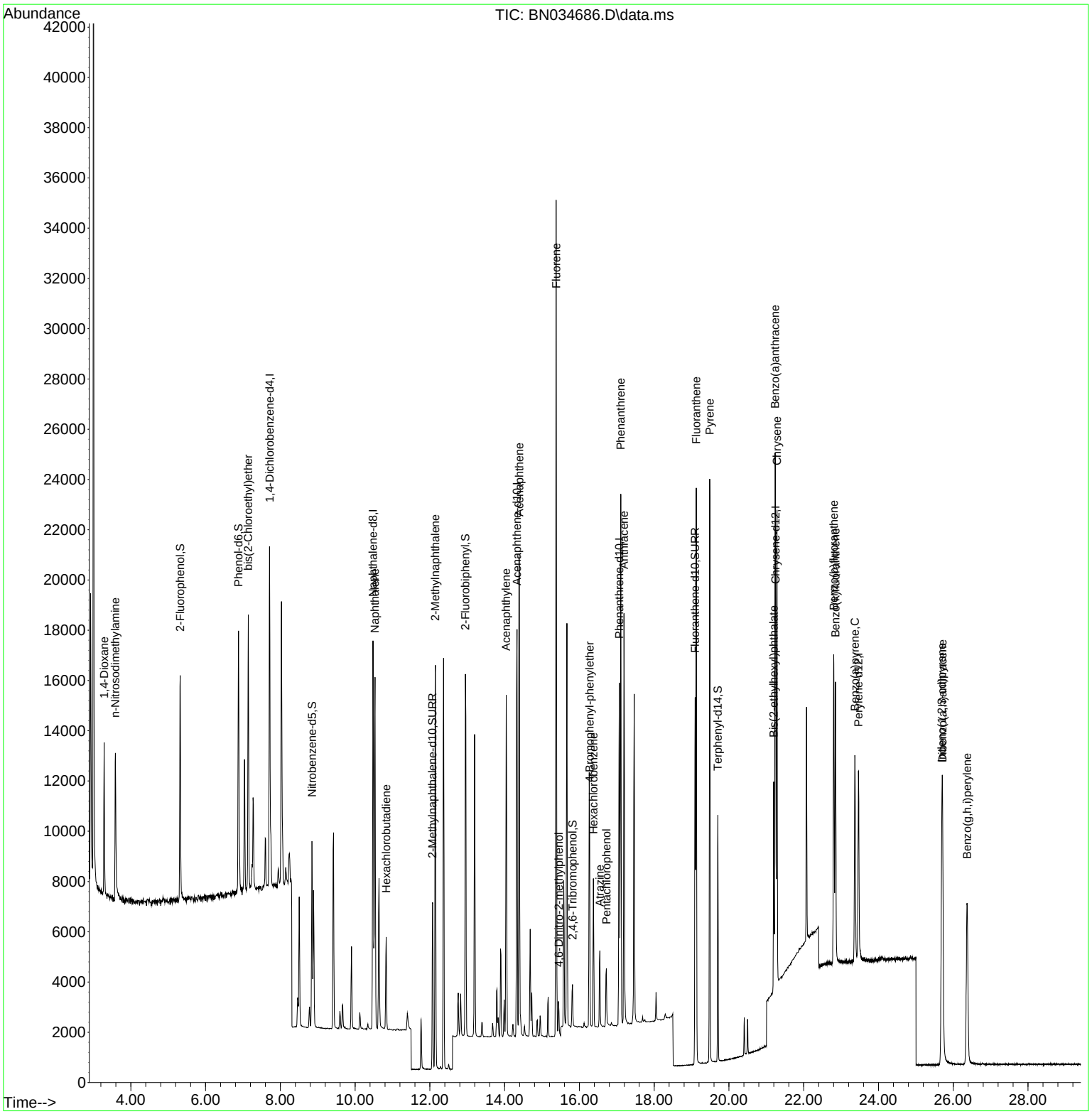
(#) = qualifier out of range (m) = manual integration (+) = signals summed

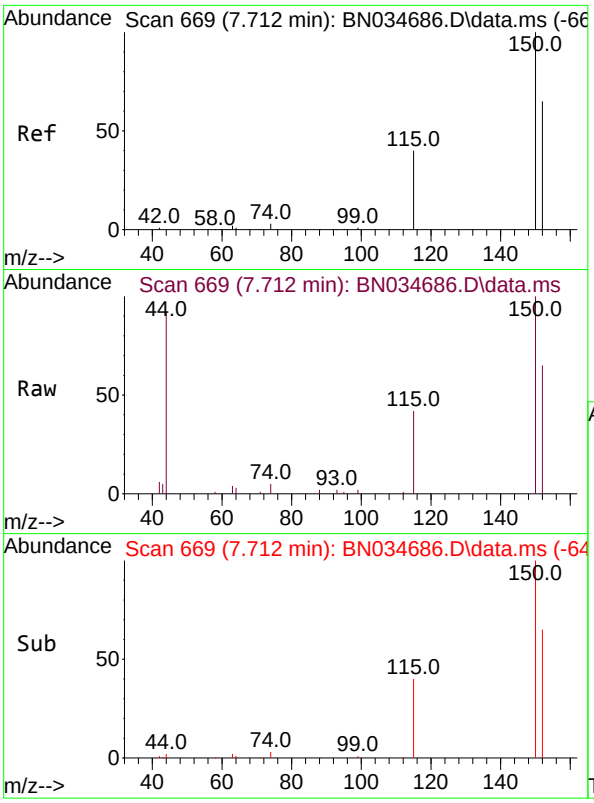
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034686.D
Acq On : 24 Oct 2024 10:23
Operator : RC/JU
Sample : SSTDICCC0.4
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Quant Time: Oct 24 12:42:59 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 12:41:40 2024
Response via : Initial Calibration



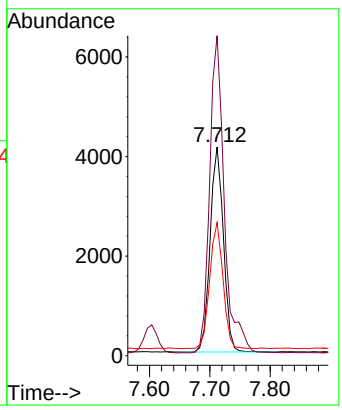


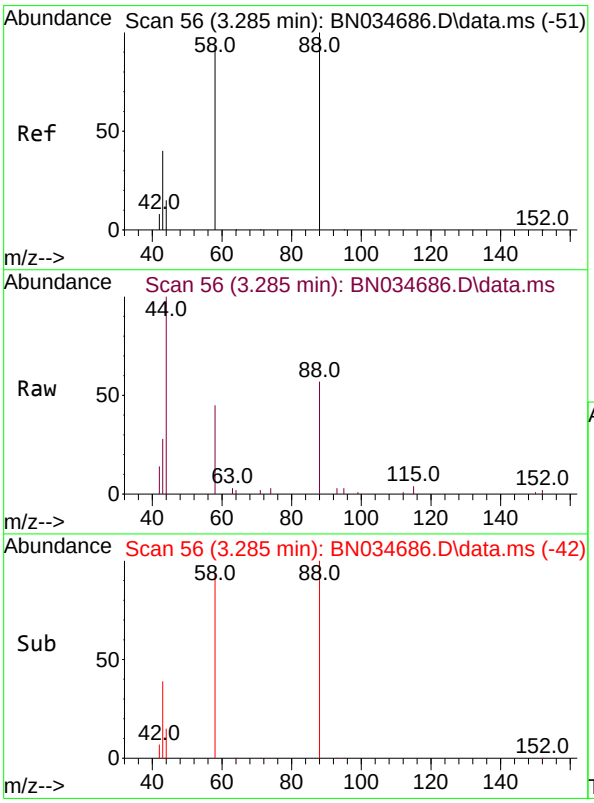
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:152 Resp: 6324

Ion	Ratio	Lower	Upper
152	100		
150	153.4	122.7	184.1
115	63.8	51.0	76.6

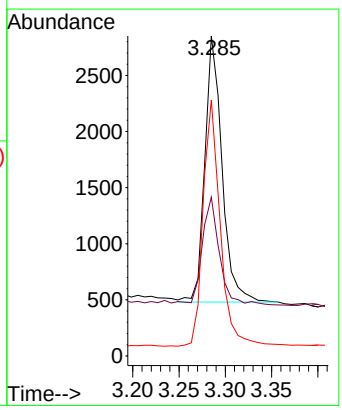


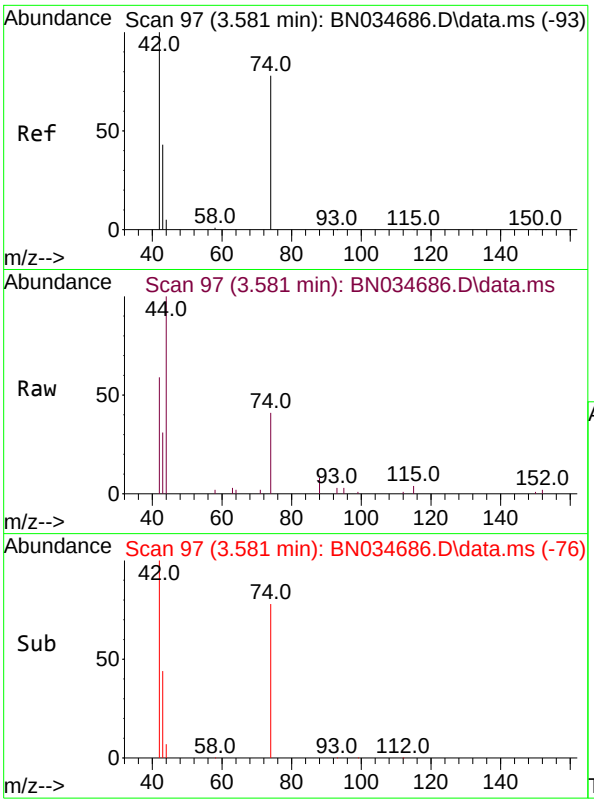


#2
1,4-Dioxane
Concen: 0.398 ng
RT: 3.285 min Scan# 56
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion: 88 Resp: 3065

Ion	Ratio	Lower	Upper
88	100		
43	40.1	32.1	48.1
58	92.1	73.7	110.5



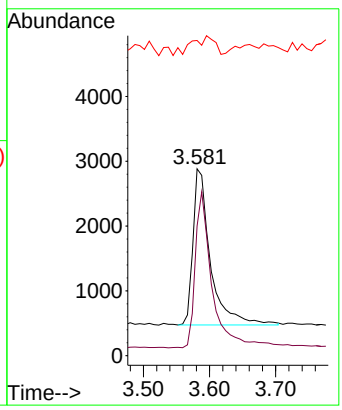


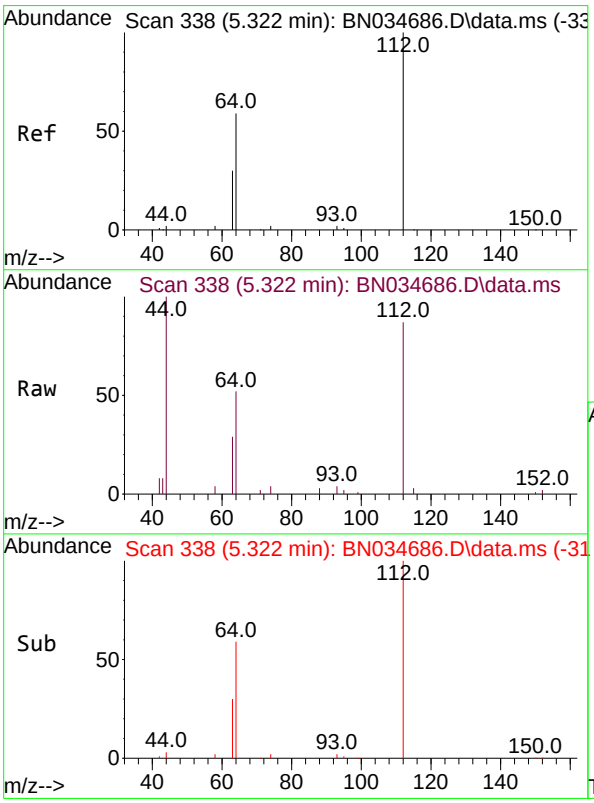
#3
n-Nitrosodimethylamine
Concen: 0.478 ng
RT: 3.581 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion: 42 Resp: 4451

Ion	Ratio	Lower	Upper
42	100		
74	96.5	77.2	115.8
44	16.8	13.4	20.2

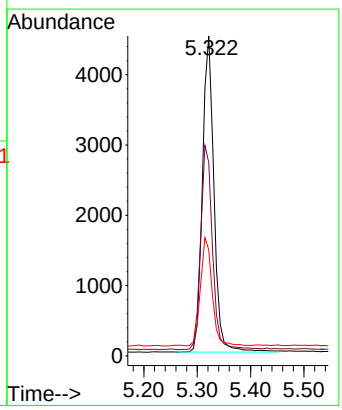


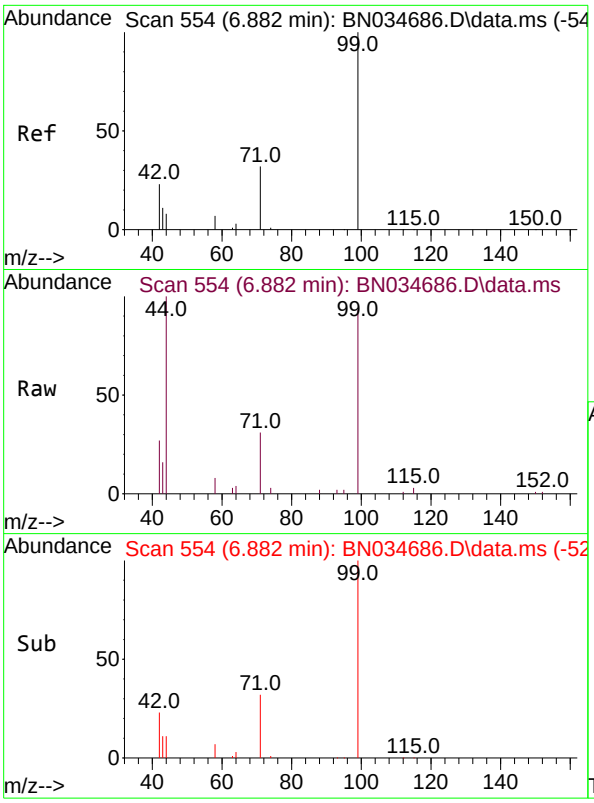


#4
2-Fluorophenol
Concen: 0.350 ng
RT: 5.322 min Scan# 338
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:112 Resp: 6764

Ion	Ratio	Lower	Upper
112	100		
64	66.3	53.0	79.6
63	34.5	27.6	41.4



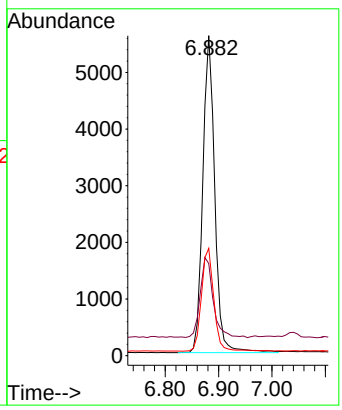


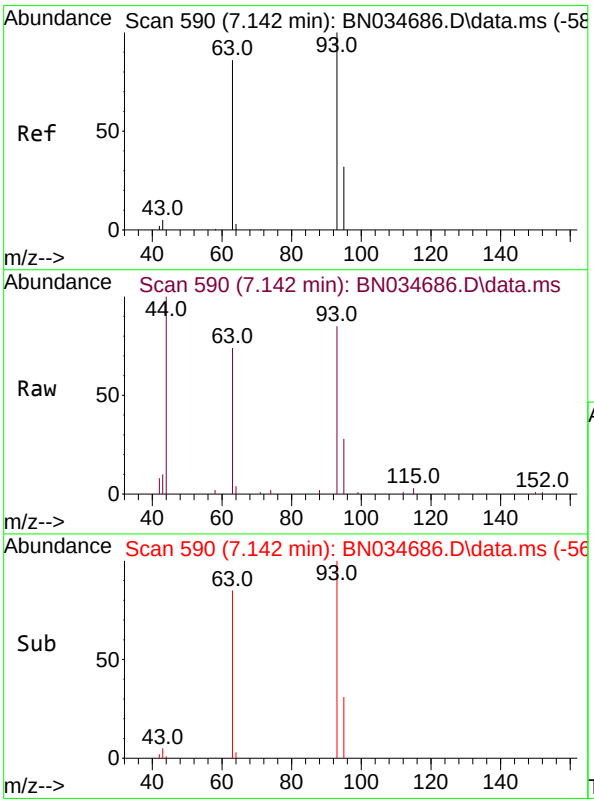
#5
Phenol-d6
Concen: 0.354 ng
RT: 6.882 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion: 99 Resp: 8764

Ion	Ratio	Lower	Upper
99	100		
42	27.3	21.8	32.8
71	33.3	26.6	40.0

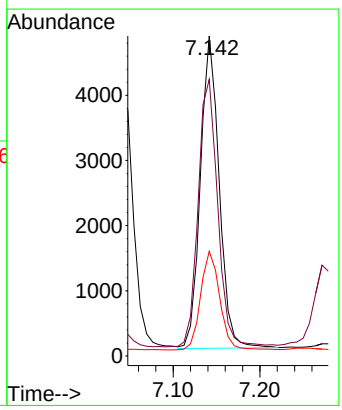


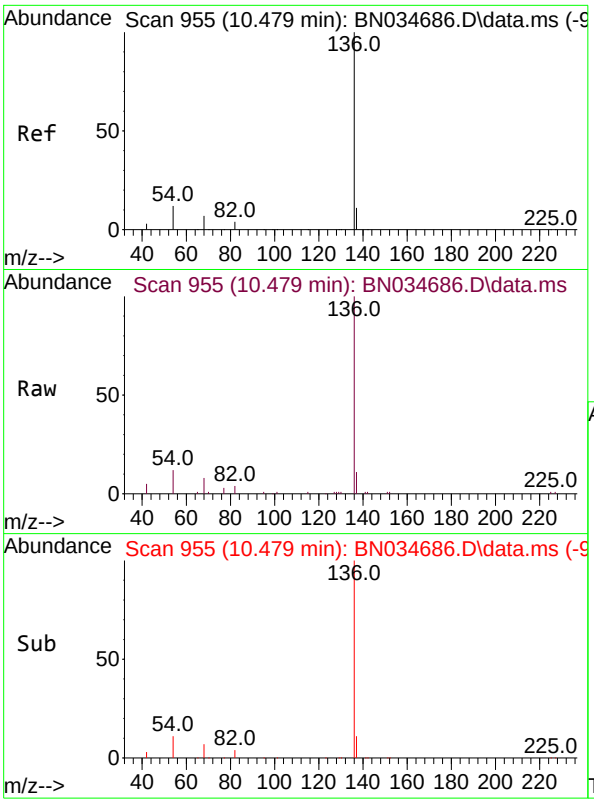


#6
bis(2-Chloroethyl)ether
Concen: 0.380 ng
RT: 7.142 min Scan# 590
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion: 93 Resp: 7208

Ion	Ratio	Lower	Upper
93	100		
63	89.4	71.5	107.3
95	32.2	25.8	38.6



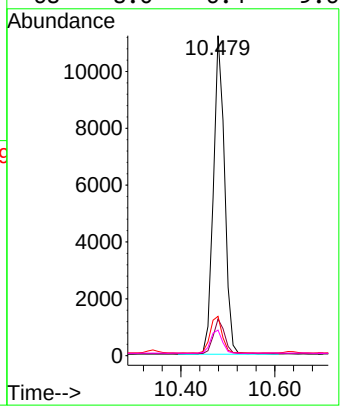


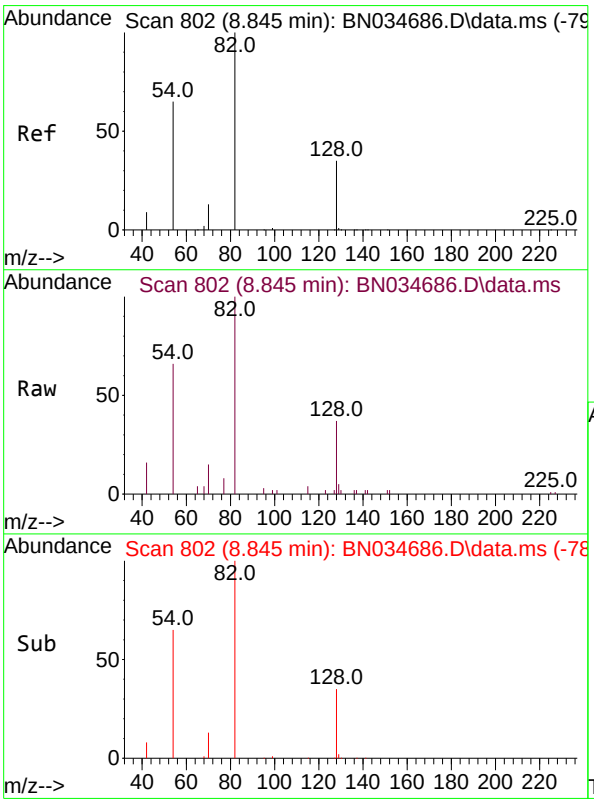
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:136 Resp: 18497

Ion	Ratio	Lower	Upper
136	100		
137	11.4	9.1	13.7
54	12.3	9.8	14.8
68	8.0	6.4	9.6

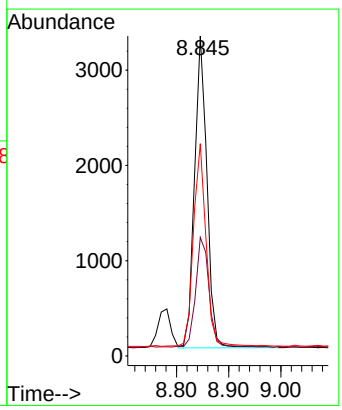


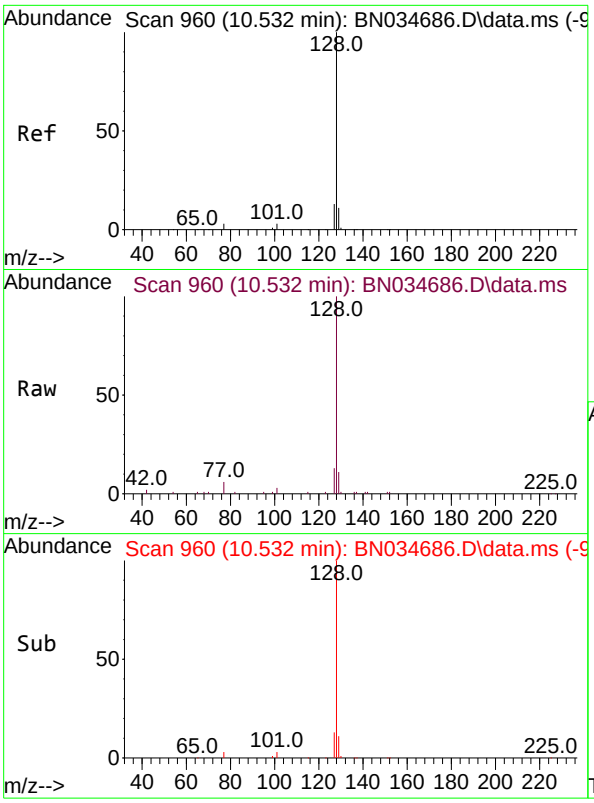


#8
Nitrobenzene-d5
Concen: 0.355 ng
RT: 8.845 min Scan# 802
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion: 82 Resp: 5433

Ion	Ratio	Lower	Upper
82	100		
128	37.1	29.7	44.5
54	66.3	53.0	79.6



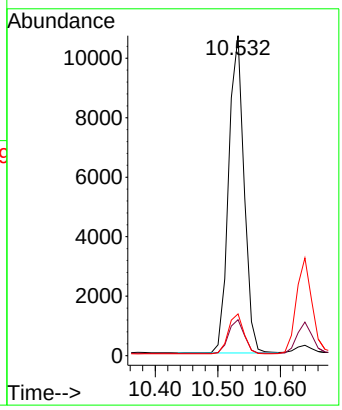


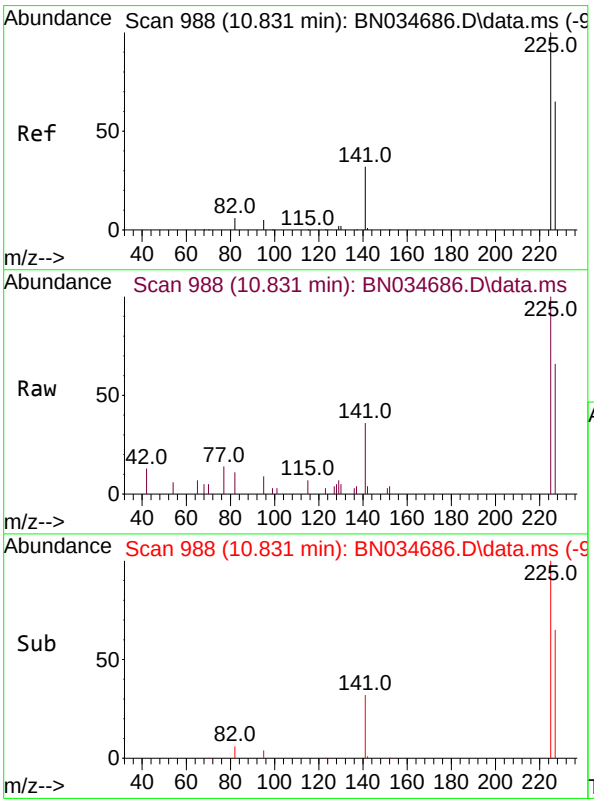
#9
Naphthalene
Concen: 0.358 ng
RT: 10.532 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:128 Resp: 18256

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

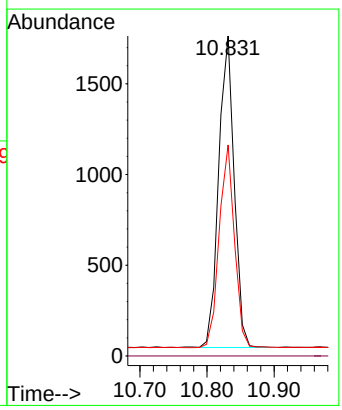


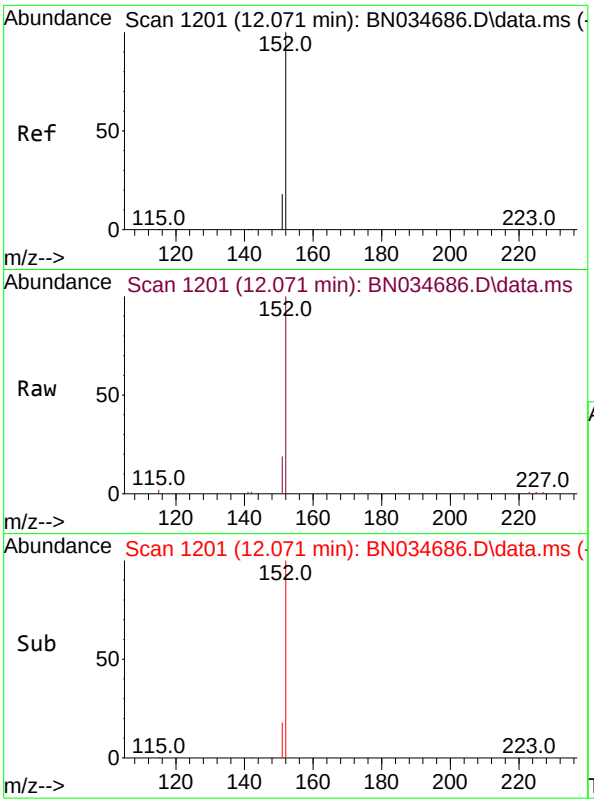


#10
Hexachlorobutadiene
Concen: 0.338 ng
RT: 10.831 min Scan# 988
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:225 Resp: 2759

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.2	51.4	77.0



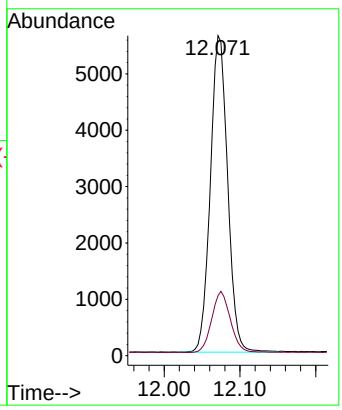


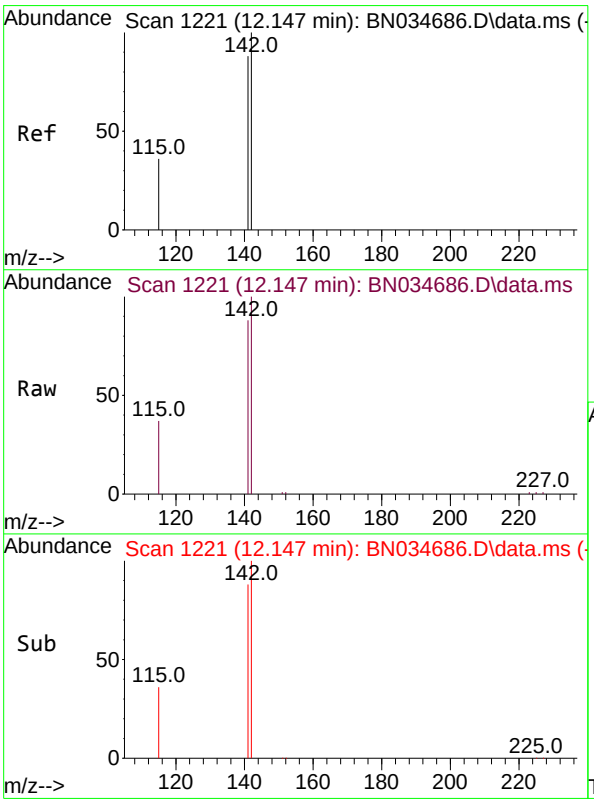
#11
2-Methylnaphthalene-d10
Concen: 0.342 ng
RT: 12.071 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:152 Resp: 8901

Ion	Ratio	Lower	Upper
152	100		
151	20.9	16.7	25.1

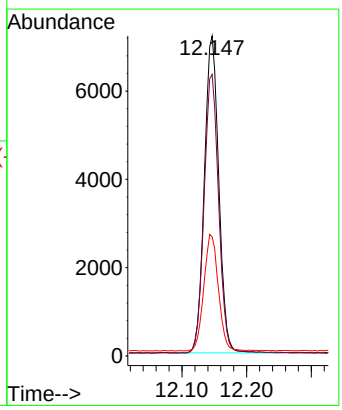


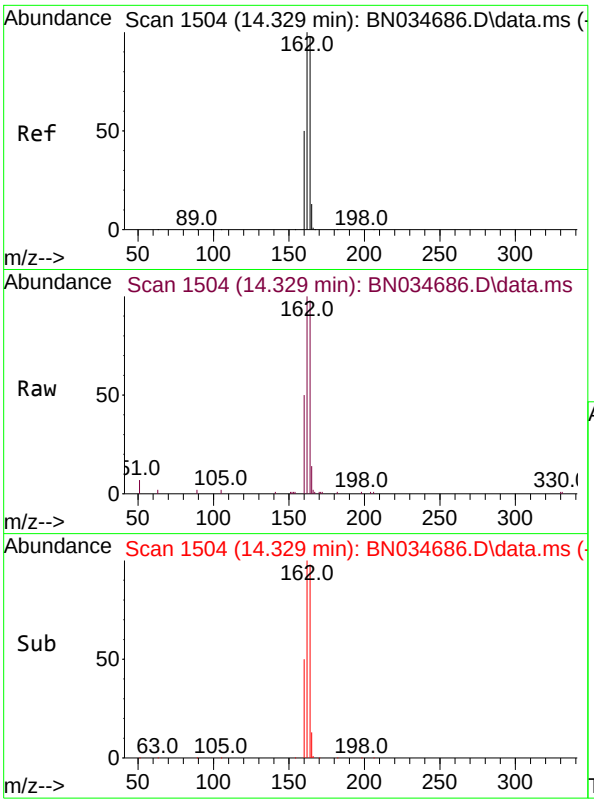


#12
2-Methylnaphthalene
Concen: 0.344 ng
RT: 12.147 min Scan# 1221
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:142 Resp: 11104

Ion	Ratio	Lower	Upper
142	100		
141	88.0	70.4	105.6
115	37.2	29.8	44.6



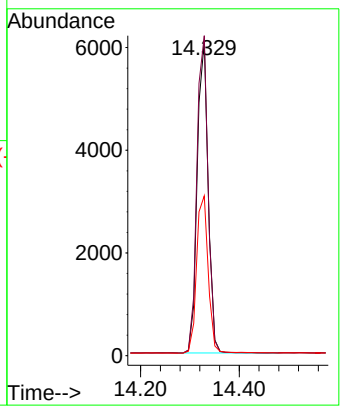


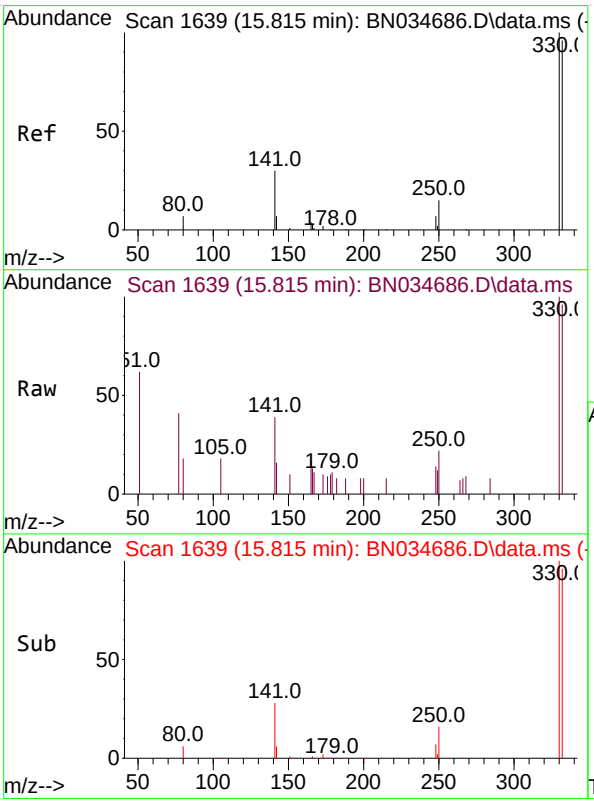
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.329 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:164 Resp: 9311

Ion	Ratio	Lower	Upper
164	100		
162	101.7	81.4	122.0
160	50.8	40.6	61.0

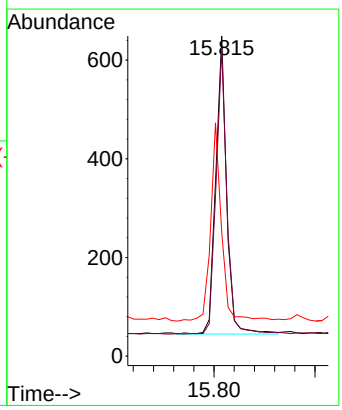


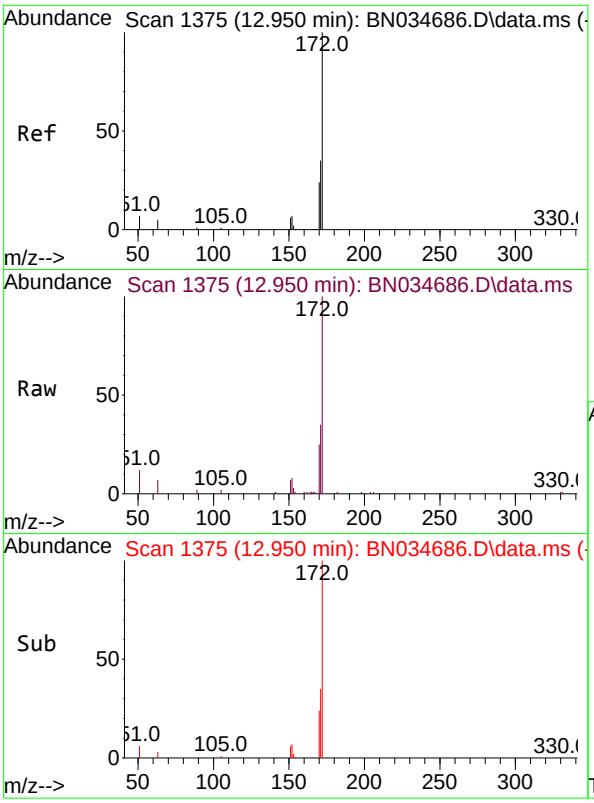


#14
2,4,6-Tribromophenol
Concen: 0.227 ng
RT: 15.815 min Scan# 1639
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:330 Resp: 897

Ion	Ratio	Lower	Upper
330	100		
332	95.8	76.6	115.0
141	68.2	54.6	81.8



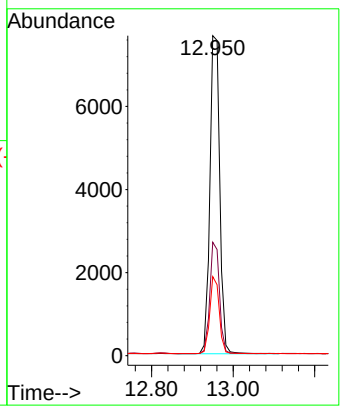


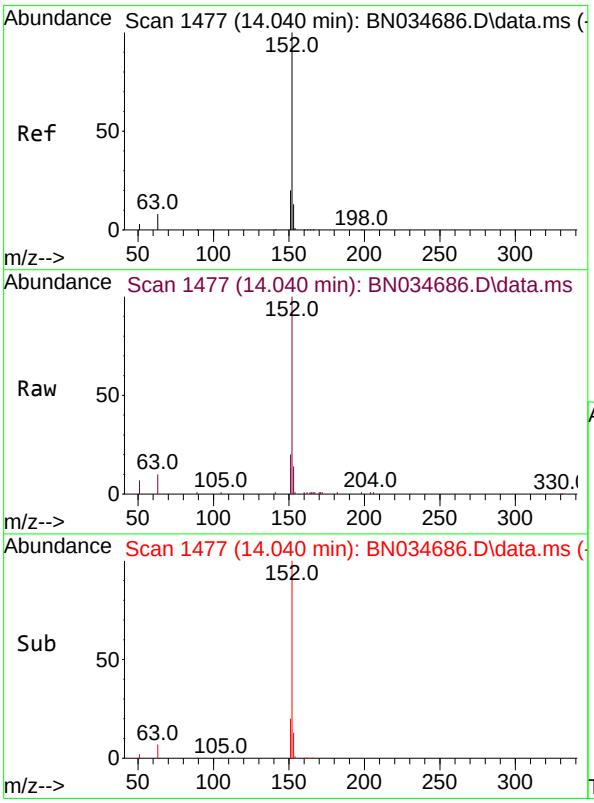
#15
2-Fluorobiphenyl
Concen: 0.350 ng
RT: 12.950 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:172 Resp: 12842

Ion	Ratio	Lower	Upper
172	100		
171	35.4	28.3	42.5
170	24.7	19.8	29.6

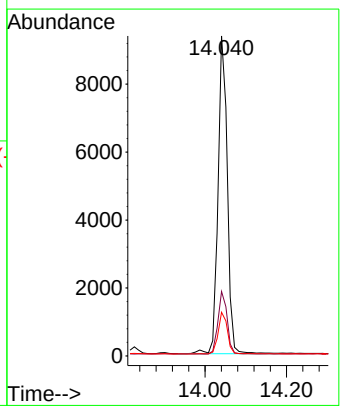


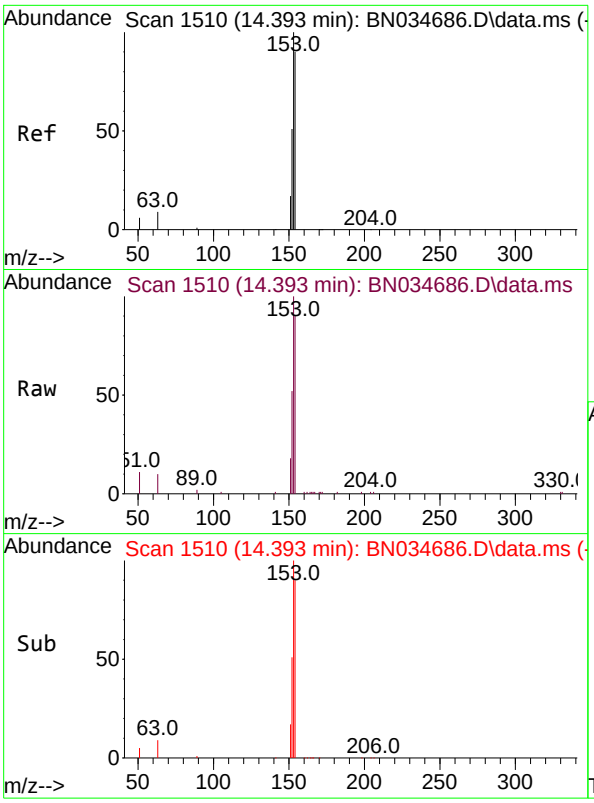


#16
Acenaphthylene
Concen: 0.329 ng
RT: 14.040 min Scan# 1477
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:152 Resp: 14720

Ion	Ratio	Lower	Upper
152	100		
151	19.5	15.6	23.4
153	13.2	10.6	15.8



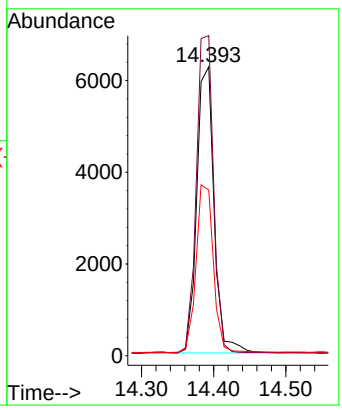


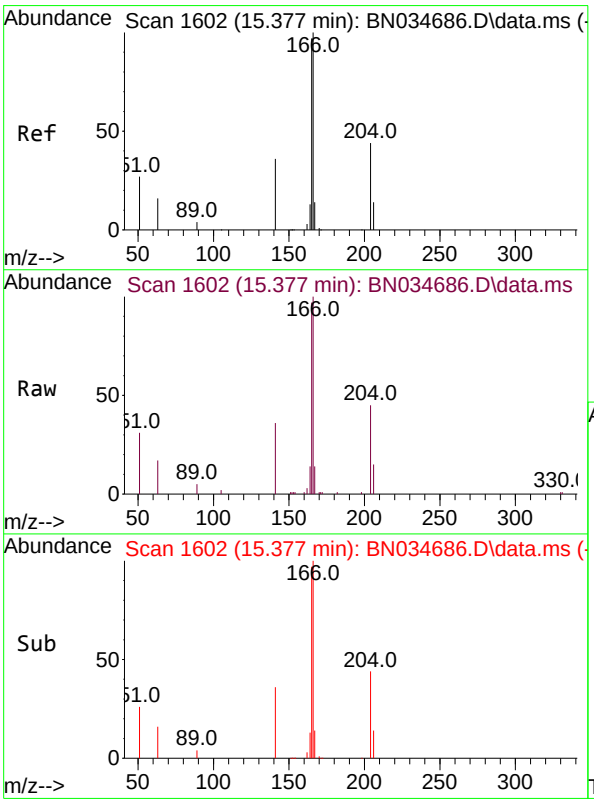
#17
Acenaphthene
Concen: 0.342 ng
RT: 14.393 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:154 Resp: 10443

Ion	Ratio	Lower	Upper
154	100		
153	110.2	88.2	132.2
152	58.6	46.9	70.3

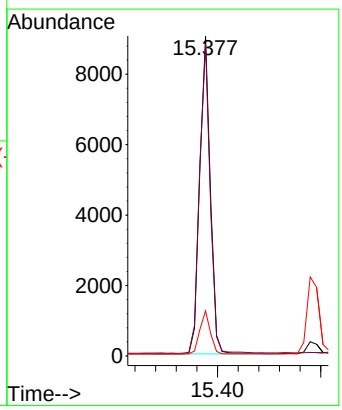


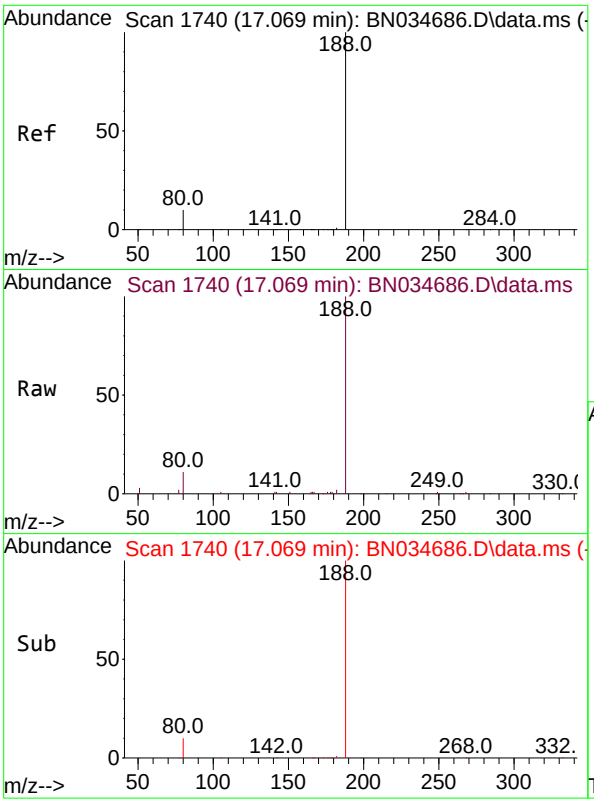


#18
Fluorene
Concen: 0.340 ng
RT: 15.377 min Scan# 1602
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:166 Resp: 12923

Ion	Ratio	Lower	Upper
166	100		
165	98.5	78.8	118.2
167	13.3	10.6	16.0



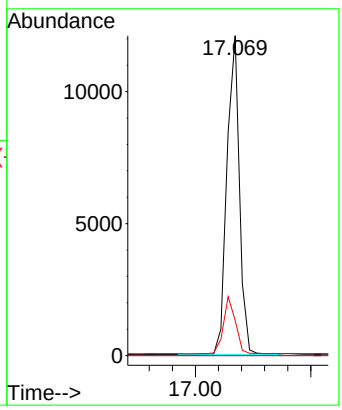


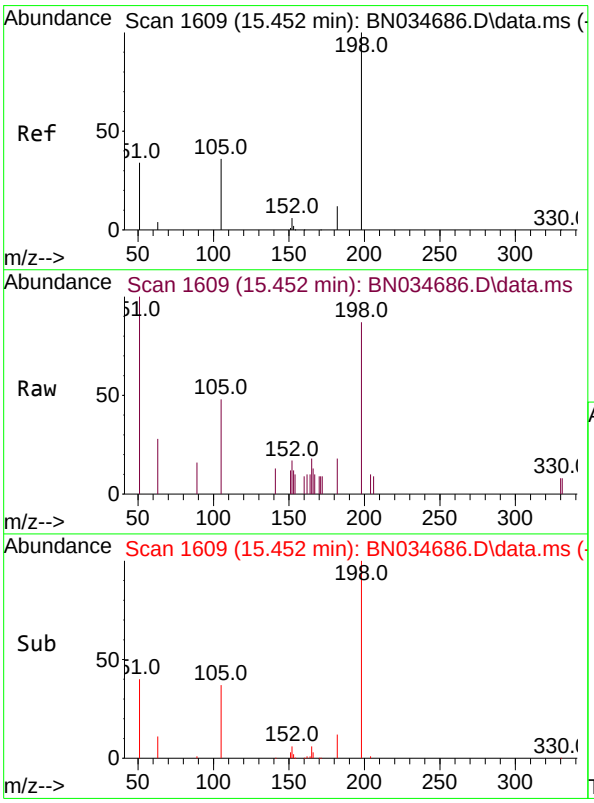
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.069 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:188 Resp: 18185

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.1	8.9	13.3

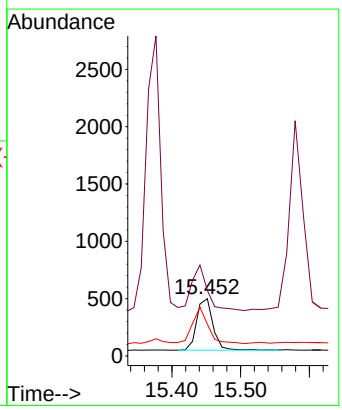


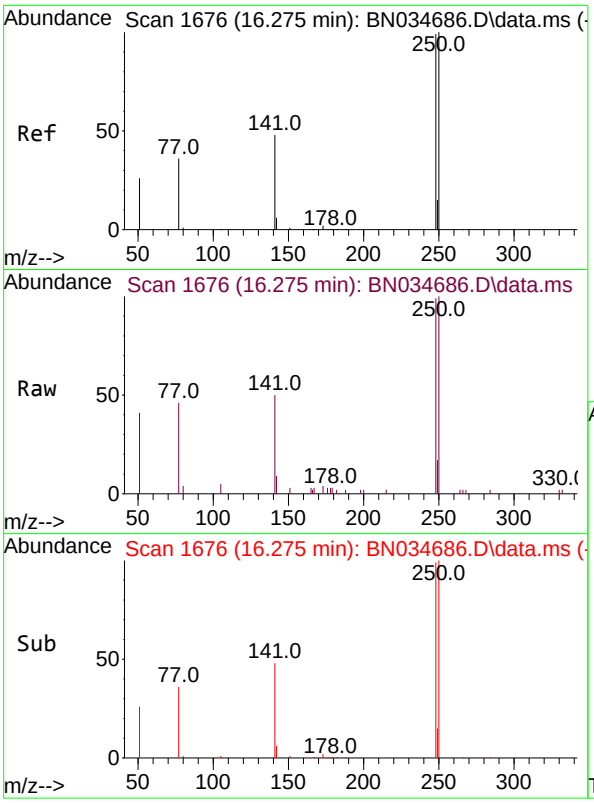


#20
4,6-Dinitro-2-methylphenol
Concen: 0.311 ng
RT: 15.452 min Scan# 1609
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:198 Resp: 774

Ion	Ratio	Lower	Upper
198	100		
51	114.8	91.8	137.8
105	55.4	44.3	66.5



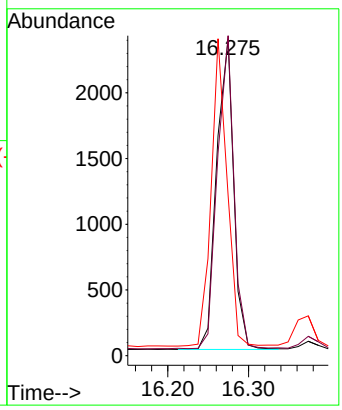


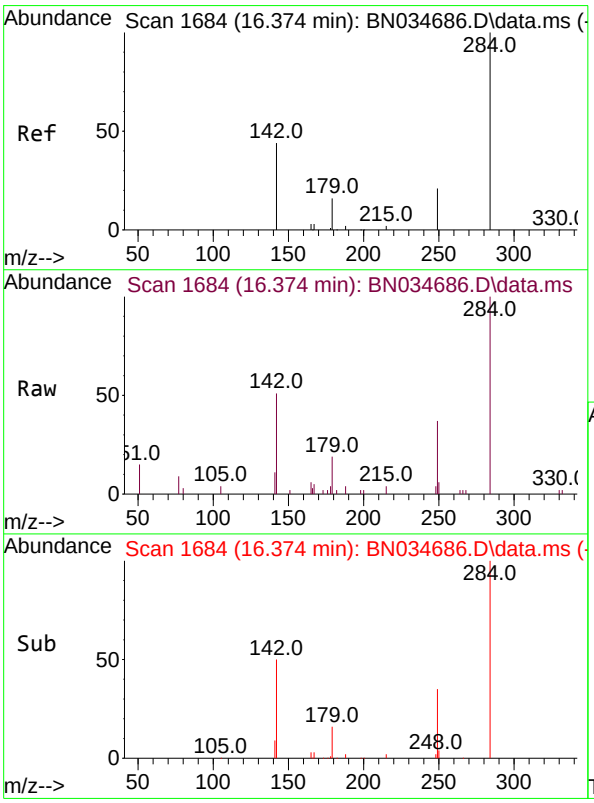
#21
4-Bromophenyl-phenylether
Concen: 0.348 ng
RT: 16.275 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:248 Resp: 3462

Ion	Ratio	Lower	Upper
248	100		
250	101.1	80.9	121.3
141	50.6	40.5	60.7

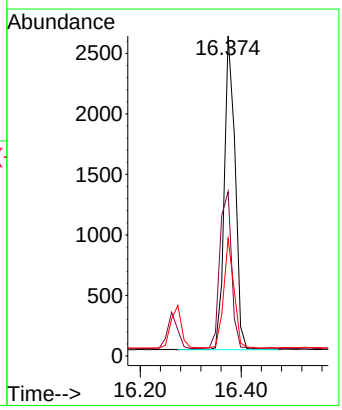


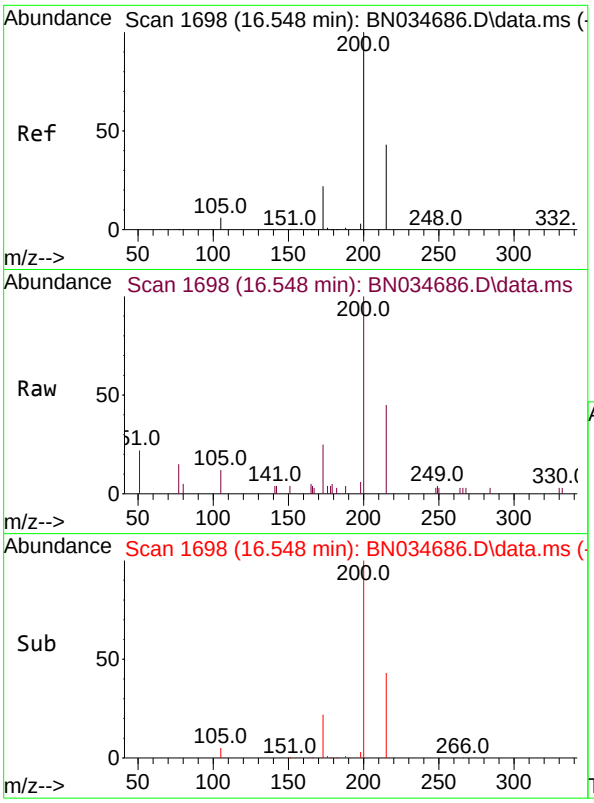


#22
Hexachlorobenzene
Concen: 0.348 ng
RT: 16.374 min Scan# 1684
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:284 Resp: 3844

Ion	Ratio	Lower	Upper
284	100		
142	54.5	43.6	65.4
249	33.3	26.6	40.0



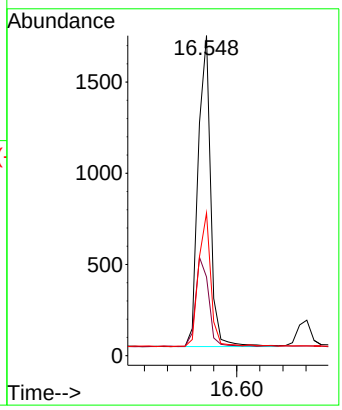


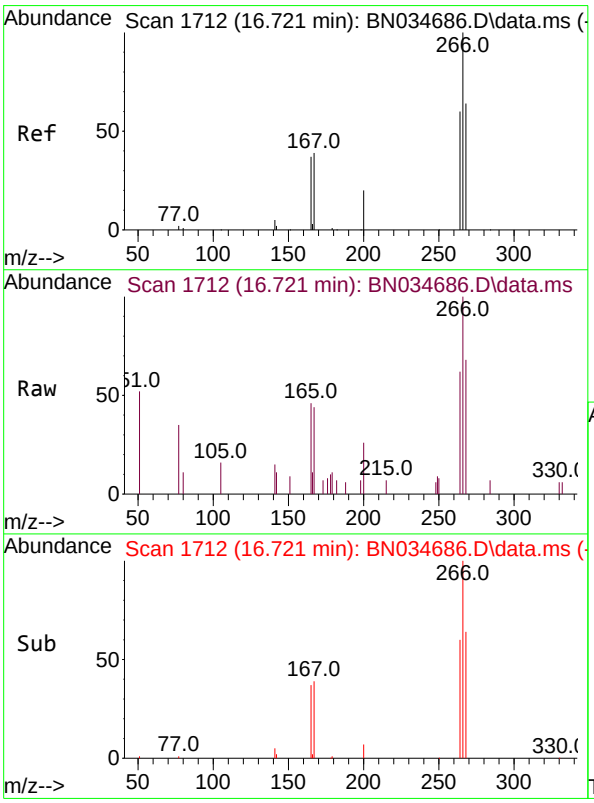
#23
Atrazine
Concen: 0.292 ng
RT: 16.548 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:200 Resp: 2545

Ion	Ratio	Lower	Upper
200	100		
173	24.6	19.7	29.5
215	44.6	35.7	53.5

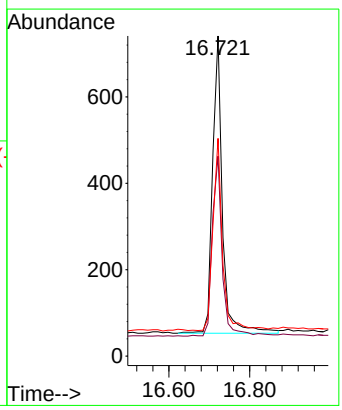


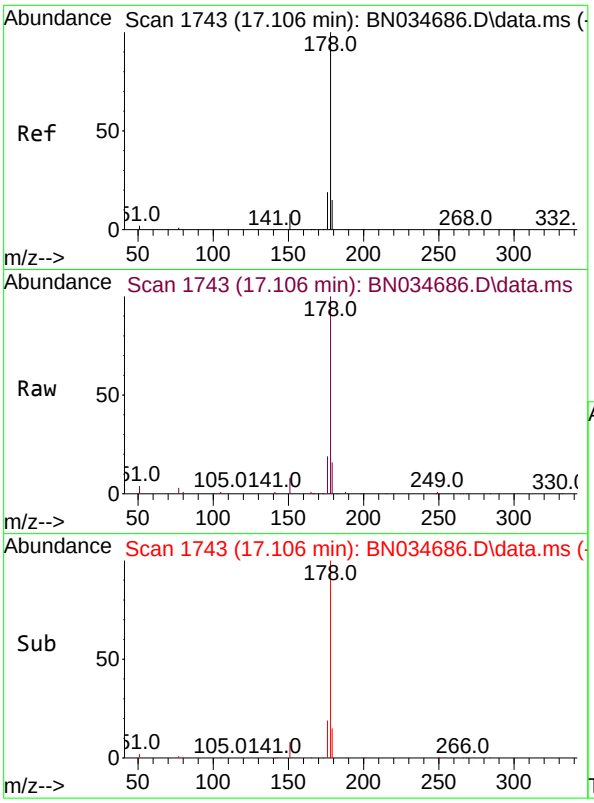


#24
Pentachlorophenol
Concen: 0.269 ng
RT: 16.721 min Scan# 1712
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:266 Resp: 1164

Ion	Ratio	Lower	Upper
266	100		
264	61.8	49.4	74.2
268	63.1	50.5	75.7



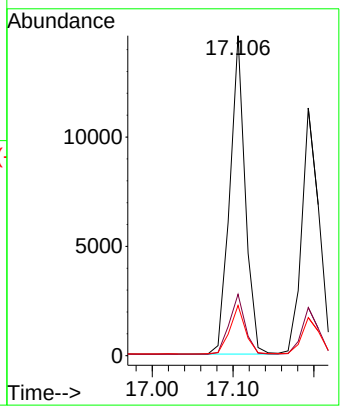


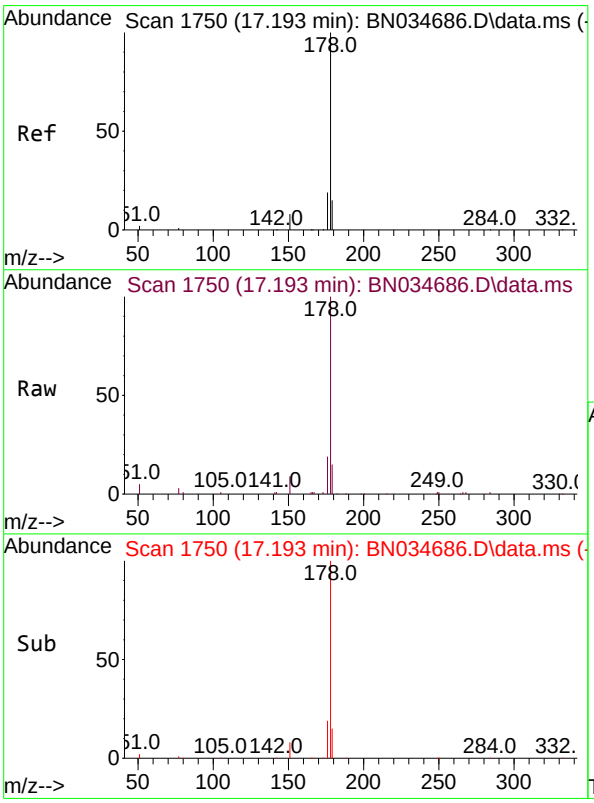
#25
Phenanthrene
Concen: 0.358 ng
RT: 17.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:178 Resp: 19369

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.2
179	15.3	12.2	18.4

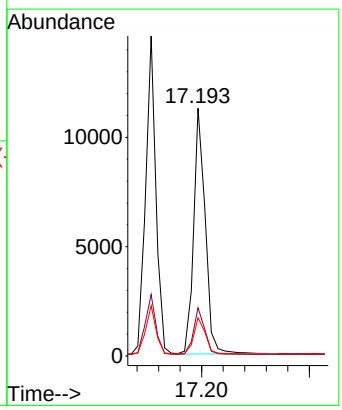


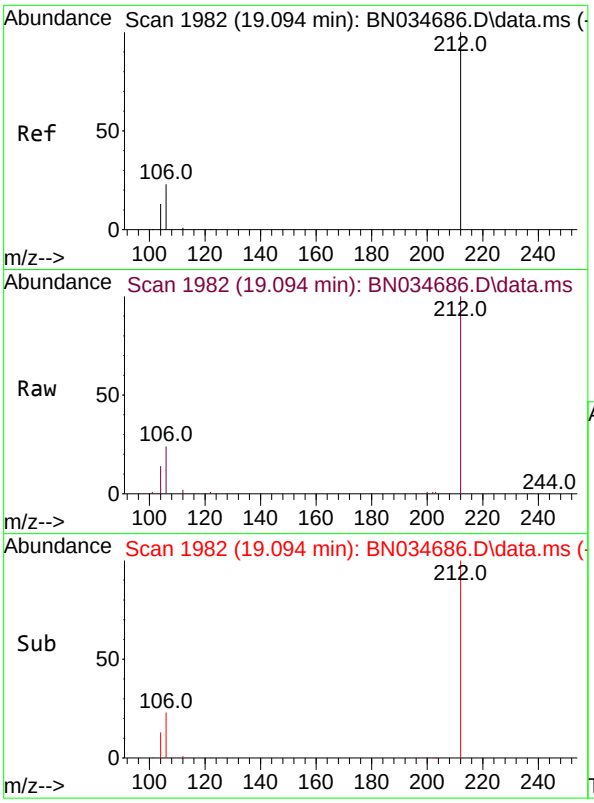


#26
Anthracene
Concen: 0.350 ng
RT: 17.193 min Scan# 1750
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:178 Resp: 16930

Ion	Ratio	Lower	Upper
178	100		
176	18.6	14.9	22.3
179	15.2	12.2	18.2



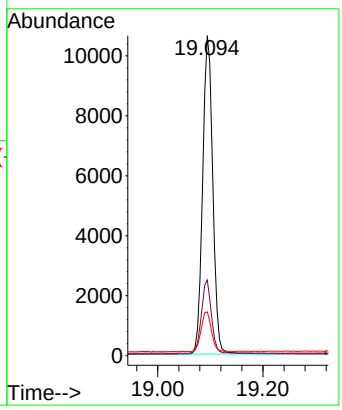


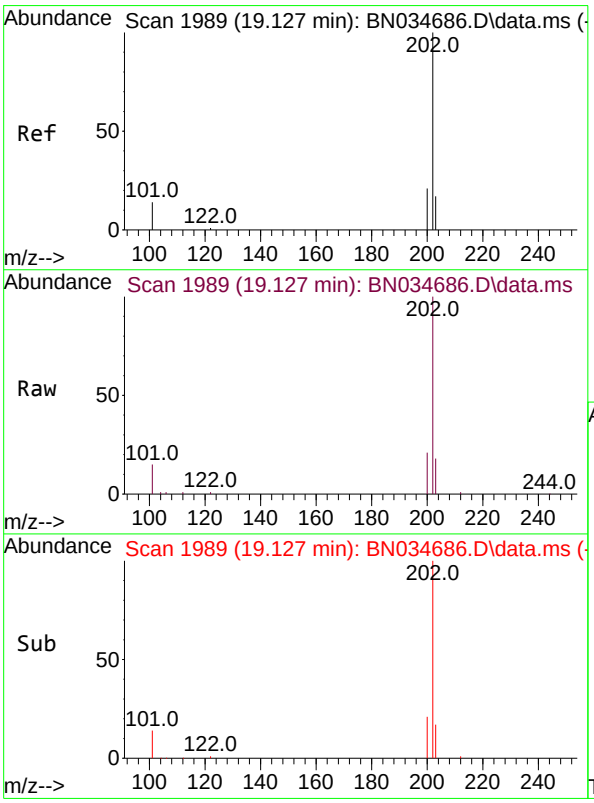
#27
Fluoranthene-d10
Concen: 0.320 ng
RT: 19.094 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:212 Resp: 14254

Ion	Ratio	Lower	Upper
212	100		
106	22.3	17.8	26.8
104	12.8	10.2	15.4

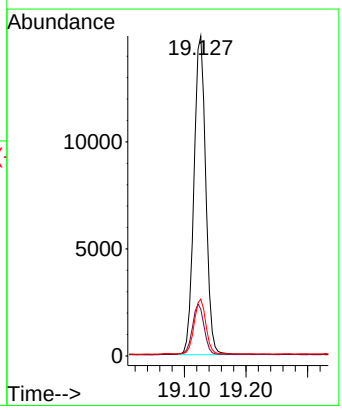


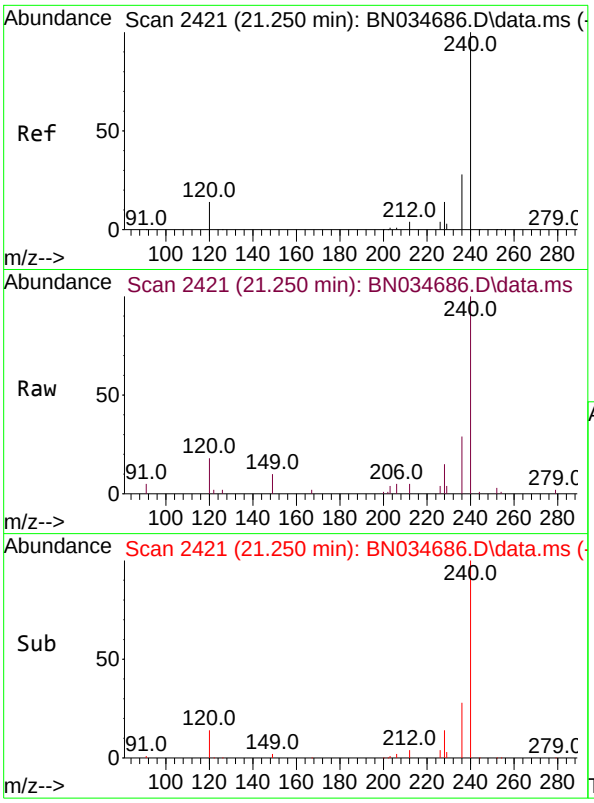


#28
Fluoranthene
Concen: 0.327 ng
RT: 19.127 min Scan# 1989
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:202 Resp: 19859

Ion	Ratio	Lower	Upper
202	100		
101	16.0	12.8	19.2
203	16.9	13.5	20.3



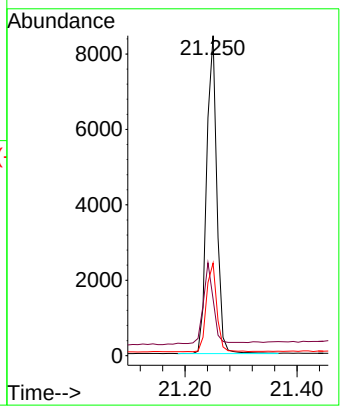


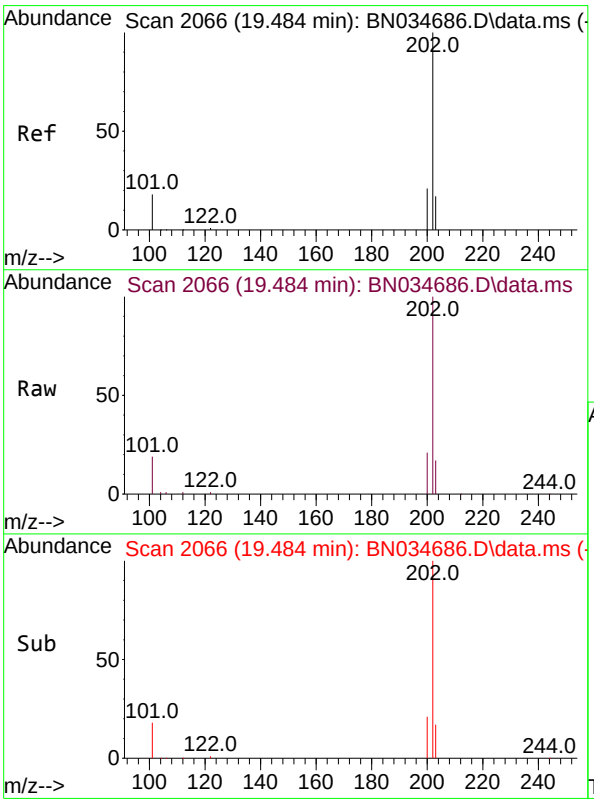
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.250 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:240 Resp: 10628

Ion	Ratio	Lower	Upper
240	100		
120	17.7	14.2	21.2
236	28.9	23.1	34.7

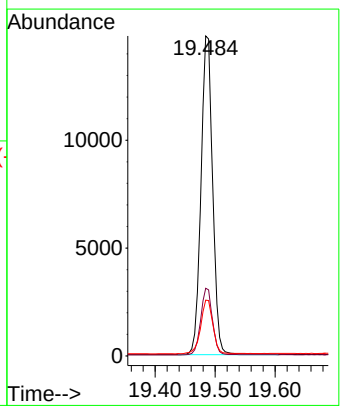


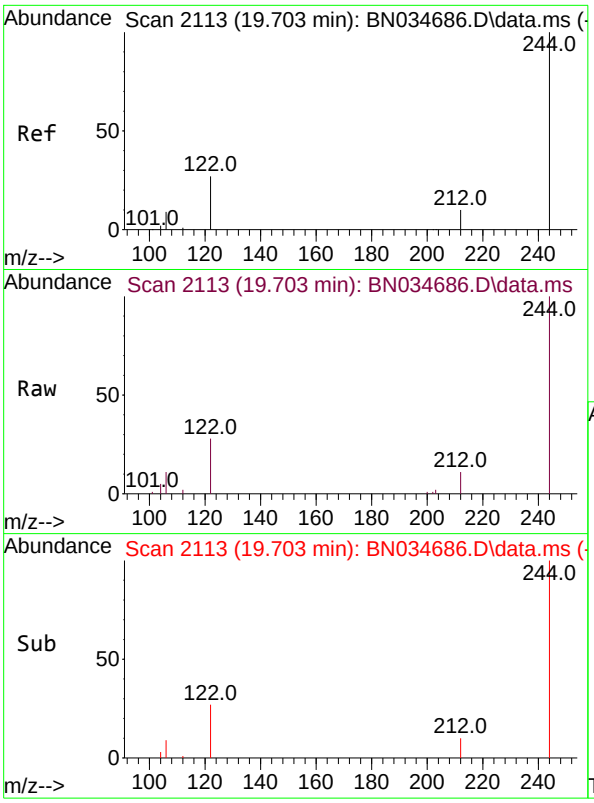


#30
Pyrene
Concen: 0.420 ng
RT: 19.484 min Scan# 2066
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:202 Resp: 19977

Ion	Ratio	Lower	Upper
202	100		
200	20.8	16.6	25.0
203	17.8	14.2	21.4



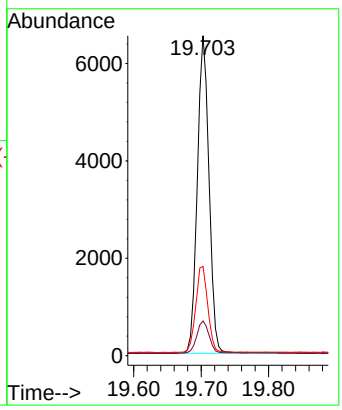


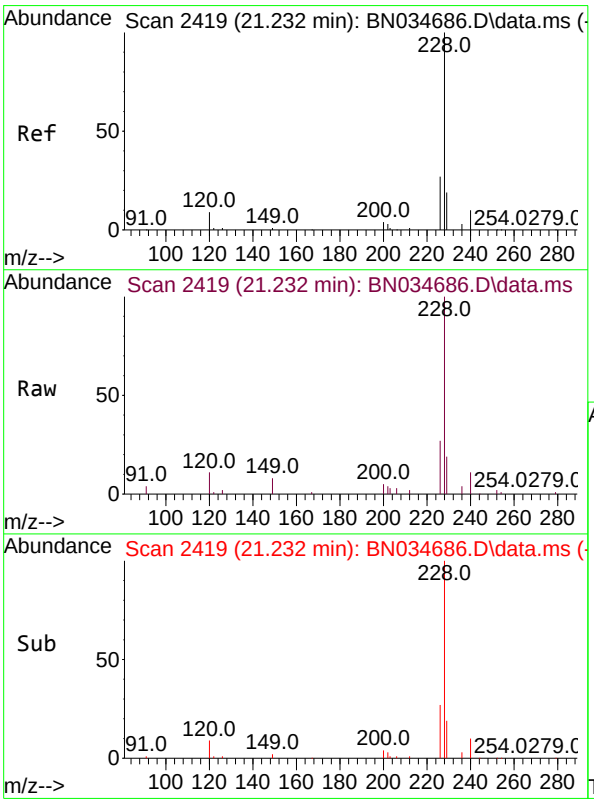
#31
Terphenyl-d14
Concen: 0.382 ng
RT: 19.703 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:244 Resp: 7865

Ion	Ratio	Lower	Upper
244	100		
212	10.8	8.6	13.0
122	27.9	22.3	33.5

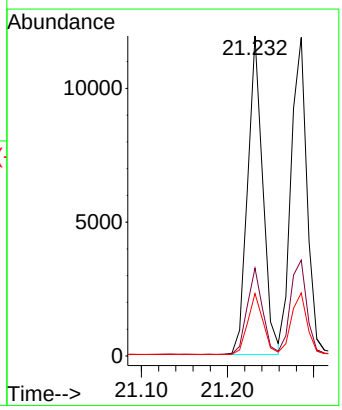


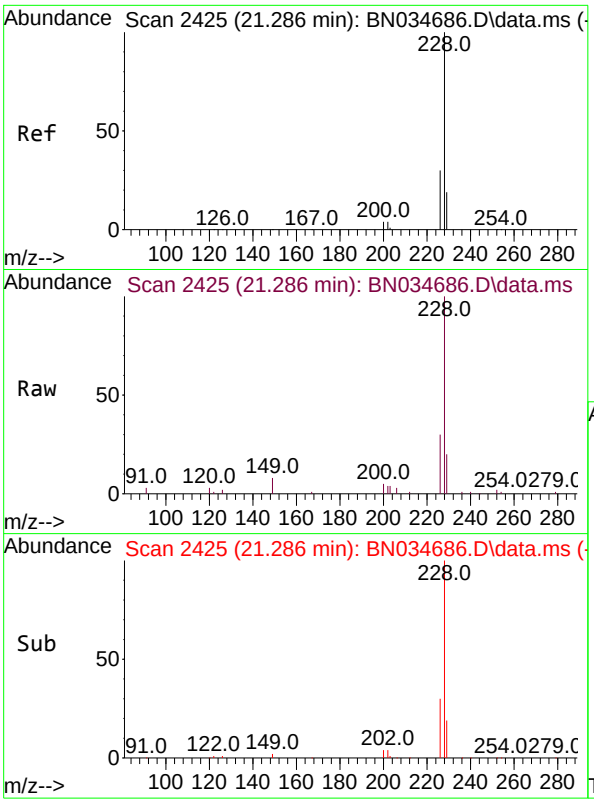


#32
Benzo(a)anthracene
Concen: 0.360 ng
RT: 21.232 min Scan# 2419
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:228 Resp: 14596

Ion	Ratio	Lower	Upper
228	100		
226	27.5	22.0	33.0
229	19.5	15.6	23.4



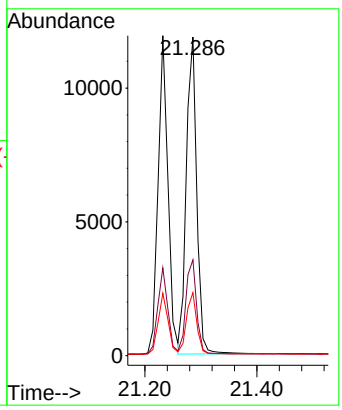


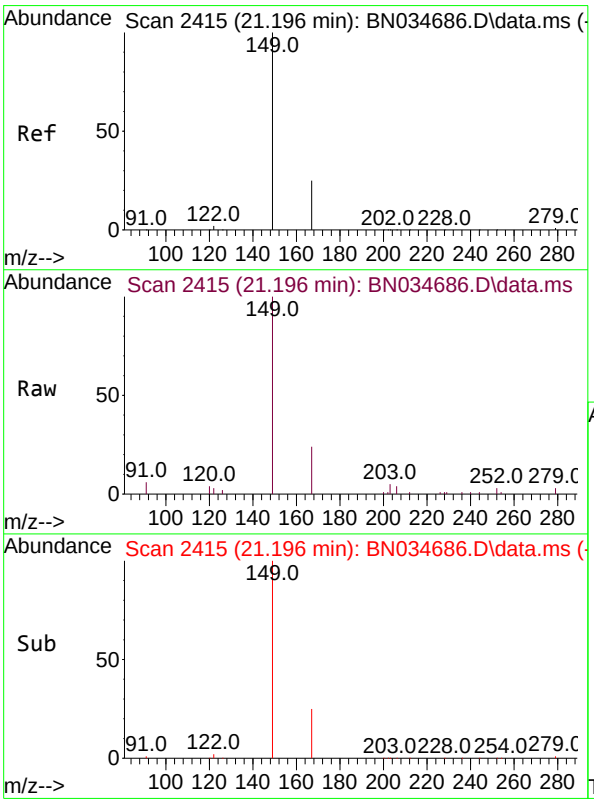
#33
Chrysene
Concen: 0.382 ng
RT: 21.286 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:228 Resp: 15321

Ion	Ratio	Lower	Upper
228	100		
226	30.1	24.1	36.1
229	19.8	15.8	23.8

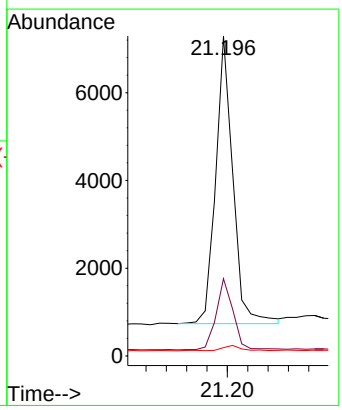


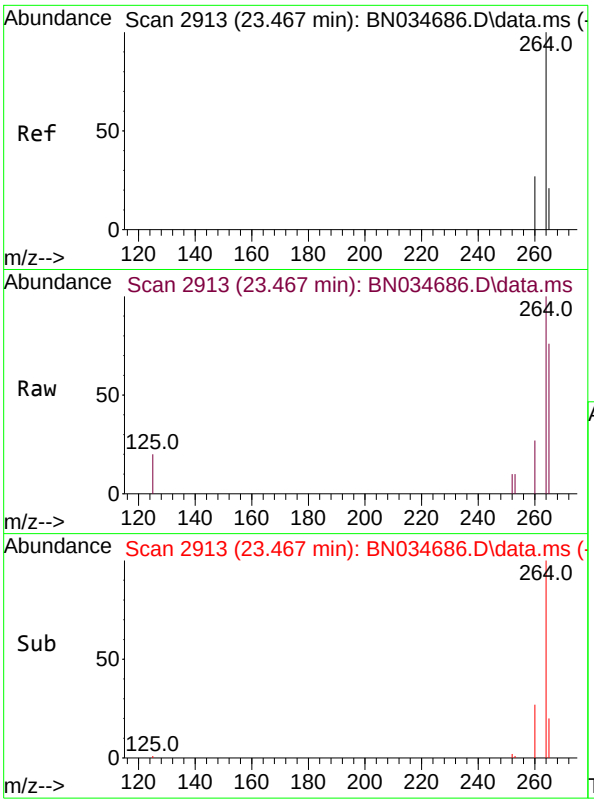


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.278 ng
RT: 21.196 min Scan# 2415
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:149 Resp: 7675

Ion	Ratio	Lower	Upper
149	100		
167	24.6	19.7	29.5
279	2.2	1.8	2.6



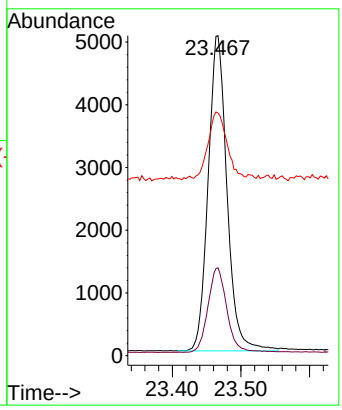


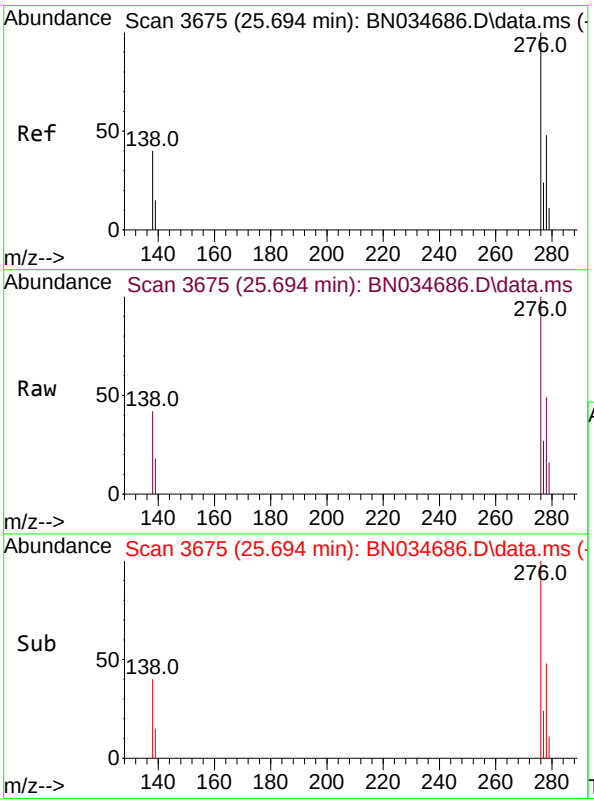
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.467 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:264 Resp: 9595

Ion	Ratio	Lower	Upper
264	100		
260	27.4	21.9	32.9
265	75.8	60.6	91.0

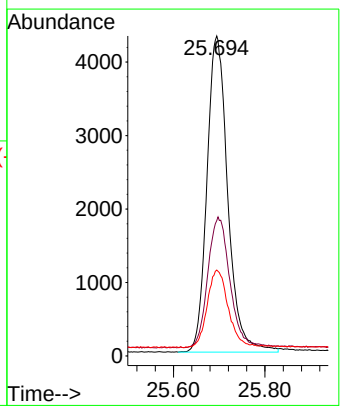


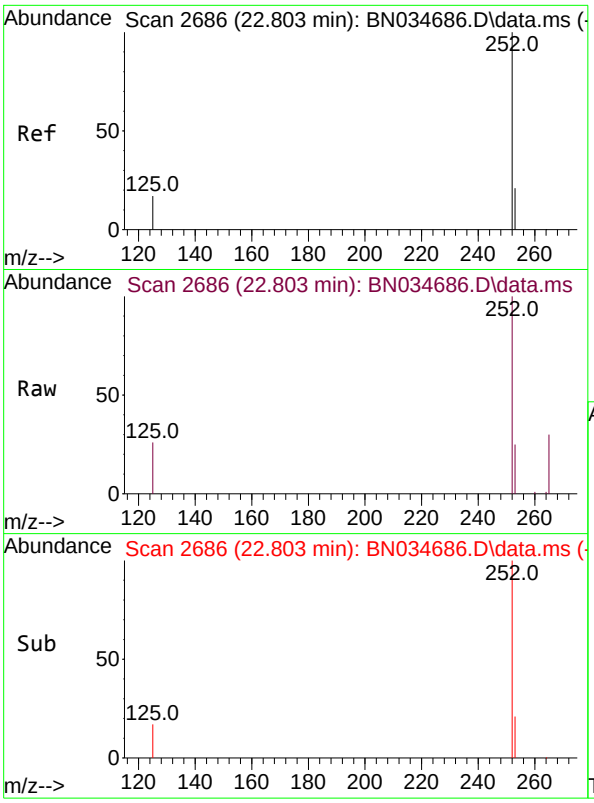


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.368 ng
RT: 25.694 min Scan# 3675
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:276 Resp: 13606

Ion	Ratio	Lower	Upper
276	100		
138	43.9	35.1	52.7
277	24.6	19.7	29.5



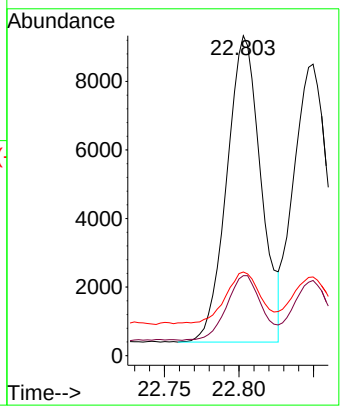


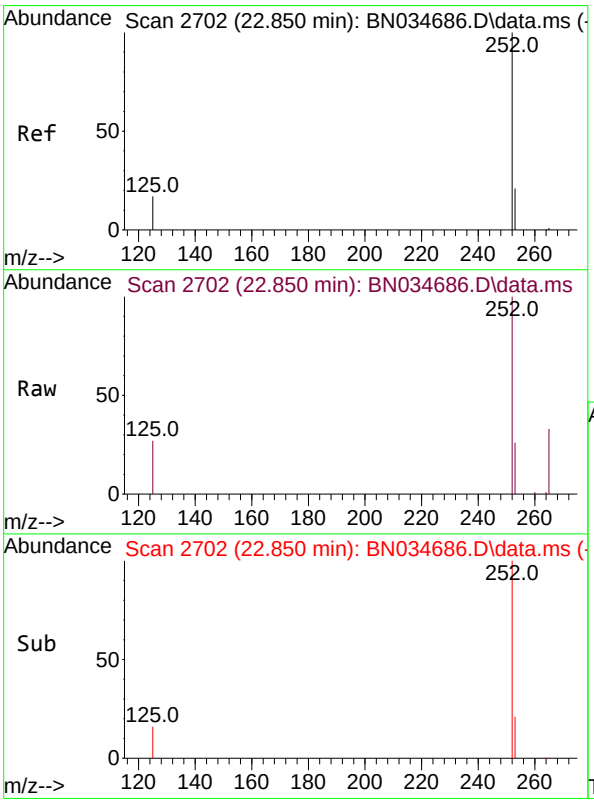
#37
Benzo(b)fluoranthene
Concen: 0.410 ng
RT: 22.803 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:252 Resp: 14206

Ion	Ratio	Lower	Upper
252	100		
253	25.0	20.0	30.0
125	26.1	20.9	31.3

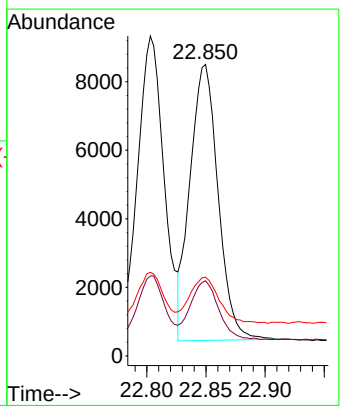


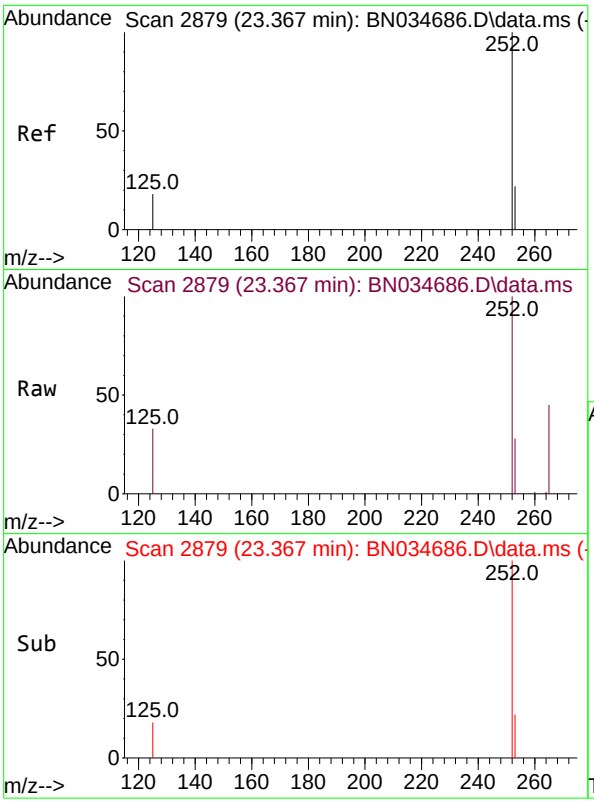


#38
Benzo(k)fluoranthene
Concen: 0.393 ng
RT: 22.850 min Scan# 2702
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:252 Resp: 13300

Ion	Ratio	Lower	Upper
252	100		
253	25.8	20.6	31.0
125	27.0	21.6	32.4



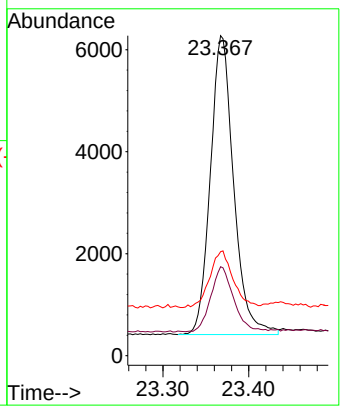


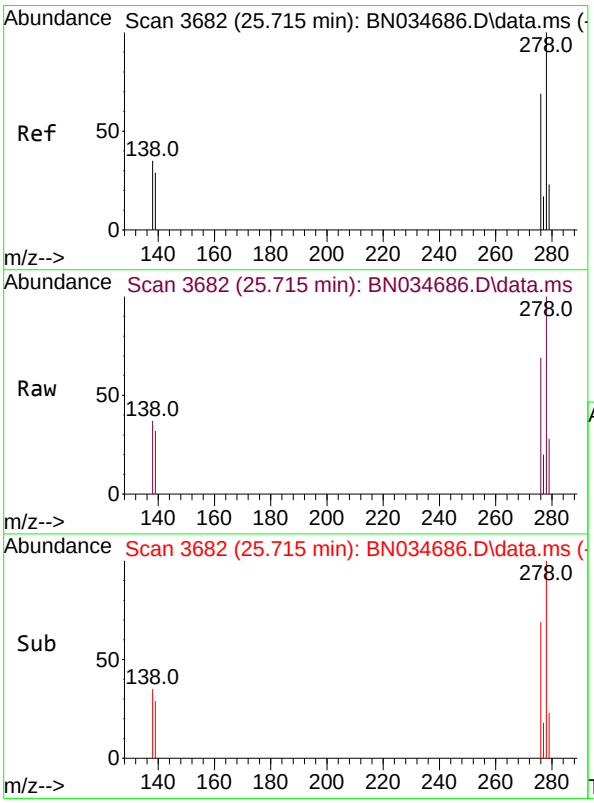
#39
Benzo(a)pyrene
Concen: 0.377 ng
RT: 23.367 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:252 Resp: 11106

Ion	Ratio	Lower	Upper
252	100		
253	27.8	22.2	33.4
125	32.5	26.0	39.0

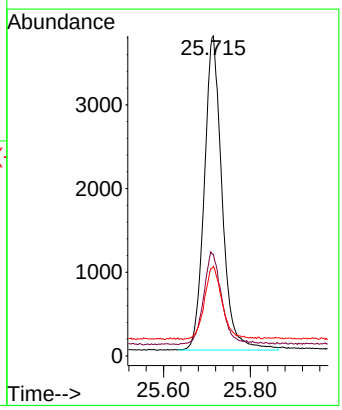


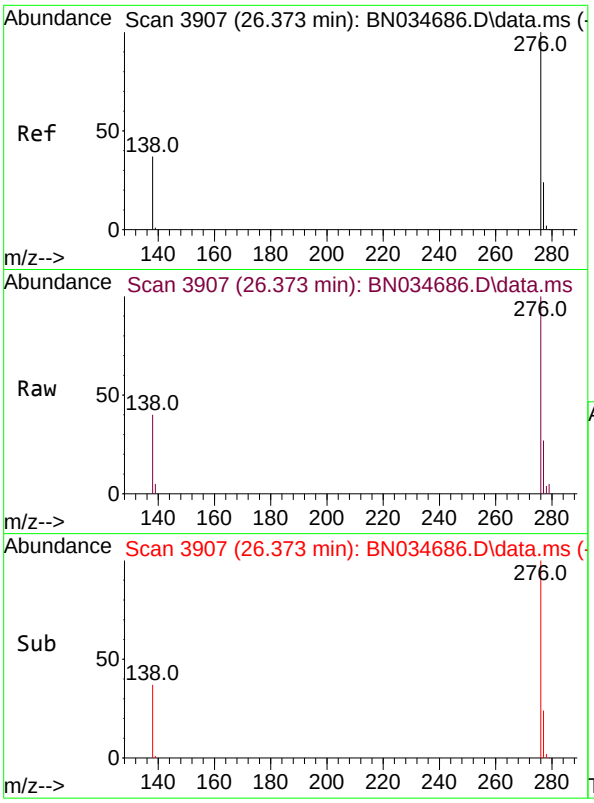


#40
Dibenzo(a,h)anthracene
Concen: 0.368 ng
RT: 25.715 min Scan# 3682
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Tgt Ion:278 Resp: 10684

Ion	Ratio	Lower	Upper
278	100		
139	31.8	25.4	38.2
279	28.0	22.4	33.6



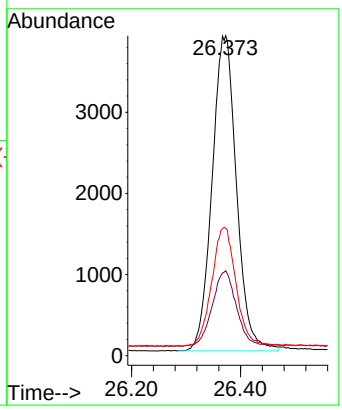


#41
Benzo(g,h,i)perylene
Concen: 0.378 ng
RT: 26.373 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN034686.D
Acq: 24 Oct 2024 10:23

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:276 Resp: 12106

Ion	Ratio	Lower	Upper
276	100		
277	26.6	21.3	31.9
138	39.9	31.9	47.9



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034687.D
Acq On : 24 Oct 2024 10:59
Operator : RC/JU
Sample : SSTDICC0.8
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 24 12:43:27 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 12:41:40 2024
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.712	152	6279	0.400	ng		0.00
7) Naphthalene-d8	10.479	136	18298	0.400	ng		0.00
13) Acenaphthene-d10	14.325	164	8788	0.400	ng		0.00
19) Phenanthrene-d10	17.063	188	18528	0.400	ng	#	0.00
29) Chrysene-d12	21.247	240	12066	0.400	ng	#	0.00
35) Perylene-d12	23.467	264	10772	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.321	112	15922	0.829	ng		0.00
5) Phenol-d6	6.881	99	20820	0.847	ng		0.00
8) Nitrobenzene-d5	8.845	82	12949	0.854	ng		0.00
11) 2-Methylnaphthalene-d10	12.071	152	21347	0.829	ng		0.00
14) 2,4,6-Tribromophenol	15.810	330	2227	0.598	ng		0.00
15) 2-Fluorobiphenyl	12.957	172	29939	0.864	ng		0.00
27) Fluoranthene-d10	19.096	212	36834	0.812	ng		0.00
31) Terphenyl-d14	19.705	244	20915	0.896	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.285	88	6845	0.895	ng		98
3) n-Nitrosodimethylamine	3.581	42	10574	1.144	ng	#	97
6) bis(2-Chloroethyl)ether	7.141	93	17336	0.921	ng		99
9) Naphthalene	10.532	128	43252	0.857	ng		99
10) Hexachlorobutadiene	10.831	225	6528	0.807	ng	#	99
12) 2-Methylnaphthalene	12.146	142	26668	0.836	ng		100
16) Acenaphthylene	14.047	152	35850	0.849	ng		99
17) Acenaphthene	14.389	154	25224	0.876	ng		99
18) Fluorene	15.373	166	31002	0.864	ng		100
20) 4,6-Dinitro-2-methylph...	15.448	198	2025	0.799	ng	#	77
21) 4-Bromophenyl-phenylether	16.269	248	8290	0.818	ng	#	80
22) Hexachlorobenzene	16.381	284	9007	0.801	ng		98
23) Atrazine	16.542	200	6777	0.764	ng	#	93
24) Pentachlorophenol	16.716	266	3059	0.693	ng		99
25) Phenanthrene	17.101	178	47181	0.856	ng		100
26) Anthracene	17.200	178	41660	0.845	ng		100
28) Fluoranthene	19.129	202	51141	0.827	ng		100
30) Pyrene	19.486	202	51944	0.963	ng		100
32) Benzo(a)anthracene	21.238	228	39570	0.860	ng		99
33) Chrysene	21.283	228	41243	0.906	ng		99
34) Bis(2-ethylhexyl)phtha...	21.203	149	20342	0.650	ng	#	99
36) Indeno(1,2,3-cd)pyrene	25.698	276	34379	0.828	ng		100
37) Benzo(b)fluoranthene	22.803	252	36922m	0.948	ng		
38) Benzo(k)fluoranthene	22.850	252	37118	0.977	ng	#	91
39) Benzo(a)pyrene	23.371	252	29490	0.892	ng	#	88
40) Dibenzo(a,h)anthracene	25.718	278	26850	0.823	ng		96
41) Benzo(g,h,i)perylene	26.373	276	29665	0.824	ng		97

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

ICAL Form

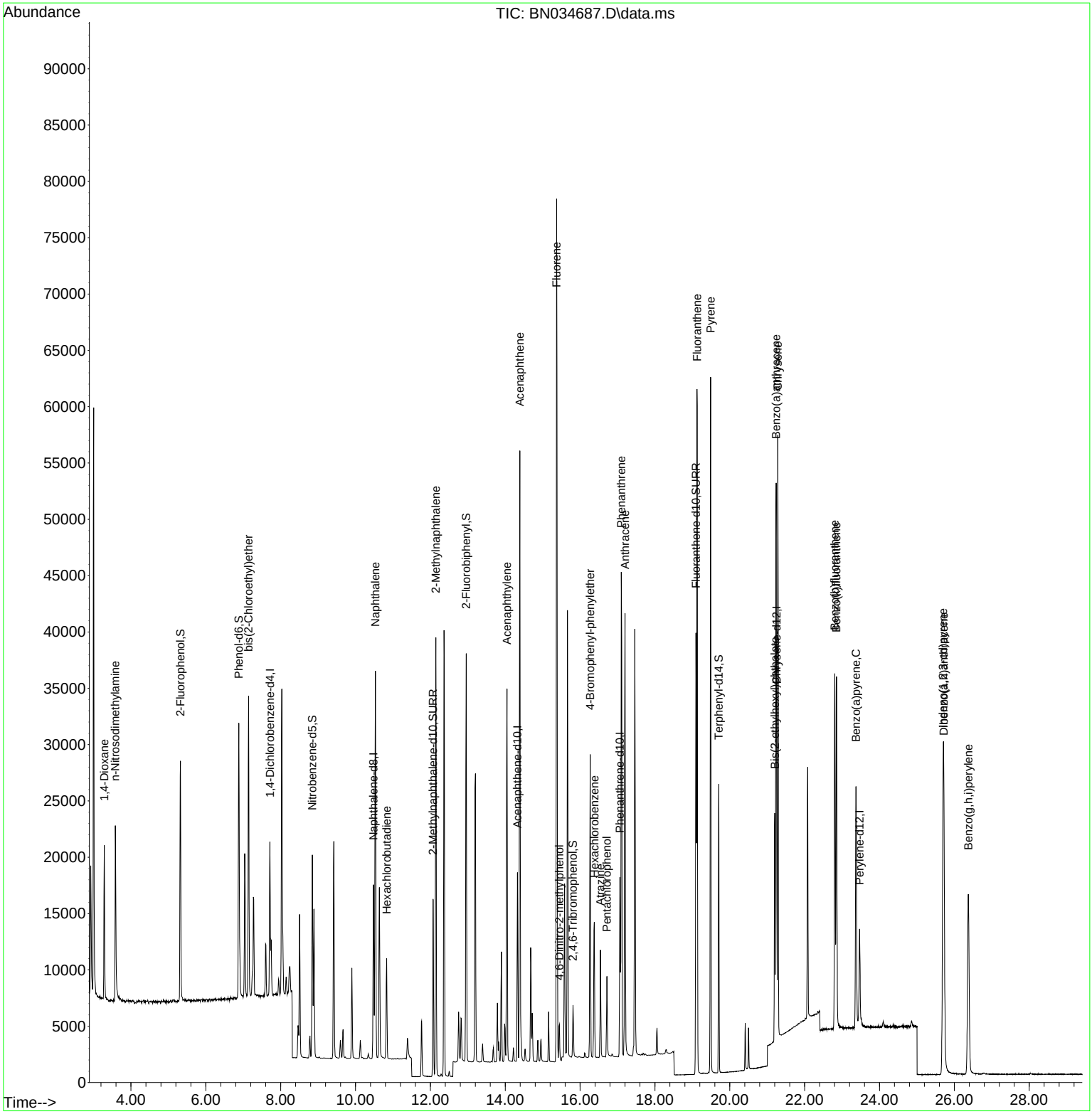
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034687.D
Acq On : 24 Oct 2024 10:59
Operator : RC/JU
Sample : SSTDICC0.8
Misc :
ALS Vial : 5 Sample Multiplier: 1

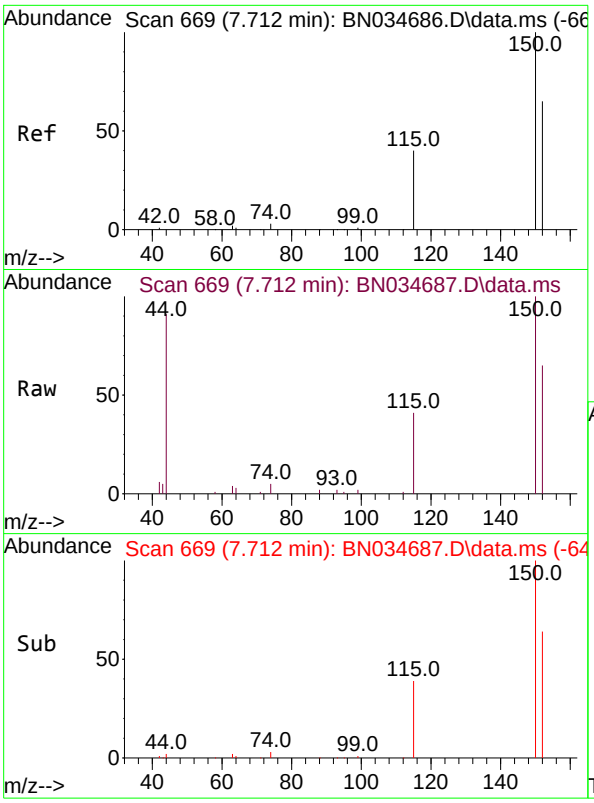
Quant Time: Oct 24 12:43:27 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 12:41:40 2024
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

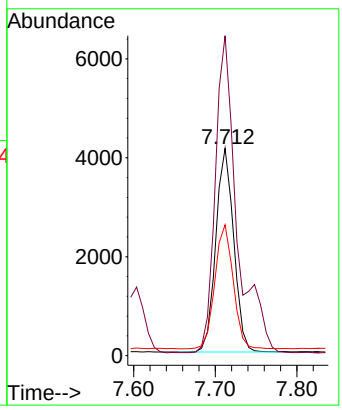




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:152 Resp: 627

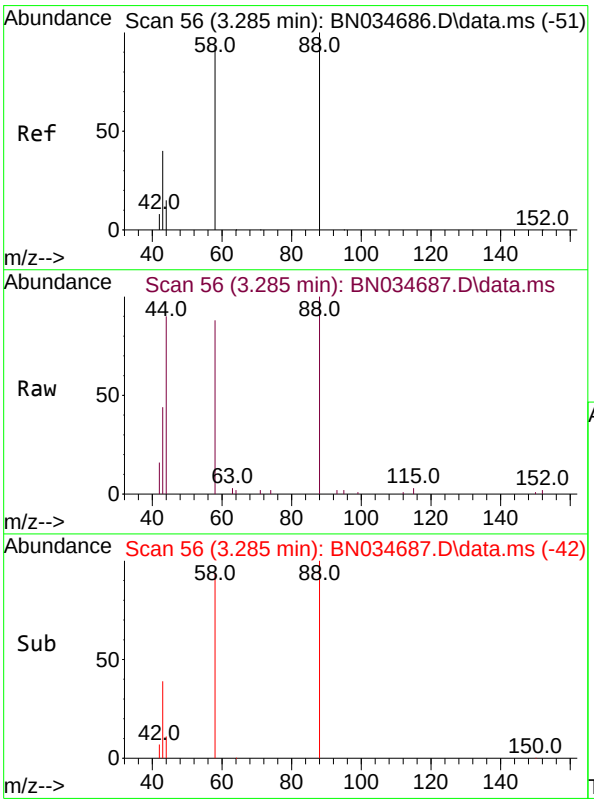
Ion	Ratio	Lower	Upper
152	100		
150	154.4	122.7	184.1
115	63.2	51.0	76.6



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Manual Integrations
APPROVED

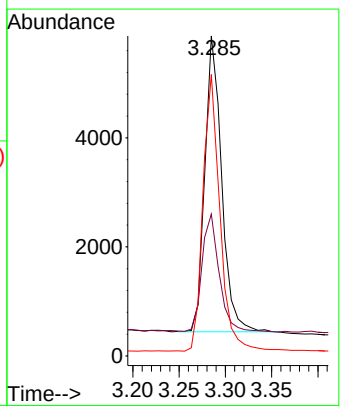
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

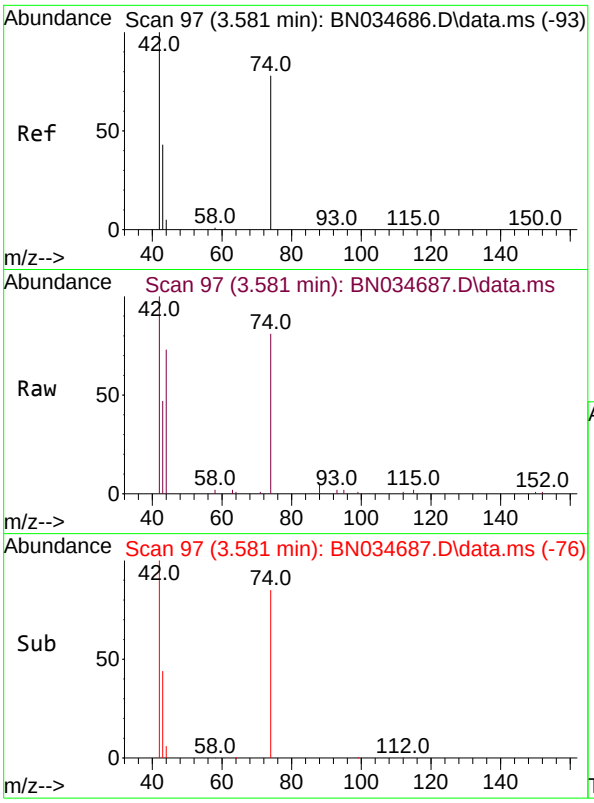


#2
1,4-Dioxane
Concen: 0.895 ng
RT: 3.285 min Scan# 56
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion: 88 Resp: 6845

Ion	Ratio	Lower	Upper
88	100		
43	41.3	32.1	48.1
58	93.9	73.7	110.5

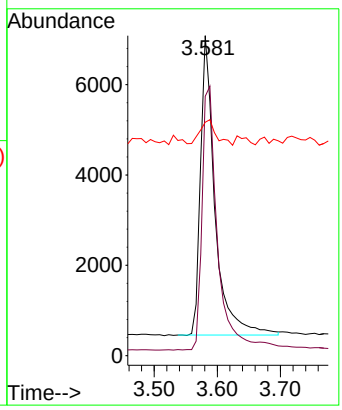




#3
n-Nitrosodimethylamine
Concen: 1.144 ng
RT: 3.581 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion: 42 Resp: 1057

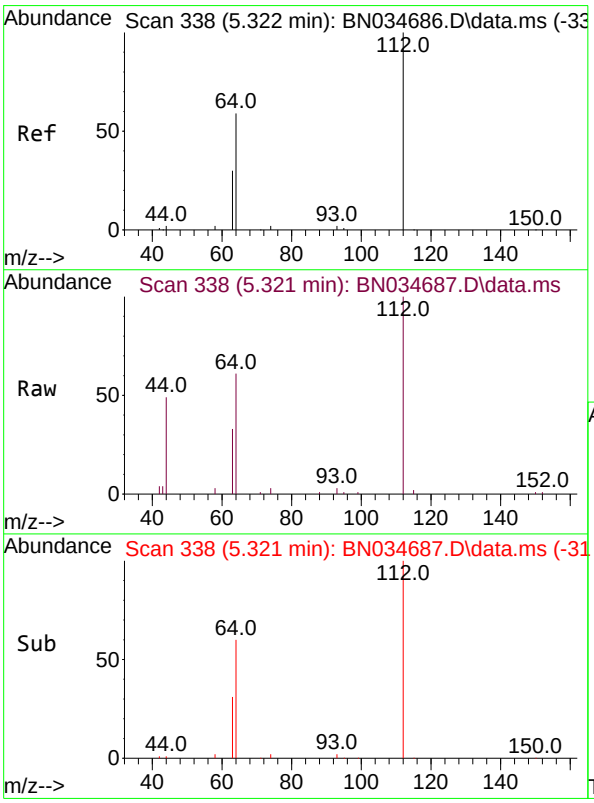
Ion	Ratio	Lower	Upper
42	100		
74	95.9	77.2	115.8
44	9.3	13.4	20.2#



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Manual Integrations
APPROVED

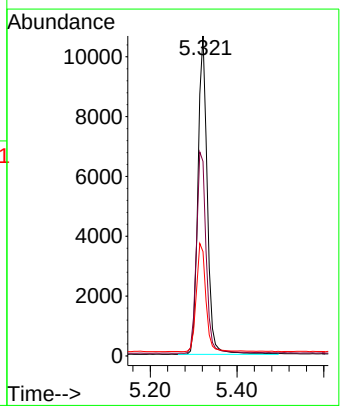
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

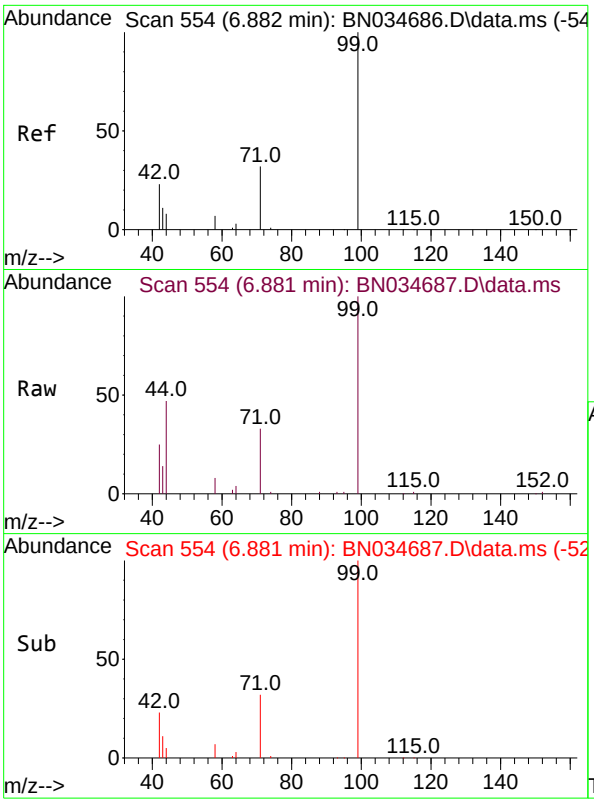


#4
2-Fluorophenol
Concen: 0.829 ng
RT: 5.321 min Scan# 338
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:112 Resp: 15922

Ion	Ratio	Lower	Upper
112	100		
64	66.1	53.0	79.6
63	34.5	27.6	41.4

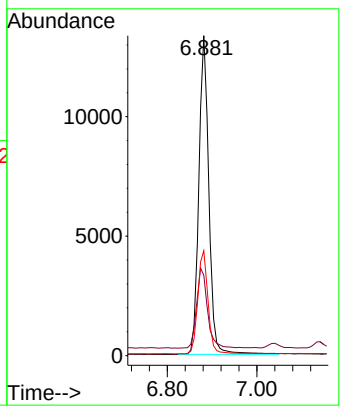




#5
Phenol-d6
Concen: 0.847 ng
RT: 6.881 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion: 99 Resp: 2082

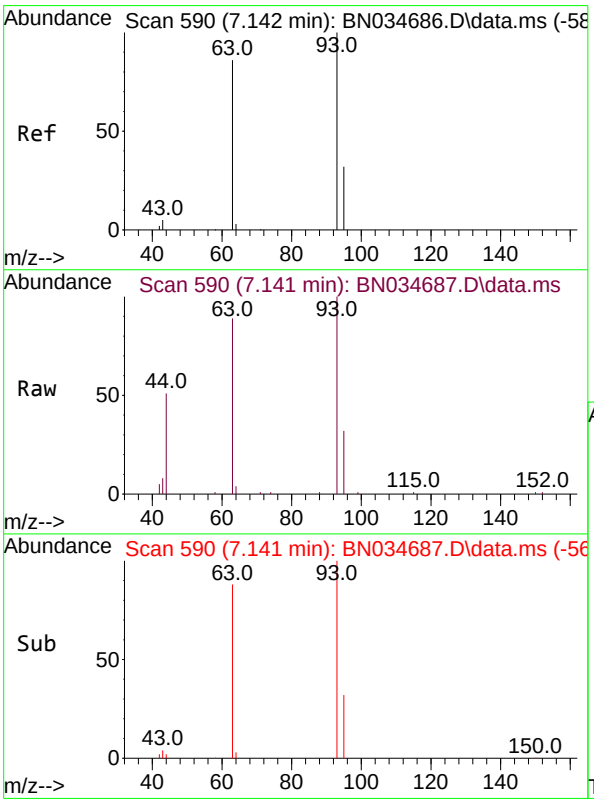
Ion	Ratio	Lower	Upper
99	100		
42	27.0	21.8	32.8
71	33.1	26.6	40.0



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Manual Integrations
APPROVED

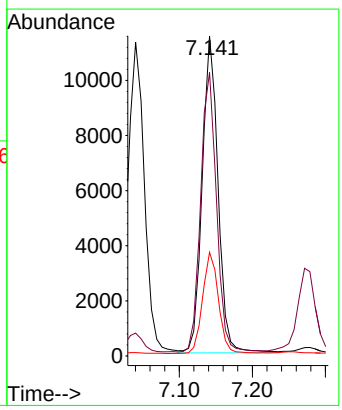
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

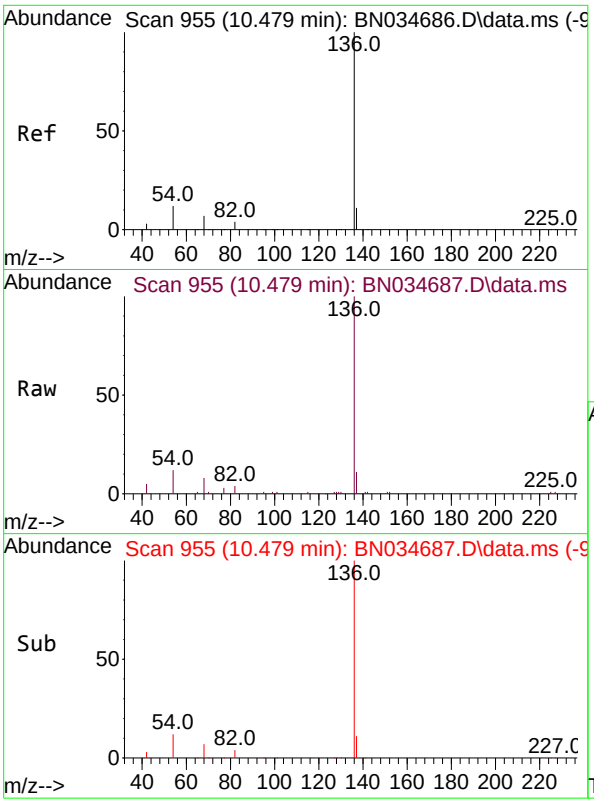


#6
bis(2-Chloroethyl)ether
Concen: 0.921 ng
RT: 7.141 min Scan# 590
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion: 93 Resp: 17336

Ion	Ratio	Lower	Upper
93	100		
63	88.1	71.5	107.3
95	32.1	25.8	38.6

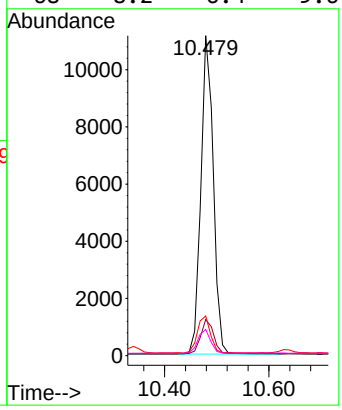




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:136 Resp: 1829

Ion	Ratio	Lower	Upper
136	100		
137	11.3	9.1	13.7
54	12.4	9.8	14.8
68	8.2	6.4	9.6



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

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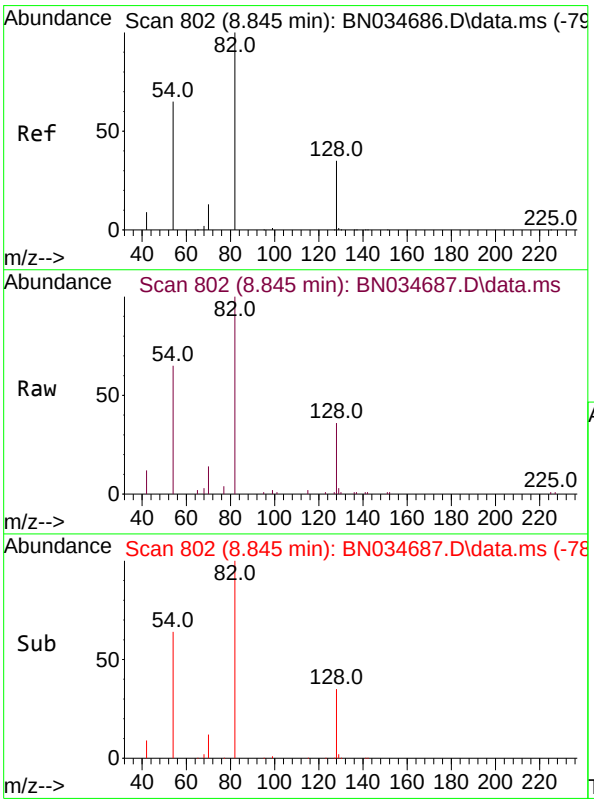
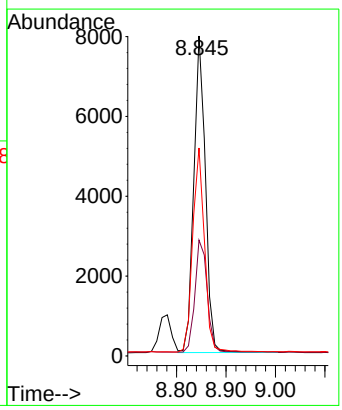
Supervised By :mohammad ahmed 10/26/2024

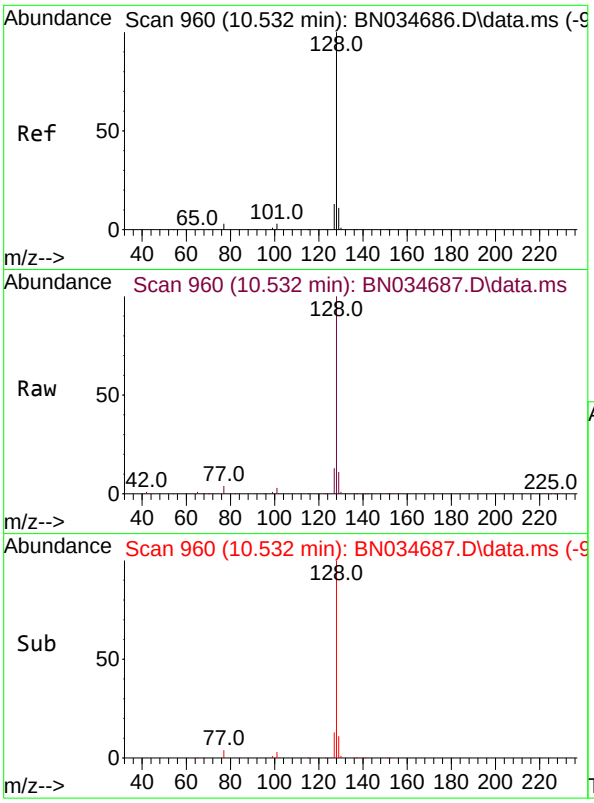


#8
Nitrobenzene-d5
Concen: 0.854 ng
RT: 8.845 min Scan# 802
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion: 82 Resp: 12949

Ion	Ratio	Lower	Upper
82	100		
128	36.2	29.7	44.5
54	65.0	53.0	79.6

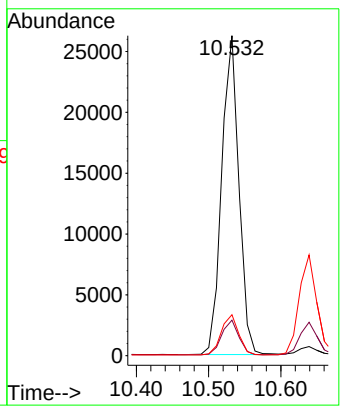




#9
Naphthalene
Concen: 0.857 ng
RT: 10.532 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:128 Resp: 4325

Ion	Ratio	Lower	Upper
128	100		
129	11.1	9.0	13.6
127	12.8	10.5	15.7



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

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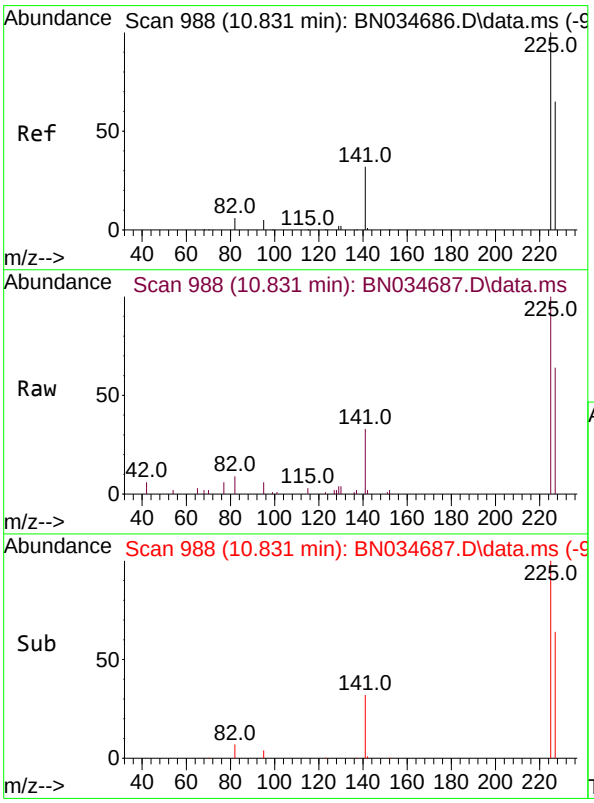
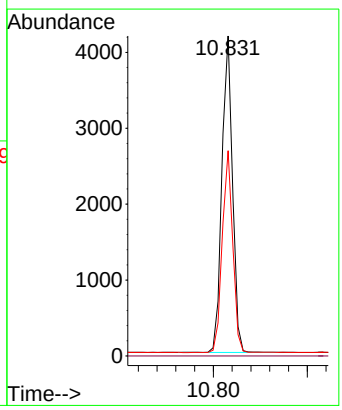
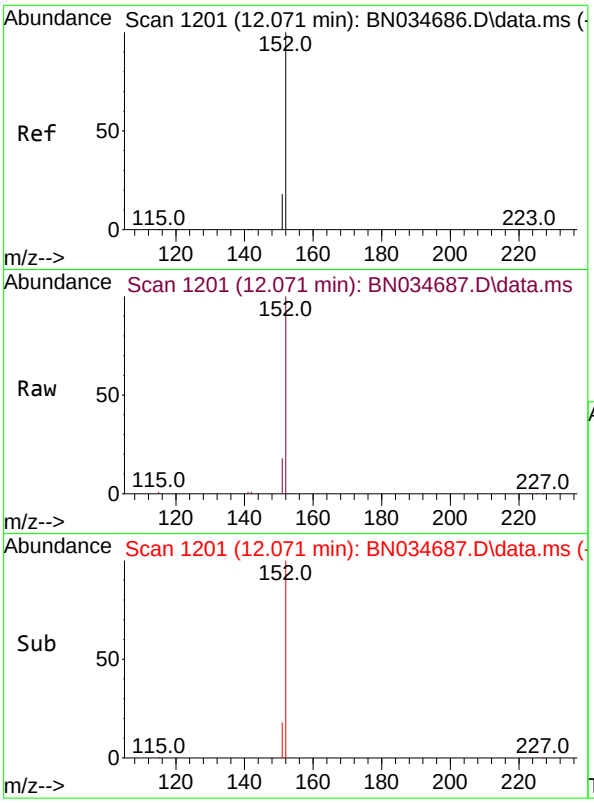


#10
Hexachlorobutadiene
Concen: 0.807 ng
RT: 10.831 min Scan# 988
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:225 Resp: 6528

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.3	51.4	77.0

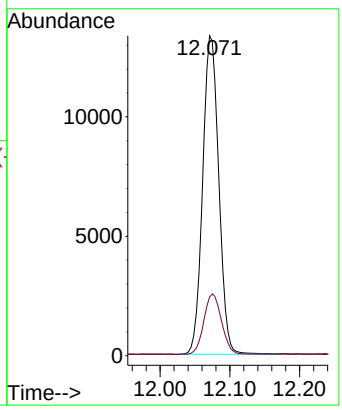




#11
2-Methylnaphthalene-d10
Concen: 0.829 ng
RT: 12.071 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:152 Resp: 2134

Ion	Ratio	Lower	Upper
152	100		
151	20.9	16.7	25.1



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

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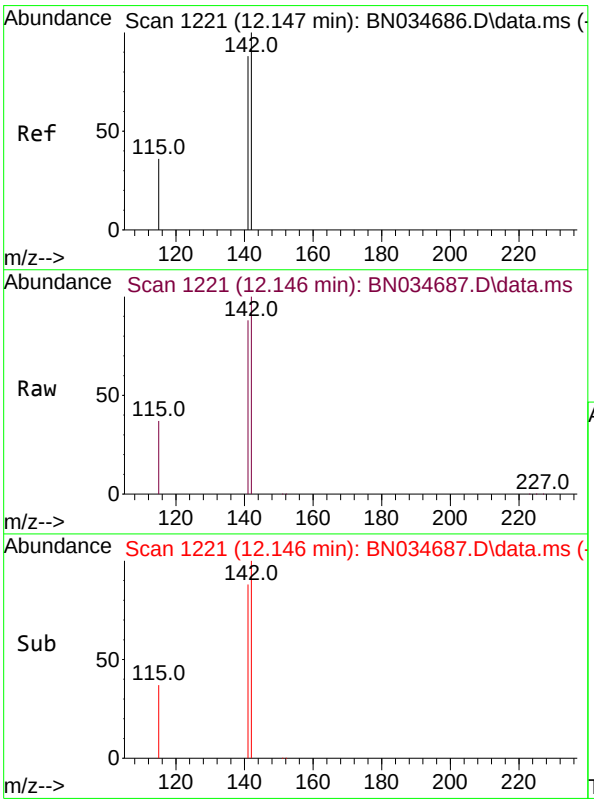
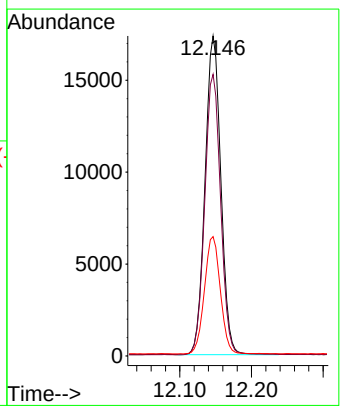
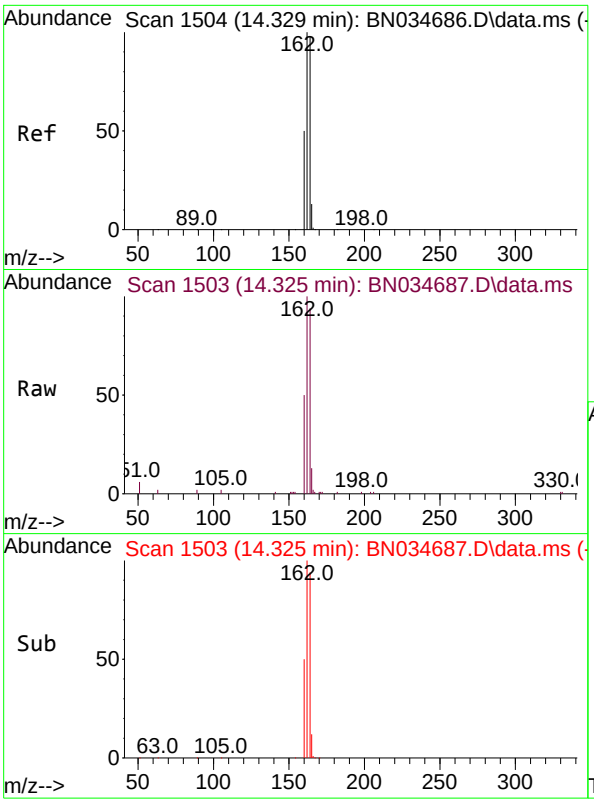


#12
2-Methylnaphthalene
Concen: 0.836 ng
RT: 12.146 min Scan# 1221
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:142 Resp: 26668

Ion	Ratio	Lower	Upper
142	100		
141	88.0	70.4	105.6
115	37.3	29.8	44.6

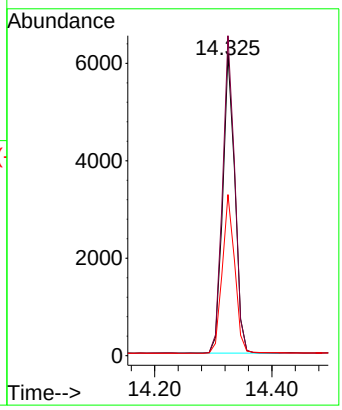




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.325 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:164 Resp: 878

Ion	Ratio	Lower	Upper
164	100		
162	106.2	81.4	122.0
160	53.4	40.6	61.0



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

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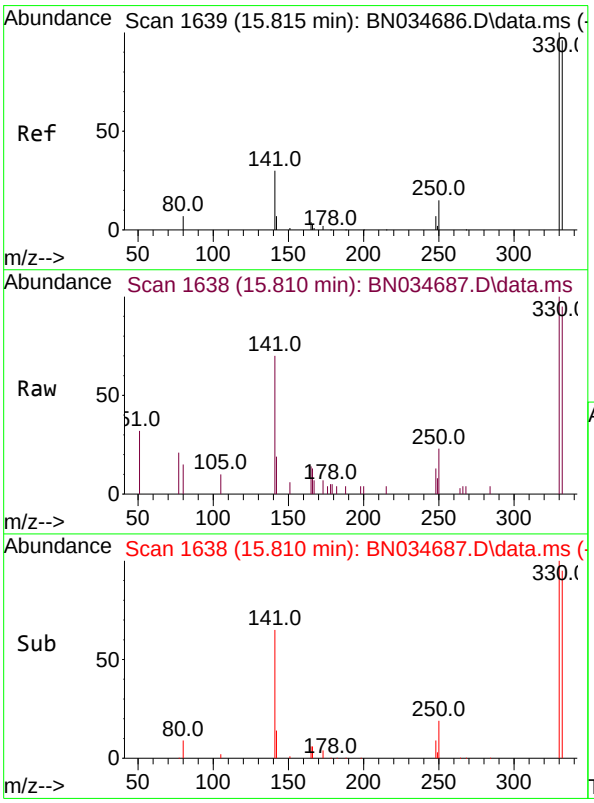
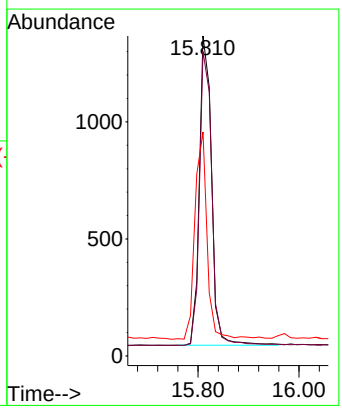
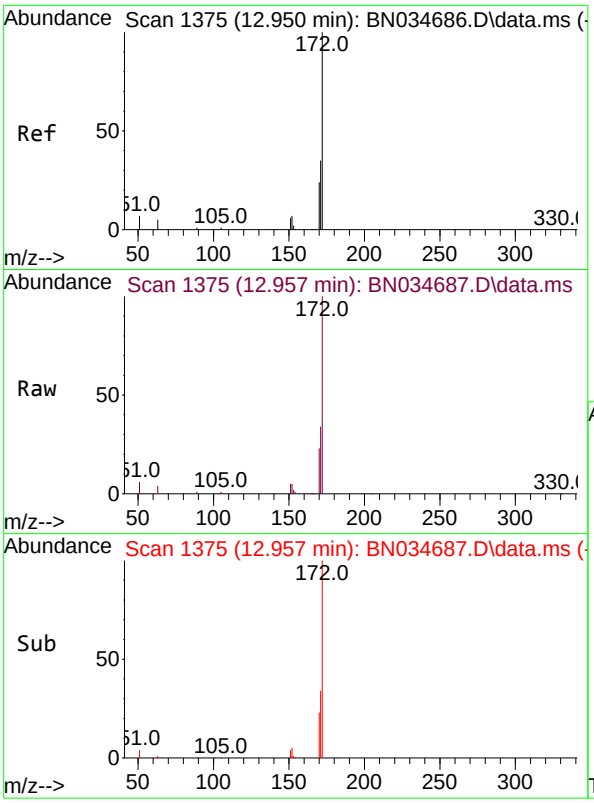


#14
2,4,6-Tribromophenol
Concen: 0.598 ng
RT: 15.810 min Scan# 1638
Delta R.T. -0.006 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:330 Resp: 2227

Ion	Ratio	Lower	Upper
330	100		
332	96.3	76.6	115.0
141	67.4	54.6	81.8

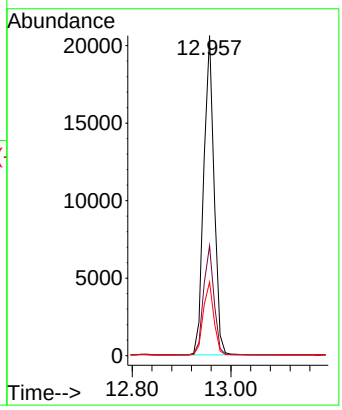




#15
2-Fluorobiphenyl
Concen: 0.864 ng
RT: 12.957 min Scan# 1
Delta R.T. 0.007 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:172 Resp: 2993

Ion	Ratio	Lower	Upper
172	100		
171	34.3	28.3	42.5
170	23.0	19.8	29.6



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

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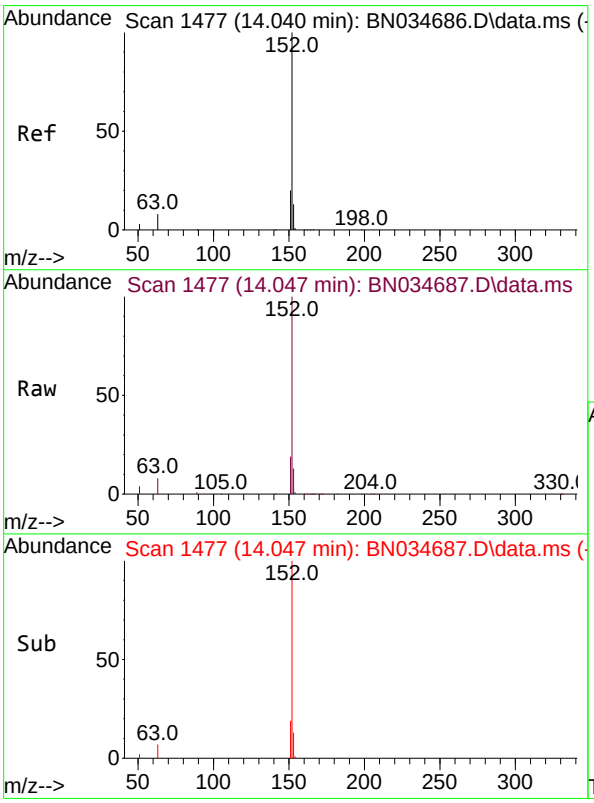
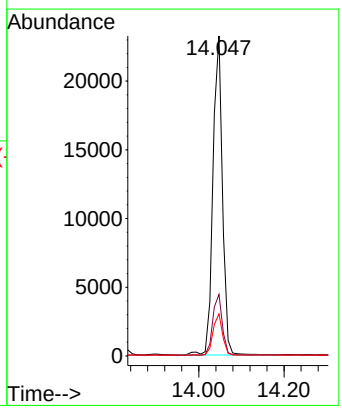
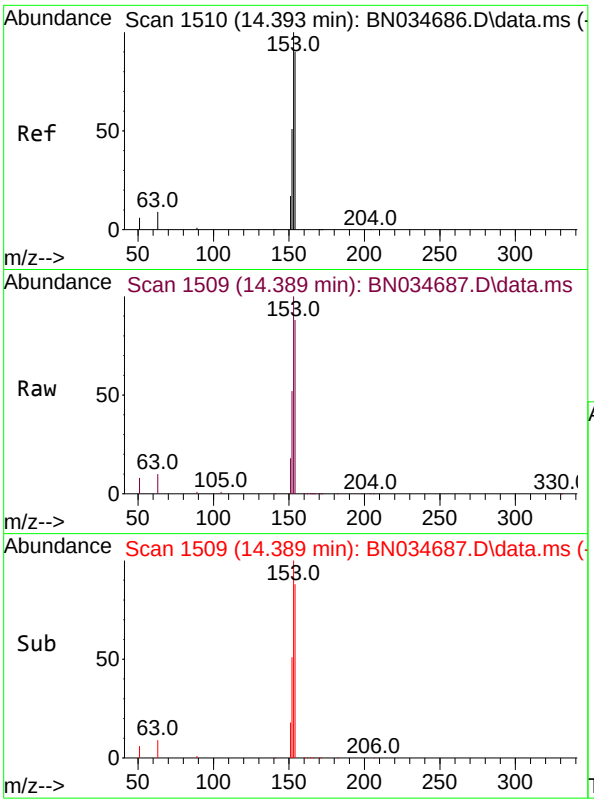


#16
Acenaphthylene
Concen: 0.849 ng
RT: 14.047 min Scan# 1477
Delta R.T. 0.007 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:152 Resp: 35850

Ion	Ratio	Lower	Upper
152	100		
151	19.1	15.6	23.4
153	12.8	10.6	15.8

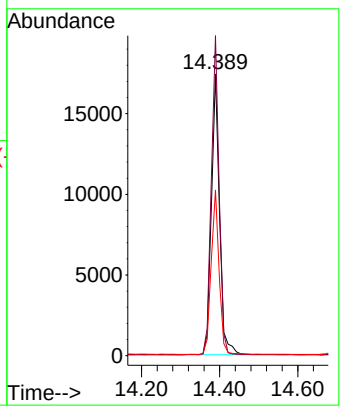




#17
Acenaphthene
Concen: 0.876 ng
RT: 14.389 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:154 Resp: 2522

Ion	Ratio	Lower	Upper
154	100		
153	109.5	88.2	132.2
152	57.2	46.9	70.3



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

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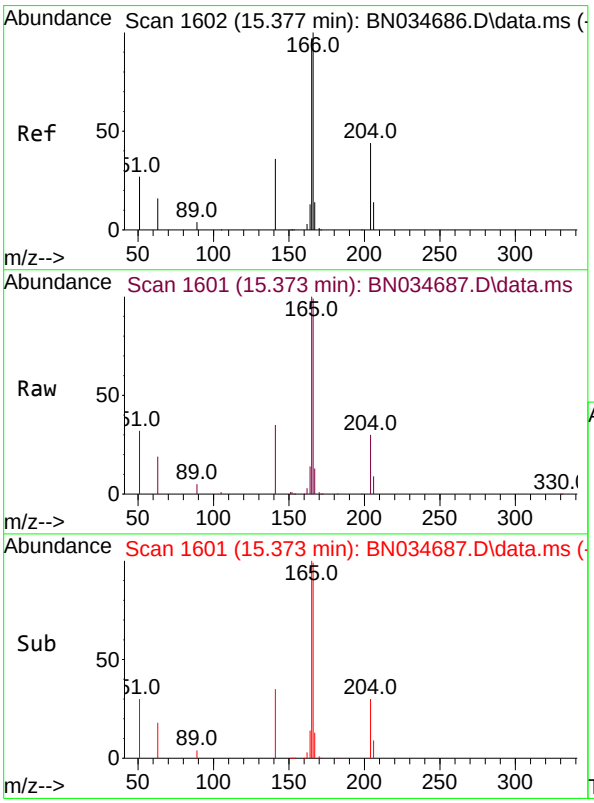
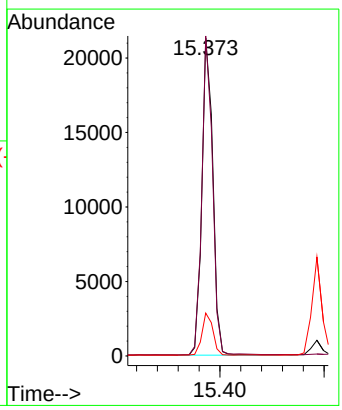
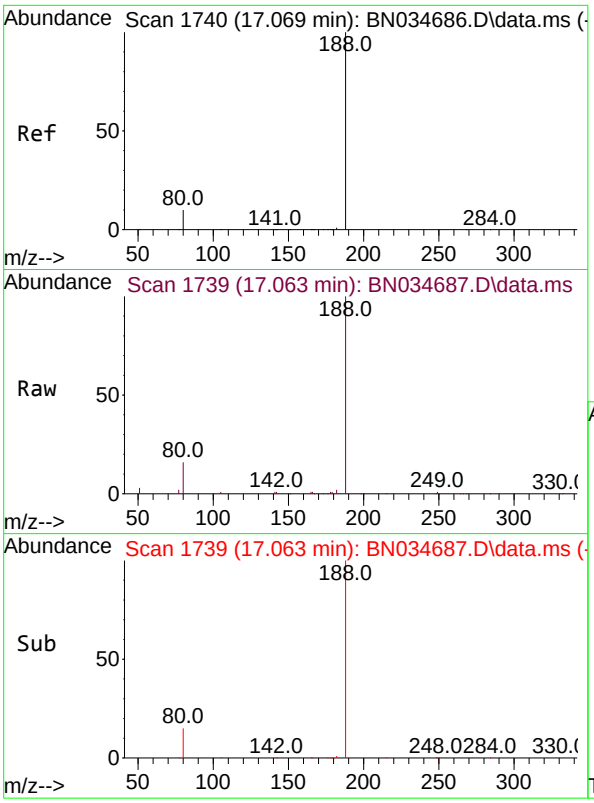


#18
Fluorene
Concen: 0.864 ng
RT: 15.373 min Scan# 1601
Delta R.T. -0.004 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:166 Resp: 31002

Ion	Ratio	Lower	Upper
166	100		
165	98.5	78.8	118.2
167	13.3	10.6	16.0

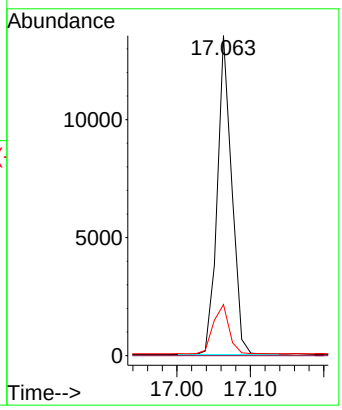




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.063 min Scan# 1
Delta R.T. -0.006 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:188 Resp: 1852

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	15.9	8.9	13.3#



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

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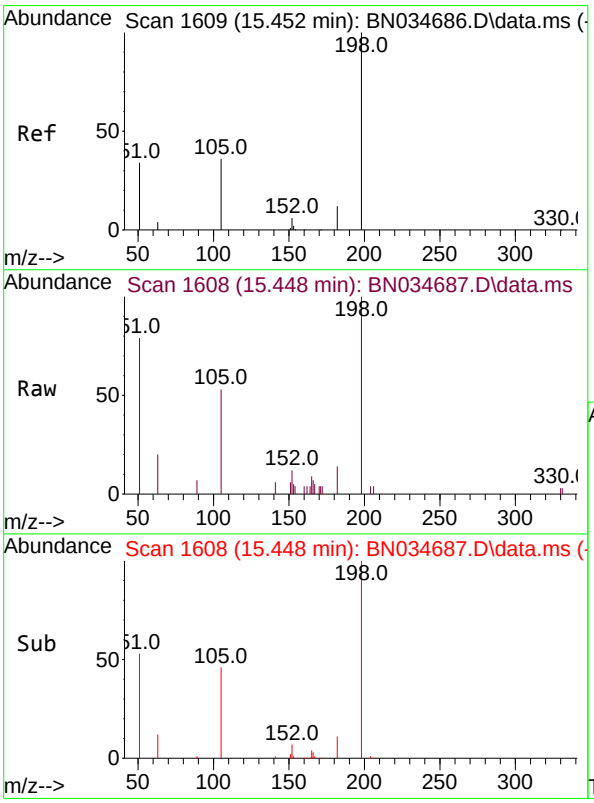
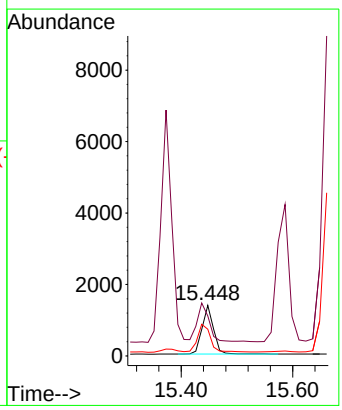
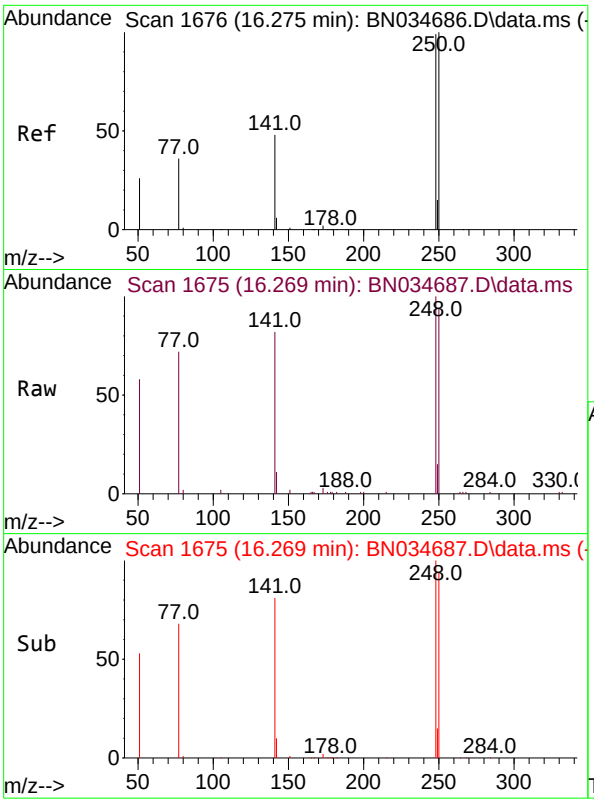


#20
4,6-Dinitro-2-methylphenol
Concen: 0.799 ng
RT: 15.448 min Scan# 1608
Delta R.T. -0.004 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:198 Resp: 2025

Ion	Ratio	Lower	Upper
198	100		
51	79.0	91.8	137.8#
105	52.7	44.3	66.5





#21
4-Bromophenyl-phenylether
Concen: 0.818 ng
RT: 16.269 min Scan# 1(
Delta R.T. -0.006 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:248 Resp: 829(

Ion	Ratio	Lower	Upper
248	100		
250	93.8	80.9	121.3
141	81.7	40.5	60.7#

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

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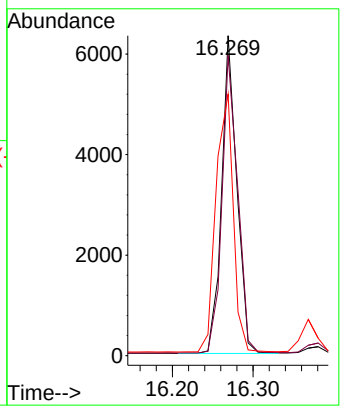
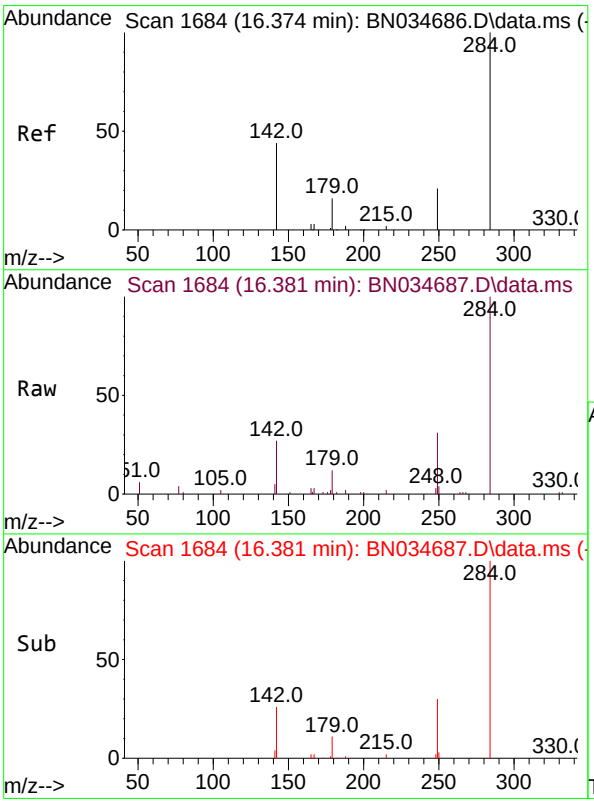
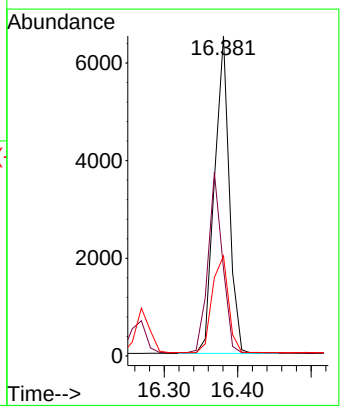


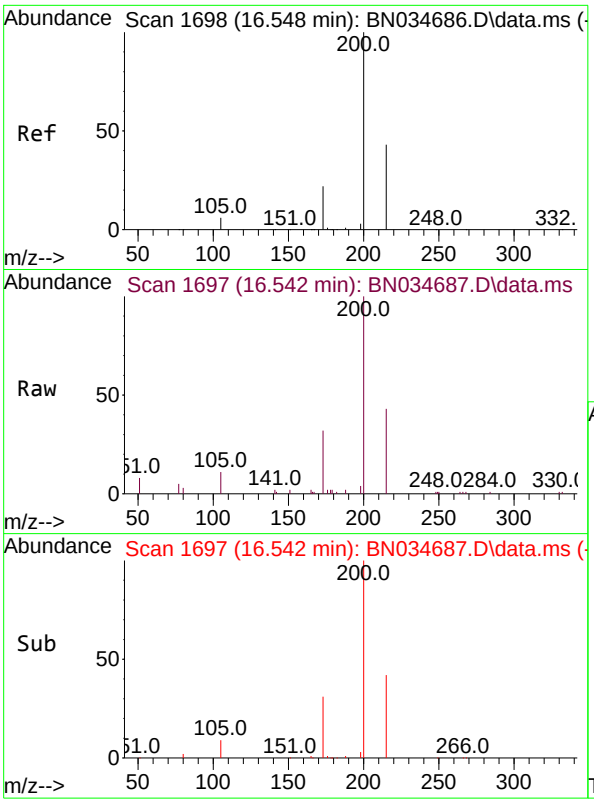


#22
Hexachlorobenzene
Concen: 0.801 ng
RT: 16.381 min Scan# 1684
Delta R.T. 0.007 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:284 Resp: 9007

Ion	Ratio	Lower	Upper
284	100		
142	56.0	43.6	65.4
249	34.1	26.6	40.0

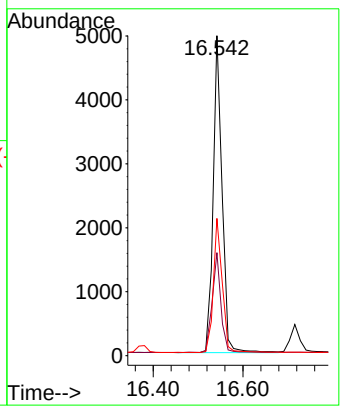




#23
Atrazine
Concen: 0.764 ng
RT: 16.542 min Scan# 1(
Delta R.T. -0.006 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:200 Resp: 677

Ion	Ratio	Lower	Upper
200	100		
173	32.2	19.7	29.5#
215	42.9	35.7	53.5



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

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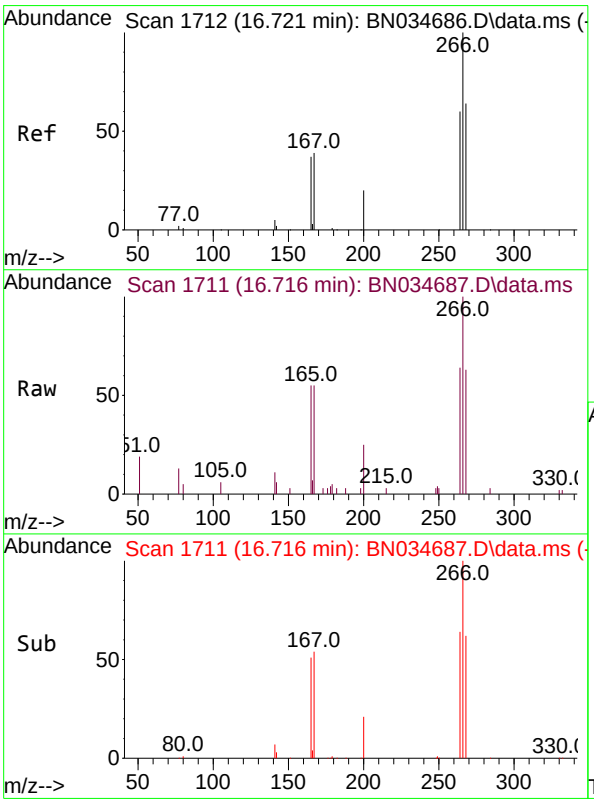
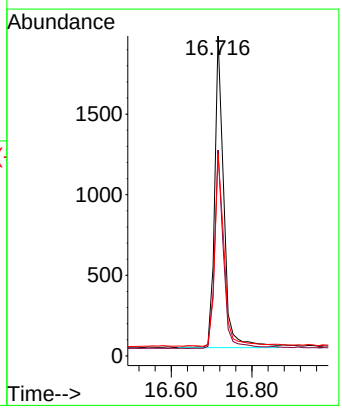
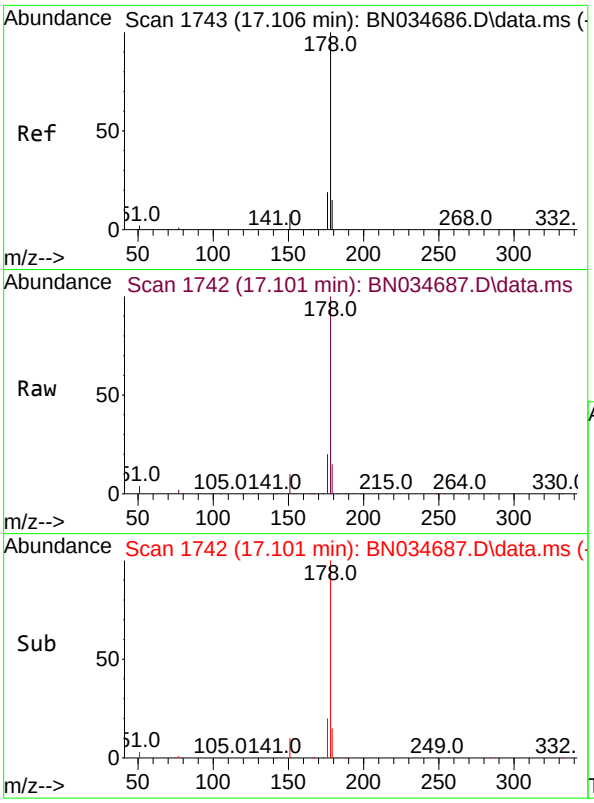


#24
Pentachlorophenol
Concen: 0.693 ng
RT: 16.716 min Scan# 1711
Delta R.T. -0.006 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:266 Resp: 3059

Ion	Ratio	Lower	Upper
266	100		
264	61.0	49.4	74.2
268	62.3	50.5	75.7

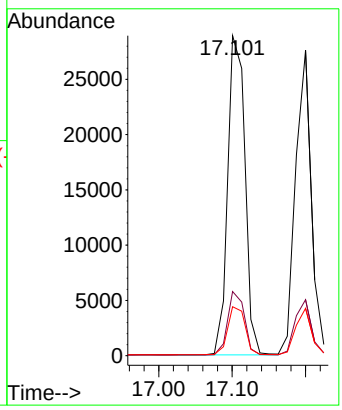




#25
Phenanthrene
Concen: 0.856 ng
RT: 17.101 min Scan# 1
Delta R.T. -0.006 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:178 Resp: 4718

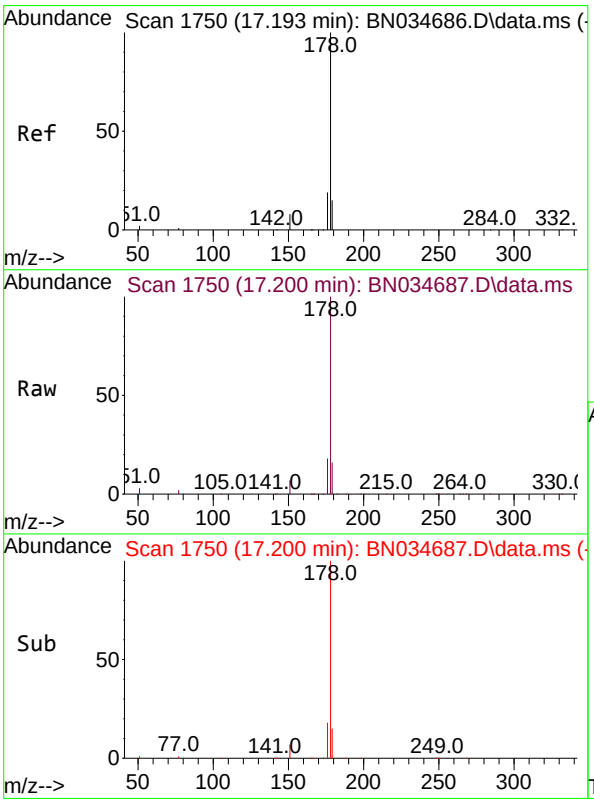
Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.2
179	15.1	12.2	18.4



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Manual Integrations
APPROVED

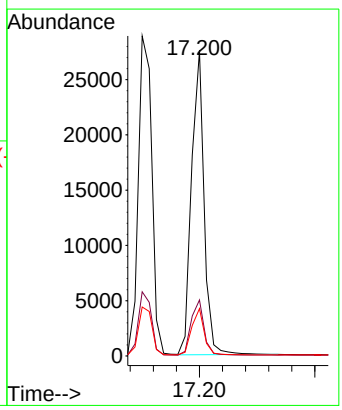
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

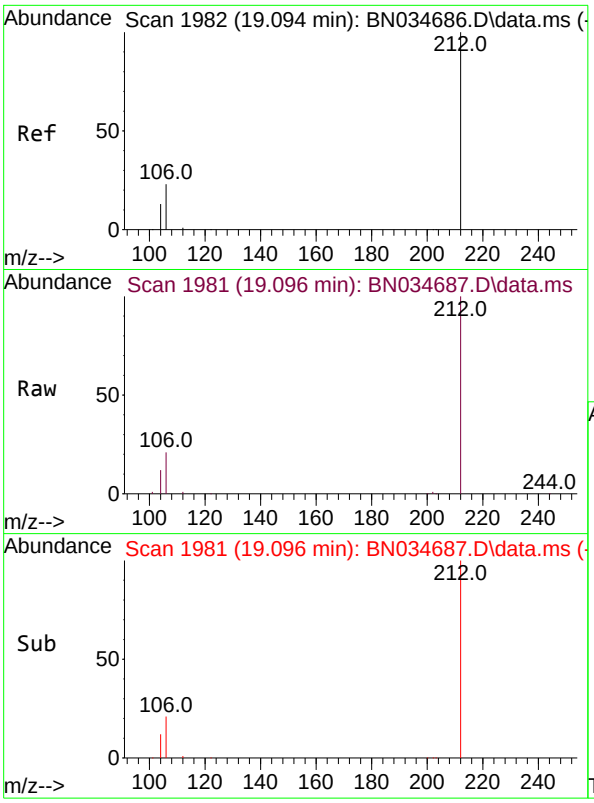


#26
Anthracene
Concen: 0.845 ng
RT: 17.200 min Scan# 1750
Delta R.T. 0.007 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:178 Resp: 41660

Ion	Ratio	Lower	Upper
178	100		
176	18.8	14.9	22.3
179	15.2	12.2	18.2

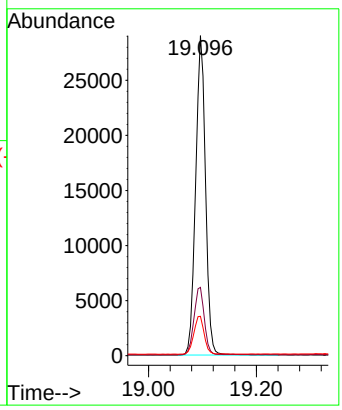




#27
Fluoranthene-d10
Concen: 0.812 ng
RT: 19.096 min Scan# 1
Delta R.T. 0.002 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:212 Resp: 3683

Ion	Ratio	Lower	Upper
212	100		
106	22.1	17.8	26.8
104	12.5	10.2	15.4



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Manual Integrations
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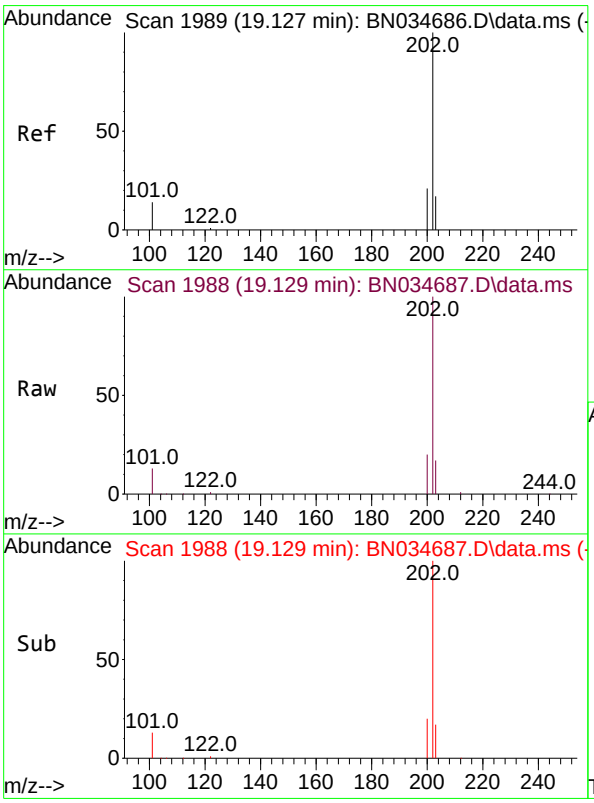
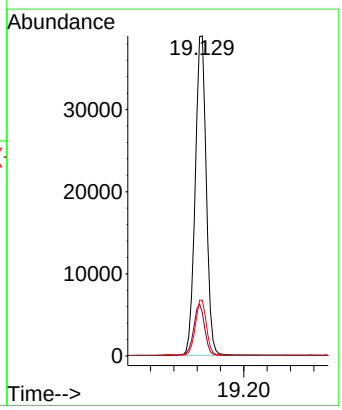
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

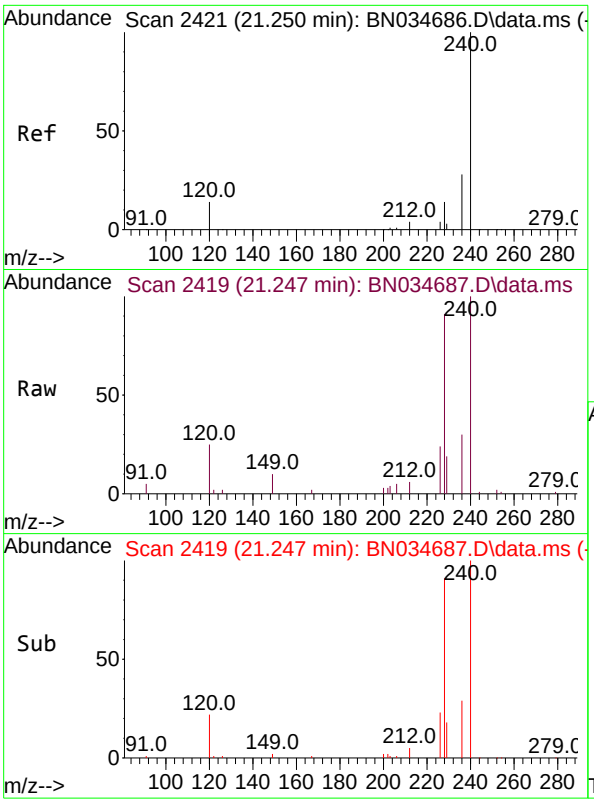


#28
Fluoranthene
Concen: 0.827 ng
RT: 19.129 min Scan# 1988
Delta R.T. 0.002 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:202 Resp: 51141

Ion	Ratio	Lower	Upper
202	100		
101	16.0	12.8	19.2
203	17.2	13.5	20.3

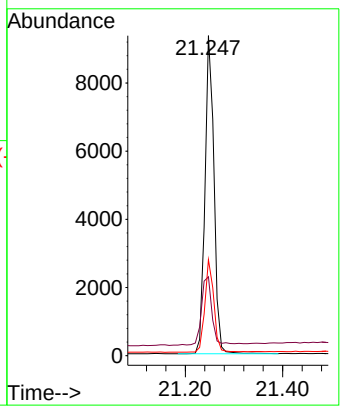




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.247 min Scan# 24
Delta R.T. -0.003 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:240 Resp: 1206

Ion	Ratio	Lower	Upper
240	100		
120	24.6	14.2	21.2
236	30.0	23.1	34.7



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Manual Integrations
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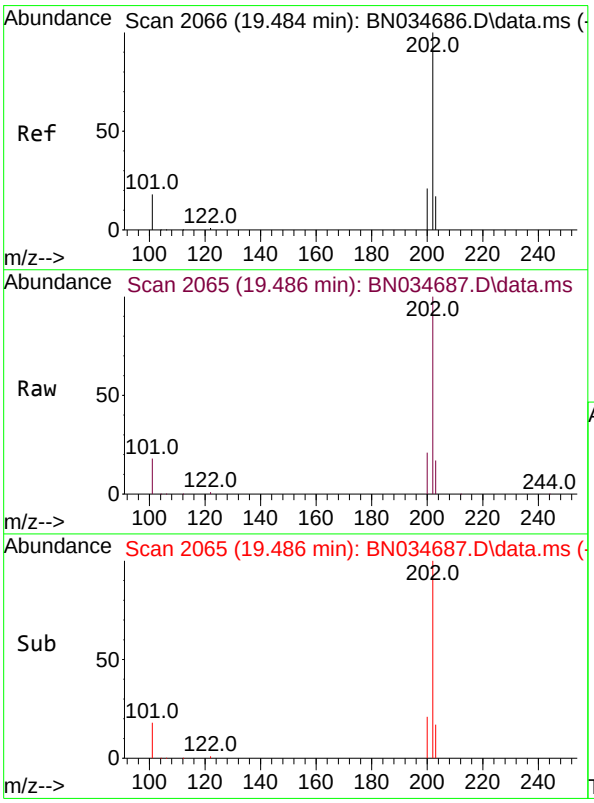
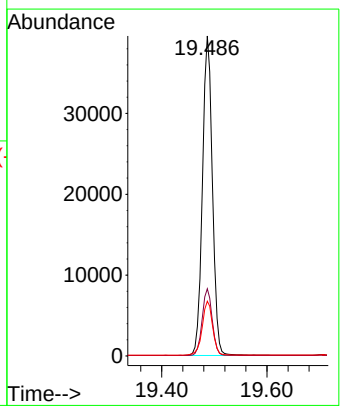
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

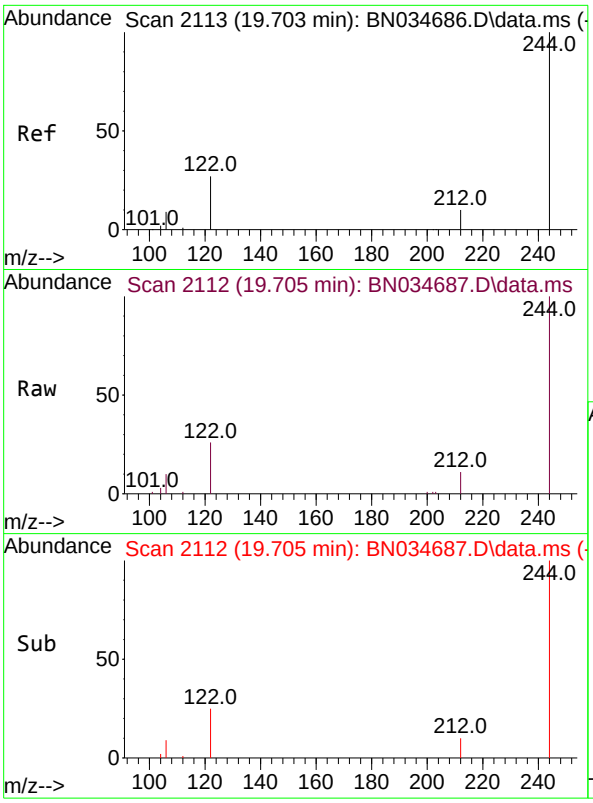


#30
Pyrene
Concen: 0.963 ng
RT: 19.486 min Scan# 2065
Delta R.T. 0.002 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:202 Resp: 51944

Ion	Ratio	Lower	Upper
202	100		
200	21.0	16.6	25.0
203	17.5	14.2	21.4

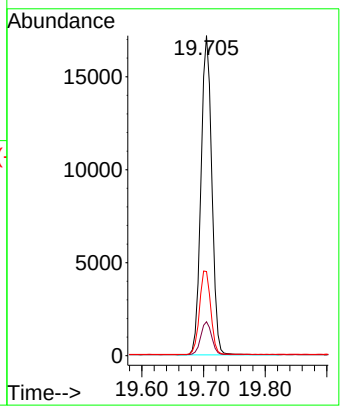




#31
Terphenyl-d14
Concen: 0.896 ng
RT: 19.705 min Scan# 21
Delta R.T. 0.002 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:244 Resp: 2091

Ion	Ratio	Lower	Upper
244	100		
212	10.6	8.6	13.0
122	26.3	22.3	33.5



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Manual Integrations
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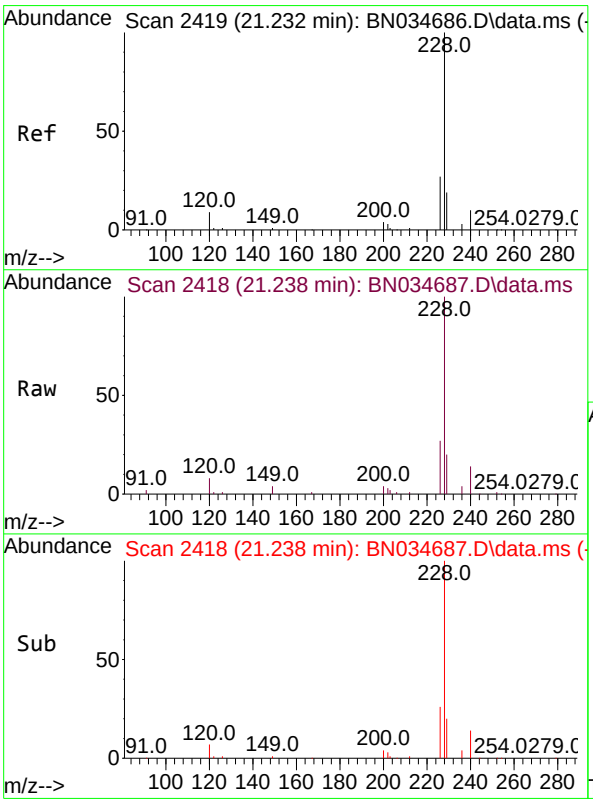
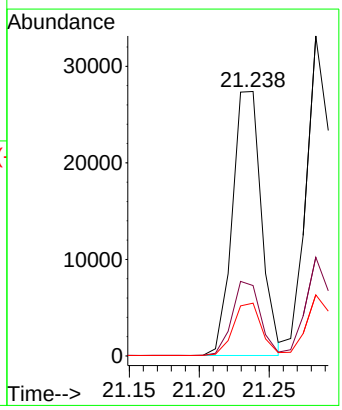
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

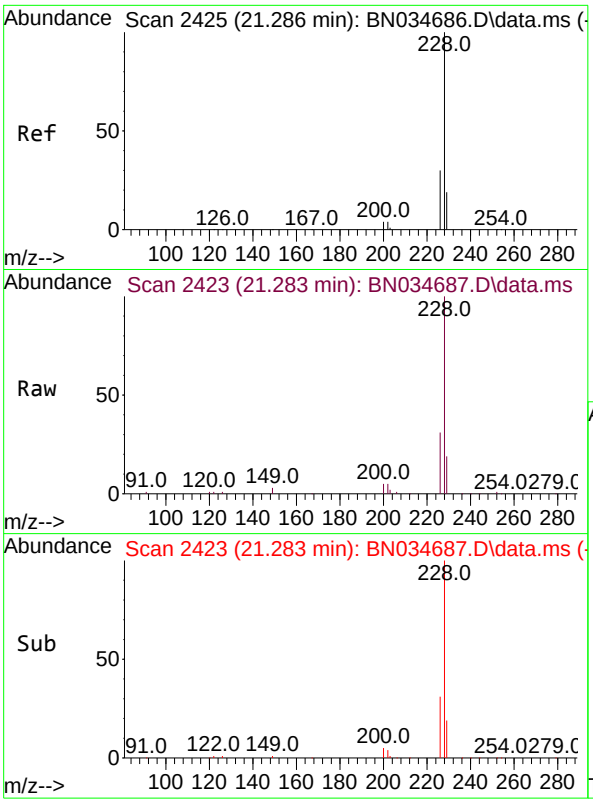


#32
Benzo(a)anthracene
Concen: 0.860 ng
RT: 21.238 min Scan# 2418
Delta R.T. 0.006 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:228 Resp: 39570

Ion	Ratio	Lower	Upper
228	100		
226	26.6	22.0	33.0
229	20.0	15.6	23.4

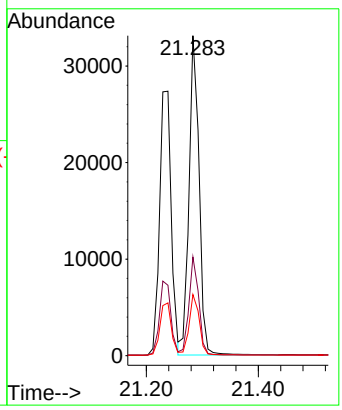




#33
Chrysene
Concen: 0.906 ng
RT: 21.283 min Scan# 24
Delta R.T. -0.002 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:228 Resp: 4124

Ion	Ratio	Lower	Upper
228	100		
226	30.8	24.1	36.1
229	19.1	15.8	23.8



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Manual Integrations
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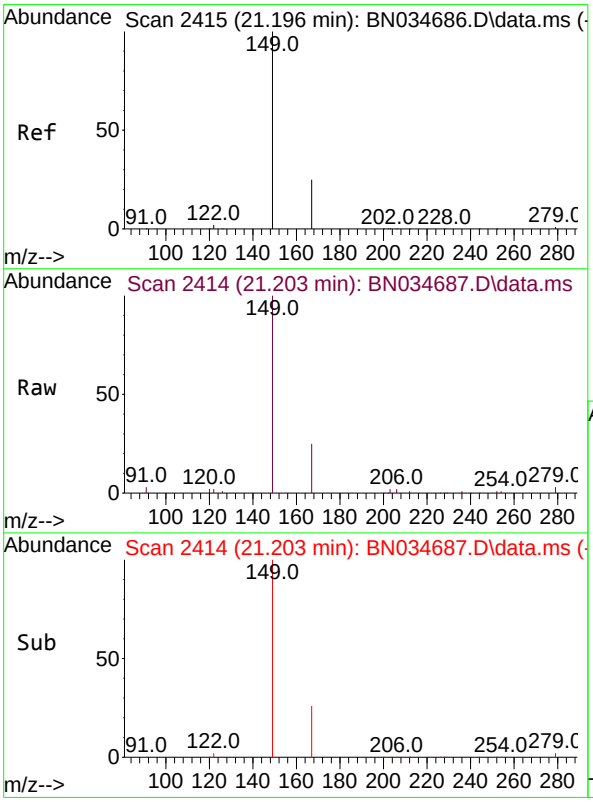
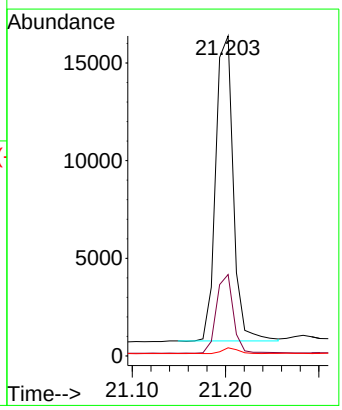
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

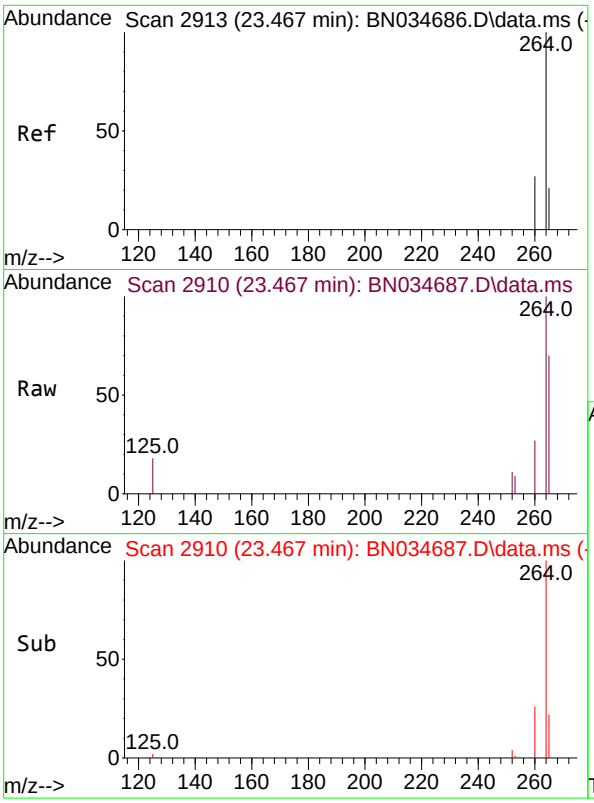


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.650 ng
RT: 21.203 min Scan# 2414
Delta R.T. 0.006 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:149 Resp: 20342

Ion	Ratio	Lower	Upper
149	100		
167	25.0	19.7	29.5
279	1.7	1.8	2.6#





#35
Perylene-d12
Concen: 0.400 ng
RT: 23.467 min Scan# 2
Delta R.T. 0.001 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

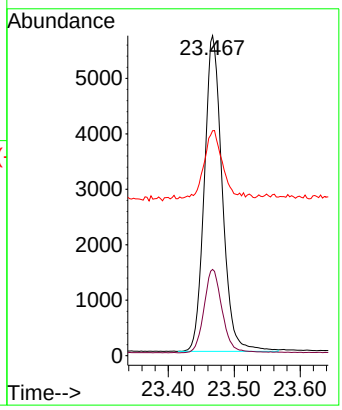
Tgt Ion:264 Resp: 1077

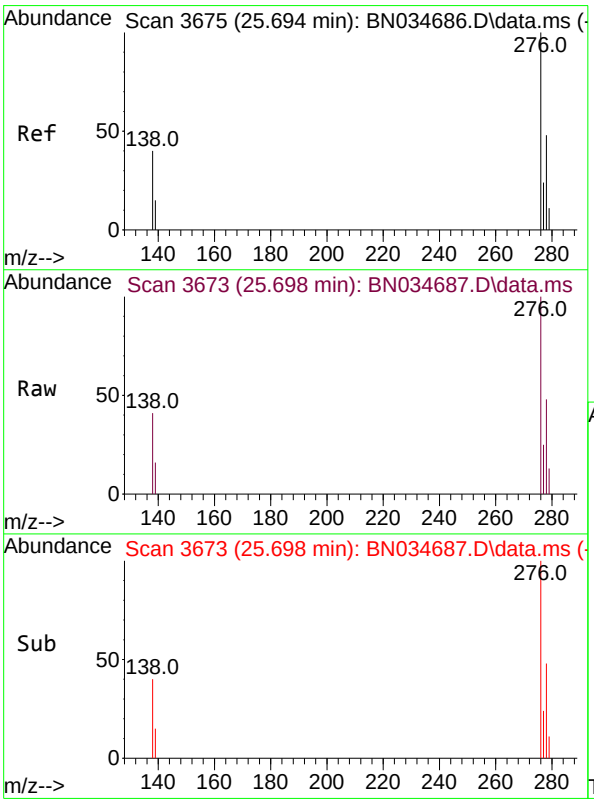
Ion	Ratio	Lower	Upper
264	100		
260	27.0	21.9	32.9
265	70.3	60.6	91.0

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

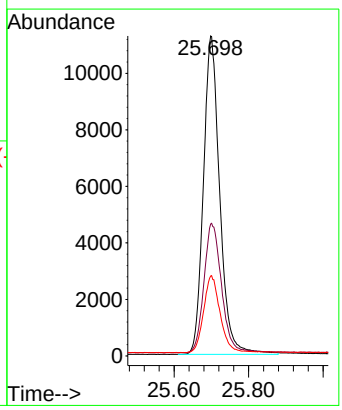


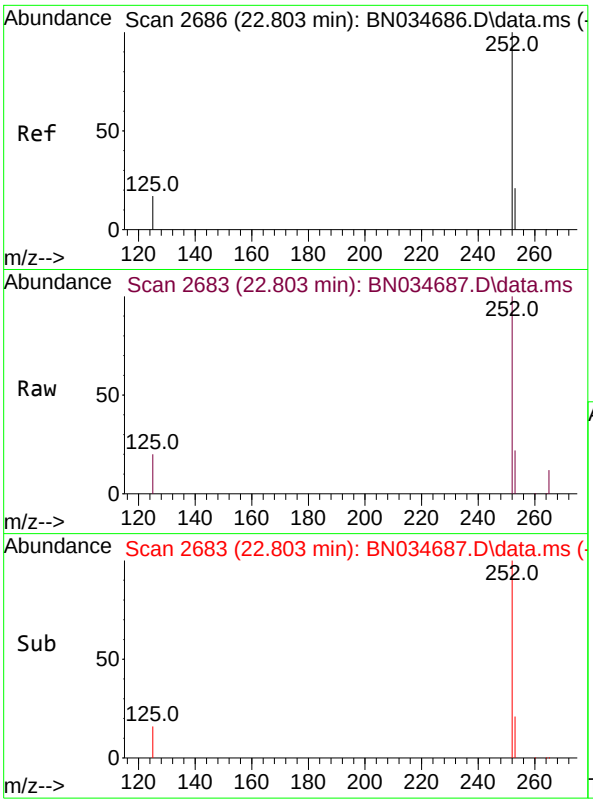


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.828 ng
RT: 25.698 min Scan# 3673
Delta R.T. 0.004 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:276 Resp: 34379

Ion	Ratio	Lower	Upper
276	100		
138	43.6	35.1	52.7
277	24.4	19.7	29.5

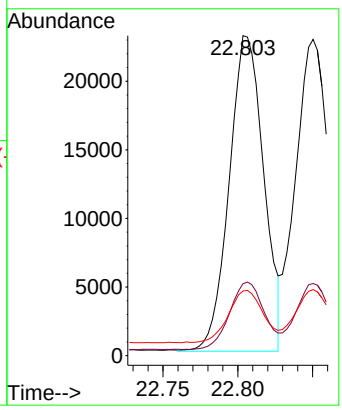




#37
Benzo(b)fluoranthene
Concen: 0.948 ng m
RT: 22.803 min Scan# 2
Delta R.T. 0.001 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:252 Resp: 3692

Ion	Ratio	Lower	Upper
252	100		
253	22.5	20.0	30.0
125	20.2	20.9	31.3#



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Manual Integrations
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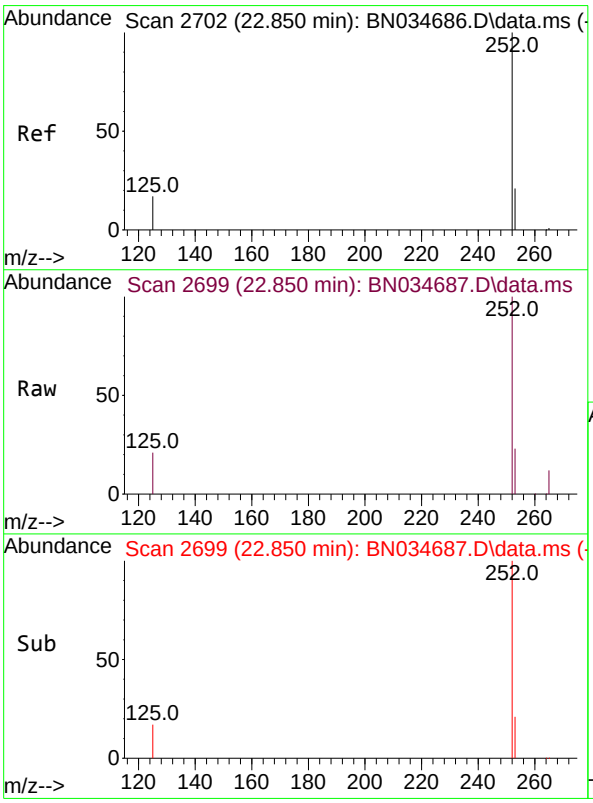
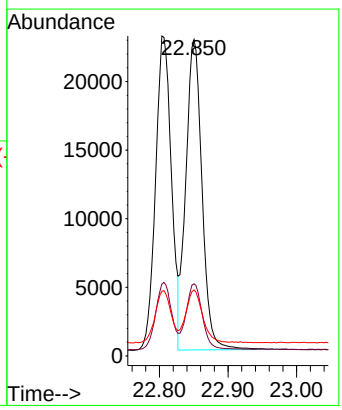
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

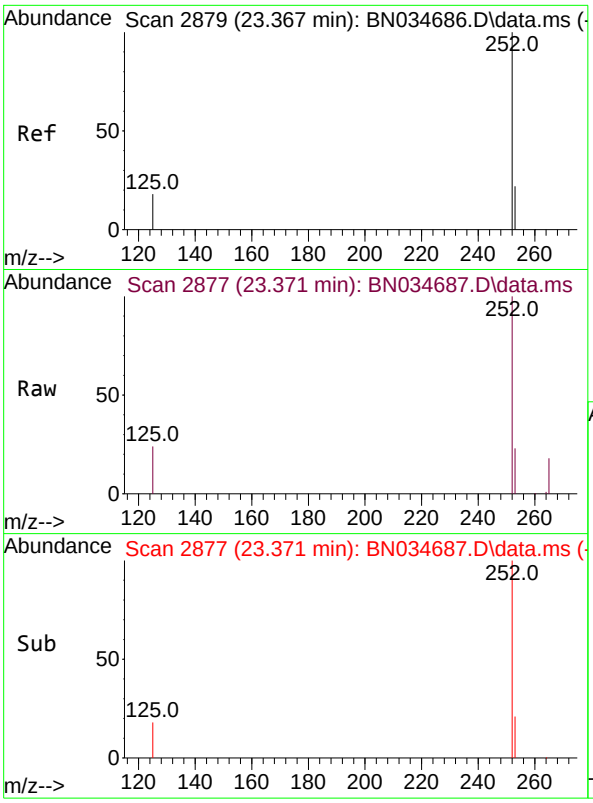


#38
Benzo(k)fluoranthene
Concen: 0.977 ng
RT: 22.850 min Scan# 2699
Delta R.T. 0.001 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:252 Resp: 37118

Ion	Ratio	Lower	Upper
252	100		
253	22.8	20.6	31.0
125	20.9	21.6	32.4#

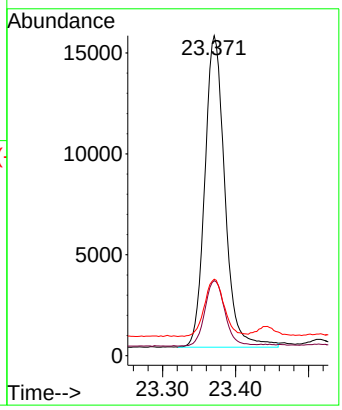




#39
Benzo(a)pyrene
Concen: 0.892 ng
RT: 23.371 min Scan# 2
Delta R.T. 0.004 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:252 Resp: 2949

Ion	Ratio	Lower	Upper
252	100		
253	23.4	22.2	33.4
125	23.9	26.0	39.0



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Manual Integrations
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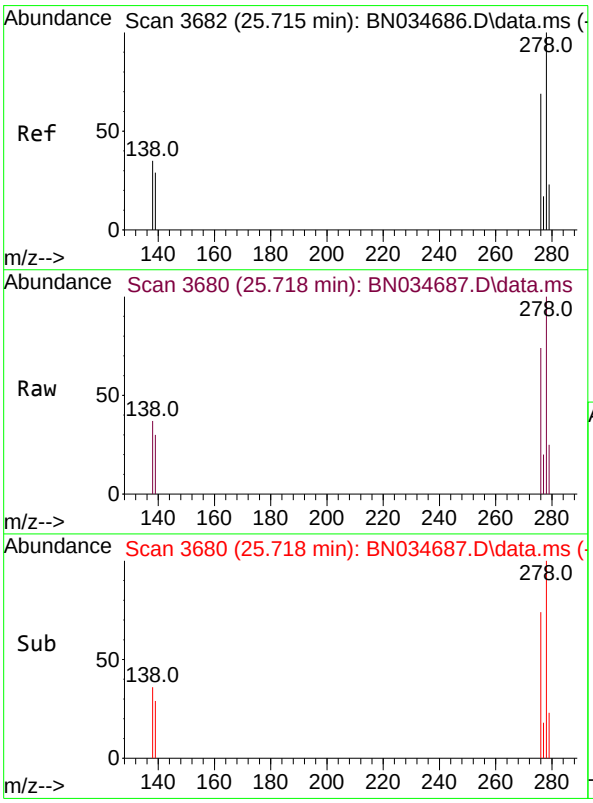
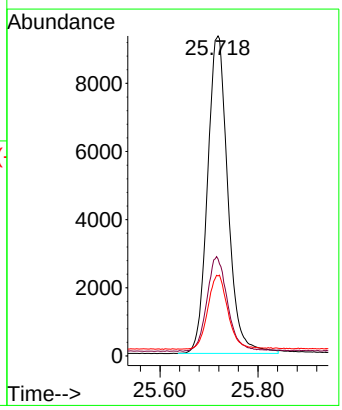
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

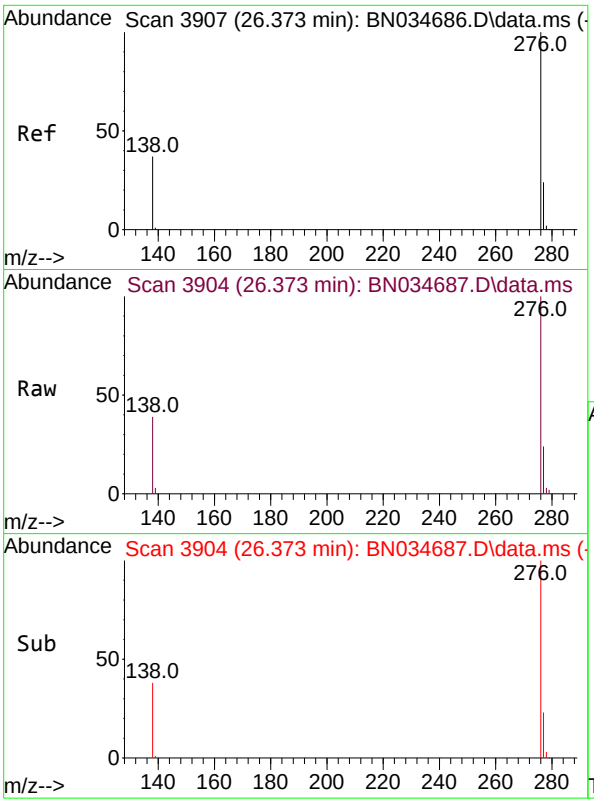


#40
Dibenzo(a,h)anthracene
Concen: 0.823 ng
RT: 25.718 min Scan# 3680
Delta R.T. 0.004 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:278 Resp: 26850

Ion	Ratio	Lower	Upper
278	100		
139	30.3	25.4	38.2
279	25.0	22.4	33.6

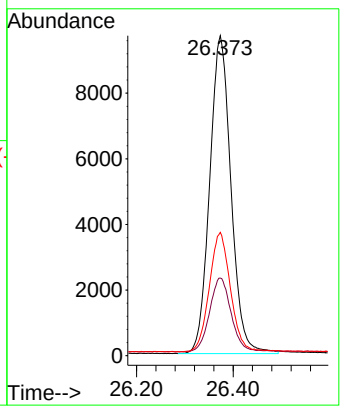




#41
Benzo(g,h,i)perylene
Concen: 0.824 ng
RT: 26.373 min Scan# 3
Delta R.T. 0.001 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:276 Resp: 2966

Ion	Ratio	Lower	Upper
276	100		
277	24.2	21.3	31.9
138	38.6	31.9	47.9



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034688.D
Acq On : 24 Oct 2024 11:35
Operator : RC/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Oct 24 12:43:58 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 12:41:40 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.712	152	6253	0.400	ng		0.00
7) Naphthalene-d8	10.479	136	18478	0.400	ng		0.00
13) Acenaphthene-d10	14.329	164	9335	0.400	ng		0.00
19) Phenanthrene-d10	17.069	188	19334	0.400	ng		0.00
29) Chrysene-d12	21.250	240	11924	0.400	ng		0.00
35) Perylene-d12	23.467	264	10103	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.322	112	31333	1.638	ng		0.00
5) Phenol-d6	6.882	99	41454	1.694	ng		0.00
8) Nitrobenzene-d5	8.845	82	25808	1.686	ng		0.00
11) 2-Methylnaphthalene-d10	12.071	152	43281	1.664	ng		0.00
14) 2,4,6-Tribromophenol	15.815	330	4968	1.255	ng		0.00
15) 2-Fluorobiphenyl	12.950	172	62224	1.691	ng		0.00
27) Fluoranthene-d10	19.094	212	73515	1.553	ng		0.00
31) Terphenyl-d14	19.703	244	41261	1.788	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.285	88	13254	1.741	ng		99
3) n-Nitrosodimethylamine	3.581	42	20688	2.247	ng	#	98
6) bis(2-Chloroethyl)ether	7.142	93	33672	1.797	ng		99
9) Naphthalene	10.532	128	85545	1.679	ng		99
10) Hexachlorobutadiene	10.831	225	12572	1.540	ng	#	100
12) 2-Methylnaphthalene	12.147	142	53951	1.675	ng		99
16) Acenaphthylene	14.040	152	76104	1.696	ng		99
17) Acenaphthene	14.393	154	52549	1.718	ng		98
18) Fluorene	15.377	166	65352	1.714	ng		100
20) 4,6-Dinitro-2-methylph...	15.452	198	4583	1.734	ng	#	50
21) 4-Bromophenyl-phenylether	16.275	248	17079	1.615	ng		98
22) Hexachlorobenzene	16.374	284	18410	1.569	ng		99
23) Atrazine	16.548	200	14024	1.516	ng		100
24) Pentachlorophenol	16.721	266	6756	1.467	ng		99
25) Phenanthrene	17.106	178	96240	1.673	ng		100
26) Anthracene	17.193	178	87194	1.695	ng		100
28) Fluoranthene	19.127	202	103093	1.598	ng		100
30) Pyrene	19.489	202	103194	1.936	ng		100
32) Benzo(a)anthracene	21.232	228	76954	1.693	ng		100
33) Chrysene	21.286	228	78358	1.741	ng		99
34) Bis(2-ethylhexyl)phtha...	21.196	149	41892	1.354	ng	#	100
36) Indeno(1,2,3-cd)pyrene	25.697	276	65482	1.682	ng		99
37) Benzo(b)fluoranthene	22.803	252	68644	1.880	ng	#	90
38) Benzo(k)fluoranthene	22.850	252	69183	1.942	ng	#	88
39) Benzo(a)pyrene	23.370	252	55896	1.802	ng	#	85
40) Dibenzo(a,h)anthracene	25.715	278	51867	1.696	ng		95
41) Benzo(g,h,i)perylene	26.373	276	56042	1.661	ng		95

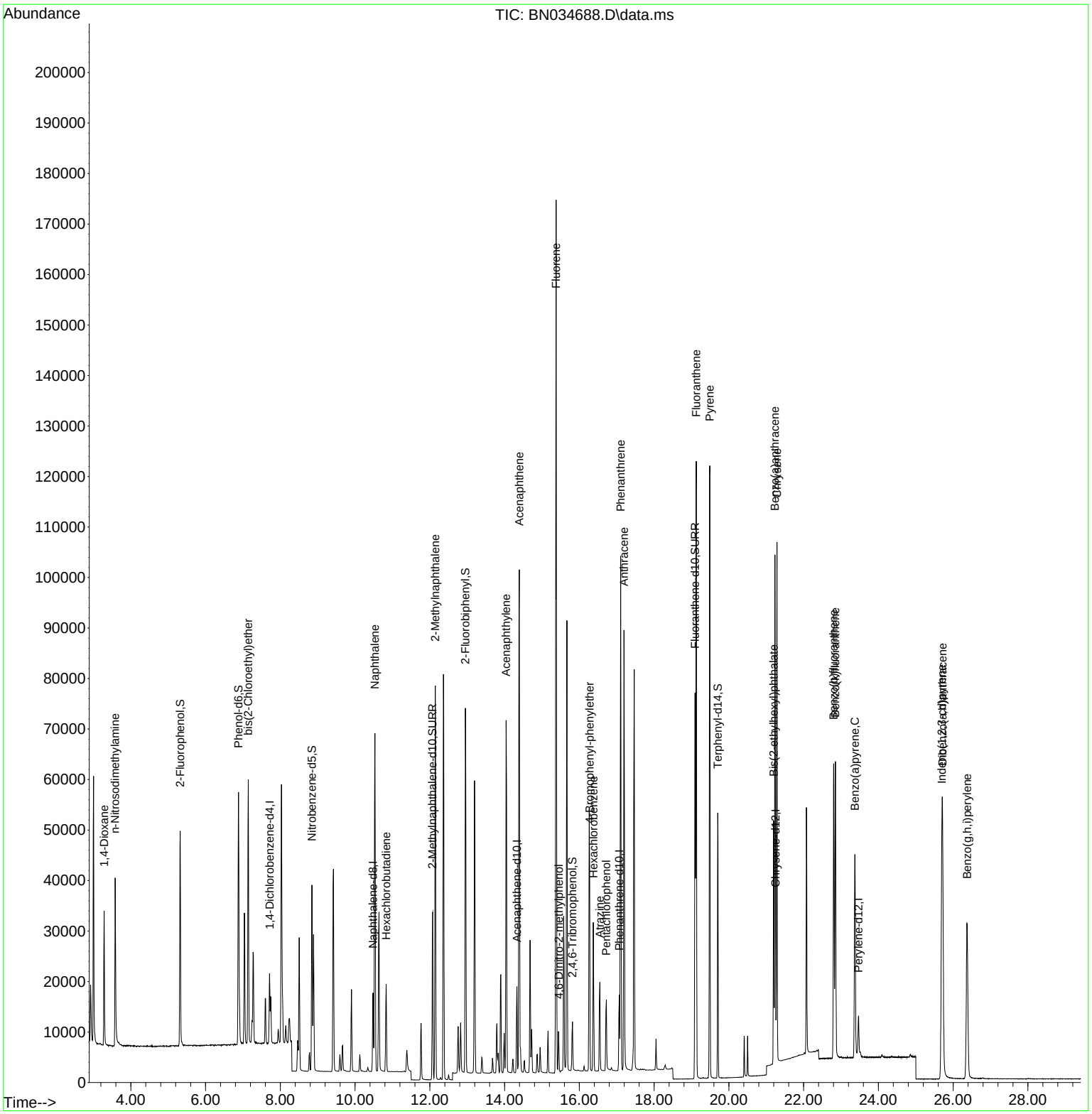
(#) = qualifier out of range (m) = manual integration (+) = signals summed

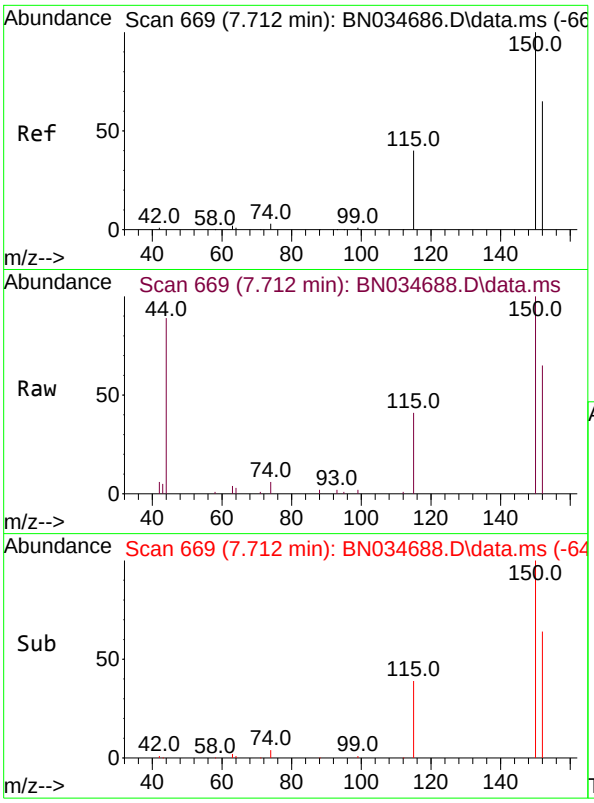
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034688.D
Acq On : 24 Oct 2024 11:35
Operator : RC/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Oct 24 12:43:58 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 12:41:40 2024
Response via : Initial Calibration



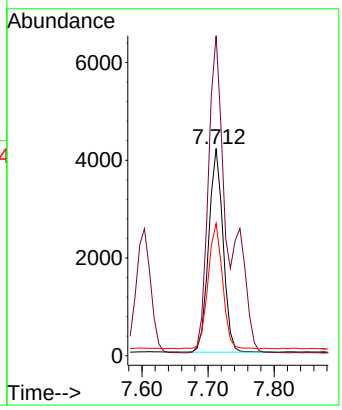


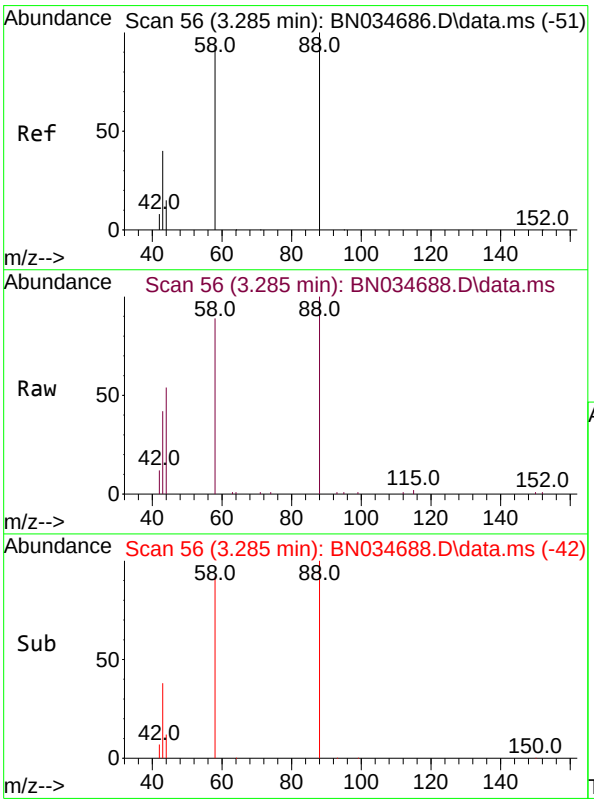
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:152 Resp: 6253

Ion	Ratio	Lower	Upper
152	100		
150	154.5	122.7	184.1
115	63.8	51.0	76.6

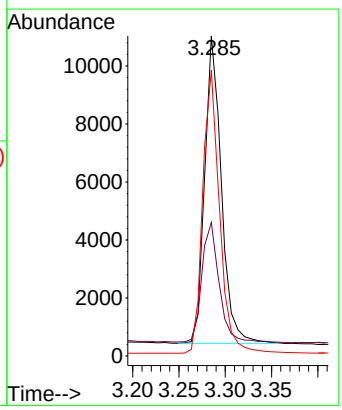


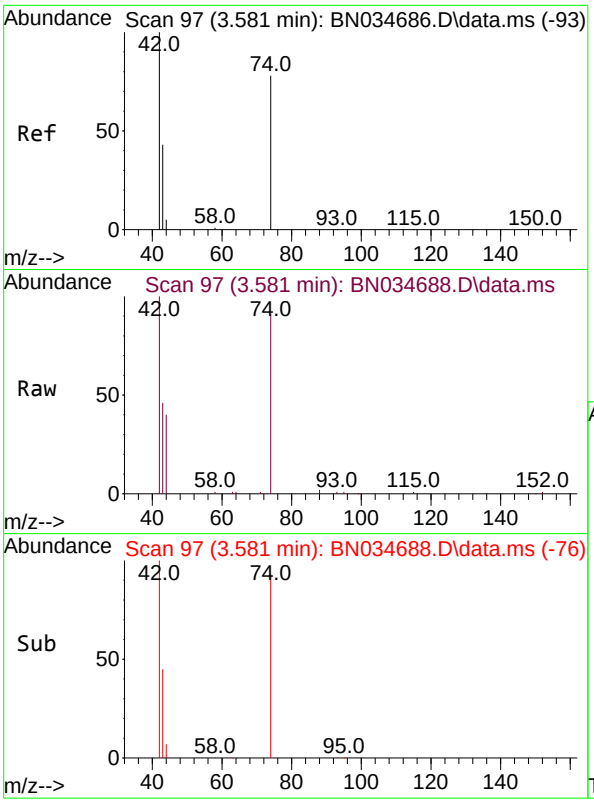


#2
1,4-Dioxane
Concen: 1.741 ng
RT: 3.285 min Scan# 56
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion: 88 Resp: 13254

Ion	Ratio	Lower	Upper
88	100		
43	40.1	32.1	48.1
58	93.0	73.7	110.5



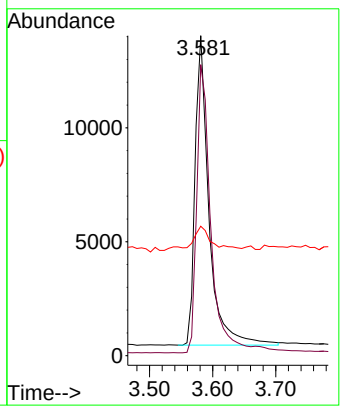


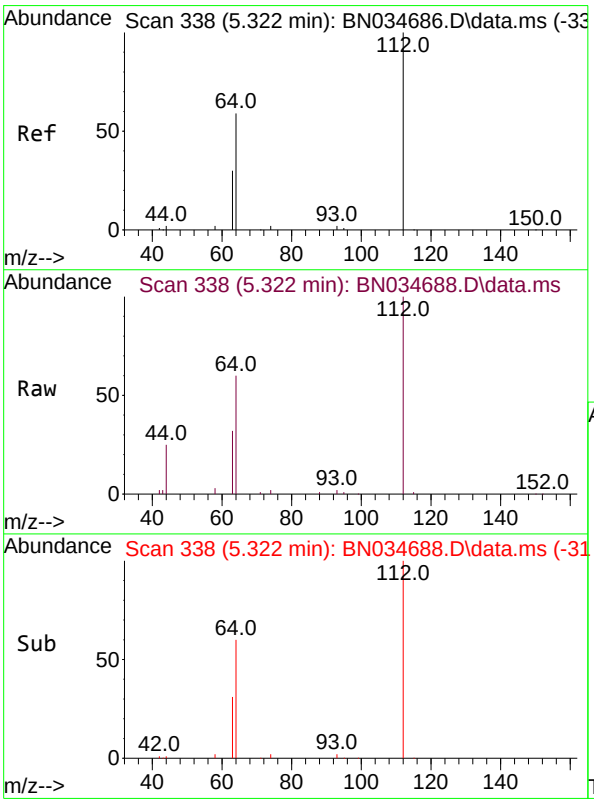
#3
n-Nitrosodimethylamine
Concen: 2.247 ng
RT: 3.581 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion: 42 Resp: 20688

Ion	Ratio	Lower	Upper
42	100		
74	96.2	77.2	115.8
44	11.1	13.4	20.2#

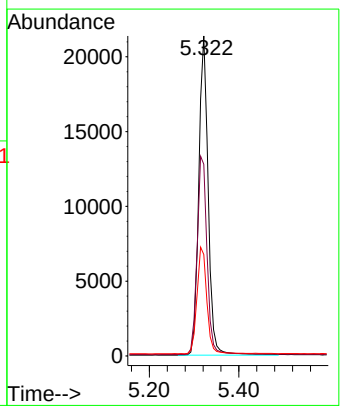


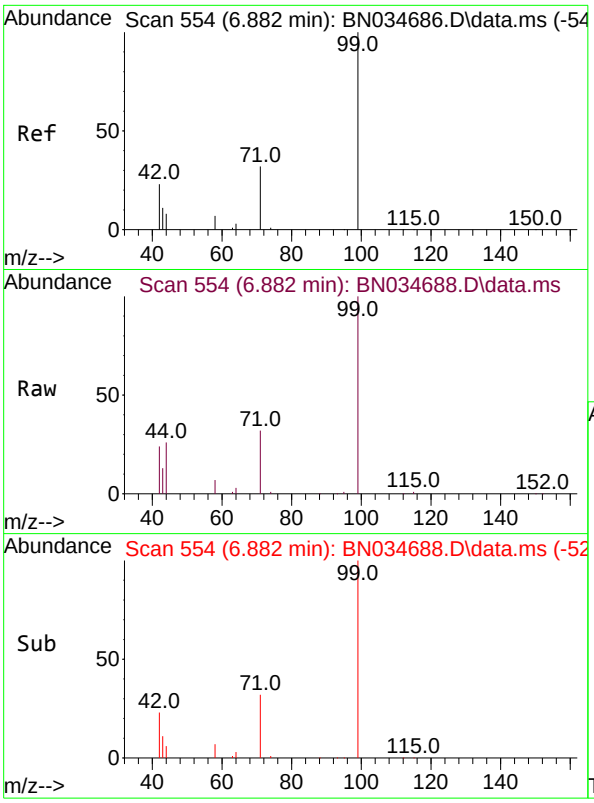


#4
2-Fluorophenol
Concen: 1.638 ng
RT: 5.322 min Scan# 338
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:112 Resp: 31333

Ion	Ratio	Lower	Upper
112	100		
64	65.7	53.0	79.6
63	34.8	27.6	41.4



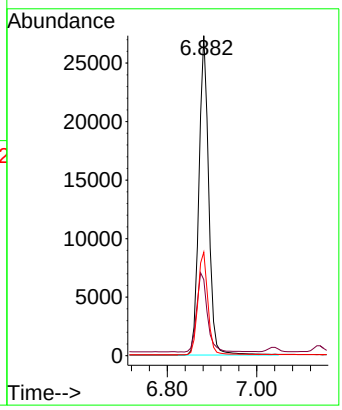


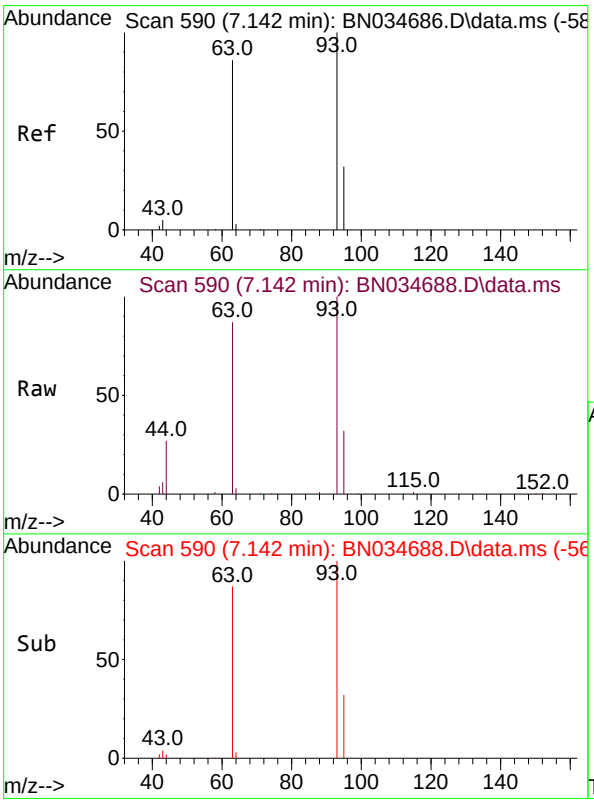
#5
Phenol-d6
Concen: 1.694 ng
RT: 6.882 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion: 99 Resp: 41454

Ion	Ratio	Lower	Upper
99	100		
42	27.2	21.8	32.8
71	33.2	26.6	40.0

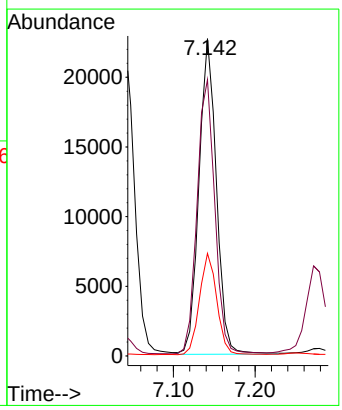


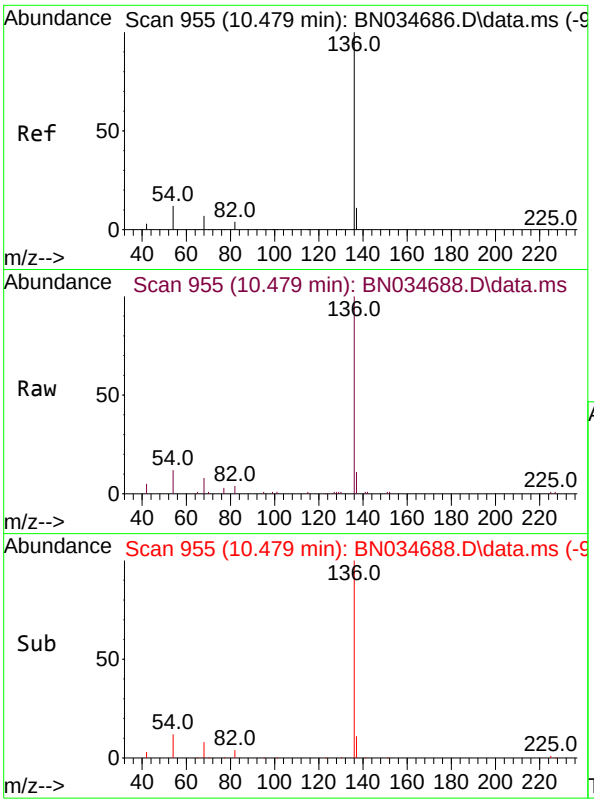


#6
bis(2-Chloroethyl)ether
Concen: 1.797 ng
RT: 7.142 min Scan# 590
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion: 93 Resp: 33672

Ion	Ratio	Lower	Upper
93	100		
63	88.5	71.5	107.3
95	32.0	25.8	38.6



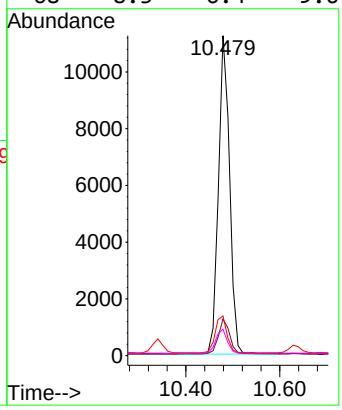


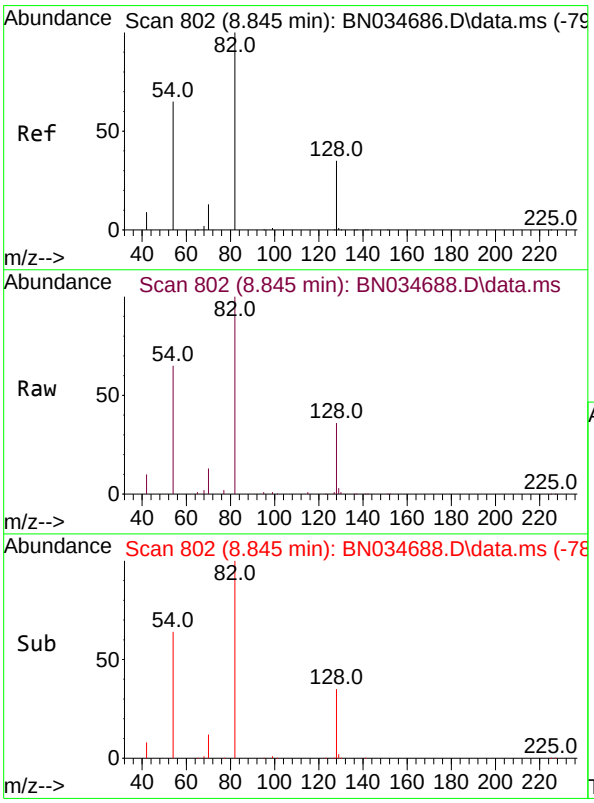
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:136 Resp: 18478

Ion	Ratio	Lower	Upper
136	100		
137	11.4	9.1	13.7
54	12.4	9.8	14.8
68	8.3	6.4	9.6

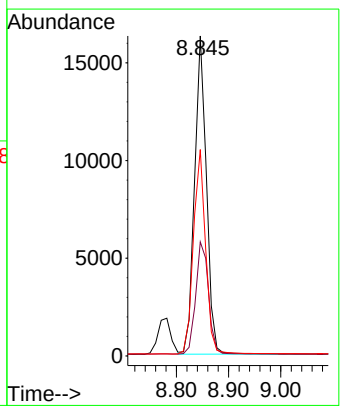


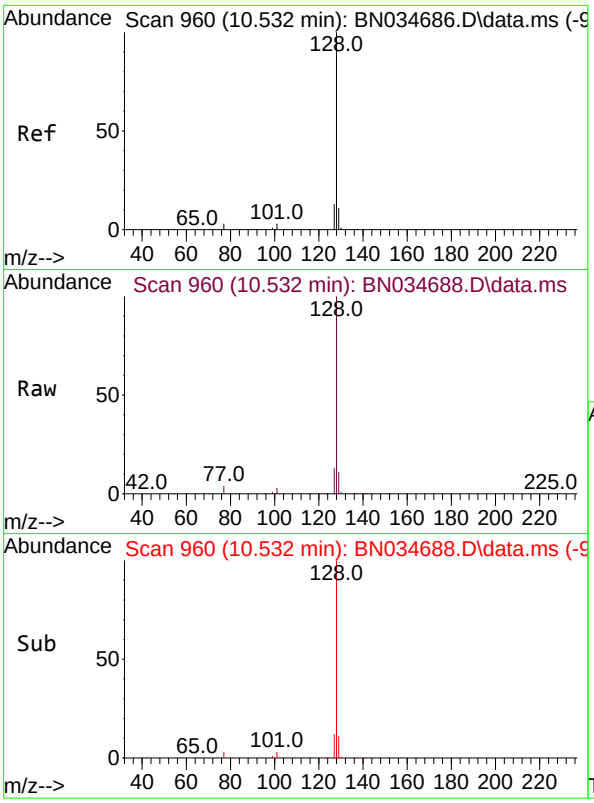


#8
Nitrobenzene-d5
Concen: 1.686 ng
RT: 8.845 min Scan# 802
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion: 82 Resp: 25808

Ion	Ratio	Lower	Upper
82	100		
128	35.7	29.7	44.5
54	64.5	53.0	79.6



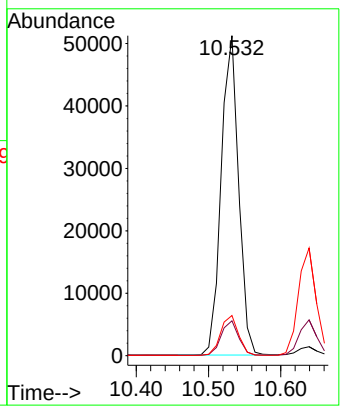


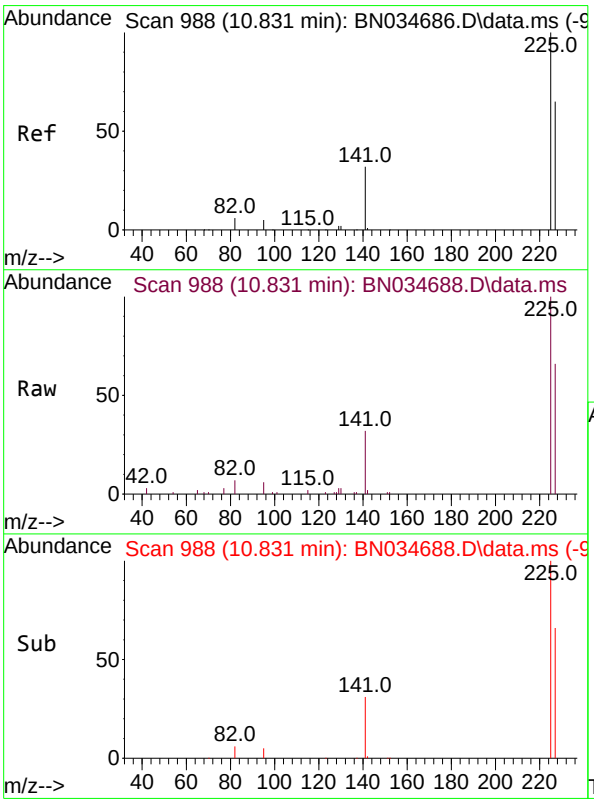
#9
Naphthalene
Concen: 1.679 ng
RT: 10.532 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:128 Resp: 85545

Ion	Ratio	Lower	Upper
128	100		
129	10.9	9.0	13.6
127	12.6	10.5	15.7

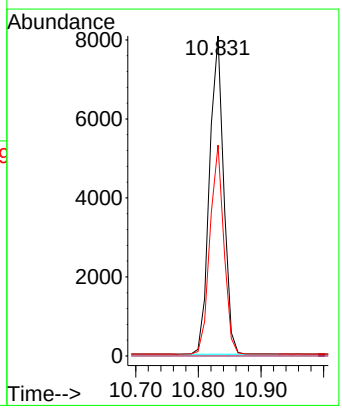


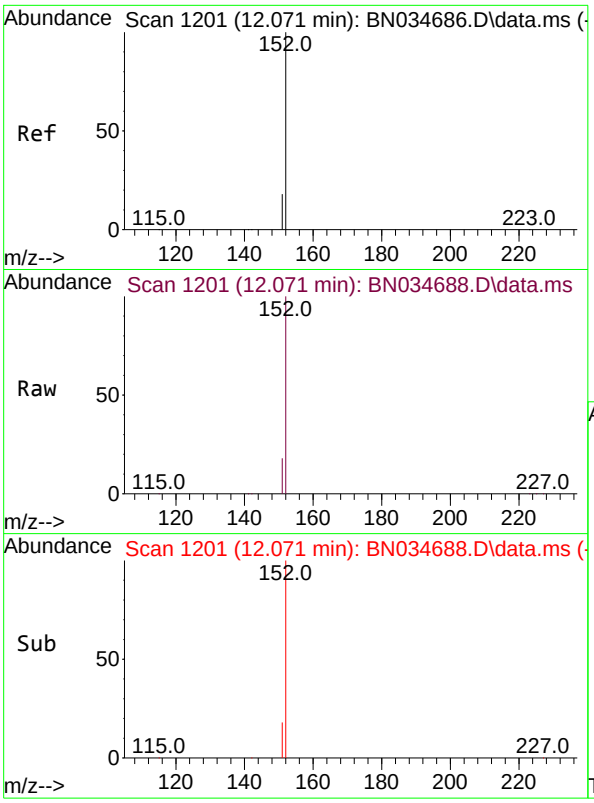


#10
Hexachlorobutadiene
Concen: 1.540 ng
RT: 10.831 min Scan# 988
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:225 Resp: 12572

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.5	51.4	77.0



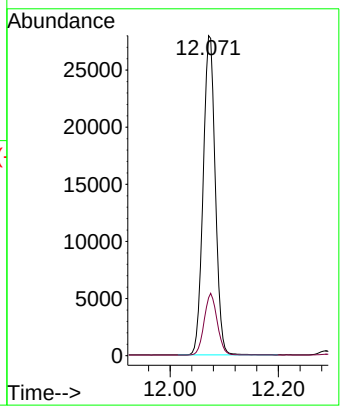


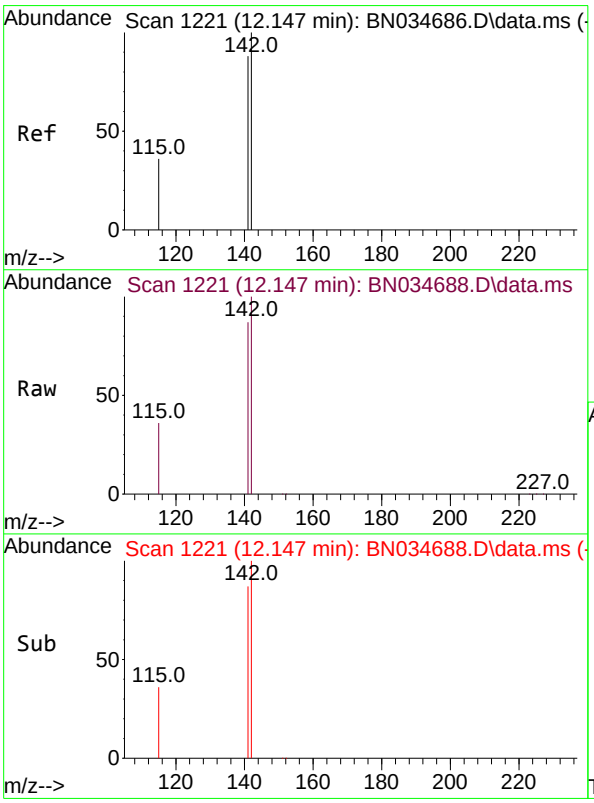
#11
2-Methylnaphthalene-d10
Concen: 1.664 ng
RT: 12.071 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:152 Resp: 43281

Ion	Ratio	Lower	Upper
152	100		
151	20.8	16.7	25.1

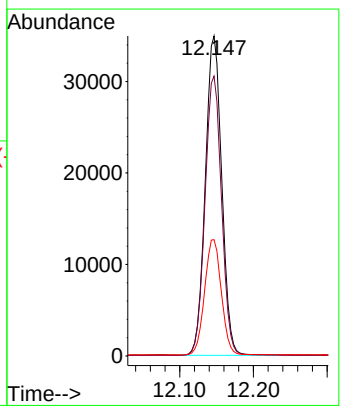


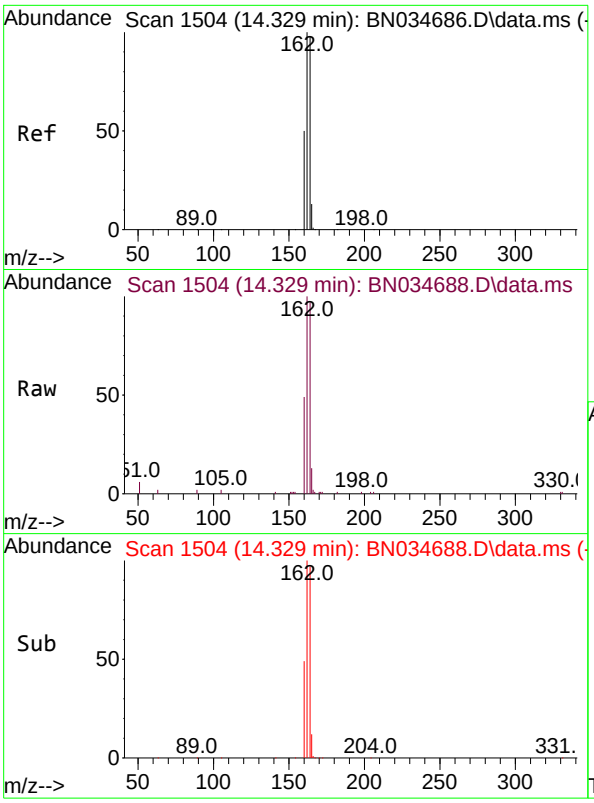


#12
2-Methylnaphthalene
Concen: 1.675 ng
RT: 12.147 min Scan# 1221
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:142 Resp: 53951

Ion	Ratio	Lower	Upper
142	100		
141	87.5	70.4	105.6
115	36.4	29.8	44.6



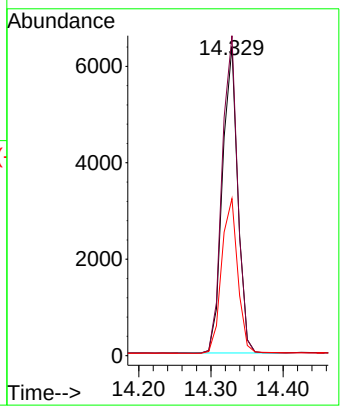


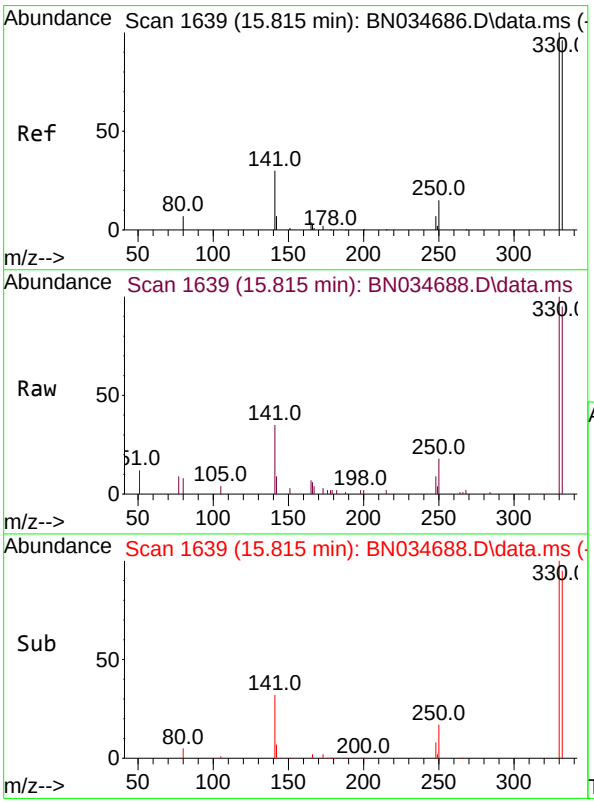
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.329 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:164 Resp: 9335

Ion	Ratio	Lower	Upper
164	100		
162	103.4	81.4	122.0
160	50.8	40.6	61.0

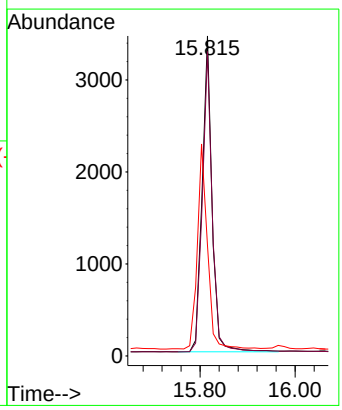


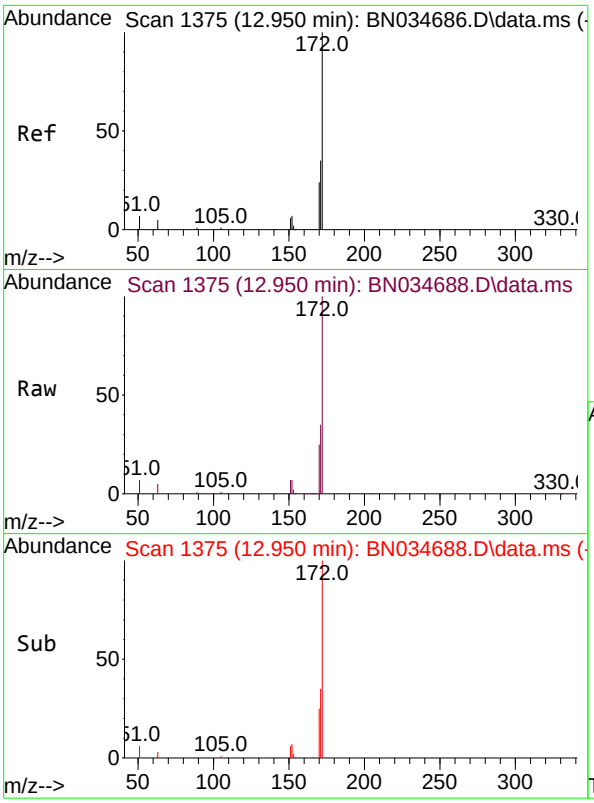


#14
2,4,6-Tribromophenol
Concen: 1.255 ng
RT: 15.815 min Scan# 1639
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:330 Resp: 4968

Ion	Ratio	Lower	Upper
330	100		
332	95.6	76.6	115.0
141	66.4	54.6	81.8



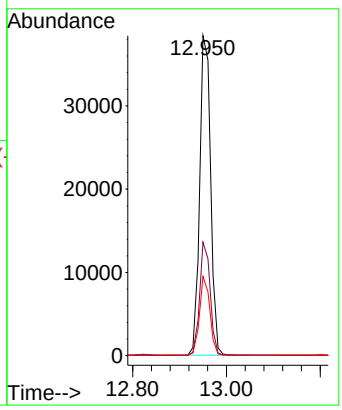


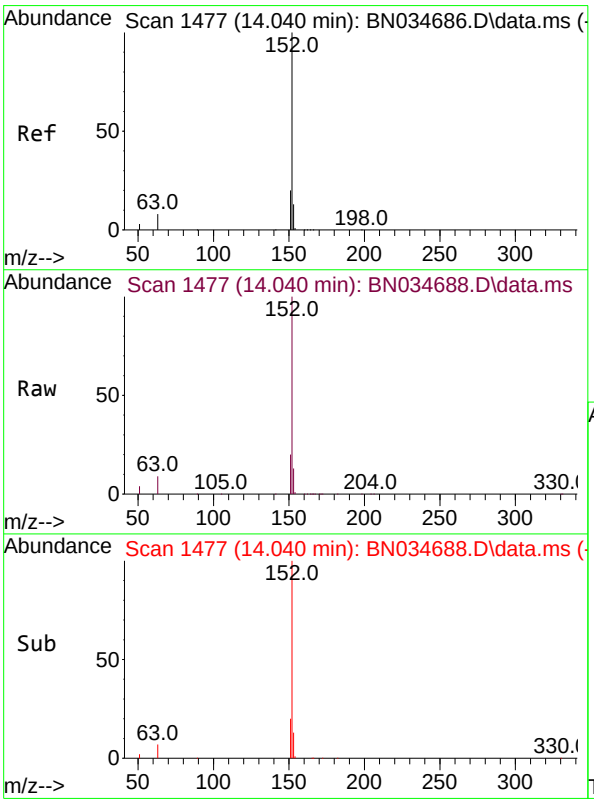
#15
2-Fluorobiphenyl
Concen: 1.691 ng
RT: 12.950 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:172 Resp: 62224

Ion	Ratio	Lower	Upper
172	100		
171	35.5	28.3	42.5
170	24.8	19.8	29.6

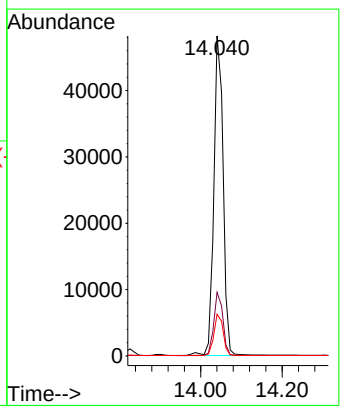


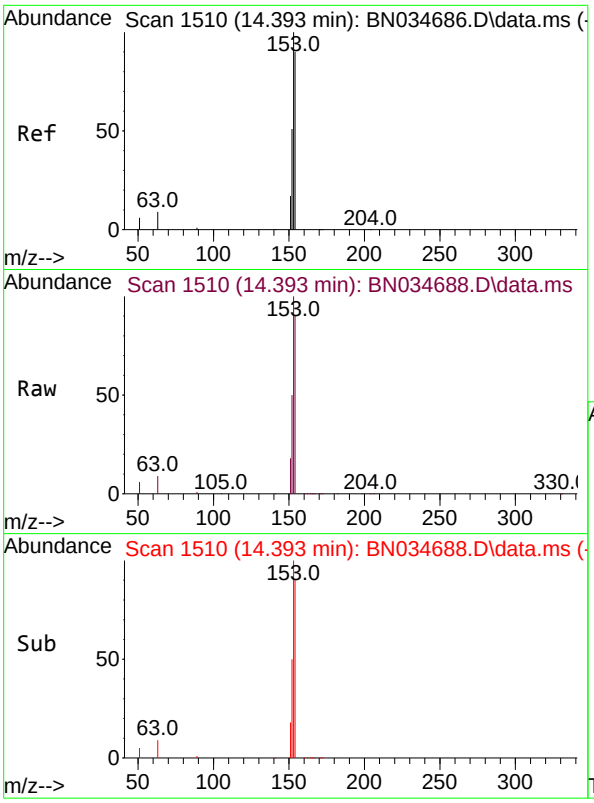


#16
Acenaphthylene
Concen: 1.696 ng
RT: 14.040 min Scan# 1477
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:152 Resp: 76104

Ion	Ratio	Lower	Upper
152	100		
151	19.3	15.6	23.4
153	12.9	10.6	15.8



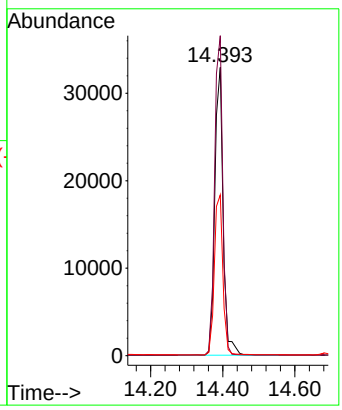


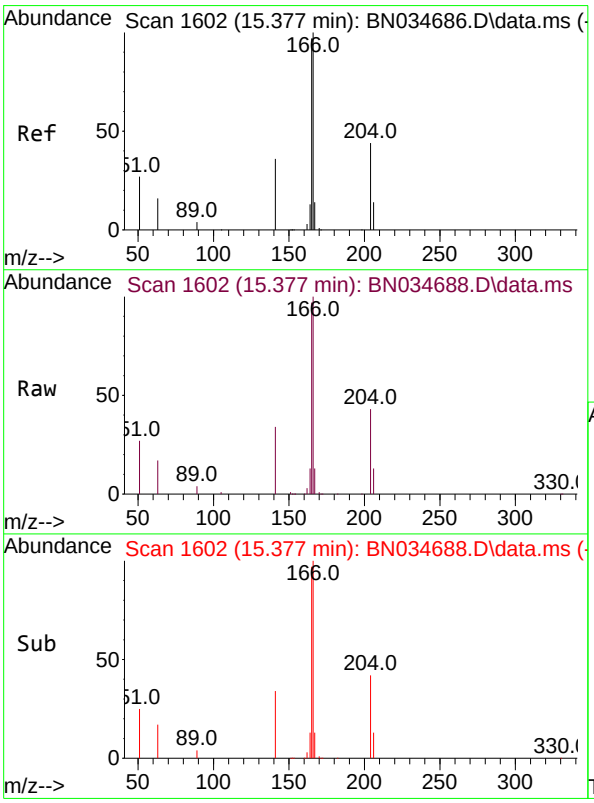
#17
Acenaphthene
Concen: 1.718 ng
RT: 14.393 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:154 Resp: 52549

Ion	Ratio	Lower	Upper
154	100		
153	108.8	88.2	132.2
152	56.9	46.9	70.3

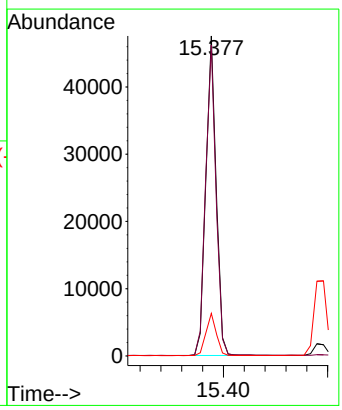


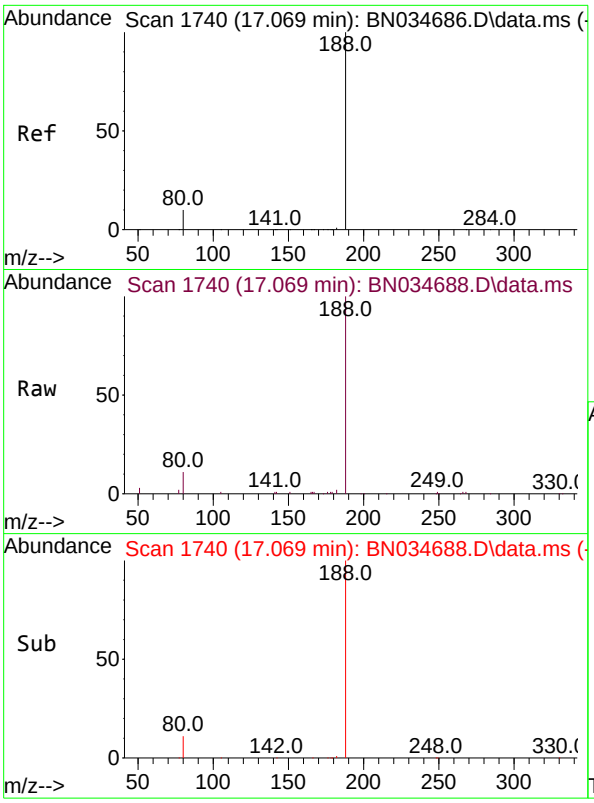


#18
Fluorene
Concen: 1.714 ng
RT: 15.377 min Scan# 1602
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:166 Resp: 65352

Ion	Ratio	Lower	Upper
166	100		
165	98.1	78.8	118.2
167	13.2	10.6	16.0



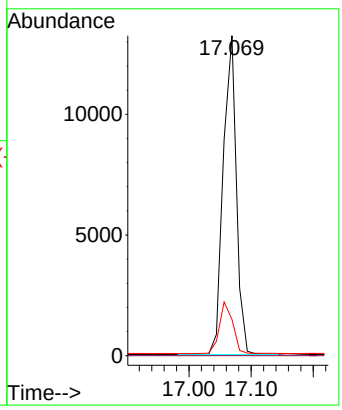


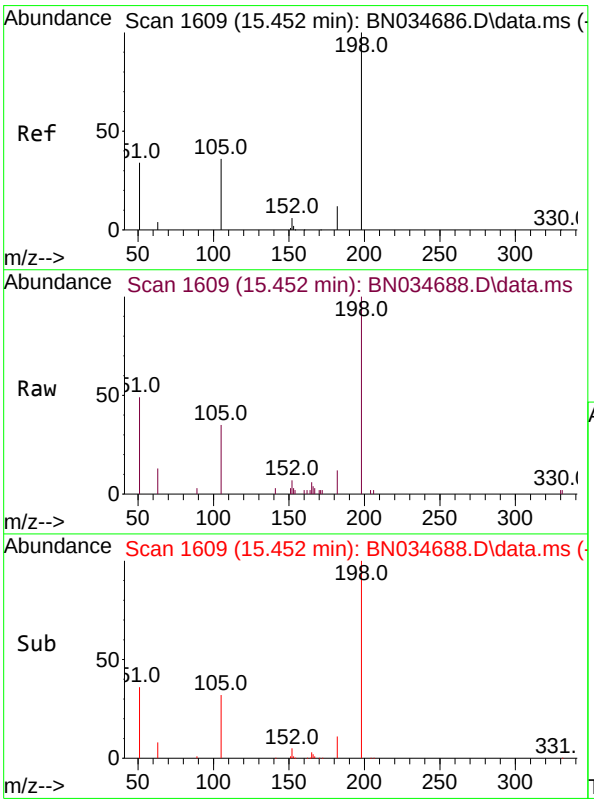
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.069 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:188 Resp: 19334

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.3	8.9	13.3

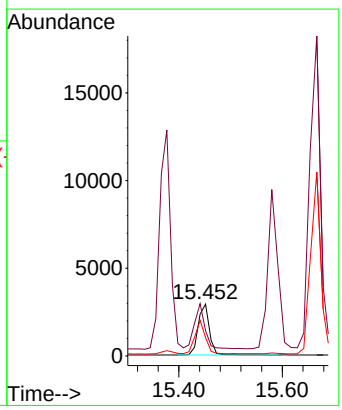


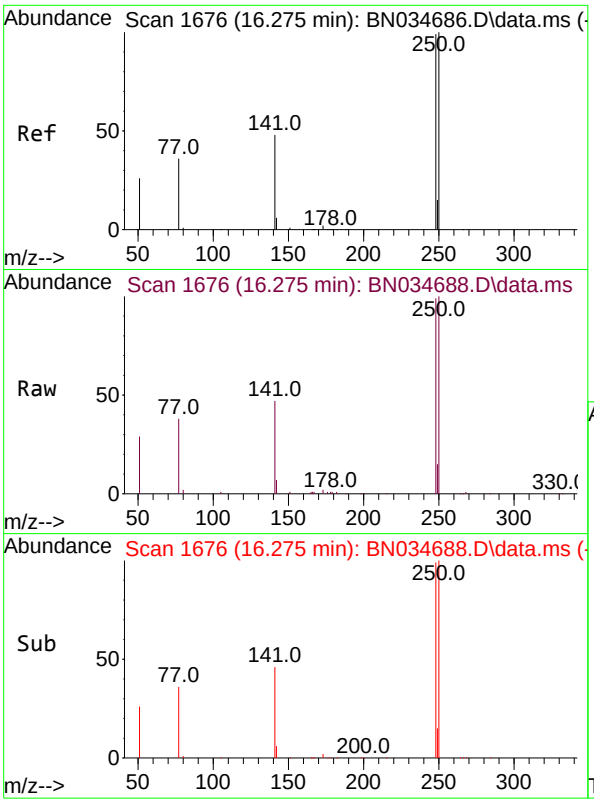


#20
4,6-Dinitro-2-methylphenol
Concen: 1.734 ng
RT: 15.452 min Scan# 1609
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:198 Resp: 4583

Ion	Ratio	Lower	Upper
198	100		
51	48.7	91.8	137.8#
105	35.4	44.3	66.5#



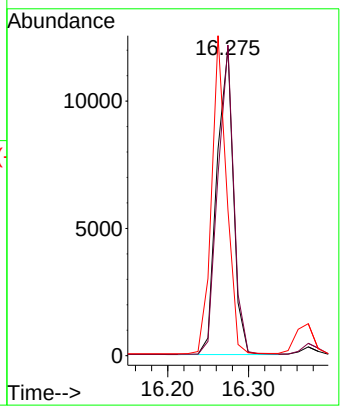


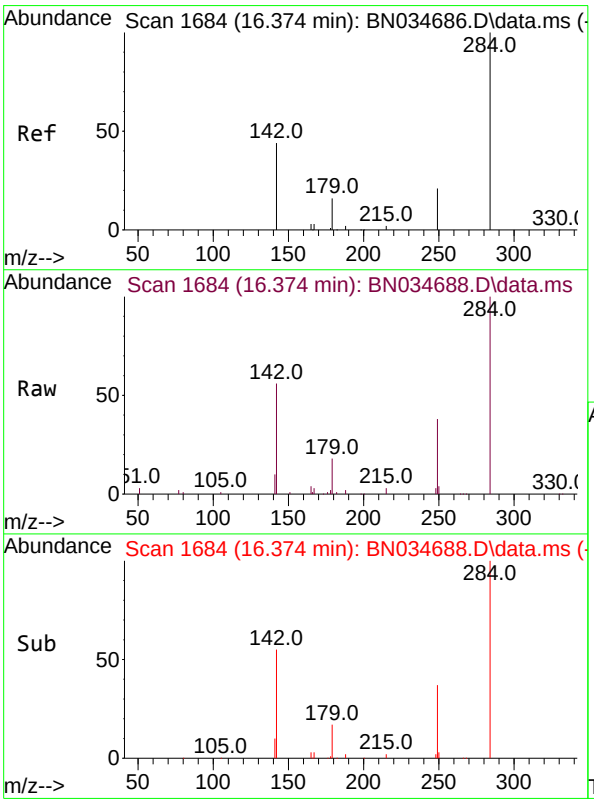
#21
4-Bromophenyl-phenylether
Concen: 1.615 ng
RT: 16.275 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:248 Resp: 17079

Ion	Ratio	Lower	Upper
248	100		
250	101.1	80.9	121.3
141	47.4	40.5	60.7

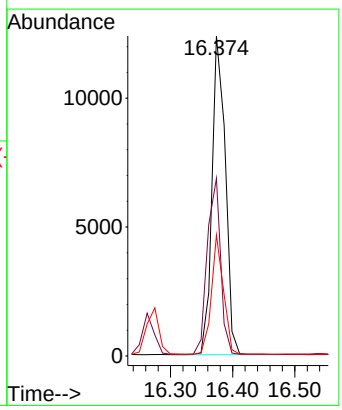


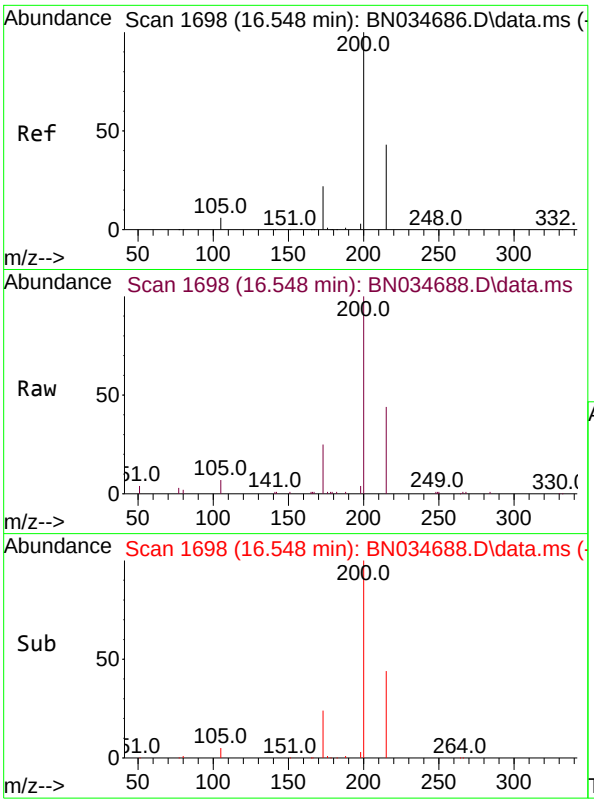


#22
Hexachlorobenzene
Concen: 1.569 ng
RT: 16.374 min Scan# 1684
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:284 Resp: 18410

Ion	Ratio	Lower	Upper
284	100		
142	55.6	43.6	65.4
249	33.9	26.6	40.0



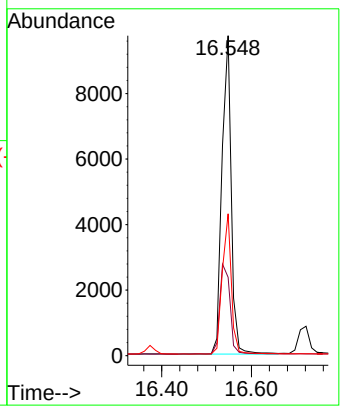


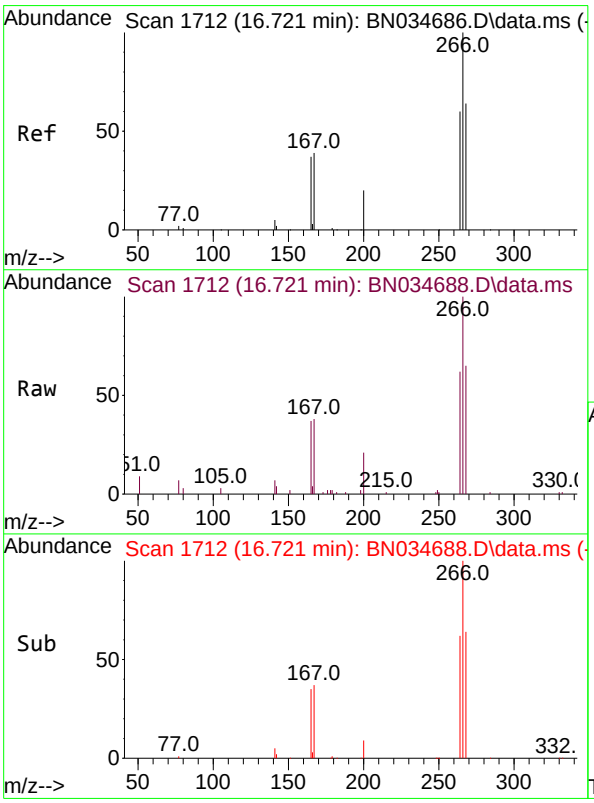
#23
Atrazine
Concen: 1.516 ng
RT: 16.548 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:200 Resp: 14024

Ion	Ratio	Lower	Upper
200	100		
173	24.5	19.7	29.5
215	44.3	35.7	53.5

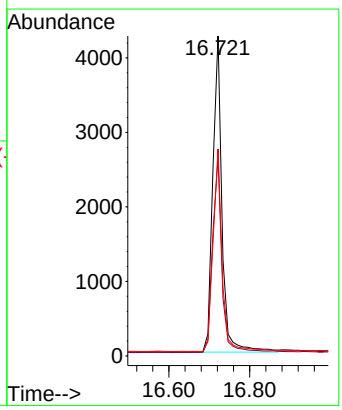


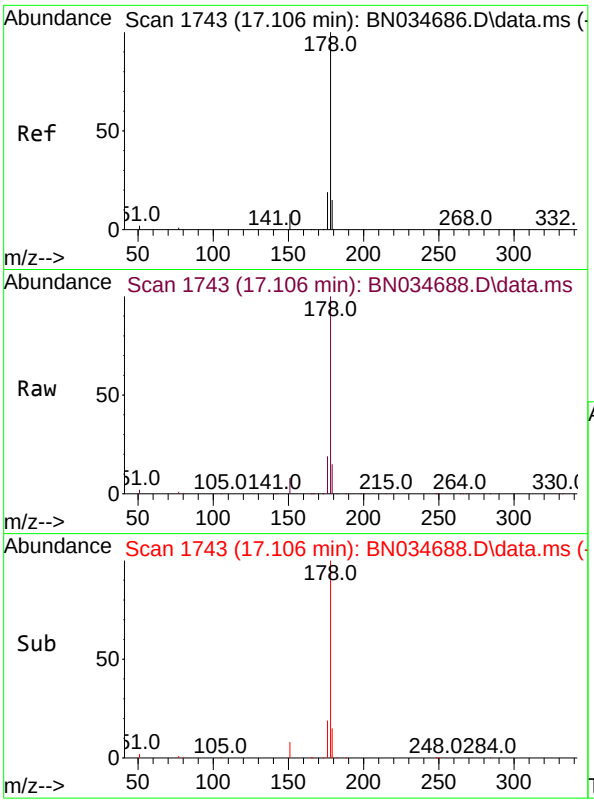


#24
Pentachlorophenol
Concen: 1.467 ng
RT: 16.721 min Scan# 1712
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:266 Resp: 6756

Ion	Ratio	Lower	Upper
266	100		
264	62.2	49.4	74.2
268	63.5	50.5	75.7



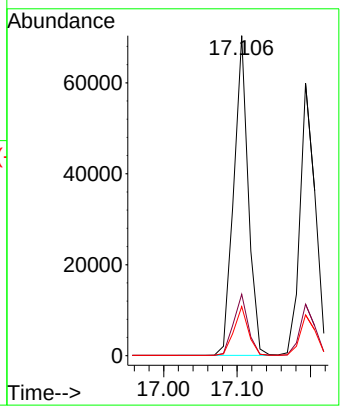


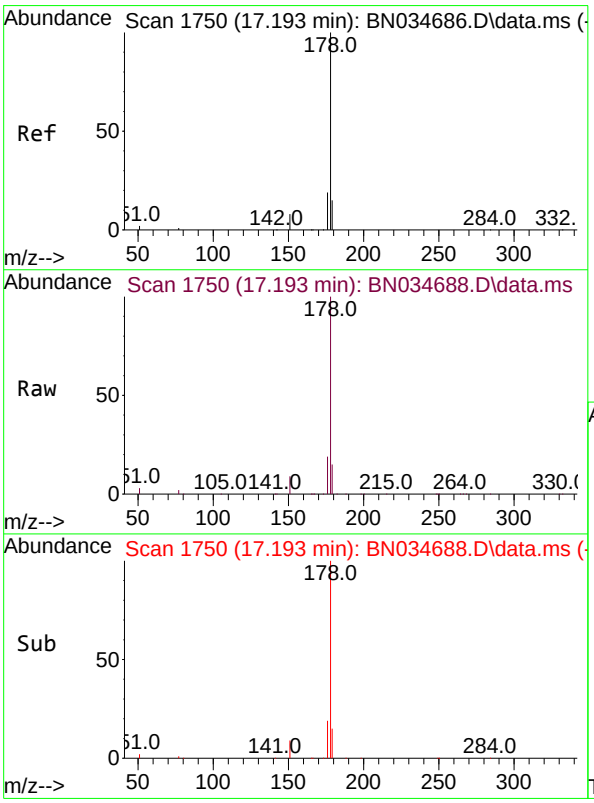
#25
Phenanthrene
Concen: 1.673 ng
RT: 17.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:178 Resp: 96240

Ion	Ratio	Lower	Upper
178	100		
176	19.2	15.4	23.2
179	15.2	12.2	18.4

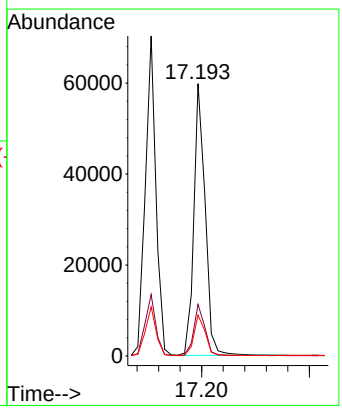


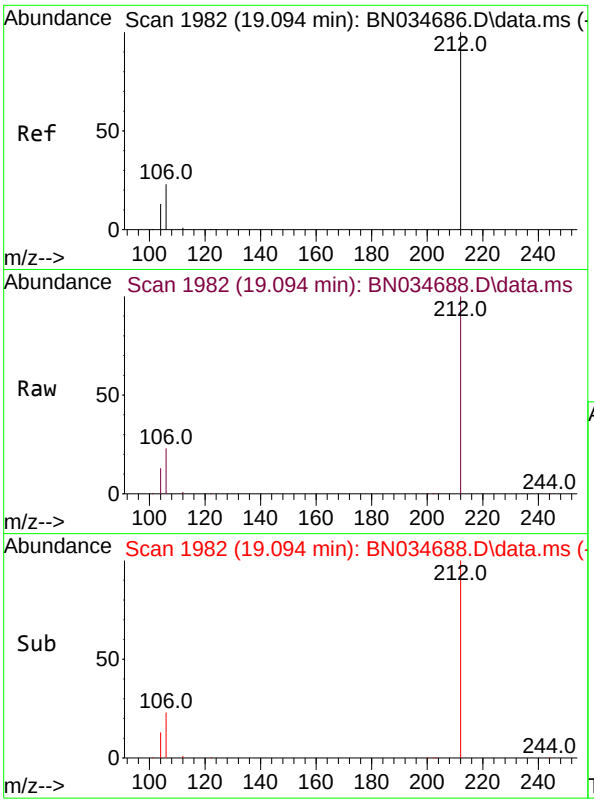


#26
Anthracene
Concen: 1.695 ng
RT: 17.193 min Scan# 1750
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:178 Resp: 87194

Ion	Ratio	Lower	Upper
178	100		
176	18.7	14.9	22.3
179	15.1	12.2	18.2



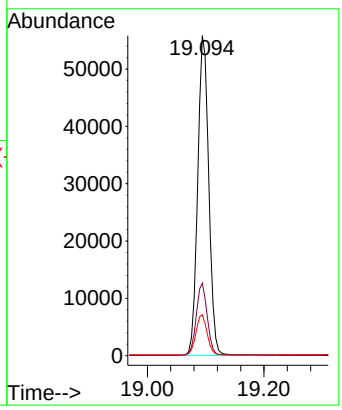


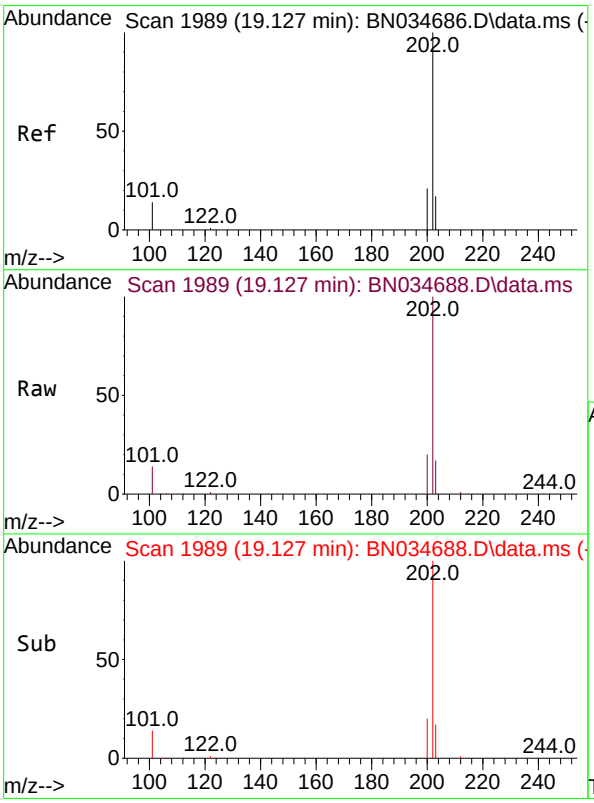
#27
Fluoranthene-d10
Concen: 1.553 ng
RT: 19.094 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:212 Resp: 73515

Ion	Ratio	Lower	Upper
212	100		
106	22.2	17.8	26.8
104	12.6	10.2	15.4

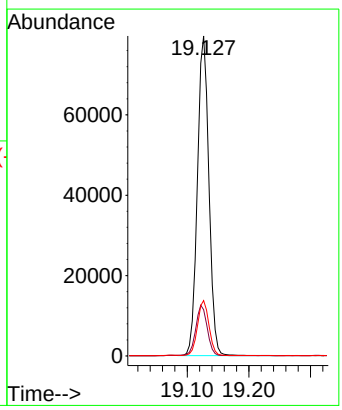


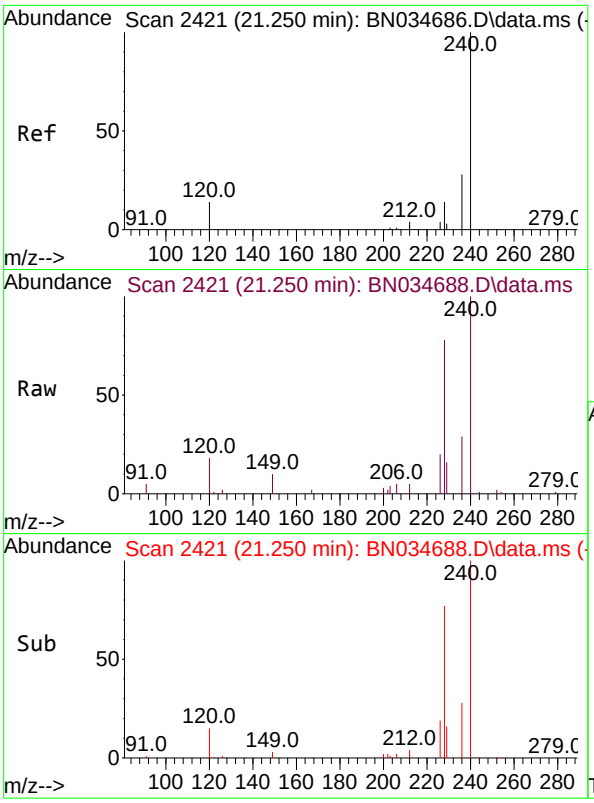


#28
Fluoranthene
Concen: 1.598 ng
RT: 19.127 min Scan# 1989
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:202 Resp: 103093

Ion	Ratio	Lower	Upper
202	100		
101	16.0	12.8	19.2
203	17.2	13.5	20.3



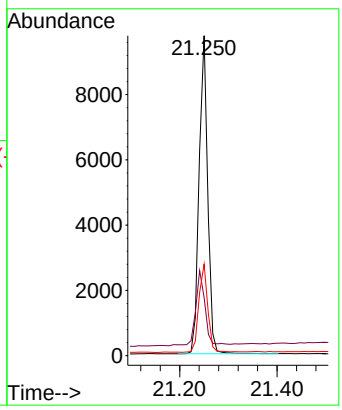


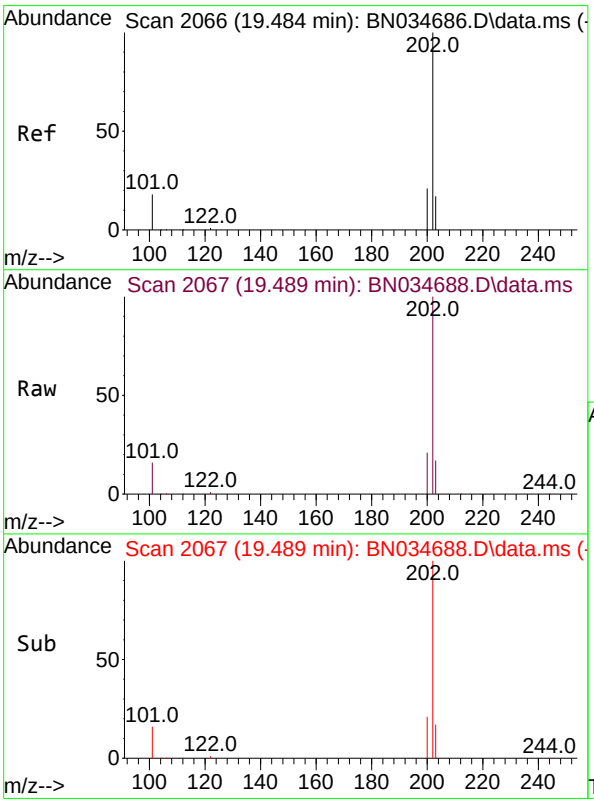
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.250 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:240 Resp: 11924

Ion	Ratio	Lower	Upper
240	100		
120	18.2	14.2	21.2
236	28.6	23.1	34.7

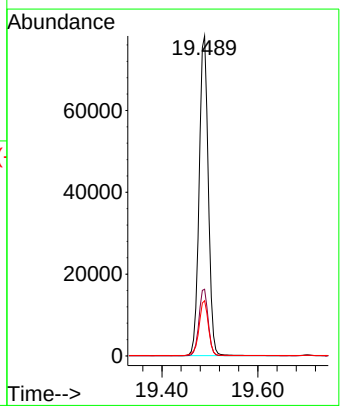


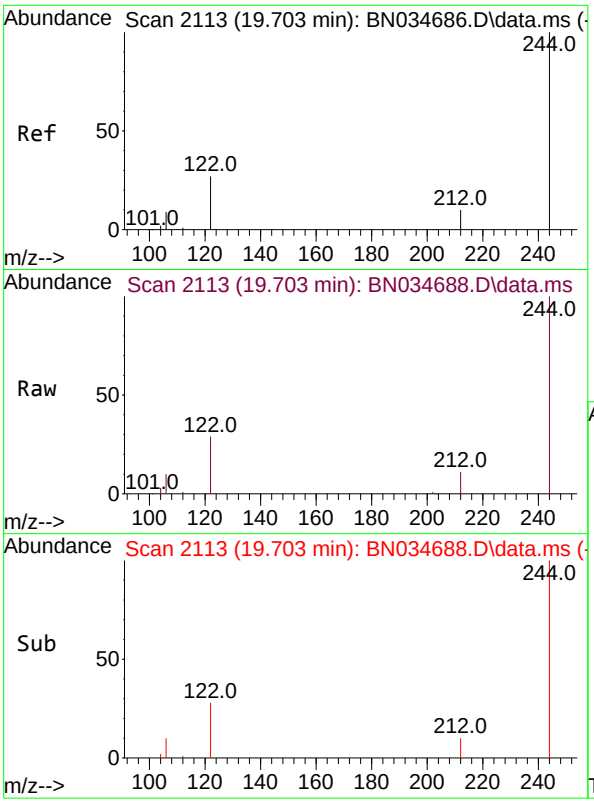


#30
Pyrene
Concen: 1.936 ng
RT: 19.489 min Scan# 2067
Delta R.T. 0.005 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:202 Resp: 103194

Ion	Ratio	Lower	Upper
202	100		
200	21.0	16.6	25.0
203	17.7	14.2	21.4



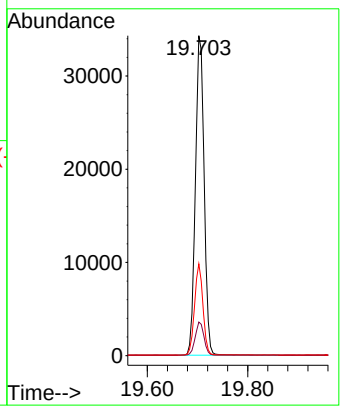


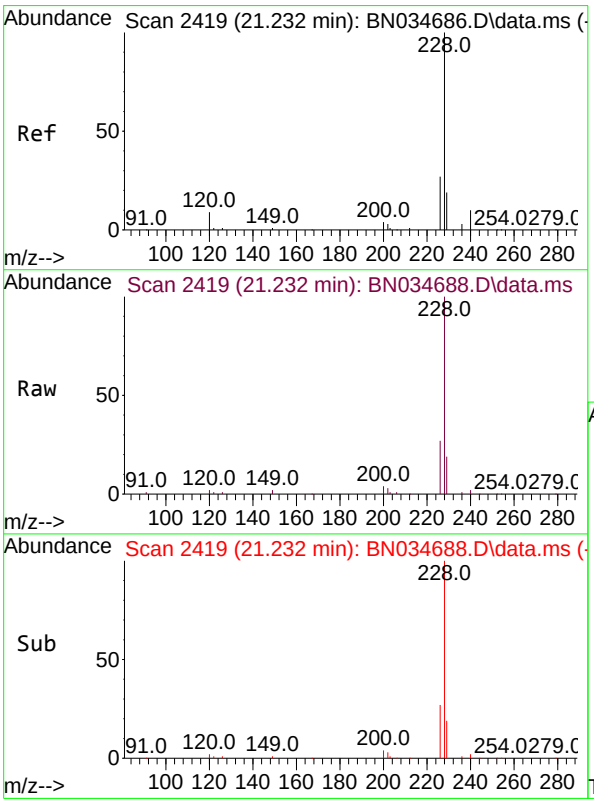
#31
Terphenyl-d14
Concen: 1.788 ng
RT: 19.703 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:244 Resp: 41261

Ion	Ratio	Lower	Upper
244	100		
212	10.5	8.6	13.0
122	28.7	22.3	33.5

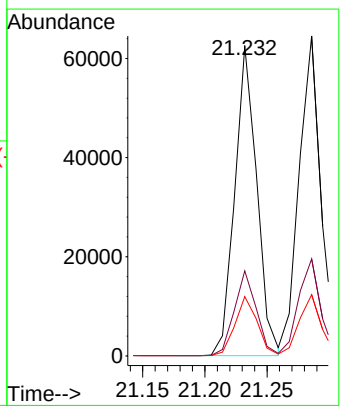


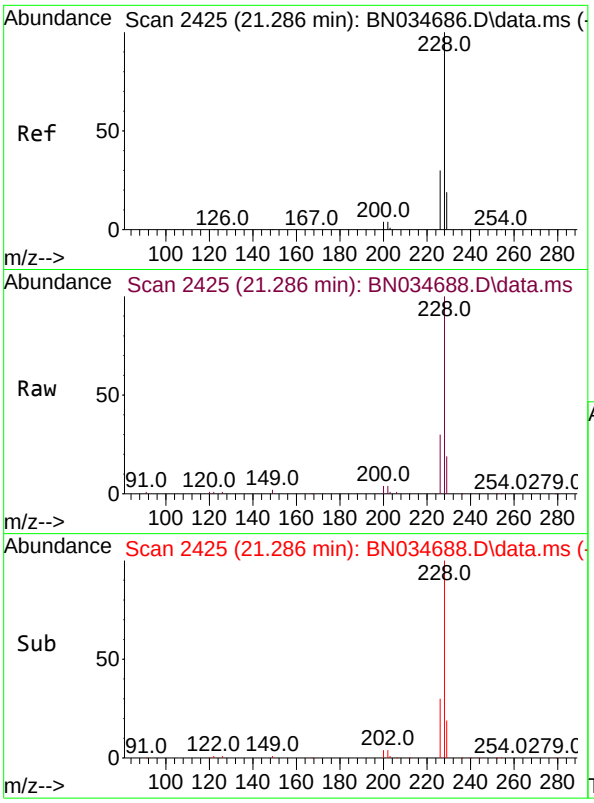


#32
Benzo(a)anthracene
Concen: 1.693 ng
RT: 21.232 min Scan# 2419
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:228 Resp: 76954

Ion	Ratio	Lower	Upper
228	100		
226	27.4	22.0	33.0
229	19.1	15.6	23.4



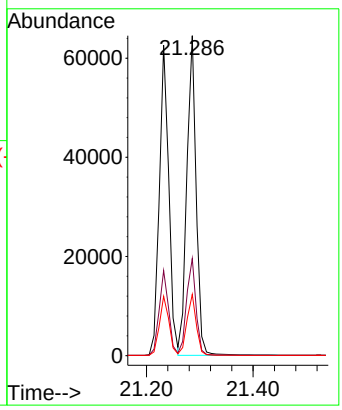


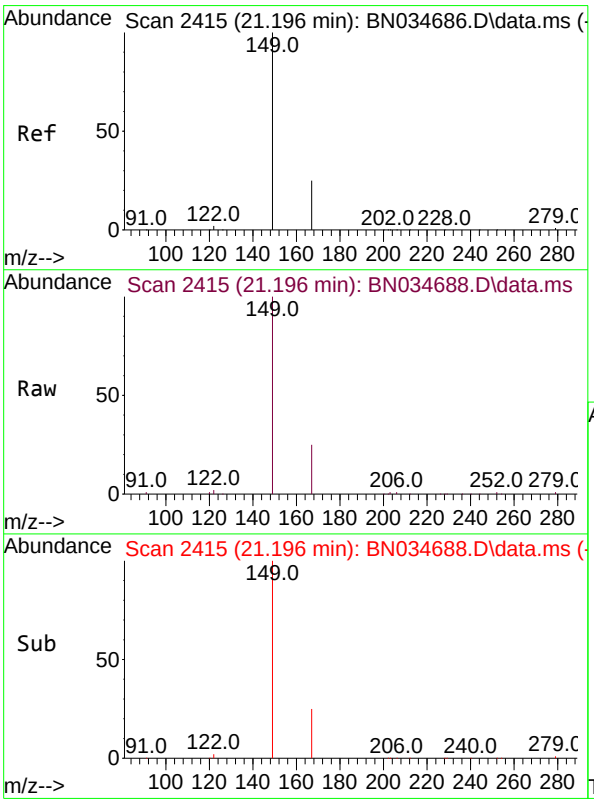
#33
Chrysene
Concen: 1.741 ng
RT: 21.286 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:228 Resp: 78358

Ion	Ratio	Lower	Upper
228	100		
226	30.4	24.1	36.1
229	19.1	15.8	23.8

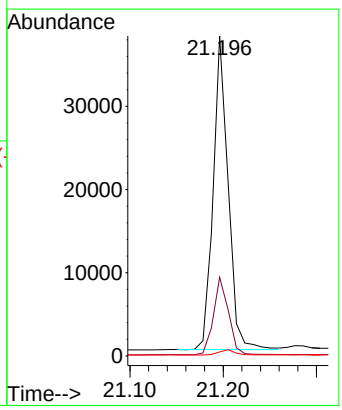


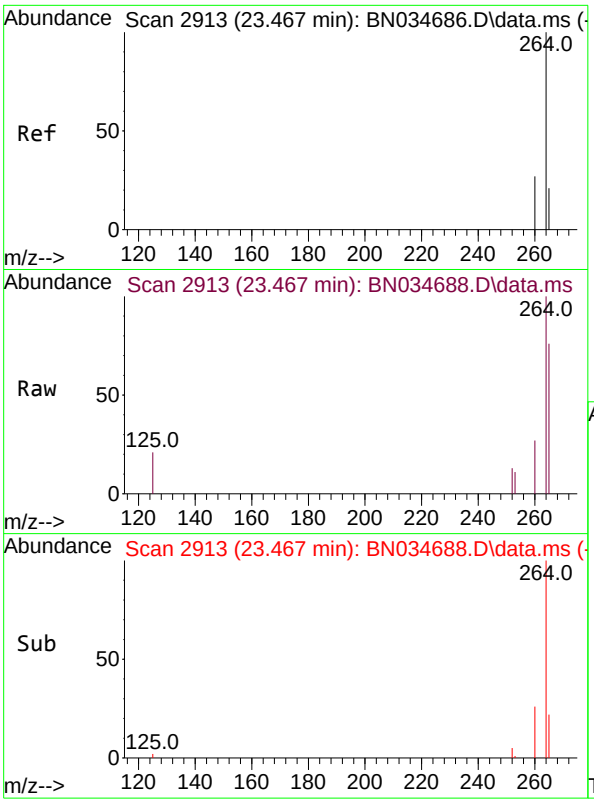


#34
Bis(2-ethylhexyl)phthalate
Concen: 1.354 ng
RT: 21.196 min Scan# 2415
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:149 Resp: 41892

Ion	Ratio	Lower	Upper
149	100		
167	24.7	19.7	29.5
279	1.7	1.8	2.6#



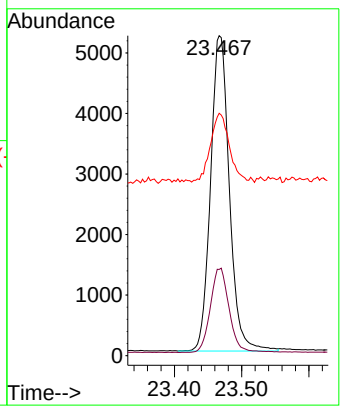


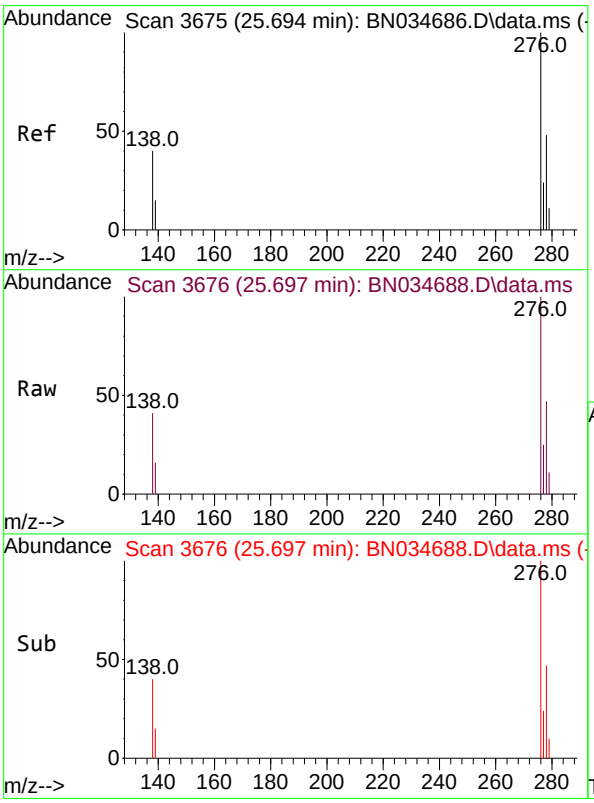
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.467 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:264 Resp: 10103

Ion	Ratio	Lower	Upper
264	100		
260	26.9	21.9	32.9
265	75.7	60.6	91.0

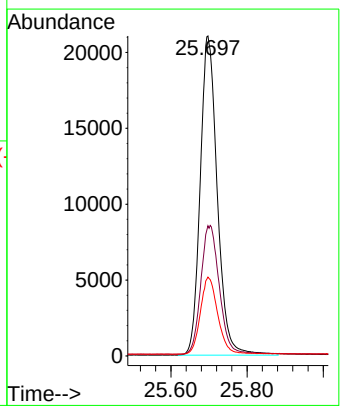


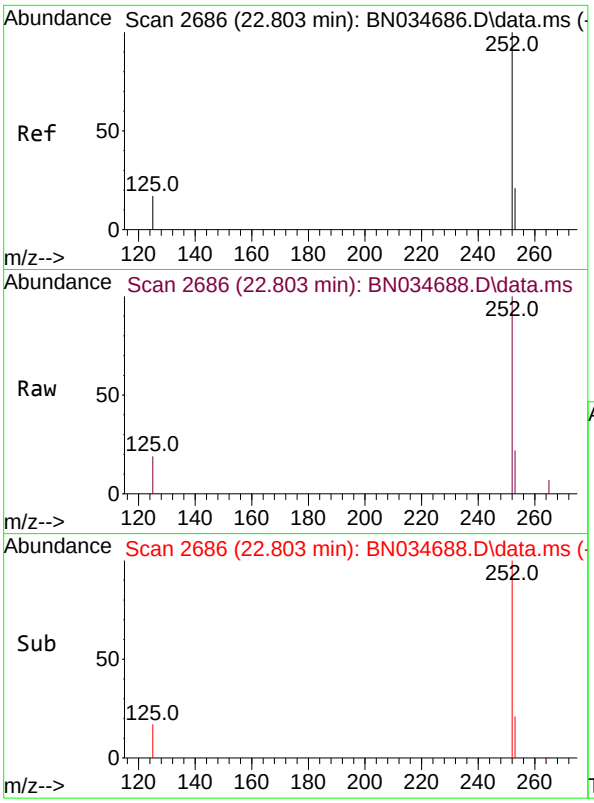


#36
Indeno(1,2,3-cd)pyrene
Concen: 1.682 ng
RT: 25.697 min Scan# 3676
Delta R.T. 0.003 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:276 Resp: 65482

Ion	Ratio	Lower	Upper
276	100		
138	43.4	35.1	52.7
277	24.3	19.7	29.5



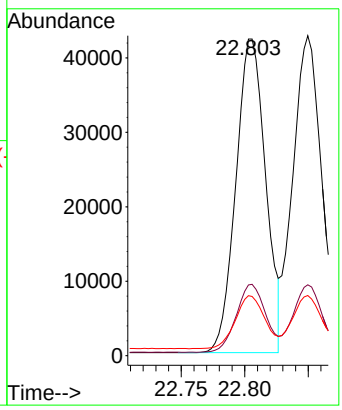


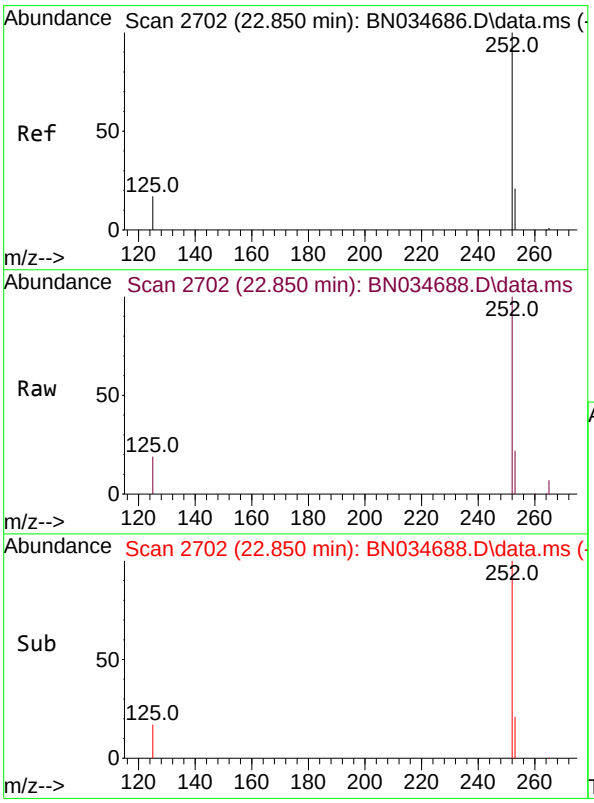
#37
Benzo(b)fluoranthene
Concen: 1.880 ng
RT: 22.803 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:252 Resp: 68644

Ion	Ratio	Lower	Upper
252	100		
253	22.3	20.0	30.0
125	18.9	20.9	31.3#

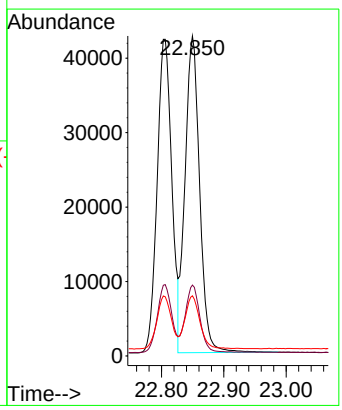


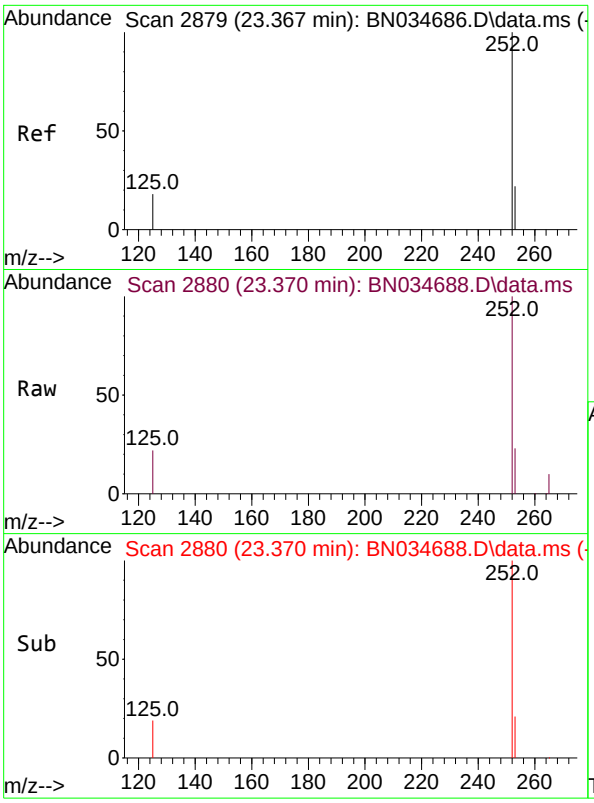


#38
Benzo(k)fluoranthene
Concen: 1.942 ng
RT: 22.850 min Scan# 2702
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:252 Resp: 69183

Ion	Ratio	Lower	Upper
252	100		
253	22.1	20.6	31.0
125	18.8	21.6	32.4#



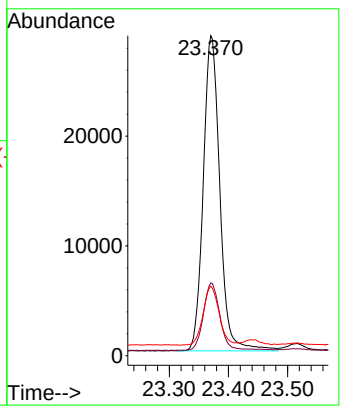


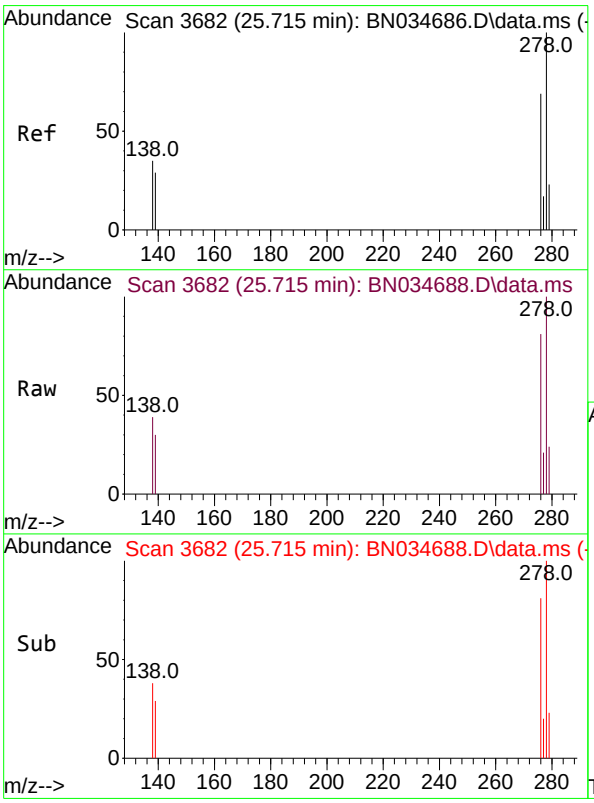
#39
Benzo(a)pyrene
Concen: 1.802 ng
RT: 23.370 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:252 Resp: 55896

Ion	Ratio	Lower	Upper
252	100		
253	22.8	22.2	33.4
125	21.7	26.0	39.0#

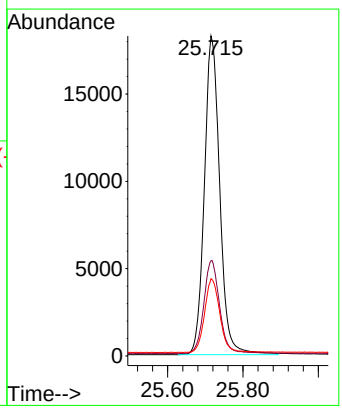


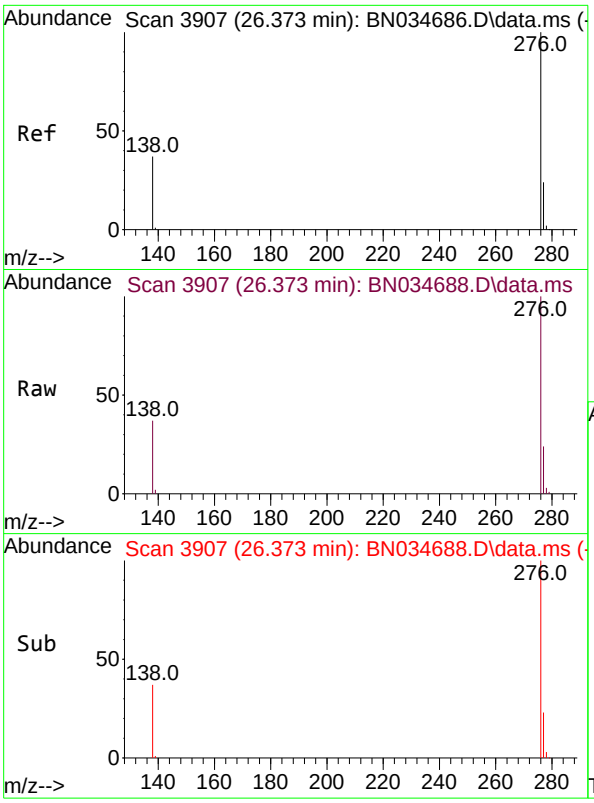


#40
Dibenzo(a,h)anthracene
Concen: 1.696 ng
RT: 25.715 min Scan# 3682
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Tgt Ion:278 Resp: 51867

Ion	Ratio	Lower	Upper
278	100		
139	29.7	25.4	38.2
279	24.2	22.4	33.6



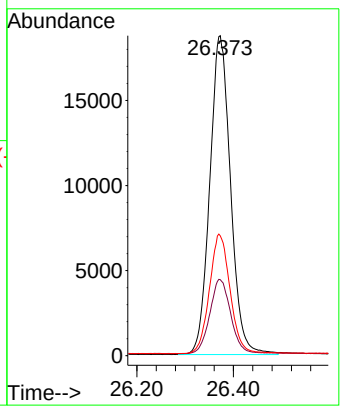


#41
Benzo(g,h,i)perylene
Concen: 1.661 ng
RT: 26.373 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN034688.D
Acq: 24 Oct 2024 11:35

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:276 Resp: 56042

Ion	Ratio	Lower	Upper
276	100		
277	23.8	21.3	31.9
138	37.5	31.9	47.9



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034689.D
Acq On : 24 Oct 2024 12:11
Operator : RC/JU
Sample : SSTDICC3.2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Quant Time: Oct 24 12:44:24 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 12:41:40 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.712	152	6787	0.400	ng		0.00
7) Naphthalene-d8	10.479	136	19859	0.400	ng		0.00
13) Acenaphthene-d10	14.329	164	10274	0.400	ng		0.00
19) Phenanthrene-d10	17.069	188	21008	0.400	ng		0.00
29) Chrysene-d12	21.250	240	13427	0.400	ng		0.00
35) Perylene-d12	23.467	264	11211	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.322	112	63436	3.054	ng		0.00
5) Phenol-d6	6.882	99	85211	3.208	ng		0.00
8) Nitrobenzene-d5	8.845	82	53485	3.251	ng		0.00
11) 2-Methylnaphthalene-d10	12.071	152	88547	3.167	ng		0.00
14) 2,4,6-Tribromophenol	15.815	330	11167	2.564	ng		0.00
15) 2-Fluorobiphenyl	12.950	172	126562	3.125	ng		0.00
27) Fluoranthene-d10	19.094	212	153423	2.983	ng		0.00
31) Terphenyl-d14	19.703	244	88081	3.389	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.285	88	27324	3.306	ng		99
3) n-Nitrosodimethylamine	3.581	42	41310	4.134	ng	#	95
6) bis(2-Chloroethyl)ether	7.142	93	67465	3.316	ng		99
9) Naphthalene	10.532	128	173884	3.175	ng		99
10) Hexachlorobutadiene	10.831	225	25389	2.893	ng	#	99
12) 2-Methylnaphthalene	12.147	142	110779	3.200	ng		99
16) Acenaphthylene	14.040	152	161452	3.270	ng		99
17) Acenaphthene	14.393	154	109212	3.243	ng		98
18) Fluorene	15.377	166	136703	3.257	ng		99
20) 4,6-Dinitro-2-methylph...	15.452	198	10505	3.657	ng	#	44
21) 4-Bromophenyl-phenylether	16.275	248	35596	3.098	ng		96
22) Hexachlorobenzene	16.374	284	38020	2.981	ng		100
23) Atrazine	16.548	200	30485	3.032	ng		99
24) Pentachlorophenol	16.721	266	15457	3.088	ng		99
25) Phenanthrene	17.106	178	200178	3.203	ng		100
26) Anthracene	17.193	178	185283	3.315	ng		100
28) Fluoranthene	19.127	202	216788	3.093	ng		100
30) Pyrene	19.484	202	219062	3.649	ng		100
32) Benzo(a)anthracene	21.232	228	166793	3.259	ng		100
33) Chrysene	21.286	228	164703	3.250	ng		100
34) Bis(2-ethylhexyl)phtha...	21.196	149	98247	2.819	ng	#	99
36) Indeno(1,2,3-cd)pyrene	25.697	276	136074	3.150	ng		99
37) Benzo(b)fluoranthene	22.806	252	144801	3.574	ng	#	88
38) Benzo(k)fluoranthene	22.847	252	143101	3.620	ng	#	87
39) Benzo(a)pyrene	23.370	252	118654	3.448	ng	#	82
40) Dibenzo(a,h)anthracene	25.715	278	107743	3.175	ng		93
41) Benzo(g,h,i)perylene	26.373	276	115668	3.089	ng		95

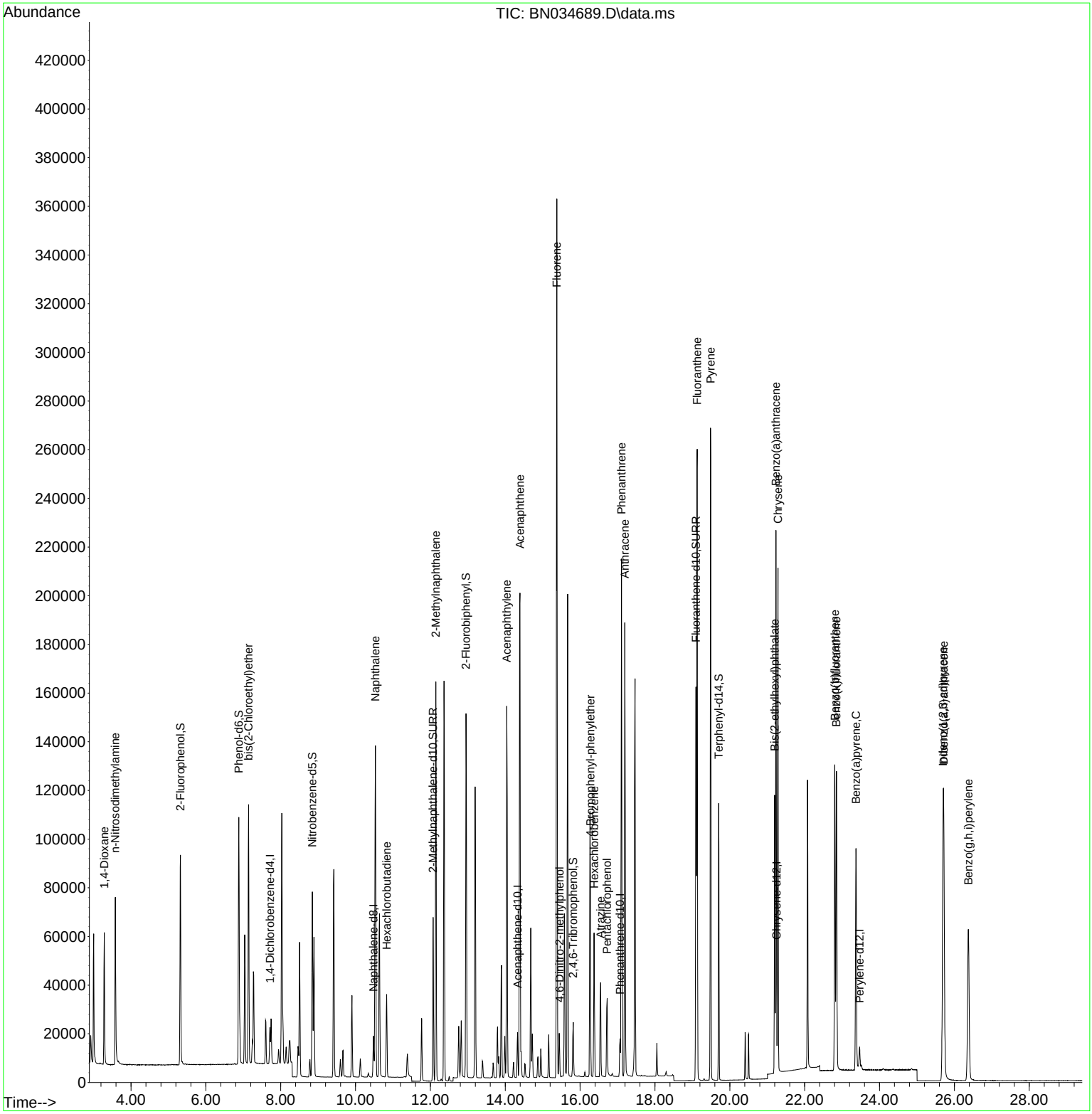
(#) = qualifier out of range (m) = manual integration (+) = signals summed

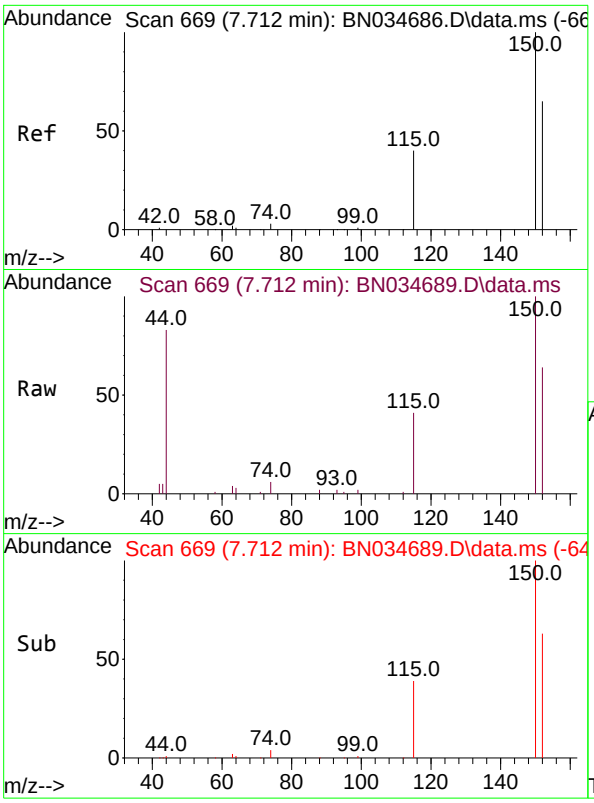
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034689.D
Acq On : 24 Oct 2024 12:11
Operator : RC/JU
Sample : SSTDICC3.2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Quant Time: Oct 24 12:44:24 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 12:41:40 2024
Response via : Initial Calibration



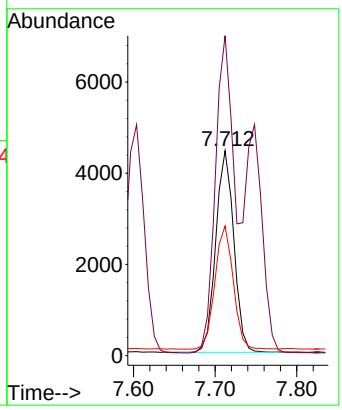


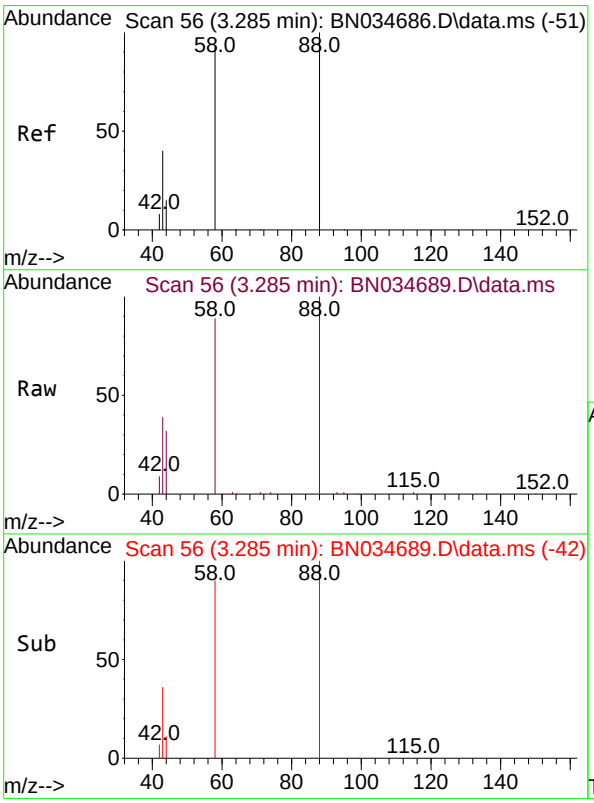
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:152 Resp: 6787

Ion	Ratio	Lower	Upper
152	100		
150	156.1	122.7	184.1
115	63.3	51.0	76.6

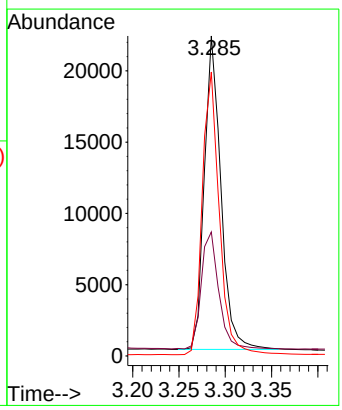


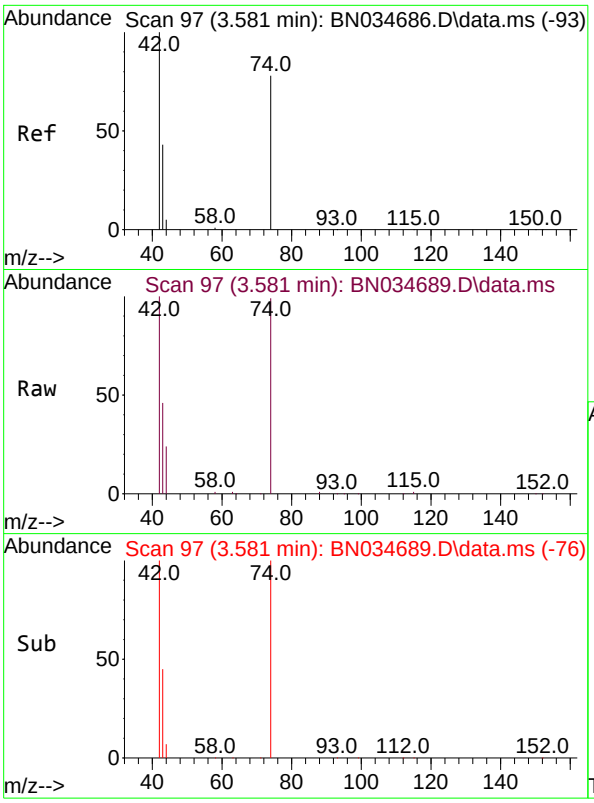


#2
1,4-Dioxane
Concen: 3.306 ng
RT: 3.285 min Scan# 56
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion: 88 Resp: 27324

Ion	Ratio	Lower	Upper
88	100		
43	39.4	32.1	48.1
58	92.6	73.7	110.5



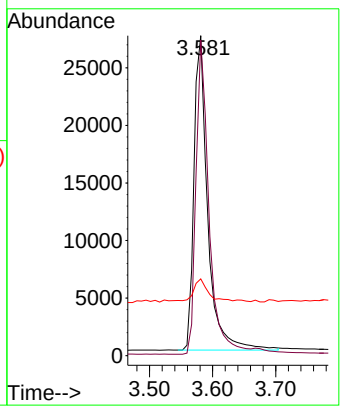


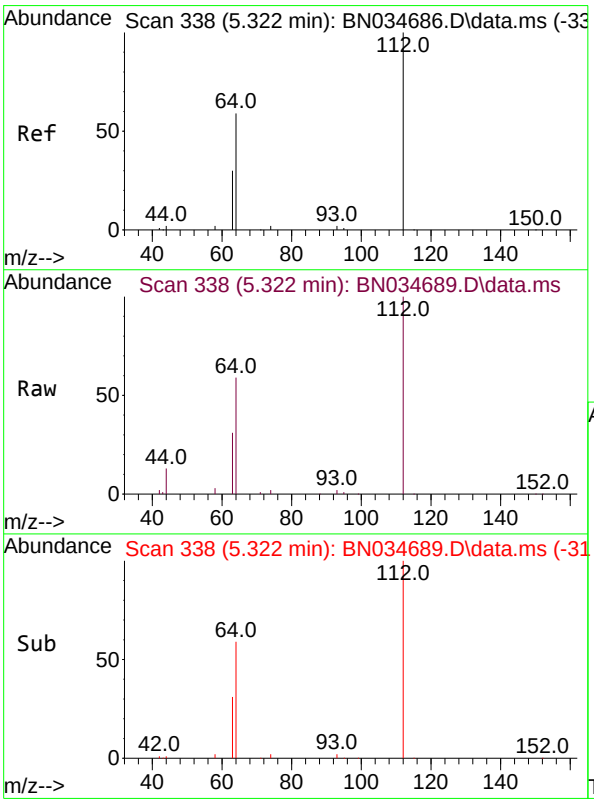
#3
n-Nitrosodimethylamine
Concen: 4.134 ng
RT: 3.581 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion: 42 Resp: 41310

Ion	Ratio	Lower	Upper
42	100		
74	94.5	77.2	115.8
44	8.2	13.4	20.2#

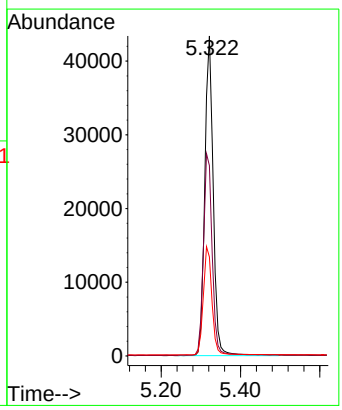


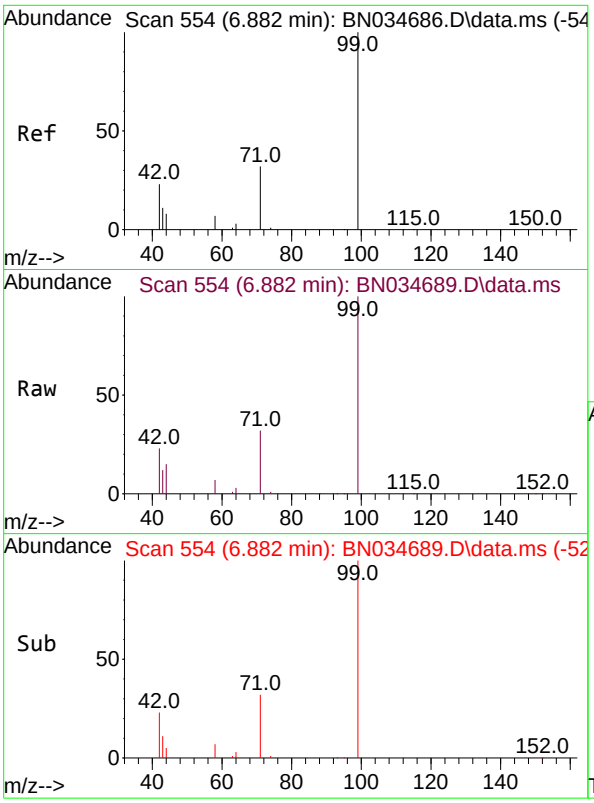


#4
2-Fluorophenol
Concen: 3.054 ng
RT: 5.322 min Scan# 338
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:112 Resp: 63436

Ion	Ratio	Lower	Upper
112	100		
64	65.8	53.0	79.6
63	34.8	27.6	41.4



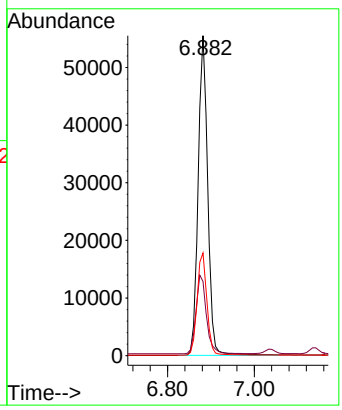


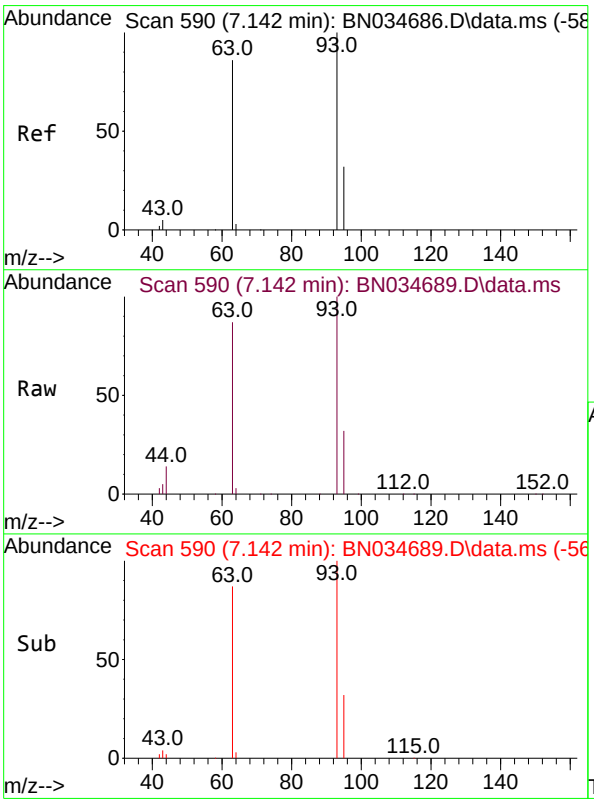
#5
Phenol-d6
Concen: 3.208 ng
RT: 6.882 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion: 99 Resp: 85211

Ion	Ratio	Lower	Upper
99	100		
42	26.8	21.8	32.8
71	32.9	26.6	40.0

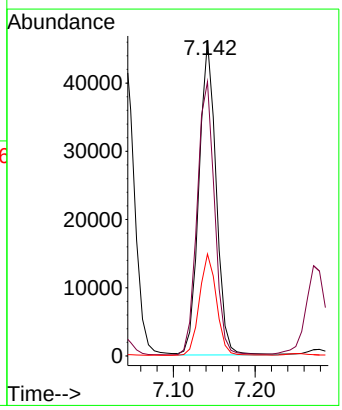


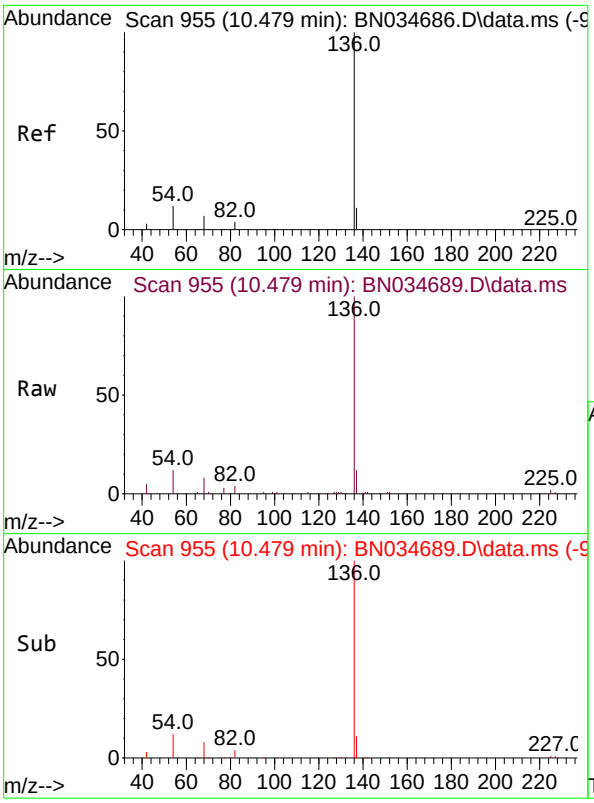


#6
bis(2-Chloroethyl)ether
Concen: 3.316 ng
RT: 7.142 min Scan# 590
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion: 93 Resp: 67465

Ion	Ratio	Lower	Upper
93	100		
63	88.4	71.5	107.3
95	32.0	25.8	38.6



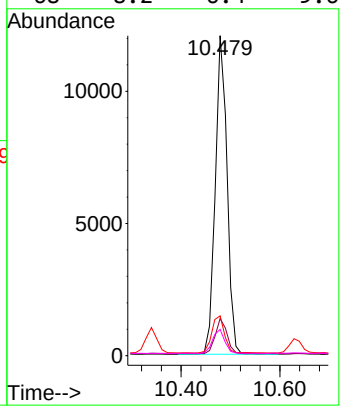


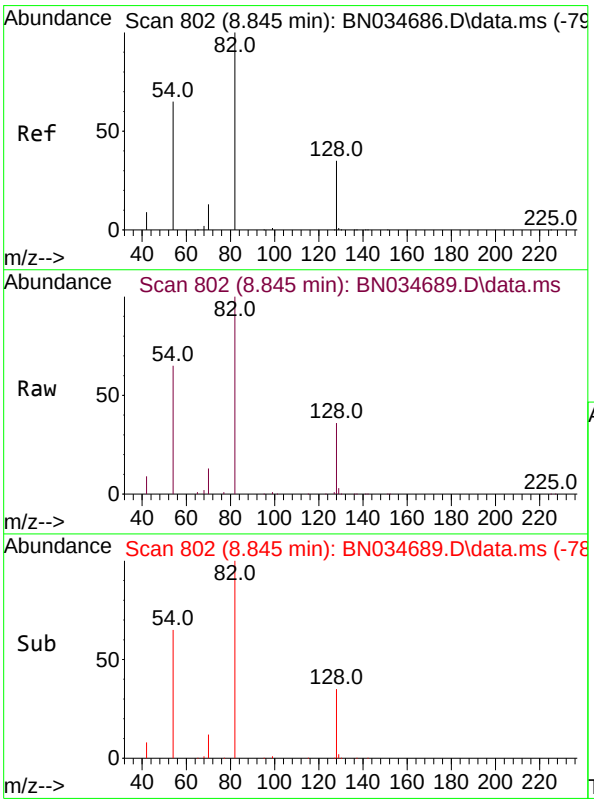
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:136 Resp: 19859

Ion	Ratio	Lower	Upper
136	100		
137	11.6	9.1	13.7
54	12.4	9.8	14.8
68	8.2	6.4	9.6

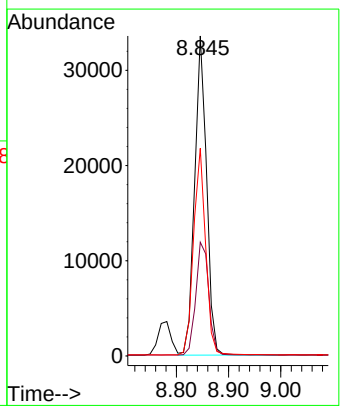


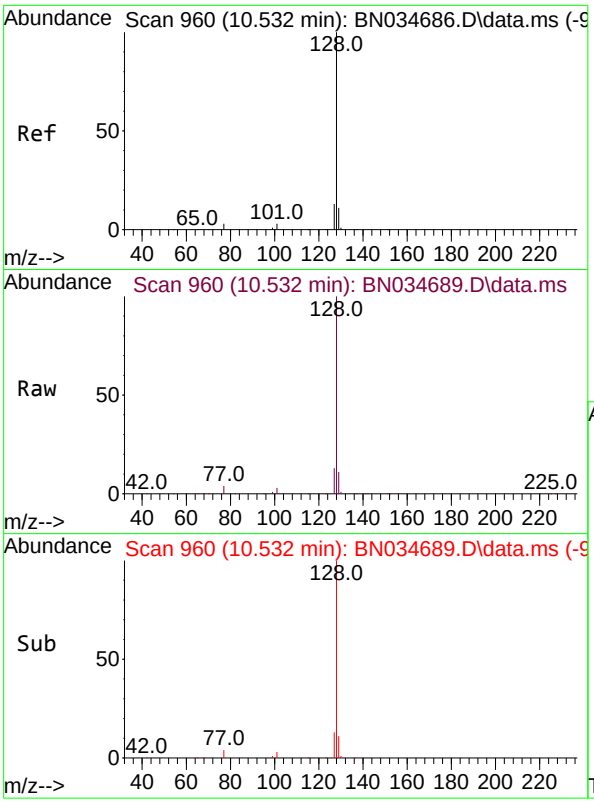


#8
Nitrobenzene-d5
Concen: 3.251 ng
RT: 8.845 min Scan# 802
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion: 82 Resp: 53485

Ion	Ratio	Lower	Upper
82	100		
128	35.5	29.7	44.5
54	64.9	53.0	79.6



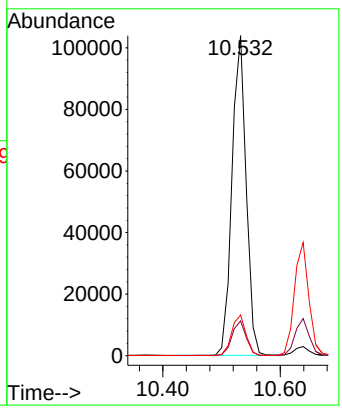


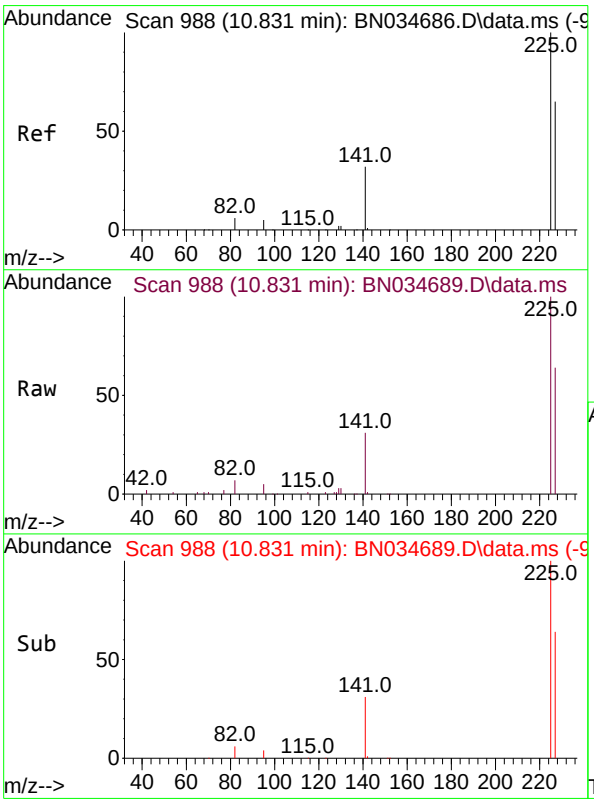
#9
Naphthalene
Concen: 3.175 ng
RT: 10.532 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:128 Resp: 173884

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

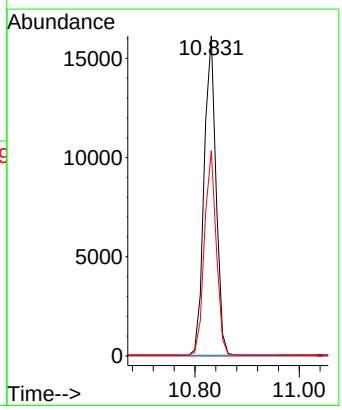


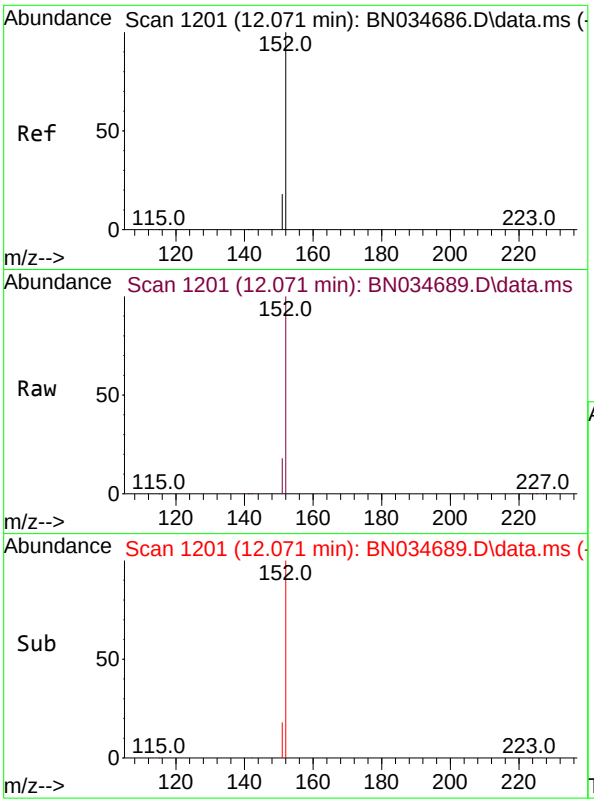


#10
Hexachlorobutadiene
Concen: 2.893 ng
RT: 10.831 min Scan# 988
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:225 Resp: 25389

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.7	51.4	77.0



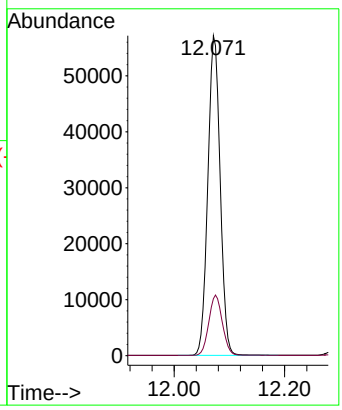


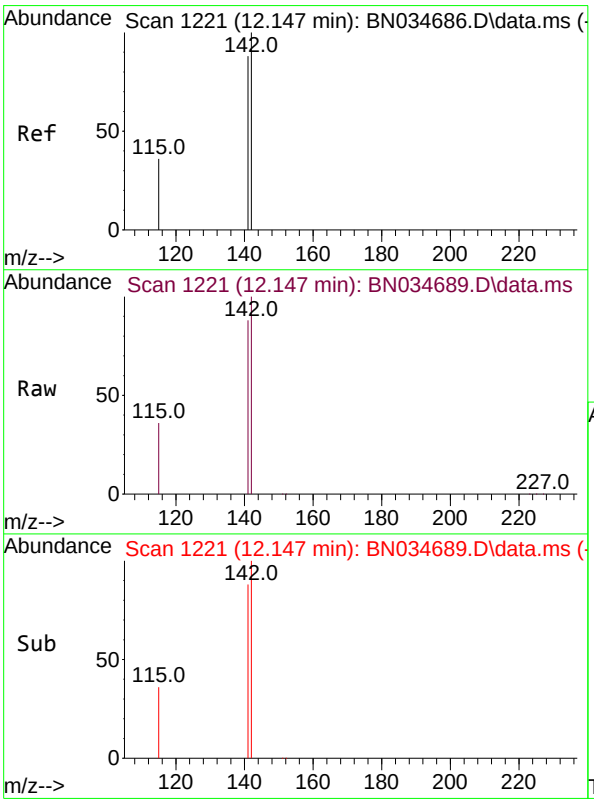
#11
2-Methylnaphthalene-d10
Concen: 3.167 ng
RT: 12.071 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:152 Resp: 88547

Ion	Ratio	Lower	Upper
152	100		
151	20.7	16.7	25.1

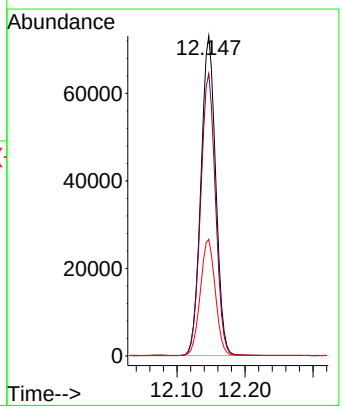


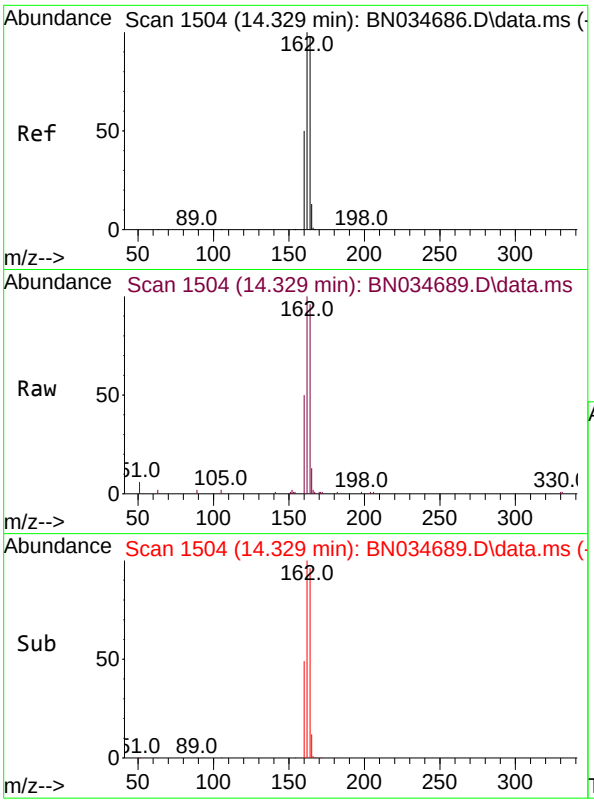


#12
2-Methylnaphthalene
Concen: 3.200 ng
RT: 12.147 min Scan# 1221
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:142 Resp: 110779

Ion	Ratio	Lower	Upper
142	100		
141	88.2	70.4	105.6
115	36.5	29.8	44.6



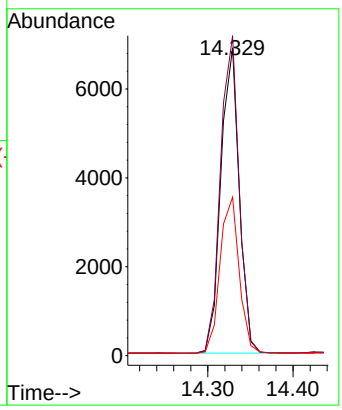


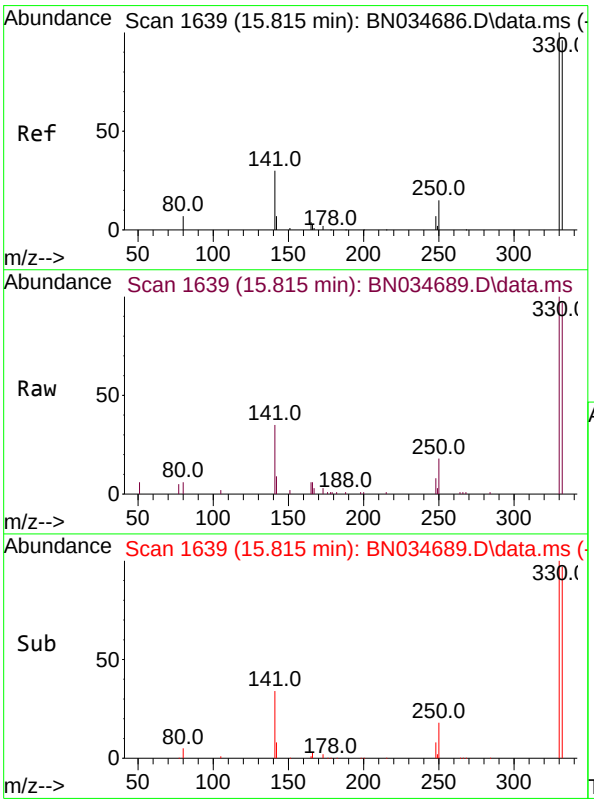
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.329 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:164 Resp: 10274

Ion	Ratio	Lower	Upper
164	100		
162	104.0	81.4	122.0
160	51.5	40.6	61.0

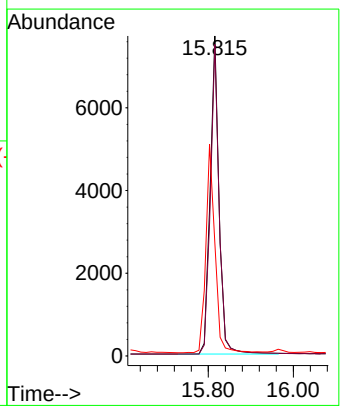


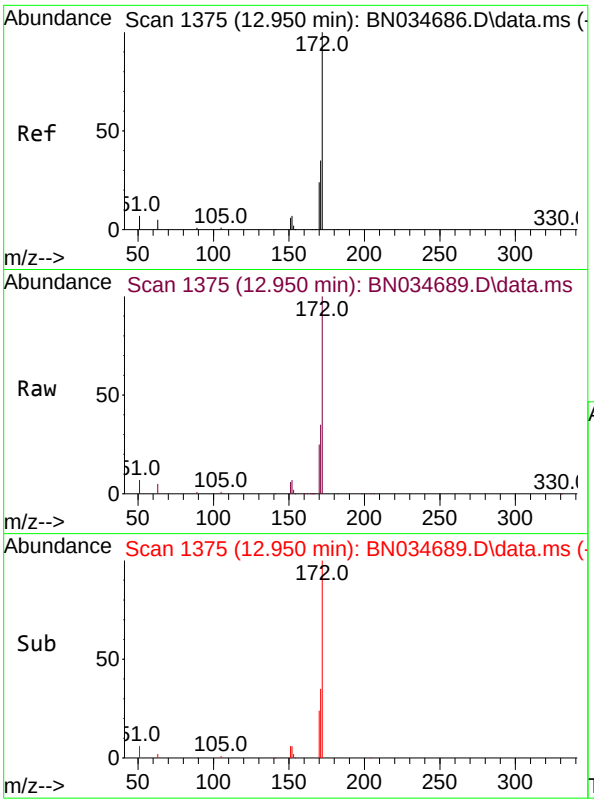


#14
2,4,6-Tribromophenol
Concen: 2.564 ng
RT: 15.815 min Scan# 1639
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:330 Resp: 11167

Ion	Ratio	Lower	Upper
330	100		
332	96.2	76.6	115.0
141	67.0	54.6	81.8



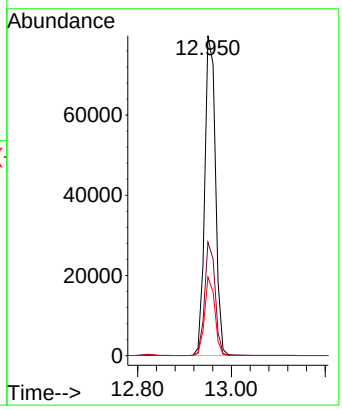


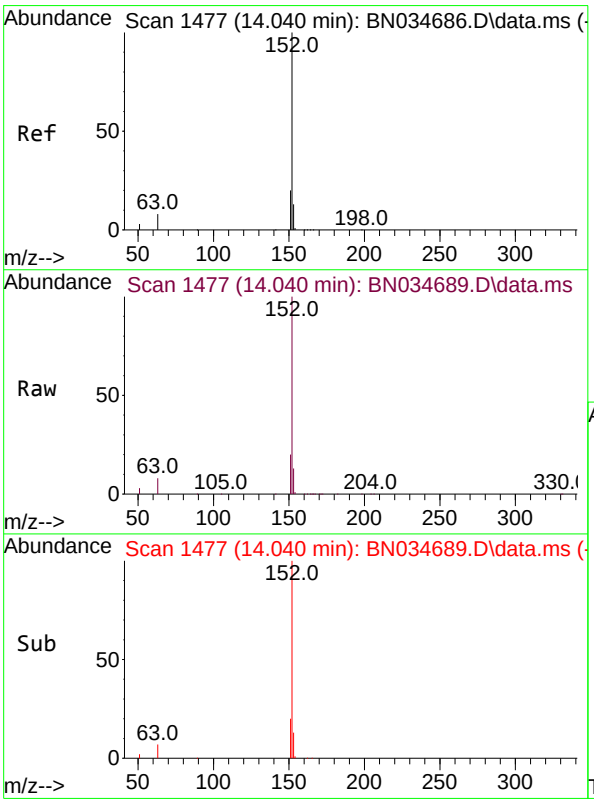
#15
2-Fluorobiphenyl
Concen: 3.125 ng
RT: 12.950 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:172 Resp: 126562

Ion	Ratio	Lower	Upper
172	100		
171	35.4	28.3	42.5
170	24.5	19.8	29.6

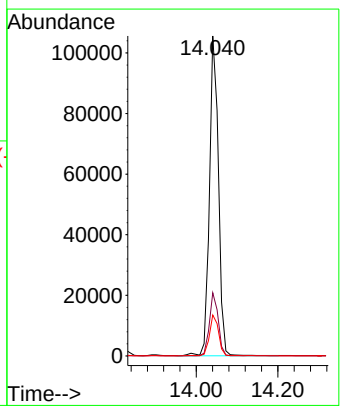


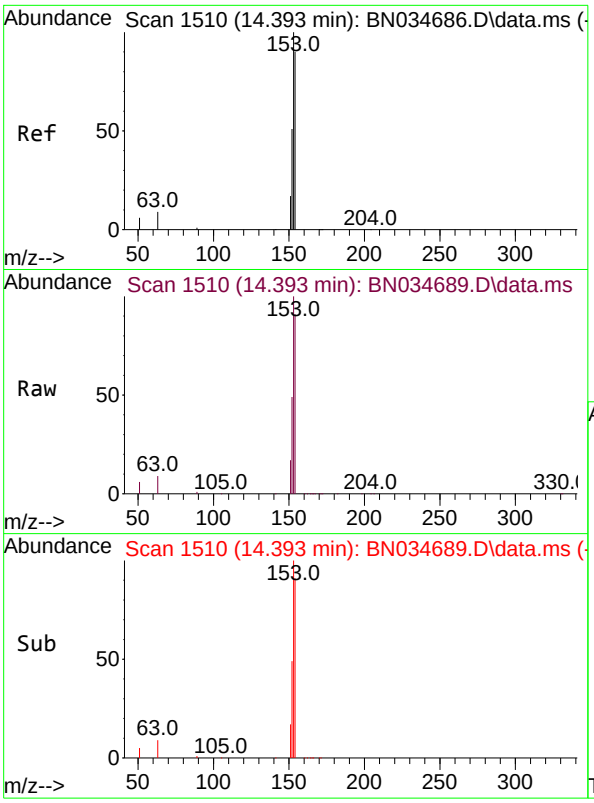


#16
Acenaphthylene
Concen: 3.270 ng
RT: 14.040 min Scan# 1477
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:152 Resp: 161452

Ion	Ratio	Lower	Upper
152	100		
151	19.3	15.6	23.4
153	12.9	10.6	15.8



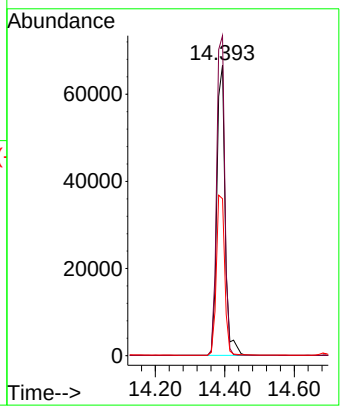


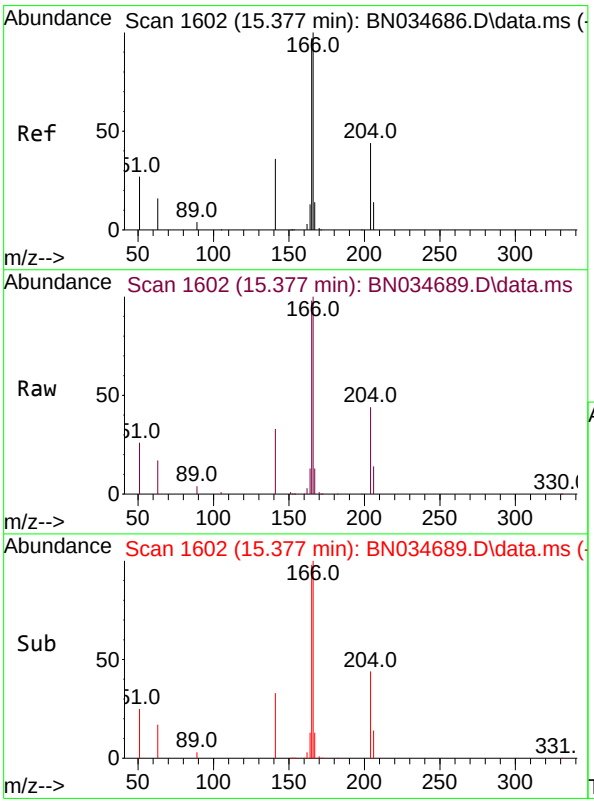
#17
Acenaphthene
Concen: 3.243 ng
RT: 14.393 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:154 Resp: 109212

Ion	Ratio	Lower	Upper
154	100		
153	108.5	88.2	132.2
152	55.7	46.9	70.3

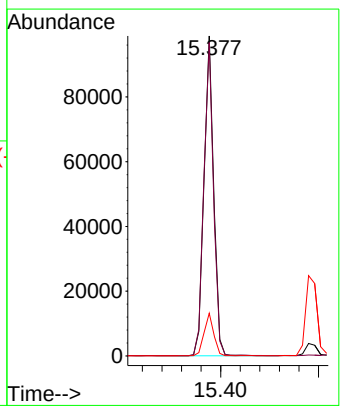


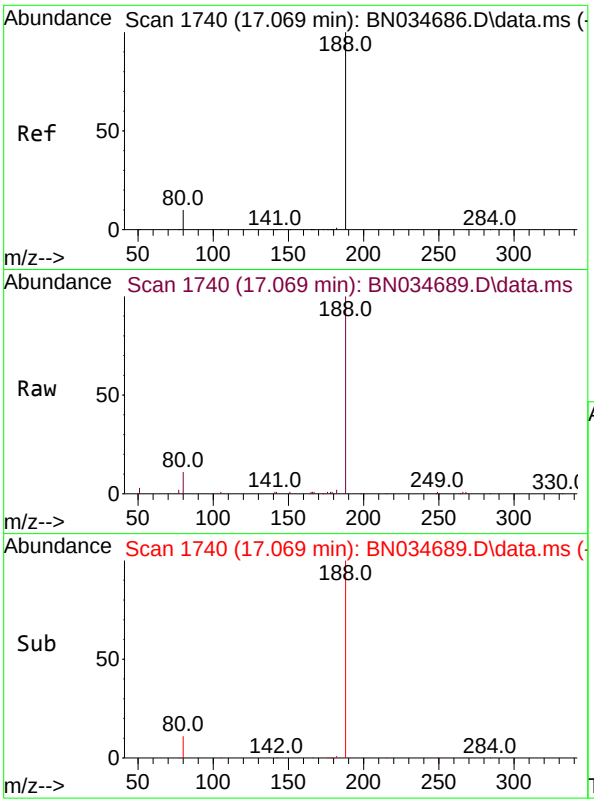


#18
Fluorene
Concen: 3.257 ng
RT: 15.377 min Scan# 1602
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:166 Resp: 136703

Ion	Ratio	Lower	Upper
166	100		
165	97.2	78.8	118.2
167	13.1	10.6	16.0



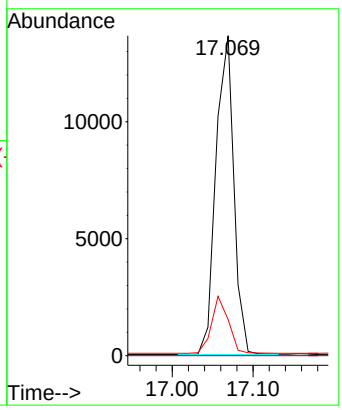


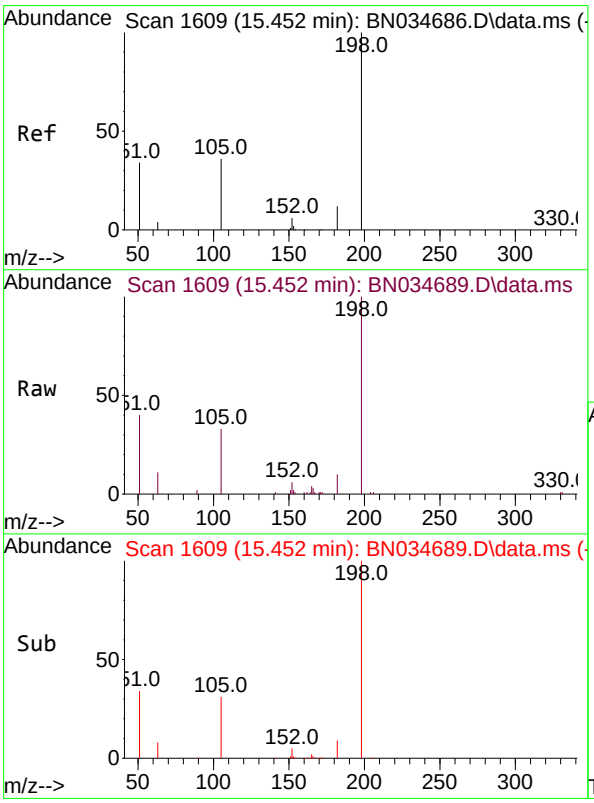
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.069 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:188 Resp: 21008

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.3	8.9	13.3

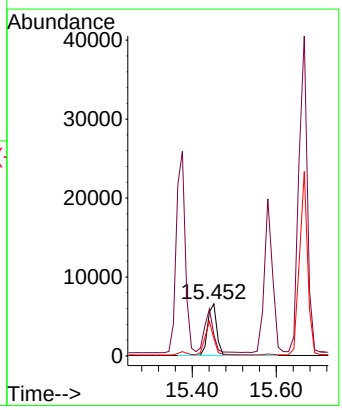


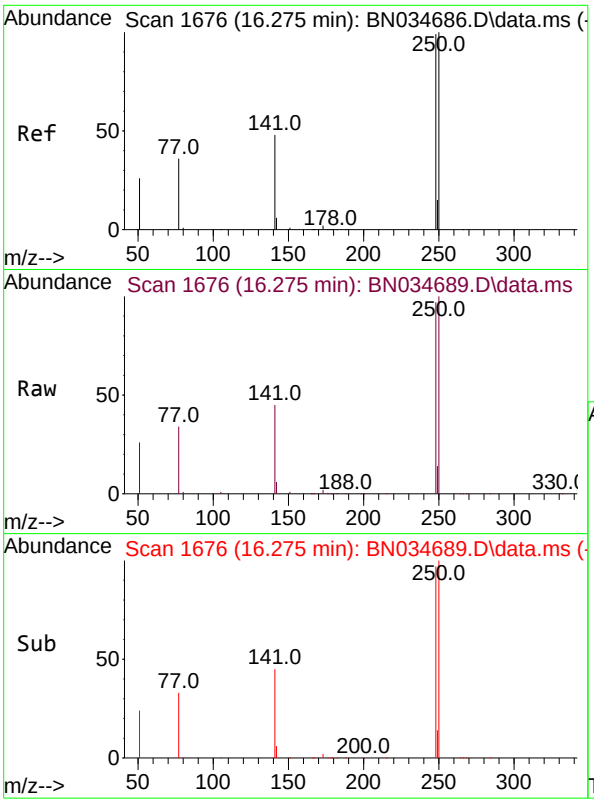


#20
4,6-Dinitro-2-methylphenol
Concen: 3.657 ng
RT: 15.452 min Scan# 1609
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:198 Resp: 10505

Ion	Ratio	Lower	Upper
198	100		
51	40.4	91.8	137.8#
105	33.3	44.3	66.5#



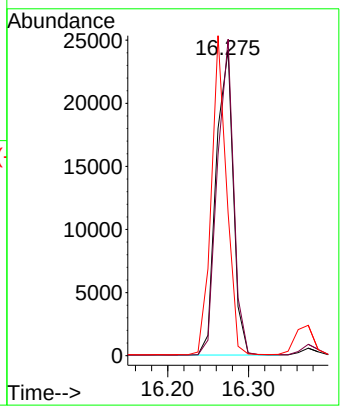


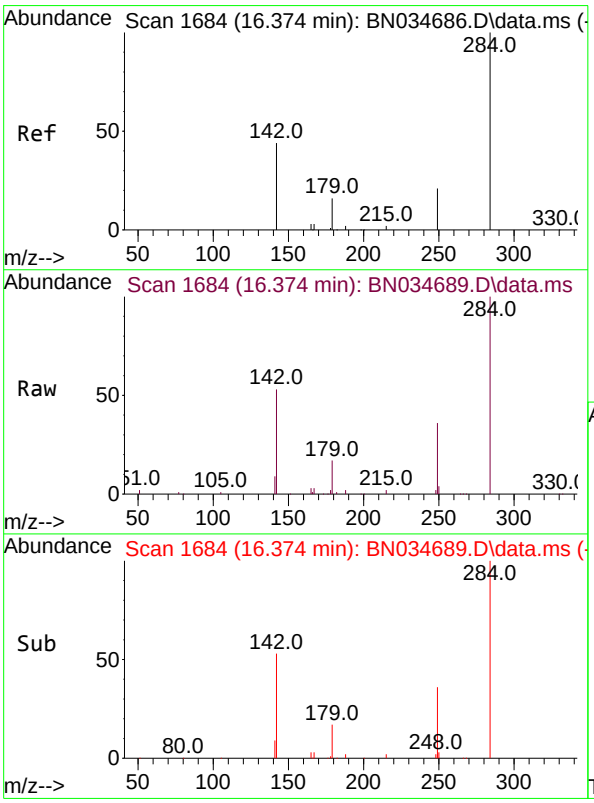
#21
4-Bromophenyl-phenylether
Concen: 3.098 ng
RT: 16.275 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:248 Resp: 35596

Ion	Ratio	Lower	Upper
248	100		
250	103.5	80.9	121.3
141	46.6	40.5	60.7

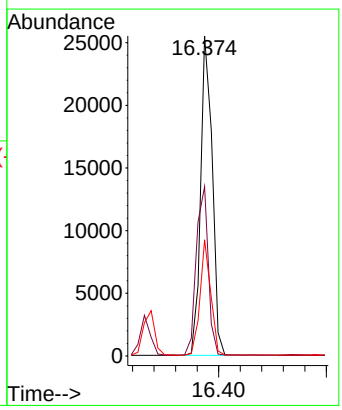


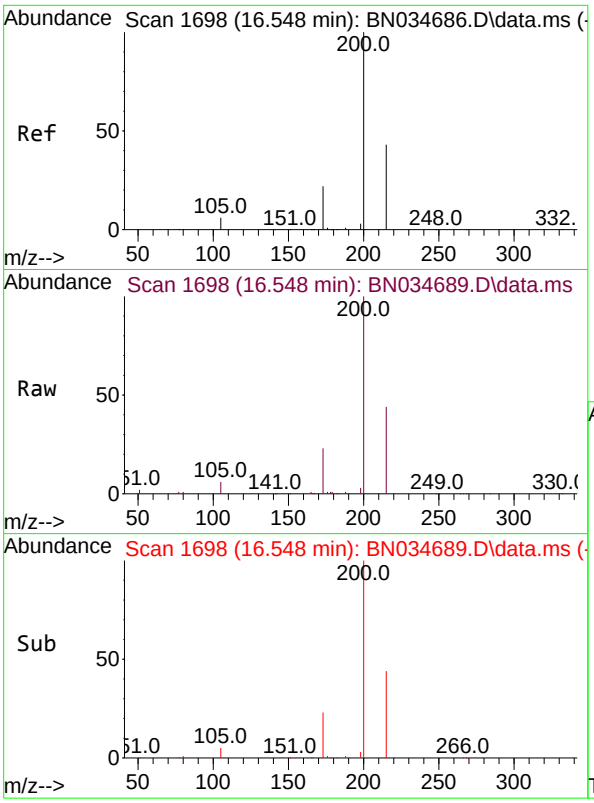


#22
Hexachlorobenzene
Concen: 2.981 ng
RT: 16.374 min Scan# 1684
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:284 Resp: 38020

Ion	Ratio	Lower	Upper
284	100		
142	55.0	43.6	65.4
249	33.4	26.6	40.0



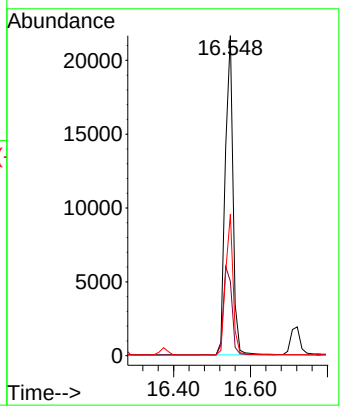


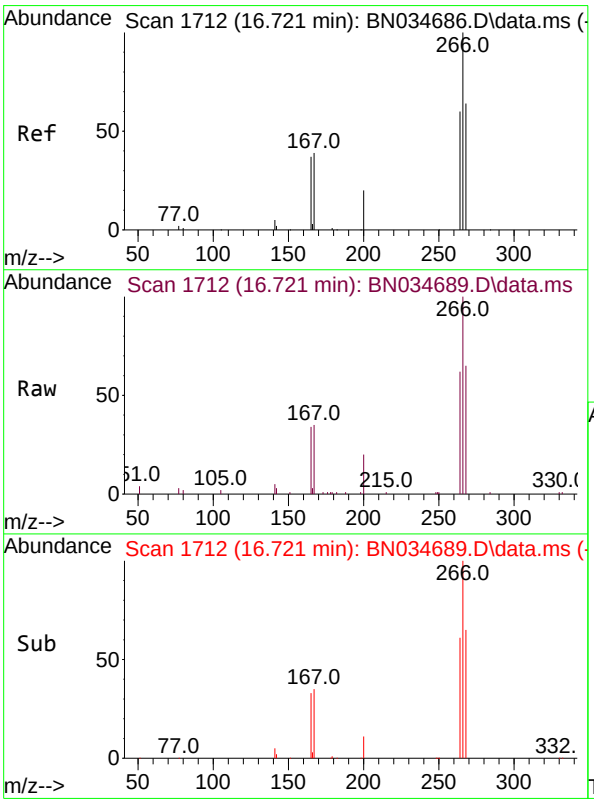
#23
Atrazine
Concen: 3.032 ng
RT: 16.548 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:200 Resp: 30485

Ion	Ratio	Lower	Upper
200	100		
173	23.2	19.7	29.5
215	44.2	35.7	53.5

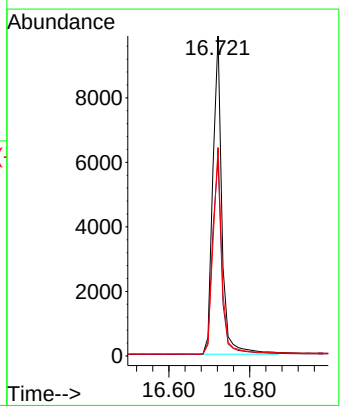


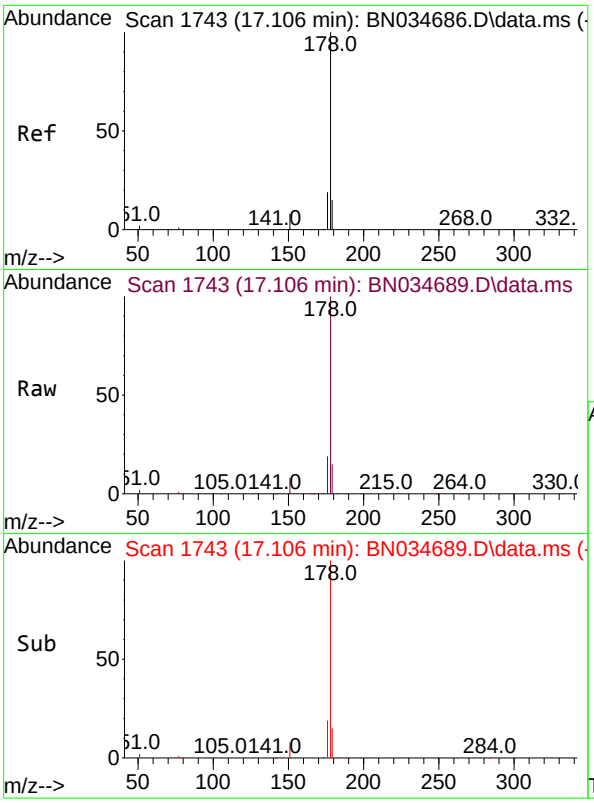


#24
Pentachlorophenol
Concen: 3.088 ng
RT: 16.721 min Scan# 1712
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:266 Resp: 15457

Ion	Ratio	Lower	Upper
266	100		
264	62.8	49.4	74.2
268	64.0	50.5	75.7



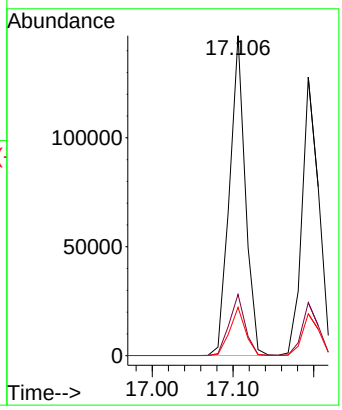


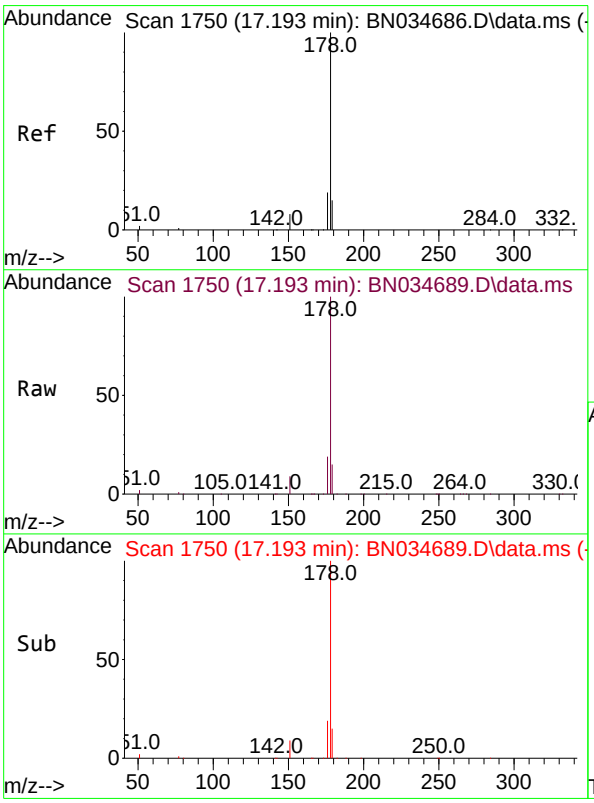
#25
Phenanthrene
Concen: 3.203 ng
RT: 17.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:178 Resp: 200178

Ion	Ratio	Lower	Upper
178	100		
176	19.2	15.4	23.2
179	15.0	12.2	18.4

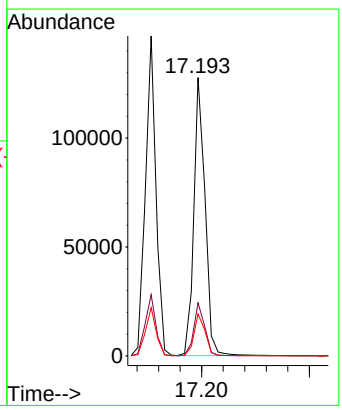


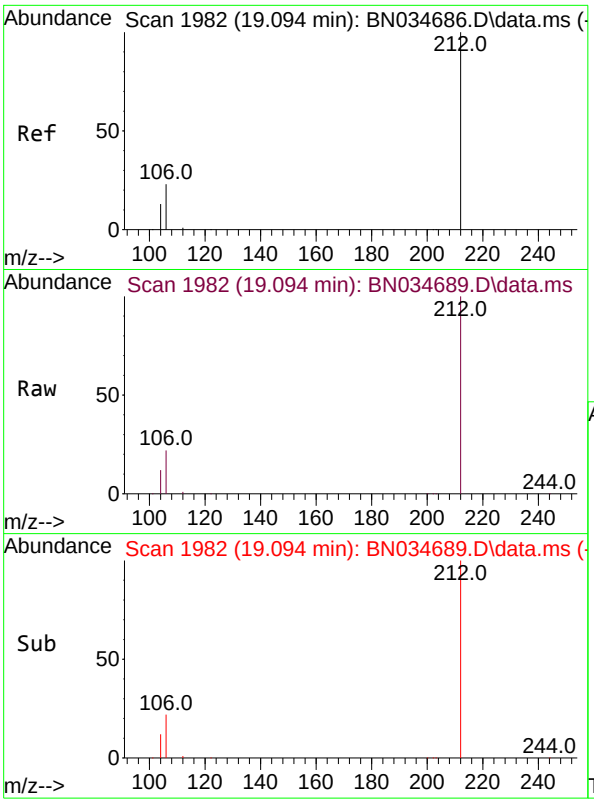


#26
Anthracene
Concen: 3.315 ng
RT: 17.193 min Scan# 1750
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:178 Resp: 185283

Ion	Ratio	Lower	Upper
178	100		
176	18.7	14.9	22.3
179	15.2	12.2	18.2



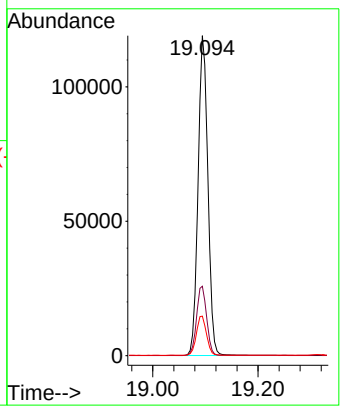


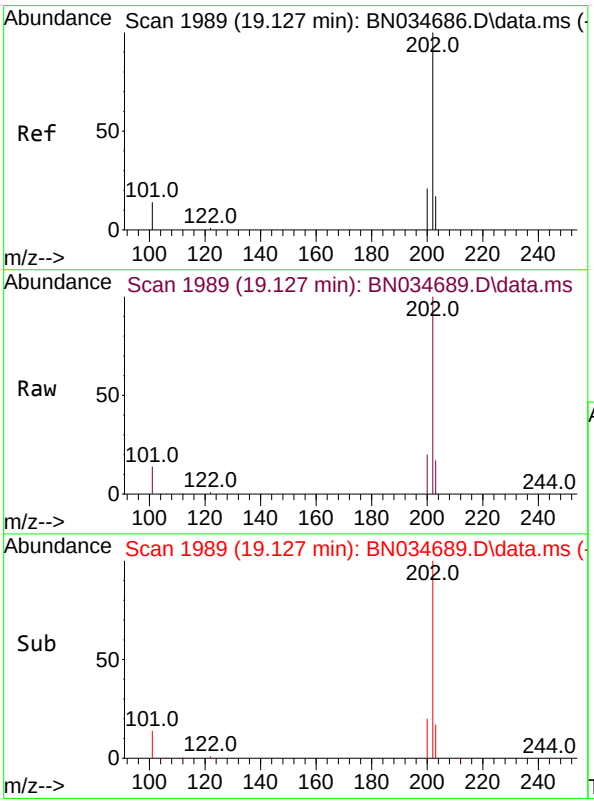
#27
Fluoranthene-d10
Concen: 2.983 ng
RT: 19.094 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:212 Resp: 153423

Ion	Ratio	Lower	Upper
212	100		
106	22.2	17.8	26.8
104	12.6	10.2	15.4

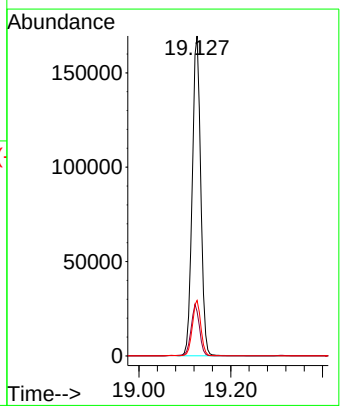


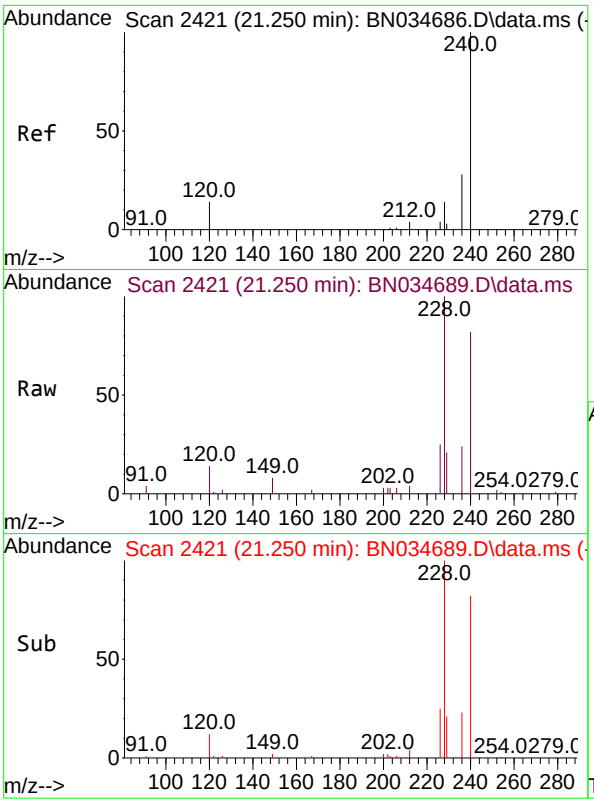


#28
Fluoranthene
Concen: 3.093 ng
RT: 19.127 min Scan# 1989
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:202 Resp: 216788

Ion	Ratio	Lower	Upper
202	100		
101	15.9	12.8	19.2
203	17.1	13.5	20.3



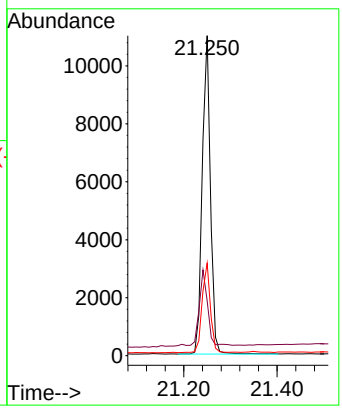


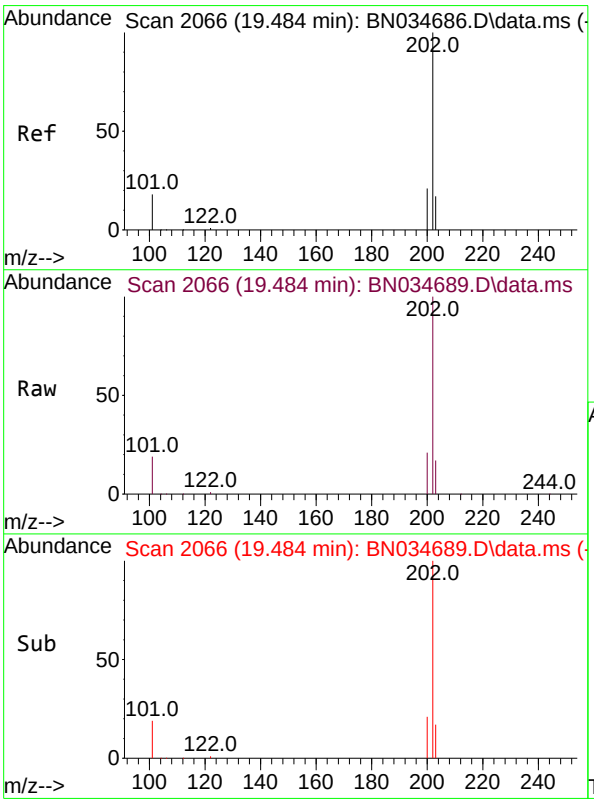
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.250 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:240 Resp: 13427

Ion	Ratio	Lower	Upper
240	100		
120	17.2	14.2	21.2
236	28.9	23.1	34.7

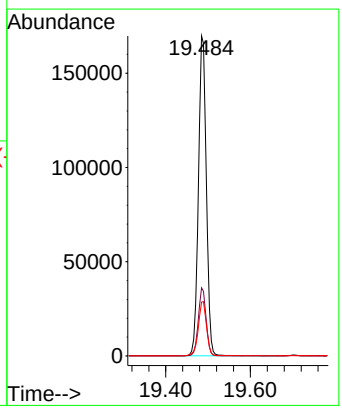


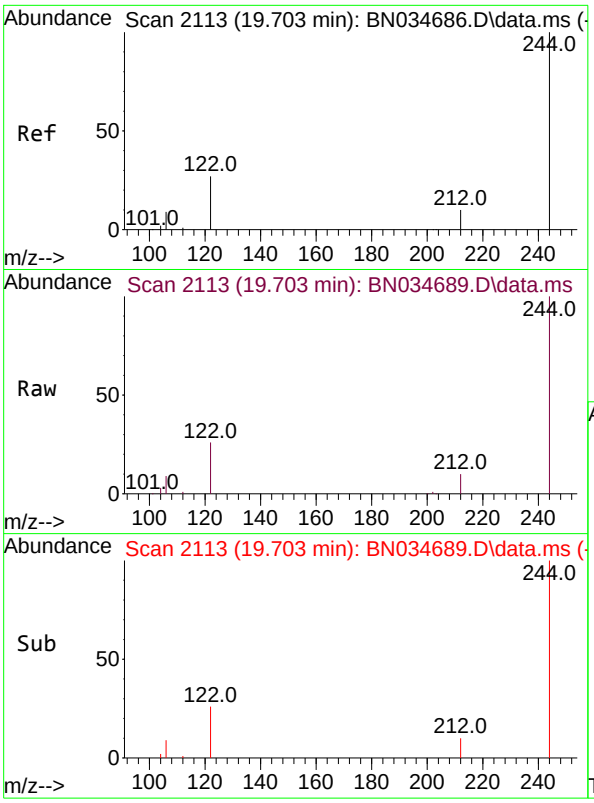


#30
Pyrene
Concen: 3.649 ng
RT: 19.484 min Scan# 2066
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:202 Resp: 219062

Ion	Ratio	Lower	Upper
202	100		
200	21.0	16.6	25.0
203	17.6	14.2	21.4



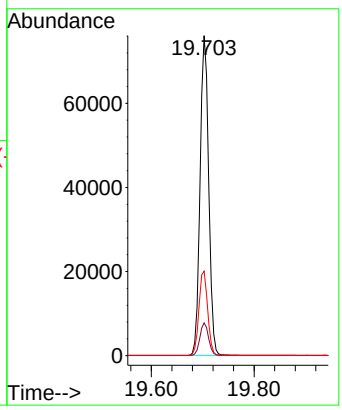


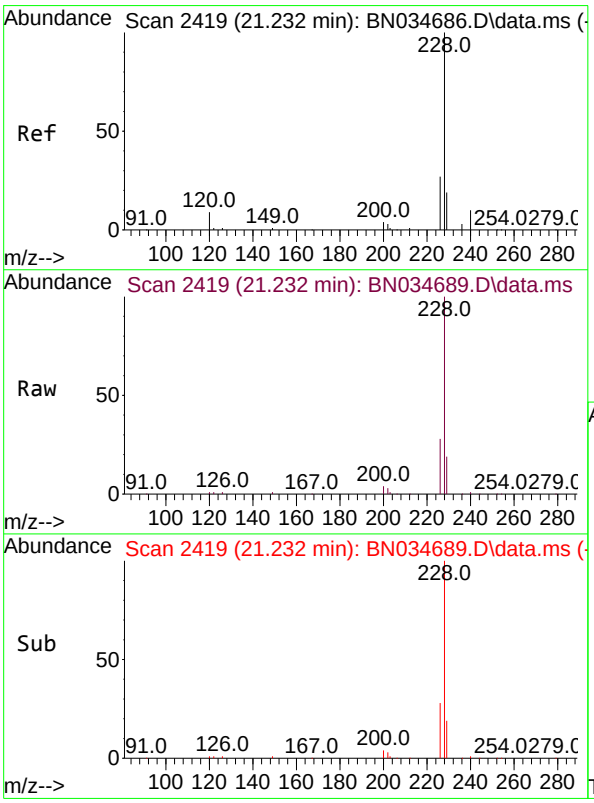
#31
Terphenyl-d14
Concen: 3.389 ng
RT: 19.703 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:244 Resp: 88081

Ion	Ratio	Lower	Upper
244	100		
212	10.2	8.6	13.0
122	26.4	22.3	33.5

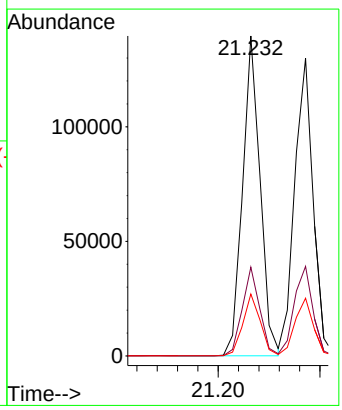


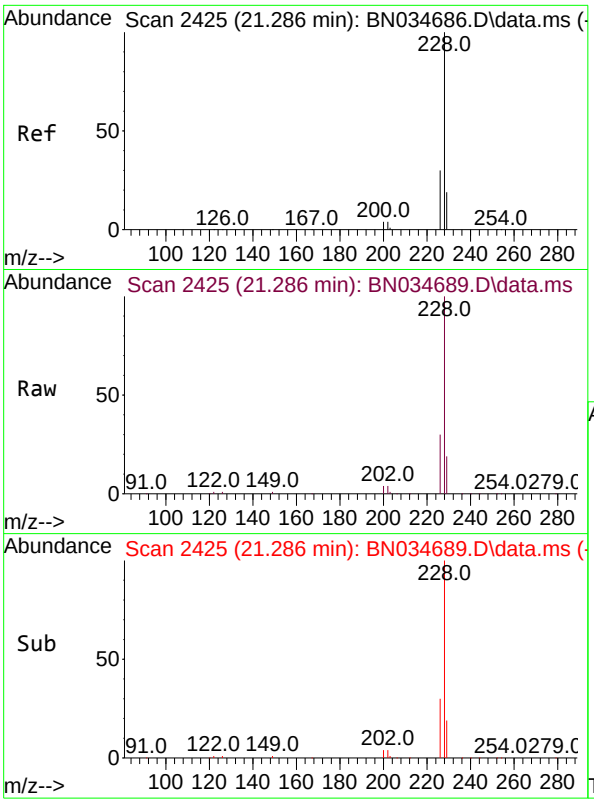


#32
Benzo(a)anthracene
Concen: 3.259 ng
RT: 21.232 min Scan# 2419
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:228 Resp: 166793

Ion	Ratio	Lower	Upper
228	100		
226	27.8	22.0	33.0
229	19.4	15.6	23.4



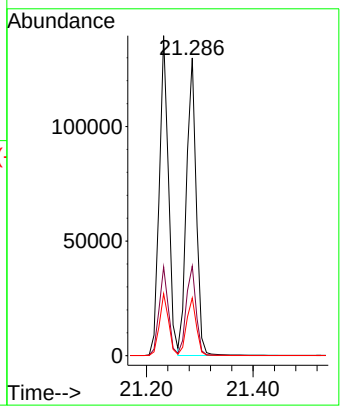


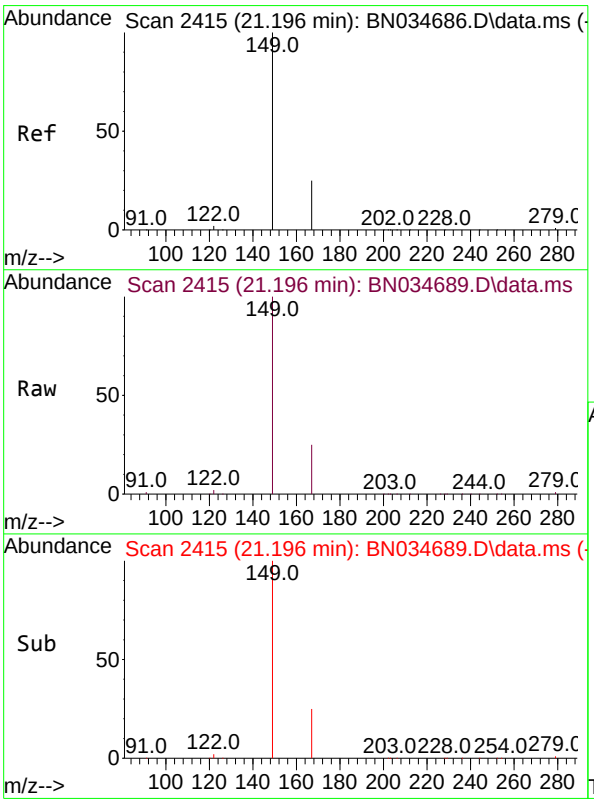
#33
Chrysene
Concen: 3.250 ng
RT: 21.286 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:228 Resp: 164703

Ion	Ratio	Lower	Upper
228	100		
226	30.1	24.1	36.1
229	19.4	15.8	23.8

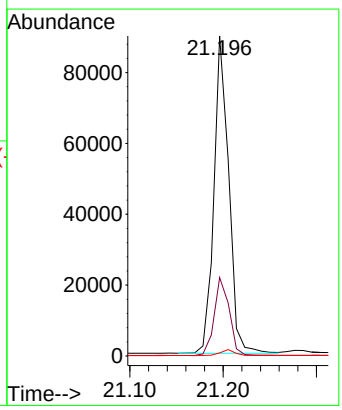


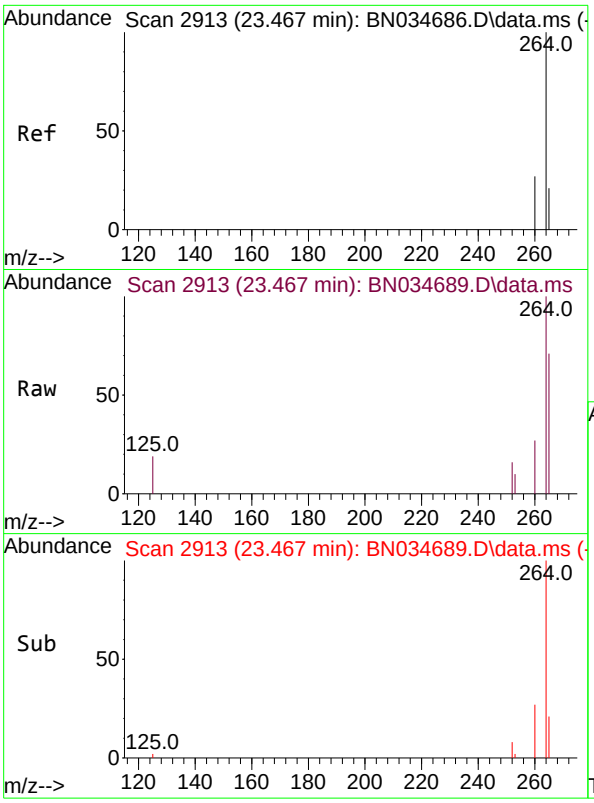


#34
Bis(2-ethylhexyl)phthalate
Concen: 2.819 ng
RT: 21.196 min Scan# 2415
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:149 Resp: 98247

Ion	Ratio	Lower	Upper
149	100		
167	25.0	19.7	29.5
279	1.8	1.8	2.6#



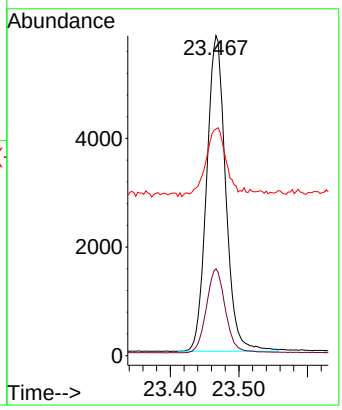


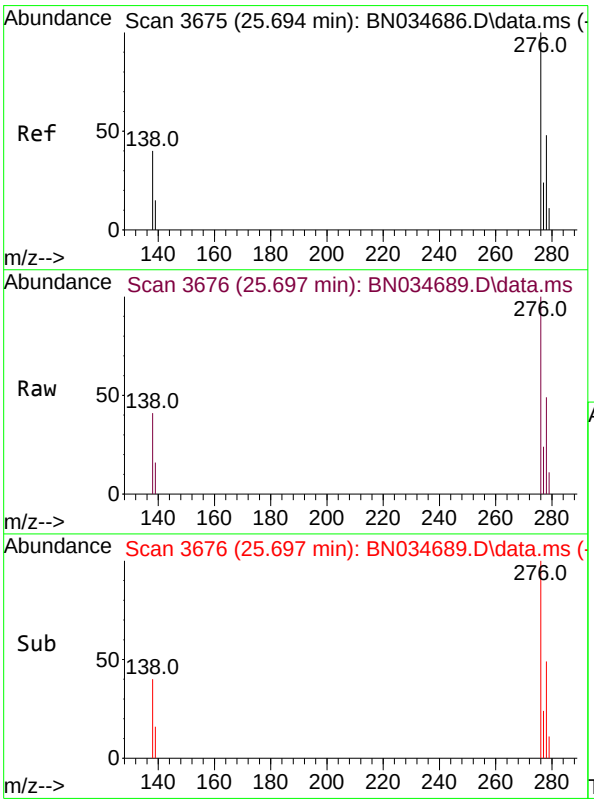
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.467 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:264 Resp: 11211

Ion	Ratio	Lower	Upper
264	100		
260	27.2	21.9	32.9
265	70.8	60.6	91.0

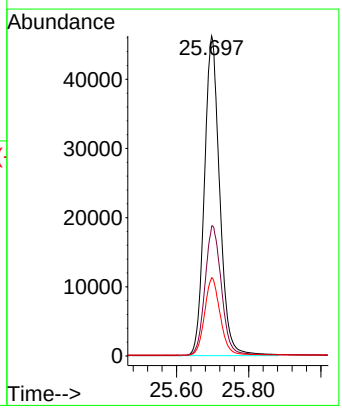


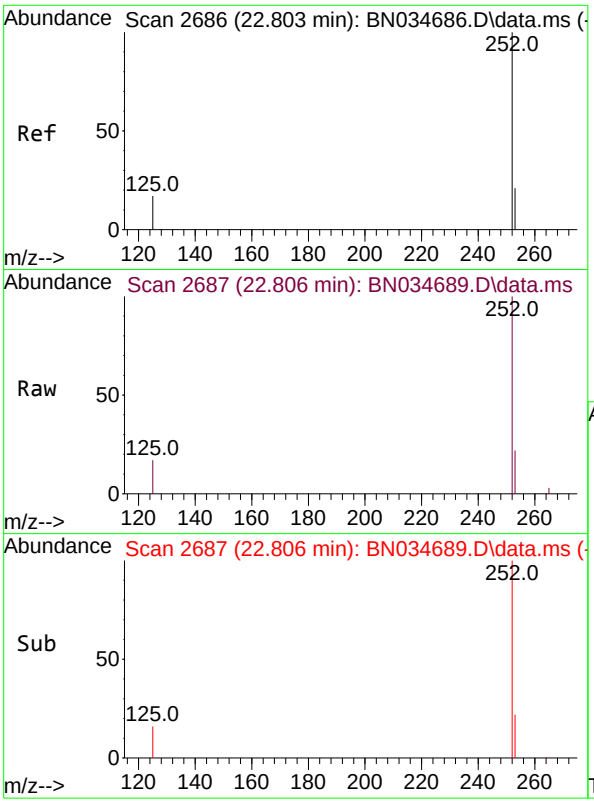


#36
Indeno(1,2,3-cd)pyrene
Concen: 3.150 ng
RT: 25.697 min Scan# 3676
Delta R.T. 0.003 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:276 Resp: 136074

Ion	Ratio	Lower	Upper
276	100		
138	43.2	35.1	52.7
277	24.6	19.7	29.5



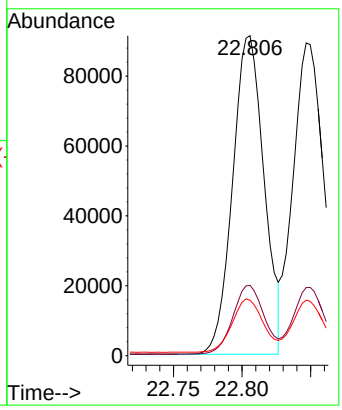


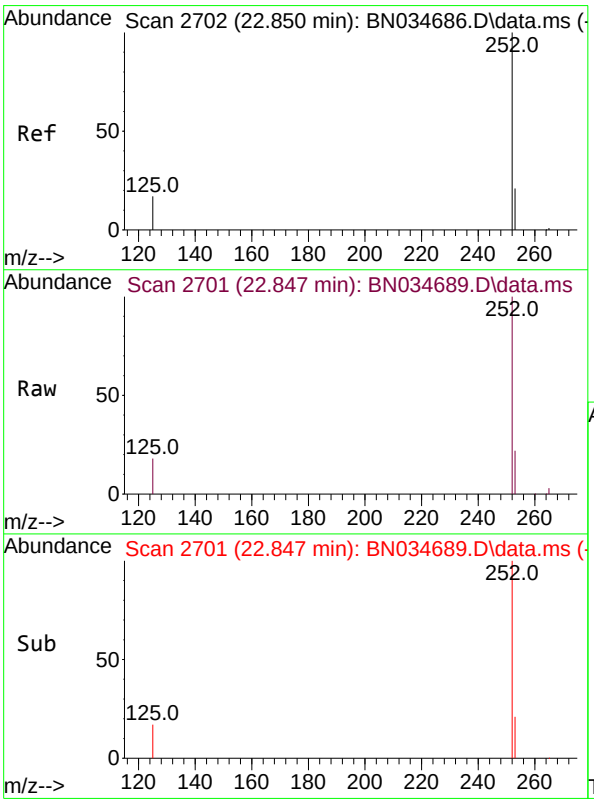
#37
Benzo(b)fluoranthene
Concen: 3.574 ng
RT: 22.806 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:252 Resp: 144801

Ion	Ratio	Lower	Upper
252	100		
253	22.0	20.0	30.0
125	17.3	20.9	31.3#

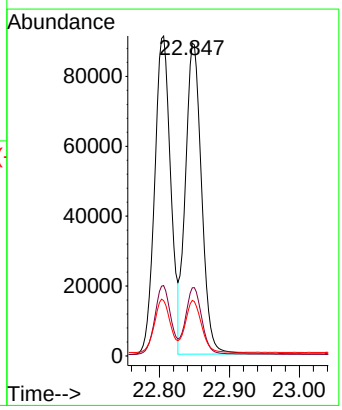


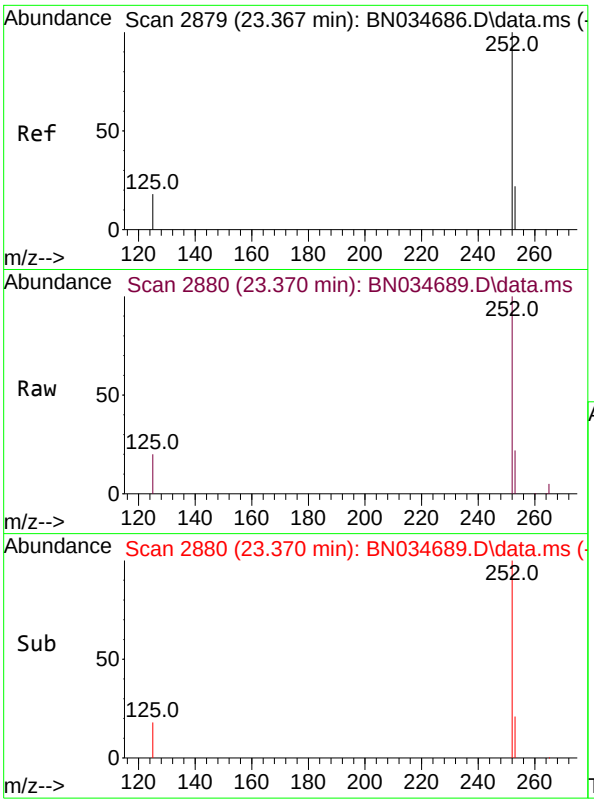


#38
Benzo(k)fluoranthene
Concen: 3.620 ng
RT: 22.847 min Scan# 2701
Delta R.T. -0.003 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:252 Resp: 143101

Ion	Ratio	Lower	Upper
252	100		
253	21.8	20.6	31.0
125	17.7	21.6	32.4#



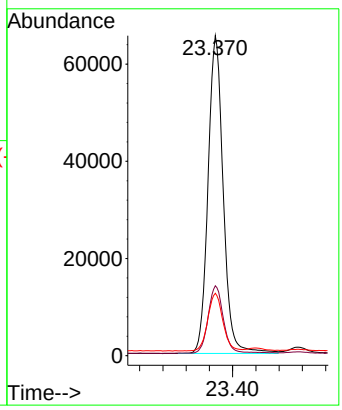


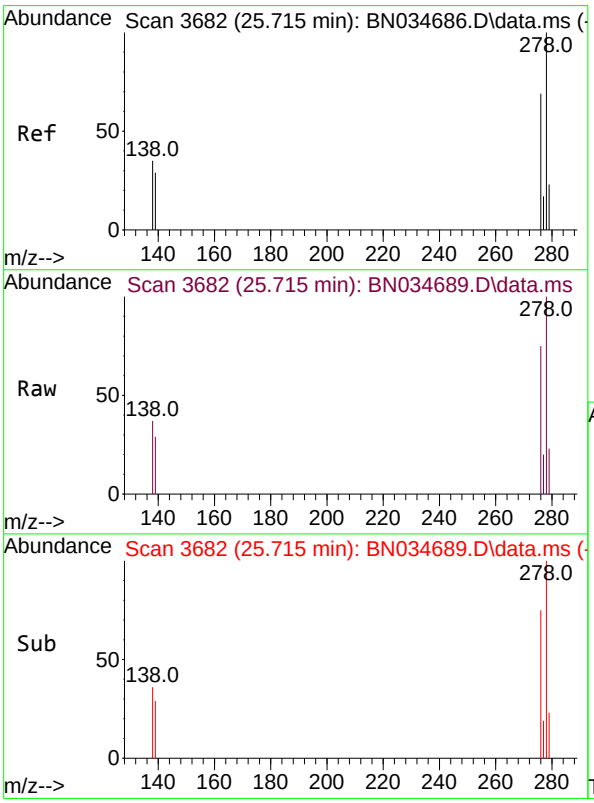
#39
Benzo(a)pyrene
Concen: 3.448 ng
RT: 23.370 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:252 Resp: 118654

Ion	Ratio	Lower	Upper
252	100		
253	21.8	22.2	33.4#
125	19.5	26.0	39.0#

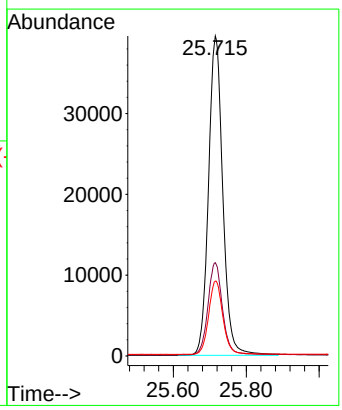


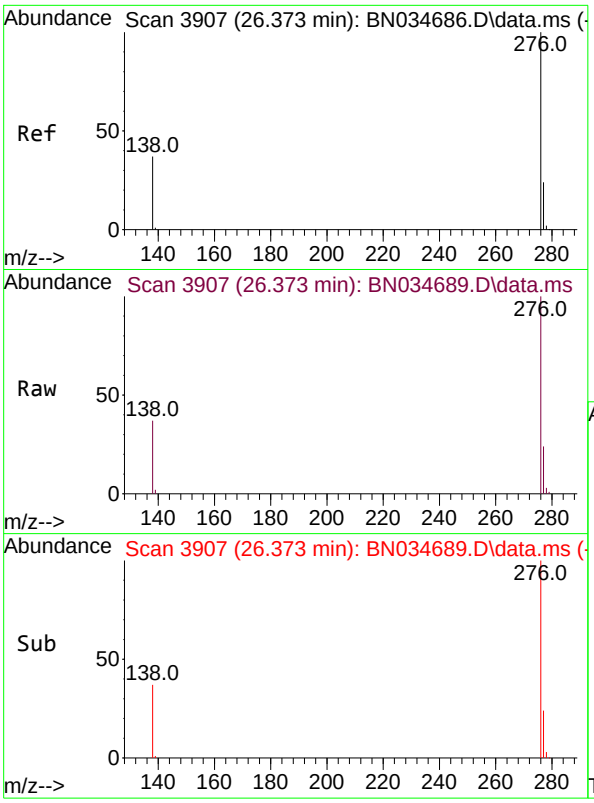


#40
Dibenzo(a,h)anthracene
Concen: 3.175 ng
RT: 25.715 min Scan# 3682
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Tgt Ion:278 Resp: 107743

Ion	Ratio	Lower	Upper
278	100		
139	29.1	25.4	38.2
279	23.4	22.4	33.6



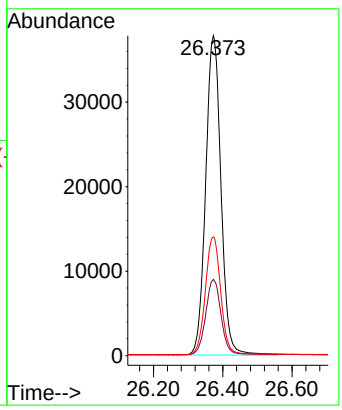


#41
Benzo(g,h,i)perylene
Concen: 3.089 ng
RT: 26.373 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN034689.D
Acq: 24 Oct 2024 12:11

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:276 Resp: 115668

Ion	Ratio	Lower	Upper
276	100		
277	23.9	21.3	31.9
138	37.1	31.9	47.9



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034690.D
Acq On : 24 Oct 2024 12:48
Operator : RC/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Quant Time: Oct 24 13:13:27 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 12:41:40 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.712	152	7073	0.400	ng		0.00
7) Naphthalene-d8	10.479	136	20368	0.400	ng		0.00
13) Acenaphthene-d10	14.325	164	10267	0.400	ng		0.00
19) Phenanthrene-d10	17.064	188	20306	0.400	ng	#	0.00
29) Chrysene-d12	21.248	240	12752	0.400	ng		0.00
35) Perylene-d12	23.464	264	10972	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.322	112	104062	4.808	ng		0.00
5) Phenol-d6	6.882	99	141189	5.100	ng		0.00
8) Nitrobenzene-d5	8.846	82	88506	5.246	ng		0.00
11) 2-Methylnaphthalene-d10	12.071	152	144128	5.026	ng		0.00
14) 2,4,6-Tribromophenol	15.810	330	18762	4.310	ng		0.00
15) 2-Fluorobiphenyl	12.957	172	205465	5.077	ng		0.00
27) Fluoranthene-d10	19.097	212	231016	4.647	ng		0.00
31) Terphenyl-d14	19.705	244	130770	5.298	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.285	88	42348	4.917	ng		99
3) n-Nitrosodimethylamine	3.581	42	66202	6.357	ng	#	96
6) bis(2-Chloroethyl)ether	7.142	93	107896	5.090	ng		99
9) Naphthalene	10.532	128	280398	4.992	ng		99
10) Hexachlorobutadiene	10.831	225	40523	4.502	ng	#	99
12) 2-Methylnaphthalene	12.147	142	179479	5.055	ng		99
16) Acenaphthylene	14.047	152	264846	5.368	ng		99
17) Acenaphthene	14.390	154	175767	5.223	ng		97
18) Fluorene	15.373	166	213452	5.090	ng		99
20) 4,6-Dinitro-2-methylph...	15.448	198	17103	6.160	ng	#	61
21) 4-Bromophenyl-phenylether	16.269	248	55507	4.998	ng	#	81
22) Hexachlorobenzene	16.381	284	58013	4.706	ng		99
23) Atrazine	16.542	200	45354	4.667	ng	#	92
24) Pentachlorophenol	16.716	266	25315	5.233	ng		99
25) Phenanthrene	17.101	178	308331	5.103	ng		99
26) Anthracene	17.200	178	287167	5.315	ng		100
28) Fluoranthene	19.124	202	322212	4.756	ng		100
30) Pyrene	19.487	202	326483	5.726	ng		100
32) Benzo(a)anthracene	21.230	228	250242	5.148	ng		100
33) Chrysene	21.283	228	244106	5.072	ng		100
34) Bis(2-ethylhexyl)phtha...	21.194	149	164213	4.961	ng		99
36) Indeno(1,2,3-cd)pyrene	25.695	276	222798	5.271	ng		99
37) Benzo(b)fluoranthene	22.801	252	221458	5.585	ng	#	88
38) Benzo(k)fluoranthene	22.847	252	221207	5.717	ng	#	86
39) Benzo(a)pyrene	23.371	252	185096	5.496	ng	#	82
40) Dibenzo(a,h)anthracene	25.716	278	176660	5.319	ng		93
41) Benzo(g,h,i)perylene	26.370	276	189041	5.158	ng		95

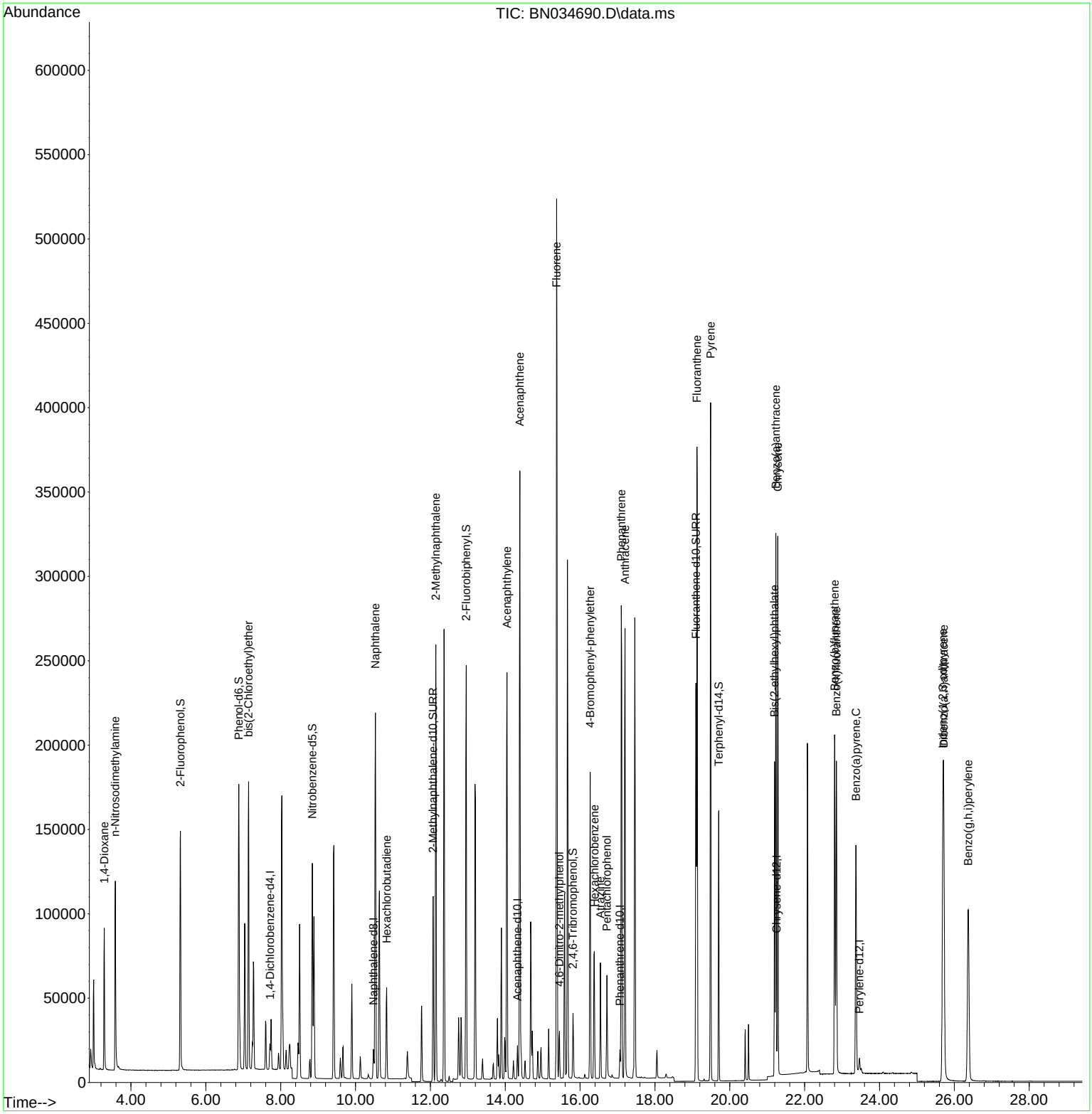
(#) = qualifier out of range (m) = manual integration (+) = signals summed

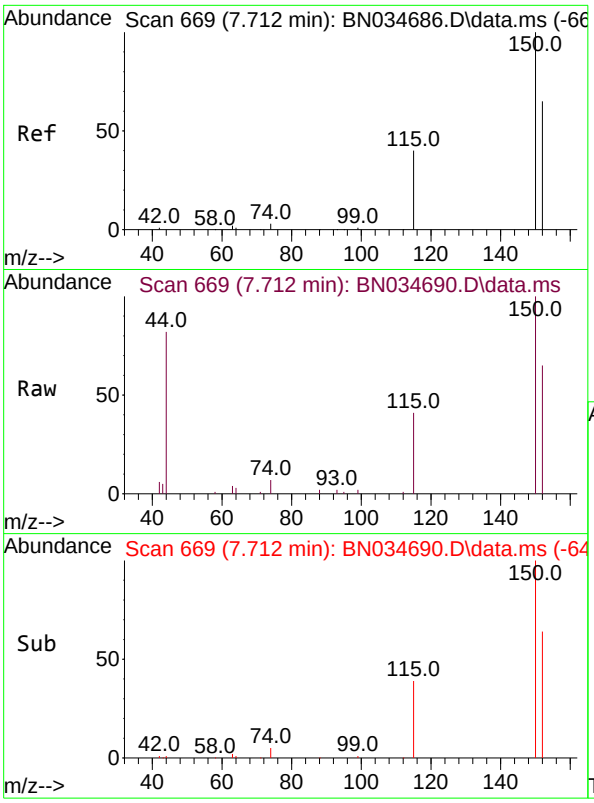
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034690.D
Acq On : 24 Oct 2024 12:48
Operator : RC/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Quant Time: Oct 24 13:13:27 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 12:41:40 2024
Response via : Initial Calibration



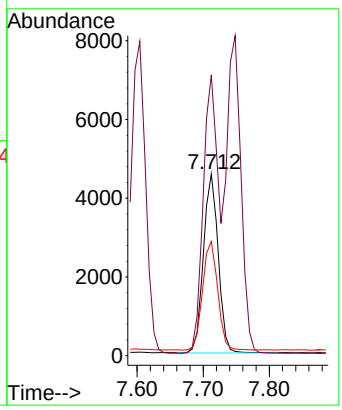


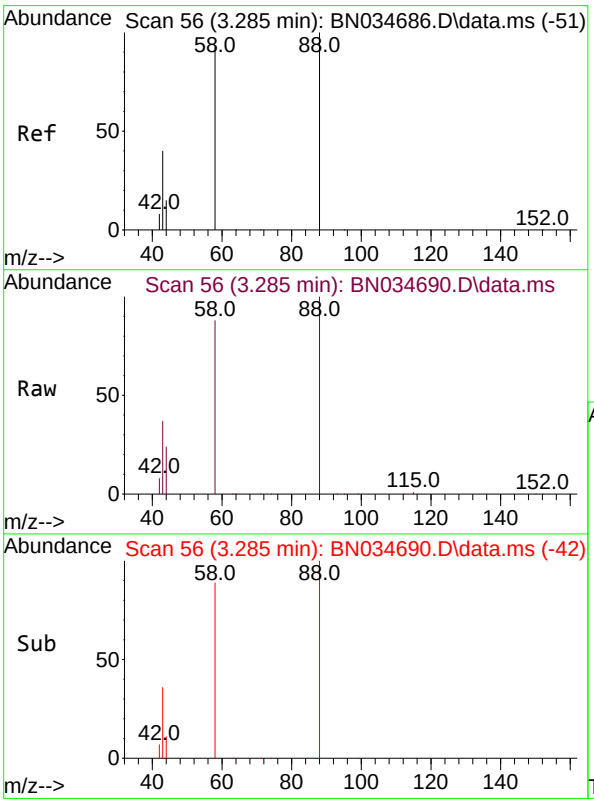
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:152 Resp: 7073

Ion	Ratio	Lower	Upper
152	100		
150	154.5	122.7	184.1
115	62.9	51.0	76.6

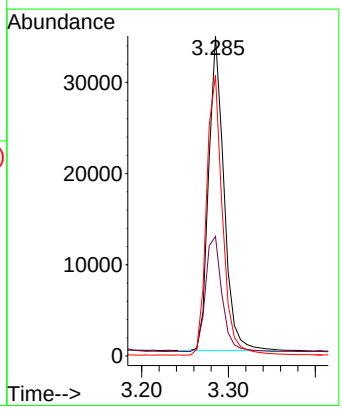


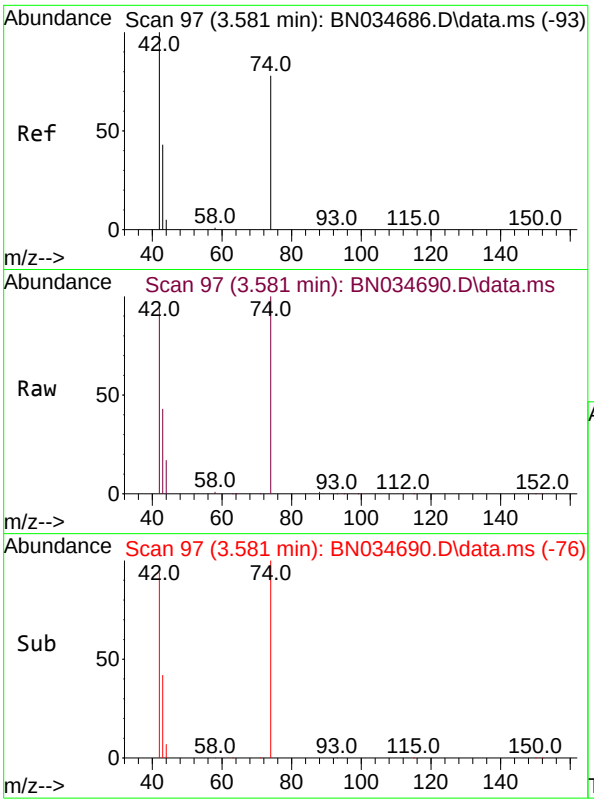


#2
1,4-Dioxane
Concen: 4.917 ng
RT: 3.285 min Scan# 56
Delta R.T. 0.000 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion: 88 Resp: 42348

Ion	Ratio	Lower	Upper
88	100		
43	39.3	32.1	48.1
58	92.9	73.7	110.5



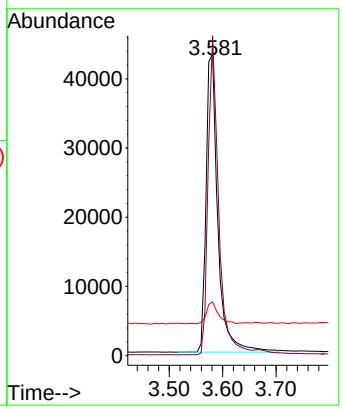


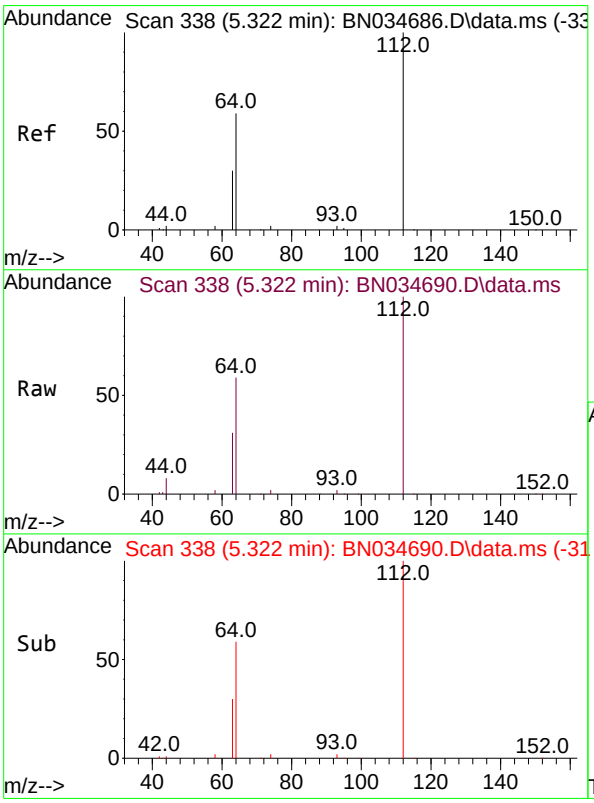
#3
n-Nitrosodimethylamine
Concen: 6.357 ng
RT: 3.581 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion: 42 Resp: 66202

Ion	Ratio	Lower	Upper
42	100		
74	95.6	77.2	115.8
44	7.1	13.4	20.2#

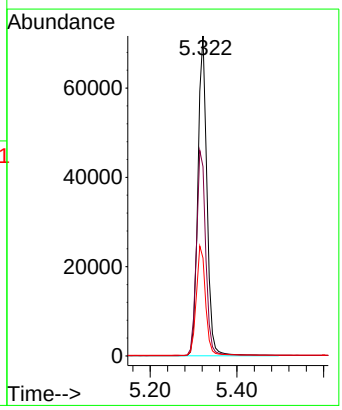


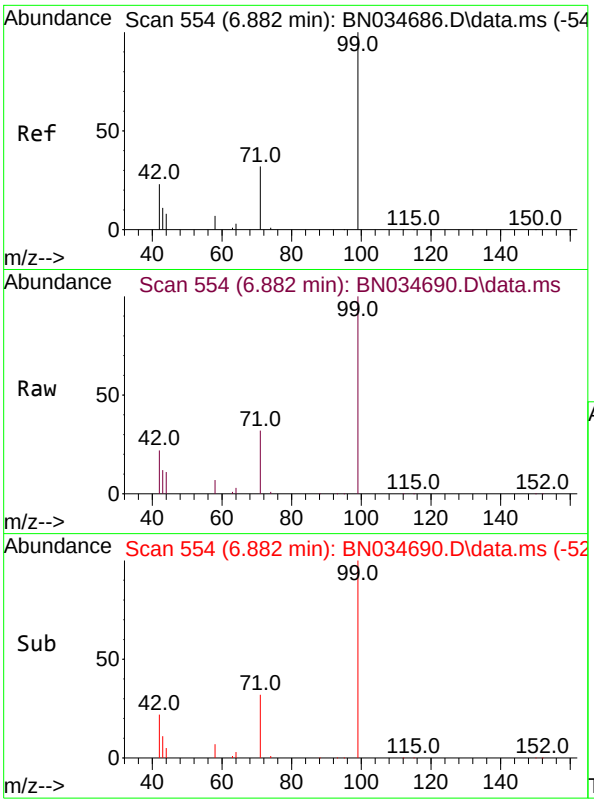


#4
2-Fluorophenol
Concen: 4.808 ng
RT: 5.322 min Scan# 338
Delta R.T. 0.000 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:112 Resp: 104062

Ion	Ratio	Lower	Upper
112	100		
64	66.0	53.0	79.6
63	34.7	27.6	41.4



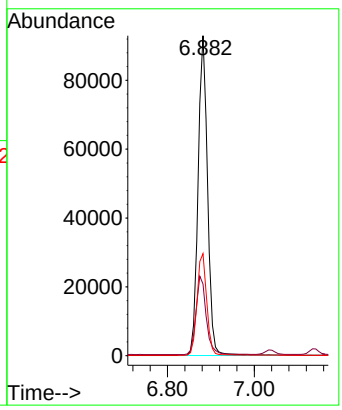


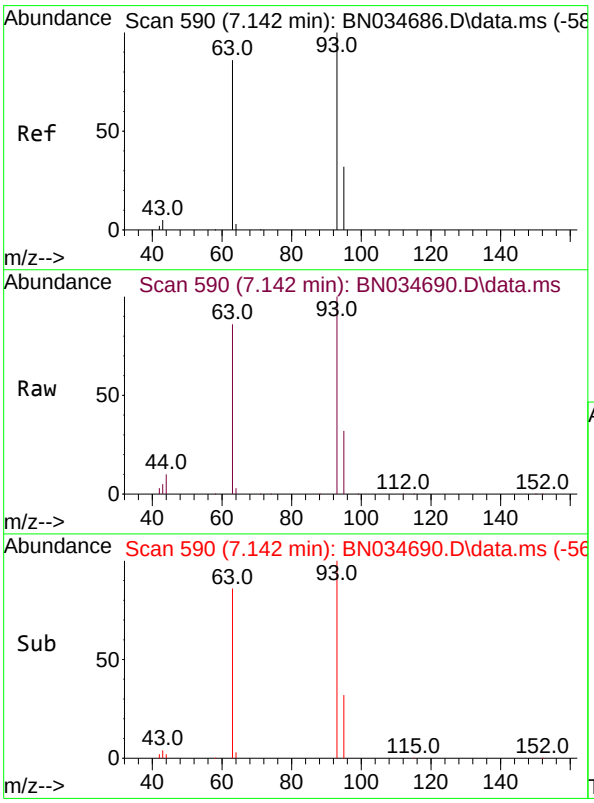
#5
Phenol-d6
Concen: 5.100 ng
RT: 6.882 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion: 99 Resp: 141189

Ion	Ratio	Lower	Upper
99	100		
42	26.5	21.8	32.8
71	32.9	26.6	40.0

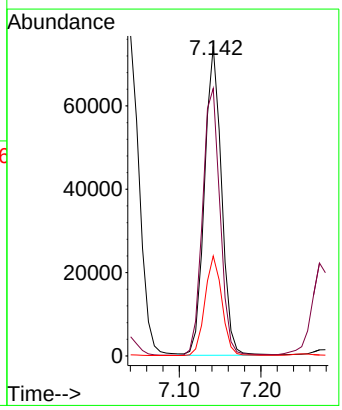


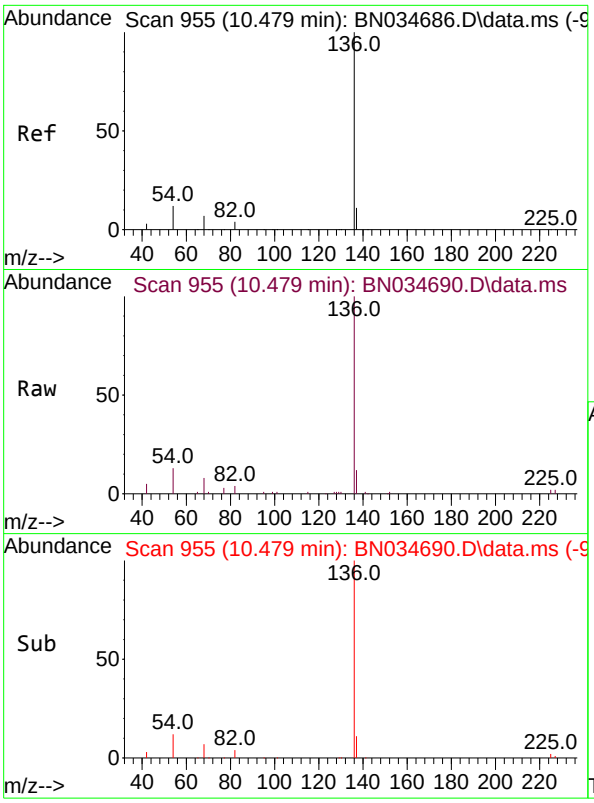


#6
bis(2-Chloroethyl)ether
Concen: 5.090 ng
RT: 7.142 min Scan# 590
Delta R.T. 0.000 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion: 93 Resp: 107896

Ion	Ratio	Lower	Upper
93	100		
63	88.8	71.5	107.3
95	32.1	25.8	38.6



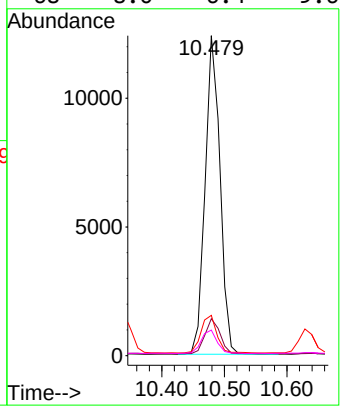


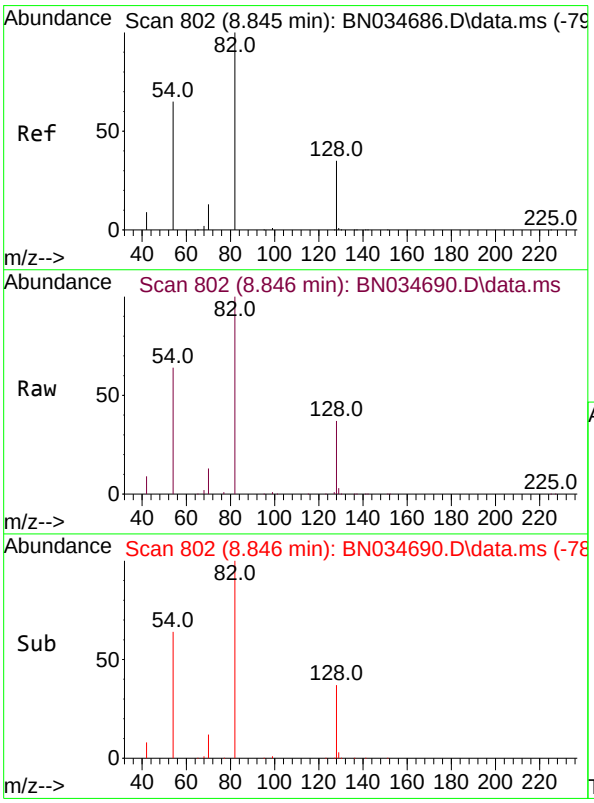
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:136 Resp: 20368

Ion	Ratio	Lower	Upper
136	100		
137	11.6	9.1	13.7
54	12.6	9.8	14.8
68	8.0	6.4	9.6

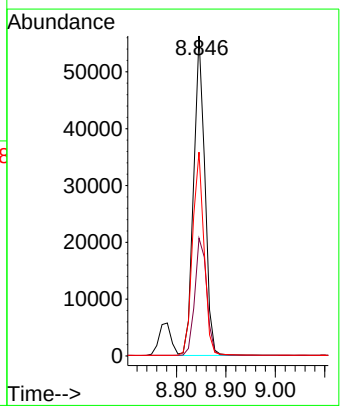


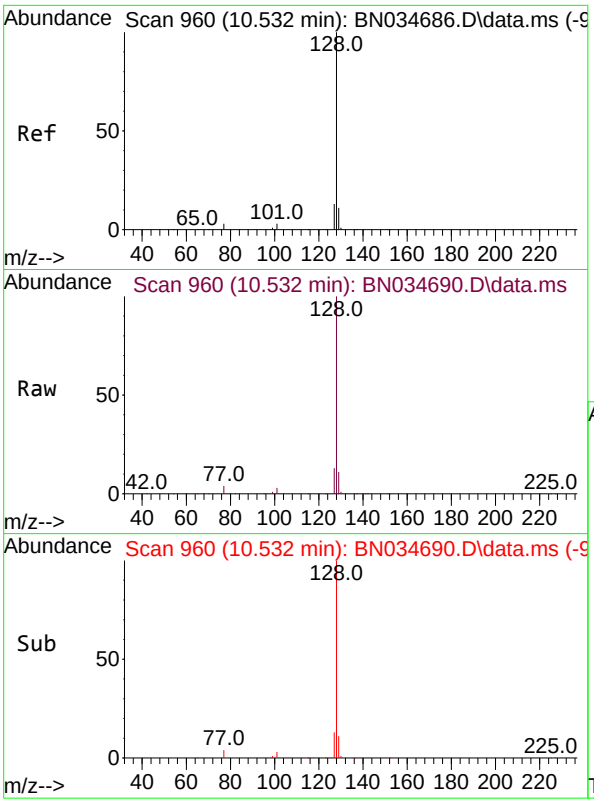


#8
Nitrobenzene-d5
Concen: 5.246 ng
RT: 8.846 min Scan# 802
Delta R.T. 0.000 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion: 82 Resp: 88506

Ion	Ratio	Lower	Upper
82	100		
128	36.8	29.7	44.5
54	63.7	53.0	79.6



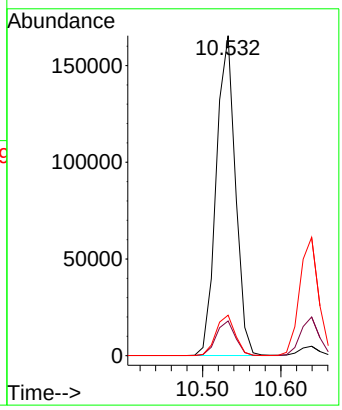


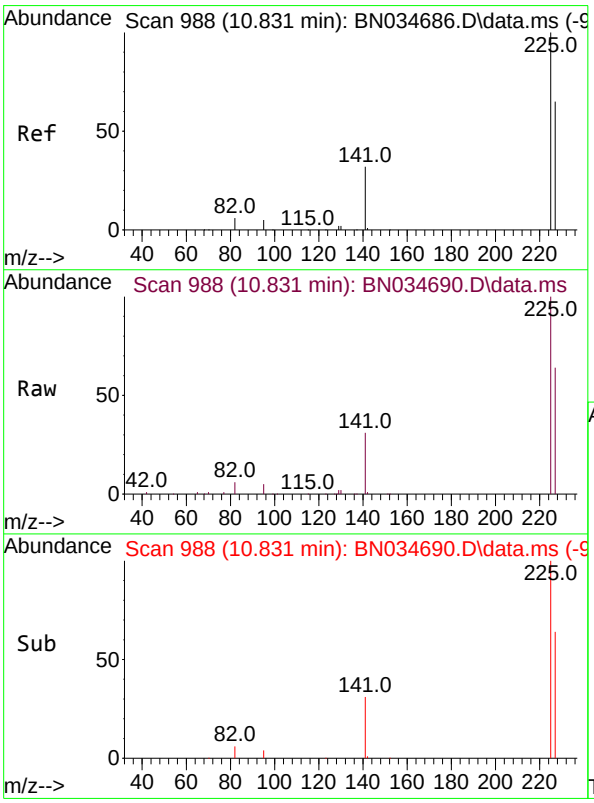
#9
Naphthalene
Concen: 4.992 ng
RT: 10.532 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:128 Resp: 280398

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

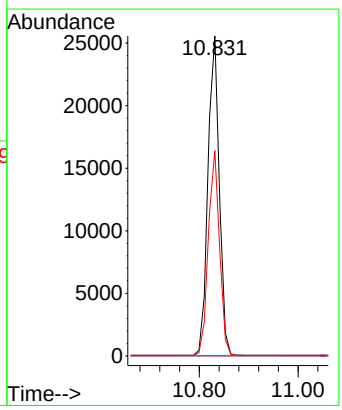


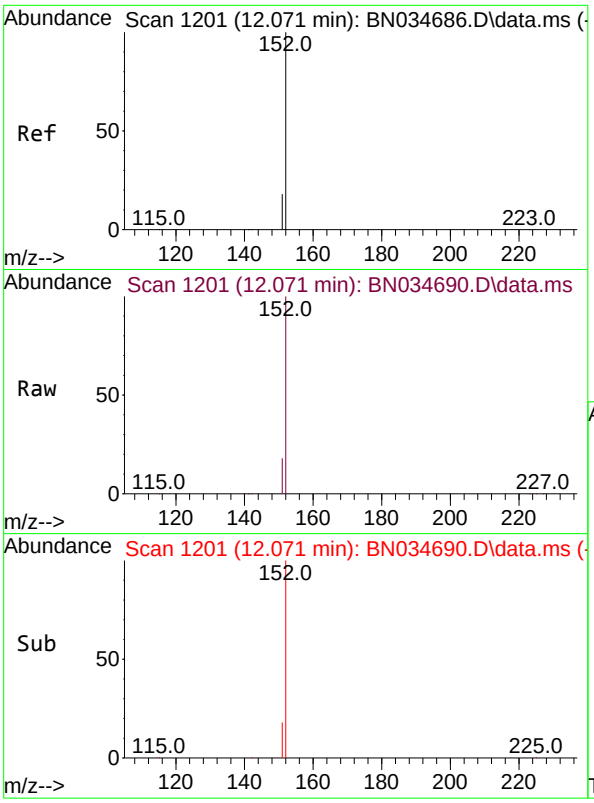


#10
Hexachlorobutadiene
Concen: 4.502 ng
RT: 10.831 min Scan# 988
Delta R.T. 0.000 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:225 Resp: 40523

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.3	51.4	77.0



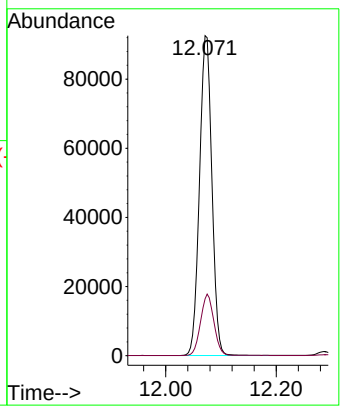


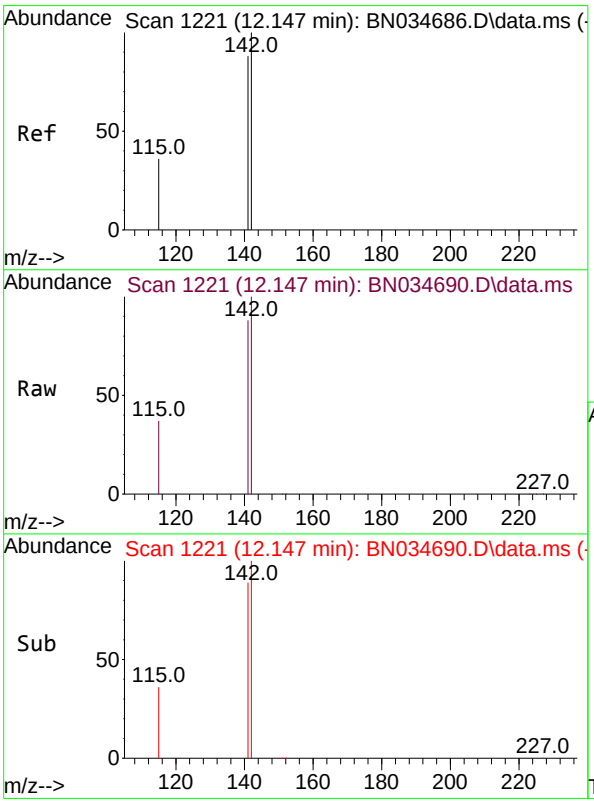
#11
2-Methylnaphthalene-d10
Concen: 5.026 ng
RT: 12.071 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:152 Resp: 144128

Ion	Ratio	Lower	Upper
152	100		
151	20.6	16.7	25.1

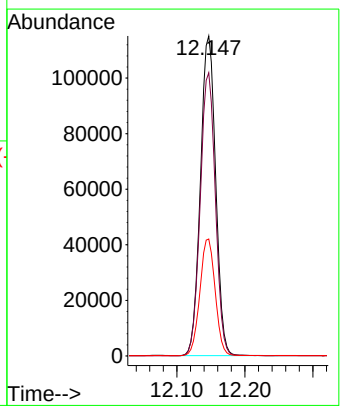


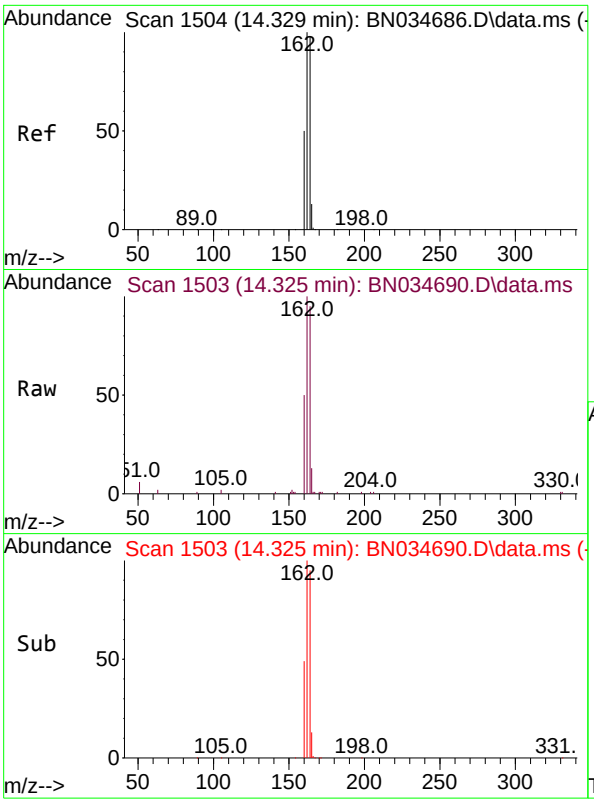


#12
2-Methylnaphthalene
Concen: 5.055 ng
RT: 12.147 min Scan# 1221
Delta R.T. 0.000 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:142 Resp: 179479

Ion	Ratio	Lower	Upper
142	100		
141	88.5	70.4	105.6
115	36.6	29.8	44.6



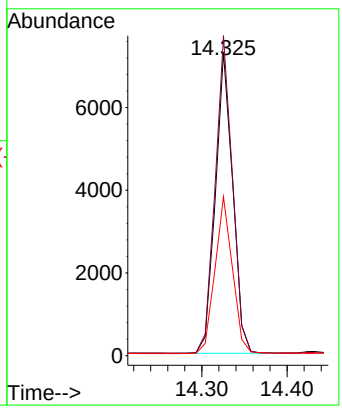


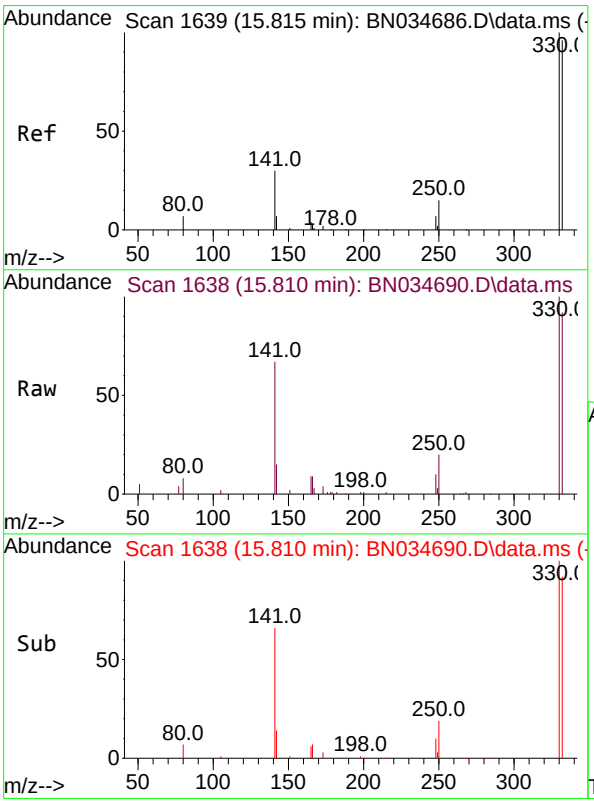
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.325 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:164 Resp: 10267

Ion	Ratio	Lower	Upper
164	100		
162	105.4	81.4	122.0
160	52.4	40.6	61.0

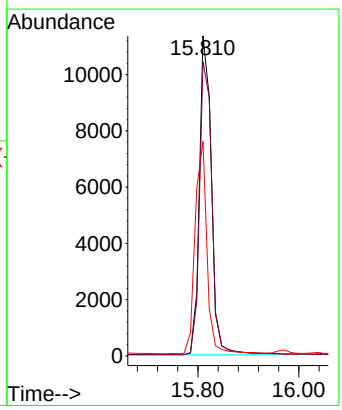


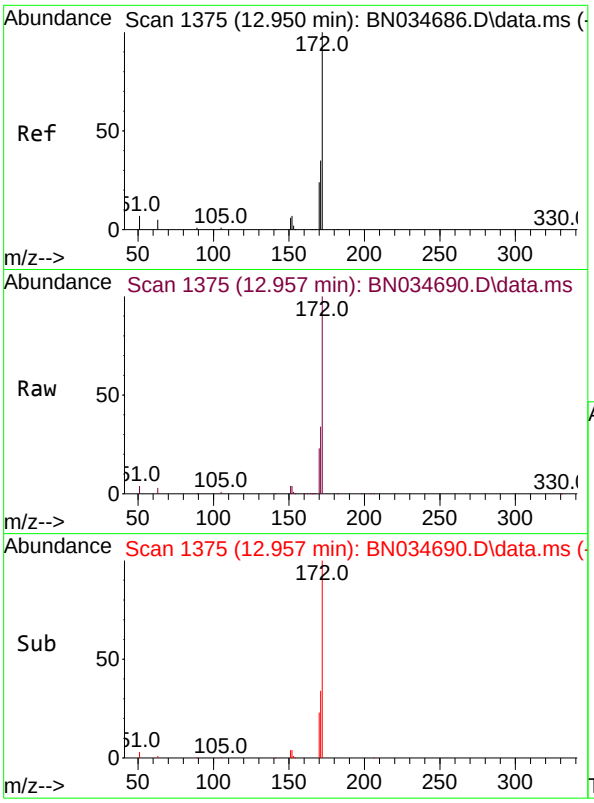


#14
2,4,6-Tribromophenol
Concen: 4.310 ng
RT: 15.810 min Scan# 1638
Delta R.T. -0.005 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:330 Resp: 18762

Ion	Ratio	Lower	Upper
330	100		
332	95.4	76.6	115.0
141	65.7	54.6	81.8



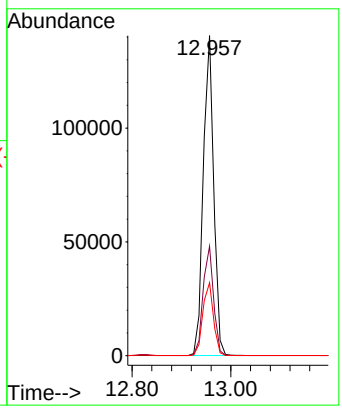


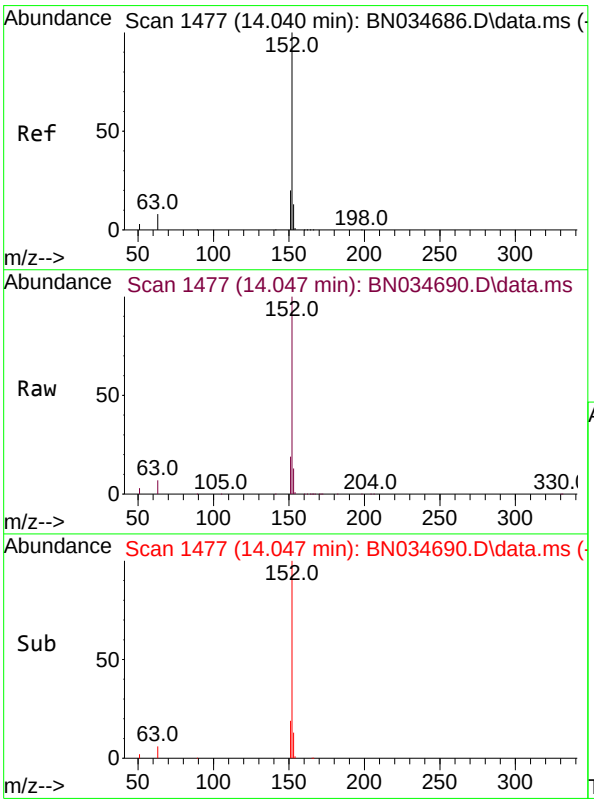
#15
2-Fluorobiphenyl
Concen: 5.077 ng
RT: 12.957 min Scan# 1
Delta R.T. 0.007 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:172 Resp: 205465

Ion	Ratio	Lower	Upper
172	100		
171	34.2	28.3	42.5
170	22.8	19.8	29.6

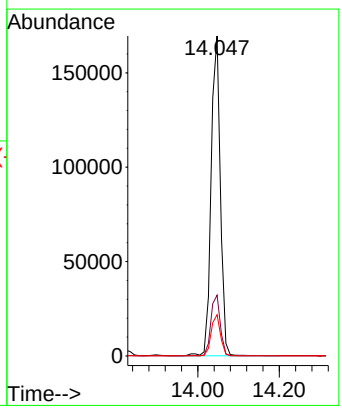


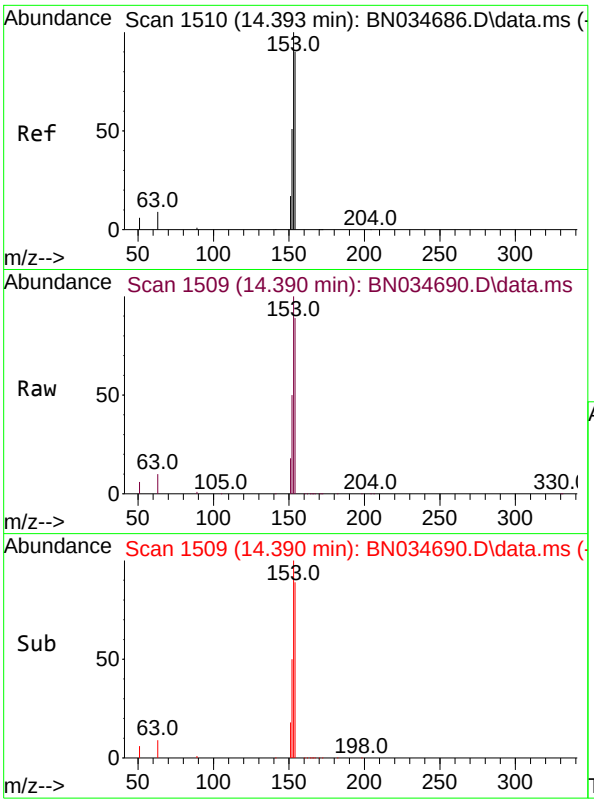


#16
Acenaphthylene
Concen: 5.368 ng
RT: 14.047 min Scan# 1477
Delta R.T. 0.007 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:152 Resp: 264846

Ion	Ratio	Lower	Upper
152	100		
151	19.3	15.6	23.4
153	12.9	10.6	15.8



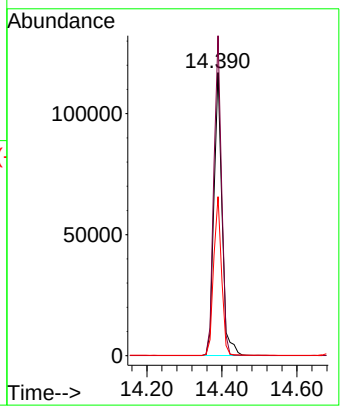


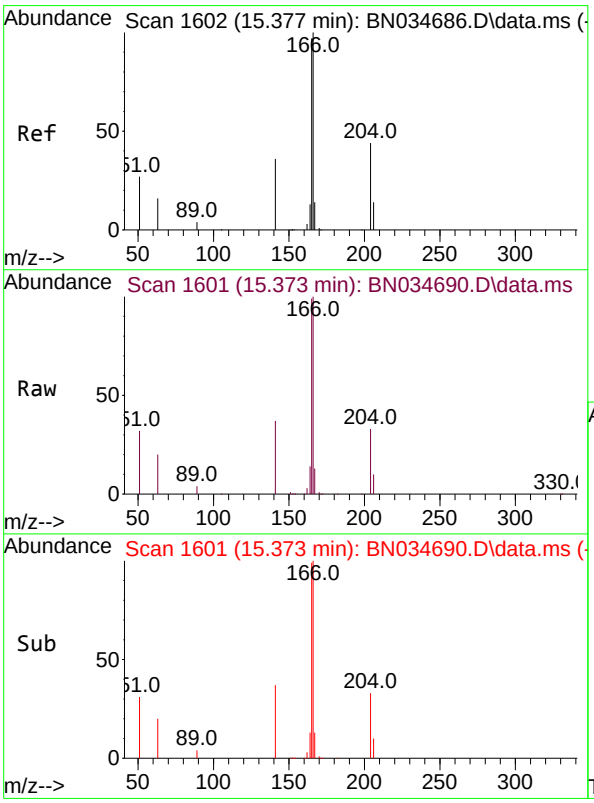
#17
Acenaphthene
Concen: 5.223 ng
RT: 14.390 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:154 Resp: 175767

Ion	Ratio	Lower	Upper
154	100		
153	108.2	88.2	132.2
152	54.7	46.9	70.3

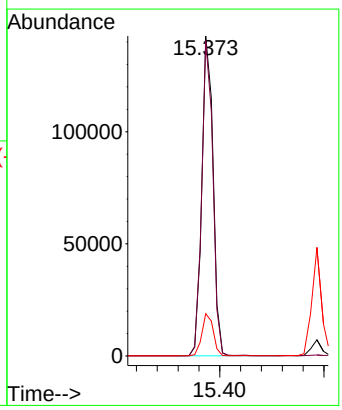


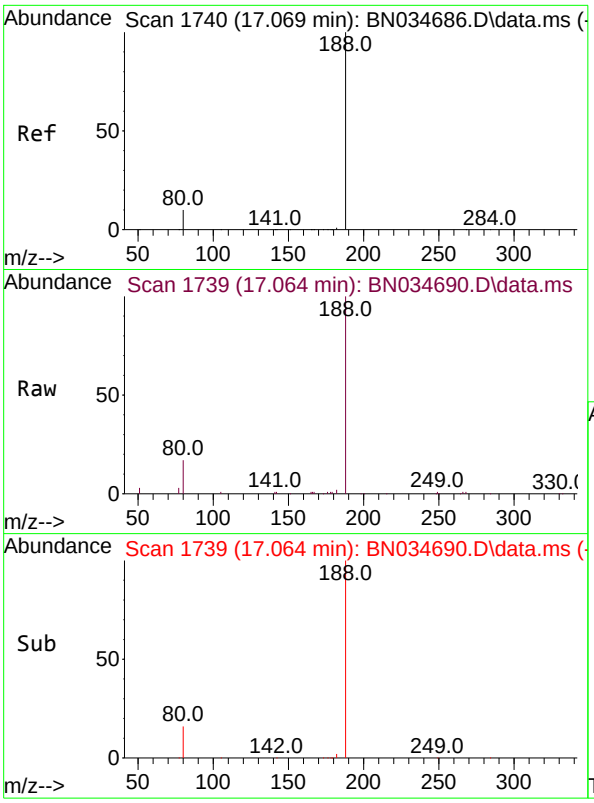


#18
Fluorene
Concen: 5.090 ng
RT: 15.373 min Scan# 1601
Delta R.T. -0.004 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:166 Resp: 213452

Ion	Ratio	Lower	Upper
166	100		
165	97.4	78.8	118.2
167	13.3	10.6	16.0



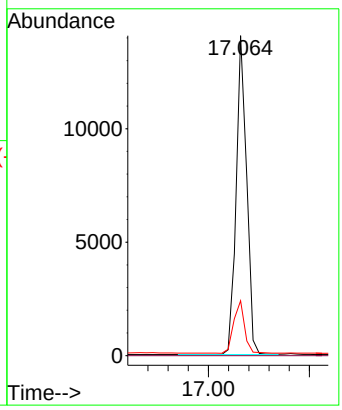


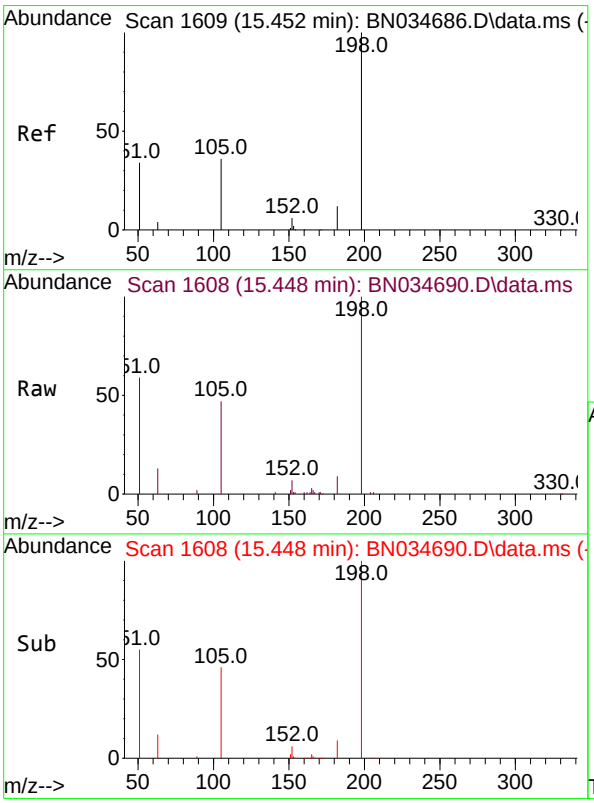
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.064 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:188 Resp: 20306

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	17.1	8.9	13.3#

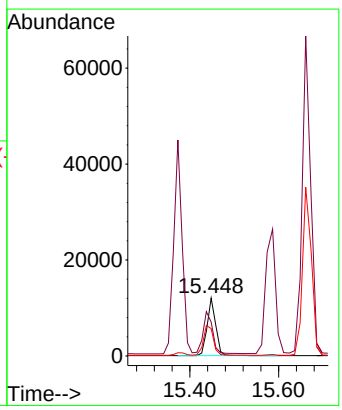


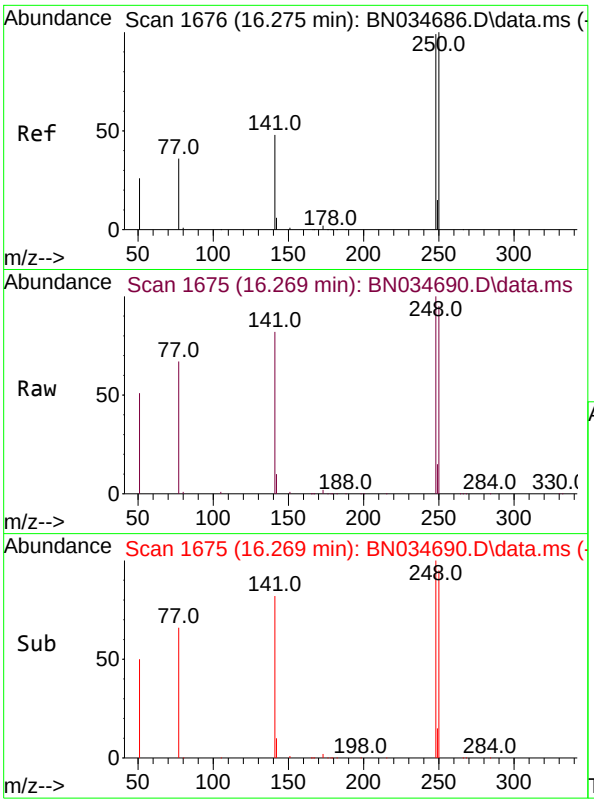


#20
4,6-Dinitro-2-methylphenol
Concen: 6.160 ng
RT: 15.448 min Scan# 1608
Delta R.T. -0.004 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:198 Resp: 17103

Ion	Ratio	Lower	Upper
198	100		
51	58.7	91.8	137.8#
105	47.2	44.3	66.5



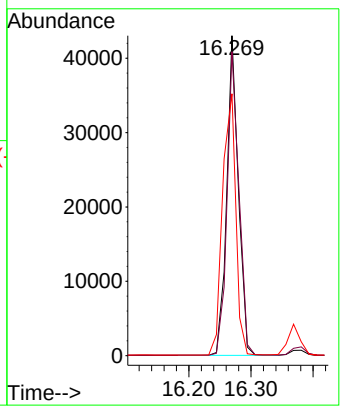


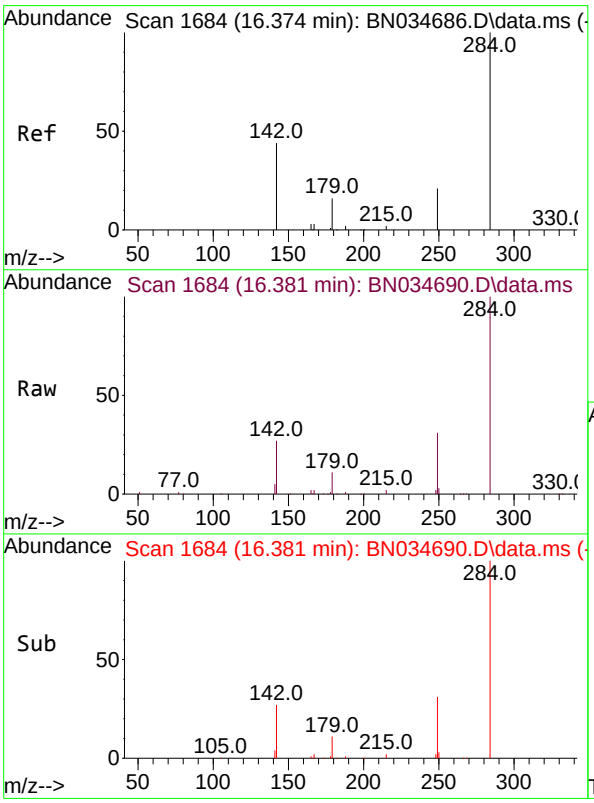
#21
4-Bromophenyl-phenylether
Concen: 4.998 ng
RT: 16.269 min Scan# 1(
Delta R.T. -0.005 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:248 Resp: 55507

Ion	Ratio	Lower	Upper
248	100		
250	95.0	80.9	121.3
141	81.9	40.5	60.7#

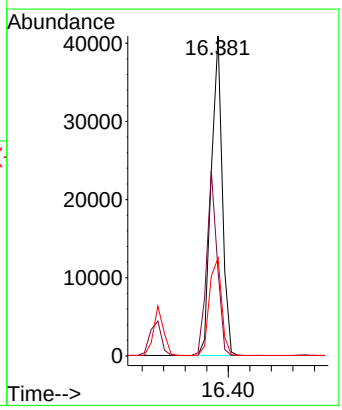


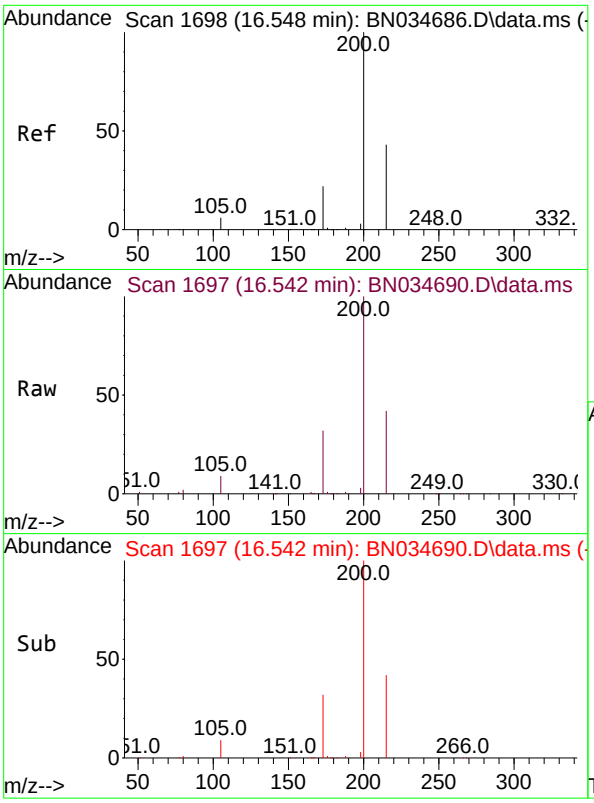


#22
Hexachlorobenzene
Concen: 4.706 ng
RT: 16.381 min Scan# 1684
Delta R.T. 0.007 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:284 Resp: 58013

Ion	Ratio	Lower	Upper
284	100		
142	55.3	43.6	65.4
249	33.7	26.6	40.0



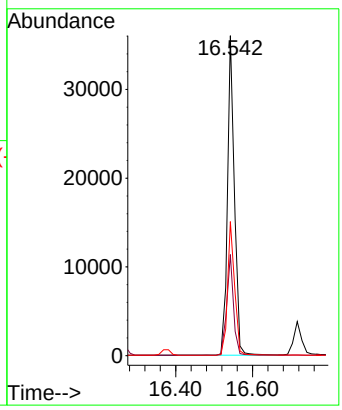


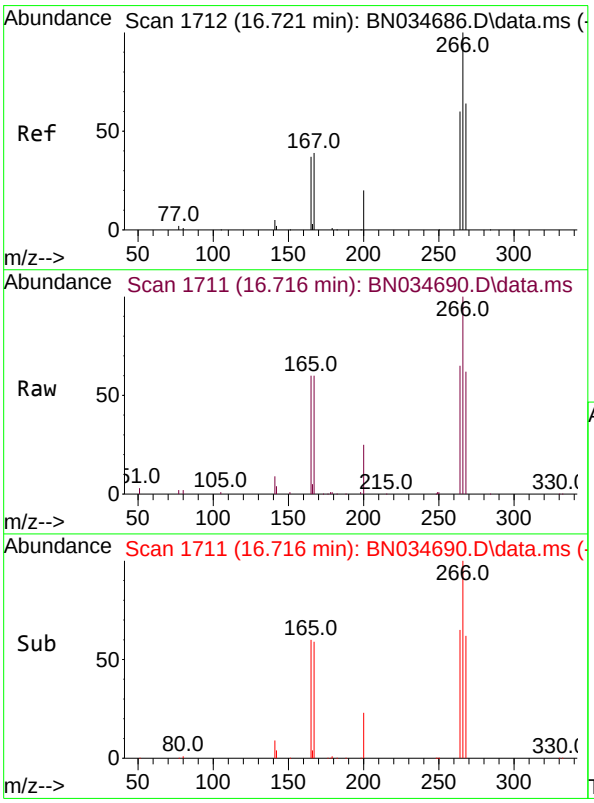
#23
Atrazine
Concen: 4.667 ng
RT: 16.542 min Scan# 1(
Delta R.T. -0.005 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:200 Resp: 45354

Ion	Ratio	Lower	Upper
200	100		
173	31.6	19.7	29.5#
215	41.9	35.7	53.5

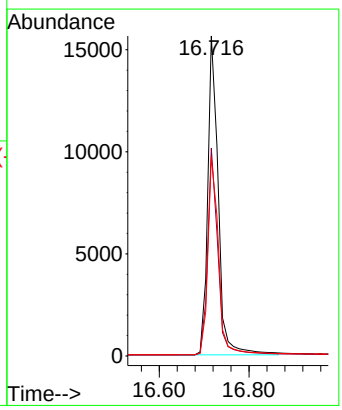


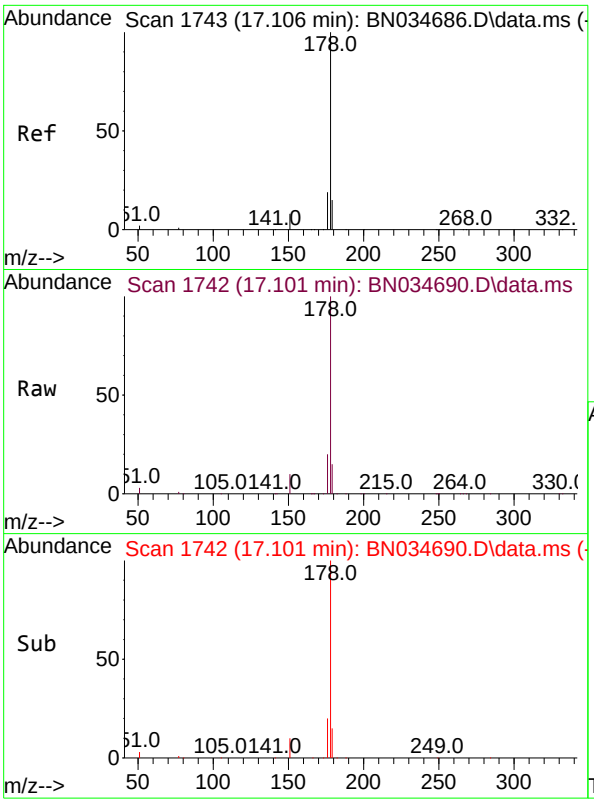


#24
Pentachlorophenol
Concen: 5.233 ng
RT: 16.716 min Scan# 1711
Delta R.T. -0.005 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:266 Resp: 25315

Ion	Ratio	Lower	Upper
266	100		
264	63.1	49.4	74.2
268	63.1	50.5	75.7



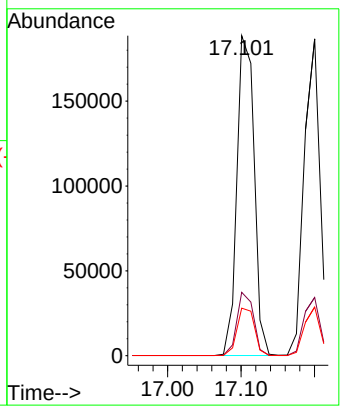


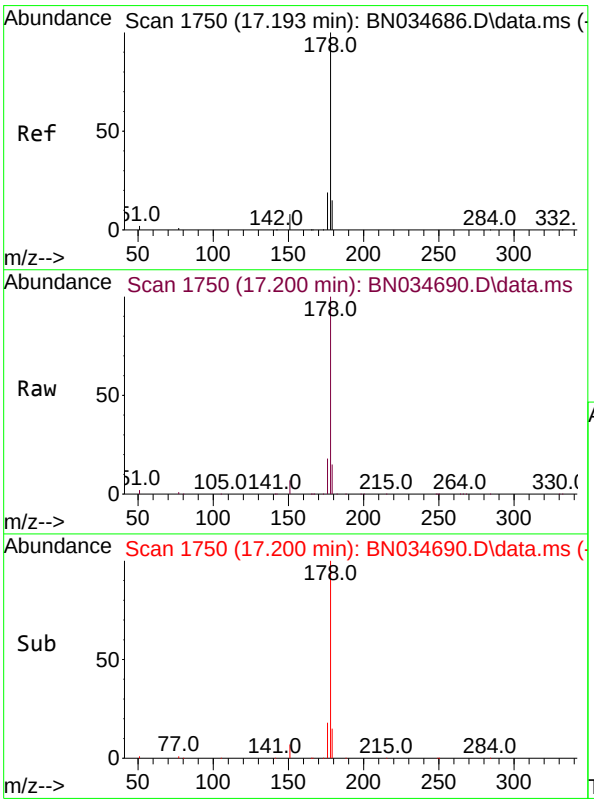
#25
Phenanthrene
Concen: 5.103 ng
RT: 17.101 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:178 Resp: 308331

Ion	Ratio	Lower	Upper
178	100		
176	19.1	15.4	23.2
179	15.0	12.2	18.4

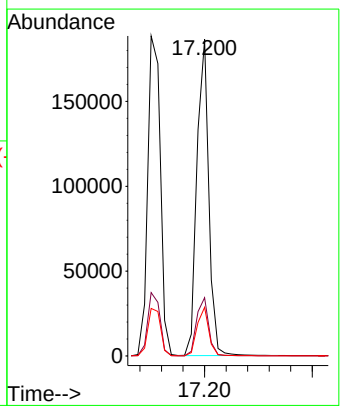


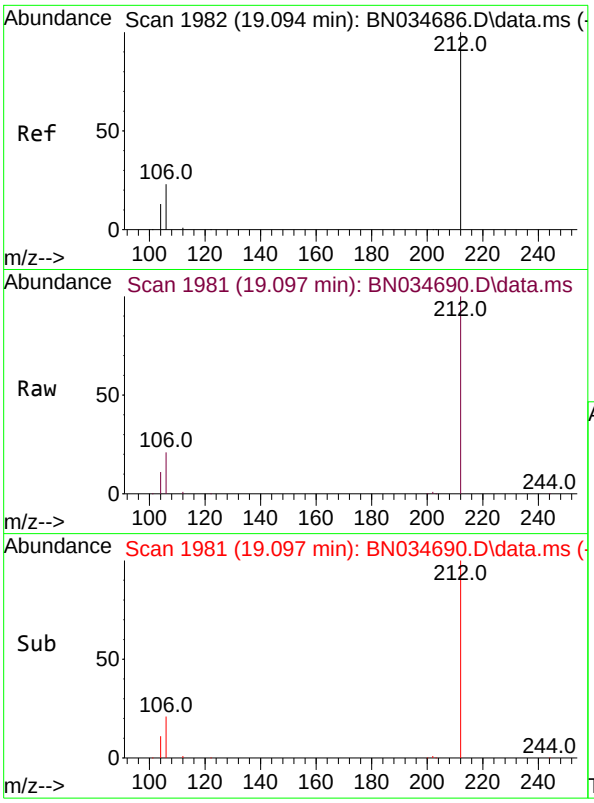


#26
Anthracene
Concen: 5.315 ng
RT: 17.200 min Scan# 1750
Delta R.T. 0.007 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:178 Resp: 287167

Ion	Ratio	Lower	Upper
178	100		
176	18.7	14.9	22.3
179	15.1	12.2	18.2



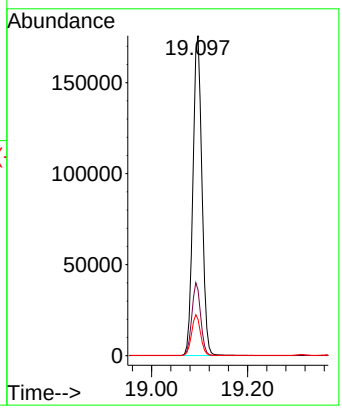


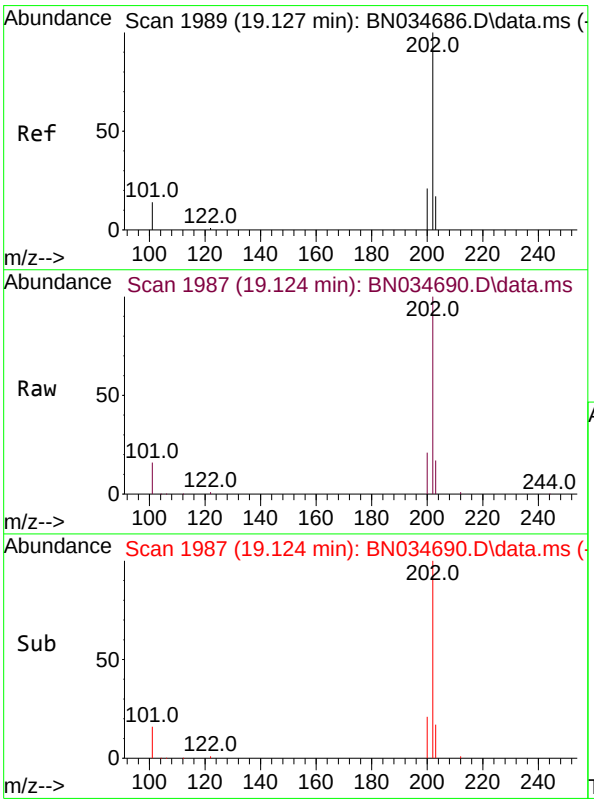
#27
Fluoranthene-d10
Concen: 4.647 ng
RT: 19.097 min Scan# 1
Delta R.T. 0.002 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:212 Resp: 231016

Ion	Ratio	Lower	Upper
212	100		
106	22.3	17.8	26.8
104	12.6	10.2	15.4

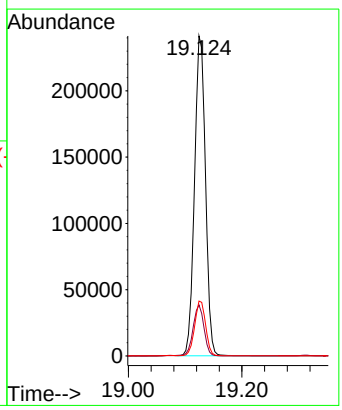


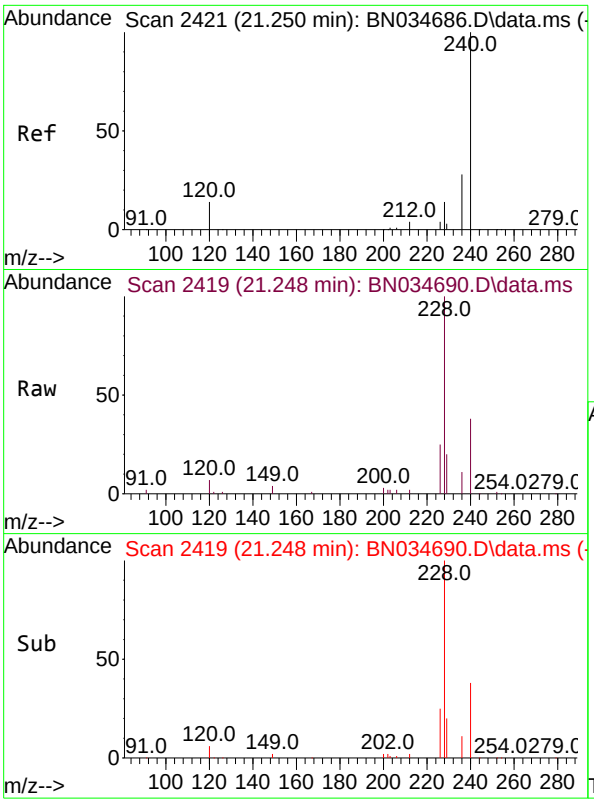


#28
Fluoranthene
Concen: 4.756 ng
RT: 19.124 min Scan# 1987
Delta R.T. -0.002 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:202 Resp: 322212

Ion	Ratio	Lower	Upper
202	100		
101	15.9	12.8	19.2
203	17.2	13.5	20.3



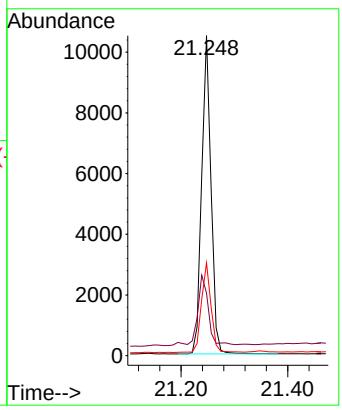


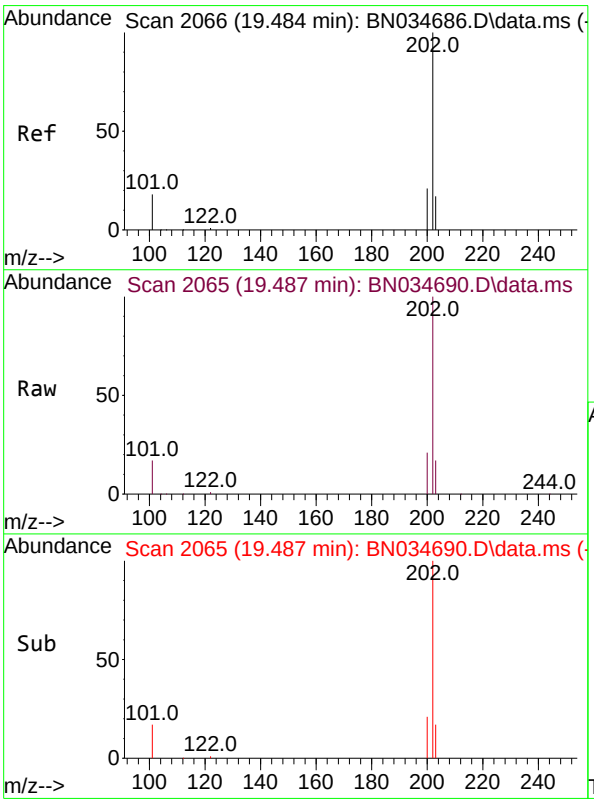
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.248 min Scan# 24
Delta R.T. -0.002 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:240 Resp: 12752

Ion	Ratio	Lower	Upper
240	100		
120	19.6	14.2	21.2
236	29.0	23.1	34.7

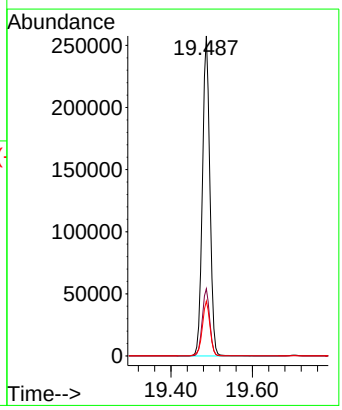


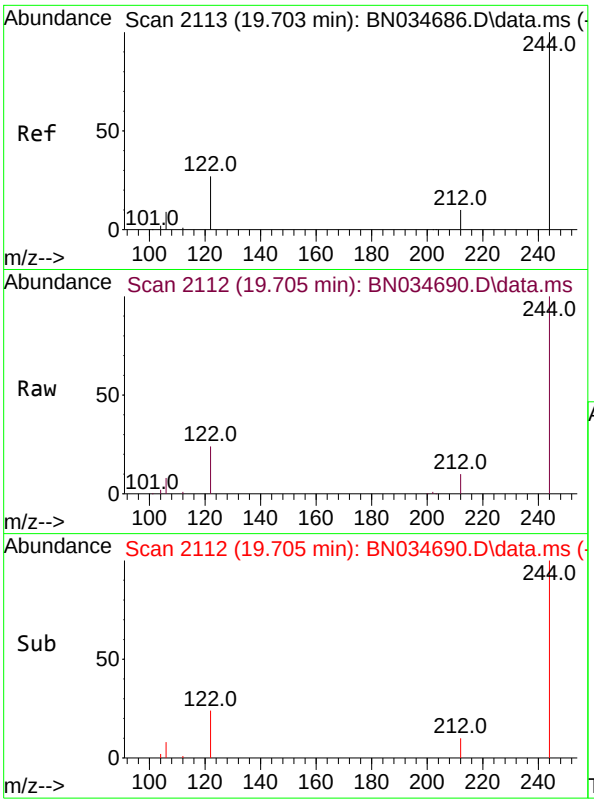


#30
Pyrene
Concen: 5.726 ng
RT: 19.487 min Scan# 2065
Delta R.T. 0.002 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:202 Resp: 326483

Ion	Ratio	Lower	Upper
202	100		
200	21.0	16.6	25.0
203	17.6	14.2	21.4



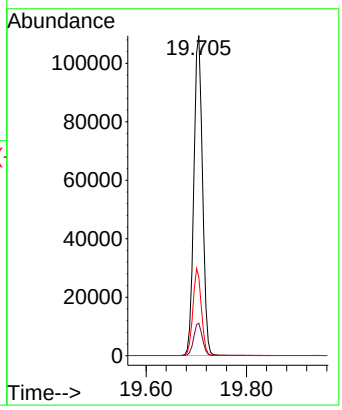


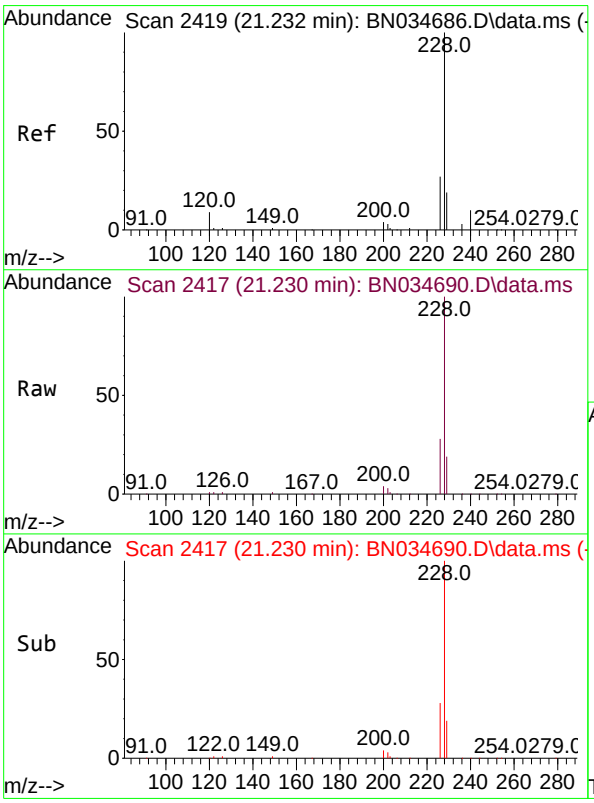
#31
Terphenyl-d14
Concen: 5.298 ng
RT: 19.705 min Scan# 21
Delta R.T. 0.002 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:244 Resp: 130770

Ion	Ratio	Lower	Upper
244	100		
212	10.1	8.6	13.0
122	24.5	22.3	33.5

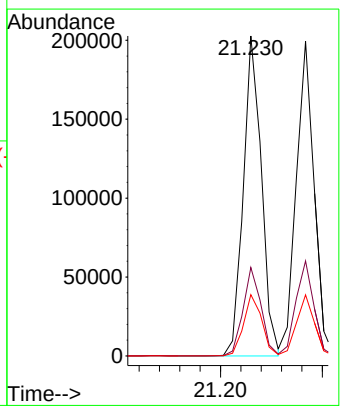


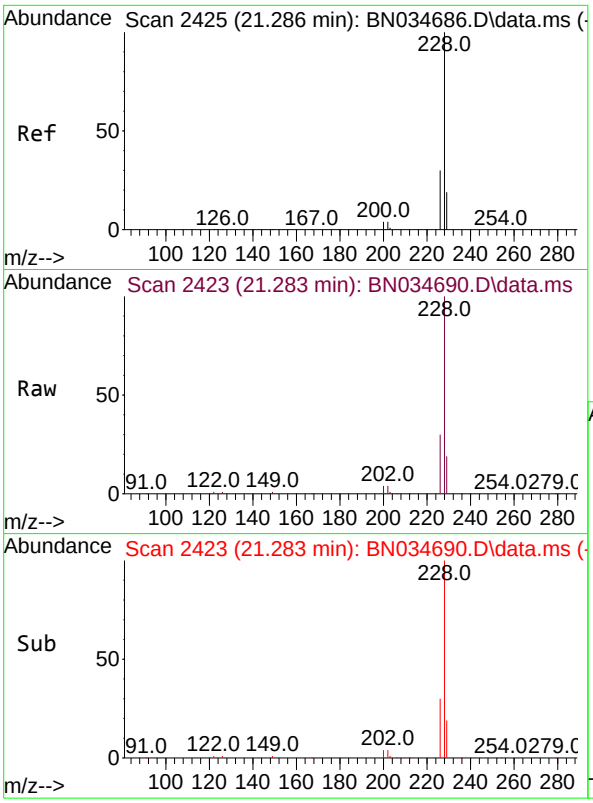


#32
Benzo(a)anthracene
Concen: 5.148 ng
RT: 21.230 min Scan# 2417
Delta R.T. -0.002 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:228 Resp: 250242

Ion	Ratio	Lower	Upper
228	100		
226	27.6	22.0	33.0
229	19.1	15.6	23.4



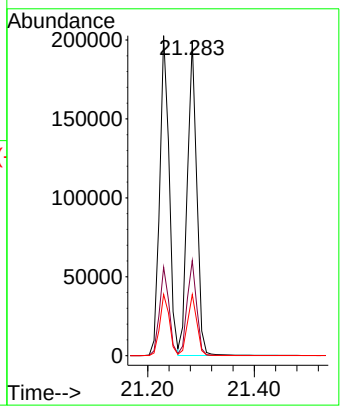


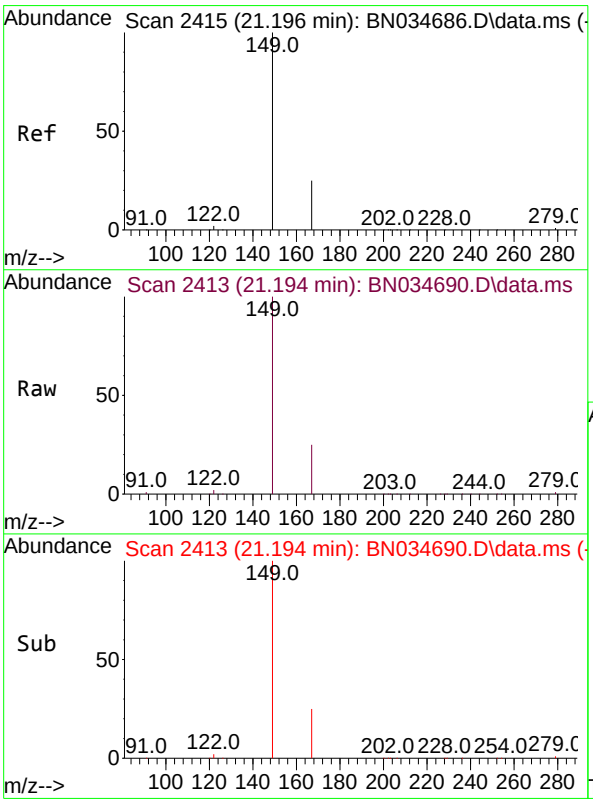
#33
Chrysene
Concen: 5.072 ng
RT: 21.283 min Scan# 24
Delta R.T. -0.002 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:228 Resp: 244106

Ion	Ratio	Lower	Upper
228	100		
226	30.2	24.1	36.1
229	19.4	15.8	23.8

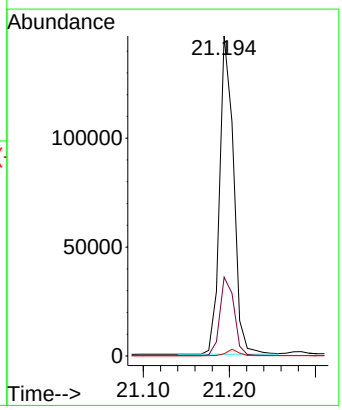


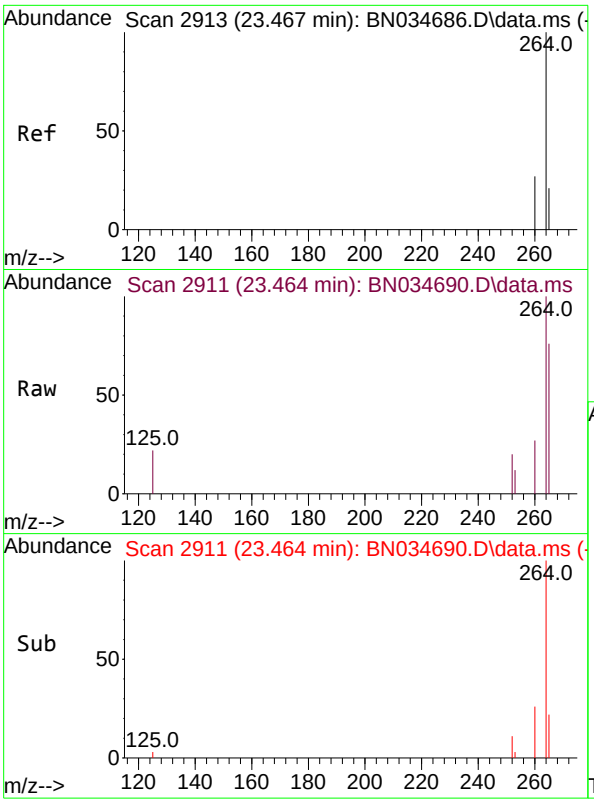


#34
Bis(2-ethylhexyl)phthalate
Concen: 4.961 ng
RT: 21.194 min Scan# 2413
Delta R.T. -0.002 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:149 Resp: 164213

Ion	Ratio	Lower	Upper
149	100		
167	25.1	19.7	29.5
279	1.8	1.8	2.6



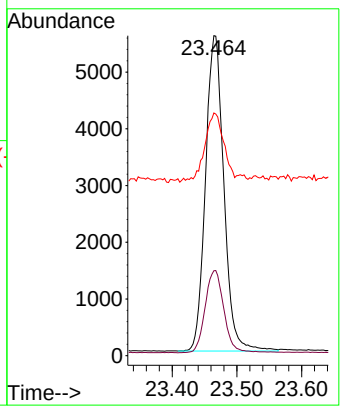


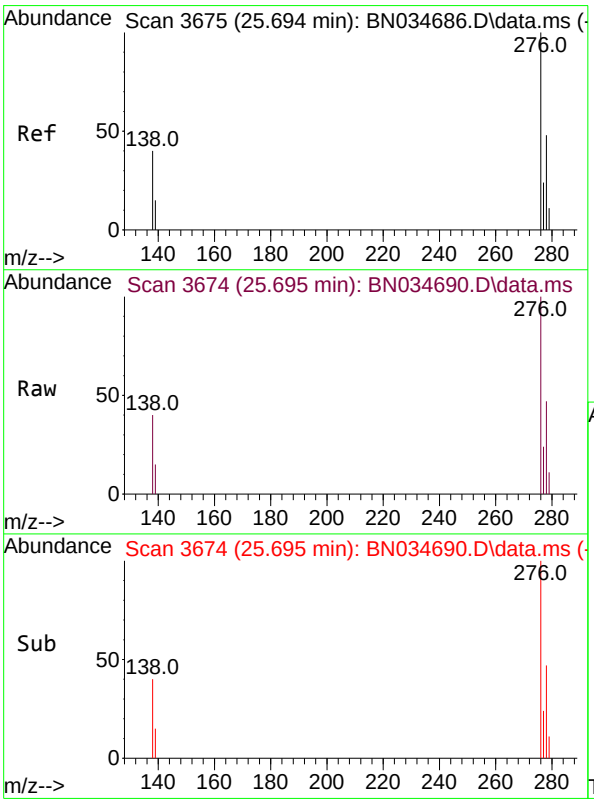
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.464 min Scan# 2
Delta R.T. -0.002 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:264 Resp: 10972

Ion	Ratio	Lower	Upper
264	100		
260	26.6	21.9	32.9
265	75.9	60.6	91.0

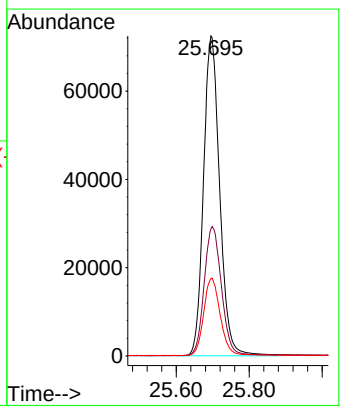


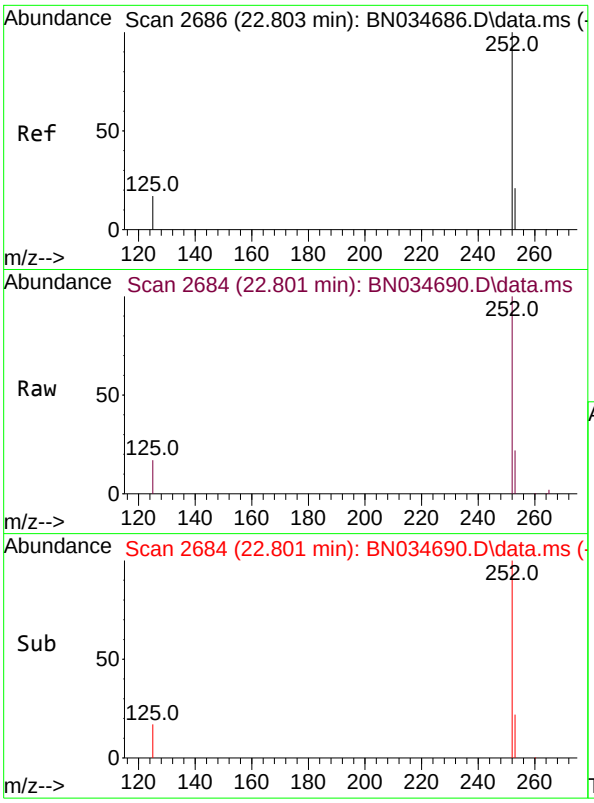


#36
Indeno(1,2,3-cd)pyrene
Concen: 5.271 ng
RT: 25.695 min Scan# 3674
Delta R.T. 0.001 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:276 Resp: 222798

Ion	Ratio	Lower	Upper
276	100		
138	43.1	35.1	52.7
277	24.7	19.7	29.5



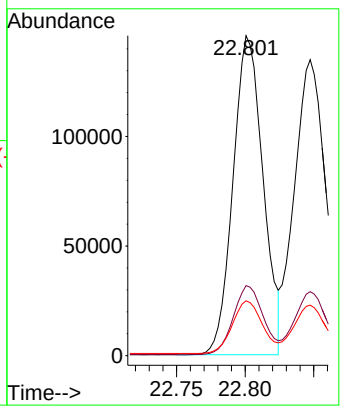


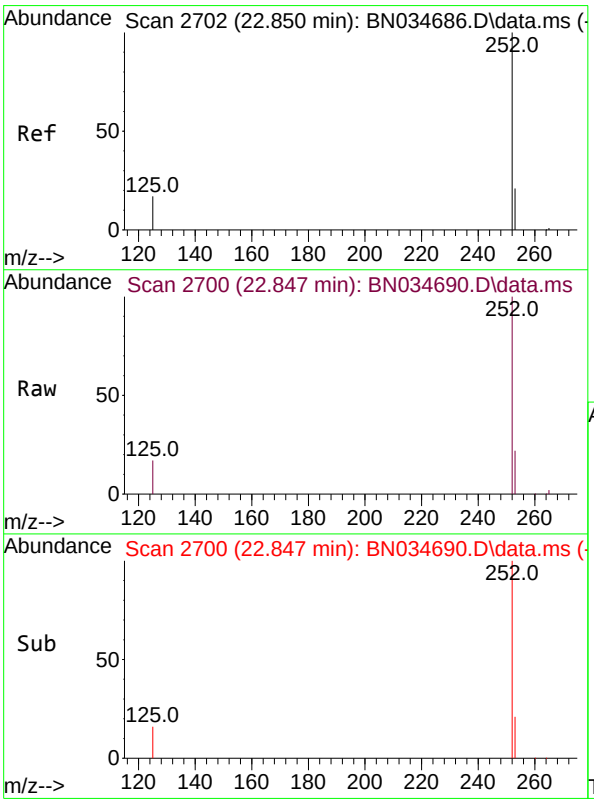
#37
Benzo(b)fluoranthene
Concen: 5.585 ng
RT: 22.801 min Scan# 2
Delta R.T. -0.002 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:252 Resp: 221458

Ion	Ratio	Lower	Upper
252	100		
253	21.9	20.0	30.0
125	17.2	20.9	31.3#

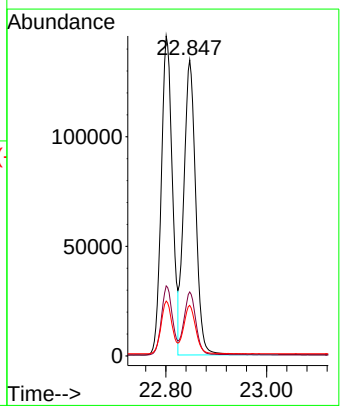


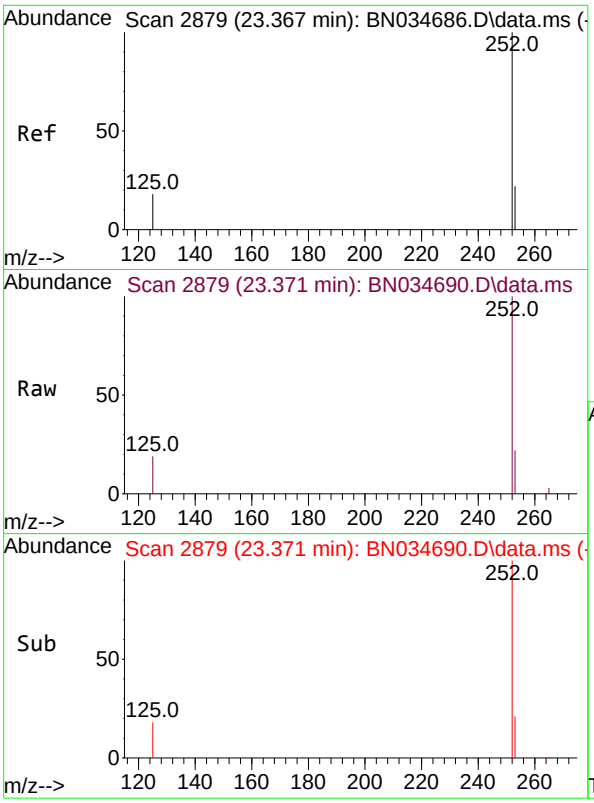


#38
Benzo(k)fluoranthene
Concen: 5.717 ng
RT: 22.847 min Scan# 2700
Delta R.T. -0.002 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:252 Resp: 221207

Ion	Ratio	Lower	Upper
252	100		
253	21.6	20.6	31.0
125	17.1	21.6	32.4#



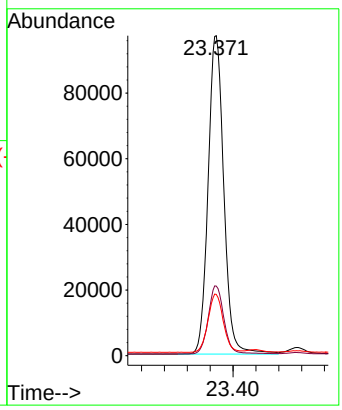


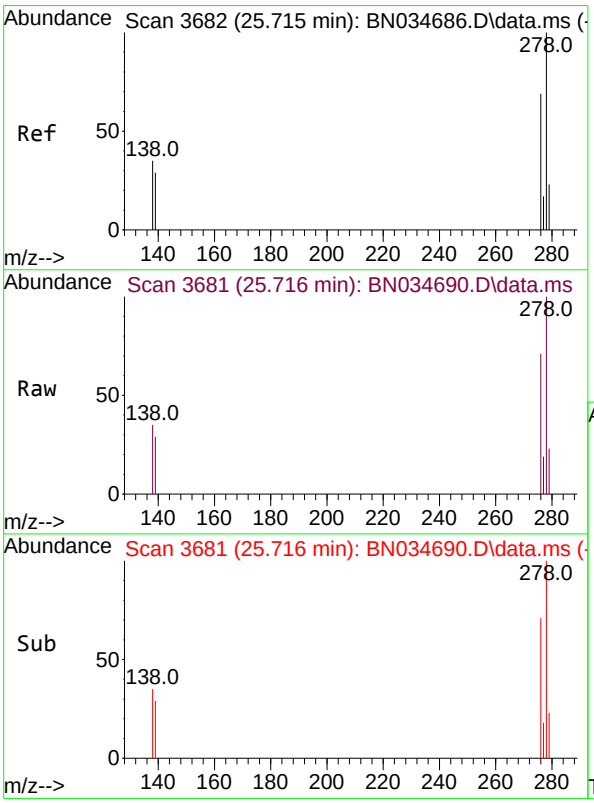
#39
Benzo(a)pyrene
Concen: 5.496 ng
RT: 23.371 min Scan# 2
Delta R.T. 0.004 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:252 Resp: 185096

Ion	Ratio	Lower	Upper
252	100		
253	21.8	22.2	33.4#
125	19.1	26.0	39.0#

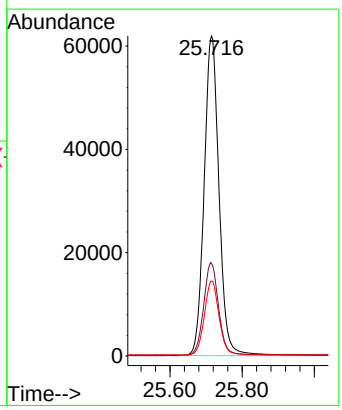


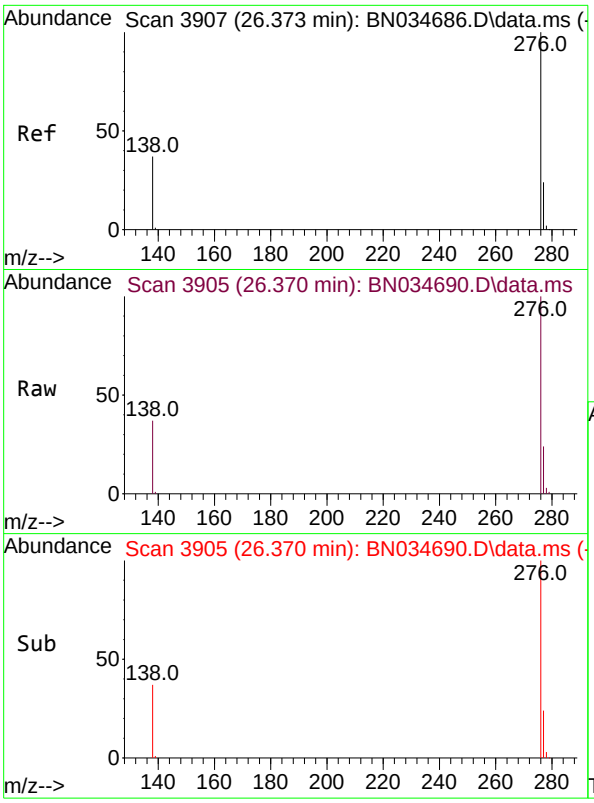


#40
Dibenzo(a,h)anthracene
Concen: 5.319 ng
RT: 25.716 min Scan# 3681
Delta R.T. 0.001 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Tgt Ion:278 Resp: 176660

Ion	Ratio	Lower	Upper
278	100		
139	28.9	25.4	38.2
279	23.4	22.4	33.6



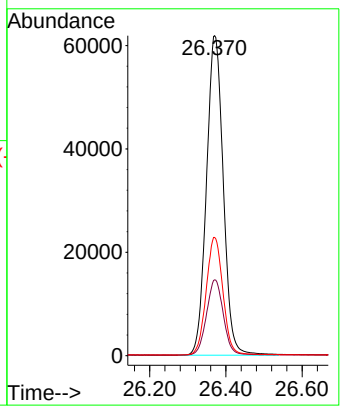


#41
Benzo(g,h,i)perylene
Concen: 5.158 ng
RT: 26.370 min Scan# 3
Delta R.T. -0.002 min
Lab File: BN034690.D
Acq: 24 Oct 2024 12:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:276 Resp: 189041

Ion	Ratio	Lower	Upper
276	100		
277	23.7	21.3	31.9
138	36.9	31.9	47.9



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034691.D
Acq On : 24 Oct 2024 14:14
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

Quant Time: Oct 24 14:43:51 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.705	152	6674	0.400	ng		0.00
7) Naphthalene-d8	10.479	136	19848	0.400	ng		0.00
13) Acenaphthene-d10	14.329	164	10372	0.400	ng		0.00
19) Phenanthrene-d10	17.069	188	21015	0.400	ng		0.00
29) Chrysene-d12	21.250	240	12401	0.400	ng		0.00
35) Perylene-d12	23.466	264	10594	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.314	112	7964	0.401	ng		0.00
5) Phenol-d6	6.882	99	10366	0.396	ng		0.00
8) Nitrobenzene-d5	8.845	82	5758	0.346	ng		0.00
11) 2-Methylnaphthalene-d10	12.071	152	9741	0.357	ng		0.00
14) 2,4,6-Tribromophenol	15.815	330	1099	0.343	ng		0.00
15) 2-Fluorobiphenyl	12.950	172	14035	0.341	ng		0.00
27) Fluoranthene-d10	19.094	212	16566	0.350	ng		0.00
31) Terphenyl-d14	19.703	244	9400	0.371	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.285	88	3154	0.355	ng		100
3) n-Nitrosodimethylamine	3.581	42	4576	0.354	ng	#	97
6) bis(2-Chloroethyl)ether	7.141	93	7850	0.369	ng		99
9) Naphthalene	10.532	128	19666	0.358	ng		100
10) Hexachlorobutadiene	10.831	225	2964	0.360	ng	#	99
12) 2-Methylnaphthalene	12.143	142	12146	0.356	ng		98
16) Acenaphthylene	14.040	152	16384	0.329	ng		99
17) Acenaphthene	14.382	154	11510	0.335	ng		99
18) Fluorene	15.377	166	14579	0.344	ng		99
20) 4,6-Dinitro-2-methylph...	15.451	198	947	0.324	ng		88
21) 4-Bromophenyl-phenylether	16.275	248	3884	0.347	ng		98
22) Hexachlorobenzene	16.374	284	4355	0.358	ng		98
23) Atrazine	16.548	200	2928	0.333	ng		99
24) Pentachlorophenol	16.721	266	1463	0.340	ng		98
25) Phenanthrene	17.106	178	22550	0.357	ng		100
26) Anthracene	17.193	178	19340	0.345	ng		100
28) Fluoranthene	19.127	202	22945	0.348	ng		100
30) Pyrene	19.489	202	23297	0.366	ng		100
32) Benzo(a)anthracene	21.232	228	16543	0.349	ng		99
33) Chrysene	21.286	228	17696	0.361	ng		99
34) Bis(2-ethylhexyl)phtha...	21.196	149	8661m	0.322	ng		
36) Indeno(1,2,3-cd)pyrene	25.697	276	14157	0.347	ng		100
37) Benzo(b)fluoranthene	22.803	252	15350	0.363	ng		99
38) Benzo(k)fluoranthene	22.850	252	14742	0.353	ng		99
39) Benzo(a)pyrene	23.373	252	12054	0.355	ng		99
40) Dibenzo(a,h)anthracene	25.718	278	11142	0.346	ng		99
41) Benzo(g,h,i)perylene	26.373	276	12576	0.354	ng		99

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

ICAL Form

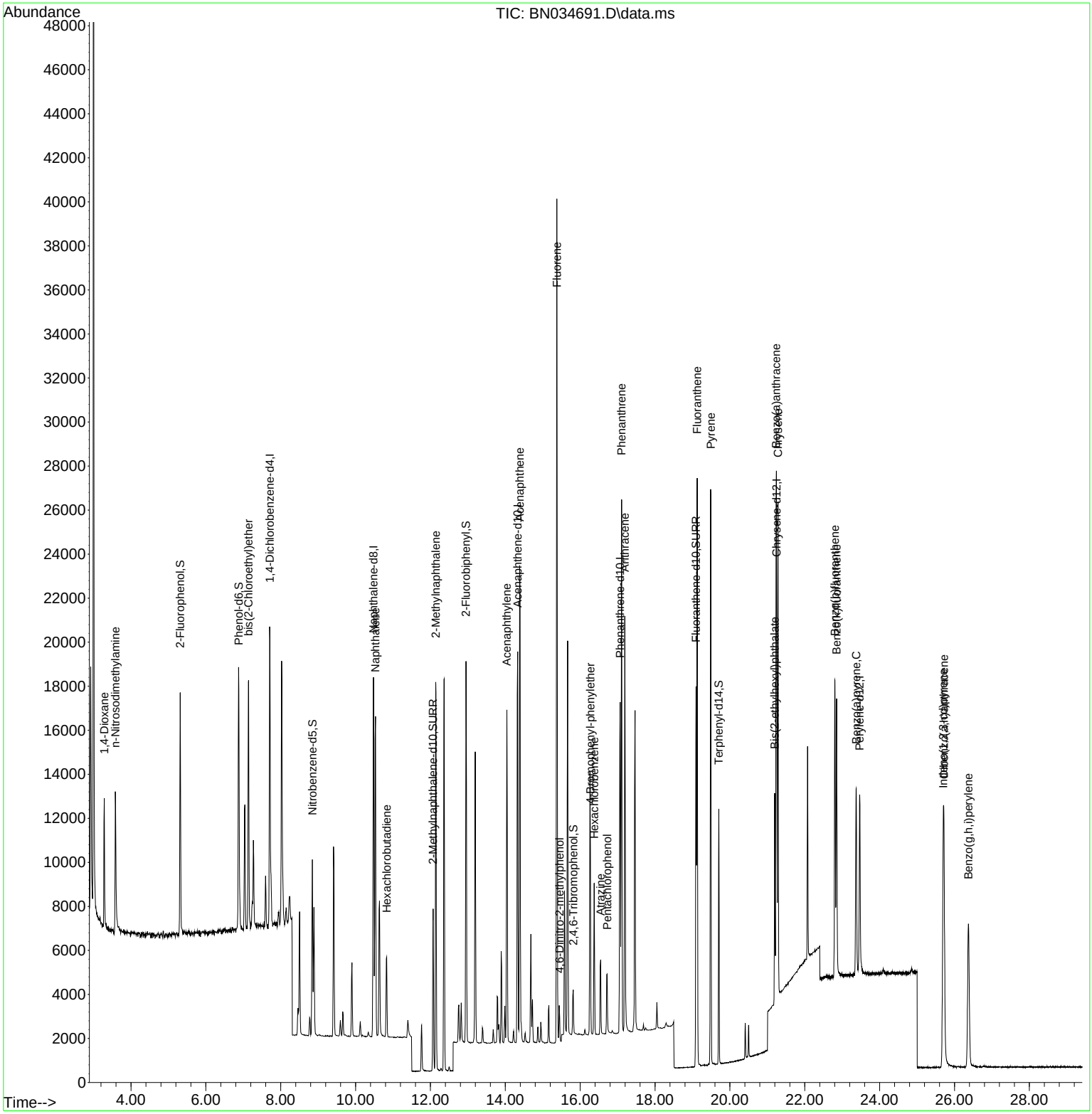
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034691.D
Acq On : 24 Oct 2024 14:14
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

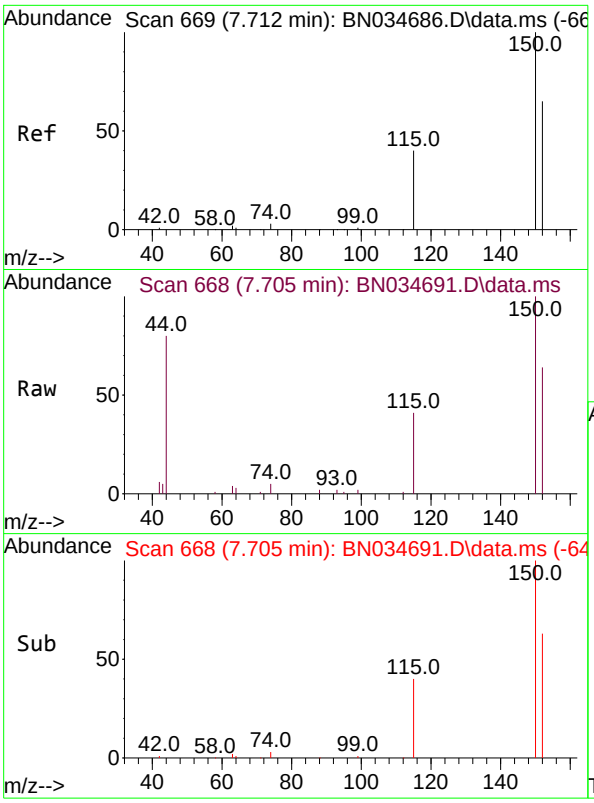
Quant Time: Oct 24 14:43:51 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

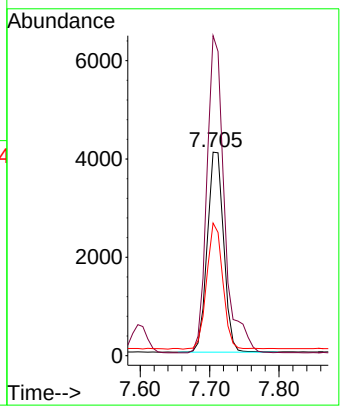




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.705 min Scan# 6
Delta R.T. -0.007 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:152 Resp: 667

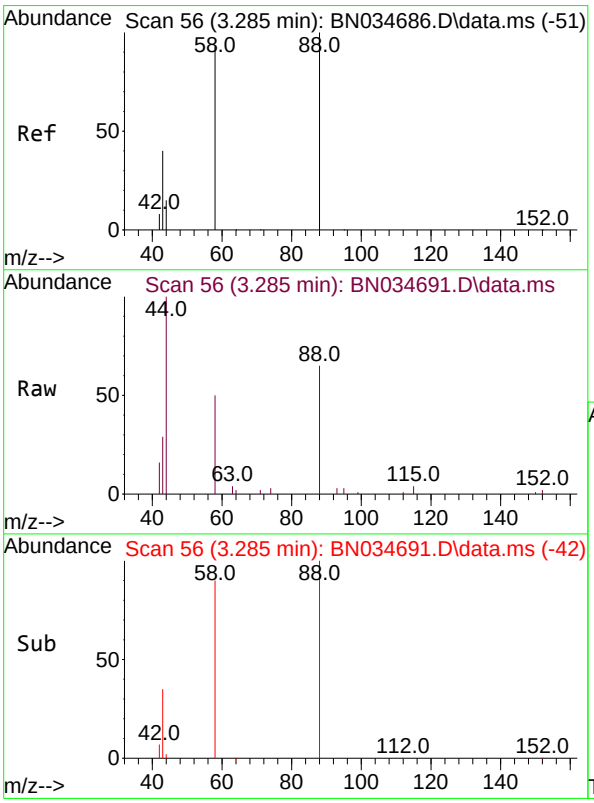
Ion	Ratio	Lower	Upper
152	100		
150	157.2	122.7	184.1
115	65.2	51.0	76.6



Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Manual Integrations
APPROVED

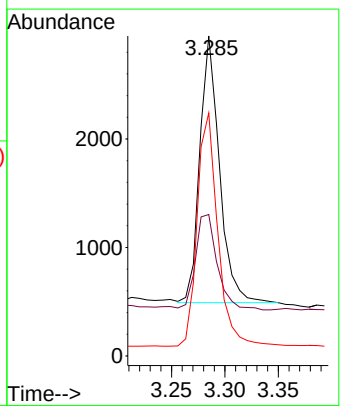
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

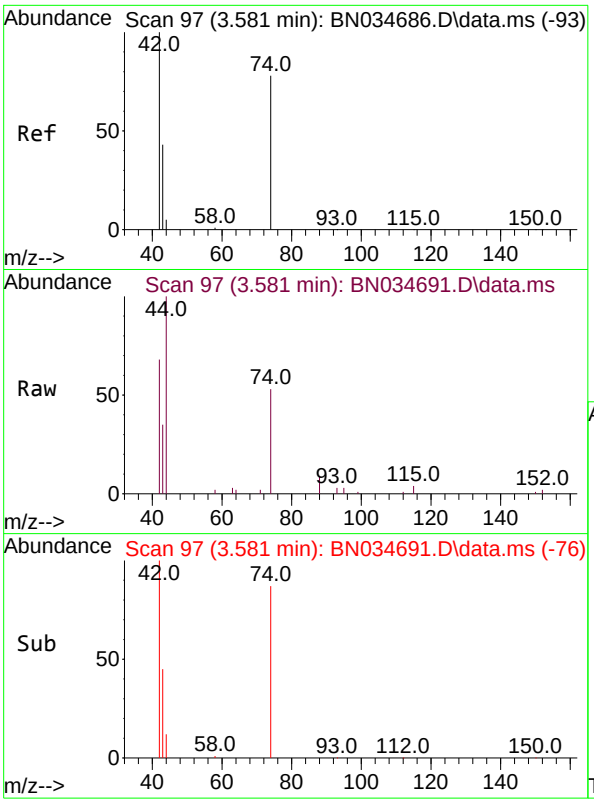


#2
1,4-Dioxane
Concen: 0.355 ng
RT: 3.285 min Scan# 56
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion: 88 Resp: 3154

Ion	Ratio	Lower	Upper
88	100		
43	39.5	32.1	48.1
58	91.9	73.7	110.5

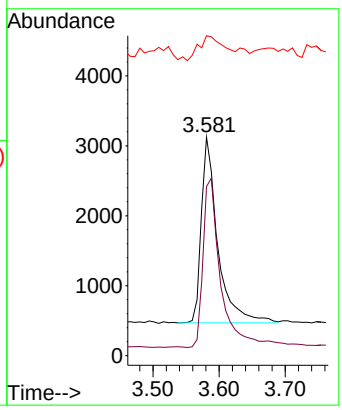




#3
n-Nitrosodimethylamine
Concen: 0.354 ng
RT: 3.581 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion: 42 Resp: 457

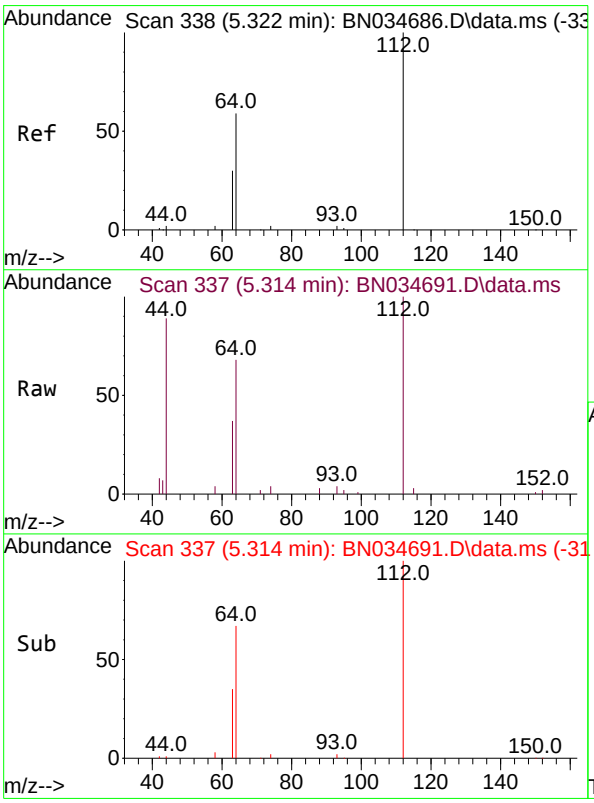
Ion	Ratio	Lower	Upper
42	100		
74	98.6	77.2	115.8
44	20.5	13.4	20.2



Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Manual Integrations
APPROVED

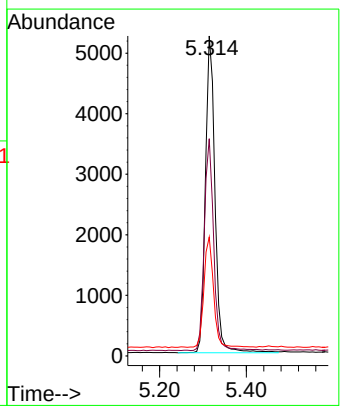
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

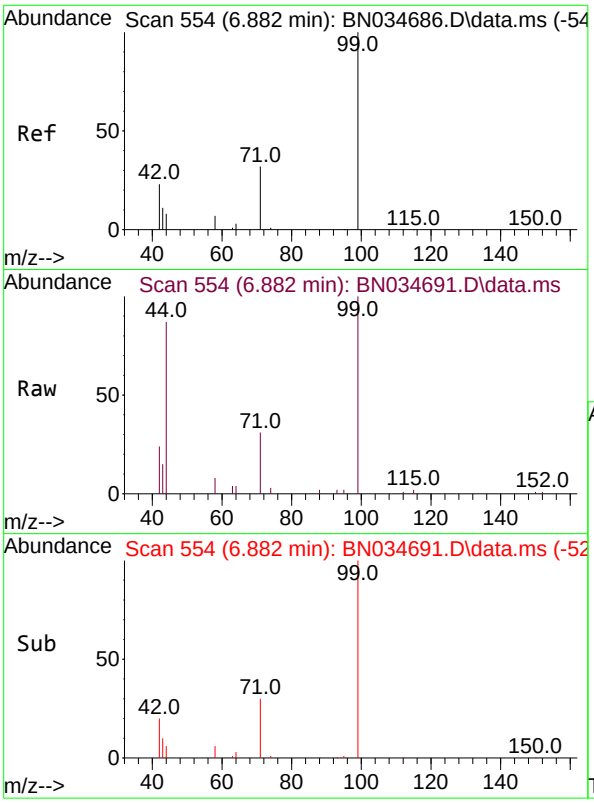


#4
2-Fluorophenol
Concen: 0.401 ng
RT: 5.314 min Scan# 337
Delta R.T. -0.007 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:112 Resp: 7964

Ion	Ratio	Lower	Upper
112	100		
64	66.0	53.0	79.6
63	35.2	27.6	41.4

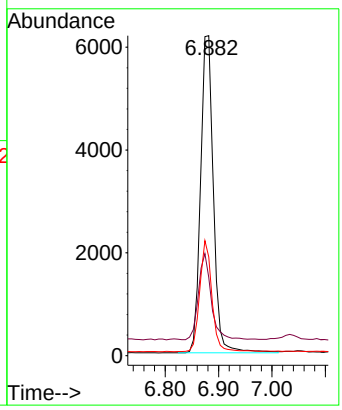




#5
Phenol-d6
Concen: 0.396 ng
RT: 6.882 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion: 99 Resp: 1036

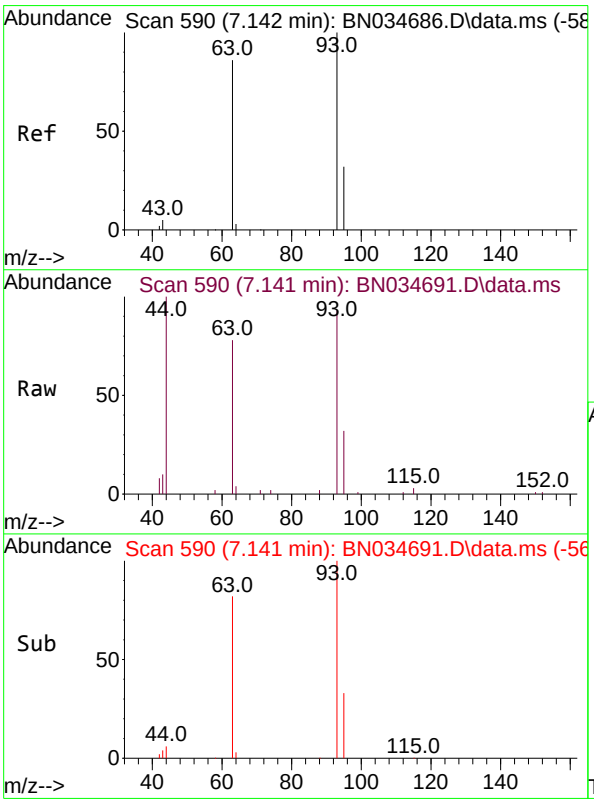
Ion	Ratio	Lower	Upper
99	100		
42	27.0	21.8	32.8
71	33.3	26.6	40.0



Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Manual Integrations
APPROVED

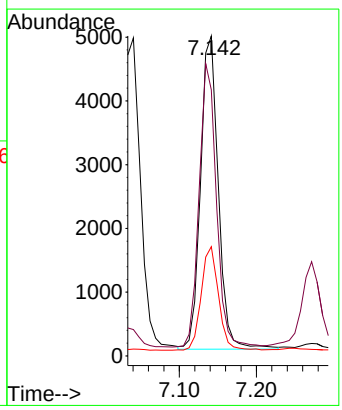
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

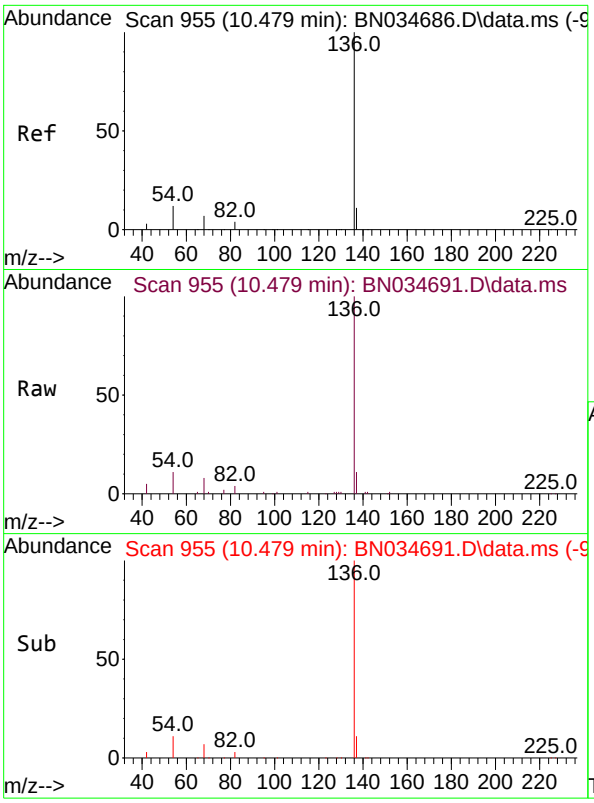


#6
bis(2-Chloroethyl)ether
Concen: 0.369 ng
RT: 7.141 min Scan# 590
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion: 93 Resp: 7850

Ion	Ratio	Lower	Upper
93	100		
63	87.8	71.5	107.3
95	32.2	25.8	38.6

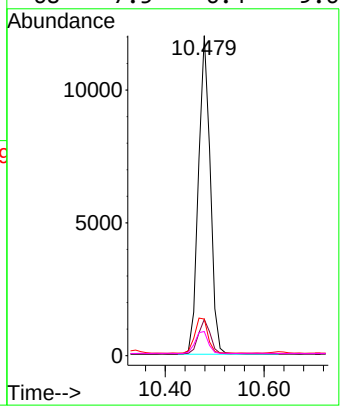




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:136 Resp: 1984

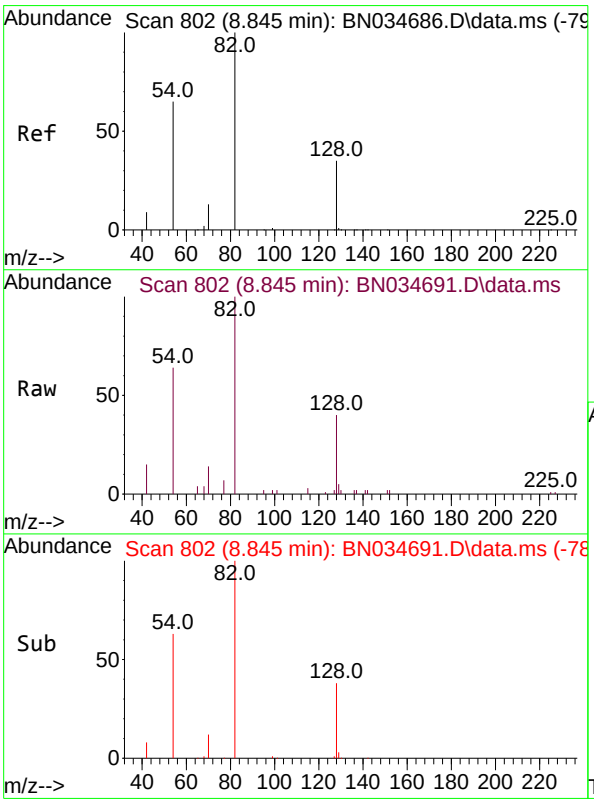
Ion	Ratio	Lower	Upper
136	100		
137	11.3	9.1	13.7
54	11.4	9.8	14.8
68	7.5	6.4	9.6



Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Manual Integrations
APPROVED

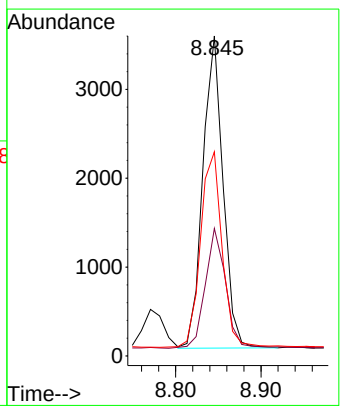
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

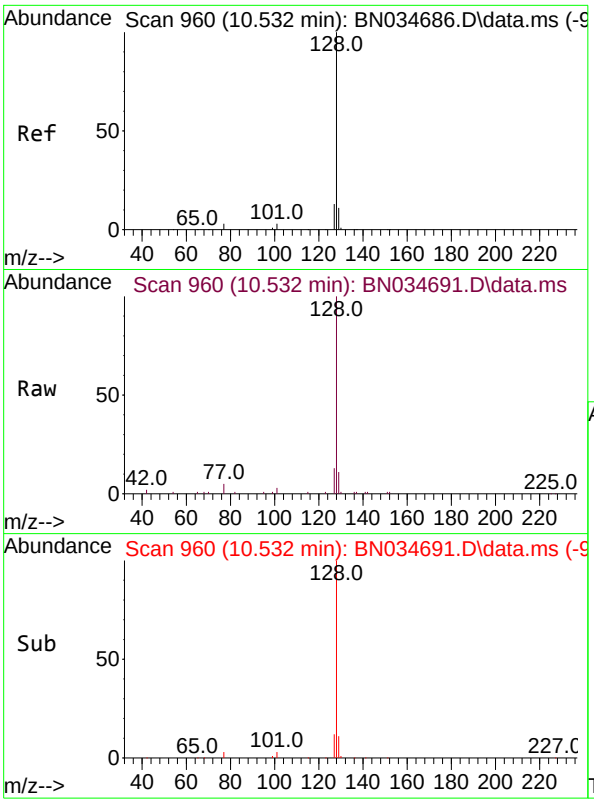


#8
Nitrobenzene-d5
Concen: 0.346 ng
RT: 8.845 min Scan# 802
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion: 82 Resp: 5758

Ion	Ratio	Lower	Upper
82	100		
128	39.9	29.7	44.5
54	63.8	53.0	79.6

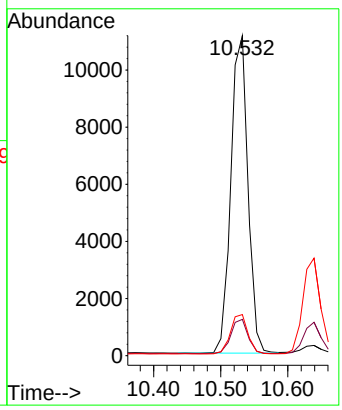




#9
Naphthalene
Concen: 0.358 ng
RT: 10.532 min Scan# 9(
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:128 Resp: 1966(

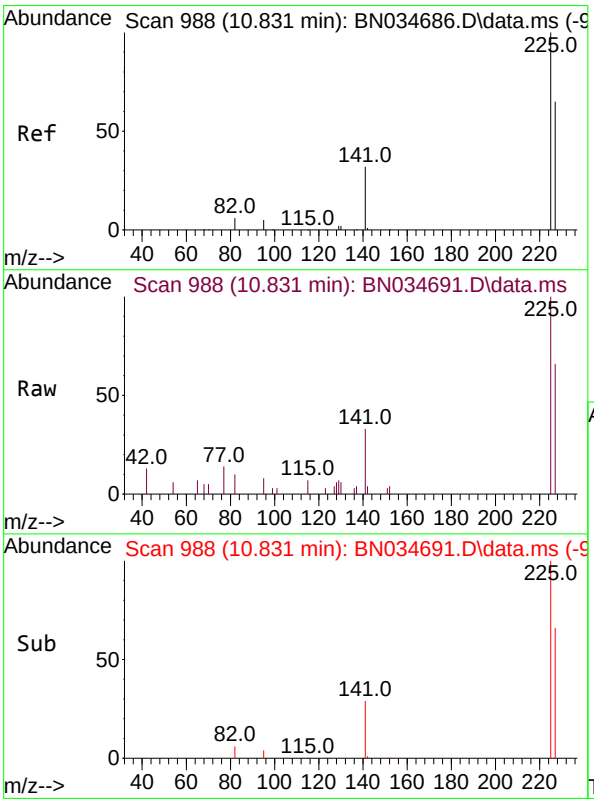
Ion	Ratio	Lower	Upper
128	100		
129	11.4	9.0	13.6
127	12.8	10.5	15.7



Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Manual Integrations
APPROVED

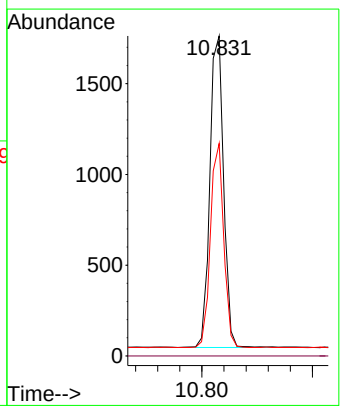
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

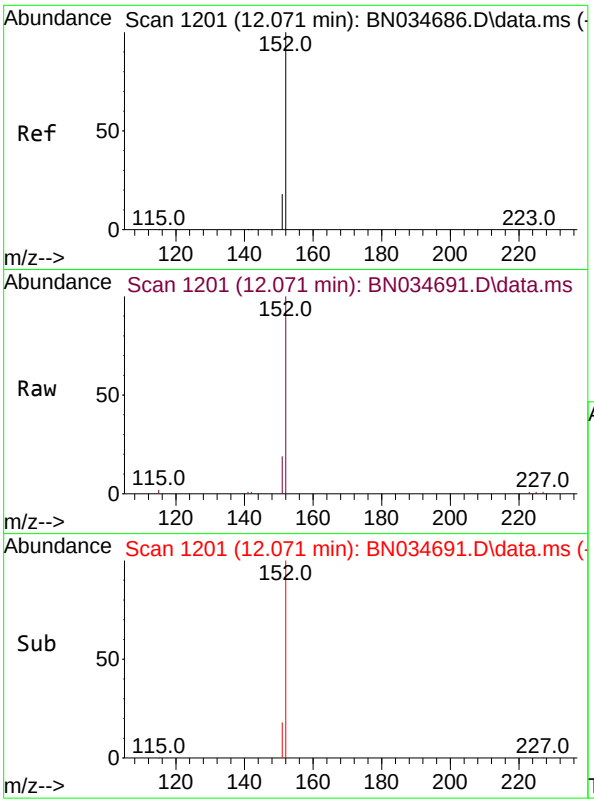


#10
Hexachlorobutadiene
Concen: 0.360 ng
RT: 10.831 min Scan# 988
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:225 Resp: 2964

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.4	51.4	77.0





#11
2-Methylnaphthalene-d10
Concen: 0.357 ng
RT: 12.071 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

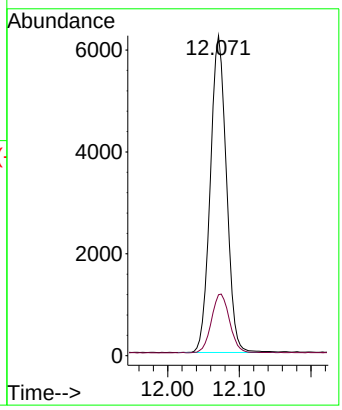
Tgt Ion:152 Resp: 974

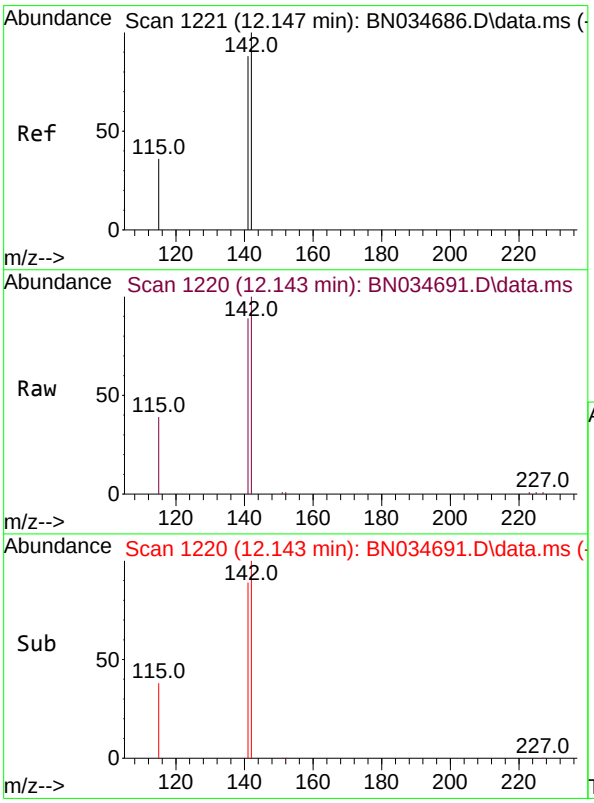
Ion	Ratio	Lower	Upper
152	100		
151	20.7	16.7	25.1

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

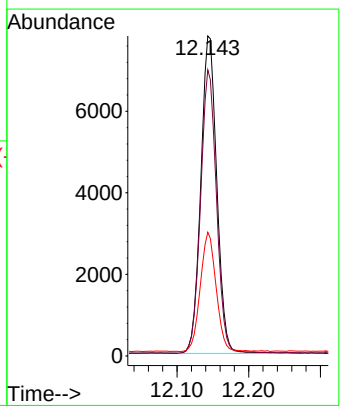


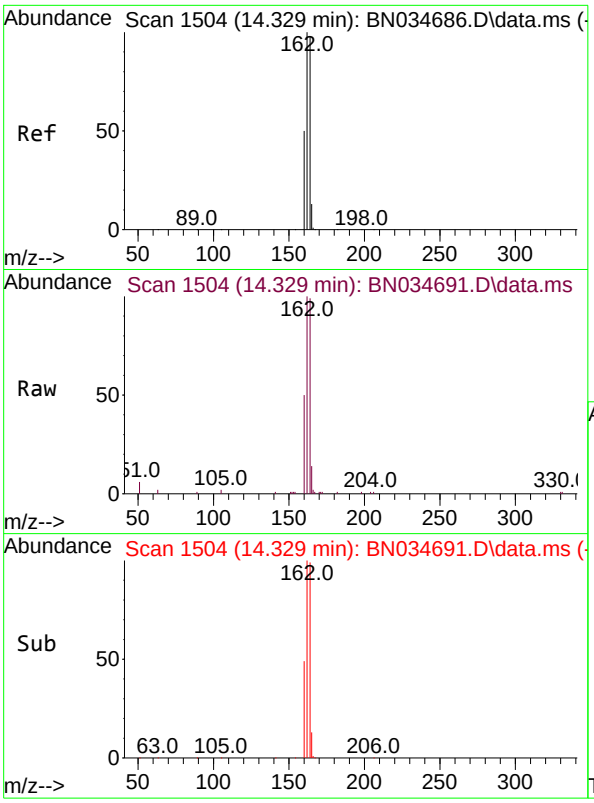


#12
2-Methylnaphthalene
Concen: 0.356 ng
RT: 12.143 min Scan# 1220
Delta R.T. -0.004 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:142 Resp: 12146

Ion	Ratio	Lower	Upper
142	100		
141	89.4	70.4	105.6
115	38.7	29.8	44.6

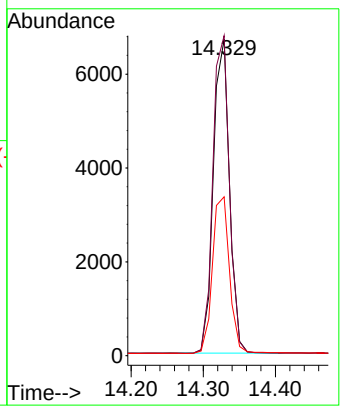




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.329 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:164 Resp: 1037

Ion	Ratio	Lower	Upper
164	100		
162	101.1	81.4	122.0
160	50.2	40.6	61.0



Instrument :
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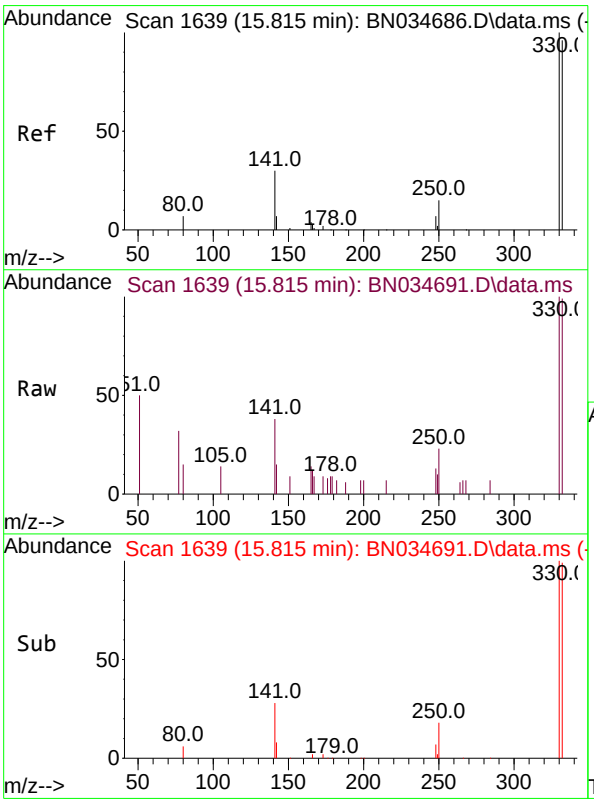
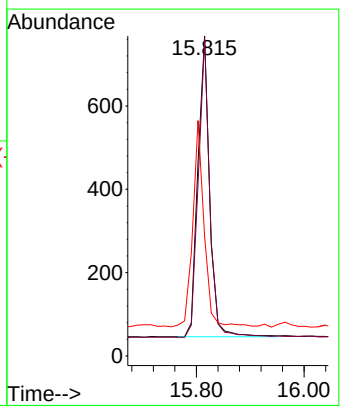
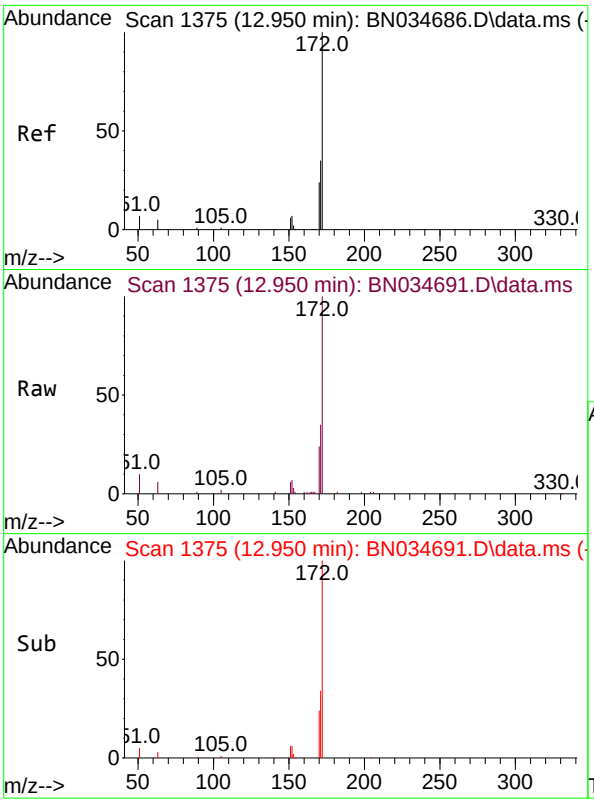


#14
2,4,6-Tribromophenol
Concen: 0.343 ng
RT: 15.815 min Scan# 1639
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:330 Resp: 1099

Ion	Ratio	Lower	Upper
330	100		
332	96.5	76.6	115.0
141	66.2	54.6	81.8

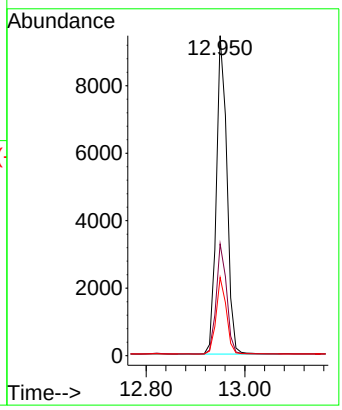




#15
2-Fluorobiphenyl
Concen: 0.341 ng
RT: 12.950 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:172 Resp: 1403

Ion	Ratio	Lower	Upper
172	100		
171	35.0	28.3	42.5
170	24.5	19.8	29.6



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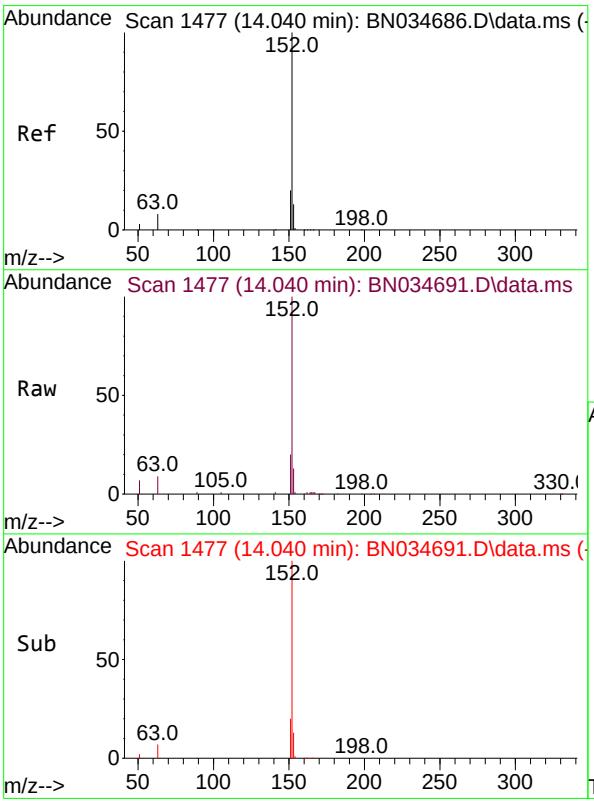
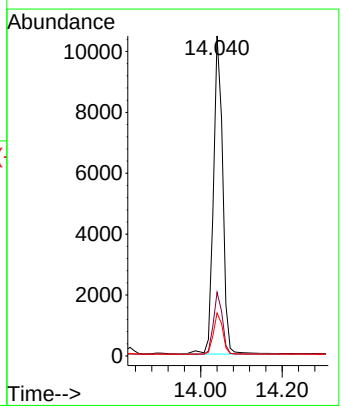
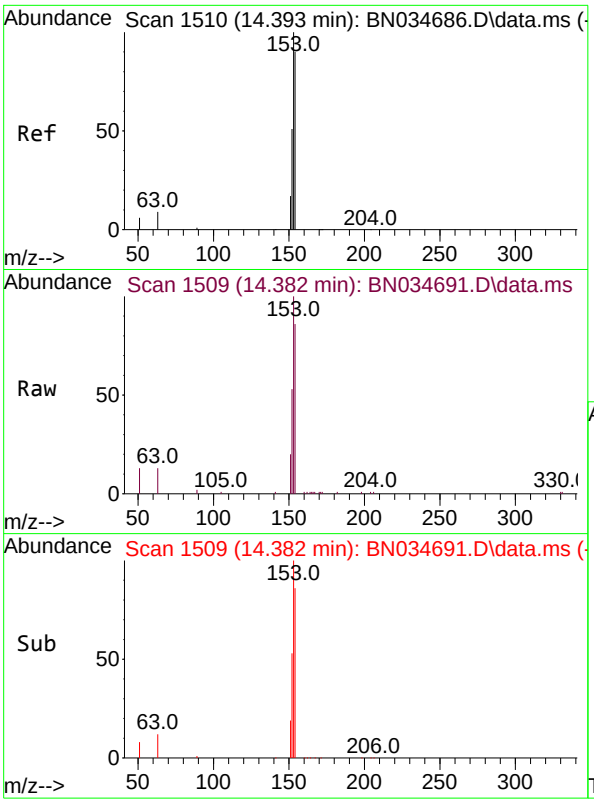


#16
Acenaphthylene
Concen: 0.329 ng
RT: 14.040 min Scan# 1477
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:152 Resp: 16384

Ion	Ratio	Lower	Upper
152	100		
151	19.0	15.6	23.4
153	13.1	10.6	15.8

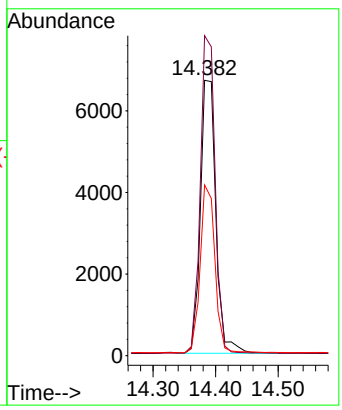




#17
Acenaphthene
Concen: 0.335 ng
RT: 14.382 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:154 Resp: 1151

Ion	Ratio	Lower	Upper
154	100		
153	111.6	88.2	132.2
152	58.6	46.9	70.3



Instrument :
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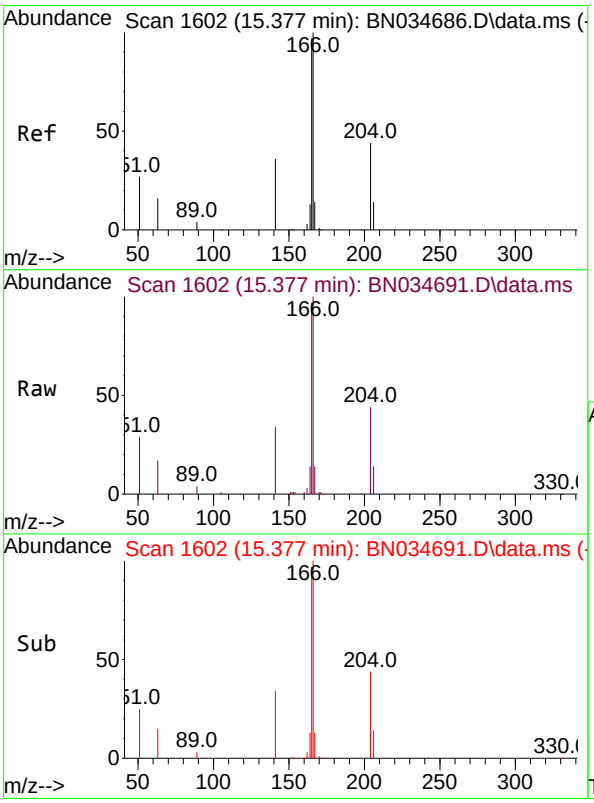
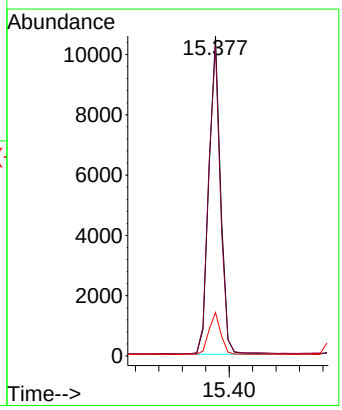
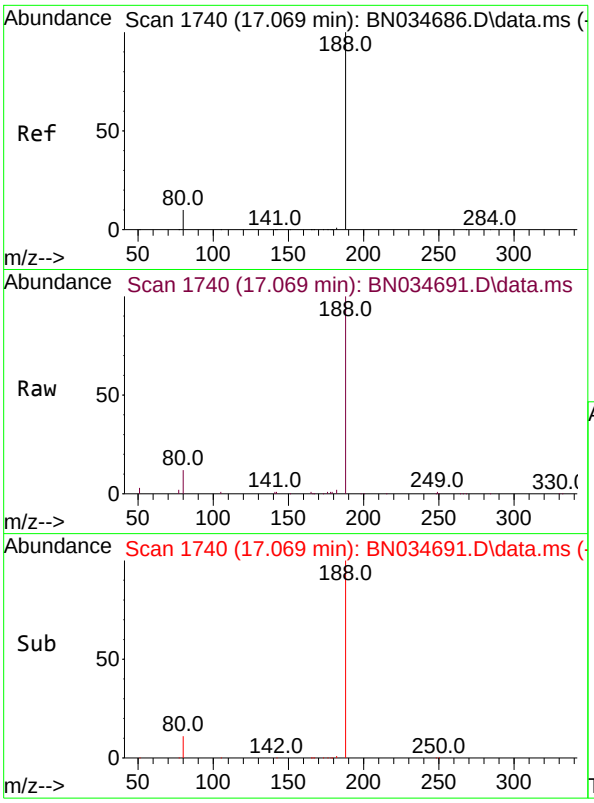


#18
Fluorene
Concen: 0.344 ng
RT: 15.377 min Scan# 1602
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:166 Resp: 14579

Ion	Ratio	Lower	Upper
166	100		
165	99.0	78.8	118.2
167	13.5	10.6	16.0

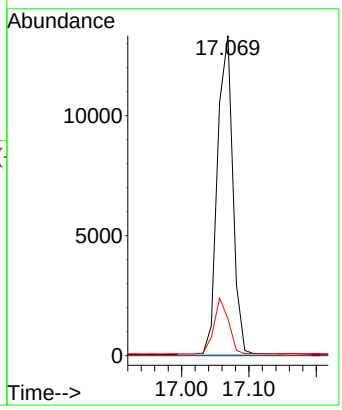




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.069 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:188 Resp: 2101

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.5	8.9	13.3



Instrument :
BNA_N
ClientSampleId :
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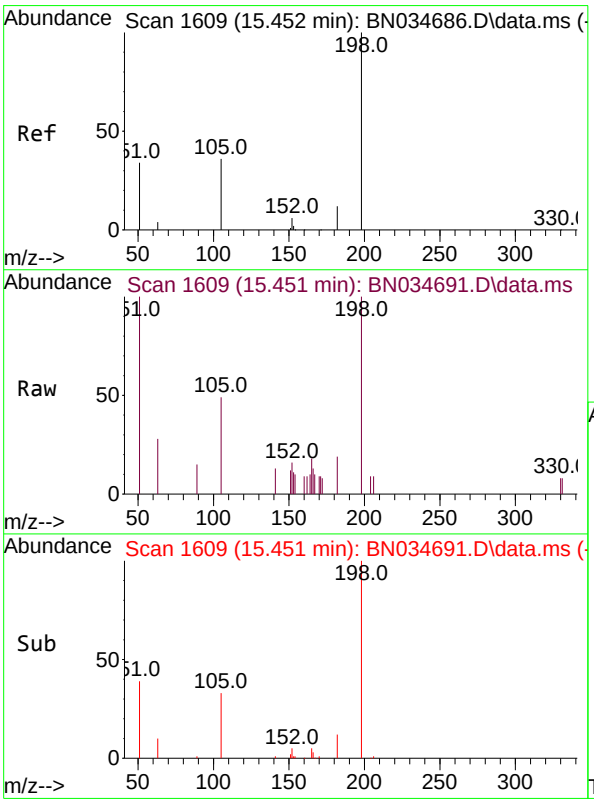
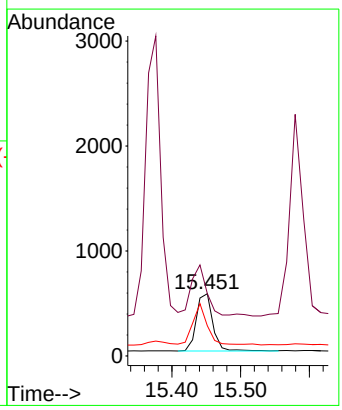
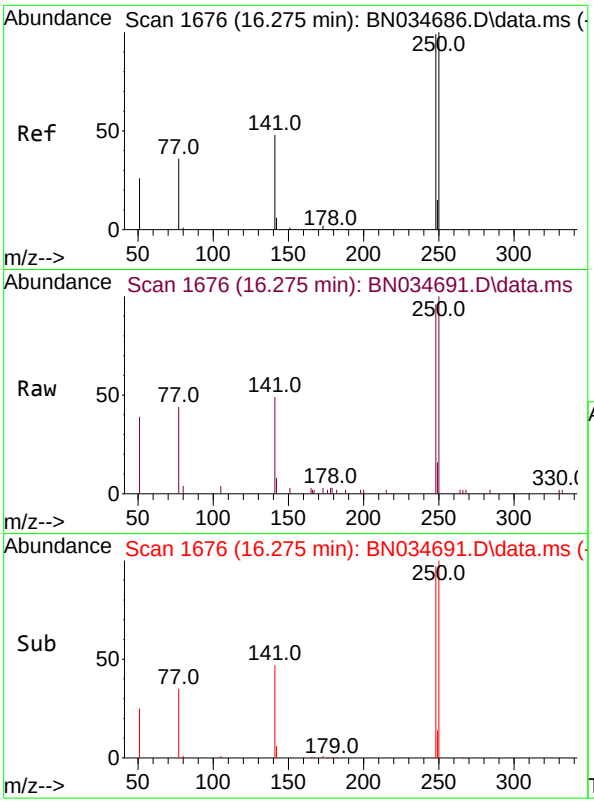


#20
4,6-Dinitro-2-methylphenol
Concen: 0.324 ng
RT: 15.451 min Scan# 1609
Delta R.T. -0.001 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:198 Resp: 947

Ion	Ratio	Lower	Upper
198	100		
51	100.2	91.8	137.8
105	48.7	44.3	66.5





#21
4-Bromophenyl-phenylether
Concen: 0.347 ng
RT: 16.275 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:248 Resp: 388

Ion	Ratio	Lower	Upper
248	100		
250	103.8	80.9	121.3
141	50.3	40.5	60.7

Instrument :
BNA_N
ClientSampleId :
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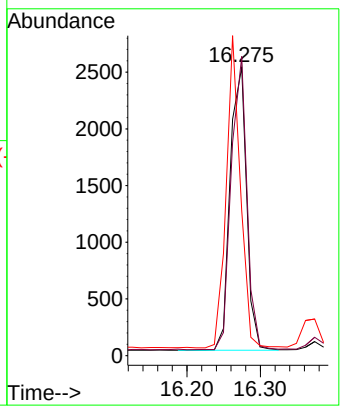
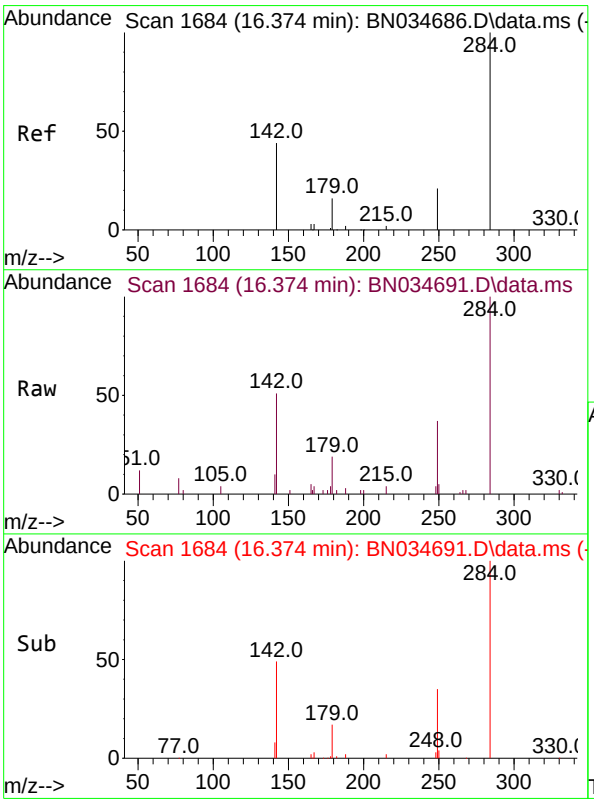
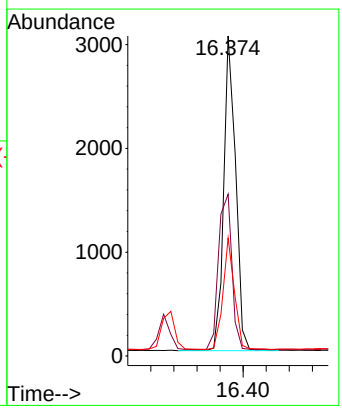


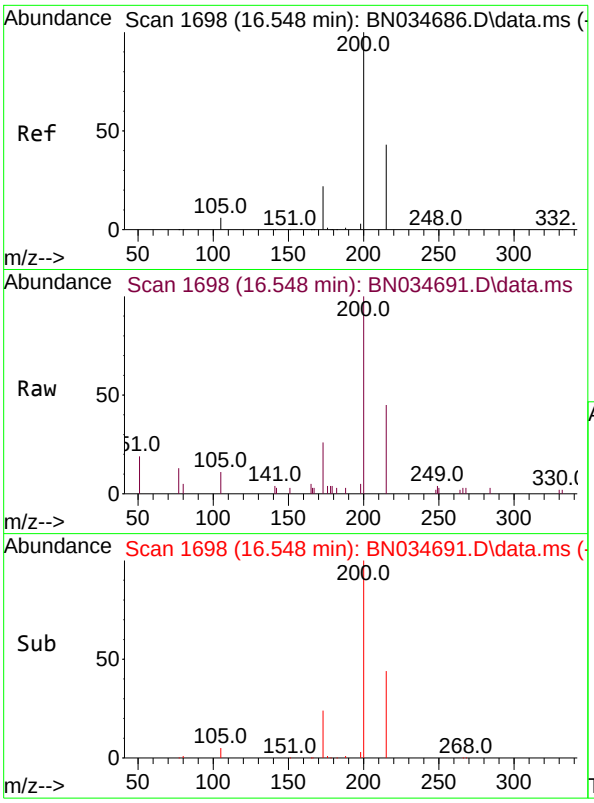


#22
Hexachlorobenzene
Concen: 0.358 ng
RT: 16.374 min Scan# 1684
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:284 Resp: 4355

Ion	Ratio	Lower	Upper
284	100		
142	55.6	43.6	65.4
249	34.2	26.6	40.0

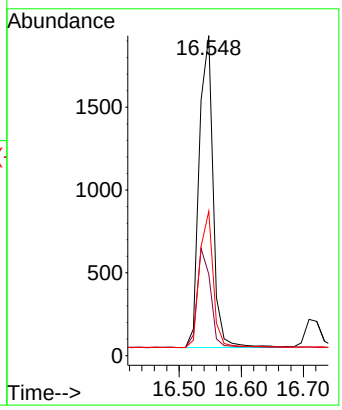




#23
Atrazine
Concen: 0.333 ng
RT: 16.548 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:200 Resp: 292

Ion	Ratio	Lower	Upper
200	100		
173	25.5	19.7	29.5
215	45.1	35.7	53.5



Instrument :
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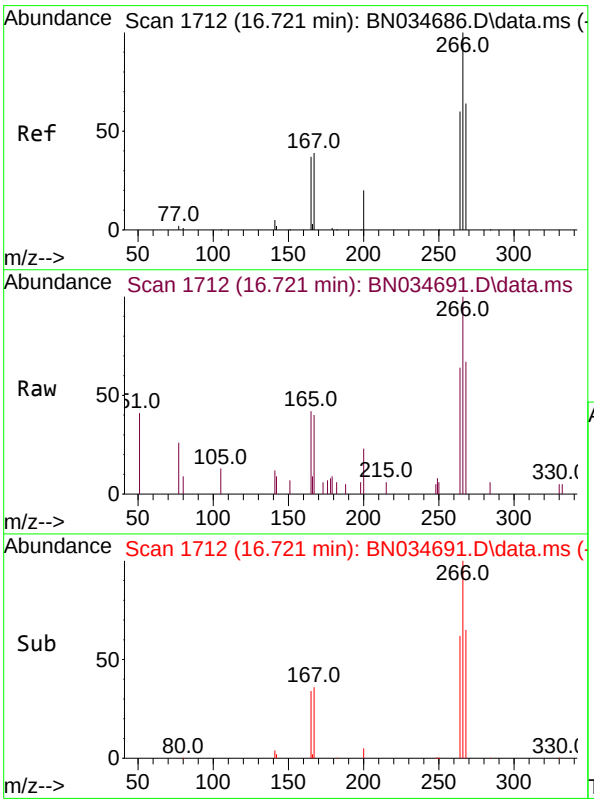
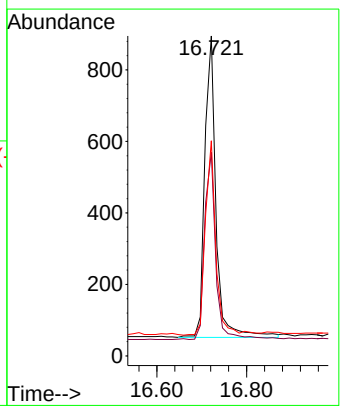
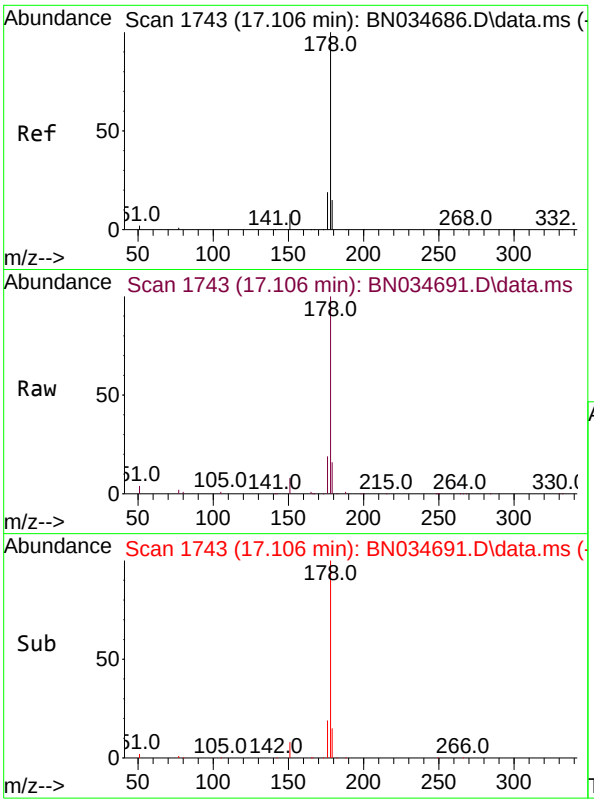


#24
Pentachlorophenol
Concen: 0.340 ng
RT: 16.721 min Scan# 1712
Delta R.T. 0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:266 Resp: 1463

Ion	Ratio	Lower	Upper
266	100		
264	61.6	49.4	74.2
268	61.0	50.5	75.7

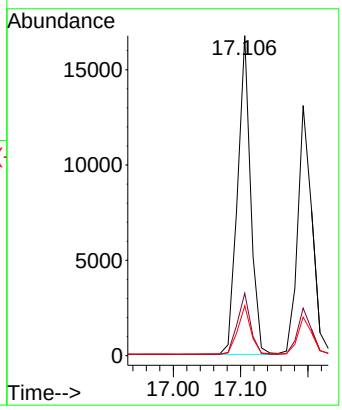




#25
Phenanthrene
Concen: 0.357 ng
RT: 17.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:178 Resp: 2255

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.2
179	15.4	12.2	18.4



Instrument :
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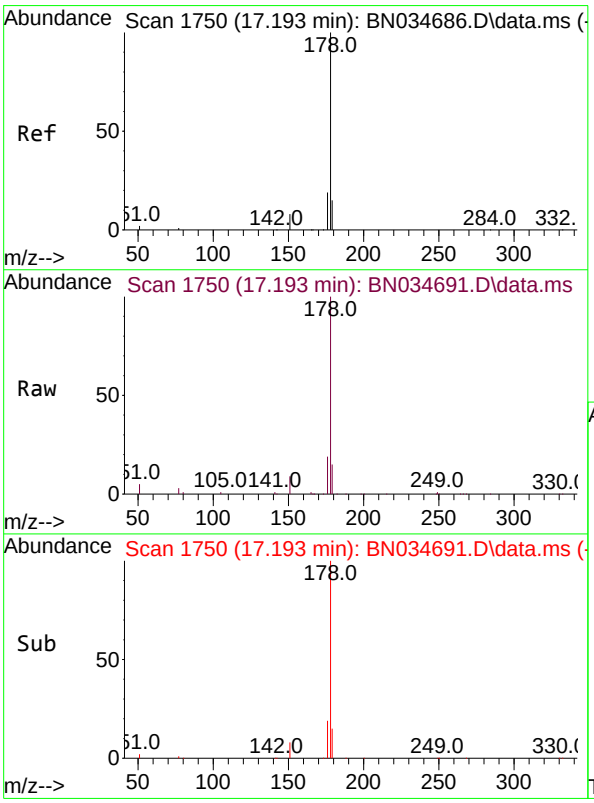
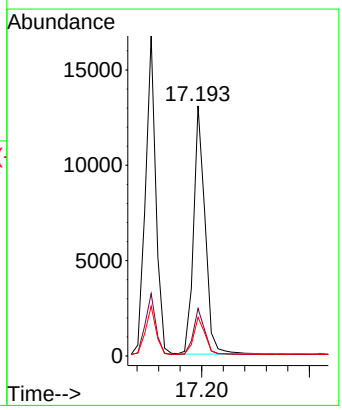
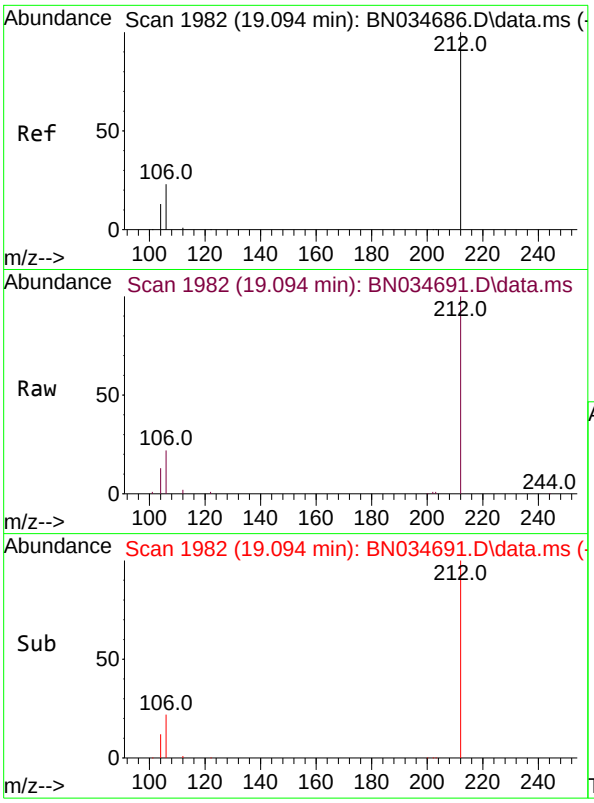


#26
Anthracene
Concen: 0.345 ng
RT: 17.193 min Scan# 1750
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:178 Resp: 19340

Ion	Ratio	Lower	Upper
178	100		
176	18.5	14.9	22.3
179	15.1	12.2	18.2

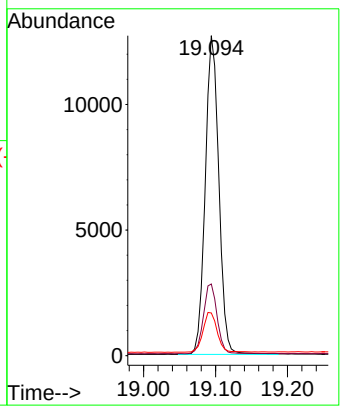




#27
Fluoranthene-d10
Concen: 0.350 ng
RT: 19.094 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:212 Resp: 1656

Ion	Ratio	Lower	Upper
212	100		
106	22.2	17.8	26.8
104	13.1	10.2	15.4



Instrument :
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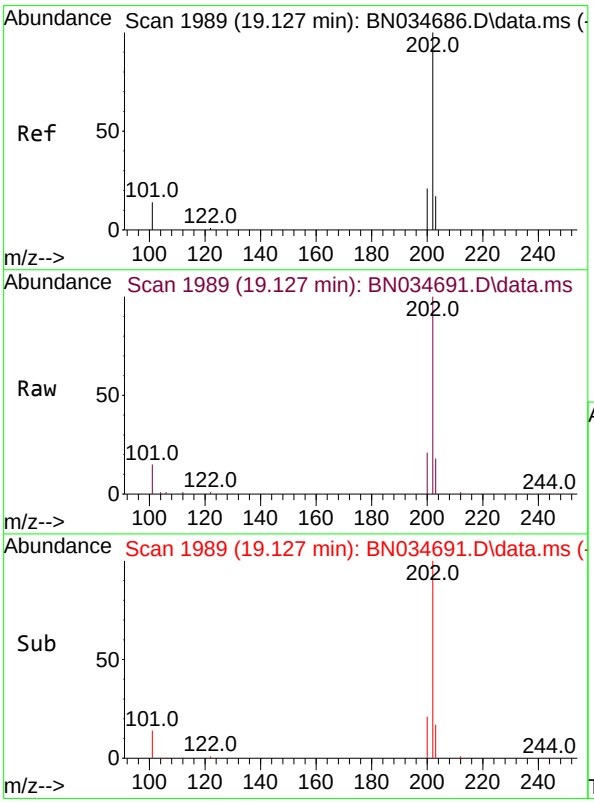
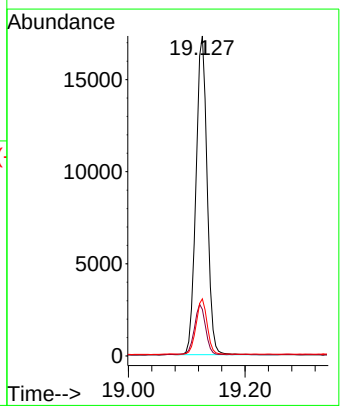
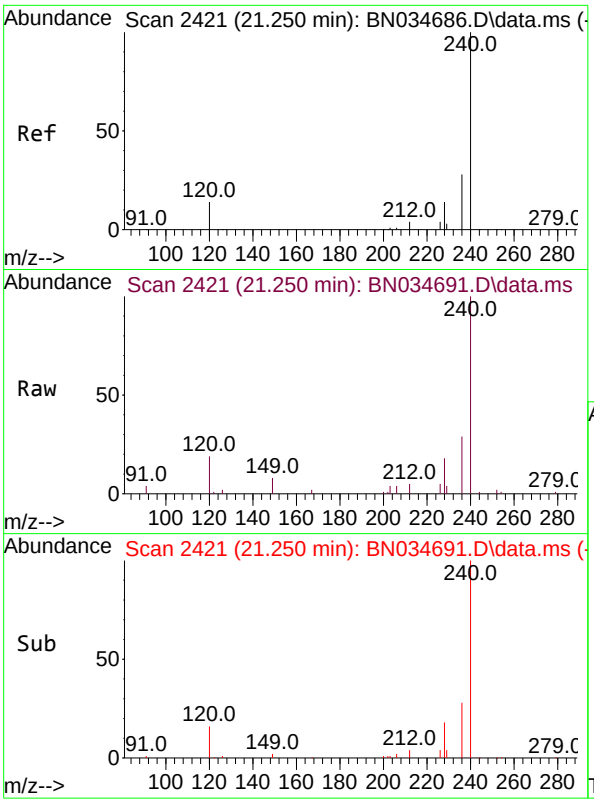


#28
Fluoranthene
Concen: 0.348 ng
RT: 19.127 min Scan# 1989
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:202 Resp: 22945

Ion	Ratio	Lower	Upper
202	100		
101	16.0	12.8	19.2
203	17.1	13.5	20.3

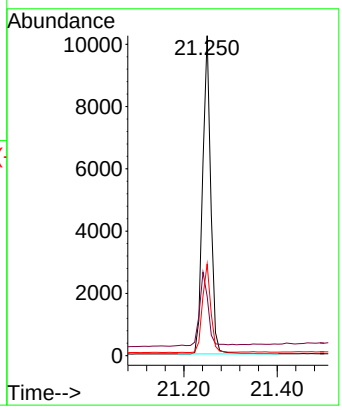




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.250 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:240 Resp: 1240

Ion	Ratio	Lower	Upper
240	100		
120	18.6	14.2	21.2
236	28.6	23.1	34.7



Instrument :
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ClientSampleId :
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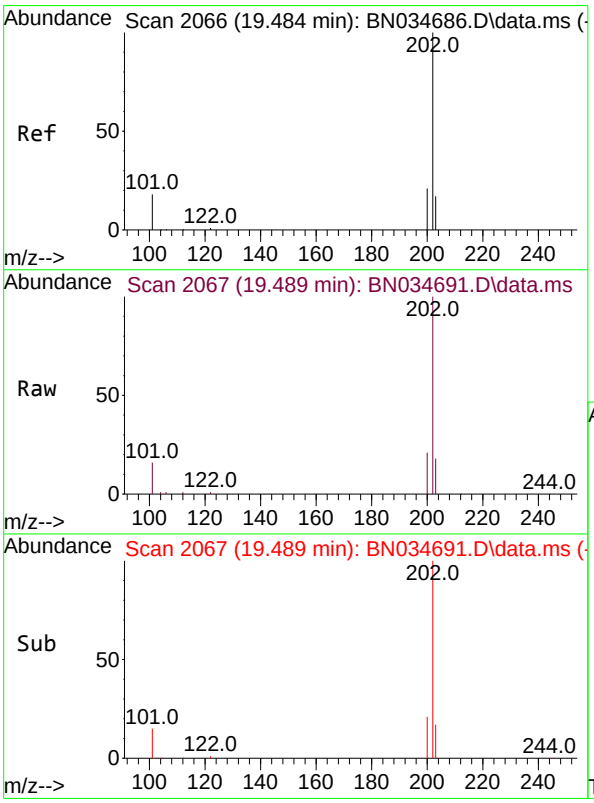
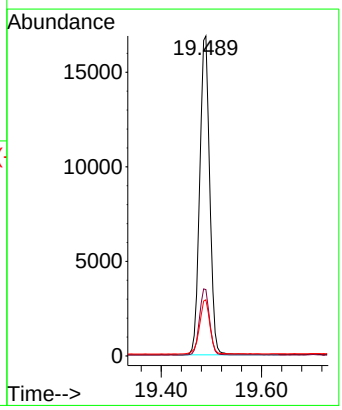
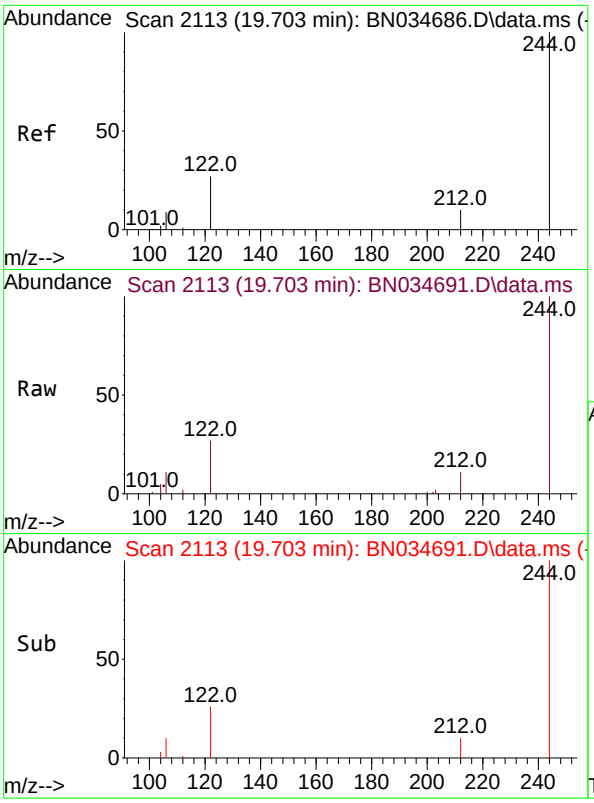


#30
Pyrene
Concen: 0.366 ng
RT: 19.489 min Scan# 2067
Delta R.T. 0.005 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:202 Resp: 23297

Ion	Ratio	Lower	Upper
202	100		
200	20.9	16.6	25.0
203	17.7	14.2	21.4

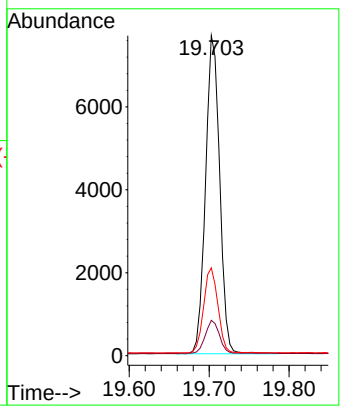




#31
Terphenyl-d14
Concen: 0.371 ng
RT: 19.703 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:244 Resp: 940

Ion	Ratio	Lower	Upper
244	100		
212	11.1	8.6	13.0
122	27.4	22.3	33.5



Instrument :
BNA_N
ClientSampleId :
ICVBN102424

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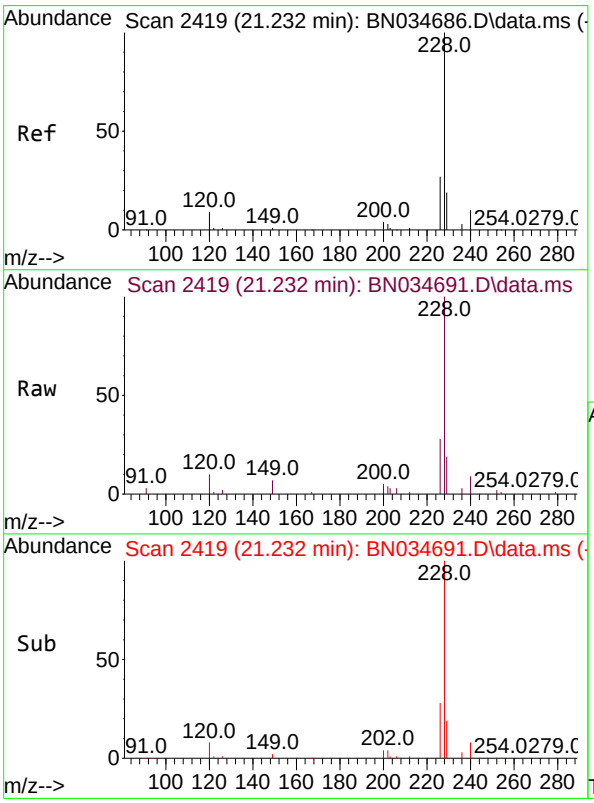
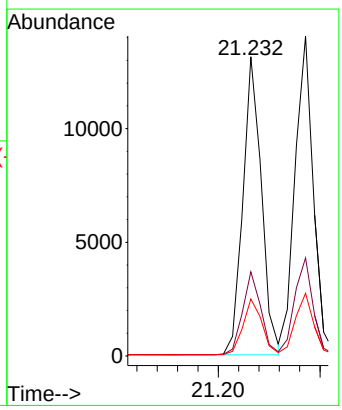
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

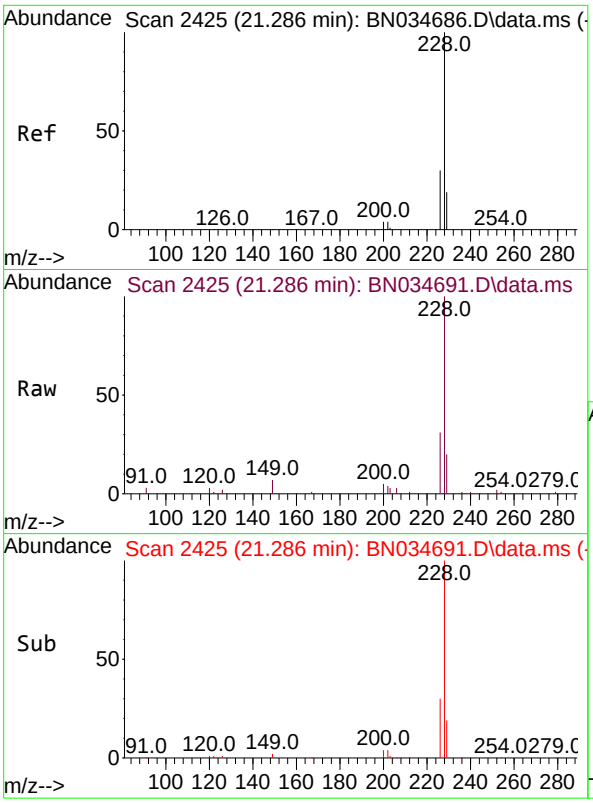


#32
Benzo(a)anthracene
Concen: 0.349 ng
RT: 21.232 min Scan# 2419
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:228 Resp: 16543

Ion	Ratio	Lower	Upper
228	100		
226	28.1	22.0	33.0
229	19.1	15.6	23.4

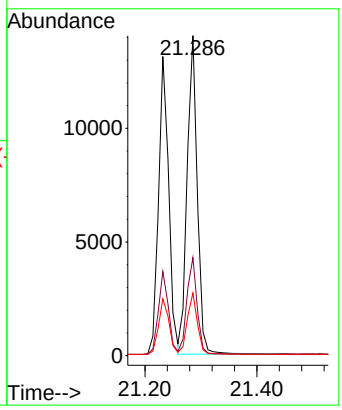




#33
Chrysene
Concen: 0.361 ng
RT: 21.286 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:228 Resp: 1769

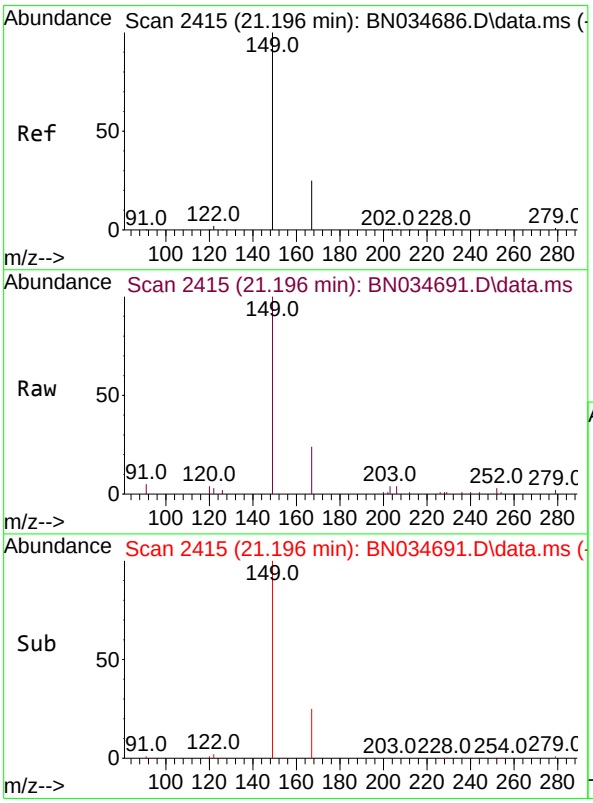
Ion	Ratio	Lower	Upper
228	100		
226	30.6	24.1	36.1
229	19.6	15.8	23.8



Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Manual Integrations
APPROVED

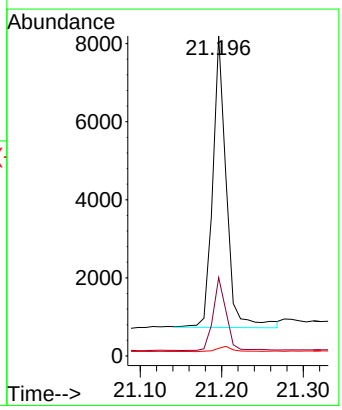
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

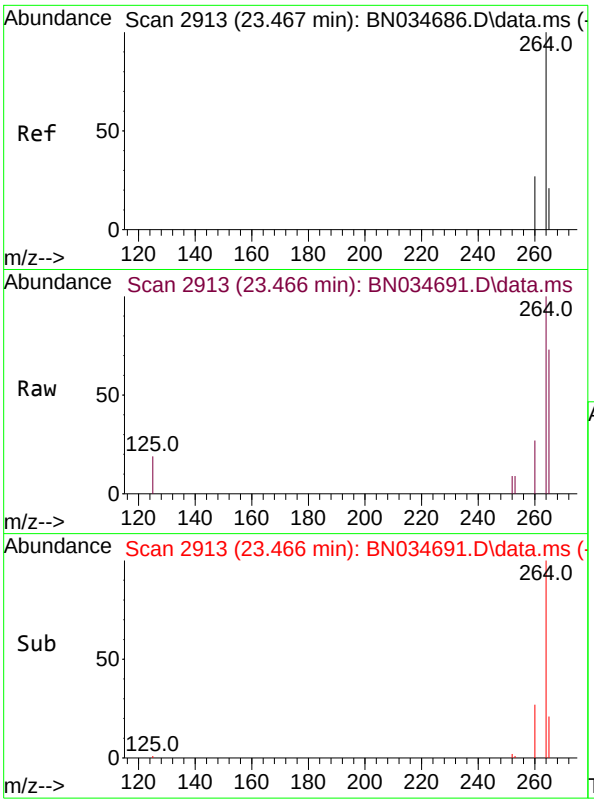


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.322 ng m
RT: 21.196 min Scan# 2415
Delta R.T. 0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:149 Resp: 8661

Ion	Ratio	Lower	Upper
149	100		
167	23.9	19.7	29.5
279	2.2	1.8	2.6

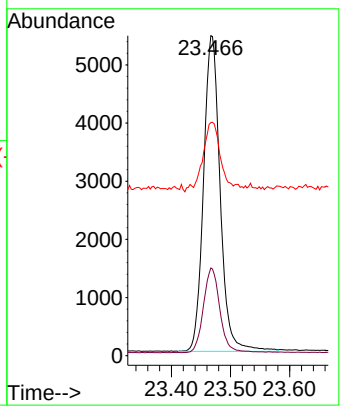




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.466 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:264 Resp: 1059

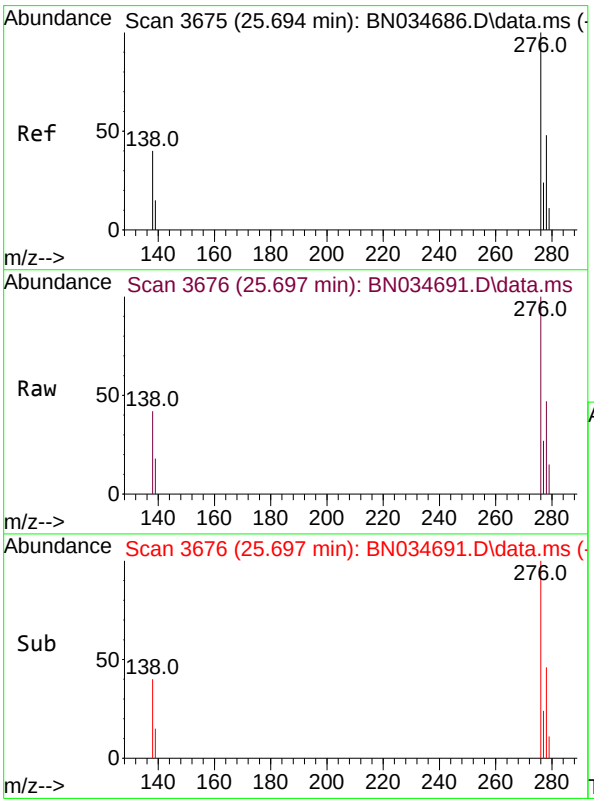
Ion	Ratio	Lower	Upper
264	100		
260	27.4	21.9	32.9
265	72.9	60.6	91.0



Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Manual Integrations
APPROVED

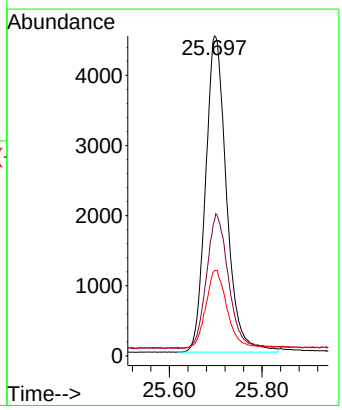
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

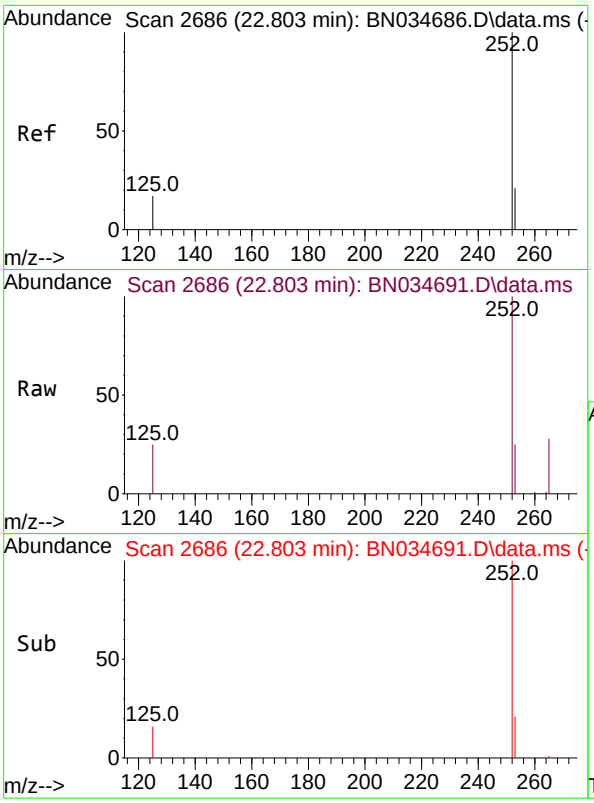


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.347 ng
RT: 25.697 min Scan# 3676
Delta R.T. 0.003 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:276 Resp: 14157

Ion	Ratio	Lower	Upper
276	100		
138	43.9	35.1	52.7
277	25.2	19.7	29.5

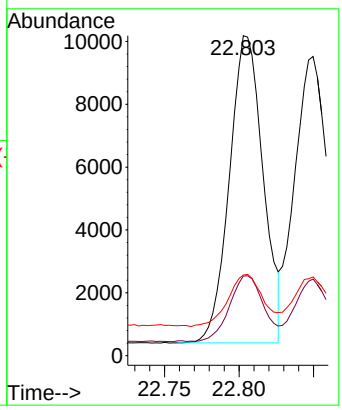




#37
Benzo(b)fluoranthene
Concen: 0.363 ng
RT: 22.803 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:252 Resp: 1535

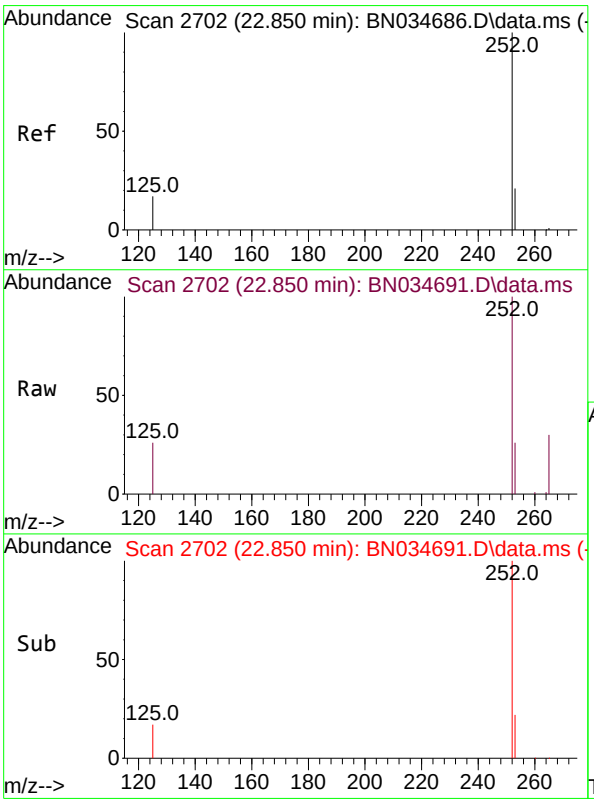
Ion	Ratio	Lower	Upper
252	100		
253	24.9	20.0	30.0
125	25.2	20.9	31.3



Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Manual Integrations
APPROVED

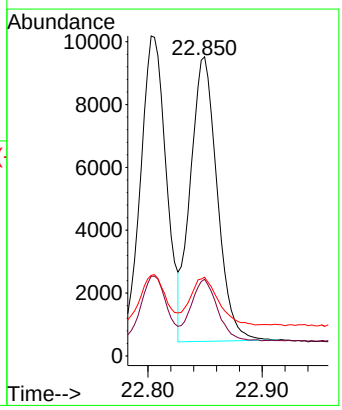
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

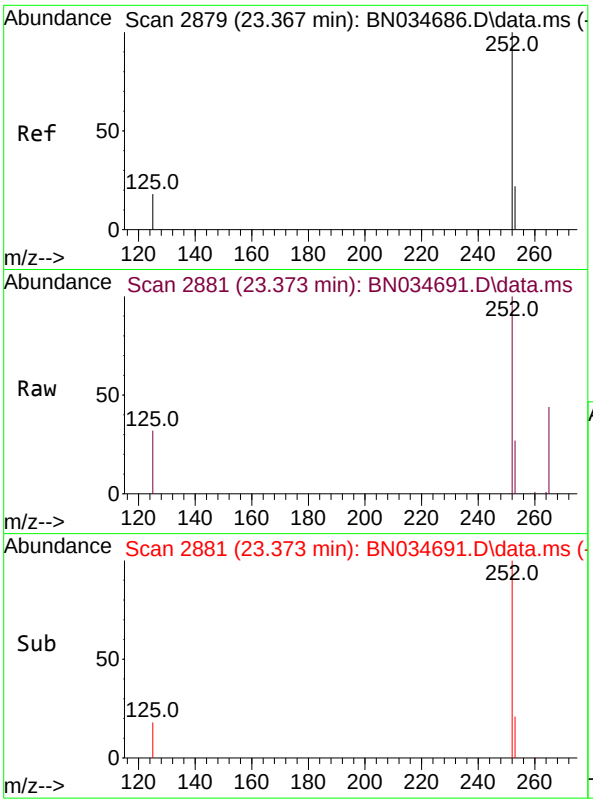


#38
Benzo(k)fluoranthene
Concen: 0.353 ng
RT: 22.850 min Scan# 2702
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:252 Resp: 14742

Ion	Ratio	Lower	Upper
252	100		
253	25.6	20.6	31.0
125	26.3	21.6	32.4

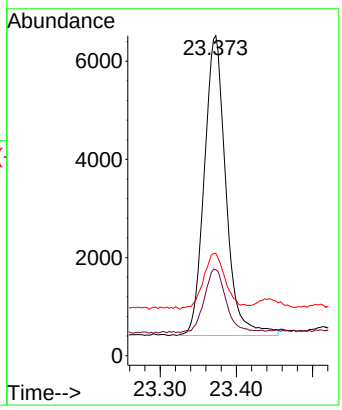




#39
Benzo(a)pyrene
Concen: 0.355 ng
RT: 23.373 min Scan# 2
Delta R.T. 0.006 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:252 Resp: 1205

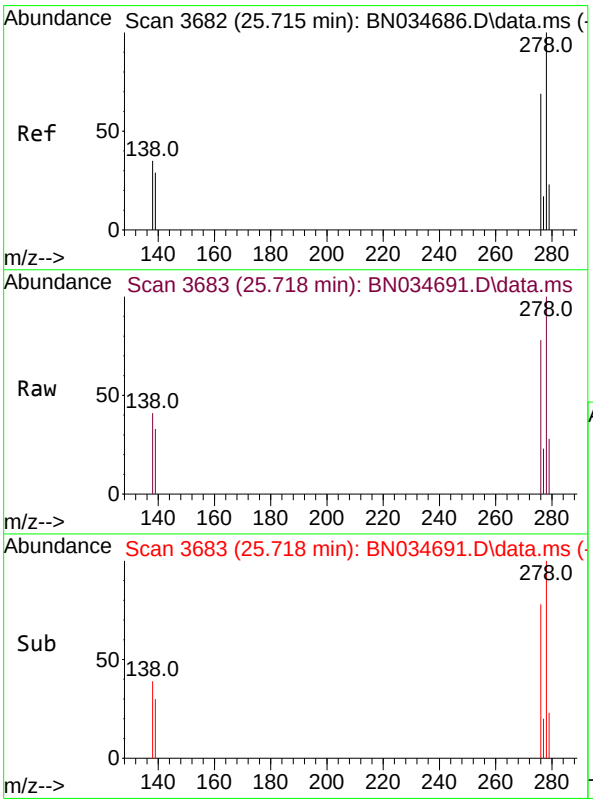
Ion	Ratio	Lower	Upper
252	100		
253	26.9	22.2	33.4
125	32.0	26.0	39.0



Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Manual Integrations
APPROVED

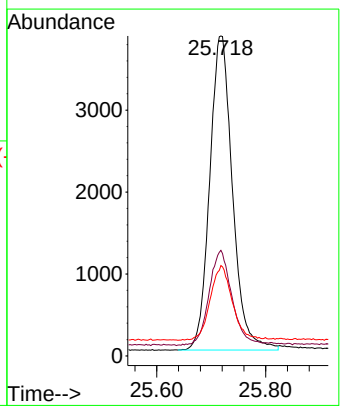
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

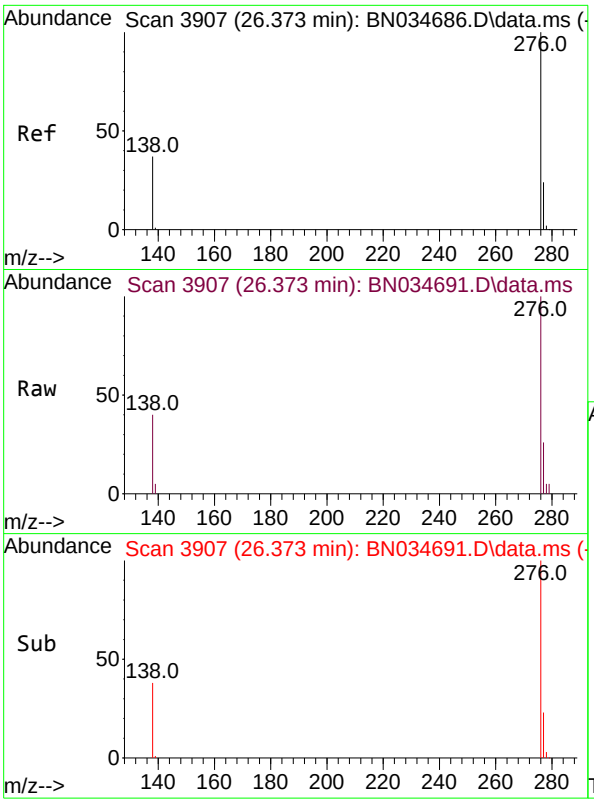


#40
Dibenzo(a,h)anthracene
Concen: 0.346 ng
RT: 25.718 min Scan# 3683
Delta R.T. 0.003 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:278 Resp: 11142

Ion	Ratio	Lower	Upper
278	100		
139	33.0	25.4	38.2
279	28.2	22.4	33.6

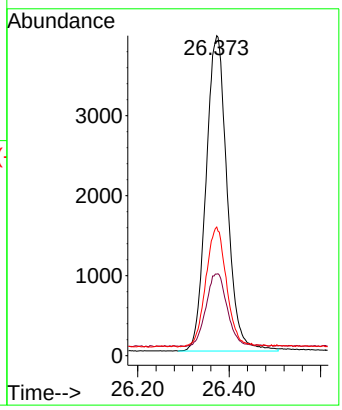




#41
Benzo(g,h,i)perylene
Concen: 0.354 ng
RT: 26.373 min Scan# 3
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:276 Resp: 1257

Ion	Ratio	Lower	Upper
276	100		
277	25.5	21.3	31.9
138	40.2	31.9	47.9



Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034691.D
Acq On : 24 Oct 2024 14:14
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Quant Time: Oct 24 14:43:51 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
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	106	0.00
2		1,4-Dioxane	0.532	0.473	11.1	103	0.00
3		n-Nitrosodimethylamine	0.775	0.686	11.5	103	0.00
4	S	2-Fluorophenol	1.189	1.193	-0.3	118	0.00
5	S	Phenol-d6	1.568	1.553	1.0	118	0.00
6		bis(2-Chloroethyl)ether	1.274	1.176	7.7	109	0.00
7	I	Naphthalene-d8	1.000	1.000	0.0	107	0.00
8	S	Nitrobenzene-d5	0.336	0.290	13.7	106	0.00
9		Naphthalene	1.107	0.991	10.5	108	0.00
10		Hexachlorobutadiene	0.166	0.149	10.2	107	0.00
11	SURR	2-Methylnaphthalene-d10	0.550	0.491	10.7	109	0.00
12		2-Methylnaphthalene	0.687	0.612	10.9	109	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	111	0.00
14	S	2,4,6-Tribromophenol	0.124	0.106	14.5	123	0.00
15	S	2-Fluorobiphenyl	1.590	1.353	14.9	109	0.00
16		Acenaphthylene	1.921	1.580	17.8	111	0.00
17		Acenaphthene	1.324	1.110	16.2	110	-0.01
18		Fluorene	1.634	1.406	14.0	113	0.00
19	I	Phenanthrene-d10	1.000	1.000	0.0	116	0.00
20		4,6-Dinitro-2-methylphenol	0.056	0.045	19.6	122	0.00
21		4-Bromophenyl-phenylether	0.213	0.185	13.1	112	0.00
22		Hexachlorobenzene	0.231	0.207	10.4	113	0.00
23		Atrazine	0.168	0.139	17.3	115	0.00
24		Pentachlorophenol	0.082	0.070	14.6	126	0.00
25		Phenanthrene	1.202	1.073	10.7	116	0.00
26		Anthracene	1.067	0.920	13.8	114	0.00
27	SURR	Fluoranthene-d10	0.901	0.788	12.5	116	0.00
28		Fluoranthene	1.253	1.092	12.8	116	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	117	0.00
30		Pyrene	2.055	1.879	8.6	117	0.00
31	S	Terphenyl-d14	0.817	0.758	7.2	120	0.00
32		Benzo(a)anthracene	1.528	1.334	12.7	113	0.00
33		Chrysene	1.581	1.427	9.7	116	0.00
34		Bis(2-ethylhexyl)phthalate	0.867	0.698	19.5	113	0.00
35	I	Perylene-d12	1.000	1.000	0.0	110	0.00
36		Indeno(1,2,3-cd)pyrene	1.541	1.336	13.3	104	0.00
37		Benzo(b)fluoranthene	1.597	1.449	9.3	108	0.00
38		Benzo(k)fluoranthene	1.576	1.392	11.7	111	0.00
39	C	Benzo(a)pyrene	1.282	1.138	11.2	109	0.00
40		Dibenzo(a,h)anthracene	1.215	1.052	13.4	104	0.00
41		Benzo(g,h,i)perylene	1.340	1.187	11.4	104	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\BN102424\
Data File : BN034691.D
Acq On : 24 Oct 2024 14:14
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Quant Time: Oct 24 14:43:51 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
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	106	0.00
2		1,4-Dioxane	0.400	0.355	11.3	103	0.00
3		n-Nitrosodimethylamine	0.400	0.354	11.5	103	0.00
4	S	2-Fluorophenol	0.400	0.401	-0.3	118	0.00
5	S	Phenol-d6	0.400	0.396	1.0	118	0.00
6		bis(2-Chloroethyl)ether	0.400	0.369	7.8	109	0.00
7	I	Naphthalene-d8	0.400	0.400	0.0	107	0.00
8	S	Nitrobenzene-d5	0.400	0.346	13.5	106	0.00
9		Naphthalene	0.400	0.358	10.5	108	0.00
10		Hexachlorobutadiene	0.400	0.360	10.0	107	0.00
11	SURR	2-Methylnaphthalene-d10	0.400	0.357	10.8	109	0.00
12		2-Methylnaphthalene	0.400	0.356	11.0	109	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	111	0.00
14	S	2,4,6-Tribromophenol	0.400	0.343	14.2	123	0.00
15	S	2-Fluorobiphenyl	0.400	0.341	14.8	109	0.00
16		Acenaphthylene	0.400	0.329	17.8	111	0.00
17		Acenaphthene	0.400	0.335	16.3	110	-0.01
18		Fluorene	0.400	0.344	14.0	113	0.00
19	I	Phenanthrene-d10	0.400	0.400	0.0	116	0.00
20		4,6-Dinitro-2-methylphenol	0.400	0.324	19.0	122	0.00
21		4-Bromophenyl-phenylether	0.400	0.347	13.3	112	0.00
22		Hexachlorobenzene	0.400	0.358	10.5	113	0.00
23		Atrazine	0.400	0.333	16.8	115	0.00
24		Pentachlorophenol	0.400	0.340	15.0	126	0.00
25		Phenanthrene	0.400	0.357	10.8	116	0.00
26		Anthracene	0.400	0.345	13.8	114	0.00
27	SURR	Fluoranthene-d10	0.400	0.350	12.5	116	0.00
28		Fluoranthene	0.400	0.348	13.0	116	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	117	0.00
30		Pyrene	0.400	0.366	8.5	117	0.00
31	S	Terphenyl-d14	0.400	0.371	7.3	120	0.00
32		Benzo(a)anthracene	0.400	0.349	12.8	113	0.00
33		Chrysene	0.400	0.361	9.8	116	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.322	19.5	113	0.00
35	I	Perylene-d12	0.400	0.400	0.0	110	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.347	13.3	104	0.00
37		Benzo(b)fluoranthene	0.400	0.363	9.3	108	0.00
38		Benzo(k)fluoranthene	0.400	0.353	11.8	111	0.00
39	C	Benzo(a)pyrene	0.400	0.355	11.3	109	0.00
40		Dibenzo(a,h)anthracene	0.400	0.346	13.5	104	0.00
41		Benzo(g,h,i)perylene	0.400	0.354	11.5	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4440 SAS No.: P4440 SDG No.: P4440

Instrument ID: BNA_N Calibration Date/Time: 10/24/2024 21:01

Lab File ID: BN034701.D Init. Calib. Date(s): 10/24/2024 10/24/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 09:11 12:48

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.550	0.473		-14.0	20.0
Fluoranthene-d10	0.901	0.768		-14.8	20.0
2-Fluorophenol	1.189	1.172		-1.4	20.0
Phenol-d6	1.568	1.616		3.1	20.0
Nitrobenzene-d5	0.336	0.290		-13.7	20.0
2-Fluorobiphenyl	1.590	1.425		-10.4	20.0
2,4,6-Tribromophenol	0.124	0.096		-22.6	20.0
Terphenyl-d14	0.817	0.690		-15.5	20.0
1,4-Dioxane	0.532	0.489		-8.1	20.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034701.D
Acq On : 24 Oct 2024 21:01
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Oct 25 02:07:31 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration

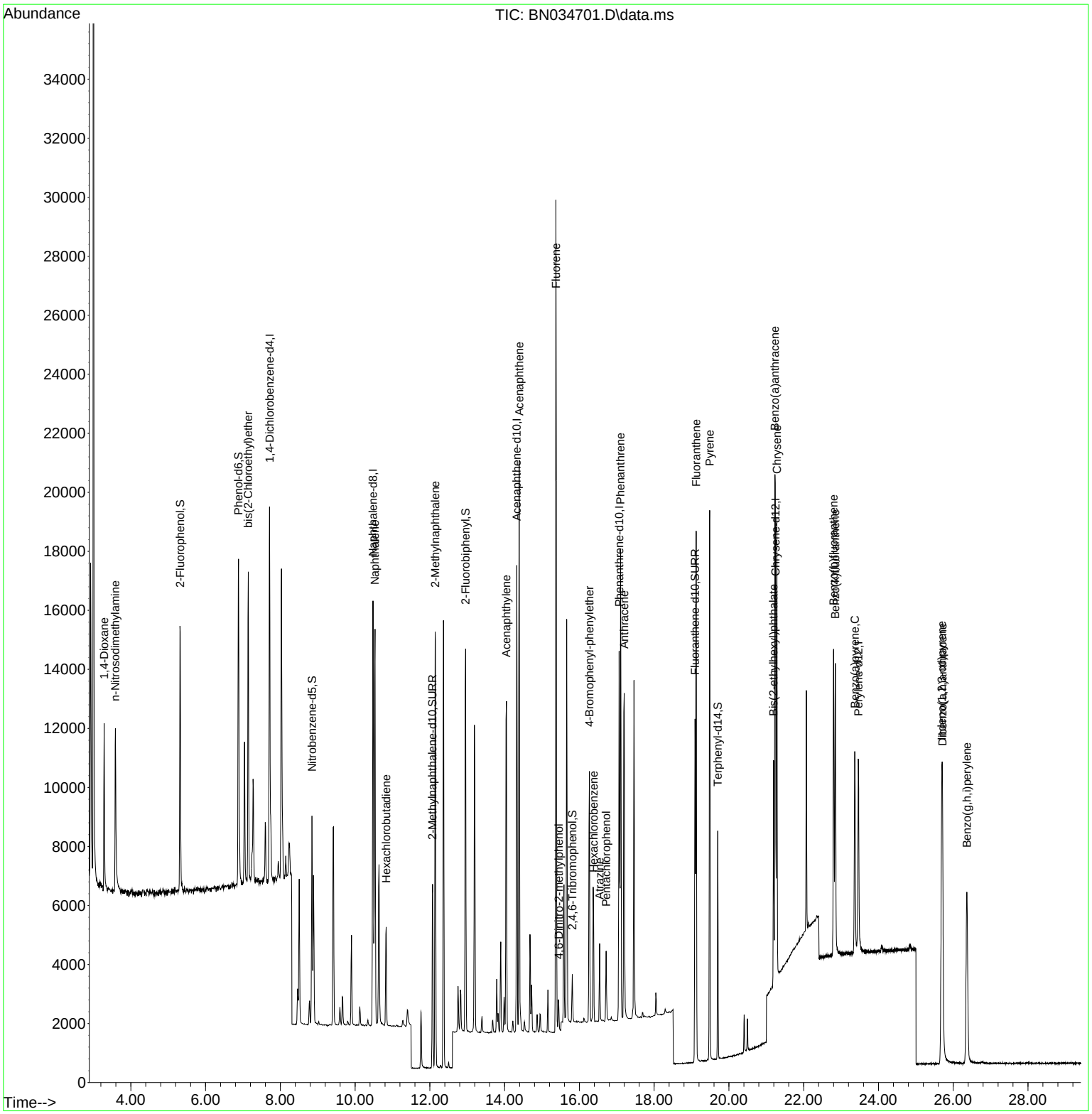
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.712	152	5885	0.400	ng		0.00
7) Naphthalene-d8	10.479	136	17350	0.400	ng		0.00
13) Acenaphthene-d10	14.325	164	8078	0.400	ng		0.00
19) Phenanthrene-d10	17.064	188	14577	0.400	ng	#	0.00
29) Chrysene-d12	21.248	240	8841	0.400	ng		0.00
35) Perylene-d12	23.464	264	8336	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.322	112	6898	0.394	ng		0.00
5) Phenol-d6	6.882	99	9511	0.412	ng		0.00
8) Nitrobenzene-d5	8.845	82	5024	0.345	ng		0.00
11) 2-Methylnaphthalene-d10	12.071	152	8204	0.344	ng		0.00
14) 2,4,6-Tribromophenol	15.810	330	779	0.312	ng		0.00
15) 2-Fluorobiphenyl	12.957	172	11511	0.359	ng		0.00
27) Fluoranthene-d10	19.092	212	11190	0.341	ng		0.00
31) Terphenyl-d14	19.700	244	6100	0.338	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.285	88	2877	0.367	ng		98
3) n-Nitrosodimethylamine	3.581	42	4327	0.380	ng	#	93
6) bis(2-Chloroethyl)ether	7.142	93	6834	0.365	ng		98
9) Naphthalene	10.532	128	17319	0.361	ng		100
10) Hexachlorobutadiene	10.831	225	2605	0.362	ng	#	100
12) 2-Methylnaphthalene	12.143	142	10362	0.348	ng		98
16) Acenaphthylene	14.047	152	13092	0.337	ng		99
17) Acenaphthene	14.389	154	9042	0.338	ng		98
18) Fluorene	15.373	166	10979	0.333	ng		99
20) 4,6-Dinitro-2-methylph...	15.448	198	621	0.306	ng		92
21) 4-Bromophenyl-phenylether	16.269	248	2820	0.363	ng	#	89
22) Hexachlorobenzene	16.381	284	3143	0.373	ng		98
23) Atrazine	16.542	200	1901	0.311	ng	#	93
24) Pentachlorophenol	16.716	266	1008	0.338	ng		97
25) Phenanthrene	17.101	178	15738	0.359	ng		100
26) Anthracene	17.200	178	13426	0.345	ng		99
28) Fluoranthene	19.124	202	15690	0.343	ng		99
30) Pyrene	19.487	202	15827	0.348	ng		99
32) Benzo(a)anthracene	21.230	228	11854	0.351	ng		99
33) Chrysene	21.283	228	12923	0.370	ng		100
34) Bis(2-ethylhexyl)phtha...	21.194	149	6855	0.358	ng		98
36) Indeno(1,2,3-cd)pyrene	25.692	276	12128	0.378	ng		97
37) Benzo(b)fluoranthene	22.801	252	12003	0.361	ng		98
38) Benzo(k)fluoranthene	22.845	252	11895	0.362	ng		98
39) Benzo(a)pyrene	23.368	252	9650	0.361	ng		97
40) Dibenzo(a,h)anthracene	25.713	278	9542	0.377	ng		97
41) Benzo(g,h,i)perylene	26.365	276	10879	0.390	ng		97

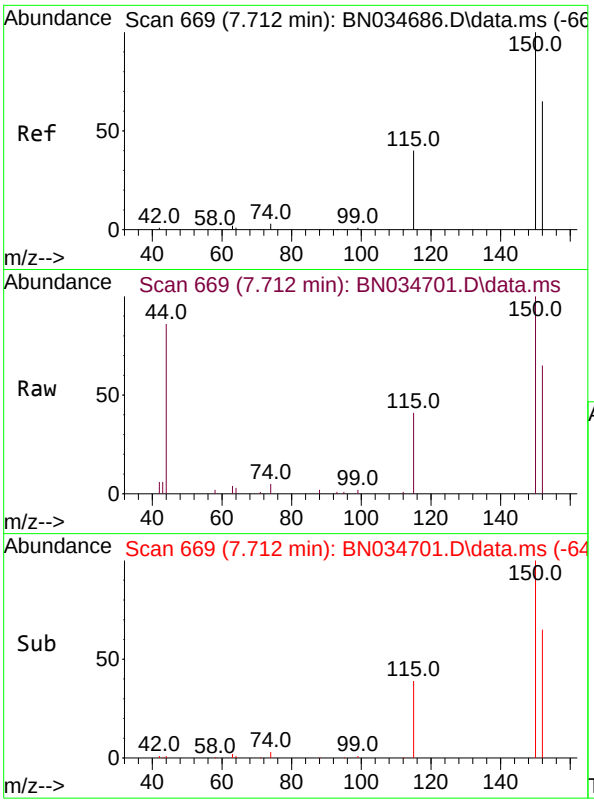
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034701.D
Acq On : 24 Oct 2024 21:01
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Oct 25 02:07:31 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration



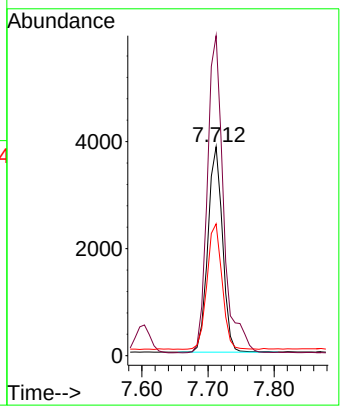


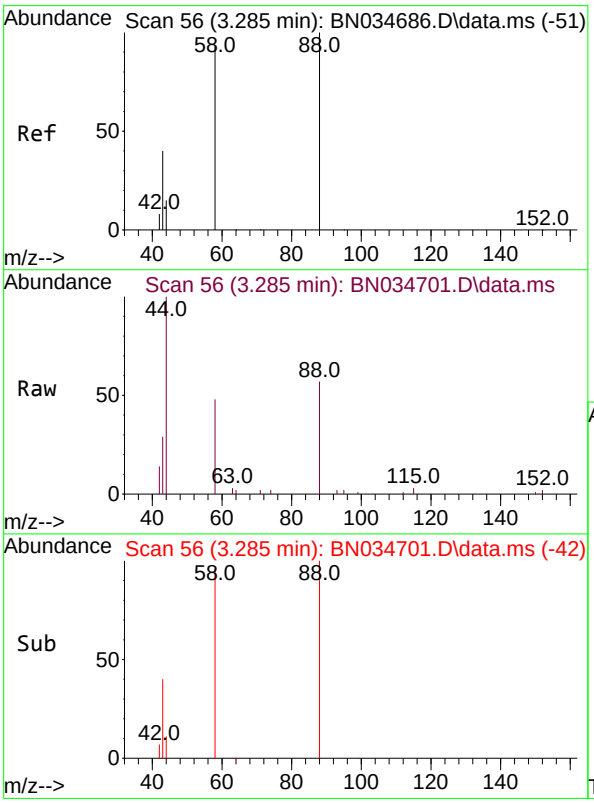
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 5885

Ion	Ratio	Lower	Upper
152	100		
150	153.2	122.7	184.1
115	63.1	51.0	76.6

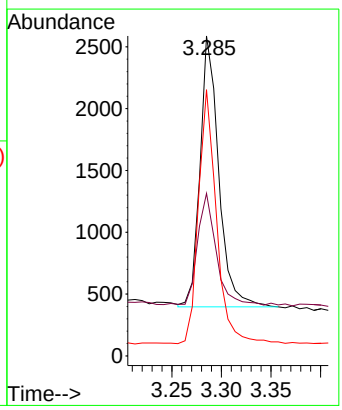


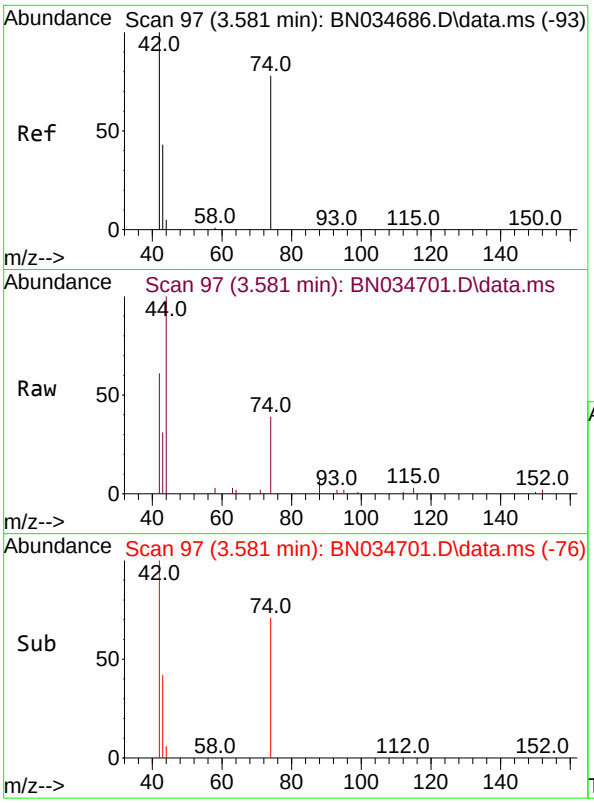


#2
1,4-Dioxane
Concen: 0.367 ng
RT: 3.285 min Scan# 56
Delta R.T. 0.000 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion: 88 Resp: 2877

Ion	Ratio	Lower	Upper
88	100		
43	40.9	32.1	48.1
58	89.8	73.7	110.5



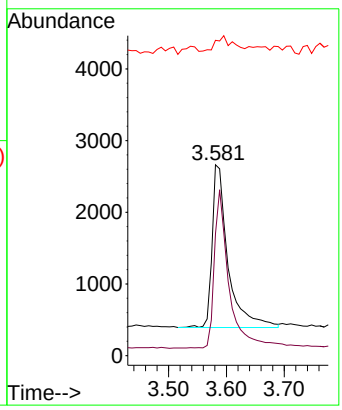


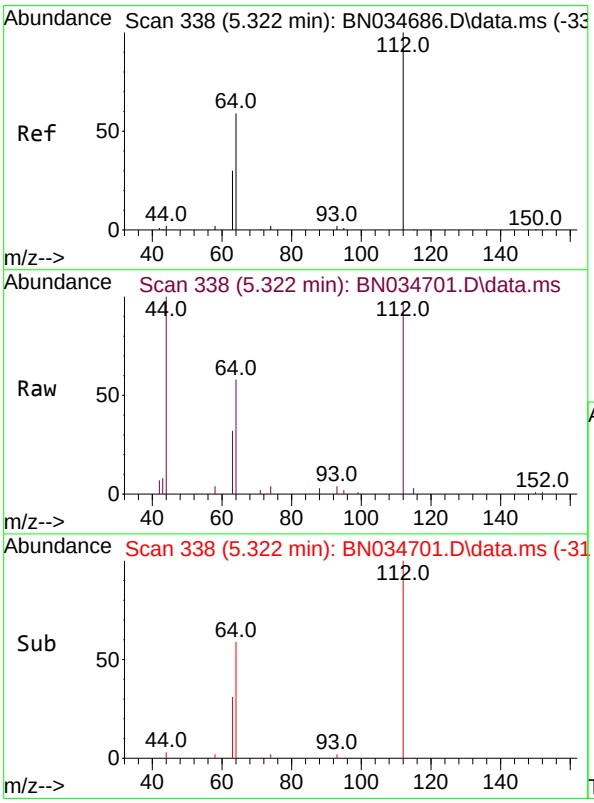
#3
n-Nitrosodimethylamine
Concen: 0.380 ng
RT: 3.581 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 42 Resp: 4327

Ion	Ratio	Lower	Upper
42	100		
74	91.2	77.2	115.8
44	9.1	13.4	20.2#

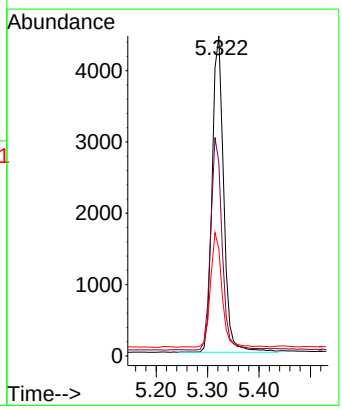


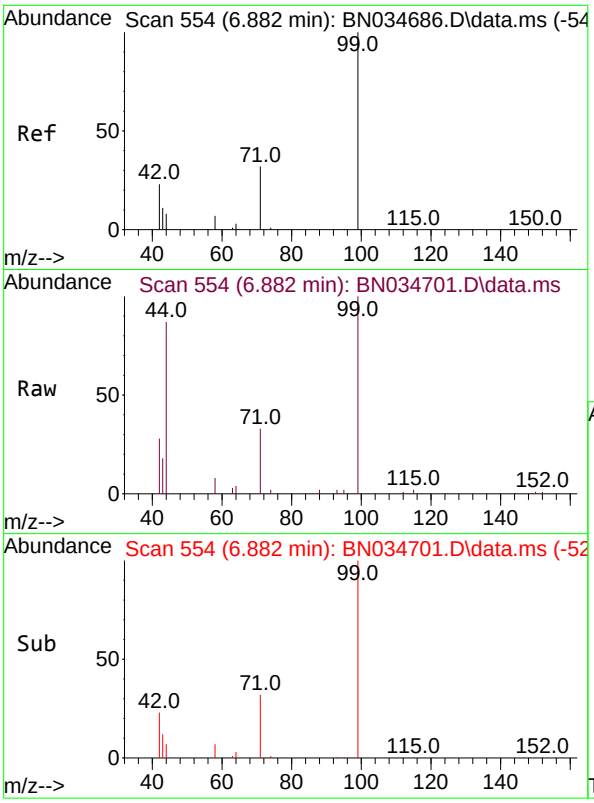


#4
2-Fluorophenol
Concen: 0.394 ng
RT: 5.322 min Scan# 338
Delta R.T. 0.000 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:112 Resp: 6898

Ion	Ratio	Lower	Upper
112	100		
64	67.5	53.0	79.6
63	35.6	27.6	41.4



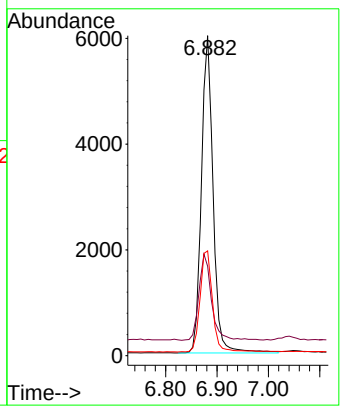


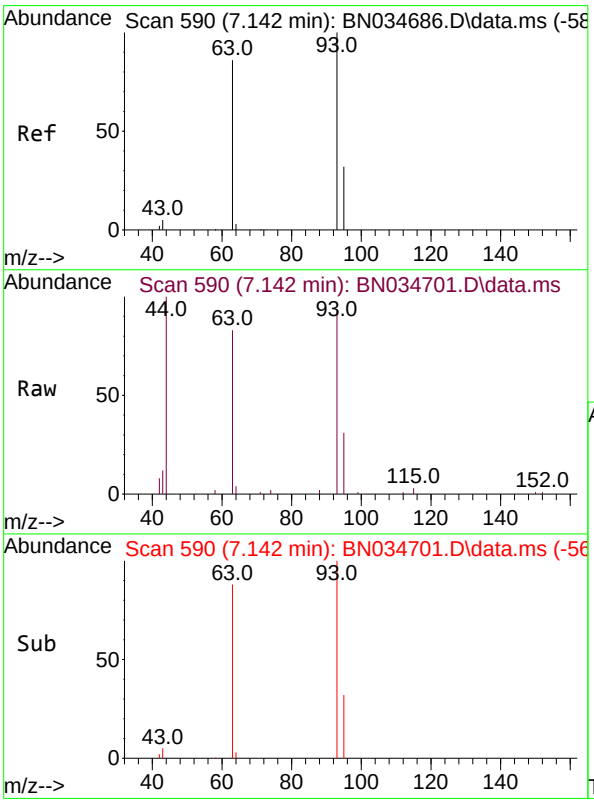
#5
Phenol-d6
Concen: 0.412 ng
RT: 6.882 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 99 Resp: 9511

Ion	Ratio	Lower	Upper
99	100		
42	29.2	21.8	32.8
71	34.1	26.6	40.0

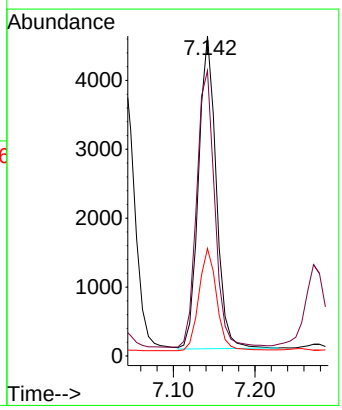


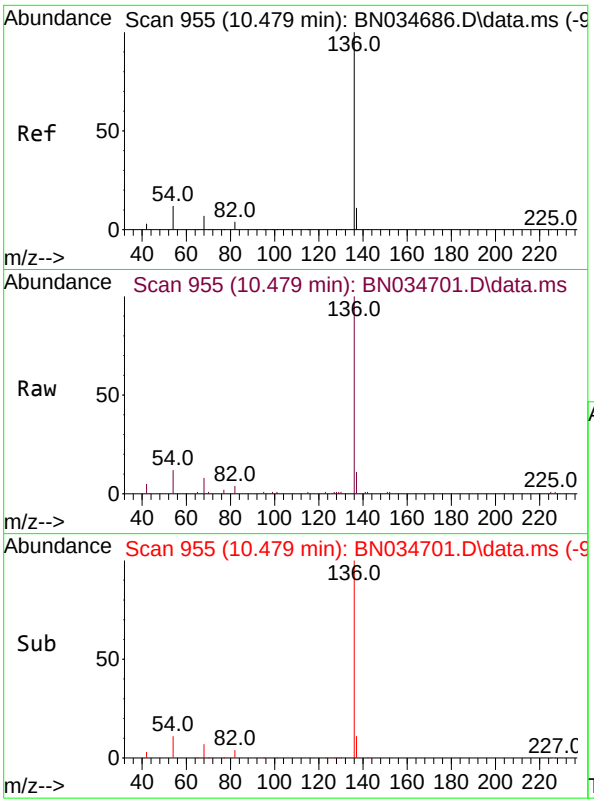


#6
bis(2-Chloroethyl)ether
Concen: 0.365 ng
RT: 7.142 min Scan# 590
Delta R.T. 0.000 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion: 93 Resp: 6834

Ion	Ratio	Lower	Upper
93	100		
63	90.8	71.5	107.3
95	33.1	25.8	38.6



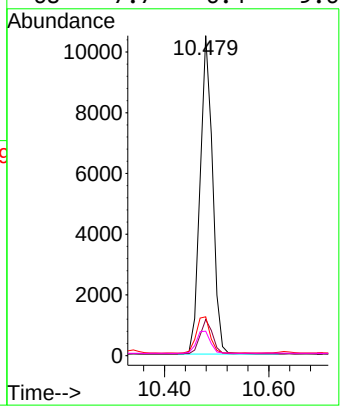


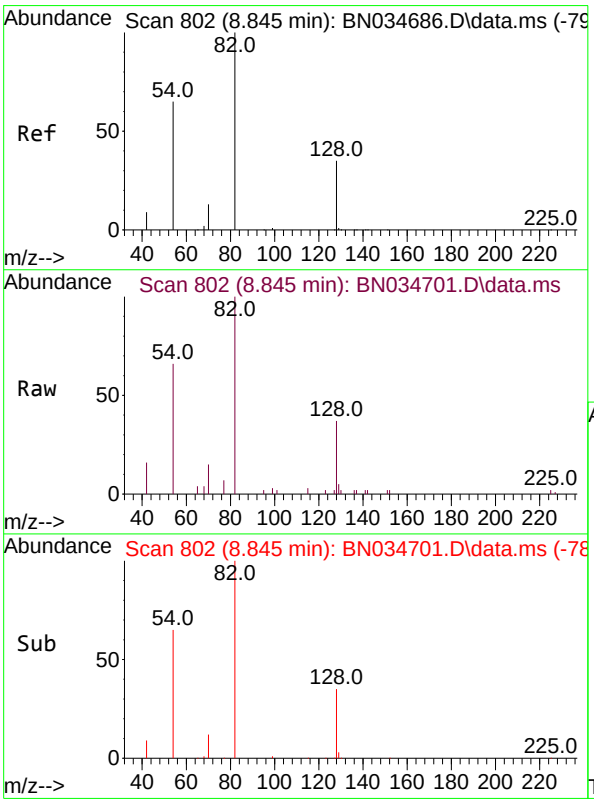
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:136 Resp: 17350

Ion	Ratio	Lower	Upper
136	100		
137	11.3	9.1	13.7
54	12.1	9.8	14.8
68	7.7	6.4	9.6

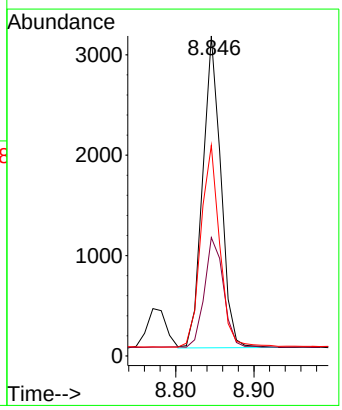


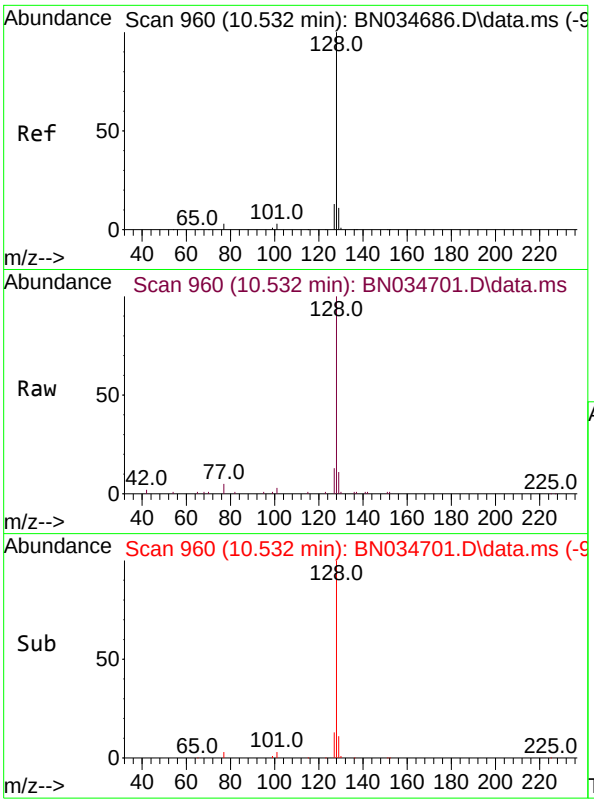


#8
Nitrobenzene-d5
Concen: 0.345 ng
RT: 8.845 min Scan# 802
Delta R.T. 0.000 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion: 82 Resp: 5024

Ion	Ratio	Lower	Upper
82	100		
128	37.0	29.7	44.5
54	65.8	53.0	79.6



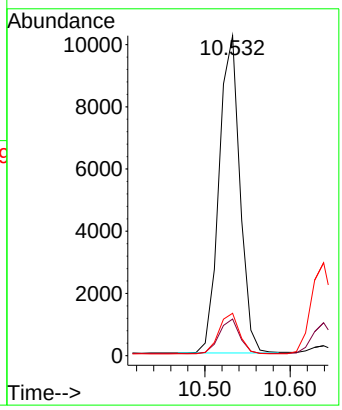


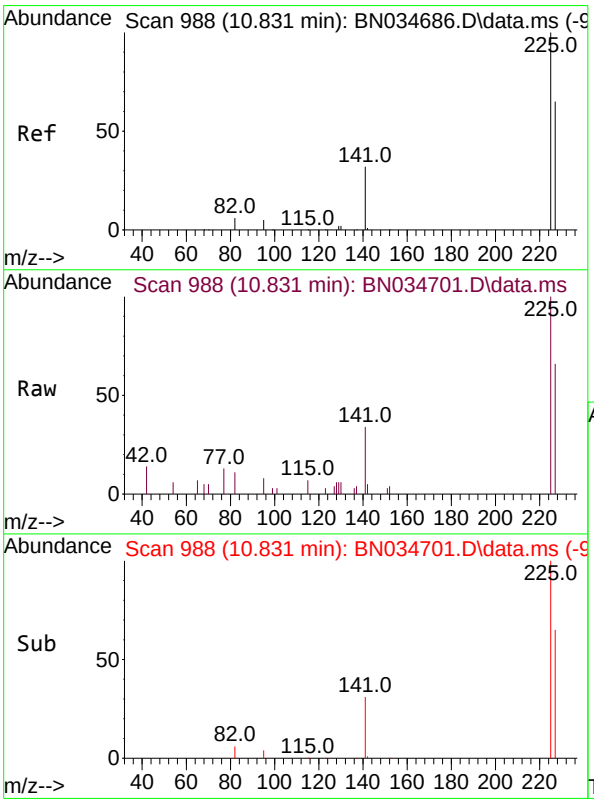
#9
Naphthalene
Concen: 0.361 ng
RT: 10.532 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:128 Resp: 17319

Ion	Ratio	Lower	Upper
128	100		
129	11.4	9.0	13.6
127	13.2	10.5	15.7

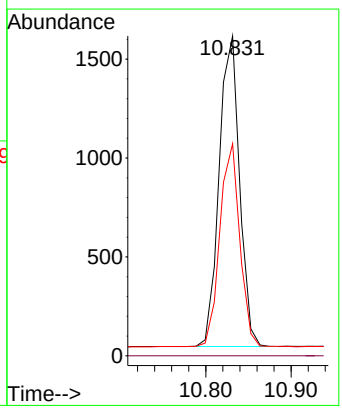


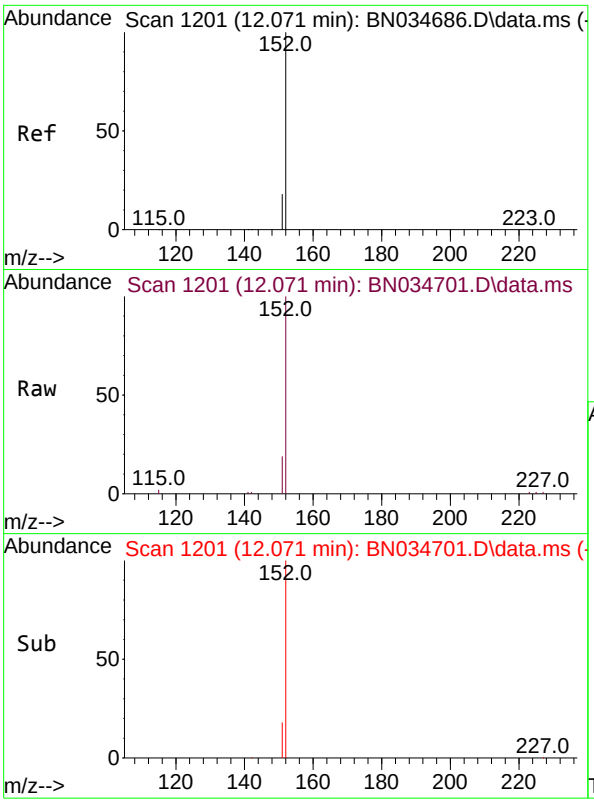


#10
Hexachlorobutadiene
Concen: 0.362 ng
RT: 10.831 min Scan# 988
Delta R.T. 0.000 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:225 Resp: 2605

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.0	51.4	77.0



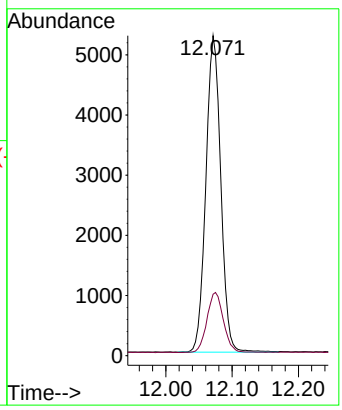


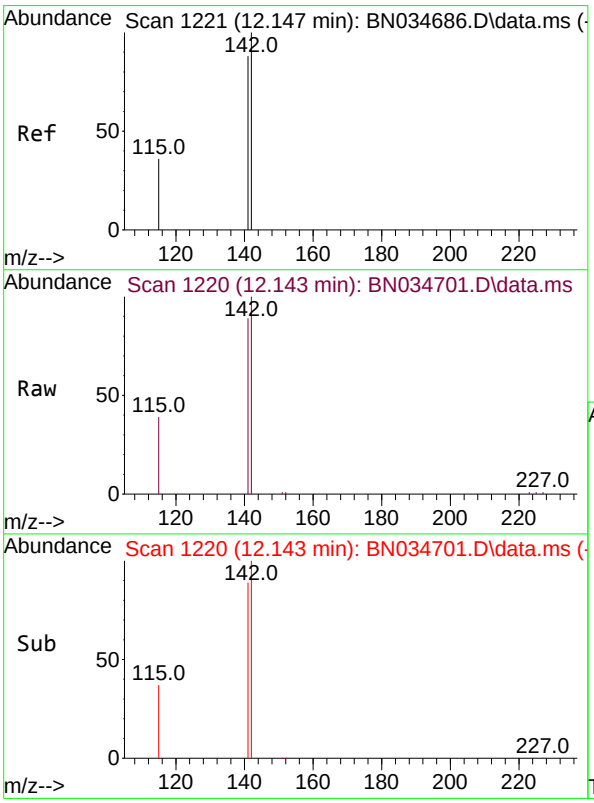
#11
2-Methylnaphthalene-d10
Concen: 0.344 ng
RT: 12.071 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 8204

Ion	Ratio	Lower	Upper
152	100		
151	21.0	16.7	25.1

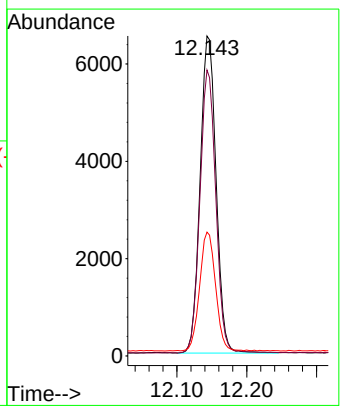


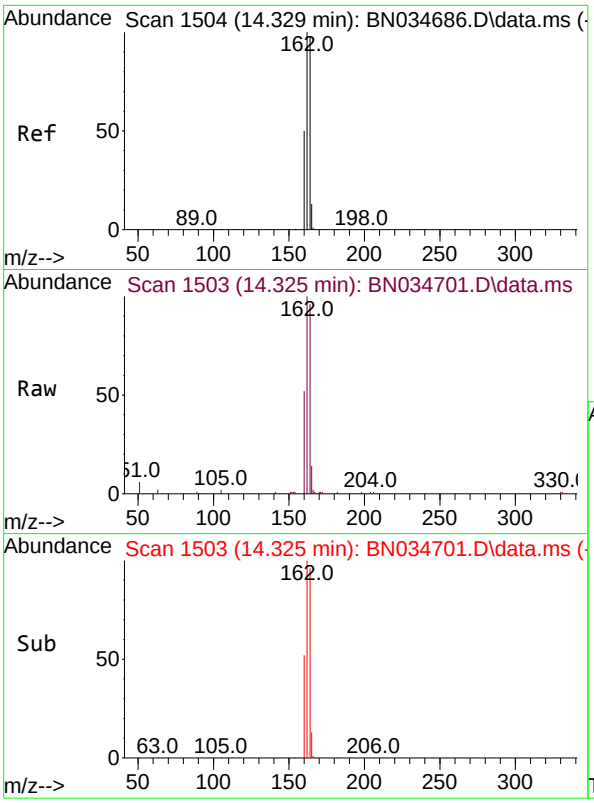


#12
2-Methylnaphthalene
Concen: 0.348 ng
RT: 12.143 min Scan# 1220
Delta R.T. -0.004 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:142 Resp: 10362

Ion	Ratio	Lower	Upper
142	100		
141	89.3	70.4	105.6
115	38.7	29.8	44.6



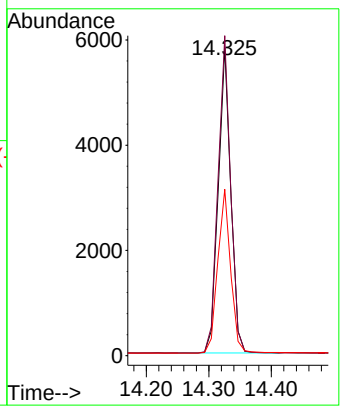


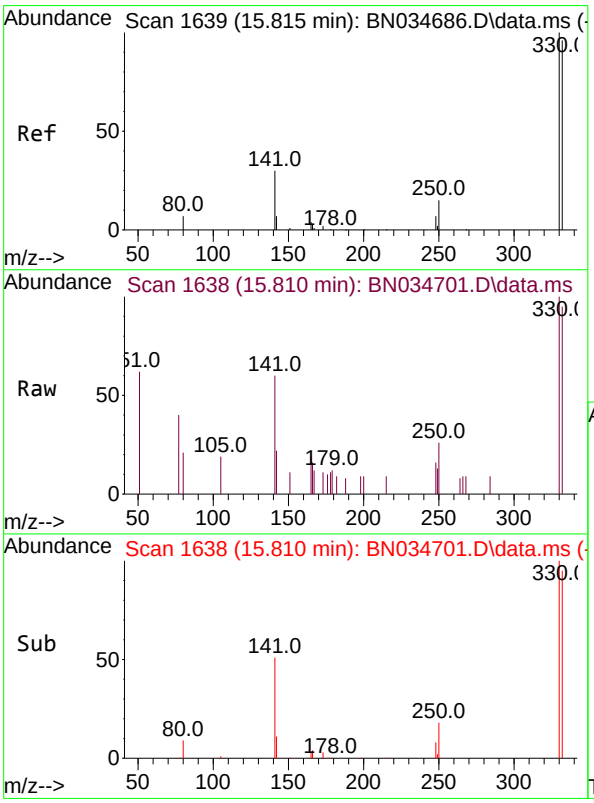
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.325 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:164 Resp: 8078

Ion	Ratio	Lower	Upper
164	100		
162	103.8	81.4	122.0
160	54.0	40.6	61.0

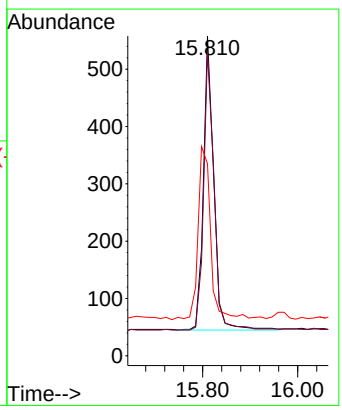


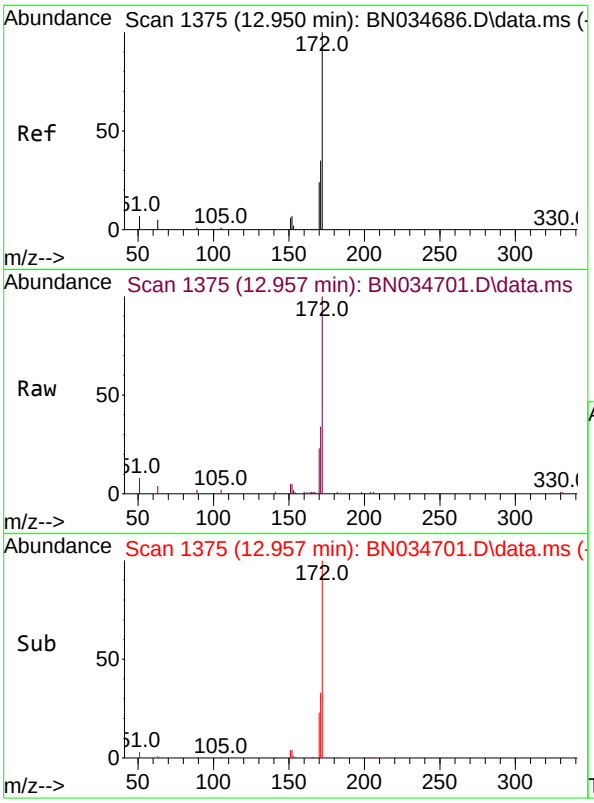


#14
2,4,6-Tribromophenol
Concen: 0.312 ng
RT: 15.810 min Scan# 1638
Delta R.T. -0.005 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:330 Resp: 779

Ion	Ratio	Lower	Upper
330	100		
332	94.7	76.6	115.0
141	71.4	54.6	81.8



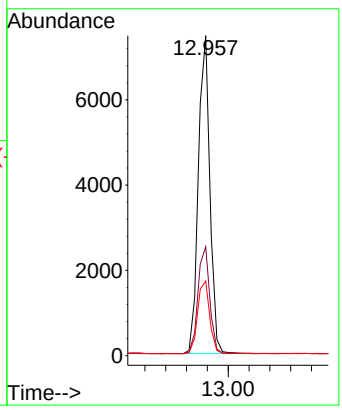


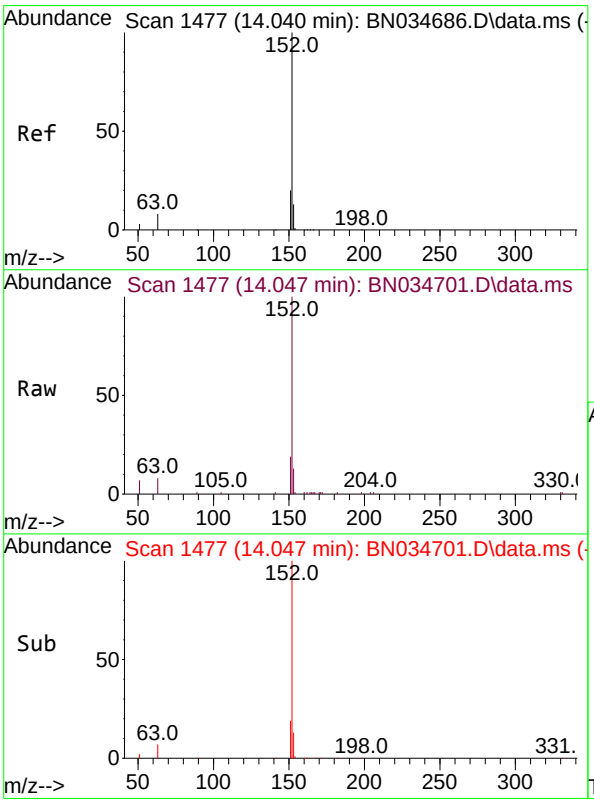
#15
2-Fluorobiphenyl
Concen: 0.359 ng
RT: 12.957 min Scan# 1
Delta R.T. 0.007 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:172 Resp: 11511

Ion	Ratio	Lower	Upper
172	100		
171	34.0	28.3	42.5
170	23.3	19.8	29.6

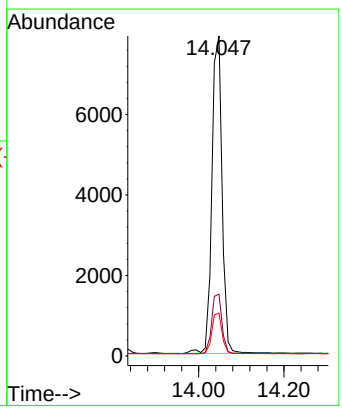


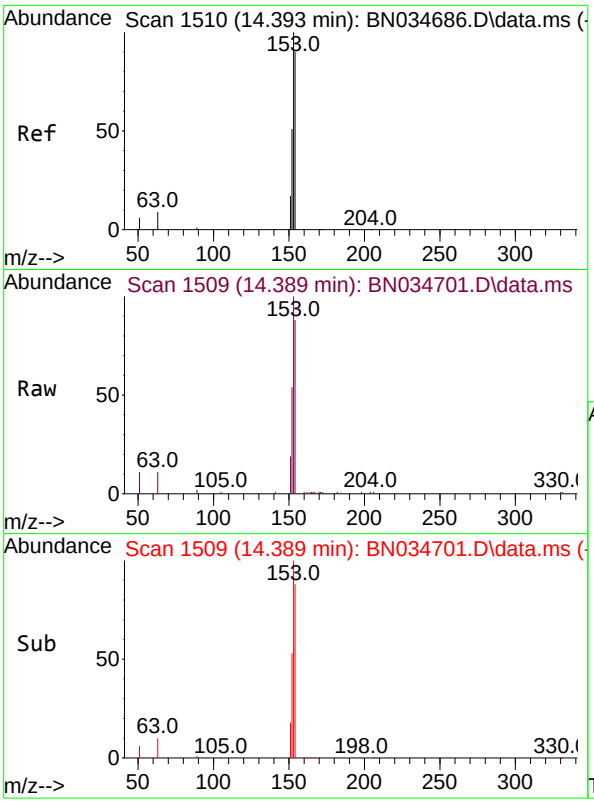


#16
Acenaphthylene
Concen: 0.337 ng
RT: 14.047 min Scan# 1477
Delta R.T. 0.007 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:152 Resp: 13092

Ion	Ratio	Lower	Upper
152	100		
151	19.1	15.6	23.4
153	12.8	10.6	15.8



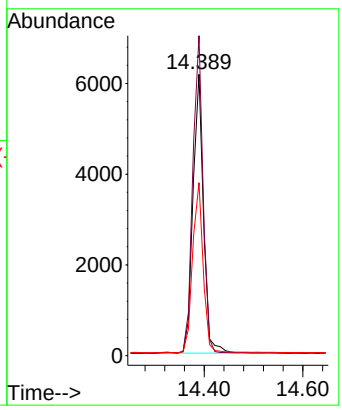


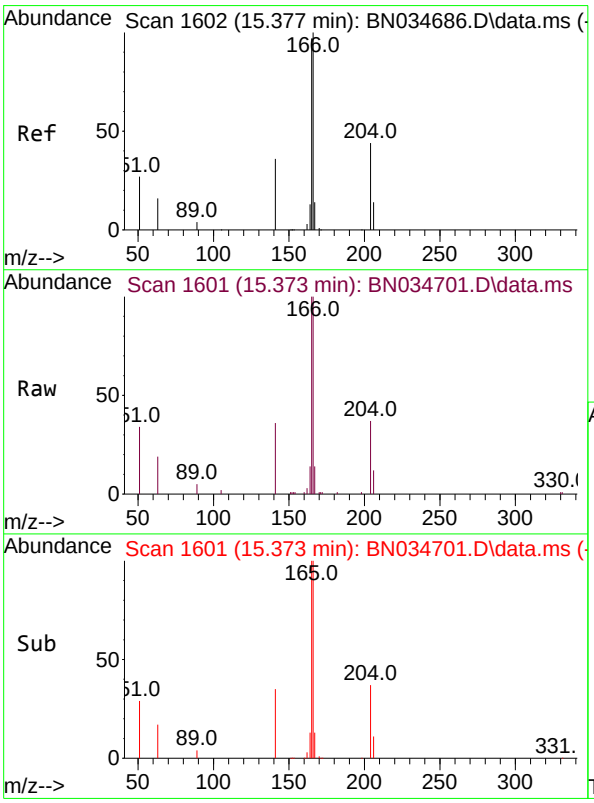
#17
Acenaphthene
Concen: 0.338 ng
RT: 14.389 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:154 Resp: 9042

Ion	Ratio	Lower	Upper
154	100		
153	111.5	88.2	132.2
152	61.5	46.9	70.3

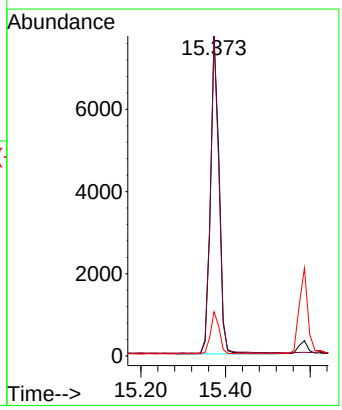


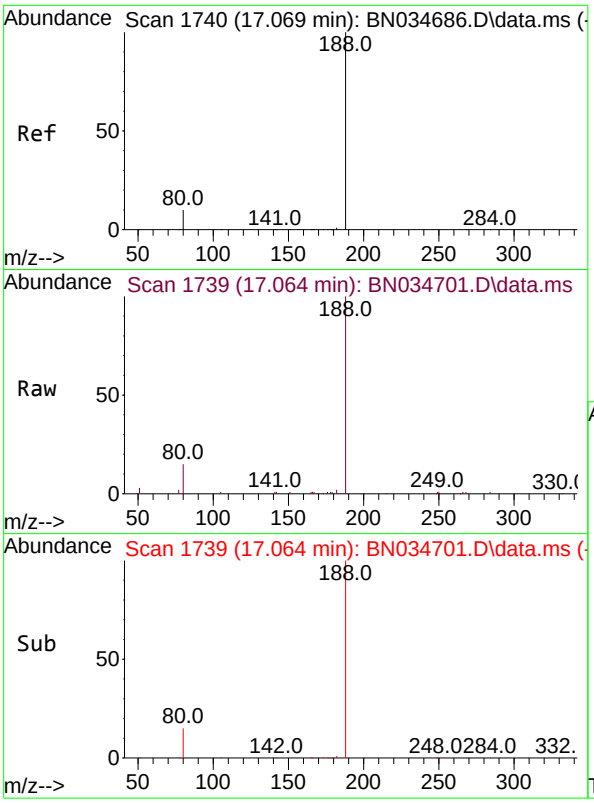


#18
Fluorene
Concen: 0.333 ng
RT: 15.373 min Scan# 1601
Delta R.T. -0.004 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:166 Resp: 10979

Ion	Ratio	Lower	Upper
166	100		
165	97.2	78.8	118.2
167	13.2	10.6	16.0



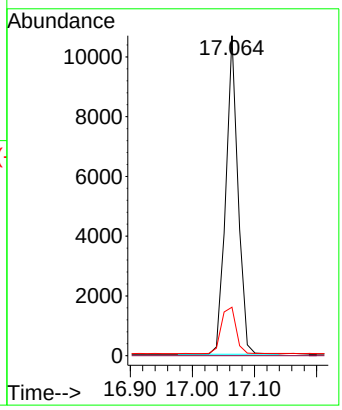


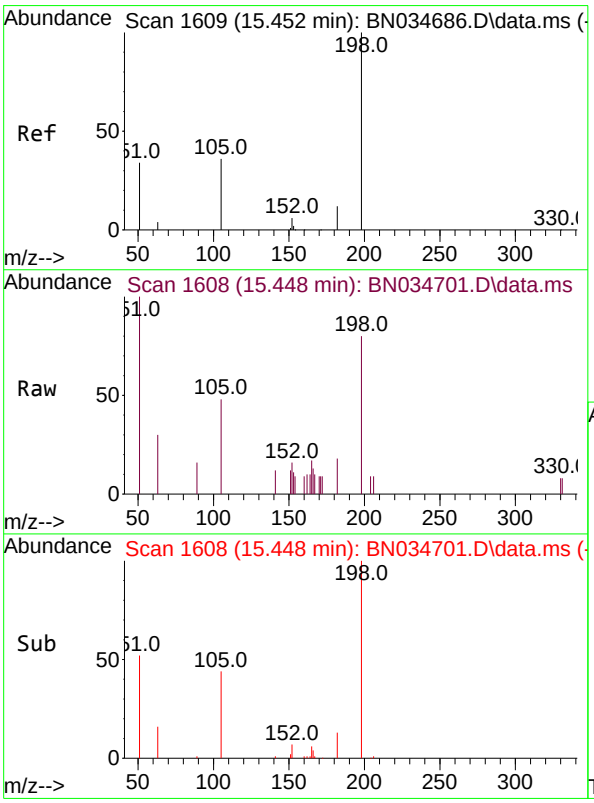
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.064 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:188 Resp: 14577

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	15.2	8.9	13.3#

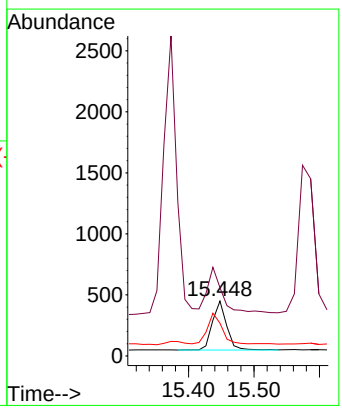


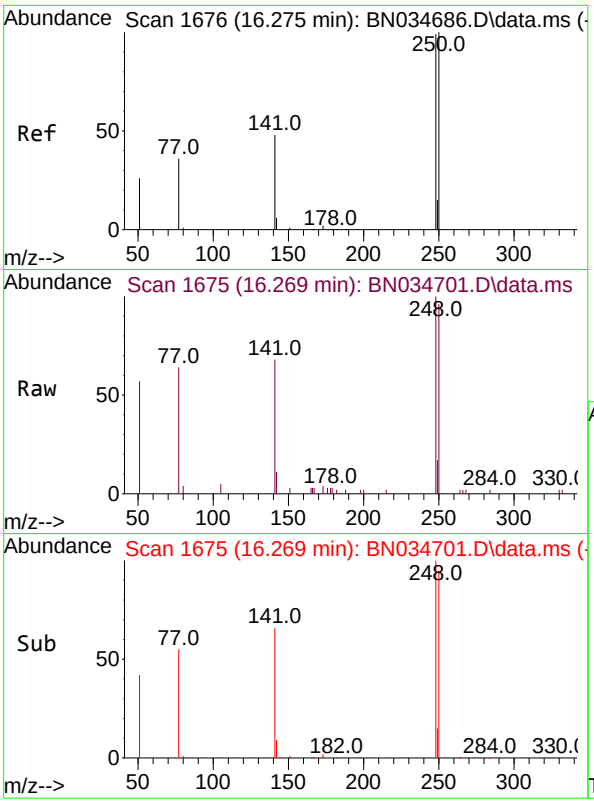


#20
4,6-Dinitro-2-methylphenol
Concen: 0.306 ng
RT: 15.448 min Scan# 1608
Delta R.T. -0.004 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:198 Resp: 621

Ion	Ratio	Lower	Upper
198	100		
51	124.4	91.8	137.8
105	59.8	44.3	66.5



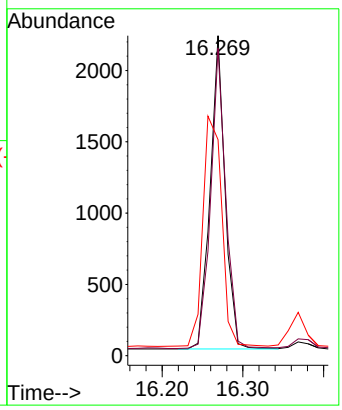


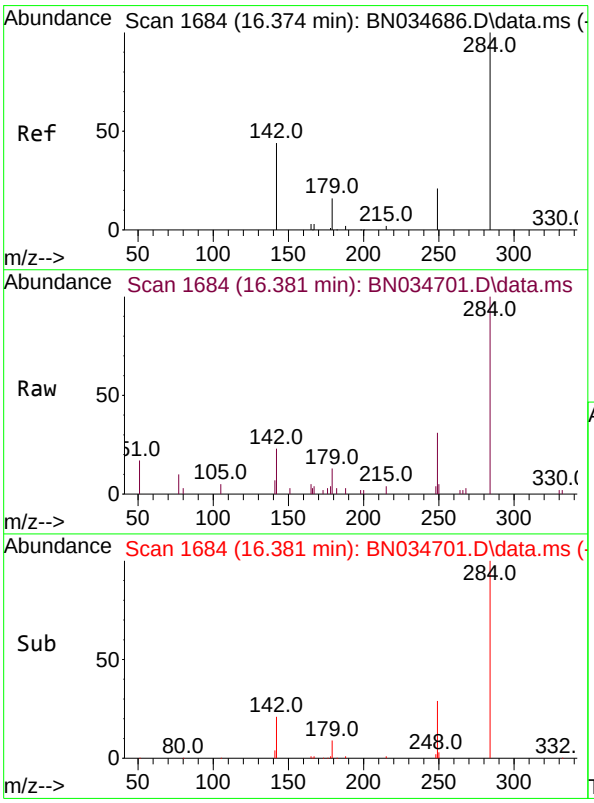
#21
4-Bromophenyl-phenylether
Concen: 0.363 ng
RT: 16.269 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:248 Resp: 2820

Ion	Ratio	Lower	Upper
248	100		
250	96.0	80.9	121.3
141	67.5	40.5	60.7#

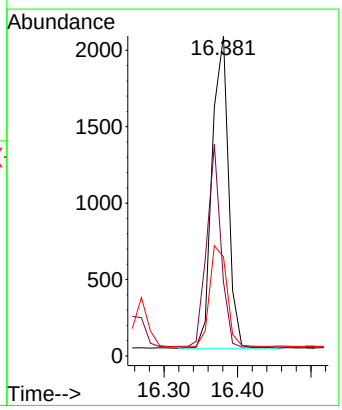


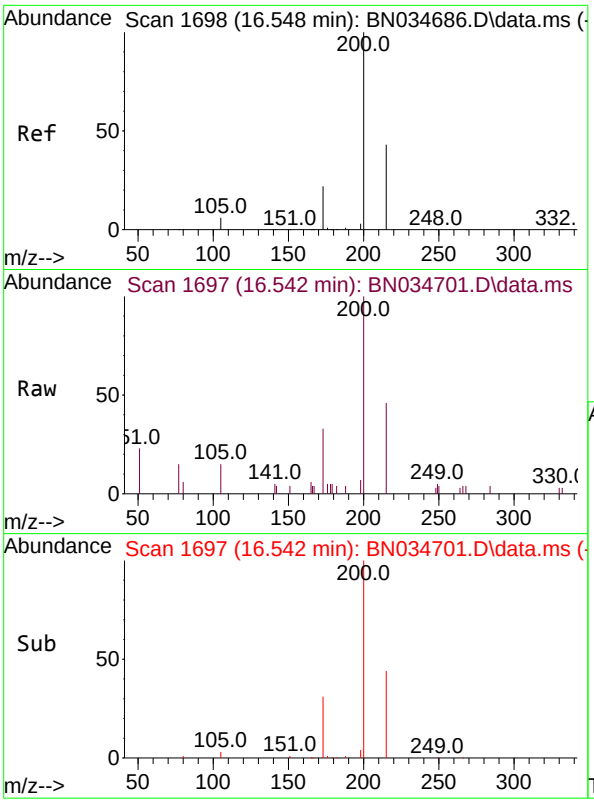


#22
Hexachlorobenzene
Concen: 0.373 ng
RT: 16.381 min Scan# 1684
Delta R.T. 0.007 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:284 Resp: 3143

Ion	Ratio	Lower	Upper
284	100		
142	56.7	43.6	65.4
249	34.2	26.6	40.0



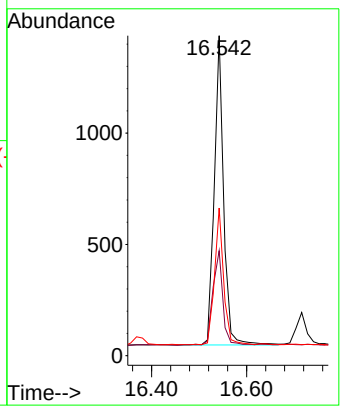


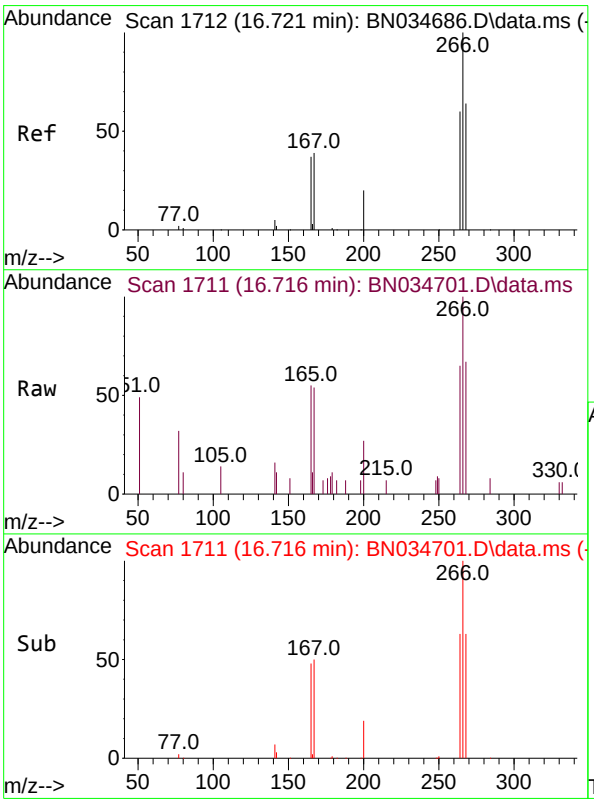
#23
Atrazine
Concen: 0.311 ng
RT: 16.542 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:200 Resp: 1901

Ion	Ratio	Lower	Upper
200	100		
173	32.8	19.7	29.5#
215	46.2	35.7	53.5

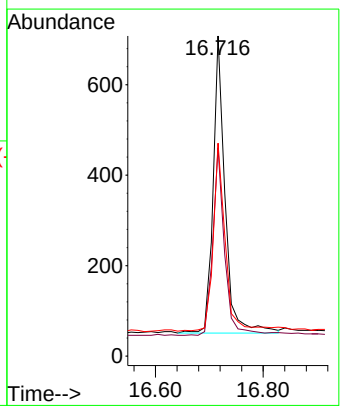


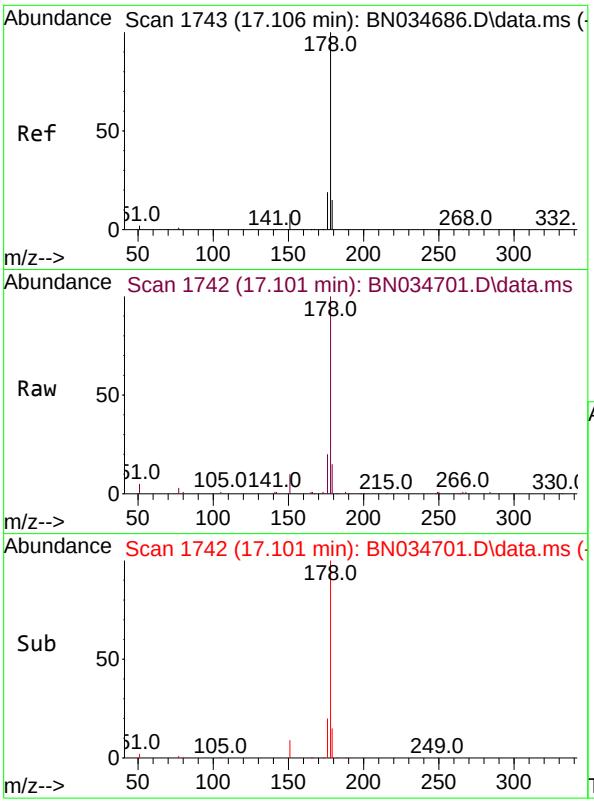


#24
Pentachlorophenol
Concen: 0.338 ng
RT: 16.716 min Scan# 1711
Delta R.T. -0.005 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:266 Resp: 1008

Ion	Ratio	Lower	Upper
266	100		
264	63.5	49.4	74.2
268	65.7	50.5	75.7



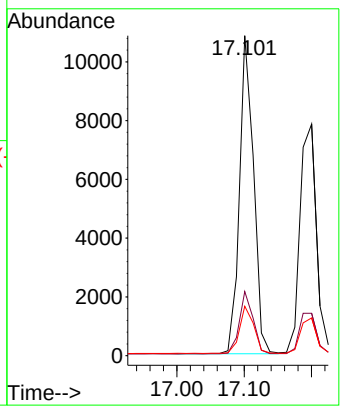


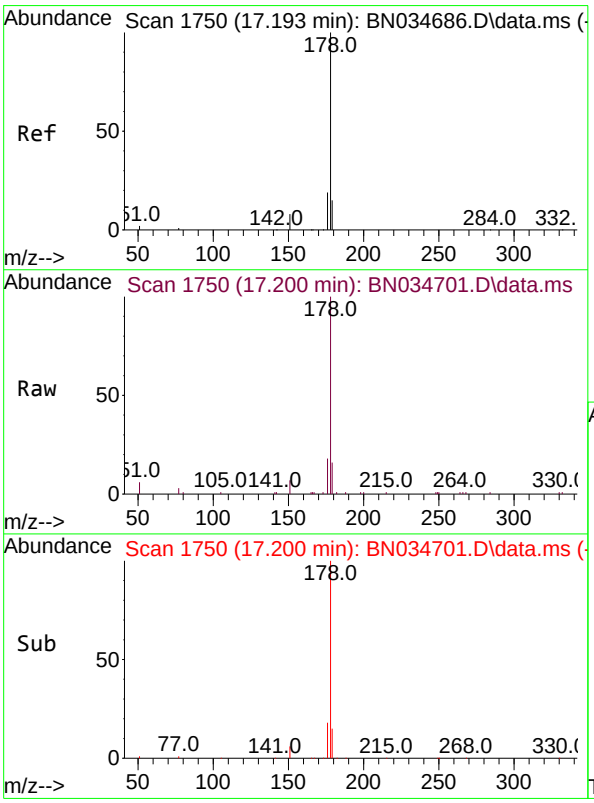
#25
Phenanthrene
Concen: 0.359 ng
RT: 17.101 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:178 Resp: 15738

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.2
179	15.2	12.2	18.4

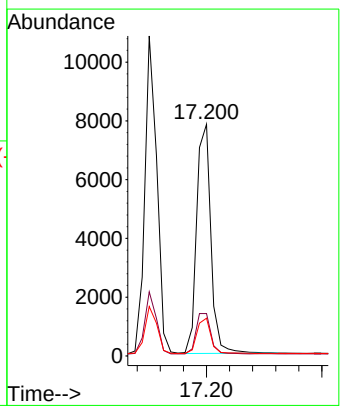


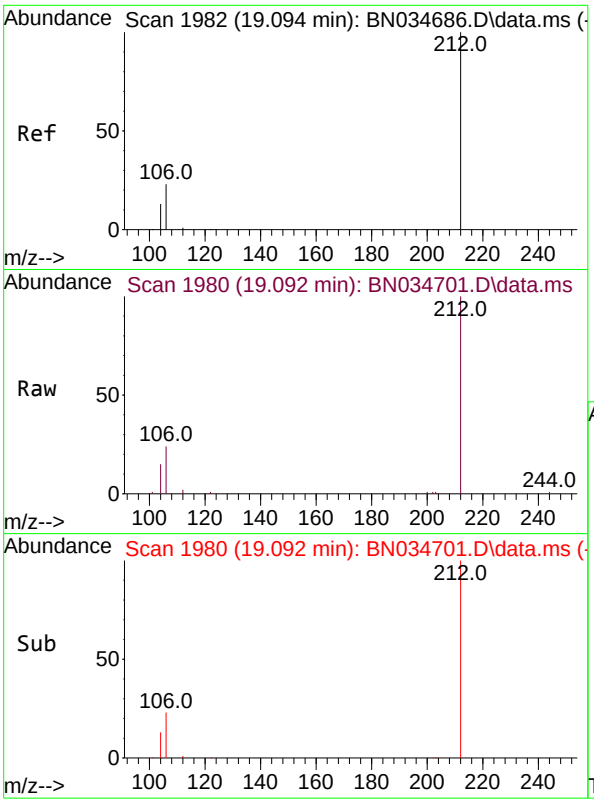


#26
Anthracene
Concen: 0.345 ng
RT: 17.200 min Scan# 1750
Delta R.T. 0.007 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:178 Resp: 13426

Ion	Ratio	Lower	Upper
178	100		
176	18.3	14.9	22.3
179	15.0	12.2	18.2



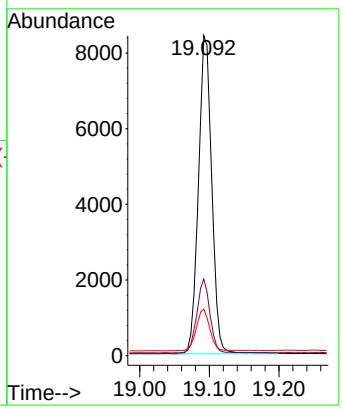


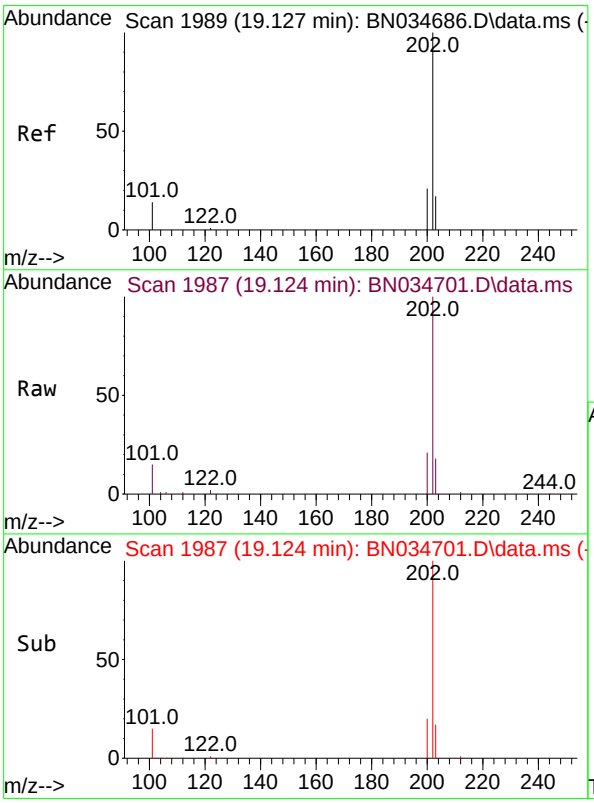
#27
Fluoranthene-d10
Concen: 0.341 ng
RT: 19.092 min Scan# 1
Delta R.T. -0.002 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:212 Resp: 11190

Ion	Ratio	Lower	Upper
212	100		
106	22.7	17.8	26.8
104	13.4	10.2	15.4

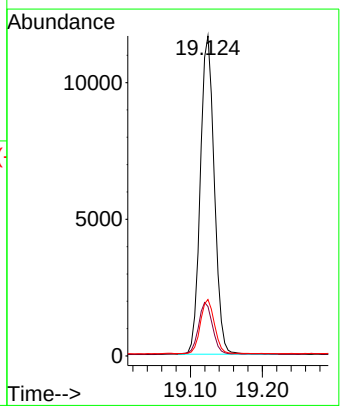


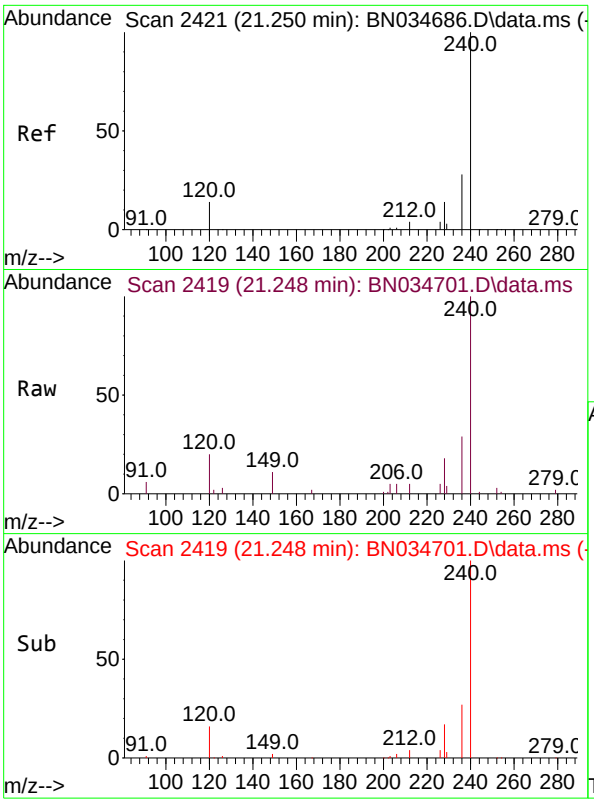


#28
Fluoranthene
Concen: 0.343 ng
RT: 19.124 min Scan# 1987
Delta R.T. -0.002 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:202 Resp: 15690

Ion	Ratio	Lower	Upper
202	100		
101	16.8	12.8	19.2
203	17.0	13.5	20.3



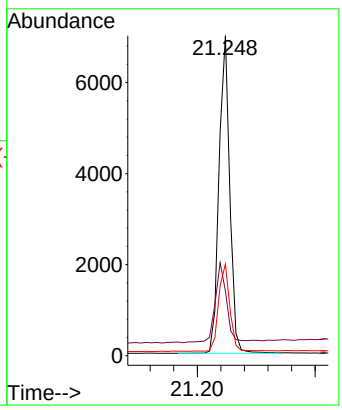


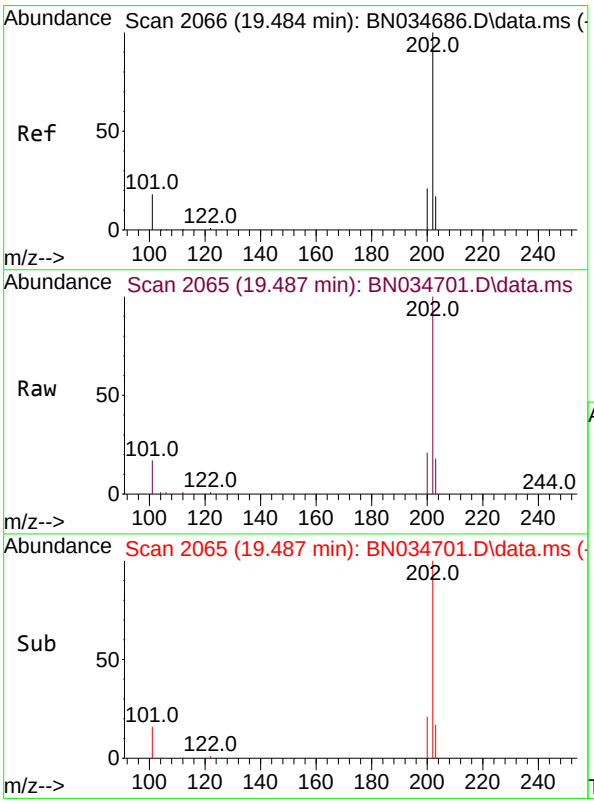
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.248 min Scan# 24
Delta R.T. -0.002 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:240 Resp: 8841

Ion	Ratio	Lower	Upper
240	100		
120	20.3	14.2	21.2
236	28.6	23.1	34.7

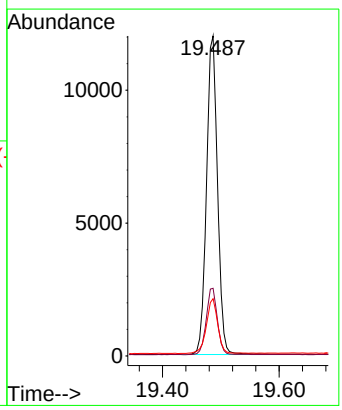


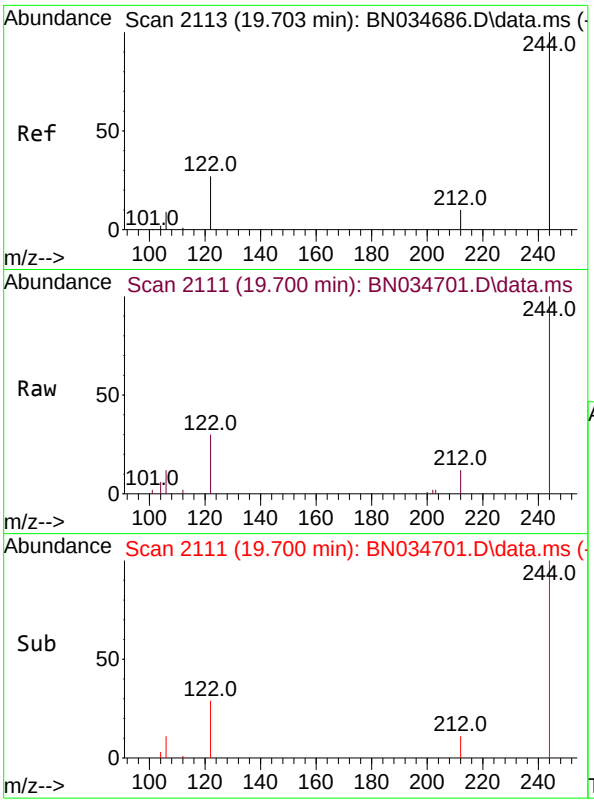


#30
Pyrene
Concen: 0.348 ng
RT: 19.487 min Scan# 2065
Delta R.T. 0.002 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:202 Resp: 15827

Ion	Ratio	Lower	Upper
202	100		
200	21.0	16.6	25.0
203	17.6	14.2	21.4



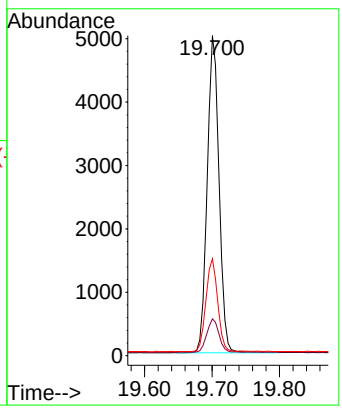


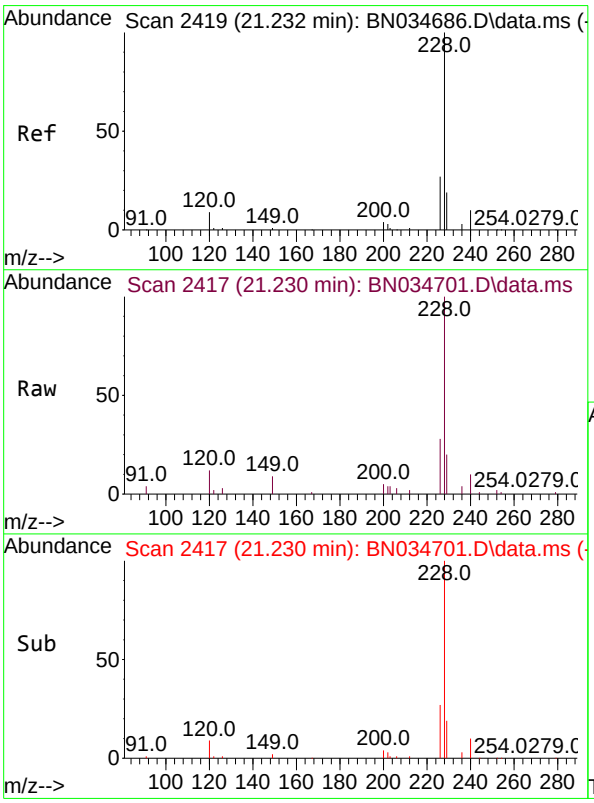
#31
Terphenyl-d14
Concen: 0.338 ng
RT: 19.700 min Scan# 21
Delta R.T. -0.002 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:244 Resp: 6100

Ion	Ratio	Lower	Upper
244	100		
212	11.5	8.6	13.0
122	30.3	22.3	33.5

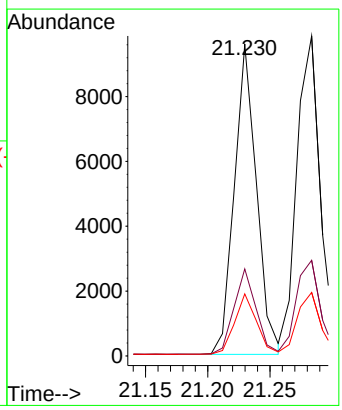


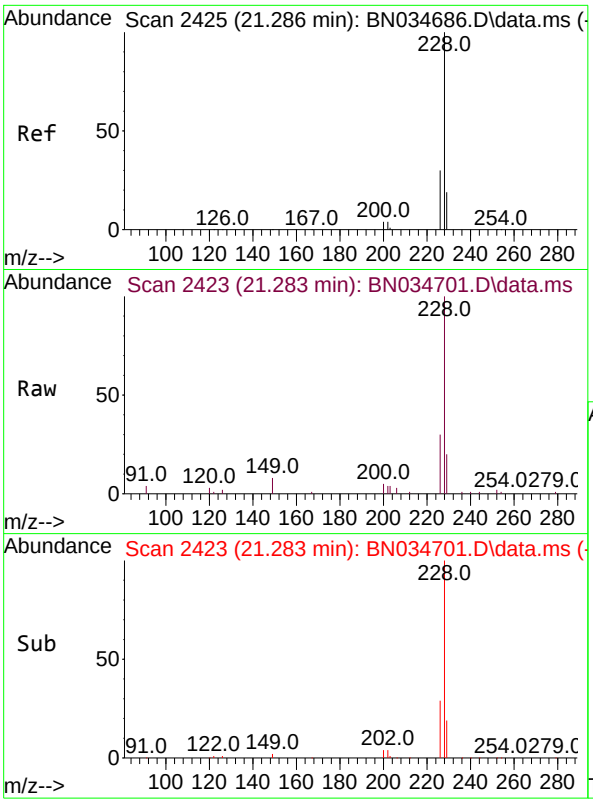


#32
Benzo(a)anthracene
Concen: 0.351 ng
RT: 21.230 min Scan# 2417
Delta R.T. -0.002 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:228 Resp: 11854

Ion	Ratio	Lower	Upper
228	100		
226	27.9	22.0	33.0
229	19.9	15.6	23.4



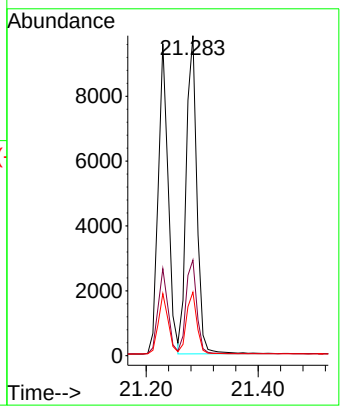


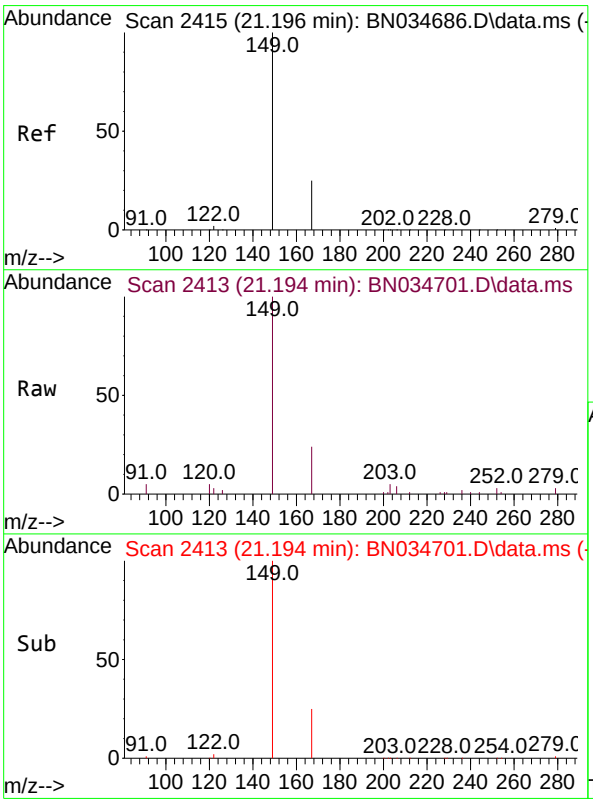
#33
Chrysene
Concen: 0.370 ng
RT: 21.283 min Scan# 24
Delta R.T. -0.002 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:228 Resp: 12923

Ion	Ratio	Lower	Upper
228	100		
226	29.9	24.1	36.1
229	19.9	15.8	23.8

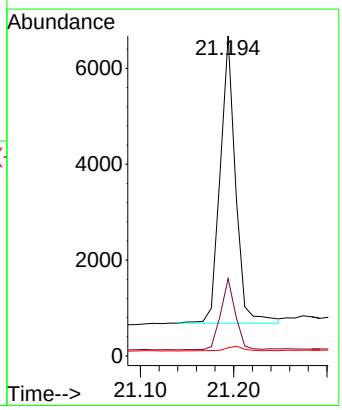


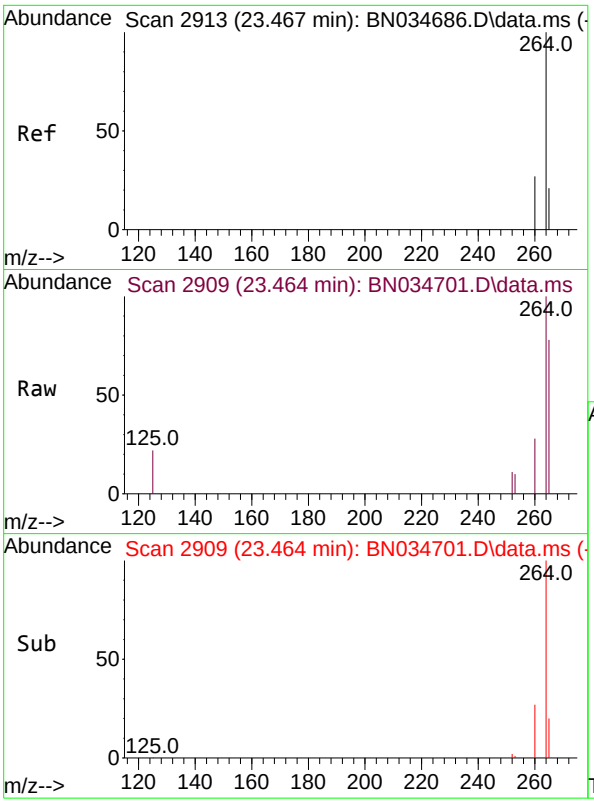


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.358 ng
RT: 21.194 min Scan# 2413
Delta R.T. -0.002 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:149 Resp: 6855

Ion	Ratio	Lower	Upper
149	100		
167	23.7	19.7	29.5
279	1.9	1.8	2.6



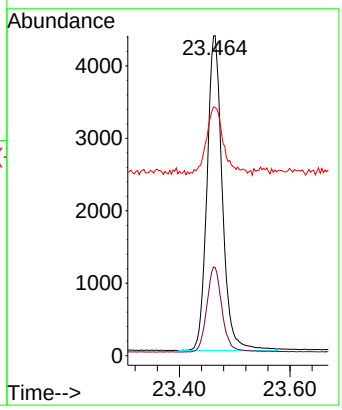


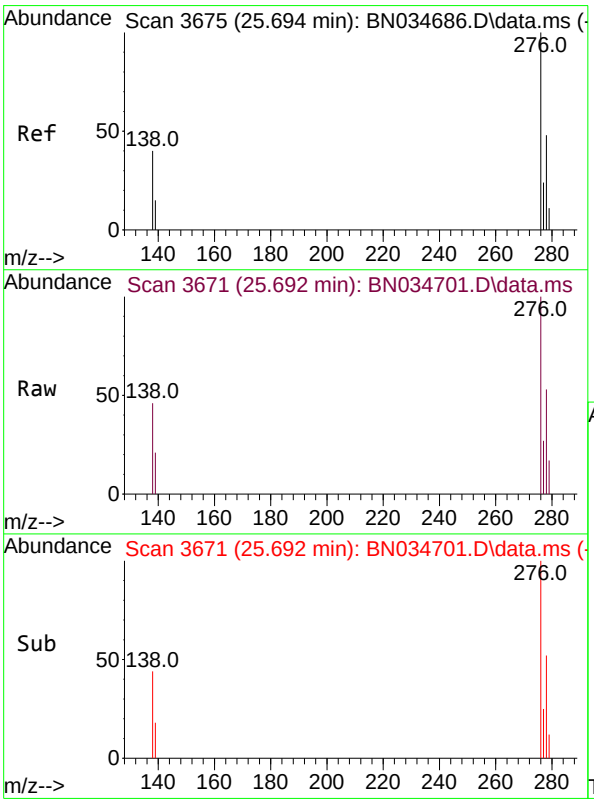
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.464 min Scan# 2
Delta R.T. -0.002 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:264 Resp: 8336

Ion	Ratio	Lower	Upper
264	100		
260	27.6	21.9	32.9
265	77.6	60.6	91.0

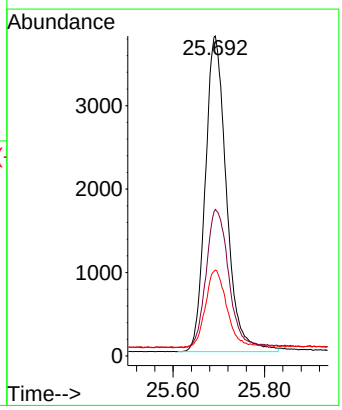


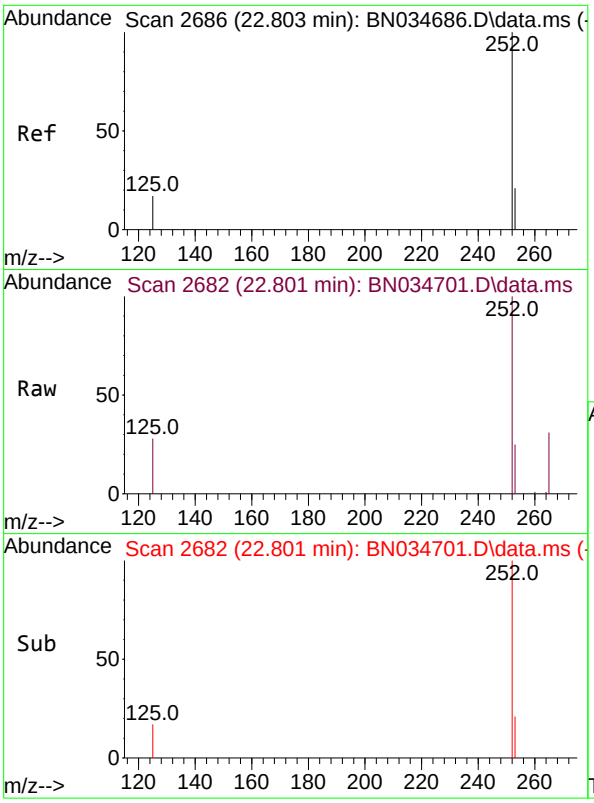


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.378 ng
RT: 25.692 min Scan# 3671
Delta R.T. -0.002 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:276 Resp: 12128

Ion	Ratio	Lower	Upper
276	100		
138	46.6	35.1	52.7
277	24.4	19.7	29.5



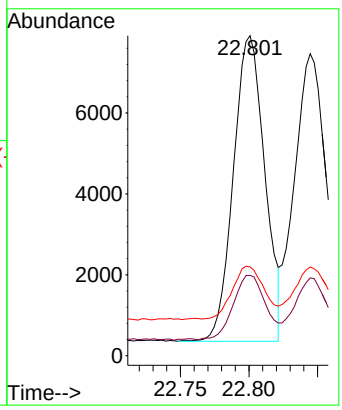


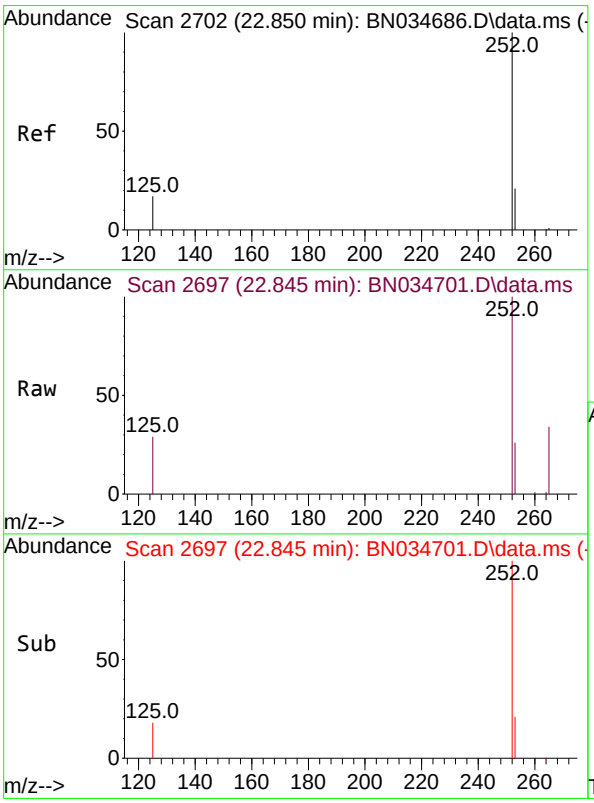
#37
Benzo(b)fluoranthene
Concen: 0.361 ng
RT: 22.801 min Scan# 2
Delta R.T. -0.002 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 12003

Ion	Ratio	Lower	Upper
252	100		
253	25.1	20.0	30.0
125	27.7	20.9	31.3

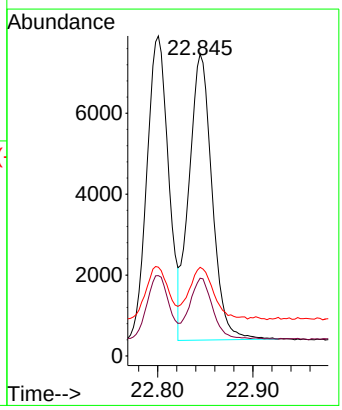


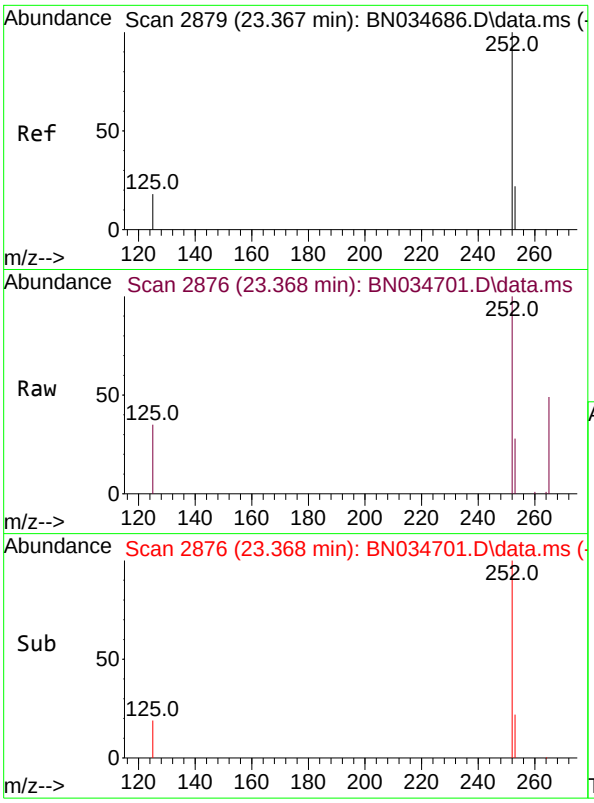


#38
Benzo(k)fluoranthene
Concen: 0.362 ng
RT: 22.845 min Scan# 2697
Delta R.T. -0.005 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:252 Resp: 11895

Ion	Ratio	Lower	Upper
252	100		
253	25.8	20.6	31.0
125	29.4	21.6	32.4



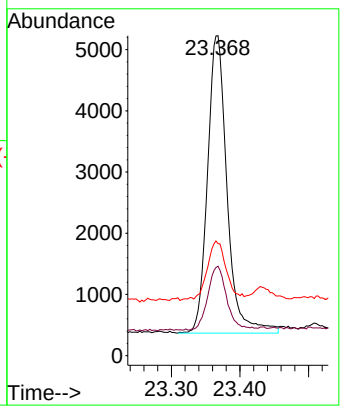


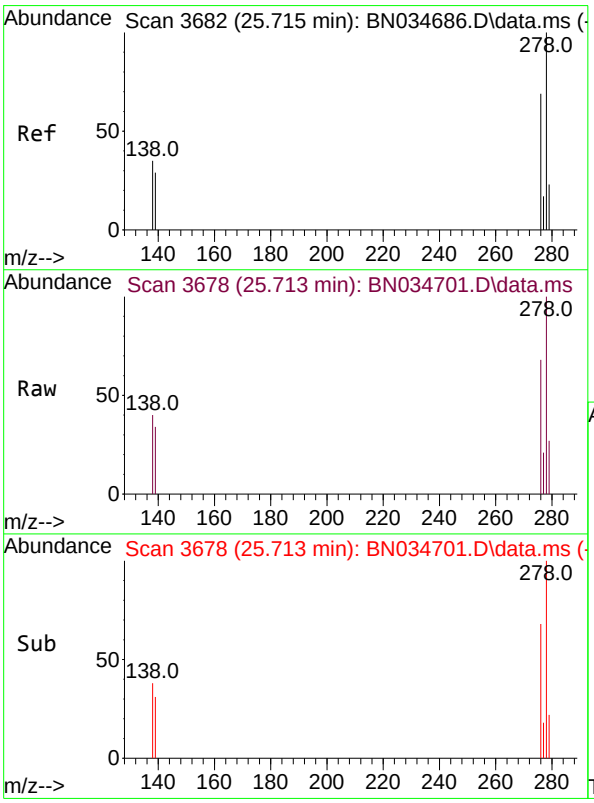
#39
Benzo(a)pyrene
Concen: 0.361 ng
RT: 23.368 min Scan# 2
Delta R.T. 0.001 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 9650

Ion	Ratio	Lower	Upper
252	100		
253	28.0	22.2	33.4
125	35.0	26.0	39.0

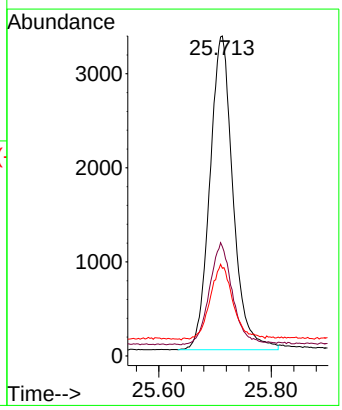


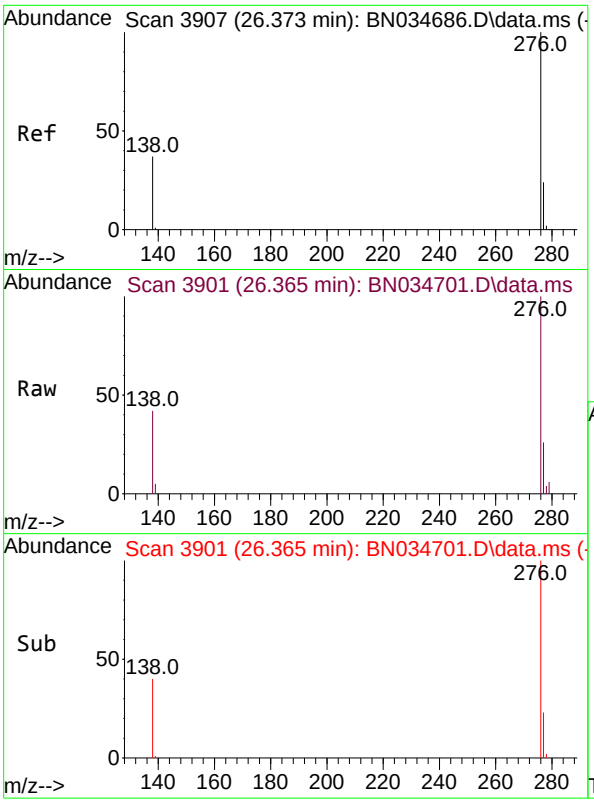


#40
Dibenzo(a,h)anthracene
Concen: 0.377 ng
RT: 25.713 min Scan# 3678
Delta R.T. -0.002 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Tgt Ion:278 Resp: 9542

Ion	Ratio	Lower	Upper
278	100		
139	34.2	25.4	38.2
279	27.4	22.4	33.6



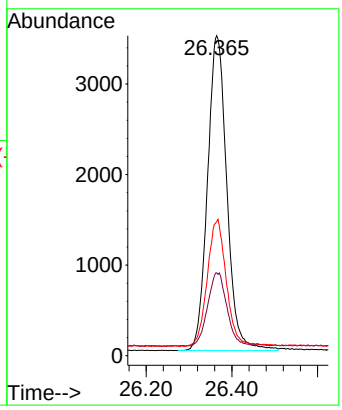


#41
Benzo(g,h,i)perylene
Concen: 0.390 ng
RT: 26.365 min Scan# 3
Delta R.T. -0.008 min
Lab File: BN034701.D
Acq: 24 Oct 2024 21:01

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:276 Resp: 10879

Ion	Ratio	Lower	Upper
276	100		
277	25.9	21.3	31.9
138	42.0	31.9	47.9



Sample Results: **BN034701.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034701.D
Acq On : 24 Oct 2024 21:01
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Oct 25 02:07:31 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
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	93	0.00
2		1,4-Dioxane	0.532	0.489	8.1	94	0.00
3		n-Nitrosodimethylamine	0.775	0.735	5.2	97	0.00
4	S	2-Fluorophenol	1.189	1.172	1.4	102	0.00
5	S	Phenol-d6	1.568	1.616	-3.1	109	0.00
6		bis(2-Chloroethyl)ether	1.274	1.161	8.9	95	0.00
7	I	Naphthalene-d8	1.000	1.000	0.0	94	0.00
8	S	Nitrobenzene-d5	0.336	0.290	13.7	92	0.00
9		Naphthalene	1.107	0.998	9.8	95	0.00
10		Hexachlorobutadiene	0.166	0.150	9.6	94	0.00
11	SURR	2-Methylnaphthalene-d10	0.550	0.473	14.0	92	0.00
12		2-Methylnaphthalene	0.687	0.597	13.1	93	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	87	0.00
14	S	2,4,6-Tribromophenol	0.124	0.096	22.6	87	0.00
15	S	2-Fluorobiphenyl	1.590	1.425	10.4	90	0.00
16		Acenaphthylene	1.921	1.621	15.6	89	0.00
17		Acenaphthene	1.324	1.119	15.5	87	0.00
18		Fluorene	1.634	1.359	16.8	85	0.00
19	I	Phenanthrene-d10	1.000	1.000	0.0	80	0.00
20		4,6-Dinitro-2-methylphenol	0.056	0.043	23.2	80	0.00
21		4-Bromophenyl-phenylether	0.213	0.193	9.4	81	0.00
22		Hexachlorobenzene	0.231	0.216	6.5	82	0.00
23		Atrazine	0.168	0.130	22.6	75	0.00
24		Pentachlorophenol	0.082	0.069	15.9	87	0.00
25		Phenanthrene	1.202	1.080	10.1	81	0.00
26		Anthracene	1.067	0.921	13.7	79	0.00
27	SURR	Fluoranthene-d10	0.901	0.768	14.8	79	0.00
28		Fluoranthene	1.253	1.076	14.1	79	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	83	0.00
30		Pyrene	2.055	1.790	12.9	79	0.00
31	S	Terphenyl-d14	0.817	0.690	15.5	78	0.00
32		Benzo(a)anthracene	1.528	1.341	12.2	81	0.00
33		Chrysene	1.581	1.462	7.5	84	0.00
34		Bis(2-ethylhexyl)phthalate	0.867	0.775	10.6	89	0.00
35	I	Perylene-d12	1.000	1.000	0.0	87	0.00
36		Indeno(1,2,3-cd)pyrene	1.541	1.455	5.6	89	0.00
37		Benzo(b)fluoranthene	1.597	1.440	9.8	84	0.00
38		Benzo(k)fluoranthene	1.576	1.427	9.5	89	0.00
39	C	Benzo(a)pyrene	1.282	1.158	9.7	87	0.00
40		Dibenzo(a,h)anthracene	1.215	1.145	5.8	89	0.00
41		Benzo(g,h,i)perylene	1.340	1.305	2.6	90	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Sample Results: **BN034701.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034701.D
Acq On : 24 Oct 2024 21:01
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Oct 25 02:07:31 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
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	93	0.00
2		1,4-Dioxane	0.400	0.367	8.3	94	0.00
3		n-Nitrosodimethylamine	0.400	0.380	5.0	97	0.00
4	S	2-Fluorophenol	0.400	0.394	1.5	102	0.00
5	S	Phenol-d6	0.400	0.412	-3.0	109	0.00
6		bis(2-Chloroethyl)ether	0.400	0.365	8.8	95	0.00
7	I	Naphthalene-d8	0.400	0.400	0.0	94	0.00
8	S	Nitrobenzene-d5	0.400	0.345	13.8	92	0.00
9		Naphthalene	0.400	0.361	9.8	95	0.00
10		Hexachlorobutadiene	0.400	0.362	9.5	94	0.00
11	SURR	2-Methylnaphthalene-d10	0.400	0.344	14.0	92	0.00
12		2-Methylnaphthalene	0.400	0.348	13.0	93	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	87	0.00
14	S	2,4,6-Tribromophenol	0.400	0.312	22.0	87	0.00
15	S	2-Fluorobiphenyl	0.400	0.359	10.3	90	0.00
16		Acenaphthylene	0.400	0.337	15.8	89	0.00
17		Acenaphthene	0.400	0.338	15.5	87	0.00
18		Fluorene	0.400	0.333	16.8	85	0.00
19	I	Phenanthrene-d10	0.400	0.400	0.0	80	0.00
20		4,6-Dinitro-2-methylphenol	0.400	0.306	23.5	80	0.00
21		4-Bromophenyl-phenylether	0.400	0.363	9.3	81	0.00
22		Hexachlorobenzene	0.400	0.373	6.8	82	0.00
23		Atrazine	0.400	0.311	22.3	75	0.00
24		Pentachlorophenol	0.400	0.338	15.5	87	0.00
25		Phenanthrene	0.400	0.359	10.3	81	0.00
26		Anthracene	0.400	0.345	13.8	79	0.00
27	SURR	Fluoranthene-d10	0.400	0.341	14.8	79	0.00
28		Fluoranthene	0.400	0.343	14.2	79	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	83	0.00
30		Pyrene	0.400	0.348	13.0	79	0.00
31	S	Terphenyl-d14	0.400	0.338	15.5	78	0.00
32		Benzo(a)anthracene	0.400	0.351	12.3	81	0.00
33		Chrysene	0.400	0.370	7.5	84	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.358	10.5	89	0.00
35	I	Perylene-d12	0.400	0.400	0.0	87	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.378	5.5	89	0.00
37		Benzo(b)fluoranthene	0.400	0.361	9.8	84	0.00
38		Benzo(k)fluoranthene	0.400	0.362	9.5	89	0.00
39	C	Benzo(a)pyrene	0.400	0.361	9.8	87	0.00
40		Dibenzo(a,h)anthracene	0.400	0.377	5.8	89	0.00
41		Benzo(g,h,i)perylene	0.400	0.390	2.5	90	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4440 SAS No.: P4440 SDG No.: P4440

Instrument ID: BNA_N Calibration Date/Time: 10/25/2024 07:51

Lab File ID: BN034719.D Init. Calib. Date(s): 10/24/2024 10/24/2024

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 09:11 12:48

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.550	0.486		-11.6	50.0
Fluoranthene-d10	0.901	0.942		4.6	50.0
2-Fluorophenol	1.189	1.294		8.8	50.0
Phenol-d6	1.568	1.736		10.7	50.0
Nitrobenzene-d5	0.336	0.300		-10.7	50.0
2-Fluorobiphenyl	1.590	1.367		-14.0	50.0
2,4,6-Tribromophenol	0.124	0.113		-8.9	50.0
Terphenyl-d14	0.817	0.696		-14.8	50.0
1,4-Dioxane	0.532	0.475		-10.7	50.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034719.D
Acq On : 25 Oct 2024 07:51
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 36 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Oct 25 08:18:02 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration

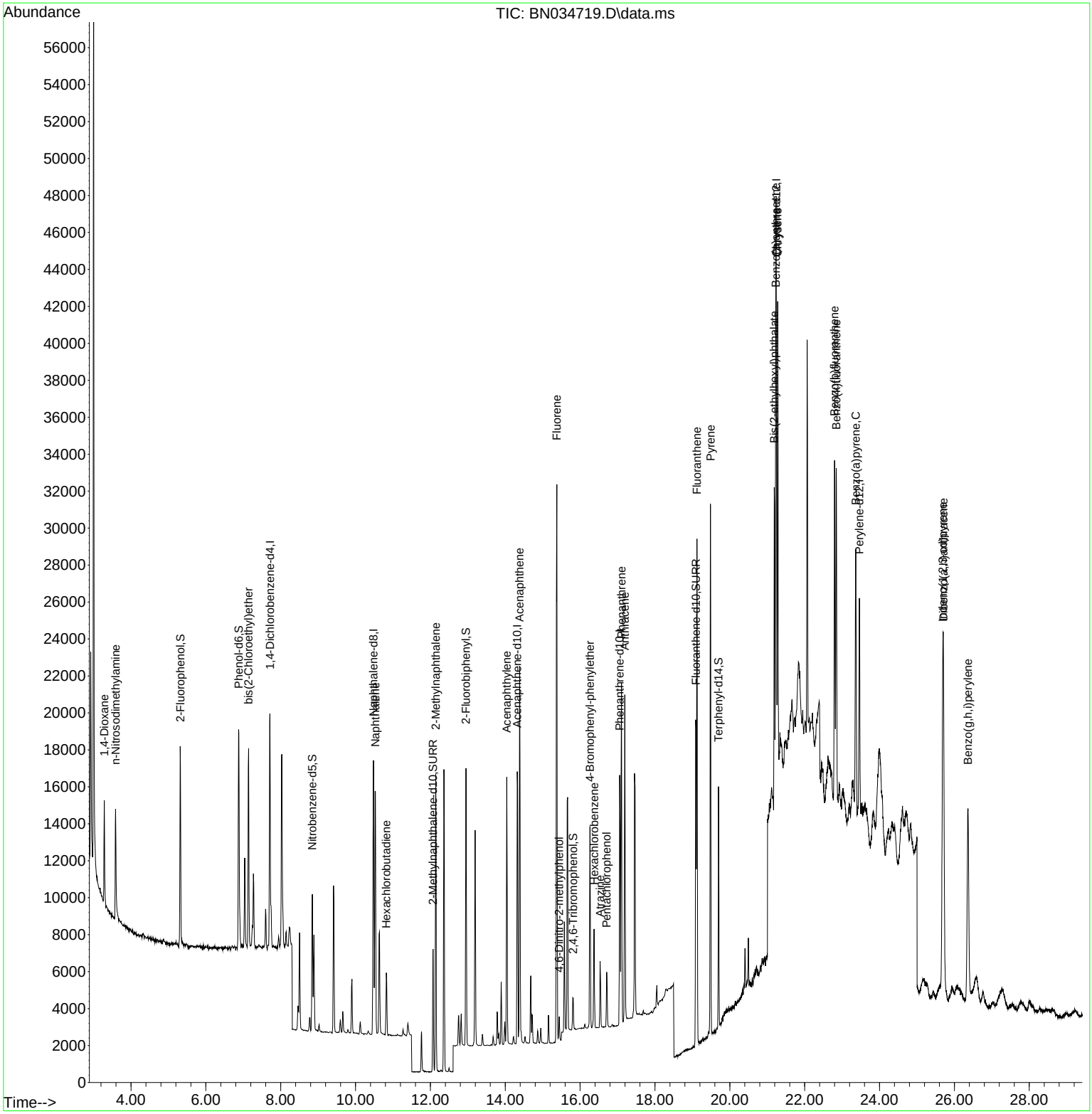
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.712	152	6027	0.400	ng		0.00
7) Naphthalene-d8	10.479	136	17907	0.400	ng		0.00
13) Acenaphthene-d10	14.318	164	8880	0.400	ng		-0.01
19) Phenanthrene-d10	17.057	188	17802	0.400	ng		#-0.01
29) Chrysene-d12	21.241	240	14770	0.400	ng		# 0.00
35) Perylene-d12	23.461	264	15941	0.400	ng		# 0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.322	112	7797	0.435	ng		0.00
5) Phenol-d6	6.882	99	10465	0.443	ng		0.00
8) Nitrobenzene-d5	8.845	82	5374	0.358	ng		0.00
11) 2-Methylnaphthalene-d10	12.071	152	8705	0.354	ng		0.00
14) 2,4,6-Tribromophenol	15.815	330	1006	0.366	ng		0.00
15) 2-Fluorobiphenyl	12.950	172	12140	0.344	ng		0.00
27) Fluoranthene-d10	19.094	212	16769	0.418	ng		0.00
31) Terphenyl-d14	19.698	244	10278	0.341	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.285	88	2863	0.357	ng		97
3) n-Nitrosodimethylamine	3.588	42	4215	0.361	ng		96
6) bis(2-Chloroethyl)ether	7.141	93	7199	0.375	ng		99
9) Naphthalene	10.532	128	18267	0.369	ng		100
10) Hexachlorobutadiene	10.821	225	2610	0.351	ng	#	98
12) 2-Methylnaphthalene	12.143	142	10986	0.357	ng		97
16) Acenaphthylene	14.040	152	14421	0.338	ng		100
17) Acenaphthene	14.382	154	10024	0.341	ng		98
18) Fluorene	15.377	166	12279	0.339	ng		100
20) 4,6-Dinitro-2-methylph...	15.441	198	746	0.301	ng	#	54
21) 4-Bromophenyl-phenylether	16.262	248	3313	0.349	ng	#	63
22) Hexachlorobenzene	16.374	284	3421	0.332	ng		95
23) Atrazine	16.535	200	2697	0.362	ng	#	90
24) Pentachlorophenol	16.709	266	1325	0.364	ng		98
25) Phenanthrene	17.106	178	18834	0.352	ng		99
26) Anthracene	17.193	178	17465	0.368	ng		99
28) Fluoranthene	19.122	202	23020	0.413	ng		99
30) Pyrene	19.484	202	24493	0.323	ng		99
32) Benzo(a)anthracene	21.232	228	22023	0.390	ng		99
33) Chrysene	21.277	228	20725	0.355	ng		98
34) Bis(2-ethylhexyl)phtha...	21.187	149	18018	0.563	ng		98
36) Indeno(1,2,3-cd)pyrene	25.688	276	23125	0.377	ng		95
37) Benzo(b)fluoranthene	22.797	252	21412	0.336	ng	#	34
38) Benzo(k)fluoranthene	22.841	252	20953	0.334	ng	#	32
39) Benzo(a)pyrene	23.364	252	19025	0.372	ng	#	20
40) Dibenzo(a,h)anthracene	25.709	278	17877	0.369	ng	#	58
41) Benzo(g,h,i)perylene	26.364	276	19691	0.369	ng	#	83

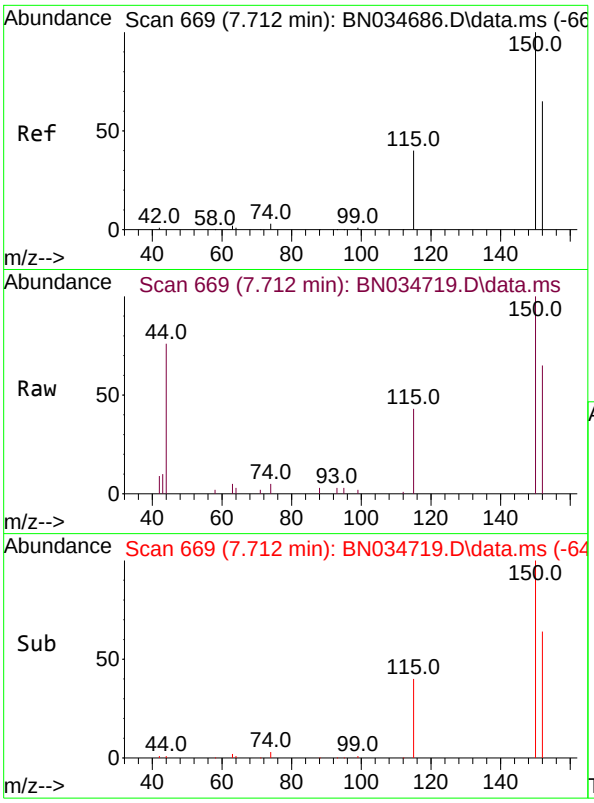
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034719.D
Acq On : 25 Oct 2024 07:51
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 36 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Oct 25 08:18:02 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration



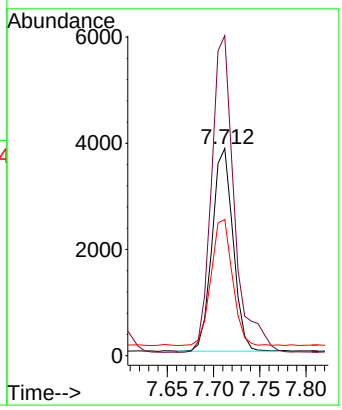


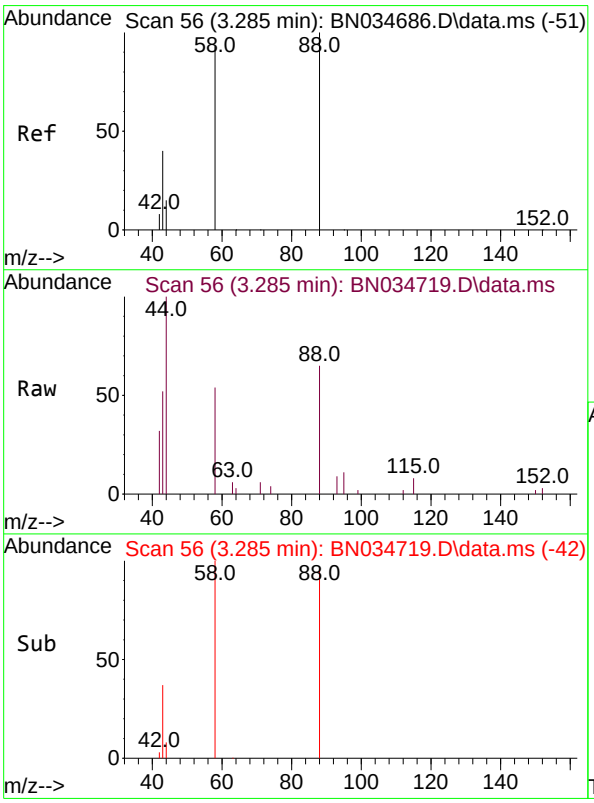
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 6027

Ion	Ratio	Lower	Upper
152	100		
150	154.5	122.7	184.1
115	65.7	51.0	76.6

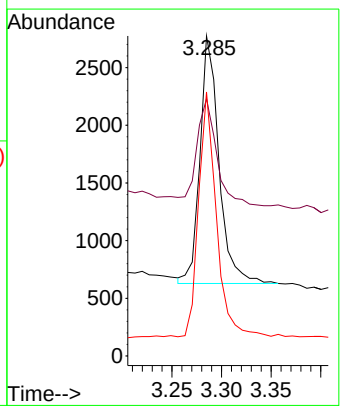


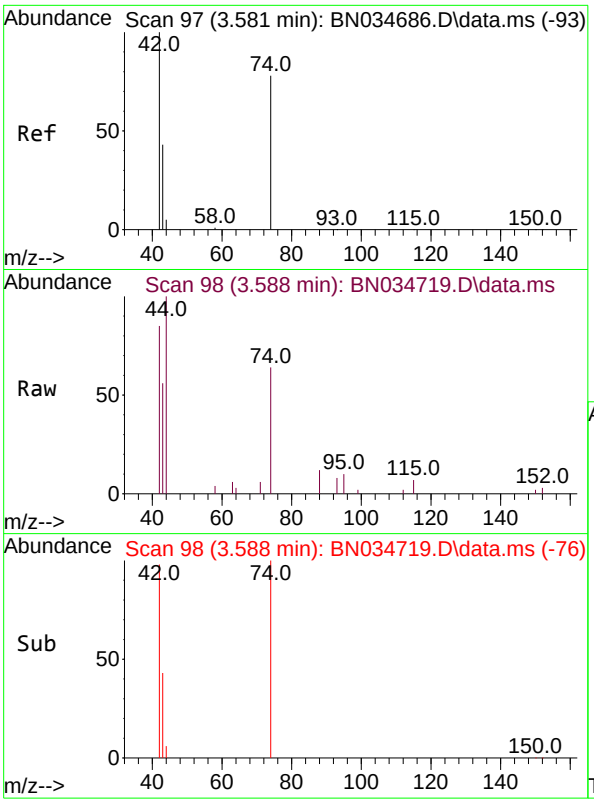


#2
1,4-Dioxane
Concen: 0.357 ng
RT: 3.285 min Scan# 56
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion: 88 Resp: 2863

Ion	Ratio	Lower	Upper
88	100		
43	45.3	32.1	48.1
58	92.2	73.7	110.5



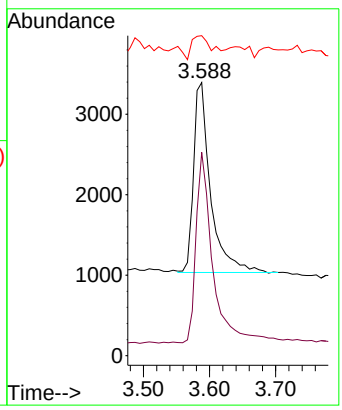


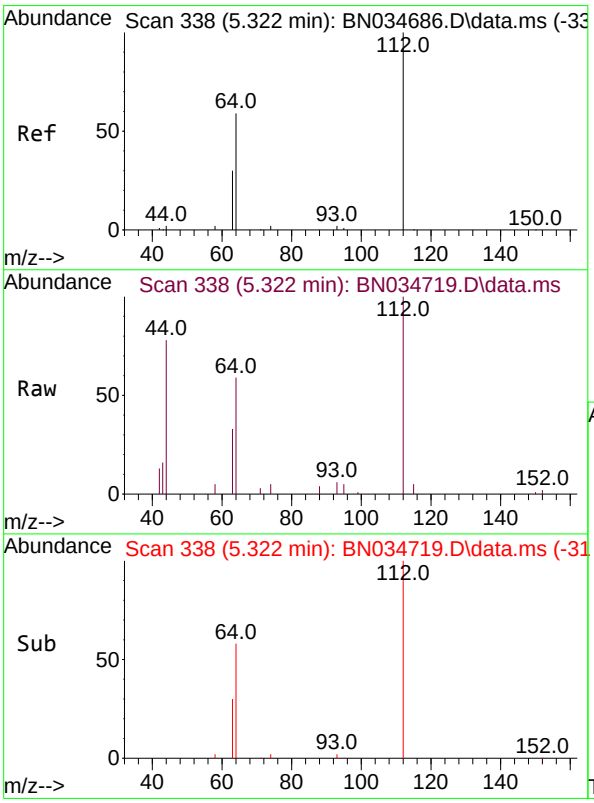
#3
n-Nitrosodimethylamine
Concen: 0.361 ng
RT: 3.588 min Scan# 9
Delta R.T. 0.007 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion: 42 Resp: 4215

Ion	Ratio	Lower	Upper
42	100		
74	100.4	77.2	115.8
44	14.9	13.4	20.2

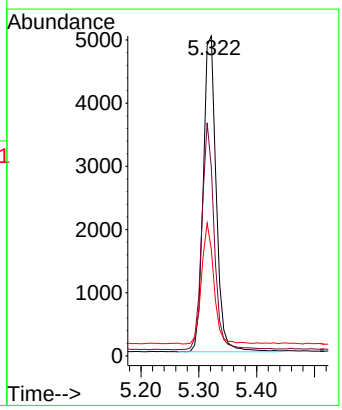


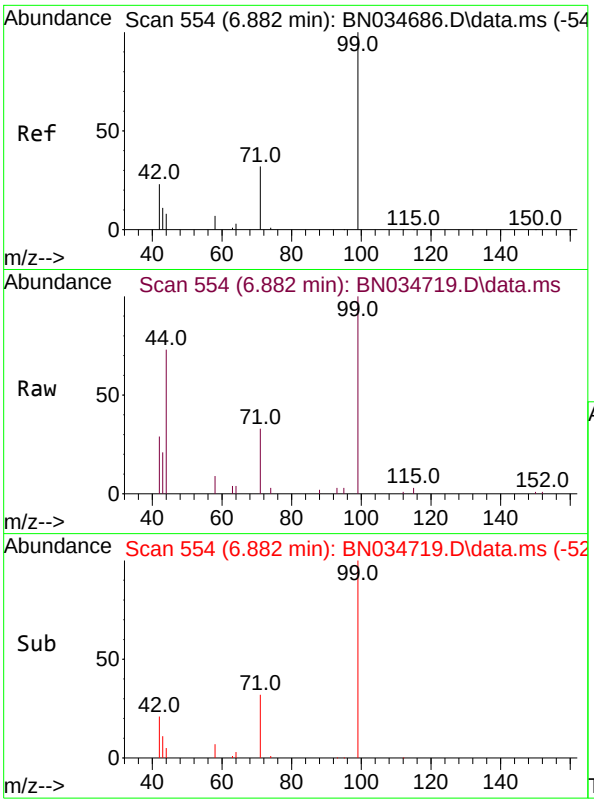


#4
2-Fluorophenol
Concen: 0.435 ng
RT: 5.322 min Scan# 338
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:112 Resp: 7797

Ion	Ratio	Lower	Upper
112	100		
64	68.9	53.0	79.6
63	36.4	27.6	41.4



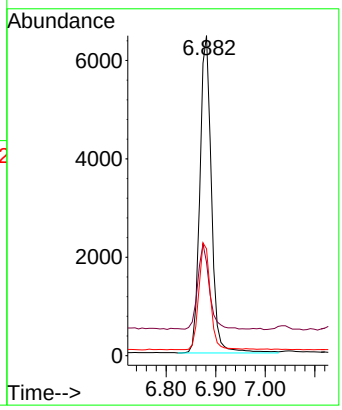


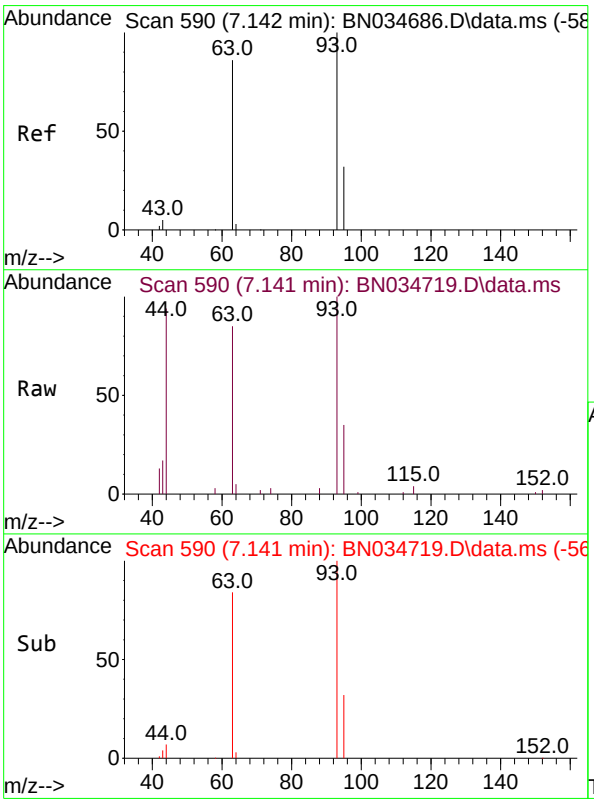
#5
Phenol-d6
Concen: 0.443 ng
RT: 6.882 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion: 99 Resp: 10465

Ion	Ratio	Lower	Upper
99	100		
42	26.7	21.8	32.8
71	33.4	26.6	40.0

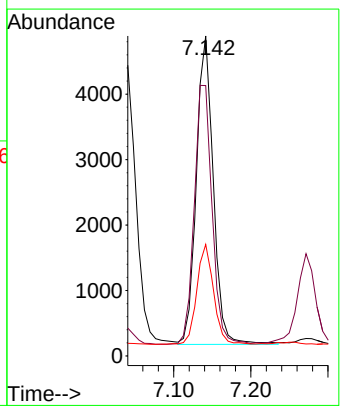


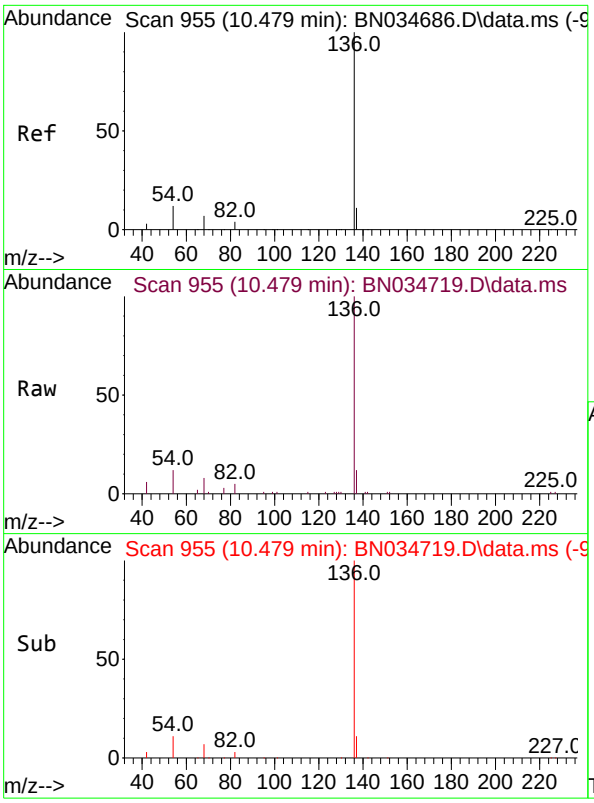


#6
bis(2-Chloroethyl)ether
Concen: 0.375 ng
RT: 7.141 min Scan# 590
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion: 93 Resp: 7199

Ion	Ratio	Lower	Upper
93	100		
63	88.1	71.5	107.3
95	32.2	25.8	38.6



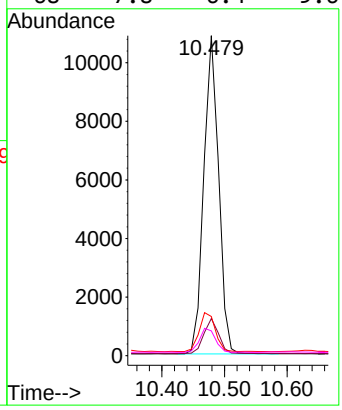


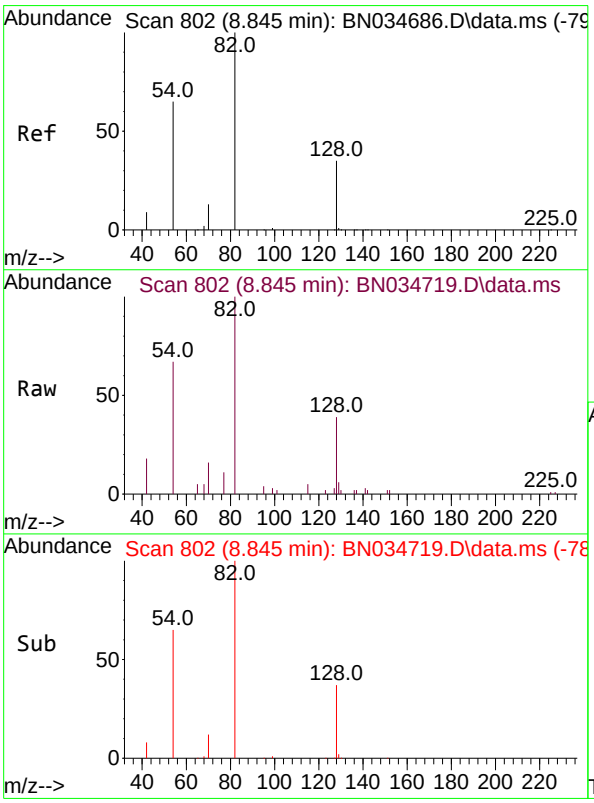
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:136 Resp: 17907

Ion	Ratio	Lower	Upper
136	100		
137	11.6	9.1	13.7
54	12.3	9.8	14.8
68	7.8	6.4	9.6

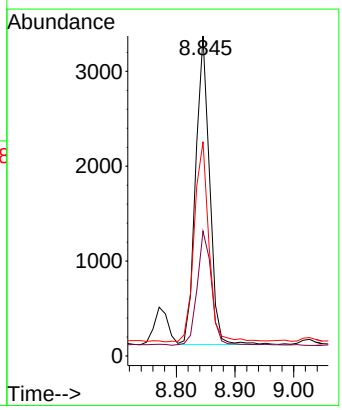


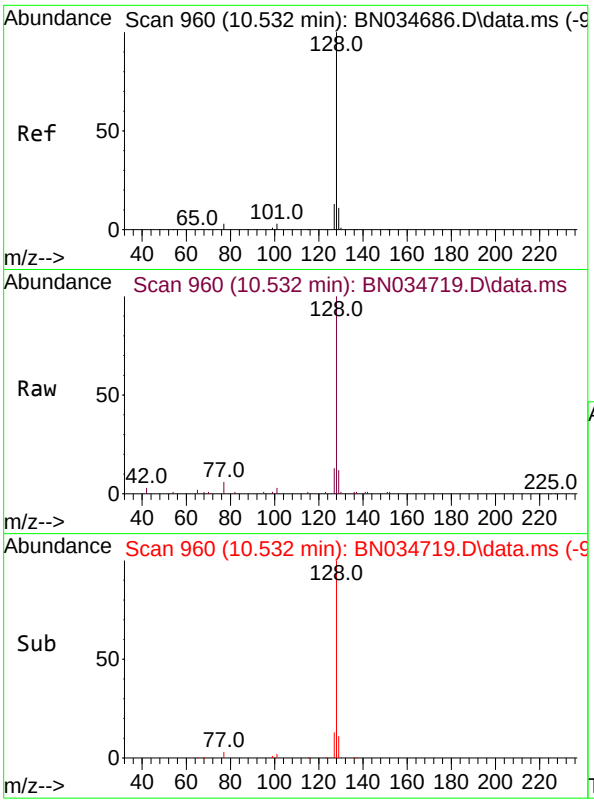


#8
Nitrobenzene-d5
Concen: 0.358 ng
RT: 8.845 min Scan# 802
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion: 82 Resp: 5374

Ion	Ratio	Lower	Upper
82	100		
128	39.0	29.7	44.5
54	66.9	53.0	79.6



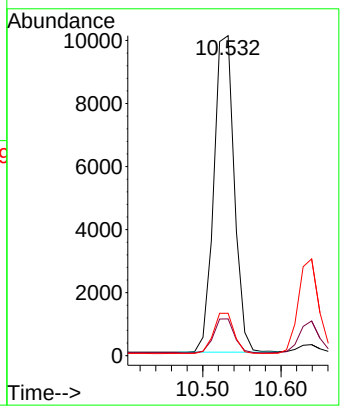


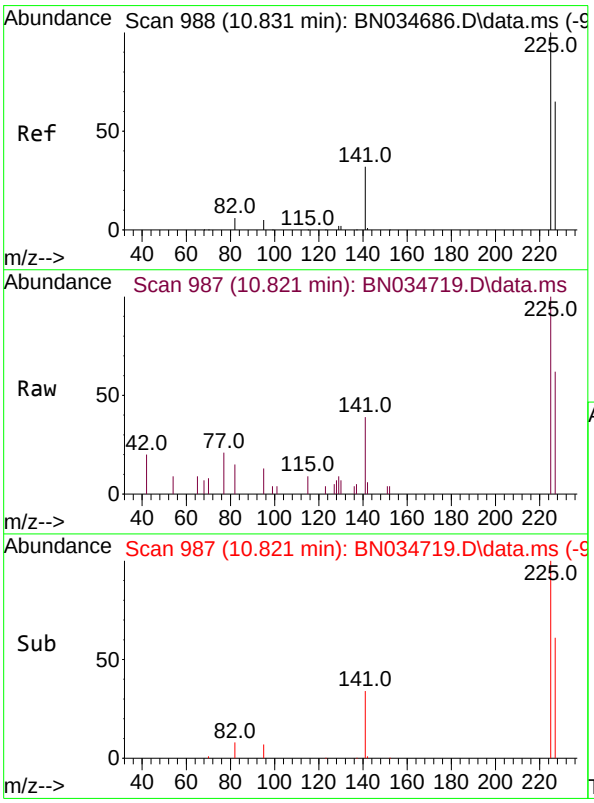
#9
Naphthalene
Concen: 0.369 ng
RT: 10.532 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:128 Resp: 18267

Ion	Ratio	Lower	Upper
128	100		
129	11.5	9.0	13.6
127	13.2	10.5	15.7

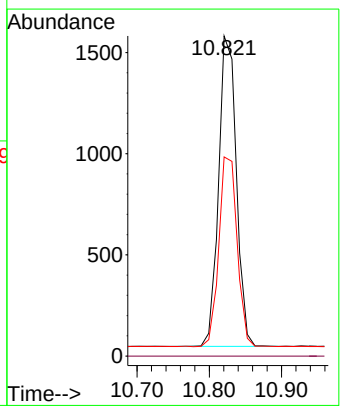


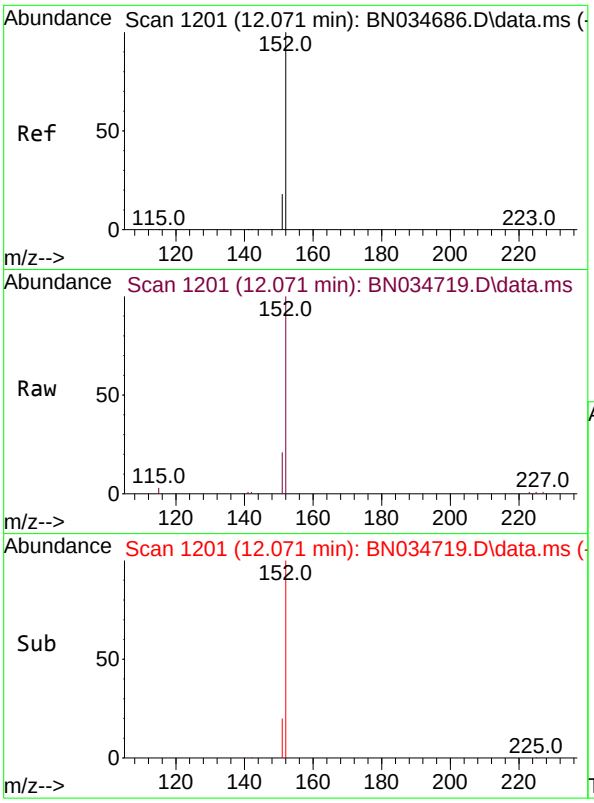


#10
Hexachlorobutadiene
Concen: 0.351 ng
RT: 10.821 min Scan# 987
Delta R.T. -0.011 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:225 Resp: 2610

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.0	51.4	77.0



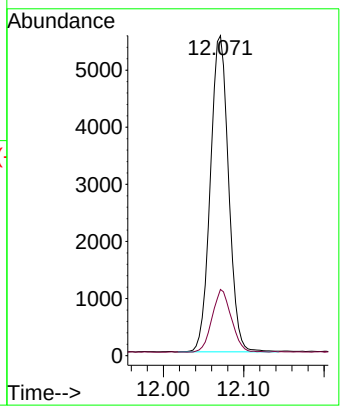


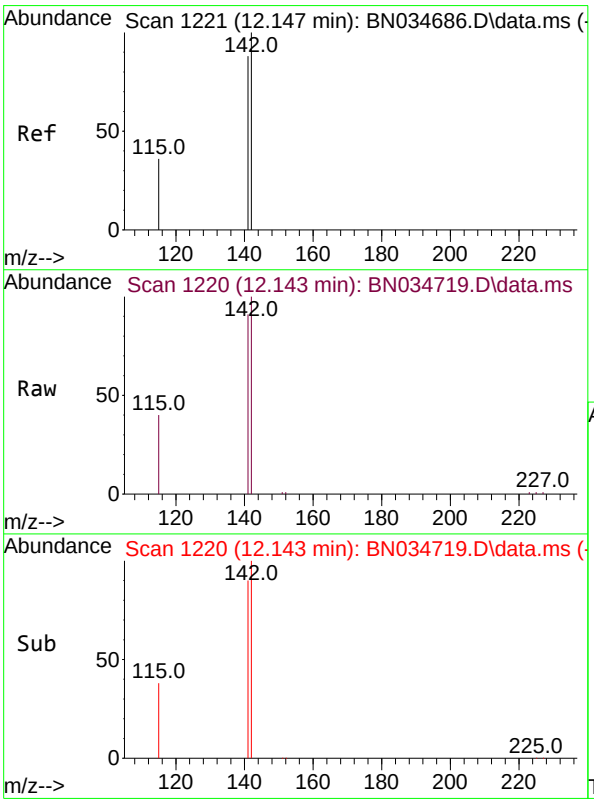
#11
2-Methylnaphthalene-d10
Concen: 0.354 ng
RT: 12.071 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 8705

Ion	Ratio	Lower	Upper
152	100		
151	20.9	16.7	25.1

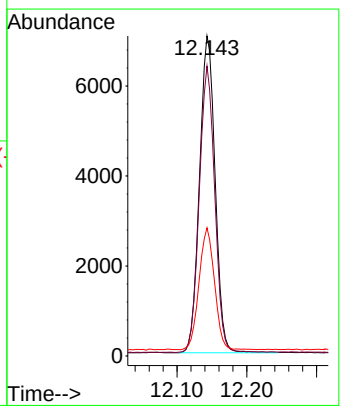


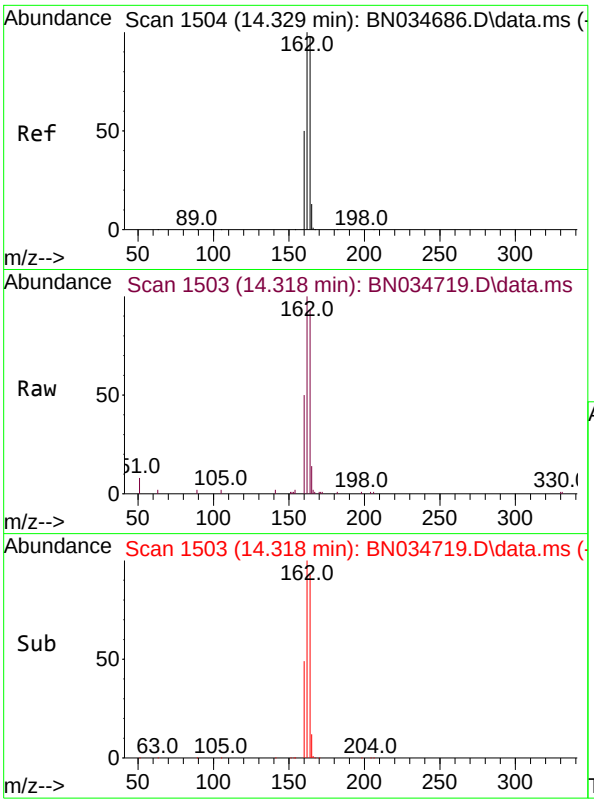


#12
2-Methylnaphthalene
Concen: 0.357 ng
RT: 12.143 min Scan# 1220
Delta R.T. -0.004 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:142 Resp: 10986

Ion	Ratio	Lower	Upper
142	100		
141	90.6	70.4	105.6
115	40.0	29.8	44.6



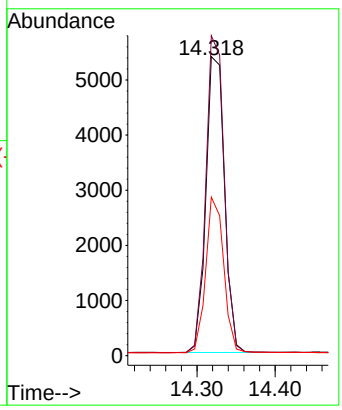


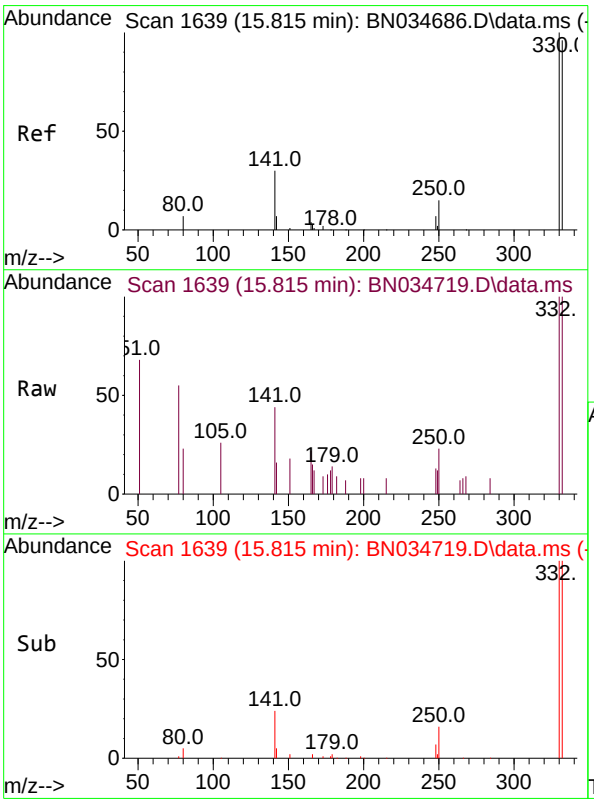
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.318 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:164 Resp: 8880

Ion	Ratio	Lower	Upper
164	100		
162	107.0	81.4	122.0
160	53.0	40.6	61.0

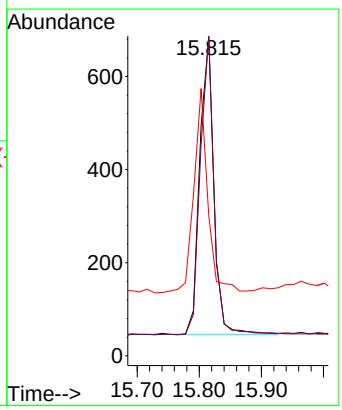


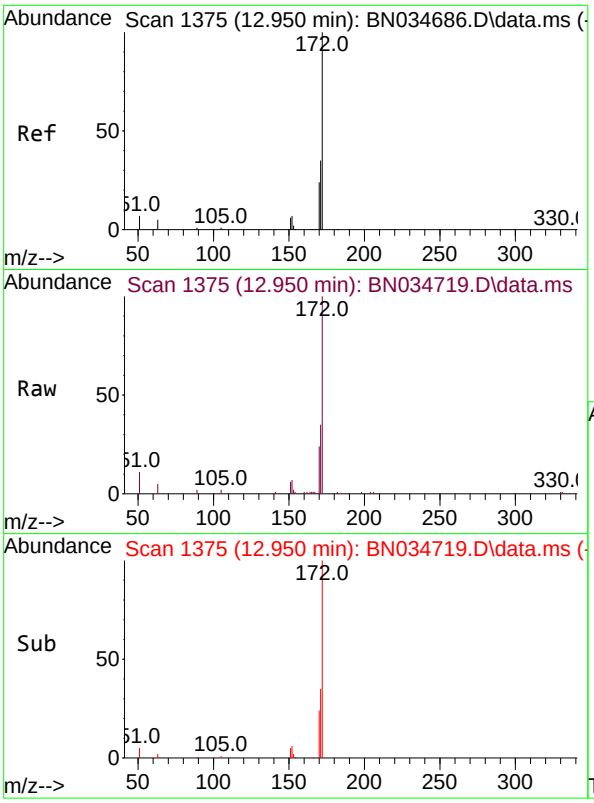


#14
2,4,6-Tribromophenol
Concen: 0.366 ng
RT: 15.815 min Scan# 1639
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:330 Resp: 1006

Ion	Ratio	Lower	Upper
330	100		
332	97.7	76.6	115.0
141	68.0	54.6	81.8



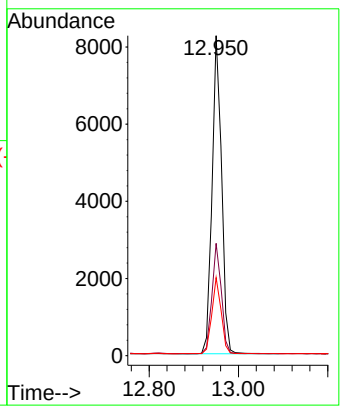


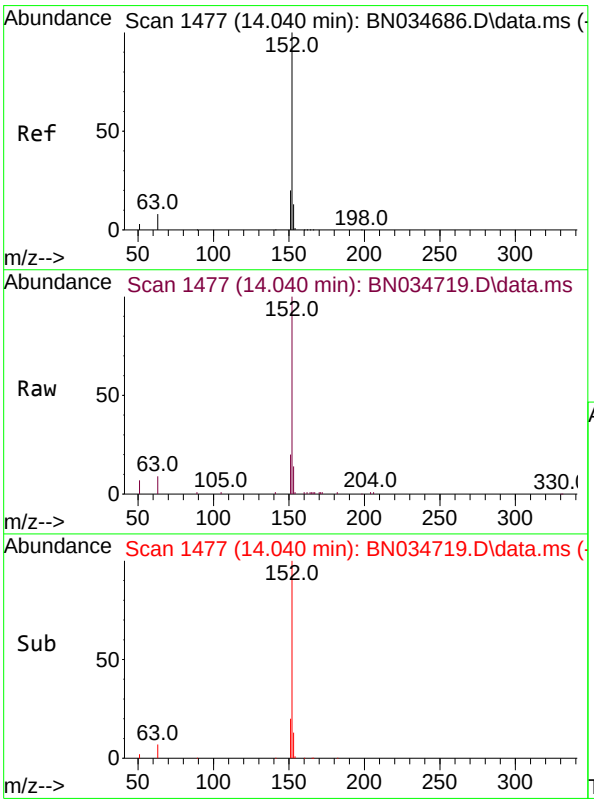
#15
2-Fluorobiphenyl
Concen: 0.344 ng
RT: 12.950 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:172 Resp: 12140

Ion	Ratio	Lower	Upper
172	100		
171	35.1	28.3	42.5
170	24.4	19.8	29.6

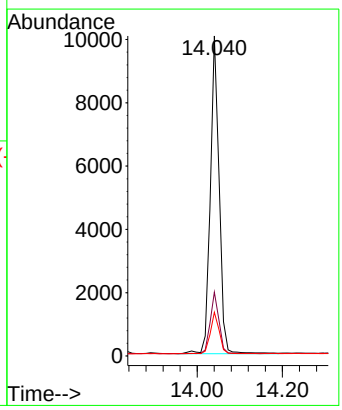


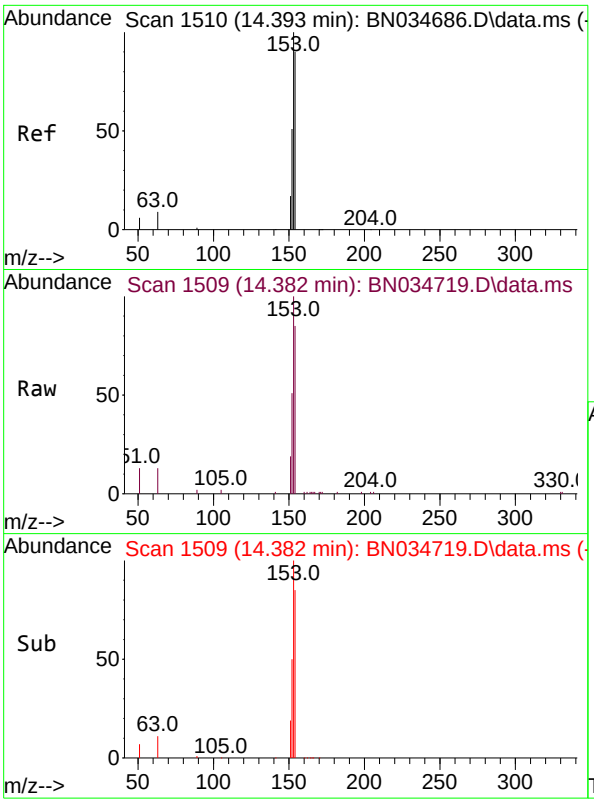


#16
Acenaphthylene
Concen: 0.338 ng
RT: 14.040 min Scan# 1477
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:152 Resp: 14421

Ion	Ratio	Lower	Upper
152	100		
151	19.5	15.6	23.4
153	13.2	10.6	15.8



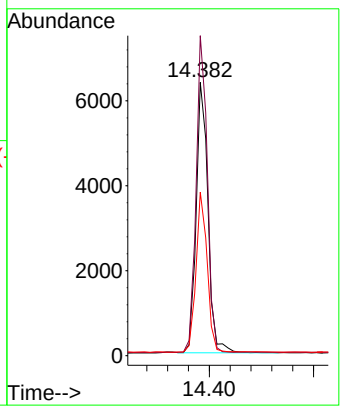


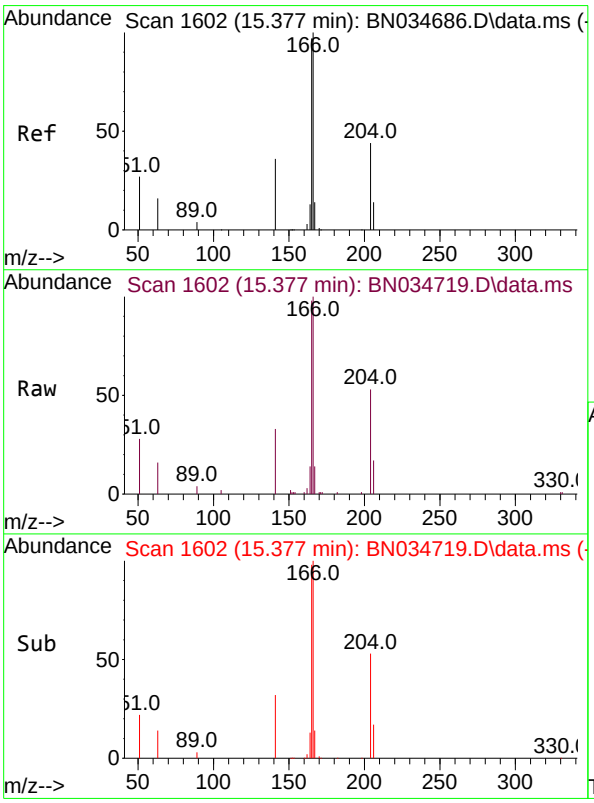
#17
Acenaphthene
Concen: 0.341 ng
RT: 14.382 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:154 Resp: 10024

Ion	Ratio	Lower	Upper
154	100		
153	111.6	88.2	132.2
152	56.1	46.9	70.3

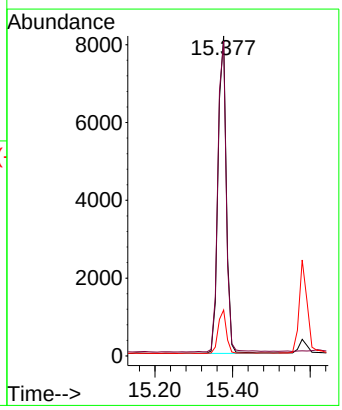


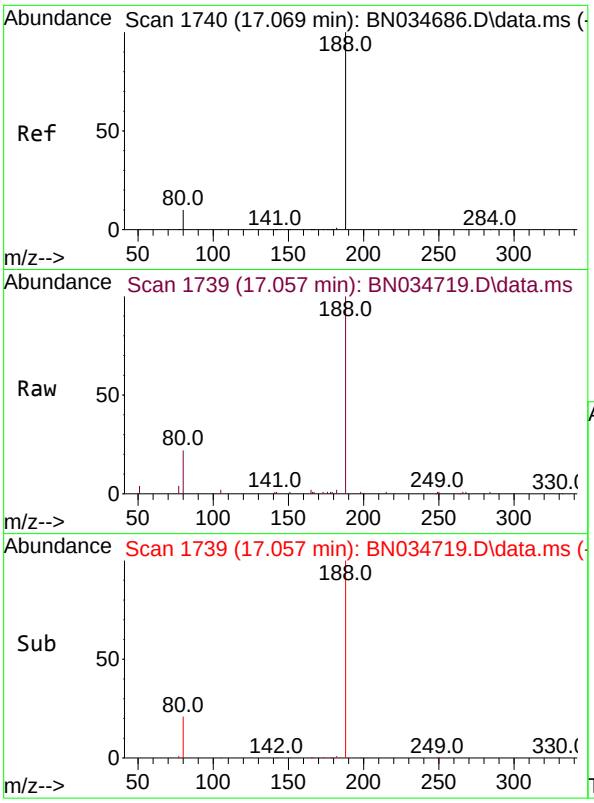


#18
Fluorene
Concen: 0.339 ng
RT: 15.377 min Scan# 1602
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:166 Resp: 12279

Ion	Ratio	Lower	Upper
166	100		
165	98.8	78.8	118.2
167	13.6	10.6	16.0



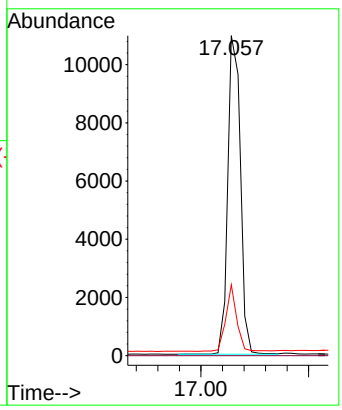


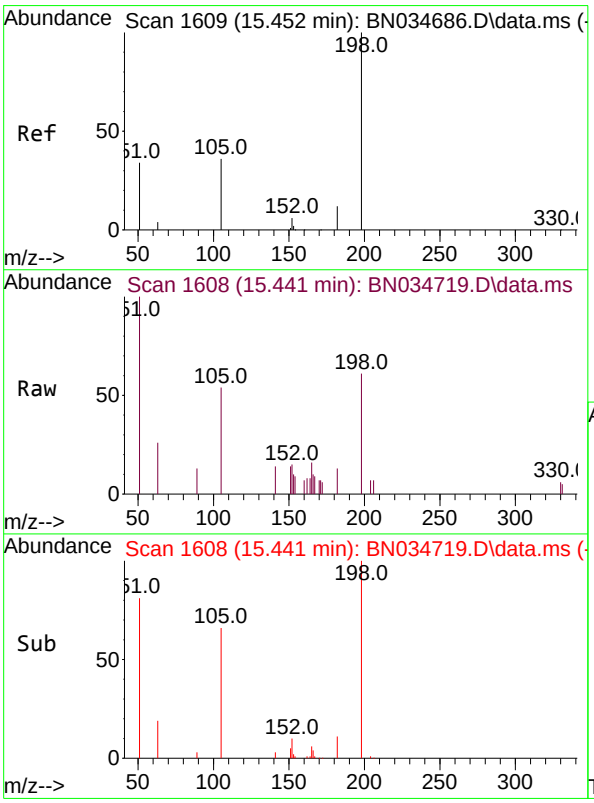
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.057 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:188 Resp: 17802

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	22.1	8.9	13.3#

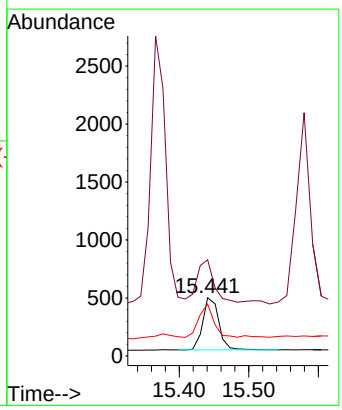


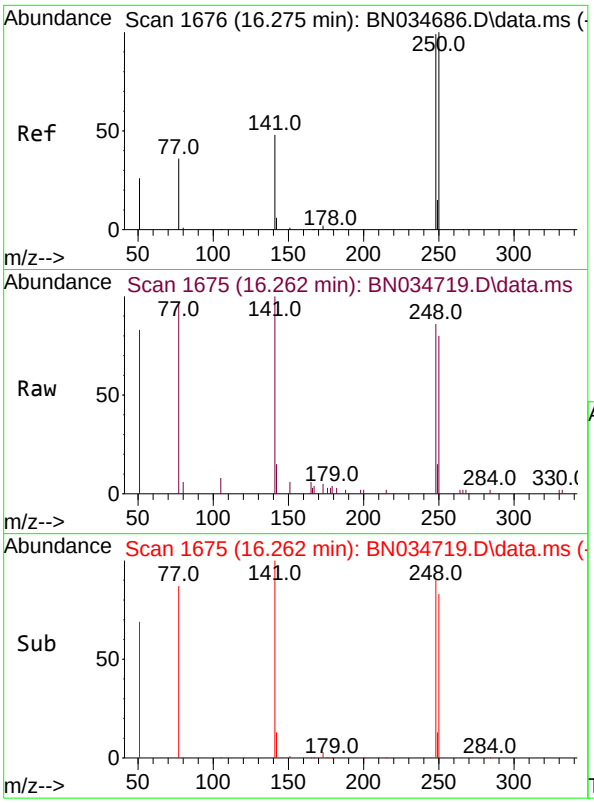


#20
4,6-Dinitro-2-methylphenol
Concen: 0.301 ng
RT: 15.441 min Scan# 1608
Delta R.T. -0.011 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:198 Resp: 746

Ion	Ratio	Lower	Upper
198	100		
51	165.1	91.8	137.8#
105	89.0	44.3	66.5#



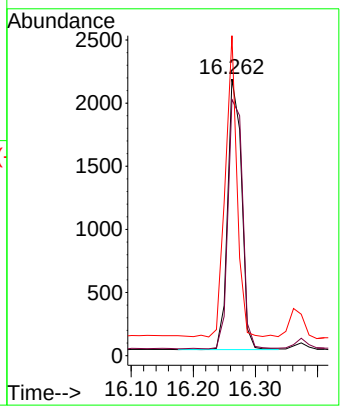


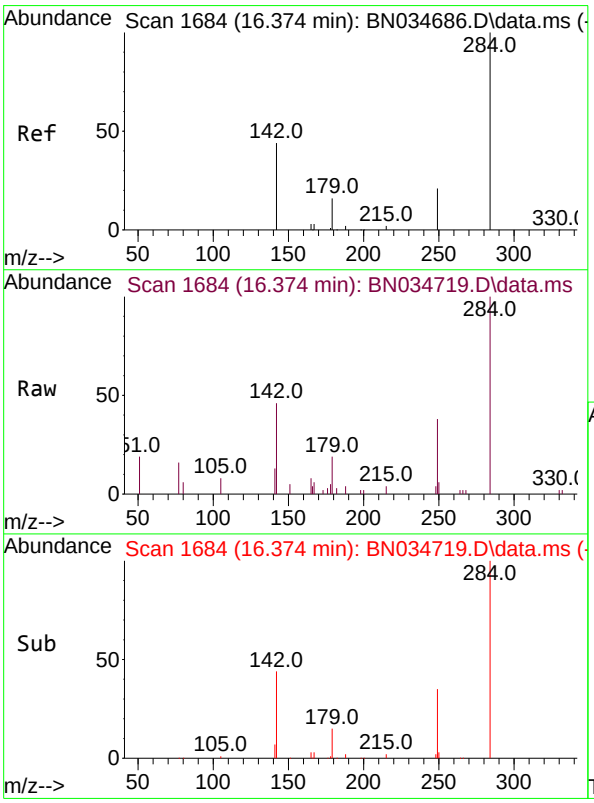
#21
4-Bromophenyl-phenylether
Concen: 0.349 ng
RT: 16.262 min Scan# 1(
Delta R.T. -0.012 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:248 Resp: 3313

Ion	Ratio	Lower	Upper
248	100		
250	92.6	80.9	121.3
141	115.7	40.5	60.7#

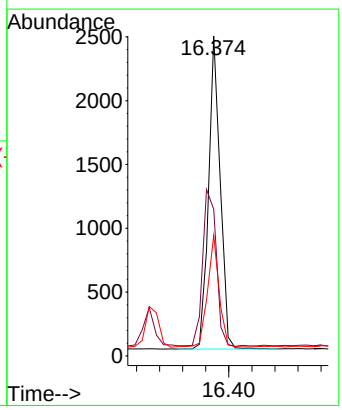


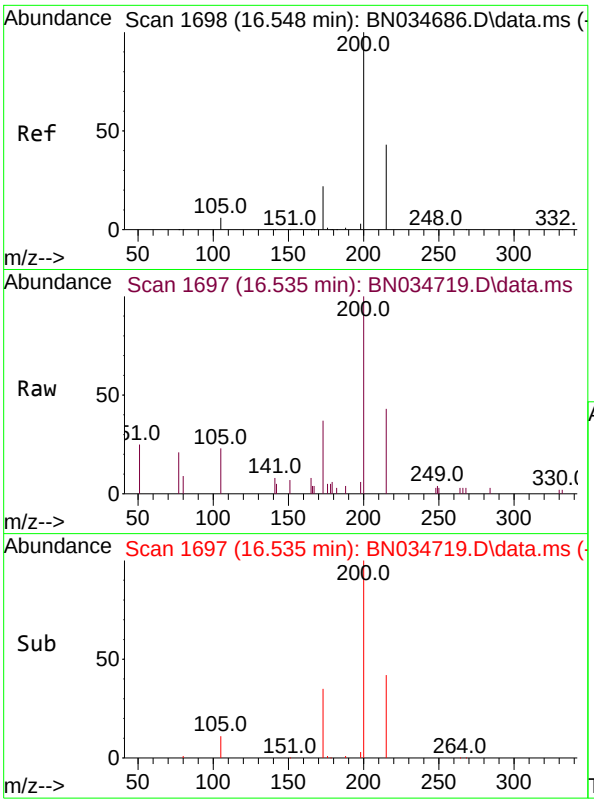


#22
Hexachlorobenzene
Concen: 0.332 ng
RT: 16.374 min Scan# 1684
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:284 Resp: 3421

Ion	Ratio	Lower	Upper
284	100		
142	58.6	43.6	65.4
249	35.2	26.6	40.0



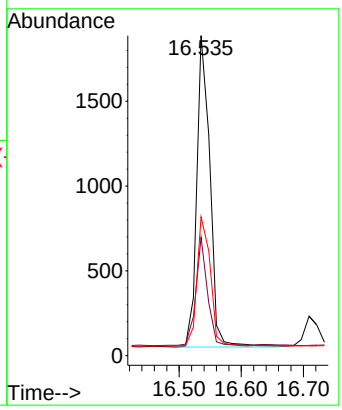


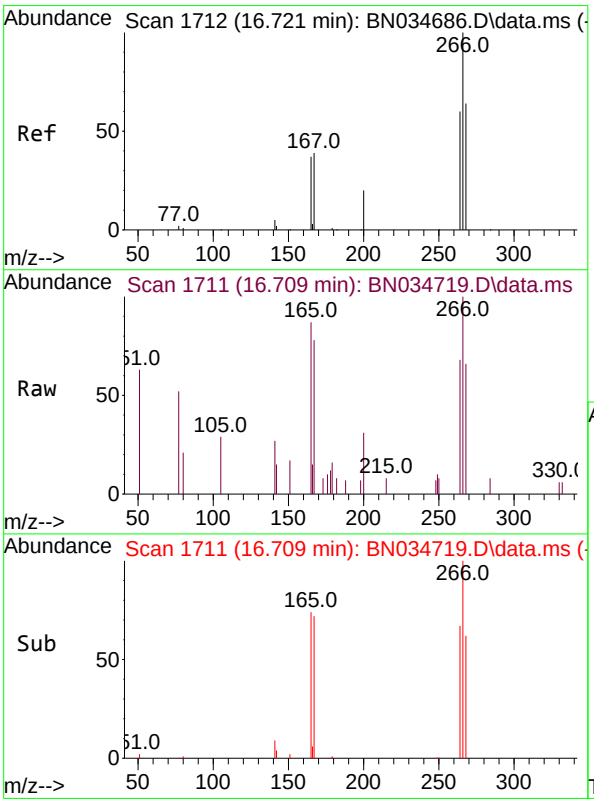
#23
Atrazine
Concen: 0.362 ng
RT: 16.535 min Scan# 1(
Delta R.T. -0.012 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:200 Resp: 2697

Ion	Ratio	Lower	Upper
200	100		
173	37.0	19.7	29.5#
215	43.4	35.7	53.5

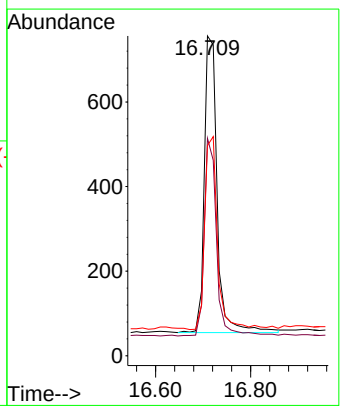


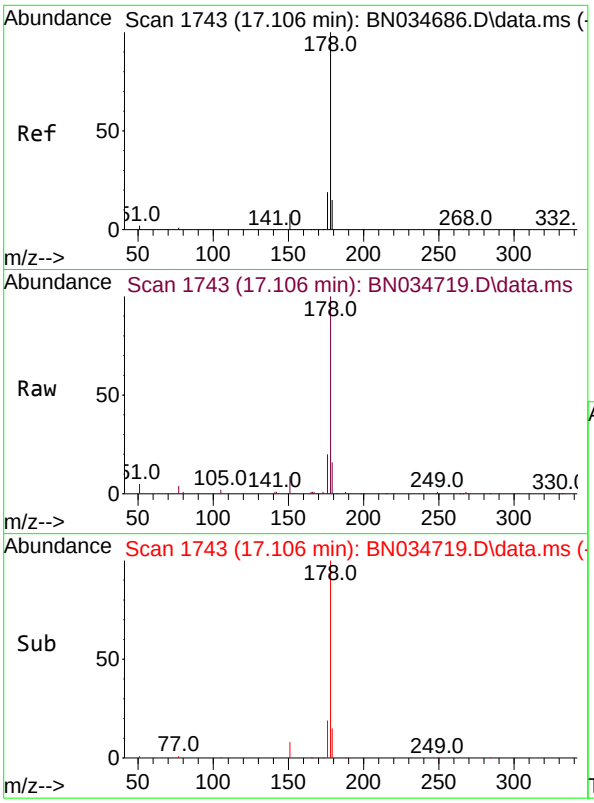


#24
Pentachlorophenol
Concen: 0.364 ng
RT: 16.709 min Scan# 1711
Delta R.T. -0.012 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:266 Resp: 1325

Ion	Ratio	Lower	Upper
266	100		
264	63.3	49.4	74.2
268	65.1	50.5	75.7



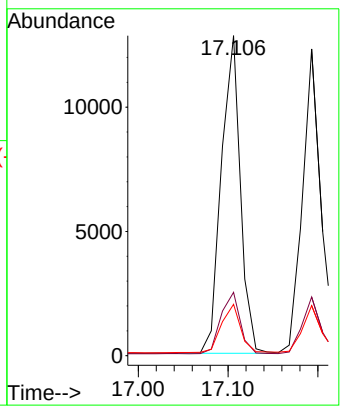


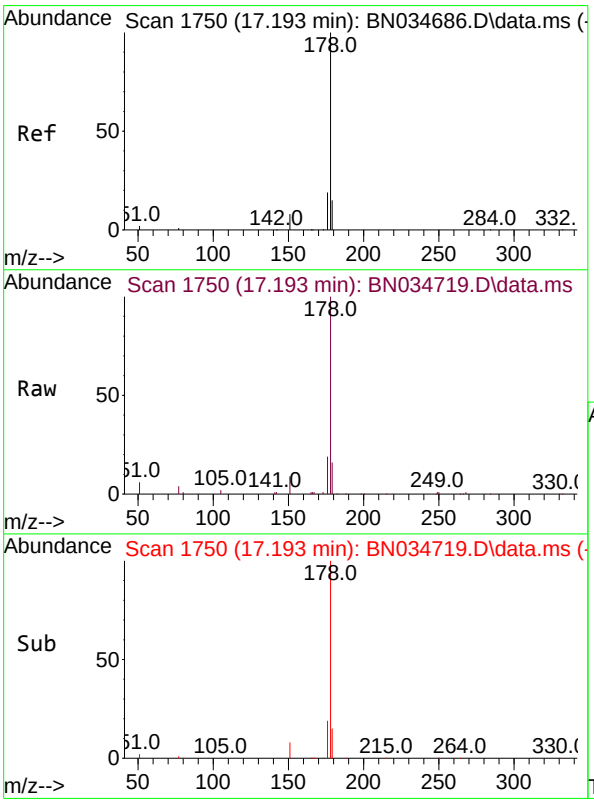
#25
Phenanthrene
Concen: 0.352 ng
RT: 17.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:178 Resp: 18834

Ion	Ratio	Lower	Upper
178	100		
176	19.9	15.4	23.2
179	15.6	12.2	18.4

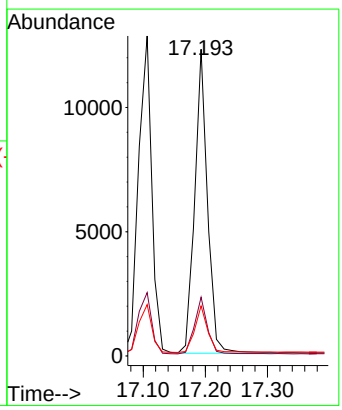


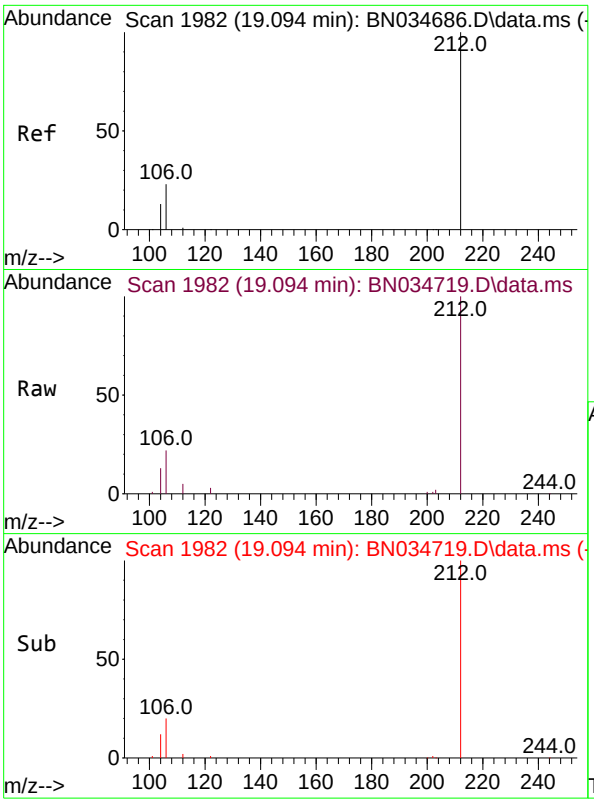


#26
Anthracene
Concen: 0.368 ng
RT: 17.193 min Scan# 1750
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:178 Resp: 17465

Ion	Ratio	Lower	Upper
178	100		
176	18.8	14.9	22.3
179	15.5	12.2	18.2



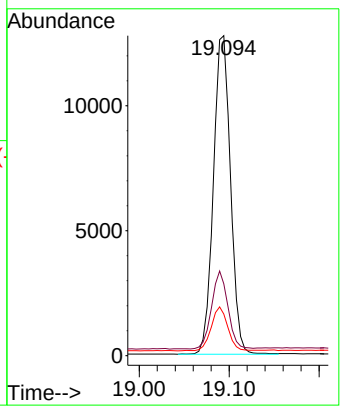


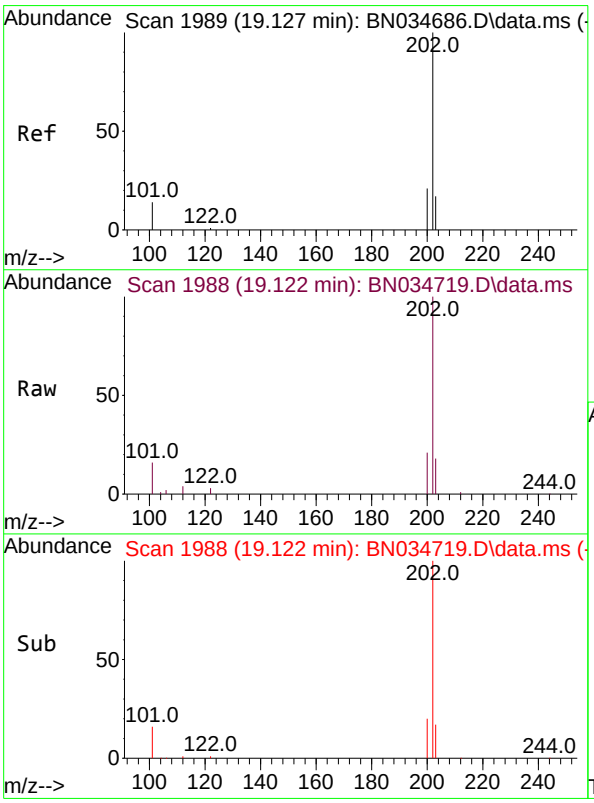
#27
Fluoranthene-d10
Concen: 0.418 ng
RT: 19.094 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:212 Resp: 16769

Ion	Ratio	Lower	Upper
212	100		
106	23.4	17.8	26.8
104	13.5	10.2	15.4

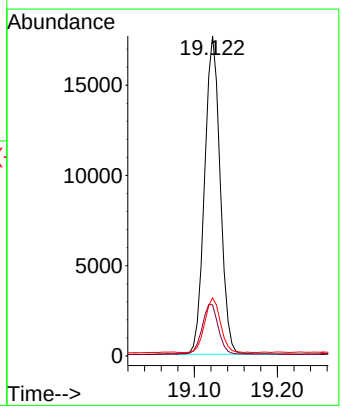


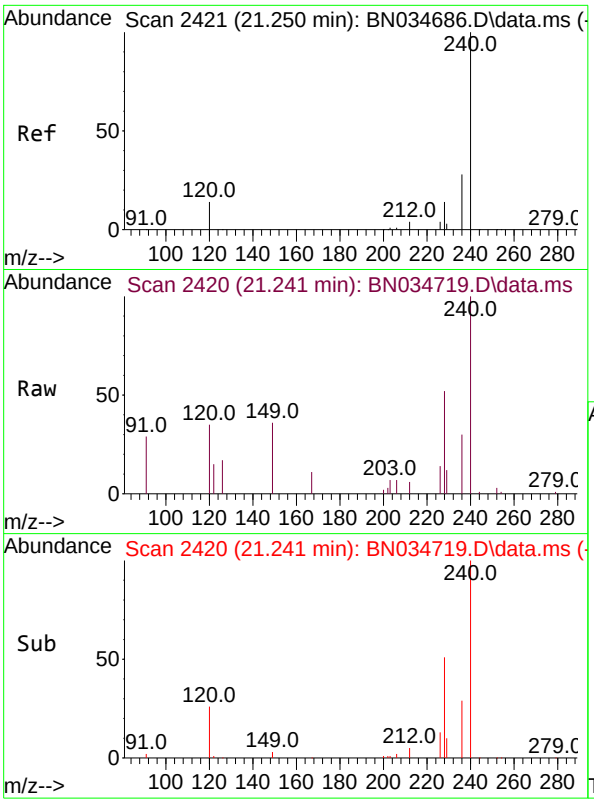


#28
Fluoranthene
Concen: 0.413 ng
RT: 19.122 min Scan# 1988
Delta R.T. -0.005 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:202 Resp: 23020

Ion	Ratio	Lower	Upper
202	100		
101	16.8	12.8	19.2
203	17.3	13.5	20.3



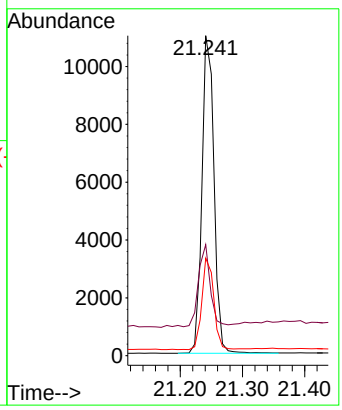


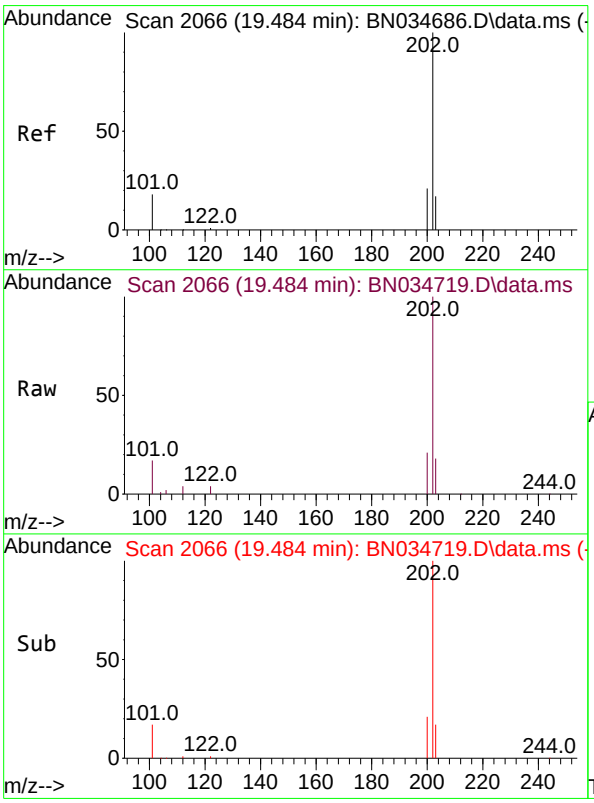
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.241 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:240 Resp: 14770

Ion	Ratio	Lower	Upper
240	100		
120	34.7	14.2	21.2#
236	30.4	23.1	34.7

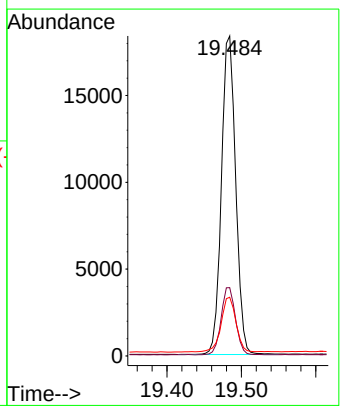


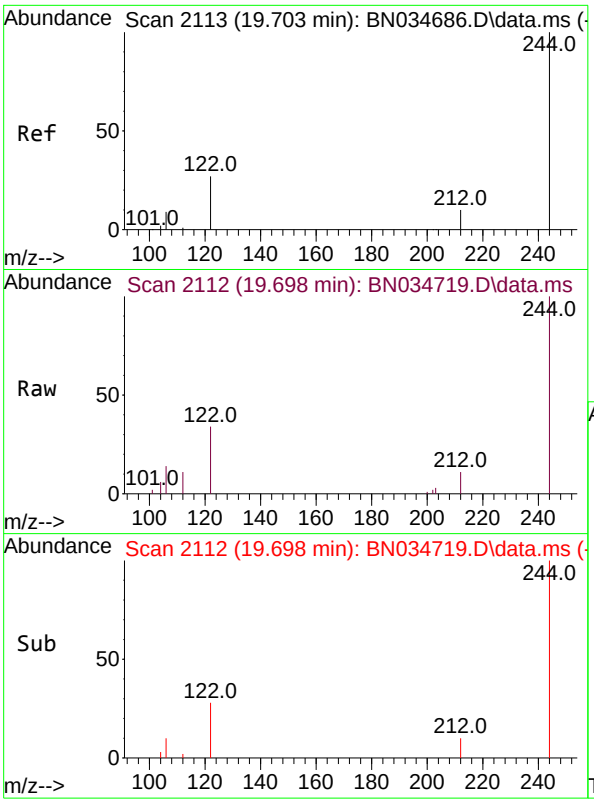


#30
Pyrene
Concen: 0.323 ng
RT: 19.484 min Scan# 2066
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:202 Resp: 24493

Ion	Ratio	Lower	Upper
202	100		
200	21.3	16.6	25.0
203	18.0	14.2	21.4



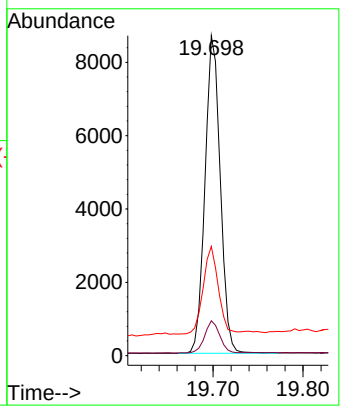


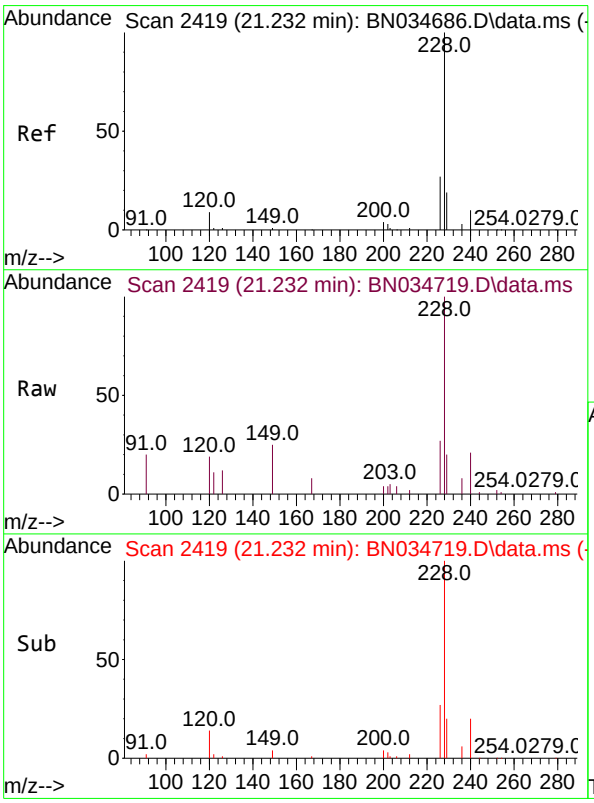
#31
Terphenyl-d14
Concen: 0.341 ng
RT: 19.698 min Scan# 21
Delta R.T. -0.005 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:244 Resp: 10278

Ion	Ratio	Lower	Upper
244	100		
212	10.9	8.6	13.0
122	34.1	22.3	33.5#

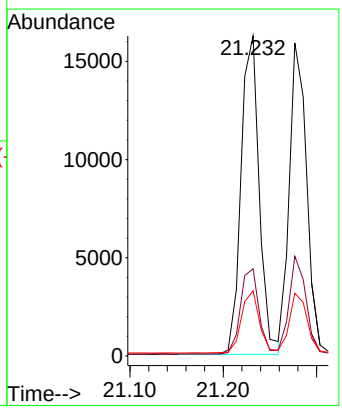


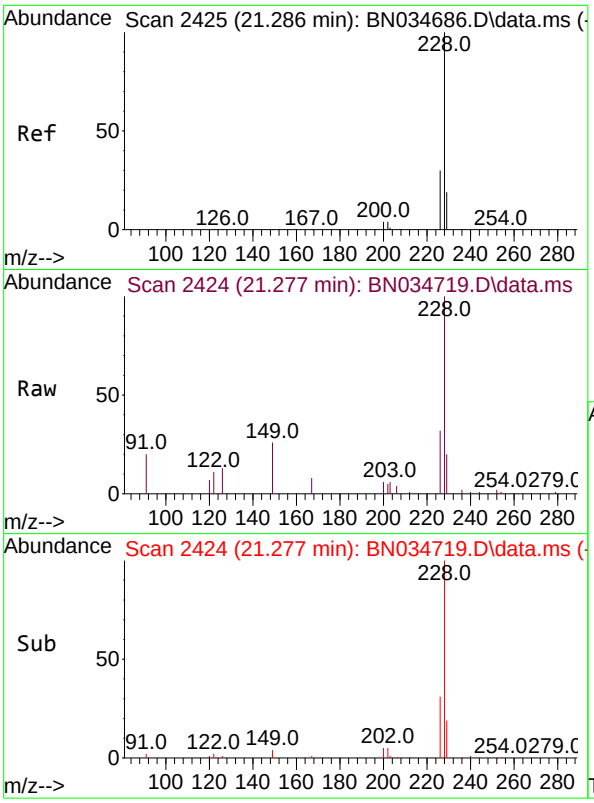


#32
Benzo(a)anthracene
Concen: 0.390 ng
RT: 21.232 min Scan# 2419
Delta R.T. -0.000 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:228 Resp: 22023

Ion	Ratio	Lower	Upper
228	100		
226	27.2	22.0	33.0
229	20.4	15.6	23.4



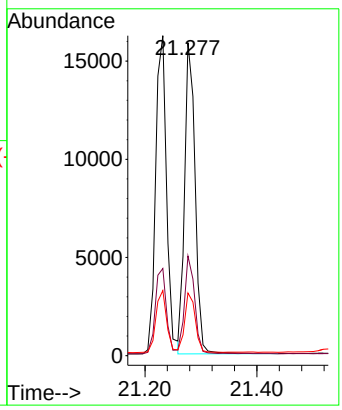


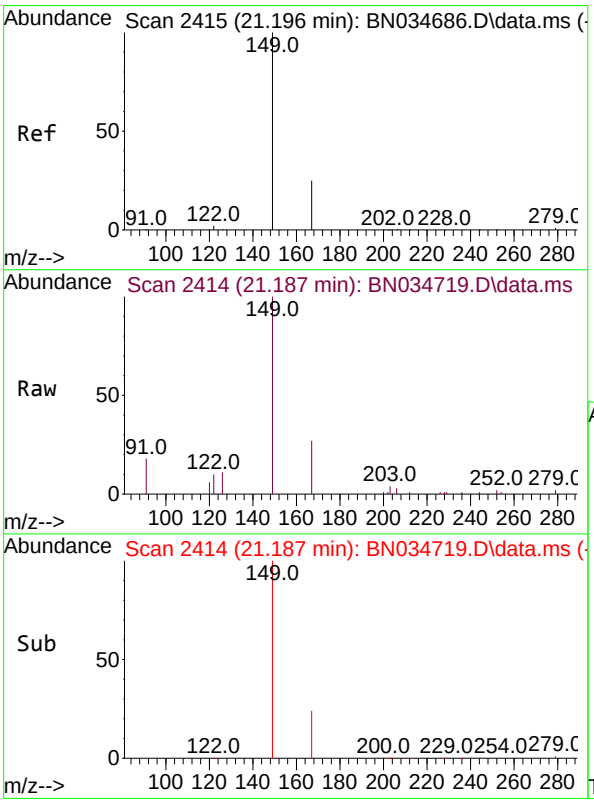
#33
Chrysene
Concen: 0.355 ng
RT: 21.277 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:228 Resp: 20725

Ion	Ratio	Lower	Upper
228	100		
226	31.9	24.1	36.1
229	20.1	15.8	23.8

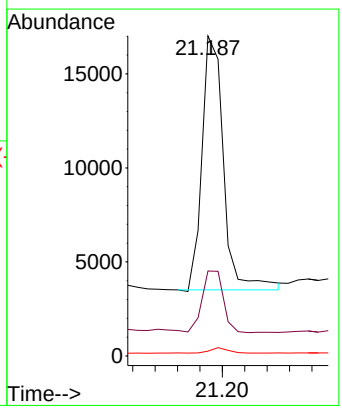


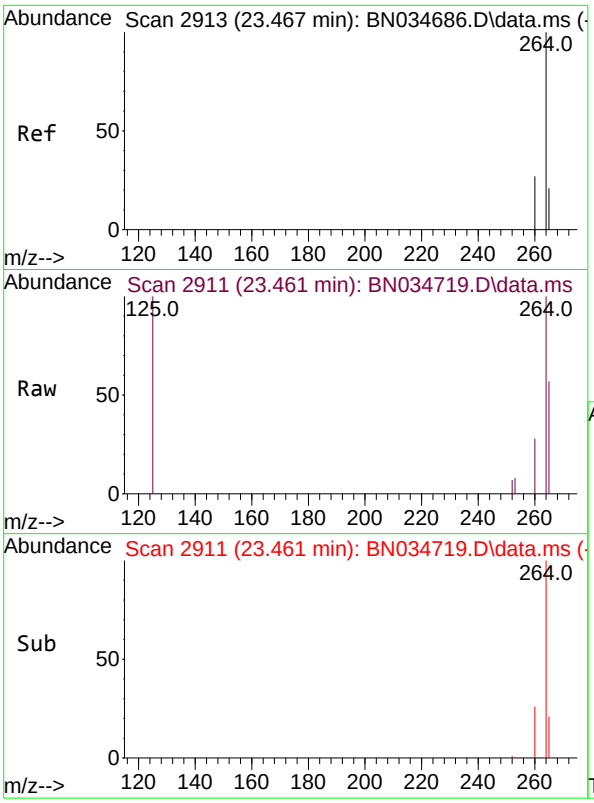


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.563 ng
RT: 21.187 min Scan# 2414
Delta R.T. -0.009 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:149 Resp: 18018

Ion	Ratio	Lower	Upper
149	100		
167	23.5	19.7	29.5
279	2.0	1.8	2.6



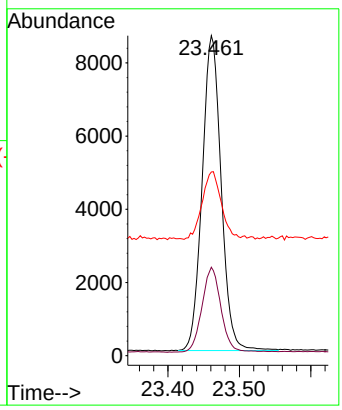


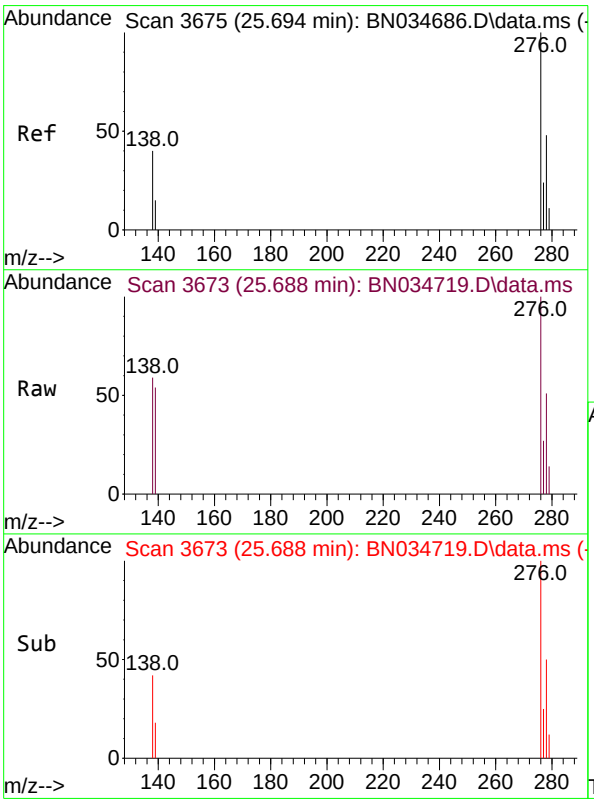
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.461 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:264 Resp: 15941

Ion	Ratio	Lower	Upper
264	100		
260	27.7	21.9	32.9
265	57.4	60.6	91.0#

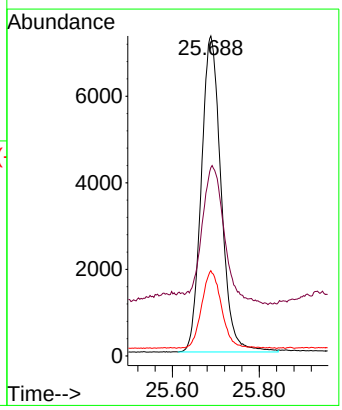


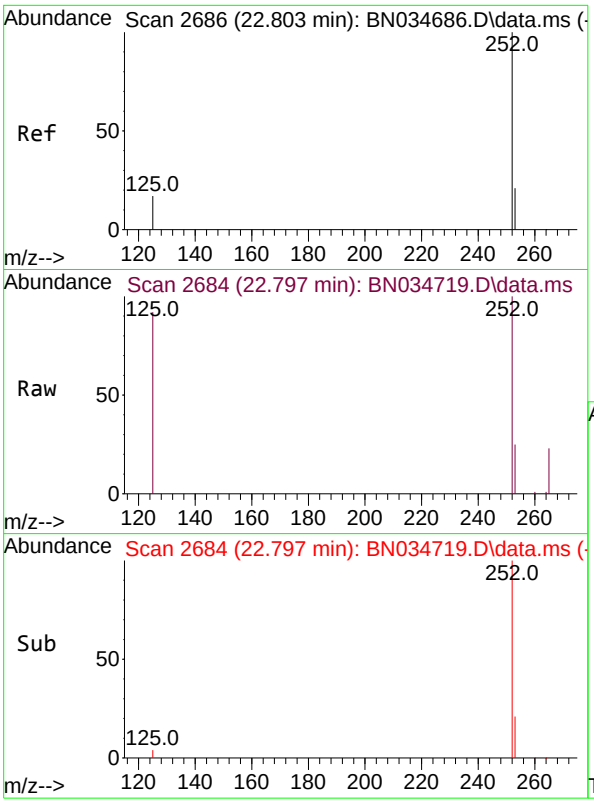


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.377 ng
RT: 25.688 min Scan# 3673
Delta R.T. -0.006 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:276 Resp: 23125

Ion	Ratio	Lower	Upper
276	100		
138	48.9	35.1	52.7
277	24.2	19.7	29.5



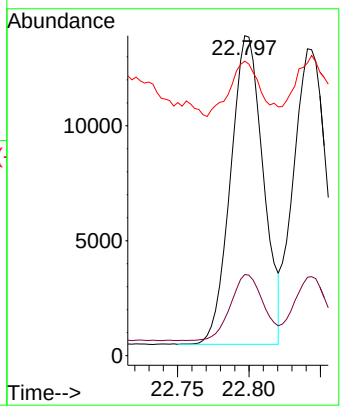


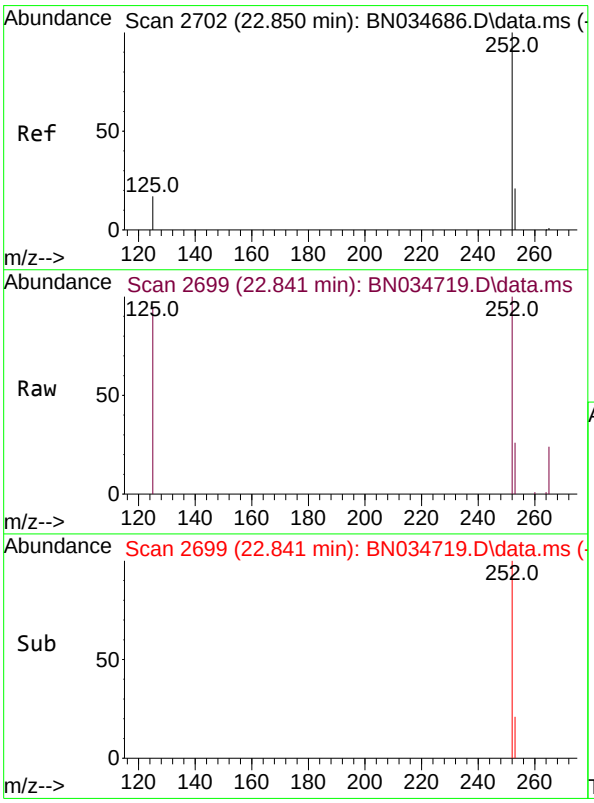
#37
Benzo(b)fluoranthene
Concen: 0.336 ng
RT: 22.797 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:252 Resp: 21412

Ion	Ratio	Lower	Upper
252	100		
253	25.3	20.0	30.0
125	92.0	20.9	31.3#

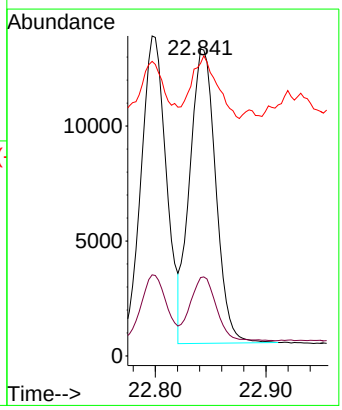


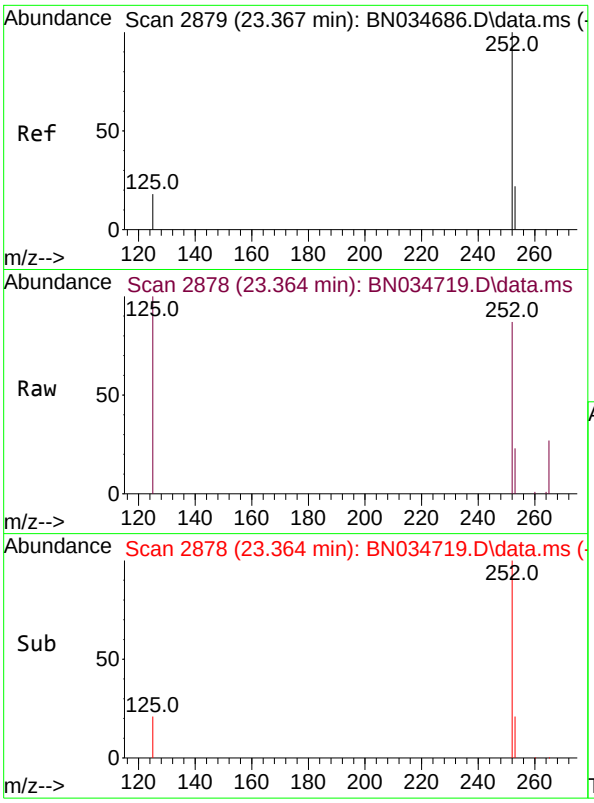


#38
Benzo(k)fluoranthene
Concen: 0.334 ng
RT: 22.841 min Scan# 2699
Delta R.T. -0.009 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:252 Resp: 20953

Ion	Ratio	Lower	Upper
252	100		
253	25.5	20.6	31.0
125	95.3	21.6	32.4#



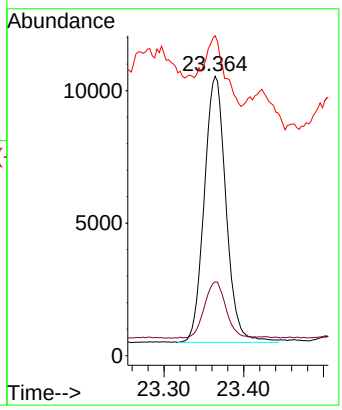


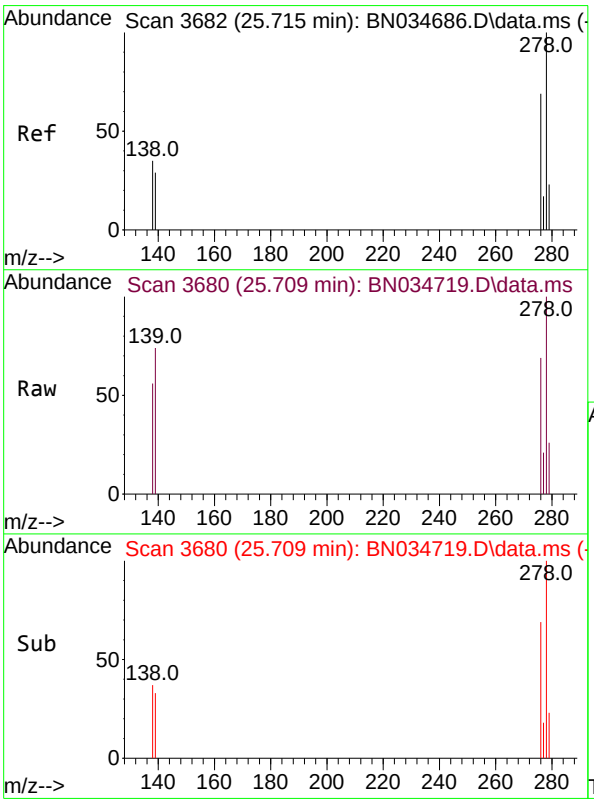
#39
Benzo(a)pyrene
Concen: 0.372 ng
RT: 23.364 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:252 Resp: 19025

Ion	Ratio	Lower	Upper
252	100		
253	26.4	22.2	33.4
125	114.5	26.0	39.0#

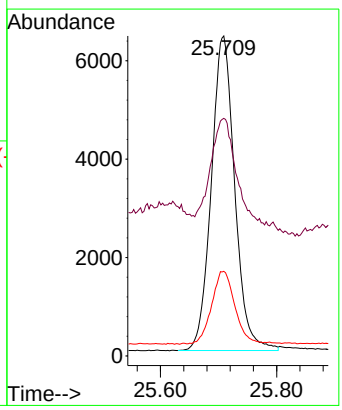


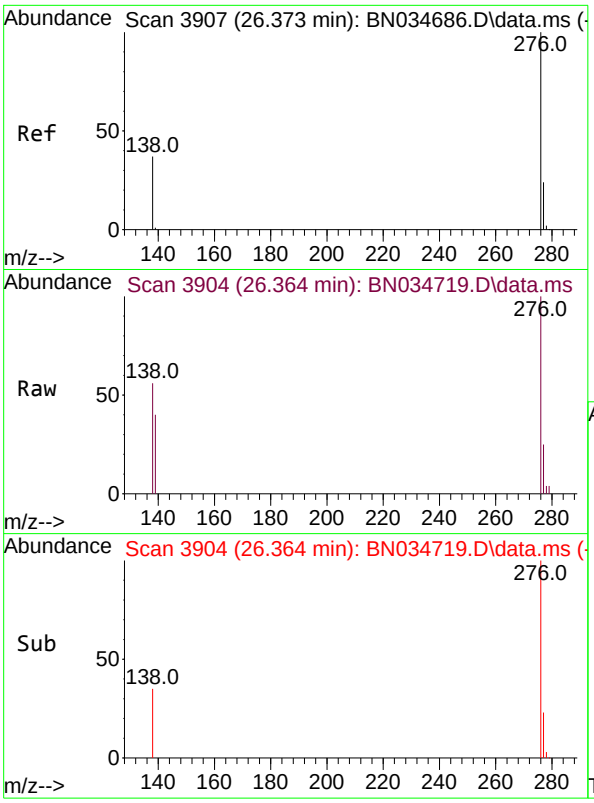


#40
Dibenzo(a,h)anthracene
Concen: 0.369 ng
RT: 25.709 min Scan# 3680
Delta R.T. -0.006 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Tgt Ion:278 Resp: 17877

Ion	Ratio	Lower	Upper
278	100		
139	74.3	25.4	38.2#
279	26.4	22.4	33.6



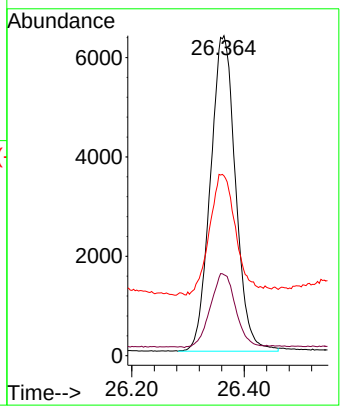


#41
Benzo(g,h,i)perylene
Concen: 0.369 ng
RT: 26.364 min Scan# 3
Delta R.T. -0.009 min
Lab File: BN034719.D
Acq: 25 Oct 2024 07:51

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:276 Resp: 19691

Ion	Ratio	Lower	Upper
276	100		
277	25.3	21.3	31.9
138	56.2	31.9	47.9#



Sample Results: **BN034719.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034719.D
Acq On : 25 Oct 2024 07:51
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 36 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Oct 25 08:18:02 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
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	95	0.00
2		1,4-Dioxane	0.532	0.475	10.7	93	0.00
3		n-Nitrosodimethylamine	0.775	0.699	9.8	95	0.00
4	S	2-Fluorophenol	1.189	1.294	-8.8	115	0.00
5	S	Phenol-d6	1.568	1.736	-10.7	119	0.00
6		bis(2-Chloroethyl)ether	1.274	1.194	6.3	100	0.00
7	I	Naphthalene-d8	1.000	1.000	0.0	97	0.00
8	S	Nitrobenzene-d5	0.336	0.300	10.7	99	0.00
9		Naphthalene	1.107	1.020	7.9	100	0.00
10		Hexachlorobutadiene	0.166	0.146	12.0	95	-0.01
11	SURR	2-Methylnaphthalene-d10	0.550	0.486	11.6	98	0.00
12		2-Methylnaphthalene	0.687	0.614	10.6	99	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	95	-0.01
14	S	2,4,6-Tribromophenol	0.124	0.113	8.9	112	0.00
15	S	2-Fluorobiphenyl	1.590	1.367	14.0	95	0.00
16		Acenaphthylene	1.921	1.624	15.5	98	0.00
17		Acenaphthene	1.324	1.129	14.7	96	-0.01
18		Fluorene	1.634	1.383	15.4	95	0.00
19	I	Phenanthrene-d10	1.000	1.000	0.0	98	-0.01
20		4,6-Dinitro-2-methylphenol	0.056	0.042	25.0	96	-0.01
21		4-Bromophenyl-phenylether	0.213	0.186	12.7	96	-0.01
22		Hexachlorobenzene	0.231	0.192	16.9	89	0.00
23		Atrazine	0.168	0.151	10.1	106	-0.01
24		Pentachlorophenol	0.082	0.074	9.8	114	-0.01
25		Phenanthrene	1.202	1.058	12.0	97	0.00
26		Anthracene	1.067	0.981	8.1	103	0.00
27	SURR	Fluoranthene-d10	0.901	0.942	-4.6	118	0.00
28		Fluoranthene	1.253	1.293	-3.2	116	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	139	0.00
30		Pyrene	2.055	1.658	19.3	123	0.00
31	S	Terphenyl-d14	0.817	0.696	14.8	131	0.00
32		Benzo(a)anthracene	1.528	1.491	2.4	151#	0.00
33		Chrysene	1.581	1.403	11.3	135	0.00
34		Bis(2-ethylhexyl)phthalate	0.867	1.220	-40.7#	235#	0.00
35	I	Perylene-d12	1.000	1.000	0.0	166#	0.00
36		Indeno(1,2,3-cd)pyrene	1.541	1.451	5.8	170#	0.00
37		Benzo(b)fluoranthene	1.597	1.343	15.9	151#	0.00
38		Benzo(k)fluoranthene	1.576	1.314	16.6	158#	0.00
39	C	Benzo(a)pyrene	1.282	1.193	6.9	171#	0.00
40		Dibenzo(a,h)anthracene	1.215	1.121	7.7	167#	0.00
41		Benzo(g,h,i)perylene	1.340	1.235	7.8	163#	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Sample Results: **BN034719.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034719.D
Acq On : 25 Oct 2024 07:51
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 36 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Oct 25 08:18:02 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
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	95	0.00
2		1,4-Dioxane	0.400	0.357	10.8	93	0.00
3		n-Nitrosodimethylamine	0.400	0.361	9.8	95	0.00
4	S	2-Fluorophenol	0.400	0.435	-8.7	115	0.00
5	S	Phenol-d6	0.400	0.443	-10.7	119	0.00
6		bis(2-Chloroethyl)ether	0.400	0.375	6.3	100	0.00
7	I	Naphthalene-d8	0.400	0.400	0.0	97	0.00
8	S	Nitrobenzene-d5	0.400	0.358	10.5	99	0.00
9		Naphthalene	0.400	0.369	7.8	100	0.00
10		Hexachlorobutadiene	0.400	0.351	12.3	95	-0.01
11	SURR	2-Methylnaphthalene-d10	0.400	0.354	11.5	98	0.00
12		2-Methylnaphthalene	0.400	0.357	10.8	99	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	95	-0.01
14	S	2,4,6-Tribromophenol	0.400	0.366	8.5	112	0.00
15	S	2-Fluorobiphenyl	0.400	0.344	14.0	95	0.00
16		Acenaphthylene	0.400	0.338	15.5	98	0.00
17		Acenaphthene	0.400	0.341	14.8	96	-0.01
18		Fluorene	0.400	0.339	15.3	95	0.00
19	I	Phenanthrene-d10	0.400	0.400	0.0	98	-0.01
20		4,6-Dinitro-2-methylphenol	0.400	0.301	24.8	96	-0.01
21		4-Bromophenyl-phenylether	0.400	0.349	12.8	96	-0.01
22		Hexachlorobenzene	0.400	0.332	17.0	89	0.00
23		Atrazine	0.400	0.362	9.5	106	-0.01
24		Pentachlorophenol	0.400	0.364	9.0	114	-0.01
25		Phenanthrene	0.400	0.352	12.0	97	0.00
26		Anthracene	0.400	0.368	8.0	103	0.00
27	SURR	Fluoranthene-d10	0.400	0.418	-4.5	118	0.00
28		Fluoranthene	0.400	0.413	-3.2	116	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	139	0.00
30		Pyrene	0.400	0.323	19.3	123	0.00
31	S	Terphenyl-d14	0.400	0.341	14.8	131	0.00
32		Benzo(a)anthracene	0.400	0.390	2.5	151	0.00
33		Chrysene	0.400	0.355	11.3	135	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.563	-40.7#	235	0.00
35	I	Perylene-d12	0.400	0.400	0.0	166	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.377	5.8	170	0.00
37		Benzo(b)fluoranthene	0.400	0.336	16.0	151	0.00
38		Benzo(k)fluoranthene	0.400	0.334	16.5	158	0.00
39	C	Benzo(a)pyrene	0.400	0.372	7.0	171	0.00
40		Dibenzo(a,h)anthracene	0.400	0.369	7.8	167	0.00
41		Benzo(g,h,i)perylene	0.400	0.369	7.8	163	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4440 SAS No.: P4440 SDG No.: P4440

Instrument ID: BNA_N Calibration Date/Time: 10/25/2024 09:46

Lab File ID: BN034721.D Init. Calib. Date(s): 10/24/2024 10/24/2024

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 09:11 12:48

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.550	0.491		-10.7	20.0
Fluoranthene-d10	0.901	0.834		-7.4	20.0
2-Fluorophenol	1.189	1.280		7.7	20.0
Phenol-d6	1.568	1.733		10.5	20.0
Nitrobenzene-d5	0.336	0.300		-10.7	20.0
2-Fluorobiphenyl	1.590	1.396		-12.2	20.0
2,4,6-Tribromophenol	0.124	0.119		-4.0	20.0
Terphenyl-d14	0.817	0.690		-15.5	20.0
1,4-Dioxane	0.532	0.460		-13.5	20.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102524\
Data File : BN034721.D
Acq On : 25 Oct 2024 09:46
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Oct 25 10:44:57 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration

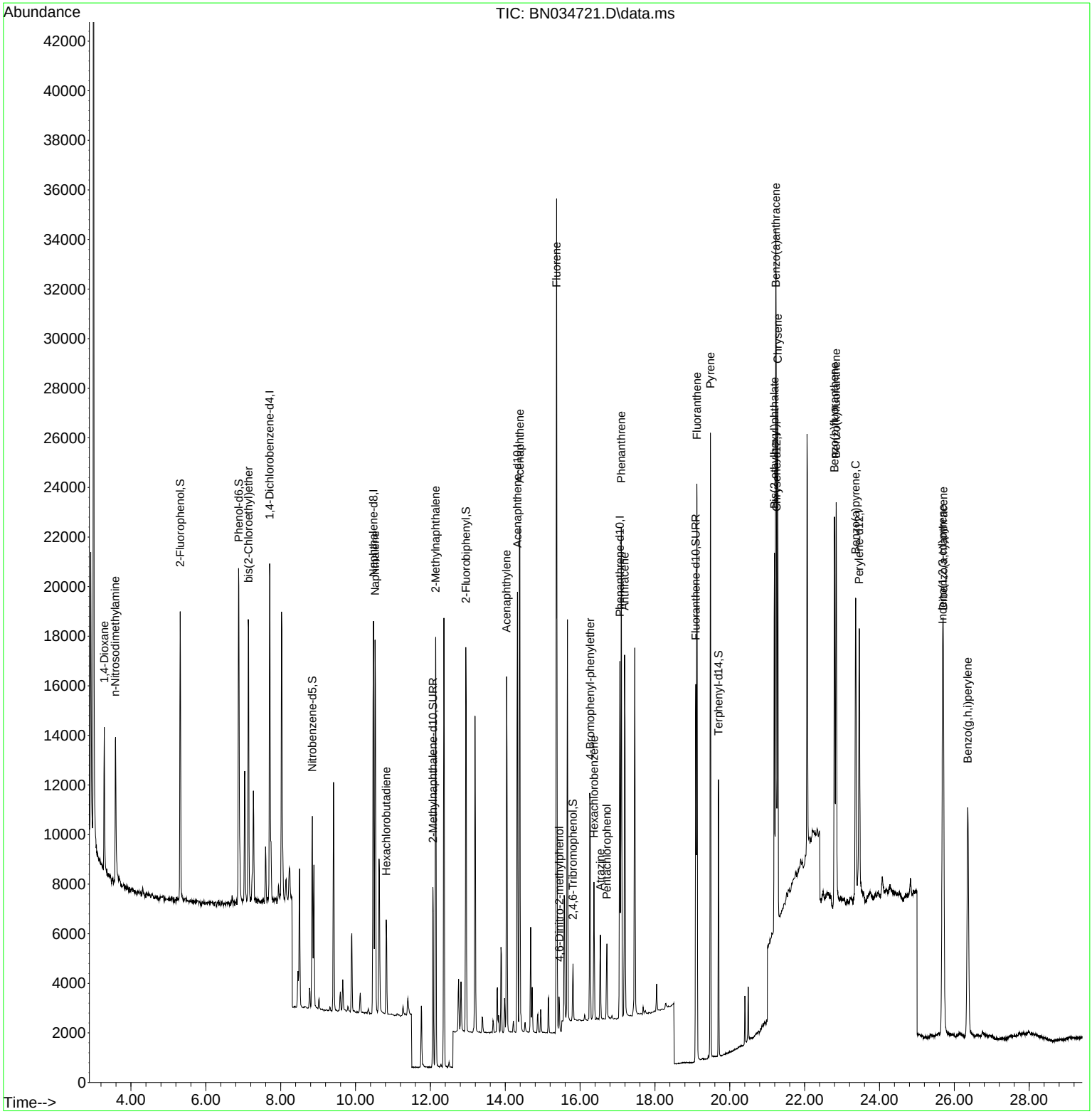
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.705	152	6565	0.400	ng		0.00
7) Naphthalene-d8	10.479	136	19566	0.400	ng		0.00
13) Acenaphthene-d10	14.325	164	9604	0.400	ng		0.00
19) Phenanthrene-d10	17.064	188	17577	0.400	ng		0.00
29) Chrysene-d12	21.248	240	13068	0.400	ng		0.00
35) Perylene-d12	23.459	264	14018	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.314	112	8404	0.431	ng		0.00
5) Phenol-d6	6.882	99	11379	0.442	ng		0.00
8) Nitrobenzene-d5	8.845	82	5869	0.358	ng		0.00
11) 2-Methylnaphthalene-d10	12.067	152	9607	0.357	ng		0.00
14) 2,4,6-Tribromophenol	15.810	330	1142	0.384	ng		0.00
15) 2-Fluorobiphenyl	12.946	172	13407	0.351	ng		0.00
27) Fluoranthene-d10	19.092	212	14664	0.370	ng		0.00
31) Terphenyl-d14	19.700	244	9017	0.338	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.285	88	3018	0.345	ng		97
3) n-Nitrosodimethylamine	3.581	42	4242	0.334	ng	#	91
6) bis(2-Chloroethyl)ether	7.142	93	7827	0.374	ng		99
9) Naphthalene	10.522	128	19690	0.364	ng		99
10) Hexachlorobutadiene	10.821	225	2852	0.351	ng	#	99
12) 2-Methylnaphthalene	12.143	142	12083	0.360	ng		99
16) Acenaphthylene	14.037	152	15625	0.339	ng		99
17) Acenaphthene	14.389	154	10877	0.342	ng		99
18) Fluorene	15.373	166	12726	0.324	ng		99
20) 4,6-Dinitro-2-methylph...	15.448	198	824	0.337	ng		98
21) 4-Bromophenyl-phenylether	16.269	248	3420	0.365	ng		96
22) Hexachlorobenzene	16.368	284	3624	0.357	ng		98
23) Atrazine	16.542	200	2675	0.363	ng		98
24) Pentachlorophenol	16.716	266	1357	0.378	ng		98
25) Phenanthrene	17.101	178	19007	0.360	ng		100
26) Anthracene	17.188	178	16769	0.358	ng		100
28) Fluoranthene	19.120	202	20290	0.368	ng		99
30) Pyrene	19.482	202	21115	0.315	ng		99
32) Benzo(a)anthracene	21.230	228	18695	0.374	ng		99
33) Chrysene	21.283	228	18028	0.349	ng		99
34) Bis(2-ethylhexyl)phtha...	21.194	149	15075	0.532	ng		100
36) Indeno(1,2,3-cd)pyrene	25.683	276	19938	0.369	ng		99
37) Benzo(b)fluoranthene	22.798	252	18466	0.330	ng	#	86
38) Benzo(k)fluoranthene	22.842	252	17979	0.326	ng	#	84
39) Benzo(a)pyrene	23.362	252	16295	0.363	ng	#	83
40) Dibenzo(a,h)anthracene	25.707	278	15708	0.369	ng	#	84
41) Benzo(g,h,i)perylene	26.359	276	17122	0.365	ng		92

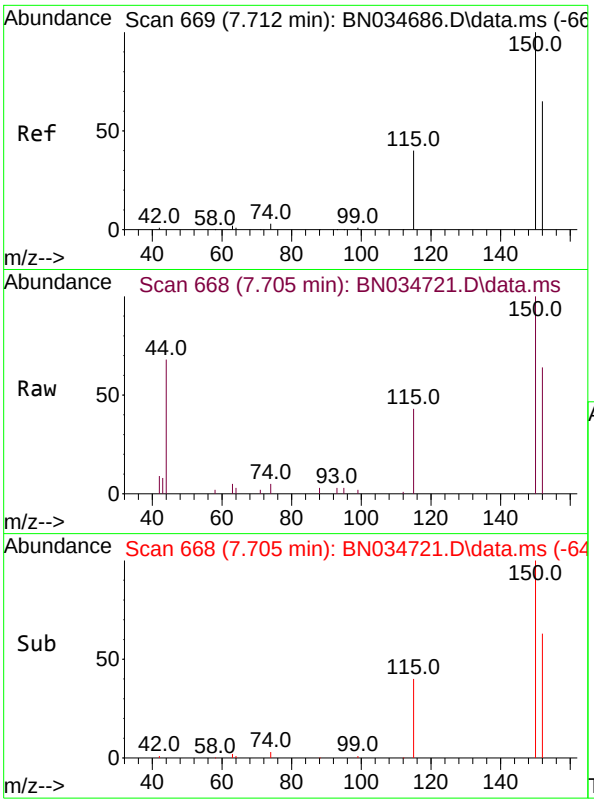
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102524\
Data File : BN034721.D
Acq On : 25 Oct 2024 09:46
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Oct 25 10:44:57 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration



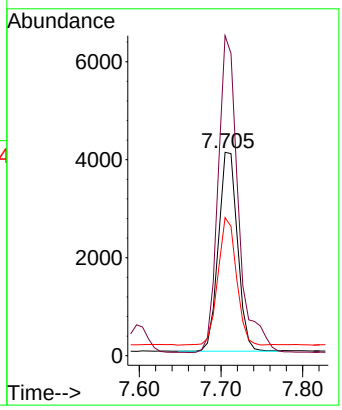


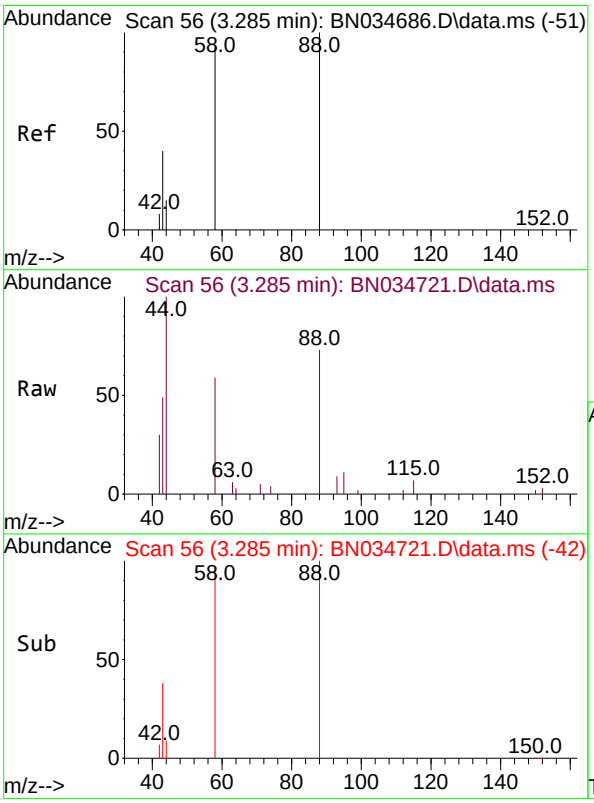
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.705 min Scan# 6
Delta R.T. -0.007 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 6565

Ion	Ratio	Lower	Upper
152	100		
150	157.4	122.7	184.1
115	67.9	51.0	76.6

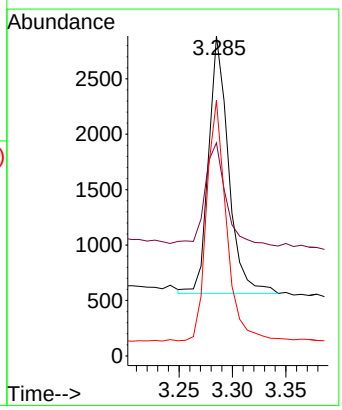


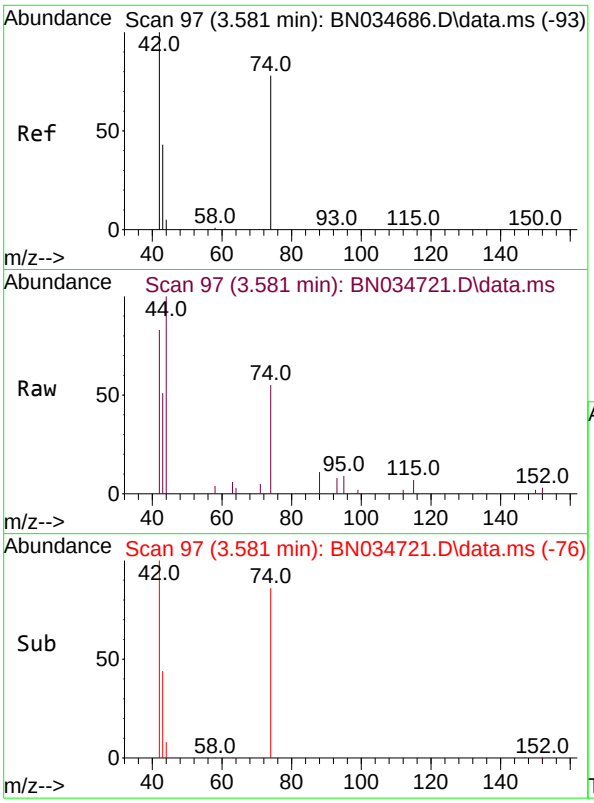


#2
1,4-Dioxane
Concen: 0.345 ng
RT: 3.285 min Scan# 56
Delta R.T. 0.000 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion: 88 Resp: 3018

Ion	Ratio	Lower	Upper
88	100		
43	42.9	32.1	48.1
58	94.3	73.7	110.5



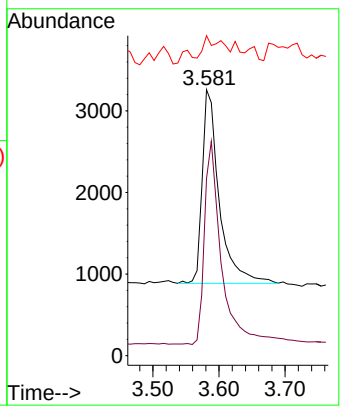


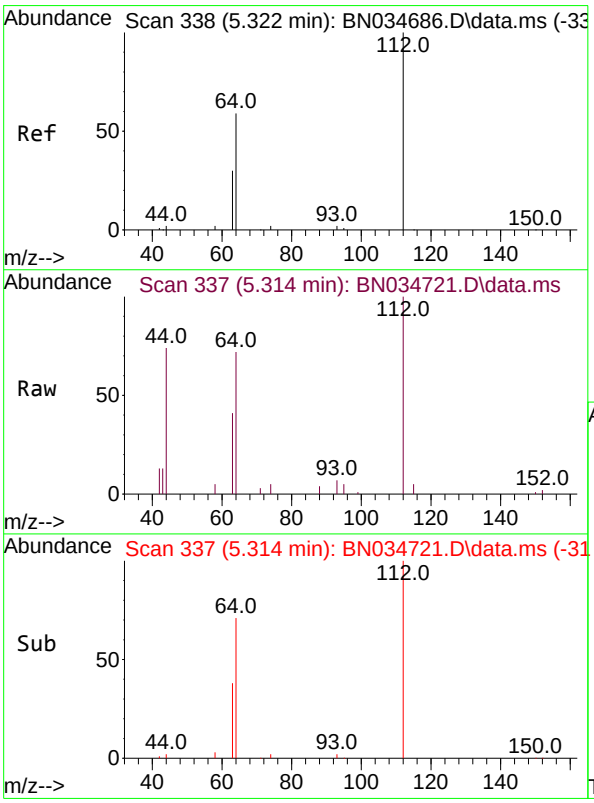
#3
n-Nitrosodimethylamine
Concen: 0.334 ng
RT: 3.581 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 42 Resp: 4242

Ion	Ratio	Lower	Upper
42	100		
74	104.9	77.2	115.8
44	11.5	13.4	20.2#

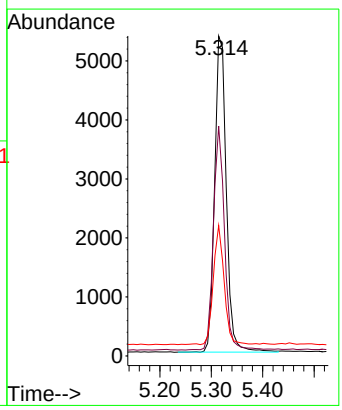


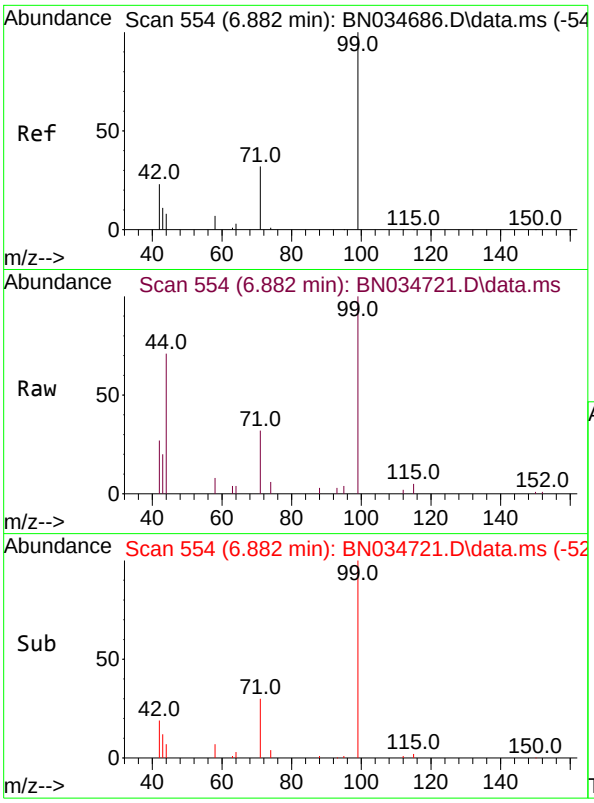


#4
2-Fluorophenol
Concen: 0.431 ng
RT: 5.314 min Scan# 337
Delta R.T. -0.007 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:112 Resp: 8404

Ion	Ratio	Lower	Upper
112	100		
64	67.2	53.0	79.6
63	34.9	27.6	41.4



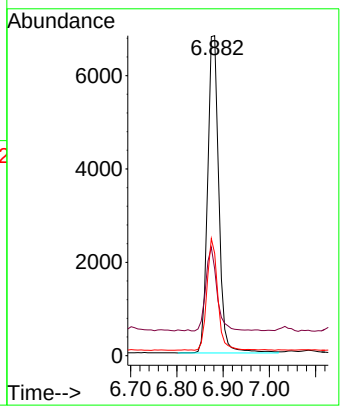


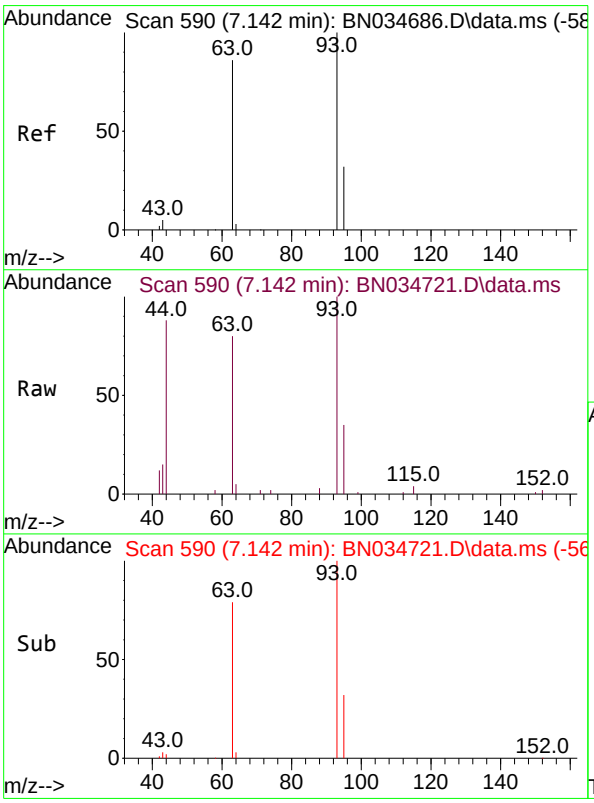
#5
Phenol-d6
Concen: 0.442 ng
RT: 6.882 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 99 Resp: 11379

Ion	Ratio	Lower	Upper
99	100		
42	26.5	21.8	32.8
71	33.6	26.6	40.0

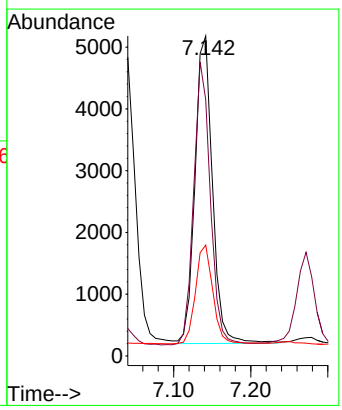


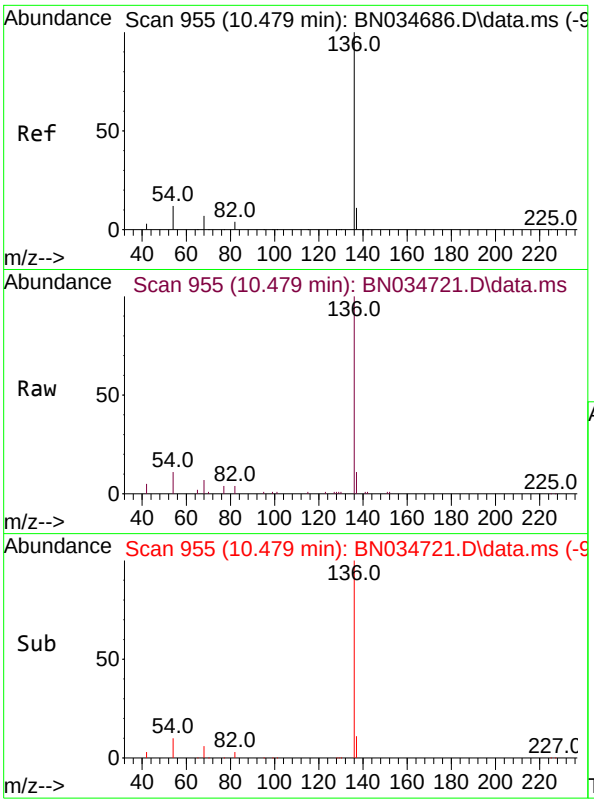


#6
bis(2-Chloroethyl)ether
Concen: 0.374 ng
RT: 7.142 min Scan# 590
Delta R.T. 0.000 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion: 93 Resp: 7827

Ion	Ratio	Lower	Upper
93	100		
63	88.1	71.5	107.3
95	32.2	25.8	38.6



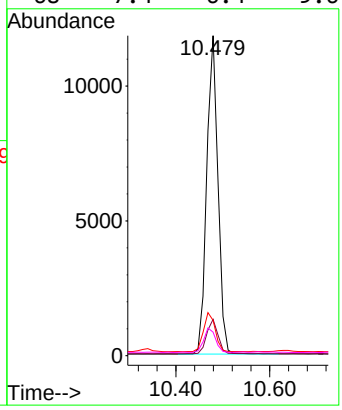


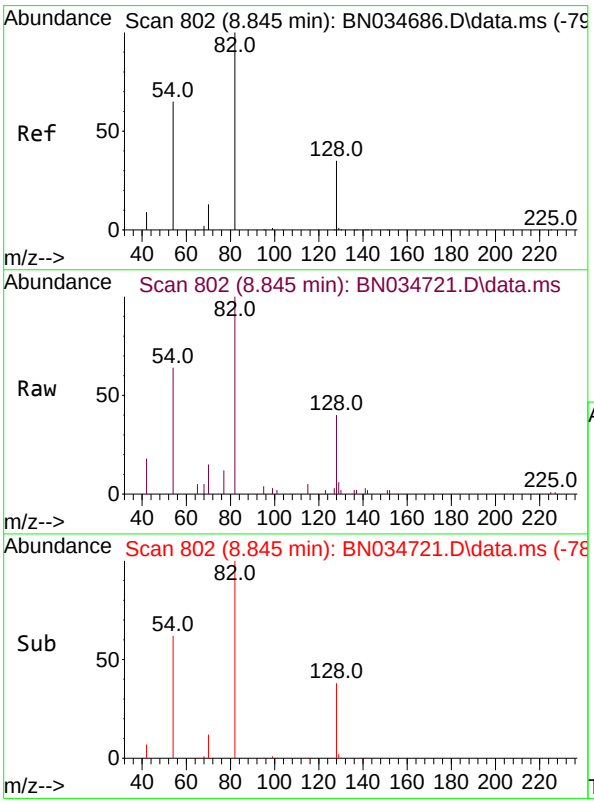
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:136 Resp: 19566

Ion	Ratio	Lower	Upper
136	100		
137	11.4	9.1	13.7
54	11.0	9.8	14.8
68	7.4	6.4	9.6

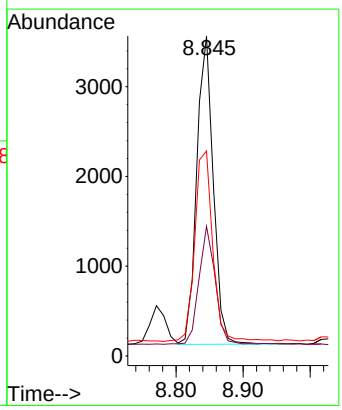


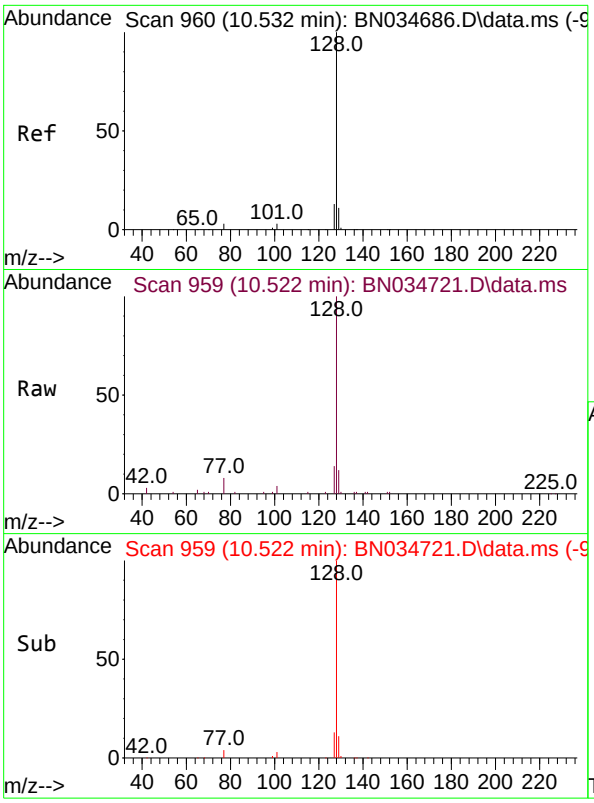


#8
Nitrobenzene-d5
Concen: 0.358 ng
RT: 8.845 min Scan# 802
Delta R.T. 0.000 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion: 82 Resp: 5869

Ion	Ratio	Lower	Upper
82	100		
128	40.5	29.7	44.5
54	64.0	53.0	79.6



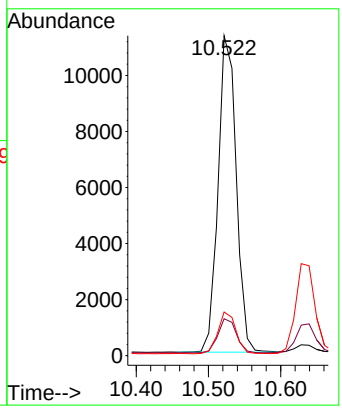


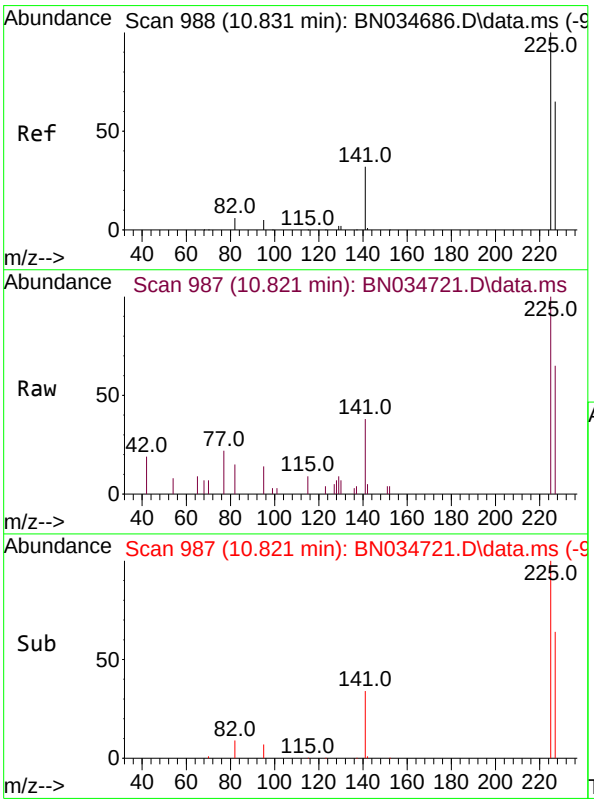
#9
Naphthalene
Concen: 0.364 ng
RT: 10.522 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:128 Resp: 19690

Ion	Ratio	Lower	Upper
128	100		
129	11.6	9.0	13.6
127	13.7	10.5	15.7

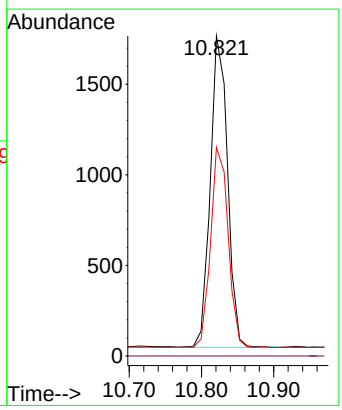


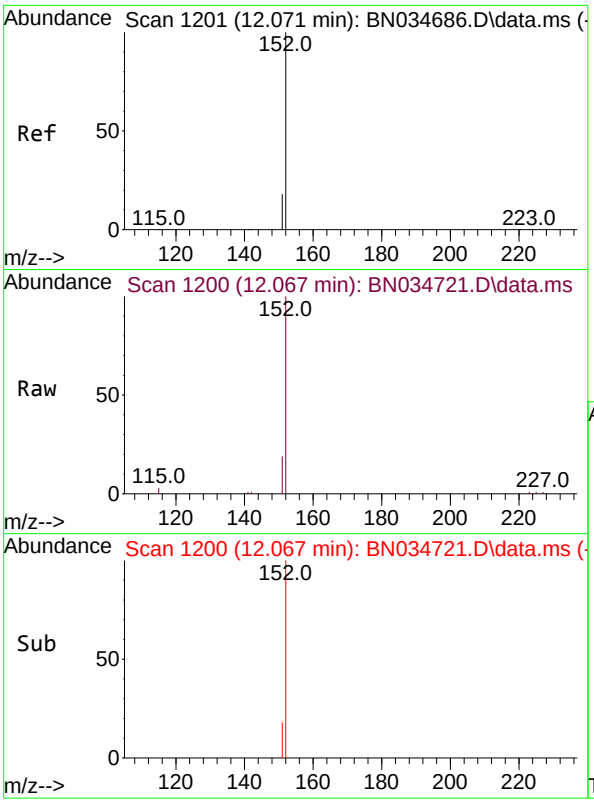


#10
Hexachlorobutadiene
Concen: 0.351 ng
RT: 10.821 min Scan# 987
Delta R.T. -0.011 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:225 Resp: 2852

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	65.4	51.4	77.0



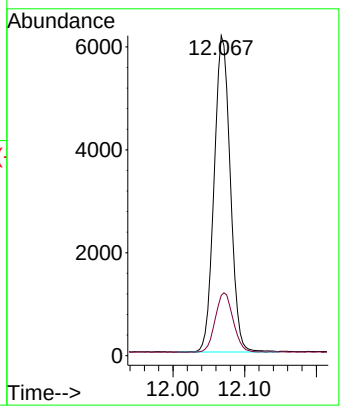


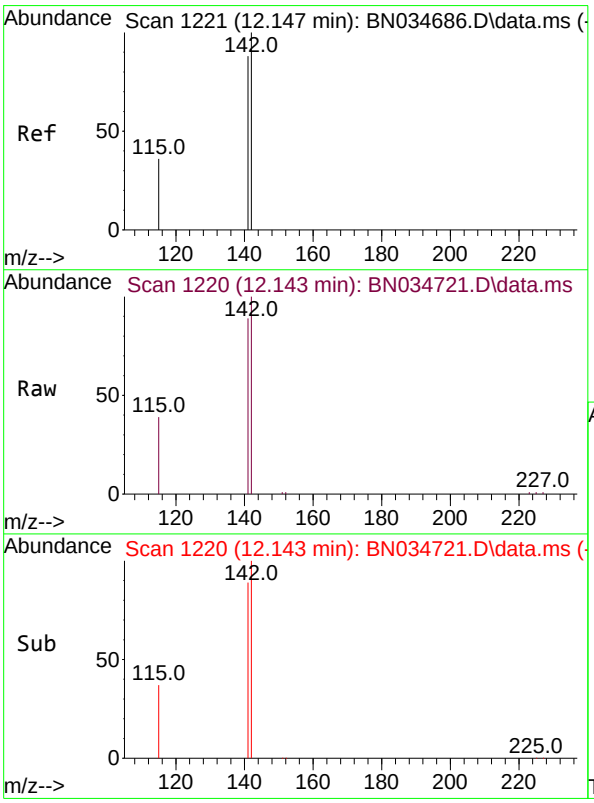
#11
2-Methylnaphthalene-d10
Concen: 0.357 ng
RT: 12.067 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 9607

Ion	Ratio	Lower	Upper
152	100		
151	20.8	16.7	25.1

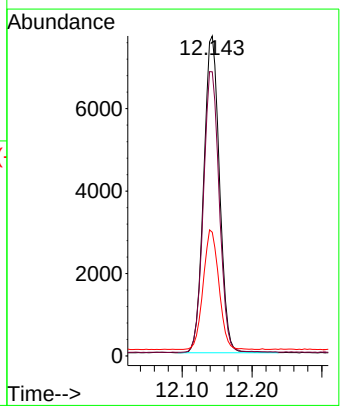


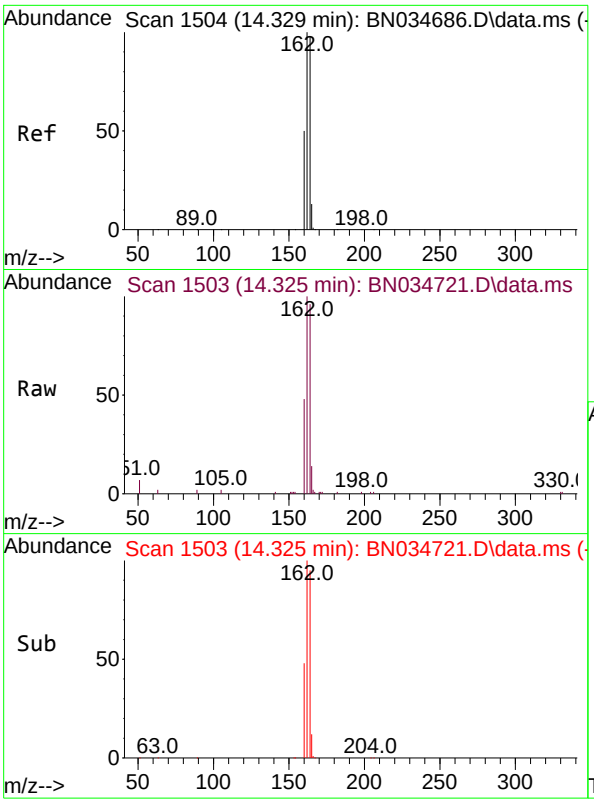


#12
2-Methylnaphthalene
Concen: 0.360 ng
RT: 12.143 min Scan# 1220
Delta R.T. -0.004 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:142 Resp: 12083

Ion	Ratio	Lower	Upper
142	100		
141	88.8	70.4	105.6
115	38.7	29.8	44.6



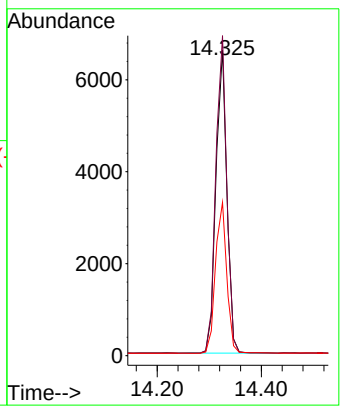


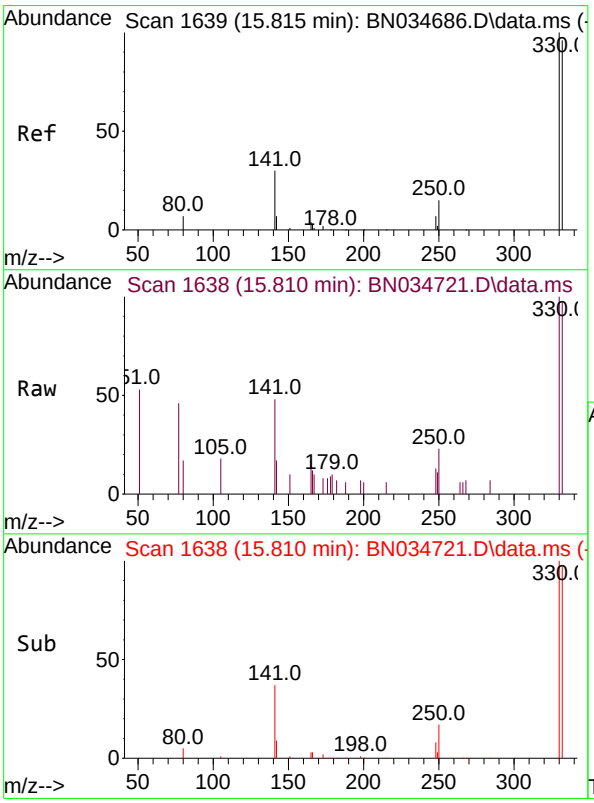
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.325 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:164 Resp: 9604

Ion	Ratio	Lower	Upper
164	100		
162	104.7	81.4	122.0
160	50.2	40.6	61.0

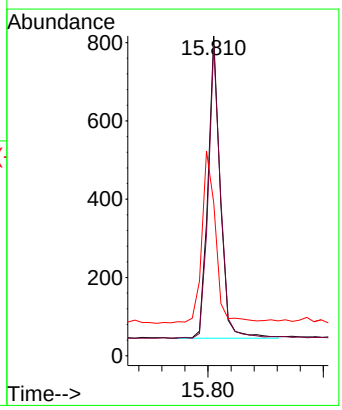


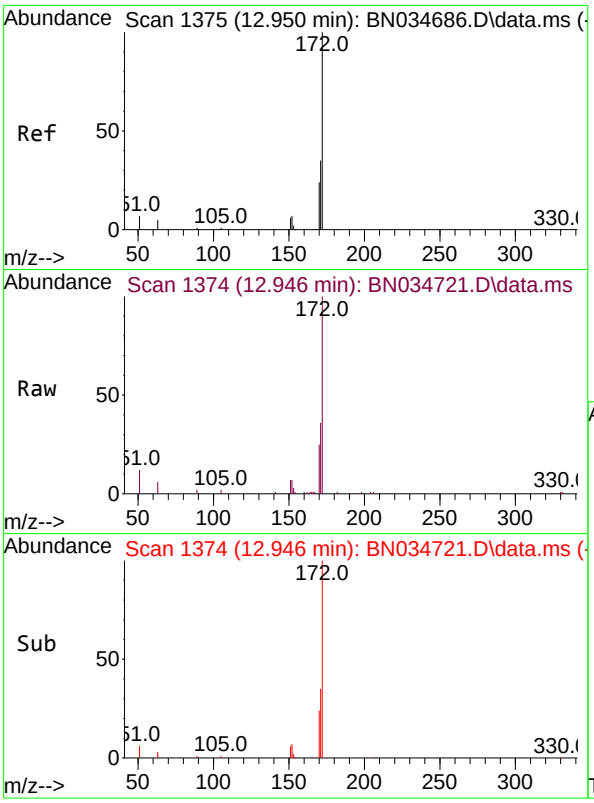


#14
2,4,6-Tribromophenol
Concen: 0.384 ng
RT: 15.810 min Scan# 1638
Delta R.T. -0.005 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:330 Resp: 1142

Ion	Ratio	Lower	Upper
330	100		
332	97.1	76.6	115.0
141	63.8	54.6	81.8



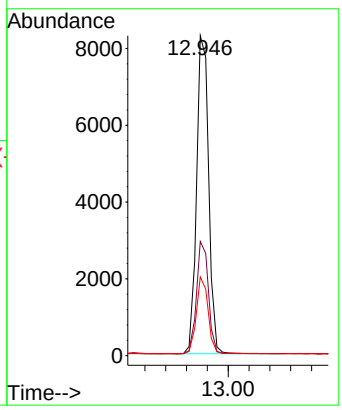


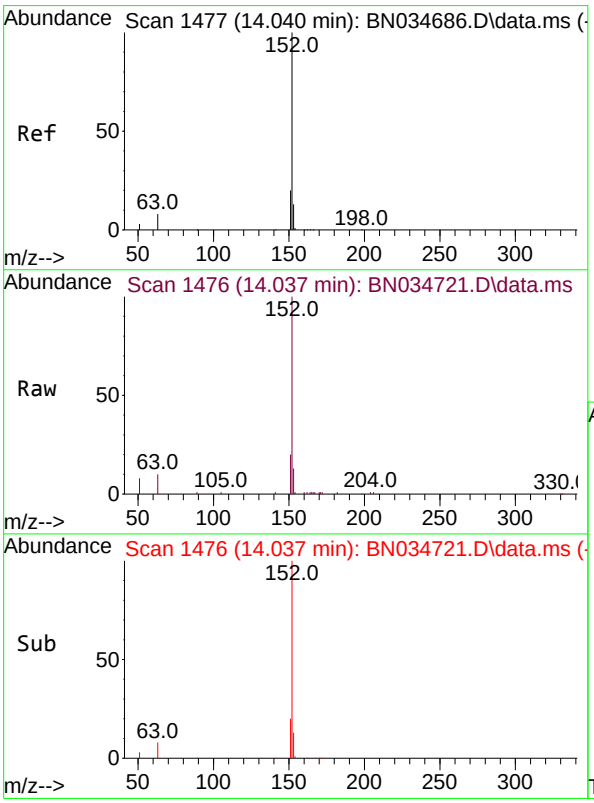
#15
2-Fluorobiphenyl
Concen: 0.351 ng
RT: 12.946 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:172 Resp: 13407

Ion	Ratio	Lower	Upper
172	100		
171	35.7	28.3	42.5
170	24.6	19.8	29.6

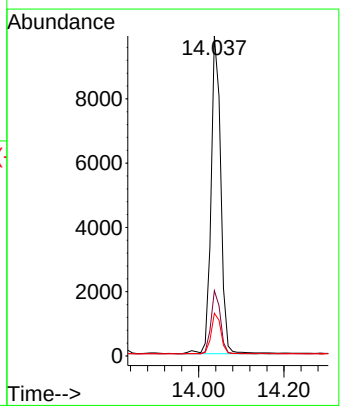


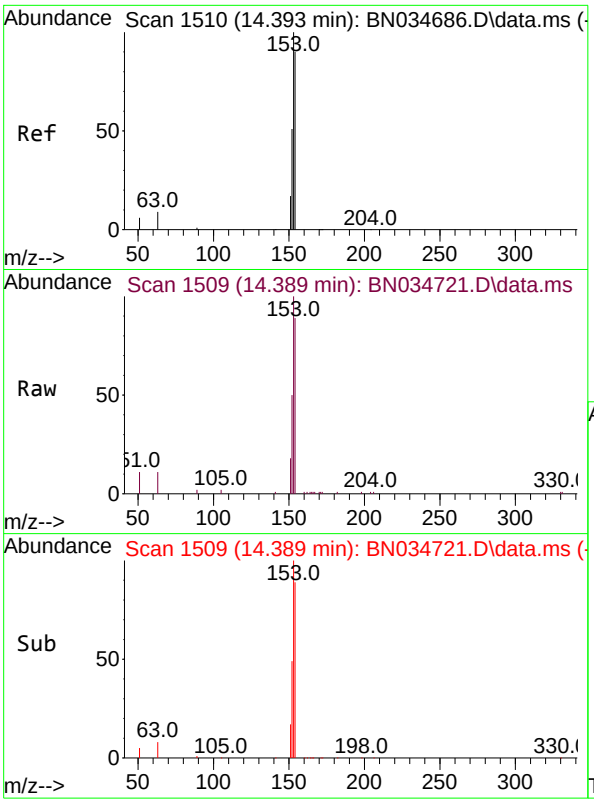


#16
Acenaphthylene
Concen: 0.339 ng
RT: 14.037 min Scan# 1476
Delta R.T. -0.004 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:152 Resp: 15625

Ion	Ratio	Lower	Upper
152	100		
151	19.3	15.6	23.4
153	12.8	10.6	15.8





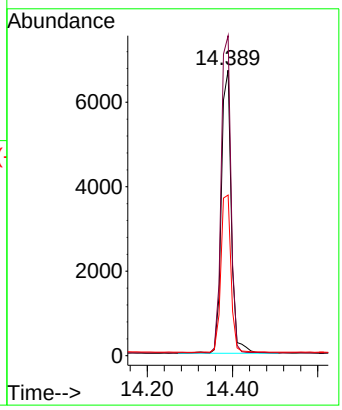
#17
Acenaphthene
Concen: 0.342 ng
RT: 14.389 min Scan# 1

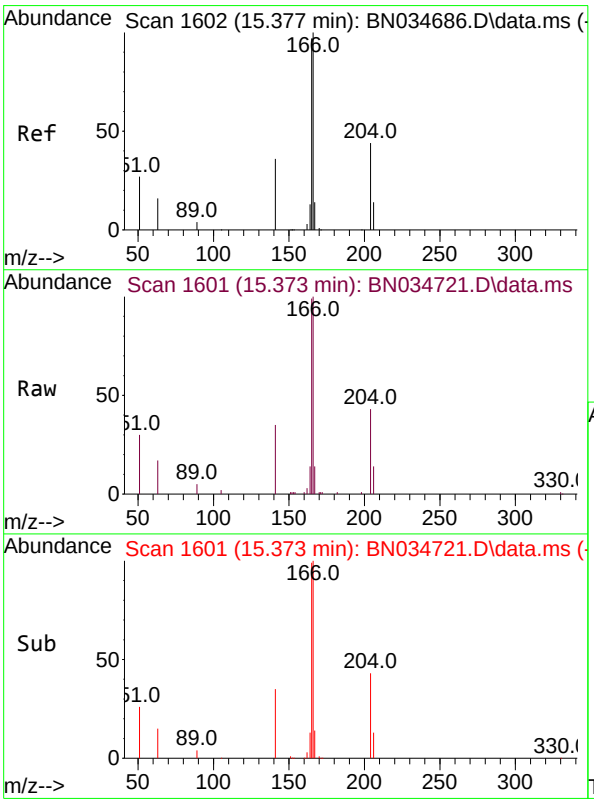
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Delta R.T. -0.004 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:154 Resp: 10877

Ion	Ratio	Lower	Upper
154	100		
153	110.3	88.2	132.2
152	56.4	46.9	70.3

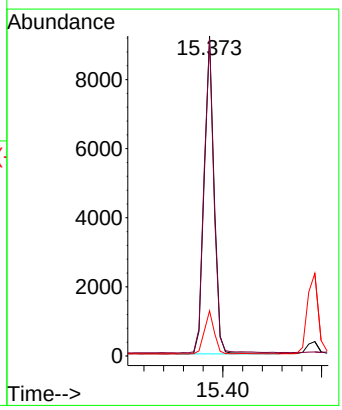


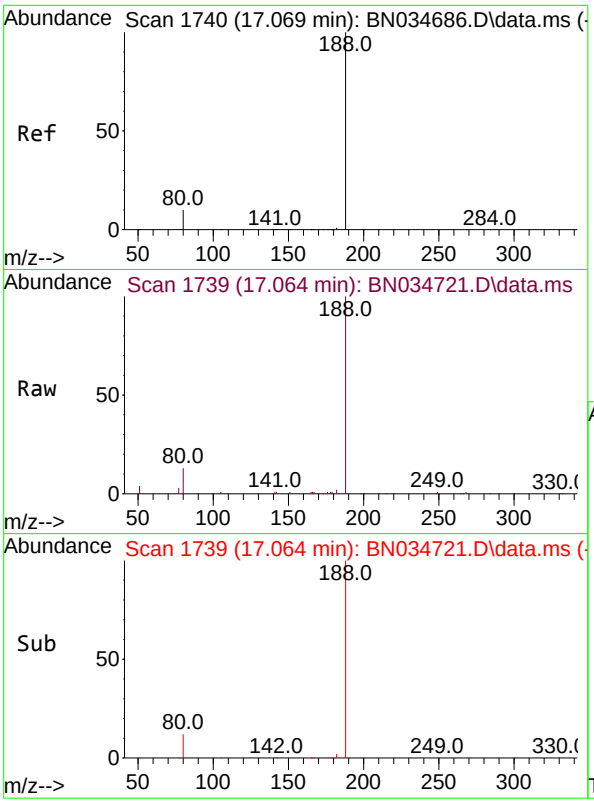


#18
Fluorene
Concen: 0.324 ng
RT: 15.373 min Scan# 1601
Delta R.T. -0.004 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:166 Resp: 12726

Ion	Ratio	Lower	Upper
166	100		
165	99.3	78.8	118.2
167	13.5	10.6	16.0



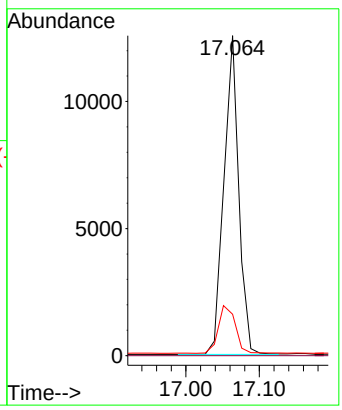


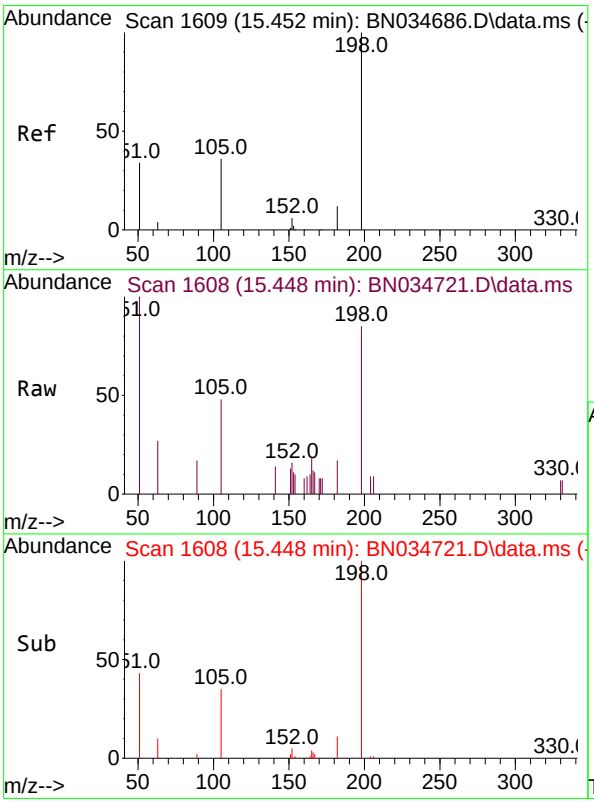
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.064 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:188 Resp: 17577

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	12.9	8.9	13.3

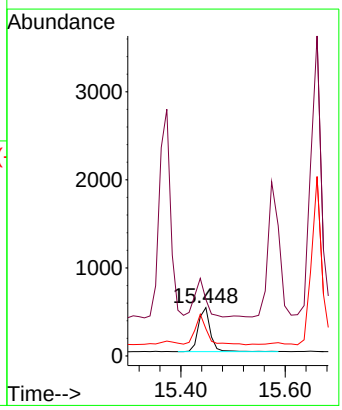


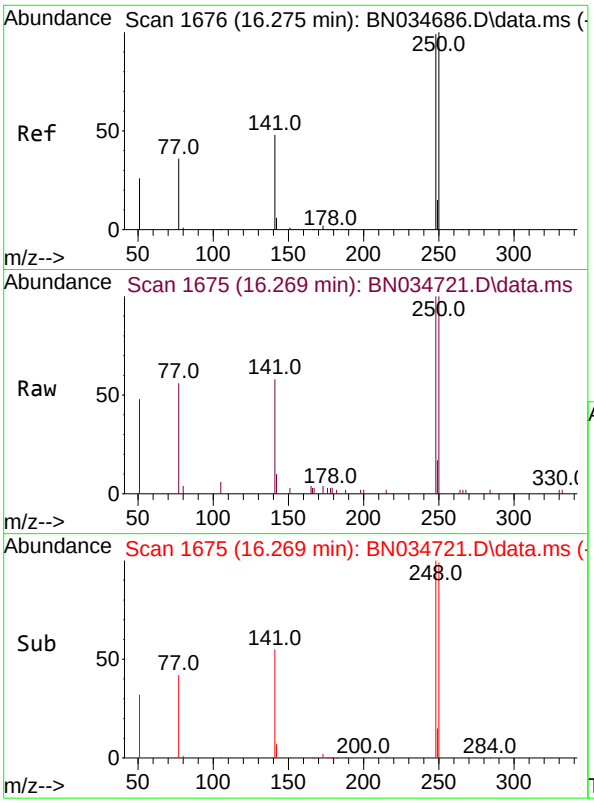


#20
4,6-Dinitro-2-methylphenol
Concen: 0.337 ng
RT: 15.448 min Scan# 1608
Delta R.T. -0.004 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:198 Resp: 824

Ion	Ratio	Lower	Upper
198	100		
51	117.2	91.8	137.8
105	56.4	44.3	66.5



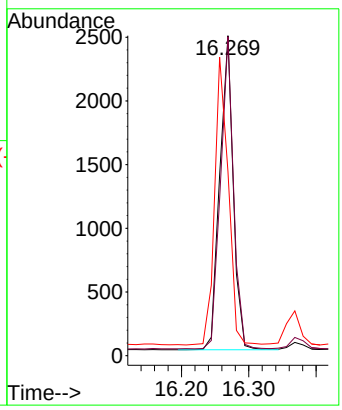


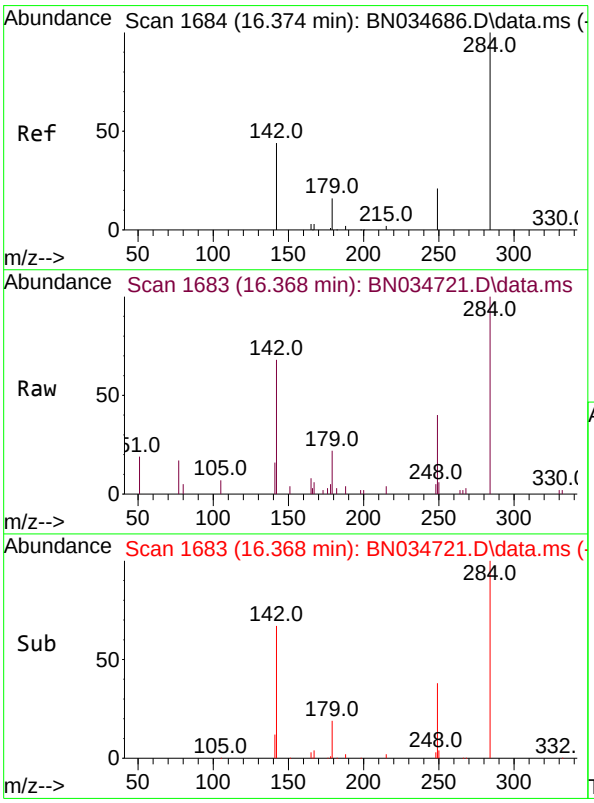
#21
4-Bromophenyl-phenylether
Concen: 0.365 ng
RT: 16.269 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:248 Resp: 3420

Ion	Ratio	Lower	Upper
248	100		
250	99.7	80.9	121.3
141	57.6	40.5	60.7

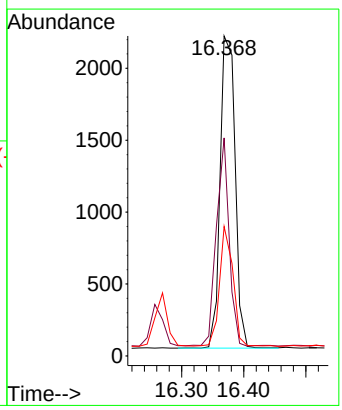


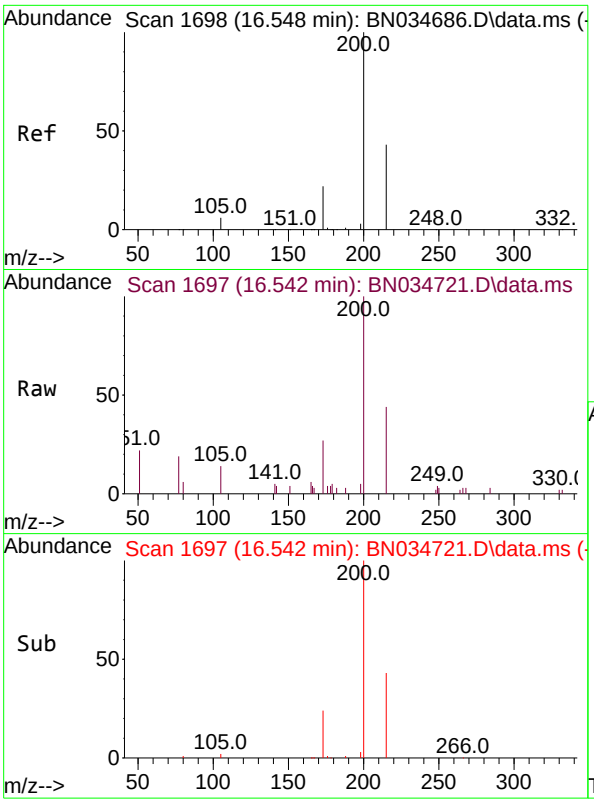


#22
Hexachlorobenzene
Concen: 0.357 ng
RT: 16.368 min Scan# 1683
Delta R.T. -0.005 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:284 Resp: 3624

Ion	Ratio	Lower	Upper
284	100		
142	56.3	43.6	65.4
249	34.7	26.6	40.0



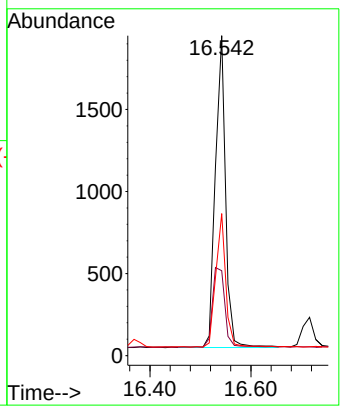


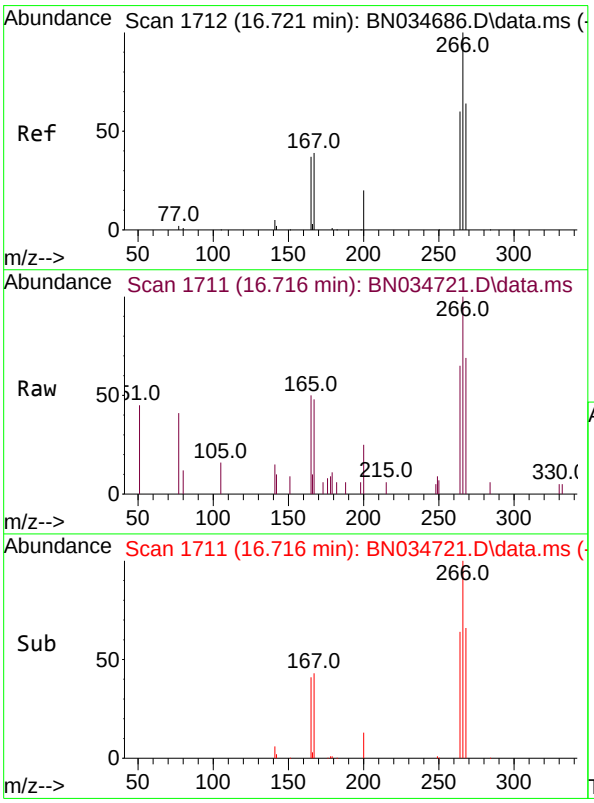
#23
Atrazine
Concen: 0.363 ng
RT: 16.542 min Scan# 1(
Delta R.T. -0.005 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:200 Resp: 2675

Ion	Ratio	Lower	Upper
200	100		
173	26.5	19.7	29.5
215	44.4	35.7	53.5

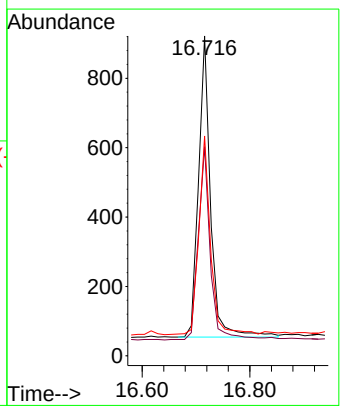


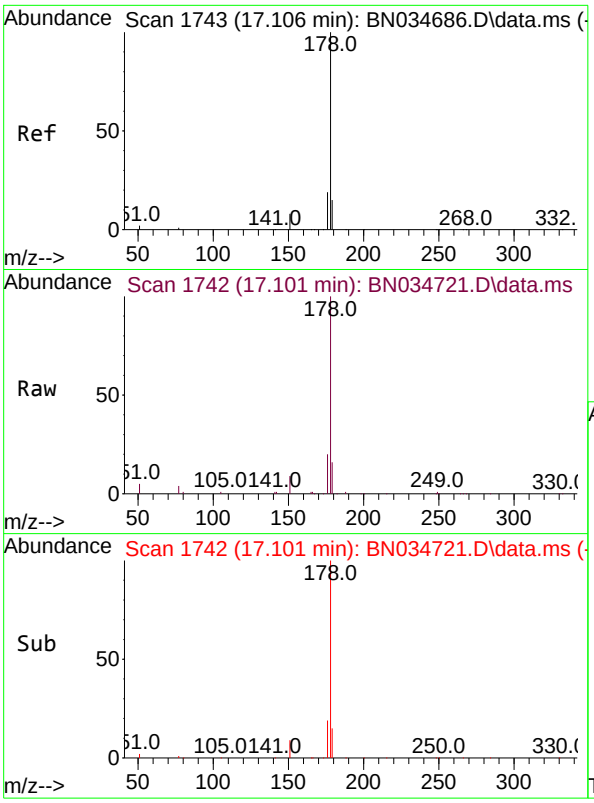


#24
Pentachlorophenol
Concen: 0.378 ng
RT: 16.716 min Scan# 1711
Delta R.T. -0.005 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:266 Resp: 1357

Ion	Ratio	Lower	Upper
266	100		
264	64.4	49.4	74.2
268	64.0	50.5	75.7



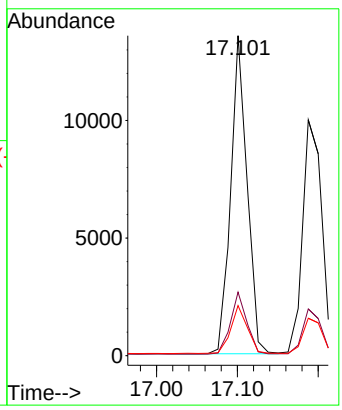


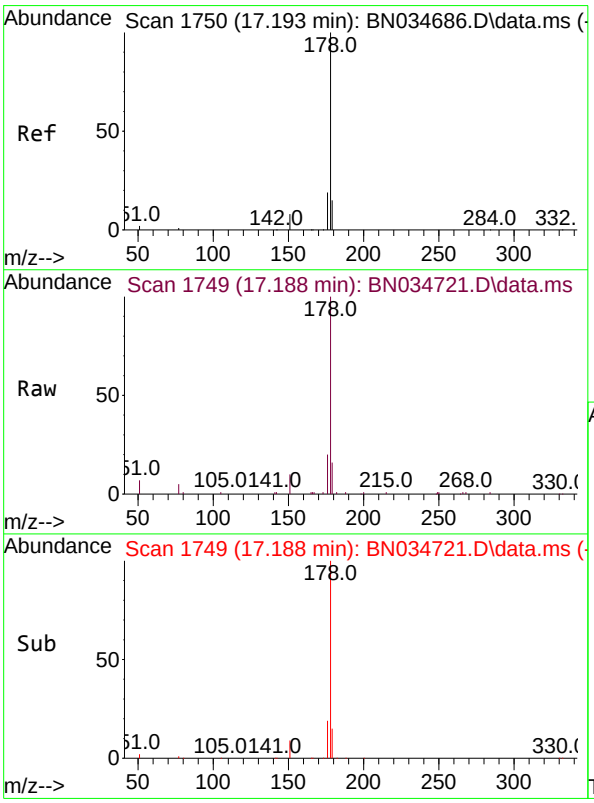
#25
Phenanthrene
Concen: 0.360 ng
RT: 17.101 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:178 Resp: 19007

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.2
179	15.4	12.2	18.4

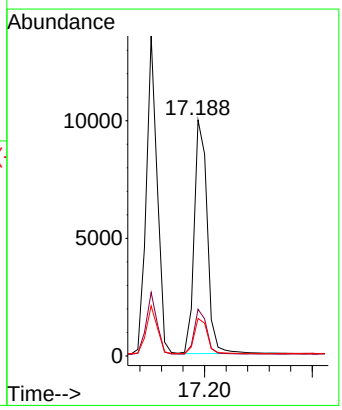


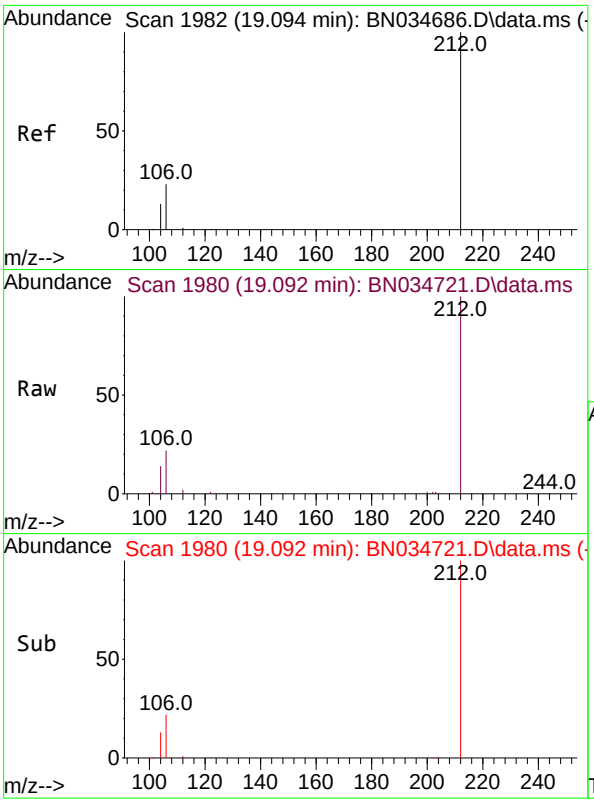


#26
Anthracene
Concen: 0.358 ng
RT: 17.188 min Scan# 1749
Delta R.T. -0.005 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:178 Resp: 16769

Ion	Ratio	Lower	Upper
178	100		
176	18.6	14.9	22.3
179	15.0	12.2	18.2



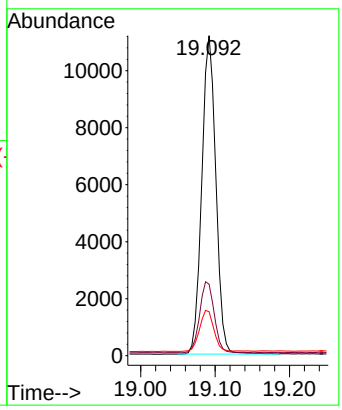


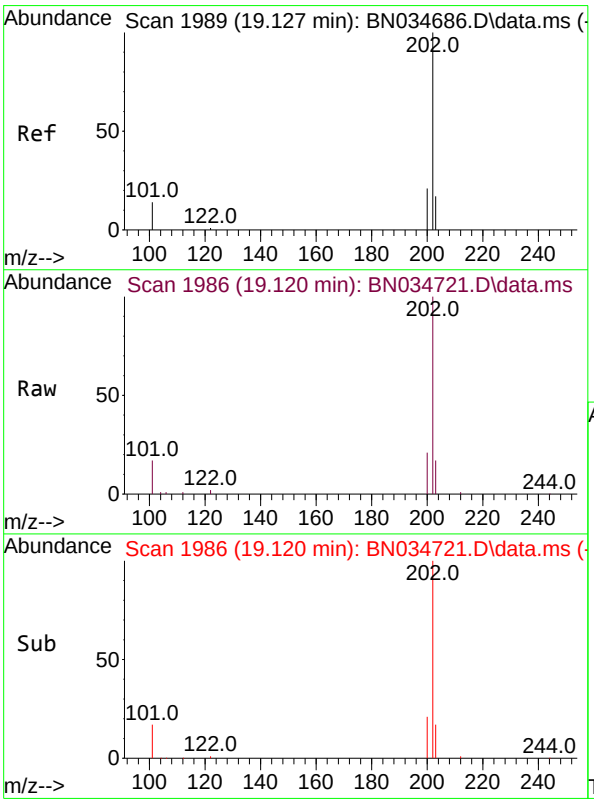
#27
Fluoranthene-d10
Concen: 0.370 ng
RT: 19.092 min Scan# 1
Delta R.T. -0.002 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:212 Resp: 14664

Ion	Ratio	Lower	Upper
212	100		
106	23.1	17.8	26.8
104	13.0	10.2	15.4

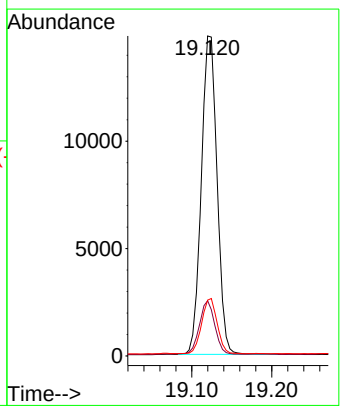


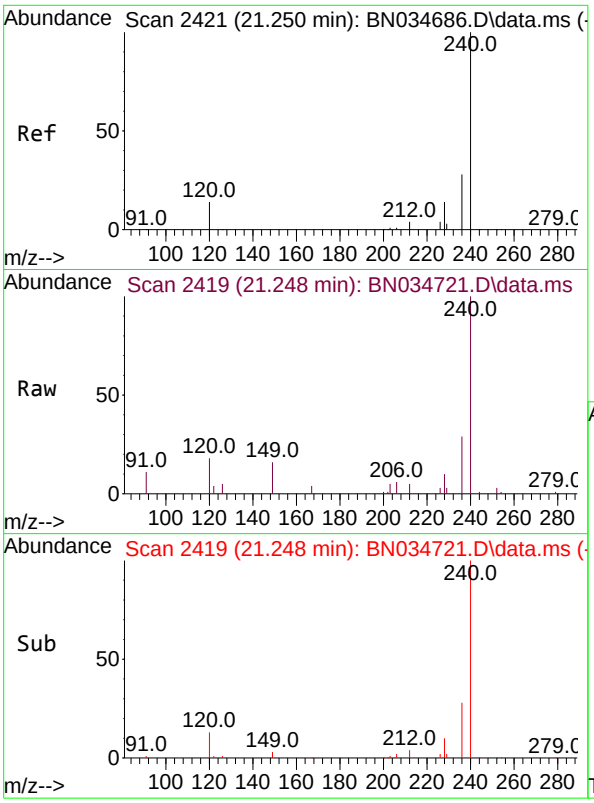


#28
Fluoranthene
Concen: 0.368 ng
RT: 19.120 min Scan# 1986
Delta R.T. -0.007 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:202 Resp: 20290

Ion	Ratio	Lower	Upper
202	100		
101	16.6	12.8	19.2
203	17.0	13.5	20.3



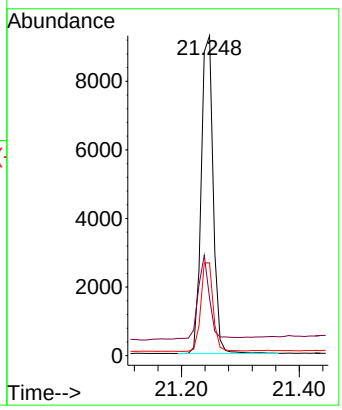


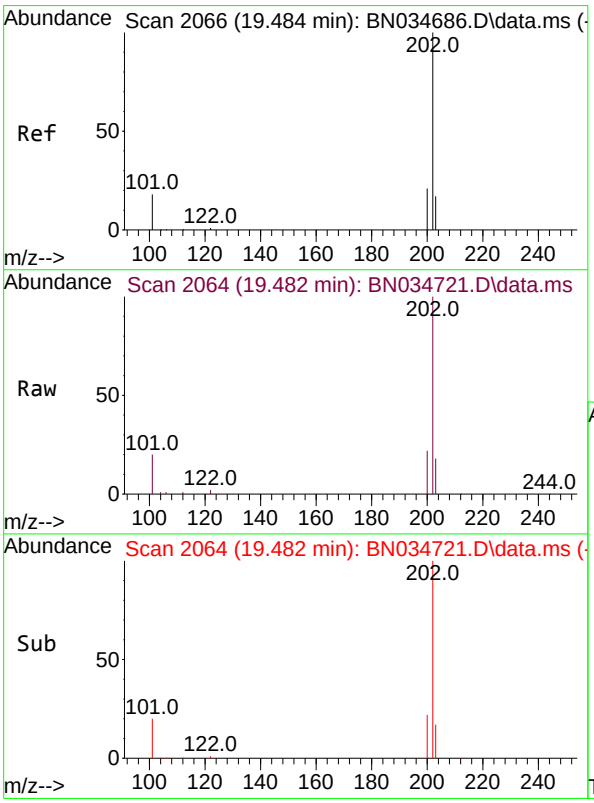
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.248 min Scan# 24
Delta R.T. -0.002 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:240 Resp: 13068

Ion	Ratio	Lower	Upper
240	100		
120	17.9	14.2	21.2
236	29.0	23.1	34.7

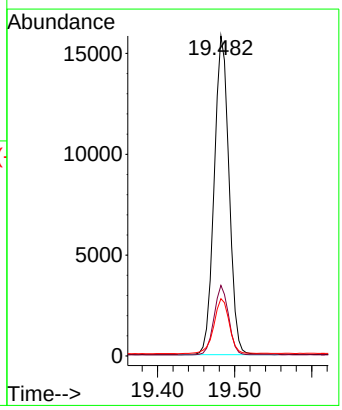


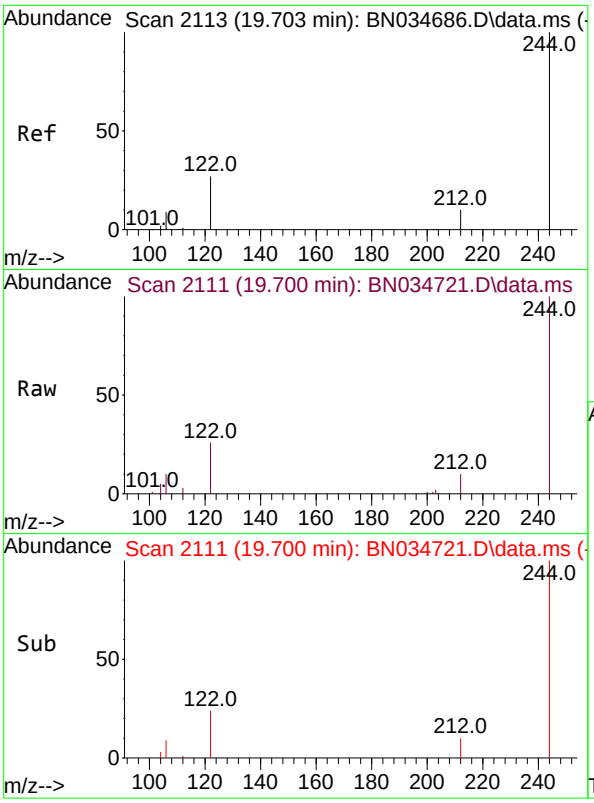


#30
Pyrene
Concen: 0.315 ng
RT: 19.482 min Scan# 2064
Delta R.T. -0.002 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:202 Resp: 21115

Ion	Ratio	Lower	Upper
202	100		
200	21.2	16.6	25.0
203	18.0	14.2	21.4



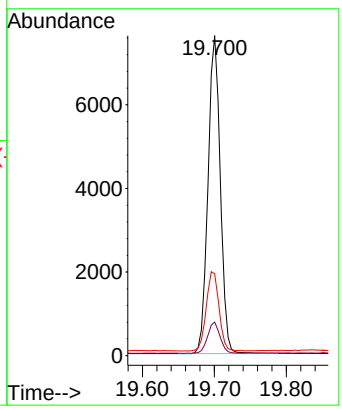


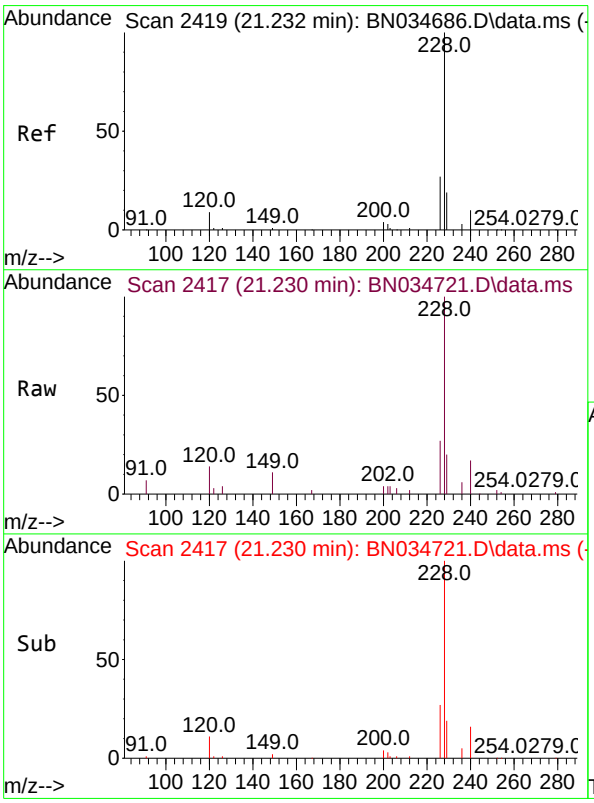
#31
Terphenyl-d14
Concen: 0.338 ng
RT: 19.700 min Scan# 21
Delta R.T. -0.002 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:244 Resp: 9017

Ion	Ratio	Lower	Upper
244	100		
212	10.5	8.6	13.0
122	25.6	22.3	33.5

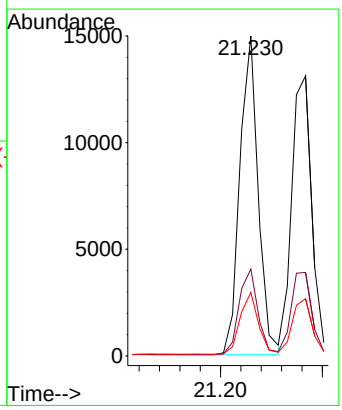


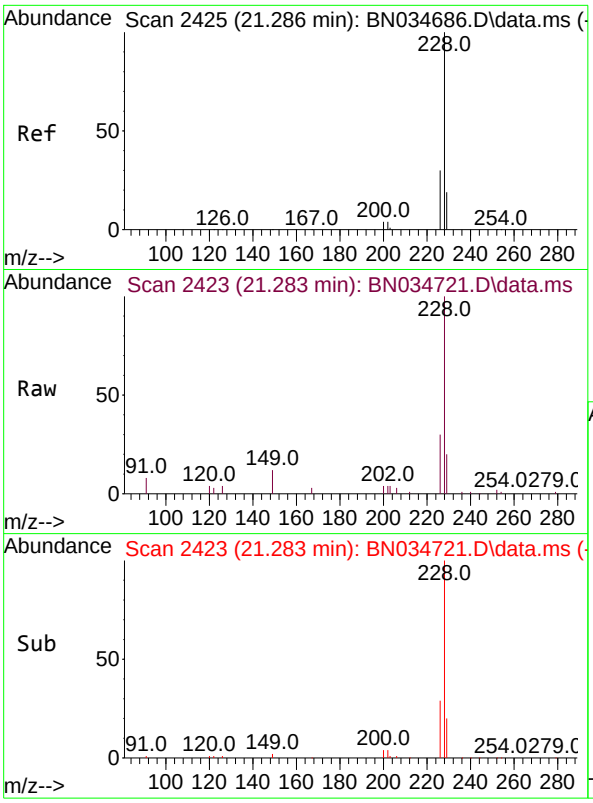


#32
Benzo(a)anthracene
Concen: 0.374 ng
RT: 21.230 min Scan# 2417
Delta R.T. -0.002 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:228 Resp: 18695

Ion	Ratio	Lower	Upper
228	100		
226	27.1	22.0	33.0
229	19.8	15.6	23.4



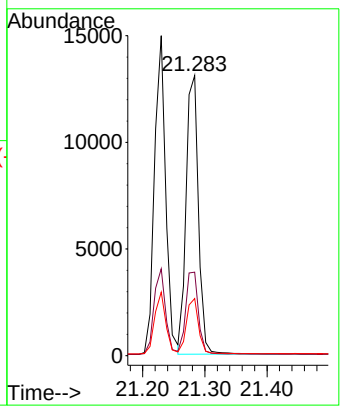


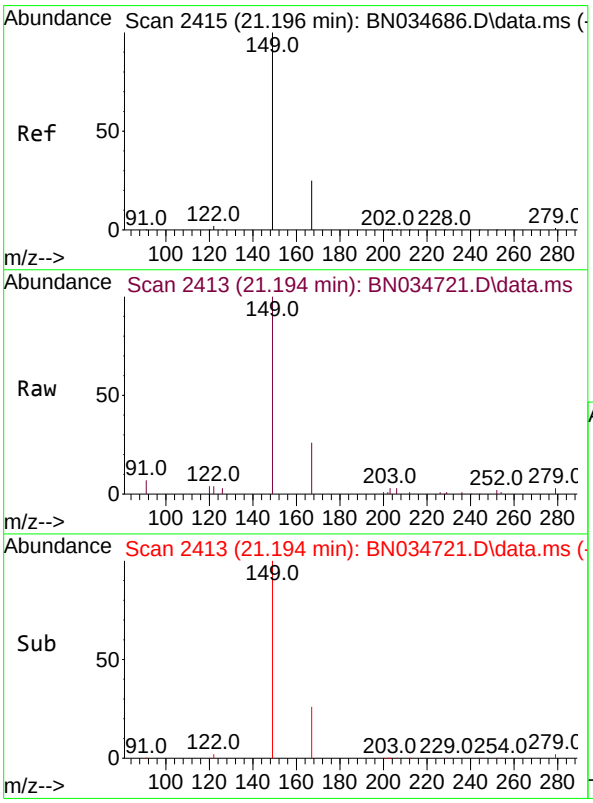
#33
Chrysene
Concen: 0.349 ng
RT: 21.283 min Scan# 24
Delta R.T. -0.002 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:228 Resp: 18028

Ion	Ratio	Lower	Upper
228	100		
226	29.8	24.1	36.1
229	20.4	15.8	23.8

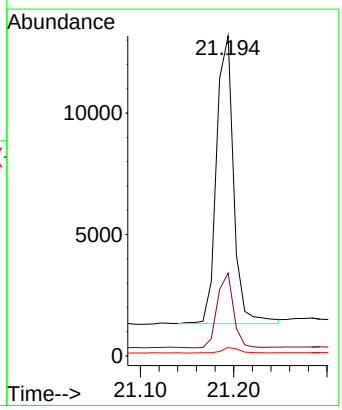


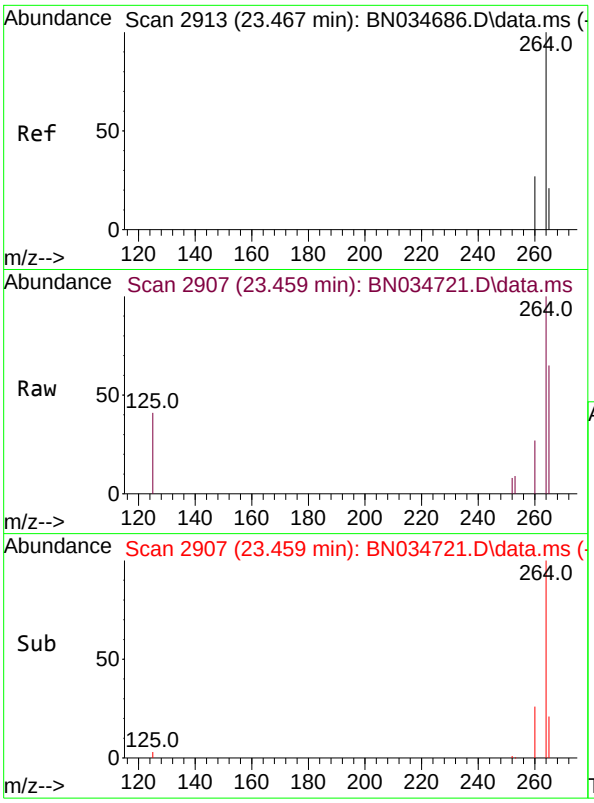


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.532 ng
RT: 21.194 min Scan# 2413
Delta R.T. -0.002 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:149 Resp: 15075

Ion	Ratio	Lower	Upper
149	100		
167	24.5	19.7	29.5
279	2.0	1.8	2.6



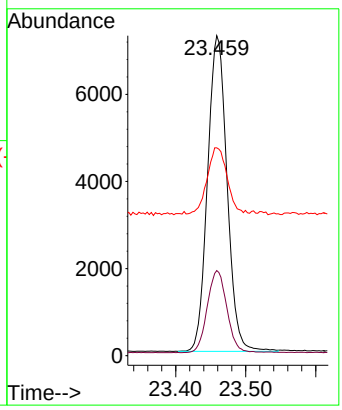


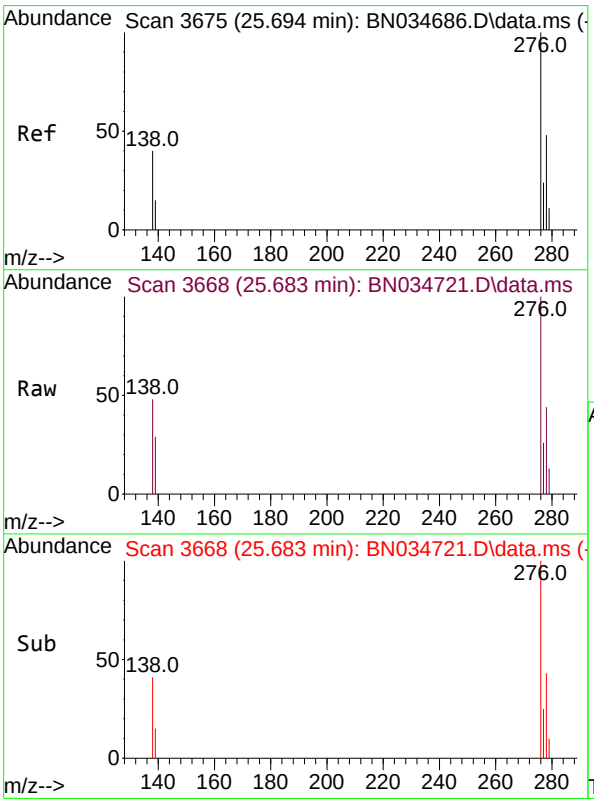
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.459 min Scan# 2
Delta R.T. -0.008 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:264 Resp: 14018

Ion	Ratio	Lower	Upper
264	100		
260	26.6	21.9	32.9
265	65.0	60.6	91.0

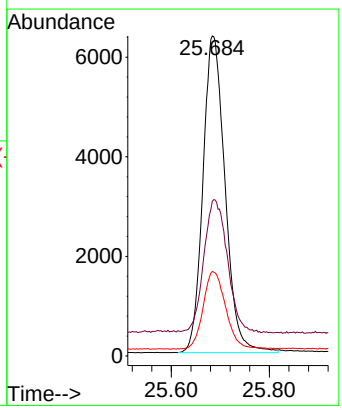


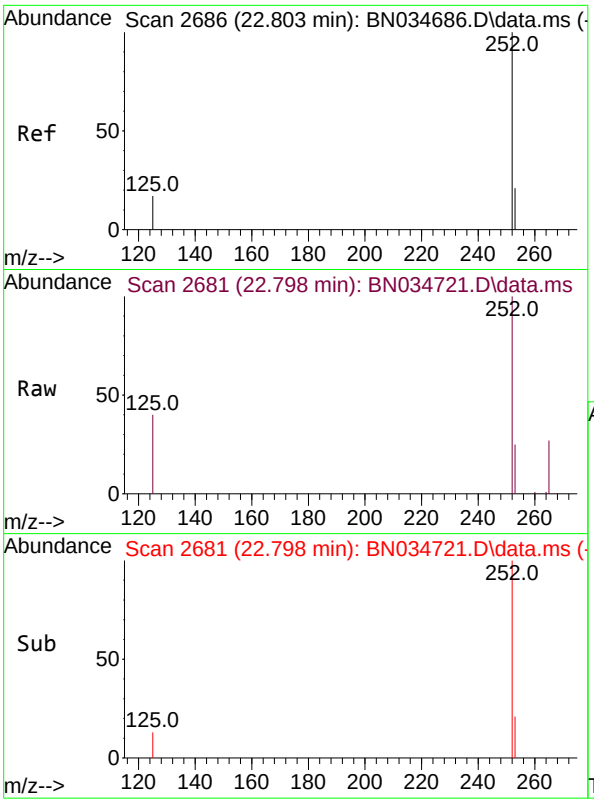


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.369 ng
RT: 25.683 min Scan# 3668
Delta R.T. -0.011 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:276 Resp: 19938

Ion	Ratio	Lower	Upper
276	100		
138	45.0	35.1	52.7
277	24.8	19.7	29.5



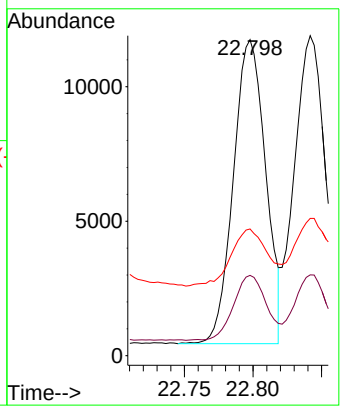


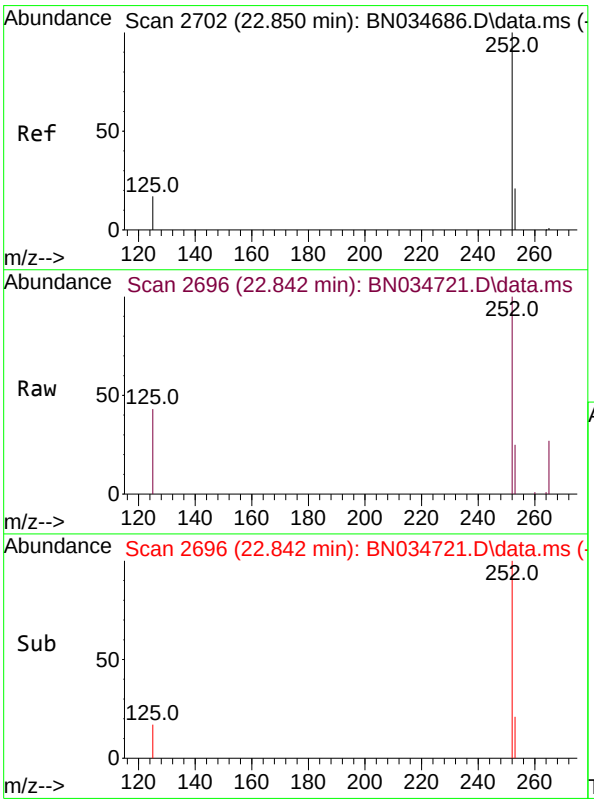
#37
Benzo(b)fluoranthene
Concen: 0.330 ng
RT: 22.798 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 18466

Ion	Ratio	Lower	Upper
252	100		
253	25.4	20.0	30.0
125	40.1	20.9	31.3#

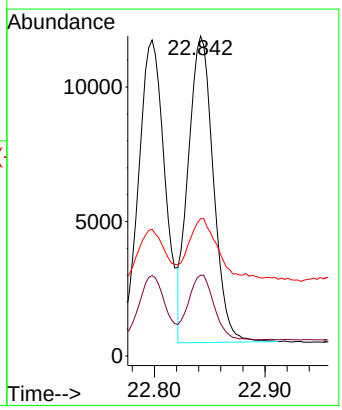


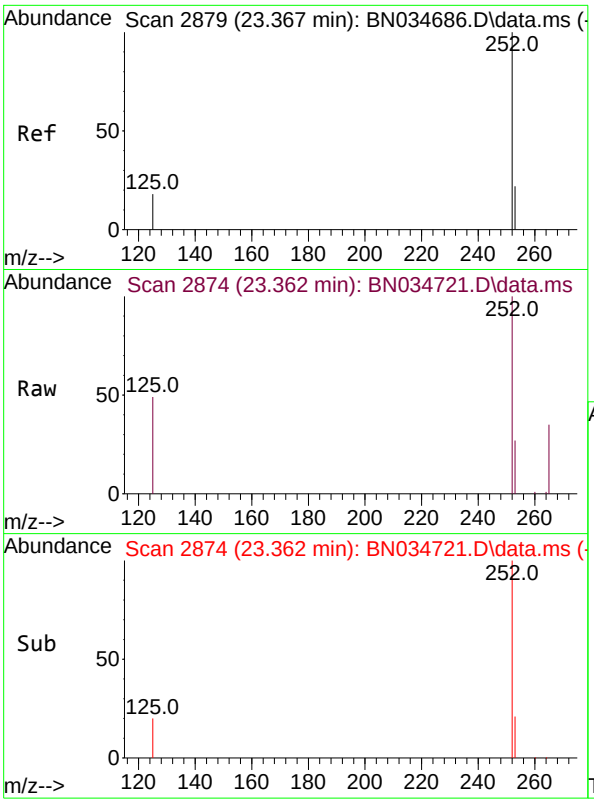


#38
Benzo(k)fluoranthene
Concen: 0.326 ng
RT: 22.842 min Scan# 2696
Delta R.T. -0.008 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:252 Resp: 17979

Ion	Ratio	Lower	Upper
252	100		
253	25.2	20.6	31.0
125	42.9	21.6	32.4#



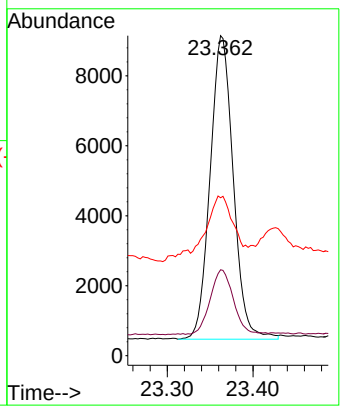


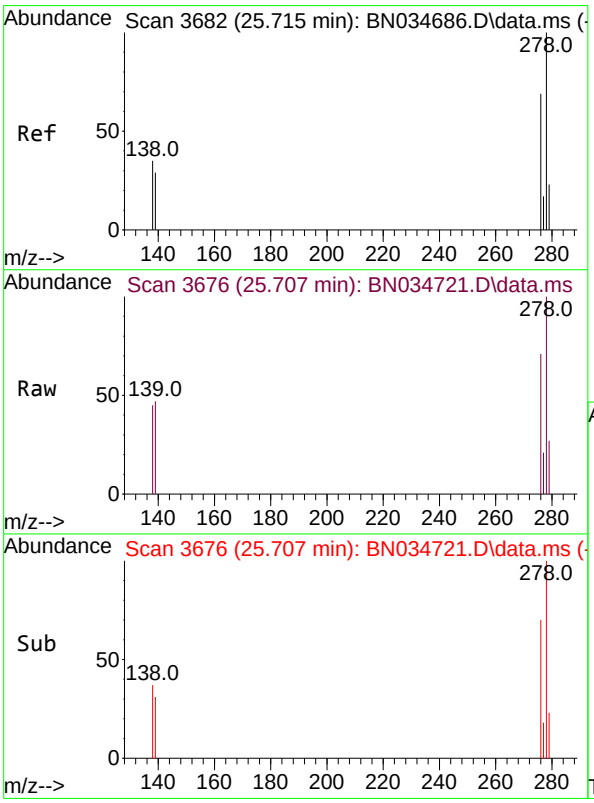
#39
Benzo(a)pyrene
Concen: 0.363 ng
RT: 23.362 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 16295

Ion	Ratio	Lower	Upper
252	100		
253	26.8	22.2	33.4
125	49.4	26.0	39.0#

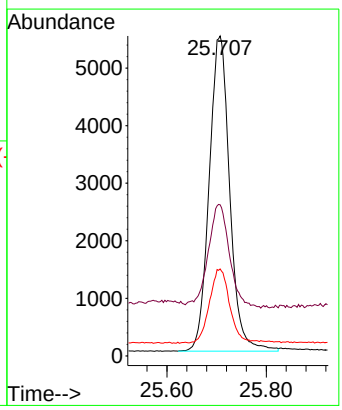


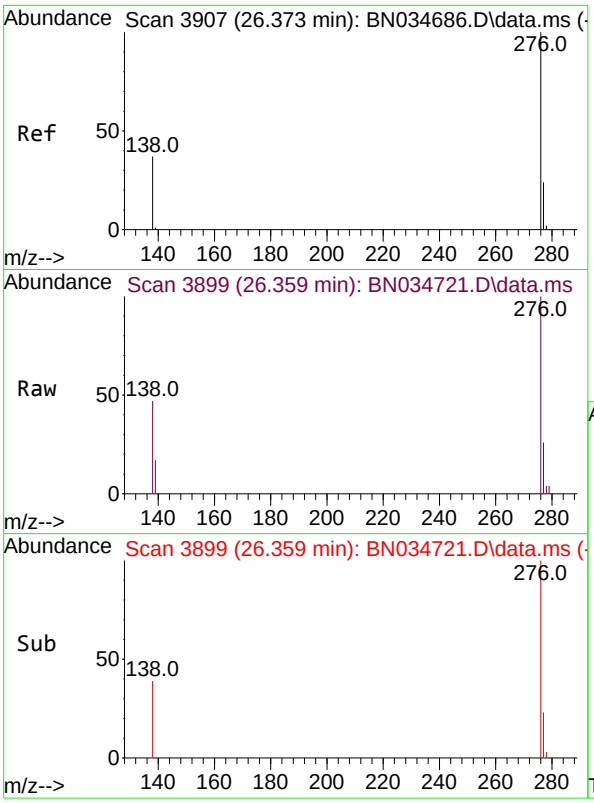


#40
Dibenzo(a,h)anthracene
Concen: 0.369 ng
RT: 25.707 min Scan# 3676
Delta R.T. -0.008 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Tgt Ion:278 Resp: 15708

Ion	Ratio	Lower	Upper
278	100		
139	47.3	25.4	38.2#
279	27.2	22.4	33.6



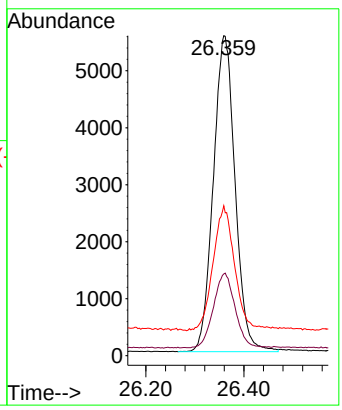


#41
Benzo(g,h,i)perylene
Concen: 0.365 ng
RT: 26.359 min Scan# 3
Delta R.T. -0.014 min
Lab File: BN034721.D
Acq: 25 Oct 2024 09:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:276 Resp: 17122

Ion	Ratio	Lower	Upper
276	100		
277	25.6	21.3	31.9
138	46.9	31.9	47.9



Sample Results: **BN034721.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102524\
Data File : BN034721.D
Acq On : 25 Oct 2024 09:46
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Oct 25 10:44:57 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
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	104	0.00
2		1,4-Dioxane	0.532	0.460	13.5	98	0.00
3		n-Nitrosodimethylamine	0.775	0.646	16.6	95	0.00
4	S	2-Fluorophenol	1.189	1.280	-7.7	124	0.00
5	S	Phenol-d6	1.568	1.733	-10.5	130	0.00
6		bis(2-Chloroethyl)ether	1.274	1.192	6.4	109	0.00
7	I	Naphthalene-d8	1.000	1.000	0.0	106	0.00
8	S	Nitrobenzene-d5	0.336	0.300	10.7	108	0.00
9		Naphthalene	1.107	1.006	9.1	108	-0.01
10		Hexachlorobutadiene	0.166	0.146	12.0	103	-0.01
11	SURR	2-Methylnaphthalene-d10	0.550	0.491	10.7	108	0.00
12		2-Methylnaphthalene	0.687	0.618	10.0	109	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	103	0.00
14	S	2,4,6-Tribromophenol	0.124	0.119	4.0	127	0.00
15	S	2-Fluorobiphenyl	1.590	1.396	12.2	104	0.00
16		Acenaphthylene	1.921	1.627	15.3	106	0.00
17		Acenaphthene	1.324	1.133	14.4	104	0.00
18		Fluorene	1.634	1.325	18.9	98	0.00
19	I	Phenanthrene-d10	1.000	1.000	0.0	97	0.00
20		4,6-Dinitro-2-methylphenol	0.056	0.047	16.1	106	0.00
21		4-Bromophenyl-phenylether	0.213	0.195	8.5	99	0.00
22		Hexachlorobenzene	0.231	0.206	10.8	94	0.00
23		Atrazine	0.168	0.152	9.5	105	0.00
24		Pentachlorophenol	0.082	0.077	6.1	117	0.00
25		Phenanthrene	1.202	1.081	10.1	98	0.00
26		Anthracene	1.067	0.954	10.6	99	0.00
27	SURR	Fluoranthene-d10	0.901	0.834	7.4	103	0.00
28		Fluoranthene	1.253	1.154	7.9	102	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	123	0.00
30		Pyrene	2.055	1.616	21.4	106	0.00
31	S	Terphenyl-d14	0.817	0.690	15.5	115	0.00
32		Benzo(a)anthracene	1.528	1.431	6.3	128	0.00
33		Chrysene	1.581	1.380	12.7	118	0.00
34		Bis(2-ethylhexyl)phthalate	0.867	1.154	-33.1#	196#	0.00
35	I	Perylene-d12	1.000	1.000	0.0	146	0.00
36		Indeno(1,2,3-cd)pyrene	1.541	1.422	7.7	147	-0.01
37		Benzo(b)fluoranthene	1.597	1.317	17.5	130	0.00
38		Benzo(k)fluoranthene	1.576	1.283	18.6	135	0.00
39	C	Benzo(a)pyrene	1.282	1.162	9.4	147	0.00
40		Dibenzo(a,h)anthracene	1.215	1.121	7.7	147	0.00
41		Benzo(g,h,i)perylene	1.340	1.221	8.9	141	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Sample Results: **BN034721.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102524\
Data File : BN034721.D
Acq On : 25 Oct 2024 09:46
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Oct 25 10:44:57 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
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	104	0.00
2		1,4-Dioxane	0.400	0.345	13.8	98	0.00
3		n-Nitrosodimethylamine	0.400	0.334	16.5	95	0.00
4	S	2-Fluorophenol	0.400	0.431	-7.7	124	0.00
5	S	Phenol-d6	0.400	0.442	-10.5	130	0.00
6		bis(2-Chloroethyl)ether	0.400	0.374	6.5	109	0.00
7	I	Naphthalene-d8	0.400	0.400	0.0	106	0.00
8	S	Nitrobenzene-d5	0.400	0.358	10.5	108	0.00
9		Naphthalene	0.400	0.364	9.0	108	-0.01
10		Hexachlorobutadiene	0.400	0.351	12.3	103	-0.01
11	SURR	2-Methylnaphthalene-d10	0.400	0.357	10.8	108	0.00
12		2-Methylnaphthalene	0.400	0.360	10.0	109	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	103	0.00
14	S	2,4,6-Tribromophenol	0.400	0.384	4.0	127	0.00
15	S	2-Fluorobiphenyl	0.400	0.351	12.3	104	0.00
16		Acenaphthylene	0.400	0.339	15.3	106	0.00
17		Acenaphthene	0.400	0.342	14.5	104	0.00
18		Fluorene	0.400	0.324	19.0	98	0.00
19	I	Phenanthrene-d10	0.400	0.400	0.0	97	0.00
20		4,6-Dinitro-2-methylphenol	0.400	0.337	15.8	106	0.00
21		4-Bromophenyl-phenylether	0.400	0.365	8.8	99	0.00
22		Hexachlorobenzene	0.400	0.357	10.8	94	0.00
23		Atrazine	0.400	0.363	9.3	105	0.00
24		Pentachlorophenol	0.400	0.378	5.5	117	0.00
25		Phenanthrene	0.400	0.360	10.0	98	0.00
26		Anthracene	0.400	0.358	10.5	99	0.00
27	SURR	Fluoranthene-d10	0.400	0.370	7.5	103	0.00
28		Fluoranthene	0.400	0.368	8.0	102	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	123	0.00
30		Pyrene	0.400	0.315	21.3	106	0.00
31	S	Terphenyl-d14	0.400	0.338	15.5	115	0.00
32		Benzo(a)anthracene	0.400	0.374	6.5	128	0.00
33		Chrysene	0.400	0.349	12.8	118	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.532	-33.0#	196	0.00
35	I	Perylene-d12	0.400	0.400	0.0	146	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.369	7.8	147	-0.01
37		Benzo(b)fluoranthene	0.400	0.330	17.5	130	0.00
38		Benzo(k)fluoranthene	0.400	0.326	18.5	135	0.00
39	C	Benzo(a)pyrene	0.400	0.363	9.3	147	0.00
40		Dibenzo(a,h)anthracene	0.400	0.369	7.8	147	0.00
41		Benzo(g,h,i)perylene	0.400	0.365	8.8	141	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P4440 SAS No.: P4440 SDG No.: P4440

Instrument ID: BNA_N Calibration Date/Time: 10/25/2024 20:41

Lab File ID: BN034732.D Init. Calib. Date(s): 10/24/2024 10/24/2024

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 09:11 12:48

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.550	0.499		-9.3	50.0
Fluoranthene-d10	0.901	0.778		-13.7	50.0
2-Fluorophenol	1.189	1.284		8.0	50.0
Phenol-d6	1.568	1.673		6.7	50.0
Nitrobenzene-d5	0.336	0.311		-7.4	50.0
2-Fluorobiphenyl	1.590	1.375		-13.5	50.0
2,4,6-Tribromophenol	0.124	0.129		4.0	50.0
Terphenyl-d14	0.817	0.831		1.7	50.0
1,4-Dioxane	0.532	0.481		-9.6	50.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102524\
Data File : BN034732.D
Acq On : 25 Oct 2024 20:41
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Oct 25 22:43:59 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Oct 25 22:11:36 2024
Response via : Initial Calibration

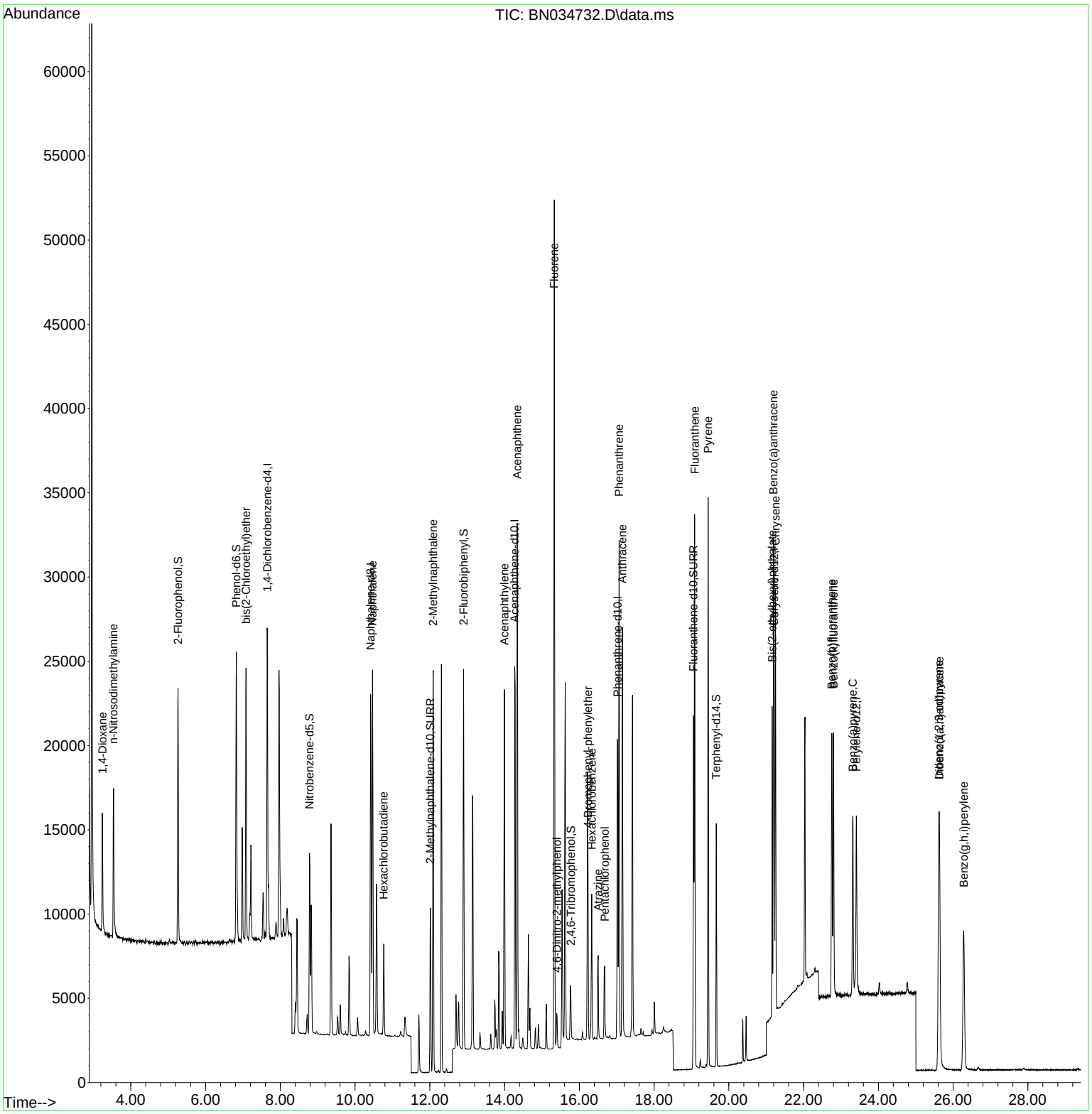
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.654	152	8703	0.400	ng		-0.06
7) Naphthalene-d8	10.415	136	25971	0.400	ng		#-0.06
13) Acenaphthene-d10	14.272	164	13484	0.400	ng		-0.06
19) Phenanthrene-d10	17.026	188	25916	0.400	ng		-0.04
29) Chrysene-d12	21.212	240	13865	0.400	ng		-0.04
35) Perylene-d12	23.412	264	12945	0.400	ng		-0.05
System Monitoring Compounds							
4) 2-Fluorophenol	5.264	112	11176	0.432	ng		-0.06
5) Phenol-d6	6.824	99	14560	0.427	ng		-0.06
8) Nitrobenzene-d5	8.781	82	8064	0.370	ng		-0.06
11) 2-Methylnaphthalene-d10	12.014	152	12963	0.363	ng		-0.06
14) 2,4,6-Tribromophenol	15.773	330	1738	0.417	ng		-0.04
15) 2-Fluorobiphenyl	12.903	172	18535	0.346	ng		-0.05
27) Fluoranthene-d10	19.055	212	20172	0.346	ng		-0.04
31) Terphenyl-d14	19.663	244	11526	0.407	ng		-0.04
Target Compounds							Qvalue
2) 1,4-Dioxane	3.242	88	4182	0.361	ng		99
3) n-Nitrosodimethylamine	3.538	42	5887	0.349	ng	#	90
6) bis(2-Chloroethyl)ether	7.084	93	10361	0.374	ng		98
9) Naphthalene	10.468	128	26161	0.364	ng		100
10) Hexachlorobutadiene	10.767	225	3881	0.360	ng	#	99
12) 2-Methylnaphthalene	12.090	142	16236	0.364	ng		100
16) Acenaphthylene	13.994	152	21659	0.334	ng		99
17) Acenaphthene	14.336	154	15327	0.343	ng		99
18) Fluorene	15.330	166	18945	0.344	ng		99
20) 4,6-Dinitro-2-methylph...	15.405	198	1194	0.331	ng	#	84
21) 4-Bromophenyl-phenylether	16.232	248	5089	0.368	ng		93
22) Hexachlorobenzene	16.331	284	5412	0.361	ng		99
23) Atrazine	16.505	200	4155	0.383	ng		99
24) Pentachlorophenol	16.679	266	2169	0.409	ng		100
25) Phenanthrene	17.064	178	28002	0.360	ng		100
26) Anthracene	17.150	178	24377	0.353	ng		100
28) Fluoranthene	19.087	202	28255	0.348	ng		99
30) Pyrene	19.445	202	28410	0.399	ng		100
32) Benzo(a)anthracene	21.194	228	19350	0.365	ng		100
33) Chrysene	21.248	228	19781	0.361	ng		100
34) Bis(2-ethylhexyl)phtha...	21.158	149	15745	0.524	ng		99
36) Indeno(1,2,3-cd)pyrene	25.619	276	17779	0.357	ng		99
37) Benzo(b)fluoranthene	22.754	252	18264	0.353	ng		100
38) Benzo(k)fluoranthene	22.801	252	17879	0.351	ng		99
39) Benzo(a)pyrene	23.315	252	14600	0.352	ng		97
40) Dibenzo(a,h)anthracene	25.634	278	14173	0.360	ng		97
41) Benzo(g,h,i)perylene	26.286	276	15303	0.353	ng		97

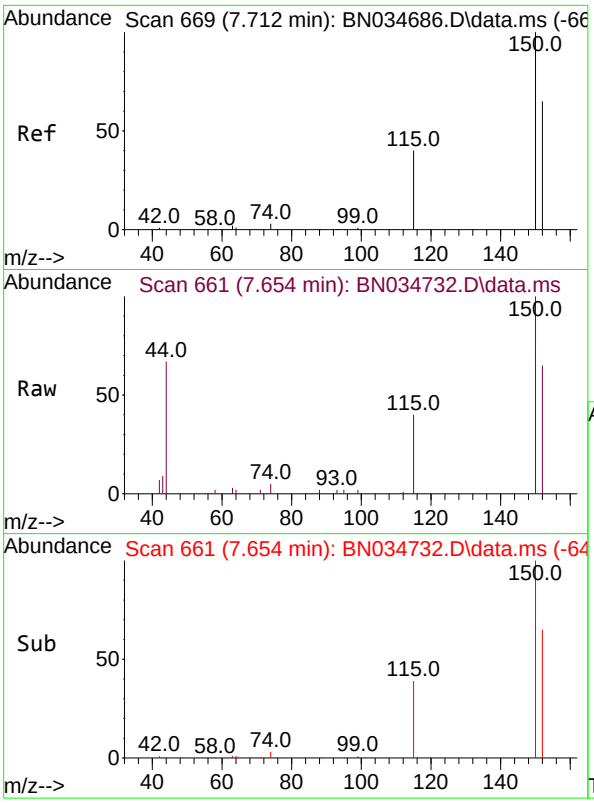
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102524\
Data File : BN034732.D
Acq On : 25 Oct 2024 20:41
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Oct 25 22:43:59 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Oct 25 22:11:36 2024
Response via : Initial Calibration



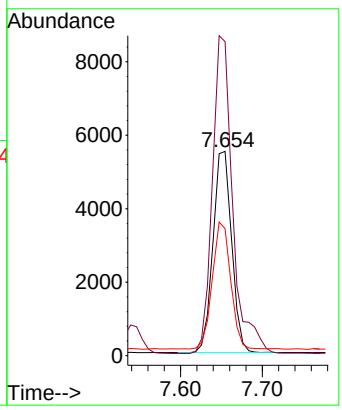


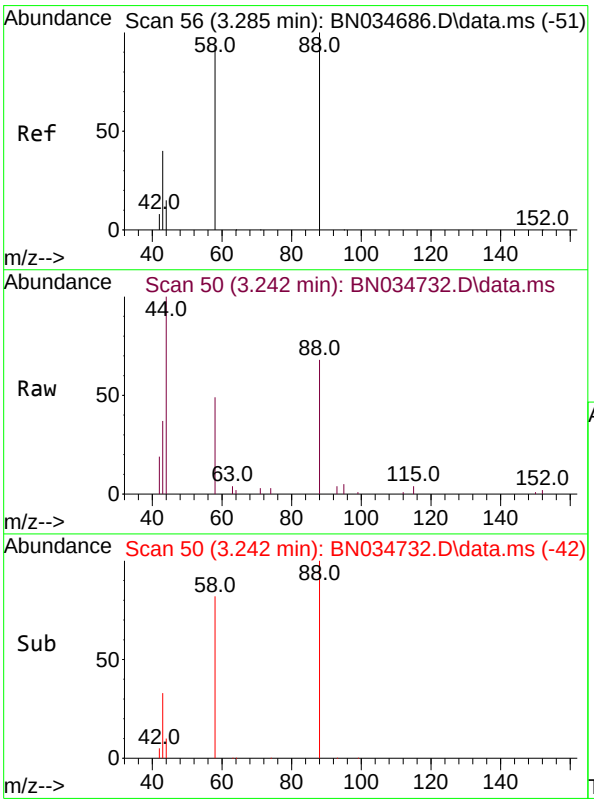
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.654 min Scan# 6
Delta R.T. -0.058 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 8703

Ion	Ratio	Lower	Upper
152	100		
150	153.7	122.7	184.1
115	62.2	51.0	76.6

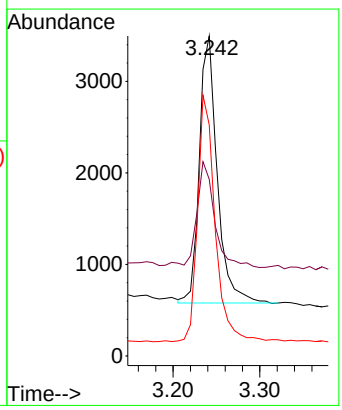


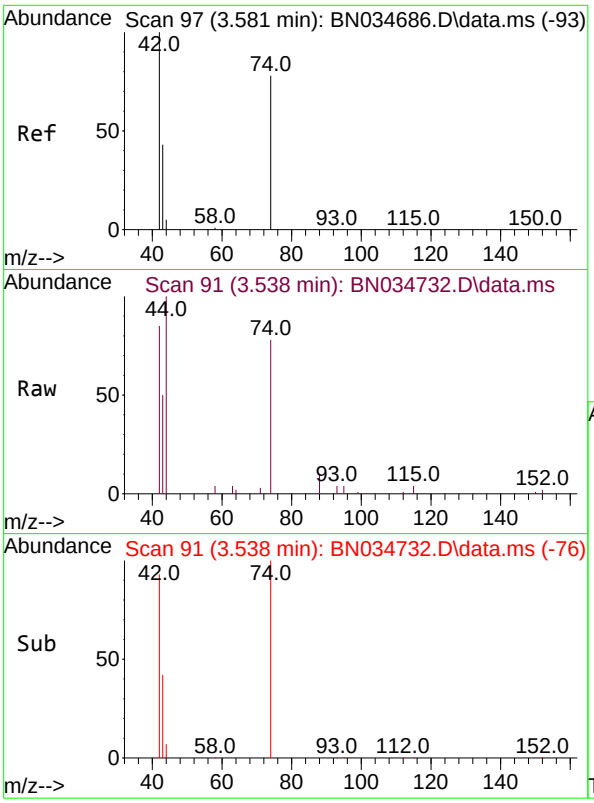


#2
1,4-Dioxane
Concen: 0.361 ng
RT: 3.242 min Scan# 50
Delta R.T. -0.043 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion: 88 Resp: 4182

Ion	Ratio	Lower	Upper
88	100		
43	40.9	32.1	48.1
58	90.9	73.7	110.5



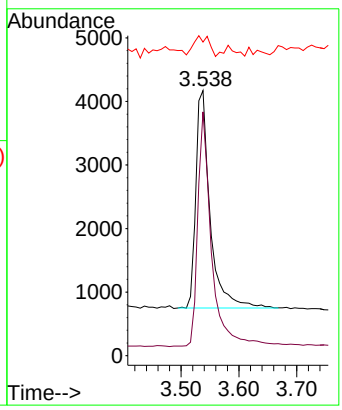


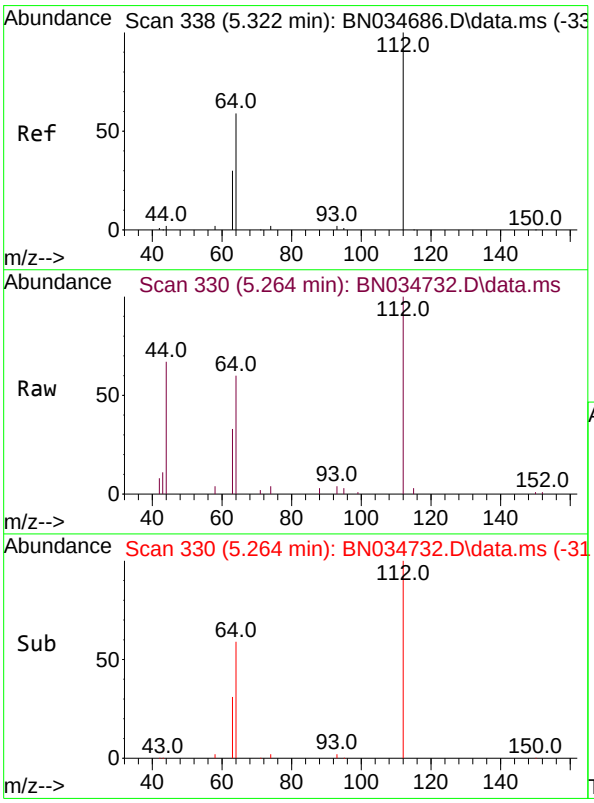
#3
n-Nitrosodimethylamine
Concen: 0.349 ng
RT: 3.538 min Scan# 9
Delta R.T. -0.043 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion: 42 Resp: 5887

Ion	Ratio	Lower	Upper
42	100		
74	104.8	77.2	115.8
44	10.2	13.4	20.2#

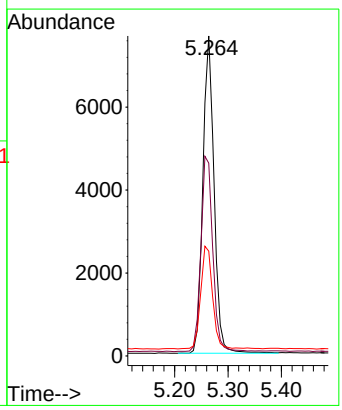


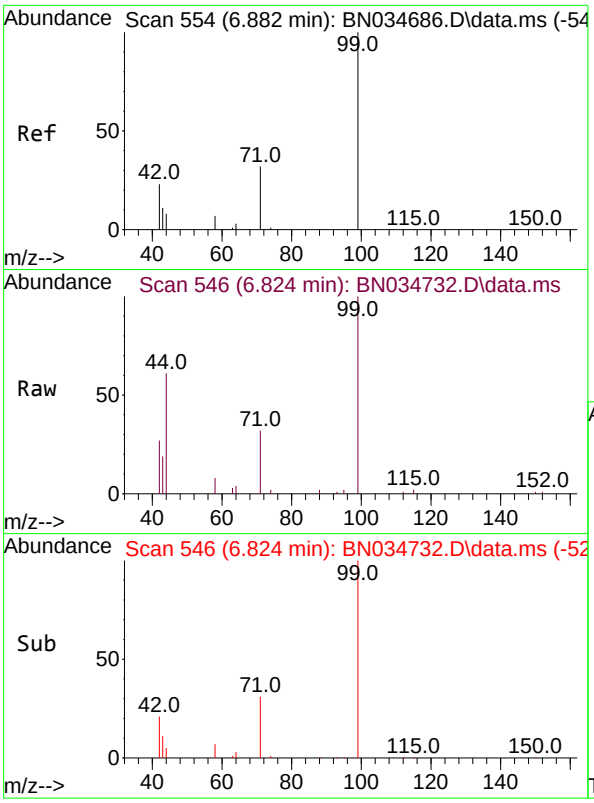


#4
2-Fluorophenol
Concen: 0.432 ng
RT: 5.264 min Scan# 330
Delta R.T. -0.058 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:112 Resp: 11176

Ion	Ratio	Lower	Upper
112	100		
64	65.2	53.0	79.6
63	34.2	27.6	41.4



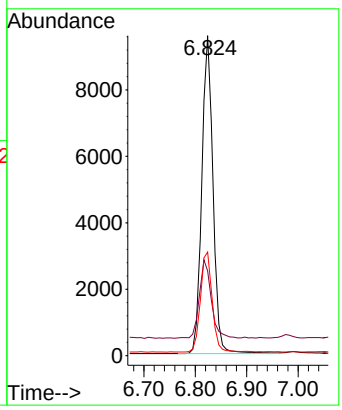


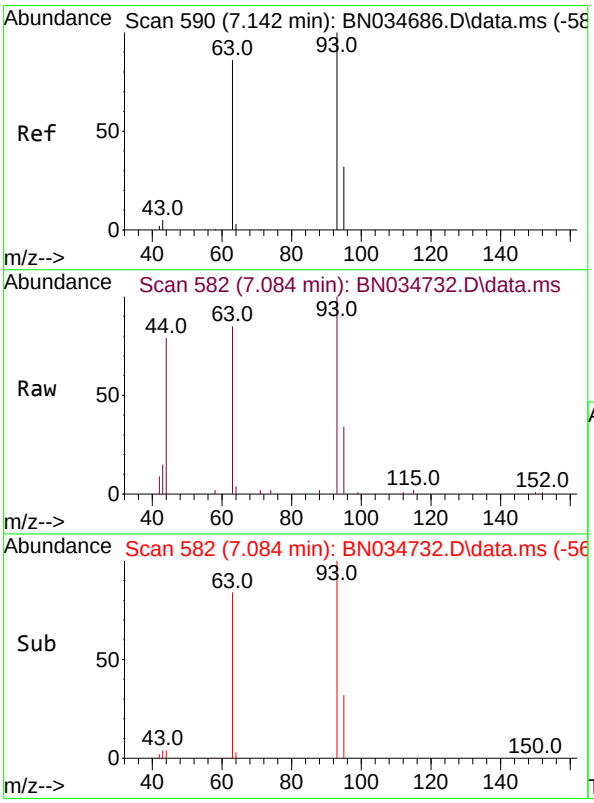
#5
Phenol-d6
Concen: 0.427 ng
RT: 6.824 min Scan# 54
Delta R.T. -0.058 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion: 99 Resp: 14560

Ion	Ratio	Lower	Upper
99	100		
42	26.2	21.8	32.8
71	32.7	26.6	40.0

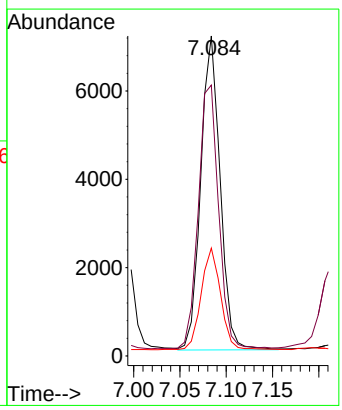


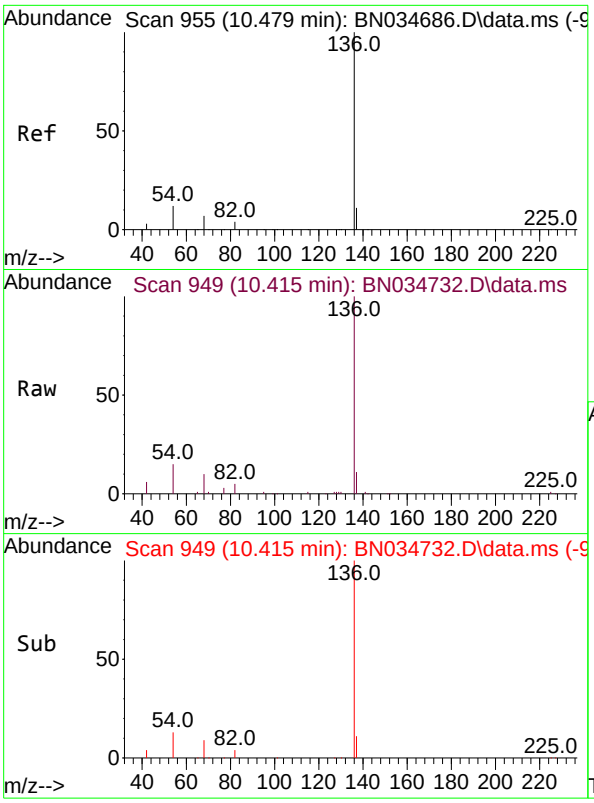


#6
bis(2-Chloroethyl)ether
Concen: 0.374 ng
RT: 7.084 min Scan# 582
Delta R.T. -0.058 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion: 93 Resp: 10361

Ion	Ratio	Lower	Upper
93	100		
63	87.6	71.5	107.3
95	32.5	25.8	38.6



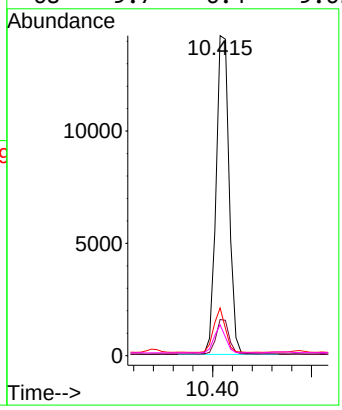


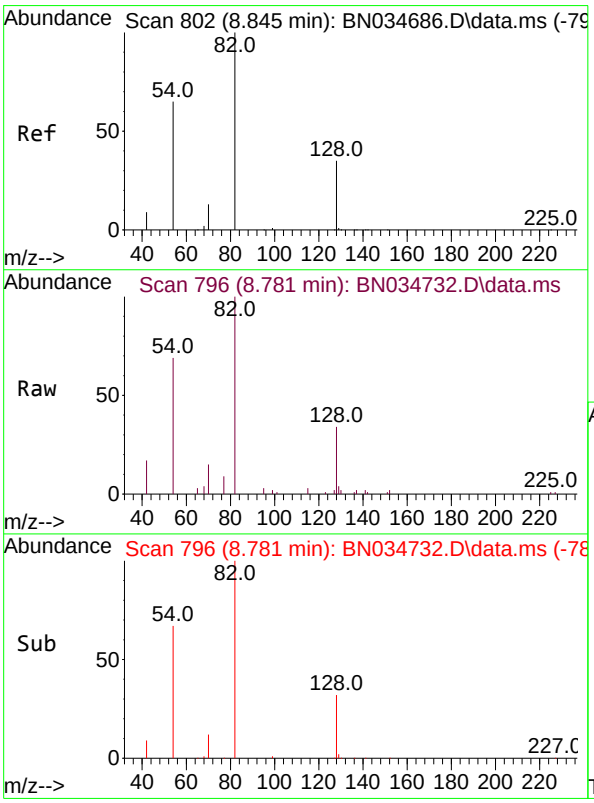
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.415 min Scan# 94
Delta R.T. -0.064 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:136 Resp: 25971

Ion	Ratio	Lower	Upper
136	100		
137	11.3	9.1	13.7
54	14.9	9.8	14.8#
68	9.7	6.4	9.6#

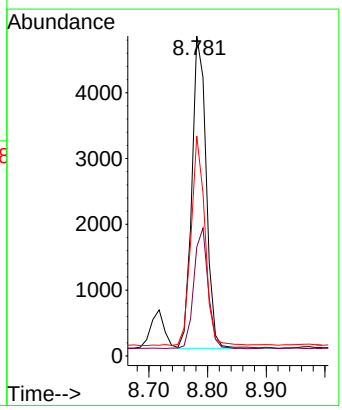


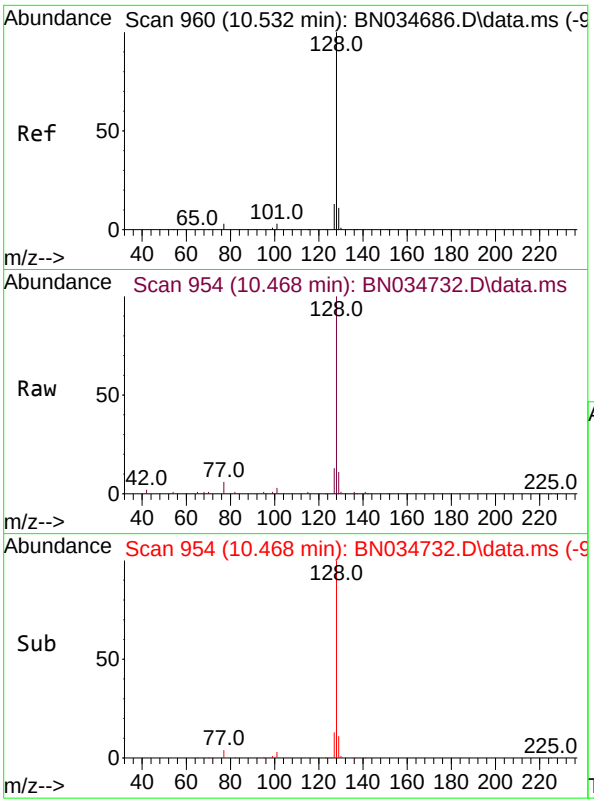


#8
Nitrobenzene-d5
Concen: 0.370 ng
RT: 8.781 min Scan# 796
Delta R.T. -0.064 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion: 82 Resp: 8064

Ion	Ratio	Lower	Upper
82	100		
128	34.0	29.7	44.5
54	68.8	53.0	79.6



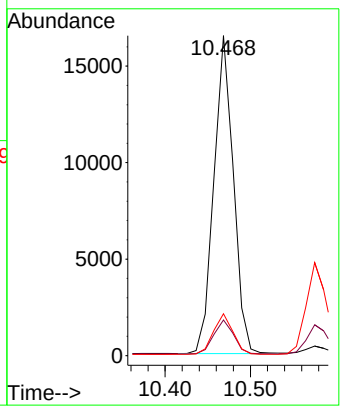


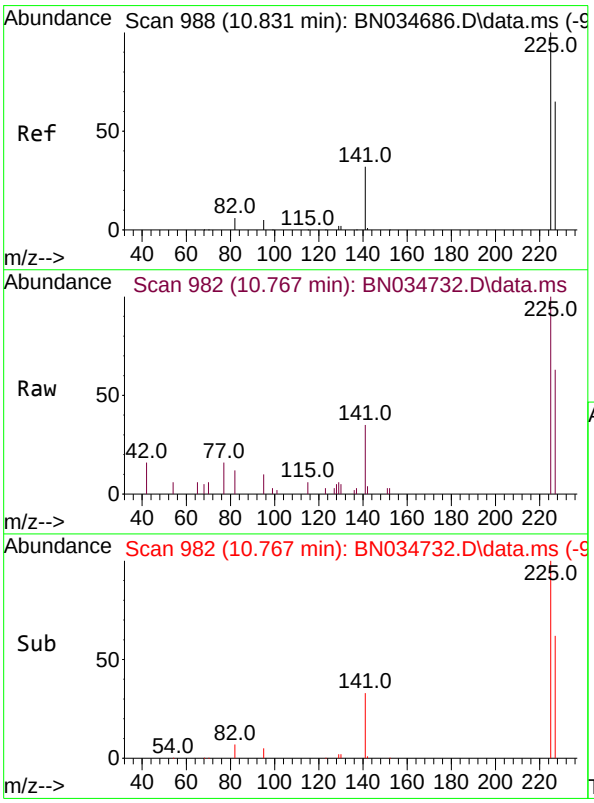
#9
Naphthalene
Concen: 0.364 ng
RT: 10.468 min Scan# 9
Delta R.T. -0.064 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:128 Resp: 26161

Ion	Ratio	Lower	Upper
128	100		
129	11.1	9.0	13.6
127	13.1	10.5	15.7

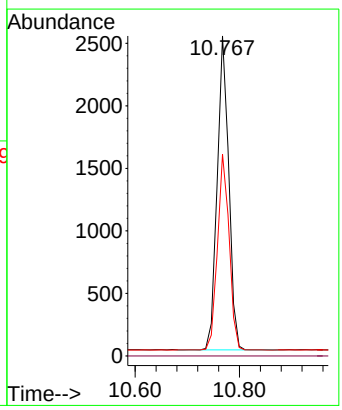


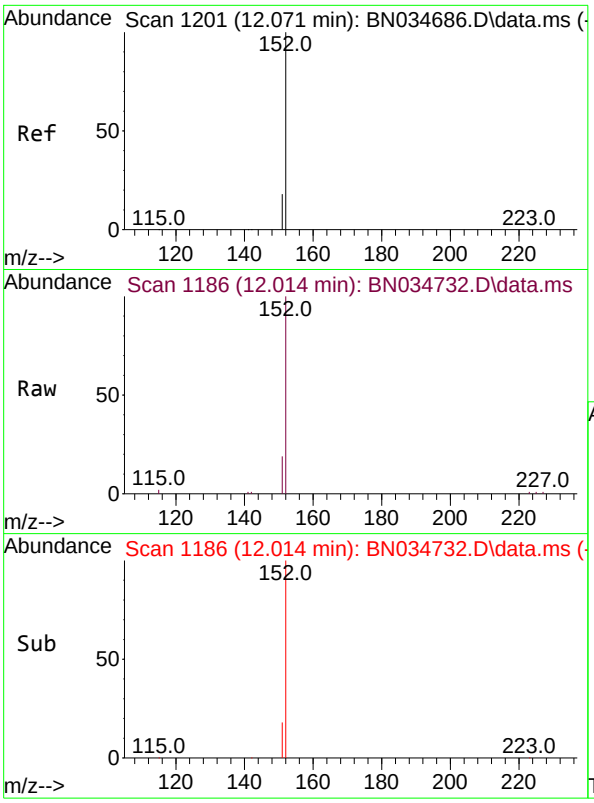


#10
Hexachlorobutadiene
Concen: 0.360 ng
RT: 10.767 min Scan# 982
Delta R.T. -0.064 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:225 Resp: 3881

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.1	51.4	77.0



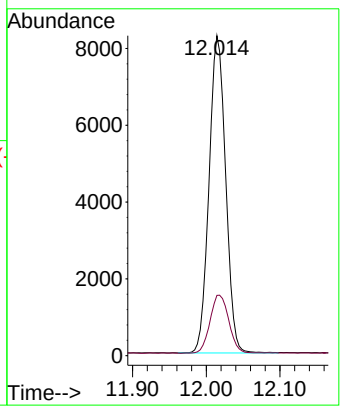


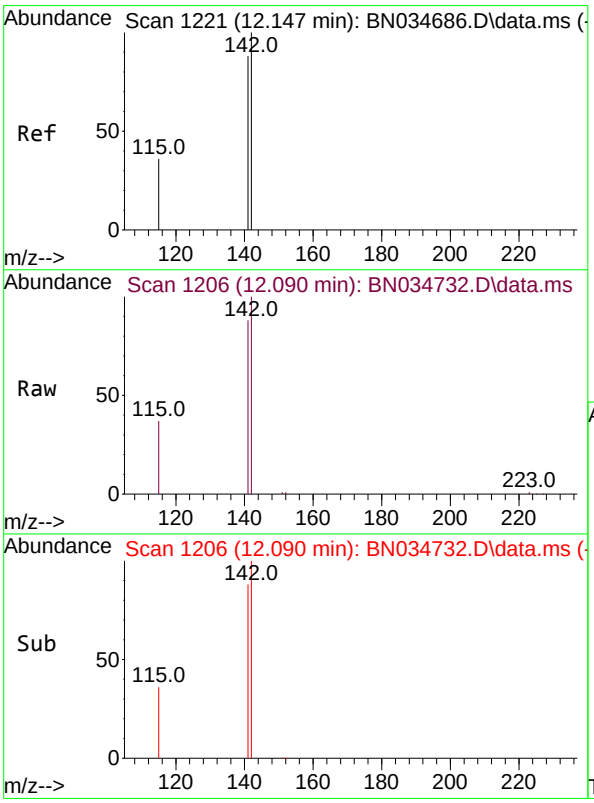
#11
2-Methylnaphthalene-d10
Concen: 0.363 ng
RT: 12.014 min Scan# 11
Delta R.T. -0.057 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 12963

Ion	Ratio	Lower	Upper
152	100		
151	20.7	16.7	25.1

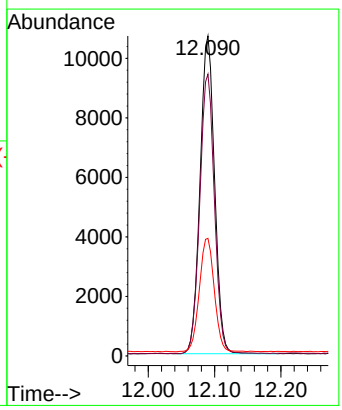


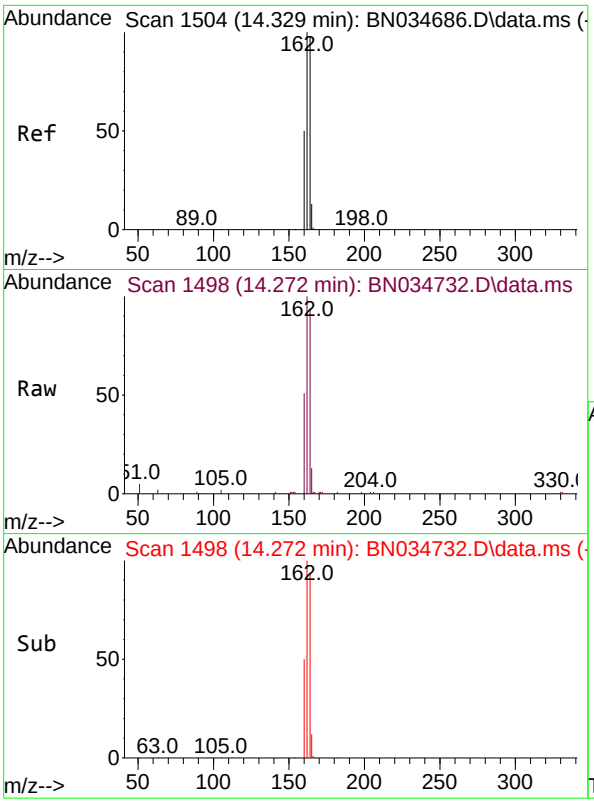


#12
2-Methylnaphthalene
Concen: 0.364 ng
RT: 12.090 min Scan# 1206
Delta R.T. -0.057 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:142 Resp: 16236

Ion	Ratio	Lower	Upper
142	100		
141	88.0	70.4	105.6
115	36.7	29.8	44.6



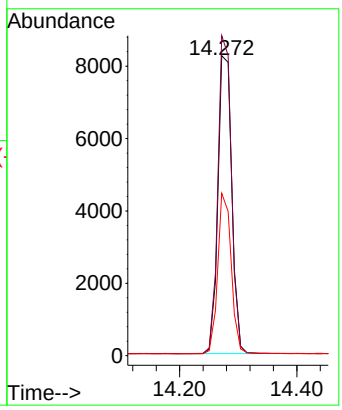


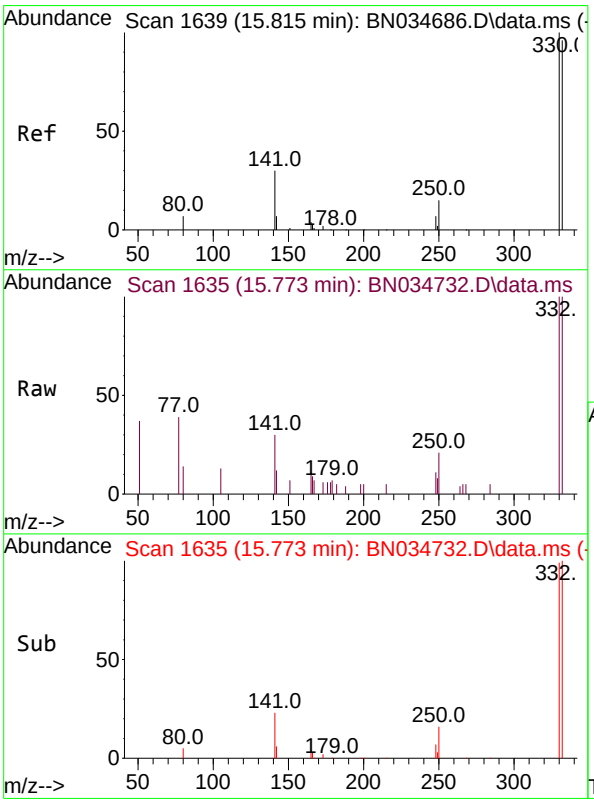
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.272 min Scan# 14
Delta R.T. -0.057 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:164 Resp: 13484

Ion	Ratio	Lower	Upper
164	100		
162	106.7	81.4	122.0
160	54.1	40.6	61.0

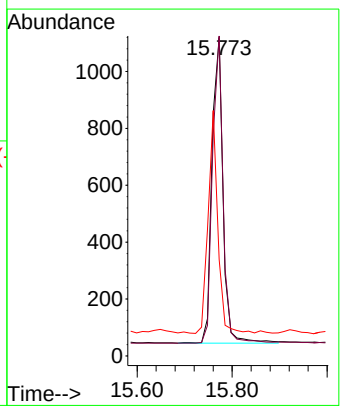


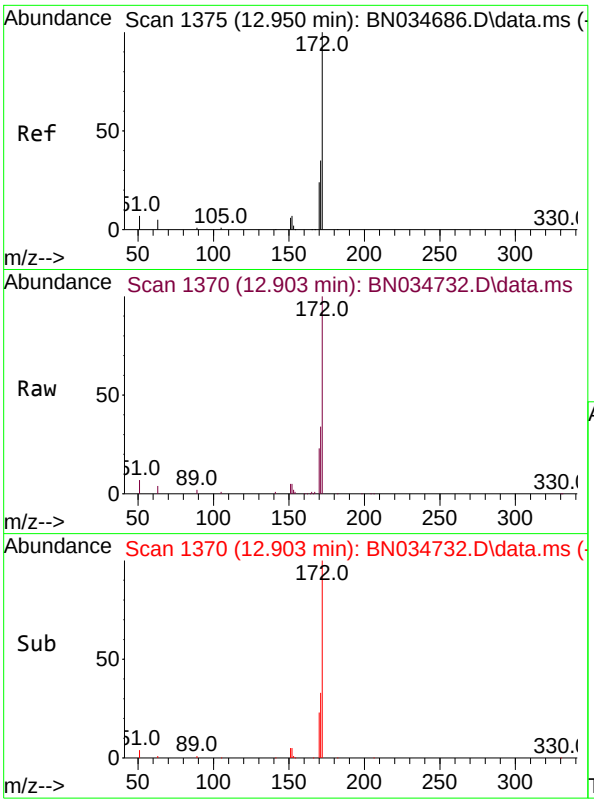


#14
2,4,6-Tribromophenol
Concen: 0.417 ng
RT: 15.773 min Scan# 1635
Delta R.T. -0.043 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:330 Resp: 1738

Ion	Ratio	Lower	Upper
330	100		
332	95.5	76.6	115.0
141	63.9	54.6	81.8



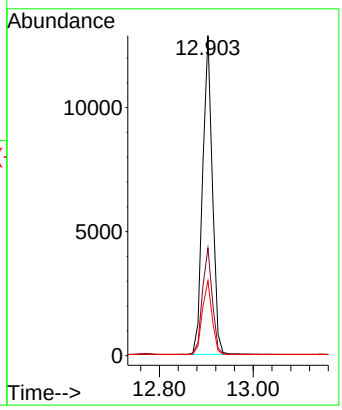


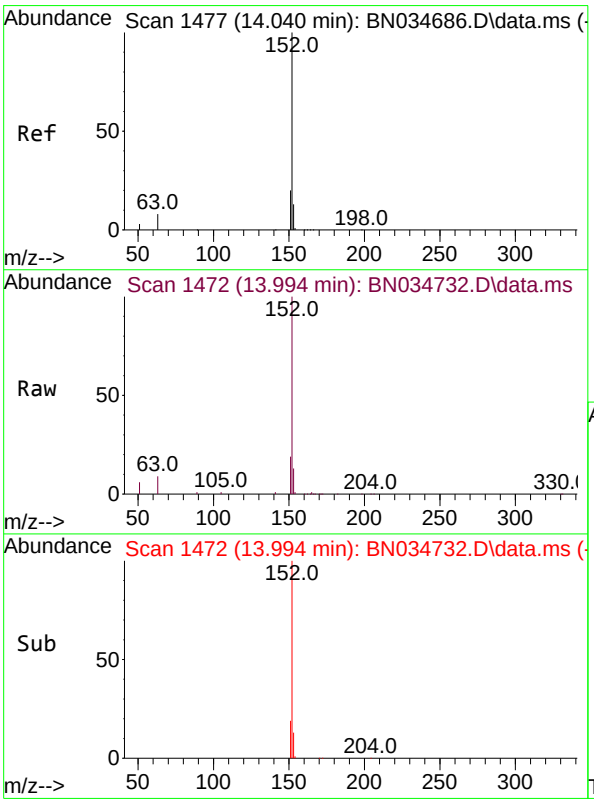
#15
2-Fluorobiphenyl
Concen: 0.346 ng
RT: 12.903 min Scan# 1
Delta R.T. -0.046 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:172 Resp: 18535

Ion	Ratio	Lower	Upper
172	100		
171	33.6	28.3	42.5
170	23.3	19.8	29.6

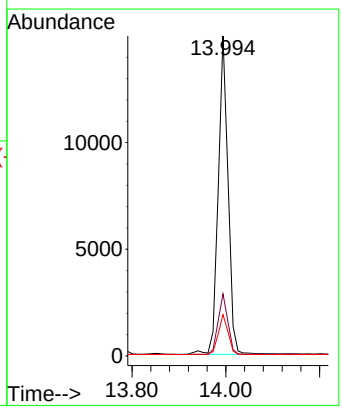


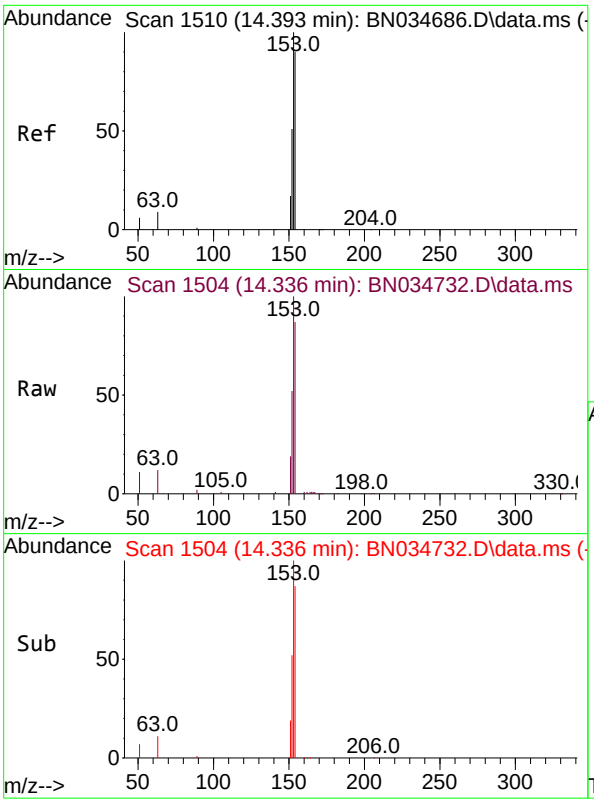


#16
Acenaphthylene
Concen: 0.334 ng
RT: 13.994 min Scan# 1472
Delta R.T. -0.046 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:152 Resp: 21659

Ion	Ratio	Lower	Upper
152	100		
151	19.1	15.6	23.4
153	12.6	10.6	15.8



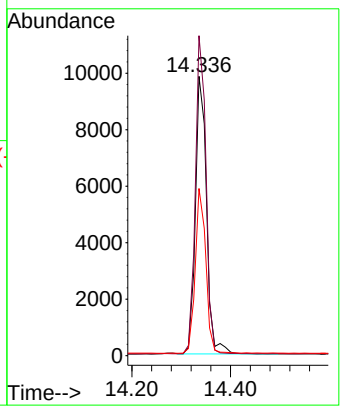


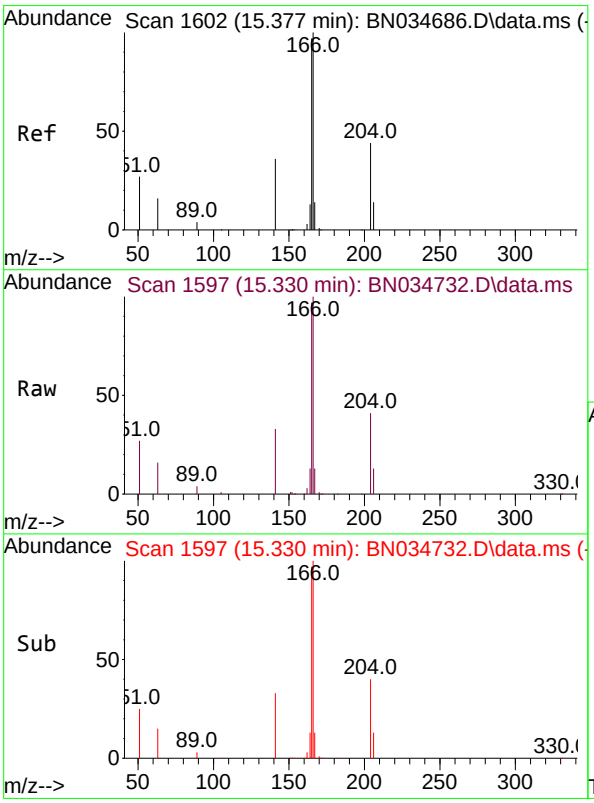
#17
Acenaphthene
Concen: 0.343 ng
RT: 14.336 min Scan# 1
Delta R.T. -0.057 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:154 Resp: 15327

Ion	Ratio	Lower	Upper
154	100		
153	109.6	88.2	132.2
152	56.5	46.9	70.3

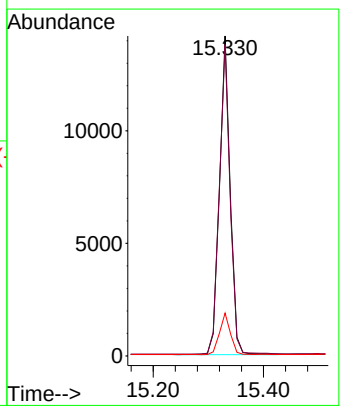


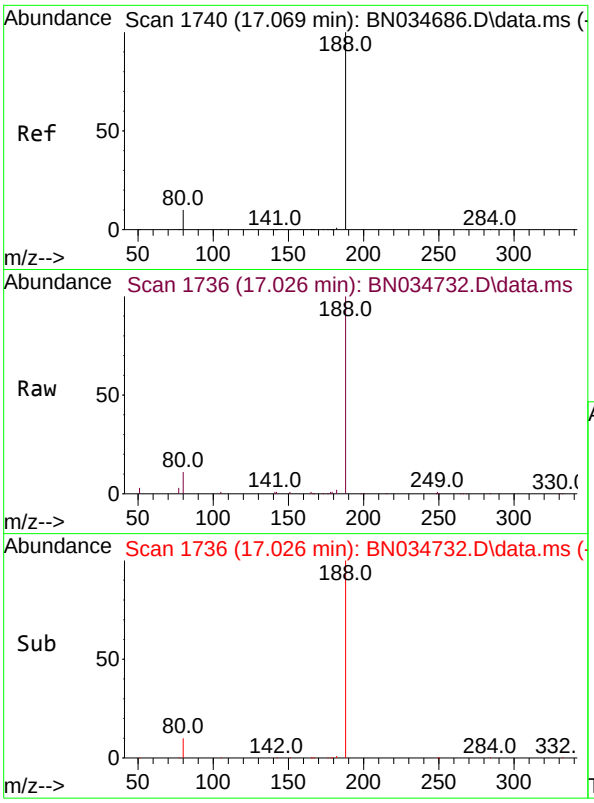


#18
Fluorene
Concen: 0.344 ng
RT: 15.330 min Scan# 1597
Delta R.T. -0.046 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:166 Resp: 18945

Ion	Ratio	Lower	Upper
166	100		
165	97.6	78.8	118.2
167	13.2	10.6	16.0



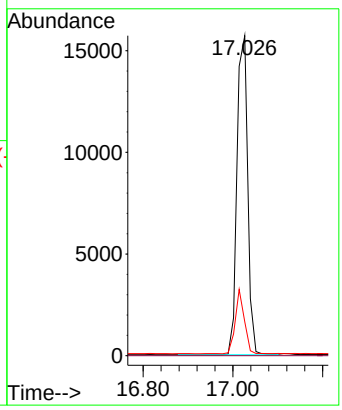


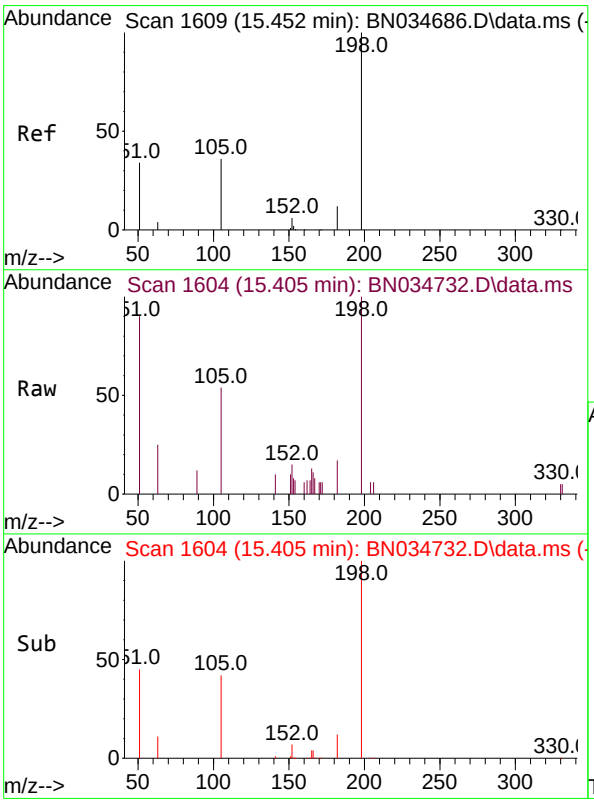
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.026 min Scan# 1
Delta R.T. -0.043 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:188 Resp: 25916

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.6	8.9	13.3

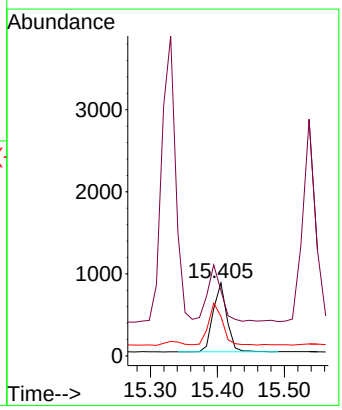


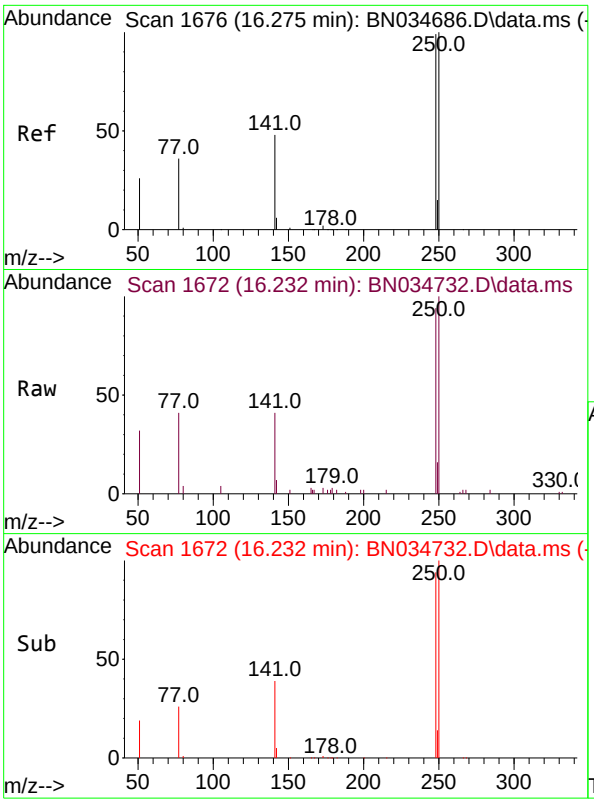


#20
4,6-Dinitro-2-methylphenol
Concen: 0.331 ng
RT: 15.405 min Scan# 1604
Delta R.T. -0.047 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:198 Resp: 1194

Ion	Ratio	Lower	Upper
198	100		
51	89.8	91.8	137.8#
105	54.4	44.3	66.5



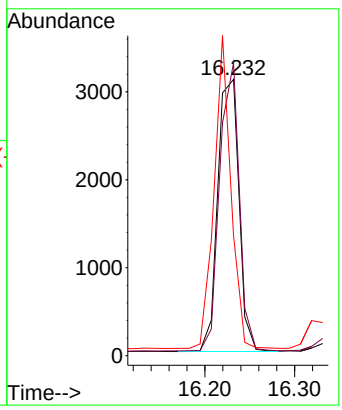


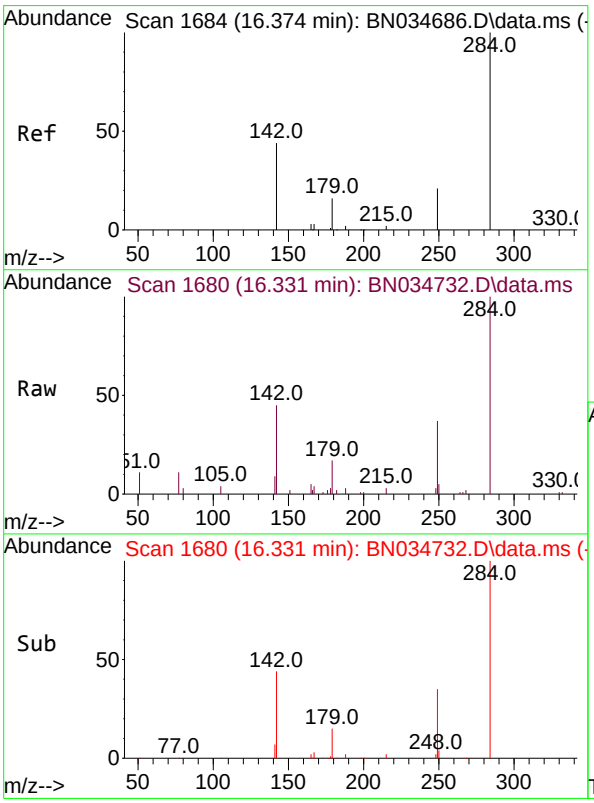
#21
4-Bromophenyl-phenylether
Concen: 0.368 ng
RT: 16.232 min Scan# 1
Delta R.T. -0.043 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:248 Resp: 5089

Ion	Ratio	Lower	Upper
248	100		
250	106.0	80.9	121.3
141	43.4	40.5	60.7

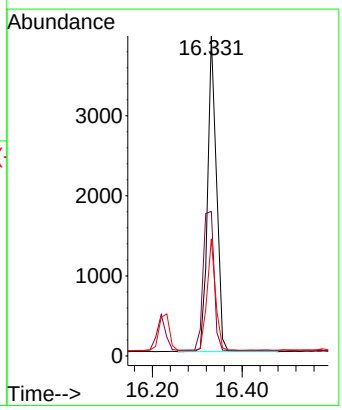


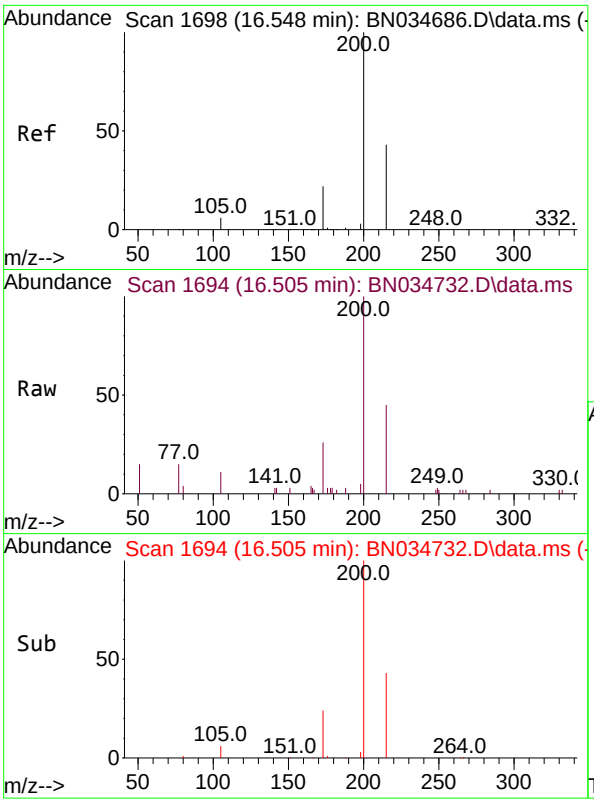


#22
Hexachlorobenzene
Concen: 0.361 ng
RT: 16.331 min Scan# 1680
Delta R.T. -0.043 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:284 Resp: 5412

Ion	Ratio	Lower	Upper
284	100		
142	54.4	43.6	65.4
249	34.0	26.6	40.0



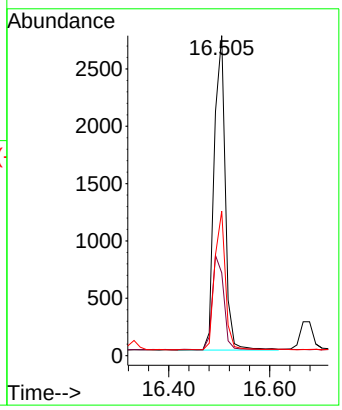


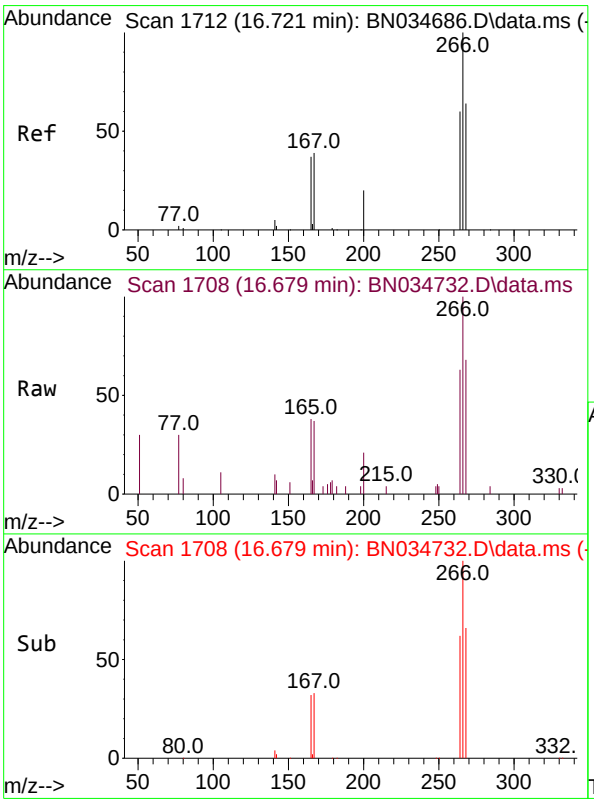
#23
Atrazine
Concen: 0.383 ng
RT: 16.505 min Scan# 1(
Delta R.T. -0.043 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:200 Resp: 4155

Ion	Ratio	Lower	Upper
200	100		
173	25.9	19.7	29.5
215	45.2	35.7	53.5

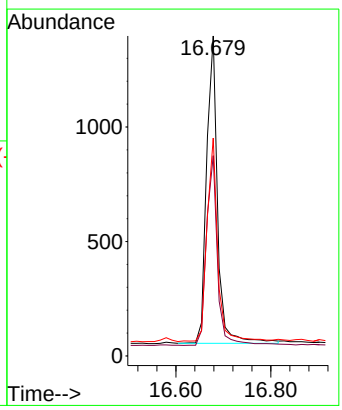


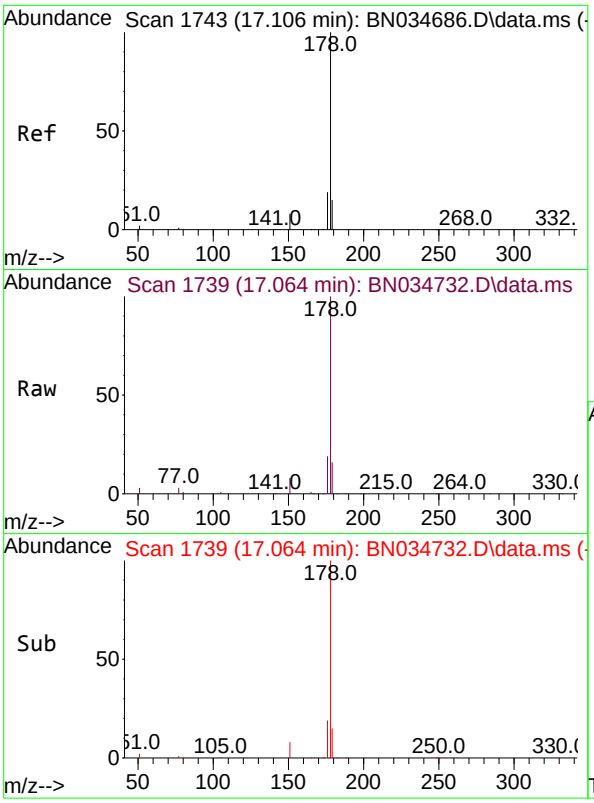


#24
Pentachlorophenol
Concen: 0.409 ng
RT: 16.679 min Scan# 1708
Delta R.T. -0.042 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:266 Resp: 2169

Ion	Ratio	Lower	Upper
266	100		
264	62.4	49.4	74.2
268	63.2	50.5	75.7



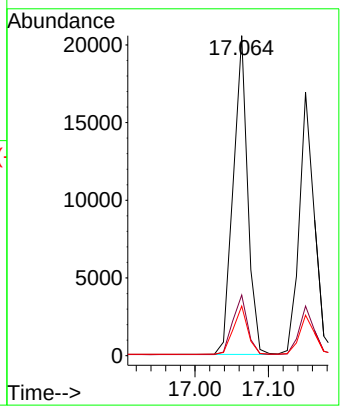


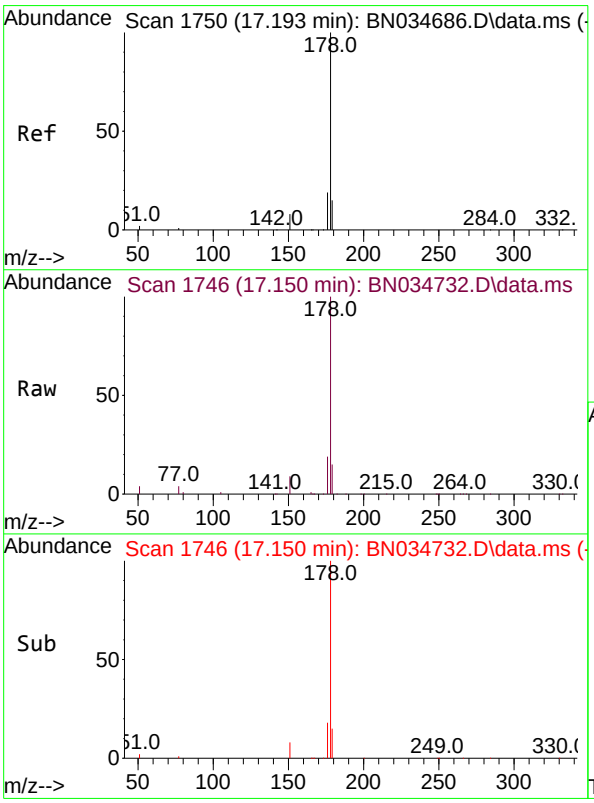
#25
Phenanthrene
Concen: 0.360 ng
RT: 17.064 min Scan# 1
Delta R.T. -0.043 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:178 Resp: 28002

Ion	Ratio	Lower	Upper
178	100		
176	19.1	15.4	23.2
179	15.1	12.2	18.4

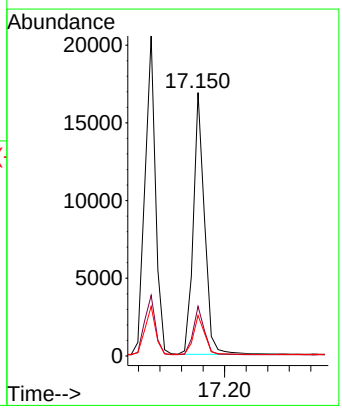


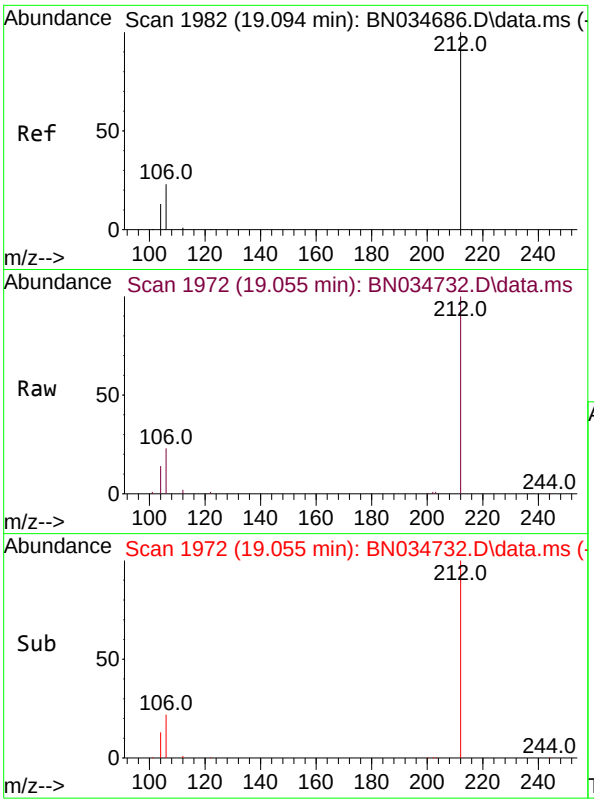


#26
Anthracene
Concen: 0.353 ng
RT: 17.150 min Scan# 1746
Delta R.T. -0.043 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:178 Resp: 24377

Ion	Ratio	Lower	Upper
178	100		
176	18.5	14.9	22.3
179	15.1	12.2	18.2



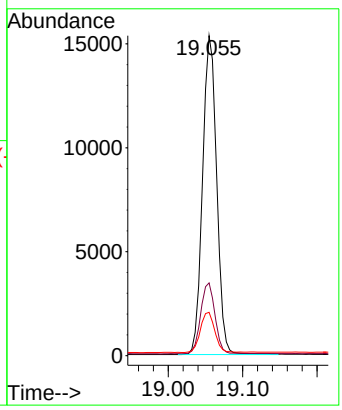


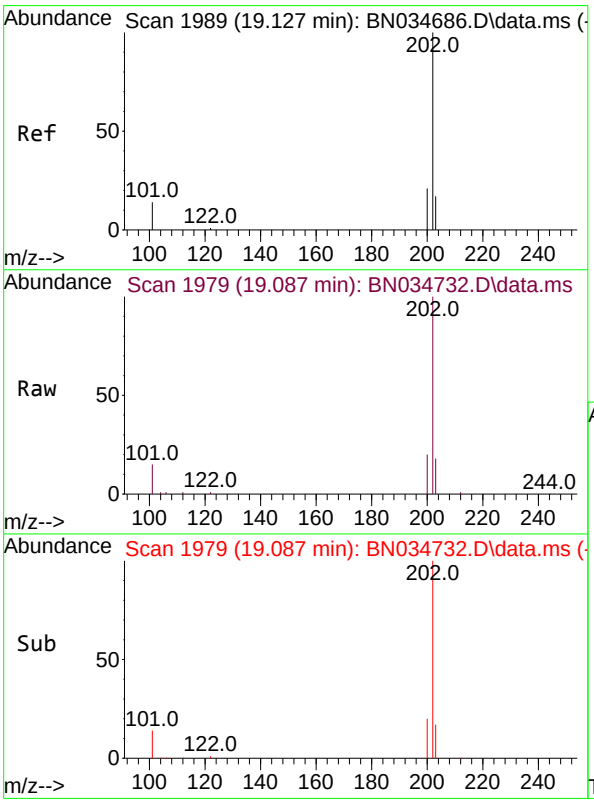
#27
Fluoranthene-d10
Concen: 0.346 ng
RT: 19.055 min Scan# 1
Delta R.T. -0.039 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:212 Resp: 20172

Ion	Ratio	Lower	Upper
212	100		
106	22.7	17.8	26.8
104	12.9	10.2	15.4

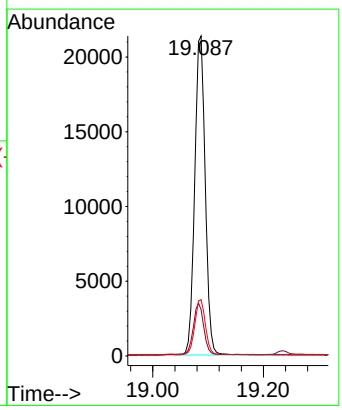


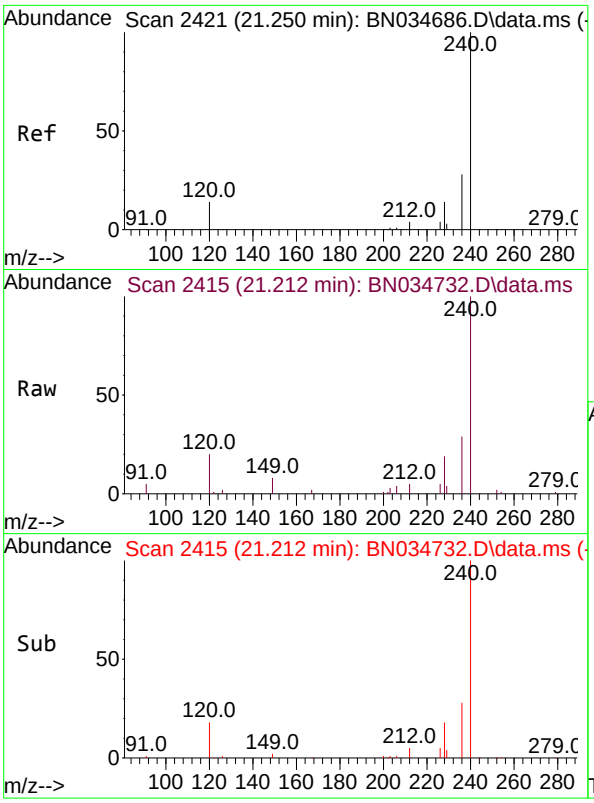


#28
Fluoranthene
Concen: 0.348 ng
RT: 19.087 min Scan# 1979
Delta R.T. -0.039 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:202 Resp: 28255

Ion	Ratio	Lower	Upper
202	100		
101	16.2	12.8	19.2
203	17.2	13.5	20.3



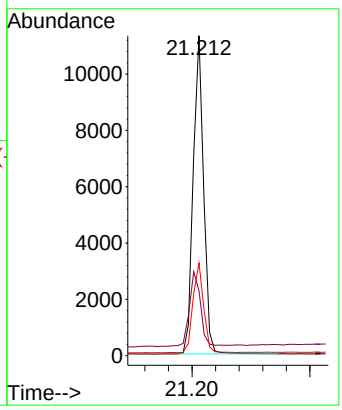


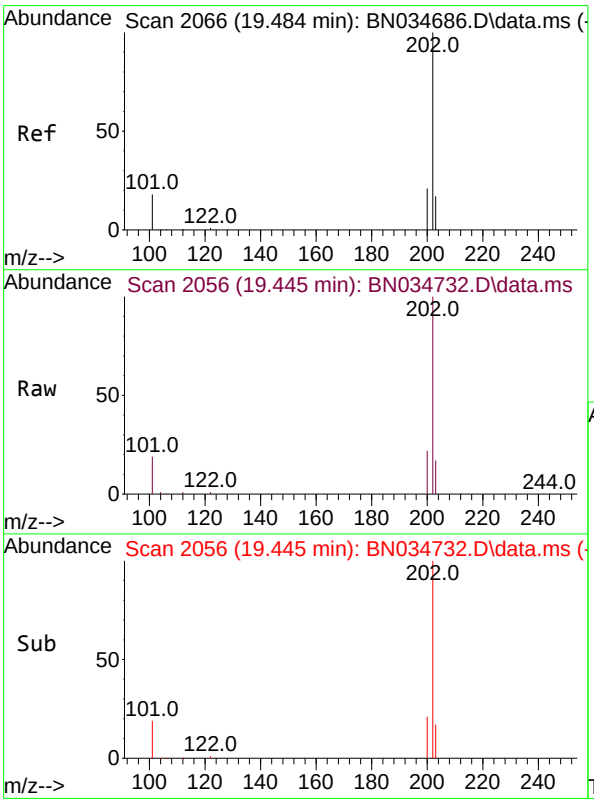
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.212 min Scan# 24
Delta R.T. -0.038 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:240 Resp: 13865

Ion	Ratio	Lower	Upper
240	100		
120	20.3	14.2	21.2
236	29.0	23.1	34.7

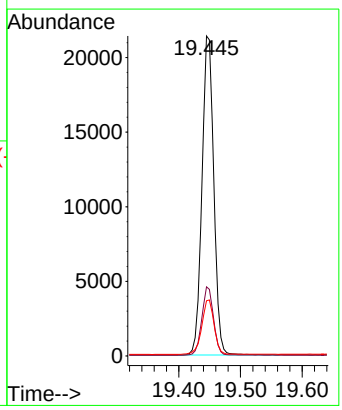


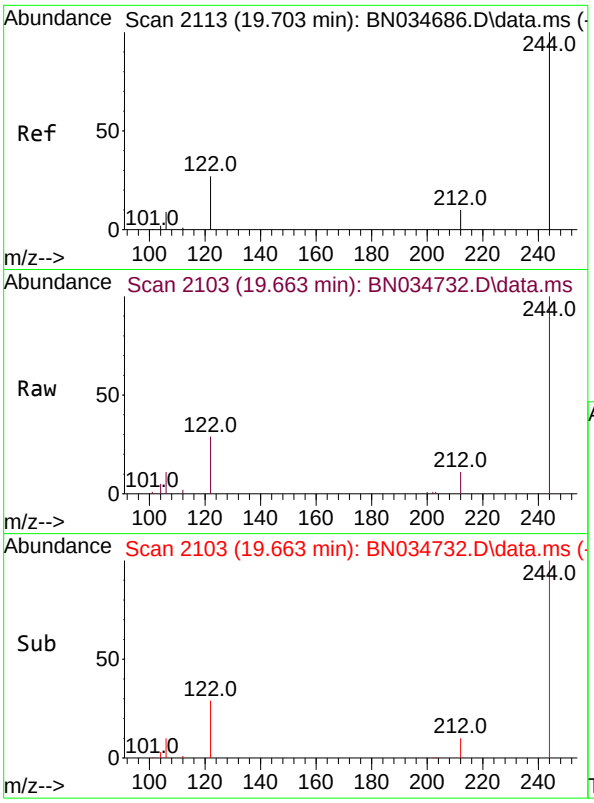


#30
Pyrene
Concen: 0.399 ng
RT: 19.445 min Scan# 2056
Delta R.T. -0.039 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:202 Resp: 28410

Ion	Ratio	Lower	Upper
202	100		
200	21.1	16.6	25.0
203	17.8	14.2	21.4



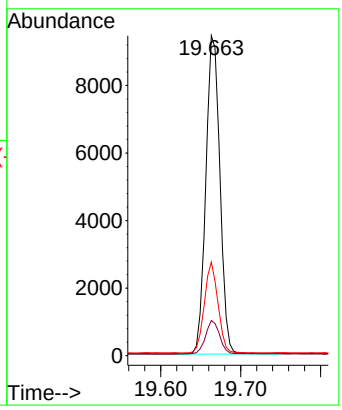


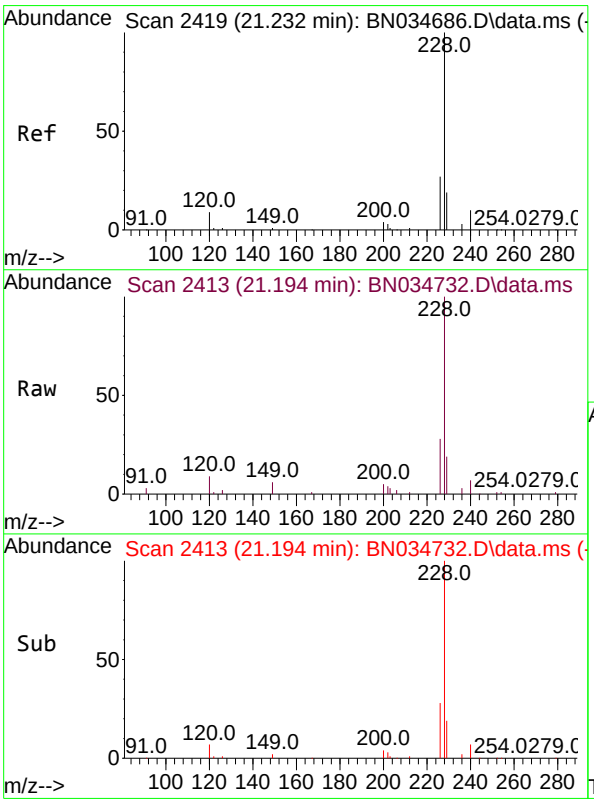
#31
Terphenyl-d14
Concen: 0.407 ng
RT: 19.663 min Scan# 21
Delta R.T. -0.039 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:244 Resp: 11526

Ion	Ratio	Lower	Upper
244	100		
212	11.0	8.6	13.0
122	29.3	22.3	33.5

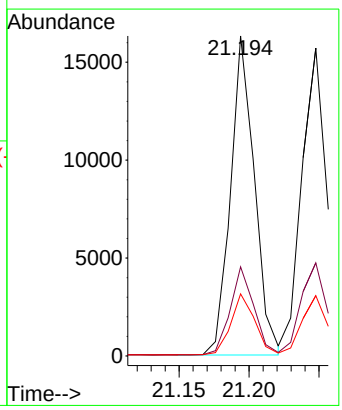


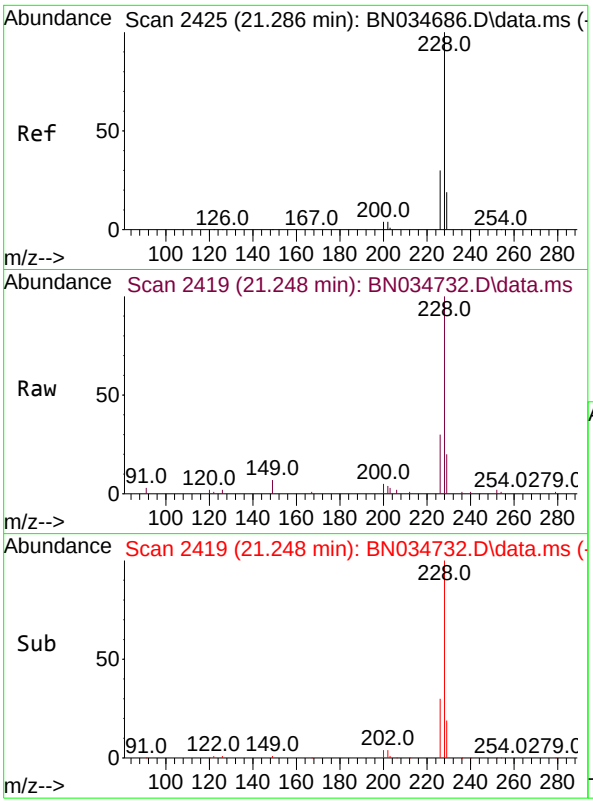


#32
Benzo(a)anthracene
Concen: 0.365 ng
RT: 21.194 min Scan# 2413
Delta R.T. -0.038 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:228 Resp: 19350

Ion	Ratio	Lower	Upper
228	100		
226	27.8	22.0	33.0
229	19.4	15.6	23.4



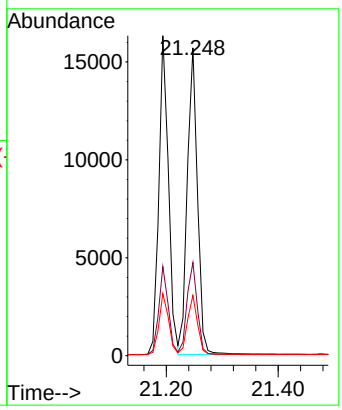


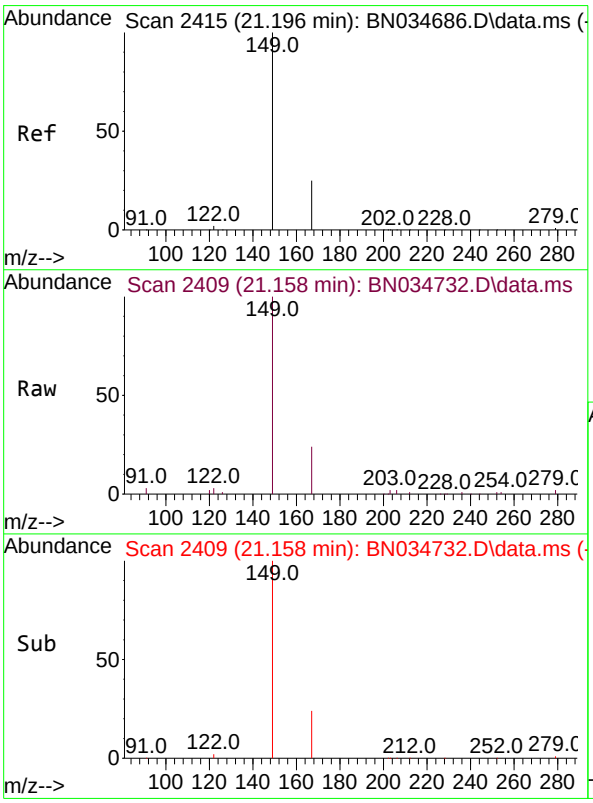
#33
Chrysene
Concen: 0.361 ng
RT: 21.248 min Scan# 24
Delta R.T. -0.038 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:228 Resp: 19781

Ion	Ratio	Lower	Upper
228	100		
226	30.2	24.1	36.1
229	19.6	15.8	23.8

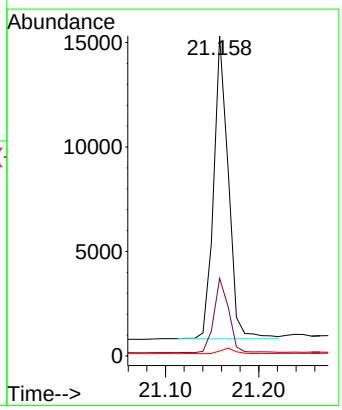


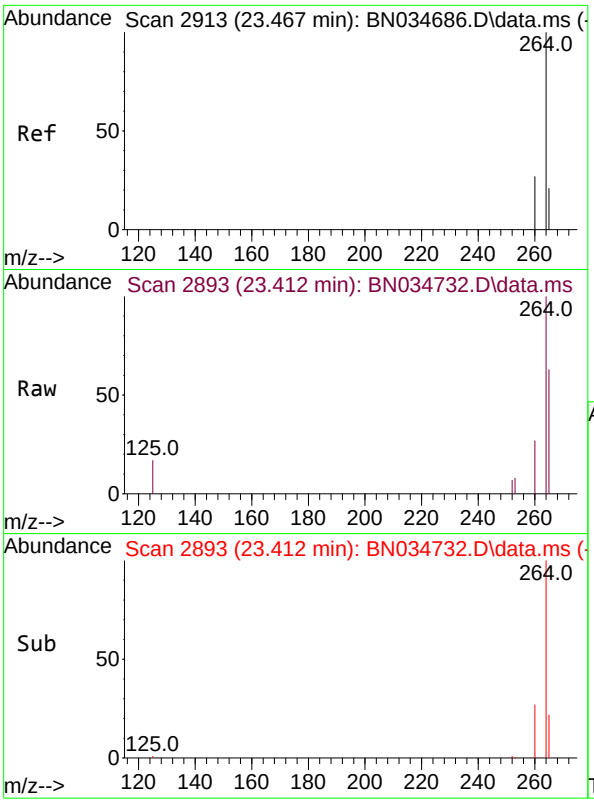


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.524 ng
RT: 21.158 min Scan# 2409
Delta R.T. -0.038 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:149 Resp: 15745

Ion	Ratio	Lower	Upper
149	100		
167	24.9	19.7	29.5
279	1.8	1.8	2.6



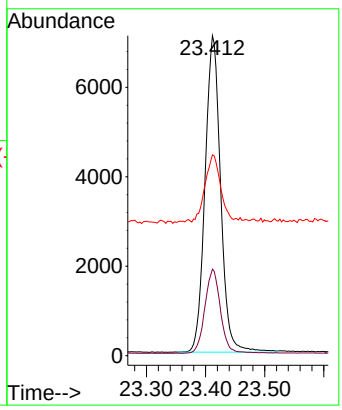


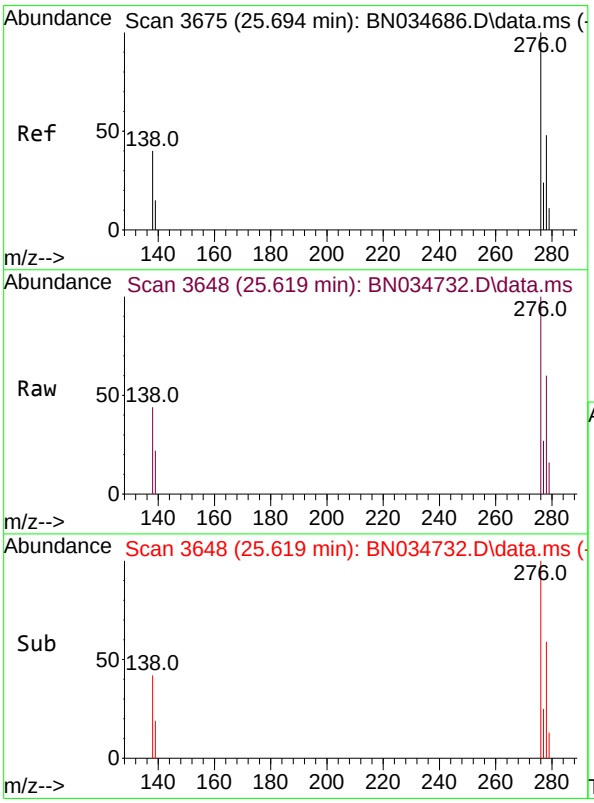
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.412 min Scan# 2
Delta R.T. -0.055 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:264 Resp: 12945

Ion	Ratio	Lower	Upper
264	100		
260	27.0	21.9	32.9
265	62.7	60.6	91.0

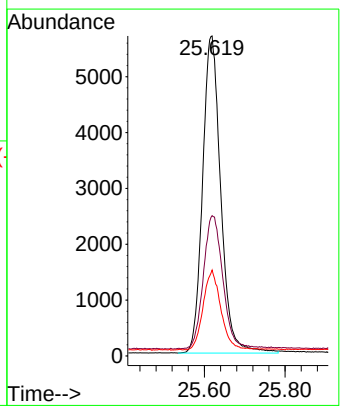


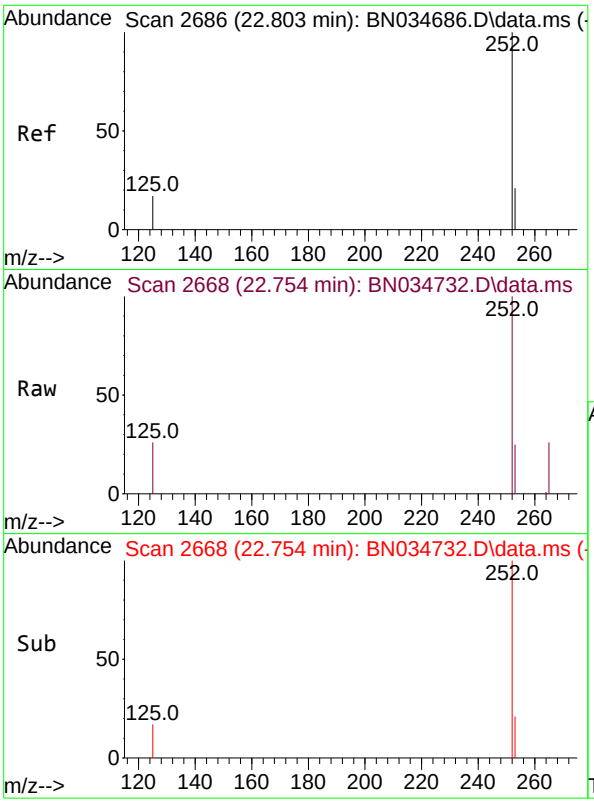


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.357 ng
RT: 25.619 min Scan# 3648
Delta R.T. -0.075 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:276 Resp: 17779

Ion	Ratio	Lower	Upper
276	100		
138	44.6	35.1	52.7
277	24.4	19.7	29.5



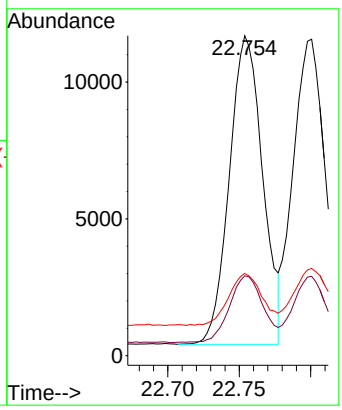


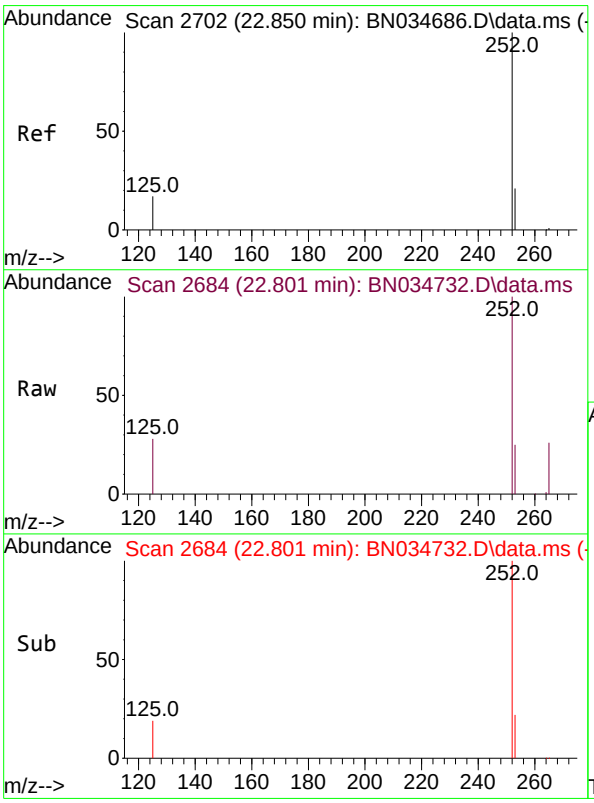
#37
Benzo(b)fluoranthene
Concen: 0.353 ng
RT: 22.754 min Scan# 2
Delta R.T. -0.049 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:252 Resp: 18264

Ion	Ratio	Lower	Upper
252	100		
253	24.9	20.0	30.0
125	25.7	20.9	31.3

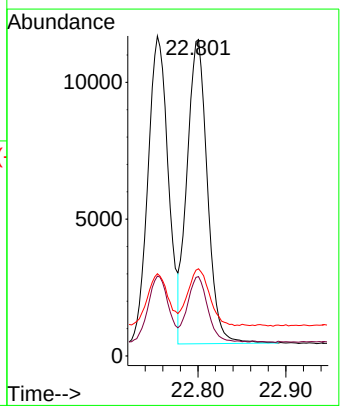


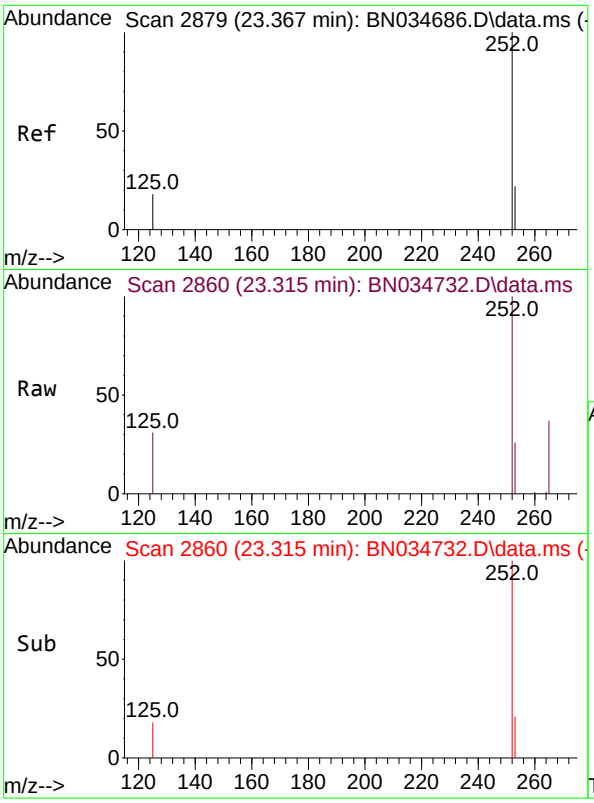


#38
Benzo(k)fluoranthene
Concen: 0.351 ng
RT: 22.801 min Scan# 2684
Delta R.T. -0.049 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:252 Resp: 17879

Ion	Ratio	Lower	Upper
252	100		
253	25.1	20.6	31.0
125	27.6	21.6	32.4



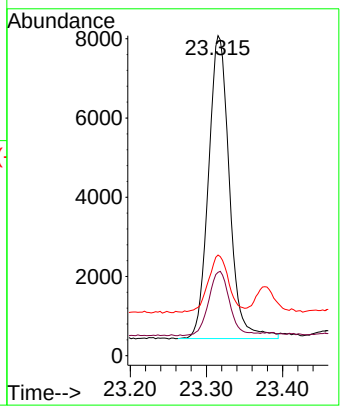


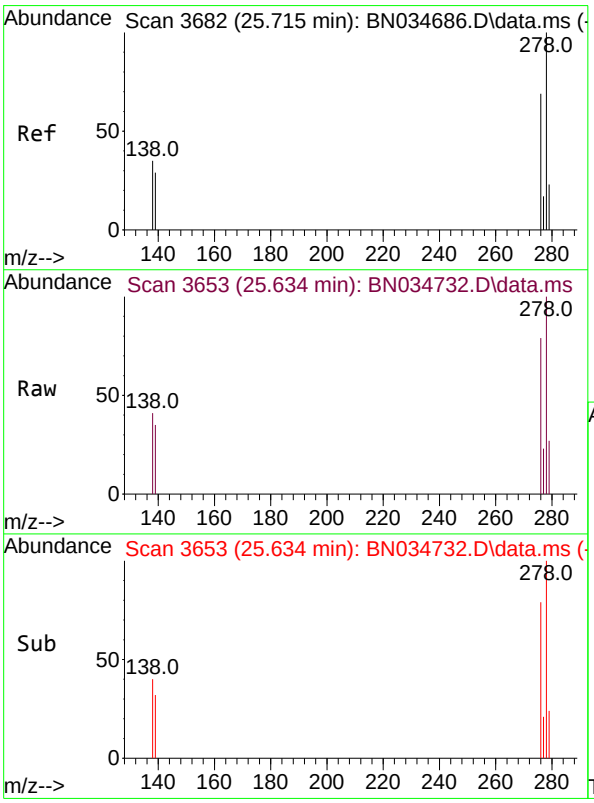
#39
Benzo(a)pyrene
Concen: 0.352 ng
RT: 23.315 min Scan# 2
Delta R.T. -0.052 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:252 Resp: 14600

Ion	Ratio	Lower	Upper
252	100		
253	26.0	22.2	33.4
125	31.4	26.0	39.0

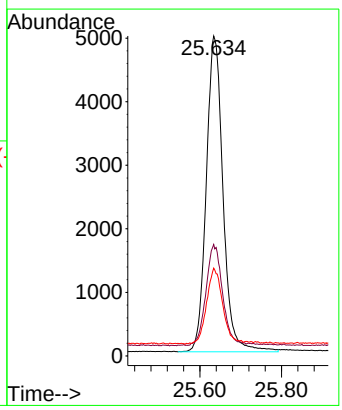


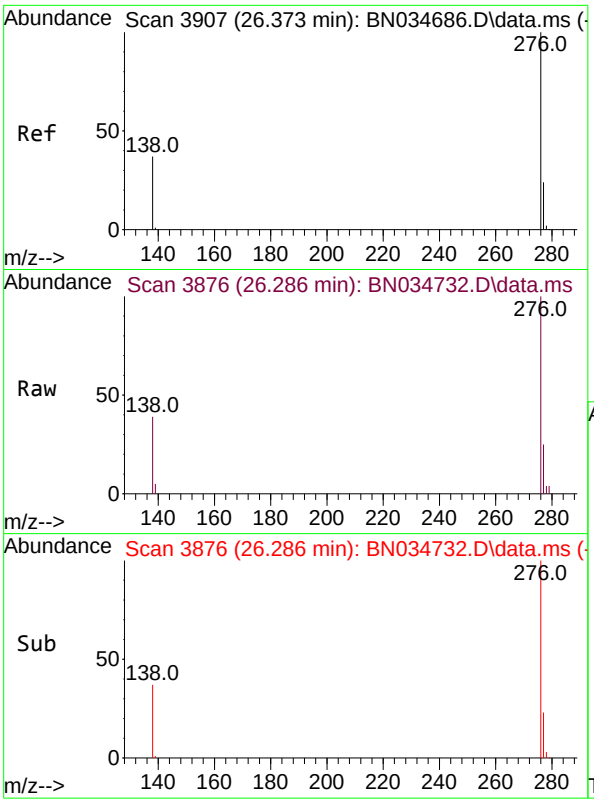


#40
Dibenzo(a,h)anthracene
Concen: 0.360 ng
RT: 25.634 min Scan# 3653
Delta R.T. -0.081 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Tgt Ion:278 Resp: 14173

Ion	Ratio	Lower	Upper
278	100		
139	34.8	25.4	38.2
279	27.5	22.4	33.6



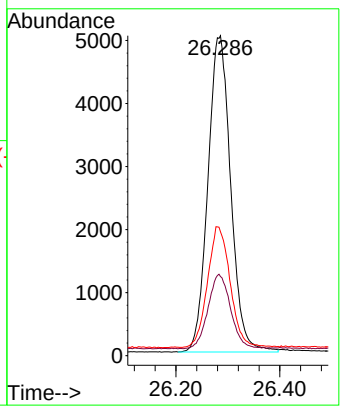


#41
Benzo(g,h,i)perylene
Concen: 0.353 ng
RT: 26.286 min Scan# 3
Delta R.T. -0.087 min
Lab File: BN034732.D
Acq: 25 Oct 2024 20:41

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:276 Resp: 15303

Ion	Ratio	Lower	Upper
276	100		
277	24.7	21.3	31.9
138	38.8	31.9	47.9



Evaluate Continuing Calibration Report

Sample Results: **BN034732.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102524\
Data File : BN034732.D
Acq On : 25 Oct 2024 20:41
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Oct 25 22:43:59 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Oct 25 22:11:36 2024
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	138	-0.06
2		1,4-Dioxane	0.532	0.481	9.6	136	-0.04
3		n-Nitrosodimethylamine	0.775	0.676	12.8	132	-0.04
4	S	2-Fluorophenol	1.189	1.284	-8.0	165#	-0.06
5	S	Phenol-d6	1.568	1.673	-6.7	166#	-0.06
6		bis(2-Chloroethyl)ether	1.274	1.191	6.5	144	-0.06
7	I	Naphthalene-d8	1.000	1.000	0.0	140	-0.06
8	S	Nitrobenzene-d5	0.336	0.311	7.4	148	-0.06
9		Naphthalene	1.107	1.007	9.0	143	-0.06
10		Hexachlorobutadiene	0.166	0.149	10.2	141	-0.06
11	SURR	2-Methylnaphthalene-d10	0.550	0.499	9.3	146	-0.06
12		2-Methylnaphthalene	0.687	0.625	9.0	146	-0.06
13	I	Acenaphthene-d10	1.000	1.000	0.0	145	-0.06
14	S	2,4,6-Tribromophenol	0.124	0.129	-4.0	194#	-0.04
15	S	2-Fluorobiphenyl	1.590	1.375	13.5	144	-0.05
16		Acenaphthylene	1.921	1.606	16.4	147	-0.05
17		Acenaphthene	1.324	1.137	14.1	147	-0.06
18		Fluorene	1.634	1.405	14.0	147	-0.05
19	I	Phenanthrene-d10	1.000	1.000	0.0	143	-0.04
20		4,6-Dinitro-2-methylphenol	0.056	0.046	17.9	154#	-0.05
21		4-Bromophenyl-phenylether	0.213	0.196	8.0	147	-0.04
22		Hexachlorobenzene	0.231	0.209	9.5	141	-0.04
23		Atrazine	0.168	0.160	4.8	163#	-0.04
24		Pentachlorophenol	0.082	0.084	-2.4	186#	-0.04
25		Phenanthrene	1.202	1.080	10.1	145	-0.04
26		Anthracene	1.067	0.941	11.8	144	-0.04
27	SURR	Fluoranthene-d10	0.901	0.778	13.7	142	-0.04
28		Fluoranthene	1.253	1.090	13.0	142	-0.04
29	I	Chrysene-d12	1.000	1.000	0.0	130	-0.04
30		Pyrene	2.055	2.049	0.3	142	-0.04
31	S	Terphenyl-d14	0.817	0.831	-1.7	147	-0.04
32		Benzo(a)anthracene	1.528	1.396	8.6	133	-0.04
33		Chrysene	1.581	1.427	9.7	129	-0.04
34		Bis(2-ethylhexyl)phthalate	0.867	1.136	-31.0#	205#	-0.04
35	I	Perylene-d12	1.000	1.000	0.0	135	-0.05
36		Indeno(1,2,3-cd)pyrene	1.541	1.373	10.9	131	-0.08
37		Benzo(b)fluoranthene	1.597	1.411	11.6	129	-0.05
38		Benzo(k)fluoranthene	1.576	1.381	12.4	134	-0.05
39	C	Benzo(a)pyrene	1.282	1.128	12.0	131	-0.05
40		Dibenzo(a,h)anthracene	1.215	1.095	9.9	133	-0.08
41		Benzo(g,h,i)perylene	1.340	1.182	11.8	126	-0.09

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Sample Results: **BN034732.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102524\
Data File : BN034732.D
Acq On : 25 Oct 2024 20:41
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Oct 25 22:43:59 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Oct 25 22:11:36 2024
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	138	-0.06
2		1,4-Dioxane	0.400	0.361	9.8	136	-0.04
3		n-Nitrosodimethylamine	0.400	0.349	12.8	132	-0.04
4	S	2-Fluorophenol	0.400	0.432	-8.0	165	-0.06
5	S	Phenol-d6	0.400	0.427	-6.7	166	-0.06
6		bis(2-Chloroethyl)ether	0.400	0.374	6.5	144	-0.06
7	I	Naphthalene-d8	0.400	0.400	0.0	140	-0.06
8	S	Nitrobenzene-d5	0.400	0.370	7.5	148	-0.06
9		Naphthalene	0.400	0.364	9.0	143	-0.06
10		Hexachlorobutadiene	0.400	0.360	10.0	141	-0.06
11	SURR	2-Methylnaphthalene-d10	0.400	0.363	9.3	146	-0.06
12		2-Methylnaphthalene	0.400	0.364	9.0	146	-0.06
13	I	Acenaphthene-d10	0.400	0.400	0.0	145	-0.06
14	S	2,4,6-Tribromophenol	0.400	0.417	-4.2	194	-0.04
15	S	2-Fluorobiphenyl	0.400	0.346	13.5	144	-0.05
16		Acenaphthylene	0.400	0.334	16.5	147	-0.05
17		Acenaphthene	0.400	0.343	14.2	147	-0.06
18		Fluorene	0.400	0.344	14.0	147	-0.05
19	I	Phenanthrene-d10	0.400	0.400	0.0	143	-0.04
20		4,6-Dinitro-2-methylphenol	0.400	0.331	17.3	154	-0.05
21		4-Bromophenyl-phenylether	0.400	0.368	8.0	147	-0.04
22		Hexachlorobenzene	0.400	0.361	9.8	141	-0.04
23		Atrazine	0.400	0.383	4.3	163	-0.04
24		Pentachlorophenol	0.400	0.409	-2.2	186	-0.04
25		Phenanthrene	0.400	0.360	10.0	145	-0.04
26		Anthracene	0.400	0.353	11.8	144	-0.04
27	SURR	Fluoranthene-d10	0.400	0.346	13.5	142	-0.04
28		Fluoranthene	0.400	0.348	13.0	142	-0.04
29	I	Chrysene-d12	0.400	0.400	0.0	130	-0.04
30		Pyrene	0.400	0.399	0.3	142	-0.04
31	S	Terphenyl-d14	0.400	0.407	-1.7	147	-0.04
32		Benzo(a)anthracene	0.400	0.365	8.8	133	-0.04
33		Chrysene	0.400	0.361	9.8	129	-0.04
34		Bis(2-ethylhexyl)phthalate	0.400	0.524	-31.0#	205	-0.04
35	I	Perylene-d12	0.400	0.400	0.0	135	-0.05
36		Indeno(1,2,3-cd)pyrene	0.400	0.357	10.8	131	-0.08
37		Benzo(b)fluoranthene	0.400	0.353	11.8	129	-0.05
38		Benzo(k)fluoranthene	0.400	0.351	12.3	134	-0.05
39	C	Benzo(a)pyrene	0.400	0.352	12.0	131	-0.05
40		Dibenzo(a,h)anthracene	0.400	0.360	10.0	133	-0.08
41		Benzo(g,h,i)perylene	0.400	0.353	11.8	126	-0.09

(#) = Out of Range SPCC's out = 0 CCC's out = 0

QC SAMPLE DATA

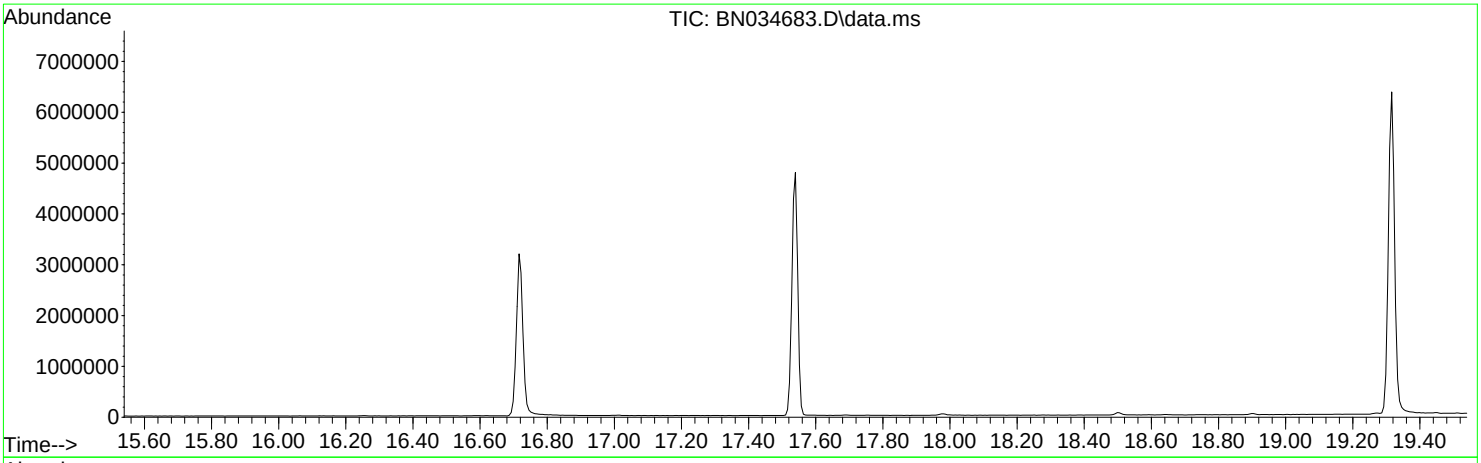
Sample Results: **BN034683.D**

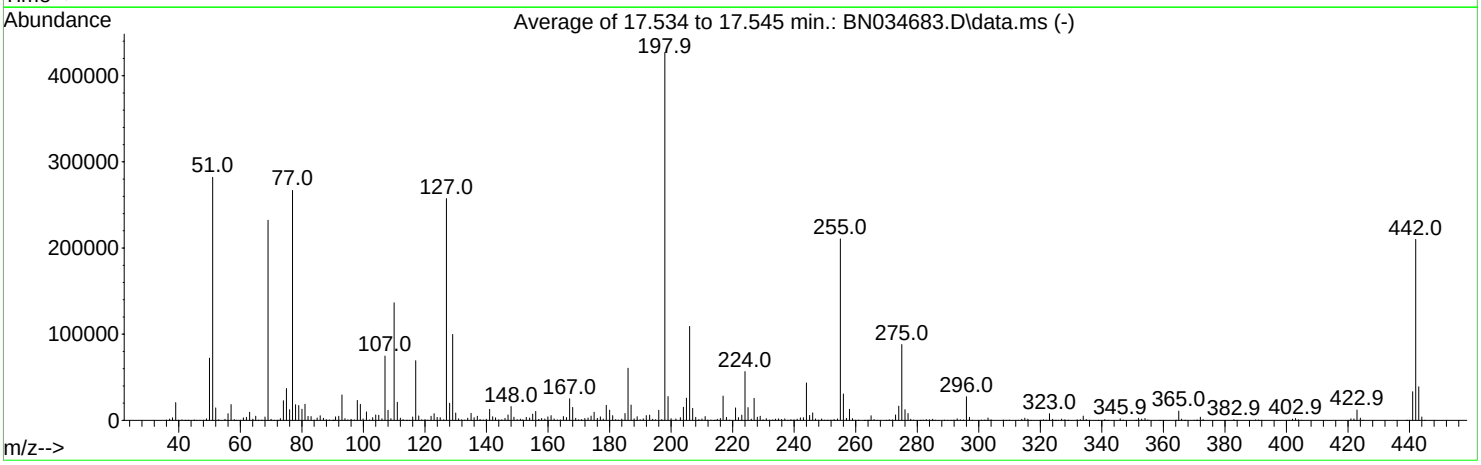
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034683.D
Acq On : 24 Oct 2024 07:59
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Oct 24 13:17:02 2024





AutoFind: Scans 2490, 2491, 2492; Background Corrected with Scan 2483

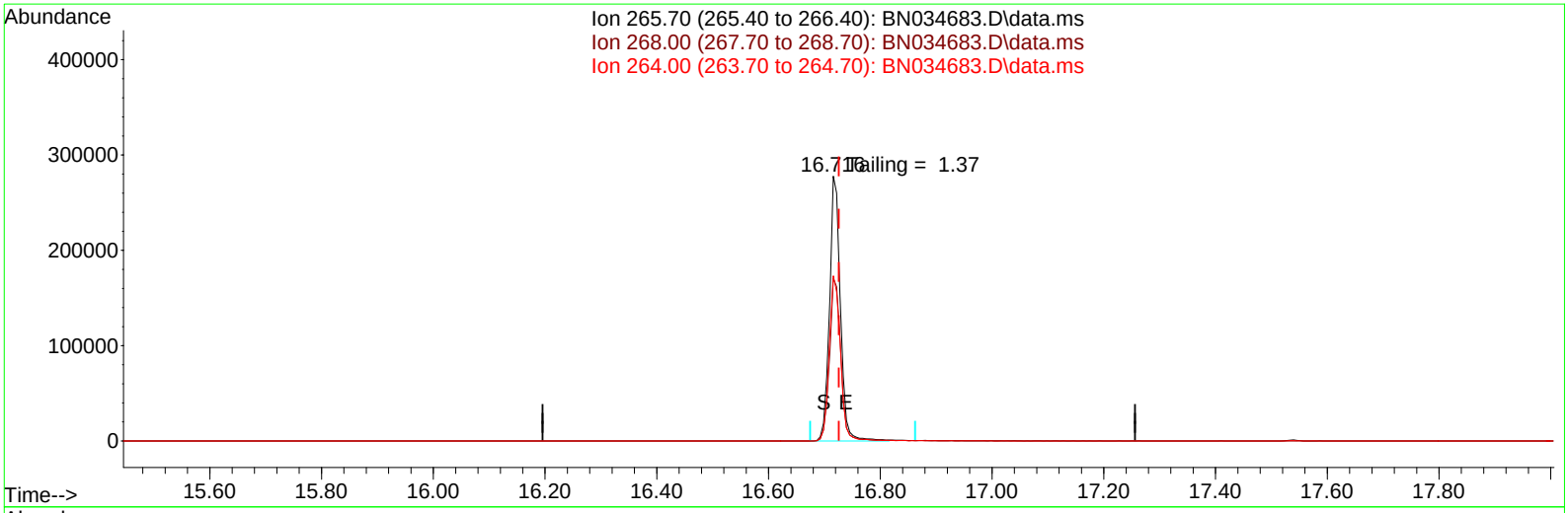
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	66.1	282114	PASS
68	69	0.00	2	1.7	3908	PASS
69	198	0.00	100	54.4	232312	PASS
70	69	0.00	2	0.5	1275	PASS
127	198	10	80	60.3	257365	PASS
197	198	0.00	2	0.2	1012	PASS
198	198	100	100	100.0	426901	PASS
199	198	5	9	6.5	27752	PASS
275	198	10	60	20.6	88117	PASS
365	198	1	100	2.5	10758	PASS
441	198	0.01	100	7.8	33160	PASS
442	442	50	100	100.0	210005	PASS
443	442	15	24	18.6	39008	PASS

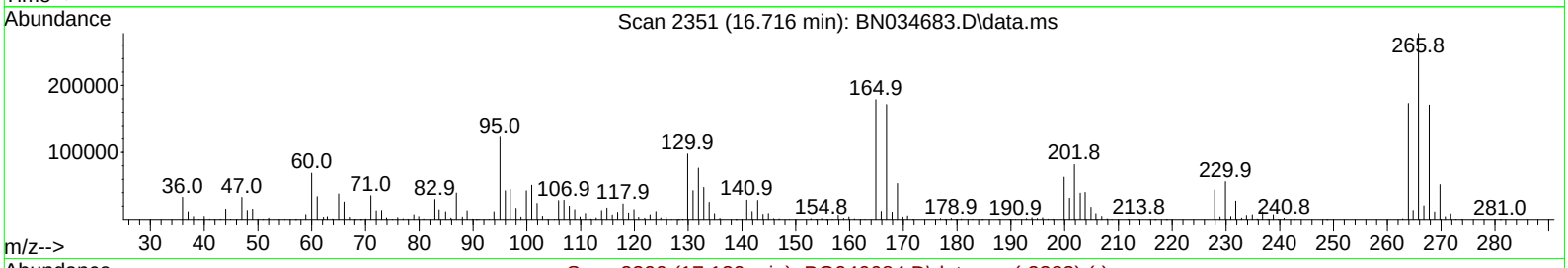
Sample Results: **BN034683.D**

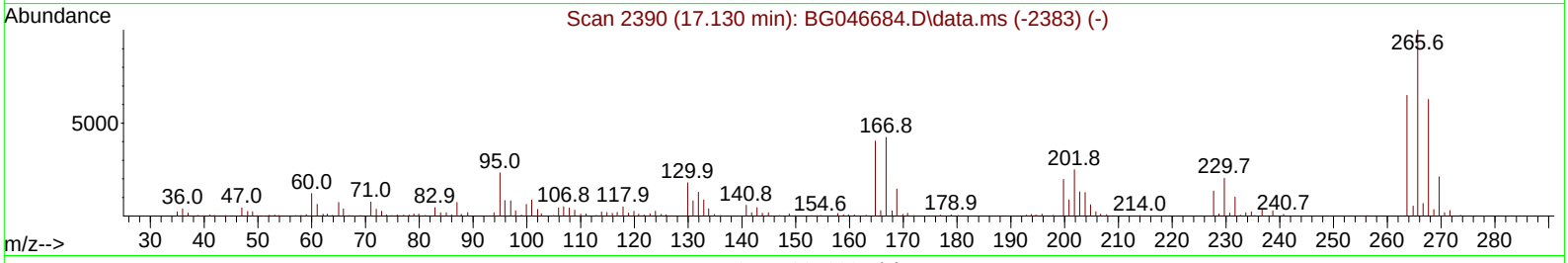
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034683.D
Acq On : 24 Oct 2024 07:59
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Oct 24 12:50:02 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Oct 23 02:40:52 2024
Response via : Initial Calibration







TIC: BN034683.D\data.ms

(70) Pentachlorophenol (C)

16.716min (-0.010) 17805.12 ng

response 375874

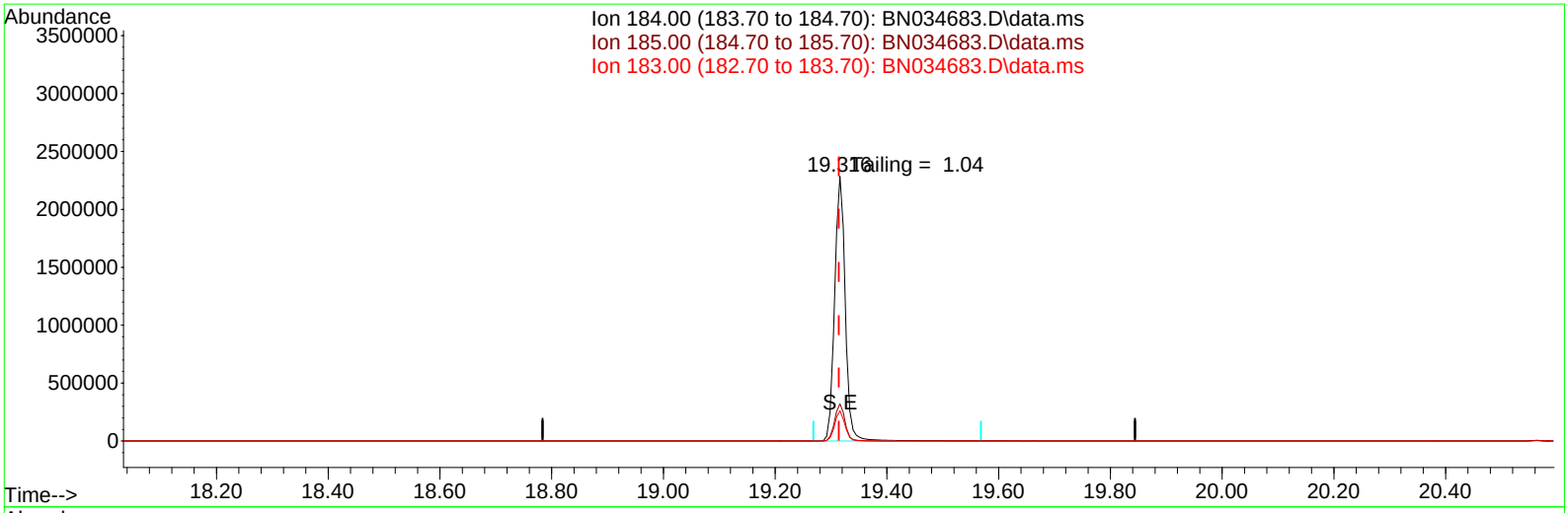
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	61.45
264.00	61.60	62.35
0.00	0.00	0.00

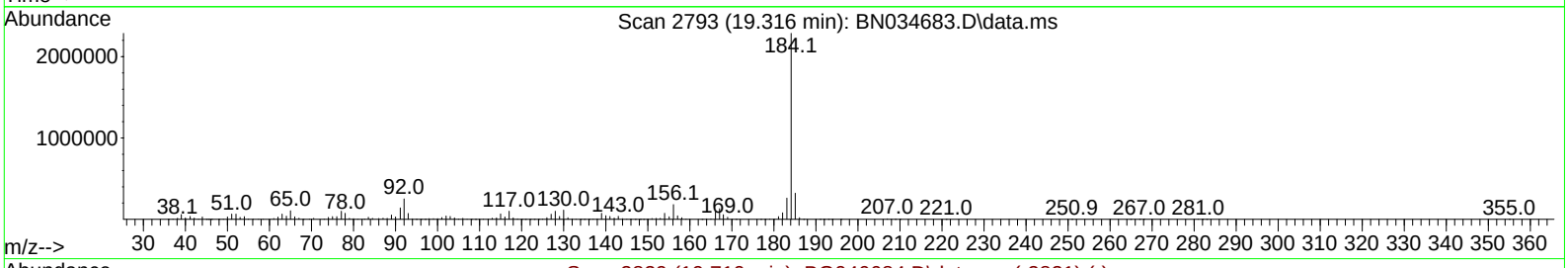
Sample Results: **BN034683.D**

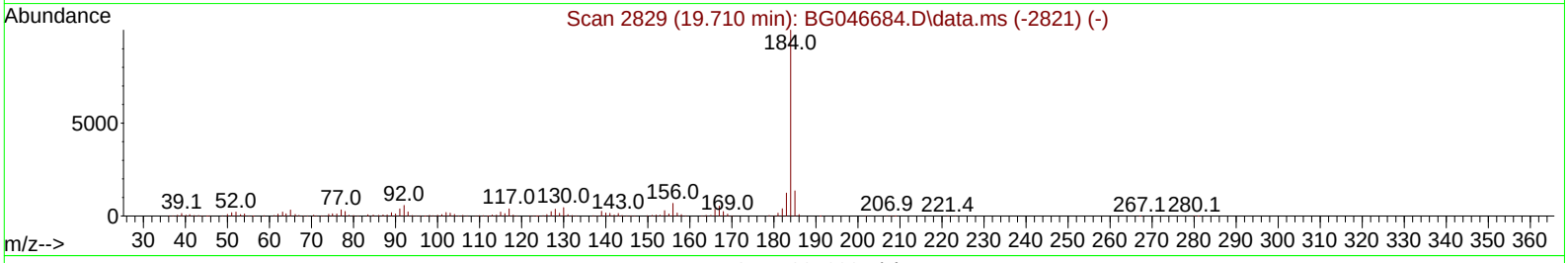
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034683.D
Acq On : 24 Oct 2024 07:59
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Oct 24 12:50:02 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Oct 23 02:40:52 2024
Response via : Initial Calibration







TIC: BN034683.D\data.ms

(77) Benzidine

19.316min (+ 0.002) 0.00 ng

response 3022437

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	14.04
183.00	13.20	11.45
0.00	0.00	0.00

Instrument :
BNA_N
ClientSampleId :
DFTPP

DDT Breakdown

Date	Instrument Name	DFTPP Data File
10/24/2024	BNA_N	BN034683.D
Compound Name	**Response**	**Retention Time**
DDT	1329547	20.563
DDD	11879	20.175
DDE	111	19.622
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
11990	1341537	0.89

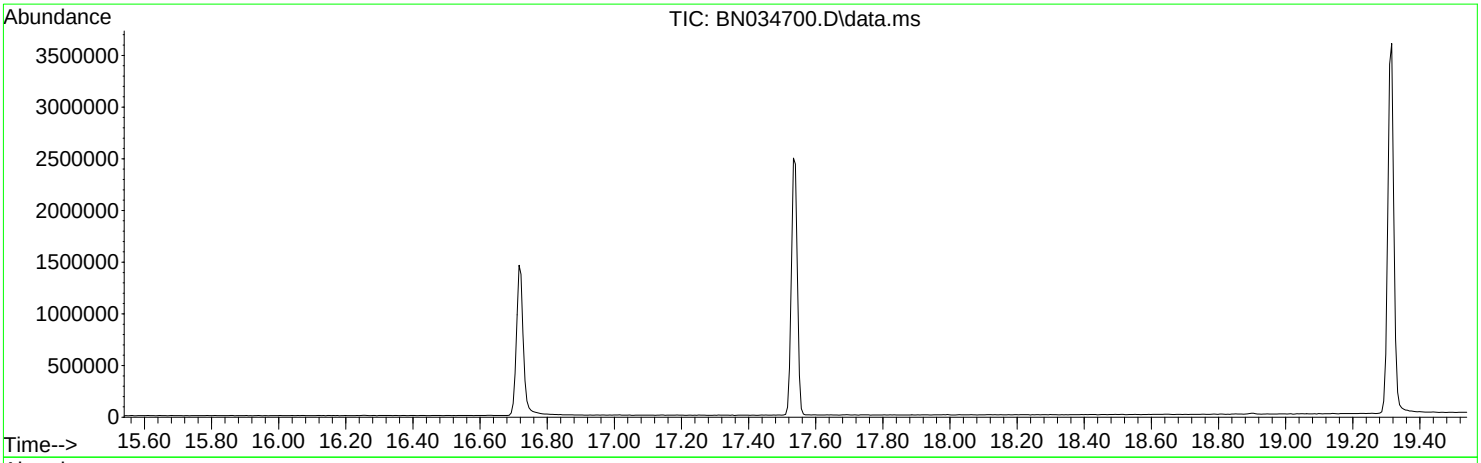
Sample Results: **BN034700.D**

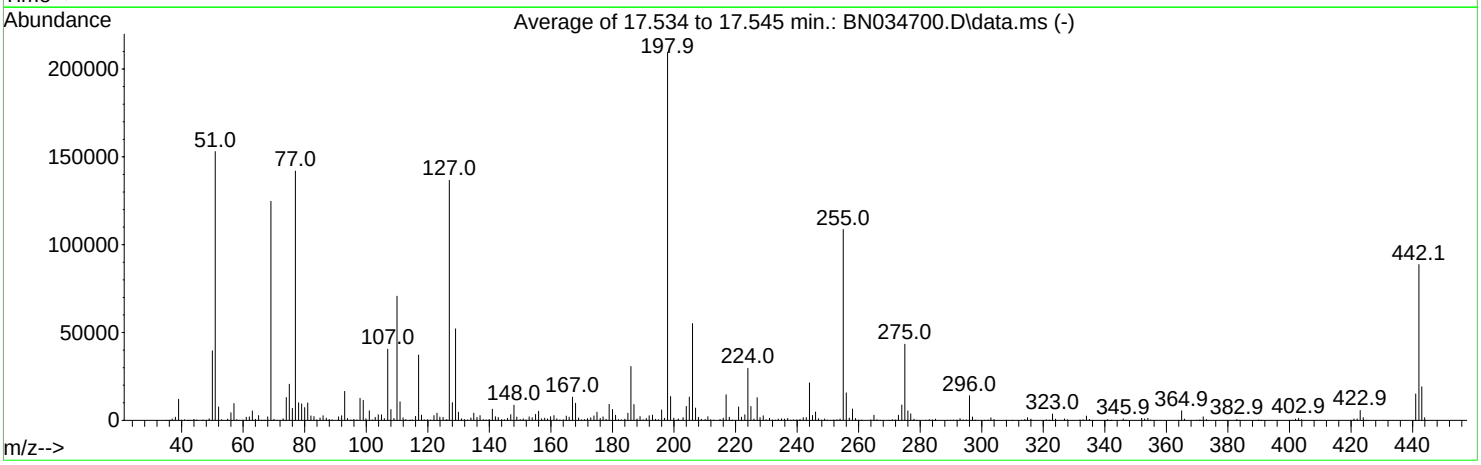
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034700.D
Acq On : 24 Oct 2024 20:22
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Oct 24 13:17:02 2024





AutoFind: Scans 2490, 2491, 2492; Background Corrected with Scan 2483

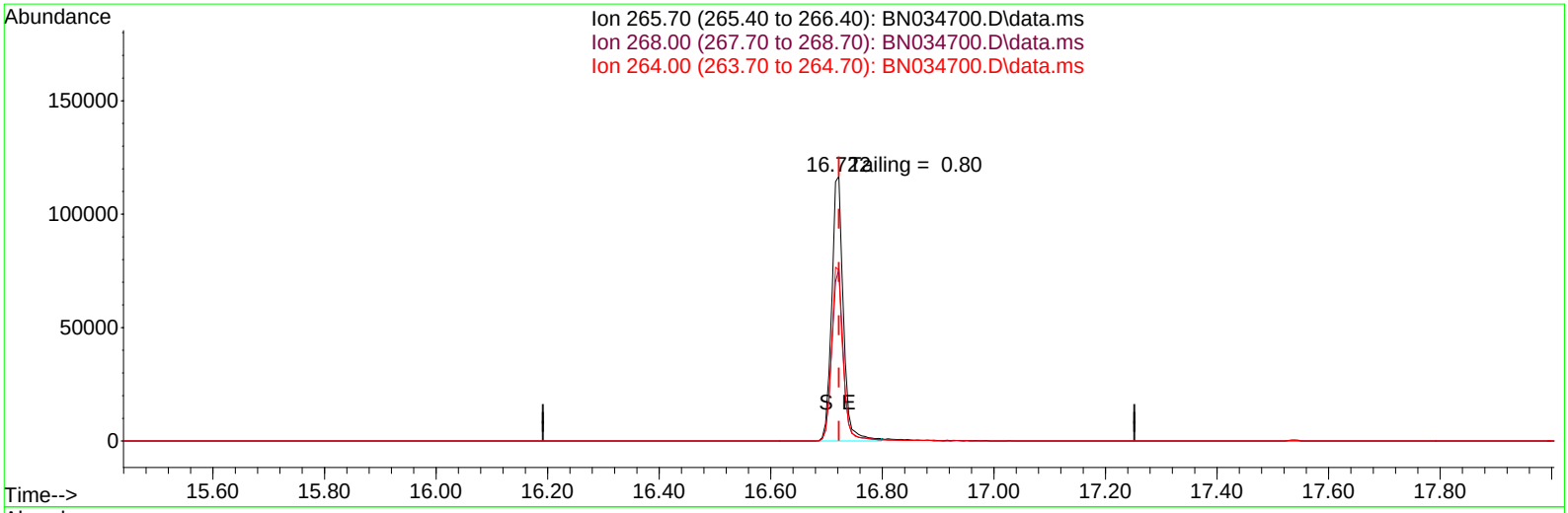
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	73.1	153072	PASS
68	69	0.00	2	1.6	1977	PASS
69	198	0.00	100	59.5	124685	PASS
70	69	0.00	2	0.5	613	PASS
127	198	10	80	65.2	136648	PASS
197	198	0.00	2	0.5	1148	PASS
198	198	100	100	100.0	209429	PASS
199	198	5	9	6.5	13571	PASS
275	198	10	60	20.7	43333	PASS
365	198	1	100	2.6	5435	PASS
441	198	0.01	100	7.2	15057	PASS
442	442	50	100	100.0	88755	PASS
443	442	15	24	21.6	19165	PASS

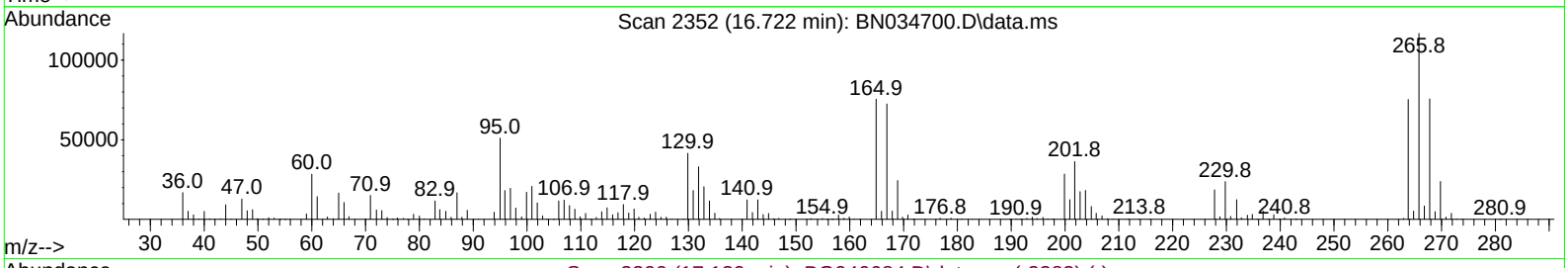
Sample Results: **BN034700.D**

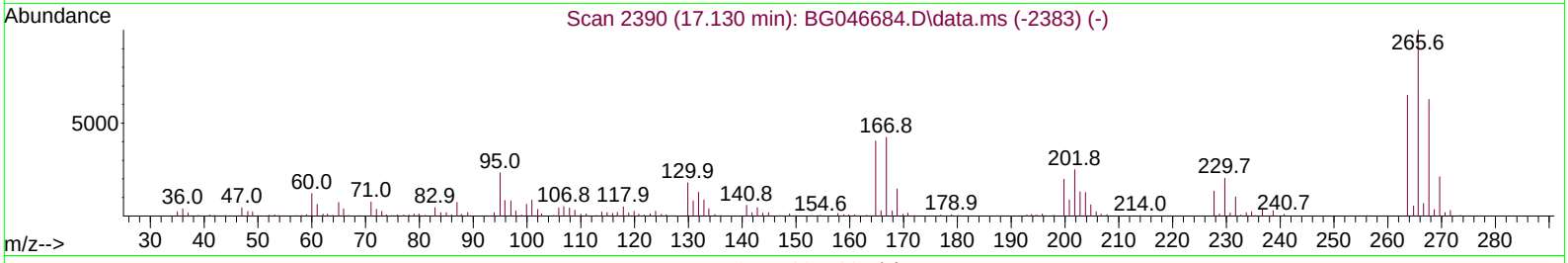
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034700.D
Acq On : 24 Oct 2024 20:22
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Oct 25 02:24:46 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Oct 25 02:24:36 2024
Response via : Initial Calibration







TIC: BN034700.D\data.ms

(70) Pentachlorophenol (C)

16.722min (0.000) 17028.21 ng

response 171184

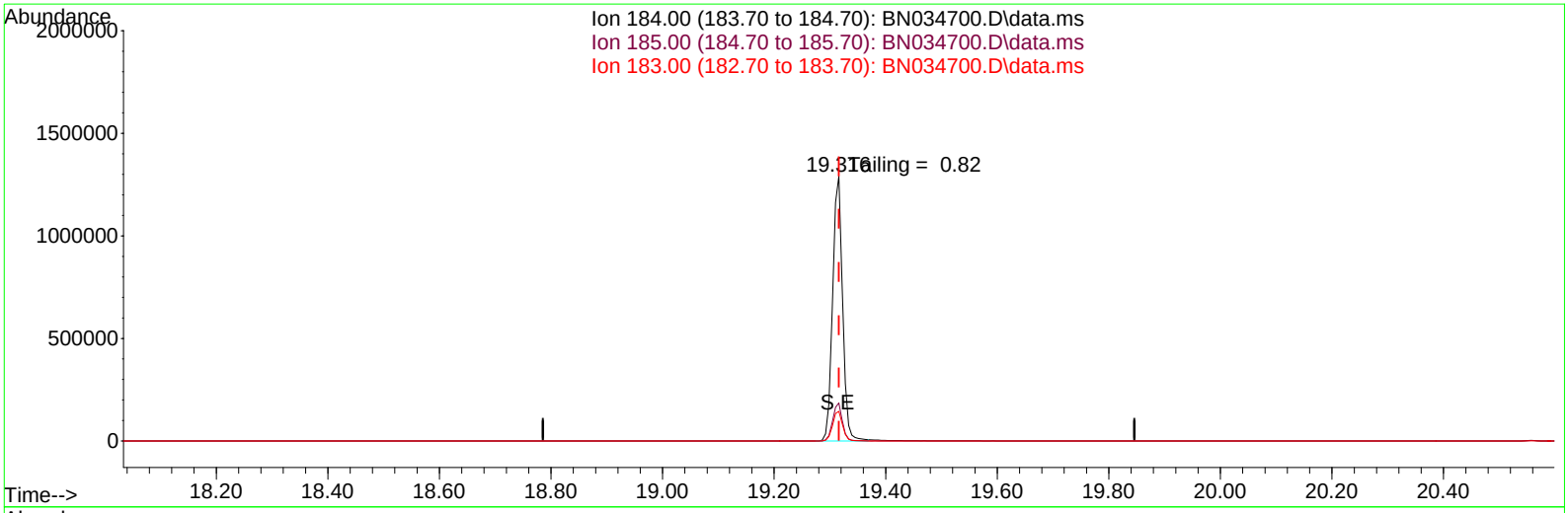
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	64.80
264.00	61.60	64.51
0.00	0.00	0.00

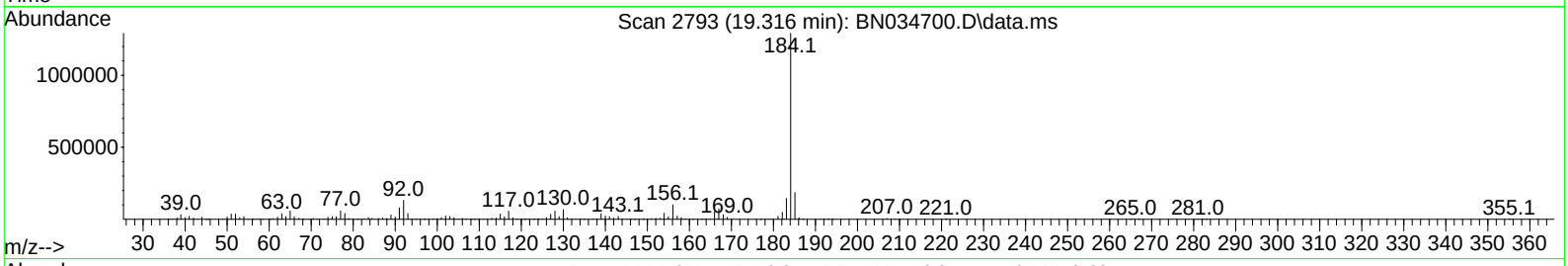
Sample Results: **BN034700.D**

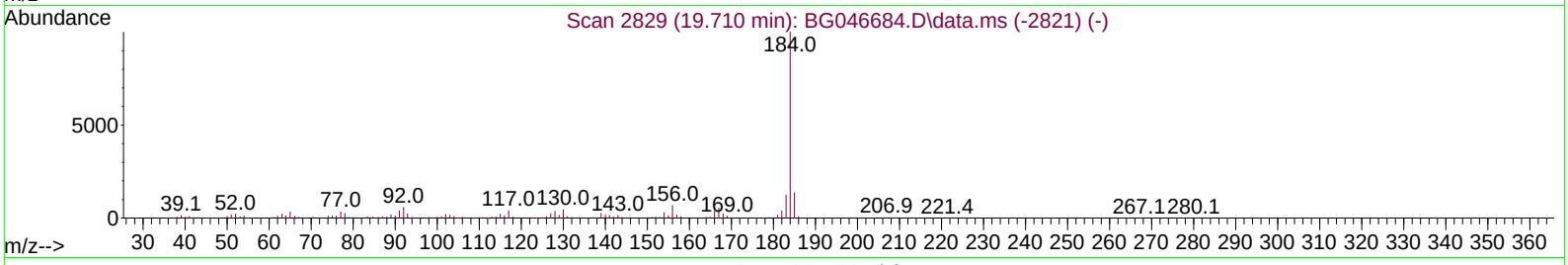
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034700.D
Acq On : 24 Oct 2024 20:22
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Oct 25 02:24:46 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Oct 25 02:24:36 2024
Response via : Initial Calibration







TIC: BN034700.D\data.ms

(77) Benzidine

19.316min (0.000) 0.00 ng

response 1621578

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	14.38
183.00	13.20	11.24
0.00	0.00	0.00

Instrument :
BNA_N
ClientSampleId :
DFTPP

DDT Breakdown

Date	Instrument Name	DFTPP Data File
10/24/2024	BNA_N	BN034700.D
Compound Name	**Response**	**Retention Time**
DDT	622621	20.557
DDD	5755	20.169
DDE	0	19.622
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
5755	628376	0.92

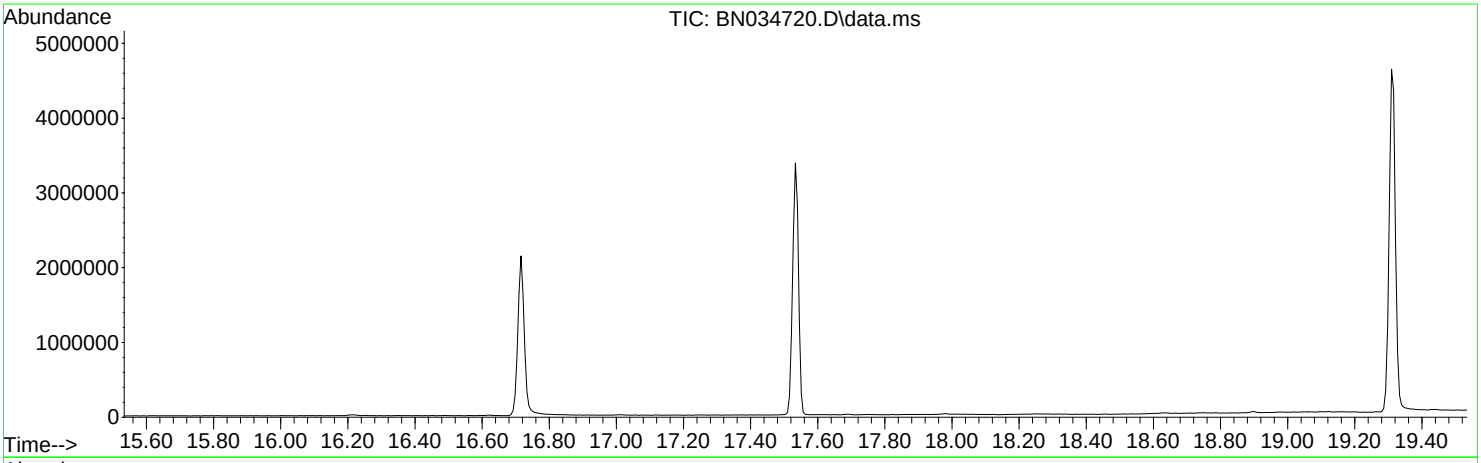
Sample Results: **BN034720.D**

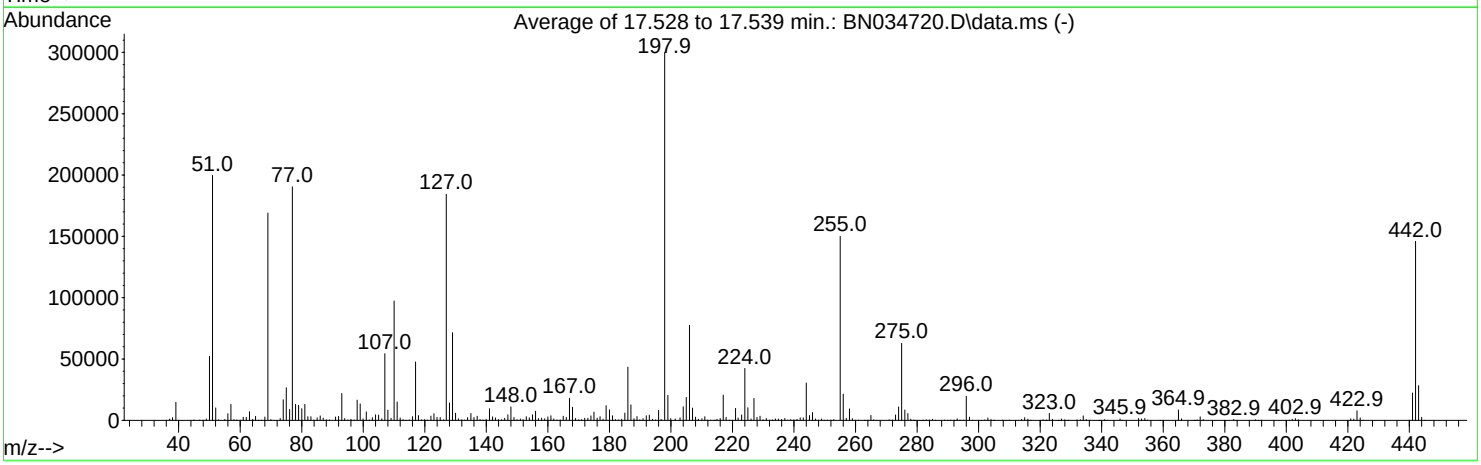
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102524\
Data File : BN034720.D
Acq On : 25 Oct 2024 09:07
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Fri Oct 25 22:11:36 2024





AutoFind: Scans 2489, 2490, 2491; Background Corrected with Scan 2482

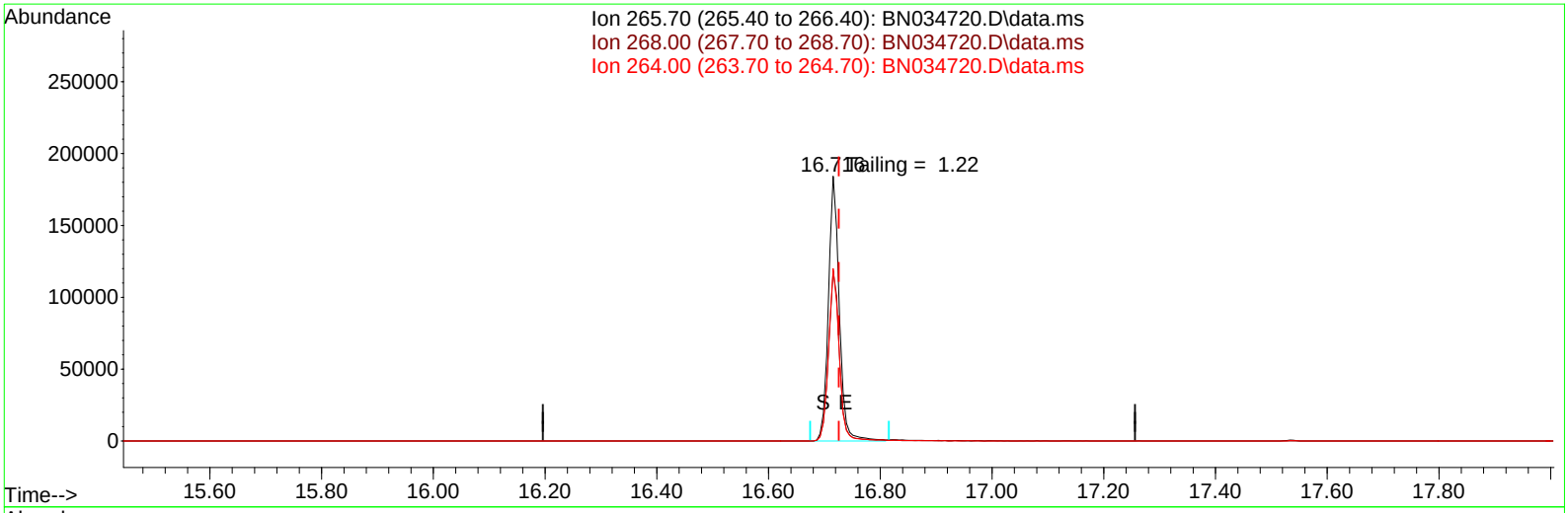
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	66.6	199713	PASS
68	69	0.00	2	1.6	2696	PASS
69	198	0.00	100	56.4	169054	PASS
70	69	0.00	2	0.4	594	PASS
127	198	10	80	61.5	184363	PASS
197	198	0.00	2	0.3	764	PASS
198	198	100	100	100.0	299904	PASS
199	198	5	9	6.8	20312	PASS
275	198	10	60	21.0	62957	PASS
365	198	1	100	2.8	8432	PASS
441	198	0.01	100	7.4	22267	PASS
442	442	50	100	100.0	145949	PASS
443	442	15	24	19.4	28343	PASS

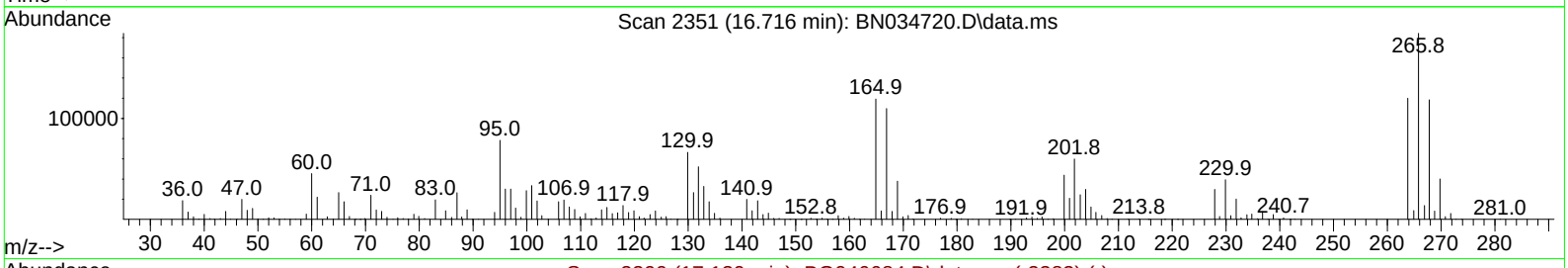
Sample Results: **BN034720.D**

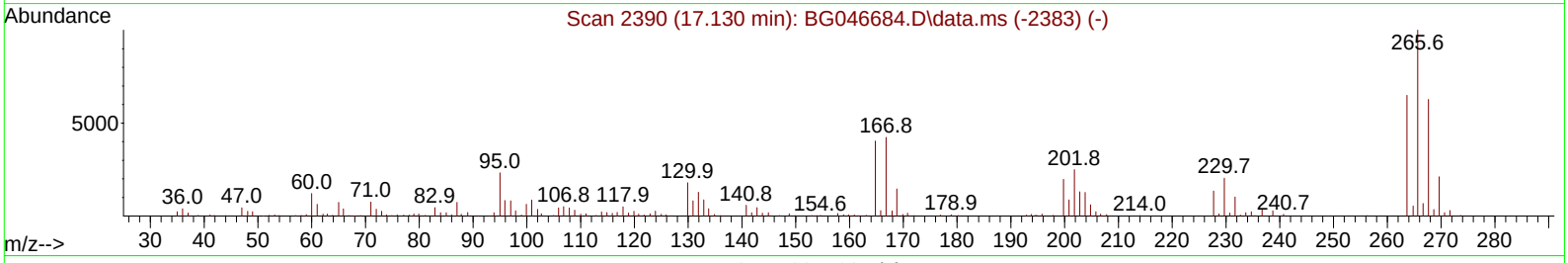
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102524\
Data File : BN034720.D
Acq On : 25 Oct 2024 09:07
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Oct 25 14:47:07 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Oct 25 02:24:36 2024
Response via : Initial Calibration







TIC: BN034720.D\data.ms

(70) Pentachlorophenol (C)

16.716min (-0.010) 16177.27 ng

response 249213

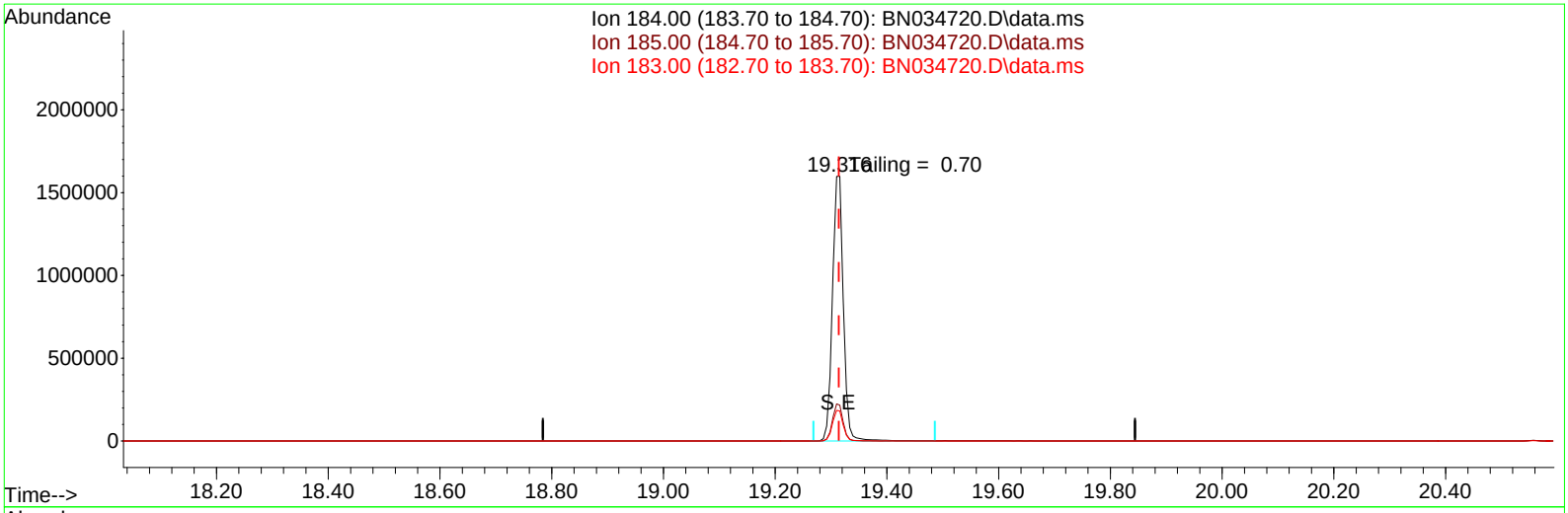
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	64.29
264.00	61.60	65.12
0.00	0.00	0.00

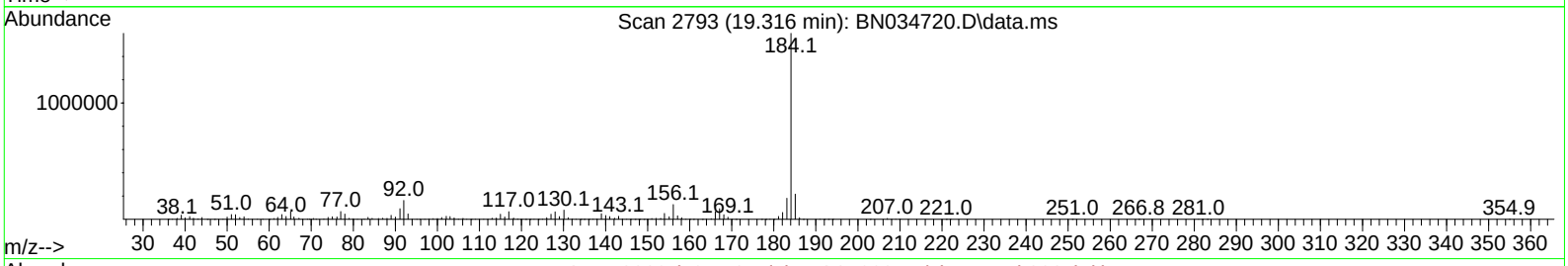
Sample Results: **BN034720.D**

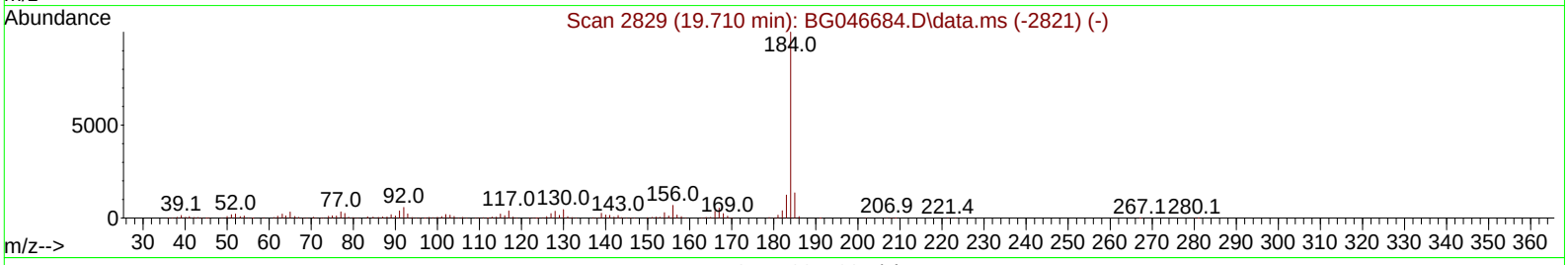
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102524\
Data File : BN034720.D
Acq On : 25 Oct 2024 09:07
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Oct 25 14:47:07 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Oct 25 02:24:36 2024
Response via : Initial Calibration







TIC: BN034720.D\data.ms

(77) Benzidine

19.316min (+ 0.002) 0.00 ng

response 2170006

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	13.53
183.00	13.20	11.36
0.00	0.00	0.00

Instrument :
BNA_N
ClientSampleId :
DFTPP

DDT Breakdown

Date	Instrument Name	DFTPP Data File
10/25/2024	BNA_N	BN034720.D
Compound Name	**Response**	**Retention Time**
DDT	888185	20.557
DDD	14092	20.169
DDE	315	19.61
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
14407	902592	1.60

Raw Data: **BN034705.D**

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	PB164282BL	SDG No.:	P4440
Lab Sample ID:	PB164282BL	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
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 :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034705.D	1	10/21/24 08:45	10/24/24 23:26	PB164282

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.33		30 - 150		83%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.34		30 - 150		86%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		85%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		91%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.39		58 - 132		97%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6450	7.712				
1146-65-2	Naphthalene-d8	17700	10.479				
15067-26-2	Acenaphthene-d10	7660	14.329				
1517-22-2	Phenanthrene-d10	13700	17.069				
1719-03-5	Chrysene-d12	7480	21.241				
1520-96-3	Perylene-d12	6740	23.461				

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

Sample Results: **BN034705.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034705.D
Acq On : 24 Oct 2024 23:26
Operator : RC/JU
Sample : PB164282BL
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB164282BL

Quant Time: Oct 25 02:08:37 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.712	152	6454	0.400	ng	0.00
7) Naphthalene-d8	10.479	136	17746	0.400	ng	0.00
13) Acenaphthene-d10	14.329	164	7655	0.400	ng	0.00
19) Phenanthrene-d10	17.069	188	13670	0.400	ng	0.00
29) Chrysene-d12	21.241	240	7475	0.400	ng	# 0.00
35) Perylene-d12	23.461	264	6736	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.322	112	5757	0.300	ng	0.00
5) Phenol-d6	6.882	99	7731	0.306	ng	0.00
8) Nitrobenzene-d5	8.845	82	5072	0.341	ng	0.00
11) 2-Methylnaphthalene-d10	12.071	152	8137	0.333	ng	0.00
14) 2,4,6-Tribromophenol	15.815	330	504	0.213	ng	0.00
15) 2-Fluorobiphenyl	12.950	172	11147	0.366	ng	0.00
27) Fluoranthene-d10	19.094	212	10547	0.343	ng	0.00
31) Terphenyl-d14	19.698	244	5913	0.387	ng	0.00
Target Compounds						Qvalue

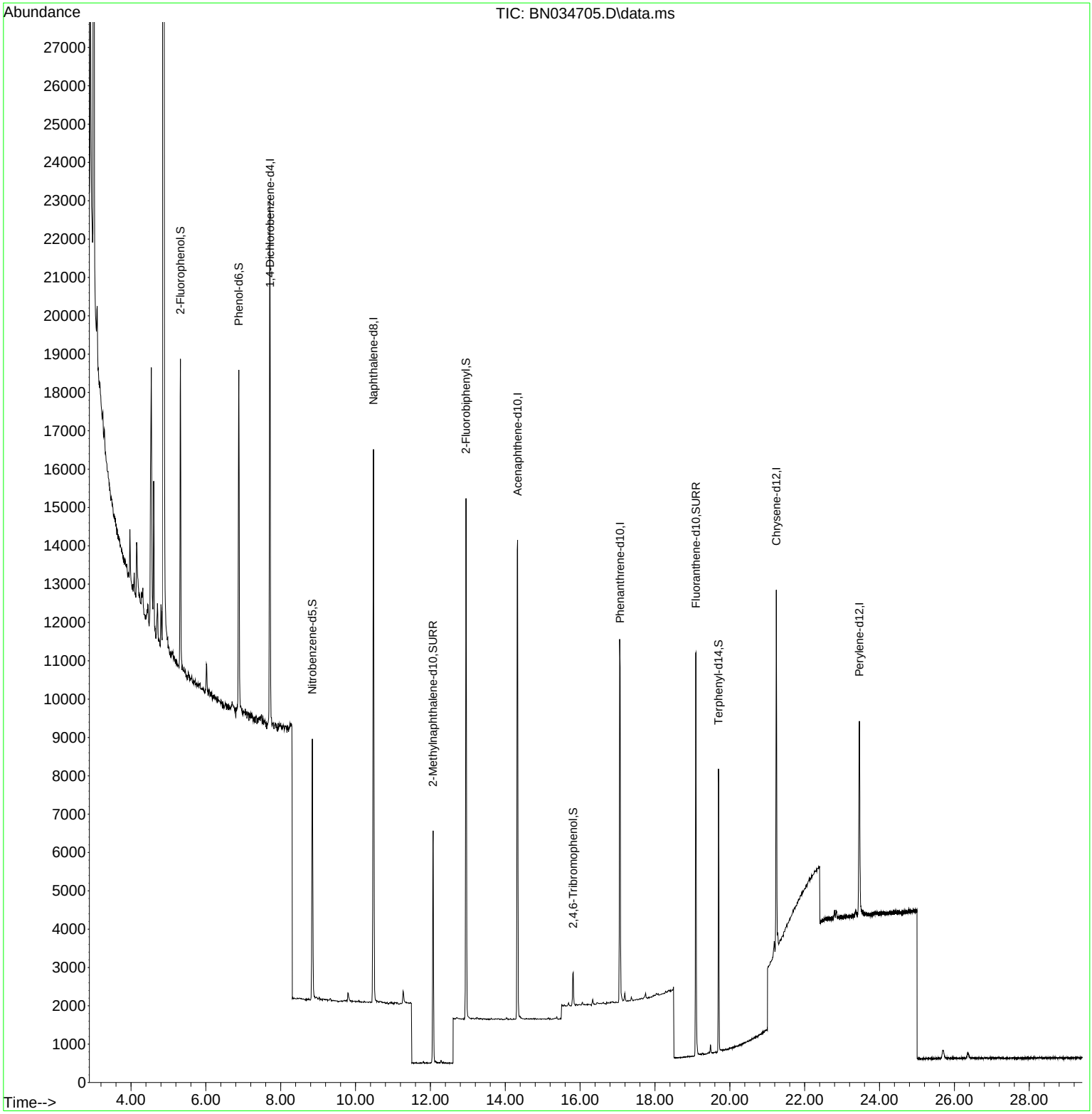
(#) = qualifier out of range (m) = manual integration (+) = signals summed

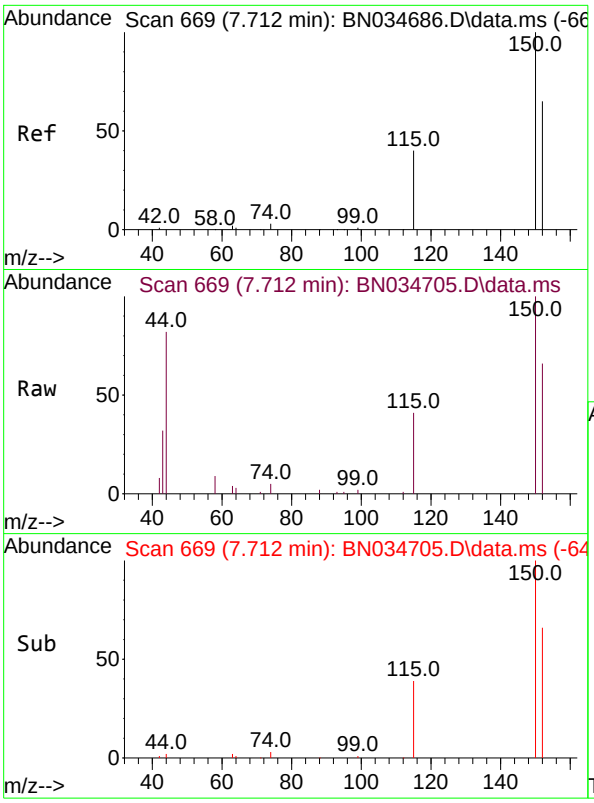
Sample Results: **BN034705.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034705.D
Acq On : 24 Oct 2024 23:26
Operator : RC/JU
Sample : PB164282BL
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB164282BL

Quant Time: Oct 25 02:08:37 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration



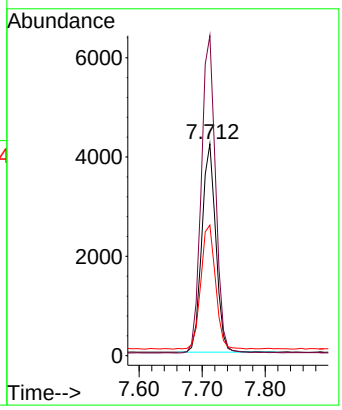


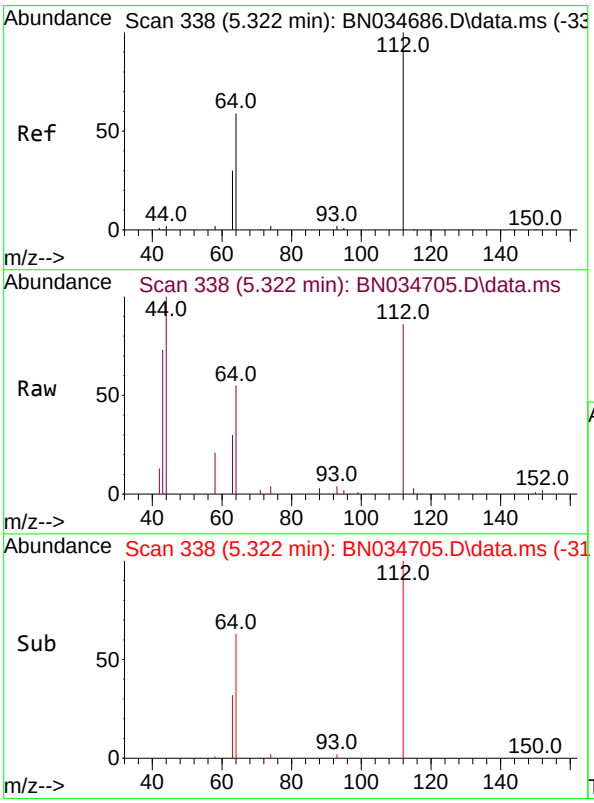
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN034705.D
Acq: 24 Oct 2024 23:26

Instrument :
BNA_N
ClientSampleId :
PB164282BL

Tgt Ion:152 Resp: 6454

Ion	Ratio	Lower	Upper
152	100		
150	151.1	122.7	184.1
115	61.7	51.0	76.6

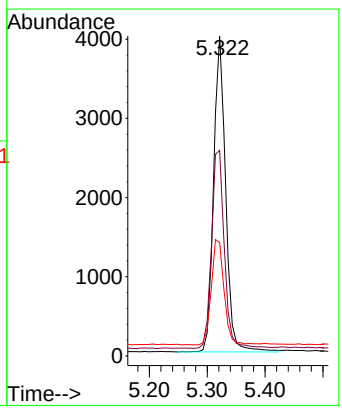


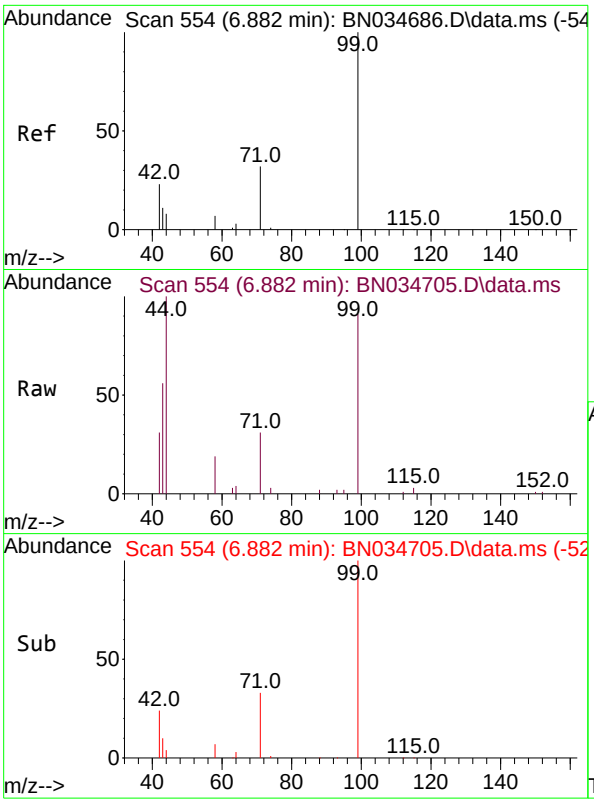


#4
2-Fluorophenol
Concen: 0.300 ng
RT: 5.322 min Scan# 338
Delta R.T. -0.000 min
Lab File: BN034705.D
Acq: 24 Oct 2024 23:26

Tgt Ion:112 Resp: 5757

Ion	Ratio	Lower	Upper
112	100		
64	66.7	53.0	79.6
63	35.6	27.6	41.4



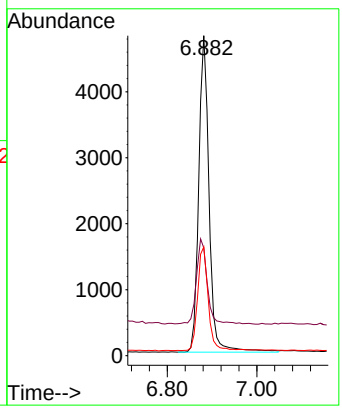


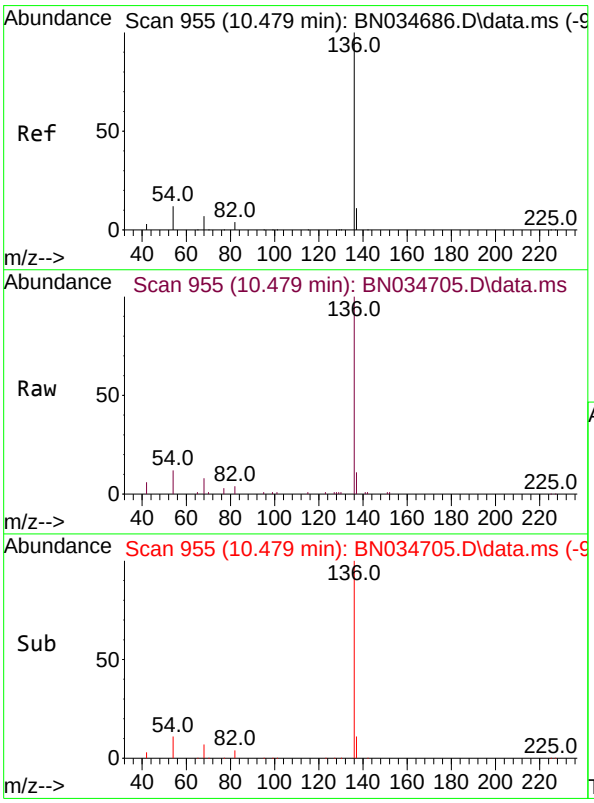
#5
Phenol-d6
Concen: 0.306 ng
RT: 6.882 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN034705.D
Acq: 24 Oct 2024 23:26

Instrument :
BNA_N
ClientSampleId :
PB164282BL

Tgt Ion: 99 Resp: 7731

Ion	Ratio	Lower	Upper
99	100		
42	28.2	21.8	32.8
71	34.0	26.6	40.0

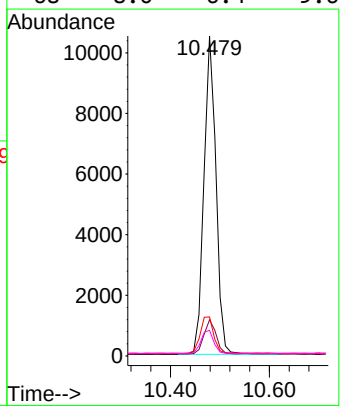


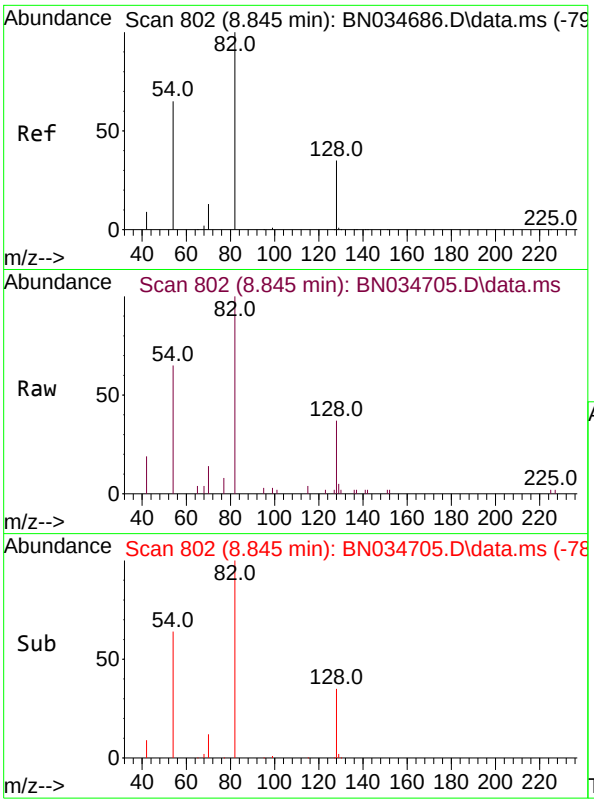


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 955
Delta R.T. -0.000 min
Lab File: BN034705.D
Acq: 24 Oct 2024 23:26

Tgt Ion:136 Resp: 17746

Ion	Ratio	Lower	Upper
136	100		
137	11.3	9.1	13.7
54	12.2	9.8	14.8
68	8.0	6.4	9.6



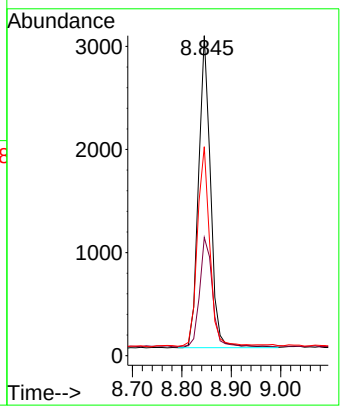


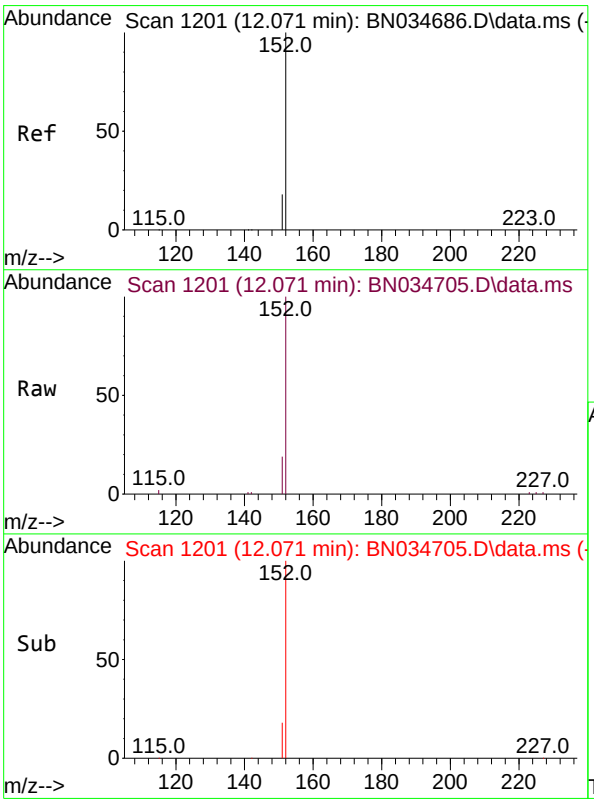
#8
Nitrobenzene-d5
Concen: 0.341 ng
RT: 8.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: BN034705.D
Acq: 24 Oct 2024 23:26

Instrument :
BNA_N
ClientSampleId :
PB164282BL

Tgt Ion: 82 Resp: 5072

Ion	Ratio	Lower	Upper
82	100		
128	37.0	29.7	44.5
54	65.3	53.0	79.6

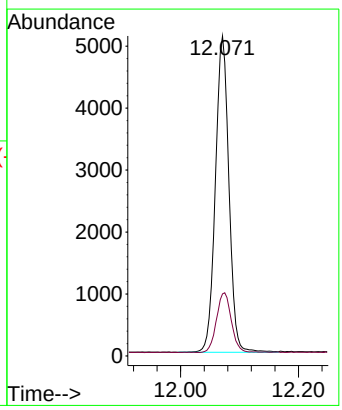


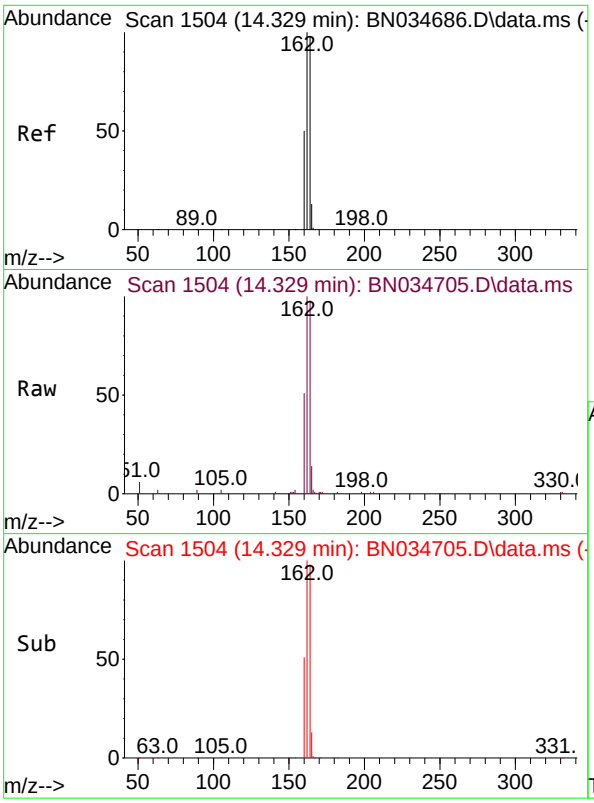


#11
2-Methylnaphthalene-d10
Concen: 0.333 ng
RT: 12.071 min Scan# 1201
Delta R.T. -0.000 min
Lab File: BN034705.D
Acq: 24 Oct 2024 23:26

Tgt Ion:152 Resp: 8137

Ion	Ratio	Lower	Upper
152	100		
151	20.8	16.7	25.1



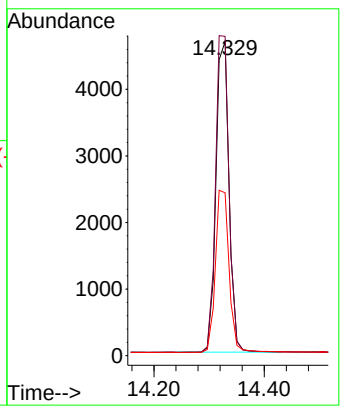


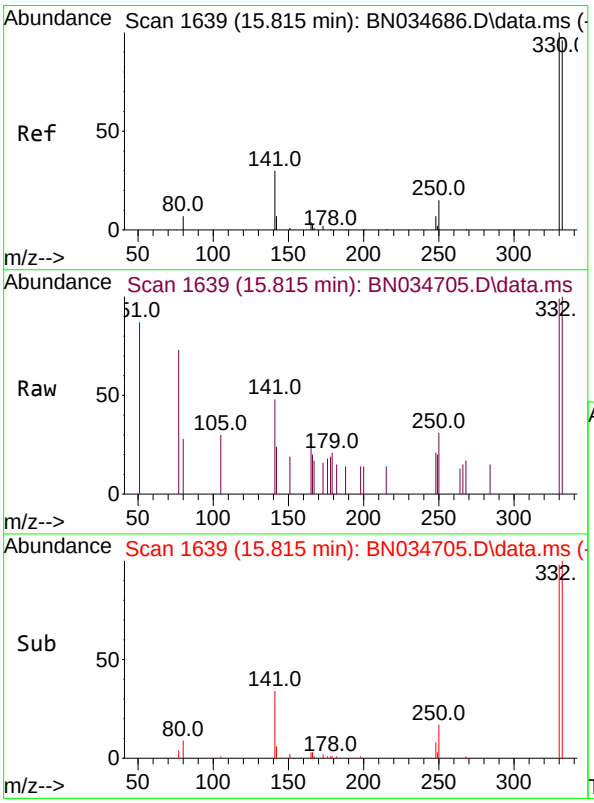
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.329 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034705.D
Acq: 24 Oct 2024 23:26

Instrument :
BNA_N
ClientSampleId :
PB164282BL

Tgt Ion:164 Resp: 7655

Ion	Ratio	Lower	Upper
164	100		
162	101.7	81.4	122.0
160	51.9	40.6	61.0

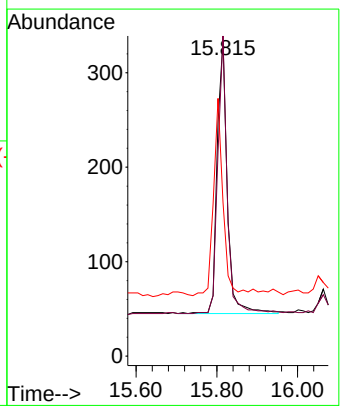


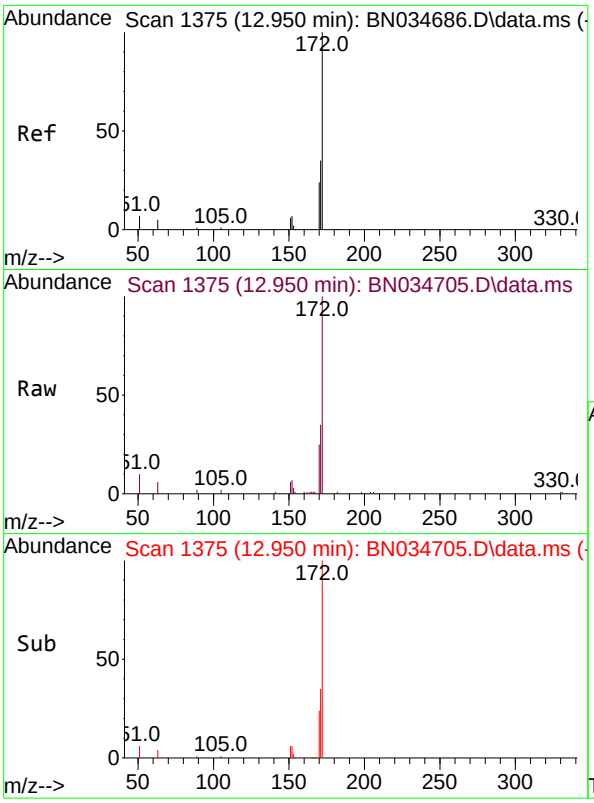


#14
2,4,6-Tribromophenol
Concen: 0.213 ng
RT: 15.815 min Scan# 1639
Delta R.T. -0.000 min
Lab File: BN034705.D
Acq: 24 Oct 2024 23:26

Tgt Ion:330 Resp: 504

Ion	Ratio	Lower	Upper
330	100		
332	94.6	76.6	115.0
141	68.3	54.6	81.8



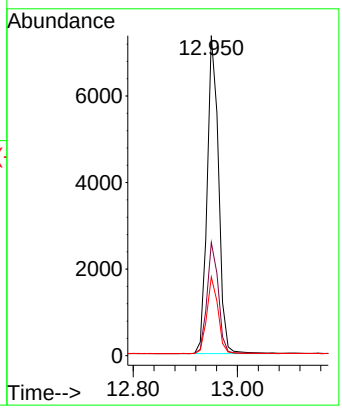


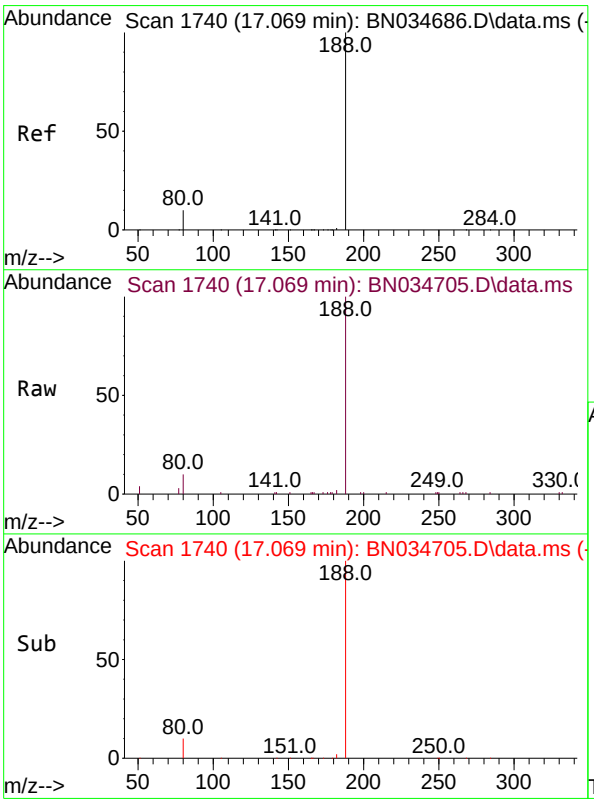
#15
2-Fluorobiphenyl
Concen: 0.366 ng
RT: 12.950 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034705.D
Acq: 24 Oct 2024 23:26

Instrument :
BNA_N
ClientSampleId :
PB164282BL

Tgt Ion:172 Resp: 11147

Ion	Ratio	Lower	Upper
172	100		
171	35.4	28.3	42.5
170	24.6	19.8	29.6

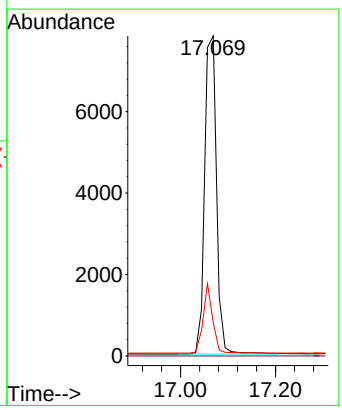


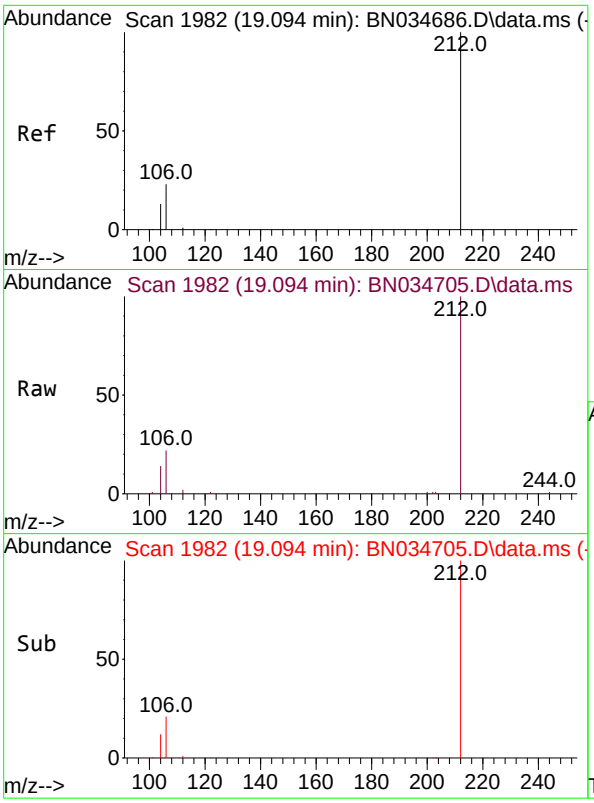


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.069 min Scan# 1740
Delta R.T. -0.000 min
Lab File: BN034705.D
Acq: 24 Oct 2024 23:26

Tgt Ion:188 Resp: 13670

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.4	8.9	13.3



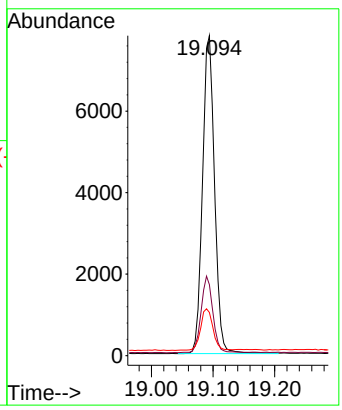


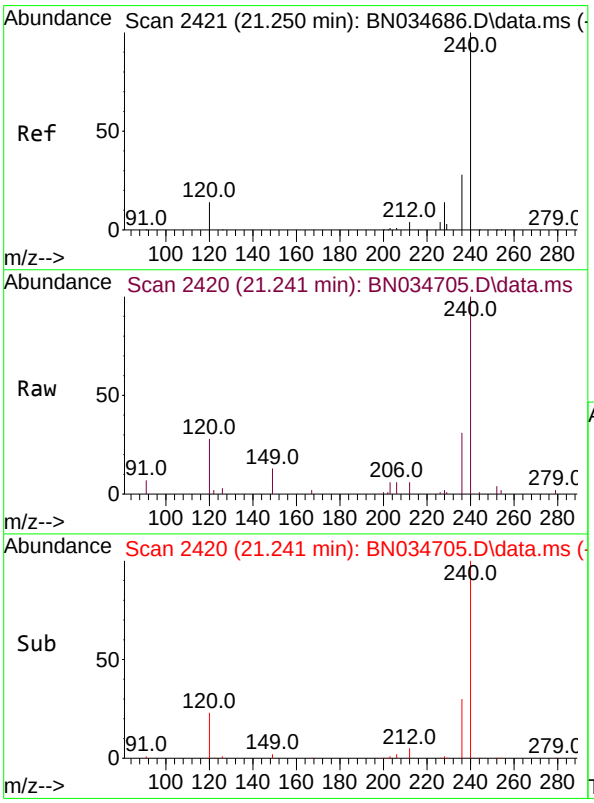
#27
Fluoranthene-d10
Concen: 0.343 ng
RT: 19.094 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034705.D
Acq: 24 Oct 2024 23:26

Instrument :
BNA_N
ClientSampleId :
PB164282BL

Tgt Ion:212 Resp: 10547

Ion	Ratio	Lower	Upper
212	100		
106	23.6	17.8	26.8
104	13.5	10.2	15.4

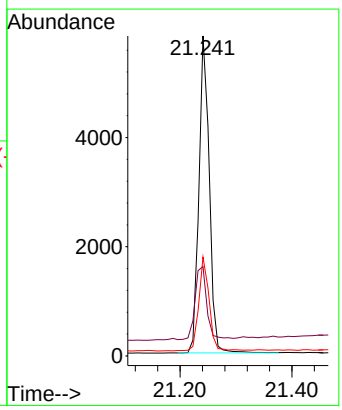


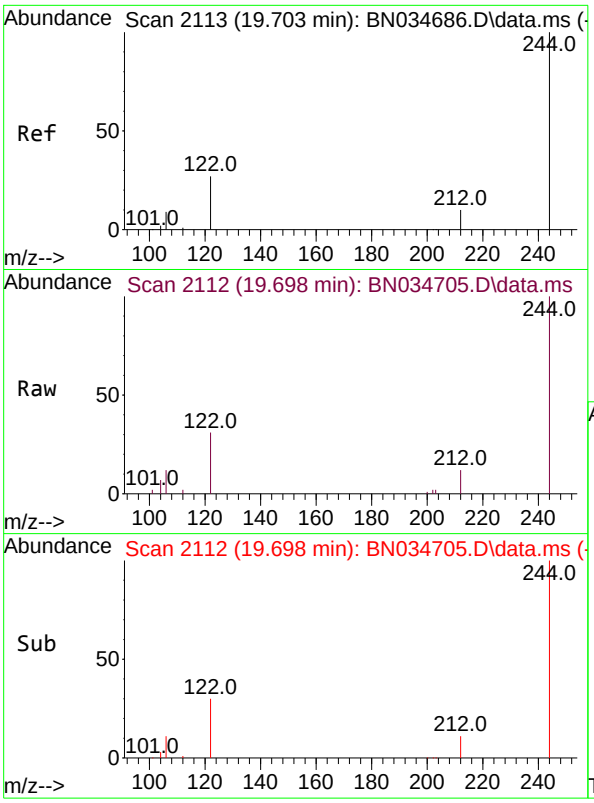


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.241 min Scan# 2420
Delta R.T. -0.009 min
Lab File: BN034705.D
Acq: 24 Oct 2024 23:26

Tgt Ion:240 Resp: 7475

Ion	Ratio	Lower	Upper
240	100		
120	28.0	14.2	21.2#
236	30.9	23.1	34.7



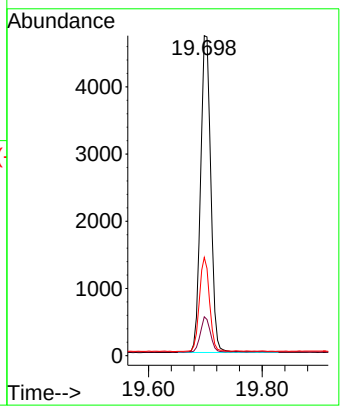


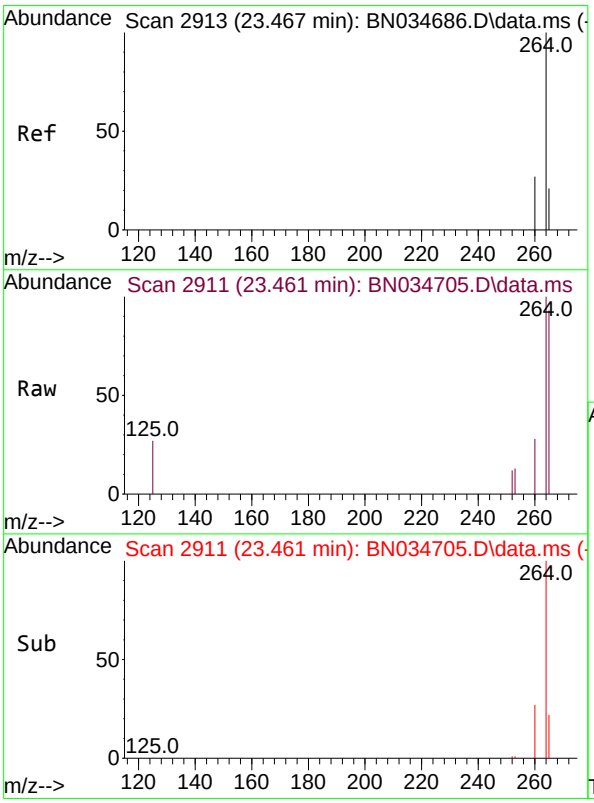
#31
Terphenyl-d14
Concen: 0.387 ng
RT: 19.698 min Scan# 21
Delta R.T. -0.005 min
Lab File: BN034705.D
Acq: 24 Oct 2024 23:26

Instrument :
BNA_N
ClientSampleId :
PB164282BL

Tgt Ion:244 Resp: 5913

Ion	Ratio	Lower	Upper
244	100		
212	12.1	8.6	13.0
122	30.7	22.3	33.5

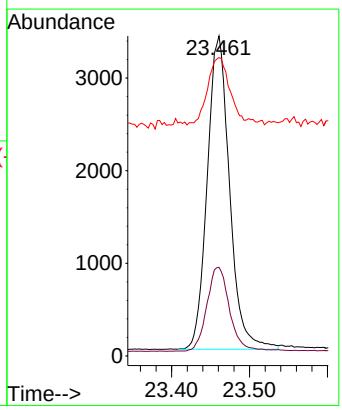




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.461 min Scan# 2911
Delta R.T. -0.006 min
Lab File: BN034705.D
Acq: 24 Oct 2024 23:26

Tgt Ion:264 Resp: 6736

Ion	Ratio	Lower	Upper
264	100		
260	27.7	21.9	32.9
265	93.2	60.6	91.0#



Raw Data: **BN034706.D**

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	PB164282BS	SDG No.:	P4440
Lab Sample ID:	PB164282BS	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
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 :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034706.D	1	10/21/24 08:45	10/25/24 00:02	PB164282

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.30		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.50		30 - 150		125%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.34		30 - 150		84%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		84%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		90%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.36		58 - 132		91%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	6280	7.712				
1146-65-2	Naphthalene-d8	17400	10.479				
15067-26-2	Acenaphthene-d10	7560	14.318				
1517-22-2	Phenanthrene-d10	13500	17.056				
1719-03-5	Chrysene-d12	7660	21.241				
1520-96-3	Perylene-d12	6460	23.461				

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\BN102424\
Data File : BN034706.D
Acq On : 25 Oct 2024 00:02
Operator : RC/JU
Sample : PB164282BS
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Manual Integrations APPROVED
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

Quant Time: Oct 25 02:08:50 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.712	152	6277	0.400	ng	0.00
7) Naphthalene-d8	10.479	136	17435	0.400	ng	0.00
13) Acenaphthene-d10	14.318	164	7557	0.400	ng	-0.01
19) Phenanthrene-d10	17.056	188	13505	0.400	ng	#-0.01
29) Chrysene-d12	21.241	240	7661	0.400	ng	# 0.00
35) Perylene-d12	23.461	264	6455	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.321	112	5611	0.301	ng	0.00
5) Phenol-d6	6.881	99	7614	0.309	ng	0.00
8) Nitrobenzene-d5	8.845	82	4924	0.337	ng	0.00
11) 2-Methylnaphthalene-d10	12.071	152	11948m	0.498	ng	0.00
14) 2,4,6-Tribromophenol	15.815	330	563	0.241	ng	0.00
15) 2-Fluorobiphenyl	12.950	172	10877	0.362	ng	0.00
27) Fluoranthene-d10	19.094	212	10197	0.335	ng	0.00
31) Terphenyl-d14	19.703	244	5692	0.364	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.285	88	2475	0.296	ng	# 46
3) n-Nitrosodimethylamine	3.581	42	4401	0.362	ng	96
6) bis(2-Chloroethyl)ether	7.141	93	7177	0.359	ng	99
9) Naphthalene	10.532	128	16863	0.350	ng	100
10) Hexachlorobutadiene	10.831	225	2523	0.349	ng	# 98
12) 2-Methylnaphthalene	12.143	142	10035	0.335	ng	99
16) Acenaphthylene	14.040	152	12822	0.353	ng	100
17) Acenaphthene	14.382	154	8528	0.341	ng	98
18) Fluorene	15.377	166	9962	0.323	ng	99
20) 4,6-Dinitro-2-methylph...	15.441	198	538	0.286	ng	# 56
21) 4-Bromophenyl-phenylether	16.262	248	2561	0.356	ng	# 61
22) Hexachlorobenzene	16.374	284	2810	0.360	ng	97
23) Atrazine	16.535	200	1814	0.321	ng	# 88
24) Pentachlorophenol	16.721	266	1431	0.518	ng	98
25) Phenanthrene	17.106	178	14856	0.366	ng	100
26) Anthracene	17.193	178	13024	0.362	ng	100
28) Fluoranthene	19.122	202	14119	0.334	ng	99
30) Pyrene	19.484	202	14340	0.364	ng	99
32) Benzo(a)anthracene	21.232	228	10619	0.363	ng	99
33) Chrysene	21.277	228	11699	0.386	ng	98
34) Bis(2-ethylhexyl)phtha...	21.187	149	5670	0.341	ng	# 100
36) Indeno(1,2,3-cd)pyrene	25.688	276	10806	0.435	ng	98
37) Benzo(b)fluoranthene	22.797	252	10399	0.403	ng	94
38) Benzo(k)fluoranthene	22.841	252	10151	0.399	ng	96
39) Benzo(a)pyrene	23.364	252	8689	0.420	ng	95
40) Dibenzo(a,h)anthracene	25.706	278	8269	0.422	ng	97
41) Benzo(g,h,i)perylene	26.361	276	8830	0.408	ng	97

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

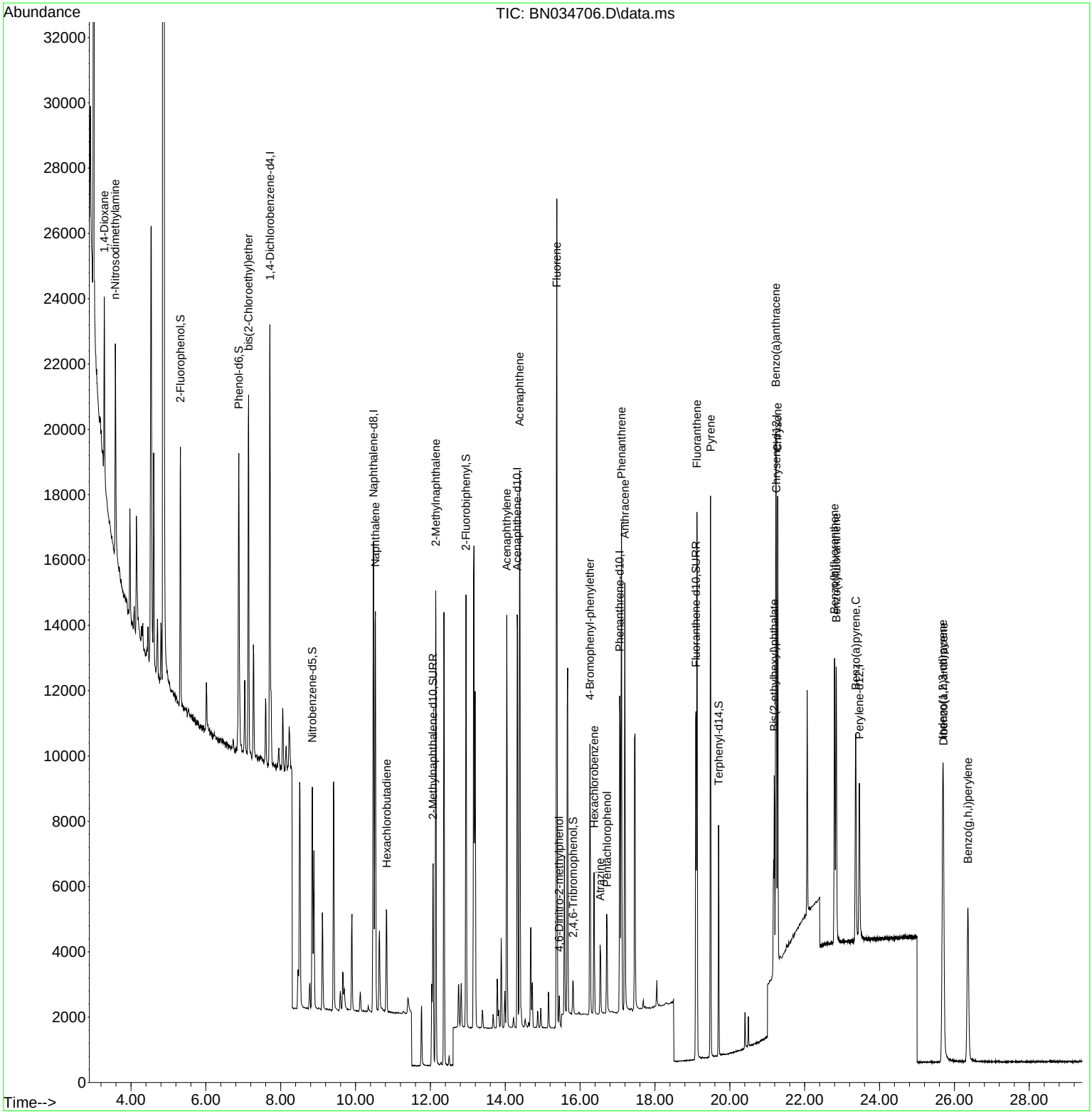
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034706.D
Acq On : 25 Oct 2024 00:02
Operator : RC/JU
Sample : PB164282BS
Misc :
ALS Vial : 23 Sample Multiplier: 1

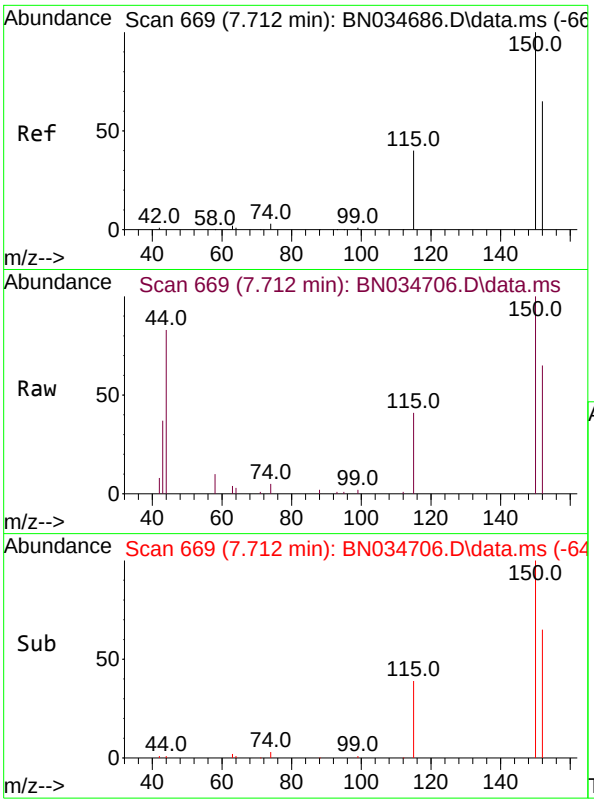
Quant Time: Oct 25 02:08:50 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

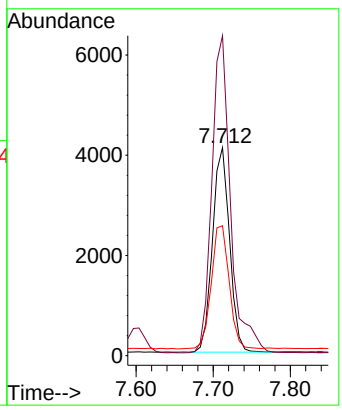




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:152 Resp: 627

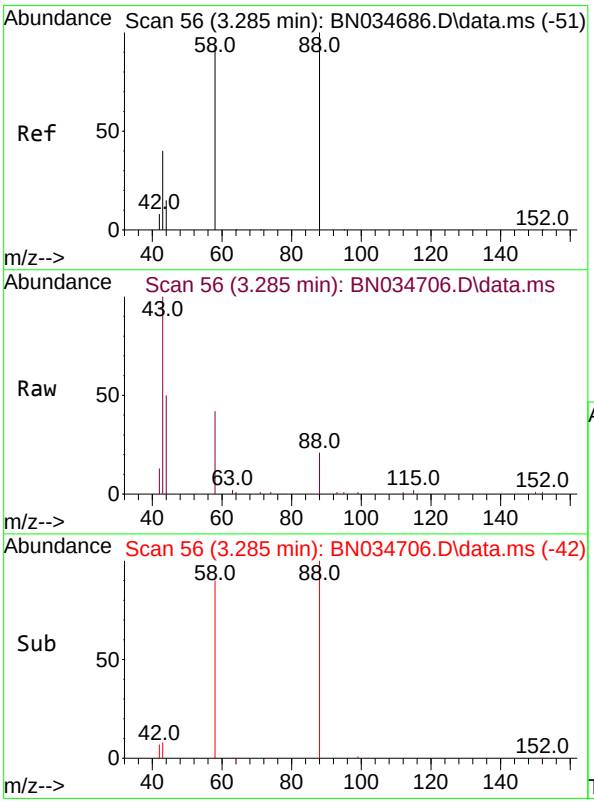
Ion	Ratio	Lower	Upper
152	100		
150	153.7	122.7	184.1
115	62.4	51.0	76.6



Instrument :
BNA_N
ClientSampleId :
PB164282BS

Manual Integrations
APPROVED

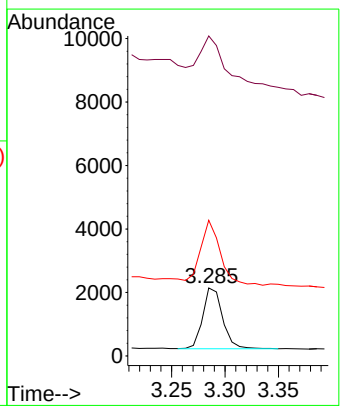
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

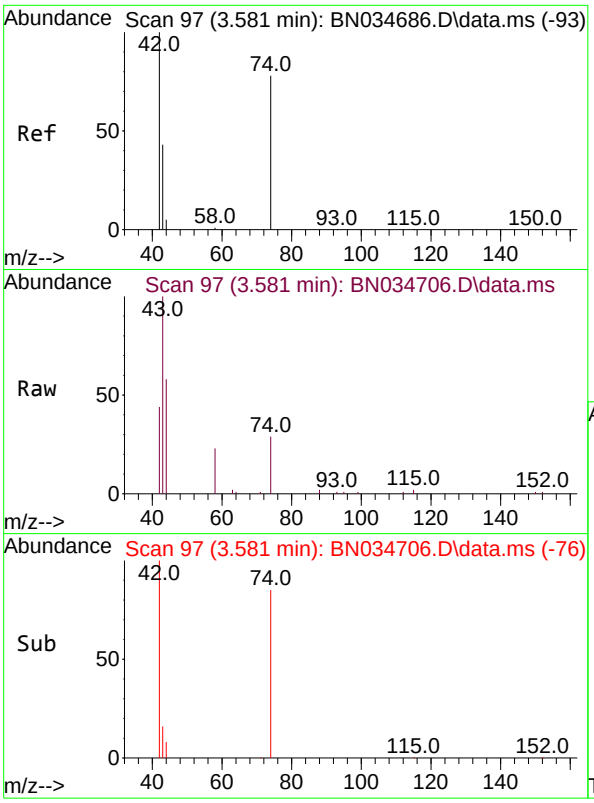


#2
1,4-Dioxane
Concen: 0.296 ng
RT: 3.285 min Scan# 56
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion: 88 Resp: 2475

Ion	Ratio	Lower	Upper
88	100		
43	124.6	32.1	48.1#
58	109.9	73.7	110.5

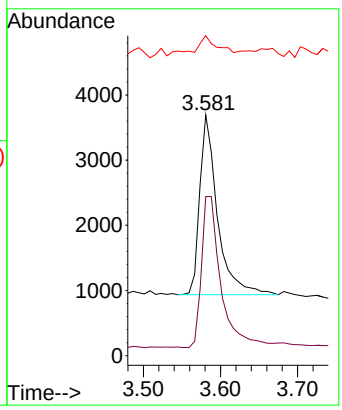




#3
n-Nitrosodimethylamine
Concen: 0.362 ng
RT: 3.581 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion: 42 Resp: 440

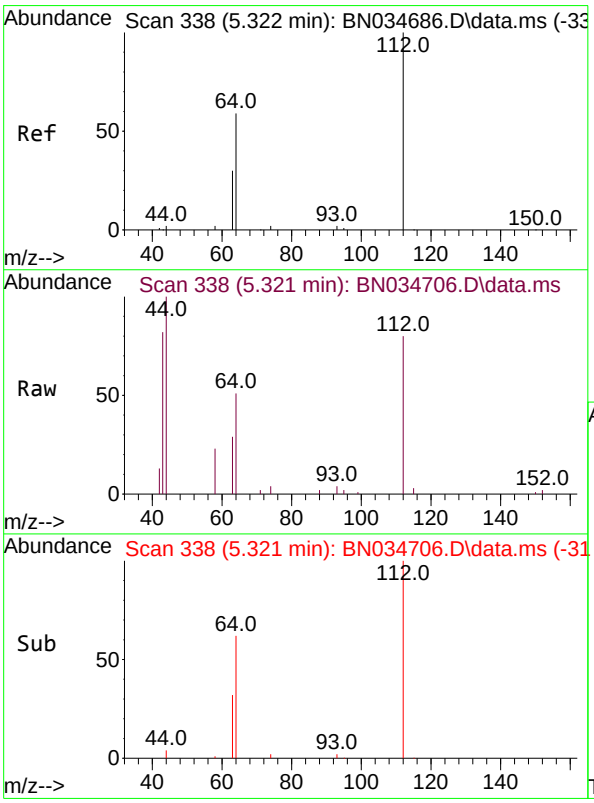
Ion	Ratio	Lower	Upper
42	100		
74	92.1	77.2	115.8
44	14.7	13.4	20.2



Instrument :
BNA_N
ClientSampleId :
PB164282BS

Manual Integrations
APPROVED

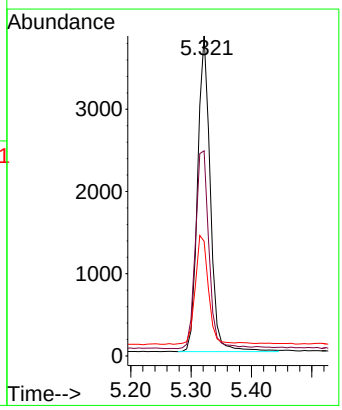
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

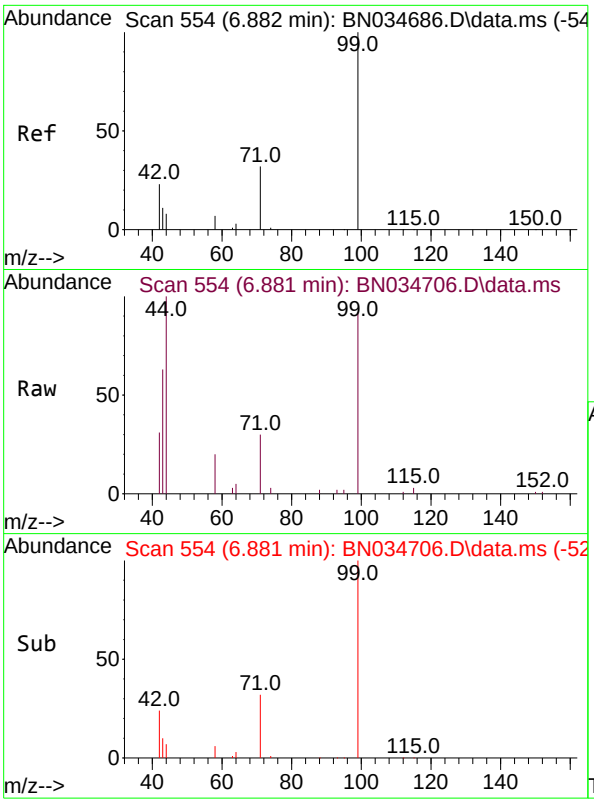


#4
2-Fluorophenol
Concen: 0.301 ng
RT: 5.321 min Scan# 338
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:112 Resp: 5611

Ion	Ratio	Lower	Upper
112	100		
64	66.5	53.0	79.6
63	35.5	27.6	41.4

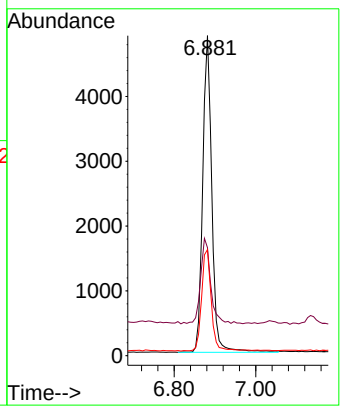




#5
Phenol-d6
Concen: 0.309 ng
RT: 6.881 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion: 99 Resp: 761

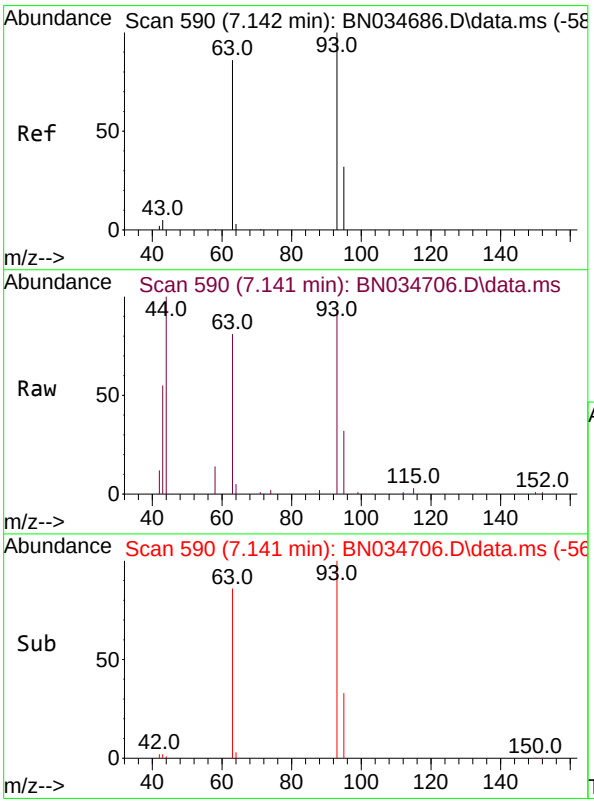
Ion	Ratio	Lower	Upper
99	100		
42	28.9	21.8	32.8
71	33.7	26.6	40.0



Instrument :
BNA_N
ClientSampleId :
PB164282BS

Manual Integrations
APPROVED

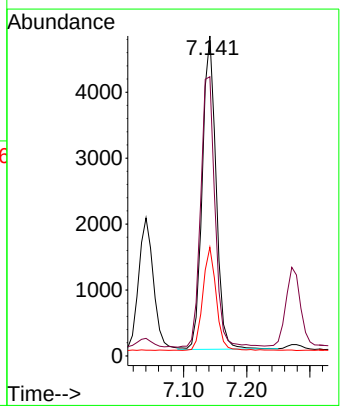
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

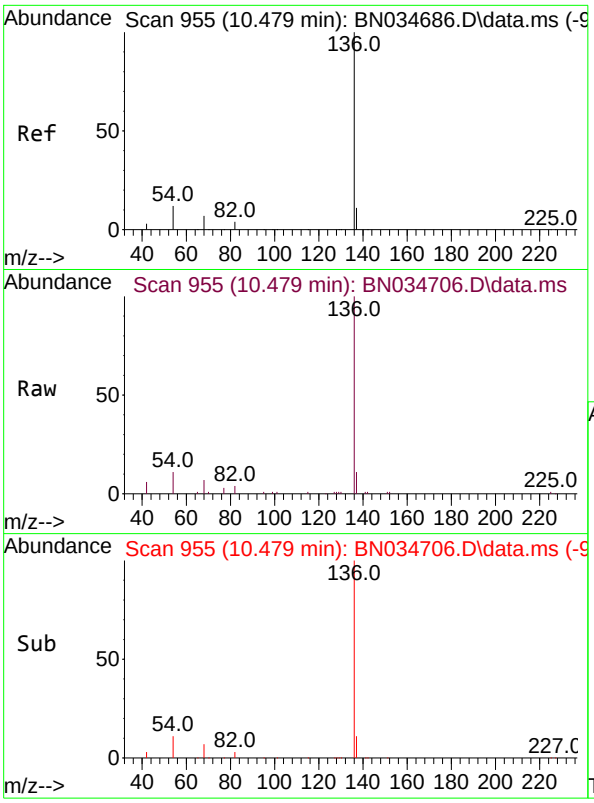


#6
bis(2-Chloroethyl)ether
Concen: 0.359 ng
RT: 7.141 min Scan# 590
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion: 93 Resp: 7177

Ion	Ratio	Lower	Upper
93	100		
63	90.6	71.5	107.3
95	31.9	25.8	38.6

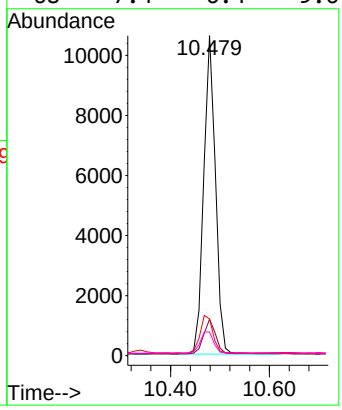




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:136 Resp: 1743

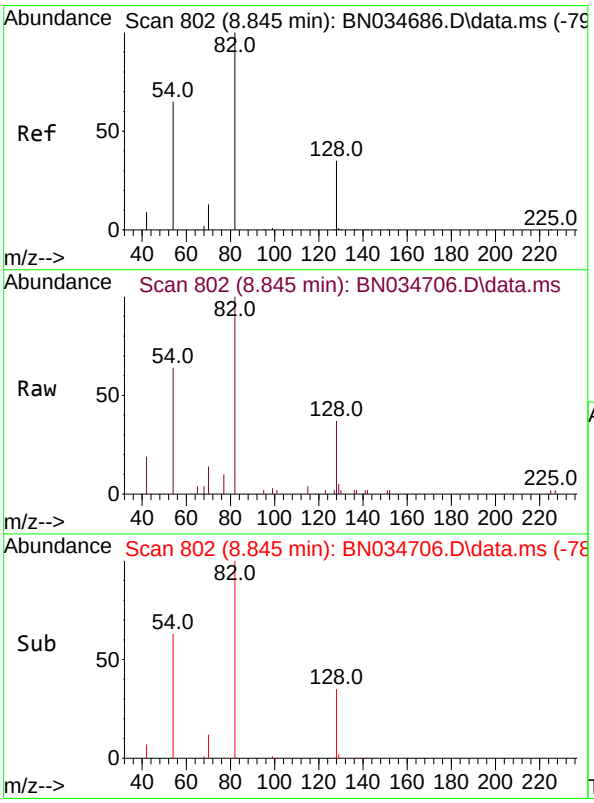
Ion	Ratio	Lower	Upper
136	100		
137	11.4	9.1	13.7
54	11.4	9.8	14.8
68	7.4	6.4	9.6



Instrument :
BNA_N
ClientSampleId :
PB164282BS

Manual Integrations
APPROVED

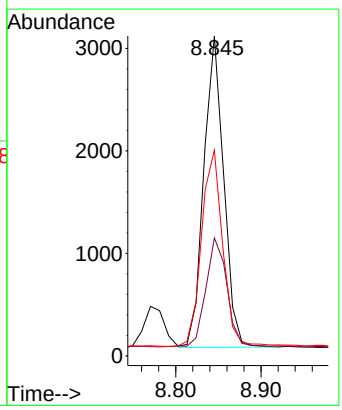
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

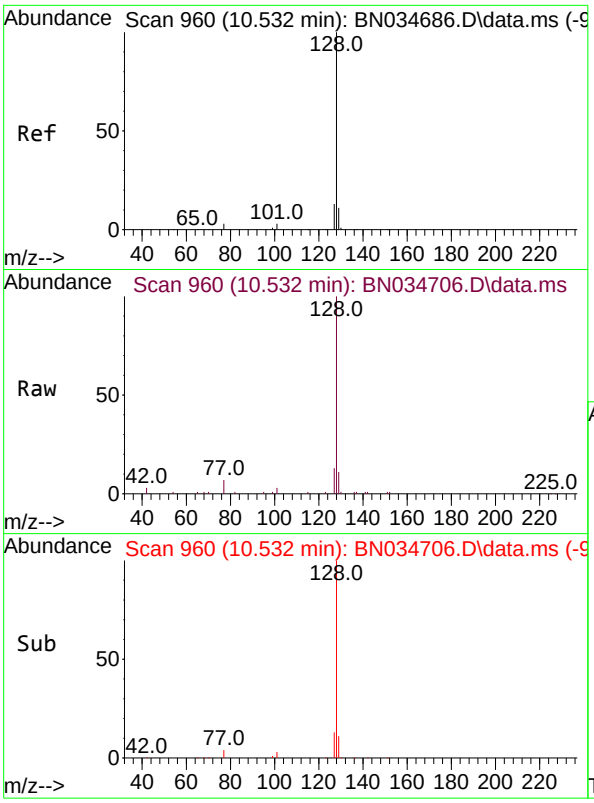


#8
Nitrobenzene-d5
Concen: 0.337 ng
RT: 8.845 min Scan# 802
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion: 82 Resp: 4924

Ion	Ratio	Lower	Upper
82	100		
128	36.9	29.7	44.5
54	64.3	53.0	79.6





#9
Naphthalene
Concen: 0.350 ng
RT: 10.532 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

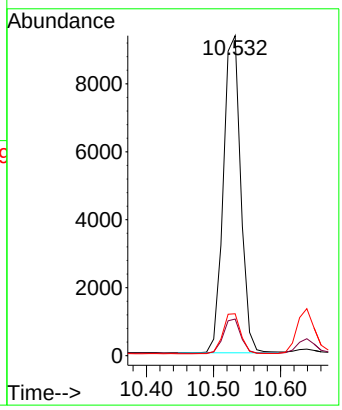
Tgt Ion:128 Resp: 1686

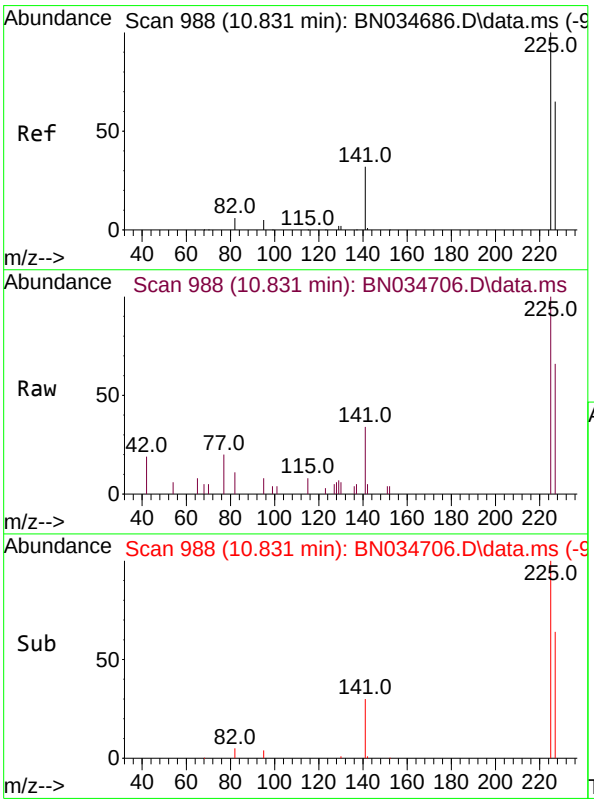
Ion	Ratio	Lower	Upper
128	100		
129	11.4	9.0	13.6
127	13.1	10.5	15.7

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

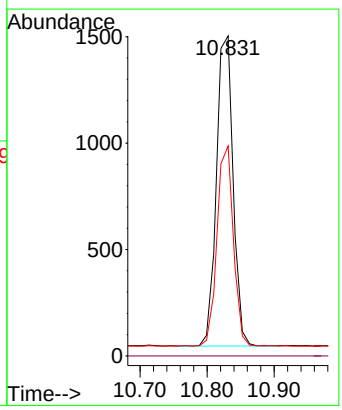


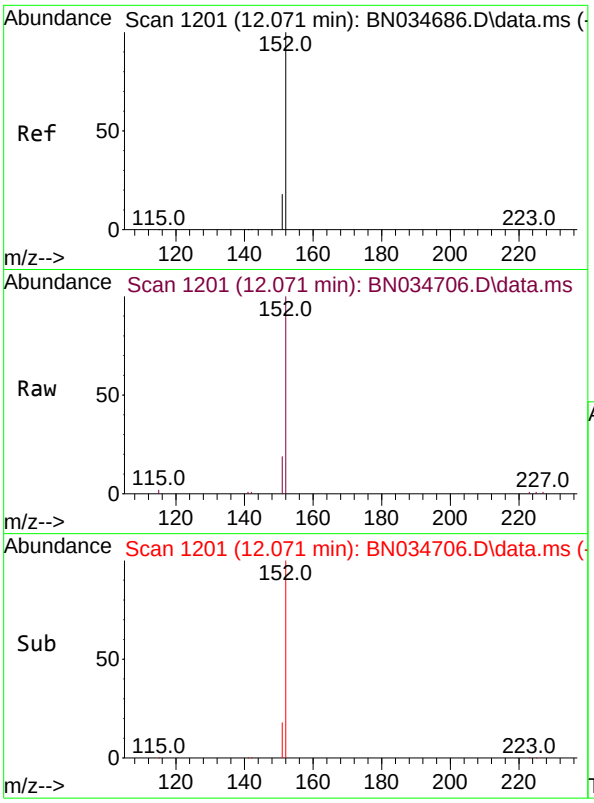


#10
Hexachlorobutadiene
Concen: 0.349 ng
RT: 10.831 min Scan# 988
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:225 Resp: 2523

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.0	51.4	77.0

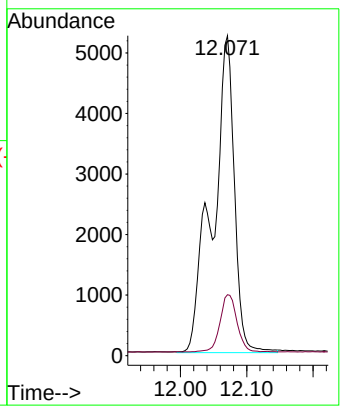




#11
2-Methylnaphthalene-d10
Concen: 0.498 ng m
RT: 12.071 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:152 Resp: 1194

Ion	Ratio	Lower	Upper
152	100		
151	14.0	16.7	25.1



Instrument :
BNA_N
ClientSampleId :
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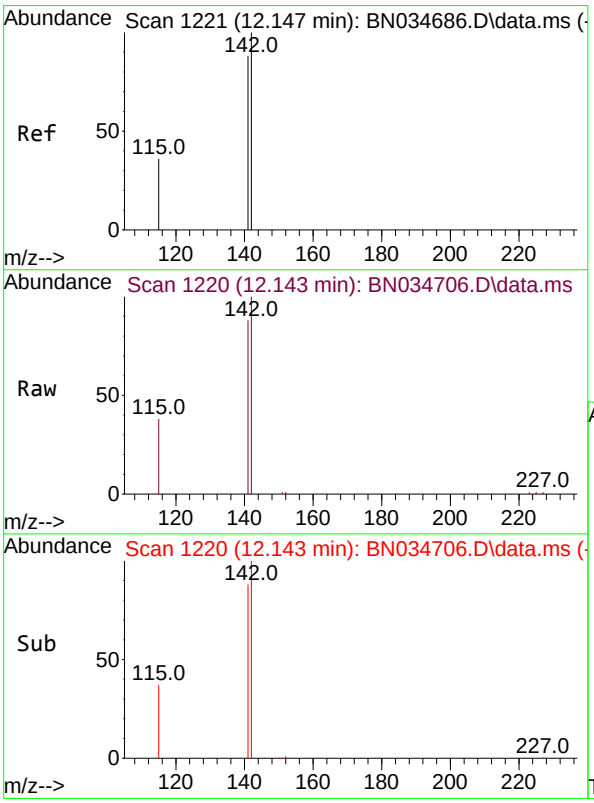
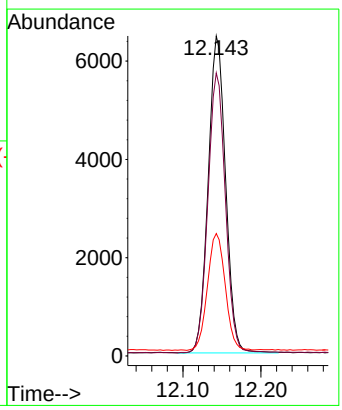
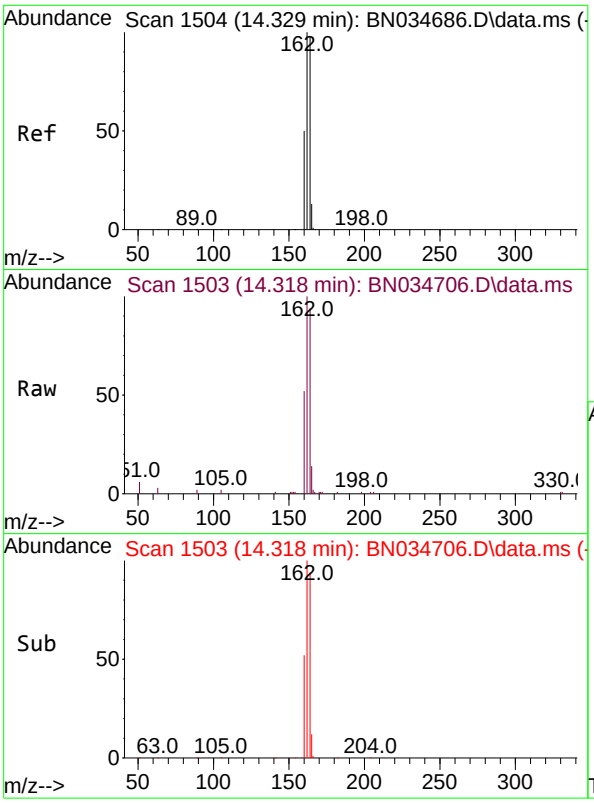


#12
2-Methylnaphthalene
Concen: 0.335 ng
RT: 12.143 min Scan# 1220
Delta R.T. -0.004 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:142 Resp: 10035

Ion	Ratio	Lower	Upper
142	100		
141	88.4	70.4	105.6
115	38.2	29.8	44.6

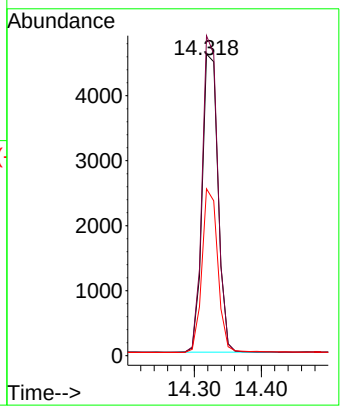




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.318 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:164 Resp: 755

Ion	Ratio	Lower	Upper
164	100		
162	106.1	81.4	122.0
160	55.4	40.6	61.0



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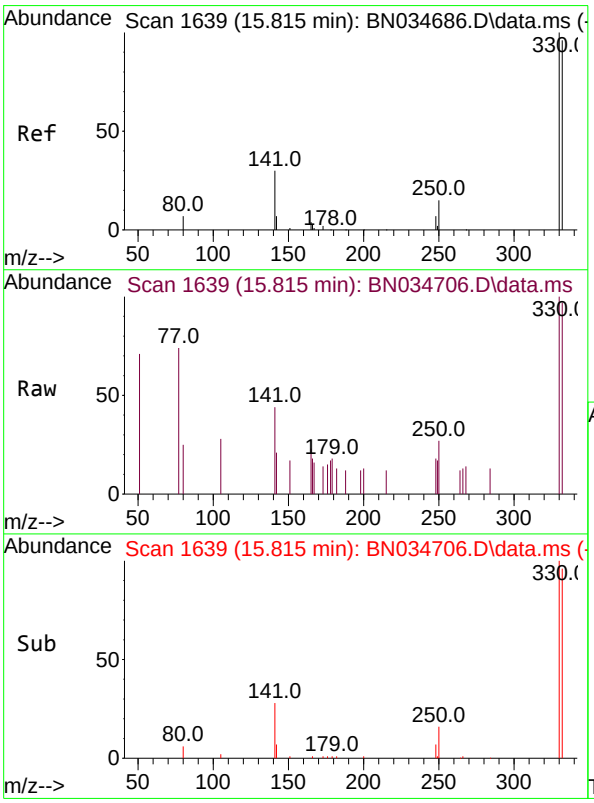
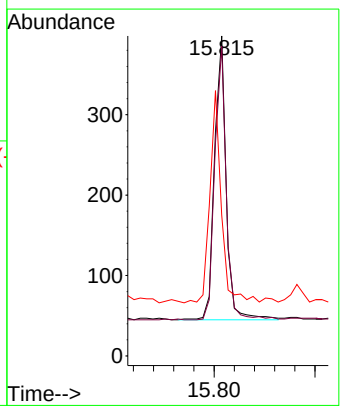
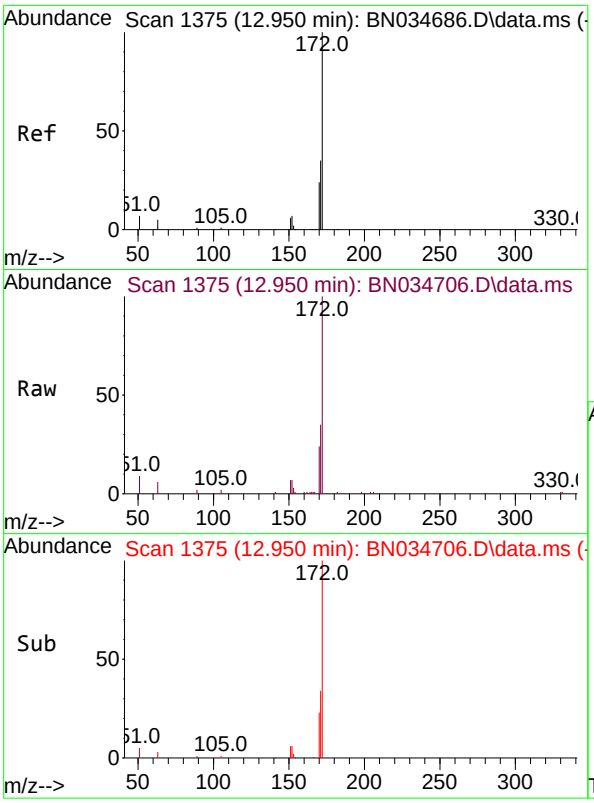


#14
2,4,6-Tribromophenol
Concen: 0.241 ng
RT: 15.815 min Scan# 1639
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:330 Resp: 563

Ion	Ratio	Lower	Upper
330	100		
332	94.7	76.6	115.0
141	73.7	54.6	81.8

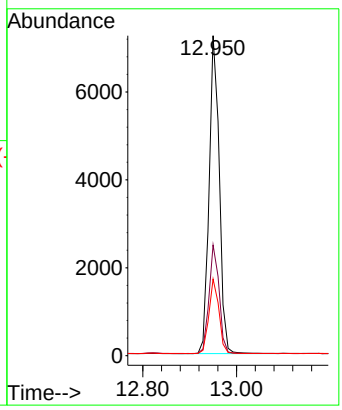




#15
2-Fluorobiphenyl
Concen: 0.362 ng
RT: 12.950 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:172 Resp: 1087

Ion	Ratio	Lower	Upper
172	100		
171	34.6	28.3	42.5
170	23.9	19.8	29.6



Instrument :
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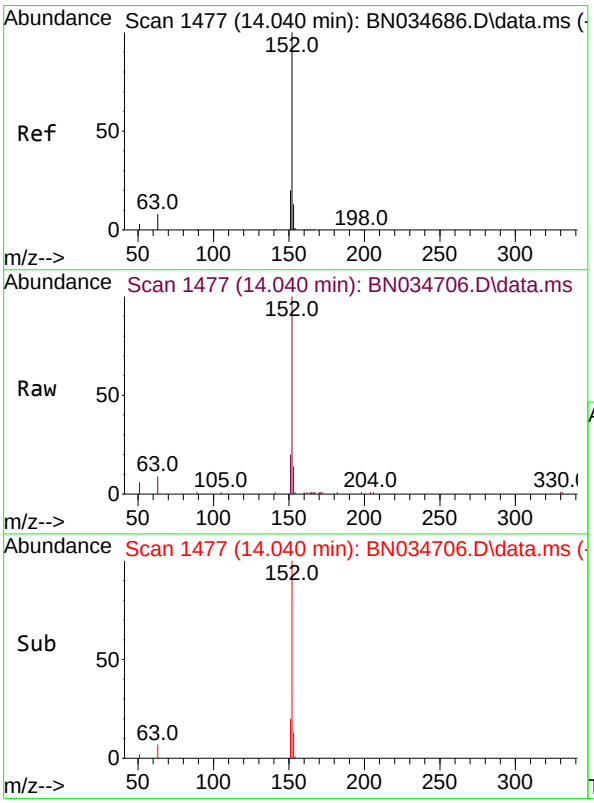
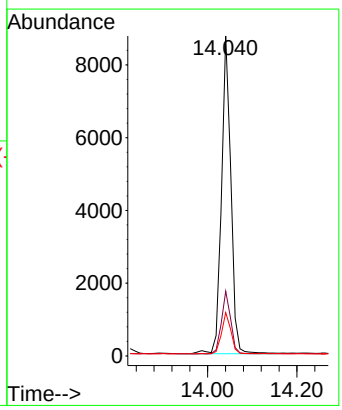
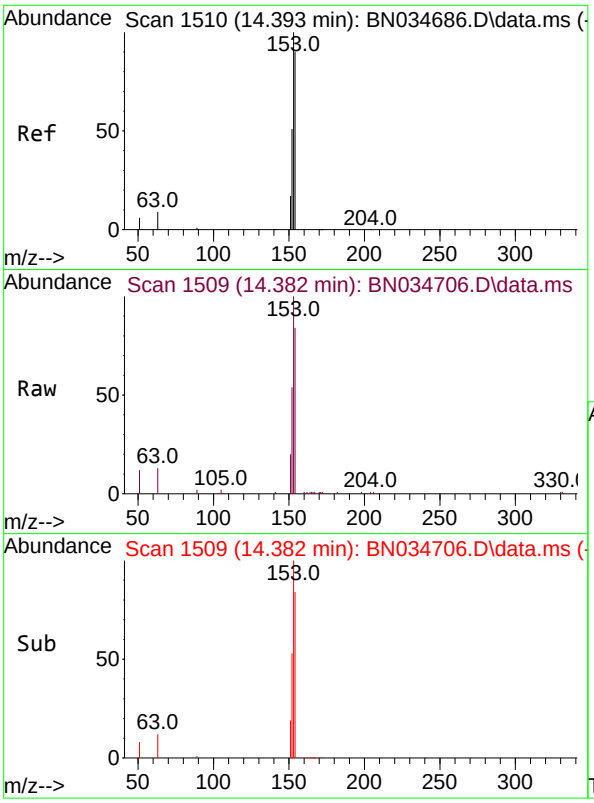


#16
Acenaphthylene
Concen: 0.353 ng
RT: 14.040 min Scan# 1477
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:152 Resp: 12822

Ion	Ratio	Lower	Upper
152	100		
151	19.5	15.6	23.4
153	13.1	10.6	15.8

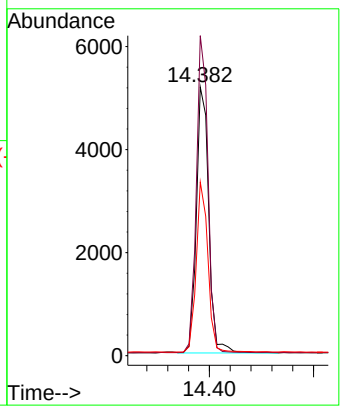




#17
Acenaphthene
Concen: 0.341 ng
RT: 14.382 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:154 Resp: 852

Ion	Ratio	Lower	Upper
154	100		
153	112.4	88.2	132.2
152	60.6	46.9	70.3



Instrument :
BNA_N
ClientSampleId :
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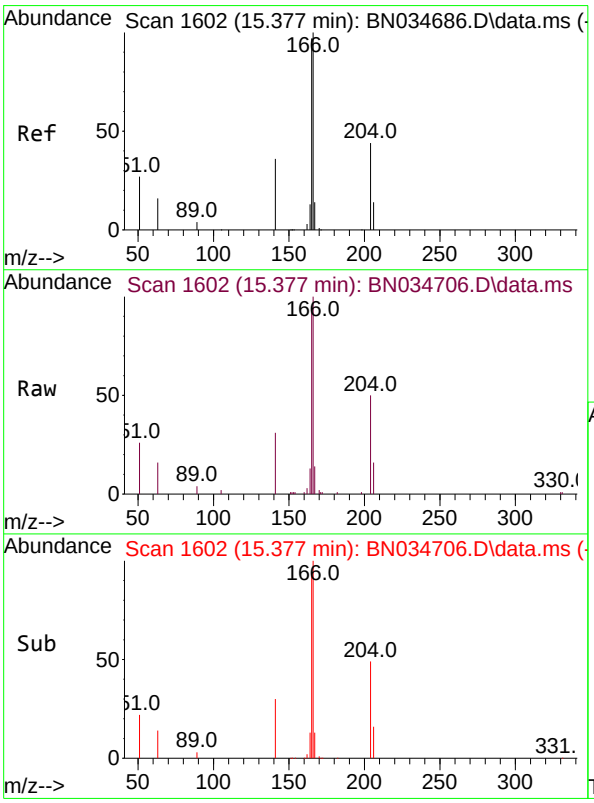
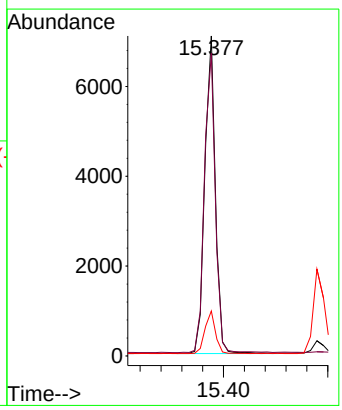
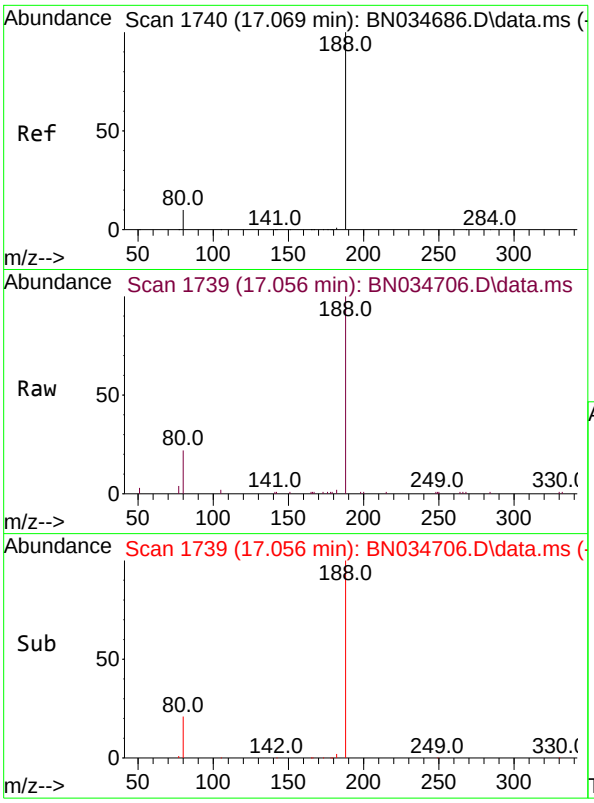


#18
Fluorene
Concen: 0.323 ng
RT: 15.377 min Scan# 1602
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:166 Resp: 9962

Ion	Ratio	Lower	Upper
166	100		
165	97.3	78.8	118.2
167	13.6	10.6	16.0

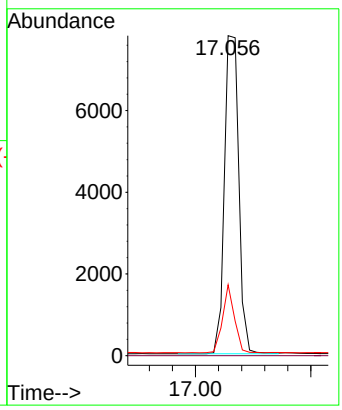




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.056 min Scan# 1
Delta R.T. -0.013 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:188 Resp: 1350

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	22.2	8.9	13.3#



Instrument :
BNA_N
ClientSampleId :
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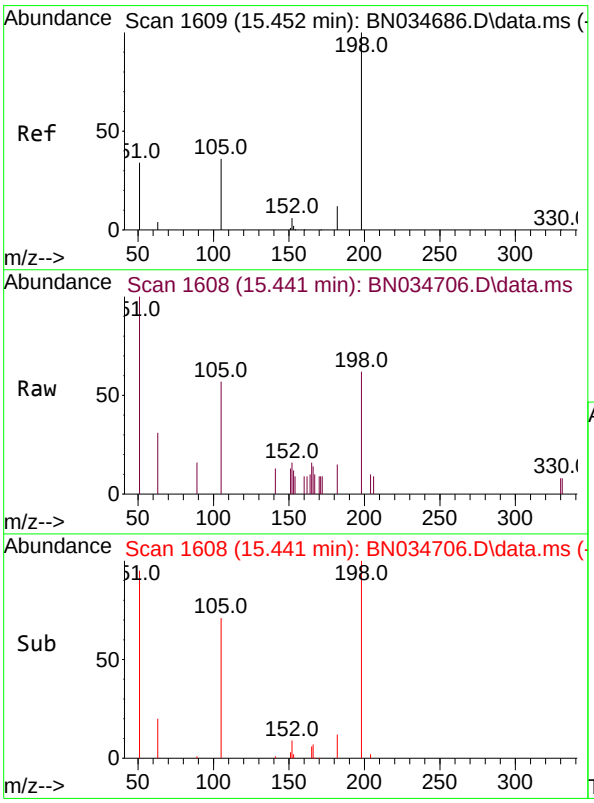
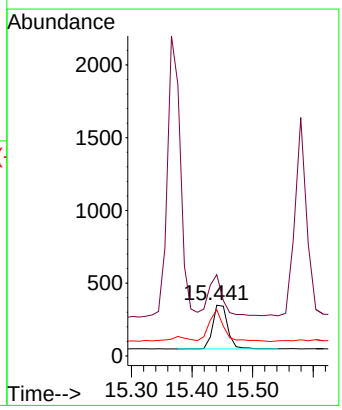
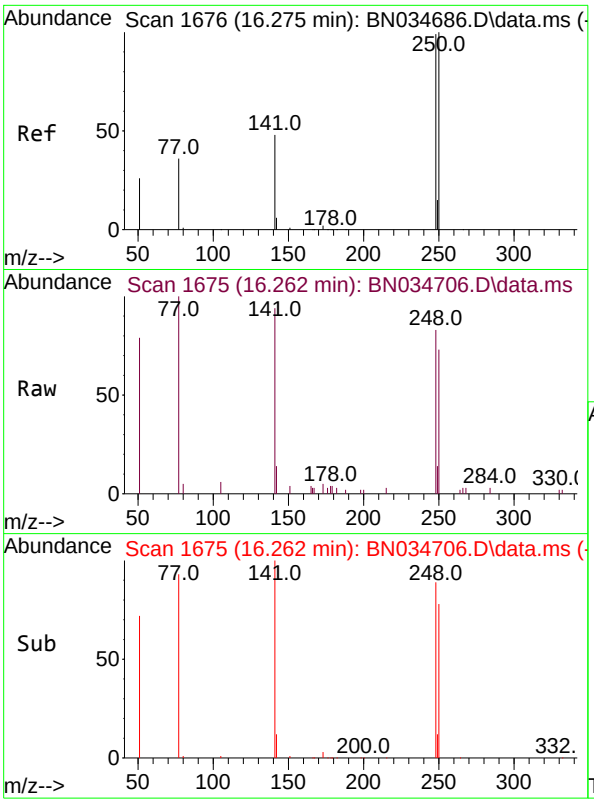


#20
4,6-Dinitro-2-methylphenol
Concen: 0.286 ng
RT: 15.441 min Scan# 1608
Delta R.T. -0.011 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:198 Resp: 538

Ion	Ratio	Lower	Upper
198	100		
51	160.2	91.8	137.8#
105	91.1	44.3	66.5#





#21
4-Bromophenyl-phenylether
Concen: 0.356 ng
RT: 16.262 min Scan# 1(
Delta R.T. -0.013 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:248 Resp: 256

Ion	Ratio	Lower	Upper
248	100		
250	88.5	80.9	121.3
141	113.9	40.5	60.7#

Instrument :
BNA_N
ClientSampleId :
PB164282BS

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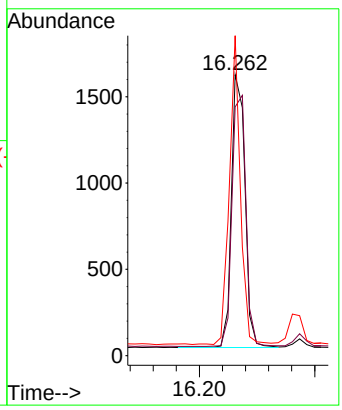
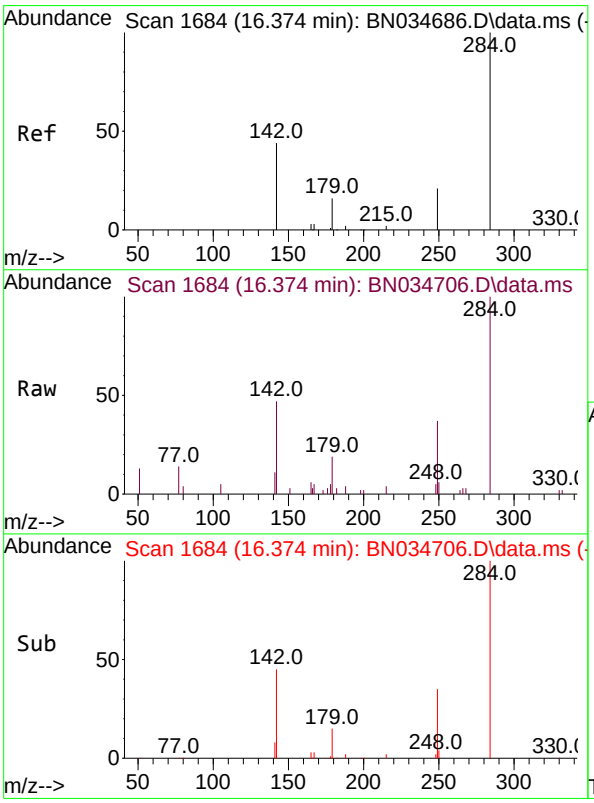
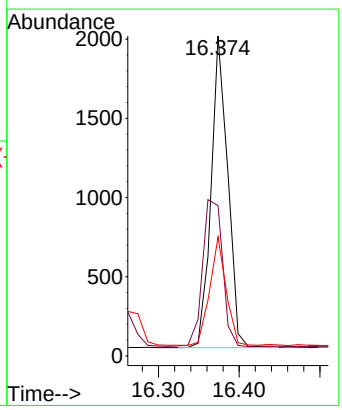


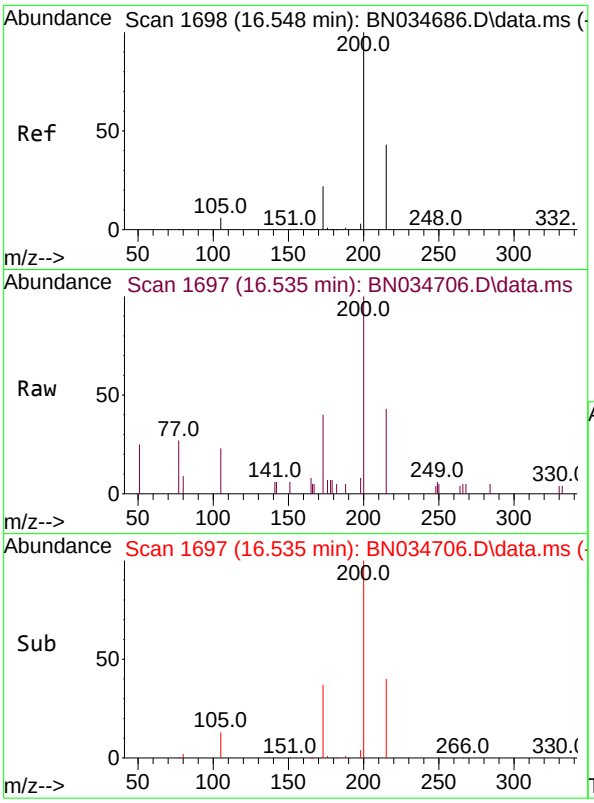


#22
Hexachlorobenzene
Concen: 0.360 ng
RT: 16.374 min Scan# 1684
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:284 Resp: 2810

Ion	Ratio	Lower	Upper
284	100		
142	57.3	43.6	65.4
249	34.1	26.6	40.0

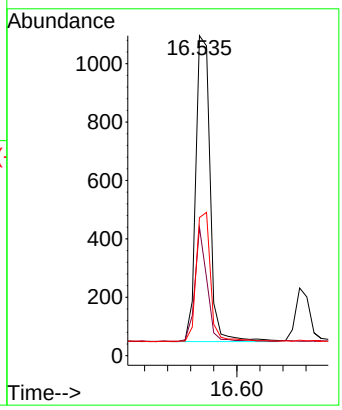




#23
Atrazine
Concen: 0.321 ng
RT: 16.535 min Scan# 1(
Delta R.T. -0.013 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:200 Resp: 181

Ion	Ratio	Lower	Upper
200	100		
173	40.1	19.7	29.5
215	43.2	35.7	53.5



Instrument :
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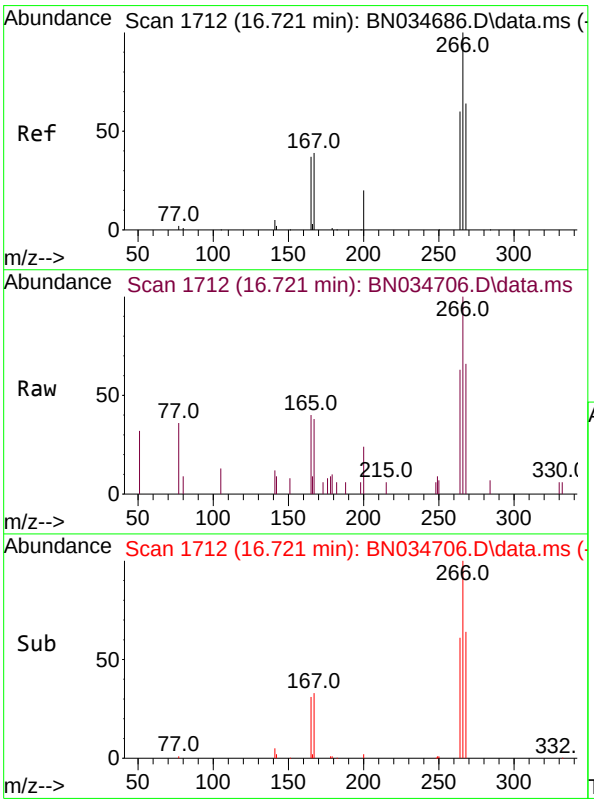
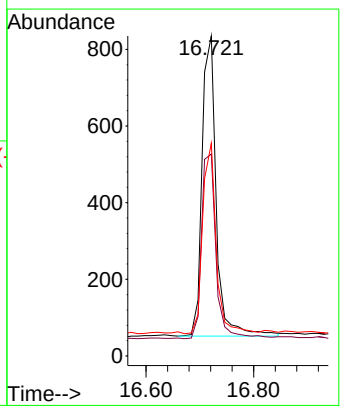
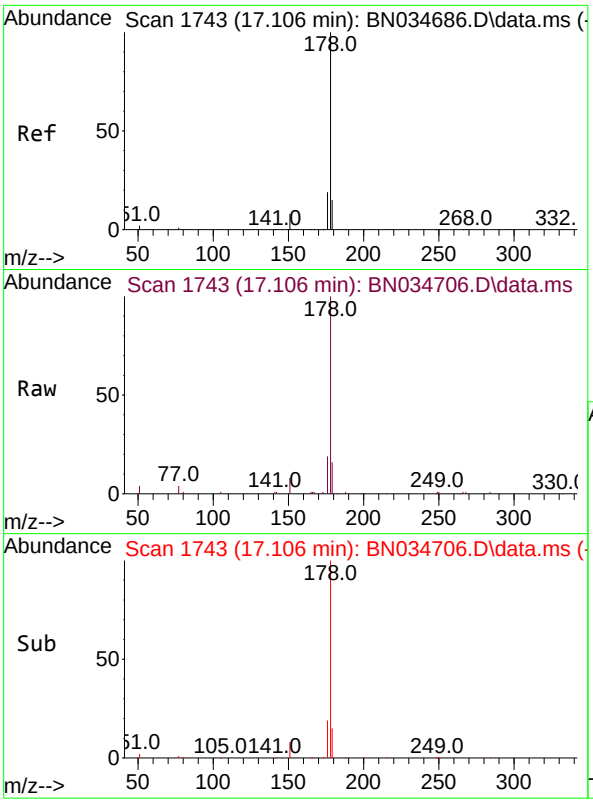


#24
Pentachlorophenol
Concen: 0.518 ng
RT: 16.721 min Scan# 1712
Delta R.T. 0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:266 Resp: 1431

Ion	Ratio	Lower	Upper
266	100		
264	63.0	49.4	74.2
268	60.7	50.5	75.7

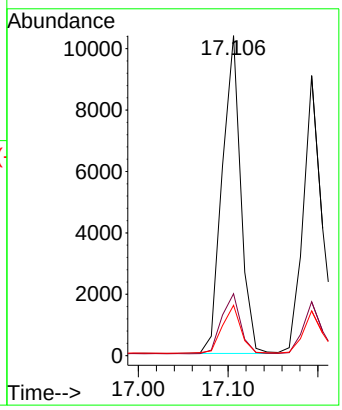




#25
Phenanthrene
Concen: 0.366 ng
RT: 17.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:178 Resp: 1485

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.2
179	15.3	12.2	18.4



Instrument :
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ClientSampleId :
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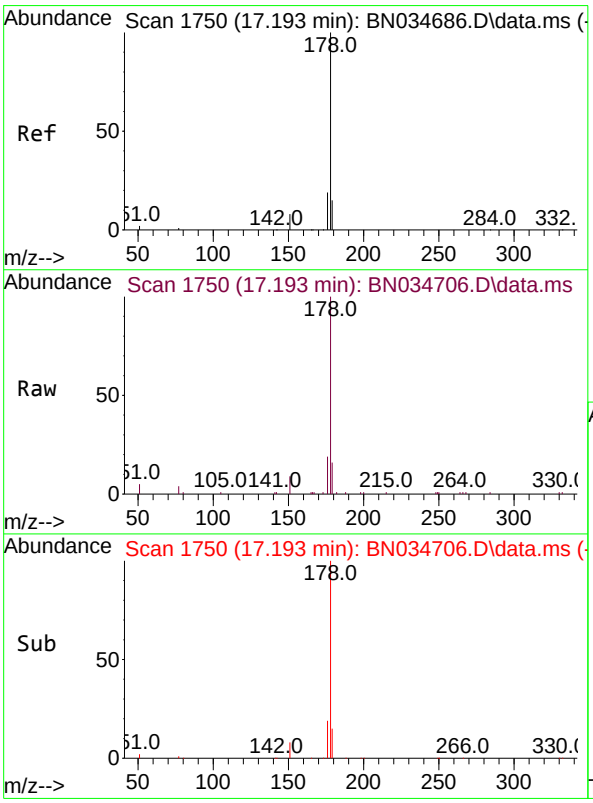
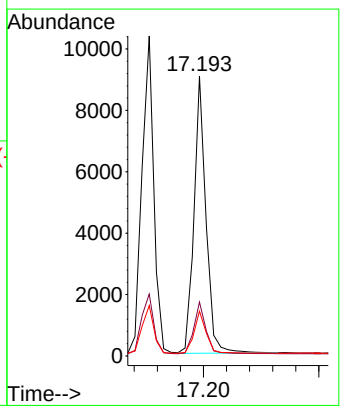
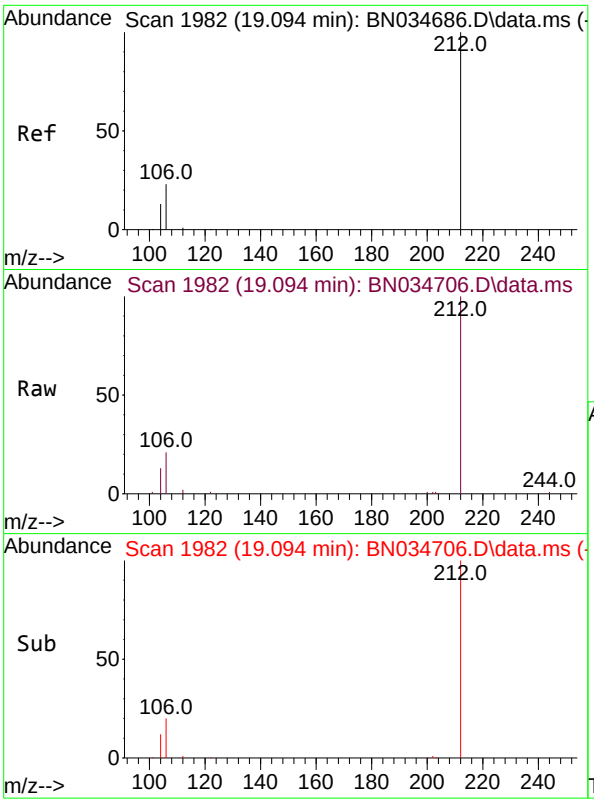


#26
Anthracene
Concen: 0.362 ng
RT: 17.193 min Scan# 1750
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:178 Resp: 13024

Ion	Ratio	Lower	Upper
178	100		
176	18.8	14.9	22.3
179	15.3	12.2	18.2





#27
Fluoranthene-d10
Concen: 0.335 ng
RT: 19.094 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:212 Resp: 1019

Ion	Ratio	Lower	Upper
212	100		
106	23.4	17.8	26.8
104	13.7	10.2	15.4

Instrument :
BNA_N
ClientSampleId :
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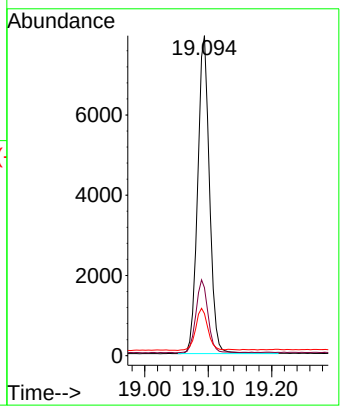
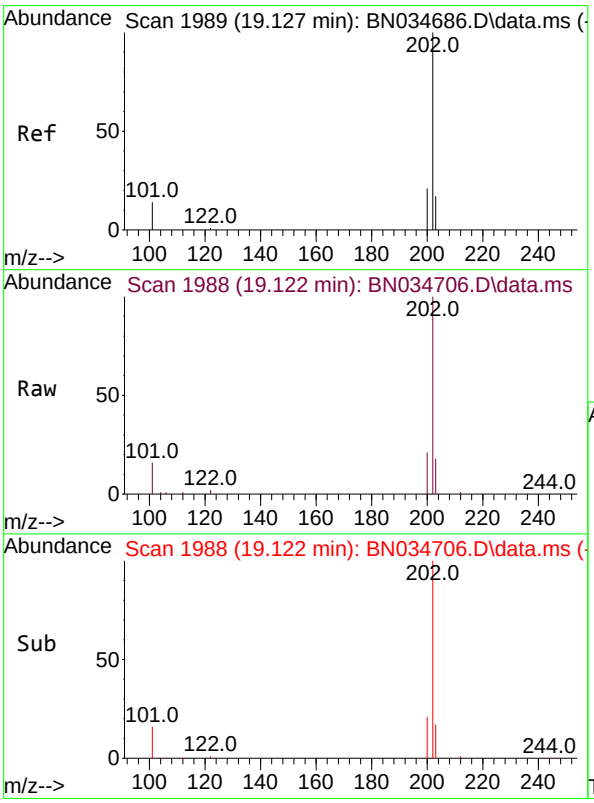
Supervised By :mohammad ahmed 10/26/2024

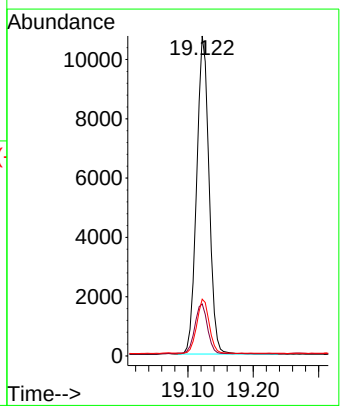


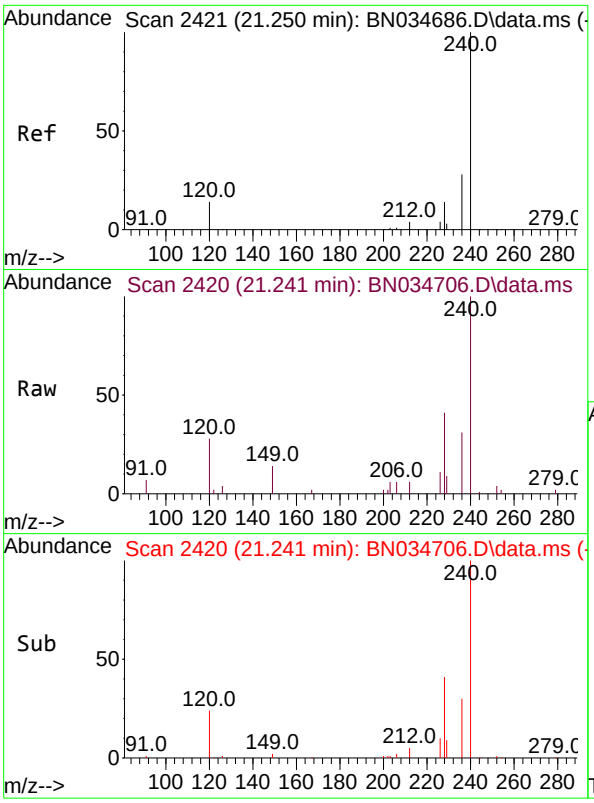


#28
Fluoranthene
Concen: 0.334 ng
RT: 19.122 min Scan# 1988
Delta R.T. -0.005 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:202 Resp: 14119

Ion	Ratio	Lower	Upper
202	100		
101	16.4	12.8	19.2
203	17.0	13.5	20.3

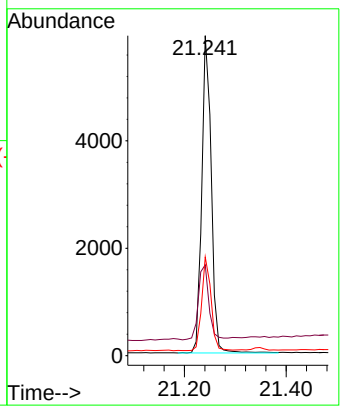




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.241 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:240 Resp: 766

Ion	Ratio	Lower	Upper
240	100		
120	28.4	14.2	21.2
236	30.8	23.1	34.7



Instrument :
BNA_N
ClientSampleId :
PB164282BS

Manual Integrations
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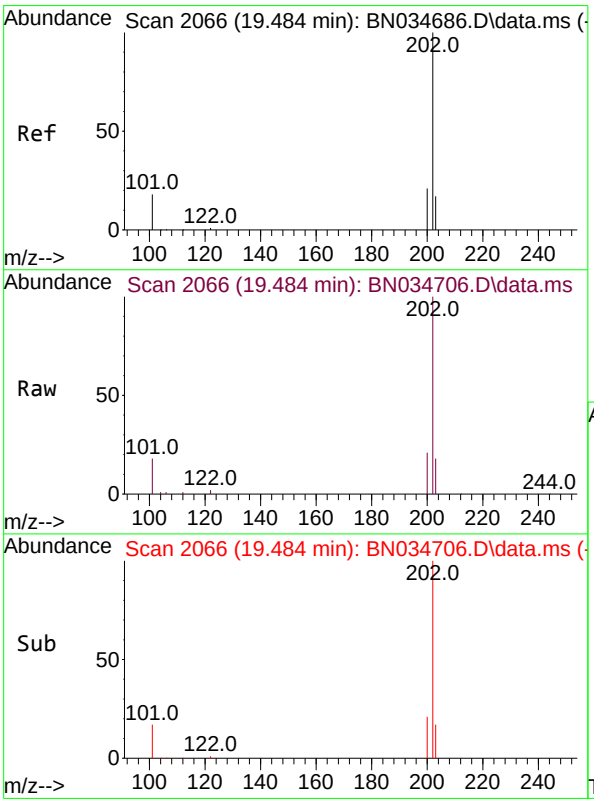
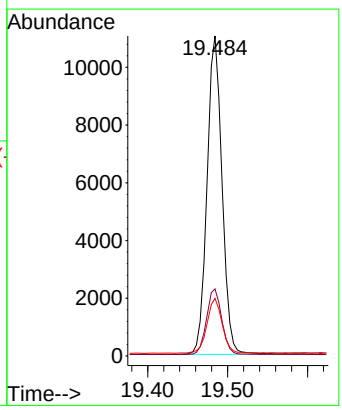
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

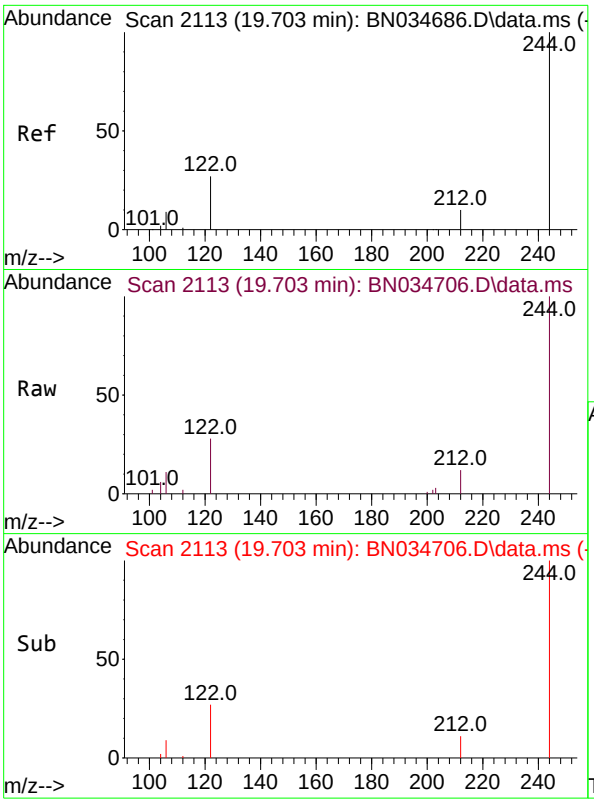


#30
Pyrene
Concen: 0.364 ng
RT: 19.484 min Scan# 2066
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:202 Resp: 14340

Ion	Ratio	Lower	Upper
202	100		
200	21.0	16.6	25.0
203	17.5	14.2	21.4

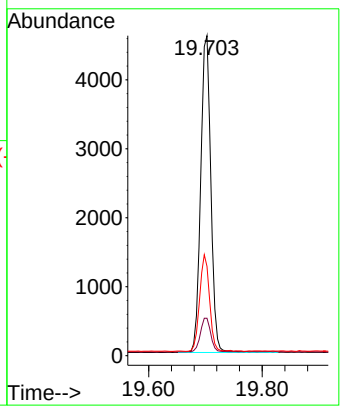




#31
Terphenyl-d14
Concen: 0.364 ng
RT: 19.703 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:244 Resp: 569

Ion	Ratio	Lower	Upper
244	100		
212	11.7	8.6	13.0
122	27.9	22.3	33.5



Instrument :
BNA_N
ClientSampleId :
PB164282BS

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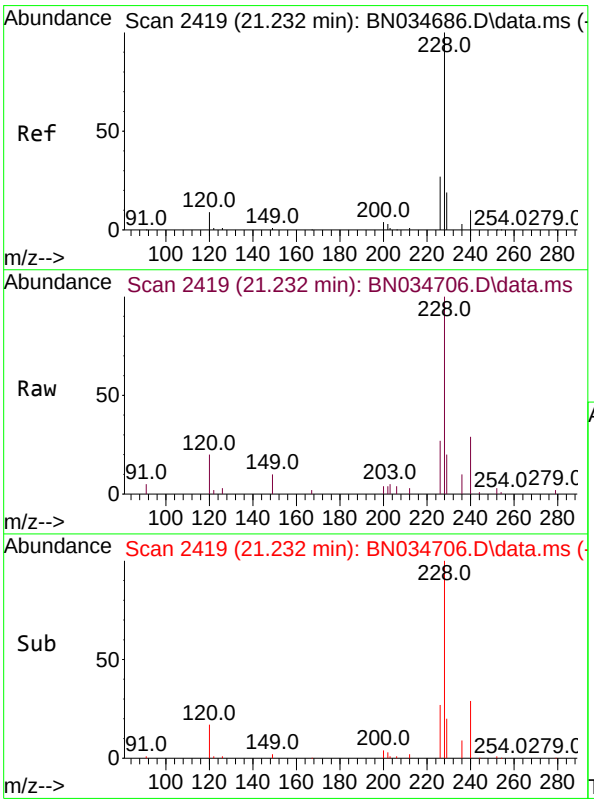
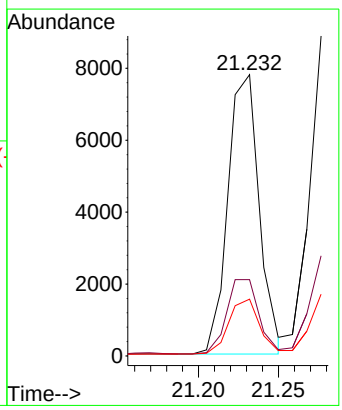
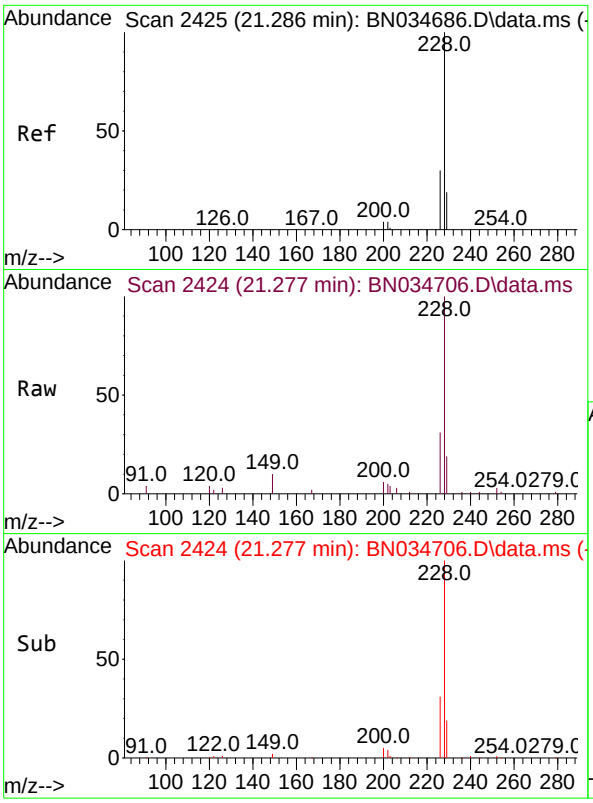


#32
Benzo(a)anthracene
Concen: 0.363 ng
RT: 21.232 min Scan# 2419
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:228 Resp: 10619

Ion	Ratio	Lower	Upper
228	100		
226	27.1	22.0	33.0
229	20.2	15.6	23.4

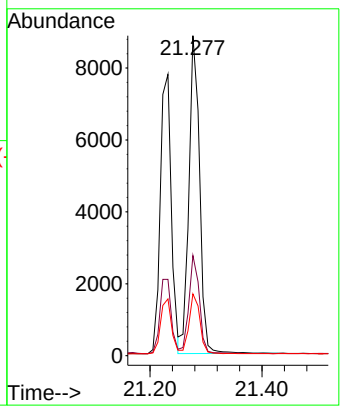




#33
Chrysene
Concen: 0.386 ng
RT: 21.277 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:228 Resp: 1169

Ion	Ratio	Lower	Upper
228	100		
226	31.3	24.1	36.1
229	19.3	15.8	23.8



Instrument :
BNA_N
ClientSampleId :
PB164282BS

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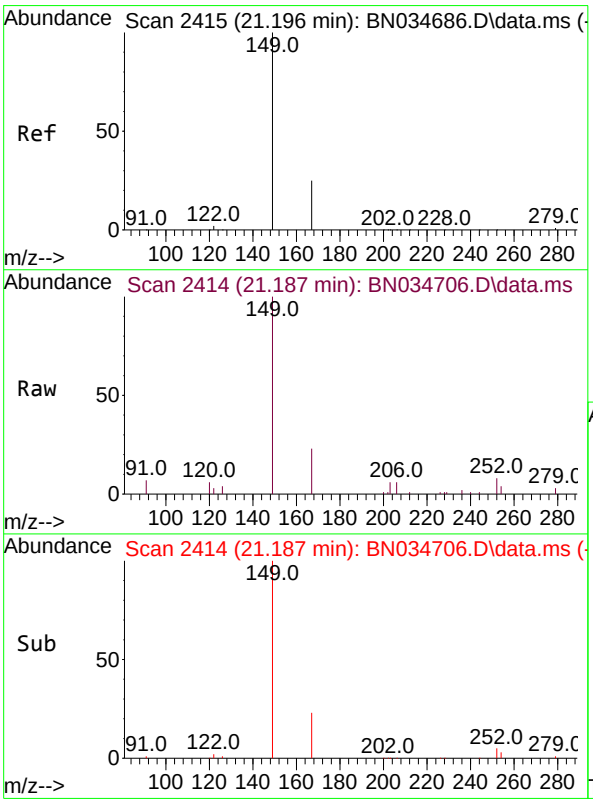
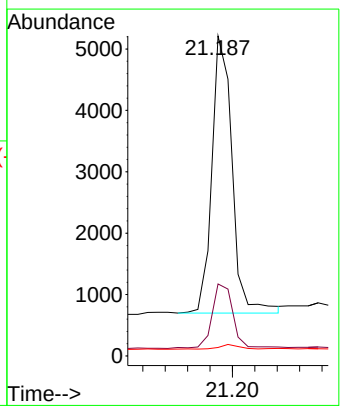
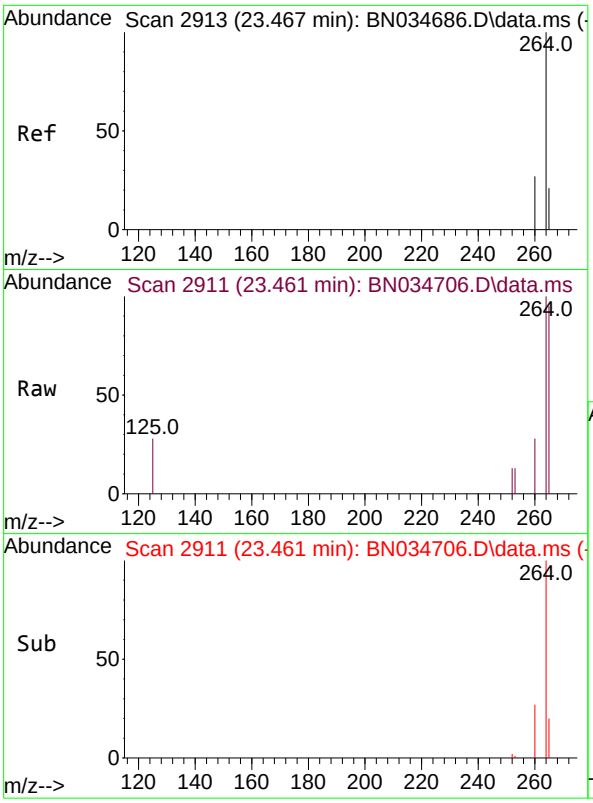


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.341 ng
RT: 21.187 min Scan# 2414
Delta R.T. -0.009 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:149 Resp: 5670

Ion	Ratio	Lower	Upper
149	100		
167	24.5	19.7	29.5
279	1.7	1.8	2.6#

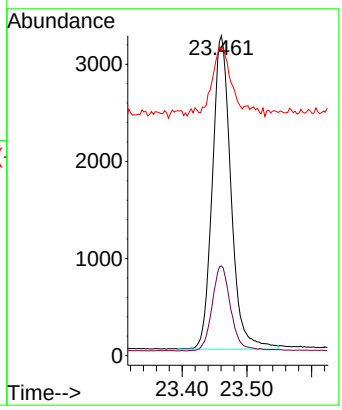




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.461 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:264 Resp: 645

Ion	Ratio	Lower	Upper
264	100		
260	28.1	21.9	32.9
265	95.5	60.6	91.0



Instrument :
BNA_N
ClientSampleId :
PB164282BS

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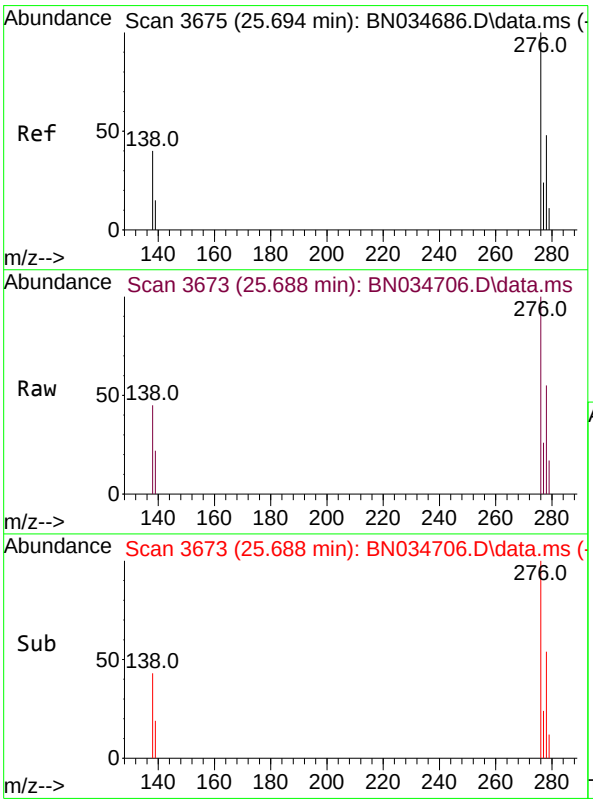
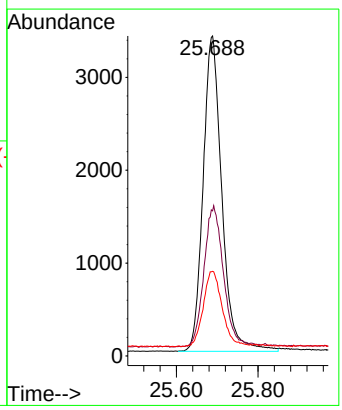
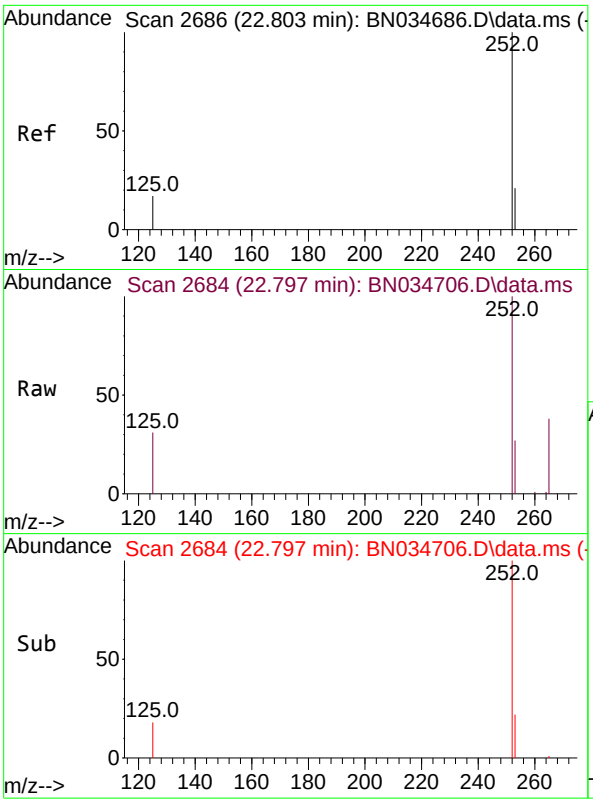


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.435 ng
RT: 25.688 min Scan# 3673
Delta R.T. -0.006 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:276 Resp: 10806

Ion	Ratio	Lower	Upper
276	100		
138	46.0	35.1	52.7
277	24.3	19.7	29.5

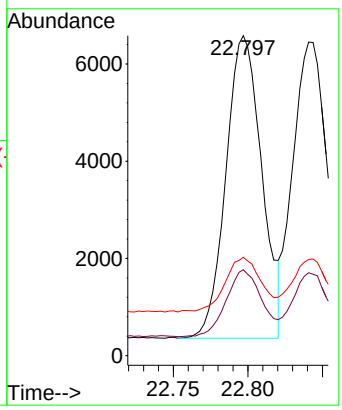




#37
Benzo(b)fluoranthene
Concen: 0.403 ng
RT: 22.797 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:252 Resp: 1039

Ion	Ratio	Lower	Upper
252	100		
253	26.8	20.0	30.0
125	30.7	20.9	31.3



Instrument :
BNA_N
ClientSampleId :
PB164282BS

Manual Integrations
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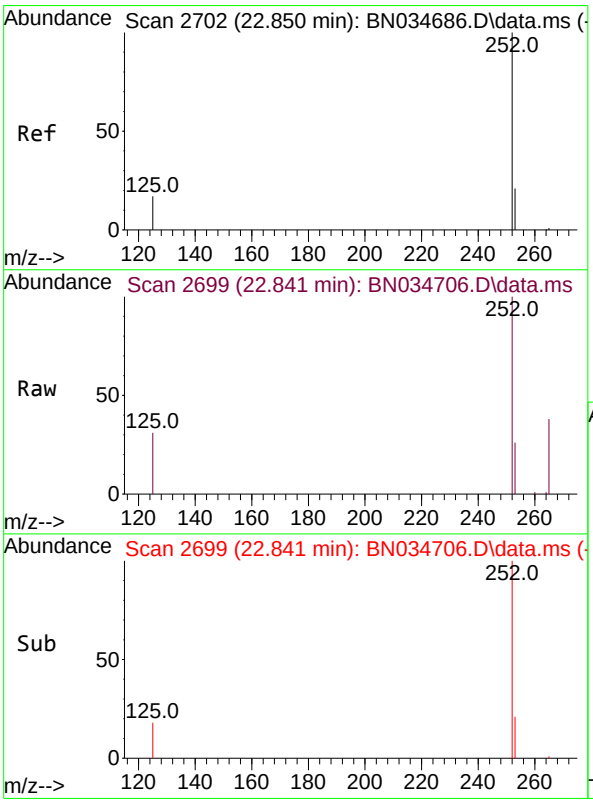
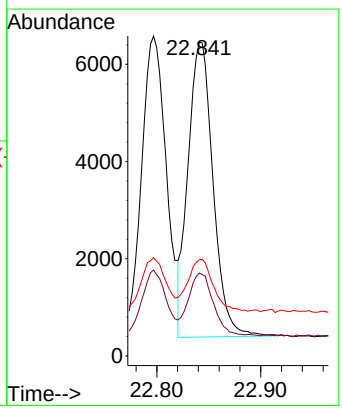
Supervised By :mohammad ahmed 10/26/2024

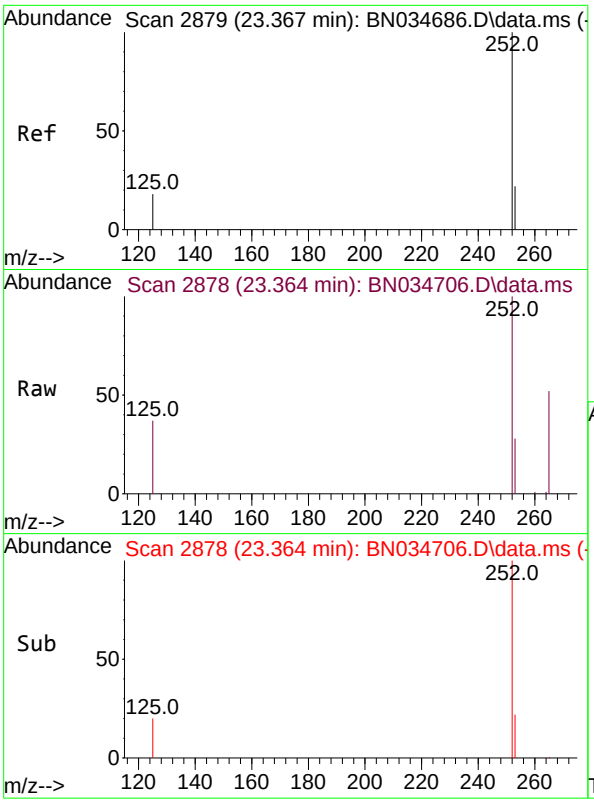


#38
Benzo(k)fluoranthene
Concen: 0.399 ng
RT: 22.841 min Scan# 2699
Delta R.T. -0.009 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:252 Resp: 10151

Ion	Ratio	Lower	Upper
252	100		
253	26.4	20.6	31.0
125	30.7	21.6	32.4

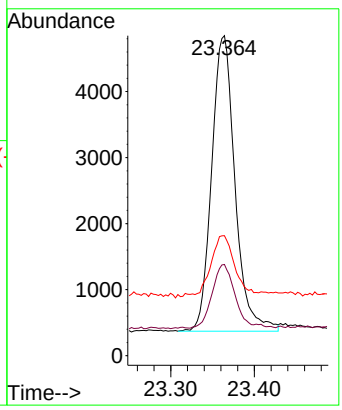




#39
Benzo(a)pyrene
Concen: 0.420 ng
RT: 23.364 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:252 Resp: 868

Ion	Ratio	Lower	Upper
252	100		
253	28.5	22.2	33.4
125	37.5	26.0	39.0



Instrument :
BNA_N
ClientSampleId :
PB164282BS

Manual Integrations
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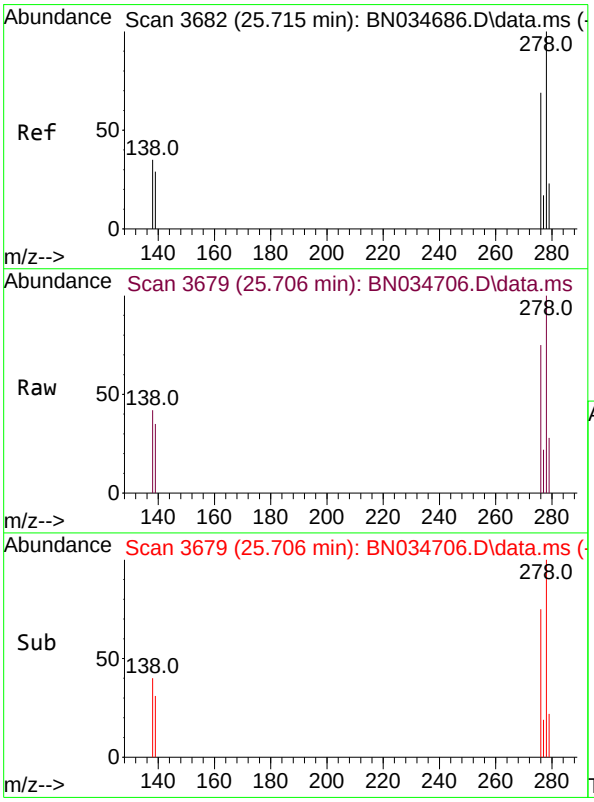
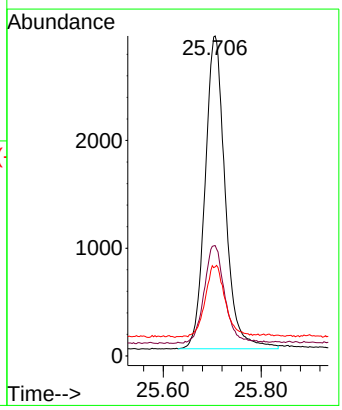
Supervised By :mohammad ahmed 10/26/2024

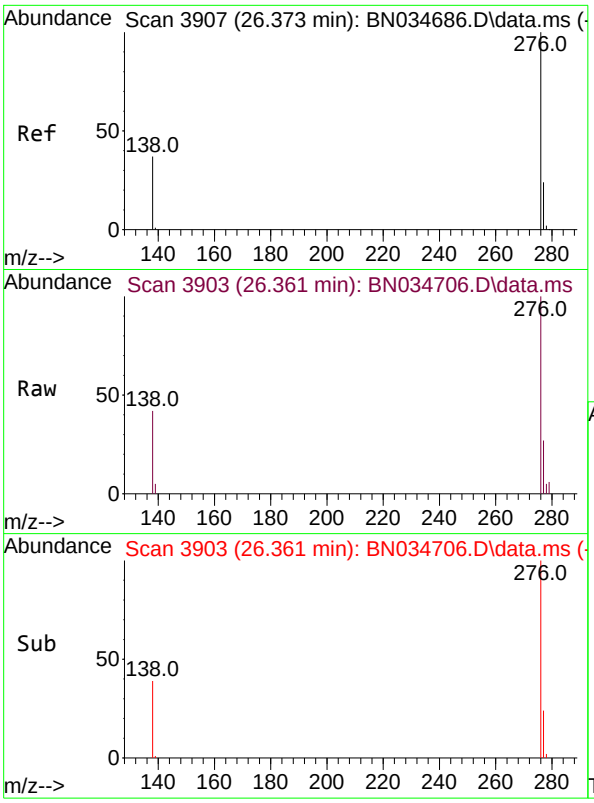


#40
Dibenzo(a,h)anthracene
Concen: 0.422 ng
RT: 25.706 min Scan# 3679
Delta R.T. -0.009 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:278 Resp: 8269

Ion	Ratio	Lower	Upper
278	100		
139	34.5	25.4	38.2
279	27.9	22.4	33.6

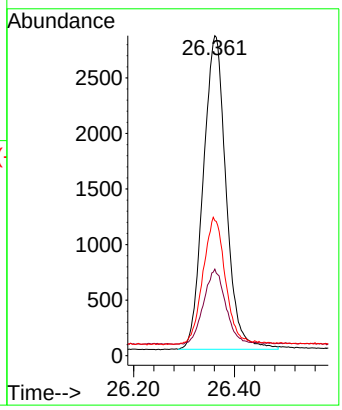




#41
Benzo(g,h,i)perylene
Concen: 0.408 ng
RT: 26.361 min Scan# 3
Delta R.T. -0.012 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:276 Resp: 883

Ion	Ratio	Lower	Upper
276	100		
277	27.0	21.3	31.9
138	42.2	31.9	47.9



Instrument :
BNA_N
ClientSampleId :
PB164282BS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

Raw Data: **BN034711.D**

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	
Project:	CTO WE13			Date Received:	
Client Sample ID:	PB164282BSD			SDG No.:	P4440
Lab Sample ID:	PB164282BSD			Matrix:	Water
Analytical Method:	SW8270SIM			% Solid:	0
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 :
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034711.D	1	10/21/24 08:45	10/25/24 03:02	PB164282

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.31		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.50		30 - 150		125%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.33		30 - 150		83%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		84%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		89%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.37		58 - 132		93%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	5970	7.712				
1146-65-2	Naphthalene-d8	16600	10.479				
15067-26-2	Acenaphthene-d10	7140	14.329				
1517-22-2	Phenanthrene-d10	13000	17.057				
1719-03-5	Chrysene-d12	7030	21.241				
1520-96-3	Perylene-d12	5870	23.458				

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\BN102424\
Data File : BN034711.D
Acq On : 25 Oct 2024 03:02
Operator : RC/JU
Sample : PB164282BSD
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Manual Integrations APPROVED
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

Quant Time: Oct 25 04:20:43 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.712	152	5974	0.400	ng	0.00
7) Naphthalene-d8	10.479	136	16564	0.400	ng	0.00
13) Acenaphthene-d10	14.329	164	7143	0.400	ng	0.00
19) Phenanthrene-d10	17.057	188	13002	0.400	ng	#-0.01
29) Chrysene-d12	21.241	240	7027	0.400	ng	# 0.00
35) Perylene-d12	23.458	264	5873	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.322	112	5283	0.297	ng	0.00
5) Phenol-d6	6.882	99	7080	0.302	ng	0.00
8) Nitrobenzene-d5	8.845	82	4660	0.335	ng	0.00
11) 2-Methylnaphthalene-d10	12.071	152	11354m	0.499	ng	0.00
14) 2,4,6-Tribromophenol	15.815	330	521	0.236	ng	0.00
15) 2-Fluorobiphenyl	12.950	172	10106	0.356	ng	0.00
27) Fluoranthene-d10	19.094	212	9709	0.332	ng	0.00
31) Terphenyl-d14	19.703	244	5323	0.371	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.285	88	2435	0.306	ng	# 53
3) n-Nitrosodimethylamine	3.581	42	4293	0.371	ng	96
6) bis(2-Chloroethyl)ether	7.142	93	6795	0.357	ng	99
9) Naphthalene	10.532	128	15953	0.348	ng	99
10) Hexachlorobutadiene	10.831	225	2383	0.347	ng	# 97
12) 2-Methylnaphthalene	12.143	142	9409	0.331	ng	98
16) Acenaphthylene	14.040	152	12085	0.352	ng	99
17) Acenaphthene	14.382	154	7997	0.338	ng	98
18) Fluorene	15.377	166	9417	0.323	ng	100
20) 4,6-Dinitro-2-methylph...	15.441	198	532	0.294	ng	# 60
21) 4-Bromophenyl-phenylether	16.262	248	2358	0.340	ng	# 62
22) Hexachlorobenzene	16.374	284	2677	0.356	ng	98
23) Atrazine	16.535	200	1782	0.327	ng	# 89
24) Pentachlorophenol	16.721	266	1302	0.490	ng	99
25) Phenanthrene	17.106	178	14207	0.364	ng	100
26) Anthracene	17.193	178	12435	0.359	ng	100
28) Fluoranthene	19.122	202	13425	0.329	ng	100
30) Pyrene	19.484	202	13610	0.377	ng	99
32) Benzo(a)anthracene	21.232	228	9893	0.369	ng	99
33) Chrysene	21.277	228	11013	0.396	ng	98
34) Bis(2-ethylhexyl)phtha...	21.187	149	5309	0.349	ng	# 96
36) Indeno(1,2,3-cd)pyrene	25.683	276	9709	0.429	ng	96
37) Benzo(b)fluoranthene	22.797	252	9630	0.411	ng	94
38) Benzo(k)fluoranthene	22.841	252	9277m	0.401	ng	
39) Benzo(a)pyrene	23.367	252	8133	0.432	ng	# 93
40) Dibenzo(a,h)anthracene	25.703	278	7436	0.417	ng	96
41) Benzo(g,h,i)perylene	26.364	276	7954	0.404	ng	97

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

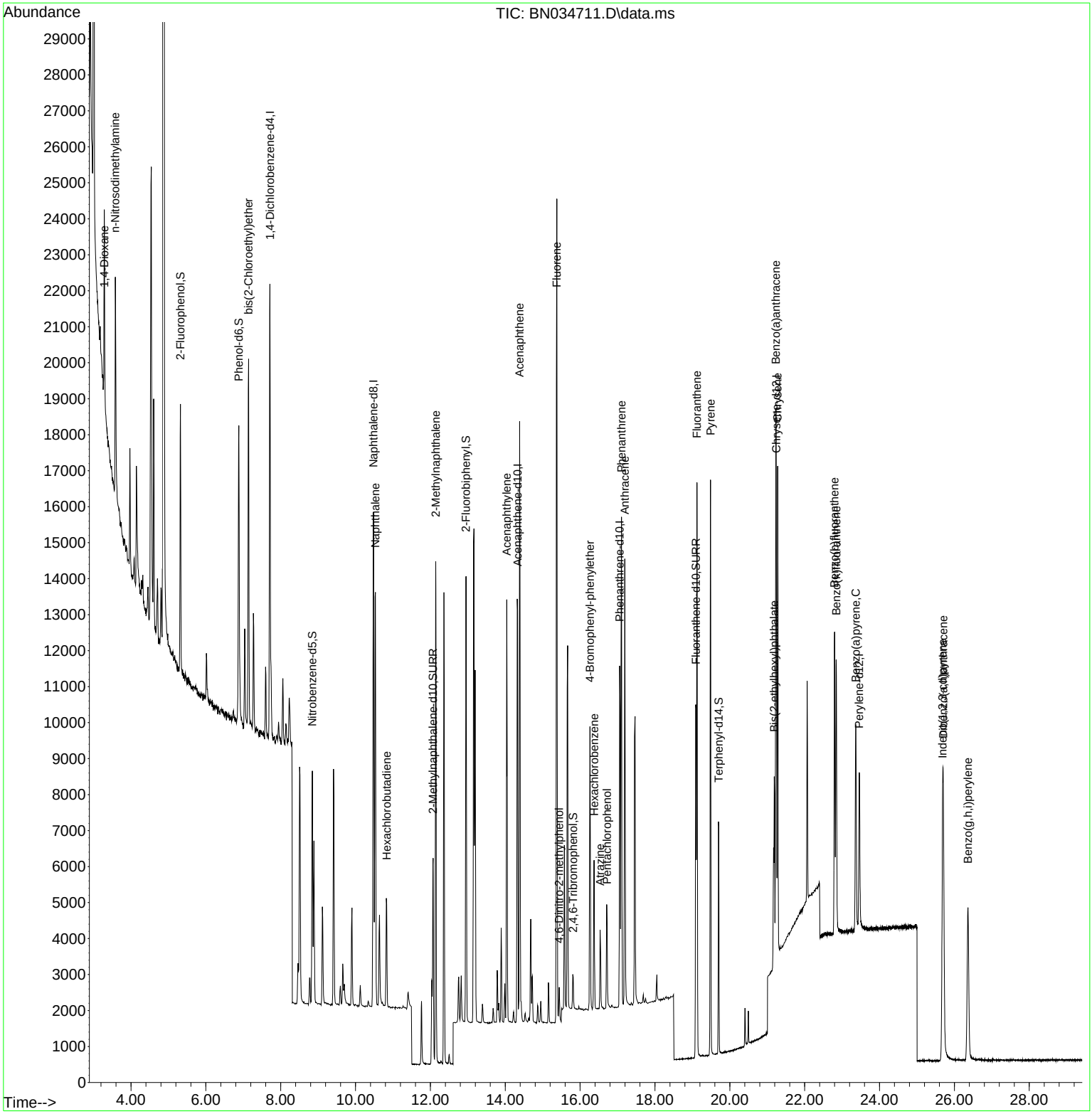
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034711.D
Acq On : 25 Oct 2024 03:02
Operator : RC/JU
Sample : PB164282BSD
Misc :
ALS Vial : 28 Sample Multiplier: 1

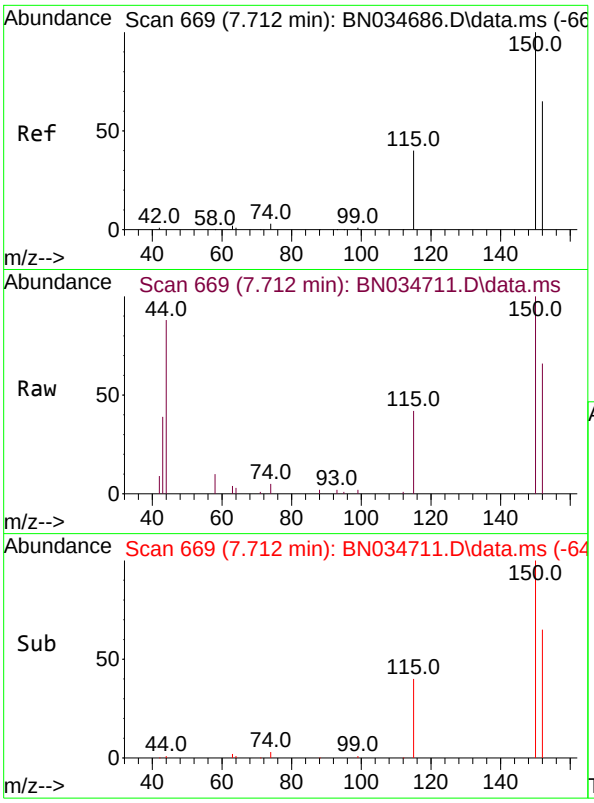
Quant Time: Oct 25 04:20:43 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

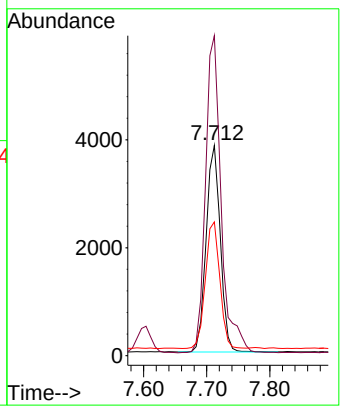




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:152 Resp: 597

Ion	Ratio	Lower	Upper
152	100		
150	152.2	122.7	184.1
115	63.6	51.0	76.6



Instrument :
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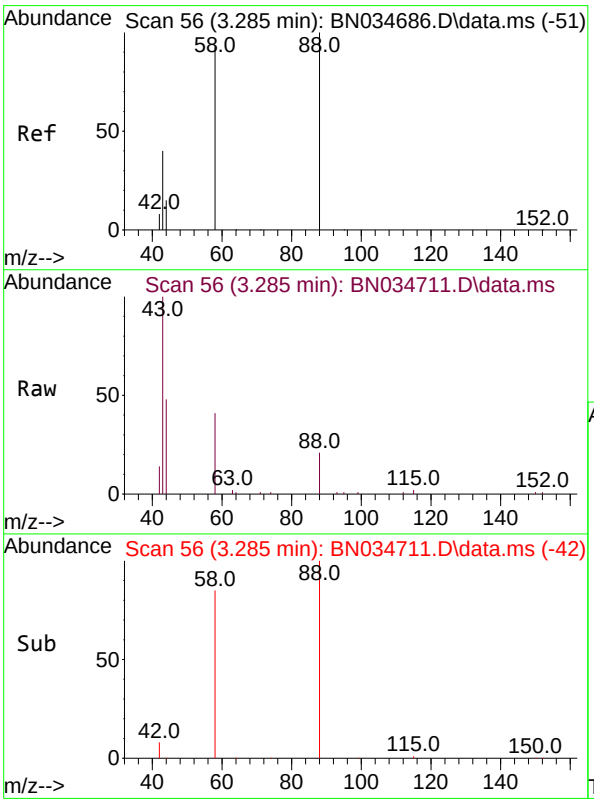
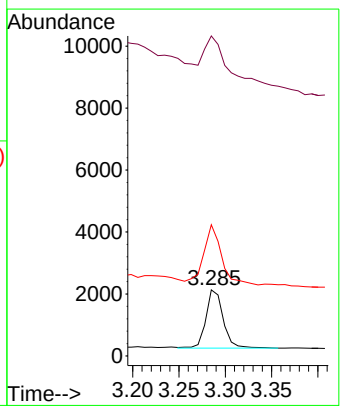
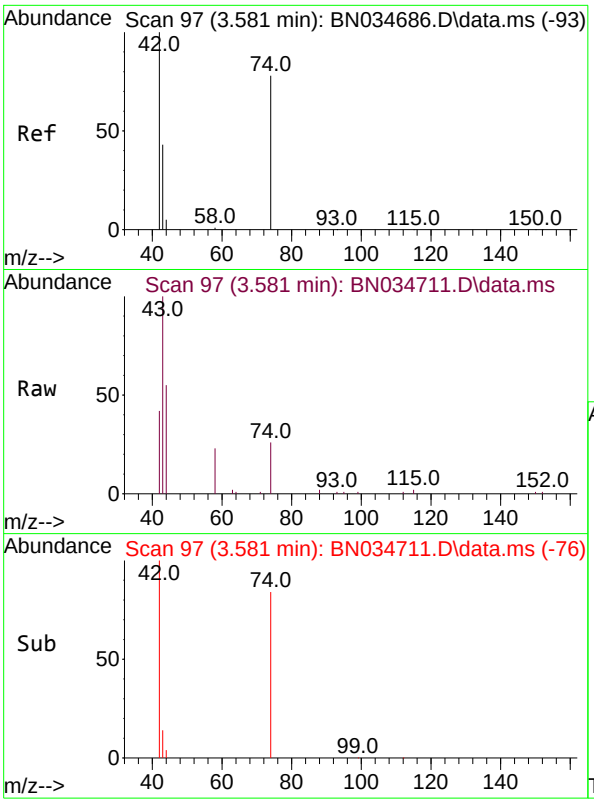


#2
1,4-Dioxane
Concen: 0.306 ng
RT: 3.285 min Scan# 56
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion: 88 Resp: 2435

Ion	Ratio	Lower	Upper
88	100		
43	114.0	32.1	48.1#
58	107.2	73.7	110.5

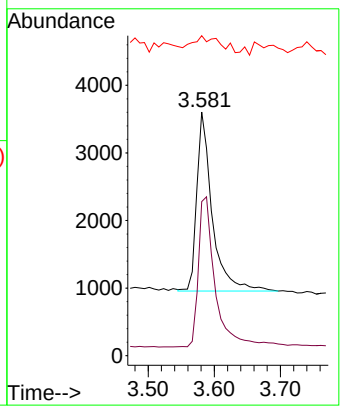




#3
n-Nitrosodimethylamine
Concen: 0.371 ng
RT: 3.581 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion: 42 Resp: 429

Ion	Ratio	Lower	Upper
42	100		
74	92.4	77.2	115.8
44	15.0	13.4	20.2



Instrument :
BNA_N
ClientSampleId :
PB164282BSD

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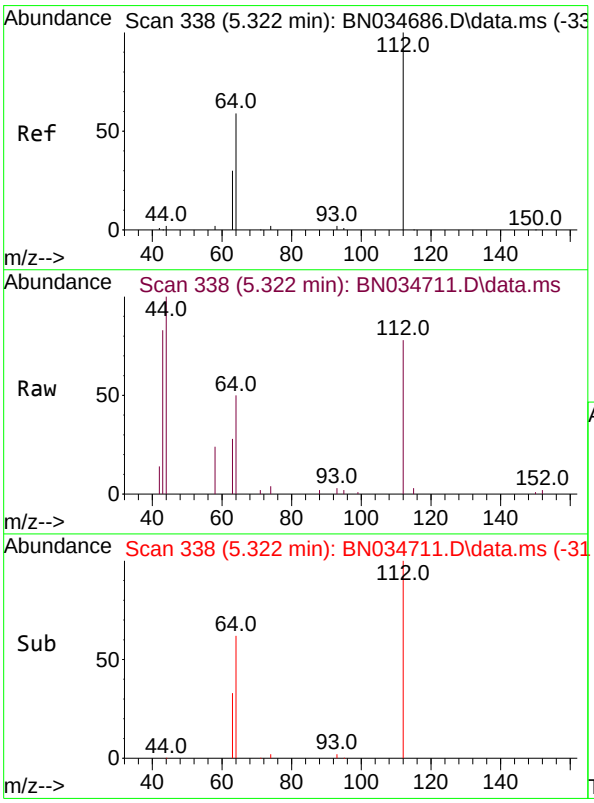
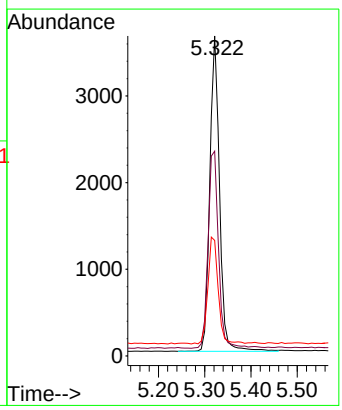
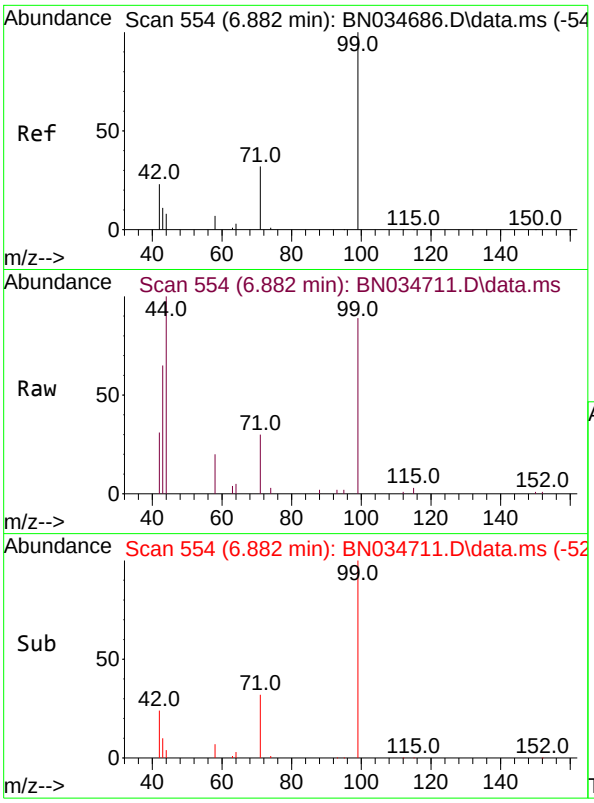


#4
2-Fluorophenol
Concen: 0.297 ng
RT: 5.322 min Scan# 338
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:112 Resp: 5283

Ion	Ratio	Lower	Upper
112	100		
64	67.3	53.0	79.6
63	35.9	27.6	41.4





#5
Phenol-d6
Concen: 0.302 ng
RT: 6.882 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion: 99 Resp: 708

Ion	Ratio	Lower	Upper
99	100		
42	30.9	21.8	32.8
71	33.8	26.6	40.0

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

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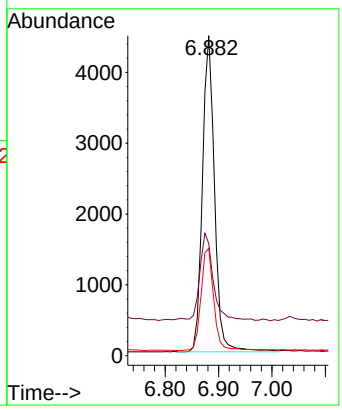
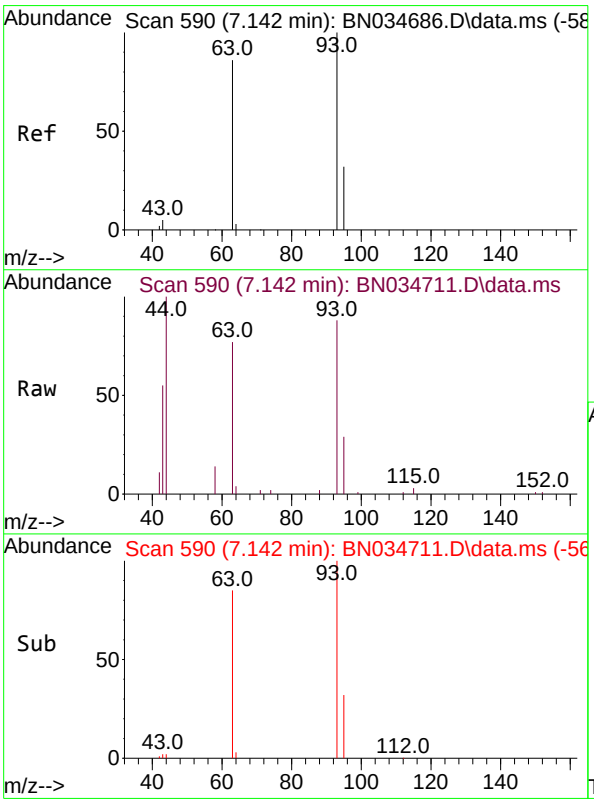
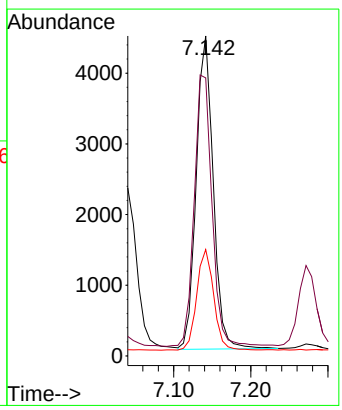


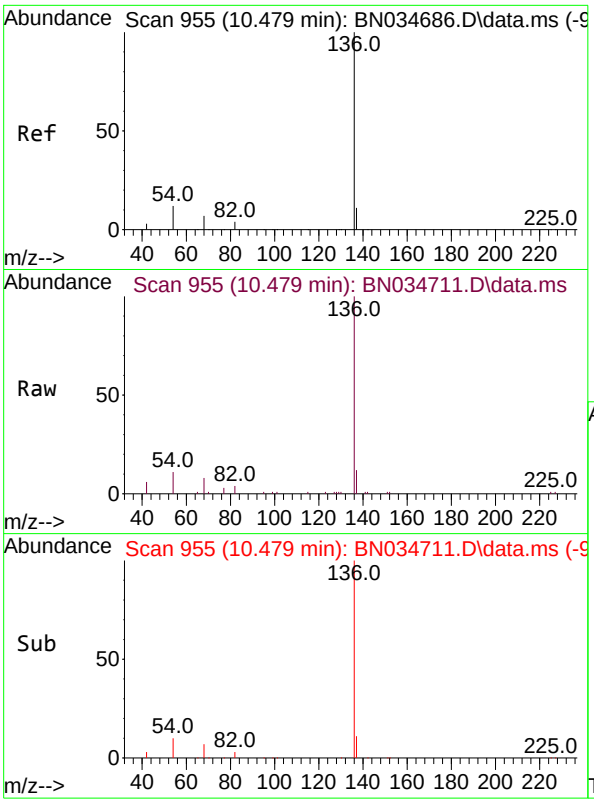


#6
bis(2-Chloroethyl)ether
Concen: 0.357 ng
RT: 7.142 min Scan# 590
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion: 93 Resp: 6795

Ion	Ratio	Lower	Upper
93	100		
63	90.5	71.5	107.3
95	32.1	25.8	38.6

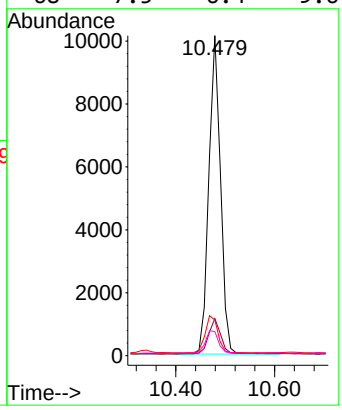




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:136 Resp: 1656

Ion	Ratio	Lower	Upper
136	100		
137	11.6	9.1	13.7
54	11.1	9.8	14.8
68	7.5	6.4	9.6



Instrument :
BNA_N
ClientSampleId :
PB164282BSD

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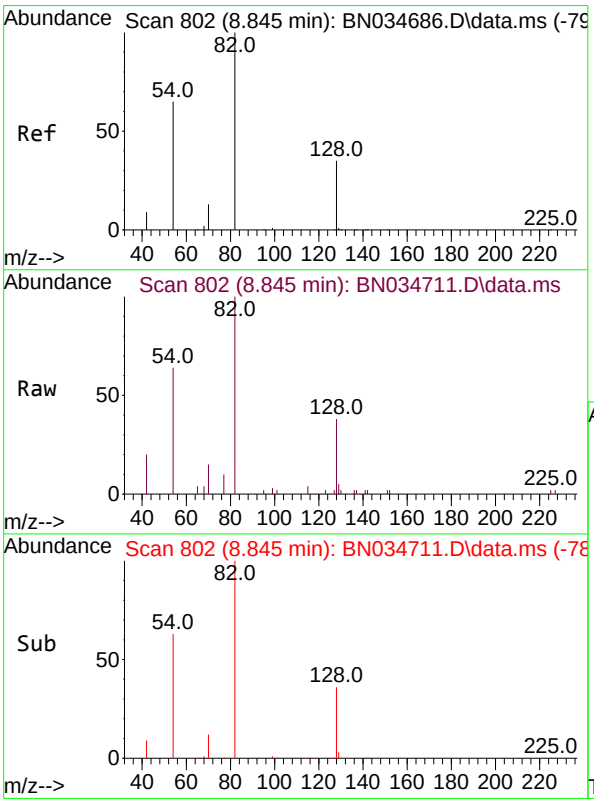
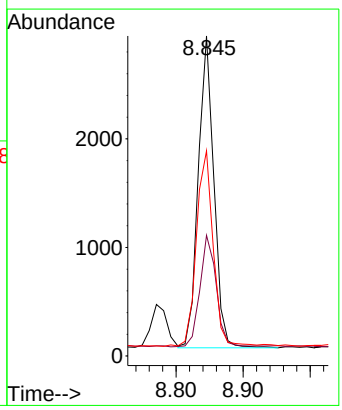
Supervised By :mohammad ahmed 10/26/2024

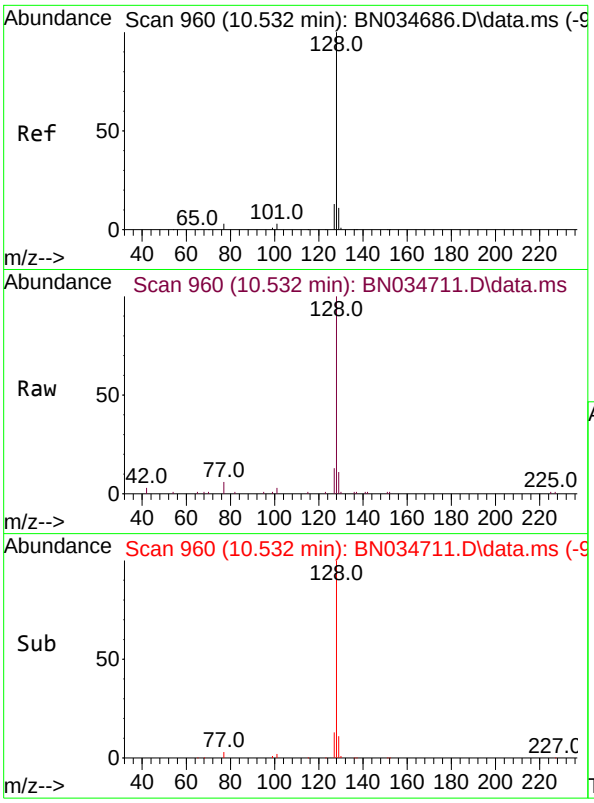


#8
Nitrobenzene-d5
Concen: 0.335 ng
RT: 8.845 min Scan# 802
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion: 82 Resp: 4660

Ion	Ratio	Lower	Upper
82	100		
128	37.7	29.7	44.5
54	64.1	53.0	79.6





#9
Naphthalene
Concen: 0.348 ng
RT: 10.532 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:128 Resp: 1595

Ion	Ratio	Lower	Upper
128	100		
129	11.4	9.0	13.6
127	13.4	10.5	15.7

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

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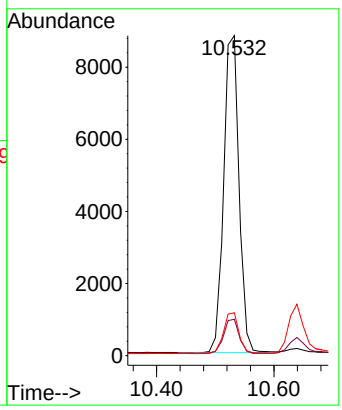
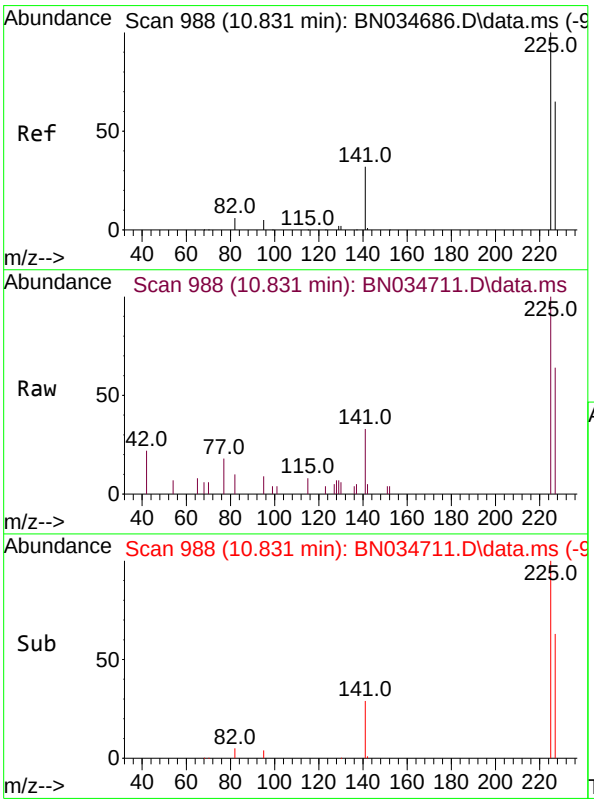
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

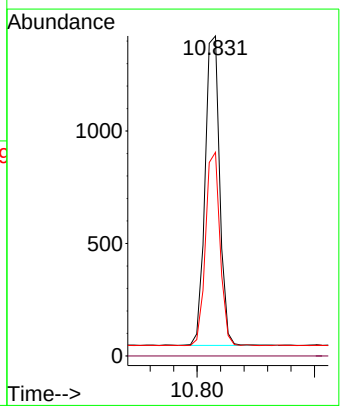


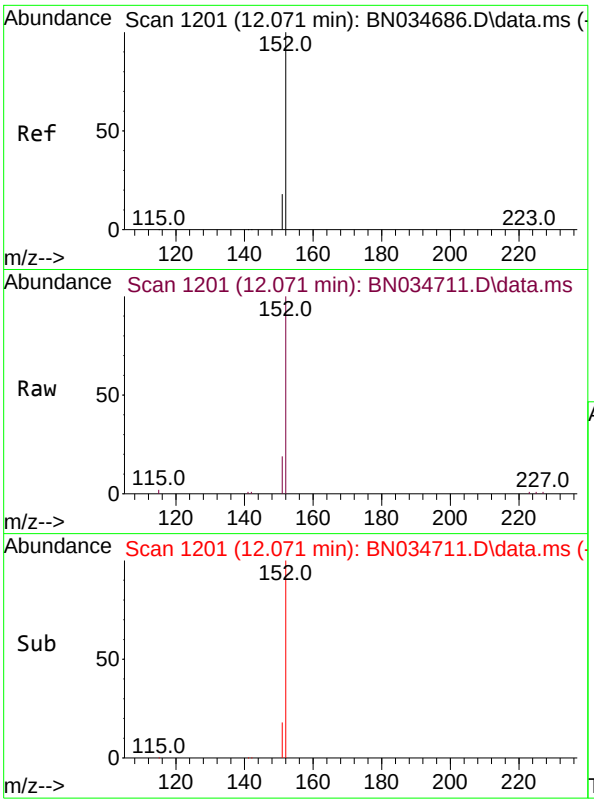


#10
Hexachlorobutadiene
Concen: 0.347 ng
RT: 10.831 min Scan# 988
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:225 Resp: 2383

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	62.1	51.4	77.0

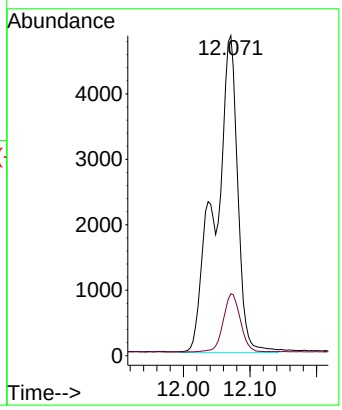




#11
2-Methylnaphthalene-d10
Concen: 0.499 ng m
RT: 12.071 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:152 Resp: 1135

Ion	Ratio	Lower	Upper
152	100		
151	14.1	16.7	25.1#



Instrument :
BNA_N
ClientSampleId :
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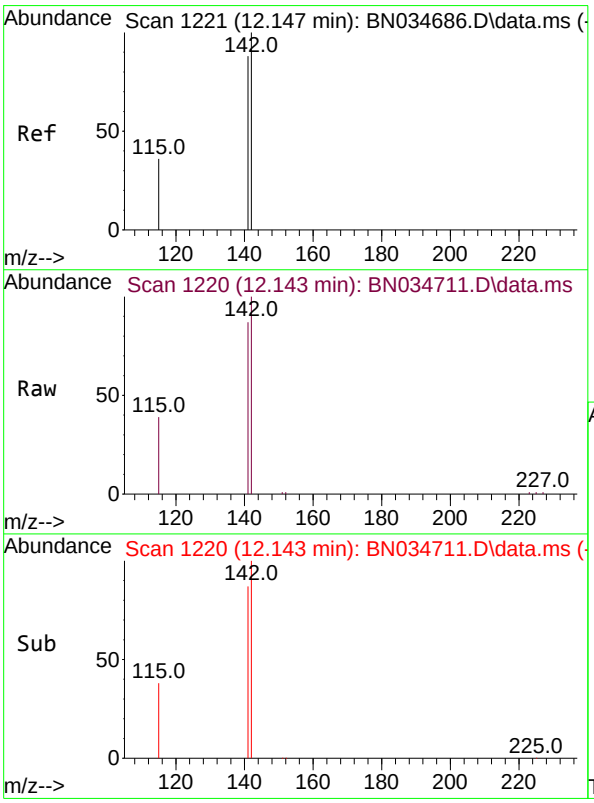
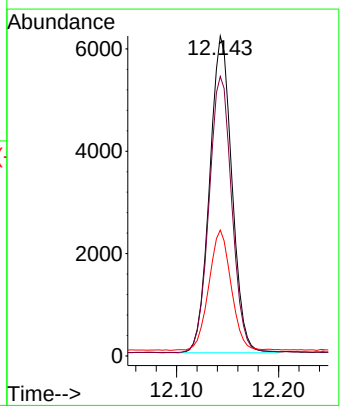
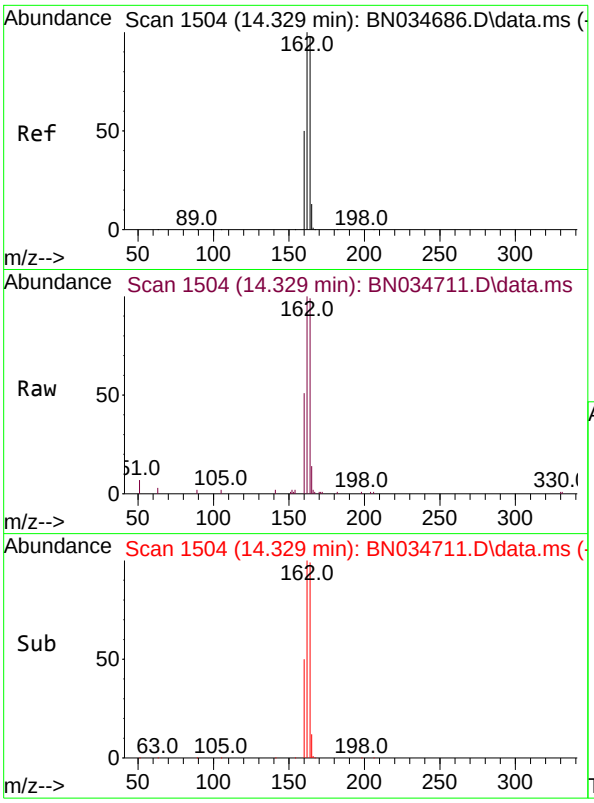


#12
2-Methylnaphthalene
Concen: 0.331 ng
RT: 12.143 min Scan# 1220
Delta R.T. -0.004 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:142 Resp: 9409

Ion	Ratio	Lower	Upper
142	100		
141	87.4	70.4	105.6
115	39.3	29.8	44.6

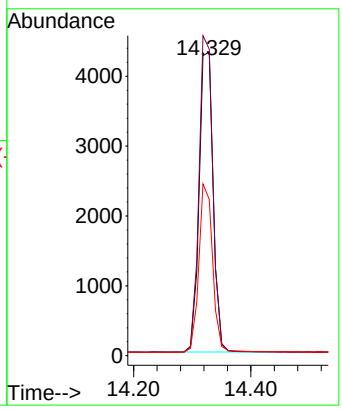




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.329 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:164 Resp: 714

Ion	Ratio	Lower	Upper
164	100		
162	100.9	81.4	122.0
160	51.4	40.6	61.0



Instrument :
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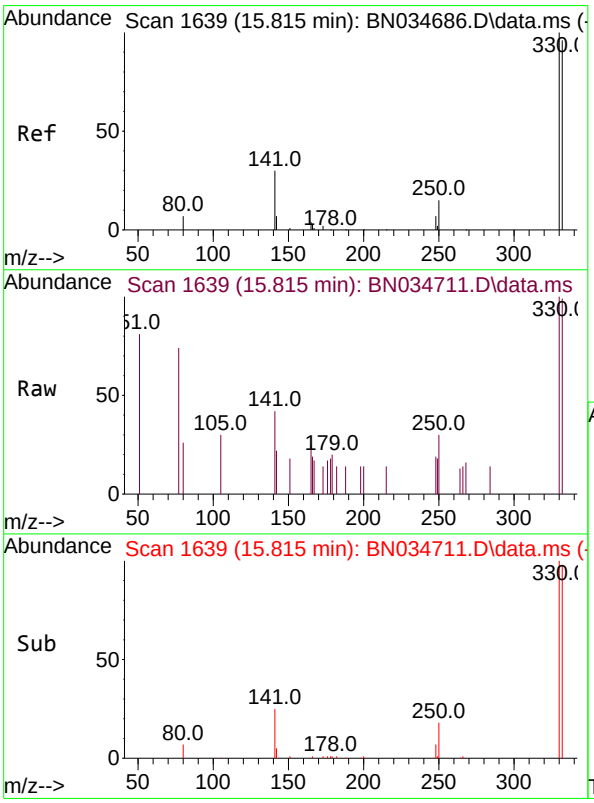
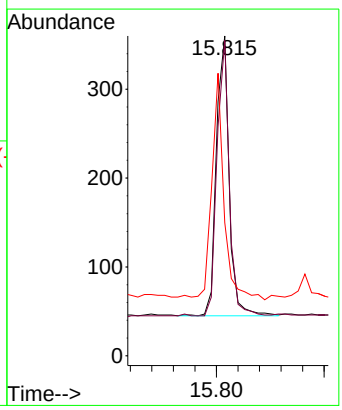
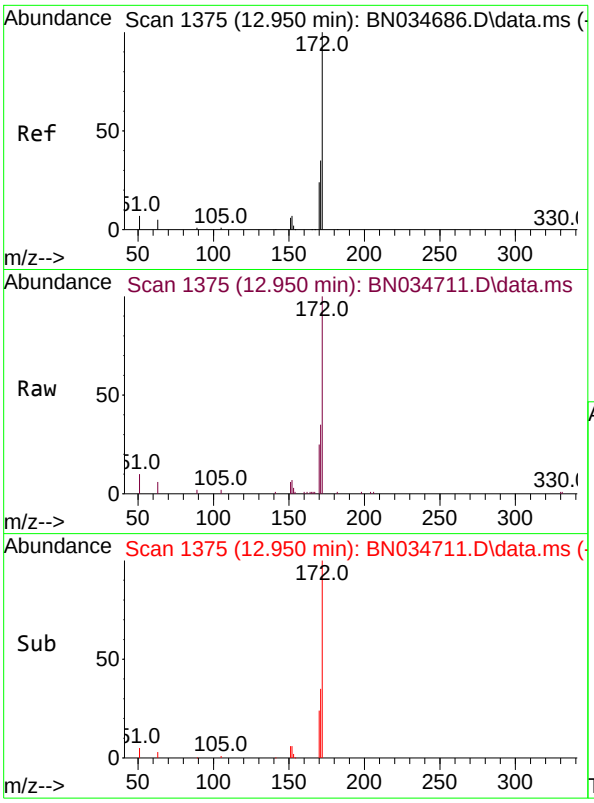


#14
2,4,6-Tribromophenol
Concen: 0.236 ng
RT: 15.815 min Scan# 1639
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:330 Resp: 521

Ion	Ratio	Lower	Upper
330	100		
332	93.5	76.6	115.0
141	77.7	54.6	81.8

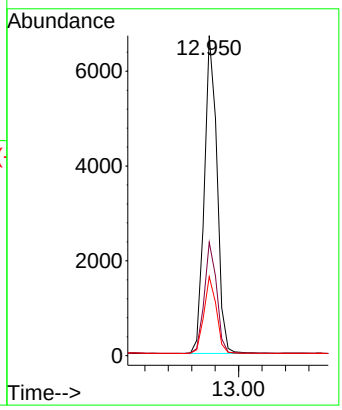




#15
2-Fluorobiphenyl
Concen: 0.356 ng
RT: 12.950 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:172 Resp: 1010

Ion	Ratio	Lower	Upper
172	100		
171	35.5	28.3	42.5
170	24.7	19.8	29.6



Instrument :
BNA_N
ClientSampleId :
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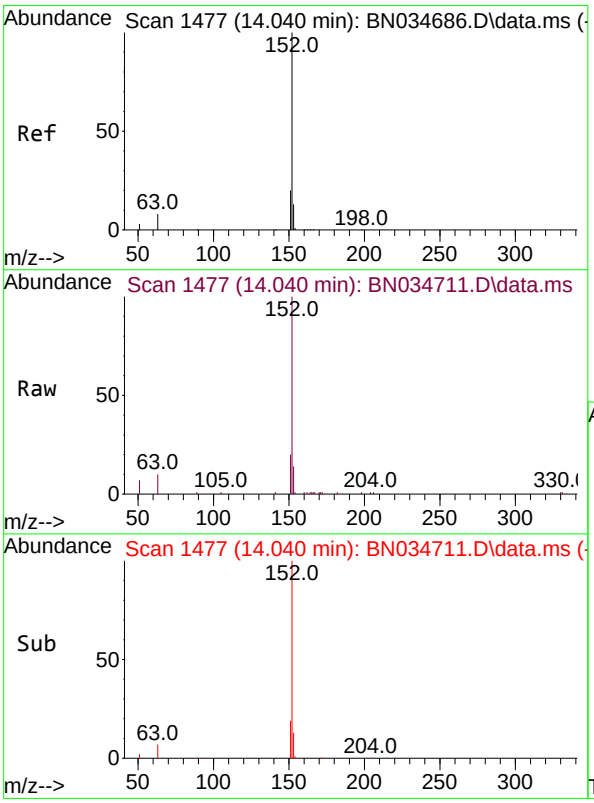
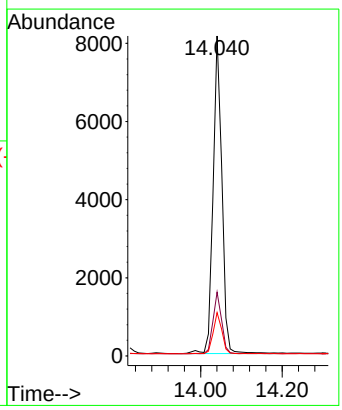
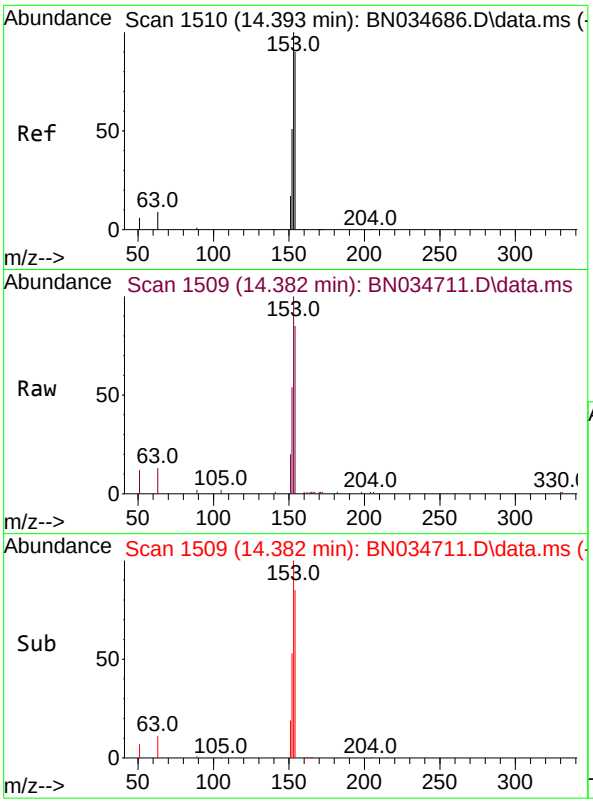


#16
Acenaphthylene
Concen: 0.352 ng
RT: 14.040 min Scan# 1477
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:152 Resp: 12085

Ion	Ratio	Lower	Upper
152	100		
151	19.1	15.6	23.4
153	12.9	10.6	15.8

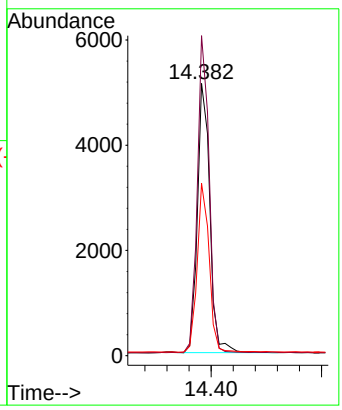




#17
Acenaphthene
Concen: 0.338 ng
RT: 14.382 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:154 Resp: 799

Ion	Ratio	Lower	Upper
154	100		
153	111.9	88.2	132.2
152	60.7	46.9	70.3



Instrument :
BNA_N
ClientSampleId :
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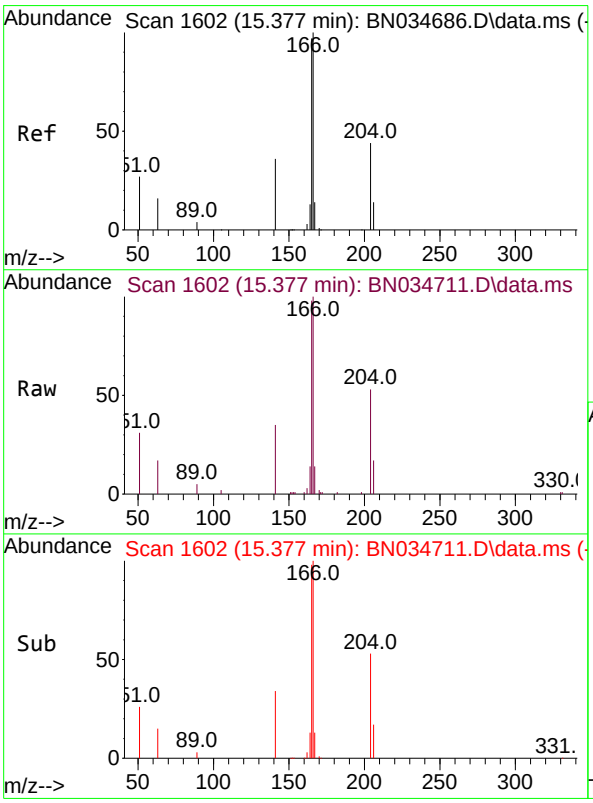
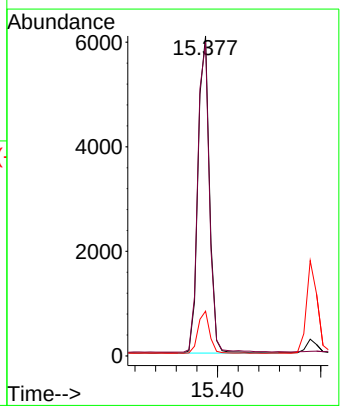
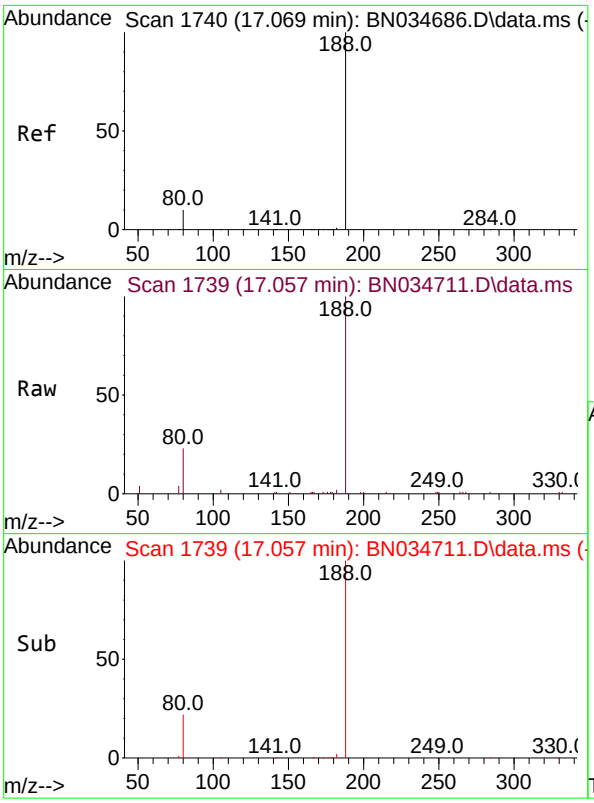


#18
Fluorene
Concen: 0.323 ng
RT: 15.377 min Scan# 1602
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:166 Resp: 9417

Ion	Ratio	Lower	Upper
166	100		
165	98.4	78.8	118.2
167	13.2	10.6	16.0

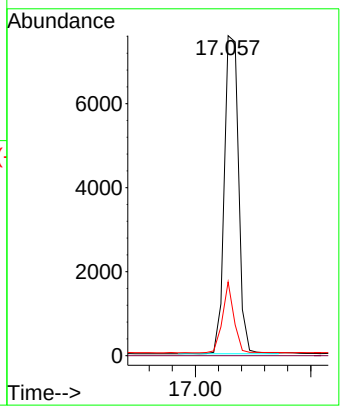




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.057 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:188 Resp: 1300

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	23.0	8.9	13.3#



Instrument :
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ClientSampleId :
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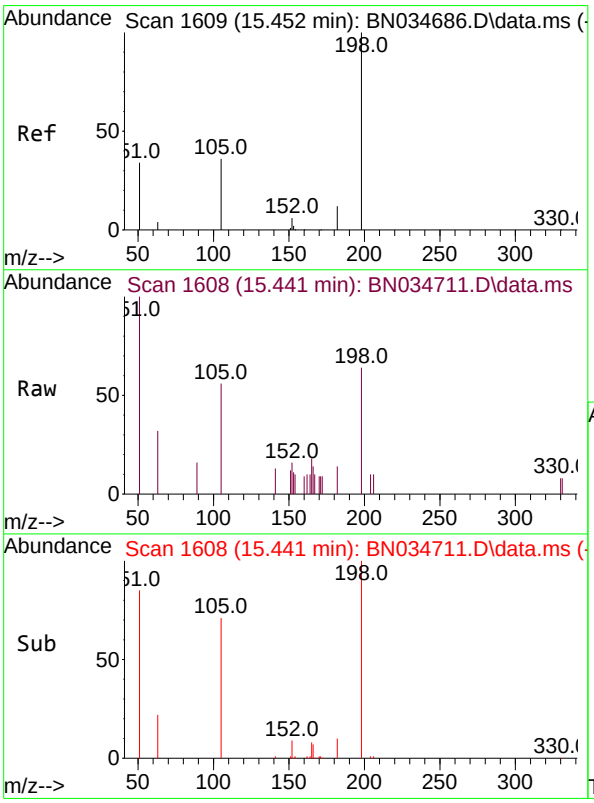
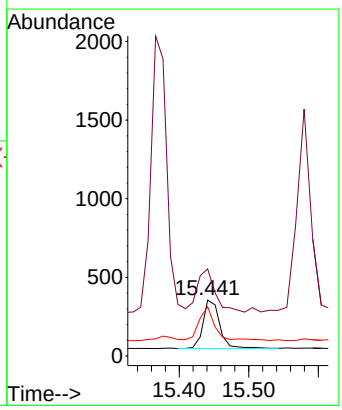
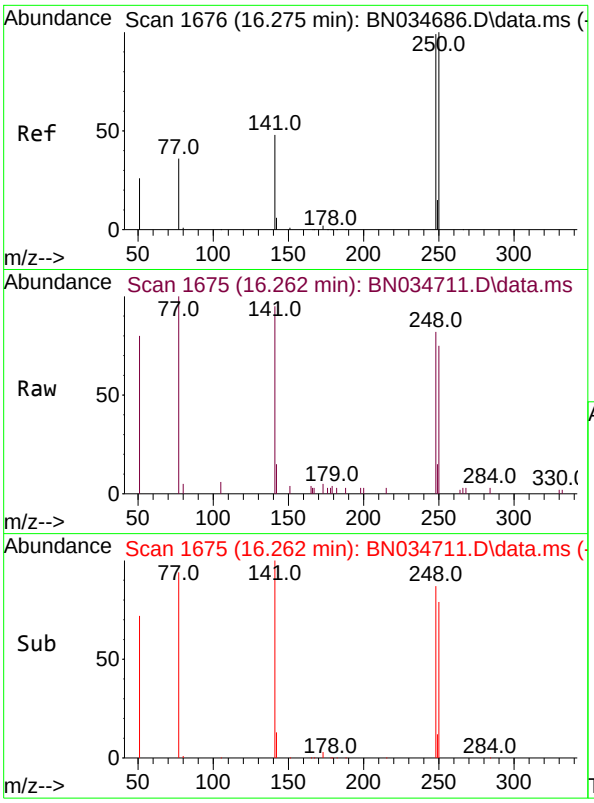


#20
4,6-Dinitro-2-methylphenol
Concen: 0.294 ng
RT: 15.441 min Scan# 1608
Delta R.T. -0.011 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:198 Resp: 532

Ion	Ratio	Lower	Upper
198	100		
51	156.1	91.8	137.8#
105	88.2	44.3	66.5#





#21
4-Bromophenyl-phenylether
Concen: 0.340 ng
RT: 16.262 min Scan# 1(
Delta R.T. -0.012 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:248 Resp: 235

Ion	Ratio	Lower	Upper
248	100		
250	91.6	80.9	121.3
141	116.5	40.5	60.7#

Instrument :
BNA_N
ClientSampleId :
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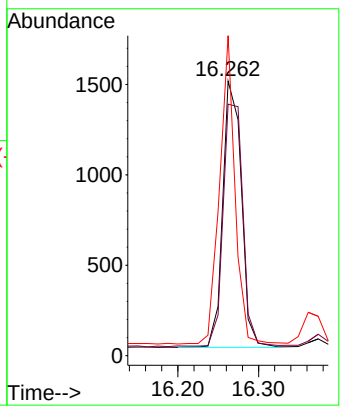
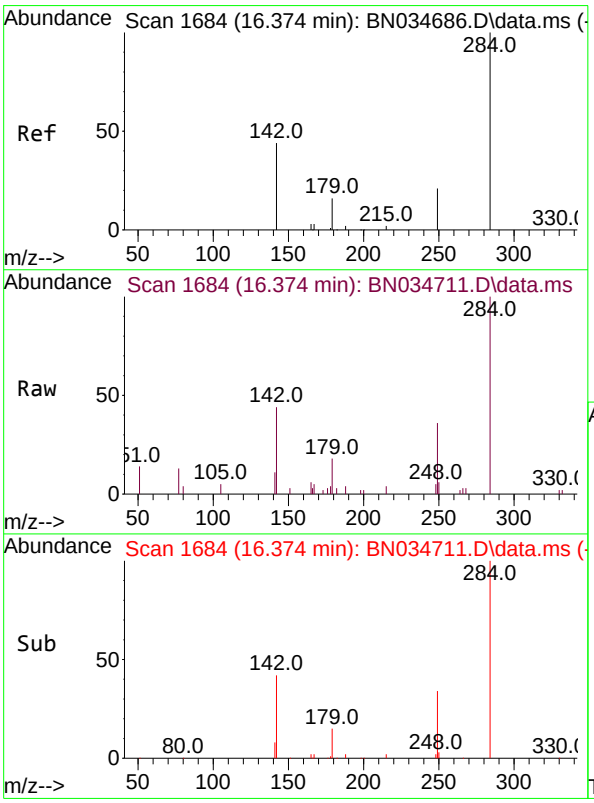
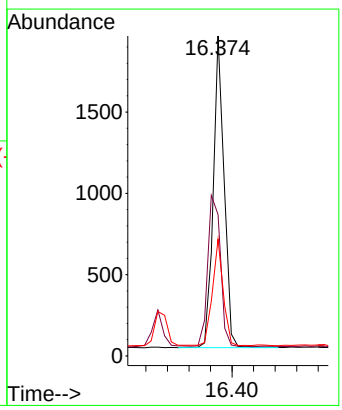


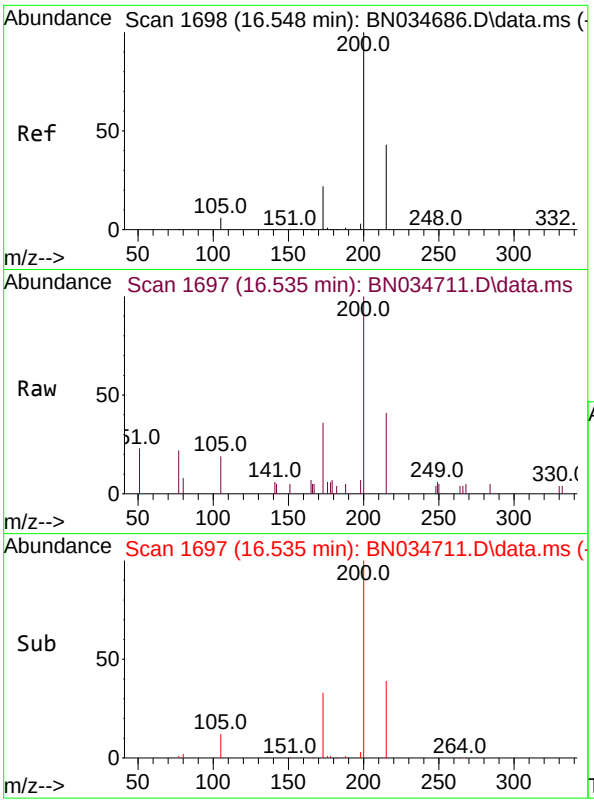


#22
Hexachlorobenzene
Concen: 0.356 ng
RT: 16.374 min Scan# 1684
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:284 Resp: 2677

Ion	Ratio	Lower	Upper
284	100		
142	56.9	43.6	65.4
249	33.8	26.6	40.0

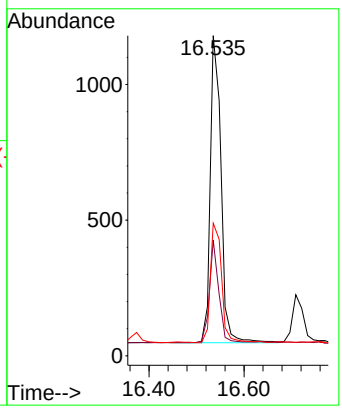




#23
Atrazine
Concen: 0.327 ng
RT: 16.535 min Scan# 1(
Delta R.T. -0.012 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:200 Resp: 178

Ion	Ratio	Lower	Upper
200	100		
173	36.2	19.7	29.5
215	41.4	35.7	53.5



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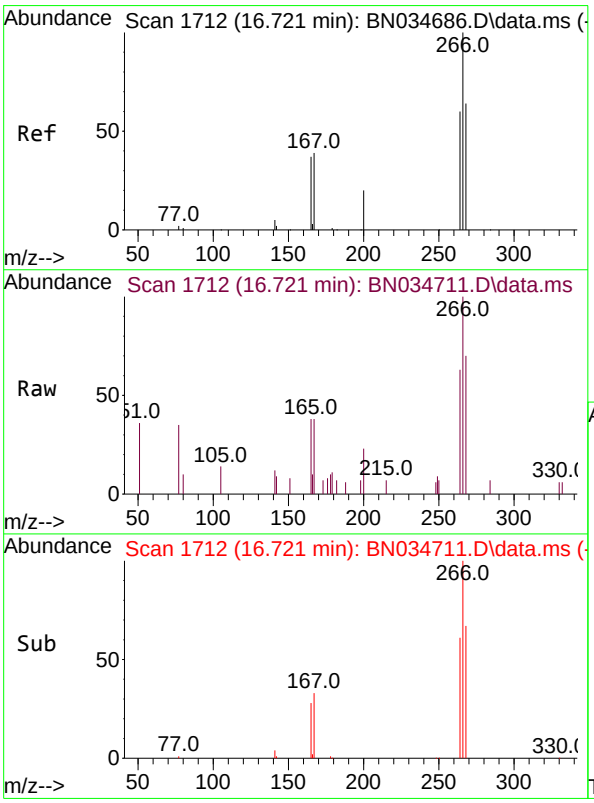
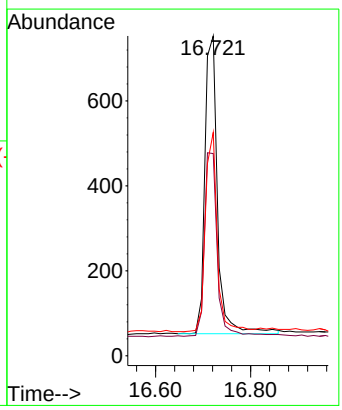
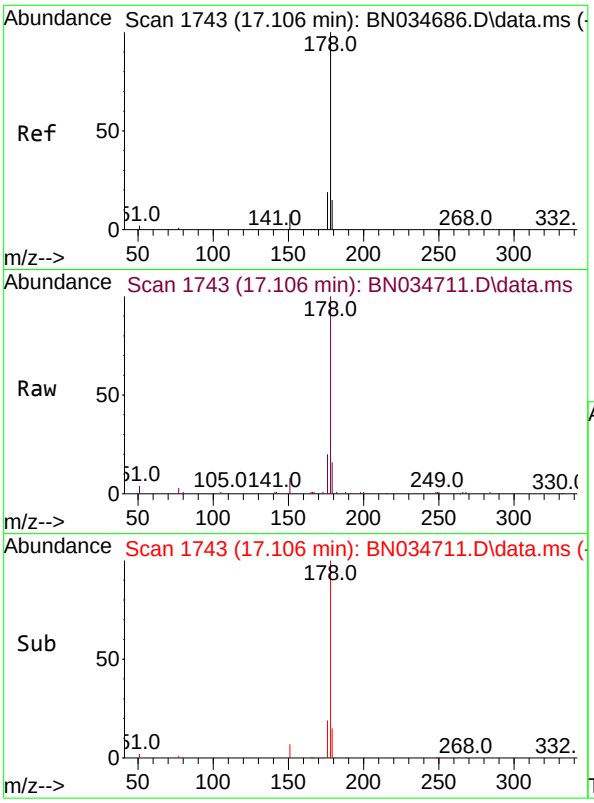


#24
Pentachlorophenol
Concen: 0.490 ng
RT: 16.721 min Scan# 1712
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:266 Resp: 1302

Ion	Ratio	Lower	Upper
266	100		
264	62.4	49.4	74.2
268	62.1	50.5	75.7

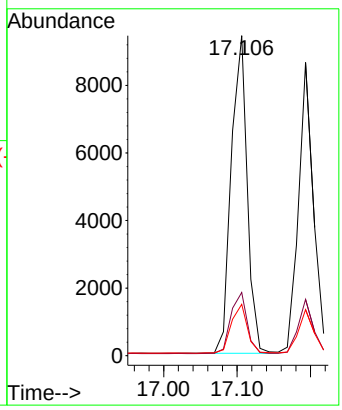




#25
Phenanthrene
Concen: 0.364 ng
RT: 17.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:178 Resp: 1420

Ion	Ratio	Lower	Upper
178	100		
176	19.5	15.4	23.2
179	15.4	12.2	18.4



Instrument :
BNA_N
ClientSampleId :
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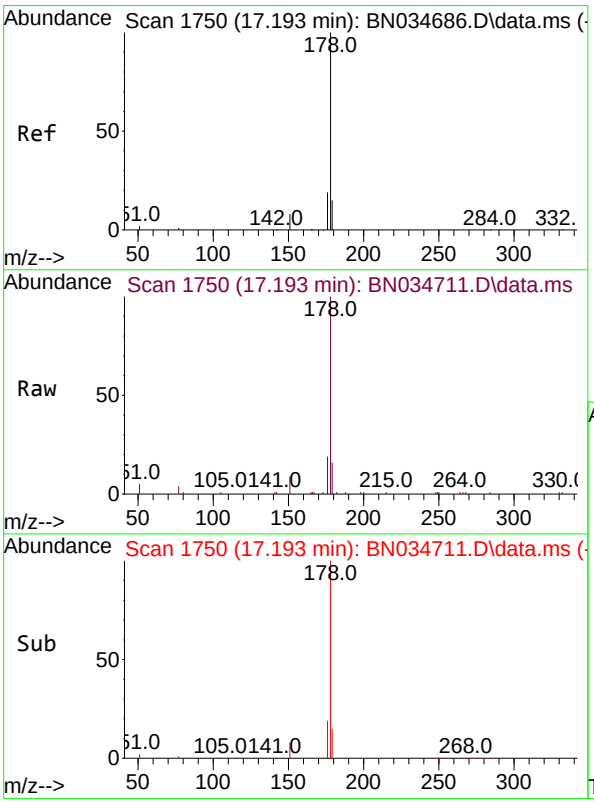
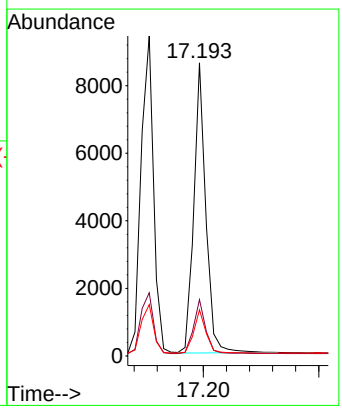
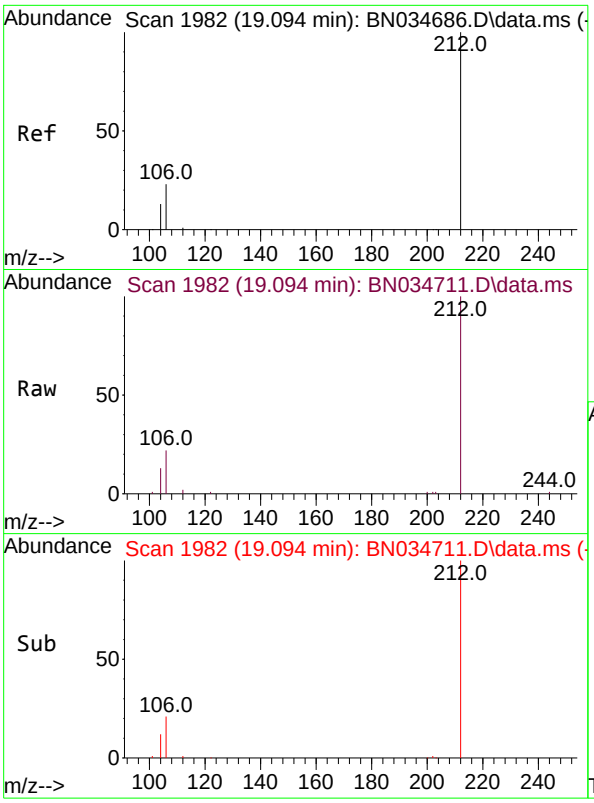


#26
Anthracene
Concen: 0.359 ng
RT: 17.193 min Scan# 1750
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:178 Resp: 12435

Ion	Ratio	Lower	Upper
178	100		
176	18.5	14.9	22.3
179	15.3	12.2	18.2

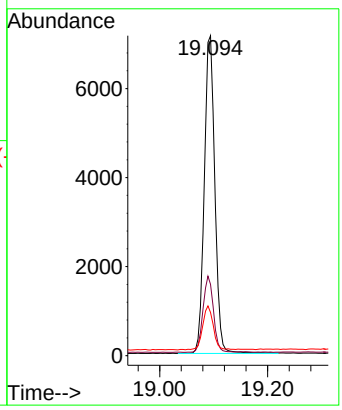




#27
Fluoranthene-d10
Concen: 0.332 ng
RT: 19.094 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:212 Resp: 970

Ion	Ratio	Lower	Upper
212	100		
106	23.6	17.8	26.8
104	13.8	10.2	15.4



Instrument :
BNA_N
ClientSampleId :
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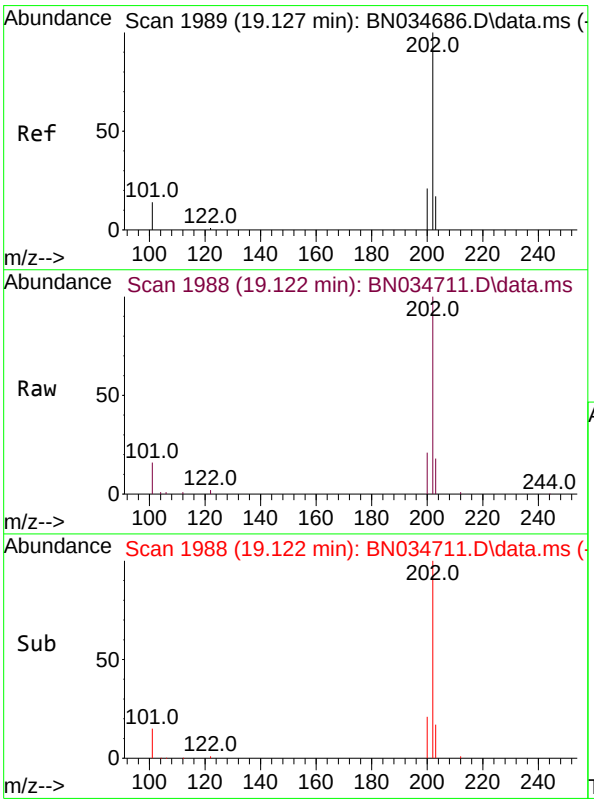
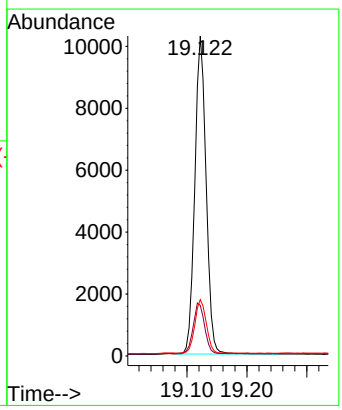
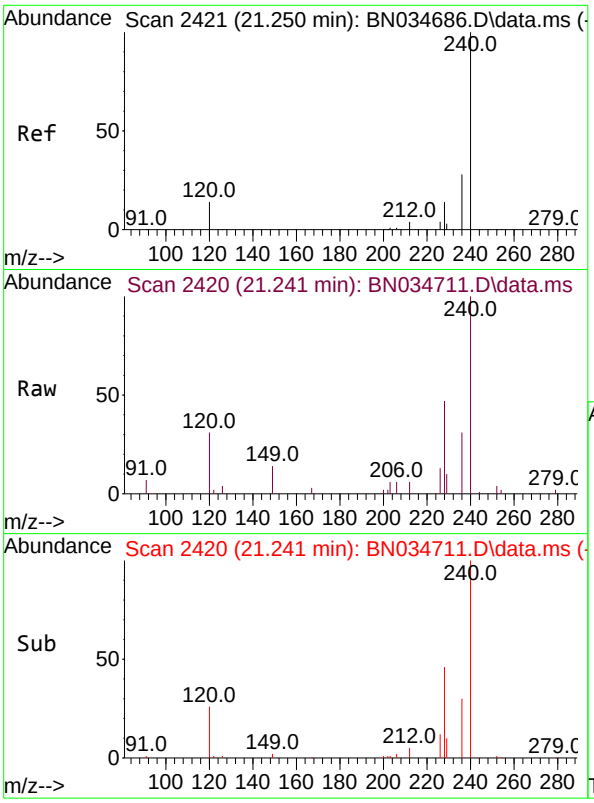


#28
Fluoranthene
Concen: 0.329 ng
RT: 19.122 min Scan# 1988
Delta R.T. -0.005 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:202 Resp: 13425

Ion	Ratio	Lower	Upper
202	100		
101	16.0	12.8	19.2
203	17.1	13.5	20.3

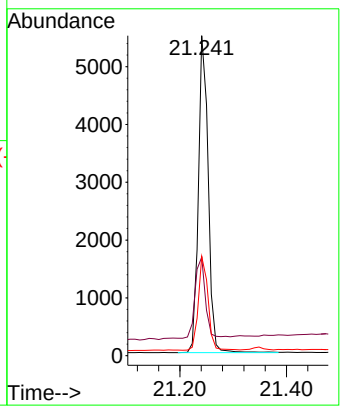




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.241 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:240 Resp: 702

Ion	Ratio	Lower	Upper
240	100		
120	30.8	14.2	21.2
236	31.0	23.1	34.7



Instrument :
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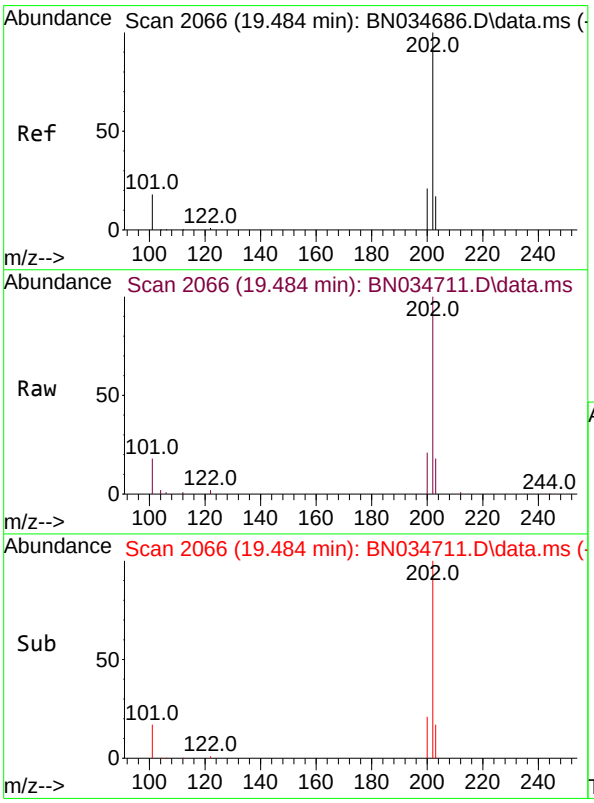
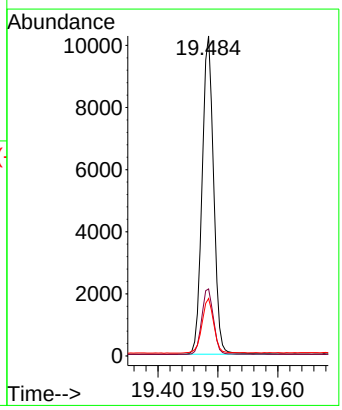
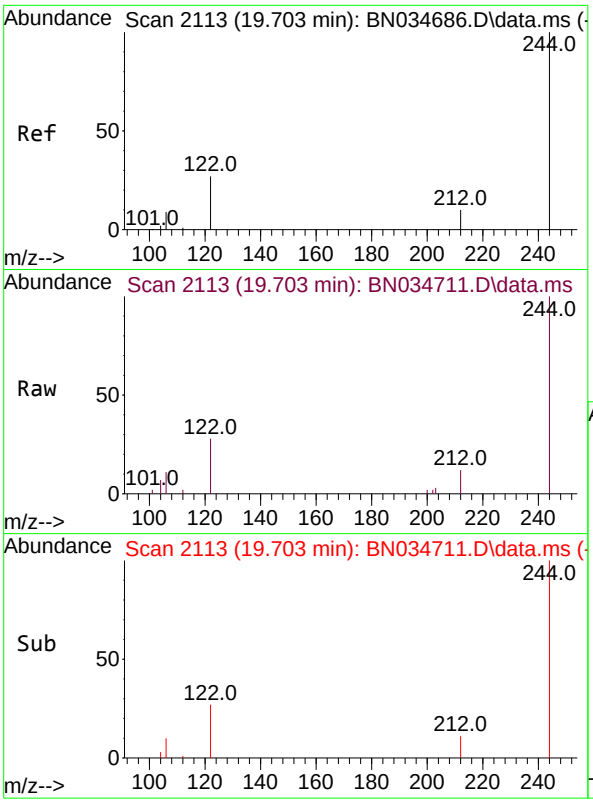


#30
Pyrene
Concen: 0.377 ng
RT: 19.484 min Scan# 2066
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:202 Resp: 13610

Ion	Ratio	Lower	Upper
202	100		
200	21.0	16.6	25.0
203	17.5	14.2	21.4





#31
Terphenyl-d14
Concen: 0.371 ng
RT: 19.703 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:244 Resp: 532

Ion	Ratio	Lower	Upper
244	100		
212	11.8	8.6	13.0
122	28.3	22.3	33.5

Instrument :
BNA_N
ClientSampleId :
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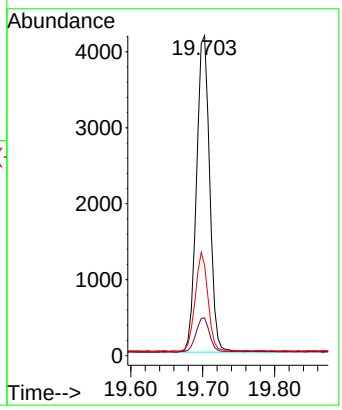
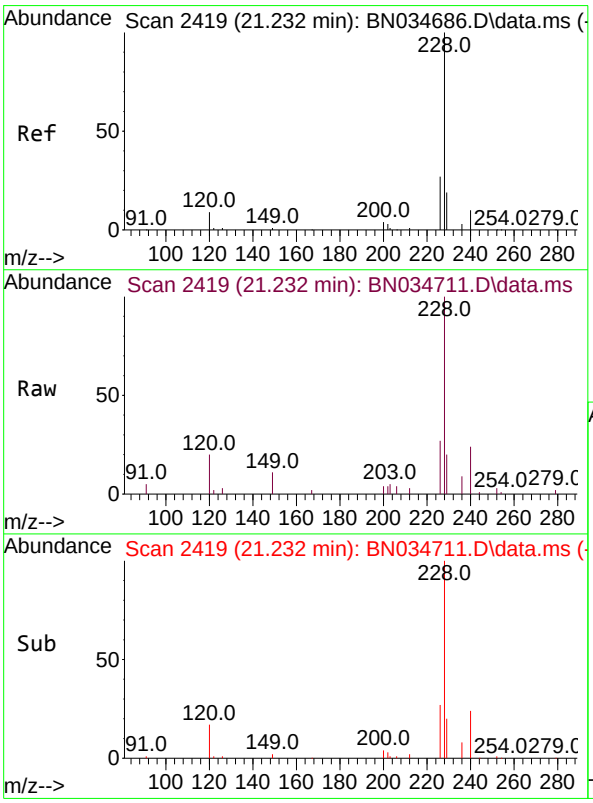
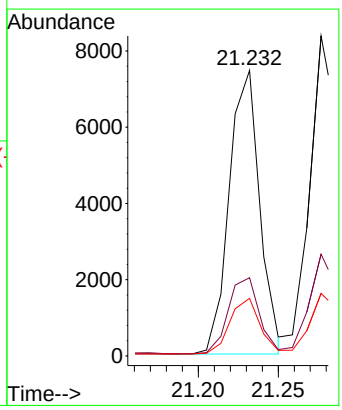


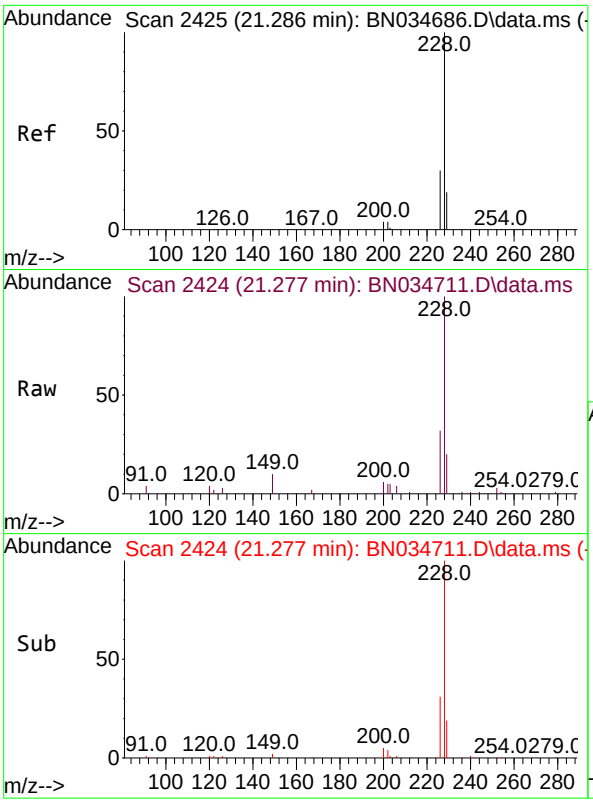


#32
Benzo(a)anthracene
Concen: 0.369 ng
RT: 21.232 min Scan# 2419
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:228 Resp: 9893

Ion	Ratio	Lower	Upper
228	100		
226	27.4	22.0	33.0
229	20.1	15.6	23.4

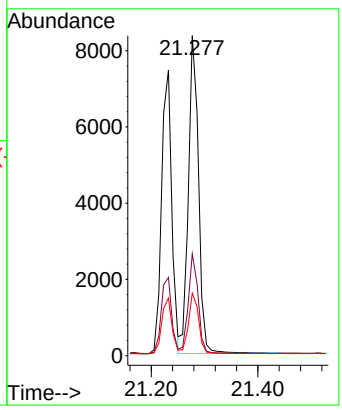




#33
Chrysene
Concen: 0.396 ng
RT: 21.277 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:228 Resp: 1101

Ion	Ratio	Lower	Upper
228	100		
226	31.8	24.1	36.1
229	19.5	15.8	23.8



Instrument :
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ClientSampleId :
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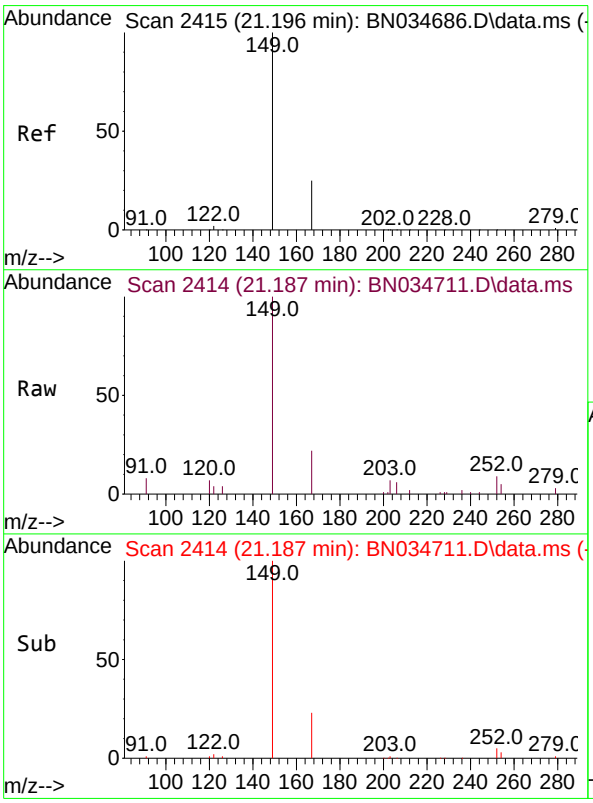
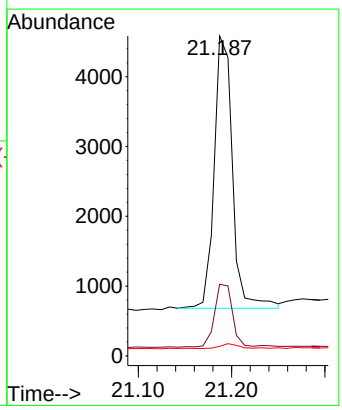
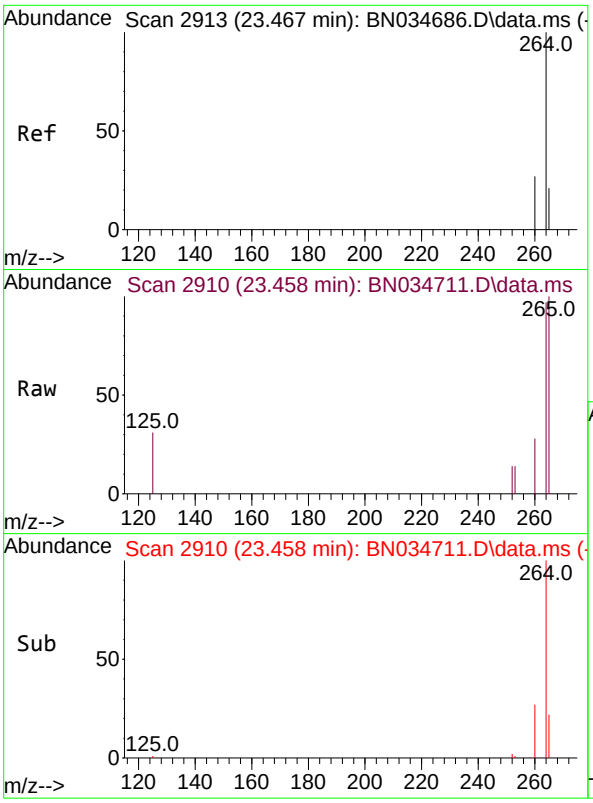


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.349 ng
RT: 21.187 min Scan# 2414
Delta R.T. -0.009 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:149 Resp: 5309

Ion	Ratio	Lower	Upper
149	100		
167	22.6	19.7	29.5
279	1.6	1.8	2.6#

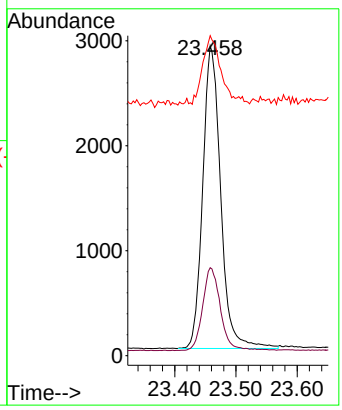




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.458 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:264 Resp: 587

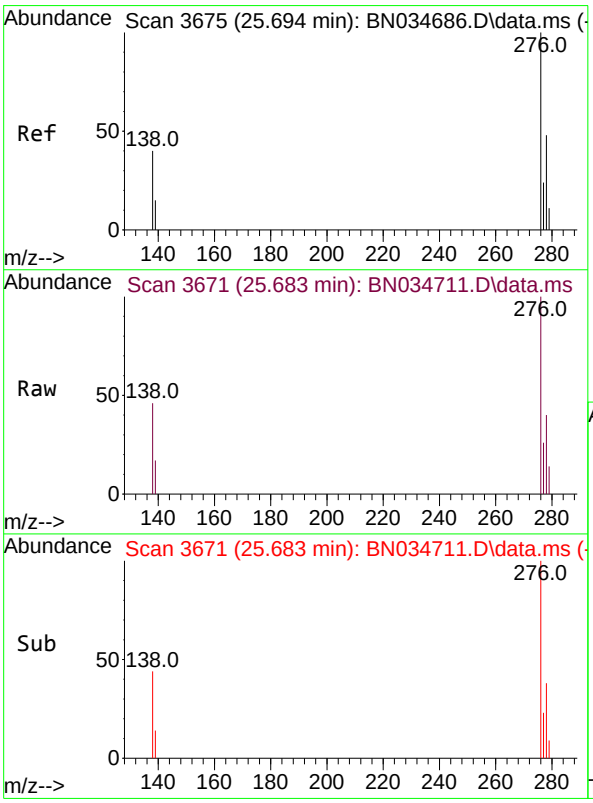
Ion	Ratio	Lower	Upper
264	100		
260	28.4	21.9	32.9
265	103.3	60.6	91.0



Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Manual Integrations
APPROVED

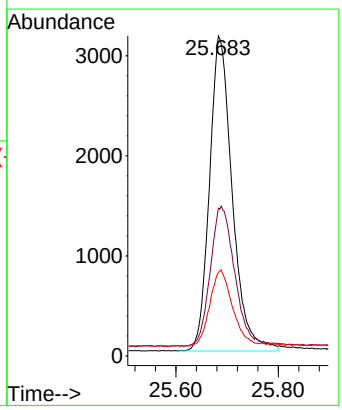
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

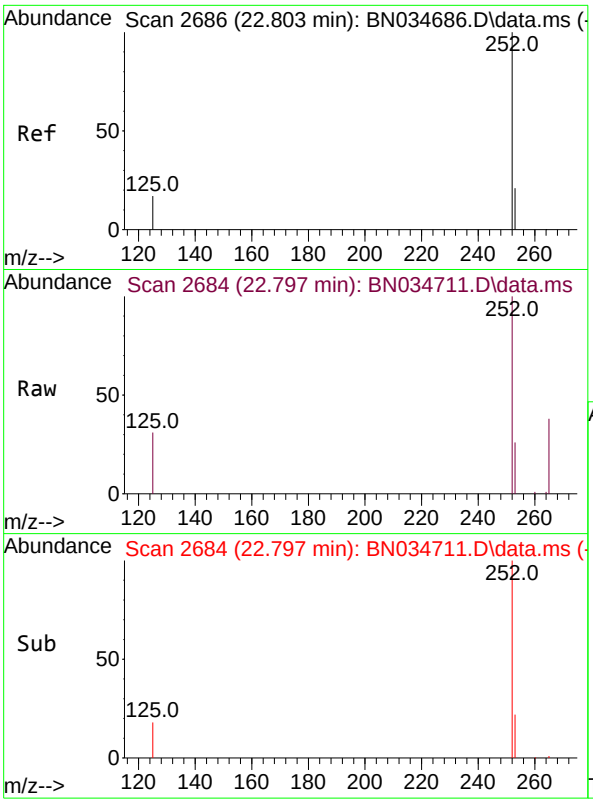


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.429 ng
RT: 25.683 min Scan# 3671
Delta R.T. -0.012 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:276 Resp: 9709

Ion	Ratio	Lower	Upper
276	100		
138	47.6	35.1	52.7
277	24.0	19.7	29.5

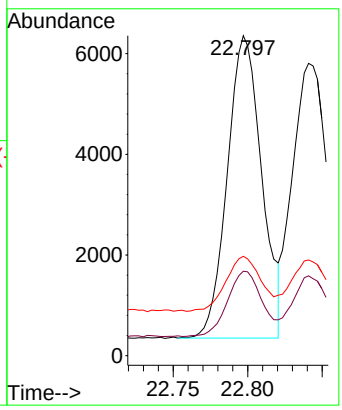




#37
Benzo(b)fluoranthene
Concen: 0.411 ng
RT: 22.797 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:252 Resp: 963

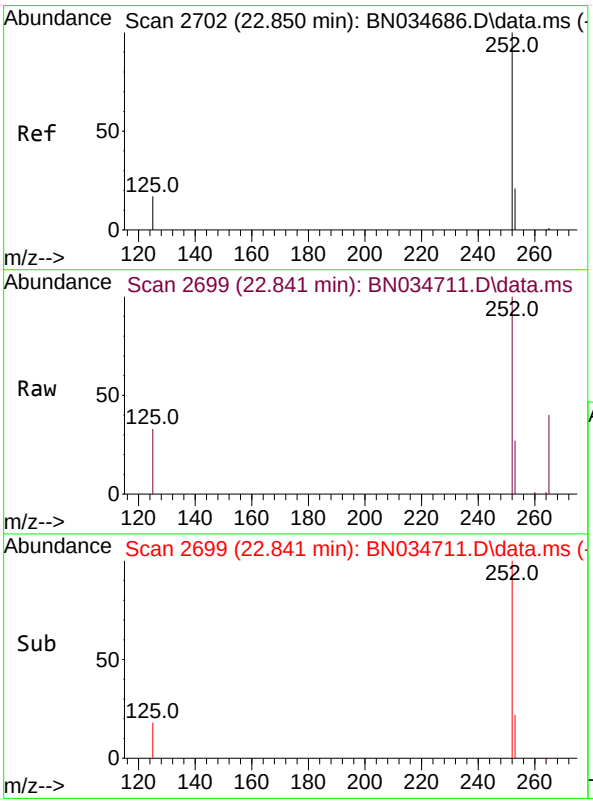
Ion	Ratio	Lower	Upper
252	100		
253	26.4	20.0	30.0
125	31.1	20.9	31.3



Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Manual Integrations
APPROVED

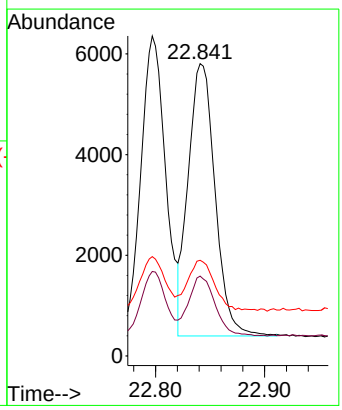
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

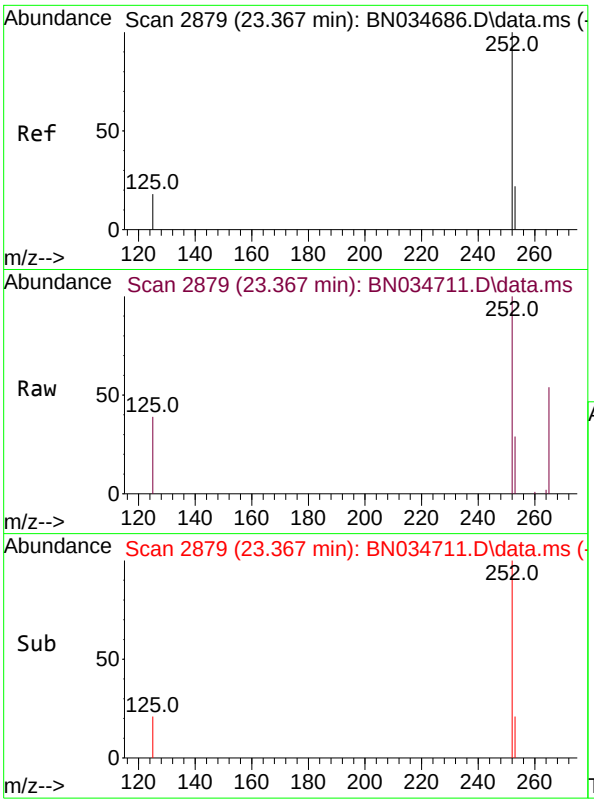


#38
Benzo(k)fluoranthene
Concen: 0.401 ng m
RT: 22.841 min Scan# 2699
Delta R.T. -0.009 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:252 Resp: 9277

Ion	Ratio	Lower	Upper
252	100		
253	27.3	20.6	31.0
125	32.7	21.6	32.4#

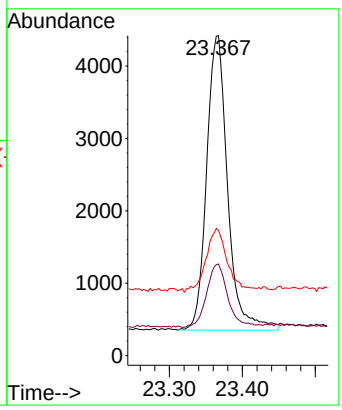




#39
Benzo(a)pyrene
Concen: 0.432 ng
RT: 23.367 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:252 Resp: 813

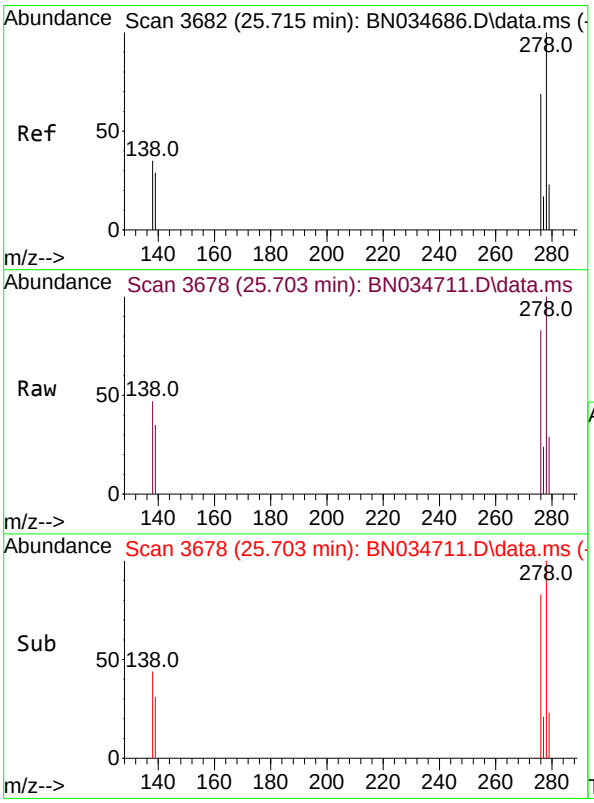
Ion	Ratio	Lower	Upper
252	100		
253	28.6	22.2	33.4
125	39.1	26.0	39.0



Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Manual Integrations
APPROVED

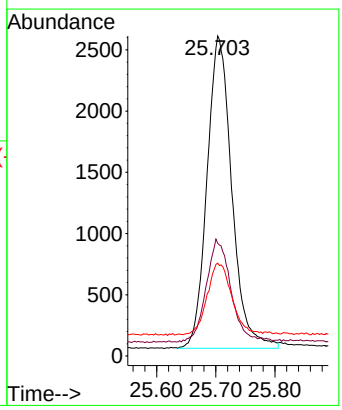
Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

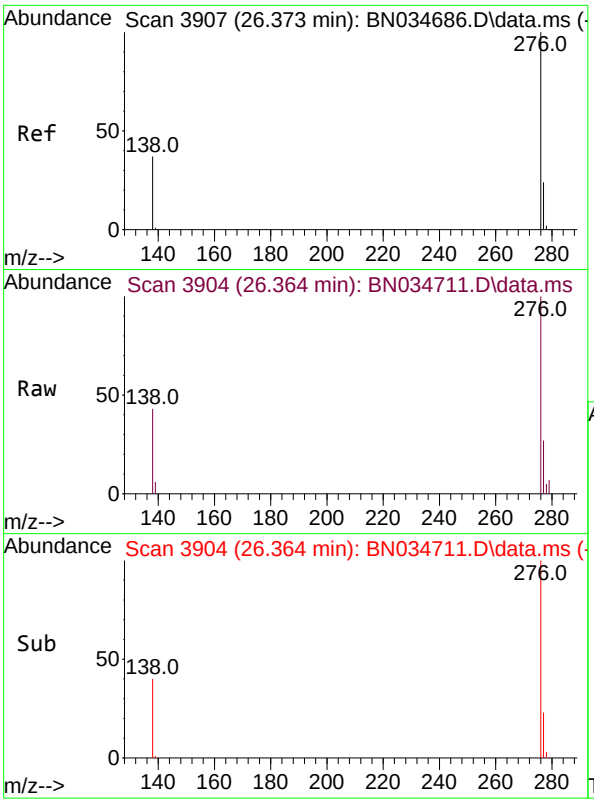


#40
Dibenzo(a,h)anthracene
Concen: 0.417 ng
RT: 25.703 min Scan# 3678
Delta R.T. -0.012 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:278 Resp: 7436

Ion	Ratio	Lower	Upper
278	100		
139	35.2	25.4	38.2
279	29.0	22.4	33.6

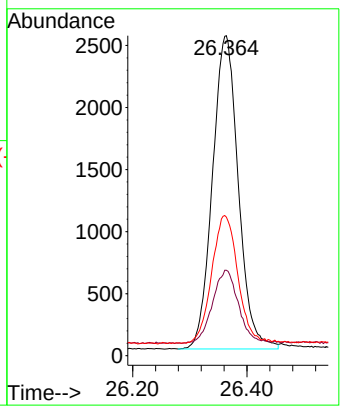




#41
Benzo(g,h,i)perylene
Concen: 0.404 ng
RT: 26.364 min Scan# 3
Delta R.T. -0.009 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:276 Resp: 795

Ion	Ratio	Lower	Upper
276	100		
277	26.7	21.3	31.9
138	43.3	31.9	47.9



Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/25/2024
Supervised By :mohammad ahmed 10/26/2024

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

Manual Integration Report

Sequence:	BN102424	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDICC0.8	BN034687.D	Benzo(b)fluoranthene	yogesh	10/25/2024 11:48:33 PM	mohammad	10/26/2024 4:13:48 AM	Peak Integrated by Software
SSTDICV0.4	BN034691.D	Bis(2-ethylhexyl)phthalate	yogesh	10/25/2024 11:48:35 PM	mohammad	10/26/2024 4:13:48 AM	Peak Integrated by Software
PB164282BS	BN034706.D	2-Methylnaphthalene-d10	yogesh	10/25/2024 11:48:47 PM	mohammad	10/26/2024 4:13:48 AM	Peak Integrated by Software
PB164282BSD	BN034711.D	2-Methylnaphthalene-d10	yogesh	10/25/2024 11:49:03 PM	mohammad	10/26/2024 4:13:48 AM	Peak Integrated by Software
PB164282BSD	BN034711.D	Benzo(k)fluoranthene	yogesh	10/25/2024 11:49:03 PM	mohammad	10/26/2024 4:13:48 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	BN102524	Instrument	BNA_n

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

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN102424

Review By	yogesh	Review On	10/25/2024 11:49:23 PM				
Supervise By	mohammad	Supervise On	10/26/2024 4:13:48 AM				
SubDirectory	BN102424	HP Acquire Method	BNA_N		HP Processing Method	bn102424	

STD. NAME	STD REF.#
Tune/Reschk	SP6573
Initial Calibration Stds	SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597
CCC	SP6601
Internal Standard/PEM	SP6527
ICV/I.BLK	SP6548
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN034683.D	24 Oct 2024 07:59	RC/JU	Ok
2	SSTDICC0.1	BN034684.D	24 Oct 2024 09:11	RC/JU	Ok
3	SSTDICC0.2	BN034685.D	24 Oct 2024 09:47	RC/JU	Ok
4	SSTDICCC0.4	BN034686.D	24 Oct 2024 10:23	RC/JU	Ok
5	SSTDICC0.8	BN034687.D	24 Oct 2024 10:59	RC/JU	Ok,M
6	SSTDICC1.6	BN034688.D	24 Oct 2024 11:35	RC/JU	Ok
7	SSTDICC3.2	BN034689.D	24 Oct 2024 12:11	RC/JU	Ok
8	SSTDICC5.0	BN034690.D	24 Oct 2024 12:48	RC/JU	Ok
9	SSTDICV0.4	BN034691.D	24 Oct 2024 14:14	RC/JU	Ok,M
10	PB164229BL	BN034692.D	24 Oct 2024 14:50	RC/JU	Ok
11	P4428-01	BN034693.D	24 Oct 2024 15:28	RC/JU	Ok
12	PB164229BS	BN034694.D	24 Oct 2024 16:05	RC/JU	Ok
13	P4428-03	BN034695.D	24 Oct 2024 16:41	RC/JU	Ok
14	P4428-04	BN034696.D	24 Oct 2024 17:18	RC/JU	Ok
15	P4475-04	BN034697.D	24 Oct 2024 17:54	RC/JU	Ok
16	P4475-06	BN034698.D	24 Oct 2024 18:30	RC/JU	Ok
17	SSTDCCC0.4	BN034699.D	24 Oct 2024 19:06	RC/JU	Ok
18	DFTPP	BN034700.D	24 Oct 2024 20:22	RC/JU	Ok
19	SSTDCCC0.4	BN034701.D	24 Oct 2024 21:01	RC/JU	Ok
20	PB164230BL	BN034702.D	24 Oct 2024 21:38	RC/JU	Ok
21	PB164323BL	BN034703.D	24 Oct 2024 22:14	RC/JU	Ok

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN102424

Review By	yogesh	Review On	10/25/2024 11:49:23 PM				
Supervise By	mohammad	Supervise On	10/26/2024 4:13:48 AM				
SubDirectory	BN102424	HP Acquire Method	BNA_N		HP Processing Method	bn102424	

STD. NAME	STD REF.#
Tune/Reschk	SP6573
Initial Calibration Stds	SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597
CCC	SP6601
Internal Standard/PEM	SP6527
ICV/I.BLK	SP6548
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	PB164229BSD	BN034704.D	24 Oct 2024 22:50	RC/JU	Ok
23	PB164282BL	BN034705.D	24 Oct 2024 23:26	RC/JU	Ok
24	PB164282BS	BN034706.D	25 Oct 2024 00:02	RC/JU	Ok,M
25	PB164230BS	BN034707.D	25 Oct 2024 00:38	RC/JU	Ok,M
26	PB164323BS	BN034708.D	25 Oct 2024 01:14	RC/JU	Ok,M
27	PB164323BSD	BN034709.D	25 Oct 2024 01:50	RC/JU	Ok,M
28	P4428-02	BN034710.D	25 Oct 2024 02:26	RC/JU	Ok
29	PB164282BSD	BN034711.D	25 Oct 2024 03:02	RC/JU	Ok,M
30	P4438-03	BN034712.D	25 Oct 2024 03:38	RC/JU	ReRun
31	P4438-04	BN034713.D	25 Oct 2024 04:14	RC/JU	Ok
32	P4438-05	BN034714.D	25 Oct 2024 04:51	RC/JU	Ok
33	P4438-06	BN034715.D	25 Oct 2024 05:27	RC/JU	Ok
34	P4438-07	BN034716.D	25 Oct 2024 06:03	RC/JU	Ok
35	P4440-01	BN034717.D	25 Oct 2024 06:39	RC/JU	ReRun
36	P4432-01	BN034718.D	25 Oct 2024 07:15	RC/JU	Not Ok
37	SSTDCCC0.4	BN034719.D	25 Oct 2024 07:51	RC/JU	Ok

M : Manual Integration

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN102524

Review By	yogesh	Review On	10/26/2024 12:01:15 AM				
Supervise By	mohammad	Supervise On	10/26/2024 4:14:54 AM				
SubDirectory	BN102524	HP Acquire Method	BNA_N		HP Processing Method	bn102424	

STD. NAME	STD REF.#
Tune/Reschk	SP6573
Initial Calibration Stds	SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597
CCC	SP6601
Internal Standard/PEM	SP6527
ICV/I.BLK	SP6548
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN034720.D	25 Oct 2024 09:07	RC/JU	Ok
2	SSTDCCC0.4	BN034721.D	25 Oct 2024 09:46	RC/JU	Ok
3	PB164323BL	BN034722.D	25 Oct 2024 10:22	RC/JU	Ok
4	P4438-03RE	BN034723.D	25 Oct 2024 10:58	RC/JU	Confirms
5	P4440-01RE	BN034724.D	25 Oct 2024 11:34	RC/JU	Confirms
6	PB164409BL	BN034725.D	25 Oct 2024 16:28	RC/JU	Not Ok
7	PB164409BL	BN034726.D	25 Oct 2024 17:04	RC/JU	Ok
8	PB164409BS	BN034727.D	25 Oct 2024 17:40	RC/JU	Ok,M
9	PB164409BSD	BN034728.D	25 Oct 2024 18:16	RC/JU	Ok,M
10	P4550-02	BN034729.D	25 Oct 2024 18:53	RC/JU	ReRun
11	P4550-05	BN034730.D	25 Oct 2024 19:29	RC/JU	Ok,M
12	P4550-09	BN034731.D	25 Oct 2024 20:05	RC/JU	Ok
13	SSTDCCC0.4	BN034732.D	25 Oct 2024 20:41	RC/JU	Ok

M : Manual Integration

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN102424

Review By	yogesh	Review On	10/25/2024 11:49:23 PM		
Supervise By	mohammad	Supervise On	10/26/2024 4:13:48 AM		
SubDirectory	BN102424	HP Acquire Method	BNA_N	HP Processing Method	bn102424

STD. NAME	STD REF.#
Tune/Reschk	SP6573
Initial Calibration Stds	SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597
CCC	SP6601
Internal Standard/PEM	SP6527
ICV/I.BLK	SP6548
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN034683.D	24 Oct 2024 07:59		RC/JU	Ok
2	SSTDICC0.1	SSTDICC0.1	BN034684.D	24 Oct 2024 09:11	Compound#20,24 removed from 0.1 ppm	RC/JU	Ok
3	SSTDICC0.2	SSTDICC0.2	BN034685.D	24 Oct 2024 09:47		RC/JU	Ok
4	SSTDICCC0.4	SSTDICCC0.4	BN034686.D	24 Oct 2024 10:23	Calibration Good for DOD & Non-DOD both	RC/JU	Ok
5	SSTDICC0.8	SSTDICC0.8	BN034687.D	24 Oct 2024 10:59		RC/JU	Ok,M
6	SSTDICC1.6	SSTDICC1.6	BN034688.D	24 Oct 2024 11:35		RC/JU	Ok
7	SSTDICC3.2	SSTDICC3.2	BN034689.D	24 Oct 2024 12:11		RC/JU	Ok
8	SSTDICC5.0	SSTDICC5.0	BN034690.D	24 Oct 2024 12:48		RC/JU	Ok
9	SSTDICV0.4	ICVBN102424	BN034691.D	24 Oct 2024 14:14		RC/JU	Ok,M
10	PB164229BL	PB164229BL	BN034692.D	24 Oct 2024 14:50	USE For Only P4428	RC/JU	Ok
11	P4428-01	RW7-SP100-20241016	BN034693.D	24 Oct 2024 15:28		RC/JU	Ok
12	PB164229BS	PB164229BS	BN034694.D	24 Oct 2024 16:05	USE For Only P4428	RC/JU	Ok
13	P4428-03	RW7-SP302-20241016	BN034695.D	24 Oct 2024 16:41		RC/JU	Ok
14	P4428-04	RW7-SP303-20241016	BN034696.D	24 Oct 2024 17:18		RC/JU	Ok
15	P4475-04	BP-VPB-190-GW-238-2	BN034697.D	24 Oct 2024 17:54		RC/JU	Ok
16	P4475-06	BP-VPB-190-GW-278-2	BN034698.D	24 Oct 2024 18:30		RC/JU	Ok
17	SSTDCCC0.4	SSTDCCC0.4EC	BN034699.D	24 Oct 2024 19:06		RC/JU	Ok

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN102424

Review By	yogesh	Review On	10/25/2024 11:49:23 PM		
Supervise By	mohammad	Supervise On	10/26/2024 4:13:48 AM		
SubDirectory	BN102424	HP Acquire Method	BNA_N	HP Processing Method	bn102424

STD. NAME	STD REF.#
Tune/Reschk	SP6573
Initial Calibration Stds	SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597
CCC	SP6601
Internal Standard/PEM	SP6527
ICV/I.BLK	SP6548
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

18	DFTPP	DFTPP	BN034700.D	24 Oct 2024 20:22		RC/JU	Ok
19	SSTDCCC0.4	SSTDCCC0.4	BN034701.D	24 Oct 2024 21:01		RC/JU	Ok
20	PB164230BL	PB164230BL	BN034702.D	24 Oct 2024 21:38	USE For Only P4432	RC/JU	Ok
21	PB164323BL	PB164323BL	BN034703.D	24 Oct 2024 22:14		RC/JU	Ok
22	PB164229BSD	PB164229BSD	BN034704.D	24 Oct 2024 22:50		RC/JU	Ok
23	PB164282BL	PB164282BL	BN034705.D	24 Oct 2024 23:26		RC/JU	Ok
24	PB164282BS	PB164282BS	BN034706.D	25 Oct 2024 00:02		RC/JU	Ok,M
25	PB164230BS	PB164230BS	BN034707.D	25 Oct 2024 00:38	USE For Only P4432	RC/JU	Ok,M
26	PB164323BS	PB164323BS	BN034708.D	25 Oct 2024 01:14		RC/JU	Ok,M
27	PB164323BSD	PB164323BSD	BN034709.D	25 Oct 2024 01:50		RC/JU	Ok,M
28	P4428-02	RW7-SP201-20241016	BN034710.D	25 Oct 2024 02:26		RC/JU	Ok
29	PB164282BSD	PB164282BSD	BN034711.D	25 Oct 2024 03:02		RC/JU	Ok,M
30	P4438-03	VPB190-HYD-2024101	BN034712.D	25 Oct 2024 03:38	Surrogate Fail	RC/JU	ReRun
31	P4438-04	BP-VPB-190-GW-58-60	BN034713.D	25 Oct 2024 04:14		RC/JU	Ok
32	P4438-05	BP-VPB-190-GW-98-10	BN034714.D	25 Oct 2024 04:51		RC/JU	Ok
33	P4438-06	BP-VPB-190-GW-158-1	BN034715.D	25 Oct 2024 05:27		RC/JU	Ok
34	P4438-07	BP-VPB-190-GW-198-2	BN034716.D	25 Oct 2024 06:03		RC/JU	Ok
35	P4440-01	BPOW6-11-HYD-20241	BN034717.D	25 Oct 2024 06:39	Surrogate Fail	RC/JU	ReRun
36	P4432-01	LOT-4078A	BN034718.D	25 Oct 2024 07:15	Need Straight Run	RC/JU	Not Ok

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Fax : 908 789 8922

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN102424

Review By	yogesh	Review On	10/25/2024 11:49:23 PM		
Supervise By	mohammad	Supervise On	10/26/2024 4:13:48 AM		
SubDirectory	BN102424	HP Acquire Method	BNA_N	HP Processing Method	bn102424

STD. NAME	STD REF.#
Tune/Reschk	SP6573
Initial Calibration Stds	SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597
CCC	SP6601
Internal Standard/PEM	SP6527
ICV/I.BLK	SP6548
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

37	SSTDCCC0.4	SSTDCCC0.4EC	BN034719.D	25 Oct 2024 07:51		RC/JU	Ok

M : Manual Integration

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN102524

Review By	yogesh	Review On	10/26/2024 12:01:15 AM		
Supervise By	mohammad	Supervise On	10/26/2024 4:14:54 AM		
SubDirectory	BN102524	HP Acquire Method	BNA_N	HP Processing Method	bn102424

STD. NAME	STD REF.#
Tune/Reschk	SP6573
Initial Calibration Stds	SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597
CCC	SP6601
Internal Standard/PEM	SP6527
ICV/I.BLK	SP6548
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN034720.D	25 Oct 2024 09:07		RC/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN034721.D	25 Oct 2024 09:46		RC/JU	Ok
3	PB164323BL	PB164323BL	BN034722.D	25 Oct 2024 10:22		RC/JU	Ok
4	P4438-03RE	VPB190-HYD-2024101	BN034723.D	25 Oct 2024 10:58	Surrogate Fail	RC/JU	Confirms
5	P4440-01RE	BPOW6-11-HYD-20241	BN034724.D	25 Oct 2024 11:34	Surrogate Fail	RC/JU	Confirms
6	PB164409BL	PB164409BL	BN034725.D	25 Oct 2024 16:28	Analyzed for contamination check	RC/JU	Not Ok
7	PB164409BL	PB164409BL	BN034726.D	25 Oct 2024 17:04		RC/JU	Ok
8	PB164409BS	PB164409BS	BN034727.D	25 Oct 2024 17:40		RC/JU	Ok,M
9	PB164409BSD	PB164409BSD	BN034728.D	25 Oct 2024 18:16		RC/JU	Ok,M
10	P4550-02	VPB190-HYD-2024102	BN034729.D	25 Oct 2024 18:53	Surrogate Fail	RC/JU	ReRun
11	P4550-05	BP-VPB-190-GW-318-3	BN034730.D	25 Oct 2024 19:29		RC/JU	Ok,M
12	P4550-09	BP-VPB-190-GW-358-3	BN034731.D	25 Oct 2024 20:05		RC/JU	Ok
13	SSTDCCC0.4	SSTDCCC0.4EC	BN034732.D	25 Oct 2024 20:41		RC/JU	Ok

M : Manual Integration

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB164282

SOP ID: M3510C,3580A-Extraction SVOC-20

Clean Up SOP #: N/A

Matrix : Water

Weigh By: N/A

Balance check: N/A

Balance ID: N/A

pH Strip Lot#: E3574

Extraction By: RS

Filter By: RS

pH Meter ID: N/A

Hood ID: 4,6,7

Extraction Start Date : 10/21/2024

Extraction Start Time : 08:45

Extraction End Date : 10/21/2024

Extraction End Time : 13:45

Concentration By: EH

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	SP6606
Surrogate	1.0ML	0.4 PPM	SP6634
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	E3817
Baked Na2SO4	N/A	EP2551
10N NaoH	N/A	EP2550
H2SO4 1:1	N/A	EP2548
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:

1.5 ML Vial lot# 2210673. pH Adjusted<2 with 1:1 H2SO4 &>11 with 10 N NaOH.

KD Bath ID: Water bath -01

KD Bath Temperature: 60 °C

Envap ID: NEVAP-02

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
10/21/24	RP (Ext-Lab)	RC/SVOC
13:30	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB164282

Analytical Method: M3510C,3580A-Extraction SVOC-20 **Concentration Date:** 10/21/2024

Sample ID	Client Sample ID	Test	g /(mL)	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB164282BL	SBLK282	SVOC-SIMGroup1	1000	6	RUPESH	rajesh	1			SEP-10
PB164282BS	SLCS282	SVOC-SIMGroup1	1000	6	RUPESH	rajesh	1			11
PB164282BSD	SLCSD282	SVOC-SIMGroup1	1000	6	RUPESH	rajesh	1			12
P4438-03	VPB190-HYD-20241016	SVOC-SIMGroup1	970	6	RUPESH	rajesh	1	C		13
P4438-04	BP-VPB-190-GW-58-60	SVOC-SIMGroup1	740	6	RUPESH	rajesh	1	C	Muddy	14
P4438-05	BP-VPB-190-GW-98-100	SVOC-SIMGroup1	700	6	RUPESH	rajesh	1	C		15
P4438-06	BP-VPB-190-158-160	SVOC-SIMGroup1	960	6	RUPESH	rajesh	1	C		16
P4438-07	BP-VPB-190-GW-198-200	SVOC-SIMGroup1	780	6	RUPESH	rajesh	1	C	Muddy	17
P4440-01	BPOW6-11-HYD-20241016	SVOC-SIMGroup1	1000	6	RUPESH	rajesh	1	C		18

* **Extracts relinquished on the same date as received.**

10/21/24

164282
8:45

WORKLIST(Hardcopy Internal Chain)

WorkList Name : P4438 **WorkList ID :** 184626 **Department :** Extraction **Date :** 10-21-2024 08:41:20

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4438-03	VPB190-HYD-20241016	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	K51	10/16/2024	8270-Modified
P4438-04	BP-VPB-190-GW-58-60	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	K51	10/15/2024	8270-Modified
P4438-05	BP-VPB-190-GW-98-100	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	K51	10/16/2024	8270-Modified
P4438-06	BP-VPB-190-158-160	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	K51	10/17/2024	8270-Modified
P4438-07	BP-VPB-190-GW-198-200	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	K51	10/17/2024	8270-Modified
P4440-01	BPOW6-11-HYD-20241016	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	K51	10/16/2024	8270-Modified

Date/Time 10/21/24 8:43
Raw Sample Received by: RS (Ext Lab)
Raw Sample Relinquished by: [signature]

RS 10/21

Date/Time 10/21/24 ~~9:10~~ 9:10
Raw Sample Received by: [signature]
Raw Sample Relinquished by: RS (Ext Lab)

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Prep Standard - Chemical Standard Summary

Order ID : P4440

Test : SVOC-SIMGroup1

Prepbatch ID : PB164282,

Sequence ID/Qc Batch ID: BN102224,BN102424,BN102524,

Standard ID :
EP2548,EP2550,EP2551,SP6527,SP6547,SP6548,SP6573,SP6596,SP6597,SP6598,SP6599,SP6600,SP6601,SP6602,SP6603,SP6606,SP6634,

Chemical ID :
E3551,E3657,E3746,E3759,E3768,E3786,E3788,E3817,M5178,S10103,S10247,S10782,S10977,S11003,S11011,S11097,S11494,S11566,S11766,S11771,S12029,S12077,S12096,S12105,S12112,S12113,S12117,S12126,S12453,W3112,

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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	EP2548	10/16/2024	04/16/2025	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 10/16/2024

FROM 1000.00000ml of W3112 + 4000.00000ml of M5178 = 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	EP2550	10/16/2024	04/16/2025	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 10/16/2024

FROM 1000.00000ml of W3112 + 400.00000gram of E3657 = 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	EP2551	10/18/2024	01/03/2025	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 10/18/2024

FROM 4000.00000gram of E3551 = 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	SP6527	06/10/2024	12/05/2024	Jagrut Upadhyay	None	None	mohammad ahmed 07/05/2024

FROM 0.10000ml of S12029 + 4.90000ml of E3759 = 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
3355	8270-SIM MDL-3.2PPM CALIBRATION STOCK SOL- 2ND SOURCE	SP6547	07/08/2024	11/21/2024	Jagrut Upadhyay	None	None	mohammad ahmed 07/08/2024

FROM 0.00630ml of S10977 + 0.01280ml of S11003 + 0.03200ml of S10782 + 0.03200ml of S11766 + 0.06400ml of S11566 + 0.06400ml of S12096 + 0.06400ml of S12117 + 19.72490ml of E3746 = Final Quantity: 20.000 ml

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	SP6548	07/08/2024	11/21/2024	Jagrut Upadhyay	None	None	mohammad ahmed 07/08/2024

FROM 0.87500ml of E3746 + 0.01000ml of SP6527 + 0.12500ml of SP6547 = 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
3895	50 ug/ml DFTPP 8270E	SP6573	07/15/2024	01/08/2025	Rahul Chavli	None	None	Yogesh Patel 07/17/2024

FROM 1.00000ml of S10247 + 19.00000ml of E3768 = Final Quantity: 20.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3339	8270 sim calibration stock 10ppm (CPI)	SP6596	08/09/2024	11/21/2024	Jagrut Upadhyay	None	None	Yogesh Patel 08/21/2024

FROM 0.02500ml of S12113 + 0.03350ml of S10103 + 0.05000ml of S11494 + 0.10000ml of S12112 + 0.12500ml of S10782 + 0.25000ml of S11097 + 0.25000ml of S12077 + 24.16650ml of E3786 = Final Quantity: 25.000 ml

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SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3361	8270-SIM MDL-5PPM CALIBRATION SOLUTION	SP6597	08/09/2024	11/21/2024	Jagrut Upadhyay	None	None	Yogesh Patel 08/21/2024

FROM 0.50000ml of E3786 + 0.01000ml of SP6527 + 0.50000ml of SP6596 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3341	8270-SIM MDL-3.2PPM CALIBRATION SOLUTION	SP6598	08/09/2024	11/21/2024	Jagrut Upadhyay	None	None	Yogesh Patel 08/21/2024

FROM 0.68000ml of E3786 + 0.01000ml of SP6527 + 0.32000ml of SP6596 = 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
3344	8270-SIM MDL-1.6PPM CALIBRATION SOLUTION	SP6599	08/09/2024	11/21/2024	Jagrut Upadhyay	None	None	Yogesh Patel 08/21/2024

FROM 0.84000ml of E3786 + 0.01000ml of SP6527 + 0.16000ml of SP6596 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3342	8270-SIM MDL-0.8PPM CALIBRATION SOLUTION	SP6600	08/09/2024	11/21/2024	Jagrut Upadhyay	None	None	Yogesh Patel 08/21/2024

FROM 0.92000ml of E3786 + 0.01000ml of SP6527 + 0.08000ml of SP6596 = 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
3343	8270-SIM MDL-0.4PPM CALIBRATION SOLUTION	SP6601	08/09/2024	11/21/2024	Jagrut Upadhyay	None	None	Yogesh Patel 08/21/2024

FROM 0.96000ml of E3786 + 0.01000ml of SP6527 + 0.04000ml of SP6596 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3345	8270-SIM MDL-0.2PPM CALIBRATION SOLUTION	SP6602	08/09/2024	11/21/2024	Jagrut Upadhyay	None	None	Yogesh Patel 08/21/2024

FROM 0.50000ml of E3786 + 0.01000ml of SP6527 + 0.50000ml of SP6601 = 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
3346	8270-SIM MDL-0.1PPM CALIBRATION SOLUTION	SP6603	08/09/2024	11/21/2024	Jagrut Upadhyay	None	None	Yogesh Patel 08/21/2024

FROM 0.75000ml of E3786 + 0.01000ml of SP6527 + 0.25000ml of SP6601 = 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	SP6606	08/20/2024	02/12/2025	Rahul Chavli	None	None	mohammad ahmed 08/21/2024

FROM 0.00160ml of S11011 + 0.02000ml of S11771 + 0.04000ml of S12105 + 0.04000ml of S12126 + 0.04000ml of S12453 + 99.85840ml of E3788 = Final Quantity: 100.000 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	SP6634	09/20/2024	11/21/2024	Rahul Chavli	None	None	Yogesh Patel 10/01/2024

FROM 0.00400ml of S10977 + 0.00800ml of S11003 + 0.02000ml of S10782 + 99.96800ml of E3788 = Final Quantity: 100.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	01/03/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

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	23B1556310	12/31/2025	12/04/2023 / Rajesh	12/01/2023 / Rajesh	E3657

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)	24C0162011	11/25/2024	05/25/2024 / Rajesh	05/08/2024 / Rajesh	E3746

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)	24D1962005	12/08/2024	06/08/2024 / Rajesh	05/31/2024 / Rajesh	E3759

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)	24E2462004	01/08/2025	07/08/2024 / Rajesh	06/21/2024 / Rajesh	E3768

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)	24F1062004	02/01/2025	08/01/2024 / Rajesh	07/16/2024 / Rajesh	E3786

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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-9254-03 / Acetone, Ultra Resi (cs/4x4L)	23H1462005	04/23/2025	08/13/2024 / Rajesh	08/13/2024 / Rajesh	E3788

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)	24H2762011	04/09/2025	10/09/2024 / Rajesh	10/09/2024 / Rajesh	E3817

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)	0000281827	03/29/2026	05/25/2022 / william	04/05/2022 / william	M5178

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	02/08/2025	08/08/2024 / Jagrut	12/09/2021 / Christian	S10103

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	01/15/2025	07/15/2024 / Rahul	03/18/2022 / Christian	S10247

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	A0186160	11/21/2024	05/21/2024 / Jagrut	09/07/2022 / Christian	S10782

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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	31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ ampul	A0188108	11/30/2024	05/31/2024 / Jagrut	12/28/2022 / Christian	S10977

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	A0189418	11/30/2024	05/31/2024 / Jagrut	12/28/2022 / Christian	S11003

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]	A0193449	02/20/2025	08/20/2024 / yogesh	01/13/2023 / Christian	S11011

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	495831	02/08/2025	08/08/2024 / Jagrut	02/07/2023 / Christian	S11097

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	506889	02/08/2025	08/08/2024 / Jagrut	08/11/2023 / Yogesh	S11494

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]	A0201940	12/05/2024	06/05/2024 / Rahul	09/18/2023 / Kiran	S11566

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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	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	12/14/2024	06/14/2024 / Rahul	11/21/2023 / Rahul	S11766

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	A0196453	02/20/2025	08/20/2024 / Rahul	11/21/2023 / Rahul	S11771

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	A0201320	12/05/2024	06/05/2024 / Rahul	12/21/2023 / Rahul	S12029

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	02/08/2025	08/08/2024 / Jagrut	01/31/2024 / Rahul	S12077

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]	A0207706	12/05/2024	06/05/2024 / Rahul	02/05/2024 / Rahul	S12096

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]	A0207706	02/12/2025	08/12/2024 / Rahul	02/05/2024 / Rahul	S12105

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

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	454157	01/09/2025	07/09/2024 / Jagrut	03/08/2024 / Rahul	S12112

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	454157	02/09/2025	08/09/2024 / Jagrut	03/08/2024 / Rahul	S12113

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]	A0203726	12/05/2024	06/05/2024 / Rahul	03/15/2024 / Rahul	S12117

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]	A0203726	02/12/2025	08/12/2024 / Rahul	03/15/2024 / Rahul	S12126

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]	A0214021	02/12/2025	08/12/2024 / Rahul	07/23/2024 / RAHUL	S12453

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

CPI INTERNATIONAL

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(707)545-7901 Fax

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by TUV USA to ISO 9001:2015

Date Received: _____

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

*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: Erica Castiglione

Erica Castiglione
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.

CPI INTERNATIONAL

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~~S11088~~ S11096 to S11099

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Date Received:_____

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Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110381-01	495831	≤ -10 °C	Methylene Chloride	10/30/2027	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	1003 ± 17.27
acenaphthylene	208-96-8	97.6	14.290.1P	999.8 ± 17.22
aniline	62-53-3	99.9	64.7.1P	995 ± 17.13
anthracene	120-12-7	99.5	15.7.1P	1001 ± 17.24
azobenzene	103-33-3	98.1	252.7.2P	999.1 ± 17.21
benzo[a]anthracene	56-55-3	100	16.7.3P	1001 ± 17.24
benzo[b]fluoranthene	205-99-2	99.8	17.421.3P	1001 ± 19.91
benzo[k]fluoranthene	207-08-9	98.9	18.421.4P	1001 ± 17.92
benzo[ghi]perylene	191-24-2	93	19.286.4P	999.6 ± 19.88
benzo[a]pyrene	50-32-8	97	20.286.2P	999.1 ± 26.35
benzyl alcohol	100-51-6	99.9	65.18.1P	1001 ± 17.24
bis(2-chloroethoxy)methane	111-91-1	99.1	31.3.15P	999.7 ± 17.89
bis(2-chloroethyl)ether	111-44-4	99.8	32.7.1P	1001 ± 17.23
bis(2-chloro-1-methylethyl) ether	108-60-1	99.5	34.3.13P	999.5 ± 17.89
bis(2-ethylhexyl)adipate	103-23-1	99.5	874.7.1P	999.5 ± 17.21
bis(2-ethylhexyl)phthalate	117-81-7	99.4	33.29.1P	998.8 ± 19.86
4-bromophenyl phenyl ether	101-55-3	99.4	35.7.1P	999.1 ± 17.2
butyl benzyl phthalate	85-68-7	98.4	36.1.6P	984.7 ± 19.58
carbazole	86-74-8	99.4	239.7.2P	1000 ± 17.22

*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: Briana Smith

Briana Smith
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.:** 495831 **Expiration Date:** 10/30/2027

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,2,4-trichlorobenzene	120-82-1	99.6	54.29.1P	1000 ± 17.22
2,4,5-trichlorophenol	95-95-4	96.5	121.7.1.1P	1000 ± 17.22
2,4,6-trichlorophenol	88-06-2	99.6	113.7.1P	1002 ± 17.25

*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: Briana Smith

Briana Smith
Chemist

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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 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)

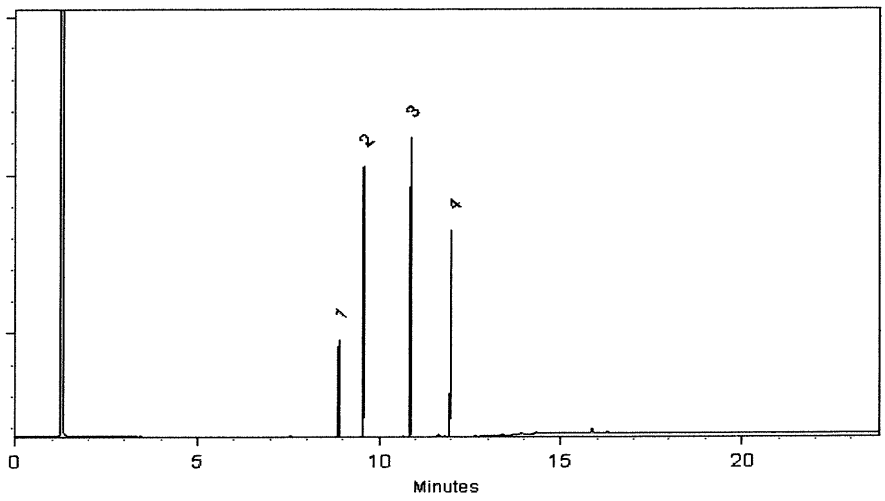
Carrier Gas:
hydrogen-constant pressure 10 psi.

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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Received on 09/07/22 by CG

S10778 to S10782

Catalog No. : 33913 **Lot No.:** A0186160

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, 2028 **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	2,015.0 µg/mL	+/- 11.8254 µg/mL	Gravimetric
	CAS # 7297-45-2 (Lot EF-135)		+/- 90.7728 µg/mL	Unstressed
	Purity 96%		+/- 100.7207 µg/mL	Stressed
2	Fluoranthene-d10	2,007.0 µg/mL	+/- 11.7782 µg/mL	Gravimetric
	CAS # 93951-69-0 (Lot PR-20668)		+/- 90.4107 µg/mL	Unstressed
	Purity 99%		+/- 100.3188 µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

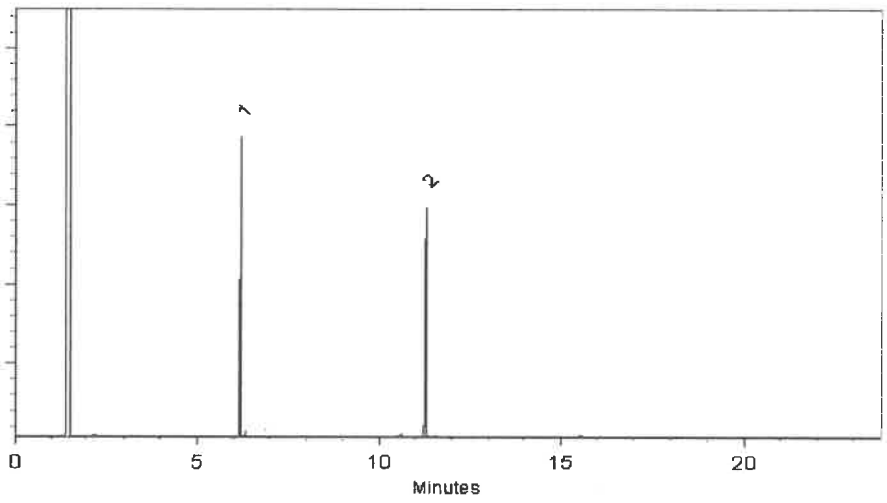
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

John Friedline - Operations Technician I

Date Mixed: 09-Jun-2022 **Balance:** B442140311

Marlina Cowan – Operations Tech II ARM QC

Date Passed: 13-Jun-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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Received by CG on 12/28/22 S10951 to S10980

Catalog No. : 31087 **Lot No.:** A0188108

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 : August 31, 2030 **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 **CAS #** 367-12-4 **Purity** 99%	(Lot STBF3761V)	10,088.5 µg/mL	+/- 58.6554 µg/mL +/- 294.4162 µg/mL +/- 357.2628 µg/mL		Gravimetric Unstressed Stressed
2	Phenol-d6 **CAS #** 13127-88-3 **Purity** 99%	(Lot PR-31262)	10,043.3 µg/mL	+/- 58.3923 µg/mL +/- 293.0957 µg/mL +/- 355.6603 µg/mL		Gravimetric Unstressed Stressed
3	2,4,6-Tribromophenol **CAS #** 118-79-6 **Purity** 99%	(Lot MKCJ7664)	10,010.0 µg/mL	+/- 58.1990 µg/mL +/- 292.1253 µg/mL +/- 354.4829 µg/mL		Gravimetric Unstressed Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

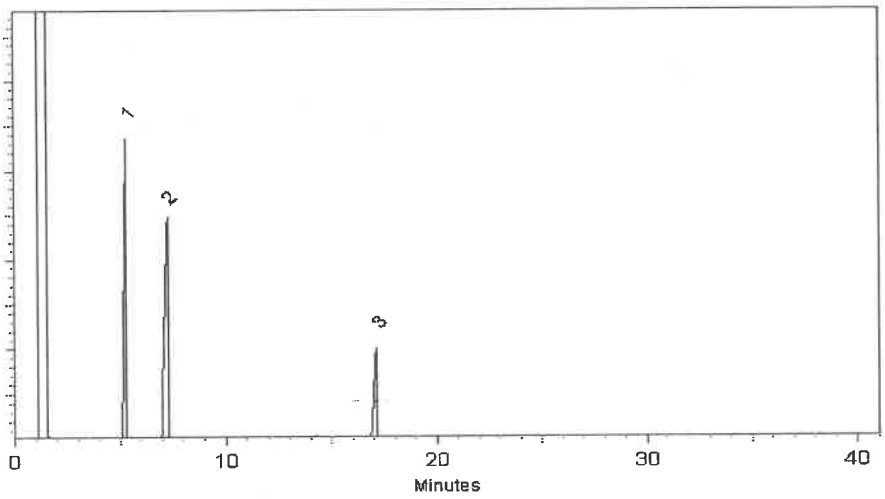
Carrier Gas:
hydrogen-constant pressure 10 psi.

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.

Morgan Craighead - Mix Technician

Date Mixed: 02-Aug-2022 **Balance:** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 05-Aug-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Received by CG on 12/28/22 $10981 to $11010

Catalog No. : 31086 **Lot No.:** A0189418

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 : August 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%	5,009.8 µg/mL	+/- 29.1271 µg/mL +/- 225.6421 µg/mL +/- 250.3778 µg/mL	Gravimetric Unstressed Stressed
2	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 00021384) **Purity** 99%	5,026.6 µg/mL	+/- 29.2250 µg/mL +/- 226.4003 µg/mL +/- 251.2191 µg/mL	Gravimetric Unstressed Stressed
3	p-Terphenyl-d14 **CAS #** 1718-51-0 (Lot PR-30504) **Purity** 99%	5,027.3 µg/mL	+/- 29.2289 µg/mL +/- 226.4304 µg/mL +/- 251.2524 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)

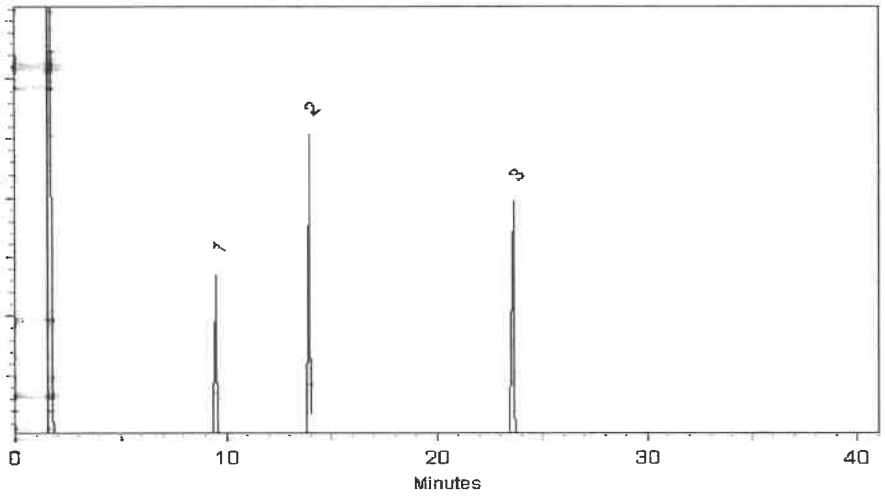
Carrier Gas:
hydrogen-constant pressure 10 psi.

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.

John Friedline - Operations Technician I

Date Mixed: 09-Sep-2022 **Balance:** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Sep-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Received on 01/13/23 by CG S11011 to S11015

Catalog No. : 555872 **Lot No.:** A0193449

Description : Custom Pentachlorophenol Standard

Custom Pentachlorophenol Standard 25,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pentachlorophenol	87-86-5	RP221012	99%	25,050.0 µg/mL	+/- 778.6378

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Russ Bookhamer - Operations Technician I **Date Mixed:** 11-Jan-2023 **Balance:** B442140311

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na_2SO_4
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na_2SO_4)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
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%	0.003 %
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%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

Recd. by RB on 7/24/23 E3551

VWR®

Certificate of Analysis

Sodium Hydroxide (Pellets)

Material: 0583
Grade: ACS GRADE
Batch Number: 23B1556310

Chemical Formula: NaOH
Molecular Weight: 40
CAS #: 1310-73-2
Appearance:

Pellets

Manufacture Date: 12/14/2022
Expiration Date: 12/31/2025

Storage: Room Temperature

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Calcium	<= 0.005 %	<0.005 %	PASS
Chloride	<= 0.005 %	0.002 %	PASS
Heavy Metals	<= 0.002 %	<0.002 %	PASS
Iron	<= 0.001 %	<0.001 %	PASS
Magnesium	<= 0.002 %	<0.002 %	PASS
Mercury	<= 0.1 ppm	<0.1 ppm	PASS
Nickel	<= 0.001 %	<0.001 %	PASS
Nitrogen Compounds	<= 0.001 %	<0.001 %	PASS
Phosphate	<= 0.001 %	<0.001 %	PASS
Potassium	<= 0.02 %	<0.02 %	PASS
Purity	>= 97.0 %	99.2 %	PASS
Sodium Carbonate	<= 1.0 %	0.5 %	PASS
Sulfate	<= 0.003 %	<0.003 %	PASS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

This document has been electronically produced and is valid without a signature.

Leona Edwardson, Quality Control Sr. Manager - Solon
VWR Chemicals, LLC.
28600 Fountain Parkway, Solon OH 44139 USA

Additional Information

Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.

E 3657	E 3659
E 3654	E 3660

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.Baker®

Material No.: 9266-A4
Batch No.: 24C0162011
Manufactured Date: 2024-01-04
Expiration Date: 2025-04-04
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	10
Residue after Evaporation	≤ 1.0 ppm	0.2 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
Manufacturer source batch: MG24A04224

E 3746

Ken Koehnlein
Sr. Manager, Quality Assurance

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.Baker®

Material No.: 9266-A4
Batch No.: 24D1962005
Manufactured Date: 2024-03-16
Expiration Date: 2025-06-15
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	8
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	≥ 99.8 %	99.9 %
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
Manufacturer source batch: MG24C16563

E 3759

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

PO: PO1-8886 PRODUCT CODE: SHIP DATE: 6/21/2024

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.Baker

Material No.: 9266-A4
Batch No.: 24E2462004
Manufactured Date: 2024-04-10
Expiration Date: 2025-07-10
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	3
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	≥ 99.8 %	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 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
Manufacturer source batch: MG24D10725

E 3768

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

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

PO: PO1-9448 PRODUCT CODE: SHIP DATE: 7/16/2024

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

Material No.: 9266-A4
Batch No.: 24F1062004
Manufactured Date: 2024-04-15
Expiration Date: 2025-07-15
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	7
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
Manufacturer source batch: MG24D15750

E 3786

Jamie Croak
Director Quality Operations, Bioscience Production

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.: 23H1462005
Manufactured Date: 2023-07-26
Expiration Date: 2026-07-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected for water)	≥ 99.4 %	99.7 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.3 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 %	0.3 %
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 8/13/24

E 3788

Ken Koehnlein
Sr. Manager, Quality Assurance

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.Baker®

Material No.: 9266-A4
Batch No.: 24H2762011
Manufactured Date: 2024-06-05
Expiration Date:2025-09-04
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 HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	5
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.3 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: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3817

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

Material No.: 9530-33
Batch No.: 0000281827
Manufactured Date: 2021/03/30
Retest Date: 2026/03/29
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS - Assay (as HCl) (by acid-base titrn)	36.5 - 38.0 %	37.6
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	1
ACS - Specific Gravity at 60°/60°F	1.185 - 1.192	1.189
ACS - Bromide (Br)	<= 0.005 %	< 0.005
ACS - Extractable Organic Substances	<= 5 ppm	< 1
ACS - Free Chlorine (as Cl_2)	<= 0.5 ppm	< 0.5
Phosphate (PO_4)	<= 0.05 ppm	< 0.03
Sulfate (SO_4)	<= 0.5 ppm	< 0.3
Sulfite (SO_3)	<= 0.8 ppm	0.3
Ammonium (NH_4)	<= 3 ppm	< 1
Trace Impurities - Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities - Aluminum (Al)	<= 10.0 ppb	0.5
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities - Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities - Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities - Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities - Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities - Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities - Calcium (Ca)	<= 50.0 ppb	15.0
Trace Impurities - Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities - Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities - Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities - Gallium (Ga)	<= 1.0 ppb	< 0.2

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

Material No.: 9530-33
Batch No.: 0000281827

Test	Specification	Result
Trace Impurities - Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities - Gold (Au)	<= 4.0 ppb	3.0
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities - Iron (Fe)	<= 15.0 ppb	1.0
Trace Impurities - Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities - Lithium (Li)	<= 1.0 ppb	< 0.2
Trace Impurities - Magnesium (Mg)	<= 10.0 ppb	< 0.4
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	0.2
Trace Impurities - Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities - Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities - Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities - Potassium (K)	<= 9.0 ppb	< 2.0
Trace Impurities - Selenium (Se), For Information Only	ppb	1.0
Trace Impurities - Silicon (Si)	<= 100.0 ppb	18.0
Trace Impurities - Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities - Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities - Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities - Tantalum (Ta)	<= 1.0 ppb	< 0.9
Trace Impurities - Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities - Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities - Titanium (Ti)	<= 1.0 ppb	< 0.2
Trace Impurities - Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	0.4
Trace Impurities - Zirconium (Zr)	<= 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

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

CPI INTERNATIONAL

5580 Skylane Blvd
Santa Rosa, CA 95403

(707)525-5788
(800)878-7654 Toll Free
(707)545-7901 Fax

Manufacturer's Quality System
Audited & Registered
by TUV USA to ISO 9001:2015

Date Received:_____

Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110094-02	506889	≤ -10 °C	Methylene Chloride	7/25/2028	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	99.7	247.29.3P	5035 ± 28.02
2-fluorobiphenyl	321-60-8	99.69	8.286.1.1P	4999 ± 103.66
nitrobenzene-d5	4165-60-0	99.67	7.9.3P	4988 ± 27.32
p-terphenyl-d14	1718-51-0	99.3	9.120.8P	5005 ± 27.85

511494 to 511498 } Y.P. 08/11/2023

*Not a certified value

Certified By: _____

Clint Tipton
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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01
ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555223 **Lot No.:** A0201940

Description : Custom 8270 Plus Standard #1

Custom 8270 Plus Standard #1 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2025 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

511539
↓
511568
Y.P. 091191

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	3,3'-Dichlorobenzidine	91-94-1	S230321RSR	99%	1,001.0 µg/mL	+/- 22.9799
2	Atrazine	1912-24-9	5FYWL	99%	1,010.0 µg/mL	+/- 23.1865
3	Benzidine	92-87-5	S221205RSR	99%	1,008.0 µg/mL	+/- 23.1406
4	epsilon-Caprolactam	105-60-2	I16X016	99%	1,008.0 µg/mL	+/- 23.1406

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Sam Moodler - Operations Tech I

REVIEWED
By Jennifer Pollino at 7:10 am, Sep 13, 2023

Date Mixed: 13-Sep-2023 **Balance:** B345965662

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31853 **Lot No.:** A0196453

Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2028 **Storage:** 0°C or colder

Ship: Ambient

S11749 ↓ S11794 RC 11/30/23

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dioxane	123-91-1	SHBN3770	99%	2,013.0 µg/mL	+/- 25.0521

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

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.)

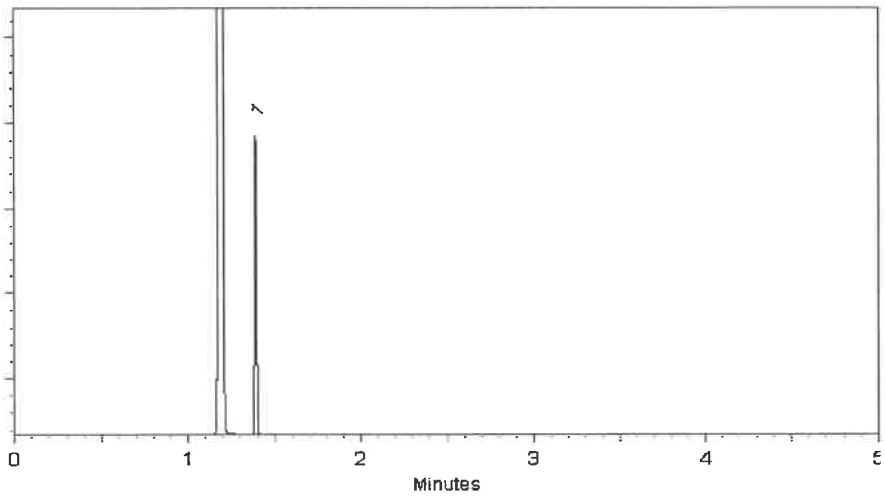
Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID

Split Vent:
100 ml/min.

Inj. Vol
1µl



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: 30-Mar-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 31-Mar-2023

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31853 **Lot No.:** A0196453

Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2028 **Storage:** 0°C or colder

Ship: Ambient

S11749 ↓ S11794 RC 11/30/23

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dioxane	123-91-1	SHBN3770	99%	2,013.0 µg/mL	+/- 25.0521

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

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.)

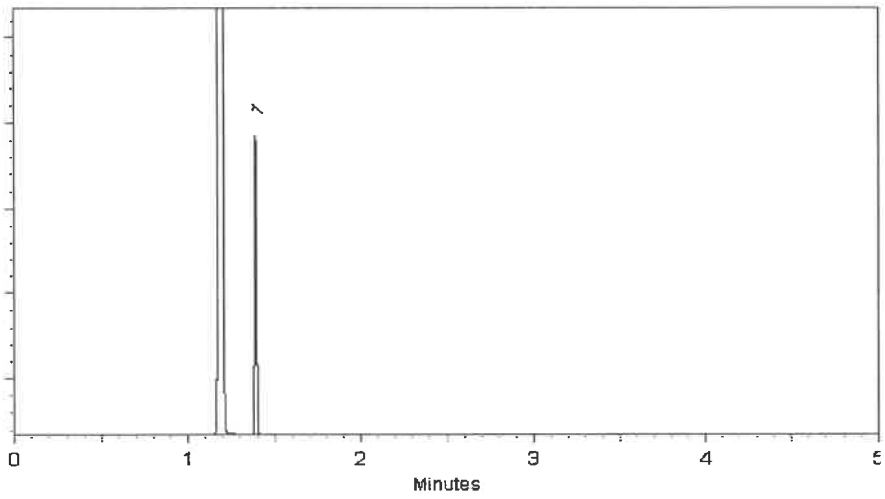
Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID

Split Vent:
100 ml/min.

Inj. Vol
1µl



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: 30-Mar-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 31-Mar-2023

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31206 **Lot No.:** A0201320

S12013 ↓ S12042 RC 12/26/23

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 : July 31, 2029 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	2,017.0 µg/mL	+/- 90.8469
2	Naphthalene-d8	1146-65-2	M-2180	99%	2,011.3 µg/mL	+/- 90.5917
3	Acenaphthene-d10	15067-26-2	PR-33507	99%	2,008.6 µg/mL	+/- 90.4685
4	Phenanthrene-d10	1517-22-2	PR-32303	99%	2,019.4 µg/mL	+/- 90.9550
5	Chrysene-d12	1719-03-5	PR-32210	99%	2,013.7 µg/mL	+/- 90.6968
6	Perylene-d12	1520-96-3	PR-33205	99%	2,012.7 µg/mL	+/- 90.6517

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

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.)

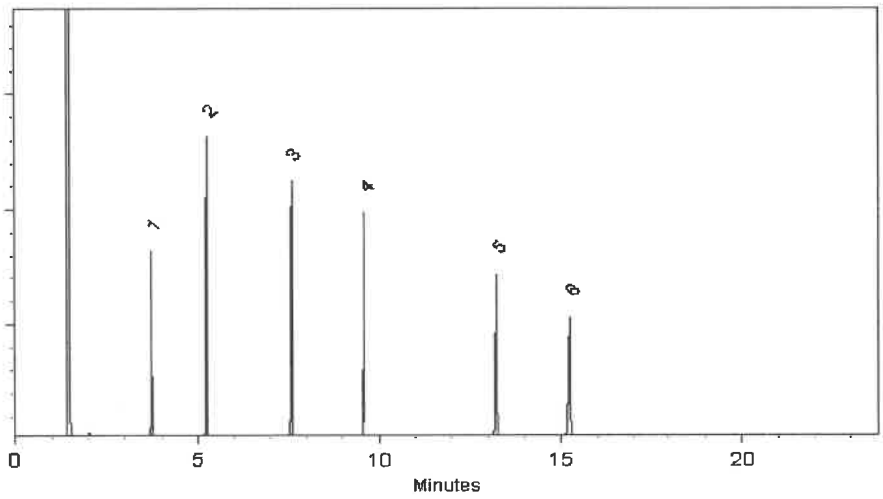
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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.

Peter Robbins - Operations Technician I

Date Mixed: 23-Aug-2023 **Balance Serial #** B345965662

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 25-Aug-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

CPI INTERNATIONAL

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Date Received: _____

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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

S12075
↓
S12079
RC
02/01/24

*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: _____
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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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555224 **Lot No.:** A0207706

Description : Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride, 1mL/ampul

S12082 ↓ S12111 RC/ 02/22/24

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,4,5-Tetrachlorobenzene	95-94-3	MKCT9480	99%	1,001.0 µg/mL	+/- 29.424320
2	Acetophenone	98-86-2	STBH8205	99%	1,004.0 µg/mL	+/- 29.512504
3	Benzaldehyde	100-52-7	RD231129RSRA	99%	1,005.0 µg/mL	+/- 29.541899
4	Benzoic acid	65-85-0	MKCR2694	99%	1,003.0 µg/mL	+/- 29.483110
5	Biphenyl	92-52-4	MKCL6515	99%	1,006.0 µg/mL	+/- 29.571294

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

John Friedline - Operations Technician I

Date Mixed: 12-Feb-2024 **Balance:** B345965662

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
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Certificate of Analysis

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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555224 **Lot No.:** A0207706

Description : Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride, 1mL/ampul

S12082 ↓ S12111 RC/ 02/22/24

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,4,5-Tetrachlorobenzene	95-94-3	MKCT9480	99%	1,001.0 µg/mL	+/- 29.424320
2	Acetophenone	98-86-2	STBH8205	99%	1,004.0 µg/mL	+/- 29.512504
3	Benzaldehyde	100-52-7	RD231129RSRA	99%	1,005.0 µg/mL	+/- 29.541899
4	Benzoic acid	65-85-0	MKCR2694	99%	1,003.0 µg/mL	+/- 29.483110
5	Biphenyl	92-52-4	MKCL6515	99%	1,006.0 µg/mL	+/- 29.571294

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

John Friedline - Operations Technician I

Date Mixed: 12-Feb-2024 **Balance:** B345965662

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-020223-01	454157	≤ -10 °C	P/T Methanol	6/10/2026	1,4-Dioxane Solution, 2000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,4-dioxane	123-91-1	100	223.1.3P	1997 ± 57.08

S12112 ↓ S12116 } RC/ 03/08/24

*Not a certified value

Certified By: Melissa Workoff

Melissa Workoff
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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Date Received:_____

Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-020223-01	454157	≤ -10 °C	P/T Methanol	6/10/2026	1,4-Dioxane Solution, 2000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,4-dioxane	123-91-1	100	223.1.3P	1997 ± 57.08

S12112 ↓ S12116 } RC/ 03/08/24

*Not a certified value

Certified By: Melissa Workoff

Melissa Workoff
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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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31850 **Lot No.:** A0203726

Description : 8270 MegaMix®

8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2025 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

S12117 ↓ S12146 RC/ 03/18/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBP6240	99%	1,001.6 µg/mL	+/- 36.4412
2	N-Nitrosodimethylamine	62-75-9	230209JLM	99%	1,005.9 µg/mL	+/- 36.5968
3	Phenol	108-95-2	MKCK1120	99%	1,003.3 µg/mL	+/- 36.5038
4	Aniline	62-53-3	X22F726	99%	1,005.8 µg/mL	+/- 36.5928
5	Bis(2-chloroethyl)ether	111-44-4	SHBL6942	99%	1,008.1 µg/mL	+/- 36.6776
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,001.8 µg/mL	+/- 36.4492
7	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	1,002.3 µg/mL	+/- 36.4654
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,003.7 µg/mL	+/- 36.5159
9	Benzyl alcohol	100-51-6	SHBK5469	99%	1,008.7 µg/mL	+/- 36.6979
10	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	1,000.3 µg/mL	+/- 36.3926
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,003.5 µg/mL	+/- 36.5099
12	2,2'-oxybis(1-chloropropane)	108-60-1	29-MAR-45-5	99%	1,007.3 µg/mL	+/- 36.6493
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	504.3 µg/mL	+/- 18.3500
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	503.6 µg/mL	+/- 18.3237
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,008.3 µg/mL	+/- 36.6857
16	Hexachloroethane	67-72-1	QTORH	99%	1,007.5 µg/mL	+/- 36.6554
17	Nitrobenzene	98-95-3	10224044	99%	1,008.6 µg/mL	+/- 36.6938

18	Isophorone	78-59-1	MKCC9506	99%	1,005.9	µg/mL	+/- 36.5988
19	2-Nitrophenol	88-75-5	RP230710	99%	1,003.2	µg/mL	+/- 36.4998
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,003.8	µg/mL	+/- 36.5200
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,002.1	µg/mL	+/- 36.4573
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,003.7	µg/mL	+/- 36.5180
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,007.6	µg/mL	+/- 36.6574
24	Naphthalene	91-20-3	STBL1057	99%	1,008.3	µg/mL	+/- 36.6837
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,001.3	µg/mL	+/- 36.4290
26	Hexachlorobutadiene	87-68-3	RP230823RSR	98%	1,008.3	µg/mL	+/- 36.6829
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,003.1	µg/mL	+/- 36.4937
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,001.9	µg/mL	+/- 36.4505
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	1,000.0	µg/mL	+/- 36.3838
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,008.5	µg/mL	+/- 36.6909
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.4	µg/mL	+/- 36.5442
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,001.9	µg/mL	+/- 36.4512
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,001.1	µg/mL	+/- 36.4230
34	2-Nitroaniline	88-74-4	RP230531	99%	1,002.9	µg/mL	+/- 36.4876
35	1,4-Dinitrobenzene	100-25-4	RP230816	99%	1,005.7	µg/mL	+/- 36.5887
36	Acenaphthylene	208-96-8	p06V	98%	1,009.5	µg/mL	+/- 36.7265
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.4	µg/mL	+/- 36.5422
38	Dimethylphthalate	131-11-3	358221L17K	99%	1,005.9	µg/mL	+/- 36.5968
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,003.2	µg/mL	+/- 36.4998
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.2	µg/mL	+/- 36.4634
41	Acenaphthene	83-32-9	MKCR7169	99%	1,009.3	µg/mL	+/- 36.7221
42	3-Nitroaniline	99-09-2	RP230822RSR	99%	1,003.9	µg/mL	+/- 36.5240
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,002.0	µg/mL	+/- 36.4553
44	Dibenzofuran	132-64-9	MKCD9952	99%	1,006.7	µg/mL	+/- 36.6251
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,003.8	µg/mL	+/- 36.5220
46	4-Nitrophenol	100-02-7	RP230627	99%	1,002.3	µg/mL	+/- 36.4674
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,008.7	µg/mL	+/- 36.6979
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230919	99%	1,006.3	µg/mL	+/- 36.6130
49	Fluorene	86-73-7	10241100	99%	1,008.3	µg/mL	+/- 36.6857
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCT7248	99%	1,003.8	µg/mL	+/- 36.5220
51	Diethylphthalate	84-66-2	MKCD2547	99%	1,008.6	µg/mL	+/- 36.6958
52	4-Nitroaniline	100-01-6	RP230111	99%	1,001.1	µg/mL	+/- 36.4230
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230718JLM	99%	1,002.0	µg/mL	+/- 36.4553

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.3	µg/mL	+/- 36.4674
55	Azobenzene	103-33-3	BCCK0887	99%	1,005.8	µg/mL	+/- 36.5928
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,003.0	µg/mL	+/- 36.4917
57	Hexachlorobenzene	118-74-1	14821700	99%	1,007.5	µg/mL	+/- 36.6554
58	Pentachlorophenol	87-86-5	RP230530RSR	99%	1,008.8	µg/mL	+/- 36.7019
59	Phenanthrene	85-01-8	MKCQ8876	99%	1,008.4	µg/mL	+/- 36.6877
60	Anthracene	120-12-7	MKCR0570	99%	1,009.0	µg/mL	+/- 36.7100
61	Carbazole	86-74-8	14351100	99%	1,000.9	µg/mL	+/- 36.4149
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,007.6	µg/mL	+/- 36.6595
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,009.6	µg/mL	+/- 36.7302
64	Pyrene	129-00-0	BCCG8479	98%	1,007.2	µg/mL	+/- 36.6453
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,002.1	µg/mL	+/- 36.4573
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,005.2	µg/mL	+/- 36.5705
67	Benz(a)anthracene	56-55-3	I220012022BAA	99%	1,002.2	µg/mL	+/- 36.4614
68	Chrysene	218-01-9	RP230601	99%	1,008.3	µg/mL	+/- 36.6837
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCQ3468	99%	1,001.8	µg/mL	+/- 36.4472
70	Di-n-octyl phthalate	117-84-0	14382700	99%	1,006.0	µg/mL	+/- 36.6008
71	Benzo(b)fluoranthene	205-99-2	012013B	99%	1,002.8	µg/mL	+/- 36.4836
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,003.0	µg/mL	+/- 36.4917
73	Benzo(a)pyrene	50-32-8	P54915-0703	99%	1,002.3	µg/mL	+/- 36.4674
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,009.4	µg/mL	+/- 36.7243
75	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	1,007.6	µg/mL	+/- 36.6595
76	Benzo(g,h,i)perylene	191-24-2	RP231003RSR	99%	1,002.9	µg/mL	+/- 36.4876

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31850 **Lot No.:** A0203726

Description : 8270 MegaMix®

8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2025 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

S12117 ↓ S12146 RC/ 03/18/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBP6240	99%	1,001.6 µg/mL	+/- 36.4412
2	N-Nitrosodimethylamine	62-75-9	230209JLM	99%	1,005.9 µg/mL	+/- 36.5968
3	Phenol	108-95-2	MKCK1120	99%	1,003.3 µg/mL	+/- 36.5038
4	Aniline	62-53-3	X22F726	99%	1,005.8 µg/mL	+/- 36.5928
5	Bis(2-chloroethyl)ether	111-44-4	SHBL6942	99%	1,008.1 µg/mL	+/- 36.6776
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,001.8 µg/mL	+/- 36.4492
7	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	1,002.3 µg/mL	+/- 36.4654
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,003.7 µg/mL	+/- 36.5159
9	Benzyl alcohol	100-51-6	SHBK5469	99%	1,008.7 µg/mL	+/- 36.6979
10	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	1,000.3 µg/mL	+/- 36.3926
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,003.5 µg/mL	+/- 36.5099
12	2,2'-oxybis(1-chloropropane)	108-60-1	29-MAR-45-5	99%	1,007.3 µg/mL	+/- 36.6493
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	504.3 µg/mL	+/- 18.3500
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	503.6 µg/mL	+/- 18.3237
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,008.3 µg/mL	+/- 36.6857
16	Hexachloroethane	67-72-1	QTORH	99%	1,007.5 µg/mL	+/- 36.6554
17	Nitrobenzene	98-95-3	10224044	99%	1,008.6 µg/mL	+/- 36.6938

18	Isophorone	78-59-1	MKCC9506	99%	1,005.9	µg/mL	+/- 36.5988
19	2-Nitrophenol	88-75-5	RP230710	99%	1,003.2	µg/mL	+/- 36.4998
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,003.8	µg/mL	+/- 36.5200
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,002.1	µg/mL	+/- 36.4573
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,003.7	µg/mL	+/- 36.5180
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,007.6	µg/mL	+/- 36.6574
24	Naphthalene	91-20-3	STBL1057	99%	1,008.3	µg/mL	+/- 36.6837
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,001.3	µg/mL	+/- 36.4290
26	Hexachlorobutadiene	87-68-3	RP230823RSR	98%	1,008.3	µg/mL	+/- 36.6829
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,003.1	µg/mL	+/- 36.4937
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,001.9	µg/mL	+/- 36.4505
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	1,000.0	µg/mL	+/- 36.3838
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,008.5	µg/mL	+/- 36.6909
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.4	µg/mL	+/- 36.5442
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,001.9	µg/mL	+/- 36.4512
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,001.1	µg/mL	+/- 36.4230
34	2-Nitroaniline	88-74-4	RP230531	99%	1,002.9	µg/mL	+/- 36.4876
35	1,4-Dinitrobenzene	100-25-4	RP230816	99%	1,005.7	µg/mL	+/- 36.5887
36	Acenaphthylene	208-96-8	p06V	98%	1,009.5	µg/mL	+/- 36.7265
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.4	µg/mL	+/- 36.5422
38	Dimethylphthalate	131-11-3	358221L17K	99%	1,005.9	µg/mL	+/- 36.5968
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,003.2	µg/mL	+/- 36.4998
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.2	µg/mL	+/- 36.4634
41	Acenaphthene	83-32-9	MKCR7169	99%	1,009.3	µg/mL	+/- 36.7221
42	3-Nitroaniline	99-09-2	RP230822RSR	99%	1,003.9	µg/mL	+/- 36.5240
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,002.0	µg/mL	+/- 36.4553
44	Dibenzofuran	132-64-9	MKCD9952	99%	1,006.7	µg/mL	+/- 36.6251
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,003.8	µg/mL	+/- 36.5220
46	4-Nitrophenol	100-02-7	RP230627	99%	1,002.3	µg/mL	+/- 36.4674
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,008.7	µg/mL	+/- 36.6979
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230919	99%	1,006.3	µg/mL	+/- 36.6130
49	Fluorene	86-73-7	10241100	99%	1,008.3	µg/mL	+/- 36.6857
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCT7248	99%	1,003.8	µg/mL	+/- 36.5220
51	Diethylphthalate	84-66-2	MKCD2547	99%	1,008.6	µg/mL	+/- 36.6958
52	4-Nitroaniline	100-01-6	RP230111	99%	1,001.1	µg/mL	+/- 36.4230
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230718JLM	99%	1,002.0	µg/mL	+/- 36.4553

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.3	µg/mL	+/- 36.4674
55	Azobenzene	103-33-3	BCCK0887	99%	1,005.8	µg/mL	+/- 36.5928
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,003.0	µg/mL	+/- 36.4917
57	Hexachlorobenzene	118-74-1	14821700	99%	1,007.5	µg/mL	+/- 36.6554
58	Pentachlorophenol	87-86-5	RP230530RSR	99%	1,008.8	µg/mL	+/- 36.7019
59	Phenanthrene	85-01-8	MKCQ8876	99%	1,008.4	µg/mL	+/- 36.6877
60	Anthracene	120-12-7	MKCR0570	99%	1,009.0	µg/mL	+/- 36.7100
61	Carbazole	86-74-8	14351100	99%	1,000.9	µg/mL	+/- 36.4149
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,007.6	µg/mL	+/- 36.6595
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,009.6	µg/mL	+/- 36.7302
64	Pyrene	129-00-0	BCCG8479	98%	1,007.2	µg/mL	+/- 36.6453
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,002.1	µg/mL	+/- 36.4573
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,005.2	µg/mL	+/- 36.5705
67	Benz(a)anthracene	56-55-3	I220012022BAA	99%	1,002.2	µg/mL	+/- 36.4614
68	Chrysene	218-01-9	RP230601	99%	1,008.3	µg/mL	+/- 36.6837
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCQ3468	99%	1,001.8	µg/mL	+/- 36.4472
70	Di-n-octyl phthalate	117-84-0	14382700	99%	1,006.0	µg/mL	+/- 36.6008
71	Benzo(b)fluoranthene	205-99-2	012013B	99%	1,002.8	µg/mL	+/- 36.4836
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,003.0	µg/mL	+/- 36.4917
73	Benzo(a)pyrene	50-32-8	P54915-0703	99%	1,002.3	µg/mL	+/- 36.4674
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,009.4	µg/mL	+/- 36.7243
75	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	1,007.6	µg/mL	+/- 36.6595
76	Benzo(g,h,i)perylene	191-24-2	RP231003RSR	99%	1,002.9	µg/mL	+/- 36.4876

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555223 **Lot No.:** A0214021

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 : July 31, 2026 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	3,3'-Dichlorobenzidine	91-94-1	S240326RSR	99%	1,004.0 µg/mL	+/- 23.0487
2	Atrazine	1912-24-9	5FYWL	99%	1,005.0 µg/mL	+/- 23.0717
3	Benzidine	92-87-5	S240430RSR	99%	1,006.0 µg/mL	+/- 23.0947
4	epsilon-Caprolactam	105-60-2	Y16H012	99%	1,000.0 µg/mL	+/- 22.9569

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S12449 ↓ S12508 } RC 7/24/24

Rebecca Gingerich - Operations Tech II **Date Mixed:** 18-Jul-2024 **Balance:** 1128353505

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax: (908) 78-8922
www.chemtech.net

Chemtech Project Number: P4440/41

COC Number:

CLIENT INFORMATION

COMPANY: Tetra Tech
ADDRESS: 4433 Corporation Lane Suite 300
CITY: Virginia Beach STATE: VA ZIP: 23462
ATTENTION: Ernie Wu
PHONE: 757-466-4901 FAX: 757-461-4148

PROJECT INFORMATION

PROJECT NAME: NWIRP Bethpage
PROJECT #: 112G08005-WE13 LOCATION: VPB-196
PROJECT MANAGER: Ernie Wu
E-MAIL: ernie.wu@tetratech.com
PHONE: 757-466-4901 FAX: 757-461-4148

BILLING INFORMATION

BILL TO: SEE CONTRACT PO#
ADDRESS:
CITY: STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: 2 & 10 DAYS*
HARD COPY: 2 & 10 DAYS*
EDD 2 & 10 DAYS*
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESEULTS ONLY
- ☐ RESULTS + QC
- ☐ New Jersey REDUCED
- ☐ New Jersey CLP
- ☐ USEPA CLP
- ☐ New York State ASP "B"
- ☐ New York State ASP "A"
- ☐ Other
- ☐ EDD Format

ANALYSIS

1	2	3	4	5	6	7	8	9
VOC(SW846-8260B)	1,4 Dioxane (8270 SIM)	1,4 Dioxane (522)						

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# of Bottles	PRESERVATIVES A	1	2	3	4	5	6	7	8	9	COMMENTS
1.	BPOW6-11-HYD-20241016	AQ		X	10/16/24	10:00	5		2	1	2							
2.	BPOW6-11-TB-20241016	QA		X	10/16/24	9:00	2		2									
3.																		
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		

<-- Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSSESSION INCLUDING COURIER DELIVERY

	RELINQUISHED BY SAMPLER	DATE/TIME	RECEIVED BY
1.		10/17/24 1700	1.
2.	RELINQUISHED BY	DATE/TIME 9:15 10-18-24	RECEIVED BY 2.
3.	RELINQUISHED BY	DATE/TIME	RECEIVED FOR LAB BY 3.

Conditions of bottles or coolers at receipt: q Compliant q Non Compliant q Cooler Temp 2.3°C
MeOH extraction requires an additional 4oz. Jar for percent solid q Ice in Cooler?: yes
Comments: **Standard TAT**

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight
CHEMTECH: ☐ Picked Up ☐ Overnight

Shipment Complete
☐ YES ☐ NO

WHITE - CHEMTECH COPYFOR RETURN TO CLIENT **YELLOW** - CHEMTECH COPY **PINK** - SAMPLER COPY

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-0830
DOD ELAP (L-A-B)	L2219
Maine	2024021
Maryland	296
New Hampshire	255423
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P4440 TETR06
Client Name : Tetra Tech NUS, Inc.
Client Contact : Ernie Wu
Invoice Name : Tetra Tech NUS, Inc.
Invoice Contact : Ernie Wu

Order Date : 10/18/2024 10:22:00 AM
Project Name : CTO WE13
Receive DateTime : 10/18/2024 9:15:00 AM
Purchase Order :

Project Mgr :
Report Type : Level 4
EDD Type : ADAPT
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P4440-01	BPOW6-11-HYD-20241016	Water	10/16/2024	10:00					
					VOCMS Group1		8260-Low		10 Bus. Days
P4440-02	BPOW6-11-TB-20241016	Water	10/16/2024	09:00					
					VOCMS Group1		8260-Low		10 Bus. Days

Relinguished By :
Date / Time : 10.16.24 1120

Received By :
Date / Time : 10/16/24 11:20 Refg #4

Storage Area : VOA Refridgerator Room

Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034687.D
Acq On : 24 Oct 2024 10:59
Operator : RC/JU
Sample : SSTDICC0.8
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Quant Time: Oct 24 12:43:27 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 12:41:40 2024
Response via : Initial Calibration

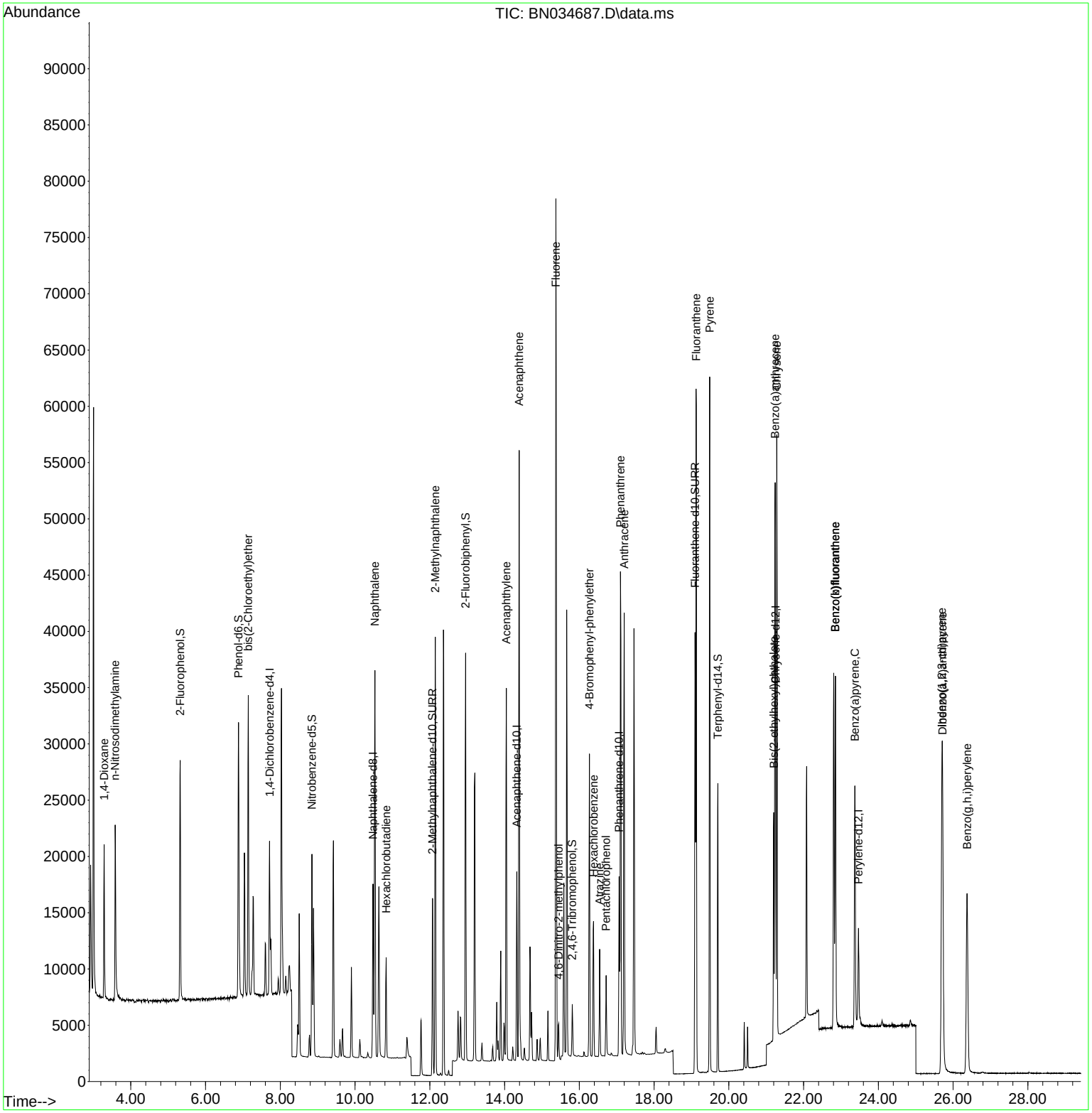
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.712	152	6279	0.400	ng		0.00
7) Naphthalene-d8	10.479	136	18298	0.400	ng		0.00
13) Acenaphthene-d10	14.325	164	8788	0.400	ng		0.00
19) Phenanthrene-d10	17.063	188	18528	0.400	ng	#	0.00
29) Chrysene-d12	21.247	240	12066	0.400	ng	#	0.00
35) Perylene-d12	23.467	264	10772	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.321	112	15922	0.829	ng		0.00
5) Phenol-d6	6.881	99	20820	0.847	ng		0.00
8) Nitrobenzene-d5	8.845	82	12949	0.854	ng		0.00
11) 2-Methylnaphthalene-d10	12.071	152	21347	0.829	ng		0.00
14) 2,4,6-Tribromophenol	15.810	330	2227	0.598	ng		0.00
15) 2-Fluorobiphenyl	12.957	172	29939	0.864	ng		0.00
27) Fluoranthene-d10	19.096	212	36834	0.812	ng		0.00
31) Terphenyl-d14	19.705	244	20915	0.896	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.285	88	6845	0.895	ng		98
3) n-Nitrosodimethylamine	3.581	42	10574	1.144	ng	#	97
6) bis(2-Chloroethyl)ether	7.141	93	17336	0.921	ng		99
9) Naphthalene	10.532	128	43252	0.857	ng		99
10) Hexachlorobutadiene	10.831	225	6528	0.807	ng	#	99
12) 2-Methylnaphthalene	12.146	142	26668	0.836	ng		100
16) Acenaphthylene	14.047	152	35850	0.849	ng		99
17) Acenaphthene	14.389	154	25224	0.876	ng		99
18) Fluorene	15.373	166	31002	0.864	ng		100
20) 4,6-Dinitro-2-methylph...	15.448	198	2025	0.799	ng	#	77
21) 4-Bromophenyl-phenylether	16.269	248	8290	0.818	ng	#	80
22) Hexachlorobenzene	16.381	284	9007	0.801	ng		98
23) Atrazine	16.542	200	6777	0.764	ng	#	93
24) Pentachlorophenol	16.716	266	3059	0.693	ng		99
25) Phenanthrene	17.101	178	47181	0.856	ng		100
26) Anthracene	17.200	178	41660	0.845	ng		100
28) Fluoranthene	19.129	202	51141	0.827	ng		100
30) Pyrene	19.486	202	51944	0.963	ng		100
32) Benzo(a)anthracene	21.238	228	39570	0.860	ng		99
33) Chrysene	21.283	228	41243	0.906	ng		99
34) Bis(2-ethylhexyl)phtha...	21.203	149	20342	0.650	ng	#	99
36) Indeno(1,2,3-cd)pyrene	25.698	276	34379	0.828	ng		100
37) Benzo(b)fluoranthene	22.850	252	37118	0.954	ng		93
38) Benzo(k)fluoranthene	22.850	252	37118	0.977	ng	#	91
39) Benzo(a)pyrene	23.371	252	29490	0.892	ng	#	88
40) Dibenzo(a,h)anthracene	25.718	278	26850	0.823	ng		96
41) Benzo(g,h,i)perylene	26.373	276	29665	0.824	ng		97

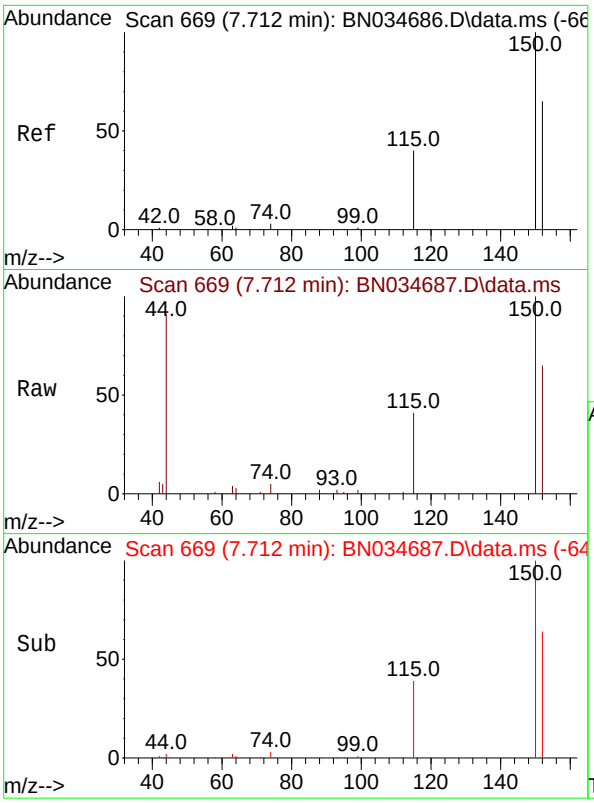
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034687.D
Acq On : 24 Oct 2024 10:59
Operator : RC/JU
Sample : SSTDICC0.8
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Quant Time: Oct 24 12:43:27 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 12:41:40 2024
Response via : Initial Calibration



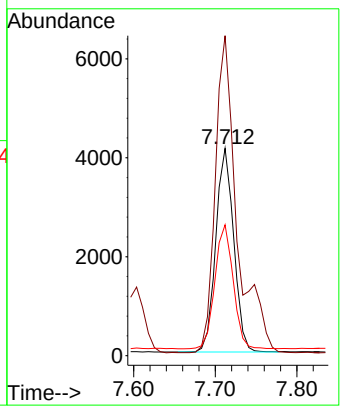


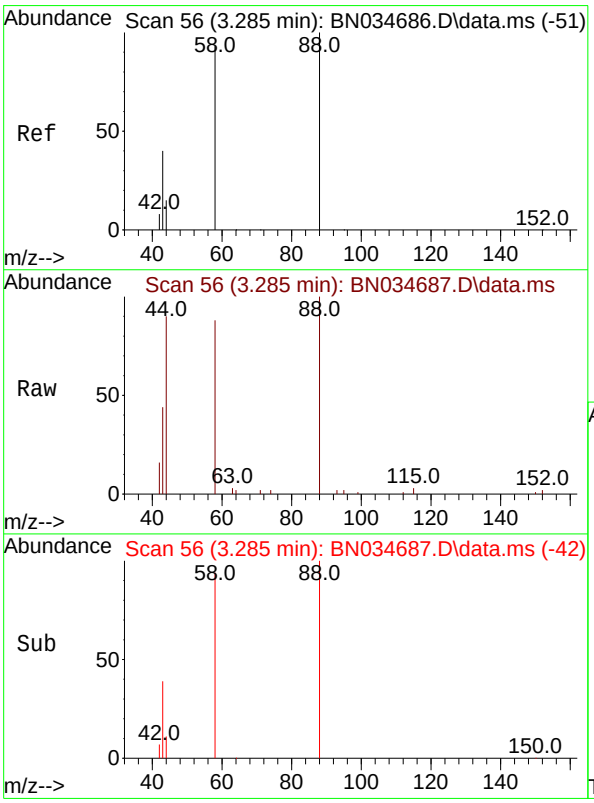
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:152 Resp: 6279

Ion	Ratio	Lower	Upper
152	100		
150	154.4	122.7	184.1
115	63.2	51.0	76.6

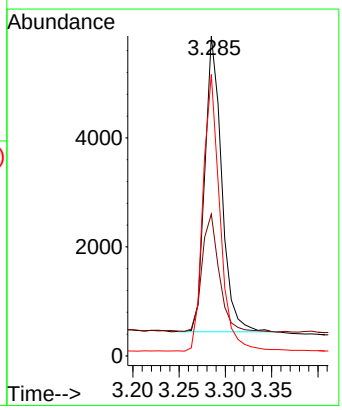


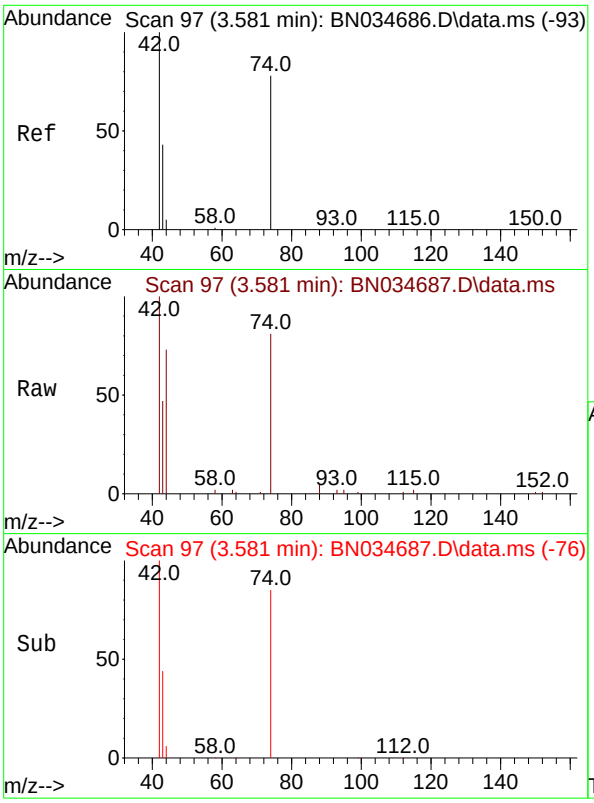


#2
1,4-Dioxane
Concen: 0.895 ng
RT: 3.285 min Scan# 56
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion: 88 Resp: 6845

Ion	Ratio	Lower	Upper
88	100		
43	41.3	32.1	48.1
58	93.9	73.7	110.5



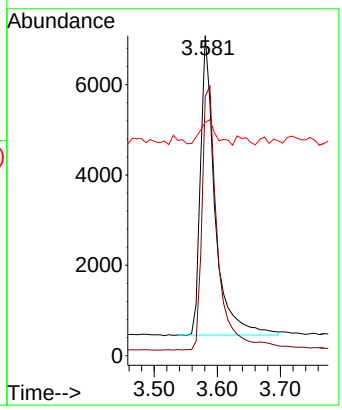


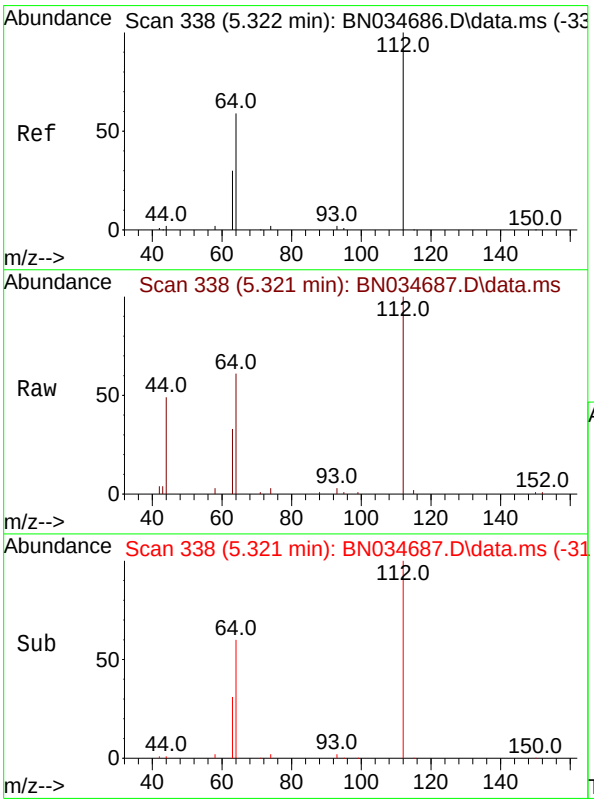
#3
n-Nitrosodimethylamine
Concen: 1.144 ng
RT: 3.581 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion: 42 Resp: 10574

Ion	Ratio	Lower	Upper
42	100		
74	95.9	77.2	115.8
44	9.3	13.4	20.2#

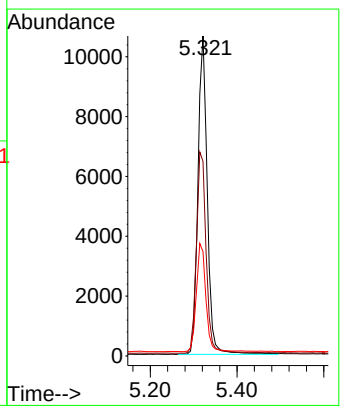


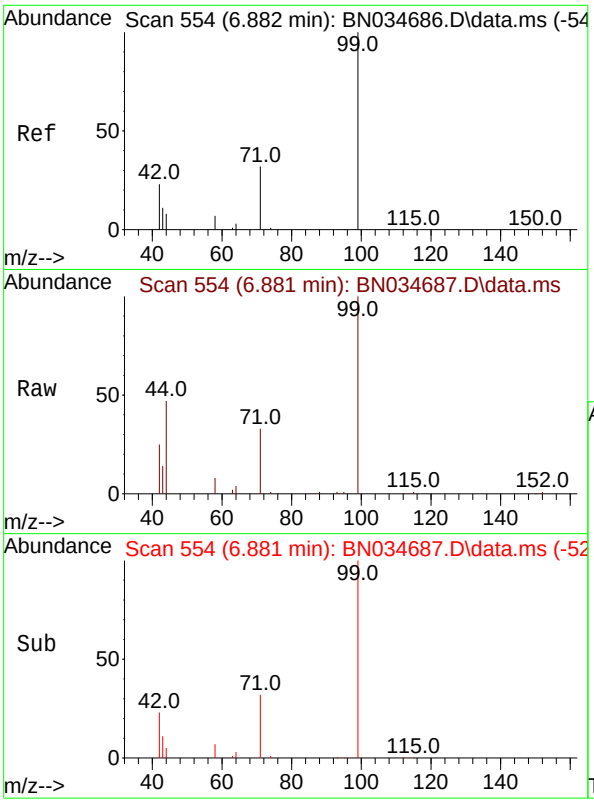


#4
2-Fluorophenol
Concen: 0.829 ng
RT: 5.321 min Scan# 338
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:112 Resp: 15922

Ion	Ratio	Lower	Upper
112	100		
64	66.1	53.0	79.6
63	34.5	27.6	41.4



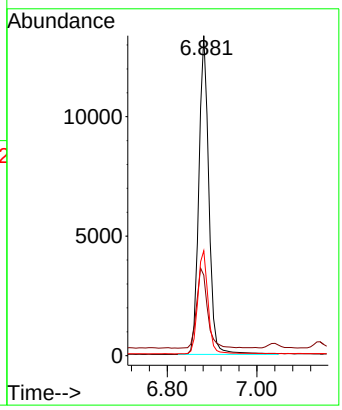


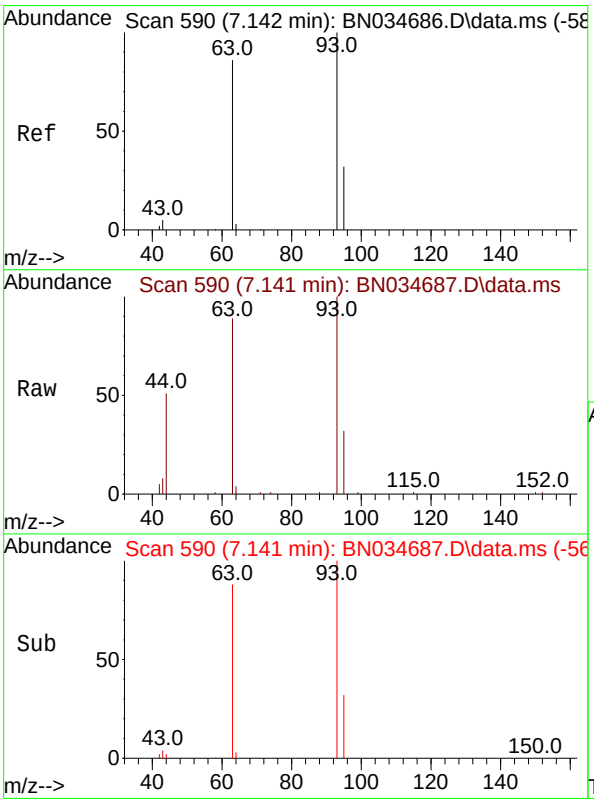
#5
Phenol-d6
Concen: 0.847 ng
RT: 6.881 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion: 99 Resp: 20820

Ion	Ratio	Lower	Upper
99	100		
42	27.0	21.8	32.8
71	33.1	26.6	40.0

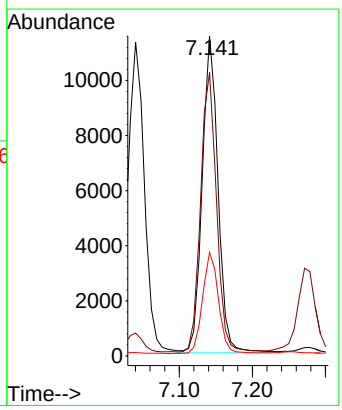


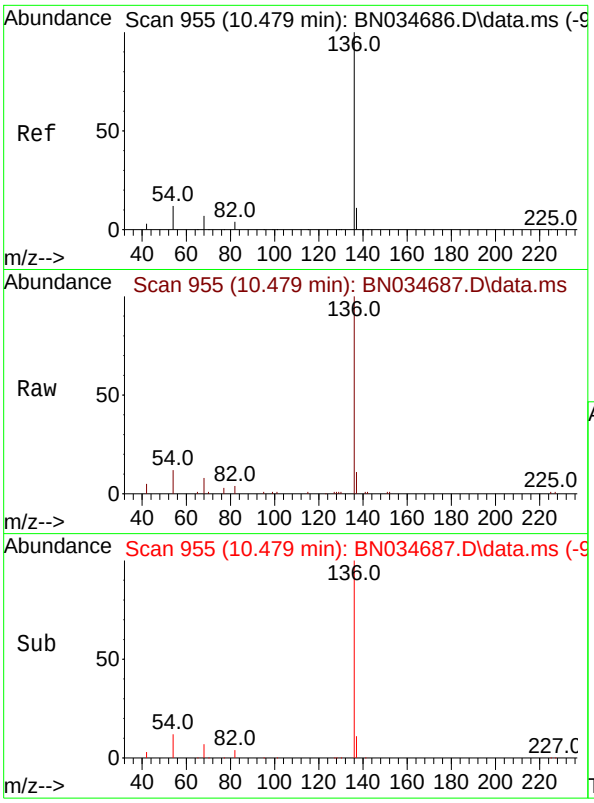


#6
bis(2-Chloroethyl)ether
Concen: 0.921 ng
RT: 7.141 min Scan# 590
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion: 93 Resp: 17336

Ion	Ratio	Lower	Upper
93	100		
63	88.1	71.5	107.3
95	32.1	25.8	38.6



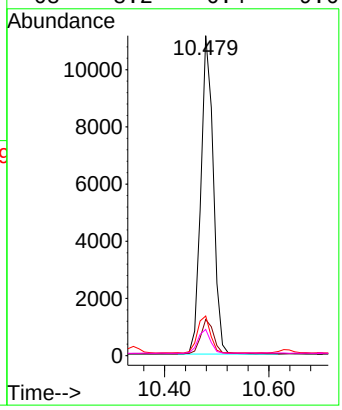


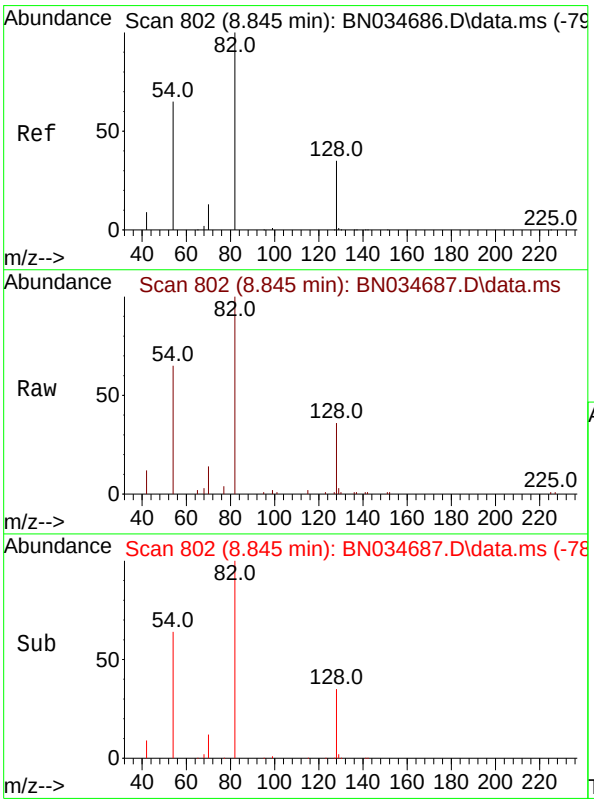
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:136 Resp: 18298

Ion	Ratio	Lower	Upper
136	100		
137	11.3	9.1	13.7
54	12.4	9.8	14.8
68	8.2	6.4	9.6

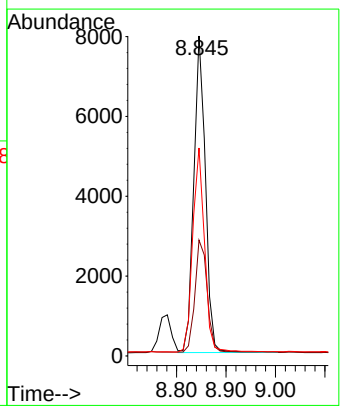


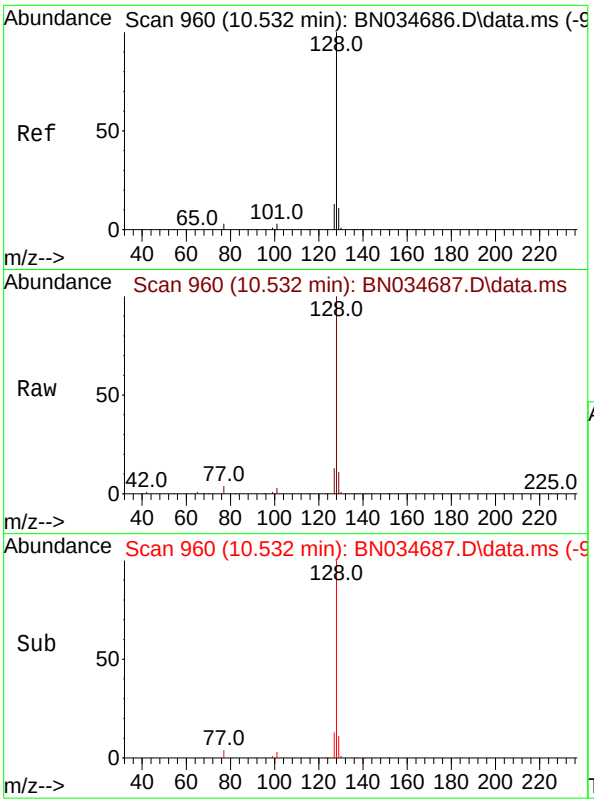


#8
Nitrobenzene-d5
Concen: 0.854 ng
RT: 8.845 min Scan# 802
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion: 82 Resp: 12949

Ion	Ratio	Lower	Upper
82	100		
128	36.2	29.7	44.5
54	65.0	53.0	79.6



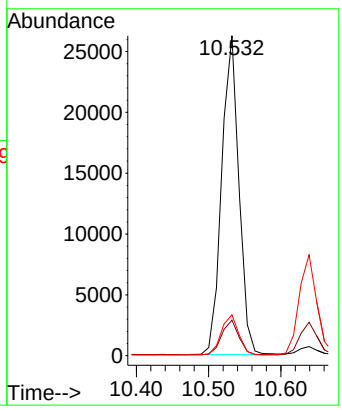


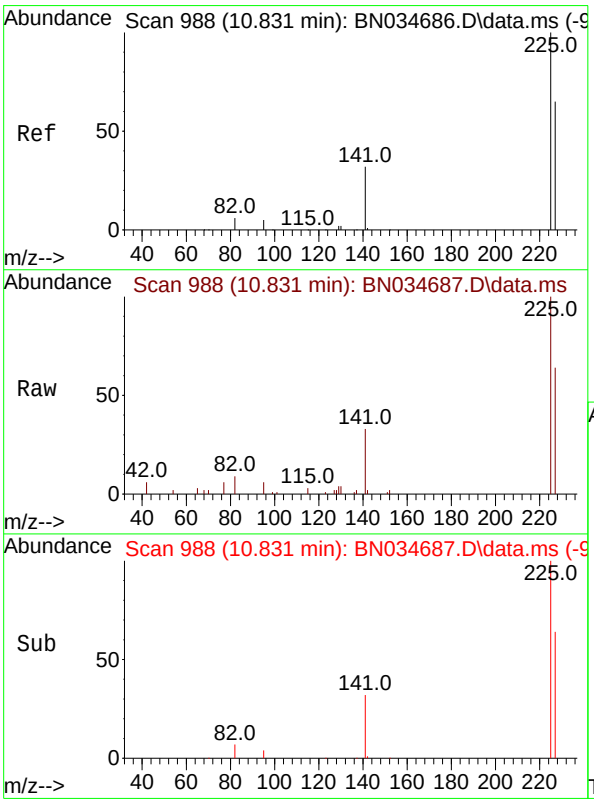
#9
Naphthalene
Concen: 0.857 ng
RT: 10.532 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:128 Resp: 43252

Ion	Ratio	Lower	Upper
128	100		
129	11.1	9.0	13.6
127	12.8	10.5	15.7

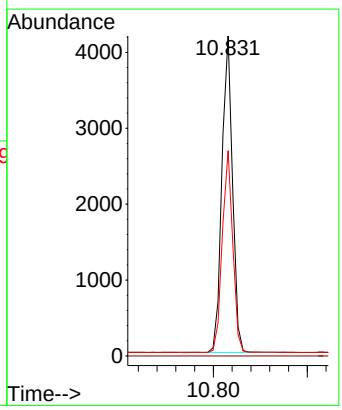


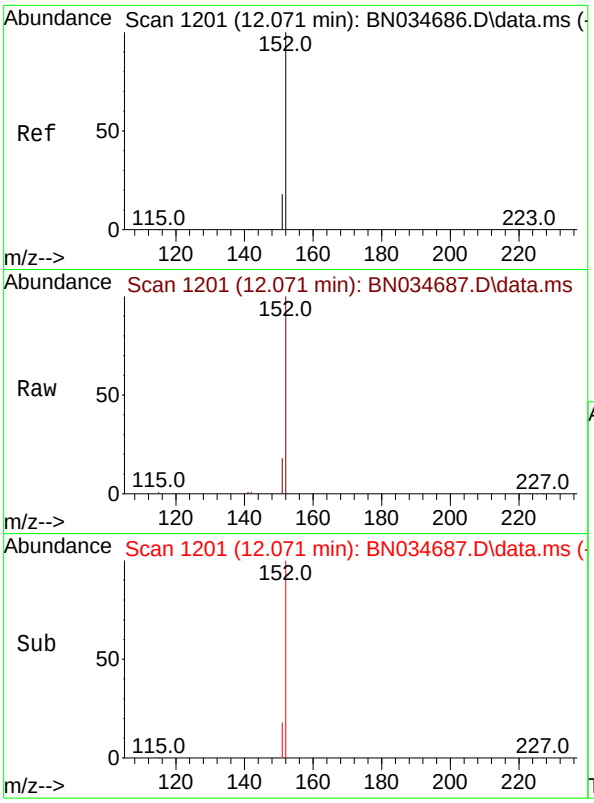


#10
Hexachlorobutadiene
Concen: 0.807 ng
RT: 10.831 min Scan# 988
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:225 Resp: 6528

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.3	51.4	77.0



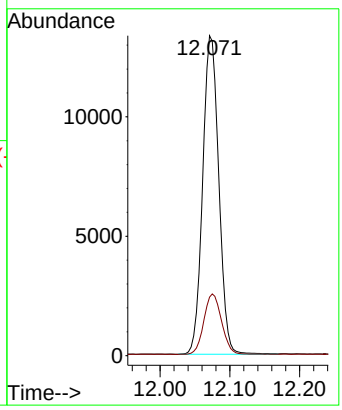


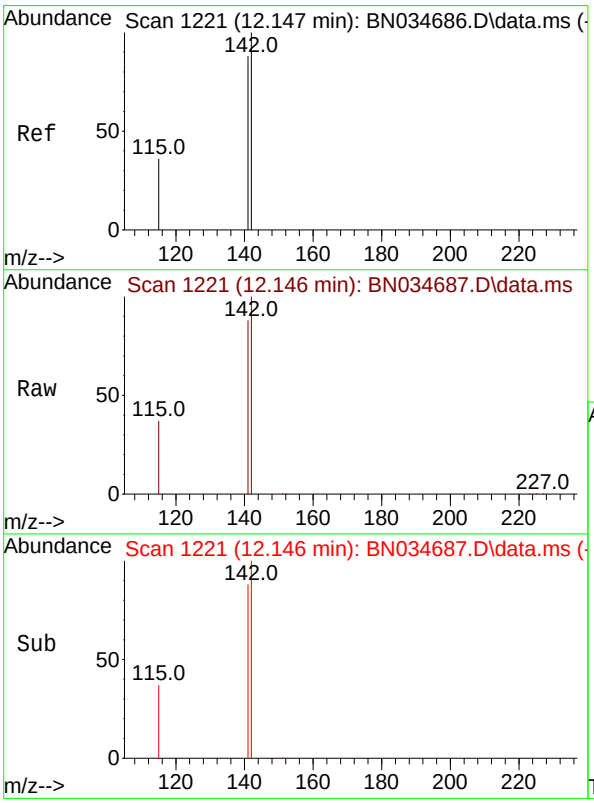
#11
2-Methylnaphthalene-d10
Concen: 0.829 ng
RT: 12.071 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:152 Resp: 21347

Ion	Ratio	Lower	Upper
152	100		
151	20.9	16.7	25.1

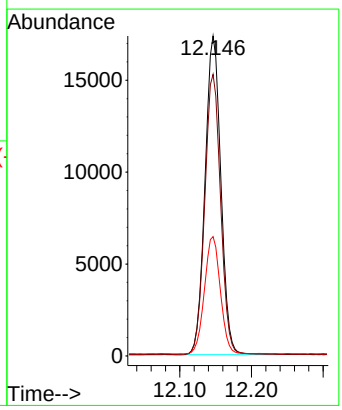


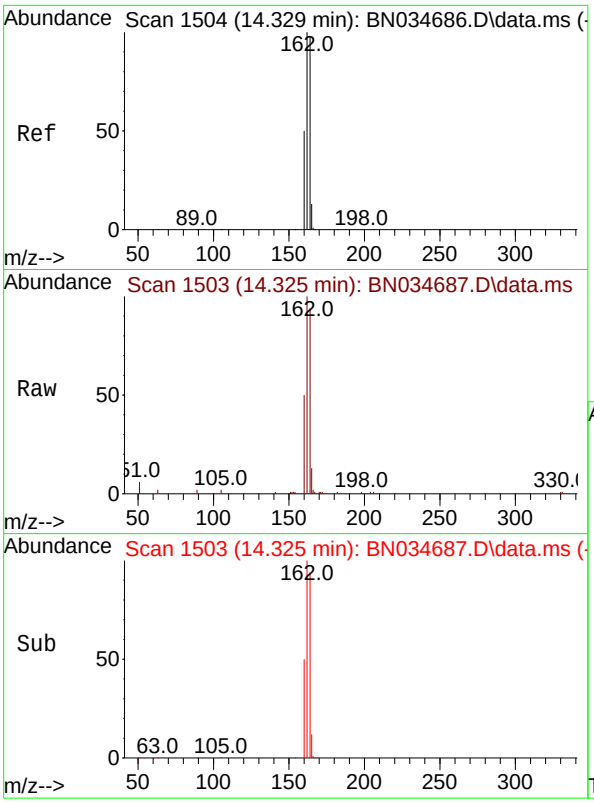


#12
2-Methylnaphthalene
Concen: 0.836 ng
RT: 12.146 min Scan# 1221
Delta R.T. -0.000 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:142 Resp: 26668

Ion	Ratio	Lower	Upper
142	100		
141	88.0	70.4	105.6
115	37.3	29.8	44.6



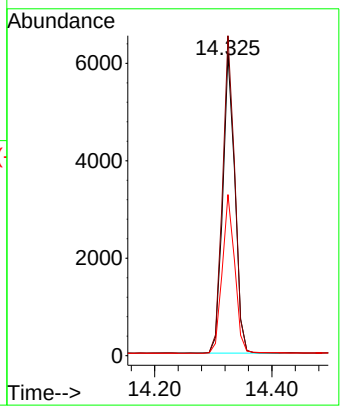


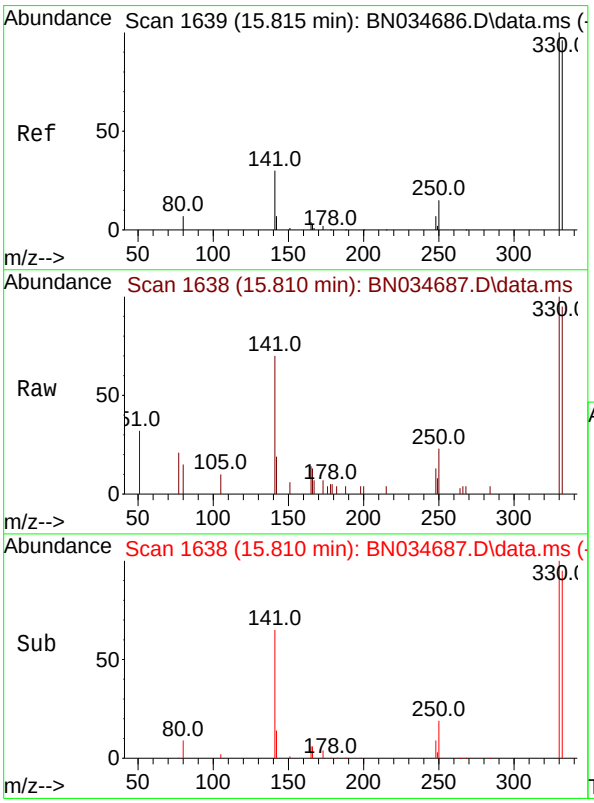
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.325 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:164 Resp: 8788

Ion	Ratio	Lower	Upper
164	100		
162	106.2	81.4	122.0
160	53.4	40.6	61.0

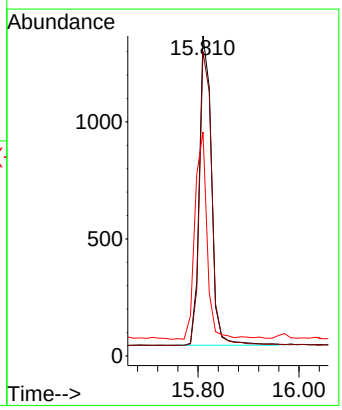


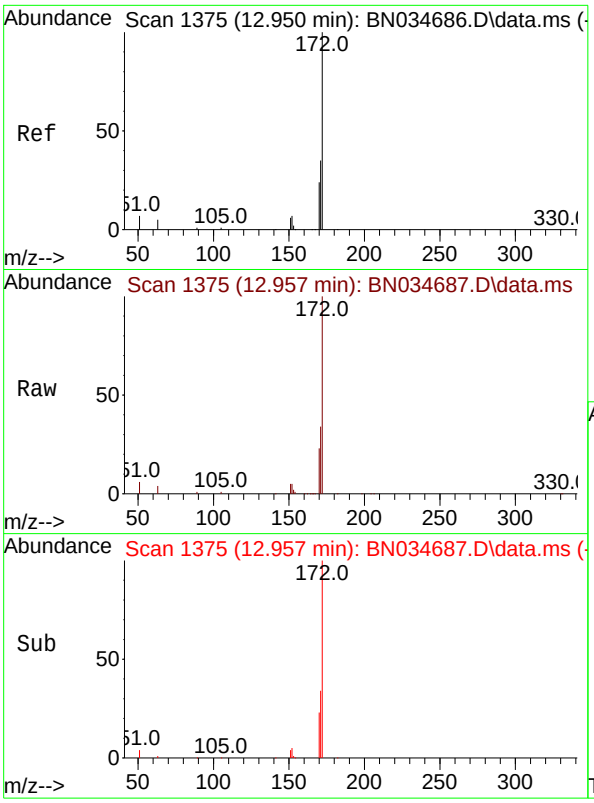


#14
2,4,6-Tribromophenol
Concen: 0.598 ng
RT: 15.810 min Scan# 1638
Delta R.T. -0.006 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:330 Resp: 2227

Ion	Ratio	Lower	Upper
330	100		
332	96.3	76.6	115.0
141	67.4	54.6	81.8



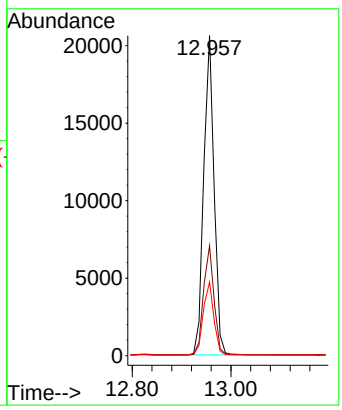


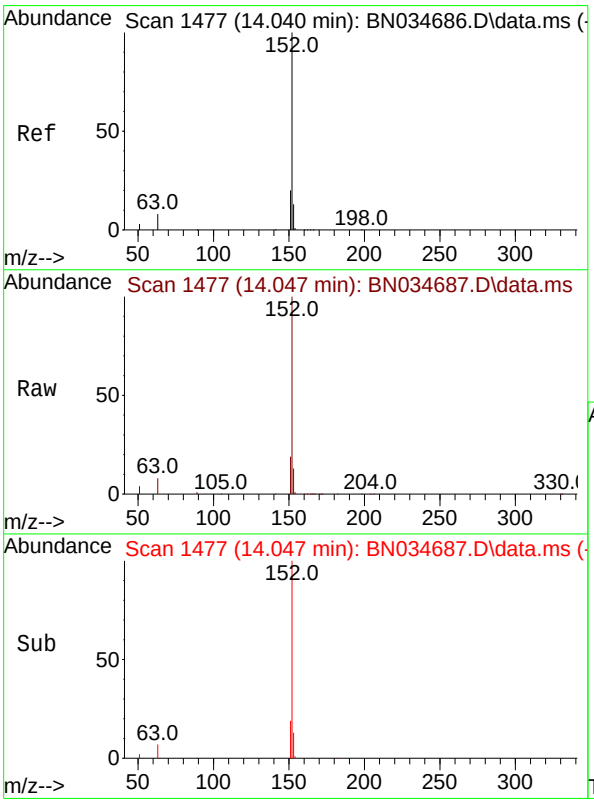
#15
2-Fluorobiphenyl
Concen: 0.864 ng
RT: 12.957 min Scan# 1
Delta R.T. 0.007 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:172 Resp: 29939

Ion	Ratio	Lower	Upper
172	100		
171	34.3	28.3	42.5
170	23.0	19.8	29.6

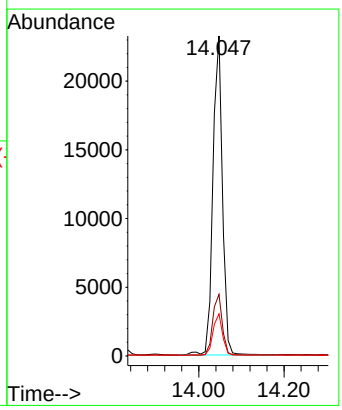


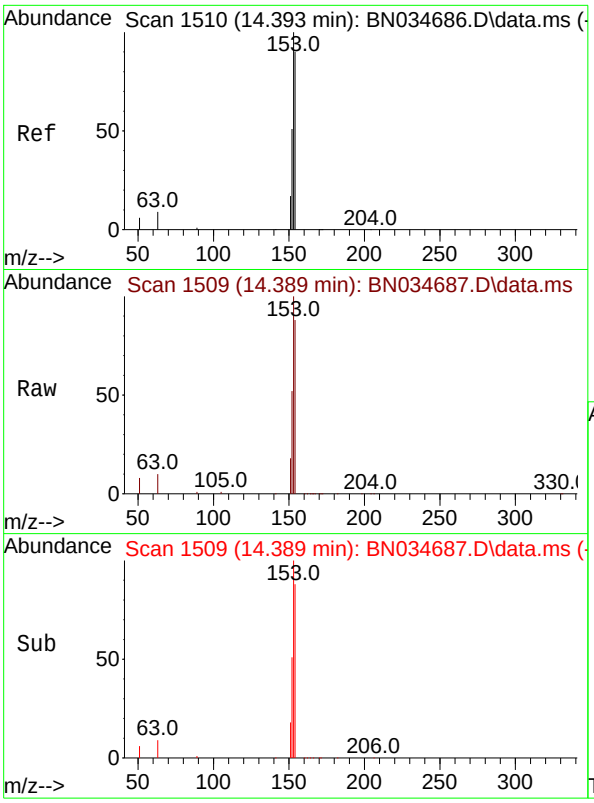


#16
Acenaphthylene
Concen: 0.849 ng
RT: 14.047 min Scan# 1477
Delta R.T. 0.007 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:152 Resp: 35850

Ion	Ratio	Lower	Upper
152	100		
151	19.1	15.6	23.4
153	12.8	10.6	15.8



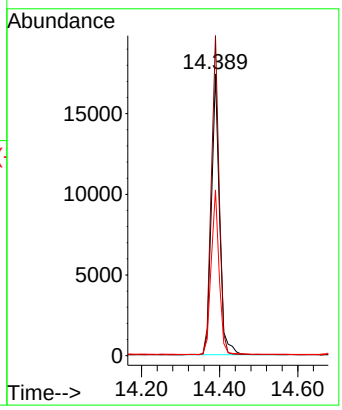


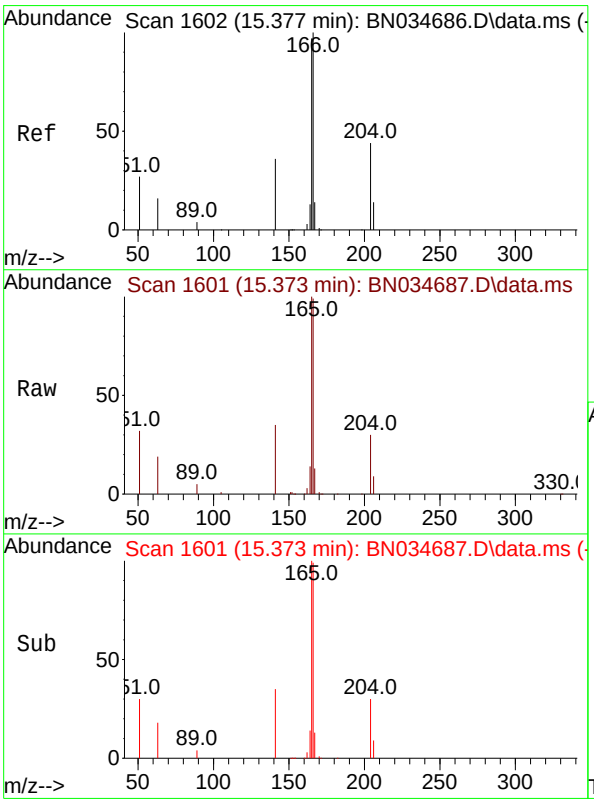
#17
Acenaphthene
Concen: 0.876 ng
RT: 14.389 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:154 Resp: 25224

Ion	Ratio	Lower	Upper
154	100		
153	109.5	88.2	132.2
152	57.2	46.9	70.3

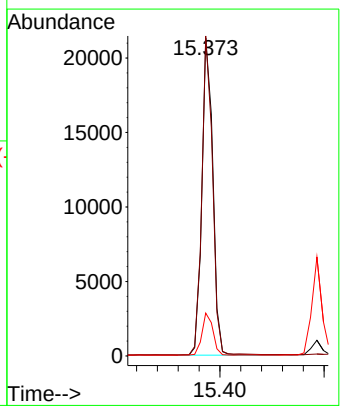


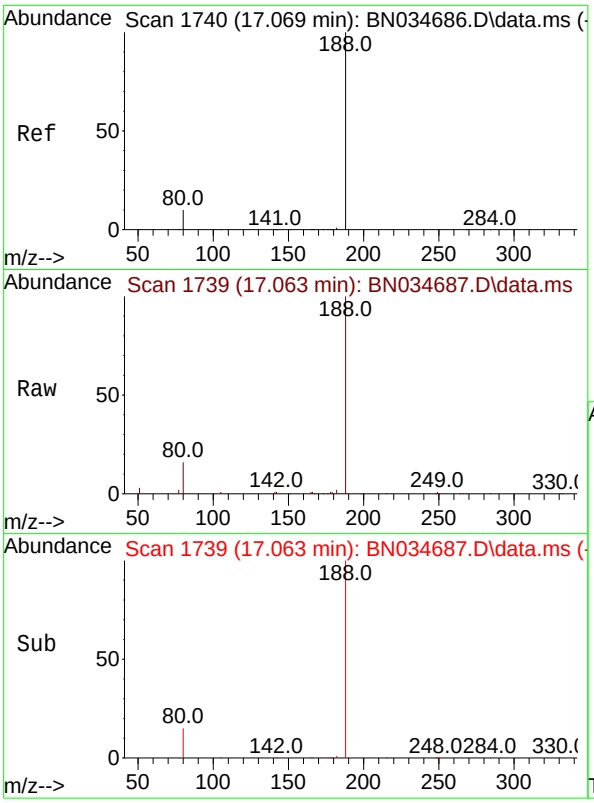


#18
Fluorene
Concen: 0.864 ng
RT: 15.373 min Scan# 1601
Delta R.T. -0.004 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:166 Resp: 31002

Ion	Ratio	Lower	Upper
166	100		
165	98.5	78.8	118.2
167	13.3	10.6	16.0



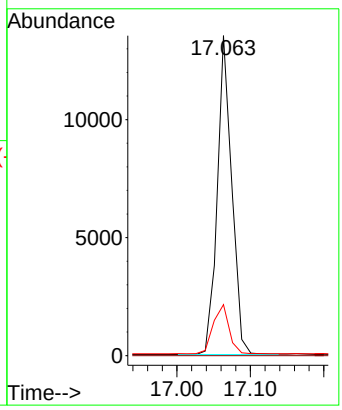


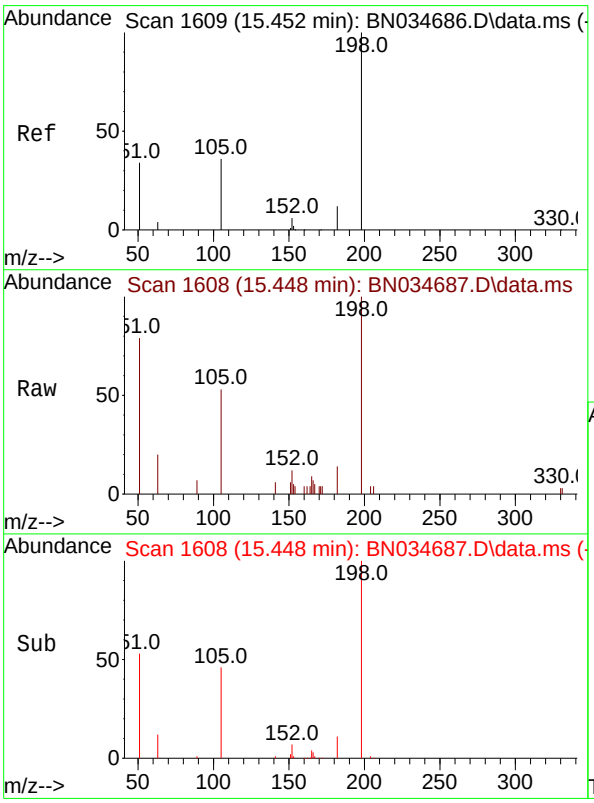
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.063 min Scan# 1
Delta R.T. -0.006 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:188 Resp: 18528

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	15.9	8.9	13.3#

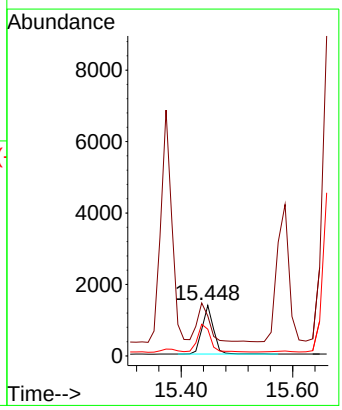


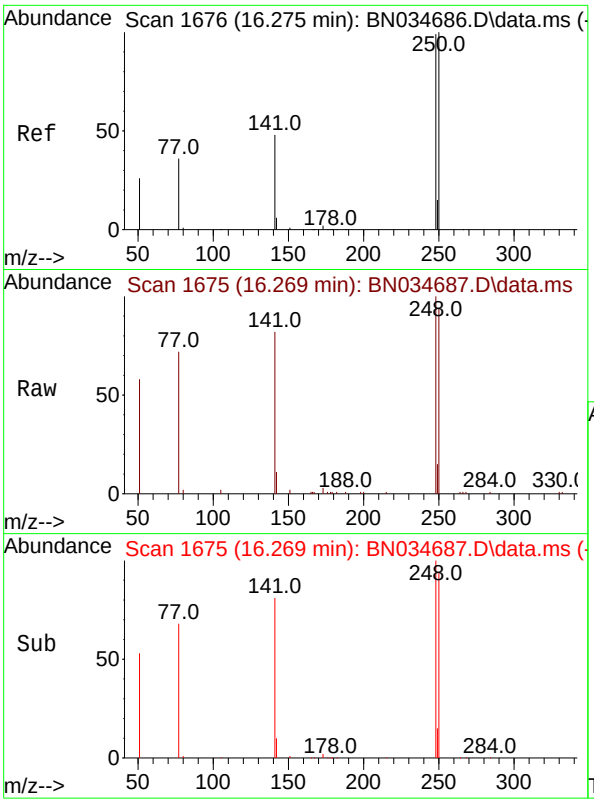


#20
4,6-Dinitro-2-methylphenol
Concen: 0.799 ng
RT: 15.448 min Scan# 1608
Delta R.T. -0.004 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:198 Resp: 2025

Ion	Ratio	Lower	Upper
198	100		
51	79.0	91.8	137.8#
105	52.7	44.3	66.5



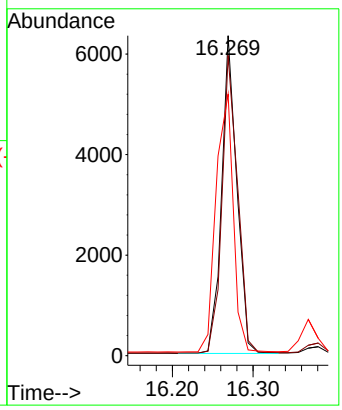


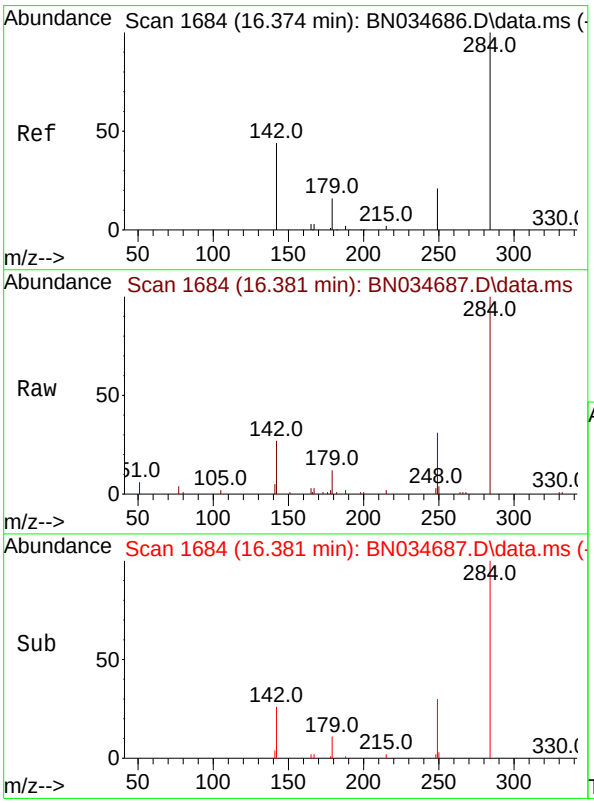
#21
4-Bromophenyl-phenylether
Concen: 0.818 ng
RT: 16.269 min Scan# 1
Delta R.T. -0.006 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:248 Resp: 8290

Ion	Ratio	Lower	Upper
248	100		
250	93.8	80.9	121.3
141	81.7	40.5	60.7#

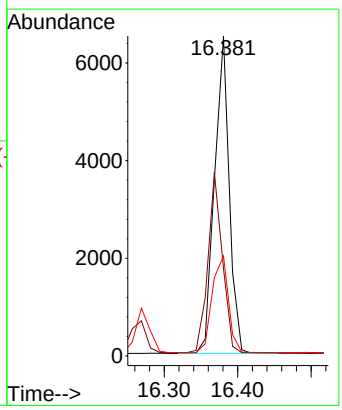


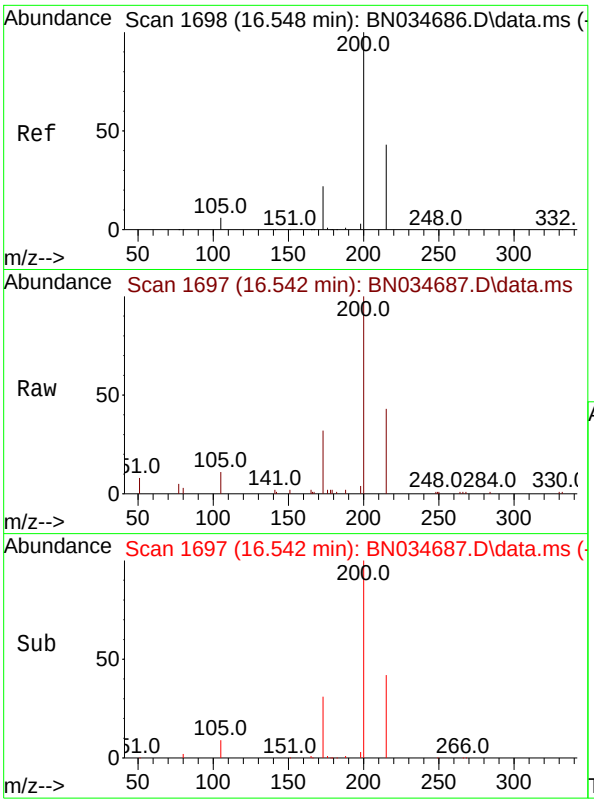


#22
Hexachlorobenzene
Concen: 0.801 ng
RT: 16.381 min Scan# 1684
Delta R.T. 0.007 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:284 Resp: 9007

Ion	Ratio	Lower	Upper
284	100		
142	56.0	43.6	65.4
249	34.1	26.6	40.0



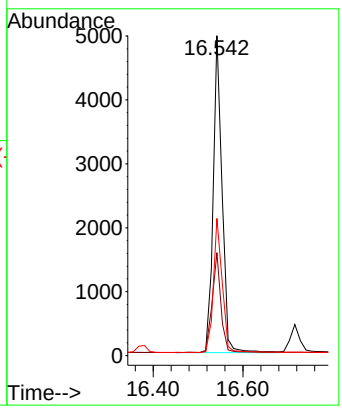


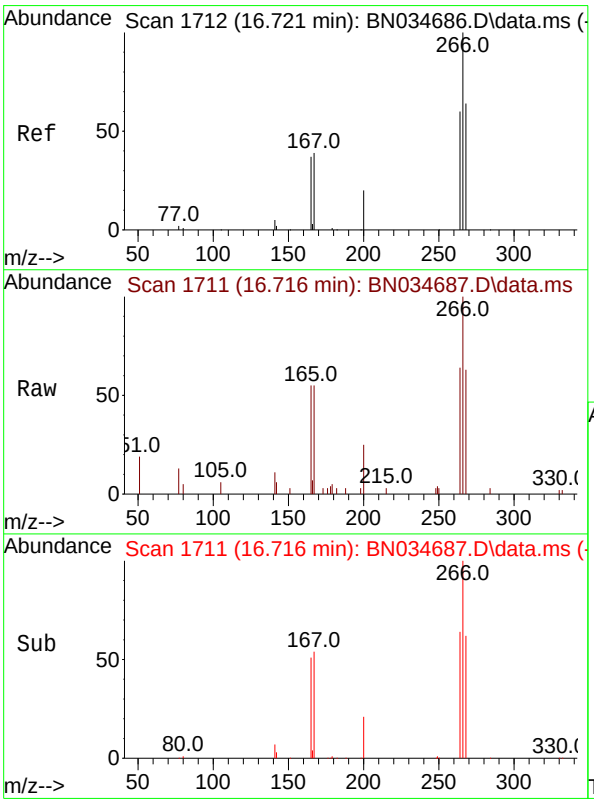
#23
Atrazine
Concen: 0.764 ng
RT: 16.542 min Scan# 1(
Delta R.T. -0.006 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:200 Resp: 6777

Ion	Ratio	Lower	Upper
200	100		
173	32.2	19.7	29.5#
215	42.9	35.7	53.5

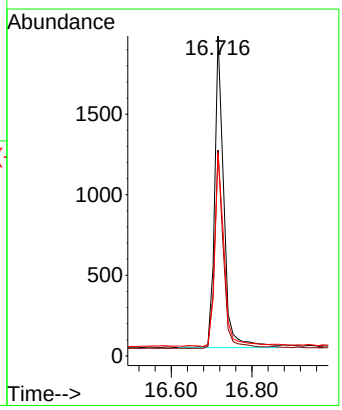


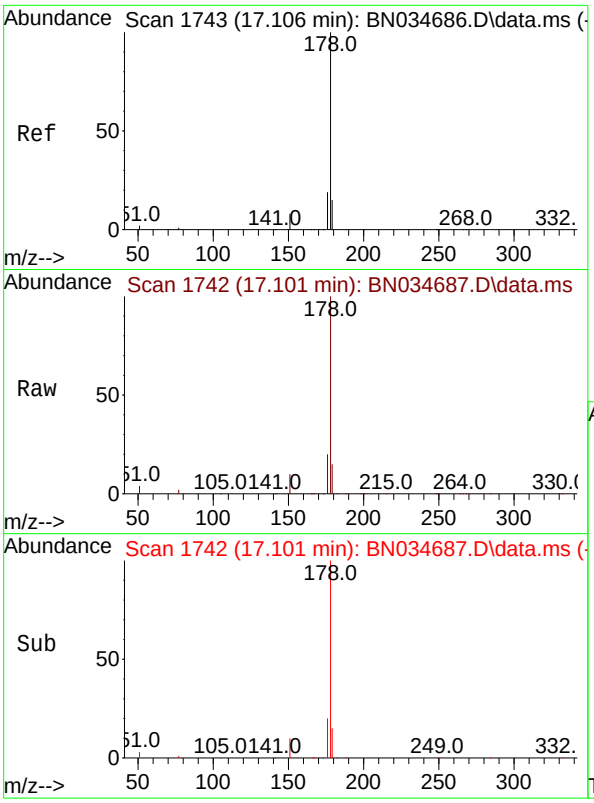


#24
Pentachlorophenol
Concen: 0.693 ng
RT: 16.716 min Scan# 1711
Delta R.T. -0.006 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:266 Resp: 3059

Ion	Ratio	Lower	Upper
266	100		
264	61.0	49.4	74.2
268	62.3	50.5	75.7



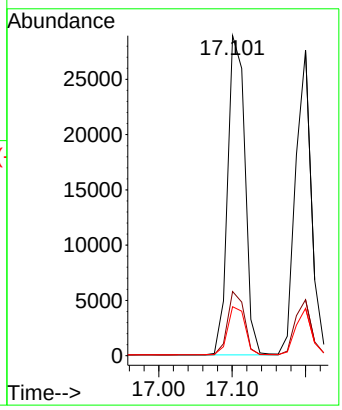


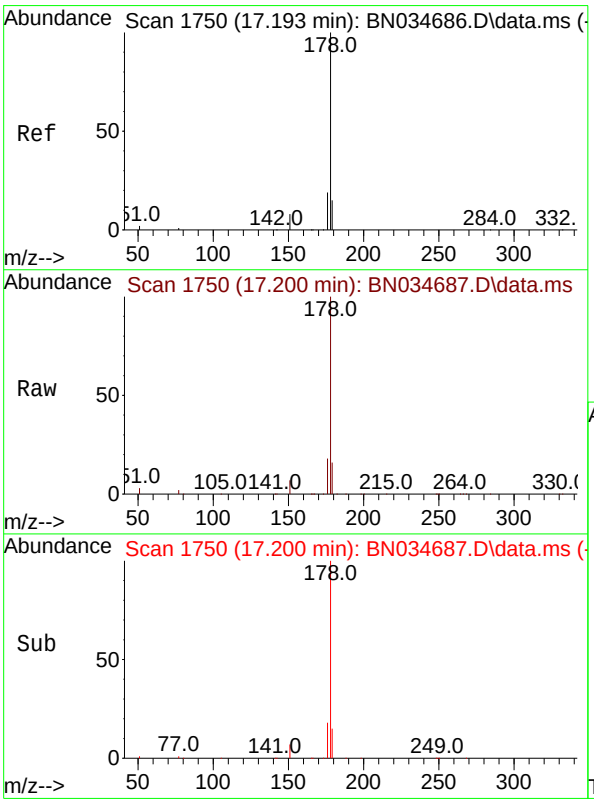
#25
Phenanthrene
Concen: 0.856 ng
RT: 17.101 min Scan# 1
Delta R.T. -0.006 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:178 Resp: 47181

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.2
179	15.1	12.2	18.4

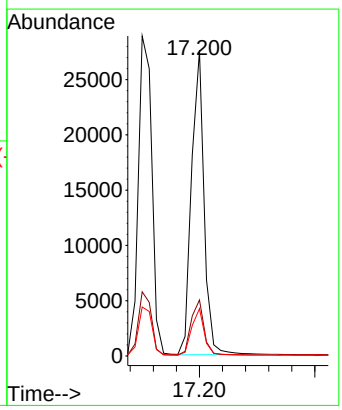


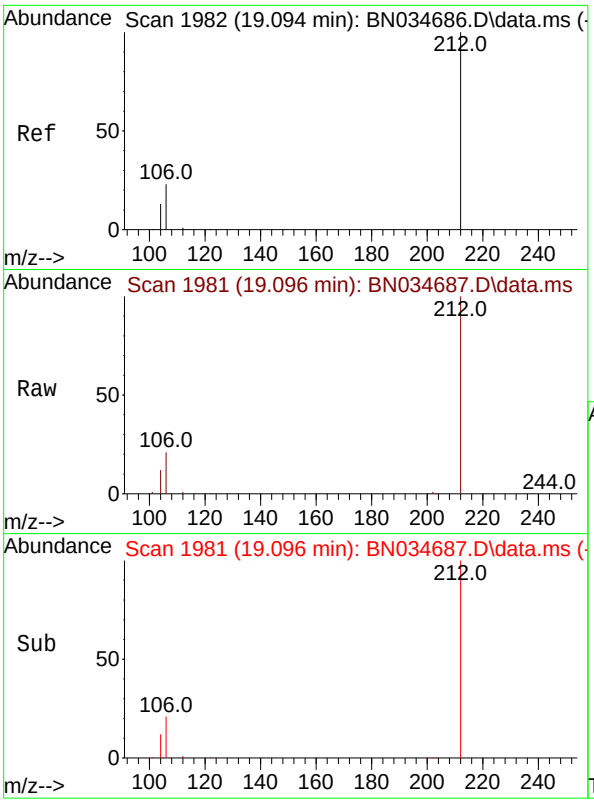


#26
Anthracene
Concen: 0.845 ng
RT: 17.200 min Scan# 1750
Delta R.T. 0.007 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:178 Resp: 41660

Ion	Ratio	Lower	Upper
178	100		
176	18.8	14.9	22.3
179	15.2	12.2	18.2



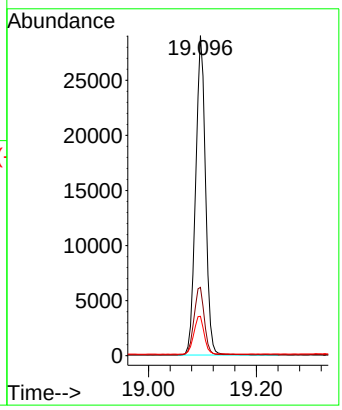


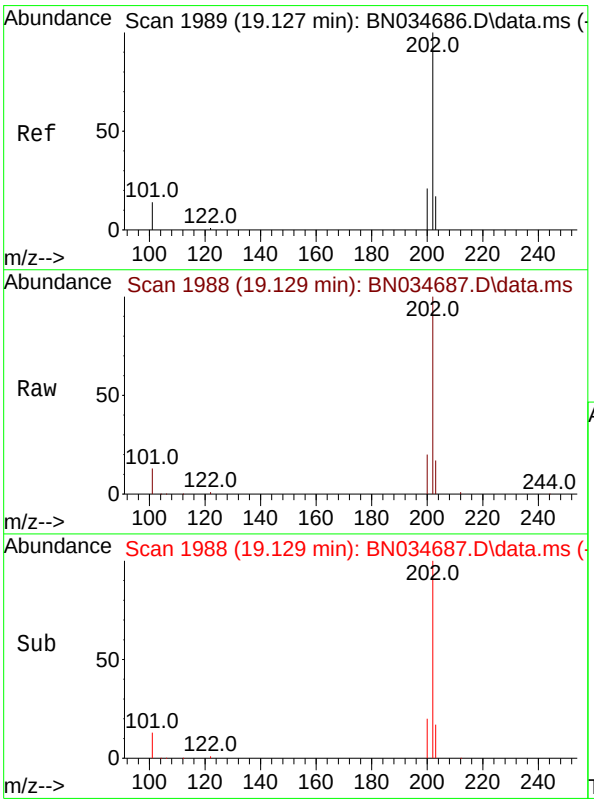
#27
Fluoranthene-d10
Concen: 0.812 ng
RT: 19.096 min Scan# 1
Delta R.T. 0.002 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:212 Resp: 36834

Ion	Ratio	Lower	Upper
212	100		
106	22.1	17.8	26.8
104	12.5	10.2	15.4

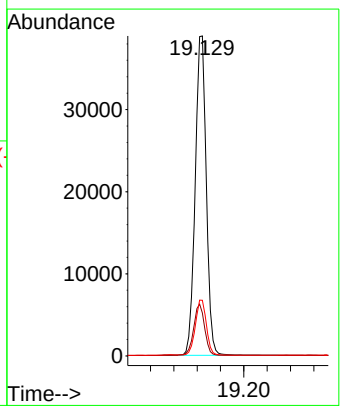


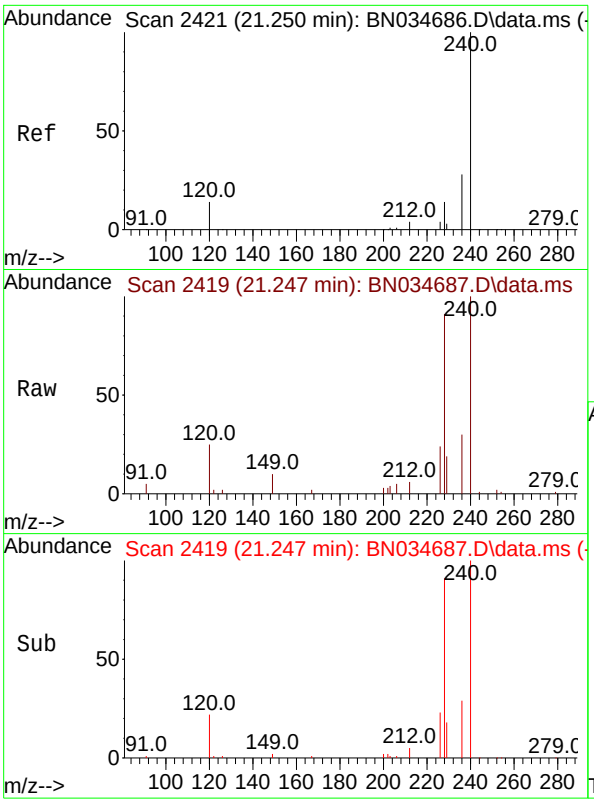


#28
Fluoranthene
Concen: 0.827 ng
RT: 19.129 min Scan# 1988
Delta R.T. 0.002 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:202 Resp: 51141

Ion	Ratio	Lower	Upper
202	100		
101	16.0	12.8	19.2
203	17.2	13.5	20.3



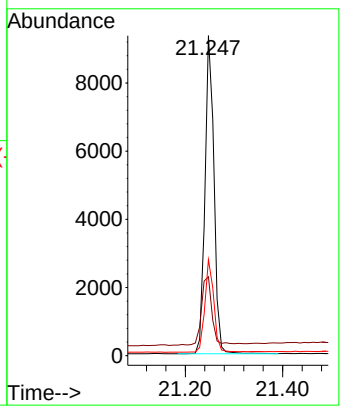


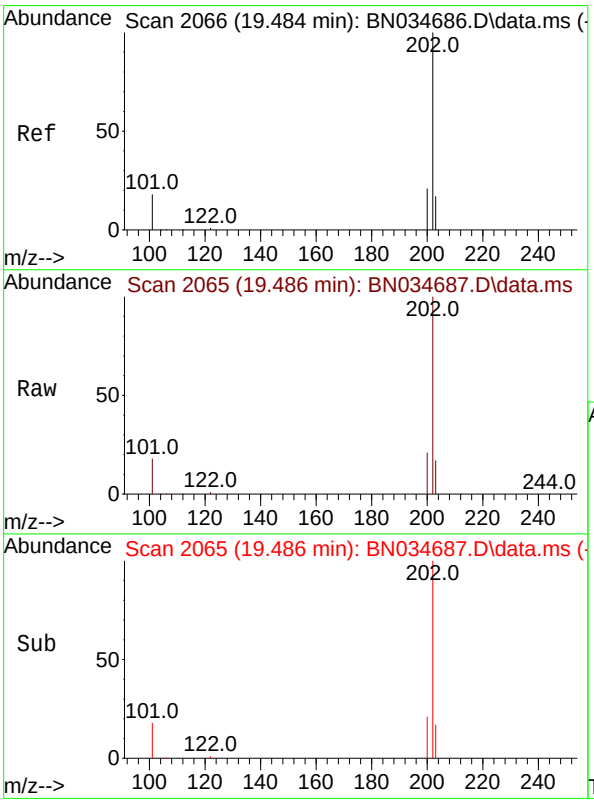
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.247 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:240 Resp: 12066

Ion	Ratio	Lower	Upper
240	100		
120	24.6	14.2	21.2#
236	30.0	23.1	34.7

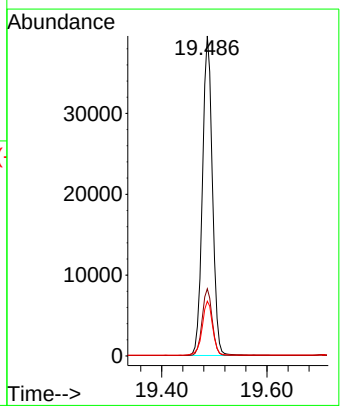


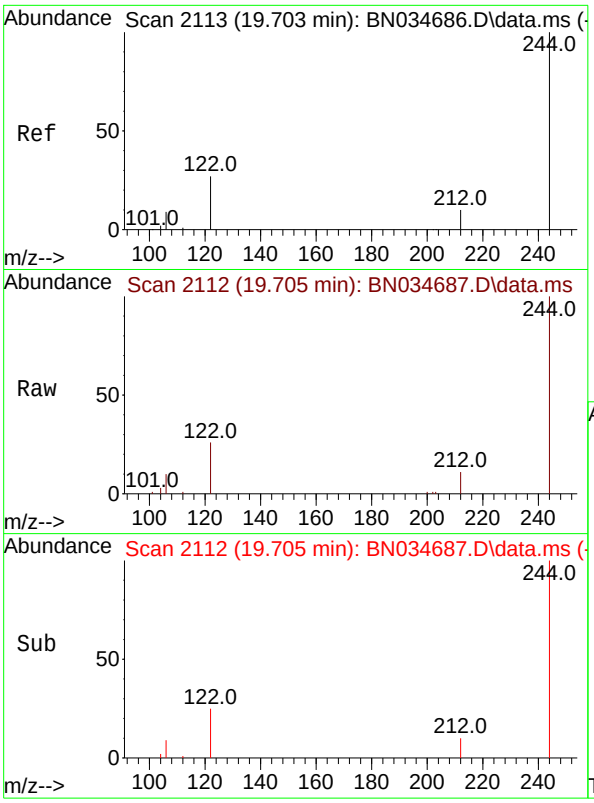


#30
Pyrene
Concen: 0.963 ng
RT: 19.486 min Scan# 2065
Delta R.T. 0.002 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:202 Resp: 51944

Ion	Ratio	Lower	Upper
202	100		
200	21.0	16.6	25.0
203	17.5	14.2	21.4



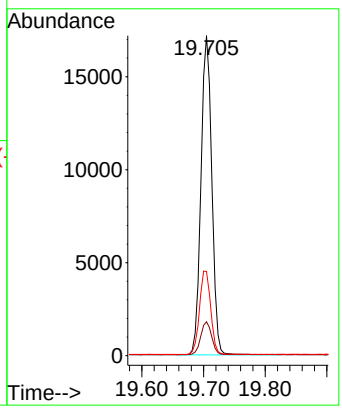


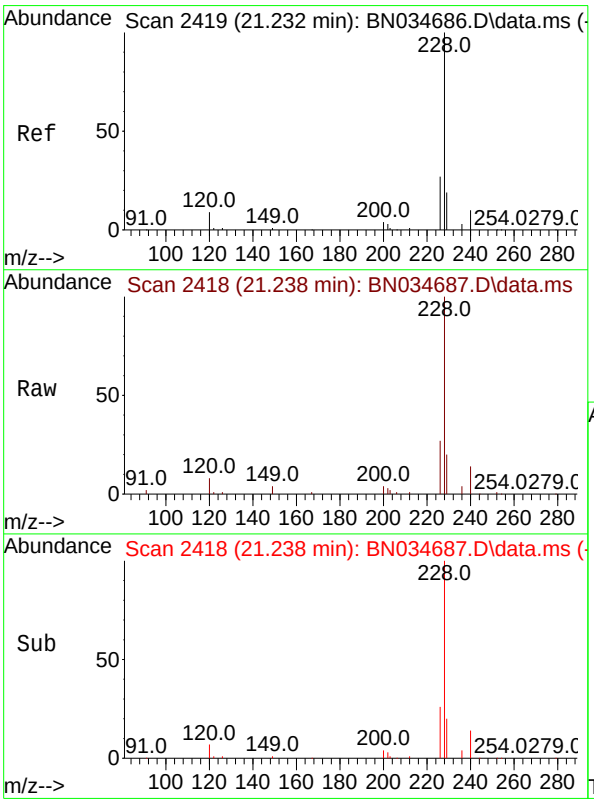
#31
Terphenyl-d14
Concen: 0.896 ng
RT: 19.705 min Scan# 2
Delta R.T. 0.002 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:244 Resp: 20915

Ion	Ratio	Lower	Upper
244	100		
212	10.6	8.6	13.0
122	26.3	22.3	33.5

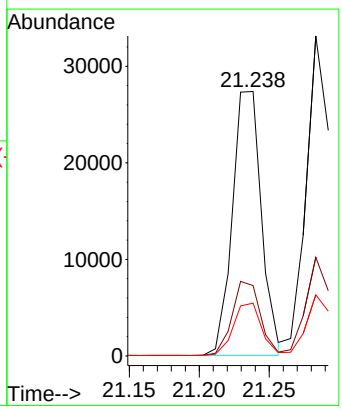


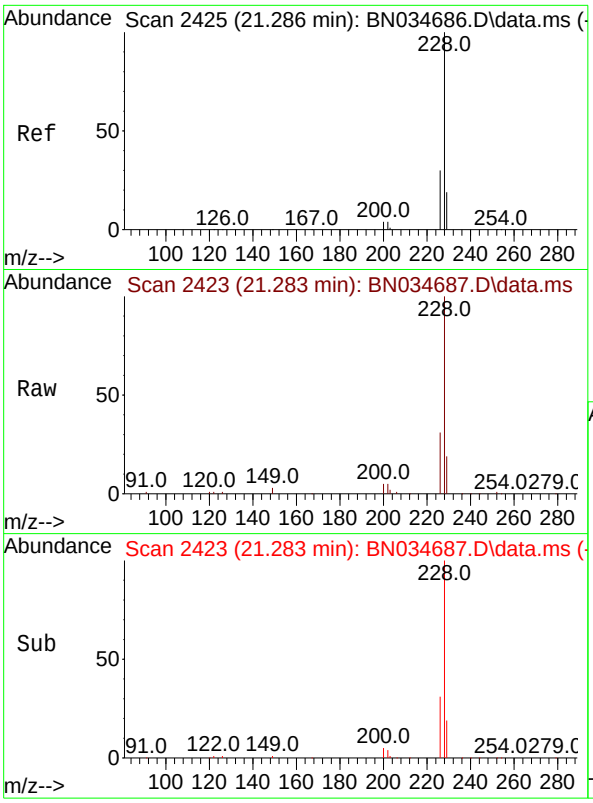


#32
Benzo(a)anthracene
Concen: 0.860 ng
RT: 21.238 min Scan# 2418
Delta R.T. 0.006 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:228 Resp: 39570

Ion	Ratio	Lower	Upper
228	100		
226	26.6	22.0	33.0
229	20.0	15.6	23.4



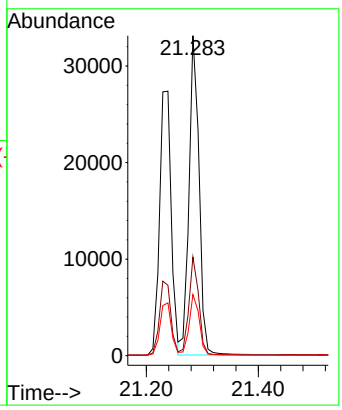


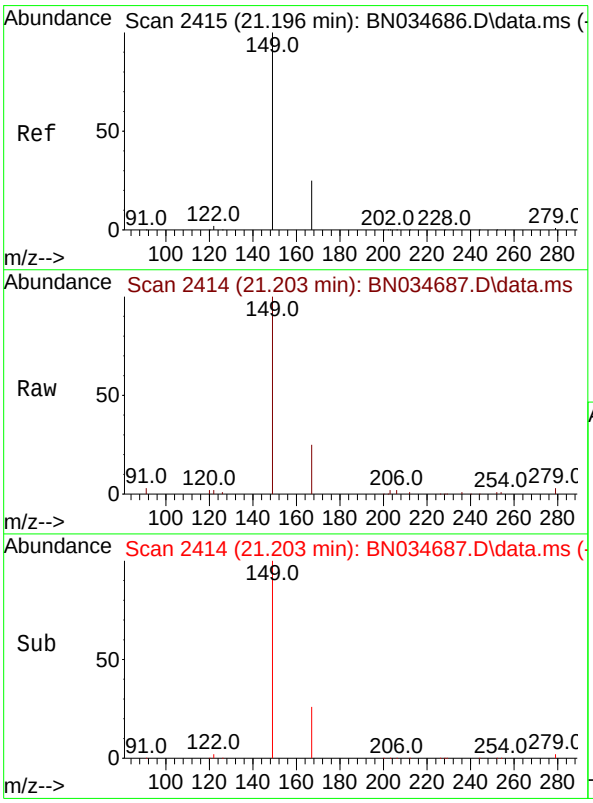
#33
Chrysene
Concen: 0.906 ng
RT: 21.283 min Scan# 24
Delta R.T. -0.002 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:228 Resp: 41243

Ion	Ratio	Lower	Upper
228	100		
226	30.8	24.1	36.1
229	19.1	15.8	23.8

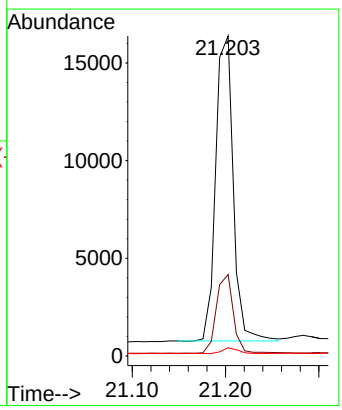


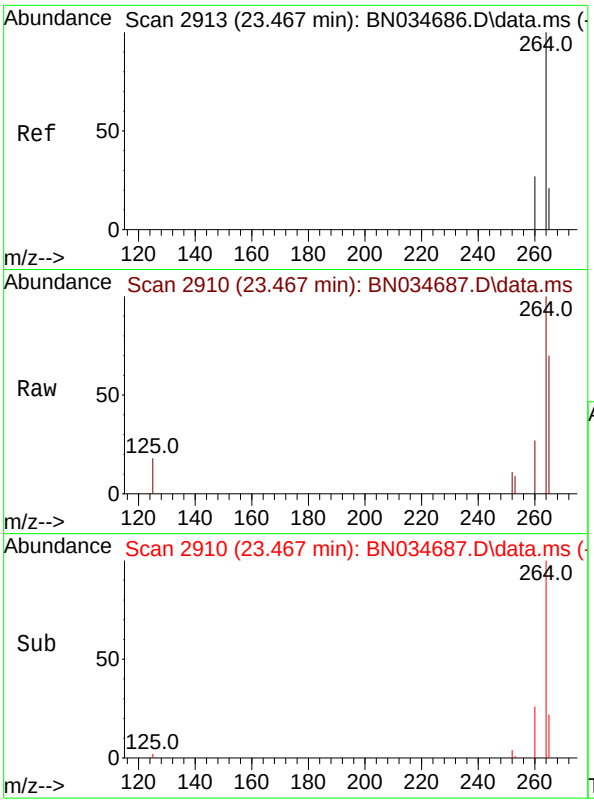


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.650 ng
RT: 21.203 min Scan# 2414
Delta R.T. 0.006 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:149 Resp: 20342

Ion	Ratio	Lower	Upper
149	100		
167	25.0	19.7	29.5
279	1.7	1.8	2.6#



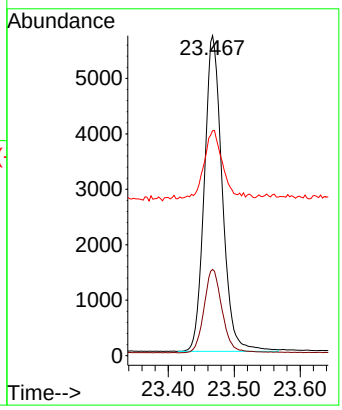


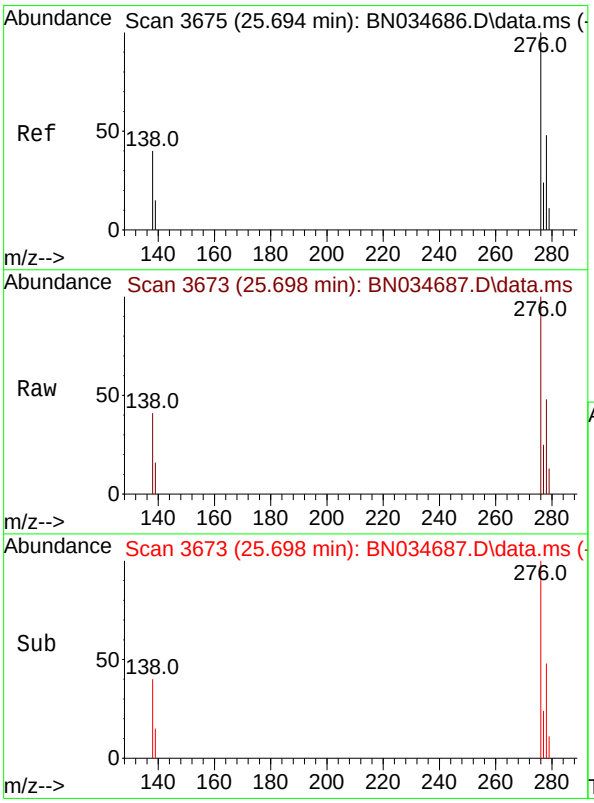
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.467 min Scan# 2
Delta R.T. 0.001 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:264 Resp: 10772

Ion	Ratio	Lower	Upper
264	100		
260	27.0	21.9	32.9
265	70.3	60.6	91.0

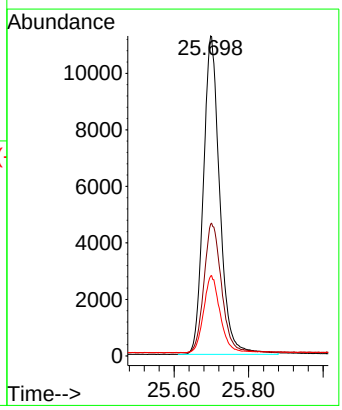


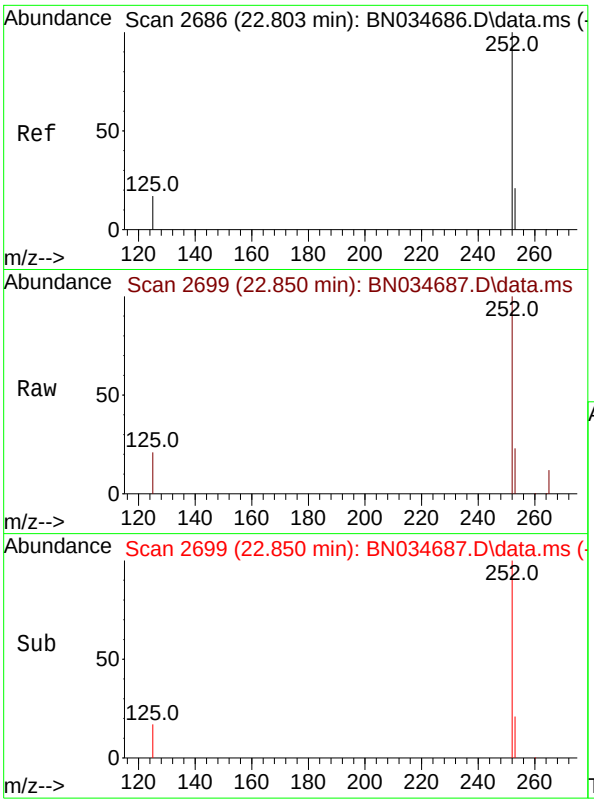


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.828 ng
RT: 25.698 min Scan# 3673
Delta R.T. 0.004 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:276 Resp: 34379

Ion	Ratio	Lower	Upper
276	100		
138	43.6	35.1	52.7
277	24.4	19.7	29.5



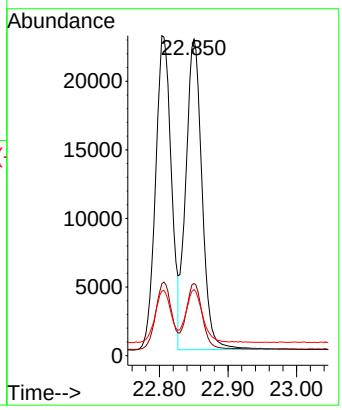


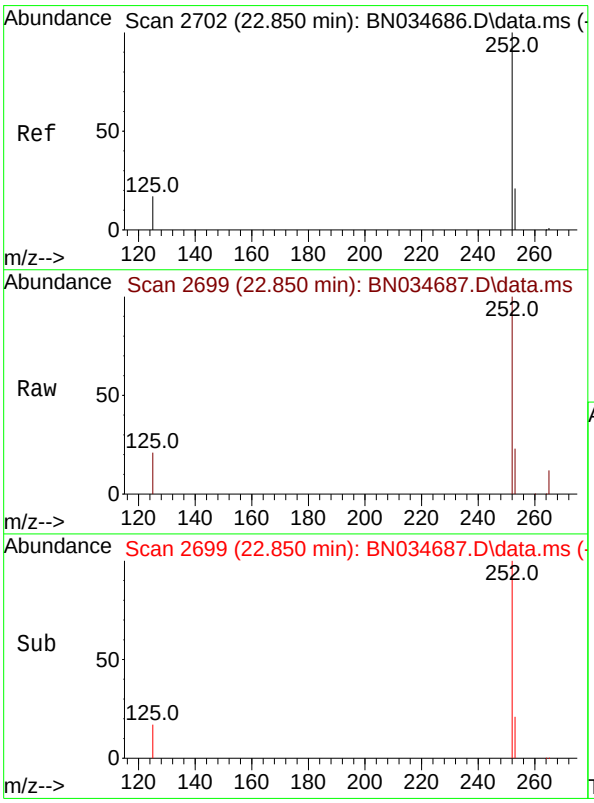
#37
Benzo(b)fluoranthene
Concen: 0.954 ng
RT: 22.850 min Scan# 2
Delta R.T. 0.047 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:252 Resp: 37118

Ion	Ratio	Lower	Upper
252	100		
253	22.8	20.0	30.0
125	20.9	20.9	31.3

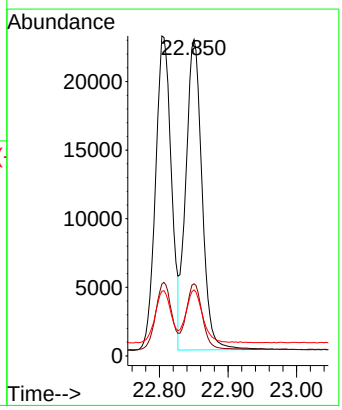


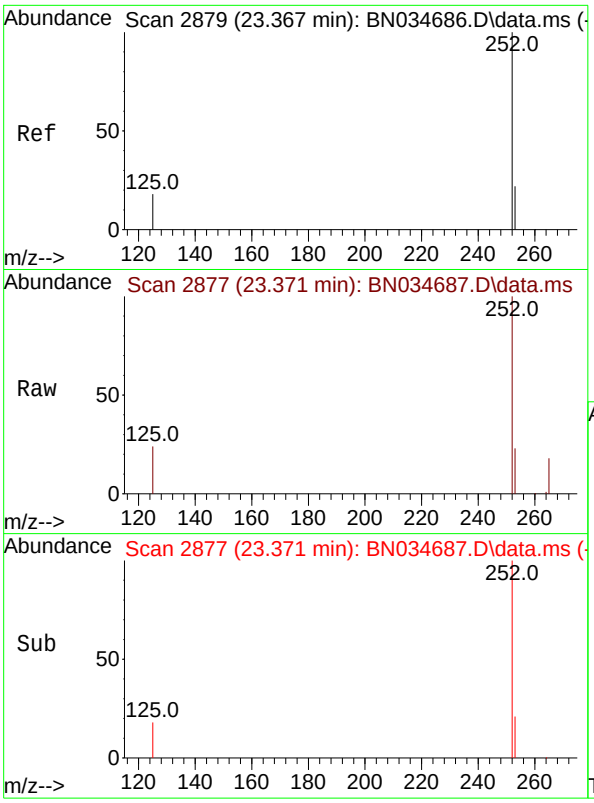


#38
Benzo(k)fluoranthene
Concen: 0.977 ng
RT: 22.850 min Scan# 2699
Delta R.T. 0.001 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:252 Resp: 37118

Ion	Ratio	Lower	Upper
252	100		
253	22.8	20.6	31.0
125	20.9	21.6	32.4#



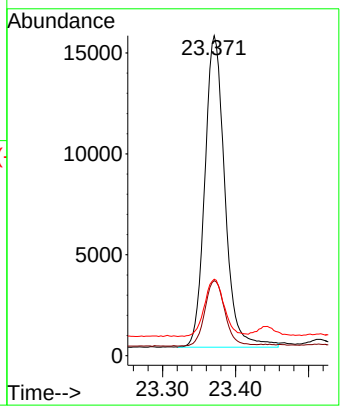


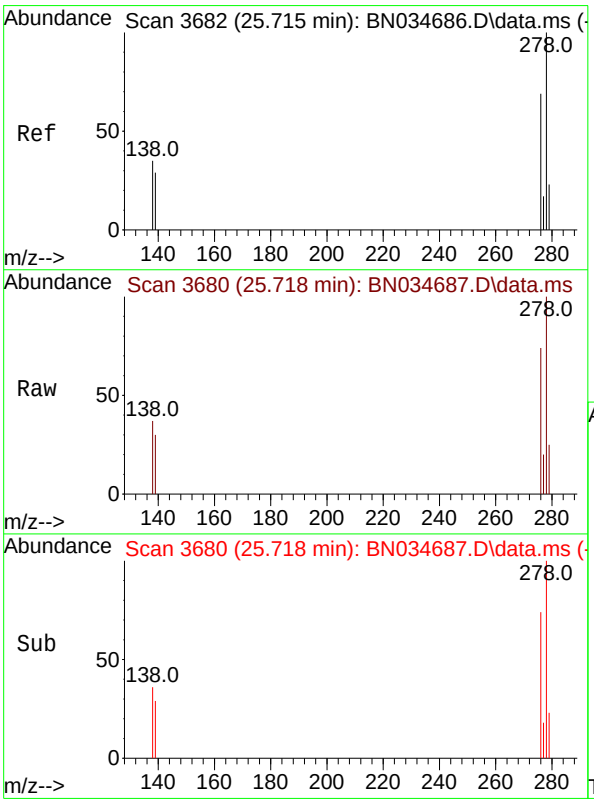
#39
Benzo(a)pyrene
Concen: 0.892 ng
RT: 23.371 min Scan# 2
Delta R.T. 0.004 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:252 Resp: 29490

Ion	Ratio	Lower	Upper
252	100		
253	23.4	22.2	33.4
125	23.9	26.0	39.0#

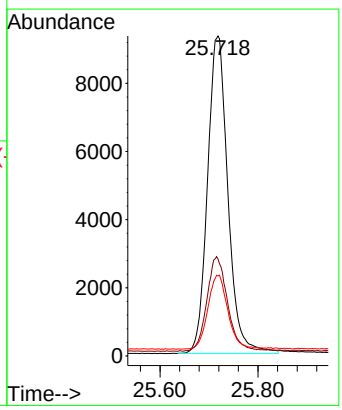


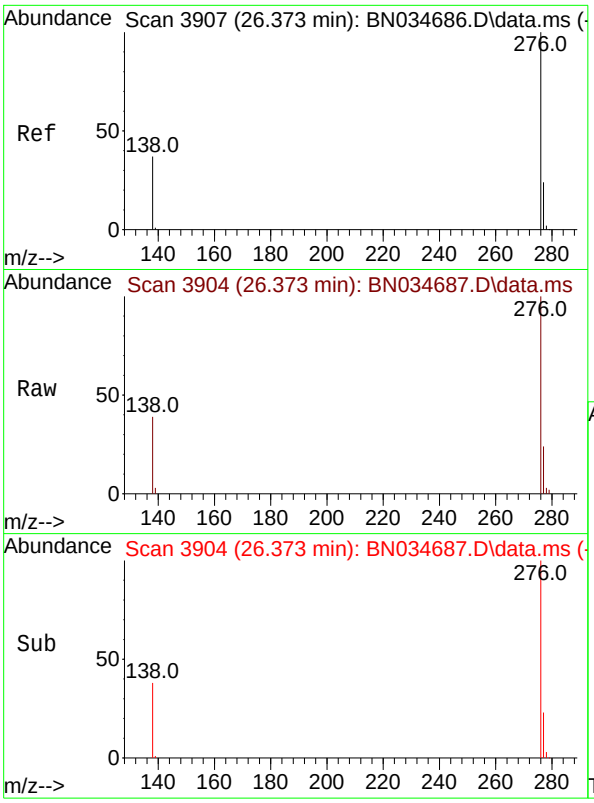


#40
Dibenzo(a,h)anthracene
Concen: 0.823 ng
RT: 25.718 min Scan# 3680
Delta R.T. 0.004 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Tgt Ion:278 Resp: 26850

Ion	Ratio	Lower	Upper
278	100		
139	30.3	25.4	38.2
279	25.0	22.4	33.6



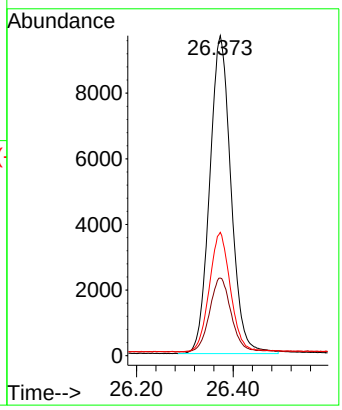


#41
Benzo(g,h,i)perylene
Concen: 0.824 ng
RT: 26.373 min Scan# 3
Delta R.T. 0.001 min
Lab File: BN034687.D
Acq: 24 Oct 2024 10:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:276 Resp: 29665

Ion	Ratio	Lower	Upper
276	100		
277	24.2	21.3	31.9
138	38.6	31.9	47.9



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034691.D
Acq On : 24 Oct 2024 14:14
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Quant Time: Oct 24 14:43:51 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.705	152	6674	0.400	ng		0.00
7) Naphthalene-d8	10.479	136	19848	0.400	ng		0.00
13) Acenaphthene-d10	14.329	164	10372	0.400	ng		0.00
19) Phenanthrene-d10	17.069	188	21015	0.400	ng		0.00
29) Chrysene-d12	21.250	240	12401	0.400	ng		0.00
35) Perylene-d12	23.466	264	10594	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.314	112	7964	0.401	ng		0.00
5) Phenol-d6	6.882	99	10366	0.396	ng		0.00
8) Nitrobenzene-d5	8.845	82	5758	0.346	ng		0.00
11) 2-Methylnaphthalene-d10	12.071	152	9741	0.357	ng		0.00
14) 2,4,6-Tribromophenol	15.815	330	1099	0.343	ng		0.00
15) 2-Fluorobiphenyl	12.950	172	14035	0.341	ng		0.00
27) Fluoranthene-d10	19.094	212	16566	0.350	ng		0.00
31) Terphenyl-d14	19.703	244	9400	0.371	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.285	88	3154	0.355	ng		100
3) n-Nitrosodimethylamine	3.581	42	4576	0.354	ng	#	97
6) bis(2-Chloroethyl)ether	7.141	93	7850	0.369	ng		99
9) Naphthalene	10.532	128	19666	0.358	ng		100
10) Hexachlorobutadiene	10.831	225	2964	0.360	ng	#	99
12) 2-Methylnaphthalene	12.143	142	12146	0.356	ng		98
16) Acenaphthylene	14.040	152	16384	0.329	ng		99
17) Acenaphthene	14.382	154	11510	0.335	ng		99
18) Fluorene	15.377	166	14579	0.344	ng		99
20) 4,6-Dinitro-2-methylph...	15.451	198	947	0.324	ng		88
21) 4-Bromophenyl-phenylether	16.275	248	3884	0.347	ng		98
22) Hexachlorobenzene	16.374	284	4355	0.358	ng		98
23) Atrazine	16.548	200	2928	0.333	ng		99
24) Pentachlorophenol	16.721	266	1463	0.340	ng		98
25) Phenanthrene	17.106	178	22550	0.357	ng		100
26) Anthracene	17.193	178	19340	0.345	ng		100
28) Fluoranthene	19.127	202	22945	0.348	ng		100
30) Pyrene	19.489	202	23297	0.366	ng		100
32) Benzo(a)anthracene	21.232	228	16543	0.349	ng		99
33) Chrysene	21.286	228	17696	0.361	ng		99
34) Bis(2-ethylhexyl)phtha...	21.196	149	8375	0.312	ng		100
36) Indeno(1,2,3-cd)pyrene	25.697	276	14157	0.347	ng		100
37) Benzo(b)fluoranthene	22.803	252	15350	0.363	ng		99
38) Benzo(k)fluoranthene	22.850	252	14742	0.353	ng		99
39) Benzo(a)pyrene	23.373	252	12054	0.355	ng		99
40) Dibenzo(a,h)anthracene	25.718	278	11142	0.346	ng		99
41) Benzo(g,h,i)perylene	26.373	276	12576	0.354	ng		99

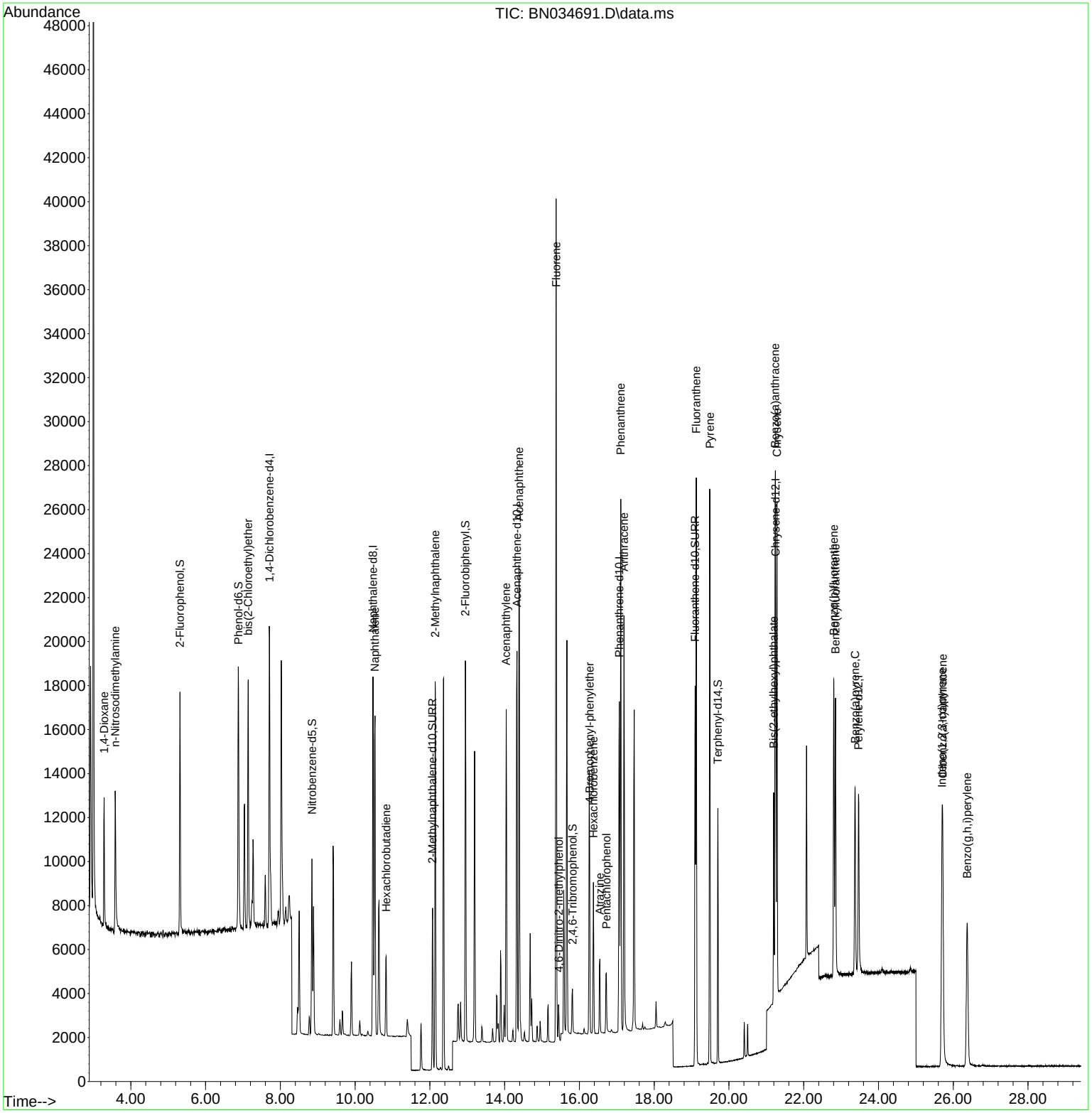
(#) = qualifier out of range (m) = manual integration (+) = signals summed

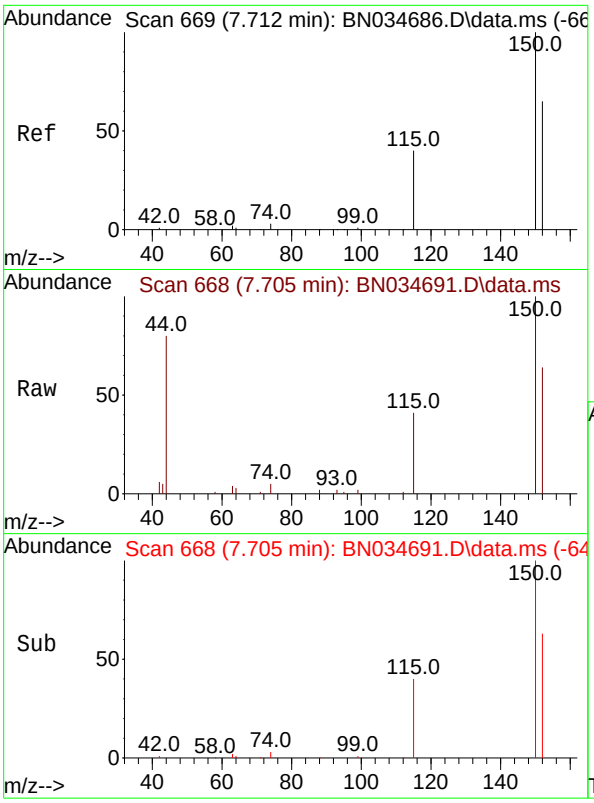
Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034691.D
Acq On : 24 Oct 2024 14:14
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Quant Time: Oct 24 14:43:51 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration



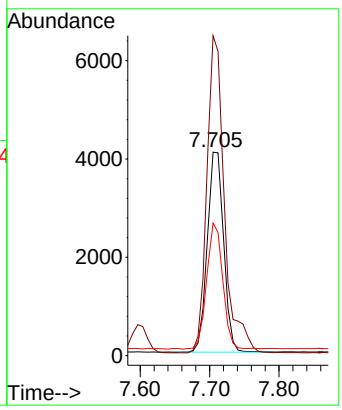


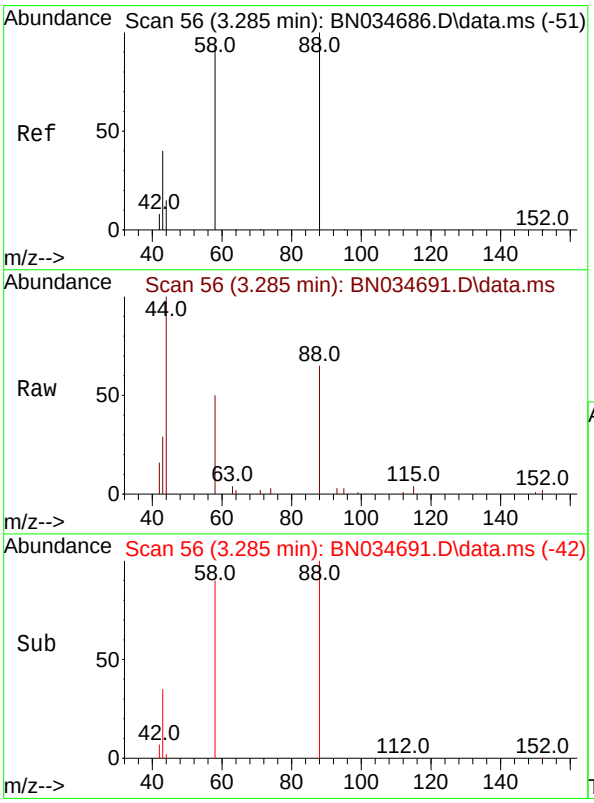
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.705 min Scan# 6
Delta R.T. -0.007 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:152 Resp: 6674

Ion	Ratio	Lower	Upper
152	100		
150	157.2	122.7	184.1
115	65.2	51.0	76.6

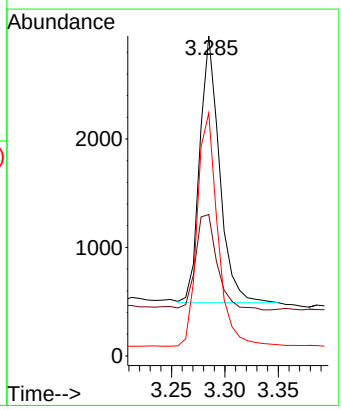


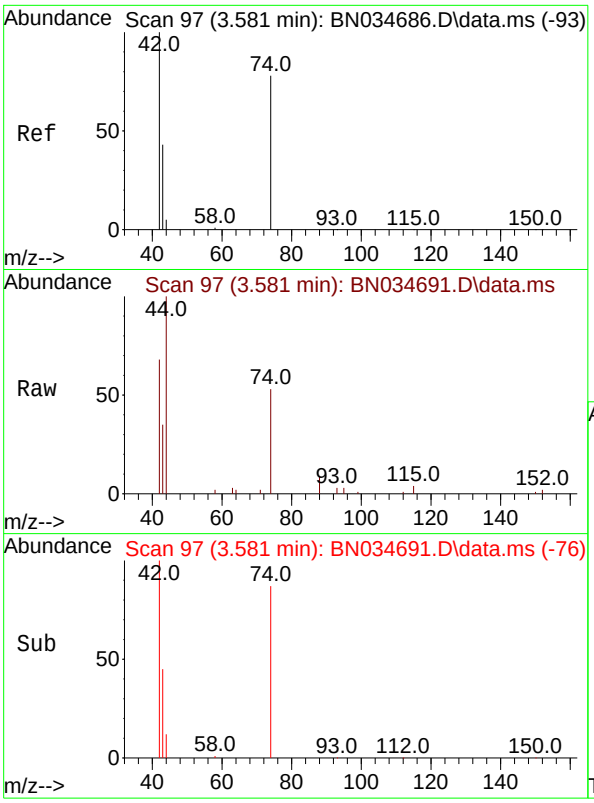


#2
1,4-Dioxane
Concen: 0.355 ng
RT: 3.285 min Scan# 56
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion: 88 Resp: 3154

Ion	Ratio	Lower	Upper
88	100		
43	39.5	32.1	48.1
58	91.9	73.7	110.5



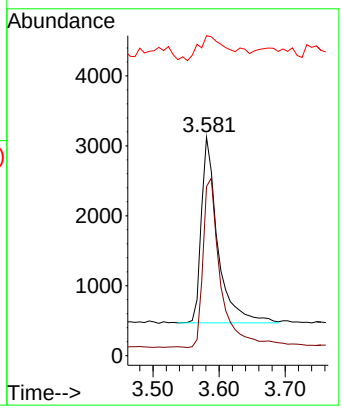


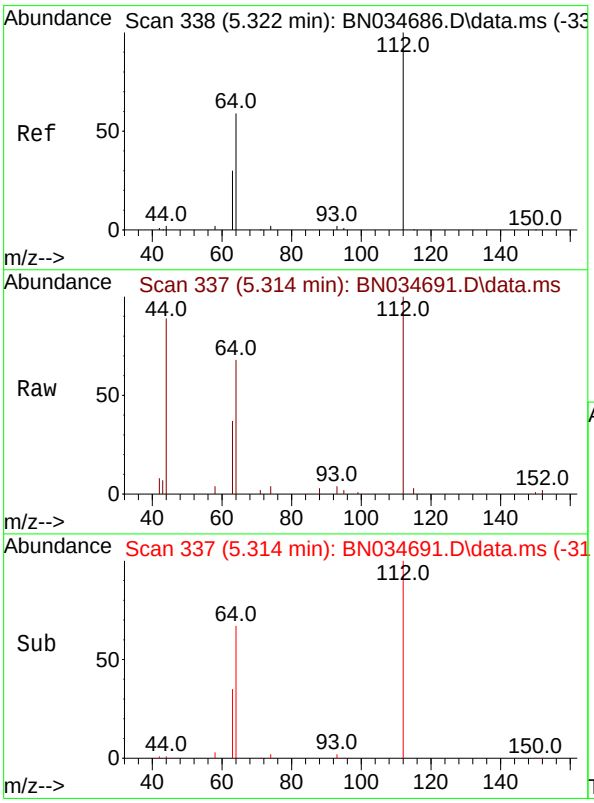
#3
n-Nitrosodimethylamine
Concen: 0.354 ng
RT: 3.581 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion: 42 Resp: 4576

Ion	Ratio	Lower	Upper
42	100		
74	98.6	77.2	115.8
44	20.5	13.4	20.2#

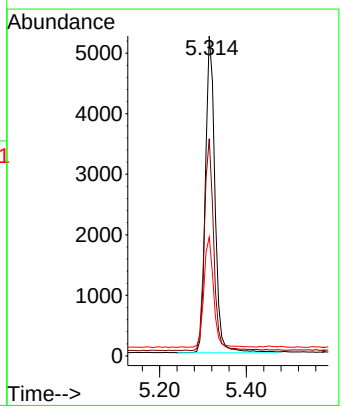


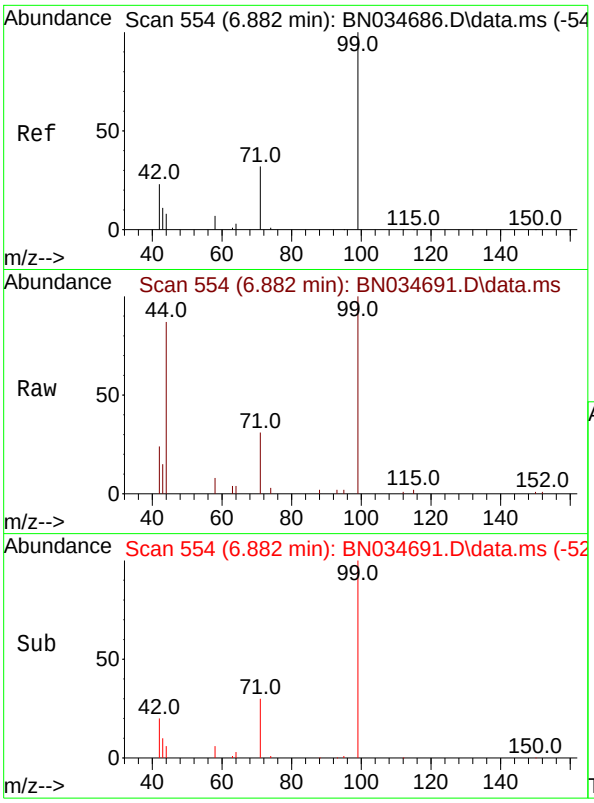


#4
2-Fluorophenol
Concen: 0.401 ng
RT: 5.314 min Scan# 337
Delta R.T. -0.007 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:112 Resp: 7964

Ion	Ratio	Lower	Upper
112	100		
64	66.0	53.0	79.6
63	35.2	27.6	41.4



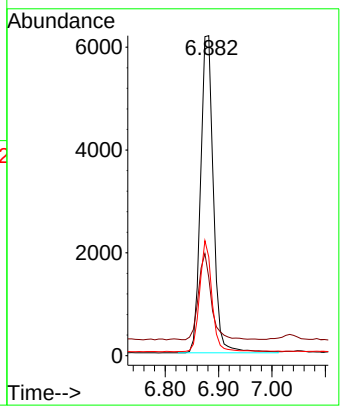


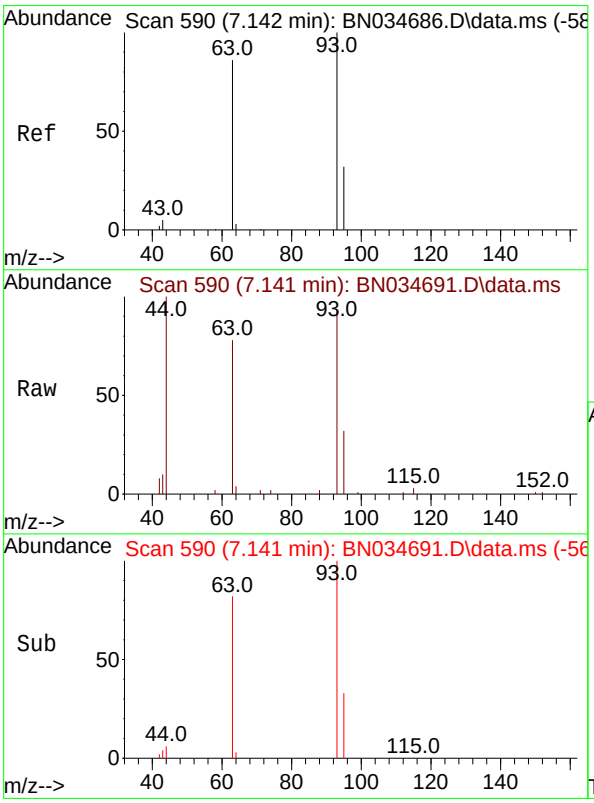
#5
Phenol-d6
Concen: 0.396 ng
RT: 6.882 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion: 99 Resp: 10366

Ion	Ratio	Lower	Upper
99	100		
42	27.0	21.8	32.8
71	33.3	26.6	40.0

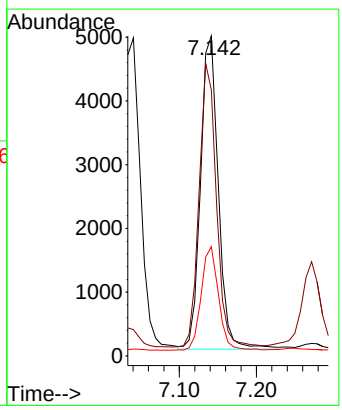


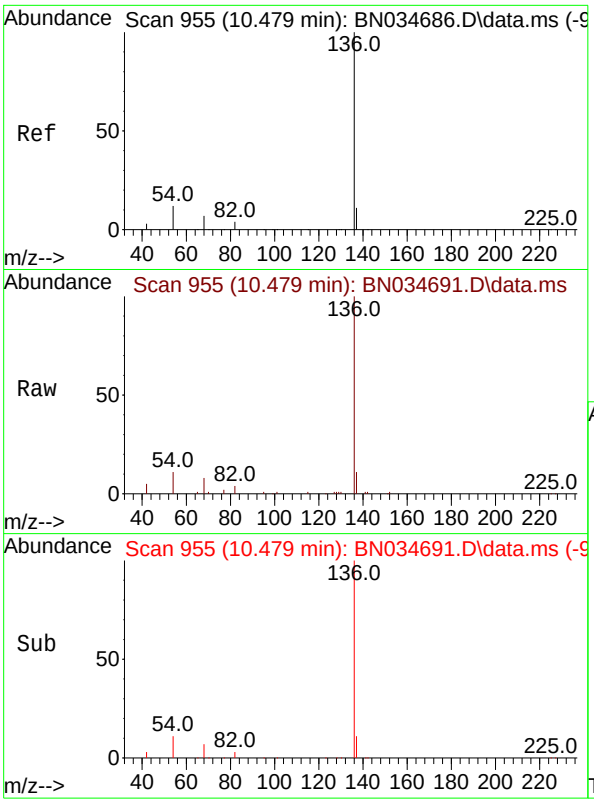


#6
bis(2-Chloroethyl)ether
Concen: 0.369 ng
RT: 7.141 min Scan# 590
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion: 93 Resp: 7850

Ion	Ratio	Lower	Upper
93	100		
63	87.8	71.5	107.3
95	32.2	25.8	38.6



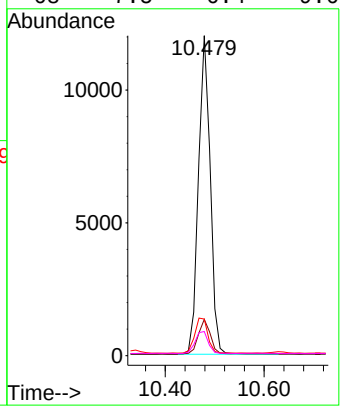


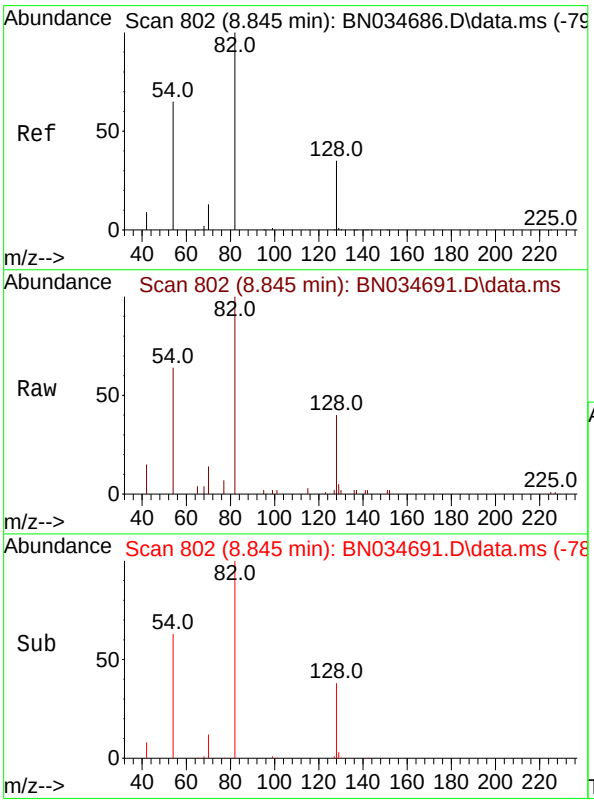
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:136 Resp: 19848

Ion	Ratio	Lower	Upper
136	100		
137	11.3	9.1	13.7
54	11.4	9.8	14.8
68	7.5	6.4	9.6

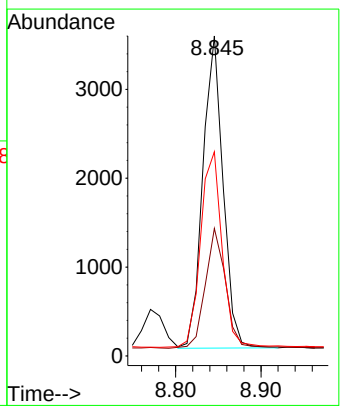


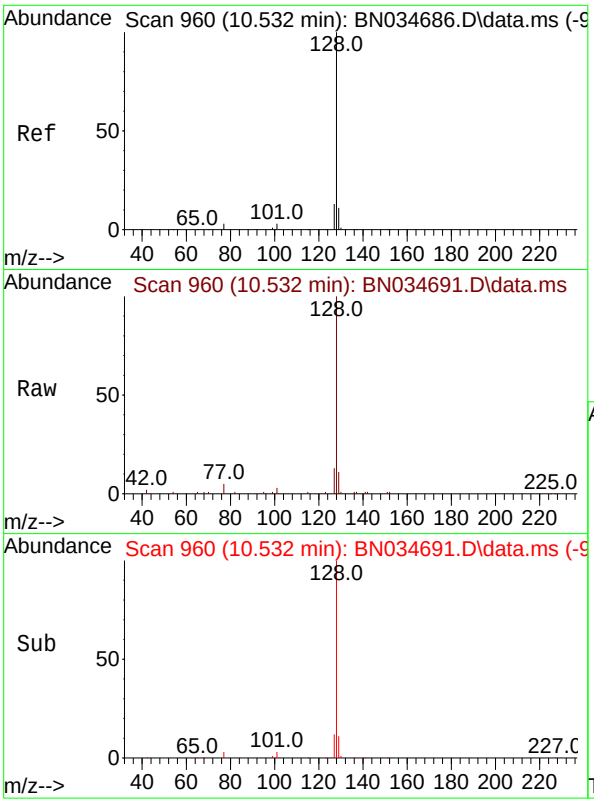


#8
Nitrobenzene-d5
Concen: 0.346 ng
RT: 8.845 min Scan# 802
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion: 82 Resp: 5758

Ion	Ratio	Lower	Upper
82	100		
128	39.9	29.7	44.5
54	63.8	53.0	79.6



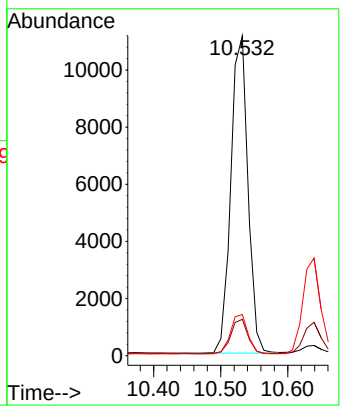


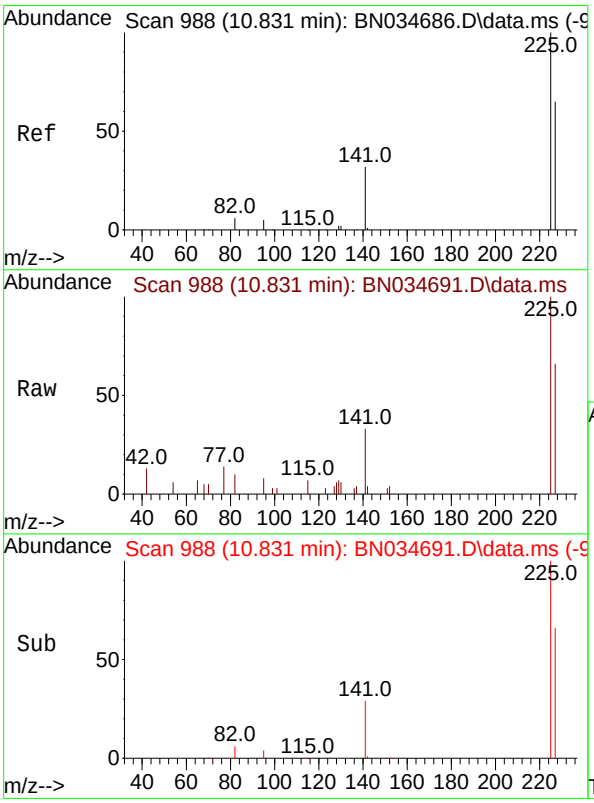
#9
Naphthalene
Concen: 0.358 ng
RT: 10.532 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:128 Resp: 19666

Ion	Ratio	Lower	Upper
128	100		
129	11.4	9.0	13.6
127	12.8	10.5	15.7

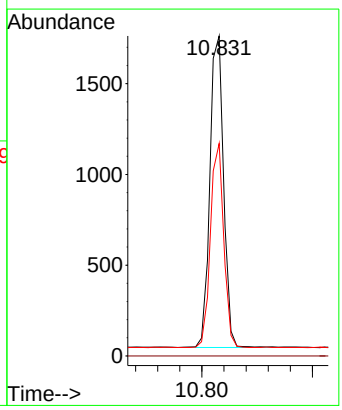


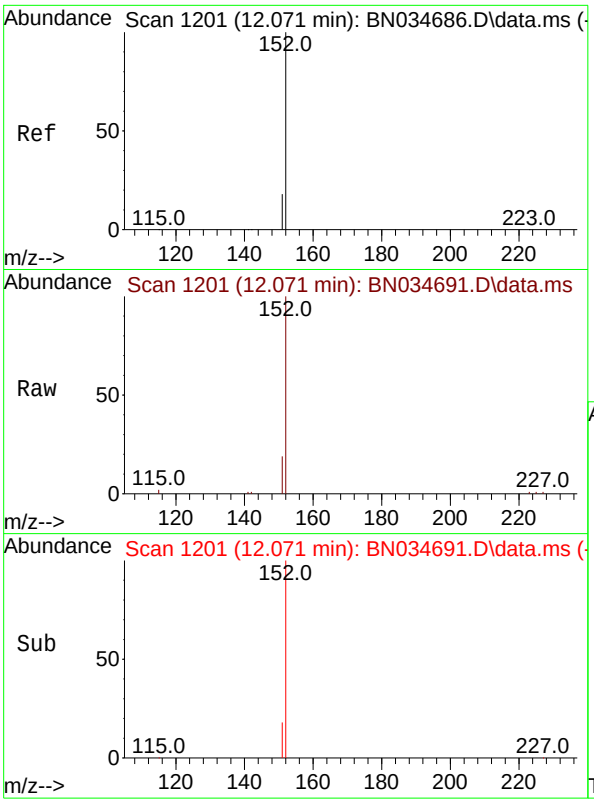


#10
Hexachlorobutadiene
Concen: 0.360 ng
RT: 10.831 min Scan# 988
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:225 Resp: 2964

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.4	51.4	77.0



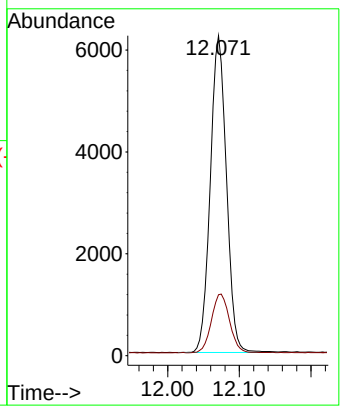


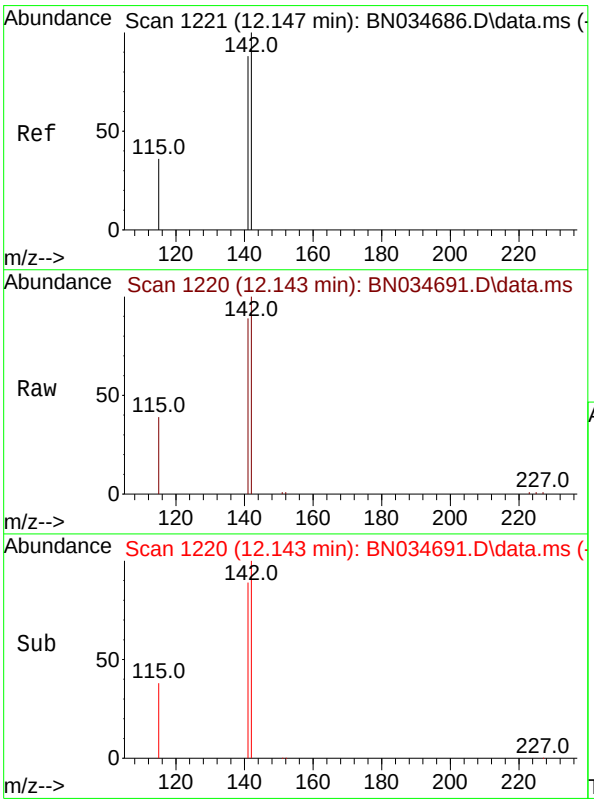
#11
2-Methylnaphthalene-d10
Concen: 0.357 ng
RT: 12.071 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:152 Resp: 9741

Ion	Ratio	Lower	Upper
152	100		
151	20.7	16.7	25.1

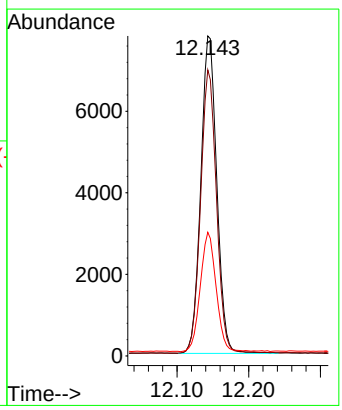


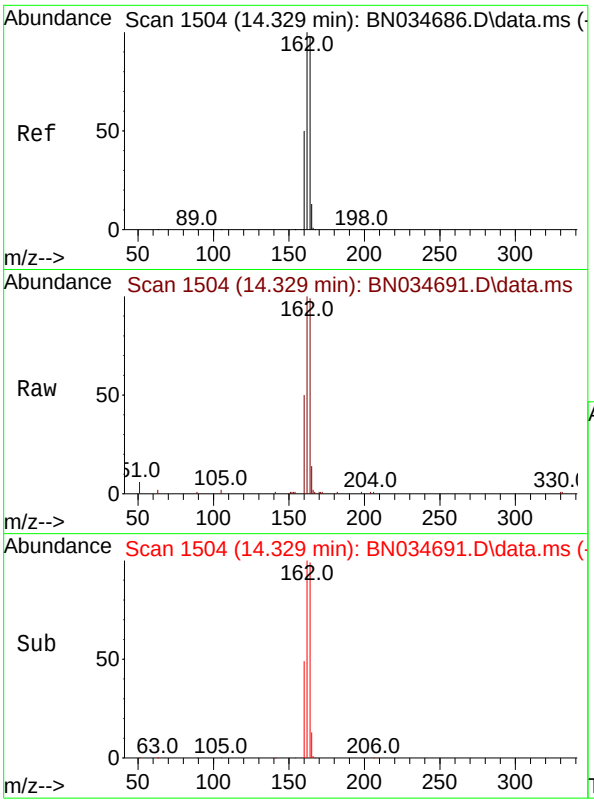


#12
2-Methylnaphthalene
Concen: 0.356 ng
RT: 12.143 min Scan# 1220
Delta R.T. -0.004 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:142 Resp: 12146

Ion	Ratio	Lower	Upper
142	100		
141	89.4	70.4	105.6
115	38.7	29.8	44.6





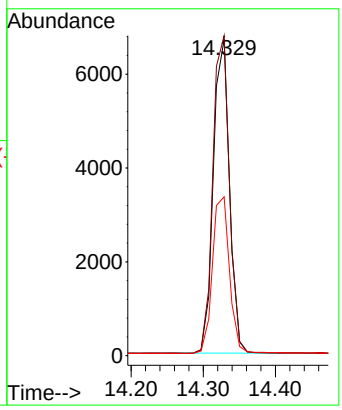
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.329 min Scan# 1

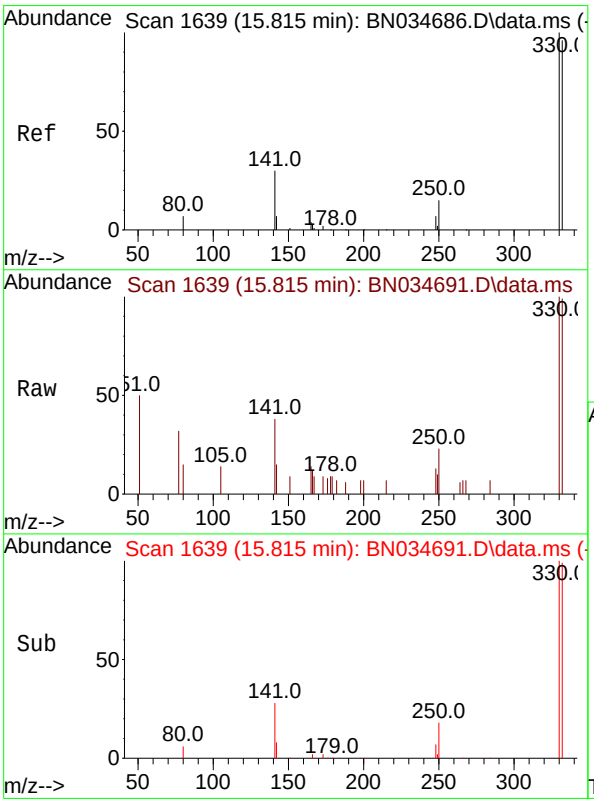
Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:164 Resp: 10372

Ion	Ratio	Lower	Upper
164	100		
162	101.1	81.4	122.0
160	50.2	40.6	61.0

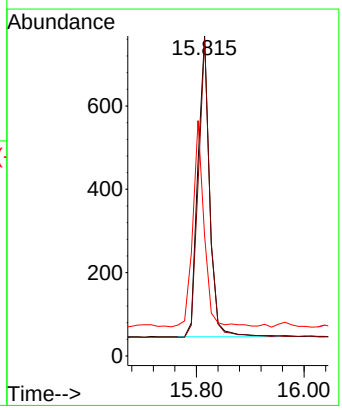


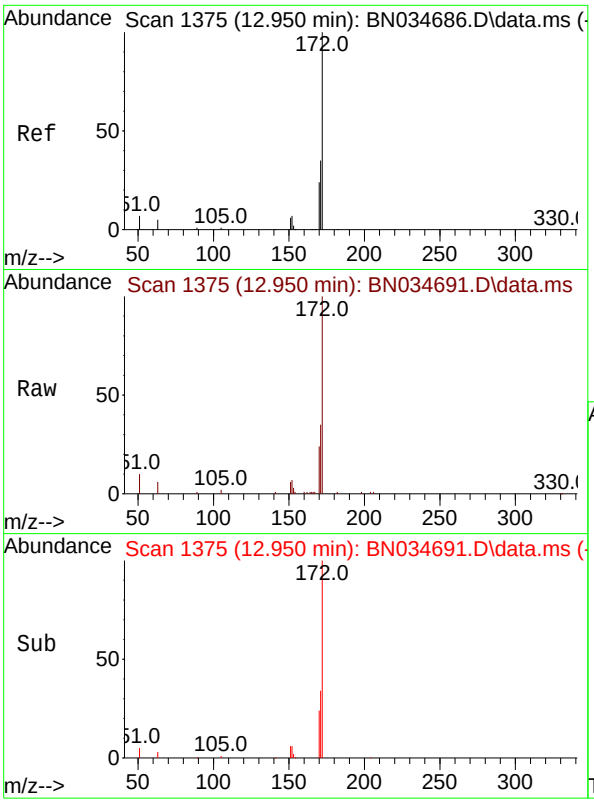


#14
2,4,6-Tribromophenol
Concen: 0.343 ng
RT: 15.815 min Scan# 1639
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:330 Resp: 1099

Ion	Ratio	Lower	Upper
330	100		
332	96.5	76.6	115.0
141	66.2	54.6	81.8



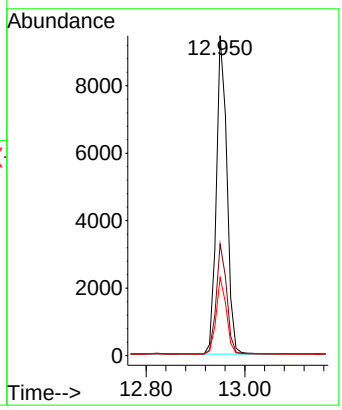


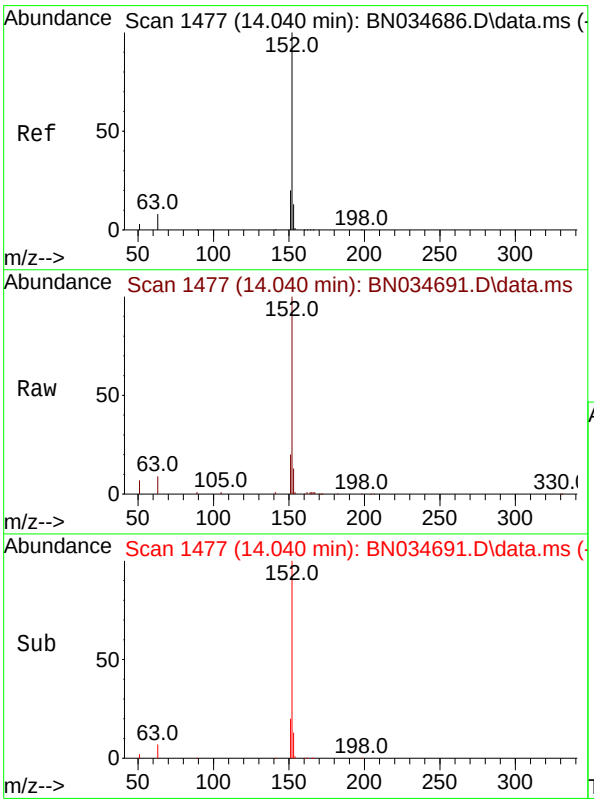
#15
2-Fluorobiphenyl
Concen: 0.341 ng
RT: 12.950 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:172 Resp: 14035

Ion	Ratio	Lower	Upper
172	100		
171	35.0	28.3	42.5
170	24.5	19.8	29.6

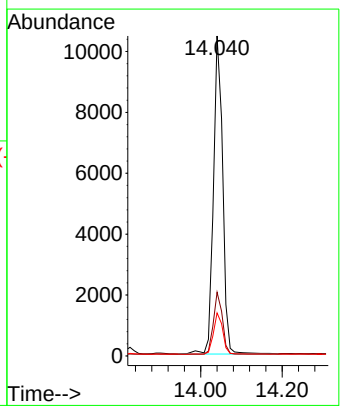


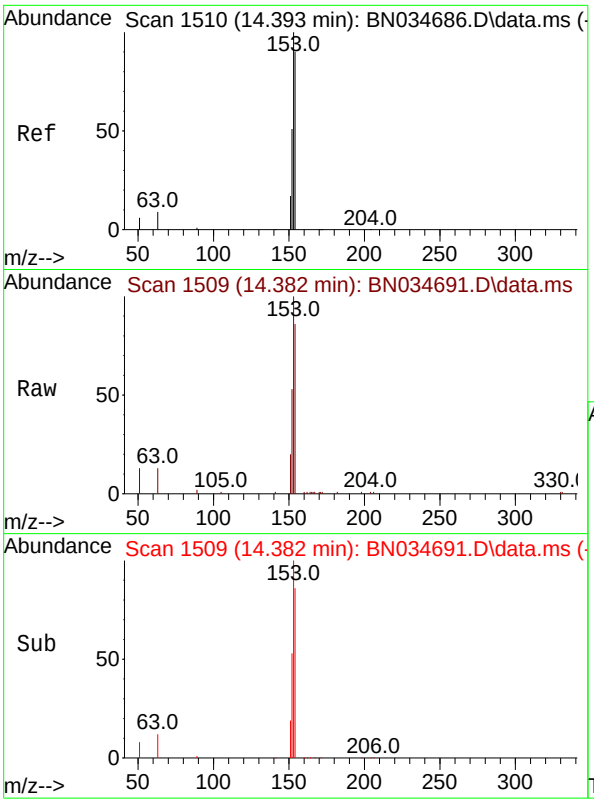


#16
Acenaphthylene
Concen: 0.329 ng
RT: 14.040 min Scan# 1477
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:152 Resp: 16384

Ion	Ratio	Lower	Upper
152	100		
151	19.0	15.6	23.4
153	13.1	10.6	15.8



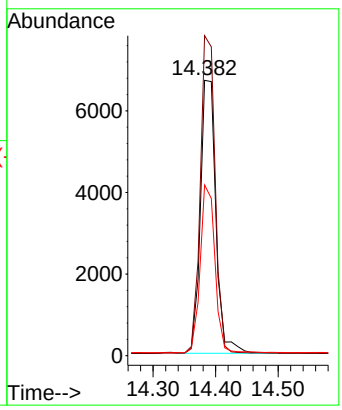


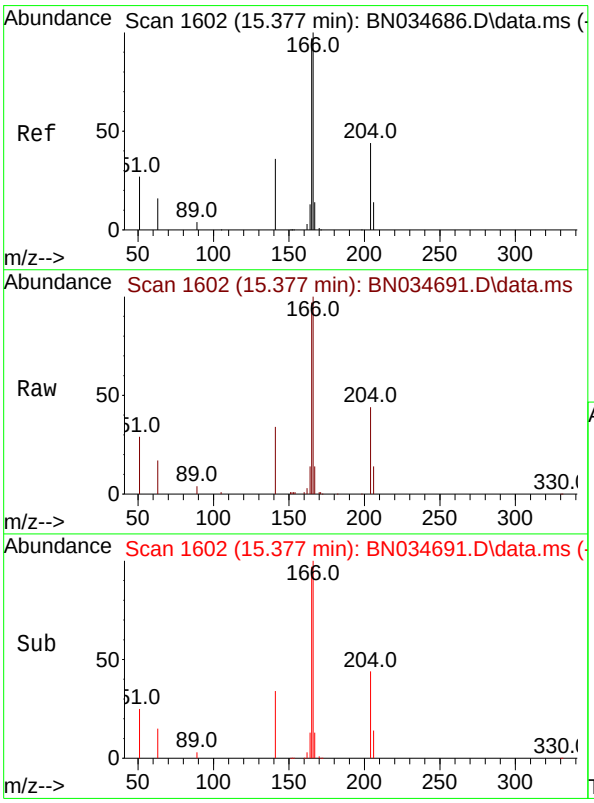
#17
Acenaphthene
Concen: 0.335 ng
RT: 14.382 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:154 Resp: 11510

Ion	Ratio	Lower	Upper
154	100		
153	111.6	88.2	132.2
152	58.6	46.9	70.3

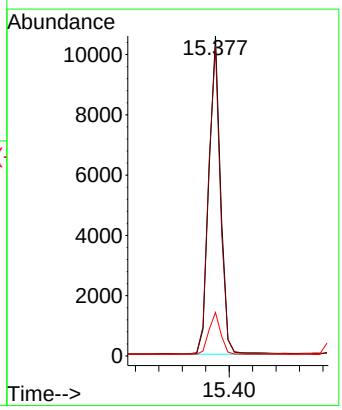


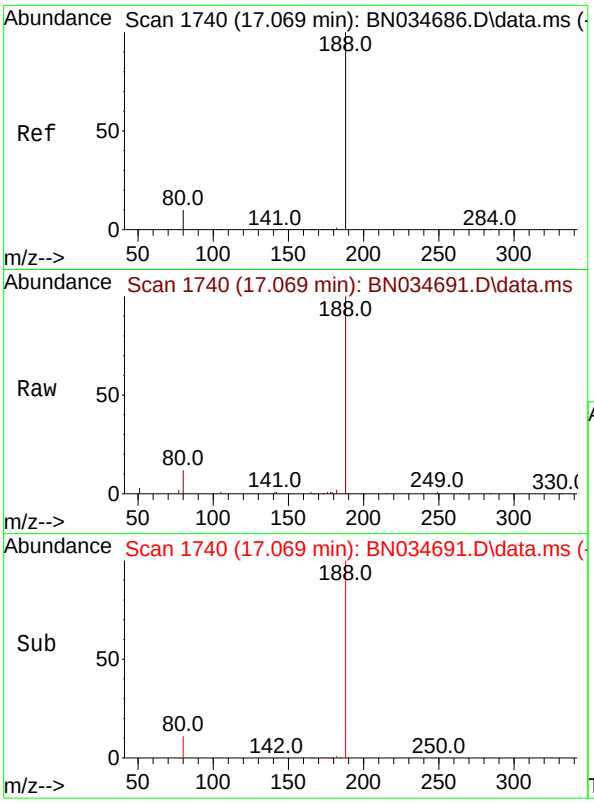


#18
Fluorene
Concen: 0.344 ng
RT: 15.377 min Scan# 1602
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:166 Resp: 14579

Ion	Ratio	Lower	Upper
166	100		
165	99.0	78.8	118.2
167	13.5	10.6	16.0



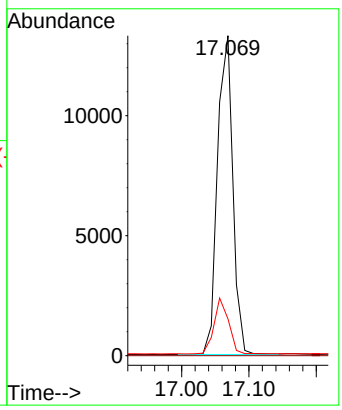


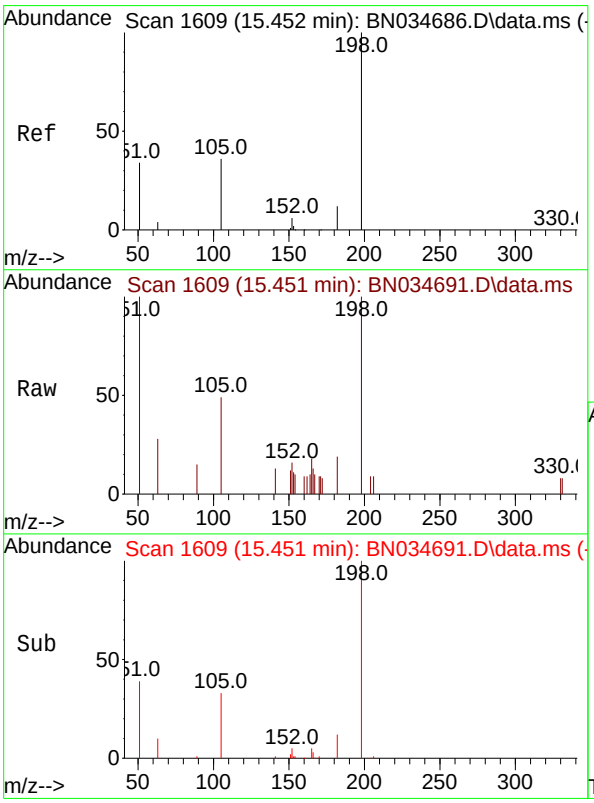
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.069 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:188 Resp: 21015

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.5	8.9	13.3

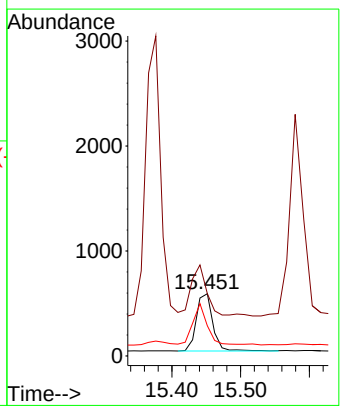


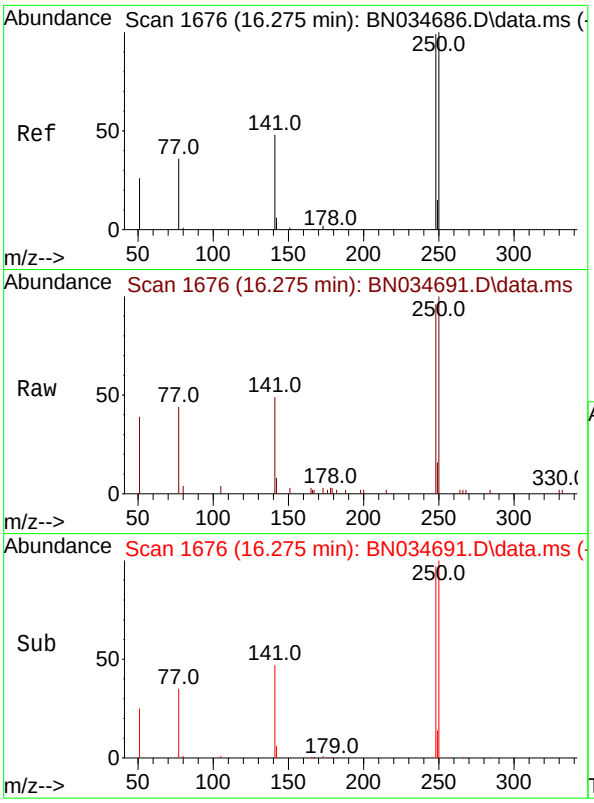


#20
4,6-Dinitro-2-methylphenol
Concen: 0.324 ng
RT: 15.451 min Scan# 1609
Delta R.T. -0.001 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:198 Resp: 947

Ion	Ratio	Lower	Upper
198	100		
51	100.2	91.8	137.8
105	48.7	44.3	66.5



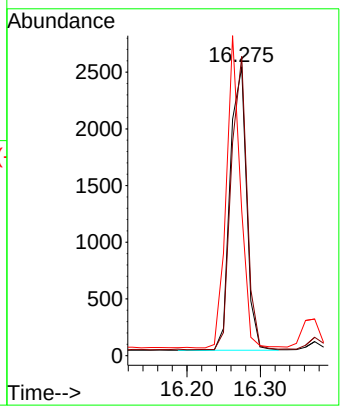


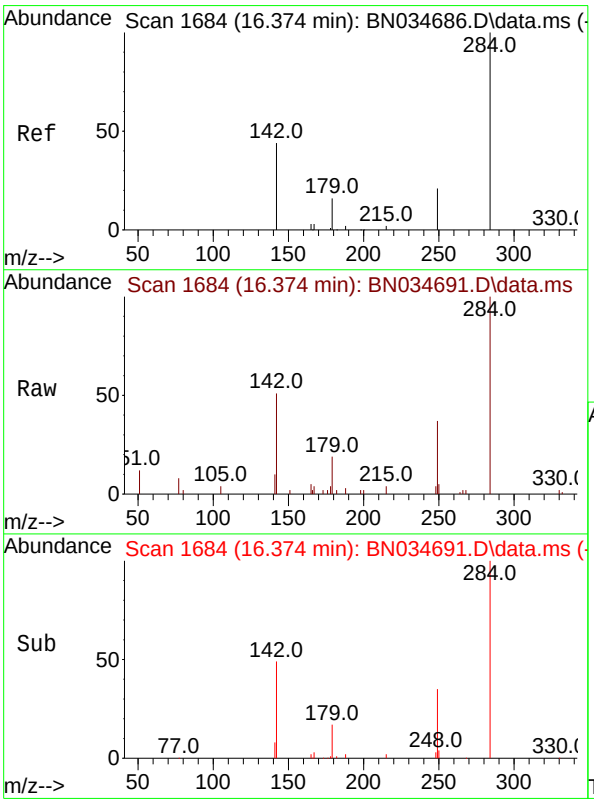
#21
4-Bromophenyl-phenylether
Concen: 0.347 ng
RT: 16.275 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:248 Resp: 3884

Ion	Ratio	Lower	Upper
248	100		
250	103.8	80.9	121.3
141	50.3	40.5	60.7

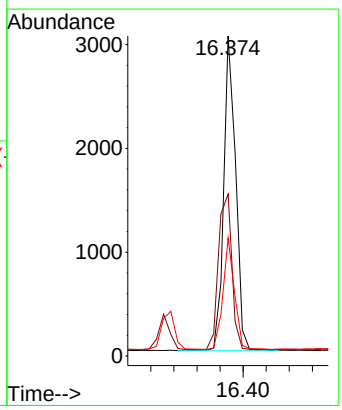


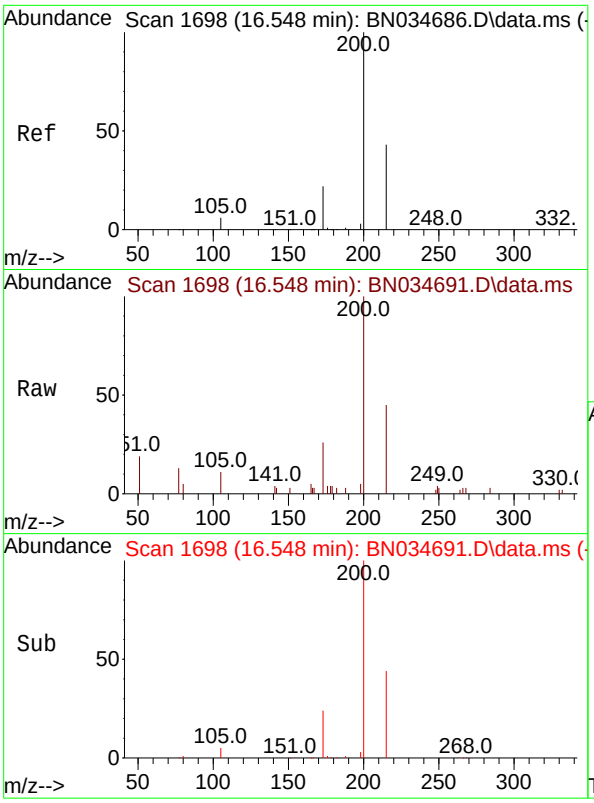


#22
Hexachlorobenzene
Concen: 0.358 ng
RT: 16.374 min Scan# 1684
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:284 Resp: 4355

Ion	Ratio	Lower	Upper
284	100		
142	55.6	43.6	65.4
249	34.2	26.6	40.0



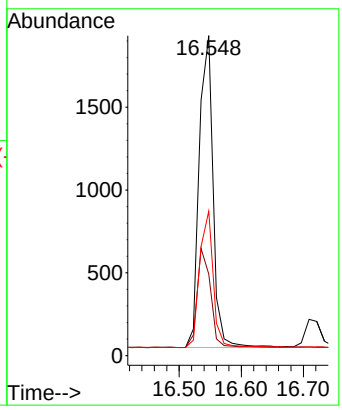


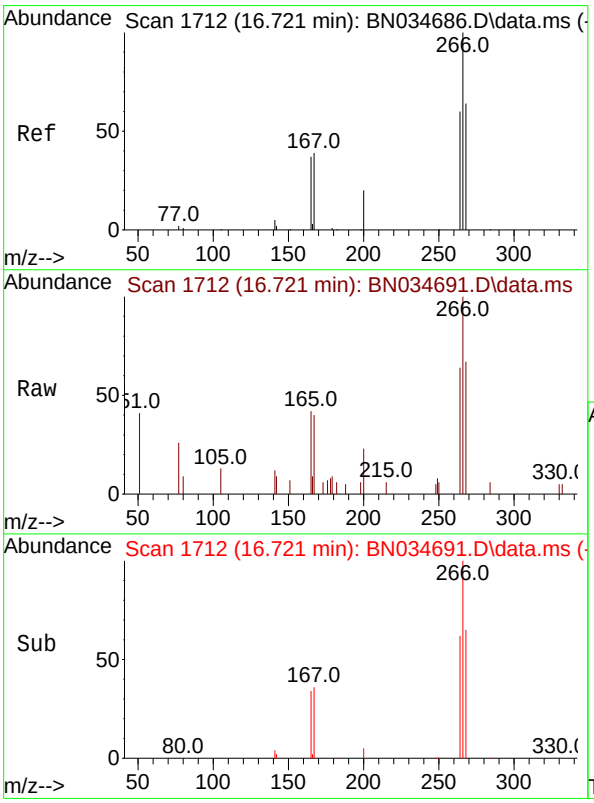
#23
Atrazine
Concen: 0.333 ng
RT: 16.548 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:200 Resp: 2928

Ion	Ratio	Lower	Upper
200	100		
173	25.5	19.7	29.5
215	45.1	35.7	53.5

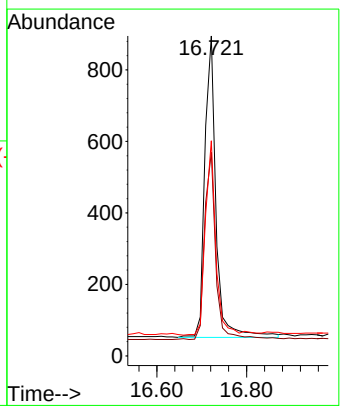


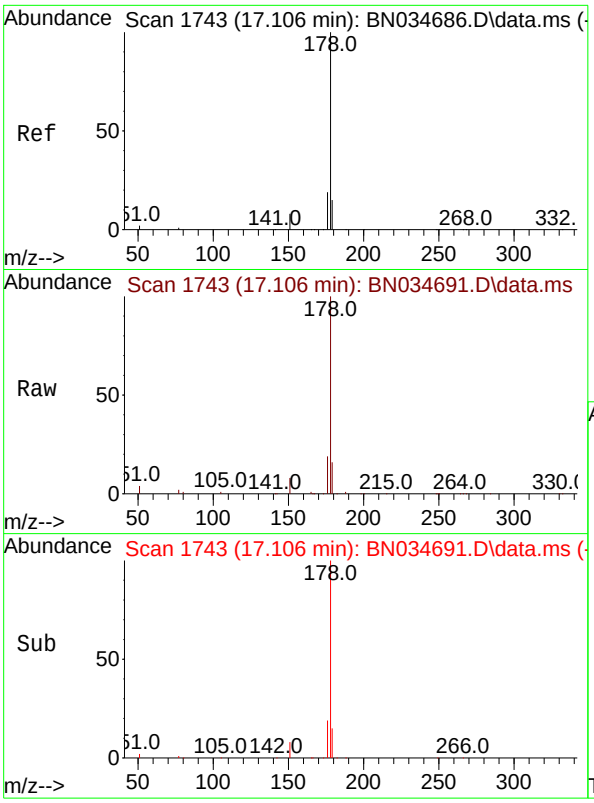


#24
Pentachlorophenol
Concen: 0.340 ng
RT: 16.721 min Scan# 1712
Delta R.T. 0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:266 Resp: 1463

Ion	Ratio	Lower	Upper
266	100		
264	61.6	49.4	74.2
268	61.0	50.5	75.7



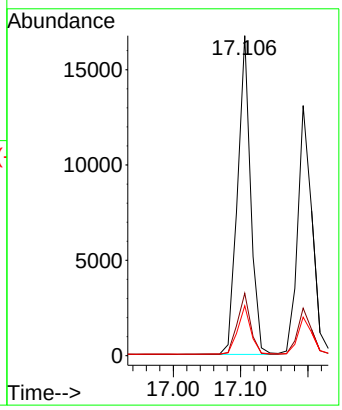


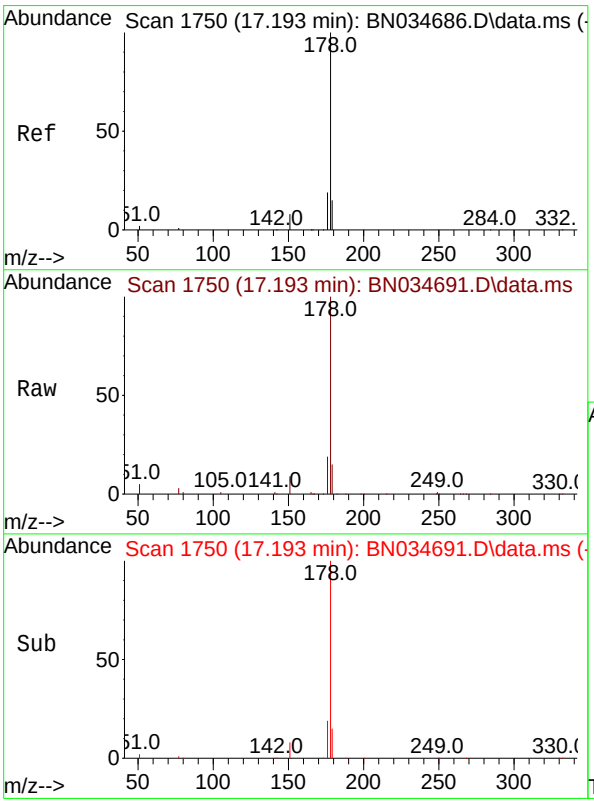
#25
Phenanthrene
Concen: 0.357 ng
RT: 17.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:178 Resp: 22550

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.2
179	15.4	12.2	18.4

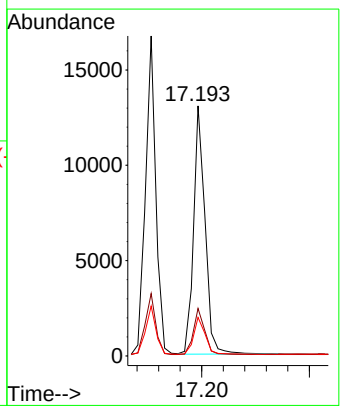


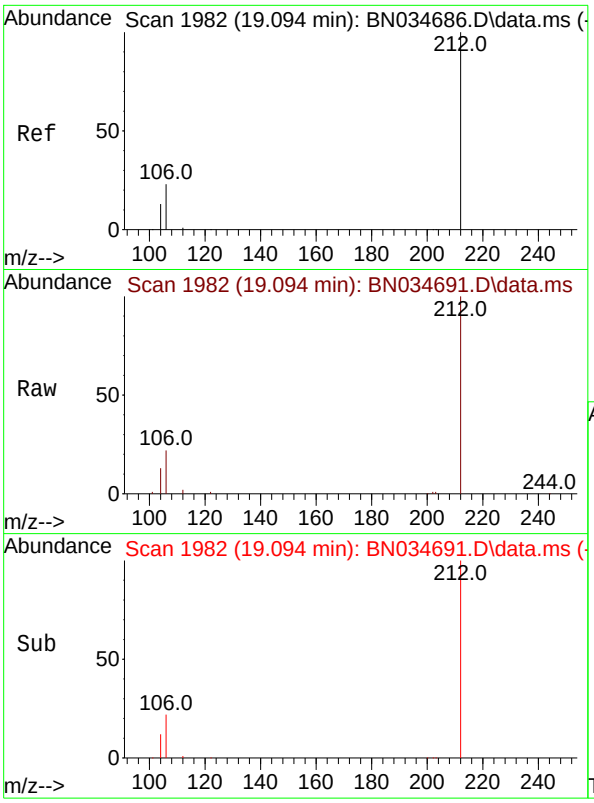


#26
Anthracene
Concen: 0.345 ng
RT: 17.193 min Scan# 1750
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:178 Resp: 19340

Ion	Ratio	Lower	Upper
178	100		
176	18.5	14.9	22.3
179	15.1	12.2	18.2



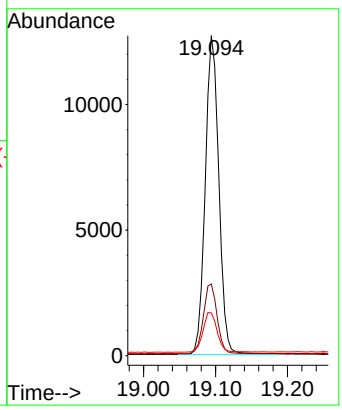


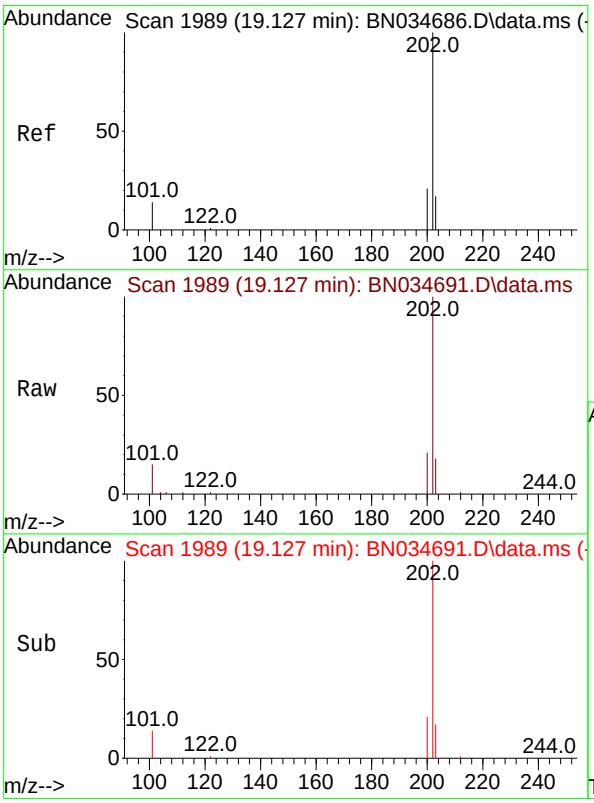
#27
Fluoranthene-d10
Concen: 0.350 ng
RT: 19.094 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:212 Resp: 16566

Ion	Ratio	Lower	Upper
212	100		
106	22.2	17.8	26.8
104	13.1	10.2	15.4

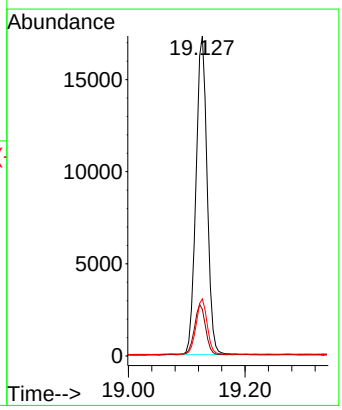


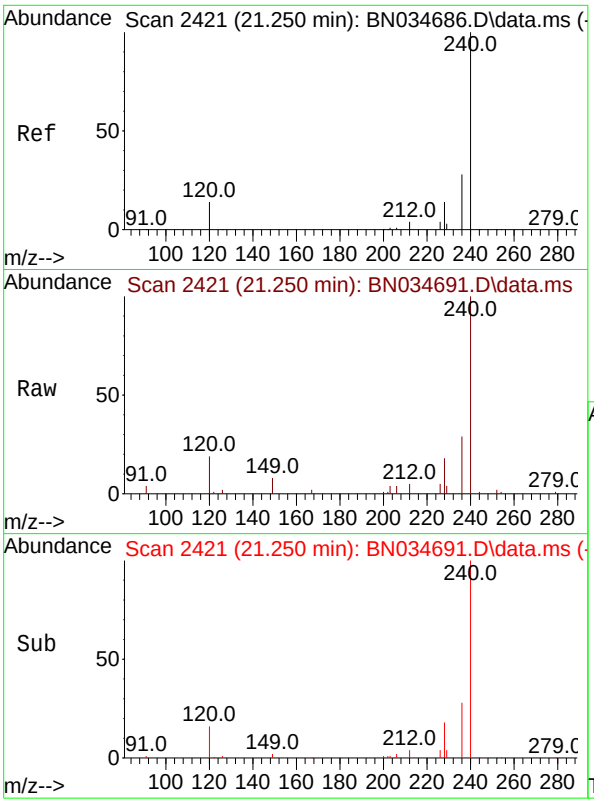


#28
Fluoranthene
Concen: 0.348 ng
RT: 19.127 min Scan# 1989
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:202 Resp: 22945

Ion	Ratio	Lower	Upper
202	100		
101	16.0	12.8	19.2
203	17.1	13.5	20.3



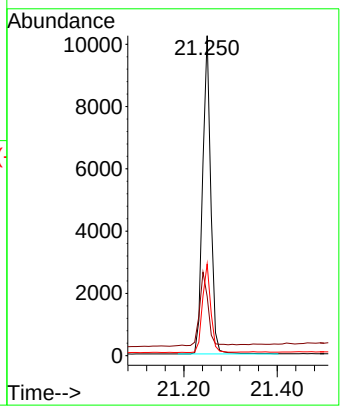


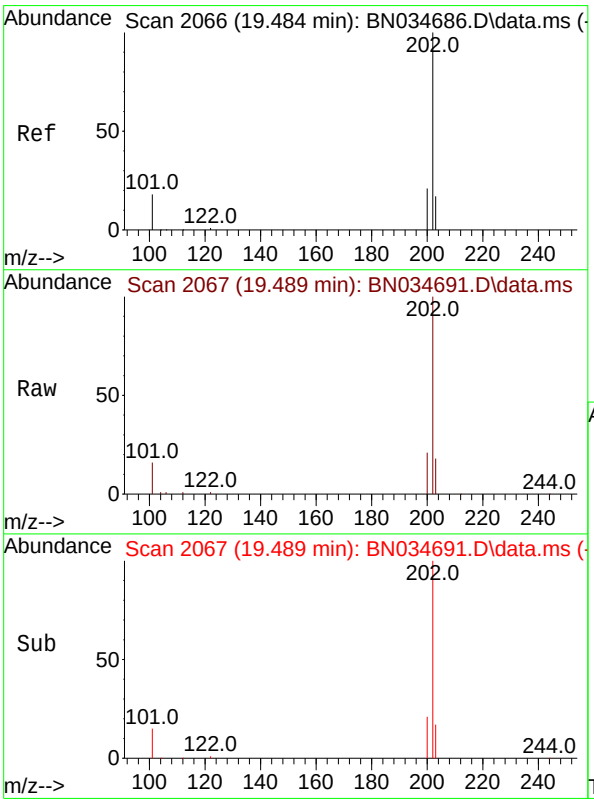
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.250 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:240 Resp: 12401

Ion	Ratio	Lower	Upper
240	100		
120	18.6	14.2	21.2
236	28.6	23.1	34.7

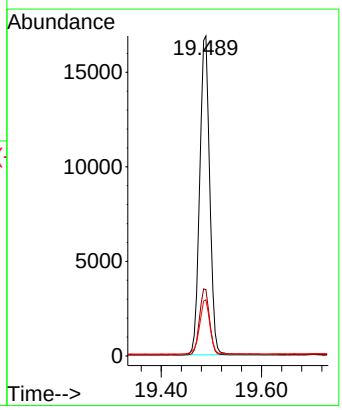


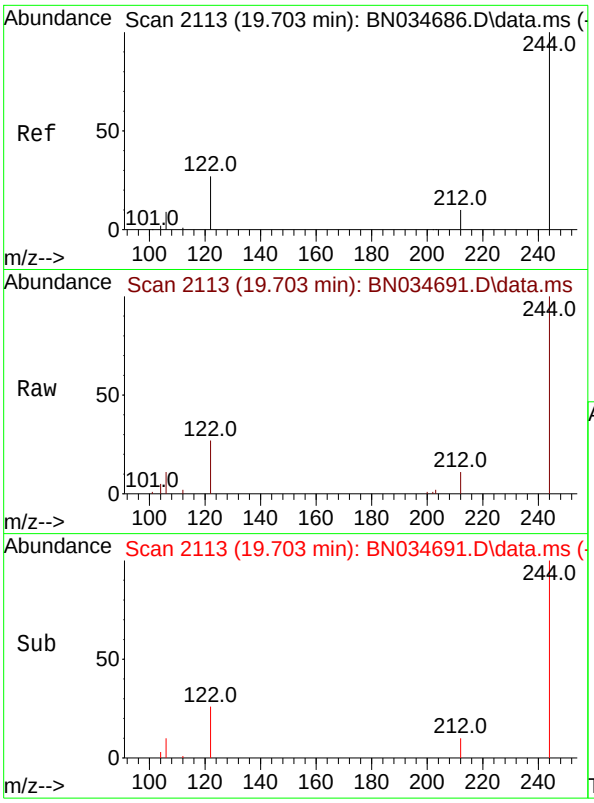


#30
Pyrene
Concen: 0.366 ng
RT: 19.489 min Scan# 2067
Delta R.T. 0.005 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:202 Resp: 23297

Ion	Ratio	Lower	Upper
202	100		
200	20.9	16.6	25.0
203	17.7	14.2	21.4



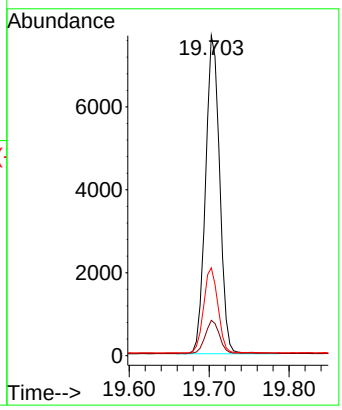


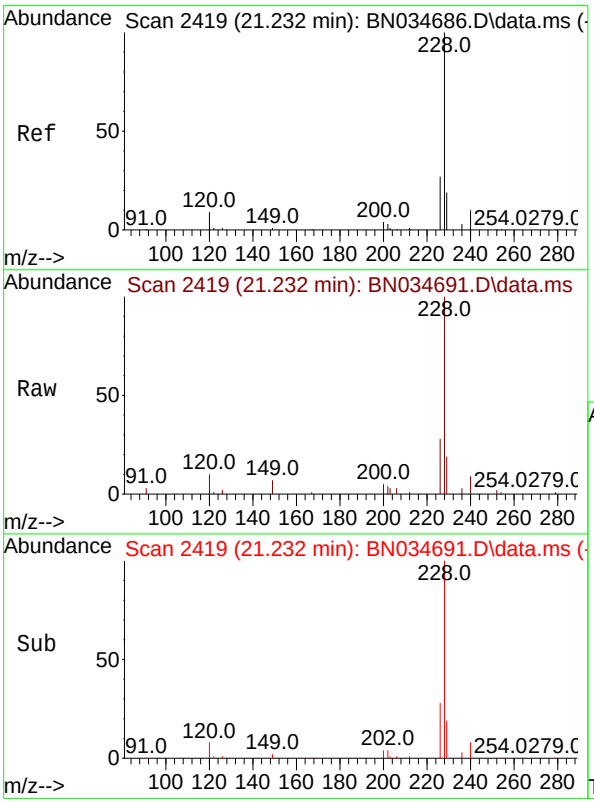
#31
Terphenyl-d14
Concen: 0.371 ng
RT: 19.703 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:244 Resp: 9400

Ion	Ratio	Lower	Upper
244	100		
212	11.1	8.6	13.0
122	27.4	22.3	33.5

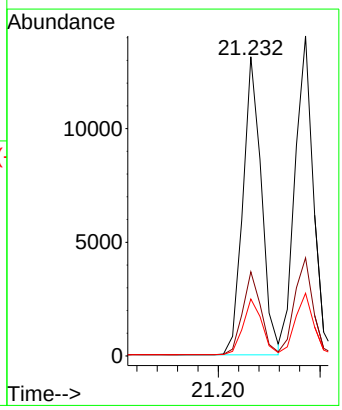


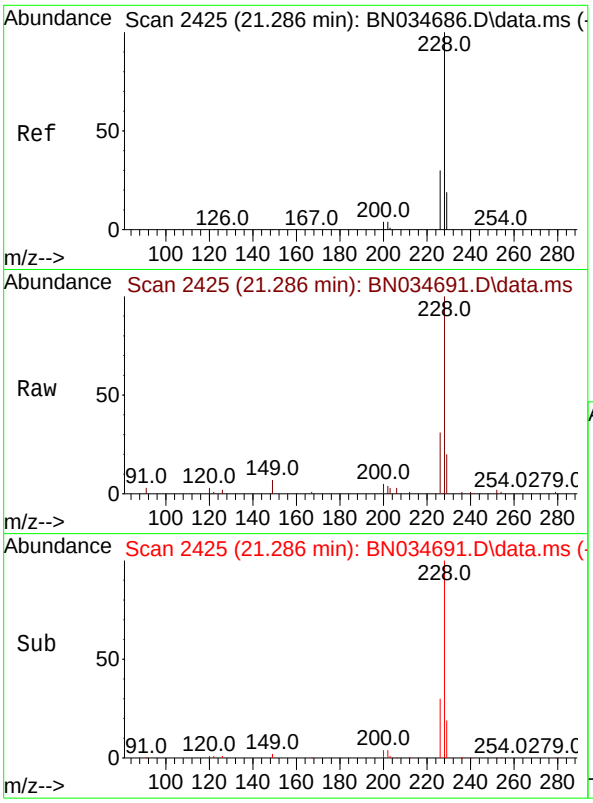


#32
Benzo(a)anthracene
Concen: 0.349 ng
RT: 21.232 min Scan# 2419
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:228 Resp: 16543

Ion	Ratio	Lower	Upper
228	100		
226	28.1	22.0	33.0
229	19.1	15.6	23.4



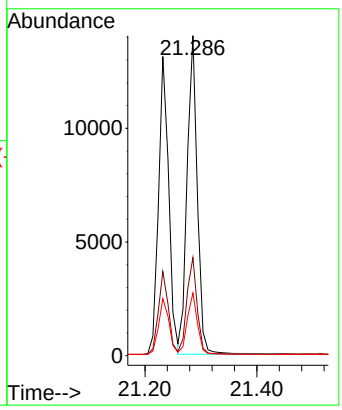


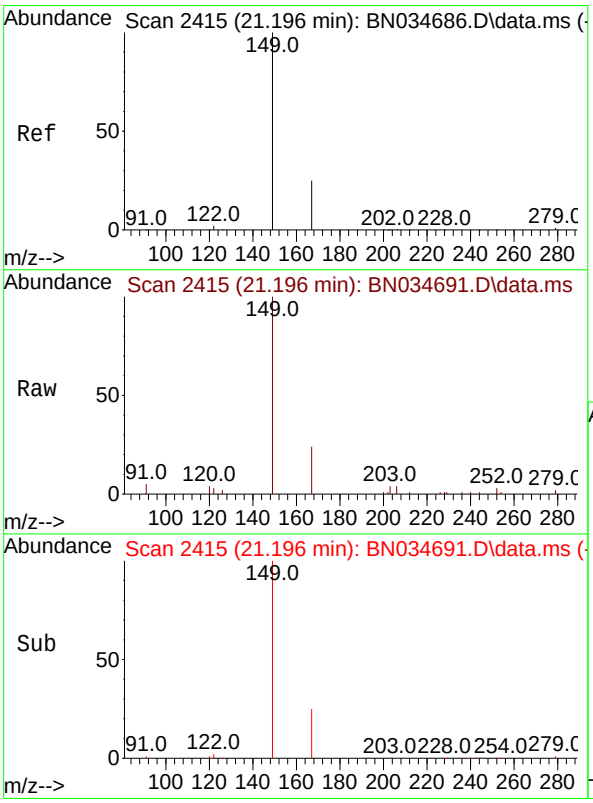
#33
Chrysene
Concen: 0.361 ng
RT: 21.286 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:228 Resp: 17696

Ion	Ratio	Lower	Upper
228	100		
226	30.6	24.1	36.1
229	19.6	15.8	23.8

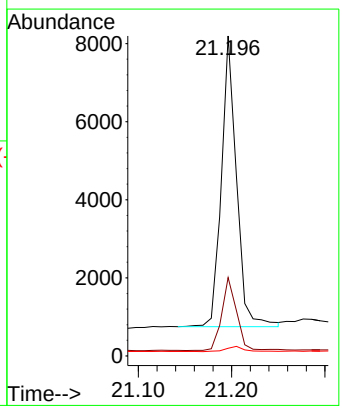


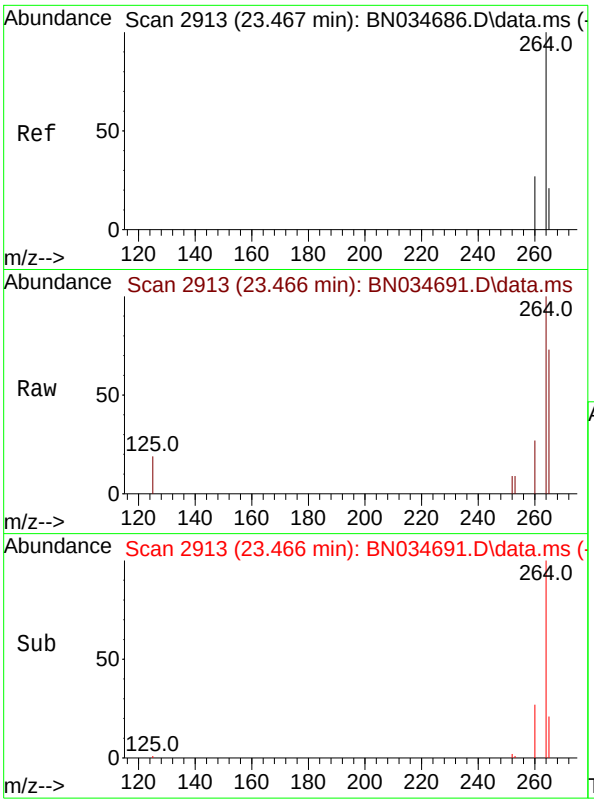


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.312 ng
RT: 21.196 min Scan# 2415
Delta R.T. 0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:149 Resp: 8375

Ion	Ratio	Lower	Upper
149	100		
167	24.7	19.7	29.5
279	2.3	1.8	2.6



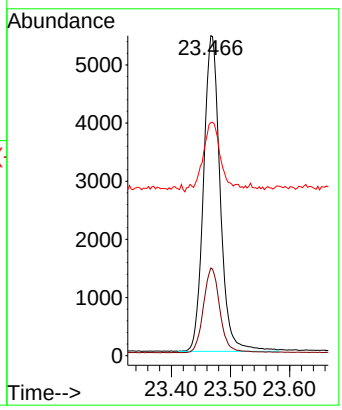


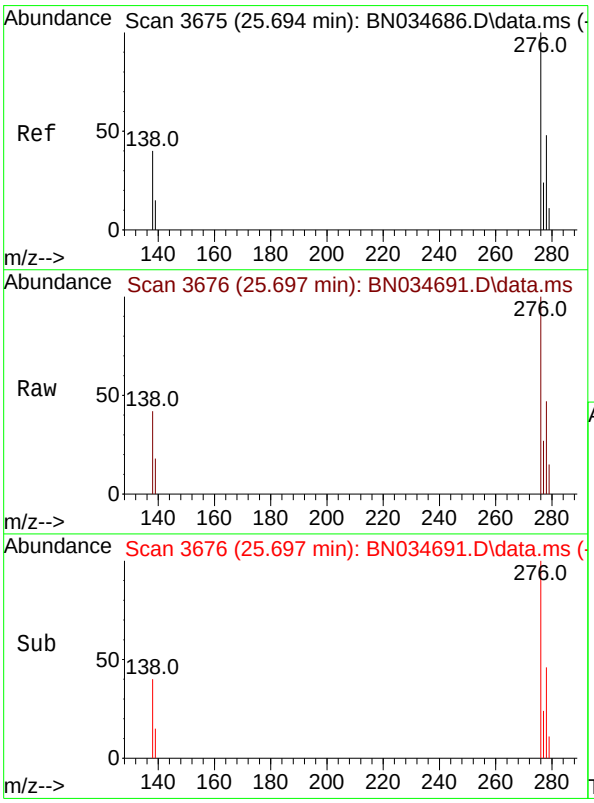
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.466 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:264 Resp: 10594

Ion	Ratio	Lower	Upper
264	100		
260	27.4	21.9	32.9
265	72.9	60.6	91.0

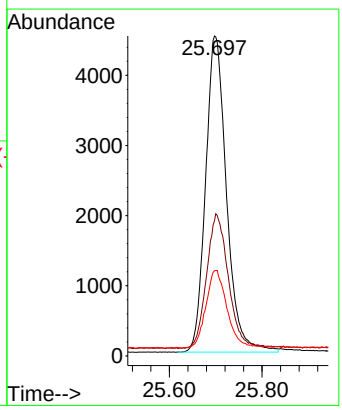


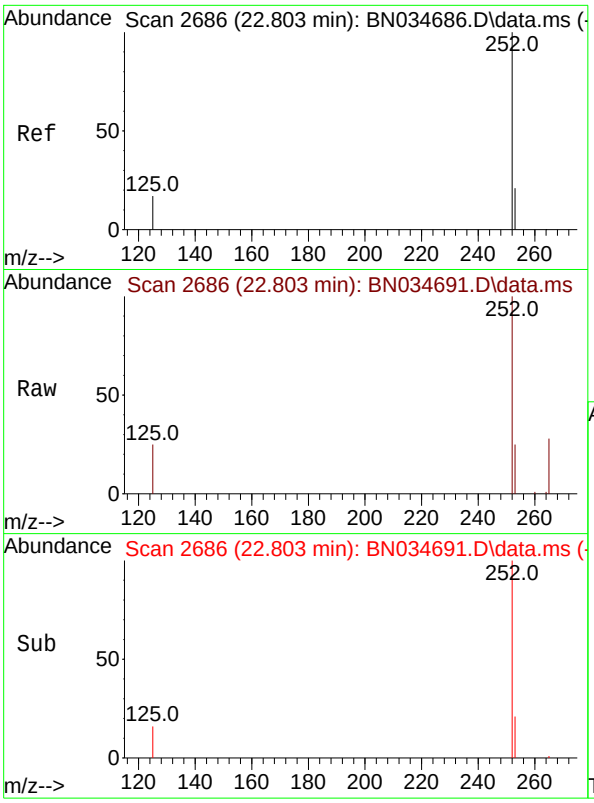


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.347 ng
RT: 25.697 min Scan# 3676
Delta R.T. 0.003 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:276 Resp: 14157

Ion	Ratio	Lower	Upper
276	100		
138	43.9	35.1	52.7
277	25.2	19.7	29.5



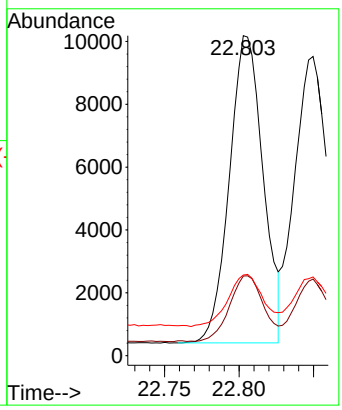


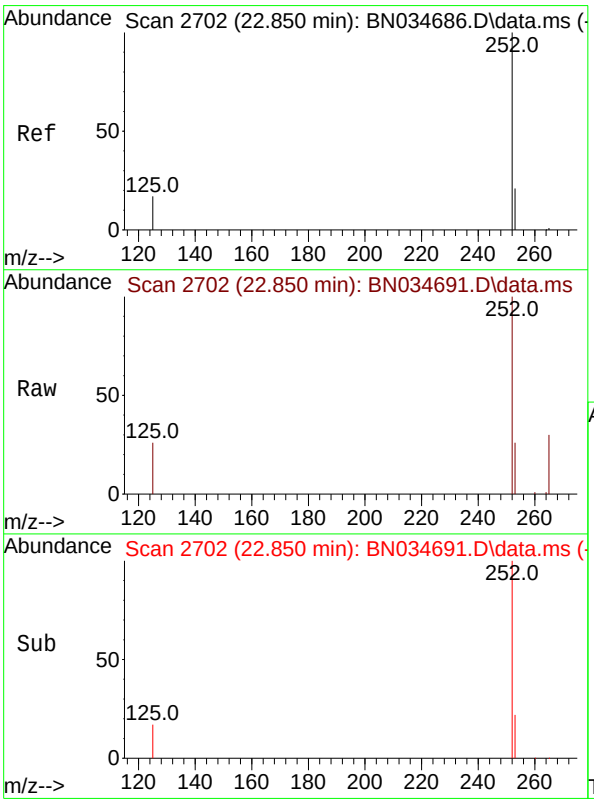
#37
Benzo(b)fluoranthene
Concen: 0.363 ng
RT: 22.803 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:252 Resp: 15350

Ion	Ratio	Lower	Upper
252	100		
253	24.9	20.0	30.0
125	25.2	20.9	31.3

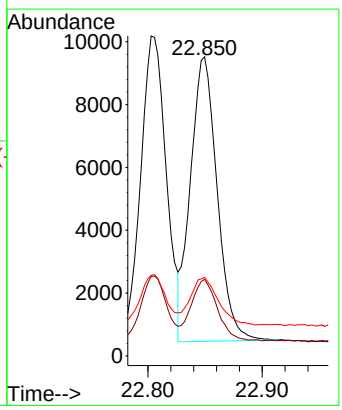


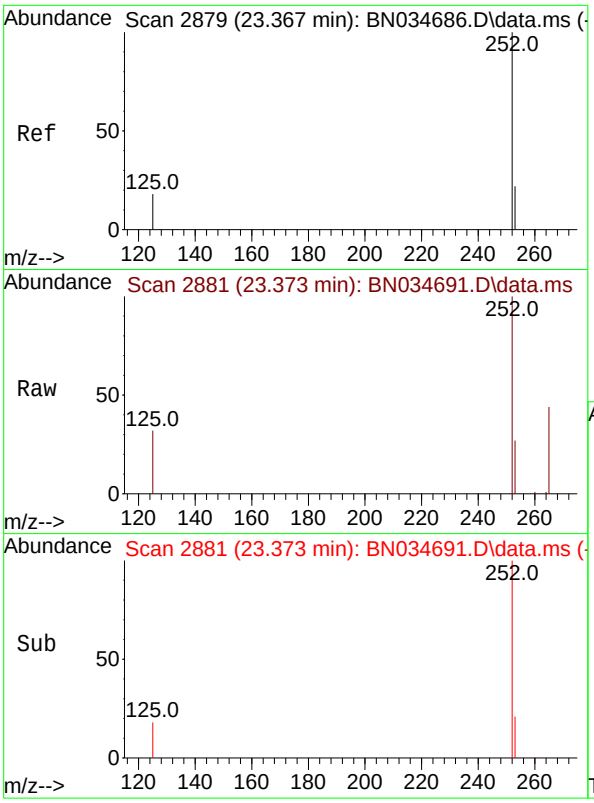


#38
Benzo(k)fluoranthene
Concen: 0.353 ng
RT: 22.850 min Scan# 2702
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:252 Resp: 14742

Ion	Ratio	Lower	Upper
252	100		
253	25.6	20.6	31.0
125	26.3	21.6	32.4



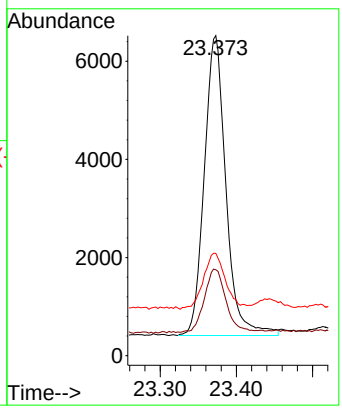


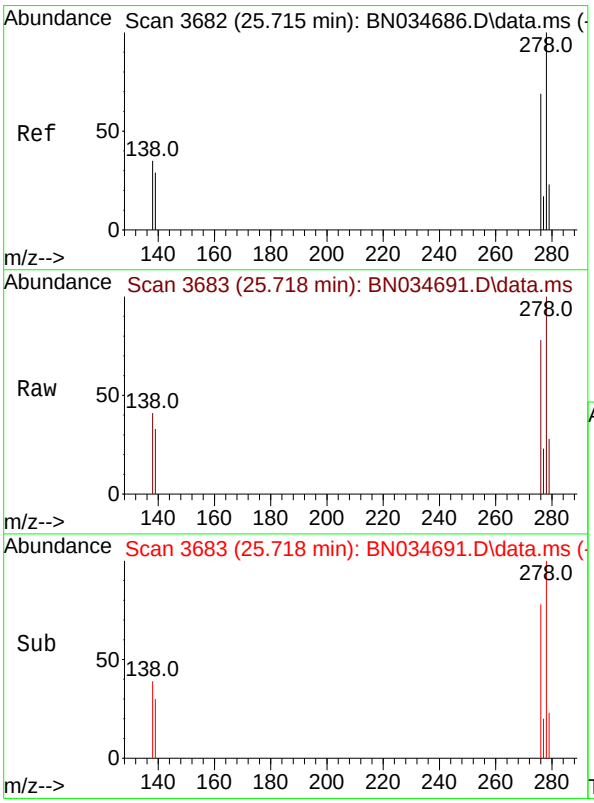
#39
Benzo(a)pyrene
Concen: 0.355 ng
RT: 23.373 min Scan# 2
Delta R.T. 0.006 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:252 Resp: 12054

Ion	Ratio	Lower	Upper
252	100		
253	26.9	22.2	33.4
125	32.0	26.0	39.0

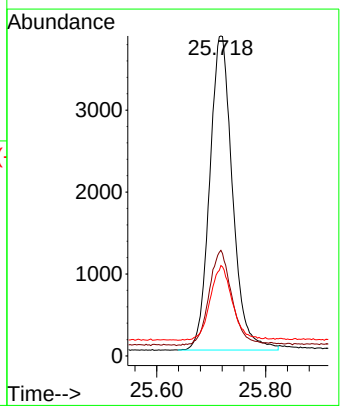


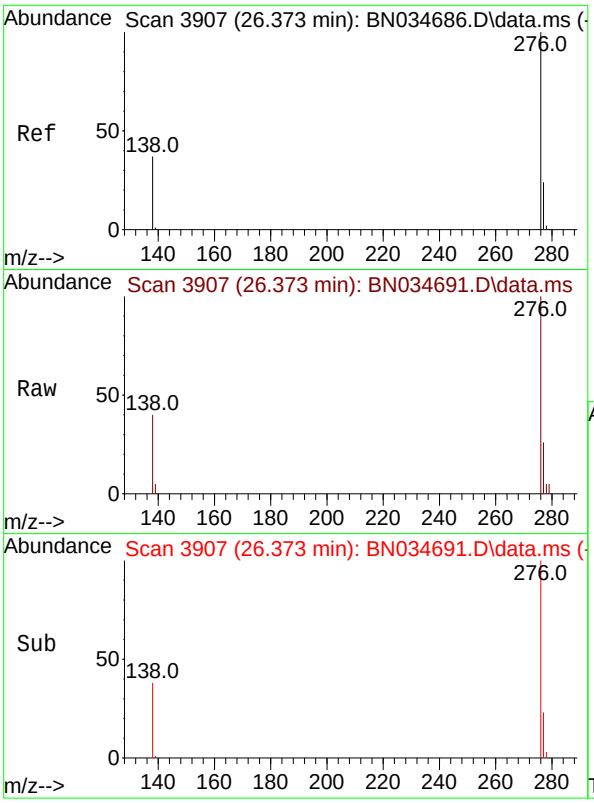


#40
Dibenzo(a,h)anthracene
Concen: 0.346 ng
RT: 25.718 min Scan# 3683
Delta R.T. 0.003 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Tgt Ion:278 Resp: 11142

Ion	Ratio	Lower	Upper
278	100		
139	33.0	25.4	38.2
279	28.2	22.4	33.6



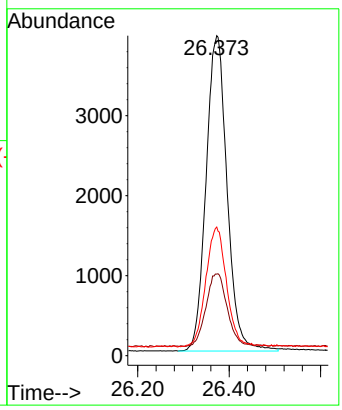


#41
Benzo(g,h,i)perylene
Concen: 0.354 ng
RT: 26.373 min Scan# 3
Delta R.T. -0.000 min
Lab File: BN034691.D
Acq: 24 Oct 2024 14:14

Instrument :
BNA_N
ClientSampleId :
ICVBN102424

Tgt Ion:276 Resp: 12576

Ion	Ratio	Lower	Upper
276	100		
277	25.5	21.3	31.9
138	40.2	31.9	47.9



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034706.D
Acq On : 25 Oct 2024 00:02
Operator : RC/JU
Sample : PB164282BS
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Quant Time: Oct 25 02:08:50 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.712	152	6277	0.400	ng	0.00
7) Naphthalene-d8	10.479	136	17435	0.400	ng	0.00
13) Acenaphthene-d10	14.318	164	7557	0.400	ng	-0.01
19) Phenanthrene-d10	17.056	188	13505	0.400	ng	#-0.01
29) Chrysene-d12	21.241	240	7661	0.400	ng	# 0.00
35) Perylene-d12	23.461	264	6455	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.321	112	5611	0.301	ng	0.00
5) Phenol-d6	6.881	99	7614	0.309	ng	0.00
8) Nitrobenzene-d5	8.845	82	4924	0.337	ng	0.00
11) 2-Methylnaphthalene-d10	12.071	152	8357	0.349	ng	0.00
14) 2,4,6-Tribromophenol	15.815	330	563	0.241	ng	0.00
15) 2-Fluorobiphenyl	12.950	172	10877	0.362	ng	0.00
27) Fluoranthene-d10	19.094	212	10197	0.335	ng	0.00
31) Terphenyl-d14	19.703	244	5692	0.364	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.285	88	2475	0.296	ng	# 46
3) n-Nitrosodimethylamine	3.581	42	4401	0.362	ng	96
6) bis(2-Chloroethyl)ether	7.141	93	7177	0.359	ng	99
9) Naphthalene	10.532	128	16863	0.350	ng	100
10) Hexachlorobutadiene	10.831	225	2523	0.349	ng	# 98
12) 2-Methylnaphthalene	12.143	142	10035	0.335	ng	99
16) Acenaphthylene	14.040	152	12822	0.353	ng	100
17) Acenaphthene	14.382	154	8528	0.341	ng	98
18) Fluorene	15.377	166	9962	0.323	ng	99
20) 4,6-Dinitro-2-methylph...	15.441	198	538	0.286	ng	# 56
21) 4-Bromophenyl-phenylether	16.262	248	2561	0.356	ng	# 61
22) Hexachlorobenzene	16.374	284	2810	0.360	ng	97
23) Atrazine	16.535	200	1814	0.321	ng	# 88
24) Pentachlorophenol	16.721	266	1431	0.518	ng	98
25) Phenanthrene	17.106	178	14856	0.366	ng	100
26) Anthracene	17.193	178	13024	0.362	ng	100
28) Fluoranthene	19.122	202	14119	0.334	ng	99
30) Pyrene	19.484	202	14340	0.364	ng	99
32) Benzo(a)anthracene	21.232	228	10619	0.363	ng	99
33) Chrysene	21.277	228	11699	0.386	ng	98
34) Bis(2-ethylhexyl)phtha...	21.187	149	5670	0.341	ng	# 100
36) Indeno(1,2,3-cd)pyrene	25.688	276	10806	0.435	ng	98
37) Benzo(b)fluoranthene	22.797	252	10399	0.403	ng	94
38) Benzo(k)fluoranthene	22.841	252	10151	0.399	ng	96
39) Benzo(a)pyrene	23.364	252	8689	0.420	ng	95
40) Dibenzo(a,h)anthracene	25.706	278	8269	0.422	ng	97
41) Benzo(g,h,i)perylene	26.361	276	8830	0.408	ng	97

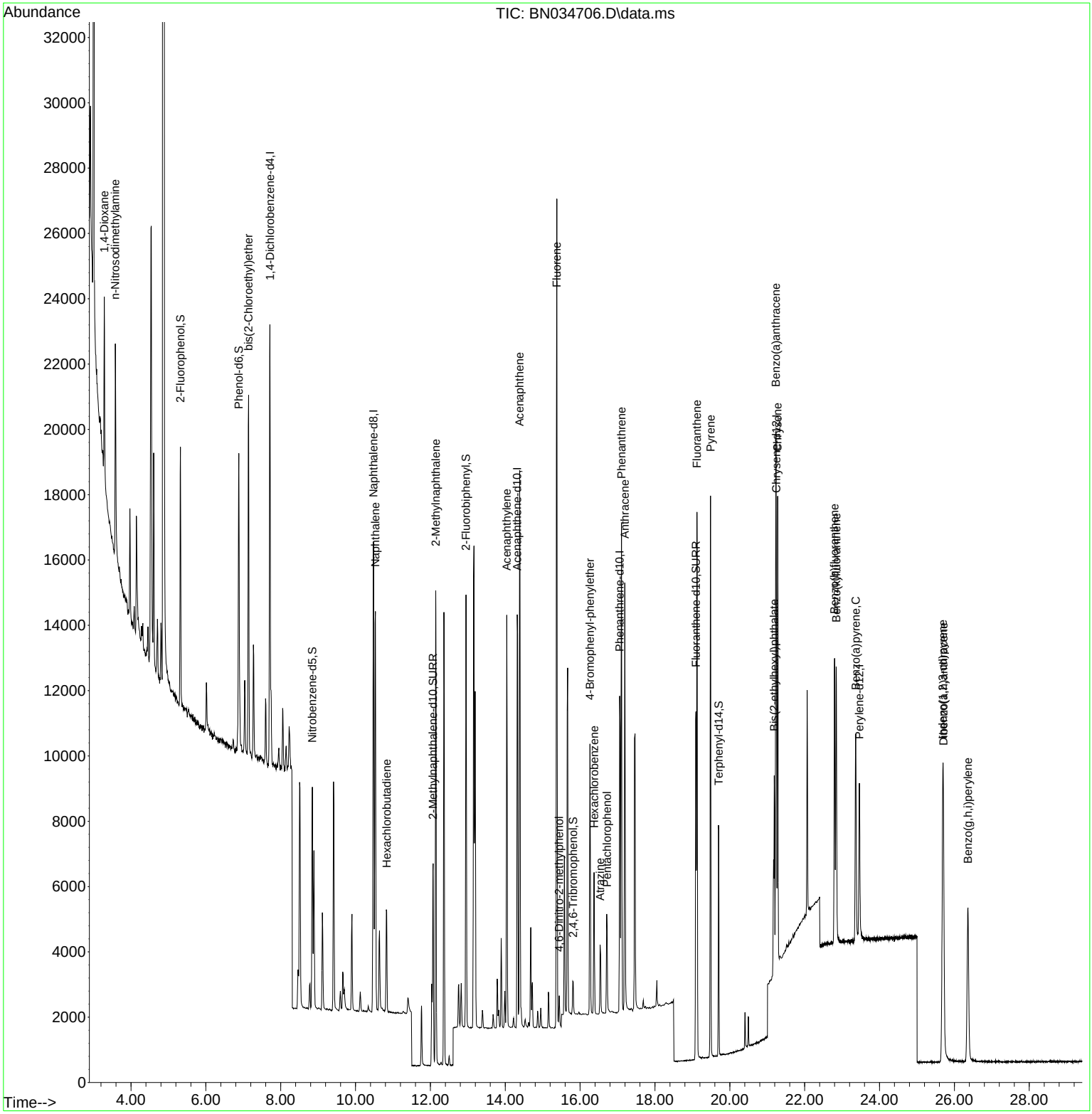
(#) = qualifier out of range (m) = manual integration (+) = signals summed

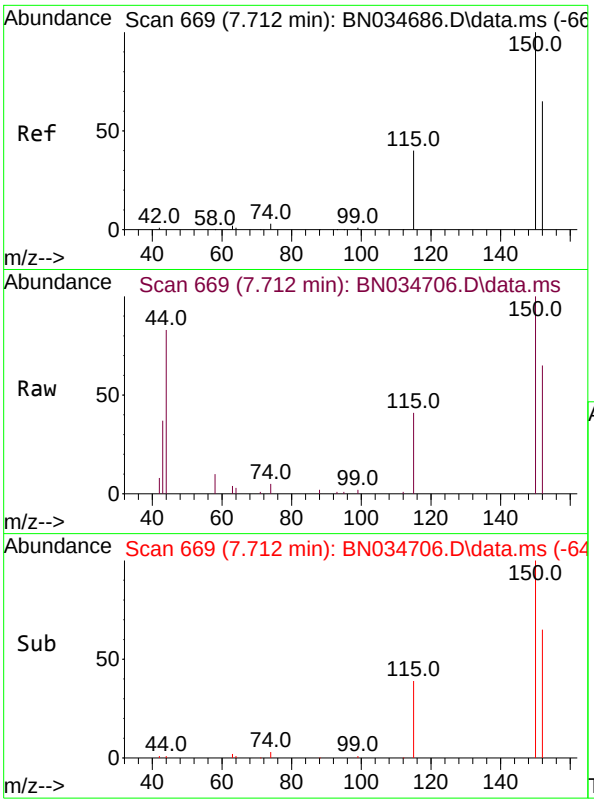
Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034706.D
Acq On : 25 Oct 2024 00:02
Operator : RC/JU
Sample : PB164282BS
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Quant Time: Oct 25 02:08:50 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration



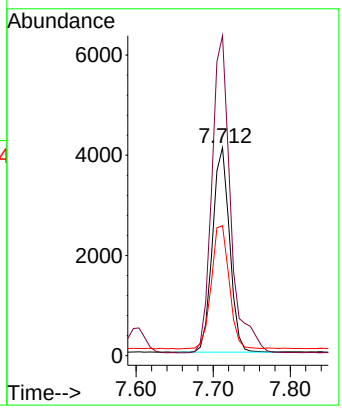


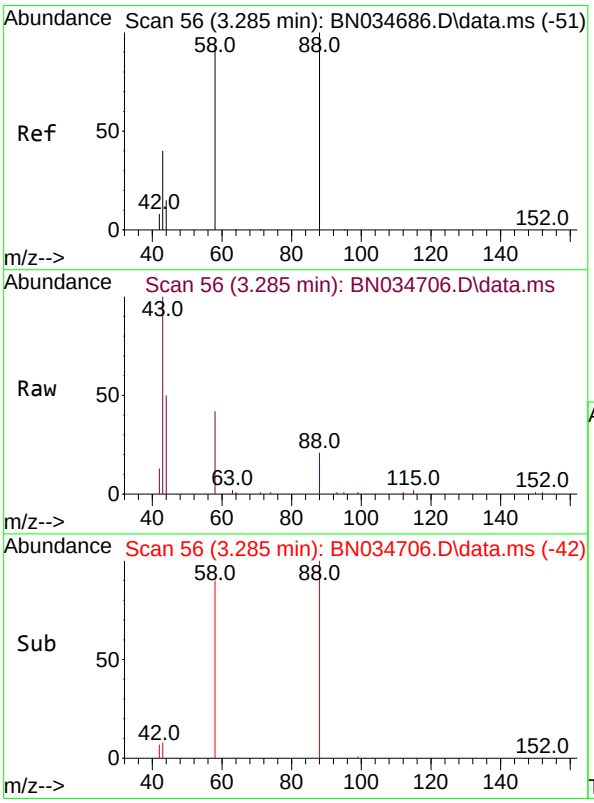
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:152 Resp: 6277

Ion	Ratio	Lower	Upper
152	100		
150	153.7	122.7	184.1
115	62.4	51.0	76.6

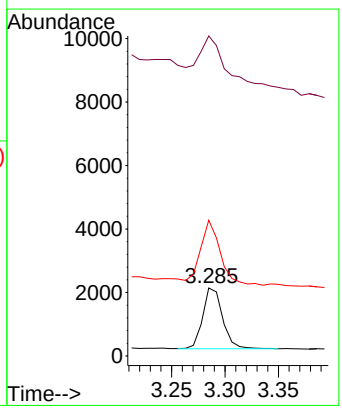


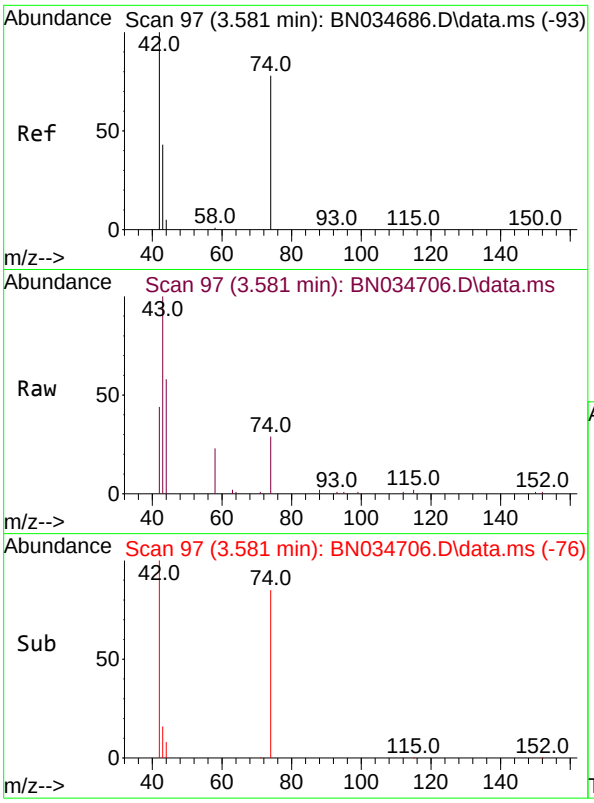


#2
1,4-Dioxane
Concen: 0.296 ng
RT: 3.285 min Scan# 56
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion: 88 Resp: 2475

Ion	Ratio	Lower	Upper
88	100		
43	124.6	32.1	48.1#
58	109.9	73.7	110.5



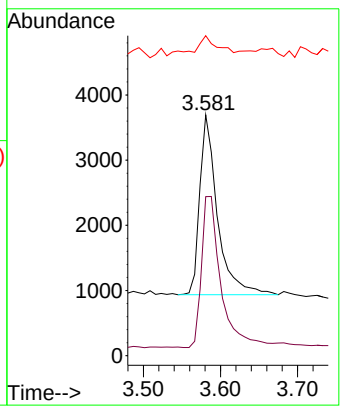


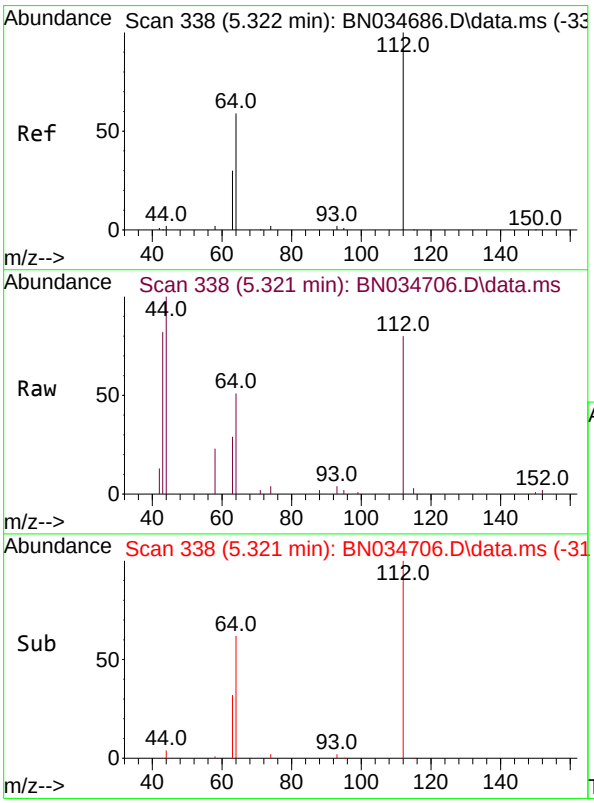
#3
n-Nitrosodimethylamine
Concen: 0.362 ng
RT: 3.581 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion: 42 Resp: 4401

Ion	Ratio	Lower	Upper
42	100		
74	92.1	77.2	115.8
44	14.7	13.4	20.2

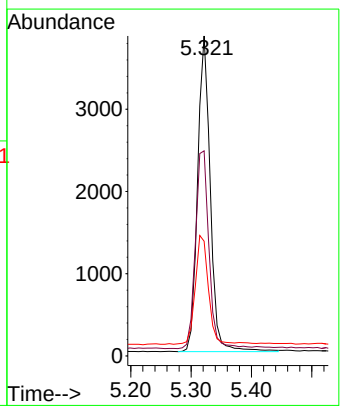


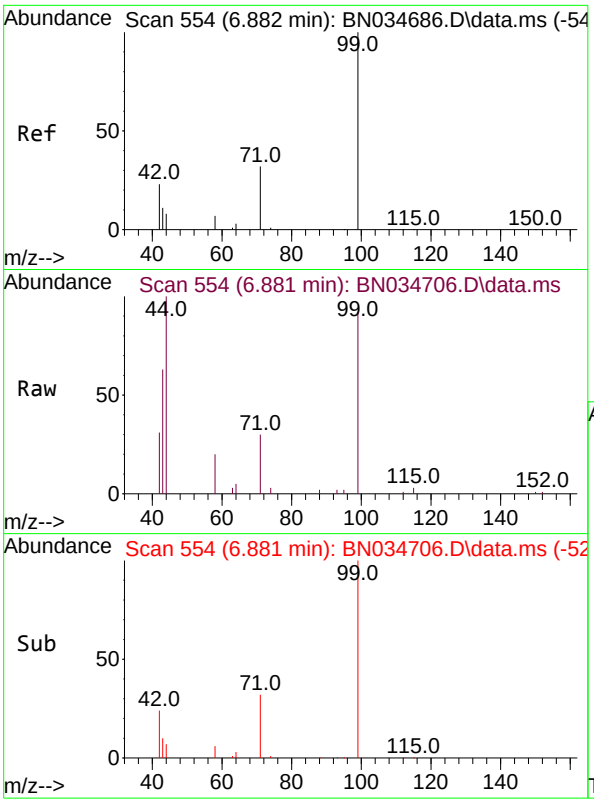


#4
2-Fluorophenol
Concen: 0.301 ng
RT: 5.321 min Scan# 338
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:112 Resp: 5611

Ion	Ratio	Lower	Upper
112	100		
64	66.5	53.0	79.6
63	35.5	27.6	41.4



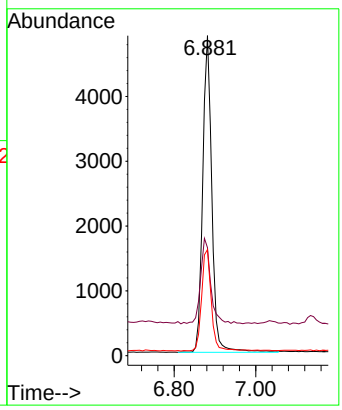


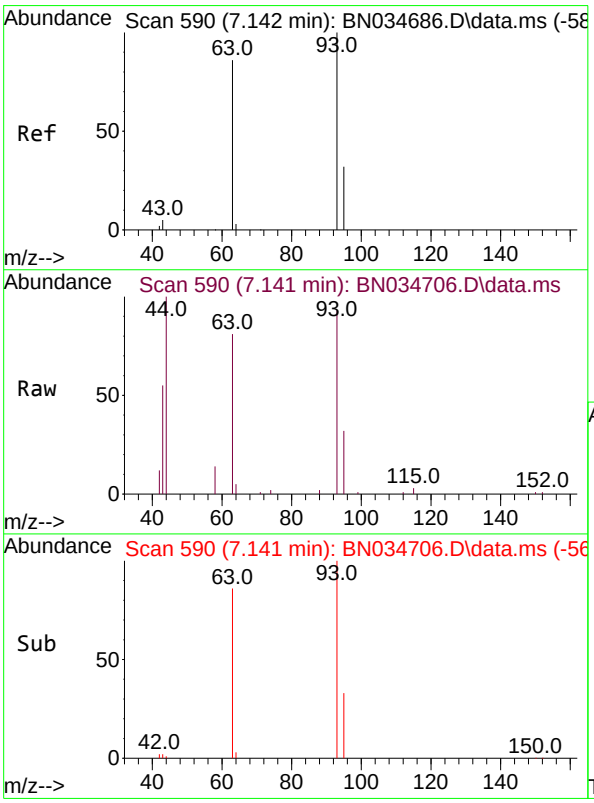
#5
Phenol-d6
Concen: 0.309 ng
RT: 6.881 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion: 99 Resp: 7614

Ion	Ratio	Lower	Upper
99	100		
42	28.9	21.8	32.8
71	33.7	26.6	40.0

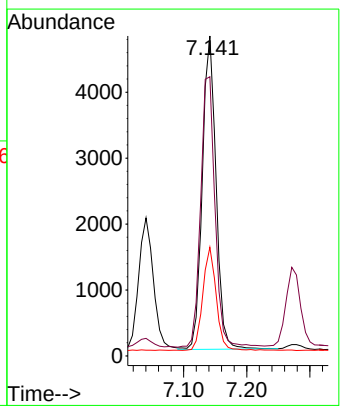


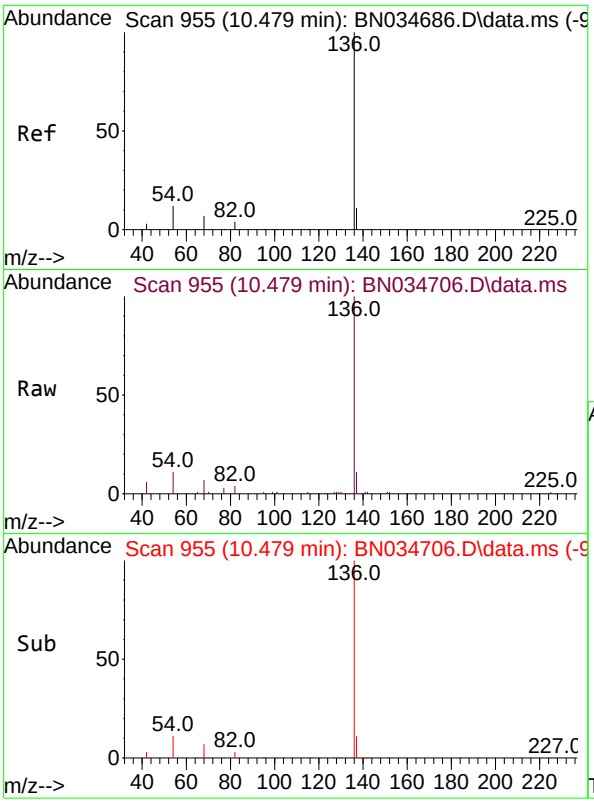


#6
bis(2-Chloroethyl)ether
Concen: 0.359 ng
RT: 7.141 min Scan# 590
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion: 93 Resp: 7177

Ion	Ratio	Lower	Upper
93	100		
63	90.6	71.5	107.3
95	31.9	25.8	38.6



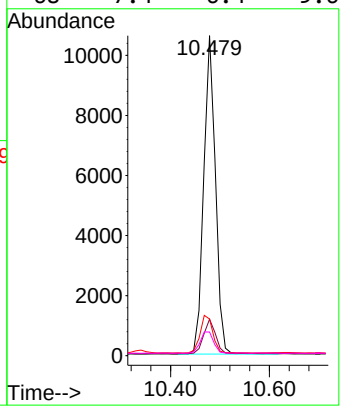


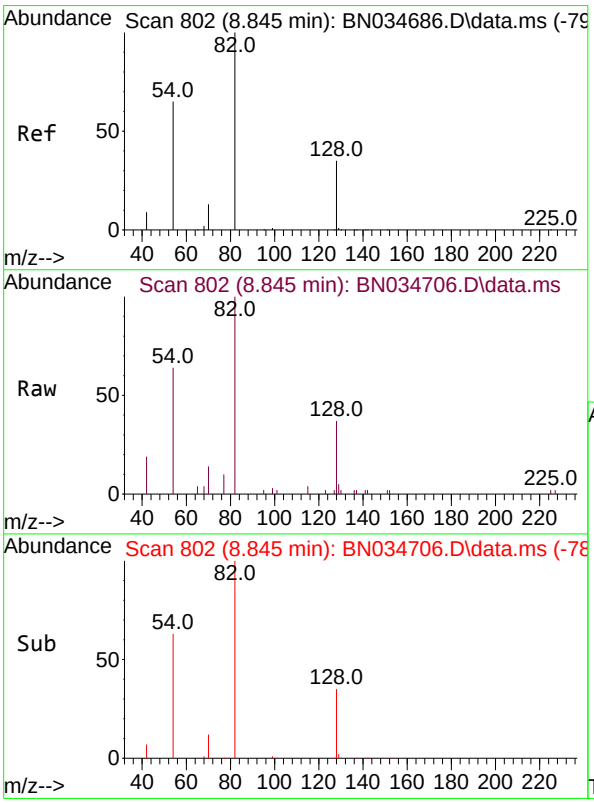
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:136 Resp: 17435

Ion	Ratio	Lower	Upper
136	100		
137	11.4	9.1	13.7
54	11.4	9.8	14.8
68	7.4	6.4	9.6

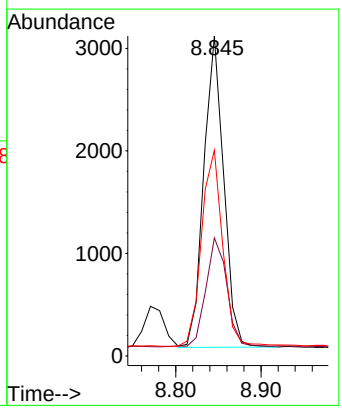


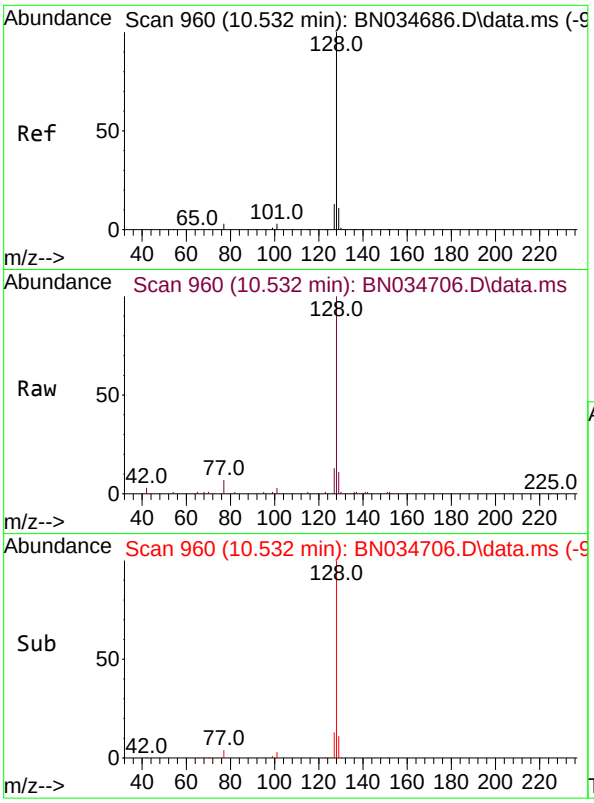


#8
Nitrobenzene-d5
Concen: 0.337 ng
RT: 8.845 min Scan# 802
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion: 82 Resp: 4924

Ion	Ratio	Lower	Upper
82	100		
128	36.9	29.7	44.5
54	64.3	53.0	79.6



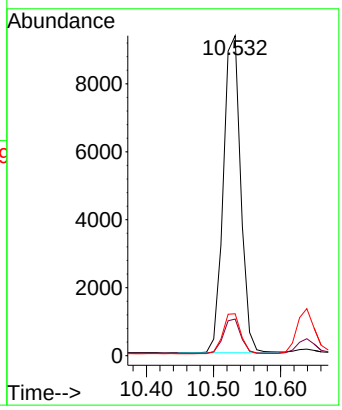


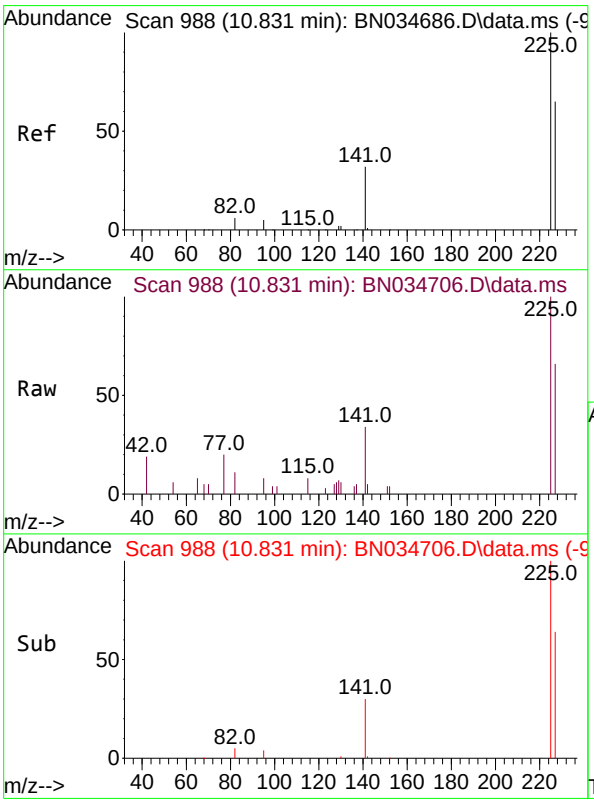
#9
Naphthalene
Concen: 0.350 ng
RT: 10.532 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:128 Resp: 16863

Ion	Ratio	Lower	Upper
128	100		
129	11.4	9.0	13.6
127	13.1	10.5	15.7

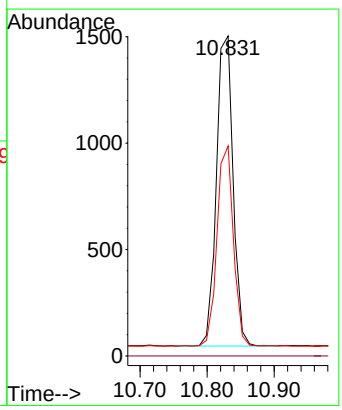


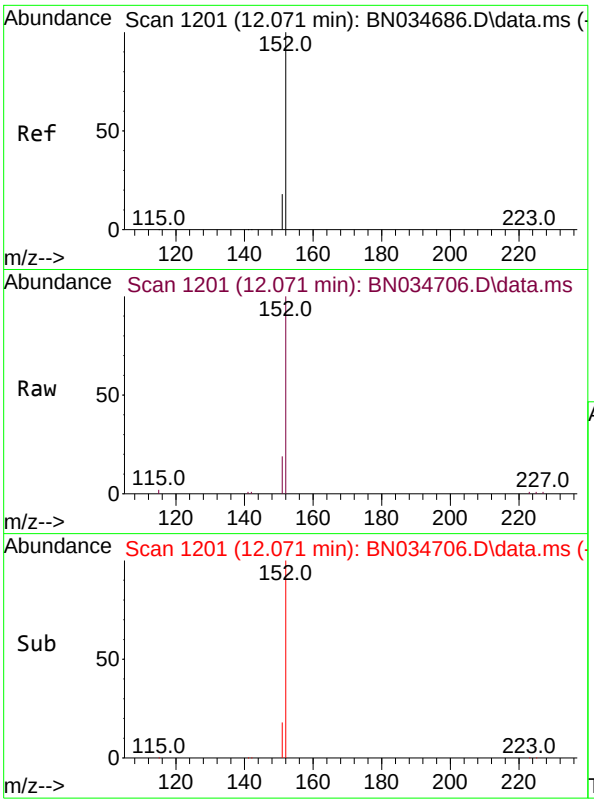


#10
Hexachlorobutadiene
Concen: 0.349 ng
RT: 10.831 min Scan# 988
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:225 Resp: 2523

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.0	51.4	77.0



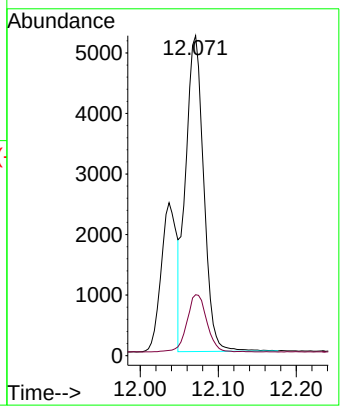


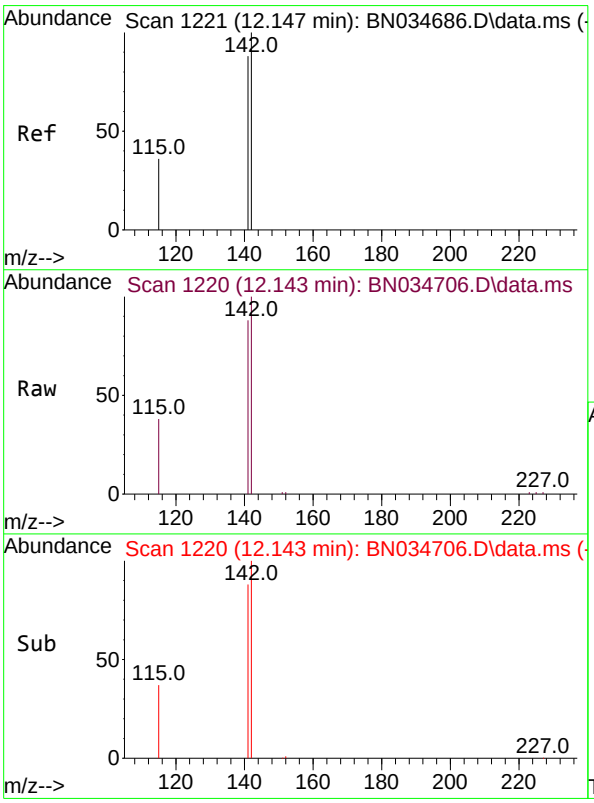
#11
2-Methylnaphthalene-d10
Concen: 0.349 ng
RT: 12.071 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:152 Resp: 8357

Ion	Ratio	Lower	Upper
152	100		
151	20.0	16.7	25.1

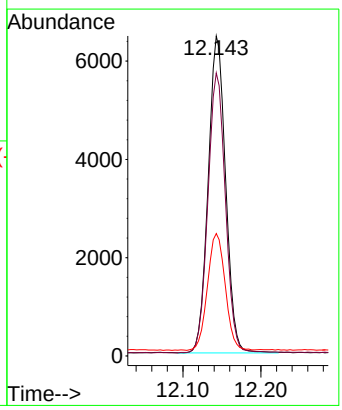


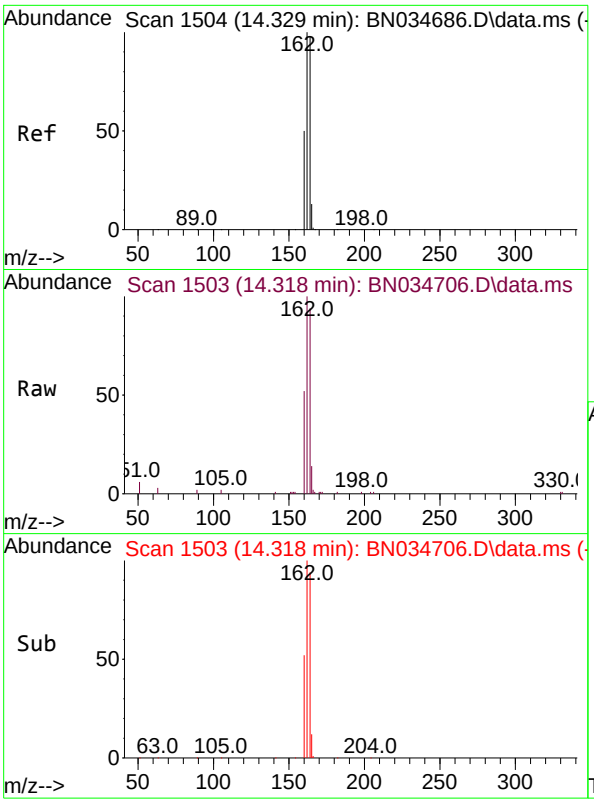


#12
2-Methylnaphthalene
Concen: 0.335 ng
RT: 12.143 min Scan# 1220
Delta R.T. -0.004 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:142 Resp: 10035

Ion	Ratio	Lower	Upper
142	100		
141	88.4	70.4	105.6
115	38.2	29.8	44.6



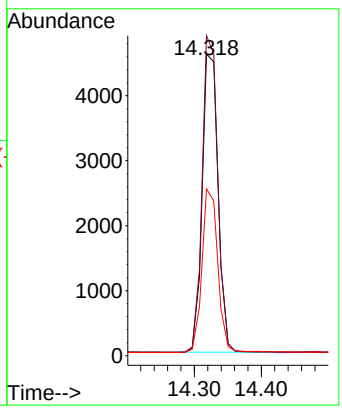


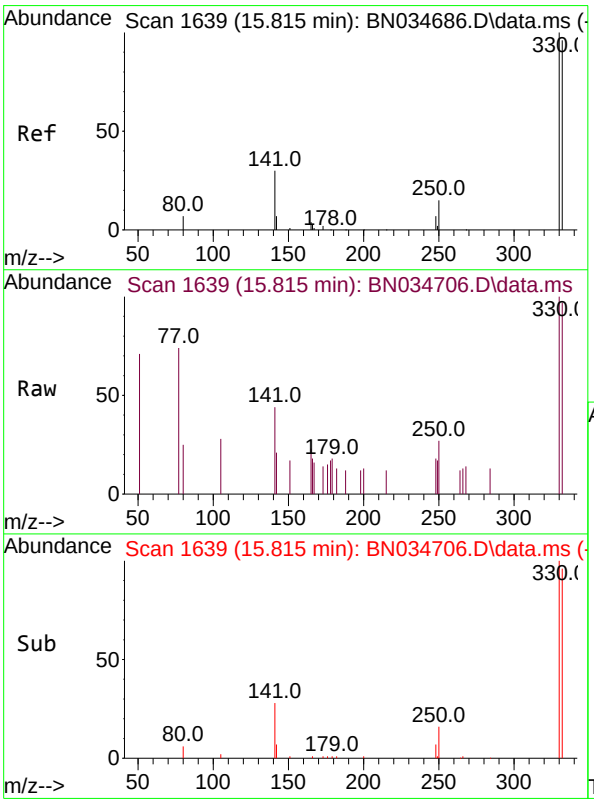
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.318 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:164 Resp: 7557

Ion	Ratio	Lower	Upper
164	100		
162	106.1	81.4	122.0
160	55.4	40.6	61.0

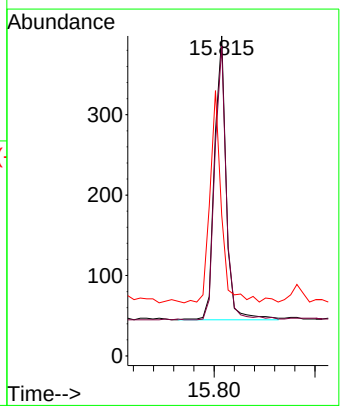


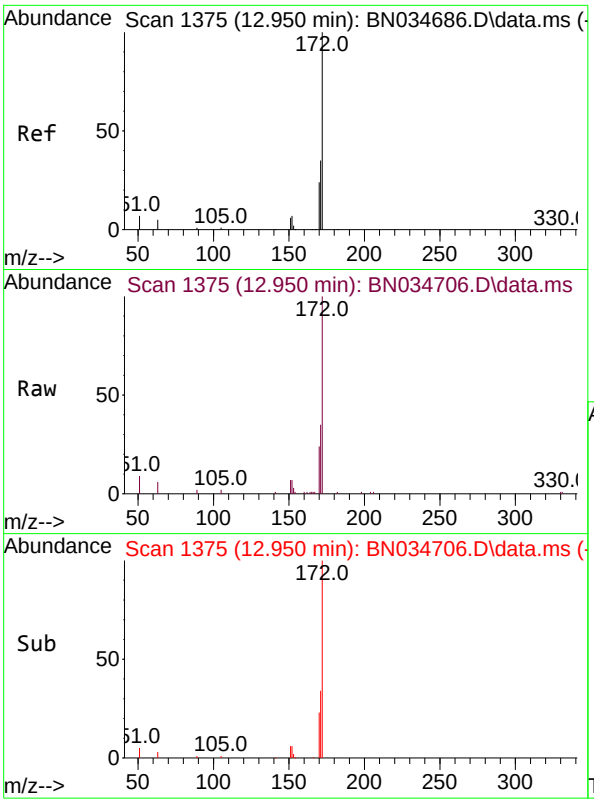


#14
2,4,6-Tribromophenol
Concen: 0.241 ng
RT: 15.815 min Scan# 1639
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:330 Resp: 563

Ion	Ratio	Lower	Upper
330	100		
332	94.7	76.6	115.0
141	73.7	54.6	81.8



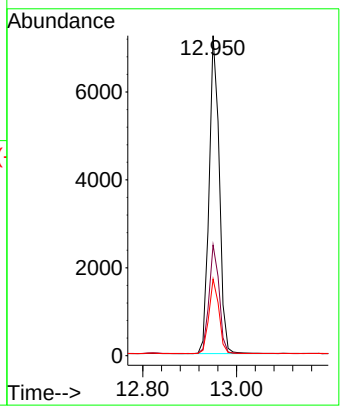


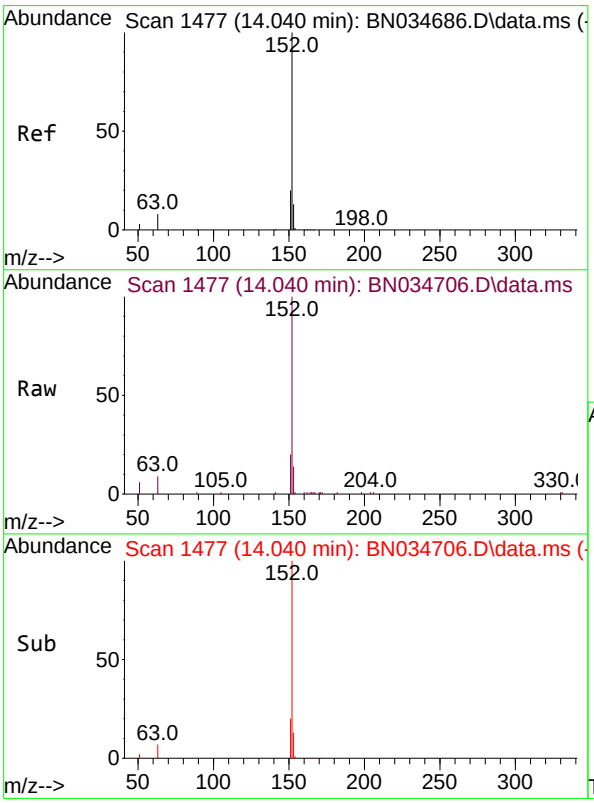
#15
2-Fluorobiphenyl
Concen: 0.362 ng
RT: 12.950 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:172 Resp: 10877

Ion	Ratio	Lower	Upper
172	100		
171	34.6	28.3	42.5
170	23.9	19.8	29.6

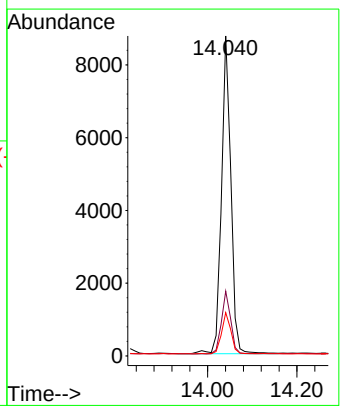


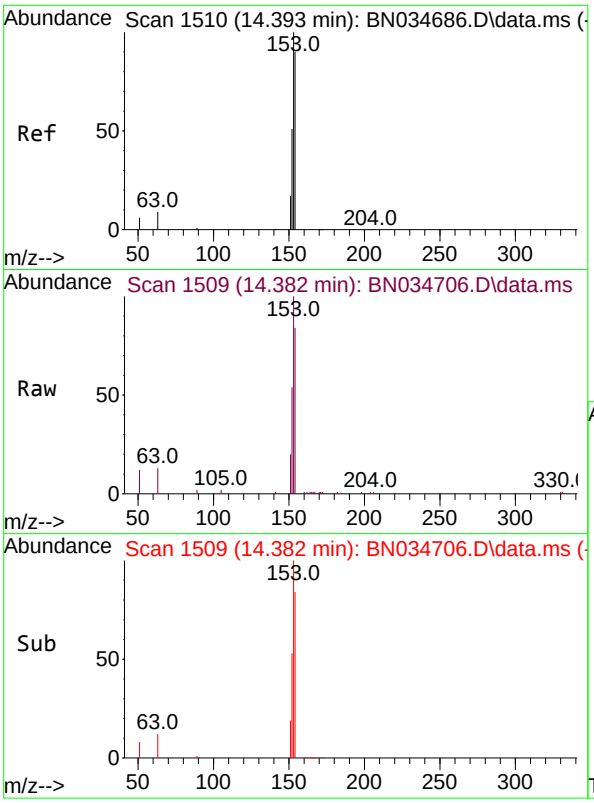


#16
Acenaphthylene
Concen: 0.353 ng
RT: 14.040 min Scan# 1477
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:152 Resp: 12822

Ion	Ratio	Lower	Upper
152	100		
151	19.5	15.6	23.4
153	13.1	10.6	15.8





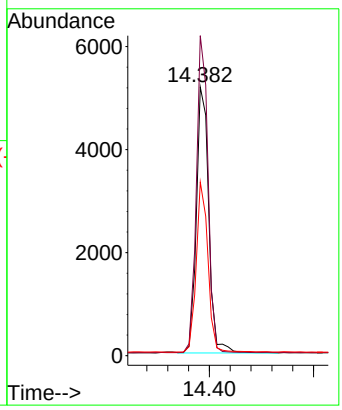
#17
Acenaphthene
Concen: 0.341 ng
RT: 14.382 min Scan# 1

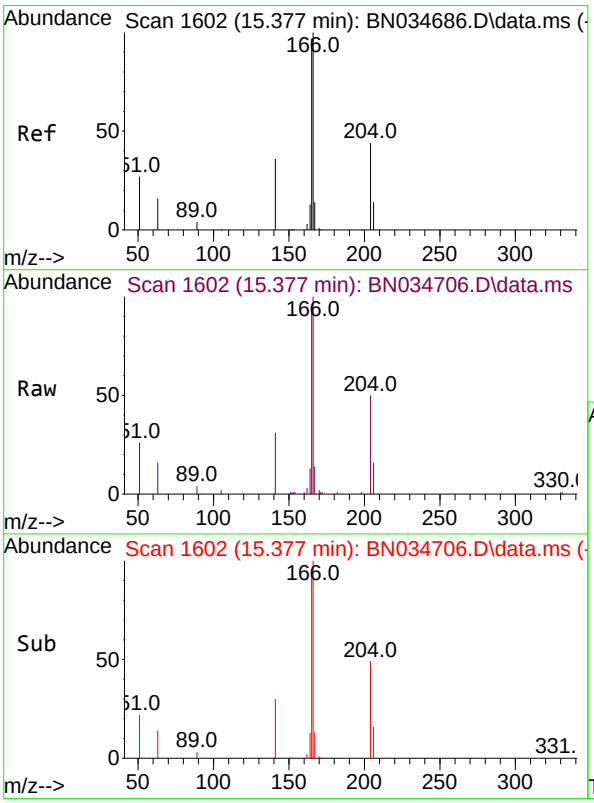
Instrument :
BNA_N
ClientSampleId :
PB164282BS

Delta R.T. -0.011 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:154 Resp: 8528

Ion	Ratio	Lower	Upper
154	100		
153	112.4	88.2	132.2
152	60.6	46.9	70.3

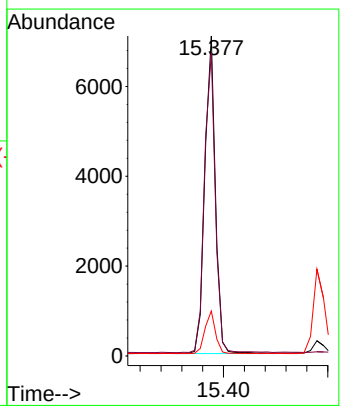


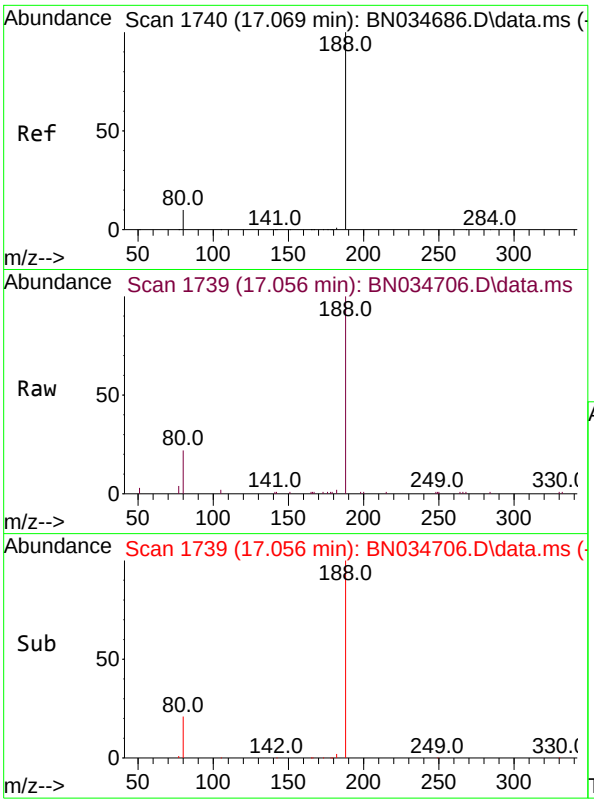


#18
Fluorene
Concen: 0.323 ng
RT: 15.377 min Scan# 1602
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:166 Resp: 9962

Ion	Ratio	Lower	Upper
166	100		
165	97.3	78.8	118.2
167	13.6	10.6	16.0



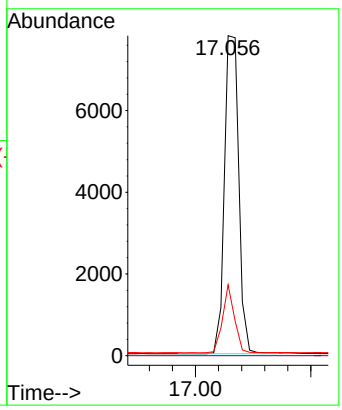


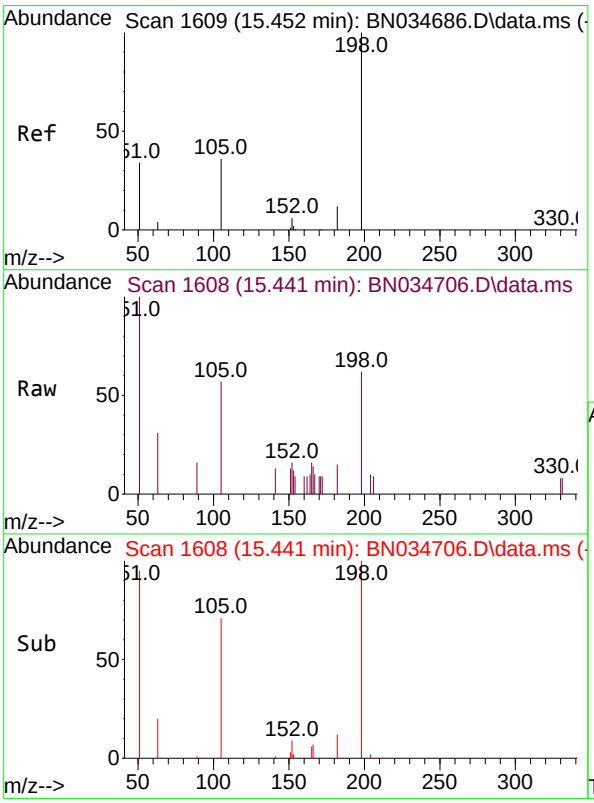
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.056 min Scan# 1
Delta R.T. -0.013 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:188 Resp: 13505

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	22.2	8.9	13.3#

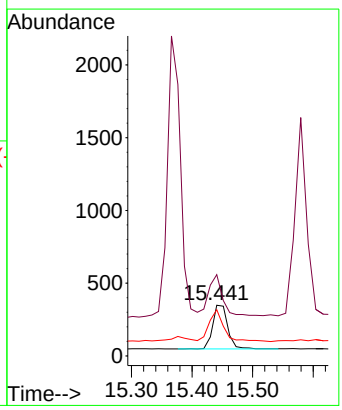


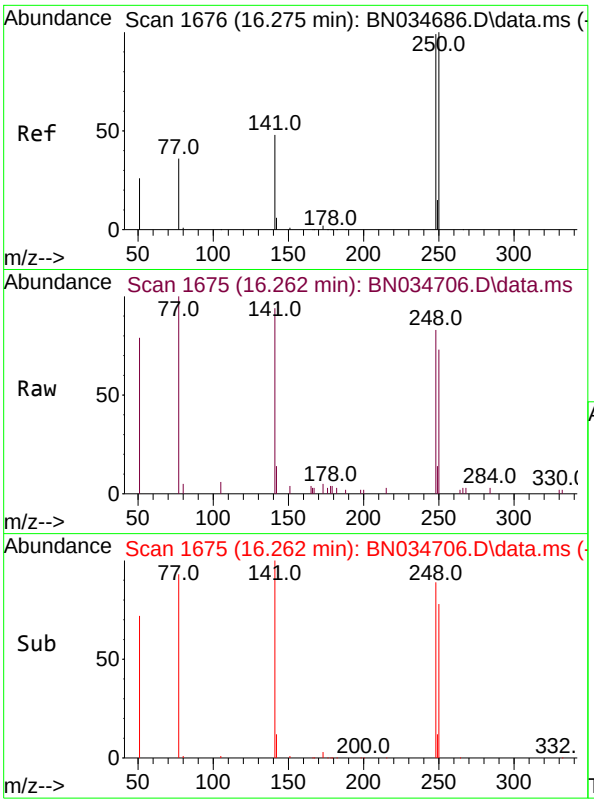


#20
4,6-Dinitro-2-methylphenol
Concen: 0.286 ng
RT: 15.441 min Scan# 1608
Delta R.T. -0.011 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:198 Resp: 538

Ion	Ratio	Lower	Upper
198	100		
51	160.2	91.8	137.8#
105	91.1	44.3	66.5#



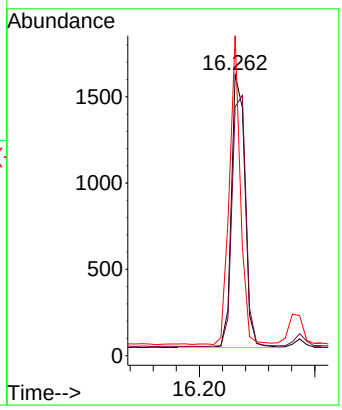


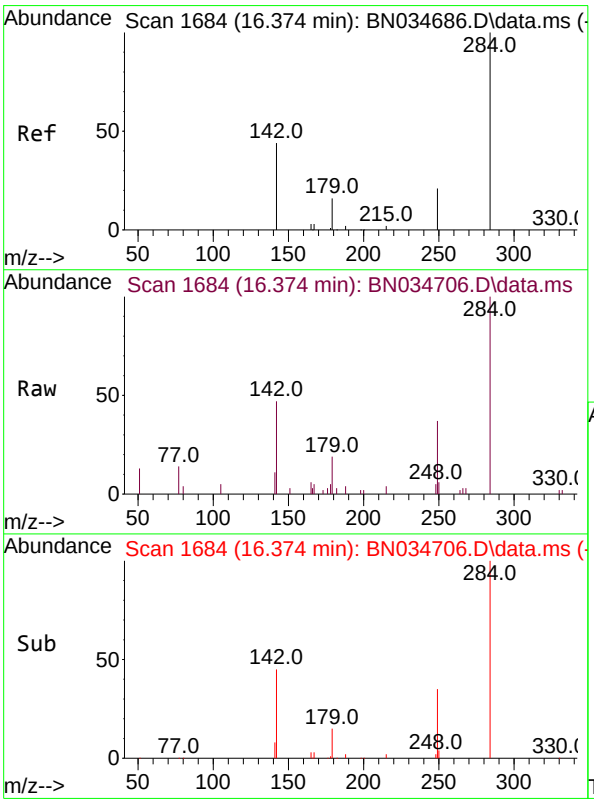
#21
4-Bromophenyl-phenylether
Concen: 0.356 ng
RT: 16.262 min Scan# 1(
Delta R.T. -0.013 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:248 Resp: 2561

Ion	Ratio	Lower	Upper
248	100		
250	88.5	80.9	121.3
141	113.9	40.5	60.7#

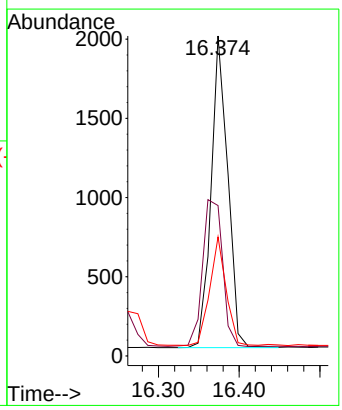


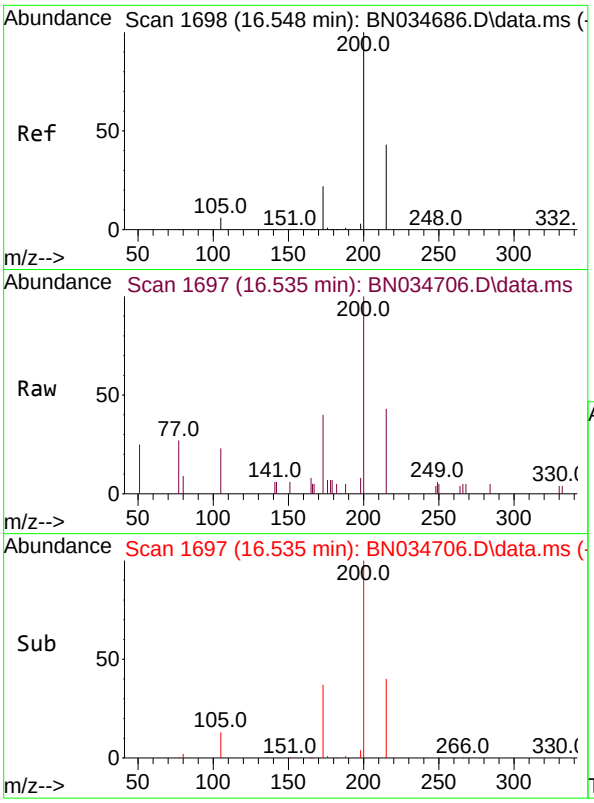


#22
Hexachlorobenzene
Concen: 0.360 ng
RT: 16.374 min Scan# 1684
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:284 Resp: 2810

Ion	Ratio	Lower	Upper
284	100		
142	57.3	43.6	65.4
249	34.1	26.6	40.0



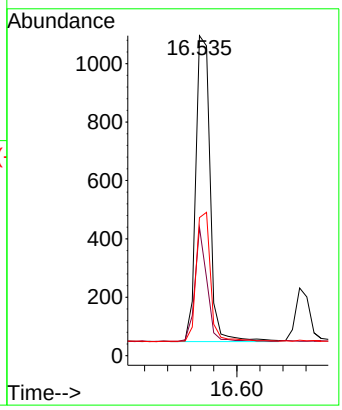


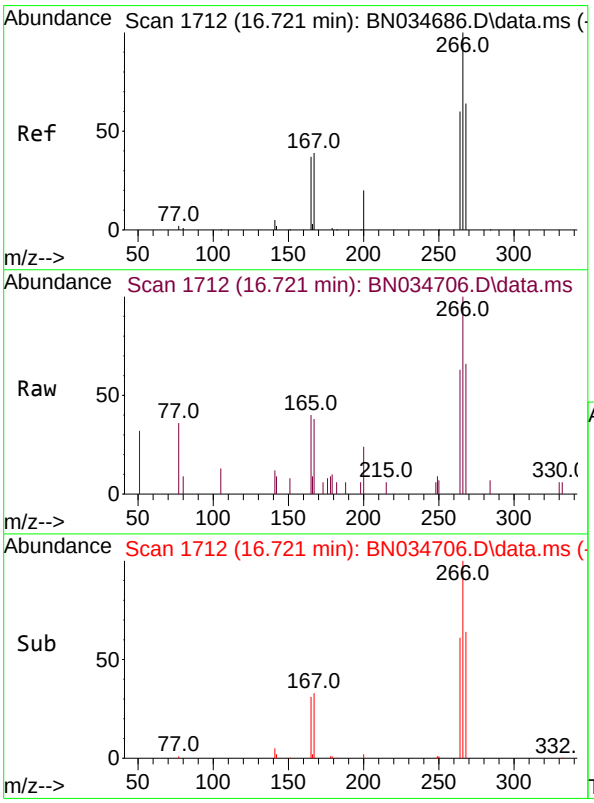
#23
Atrazine
Concen: 0.321 ng
RT: 16.535 min Scan# 1(
Delta R.T. -0.013 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:200 Resp: 1814

Ion	Ratio	Lower	Upper
200	100		
173	40.1	19.7	29.5#
215	43.2	35.7	53.5

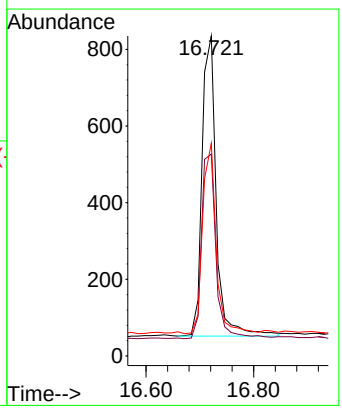


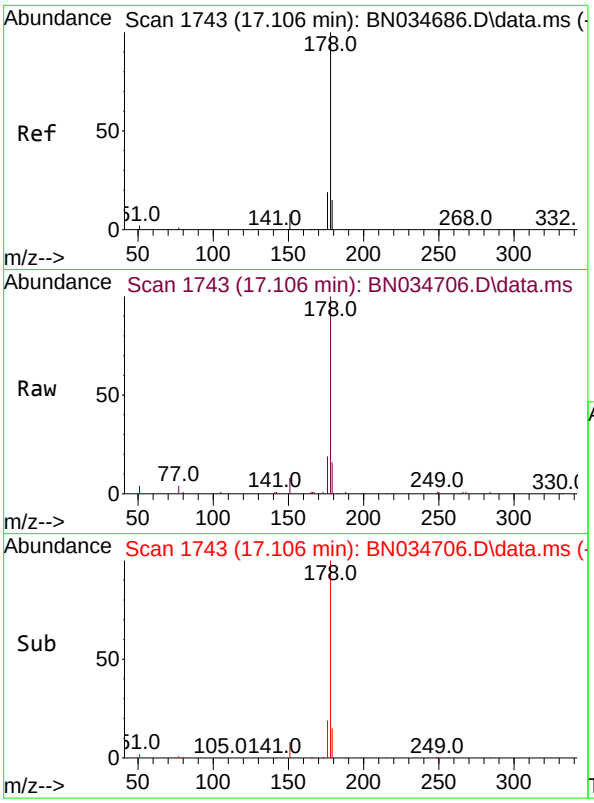


#24
Pentachlorophenol
Concen: 0.518 ng
RT: 16.721 min Scan# 1712
Delta R.T. 0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:266 Resp: 1431

Ion	Ratio	Lower	Upper
266	100		
264	63.0	49.4	74.2
268	60.7	50.5	75.7



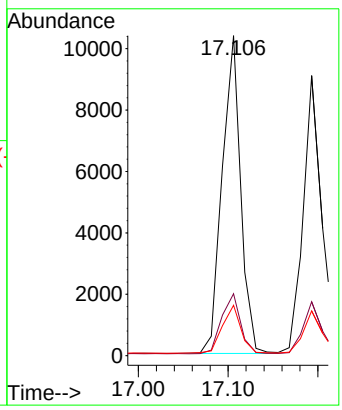


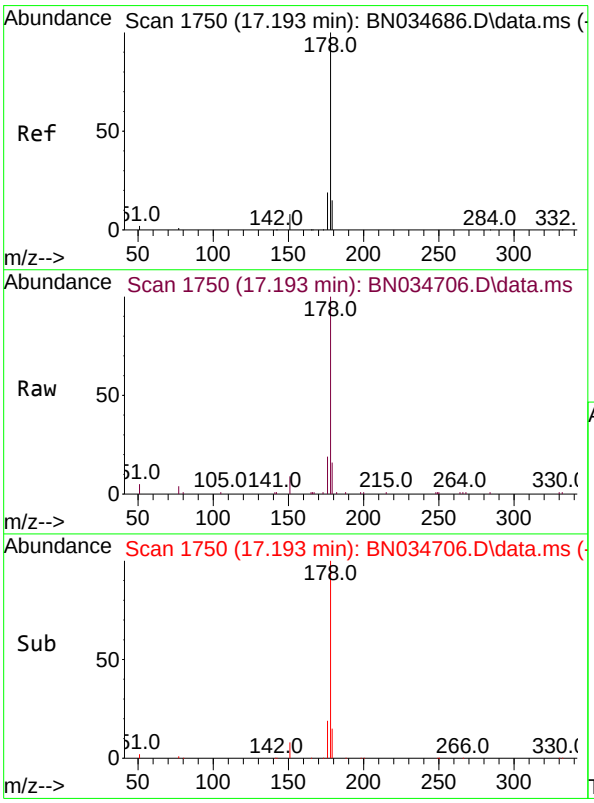
#25
Phenanthrene
Concen: 0.366 ng
RT: 17.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:178 Resp: 14856

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.2
179	15.3	12.2	18.4

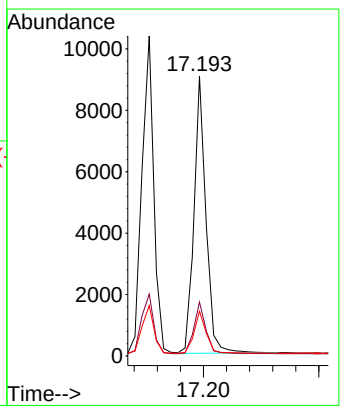


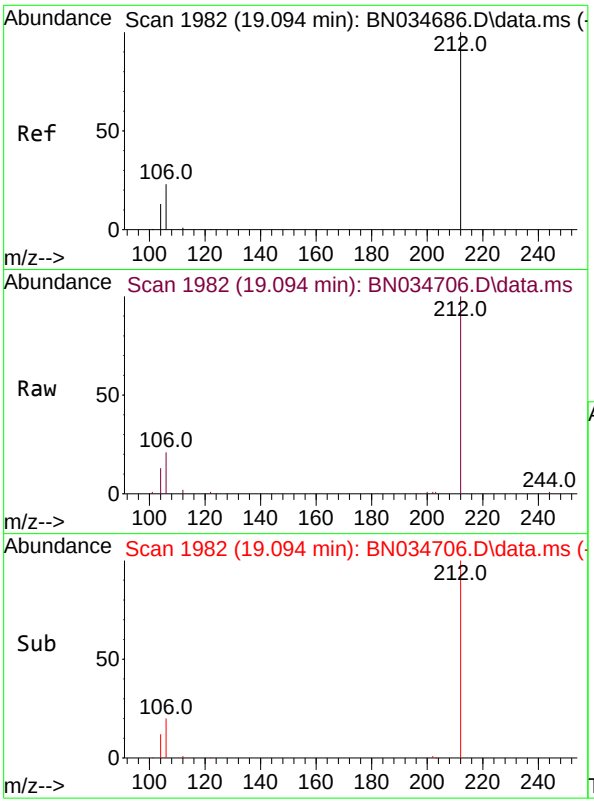


#26
Anthracene
Concen: 0.362 ng
RT: 17.193 min Scan# 1750
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:178 Resp: 13024

Ion	Ratio	Lower	Upper
178	100		
176	18.8	14.9	22.3
179	15.3	12.2	18.2





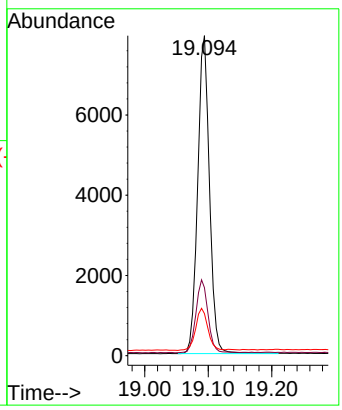
#27
Fluoranthene-d10
Concen: 0.335 ng
RT: 19.094 min Scan# 1

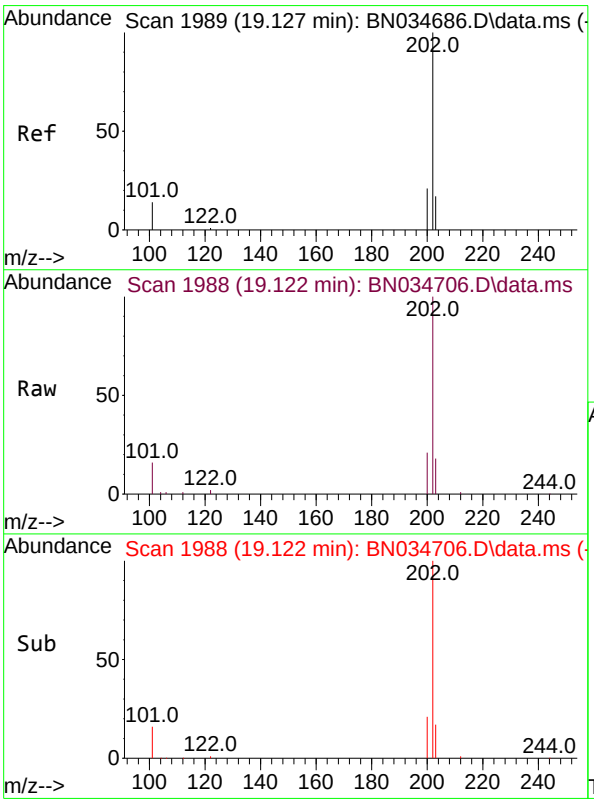
Instrument :
BNA_N
ClientSampleId :
PB164282BS

Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:212 Resp: 10197

Ion	Ratio	Lower	Upper
212	100		
106	23.4	17.8	26.8
104	13.7	10.2	15.4

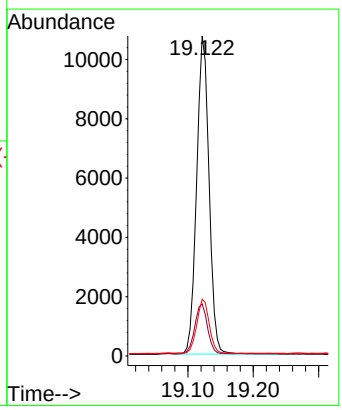


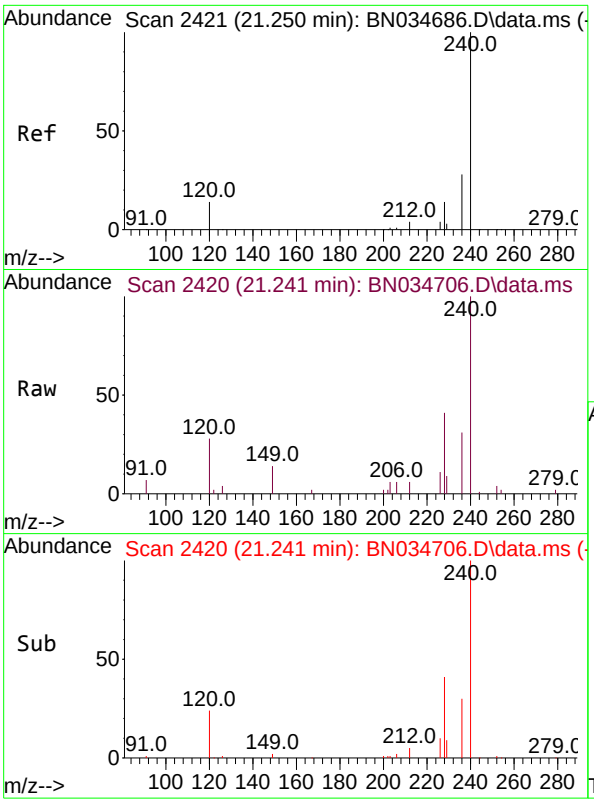


#28
Fluoranthene
Concen: 0.334 ng
RT: 19.122 min Scan# 1988
Delta R.T. -0.005 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:202 Resp: 14119

Ion	Ratio	Lower	Upper
202	100		
101	16.4	12.8	19.2
203	17.0	13.5	20.3



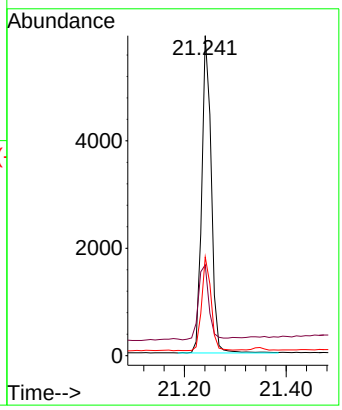


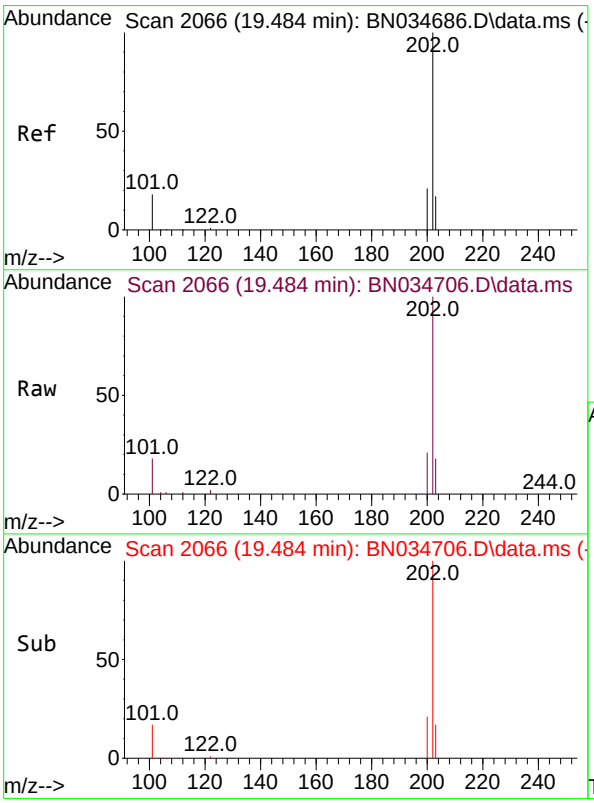
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.241 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:240 Resp: 7661

Ion	Ratio	Lower	Upper
240	100		
120	28.4	14.2	21.2#
236	30.8	23.1	34.7

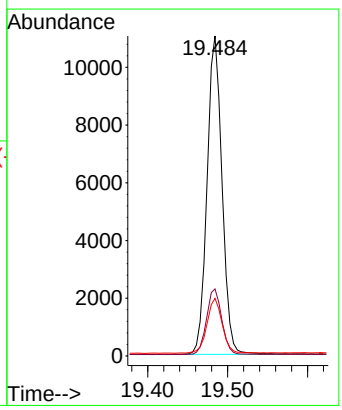


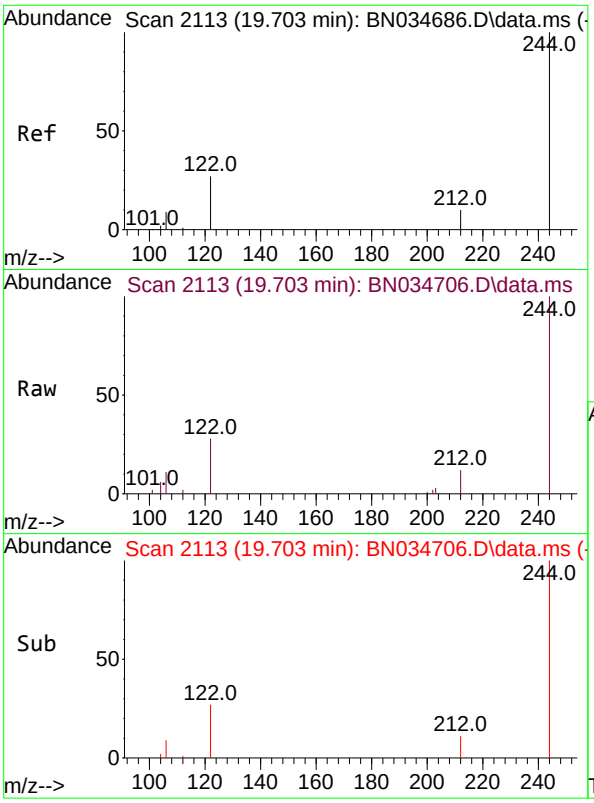


#30
Pyrene
Concen: 0.364 ng
RT: 19.484 min Scan# 2066
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:202 Resp: 14340

Ion	Ratio	Lower	Upper
202	100		
200	21.0	16.6	25.0
203	17.5	14.2	21.4



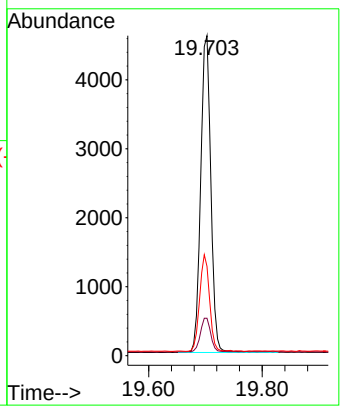


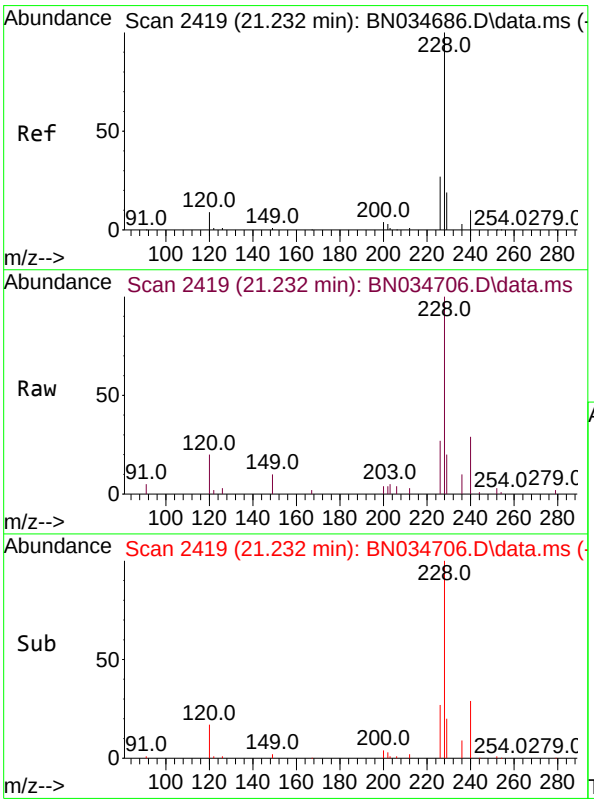
#31
Terphenyl-d14
Concen: 0.364 ng
RT: 19.703 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:244 Resp: 5692

Ion	Ratio	Lower	Upper
244	100		
212	11.7	8.6	13.0
122	27.9	22.3	33.5

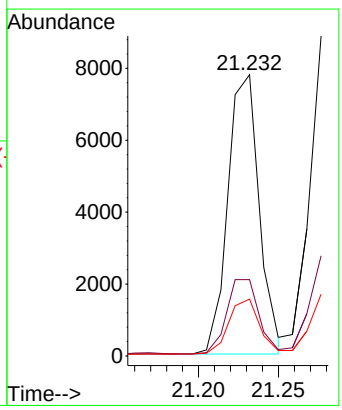


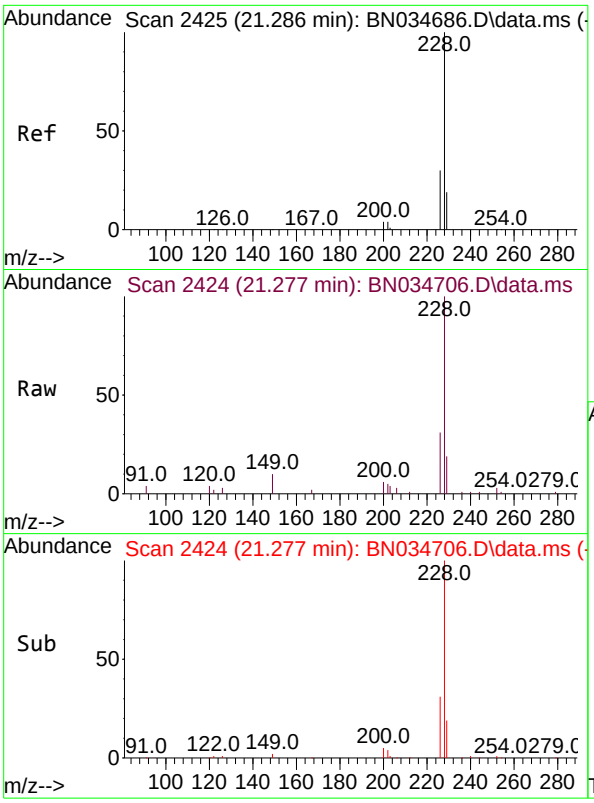


#32
Benzo(a)anthracene
Concen: 0.363 ng
RT: 21.232 min Scan# 2419
Delta R.T. -0.000 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:228 Resp: 10619

Ion	Ratio	Lower	Upper
228	100		
226	27.1	22.0	33.0
229	20.2	15.6	23.4



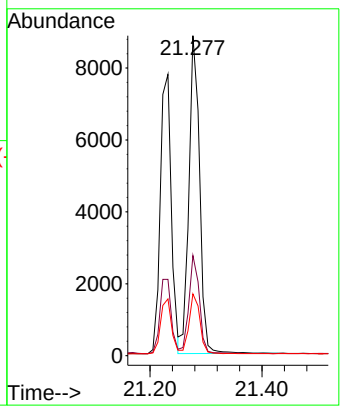


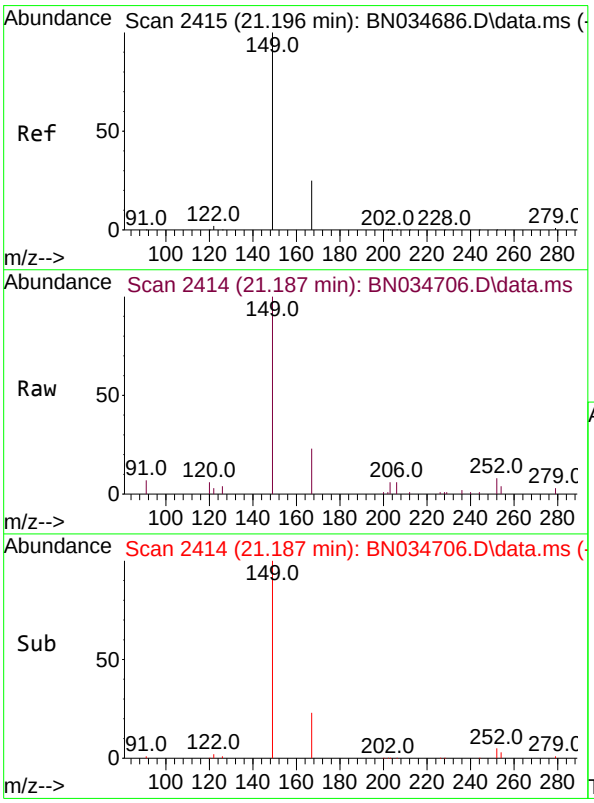
#33
Chrysene
Concen: 0.386 ng
RT: 21.277 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:228 Resp: 11699

Ion	Ratio	Lower	Upper
228	100		
226	31.3	24.1	36.1
229	19.3	15.8	23.8

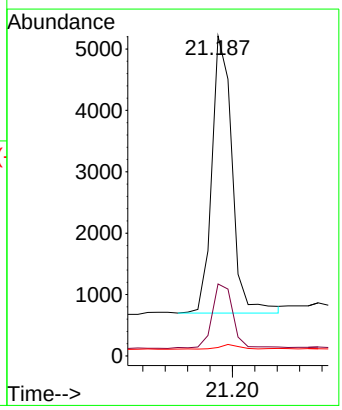


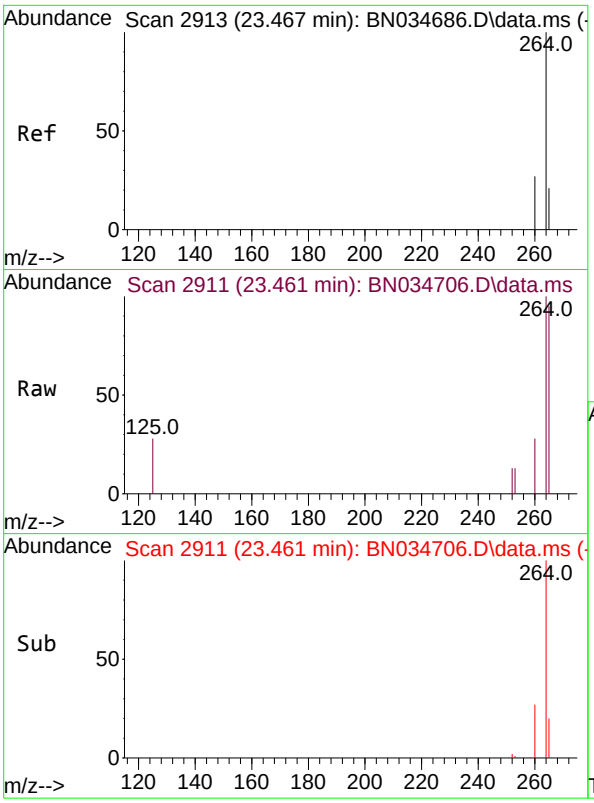


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.341 ng
RT: 21.187 min Scan# 2414
Delta R.T. -0.009 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:149 Resp: 5670

Ion	Ratio	Lower	Upper
149	100		
167	24.5	19.7	29.5
279	1.7	1.8	2.6#



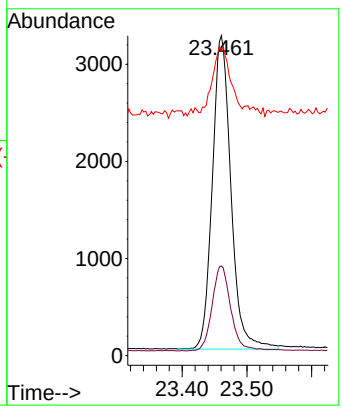


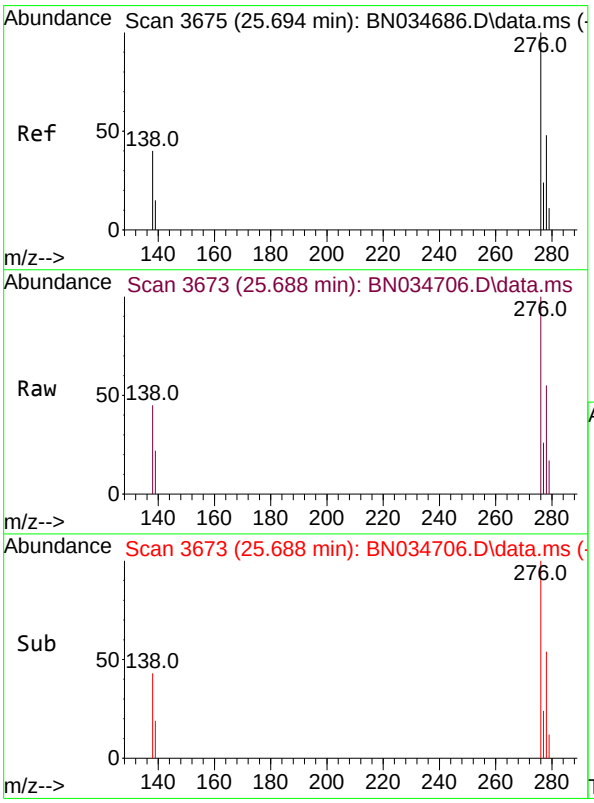
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.461 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:264 Resp: 6455

Ion	Ratio	Lower	Upper
264	100		
260	28.1	21.9	32.9
265	95.5	60.6	91.0#

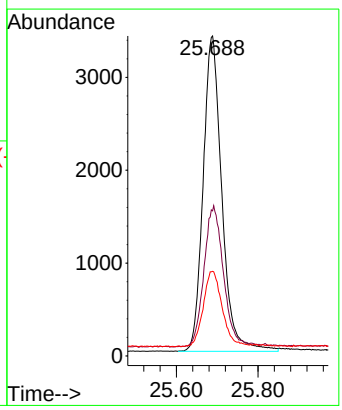


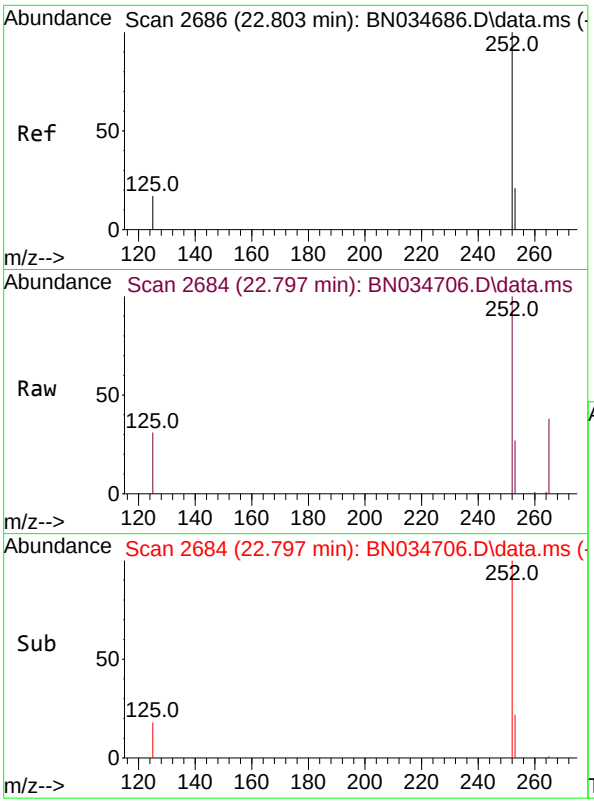


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.435 ng
RT: 25.688 min Scan# 3673
Delta R.T. -0.006 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:276 Resp: 10806

Ion	Ratio	Lower	Upper
276	100		
138	46.0	35.1	52.7
277	24.3	19.7	29.5



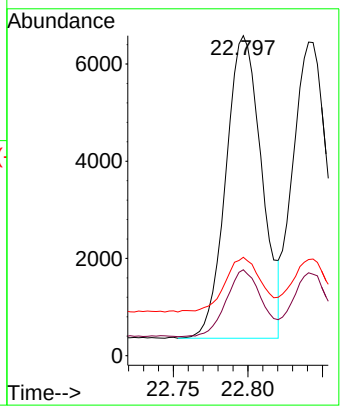


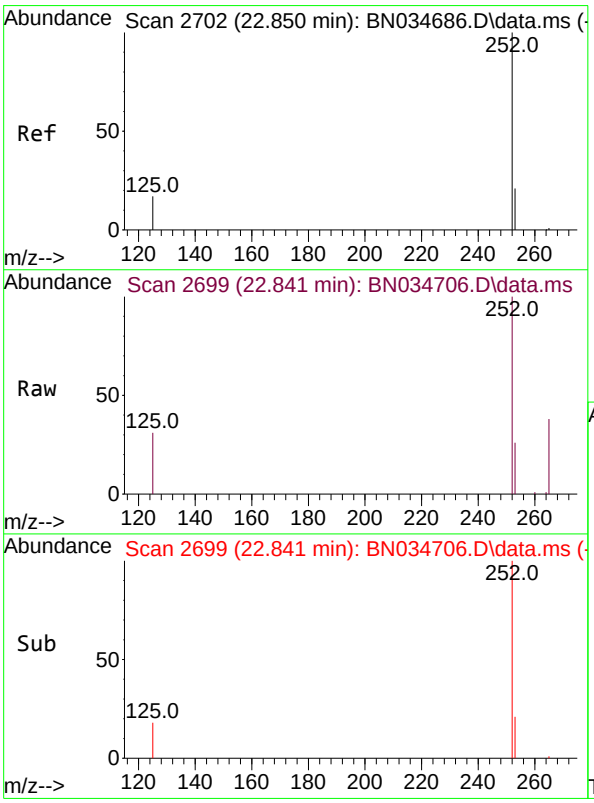
#37
Benzo(b)fluoranthene
Concen: 0.403 ng
RT: 22.797 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:252 Resp: 10399

Ion	Ratio	Lower	Upper
252	100		
253	26.8	20.0	30.0
125	30.7	20.9	31.3

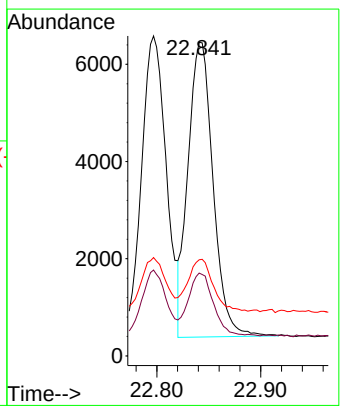


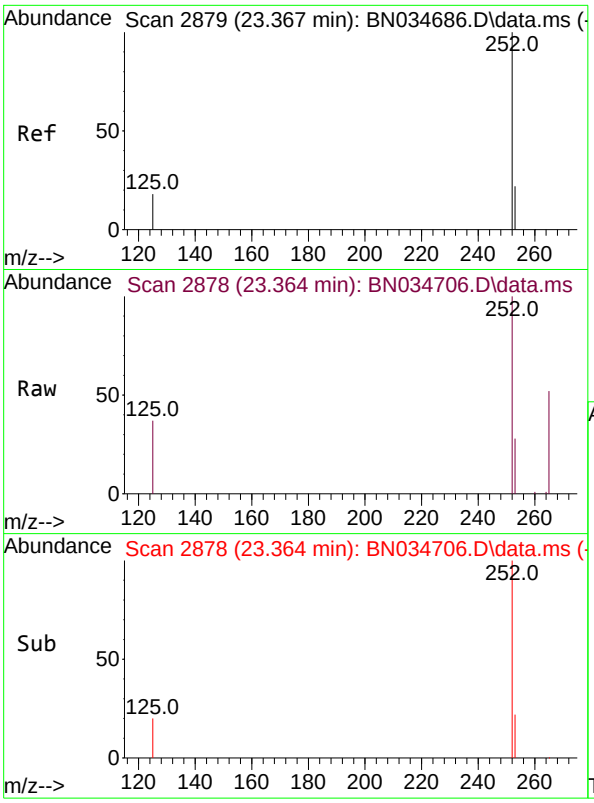


#38
Benzo(k)fluoranthene
Concen: 0.399 ng
RT: 22.841 min Scan# 2699
Delta R.T. -0.009 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:252 Resp: 10151

Ion	Ratio	Lower	Upper
252	100		
253	26.4	20.6	31.0
125	30.7	21.6	32.4



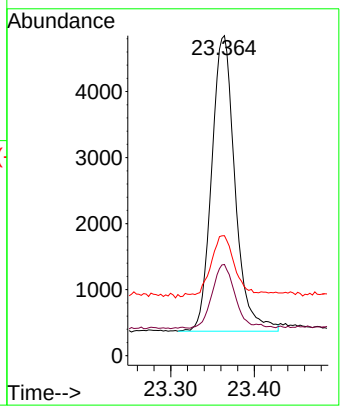


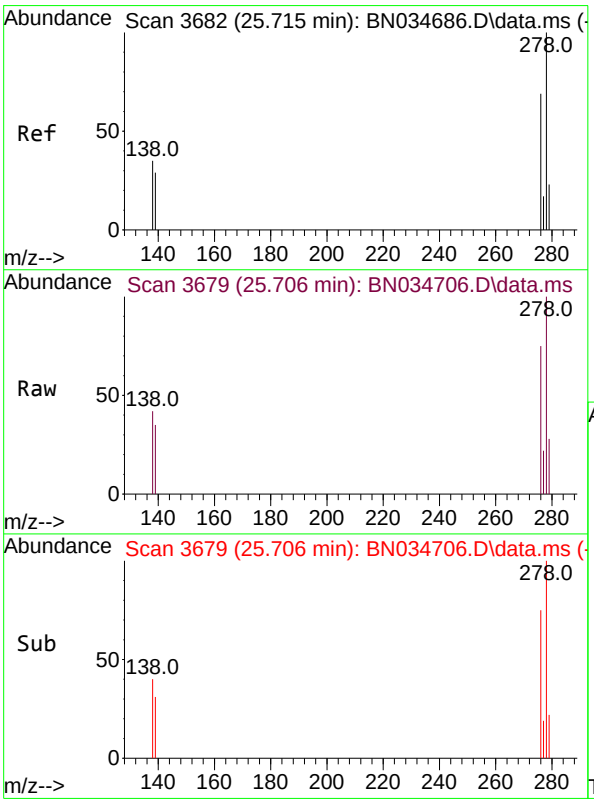
#39
Benzo(a)pyrene
Concen: 0.420 ng
RT: 23.364 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:252 Resp: 8689

Ion	Ratio	Lower	Upper
252	100		
253	28.5	22.2	33.4
125	37.5	26.0	39.0

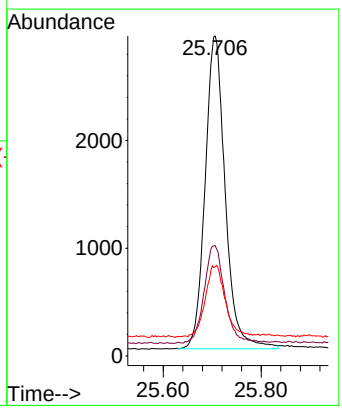


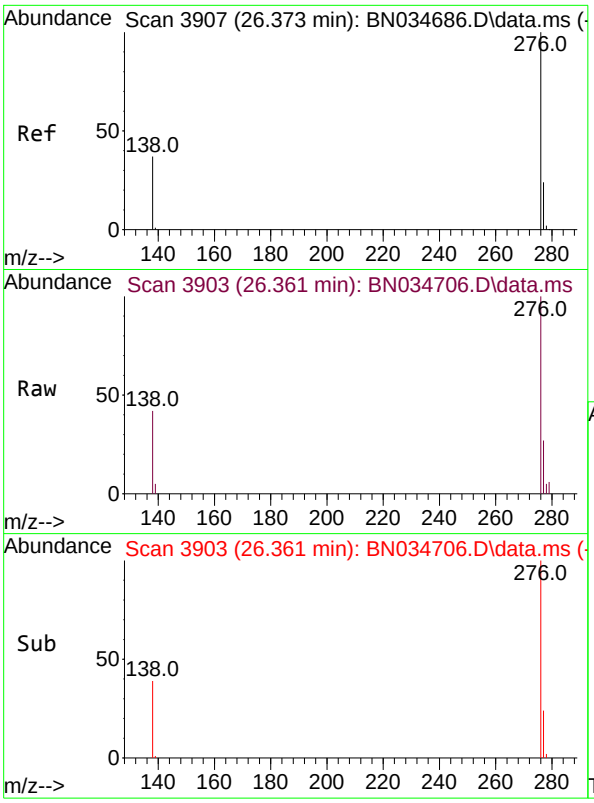


#40
Dibenzo(a,h)anthracene
Concen: 0.422 ng
RT: 25.706 min Scan# 3679
Delta R.T. -0.009 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Tgt Ion:278 Resp: 8269

Ion	Ratio	Lower	Upper
278	100		
139	34.5	25.4	38.2
279	27.9	22.4	33.6



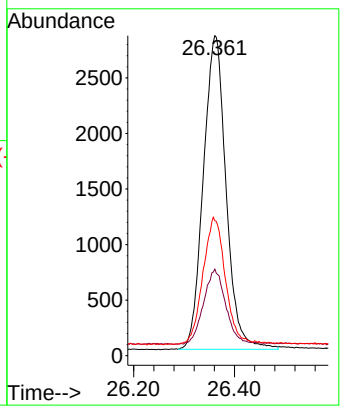


#41
Benzo(g,h,i)perylene
Concen: 0.408 ng
RT: 26.361 min Scan# 3
Delta R.T. -0.012 min
Lab File: BN034706.D
Acq: 25 Oct 2024 00:02

Instrument :
BNA_N
ClientSampleId :
PB164282BS

Tgt Ion:276 Resp: 8830

Ion	Ratio	Lower	Upper
276	100		
277	27.0	21.3	31.9
138	42.2	31.9	47.9



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034711.D
Acq On : 25 Oct 2024 03:02
Operator : RC/JU
Sample : PB164282BSD
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Quant Time: Oct 25 04:20:43 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.712	152	5974	0.400	ng	0.00
7) Naphthalene-d8	10.479	136	16564	0.400	ng	0.00
13) Acenaphthene-d10	14.329	164	7143	0.400	ng	0.00
19) Phenanthrene-d10	17.057	188	13002	0.400	ng	#-0.01
29) Chrysene-d12	21.241	240	7027	0.400	ng	# 0.00
35) Perylene-d12	23.458	264	5873	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.322	112	5283	0.297	ng	0.00
5) Phenol-d6	6.882	99	7080	0.302	ng	0.00
8) Nitrobenzene-d5	8.845	82	4660	0.335	ng	0.00
11) 2-Methylnaphthalene-d10	12.071	152	7875	0.346	ng	0.00
14) 2,4,6-Tribromophenol	15.815	330	521	0.236	ng	0.00
15) 2-Fluorobiphenyl	12.950	172	10106	0.356	ng	0.00
27) Fluoranthene-d10	19.094	212	9709	0.332	ng	0.00
31) Terphenyl-d14	19.703	244	5323	0.371	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.285	88	2435	0.306	ng	# 53
3) n-Nitrosodimethylamine	3.581	42	4293	0.371	ng	96
6) bis(2-Chloroethyl)ether	7.142	93	6795	0.357	ng	99
9) Naphthalene	10.532	128	15953	0.348	ng	99
10) Hexachlorobutadiene	10.831	225	2383	0.347	ng	# 97
12) 2-Methylnaphthalene	12.143	142	9409	0.331	ng	98
16) Acenaphthylene	14.040	152	12085	0.352	ng	99
17) Acenaphthene	14.382	154	7997	0.338	ng	98
18) Fluorene	15.377	166	9417	0.323	ng	100
20) 4,6-Dinitro-2-methylph...	15.441	198	532	0.294	ng	# 60
21) 4-Bromophenyl-phenylether	16.262	248	2358	0.340	ng	# 62
22) Hexachlorobenzene	16.374	284	2677	0.356	ng	98
23) Atrazine	16.535	200	1782	0.327	ng	# 89
24) Pentachlorophenol	16.721	266	1302	0.490	ng	99
25) Phenanthrene	17.106	178	14207	0.364	ng	100
26) Anthracene	17.193	178	12435	0.359	ng	100
28) Fluoranthene	19.122	202	13425	0.329	ng	100
30) Pyrene	19.484	202	13610	0.377	ng	99
32) Benzo(a)anthracene	21.232	228	9893	0.369	ng	99
33) Chrysene	21.277	228	11013	0.396	ng	98
34) Bis(2-ethylhexyl)phtha...	21.187	149	5309	0.349	ng	# 96
36) Indeno(1,2,3-cd)pyrene	25.683	276	9709	0.429	ng	96
37) Benzo(b)fluoranthene	22.797	252	9630	0.411	ng	94
38) Benzo(k)fluoranthene	22.797	252	9630	0.416	ng	95
39) Benzo(a)pyrene	23.367	252	8133	0.432	ng	# 93
40) Dibenzo(a,h)anthracene	25.703	278	7436	0.417	ng	96
41) Benzo(g,h,i)perylene	26.364	276	7954	0.404	ng	97

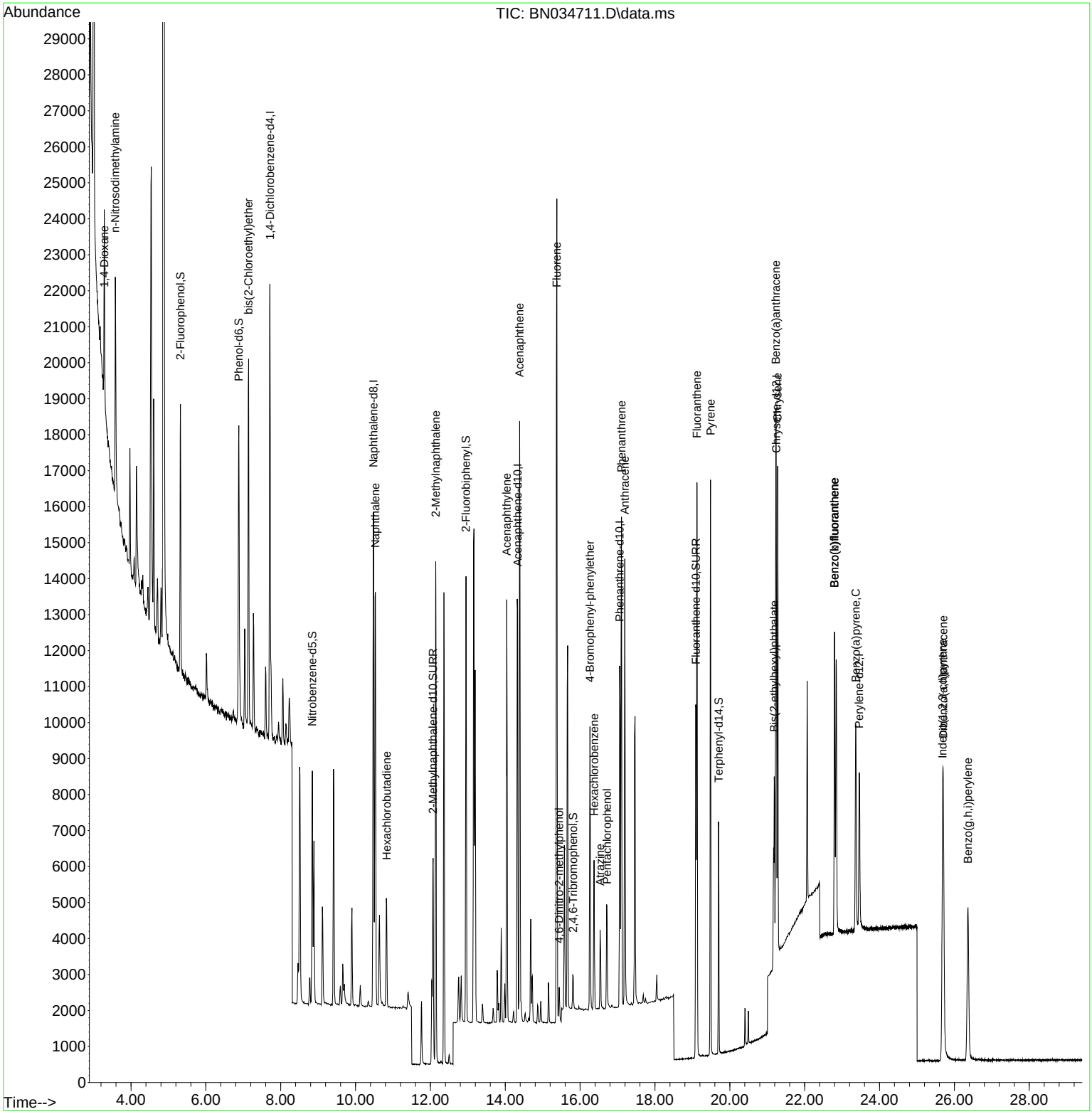
(#) = qualifier out of range (m) = manual integration (+) = signals summed

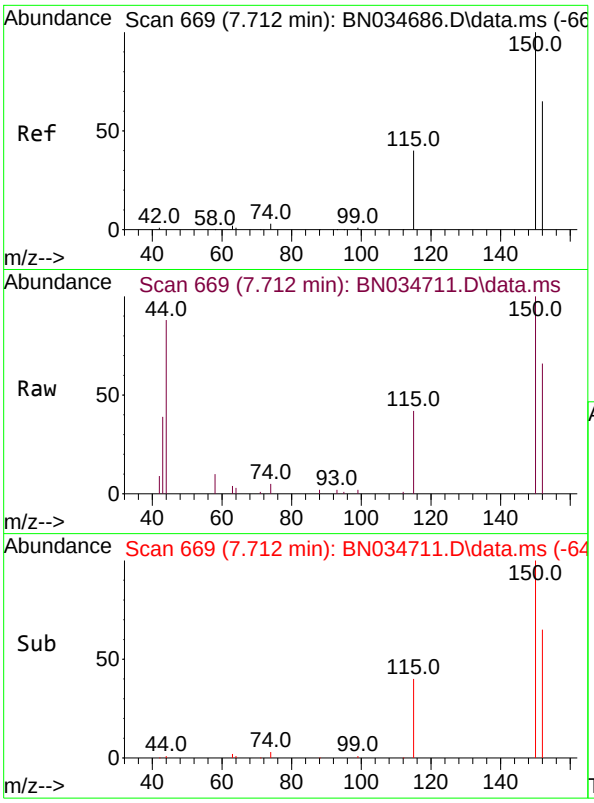
Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN102424\
Data File : BN034711.D
Acq On : 25 Oct 2024 03:02
Operator : RC/JU
Sample : PB164282BSD
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Quant Time: Oct 25 04:20:43 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN102424.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 24 13:17:02 2024
Response via : Initial Calibration



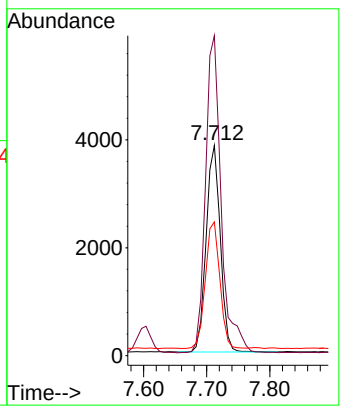


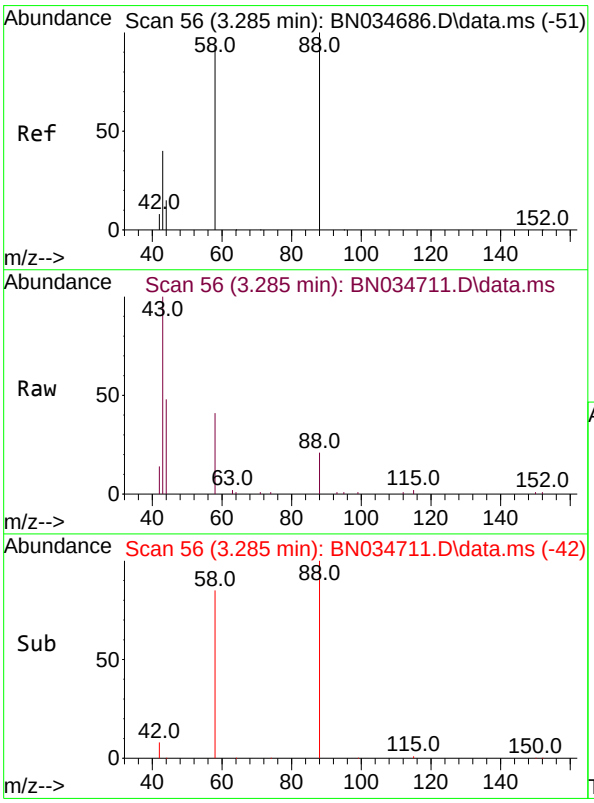
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:152 Resp: 5974

Ion	Ratio	Lower	Upper
152	100		
150	152.2	122.7	184.1
115	63.6	51.0	76.6

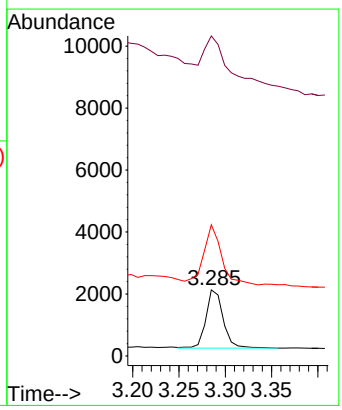


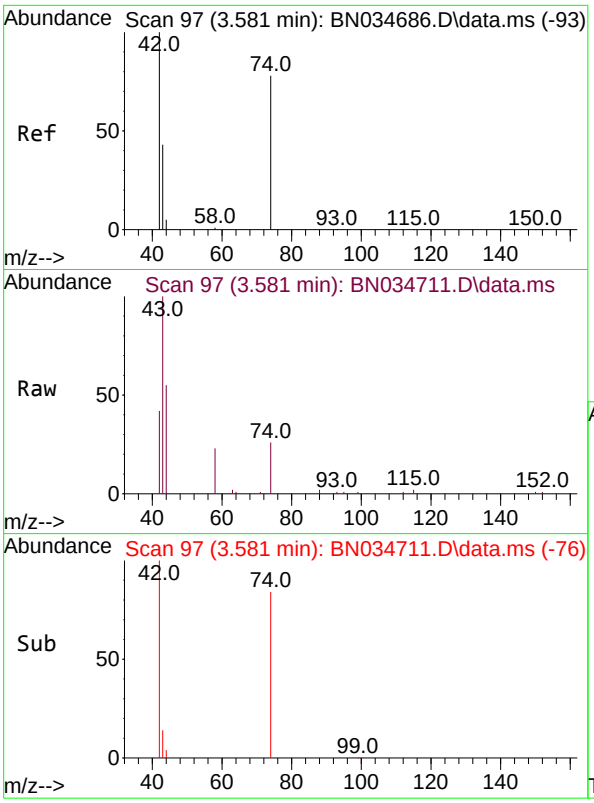


#2
1,4-Dioxane
Concen: 0.306 ng
RT: 3.285 min Scan# 56
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion: 88 Resp: 2435

Ion	Ratio	Lower	Upper
88	100		
43	114.0	32.1	48.1#
58	107.2	73.7	110.5



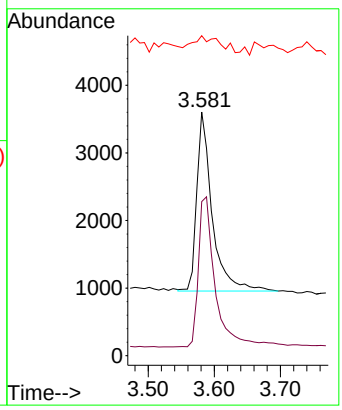


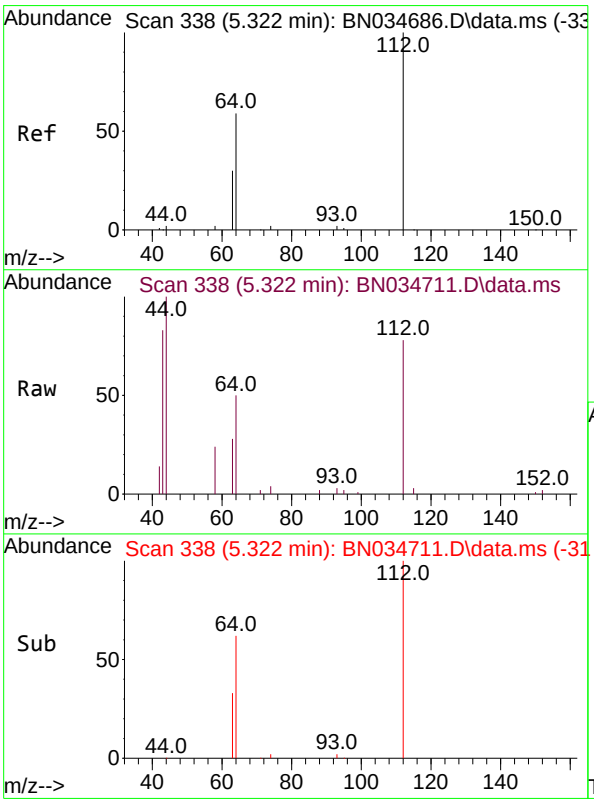
#3
n-Nitrosodimethylamine
Concen: 0.371 ng
RT: 3.581 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion: 42 Resp: 4293

Ion	Ratio	Lower	Upper
42	100		
74	92.4	77.2	115.8
44	15.0	13.4	20.2

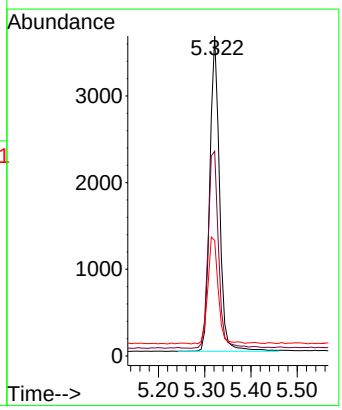


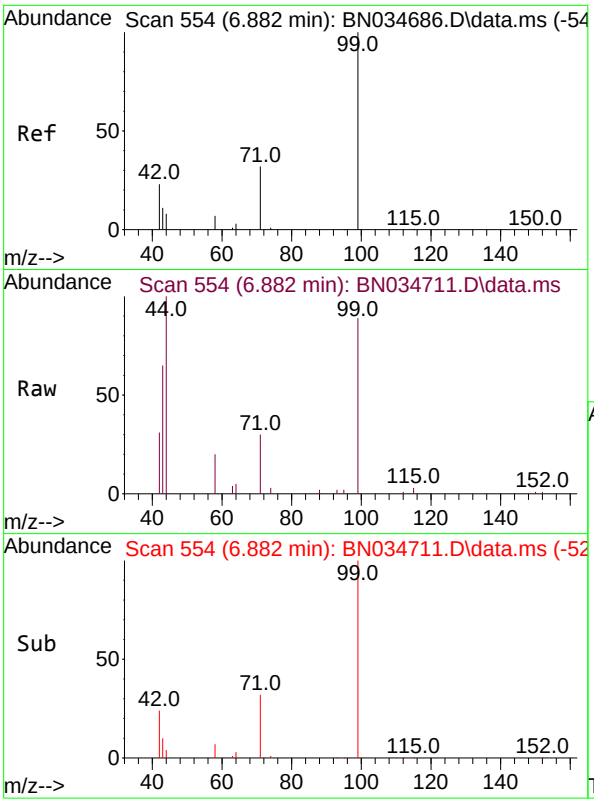


#4
2-Fluorophenol
Concen: 0.297 ng
RT: 5.322 min Scan# 338
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:112 Resp: 5283

Ion	Ratio	Lower	Upper
112	100		
64	67.3	53.0	79.6
63	35.9	27.6	41.4



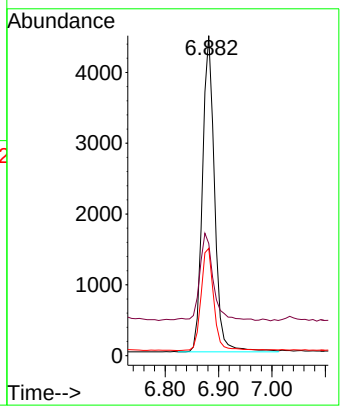


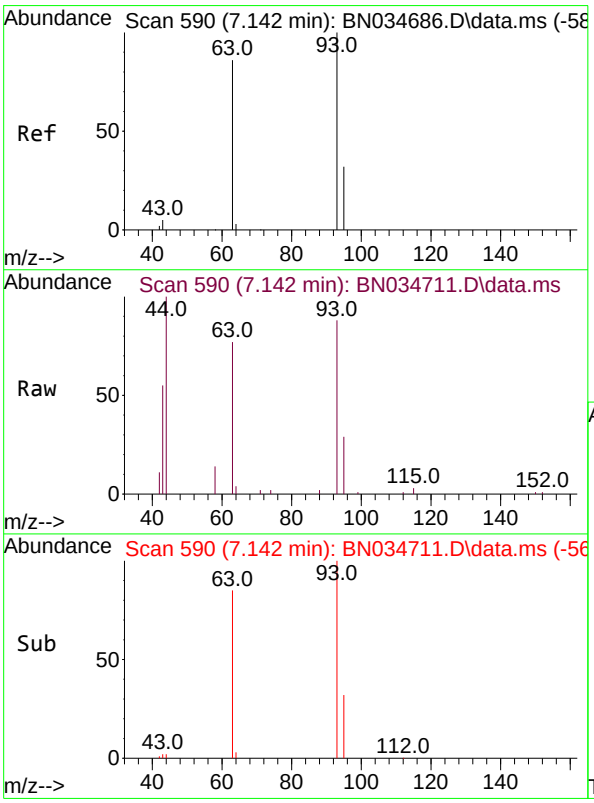
#5
Phenol-d6
Concen: 0.302 ng
RT: 6.882 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion: 99 Resp: 7080

Ion	Ratio	Lower	Upper
99	100		
42	30.9	21.8	32.8
71	33.8	26.6	40.0

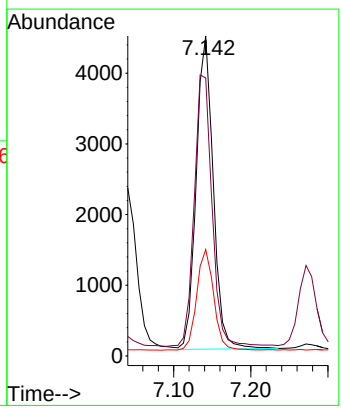


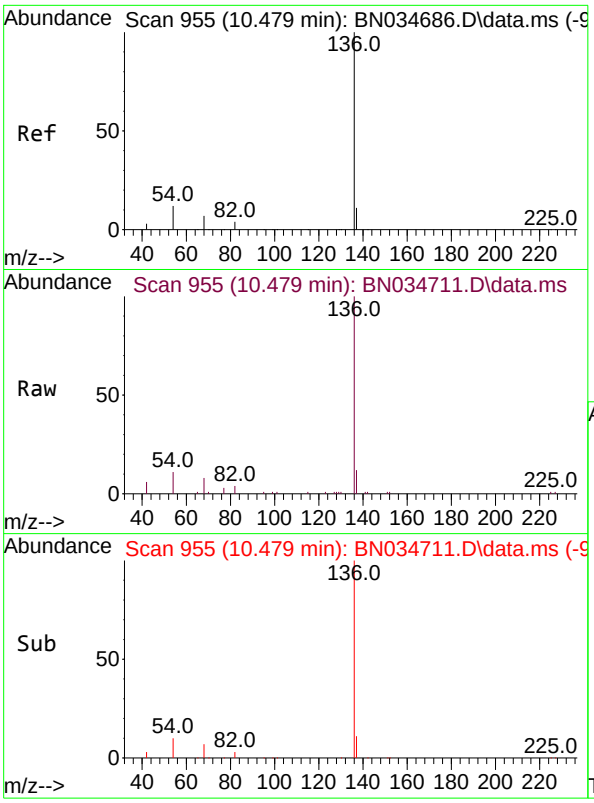


#6
bis(2-Chloroethyl)ether
Concen: 0.357 ng
RT: 7.142 min Scan# 590
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion: 93 Resp: 6795

Ion	Ratio	Lower	Upper
93	100		
63	90.5	71.5	107.3
95	32.1	25.8	38.6



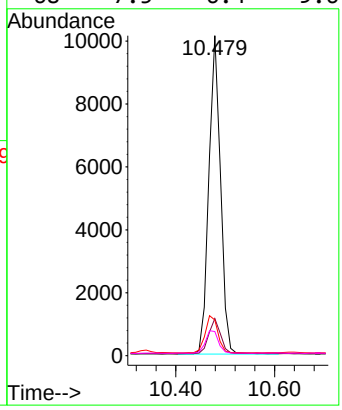


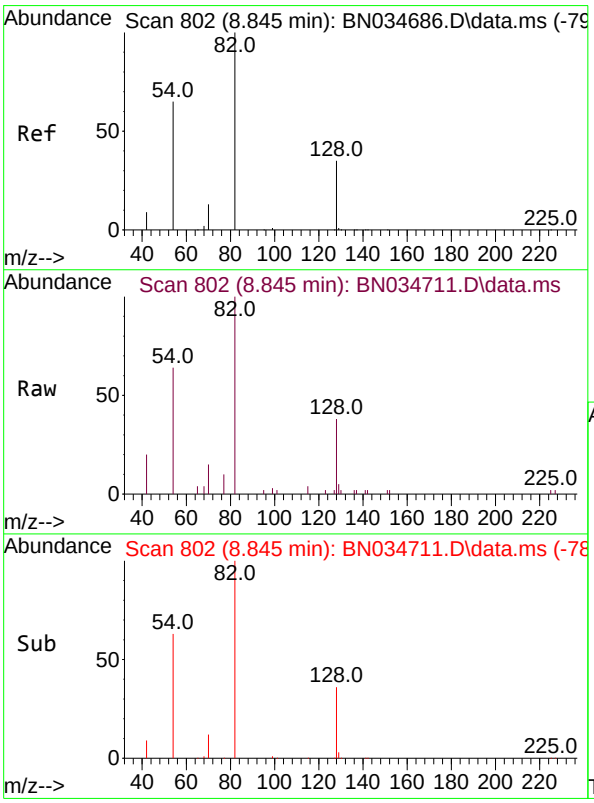
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.479 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:136 Resp: 16564

Ion	Ratio	Lower	Upper
136	100		
137	11.6	9.1	13.7
54	11.1	9.8	14.8
68	7.5	6.4	9.6

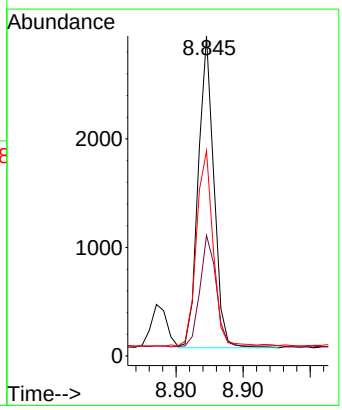


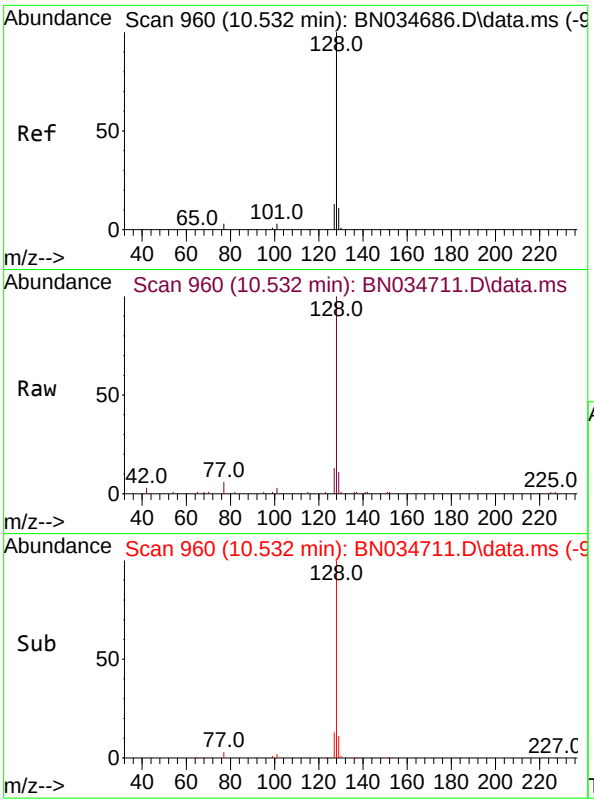


#8
Nitrobenzene-d5
Concen: 0.335 ng
RT: 8.845 min Scan# 802
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion: 82 Resp: 4660

Ion	Ratio	Lower	Upper
82	100		
128	37.7	29.7	44.5
54	64.1	53.0	79.6



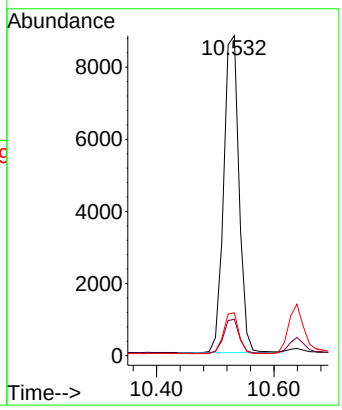


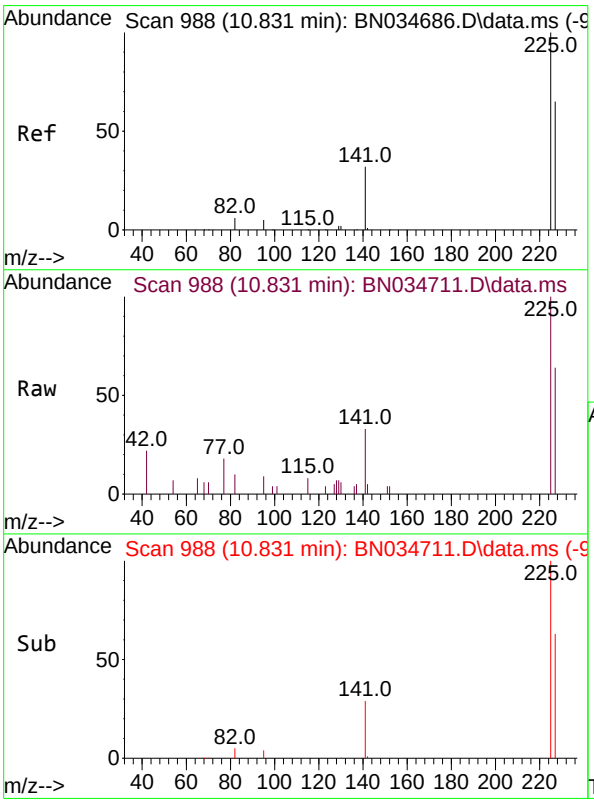
#9
Naphthalene
Concen: 0.348 ng
RT: 10.532 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:128 Resp: 15953

Ion	Ratio	Lower	Upper
128	100		
129	11.4	9.0	13.6
127	13.4	10.5	15.7

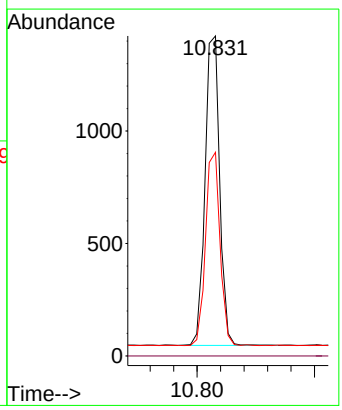


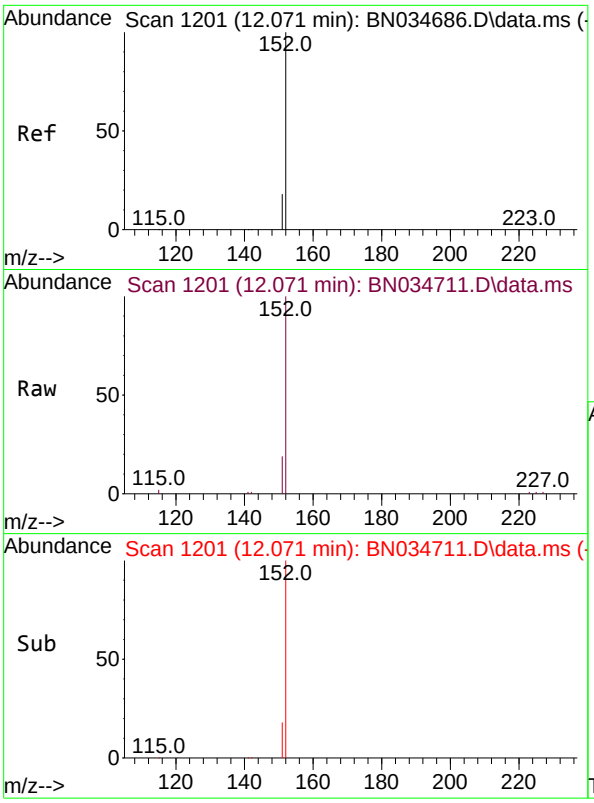


#10
Hexachlorobutadiene
Concen: 0.347 ng
RT: 10.831 min Scan# 988
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:225 Resp: 2383

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	62.1	51.4	77.0



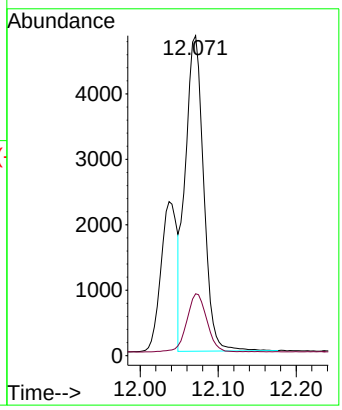


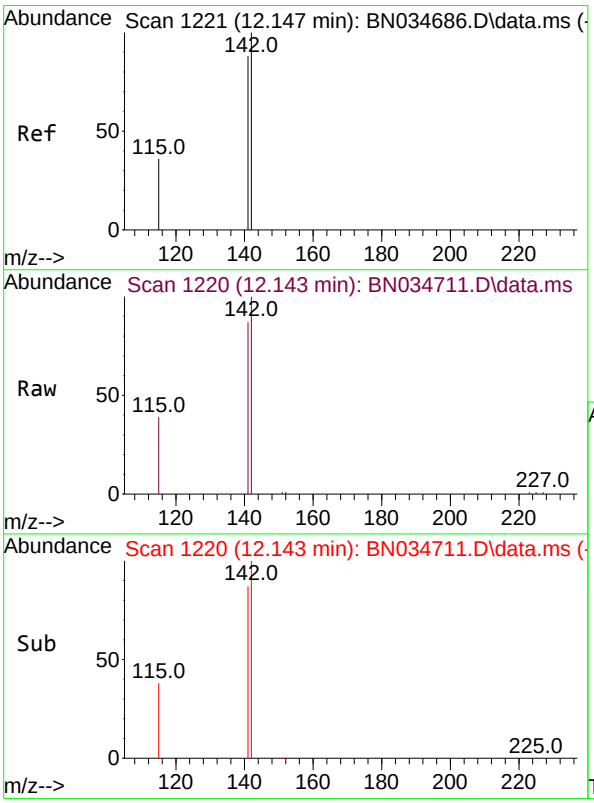
#11
2-Methylnaphthalene-d10
Concen: 0.346 ng
RT: 12.071 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:152 Resp: 7875

Ion	Ratio	Lower	Upper
152	100		
151	20.3	16.7	25.1

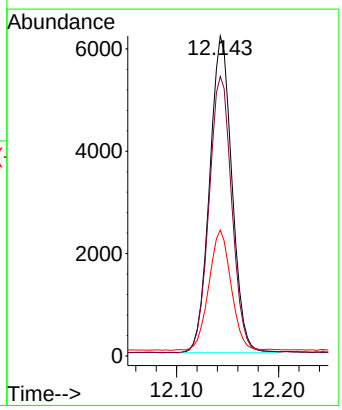


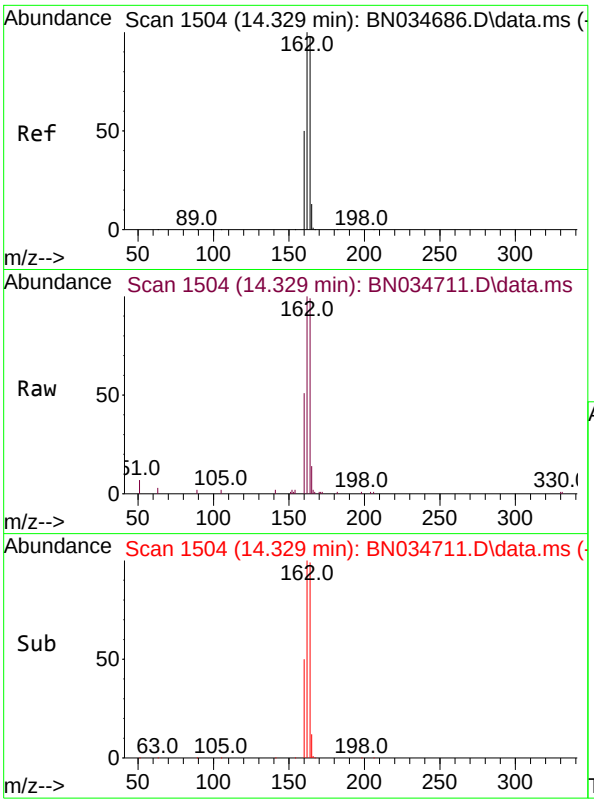


#12
2-Methylnaphthalene
Concen: 0.331 ng
RT: 12.143 min Scan# 1220
Delta R.T. -0.004 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:142 Resp: 9409

Ion	Ratio	Lower	Upper
142	100		
141	87.4	70.4	105.6
115	39.3	29.8	44.6



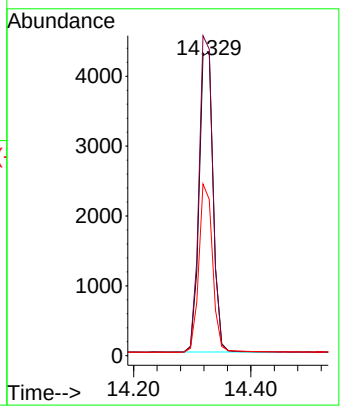


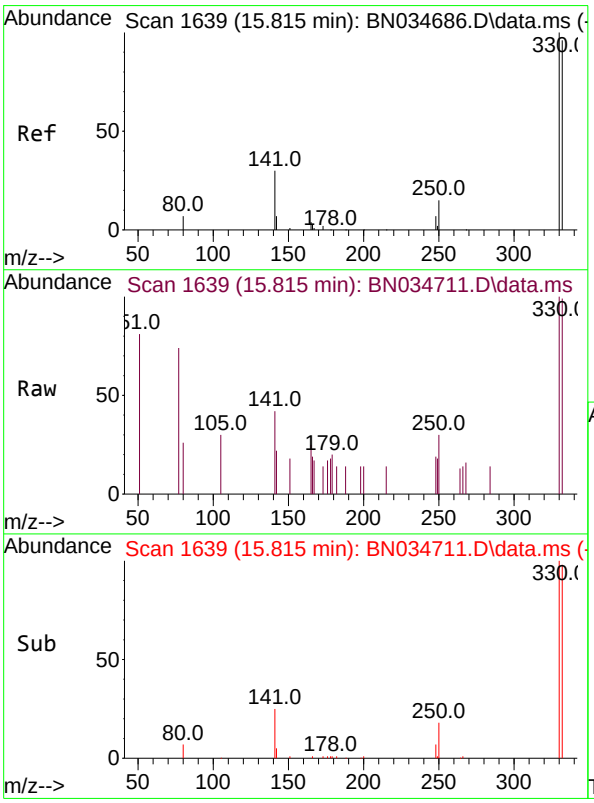
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.329 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:164 Resp: 7143

Ion	Ratio	Lower	Upper
164	100		
162	100.9	81.4	122.0
160	51.4	40.6	61.0

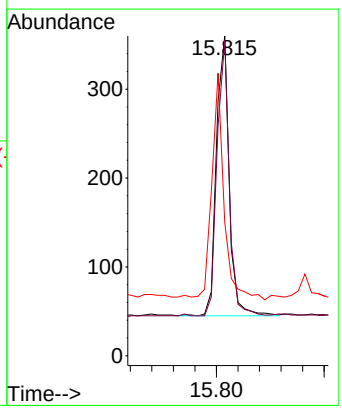


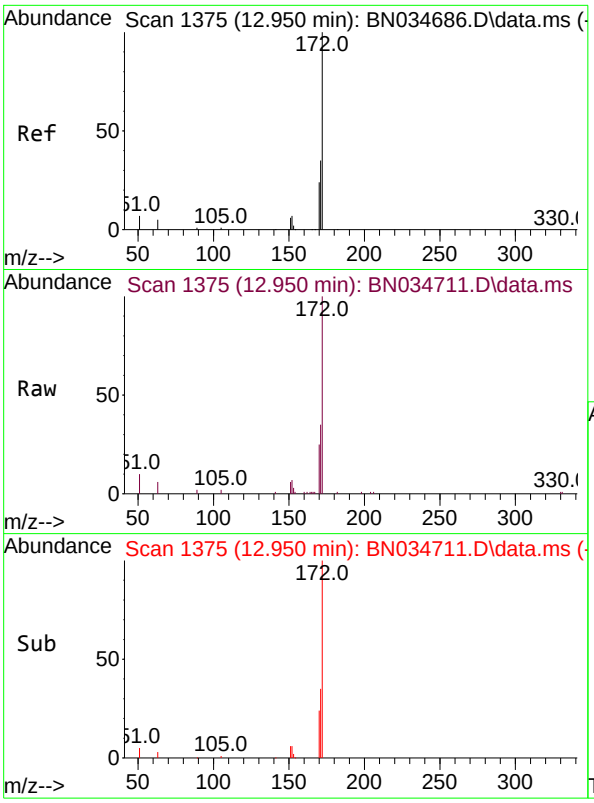


#14
2,4,6-Tribromophenol
Concen: 0.236 ng
RT: 15.815 min Scan# 1639
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:330 Resp: 521

Ion	Ratio	Lower	Upper
330	100		
332	93.5	76.6	115.0
141	77.7	54.6	81.8



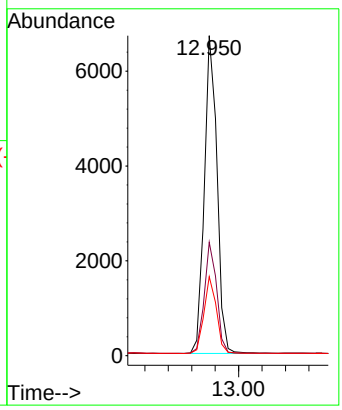


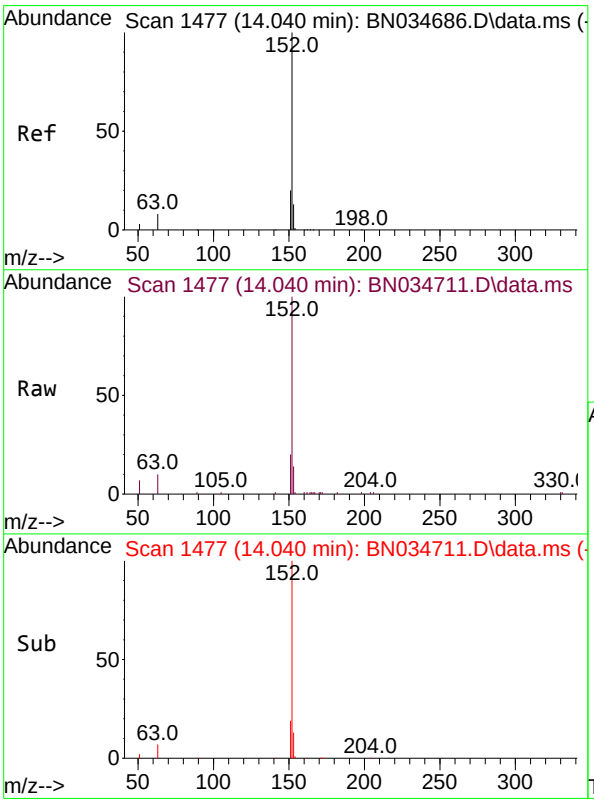
#15
2-Fluorobiphenyl
Concen: 0.356 ng
RT: 12.950 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:172 Resp: 10106

Ion	Ratio	Lower	Upper
172	100		
171	35.5	28.3	42.5
170	24.7	19.8	29.6

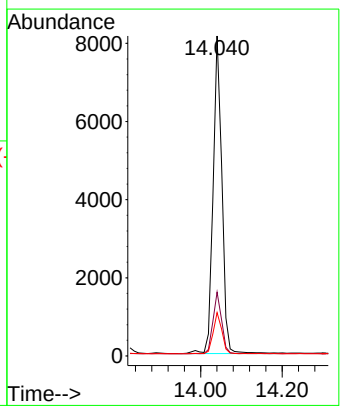


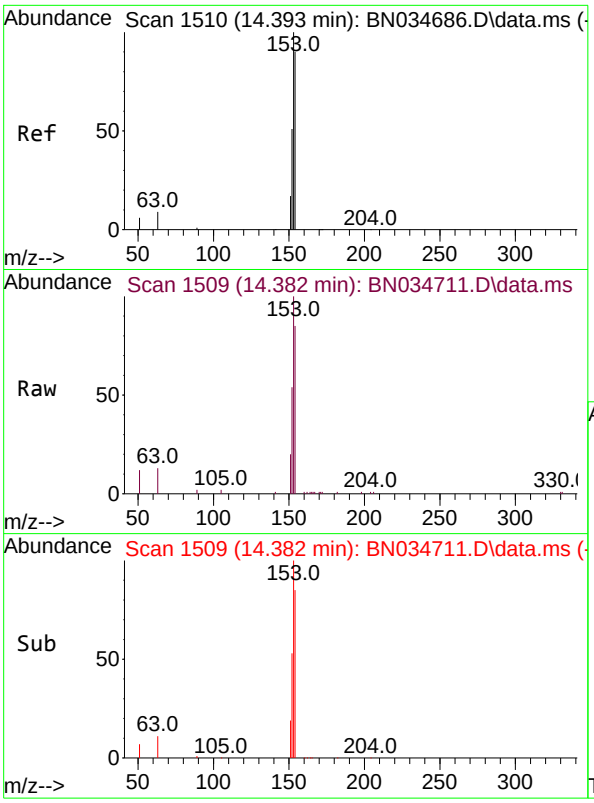


#16
Acenaphthylene
Concen: 0.352 ng
RT: 14.040 min Scan# 1477
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:152 Resp: 12085

Ion	Ratio	Lower	Upper
152	100		
151	19.1	15.6	23.4
153	12.9	10.6	15.8



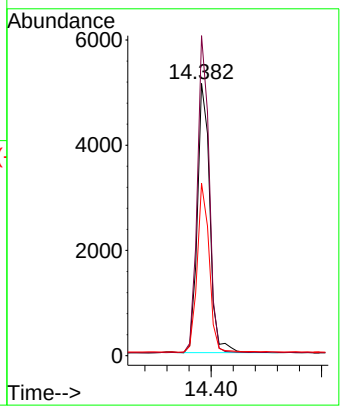


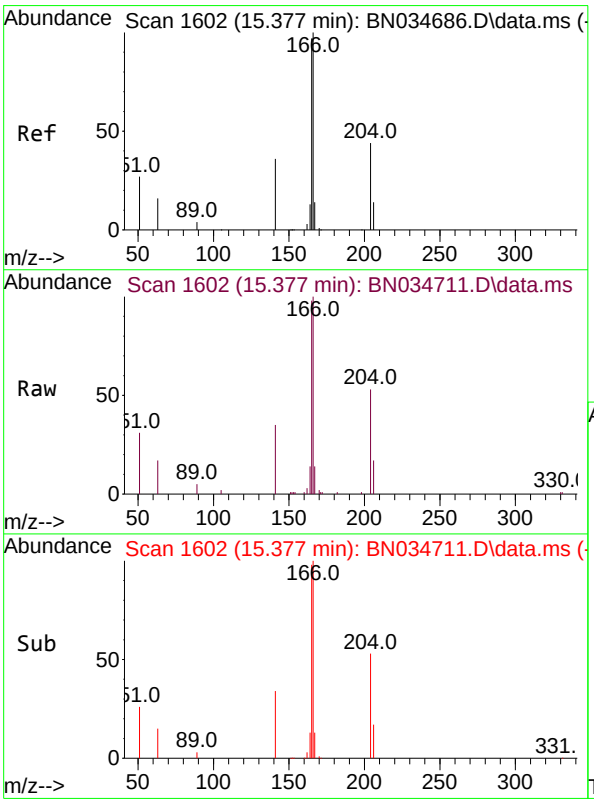
#17
Acenaphthene
Concen: 0.338 ng
RT: 14.382 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:154 Resp: 7997

Ion	Ratio	Lower	Upper
154	100		
153	111.9	88.2	132.2
152	60.7	46.9	70.3

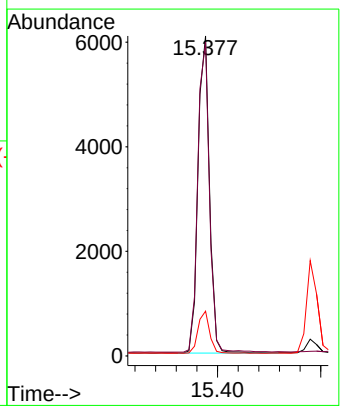


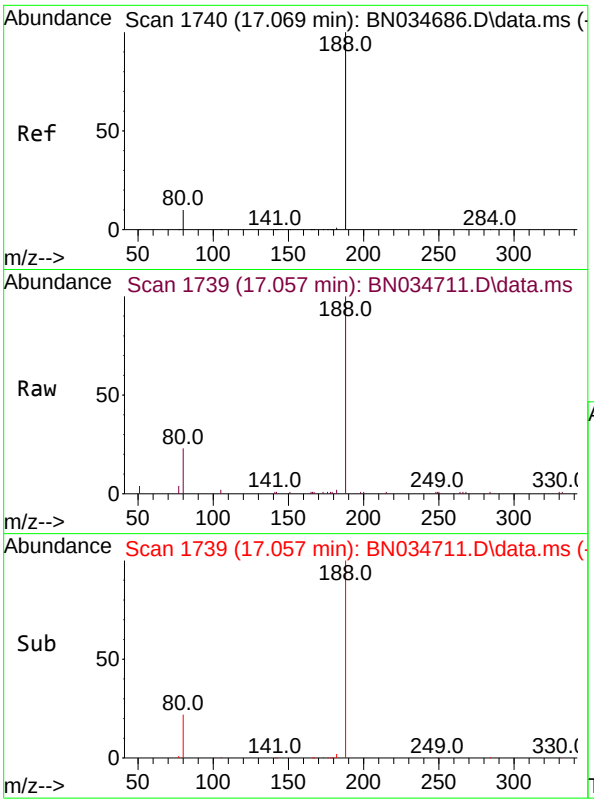


#18
Fluorene
Concen: 0.323 ng
RT: 15.377 min Scan# 1602
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:166 Resp: 9417

Ion	Ratio	Lower	Upper
166	100		
165	98.4	78.8	118.2
167	13.2	10.6	16.0



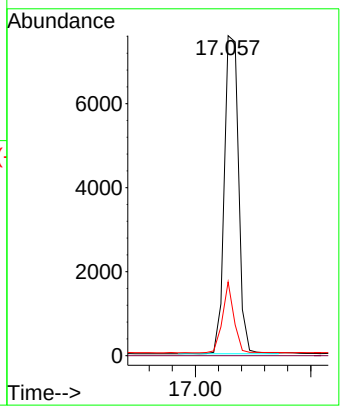


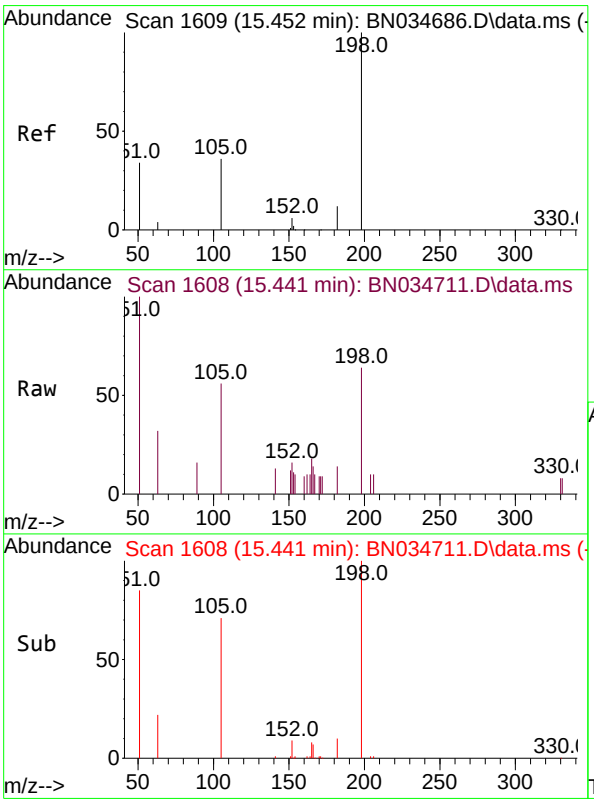
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.057 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:188 Resp: 13002

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	23.0	8.9	13.3#

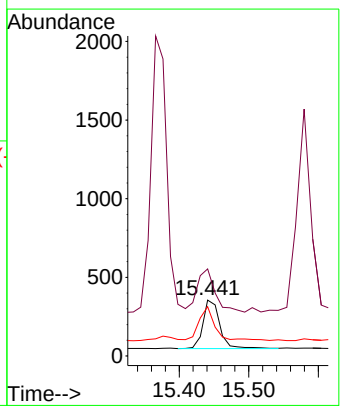


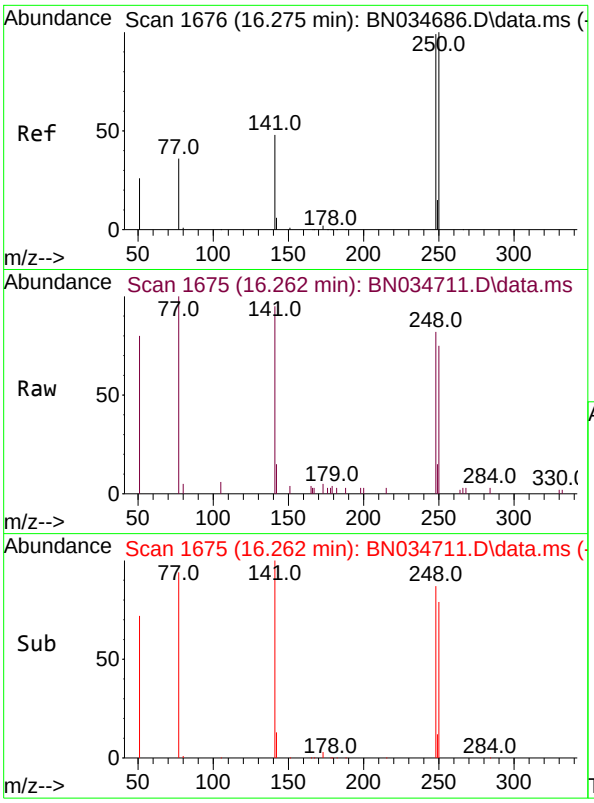


#20
4,6-Dinitro-2-methylphenol
Concen: 0.294 ng
RT: 15.441 min Scan# 1608
Delta R.T. -0.011 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:198 Resp: 532

Ion	Ratio	Lower	Upper
198	100		
51	156.1	91.8	137.8#
105	88.2	44.3	66.5#



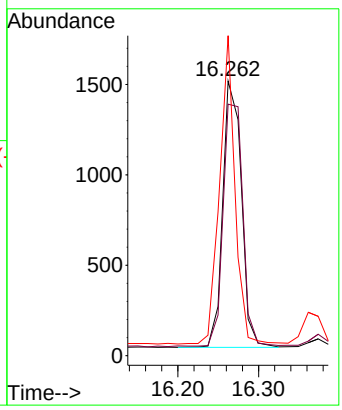


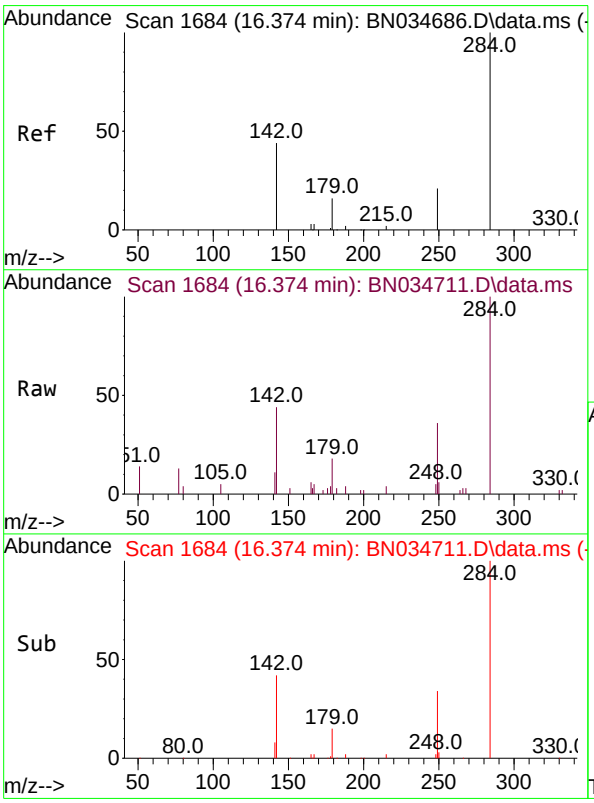
#21
4-Bromophenyl-phenylether
Concen: 0.340 ng
RT: 16.262 min Scan# 1(
Delta R.T. -0.012 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:248 Resp: 2358

Ion	Ratio	Lower	Upper
248	100		
250	91.6	80.9	121.3
141	116.5	40.5	60.7#

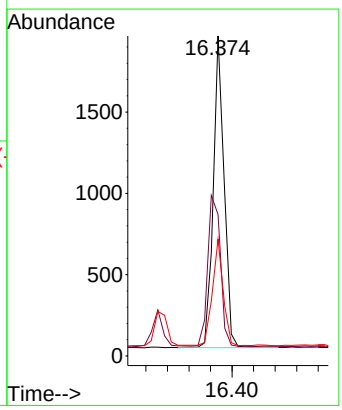


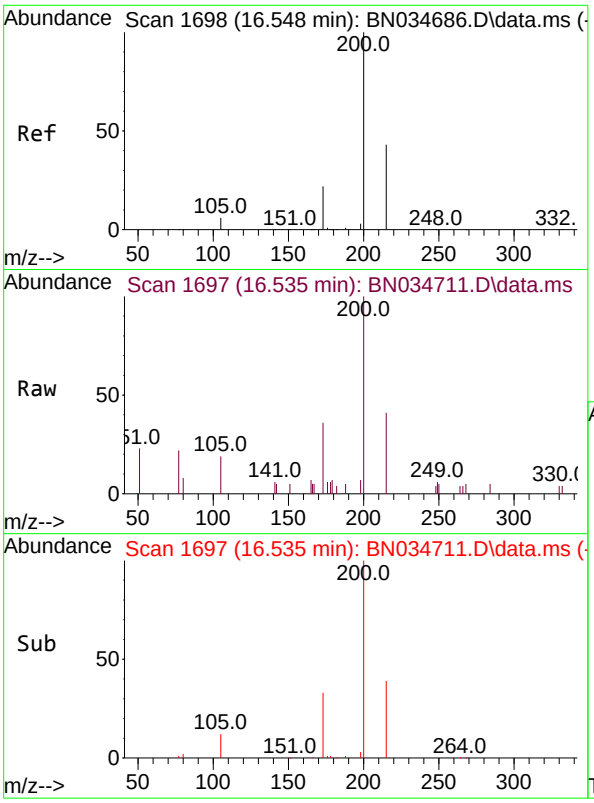


#22
Hexachlorobenzene
Concen: 0.356 ng
RT: 16.374 min Scan# 1684
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:284 Resp: 2677

Ion	Ratio	Lower	Upper
284	100		
142	56.9	43.6	65.4
249	33.8	26.6	40.0



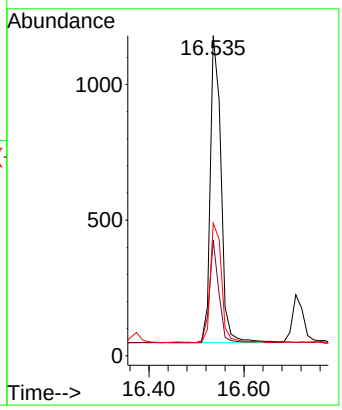


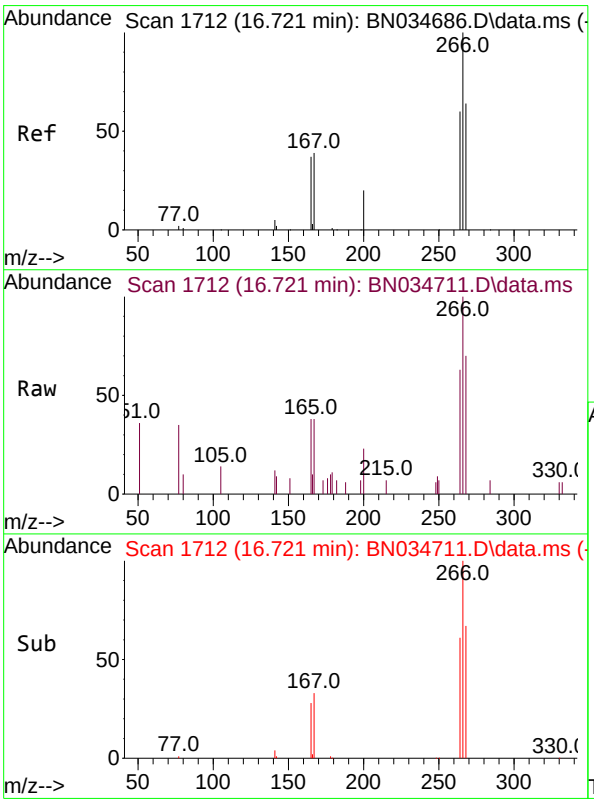
#23
Atrazine
Concen: 0.327 ng
RT: 16.535 min Scan# 1(
Delta R.T. -0.012 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:200 Resp: 1782

Ion	Ratio	Lower	Upper
200	100		
173	36.2	19.7	29.5#
215	41.4	35.7	53.5

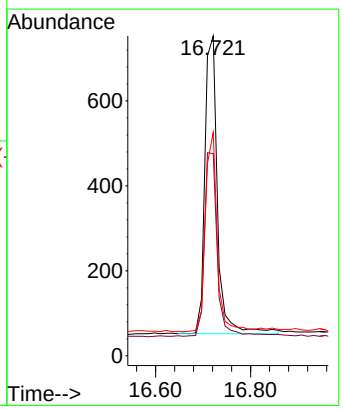


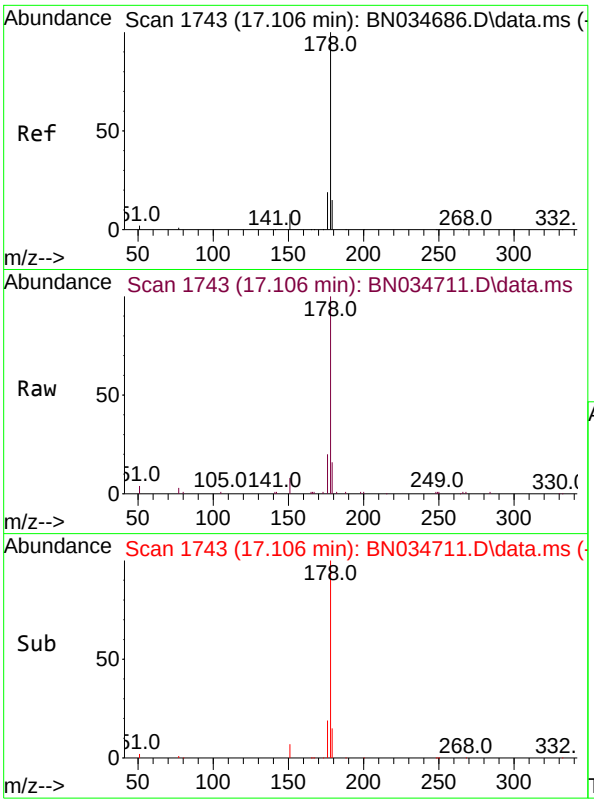


#24
Pentachlorophenol
Concen: 0.490 ng
RT: 16.721 min Scan# 1712
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:266 Resp: 1302

Ion	Ratio	Lower	Upper
266	100		
264	62.4	49.4	74.2
268	62.1	50.5	75.7



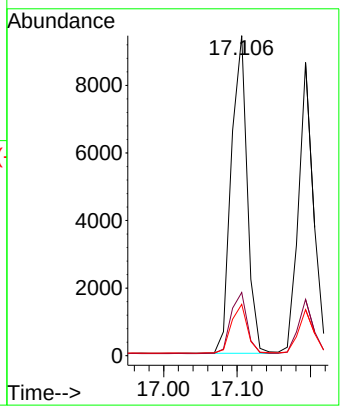


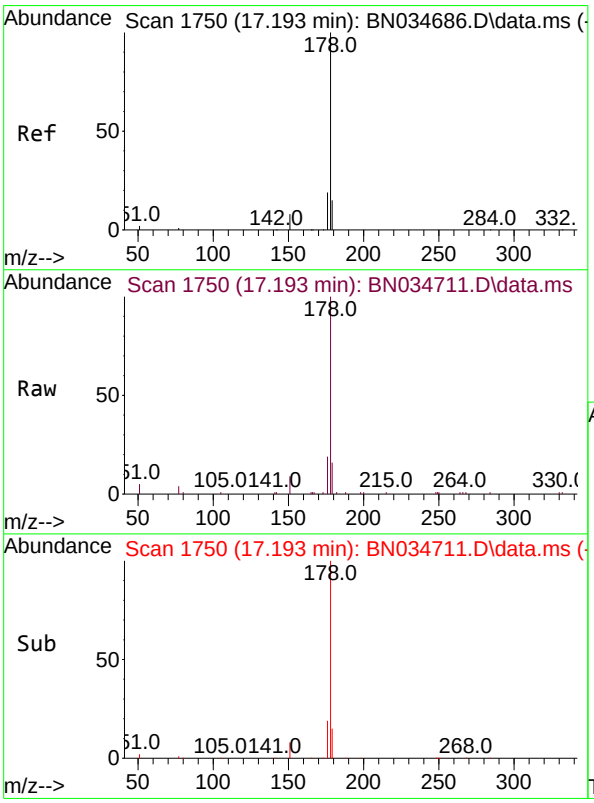
#25
Phenanthrene
Concen: 0.364 ng
RT: 17.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:178 Resp: 14207

Ion	Ratio	Lower	Upper
178	100		
176	19.5	15.4	23.2
179	15.4	12.2	18.4

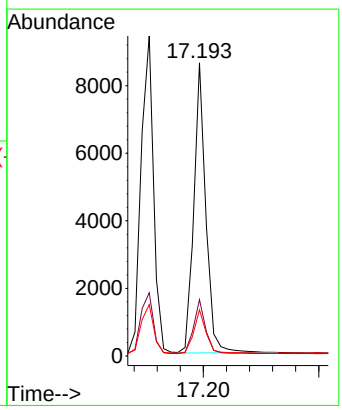


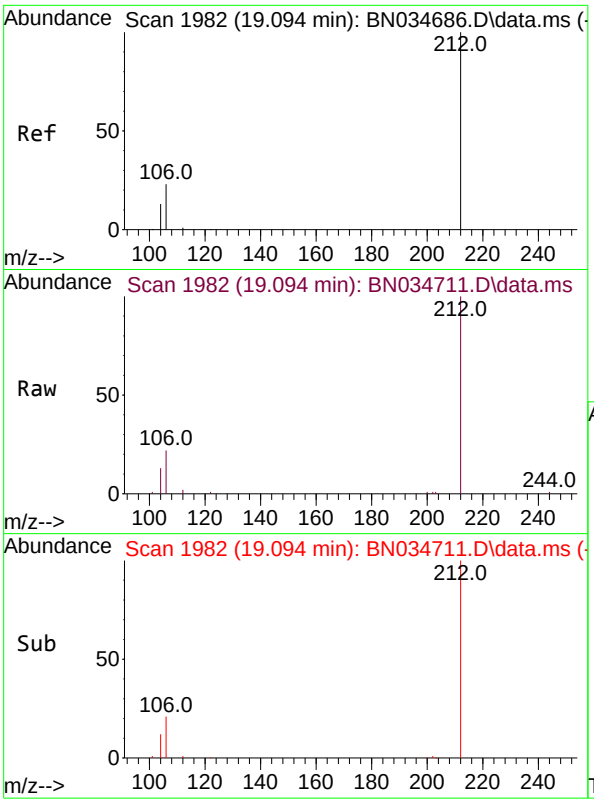


#26
Anthracene
Concen: 0.359 ng
RT: 17.193 min Scan# 1750
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:178 Resp: 12435

Ion	Ratio	Lower	Upper
178	100		
176	18.5	14.9	22.3
179	15.3	12.2	18.2



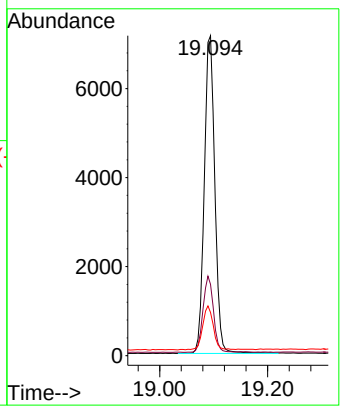


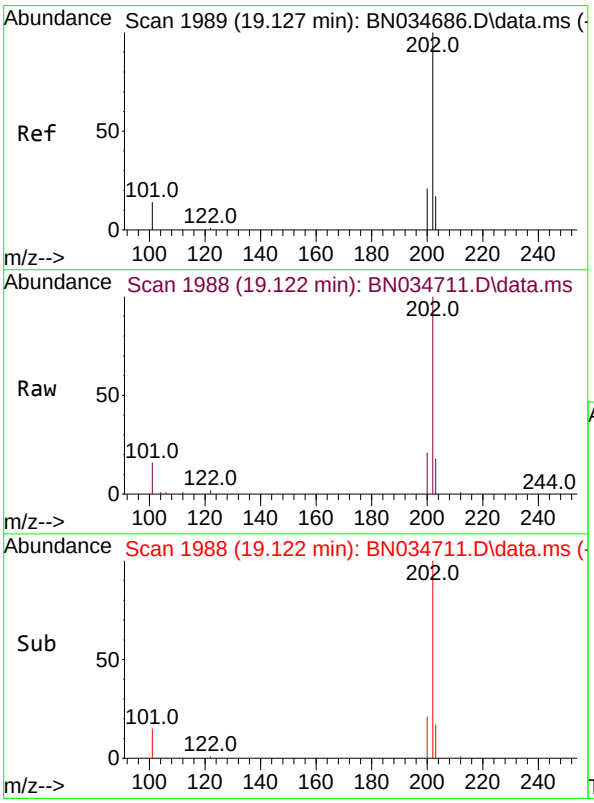
#27
Fluoranthene-d10
Concen: 0.332 ng
RT: 19.094 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:212 Resp: 9709

Ion	Ratio	Lower	Upper
212	100		
106	23.6	17.8	26.8
104	13.8	10.2	15.4

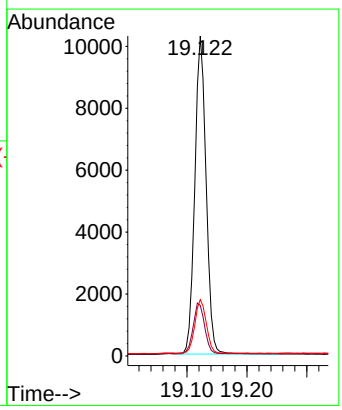


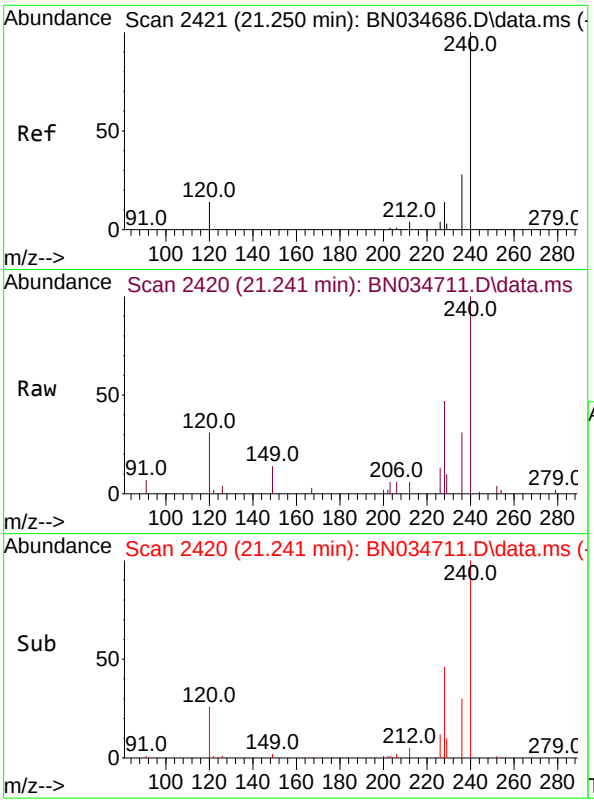


#28
Fluoranthene
Concen: 0.329 ng
RT: 19.122 min Scan# 1988
Delta R.T. -0.005 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:202 Resp: 13425

Ion	Ratio	Lower	Upper
202	100		
101	16.0	12.8	19.2
203	17.1	13.5	20.3



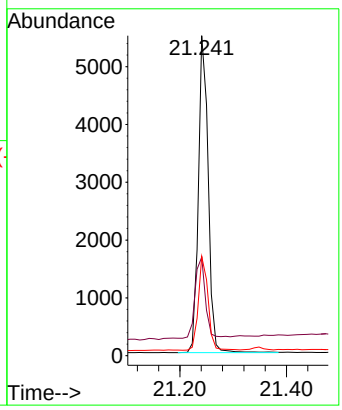


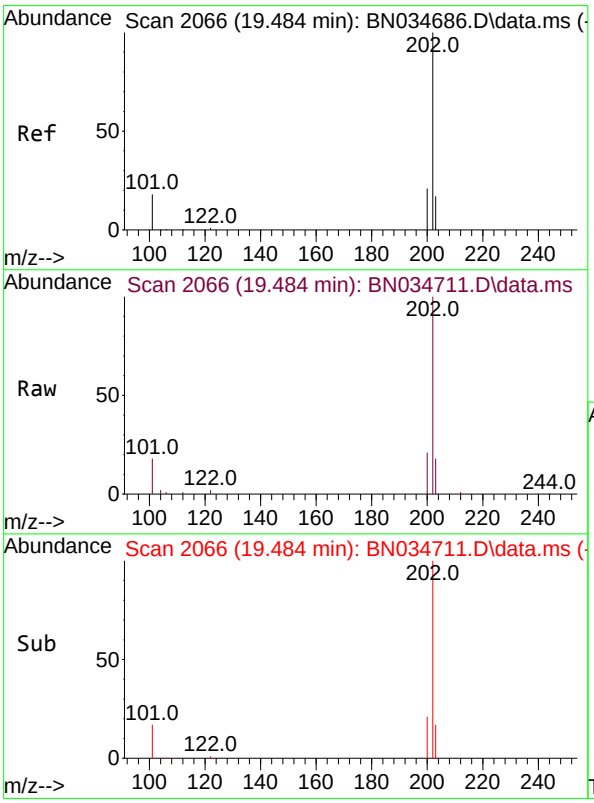
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.241 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:240 Resp: 7027

Ion	Ratio	Lower	Upper
240	100		
120	30.8	14.2	21.2#
236	31.0	23.1	34.7

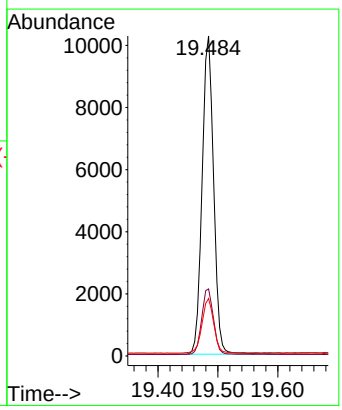


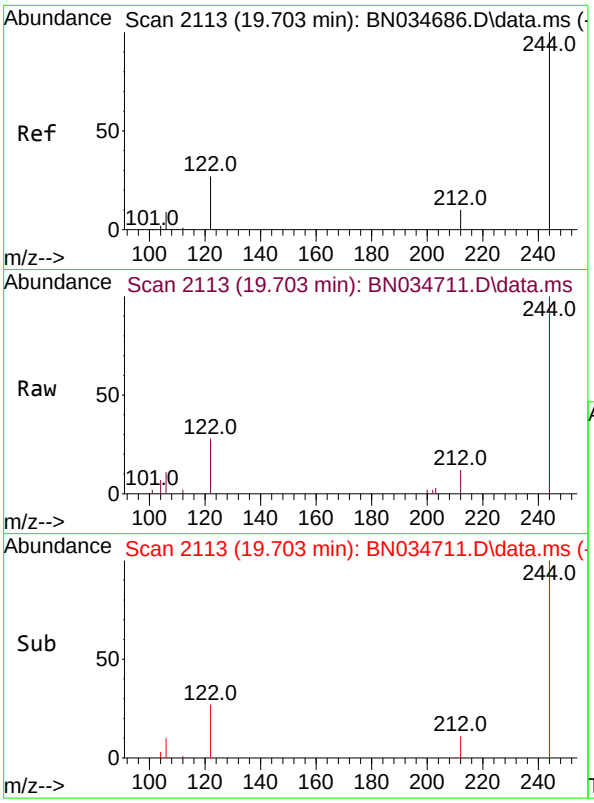


#30
Pyrene
Concen: 0.377 ng
RT: 19.484 min Scan# 2066
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:202 Resp: 13610

Ion	Ratio	Lower	Upper
202	100		
200	21.0	16.6	25.0
203	17.5	14.2	21.4



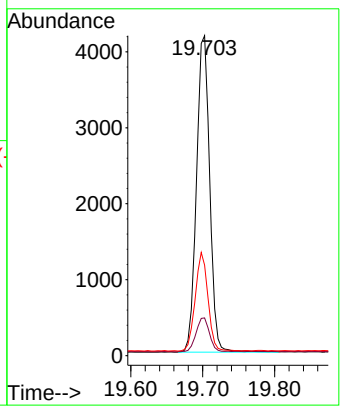


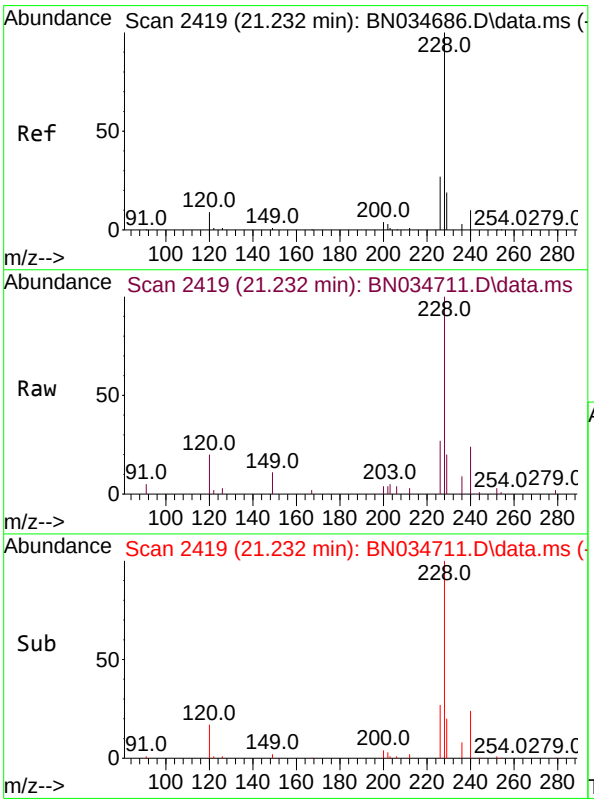
#31
Terphenyl-d14
Concen: 0.371 ng
RT: 19.703 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:244 Resp: 5323

Ion	Ratio	Lower	Upper
244	100		
212	11.8	8.6	13.0
122	28.3	22.3	33.5

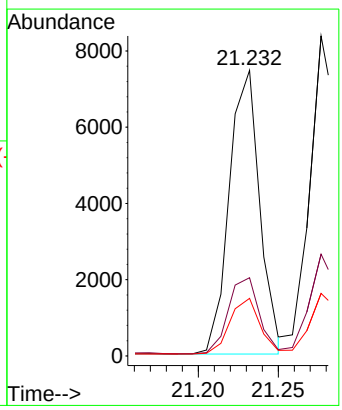


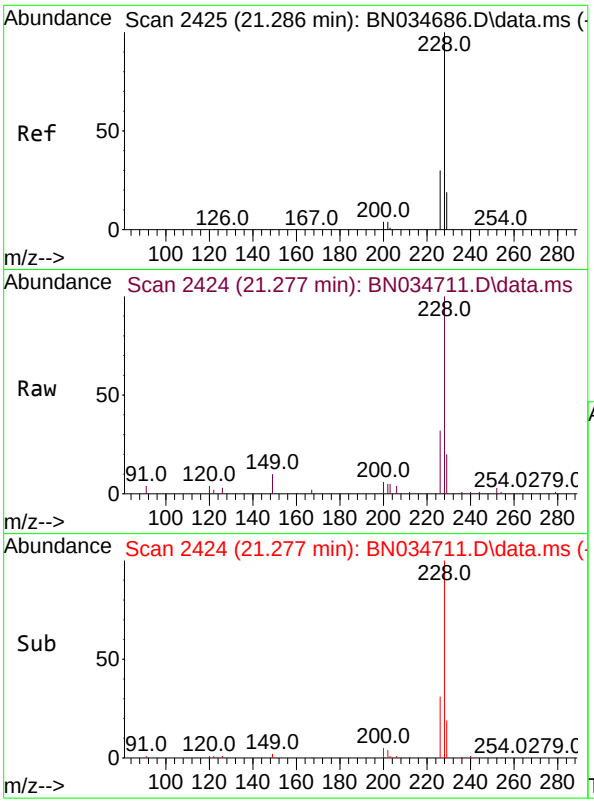


#32
Benzo(a)anthracene
Concen: 0.369 ng
RT: 21.232 min Scan# 2419
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:228 Resp: 9893

Ion	Ratio	Lower	Upper
228	100		
226	27.4	22.0	33.0
229	20.1	15.6	23.4



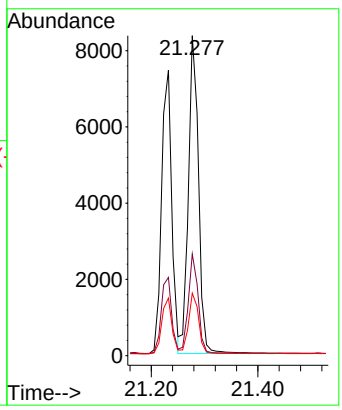


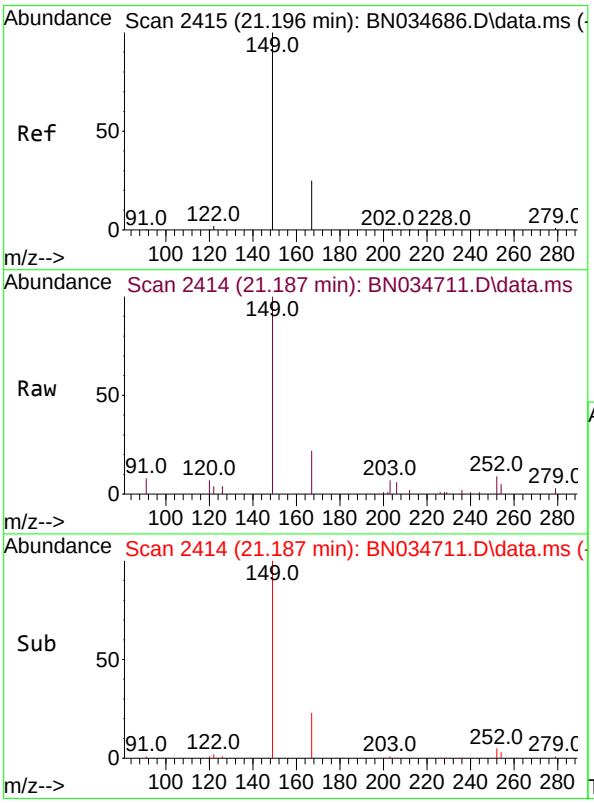
#33
Chrysene
Concen: 0.396 ng
RT: 21.277 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:228 Resp: 11013

Ion	Ratio	Lower	Upper
228	100		
226	31.8	24.1	36.1
229	19.5	15.8	23.8

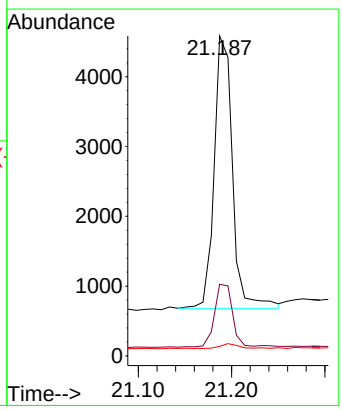


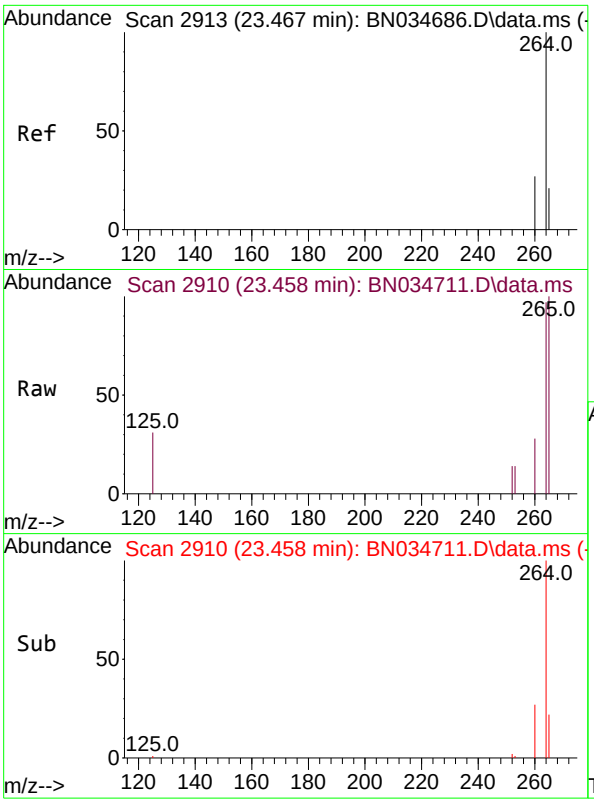


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.349 ng
RT: 21.187 min Scan# 2414
Delta R.T. -0.009 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:149 Resp: 5309

Ion	Ratio	Lower	Upper
149	100		
167	22.6	19.7	29.5
279	1.6	1.8	2.6#



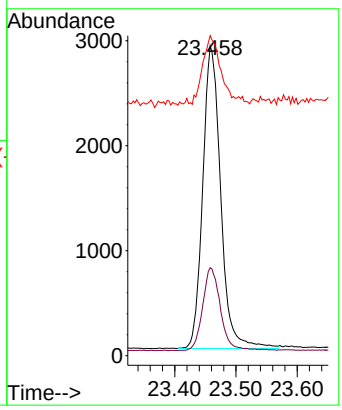


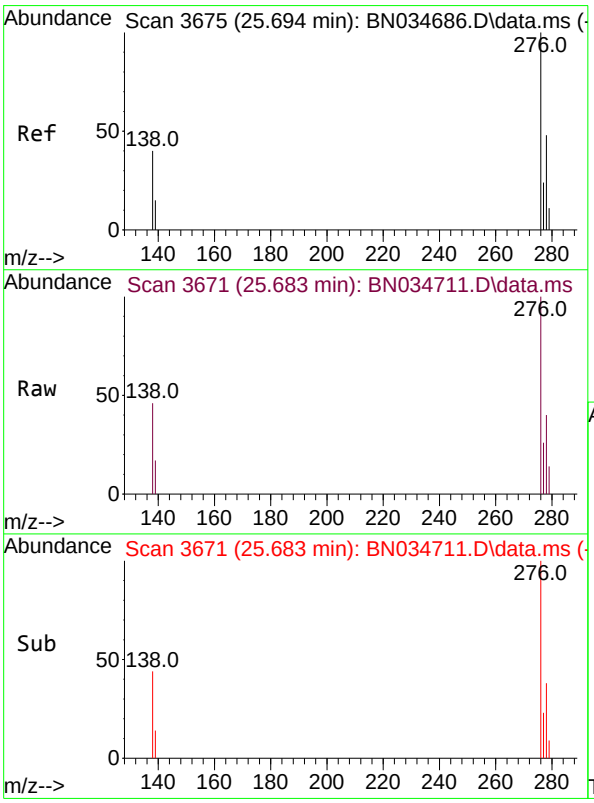
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.458 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:264 Resp: 5873

Ion	Ratio	Lower	Upper
264	100		
260	28.4	21.9	32.9
265	103.3	60.6	91.0#

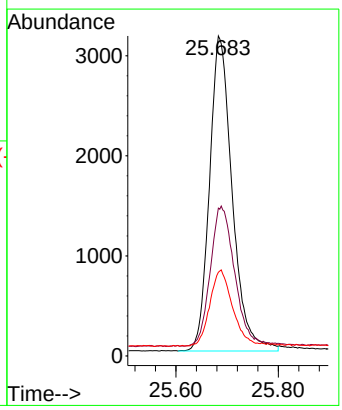


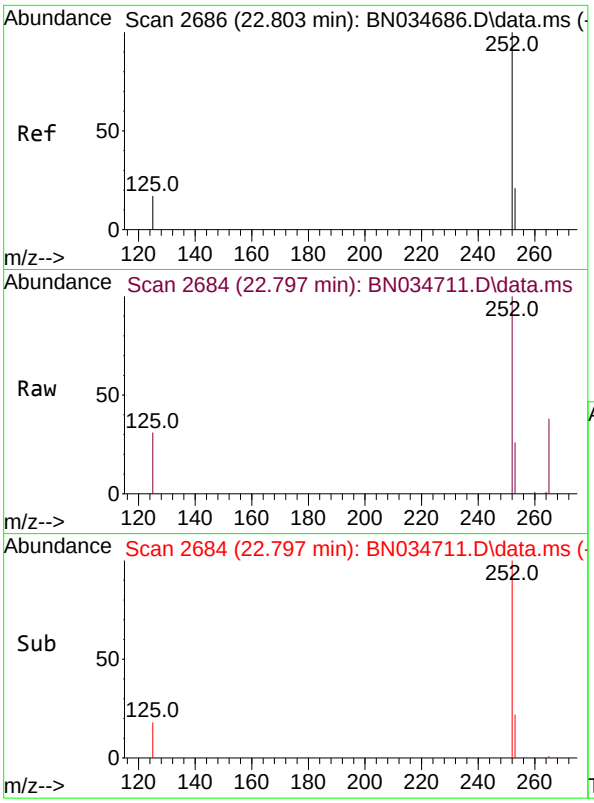


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.429 ng
RT: 25.683 min Scan# 3671
Delta R.T. -0.012 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:276 Resp: 9709

Ion	Ratio	Lower	Upper
276	100		
138	47.6	35.1	52.7
277	24.0	19.7	29.5



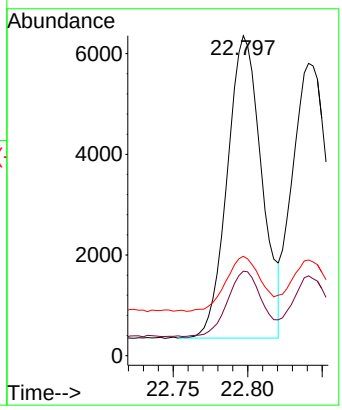


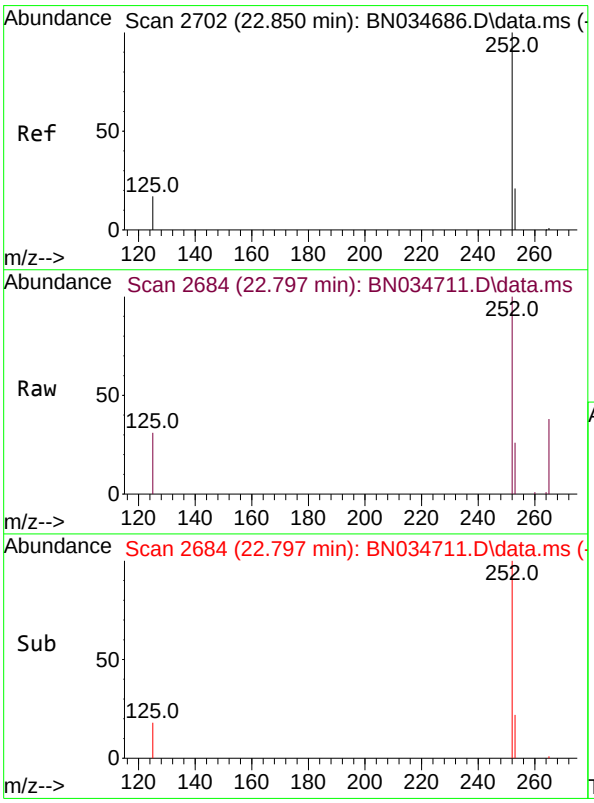
#37
Benzo(b)fluoranthene
Concen: 0.411 ng
RT: 22.797 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:252 Resp: 9630

Ion	Ratio	Lower	Upper
252	100		
253	26.4	20.0	30.0
125	31.1	20.9	31.3

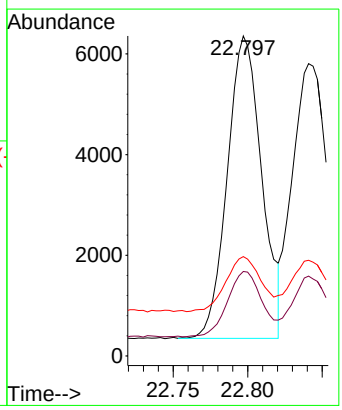


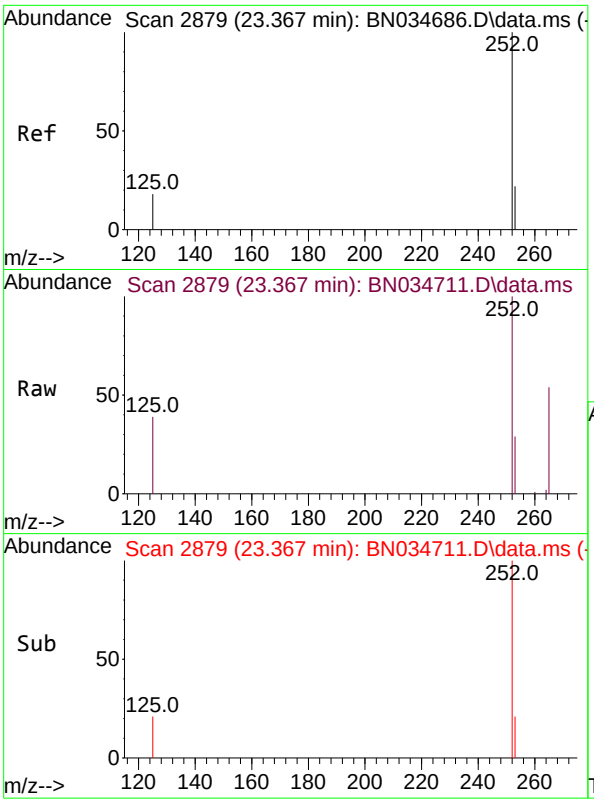


#38
Benzo(k)fluoranthene
Concen: 0.416 ng
RT: 22.797 min Scan# 2684
Delta R.T. -0.053 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:252 Resp: 9630

Ion	Ratio	Lower	Upper
252	100		
253	26.4	20.6	31.0
125	31.1	21.6	32.4



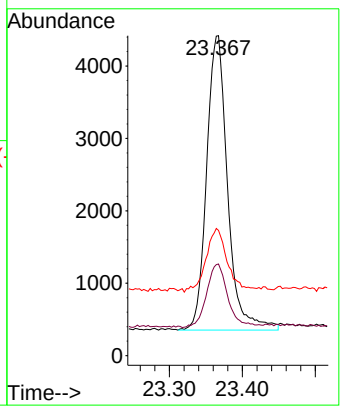


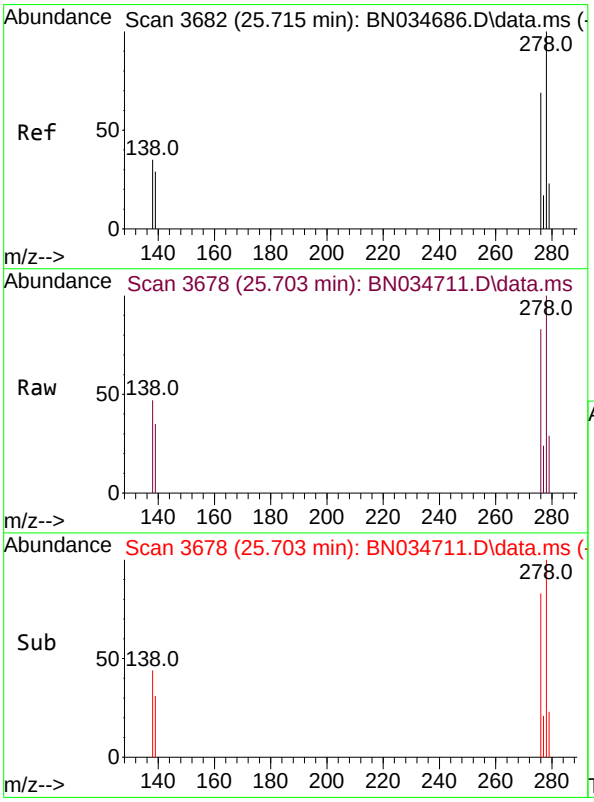
#39
Benzo(a)pyrene
Concen: 0.432 ng
RT: 23.367 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:252 Resp: 8133

Ion	Ratio	Lower	Upper
252	100		
253	28.6	22.2	33.4
125	39.1	26.0	39.0#

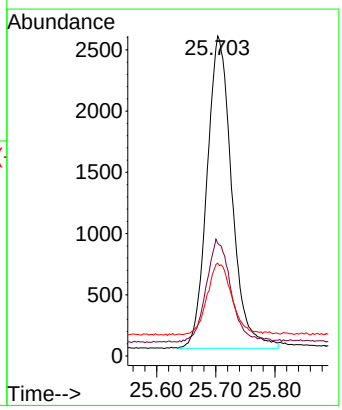


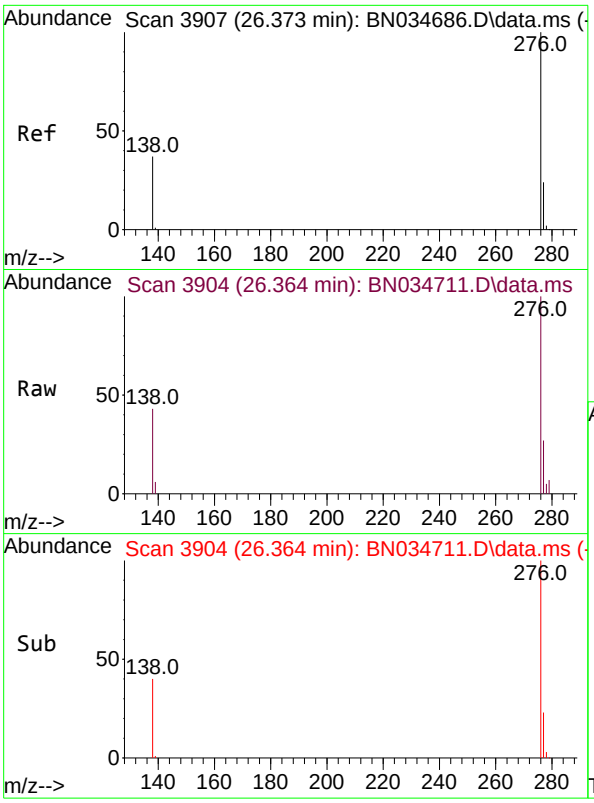


#40
Dibenzo(a,h)anthracene
Concen: 0.417 ng
RT: 25.703 min Scan# 3678
Delta R.T. -0.012 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Tgt Ion:278 Resp: 7436

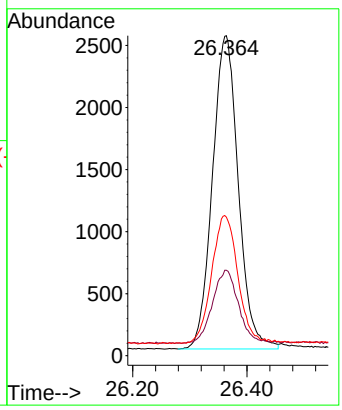
Ion	Ratio	Lower	Upper
278	100		
139	35.2	25.4	38.2
279	29.0	22.4	33.6





#41
Benzo(g,h,i)perylene
Concen: 0.404 ng
RT: 26.364 min Scan# 3
Delta R.T. -0.009 min
Lab File: BN034711.D
Acq: 25 Oct 2024 03:02

Instrument :
BNA_N
ClientSampleId :
PB164282BSD

Tgt Ion:276 Resp: 7954

Ion	Ratio	Lower	Upper
276	100		
277	26.7	21.3	31.9
138	43.3	31.9	47.9